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**All data, including phase data, are available on CD-ROM and from the internet - http://www.isc.ac.uk**

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## Addendum I

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

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

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

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

The following example illustrates the changes :-

**September 2002**

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

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

*Epicentral Estimates*

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

*Observational Data*

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

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

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

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

## Addendum II

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

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

## Addendum III

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

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

*ISCJB 01 00:20:11.2±0.3, 3°.50N±0°.04×75°.59W±0°.04, h33$^{km}$, mb4.3/42, MS3.5/4, Error ellipse: s-maj=6.4km s-min=4.8km az=29.2*
*NEIC 01 00:20:12.1±2.9, 3°.38N×75°.57W, h32$^{km}$±22$^{km}$, mb4.5/26, Error ellipse: s-maj=12.3km s-min=9.9km az=74.0*
*IDC 01 00:20:15.8±2.3, 3°.57N×75°.45W, h58$^{km}$±21$^{km}$, mb3.7/16, mb1 4.0/18, mb1mx3.9/29, mbtmp4.1/18, ML3.6/2, MS3.6/4, Ms1 3.5/4, ms1mx3.2/18, Error ellipse: s-maj=19.1km s-min=12.0km az=65.0*
**ISC 01 00:20:12.7±0.5, 3°.42N±0°.05×75°.62W±0°.06, h35$^{km}$, n66, σ1s.47/69, mb4.4/42, MS3.4/4, Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ROSC | El Rosal | 1.92 | 42 | P | Pn | 00 20 44.4 | +1.2 |
| | 244nm,0.3s,baz=256,slow=3.8,SNR=312 | | | | | | |
| ROSC | | | | S | Sn | 00 21 09.9 | +3.6 |
| | 157nm,0.3s,baz=108,slow=18,SNR=5.4 | | | | | | |
| ROSC | | | | LR | LR | 00 21 23.2 | |
| | comp=Z,145nm,19.0s,baz=322,slow=40 | | | | | | |
| ROSC | El Rosal | 1.92 | 42 | ePn | Pn | 00 20 44.6 | +1.3 |
| OTAV | Otavalo | 4.24 | 222 | Pn | Pn | 00 21 16.3 | +1.0 |
| OTAV | | | | eS | Sn | 00 22 15.7 | +12 |
| BCIP | Isla Barro Col | 7.08 | 324 | ePn | Pn | 00 21 52.9 | -1.0 |
| BCIP | | | | eS | Sn | 00 23 12.6 | -0.6 |
| SDV | Santo Domingo | 7.35 | 42 | ePn | Pn | 00 21 57.0 | -0.8 |
| SDV | | | | eS | Sn | 00 23 22.4 | +2.3 |
| PCRV | Puerto La Cruz | 12.80 | 58 | P | Pn | 00 23 10.6 | -1.7 |
| | 0.6nm,0.3s,baz=23,slow=7.7,SNR=2.4 | | | | | | |
| PCRV | | | | S | Sn | 00 25 34.0 | +0.3 |
| | 0.5nm,0.3s,baz=194,slow=17,SNR=3.0 | | | | | | |
| PCRV | | | | Lg | Lg | 00 27 01.8 | |
| | 0.4nm,0.3s,baz=239,slow=15,SNR=2.0 | | | | | | |
| SDDR | Presa de Saban | 16.03 | 15 | ePn | Pn | 00 23 56.6 | +0.9 |
| PTGA | Pitinga | 16.18 | 104 | P | Pn | 00 23 56.1 | -1.5 |
| | 0.1nm,0.3s,baz=286,slow=14,SNR=4.1 | | | | | | |
| PTGA | | | | S | Sn | 00 26 55.9 | -0.2 |
| | 0.3nm,0.3s,baz=330,slow=20,SNR=2.6 | | | | | | |
| PTGA | | | | Lg | Lg | 00 28 34.5 | |
| | 1.3nm,0.3s,baz=347,slow=19,SNR=6.5 | | | | | | |
| SAML | Samuel | 17.46 | 135 | ePn | Pn | 00 24 10.5 | -3.1 |
| SAML | | | | eS | Sn | 00 27 21.5 | -5.5 |
| LPAZ | La Paz | 20.94 | 159 | P | P | 00 24 53.9 | +0.7 |
| | 1.5nm,0.9s,baz=285,slow=12,SNR=3.2 | | | | | | |
| LPAZ | | | | LR | LR | 00 33 34.6 | |
| | comp=Z,111nm,19.9s,baz=12,slow=38 | | | | | | |
| CMIG | Matias Romero | 23.28 | 307 | P | P | 00 25 17.2 | -0.3 |
| | 1.8nm,0.5s,baz=100,slow=12,SNR=2.7 | | | | | | |
| SIV | San Ignacio | 24.07 | 144 | P | P | 00 25 26.1 | +1.2 |
| | 5.7nm,0.9s,baz=327,slow=11,SNR=9.8 | | | | | | |
| LVC | Limon Verde | 26.69 | 166 | P | P | 00 25 51.4 | +2.4 |
| | 47nm,0.9s,baz=343,slow=5.7,SNR=11 | | | | | | |
| LVC | Limon Verde | 26.69 | 166 | eP | P | 00 25 47.7 | -1.3 |
| | 18nm,1.0s | | | | | | |
| BDFB | Brasilia | 33.24 | 125 | P | P | 00 26 47.8 | +0.9 |
| | 3.6nm,0.9s,baz=280,slow=12,SNR=3.5 | | | | | | |
| BDFB | | | | LR | LR | 00 40 44.4 | |
| | comp=Z,211nm,18.6s,baz=250,slow=37 | | | | | | |
| CPUP | Villa Florida | 34.47 | 150 | P | P | 00 26 58.5 | +1.2 |
| | 0.8nm,0.5s,baz=348,slow=9.0,SNR=3.4 | | | | | | |
| CPUP | | | | LR | LR | 00 41 01.4 | |
| | comp=Z,76nm,21.6s,baz=331,slow=36 | | | | | | |
| CFAA | Coronel Fontan | 35.53 | 169 | P | P | 00 27 09.1 | +2.6 |
| | 1.1nm,0.8s,baz=338,slow=8.0,SNR=11 | | | | | | |
| TX31 | Lajitas Ar. Si | 37.04 | 317 | eP | P | 00 27 17.9 | -1.6 |
| TXAR | Lajitas Array | 37.04 | 317 | P | P | 00 27 21.1 | +1.5 |
| | 1.0nm,0.9s,baz=142,slow=6.3,SNR=6.7 | | | | | | |
| TXAR | | | | PcP | PcP | 00 29 40.4 | +0.4 |
| | 0.6nm,0.7s,baz=132,slow=3.8,SNR=5.8 | | | | | | |
| WMOK | Wichita Mounta | 37.86 | 328 | eP | P | 00 27 25.9 | -0.5 |
| | 27nm,1.9s | | | | | | |
| MNTX | Cornudas Mount | 39.68 | 318 | eP | P | 00 27 42.8 | +1.2 |
| | 6.5nm,1.3s | | | | | | |
| 121A | Cookes Peak, D | 41.79 | 318 | eP | P | 00 28 01.2 | +2.0 |
| | 11nm,1.0s | | | | | | |
| ANMO | Albuquerque | 42.45 | 321 | eP | P | 00 28 05.3 | +0.8 |
| | 4.6nm,0.9s | | | | | | |
| LAZ | Ladron | 42.53 | 320 | eP | P | 00 28 06.4 | +1.2 |
| TUC | Tucson | 43.73 | 315 | eP | P | 00 28 16.1 | +1.2 |
| | 14nm,1.8s | | | | | | |
| SDCO | Great Sand Dun | 43.76 | 325 | eP | P | 00 28 17.4 | +2.1 |
| | 4.3nm,1.0s | | | | | | |
| S22A | 4UR Ranch, Cre | 44.52 | 324 | eP | P | 00 28 21.6 | +0.1 |
| | 14nm,1.7s | | | | | | |
| WUAZ | Wupatki | 45.96 | 318 | eP | P | 00 28 34.0 | +1.3 |
| | 5.9nm,0.9s | | | | | | |
| SRU | San Rafael | 47.61 | 323 | eP | P | 00 28 46.8 | +1.3 |
| | 3.2nm,0.7s | | | | | | |
| RSSD | Black Hills | 47.67 | 332 | eP | P | 00 28 46.1 | +0.1 |
| | 9.9nm,1.3s | | | | | | |
| MSU | Marysvale | 48.25 | 321 | eP | P | 00 28 50.0 | -0.6 |
| | 7.9nm,1.6s | | | | | | |
| PLM | Palomar | 48.65 | 313 | eP | P | 00 28 49.0 | -4.6 |
| GMU | Granite Mounta | 49.27 | 324 | eP | P | 00 29 00.2 | +1.8 |
| BW06 | Boulder Array | 49.46 | 327 | eP | P | 00 28 59.3 | -0.5 |
| | 32nm,2.4s | | | | | | |
| DUG | Dugway | 49.67 | 323 | eP | P | 00 28 59.8 | -1.5 |
| | 7.5nm,1.4s | | | | | | |
| SPUT | South Promonto | 50.14 | 324 | eP | P | 00 29 04.9 | 0.0 |
| | 6.8nm,1.2s | | | | | | |
| BGU | Big Grassy Mou | 50.24 | 323 | eP | P | 00 29 05.0 | -0.7 |
| | 3.6nm,1.1s | | | | | | |
| STTC | Scott Ranch | 50.50 | 314 | eP | P | 00 29 04.4 | -3.2 |
| REDW | Red Top Meadow | 50.56 | 327 | eP | P | 00 29 08.4 | +0.3 |
| | 8.5nm,1.2s | | | | | | |
| YMC | Maple Creek | 51.58 | 328 | eP | P | 00 29 14.9 | -0.9 |
| SCHQ | Schefferville | 51.75 | 6 | LR | LR | 00 53 54.8 | |
| | comp=Z,31nm,18.1s,baz=314,slow=39 | | | | | | |
| NV01 | Mina Array Sit | 52.19 | 318 | eP | P | 00 29 21.9 | +1.4 |
| NVAR | Mina Array Bea | 52.19 | 318 | P | P | 00 29 21.8 | +1.3 |
| | 3.3nm,0.8s,baz=128,slow=6.6,SNR=16 | | | | | | |
| NVAR | | | | PcP | PcP | 00 30 32.5 | +0.7 |
| | 1.0nm,0.7s,baz=142,slow=4.6,SNR=3.0 | | | | | | |
| BMN | Battle Mountai | 52.55 | 320 | eP | P | 00 29 21.9 | -1.0 |
| | 4.4nm,1.0s | | | | | | |
| HLID | Hailey | 52.68 | 325 | eP | P | 00 29 24.6 | +0.8 |
| | 2.2nm,0.8s | | | | | | |
| MFID | Camas Ranch | 53.41 | 324 | eP | P | 00 29 29.1 | -0.1 |
| | 86nm,2.8s | | | | | | |
| WVOR | Wild Horse Val | 54.54 | 322 | eP | P | 00 29 36.9 | -0.6 |
| | 11nm,1.1s | | | | | | |
| J08A | Circle Bar Ran | 54.95 | 323 | eP | P | 00 29 37.5 | -2.9 |
| | 5.0nm,1.1s | | | | | | |
| G08A | Pilot Rock | 56.32 | 324 | eP | P | 00 29 45.8 | -4.5 |
| | 4.6nm,1.0s | | | | | | |
| B08A | Colville Reser | 58.30 | 327 | eP | P | 00 30 02.2 | -1.9 |
| | 43nm,2.3s | | | | | | |
| YKA | Yellowknife Ar | 65.62 | 341 | P | P | 00 30 51.8 | -1.1 |
| | 1.7nm,0.7s,baz=133,slow=5.9,SNR=4.7 | | | | | | |
| DBIC | Dimbokro | 70.52 | 84 | P | P | 00 31 23.2 | -1.4 |
| | 2.6nm,0.7s,baz=247,slow=4.6,SNR=4.8 | | | | | | |
| SUMG | Summit | 72.77 | 11 | iP | P | 00 31 37.2 | -0.4 |
| | 12nm,1.0s | | | | | | |
| SUMG | Summit | 72.77 | 11 | eP | P | 00 31 36.3 | -1.3 |
| ESDC | Sonseca Array | 73.73 | 50 | P | P | 00 31 42.9 | -0.5 |
| | 1.0nm,0.9s,baz=263,slow=8.4,SNR=5.8 | | | | | | |
| TORD | Torodi Ar. Bea | 76.88 | 77 | P | P | 00 32 00.7 | -1.3 |
| | 0.7nm,0.8s,baz=293,slow=6.3,SNR=7.4 | | | | | | |
| DOT | Dot Lake | 77.48 | 335 | eP | P | 00 32 04.8 | +0.4 |
| | 18nm,0.8s | | | | | | |
| ILAR | Eielson Array | 78.99 | 336 | P | P | 00 32 12.6 | -0.1 |
| | 1.7nm,0.7s,baz=110,slow=3.8,SNR=12 | | | | | | |
| NOA | NORSAR Array B | 85.49 | 29 | P | P | 00 32 48.0 | +1.1 |
| | 1.1nm,0.8s,baz=269,slow=4.9,SNR=3.2 | | | | | | |
| KHC | Kasperske Hory | 86.91 | 41 | eP | P | 00 32 55.6 | +1.4 |
| GERES | GERESS Array B | 87.00 | 41 | P | P | 00 32 54.4 | -0.2 |
| | 1.5nm,0.8s,baz=258,slow=2.9,SNR=14 | | | | | | |
| SNAA | Sanae | 87.87 | 162 | eP | P | 00 32 59.5 | +1.3 |
| | 1.5nm,1.1s | | | | | | |
| FINES | FINESS Array B | 92.59 | 28 | P | P | 00 33 20.3 | -0.1 |
| | 1.2nm,0.8s,baz=318,slow=2.6,SNR=4.3 | | | | | | |
| ASAR | Alice Springs | 145.09 | 232 | PKPbc | PKPbc | 00 39 47.1 | +0.2 |
| | 5.5nm,0.8s,baz=123,slow=3.8,SNR=37 | | | | | | |
| WRA | Warramunga Arr | 146.48 | 238 | PKPbc | PKPdf | 00 39 50.2 | +0.4 |
| | 3.8nm,0.9s,baz=109,slow=2.7,SNR=14 | | | | | | |
| CMAR | Chiang Mai Arr | 157.61 | 14 | PKPab | PKPab | 00 40 37.1 | -1.1 |
| | 0.6nm,0.3s,baz=339,slow=4.8,SNR=3.0 | | | | | | |

**JMA 01 00:28:22.0, 37°.25N×140°.02E, h4$^{km}$±2$^{km}$, M2.6, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JSB | Shiboa | 0.29 | 196 | P | Pg | 00 28 28.4 | +0.7 |
| JFY | Yanaizu | 0.30 | 302 | P | Pg | 00 28 28.1 | +0.3 |
| JFY | | | | S | Sg | 00 28 32.3 | +0.6 |
| JFT | Otama | 0.37 | 43 | P | Pg | 00 28 29.3 | +0.1 |
| JFT | | | | S | Sg | 00 28 34.3 | +0.3 |
| JFK | Kawauchi | 0.69 | 80 | P | Pg | 00 28 35.0 | -0.4 |
| JNS | Sasagawa | 0.80 | 316 | P | Pg | 00 28 37.2 | -0.1 |
| MAT | Matsushiro | 1.62 | 245 | P | Pb | 00 28 52.1 | -0.3 |
| MAT | | | | S | Sg | 00 29 16.2 | +2.2 |

*IDC 01 00:31:58.8±2.9, 16°.39S×174°.06W, h63$^{km}$±27$^{km}$, mb3.5/7, mb1 3.9/9, mb1mx3.7/25, mbtmp3.9/9, ML4.0/2, MS3.6/1, Ms1 3.6/1, ms1mx2.9/12, Error ellipse: s-maj=34.9km s-min=16.1km az=136.0*
*ISCJB 01 00:32:00.2±0.8, 16°.2S±0°.2×173°.9W±0°.2, h111$^{km}$, mb3.6/7, Error ellipse: s-maj=30.0km s-min=10.5km az=44.7*
**ISC 01 00:32:03.1±0.7, 16°.2S±0°.2×173°.9W±0°.2, h111$^{km}$, n16, σ2s.31/14, mb3.5/7, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 3.06 | 43 | P | Pn | 00 32 48.2 | -1.8 |
| | 52nm,0.3s,baz=197,slow=1.2,SNR=31 | | | | | | |
| AFI | | | | S | Sn | 00 33 22.0 | -4.2 |
| | 98nm,0.3s,baz=45,slow=21,SNR=17 | | | | | | |
| DZM | Mont Dzumac | 19.46 | 249 | P | P | 00 36 19.7 | -1.6 |
| | 0.1nm,0.3s,baz=186,slow=10,SNR=2.7 | | | | | | |
| URZ | Urewera | 23.36 | 198 | P | P | 00 36 58.8 | -3.0 |
| | 8.2nm,0.7s,baz=135,slow=1.4,SNR=3.5 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 39.40 | 330 | T | T | 01 20 07.1 | |
| | baz=146,slow=76,SNR=4.8 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.41 | 330 | T | T | 01 20 05.9 | |
| | baz=146,slow=76,SNR=4.7 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.41 | 330 | T | T | 01 20 05.4 | |
| | baz=146,slow=76,SNR=3.7 | | | | | | |
| WRA | Warramunga Arr | 49.19 | 257 | P | P | 00 40 39.1 | -1.3 |
| | 0.2nm,0.4s,baz=96,slow=6.9,SNR=6.2 | | | | | | |
| ASAR | Alice Springs | 49.41 | 253 | P | P | 00 40 40.9 | -1.1 |
| | 1.7nm,0.6s,baz=89,slow=8.2,SNR=18 | | | | | | |
| ASAR | | | | LR | LR | 01 01 22.7 | |
| | comp=Z,53nm,18.1s,baz=236,slow=36 | | | | | | |
| VNDA | Vanda | 62.54 | 186 | P | P | 00 42 14.5 | -0.1 |
| | 0.8nm,1.0s,baz=9.1,slow=7.9,SNR=3.6 | | | | | | |
| NVAR | Mina Array Bea | 75.24 | 42 | P | P | 00 43 37.0 | +2.9 |
| | 0.4nm,0.6s,baz=234,slow=7.7,SNR=3.0 | | | | | | |
| TXAR | Lajitas Array | 81.46 | 56 | P | P | 00 44 11.2 | +2.8 |
| | 0.5nm,0.7s,baz=232,slow=4.4,SNR=4.7 | | | | | | |
| ILAR | Eielson Array | 83.31 | 11 | P | P | 00 44 18.4 | +1.3 |
| | 0.4nm,0.7s,baz=197,slow=4.7,SNR=3.4 | | | | | | |
| ARCES | ARCESS Array B | 125.32 | 352 | PKP | PKPdf | 00 50 51.3 | +1.1 |
| | 1.3nm,0.8s,baz=33,slow=2.9,SNR=8.1 | | | | | | |
| FINES | FINESS Array B | 132.60 | 347 | PKP | PKPdf | 00 51 06.4 | +2.1 |
| | 0.5nm,0.8s,baz=35,slow=3.4,SNR=4.1 | | | | | | |
| BRTR | Keskin Array B | 146.45 | 320 | PKPbc | PKPab | 00 51 33.3 | +0.4 |
| | 0.5nm,0.7s,baz=123,slow=2.3,SNR=4.0 | | | | | | |
| GERES | GERESS Array B | 146.84 | 351 | PKPbc | PKPab | 00 51 34.2 | +0.2 |
| | 0.7nm,0.8s,baz=40,slow=2.3,SNR=4.5 | | | | | | |

*JMA 01 00:33:21.4±0.1, 23°.92N×121°.67E, h26$^{km}$±3$^{km}$, M2.7*
*ISCJB 01 00:33:22.7±0.3, 23°.94N±0°.02×121°.69E±0°.02, h25$^{km}$±2$^{km}$, Error ellipse: s-maj=3.6km s-min=2.3km az=40.4*
*TAP 01 00:33:22.6, 23°.95N×121°.62E, h29$^{km}$, ML3.6, B*
**ISC 01 00:33:22.7±0.9, 23°.94N±0°.02×121°.67E±0°.02, h28$^{km}$±5$^{km}$, n60, σ0s.82/93, 6C-6D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HWA | Hwalien | 0.07 | 298 | ⇓iP | Pb | 00 33 27.7 | +0.1 |
| | baz=341 | | | | | | |
| HWA | | | | S | Sb | 00 33 32.0 | +1.1 |
| | baz=341 | | | | | | |
| TWD | Chiawan | 0.15 | 332 | ⇓iP | Pb | 00 33 28.1 | -0.1 |
| | baz=344 | | | | | | |
| TWD | | | | iS | Sb | 00 33 32.3 | +0.3 |
| | baz=344 | | | | | | |
| ESF | Shoufeng Towns | 0.17 | 245 | eP | Pn | 00 33 28.9 | -0.6 |
| | baz=240 | | | | | | |
| ESL | Shilin | 0.26 | 240 | ⇑iP | Pb | 00 33 28.9 | -0.6 |
| | baz=240 | | | | | | |
| ESL | | | | S | Sb | 00 33 33.6 | -0.4 |
| | baz=240 | | | | | | |
| TEGC | Jichi Village | 0.26 | 208 | eP | Pn | 00 33 30.5 | -0.3 |
| | baz=186 | | | | | | |
| EHP | Heping Village | 0.37 | 10 | eP | Pn | 00 33 31.8 | -0.5 |
| | baz=18 | | | | | | |
| WHF | Hehuan Shan | 0.42 | 298 | ⇑iP | Pb | 00 33 31.3 | -0.9 |
| | baz=293 | | | | | | |
| WHF | | | | iS | Sb | 00 33 37.0 | -1.5 |
| | baz=293 | | | | | | |
| ENA | Nanau | 0.49 | 7 | ⇑iP | Pb | 00 33 32.9 | +0.1 |
| | baz=7.0 | | | | | | |
| ENA | | | | iS | Sn | 00 33 40.2 | -1.3 |
| | baz=7.0 | | | | | | |
| EHY | Hungye | 0.54 | 217 | ⇓eP | Pb | 00 33 32.5 | -1.2 |
| | baz=211 | | | | | | |
| TWT | Tachien | 0.55 | 304 | ⇑iP | Pb | 00 33 33.8 | -0.3 |
| | baz=305 | | | | | | |
| TWT | | | | iS | Sb | 00 33 40.8 | -0.9 |
| | baz=305 | | | | | | |
| NNS | Nan Shan | 0.56 | 331 | iP | Pb | 00 33 33.8 | -0.4 |
| | baz=335 | | | | | | |
| NNS | | | | S | Sb | 00 33 41.3 | -0.8 |
| | baz=335 | | | | | | |
| TWC | Suao | 0.68 | 14 | eP | Pn | 00 33 36.0 | -0.6 |
| | baz=15 | | | | | | |
| TWC | | | | S | Sn | 00 33 45.8 | -0.5 |
| | baz=15 | | | | | | |
| TWF1 | Yuli | 0.68 | 210 | ⇓eP | Pb | 00 33 34.5 | -1.6 |
| | baz=216 | | | | | | |
| ENTT | Nioudou | 0.70 | 352 | ⇑iP | Pb | 00 33 36.0 | -0.4 |
| | baz=352 | | | | | | |
| ENTT | | | | eS | Sb | 00 33 45.2 | -0.6 |
| | baz=352 | | | | | | |
| SMLT | Sun Moon Lake | 0.71 | 265 | ⇑iP | Pb | 00 33 36.0 | -0.6 |
| | baz=263 | | | | | | |
| SMLT | | | | S | Sb | 00 33 45.2 | -0.9 |
| | baz=263 | | | | | | |
| TYC | Yuchr | 0.75 | 267 | P | Pb | 00 33 36.5 | -0.7 |
| | baz=266 | | | | | | |
| TYC | | | | S | Sb | 00 33 45.6 | -1.4 |
| | baz=266 | | | | | | |
| TWE | Neicheng | 0.77 | 360 | eP | Pb | 00 33 37.1 | -0.5 |
| | baz=356 | | | | | | |
| TWE | | | | eS | Sn | 00 33 48.0 | -0.6 |
| | baz=356 | | | | | | |
| NSK | Sanguang | 0.78 | 338 | iP | Pb | 00 33 37.3 | -0.6 |
| | baz=340 | | | | | | |
| NSK | | | | iS | Sb | 00 33 47.0 | -1.2 |
| | baz=340 | | | | | | |
| YUS | Yu-Shan | 0.80 | 236 | ⇓iP | Pb | 00 33 37.9 | -0.5 |
| | baz=232 | | | | | | |
| YUS | | | | iS | Sb | 00 33 47.7 | -1.4 |
| | baz=232 | | | | | | |
| CHKT | Chengkung | 0.89 | 199 | eP | Pb | 00 33 39.5 | 0.0 |
| | baz=208 | | | | | | |
| CHKT | | | | eS | Sn | 00 33 53.0 | +1.6 |
| | baz=208 | | | | | | |
| ALS | Alishan | 0.91 | 242 | P | Pn | 00 33 39.6 | -0.3 |
| | baz=239 | | | | | | |
| ALS | | | | S | Sb | 00 33 51.0 | -0.9 |
| | baz=239 | | | | | | |
| WNT | Mingjian | 0.91 | 266 | eP | Pb | 00 33 40.2 | +0.2 |
| | baz=265 | | | | | | |
| WNT | | | | eS | Sn | 00 33 52.2 | +0.3 |
| | baz=265 | | | | | | |
| TWQ1 | Liyutan | 0.92 | 296 | eP | Pb | 00 33 40.3 | +0.3 |
| | baz=301 | | | | | | |
| TWQ1 | | | | eS | Sn | 00 33 51.8 | -0.3 |
| | baz=301 | | | | | | |
| NSTT | Nanjuang | 0.92 | 318 | P | Pb | 00 33 39.9 | -0.2 |
| | baz=319 | | | | | | |
| NSTT | | | | S | Sb | 00 33 51.5 | -0.5 |
| | baz=319 | | | | | | |
| TCU | Taichung | 0.94 | 283 | eP | Pb | 00 33 41.1 | +0.8 |
| | baz=282 | | | | | | |
| TCU | | | | eS | Sn | 00 33 53.6 | +1.1 |
| | baz=282 | | | | | | |
| NSY | Sanyi | 0.96 | 300 | eP | Pb | 00 33 41.3 | +0.5 |
| | baz=299 | | | | | | |
| NSY | | | | eS | Sn | 00 33 53.8 | +0.6 |
| | baz=299 | | | | | | |
| ELDTW | Lidau | 0.96 | 219 | eP | Pn | 00 33 39.7 | -0.9 |
| | baz=205 | | | | | | |
| CHN5 | Tsauling | 0.98 | 249 | ⇓iP | Pb | 00 33 41.2 | +0.1 |
| | baz=248 | | | | | | |
| CHN5 | | | | iS | Sn | 00 33 54.5 | +0.8 |
| | baz=248 | | | | | | |
| TWA | Mucha | 1.03 | 355 | eP | Pb | 00 33 41.8 | -0.3 |
| | baz=345 | | | | | | |
| TWA | | | | eS | Sn | 00 33 54.4 | -0.7 |
| | baz=345 | | | | | | |
| WGK | Gukeng | 1.05 | 256 | eP | Pn | 00 33 41.7 | +0.1 |
| | baz=254 | | | | | | |
| WGK | | | | eS | Sb | 00 33 57.1 | +1.4 |
| | baz=254 | | | | | | |
| HSN | Hsinchu | 1.07 | 323 | eP | Pb | 00 33 44.5 | +1.9 |
| | baz=327 | | | | | | |
| TWB1 | Santiao Chiao | 1.10 | 15 | eP | Pb | 00 33 44.4 | +1.3 |
| | baz=19 | | | | | | |
| TAP1 | Taipei | 1.10 | 353 | eP | Pb | 00 33 43.1 | 0.0 |
| | baz=354 | | | | | | |
| NCU | National Centr | 1.11 | 337 | eP | Pb | 00 33 44.0 | +0.6 |
| | baz=338 | | | | | | |
| NWF | Wu-fen Shan | 1.13 | 5 | eP | Pb | 00 33 43.4 | -0.3 |
| | baz=8.0 | | | | | | |
| STYT | Tauyuan | 1.15 | 227 | P | Pn | 00 33 43.3 | +0.3 |
| | baz=219 | | | | | | |
| STYT | | | | eS | Sn | 00 33 57.7 | -0.1 |
| | baz=219 | | | | | | |
| TWS1 | Kuangyinshan | 1.18 | 349 | eP | Pb | 00 33 44.8 | +0.3 |
| | baz=1.0 | | | | | | |
| TWS1 | | | | eS | Sb | 00 33 59.5 | +0.3 |
| | baz=1.0 | | | | | | |
| WTP | Ta-pu | 1.20 | 235 | eP | Pb | 00 33 44.4 | -0.4 |
| | baz=225 | | | | | | |
| WTP | | | | eS | Sb | 00 34 01.2 | +1.4 |
| | baz=225 | | | | | | |
| CHY | Chiayi | 1.23 | 249 | eP | Pb | 00 33 46.3 | +0.9 |
| | baz=247 | | | | | | |
| TWG | Pinlang | 1.25 | 206 | eP | Pn | 00 33 43.2 | -1.1 |
| | baz=190 | | | | | | |
| JYNG | Yonagunijimaku | 1.27 | 66 | P | Pn | 00 33 44.3 | -0.3 |
| JYNG | | | | eS | Sb | 00 34 01.6 | -0.2 |
| TWK | Hsinying | 1.28 | 238 | eP | Pb | 00 33 45.7 | -0.5 |
| | baz=236 | | | | | | |
| CHN1 | Nanshi | 1.29 | 235 | eP | Pn | 00 33 45.4 | +0.3 |
| | baz=232 | | | | | | |
| SGST | Jiashian | 1.32 | 230 | eP | Pb | 00 33 46.6 | -0.3 |
| | baz=227 | | | | | | |
| SGST | | | | eS | Sb | 00 34 04.4 | +1.0 |
| | baz=227 | | | | | | |
| YOJ | Yonaguni jima | 1.32 | 67 | P | Pn | 00 33 45.4 | 0.0 |
| YOJ | | | | eS | Sb | 00 34 03.0 | -0.5 |
| YOJ | Yonaguni jima | 1.32 | 67 | eP | Pb | 00 33 46.0 | -1.0 |
| | baz=69 | | | | | | |
| SSD | Sandimen | 1.53 | 219 | eP | Pb | 00 33 50.0 | -0.4 |
| | baz=216 | | | | | | |
| EAST | Anshuo | 1.73 | 206 | eP | Pn | 00 33 52.0 | +1.0 |
| | baz=194 | | | | | | |
| SCZT | Fangliau | 1.84 | 212 | eP | Pn | 00 33 53.0 | +0.5 |
| | baz=196 | | | | | | |
| LAY | Lan-yu | 1.90 | 183 | eP | Pn | 00 33 51.4 | -1.9 |
| | baz=181 | | | | | | |
| IRIF | Iriomote-Funau | 1.92 | 78 | P | Pn | 00 33 54.4 | +0.8 |
| HATJ | Hateruma jima | 1.95 | 86 | eS | Sn | 00 34 18.4 | +0.8 |
| WDGT | Dungji | 1.97 | 250 | eP | Pn | 00 33 54.5 | +0.3 |
| | baz=248 | | | | | | |
| PNG | Penghu | 1.98 | 259 | eP | Pn | 00 33 54.2 | -0.2 |
| | baz=259 | | | | | | |
| TWK1 | Hengchun | 2.15 | 202 | eP | Pn | 00 33 58.1 | +1.4 |
| | baz=189 | | | | | | |
| JKRS | Kuro-shima | 2.15 | 82 | P | Pn | 00 33 57.9 | +1.1 |
| JKRS | | | | eS | Sn | 00 34 24.2 | +1.6 |
| JIJ | Ishigaki jima | 2.29 | 79 | P | Pn | 00 33 58.8 | +0.1 |
| JIJ | | | | eS | Sn | 00 34 25.9 | -0.2 |
| JISG | Ishigakijimahi | 2.49 | 75 | P | Pn | 00 34 02.0 | +0.6 |
| JISG | | | | S | Sn | 00 34 30.6 | -0.3 |
| JTJ | Tarama | 2.85 | 75 | P | Pn | 00 34 07.2 | +0.8 |
| KNM | Kinmen | 3.00 | 280 | eP | Pn | 00 34 09.3 | +0.8 |
| | baz=280 | | | | | | |

*ISK 01 00:34:10.8, 39°.36N×25°.96E, h11$^{km}$, MD3.0*
*DDA 01 00:34:10.8, 39°.34N×26°.04E, h7$^{km}$, Md2.8*
*ATH 01 00:34:11.1, 39°.36N×26°.00E, h5$^{km}$±2$^{km}$, MD2.9/6*
*THE 01 00:34:11.5, 39°.35N×25°.98E, h1$^{km}$±1$^{km}$, ML2.1/5, Error ellipse: s-maj=1.6km s-min=0.5km az=197.0*
*ISCJB 01 00:34:11.1±0.5, 39°.35N±0°.02×25°.98E±0°.04, h6$^{km}$±4$^{km}$, Error ellipse: s-maj=5.2km s-min=3.2km az=167.5*
*CSEM 01 00:34:11.2±0.1, 39°.35N×25°.99E, h8$^{km}$, MD3.0, Error ellipse: s-maj=2.8km s-min=1.7km az=78.0*
**ISC 01 00:34:11.3±0.9, 39°.36N±0°.02×25°.99E±0°.02, h9$^{km}$±7$^{km}$, n54, σ0s.44/81, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIGR | SIGRI | 0.18 | 215 | ePG | Pg | 00 34 14.9 | -0.1 |
| SIGR | SIGRI | 0.18 | 215 | ePG | Pg | 00 34 14.9 | -0.1 |
| SIGR | | | | eSG | Sg | 00 34 17.5 | -0.1 |
| SIGR | SIGRI | 0.18 | 215 | P | Pg | 00 34 14.8 | -0.2 |
| SIGR | | | | S | Sg | 00 34 17.4 | -0.1 |
| SIGR | SIGRI | 0.18 | 215 | ePg | Pg | 00 34 14.9 | -0.1 |
| SIGR | | | | eSg | Sg | 00 34 17.5 | -0.1 |
| PRK | Paraskevi | 0.25 | 116 | ePG | Pg | 00 34 16.2 | -0.1 |
| PRK | | | | eSG | Sg | 00 34 19.9 | +0.2 |
| PRK | Paraskevi | 0.25 | 116 | P | Pg | 00 34 16.1 | -0.2 |
| PRK | | | | S | Sg | 00 34 19.8 | +0.1 |
| PRK | Paraskevi | 0.25 | 116 | ePg | Pg | 00 34 16.2 | -0.1 |
| PRK | | | | S | Sg | 00 34 19.8 | +0.1 |
| BOZC | Bozcaada | 0.49 | 6 | P | Pg | 00 34 20.7 | -0.1 |
| BOZC | | | | S | Sb | 00 34 28.2 | -1.1 |
| EZN | Ezine | 0.54 | 29 | ePG | Pg | 00 34 21.7 | 0.0 |
| EZN | Ezine | 0.54 | 29 | ePg | Pg | 00 34 21.7 | 0.0 |
| AYVA | Ayvalik | 0.55 | 95 | iP | Pg | 00 34 21.4 | -0.5 |
| AYVA | | | | iS | Sb | 00 34 32.2 | +1.2 |
| AYVA | Ayvalik | 0.55 | 95 | P | Pg | 00 34 21.4 | -0.5 |
| AYVA | | | | S | Sb | 00 34 32.2 | +1.2 |
| DKL | Dikili | 0.77 | 111 | ePG | Pb | 00 34 26.6 | -0.2 |
| DKL | Dikili | 0.77 | 111 | ePg | Pb | 00 34 26.6 | -0.2 |
| LIA | Limnos Island | 0.82 | 311 | ePB | Pg | 00 34 27.3 | +0.1 |
| LIA | | | | eSB | Sb | 00 34 39.1 | +0.2 |
| LIA | Limnos Island | 0.82 | 311 | P | Pg | 00 34 27.2 | +0.1 |
| LIA | | | | S | Sb | 00 34 39.1 | +0.2 |
| LIA | Limnos Island | 0.82 | 311 | P | Pg | 00 34 27.2 | +0.1 |
| LIA | | | | eSb | Sb | 00 34 39.1 | +0.2 |
| GADA | Gvkgeada | 0.84 | 355 | ePG | Pg | 00 34 27.3 | -0.1 |
| GADA | | | | eSG | Sb | 00 34 39.9 | +0.6 |
| GADA | Gvkgeada | 0.84 | 355 | ePg | Pg | 00 34 27.3 | -0.1 |
| GADA | | | | eSg | Sb | 00 34 39.9 | +0.6 |
| CHOS | Chios island | 0.97 | 177 | ePG | Pb | 00 34 30.3 | 0.0 |
| CHOS | Chios island | 0.97 | 177 | ePG | Pg | 00 34 29.3 | -0.6 |
| CHOS | | | | eSB | Sb | 00 34 43.6 | +0.3 |
| CHOS | Chios island | 0.97 | 177 | P | Pg | 00 34 29.8 | -0.1 |
| CHOS | | | | S | Sb | 00 34 43.5 | +0.3 |
| CHOS | Chios island | 0.97 | 177 | P | Pg | 00 34 29.8 | -0.1 |
| CHOS | Chios island | 0.97 | 177 | ePg | Pb | 00 34 30.3 | 0.0 |
| CHOS | | | | S | Sb | 00 34 43.5 | +0.3 |
| URLA | Izmir | 1.10 | 154 | iP | Pg | 00 34 31.2 | -1.3 |
| URLA | | | | iS | Sg | 00 34 46.8 | 0.0 |
| URLA | Izmir | 1.10 | 154 | P | Pg | 00 34 31.2 | -1.3 |
| URLA | | | | S | Sg | 00 34 46.8 | 0.0 |
| GELI | Tayfur-Gelibol | 1.11 | 20 | ePN | Pg | 00 34 32.2 | -0.4 |
| GELI | Tayfur-Gelibol | 1.11 | 20 | ePn | Pg | 00 34 32.2 | -0.4 |
| SMTH | Samothraki Isl | 1.17 | 343 | ePB | Pg | 00 34 33.3 | -0.4 |
| SMTH | | | | eSB | Sb | 00 34 49.3 | +0.5 |
| SMTH | Samothraki Isl | 1.17 | 343 | P | Pg | 00 34 33.3 | -0.4 |
| SMTH | | | | S | Sn | 00 34 49.8 | 0.0 |
| SMTH | Samothraki Isl | 1.17 | 343 | P | Pg | 00 34 33.3 | -0.4 |
| SMTH | | | | eSb | Sb | 00 34 49.3 | +0.5 |
| SMTH | | | | S | Sn | 00 34 49.8 | 0.0 |
| ERIK | Erikli-Kesan | 1.37 | 17 | ePN | Pn | 00 34 36.5 | -0.1 |
| ERIK | Erikli-Kesan | 1.37 | 17 | ePn | Pn | 00 34 36.5 | -0.1 |
| ENEZ | Enez | 1.38 | 5 | ePN | Pn | 00 34 36.6 | -0.1 |
| ENEZ | Enez | 1.38 | 5 | ePn | Pn | 00 34 36.6 | -0.1 |
| KRBG | Karabiga-Canak | 1.45 | 44 | ePN | Pn | 00 34 37.6 | 0.0 |
| KRBG | Karabiga-Canak | 1.45 | 44 | ePn | Pn | 00 34 37.6 | 0.0 |
| GONE | Gonen-Balikesi | 1.48 | 62 | ePN | Pn | 00 34 38.4 | +0.3 |
| GONE | Gonen-Balikesi | 1.48 | 62 | ePn | Pn | 00 34 38.4 | +0.3 |
| BALB | Balikesir | 1.49 | 78 | ePN | Pb | 00 34 38.9 | -0.3 |
| BALB | Balikesir | 1.49 | 78 | ePn | Pb | 00 34 38.9 | -0.3 |
| ALN | Alexandroupoli | 1.54 | 2 | ePG | Pb | 00 34 39.6 | -0.4 |
| ALN | | | | eSB | Sb | 00 35 00.1 | +0.6 |
| ALN | Alexandroupoli | 1.54 | 2 | P | Pn | 00 34 39.4 | +0.5 |
| ALN | | | | S | Sg | 00 35 00.4 | -0.4 |
| ALN | Alexandroupoli | 1.54 | 2 | P | Pn | 00 34 39.4 | +0.5 |
| ALN | | | | eSb | Sb | 00 35 00.1 | +0.6 |
| ALN | | | | S | Sg | 00 35 00.4 | -0.4 |
| RKY | Sarkoy-Tekirda | 1.61 | 34 | ePN | Pn | 00 34 40.0 | 0.0 |
| RKY | Sarkoy-Tekirda | 1.61 | 34 | ePn | Pn | 00 34 40.0 | 0.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **EDC** | **Edincik** | **1.75** | **55** | *e*PN | **Pn** | **00 34 42.4** | **+0.6** |
| **EDC** | **Edincik** | **1.75** | **55** | *e*Pn | **Pn** | **00 34 42.4** | **+0.6** |
| **MRMT** | **Marmara Adasi** | **1.76** | **44** | *e*PN | **Pn** | **00 34 42.4** | **+0.5** |
| **MRMT** | **Marmara Adasi** | **1.76** | **44** | *e*Pn | **Pn** | **00 34 42.4** | **+0.5** |
| **KCTX** | **Karacabey (Bur** | **2.04** | **63** | *e*PN | **Pn** | **00 34 46.2** | **+0.4** |
| **KCTX** | **Karacabey (Bur** | **2.04** | **63** | *e*Pn | **Pn** | **00 34 46.2** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.05** | **133** | *e*PN | **Pn** | **00 34 46.2** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.05** | **133** | *e*Pn | **Pn** | **00 34 46.2** | **+0.2** |

*ISCJB **01** 00:39:49.7±0.6, 37°.00N±0°.03×28°.90E±0°.04, h4km±7km, Error ellipse: s-maj=6.2km s-min=4.8km az=146.7*
*ISK **01** 00:39:49.1, 37°.02N×28°.90E, h6km, MD2.7*
*CSEM **01** 00:39:49.7±0.2, 37°.00N×28°.89E, h10km, MD2.7, Error ellipse: s-maj=4.0km s-min=3.5km az=18.0*
*DDA **01** 00:39:49.5, 37°.03N×28°.94E, h7km, Md2.9*
**ISC 01 00:39:49.3**±1.4**, 37°.02N**±0°.03×**28°.89E**±0°.02**, h3**km±12km**, n27, σ0ˢ.88**/40**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TURN** | **Turunc** | **0.27** | **238** | P | **Pn** | **00 39 59.8** | **-0.3** |
| TURN | | | | S | Sb | 00 40 09.8 | +8.1 |
| **DALY** | **Dalyan (Mu˜la** | **0.27** | **223** | *e*PG | **Pg** | **00 39 54.8** | **+0.3** |
| DALY | | | | *e*SG | **Sb** | **00 40 00.0** | **-1.8** |
| **DALY** | **Dalyan (Mu˜la** | **0.27** | **223** | *e*Pg | **Pg** | **00 39 54.8** | **+0.3** |
| DALY | | | | *e*Sg | **Sb** | **00 40 00.0** | **-1.8** |
| **FETY** | **Fethiye** | **0.41** | **157** | *e*PG | **Pg** | **00 39 57.4** | **+0.2** |
| **FETY** | **Fethiye** | **0.41** | **157** | *e*Pg | **Pg** | **00 39 57.4** | **+0.2** |
| **YER** | **Yerkesik** | **0.50** | **284** | *e*PG | **Pg** | **00 39 59.3** | **+0.5** |
| **YER** | **Yerkesik** | **0.50** | **284** | *e*Pg | **Pg** | **00 39 59.3** | **+0.5** |
| **GOLH** | **Golhisar** | **0.58** | **68** | *i* P | **Pg** | **00 39 59.9** | **-0.5** |
| GOLH | | | | *i* S | **Sb** | **00 40 10.4** | **-0.5** |
| **GOLH** | **Golhisar** | **0.58** | **68** | P | **Pg** | **00 39 59.9** | **-0.5** |
| GOLH | | | | S | **Sb** | **00 40 10.4** | **-0.5** |
| **DNZL** | **Cakiroluk** | **0.68** | **11** | *i* P | **Pg** | **00 40 02.5** | **+0.1** |
| DNZL | | | | *i* S | **Sb** | **00 40 14.3** | **+0.3** |
| **DNZL** | **Cakiroluk** | **0.68** | **11** | P | **Pg** | **00 40 02.5** | **+0.1** |
| DNZL | | | | S | **Sb** | **00 40 14.3** | **+0.3** |
| **ELL** | **Elmali** | **0.86** | **108** | *e*PG | **Pg** | **00 40 06.2** | **+0.5** |
| **ELL** | **Elmali** | **0.86** | **108** | *e*Pg | **Pg** | **00 40 06.3** | **+0.5** |
| **AKAS** | **Kas** | **0.97** | **143** | *i* P | **Pb** | **00 40 08.6** | **-0.2** |
| **AKAS** | **Kas** | **0.97** | **143** | P | **Pb** | **00 40 08.6** | **-0.2** |
| AKAS | | | | S | **Sn** | **00 40 25.9** | **+1.5** |
| **AYDN** | **Tasoluk** | **1.03** | **309** | *i* P | **Pg** | **00 40 09.6** | **+0.6** |
| AYDN | | | | *i* S | **Sn** | **00 40 24.7** | **-1.0** |
| **AYDN** | **Tasoluk** | **1.03** | **309** | P | **Pg** | **00 40 09.6** | **+0.6** |
| AYDN | | | | S | **Sn** | **00 40 24.7** | **-1.0** |
| **BDRM** | **Kayabasi** | **1.16** | **273** | *i* P | **Pb** | **00 40 11.5** | **-0.4** |
| BDRM | | | | *i* S | **Sn** | **00 40 31.1** | **+2.4** |
| **BDRM** | **Kayabasi** | **1.16** | **273** | P | **Pb** | **00 40 11.5** | **-0.4** |
| BDRM | | | | S | **Sn** | **00 40 31.1** | **+2.4** |
| **KORT** | **Korkueli** | **1.17** | **90** | *i* P | **Pg** | **00 40 12.5** | **+0.8** |
| **KORT** | **Korkueli** | **1.17** | **90** | P | **Pg** | **00 40 12.5** | **+0.8** |
| KORT | | | | S | Sn | 00 40 34.6 | +5.4 |
| **AYDB** | **Zeytinkoy-Aydi** | **1.22** | **320** | *e*PN | **Pn** | **00 40 13.2** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.22** | **320** | *e*Pn | **Pn** | **00 40 13.2** | **-0.2** |
| **KHAL** | **Karahalli** | **1.43** | **19** | *i* P | **Pn** | **00 40 16.5** | **+0.2** |
| KHAL | | | | *i* S | **Sn** | **00 40 35.4** | **-0.3** |
| **KHAL** | **Karahalli** | **1.43** | **19** | P | **Pn** | **00 40 16.5** | **+0.2** |
| KHAL | | | | S | **Sn** | **00 40 35.5** | **-0.3** |
| **KULA** | **Kula-Manisa** | **1.51** | **353** | *e*PN | **Pn** | **00 40 17.4** | **+0.1** |
| **KULA** | **Kula-Manisa** | **1.51** | **353** | *e*Pn | **Pn** | **00 40 17.4** | **+0.1** |

*TIR **01** 00:40:45.9±2.4, 42°.55N×20°.12E, h13km±15km, ML2.7*
*CSEM **01** 00:40:46.9±0.2, 42°.58N×20°.14E, h2km, ML2.2, Error ellipse: s-maj=4.1km s-min=2.7km az=150.0*
*PDG **01** 00:40:46.8±0.1, 42°.56N×20°.15E, h11km, MD2.3/1, ML2.2/11, Error ellipse: s-maj=0.2km s-min=0.3km az=0.0*
*SKO **01** 00:40:47.6, 42°.56N×20°.15E, h2km, M2.0, ML2.4*
*BEO **01** 00:40:48.2±0.4, 42°.58N×20°.12E, h0km, ML2.0/1*
**ISC 01 00:40:46.9**±1.0**, 42°.55N**±0°.02×**20°.14E**±0°.02**, h5**km±8km**, n54, σ0ˢ.69**/99**, 7C-12D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PVY** | **Plav** | **0.14** | **288** | ⇑*i*Pg | **Pg** | **00 40 49.8** | **-0.1** |
| PVY | | | | *e*Sg | **Sg** | **00 40 52.3** | **+0.5** |
| **PVY** | **Plav** | **0.14** | **288** | ⇑*i*Pg | **Pg** | **00 40 49.8** | **-0.1** |
| PVY | | | | *e*Sg | **Sg** | **00 40 52.3** | **+0.5** |
| **BEY** | **Berane** | **0.37** | **330** | ⇑*i*Pg | **Pg** | **00 40 53.7** | **-0.4** |
| BEY | | | | *e*Sg | **Sg** | **00 40 59.7** | **+0.7** |
| **IVA** | **Berane** | **0.37** | **330** | ⇑*i*Pg | **Pg** | **00 40 53.7** | **-0.4** |
| IVA | | | | *e*Sg | **Sg** | **00 40 59.7** | **+0.7** |
| **PDG** | **Podgorica** | **0.67** | **260** | *i* Pg | **Pg** | **00 41 00.1** | **+0.4** |
| PDG | | | | *e*Sg | **Sg** | **00 41 08.4** | **0.0** |
| **PDG** | **Podgorica** | **0.67** | **260** | *i* Pg | **Pg** | **00 41 00.1** | **+0.4** |
| PDG | | | | *e*Sg | **Sg** | **00 41 08.4** | **0.0** |
| **TTG** | **Podgorica** | **0.67** | **260** | ⇑*i*Pg | **Pg** | **00 40 59.2** | **-0.5** |
| TTG | | | | *e*Sg | **Sg** | **00 41 09.6** | **+1.2** |
| **SJES** | **Sjenica** | **0.72** | **350** | *i* Pg | **Pg** | **00 41 00.5** | **-0.3** |
| **SJES** | **Sjenica** | **0.72** | **350** | *i* Pg | **Pg** | **00 41 00.5** | **-0.3** |
| **DRME** | **Dracevica, Mon** | **0.80** | **243** | ⇑*i*Pg | **Pg** | **00 41 01.6** | **-0.6** |
| DRME | | | | *e*Sg | **Sb** | **00 41 14.6** | **+0.2** |
| **DRME** | **Dracevica, Mon** | **0.80** | **243** | ⇑*i*Pg | **Pg** | **00 41 01.6** | **-0.6** |
| DRME | | | | *e*Sg | **Sb** | **00 41 14.6** | **+0.2** |
| **NKY** | **Niksic** | **0.89** | **288** | ⇓*i*Pg | **Pg** | **00 41 03.4** | **-0.5** |
| NKY | | | | *e*Sg | **Sb** | **00 41 17.2** | **+0.1** |
| **NKY** | **Niksic** | **0.89** | **288** | ⇓*i*Pg | **Pg** | **00 41 03.4** | **-0.5** |
| NKY | | | | *e*Sg | **Sb** | **00 41 17.2** | **+0.1** |
| **ULC** | **Ulcinj** | **0.89** | **229** | *e*Pg | **Pg** | **00 41 03.5** | **-0.4** |
| ULC | | | | *e*Sg | **Sb** | **00 41 17.9** | **+0.9** |
| **ULC** | **Ulcinj** | **0.89** | **229** | *e*Pg | **Pg** | **00 41 03.5** | **-0.4** |
| ULC | | | | *e*Sg | **Sb** | **00 41 17.9** | **+0.9** |
| **PHP** | **Peshkopia** | **0.89** | **165** | *i* PG | **Pg** | **00 41 01.7** | **-2.3** |
| PHP | | | | *i* SG | **Sn** | **00 41 19.2** | **-0.4** |
| **PHP** | **Peshkopia** | **0.89** | **165** | *i* Pg | **Pg** | **00 41 01.7** | **-2.3** |
| | SNR=94 | | | | | | |
| PHP | | | | *i* Sg | **Sn** | **00 41 19.2** | **-0.4** |
| | SNR=94 | | | | | | |
| **NKME** | **Niksic** | **0.90** | **284** | ⇓*i*Pg | **Pg** | **00 41 03.7** | **-0.6** |
| NKME | | | | *e*Sg | **Sb** | **00 41 17.6** | **+0.1** |
| **NKME** | **Niksic** | **0.90** | **284** | ⇓*i*Pg | **Pg** | **00 41 03.7** | **-0.6** |
| NKME | | | | *e*Sg | **Sb** | **00 41 17.6** | **+0.1** |
| **PLE** | **Pljevlja** | **0.96** | **325** | ⇓*i*Pg | **Pg** | **00 41 04.3** | **-1.0** |
| PLE | | | | *e*Sg | **Sb** | **00 41 18.9** | **-0.2** |
| **PLE** | **Pljevlja** | **0.96** | **325** | ⇓*i*Pg | **Pg** | **00 41 04.3** | **-1.0** |
| PLE | | | | *e*Sg | **Sb** | **00 41 18.9** | **-0.2** |
| **BUM** | **Brajici-Budva** | **0.96** | **255** | ⇓*i*Pg | **Pg** | **00 41 04.8** | **-0.5** |
| BUM | | | | *e*Sg | **Sb** | **00 41 19.8** | **+0.7** |
| **BUM** | **Brajici-Budva** | **0.96** | **255** | ⇓*i*Pg | **Pg** | **00 41 04.8** | **-0.5** |
| BUM | | | | *e*Sg | **Sb** | **00 41 19.8** | **+0.7** |
| **SELS** | **Selova** | **0.98** | **47** | *i* Pg | **Pb** | **00 41 06.3** | **-0.2** |
| SELS | | | | *e*Sg | **Sb** | **00 41 19.7** | **0.0** |
| **IVAS** | **Ivanjica** | **1.03** | **0** | *i* Pg | **Pg** | **00 41 06.7** | **+0.1** |
| IVAS | | | | *e*Sg | **Sg** | **00 41 19.5** | **-0.4** |
| **IVAS** | **Ivanjica** | **1.03** | **0** | *i* Pg | **Pg** | **00 41 06.7** | **+0.1** |
| IVAS | | | | *e*Sg | **Sg** | **00 41 19.5** | **-0.4** |
| **UPM** | **Unac-Piva** | **1.12** | **306** | ⇓*i*Pg | **Pg** | **00 41 07.4** | **-1.0** |
| UPM | | | | *e*Sg | **Sn** | **00 41 25.1** | **-0.3** |
| **UPM** | **Unac-Piva** | **1.12** | **306** | ⇓*i*Pg | **Pg** | **00 41 07.4** | **-1.0** |
| **HCY** | **Herceg Novi** | **1.22** | **266** | ⇓*i*Pg | **Pg** | **00 41 09.2** | **-1.2** |
| HCY | | | | *e*Sg | **Sn** | **00 41 28.6** | **+0.9** |
| **HCY** | **Herceg Novi** | **1.22** | **266** | ⇓*i*Pg | **Pg** | **00 41 09.2** | **-1.2** |
| HCY | | | | *e*Sg | **Sn** | **00 41 28.6** | **+0.9** |
| **BRY** | **Bratogost** | **1.23** | **287** | *e*Pg | **Pg** | **00 41 09.3** | **-1.3** |
| BRY | | | | *e*Sg | **Sn** | **00 41 28.6** | **+0.5** |
| **BRY** | **Bratogost** | **1.23** | **287** | *e*Pg | **Pg** | **00 41 09.3** | **-1.3** |
| BRY | | | | *e*Sg | **Sn** | **00 41 28.6** | **+0.5** |
| **BARS** | **Barje** | **1.26** | **77** | *e*Pg | **Pg** | **00 41 10.9** | **-0.2** |
| BARS | | | | *e*Sg | **Sg** | **00 41 27.5** | **0.0** |
| **BARS** | **Barje** | **1.26** | **77** | *e*Pg | **Pg** | **00 41 10.9** | **-0.2** |
| BARS | | | | *e*Sg | **Sg** | **00 41 27.5** | **0.0** |
| **GRUS** | **Gruza** | **1.40** | **17** | *i* Pg | **Pb** | **00 41 14.0** | **+0.4** |
| GRUS | | | | *e*Sg | **Sn** | **00 41 33.0** | **+0.9** |
| **GRUS** | **Gruza** | **1.40** | **17** | *i* Pg | **Pb** | **00 41 14.0** | **+0.4** |
| GRUS | | | | *e*Sg | **Sn** | **00 41 33.0** | **+0.9** |
| **BBLS** | **Lazići** | **1.42** | **338** | *i* Pg | **Pn** | **00 41 12.8** | **-0.7** |
| BBLS | | | | *e*Sg | **Sn** | **00 41 32.5** | **-0.2** |
| **BBLS** | **Lazići** | **1.42** | **338** | *i* Pg | **Pn** | **00 41 12.8** | **-0.7** |
| BBLS | | | | *e*Sg | **Sn** | **00 41 32.5** | **-0.2** |
| **OHR** | **Ohrid** | **1.52** | **161** | *i* Pn | **Pg** | **00 41 16.2** | **+0.2** |
| OHR | | | | *i* Sn | **Sg** | **00 41 37.0** | **+1.3** |
| OHR | | | | *e*Lg | Lg | 00 41 38.9 | |
| | comp=N,33nm,0.5s | | | | | | |
| OHR | | | | *e*Lg | Lg | 00 41 43.6 | |
| | comp=E,56nm,0.9s | | | | | | |
| **OHR** | **Ohrid** | **1.52** | **161** | *i* Pn | **Pg** | **00 41 16.2** | **+0.2** |
| OHR | | | | *i* Sn | **Sg** | **00 41 37.0** | **+1.3** |
| OHR | | | | *e*Lg | Lg | 00 41 38.8 | |
| | comp=E,33nm,0.5s | | | | | | |
| **DIVS** | **Divibare** | **1.55** | **356** | *i* Pg | **Pn** | **00 41 15.4** | **+0.1** |
| DIVS | | | | *e*Sg | **Sn** | **00 41 35.9** | **0.0** |
| **DIVS** | **Divibare** | **1.55** | **356** | *i* Pg | **Pn** | **00 41 15.4** | **+0.1** |
| DIVS | | | | *e*Sg | **Sn** | **00 41 35.9** | **0.0** |
| **BOVS** | **Bovan** | **1.58** | **46** | *e*Pg | **Pn** | **00 41 16.1** | **+0.5** |
| BOVS | | | | *e*Sg | **Sb** | **00 41 36.9** | **+0.1** |
| **BOVS** | **Bovan** | **1.58** | **46** | *e*Pg | **Pn** | **00 41 16.1** | **+0.5** |
| BOVS | | | | *e*Sg | **Sb** | **00 41 36.9** | **+0.1** |
| **TRUS** | **Trudelj** | **1.68** | **6** | *e*Pg | **Pn** | **00 41 17.5** | **+0.4** |
| TRUS | | | | *e*Sg | **Sn** | **00 41 39.4** | **+0.4** |
| **TRUS** | **Trudelj** | **1.68** | **6** | *e*Pg | **Pn** | **00 41 17.5** | **+0.4** |
| TRUS | | | | *e*Sg | **Sn** | **00 41 39.4** | **+0.4** |
| **BOLS** | **Boljevac** | **1.84** | **45** | *e*Pg | **Pg** | **00 41 22.5** | **+0.3** |
| **BOLS** | **Boljevac** | **1.84** | **45** | *e*Pg | **Pg** | **00 41 22.5** | **+0.3** |
| **ZAPS** | **Zavoj** | **1.97** | **68** | *e*Pg | **Pb** | **00 41 22.5** | **-0.8** |
| ZAPS | | | | *e*Sn | **Sb** | **00 41 48.5** | **+0.4** |
| **ZAPS** | **Zavoj** | **1.97** | **68** | *e*Pg | **Pb** | **00 41 22.5** | **-0.8** |
| ZAPS | | | | *e*Sn | **Sb** | **00 41 48.5** | **+0.4** |
| **TEKS** | **Tekeris** | **2.05** | **348** | *e*Pn | **Pb** | **00 41 23.8** | **-0.8** |
| **TEKS** | **Tekeris** | **2.05** | **348** | *e*Pn | **Pb** | **00 41 23.8** | **-0.8** |
| **KUBS** | **Kucevo** | **2.17** | **30** | *e*Pg | **Pg** | **00 41 27.7** | **-0.8** |
| **KUBS** | **Kucevo** | **2.17** | **30** | *e*Pg | **Pg** | **00 41 27.7** | **-0.8** |

**MEX 01 01:19:59.5**±0.4**, 15°.08N**×**93°.42W, h61**km±9km**, MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.65** | **17** | *e*P | Pn | 01 20 11.9 | -1.3 |
| PCIG | | | | *i* S | Sn | 01 20 21.3 | -1.9 |
| **TGIG** | | **1.71** | **10** | *i* P | Pn | 01 20 25.1 | -2.1 |
| TGIG | | | | *i* S | Sn | 01 20 46.5 | -1.6 |
| **CCIG** | **Comitan** | **1.72** | **46** | *e*P | Pn | 01 20 26.1 | -1.2 |
| CCIG | | | | *i* S | Sn | 01 20 46.8 | -1.7 |
| **HUIG** | **Huatulco** | **2.68** | **285** | *i* P | Pn | 01 20 39.0 | -1.4 |
| HUIG | | | | *i* S | Sn | 01 21 09.8 | -1.9 |

*CSEM **01** 01:21:12.2, 42°.58N×20°.10E, h0km, ML1.5, After BEO*
**BEO 01 01:21:12.2**±0.4**, 42°.58N**×**20°.10E, h0**km**, ML1.5**/4**, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDG** | **Podgorica** | **0.64** | **257** | *e*Pg | Pg | 01 21 23.4 | -1.1 |
| PDG | | | | *e*Sg | Sg | 01 21 32.1 | -0.7 |
| **PDG** | **Podgorica** | **0.64** | **257** | *e*Pg | Pg | 01 21 23.4 | -1.1 |
| PDG | | | | *e*Sg | Sg | 01 21 32.1 | -0.7 |
| **SJES** | **Sjenica** | **0.69** | **352** | *i* Pg | Pg | 01 21 24.1 | -1.5 |
| **SELS** | **Selova** | **0.98** | **49** | *e*Pg | Pg | 01 21 29.3 | -1.9 |
| **IVAS** | **Ivanjica** | **1.00** | **2** | *e*Pg | Pg | 01 21 30.6 | -0.8 |
| IVAS | | | | *e*Sg | Sg | 01 21 43.0 | -1.5 |
| **IVAS** | **Ivanjica** | **1.00** | **2** | *e*Pg | Pg | 01 21 30.6 | -0.8 |
| IVAS | | | | *e*Sg | Sg | 01 21 43.0 | -1.5 |
| **BARS** | **Barje** | **1.29** | **79** | *e*Pg | Pg | 01 21 34.7 | -2.2 |
| BARS | | | | *e*Sg | Sg | 01 21 52.9 | -0.7 |
| **BARS** | **Barje** | **1.29** | **79** | *e*Pg | Pg | 01 21 34.7 | -2.2 |
| BARS | | | | *e*Sg | Sg | 01 21 52.9 | -0.7 |
| **BBLS** | **Lazići** | **1.38** | **339** | *e*Pg | Pg | 01 21 38.4 | -0.4 |
| **BBLS** | **Lazići** | **1.38** | **339** | *e*Pg | Pg | 01 21 38.4 | -0.4 |
| **GRUS** | **Gruza** | **1.38** | **19** | *e*Pg | Pg | 01 21 38.6 | -0.2 |
| **GRUS** | **Gruza** | **1.38** | **19** | *e*Pg | Pg | 01 21 38.6 | -0.2 |
| **DIVS** | **Divibare** | **1.52** | **357** | *e*Pg | Pn | 01 21 40.9 | +0.1 |
| **DIVS** | **Divibare** | **1.52** | **357** | *e*Pg | Pn | 01 21 40.9 | +0.1 |

*AUST **01** 01:24:22.9±0.2, 11°.06S×113°.64E, h0km, Error ellipse: s-maj=6.6km s-min=3.7km az=33.0*
*IDC **01** 01:24:23.5±0.3, 10°.92S×113°.82E, h0km, mb5.2/28, mb1 5.2/30, mb1mx5.2/32, mbtmp5.2/30, ML5.5/3, MS4.3/27, Ms1 4.3/27, ms1mx4.2/41, Error ellipse: s-maj=13.8km s-min=10.1km az=86.0*
*ISCJB **01** 01:24:25.2±0.6, 10°.96S±0°.02×113°.74E±0°.02, h22km±4km, mb5.4/118, MS4.7/98, Error ellipse: s-maj=3.8km s-min=3.0km az=23.4*
*DJA **01** 01:24:25.7±0.3, 11˚S±3˚×11˚4E±˚, h10km, M5.6/61, mb5.7/61, mB6.0/57, MLv5.9/31, Mw(mB)5.6/57, Mwp5.9/3*
*NEIC **01** 01:24:26.1±1.6, 10°.93S×113°.79E, h15km±9km, mb5.5/61, MS4.8/67, Error ellipse: s-maj=5.6km s-min=3.6km az=224.0*
*NEIC Felt [III] at Badung and [II] at Banyuwangi. Felt [III] at Denpasar, Bali. Also felt at Kuta, Tabanan and Ubud.*
*GCMT **01** 01:24:26.1±0.1, 11°.12S×113°.78E, h13km, MW5.3/89, Moment Tensor Solution. s68,c114; s89,c181; Duration: 1ˢ.0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.68±.02; $M_{\theta\theta}$1.02±.02; $M_{\phi\phi}$-0.33±.02; $M_{r\theta}$0.05±.03; $M_{\theta\phi}$0.16±.01; $M_{\phi r}$0.35±.05; Best double couple: $M_0$0.97200×$10^{17}$ NP1:$\phi_s$236.00000°, δ56.00000°, λ-130.00000°. NP2:$\phi_s$112.00000°, δ50.00000°, λ-47.00000°. Principal axes: T 1.0430, Plg3.0000°, Azm353.0000°; N -0.1450, Plg32.0000°, Azm261.0000°; P -0.9010, Plg58.0000°, Azm88.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI **01** 01:24:27.5, 10°.90S×113°.80E, h30km, mb5.3/71, mB5.3/51, Ms4.9/64, Ms7 4.6/64*
*MOS **01** 01:24:27.5±1.1, 10°.80S×113°.83E, h33km, mb5.6/76, MS4.5/21, Error ellipse: s-maj=8.8km s-min=5.1km az=115.3*
**ISC 01 01:24:28.8**±0.3**, 10°.89S**±0°.03×**113°.83E**±0°.03**, h35**km±1km**, h35**km**:pP-P, n900, σ1ˢ.43**/850**, mb5.5**/117**, MS4.6**/96**, 37C-25D, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAGI** | **Jajag, Banyuwa** | **2.43** | **8** | *e*Pn | **Pn** | **01 25 06.5** | **+0.5** |
| JAGI | | | | *e*Sn | **Sn** | **01 25 34.5** | **-0.1** |
| **IGBI** | **Denpasar** | **2.44** | **32** | P | **Pb** | **01 25 09.2** | **-2.8** |
| IGBI | | | | S | **Sb** | **01 25 41.3** | **-0.4** |
| **DNP** | **Denpasar** | **2.59** | **32** | P | **Pb** | **01 25 11.6** | **-3.0** |
| DNP | | | | S | **Sn** | **01 25 39.9** | **+1.4** |
| **ABJI** | **Asem Bagus** | **3.10** | **7** | P | Pn | 01 25 18.5 | +3.2 |
| **SRBI** | **Singaraja** | **3.11** | **26** | P | **Pn** | **01 25 17.4** | **+2.0** |
| **BLJI** | **Banyuglugur** | **3.14** | **356** | P | **Pn** | **01 25 17.1** | **+1.3** |
| **TWSI** | **Taliwang, Sumb** | **3.69** | **55** | P | **Pn** | **01 25 25.3** | **+1.9** |
| TWSI | | | | S | **Sn** | **01 26 06.1** | **+0.3** |
| **PCJI** | **Pacitan** | **3.74** | **316** | P | **Pn** | **01 25 22.0** | **-2.1** |
| **KMMI** | **Kalianget** | **3.82** | **2** | P | **Pn** | **01 25 27.7** | **+2.5** |
| **GRJI** | **Gresik** | **4.17** | **341** | P | **Pn** | **01 25 30.8** | **+0.8** |
| GRJI | | | | S | **Sn** | **01 26 18.3** | **+0.8** |
| **WOJI** | **Wonogiri, Jawa** | **4.17** | **316** | P | **Pn** | **01 25 28.6** | **-1.4** |
| WOJI | | | | S | **Sn** | **01 26 13.7** | **-3.9** |
| **NGJI** | **Ngawi** | **4.21** | **326** | P | **Pn** | **01 25 31.2** | **+0.7** |
| **UGM** | **Wanagama** | **4.40** | **312** | P | **Pn** | **01 25 31.0** | **-2.2** |
| | baz=4.4,SNR=104 | | | | | | |
| **UGM** | **Wanagama** | **4.40** | **312** | P | **Pn** | **01 25 33.5** | **+0.3** |
| UGM | | | | S | **Sn** | **01 26 19.8** | **-3.6** |
| **UGM** | **Wanagama** | **4.40** | **312** | *e*Pn | Pn | 01 25 29.5 | -3.7 |
| **TBJI** | **Tambak Boyo** | **4.50** | **334** | P | **Pn** | **01 25 35.8** | **+1.3** |
| **SMRI** | **Semarang** | **5.08** | **319** | P | **Pn** | **01 25 42.4** | **0.0** |
| | baz=5.1,SNR=23 | | | | | | |
| **SMRI** | **Semarang** | **5.08** | **319** | P | **Pn** | **01 25 42.9** | **+0.4** |
| | 1µm,0.7s,16µm7.1nm | | | | | | |
| **SMRI** | **Semarang** | **5.08** | **319** | *e*Pn | **Pn** | **01 25 42.2** | **-0.2** |
| **UWJI** | **Ujung Watu** | **5.28** | **327** | P | **Pn** | **01 25 46.2** | **+1.0** |
| | 538nm,1.1s,17µm2.8nm | | | | | | |
| **WBSI** | **Waikabubak, Su** | **5.62** | **78** | P | **Pn** | **01 25 48.6** | **-1.3** |
| | 757nm,0.9s,24µm9.0nm | | | | | | |
| WBSI | | | | S | **Sn** | **01 26 52.3** | **-1.0** |
| | 757nm,0.9s,24µm9.0nm | | | | | | |
| **CMJI** | **Cimerak** | **6.14** | **300** | P | **Pn** | **01 25 54.8** | **-2.3** |
| | 728nm,0.7s,14µm4.9nm | | | | | | |
| CMJI | | | | S | Sn | 01 26 55.3 | -11 |
| | 728nm,0.7s,14µm4.9nm | | | | | | |
| **WSI** | **Waingapu** | **6.48** | **80** | P | **Pn** | **01 26 04.0** | **+2.2** |
| | 2µm,0.5s,67µm23nm | | | | | | |
| WSI | | | | S | **Sn** | **01 27 12.9** | **-1.7** |
| | 2µm,0.5s,67µm23nm | | | | | | |
| **BASI** | **Baing, Sumba** | **6.67** | **85** | P | **Pn** | **01 26 06.5** | **+2.1** |
| | 641nm,0.9s,21µm8.2nm | | | | | | |
| **LEM** | **Lembang** | **7.34** | **303** | Pn | **Pn** | **01 26 13.2** | **-0.6** |
| | 28nm,0.3s,baz=136,slow=11,SNR=38 | | | | | | |
| LEM | | | | Sn | Sn | 01 27 29.0 | -7.0 |
| | 26nm,0.3s,baz=343,slow=19,SNR=1.9 | | | | | | |
| LEM | | | | LR | LR | 01 30 02.1 | |
| | comp=Z,3µm,18.7s,baz=126,slow=46 | | | | | | |
| **LEM** | **Lembang** | **7.34** | **303** | P | **Pn** | **01 26 13.2** | **-0.6** |
| LEM | | | | | | 01 27 29.0 | |
| LEM | | | | pmax | pmax | | |
| | comp=Z,29nm,0.3s | | | | | | |
| LEM | | | | smax | smax | | |
| | comp=N,26nm,0.3s | | | | | | |
| LEM | | | | MLR | MLR | | |
| | comp=Z,3µm,18.7s | | | | | | |
| **LEM** | **Lembang** | **7.34** | **303** | P | **Pn** | **01 26 13.1** | **-0.7** |
| | comp=Z,4µm,0.9s,comp=Z,53µmcomp=Z,108µmcomp=Z,20nm | | | | | | |
| **BBKI** | **Banjar Baru** | **7.45** | **8** | P | Pn | 01 26 18.3 | +3.2 |
| | comp=Z,465nm,1.3s,comp=Z,9µmcomp=Z,1.8nm | | | | | | |
| **CNJI** | **Cibinong** | **7.51** | **298** | P | **Pn** | **01 26 13.8** | **-2.1** |
| | comp=Z,571nm,1.2s,comp=Z,12µmcomp=Z,3.7nm | | | | | | |
| **KBKI** | **Kotabaru** | **7.89** | **17** | P | **Pn** | **01 26 23.8** | **+2.6** |
| | comp=Z,196nm,1.0s,comp=Z,9µm | | | | | | |
| **XMI** | **Christmas Isla** | **8.01** | **272** | P | Pn | 01 26 17.9 | -4.9 |
| | baz=7.8,SNR=8.2 | | | | | | |
| **EDFI** | **Ende, Flores** | **8.04** | **75** | P | **Pn** | **01 26 24.8** | **+1.6** |
| | comp=Z,465nm,0.5s,comp=Z,9µm | | | | | | |
| **XMIS** | **Christmas Isla** | **8.04** | **272** | P | Pn | 01 26 18.4 | -4.9 |
| | baz=7.9,SNR=5.1 | | | | | | |
| **XMIS** | **Christmas Isla** | **8.04** | **272** | *e*Pn | Pn | 01 26 18.3 | -4.9 |
| XMIS | | | | *e*Sn | Sn | 01 27 35.5 | -18 |
| **BSSI** | **Bau Bau, Buton** | **8.11** | **55** | P | **Pn** | **01 26 25.9** | **+1.8** |
| | comp=Z,610nm,1.2s,comp=Z,8µmcomp=Z,32µm | | | | | | |
| **SKJI** | **Sukabumi** | **8.15** | **298** | P | **Pn** | **01 26 23.5** | **-1.3** |
| | comp=Z,716nm,0.6s,comp=Z,11µm | | | | | | |
| **KAPI** | **Kappang** | **8.28** | **46** | Pn | **Pn** | **01 26 24.8** | **-1.6** |
| | comp=Z,25nm,0.3s,baz=223,slow=3.8,SNR=38 | | | | | | |
| KAPI | | | | Sn | **Sn** | **01 27 55.6** | **-3.2** |
| | comp=Z,23nm,0.3s,baz=67,slow=21,SNR=10 | | | | | | |
| **KAPI** | **Kappang** | **8.28** | **46** | Pn | **Pn** | **01 26 28.5** | **+2.1** |
| | comp=Z,893nm,1.5s,SNR=21 | | | | | | |
| **BKSI** | **Bulukumba** | **8.33** | **49** | P | **Pn** | **01 26 29.4** | **+2.2** |
| | comp=Z,365nm,0.6s,comp=Z,3µm | | | | | | |
| **PBKI** | **Pangkalan Bun** | **8.41** | **345** | P | **Pn** | **01 26 29.5** | **+1.2** |
| | comp=Z,443nm,1.1s,comp=Z,6µm | | | | | | |
| **TNG** | **Tangerang** | **8.51** | **303** | P | **Pn** | **01 26 28.9** | **-0.7** |
| | comp=Z,18µmcomp=Z,493nm,0.5s | | | | | | |
| TNG | | | | P | **Pn** | **01 26 28.0** | **-1.6** |
| | comp=Z,25µmcomp=Z,596nm,0.5s | | | | | | |
| **MMRI** | **Maumere** | **8.59** | **76** | P | **Pn** | **01 26 32.5** | **+1.8** |
| | comp=Z,1µm,1.1s,comp=Z,14µm | | | | | | |
| **MMRI** | **Maumere** | **8.59** | **76** | *e*Pn | **Pn** | **01 26 32.1** | **+1.4** |
| MMRI | | | | *e*Sn | **Sn** | **01 28 03.9** | **-2.5** |
| **SBJI** | **Serang** | **8.97** | **301** | P | **Pn** | **01 26 35.2** | **-0.7** |
| | comp=Z,358nm,1.5s,comp=Z,6µm | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.06** | **41** | P | Pn | 01 26 41.1 | +3.9 |
| | comp=Z,95nm,1.2s,comp=Z,1µmcomp=Z,41µm | | | | | | |
| **CGJI** | **Cibinong** | **9.09** | **297** | P | **Pn** | **01 26 35.4** | **-2.2** |
| | comp=Z,996nm,0.5s,comp=Z,18µm | | | | | | |
| **BATI** | **Baumata** | **9.70** | **87** | Pn | **Pn** | **01 26 43.9** | **-2.0** |
| | comp=Z,249nm,0.3s,baz=264,slow=2.4,SNR=59 | | | | | | |
| BATI | | | | Sn | Sn | 01 28 27.8 | -6.0 |
| | comp=Z,49nm,0.3s,baz=180,slow=20,SNR=4.7 | | | | | | |
| **BATI** | **Baumata** | **9.70** | **87** | P | **Pn** | **01 26 46.3** | **+0.4** |
| | comp=Z,480nm,0.6s,comp=Z,6µm | | | | | | |
| **TTSI** | **Tana Toraja** | **9.80** | **38** | P | Pn | 01 26 51.5 | +4.1 |
| | comp=Z,187nm,0.9s,comp=Z,2µm | | | | | | |
| **MTKI** | **Muara Teweh, K** | **9.94** | **6** | P | **Pn** | **01 26 52.4** | **+3.1** |
| | comp=Z,69µm,0.7s | | | | | | |
| **BKB** | **Balikpapan** | **10.04** | **18** | P | Pn | 01 26 55.5 | +4.8 |
| | comp=Z,188nm,1.0s,comp=Z,4µm | | | | | | |
| **TPI** | **Tanjungpandan** | **10.14** | **322** | P | **Pn** | **01 26 49.1** | **-2.9** |
| | comp=Z,57nm,1.5s,comp=Z,868nm | | | | | | |
| **SOEI** | **Soe** | **10.34** | **85** | P | **Pn** | **01 26 54.2** | **-0.6** |
| | baz=10,SNR=110 | | | | | | |
| **SOEI** | **Soe** | **10.34** | **85** | P | **Pn** | **01 26 55.8** | **+1.0** |
| | comp=Z,523nm,0.9s,comp=Z,5µm | | | | | | |
| **SOEI** | **Soe** | **10.34** | **85** | *e*Pn | **Pn** | **01 26 55.1** | **+0.3** |
| SOEI | | | | *e*Sn | Sn | 01 28 40.4 | -9.2 |
| **KASI** | **Kota Agung** | **10.66** | **299** | P | **Pn** | **01 26 58.0** | **-1.1** |
| | comp=Z,205nm,1.0s,comp=Z,3µm | | | | | | |
| **KLI** | **Kotabumi** | **10.71** | **303** | P | **Pn** | **01 26 59.3** | **-0.5** |
| | comp=Z,237nm,0.8s | | | | | | |
| **KDI** | **Kendari** | **11.11** | **52** | P | **Pn** | **01 27 08.4** | **+3.1** |
| | comp=Z,67nm,1.2s,comp=Z,1µm | | | | | | |
| **LWLI** | **Liwa** | **11.29** | **300** | P | **Pn** | **01 27 06.9** | **-1.0** |
| | comp=Z,165nm,0.7s,comp=Z,8µm | | | | | | |
| **MDSI** | **Maura Dua** | **11.48** | **303** | P | **Pn** | **01 27 08.2** | **-2.2** |
| | comp=Z,72nm,0.9s,comp=Z,2µm | | | | | | |
| **PPBI** | **Pangkal Pinang** | **11.55** | **318** | P | **Pn** | **01 27 10.2** | **-1.2** |
| | comp=Z,70nm,1.5s,comp=Z,38µm | | | | | | |
| **PCI** | **Palu** | **11.58** | **31** | P | Pn | 01 27 15.5 | +3.8 |
| | comp=Z,186nm,1.2s,comp=Z,2µm | | | | | | |
| **MBWA** | **Marble Bar** | **11.68** | **152** | Pn | Pn | 01 27 06.5 | -6.5 |
| | SNR=20 | | | | | | |
| **MBWA** | **Marble Bar** | **11.68** | **152** | *e*Pn | Pn | 01 27 06.3 | -6.7 |
| MBWA | | | | *e*Sn | Sn | 01 29 03.2 | -19 |
| **LHSI** | **Lahat** | **12.39** | **304** | P | **Pn** | **01 27 21.9** | **-0.9** |
| | comp=Z,241nm,1.2s,comp=Z,3µm | | | | | | |
| **MNAI** | **Manna** | **12.57** | **300** | P | Pn | 01 27 21.6 | -3.7 |
| | baz=12,SNR=24 | | | | | | |
| **MNAI** | **Manna** | **12.57** | **300** | P | **Pn** | **01 27 23.7** | **-1.6** |
| | comp=Z,710nm,1.0s,comp=Z,12µm | | | | | | |
| **MNAI** | **Manna** | **12.57** | **300** | *e*Pn | Pn | 01 27 21.6 | -3.7 |
| **APSI** | **Ampana** | **12.60** | **39** | P | Pn | 01 27 29.5 | +3.8 |
| | comp=Z,253nm,1.6s,comp=Z,3µm | | | | | | |
| **MPSI** | **Mapaga** | **12.69** | **29** | P | Pn | 01 27 30.9 | +4.1 |
| | comp=Z,68nm,1.0s,comp=Z,7µm | | | | | | |
| **KSM** | **Kuching** | **12.77** | **344** | *e*Pn | **Pn** | **01 27 28.3** | **+0.2** |
| **LUWI** | **Luwuk** | **13.22** | **43** | P | Pn | 01 27 37.6 | +3.5 |
| | baz=14,SNR=5.6 | | | | | | |
| **LUWI** | **Luwuk** | **13.22** | **43** | P | Pn | 01 27 38.7 | +4.6 |
| | comp=Z,180nm,0.7s,comp=Z,3µm | | | | | | |
| **LUWI** | **Luwuk** | **13.22** | **43** | *e*Pn | **Pn** | **01 27 35.2** | **+1.1** |
| **KSI** | **Kapahiang** | **13.26** | **302** | P | Pn | 01 27 31.4 | -3.3 |
| | comp=Z,912nm,0.6s,comp=Z,10µm | | | | | | |
| **SBUM** | **Sibu** | **13.35** | **353** | *e*Pn | **Pn** | **01 27 37.2** | **+1.2** |
| **FITZ** | **Fitzroy Crossi** | **13.49** | **123** | Pn | Pn | 01 27 33.2 | -4.6 |
| | comp=Z,8.6nm,0.3s,baz=314,slow=9.4,SNR=201 | | | | | | |
| FITZ | | | | Sn | Sn | 01 29 51.3 | -15 |
| | comp=Z,15nm,0.3s,baz=42,slow=22,SNR=21 | | | | | | |
| FITZ | | | | LR | LR | 01 32 32.0 | |
| | comp=Z,3µm,20.6s,baz=302,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **13.49** | **123** | *e*Pn | Pn | 01 27 33.3 | -4.6 |
| FITZ | | | | *e*Sn | Sn | 01 29 52.0 | -15 |
| **MRSI** | **Marisa** | **13.88** | **36** | P | **P** | **01 27 51.0** | **+0.1** |
| **GTOI** | **Gorontalo** | **14.65** | **39** | P | **P** | **01 27 59.4** | **-0.1** |
| | comp=Z,573nm,0.6s,comp=Z,6µm | | | | | | |
| **SANI** | **Sanana** | **14.93** | **55** | P | **Pn** | **01 28 00.0** | **+2.6** |
| | comp=Z,401nm,0.9s,comp=Z,4µm | | | | | | |
| **NLAI** | **Namlea** | **15.20** | **61** | P | **P** | **01 28 03.8** | **-1.8** |
| | comp=Z,165nm,1.0s,comp=Z,2µm | | | | | | |
| **KMSI** | **Cibinong** | **15.22** | **42** | P | **P** | **01 28 05.1** | **-0.8** |
| | comp=Z,1µm,1.0s,comp=Z,51µm | | | | | | |
| **KNRA** | **Kununurra** | **15.29** | **110** | P | **Pn** | **01 28 00.6** | **-1.6** |
| | baz=15,SNR=9.4 | | | | | | |
| **AAI** | **Ambon** | **15.94** | **64** | P | **P** | **01 28 12.4** | **-1.5** |
| | comp=Z,246nm,1.3s,comp=Z,3µm | | | | | | |
| **MYKOM** | **Kota Tinggi** | **16.04** | **321** | *e*Pn | Pn | 01 28 06.8 | -5.0 |
| **MSAI** | **Masohi** | **16.75** | **65** | P | **P** | **01 28 22.1** | **-0.7** |
| | comp=Z,68nm,0.7s | | | | | | |
| **PPI** | **Padang Panjang** | **16.90** | **307** | P | **Pn** | **01 28 19.6** | **-3.2** |
| | baz=17,SNR=4.8 | | | | | | |
| **BKNI** | **Bangkinang** | **16.91** | **310** | P | **Pn** | **01 28 20.6** | **-2.3** |
| | baz=17,SNR=3.4 | | | | | | |
| **BKNI** | **Bangkinang** | **16.91** | **310** | *e*Pn | **Pn** | **01 28 19.9** | **-2.9** |
| | comp=Z,337nm,1.0s | | | | | | |
| **LBMI** | **Labuha** | **16.98** | **54** | P | **P** | **01 28 26.6** | **+1.2** |
| **KKM** | **Kota Kinabalu** | **16.99** | **8** | *e*Pn | **Pn** | **01 28 22.9** | **-1.1** |
| | comp=Z,320nm,1.9s | | | | | | |
| KKM | | | | *e*Sn | **Sn** | **01 31 27.0** | **-5.0** |
| **MTN** | **Manton Dam** | **17.05** | **98** | P | **Pn** | **01 28 23.6** | **-1.0** |
| | baz=17,SNR=43 | | | | | | |
| **MTN** | **Manton Dam** | **17.05** | **98** | *e*Pn | **Pn** | **01 28 23.8** | **-0.8** |
| | comp=Z,174nm,1.1s | | | | | | |
| **SAUI** | **Saumlaki** | **17.48** | **82** | *e*Pn | **P** | **01 28 32.7** | **+1.8** |
| | comp=Z,345nm,0.9s | | | | | | |
| **TNTI** | **Ternate** | **17.76** | **50** | *e*Pn | **Pn** | **01 28 32.0** | **-1.5** |
| **KDU** | **Kakadu** | **18.34** | **97** | P | **P** | **01 28 39.5** | **-0.9** |
| | baz=18,SNR=7.6 | | | | | | |
| **WRKA** | **Warakurna** | **19.65** | **138** | P | **P** | **01 28 53.7** | **-1.1** |
| | baz=20,SNR=39 | | | | | | |
| **BLDU** | **Ballidu** | **19.81** | **173** | P | **P** | **01 28 53.4** | **-3.0** |
| | baz=20,SNR=13 | | | | | | |
| **IPM** | **Ipoh** | **19.89** | **320** | *e*P | **P** | **01 28 57.8** | **+0.4** |
| | comp=Z,453nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **19.92** | **68** | *e*P | **P** | **01 28 56.0** | **-1.7** |
| | comp=Z,276nm,0.8s | | | | | | |
| **SWI** | **Sorong** | **19.98** | **61** | P | **Pn** | **01 28 59.7** | **-0.5** |
| | baz=20,SNR=4.5 | | | | | | |
| **SIJI** | **Sorong** | **19.98** | **61** | P | **P** | **01 28 57.2** | **-1.2** |
| | comp=Z,438nm,0.9s,baz=270,slow=5.9,SNR=63 | | | | | | |

SIJI S S 01 32 33.3 -8.2
comp=Z,3.6nm,0.4s,baz=287,slow=19,SNR=5.2
SIJI LR LR 01 38 54.9
comp=Z,834nm,18.1s,baz=217,slow=44
**PSI Prapat 20.12 312** P **P** **01 28 55.6 -4.5**
comp=Z,29nm,0.9s,baz=161,slow=9.9,SNR=26
PSI S S 01 32 31.1 -13
comp=Z,1.7nm,0.4s,baz=270,slow=20,SNR=1.9
PSI LR LR 01 38 42.5
comp=Z,3μm,18.5s,baz=134,slow=43
**PSI Prapat 20.12 312** P **P** **01 28 55.6 -4.5**
PSI S S 01 32 31.2 -13
PSI pmax pmax
comp=Z,29nm,0.9s
PSI smax smax
comp=N,2.0nm,0.4s
PSI MLR MLR
comp=Z,3μm,18.5s
**PSI Prapat 20.12 312** *e*P P 01 28 55.2 -4.9
comp=Z,67nm,1.2s
PSI S S 01 32 31.1 -13
**GSI Gunungsitoli 20.20 306** *e*P **P** **01 28 56.1 -4.7**
comp=Z,108nm,0.6s
**KULM Kulim 20.75 320** *e*P **P** **01 29 05.7 -1.0**
comp=Z,169nm,0.6s
KULM LR LR
comp=Z,2μm,19.0s
**KMBL Kambalda 21.70 161** P **P** **01 29 15.5 -1.3**
baz=22,SNR=32
**WRA Warramunga Arr 21.70 117** P **P** **01 29 16.7 -0.3**
comp=Z,59nm,0.6s,baz=295,slow=11,SNR=97
WRA S S 01 33 04.5 -11
comp=Z,31nm,0.9s,baz=283,slow=23,SNR=6.7
WRA LR LR 01 37 25.1
comp=Z,2μm,20.4s,baz=250,slow=36
**WRA Warramunga Arr 21.70 117** P **P** **01 29 16.7 -0.3**
WRA S S 01 33 04.5 -11
WRA pmax pmax
comp=Z,59nm,0.6s
WRA smax smax
comp=N,31nm,0.9s
WRA MLR MLR
comp=Z,2μm,20.4s
**WRAB Tennant Creek 21.71 117** *d i*P **P** **01 29 16.7 -0.4**
WRAB pmax pmax
comp=Z,435nm,1.7s
**WRAB Tennant Creek 21.71 117** P **P** **01 29 17.0 -0.1**
comp=Z,638nm,0.9s,SNR=70
**WRAB Tennant Creek 21.71 117** *e*P **P** **01 29 16.8 -0.3**
comp=Z,140nm,0.9s
WRAB *e*S S 01 33 07.0 -8.7
**NWAO Narrogin (SRO) 22.15 172** P **P** **01 29 20.3 -1.4**
comp=Z,54nm,1.0s,baz=142,slow=0.0,SNR=17
NWAO S S 01 33 10.2 -14
comp=Z,33nm,0.5s,baz=359,slow=0.0,SNR=3.4
NWAO LR LR 01 38 34.6
comp=Z,4.7nm,19.0s,baz=246,slow=38
**NWAO Narrogin (SRO) 22.15 172** P **P** **01 29 20.0 -1.6**
baz=22,SNR=14
**NWAO Narrogin (SRO) 22.15 172** P **P** **01 29 23.8 +2.1**
SNR=9.7
**NWAO Narrogin (SRO) 22.15 172** *e*P **P** **01 29 20.4 -1.3**
comp=Z,191nm,1.4s
NWAO S S 01 33 10.2 -14
NWAO LR LR
comp=Z,2μm,21.0s
**ASAR Alice Springs 22.96 126** P **P** **01 29 29.1 -1.2**
comp=Z,26nm,0.7s,baz=303,slow=8.8,SNR=155
ASAR PcP **PcP** **01 33 20.4 +0.6**
comp=Z,10nm,0.9s,baz=283,slow=1.6,SNR=5.7
ASAR S **S** **01 33 33.8 -4.6**
comp=Z,22nm,1.2s,baz=297,slow=21,SNR=3.8
ASAR LR LR 01 38 19.9
comp=Z,1μm,21.0s,baz=294,slow=36
**ASAR Alice Springs 22.96 126** P **P** **01 29 29.1 -1.2**
ASAR 01 33 20.5
ASAR S **S** **01 33 33.8 -4.6**
ASAR pmax pmax
comp=Z,26nm,0.7s
ASAR pmax pmax
comp=Z,10.0nm,0.9s
ASAR smax smax
comp=N,22nm,1.2s
ASAR MLR MLR
comp=Z,1μm,21.0s
**AS01 Alice Springs 23.00 126** *e*P **P** **01 29 29.6 -1.1**
**DLV T Lat 23.30 347** *e*P **P** **01 29 34.8 +0.8**
comp=Z,234nm,1.1s
**TRTT Trang 23.32 322** P **P** **01 29 33.6 -0.4**
comp=Z,186nm,1.1s,comp=Z,2μm
**FORT Forrest 23.79 148** P **P** **01 29 38.0 -0.4**
baz=24,SNR=49
**FORT Forrest 23.79 148** *e*P **P** **01 29 37.9 -0.5**
comp=Z,371nm,0.9s
FORT *e*S **S** **01 33 52.2 +0.4**
**RCP Roxas 24.00 22**⇑ *e*P **P** **01 29 43.0 +2.5**
**PKDT Phuket 24.21 320** P **P** **01 29 42.5 +0.1**
comp=Z,252nm,1.4s,comp=Z,4μm
**QIS Mount Isa 26.57 114** P **P** **01 30 04.4 +0.5**
baz=27,SNR=23
**PATY Pattaya 26.93 331** P **P** **01 30 10.4 +3.4**
comp=Z,57nm,0.9s,comp=Z,3μm
**UBPT Khong Chiam 27.29 342** P **P** **01 30 12.2 +2.0**
comp=Z,56nm,1.1s,comp=Z,1μm
**JAY Jayapura 27.94 75** P **P** **01 30 16.7 +0.5**
baz=28,SNR=4.4
**COEN Coen 28.81 99** P **P** **01 30 25.3 +1.4**
baz=29,SNR=8.5
**COEN Coen 28.81 99** *e*P **P** **01 30 25.4 +1.4**
comp=Z,72nm,1.2s
**BBOO Buckleboo 29.90 140** P **P** **01 30 32.7 -0.7**
baz=30,SNR=14
**BBOO Buckleboo 29.90 140** *e*P **P** **01 30 33.0 -0.4**
**QIZ Qiongzhong 29.99 352** P **P** **01 30 37.1 +2.8**
QIZ S **S** **01 35 32.5 +2.5**
QIZ LN
comp=Z,630nm,17.6s
QIZ LZ
comp=Z,670nm,19.4s
**QIZ Qiongzhong 29.99 352** *e*P **P** **01 30 35.0 +0.8**
comp=Z,80nm,1.0s
QIZ LR LR
comp=Z,625nm,19.0s
**PBKT Sadao Pong 30.10 335** P **P** **01 30 36.7 +1.4**
comp=Z,74nm,1.1s,comp=Z,1μm
**UMPA Umpang Tak 30.73 331** P **P** **01 30 40.6 -0.2**
comp=Z,23nm,0.7s,comp=Z,802nm
**LOEI Loei 30.83 336** P **P** **01 30 41.4 -0.3**
comp=Z,28nm,1.3s,comp=Z,505nm
**UTTA Uttaradit 31.33 335** P **P** **01 30 48.1 +2.0**
comp=Z,31nm,1.1s,comp=Z,340nm
**HTT Hallett 32.14 138** P **P** **01 30 51.9 -1.3**
baz=32,SNR=7.9
**CTAO Charters Tower 32.51 110** *e*P **P** **01 30 57.3 +0.7**
CTAO pmax pmax
comp=Z,53nm,1.1s
**CTAO Charters Tower 32.51 110** *e*P **P** **01 30 57.2 +0.7**
comp=Z,53nm,1.1s
**CM01 Chiang Mai Arr 32.61 333** *e*P **P** **01 30 58.1 +0.7**
**CMAR Chiang Mai Arr 32.65 333** P **P** **01 30 58.3 +0.5**
comp=Z,65nm,0.9s,baz=167,slow=7.6,SNR=103
CMAR PcP **PcP** **01 33 44.9 +1.5**
comp=Z,11nm,1.0s,baz=194,slow=3.0,SNR=5.0
CMAR S **S** **01 36 09.4 -2.3**
comp=Z,1.0nm,0.3s,baz=156,slow=9.8,SNR=3.7
CMAR LR LR 01 44 60.0
comp=Z,739nm,20.0s,baz=160,slow=38
**CMAR Chiang Mai Arr 32.65 333** *ce*P **P** **01 30 59.0 +1.3**
CMAR pmax pmax
comp=Z,65nm,0.9s
**PMG Port Moresby 32.84 90** P **P** **01 31 01.0 +1.5**
PMG pmax pmax
comp=Z,220nm,1.2s
**PMG Port Moresby 32.84 90** *e*P **P** **01 30 59.2 -0.3**
comp=Z,50nm,0.9s
**CHTO Chiang Mai 32.97 333** P **P** **01 31 01.8 +1.3**
comp=Z,245nm,1.3s,comp=Z,3μm
**CHTO Chiang Mai 32.97 333** *e*P **P** **01 31 01.5 +1.0**
CHTO *e* 01 33 45.7
CHTO pmax pmax
comp=Z,66nm,1.2s
**CHTO Chiang Mai 32.97 333** P **P** **01 31 01.6 +1.0**
SNR=22
**CHTO Chiang Mai 32.97 333** *e*P **P** **01 31 01.5 +1.0**
comp=Z,66nm,1.2s
CHTO *e*PcP **PcP** **01 33 45.7 +1.5**
**SLVN Son La 33.48 343** *e*P **P** **01 31 06.7 +1.8**
comp=Z,67nm,1.2s
**CMAI Chiengmai2 33.91 335** P **P** **01 31 10.7 +1.8**
comp=Z,42nm,1.2s,comp=Z,536nm
**SSLB Suanglung 35.16 11** *e*P **P** **01 31 18.8 -0.7**
comp=Z,47nm,1.2s
**ARPS Mount Arapiles 36.08 140** P **P** **01 31 28.0 +0.7**
baz=36,SNR=9.3
**YHNB Yeheng 36.10 12** PFAKE 01 31 40.0 +12
YHNB LR LR
comp=Z,910nm,19.0s
**KMI Kunming 37.39 343** P P 01 31 42.6 +3.8
KMI pP pP 01 31 52.5 +3.6
KMI sP sP 01 31 56.6 +3.5
KMI PP **PnPn** **01 33 11.5 +6.1**
KMI S **S** **01 37 29.7 +4.8**
KMI ScP **ScP** **01 37 43.4 +1.3**
KMI sS sS 01 37 46.6 +4.9
KMI PMZ
comp=Z,80nm,1.0s
KMI PMZ
comp=Z,320nm,4.8s
KMI LN
comp=Z,860nm,17.0s
KMI LE
comp=Z,1μm,18.0s
KMI LZ
comp=Z,940nm,15.6s
**PALK Pallekele 37.59 297** *e*P **P** **01 31 40.6 +0.2**
PALK pmax pmax
comp=Z,25nm,0.9s
**PALK Pallekele 37.59 297** *e*P **P** **01 31 40.5 +0.2**
comp=Z,25nm,0.9s
**GYA Guiyang 37.77 349**⇑ *i*P **P** **01 31 42.8 +0.9**
GYA pP **pP** **01 31 55.0 +3.0**
GYA PP **PnPn** **01 33 16.1 +6.2**
GYA PcP **PcP** **01 34 00.8 +2.5**
GYA S **S** **01 37 30.3 -0.2**
GYA ScP **ScP** **01 37 44.0 +0.6**
GYA sS sS 01 37 52.6 +5.4
GYA SS **SnSn** **01 40 12.5 -0.1**
GYA PMZ
comp=Z,50nm,1.0s
GYA PMZ
comp=Z,410nm,4.9s
GYA LN
comp=Z,420nm,20.4s
GYA LE
comp=Z,400nm,18.5s
GYA LZ
comp=Z,660nm,17.5s
**YNG Young 39.20 132** P **P** **01 31 53.7 -0.1**
baz=39,SNR=9.9
**GUMO Guam 39.24 52** LR LR 01 49 02.8
comp=Z,124nm,21.1s,baz=230,slow=38
**GUMO Guam 39.24 52** *e*P **P** **01 31 53.7 -0.6**
GUMO pmax pmax
comp=Z,459nm,1.3s
**GUMO Guam 39.24 52** *e*P **P** **01 31 53.7 -0.6**
comp=Z,459nm,1.3s
**ARMA Armidale 40.09 125** P **P** **01 32 01.7 +0.3**
baz=40,SNR=7.5
**ARMA Armidale 40.09 125** *e*P **P** **01 32 02.5 +1.2**
comp=Z,20nm,0.8s
**CAN Canberra 40.13 133** *e*P **P** **01 32 02.1 +0.6**
CAN pmax pmax
comp=Z,21nm,0.9s
CAN MLR MLR
comp=Z,2μm,20.0s
**CAN Canberra 40.13 133** *e*P **P** **01 32 02.1 +0.6**
comp=Z,21nm,0.9s
CAN LR LR
comp=Z,2μm,20.0s
**H08S2 Diego Garcia H 40.90 271** T T 02 15 44.7
baz=98,slow=75
**H08S3 Diego Garcia H 40.91 271** T T 02 15 44.2
baz=98
**H08S1 Diego Carcia H 40.92 271** T T 02 15 45.9
baz=98,slow=75
**ENH Enshi 41.14 354** *e*P **P** **01 32 09.8 0.0**
comp=Z,34nm,0.8s
**WHN Wuhan 41.20 1** P **P** **01 32 11.6 +1.4**
WHN S **S** **01 38 17.0 -4.5**
WHN PMZ
comp=Z,140nm,0.8s
WHN LN
comp=Z,3μm,24.0s
WHN LE
comp=Z,2μm,24.4s
WHN LZ
comp=Z,1μm,19.8s
**CHLP Challavanipeta 41.42 315** *e*P **P** **01 32 12.4 +0.1**
**SKHT Srikalahasti 41.77 305** *e*P **P** **01 32 14.7 -0.4**
**SSE Sheshan 42.34 9**⇑ P **P** **01 32 20.8 +1.3**
SSE sP **sP** **01 32 34.0 +0.1**
SSE S **S** **01 38 40.1 +1.7**
SSE sS **sS** **01 38 55.5 +0.2**
SSE PMZ
comp=Z,39nm,0.8s
SSE PMZ
comp=Z,71nm,3.6s
SSE LZ
comp=Z,370nm,23.6s
**PVM Polavaram 42.36 311** *e*P **P** **01 32 19.9 -0.1**
**CD2 Chengdu 42.67 347**⇓ *e*P **P** **01 32 23.8 +1.5**
CD2 pP **pP** **01 32 33.9 +1.3**
CD2 sP **sP** **01 32 38.4 +1.7**
CD2 S **S** **01 38 47.1 +3.7**
CD2 sS sS 01 39 04.5 +4.1
CD2 PMZ
comp=Z,50nm,0.6s
CD2 PMZ
comp=Z,190nm,5.2s
CD2 LN
comp=Z,880nm,12.7s
CD2 LE
comp=Z,2μm,15.5s
CD2 LZ
comp=Z,840nm,13.9s
**ADKI Addanki 42.77 308** *e*P **P** **01 32 23.7 +0.5**
**NJ2 Nanjing 42.97 6** *e*P **P** **01 32 25.2 +0.6**
NJ2 pP **pP** **01 32 34.1 -0.8**
NJ2 sP **sP** **01 32 39.2 +0.1**
NJ2 S **S** **01 38 50.2 +2.6**
NJ2 sS **sS** **01 39 04.7 +0.1**
NJ2 PMZ
comp=Z,110nm,1.0s
NJ2 PMZ
comp=Z,580nm,6.8s
NJ2 LN
comp=Z,930nm,28.4s
NJ2 LE
comp=Z,1μm,26.7s
NJ2 LZ
comp=Z,5μm,25.0s
**TAU Tasmania Unive 43.18 144** PFAKE 01 32 40.0 +14
TAU LR LR
comp=Z,732nm,19.0s
**NJS Nagarjunasagar 43.70 308** *e*P **P** **01 32 30.0 -0.8**
**URV Uravakonda 44.41 305** *e*P **P** **01 32 37.6 +1.1**
**HYBB Hyderabad (bro 44.79 309** *e*P **P** **01 32 39.2 -0.4**
HYBB *e*S **S** **01 39 17.7 +3.0**
**XAN Xi'an 44.92 354** P **P** **01 32 40.3 -0.1**
XAN sP **sP** **01 32 54.0 -0.8**
XAN PP **PP** **01 34 25.3 -0.6**
XAN PcS **PcS** **01 38 14.9 -0.3**
XAN S **S** **01 39 12.7 -3.5**
XAN SS ScS 01 42 25.8 -9.4
XAN ScS **SS** **01 42 32.9 -5.9**
XAN PMZ
comp=Z,43nm,1.2s
XAN PMZ
comp=Z,240nm,9.0s
XAN LN
comp=Z,280nm,22.1s
XAN LE
comp=Z,450nm,17.3s
XAN LZ
comp=Z,680nm,15.6s
**RPR Rampur 45.09 311** *e*P **P** **01 32 41.6 -0.3**
**HNR Honiara 45.39 93** PFAKE 01 33 00.0 +16
HNR LR LR
comp=Z,506nm,19.0s
**ODAN Odare 45.47 326** *e*P **P** **01 32 45.0 0.0**
comp=Z,174nm,0.8s
**TAPN Taplejung 45.68 327** *e*P **P** **01 32 47.1 +0.3**
comp=Z,110nm,0.6s
**LSA Lhasa 45.90 332** P **P** **01 32 49.5 +0.9**
**LSA Lhasa 45.90 332** *e*P **P** **01 32 49.7 +1.1**
LSA pmax pmax
comp=Z,48nm,0.6s
LSA MLR MLR
comp=Z,830nm,20.0s
**LSA Lhasa 45.90 332** *e*P **P** **01 32 49.7 +1.1**
comp=Z,48nm,0.6s
LSA LR LR
comp=Z,830nm,20.0s
**RAMN Ramite 45.97 325** *e*P **P** **01 32 49.1 0.0**
comp=Z,180nm,1.2s
**JNU Nakatsue 46.69 20** *e*P **P** **01 32 53.3 -1.0**
comp=Z,56nm,1.1s
**CBIJ Chichi jima 46.73 36** *e*P **P** **01 32 54.2 -0.4**
comp=Z,33nm,0.6s
**TIA Tai'an 46.95 4**⇓ P **P** **01 32 55.7 -0.6**
TIA pP **pP** **01 33 09.5 +2.9**
TIA S **S** **01 39 43.4 -1.8**
TIA sS **sS** **01 40 03.2 +0.9**
TIA PMZ
comp=Z,20nm,0.9s
TIA PMZ
comp=Z,250nm,3.5s
TIA LN
comp=Z,540nm,21.4s
TIA LE
comp=Z,340nm,20.2s
TIA LZ
comp=Z,520nm,16.1s
**GUN Gumba 47.12 326** *e*P **P** **01 32 58.2 0.0**
comp=Z,357nm,1.0s
**PKI Pulchoki 47.12 325** *e*P **P** **01 32 57.6 -0.6**
comp=Z,48nm,0.8s
**DMN Daman 47.33 325** *e*P **P** **01 32 59.4 -0.3**
comp=Z,108nm,0.6s
**KKN Kakani 47.36 325** *e*P **P** **01 32 59.6 -0.3**
comp=Z,101nm,1.0s
**LZH Lanzhou 47.67 349** *e*P **P** **01 33 02.3 +0.3**
LZH pP **pP** **01 33 12.8 +0.4**
LZH sP **sP** **01 33 17.0 +0.5**
LZH PP **PP** **01 34 53.4 -0.7**
LZH S **S** **01 39 55.5 -0.2**
LZH sS **sS** **01 40 13.2 +0.4**
LZH SS **SS** **01 43 19.5 -5.0**
LZH PMZ
comp=Z,82nm,1.4s
LZH PMZ
comp=Z,410nm,7.9s
LZH LN
comp=Z,710nm,15.1s
LZH LE
comp=Z,670nm,16.0s
LZH LZ
comp=Z,800nm,18.0s
**GKN Gorkha 47.89 324** *e*P **P** **01 33 03.6 -0.3**
comp=Z,58nm,0.4s
**KOLN Koldanda 48.32 323** *e*P **P** **01 33 06.9 -0.4**
comp=Z,101nm,0.5s
**DANN Dangsing 48.66 324** *e*P **P** **01 33 09.6 -0.4**
comp=Z,16nm,0.6s
**TJN Taejon 48.72 15**⇓ *e*P **P** **01 33 11.7 +1.8**
**KSBON Boeun 48.94 15** P **P** **01 33 12.3 +0.6**
SNR=6.5
**POO Poona 49.09 306**⇑ *i*P P 01 33 10.0 -3.2
**KSCHJ Chungju 49.34 15** P **P** **01 33 14.8 +0.1**
SNR=8.5
**INCN Inchon 49.60 13** PFAKE 01 33 30.0 +13
INCN LR LR
comp=Z,431nm,22.0s
**KSAR Wonju Array Be 49.86 15** P **P** **01 33 19.1 +0.5**
**KSAR Wonju Array Be 49.86 15** P **P** **01 33 19.1 +0.5**
**KSRS Korea Array 49.88 15** P **P** **01 33 19.1 +0.3**
comp=Z,42nm,1.0s,baz=195,slow=7.5,SNR=80
KSRS LR LR 01 57 41.3
comp=Z,141nm,20.1s,baz=216,slow=40
**KSRS Korea Array 49.88 15** P **P** **01 33 19.1 +0.3**
KSRS pmax pmax
comp=Z,42nm,1.0s
KSRS MLR MLR
comp=Z,141nm,20.1s
**KS01 Wonju Array Si 49.89 15** *e*P **P** **01 33 18.4 -0.5**
**KSMUS Musan 50.01 13** P **P** **01 33 20.6 +0.8**
SNR=8.3
**DL2 Dalian 50.07 8** P P 01 33 24.0 +3.8
DL2 S S 01 40 39.5 +10
DL2 PMZ
comp=Z,45nm,1.1s
DL2 PMZ
comp=Z,300nm,4.4s
**YNCB YEONCHEON 50.20 13** P **P** **01 33 21.8 +0.6**
SNR=10
**KSDGY Daegwallycong 50.29 15** P **P** **01 33 22.6 +0.6**
SNR=6.7
**KSCWO Cheorwon 50.38 14** P **P** **01 33 23.0 +0.4**
SNR=6.2
**KSIJA INJE 50.43 15** P **P** **01 33 23.9 +1.0**
SNR=7.6
**BJI Beijing 50.72 2** P **P** **01 33 24.9 -0.2**
BJI pP **pP** **01 33 36.8 +1.3**
BJI sP **sP** **01 33 40.3 +0.7**
BJI S **S** **01 40 35.2 -2.9**
BJI sS sS 01 40 59.4 +4.1
BJI PMZ
comp=Z,25nm,1.1s
BJI PMZ
comp=Z,330nm,7.6s
BJI LN
comp=Z,570nm,21.7s
BJI LE
comp=Z,310nm,21.3s
BJI LZ
comp=Z,520nm,22.2s
**SEHB SEOHWA 50.73 15** P **P** **01 33 25.9 +0.6**
SNR=7.7
**KSSKC Sokcho 50.82 15** P **P** **01 33 26.8 +0.9**
SNR=14
**DZM Mont Dzumac 51.44 110** *e*LR LR 01 48 14.9
comp=Z,1μm,22.2s
**HHC Hu-ho-hao-te 51.52 358** *e*P **P** **01 33 31.4 +0.1**
HHC pP **pP** **01 33 42.4 +0.7**
HHC sP **sP** **01 33 46.2 +0.4**
HHC S **S** **01 40 50.3 +0.9**
HHC PMZ
comp=Z,32nm,0.4s
HHC PMZ
comp=Z,250nm,6.3s
HHC LN
comp=Z,450nm,14.8s
HHC LE
comp=Z,490nm,14.8s
HHC LZ
comp=Z,280nm,14.8s
**GTA Gaotai 51.72 346** *e*P **P** **01 33 33.8 +1.0**
GTA pP **pP** **01 33 43.3 +0.1**
GTA sP **sP** **01 33 47.5 +0.2**
GTA PcP **PcP** **01 34 47.8 +1.9**
GTA PP **PP** **01 35 33.3 +2.5**
GTA PcS **PcS** **01 38 42.9 -1.1**
GTA S **S** **01 40 54.6 +2.4**
GTA sS **sS** **01 41 12.0 +2.6**
GTA SS **SS** **01 44 30.3 +1.0**
GTA PMZ
comp=Z,12nm,1.1s
GTA PMZ
comp=Z,140nm,5.7s
GTA LN
comp=Z,280nm,20.4s
GTA LE
comp=Z,630nm,21.9s
GTA LZ
comp=Z,340nm,20.9s
**MAJO Matsushiro 52.47 25**⇓ *i*P **P** **01 33 36.7 -1.6**
MAJO pmax pmax
comp=Z,167nm,1.3s
**MAJO Matsushiro 52.47 25** *e*P **P** **01 33 36.0 -2.3**
comp=Z,31nm,1.1s
MAJO LR LR
comp=Z,268nm,20.0s
**MAT Matsushiro 52.47 25** P **P** **01 33 36.6 -1.7**
MAT S **S** **01 40 59.8 -2.6**
**MJAR Matsushiro Arr 52.47 25** P **P** **01 33 36.8 -1.5**
comp=Z,12nm,0.8s,baz=200,slow=7.8,SNR=22
MJAR LR LR 01 56 12.4
comp=Z,153nm,21.4s,baz=200,slow=36

**MJAR Matsushiro Arr 52.47 25** P **P** **01 33 36.8 -1.5**
MJAR pmax pmax
comp=Z,12nm,0.8s
MJAR MLR MLR
comp=Z,153nm,21.4s
**NDI New Delhi 52.91 319** *e*P **P** **01 33 39.5 -2.2**
**CASY Casey 55.36 182** *e*P **P** **01 33 58.2 -0.8**
comp=Z,15nm,1.0s
CASY LR LR
comp=Z,1µm,20.0s
**CN2 Changchun 55.45 10** *e*P **P** **01 33 58.3 -1.6**
CN2 *es*P **sP** **01 34 12.3 -2.2**
CN2 *e*S **S** **01 41 40.7 -1.7**
CN2 PMZ
comp=Z,20nm,0.7s
CN2 PMZ
comp=Z,200nm,5.0s
CN2 LN
comp=Z,300nm,15.0s
CN2 LE
comp=Z,400nm,15.0s
CN2 LZ
comp=Z,300nm,15.0s
**MSHR Mys Shultsa 55.53 15***d i*P **P** **01 34 00.3 -0.2**
**VLA Vladivostok 56.23 16**⇑*i*P **P** **01 34 04.4 -1.1**
VLA *e* 01 35 01.6
VLA *e* 01 36 09.5
VLA *e*S **S** **01 41 52.6 -0.1**
VLA pmax pmax
comp=Z,74nm,1.6s
**MDJ Mudanjiang 57.07 13** P **P** **01 34 11.2 -0.2**
MDJ pP **pP** **01 34 23.7 +1.7**
MDJ ScP **ScP** **01 39 05.0 +1.7**
MDJ S **S** **01 42 08.2 +4.4**
MDJ PMZ
comp=Z,46nm,1.0s
MDJ PMZ
comp=Z,130nm,3.1s
MDJ LN
comp=Z,140nm,26.1s
MDJ LE
comp=Z,180nm,27.6s
MDJ LZ
comp=Z,370nm,33.7s
**MDJ Mudanjiang 57.07 13** *e*P **P** **01 34 11.0 -0.4**
comp=Z,83nm,0.8s
**USRK Ussuriysk Ar. 57.26 15** P **P** **01 34 12.7 -0.1**
comp=Z,45nm,0.8s,baz=199,slow=5.9,SNR=97
USRK S **S** **01 42 04.9 -1.5**
comp=Z,0.5nm,0.7s,baz=190,slow=16,SNR=2.5
**DRV Dumont d'Urvil 58.44 168** S S 01 42 11.0 -10
**ULN Ulaanbaatar 58.80 355***ce*P **P** **01 34 24.0 +0.2**
ULN pmax pmax
comp=Z,31nm,0.8s
**ULN Ulaanbaatar 58.80 355** P **P** **01 34 24.3 +0.6**
SNR=16
**ULN Ulaanbaatar 58.80 355** *e*P **P** **01 34 23.9 +0.1**
comp=Z,102nm,1.5s
**SONM Songino Array 58.84 354** P **P** **01 34 24.1 +0.1**
comp=Z,20nm,0.5s,baz=172,slow=8.1,SNR=39
SONM LR LR 02 02 36.1
comp=Z,433nm,18.9s,baz=192,slow=39
**SONM Songino Array 58.84 354** P **P** **01 34 24.1 +0.1**
SONM pmax pmax
comp=Z,20nm,0.5s
SONM MLR MLR
comp=Z,433nm,18.9s
**SONA1 Songino Array 58.85 354** *e*P **P** **01 34 23.4 -0.6**
**ERM Erimo 59.14 25**⇓*e*P **P** **01 34 25.5 -0.5**
ERM pmax pmax
comp=Z,39nm,1.2s
**ERM Erimo 59.14 25** PFAKE 01 34 40.0 +14
ERM LR LR
comp=Z,234nm,21.0s
**WMQ Urumqi 59.42 338** P **P** **01 34 28.8 +0.8**
WMQ sP **sP** **01 34 42.0 -0.7**
WMQ PP **PP** **01 36 44.0 +4.4**
WMQ S **S** **01 42 34.0 -0.8**
WMQ ScS **ScS** **01 44 13.0 -2.6**
WMQ SS **SS** **01 46 35.0 +4.5**
WMQ PMZ
comp=Z,24nm,1.0s
WMQ PMZ
comp=Z,210nm,4.0s
WMQ LN
comp=Z,430nm,16.0s
WMQ LE
comp=Z,560nm,16.0s
WMQ LZ
comp=Z,340nm,15.0s
**TARA Tarawa 60.01 82** PFAKE 01 34 50.0 +17
TARA LR LR
comp=Z,2µm,22.0s
**HIA Hailar 60.12 4** PFAKE 01 34 50.0 +17
HIA LR LR
comp=Z,333nm,20.0s
**ASAJ Asahikawa 60.67 23** P **P** **01 34 36.5 0.0**
comp=Z,27nm,0.8s,baz=244,slow=13,SNR=9.6
**ASAJ Asahikawa 60.67 23** P **P** **01 34 36.5 0.0**
ASAJ pmax pmax
comp=Z,27nm,0.8s
**ASAJ Asahikawa 60.67 23** *e*P **P** **01 34 35.8 -0.6**
comp=Z,45nm,1.0s
**SNZO South Karori 61.08 131** PFAKE 01 34 50.0 +11
SNZO LR LR
comp=Z,1µm,19.0s
**KSH Kashi 61.25 327**⇓*i*P **P** **01 34 40.0 -0.7**
KSH pP **pP** **01 34 50.5 -0.9**
KSH sP **sP** **01 34 53.9 -1.5**
KSH PcP **PcP** **01 35 23.6 +0.5**
KSH S S 01 42 52.6 -6.0
KSH ScS **SKKSac** **01 44 26.1 -3.4**
KSH SS **SS** **01 46 53.9 -5.6**
KSH PMZ
comp=Z,180nm,2.3s
KSH LN
comp=Z,150nm,6.0s
KSH LE
comp=Z,160nm,6.4s
KSH LZ
comp=Z,280nm,19.5s
**ZAK Zakamensk 61.71 352** *e*P **P** **01 34 42.4 -1.1**
ZAK pmax pmax
comp=Z,11nm,1.4s
**KLR Kul'dur 61.91 13** *e*P P 01 34 40.2 -4.5
KLR pmax pmax
comp=Z,78nm,1.6s
**YUK Yuzh-Kuril'sk 61.93 26** P **P** **01 34 42.4 -2.6**
YUK *e*S **S** **01 43 04.2 -2.4**
YUK MLR MLR
comp=Z,295nm,20.0s
**KBL Kabul 62.00 319** *e*P **P** **01 34 45.4 -0.5**
KBL pmax pmax
comp=Z,51nm,0.9s
**KBL Kabul 62.00 319** *e*P **P** **01 34 45.4 -0.5**
comp=Z,50nm,0.9s
**HABR Khabarovsk 62.02 16** *e*P **P** **01 34 43.6 -1.9**
HABR *e**PP **pP** **01 34 53.5 -2.6**
HABR *e**SP **sP** **01 34 57.7 -2.5**
HABR *e* 01 35 24.0
HABR *e*S **S** **01 43 05.5 -2.1**
HABR *e**SS **sS** **01 43 23.2 -1.9**
HABR *e* 01 44 32.4
HABR *e*SS **SS** **01 47 09.4 -1.5**
HABR pmax pmax
comp=Z,168nm,2.4s
HABR pmax pmax
comp=N,29nm,1.2s
HABR pmax pmax
comp=E,16nm,0.6s
HABR MLR MLR
comp=Z,230nm,20.0s
**BKZ Black Stump Fm 62.05 129** *e*P **P** **01 34 47.2 +1.0**
comp=Z,49nm,1.0s
**MSVF Nonsavu 62.36 104** *e*P **P** **01 34 49.9 +1.3**
MSVF pmax pmax
comp=Z,376nm,2.3s
MSVF MLR MLR
comp=Z,574nm,21.0s
**MSVF Nonsavu 62.36 104** *e*P **P** **01 34 49.9 +1.3**
comp=Z,376nm,2.3s
MSVF LR LR
comp=Z,574nm,21.0s
**PDGK Podgornoye 62.39 332** P **P** **01 34 48.8 +0.7**
PDGK pmax pmax
comp=Z,85nm,1.3s
**TLY Talaya 62.94 353** *e*P **P** **01 34 52.1 +0.5**
TLY pmax pmax
comp=Z,11nm,1.0s
**TLY Talaya 62.94 353** *e*P **P** **01 34 52.7 +1.1**
comp=Z,74nm,1.6s
TLY LR LR
comp=Z,339nm,20.0s
**SFK Sufi-Kurgan 62.94 326** P **P** **01 34 52.2 0.0**
SFK pmax pmax
comp=Z,79nm,0.8s
**ULHL Ulahol 63.12 329** P **P** **01 34 53.8 +0.6**
SNR=12
**YSS Yuzh-Sakhalins 63.12 22** *e*P **P** **01 34 52.8 -0.1**
YSS *e* 01 35 05.5
YSS pmax pmax
comp=Z,60nm,1.0s
**YSS Yuzh-Sakhalins 63.12 22** *e*P **P** **01 34 53.3 +0.5**
comp=Z,57nm,0.8s
**MOY Mondy 63.28 351** *e*P **P** **01 34 54.6 +0.6**
MOY pmax pmax
comp=Z,59nm,1.8s
**IRK Irkutsk 63.42 353** *e*P **P** **01 34 54.6 -0.2**
IRK pmax pmax
comp=Z,55nm,1.7s
**KZA Kyzart 63.49 329** P **P** **01 34 56.9 +0.9**
SNR=32
**KUR Kuril'sk 63.75 26***c i*P **P** **01 34 58.0 +0.9**
KUR *i* 01 35 34.8
KUR *i* 01 37 16.2
KUR *i* PPP PPP 01 38 45.1
KUR *e*S **S** **01 43 33.4 +4.0**
KUR *e* 01 44 40.4
KUR *e*SS **SS** **01 47 39.1 +1.0**
KUR pmax pmax
comp=Z,114nm,0.9s
KUR pmax pmax
comp=N,85nm,1.7s
KUR pmax pmax
comp=E,50nm,1.7s
**TKM2 Tokmak 2 63.94 330** *e*P **P** **01 34 59.2 +0.6**
TKM2 pmax pmax
comp=Z,110nm,1.2s
**TKM2 Tokmak 2 63.94 330** P **P** **01 34 59.2 +0.6**
SNR=61
**TKM2 Tokmak 2 63.94 330** *e*P **P** **01 34 59.2 +0.6**
comp=Z,110nm,1.2s
**MK01 Makanchi Array 63.95 336** *e*P **P** **01 34 58.6 +0.2**
**MK31 Makanchi Array 63.98 336** *i* P **P** **01 34 58.7 +0.1**
MK31 pmax pmax
comp=Z,21nm,0.5s
**MKAR Makanchi Array 63.98 336** P **P** **01 34 58.9 +0.3**
comp=Z,36nm,0.8s,baz=146,slow=7.8,SNR=168
MKAR LR LR 02 07 14.4
comp=Z,131nm,20.1s,baz=162,slow=40
**MKAR Makanchi Array 63.98 336** P **P** **01 34 58.9 +0.3**
MKAR pmax pmax
comp=Z,36nm,0.9s
MKAR MLR MLR
comp=Z,131nm,20.2s
**UCH Uchtor 63.98 328** P **P** **01 34 59.8 +0.6**
SNR=24
**KBK Karagaybulak 64.07 329** P **P** **01 35 00.6 +1.1**
SNR=44
**HVS Khovu-Aksy 64.20 346**⇓*e*P **P** **01 35 00.4 +0.4**
HVS pmax pmax
comp=Z,17nm,1.0s
**AAK Ala-Archa 64.28 329** PKPPKP **P'P'df** **02 03 50.6 +1.8**
comp=Z,0.4nm,0.3s,baz=338,slow=15,SNR=1.9
**AAK Ala-Archa 64.28 329***d i*P **P** **01 35 01.6 +0.7**
AAK pmax pmax
comp=Z,172nm,1.0s
**AAK Ala-Archa 64.28 329** P **P** **01 35 01.0 +0.1**
comp=Z,360nm,1.1s,SNR=36
**AAK Ala-Archa 64.28 329** P **P** **01 35 01.6 +0.7**
SNR=39
**AAK Ala-Archa 64.28 329** P **P** **01 35 01.8 +0.9**
SNR=49
**AAK Ala-Archa 64.28 329** *e*P **P** **01 35 01.8 +0.9**
comp=Z,102nm,1.1s
AAK P'P' 02 03 50.6
AAK LR LR
comp=Z,274nm,20.0s
**AML Almayashu 64.33 328** P **P** **01 35 02.3 +0.8**
SNR=56
**FRU Bishkek 64.36 329** *e*P **P** **01 35 01.0 -0.2**
FRU *e* 01 35 15.0
FRU pmax pmax
comp=Z,150nm,2.0s
**CHMS Chumysh 64.42 329** P **P** **01 35 01.8 +0.2**
SNR=7.2
**EKS2 Erkin-Say 64.67 328** *e*P **P** **01 35 04.3 +1.0**
EKS2 pmax pmax
comp=Z,78nm,0.8s
**EKS2 Erkin-Say 64.67 328** P **P** **01 35 03.9 +0.5**
SNR=58
**EKS2 Erkin-Say 64.67 328** *e*P **P** **01 35 04.3 +1.0**
comp=Z,78nm,0.8s
**USP Ospenovka 64.74 329** P **P** **01 35 03.7 0.0**
SNR=41
**DZET Dzherino 64.82 322** P **P** **01 35 03.0 -1.4**
DZET pmax pmax
comp=Z,42nm,0.7s
**MNAS Manas 65.21 327** P **P** **01 35 07.8 +0.9**
MNAS pmax pmax
comp=Z,235nm,1.1s
**RBK Rabkut 65.30 295** P **P** **01 35 08.2 +0.4**
SNR=13
**MAW Mawson 65.76 199** P **P** **01 35 09.4 -0.4**
comp=Z,12nm,1.1s,baz=42,slow=8.4,SNR=17
MAW LR LR 01 57 24.5
comp=Z,229nm,19.8s,baz=54,slow=30
MAW PKPPKP **P'P'df** **02 03 48.7 -1.0**
comp=Z,2.4nm,0.8s,baz=269,slow=2.8,SNR=5.4
**MAW Mawson 65.76 199** P **P** **01 35 09.5 -0.4**
baz=66,SNR=10
**ABTO Aybut 66.06 295** P **P** **01 35 12.7 0.0**
SNR=21
**UOSS Wadi Hilu 66.50 303** *e*P **P** **01 35 14.9 -0.5**
comp=Z,64nm,1.5s
**HATD Hatta, Dubai 66.51 303**⇑*i*P **P** **01 35 15.2 -0.3**
SNR=9.0
**ASHO Ashiyiah 66.51 303**⇑*i*P **P** **01 35 15.2 -0.3**
SNR=12
**KK31 Karatay Array 66.70 327** *e*P **P** **01 35 16.0 -0.3**
KK31 pmax pmax
comp=Z,59nm,1.2s
**KKAR Karatay Array 66.70 327** *e*P **P** **01 35 16.3 0.0**
KKAR pmax pmax
comp=Z,13nm,0.6s
**KKAR Karatay Array 66.70 327** *e*P **P** **01 35 16.3 0.0**
comp=Z,13nm,0.6s
**FAQ Al Faqa, Dubai 66.92 303** *i* P **P** **01 35 17.6 -0.4**
SNR=31
**NAZ Nazwa, Dubai 66.97 303**⇓*i*P **P** **01 35 17.7 -0.6**
SNR=6.9
**ASUD Al Ashush, Dub 67.09 303** *i* P **P** **01 35 19.0 -0.1**
SNR=6.9
**IDAH Dahanechah 67.29 312** *e*P **P** **01 35 20.3 -0.3**
**IKOO Kooshah 67.77 312** *e*P **P** **01 35 22.7 -0.9**
**CLNS Chul'man 68.10 7** *e*P **P** **01 35 25.5 +0.6**
CLNS pmax pmax
comp=Z,34nm,1.2s
CLNS pmax pmax
comp=N,24nm,1.2s
CLNS pmax pmax
comp=E,13nm,1.1s
**ITEG Tejag 68.19 312** *e*P **P** **01 35 25.5 -0.6**
**BOD Bodaibo 68.47 0**⇑*i*P **P** **01 35 26.9 -0.2**
BOD pmax pmax
comp=Z,39nm,1.2s
**KURK Kurchatov 68.58 337** *e*P **P** **01 35 28.0 +0.1**
KURK pmax pmax
comp=Z,83nm,0.6s
**KURK Kurchatov 68.58 337** P **P** **01 35 28.3 +0.4**
SNR=24
**KURK Kurchatov 68.58 337** P **P** **01 35 28.9 +1.0**
comp=Z,250nm,0.6s,SNR=36
**KURK Kurchatov 68.58 337** *e*P **P** **01 35 28.0 +0.1**
comp=Z,83nm,0.6s
**KRAR Krasnoyarsk 68.91 348**⇑*i*P **P** **01 35 30.6 +0.7**
KRAR pmax pmax
comp=Z,85nm,1.3s
**ZALV Zalesovo Beam 69.12 342** P **P** **01 35 30.8 -0.5**
comp=Z,22nm,0.5s,baz=150,slow=4.7,SNR=53
ZALV PP PP 01 37 57.1 -7.3
comp=Z,4.1nm,0.9s,baz=145,slow=5.3,SNR=2.2
ZALV PKP2bc 02 03 41.8
comp=Z,3.2nm,0.9s,baz=329,slow=5.5,SNR=9.7
ZALV LR LR 02 09 10.0
comp=Z,159nm,19.1s,baz=240,slow=39
**OTUK Ortayu 69.38 332** P **P** **01 35 33.5 +0.5**
OTUK pmax pmax
comp=Z,89nm,1.1s
**ISRO Mashad 69.41 315** *e*P **P** **01 35 33.1 -0.5**
**IPAY Payeh 69.81 315** *e*P **P** **01 35 35.7 -0.5**
**IAKL Akhelmad 70.06 315** *e*P **P** **01 35 37.6 -0.2**
**NVS Novosibirsk 70.37 342** *e*P **P** **01 35 37.5 -1.4**
NVS *e*S **S** **01 44 45.6 -3.2**
NVS pmax pmax
comp=N,34nm,1.6s
NVS pmax pmax
comp=E,26nm,1.6s
NVS pmax pmax
comp=Z,76nm,1.6s
NVS smax smax
comp=N,18nm,1.9s
NVS smax smax
comp=E,30nm,1.9s
**IEMG Emamgholi 70.55 316** *e*P **P** **01 35 41.2 +0.4**
**ISFR Sfrayin 70.81 316** *e*P **P** **01 35 42.7 +0.4**
**ISRV Sarvestan 70.87 306** *e*P **P** **01 35 43.5 +0.5**
**VNDA Vanda 70.97 170** P **P** **01 35 42.1 -0.2**
comp=E,14nm,0.9s,baz=302,slow=6.1,SNR=60
VNDA LR LR 02 06 08.2
comp=E,310nm,18.5s,baz=297,slow=35
**VNDA Vanda 70.97 170** *e*P **P** **01 35 42.1 -0.2**
comp=E,26nm,1.1s
**IPAR Pars 71.11 307** *e*P **P** **01 35 44.3 -0.1**
**ABKT Ailbek 71.17 316** P **P** **01 35 44.6 +0.3**
comp=E,275nm,1.0s,SNR=15
**GEYT Alibeck 71.18 316** P **P** **01 35 44.7 +0.4**
comp=E,39nm,1.1s,baz=144,slow=5.3,SNR=70
**SBA Scott Base 72.01 170** *e*P **P** **01 35 49.0 +0.4**
SBA pmax pmax
comp=Z,101nm,2.2s
**SBA Scott Base 72.01 170** *e*P **P** **01 35 49.0 +0.4**
comp=Z,101nm,2.2s
**IKAZ Kazeroun 72.04 306** *e*P **P** **01 35 49.6 -0.4**
**AFI Afiamalu 72.46 101** P **P** **01 35 53.9 +1.4**
comp=Z,20nm,0.7s,baz=270,slow=20,SNR=5.0
**AFI Afiamalu 72.46 101** P **P** **01 35 53.9 +1.4**
AFI pmax pmax
comp=Z,20nm,0.7s
**IRAM Ramesheh 72.47 308** *e*P **P** **01 35 51.2 -1.2**
**IZEF Zefreh 72.97 309** *e*P **P** **01 35 53.9 -1.5**
**IGAR Gharneh 72.98 309** *e*P **P** **01 35 54.8 -0.7**
**DAMY Dhamar 73.31 289** *e*P **P** **01 35 59.2 +1.4**
comp=Z,71nm,1.1s
**BVA0 Borovoye Array 73.67 334** *i* P **P** **01 35 58.6 -0.2**
BVA0 pmax pmax
comp=Z,47nm,1.5s
**BVAR Borovoye Array 73.67 334** LR LR 02 11 25.7
comp=Z,211nm,20.9s,slow=38
**IKLH Kolahrood 73.72 309** *e*P **P** **01 35 59.4 -0.4**
**BRVK Borovoye 73.74 334***ce*P **P** **01 35 58.8 -0.3**
BRVK pmax pmax
comp=Z,25nm,1.0s
**BRVK Borovoye 73.74 334** P **P** **01 35 59.3 +0.2**
comp=Z,117nm,0.9s,SNR=11
**BRVK Borovoye 73.74 334** P **P** **01 35 59.6 +0.4**
SNR=16
**BRVK Borovoye 73.74 334** *e*P **P** **01 35 59.1 0.0**
comp=Z,25nm,0.9s
**YAK Yakutsk 73.75 8** P **P** **01 35 58.5 -0.5**
comp=Z,6.6nm,0.3s,baz=200,slow=21,SNR=8.2
**YAK Yakutsk 73.75 8** *e*P **P** **01 35 58.7 -0.3**
YAK *e* 01 36 11.5
YAK *e* 01 38 44.5
YAK *e*PPP PPP 01 40 34.8
YAK *e*S **SKiKP** **01 45 23.0 -2.9**
YAK *e* 01 45 59.2
YAK *e**SS **ScS** **01 46 07.9 +2.4**
YAK *e*SS **SS** **01 50 07.8 -4.0**
YAK *e*SSS SSS 01 53 27.8
YAK pmax pmax
comp=Z,104nm,1.0s
YAK pmax pmax
comp=N,40nm,1.1s
YAK pmax pmax
comp=E,18nm,1.1s
YAK pmax pmax
comp=Z,294nm,4.7s
YAK pmax pmax
comp=N,447nm,4.4s
YAK pmax pmax
comp=E,196nm,4.6s
YAK smax smax
comp=N,389nm,2.8s
YAK smax smax
comp=E,136nm,1.9s
**YAK Yakutsk 73.75 8** *e*P **P** **01 35 58.4 -0.5**
comp=E,80nm,1.0s
**PEA0 Petropavlovsk- 73.91 26** *e*P **P** **01 36 00.7 +0.5**
**PETK Petropavlovsk- 73.91 26** P **P** **01 36 00.6 +0.4**
comp=E,19nm,0.9s,baz=209,slow=2.7,SNR=8.5
**PETK Petropavlovsk- 73.91 26** P **P** **01 36 00.6 +0.4**
PETK pmax pmax
comp=Z,19nm,0.9s
**IPIR Pirpir 73.98 309** *e*P **P** **01 36 00.0 -1.4**
**QAM Ghamsar 74.01 310** *e*P **P** **01 36 01.2 -0.3**
**SYO Syowa Base 74.26 201**⇓*i*P **P** **01 36 00.0 -2.0**
**IDMV Damavand 74.35 312** *e*P **P** **01 36 03.1 -0.4**
**RAYN Ar Rayn 75.02 298** P **P** **01 36 06.0 -1.3**
comp=Z,205nm,1.1s,SNR=30
**RAYN Ar Rayn 75.02 298** *e*P **P** **01 36 06.8 -0.5**
comp=Z,58nm,1.2s
RAYN LR LR
comp=Z,267nm,20.0s
**IR5 Iran Long-Peri 75.27 311** *e*P **P** **01 36 08.6 -0.1**
**IRAZ Razeghan 75.83 311** *e*P **P** **01 36 11.8 -0.2**
**AB31 Akbulak array 76.26 327** P **P** **01 36 13.6 -0.2**
AB31 pmax pmax
comp=Z,56nm,0.6s
**ABKAR Akbulak array 76.26 327** *e*P **P** **01 36 13.8 0.0**
**KMBO Kilima Mbogo 76.60 271** P **P** **01 36 17.6 +0.8**
comp=Z,17nm,1.1s,baz=62,slow=9.1,SNR=21
KMBO LR LR 02 04 06.2
comp=Z,405nm,21.2s,baz=96,slow=31
**KMBO Kilima Mbogo 76.60 271** P **P** **01 36 18.1 +1.2**
SNR=6.8
**KMBO Kilima Mbogo 76.60 271** *e*P **P** **01 36 17.5 +0.7**
comp=Z,31nm,1.2s
**QSPA South Pole Qui 79.12 180** P **P** **01 36 29.0 -0.6**
comp=Z,22nm,1.1s,baz=323,slow=3.0,SNR=34
**QSPA South Pole Qui 79.12 180** *e*P **P** **01 36 29.1 -0.6**
comp=Z,42nm,1.2s
**SEY Seymchan 79.37 17** P **P** **01 36 31.3 +0.5**
comp=Z,35nm,1.0s,baz=205,slow=3.6,SNR=18
**SVE Sverdlovsk 80.40 333***c i*P **P** **01 36 37.0 +0.5**
SVE *e*S S 01 46 32.9 -7.1
SVE pmax pmax
comp=Z,106nm,1.2s
**ARU Arti 81.09 332** LR LR 02 18 07.1
comp=Z,132nm,18.3s,baz=121,slow=40
**ARU Arti 81.09 332***c i*P **P** **01 36 39.9 -0.3**
ARU 01 39 43.4
ARU S **S** **01 46 47.9 +0.7**
ARU pmax pmax
comp=Z,121nm,1.7s
**ARU Arti 81.09 332** P **P** **01 36 40.9 +0.7**
comp=Z,329nm,1.2s,SNR=16
**ARU Arti 81.09 332** *e*P **P** **01 36 40.2 0.0**
comp=Z,72nm,1.1s
**CUKT Cukurca 81.25 311** *e*P **P** **01 36 41.4 -0.3**
**HKR Hakkari 81.27 311** *e*P **P** **01 36 41.8 -0.1**
**GNI Garni 81.48 314***d i*P **P** **01 36 43.5 +0.6**
GNI pmax pmax
comp=Z,39nm,1.0s
**GNI Garni 81.48 314** P **P** **01 36 44.5 +1.6**
SNR=5.3
**GNI Garni 81.48 314** *i* P **P** **01 36 44.2 +1.3**
SNR=7.0
**GNI Garni 81.48 314** *e*P **P** **01 36 42.3 -0.5**
GNI LR LR
comp=Z,188nm,20.0s
**AGRB Hanur-Agry 82.53 313** *e*P **P** **01 36 48.9 +0.5**
**AKH Akhalkalaki 82.82 314**⇑P **P** **01 36 51.6 +1.7**
**AKH Akhalkalaki 82.82 314**⇑*i*P **P** **01 36 51.6 +1.7**
**KARS Kars 82.83 314** *e*P **P** **01 36 51.3 +1.3**
**MZRK Al-Mazaregh 83.01 308** *e*P **P** **01 36 52.8 +2.0**
**LSZ Lusaka 83.03 256** *e*P **P** **01 36 51.4 -0.1**

LSZ pmax pmax
comp=Z,19nm,0.6s
**LSZ Lusaka 83.03 256** P **P** **01 36 51.1 -0.5**
SNR=7.0
**LSZ Lusaka 83.03 256** *e*P **P** **01 36 51.4 -0.1**
comp=Z,19nm,0.6s
**ZEI Tsey 83.04 316** *e*P **P** **01 36 51.4 +0.3**
ZEI pmax pmax
comp=Z,259nm,1.0s
**MBAR Mbarara 83.10 271** *e*P **P** **01 36 51.8 -0.2**
MBAR pmax pmax
comp=Z,50nm,1.0s
MBAR MLR MLR
comp=Z,646nm,22.0s
**MBAR Mbarara 83.10 271** P **P** **01 36 52.0 0.0**
comp=Z,60nm,1.1s,SNR=5.3
**MBAR Mbarara 83.10 271** *e*P **P** **01 36 51.8 -0.2**
comp=Z,50nm,1.0s
MBAR LR LR
comp=Z,646nm,22.0s
**SVAN Silvan-Diyarba 83.36 311** *e*P **P** **01 36 53.0 +0.4**
**KBSD Kabsdagh 83.47 309** *e*P **P** **01 36 54.0 +0.8**
**VRTB Varto-Mus 83.50 312** *e*P **P** **01 36 55.1 +1.7**
**NCK Nalchik 83.51 316**‖ *e*P **P** **01 36 54.2 +1.0**
**SFNV Sufian 83.62 309** *e*P **P** **01 36 56.3 +2.3**
**BOSA Boshof 83.63 242** P **P** **01 36 54.0 -0.4**
comp=Z,26nm,1.0s,baz=110,slow=3.8,SNR=30
BOSA LR LR 02 07 39.4
comp=Z,140nm,22.0s,baz=94,slow=31
**BOSA Boshof 83.63 242** *e*P **P** **01 36 53.9 -0.4**
**SOKR Solikamsk 83.67 335***c i*P **P** **01 36 53.6 0.0**
SOKR pmax pmax
comp=Z,50nm,1.5s
**NVL N'lazarevskaya 83.71 199** *e*P **P** **01 36 53.5 -0.3**
NVL *e*S **S** **01 47 11.0 -2.8**
NVL pmax pmax
comp=Z,21nm,0.9s
**EZM Erzurum 83.82 312** *e*P **P** **01 36 57.0 +1.7**
**LBTB Lobatse 83.89 246** *e*P **P** **01 36 55.6 -0.1**
**LBTB Lobatse 83.89 246** *e*P **P** **01 36 55.6 -0.1**
**BNGB Bing¶‖ 84.02 311** *e*P **P** **01 36 56.9 +0.9**
**NEY Neytrino 84.02 316**‖ *e*P **P** **01 36 57.8 +1.8**
NEY pmax pmax
comp=Z,10.0nm,1.0s
**KBZ Khabaz 84.07 316** P **P** **01 36 56.8 +0.8**
comp=Z,29nm,1.0s,baz=116,slow=2.0,SNR=20
KBZ LR LR 02 20 16.4
comp=Z,54nm,18.1s,baz=104,slow=40
**DYBB Diyarbakir 84.08 310** *e*P **P** **01 36 57.4 +1.1**
**KIV Kislovodsk 84.29 317***d i*P **P** **01 36 57.8 +0.5**
KIV pmax pmax
comp=Z,37nm,1.7s
KIV MLR MLR
comp=Z,112nm,21.0s
**KIV Kislovodsk 84.29 317** *e*P **P** **01 36 58.5 +1.2**
comp=Z,34nm,1.2s
KIV LR LR
comp=Z,189nm,19.0s
**ZALF Zalf 84.75 305** *e*P **P** **01 36 60.0 +0.2**
**BAYT Ayd¯–ntepe-Bay 84.86 313** *e*P **P** **01 37 01.3 +1.0**
**ASF Jabal al Asfar 84.90 304** LR LR 02 18 49.5
comp=Z,244nm,18.2s,baz=54,slow=38
**ROOS tl_alroos 85.14 306** *e*P **P** **01 37 03.0 +1.1**
**SALA Sala 85.18 304** *e*P P 01 36 56.8 -5.3
**RABH Abou Rabah 85.29 306** *e*P **P** **01 37 01.3 -1.2**
**MALT Malatya 85.48 310** *e*P **P** **01 37 04.4 +1.0**
**MALT Malatya 85.48 310**⇑ *e*P **P** **01 37 05.9 +2.5**
**MALT Malatya 85.48 310**⇑ *i*P **P** **01 37 05.9 +2.5**
**TCHB Talchebab 85.79 304** *e*P P 01 36 59.6 -5.4
**EIL Elat 85.84 301** *e*P **P** **01 37 06.5 +1.2**
**EIL Elat 85.84 301** LR LR 02 17 58.3
comp=Z,285nm,18.0s,baz=67,slow=37
**HRFI Mount Harif 85.87 301** *e*P **P** **01 37 06.4 +0.9**
**HAWK Haweek 85.94 306** *e*P **P** **01 37 06.5 +0.7**
**BRBR Barbar 86.01 305** *e*P **P** **01 37 06.3 0.0**
**DARE Darende-Malaty 86.26 310** *e*P **P** **01 37 08.3 +1.1**
**BTCH Batrach 86.32 308** *e*P **P** **01 37 06.5 -1.1**
**SUR Sutherland 86.77 238** *e*P **P** **01 37 09.8 -0.4**
comp=Z,54nm,1.2s
**SVSK Karacayir 87.01 311** *e*P **P** **01 37 12.1 +1.4**
**VRH Novokhopyorsk 87.48 323** *e*P **P** **01 37 12.5 -0.2**
VRH *e*SP **sP** **01 37 25.7 -2.1**
VRH pmax pmax
comp=Z,140nm,1.2s
VRH pmax pmax
comp=N,40nm,0.8s
VRH pmax pmax
comp=E,120nm,1.5s
**BNN Bunyan 87.57 310** *e*P **P** **01 37 14.1 +0.4**
**SNAA Sanae 87.78 196** P **P** **01 37 14.0 -0.1**
comp=E,9.7nm,0.8s,baz=98,slow=6.5,SNR=104
**SNAA Sanae 87.78 196***d i*P **P** **01 37 13.7 -0.3**
SNAA pmax pmax
comp=Z,19nm,1.0s
**SNAA Sanae 87.78 196** *e*P **P** **01 37 13.8 -0.3**
comp=Z,15nm,0.9s
**KVT Kavak 88.04 312** *e*P **P** **01 37 17.3 +1.5**
**LFK Lefkose 88.42 306** *e*P **P** **01 37 18.1 +0.3**
**CSS Prodhromos 88.50 306** *e*P **P** **01 37 18.1 +0.1**
**CSS Prodhromos 88.50 306** *e*P **P** **01 37 19.1 +1.0**
comp=Z,14nm,1.0s
CSS *e*pP **pP** **01 37 30.8 +1.7**
**GULA Gulagac 88.65 309** *e*P **P** **01 37 19.9 +1.1**
**VORD Divnogorie 88.84 322** *e*P **P** **01 37 19.1 -0.1**
VORD *e*SP **sP** **01 37 31.9 -2.4**
VORD pmax pmax
comp=N,80nm,0.8s
VORD pmax pmax
comp=E,160nm,0.8s
VORD pmax pmax
comp=Z,50nm,0.8s
**YESY Yesilyurt 88.88 309** *e*P **P** **01 37 19.0 -0.9**
**VSR Storozhevoye 89.00 323** *e*P **P** **01 37 19.4 -0.6**
VSR *e*SP **sP** **01 37 32.6 -2.4**
VSR pmax pmax
comp=N,20nm,1.1s
VSR pmax pmax
comp=Z,160nm,1.1s
VSR pmax pmax
comp=E,120nm,1.2s
**SULT Sultanhani-AKS 89.16 309** *e*P **P** **01 37 21.5 +0.3**
**KAMT Kaman 89.31 310** *e*P **P** **01 37 21.4 -0.5**
**BRTR Keskin Array B 89.45 311** P **P** **01 37 22.4 -0.1**
comp=E,14nm,1.0s,baz=120,slow=4.2,SNR=41
BRTR LR LR 02 18 56.1
comp=E,117nm,21.9s,baz=102,slow=37
**BRTR Keskin Array B 89.45 311** P **P** **01 37 22.5 -0.1**
BRTR pmax pmax
comp=Z,15nm,1.0s
BRTR MLR MLR
comp=Z,117nm,21.9s
**LPSR Galich'ya Gora 89.58 324** *e*P **P** **01 37 22.4 -0.2**
LPSR *e*SP **sP** **01 37 35.9 -1.8**
LPSR pmax pmax
comp=Z,50nm,1.1s
LPSR pmax pmax
comp=N,10.0nm,1.8s
LPSR pmax pmax
comp=E,40nm,1.6s
**AFSR Af`ar-Bala (A 89.81 310** *e*P **P** **01 37 24.2 0.0**
**ANTO Ankara 90.12 311** PFAKE 01 37 40.0 +14
ANTO LR LR
comp=Z,197nm,21.0s
**BR231 Keskin MP Arra 90.12 310** *e*P P 01 37 22.2 -3.5
**SIM Simferopol' 90.44 316** P **P** **01 37 27.0 +0.1**
SIM pmax pmax
comp=Z,17nm,0.9s
**MOS Moscow 91.28 327** *e*P **P** **01 37 30.2 -0.3**
MOS *i* 01 37 42.8
MOS *e* 01 48 30.9
MOS pmax pmax
comp=Z,47nm,1.2s
**ELL Elmali 91.62 307** *e*P **P** **01 37 33.2 +0.5**
**OBN Obninsk 91.67 326**⇑ *i*P **P** **01 37 32.0 -0.3**
OBN *e* 01 41 08.0
OBN pmax pmax
comp=Z,48nm,1.4s
OBN MLR MLR
comp=Z,283nm,22.0s
**OBN Obninsk 91.67 326** *e*P **P** **01 37 32.6 +0.3**
comp=Z,42nm,1.1s
OBN *e*pP **pP** **01 37 45.6 +2.2**
**TBI Tubuai 91.81 114** *e*LR LR 02 06 57.0
comp=Z,416nm,23.2s
**GULT Gulveren 91.95 311** *e*P **P** **01 37 32.0 -2.1**

**PPT2 Papeete2 92.94 108** *e*LR LR 02 07 27.9
comp=Z,514nm,25.0s
**PPT Papeete 92.94 108** LR LR 02 16 12.0
comp=Z,158nm,20.6s,baz=203,slow=33
**TMCR Tamitsa 93.62 335** *e*P **P** **01 37 40.2 -0.9**
TMCR pmax pmax
comp=Z,38nm,1.3s
**TLB Topalu 94.57 314**⇑ P **P** **01 37 44.1 -1.9**
**TLB Topalu 94.57 314**⇑ *i*P **P** **01 37 44.1 -1.9**
**CFR Carcaliu 94.62 315**⇓ *i*P **P** **01 37 46.4 +0.3**
**CFR Carcaliu 94.62 315**⇓ *i*P **P** **01 37 46.4 +0.3**
**AKASG Malin Array Be 94.94 321** P **P** **01 37 46.5 -1.0**
comp=Z,3.5nm,0.7s,baz=84,slow=4.4,SNR=33
AKASG LR LR 02 29 34.0
comp=Z,95nm,18.1s,baz=95,slow=41
**KIEV Kiev 94.95 321***d i*P **P** **01 37 46.0 -1.5**
KIEV pmax pmax
comp=Z,11nm,0.9s
**KIEV Kiev 94.95 321** *e*P **P** **01 37 46.3 -1.2**
comp=Z,12nm,0.9s
**AK11 Malin Array Si 94.97 321** *e*P **P** **01 37 47.0 -0.7**
**SANT Santorini 95.06 306** PFAKE 01 38 00.0 +12
SANT LR LR
comp=Z,102nm,21.0s
**VRI Vrincioaia 95.71 315**⇑ P **P** **01 37 51.5 +0.3**
**VRI Vrincioaia 95.71 315**⇑ *i*P **P** **01 37 51.5 +0.3**
**TESR Tescani 95.88 316**⇑ *i*P **P** **01 37 51.9 0.0**
**LVZ Lovozero 95.97 338** PFAKE 01 38 00.0 +8.1
LVZ LR LR
comp=Z,341nm,20.0s
**MLR Muntele Rosu 96.19 315**⇑ P **P** **01 37 53.2 -0.3**
**MLR Muntele Rosu 96.19 315**⇑ *i*P **P** **01 37 53.2 -0.3**
**PRAR RASCA 96.30 317**⇑ *i*P **P** **01 37 53.7 -0.1**
**VOIR 96.81 315**⇑ P P 01 37 49.3 -7.0
**VOIR 96.81 315**⇑ *i*P P 01 37 49.3 -7.0
**BURAR Bucovina Array 97.02 317**⇑ P **P** **01 37 56.9 -0.3**
**BURAR Bucovina Array 97.02 317**⇑ *i*P **P** **01 37 56.9 -0.3**
**BUR04 Bucovina Ar. S 97.02 317** *e*P **P** **01 37 57.0 -0.2**
**VSU Vasula 97.67 328**‖ *e*P Pdif 01 37 59.9 +0.1
VSU pmax pmax
comp=Z,36nm,1.1s
**GZR Gura Zlata 98.39 315**⇓ P Pdif 01 38 05.2 +1.8
**GZR Gura Zlata 98.39 315**⇓ *i*P Pdif 01 38 05.2 +1.8
**FINES FINESS Array B 98.40 331** P **P** **01 38 02.8 -0.1**
comp=Z,2.8nm,0.9s,baz=131,slow=8.3,SNR=9.0
FINES PKKPbc **PKKPbc** **01 54 33.7 -2.3**
comp=Z,3.6nm,1.0s,baz=204,slow=3.0,SNR=5.0
FINES LR LR 02 27 07.0
comp=Z,110nm,20.1s,baz=102,slow=38
**FINES FINESS Array B 98.40 331** *i* P **P** **01 38 03.0 +0.1**
FINES pmax pmax
comp=Z,3.0nm,0.9s
**DRGR 98.60 316**⇑ P Pdif 01 38 05.4 +1.1
**DRGR 98.60 316**⇑ *i*P Pdif 01 38 05.4 +1.1
**UZH Uzhgorod 99.09 318** *e*P **Pdif** **01 38 05.2 -1.1**
UZH *e* 01 38 15.2
**KOLS Kolonicke sedl 99.13 318** *e*P **Pdif** **01 38 06.5 0.0**
**KOLS Kolonicke sedl 99.13 318** PDIF **Pdif** **01 38 06.5 0.0**
**ARCES ARCESS Array B 99.53 339** P **Pdif** **01 38 07.0 -0.9**
comp=Z,3.0nm,1.0s,baz=106,slow=5.7,SNR=7.1
ARCES LR LR 02 28 53.3
comp=Z,291nm,20.2s,baz=113,slow=39
**ARCES ARCESS Array B 99.53 339** P **Pdif** **01 38 07.0 -0.9**
ARCES pmax pmax
comp=Z,3.0nm,1.0s
**TIR Tirane 100.06 310** PFAKE 01 38 20.0 +9.2
TIR LR LR
comp=Z,181nm,19.0s
**DIVS Divibare 100.23 313**⇓ *i*P **Pdif** **01 38 11.6 0.0**
**PSZ Piszkesteto 100.62 317**⇓ P Pdif 01 38 01.9 -11
**PSZ Piszkesteto 100.62 317**⇓ *i*P Pdif 01 38 01.9 -11
**PSZ Piszkesteto 100.62 317** PFAKE 01 38 20.0 +6.7
PSZ LR LR
comp=Z,181nm,20.0s
**OKC Ostrava-Krasne 101.89 319** *e*PP PP 01 42 29.6 -0.6
OKC *ex* x 01 42 41.4
**TIP Timpagrande 102.24 308** PFAKE 01 38 30.0 +9.3
TIP LR LR
comp=Z,85nm,22.0s
**MORC Moravsky Berou 102.28 319** *e*P **Pdif** **01 38 20.8 +0.2**
**MORC Moravsky Berou 102.28 319** *e*Pdif **Pdif** **01 38 20.8 +0.2**
**KRLC Kraliky 102.78 319** *e*PP PP 01 42 38.2 +1.3
**KBS Kingsbay 102.90 349** PFAKE 01 38 30.0 +7.3
KBS LR LR
comp=Z,269nm,20.0s
**CUC Castrocucco 103.02 309** PFAKE 01 38 40.0 +16
CUC LR LR
comp=Z,102nm,22.0s
**DPC Dobruska-Polom 103.08 319** *e*PP PP 01 42 41.2 +2.0
DPC *ex* x 01 42 50.4
DPC AMS AMS 02 35 00.0
comp=Z,200nm,16.6s
**UPC Upice 103.28 319** AMS AMS 02 35 10.0
comp=Z,300nm,22.1s
**ILAR Eielson Array 103.74 26** Pdiff **Pdif** **01 38 27.4 +0.7**
comp=Z,0.2nm,0.8s,baz=246,slow=4.5,SNR=3.1
ILAR PKKPbc **PKKPbc** **01 54 18.1 -2.6**
comp=Z,1.6nm,1.0s,baz=122,slow=1.8,SNR=8.0
ILAR PKKP **PKKPdf** **01 54 30.2 +0.8**
comp=Z,0.4nm,0.5s,baz=100,slow=1.4,SNR=6.7
**BRG Berggiesshubel 104.60 320** *e*P **PKiKP** **01 42 47.9 +1.4**
comp=Z,9.3nm,1.3s
comp=N,133nm,11.9s
comp=E,156nm,16.7s
comp=Z,235nm,29.3s
**GERES GERESS Array B 104.77 318** PKiKP **PKiKP** **01 42 47.0 0.0**
comp=Z,0.3nm,0.5s,baz=102,slow=4.2,SNR=2.9
GERES PKKPbc **PKKPbc** **01 54 15.8 -1.3**
comp=Z,0.1nm,0.3s,baz=318,slow=1.3,SNR=6.2
**CLL Collm 105.19 320** *e*PP PP 01 42 51.0 -3.7
CLL *e*PS **PS** **01 52 04.0 -6.1**
CLL LmV 02 30 00.0
comp=Z,100nm,19.7s
**VLC Villacollemand 107.14 313** PFAKE 01 43 00.0
VLC LR LR
comp=Z,199nm,21.0s
**TUE Stuetta 107.78 315** PFAKE 01 43 00.0
TUE LR LR
comp=Z,194nm,20.0s
**VSL Villasalto 107.97 308** PFAKE 01 43 10.0
VSL LR LR
comp=Z,114nm,20.0s
**PTCN Pitcairn Island 108.21 121** PFAKE 01 43 10.0
PTCN LR LR
comp=Z,2µm,21.0s
**INK Inuvik 108.36 21** *e*PKP 01 42 50.4
**BFO Black Forest 108.36 317** PFAKE 01 43 10.0
BFO LR LR
comp=Z,148nm,19.0s
**ECH Echery 109.15 317** PFAKE 01 43 10.0
ECH LR LR
comp=Z,192nm,21.0s
**WLF Walferdange 109.66 319** PFAKE 01 43 10.0
WLF LR LR
comp=Z,178nm,19.0s
**TAM Tamanrasset 110.91 290** PFAKE 01 43 10.0
TAM LR LR
comp=Z,149nm,20.0s
**TORD Torodi Ar. Bea 113.76 280** PKiKP **PKiKP** **01 43 04.2 -0.6**
comp=Z,1.2nm,0.4s,baz=79,slow=1.4,SNR=55
TORD PKKPbc **PKKPbc** **01 53 47.5 +0.3**
comp=Z,0.6nm,0.9s,baz=289,slow=4.7,SNR=2.5
**ESK Eskdalemuir 114.16 326** *i* PKiKP PKPdf 01 43 04.3 0.0
**YKA Yellowknife Ar 117.96 23** PKP **PKPdf** **01 43 11.7 +0.3**
comp=Z,6.4nm,0.8s,baz=316,slow=1.9,SNR=14
**YKA Yellowknife Ar 117.96 23** PKiKP **PKPdf** **01 43 11.7 +0.3**
YKA pmax pmax
comp=Z,6.0nm,0.8s
**PAB San Pablo 118.53 309** PFAKE 01 43 30.0 +17
PAB LR LR
comp=Z,213nm,19.0s
**DBIC Dimbokro 119.34 272** PKP **PKPdf** **01 43 14.9 -0.6**
comp=Z,1.9nm,0.4s,baz=51,slow=2.8,SNR=15
DBIC PKKPab **PKKPab** **01 53 30.1 +0.2**
comp=Z,3.1nm,0.8s,baz=242,slow=4.9,SNR=3.5
**NLWA Neilton Lookou 119.63 41** PFAKE 01 43 30.0 +15
NLWA LR LR
comp=Z,360nm,19.0s
**B05A Bryant 120.49 40** P **PKPdf** **01 43 18.1 +1.3**
baz=120
**I04A Tendick Farm, 121.65 45** P **PKPdf** **01 43 19.9 +0.7**
baz=122
**G05D Wamic, OR 121.97 43** P **PKPdf** **01 43 20.3 +0.6**
baz=122
**M02C Callahan 121.98 48** P **PKPdf** **01 43 21.3 +1.3**
baz=122
**YBH Yreka Blue Hor 122.00 47** PKP **PKPdf** **01 43 20.8 +0.8**
comp=Z,2.8nm,0.9s,baz=127,slow=15,SNR=3.9
**YBH Yreka Blue Hor 122.00 47** PKIKP **PKPdf** **01 43 20.8 +0.8**
YBH pmax pmax
comp=Z,3.0nm,0.9s
**J04D Umpqua Nationa 122.02 46** P **PKPdf** **01 43 21.6 +1.4**
baz=122
**N02D Trinity Center 122.19 48** P **PKPdf** **01 43 21.6 +1.3**
baz=122
**I05D Terrebonne, OR 122.23 44** P **PKPdf** **01 43 21.1 +0.8**
baz=122
**M04C Macdoel 122.61 47** P **PKPdf** **01 43 22.8 +1.5**
baz=123
**J05D Fort Rock, OR 122.62 45** P **PKPdf** **01 43 22.6 +1.4**
baz=123
**HAWA Hanford 122.77 41** *e*PKPdf **PKPdf** **01 43 22.6 +1.4**
**O03D Paynes Creek 123.03 49** P **PKPdf** **01 43 23.0 +1.0**
baz=123
**EDM Edmonton 123.47 32** *e*PKIKP **PKPdf** **01 43 23.3 +0.9**
**EDM Edmonton 123.47 32** *e*PKPdf **PKPdf** **01 43 23.3 +0.9**
**NEW Newport 123.58 39** *e*PKIKP **PKPdf** **01 43 23.7 +0.9**
**NEW Newport 123.58 39** P **PKPdf** **01 43 23.3 +0.5**
baz=124
**NEW Newport 123.58 39** *e*PKPdf **PKPdf** **01 43 23.6 +0.9**
**CMB Columbia Colle 124.66 51** *e*PKIKP **PKPdf** **01 43 26.2 +1.0**
CMB *e* 01 45 10.2
**CMB Columbia Colle 124.66 51** *e*PKPdf **PKPdf** **01 43 26.2 +1.0**
CMB *e*PP **PP** **01 45 10.2 -2.3**
**BSMT Bassoo Peak 125.18 38** *e*PKPdf **PKPdf** **01 43 26.5 +0.4**
**JTMT Jette 125.53 38** *e*PKPdf **PKPdf** **01 43 27.1 +0.4**
**SWMT Swartz Lake 125.81 38** *e*PKPdf **PKPdf** **01 43 27.7 +0.5**
**PKM Peak Mountain 125.84 55** P **PKPdf** **01 43 29.7 +2.0**
baz=126
**NVAR Mina Array Bea 126.14 50** PKP **PKPdf** **01 43 28.4 +0.2**
comp=Z,3.7nm,0.8s,baz=247,slow=2.2,SNR=23
NVAR PP **PP** **01 45 19.8 -2.7**
comp=Z,2.4nm,1.0s,baz=274,slow=6.6,SNR=5.8
**MSO Missoula 126.14 39** P **PKPdf** **01 43 28.8 +1.0**
baz=126
**VES Vestal, Richgr 126.21 53** P **PKPdf** **01 43 29.2 +1.0**
baz=126
**SLMT Seeley Lake 126.23 38** *e*PKPdf **PKPdf** **01 43 28.4 +0.4**
**MFID Camas Ranch 126.30 44** *e*PKPdf **PKPdf** **01 43 29.8 +1.6**
**CHMT Chamberlain Mo 126.53 39** *e*PKPdf **PKPdf** **01 43 29.1 +0.4**
**ARVC Arvin 126.58 54** P **PKPdf** **01 43 30.5 +1.6**
baz=127
**BLG Laguna Peak 126.62 56** P **PKPdf** **01 43 30.3 +1.3**
baz=127
**ISA Isabella 126.73 54** *e*PKIKP **PKPdf** **01 43 30.1 +0.9**
**ISA Isabella 126.73 54** P **PKPdf** **01 43 30.5 +1.2**
baz=127
**ISA Isabella 126.73 54** *e*PKPdf **PKPdf** **01 43 30.1 +0.9**
**CWC Cottonwood Cre 126.85 52** P **PKPdf** **01 43 31.2 +1.7**
baz=127
**HLID Hailey 127.19 43** P **PKPdf** **01 43 32.0 +1.9**
baz=127
**HLID Hailey 127.19 43** *e*PKPdf **PKPdf** **01 43 31.9 +1.9**
HLID LR LR
comp=Z,271nm,21.0s
**GRAC Grapevine Rang 127.25 52** P **PKPdf** **01 43 31.9 +1.8**
baz=127
**EDW2 Edwards Air Fo 127.31 54** P **PKPdf** **01 43 32.2 +1.8**
baz=127
**LRMC Laurel Mountai 127.40 54** P **PKPdf** **01 43 32.5 +2.0**
baz=127
**MPMC Manual Prospec 127.41 53** P **PKPdf** **01 43 32.3 +1.6**
baz=127
**DLMT Dillon 127.62 40** *e*PKPdf **PKPdf** **01 43 32.5 +1.7**
**ELK Elko 127.66 46** *e*PKIKP **PKPdf** **01 43 32.9 +1.8**
**ELK Elko 127.66 46** *e*PKPdf **PKPdf** **01 43 32.9 +1.8**
**MCMT McKenzie Canyo 127.70 41** *e*PKPdf **PKPdf** **01 43 32.5 +1.5**
**FURC Furnace Creek, 127.79 52** P **PKPdf** **01 43 33.3 +2.3**
baz=128
**FFC Flin Flon 127.95 25** *e*PKIKP **PKPdf** **01 43 31.6 +0.7**
**FFC Flin Flon 127.95 25** *e*PKPdf **PKPdf** **01 43 31.6 +0.7**
**EGMT Eagleton 128.08 36** P **PKPdf** **01 43 32.5 +1.0**
baz=128
**EGMT Eagleton 128.08 36** *e*PKPdf **PKPdf** **01 43 32.7 +1.3**
**BOZ Bozeman (W) 128.10 39** *e*PKIKP **PKPdf** **01 43 33.2 +1.5**
**BOZ Bozeman (W) 128.10 39** P **PKPdf** **01 43 32.9 +1.2**
baz=128
**BOZ Bozeman (W) 128.10 39** *e*PKPdf **PKPdf** **01 43 33.2 +1.5**
**TPNV Topopah Spring 128.12 51** P **PKPdf** **01 43 33.2 +1.2**
baz=128
**GSC Goldstone 128.14 54** P **PKPdf** **01 43 33.8 +1.8**
baz=128
**R11A Troy Canyon, C 128.20 49** P **PKPdf** **01 43 33.6 +1.5**
baz=128
**HEC Hector,Ludlow 128.64 54** P **PKPdf** **01 43 34.5 +1.6**
baz=129
**PFO Pinyon Flat Ob 128.85 56** P **PKPdf** **01 43 35.5 +2.1**
baz=129
**MONP Monument Peak 129.05 56** P **PKPdf** **01 43 36.2 +2.3**
baz=129
**SHPR Sheep Range 129.09 52** *e*PKPdf **PKPdf** **01 43 36.2 +2.3**
SHPR *e*PP **PP** **01 45 42.2 +0.3**
**BELC Belle Mtn. Jos 129.12 55** P **PKPdf** **01 43 35.9 +1.9**
baz=129
**GMRC Granite Mounta 129.19 54** P **PKPdf** **01 43 36.2 +2.2**
baz=129
**GCMT Greycliff 129.25 38** *e*PKPdf **PKPdf** **01 43 35.2 +1.4**
**LKWY Lake 129.38 40** PFAKE 01 43 50.0 +16
LKWY LR LR
comp=Z,390nm,20.0s
**SPUT South Promonto 129.41 45** *e*PKPdf **PKPdf** **01 43 35.3 +1.0**
**DUG Dugway 129.59 46** *e*PKIKP **PKPdf** **01 43 36.1 +1.5**
DUG MLR MLR
comp=Z,126nm,20.0s
**DUG Dugway 129.59 46** P **PKPdf** **01 43 36.1 +1.5**
baz=130
**DUG Dugway 129.59 46** *e*PKPdf **PKPdf** **01 43 36.1 +1.5**
DUG LR LR
comp=Z,126nm,20.0s
**REDW Red Top Meadow 129.63 42** *e*PKPdf **PKPdf** **01 43 36.3 +1.5**
**BC3 Big Chuckawall 129.65 55** P **PKPdf** **01 43 37.2 +2.3**
baz=130
**IRM Iron Mountain 129.76 54** P **PKPdf** **01 43 37.1 +2.1**
baz=130
**RLMT Red Lodge 129.82 39** P **PKPdf** **01 43 36.6 +1.5**
baz=130
**RLMT Red Lodge 129.82 39** PFAKE 01 43 50.0 +15
RLMT LR LR
comp=Z,457nm,20.0s
**GLA Glamis 130.31 56** P **PKPdf** **01 43 37.7 +1.6**
baz=130
**PDMCI Parker Dam,Lak 130.52 54** P **PKPdf** **01 43 38.3 +1.9**
baz=131
**MSU Marysvale 130.67 48** *e*PKIKP **PKPdf** **01 43 37.6 +0.7**
MSU *e* 01 45 50.4
**MSU Marysvale 130.67 48** *e*PKPdf **PKPdf** **01 43 37.6 +0.7**
MSU *e*PP **PP** **01 45 50.4 -1.7**
**LAO LASA Array 130.83 36** P **PKPdf** **01 43 38.7 +2.0**
baz=131
**LAO LASA Array 130.83 36** *e*PKPdf **PKPdf** **01 43 38.0 +1.3**
LAO *e*PP **PP** **01 45 50.3 -2.1**
**TMUT Trail Mountain 131.07 47** *e*PKPdf **PKPdf** **01 43 40.0 +2.3**
**SRU San Rafael 131.64 47** *e*PKIKP **PKPdf** **01 43 39.1 +0.5**
SRU *e* 01 45 56.8
**SRU San Rafael 131.64 47** *e*PKPdf **PKPdf** **01 43 39.1 +0.5**
SRU *e*PP **PP** **01 45 56.8 -1.5**
**A26A Wade Farm, Ken 131.79 31** P **PKPdf** **01 43 40.8 +2.5**
baz=132
**A27A Ledoux Ranch, 132.15 31** P **PKPdf** **01 43 41.2 +2.2**
baz=132
**WUAZ Wupatki 132.31 52** P **PKPdf** **01 43 41.8 +1.8**
baz=132
**WUAZ Wupatki 132.31 52** *e*PKPdf **PKPdf** **01 43 41.4 +1.4**
WUAZ *e*PP **PP** **01 46 01.5 -1.3**
**C26A Wahner Farm, P 132.43 32** P **PKPdf** **01 43 41.3 +1.7**
baz=132
**A28A Rude Farm, Bot 132.67 30** P **PKPdf** **01 43 42.6 +2.5**
baz=133
**K22A Casper 132.76 41** P **PKPdf** **01 43 41.9 +1.3**
baz=133
**K22A Casper 132.76 41** *e*PKPdf **PKPdf** **01 43 41.7 +1.1**
**O20A White River Ci 132.81 44** P **PKPdf** **01 43 42.1 +1.3**
baz=133
**O20A White River Ci 132.81 44** *e*PKPdf **PKPdf** **01 43 42.2 +1.3**
**B28A Dugan Ranch, T 132.92 31** P **PKPdf** **01 43 42.0 +1.5**
baz=133
**E26A Carlson Angus 133.07 34** P **PKPdf** **01 43 42.6 +1.7**
baz=133
**G25A Newell 133.29 36** P **PKPdf** **01 43 42.7 +1.3**
baz=133

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| C28A | Hausauer Farms | 133.39 | 32 | P | PKPdf | 01 43 42.8 | +1.3 |
| | baz=133 | | | | | | |
| B29A | Wagenman Farm, | 133.41 | 30 | P | PKPdf | 01 43 42.8 | +1.4 |
| | baz=133 | | | | | | |
| PV01 | Paradox Valley | 133.43 | 47 | ePKPdf | PKPdf | 01 43 43.7 | +1.6 |
| RSSD | Black Hills | 133.53 | 38 | ePKIKP | PKPdf | 01 43 42.4 | +0.3 |
| RSSD | Black Hills | 133.53 | 38 | ePKPdf | PKPdf | 01 43 42.4 | +0.3 |
| F27A | Lemmon | 133.68 | 34 | P | PKPdf | 01 43 43.4 | +1.4 |
| | baz=134 | | | | | | |
| G26A | Maurine | 133.70 | 35 | P | PKPdf | 01 43 42.9 | +0.7 |
| | baz=134 | | | | | | |
| MDND | Maddock | 133.70 | 31 | P | PKPdf | 01 43 43.1 | +1.1 |
| | baz=134 | | | | | | |
| ULM | Lac du Bonnet | 133.76 | 26 | PKP | PKPdf | 01 43 40.6 | -1.3 |
| | comp=Z,6.3nm,1.0s,baz=309,slow=6.3,SNR=4.0 | | | | | | |
| ULM | Lac du Bonnet | 133.76 | 26 | PKIKP | PKPdf | 01 43 40.7 | -1.3 |
| ULM | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| I25A | Rochford | 133.77 | 38 | P | PKPdf | 01 43 42.7 | +0.2 |
| | baz=134 | | | | | | |
| TUC | Tucson | 133.79 | 55 | ePKIKP | PKPdf | 01 43 43.1 | +0.4 |
| TUC | | | | MLR | MLR | | |
| | comp=Z,188nm,19.0s | | | | | | |
| TUC | Tucson | 133.79 | 55 | ePKPdf | PKPdf | 01 43 43.1 | +0.4 |
| TUC | | | | LR | LR | | |
| | comp=Z,188nm,19.0s | | | | | | |
| G27A | Dupree | 134.02 | 35 | P | PKPdf | 01 43 43.0 | +0.2 |
| | baz=134 | | | | | | |
| I26A | New Underwood | 134.28 | 37 | P | PKPdf | 01 43 43.6 | +0.3 |
| | baz=134 | | | | | | |
| H27A | Howes | 134.39 | 36 | P | PKPdf | 01 43 44.0 | +0.5 |
| | baz=134 | | | | | | |
| J26A | Sides Ranch, S | 134.56 | 38 | P | PKPdf | 01 43 44.1 | +0.2 |
| | baz=135 | | | | | | |
| C31A | Landman Farms, | 134.67 | 30 | P | PKPdf | 01 43 44.5 | +0.7 |
| | baz=135 | | | | | | |
| ISCO | Idaho Springs | 134.76 | 44 | ePKIKP | PKPdf | 01 43 44.9 | +0.3 |
| ISCO | Idaho Springs | 134.76 | 44 | P | PKPdf | 01 43 44.8 | +0.1 |
| | baz=135 | | | | | | |
| ISCO | Idaho Springs | 134.76 | 44 | ePKPdf | PKPdf | 01 43 44.9 | +0.3 |
| B32A | Ashes, Strandq | 134.81 | 28 | P | PKPdf | 01 43 44.0 | -0.1 |
| | baz=135 | | | | | | |
| K26A | Motz Farm, Whi | 134.84 | 39 | P | PKPdf | 01 43 45.0 | +0.6 |
| | baz=135 | | | | | | |
| F29A | Eureka | 134.90 | 33 | P | PKPdf | 01 43 45.0 | +0.6 |
| | baz=135 | | | | | | |
| E30A | Jud | 134.95 | 32 | P | PKPdf | 01 43 45.2 | +0.8 |
| | baz=135 | | | | | | |
| H28A | Mission Ridge | 134.96 | 35 | P | PKPdf | 01 43 45.2 | +0.7 |
| | baz=135 | | | | | | |
| AGMN | Agassiz Nation | 135.20 | 28 | PFAKE | | 01 44 00.0 | +15 |
| AGMN | | | | LR | LR | | |
| | comp=Z,288nm,19.0s | | | | | | |
| G29A | Hoven | 135.25 | 34 | P | PKPdf | 01 43 45.6 | +0.5 |
| | baz=135 | | | | | | |
| I28A | Midland | 135.29 | 36 | P | PKPdf | 01 43 45.4 | +0.2 |
| | baz=135 | | | | | | |
| F30A | Leola | 135.33 | 33 | P | PKPdf | 01 43 45.4 | +0.3 |
| | baz=135 | | | | | | |
| J28A | Allard Ranch, | 135.59 | 37 | P | PKPdf | 01 43 47.1 | +1.4 |
| | baz=136 | | | | | | |
| B34A | Aery, Baudette | 135.61 | 27 | P | PKPdf | 01 43 46.0 | +0.5 |
| | baz=136 | | | | | | |
| G30A | Faulkton | 135.72 | 33 | P | PKPdf | 01 43 47.5 | +1.7 |
| | baz=136 | | | | | | |
| I29A | Vivian Onida | 135.77 | 35 | P | PKPdf | 01 43 46.9 | +0.8 |
| | baz=136 | | | | | | |
| SDCO | Great Sand Dun | 135.79 | 46 | PFAKE | | 01 44 00.0 | +13 |
| SDCO | | | | LR | LR | | |
| | comp=Z,160nm,19.0s | | | | | | |
| D33A | AnnSam, Waubun | 136.04 | 29 | P | PKPdf | 01 43 47.1 | +0.7 |
| | baz=136 | | | | | | |
| 121A | Cookes Peak, D | 136.12 | 54 | ePKPdf | PKPdf | 01 43 48.4 | +1.1 |
| J29A | Okreek | 136.13 | 36 | P | PKPdf | 01 43 48.1 | +1.3 |
| | baz=136 | | | | | | |
| SCHQ | Schefferville | 136.17 | 1 | PKP | PKPdf | 01 43 46.2 | -0.2 |
| | comp=Z,10.0nm,1.1s,baz=350,slow=6.1,SNR=3.4 | | | | | | |
| SUSD | South Dakota S | 136.26 | 34 | P | PKPdf | 01 43 46.0 | -0.9 |
| | baz=136 | | | | | | |
| ANMO | Albuquerque | 136.27 | 50c | iPKIKP | PKPdf | 01 43 50.8 | +3.3 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| ANMO | Albuquerque | 136.27 | 50 | ePKPpre | PKPpre | 01 43 37.7 | |
| ANMO | | | | ePKPdf | PKiKP | 01 43 48.9 | -0.3 |
| ANMO | | | | LR | LR | | |
| | comp=Z,246nm,20.0s | | | | | | |
| D34A | Park Rapids | 136.39 | 29 | P | PKPdf | 01 43 47.6 | +0.5 |
| | baz=136 | | | | | | |
| P26A | Davis Ranch, A | 136.40 | 43 | P | PKPdf | 01 43 48.0 | +0.5 |
| | baz=136 | | | | | | |
| E33A | Westby DABS, E | 136.41 | 30 | P | PKPdf | 01 43 47.3 | +0.2 |
| | baz=136 | | | | | | |
| OGNE | Ogallala | 136.52 | 40 | PFAKE | | 01 44 00.0 | +12 |
| OGNE | | | | LR | LR | | |
| | comp=Z,356nm,21.0s | | | | | | |
| F33A | 5 Mile Ranch, | 136.73 | 31 | P | PKPdf | 01 43 48.6 | +0.9 |
| | baz=137 | | | | | | |
| R26A | Arlington | 136.96 | 44 | P | PKPdf | 01 43 49.7 | +1.1 |
| | baz=137 | | | | | | |
| K30A | Basset | 136.99 | 37 | P | PKPdf | 01 43 49.2 | +0.8 |
| | baz=137 | | | | | | |
| I32A | Karley and Nic | 137.35 | 34 | P | PKPdf | 01 43 50.5 | +1.5 |
| | baz=137 | | | | | | |
| EYMN | Ely | 137.38 | 25 | P | PKPdf | 01 43 50.1 | +1.2 |
| | baz=137 | | | | | | |
| EYMN | Ely | 137.38 | 25 | PFAKE | | 01 44 00.0 | +11 |
| EYMN | | | | LR | LR | | |
| | comp=Z,264nm,19.0s | | | | | | |
| T26A | Comanche Natio | 137.40 | 46 | P | PKPdf | 01 43 50.7 | +1.3 |
| | baz=137 | | | | | | |
| F35A | Swanville | 137.57 | 30 | P | PKPdf | 01 43 49.7 | +0.4 |
| | baz=138 | | | | | | |
| D37A | Cotton | 137.59 | 27 | P | PKPdf | 01 43 49.7 | +0.4 |
| | baz=138 | | | | | | |
| Q28A | Sharon Springs | 137.66 | 42 | P | PKPdf | 01 43 51.5 | +1.7 |
| | baz=138 | | | | | | |
| CFAA | Coronel Fontan | 137.70 | 177 | PKP | PKPdf | 01 43 49.9 | -0.2 |
| | comp=Z,1.2nm,0.9s,baz=206,slow=3.2,SNR=9.3 | | | | | | |
| F36A | Milaca | 138.07 | 29 | P | PKPdf | 01 43 50.7 | +0.5 |
| | baz=138 | | | | | | |
| MNTX | Cornudas Mount | 138.32 | 54 | ePKPpre | PKPpre | 01 43 41.8 | |
| MNTX | | | | ePKPdf | PKiKP | 01 43 52.5 | -0.7 |
| MSTX | Muleshoe | 139.44 | 50 | ePKPpre | PKPpre | 01 43 45.4 | |
| MSTX | | | | ePKPdf | PKPdf | 01 43 54.0 | +0.8 |
| COWI | Conover | 139.83 | 25 | PFAKE | | 01 44 10.0 | +17 |
| COWI | | | | LR | LR | | |
| | comp=Z,202nm,21.0s | | | | | | |
| X29A | Tulia | 140.03 | 48 | P | PKPpre | 01 43 48.0 | |
| | baz=140 | | | | | | |
| LCO | Las Campanas | 140.09 | 174 | ePKPdf | PKPdf | 01 43 55.8 | +1.0 |
| Y29A | Porterfield Fa | 140.31 | 49 | P | PKPpre | 01 43 48.5 | |
| | baz=140 | | | | | | |
| TXAR | Lajitas Array | 140.53 | 57 | PKhKP | PKPpre | 01 43 48.6 | |
| | comp=Z,4.8nm,0.9s,baz=252,slow=2.7,SNR=26 | | | | | | |
| TXAR | Lajitas Array | 140.53 | 57 | i PKHKP | PKPpre | 01 43 48.6 | |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| Z29A | Hungry Hill Ra | 140.55 | 50 | P | PKPpre | 01 43 49.2 | |
| | baz=141 | | | | | | |
| P34A | Walnut Farm, R | 140.57 | 38 | P | PKPpre | 01 43 49.1 | |
| | baz=141 | | | | | | |
| 129A | Stewart Farms, | 140.70 | 51 | P | PKPpre | 01 43 50.5 | |
| | baz=141 | | | | | | |
| V31A | Spring Creek L | 140.72 | 45 | P | PKPpre | 01 43 50.6 | |
| | baz=141 | | | | | | |
| Y30A | Stafford Cattl | 140.88 | 49 | P | PKPpre | 01 43 51.1 | |
| | baz=141 | | | | | | |
| W31A | Holland Ranch, | 140.94 | 46 | P | PKPpre | 01 43 51.2 | |
| | baz=141 | | | | | | |
| Z30A | Sanderson Ranc | 140.97 | 50 | P | PKPpre | 01 43 50.5 | |
| | baz=141 | | | | | | |
| KSU1 | Kansas State U | 140.98 | 39 | ePKPpre | PKPpre | 01 43 54.5 | |
| KSU1 | | | | LR | LR | | |
| | comp=Z,263nm,22.0s | | | | | | |
| 329A | Wagon Wheel Ra | 141.09 | 53 | P | PKPpre | 01 43 50.5 | |
| | baz=141 | | | | | | |
| X31A | McDonald Ranch | 141.19 | 47 | P | PKPpre | 01 43 51.7 | |
| | baz=141 | | | | | | |
| Y31A | Rekieta Farm, | 141.31 | 48 | P | PKPpre | 01 43 52.4 | |
| | baz=141 | | | | | | |
| 130A | Snyder | 141.40 | 51 | P | PKPpre | 01 43 52.3 | |
| | baz=141 | | | | | | |
| 529A | Stev Forest Ra | 141.43 | 55 | P | PKPpre | 01 43 51.7 | |
| | baz=141 | | | | | | |
| W32A | Sentinel | 141.47 | 46 | P | PKPpre | 01 43 52.3 | |
| | baz=142 | | | | | | |
| Q35A | Mercer Eighty, | 141.48 | 39 | P | PKPpre | 01 43 51.7 | |
| | baz=142 | | | | | | |
| 429A | Davenport Ranc | 141.50 | 54 | P | PKPpre | 01 43 52.1 | |
| | baz=142 | | | | | | |
| 230A | Sterling City | 141.60 | 52 | P | PKPpre | 01 43 52.7 | |
| | baz=142 | | | | | | |
| Z31A | Sharp Cattle R | 141.69 | 49 | P | PKPpre | 01 43 53.6 | |
| | baz=142 | | | | | | |
| 330A | Mertzon | 141.75 | 52 | P | PKPpre | 01 43 53.3 | |
| | baz=142 | | | | | | |
| 131A | Roby | 141.81 | 50 | P | PKPpre | 01 43 54.0 | |
| | baz=142 | | | | | | |
| JFWS | Jewell Farm | 141.83 | 29 | ePKIKP | PKPdf | 01 43 56.9 | -0.2 |
| JFWS | Jewell Farm | 141.83 | 29 | ePKPdf | PKPdf | 01 43 56.9 | -0.2 |
| Y32A | R-V Farms, Ver | 141.88 | 48 | P | PKPpre | 01 43 54.0 | |
| | baz=142 | | | | | | |
| 430A | Baggett Ranch, | 141.95 | 53 | P | PKPpre | 01 43 53.9 | |
| | baz=142 | | | | | | |
| WMOK | Wichita Mounta | 141.99 | 46 | ePKHKP | PKPpre | 01 43 52.4 | |
| WMOK | | | | MLR | MLR | | |
| | comp=Z,133nm,21.0s | | | | | | |
| WMOK | Wichita Mounta | 141.99 | 46 | ePKPpre | PKPpre | 01 43 52.4 | |
| WMOK | | | | LR | LR | | |
| | comp=Z,133nm,21.0s | | | | | | |
| CPUP | Villa Florida | 142.01 | 193 | PKhKP | PKPpre | 01 43 52.1 | |
| | comp=Z,2.4nm,0.6s,baz=149,slow=2.4,SNR=6.7 | | | | | | |
| CPUP | | | | PKP | PKPdf | 01 43 57.4 | -0.5 |
| | comp=Z,8.1nm,1.0s,baz=227,slow=1.0,SNR=6.9 | | | | | | |
| CPUP | Villa Florida | 142.01 | 193 | i PKHKP | PKPpre | 01 43 52.1 | |
| CPUP | | | | | | 01 43 57.4 | |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| S35A | Otter Creek Ra | 142.01 | 40 | P | PKPpre | 01 43 54.1 | |
| | baz=142 | | | | | | |
| 530A | J-C Ranch, Com | 142.12 | 54 | P | PKPpre | 01 43 53.8 | |
| | baz=142 | | | | | | |
| R36A | Gordon, Harris | 142.13 | 39 | P | PKPpre | 01 43 53.5 | |
| | baz=142 | | | | | | |
| 231A | Bronte | 142.19 | 51 | P | PKPpre | 01 43 54.5 | |
| | baz=142 | | | | | | |
| Z32A | Haskell | 142.19 | 49 | P | PKPpre | 01 43 55.7 | |
| | baz=142 | | | | | | |
| 331A | San Angelo | 142.37 | 52 | P | PKPpre | 01 43 55.2 | |
| | baz=142 | | | | | | |
| ABTX | Abilene, Hawle | 142.39 | 50 | P | PKPpre | 01 43 56.2 | |
| | baz=142 | | | | | | |
| ABTX | Abilene, Hawle | 142.39 | 50 | ePKPdf | PKPpre | 01 43 56.1 | |
| S36A | Lake Cedric, C | 142.45 | 40 | P | PKPpre | 01 43 55.3 | |
| | baz=142 | | | | | | |
| 431A | Sonora | 142.49 | 53 | P | PKPpre | 01 43 55.2 | |
| | baz=142 | | | | | | |
| U35A | Pawnee | 142.51 | 42 | P | PKPpre | 01 43 56.0 | |
| | baz=142 | | | | | | |
| R37A | Teagarden Farm | 142.56 | 38 | P | PKPpre | 01 43 54.0 | |
| | baz=142 | | | | | | |
| T36A | Boggs Farm, Ca | 142.67 | 41 | P | PKPpre | 01 43 55.8 | |
| | baz=143 | | | | | | |
| 232A | Coleman | 142.72 | 51 | P | PKPpre | 01 43 56.6 | |
| | baz=143 | | | | | | |
| Z33A | Whitaker Ranch | 142.72 | 48 | P | PKPpre | 01 43 57.4 | |
| | baz=143 | | | | | | |
| 531A | Rocksprings | 142.75 | 54 | P | PKPpre | 01 43 56.2 | |
| | baz=143 | | | | | | |
| 332A | Millersview | 142.87 | 52 | P | PKPpre | 01 43 56.8 | |
| | baz=143 | | | | | | |
| S37A | Fort Scott | 142.90 | 39 | P | PKPpre | 01 43 55.4 | |
| | baz=143 | | | | | | |
| 133A | Hamilton Ranch | 142.94 | 49 | P | PKPpre | 01 43 57.6 | |
| | baz=143 | | | | | | |
| 631A | Perdido Creek | 143.02 | 55 | P | PKPbc | 01 43 57.0 | +0.5 |
| | baz=143 | | | | | | |
| 432A | Menard | 143.05 | 52 | P | PKPbc | 01 43 56.9 | +0.3 |
| | baz=143 | | | | | | |
| Y34A | Reagan Ranch, | 143.12 | 46 | P | PKPbc | 01 43 57.4 | +0.8 |
| | baz=143 | | | | | | |
| JCT | Junction City | 143.21 | 53 | ePKIKP | PKPbc | 01 43 57.9 | +0.9 |
| JCT | | | | MLR | MLR | | |
| | comp=Z,238nm,20.0s | | | | | | |
| JCT | Junction City | 143.21 | 53 | P | PKPbc | 01 43 57.5 | +0.5 |
| | baz=143 | | | | | | |
| JCT | Junction City | 143.21 | 53 | ePKPdf | PKPbc | 01 43 57.9 | +0.9 |
| JCT | | | | LR | LR | | |
| | comp=Z,238nm,20.0s | | | | | | |
| 233A | Rising Star | 143.22 | 50 | P | PKPbc | 01 43 58.0 | +1.0 |
| | baz=143 | | | | | | |
| 532A | Rocksprings | 143.27 | 54 | P | PKPbc | 01 43 57.7 | +0.5 |
| | baz=143 | | | | | | |
| Z34A | Collier Ranch, | 143.30 | 47 | P | PKPbc | 01 43 58.2 | +1.1 |
| | baz=143 | | | | | | |
| V36A | Jenks | 143.37 | 43 | P | PKPbc | 01 43 57.5 | +0.3 |
| | baz=143 | | | | | | |
| TUL1 | Tulsa | 143.40 | 42 | P | PKPbc | 01 43 57.4 | +0.1 |
| | baz=143 | | | | | | |
| TUL1 | Tulsa | 143.40 | 42 | ePKPdf | PKPbc | 01 43 57.8 | +0.5 |
| 333A | Richland Sprin | 143.47 | 51 | P | PKPbc | 01 43 58.7 | +1.0 |
| | baz=144 | | | | | | |
| U37A | Salina | 143.55 | 41 | P | PKPbc | 01 43 58.0 | +0.3 |
| | baz=144 | | | | | | |
| 632A | Uvalde | 143.62 | 54 | P | PKPbc | 01 43 59.4 | +1.3 |
| | baz=144 | | | | | | |
| 433A | Art | 143.64 | 52 | P | PKPbc | 01 43 58.7 | +0.5 |
| | baz=144 | | | | | | |
| 732A | Laxson Ranch, | 143.77 | 56 | P | PKPbc | 01 43 59.8 | +1.2 |
| | baz=144 | | | | | | |
| X36A | Centrahoma | 143.78 | 45 | P | PKPbc | 01 43 59.3 | +0.8 |
| | baz=144 | | | | | | |
| Z35A | Perchaven, San | 143.80 | 47 | P | PKPbc | 01 43 59.4 | +0.8 |
| | baz=144 | | | | | | |
| 234A | Clairette | 143.80 | 50 | P | PKPbc | 01 43 59.7 | +1.0 |
| | baz=144 | | | | | | |
| V37A | Hulbert | 143.84 | 42 | P | PKPbc | 01 43 59.0 | +0.4 |
| | baz=144 | | | | | | |
| 832A | Faith Ranch, C | 143.93 | 56 | P | PKPbc | 01 44 00.3 | +1.2 |
| | baz=144 | | | | | | |
| 533A | Kerrville | 143.98 | 53 | P | PKPbc | 01 44 00.2 | +1.0 |
| | baz=144 | | | | | | |
| U38A | Gravette | 144.00 | 40 | P | PKPbc | 01 43 59.1 | 0.0 |
| | baz=144 | | | | | | |
| 334A | Lometa | 144.04 | 51 | P | PKPbc | 01 44 00.3 | +1.0 |
| | baz=144 | | | | | | |
| 135A | Vickery Place, | 144.07 | 48 | P | PKPdf | 01 44 01.0 | -0.4 |
| | baz=144 | | | | | | |
| HDIL | Hopedale | 144.08 | 31 | P | PKPbc | 01 43 59.3 | +0.1 |
| | baz=144 | | | | | | |
| HDIL | Hopedale | 144.08 | 31 | ePKPdf | PKPbc | 01 43 59.3 | +0.1 |
| HDIL | | | | LR | LR | | |
| | comp=Z,344nm,20.0s | | | | | | |
| W37A | Quinton | 144.09 | 43 | P | PKPbc | 01 43 60.0 | +0.6 |
| | baz=144 | | | | | | |
| 633A | Saathoff Ranch | 144.12 | 54 | P | PKPdf | 01 44 01.1 | -0.5 |
| | baz=144 | | | | | | |
| Y36A | Durant | 144.19 | 45 | P | PKPbc | 01 44 00.1 | +0.4 |
| | baz=144 | | | | | | |
| 434A | Burnet | 144.25 | 51 | P | PKPbc | 01 44 00.7 | +0.7 |
| | baz=144 | | | | | | |
| WHTX | Lake Whitney | 144.32 | 49 | P | PKPdf | 01 44 01.4 | -0.4 |
| | baz=144 | | | | | | |
| WHTX | Lake Whitney | 144.32 | 49 | ePKPdf | PKPdf | 01 44 01.8 | 0.0 |
| 733A | Divot King Ran | 144.32 | 55 | P | PKPdf | 01 44 01.7 | -0.2 |
| | baz=144 | | | | | | |
| V38A | Canehill | 144.33 | 41 | P | PKPbc | 01 44 00.2 | +0.1 |
| | baz=144 | | | | | | |
| 833A | Chaparral WMA, | 144.39 | 56 | P | PKPdf | 01 44 01.8 | -0.3 |
| | baz=144 | | | | | | |
| Z36A | Blue Ridge | 144.42 | 47 | P | PKPdf | 01 44 01.4 | -0.6 |
| | baz=144 | | | | | | |
| 534A | Blanco | 144.44 | 53 | P | PKPdf | 01 44 01.8 | -0.3 |
| | baz=144 | | | | | | |
| X37A | Clayton | 144.44 | 44 | P | PKPbc | 01 44 01.3 | +0.9 |
| | baz=144 | | | | | | |
| Y37A | Hugo | 144.61 | 45 | P | PKPbc | 01 44 01.8 | +0.8 |
| | baz=145 | | | | | | |
| 335A | Moody | 144.68 | 50 | P | PKPdf | 01 44 02.5 | 0.0 |
| | baz=145 | | | | | | |
| W38A | Poteau | 144.73 | 42 | P | PKPdf | 01 44 02.2 | -0.2 |
| | baz=145 | | | | | | |
| 933A | Laredo | 144.76 | 57 | P | PKPdf | 01 44 04.0 | +1.2 |
| | baz=145 | | | | | | |
| 136A | Ennis | 144.76 | 48 | P | PKPdf | 01 44 03.2 | +0.6 |
| | baz=145 | | | | | | |
| X38A | Whitesboro | 144.76 | 43 | P | PKPdf | 01 44 02.6 | +0.1 |
| | baz=145 | | | | | | |
| 435B | Jarrell | 144.79 | 51 | P | PKPdf | 01 44 03.0 | +0.3 |
| | baz=145 | | | | | | |
| 634A | China Grove, S | 144.81 | 54 | P | PKPdf | 01 44 03.5 | +0.8 |
| | baz=145 | | | | | | |
| 734A | La Parita Cree | 144.86 | 55 | P | PKPdf | 01 44 03.9 | +1.1 |
| | baz=145 | | | | | | |
| 236A | Katherine and | 145.00 | 48 | P | PKPdf | 01 44 03.9 | +0.9 |
| | baz=145 | | | | | | |
| Z37A | Pogue Cattle C | 145.03 | 46 | P | PKPdf | 01 44 03.7 | +0.7 |
| | baz=145 | | | | | | |
| 336A | Riesel | 145.06 | 50 | P | PKPdf | 01 44 04.0 | +0.9 |
| | baz=145 | | | | | | |
| 535A | Dale | 145.14 | 52 | P | PKPdf | 01 44 04.5 | +1.2 |
| | baz=145 | | | | | | |
| 834A | Tilden | 145.15 | 56 | P | PKPdf | 01 44 05.5 | +2.2 |
| | baz=145 | | | | | | |
| AAM | Ann Arbor | 145.18 | 23 | ePKIKP | PKPdf | 01 44 03.2 | +0.2 |
| AAM | | | | MLR | MLR | | |
| | comp=Z,163nm,19.0s | | | | | | |
| AAM | Ann Arbor | 145.18 | 23 | ePKPbc | PKPdf | 01 44 03.2 | +0.2 |
| AAM | | | | LR | LR | | |
| | comp=Z,163nm,19.0s | | | | | | |
| Y38A | Idabel | 145.25 | 44 | P | PKPdf | 01 44 03.8 | +0.4 |
| | baz=145 | | | | | | |
| 137A | Heron Place, G | 145.25 | 47 | P | PKPdf | 01 44 05.0 | +1.6 |
| | baz=145 | | | | | | |
| 635A | Leesville | 145.26 | 53 | P | PKPdf | 01 44 05.1 | +1.6 |
| | baz=145 | | | | | | |
| SFIN | Scholer Farm | 145.29 | 29 | P | PKPdf | 01 44 03.5 | +0.3 |
| | baz=145 | | | | | | |
| SFIN | Scholer Farm | 145.29 | 29 | ePKPdf | PKPdf | 01 44 03.4 | +0.2 |
| 934A | Benavides | 145.38 | 57 | P | PKPab | 01 44 06.7 | +2.8 |
| | baz=145 | | | | | | |
| 436A | Wall Ranch, Ga | 145.40 | 51 | P | PKPab | 01 44 05.4 | +1.6 |
| | baz=145 | | | | | | |
| 034A | Hebbronville | 145.45 | 58 | P | PKPab | 01 44 06.8 | +2.7 |
| | baz=146 | | | | | | |
| Z38A | Mt. Pleasant | 145.45 | 45 | P | PKPab | 01 44 05.1 | +1.1 |
| | baz=145 | | | | | | |
| 735A | Kenedy | 145.46 | 54 | P | PKPab | 01 44 06.4 | +2.3 |
| | baz=146 | | | | | | |
| 536A | Bastrop | 145.51 | 52 | P | PKPab | 01 44 05.8 | +1.5 |
| | baz=146 | | | | | | |
| 237A | Washetta, Mont | 145.53 | 48 | P | PKPab | 01 44 06.0 | +1.7 |
| | baz=146 | | | | | | |
| FRNY | Flat Rock | 145.58 | 9 | ePKPbc | PKPbc | 01 44 04.1 | +0.3 |
| RCBR | Riachuelo | 145.59 | 243 | PKPbc | PKPab | 01 44 05.1 | 0.0 |
| | comp=Z,85nm,1.1s,baz=128,slow=3.7,SNR=15 | | | | | | |
| RCBR | Riachuelo | 145.59 | 243 | ePKPbc | PKPdf | 01 44 04.7 | +0.1 |
| RCBR | | | | LR | LR | | |
| | comp=Z,359nm,20.0s | | | | | | |
| LONY | Lake Ozonia | 145.62 | 11 | ePKPbc | PKPab | 01 44 04.5 | +0.3 |
| LONY | | | | LR | LR | | |
| | comp=Z,233nm,20.0s | | | | | | |
| MIAR | Mount Ida | 145.67 | 42 | ePKP2 | PKPab | 01 44 05.4 | +0.7 |
| MIAR | | | | MLR | MLR | | |
| | comp=Z,264nm,19.0s | | | | | | |
| MIAR | Mount Ida | 145.67 | 42 | P | PKPab | 01 44 05.5 | +0.7 |
| | baz=146 | | | | | | |
| MIAR | Mount Ida | 145.67 | 42 | ePKPbc | PKPab | 01 44 05.4 | +0.7 |
| MIAR | | | | LR | LR | | |
| | comp=Z,264nm,19.0s | | | | | | |
| 835A | Beeville | 145.68 | 55 | P | PKPab | 01 44 07.3 | +2.4 |
| | baz=146 | | | | | | |
| Y39A | Lockesburg | 145.68 | 44 | P | PKPab | 01 44 05.5 | +0.8 |
| | baz=146 | | | | | | |
| 138A | Matatall Enter | 145.70 | 46 | P | PKPab | 01 44 06.8 | +2.0 |
| | baz=146 | | | | | | |
| 636A | Smothers Creek | 145.78 | 53 | P | PKPab | 01 44 07.7 | +2.4 |
| | baz=146 | | | | | | |
| 337A | Centerville | 145.81 | 49 | P | PKPab | 01 44 07.2 | +1.8 |
| | baz=146 | | | | | | |
| 437A | Phantom Ranch, | 145.86 | 50 | P | PKPab | 01 44 07.0 | +1.5 |
| | baz=146 | | | | | | |
| KVTX | Kingsville | 145.92 | 56 | ePKPbc | PKPab | 01 44 08.2 | +2.3 |
| KVTX | | | | LR | LR | | |
| | comp=Z,354nm,20.0s | | | | | | |
| 035A | Encino | 145.97 | 58 | P | PKPab | 01 44 08.1 | +2.0 |
| | baz=146 | | | | | | |
| 736A | Circle Diamond | 146.00 | 54 | P | PKPab | 01 44 08.2 | +2.1 |
| | baz=146 | | | | | | |
| Z39A | Irene McRaven, | 146.01 | 45 | P | PKPab | 01 44 07.3 | +1.2 |
| | baz=146 | | | | | | |
| 238A | Jacksonville | 146.02 | 47 | P | PKPab | 01 44 07.5 | +1.4 |
| | baz=146 | | | | | | |
| OLIL | Olney | 146.06 | 32 | ePKPbc | PKPbc | 01 44 05.8 | +0.3 |
| 537A | Green Hill Far | 146.09 | 51 | P | PKPab | 01 44 08.2 | +1.8 |
| | baz=146 | | | | | | |
| 035Z | Hargill | 146.18 | 58 | P | PKPab | 01 44 08.6 | +1.7 |
| | baz=146 | | | | | | |
| 139A | Bunkhouse Ranc | 146.18 | 46 | P | PKPab | 01 44 07.6 | +1.0 |
| | baz=146 | | | | | | |
| SIUC | Southern Illin | 146.22 | 34 | ePKPbc | PKPbc | 01 44 05.8 | -0.2 |
| 338A | Crockett | 146.22 | 49 | P | PKPab | 01 44 08.3 | +1.4 |
| | baz=146 | | | | | | |
| EMMW | East Machias | 146.28 | 2 | ePKPbc | PKPbc | 01 44 06.3 | +0.4 |
| NCB | Newcomb | 146.31 | 11 | ePKPbc | PKPab | 01 44 06.7 | -0.2 |
| NCB | | | | LR | LR | | |
| | comp=Z,281nm,19.0s | | | | | | |
| WVL | Waterville | 146.31 | 4 | ePKPbc | PKPab | 01 44 06.6 | -0.2 |
| UALR | University of | 146.33 | 41 | ePKPbc | PKPab | 01 44 07.2 | -0.1 |
| 637A | Eagle Lake | 146.37 | 52 | P | PKPab | 01 44 09.2 | +1.7 |
| | baz=146 | | | | | | |
| 438A | Sam Houston St | 146.40 | 50 | P | PKPab | 01 44 08.7 | +1.1 |
| | baz=146 | | | | | | |
| MDV | Middlebury | 146.46 | 9 | ePKPbc | PKPab | 01 44 07.1 | -0.2 |
| 239A | Gary | 146.48 | 47 | P | PKPab | 01 44 08.4 | +0.6 |
| | baz=146 | | | | | | |
| NATX | Nacogdoches | 146.48 | 47 | PFAKE | | 01 44 20.0 | +12 |
| NATX | | | | LR | LR | | |
| | comp=Z,263nm,19.0s | | | | | | |
| BLO | Bloomington | 146.51 | 29 | ePKP2 | PKPbc | 01 44 07.3 | +0.5 |
| BLO | Bloomington | 146.51 | 29 | ePKPbc | PKPbc | 01 44 07.3 | +0.5 |
| HKT | Hockley | 146.52 | 51 | ePKP2 | PKPab | 01 44 08.1 | +0.1 |
| HKT | Hockley | 146.52 | 51 | ePKPbc | PKPab | 01 44 08.1 | +0.1 |
| LVC | Limon Verde | 146.59 | 175 | PKPbc | PKPbc | 01 44 08.1 | +0.2 |
| | comp=Z,54nm,0.8s,baz=194,slow=1.9,SNR=14 | | | | | | |
| LVC | Limon Verde | 146.59 | 175 | ePKPbc | PKPab | 01 44 08.5 | -0.4 |
| ERPA | Erie | 146.62 | 19 | ePKPbc | PKPab | 01 44 07.9 | -0.2 |
| ERPA | | | | LR | LR | | |
| | comp=Z,230nm,19.0s | | | | | | |
| PARMO | Parma | 146.66 | 36 | ePKPbc | PKPab | 01 44 08.2 | -0.2 |
| 339A | Huntington | 146.78 | 48 | P | PKPab | 01 44 09.3 | +0.3 |
| | baz=147 | | | | | | |
| USIN | University of | 146.86 | 32 | ePKPbc | PKPbc | 01 44 08.6 | +0.7 |
| HBAR | Harrisburg | 146.88 | 38 | ePKPbc | PKPab | 01 44 09.2 | -0.1 |
| ACCN | Adirondack Com | 146.98 | 10 | ePKPbc | PKPbc | 01 44 08.9 | +0.9 |
| GNAR | Gosnell | 146.99 | 37 | ePKPbc | PKPab | 01 44 09.4 | -0.3 |
| ACSO | Alum Creek Sta | 147.21 | 24 | ePKPbc | PKPbc | 01 44 09.2 | +0.4 |
| ACSO | | | | LR | LR | | |
| | comp=Z,202nm,19.0s | | | | | | |
| GLAT | Glass | 147.21 | 36 | ePKPbc | PKPbc | 01 44 09.4 | +0.6 |
| 340A | Bronson | 147.22 | 47 | P | PKPab | 01 44 10.4 | -0.3 |
| | baz=147 | | | | | | |
| WCI | Wyandotte Cave | 147.36 | 30 | ePKIKP | PKPdf | 01 44 07.4 | +0.5 |
| WCI | | | | e | | 01 44 09.8 | |
| WCI | Wyandotte Cave | 147.36 | 30 | ePKPdf | PKPdf | 01 44 07.4 | +0.5 |
| WCI | | | | ePKPbc | PKPbc | 01 44 09.8 | +0.5 |
| UTMT | University of | 147.40 | 35 | ePKPbc | PKPbc | 01 44 10.4 | +1.0 |
| TRY | Troy | 147.62 | 10 | ePKPbc | PKPbc | 01 44 10.8 | +1.0 |
| BDFB | Brasilia | 148.09 | 215 | PKP | PKPdf | 01 44 07.6 | -1.2 |
| | comp=Z,13nm,0.7s,baz=217,slow=5.1,SNR=4.9 | | | | | | |
| BDFB | | | | PKPbc | PKPbc | 01 44 12.2 | +0.3 |
| | comp=Z,42nm,1.1s,baz=170,slow=3.0,SNR=24 | | | | | | |
| BDFB | Brasilia | 148.09 | 215 | PKIKP | PKPdf | 01 44 07.6 | -1.2 |
| BDFB | | | | | | 01 44 12.2 | |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,42nm,1.1s | | | | | | |
| WVT | Waverly | 148.13 | 34 | ePKP2 | PKPbc | 01 44 12.0 | +0.6 |
| WVT | Waverly | 148.13 | 34 | ePKPbc | PKPbc | 01 44 11.9 | +0.6 |
| HRV | Adam Dziewonsk | 148.16 | 8 | ePKP2 | PKPbc | 01 44 11.8 | +0.6 |
| HRV | Adam Dziewonsk | 148.16 | 8 | ePKPbc | PKPbc | 01 44 11.8 | +0.6 |
| OXF | Oxford | 148.34 | 38 | ePKP2 | PKPbc | 01 44 12.6 | +0.6 |
| OXF | Oxford | 148.34 | 38 | ePKPbc | PKPbc | 01 44 12.6 | +0.6 |
| VBMS | Vicksburg | 149.11 | 43 | P | PKPbc | 01 44 15.2 | +1.2 |
| | baz=149 | | | | | | |
| SWET | Sewanee | 149.84 | 33 | ePKPbc | PKPbc | 01 44 15.6 | -0.2 |
| TZTN | Tazewell | 150.02 | 29 | ePKPbc | PKPbc | 01 44 16.8 | +0.6 |
| CPCT | Cooper Cave | 150.41 | 31 | ePKPbc | PKPbc | 01 44 17.5 | +0.4 |
| BLA | Blacksburg | 150.82 | 24 | ePKPbc | PKPbc | 01 44 18.1 | 0.0 |
| VWCC | Virginia Weste | 150.96 | 23 | ePKPbc | PKPbc | 01 44 18.4 | 0.0 |
| CBN | Corbin | 151.01 | 18 | ePKPbc | PKPbc | 01 44 19.7 | +1.3 |
| CBN | | | | LR | LR | | |
| | comp=Z,387nm,22.0s | | | | | | |
| CMIG | Matias Romero | 151.49 | 74 | PKP | PKPdf | 01 44 14.9 | +1.0 |
| | comp=Z,9.7nm,0.9s,baz=15,slow=2.7,SNR=5.4 | | | | | | |
| CMIG | | | | PKPbc | PKiKP | 01 44 21.1 | +0.6 |
| | comp=Z,16nm,0.8s,baz=308,slow=2.9,SNR=16 | | | | | | |
| CMIG | | | | PKPab | PKPab | 01 44 29.3 | +0.7 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,16nm,1.0s,baz=335,slow=6.5,SNR=6.3 | | | | | | |
| BRAL | Brewton | 152.15 | 41 | ePKPbc | PKPbc | 01 44 22.3 | +1.0 |
| KMSC | Kings Mountain | 152.19 | 27 | P | PKPbc | 01 44 22.0 | +0.7 |
| | baz=152 | | | | | | |
| GOGA | Godfrey | 152.54 | 33 | ePKPbc | PKPbc | 01 44 22.8 | +0.8 |
| SIV | San Ignacio | 152.82 | 191 | PKP | PKPdf | 01 44 16.7 | +0.6 |
| | comp=Z,5.3nm,1.0s,baz=146,slow=2.6,SNR=6.5 | | | | | | |
| SIV | | | | PKPbc | PKiKP | 01 44 23.5 | +0.1 |
| | comp=Z,3.7nm,0.5s,baz=243,slow=7.3,SNR=11 | | | | | | |
| SIV | | | | PKPab | PKPab | 01 44 33.0 | -1.0 |
| | comp=Z,9.8nm,0.9s,baz=156,slow=3.6,SNR=8.5 | | | | | | |
| LPAZ | La Paz | 152.93 | 176 | PKP | PKPdf | 01 44 17.7 | +0.7 |
| | comp=Z,4.0nm,0.9s,baz=150,slow=1.8,SNR=10 | | | | | | |
| LPAZ | | | | PKPbc | PKiKP | 01 44 24.9 | +0.5 |
| | comp=Z,14nm,0.9s,baz=98,slow=1.9,SNR=28 | | | | | | |
| LPAZ | | | | PKPab | PKPab | 01 44 35.4 | +0.3 |
| | comp=Z,18nm,0.9s,baz=183,slow=6.1,SNR=14 | | | | | | |
| LPAZ | La Paz | 152.93 | 176 | PKIKP | PKPdf | 01 44 17.7 | +0.7 |
| LPAZ | | | | | | 01 44 24.9 | |
| LPAZ | | | | | | 01 44 35.4 | |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| CNNC | Cliffs of the | 153.52 | 22 | PFAKE | | 01 44 30.0 | +5.8 |
| CNNC | | | | LR | LR | | |
| | comp=Z,579nm,21.0s | | | | | | |
| TEIG | Tepich | 156.80 | 64 | PFAKE | | 01 44 30.0 | +8.6 |
| TEIG | | | | LR | LR | | |
| | comp=Z,303nm,20.0s | | | | | | |
| SAML | Samuel | 160.07 | 189 | ePKPdf | PKPdf | 01 44 25.8 | +0.3 |
| SAML | | | | ePKPab | PKPab | 01 45 04.3 | -0.7 |
| SAML | | | | LR | LR | | |
| | comp=Z,280nm,19.0s | | | | | | |
| JTS | JuntasAbangare | 161.53 | 90 | PFAKE | | 01 44 40.0 | +13 |
| JTS | | | | LR | LR | | |
| | comp=Z,1μm,21.0s | | | | | | |
| OTAV | Otavalo | 163.85 | 130 | ePKPdf | PKPdf | 01 44 31.1 | +1.2 |
| OTAV | | | | LR | LR | | |
| | comp=Z,151nm,19.0s | | | | | | |
| BCIP | Isla Barro Col | 166.44 | 96 | PFAKE | | 01 44 40.0 | +8.5 |
| BCIP | | | | LR | LR | | |
| | comp=Z,224nm,20.0s | | | | | | |
| PTGA | Pitinga | 166.91 | 209 | PKP | PKPdf | 01 44 32.7 | +0.7 |
| | comp=Z,1.6nm,0.8s,baz=226,slow=16,SNR=3.4 | | | | | | |
| PTGA | | | | PKPab | PKPab | 01 45 33.0 | -2.1 |
| | comp=Z,1.0nm,0.5s,baz=151,slow=7.1,SNR=5.1 | | | | | | |
| SDDR | Presa de Saban | 170.56 | 31 | PFAKE | | 01 44 50.0 | +16 |
| SDDR | | | | LR | LR | | |
| | comp=Z,564nm,20.0s | | | | | | |
| ANWB | Willy Bob | 172.03 | 328 | PFAKE | | 01 44 50.0 | +15 |
| ANWB | | | | LR | LR | | |
| | comp=Z,436nm,19.0s | | | | | | |
| SJG | San Juan | 172.82 | 360 | PFAKE | | 01 44 50.0 | +15 |
| SJG | | | | LR | LR | | |
| | comp=Z,282nm,20.0s | | | | | | |
| SDV | Santo Domingo | 175.18 | 114 | PFAKE | | 01 44 50.0 | +14 |
| SDV | | | | LR | LR | | |
| | comp=Z,318nm,20.0s | | | | | | |
| GRGR | Grenville | 175.40 | 286 | PFAKE | | 01 44 50.0 | +14 |
| GRGR | | | | LR | LR | | |
| | comp=Z,105nm,20.0s | | | | | | |

*IDC **01** 01:25:08.6±1.6, 4°32N×77°16W, h0km, mb3.5/3, mb1 3.8/4, mb1mx3.6/31, mbtmp3.6/4, ML2.9/1, Error ellipse: s-maj=60.6km s-min=25.5km az=14.0*
*FUNV **01** 01:25:14.9, 6°68N×73°17W, h159km, MW3.7*
*ISCJB **01** 01:25:15.8±0.7, 6°85N±0°06×72°92W±0°06, h166km, mb3.1/2, Error ellipse: s-maj=10.3km s-min=6.5km az=140.9*
**ISC 01 01:25:16.1**±1.0**, 6°81N**±0°07×**72°96W**±0°07**, h166km, n21, σ1s16**/29**, 6C, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CAPV | Capacho | 1.23 | 31 | ⇑eP | Pn | 01 25 44.7 | +0.1 |
| CAPV | | | | eS | Sn | 01 26 05.8 | -0.8 |
| ROSC | El Rosal | 2.37 | 215 | Pn | Pn | 01 25 56.9 | -0.1 |
| | 34nm,0.3s,baz=273,slow=8.8,SNR=60 | | | | | | |
| ROSC | | | | Sn | Sn | 01 26 25.4 | -3.1 |
| | 45nm,0.3s,baz=97,slow=19,SNR=11 | | | | | | |
| VIGV | El Vigia | 2.56 | 38 | ⇑iP | Pn | 01 25 59.4 | +0.5 |
| VIGV | | | | eS | Sn | 01 26 31.5 | -0.6 |
| ELOV | Elorza | 3.46 | 87 | eP | Pn | 01 26 10.5 | +0.6 |
| ELOV | | | | eS | Sn | 01 26 50.1 | -1.6 |
| VIRV | Villa del Rosa | 3.71 | 8 | ⇑iP | Pn | 01 26 11.6 | -1.6 |
| QARV | Quebrada Arrib | 4.15 | 35 | ⇑iP | Pn | 01 26 19.3 | +0.5 |
| QARV | | | | eS | Sn | 01 27 06.3 | -1.4 |
| SANV | Sanarito | 4.32 | 52 | eP | Pn | 01 26 21.3 | +0.3 |
| SANV | | | | eS | Sn | 01 27 10.8 | -1.0 |
| CURV | Curarigua | 4.35 | 43 | eP | Pn | 01 26 21.6 | +0.2 |
| CURV | | | | eS | Sn | 01 27 11.0 | -1.5 |
| DABV | Dabajuro | 4.69 | 29 | eP | Pn | 01 26 25.9 | +0.2 |
| DABV | | | | eS | Sn | 01 27 18.1 | -2.2 |
| TEPV | Terepaima | 4.87 | 50 | iP | Pn | 01 26 28.5 | +0.3 |
| TEPV | | | | eS | Sn | 01 27 22.9 | -1.7 |
| SIQV | Siquisique | 4.92 | 39 | ⇑iP | Pn | 01 26 28.8 | -0.1 |
| BAUV | El Baul | 5.31 | 66 | eP | Pn | 01 26 33.3 | -0.7 |
| MAPV | Macapo | 5.37 | 56 | ⇑iP | Pn | 01 26 35.0 | +0.2 |
| MONV | Montecano | 5.90 | 30 | eP | Pn | 01 26 40.8 | -0.9 |
| TURV | Turiamo | 6.22 | 54 | eP | Pn | 01 26 46.1 | +0.2 |
| BIRV | Birongo | 7.55 | 61 | eP | Pn | 01 27 03.0 | -0.6 |
| CUPV | Cœpira | 7.79 | 65 | eP | Pn | 01 27 06.4 | -0.5 |
| TXAR | Lajitas Array | 36.59 | 312 | P | P | 01 32 07.5 | +1.0 |
| | 0.3nm,0.4s,baz=128,slow=9.0,SNR=5.7 | | | | | | |
| NVAR | Mina Array Bea | 51.60 | 315 | P | P | 01 34 07.4 | +1.5 |
| | 0.1nm,0.3s,baz=127,slow=6.9,SNR=2.5 | | | | | | |
| TORD | Torodi Ar. Bea | 73.58 | 78 | P | pP | 01 37 10.5 | -1.5 |
| | 0.5nm,1.1s,baz=271,slow=7.1,SNR=2.5 | | | | | | |
| WRA | Warramunga Arr | 150.47 | 241 | PKPbc | PKPbc | 01 44 49.4 | +0.3 |
| | 0.3nm,0.5s,baz=106,slow=2.3,SNR=4.2 | | | | | | |

*ISCJB **01** 01:29:18.5±0.4, 39°09N±0°02×27°88E±0°03, h8km±4km, Error ellipse: s-maj=4.6km s-min=3.9km az=19.4*
*CSEM **01** 01:29:18.7±0.1, 39°08N×27°88E, h10km, ML3.0, Error ellipse: s-maj=1.7km s-min=1.5km az=96.0*
*ISK **01** 01:29:18.1, 39°09N×27°89E, h9km, MD2.8*
*DDA **01** 01:29:18.1, 39°09N×27°86E, h7km, Ml3.0*
**ISC 01 01:29:18.5**±0.9**, 39°10N**±0°02×**27°88E**±0°02**, h11km**±9km**, n50, σ0s45**/64**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKHS | Akhisar | 0.23 | 192 | i P | Pg | 01 29 22.9 | -0.3 |
| AKHS | | | | i S | Sg | 01 29 26.8 | +0.3 |
| AKHS | Akhisar | 0.23 | 192 | P | Pg | 01 29 22.9 | -0.3 |
| AKHS | | | | S | Sg | 01 29 26.8 | +0.3 |
| AKS | Akhisar | 0.23 | 192 | PG | Pg | 01 29 23.1 | -0.1 |
| AKS | | | | eSG | Sg | 01 29 26.8 | +0.4 |
| AKS | Akhisar | 0.23 | 192 | i Pg | Pg | 01 29 23.1 | -0.1 |
| AKS | | | | eSg | Sg | 01 29 26.8 | +0.4 |
| BALB | Balikesir | 0.54 | 0 | ePG | Pb | 01 29 29.2 | -0.7 |
| BALB | | | | eSG | Sb | 01 29 37.3 | -0.4 |
| BALB | Balikesir | 0.54 | 0 | ePg | Pb | 01 29 29.2 | -0.7 |
| BALB | | | | eSg | Sb | 01 29 37.3 | -0.4 |
| DEMI | Demirci | 0.66 | 95 | i P | Pb | 01 29 31.6 | -0.4 |
| DEMI | | | | i S | Sb | 01 29 41.0 | -0.2 |
| DEMI | Demirci | 0.66 | 95 | P | Pb | 01 29 31.6 | -0.4 |
| DEMI | | | | S | Sb | 01 29 41.0 | -0.2 |
| DURS | Dursunbey | 0.68 | 43 | i P | Pb | 01 29 32.0 | -0.5 |
| DURS | | | | i S | Sb | 01 29 41.8 | -0.1 |
| DURS | Dursunbey | 0.68 | 43 | P | Pb | 01 29 32.0 | -0.5 |
| DURS | | | | S | Sb | 01 29 41.9 | -0.1 |
| DKL | Dikili | 0.76 | 268 | ePG | Pb | 01 29 33.3 | -0.4 |
| DKL | Dikili | 0.76 | 268 | ePg | Pb | 01 29 33.3 | -0.4 |
| MANT | Manisa | 0.81 | 139 | i P | Pg | 01 29 34.0 | -0.2 |
| MANT | | | | i S | Sb | 01 29 45.1 | -0.7 |
| MANT | Manisa | 0.81 | 139 | P | Pg | 01 29 34.0 | -0.2 |
| MANT | | | | S | Sb | 01 29 45.1 | -0.7 |
| KULA | Kula-Manisa | 0.85 | 134 | ePG | Pg | 01 29 34.7 | -0.1 |
| KULA | Kula-Manisa | 0.85 | 134 | ePg | Pg | 01 29 34.7 | -0.1 |
| IZM | Izmir | 0.85 | 214 | ePG | Pg | 01 29 34.9 | 0.0 |
| IZM | Izmir | 0.85 | 214 | ePg | Pg | 01 29 34.9 | 0.0 |
| AYVA | Ayvalik | 0.94 | 283 | i P | Pg | 01 29 36.4 | -0.3 |
| AYVA | | | | i S | Sb | 01 29 49.3 | -0.1 |
| AYVA | Ayvalik | 0.94 | 283 | P | Pg | 01 29 36.4 | -0.3 |
| AYVA | | | | S | Sb | 01 29 49.3 | -0.1 |
| GONE | Gonen-Balikesi | 0.95 | 351 | ePG | Pb | 01 29 37.1 | +0.1 |
| GONE | Gonen-Balikesi | 0.95 | 351 | ePg | Pb | 01 29 37.1 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 1.16 | 179 | ePN | Pb | 01 29 40.3 | -0.3 |
| AYDB | Zeytinkoy-Aydi | 1.16 | 179 | ePn | Pb | 01 29 40.3 | -0.3 |
| KCTX | Karacabey (Bur | 1.22 | 18 | ePN | Pg | 01 29 41.6 | -0.3 |
| KCTX | Karacabey (Bur | 1.22 | 18 | ePn | Pg | 01 29 41.6 | -0.3 |
| EDC | Edincik | 1.24 | 360 | ePN | Pg | 01 29 42.3 | 0.0 |
| EDC | Edincik | 1.24 | 360 | ePn | Pg | 01 29 42.3 | 0.0 |
| KRBG | Karabiga-Canak | 1.36 | 341 | ePN | Pb | 01 29 44.0 | 0.0 |
| KRBG | Karabiga-Canak | 1.36 | 341 | ePn | Pb | 01 29 44.0 | 0.0 |
| EZN | Ezine | 1.40 | 301 | ePN | Pb | 01 29 44.8 | +0.1 |
| EZN | Ezine | 1.40 | 301 | ePn | Pb | 01 29 44.8 | +0.1 |
| MDNY | Mudanya-Bursa | 1.48 | 31 | ePN | Pb | 01 29 45.9 | -0.2 |
| MDNY | Mudanya-Bursa | 1.48 | 31 | ePn | Pb | 01 29 45.9 | -0.2 |
| MRMT | Marmara Adasi | 1.51 | 352 | ePN | Pb | 01 29 46.3 | -0.3 |
| MRMT | Marmara Adasi | 1.51 | 352 | ePn | Pb | 01 29 46.3 | -0.3 |
| SIGR | SIGRI | 1.57 | 275 | ePN | Pb | 01 29 47.1 | -0.5 |
| SIGR | SIGRI | 1.57 | 275 | ePn | Pb | 01 29 47.1 | -0.5 |
| CHOS | Chios island | 1.59 | 244 | ePN | Pb | 01 29 47.5 | -0.5 |
| CHOS | Chios island | 1.59 | 244 | ePn | Pb | 01 29 47.5 | -0.5 |
| ARMT | Armutlu | 1.65 | 27 | ePN | Pb | 01 29 48.2 | -0.6 |
| ARMT | Armutlu | 1.65 | 27 | ePn | Pb | 01 29 48.3 | -0.6 |
| RKY | Sarkoy-Tekirda | 1.67 | 341 | ePN | Pb | 01 29 48.6 | -0.7 |
| RKY | Sarkoy-Tekirda | 1.67 | 341 | ePn | Pb | 01 29 48.6 | -0.7 |
| GELI | Tayfur-Gelibol | 1.69 | 321 | ePN | Pb | 01 29 48.6 | -0.9 |
| GELI | Tayfur-Gelibol | 1.69 | 321 | ePn | Pb | 01 29 48.6 | -0.9 |
| IZI | Iznik | 1.74 | 44 | ePN | Pn | 01 29 49.4 | +0.6 |
| IZI | Iznik | 1.74 | 44 | ePn | Pn | 01 29 49.4 | +0.6 |
| GULT | Gulveren | 2.43 | 56 | ePN | Pn | 01 29 59.1 | +0.9 |
| GULT | Gulveren | 2.43 | 56 | ePn | Pn | 01 29 59.1 | +0.9 |

*ISCJB **01** 01:31:19.8±0.5, 39°08N±0°02×27°87E±0°04, h8km±5km, Error ellipse: s-maj=5.1km s-min=4.1km az=2.4*
*CSEM **01** 01:31:19.9±0.1, 39°07N×27°87E, h8km, MD2.7, Error ellipse: s-maj=3.1km s-min=2.6km az=84.0*
*ISK **01** 01:31:19.6, 39°07N×27°91E, h6km, MD2.7*
*DDA **01** 01:31:19.1, 39°09N×27°85E, h7km, Md2.8*
**ISC 01 01:31:19.8**±0.9**, 39°07N**±0°02×**27°86E**±0°03**, h14km**±8km**, n30, σ0s39**/44**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKHS | Akhisar | 0.19 | 191 | i P | Pg | 01 31 23.9 | -0.4 |
| AKHS | | | | i S | Sg | 01 31 27.6 | +0.4 |
| AKHS | Akhisar | 0.19 | 191 | P | Pg | 01 31 23.9 | -0.4 |
| AKHS | | | | S | Sg | 01 31 27.6 | +0.4 |
| AKS | Akhisar | 0.19 | 192 | PG | Pg | 01 31 24.0 | -0.2 |
| AKS | Akhisar | 0.19 | 192 | i Pg | Pg | 01 31 24.0 | -0.2 |
| BALB | Balikesir | 0.57 | 1 | ePG | Pg | 01 31 31.1 | +0.1 |
| BALB | | | | eSG | Sb | 01 31 39.4 | -0.2 |
| BALB | Balikesir | 0.57 | 1 | ePg | Pg | 01 31 31.1 | +0.1 |
| BALB | | | | eSg | Sb | 01 31 39.4 | -0.2 |
| DEMI | Demirci | 0.67 | 92 | i P | Pg | 01 31 33.0 | +0.2 |
| DEMI | | | | i S | Sb | 01 31 42.1 | -0.3 |
| DEMI | Demirci | 0.67 | 92 | P | Pg | 01 31 33.0 | +0.2 |
| DEMI | | | | S | Sb | 01 31 42.1 | -0.3 |
| DURS | Dursunbey | 0.71 | 42 | i P | Pg | 01 31 33.2 | -0.5 |
| DURS | | | | i S | Sg | 01 31 42.8 | -0.4 |
| DURS | Dursunbey | 0.71 | 42 | P | Pg | 01 31 33.2 | -0.5 |
| DURS | | | | S | Sg | 01 31 42.8 | -0.4 |
| DKL | Dikili | 0.74 | 271 | ePG | Pb | 01 31 35.4 | +0.8 |
| DKL | Dikili | 0.74 | 271 | ePg | Pb | 01 31 35.4 | +0.8 |
| MANT | Manisa | 0.79 | 136 | i P | Pb | 01 31 36.1 | +0.6 |
| MANT | | | | i S | Sb | 01 31 46.2 | 0.0 |
| MANT | Manisa | 0.79 | 136 | P | Pb | 01 31 36.1 | +0.6 |
| MANT | | | | S | Sb | 01 31 46.2 | 0.0 |
| DST | Dursunbey | 0.79 | 47 | ePG | Pg | 01 31 34.9 | -0.3 |
| DST | Dursunbey | 0.79 | 47 | ePg | Pg | 01 31 34.9 | -0.3 |
| KULA | Kula-Manisa | 0.83 | 131 | ePG | Pg | 01 31 35.7 | -0.3 |
| KULA | Kula-Manisa | 0.83 | 131 | ePg | Pg | 01 31 35.7 | -0.3 |
| AYVA | Ayvalik | 0.94 | 285 | i P | Pg | 01 31 37.4 | -0.6 |
| AYVA | | | | i S | Sg | 01 31 50.1 | -0.3 |
| AYVA | Ayvalik | 0.94 | 285 | P | Pg | 01 31 37.4 | -0.6 |
| AYVA | | | | S | Sg | 01 31 50.1 | -0.3 |
| GONE | Gonen-Balikesi | 0.99 | 352 | ePG | Pb | 01 31 39.1 | +0.4 |
| GONE | Gonen-Balikesi | 0.99 | 352 | ePg | Pb | 01 31 39.1 | +0.4 |
| AYDB | Zeytinkoy-Aydi | 1.12 | 179 | ePN | Pb | 01 31 41.0 | -0.1 |
| AYDB | Zeytinkoy-Aydi | 1.12 | 179 | ePn | Pb | 01 31 41.0 | -0.1 |
| KCTX | Karacabey (Bur | 1.25 | 18 | ePN | Pb | 01 31 43.6 | +0.3 |
| KCTX | Karacabey (Bur | 1.25 | 18 | ePn | Pb | 01 31 43.6 | +0.3 |
| EDC | Edincik | 1.28 | 0 | ePN | Pg | 01 31 44.7 | +0.3 |
| EDC | Edincik | 1.28 | 0 | ePn | Pg | 01 31 44.7 | +0.3 |
| AYDN | Tasoluk | 1.41 | 179 | i P | Pb | 01 31 46.0 | +0.1 |
| AYDN | | | | i S | Sg | 01 32 05.3 | +0.2 |
| AYDN | Tasoluk | 1.41 | 179 | P | Pb | 01 31 46.0 | +0.1 |
| AYDN | | | | S | Sg | 01 32 05.3 | +0.2 |

*IDC **01** 01:32:38.8±1.1, 4°94S×133°68E, h0km, mb4.0/5, mb1 4.2/8, mb1mx3.9/35, mbtmp4.1/8, ML4.3/3, MS4.1/2, Ms1 4.1/2, ms1mx3.3/31, Error ellipse: s-maj=48.2km s-min=21.5km az=76.0*
*ISCJB **01** 01:32:41.1±0.6, 5°00S±0°06×133°3E±0°1, h25km, mb4.0/6, MS4.1/2, Error ellipse: s-maj=15.7km s-min=7.0km az=164.3*
*NEIC **01** 01:32:43.8±3.3, 5°04S×133°44E, h33km±25km, mb4.3/2, Error ellipse: s-maj=16.7km s-min=9.9km az=59.0*
**ISC 01 01:32:42.7**±0.7**, 5°05S**±0°07×**133°3E**±0°1**, h25km, n21, σ1s64**/21**, mb4.0**/6**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.37 | 333 | ePn | Pn | 01 33 21.0 | +1.0 |
| FAKI | | | | eSn | Sn | 01 33 45.9 | -2.5 |
| SIJI | Sorong | 4.63 | 334 | Pn | Pn | 01 33 52.2 | +1.0 |
| | 7.2nm,0.3s,baz=203,slow=23,SNR=18 | | | | | | |
| SIJI | | | | Sn | Sn | 01 34 41.8 | -2.4 |
| | 5.0nm,0.3s,baz=173,slow=18,SNR=3.0 | | | | | | |
| SOEI | Soe | 10.12 | 242 | ePn | Pn | 01 35 07.0 | +0.3 |
| COEN | Coen | 13.14 | 133 | ePn | Pn | 01 35 48.3 | +0.5 |
| WRA | Warramunga Arr | 14.84 | 176 | Pn | Pn | 01 36 06.3 | -4.7 |
| | baz=356,slow=13,SNR=2.4 | | | | | | |
| FITZ | Fitzroy Crossi | 14.99 | 209 | Pn | Pn | 01 36 13.7 | +0.7 |
| | 2.7nm,0.3s,baz=42,slow=13,SNR=11 | | | | | | |
| FITZ | Fitzroy Crossi | 14.99 | 209 | eP | Pn | 01 36 14.9 | +1.8 |
| FITZ | | | | eSn | Sn | 01 38 54.9 | -3.6 |
| ASAR | Alice Springs | 18.52 | 178 | P | Pn | 01 36 58.9 | +1.2 |
| | 0.4nm,0.3s,baz=7.3,slow=10,SNR=2.8 | | | | | | |
| CTAO | Charters Tower | 19.54 | 141 | eP | P | 01 37 05.8 | -2.8 |
| | 25nm,1.2s | | | | | | |
| JHJ | Hachijo jima 2 | 38.45 | 9 | LR | LR | 01 52 36.6 | |
| | comp=Z,218nm,19.8s,baz=26,slow=31 | | | | | | |
| CMAR | Chiang Mai Arr | 41.16 | 305 | P | P | 01 40 27.4 | +2.1 |
| | 0.9nm,0.3s,baz=128,slow=8.2,SNR=4.9 | | | | | | |
| KSAR | Wonju Array Be | 42.58 | 354 | P | P | 01 40 36.4 | -0.2 |
| KSRS | Korea Array | 42.58 | 354 | P | P | 01 40 36.4 | -0.2 |
| | 0.4nm,0.3s,baz=162,slow=12,SNR=4.1 | | | | | | |
| USRK | Ussuriysk Ar. | 49.04 | 359 | P | P | 01 41 26.2 | -1.3 |
| | 1.0nm,0.6s,baz=180,slow=13,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 68.48 | 325 | P | P | 01 43 43.9 | +1.1 |
| | 1.1nm,0.4s,baz=115,slow=7.9,SNR=9.7 | | | | | | |
| ZALV | Zalesovo Beam | 71.36 | 332 | P | P | 01 44 00.0 | -0.3 |
| | 0.7nm,0.5s,baz=127,slow=6.2,SNR=2.5 | | | | | | |
| BRVK | Borovoye | 78.30 | 327 | eP | P | 01 44 40.6 | +0.2 |
| | 2.5nm,0.9s | | | | | | |
| ABKAR | Akbulak array | 83.07 | 321 | eP | P | 01 45 06.6 | +0.5 |
| KDAK | Kodiak Island | 85.84 | 31 | LR | LR | 02 20 17.5 | |
| | comp=Z,112nm,19.4s,baz=271,slow=33 | | | | | | |
| CPUP | Villa Florida | 147.14 | 162 | PKPbc | PKPbc | 01 52 23.9 | -0.4 |
| | 0.5nm,0.4s,baz=287,slow=7.3,SNR=3.0 | | | | | | |
| LPAZ | La Paz | 150.00 | 135 | PKPbc | PKPbc | 01 52 32.4 | -0.4 |
| | 1.3nm,0.9s,baz=253,slow=5.4,SNR=3.3 | | | | | | |

*ISCJB **01** 01:42:36.8±0.7, 6°7N±0°1×123°9E±0°2, h600km, mb4.0/11, Error ellipse: s-maj=25.0km s-min=9.0km az=151.6*
*IDC **01** 01:42:40.1±1.4, 6°63N×123°68E, h627km±17km, mb3.3/11, mb1 3.6/13, mb1mx3.1/37, mbtmp4.5/13, Error ellipse: s-maj=28.6km s-min=8.8km az=64.0*
**ISC 01 01:42:38.3**±0.7**, 6°6N**±0°1×**123°7E**±0°2**, h600km, n24, σ1s28**/27**, mb4.0**/11**, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 10.61 | 134 | P | P | 01 45 05.6 | +2.3 |
| | 3.4nm,0.3s,baz=318,slow=10,SNR=8.2 | | | | | | |
| BATI | Baumata | 16.72 | 180 | P | P | 01 46 03.4 | +0.9 |
| | 9.3nm,0.3s,baz=350,slow=1.6,SNR=5.6 | | | | | | |
| FITZ | Fitzroy Crossi | 24.64 | 176 | P | P | 01 47 14.0 | +0.5 |
| | 2.4nm,0.3s,baz=0.7,slow=7.3,SNR=26 | | | | | | |
| PSI | Prapat | 24.97 | 262 | P | P | 01 47 17.1 | +0.5 |
| | 4.1nm,0.5s,baz=76,slow=6.2,SNR=5.1 | | | | | | |
| CMAR | Chiang Mai Arr | 26.83 | 298 | P | P | 01 47 33.5 | +0.8 |
| | 1.9nm,0.5s,baz=115,slow=7.8,SNR=8.3 | | | | | | |
| WRA | Warramunga Arr | 28.40 | 159 | P | P | 01 47 47.1 | +0.6 |
| | 17nm,0.4s,baz=341,slow=9.2,SNR=84 | | | | | | |
| WRA | | | | S | S | 01 51 49.1 | -3.8 |
| | 0.6nm,0.5s,baz=337,slow=17,SNR=5.6 | | | | | | |
| WRA | | | | ScP | ScP | 01 53 22.2 | -1.8 |
| | 1.0nm,0.5s,baz=342,slow=3.1,SNR=11 | | | | | | |
| ASAR | Alice Springs | 31.71 | 162 | P | P | 01 48 16.1 | +1.3 |
| | 12nm,0.3s,baz=340,slow=7.3,SNR=212 | | | | | | |
| ASAR | | | | S | S | 01 52 42.4 | -1.2 |
| | 3.1nm,0.7s,baz=351,slow=22,SNR=15 | | | | | | |
| ASAR | | | | ScP | ScP | 01 53 32.8 | -2.2 |
| | 0.6nm,0.4s,baz=339,slow=3.0,SNR=6.4 | | | | | | |
| TAPN | Taplejung | 39.88 | 305 | eP | P | 01 49 23.0 | +0.6 |
| | 6.1nm,0.4s | | | | | | |
| ODAN | Odare | 39.95 | 305 | eP | P | 01 49 23.2 | +0.4 |
| | 6.8nm,0.4s | | | | | | |
| RAMN | Ramite | 40.63 | 304 | eP | P | 01 49 28.7 | +0.5 |
| | 5.0nm,0.4s | | | | | | |
| GUN | Gumba | 41.59 | 305 | eP | P | 01 49 36.4 | +0.4 |
| | 8.0nm,0.3s | | | | | | |
| PKI | Pulchoki | 41.85 | 304 | eP | P | 01 49 38.0 | +0.1 |
| | 3.4nm,0.3s | | | | | | |
| PKIN | Phulchoki | 41.86 | 304 | eP | P | 01 49 38.5 | +0.6 |
| | 4.9nm,0.5s | | | | | | |
| KKN | Kakani | 42.04 | 305 | eP | P | 01 49 39.4 | +0.1 |
| | 5.6nm,0.3s | | | | | | |
| DMN | Daman | 42.11 | 304 | eP | P | 01 49 40.3 | +0.4 |
| | 4.5nm,0.2s | | | | | | |
| GKN | Gorkha | 42.64 | 305 | eP | P | 01 49 44.1 | +0.2 |
| | 6.4nm,0.3s | | | | | | |
| KOLN | Koldanda | 43.41 | 304 | eP | P | 01 49 50.5 | +0.6 |
| | 8.2nm,0.2s | | | | | | |
| SONM | Songino Array | 43.64 | 343 | P | P | 01 49 51.8 | +0.5 |
| | 0.8nm,0.7s,baz=164,slow=7.4,SNR=4.0 | | | | | | |
| MKAR | Makanchi Array | 53.47 | 326 | P | P | 01 51 04.2 | +0.4 |
| | 5.5nm,0.4s,baz=120,slow=7.9,SNR=51 | | | | | | |
| MKAR | | | | PcP | PcP | 01 52 00.2 | -0.7 |
| | 0.6nm,0.5s,baz=96,slow=2.9,SNR=3.2 | | | | | | |
| ZALV | Zalesovo Beam | 56.66 | 334 | P | P | 01 51 24.8 | -0.9 |
| | 0.7nm,0.3s,baz=130,slow=6.4,SNR=2.8 | | | | | | |
| BRTR | Keskin Array B | 85.86 | 309 | P | P | 01 54 14.7 | -1.5 |
| | 0.9nm,0.8s,baz=112,slow=5.4,SNR=4.2 | | | | | | |
| ARCES | ARCESS Array B | 86.70 | 340 | P | P | 01 54 17.4 | -1.9 |
| | 2.8nm,1.1s,baz=64,slow=5.5,SNR=3.7 | | | | | | |
| FINES | FINESS Array B | 87.87 | 332 | P | P | 01 54 23.4 | -1.4 |
| | 0.8nm,0.6s,baz=90,slow=6.1,SNR=8.9 | | | | | | |
| TORD | Torodi Ar. Bea | 119.14 | 289 | PKP | PKPdf | 02 00 20.1 | -1.0 |
| | 0.2nm,0.3s,baz=76,slow=1.4,SNR=8.6 | | | | | | |

*CSEM **01** 01:55:28.8, 40°46N×29°50W, h10km, ML3.3, After PDA*
**PDA 01 01:55:28.8**±0.9**, 40°46N×29°50W, h10km, MD4.0, ML3.3, Error ellipse: s-maj=11.4km s-min=4.3km az=86.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H07N1 | FLORES T-PHASE | 1.46 | 239 | eP | Pg | 01 55 59.7 | +2.9 |
| H07S1 | FLORES T-PHASE | 1.69 | 231 | eP | Pn | 01 55 58.8 | +0.3 |
| PGRA | Graciosa | 1.85 | 140 | eP | Pn | 01 55 55.8 | -4.7 |
| PGRA | | | | eS | Sn | 01 56 16.7 | -7.2 |
| PGRA | | | | A | A | 01 56 19.8 | |
| | 56nm,0.5s | | | | | | |
| PGRA | Graciosa | 1.85 | 140 | eP | Pn | 01 55 55.8 | -4.7 |
| PGRA | | | | eS | Sn | 01 56 16.7 | -7.2 |
| PCED | Cedros | 1.93 | 161 | eS | Sn | 01 56 18.2 | -7.8 |
| PCED | | | | A | A | 01 56 18.8 | |
| | 82nm,0.6s | | | | | | |
| PCED | Cedros | 1.93 | 161 | eS | Sn | 01 56 18.2 | -7.8 |
| CALA | Caldeira | 1.97 | 161 | eS | Sn | 01 56 19.5 | -7.7 |
| CALA | Caldeira | 1.97 | 161 | eS | Sn | 01 56 19.5 | -7.7 |
| ROSA | Rosais | 1.99 | 150 | eP | Pn | 01 55 57.8 | -4.7 |
| ROSA | | | | eS | Sn | 01 56 19.4 | -8.1 |
| ROSA | | | | A | A | 01 56 23.1 | |
| | 49nm,0.3s | | | | | | |
| ROSA | Rosais | 1.99 | 150 | eP | Pn | 01 55 57.8 | -4.7 |
| ROSA | | | | eS | Sn | 01 56 19.4 | -8.1 |
| PICO | Pico | 2.12 | 157 | eS | Sn | 01 56 23.2 | -7.7 |
| PICO | Pico | 2.12 | 157 | eS | Sn | 01 56 23.2 | -7.7 |
| PMAN | Manadas | 2.12 | 149 | eP | Pn | 01 55 59.9 | -4.5 |
| PMAN | | | | eS | Sn | 01 56 22.7 | -8.1 |
| PMAN | | | | A | A | 01 56 24.4 | |
| | 49nm,0.3s | | | | | | |
| PMAN | Manadas | 2.12 | 149 | eP | Pn | 01 55 59.9 | -4.5 |
| PMAN | | | | eS | Sn | 01 56 22.7 | -8.1 |
| PCAN | Candelaria | 2.14 | 158 | eP | Pn | 01 56 00.1 | -4.5 |
| PCAN | | | | eS | Sn | 01 56 23.7 | -7.6 |
| PCAN | | | | A | A | 01 56 28.5 | |
| | 103nm,0.3s | | | | | | |
| PCAN | Candelaria | 2.14 | 158 | eP | Pn | 01 56 00.1 | -4.5 |
| PCAN | | | | eS | Sn | 01 56 23.7 | -7.6 |
| PPNO | Prainha do Nor | 2.20 | 154 | eS | Sn | 01 56 25.2 | -7.7 |
| PPNO | | | | A | A | 01 56 32.0 | |
| | 54nm,0.5s | | | | | | |
| PPNO | Prainha do Nor | 2.20 | 154 | eS | Sn | 01 56 25.2 | -7.7 |
| ADH | Angra Heroismo | 2.51 | 135 | eP | Pn | 01 56 04.8 | -4.9 |
| ADH | | | | eS | Sn | 01 56 32.4 | -7.9 |
| ADH | | | | A | A | 01 56 34.5 | |
| | 36nm,0.5s | | | | | | |
| ADH | Angra Heroismo | 2.51 | 135 | eP | Pn | 01 56 04.8 | -4.9 |
| ADH | | | | eS | Sn | 01 56 32.4 | -7.9 |
| PSET | Sete Cidades | 3.94 | 131 | eP | Pn | 01 56 25.4 | -4.0 |
| PSET | Sete Cidades | 3.94 | 131 | eP | Pn | 01 56 25.4 | -4.0 |
| PDA | Ponta Delgada | 4.03 | 131 | eP | Pn | 01 56 26.6 | -3.9 |
| PDA | Ponta Delgada | 4.03 | 131 | eP | Pn | 01 56 26.6 | -3.9 |
| BART | Pico Bartolome | 4.30 | 127 | eP | Pn | 01 56 30.1 | -4.3 |
| BART | Pico Bartolome | 4.30 | 127 | eP | Pn | 01 56 30.1 | -4.3 |
| PSMA | Santa Maria | 4.86 | 134 | eP | Pn | 01 56 37.6 | -4.4 |
| PSMN | Pico do Norte, | 4.89 | 133 | eP | Pn | 01 56 38.2 | -4.2 |
| PSMN | Pico do Norte, | 4.89 | 133 | eP | Pn | 01 56 38.2 | -4.2 |

*ISCJB **01** 01:55:41.7±2.2, 34°4N±0°1×73°1E±0°3, h21km, Error ellipse: s-maj=40.4km s-min=7.4km az=154.4*
*NNC **01** 01:55:52.3±4.9, 35°01N×73°68E, h273km±75km, mb2.6, mpv3.9, Error ellipse: s-maj=86.4km s-min=45.2km az=71.0*
**ISC 01 01:55:42.8**±2.7**, 34°3N**±0°2×**72°9E**±0°3**, h21km, n4, σ2s21**/7**, 3C-2D, Pakistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SMLA | Simla | 4.83 | 130 | i P | Pn | 01 56 54.7 | +0.5 |
| SMLA | | | | i S | Sn | 01 57 47.8 | -1.6 |
| SMLA | | | | AML | AML | 01 57 49.3 | |
| | comp=N,259nm,0.2s | | | | | | |
| SMLA | | | | AML | AML | 01 57 50.8 | |
| | comp=E,221nm,0.3s | | | | | | |
| SFK | Sufi-Kurgan | 5.70 | 5 | ⇑P | Pn | 01 57 08.2 | +1.9 |
| | comp=E,3.6nm,0.4s | | | | | | |
| SFK | | | | ⇓S | Sn | 01 58 11.3 | +0.1 |
| | comp=E,5.1nm,0.3s | | | | | | |
| MNAS | Manas | 8.15 | 358 | ⇑P | Pn | 01 57 40.3 | +0.4 |
| | comp=E,3.0nm,0.5s | | | | | | |
| MNAS | | | | ⇑S | Sn | 01 59 06.6 | -4.9 |
| | comp=E,2.1nm,0.4s | | | | | | |
| KK31 | Karatay Array | 8.95 | 349 | P | Pn | 01 57 52.0 | +1.2 |
| | comp=E,6.1nm,0.4s,baz=158,slow=12,SNR=94 | | | | | | |
| KK31 | | | | ⇓S | Sn | 01 59 27.6 | -3.4 |
| | comp=E,2.3nm,0.5s,baz=164,slow=22 | | | | | | |

**WEL 01 02:01:41.9**±0.2**, 43°76S×172°99E, h25km, ML3.5**/8**, 1C-4D, Error ellipse: s-maj=1.6km s-min=1.2km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MQZ | McQueen's Vall | 0.25 | 283 | ⇓P* | Pb | 02 01 48.1 | -0.2 |
| MQZ | | | | S* | Sb | 02 01 52.4 | -0.1 |
| MQZ | | | | AML | AML | 02 01 52.6 | |
| CRLZ | Canterbury Las | 0.33 | 305 | ⇓P* | Pb | 02 01 49.5 | +0.2 |
| CRLZ | | | | S* | Sb | 02 01 54.5 | +0.1 |
| CRLZ | | | | AML | AML | 02 01 57.8 | |
| OXZ | Oxford | 0.82 | 302 | P* | Pb | 02 01 57.3 | -0.3 |
| OXZ | | | | S* | Sb | 02 02 08.3 | +0.1 |
| LTZ | Lake Taylor | 1.11 | 332 | PN | Pn | 02 02 01.6 | -0.4 |
| LTZ | | | | SN | Sn | 02 02 15.8 | -0.8 |
| LTZ | | | | AML | AML | 02 02 25.2 | |
| KHZ | Kahutara | 1.40 | 17 | ⇑PN | Pn | 02 02 05.3 | -0.6 |
| KHZ | | | | SN | Sn | 02 02 23.0 | -0.6 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| THZ | Tophouse | 2.00 | 358 | ⇓PN | Pn | 02 02 14.0 | -0.2 |
| ODZ | Otahua Downs | 2.11 | 232 | PN | Pn | 02 02 15.0 | -0.7 |
| ODZ | | | | AML | AML | 02 02 55.6 | |
| ODZ | | | | AML | AML | 02 02 55.6 | |
| ODZ | | | | AML | AML | 02 02 56.3 | |
| ODZ | | | | AML | AML | 02 02 56.3 | |
| LBZ | Lake Benmore | 2.12 | 252 | PN | Pn | 02 02 15.5 | -0.3 |
| LBZ | | | | AML | AML | 02 03 06.1 | |
| LBZ | | | | AML | AML | 02 04 59.5 | |
| BSWZ | Blackbirch Sta | 2.15 | 18 | PN | Pn | 02 02 15.8 | -0.4 |
| DSZ | Denniston Nort | 2.20 | 336 | PN | Pn | 02 02 17.4 | +0.5 |
| DSZ | | | | SN | Sn | 02 02 42.3 | -1.0 |
| DSZ | | | | AML | AML | 02 02 46.1 | |
| FOZ | Fox Glacier | 2.40 | 274 | PN | Pn | 02 02 20.4 | +0.8 |
| NNZ | Nelson | 2.56 | 7 | PN | Pn | 02 02 22.3 | +0.5 |
| CAW | Cannon Point | 3.07 | 31 | ⇓PN | Pn | 02 02 27.2 | -1.6 |
| TUZ | Tuapeka | 3.24 | 226 | AML | AML | 02 03 32.7 | |
| TUZ | | | | AML | AML | 02 03 34.1 | |

*ISCJB **01** 02:02:59.3±0.5, 23°03S±0°07×66°49W±0°07, h222km, mb3.1/2, Error ellipse: s-maj=10.4km s-min=8.8km az=23.3*
*IDC **01** 02:02:59.4±1.2, 23°08S×66°52W, h219km±15km, mb2.9/2, mb1 3.3/4, mb1mx3.1/23, mbtmp3.7/4, Error ellipse: s-maj=26.3km s-min=20.9km az=32.0*
*SJA **01** 02:03:03.9±1.4, 23°18S×66°18W, h192km±17km, MD2.5, ML2.4*
**ISC 01 02:02:58.5**±0.9**, 23°18S**±0°08×**66°45W**±0°07**, h222km, n12, σ2s00**/14**, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HJA | Humahuaca | 0.96 | 92 | *i* P | Pn | 02 03 33.0 | +2.3 |
| HJA | | | | *i* S | S | 02 03 53.2 | -2.6 |
| YJA | Yavi | 1.32 | 41 | *i* P | Pn | 02 03 34.6 | +1.3 |
| YJA | | | | *i* S | S | 02 03 59.5 | -0.8 |
| AZAP | Zapla | 1.64 | 130 | *i* P | Pn | 02 03 37.9 | +2.2 |
| AZAP | | | | *i* S | S | 02 04 02.0 | -2.6 |
| AZAP | | | | AML | AML | 02 04 03.9 | |
| | comp=Z,22nm,0.6s | | | | | | |
| SLA | San Lorenzo | 1.76 | 151 | *i* P | Pn | 02 03 39.7 | +3.0 |
| ASTB | Santa Barbara | 1.96 | 113 | *i* P | Pn | 02 03 40.2 | +1.8 |
| LVC | Limon Verde | 2.34 | 284 | P | Pn | 02 03 43.2 | +0.8 |
| | comp=Z,529nm,0.3s,baz=122,slow=13,SNR=129 | | | | | | |
| LVC | | | | S | S | 02 04 15.9 | -0.5 |
| | comp=Z,241nm,0.3s,baz=247,slow=21,SNR=21 | | | | | | |
| FSA | Cafayete | 2.93 | 172 | *i* P | Pn | 02 03 52.9 | +4.3 |
| LPAZ | La Paz | 7.04 | 347 | P | Pn | 02 04 39.3 | -0.7 |
| | comp=Z,0.9nm,0.3s,baz=175,slow=15,SNR=30 | | | | | | |
| LPAZ | | | | S | S | 02 05 51.9 | -8.9 |
| | baz=192,slow=20,SNR=1.6 | | | | | | |
| CFAA | Coronel Fontan | 8.54 | 190 | P | Pn | 02 05 00.7 | +2.1 |
| | comp=Z,0.0nm,0.3s,baz=26,slow=14,SNR=6.9 | | | | | | |
| CFAA | | | | S | S | 02 06 32.1 | -3.0 |
| | comp=Z,0.1nm,0.3s,baz=293,slow=9.9,SNR=8.7 | | | | | | |
| BDFB | Brasilia | 18.93 | 70 | P | Pn | 02 07 04.6 | -1.9 |
| | comp=Z,0.2nm,0.3s,baz=228,slow=12,SNR=7.2 | | | | | | |
| TXAR | Lajitas Array | 63.31 | 324 | P | P | 02 13 04.6 | +0.5 |
| | comp=Z,0.2nm,0.7s,baz=146,slow=12,SNR=2.1 | | | | | | |
| TORD | Torodi Ar. Bea | 75.81 | 69 | P | P | 02 14 21.7 | +1.2 |
| | comp=Z,0.4nm,0.5s,baz=259,slow=5.7,SNR=14 | | | | | | |

*NIED **01** 02:14:00, 46°90N×152°90E, h59km, Mw4.4 Best double couple: M0 4.61000×10^15 NP1:φs258.00000°, δ15.00000°, λ91.00000°. NP2:φs76.00000°, δ75.00000°, λ90.00000°.*
*ISCJB **01** 02:14:33.0±0.5, 46°75N±0°07×152°84E±0°08, h35km, mb4.0/14, MS2.7/1, Error ellipse: s-maj=11.8km s-min=3.5km az=140.7*
*JMA **01** 02:14:34.2±0.7, 46°86N×152°90E, h30km, M4.6*
*SKHL **01** 02:14:35.5±0.8, 46°73N×152°92E, h67km±4km*
*MOS **01** 02:14:35.2±1.5, 46°84N×152°82E, h59km, mb4.3/11, Error ellipse: s-maj=18.4km s-min=8.5km az=60.2*
*IDC **01** 02:14:40.1±2.5, 46°94N×152°68E, h84km±21km, mb3.6/15, mb1 3.8/18, mb1mx3.6/42, mbtmp4.0/18, MS3.0/3, Ms1 3.0/3, ms1mx2.8/31, Error ellipse: s-maj=21.8km s-min=12.6km az=152.0*
**ISC 01 02:14:34.2**±0.6**, 46°65N**±0°07×**152°95E**±0°06**, h35km, n80, σ1s99**/73**, mb4.1**/14**, 2C, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUR | Kuril'sk | 3.82 | 250 | *e*PN | Pn | 02 15 34.9 | +4.5 |
| KUR | | | | *i* S | Sn | 02 16 18.1 | +4.1 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,86nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,32nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,39nm,0.1s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,54nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,147nm,0.2s | | | | | | |
| KUR | Kuril'sk | 3.82 | 250 | *e*P | Pn | 02 15 33.7 | +3.3 |
| KUR | | | | AMB | AMB | 02 15 36.0 | |
| | comp=N,29nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 02 15 36.0 | |
| | comp=N,19nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 02 15 36.0 | |
| | comp=N,53nm,0.3s | | | | | | |
| KUR | | | | *e*S | Sn | 02 16 16.5 | +2.5 |
| KUR | | | | A | A | 02 16 22.8 | |
| | comp=N,147nm,0.2s | | | | | | |
| KUR | | | | A | A | 02 16 22.8 | |
| | comp=N,54nm,0.2s | | | | | | |
| SKR | Severo-Kuril's | 4.55 | 26 | *e*PN | Pn | 02 15 39.0 | -1.4 |
| SKR | | | | pmax | pmax | | |
| | comp=N,80nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,90nm,0.5s | | | | | | |
| SKR | Severo-Kuril's | 4.55 | 26 | *e*P | Pn | 02 15 41.0 | +0.6 |
| SKR | | | | AMB | AMB | 02 15 41.5 | |
| | comp=Z,80nm,0.5s | | | | | | |
| SKR | | | | AMB | AMB | 02 15 41.5 | |
| | comp=Z,90nm,0.5s | | | | | | |
| SKR | | | | *e*S | Sn | 02 16 28.8 | -3.1 |
| SKR | | | | A | A | 02 16 32.0 | |
| | comp=Z,280nm,0.4s | | | | | | |
| SKR | | | | A | A | 02 16 32.0 | |
| | comp=Z,200nm,0.4s | | | | | | |
| SKR | | | | A | A | 02 16 32.0 | |
| | comp=Z,140nm,0.4s | | | | | | |
| SHO | Shikotan | 5.14 | 239 | *e*P | Pn | 02 15 50.1 | +1.6 |
| SHO | | | | AMB | AMB | 02 15 59.4 | |
| | comp=Z,90nm,0.7s | | | | | | |
| SHO | | | | *e*S | Sn | 02 16 44.9 | -1.7 |
| SHO | | | | A | A | 02 16 53.8 | |
| | comp=Z,106nm,0.3s | | | | | | |
| YUK | Yuzh-Kuril'sk | 5.64 | 245*c* | *i*PN | Pn | 02 15 59.0 | +3.6 |
| YUK | | | | *i* S | Sn | 02 17 02.0 | +3.1 |
| YUK | | | | pmax | pmax | | |
| | comp=N,41nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,47nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,86nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,40nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,131nm,0.6s | | | | | | |
| YUK | Yuzh-Kuril'sk | 5.64 | 245 | *e*P | Pn | 02 15 59.0 | +3.6 |
| YUK | | | | AMB | AMB | 02 16 01.2 | |
| | comp=E,41nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 02 16 01.2 | |
| | comp=E,47nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 02 16 01.2 | |
| | comp=E,86nm,0.2s | | | | | | |
| YUK | | | | *e*S | Sn | 02 17 02.0 | +3.1 |
| YUK | | | | A | A | 02 17 18.6 | |
| | comp=E,40nm,0.4s | | | | | | |
| YUK | | | | A | A | 02 17 18.6 | |
| | comp=E,131nm,0.4s | | | | | | |
| NEM2 | Nemuro 2 | 6.07 | 240 | P | Pn | 02 16 02.5 | +1.1 |
| NEM2 | | | | *e*S | Sn | 02 17 07.8 | -1.8 |
| JRA | Rausu | 6.15 | 247 | P | Pn | 02 16 05.5 | +3.0 |
| JNK | Nakash | 6.58 | 245 | P | Pn | 02 16 10.7 | +2.3 |
| JAK | Akkeshi | 6.91 | 241 | P | Pn | 02 16 14.0 | +1.1 |
| JAK | | | | *e*S | Sn | 02 17 26.6 | -3.7 |
| JTKR | Abashiri--Toko | 6.92 | 250 | P | Pn | 02 16 16.3 | +3.4 |
| YSS | Yuzh-Sakhalins | 7.00 | 276 | *e*P | Pn | 02 16 15.0 | +0.9 |
| YSS | | | | AMB | AMB | 02 16 21.4 | |
| | comp=E,16nm,0.3s | | | | | | |
| YSS | | | | *e*S | Sn | 02 17 30.0 | -2.5 |
| YSS | | | | A | A | 02 17 32.2 | |
| | comp=E,34nm,0.3s | | | | | | |
| PETK | Petropavlovsk- | 7.15 | 24 | P | Pn | 02 16 18.5 | +2.3 |
| | comp=E,1.3nm,0.3s,baz=186,slow=12,SNR=10 | | | | | | |
| PETK | | | | S | Sn | 02 17 37.4 | +1.3 |
| | comp=E,0.1nm,0.3s,baz=160,slow=18,SNR=2.2 | | | | | | |
| PETK | | | | LR | LR | 02 18 58.2 | |
| | comp=E,181nm,18.2s,baz=247,slow=37 | | | | | | |
| PETK | Petropavlovsk- | 7.15 | 24 | PN | Pn | 02 16 18.5 | +2.3 |
| PETK | | | | S | Sn | 02 17 37.4 | +1.3 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,181nm,18.2s | | | | | | |
| JMP | Maruseppu | 7.26 | 252 | P | Pn | 02 16 21.7 | +4.0 |
| JAR | Ashorobuto | 7.32 | 246 | P | Pn | 02 16 21.3 | +2.7 |
| JAR | | | | *e*S | Sn | 02 17 42.2 | +1.8 |
| PET | Petropavlovsk | 7.36 | 28 | *e*PN | Pn | 02 16 22.4 | +3.3 |
| PET | | | | MLR | MLR | | |
| | comp=Z,100nm,13.0s | | | | | | |
| JOB | Onbets | 7.49 | 243 | P | Pn | 02 16 22.5 | +1.7 |
| JOB | | | | *e*S | Sn | 02 17 42.8 | -1.7 |
| HRK | Horoka | 7.65 | 249 | *e*P | Pn | 02 16 26.6 | +3.5 |
| UGL | Uglegorsk | 7.71 | 292 | *e*P | Pn | 02 16 25.4 | +1.6 |
| JKA | Kamikawa-asahi | 7.71 | 255 | *e*P | Pn | 02 16 28.9 | +5.0 |
| JKK2 | Kamakawa 2 | 7.71 | 253 | P | Pn | 02 16 28.0 | +4.1 |
| ASAJ | Asahikawa | 7.72 | 255 | P | Pn | 02 16 28.9 | +4.9 |
| | baz=75,slow=16 | | | | | | |
| JCH | Churui | 7.94 | 243 | P | Pn | 02 16 28.0 | +1.0 |
| JCH | | | | *e*S | Sn | 02 17 52.4 | -3.1 |
| MYR | Moyori | 8.17 | 241 | *e*P | Pn | 02 16 30.5 | +0.3 |
| MYR | | | | *e*S | Sn | 02 17 56.8 | -4.4 |
| JEM | Erimo | 8.41 | 240 | P | Pn | 02 16 33.4 | 0.0 |
| JEM | | | | *e*S | Sn | 02 18 02.3 | -4.8 |
| ERM | Erimo | 8.41 | 240⇑ | *e*PN | Pn | 02 16 34.4 | +1.0 |
| JBT2 | Biratori 2 | 8.47 | 247 | P | Pn | 02 16 37.0 | +2.7 |
| JNBK | Urakawa-nobuka | 8.50 | 243 | P | Pn | 02 16 35.5 | +0.8 |
| JNBK | | | | *e*S | Sn | 02 18 05.0 | -4.3 |
| JNB | Noboribetsu | 9.47 | 248 | *e*S | Sn | 02 18 31.6 | -1.6 |
| JKB | Kayabe | 9.78 | 245 | P | Pn | 02 16 52.7 | +0.5 |
| JKB | | | | *e*S | Sn | 02 18 35.8 | -5.0 |
| JANG | Nango | 10.40 | 237 | P | Pn | 02 16 59.3 | -1.5 |
| JANG | | | | *e*S | Sn | 02 18 47.6 | -8.5 |
| JTH | Tanohata | 10.50 | 234 | *e*S | Sn | 02 18 48.7 | -10 |
| JOSM | Okushiri--Mats | 10.67 | 249 | P | Pn | 02 17 05.6 | +1.2 |
| EKMR | Ekimchan | 14.38 | 304 | *e*rx | rx | 02 17 09.6 | |
| USRK | Ussuriysk Ar. | 14.92 | 268 | P | Pn | 02 18 04.2 | +1.9 |
| | comp=Z,0.2nm,0.3s,baz=62,slow=14,SNR=2.7 | | | | | | |
| MJAR | Matsushiro Arr | 14.93 | 233 | P | Pn | 02 18 01.5 | -1.1 |
| | comp=Z,0.4nm,0.3s,baz=26,slow=13,SNR=4.9 | | | | | | |
| MJAR | | | | LR | LR | 02 23 35.6 | |
| | comp=Z,43nm,20.5s,baz=185,slow=36 | | | | | | |
| YAK | Yakutsk | 20.34 | 328 | *e*P | Pn | 02 19 16.3 | +7.0 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KSRS | Korea Array | 20.66 | 253 | P | P | 02 19 12.5 | +1.8 |
| | comp=Z,0.7nm,0.3s,baz=61,slow=9.9,SNR=5.3 | | | | | | |
| KSRS | | | | LR | LR | 02 26 09.1 | |
| | comp=Z,33nm,18.4s,baz=75,slow=33 | | | | | | |
| KSRS | Korea Array | 20.66 | 253 | *e*P | Pn | 02 19 14.6 | +1.4 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| KSRS | Korea Array | 20.66 | 253 | *e*P | Pn | 02 19 14.6 | +1.4 |
| H11N2 | WAKE ISLAND Hy | 29.19 | 152 | T | T | 02 52 03.8 | |
| | baz=340,slow=76,SNR=1743 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.20 | 152 | T | T | 02 52 04.4 | |
| | baz=340,slow=76,SNR=1055 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.20 | 152 | T | T | 02 52 03.5 | |
| | baz=340,slow=76,SNR=832 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 30.27 | 153 | T | T | 02 53 23.4 | |
| | baz=340,slow=76,SNR=1056 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.28 | 153 | T | T | 02 53 24.5 | |
| | baz=340,slow=76,SNR=854 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.29 | 153 | T | T | 02 53 24.5 | |
| | baz=340,slow=76,SNR=750 | | | | | | |
| ILAR | Eielson Array | 36.69 | 38 | P | P | 02 21 37.1 | -0.2 |
| | comp=Z,1.7nm,1.0s,baz=261,slow=8.7,SNR=9.2 | | | | | | |
| ILAR | Eielson Array | 36.69 | 38 | *e*P | P | 02 21 37.1 | -0.2 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| INK | Inuvik | 41.79 | 32 | P | P | 02 22 20.2 | +0.5 |
| | comp=Z,4.3nm,0.9s,baz=275,slow=5.9,SNR=9.0 | | | | | | |
| INK | Inuvik | 41.79 | 32 | P | P | 02 22 20.3 | +0.5 |
| INK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| DLBC | Dease Lake | 45.74 | 46 | P | P | 02 22 53.2 | +1.5 |
| | comp=Z,2.8nm,0.8s,baz=243,slow=5.4,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 46.88 | 297 | P | P | 02 22 59.6 | -1.2 |
| | comp=Z,0.3nm,0.3s,baz=76,slow=9.1,SNR=1.9 | | | | | | |
| YKA | Yellowknife Ar | 51.07 | 37 | P | P | 02 23 31.6 | -0.9 |
| | comp=Z,1.3nm,0.8s,baz=297,slow=6.9,SNR=3.5 | | | | | | |
| YKA | Yellowknife Ar | 51.07 | 37 | P | P | 02 23 31.6 | -0.9 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 52.24 | 256 | *e*P | P | 02 23 43.8 | +1.9 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| CMAR | Chiang Mai Arr | 52.24 | 256 | *e*P | P | 02 23 43.8 | +1.9 |
| DAG | Danmarks Havn | 56.74 | 358 | *i* P | P | 02 24 22.3 | +8.6 |
| DAG | Danmarks Havn | 56.74 | 358 | *i* P | P | 02 24 22.3 | +8.6 |
| YBH | Yreka Blue Hor | 57.89 | 62 | P | P | 02 24 23.7 | +1.2 |
| | comp=Z,1.2nm,0.7s,baz=14,slow=8.3,SNR=3.5 | | | | | | |
| YBH | Yreka Blue Hor | 57.89 | 62 | P | P | 02 24 23.7 | +1.2 |
| YBH | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| ARCES | ARCESS Array B | 57.91 | 341 | P | P | 02 24 19.5 | -2.6 |
| | comp=Z,1.0nm,0.8s,baz=30,slow=7.3,SNR=3.3 | | | | | | |
| ARCES | ARCESS Array B | 57.91 | 341 | P | P | 02 24 19.5 | -2.6 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| SUMG | Summit | 60.80 | 4 | *i* P | P | 02 24 42.2 | -0.3 |
| SUMG | Summit | 60.80 | 4 | *i* P | P | 02 24 42.2 | -0.3 |
| NVAR | Mina Array Bea | 62.58 | 62 | P | P | 02 24 55.6 | +0.8 |
| | comp=Z,1.3nm,0.7s,baz=292,slow=7.4,SNR=8.7 | | | | | | |
| FINES | FINESS Array B | 64.08 | 335 | P | P | 02 25 02.5 | -1.5 |
| | comp=Z,1.9nm,0.5s,baz=39,slow=6.0,SNR=20 | | | | | | |
| FINES | FINESS Array B | 64.08 | 335 | P | P | 02 25 02.5 | -1.5 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| NB2 | NORSAR Subarra | 68.28 | 341 | P | P | 02 25 29.9 | -1.2 |
| | comp=Z,1.6nm,0.6s,baz=28,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 68.28 | 341 | P | P | 02 25 29.8 | -1.2 |
| | comp=Z,2.4nm,0.7s,baz=31,slow=6.8,SNR=10.0 | | | | | | |
| NOA | NORSAR Array B | 68.28 | 341 | P | P | 02 25 29.8 | -1.3 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| AKASG | Malin Array Be | 71.56 | 326 | P | P | 02 25 49.8 | -1.5 |
| | comp=Z,1.6nm,0.5s,baz=33,slow=6.1,SNR=8.6 | | | | | | |
| AKASG | Malin Array Be | 71.56 | 326 | P | P | 02 25 49.8 | -1.5 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| ASAR | Alice Springs | 72.08 | 198 | P | P | 02 25 56.1 | +1.4 |
| | comp=Z,0.2nm,0.4s,baz=18,slow=5.4,SNR=4.3 | | | | | | |
| TXAR | Lajitas Array | 77.64 | 60 | P | P | 02 26 27.3 | +0.2 |
| | comp=Z,0.9nm,0.5s,baz=301,slow=4.7,SNR=25 | | | | | | |
| TXAR | Lajitas Array | 77.64 | 60 | P | P | 02 26 27.3 | +0.2 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| GERES | GERESS Array B | 78.49 | 334 | P | P | 02 26 30.0 | -1.4 |
| | comp=Z,0.2nm,0.4s,baz=42,slow=4.5,SNR=4.4 | | | | | | |
| BDFB | Brasilia | 144.49 | 36 | PKP | PKPab | 02 34 05.0 | -0.4 |
| | comp=Z,1.0nm,0.4s,baz=73,slow=2.5,SNR=3.1 | | | | | | |
| BDFB | Brasilia | 144.49 | 36 | PKIKP | PKPab | 02 34 05.0 | -0.4 |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |

*DDA **01** 02:22:18.5, 36°90N×28°85E, h7km, Md2.7*
*ISCJB **01** 02:22:20.8±0.7, 37°03N±0°06×28°91E±0°06, h7km, Error ellipse: s-maj=9.7km s-min=5.4km az=154.5*
*CSEM **01** 02:22:20.8±0.4, 37°04N×28°90E, h5km, MD2.3, Error ellipse: s-maj=10.1km s-min=7.5km az=7.0*
*ISK **01** 02:22:20.2, 37°03N×28°92E, h5km, MD2.3*
**ISC 01 02:22:20.5**±1.1**, 37°02N**±0°05×**28°91E**±0°03**, h7km, n12, σ0s66**/15**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DALY | Dalyan (Mu˜la | 0.28 | 225 | *e*PG | Pg | 02 22 26.8 | +0.7 |
| DALY | | | | *e*SG | Sb | 02 22 31.6 | -1.3 |
| DALY | Dalyan (Mu˜la | 0.28 | 225 | *e*Pg | Pg | 02 22 26.8 | +0.7 |
| DALY | | | | *e*Sg | Sb | 02 22 31.6 | -1.3 |
| FETY | Fethiye | 0.41 | 159 | *e*PG | Pg | 02 22 28.9 | +0.5 |
| FETY | Fethiye | 0.41 | 159 | *e*Pg | Pg | 02 22 28.9 | +0.5 |
| YER | Yerkesik | 0.51 | 283 | *e*PG | Pg | 02 22 30.7 | +0.3 |
| YER | Yerkesik | 0.51 | 283 | *e*Pg | Pg | 02 22 30.7 | +0.3 |
| GOLH | Golhisar | 0.57 | 67 | *i* S | Sb | 02 22 41.6 | +0.4 |
| GOLH | Golhisar | 0.57 | 67 | P | Pg | 02 22 31.2 | -0.3 |
| GOLH | | | | S | Sb | 02 22 41.6 | +0.4 |
| ELL | Elmali | 0.85 | 108 | *e*PG | Pg | 02 22 36.8 | 0.0 |
| ELL | Elmali | 0.85 | 108 | *e*Pg | Pg | 02 22 36.8 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 1.23 | 319 | *e*PN | Pn | 02 22 44.3 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 1.23 | 319 | *e*Pn | Pn | 02 22 44.3 | 0.0 |

*IDC **01** 03:18:33.5±0.5, 13°55N×88°84W, h49km±3km, mb4.2/25, mb1 4.3/27, mb1mx4.3/36, mbtmp4.5/27, MS3.7/18, Ms1 3.7/18, ms1mx3.7/23, Error ellipse: s-maj=20.6km s-min=9.0km az=55.0*
*ISCJB **01** 03:18:35.9±0.3, 13°33N±0°03×89°15W±0°03, h88km±2km, mb4.8/138, Error ellipse: s-maj=6.6km s-min=2.7km az=42.4*
*CASC **01** 03:18:35.5±2.2, 13°05N×89°42W, h43km±26km, MD4.5, ML5.1, mb4.8(NEIC)*
*NEIC **01** 03:18:40.7±0.7, 13°29N×89°07W, h120km±6km, mb4.8/120, Error ellipse: s-maj=6.1km s-min=3.0km az=225.0*
*NEIC Felt [V] at Mejicanos and [IV] at Antiguo Cuscatlan, Nueva San Salvador, San Salvador and Zaragoza. Also felt at Ayutuxtepeque, Chinameca, Ciudad Arce, Colon, Ilopango, Izalco, La Libertad, San Antonio del Monte, San Martin, San Pedro Perulapan, Santa Ana and Santo Tomas.*
*BJI **01** 03:18:41.4, 13°30N×89°10W, h117km, mB5.0/1*
**ISC 01 03:18:35.1**±0.7**, 13°24N**±0°05×**89°31W**±0°05**, h72km**±5km**, n697, σ1s23**/740**, mb4.8**/138**, 4C-11D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AIES | Las Flores | 0.34 | 49⇓ | *i*P | Pn | 03 18 47.1 | +0.3 |
| AIES | | | | AML | AML | 03 18 56.2 | |
| | comp=Z,79μm,0.4s | | | | | | |
| AIES | | | | *e*S | Sn | 03 18 56.6 | +1.3 |
| SNET | Serv Nac Est T | 0.46 | 10⇓ | *i*P | Pn | 03 18 48.4 | +0.5 |
| SNET | | | | *e*S | Sn | 03 18 58.4 | +1.2 |
| SNET | | | | AML | AML | 03 19 00.0 | |
| | comp=Z,210μm,0.2s | | | | | | |
| LFRS | El Faro | 0.46 | 32⇓ | *i*P | Pn | 03 18 48.7 | +0.8 |
| BOQS | Boqueron | 0.50 | 4⇑ | *i*P | Pn | 03 18 49.1 | +0.7 |
| LFU | La Fuente | 0.55 | 21⇓ | *i*P | Pn | 03 18 50.0 | +1.2 |
| LBRS | Las Brisas | 0.56 | 28⇓ | *i*P | Pn | 03 18 50.3 | +1.4 |
| SNVI | San Vicente | 0.59 | 51⇓ | *i*P | Pn | 03 18 50.2 | +1.0 |
| SONS | Sonsonate | 0.64 | 322 | *e*P | Pn | 03 18 49.0 | -0.6 |
| SONS | | | | *e*S | Sn | 03 18 59.4 | -0.8 |
| SBLS | San Blas | 0.67 | 333⇓ | *i*P | Pn | 03 18 50.5 | +0.3 |
| SNJE | San Jose | 0.69 | 336⇓ | *i*P | Pn | 03 18 50.7 | +0.4 |
| RTR | El Retiro | 0.73 | 334⇓ | *i*P | Pn | 03 18 51.4 | +0.6 |
| RBDL | Robledal | 0.94 | 337⇑ | *i*P | Pn | 03 18 54.0 | +0.7 |
| CAHU | Cacacuatique | 1.20 | 63⇑ | *i*P | Pn | 03 18 58.3 | +1.9 |
| CNCH | Conchagua | 1.44 | 88 | *i* P | Pn | 03 19 01.3 | +1.8 |
| NBG | Las Nubes | 1.68 | 323 | *e*P | Pn | 03 19 05.0 | +2.2 |
| PCG | Pacaya | 1.71 | 313 | *e*P | Pn | 03 19 04.9 | +1.7 |
| MRL | Marmol | 1.86 | 349 | *e*P | Pn | 03 19 08.0 | +2.9 |
| FUG | Fuego 3 | 1.91 | 309 | *e*P | Pn | 03 19 06.9 | +1.0 |
| TGUH | Tegucigalpa,Un | 2.14 | 67⇑ | *i*P | Pn | 03 19 11.1 | +2.3 |
| TGUH | Tegucigalpa,Un | 2.14 | 67 | *e*Pn | Pn | 03 19 11.0 | +2.3 |
| JAT | Jato | 2.50 | 296⇓ | *e*P | Pn | 03 19 14.2 | +0.6 |
| COPN | Copaltepe | 2.85 | 111 | *i* P | Pn | 03 19 18.8 | +0.4 |
| JTS | JuntasAbangare | 5.18 | 124 | *e*Pn | Pn | 03 19 52.1 | +1.9 |
| JTS | | | | *e*Sn | Sn | 03 20 51.1 | +2.5 |
| JCR | Jicaral | 5.32 | 129⇓ | *e*P | Pn | 03 19 54.3 | +2.2 |
| JCR | | | | *e*S | Sn | 03 20 49.5 | -2.6 |
| CAO | Cobano | 5.42 | 130 | *e*P | Pn | 03 19 54.7 | +1.3 |
| CAO | | | | *e*S | Sn | 03 20 55.1 | +0.6 |
| CGA2 | Cerro Gallo 2 | 5.72 | 123 | *e*P | Pn | 03 20 00.1 | +2.4 |
| CGA2 | | | | *e*S | Sn | 03 21 01.7 | -0.5 |
| BUS | Buena Vista | 6.56 | 123 | *e*P | Pn | 03 20 12.4 | +3.0 |
| BUS | | | | *e*S | Sn | 03 21 21.1 | -2.0 |
| CMIG | Matias Romero | 6.61 | 306 | P | Pn | 03 20 10.8 | +1.1 |
| | comp=Z,6.4nm,0.3s,baz=125,slow=8.4,SNR=213 | | | | | | |
| CMIG | | | | S | Sn | 03 21 23.4 | -0.2 |
| | comp=Z,18nm,0.3s,baz=65,slow=23,SNR=8.2 | | | | | | |
| CTCR | Cotoan | 7.74 | 123 | *e*P | Pn | 03 20 28.3 | +2.9 |
| CTCR | | | | *e*S | Sn | 03 21 52.3 | +0.5 |
| TBS2 | | 7.88 | 123 | *e*P | Pn | 03 20 30.9 | +3.6 |
| TBS2 | | | | *e*S | Sn | 03 21 54.3 | -0.9 |
| BCIP | Isla Barro Col | 10.14 | 113 | *e*Pn | Pn | 03 21 00.1 | +2.2 |
| MTDJ | Mount Denham | 12.37 | 65 | *e*Pn | Pn | 03 21 32.2 | +3.6 |
| 035Z | Hargill | 15.51 | 329 | P | P | 03 22 13.0 | +0.4 |
| | baz=16,SNR=7.4 | | | | | | |
| 035A | Encino | 15.93 | 330 | P | P | 03 22 17.6 | +0.4 |
| | baz=16,SNR=7.5 | | | | | | |
| 034A | Hebbronville | 16.32 | 329 | P | P | 03 22 23.5 | +1.9 |
| | baz=16,SNR=18 | | | | | | |
| KVTX | Kingsville | 16.34 | 332 | *e*Pn | P | 03 22 25.1 | +3.3 |
| | comp=Z,95nm,1.1s | | | | | | |
| DWPF | Disney | 16.52 | 25 | *e*Pn | P | 03 22 26.6 | +2.8 |
| | comp=Z,251nm,0.8s | | | | | | |
| 934A | Benavides | 16.68 | 330 | P | P | 03 22 27.4 | +1.8 |
| | baz=17,SNR=35 | | | | | | |
| OTAV | Otavalo | 16.81 | 139 | *e*Pn | P | 03 22 31.1 | +3.5 |
| | comp=Z,27nm,1.5s | | | | | | |
| 835A | Beeville | 16.95 | 333 | P | P | 03 22 31.1 | +2.6 |
| | baz=17,SNR=9.1 | | | | | | |
| ROSC | El Rosal | 16.97 | 118 | P | Pn | 03 22 26.6 | -1.8 |
| | comp=Z,0.5nm,0.3s,baz=66,slow=21,SNR=2.3 | | | | | | |
| ROSC | | | | LR | LR | 03 29 31.9 | |
| | comp=Z,124nm,21.4s,baz=303,slow=39 | | | | | | |
| ROSC | El Rosal | 16.97 | 118 | *e*Pn | P | 03 22 33.0 | +3.8 |
| 933A | Laredo | 17.07 | 328 | P | P | 03 22 31.7 | +1.8 |
| | baz=17 | | | | | | |
| 834A | Tilden | 17.14 | 331 | P | P | 03 22 31.7 | +1.1 |
| | baz=17,SNR=7.2 | | | | | | |
| 736A | Circle Diamond | 17.22 | 336 | P | P | 03 22 32.8 | +1.3 |
| | baz=17,SNR=16 | | | | | | |
| 637A | Eagle Lake | 17.39 | 339 | P | P | 03 22 35.9 | +2.5 |
| | baz=18,SNR=9.6 | | | | | | |
| 735A | Kenedy | 17.43 | 334 | P | P | 03 22 35.7 | +1.8 |
| | baz=18 | | | | | | |
| 636A | Smothers Creek | 17.69 | 337 | P | Pn | 03 22 39.2 | +2.5 |
| | baz=18 | | | | | | |
| HKT | Hockley | 17.70 | 341 | *e*P | Pn | 03 22 39.9 | +3.1 |
| | comp=Z,17nm,1.0s | | | | | | |
| 833A | Chaparral WMA, | 17.71 | 330 | P | Pn | 03 22 38.6 | +1.6 |
| | baz=18,SNR=8.7 | | | | | | |
| 734A | La Parita Cree | 17.75 | 332 | P | Pn | 03 22 38.9 | +1.3 |
| | baz=18,SNR=7.7 | | | | | | |
| 538A | Harpers Horsep | 17.84 | 342 | P | Pn | 03 22 39.9 | +1.3 |
| | baz=18 | | | | | | |
| 635A | Leesville | 17.89 | 335 | P | Pn | 03 22 40.2 | +1.1 |
| | baz=18,SNR=9.2 | | | | | | |
| 440A | Kirbyville | 17.95 | 347 | P | Pn | 03 22 43.0 | +3.1 |
| | baz=18,SNR=9.6 | | | | | | |
| 832A | Faith Ranch, C | 17.97 | 328 | P | Pn | 03 22 41.9 | +1.7 |
| | baz=18,SNR=9.4 | | | | | | |
| 537A | Green Hill Far | 17.97 | 340 | P | Pn | 03 22 42.1 | +2.0 |
| | baz=18,SNR=20 | | | | | | |
| 733A | Divot King Ran | 17.99 | 330 | P | Pn | 03 22 42.2 | +1.8 |
| | baz=18,SNR=26 | | | | | | |
| 634A | China Grove, S | 18.12 | 334 | P | Pn | 03 22 43.7 | +1.7 |
| | baz=18 | | | | | | |
| 439A | Center Grove, | 18.18 | 345 | P | Pn | 03 22 44.8 | +2.0 |
| | baz=18,SNR=13 | | | | | | |
| SDDR | Presa de Saban | 18.23 | 69 | *e*P | P | 03 22 43.0 | +0.2 |
| | comp=Z,33nm,0.9s | | | | | | |
| 536A | Bastrop | 18.23 | 338 | P | Pn | 03 22 44.8 | +1.6 |
| | baz=18 | | | | | | |
| 732A | Laxson Ranch, | 18.33 | 329 | P | Pn | 03 22 45.3 | +0.7 |
| | baz=18,SNR=15 | | | | | | |
| 438A | Sam Houston St | 18.34 | 343 | P | Pn | 03 22 46.6 | +2.0 |
| | baz=18 | | | | | | |
| 535A | Dale | 18.38 | 337 | P | Pn | 03 22 45.9 | +0.8 |
| | baz=18,SNR=8.5 | | | | | | |
| 633A | Saathoff Ranch | 18.56 | 332 | P | Pn | 03 22 47.8 | +0.5 |
| | baz=19,SNR=15 | | | | | | |
| 340A | Bronson | 18.58 | 348 | P | Pn | 03 22 48.8 | +1.3 |
| | baz=19,SNR=11 | | | | | | |
| 437A | Phantom Ranch, | 18.61 | 341 | P | Pn | 03 22 49.0 | +1.2 |
| | baz=19 | | | | | | |
| 339A | Huntington | 18.65 | 346 | P | Pn | 03 22 49.6 | +1.4 |
| | baz=19 | | | | | | |
| 534A | Blanco | 18.74 | 335 | P | Pn | 03 22 49.6 | +0.2 |
| | baz=19,SNR=24 | | | | | | |
| 436A | Wall Ranch, Ga | 18.77 | 340 | P | Pn | 03 22 49.8 | +0.1 |

baz=19
SDV **Santo Domingo** 18.83 101 *e*P P 03 22 49.8 +0.2
comp=Z,42nm,0.8s
SDV *e*PcP PcP 03 27 14.9 +0.7
338A **Crockett** 18.86 344 P Pn 03 22 51.7 +0.9
baz=19,SNR=19
TIGA **Tifton** 18.87 15 P Pn 03 22 52.1 +1.1
baz=19,SNR=7.3
632A **Uvalde** 18.88 331 P Pn 03 22 52.0 +0.8
baz=19,SNR=18
VBMS **Vicksburg** 18.93 357 P Pn 03 22 53.6 +2.0
baz=19,SNR=20
337A **Centerville** 18.98 342 P Pn 03 22 52.5 +0.2
baz=19
533A **Kerrville** 19.02 333 P Pn 03 22 52.4 -0.4
baz=19,SNR=21
435B **Jarrell** 19.06 338 P Pn 03 22 53.4 +0.2
baz=19,SNR=12
NATX **Nacogdoches** 19.08 346 P Pn 03 22 53.2 -0.3
baz=19
NATX **Nacogdoches** 19.08 346 *e*P Pn 03 22 53.8 +0.3
comp=Z,69nm,0.8s
631A **Perdido Creek** 19.19 329 P Pn 03 22 54.8 0.0
baz=19,SNR=26
239A **Gary** 19.29 347 P Pn 03 22 55.4 -0.5
baz=19
434A **Burnet** 19.35 336 P P 03 22 55.6 +0.7
baz=20,SNR=24
336A **Riesel** 19.35 340 P Pn 03 22 56.2 -0.5
baz=20,SNR=6.5
238A **Jacksonville** 19.43 345 P P 03 22 56.0 +0.3
baz=20
335A **Moody** 19.45 339 P Pn 03 22 57.2 -0.6
baz=20,SNR=23
532A **Rocksprings** 19.46 331 P Pn 03 22 57.4 -0.6
baz=20,SNR=47
237A **Washetta, Mont** 19.61 343 P Pn 03 22 59.1 -0.5
baz=20
433A **Art** 19.63 334 P P 03 22 58.5 +0.4
baz=20,SNR=41
JCT **Junction City** 19.71 332 P P 03 22 59.8 +0.9
baz=20,SNR=18
JCT **Junction City** 19.71 332 *e*P Pn 03 23 00.4 -0.6
comp=Z,26nm,0.7s
531A **Rocksprings** 19.79 330 P Pn 03 23 01.1 -0.8
baz=20,SNR=16
334A **Lometa** 19.80 337 P P 03 23 00.2 +0.4
baz=20,SNR=55
236A **Katherine and** 19.82 342 P P 03 23 00.1 +0.1
baz=20,SNR=8.6
139A **Bunkhouse Ranc** 19.91 347 P P 03 23 00.9 0.0
baz=20
432A **Menard** 20.04 333 P P 03 23 03.0 +0.5
baz=20,SNR=28
138A **Matatall Enter** 20.05 346 P P 03 23 02.9 +0.5
baz=20
333A **Richland Sprin** 20.08 335 P P 03 23 03.8 +0.9
baz=20,SNR=148
WHTX **Lake Whitney** 20.11 340 P P 03 23 04.0 +0.9
baz=20
137A **Heron Place, G** 20.16 344 P P 03 23 04.1 +0.5
baz=20
530A **J-C Ranch, Com** 20.17 328 P P 03 23 05.2 +1.3
baz=20,SNR=28
431A **Sonora** 20.25 331 P P 03 23 05.9 +1.1
baz=20,SNR=34
136A **Ennis** 20.26 342 P P 03 23 06.0 +1.2
baz=20,SNR=10
234A **Clairette** 20.36 338 P P 03 23 06.2 +0.3
baz=20,SNR=33
332A **Millersview** 20.45 334 P P 03 23 07.9 +1.0
baz=21,SNR=40
Z38A **Mt. Pleasant** 20.59 346 P P 03 23 08.4 +0.2
baz=21
135A **Vickery Place,** 20.61 340 P P 03 23 08.5 -0.1
baz=21
529A **Stev Forest Ra** 20.62 327 P P 03 23 09.7 +1.0
baz=21,SNR=11
430A **Baggett Ranch,** 20.64 330 P P 03 23 10.2 +1.2
baz=21,SNR=18
233A **Rising Star** 20.66 336 P P 03 23 09.8 +0.6
baz=21,SNR=66
Z37A **Pogue Cattle C** 20.69 345 P P 03 23 09.8 +0.4
baz=21
331A **San Angelo** 20.69 332 P P 03 23 09.9 +0.4
baz=21,SNR=36
GOGA **Godfrey** 20.78 14 *e*P Pn 03 23 12.4 -1.0
comp=Z,24nm,0.7s
TXAR **Lajitas Array** 20.83 323 P Pn 03 23 13.7 -0.6
comp=Z,13nm,0.7s,baz=137,slow=9.8,SNR=100
TXAR PcP PcP 03 27 19.2 +1.8
comp=Z,3.0nm,0.9s,baz=153,slow=3.3,SNR=7.8
TXAR ScP ScP 03 30 49.8 +1.9
comp=Z,0.7nm,0.7s,baz=132,slow=5.6,SNR=6.6
TXAR LR LR 03 31 29.6
comp=Z,91nm,18.1s,baz=0.0,slow=37
TX31 **Lajitas Ar. Si** 20.83 323 *e*P Pn 03 23 13.3 -1.0
429A **Davenport Ranc** 20.84 328 P P 03 23 11.9 +0.7
baz=21,SNR=45
232A **Coleman** 20.85 335 P P 03 23 11.6 +0.4
baz=21,SNR=53
134A **White-Moore Ra** 20.85 339 P P 03 23 11.6 +0.4
baz=21,SNR=7.6
Z36A **Blue Ridge** 20.98 343 P P 03 23 13.3 +0.8
baz=21,SNR=8.4
Y39A **Lockesburg** 21.06 349 P P 03 23 16.9 +3.5
baz=21,SNR=7.9
330A **Mertzon** 21.12 331 P P 03 23 14.3 +0.2
baz=21,SNR=19
231A **Bronte** 21.18 333 P P 03 23 14.6 -0.1
baz=21,SNR=25
Y38A **Idabel** 21.18 347 P P 03 23 15.3 +0.6
baz=21
OXF **Oxford** 21.18 360 *e*P P 03 23 17.1 +2.4
comp=Z,164nm,1.0s
133A **Hamilton Ranch** 21.19 337 P P 03 23 15.3 +0.5
baz=21,SNR=30
Z35A **Perchaven, San** 21.27 341 P P 03 23 15.7 0.0
baz=21,SNR=9.0
Y37A **Hugo** 21.43 346 P P 03 23 19.0 +1.7
baz=22,SNR=7.5
ABTX **Abilene, Hawle** 21.49 336 P P 03 23 18.1 +0.1
baz=22,SNR=27
230A **Sterling City** 21.49 332 P P 03 23 17.6 -0.5
baz=22,SNR=15
Z34A **Collier Ranch,** 21.52 340 P P 03 23 18.4 +0.1
baz=22,SNR=6.8
Y36A **Durant** 21.53 344 P P 03 23 19.5 +1.1
baz=22
MIAR **Mount Ida** 21.57 350 P P 03 23 20.1 +1.3
baz=22,SNR=36
MIAR **Mount Ida** 21.57 350 *e*P P 03 23 20.6 +1.9
comp=Z,66nm,0.8s
329A **Wagon Wheel Ra** 21.58 329 P P 03 23 19.2 +0.1
baz=22,SNR=31
UALR **University of** 21.62 353 *e*P P 03 23 21.3 +1.9
comp=Z,65nm,0.8s
Z33A **Whitaker Ranch** 21.74 338 P P 03 23 21.1 +0.4
baz=22,SNR=99
Y35A **Marietta** 21.74 342 P P 03 23 21.5 +0.8
baz=22,SNR=21
131A **Roby** 21.84 334 P P 03 23 21.9 +0.1
baz=22,SNR=17
229A **Bryant Ranch,** 21.89 330 P P 03 23 22.3 -0.1
baz=22,SNR=14
X37A **Clayton** 21.96 347 P P 03 23 25.8 +2.8
baz=22,SNR=14
Y34A **Reagan Ranch,** 22.01 341 P P 03 23 23.4 -0.2
baz=22,SNR=12
130A **Snyder** 22.02 333 P P 03 23 23.1 -0.6
baz=22,SNR=14
Z32A **Haskell** 22.03 337 P P 03 23 23.8 +0.1
baz=22,SNR=68
SWET **Sewanee** 22.10 7 *e*P P 03 23 25.3 +0.8
comp=Z,4.6nm,0.6s
SLBS **Sierra La Lagu** 22.13 301 *e*P P 03 23 31.6 +6.5
comp=Z,102nm,1.8s
X36A **Centrahoma** 22.18 344 P P 03 23 25.7 +0.3
baz=22,SNR=13
X35A **Drake** 22.19 343 P P 03 23 25.5 0.0
baz=22,SNR=7.2
JSC **Jenkinsville** 22.19 18 *e*P P 03 23 27.7 +2.2
comp=Z,52nm,0.9s
W38A **Poteau** 22.24 349 P P 03 23 27.4 +1.3
baz=22
HBAR **Harrisburg** 22.26 357 *e*P P 03 23 28.3 +2.1
Z31A **Sharp Cattle R** 22.30 336 P P 03 23 26.4 -0.3
baz=22,SNR=24

Y33A **Hilltop Ranch,** 22.35 339 P P 03 23 26.8 -0.4
baz=22,SNR=13
228A **UT Block 9, Go** 22.39 329 P P 03 23 27.5 -0.3
baz=22
CELP **Cerrillos** 22.40 75 *e*P P 03 23 26.5 -1.5
129A **Stewart Farms,** 22.46 331 P P 03 23 27.7 -0.8
baz=23,SNR=30
W37A **Quinton** 22.50 347 P P 03 23 30.2 +1.4
baz=23,SNR=33
CPCT **Cooper Cave** 22.54 10 *e*P P 03 23 29.8 +0.6
HALT **Halls** 22.58 360 *e*P P 03 23 29.8 +0.2
X34A **Smith Ranch, M** 22.63 341 P P 03 23 30.5 +0.3
baz=23,SNR=44
Y32A **R-V Farms, Ver** 22.63 338 P P 03 23 29.6 -0.6
baz=23,SNR=22
GNAR **Gosnell** 22.64 359 *e*P P 03 23 32.2 +2.0
comp=Z,6µm,1.3s
Z30A **Sanderson Ranc** 22.68 334 P P 03 23 29.3 -1.6
baz=23,SNR=47
W36A **Wetumka** 22.69 345 P P 03 23 30.5 -0.3
baz=23,SNR=8.2
128A **Castleberry Fa** 22.75 330 P P 03 23 30.5 -1.1
baz=23,SNR=15
X33A **Lawton** 22.79 340 P P 03 23 30.9 -0.9
baz=23,SNR=70
SJG **San Juan** 22.81 75 P P 03 23 31.4 -0.9
comp=Z,14nm,0.6s,baz=289,slow=3.7,SNR=8.4
SJG PcP PcP 03 27 21.7 +0.3
comp=Z,8.3nm,0.8s,baz=342,slow=2.1,SNR=4.4
SJG **San Juan** 22.81 75 *e*P P 03 23 31.0 -1.3
comp=Z,16nm,0.7s
SJG PcP PcP 03 27 21.7 +0.3
WVT **Waverly** 22.84 3 *e*P P 03 23 33.0 +0.7
comp=Z,16nm,0.8s
W35A **Tecumseh** 22.87 344 P P 03 23 31.7 -1.0
baz=23,SNR=14
TKL **Tuckaleechee C** 22.88 12 P P 03 23 33.6 +0.9
comp=Z,20nm,0.8s,baz=179,slow=11,SNR=25
TKL **Tuckaleechee C** 22.88 12 *e*P P 03 23 33.8 +1.0
Y31A **Rekieta Farm,** 22.91 336 P P 03 23 32.8 -0.4
baz=23,SNR=67
Z29A **Hungry Hill Ra** 22.92 332 P P 03 23 32.6 -0.7
baz=23
GLAT **Glass** 22.94 0 *e*P P 03 23 34.0 +0.7
X32A **Elmer** 22.95 338 P P 03 23 32.8 -0.8
baz=23,SNR=29
KMSC **Kings Mountain** 22.97 17 P P 03 23 34.1 +0.4
baz=23
V38A **Canehill** 22.99 349 P P 03 23 33.8 -0.1
baz=23,SNR=6.5
UTMT **University of** 23.01 1 *e*P P 03 23 35.6 +1.5
comp=Z,134nm,1.0s
WMOK **Wichita Mounta** 23.06 340 *e*P P 03 23 34.1 -0.6
comp=Z,27nm,0.8s
Y30A **Stafford Cattl** 23.09 335 P P 03 23 34.1 -0.9
baz=23,SNR=33
V37A **Hulbert** 23.15 348 P P 03 23 35.9 +0.4
baz=23,SNR=31
W34A **Bridge Creek,** 23.20 342 P P 03 23 35.7 -0.2
baz=23,SNR=35
V36A **Jenks** 23.23 346 P P 03 23 36.2 0.0
baz=23
Z28A **Tucker Farm, M** 23.25 331 P P 03 23 35.3 -1.3
baz=23,SNR=18
TUL1 **Tulsa** 23.32 347 P P 03 23 36.8 -0.2
baz=23,SNR=7.3
PARMO **Parma** 23.33 359 *e*P P 03 23 38.1 +1.0
W33A **Caddo, Fort Co** 23.34 341 P P 03 23 36.8 -0.4
baz=23,SNR=18
X31A **McDonald Ranch** 23.39 337 P P 03 23 37.6 -0.1
baz=24,SNR=33
Y29A **Porterfield Fa** 23.41 333 P P 03 23 37.8 -0.2
baz=24,SNR=23
V35A **Meyer Ranch, C** 23.43 344 P P 03 23 37.6 -0.5
baz=24,SNR=7.8
PBMO **Poplar Bluff** 23.46 358 *e*P P 03 23 39.0 +0.7
comp=Z,132nm,0.8s
U38A **Gravette** 23.55 350 P P 03 23 39.2 0.0
baz=24
MNTX **Cornudas Mount** 23.57 324 P P 03 23 39.3 -0.1
baz=24
MNTX **Cornudas Mount** 23.57 324 *e*P P 03 23 39.6 +0.1
comp=Z,6.6nm,1.0s
MNTX *e*PcP PcP 03 27 23.3 +0.5
W32A **Sentinel** 23.57 339 P P 03 23 39.3 -0.1
baz=24
X30A **Coker Ranch, T** 23.58 336 P P 03 23 39.7 +0.2
baz=24,SNR=79
U37A **Salina** 23.65 348 P P 03 23 40.2 +0.1
baz=24,SNR=16
V34A **Guthrie** 23.68 343 P P 03 23 39.6 -0.8
baz=24,SNR=18
Y28A **McKinney Farm,** 23.70 332 P P 03 23 40.1 -0.6
baz=24,SNR=14
CPRX **Cap Rock** 23.77 328 *e*P P 03 23 42.2 +0.9
comp=Z,2.8nm,0.6s
U36A **Oologah** 23.77 347 P P 03 23 41.3 +0.2
baz=24
TZTN **Tazewell** 23.78 12 *e*P P 03 23 42.0 +0.8
comp=Z,80nm,1.5s
W31A **Holland Ranch,** 23.87 338 P P 03 23 42.0 -0.1
baz=24,SNR=9.8
V33A **Lossen Ranch,** 23.90 342 P P 03 23 42.5 +0.2
baz=24,SNR=8.2
X29A **Tulia** 23.92 334 P P 03 23 42.6 0.0
baz=24,SNR=8.7
STVI **Saint Thomas** 23.97 75 *e*P P 03 23 42.3 -0.8
comp=Z,47nm,0.8s
U35A **Pawnee** 23.98 345 P P 03 23 43.0 0.0
baz=24,SNR=14
MSTX **Muleshoe** 24.00 332 P P 03 23 43.2 -0.1
baz=24,SNR=32
V32A **Arapaho** 24.05 340 P P 03 23 43.8 +0.2
baz=24,SNR=16
W30A **Crocket Farms** 24.11 337 P P 03 23 44.3 +0.1
baz=24,SNR=5.2
X28A **Dimmitt** 24.20 333 P P 03 23 45.1 0.0
baz=24,SNR=17
U34A **Anderson Ranch** 24.25 344 P P 03 23 45.2 -0.3
baz=24,SNR=14
AMTX **Amarillo** 24.29 335 P P 03 23 46.6 +0.7
baz=24
AMTX **Amarillo** 24.29 335 *e*P P 03 23 46.8 +0.9
comp=Z,42nm,0.5s
T37A **Cheneyville 18** 24.31 349 P P 03 23 46.0 0.0
baz=24,SNR=19
PCRV **Puerto La Cruz** 24.35 95 P P 03 23 46.6 0.0
comp=Z,11nm,0.7s,baz=215,slow=4.1,SNR=7.6
V31A **Spring Creek L** 24.36 339 P P 03 23 47.5 +0.9
baz=24,SNR=25
SIUC **Southern Illin** 24.38 0 *e*P P 03 23 48.0 +1.4
comp=Z,60nm,0.9s
U33A **Lingo Farm, Me** 24.41 343 P P 03 23 47.4 +0.5
baz=24
T36A **Boggs Farm, Ca** 24.44 347 P P 03 23 47.1 -0.1
baz=24,SNR=14
T35A **Sooner Cattle** 24.45 346 P P 03 23 48.1 +0.8
baz=24,SNR=6.6
W29A **Amarillo** 24.48 335 P P 03 23 48.5 +0.8
baz=25,SNR=13
U32A **Winter Ranch,** 24.64 341 P P 03 23 50.3 +1.3
baz=25
V30A **Spur Ranch, Mi** 24.66 337 P P 03 23 50.0 +0.7
baz=25
USIN **University of** 24.67 3 *e*P P 03 23 50.0 +0.7
comp=Z,30nm,0.8s
T34A **McClaskey Farm** 24.71 345 P P 03 23 49.8 +0.1
baz=25,SNR=11
W28A **Vega** 24.83 334 P P 03 23 51.5 +0.7
baz=25,SNR=6.1
U31A **Nine Bar Ranch** 24.91 339 P P 03 23 51.8 +0.3
baz=25
S37A **Fort Scott** 24.91 350 P P 03 23 52.1 +0.6
baz=25,SNR=20
S36A **Lake Cedric, C** 25.02 348 P P 03 23 52.7 +0.2
baz=25,SNR=12
WCI **Wyandotte Cave** 25.04 6 *e*P P 03 23 52.3 -0.3
comp=Z,164nm,0.7s
V29A **Stinnett** 25.08 336 P P 03 23 53.7 +0.6
baz=25
S35A **Otter Creek Ra** 25.14 347 P P 03 23 53.1 -0.4
baz=25,SNR=12
BLA **Blacksburg** 25.17 17 *e*P P 03 23 55.1 +1.3
comp=Z,36nm,0.9s
V28A **Channing** 25.26 335 P P 03 23 55.3 +0.5
baz=25,SNR=15
SLM **Saint Louis** 25.31 358 *e*P P 03 23 57.0 +1.9
comp=Z,124nm,0.5s

VWCC **Virginia Weste** 25.33 18 *e*P P 03 23 56.6 +1.4
U30A **WK&E Inc. Balk** 25.33 338 P P 03 23 56.9 +1.5
baz=26,SNR=17
S34A **Willow Spring** 25.34 345 P P 03 23 55.7 +0.3
baz=25
T32A **Huddler Ranch,** 25.35 342 P P 03 23 56.0 +0.5
baz=26
OLIL **Olney** 25.42 2 *e*P P 03 23 56.6 +0.6
comp=Z,24nm,0.8s
R37A **Teagarden Farm** 25.45 350 P P 03 23 56.7 +0.4
baz=26,SNR=6.8
U29A **Oasis Ranch, S** 25.49 337 P P 03 23 58.4 +1.6
baz=26,SNR=6.0
T31A **Randall Ranch,** 25.51 340 P P 03 23 57.8 +0.8
baz=26,SNR=6.5
V27A **Dan Oppiter Fa** 25.52 334 P P 03 23 57.9 +0.7
baz=26,SNR=13
121A **Cookes Peak, D** 25.59 322 P P 03 24 00.8 +3.0
baz=26,SNR=7.7
R36A **Gordon, Harris** 25.59 349 P P 03 23 57.2 -0.4
baz=26,SNR=10
R35A **Emporia Munici** 25.73 347 P P 03 23 59.2 +0.4
baz=26
T30A **Plains** 25.75 339 P P 03 24 00.2 +1.0
baz=26,SNR=5.1
U28A **Mallet** 25.80 336 P P 03 24 00.3 +0.6
baz=26
S32A **Newby Ranch, P** 25.83 342 P P 03 24 00.5 +0.6
baz=26
S31A **Mullinville** 25.93 341 P P 03 24 01.7 +1.0
baz=26
Q37A **Longview Farm,** 25.94 351 P P 03 24 01.0 +0.2
baz=26,SNR=6.2
R34A **Isabella, Hill** 25.94 346 P P 03 24 00.7 -0.1
baz=26,SNR=10
U27A **Thompson Grove** 26.08 335 P P 03 24 03.1 +0.9
baz=26,SNR=7.2
BNM **Barren Site** 26.09 326 *e*P P 03 24 05.1 +2.6
T29A **Hugoton** 26.12 338 P P 03 24 02.8 +0.3
baz=26,SNR=9.6
R33A **Olander Ranch,** 26.13 344 P P 03 24 03.2 +0.6
baz=26
Q36A **Arnold C. Orve** 26.20 349 P P 03 24 03.2 +0.1
baz=26
Y22D **IRIS PASSCAL I** 26.20 325 P P 03 24 04.6 +1.3
baz=26
Q35A **Mercer Eighty,** 26.21 348 P P 03 24 02.9 -0.3
baz=26,SNR=6.3
S30A **Montezuma** 26.26 340 P P 03 24 04.3 +0.6
baz=26
T28A **Walsh** 26.40 337 P P 03 24 05.0 -0.1
baz=26,SNR=6.7
R32A **Long Quarter,** 26.44 343 P P 03 24 05.6 +0.3
baz=26
Q34A **Chapman** 26.46 347 P P 03 24 05.0 -0.5
baz=27,SNR=6.8
S29A **Ulysses** 26.47 339 P P 03 24 06.4 +0.7
baz=27,SNR=15
R31A **Burdett** 26.55 342 P P 03 24 07.0 +0.6
baz=27,SNR=5.5
KSU1 **Kansas State U** 26.56 347 P P 03 24 06.2 -0.2
baz=27,SNR=9.9
KSU1 **Kansas State U** 26.56 347 *e*P P 03 24 07.0 +0.7
comp=Z,46nm,0.8s
LAZ **Ladron** 26.56 326 *e*P P 03 24 08.6 +1.9
LAZ *e*PcP PcP 03 27 31.4 +1.8
T27A **Campo** 26.59 336 P P 03 24 06.9 0.0
baz=27,SNR=6.2
ANMO **Albuquerque** 26.60 327 P P 03 24 09.2 +2.1
comp=Z,2.0nm,0.7s,baz=138,slow=12,SNR=6.9
ANMO PcP PcP 03 27 30.9 +1.2
comp=Z,2.1nm,0.7s,baz=129,slow=4.7,SNR=4.9
ANMO **Albuquerque** 26.60 327 *e*P P 03 24 09.6 +2.6
comp=Z,2.5nm,0.9s
ANMO *e*PcP PcP 03 27 31.7 +2.0
S28A **Manter** 26.73 337 P P 03 24 08.3 +0.3
baz=27,SNR=8.8
Q33A **Connelly Farm,** 26.75 345 P P 03 24 08.0 -0.1
baz=27,SNR=6.6
R30A **Dighton** 26.79 341 P P 03 24 08.9 +0.4
baz=27,SNR=9.8
P36A **Good Intent, A** 26.79 350 P P 03 24 08.0 -0.4
baz=27,SNR=9.5
P35A **Duane Minner,** 26.85 348 P P 03 24 09.0 0.0
baz=27,SNR=15
Q32A **Meitler Ranch,** 26.93 344 P P 03 24 10.1 +0.4
baz=27,SNR=6.0
P34A **Walnut Farm, R** 27.04 347 P P 03 24 11.3 +0.6
baz=27,SNR=29
CBKS **Cedar Bluff** 27.10 342 P P 03 24 11.8 +0.5
baz=27
CBKS **Cedar Bluff** 27.10 342 *e*P P 03 24 11.2 0.0
comp=Z,7.1nm,0.7s
CBKS *e*PcP PcP 03 27 30.9 +0.2
SFIN **Scholer Farm** 27.11 4 P P 03 24 10.2 -1.1
baz=27
P33A **Williams Farm,** 27.13 346 P P 03 24 11.9 +0.4
baz=27
Q31A **Ellis** 27.18 343 P P 03 24 12.3 +0.3
baz=27
R29A **Marienthal** 27.20 339 P P 03 24 12.6 +0.4
baz=27
HDIL **Hopedale** 27.22 0 P P 03 24 12.4 +0.1
baz=27
HDIL **Hopedale** 27.22 0 *e*P P 03 24 12.9 +0.7
comp=Z,83nm,1.1s
HDIL *e*PcP PcP 03 27 30.8 0.0
O36A **Bolckow** 27.25 351 P P 03 24 12.3 -0.2
baz=27,SNR=6.2
TUC **Tucson** 27.33 318 *e*P P 03 24 17.5 +4.0
comp=Z,6.0nm,0.8s
TUC *e*PcP PcP 03 27 33.5 +2.1
T25A **Trinidad** 27.37 333 P P 03 24 15.4 +1.5
baz=28,SNR=15
S26A **Kim** 27.38 335 P P 03 24 14.2 +0.3
baz=28,SNR=5.6
Q30A **Quinter** 27.40 341 P P 03 24 13.4 -0.6
baz=28
ACSO **Alum Creek Sta** 27.46 11 *e*P P 03 24 15.0 +0.6
comp=Z,23nm,0.8s
P32A **Huiting Farm,** 27.53 344 P P 03 24 15.1 0.0
baz=28
O35A **Humboldt** 27.54 349 P P 03 24 14.9 -0.3
baz=28,SNR=11
Q29A **Oakley** 27.56 340 P P 03 24 15.6 +0.1
baz=28
O34A **Beatrice** 27.62 348 P P 03 24 16.0 +0.2
baz=28,SNR=37
P31A **Stockton** 27.65 343 P P 03 24 16.6 +0.4
baz=28
R27A **Eads** 27.68 337 P P 03 24 16.4 -0.1
baz=28,SNR=11
O33A **Hebron** 27.71 346 P P 03 24 16.8 +0.1
baz=28,SNR=6.4
P30A **Selden** 27.93 342 P P 03 24 19.1 +0.5
baz=28
R26A **Arlington** 27.95 336 P P 03 24 19.9 +0.9
baz=28,SNR=5.7
Q28A **Sharon Springs** 28.01 339 P P 03 24 19.5 0.0
baz=28
O32A **Brockman Farm,** 28.05 345 P P 03 24 20.3 +0.6
baz=28,SNR=8.0
N35A **Tabor** 28.07 350 P P 03 24 20.2 +0.3
baz=28,SNR=6.9
P29A **Atwood** 28.19 341 P P 03 24 21.8 +0.7
baz=28
N34A **Lincoln** 28.21 348 P P 03 24 20.9 -0.2
baz=28,SNR=6.7
O31A **Woolen Ranch,** 28.22 344 P P 03 24 21.7 +0.4
baz=28,SNR=5.3
KSCO **Kaye Shedlock'** 28.25 338 P P 03 24 22.2 +0.6
baz=28,SNR=6.5
SDMD **Soldier's Deli** 28.30 21 *e*P P 03 24 23.0 +1.1
comp=Z,18nm,0.7s
N33A **J Bar K, Exete** 28.31 347 P P 03 24 22.8 +0.8
baz=28,SNR=15
SDCO **Great Sand Dun** 28.36 332 P P 03 24 24.5 +1.7
baz=28
SDCO **Great Sand Dun** 28.36 332 *e*P P 03 24 24.6 +1.7
comp=Z,4.9nm,0.7s
P28A **Saint Francis** 28.44 340 P P 03 24 24.2 +0.9
baz=29,SNR=5.6
O30A **MW Ranch, Wils** 28.45 343 P P 03 24 24.8 +1.5
baz=29
Q26A **Hugo** 28.51 336 P P 03 24 25.3 +1.3
baz=29
N32A **Stulken Farm,** 28.53 346 P P 03 24 24.9 +0.9
baz=29

O29A 4D Ranch, Culb 28.63 341 P P 03 24 26.0 +1.1
baz=29
M35A Neola 28.67 350 P P 03 24 25.8 +0.6
baz=29
SCIA State Center 28.77 354 eP P 03 24 26.6 +0.6
comp=Z,17nm,0.8s
S22A 4UR Ranch, Cre 28.98 330 P P 03 24 30.1 +1.7
baz=29,SNR=24
P26A Davis Ranch, A 29.00 337 P P 03 24 29.4 +1.1
baz=29
M33A Taylor Creek F 29.06 348 P P 03 24 29.3 +0.7
baz=29
BGNE Belgrade 29.11 346 P P 03 24 29.8 +0.6
baz=29,SNR=12
N29A Votaw Ranch, W 29.21 342 P P 03 24 30.2 +0.2
baz=29
Q24A Divide 29.21 334 P P 03 24 31.4 +1.0
baz=29
O27A Beecher Island 29.24 339 P P 03 24 31.2 +0.8
baz=29
M31A Lambtecht Ranc 29.25 345 P P 03 24 31.7 +1.3
baz=29,SNR=12
L35A Bielow Farm, R 29.28 350 P P 03 24 30.1 -0.5
baz=29,SNR=9.6
L34A Svendsen Farm, 29.28 349 P P 03 24 30.2 -0.4
baz=29,SNR=6.0
N28A Pribbeno Ranch 29.37 341 P P 03 24 32.8 +1.2
baz=30
MVCO Mesa Verde 29.40 328 P P 03 24 33.7 +1.7
baz=30
MVCO Mesa Verde 29.40 328 eP P 03 24 33.5 +1.5
comp=Z,5.5nm,0.8s
MVCO ePcP PcP 03 27 37.2 +0.7
JFWS Jewell Farm 29.58 359 eP P 03 24 33.8 +0.5
comp=Z,38nm,0.6s
O26A Horse Wrangler 29.58 338 P P 03 24 34.5 +1.1
baz=30
L33A Hoskins 29.64 348 P P 03 24 34.6 +0.8
baz=30
L32A Elgin 29.64 347 P P 03 24 34.6 +0.7
baz=30,SNR=19
M30A Dale-Ortello V 29.66 344 P P 03 24 34.4 +0.3
baz=30
WUAZ Wupatki 29.80 322 P P 03 24 37.8 +2.4
baz=30
WUAZ Wupatki 29.80 322 eP P 03 24 40.3 +4.9
comp=Z,3.7nm,0.8s
M29A Burnside Ranch 29.81 343 P P 03 24 36.1 +0.8
baz=30
N27A Anderson Farm, 29.81 340 P P 03 24 36.3 +0.9
baz=30
K35A Storm Lake 29.82 351 P P 03 24 35.5 +0.1
baz=30
LUPA Lehigh Univers 29.88 22 eP P 03 24 37.1 +1.3
comp=Z,23nm,0.6s
K34A Le Mars 29.93 350 P P 03 24 36.5 +0.2
baz=30
M28A Bar X Bar Ranc 29.96 342 P P 03 24 37.8 +1.1
baz=30
L31A Butterfield Fa 30.00 346 P P 03 24 37.8 +0.8
baz=30,SNR=14
L30A Spencer Herefo 30.01 344 P P 03 24 38.2 +1.1
baz=30,SNR=6.4
K33A Hardington 30.01 349 P P 03 24 37.1 0.0
baz=30,SNR=8.4
ISCO Idaho Springs 30.11 334 P P 03 24 39.2 +0.9
baz=30,SNR=20
ISCO Idaho Springs 30.11 334 eP P 03 24 39.8 +1.4
comp=Z,12nm,0.8s
SMCO Snowmass 30.19 332 eP P 03 24 40.9 +1.8
comp=Z,11nm,0.8s
K32A Verdigre 30.26 347 P P 03 24 39.2 -0.1
baz=30,SNR=32
PV05 Paradox Valley 30.36 328 eP P 03 24 42.8 +2.3
K31A O'Neill 30.40 346 P P 03 24 41.1 +0.5
baz=30,SNR=22
J35A Milford 30.45 352 P P 03 24 40.9 0.0
baz=30
J34A George 30.49 350 P P 03 24 41.0 -0.2
baz=31
PV04 Paradox Valley 30.50 329 eP P 03 24 43.3 +1.6
GLA Glamis 30.51 315 P P 03 24 43.3 +1.6
baz=31
PV10 Paradox Valley 30.56 329 eP P 03 24 43.9 +1.7
K30A Basset 30.66 345 P P 03 24 43.6 +0.8
baz=31,SNR=28
J33A Davis 30.70 349 P P 03 24 43.2 +0.1
baz=31
PV09 Paradox Valley 30.70 329 eP P 03 24 45.9 +2.3
PDMCI Parker Dam,Lak 30.77 317 P P 03 24 45.6 +1.8
baz=31
I35A Creekview Farm 30.90 352 P P 03 24 44.9 0.0
baz=31
J32A Parkston 30.92 348 P P 03 24 44.7 -0.3
baz=31,SNR=17
K29A Lazy Trails An 30.92 344 P P 03 24 46.3 +1.1
baz=31,SNR=18
I36A Fitzsimmons Fa 30.94 353 P P 03 24 45.4 +0.1
baz=31
ECSD EROS Data Cent 31.03 350 P P 03 24 45.5 -0.6
baz=31,SNR=10.0
ECSD EROS Data Cent 31.03 350 eP P 03 24 46.0 -0.1
comp=Z,21nm,0.8s
ECSD ePcP PcP 03 27 39.7 -0.7
J31A Geddes 31.03 347 P P 03 24 46.1 0.0
baz=31,SNR=19
BINY Binghamton 31.09 19 eP P 03 24 47.3 +0.6
comp=Z,297nm,2.8s
SWSC Sam W. Stewart 31.12 313 P P 03 24 48.4 +1.4
baz=31
N23A Red Feather La 31.16 335 P P 03 24 49.1 +1.5
baz=31,SNR=9.9
K28A Ten Mile Ranch 31.17 343 P P 03 24 48.8 +1.4
baz=31,SNR=7.0
IBP Imperial Bould 31.19 313 P P 03 24 49.3 +1.6
baz=31
I34A Hadley 31.21 351 P P 03 24 47.4 -0.3
baz=31
J30A Dallas 31.24 346 P P 03 24 48.2 +0.3
baz=31,SNR=30
BC3 Big Chuckawall 31.28 315 P P 03 24 50.5 +2.0
baz=31,SNR=11
PHWY Pilot Hill 31.31 336 eP P 03 24 50.4 +1.5
comp=Z,16nm,1.1s
PHWY ePcP PcP 03 27 41.8 +0.3
IRM Iron Mountain 31.36 316 P P 03 24 50.9 +1.8
baz=32
I33A Coleman 31.37 350 P P 03 24 48.5 -0.6
baz=32,SNR=8.7
K27A Flueckinger Fa 31.42 342 P P 03 24 50.1 +0.5
baz=32
L25A Engebretsen Ra 31.50 339 P P 03 24 51.3 +1.0
baz=32
J29A Okreek 31.53 345 P P 03 24 51.1 +0.7
baz=32,SNR=41
MONP Monument Peak 31.54 313 P P 03 24 53.3 +2.4
baz=32,SNR=6.0
O20A White River Ci 31.54 332 P P 03 24 52.5 +1.6
baz=32,SNR=23
I31A Royce, Wessing 31.69 347 P P 03 24 51.8 -0.1
baz=32
I30A Oacoma 31.78 346 P P 03 24 53.3 +0.6
baz=32,SNR=51
J28A Allard Ranch, 31.79 343 P P 03 24 53.9 +1.1
baz=32,SNR=11
H34A Spellman Lake, 31.81 351 P P 03 24 52.1 -0.8
baz=32,SNR=5.7
BELC Belle Mtn. Jos 31.85 315 P P 03 24 55.5 +2.0
baz=32
J27A Elkhorn Farm, 31.85 342 P P 03 24 54.9 +1.5
baz=32,SNR=7.2
LDFC Landfair 31.87 317 eP P 03 24 56.8 +3.1
comp=Z,14nm,0.8s
SRU San Rafael 31.88 328 eP P 03 24 55.5 +1.8
comp=Z,7.3nm,0.7s
H32A Carlson Farm, 31.93 349 P P 03 24 53.4 -0.6
baz=32,SNR=21
PFO Pinyon Flat Ob 31.95 314 P P 03 24 56.4 +1.9
baz=32
H33A Prehn Over Nor 31.98 350 P P 03 24 53.1 -1.3
baz=32,SNR=7.6
SPMN St. Paul 32.02 355 P P 03 24 54.2 -0.5
baz=32,SNR=36
109C Camp Elliot, M 32.03 312 P P 03 24 57.0 +2.0
baz=32
GMRC Granite Mounta 32.06 317 P P 03 24 57.5 +2.1
baz=32
I29A Vivian Onida 32.10 345 P P 03 24 56.2 +0.8
baz=32,SNR=75
H31A Wolsey 32.11 348 P P 03 24 55.4 -0.1
baz=32
G36A St. Michael 32.12 354 P P 03 24 55.1 -0.4
baz=32,SNR=6.3
P18A Preston Nutter 32.12 329 eP P 03 24 58.4 +2.4
comp=Z,7.7nm,0.7s
SUSD South Dakota S 32.18 347 P P 03 24 56.2 +0.1
baz=32,SNR=29
J26A Sides Ranch, S 32.23 341 P P 03 24 58.2 +1.4
baz=32,SNR=8.6
PTGA Pitinga 32.23 113 eP P 03 24 56.0 -1.0
comp=Z,9.7nm,0.9s
PTGA ePcP PcP 03 27 45.5 +1.4
P17A Butcher Ranch, 32.26 328 eP P 03 24 59.2 +2.1
comp=Z,21nm,0.7s
I28A Midland 32.30 344 P P 03 24 58.1 +0.8
baz=32,SNR=15
MSU Marysvale 32.33 325 eP P 03 25 00.5 +2.7
CCUT Cedar City 32.35 323 eP P 03 25 00.9 +2.9
comp=Z,61nm,2.9s
CCUT ePcP PcP 03 27 47.0 +2.6
G34A Benson 32.35 352 P P 03 24 57.7 +0.1
baz=32
TMUT Trail Mountain 32.37 327 eP P 03 25 00.3 +2.0
comp=Z,18nm,0.9s
MURC Murrieta 32.47 313 P P 03 25 00.3 +1.4
baz=33
J25A Sunshine Ranch 32.54 340 P P 03 24 59.8 +0.4
baz=33
HEC Hector,Ludlow 32.54 316 P P 03 25 01.0 +1.5
baz=33
SADO Sadowa 32.60 13 eP P 03 24 59.8 -0.1
comp=Z,24nm,0.6s
H29A Onida 32.64 346 P P 03 24 59.9 -0.3
baz=33,SNR=6.6
G32A Webster 32.66 349 P P 03 24 59.9 -0.5
baz=33,SNR=15
F36A Milaca 32.72 355 P P 03 25 00.4 -0.3
baz=33
COWI Conover 32.76 0 eP P 03 25 00.8 -0.4
comp=Z,55nm,0.7s
G31A Conde 32.77 348 P P 03 25 00.9 -0.4
baz=33
I26A New Underwood 32.82 342 P P 03 25 03.1 +1.3
baz=33,SNR=5.5
F35A Swanville 32.82 353 P P 03 25 01.4 -0.3
baz=33,SNR=15
G30A Faulkton 32.87 347 P P 03 25 01.8 -0.4
baz=33,SNR=20
K22A Casper 32.88 336 P P 03 25 03.2 +0.8
baz=33,SNR=10
H28A Mission Ridge 32.89 345 P P 03 25 03.2 +0.8
baz=33,SNR=48
F33A 5 Mile Ranch, 33.03 351 P P 03 25 02.4 -1.2
baz=33,SNR=10.0
I25A Rochford 33.08 341 P P 03 25 05.3 +1.0
baz=33,SNR=10
G29A Hoven 33.11 346 P P 03 25 04.1 -0.2
baz=33,SNR=18
SCI San Clemente I 33.12 311 P P 03 25 07.3 +2.7
baz=33
GSC Goldstone 33.13 316 P P 03 25 07.0 +2.3
baz=33
BFSC Mount Baldy Ra 33.13 314 P P 03 25 06.7 +1.9
baz=33
H27A Howes 33.14 343 P P 03 25 05.4 +0.8
baz=33,SNR=32
G28A Parade 33.24 345 P P 03 25 06.0 +0.6
baz=33,SNR=20
RSSD Black Hills 33.27 341 eP P 03 25 07.5 +1.6
comp=Z,9.9nm,0.8s
RSSD ePcP PcP 03 27 46.9 +0.1
NLU North Lily Min 33.31 327 eP P 03 25 07.8 +1.5
comp=Z,7.1nm,1.4s
H26A Fairpoint 33.32 342 P P 03 25 06.8 +0.6
baz=33,SNR=11
F31A Hecla 33.39 349 P P 03 25 05.8 -0.8
baz=34,SNR=7.1
E35A Pequot Lakes 33.49 354 P P 03 25 07.2 -0.3
baz=34,SNR=15
F30A Leola 33.52 348 P P 03 25 07.0 -0.8
baz=34,SNR=13
E34A Wadena 33.54 353 P P 03 25 07.6 -0.4
baz=34,SNR=6.9
H25A Fruitdale 33.58 341 P P 03 25 09.7 +1.3
baz=34,SNR=10
MDV Middlebury 33.64 21 eP P 03 25 08.2 -0.6
E33A Westby DABS, E 33.64 352 P P 03 25 08.2 -0.6
baz=34,SNR=18
CTU Camp Tracy 33.68 328 eP P 03 25 11.3 +1.8
comp=Z,9.4nm,0.9s
F29A Eureka 33.69 347 P P 03 25 08.8 -0.5
baz=34,SNR=15
EDW2 Edwards Air Fo 33.71 315 P P 03 25 11.2 +1.5
baz=34
LONY Lake Ozonia 33.71 19 eP P 03 25 09.4 -0.2
comp=Z,15nm,0.8s
TPNV Topopah Spring 33.73 319 P P 03 25 12.2 +2.2
baz=34
TPNV Topopah Spring 33.73 319 eP P 03 25 13.1 +3.0
comp=Z,49nm,2.6s
TPNV ePcP PcP 03 27 50.3 +2.1
G27A Dupree 33.78 344 P P 03 25 11.0 +0.8
baz=34,SNR=43
LRMC Laurel Mountai 33.83 316 P P 03 25 12.2 +1.4
baz=34
TCUT Toone Canyon 33.83 329 eP P 03 25 13.4 +2.5
comp=Z,27nm,0.6s
FURC Furnace Creek, 33.84 318 P P 03 25 12.7 +2.0
baz=34
DUG Dugway 33.87 327 P P 03 25 11.7 +0.5
baz=34
DUG Dugway 33.87 327 eP P 03 25 13.5 +2.4
comp=Z,3.4nm,0.8s
DUG ePcP PcP 03 27 49.2 +0.7
E32A Braaten, Kindr 33.89 350 P P 03 25 10.8 -0.1
baz=34
G26A Maurine 33.89 343 P P 03 25 11.7 +0.5
baz=34,SNR=10.0
D37A Cotton 33.92 356 P P 03 25 10.8 -0.5
baz=34,SNR=16
F28A McLaughlin 33.93 346 P P 03 25 11.8 +0.3
baz=34,SNR=18
D35A Remer 33.97 354 P P 03 25 11.0 -0.8
baz=34,SNR=9.1
D36A Goodland 33.99 355 P P 03 25 11.0 -0.8
baz=34,SNR=14
E31A Nome 33.99 349 P P 03 25 11.2 -0.8
baz=34,SNR=5.9
MPMC Manual Prospec 34.02 317 P P 03 25 13.6 +1.1
baz=34
G25A Newell 34.04 342 P P 03 25 13.2 +0.8
baz=34,SNR=14
SAML Samuel 34.04 129 eP P 03 25 12.2 -0.5
comp=Z,35nm,0.8s
SAML ePcP PcP 03 27 50.6 +1.4
D34A Park Rapids 34.10 353 P P 03 25 12.3 -0.6
baz=34,SNR=18
E30A Jud 34.13 348 P P 03 25 12.4 -0.7
baz=34,SNR=21
R11A Troy Canyon, C 34.20 322 P P 03 25 15.8 +1.8
baz=34
RSUT Red Spur Mount 34.22 330 eP P 03 25 15.6 +1.3
BW06 Boulder Array 34.24 333 eP P 03 25 15.1 +0.7
comp=Z,5.2nm,0.9s
BW06 ePcP PcP 03 27 49.4 -0.3
D33A AnnSam, Waubun 34.24 352 P P 03 25 13.5 -0.5
baz=34,SNR=24
F27A Lemmon 34.27 344 P P 03 25 15.0 +0.6
baz=34,SNR=40
HWUT Hardware Ranch 34.27 330 eP P 03 25 16.1 +1.4
comp=Z,7.7nm,0.7s
HWUT ePcP PcP 03 27 49.8 +0.2
E29A Napoleon 34.35 347 P P 03 25 14.8 -0.2
baz=34,SNR=10
BMUT Black Mountain 34.38 330 eP P 03 25 16.7 +1.0
D32A Dogwood Acres, 34.41 351 P P 03 25 14.5 -0.9
baz=34,SNR=10
C38A Sawbill Land, 34.41 358 P P 03 25 14.5 -1.1
baz=34,SNR=17
ARVC Arvin 34.42 314 P P 03 25 17.8 +2.0
baz=35
F26A Lodgepole 34.42 343 P P 03 25 16.5 +0.8
baz=34,SNR=38
D31A Mcclaflin, Tow 34.44 350 P P 03 25 14.8 -0.9
baz=34,SNR=5.1
ISA Isabella 34.46 315 P P 03 25 18.1 +1.9
baz=35
C37A Embarrass 34.47 357 P P 03 25 15.9 -0.1
baz=34,SNR=6.4
GRAC Grapevine Rang 34.48 318 P P 03 25 18.5 +2.2
baz=35
SPUT South Promonto 34.49 328 eP P 03 25 18.4 +1.9
comp=Z,6.6nm,0.8s
BGU Big Grassy Mou 34.51 327 eP P 03 25 18.6 +1.9
comp=Z,6.7nm,1.1s
C36A Pine Crest Far 34.54 356 P P 03 25 16.6 -0.1
baz=35,SNR=14
E28A Huff 34.59 346 P P 03 25 17.2 +0.1
baz=35,SNR=18
EYMN Ely 34.65 357 P P 03 25 16.5 -1.1
baz=35,SNR=20
EYMN Ely 34.65 357 eP P 03 25 16.8 -0.8
comp=Z,50nm,0.6s
E27A Carson 34.66 345 P P 03 25 18.3 +0.6
baz=35,SNR=28
D30A Buchanan 34.69 349 P P 03 25 17.5 -0.4
baz=35,SNR=29
F25A Bowman 34.71 343 P P 03 25 19.2 +0.9
baz=35,SNR=16
D29A Pettibone, Tap 34.81 348 P P 03 25 18.6 -0.3
baz=35,SNR=13
C33A Trail 34.84 352 P P 03 25 17.7 -1.5
baz=35
E26A Carlson Angus 34.94 344 P P 03 25 20.6 +0.5
baz=35,SNR=23
AHID Auburn Hatcher 34.94 331 eP P 03 25 21.9 +1.6
comp=Z,25nm,0.6s
VES Vestal, Richgr 34.98 315 P P 03 25 22.5 +2.0
baz=35
PKM Peak Mountain 35.00 313 P P 03 25 23.2 +2.3
baz=35
HVU Hansel Valley 35.00 329 eP P 03 25 22.5 +1.6
comp=Z,8.8nm,0.8s
TIN Tinemaha 35.08 318 eP P 03 25 20.1 -1.5
D28A Regan 35.14 347 P P 03 25 22.1 +0.2
baz=35,SNR=32
C31A Landman Farms, 35.16 350 P P 03 25 21.3 -0.7
baz=35,SNR=15
C30A Mose, Pekin 35.20 349 P P 03 25 22.4 0.0
baz=35,SNR=37
E25A Miller Ranch, 35.22 343 P P 03 25 23.5 +0.9
baz=35,SNR=56
D27A Center 35.29 346 P P 03 25 23.7 +0.5
baz=35,SNR=13
REDW Red Top Meadow 35.29 332 eP P 03 25 24.6 +1.2
comp=Z,60nm,0.6s
SNOW Snow King Moun 35.32 333 eP P 03 25 25.3 +1.5
comp=Z,81nm,0.6s
SMMC Simmler 35.33 314 P P 03 25 26.2 +2.5
baz=36
RCTC Rector, Farmer 35.34 316 P P 03 25 25.8 +2.2
baz=36
LOHW Long Hollow 35.38 333 eP P 03 25 26.1 +2.0
comp=Z,22nm,0.7s
AGMN Agassiz Nation 35.38 352 P P 03 25 23.3 -0.6
baz=36,SNR=28
AGMN Agassiz Nation 35.38 352 eP P 03 25 23.6 -0.2
comp=Z,39nm,0.6s
B34A Aery, Burette 35.42 354 P P 03 25 23.6 -0.6
baz=36,SNR=23
TPAW Teton Pass 35.43 332 eP P 03 25 26.4 +1.7
comp=Z,20nm,0.6s
D26A Manning 35.45 344 P P 03 25 25.2 +0.7
baz=36,SNR=15
MOOW Moose Ponds 35.55 333 eP P 03 25 26.7 +1.1
comp=Z,8.6nm,0.6s
MDND Maddock 35.56 348 P P 03 25 25.3 -0.1
baz=36,SNR=9.4
B32A Ashes, Strandq 35.56 352 P P 03 25 25.3 -0.1
baz=36,SNR=45
ELK Elko 35.58 325 eP P 03 25 27.8 +1.9
comp=Z,2.0nm,0.8s
ELK ePcP PcP 03 27 55.2 +1.6
C28A Hausauer Farms 35.60 347 P P 03 25 26.0 +0.2
baz=36,SNR=21
IMW Indian Meadow 35.75 333 eP P 03 25 28.8 +1.4
comp=Z,14nm,0.6s
IMW ePcP PcP 03 27 55.2 +1.1
B31A Greenbush Farm 35.76 350 P P 03 25 26.3 -0.8
baz=36,SNR=15
FLWY Flagg Ranch 35.79 333 eP P 03 25 29.5 +1.8
comp=Z,10nm,0.6s
FLWY ePcP PcP 03 27 54.8 +0.7
D25A Fairfield 35.79 344 P P 03 25 28.5 +1.0
baz=36,SNR=11
MLAC Mammoth Lakes 35.80 318 P P 03 25 29.7 +1.8
baz=36
C27A Sayler Ranch, 35.85 346 P P 03 25 28.4 +0.5
baz=36,SNR=11
B30A Myrvik Farm, E 35.90 350 P P 03 25 28.3 -0.1
baz=36,SNR=22
NV01 Mina Array Sit 35.92 320 eP P 03 25 30.8 +1.9
NV01 ePcP PcP 03 27 56.2 +1.6
NVAR Mina Array Bea 35.92 320 P P 03 25 30.1 +1.2
comp=Z,3.2nm,0.8s,baz=136,slow=7.1,SNR=19
NVAR sP sP 03 25 49.2 -5.4
comp=Z,5.2nm,0.8s,baz=138,slow=7.3,SNR=8.9
NVAR PcP PcP 03 27 56.0 +1.4
comp=Z,4.5nm,0.7s,baz=134,slow=3.9,SNR=14
NVAR ScP ScP 03 31 36.9 +2.3
comp=Z,3.5nm,0.7s,baz=135,slow=4.5,SNR=22
NVAR LR LR 03 41 27.2
comp=Z,190nm,19.6s,baz=130,slow=38
H17A Grant Village 35.98 334 P P 03 25 31.2 +1.8
baz=36,SNR=6.5
RLMT Red Lodge 36.03 336 P P 03 25 30.8 +1.0
baz=36,SNR=26
RLMT Red Lodge 36.03 336 eP P 03 25 30.9 +1.1
comp=Z,22nm,1.0s
RLMT ePcP PcP 03 27 55.1 +0.3
LPAZ La Paz 36.04 144 P P 03 25 31.8 +1.2
comp=Z,1.3nm,0.6s,baz=293,slow=6.6,SNR=6.5
LPAZ sP sP 03 25 50.5 -5.8
comp=Z,3.2nm,0.8s,baz=355,slow=22,SNR=4.6
LPAZ LR LR 03 41 20.9
comp=Z,75nm,19.5s,baz=308,slow=38
LPAZ La Paz 36.04 144 eP P 03 25 32.2 +1.7
comp=Z,3.3nm,0.8s
LPAZ sP sP 03 25 50.5 -5.8
LKWY Lake 36.05 334 eP P 03 25 32.1 +2.1
comp=Z,7.5nm,0.8s
C26A Wahner Farm, P 36.10 345 P P 03 25 30.2 +0.1
baz=36,SNR=15
B29A Wagenman Farm, 36.10 349 P P 03 25 30.0 0.0
baz=36,SNR=22
YFT Old Faithful 36.14 334 eP P 03 25 33.3 +2.6
comp=Z,26nm,1.0s
YFT ePcP PcP 03 27 57.1 +1.9
A31A Linda, St. Vin 36.18 351 P P 03 25 30.5 -0.2
baz=36
LAO LASA Array 36.26 340 P P 03 25 32.6 +1.1
baz=36,SNR=18
LAO LASA Array 36.26 340 eP P 03 25 32.6 +1.1
comp=Z,32nm,0.8s
YNR Norris Junctio 36.29 334 eP P 03 25 33.7 +1.8
comp=Z,25nm,1.0s
B28A Dugan Ranch, T 36.29 348 P P 03 25 32.2 +0.6
baz=36,SNR=37
C25A Freed Ranch, W 36.29 344 P P 03 25 32.7 +1.0
baz=36,SNR=26
A30A Hoffart Farm, 36.37 350 P P 03 25 32.1 -0.2
baz=36,SNR=18
YMR Madison River 36.37 334 eP P 03 25 35.1 +2.5
comp=Z,38nm,0.8s
B27A Peters Farms, 36.44 347 P P 03 25 33.2 +0.2
baz=36,SNR=6.0
BMN Battle Mountai 36.50 323 eP P 03 25 35.8 +2.1
comp=Z,28nm,2.3s
A29A Manning Farm, 36.52 349 P P 03 25 33.4 -0.2
baz=37,SNR=13
B26A Jensen Ranch, 36.64 346 P P 03 25 35.1 +0.4
baz=37,SNR=5.7
QLMT Earthquake Lak 36.70 333 eP P 03 25 38.6 +3.2
A28A Rude Farm, Bot 36.71 348 P P 03 25 35.1 -0.1
baz=37,SNR=10
GCMT Greycliff 36.74 336 eP P 03 25 36.9 +1.1
B25A Knox Farm, Ray 36.78 345 P P 03 25 37.2 +1.3
baz=37,SNR=9.2
A27A Ledoux Ranch, 36.95 347 P P 03 25 37.6 +0.3
baz=37,SNR=5.6
CMB Columbia Colle 37.04 317 eP P 03 25 41.0 +2.7
comp=Z,31nm,2.5s
CMB ePcP PcP 03 27 59.4 +1.6
A26A Wade Farm, Ken 37.08 346 P P 03 25 38.9 +0.5

baz=37,SNR=13
**HLID Hailey 37.13 329 P P 03 25 40.6 +1.5**
baz=37,SNR=11
**HLID Hailey 37.13 329 eP P 03 25 40.6 +1.5**
comp=Z,3.3nm,0.6s
**DGMT Dagmar 37.24 344 P P 03 25 40.6 +0.8**
baz=37,SNR=34
**DGMT Dagmar 37.24 344 eP P 03 25 41.0 +1.3**
comp=Z,116nm,0.6s
**ULM Lac du Bonnet 37.30 353 P P 03 25 39.3 -0.8**
comp=Z,36nm,0.8s,baz=175,slow=8.5,SNR=32
ULM ScP ScP **03 31 39.9 +0.7**
comp=Z,1.8nm,0.6s,baz=166,slow=4.6,SNR=4.1
ULM LR LR 03 43 18.7
comp=Z,177nm,19.1s,baz=150,slow=40
**ULM Lac du Bonnet 37.30 353 eP P 03 25 39.3 -0.8**
comp=Z,31nm,0.8s
ULM ScP ScP **03 31 39.9 +0.7**
**MCMT McKenzie Canyo 37.33 332 eP P 03 25 43.1 +2.3**
**A25A Svangstu Ranch 37.38 345 P P 03 25 41.7 +0.8**
baz=38
**BOZ Bozeman (W) 37.43 334 P P 03 25 42.7 +1.1**
baz=38,SNR=14
**BOZ Bozeman (W) 37.43 334 eP P 03 25 42.8 +1.2**
comp=Z,7.1nm,0.6s
**DLMT Dillon 37.63 333 eP P 03 25 44.9 +1.7**
comp=Z,7.1nm,0.9s
**MFID Camas Ranch 37.74 328 eP P 03 25 46.6 +2.4**
comp=Z,7.3nm,1.1s
**LRM Limekiln Ridge 37.93 333 eP P 03 25 47.5 +1.6**
**HRY Holter Researc 38.37 335 eP P 03 25 50.9 +1.5**
**WVOR Wild Horse Val 38.61 324 eP P 03 25 52.5 +1.1**
comp=Z,3.2nm,0.7s
**EGMT Eagleton 38.63 338 P P 03 25 52.6 +1.0**
baz=39,SNR=15
**EGMT Eagleton 38.63 338 eP P 03 25 53.0 +1.5**
comp=Z,23nm,0.8s
**J08A Circle Bar Ran 39.12 326 eP P 03 25 56.9 +1.2**
comp=Z,7.1nm,0.9s
**CHMT Chamberlain Mo 39.13 334 eP P 03 25 54.8 -1.0**
**MSO Missoula 39.36 333 P P 03 25 58.2 +0.5**
baz=40
**MSO Missoula 39.36 333 eP P 03 25 58.9 +1.3**
comp=Z,10.0nm,1.3s
**SLMT Seeley Lake 39.48 334 eP P 03 25 59.5 +0.8**
**SWMT Swartz Lake 39.91 334 eP P 03 26 02.2 0.0**
SWMT ePcP PcP **03 28 07.0 +0.5**
**M04C Macdoel 40.09 321 P P 03 26 05.2 +1.4**
baz=40
**YBMT Yellow Bay 40.19 334 eP P 03 26 04.5 0.0**
**JTMT Jette 40.21 334 eP P 03 26 04.7 -0.1**
JTMT ePcP PcP **03 28 08.4 +0.8**
**SIV San Ignacio 40.29 135 P P 03 26 06.4 +0.8**
comp=Z,17nm,0.8s,baz=316,slow=8.8,SNR=41
SIV pP pP **03 26 19.7 -3.6**
comp=Z,2.5nm,0.5s,baz=332,slow=3.5,SNR=2.7
SIV sP sP 03 26 24.7 -6.8
comp=Z,2.5nm,0.5s,baz=350,slow=7.7,SNR=2.7
SIV PcP PcP **03 28 11.2 +3.0**
comp=Z,7.3nm,0.7s,baz=329,slow=2.0,SNR=7.2
**BSMT Bassoo Peak 40.51 334 eP P 03 26 07.5 +0.2**
**YBH Yreka Blue Hor 40.59 321 P P 03 26 07.9 0.0**
comp=Z,1.2nm,0.7s,baz=114,slow=5.5,SNR=5.7
YBH PcP PcP **03 28 10.0 +1.1**
comp=Z,2.5nm,1.0s,baz=45,slow=4.3,SNR=3.5
YBH ScP ScP **03 31 53.8 +1.7**
comp=Z,0.7nm,0.6s,baz=104,slow=4.2,SNR=3.7
**LVC Limon Verde 40.85 150 P P 03 26 11.2 +0.8**
comp=Z,13nm,0.7s,baz=321,slow=4.5,SNR=4.3
**LVC Limon Verde 40.85 150 eP P 03 26 10.2 -0.2**
comp=Z,6.9nm,0.9s
**WALA Waterton Lakes 41.08 335 eP P 03 26 13.1 +1.2**
comp=Z,6.3nm,0.9s
WALA ePcP PcP **03 28 10.6 +0.2**
**J04D Umpqua Nationa 41.11 323 P P 03 26 13.8 +1.5**
baz=41
**I04A Tendick Farm, 41.62 323 P P 03 26 17.4 +1.1**
baz=42
**NEW Newport 41.86 332 P P 03 26 18.0 -0.1**
baz=42
**C09A Chrisman Ranch 42.06 331 eP P 03 26 20.5 +0.7**
comp=Z,8.2nm,0.6s
**FFC Flin Flon 42.57 349 eP P 03 26 24.2 +0.4**
comp=Z,24nm,0.6s
**EDM Edmonton 44.23 339 eP P 03 26 37.3 +0.1**
comp=Z,58nm,1.0s
EDM ePcP PcP **03 28 20.2 -0.4**
**B05A Bryant 44.25 329 P P 03 26 37.9 +0.5**
baz=44
**DRLN Deer Lake 44.43 30 eP P 03 26 38.4 -0.4**
comp=Z,34nm,1.0s
**RPN Rapa Nui 44.58 206 LR LR 03 41 44.0**
comp=Z,82nm,19.7s,baz=34,slow=31
**SCHQ Schefferville 45.08 18 P P 03 26 42.6 -1.3**
comp=Z,32nm,0.6s,baz=219,slow=6.7,SNR=51
SCHQ PcP PcP **03 28 22.4 -1.1**
comp=Z,4.4nm,0.5s,baz=242,slow=2.1,SNR=6.0
SCHQ LR LR 03 44 29.7
comp=Z,123nm,20.7s,baz=282,slow=35
**SCHQ Schefferville 45.08 18 eP P 03 26 43.0 -0.9**
comp=Z,36nm,0.8s
SCHQ PcP PcP **03 28 22.4 -1.1**
**FCC Fort Churchill 45.58 357 eP P 03 26 47.4 -0.4**
**LCO Las Campanas 45.69 157 eP P 03 26 50.5 +1.2**
comp=Z,25nm,1.1s
**CFAA Coronel Fontan 48.95 156 P P 03 27 15.7 +1.3**
comp=Z,0.3nm,0.3s,baz=232,slow=15,SNR=15
CFAA LR LR 03 45 49.3
comp=Z,6.6nm,19.7s,baz=74,slow=33
**BDFB Brasilia 49.92 124 P P 03 27 21.3 -0.8**
comp=Z,3.4nm,0.5s,baz=268,slow=6.8,SNR=8.5
BDFB sP sP 03 27 38.8 -10
comp=Z,4.0nm,0.5s,baz=296,slow=8.2,SNR=3.9
BDFB PcP PcP **03 28 43.1 +1.6**
comp=Z,5.8nm,0.8s,baz=315,slow=4.3,SNR=6.7
BDFB LR LR 03 50 55.2
comp=Z,85nm,20.9s,baz=282,slow=39
**BDFB Brasilia 49.92 124 eP P 03 27 22.8 +0.7**
comp=Z,22nm,1.2s
BDFB sP sP 03 27 38.8 -10
BDFB PcP PcP **03 28 43.1 +1.6**
**CPUP Villa Florida 50.14 142 P P 03 27 24.1 +0.7**
comp=Z,1.7nm,0.8s,baz=287,slow=11,SNR=3.2
CPUP sP sP 03 27 42.3 -7.5
comp=Z,3.3nm,0.6s,baz=340,slow=9.2,SNR=4.9
CPUP LR LR 03 51 41.0
comp=Z,36nm,18.6s,baz=250,slow=40
**YKA Yellowknife Ar 52.39 345 P P 03 27 39.6 -0.2**
comp=Z,23nm,0.7s,baz=144,slow=7.6,SNR=57
**DLBC Dease Lake 54.43 335 eP P 03 27 56.5 +1.6**
comp=Z,8.2nm,0.8s
**TAOE Nuku Hiva Isla 55.04 249 eT T 04 26 48.3**
comp=Z,98nm,0.3s
**RCBR Riachuelo 56.32 106 eP P 03 28 07.5 -1.7**
comp=Z,5.1nm,0.6s
**NRS Narsarsuaq 57.37 24 i P P 03 28 13.7 -2.0**
comp=Z,37nm,0.8s
**RKT Rikitea 57.47 231 eT T 04 29 50.0**
comp=Z,3.9nm,0.3s
**SFJD Kangerlussuaq 59.48 17 i P P 03 28 28.7 -1.6**
comp=Z,26nm,1.1s
**SFJD Kangerlussuaq 59.48 17 eP P 03 28 29.3 -1.0**
comp=Z,17nm,0.8s
**RES Resolute Bay 61.52 358 P P 03 28 43.4 -0.8**
comp=Z,16nm,0.5s,baz=190,slow=10,SNR=3.2
**RAGM Ragged Mountai 61.81 332 eP P 03 28 48.5 +2.1**
comp=Z,2µm,1.0s
**INK Inuvik 61.92 343 eP P 03 28 47.1 +0.3**
comp=Z,14nm,0.8s
**PMOR Pomariorio Ree 64.41 246 eT T 04 38 29.1**
comp=Z,2.5nm,0.2s
**IL1 Eielson Array 64.58 336 eP P 03 29 03.7 -0.9**
**ILAR Eielson Array 64.58 336 P P 03 29 04.1 -0.5**
comp=Z,5.8nm,1.0s,baz=166,slow=4.6,SNR=47
ILAR PP PP **03 31 27.5 +0.3**
comp=Z,0.8nm,0.9s,baz=108,slow=8.2,SNR=5.4
ILAR LR LR 04 00 27.4
comp=Z,92nm,18.9s,baz=146,slow=39
**KDAK Kodiak Island 64.74 328 P P 03 29 05.0 -0.7**
comp=Z,5.7nm,0.8s,baz=27,slow=4.5,SNR=2.9
**RND Reindeer 64.83 335 eP P 03 29 07.0 +0.7**
comp=Z,17nm,0.9s
**WRH Wood River Hil 64.93 336 eP P 03 29 06.4 -0.4**
comp=Z,91nm,2.5s
**MCK McKinley 64.98 335 eP P 03 29 07.3 0.0**
comp=Z,4.4nm,0.6s
**BWN Browne 65.37 335 eP P 03 29 09.8 +0.1**
comp=Z,37nm,1.0s
**BPAW Bear Paw Mtn. 65.96 335 eP P 03 29 13.3 -0.3**
comp=Z,7.1nm,0.6s
**MLY Manley 66.19 336 eP P 03 29 15.0 -0.1**
comp=Z,9.3nm,0.6s
**SUMG Summit 66.29 15 i P P 03 29 14.9 -1.0**
comp=Z,20nm,1.0s
**SUMG Summit 66.29 15 eP P 03 29 15.0 -1.0**
comp=Z,20nm,1.0s
**COLD Coldfoot 66.80 338 eP P 03 29 19.8 +1.0**
comp=Z,8.9nm,1.2s
**PPT Papeete 66.89 244 LR LR 03 50 01.8**
comp=Z,198nm,21.0s,baz=70,slow=28
**PPT2 Papeete2 66.90 244 eLR LR 03 49 19.9**
comp=Z,358nm,27.0s
**TBI Tubuai 69.16 239 eLR LR 03 50 37.4**
comp=Z,204nm,27.5s
**TBI Tubuai 69.16 239 eT T 04 44 25.9**
comp=Z,5.3nm,0.3s
**DAG Danmarks Havn 72.80 13 i P P 03 29 54.6 -0.9**
**PCAS Casmilo, Conde 74.62 52 eP P 03 30 04.7 -2.2**
comp=Z,51nm,1.6s
**MVO Moncorvo 75.65 51 eP P 03 30 11.5 -1.3**
comp=Z,32nm,1.8s
**PBAR Barrancos 75.92 54 eP P 03 30 13.2 -1.2**
**ESDC Sonseca Array 78.14 52 P P 03 30 24.6 -2.3**
comp=Z,2.5nm,0.7s,baz=285,slow=5.1,SNR=16
**ES19 SONSECA Array 78.18 52 eP P 03 30 24.7 -2.4**
**DBIC Dimbokro 83.12 85 P P 03 30 52.5 -1.4**
comp=Z,2.3nm,0.7s,baz=203,slow=5.7,SNR=4.6
DBIC LR LR 04 04 55.3
comp=Z,48nm,18.7s,baz=186,slow=34
**NB2 NORSAR Subarra 83.56 29 P P 03 30 54.1 -1.2**
comp=Z,1.4nm,0.6s,baz=288,slow=5.1
**NOA NORSAR Array B 83.56 29 P P 03 30 54.2 -1.1**
comp=Z,1.9nm,0.7s,baz=288,slow=5.0,SNR=11
NOA LR LR 04 04 06.6
comp=Z,41nm,21.8s,baz=270,slow=33
**ARCES ARCESS Array B 86.03 19 P P 03 31 06.2 -1.3**
comp=Z,1.5nm,0.6s,baz=287,slow=4.6,SNR=11
ARCES LR LR 04 08 04.9
comp=Z,29nm,18.2s,baz=312,slow=35
**TUE Stuetta 86.38 43 eP P 03 31 08.3 -1.7**
**CLL Collm 87.32 38 eP P 03 31 12.0 -2.1**
**TOA0 Torodi Ar. Sit 88.01 77 eP P 03 31 14.9 -3.2**
**TORD Torodi Ar. Bea 88.01 77 P P 03 31 15.3 -2.9**
comp=Z,0.8nm,0.6s,baz=290,slow=4.9,SNR=23
TORD LR LR 04 09 15.8
comp=Z,24nm,19.6s,baz=160,slow=35
**KHC Kasperske Hory 88.35 40 eP P 03 31 17.3 -1.8**
**GERES GERESS Array B 88.51 40 P P 03 31 18.2 -1.8**
comp=Z,1.0nm,0.8s,baz=327,slow=2.2,SNR=7.1
GERES LR LR 04 05 59.9
comp=Z,58nm,19.3s,baz=292,slow=32
**KEST Kesra 89.25 54 P P 03 31 22.1 -1.7**
comp=Z,2.1nm,0.7s,baz=307,slow=5.1,SNR=3.3
**FINES FINESS Array B 90.06 26 P P 03 31 25.4 -1.4**
comp=Z,1.0nm,0.6s,baz=280,slow=1.2,SNR=5.8
FINES LR LR 04 11 50.9
comp=Z,32nm,19.4s,baz=260,slow=36
**SEY Seymchan 90.51 336 P P 03 31 28.9 0.0**
comp=Z,3.2nm,0.2s,baz=359,slow=12,SNR=4.1
**AKASG Malin Array Be 96.91 34 LR LR 04 13 57.5**
comp=Z,26nm,20.6s,baz=325,slow=34
**ZALV Zalesovo Beam 112.90 4 PKiKP PKiKP 03 37 02.8 -1.1**
comp=Z,0.7nm,0.3s,baz=340,slow=4.3,SNR=4.0
ZALV PP PP **03 37 50.8 -1.1**
comp=Z,5.8nm,0.8s,baz=350,slow=7.5,SNR=9.6
**KURK Kurchatov 115.45 8 ePKPdf PKPdf 03 37 07.7 -1.1**
**SONM Songino Array 117.61 348 PKP PKPdf 03 37 13.2 -0.1**
comp=Z,1.1nm,0.6s,baz=346,slow=2.5,SNR=9.9
**BOSA Boshof 117.67 115 PKP PKPdf 03 37 14.3 +0.5**
comp=Z,7.3nm,0.9s,baz=271,slow=3.9,SNR=9.5
**KSRS Korea Array 118.63 327 PKP PKPdf 03 37 15.2 -0.1**
comp=Z,1.9nm,0.6s,baz=14,slow=2.5,SNR=9.1
**KSAR Wonju Array Be 118.66 327 PKP PKPdf 03 37 15.2 -0.2**
**LSZ Lusaka 119.57 100 ePKPdf PKPdf 03 37 18.5 +0.7**
**MKAR Makanchi Array 119.77 7 PKP PKPdf 03 37 16.1 -1.2**
comp=Z,0.9nm,0.6s,baz=314,slow=3.9,SNR=6.0
**EKS2 Erkin-Say 122.25 15 ePKPdf PKPdf 03 37 22.5 +0.2**
**TKM2 Tokmak 2 122.43 13 ePKPdf PKPdf 03 37 22.3 -0.5**
**AAK Ala-Archa 122.45 14 ePKPdf PKPdf 03 37 22.5 -0.3**
**HHC Hu-ho-hao-te 122.82 341 ePKP PKPdf 03 37 23.0 -0.5**
**WMQ Urumqi 123.16 3 ePKP PKPdf 03 37 25.0 +1.0**
**KSH Kashi 125.76 14 ePKP PKPdf 03 37 29.5 +0.3**
KSH PKS PKSdf **03 41 04.8 -1.1**
KSH PPMZ
comp=Z,120nm,5.9s
KSH LN
comp=Z,77nm,6.8s
KSH LE
comp=Z,94nm,7.4s
KSH LZ
comp=Z,100nm,7.2s
**GTA Gaotai 126.94 351 ePKP PKPdf 03 37 31.7 +0.3**
GTA sPKP 03 38 11.2
**LZH Lanzhou 129.39 346 ePKP PKPdf 03 37 36.8 +0.5**
LZH sPKP 03 38 18.5
LZH LN
comp=Z,130nm,18.0s
LZH LE
comp=Z,130nm,17.9s
LZH LZ
comp=Z,170nm,20.1s
**CD2 Chengdu 134.34 344 PKP PKPdf 03 37 44.2 -1.4**
**WRAB Tennant Creek 137.72 255 ePKPdf PKPdf 03 37 54.3 +2.3**
**WRA Warramunga Arr 137.73 255 PKhKP PKPpre 03 37 46.2**
comp=Z,0.5nm,0.6s,baz=82,slow=3.1,SNR=7.3
WRA PKP PKiKP **03 37 53.9 -0.2**
comp=Z,7.0nm,0.7s,baz=87,slow=2.0,SNR=43
WRA SKP 03 41 25.1
comp=Z,3.1nm,0.8s,baz=92,slow=2.5,SNR=18
**ASAR Alice Springs 137.86 249 PKhKP PKPpre 03 37 45.7**
comp=Z,0.4nm,0.5s,baz=109,slow=2.8,SNR=6.5
ASAR PKP PKPdf **03 37 53.0 +0.8**
comp=Z,2.6nm,0.7s,baz=92,slow=2.0,SNR=12
ASAR SKP 03 41 25.8
comp=Z,4.5nm,1.1s,baz=102,slow=2.7,SNR=13
**KMI Kunming 140.10 343 PKP PKPdf 03 37 56.2 -0.4**
**FORT Forrest 141.43 237 ePKPdf PKPdf 03 37 59.0 +0.5**
**KMSI Cibinong 144.26 290 P PKPdf 03 38 12.8 +8.8**
**GTOI Gorontalo 145.12 291 P PKPbc 03 38 03.0 -2.1**
**LUWI Luwuk 146.00 288 P PKPab 03 38 09.1 +0.7**
**LUWI Luwuk 146.00 288 ePKPdf PKPdf 03 38 05.7 -1.2**
LUWI ePKPbc PKPab **03 38 09.6 +1.2**
**FITZ Fitzroy Crossi 146.04 257 ePKPbc PKPab 03 38 08.8 +0.3**
**MRSI Marisa 146.16 291 P PKPdf 03 38 06.0 -1.2**
**APSI Ampana 146.98 289 P PKPab 03 38 13.0 +0.7**
**CHTO Chiang Mai 147.13 345 ePKPbc PKPbc 03 38 10.1 -0.9**
**HYB Hyderabad 147.27 22 i PKP PKPdf 03 38 08.5 -0.6**
**CMAR Chiang Mai Arr 147.47 345 PKPbc PKPbc 03 38 10.9 -0.9**
comp=Z,12nm,0.8s,baz=338,slow=3.9,SNR=23
**CHLP Challavanipeta 147.79 12 ePKPbc PKPbc 03 38 11.5 -1.2**
**MPSI Mapaga 148.06 293 P PKPbc 03 38 12.6 -1.0**
**NJS Nagarjunasagar 148.34 21 ePKPbc PKPbc 03 38 12.7 -1.5**
**PVM Polavaram 148.41 17 ePKPbc PKPbc 03 38 13.2 -1.2**
**URV Uravakonda 149.00 26 ePKPbc PKPdf 03 38 13.8 +1.8**
**SKHT Srikalahasti 151.07 22 ePKiKP PKPbc 03 38 19.8 -1.2**
**MBWA Marble Bar 151.19 250 ePKPbc PKPbc 03 38 21.5 +0.3**

*NIED **01** 03:24:00,42.°30N×143.°00E,h53km,Mw3.7 Best double couple: M0 4.54000×10^14 NP1:ϕs=203.00000°,δ=28.00000°,λ=79.00000°. NP2:ϕs=35.00000°,δ=62.00000°,λ=96.00000°.*
*ISCJB **01** 03:24:25.7±0.5,42.°32N±0.°05×142.°96E±0.°06,h67km±3km, mb3.6/11,Error ellipse: s-maj=8.3km s-min=6.7km az=146.0*
*JMA **01** 03:24:27.0±0.1,42.°33N×143.°01E,h54km±1km,M3.5*
*JMA Felt I J1.*
*IDC **01** 03:24:28.3±2.5,42.°47N×142.°78E,h67km±17km,mb3.5/11, mb1 3.7/12,mb1mx3.5/40,mbtmp3.8/12,Error ellipse: s-maj=23.3km s-min=17.8km az=121.0*
**ISC 01 03:24:26.7±0.8,42.°34N±0.°05×142.°97E±0.°05,h59km±6km, n29,σ0=92/31,mb3.8/11,5C-1D,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNBK** | **Urakawa-nobuka** | **0.17** | **250** | **⇑P** | **Pn** | **03 24 35.5** | **-0.3** |
| JNBK | | | | *eS* | **Sn** | **03 24 42.2** | **-0.2** |
| **JEM** | **Erimo** | **0.35** | **157** | **⇑P** | **Pn** | **03 24 36.9** | **-0.1** |
| JEM | | | | *eS* | **Sn** | **03 24 45.1** | **+0.6** |
| **JCH** | **Churui** | **0.40** | **46** | **⇑P** | **Pn** | **03 24 37.3** | **-0.2** |
| JCH | | | | *eS* | **Sn** | **03 24 45.4** | **+0.1** |
| **JBT2** | **Biratori 2** | **0.63** | **314** | **⇓P** | **Pn** | **03 24 40.4** | **+0.4** |
| JBT2 | | | | *eS* | **Sn** | **03 24 51.6** | **+1.9** |
| **JOB** | **Onbets** | **0.85** | **48** | **⇑P** | **Pn** | **03 24 43.3** | **+0.6** |
| JOB | | | | *eS* | **Sn** | **03 24 56.1** | **+1.6** |
| **JFR** | **Furan** | **0.87** | **341** | **P** | **Pn** | **03 24 42.8** | **-0.2** |
| **JAR** | **Ashorobuto** | **1.12** | **31** | **⇑P** | **Pn** | **03 24 46.2** | **0.0** |
| JAR | | | | *eS* | **Sn** | **03 25 00.5** | **-0.3** |
| **JEW** | **Eniwo** | **1.23** | **294** | **P** | **Pn** | **03 24 48.1** | **+0.4** |
| **JAB** | **Ashibetsu** | **1.29** | **335** | **P** | **Pn** | **03 24 49.7** | **+1.2** |
| **JAK** | **Akkeshi** | **1.43** | **62** | **P** | **Pn** | **03 24 50.2** | **-0.1** |
| JAK | | | | *eS* | **Sn** | **03 25 08.2** | **+0.1** |
| **ASAJ** | **Asahikawa** | **1.80** | **351** | **P** | **Pn** | **03 24 56.3** | **+1.0** |
| ASAJ | 32nm,0.3s,baz=200,slow=18,SNR=33 | | | S | **Sn** | **03 25 15.4** | **-1.6** |
| **MJAR** | 12nm,0.3s,baz=24,slow=20,SNR=9.6 **Matsushiro Arr** | **6.86** | **214** | **P** | **Pn** | **03 26 05.5** | **+0.9** |
| **SONM** | 0.4nm,0.3s,baz=13,slow=14,SNR=4.9 **Songino Array** | **26.23** | **295** | **P** | **P** | **03 29 55.7** | **-0.4** |
| **TLY** | 0.6nm,0.5s,baz=89,slow=10,SNR=5.0 **Talaya** | **28.09** | **303** | **P** | **P** | **03 30 10.8** | **-1.8** |
| **H11N2** | 2.3nm,0.6s,baz=27,slow=22,SNR=10.0 **WAKE ISLAND Hy** | **30.27** | **131** | **T** | **T** | 04 02 01.1 | |
| **H11N1** | baz=325,slow=75 **WAKE ISLAND Hy** | **30.29** | **131** | **T** | **T** | 04 02 02.7 | |
| **H11N3** | baz=325,slow=75 **WAKE ISLAND Hy** | **30.29** | **131** | **T** | **T** | 04 02 00.5 | |
| **H11S1** | baz=325,slow=75 **WAKE ISLAND Hy** | **31.15** | **132** | **T** | **T** | 04 03 11.7 | |
| **H11S3** | baz=324,slow=76 **WAKE ISLAND Hy** | **31.15** | **132** | **T** | **T** | 04 03 11.1 | |
| **H11S2** | baz=324,slow=76 **WAKE ISLAND Hy** | **31.17** | **132** | **T** | **T** | 04 03 08.5 | |
| **ZALV** | baz=324,slow=76 **Zalesovo Beam** | **39.42** | **308** | **P** | **P** | **03 31 50.5** | **-0.1** |
| **MKAR** | 1.3nm,0.5s,baz=99,slow=7.7,SNR=5.7 **Makanchi Array** | **42.52** | **298** | **P** | **P** | **03 32 16.0** | **-0.2** |
| **ILAR** | 1.1nm,0.6s,baz=88,slow=9.6,SNR=4.7 **Eielson Array** | **44.42** | **35** | **P** | **P** | **03 32 31.9** | **+0.7** |
| **BVAR** | 0.2nm,0.5s,baz=252,slow=5.4,SNR=3.0 **Borovoye Array** | **48.02** | **309** | **P** | **P** | **03 32 59.5** | **-0.1** |
| **ARCES** | 0.8nm,0.4s,baz=78,slow=6.8,SNR=4.9 **ARCESS Array B** | **59.48** | **339** | **P** | **P** | **03 34 22.0** | **-1.0** |
| **FINES** | 3.9nm,1.1s,baz=49,slow=7.3,SNR=3.2 **FINESS Array B** | **64.70** | **332** | **P** | **P** | **03 34 57.1** | **-0.9** |
| **NOA** | 0.9nm,0.5s,baz=62,slow=6.9,SNR=14 **NORSAR Array B** | **69.76** | **337** | **P** | **P** | **03 35 29.1** | **-1.1** |
| **NVAR** | 0.6nm,0.8s,baz=33,slow=6.5,SNR=2.6 **Mina Array Bea** | **70.91** | **55** | **P** | **P** | **03 35 39.2** | **+1.3** |
| **TXAR** | 0.1nm,0.3s,baz=318,slow=3.6,SNR=2.5 **Lajitas Array** | **85.96** | **53** | **P** | **P** | **03 37 01.3** | **+0.6** |
| | 0.2nm,0.5s,baz=299,slow=3.7,SNR=3.3 | | | | | | |

*NIED **01** 03:26:00,34.°10N×135.°60E,h460km,Mw4.1 Best double couple: M0 1.60000×10^15 NP1:ϕs=37.00000°,δ=49.00000°,λ=-151.00000°. NP2:ϕs=287.00000°,δ=68.00000°,λ=-45.00000°.*
*ISCJB **01** 03:26:22.7±0.4,34.°05N±0.°06×135.°62E±0.°04,h427km±3km,mb3.6/14,Error ellipse: s-maj=8.9km s-min=5.7km az=174.8*
*JMA **01** 03:26:23.7±0.1,34.°09N×135.°56E,h420km±1km,M3.8*
*IDC **01** 03:26:23.3±0.5,34.°00N×135.°58E,h416km±5km,mb3.3/14, mb1 3.5/20,mb1mx3.3/45,mbtmp4.2/20,Error ellipse: s-maj=9.9km s-min=8.8km az=139.0*
**ISC 01 03:26:23.5±0.6,34.°06N±0.°07×135.°59E±0.°06,h420km±5km, n64,σ0=89/77,mb3.5/14,1C-8D,Near south coast of western Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JWZ** | **Kozaga** | **0.54** | **169** | **⇓P** | **P** | **03 27 15.8** | **+0.2** |
| JWZ | | | | *S* | **S** | **03 27 56.8** | **-0.7** |
| **JIE** | **Ise** | **0.99** | **70** | **⇓P** | **P** | **03 27 17.3** | **+0.8** |
| JIE | | | | *S* | **S** | **03 27 59.2** | **-0.3** |
| **JWT** | **Wachi** | **1.23** | **353** | **⇓P** | **P** | **03 27 17.8** | **+0.4** |
| JWT | | | | *S* | **S** | **03 28 00.0** | **-1.1** |
| **JEG** | **Eigenji** | **1.26** | **31** | **P** | **P** | **03 27 18.3** | **+0.8** |
| **JGM** | **Miyama** | **1.89** | **29** | **⇓P** | **P** | **03 27 21.3** | **+0.8** |
| JGM | | | | *S* | **S** | **03 28 06.8** | **0.0** |
| **HMMJ** | **Hamamatsu 2** | **1.94** | **65** | **⇓P** | **P** | **03 27 21.5** | **+0.7** |
| **JHMK** | **Hamakita** | **1.95** | **66** | **P** | **P** | **03 27 21.5** | **+0.8** |
| **JHS** | **Saijyo** | **2.25** | **295** | **⇑P** | **P** | **03 27 23.1** | **+0.4** |
| JHS | | | | *S* | **S** | **03 28 10.4** | **-0.4** |
| **JNY** | **Yasuok** | **2.28** | **55** | **⇓P** | **P** | **03 27 23.5** | **+0.5** |
| **JKG** | **Kaga** | **2.30** | **15** | **⇓P** | **P** | **03 27 23.4** | **+0.5** |
| **JYN** | **Shimob** | **2.83** | **59** | **⇓P** | **P** | **03 27 27.2** | **+0.4** |
| **MAT** | **Matsushiro** | **3.28** | **40** | **P** | **P** | **03 27 30.7** | **+0.4** |
| MAT | | | | *S* | **S** | **03 28 23.4** | **-1.3** |
| **MAT** | **Matsushiro** | **3.28** | **40** | **P** | **P** | **03 27 30.7** | **+0.4** |
| **MJAR** | **Matsushiro Arr** 17nm,0.3s,baz=212,slow=8.4,SNR=203 | **3.28** | **40** | **P** | **P** | **03 27 30.9** | **+0.6** |
| MJAR | | | | *S* | **S** | **03 28 24.0** | **-0.7** |
| **JRY** | baz=206,slow=13,SNR=1.9 **Ryogami san** | **3.35** | **53** | **P** | **P** | **03 27 31.6** | **+0.7** |
| **JHU** | **Hanno** | **3.52** | **58** | **P** | **P** | **03 27 32.7** | **+0.4** |
| **JHJ** | **Hachijo jima 2** 22nm,0.3s,baz=199,slow=20,SNR=4.6 | **3.62** | **104** | **P** | **P** | **03 27 34.5** | **+1.2** |
| JHJ | | | | *S* | **S** | **03 28 30.1** | **0.0** |
| **JNU** | 8.7nm,0.3s,baz=232,slow=19,SNR=2.1 **Nakatsue** | **4.04** | **258** | **P** | **P** | **03 27 37.4** | **+0.3** |
| JNU | 1.0nm,0.3s,baz=70,slow=4.1,SNR=7.7 | | | *S* | **S** | **03 28 36.3** | **-0.7** |
| **KSULL** | 0.3nm,0.3s,baz=252,slow=15,SNR=3.2 **Ulleungdo** | **5.11** | **313** | **P** | **P** | **03 27 48.5** | **+1.2** |
| **KSULL** | SNR=14 **Ulleungdo** | **5.11** | **313** | **P** | **P** | **03 27 48.5** | **+1.2** |
| **KSULJ** | SNR=14 **Uljin** | **5.70** | **299** | **P** | **P** | **03 27 53.4** | **+0.1** |
| **KSULJ** | SNR=7.1 **Uljin** | **5.70** | **299** | **P** | **P** | **03 27 53.4** | **+0.1** |
| **KSTBA** | SNR=7.1 **Taebaek** | **6.21** | **301** | **P** | **P** | **03 27 59.7** | **+0.9** |
| **KSTBA** | SNR=26 **Taebaek** | **6.21** | **301** | **P** | **P** | **03 27 59.7** | **+0.9** |
| **KSSAJ** | SNR=26 **Sangju** | **6.52** | **293** | **P** | **P** | **03 28 03.0** | **+0.5** |
| **KSSAJ** | SNR=7.8 **Sangju** | **6.52** | **293** | **P** | **P** | **03 28 03.0** | **+0.5** |
| **KSJES** | SNR=7.8 **JEONGSEON** | **6.56** | **303** | **P** | **P** | **03 28 03.4** | **+0.5** |
| **KSJES** | SNR=20 **JEONGSEON** | **6.56** | **303** | **P** | **P** | **03 28 03.4** | **+0.5** |
| **KSCPR** | SNR=20 **CHUPUNGNYEONG** | **6.60** | **291** | **P** | **P** | **03 28 04.3** | **+0.8** |
| **KSCPR** | SNR=6.3 **CHUPUNGNYEONG** | **6.60** | **291** | **P** | **P** | **03 28 04.3** | **+0.8** |
| **KSDGY** | SNR=6.3 **Daegwallycong** | **6.68** | **305** | **P** | **P** | **03 28 05.0** | **+0.6** |
| **KSDGY** | SNR=10 **Daegwallycong** | **6.68** | **305** | **P** | **P** | **03 28 05.0** | **+0.6** |
| **KSJMJ** | SNR=10 **Jumunjin** | **6.73** | **307** | **P** | **P** | **03 28 05.3** | **+0.5** |
| **KSJMJ** | SNR=35 **Jumunjin** | **6.73** | **307** | **P** | **P** | **03 28 05.3** | **+0.5** |
| **KSBON** | SNR=35 **Boeun** | **6.82** | **293** | **P** | **P** | **03 28 06.6** | **+0.8** |
| **KSBON** | SNR=11 **Boeun** | **6.82** | **293** | **P** | **P** | **03 28 06.6** | **+0.8** |
| **KSRS** | SNR=11 **Korea Array** 2.0nm,0.3s,baz=120,slow=12,SNR=41 | **7.09** | **301** | **P** | **P** | **03 28 09.6** | **+0.9** |
| **KSSKC** | **Sokcho** | **7.11** | **309** | **P** | **P** | **03 28 09.6** | **+0.8** |
| **KSSKC** | SNR=11 **Sokcho** | **7.11** | **309** | **P** | **P** | **03 28 09.6** | **+0.8** |
| **KSIJA** | SNR=11 **INJE** | **7.22** | **305** | **P** | **P** | **03 28 11.0** | **+0.9** |
| **SEHB** | SNR=16 **SEOHWA** | **7.27** | **307** | **P** | **P** | **03 28 11.6** | **+0.9** |
| **SEHB** | SNR=24 **SEOHWA** | **7.27** | **307** | **P** | **P** | **03 28 11.6** | **+0.9** |
| **KSCHC** | SNR=26 **Chuncheon** | **7.32** | **303** | **P** | **P** | **03 28 12.3** | **+1.1** |
| **KSCEA** | SNR=8.0 **Cheonan** | **7.34** | **294** | **P** | **P** | **03 28 12.3** | **+0.9** |
| **KSCWO** | SNR=11 **Cheorwon** | **7.67** | **304** | **P** | **P** | **03 28 16.5** | **+1.4** |
| **YNCB** | SNR=18 **YEONCHEON** | **8.06** | **302** | **P** | **P** | **03 28 20.5** | **+1.3** |
| **JOW** | SNR=20 **Kunigami** 0.4nm,0.3s,baz=101,slow=25,SNR=13 | **9.57** | **223** | **P** | **P** | **03 28 36.6** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** 0.8nm,0.3s,baz=166,slow=9.9,SNR=28 | **10.51** | **346** | **P** | **P** | **03 28 46.6** | **+0.5** |
| **ASAJ** | **Asahikawa** 1.4nm,0.3s,baz=212,slow=9.4,SNR=5.2 | **11.42** | **26** | **P** | **P** | **03 28 56.9** | **+0.7** |
| ASAJ | | | | *S* | **S** | **03 30 58.3** | **-4.0** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | baz=53,slow=20 | | | | | | |
| **SONM** | **Songino Array** | **25.81** | **311** | P | **P** | **03 31 20.3** | **+1.3** |
| | 4.7nm,0.6s,baz=115,slow=7.6,SNR=24 | | | | | | |
| SONM | | | | ScP | **ScP** | **03 37 33.9** | **-0.4** |
| | 0.5nm,0.6s,baz=11,slow=1.5,SNR=3.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.13** | **254** | P | **P** | **03 32 46.7** | **-1.6** |
| | 2.6nm,0.3s,baz=50,slow=8.4,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.54** | **315** | P | **P** | **03 33 23.9** | **-0.1** |
| | 0.7nm,0.4s,baz=76,slow=6.1,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.76** | **304** | P | **P** | **03 33 34.3** | **+0.3** |
| | 0.8nm,0.4s,baz=84,slow=10,SNR=8.2 | | | | | | |
| MKAR | | | | ScP | **ScP** | **03 38 30.1** | **-0.4** |
| | 0.9nm,0.7s,baz=68,slow=3.9,SNR=3.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **49.11** | **314** | P | **P** | **03 34 30.8** | **+0.2** |
| | 0.5nm,0.3s,baz=101,slow=4.7,SNR=4.6 | | | | | | |
| **KDAK** | **Kodiak Island** | **52.45** | **40** | P | **P** | **03 34 56.0** | **+1.0** |
| | 3.2nm,0.4s,baz=264,slow=3.6,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.71** | **181** | P | **P** | **03 35 04.2** | **-0.3** |
| | 2.2nm,0.3s,baz=0.3,slow=7.7,SNR=65 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 36 04.8** | **+0.5** |
| | 0.3nm,0.5s,baz=355,slow=4.4,SNR=5.0 | | | | | | |
| **ILAR** | **Eielson Array** | **54.52** | **31** | P | **P** | **03 35 10.4** | **+0.8** |
| | 0.5nm,0.7s,baz=262,slow=6.7,SNR=8.0 | | | | | | |
| **ASAR** | **Alice Springs** | **57.42** | **182** | P | **P** | **03 35 30.0** | **-0.6** |
| | 1.4nm,0.6s,baz=12,slow=14,SNR=14 | | | | | | |
| **INK** | **Inuvik** | **59.16** | **26** | P | **P** | **03 35 43.0** | **+1.3** |
| | 1.9nm,0.9s,baz=288,slow=7.7,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **65.07** | **339** | P | **P** | **03 36 21.1** | **+0.7** |
| | 1.8nm,0.7s,baz=56,slow=8.1,SNR=14 | | | | | | |
| **YKA** | **Yellowknife Ar** | **68.71** | **28** | P | **P** | **03 36 42.3** | **-0.9** |
| | 0.5nm,0.6s,baz=299,slow=6.4,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **69.17** | **331** | P | **P** | **03 36 46.0** | **0.0** |
| | 1.5nm,0.4s,baz=72,slow=5.2,SNR=22 | | | | | | |
| **NOA** | **NORSAR Array B** | **75.00** | **335** | P | **P** | **03 37 19.9** | **-0.2** |
| | 0.4nm,0.4s,baz=58,slow=6.9,SNR=5.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.77** | **309** | PKP | **PKPdf** | **03 44 16.9** | **-0.7** |
| | 0.2nm,1.0s,baz=18,slow=2.2,SNR=3.5 | | | | | | |

**GUC 01 03:47:34.6±0.7, 22°.71S×68°.63W, h124km±7km, ML3.3, 4C-1D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **0.87** | **270** | ⇑ *i*P | Pn | 03 47 56.1 | +0.2 |
| PB06 | | | | *i* S | Sn | 03 48 12.9 | +0.9 |
| PB06 | | | | AML | AML | 03 48 14.4 | |
| | comp=E,875nm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **1.07** | **328** | *e*P | Pn | 03 47 58.7 | +0.8 |
| PB09 | | | | *i* S | Sn | 03 48 16.6 | +1.2 |
| **PB04** | **IPOC Station P** | **1.45** | **285** | ⇑ *i*P | Pn | 03 48 02.6 | +0.6 |
| PB04 | | | | *i* S | Sn | 03 48 24.3 | +1.6 |
| PB04 | | | | AML | AML | 03 48 29.8 | |
| | comp=E,448nm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **1.52** | **310** | ⇑ *i*P | Pn | 03 48 03.5 | +0.7 |
| PB07 | | | | *i* S | Sn | 03 48 25.0 | +0.9 |
| PB07 | | | | AML | AML | 03 48 26.5 | |
| | comp=E,548nm,0.1s | | | | | | |
| **PB01** | **IPOC Station P** | **1.84** | **334** | ⇓ *i*P | Pn | 03 48 07.0 | +0.6 |
| PB01 | | | | *i* S | Sn | 03 48 31.5 | +0.8 |
| PB01 | | | | AML | AML | 03 48 33.6 | |
| | comp=E,296nm,0.3s | | | | | | |
| **ANCH** | **Antofagasta** | **1.90** | **239** | ⇑ *i*P | Pn | 03 48 00.9 | -6.1 |
| ANCH | | | | *i* S | Sn | 03 48 25.7 | -6.2 |

**SIGU 01 03:49:14.4, 44°.67N×33°.26E, h20km, Crimea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SEV** | **Sevastopol'** | **0.32** | **113** | *e*Pg | Pb | 03 49 22.0 | +0.6 |
| | baz=114 | | | | | | |
| SEV | | | | *e*Sg | Sb | 03 49 27.2 | +1.1 |
| | baz=114 | | | | | | |
| SEV | | | | Sgm | | 03 49 27.5 | |
| | baz=114 | | | | | | |
| SEV | | | | Sgm | | 03 49 27.5 | |
| | baz=114 | | | | | | |
| **YAL** | **Yalta** | **0.67** | **106** | *e*Sg | Sn | 03 49 38.0 | -0.5 |
| | baz=109 | | | | | | |
| **SUDU** | **Sudak** | **1.26** | **79** | *e*Sg | Sb | 03 49 57.2 | +4.0 |
| | baz=81 | | | | | | |
| SUDU | | | | Sgm | | 03 49 58.4 | |
| | baz=81 | | | | | | |
| SUDU | | | | Sgm | | 03 49 58.6 | |
| | baz=81 | | | | | | |

*DDA **01** 03:49:56.4, 40°.38N×37°.72E, h6km, Md3.2*
*ISK **01** 03:49:56.9, 40°.42N×37°.64E, h4km, MD3.0*
*CSEM **01** 03:49:57.5±0.2, 40°.40N×37°.71E, h2km, MD3.2, Error ellipse: s-maj=6.7km s-min=4.5km az=179.0*
**ISC 01 03:49:57.2±1.1, 40°.37N±0°.02×37°.72E±0°.02, h5km±10km, n47, σ0s.83/79, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SUSE** | **Susehri** | **0.41** | **114** | *i* P | **Pg** | **03 50 05.2** | **+0.1** |
| SUSE | | | | *i* S | **Sg** | **03 50 11.8** | **+1.3** |
| **SUSE** | **Susehri** | **0.41** | **114** | P | **Pg** | **03 50 05.2** | **+0.1** |
| SUSE | | | | S | **Sg** | **03 50 11.8** | **+1.3** |
| **CUZAR** | **Zara_SIVAS** | **0.49** | **175** | P | **Pg** | **03 50 05.9** | **-0.7** |
| CUZAR | | | | S | **Sg** | **03 50 14.0** | **+1.1** |
| **SCER** | **sogukcermik** | **0.68** | **222** | *i* P | **Pg** | **03 50 10.0** | **-0.3** |
| SCER | | | | *i* S | **Sg** | **03 50 19.7** | **+0.6** |
| **SCER** | **sogukcermik** | **0.68** | **222** | P | **Pg** | **03 50 10.0** | **-0.3** |
| SCER | | | | S | **Sg** | **03 50 19.7** | **+0.6** |
| **GRSN** | **GIRESUNGRSN** | **0.69** | **37** | *i* P | **Pg** | **03 50 10.3** | **-0.2** |
| GRSN | | | | *i* S | **Sg** | **03 50 19.7** | **+0.1** |
| **GRSN** | **GIRESUNGRSN** | **0.69** | **37** | P | **Pg** | **03 50 10.3** | **-0.2** |
| GRSN | | | | S | **Sg** | **03 50 19.7** | **+0.1** |
| **SVSK** | **Karacayir** | **0.71** | **231** | *e*PG | **Pg** | **03 50 10.7** | **-0.2** |
| SVSK | | | | *e*SG | **Sb** | **03 50 21.5** | **-0.7** |
| **SVSK** | **Karacayir** | **0.71** | **231** | *e*Pg | **Pg** | **03 50 10.7** | **-0.2** |
| SVSK | | | | *e*Sg | **Sb** | **03 50 21.5** | **-0.7** |
| **TOKT** | **Tokat** | **0.90** | **267** | *e*PG | **Pg** | **03 50 14.1** | **-0.3** |
| **TOKT** | **Tokat** | **0.90** | **267** | *e*Pg | **Pg** | **03 50 14.1** | **-0.3** |
| **TOKA** | **Tokat** | **0.95** | **267** | *i* P | **Pg** | **03 50 14.3** | **-1.1** |
| TOKA | | | | *i* S | **Sn** | **03 50 30.6** | **-0.5** |
| **TOKA** | **Tokat** | **0.95** | **267** | P | **Pg** | **03 50 14.3** | **-1.1** |
| TOKA | | | | S | **Sn** | **03 50 30.6** | **-0.5** |
| **CUKAN** | **kangal_SIVAS** | **1.07** | **190** | P | **Pg** | **03 50 16.7** | **-1.1** |
| CUKAN | | | | S | **Sg** | **03 50 32.7** | **+1.1** |
| **KELT** | **Kelkit** | **1.20** | **100** | *i* P | **Pg** | **03 50 19.5** | **-0.7** |
| KELT | | | | *i* S | **Sg** | **03 50 35.3** | **-0.4** |
| **KELT** | **Kelkit** | **1.20** | **100** | P | **Pg** | **03 50 19.5** | **-0.7** |
| KELT | | | | S | **Sg** | **03 50 35.3** | **-0.4** |
| **KEMA** | **Kemaliye** | **1.25** | **151** | *i* P | **Pg** | **03 50 20.2** | **-1.0** |
| KEMA | | | | *i* S | **Sb** | **03 50 38.5** | **+0.6** |
| **KEMA** | **Kemaliye** | **1.25** | **151** | P | **Pg** | **03 50 20.2** | **-1.0** |
| KEMA | | | | S | **Sb** | **03 50 38.5** | **+0.6** |
| **CUALT** | **Altinyayla-SIV** | **1.32** | **214** | P | **Pn** | **03 50 22.4** | **0.0** |
| CUALT | | | | S | **Sn** | **03 50 42.8** | **+2.2** |
| **KVT** | **Kavak** | **1.45** | **300** | *e*PN | **Pn** | **03 50 23.8** | **-0.4** |
| **KVT** | **Kavak** | **1.45** | **300** | *e*Pn | **Pn** | **03 50 23.8** | **-0.4** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.48** | **230** | P | **Pn** | **03 50 24.4** | **-0.2** |
| CUSAR | | | | S | **Sg** | **03 50 45.2** | **+0.5** |
| **MACK** | **Trabzon** | **1.66** | **69** | *i* P | **Pb** | **03 50 27.9** | **-0.4** |
| MACK | | | | *i* S | **Sg** | **03 50 50.7** | **+0.1** |
| **MACK** | **Trabzon** | **1.66** | **69** | P | **Pb** | **03 50 27.9** | **-0.4** |
| MACK | | | | S | **Sg** | **03 50 50.7** | **+0.1** |
| **HAVZ** | **Havza** | **1.67** | **295** | *i* P | **Pg** | **03 50 29.9** | **+0.7** |
| HAVZ | | | | *i* S | **Sg** | **03 50 52.9** | **+2.0** |
| **HAVZ** | **Havza** | **1.67** | **295** | P | **Pg** | **03 50 29.9** | **+0.7** |
| HAVZ | | | | S | **Sg** | **03 50 52.9** | **+2.0** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **1.85** | **89** | *e*PN | **Pb** | **03 50 30.9** | **-0.7** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **1.85** | **89** | *e*Pn | **Pb** | **03 50 30.9** | **-0.7** |
| **PTK** | **Pertek** | **1.96** | **138** | *e*PN | **Pb** | **03 50 33.0** | **-0.6** |
| **PTK** | **Pertek** | **1.96** | **138** | *e*Pn | **Pb** | **03 50 33.0** | **-0.6** |
| **YOZ** | **Yozgat** | **1.98** | **249** | *e*PN | **Pn** | **03 50 31.8** | **+0.3** |
| **YOZ** | **Yozgat** | **1.98** | **249** | *e*Pn | **Pn** | **03 50 31.8** | **+0.3** |
| **AKCD** | **Akcadag** | **2.08** | **176** | *i* P | **Pb** | **03 50 34.8** | **-0.7** |
| AKCD | | | | *i* S | **Sg** | **03 51 04.3** | **+0.3** |
| **AKCD** | **Akcadag** | **2.08** | **176** | P | **Pb** | **03 50 34.8** | **-0.7** |
| AKCD | | | | S | **Sg** | **03 51 04.3** | **+0.3** |
| **BNN** | **Bunyan** | **2.10** | **224** | *e*PN | **Pn** | **03 50 34.2** | **+1.1** |
| **BNN** | **Bunyan** | **2.10** | **224** | *e*Pn | **Pn** | **03 50 34.2** | **+1.1** |
| **ELZG** | **Elazig** | **2.11** | **152** | *i* P | **Pb** | **03 50 35.0** | **-1.1** |
| ELZG | | | | *i* S | **Sb** | **03 51 03.8** | **+1.1** |
| **ELZG** | **Elazig** | **2.11** | **152** | P | **Pb** | **03 50 35.0** | **-1.1** |
| ELZG | | | | S | **Sb** | **03 51 03.8** | **+1.1** |
| **MALT** | **Malatya** | **2.13** | **165** | *e*PN | **Pb** | **03 50 35.6** | **-0.7** |
| **MALT** | **Malatya** | **2.13** | **165** | *e*Pn | **Pb** | **03 50 35.6** | **-0.7** |
| **SARI** | **SarD1z-Kayseri** | **2.21** | **208** | *e*PN | **Pn** | **03 50 35.6** | **+1.0** |
| **CTKT** | **Corum** | **2.25** | **277** | *i* P | **Pn** | **03 50 35.3** | **+0.1** |
| CTKT | | | | *i* S | **Sg** | **03 51 10.0** | **+0.7** |
| **CTKT** | **Corum** | **2.25** | **277** | P | **Pn** | **03 50 35.3** | **+0.1** |
| CTKT | | | | S | **Sg** | **03 51 09.9** | **+0.7** |
| **BOYT** | **Boyabat** | **2.38** | **297** | *i* P | **Pn** | **03 50 36.2** | **-0.6** |
| BOYT | | | | *i* S | **Sg** | **03 51 14.5** | **+1.0** |
| **BOYT** | **Boyabat** | **2.38** | **297** | P | **Pn** | **03 50 36.2** | **-0.6** |
| BOYT | | | | S | **Sg** | **03 51 14.5** | **+1.0** |
| **CDAG** | **Cicekdag** | **2.67** | **255** | *i* P | **Pb** | **03 50 44.6** | **-1.0** |
| CDAG | | | | *i* S | **Sg** | **03 51 22.2** | **-0.9** |
| **CDAG** | **Cicekdag** | **2.67** | **255** | P | **Pb** | **03 50 44.6** | **-1.0** |
| CDAG | | | | S | **Sg** | **03 51 22.2** | **-0.9** |

**WEL 01 04:06:15.2±0.1, 43°.63S×172°.47E, h5km, ML3.7/14, 1C-3D, Error ellipse: s-maj=0.8km s-min=0.7km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.12** | **65** | ⇑PG | Pg | 04 06 17.7 | 0.0 |
| CRLZ | | | | SG | Sg | 04 06 19.4 | +0.1 |
| CRLZ | | | | AML | AML | 04 06 19.6 | |
| CRLZ | | | | AML | AML | 04 06 19.7 | |
| CRLZ | | | | AML | AML | 04 06 19.7 | |
| **MQZ** | **McQueen's Vall** | **0.15** | **122** | ⇓PG | Pg | 04 06 18.6 | +0.3 |
| MQZ | | | | SG | Sg | 04 06 21.1 | +0.7 |
| MQZ | | | | AML | AML | 04 06 21.5 | |
| **OXZ** | **Oxford** | **0.44** | **313** | PG | Pg | 04 06 23.8 | +0.1 |
| **LTZ** | **Lake Taylor** | **0.86** | **350** | ⇓P* | Pg | 04 06 31.9 | +0.2 |
| LTZ | | | | S* | Sb | 04 06 43.8 | -0.7 |
| LTZ | | | | AML | AML | 04 06 46.2 | |
| **RPZ** | **Rata Peaks** | **1.03** | **265** | ⇓P* | Pg | 04 06 35.3 | +0.2 |
| RPZ | | | | AML | AML | 04 06 51.8 | |
| RPZ | | | | AML | AML | 04 06 52.9 | |
| **WVZ** | **Waitaha Valley** | **1.38** | **293** | PN | Pn | 04 06 40.4 | -0.7 |
| WVZ | | | | AML | AML | 04 07 04.6 | |
| WVZ | | | | AML | AML | 04 07 07.9 | |
| **KHZ** | **Kahutara** | **1.44** | **33** | PN | Pn | 04 06 39.9 | -2.0 |
| KHZ | | | | AML | AML | 04 07 16.0 | |
| KHZ | | | | AML | AML | 04 07 21.0 | |
| **LBZ** | **Lake Benmore** | **1.82** | **245** | PN | Pn | 04 06 46.6 | -0.6 |
| LBZ | | | | AML | AML | 04 07 15.8 | |
| LBZ | | | | AML | AML | 04 07 15.8 | |
| LBZ | | | | AML | AML | 04 07 17.5 | |
| LBZ | | | | AML | AML | 04 07 17.6 | |
| **THZ** | **Tophouse** | **1.89** | **10** | PN | Pn | 04 06 46.9 | -1.3 |
| THZ | | | | AML | AML | 04 07 16.7 | |
| THZ | | | | AML | AML | 04 07 21.2 | |
| **ODZ** | **Otahua Downs** | **1.93** | **222** | PN | Pn | 04 06 47.6 | -1.1 |
| ODZ | | | | AML | AML | 04 07 24.5 | |
| ODZ | | | | AML | AML | 04 07 26.4 | |
| ODZ | | | | AML | AML | 04 07 26.8 | |
| ODZ | | | | AML | AML | 04 07 29.5 | |
| **DSZ** | **Denniston Nort** | **1.94** | **345** | PN | Pn | 04 06 49.3 | +0.4 |
| DSZ | | | | AML | AML | 04 07 23.3 | |
| DSZ | | | | AML | AML | 04 07 26.4 | |
| **FOZ** | **Fox Glacier** | **2.02** | **271** | PN | Pn | 04 06 49.4 | -0.5 |
| FOZ | | | | AML | AML | 04 07 24.0 | |
| FOZ | | | | AML | AML | 04 07 25.5 | |
| **NNZ** | **Nelson** | **2.50** | **16** | PN | Pn | 04 06 56.2 | -0.3 |
| **JCZ** | **Jackson Bay** | **2.73** | **259** | PN | Pn | 04 06 59.0 | -0.8 |
| JCZ | | | | AML | AML | 04 07 46.6 | |
| JCZ | | | | AML | AML | 04 07 49.1 | |
| **EAZ** | **Earnscleugh** | **2.78** | **234** | PN | Pn | 04 06 59.4 | -1.0 |
| EAZ | | | | AML | AML | 04 07 46.5 | |
| EAZ | | | | AML | AML | 04 07 54.3 | |
| **TUZ** | **Tuapeka** | **3.08** | **220** | AML | AML | 04 08 02.6 | |
| TUZ | | | | AML | AML | 04 08 07.8 | |
| **MRZ** | **Mangatainoka R** | **3.76** | **39** | PN | Pn | 04 07 13.4 | -0.4 |

**IDC 01 04:08:33.7±2.1, 5°.13S×152°.91E, h0km, mb3.6/4, mb1 3.9/4, mb1mx3.6/29, mbtmp3.7/4, MS2.7/1, Ms1 2.7/1, ms1mx2.4/27, Error ellipse: s-maj=127.1km s-min=26.5km az=130.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **7.12** | **233** | LR | LR | 04 13 08.2 | |
| | comp=Z,52nm,19.8s,baz=94,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.31** | **229** | P | P | 04 13 42.4 | -1.3 |
| | 0.8nm,0.8s,baz=54,slow=10,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **25.98** | **223** | P | P | 04 14 09.2 | +0.7 |
| | 0.8nm,0.7s,baz=61,slow=8.7,SNR=6.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.60** | **242** | P | P | 04 14 41.4 | +0.5 |
| | 1.2nm,0.8s,baz=43,slow=8.2,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **82.42** | **22** | P | P | 04 20 57.8 | +0.2 |
| | 0.9nm,0.9s,baz=238,slow=4.7,SNR=6.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.51** | **288** | PKPbc | PKPbc | 04 28 27.8 | -0.8 |
| | 0.2nm,0.4s,baz=93,slow=2.5,SNR=5.0 | | | | | | |

**BJI 01 04:19:46.4, 32°.59N×105°.34E, h10km, ML3.7/20, Ms3.3/2, Ms7 3.3/1, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CD2** | **Chengdu** | **2.15** | **219** | Pn | Pn | 04 20 22.1 | -0.3 |
| CD2 | | | | Pg | Pb | 04 20 25.2 | -0.3 |
| CD2 | | | | Sn | Sn | 04 20 45.3 | -3.9 |
| CD2 | | | | Sg | Sb | 04 20 53.7 | +1.4 |
| CD2 | | | | SMN | | | |
| | 1µm,0.7s | | | | | | |
| CD2 | | | | SME | | | |
| | 2µm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **3.33** | **63** | Pn | Pn | 04 20 38.8 | +0.2 |
| XAN | | | | Pg | Pb | 04 20 47.9 | +2.3 |
| XAN | | | | Sn | Sn | 04 21 13.7 | -4.6 |
| XAN | | | | Sg | Sb | 04 21 25.7 | -0.6 |
| XAN | | | | SMN | | | |
| | 300nm,0.8s | | | | | | |
| XAN | | | | SME | | | |
| | 190nm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **3.70** | **341** | Pn | Pn | 04 20 46.5 | +2.6 |
| LZH | | | | Pg | Pb | 04 20 54.0 | +1.9 |
| LZH | | | | Sg | Sg | 04 21 42.9 | -2.8 |
| LZH | | | | SMN | | | |
| | 250nm,1.0s | | | | | | |
| LZH | | | | SME | | | |
| | 330nm,1.0s | | | | | | |
| LZH | | | | LN | | | |
| | 310nm,4.1s | | | | | | |
| LZH | | | | LE | | | |
| | 320nm,5.2s | | | | | | |
| LZH | | | | LZ | | | |
| | 330nm,7.6s | | | | | | |
| **GYA** | **Guiyang** | **6.22** | **169** | Pn | Pn | 04 21 17.7 | -0.7 |
| GYA | | | | Pg | Pb | 04 21 39.2 | +4.2 |
| GYA | | | | Sn | Sn | 04 22 26.1 | -3.6 |
| GYA | | | | SMN | | | |
| | 60nm,0.6s | | | | | | |
| GYA | | | | SME | | | |
| | 70nm,0.7s | | | | | | |

*AUST **01** 04:19:46.3±99.0, 13°.53S×176°.82W, h1km±3km, Error ellipse: s-maj=5.3km s-min=3.0km az=228.0*
*ISCJB **01** 04:20:58.4±0.7, 17°.4S±0°.1×178°.8W±0°.1, h539km, mb3.6/8, Error ellipse: s-maj=21.1km s-min=12.3km az=146.2*
*IDC **01** 04:20:58.1±2.1, 17°.39S×178°.86W, h514km±25km, mb3.2/8, mb1 3.4/10, mb1mx3.2/32, mbtmp4.1/10, Error ellipse: s-maj=20.4km s-min=15.0km az=136.0*
**ISC 01 04:20:59.6±0.7, 17°.4S±0°.2×178°.9W±0°.1, h539km, n18, σ1s.05/16, mb3.5/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.63** | **64** | P | **P** | **04 22 52.2** | **-1.3** |
| | 3.6nm,0.3s,baz=40,slow=6.6,SNR=3.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.61** | **249** | P | **P** | **04 24 04.0** | **-1.4** |
| | 0.2nm,0.3s,baz=352,slow=15,SNR=2.3 | | | | | | |
| **URZ** | **Urewera** | **21.10** | **189** | P | **P** | **04 25 04.5** | **-1.5** |
| | 2.8nm,0.4s,baz=125,slow=12,SNR=3.3 | | | | | | |
| **PMG** | **Port Moresby** | **33.96** | **279** | P | P | 04 26 50.1 | -8.5 |
| | baz=36,SNR=3.3 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.05** | **240** | P | **P** | **04 27 08.7** | **+1.2** |
| | baz=39,SNR=6.4 | | | | | | |
| **BBOO** | **Buckleboo** | **43.30** | **240** | P | **P** | **04 28 14.7** | **+0.7** |
| | baz=47,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.32** | **259** | P | **P** | **04 28 21.9** | **-0.3** |
| | 0.7nm,0.3s,baz=94,slow=8.1,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **44.53** | **254** | P | **P** | **04 28 24.1** | **+0.4** |
| | 7.2nm,0.4s,baz=89,slow=8.1,SNR=107 | | | | | | |
| **MTN** | **Manton Dam** | **48.40** | **268** | P | P | 04 28 47.3 | -5.7 |
| | baz=51,SNR=3.7 | | | | | | |
| **WRKA** | **Warakurna** | **49.61** | **252** | P | **P** | **04 29 02.4** | **+0.5** |
| | baz=53,SNR=31 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.70** | **260** | P | **P** | **04 29 25.3** | **+0.9** |
| | 0.6nm,0.3s,baz=90,slow=5.1,SNR=6.0 | | | | | | |
| **VNDA** | **Vanda** | **60.93** | **185** | P | **P** | **04 30 21.0** | **+1.2** |
| | 0.2nm,0.4s,baz=21,slow=6.5,SNR=2.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.24** | **323** | P | **P** | **04 31 00.8** | **+0.2** |
| | 1.0nm,0.3s,baz=154,slow=7.3,SNR=3.1 | | | | | | |
| **PMBI** | **Palembang** | **76.14** | **271** | P | **P** | **04 31 51.6** | **-1.2** |
| | baz=78,SNR=5.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.34** | **44** | P | **P** | **04 32 11.3** | **+1.4** |
| | 0.4nm,0.6s,baz=219,slow=7.0,SNR=4.0 | | | | | | |
| **ILAR** | **Eielson Array** | **85.47** | **13** | P | **P** | **04 32 39.5** | **-0.4** |
| | 0.4nm,0.4s,baz=224,slow=5.2,SNR=6.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.12** | **315** | PKP | **PKPdf** | **04 39 34.6** | **+0.1** |
| | 0.8nm,0.8s,baz=84,slow=4.5,SNR=3.7 | | | | | | |
| **GERES** | **GERESS Array B** | **147.00** | **345** | PKPbc | **PKPbc** | **04 39 42.6** | **+0.7** |
| | 0.7nm,0.5s,baz=37,slow=3.3,SNR=8.2 | | | | | | |

*ISCJB **01** 04:23:48.6±0.5, 5°.09S±0°.08×152°.58E±0°.09, h55km, mb4.2/19, Error ellipse: s-maj=15.2km s-min=7.8km az=38.7*
*IDC **01** 04:23:50.1±4.0, 5°.10S×152°.60E, h56km±35km, mb3.8/12, mb1 4.0/13, mb1mx3.9/29, mbtmp4.1/13, ML2.0/1, Error ellipse: s-maj=21.0km s-min=18.2km az=70.0*
*NEIC **01** 04:23:51.4±1.6, 5°.09S×152°.56E, h66km±14km, mb4.4/9, Error ellipse: s-maj=11.5km s-min=10.5km az=220.0*
**ISC 01 04:23:50.1±0.6, 5°.06S±0°.10×152°.6E±0°.1, h55km, n30, σ0s.77/32, mb4.3/19, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **6.91** | **231** | P | **Pn** | **04 25 29.5** | **+0.7** |
| | 1.7nm,0.3s,baz=17,slow=14,SNR=2.9 | | | | | | |
| PMG | | | | S | **Sn** | **04 26 46.3** | **+0.3** |
| | 4.5nm,0.3s,baz=143,slow=20,SNR=4.8 | | | | | | |
| **COEN** | **Coen** | **12.82** | **226** | *e*Pn | **Pn** | **04 26 49.9** | **+0.2** |
| **DZM** | **Mont Dzumac** | **21.58** | **143** | P | **P** | **04 28 34.8** | **-0.6** |
| | 6.5nm,0.7s,baz=346,slow=2.2,SNR=7.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.58** | **143** | *e*P | **P** | **04 28 37.0** | **+1.6** |
| | 8.6nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.11** | **229** | *e*P | **P** | **04 28 51.6** | **0.0** |
| | 5.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.12** | **229** | P | **P** | **04 28 51.4** | **-0.2** |
| | 1.1nm,0.4s,baz=52,slow=9.6,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **25.82** | **222** | P | **P** | **04 29 16.9** | **+0.5** |
| | 1.2nm,0.7s,baz=59,slow=8.4,SNR=6.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.36** | **242** | P | **P** | **04 29 47.2** | **-0.9** |
| | 2.5nm,0.5s,baz=67,slow=7.4,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.36** | **242** | *e*P | **P** | **04 29 46.8** | **-1.4** |
| | 2.3nm,0.5s | | | | | | |
| **LUWI** | **Luwuk** | **30.04** | **277** | *e*P | **P** | **04 29 53.9** | **-0.4** |
| **DLV** | **T Lat** | **47.01** | **291** | *e*P | **P** | **04 32 16.7** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **57.80** | **295** | P | **P** | **04 33 37.1** | **+0.7** |
| | 1.4nm,0.4s,baz=107,slow=5.5,SNR=10.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.11** | **4** | P | **P** | **04 33 38.3** | **+0.5** |
| | 2.5nm,0.4s,baz=182,slow=10.0,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **66.44** | **328** | P | **P** | **04 34 33.3** | **-0.5** |
| | 0.3nm,0.4s,baz=141,slow=5.9,SNR=3.4 | | | | | | |
| **VNDA** | **Vanda** | **72.58** | **178** | P | **P** | **04 35 09.8** | **-1.2** |
| | 0.4nm,0.6s,baz=340,slow=5.9,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.39** | **319** | P | **P** | **04 35 55.9** | **+0.1** |
| | 0.2nm,0.3s,baz=101,slow=7.0,SNR=2.2 | | | | | | |
| **MCK** | **McKinley** | **81.18** | **23** | *e*P | **P** | **04 35 59.2** | **-0.5** |
| | 3.2nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.26** | **326** | P | **P** | **04 36 00.1** | **-0.1** |
| | 2.1nm,0.6s,baz=112,slow=4.5,SNR=5.6 | | | | | | |
| **COLA** | **College** | **82.17** | **22** | *e*P | **P** | **04 36 04.0** | **-0.8** |
| | 2.8nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **82.48** | **22** | P | **P** | **04 36 05.7** | **-0.8** |
| | 2.9nm,0.7s,baz=255,slow=5.4,SNR=30 | | | | | | |
| **KURK** | **Kurchatov** | **83.85** | **322** | *e*P | **P** | **04 36 14.4** | **+0.7** |
| | 3.8nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **83.97** | **314** | *e*P | **P** | **04 36 15.8** | **+0.9** |
| | 1.7nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **84.70** | **314** | *e*P | **P** | **04 36 19.8** | **+1.3** |
| | 3.2nm,0.9s | | | | | | |
| **EKS2** | **Erkin-Say** | **85.22** | **313** | *e*P | **P** | **04 36 22.5** | **+1.4** |
| | 5.3nm,1.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.41** | **52** | P | **P** | **04 36 55.8** | **+0.4** |
| | 0.4nm,0.7s,baz=255,slow=5.5,SNR=2.6 | | | | | | |
| **GERES** | **GERESS Array B** | **124.17** | **328** | PKP | **PKPdf** | **04 42 43.0** | **+0.1** |
| | 0.8nm,0.6s,baz=45,slow=0.4,SNR=7.0 | | | | | | |
| **LPAZ** | **La Paz** | **134.47** | **119** | PKP | **PKPdf** | **04 43 04.7** | **+0.7** |
| | 0.5nm,0.4s,baz=257,slow=0.9,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.19** | **288** | PKPbc | **PKPbc** | **04 43 35.6** | **-0.5** |
| | 1.0nm,0.5s,baz=83,slow=2.1,SNR=19 | | | | | | |
| **BDFB** | **Brasilia** | **151.02** | **136** | PKPbc | **PKPbc** | **04 43 37.8** | **-0.3** |
| | 2.9nm,0.6s,baz=207,slow=1.2,SNR=6.7 | | | | | | |
| BDFB | | | | PKPab | **PKPab** | **04 43 46.0** | **+0.3** |
| | 1.2nm,0.6s,baz=226,slow=6.0,SNR=3.3 | | | | | | |
| **DBIC** | **Dimbokro** | **157.51** | **275** | PKPab | **PKPab** | **04 44 12.6** | **-0.7** |
| | 2.2nm,0.9s,baz=96,slow=5.9,SNR=4.7 | | | | | | |

*IDC **01** 04:52:48.3±0.8, 13°.70N×90°.49W, h0km, mb4.3/12, mb1 4.4/15, mb1mx4.1/35, mbtmp4.3/15, ML3.0/2, MS3.7/6, Ms1 3.8/6, ms1mx3.3/24, Error ellipse: s-maj=33.2km s-min=13.7km az=45.0*
*CASC **01** 04:52:51.6±2.8, 13°.39N×90°.95W, h22km±23km, MD4.3, ML4.4, mb4.6(NEIC)*
*ISCJB **01** 04:52:58.1±0.5, 13°.83N±0°.05×90°.40W±0°.05, h89km±4km, mb4.5/49, Error ellipse: s-maj=10.5km s-min=4.0km az=44.3*
*UCR **01** 04:52:59.4, 14°.76N×89°.19W, h189km, MD5.0*
*NEIC **01** 04:52:59.7±0.9, 13°.76N×90°.45W, h88km±8km, mb4.6/41, Error ellipse: s-maj=12.0km s-min=4.6km az=47.0*
*GCG **01** 04:52:59.0, 14°.03N×91°.02W, h58km, MD4.6*
**ISC 01 04:52:56.4±1.2, 13°.67N±0°.09×90°.65W±0°.08, h62km±10km, n312, σ1s.02/313, mb4.5/50, 1C, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCG** | **Pacaya** | **0.72** | **3** | *e*P | **Pn** | **04 53 10.8** | **-0.5** |
| **FUG** | **Fuego 3** | **0.80** | **347** | *e*P | **Pn** | **04 53 10.8** | **-1.3** |
| **NBG** | **Las Nubes** | **0.96** | **18** | *e*P | **Pn** | **04 53 15.8** | **+1.4** |
| **RTR** | **El Retiro** | **1.00** | **77** | *i* P | **Pn** | **04 53 14.8** | **0.0** |
| **SBLS** | **San Blas** | **1.01** | **80** | *i* P | **Pn** | **04 53 14.5** | **-0.4** |
| **SNJE** | **San Jose** | **1.04** | **79** | *i* P | **Pn** | **04 53 15.0** | **-0.2** |
| **RBDL** | **Robledal** | **1.04** | **65** | *i* P | **Pn** | **04 53 15.7** | **+0.5** |
| **JAT** | **Jato** | **1.15** | **304** | *e*P | Pn | 04 53 12.6 | -3.9 |
| **BOQS** | **Boqueron** | **1.33** | **87** | ⇑ *i*P | **Pn** | **04 53 19.4** | **+0.2** |
| **SNET** | **Serv Nac Est T** | **1.38** | **89** | *i* P | **Pn** | **04 53 19.7** | **+0.1** |
| SNET | | | | *e*S | Sn | 04 53 44.3 | +7.2 |
| SNET | | | | AML | AML | 04 53 45.8 | |
| | comp=Z,5µm,0.3s | | | | | | |
| **LFU** | **La Fuente** | **1.50** | **87** | *i* P | **Pn** | **04 53 21.9** | **+0.7** |
| **LFRS** | **El Faro** | **1.55** | **91** | *i* P | **Pn** | **04 53 22.0** | **+0.1** |
| **LBRS** | **Las Brisas** | **1.56** | **87** | *i* P | **Pn** | **04 53 22.9** | **+0.7** |
| **MRL** | **Marmol** | **1.67** | **34** | *e*P | Pn | 04 53 26.8 | +3.1 |
| **SNVI** | **San Vicente** | **1.76** | **92** | *i* P | **Pn** | **04 53 25.5** | **+0.7** |
| **CAHU** | **Cacacuatique** | **2.37** | **87** | *e*P | **Pn** | **04 53 34.1** | **+0.9** |
| **CNCH** | **Conchagua** | **2.77** | **98** | *i* P | **Pn** | **04 53 39.0** | **+0.5** |
| **TGUH** | **Tegucigalpa,Un** | **3.30** | **83** | *e*P | **Pn** | **04 53 46.7** | **+0.9** |
| **TGUH** | **Tegucigalpa,Un** | **3.30** | **83** | *e*Pn | **Pn** | **04 53 47.1** | **+1.4** |
| **COPN** | **Copaltepe** | **4.22** | **110** | *e*P | **Pn** | **04 53 57.6** | **-0.8** |
| **CMIG** | **Matias Romero** | **5.32** | **310** | Pn | Pn | 04 54 09.4 | -3.9 |
| | comp=Z,4.4nm,0.3s,baz=140,slow=10,SNR=36 | | | | | | |
| CMIG | | | | Sn | **Sn** | **04 55 12.9** | **-0.3** |
| | comp=Z,12nm,0.3s,baz=69,slow=18,SNR=6.3 | | | | | | |
| **JTS** | **JuntasAbangare** | **6.51** | **120** | *e*Pn | **Pn** | **04 54 31.5** | **+1.8** |
| **JCR** | **Jicaral** | **6.62** | **124** | *e*P | **Pn** | **04 54 32.4** | **+1.1** |
| JCR | | | | *e*S | Sn | 04 56 10.0 | +25 |
| **CGA2** | **Cerro Gallo 2** | **7.06** | **120** | *e*P | **Pn** | **04 54 38.1** | **+0.8** |
| CGA2 | | | | *e*S | **Sn** | **04 55 54.9** | **-1.4** |
| **BUS** | **Buena Vista** | **7.89** | **120** | *e*P | **Pn** | **04 54 50.3** | **+1.2** |
| BUS | | | | *e*S | Sn | 04 56 10.9 | -6.3 |
| **BCIP** | **Isla Barro Col** | **11.51** | **112** | *e*Pn | **Pn** | **04 55 38.5** | **+0.5** |
| **035Z** | **Hargill** | **14.51** | **332** | P | **P** | **04 56 24.1** | **+0.6** |
| | baz=15 | | | | | | |
| **035A** | **Encino** | **14.93** | **333** | P | **P** | **04 56 28.3** | **+0.1** |
| | baz=15 | | | | | | |
| **034A** | **Hebbronville** | **15.30** | **332** | P | **P** | **04 56 34.0** | **+1.7** |
| | baz=15 | | | | | | |
| **934A** | **Benavides** | **15.69** | **333** | P | **P** | **04 56 38.5** | **+1.9** |
| | baz=16 | | | | | | |
| **835A** | **Beeville** | **16.01** | **336** | P | **P** | **04 56 41.7** | **+1.5** |
| | baz=16 | | | | | | |
| **834A** | **Tilden** | **16.16** | **334** | P | **P** | **04 56 43.6** | **+1.8** |

baz=16
736A **Circle Diamond** 16.34 340 P P 04 56 45.3 +1.5
baz=16
735A **Kenedy** 16.51 337 P P 04 56 47.7 +1.9
baz=17
833A **Chaparral WMA,** 16.70 332 P P 04 56 49.0 +1.2
baz=17
734A **La Parita Cree** 16.80 335 P P 04 56 49.5 +0.6
baz=17
832A **Faith Ranch, C** 16.94 331 P P 04 56 51.3 +0.8
baz=17
732A **Laxson Ranch,** 17.31 331 P P 04 56 55.8 +1.2
baz=17
633A **Saathoff Ranch** 17.59 335 P P 04 56 58.2 +0.5
baz=18
534A **Blanco** 17.82 337 P Pn 04 57 01.1 +0.9
baz=18
632A **Uvalde** 17.89 333 P Pn 04 57 01.7 +0.7
baz=18
340A **Bronson** 17.91 351 P Pn 04 57 01.8 +0.5
baz=18
OTAV **Otavalo** 18.00 137 *e*Pn Pn 04 57 04.1 +1.2
533A **Kerrville** 18.07 336 P Pn 04 57 03.9 +0.6
baz=18
631A **Perdido Creek** 18.17 331 P P 04 57 04.2 +0.2
baz=18,SNR=7.2
337A **Centerville** 18.21 346 P P 04 57 04.2 -0.3
baz=18
ROSC **El Rosal** 18.32 117 P P 04 57 04.3 -1.9
comp=Z,0.2nm,0.3s,baz=283,slow=13,SNR=2.3
ROSC **El Rosal** 18.32 117 *e*P Pn 04 57 10.5 +3.7
434A **Burnet** 18.45 339 P Pn 04 57 08.0 +0.1
baz=18
532A **Rocksprings** 18.48 334 P Pn 04 57 08.4 +0.1
baz=18
335A **Moody** 18.61 342 P Pn 04 57 09.8 +0.1
baz=19
433A **Art** 18.70 337 P Pn 04 57 10.8 -0.1
baz=19
JCT **Junction City** 18.74 335 P Pn 04 57 11.6 +0.2
baz=19
JCT **Junction City** 18.74 335 *e*P Pn 04 57 13.1 +1.7
comp=Z,7.2nm,0.9s
531A **Rocksprings** 18.79 332 P Pn 04 57 12.5 +0.5
baz=19
334A **Lometa** 18.91 340 P P 04 57 12.7 +0.5
baz=19
432A **Menard** 19.08 335 P P 04 57 14.7 +0.6
baz=19,SNR=6.2
530A **J-C Ranch, Com** 19.14 331 P Pn 04 57 16.6 +0.4
baz=19,SNR=5.9
333A **Richland Sprin** 19.17 338 P P 04 57 15.5 +0.5
baz=19,SNR=9.4
431A **Sonora** 19.26 333 P Pn 04 57 17.6 -0.1
baz=19,SNR=12
WHTX **Lake Whitney** 19.28 342 P P 04 57 16.4 +0.3
baz=19
234A **Clairette** 19.50 341 P P 04 57 19.2 +0.6
baz=20
332A **Millersview** 19.51 336 P P 04 57 19.4 +0.6
baz=20
529A **Stev Forest Ra** 19.56 329 P P 04 57 20.7 +1.4
baz=20,SNR=6.9
430A **Baggett Ranch,** 19.63 332 P P 04 57 21.3 +1.2
baz=20,SNR=9.8
TX31 **Lajitas Ar. Si** 19.71 324 *e*P P 04 57 21.6 +0.5
TX31 *e*Pn Pn 04 57 22.3 -0.7
TXAR **Lajitas Array** 19.71 324 P P 04 57 22.3 +1.2
comp=Z,0.9nm,0.3s,baz=151,slow=12,SNR=77
TXAR PcP PcP 05 01 38.3 +0.4
comp=Z,0.1nm,0.3s,baz=146,slow=3.1,SNR=6.7
331A **San Angelo** 19.72 334 P P 04 57 21.9 +0.8
baz=20,SNR=14
233A **Rising Star** 19.77 339 P P 04 57 21.9 +0.3
baz=20
135A **Vickery Place,** 19.79 343 P P 04 57 21.9 +0.1
baz=20
429A **Davenport Ranc** 19.80 330 P P 04 57 23.2 +1.2
baz=20,SNR=15
232A **Coleman** 19.92 337 P P 04 57 24.0 +0.7
baz=20,SNR=9.7
134A **White-Moore Ra** 20.01 341 P P 04 57 24.2 +0.1
baz=20
H06E1 **SOCORRO T-PHAS** 20.11 287 T T 05 17 38.1
SNR=11
330A **Mertzon** 20.13 333 P P 04 57 26.1 +0.5
baz=20,SNR=6.6
Z36A **Blue Ridge** 20.21 346 P P 04 57 26.7 +0.4
baz=20
231A **Bronte** 20.23 336 P P 04 57 27.1 +0.6
baz=20
133A **Hamilton Ranch** 20.31 340 P P 04 57 27.6 +0.1
baz=20,SNR=12
Y39A **Lockesburg** 20.42 352 P P 04 57 28.2 -0.3
baz=20
Y38A **Idabel** 20.51 350 P P 04 57 29.5 0.0
baz=20,SNR=5.8
230A **Sterling City** 20.52 334 P P 04 57 30.3 +0.5
baz=21,SNR=7.6
329A **Wagon Wheel Ra** 20.56 331 P P 04 57 31.2 +1.0
baz=21
ABTX **Abilene, Hawle** 20.58 338 P P 04 57 30.7 +0.3
baz=21
ABTX **Abilene, Hawle** 20.58 338 *e*P P 04 57 30.5 +0.1
comp=Z,17nm,1.0s
Z34A **Collier Ranch,** 20.70 343 P P 04 57 32.3 +0.7
baz=21
GOGA **Godfrey** 20.72 17 *e*P Pn 04 57 35.0 +0.4
comp=Z,308nm,2.6s
Y37A **Hugo** 20.72 348 P P 04 57 32.3 +0.5
baz=21
Z33A **Whitaker Ranch** 20.88 341 P P 04 57 33.8 +0.2
baz=21,SNR=7.1
229A **Bryant Ranch,** 20.89 333 P P 04 57 34.5 +0.7
baz=21
131A **Roby** 20.91 336 P P 04 57 34.4 +0.5
baz=21
MIAR **Mount Ida** 20.95 353 P P 04 57 34.3 0.0
baz=21
MIAR **Mount Ida** 20.95 353 *e*P P 04 57 34.6 +0.2
comp=Z,19nm,1.0s
Y35A **Marietta** 20.97 345 P P 04 57 34.5 0.0
baz=21
130A **Snyder** 21.07 335 P P 04 57 36.0 +0.4
baz=21
Z32A **Haskell** 21.14 339 P P 04 57 36.6 +0.2
baz=21,SNR=10
Y34A **Reagan Ranch,** 21.21 343 P P 04 57 37.4 +0.4
baz=21
X37A **Clayton** 21.26 349 P P 04 57 38.3 +0.7
baz=21
228A **UT Block 9, Go** 21.37 331 P P 04 57 38.9 -0.1
baz=22
Z31A **Sharp Cattle R** 21.39 338 P P 04 57 38.7 -0.3
baz=22
129A **Stewart Farms,** 21.48 333 P P 04 57 40.3 +0.2
baz=22,SNR=8.8
W38A **Poteau** 21.59 351 P P 04 57 40.4 -0.8
baz=22
Z30A **Sanderson Ranc** 21.74 336 P P 04 57 42.2 -0.6
baz=22
128A **Castleberry Fa** 21.75 332 P P 04 57 43.0 +0.1
baz=22,SNR=5.7
Y32A **R-V Farms, Ver** 21.76 340 P P 04 57 43.6 +0.6
baz=22
W37A **Quinton** 21.81 349 P P 04 57 42.6 -0.9
baz=22
X34A **Smith Ranch, M** 21.83 344 P P 04 57 44.4 +0.6
baz=22
SWET **Sewanee** 21.88 10 *e*P P 04 57 45.3 +1.1
comp=Z,3.2nm,0.8s
Z29A **Hungry Hill Ra** 21.95 335 P P 04 57 44.5 -0.6
baz=22
W36A **Wetumka** 21.96 348 P P 04 57 44.0 -1.2
baz=22
X33A **Lawton** 21.96 342 P P 04 57 45.0 -0.1
baz=22,SNR=5.7
Y31A **Rekieta Farm,** 22.01 338 P P 04 57 45.5 -0.2
baz=22,SNR=5.5
X32A **Elmer** 22.09 341 P P 04 57 46.5 0.0
baz=22
W35A **Tecumseh** 22.12 346 P P 04 57 46.2 -0.6
baz=22
Y30A **Stafford Cattl** 22.17 337 P P 04 57 47.9 +0.4
baz=22
WMOK **Wichita Mounta** 22.23 342 *e*P P 04 57 47.9 -0.1
Z28A **Tucker Farm, M** 22.27 333 P P 04 57 48.3 -0.2
baz=22

V38A **Canehill** 22.36 352 P P 04 57 47.9 -1.5
baz=22,SNR=6.4
W34A **Bridge Creek,** 22.42 345 P P 04 57 49.2 -0.9
baz=22
Y29A **Porterfield Fa** 22.46 335 P P 04 57 50.5 -0.1
baz=22
MNTX **Cornudas Mount** 22.47 325 P P 04 57 50.6 0.0
baz=23,SNR=50
MNTX **Cornudas Mount** 22.47 325 *e*P P 04 57 50.1 -0.5
comp=Z,30nm,0.9s
V37A **Hulbert** 22.49 350 P P 04 57 49.5 -1.3
baz=22,SNR=7.0
WVT **Waverly** 22.51 6 *e*P P 04 57 51.5 +0.5
comp=Z,105nm,2.3s
X31A **McDonald Ranch** 22.52 340 P P 04 57 51.2 +0.1
baz=23
W33A **Caddo, Fort Co** 22.53 343 P P 04 57 51.0 -0.2
baz=23
V36A **Jenks** 22.53 349 P P 04 57 50.3 -0.9
baz=23
GLAT **Glass** 22.54 3 *e*P P 04 57 50.6 -0.7
TUL1 **Tulsa** 22.63 349 P P 04 57 50.8 -1.5
baz=23
TUL1 **Tulsa** 22.63 349 *e*P P 04 57 51.0 -1.2
comp=Z,5.3nm,0.5s
X30A **Coker Ranch, T** 22.67 338 P P 04 57 52.0 -0.8
baz=23,SNR=10
V35A **Meyer Ranch, C** 22.70 347 P P 04 57 51.8 -1.1
baz=23
W32A **Sentinel** 22.73 342 P P 04 57 52.3 -1.1
baz=23
Y28A **McKinney Farm,** 22.74 334 P P 04 57 52.8 -0.8
baz=23
TKL **Tuckaleechee C** 22.76 15 P P 04 57 53.0 -0.7
comp=Z,3.5nm,0.5s,baz=192,slow=10,SNR=7.6
U38A **Gravette** 22.92 352 P P 04 57 54.1 -1.2
baz=23
U37A **Salina** 23.00 351 P P 04 57 54.9 -1.1
baz=23,SNR=12
W31A **Holland Ranch,** 23.01 340 P P 04 57 55.4 -0.8
baz=23
MSTX **Muleshoe** 23.01 333 P P 04 57 55.6 -0.8
baz=23
U36A **Oologah** 23.08 350 P P 04 57 55.7 -1.2
baz=23
V33A **Lossen Ranch,** 23.10 344 P P 04 57 55.6 -1.5
baz=23
U35A **Pawnee** 23.26 347 P P 04 57 57.8 -0.8
baz=23
AMTX **Amarillo** 23.36 337 P P 04 57 59.0 -0.7
baz=23
U34A **Anderson Ranch** 23.50 346 P P 04 57 59.6 -1.3
baz=24
V31A **Spring Creek L** 23.52 341 P P 04 57 59.4 -1.7
baz=24
W29A **Amraillo** 23.55 337 P P 04 58 00.4 -1.1
baz=24
U33A **Lingo Farm, Me** 23.64 345 P P 04 58 00.5 -1.7
baz=24
T37A **Cheneyville 18** 23.67 351 P P 04 58 01.2 -1.2
baz=24,SNR=7.5
T35A **Sooner Cattle** 23.74 348 P P 04 58 01.4 -1.7
baz=24
T36A **Boggs Farm, Ca** 23.76 350 P P 04 58 01.4 -1.8
baz=24,SNR=8.5
V30A **Spur Ranch, Mi** 23.78 339 P P 04 58 01.9 -1.6
baz=24
W28A **Vega** 23.89 336 P P 04 58 04.3 -0.3
baz=24
T34A **McClaskey Farm** 23.98 347 P P 04 58 04.2 -1.1
baz=24,SNR=5.4
U31A **Nine Bar Ranch** 24.07 342 P P 04 58 06.1 0.0
baz=24
S37A **Fort Scott** 24.28 352 P P 04 58 07.5 -0.5
baz=24,SNR=8.0
S36A **Lake Cedric, C** 24.36 350 P P 04 58 08.2 -0.5
baz=24,SNR=23
S35A **Otter Creek Ra** 24.44 349 P P 04 58 08.9 -0.5
baz=24
121A **Cookes Peak, D** 24.45 323 P P 04 58 11.2 +1.5
baz=24,SNR=26
S34A **Willow Spring** 24.62 348 P P 04 58 10.6 -0.5
baz=25
WCI **Wyandotte Cave** 24.77 8 *e*P P 04 58 13.0 +0.6
comp=Z,152nm,0.8s
R37A **Teagarden Farm** 24.83 352 P P 04 58 11.9 -1.0
baz=25
R36A **Gordon, Harris** 24.93 351 P P 04 58 12.8 -1.1
baz=25
BNM **Barren Site** 25.02 327 *e*P P 04 58 16.5 +1.5
LPM **Los Pinos Moun** 25.14 328 *e*P P 04 58 17.1 +1.1
R34A **Isabella, Hill** 25.22 348 P P 04 58 16.3 -0.3
baz=25
T29A **Hugoton** 25.25 340 P P 04 58 16.6 -0.3
baz=25
LAZ **Ladron** 25.48 327 *e*P P 04 58 20.3 +1.1
T28A **Walsh** 25.50 338 P P 04 58 19.0 -0.2
baz=26
ANMO **Albuquerque** 25.55 329 P P 04 58 20.6 +0.8
comp=Z,2.4nm,0.8s,baz=150,slow=12,SNR=10
ANMO PcP PcP 05 01 50.1 +0.3
comp=Z,0.8nm,0.9s,baz=158,slow=8.1,SNR=4.0
ANMO **Albuquerque** 25.55 329 *e*P P 04 58 20.8 +1.1
comp=Z,3.7nm,1.0s
ANMO PcP PcP 05 01 50.1 +0.3
Q36A **Arnold C. Orve** 25.55 351 P P 04 58 19.0 -0.5
baz=26
S29A **Ulysses** 25.61 341 P P 04 58 20.3 +0.1
baz=26
R31A **Burdett** 25.76 344 P P 04 58 21.3 -0.2
baz=26
KSU1 **Kansas State U** 25.88 349 P P 04 58 22.7 +0.3
baz=26
R30A **Dighton** 25.96 343 P P 04 58 24.1 +0.8
baz=26
Q33A **Connelly Farm,** 26.02 347 P P 04 58 24.1 +0.4
baz=26
TUC **Tucson** 26.14 319 *e*P P 04 58 26.0 +1.0
comp=Z,4.3nm,0.9s
P36A **Good Intent, A** 26.16 352 P P 04 58 24.9 -0.1
baz=26
Q32A **Meitler Ranch,** 26.18 346 P P 04 58 25.4 +0.2
baz=26
P35A **Duane Minner,** 26.19 351 P P 04 58 25.2 -0.1
baz=26
CBKS **Cedar Bluff** 26.31 344 P P 04 58 25.3 -1.1
baz=26
Q31A **Ellis** 26.39 345 P P 04 58 26.1 -1.0
baz=26
P33A **Williams Farm,** 26.41 348 P P 04 58 28.4 +1.1
baz=26
SDCO **Great Sand Dun** 27.38 334 P P 04 58 37.3 +0.9
baz=28
S22A **4UR Ranch, Cre** 27.97 332 P P 04 58 42.2 +0.5
baz=28
SCIA **State Center** 28.23 356 *e*P P 04 58 44.1 +0.6
comp=Z,14nm,0.3s
MVCO **Mesa Verde** 28.35 329 P P 04 58 45.7 +0.8
baz=28
MVCO **Mesa Verde** 28.35 329 *e*P P 04 58 46.2 +1.3
comp=Z,5.2nm,0.8s
WUAZ **Wupatki** 28.66 323 P P 04 58 48.6 +0.9
baz=29,SNR=12
WUAZ **Wupatki** 28.66 323 *e*P P 04 58 49.0 +1.3
comp=Z,8.7nm,0.8s
WUAZ *e*PcP PcP 05 01 58.2 +1.0
PDMCI **Parker Dam,Lak** 29.57 318 P P 04 58 57.7 +2.1
baz=30
BC3 **Big Chuckawall** 30.06 316 P P 04 59 01.5 +1.5
baz=30
IRM **Iron Mountain** 30.15 317 P P 04 59 02.3 +1.5
baz=30
ECSD **EROS Data Cent** 30.40 351 P P 04 59 02.3 -0.4
baz=30
O20A **White River Ci** 30.56 333 P P 04 59 05.2 +0.8
baz=31
K27A **Flueckinger Fa** 30.62 343 P P 04 59 04.1 -0.7
baz=31
BELC **Belle Mtn. Jos** 30.63 316 P P 04 59 06.4 +1.3
baz=31
SRU **San Rafael** 30.83 329 *e*P P 04 59 08.9 +2.1
comp=Z,71nm,2.9s
GMRC **Granite Mounta** 30.86 317 P P 04 59 08.7 +1.6
baz=31
P17A **Butcher Ranch,** 31.21 329 *e*P P 04 59 11.9 +1.7
comp=Z,6.4nm,0.9s
CCUT **Cedar City** 31.22 324 *e*P P 04 59 12.4 +2.0
comp=Z,9.2nm,1.0s

CCUT *e*PcP PcP 05 02 05.0 +1.2
H32A **Carlson Farm,** 31.27 351 P P 04 59 10.3 -0.2
baz=31
TMUT **Trail Mountain** 31.31 328 *e*P P 04 59 12.4 +1.2
comp=Z,176nm,3.0s
HEC **Hector,Ludlow** 31.33 317 P P 04 59 13.1 +1.9
baz=31
H33A **Prehn Over Nor** 31.34 352 P P 04 59 10.6 -0.5
baz=31
I29A **Vivian Onida** 31.36 347 P P 04 59 11.3 +0.1
baz=31
TUQ **Turquoise Moun** 31.43 318 P P 04 59 14.3 +2.2
baz=32
SPMN **St. Paul** 31.51 357 P P 04 59 12.2 -0.3
baz=32
SPMN **St. Paul** 31.51 357 *e*P P 04 59 12.1 -0.4
comp=Z,6.3nm,0.4s
SHPR **Sheep Range** 31.60 320 *e*P P 04 59 15.5 +1.8
comp=Z,10nm,1.5s
BFSC **Mount Baldy Ra** 31.90 315 P P 04 59 17.8 +1.6
baz=32
GSC **Goldstone** 31.92 317 P P 04 59 17.7 +1.3
baz=32
G32A **Webster** 32.02 351 P P 04 59 16.7 -0.3
baz=32
TPNV **Topopah Spring** 32.56 320 P P 04 59 23.8 +1.7
baz=33
TPNV **Topopah Spring** 32.56 320 *e*P P 04 59 24.7 +2.6
comp=Z,7.1nm,1.3s
TPNV *e*PcP PcP 05 02 08.7 +1.2
CTU **Camp Tracy** 32.64 330 *e*P P 04 59 24.8 +2.1
comp=Z,4.8nm,0.8s
FURC **Furnace Creek,** 32.66 319 P P 04 59 23.9 +1.3
baz=33
TCUT **Toone Canyon** 32.80 330 *e*P P 04 59 26.4 +2.2
comp=Z,37nm,1.8s
DUG **Dugway** 32.81 328 P P 04 59 24.8 +0.7
baz=33
DUG **Dugway** 32.81 328 *e*P P 04 59 25.4 +1.3
comp=Z,42nm,2.6s
BLG **Laguna Peak** 32.81 313 P P 04 59 24.6 +0.5
baz=33
MPMC **Manual Prospec** 32.82 318 P P 04 59 25.5 +1.2
baz=33,SNR=7.3
E34A **Wadena** 32.96 354 P P 04 59 24.3 -0.9
baz=33
DAC **Darwin (Calif)** 33.01 318 *e*P P 04 59 27.7 +1.7
comp=Z,28nm,2.3s
E33A **Westby DABS, E** 33.04 353 P P 04 59 25.5 -0.5
baz=33
R11A **Troy Canyon, C** 33.06 323 P P 04 59 27.5 +1.1
baz=33,SNR=6.7
G26A **Maurine** 33.12 344 P P 04 59 26.4 -0.3
baz=33
BSC **Santa Cruz Isl** 33.16 313 P P 04 59 29.9 +2.8
baz=33
HWUT **Hardware Ranch** 33.25 331 *e*P P 04 59 29.3 +1.2
comp=Z,5.9nm,1.0s
GRAC **Grapevine Rang** 33.30 319 P P 04 59 29.7 +1.3
baz=33
D37A **Cotton** 33.42 358 P P 04 59 28.9 -0.3
baz=33
D35A **Remer** 33.43 356 P P 04 59 28.7 -0.6
baz=34
SPUT **South Promonto** 33.45 330 *e*P P 04 59 31.3 +1.5
comp=Z,73nm,2.8s
BGU **Big Grassy Mou** 33.46 328 *e*P P 04 59 31.4 +1.6
comp=Z,24nm,2.2s
D36A **Goodland** 33.47 357 P P 04 59 27.6 -2.1
baz=34
PTGA **Pitinga** 33.60 113 P P 04 59 30.5 -0.7
comp=Z,6.8nm,0.7s,baz=294,slow=10,SNR=12
PTGA **Pitinga** 33.60 113 *e*P P 04 59 31.8 +0.6
comp=Z,7.6nm,0.8s
D33A **AnnSam, Waubun** 33.65 354 P P 04 59 30.5 -0.8
baz=34
PKM **Peak Mountain** 33.76 314 P P 04 59 33.9 +1.4
baz=34
VES **Vestal, Richgr** 33.76 316 P P 04 59 33.7 +1.4
baz=34
C38A **Sawbill Land.** 33.95 359 P P 04 59 32.5 -1.4
baz=34
C36A **Pine Crest Far** 34.04 357 P P 04 59 33.8 -0.8
baz=34
RCTC **Rector, Farmer** 34.12 316 P P 04 59 37.3 +1.9
baz=34
EYMN **Ely** 34.18 359 P P 04 59 34.5 -1.4
baz=34
ELK **Elko** 34.49 326 *e*P P 04 59 40.3 +1.4
comp=Z,3.0nm,0.8s
C31A **Landman Farms,** 34.53 352 P P 04 59 38.5 -0.3
baz=35
C30A **Mose, Pekin** 34.55 351 P P 04 59 38.3 -0.8
baz=35
NV01 **Mina Array Sit** 34.76 320 *e*P P 04 59 42.6 +1.4
NVAR **Mina Array Bea** 34.76 320 P P 04 59 42.8 +1.6
comp=Z,8.6nm,0.7s,baz=136,slow=7.6,SNR=73
NVAR PcP PcP 05 02 14.8 +1.1
comp=Z,3.2nm,0.8s,baz=134,slow=3.9,SNR=14
NVAR LR LR 05 13 38.7
comp=Z,163nm,19.1s,baz=170,slow=36
AGMN **Agassiz Nation** 34.80 354 P P 04 59 40.8 -0.3
baz=35
FLWY **Flagg Ranch** 34.83 334 *e*P P 04 59 40.5 -1.2
B34A **Aery, Baudette** 34.87 355 P P 04 59 40.7 -1.0
baz=35
MDND **Maddock** 34.88 349 P P 04 59 41.7 -0.2
baz=35
B32A **Ashes, Strandq** 34.97 353 P P 04 59 41.7 -0.9
baz=35
MCID **Moose Creek** 35.12 334 *e*P P 04 59 42.5 -1.8
B31A **Greenbush Farm** 35.14 352 P P 04 59 43.8 -0.2
baz=35
B30A **Myrvik Farm, E** 35.26 351 P P 04 59 43.9 -1.2
baz=35
SAML **Samuel** 35.33 128 *e*P P 04 59 44.6 -1.5
comp=Z,68nm,2.8s
B28A **Dugan Ranch, T** 35.60 349 P P 04 59 47.5 -0.6
baz=36
A30A **Hoffart Farm,** 35.73 351 P P 04 59 48.9 -0.2
baz=36
A29A **Manning Farm,** 35.86 350 P P 04 59 49.0 -1.3
baz=36
B26A **Jensen Ranch,** 35.92 347 P P 04 59 49.2 -1.6
baz=36
HLID **Hailey** 36.10 330 P P 04 59 52.8 +0.2
baz=36
HLID **Hailey** 36.10 330 *e*P P 04 59 53.8 +1.2
comp=Z,10nm,1.6s
MCMT **McKenzie Canyo** 36.35 333 *e*P P 04 59 56.5 +1.7
A26A **Wade Farm, Ken** 36.37 347 P P 04 59 54.9 +0.3
baz=36
DGMT **Dagmar** 36.47 345 P P 04 59 55.4 -0.2
baz=36
BOZ **Bozeman (W)** 36.49 335 P P 04 59 55.2 -0.6
baz=37
MFID **Camas Ranch** 36.70 329 *e*P P 04 59 58.9 +1.3
comp=Z,25nm,2.2s
ULM **Lac du Bonnet** 36.73 354 P P 04 59 56.0 -1.6
comp=Z,2.5nm,0.6s,baz=153,slow=13,SNR=3.1
ULM LR LR 05 16 19.3
comp=Z,116nm,20.5s,baz=236,slow=38
LPAZ **La Paz** 37.17 142 LR LR 05 15 13.3
comp=Z,119nm,21.1s,baz=326,slow=36
WVOR **Wild Horse Val** 37.50 325 *e*P P 05 00 05.8 +1.4
comp=Z,6.3nm,0.8s
J08A **Circle Bar Ran** 38.03 326 *e*P P 05 00 09.9 +0.9
comp=Z,13nm,0.8s
O03D **Paynes Creek** 38.04 320 P P 05 00 10.1 +1.1
baz=38
MOD **Modoc** 38.11 323 *e*P P 05 00 10.5 +0.9
M04C **Macdoel** 38.94 322 P P 05 00 16.7 +0.1
baz=39
I07A **Izee** 39.07 327 *e*P P 05 00 18.1 +0.5
comp=Z,104nm,2.9s
M02C **Callahan** 39.33 321 P P 05 00 20.4 +0.6
baz=39
J05D **Fort Rock, OR** 39.51 324 P P 05 00 22.3 +0.9
baz=40
J04D **Umpqua Nationa** 39.98 324 P P 05 00 26.5 +1.1
baz=40
I05D **Terrebonne, OR** 40.24 325 P P 05 00 27.9 +0.7
baz=40
I04A **Tendick Farm,** 40.50 324 P P 05 00 29.4 0.0
baz=41
G05D **Wamic, OR** 40.81 327 P P 05 00 32.7 +0.7
baz=41
NEW **Newport** 40.88 333 P P 05 00 32.1 -0.3

baz=41
H04A Detroit Lake 40.93 325 eP P 05 00 33.7 +0.8
comp=Z,23nm,1.0s
I03D Drain, OR 40.98 323 P P 05 00 33.9 +0.6
baz=41
SIV San Ignacio 41.52 134 P P 05 00 37.2 -0.8
comp=Z,3.8nm,0.7s,baz=317,slow=10.0,SNR=10
G03D McMinnville, O 41.85 325 P P 05 00 41.2 +0.8
baz=42
FFC Flin Flon 41.91 350 eP P 05 00 41.6 +0.8
comp=Z,4.0nm,0.9s
LON Longmire 42.06 328 eP P 05 00 43.1 +0.9
comp=Z,5.8nm,0.9s
B05A Bryant 43.21 329 P P 05 00 51.1 -0.3
baz=43
EDM Edmonton 43.38 340 eP P 05 00 51.8 -0.9
comp=Z,8.9nm,1.0s
A04D Lummi Island 43.82 329 P P 05 00 56.9 +0.7
baz=44
SCHQ Schefferville 45.09 19 P P 05 01 05.3 -1.0
comp=Z,1.9nm,0.3s,baz=223,slow=8.6,SNR=9.8
CPUP Villa Florida 51.29 141 LR LR 05 23 12.7
comp=Z,94nm,19.5s,baz=324,slow=36
YKA Yellowknife Ar 51.66 346 P P 05 01 56.6 -0.1
comp=Z,0.8nm,0.7s,baz=149,slow=8.3,SNR=3.2
RCBR Riachuelo 57.69 106 eP P 05 02 41.4 +0.2
comp=Z,12nm,0.9s
ILAR Eielson Array 63.66 337 P P 05 03 20.1 -0.8
comp=Z,0.6nm,0.4s,baz=123,slow=5.3,SNR=22
ESDC Sonseca Array 78.89 52 P P 05 04 49.4 -4.1
comp=Z,0.4nm,0.5s,baz=286,slow=5.8,SNR=2.8
TIC Toumodi 84.23 85 eP P 05 05 21.2 -0.9
LIC Lamto 84.32 85 eP P 05 05 22.0 -0.5
comp=Z,18nm,0.6s
DBIC Dimbokro 84.38 85 P P 05 05 22.5 -0.3
comp=Z,5.0nm,0.4s,baz=268,slow=4.5,SNR=26
KIC Kosan Boka 84.56 85 eP P 05 05 23.2 -0.6
comp=Z,15nm,0.5s
ARCES ARCESS Array B 86.04 18 P P 05 05 29.5 -0.6
comp=Z,2.0nm,1.0s,baz=304,slow=3.9,SNR=4.0
ARCES LR LR 05 42 41.7
comp=Z,32nm,20.4s,baz=328,slow=35
GERES GERESS Array B 89.02 40 LR LR 05 41 42.1
comp=Z,41nm,20.2s,baz=268,slow=33
TORD Torodi Ar. Bea 89.18 77 P P 05 05 44.5 -1.7
comp=Z,0.5nm,0.5s,baz=290,slow=4.2,SNR=9.3
KSRS Korea Array 117.55 326 PKP PKPdf 05 11 36.1 +0.3
comp=Z,1.3nm,0.7s,baz=26,slow=2.5,SNR=5.9
KSAR Wonju Array Be 117.58 326 PKP PKPdf 05 11 36.1 +0.2
BOSA Boshof 119.03 115 PKP PKPdf 05 11 39.1 +0.1
comp=Z,3.4nm,0.8s,baz=247,slow=4.3,SNR=6.2
EKS2 Erkin-Say 122.15 14 ePKPdf PKPdf 05 11 45.4 +0.7
CHTO Chiang Mai 146.37 343 ePKPbc PKPdf 05 12 30.9 +0.9
CMAR Chiang Mai Arr 146.71 343 PKPbc PKPbc 05 12 32.5 +0.3
comp=Z,7.8nm,0.7s,baz=343,slow=3.4,SNR=31
MBWA Marble Bar 150.11 251 ePKPbc PKPbc 05 12 40.0 -1.1

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*BJI **01** 05:00:15.7, 5.°30N×125.°40E, h178km, mb4.6/43, mB4.8/30*
*ISCJB **01** 05:00:17.8±0.2, 5.°26N±0.°02×125.°44E±0.°03, h199km±2km, mb4.7/97, Error ellipse: s-maj=4.7km s-min=2.8km az=169.6*
*MAN **01** 05:00:17, 5.°23N×125.°39E, h192km, mb5.4, ML4.4, MS4.7*
*DJA **01** 05:00:17.8±0.8, 5.°N±7°×12.°6E±°, h184km±6km, M4.7/35, mb5.0/35, mB5.2/25, MLv5.4/8, Mw(mB)4.5/25*
*IDC **01** 05:00:18.1±0.7, 5.°26N×125.°31E, h189km±6km, mb4.2/27, mb1 4.3/29, mb1mx4.2/36, mbtmp4.7/29, MS3.2/2, Ms1 3.3/2, ms1mx2.8/25, Error ellipse: s-maj=12.2km s-min=7.1km az=88.0*
*NEIC **01** 05:00:19.0±0.7, 5.°27N×125.°41E, h195km±7km, mb5.0/52, Error ellipse: s-maj=6.5km s-min=4.4km az=76.0*
*MOS **01** 05:00:20.6±1.4, 5.°27N×125.°29E, h227km, mb4.6/28, Error ellipse: s-maj=10.8km s-min=6.3km az=111.9*
*AUST **01** 05:00:20.4±0.9, 5.°11N×125.°46E, h210km±8km, Error ellipse: s-maj=8.1km s-min=6.5km az=22.0*
**ISC 01 05:00:17.5**±0.3**, 5.°21N**±0.°03×**125.°38E**±0.°04**, h182**km±2km**, h182**km**:pP-P, n314, σ1.58**/387**, mb4.7**/97**, 10C-6D, Mindanao**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
GSPH General Santos 0.97 334⇓iP Pn 05 00 47.6 +2.2
GSPH iS Sn 05 01 09.1 +2.0
SGSI Sangihe 1.52 174 P Pn 05 00 50.7 +0.8
KCP Kidapawan 1.81 351 iP Pn 05 00 54.1 +1.3
KCP iS Sn 05 01 23.0 +2.6
MATI Mati 1.94 27 eP Pn 05 00 54.7 +0.6
CTBH Cotabato--PC H 2.30 331⇑iP Pn 05 00 59.5 +1.4
BUKP Musuan 2.67 353 eP Pn 05 01 04.0 +1.5
BUKP eS Sn 05 01 29.8 -7.8
PAGZ Pagadian 3.29 323 eP Pn 05 01 10.7 +0.9
CGP Cagayan de Oro 3.30 348 eP Pn 05 01 11.6 +1.6
CGP eS Sn 05 01 52.4 +1.5
BUTP Butuan 3.75 4 eP Pn 05 01 17.1 +1.6
SCPH Surigao 4.55 1⇓eP Pn 05 01 26.8 +1.1
KMSI Cibinong 4.81 197 P Pn 05 01 30.3 +1.2
TNTI Ternate 4.83 156 P Pn 05 01 29.1 -0.3
TNTI Ternate 4.83 156 ePn Pn 05 01 28.9 -0.5
TNTI eSn Sn 05 02 21.6 -4.2
MSLP Maasin 4.92 354 eP Pn 05 01 32.7 +2.1
GTOI Gorontalo 5.12 208 P Pn 05 01 33.9 +0.8
985nm,0.9s,7μm3.3nm
MRSI Marisa 5.82 216 P Pn 05 01 44.0 +1.8
225nm,1.1s,5μm0.7nm
LUWI Luwuk 6.73 203 P Pn 05 01 55.7 +1.5
baz=6.7,SNR=8.4
LUWI Luwuk 6.73 203 P Pn 05 01 57.3 +3.1
LUWI Luwuk 6.73 203 ePn Pn 05 01 56.7 +2.5
MYLDM Lahad Datu 6.85 270 ePn Pn 05 01 59.9 +4.2
APSI Ampana 7.13 212 P Pn 05 02 02.4 +3.0
293nm,1.1s,2μm0.9nm
SANI Sanana 7.23 175 P Pn 05 01 59.1 -1.7
328nm,0.7s,6μm1.5nm
MPSI Mapaga 7.30 229 P Pn 05 02 05.2 +3.5
SWI Sorong 8.42 136 P Pn 05 02 18.4 +2.0
baz=8.3,SNR=3.3
SIJI Sorong 8.43 136 P Pn 05 02 17.9 +1.4
9.5nm,0.3s,baz=342,slow=20,SNR=7.6
SIJI S Sn 05 03 47.0 -3.9
5.3nm,0.3s,baz=124,slow=20,SNR=6.5
SIJI LR LR 05 05 23.6
comp=Z,185nm,21.4s,baz=250,slow=36
NLAI Namlea 8.56 168 P Pn 05 02 16.8 -1.5
132nm,0.6s,4μm
KKM Kota Kinabalu 9.16 276 ePn Pn 05 02 27.6 +1.5
AAI Ambon 9.27 162 P Pn 05 02 28.6 +1.0
204nm,0.5s,3μm
PALU Palau 9.29 76 P Pn 05 02 29.0 +1.2
baz=9.2,SNR=13
TTSI Tana Toraja 9.90 214 P Pn 05 02 39.6 +3.8
121nm,1.1s,1μm
FAKI Fak Fak 10.60 139 P Pn 05 02 45.9 +1.0
baz=10,SNR=9.4
FAKI Fak Fak 10.60 139 P Pn 05 02 45.8 +0.9
62nm,1.2s
FAKI Fak Fak 10.60 139 ePn Pn 05 02 45.7 +0.8
FAKI eSn S 05 04 44.2 +0.7
KAPI Kappang 11.60 209 P Pn 05 02 59.6 +1.7
3.3nm,0.3s,baz=71,slow=1.8,SNR=16
KAPI Kappang 11.60 209 ePn Pn 05 02 59.7 +1.7
17nm,0.6s
BKSI Bulukumba 11.70 207 P Pn 05 03 00.1 +0.9
32nm,0.8s,424nm
BBKI Banjar Baru 13.60 231 P P 05 03 29.0 +2.8
354nm,1.1s,11μm
MMRI Maumere 14.10 193 eP P 05 03 31.9 +0.1
132nm,0.6s
SOEI Soe 14.90 184 P P 05 03 42.1 +1.4
baz=15,SNR=7.3
SOEI Soe 14.90 184 P P 05 03 42.6 +1.9
118nm,1.0s,1μm
SOEI Soe 14.90 184 eP P 05 03 41.7 +1.0
110nm,0.8s
BATI Baumata 15.41 186 P P 05 03 47.3 +1.1
46nm,0.3s,baz=346,slow=1.0,SNR=27
BATI S S 05 06 32.6 -5.3
4.7nm,0.3s,baz=287,slow=17,SNR=2.0
BATI Baumata 15.41 186 P P 05 03 48.0 +1.8
251nm,0.6s,2μm
KSM Kuching 15.49 257 P P 05 03 50.6 +3.5
baz=16,SNR=12
KSM Kuching 15.49 257 eP P 05 03 50.0 +2.9
59nm,0.8s
WBSI Waikabubak, Su 15.91 202 P P 05 03 51.9 +0.1
71nm,0.7s
KMMI Kalianget 16.67 223 P Pn 05 04 03.3 +2.4
90nm,0.7s
GENI Genyem 16.68 117 P Pn 05 04 03.6 +2.5
JAY Jayapura 17.12 116 P P 05 04 03.7 -1.5
baz=17,SNR=19
JAGI Jajag, Banyuwa 17.60 220 P Pn 05 04 12.7 +0.7
baz=18,SNR=7.1
JAGI Jajag, Banyuwa 17.60 220 eP P 05 04 11.2 +0.8
81nm,0.7s
DLV T Lat 17.99 293 eP Pn 05 04 17.9 +1.2
102nm,1.0s
TWG Pinlang 18.00 347 eP P 05 04 13.2 -1.5
85nm,0.5s
YULB Yu-li 18.50 348 eP P 05 04 17.8 -2.4
69nm,1.5s
TPUB Ta-pu 18.56 346 eP P 05 04 18.8 -2.0
246nm,2.1s
NGJI Ngawi 18.68 228 P Pn 05 04 26.7 +2.1
120nm,0.9s
MTN Manton Dam 18.82 162 P P 05 04 25.0 +1.4
baz=19,SNR=13
MTN Manton Dam 18.82 162 eP P 05 04 24.7 +1.1
67nm,0.4s
SSLB Suanglung 18.96 347 eP P 05 04 25.1 0.0
14nm,0.6s
KDU Kakadu 19.12 158 P P 05 04 27.9 +1.0
baz=19,SNR=48
NACB Ninganchiao 19.21 349 eP P 05 04 26.5 -1.2
17nm,0.6s
SMRI Semarang 19.25 231 eP Pn 05 04 30.8 -0.5
78nm,0.8s
TPI Tanjungpandan 19.39 246 P Pn 05 04 31.8 -1.3
168nm,1.0s,1μm
YHNB Yeheng 19.73 349 eP P 05 04 33.0 -0.4
28nm,0.8s
QIZ Qiongzhong 20.45 314 P P 05 04 41.3 +0.2
QIZ sP sP 05 05 32.2 -3.0
QIZ S S 05 08 20.4 +0.2
QIZ PMZ
46nm,2.2s
QIZ Qiongzhong 20.45 314 eP P 05 04 41.9 +0.8
71nm,1.3s
GUMO Guam 20.94 65 P P 05 04 47.7 +1.3
42nm,0.3s,baz=310,slow=3.1,SNR=8.6
GUMO Guam 20.94 65 eP P 05 04 48.9 +2.6
GUMO pmax pmax
comp=Z,109nm,1.1s
GUMO Guam 20.94 65 eP P 05 04 48.9 +2.6
comp=Z,109nm,1.1s
KNRA Kununurra 21.02 171 P P 05 04 47.6 +0.5
baz=21,SNR=21
LEM Lembang 21.38 236 P P 05 04 52.6 +1.4
comp=Z,89nm,0.8s,baz=30,slow=10,SNR=13
LEM Lembang 21.38 236 P P 05 04 53.5 +2.3
comp=Z,982nm,1.0s
JOW Kunigami 21.68 7 P P 05 04 54.8 +0.7
comp=Z,0.7nm,0.4s,baz=32,slow=13,SNR=6.1
MYKOM Kota Tinggi 21.75 262 eP P 05 04 56.3 +1.4
comp=Z,148nm,1.0s
BTDF Bukit Timah Da 21.90 261 P P 05 04 58.2 +1.8
baz=22,SNR=4.2
CGJI Cibinong 22.89 239 P P 05 05 08.6 +3.0
comp=Z,46nm,0.9s,comp=Z,974nm
FITZ Fitzroy Crossi 23.16 179 P P 05 05 08.4 +0.4
comp=Z,42nm,0.7s,baz=7.3,slow=8.3,SNR=100
FITZ S S 05 09 02.0 -3.9
comp=Z,6.7nm,0.7s,baz=356,slow=16,SNR=3.6
FITZ Fitzroy Crossi 23.16 179 P P 05 05 08.1 +0.1
baz=23,SNR=113
FITZ Fitzroy Crossi 23.16 179 eP P 05 05 08.2 +0.3
comp=Z,44nm,0.8s
FITZ eS S 05 09 04.3 -1.6
MDSI Maura Dua 23.26 246 P P 05 05 10.9 +1.9
comp=Z,93nm,0.9s,comp=Z,1μm
KASI Kota Agung 23.42 243 P P 05 05 11.5 +1.1
comp=Z,50nm,0.9s
SKNT Sakolnakorn 24.00 301 P P 05 05 17.0 +1.3
comp=Z,186nm,1.0s
IPM Ipoh 24.28 269 eP P 05 05 19.3 +1.0
comp=Z,45nm,1.0s
KULM Kulim 24.62 271 eP P 05 05 22.6 +1.2
comp=Z,63nm,1.2s
KHON Khomkaen 24.73 298 P P 05 05 23.9 +1.5
comp=Z,107nm,1.0s,comp=Z,2μm
BKNI Bangkinang 24.78 259 P P 05 05 24.1 +1.3
comp=Z,174nm,1.0s
BKNI Bangkinang 24.78 259 eP P 05 05 24.2 +1.3
comp=Z,90nm,0.6s
NONG Nongkai 25.20 302 P P 05 05 27.5 +0.9
comp=Z,37nm,1.3s,comp=Z,10μm
PPI Padang Panjang 25.58 258 P P 05 05 31.6 +1.6
baz=26,SNR=7.1
PPI Padang Panjang 25.58 258 P P 05 05 31.5 +1.5
TRTT Trang 25.65 277 P P 05 05 32.2 +1.5
comp=Z,55nm,1.1s
SRIT Nakonsritamara 25.80 279 P P 05 05 33.6 +1.5
comp=Z,68nm,1.0s
PSI Prapat 26.50 266 P P 05 05 39.3 +0.9
comp=Z,36nm,0.9s,baz=93,slow=3.7,SNR=33
PSI Prapat 26.50 266 eP P 05 05 39.5 +1.1
PSI pmax pmax
comp=Z,48nm,0.9s
PSI Prapat 26.50 266 P P 05 05 39.6 +1.1
baz=27,SNR=24
PSI Prapat 26.50 266 eP P 05 05 39.5 +1.1
comp=Z,48nm,0.9s
WRAB Tennant Creek 26.50 161 ceP P 05 05 37.7 -0.5
WRAB pmax pmax
comp=Z,79nm,0.9s
WRAB Tennant Creek 26.50 161 P P 05 05 38.0 -0.2
comp=Z,182nm,0.7s,SNR=56
WRAB Tennant Creek 26.50 161 eP P 05 05 38.1 -0.2
comp=Z,22nm,0.7s
WRAB eS S 05 09 54.4 -4.4
WRA Warramunga Arr 26.50 161 P P 05 05 38.0 -0.3
comp=Z,21nm,0.8s,baz=338,slow=10,SNR=97
WRA pP pP 05 06 16.3 +0.9
comp=Z,14nm,0.8s,baz=344,slow=9.9,SNR=4.2
WRA PcP PcP 05 08 58.5 0.0
comp=Z,2.4nm,0.6s,baz=333,slow=2.6,SNR=5.4
WRA S S 05 09 52.8 -6.1
comp=Z,9.0nm,1.0s,baz=340,slow=16,SNR=10
WRA ScP ScP 05 12 19.4 -1.9
comp=Z,3.8nm,0.9s,baz=342,slow=3.2,SNR=5.6
LOEI Loei 26.57 299 P P 05 05 37.1 -1.8
comp=Z,82nm,1.0s,comp=Z,799nm
MBWA Marble Bar 26.78 192 eP P 05 05 40.1 -0.6
comp=Z,39nm,0.8s
WHN Wuhan 27.26 339 P P 05 05 45.3 +0.4
UTTA Uttaradit 27.28 299 P P 05 05 47.2 +1.9
comp=Z,10nm,1.1s,comp=Z,102nm
NJ2 Nanjing 27.40 348 eP P 05 05 46.0 -0.1
NJ2 PMZ
comp=Z,50nm,0.6s
UTHA Uthaitani 27.47 294 P P 05 05 48.3 +1.4
comp=Z,8.2nm,0.9s,comp=Z,162nm
GYA Guiyang 27.68 322 P P 05 05 51.0 +2.1
GYA pP pP 05 06 25.3 -0.9
GYA PP PnPn 05 06 47.0 +1.4
GYA PcP PcP 05 09 02.6 +1.3
GYA S S 05 10 18.8 +1.1
GYA sS sS 05 11 22.2 -2.0
GYA PMZ
comp=Z,20nm,0.8s
GYA PMZ
comp=Z,130nm,5.0s
GSI Gunungsitoli 28.02 263 eP P 05 05 51.4 -0.6
comp=Z,91nm,0.8s
UMPA Umpang Tak 28.21 295 P P 05 05 55.4 +1.8
comp=Z,9.2nm,1.1s,comp=Z,798nm
JNU Nakatsue 28.24 10 P P 05 05 52.5 -1.1
comp=Z,9.8nm,0.9s,baz=99,slow=12,SNR=4.3
CM01 Chiang Mai Arr 28.94 299 eP P 05 06 01.3 +1.3
CMAR Chiang Mai Arr 28.97 299 P P 05 06 02.2 +2.0
comp=Z,19nm,0.9s,baz=120,slow=7.7,SNR=48
CHTO Chiang Mai 29.12 300 P P 05 06 03.1 +1.5
comp=Z,138nm,1.3s,comp=Z,2μm
CHTO Chiang Mai 29.12 300 eP P 05 06 03.4 +1.8
CHTO pmax pmax
comp=Z,36nm,1.1s
CHTO Chiang Mai 29.12 300 eP P 05 06 03.4 +1.8
comp=Z,36nm,1.1s
QIS Mount Isa 29.17 152 P P 05 06 02.8 +0.8
baz=29,SNR=6.3
KMI Kunming 29.39 315 P P 05 06 06.5 +2.4
KMI pP pP 05 06 41.3 -0.4
KMI sP sP 05 07 02.6 -0.2
KMI PP PnPn 05 07 09.5 +1.9
KMI PcP PcP 05 09 05.1 -0.7
KMI S S 05 10 45.8 +1.1
KMI sS sS 05 11 49.8 -1.6
KMI SS SnSn 05 12 33.4 -2.1
KMI PMZ
comp=Z,9.0nm,1.1s
KMI PMZ
comp=Z,55nm,4.0s
KMI LN
comp=Z,140nm,5.2s
KMI LE
comp=Z,120nm,4.2s
KMI LZ
comp=Z,98nm,6.6s
CMAI Chiengmai2 29.50 302 P P 05 06 06.6 +1.4
comp=Z,21nm,1.3s,comp=Z,693nm
GIRL Giralia 29.75 201 P P 05 06 07.9 +0.9
baz=30,SNR=4.9
ASAR Alice Springs 29.88 164 P P 05 06 08.5 +0.3
comp=Z,9.5nm,0.6s,baz=339,slow=7.0,SNR=86
ASAR PcP PcP 05 09 06.9 +0.1
comp=Z,4.4nm,0.3s,baz=346,slow=2.4,SNR=14
ASAR S S 05 10 48.6 -3.4
comp=Z,3.3nm,0.8s,baz=352,slow=19,SNR=8.4
ASAR ScP ScP 05 12 29.8 -2.1
comp=Z,2.9nm,0.8s,baz=335,slow=2.6,SNR=8.2
AS01 Alice Springs 29.89 164 eP P 05 06 08.3 0.0
WRKA Warakurna 30.20 175 P P 05 06 11.3 +0.3
baz=30,SNR=25
KSAR Wonju Array Be 32.17 4 P P 05 06 28.2 +0.1
KSAR 05 09 12.2
KSAR Wonju Array Be 32.17 4 P P 05 06 28.1 +0.1
KSAR pP pP 05 07 07.1 +1.2
KSAR PcP PcP 05 09 12.2 -0.4
KSAR ScP ScP 05 12 36.9 -2.2
KSRS Korea Array 32.18 4 P P 05 06 28.1 0.0
comp=Z,2.3nm,0.4s,baz=182,slow=10,SNR=18
KSRS pP pP 05 07 07.1 +1.1
comp=Z,0.4nm,0.3s,baz=14,slow=11,SNR=1.1
KSRS PcP PcP 05 09 12.2 -0.4
comp=Z,0.8nm,0.4s,baz=186,slow=1.9,SNR=5.6
KSRS ScP ScP 05 12 36.9 -2.2
comp=Z,0.5nm,0.3s,baz=196,slow=3.4,SNR=3.2
KS01 Wonju Array Si 32.20 4 eP P 05 06 28.2 -0.2
MEEK Meekatharra 32.33 191 P P 05 06 29.2 -0.4
baz=32,SNR=43
CTA Charters Tower 32.45 141 P P 05 06 31.8 +1.0
comp=Z,5.5nm,0.7s,baz=286,slow=8.4,SNR=3.2
XAN Xi'an 32.50 334 P P 05 06 30.5 -0.7
XAN pP pP 05 07 07.1 -1.9
XAN sP sP 05 07 27.6 -2.4
XAN PMZ
comp=Z,20nm,0.9s
XAN PMZ
comp=Z,53nm,5.4s
CD2 Chengdu 32.66 324 eP P 05 06 33.5 +0.9
CD2 PMZ
comp=Z,10.0nm,0.5s
MAJO Matsushiro 33.34 19c iP P 05 06 38.1 -0.2
MAJO pmax pmax
comp=Z,58nm,0.8s
MAJO Matsushiro 33.34 19 eP P 05 06 37.9 -0.4
comp=Z,8.7nm,0.8s
MAT Matsushiro 33.34 19 P P 05 06 38.0 -0.3
MJAR Matsushiro Arr 33.34 19 P P 05 06 38.0 -0.3
comp=Z,5.1nm,0.7s,baz=194,slow=9.5,SNR=15
MJAR PcP PcP 05 09 15.8 -0.1
comp=Z,0.4nm,0.3s,baz=96,slow=9.3,SNR=4.1
MJAR ScP ScP 05 12 42.4 -0.8
comp=Z,0.6nm,0.3s,baz=212,slow=4.3,SNR=3.3
MORW Morawa 35.24 194 P P 05 06 54.5 -0.2
baz=35,SNR=21
BJI Beijing 35.66 348 P P 05 06 57.8 -0.3
BJI sP sP 05 07 52.4 -4.9
BJI PP PP 05 08 22.9 -0.2
BJI PcP PcP 05 09 23.0 +0.5
BJI S S 05 12 22.1 +1.2
BJI PMZ
comp=Z,9.0nm,0.9s
BJI PMZ
comp=Z,140nm,4.8s
FORT Forrest 35.87 176 P P 05 07 00.6 +0.5
baz=36,SNR=13
FORT Forrest 35.87 176 eP P 05 07 00.3 +0.2
comp=Z,62nm,0.8s
QLP Quilpie 36.50 151 P P 05 07 05.6 +0.2
baz=36,SNR=11
KMBL Kambalda 36.52 185 P P 05 07 05.7 +0.1
baz=37,SNR=45
LZH Lanzhou 36.56 330 eP P 05 07 06.3 +0.2
LZH pP pP 05 07 43.0 -1.6
LZH sP sP 05 08 03.2 -2.2
LZH PP PnPn 05 08 37.5 +1.9
LZH S S 05 12 35.2 +0.1
LZH sS sS 05 13 40.1 -2.8
LZH SS SS 05 15 14.5 -8.6
LZH PMZ
comp=Z,50nm,1.1s
LZH PMZ
comp=Z,140nm,4.5s
BLDU Ballidu 36.57 193 P P 05 07 05.7 -0.3
baz=37,SNR=69
KLBR Kellerberrin 37.31 191 P P 05 07 12.2 -0.1
baz=37,SNR=53
MSHR Mys Shultsa 37.57 7⇓eP P 05 07 15.4 +1.1
HHC Hu-ho-hao-te 37.59 343 eP P 05 07 17.0 +2.4
HHC pP pP 05 07 54.1 +0.8
HHC sP sP 05 08 12.9 -1.2
HHC PMZ
comp=Z,27nm,0.6s
HHC PMZ
comp=Z,120nm,7.3s
CN2 Changchun 38.44 0 eP P 05 07 16.4 -5.1
CN2 PMZ
comp=Z,10.0nm,0.8s
NWAO Narrogin (SRO) 38.70 191 eP P 05 07 24.1 +0.2
NWAO pmax pmax
comp=Z,76nm,1.0s
NWAO Narrogin (SRO) 38.70 191 P P 05 07 24.3 +0.4
baz=39,SNR=77
NWAO Narrogin (SRO) 38.70 191 eP P 05 07 24.1 +0.2
comp=Z,76nm,1.0s
BBOO Buckleboo 39.15 166 P P 05 07 28.4 +0.9
baz=39,SNR=173
BBOO Buckleboo 39.15 166 eP P 05 07 28.4 +0.9
comp=Z,58nm,0.6s
USRK Ussuriysk Ar. 39.27 8 P P 05 07 28.8 +0.4
comp=Z,3.8nm,0.5s,baz=187,slow=6.2,SNR=13
MDJ Mudanjiang 39.43 5 P P 05 07 30.3 +0.6
MDJ pP pP 05 08 06.5 -2.2
MDJ S S 05 13 19.5 +1.8
MDJ sS sS 05 14 24.3 -1.8
MDJ PMZ
comp=Z,18nm,0.9s
MDJ PMZ
comp=Z,40nm,4.6s
MDJ Mudanjiang 39.43 5 eP P 05 07 30.4 +0.7
comp=Z,14nm,0.6s
RKGY Rocky Gully 40.39 191 P P 05 07 39.2 +1.4
baz=40,SNR=143
LSA Lhasa 40.46 311 eP P 05 07 40.1 +1.0
LSA pmax pmax
comp=Z,20nm,0.9s
LSA Lhasa 40.46 311 eP P 05 07 40.0 +1.0
comp=Z,20nm,0.9s
HTT Hallett 40.51 162 P P 05 07 38.9 0.0
baz=41,SNR=18
GTA Gaotai 41.15 329 eP P 05 07 44.5 +0.4
GTA pP pP 05 08 23.2 -0.2
GTA sP sP 05 08 43.0 -1.0
GTA PcP PcP 05 09 40.0 +0.1
GTA ScP ScP 05 13 10.4 -2.3
GTA S S 05 13 45.6 +1.9
GTA sS sS 05 14 53.1 +0.6
GTA SS SS 05 16 50.0 -4.2
GTA PMZ
comp=Z,7.0nm,1.1s
GTA PMZ
comp=Z,70nm,5.9s
GTA LN
comp=Z,130nm,16.1s
GTA LE
comp=Z,190nm,17.8s

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| GTA | | | | LZ | | | |
| | comp=Z,89nm,17.6s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **41.36** | **153** | P | **P** | **05 07 47.1** | **+1.4** |
| | baz=41,SNR=18 | | | | | | |
| **ASAJ** | **Asahikawa** | **41.61** | **19** | P | **P** | **05 07 47.5** | **-0.1** |
| | comp=Z,7.0nm,0.3s,baz=234,slow=8.7,SNR=5.0 | | | | | | |
| **TAPN** | **Taplejung** | **42.06** | **306** | *e*P | **P** | **05 07 52.5** | **+0.5** |
| | comp=Z,28nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **42.12** | **305** | *e*P | **P** | **05 07 53.3** | **+0.9** |
| | comp=Z,66nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **42.80** | **305** | *e*P | **P** | **05 07 58.1** | **+0.2** |
| | comp=Z,64nm,0.9s | | | | | | |
| **ARMA** | **Armidale** | **43.43** | **146** | P | **P** | **05 08 04.6** | **+1.9** |
| | baz=44,SNR=4.9 | | | | | | |
| **ARMA** | **Armidale** | **43.43** | **146** | *e*P | **P** | **05 08 04.6** | **+1.9** |
| | comp=Z,13nm,0.9s | | | | | | |
| **GUN** | **Gumba** | **43.77** | **306** | *e*P | **P** | **05 08 05.8** | **0.0** |
| | comp=Z,41nm,0.5s | | | | | | |
| **HABR** | **Khabarovsk** | **43.90** | **9** | *e*P | **P** | **05 08 04.1** | **-1.8** |
| HABR | | | | *e**SP | sP | 05 08 54.7 | -11 |
| HABR | | | | *e* | | 05 09 47.4 | |
| HABR | | | | *e* | | 05 09 49.9 | |
| HABR | | | | S | **S** | **05 14 25.8** | **+2.5** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,49nm,1.7s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,120nm,21.0s | | | | | | |
| **PKI** | **Pulchoki** | **44.02** | **305** | *e*P | **P** | **05 08 07.9** | **+0.2** |
| | comp=Z,7.5nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **44.03** | **305** | *e*P | **P** | **05 08 07.8** | **0.0** |
| | comp=Z,18nm,0.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **44.21** | **17** | *e*P | **P** | **05 08 09.2** | **+0.7** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,51nm,1.5s | | | | | | |
| **KKN** | **Kakani** | **44.21** | **305** | *e*P | **P** | **05 08 09.8** | **+0.7** |
| | comp=Z,21nm,0.4s | | | | | | |
| **DMN** | **Daman** | **44.28** | **305** | *e*P | **P** | **05 08 09.8** | **+0.1** |
| | comp=Z,37nm,0.8s | | | | | | |
| **ARPS** | **Mount Arapiles** | **44.50** | **161** | P | **P** | **05 08 12.6** | **+1.7** |
| | baz=45,SNR=20 | | | | | | |
| **GKN** | **Gorkha** | **44.82** | **305** | *e*P | **P** | **05 08 13.8** | **0.0** |
| | comp=Z,15nm,0.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **45.31** | **343⇓** | *e*P | **P** | **05 08 15.3** | **-2.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **45.48** | **342** | P | **P** | **05 08 18.2** | **-0.5** |
| | comp=Z,1.0nm,0.5s,baz=161,slow=8.2,SNR=7.9 | | | | | | |
| SONM | | | | PcP | **PcP** | **05 09 54.6** | **+0.1** |
| | comp=Z,1.9nm,0.8s,baz=160,slow=4.1,SNR=5.2 | | | | | | |
| **SONA1** | **Songino Array** | **45.49** | **342** | *e*P | **P** | **05 08 17.8** | **-1.0** |
| **KOLN** | **Koldanda** | **45.58** | **304** | *e*P | **P** | **05 08 19.9** | **0.0** |
| | comp=Z,43nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **45.67** | **305** | *e*P | **P** | **05 08 21.2** | **+0.5** |
| | comp=Z,5.1nm,0.3s | | | | | | |
| **CAN** | **Canberra** | **46.03** | **153** | *e*P | **P** | **05 08 25.4** | **+2.4** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,35nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **46.03** | **153** | *e*P | **P** | **05 08 25.4** | **+2.4** |
| | comp=Z,35nm,0.8s | | | | | | |
| **CNB** | **Canberra Magne** | **46.19** | **153** | P | **P** | **05 08 26.7** | **+2.4** |
| | baz=46,SNR=9.4 | | | | | | |
| **TOO** | **Toolangi** | **46.50** | **158** | P | **P** | **05 08 29.0** | **+2.3** |
| | baz=47,SNR=20 | | | | | | |
| **WMQ** | **Urumqi** | **50.75** | **325** | P | **P** | **05 08 59.5** | **+0.5** |
| WMQ | | | | PMZ | | | |
| | comp=Z,12nm,1.2s | | | | | | |
| **PETK** | **Petropavlovsk-** | **54.60** | **23** | P | **P** | **05 09 28.3** | **+1.3** |
| | comp=Z,5.3nm,0.7s,baz=198,slow=9.2,SNR=4.5 | | | | | | |
| **PDGK** | **Podgornoye** | **55.43** | **320** | P | **P** | **05 09 32.6** | **-0.5** |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| **MK01** | **Makanchi Array** | **55.56** | **325** | *e*P | **P** | **05 09 33.4** | **-0.7** |
| **MK31** | **Makanchi Array** | **55.58** | **325** | *e*P | **P** | **05 09 33.9** | **-0.3** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.58** | **325** | P | **P** | **05 09 34.0** | **-0.2** |
| | comp=Z,3.5nm,0.3s,baz=119,slow=7.8,SNR=44 | | | | | | |
| MKAR | | | | PcP | **PcP** | **05 10 30.1** | **-1.6** |
| | comp=Z,2.9nm,0.6s,baz=116,slow=5.5,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.58** | **325***c* | *e*P | **P** | **05 09 34.0** | **-0.2** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| **MAKZ** | **Makanchi** | **55.77** | **325** | *e*P | **P** | **05 09 35.9** | **+0.4** |
| **KSH** | **Kashi** | **56.05** | **315** | P | **P** | **05 09 39.2** | **+1.4** |
| KSH | | | | *e*pP | **pP** | **05 10 19.6** | **+0.2** |
| KSH | | | | *e*sP | **sP** | **05 10 39.1** | **-0.3** |
| KSH | | | | *e*PP | **PP** | **05 11 49.8** | **+5.0** |
| KSH | | | | S | **S** | **05 17 11.6** | **-0.7** |
| KSH | | | | ScS | **ScS** | **05 19 07.0** | **-1.9** |
| KSH | | | | PMZ | | | |
| | comp=Z,14nm,1.2s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,96nm,4.4s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,150nm,5.6s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,110nm,4.6s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,110nm,6.1s | | | | | | |
| **YAK** | **Yakutsk** | **56.79** | **2** | *e*P | **P** | **05 09 42.1** | **-0.3** |
| YAK | | | | *e**PP | **pP** | **05 10 29.2** | **+5.2** |
| YAK | | | | *e* | | 05 10 35.3 | |
| YAK | | | | *e* | | 05 11 49.0 | |
| YAK | | | | *e*PPP | PPP | 05 13 22.9 | |
| YAK | | | | *e*S | **S** | **05 17 18.7** | **-2.2** |
| YAK | | | | *e*SS | **SS** | **05 21 06.4** | **-5.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,43nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,18nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,216nm,5.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,265nm,3.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,232nm,3.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,290nm,3.3s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,213nm,4.0s | | | | | | |
| **KRAR** | **Krasnoyarsk** | **56.89** | **339⇓** | *e*P | **P** | **05 09 43.6** | **+0.4** |
| KRAR | | | | pmax | pmax | | |
| | comp=Z,32nm,0.5s | | | | | | |
| **KZA** | **Kyzart** | **57.62** | **317** | P | **P** | **05 09 50.0** | **+0.8** |
| | SNR=5.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **57.75** | **318** | P | **P** | **05 09 49.3** | **-0.5** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **57.75** | **318** | P | **P** | **05 09 49.7** | **-0.2** |
| | SNR=5.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **57.75** | **318** | *e*P | **P** | **05 09 49.6** | **-0.2** |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **58.00** | **315** | P | **P** | **05 09 51.6** | **0.0** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **UCH** | **Uchtor** | **58.18** | **317** | P | **P** | **05 09 53.9** | **+0.8** |
| | SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **58.36** | **318⇑** | *i*P | **P** | **05 09 53.6** | **-0.4** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,23nm,1.7s | | | | | | |
| **AAK** | **Ala-Archa** | **58.36** | **318** | *e*P | **P** | **05 09 53.9** | **-0.2** |
| | comp=Z,5.5nm,1.0s | | | | | | |
| **USP** | **Ospenovka** | **58.63** | **318** | P | **P** | **05 09 55.3** | **-0.4** |
| | SNR=7.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.67** | **333** | P | **P** | **05 09 53.7** | **-2.0** |
| | comp=Z,1.5nm,0.3s,baz=131,slow=6.9,SNR=7.2 | | | | | | |
| **AML** | **Almayashu** | **58.70** | **317** | P | **P** | **05 09 56.8** | **+0.2** |
| | SNR=11 | | | | | | |
| **EKS2** | **Erkin-Say** | **58.86** | **318** | *e*P | **P** | **05 09 57.2** | **-0.2** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **EKS2** | **Erkin-Say** | **58.86** | **318** | P | **P** | **05 09 57.9** | **+0.5** |
| | SNR=6.4 | | | | | | |
| **EKS2** | **Erkin-Say** | **58.86** | **318** | *e*P | **P** | **05 09 57.2** | **-0.2** |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **MNAS** | **Manas** | **59.65** | **317** | P | **P** | **05 10 02.6** | **-0.2** |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **59.78** | **328** | *e*P | **P** | **05 10 02.4** | **-0.9** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,72nm,1.2s | | | | | | |
| **KURK** | **Kurchatov** | **59.78** | **328** | P | **P** | **05 10 02.8** | **-0.5** |
| | comp=Z,104nm,0.5s,SNR=6.5 | | | | | | |
| **KURK** | **Kurchatov** | **59.78** | **328** | *e*P | **P** | **05 10 02.4** | **-0.9** |
| | comp=Z,72nm,1.2s | | | | | | |
| **KK31** | **Karatay Array** | **61.24** | **317** | *i* P | **P** | **05 10 12.6** | **-0.8** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **KKAR** | **Karatay Array** | **61.24** | **317** | *e*P | **P** | **05 10 13.0** | **-0.5** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **61.24** | **317** | *e*P | **P** | **05 10 13.0** | **-0.5** |
| | comp=Z,7.2nm,0.8s | | | | | | |
| **OTUK** | **Ortayu** | **62.14** | **323** | P | **P** | **05 10 18.5** | **-0.9** |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,15nm,1.4s | | | | | | |
| **BKZ** | **Black Stump Fm** | **64.58** | **138** | *e*P | **P** | **05 10 36.8** | **+1.3** |
| **BVA0** | **Borovoye Array** | **65.36** | **327** | P | **P** | **05 10 39.1** | **-1.2** |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| **BRVK** | **Borovoye** | **65.43** | **327***c* | *i*P | **P** | **05 10 40.1** | **-0.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **65.43** | **327** | *e*P | **P** | **05 10 39.9** | **-0.8** |
| | comp=Z,13nm,1.0s | | | | | | |
| **CHKZ** | **Chkalovo** | **65.52** | **328** | P | **P** | **05 10 39.7** | **-1.6** |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,11nm,1.4s | | | | | | |
| **ZRNK** | **Zerenda** | **66.08** | **327** | P | **P** | **05 10 43.1** | **-1.8** |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **IMYA** | **Miami** | **67.08** | **307** | *e*P | **P** | **05 10 50.1** | **-1.7** |
| **ATKA** | **Atka Island** | **68.06** | **35** | *e*P | **P** | **05 10 58.2** | **+0.8** |
| **GEYT** | **Alibeck** | **68.92** | **309** | P | **P** | **05 11 02.4** | **-0.7** |
| | comp=Z,5.7nm,0.7s,baz=105,slow=2.2,SNR=6.7 | | | | | | |
| **AB31** | **Akbulak array** | **70.16** | **321** | *i* P | **P** | **05 11 09.4** | **-0.9** |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **70.16** | **321** | *e*P | **P** | **05 11 09.2** | **-1.2** |
| | comp=Z,2.1nm,0.3s | | | | | | |
| **ISAD** | **Sadrabad** | **71.73** | **302** | *e*P | **P** | **05 11 18.2** | **-2.4** |
| **ISRV** | **Sarvestan** | **72.01** | **299** | *e*P | P | 05 11 18.7 | -3.6 |
| **IPAR** | **Pars** | **72.10** | **300** | *e*P | **P** | **05 11 21.0** | **-1.8** |
| **CASY** | **Casey** | **72.12** | **186** | *e*P | **P** | **05 11 22.3** | **+0.6** |
| | comp=Z,10nm,0.9s | | | | | | |
| **ARU** | **Arti** | **72.98** | **328***d* | *i*P | **P** | **05 11 24.9** | **-2.1** |
| ARU | | | | S | **S** | **05 20 39.2** | **+0.4** |
| ARU | | | | SS | SS | 05 25 15.0 | -8.2 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **ARU** | **Arti** | **72.98** | **328** | *e*P | **P** | **05 11 26.3** | **-0.7** |
| | comp=Z,3.5nm,0.4s | | | | | | |
| **IKAZ** | **Kazeroun** | **73.15** | **299** | *e*P | **P** | **05 11 27.7** | **-1.3** |
| **IKLH** | **Kolahrood** | **73.62** | **303** | *e*P | **P** | **05 11 30.4** | **-1.3** |
| **RAYN** | **Ar Rayn** | **78.67** | **293** | P | **P** | **05 11 58.9** | **-1.1** |
| | comp=Z,76nm,0.9s,SNR=7.5 | | | | | | |
| **RAYN** | **Ar Rayn** | **78.67** | **293** | *e*P | **P** | **05 11 58.7** | **-1.3** |
| | comp=Z,15nm,1.0s | | | | | | |
| **TTA** | **Tatalina** | **80.20** | **27** | *e*P | **P** | **05 12 09.1** | **+1.5** |
| **TTA** | **Tatalina** | **80.20** | **27** | *e*P | **P** | **05 12 09.1** | **+1.5** |
| **KIV** | **Kislovodsk** | **81.15** | **314** | P | P | 05 12 09.3 | -3.7 |
| KIV | | | | *e* | | 05 15 15.0 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **81.37** | **32** | *i* P | **P** | **05 12 14.6** | **+0.9** |
| **KDAK** | **Kodiak Island** | **81.37** | **32** | P | **P** | **05 12 15.0** | **+1.3** |
| | comp=Z,88nm,0.5s,SNR=6.3 | | | | | | |
| **CAST** | **Castle Rocks** | **82.03** | **27** | *e*P | **P** | **05 12 18.5** | **+1.4** |
| **BRLK** | **Bradley Lake** | **82.37** | **31** | *e*P | **P** | **05 12 19.5** | **+0.5** |
| **BPAW** | **Bear Paw Mtn.** | **82.56** | **26** | *e*P | **P** | **05 12 20.9** | **+1.1** |
| | comp=Z,8.7nm,1.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **83.00** | **29** | *e*P | **P** | **05 12 22.5** | **+0.4** |
| | comp=Z,17nm,0.6s | | | | | | |
| **COLD** | **Coldfoot** | **83.07** | **23** | *e*P | **P** | **05 12 24.1** | **+1.7** |
| | comp=Z,20nm,1.1s | | | | | | |
| **SEW** | **Seward** | **83.11** | **30** | *e*P | **P** | **05 12 23.7** | **+1.0** |
| | comp=Z,24nm,0.8s | | | | | | |
| **PMR** | **Palmer** | **83.30** | **29** | *e*P | **P** | **05 12 23.9** | **+0.2** |
| PMR | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| **PMR** | **Palmer** | **83.30** | **29** | *e*P | **P** | **05 12 23.9** | **+0.2** |
| | comp=Z,14nm,1.0s | | | | | | |
| **MCK** | **McKinley** | **83.45** | **27** | *e*P | **P** | **05 12 24.9** | **+0.5** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **MCK** | **McKinley** | **83.45** | **27** | *e*P | **P** | **05 12 24.9** | **+0.5** |
| | comp=Z,20nm,0.9s | | | | | | |
| **COLA** | **College** | **83.95** | **25** | P | **P** | **05 12 26.6** | **-0.2** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **TMCR** | **Tamitsa** | **84.19** | **334** | *e*P | **P** | **05 12 27.2** | **-0.9** |
| TMCR | | | | pmax | pmax | | |
| | comp=Z,22nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **84.36** | **25** | P | **P** | **05 12 27.7** | **-1.2** |
| | comp=Z,1.3nm,0.4s,baz=254,slow=4.6,SNR=45 | | | | | | |
| ILAR | | | | pP | **pP** | **05 13 13.9** | **0.0** |
| | comp=Z,2.8nm,1.0s,baz=310,slow=7.1,SNR=5.3 | | | | | | |
| **MAW** | **Mawson** | **84.67** | **200** | P | **P** | **05 12 29.9** | **-0.5** |
| | comp=Z,6.4nm,0.8s,baz=58,slow=4.4,SNR=13 | | | | | | |
| **MAW** | **Mawson** | **84.67** | **200** | *e*P | **P** | **05 12 30.3** | **0.0** |
| **MAW** | **Mawson** | **84.67** | **200** | P | **P** | **05 12 30.4** | **0.0** |
| | baz=85,SNR=5.9 | | | | | | |
| **MAW** | **Mawson** | **84.67** | **200** | *e*P | **P** | **05 12 30.3** | **0.0** |
| **ANN** | **Anapa** | **84.91** | **314** | *e*P | P | 05 12 27.4 | -4.7 |
| ANN | | | | pmax | pmax | | |
| | comp=Z,135nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **85.05** | **173** | P | **P** | **05 12 32.1** | **0.0** |
| | comp=Z,2.4nm,0.3s,baz=321,slow=5.2,SNR=26 | | | | | | |
| **OBN** | **Obninsk** | **85.09** | **325***c* | *e*P | **P** | **05 12 31.4** | **-1.3** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **SBA** | **Scott Base** | **85.97** | **172** | *e*P | **P** | **05 12 37.9** | **+1.2** |
| **SBA** | **Scott Base** | **85.97** | **172** | *e*P | **P** | **05 12 37.9** | **+1.2** |
| **BRTR** | **Keskin Array B** | **88.05** | **310** | P | **P** | **05 12 45.2** | **-2.5** |
| | comp=Z,0.8nm,0.3s,baz=102,slow=4.7,SNR=9.7 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **88.23** | **269** | *e*P | **P** | **05 12 49.3** | **+0.1** |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **88.23** | **269** | *e*P | **P** | **05 12 49.3** | **+0.1** |
| | comp=Z,16nm,1.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.61** | **340** | P | **P** | **05 12 47.7** | **-1.8** |
| | comp=Z,1.8nm,0.5s,baz=88,slow=6.2,SNR=31 | | | | | | |
| ARCES | | | | PKKPbc | **PKKPdf** | **05 30 29.6** | **+3.0** |
| | comp=Z,1.2nm,0.8s,baz=298,slow=1.9,SNR=3.9 | | | | | | |
| **INK** | **Inuvik** | **89.29** | **21** | P | **P** | **05 12 51.3** | **-1.4** |
| | comp=Z,1.6nm,0.8s,baz=278,slow=5.4,SNR=3.1 | | | | | | |
| **FINES** | **FINESS Array B** | **89.90** | **332** | P | **P** | **05 12 53.0** | **-2.7** |
| | comp=Z,2.5nm,0.4s,baz=81,slow=4.5,SNR=32 | | | | | | |
| **AKASG** | **Malin Array Be** | **89.90** | **321** | P | **P** | **05 12 53.5** | **-2.5** |
| | comp=Z,0.5nm,0.3s,baz=65,slow=4.7,SNR=4.8 | | | | | | |
| **KIEV** | **Kiev** | **89.92** | **321** | P | **P** | **05 12 57.6** | **+1.6** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,2.2s | | | | | | |
| **DLBC** | **Dease Lake** | **93.17** | **31** | *e*P | **P** | **05 13 11.3** | **+0.2** |
| | comp=Z,8.3nm,1.1s | | | | | | |
| **SYO** | **Syowa Base** | **93.31** | **201⇑** | *e*X | **P** | **05 13 09.8** | **-1.4** |
| **UZH** | **Uzhgorod** | **94.71** | **320⇑** | *i*P | **P** | **05 13 19.2** | **+1.0** |
| UZH | | | | *e* | | 05 14 15.4 | |
| **QSPA** | **South Pole Qui** | **95.10** | **180** | P | **P** | **05 13 19.8** | **+0.2** |
| | comp=Z,4.8nm,1.1s,baz=331,slow=8.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **96.87** | **333** | P | **P** | **05 13 25.2** | **-2.6** |
| | comp=Z,2.7nm,1.0s,baz=68,slow=4.7,SNR=3.6 | | | | | | |
| NOA | | | | LR | LR | 05 59 15.8 | |
| | comp=Z,11nm,21.5s,baz=355,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **98.71** | **24** | PKKPbc | PKKPbc | 05 30 02.1 | -4.1 |
| | comp=Z,1.0nm,0.7s,baz=123,slow=3.5,SNR=6.1 | | | | | | |
| **GERES** | **GERESS Array B** | **100.10** | **321** | P | **Pdif** | **05 13 41.1** | **-1.5** |
| | comp=Z,0.2nm,0.4s,baz=103,slow=4.3,SNR=2.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **106.92** | **47** | PKiKP | **PKiKP** | **05 18 22.6** | **+0.4** |
| | comp=Z,0.3nm,0.5s,baz=270,slow=1.8,SNR=4.1 | | | | | | |
| NVAR | | | | PKKPbc | **PKKPbc** | **05 29 40.8** | **-0.7** |
| | comp=Z,1.0nm,0.8s,baz=144,slow=4.0,SNR=8.4 | | | | | | |
| NVAR | | | | PKKPab | **PKKPdf** | **05 29 55.0** | **+1.6** |
| | comp=Z,0.7nm,0.7s,baz=134,slow=4.3,SNR=5.9 | | | | | | |
| **ANMO** | **Albuquerque** | **117.01** | **46***c* | *i*PKIKP | **PKPdf** | **05 18 42.3** | **+0.8** |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,2.5s | | | | | | |
| **ANMO** | **Albuquerque** | **117.01** | **46** | *e*PKPdf | **PKPdf** | **05 18 42.3** | **+0.8** |
| **SCHQ** | **Schefferville** | **119.32** | **8** | PKP | **PKPdf** | **05 18 44.0** | **-1.1** |
| | comp=Z,3.0nm,0.8s,baz=18,slow=3.2,SNR=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.18** | **289** | PKP | **PKPdf** | **05 18 48.3** | **-1.5** |
| | comp=Z,0.7nm,0.3s,baz=74,slow=1.5,SNR=34 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **121.27** | **46** | P | **PKPdf** | **05 18 49.6** | **0.0** |
| | baz=121 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **121.66** | **46** | P | **PKPdf** | **05 18 50.4** | **+0.1** |
| | baz=122 | | | | | | |
| **TXAR** | **Lajitas Array** | **121.74** | **51** | PKP | **PKPdf** | **05 18 51.0** | **+0.3** |
| | comp=Z,1.4nm,0.8s,baz=238,slow=0.9,SNR=16 | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **05 28 49.5** | **-1.1** |
| | comp=Z,0.8nm,0.8s,baz=128,slow=5.9,SNR=9.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **121.74** | **51** | PKIKP | **PKPdf** | **05 18 51.0** | **+0.3** |
| **429A** | **Davenport Ranc** | **122.47** | **49** | P | **PKPdf** | **05 18 52.1** | **+0.1** |
| | baz=122 | | | | | | |
| **529A** | **Stev Forest Ra** | **122.47** | **49** | P | **PKPdf** | **05 18 52.1** | **+0.2** |
| | baz=122 | | | | | | |
| **430A** | **Baggett Ranch,** | **122.88** | **48** | P | **PKPdf** | **05 18 52.8** | **+0.1** |
| | baz=123 | | | | | | |
| **231A** | **Bronte** | **122.96** | **46** | P | **PKPdf** | **05 18 53.1** | **+0.3** |
| | baz=123 | | | | | | |
| **530A** | **J-C Ranch, Com** | **123.12** | **49** | P | **PKPdf** | **05 18 53.9** | **+0.6** |
| | baz=123 | | | | | | |
| **331A** | **San Angelo** | **123.20** | **47** | P | **PKPdf** | **05 18 52.8** | **-0.6** |
| | baz=123 | | | | | | |
| **431A** | **Sonora** | **123.39** | **48** | P | **PKPdf** | **05 18 53.5** | **-0.3** |
| | baz=123 | | | | | | |
| **332A** | **Millersview** | **123.66** | **47** | P | **PKPdf** | **05 18 54.4** | **+0.2** |
| | baz=124 | | | | | | |
| **631A** | **Perdido Creek** | **124.06** | **49** | P | **PKPdf** | **05 18 55.1** | **+0.1** |
| | baz=124 | | | | | | |
| **JCT** | **Junction City** | **124.09** | **48** | *e*PKIKP | **PKPdf** | **05 18 54.9** | **-0.2** |
| **JCT** | **Junction City** | **124.09** | **48** | P | **PKPdf** | **05 18 55.1** | **0.0** |
| | baz=124 | | | | | | |
| **JCT** | **Junction City** | **124.09** | **48** | *e*PKPdf | **PKPdf** | **05 18 54.9** | **-0.2** |
| **X36A** | **Centrahoma** | **124.22** | **42** | P | **PKPdf** | **05 18 55.5** | **+0.3** |
| | baz=124 | | | | | | |
| **333A** | **Richland Sprin** | **124.24** | **46** | P | **PKPdf** | **05 18 55.5** | **+0.2** |
| | baz=124 | | | | | | |
| **U38A** | **Gravette** | **124.33** | **39** | P | **PKPdf** | **05 18 55.2** | **-0.1** |
| | baz=124 | | | | | | |
| **433A** | **Art** | **124.47** | **47** | P | **PKPdf** | **05 18 55.6** | **-0.1** |
| | baz=124 | | | | | | |
| **632A** | **Uvalde** | **124.61** | **49** | P | **PKPdf** | **05 18 56.4** | **+0.4** |
| | baz=124 | | | | | | |
| **832A** | **Faith Ranch, C** | **125.08** | **50** | P | **PKPdf** | **05 18 58.1** | **+1.1** |
| | baz=125 | | | | | | |
| **534A** | **Blanco** | **125.31** | **47** | P | **PKPdf** | **05 18 57.4** | **0.0** |
| | baz=125 | | | | | | |
| **833A** | **Chaparral WMA,** | **125.50** | **50** | P | **PKPdf** | **05 18 58.8** | **+1.1** |
| | baz=125 | | | | | | |
| **TRQA** | **Tornquist** | **146.62** | **169** | *e*PKPdf | **PKPbc** | **05 19 38.0** | **-0.1** |
| **CFAA** | **Coronel Fontan** | **150.80** | **156** | PKPbc | **PKPbc** | **05 19 49.2** | **+0.2** |
| | comp=Z,3.1nm,0.7s,baz=232,slow=2.9,SNR=44 | | | | | | |
| **CPUP** | **Villa Florida** | **158.84** | **173** | PKP | **PKPdf** | **05 19 55.0** | **+0.7** |
| | comp=Z,1.3nm,0.8s,baz=86,slow=17,SNR=4.3 | | | | | | |
| CPUP | | | | PKPab | **PKPab** | **05 20 30.9** | **+0.1** |
| | comp=Z,1.8nm,0.6s,baz=195,slow=2.5,SNR=5.2 | | | | | | |
| **LPAZ** | **La Paz** | **162.77** | **131** | PKP | **PKPdf** | **05 20 00.2** | **+0.6** |
| | comp=Z,1.5nm,0.8s,baz=315,slow=1.7,SNR=6.1 | | | | | | |
| **BDFB** | **Brasilia** | **167.77** | **212** | PKPab | **PKPab** | **05 21 09.7** | **-0.8** |
| | comp=Z,6.1nm,0.9s,baz=161,slow=4.5,SNR=9.5 | | | | | | |

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*ISK **01** 05:03:08.1, 37°.27N×28°.27E, h2km, MD2.7*
*CSEM **01** 05:03:09.3±0.3, 37°.22N×28°.21E, h10km, MD2.7, Error ellipse: s-maj=8.5km s-min=4.3km az=40.0*
*DDA **01** 05:03:09.1, 37°.21N×28°.16E, h7km, Md2.8*
**ISC 01 05:03:08.9**±1.1**, 37°.23N**±0°.04×**28°.19E**±0°.03**, h8**km±11km**,**
**n16, σ0ˢ.40**/24**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.12** | **143** | *e*PG | **Pg** | **05 03 11.5** | **-0.2** |
| **YER** | **Yerkesik** | **0.12** | **143** | *e*Pg | **Pg** | **05 03 11.5** | **-0.2** |
| **TURN** | **Turunc** | **0.49** | **137** | *i* P | **Pg** | **05 03 18.3** | **-0.1** |
| TURN | | | | *i* S | **Sg** | **05 03 25.1** | **+0.4** |
| **TURN** | **Turunc** | **0.49** | **137** | P | **Pg** | **05 03 18.3** | **-0.1** |
| TURN | | | | S | **Sg** | **05 03 25.1** | **+0.4** |
| **AYDN** | **Tasoluk** | **0.50** | **330** | *i* P | **Pb** | **05 03 20.3** | **+0.3** |
| AYDN | | | | *i* S | **Sb** | **05 03 27.4** | **0.0** |
| **AYDN** | **Tasoluk** | **0.50** | **330** | P | **Pb** | **05 03 20.3** | **+0.3** |
| AYDN | | | | S | **Sb** | **05 03 27.4** | **0.0** |
| **DALY** | **Dalyan (Mu˜la** | **0.55** | **138** | *e*PG | **Pg** | **05 03 19.6** | **0.0** |
| DALY | | | | *e*SG | **Sb** | **05 03 28.1** | **-0.9** |
| **DALY** | **Dalyan (Mu˜la** | **0.55** | **138** | *e*Pg | **Pg** | **05 03 19.6** | **0.0** |
| DALY | | | | *e*Sg | **Sb** | **05 03 28.1** | **-0.9** |
| **BDRM** | **Kayabasi** | **0.62** | **255** | *i* P | **Pg** | **05 03 20.8** | **-0.1** |
| BDRM | | | | *i* S | **Sg** | **05 03 28.7** | **-0.3** |
| **BDRM** | **Kayabasi** | **0.62** | **255** | P | **Pg** | **05 03 20.8** | **-0.1** |
| BDRM | | | | S | **Sg** | **05 03 28.7** | **-0.3** |
| **BODT** | **Bodrum** | **0.72** | **257** | *e*PG | **Pb** | **05 03 24.4** | **+0.6** |
| **BODT** | **Bodrum** | **0.72** | **257** | *e*Pg | **Pb** | **05 03 24.4** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.75** | **342** | *e*PG | **Pg** | **05 03 23.2** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.75** | **342** | *e*Pg | **Pg** | **05 03 23.2** | **-0.3** |
| **FETY** | **Fethiye** | **0.93** | **130** | *e*PG | **Pg** | **05 03 26.7** | **-0.1** |
| **FETY** | **Fethiye** | **0.93** | **130** | *e*Pg | **Pg** | **05 03 26.7** | **-0.1** |

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*IDC **01** 05:12:14.6±1.0, 60°.47S×27°.29W, h0km, mb4.1/3, mb1 4.2/5, mb1mx3.8/21, mbtmp4.2/5, ML4.7/2, MS3.4/1, Ms1 3.4/1, ms1mx2.9/13, Error ellipse: s-maj=48.4km s-min=23.6km az=102.0*
*ISCJB **01** 05:12:16.5±1.0, 60°.7S±0°.1×26°.8W±0°.3, h20km, mb3.9/4, Error ellipse: s-maj=20.1km s-min=17.3km az=32.6*
*NEIC **01** 05:12:20.6±0.9, 60°.71S×26°.85W, h35km, mb4.2/3, Error ellipse: s-maj=21.4km s-min=17.2km az=125.0*
**ISC 01 05:12:18.4**±1.0**, 60°.7S**±0°.1×**26°.7W**±0°.1**, h20**km**, n18,**
**σ1ˢ.82**/13**, mb4.1**/4**, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **14.45** | **149** | Pn | **Pn** | **05 15 43.1** | **+1.5** |
| | 0.7nm,0.3s,baz=324,slow=16,SNR=87 | | | | | | |
| SNAA | | | | Sn | **Sn** | **05 18 17.9** | **-3.0** |
| | 0.1nm,0.3s,baz=350,slow=18,SNR=3.8 | | | | | | |
| **SNAA** | **Sanae** | **14.45** | **149** | *e*Pn | **Pn** | **05 15 41.6** | **+0.1** |
| | 1.9nm,0.5s | | | | | | |
| SNAA | | | | *e*Sn | **Sn** | **05 18 19.4** | **-1.5** |
| **PMSA** | **Palmer Station** | **17.38** | **240** | P | **Pn** | **05 16 18.4** | **-0.9** |
| | 1.1nm,0.3s,baz=93,slow=12,SNR=7.2 | | | | | | |
| PMSA | | | | LR | LR | 05 20 47.1 | |
| | comp=Z,136nm,20.3s,baz=76,slow=30 | | | | | | |
| **PMSA** | **Palmer Station** | **17.38** | **240** | *e*P | **Pn** | **05 16 18.4** | **-0.9** |
| | 44nm,1.4s | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **25.35** | **28** | T | T | 05 44 25.6 | |
| | SNR=3.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **29.51** | **180** | P | **P** | **05 18 22.7** | **+1.7** |
| | 2.1nm,0.9s,baz=202,slow=3.3,SNR=10 | | | | | | |
| **QSPA** | **South Pole Qui** | **29.51** | **180** | *e*P | **P** | **05 18 22.5** | **+1.5** |
| | 4.2nm,1.0s | | | | | | |
| **VNDA** | **Vanda** | **41.90** | **183** | P | **P** | **05 20 07.8** | **+1.2** |
| | 1.1nm,0.7s,baz=187,slow=7.9,SNR=11 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **52.44** | **15** | T | T | 06 18 20.2 | |
| | baz=187,slow=75,SNR=18 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **52.45** | **15** | T | T | 06 18 20.4 | |
| | baz=187,slow=75,SNR=14 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **52.46** | **15** | T | T | 06 18 21.3 | |
| | baz=187,slow=75,SNR=15 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **53.56** | **15** | T | T | 06 19 46.9 | |
| | baz=189,slow=76,SNR=5.3 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **53.56** | **15** | T | T | 06 19 47.4 | |
| | baz=189,slow=76,SNR=11 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **53.58** | **15** | T | T | 06 19 48.2 | |
| | baz=189,slow=76,SNR=8.3 | | | | | | |
| **LSZ** | **Lusaka** | **59.95** | **66** | *e*P | **P** | **05 22 23.7** | **+0.5** |
| | 1.6nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.04** | **28** | P | **P** | **05 24 09.1** | **-0.6** |
| | 0.9nm,0.4s,baz=197,slow=6.4,SNR=22 | | | | | | |
| **SONM** | **Songino Array** | **150.44** | **94** | PKPbc | **PKPbc** | **05 32 08.4** | **+0.9** |
| | 0.5nm,0.5s,baz=234,slow=3.6,SNR=3.8 | | | | | | |
| **ILAR** | **Eielson Array** | **153.22** | **305** | PKPbc | **PKPbc** | **05 32 09.9** | **-3.1** |
| | 0.3nm,0.6s,baz=98,slow=0.8,SNR=7.1 | | | | | | |

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*ISK **01** 05:14:51.2, 36°.91N×28°.69E, h14km, MD2.5*
*CSEM **01** 05:14:51.8±0.3, 36°.87N×28°.71E, h12km, MD2.5, Error ellipse: s-maj=7.4km s-min=4.9km az=26.0*
*DDA **01** 05:14:53.9, 36°.98N×28°.71E, h7km, Md2.8*
**ISC 01 05:14:52.2**±1.0**, 36°.95N**±0°.04×**28°.70E**±0°.03**, h5**km±10km**,**
**n19, σ0ˢ.69**/29**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TURN** | **Turunc** | **0.10** | **226** | S | Sg | 05 15 05.8 | +10 |
| **DALY** | **Dalyan (Mu˜la** | **0.13** | **195** | *e*PG | **Pg** | **05 14 54.4** | **-0.6** |
| DALY | | | | *e*SG | **Sg** | **05 14 57.0** | **+0.3** |
| **DALY** | **Dalyan (Mu˜la** | **0.13** | **195** | *e*Pg | **Pg** | **05 14 54.4** | **-0.6** |
| DALY | | | | *e*Sg | **Sg** | **05 14 57.0** | **+0.3** |
| **YER** | **Yerkesik** | **0.38** | **300** | *e*PG | **Pg** | **05 14 59.6** | **-0.1** |
| YER | | | | *e*SG | **Sg** | **05 15 05.8** | **+1.1** |
| **YER** | **Yerkesik** | **0.38** | **300** | *e*Pg | **Pg** | **05 14 59.6** | **-0.1** |
| YER | | | | *e*Sg | **Sg** | **05 15 05.8** | **+1.1** |
| **FETY** | **Fethiye** | **0.44** | **135** | *e*PG | **Pg** | **05 14 59.9** | **-0.8** |
| **FETY** | **Fethiye** | **0.44** | **135** | *e*Pg | **Pg** | **05 14 59.9** | **-0.8** |
| **DNZL** | **Cakiroluk** | **0.79** | **20** | *i* P | **Pb** | **05 15 08.3** | **-0.4** |
| DNZL | | | | *i* S | **Sb** | **05 15 20.0** | **+0.2** |
| **DNZL** | **Cakiroluk** | **0.79** | **20** | P | **Pb** | **05 15 08.3** | **-0.4** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DNZL | | | | S | Sb | 05 15 20.0 | +0.2 |
| AYDN | Tasoluk | 0.97 | 318 | *i* P | Pn | 05 15 12.7 | +0.2 |
| AYDN | | | | *i* S | Sn | 05 15 25.9 | -0.7 |
| AYDN | Tasoluk | 0.97 | 318 | P | Pn | 05 15 12.7 | +0.2 |
| AYDN | | | | S | Sn | 05 15 25.9 | -0.7 |
| ELL | Elmali | 0.99 | 101 | *e*PG | Pg | 05 15 10.6 | -0.7 |
| ELL | Elmali | 0.99 | 101 | *e*Pg | Pg | 05 15 10.6 | -0.7 |
| BDRM | Kayabasi | 1.01 | 277 | *i* P | Pg | 05 15 10.7 | -0.9 |
| BDRM | | | | *i* S | Sn | 05 15 27.2 | -0.5 |
| BDRM | Kayabasi | 1.01 | 277 | P | Pg | 05 15 10.7 | -0.9 |
| BDRM | | | | S | Sn | 05 15 27.2 | -0.5 |
| AKAS | Kas | 1.02 | 134 | *i* P | Pn | 05 15 14.3 | +1.0 |
| AKAS | Kas | 1.02 | 134 | P | Pn | 05 15 14.3 | +1.0 |
| AKAS | | | | S | Sn | 05 15 28.7 | +0.7 |
| BODT | Bodrum | 1.11 | 276 | *e*PN | Pg | 05 15 13.2 | -0.5 |
| BODT | Bodrum | 1.11 | 276 | *e*Pn | Pg | 05 15 13.2 | -0.5 |

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**DJA 01 05:15:05.5**±1.1**, 1°S**±7°×**12°4E**±°**, h10**km**, M3.6**/5**, MLv3.6**/5**, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LUWI | Luwuk | 0.73 | 275 | P | Pg | 05 15 18.4 | -1.2 |
| APSI | Ampana | 1.86 | 276 | P | Pn | 05 15 36.6 | -0.9 |
| APSI | | | | S | Sn | 05 16 01.8 | +0.7 |
| MRSI | Marisa | 2.22 | 315 | P | Pn | 05 15 42.6 | +0.2 |
| SPSI | Sidrap Palu | 4.68 | 233 | P | Pn | 05 16 16.4 | +0.1 |

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*IDC **01** 05:46:38.5±2.0, 26°57N×130°05E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.3/29, mbtmp3.3/3, Error ellipse: s-maj=51.0km s-min=21.1km az=43.0*

*JMA **01** 05:46:39.8, 26°59N×130°24E, h45km, M4.2*

**ISC 01 05:46:36.6**±1.8**, 26°58N**±0°04×**130°14E**±0°04**, h2**km±12km**, n17,** σ**1§54**/30**, mb3.4**/3**, Southeast of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JMZ | Minamidaito 2 | 1.23 | 128 | P | Pn | 05 47 00.1 | -0.8 |
| JMZ | | | | *e*S | Sb | 05 47 15.3 | -1.7 |
| JOKE | Okinoerabujima | 1.60 | 300 | P | Pg | 05 47 07.8 | +0.4 |
| JOKE | | | | *e*S | Sb | 05 47 26.7 | -1.0 |
| JTK | Tokunoshima | 1.60 | 319 | P | Pb | 05 47 07.5 | +0.5 |
| JTK | | | | *e*S | Sb | 05 47 27.0 | -0.7 |
| JOW | Kunigami | 1.69 | 279 | P | Pg | 05 47 09.1 | +0.1 |
| JOW | | | | *e*S | Sb | 05 47 29.1 | -1.0 |
| JOW | Kunigami | 1.69 | 279 | Pn | Pg | 05 47 09.1 | +0.1 |
| | 49nm,0.3s,baz=103,slow=18,SNR=2599 | | | | | | |
| JOW | | | | Sn | Sb | 05 47 28.9 | -1.2 |
| | 8.9nm,0.3s,baz=119,slow=29,SNR=8.9 | | | | | | |
| JZK | Kikaishima | 1.74 | 355 | *e*S | Sn | 05 47 29.7 | -0.9 |
| JAMN | Amaminishikomi | 1.87 | 333 | P | Pn | 05 47 10.5 | +0.9 |
| JAMN | | | | *e*S | Sn | 05 47 31.9 | -1.9 |
| JAM | Amami Oshima | 1.89 | 346 | P | Pn | 05 47 10.7 | +0.8 |
| JAM | | | | *e*S | Sn | 05 47 32.1 | -2.2 |
| JNTH | Nagotoyohara | 1.90 | 269 | P | Pb | 05 47 11.8 | -0.2 |
| JNTH | | | | *e*S | Sb | 05 47 34.0 | -2.1 |
| JIH | Iheya | 1.99 | 284 | P | Pb | 05 47 13.3 | -0.3 |
| JIH | | | | *e*S | Sb | 05 47 36.9 | -2.0 |
| JJT2 | Tamagusuku 2 | 2.19 | 259 | P | Pb | 05 47 16.4 | -0.6 |
| JJT2 | | | | *e*S | Sb | 05 47 42.4 | -2.1 |
| JAGN | Aguni-jima | 2.59 | 271 | P | Pb | 05 47 21.5 | -2.3 |
| JAGN | | | | S | Sn | 05 47 51.5 | -0.2 |
| JTAJ | Takarajima | 2.70 | 342 | P | Pn | 05 47 21.6 | +0.5 |
| JTAJ | | | | *e*S | Sn | 05 47 50.7 | -3.6 |
| JKE | Kume jima 2 | 3.01 | 266 | P | Pn | 05 47 26.3 | +0.9 |
| JKE | | | | *e*S | Sn | 05 48 02.3 | +0.2 |
| MKAR | Makanchi Array | 42.59 | 311 | P | P | 05 54 35.3 | +1.2 |
| | 0.3nm,0.5s,baz=90,slow=8.9,SNR=2.9 | | | | | | |
| WRA | Warramunga Arr | 46.42 | 175 | P | P | 05 55 06.0 | +1.1 |
| | 0.3nm,0.5s,baz=354,slow=8.4,SNR=5.1 | | | | | | |
| ASAR | Alice Springs | 50.08 | 175 | P | P | 05 55 35.9 | +2.7 |
| | 0.2nm,0.4s,baz=13,slow=13,SNR=4.0 | | | | | | |

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**IDC 01 06:15:27.1**±9.0**, 5°72S**×**133°60E, h50**km±97km**, mb3.5**/1**, mb1 4.0**/4**, mb1mx3.3**/44**, mbtmp4.0**/4**, ML4.0**/3**, Error ellipse: s-maj=73.5km s-min=42.0km az=70.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 14.16 | 177 | P | Pn | 06 18 44.9 | -0.2 |
| | 0.4nm,0.3s,baz=356,slow=13,SNR=14 | | | | | | |
| WRA | | | | S | Sn | 06 21 21.9 | +1.1 |
| | 0.2nm,0.3s,baz=358,slow=24,SNR=4.9 | | | | | | |
| FITZ | Fitzroy Crossi | 14.56 | 212 | P | Pn | 06 18 50.2 | -0.1 |
| | 1.1nm,0.3s,baz=25,slow=14,SNR=19 | | | | | | |
| FITZ | | | | S | Sn | 06 21 31.0 | +0.6 |
| | 0.9nm,0.3s,baz=155,slow=9.3,SNR=9.5 | | | | | | |
| ASAR | Alice Springs | 17.85 | 179 | P | P | 06 19 32.7 | +0.5 |
| | 0.4nm,0.3s,baz=359,slow=13,SNR=14 | | | | | | |
| ASAR | | | | S | Sn | 06 22 50.5 | +0.2 |
| | 0.1nm,0.3s,baz=0.4,slow=25,SNR=2.7 | | | | | | |
| MKAR | Makanchi Array | 69.18 | 325 | P | P | 06 26 28.5 | -0.1 |
| | 0.6nm,0.6s,baz=102,slow=8.3,SNR=4.0 | | | | | | |

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*IDC **01** 06:20:54.8±1.3, 5°16S×152°83E, h0km, mb4.0/9, mb1 4.2/9, mb1mx3.9/41, mbtmp4.0/9, MS2.7/3, Ms1 2.7/3, ms1mx2.6/23, Error ellipse: s-maj=47.6km s-min=21.1km az=121.0*

*ISCJB **01** 06:20:59.4±1.5, 5°1S±0°2×152°8E±0°3, h43km, mb3.9/10, MS2.2/1, Error ellipse: s-maj=50.0km s-min=13.0km az=30.4*

*NEIC **01** 06:21:00.0±0.9, 5°15S×152°92E, h35km, mb4.1/2, Error ellipse: s-maj=33.9km s-min=12.4km az=124.0*

**ISC 01 06:21:01.1**±1.2**, 5°1S**±0°2×**152°9E**±0°3**, h43**km**, n18,** σ**1§08**/16**, mb4.0**/10**, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 7.10 | 233 | LR | LR | 06 24 57.6 | |
| | comp=Z,59nm,20.4s,baz=62,slow=34 | | | | | | |
| PMG | Port Moresby | 7.10 | 233 | *e*Pn | Pn | 06 22 44.4 | +1.9 |
| HNR | Honiara | 8.19 | 122 | LR | LR | 06 25 57.2 | |
| | comp=Z,101nm,20.2s,baz=338,slow=37 | | | | | | |
| GUMO | Guam | 20.23 | 337 | LR | LR | 06 33 26.2 | |
| | comp=Z,10nm,18.9s,baz=148,slow=37 | | | | | | |
| WRAB | Tennant Creek | 23.29 | 229 | *e*P | P | 06 26 04.9 | -0.4 |
| | 4.8nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 23.30 | 229 | P | P | 06 26 04.0 | -1.4 |
| | 0.3nm,0.5s,baz=55,slow=10,SNR=2.4 | | | | | | |
| ASAR | Alice Springs | 25.97 | 223 | P | P | 06 26 29.3 | -0.7 |
| | 1.2nm,0.7s,baz=59,slow=9.1,SNR=10 | | | | | | |
| FITZ | Fitzroy Crossi | 29.59 | 242 | P | P | 06 27 00.6 | -1.7 |
| | 1.4nm,0.6s,baz=70,slow=9.7,SNR=6.5 | | | | | | |
| FITZ | Fitzroy Crossi | 29.59 | 242 | *e*P | P | 06 27 00.8 | -1.5 |
| | 2.1nm,0.5s | | | | | | |
| CMAR | Chiang Mai Arr | 58.10 | 295 | P | P | 06 30 51.0 | +0.3 |
| | 0.9nm,0.3s,baz=111,slow=5.3,SNR=5.8 | | | | | | |
| PETK | Petropavlovsk- | 58.16 | 3 | P | P | 06 30 51.5 | +1.1 |
| | 1.6nm,0.7s,baz=168,slow=8.9,SNR=5.1 | | | | | | |
| SONM | Songino Array | 66.66 | 328 | P | P | 06 31 47.8 | +0.3 |
| | 0.9nm,0.9s,baz=126,slow=3.7,SNR=2.0 | | | | | | |
| MKAR | Makanchi Array | 80.64 | 319 | P | P | 06 33 08.2 | -1.3 |
| | 0.2nm,0.6s,baz=103,slow=6.9,SNR=2.2 | | | | | | |
| ZALV | Zalesovo Beam | 81.48 | 326 | P | P | 06 33 13.2 | -0.6 |
| | 1.8nm,0.5s,baz=102,slow=6.5,SNR=5.6 | | | | | | |
| ILAR | Eielson Array | 82.43 | 22 | P | P | 06 33 18.7 | +0.2 |
| | 5.4nm,0.9s,baz=249,slow=8.4,SNR=7.0 | | | | | | |
| GERES | GERESS Array B | 124.39 | 328 | PKP | PKPdf | 06 39 55.5 | -0.2 |
| | 0.5nm,0.5s,baz=42,slow=1.6,SNR=2.3 | | | | | | |
| LPAZ | La Paz | 134.18 | 118 | PKP | PKPdf | 06 40 16.3 | +0.4 |
| | 0.3nm,0.4s,baz=270,slow=8.1,SNR=5.2 | | | | | | |
| TORD | Torodi Ar. Bea | 150.50 | 288 | PKP | PKPdf | 06 40 43.6 | -0.2 |
| | 0.3nm,0.8s,baz=336,slow=3.2,SNR=2.1 | | | | | | |
| TORD | | | | PKPbc | PKPbc | 06 40 49.0 | -0.3 |
| | 1.5nm,0.8s,baz=53,slow=2.0,SNR=8.0 | | | | | | |

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*IDC **01** 06:23:25.1±1.4, 54°98N×157°53W, h0km, mb4.0/10, mb1 4.1/13, mb1mx3.8/52, mbtmp3.9/13, ML3.7/3, Error ellipse: s-maj=34.3km s-min=21.5km az=161.0*

*ISCJB **01** 06:23:26.1±0.6, 55°02N±0°06×156°88W±0°06, h24km, mb3.9/10, Error ellipse: s-maj=9.5km s-min=3.7km az=159.1*

*NEIC **01** 06:23:30.6, 55°10N×157°04W, h24km, ML3.6(AEIC), After AEIC.*

**ISC 01 06:23:29.3**±0.9**, 55°17N**±0°09×**156°99W**±0°05**, h24**km**, n54,** σ**1§07**/53**, mb4.0**/10**, South of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHIR | Chirikof Islan | 1.02 | 49 | P | Pn | 06 23 48.7 | +0.6 |
| CHIR | | | | S | Sb | 06 24 01.6 | +0.5 |
| CHGN | Chignik | 1.39 | 325 | P | Pn | 06 23 53.1 | 0.0 |
| CHGN | | | | S | Sn | 06 24 10.6 | -0.2 |
| VNKR | Veniaminof 5 | 1.60 | 304 | P | Pn | 06 23 56.3 | +0.2 |
| VNKR | | | | S | Sn | 06 24 16.4 | +0.3 |
| VNHG | Veniaminof 1 | 1.62 | 312 | P | Pn | 06 23 57.4 | +1.0 |
| VNWF | Veniaminof 8 | 1.76 | 305 | P | Pn | 06 23 59.4 | +1.1 |
| ANPB | Aniakchak Plen | 1.79 | 337 | P | Pn | 06 23 59.4 | +0.7 |
| SDPT | Sand Point | 2.00 | 277 | P | Pn | 06 24 00.6 | -1.0 |
| SII | Sitkinak Islan | 2.11 | 47 | P | Pn | 06 24 03.9 | +0.8 |
| PS4A | Pavlof South-4 | 2.79 | 276 | P | Pn | 06 24 11.5 | -0.9 |
| OHAK | Old Harbor | 2.92 | 44 | P | Pn | 06 24 14.9 | +0.8 |
| KJL | Kejulik | 3.00 | 15 | P | Pn | 06 24 16.8 | +1.5 |
| KABR | Katmai Barrier | 3.17 | 20 | P | Pn | 06 24 19.1 | +1.4 |
| KAKN | Katmai Knife C | 3.31 | 18 | P | Pn | 06 24 20.5 | +0.8 |
| KDAK | Kodiak Island | 3.58 | 41 | Pn | Pn | 06 24 23.7 | +0.5 |
| | 3.0nm,0.3s,baz=193,slow=6.0,SNR=21 | | | | | | |
| KDAK | | | | Sn | Sn | 06 25 01.3 | -3.4 |
| | 3.1nm,0.3s,baz=249,slow=12,SNR=4.7 | | | | | | |
| KAPH | Katmai Pasha | 3.73 | 22 | P | Pn | 06 24 27.1 | +1.7 |
| ISNN | Isanotski Nort | 3.92 | 268 | P | Pn | 06 24 28.0 | 0.0 |
| SSLW | Shishaldin Wes | 4.13 | 267 | P | Pn | 06 24 30.1 | -0.7 |
| WESP | Westdahl Peak | 4.52 | 265 | P | Pn | 06 24 36.2 | 0.0 |
| WESP | | | | S | Sn | 06 25 26.3 | -1.7 |
| WECS | Westdahl Cape | 4.55 | 265 | P | Pn | 06 24 36.7 | +0.2 |
| CNPM | China Poot | 5.37 | 33 | P | Pn | 06 24 48.8 | +1.0 |
| CNPM | | | | S | Sn | 06 25 48.2 | -0.5 |
| BRLK | Bradley Lake | 5.66 | 33 | P | Pn | 06 24 52.2 | +0.3 |
| UNV | Unalaska Valle | 5.70 | 260 | P | Pn | 06 24 51.0 | -1.3 |
| RDWB | Redoubt West | 5.78 | 21 | P | Pn | 06 24 54.2 | +0.7 |
| SEW | Seward | 6.39 | 36 | P | Pn | 06 25 02.0 | +0.2 |
| SLKM | Skilak Lake | 6.46 | 31 | P | Pn | 06 25 03.1 | +0.4 |
| RC01 | Rabbit Creek A | 7.07 | 30 | P | Pn | 06 25 11.8 | +0.7 |
| PWL | Port Wells | 7.32 | 35 | P | Pn | 06 25 14.3 | -0.3 |
| FID | Port Fidalgo | 7.90 | 41 | P | Pn | 06 25 21.8 | -0.7 |
| SML | Sawmill | 8.05 | 31 | P | Pn | 06 25 24.4 | -0.2 |
| EYAK | Cordova Ski Ar | 8.06 | 43 | P | Pn | 06 25 24.5 | -0.2 |
| VLZ | Valdez | 8.21 | 39 | P | Pn | 06 25 27.1 | +0.4 |
| SCM | Sheep Creek Mo | 8.37 | 33 | P | Pn | 06 25 29.2 | +0.2 |
| KLU | Klutina | 8.60 | 38 | P | Pn | 06 25 31.8 | -0.4 |
| KIAG | Kiagna River | 9.65 | 47 | P | Pn | 06 25 46.7 | 0.0 |
| BALM | Baldy | 9.72 | 47 | P | Pn | 06 25 46.5 | -1.0 |
| GRNC | Granite Creek | 9.82 | 49 | P | Pn | 06 25 48.6 | -0.4 |
| ILAR | Eielson Array | 10.86 | 24 | Pn | Pn | 06 26 01.2 | -1.8 |
| | 0.3nm,0.3s,baz=206,slow=13,SNR=16 | | | | | | |
| INK | Inuvik | 17.06 | 30 | Pn | Pn | 06 27 26.3 | +0.4 |
| | 0.2nm,0.3s,baz=232,slow=8.2,SNR=6.4 | | | | | | |
| PETK | Petropavlovsk- | 26.27 | 284 | P | P | 06 28 58.9 | -3.5 |
| | 6.6nm,0.9s,baz=74,slow=12,SNR=4.7 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 44.64 | 232 | T | T | 07 19 23.3 | |
| | baz=23 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 44.65 | 232 | T | T | 07 19 31.5 | |
| | baz=23 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 44.66 | 232 | T | T | 07 19 27.1 | |
| | baz=23 | | | | | | |
| TXAR | Lajitas Array | 45.70 | 102 | P | P | 06 31 50.3 | +2.0 |
| | 0.3nm,0.7s,baz=304,slow=5.1,SNR=4.5 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 45.80 | 232 | T | T | 07 21 01.0 | |
| | baz=29 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 45.81 | 232 | T | T | 07 20 59.8 | |
| | baz=29 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 45.82 | 232 | T | T | 07 21 00.1 | |
| | baz=29 | | | | | | |
| ARCES | ARCESS Array B | 55.59 | 359 | P | P | 06 33 02.7 | +0.5 |
| | 0.9nm,0.8s,baz=7.8,slow=7.3,SNR=3.1 | | | | | | |
| SONM | Songino Array | 55.90 | 306 | P | P | 06 33 05.2 | +0.3 |
| | 1.0nm,0.7s,baz=33,slow=9.6,SNR=4.0 | | | | | | |
| FINES | FINESS Array B | 63.71 | 358 | P | P | 06 33 58.4 | +0.3 |
| | 0.6nm,0.7s,baz=46,slow=9.9,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 66.81 | 320 | P | P | 06 34 18.2 | -0.4 |
| | 0.8nm,0.6s,baz=48,slow=4.7,SNR=5.2 | | | | | | |
| AKTO | Aktyubinsk | 70.78 | 337 | P | P | 06 34 43.2 | 0.0 |
| | 1.1nm,0.5s,baz=24,slow=7.6,SNR=6.3 | | | | | | |
| AKASG | Malin Array Be | 74.37 | 356 | P | P | 06 35 04.4 | -0.1 |
| | 0.8nm,0.5s,baz=4.2,slow=5.0,SNR=5.3 | | | | | | |
| CMAR | Chiang Mai Arr | 82.80 | 292 | P | P | 06 35 49.2 | -2.2 |
| | 1.2nm,0.3s,baz=15,slow=5.2,SNR=6.7 | | | | | | |
| BRTR | Keskin Array B | 85.04 | 352 | P | P | 06 36 03.7 | +1.0 |
| | 0.9nm,0.7s,baz=28,slow=1.8,SNR=5.1 | | | | | | |

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*IDC **01** 06:28:52.7±0.5, 52°15N×169°67W, h0km, mb4.4/34, mb1 4.6/35, mb1mx4.5/49, mbtmp4.4/35, ML4.7/1, MS3.7/13, Ms1 3.7/13, ms1mx3.5/31, Error ellipse: s-maj=17.5km s-min=10.0km az=170.0*

*BJI **01** 06:28:54.8, 52°30N×169°60W, h33km, mb4.9/21, mB5.0/15, Ms4.7/10, Ms7 4.3/10*

*MOS **01** 06:28:56.7±1.0, 52°27N×169°61W, h32km, mb4.8/31, Error ellipse: s-maj=9.7km s-min=6.1km az=75.0*

*ISCJB **01** 06:28:58.1±0.4, 52°22N±0°03×169°52W±0°02, h48km±3km, mb4.5/93, MS3.8/14, Error ellipse: s-maj=5.7km s-min=2.3km az=170.1*

*NEIC **01** 06:28:59.7, 52°45N×169°69W, h39km, mb4.6/78, ML4.2(AEIC), After AEIC.*

**ISC 01 06:28:58.3**±0.6**, 52°18N**±0°07×**169°50W**±0°04**, h34**km±1km**, h35**km**:pP-P, n527,** σ**1§03**/540**, mb4.6**/101**, MS3.8**/14**, 11C-7D, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIKH | Nikolski High | 0.89 | 26 | *e*Pn | Pn | 06 29 13.9 | -0.4 |
| OKSO | Okmok South | 1.44 | 34 | P | Pn | 06 29 22.0 | +0.2 |
| OKSO | | | | S | Sn | 06 29 39.2 | -0.3 |
| OKCE | Okmok Cone E | 1.49 | 32 | P | Pn | 06 29 23.8 | +1.1 |
| OKTU | Okmok Mt. Tuli | 1.50 | 36 | P | Pn | 06 29 23.4 | +0.6 |
| OKAK | Okmok | 1.57 | 26 | P | Pn | 06 29 22.4 | -1.2 |
| OKFG | Magazine Ridge | 1.57 | 37 | P | Pn | 06 29 23.7 | 0.0 |
| OKFG | | | | S | Sn | 06 29 41.4 | -1.3 |
| MSOM | Makushin Julie | 2.25 | 42 | P | Pn | 06 29 33.4 | +0.4 |
| MSOM | Makushin Julie | 2.25 | 42 | P | Pn | 06 29 33.4 | +0.4 |
| MGOD | Makushin Gods | 2.27 | 43 | P | Pn | 06 29 34.1 | +0.8 |
| MGOD | | | | S | Sn | 06 30 02.1 | +2.0 |
| MCIR | Makushin Cirqu | 2.37 | 40 | P | Pn | 06 29 36.1 | +1.3 |
| MSW | Makushin Switc | 2.39 | 42 | P | Pn | 06 29 35.5 | +0.5 |
| MSW | | | | S | Sn | 06 30 03.9 | +0.8 |
| UNV | Unalaska Valle | 2.46 | 46 | *e*Pn | Pn | 06 29 36.5 | +0.6 |
| KOFP | Korovin Flat P | 2.83 | 274 | P | Pn | 06 29 42.6 | +1.5 |
| AKRB | Akutan Reef Bi | 2.84 | 45 | P | Pn | 06 29 43.3 | +2.1 |
| ZRO | Akutan Zero | 2.86 | 46 | P | Pn | 06 29 43.1 | +1.7 |
| ATKA | Atka Island | 2.89 | 272 | *e*Pn | Pn | 06 29 42.0 | +0.2 |
| KOKL | Mount Kliuchef | 2.90 | 275 | P | Pn | 06 29 44.0 | +2.0 |
| AKGG | Akutan Green G | 2.92 | 45 | P | Pn | 06 29 44.5 | +2.2 |
| KOWE | Korovin West | 2.93 | 276 | P | Pn | 06 29 44.1 | +1.8 |
| AKUT | Akutan | 2.98 | 47 | *e*Pn | Pn | 06 29 44.7 | +1.6 |
| AKUT | | | | *e*S | Sb | 06 30 31.0 | +4.5 |
| WECS | Westdahl Cape | 3.68 | 48 | P | Pn | 06 29 55.2 | +2.5 |
| WEBT | Westdahl Beart | 3.73 | 48 | P | Pn | 06 29 54.7 | +1.3 |
| WESN | West Dahl Nort | 3.79 | 49 | P | Pn | 06 29 56.4 | +2.1 |
| GSTR | Great Sitkin T | 4.04 | 271 | *e*Pn | Pn | 06 29 58.1 | +0.4 |
| GSTR | | | | *e*Sn | Sn | 06 30 46.2 | +2.3 |
| GSMY | Great Sitkin M | 4.05 | 271 | P | Pn | 06 29 58.4 | +0.7 |
| GSTD | Great Sitkin T | 4.10 | 271 | P | Pn | 06 29 58.1 | -0.4 |
| GSTD | | | | S | Sn | 06 30 46.2 | +0.9 |
| GSCK | Great Sitkin C | 4.12 | 270 | P | Pn | 06 29 59.4 | +0.7 |
| ETKA | Kagalaska Isla | 4.28 | 269 | P | Pn | 06 30 01.2 | +0.3 |
| ADAG | Mount Adagdak | 4.39 | 270 | P | Pn | 06 30 03.9 | +1.5 |
| FALS | False Pass | 4.51 | 51 | *e*Pn | Pn | 06 30 07.7 | +3.6 |
| KIKV | Kanaga Island | 4.75 | 269 | P | Pn | 06 30 08.1 | +0.7 |
| SPIA | Saint Paul Isl | 5.03 | 355 | P | Pn | 06 30 13.0 | +1.8 |
| TAPA | Tanaga Point A | 5.15 | 269 | P | Pn | 06 30 15.4 | +2.4 |
| TAFL | Tanaga Flats | 5.21 | 269 | P | Pn | 06 30 16.4 | +2.7 |
| TAFP | Tanaga Falls P | 5.25 | 270 | P | Pn | 06 30 16.4 | +2.2 |
| GAEA | Gareloi East | 5.73 | 270 | P | Pn | 06 30 23.4 | +2.5 |
| GANE | Gareloi Northe | 5.75 | 270 | P | Pn | 06 30 23.5 | +2.4 |
| GALAA | Gareloi Lava P | 5.75 | 270 | P | Pn | 06 30 22.5 | +1.4 |
| SDPT | Sand Point | 6.22 | 56 | *e*Pn | Pn | 06 30 28.4 | +0.9 |
| CESW | Semis' Southwe | 6.76 | 272 | P | Pn | 06 30 36.6 | +1.7 |
| AMKA | Amchitka | 7.00 | 268 | *e*Pn | Pn | 06 30 38.9 | +0.7 |
| | 101nm,0.4s | | | | | | |
| VNKR | Veniaminof 5 | 7.10 | 53 | P | Pn | 06 30 42.7 | +3.1 |
| CHGN | Chignik | 7.69 | 53 | *e*Pn | Pn | 06 30 49.1 | +1.4 |
| SII | Sitkinak Islan | 9.95 | 58 | *e*Pn | Pn | 06 31 19.0 | +0.3 |
| OHAK | Old Harbor | 10.64 | 55 | *e*Pn | Pn | 06 31 26.9 | -1.2 |
| KDAK | Kodiak Island | 11.21 | 53 | Pn | Pn | 06 31 32.5 | -3.3 |
| | 5.5nm,0.3s,baz=254,slow=7.0,SNR=25 | | | | | | |
| KDAK | | | | Sn | Sn | 06 33 35.0 | -4.7 |
| | baz=41,slow=19,SNR=2.2 | | | | | | |
| KDAK | Kodiak Island | 11.21 | 53 | *e*P | Pn | 06 31 35.3 | -0.5 |
| KDAK | | | | | | 06 33 35.0 | |
| KDAK | Kodiak Island | 11.21 | 53 | *e*Pn | Pn | 06 31 35.3 | -0.5 |
| KDAK | | | | Sn | Sn | 06 33 35.0 | -4.7 |
| RSO | Redoubt South | 12.43 | 42 | *e*Pn | Pn | 06 31 54.1 | +1.5 |
| HOM | Homer | 12.47 | 46 | *e*Pn | Pn | 06 31 54.0 | +0.8 |
| BRLK | Bradley Lake | 12.86 | 47 | *e*Pn | Pn | 06 31 58.6 | +0.2 |
| SPU | Mount Spurr | 13.12 | 40 | *e*Pn | Pn | 06 32 03.7 | +1.7 |
| TNA | Tin City | 13.45 | 3 | *e*Pn | Pn | 06 32 08.4 | +2.0 |
| SEW | Seward | 13.66 | 47 | *e*Pn | Pn | 06 32 08.7 | -0.6 |
| RC01 | Rabbit Creek A | 14.01 | 43 | *e*Pn | Pn | 06 32 13.1 | -1.0 |
| PPLA | Purkeypile | 14.15 | 34 | *e*Pn | Pn | 06 32 19.3 | +3.2 |
| PMR | Palmer | 14.52 | 42 | *e*P | Pn | 06 32 20.4 | -0.6 |
| PMR | Palmer | 14.52 | 42 | *e*Pn | Pn | 06 32 20.4 | -0.6 |
| SML | Sawmill | 14.96 | 42 | *e*P | Pn | 06 32 27.1 | +0.1 |
| SML | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| SML | Sawmill | 14.96 | 42 | *e*Pn | Pn | 06 32 27.1 | +0.1 |
| | comp=Z,2.9nm,0.4s | | | | | | |
| TRF | Thorofare Moun | 15.16 | 34 | *e*P | P | 06 32 33.1 | -1.3 |
| | comp=Z,6.5nm,0.3s | | | | | | |
| BPAW | Bear Paw Mtn. | 15.36 | 32 | P | P | 06 32 35.0 | -1.4 |
| | comp=Z,28nm,0.6s | | | | | | |
| SCM | Sheep Creek Mo | 15.39 | 42 | *e*P | Pn | 06 32 31.0 | -1.6 |
| SCM | | | | pmax | pmax | | |
| | comp=Z,34nm,0.6s | | | | | | |
| SCM | Sheep Creek Mo | 15.39 | 42 | *e*Pn | Pn | 06 32 31.0 | -1.6 |
| | comp=Z,34nm,0.6s | | | | | | |
| EYAK | Cordova Ski Ar | 15.52 | 48 | *e*Pn | Pn | 06 32 32.3 | -2.0 |
| | comp=Z,630nm,2.7s | | | | | | |
| RND | Reindeer | 15.65 | 36 | *e*P | P | 06 32 38.0 | -1.8 |
| RND | | | | pmax | pmax | | |
| | comp=Z,93nm,1.9s | | | | | | |
| RND | Reindeer | 15.65 | 36 | *e*Pn | P | 06 32 38.0 | -1.8 |
| | comp=Z,92nm,1.9s | | | | | | |
| DIV | Divide | 15.74 | 46 | *e*P | Pn | 06 32 34.9 | -2.3 |
| | comp=Z,498nm,3.0s | | | | | | |
| MCK | McKinley | 15.81 | 35 | *e*P | Pn | 06 32 39.4 | +1.3 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| MCK | McKinley | 15.81 | 35 | *e*P | Pn | 06 32 39.4 | +1.3 |
| | comp=Z,14nm,0.9s | | | | | | |
| BWN | Browne | 15.90 | 33 | *e*Pn | P | 06 32 41.6 | -0.9 |
| | comp=Z,32nm,0.9s | | | | | | |
| BMRM | Bremner River | 16.20 | 47 | *e*P | Pn | 06 32 40.7 | -2.4 |
| | comp=Z,94nm,1.5s | | | | | | |
| HARP | HAARP | 16.56 | 42 | *e*Pn | Pn | 06 32 46.8 | -0.8 |
| | comp=Z,391nm,2.0s | | | | | | |
| WRH | Wood River Hil | 16.56 | 34 | *e*Pn | Pn | 06 32 47.4 | -0.1 |
| | comp=Z,21nm,1.2s | | | | | | |
| PAX | Paxson | 16.70 | 40 | *e*P | Pn | 06 32 48.3 | -1.1 |
| PAX | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| PAX | Paxson | 16.70 | 40 | *e*P | Pn | 06 32 48.3 | -1.1 |
| | comp=Z,11nm,1.0s | | | | | | |
| CCB | Clear Creek Bu | 16.77 | 33 | *e*Pn | Pn | 06 32 49.5 | -0.6 |
| | comp=Z,13nm,0.7s | | | | | | |
| COLA | College | 16.89 | 33 | ⇑*i*P | Pn | 06 32 51.7 | 0.0 |
| COLA | College | 16.89 | 33 | *e*P | Pn | 06 32 51.6 | 0.0 |
| | comp=Z,24nm,1.1s | | | | | | |
| HDA | Harding Lake | 16.91 | 35 | *e*Pn | Pn | 06 32 51.5 | -0.4 |
| | comp=Z,32nm,1.2s | | | | | | |
| IL1 | Eielson Array | 17.16 | 34 | *e*Pn | Pn | 06 32 53.2 | -1.8 |
| IL1 | | | | *e*S | S | 06 36 15.6 | +2.6 |
| ILAR | Eielson Array | 17.16 | 34 | Pn | Pn | 06 32 53.5 | -1.5 |
| | comp=Z,1.1nm,0.3s,baz=232,slow=11,SNR=79 | | | | | | |
| MENT | Mentasta | 17.39 | 42 | *e*P | Pn | 06 32 57.3 | -0.6 |
| DOT | Dot Lake | 17.59 | 39 | *e*P | Pn | 06 32 59.7 | -0.7 |
| | comp=Z,26nm,1.0s | | | | | | |
| COLD | Coldfoot | 17.82 | 25 | *e*P | P | 06 33 04.7 | +1.0 |
| | comp=Z,9.0nm,0.9s | | | | | | |
| PCA | Pinnacle | 17.99 | 52 | *e*Pn | P | 06 33 07.7 | +2.1 |
| | comp=Z,56nm,0.7s | | | | | | |
| FYU | Fort Yukon | 18.80 | 31 | *e*P | Pn | 06 33 14.7 | -0.4 |
| | comp=Z,19nm,0.8s | | | | | | |
| EGAK | Eagle | 19.24 | 38 | *e*P | P | 06 33 18.9 | -0.3 |
| | comp=Z,13nm,0.6s | | | | | | |
| PET | Petropavlovsk | 19.29 | 285 | *e*P | P | 06 33 20.4 | +0.6 |
| PET | | | | *e*S | S | 06 36 52.3 | -3.7 |
| PET | | | | MLR | MLR | | |
| | comp=Z,200nm,17.0s | | | | | | |
| PET | Petropavlovsk | 19.29 | 285 | *e*P | P | 06 33 19.7 | -0.2 |
| | comp=Z,13nm,0.6s | | | | | | |
| DAWY | Dawson | 19.63 | 41 | *e*P | P | 06 33 22.5 | -1.1 |
| | comp=Z,9.7nm,0.7s | | | | | | |
| BILL | Bilibino | 19.74 | 333 | *e*P | P | 06 33 23.5 | -1.1 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| PEA0 | Petropavlovsk- | 19.84 | 286 | *e*P | P | 06 33 26.2 | +0.3 |
| PETK | Petropavlovsk- | 19.84 | 286 | P | P | 06 33 26.0 | +0.1 |
| | comp=Z,6.7nm,0.3s,baz=90,slow=13,SNR=51 | | | | | | |
| PETK | | | | LR | LR | 06 41 17.3 | |
| | comp=Z,75nm,20.7s,baz=90,slow=38 | | | | | | |
| BESE | Bessie Mountai | 20.52 | 58 | *e*P | Pn | 06 33 35.9 | +0.2 |
| | comp=Z,88nm,2.2s | | | | | | |
| DLBC | Dease Lake | 23.05 | 59 | P | P | 06 34 01.6 | +1.3 |
| | comp=Z,8.4nm,0.8s,baz=279,slow=8.0,SNR=9.0 | | | | | | |
| DLBC | | | | LR | LR | 06 43 16.0 | |
| | comp=Z,308nm,19.5s,baz=254,slow=37 | | | | | | |
| DLBC | Dease Lake | 23.05 | 59 | *e*P | P | 06 34 03.6 | +3.3 |
| | comp=Z,37nm,1.4s | | | | | | |
| INK | Inuvik | 23.55 | 33 | P | P | 06 34 03.3 | -1.7 |
| | comp=Z,12nm,0.5s,baz=248,slow=6.1,SNR=65 | | | | | | |
| INK | Inuvik | 23.55 | 33 | *e*P | P | 06 34 03.8 | -1.3 |
| INK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.5s | | | | | | |
| INK | Inuvik | 23.55 | 33 | *e*P | P | 06 34 03.8 | -1.3 |
| | comp=Z,13nm,0.5s | | | | | | |
| BBB | Bella Bella | 25.13 | 73 | P | P | 06 34 19.1 | -0.6 |
| | comp=Z,3.8nm,0.9s,baz=266,slow=4.2,SNR=4.3 | | | | | | |
| B05A | Bryant | 30.15 | 78 | P | P | 06 35 04.7 | 0.0 |
| | baz=30 | | | | | | |
| YKA | Yellowknife Ar | 30.43 | 49 | P | P | 06 35 08.0 | +1.0 |
| | comp=Z,5.3nm,0.4s,baz=78,slow=6.7,SNR=41 | | | | | | |
| YKA | Yellowknife Ar | 30.43 | 49 | P | P | 06 35 08.0 | +1.0 |
| YKA | Yellowknife Ar | 30.43 | 49 | P | P | 06 35 08.0 | +1.0 |
| ASAJ | Asahikawa | 32.45 | 275 | P | P | 06 35 22.3 | -2.7 |
| | comp=Z,6.6nm,0.6s,baz=101,slow=19,SNR=2.3 | | | | | | |
| HAWA | Hanford | 32.56 | 80 | *e*P | P | 06 35 27.3 | +1.4 |
| | comp=Z,8.8nm,1.0s | | | | | | |
| YBH | Yreka Blue Hor | 33.06 | 90 | P | P | 06 35 30.1 | -0.4 |
| | comp=Z,1.2nm,0.8s,baz=243,slow=2.3,SNR=2.6 | | | | | | |
| NEW | Newport | 33.13 | 76 | P | P | 06 35 31.8 | +0.9 |
| | comp=Z,4.1nm,0.7s,baz=293,slow=8.9,SNR=8.6 | | | | | | |
| NEW | | | | LR | LR | 06 48 15.8 | |
| | comp=Z,143nm,18.1s,baz=304,slow=35 | | | | | | |
| NEW | Newport | 33.13 | 76 | *e*P | P | 06 35 31.9 | +0.9 |
| NEW | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| NEW | Newport | 33.13 | 76 | P | P | 06 35 31.9 | +0.9 |
| | baz=33 | | | | | | |
| NEW | Newport | 33.13 | 76 | *e*P | P | 06 35 31.9 | +0.9 |
| | comp=Z,7.3nm,0.8s | | | | | | |
| EDM | Edmonton | 33.30 | 65 | *e*P | P | 06 35 33.6 | +1.2 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| EDM | Edmonton | 33.30 | 65 | *e*P | P | 06 35 33.6 | +1.2 |
| | comp=Z,13nm,0.6s | | | | | | |
| I07A | Izee | 33.74 | 84 | *e*P | P | 06 35 37.6 | +1.2 |
| I07A | | | | *e*pP | pP | 06 35 46.7 | +0.3 |
| WALA | Waterton Lakes | 34.67 | 73 | *e*P | P | 06 35 45.8 | +1.4 |
| | comp=Z,69nm,2.1s | | | | | | |
| BSMT | Bassoo Peak | 34.71 | 75 | *e*P | P | 06 35 45.9 | +1.0 |
| BLMT | Blacktail Moun | 34.89 | 74 | *e*P | P | 06 35 47.5 | +1.1 |
| WVOR | Wild Horse Val | 35.17 | 85 | *e*P | P | 06 35 50.9 | +2.1 |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| WVOR | Wild Horse Val | 35.17 | 85 | *e*P | P | 06 35 50.9 | +2.1 |
| | comp=Z,5.0nm,1.0s | | | | | | |
| MSO | Missoula | 35.71 | 76 | P | P | 06 35 53.7 | +0.3 |
| | baz=36 | | | | | | |
| MSO | Missoula | 35.71 | 76 | *e*P | P | 06 35 55.0 | +1.7 |
| | comp=Z,18nm,1.6s | | | | | | |
| CHMT | Chamberlain Mo | 36.08 | 75 | *e*P | P | 06 35 57.6 | +0.9 |
| MFID | Camas Ranch | 36.35 | 82 | *e*P | P | 06 36 00.1 | +1.2 |
| HLID | Hailey | 37.13 | 81 | P | P | 06 36 06.5 | +1.0 |
| | baz=37 | | | | | | |
| HLID | Hailey | 37.13 | 81 | *e*P | P | 06 36 07.1 | +1.6 |
| | comp=Z,2.0nm,0.6s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 37.25 | 219 | T | T | 07 15 57.4 | |
| | baz=29 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 37.26 | 219 | T | T | 07 15 50.9 | |
| | baz=29,slow=74 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 37.27 | 219 | T | T | 07 15 52.3 | |
| | baz=29,slow=74 | | | | | | |
| MCMT | McKenzie Canyo | 37.39 | 78 | *e*P | P | 06 36 09.0 | +1.1 |
| EGMT | Eagleton | 37.60 | 72 | P | P | 06 36 09.9 | +0.5 |

baz=38,SNR=7.2
**EGMT Eagleton** 37.60 72 *e*P P 06 36 10.4 +1.0
comp=Z,20nm,0.8s
**BOZ Bozeman (W)** 37.69 76 *e*P P 06 36 11.5 +1.2
BOZ pmax pmax
comp=Z,19nm,1.8s
**BOZ Bozeman (W)** 37.69 76 P P 06 36 10.4 +0.1
baz=38,SNR=6.7
**BOZ Bozeman (W)** 37.69 76 *e*P P 06 36 11.5 +1.2
comp=Z,19nm,1.8s
**NVAR Mina Array Bea** 37.74 91 P P 06 36 11.7 +0.8
comp=Z,1.3nm,0.8s,baz=297,slow=8.0,SNR=11
**NV01 Mina Array Sit** 37.74 91 *e*P P 06 36 14.5 +3.6
**H11S1 WAKE ISLAND Hy** 38.44 218 T T 07 17 31.4
baz=23,slow=76,SNR=195
**H11S2 WAKE ISLAND Hy** 38.46 218 T T 07 17 25.6
baz=23,slow=76,SNR=178
**H11S3 WAKE ISLAND Hy** 38.46 218 T T 07 17 25.8
baz=23,slow=76,SNR=147
**YMR Madison River** 38.61 77 *e*P P 06 36 19.4 +1.3
comp=Z,8.8nm,0.8s
**GCMT Greycliff** 38.79 75 *e*P P 06 36 20.0 +0.5
**USRK Ussuriysk Ar.** 38.86 282 P P 06 36 19.3 -0.6
comp=Z,1.4nm,0.5s,baz=86,slow=13,SNR=4.2
**H17A Grant Village** 38.99 77 *e*P P 06 36 23.7 +2.3
comp=Z,4.4nm,0.8s
**LKWY Lake** 39.01 77 *e*P P 06 36 23.0 +1.5
LKWY pmax pmax
comp=Z,6.0nm,0.7s
**LKWY Lake** 39.01 77 *e*P P 06 36 23.0 +1.5
comp=Z,5.6nm,0.7s
**IMW Indian Meadow** 39.05 78 *e*P P 06 36 23.4 +1.6
comp=Z,6.6nm,1.0s
**HVU Hansel Valley** 39.13 82 *e*P P 06 36 24.5 +2.1
HVU pmax pmax
comp=Z,6.0nm,0.7s
**HVU Hansel Valley** 39.13 82 *e*P P 06 36 24.5 +2.1
comp=Z,6.3nm,0.7s
**CWC Cottonwood Cre** 39.13 93 *e*P P 06 36 26.3 +3.7
**FXWY Fox Creek** 39.14 79 *e*P P 06 36 24.1 +1.5
comp=Z,30nm,2.5s
**GRAC Grapevine Rang** 39.21 92 P P 06 36 22.9 -0.2
baz=39
**TPAW Teton Pass** 39.27 79 *e*P P 06 36 25.2 +1.6
comp=Z,2.2nm,0.6s
**RLMT Red Lodge** 39.38 76 P P 06 36 24.9 +0.3
baz=39
**RLMT Red Lodge** 39.38 76 *e*P P 06 36 25.6 +1.0
comp=Z,7.3nm,0.9s
**REDW Red Top Meadow** 39.40 79 *e*P P 06 36 26.8 +2.1
comp=Z,22nm,1.8s
**ISA Isabella** 39.40 94 P P 06 36 25.2 +0.6
baz=39
**R11A Troy Canyon, C** 39.46 89 P P 06 36 26.2 +0.9
baz=40
**MJAR Matsushiro Arr** 39.61 268 LR LR 06 52 05.4
comp=Z,72nm,21.1s,baz=65,slow=35
**MAJO Matsushiro** 39.61 268 P P 06 36 26.1 -0.2
MAJO pmax pmax
comp=Z,39nm,0.9s
**FURC Furnace Creek,** 39.87 92 P P 06 36 29.0 +0.6
baz=40
**TPNV Topopah Spring** 39.94 91 *e*P P 06 36 30.8 +1.6
TPNV pmax pmax
comp=Z,5.0nm,0.8s
**TPNV Topopah Spring** 39.94 91 P P 06 36 29.0 -0.1
baz=40
**TPNV Topopah Spring** 39.94 91 *e*P P 06 36 30.8 +1.6
comp=Z,4.5nm,0.8s
**DUG Dugway** 40.04 84 *e*P P 06 36 29.9 -0.1
DUG pmax pmax
comp=Z,7.0nm,1.0s
**DUG Dugway** 40.04 84 P P 06 36 30.5 +0.5
baz=40
**DUG Dugway** 40.04 84 *e*P P 06 36 29.9 -0.1
comp=Z,6.9nm,1.0s
**EDW2 Edwards Air Fo** 40.21 95 P P 06 36 30.8 -0.5
baz=40
**LAO LASA Array** 40.35 72 P P 06 36 31.7 -0.7
baz=40
**BW06 Boulder Array** 40.52 79 *e*P P 06 36 34.4 +0.4
comp=Z,7.1nm,1.0s
**DGMT Dagmar** 40.59 68 P P 06 36 34.6 +0.2
baz=40
**GSC Goldstone** 40.66 93 *e*P P 06 36 37.4 +2.3
GSC pmax pmax
comp=Z,6.0nm,1.1s
**GSC Goldstone** 40.66 93 P P 06 36 36.4 +1.3
baz=41,SNR=5.0
**GSC Goldstone** 40.66 93 *e*P P 06 36 37.4 +2.3
comp=Z,6.0nm,1.1s
**A25A Svangstu Ranch** 40.97 67 P P 06 36 38.0 +0.6
baz=41,SNR=5.6
**HEC Hector,Ludlow** 41.27 93 P P 06 36 41.2 +1.1
baz=41
**B25A Knox Farm, Ray** 41.29 68 P P 06 36 40.3 +0.2
baz=41
**C25A Freed Ranch, W** 41.53 69 P P 06 36 41.9 -0.2
baz=41
**TMUT Trail Mountain** 41.57 84 *e*P P 06 36 44.7 +1.9
comp=Z,25nm,0.9s
**A26A Wade Farm, Ken** 41.60 67 P P 06 36 42.9 +0.3
baz=41
**GMRC Granite Mounta** 41.71 93 P P 06 36 44.5 +0.7
baz=42
**P18A Preston Nutter** 41.95 83 *e*P P 06 36 48.0 +2.0
comp=Z,12nm,1.2s
**PFO Pinyon Flat Ob** 42.01 95 P P 06 36 46.9 +0.7
baz=42
**BELC Belle Mtn. Jos** 42.02 94 P P 06 36 47.3 +1.0
baz=42
**A27A Ledoux Ranch,** 42.02 66 P P 06 36 46.1 +0.1
baz=42
**BOD Bodaibo** 42.05 309 *e*P P 06 36 44.5 -1.6
BOD pmax pmax
comp=Z,5.0nm,1.1s
**E25A Miller Ranch,** 42.09 70 P P 06 36 47.4 +0.7
baz=42
**SRU San Rafael** 42.10 84 *e*P P 06 36 50.6 +3.6
SRU pmax pmax
comp=Z,86nm,2.5s
**SRU San Rafael** 42.10 84 *e*P P 06 36 50.6 +3.6
comp=Z,86nm,2.5s
**C26A Wahner Farm, P** 42.13 68 P P 06 36 47.7 +0.7
baz=42
**B27A Peters Farms,** 42.30 67 P P 06 36 49.1 +0.8
baz=42
**D26A Manning** 42.36 69 P P 06 36 49.4 +0.6
baz=42
**IRM Iron Mountain** 42.44 93 P P 06 36 51.5 +1.9
baz=42
**A28A Rude Farm, Bot** 42.59 66 P P 06 36 50.8 +0.1
baz=42
**E26A Carlson Angus** 42.65 70 P P 06 36 51.4 +0.2
baz=42
**B28A Dugan Ranch, T** 42.78 66 P P 06 36 52.7 +0.4
baz=43
**G25A Newell** 42.80 72 P P 06 36 52.7 +0.2
baz=43
**D27A Center** 42.84 69 P P 06 36 52.8 +0.1
baz=43
**O20A White River Ci** 42.87 81 P P 06 36 53.6 +0.3
baz=43
**O20A White River Ci** 42.87 81 *e*P P 06 36 53.8 +0.6
comp=Z,15nm,0.7s
**F26A Lodgepole** 42.87 71 P P 06 36 53.8 +0.7
baz=43
**PDMCI Parker Dam,Lak** 42.96 92 P P 06 36 55.1 +1.3
baz=43
**H25A Fruitdale** 43.02 73 P P 06 36 54.4 +0.1
baz=43
**Y12C Blythe** 43.10 93 P P 06 36 55.8 +0.9
baz=43
**A29A Manning Farm,** 43.17 65 P P 06 36 55.7 +0.4
baz=43
**E27A Carson** 43.19 69 P P 06 36 54.9 -0.7
baz=43
**G26A Maurine** 43.23 71 P P 06 36 56.0 +0.1
baz=43,SNR=10.0
**F27A Lemmon** 43.24 70 P P 06 36 56.0 0.0
baz=43
**I25A Rochford** 43.28 74 P P 06 36 56.4 -0.1
baz=43
**B29A Wagenman Farm,** 43.34 66 P P 06 36 57.0 +0.3
baz=43
**D28A Regan** 43.34 68 P P 06 36 57.1 +0.3
baz=43
**H26A Fairpoint** 43.51 72 P P 06 36 58.3 +0.1
baz=43
**MDND Maddock** 43.54 67 P P 06 36 58.5 +0.2
baz=43
**PV04 Paradox Valley** 43.54 84 *e*P P 06 36 58.8 +0.2
**G27A Dupree** 43.57 71 P P 06 36 58.2 -0.4
baz=43
**I26A New Underwood** 43.79 73 P P 06 37 00.7 +0.3
baz=44
**N23A Red Feather La** 43.80 79 P P 06 37 01.4 +0.6
baz=44
**WUAZ Wupatki** 43.86 89 P P 06 37 02.5 +1.2
baz=44
**WUAZ Wupatki** 43.86 89 *e*P P 06 37 02.6 +1.4
comp=Z,6.3nm,0.8s
**H27A Howes** 43.91 72 P P 06 37 01.2 -0.1
baz=44
**PV01 Paradox Valley** 43.91 84 *e*P P 06 37 02.2 +0.5
**B30A Myrvik Farm, E** 43.92 65 P P 06 37 02.1 +0.6
baz=44
**F28A McLaughlin** 43.96 70 P P 06 37 02.2 +0.5
baz=44
**D29A Pettibone, Tap** 43.97 68 P P 06 37 01.8 -0.1
baz=44
**E29A Napoleon** 44.22 68 P P 06 37 03.6 -0.2
baz=44
**I27A Quinn** 44.24 73 P P 06 37 04.4 +0.2
baz=44
**C30A Mose, Pekin** 44.25 66 P P 06 37 04.2 +0.1
baz=44
**ULM Lac du Bonnet** 44.31 62 P P 06 37 04.8 +0.3
comp=Z,3.0nm,0.5s,baz=311,slow=12,SNR=4.6
ULM LR LR 06 57 06.6
comp=Z,166nm,18.3s,baz=332,slow=38
**B31A Greenbush Farm** 44.32 65 P P 06 37 04.8 +0.3
baz=44
**G28A Parade** 44.33 71 P P 06 37 04.7 0.0
baz=44
**D30A Buchanan** 44.42 67 P P 06 37 05.6 +0.2
baz=44
**H28A Mission Ridge** 44.50 71 P P 06 37 06.5 +0.4
baz=44
**F29A Eureka** 44.53 69 P P 06 37 06.4 +0.1
baz=44
**MVCO Mesa Verde** 44.53 85 P P 06 37 06.8 0.0
baz=44
**C31A Landman Farms,** 44.62 66 P P 06 37 07.0 0.0
baz=44
**E30A Jud** 44.67 68 P P 06 37 07.4 -0.1
baz=44
**J27A Elkhorn Farm,** 44.75 73 P P 06 37 08.3 +0.1
baz=45
**I28A Midland** 44.80 72 P P 06 37 08.8 +0.3
baz=45
**G29A Hoven** 44.84 70 P P 06 37 08.9 +0.1
baz=45
**B32A Ashes, Strandq** 44.95 64 P P 06 37 09.7 +0.1
baz=45
**F30A Leola** 44.99 69 P P 06 37 10.0 +0.1
baz=45
**H29A Onida** 45.00 71 P P 06 37 10.2 +0.1
baz=45
**D31A Mcclaflin, Tow** 45.04 67 P P 06 37 09.9 -0.5
baz=45
**J28A Allard Ranch,** 45.10 73 P P 06 37 11.3 +0.4
baz=45
**S22A 4UR Ranch, Cre** 45.22 83 P P 06 37 11.7 -0.5
baz=45
**E31A Nome** 45.23 67 P P 06 37 11.5 -0.3
baz=45
**I29A Vivian Onida** 45.30 72 P P 06 37 12.5 0.0
baz=45,SNR=5.4
**G30A Faulkton** 45.32 70 P P 06 37 12.6 0.0
baz=45
**KSRS Korea Array** 45.35 277 P P 06 37 13.3 +0.5
comp=Z,2.2nm,0.6s,baz=56,slow=7.6,SNR=11
KSRS LR LR 06 55 25.8
comp=Z,59nm,20.1s,baz=62,slow=35
**KS01 Wonju Array Si** 45.35 277 *e*P P 06 37 12.8 -0.1
**KSAR Wonju Array Be** 45.38 277 P P 06 37 13.4 +0.2
**KSAR Wonju Array Be** 45.38 277 P P 06 37 13.3 +0.2
**AGMN Agassiz Nation** 45.38 64 P P 06 37 12.6 -0.4
baz=45
**AGMN Agassiz Nation** 45.38 64 *e*P P 06 37 13.2 +0.2
comp=Z,7.3nm,0.8s
**D32A Dogwood Acres,** 45.39 66 P P 06 37 12.9 -0.2
baz=45
**F31A Hecla** 45.42 68 P P 06 37 13.4 +0.1
baz=45
**J29A Okreek** 45.65 72 P P 06 37 15.0 -0.2
baz=46
**E32A Braaten, Kindr** 45.67 67 P P 06 37 15.4 0.0
baz=46
**G31A Cede** 45.81 69 P P 06 37 16.4 0.0
baz=46
**SUSD South Dakota S** 45.83 70 P P 06 37 16.5 -0.1
baz=46,SNR=5.0
**I30A Oacoma** 45.87 71 P P 06 37 17.0 0.0
baz=46
**B34A Aery, Baudette** 45.95 63 P P 06 37 17.3 -0.2
baz=46,SNR=5.5
**SDCO Great Sand Dun** 46.03 82 P P 06 37 19.1 +0.5
baz=46
**SDCO Great Sand Dun** 46.03 82 *e*P P 06 37 18.4 -0.2
comp=Z,40nm,2.4s
**K29A Lazy Trails An** 46.03 73 P P 06 37 18.8 +0.5
baz=46
**D33A AnnSam, Waubun** 46.05 65 P P 06 37 17.9 -0.4
baz=46,SNR=5.1
**H31A Wolsey** 46.09 70 P P 06 37 18.9 +0.2
baz=46
**J30A Dallas** 46.18 72 P P 06 37 19.6 +0.1
baz=46
**P26A Davis Ranch, A** 46.19 78 P P 06 37 19.9 +0.2
baz=46
**G32A Webster** 46.20 69 P P 06 37 19.1 -0.5
baz=46
**I31A Royce, Wessing** 46.32 71 P P 06 37 20.7 +0.2
baz=46
**E33A Westby DABS, E** 46.32 66 P P 06 37 20.1 -0.4
baz=46
**TUC Tucson** 46.38 91 *e*P P 06 37 22.3 +1.1
TUC pmax pmax
comp=Z,4.0nm,1.0s
**TUC Tucson** 46.38 91 *e*P P 06 37 22.3 +1.1
comp=Z,4.4nm,1.0s
**JNU Nakatsue** 46.39 270 P P 06 37 19.6 -1.6
comp=Z,6.7nm,0.8s,baz=105,slow=7.3,SNR=3.4
**D34A Park Rapids** 46.44 65 P P 06 37 21.0 -0.4
baz=46,SNR=9.7
**K30A Beset** 46.50 73 P P 06 37 22.1 +0.1
baz=46
**F33A 5 Mile Ranch,** 46.54 67 P P 06 37 22.0 -0.2
baz=46
**M29A Burnside Ranch** 46.62 75 P P 06 37 23.1 +0.1
baz=46
**J31A Geddes** 46.64 71 P P 06 37 22.7 -0.4
baz=46,SNR=7.5
**H32A Carlson Farm,** 46.68 69 P P 06 37 22.4 -0.9
baz=46
**R26A Arlington** 46.92 80 P P 06 37 25.3 -0.1
baz=47
**H33A Prehn Over Nor** 46.97 69 P P 06 37 25.4 -0.2
baz=47
**T25A Trinidad** 47.08 82 P P 06 37 26.5 -0.3
baz=47
**D35A Remer** 47.08 65 P P 06 37 25.9 -0.5
baz=47,SNR=9.2
**J32A Parkston** 47.11 71 P P 06 37 26.3 -0.4
baz=47
**E35A Pequot Lakes** 47.19 65 P P 06 37 27.2 0.0
baz=47
**LAZ Ladron** 47.21 87 *e*P P 06 37 28.9 +1.1
comp=Z,2.7nm,1.2s
**ANMO Albuquerque** 47.26 85 *i*P P 06 37 29.2 +1.0
ANMO pmax pmax
comp=Z,3.0nm,1.4s
**ANMO Albuquerque** 47.26 85 *e*P P 06 37 29.9 +1.7
comp=Z,6.2nm,1.4s
**G34A Benson** 47.27 68 P P 06 37 27.7 -0.2
baz=47
**I33A Coleman** 47.32 69 P P 06 37 27.9 -0.4
baz=47
**R27A Eads** 47.32 79 P P 06 37 29.3 +0.7
baz=47
**S26A Kim** 47.34 81 P P 06 37 29.5 +0.8
baz=47
**C36A Pine Crest Far** 47.36 63 P P 06 37 28.2 -0.3
baz=47
**K32A Verdigre** 47.47 72 P P 06 37 28.8 -0.7
baz=47
**F35A Swanville** 47.51 66 P P 06 37 29.0 -0.7
baz=47,SNR=5.1
**D36A Goodland** 47.52 64 P P 06 37 29.6 -0.2
baz=47
**H34A Spellman Lake,** 47.53 68 P P 06 37 29.2 -0.7
baz=47
**T26A Comanche Natio** 47.55 81 P P 06 37 29.8 -0.7
baz=48
**ECSD EROS Data Cent** 47.61 70 P P 06 37 30.4 -0.2
baz=47
**ECSD EROS Data Cent** 47.61 70 *e*P P 06 37 29.9 -0.7
comp=Z,135nm,3.0s
**P29A Atwood** 47.61 77 P P 06 37 31.3 +0.6
baz=48
**J33A Davis** 47.66 70 P P 06 37 30.7 -0.3
baz=48
**C37A Embarrass** 47.73 63 P P 06 37 30.9 -0.6
baz=48,SNR=6.1
**R28A Tribune** 47.88 79 P P 06 37 32.5 -0.4
baz=48
**G35A Watkins** 47.94 67 P P 06 37 32.5 -0.6
baz=48
**D37A Cotton** 47.94 64 P P 06 37 32.1 -0.9
baz=48
**EYMN Ely** 47.98 62 P P 06 37 32.7 -0.7
baz=48
**P30A Selden** 48.06 76 P P 06 37 34.5 +0.3
baz=48
**121A Cookes Peak, D** 48.07 89 P P 06 37 35.1 +0.6
baz=48
**121A Cookes Peak, D** 48.07 89 *e*P P 06 37 35.2 +0.7
comp=Z,3.4nm,0.8s
**F36A Milaca** 48.09 66 P P 06 37 33.0 -1.3
baz=48
**O31A Woolen Ranch,** 48.23 75 P P 06 37 35.9 +0.5
baz=48
**R29A Marienthal** 48.24 78 P P 06 37 36.2 +0.6
baz=48
**C38A Sawbill Land.** 48.24 62 P P 06 37 35.3 -0.1
baz=48
**J34A George** 48.26 70 P P 06 37 35.5 -0.2
baz=48
**S28A Manter** 48.32 80 P P 06 37 37.0 +0.8
baz=48
**G36A St. Michael** 48.34 66 P P 06 37 36.2 0.0
baz=48
**U27A Thompson Grove** 48.51 81 P P 06 37 38.1 +0.3
baz=48
**K34A Le Mars** 48.55 71 P P 06 37 37.7 -0.1
baz=48,SNR=7.0
**M33A Taylor Creek F** 48.60 72 P P 06 37 38.0 -0.2
baz=48
**J35A Milford** 48.65 69 P P 06 37 38.4 -0.2
baz=48
**L34A Svendsen Farm,** 48.83 71 P P 06 37 39.7 -0.4
baz=49
**R30A Dighton** 48.85 78 P P 06 37 41.0 +0.8
baz=49
**SPMN St. Paul** 48.88 66 P P 06 37 39.3 -1.0
baz=49,SNR=5.7
**U28A Mallet** 48.91 81 P P 06 37 41.0 +0.2
baz=49
**P32A Huiting Farm,** 48.99 75 P P 06 37 41.0 -0.3
baz=49
**K35A Storm Lake** 49.03 70 P P 06 37 40.9 -0.7
baz=49
**S30A Montezuma** 49.15 79 P P 06 37 42.2 -0.3
baz=49
**R31A Burdett** 49.30 77 P P 06 37 43.8 +0.1
baz=49
**O33A Hebron** 49.31 74 P P 06 37 43.0 -0.7
baz=49
**Q32A Meitler Ranch,** 49.42 76 P P 06 37 44.2 -0.4
baz=49
**U30A WK&E Inc. Balk** 49.76 80 P P 06 37 47.1 -0.2
baz=50
**O34A Beatrice** 49.77 73 P P 06 37 47.1 -0.1
baz=50
**Q33A Connelly Farm,** 49.85 75 P P 06 37 48.0 +0.1
baz=50
**N35A Tabor** 49.96 72 P P 06 37 48.6 0.0
baz=50
**DAG Danmarks Havn** 49.99 8 *i*P P 06 37 47.8 -0.6
DAG pmax pmax
comp=Z,9.0nm,0.6s
**DAG Danmarks Havn** 49.99 8 *i*P P 06 37 47.8 -0.6
comp=Z,13nm,0.6s
**MNTX Cornudas Mount** 50.12 88 P P 06 37 50.5 +0.5
baz=50,SNR=11
**MNTX Cornudas Mount** 50.12 88 *e*P P 06 37 51.0 +1.0
comp=Z,6.0nm,0.8s
**COWI Conover** 50.38 63 *e*P P 06 37 51.3 -0.4
comp=Z,5.1nm,0.4s
**TLY Talaya** 50.39 306 P P 06 37 50.9 -0.9
comp=Z,4.1nm,0.6s,baz=234,slow=7.4,SNR=3.7
**Q34A Chapman** 50.43 75 P P 06 37 52.1 -0.1
baz=50
**KSU1 Kansas State U** 50.51 74 P P 06 37 53.3 +0.5
baz=50
**Y28A McKinney Farm,** 50.54 83 P P 06 37 54.0 +0.8
baz=50
**R34A Isabella, Hill** 50.65 76 P P 06 37 54.2 +0.3
baz=50
**BJI Beijing** 50.76 287 P P 06 37 55.1 +0.5
BJI PP PP 06 39 51.1 +0.4
BJI S S 06 45 07.1 -0.6
BJI PMZ
comp=Z,6.0nm,1.1s
BJI PMZ
comp=Z,110nm,6.0s
BJI LN
comp=Z,150nm,15.5s
BJI LE
comp=Z,160nm,15.5s
BJI LZ
comp=Z,67nm,20.6s
**Z28A Tucker Farm, M** 50.87 84 P P 06 37 55.8 +0.1
baz=51
**ULN Ulaanbaatar** 50.97 301 ⇑*i*P P 06 37 56.1 -0.2
ULN pmax pmax
comp=Z,3.0nm,1.0s
**SUMG Summit** 50.99 17 *e*P P 06 37 57.1 +0.7
SUMG pmax pmax
comp=Z,60nm,1.7s
**SUMG Summit** 50.99 17 *i*P P 06 37 57.2 +0.7
comp=Z,11nm,0.7s
**SUMG Summit** 50.99 17 *e*P P 06 37 57.1 +0.7
comp=Z,60nm,1.7s
**S34A Willow Spring** 51.12 76 P P 06 37 57.5 0.0
baz=51
**128A Castleberry Fa** 51.27 85 P P 06 37 58.7 0.0
baz=51
**Z29A Hungry Hill Ra** 51.31 84 P P 06 37 59.1 +0.1
baz=51
**SONA1 Songino Array** 51.32 301 *e*P P 06 37 59.2 +0.2
**SONM Songino Array** 51.33 301 P P 06 37 58.3 -0.7
comp=Z,0.9nm,0.6s,baz=62,slow=7.5,SNR=5.6
SONM PcP PcP 06 39 13.3 -0.2
comp=Z,1.3nm,0.6s,baz=59,slow=2.8,SNR=2.8
SONM LR LR 07 01 51.8
comp=Z,212nm,18.5s,baz=48,slow=39
**ZAK Zakamensk** 51.37 305 *e*P P 06 37 59.4 +0.2
ZAK *e* 06 39 15.0
ZAK pmax pmax
comp=Z,3.0nm,1.4s
ZAK pmax pmax
comp=Z,4.0nm,1.3s
**Y30A Stafford Cattl** 51.38 82 P P 06 37 59.9 +0.4
baz=51
**X31A McDonald Ranch** 51.43 81 P P 06 38 00.8 +0.9
baz=51
**T34A McClaskey Farm** 51.53 77 P P 06 38 00.3 -0.2
baz=51
**S35A Otter Creek Ra** 51.61 76 P P 06 38 00.7 -0.4
baz=52
**Z30A Sanderson Ranc** 51.64 83 P P 06 38 01.6 +0.1
baz=52
**R36A Gordon, Harris** 51.67 75 P P 06 38 01.3 -0.3
baz=52
**MOY Mondy** 51.70 307 *e*P P 06 38 02.1 +0.3
**U34A Anderson Ranch** 51.70 78 P P 06 38 02.8 +1.0
baz=52
**JFWS Jewell Farm** 51.76 67 *e*P P 06 38 01.1 -1.1
JFWS pmax pmax
comp=Z,7.0nm,0.7s
**JFWS Jewell Farm** 51.76 67 *e*P P 06 38 01.1 -1.1

comp=Z,7.0nm,0.7s
**X32A Elmer** 52.00 81 P P 06 38 03.7 -0.3
baz=52
**T35A Sooner Cattle** 52.00 77 P P 06 38 03.7 -0.3
baz=52
**W33A Caddo, Fort Co** 52.00 80 P P 06 38 04.3 +0.3
baz=52
**S36A Lake Cedric, C** 52.02 75 P P 06 38 04.4 +0.3
baz=52
**WMOK Wichita Mounta** 52.09 80 eP P 06 38 05.1 +0.4
WMOK pmax pmax
comp=Z,60nm,2.4s
**WMOK Wichita Mounta** 52.09 80 eP P 06 38 05.1 +0.4
comp=Z,60nm,2.4s
**130A Snyder** 52.22 84 P P 06 38 06.0 +0.2
baz=52
**329A Wagon Wheel Ra** 52.36 85 P P 06 38 07.0 +0.2
baz=52
**S37A Fort Scott** 52.45 75 P P 06 38 06.8 -0.5
baz=52
**131A Roby** 52.52 83 P P 06 38 07.9 0.0
baz=52
**230A Sterling City** 52.61 84 P P 06 38 08.7 0.0
baz=53
**Z32A Haskell** 52.64 82 P P 06 38 08.9 +0.1
baz=53,SNR=5.3
**X34A Smith Ranch, M** 52.76 80 P P 06 38 09.8 +0.1
baz=53
**T37A Cheneyville 18** 52.82 75 P P 06 38 09.7 -0.3
baz=53
**TX31 Lajitas Ar. Si** 52.83 89 eP P 06 38 10.1 -0.3
**TXAR Lajitas Array** 52.83 89 P P 06 38 10.6 +0.3
comp=Z,1.8nm,0.5s,baz=300,slow=5.5,SNR=52
TXAR PcP PcP 06 39 19.6 +0.3
comp=Z,0.8nm,0.7s,baz=298,slow=4.0,SNR=1.5
TXAR LR LR 06 58 38.8
comp=Z,42nm,19.7s,baz=0.0,slow=34
**330A Mertzon** 52.91 85 P P 06 38 11.3 +0.4
baz=53
**HHC Hu-ho-hao-te** 52.92 291 eP P 06 38 12.1 +1.2
HHC sP sP 06 38 26.2 +0.9
HHC S S 06 45 28.1 -9.5
HHC PMZ
comp=Z,16nm,0.7s
HHC PMZ
comp=Z,150nm,8.6s
HHC LN
comp=Z,240nm,16.0s
HHC LE
comp=Z,180nm,17.8s
HHC LZ
comp=Z,160nm,17.3s
**W35A Tecumseh** 52.96 78 P P 06 38 11.4 +0.2
baz=53
**ABTX Abilene, Hawle** 53.01 83 P P 06 38 11.4 -0.1
baz=53
**429A Davenport Ranc** 53.01 86 P P 06 38 11.8 +0.2
baz=53
**Z33A Whitaker Ranch** 53.09 81 P P 06 38 12.4 +0.3
baz=53
**TUL1 Tulsa** 53.10 77 P P 06 38 12.4 +0.2
baz=53
**529A Stev Forest Ra** 53.16 87 P P 06 38 13.2 +0.5
baz=53
**U37A Salina** 53.18 76 P P 06 38 12.4 -0.3
baz=53
**Y34A Reagan Ranch,** 53.24 80 P P 06 38 13.6 +0.4
baz=53
**430A Baggett Ranch,** 53.30 86 P P 06 38 13.8 0.0
baz=53
**W36A Wetumka** 53.36 78 P P 06 38 13.6 -0.5
baz=53
**331A San Angelo** 53.44 84 P P 06 38 14.5 -0.2
baz=53
**133A Hamilton Ranch** 53.46 82 P P 06 38 14.7 -0.1
baz=53
**232A Coleman** 53.51 83 P P 06 38 14.8 -0.5
baz=54
**V37A Hulbert** 53.51 77 P P 06 38 14.3 -0.9
baz=53
**Z34A Collier Ranch,** 53.55 81 P P 06 38 15.4 -0.1
baz=54
**U38A Gravette** 53.59 76 P P 06 38 15.3 -0.5
baz=54
**530A J-C Ranch, Com** 53.69 86 P P 06 38 16.9 +0.3
baz=54,SNR=7.4
**431A Sonora** 53.76 85 P P 06 38 17.1 -0.1
baz=54,SNR=7.8
**332A Millersview** 53.80 84 P P 06 38 17.3 -0.1
baz=54
**HDIL Hopedale** 53.83 68 P P 06 38 17.0 -0.4
baz=54
**W37A Quinton** 53.84 77 P P 06 38 17.7 +0.1
baz=54
**233A Rising Star** 53.88 83 P P 06 38 17.9 0.0
baz=54
**V38A Canehill** 53.97 76 P P 06 38 18.4 -0.1
baz=54
**134A White-Moore Ra** 53.99 82 P P 06 38 19.5 +0.7
baz=54
**531A Rocksprings** 54.16 86 P P 06 38 20.1 +0.1
baz=54
**X37A Clayton** 54.25 78 P P 06 38 20.3 -0.2
baz=54
**333A Richland Sprin** 54.31 83 P P 06 38 21.2 +0.2
baz=54
**234A Clairette** 54.35 82 P P 06 38 21.8 +0.4
baz=54
**JCT Junction City** 54.40 85 eP P 06 38 23.4 +1.6
JCT pmax pmax
comp=Z,5.0nm,0.6s
**JCT Junction City** 54.40 85 P P 06 38 22.1 +0.3
baz=54
**JCT Junction City** 54.40 85 eP P 06 38 23.4 +1.6
comp=Z,5.2nm,0.6s
**135A Vickery Place,** 54.41 81 P P 06 38 22.3 +0.5
baz=54
**W38A Poteau** 54.44 77 P P 06 38 21.9 0.0
baz=54
**NJ2 Nanjing** 54.50 278 eP P 06 38 23.8 +1.4
NJ2 PMZ
comp=Z,30nm,0.7s
**Z36A Blue Ridge** 54.51 80 P P 06 38 22.8 +0.3
baz=54
**Y37A Hugo** 54.52 79 P P 06 38 22.6 0.0
baz=54
**532A Rocksprings** 54.58 85 P P 06 38 23.7 +0.6
baz=54
**433A Art** 54.64 84 P P 06 38 23.3 -0.2
baz=55
**631A Perdido Creek** 54.67 86 P P 06 38 23.3 -0.5
baz=55
**334A Lometa** 54.76 83 P P 06 38 24.5 +0.1
baz=55
**WHTX Lake Whitney** 54.78 82 P P 06 38 24.9 +0.5
baz=55
**136A Ennis** 55.01 81 P P 06 38 27.2 +1.1
baz=55
**Z37A Pogue Cattle C** 55.05 79 P P 06 38 26.5 +0.1
baz=55
**632A Uvalde** 55.09 86 P P 06 38 27.5 +0.7
baz=55
**434A Burnet** 55.10 83 P P 06 38 26.9 0.0
baz=55
**533A Kerrville** 55.16 85 P P 06 38 27.2 -0.1
baz=55
**SFIN Scholer Farm** 55.20 67 P P 06 38 26.8 -0.6
baz=55
**335A Moody** 55.29 82 P P 06 38 28.8 +0.7
baz=55
**MIAR Mount Ida** 55.36 77 P P 06 38 28.2 -0.4
baz=55
**534A Blanco** 55.53 84 P P 06 38 29.9 -0.1
baz=56
**732A Laxson Ranch,** 55.53 86 P P 06 38 30.1 +0.2
baz=56
**SCHQ Schefferville** 55.63 43 P P 06 38 31.1 +0.8
comp=Z,8.2nm,0.9s,baz=321,slow=7.2,SNR=6.7
**OLIL Olney** 55.73 69 eP P 06 38 33.4 +2.1
comp=Z,14nm,0.7s
**833A Chaparral WMA,** 56.17 86 P P 06 38 34.7 +0.2
baz=56
**635A Leesville** 56.41 84 P P 06 38 36.8 +0.6
baz=56
**835A Beeville** 57.16 85 P P 06 38 42.0 +0.4
baz=57
**ZAA0 Zalesovo Array** 57.51 318 eP P 06 38 43.8 +0.2
**ZALV Zalesovo Beam** 57.51 318 P P 06 38 41.2 -2.4
comp=Z,2.3nm,0.4s,baz=41,slow=6.0,SNR=6.6
ZALV LR LR 07 06 06.2
comp=Z,85nm,18.2s,baz=68,slow=39
**KEV Kevo** 57.78 353 eP P 06 38 45.5 +0.2
KEV pmax pmax
comp=Z,16nm,1.2s
**KEV Kevo** 57.78 353 eP P 06 38 45.5 +0.2
comp=Z,16nm,1.2s
**ARCES ARCESS Array B** 58.11 354 P P 06 38 47.1 -0.5
comp=Z,1.9nm,0.4s,baz=21,slow=7.3,SNR=40
ARCES PcP PcP 06 39 39.1 +0.2
comp=Z,1.1nm,0.5s,baz=32,slow=5.3,SNR=2.5
ARCES LR LR 07 05 44.5
comp=Z,65nm,18.9s,baz=4.5,slow=38
**GTA Gaotai** 60.50 297 eP P 06 39 04.9 +0.2
GTA pP pP 06 39 15.0 -0.3
GTA sP sP 06 39 18.9 -0.4
GTA PP PP 06 41 18.8 +0.9
GTA S S 06 47 15.6 -2.2
GTA sS sS 06 47 32.7 -2.4
GTA SS SS 06 51 15.0 -0.4
GTA PMZ
comp=Z,5.0nm,0.8s
GTA PMZ
comp=Z,130nm,5.7s
GTA LN
comp=Z,140nm,18.5s
GTA LE
comp=Z,150nm,18.1s
GTA LZ
comp=Z,160nm,19.0s
**LZH Lanzhou** 60.59 292 eP P 06 39 05.6 +0.2
LZH pP pP 06 39 16.0 0.0
LZH sP sP 06 39 19.5 -0.5
LZH PP PP 06 41 20.4 +1.6
LZH PMZ
comp=Z,20nm,1.4s
LZH PMZ
comp=Z,75nm,7.8s
LZH LN
comp=Z,400nm,15.1s
LZH LE
comp=Z,410nm,15.5s
LZH LZ
comp=Z,560nm,18.2s
**KMSC Kings Mountain** 62.12 68 P P 06 39 15.3 -0.3
baz=62
**KURK Kurchatov** 62.47 318 eP P 06 39 17.4 -0.2
KURK pmax pmax
comp=Z,26nm,0.8s
**KURK Kurchatov** 62.47 318 eP P 06 39 17.4 -0.2
comp=Z,26nm,0.8s
**WMQ Urumqi** 63.59 308 eP P 06 39 28.0 +2.7
WMQ PMZ
comp=Z,11nm,1.0s
**BRVK Borovoye** 63.83 324 ⇑iP P 06 39 26.6 0.0
BRVK pmax pmax
comp=Z,12nm,1.7s
**BRVK Borovoye** 63.83 324 eP P 06 39 26.6 0.0
comp=Z,6.9nm,0.8s
**MKAR Makanchi Array** 63.88 313 P P 06 39 26.3 -0.9
comp=Z,1.1nm,0.4s,baz=57,slow=7.0,SNR=21
**MKAR Makanchi Array** 63.88 313 ceP P 06 39 26.2 -0.9
MKAR pmax pmax
comp=Z,1.0nm,0.4s
**MK01 Makanchi Array** 63.90 313 eP P 06 39 26.3 -1.0
**CD2 Chengdu** 64.36 288 eP P 06 39 30.0 -0.5
CD2 PMZ
comp=Z,10.0nm,0.5s
**ARU Arti** 64.76 333 ciP P 06 39 32.3 -0.3
ARU S S 06 48 11.9 +1.5
ARU SS SS 06 52 29.2 +8.4
ARU pmax pmax
comp=Z,6.0nm,1.0s
**ARU Arti** 64.76 333 eP P 06 39 32.4 -0.3
comp=Z,4.8nm,0.8s
**GYA Guiyang** 65.90 282 P P 06 39 42.2 +1.5
GYA PMZ
comp=Z,20nm,0.8s
**FINES FINESS Array B** 66.05 352 P P 06 39 40.8 -0.2
comp=Z,5.8nm,0.5s,baz=21,slow=6.4,SNR=33
FINES LR LR 07 10 23.8
comp=Z,61nm,19.0s,baz=23,slow=38
**NB2 NORSAR Subarra** 67.13 360 P P 06 39 47.8 -0.1
comp=Z,5.3nm,0.6s,baz=0.4,slow=6.2
**NOA NORSAR Array B** 67.13 360 P P 06 39 47.8 -0.1
comp=Z,5.3nm,0.6s,baz=1.2,slow=6.3,SNR=25
NOA LR LR 07 08 38.5
comp=Z,21nm,21.0s,baz=350,slow=36
**VSU Vasula** 68.93 351 iP P 06 39 59.4 +0.2
VSU pmax pmax
comp=Z,46nm,1.0s
**KMI Kunming** 69.24 284 P P 06 40 02.9 +1.0
KMI PMZ
comp=Z,11nm,1.0s
KMI PMZ
comp=Z,100nm,4.9s
**QIZ Qiongzhong** 69.52 275 P P 06 40 03.2 -0.2
QIZ S S 06 49 09.3 +0.5
**TKM2 Tokmak 2** 69.87 315 eP P 06 40 06.0 +0.4
TKM2 pmax pmax
comp=Z,4.0nm,1.1s
**TKM2 Tokmak 2** 69.87 315 eP P 06 40 06.0 +0.4
comp=Z,4.2nm,1.1s
**ABKAR Akbulak array** 70.56 328 eP P 06 40 09.4 +0.1
comp=Z,2.8nm,0.6s
**AAK Ala-Archa** 70.58 315 P P 06 40 09.7 -0.2
comp=Z,6.1nm,0.7s,baz=82,slow=5.0,SNR=17
**AAK Ala-Archa** 70.58 315 iP P 06 40 09.8 -0.1
AAK pmax pmax
comp=Z,13nm,0.9s
**EKS2 Erkin-Say** 70.87 316 eP P 06 40 12.3 +0.7
EKS2 pmax pmax
comp=Z,8.0nm,0.8s
**EKS2 Erkin-Say** 70.87 316 eP P 06 40 12.3 +0.7
comp=Z,8.4nm,0.8s
**OBN Obninsk** 70.91 345 ⇑eP P 06 40 10.6 -0.8
OBN e 06 40 31.4
OBN pmax pmax
comp=Z,6.0nm,0.9s
OBN MLR MLR
comp=Z,48nm,17.0s
**KKAR Karatay Array** 71.88 318 eP P 06 40 17.6 +0.1
KKAR pmax pmax
comp=Z,4.0nm,0.5s
**KKAR Karatay Array** 71.88 318 eP P 06 40 17.6 +0.1
comp=Z,4.3nm,0.5s
**KSH Kashi** 72.45 312 eP P 06 40 24.6 +3.5
KSH epP PcP 06 40 38.4 -0.4
KSH S S 06 49 43.8 +1.3
KSH sS sS 06 50 03.2 +3.0
KSH ScS ScS 06 50 24.8 -0.5
KSH PMZ
comp=Z,7.0nm,0.4s
KSH PMZ
comp=Z,89nm,4.4s
KSH LN
comp=Z,160nm,7.9s
KSH LE
comp=Z,86nm,6.3s
KSH LZ
comp=Z,130nm,5.2s
**AKASG Malin Array Be** 76.28 348 P P 06 40 41.3 -1.7
comp=Z,4.5nm,0.5s,baz=15,slow=5.8,SNR=14
**AKASG Malin Array Be** 76.28 348 ceP P 06 40 42.2 -0.8
AKASG pmax pmax
comp=Z,5.0nm,0.5s
**KIEV Kiev** 76.29 348 iP P 06 40 42.5 -0.5
KIEV pmax pmax
comp=Z,4.0nm,0.8s
**KIEV Kiev** 76.29 348 eP P 06 40 42.6 -0.5
comp=Z,8.9nm,0.8s
**CMAR Chiang Mai Arr** 76.58 283 P P 06 40 45.9 +0.6
comp=Z,4.1nm,0.7s,baz=23,slow=6.4,SNR=10
CMAR LR LR 07 18 55.3
comp=Z,45nm,18.1s,baz=218,slow=39
**CM01 Chiang Mai Arr** 76.60 283 eP P 06 40 45.7 +0.3
**CLL Collm** 76.87 358 eP P 06 40 47.0 +0.7
**CLL Collm** 76.87 358 eP P 06 40 47.0 +0.7
**BRG Berggiesshubel** 77.28 358 eP P 06 40 48.9 +0.2
comp=Z,5.3nm,0.8s
**BRG Berggiesshubel** 77.28 358 eP P 06 40 48.9 +0.2
BRG pmax pmax
comp=Z,5.0nm,0.8s
**DPC Dobruska-Polom** 77.73 356 eP P 06 40 52.3 +1.1
**DPC Dobruska-Polom** 77.73 356 eP P 06 40 52.3 +1.1
**PRU Pruhonice** 78.15 357 eP P 06 40 54.4 +0.9
**PRU Pruhonice** 78.15 357 eP P 06 40 54.4 +0.9
**KHC Kasperske Hory** 79.04 358 eP P 06 40 59.6 +1.1
**KHC Kasperske Hory** 79.04 358 eP P 06 40 59.6 +1.1
**GERES GERESS Array B** 79.32 358 P P 06 41 00.3 +0.2
comp=Z,1.7nm,0.7s,baz=34,slow=5.0,SNR=6.8
**KBL Kabul** 79.67 314 eP P 06 41 02.1 -0.3
**KBL Kabul** 79.67 314 eP P 06 41 02.1 -0.3
**BUR04 Bucovina Ar. S** 79.79 350 eP P 06 41 02.1 -0.6
**KIV Kislovodsk** 80.30 337 iP P 06 41 06.2 +0.7
KIV pmax pmax
comp=Z,11nm,0.7s
KIV MLR MLR
comp=Z,39nm,18.0s
**KBZ Khabaz** 80.46 337 P P 06 41 06.4 +0.2
comp=Z,5.5nm,0.8s,baz=2.3,slow=1.8,SNR=7.5
**RETA Reutte** 80.72 360 ⇓iPKiKP P 06 41 08.5 +0.8
comp=Z,1.5nm,0.5s
**ARSA Arzberg** 80.86 357 ⇑iPKiKP P 06 41 09.4 +1.0
comp=Z,4.1nm,0.7s
**DAVA Damuels** 80.92 0 ⇑epPKiKP P 06 41 10.1 +1.3
comp=Z,6.5nm,0.9s
**KBA Koelnbreinsper** 81.09 358 ⇑iPKiKP P 06 41 09.6 -0.2
comp=Z,18nm,1.1s
**GEYT Alibeck** 81.14 324 P P 06 41 10.2 +0.2
comp=Z,3.3nm,0.6s,baz=351,slow=4.9,SNR=4.0
**FETA Feichten** 81.18 360 ⇓epPKiKP P 06 41 10.4 +0.2
comp=Z,8.7nm,1.1s
**SOKA Soboth** 81.45 357 ⇓iPKiKP P 06 41 11.4 -0.2
comp=Z,8.5nm,1.1s
**OBKA Obir** 81.63 357 ⇓iPKiKP P 06 41 13.1 +0.6
comp=Z,3.1nm,0.7s
**BNI Bardonecchia** 83.09 3 eP P 06 41 22.8 +2.5
BNI pmax pmax
comp=Z,11nm,1.0s
**BNI Bardonecchia** 83.09 3 eP P 06 41 22.8 +2.5
comp=Z,11nm,1.0s
**BRTR Keskin Array B** 86.28 342 P P 06 41 36.5 0.0
comp=Z,1.0nm,0.6s,baz=65,slow=2.6,SNR=4.0
**BR231 Keskin MP Arra** 86.33 343 eP P 06 41 37.7 +1.1
**WRA Warramunga Arr** 86.82 232 P P 06 41 37.6 -1.4
comp=Z,1.2nm,0.5s,baz=34,slow=5.6,SNR=17
**ESDC Sonseca Array** 87.66 11 P P 06 41 43.5 +0.4
comp=Z,1.0nm,0.5s,baz=347,slow=5.0,SNR=6.5
**PSI Prapat** 88.78 273 P P 06 41 47.4 -1.3
comp=Z,3.4nm,0.5s,baz=18,slow=11,SNR=4.8
**PSI Prapat** 88.78 273 eP P 06 41 52.5 +3.7
**PSI Prapat** 88.78 273 eP P 06 41 52.5 +3.7
**FITZ Fitzroy Crossi** 89.69 239 P P 06 41 51.1 -1.5
comp=Z,0.9nm,0.5s,baz=45,slow=7.4,SNR=6.7
**ASAR Alice Springs** 90.21 230 P P 06 41 53.5 -1.5
comp=Z,3.0nm,0.8s,baz=35,slow=4.6,SNR=22
**PALK Pallekele** 96.19 290 P P 06 42 23.8 +0.9
comp=Z,2.8nm,0.6s,baz=115,slow=1.2,SNR=3.0
**RAYN Ar Rayn** 98.65 328 eP P 06 42 32.7 -1.2
comp=Z,2.8nm,1.0s
**TORD Torodi Ar. Bea** 114.50 9 PKP PKPdf 06 47 33.9 -0.8
comp=Z,0.2nm,0.4s,baz=334,slow=2.2,SNR=3.4
TORD PKKPab **PKKPab** 06 58 17.9 -4.4
comp=Z,1.0nm,0.9s,baz=176,slow=3.4,SNR=4.1
**DBIC Dimbokro** 119.93 18 PKP **PKPdf** 06 47 45.0 -0.2
comp=Z,1.7nm,0.9s,baz=31,slow=6.6,SNR=3.8
**MAW Mawson** 150.67 218 PKPbc **PKPbc** 06 48 45.2 +0.1
comp=Z,1.3nm,0.6s,baz=21,slow=5.9,SNR=4.5
**BOSA Boshof** 154.02 329 PKPbc **PKPbc** 06 48 54.9 +0.8
comp=Z,1.6nm,0.5s,baz=8.7,slow=4.2,SNR=6.9

*AUST **01** 06:30:28.5±6.0, 5°.64N×122°.53E, h0km, Error ellipse: s-maj=1.6km s-min=1.5km az=317.0*
*ISCJB **01** 06:31:29.8±1.0, 0°.40N±0°.10×121°.95E±0°.06, h190km±6km, Error ellipse: s-maj=15.8km s-min=10.4km az=7.8*
*DJA **01** 06:31:32.8±0.8, 0°N±4°×12°2E±°, h166km±7km, M3.6/6, MLv3.6/6*

**ISC 01 06:31:30.8±1.6, 0°.4N±0°.1×121°.96E±0°.07, h182km±11km, n11, σ0°73/14, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **0.04** | **337** | P | **Pn** | **06 31 55.1** | **+0.2** |
| MRSI | | | | S | **Sn** | **06 32 12.7** | **-0.7** |
| **GTOI** | **Gorontalo** | **1.07** | **79** | P | **Pn** | **06 31 59.8** | **+0.5** |
| **APSI** | **Ampana** | **1.37** | **193** | P | **Pn** | **06 32 02.7** | **+0.9** |
| APSI | | | | S | **Sn** | **06 32 25.9** | **-0.1** |
| **LUWI** | **Luwuk** | **1.68** | **151** | P | **Pn** | **06 32 05.5** | **+0.8** |
| | baz=6.7,SNR=12 | | | | | | |
| **LUWI** | **Luwuk** | **1.68** | **151** | P | **Pn** | **06 32 05.5** | **+0.8** |
| LUWI | | | | S | **Sn** | **06 32 30.5** | **-0.6** |
| **MPSI** | **Mapaga** | **2.06** | **267** | P | **Pn** | **06 32 09.7** | **+1.0** |
| MPSI | | | | S | **Sn** | **06 32 37.9** | **-0.2** |
| **PCI** | **Palu** | **2.51** | **238** | P | **Pn** | **06 32 13.9** | **+0.2** |
| PCI | | | | S | **Sn** | **06 32 46.4** | **-0.7** |
| **MTN** | **Manton Dam** | **16.03** | **146** | P | **Pn** | **06 35 06.6** | **+0.1** |
| | baz=20,SNR=6.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **18.78** | **169** | P | **P** | **06 35 35.6** | **-0.7** |
| | baz=24,SNR=11 | | | | | | |
| **WRKA** | **Warakurna** | **26.06** | **167** | P | P | 06 36 46.8 | -0.7 |
| | baz=31,SNR=11 | | | | | | |
| **HTT** | **Hallett** | **37.28** | **156** | P | P | 06 38 24.1 | -1.3 |
| | baz=42,SNR=4.8 | | | | | | |

*ISCJB **01** 06:41:18.2±0.6, 32°.22N±0°.03×115°.20W±0°.04, h14km±5km, Error ellipse: s-maj=5.3km s-min=4.7km az=28.7*
*ECX **01** 06:41:19.6±0.5, 32°.19N×115°.24W, h10km, MD3.1, ML3.3*
*NEIC **01** 06:41:19.7, 32°.20N×115°.25W, h9km, ML2.8(PAS), ML3.0(ECX), After ECX.*
*MEX **01** 06:41:20.0±0.4, 32°.29N×115°.09W, h22km±15km, MD3.9*

**ISC 01 06:41:18.2±0.9, 32°.19N±0°.02×115°.23W±0°.02, h16km±7km, n44, σ0°70/67, 5C-2D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MBIG** | **Mexicali** | **0.21** | **8** | iP | **Pb** | **06 41 23.9** | **+0.1** |
| MBIG | | | | eS | **Sg** | **06 41 26.3** | **-0.3** |
| **MBIG** | **Mexicali** | **0.21** | **8** | eP | **Pb** | **06 41 24.1** | **+0.3** |
| **MBIG** | **Mexicali** | **0.21** | **8** | eP | **Pb** | **06 41 24.1** | **+0.3** |
| **CPBX** | **Cerro Prieto** | **0.23** | **345** | eP | **Pg** | **06 41 23.9** | **+0.4** |
| CPBX | | | | eS | **Sb** | **06 41 27.7** | **-0.4** |
| CPBX | | | | IAML | | 06 41 29.2 | |
| | comp=E,13μm,0.2s | | | | | | |
| **CPBX** | **Cerro Prieto** | **0.23** | **345** | iP | **Pg** | **06 41 23.9** | **+0.4** |
| CPBX | | | | eS | **Sg** | **06 41 27.5** | **+0.4** |
| **EMSC** | **East Mesa** | **0.58** | **21** | ⇑iP | **Pg** | **06 41 30.1** | **+0.3** |
| **EMSC** | **East Mesa** | **0.58** | **21** | iP | **Pg** | **06 41 30.1** | **+0.3** |
| **SGL** | **Mount Signal** | **0.62** | **318** | ⇓iP | **Pg** | **06 41 30.2** | **-0.2** |
| **SGL** | **Mount Signal** | **0.62** | **318** | iP | **Pg** | **06 41 30.2** | **-0.2** |
| **DREC** | **Desert Rsrch C** | **0.64** | **343** | eP | **Pb** | **06 41 31.0** | **0.0** |
| **DREC** | **Desert Rsrch C** | **0.64** | **343** | iP | **Pb** | **06 41 31.0** | **0.0** |
| **RDX** | **Rancho Dawling** | **0.66** | **247** | ⇑eP | **Pb** | **06 41 31.6** | **+0.1** |
| RDX | | | | eS | **Sb** | **06 41 40.3** | **-0.1** |
| RDX | | | | IAML | | 06 41 42.2 | |
| | comp=N,866nm,0.3s | | | | | | |
| RDX | | | | ⇑e | | 06 41 42.2 | |
| **RDX** | **Rancho Dawling** | **0.66** | **247** | eP | **Pb** | **06 41 31.6** | **+0.1** |
| RDX | | | | eS | **Sb** | **06 41 40.3** | **-0.1** |
| **COA** | **Coachella** | **0.67** | **8** | eP | **Pg** | **06 41 31.3** | **-0.2** |
| **COA** | **Coachella** | **0.67** | **8** | eP | **Pg** | **06 41 31.3** | **-0.2** |
| **YMD** | **Yuma Desert** | **0.68** | **58** | ⇑iP | **Pg** | **06 41 31.4** | **-0.2** |
| **YMD** | **Yuma Desert** | **0.68** | **58** | iP | **Pg** | **06 41 31.4** | **-0.2** |
| **WESC** | **Westside Schoo** | **0.70** | **323** | eP | **Pb** | **06 41 32.2** | **0.0** |
| **WESC** | **Westside Schoo** | **0.70** | **323** | eP | **Pb** | **06 41 32.2** | **0.0** |
| **YUH** | **Yuha Desert** | **0.74** | **308** | ⇓iP | **Pg** | **06 41 32.1** | **-0.6** |
| **YUH** | **Yuha Desert** | **0.74** | **308** | iP | **Pg** | **06 41 32.1** | **-0.6** |
| **RMX** | **La Rumorosa** | **0.82** | **300** | eP | **Pg** | **06 41 34.0** | **-0.4** |
| RMX | | | | eS | **Sg** | **06 41 44.7** | **-0.6** |
| **RMX** | **La Rumorosa** | **0.82** | **300** | eP | **Pg** | **06 41 34.0** | **-0.4** |
| RMX | | | | eS | **Sg** | **06 41 44.7** | **-0.6** |
| **IBP** | **Imperial Bould** | **0.86** | **303** | eP | **Pb** | **06 41 34.8** | **-0.2** |
| **IBP** | **Imperial Bould** | **0.86** | **303** | eP | **Pb** | **06 41 34.8** | **-0.2** |
| **GLA** | **Glamis** | **0.92** | **22** | ePg | **Pb** | **06 41 34.4** | **-1.5** |
| GLA | | | | eSg | **Sb** | **06 41 46.4** | **-1.6** |
| **ZAX** | **El Zacaton** | **1.11** | **233** | eP | **Pb** | **06 41 38.9** | **-0.3** |
| ZAX | | | | eS | **Sb** | **06 41 53.6** | **+0.1** |
| **SPIG** | **San Pedro Mart** | **1.16** | **190** | iP | **Pn** | **06 41 39.7** | **-0.5** |
| SPIG | | | | eS | **Sb** | **06 41 55.5** | **+0.4** |
| **SPIG** | **San Pedro Mart** | **1.16** | **190** | eP | **Pn** | **06 41 39.6** | **-0.5** |
| SPIG | | | | eS | **Sb** | **06 41 55.8** | **+0.7** |
| **SPIG** | **San Pedro Mart** | **1.16** | **190** | eP | **Pn** | **06 41 39.6** | **-0.5** |
| SPIG | | | | eS | **Sb** | **06 41 55.8** | **+0.7** |
| **SPX** | **San Pedro Mart** | **1.16** | **190** | eP | **Pn** | **06 41 39.6** | **-0.5** |
| SPX | | | | ⇑e | | 06 41 57.2 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| SPX | | | | IAML | | 06 41 57.2 | |
| | comp=E,334nm,0.3s | | | | | | |
| **SPX** | **San Pedro Mart** | **1.16** | **190** | *e*P | **Pn** | **06 41 39.6** | **-0.5** |
| SPX | | | | *e*S | **Sg** | **06 41 56.4** | **+0.4** |
| **CBX** | **Cerro Bola** | **1.22** | **276** | *i* P | **Pn** | **06 41 40.2** | **-0.6** |
| CBX | | | | *e*S | **Sn** | **06 41 56.6** | **-0.4** |
| **CBX** | **Cerro Bola** | **1.22** | **276** | *e*P | **Pn** | **06 41 40.3** | **-0.4** |
| CBX | | | | *e*S | **Sn** | **06 41 56.8** | **-0.2** |
| CBX | | | | *e*S | **Sn** | **06 41 56.9** | **-0.2** |
| CBX | | | | *e* | | 06 41 58.9 | |
| CBX | | | | IAML | | 06 41 58.9 | |
| | comp=E,658nm,0.3s | | | | | | |
| **CBX** | **Cerro Bola** | **1.22** | **276** | *e*P | **Pn** | **06 41 40.3** | **-0.4** |
| CBX | | | | *e*S | **Sn** | **06 41 56.8** | **-0.2** |
| **ECNX** | **Esteban Cantu** | **1.28** | **246** | *e*P | **Pn** | **06 41 41.5** | **-0.1** |
| ECNX | | | | *e*S | **Sn** | **06 41 58.7** | **+0.3** |
| **ECNX** | **Esteban Cantu** | **1.28** | **246** | *e*P | **Pn** | **06 41 41.5** | **-0.1** |
| ECNX | | | | *e*S | **Sn** | **06 41 58.7** | **+0.3** |
| **BAR** | **Barrett** | **1.31** | **292** | *e*Pn | **Pb** | **06 41 42.4** | **-0.1** |
| BAR | | | | *e*Sg | **Sb** | **06 41 58.8** | **-0.3** |
| **PBX** | **Punta Banda** | **1.35** | **251** | *e*P | **Pn** | **06 41 42.4** | **0.0** |
| PBX | | | | *e*S | **Sb** | **06 42 00.5** | **+0.4** |
| **PBX** | **Punta Banda** | **1.35** | **251** | *e*P | **Pn** | **06 41 42.4** | **0.0** |
| PBX | | | | *e*S | **Sb** | **06 42 00.5** | **+0.4** |
| **LDFC** | **Landfair** | **2.88** | **2** | *e*Pg | **Pg** | **06 42 15.7** | **+2.2** |
| **GSC** | **Goldstone** | **3.37** | **338** | *e*Pg | **Pg** | **06 42 24.8** | **+2.0** |
| **TUC** | **Tucson** | **3.77** | **87** | *e*Pg | **Pg** | **06 42 31.5** | **+1.0** |
| TUC | | | | *e*Sg | **Sg** | **06 43 16.9** | **-2.5** |
| **WUAZ** | **Wupatki** | **4.61** | **43** | *e*Pn | **Pn** | **06 42 29.0** | **+1.5** |

*IDC **01** 06:44:06.8±2.4, 4.°23S×125.°68E, h442km±25km, mb3.2/3, mb1 3.3/6, mb1mx2.9/29, mbtmp4.1/6, Error ellipse: s-maj=55.0km s-min=15.5km az=58.0*
*DJA **01** 06:44:08.5±0.8, 5°S±5°×12°5E±°, h462km±14km, M4.1/19, mb4.3/12, mB4.6/6, MLv4.3/19, Mw(mB)3.8/6*
*ISCJB **01** 06:44:09.1±0.4, 4.°62S±0.°05×125.°38E±0.°06, h441km, mb3.7/2, Error ellipse: s-maj=8.1km s-min=6.9km az=19.9*
**ISC 01 06:44:07.8**±0.8**, 4.°56S**±0.°08×**125.°32E**±0.°10**, h441**km**, n26, σ2s24**/28**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NLAI** | **Namlea** | **2.21** | **54** | P | **P** | **06 45 11.1** | **+2.4** |
| **SANI** | **Sanana** | **2.58** | **15** | P | P | 06 45 14.6 | +3.4 |
| **KDI** | **Kendari** | **2.76** | **282** | P | **P** | **06 45 15.1** | **+2.7** |
| **AAI** | **Ambon** | **3.00** | **73** | P | **P** | **06 45 15.5** | **+1.4** |
| **MSAI** | **Masohi** | **3.80** | **72** | P | **P** | **06 45 21.8** | **+1.2** |
| **LBMI** | **Labuha** | **4.46** | **29** | P | **P** | **06 45 29.7** | **+3.1** |
| **BSSI** | **Bau Bau, Buton** | **5.06** | **252** | P | **P** | **06 45 35.1** | **+2.8** |
| | 165nm,0.7s,0.5nm | | | | | | |
| **APSI** | **Ampana** | **5.15** | **315** | P | **P** | **06 45 35.7** | **+2.4** |
| | 42nm,1.0s,524nm0.1nm | | | | | | |
| **BKSI** | **Bulukumba** | **5.23** | **261** | P | **P** | **06 45 36.3** | **+2.3** |
| | 64nm,0.6s,722nm0.2nm | | | | | | |
| **SOEI** | **Soe** | **5.27** | **191** | P | **P** | **06 45 36.5** | **+2.0** |
| | 28nm,0.9s,0.2nm | | | | | | |
| **EDFI** | **Ende, Flores** | **5.51** | **221** | P | **P** | **06 45 39.2** | **+2.3** |
| | 42nm,0.7s,2μm0.1nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.56** | **276** | P | **P** | **06 45 38.6** | **+1.2** |
| | 32nm,0.7s,0.1nm | | | | | | |
| **KAPI** | **Kappang** | **5.57** | **265** | P | **P** | **06 45 39.6** | **+2.2** |
| | 5.1nm,0.3s,baz=117,slow=5.7,SNR=17 | | | | | | |
| **TTSI** | **Tana Toraja** | **5.69** | **285** | P | **P** | **06 45 41.8** | **+3.2** |
| | 35nm,0.7s,0.1nm | | | | | | |
| **BATI** | **Baumata** | **5.85** | **196** | P | **P** | **06 45 42.9** | **+2.6** |
| | 60nm,0.3s,baz=50,slow=2.5,SNR=18 | | | | | | |
| BATI | | | | S | **S** | **06 46 57.3** | **+1.5** |
| | 11nm,0.3s,baz=18,slow=20,SNR=1.6 | | | | | | |
| **BATI** | **Baumata** | **5.85** | **196** | P | **P** | **06 45 42.8** | **+2.6** |
| | 165nm,0.9s,2μm0.7nm | | | | | | |
| **MRSI** | **Marisa** | **6.03** | **326** | P | **P** | **06 45 44.1** | **+1.9** |
| | 40nm,0.6s,0.1nm | | | | | | |
| **SWI** | **Sorong** | **6.98** | **58** | P | **P** | **06 45 54.4** | **+2.2** |
| | 72nm,0.7s,1μm0.3nm | | | | | | |
| **FAKI** | **Fak Fak** | **7.10** | **77** | P | **P** | **06 45 54.6** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **13.47** | **179** | P | **P** | **06 47 03.6** | **+0.9** |
| | 0.3nm,0.3s,baz=348,slow=8.3,SNR=11 | | | | | | |
| FITZ | | | | S | **S** | **06 49 24.8** | **-2.4** |
| | 0.3nm,0.3s,baz=92,slow=20,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.64** | **151** | P | **P** | **06 47 47.7** | **+0.5** |
| | 1.9nm,0.3s,baz=337,slow=10,SNR=86 | | | | | | |
| **CBJI** | **Citeko** | **18.48** | **263** | P | **P** | **06 47 53.2** | **-2.5** |
| **ASAR** | **Alice Springs** | **20.73** | **157** | P | **P** | **06 48 17.2** | **+0.8** |
| | 1.6nm,0.4s,baz=349,slow=15,SNR=26 | | | | | | |
| ASAR | | | | ScP | **ScP** | **06 54 59.0** | **-2.5** |
| | 0.6nm,0.6s,baz=351,slow=2.2,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.68** | **328** | P | **P** | **06 53 53.5** | **-1.1** |
| | 0.9nm,0.4s,baz=115,slow=8.7,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.39** | **335** | P | **P** | **06 54 15.8** | **-1.9** |
| | 0.7nm,0.3s,baz=116,slow=3.4,SNR=1.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.75** | **283** | PKP | **PKPdf** | **07 02 13.3** | **-2.2** |
| | 0.6nm,0.7s,baz=59,slow=1.8,SNR=4.8 | | | | | | |

*ISCJB **01** 07:01:15.1±0.5, 23.°74N±0.°02×122.°17E±0.°02, h15km±6km, Error ellipse: s-maj=4.9km s-min=2.7km az=138.6*
*TAP **01** 07:01:15.8, 23.°78N×122.°14E, h18km, ML3.0, C*
*JMA **01** 07:01:15.1±0.2, 23.°77N×122.°15E, h20km±4km, M2.5*
**ISC 01 07:01:15.4**±1.3**, 23.°75N**±0.°03×**122.°14E**±0.°03**, h21**km±4km**, n37, σ0s58**/66**, 3C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWD** | **Chiawan** | **0.60** | **303** | *i* P | **Pb** | **07 01 27.3** | **0.0** |
| | baz=301 | | | | | | |
| TWD | | | | S | **Sb** | **07 01 35.4** | **0.0** |
| | baz=301 | | | | | | |
| **ESL** | **Shilin** | **0.65** | **276** | P | **Pb** | **07 01 27.9** | **-0.3** |
| | baz=272 | | | | | | |
| ESL | | | | S | **Sb** | **07 01 36.8** | **-0.1** |
| | baz=272 | | | | | | |
| **ENA** | **Nanau** | **0.77** | **331** | *e*P | **Pb** | **07 01 30.2** | **+0.2** |
| | baz=314 | | | | | | |
| ENA | | | | *e*S | **Sb** | **07 01 40.6** | **+0.5** |
| | baz=314 | | | | | | |
| **EHY** | **Hungye** | **0.79** | **252** | P | **Pb** | **07 01 30.7** | **+0.2** |
| | baz=260 | | | | | | |
| EHY | | | | *e*S | **Sb** | **07 01 41.7** | **+0.9** |
| | baz=260 | | | | | | |
| **TWF1** | **Yuli** | **0.87** | **243** | *i* P | **Pb** | **07 01 32.2** | **+0.3** |
| | baz=240 | | | | | | |
| TWF1 | | | | S | **Sn** | **07 01 44.1** | **-0.4** |
| | baz=240 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.90** | **296** | ⇑*i*P | **Pb** | **07 01 32.1** | **-0.4** |
| | baz=280 | | | | | | |
| WHF | | | | *e*S | **Sb** | **07 01 43.3** | **-0.9** |
| | baz=280 | | | | | | |
| **TWC** | **Suao** | **0.90** | **343** | *e*P | **Pb** | **07 01 32.4** | **+0.2** |
| | baz=354 | | | | | | |
| TWC | | | | *e*S | **Sb** | **07 01 42.4** | **-1.4** |
| | baz=354 | | | | | | |
| **WDT** | **Danda** | **0.93** | **271** | ⇑*i*P | **Pb** | **07 01 32.9** | **0.0** |
| | baz=267 | | | | | | |
| WDT | | | | S | **Sb** | **07 01 44.8** | **-0.1** |
| | baz=267 | | | | | | |
| **CHKT** | **Chengkung** | **0.96** | **228** | *e*P | **Pb** | **07 01 32.8** | **-0.6** |
| | baz=211 | | | | | | |
| CHKT | | | | *e*S | **Sb** | **07 01 44.8** | **-0.9** |
| | baz=211 | | | | | | |
| **NNS** | **Nan Shan** | **0.98** | **314** | P | **Pb** | **07 01 33.6** | **-0.2** |
| | baz=312 | | | | | | |
| NNS | | | | *e*S | **Sb** | **07 01 46.4** | **-0.1** |
| | baz=312 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.01** | **46** | P | **Pb** | **07 01 33.7** | **-0.5** |
| JYNG | | | | S | **Sb** | **07 01 47.0** | **-0.1** |
| **TWT** | **Tachien** | **1.02** | **300** | *i* P | **Pn** | **07 01 34.5** | **-0.1** |
| | baz=296 | | | | | | |
| TWT | | | | S | **Sn** | **07 01 48.2** | **-0.2** |
| | baz=296 | | | | | | |
| **ENTT** | **Nioudou** | **1.03** | **329** | *e*P | **Pn** | **07 01 34.2** | **-0.5** |
| | baz=315 | | | | | | |
| ENTT | | | | *e*S | **Sb** | **07 01 48.0** | **+0.3** |
| | baz=315 | | | | | | |
| **TWE** | **Neicheng** | **1.06** | **336** | *e*P | **Pb** | **07 01 36.4** | **+1.3** |
| | baz=335 | | | | | | |
| TWE | | | | *e*S | **Sn** | **07 01 49.3** | **+0.1** |
| | baz=335 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.06** | **48** | P | **Pn** | **07 01 34.4** | **-0.7** |
| **EGS** | | **1.11** | **350** | *e*P | **Pn** | **07 01 35.5** | **-0.2** |
| | baz=350 | | | | | | |
| **YUS** | **Yu-Shan** | **1.12** | **257** | ⇑P | **Pb** | **07 01 36.6** | **+0.2** |
| | baz=254 | | | | | | |
| YUS | | | | S | **Sb** | **07 01 50.8** | **+0.1** |
| | baz=254 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.15** | **277** | P | **Pn** | **07 01 36.5** | **+0.1** |
| | baz=274 | | | | | | |
| SMLT | | | | *e*S | **Sb** | **07 01 50.6** | **-0.5** |
| | baz=274 | | | | | | |
| **ELDTW** | **Lidau** | **1.18** | **242** | *e*P | **Pn** | **07 01 36.2** | **-0.5** |
| | baz=239 | | | | | | |
| **TYC** | **Yuchr** | **1.19** | **278** | *e*P | **Pn** | **07 01 36.9** | **+0.1** |
| | baz=275 | | | | | | |
| TYC | | | | *e*S | **Sn** | **07 01 52.2** | **-0.1** |
| | baz=275 | | | | | | |
| **ALS** | **Alishan** | **1.25** | **259** | *e*P | **Pn** | **07 01 38.2** | **+0.2** |
| | baz=256 | | | | | | |
| ALS | | | | *e*S | **Sn** | **07 01 54.4** | **0.0** |
| | baz=256 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.26** | **354** | *e*P | **Pn** | **07 01 38.1** | **+0.3** |
| | baz=354 | | | | | | |
| **TWG** | **Pinlang** | **1.35** | **227** | *e*P | **Pn** | **07 01 39.0** | **-0.1** |
| | baz=216 | | | | | | |
| TWG | | | | *e*S | **Sn** | **07 01 55.1** | **-1.3** |
| | baz=216 | | | | | | |
| **CHN5** | **Tsauling** | **1.35** | **264** | *e*P | **Pb** | **07 01 39.8** | **-0.3** |
| | baz=261 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **07 01 57.3** | **+0.3** |
| | baz=261 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.36** | **346** | *e*P | **Pn** | **07 01 39.0** | **-0.2** |
| | baz=345 | | | | | | |
| NWF | | | | *e*S | **Sb** | **07 01 57.5** | **+0.3** |
| | baz=345 | | | | | | |
| **NSTT** | **Nanjuang** | **1.36** | **310** | *e*P | **Pb** | **07 01 40.5** | **+0.3** |
| | baz=308 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **07 01 56.3** | **-0.4** |
| | baz=308 | | | | | | |
| **STYT** | **Tauyuan** | **1.40** | **246** | *e*P | **Pb** | **07 01 41.3** | **+0.4** |
| | baz=231 | | | | | | |
| STYT | | | | *e*S | **Sb** | **07 01 58.5** | **+0.1** |
| | baz=231 | | | | | | |
| **WTP** | **Ta-pu** | **1.49** | **251** | *e*P | **Pb** | **07 01 43.3** | **+0.9** |
| | baz=248 | | | | | | |
| WTP | | | | *e*S | **Sb** | **07 02 00.7** | **-0.3** |
| | baz=248 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.55** | **78** | P | **Pn** | **07 01 41.9** | **+0.1** |
| **IRIF** | **Iriomote-Funau** | **1.56** | **68** | P | **Pn** | **07 01 42.2** | **+0.2** |
| **CHN1** | **Nanshi** | **1.59** | **250** | *e*P | **Pb** | **07 01 44.5** | **+0.5** |
| | baz=247 | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **07 02 04.0** | **+0.3** |
| | baz=247 | | | | | | |
| **TWK** | **Hsinying** | **1.59** | **253** | *e*P | **Pb** | **07 01 43.5** | **-0.7** |
| | baz=250 | | | | | | |
| **SSD** | **Sandimen** | **1.71** | **235** | *e*P | **Pb** | **07 01 46.2** | **+0.1** |
| | baz=221 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.77** | **74** | P | **Pn** | **07 01 45.6** | **+0.7** |
| JKRS | | | | *e*S | **Sn** | **07 02 06.9** | **+0.1** |
| **EAST** | **Anshuo** | **1.81** | **222** | *e*P | **Pn** | **07 01 46.6** | **+1.2** |
| | baz=220 | | | | | | |
| EAST | | | | *e*S | **Sn** | **07 02 06.0** | **-1.7** |
| | baz=220 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.93** | **71** | P | **Pn** | **07 01 47.6** | **+0.6** |
| JIJ | | | | *e*S | **Sn** | **07 02 10.0** | **-0.6** |
| **SCZT** | **Fangliau** | **1.96** | **226** | *e*P | **Pb** | **07 01 50.5** | **+0.1** |
| | baz=215 | | | | | | |
| SCZT | | | | *e*S | **Sn** | **07 02 12.7** | **+1.2** |
| | baz=215 | | | | | | |

*ISK **01** 07:21:31.2, 37.°26N×28.°19E, h3km, MD2.7*
*ISCJB **01** 07:21:32.0±0.6, 37.°23N±0.°04×28.°19E±0.°04, h0km, Error ellipse: s-maj=7.0km s-min=4.2km az=28.8*
*CSEM **01** 07:21:32.4±0.2, 37.°23N×28.°19E, h1km, MD2.7, Error ellipse: s-maj=6.0km s-min=4.2km az=31.0, Mining explosion.*
*DDA **01** 07:21:32.0, 37.°21N×28.°16E, h7km, Md2.6*
**ISC 01 07:21:31.8**±1.0**, 37.°25N**±0.°03×**28.°18E**±0.°03**, h0**km**, n20, σ0s62**/26**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.14** | **145** | *e*PG | **Pg** | **07 21 34.6** | **+0.1** |
| YER | | | | *e*SG | **Sg** | **07 21 37.6** | **+1.3** |
| **YER** | **Yerkesik** | **0.14** | **145** | *e*Pg | **Pg** | **07 21 34.6** | **+0.1** |
| YER | | | | *e*Sg | **Sg** | **07 21 37.6** | **+1.3** |
| **AYDN** | **Tasoluk** | **0.48** | **330** | *i* P | **Pb** | **07 21 43.3** | **+0.2** |
| **AYDN** | **Tasoluk** | **0.48** | **330** | P | **Pb** | **07 21 43.3** | **+0.2** |
| **TURN** | **Turunc** | **0.50** | **138** | *i* P | **Pg** | **07 21 40.7** | **-0.8** |
| TURN | | | | *i* S | **Sg** | **07 21 47.9** | **-0.1** |
| **TURN** | **Turunc** | **0.50** | **138** | P | **Pg** | **07 21 40.7** | **-0.8** |
| TURN | | | | S | **Sg** | **07 21 47.9** | **-0.1** |
| **DALY** | **Dalyan (Mu˜la** | **0.57** | **139** | *e*PG | **Pg** | **07 21 43.5** | **+0.7** |
| **DALY** | **Dalyan (Mu˜la** | **0.57** | **139** | *e*Pg | **Pg** | **07 21 43.5** | **+0.7** |
| **BDRM** | **Kayabasi** | **0.62** | **253** | *i* P | **Pg** | **07 21 43.5** | **-0.2** |
| **BDRM** | **Kayabasi** | **0.62** | **253** | P | **Pg** | **07 21 43.5** | **-0.2** |
| **BODT** | **Bodrum** | **0.72** | **255** | *e*PG | **Pg** | **07 21 46.1** | **+0.4** |
| BODT | | | | *e*SG | **Sb** | **07 21 56.7** | **-1.1** |
| **BODT** | **Bodrum** | **0.72** | **255** | *e*Pg | **Pg** | **07 21 46.1** | **+0.4** |
| BODT | | | | *e*Sg | **Sb** | **07 21 56.7** | **-1.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.73** | **342** | *e*PG | **Pg** | **07 21 46.2** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.73** | **342** | *e*Pg | **Pg** | **07 21 46.2** | **+0.3** |
| **DNZL** | **Cakiroluk** | **0.81** | **57** | *i* P | **Pb** | **07 21 48.7** | **-0.3** |
| **DNZL** | **Cakiroluk** | **0.81** | **57** | P | **Pb** | **07 21 48.7** | **-0.3** |
| **FETY** | **Fethiye** | **0.95** | **130** | *e*PG | **Pg** | **07 21 50.2** | **+0.2** |
| **FETY** | **Fethiye** | **0.95** | **130** | *e*Pg | **Pg** | **07 21 50.2** | **+0.2** |
| **NIS1** | **Nisyros Isl.** | **1.03** | **232** | *e*PG | **Pb** | **07 21 52.7** | **+0.1** |
| **NIS1** | **Nisyros Isl.** | **1.03** | **232** | *e*Pg | **Pb** | **07 21 52.7** | **+0.1** |

**NNC 01 07:24:38.4**±0.7**, 49.°99N**×**78.°55E, h0**km**, mb3.1, mpv3.0, 6C, Error ellipse: s-maj=14.6km s-min=2.8km az=79.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR07** | **Kurchatov Arra** | **0.59** | **358** | P | Pg | 07 24 50.1 | +0.3 |
| KUR07 | | | | S | Sb | 07 24 59.4 | -1.3 |
| **KUR06** | **Kurchatov Arra** | **0.61** | **359** | P | Pg | 07 24 50.5 | +0.4 |
| KUR06 | | | | S | Sb | 07 25 00.0 | -1.2 |
| **KUR14** | **Kurchatov Arra** | **0.63** | **3** | P | Pg | 07 24 50.4 | +0.1 |
| KUR14 | | | | S | Sg | 07 24 59.5 | +0.9 |
| **KUR15** | **Kurchatov Arra** | **0.63** | **1** | P | Pg | 07 24 50.6 | +0.2 |
| KUR15 | | | | S | Sg | 07 25 00.0 | +1.4 |
| **KURBB** | **Kurchatov Arra** | **0.63** | **359** | ⇑P | Pg | 07 24 50.8 | +0.3 |
| | 28nm,0.3s | | | | | | |
| KURBB | | | | ⇑S | Sg | 07 25 00.1 | +1.3 |
| | 236nm,0.8s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.64** | **357** | P | Pg | 07 24 50.8 | +0.2 |
| KUR16 | | | | S | Sg | 07 24 59.8 | +0.9 |
| **KUR17** | **Kurchatov Arra** | **0.64** | **356** | P | Pg | 07 24 51.1 | +0.4 |
| KUR17 | | | | S | Sg | 07 24 59.9 | +0.8 |
| **KUR05** | **Kurchatov Arra** | **0.65** | **360** | P | Pg | 07 24 51.1 | +0.1 |
| KUR05 | | | | S | Sg | 07 25 00.5 | +1.1 |
| **KUR04** | **Kurchatov Arra** | **0.67** | **360** | P | Pg | 07 24 51.5 | +0.2 |
| KUR04 | | | | S | Sg | 07 25 00.8 | +0.8 |
| **KURK** | **Kurchatov** | **0.73** | **4** | ⇑P | Pg | 07 24 52.2 | -0.2 |
| | 30nm,0.4s | | | | | | |
| KURK | | | | ⇑S | Sg | 07 25 02.2 | +0.4 |
| | 222nm,1.3s | | | | | | |
| **MK31** | **Makanchi Array** | **4.06** | **141** | Pn | Pn | 07 25 42.3 | +0.6 |
| | 0.3nm,0.3s,baz=332,slow=11,SNR=16 | | | | | | |
| MK31 | | | | Pg | Pb | 07 25 50.2 | -0.5 |
| | 0.9nm,0.3s,baz=328,slow=15,SNR=17 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 07 26 32.4 | +2.4 |
| | 1.3nm,0.3s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 07 26 46.4 | |
| | 10nm,0.5s | | | | | | |

*NEIC **01** 07:24:47.4, 43.°60S×172.°34E, h8km, ML3.8(WEL), After WEL.*
*NEIC Felt at Christchurch.*
**WEL 01 07:24:47.4**±0.1**, 43.°61S**×**172.°33E, h5**km**, ML3.8**/19**, 4C-2D, Error ellipse: s-maj=0.9km s-min=0.6km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.21** | **83** | PG | Pg | 07 24 51.8 | +0.1 |
| CRLZ | | | | SG | Sg | 07 24 54.7 | +0.2 |
| CRLZ | | | | AML | AML | 07 24 55.2 | |
| **CRLZ** | **Canterbury Las** | **0.21** | **83** | Pg | Pg | 07 24 51.4 | -0.3 |
| CRLZ | | | | Sg | Sg | 07 24 54.7 | +0.2 |
| **MQZ** | **McQueen's Vall** | **0.26** | **114** | PG | Pg | 07 24 52.6 | +0.2 |
| MQZ | | | | SG | Sg | 07 24 56.3 | +0.5 |
| MQZ | | | | AML | AML | 07 24 56.7 | |
| **MQZ** | **McQueen's Vall** | **0.26** | **114** | Pg | Pg | 07 24 52.6 | +0.2 |
| MQZ | | | | Sg | Sg | 07 24 56.3 | +0.5 |
| **OXZ** | **Oxford** | **0.35** | **323** | PG | Pg | 07 24 54.4 | +0.2 |
| **OXZ** | **Oxford** | **0.35** | **323** | Pg | Pg | 07 24 54.4 | +0.2 |
| **LTZ** | **Lake Taylor** | **0.82** | **357** | ⇑P* | Pg | 07 25 03.3 | 0.0 |
| LTZ | | | | AML | AML | 07 25 17.6 | |
| LTZ | | | | AML | AML | 07 25 20.7 | |
| **LTZ** | **Lake Taylor** | **0.82** | **357** | P* | Pg | 07 25 02.9 | -0.4 |
| **RPZ** | **Rata Peaks** | **0.93** | **263** | ⇓P* | Pb | 07 25 06.0 | -0.1 |
| RPZ | | | | AML | AML | 07 25 22.5 | |
| RPZ | | | | AML | AML | 07 25 24.3 | |
| **RPZ** | **Rata Peaks** | **0.93** | **263** | P* | Pb | 07 25 06.0 | -0.1 |
| **WVZ** | **Waitaha Valley** | **1.28** | **294** | ⇓P* | Pn | 07 25 10.9 | -1.0 |
| WVZ | | | | AML | AML | 07 25 30.4 | |
| WVZ | | | | AML | AML | 07 25 32.7 | |
| **WVZ** | **Waitaha Valley** | **1.28** | **294** | P* | Pn | 07 25 10.9 | -1.0 |
| **KHZ** | **Kahutara** | **1.48** | **37** | ⇑PN | Pn | 07 25 12.3 | -2.4 |
| KHZ | | | | AML | AML | 07 25 36.5 | |
| KHZ | | | | AML | AML | 07 25 42.9 | |
| **KHZ** | **Kahutara** | **1.48** | **37** | Pn | Pn | 07 25 12.3 | -2.4 |
| **LBZ** | **Lake Benmore** | **1.73** | **242** | PN | Pn | 07 25 17.4 | -0.9 |
| LBZ | | | | AML | AML | 07 25 45.3 | |
| LBZ | | | | AML | AML | 07 25 45.4 | |
| LBZ | | | | AML | AML | 07 25 48.7 | |
| LBZ | | | | AML | AML | 07 25 48.7 | |
| **LBZ** | **Lake Benmore** | **1.73** | **242** | Pn | Pn | 07 25 17.4 | -0.9 |
| **ODZ** | **Otahua Downs** | **1.88** | **219** | ⇑PN | Pn | 07 25 18.8 | -1.5 |
| ODZ | | | | AML | AML | 07 25 48.9 | |
| ODZ | | | | AML | AML | 07 25 48.9 | |
| ODZ | | | | AML | AML | 07 25 52.1 | |
| ODZ | | | | AML | AML | 07 25 52.1 | |
| **ODZ** | **Otahua Downs** | **1.88** | **219** | Pn | Pn | 07 25 18.8 | -1.5 |
| **THZ** | **Tophouse** | **1.89** | **13** | ⇑PN | Pn | 07 25 18.2 | -2.3 |
| THZ | | | | AML | AML | 07 25 57.9 | |
| THZ | | | | AML | AML | 07 25 58.2 | |
| **THZ** | **Tophouse** | **1.89** | **13** | Pn | Pn | 07 25 18.2 | -2.3 |
| **DSZ** | **Denniston Nort** | **1.90** | **348** | PN | Pn | 07 25 18.8 | -1.7 |
| DSZ | | | | AML | AML | 07 25 50.6 | |
| DSZ | | | | AML | AML | 07 25 50.6 | |
| DSZ | | | | AML | AML | 07 25 53.1 | |
| DSZ | | | | AML | AML | 07 25 53.2 | |
| **DSZ** | **Denniston Nort** | **1.90** | **348** | Pn | Pn | 07 25 18.9 | -1.7 |
| **FOZ** | **Fox Glacier** | **1.92** | **270** | PN | Pn | 07 25 19.9 | -0.9 |
| FOZ | | | | AML | AML | 07 25 51.2 | |
| FOZ | | | | AML | AML | 07 25 53.1 | |
| **FOZ** | **Fox Glacier** | **1.92** | **270** | Pn | Pn | 07 25 19.9 | -0.9 |
| **BSWZ** | **Blackbirch Sta** | **2.21** | **32** | PN | Pn | 07 25 23.2 | -1.6 |
| BSWZ | | | | AML | AML | 07 25 59.4 | |
| BSWZ | | | | AML | AML | 07 25 59.6 | |
| **BSWZ** | **Blackbirch Sta** | **2.21** | **32** | Pn | Pn | 07 25 23.2 | -1.6 |
| **NNZ** | **Nelson** | **2.51** | **18** | PN | Pn | 07 25 27.2 | -1.6 |
| **NNZ** | **Nelson** | **2.51** | **18** | Pn | Pn | 07 25 27.2 | -1.6 |
| **HHSZ** | **Highcliff Hill** | **2.59** | **208** | Pn | Pg | 07 25 35.9 | -1.3 |
| **JCZ** | **Jackson Bay** | **2.62** | **258** | PN | Pn | 07 25 30.5 | -0.1 |
| JCZ | | | | AML | AML | 07 26 17.6 | |
| JCZ | | | | AML | AML | 07 26 22.9 | |
| **JCZ** | **Jackson Bay** | **2.62** | **258** | Pn | Pn | 07 25 30.5 | -0.1 |
| **EAZ** | **Earnscleugh** | **2.71** | **232** | PN | Pn | 07 25 30.3 | -1.3 |
| EAZ | | | | AML | AML | 07 26 19.1 | |
| EAZ | | | | AML | AML | 07 26 19.2 | |
| EAZ | | | | AML | AML | 07 26 19.2 | |
| EAZ | | | | AML | AML | 07 26 19.3 | |
| **EAZ** | **Earnscleugh** | **2.71** | **232** | Pn | Pn | 07 25 30.3 | -1.3 |
| **QRZ** | **Quartz Range** | **2.78** | **3** | PN | Pn | 07 25 31.2 | -1.4 |
| QRZ | | | | AML | AML | 07 25 39.9 | |
| QRZ | | | | AML | AML | 07 25 39.9 | |
| QRZ | | | | AML | AML | 07 26 23.4 | |
| QRZ | | | | AML | AML | 07 26 23.4 | |
| **QRZ** | **Quartz Range** | **2.78** | **3** | Pn | Pn | 07 25 31.2 | -1.4 |
| **TCW** | **Tory Channel** | **2.79** | **32** | AML | AML | 07 26 15.3 | |
| **TUZ** | **Tuapeka** | **3.04** | **218** | PN | Pn | 07 25 34.9 | -1.2 |
| TUZ | | | | AML | AML | 07 26 34.7 | |
| TUZ | | | | AML | AML | 07 26 34.8 | |
| TUZ | | | | AML | AML | 07 26 35.1 | |
| TUZ | | | | AML | AML | 07 26 37.0 | |
| **TUZ** | **Tuapeka** | **3.04** | **218** | Pn | Pn | 07 25 34.9 | -1.2 |
| **CAW** | **Cannon Point** | **3.22** | **40** | PN | Pn | 07 25 35.3 | -3.3 |
| CAW | | | | AML | AML | 07 26 21.9 | |
| CAW | | | | AML | AML | 07 26 46.2 | |
| **CAW** | **Cannon Point** | **3.22** | **40** | Pn | Pn | 07 25 35.4 | -3.3 |
| **SYZ** | **Scrubby Hill** | **3.70** | **216** | PN | Pn | 07 25 44.3 | -0.9 |
| SYZ | | | | AML | AML | 07 26 55.0 | |
| SYZ | | | | AML | AML | 07 26 55.5 | |
| **SYZ** | **Scrubby Hill** | **3.70** | **216** | Pn | Pn | 07 25 44.3 | -0.9 |
| **BFZ** | **Birch Farm** | **4.12** | **46** | PN | Pn | 07 25 49.8 | -1.3 |
| **HIZ** | **Hauiti** | **5.43** | **21** | PN | Pn | 07 26 08.2 | -0.9 |
| **HIZ** | **Hauiti** | **5.43** | **21** | Pn | Pn | 07 26 08.2 | -0.9 |

*AUST **01** 07:26:02.8±2.7, 17.°50S×172.°46W, h0km±18km, Error ellipse: s-maj=12.5km s-min=10.7km az=16.0*
*IDC **01** 07:26:06.6±0.5, 17.°83S×173.°08W, h0km, mb4.9/17, mb1 5.1/17, mb1mx4.8/33, mbtmp4.9/17, MS4.5/26, Ms1 4.6/26, ms1mx4.4/41, Error ellipse: s-maj=19.3km s-min=12.7km az=114.0*
*MOS **01** 07:26:10.7±1.4, 17.°74S×173.°12W, h33km, mb5.3/24, Error ellipse: s-maj=12.5km s-min=9.8km az=143.4*
*ISCJB **01** 07:26:11.2±0.2, 17.°70S±0.°05×173.°19W±0.°04, h33km, mb5.1/125, MS4.7/31, Error ellipse: s-maj=7.7km s-min=3.7km az=152.1*
*NEIC **01** 07:26:12.7±2.7, 17.°67S×173.°11W, h37km±23km, mb5.1/98, Error ellipse: s-maj=10.5km s-min=5.7km az=149.0*
*GCMT **01** 07:26:12.7±0.2, 17.°75S×172.°43W, h17km, MW5.2/103, Moment Tensor Solution. s55,c72; s103,c172; Duration: 1s0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$6.02±.19; $M_{\theta\theta}$-1.59±.11; $M_{\phi\phi}$-4.43±.13; $M_{r\theta}$1.21±.29; $M_{\theta\phi}$-1.93±.07; $M_{\phi r}$4.73±.31; Best double couple: $M_0$7.50900×$10^{16}$ NP1:$\phi_s$19.00000°, δ65.00000°, λ84.00000°. NP2:$\phi_s$213.00000°, δ25.00000°, λ102.00000°. Principal axes: T 7.8640, Plg69.0000°, Azm278.0000°; N -0.7100, Plg5.0000°, Azm22.0000°; P -7.1540, Plg20.0000°, Azm113.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI **01** 07:26:13.0, 17.°32S×172.°95W, h39km, mb5.1/32, mB5.6/37, Ms5.2/25, Ms7 4.8/26*
**ISC 01 07:26:13.9**±0.4**, 17.°73S**±0.°06×**173.°19W**±0.°07**, h46**km±2km**, h45**km**:pP-P, n478, σ1s27**/506**, mb5.1**/126**, MS4.7**/32**, 9C-26D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **3.37** | **114** | P | Pn | 07 26 49.7 | -14 |
| | baz=2.9,SNR=84 | | | | | | |
| **AFI** | **Afiamalu** | **4.03** | **20** | Pn | Pn | 07 27 01.8 | -12 |
| | 12nm,0.3s,baz=178,slow=3.1,SNR=26 | | | | | | |
| AFI | | | | Sn | Sn | 07 27 42.9 | -16 |
| | 81nm,0.3s,baz=177,slow=20,SNR=8.1 | | | | | | |
| **AFI** | **Afiamalu** | **4.03** | **20** | *e*P | Pn | 07 27 01.9 | -11 |
| **RAO** | **Raoul Island** | **12.26** | **200** | LR | LR | 07 33 12.0 | |
| | comp=Z,696nm,18.3s,baz=33,slow=35 | | | | | | |
| **RAR** | **Rarotonga** | **13.12** | **107** | Pn | Pn | 07 29 03.2 | -14 |
| | 6.6nm,0.3s,baz=245,slow=6.2,SNR=7.3 | | | | | | |
| RAR | | | | LR | LR | 07 33 42.0 | |
| | comp=Z,3μm,19.1s,baz=273,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.63** | **254** | *e*LR | LR | 07 35 21.3 | |
| | 1μm,23.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.63** | **254** | LR | LR | 07 37 18.5 | |
| | comp=Z,2μm,18.6s,baz=85,slow=34 | | | | | | |
| **GRZ** | **Great Barrier** | **21.01** | **206** | PP | **P** | **07 30 54.0** | **+0.4** |
| **OUZ** | **Omahuta** | **21.02** | **211** | *e*P | **P** | **07 30 54.2** | **+0.4** |
| | 54nm,0.8s | | | | | | |
| **OUZ** | **Omahuta** | **21.02** | **211** | PP | **P** | **07 30 54.1** | **+0.4** |
| **WCZ** | **Waipu Caves** | **21.24** | **209** | PP | **P** | **07 30 55.9** | **-0.2** |
| **KUZ** | **Kuaotunu** | **21.33** | **205** | PP | **P** | **07 30 57.0** | **0.0** |
| **WIAZ** | **Waiheke Island** | **21.61** | **206** | PP | **P** | **07 31 00.2** | **+0.2** |
| **MKAZ** | **Moumakai** | **21.86** | **206** | PP | **P** | **07 31 02.8** | **0.0** |
| **URZ** | **Urewera** | **22.15** | **201** | P | **P** | **07 31 05.1** | **-0.8** |
| | 156nm,0.9s,baz=24,slow=7.0,SNR=12 | | | | | | |
| URZ | | | | S | **S** | **07 35 07.3** | **+0.1** |
| | 13nm,0.8s,baz=69,slow=17,SNR=4.6 | | | | | | |
| **URZ** | **Urewera** | **22.15** | **201** | *e*P | **P** | **07 31 04.8** | **-1.0** |
| | 135nm,0.8s | | | | | | |
| URZ | | | | S | **S** | **07 35 07.2** | **+0.1** |
| **URZ** | **Urewera** | **22.15** | **201** | *e* | **P** | **07 31 04.7** | **-1.0** |
| **TOZ** | **Tahuroa Road** | **22.26** | **204** | PP | **P** | **07 31 07.6** | **+0.5** |
| **PPT2** | **Papeete2** | **22.50** | **93** | *e*S | S | 07 35 04.5 | -9.4 |
| | 2μm,25.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 07 36 25.3 | |
| | 1μm,21.0s,baz=255 | | | | | | |
| **PPT** | **Papeete** | **22.50** | **93** | LR | LR | 07 38 09.7 | |

comp=Z,2µm,18.0s,baz=258,slow=32
**SNGZ Shannon Statio 22.55 200** PP P 07 31 17.6 +7.4
**TBI Tubuai 22.90 108** *e*S S 07 35 10.8 -10
2µm,25.8s
TBI *e*LR LR 07 36 31.0
2µm,28.2s
**HIZ Hauiti 23.20 204** *e*P **P 07 31 17.9 +1.1**
**SNZO South Karori 25.70 201** *e*P **P 07 31 41.0 +1.2**
172nm,1.3s
**KHZ Kahutara 27.09 202** *e*P **P 07 31 56.9 +4.6**
24nm,0.7s
**HNR Honiara 27.36 284** LR LR 07 41 08.4
comp=Z,2µm,18.7s,baz=116,slow=33
**OXZ Oxford 28.42 203** *e*P P 07 32 07.5 +3.3
**RPZ Rata Peaks 29.13 204** P P 07 32 15.8 +5.2
55nm,0.8s,baz=345,slow=2.0,SNR=6.9
**RPZ Rata Peaks 29.13 204** *e*P P 07 32 15.9 +5.4
103nm,1.0s
**RPZ Rata Peaks 29.13 204** pP P 07 32 15.8 +5.2
**WHZ Wether Hill Ro 32.17 205** *e*P P 07 32 40.7 +3.4
179nm,1.4s
**RKT Rikitea 36.14 105** *e*LR LR 07 42 35.6
1µm,28.8s
**CTA Charters Tower 38.38 260** P **P 07 33 29.7 -1.4**
12nm,0.7s,baz=98,slow=11,SNR=5.8
**CTA Charters Tower 38.38 260** P **P 07 33 29.7 -1.4**
baz=39
**CTAO Charters Tower 38.38 260** *e*P **P 07 33 29.3 -1.8**
CTAO pmax pmax
comp=Z,13nm,0.7s
**CTAO Charters Tower 38.38 260** *e*P **P 07 33 29.3 -1.8**
comp=Z,13nm,0.7s
**CMSA Cobar Meteorol 39.59 242** P **P 07 33 40.3 -0.8**
baz=40
**TOO Toolangi 41.19 233** P **P 07 33 54.0 -0.3**
baz=42,SNR=4.2
**COEN Coen 42.08 269** P **P 07 34 01.1 -0.6**
baz=43,SNR=5.4
**COEN Coen 42.08 269** *e*P **P 07 34 02.9 +1.1**
comp=Z,15nm,0.8s
**ARPS Mount Arapiles 43.80 235** P **P 07 34 14.6 -0.8**
baz=44
**QIS Mount Isa 44.57 258** P **P 07 34 23.4 +1.6**
baz=45
**BBOO Buckleboo 47.86 242** P **P 07 34 46.8 -0.7**
baz=48,SNR=12
**BBOO Buckleboo 47.86 242** *e*P **P 07 34 45.6 -1.9**
comp=Z,23nm,0.7s
**WRAB Tennant Creek 49.54 259** *e*P **P 07 34 58.5 -2.1**
WRAB pmax pmax
comp=Z,26nm,0.9s
**WRAB Tennant Creek 49.54 259** P **P 07 34 59.8 -0.8**
comp=Z,146nm,1.0s,SNR=6.4
**WRAB Tennant Creek 49.54 259** *e*P **P 07 34 58.5 -2.1**
comp=Z,26nm,0.9s
**WRA Warramunga Arr 49.55 259** P **P 07 34 59.0 -1.7**
comp=Z,9.8nm,0.5s,baz=97,slow=7.0,SNR=21
WRA PcP **PcP 07 36 22.3 +0.2**
comp=Z,6.0nm,1.1s,baz=93,slow=4.5,SNR=3.7
WRA LR LR 07 56 41.8
comp=Z,1µm,18.2s,baz=95,slow=37
**ASAR Alice Springs 49.62 254** P **P 07 34 60.0 -1.3**
comp=Z,61nm,0.7s,baz=88,slow=8.5,SNR=43
ASAR S **S 07 42 05.2 -1.6**
comp=Z,1.6nm,0.9s,baz=86,slow=15,SNR=7.7
ASAR LR LR 07 55 42.0
comp=Z,473nm,19.2s,baz=96,slow=36
**GUMO Guam 51.78 304** P **P 07 35 16.9 -0.5**
comp=Z,30nm,1.0s,baz=215,slow=1.5,SNR=3.8
GUMO LR LR 07 56 09.7
comp=Z,521nm,18.5s,baz=116,slow=35
**KDU Kakadu 52.54 267** P **P 07 35 22.0 -1.1**
baz=53,SNR=3.2
**MTN Manton Dam 53.78 267** P **P 07 35 30.8 -1.5**
baz=54
**WRKA Warakurna 54.63 252** P **P 07 35 37.7 -0.7**
baz=55,SNR=8.5
**KNRA Kununurra 55.45 263** P **P 07 35 43.2 -1.2**
baz=56
**SIJI Sorong 57.07 281** P **P 07 35 56.0 0.0**
comp=Z,32nm,0.9s,baz=58,slow=6.7,SNR=6.9
SIJI LR LR 07 59 03.5
comp=Z,416nm,19.7s,baz=108,slow=35
**FITZ Fitzroy Crossi 57.96 259** LR LR 08 01 01.4
comp=Z,802nm,18.1s,baz=100,slow=36
**FITZ Fitzroy Crossi 57.96 259** P **P 07 36 02.0 -0.3**
baz=59
**FITZ Fitzroy Crossi 57.96 259** *e*P **P 07 36 01.9 -0.3**
comp=Z,21nm,1.3s
**SBA Scott Base 60.96 185** *e*P **P 07 36 22.8 +0.9**
SBA pmax pmax
comp=Z,14nm,0.9s
**SBA Scott Base 60.96 185** *e*P **P 07 36 22.8 +0.9**
comp=Z,14nm,0.9s
**SOEI Soe 61.05 268** *e*P **P 07 36 26.8 +3.1**
comp=Z,32nm,0.6s
**VNDA Vanda 61.09 186** P **P 07 36 22.7 -0.1**
comp=Z,6.5nm,0.9s,baz=8.1,slow=4.3,SNR=5.8
VNDA LR LR 07 59 25.9
comp=Z,286nm,19.5s,baz=12,slow=33
**MBWA Marble Bar 62.93 255** *e*P **P 07 36 35.7 -0.5**
comp=Z,30nm,1.1s
**MEEK Meekatharra 63.14 249** P **P 07 36 37.0 -0.6**
baz=64
**KLBR Kellerberrin 63.35 243** P **P 07 36 38.4 -0.4**
baz=64,SNR=4.3
**NWAO Narrogin (SRO) 63.68 242** P **P 07 36 41.1 +0.2**
baz=64
**BLDU Ballidu 64.34 244** P **P 07 36 45.1 -0.2**
baz=65,SNR=5.6
**MORW Morawa 65.10 246** P **P 07 36 50.6 +0.3**
baz=66
**CASY Casey 68.39 205** *e*P **P 07 37 10.5 0.0**
comp=Z,32nm,1.2s
**MJAR Matsushiro Arr 70.85 320** P **P 07 37 26.4 +0.3**
comp=Z,8.7nm,0.9s,baz=159,slow=6.0,SNR=7.6
MJAR LR LR 08 03 37.0
comp=Z,280nm,21.4s,baz=155,slow=32
**MAT Matsushiro 70.85 320** P **P 07 37 25.9 -0.2**
MAT S **S 07 46 40.0 +1.9**
**JAGI Jajag, Banyuwa 71.02 267** P **P 07 37 27.3 -0.3**
baz=72
**JAGI Jajag, Banyuwa 71.02 267** *e*P **P 07 37 27.2 -0.5**
comp=Z,67nm,1.1s
**MYLDM Lahad Datu 71.12 282** *e*P **P 07 37 30.6 +2.3**
comp=Z,38nm,1.2s
**KUR Kuril'sk 71.97 332** *c i*P **P 07 37 33.6 +1.0**
KUR *i* 07 37 53.0
KUR *e* 07 40 13.1
KUR *e*S **S 07 46 52.7 +2.2**
KUR *i* 07 47 34.5
KUR *e*SS **SS 07 51 23.0 -5.4**
KUR pmax pmax
comp=N,35nm,1.5s
KUR pmax pmax
comp=E,36nm,1.5s
KUR pmax pmax
comp=Z,68nm,1.5s
KUR MLR MLR
comp=N,630nm,19.0s
KUR MLR MLR
comp=E,364nm,19.0s
KUR MLR MLR
comp=Z,610nm,19.0s
**YUK Yuzh-Kuril'sk 71.97 330** *d i*P **P 07 37 31.6 -1.0**
YUK *e* 07 40 12.9
YUK S **S 07 46 49.4 -1.2**
YUK MLR MLR
comp=Z,323nm,18.0s
**QSPA South Pole Qui 72.33 180** *e*P **P 07 37 35.9 +1.2**
comp=Z,35nm,1.3s
**PKM Peak Mountain 72.84 44** P **P 07 37 39.7 +1.4**
baz=73
**JNU Nakatsue 73.54 314** P **P 07 37 41.7 -0.6**
comp=Z,16nm,0.8s,baz=148,slow=3.3,SNR=6.2
**JNU Nakatsue 73.54 314** *e*P **P 07 37 42.5 +0.2**
comp=Z,7.8nm,0.9s
**ASAJ Asahikawa 73.62 328** LR LR 08 04 26.9
comp=Z,268nm,21.4s,baz=158,slow=31
**ASAJ Asahikawa 73.62 328** *e*P **P 07 37 43.1 +0.7**
comp=Z,33nm,1.4s
**MURC Murrieta 73.84 46** P **P 07 37 44.7 +0.6**
baz=74
**VES Vestal, Richgr 73.88 43** P **P 07 37 44.8 +0.7**
baz=74
**MONP Monument Peak 73.98 47** P **P 07 37 45.4 +0.2**
baz=74
**EDW2 Edwards Air Fo 74.04 45** P **P 07 37 45.8 +0.5**
baz=74
**ISA Isabella 74.18 44** *e*P **P 07 37 46.1 +0.1**
ISA pmax pmax
comp=Z,14nm,1.3s
**ISA Isabella 74.18 44** P **P 07 37 46.6 +0.5**
baz=74
**ISA Isabella 74.18 44** *e*P **P 07 37 46.1 +0.1**
comp=Z,14nm,1.3s
**PFO Pinyon Flat Ob 74.36 46** P **P 07 37 47.2 0.0**
baz=74
**CMB Columbia Colle 74.38 41** *e*P **P 07 37 45.2 -1.9**
CMB pmax pmax
comp=Z,6.0nm,1.0s
**CMB Columbia Colle 74.38 41** *e*P **P 07 37 45.2 -1.9**
comp=Z,5.6nm,1.0s
**LRMC Laurel Mountai 74.59 44** P **P 07 37 48.9 +0.4**
baz=75
**WDC Whiskeytown Da 74.68 38** *e*P **P 07 37 48.4 -0.4**
WDC pmax pmax
comp=Z,38nm,1.7s
**WDC Whiskeytown Da 74.68 38** *e*P **P 07 37 48.4 -0.4**
comp=Z,38nm,1.7s
**N02D Trinity Center 74.84 37** P **P 07 37 50.4 +0.6**
baz=75
**CWC Cottonwood Cre 74.89 43** P **P 07 37 50.7 +0.4**
baz=75
**BELC Belle Mtn. Jos 74.89 46** P **P 07 37 50.6 +0.2**
baz=75
**PETK Petropavlovsk- 74.90 342** LR LR 08 09 05.3
comp=Z,153nm,19.0s,baz=152,slow=34
**O03D Paynes Creek 74.93 38** P **P 07 37 50.6 +0.3**
baz=75
**SMRI Semarang 74.94 267** *e*P **P 07 37 51.3 +0.4**
comp=Z,38nm,0.4s
**M02C Callahan 75.03 37** P **P 07 37 51.4 +0.6**
baz=75
**MPMC Manual Prospec 75.06 44** P **P 07 37 51.0 -0.3**
baz=75
**GSC Goldstone 75.08 45** P **P 07 37 51.1 -0.1**
baz=75
**BC3 Big Chuckawall 75.08 47** P **P 07 37 50.9 -0.5**
baz=75
**YBH Yreka Blue Hor 75.33 37** *e*P **P**
YBH pmax pmax
comp=Z,12nm,1.1s
**YBH Yreka Blue Hor 75.33 37** *e*P **P 07 37 51.3 -1.3**
comp=Z,12nm,1.1s
**MIR Mirnyy 75.40 204** *f e*P P 07 38 03.0 +10
MIR pmax pmax
comp=Z,60nm,2.0s
**GMRC Granite Mounta 75.56 46** P **P 07 37 53.3 -0.8**
baz=76
**IRM Iron Mountain 75.57 47** P **P 07 37 53.3 -0.7**
baz=76
**YSS Yuzh-Sakhalins 75.60 331** *e*P **P 07 37 54.9 +1.0**
YSS *e* 07 40 49.0
YSS *e*S S 07 47 40.0 +8.6
YSS MLR MLR
comp=Z,500nm,18.0s
**GRAC Grapevine Rang 75.68 43** P **P 07 37 54.9 +0.2**
baz=76
**FURC Furnace Creek, 75.71 44** P **P 07 37 55.1 +0.4**
baz=76
**TUQ Turquoise Moun 75.75 45** P **P 07 37 55.2 0.0**
baz=76
**Y12C Blythe 75.78 47** P **P 07 37 55.2 -0.1**
baz=76
**M04C Macdoel 75.86 37** P **P 07 37 55.3 -0.3**
baz=76
**NV01 Mina Array Sit 75.92 41** *e*P **P 07 37 54.4 -1.8**
**NVAR Mina Array Bea 75.92 41** P **P 07 37 54.7 -1.5**
comp=Z,3.0nm,0.8s,baz=226,slow=9.3,SNR=22
NVAR LR LR 08 06 20.6
comp=Z,1µm,18.1s,baz=236,slow=32
**LDFC Landfair 76.10 46** *e*P **P 07 37 57.3 +0.1**
comp=Z,52nm,1.6s
**TPNV Topopah Spring 76.38 44** P **P 07 37 58.6 -0.2**
baz=76
**TPUB Ta-pu 76.42 300** *e*P **P 07 37 57.7 -1.4**
comp=Z,55nm,1.1s
**MOD Modoc 76.82 38** *e*P **P 07 37 59.6 -1.6**
comp=Z,10nm,1.0s
**SHPR Sheep Range 76.86 45** *e*P **P 07 38 00.4 -1.1**
comp=Z,42nm,1.7s
**J05D Fort Rock, OR 77.16 36** P **P 07 38 03.2 +0.2**
baz=77
**KSM Kuching 77.61 276** *e*P **P 07 38 06.6 +0.6**
comp=Z,86nm,1.3s
**R11A Troy Canyon, C 77.61 43** P **P 07 38 05.5 -0.2**
baz=78
**R11A Troy Canyon, C 77.61 43** *e*Pn **P 07 38 02.8 -2.9**
comp=Z,8.1nm,0.9s
**TUC Tucson 77.71 50** *e*P **P 07 38 04.2 -2.1**
TUC pmax pmax
comp=Z,15nm,1.3s
**TUC Tucson 77.71 50** *e*P **P 07 38 04.2 -2.1**
comp=Z,14nm,1.3s
**I05D Terrebonne, OR 77.78 35** P **P 07 38 07.3 +0.9**
baz=78
**BMN Battle Mountai 77.78 40** *e*P **P 07 38 04.9 -1.7**
BMN pmax pmax
comp=Z,14nm,1.2s
**BMN Battle Mountai 77.78 40** *e*P **P 07 38 04.8 -1.7**
comp=Z,14nm,1.2s
**KSRS Korea Array 77.96 316** P **P 07 38 09.2 +1.8**
comp=Z,16nm,1.1s,baz=132,slow=6.6,SNR=27
KSRS LR LR 08 08 02.1
comp=Z,137nm,19.8s,baz=118,slow=32
**KSAR Wonju Array Be 77.98 316** P **P 07 38 09.2 +1.7**
**KSAR Wonju Array Be 77.98 316** P **P 07 38 09.2 +1.7**
**KS01 Wonju Array Si 77.99 316** *e*P **P 07 38 08.3 +0.7**
**KSKC Sokcho 78.03 317** P **P 07 38 09.8 +2.0**
SNR=6.2
**WVOR Wild Horse Val 78.12 38** *e*P **P 07 38 07.7 -0.7**
WVOR pmax pmax
comp=Z,9.0nm,0.9s
**WVOR Wild Horse Val 78.12 38** *e*P **P 07 38 07.7 -0.7**
comp=Z,8.6nm,0.9s
**SEHB SEOHWA 78.19 317** P **P 07 38 11.4 +2.6**
SNR=5.5
**KSICN Icheon 78.21 315** P **P 07 38 11.4 +2.6**
SNR=5.1
**KSCHC Chuncheon 78.21 316** P **P 07 38 11.4 +2.5**
SNR=5.0
**G05D Waxie, OR 78.37 35** P **P 07 38 10.6 +1.0**
baz=78
**KSSWO Suwon 78.50 315** P **P 07 38 12.4 +2.1**
SNR=6.2
**KSCWO Cheorwon 78.57 316** P **P 07 38 13.8 +3.0**
SNR=5.1
**CCUT Cedar City 78.63 44** *e*P **P 07 38 11.7 +0.3**
comp=Z,13nm,1.3s
**I07A Izee 78.64 36** *e*P **P 07 38 10.2 -1.0**
**WUAZ Wupatki 78.92 47** P **P 07 38 13.3 +0.3**
baz=79
**WUAZ Wupatki 78.92 47** *e*P **P 07 38 14.1 +1.1**
comp=Z,7.9nm,1.1s
**YNCB YEONCHEON 78.94 316** P **P 07 38 15.1 +2.3**
SNR=6.6
**KSMUS Musan 78.97 316** P **P 07 38 15.1 +2.1**
SNR=6.9
**KSGAH Ganghwa 79.08 315** P **P 07 38 15.9 +2.3**
SNR=7.2
**ELK Elko 79.19 41** *e*P **P 07 38 14.1 -0.4**
ELK pmax pmax
comp=Z,15nm,1.4s
**ELK Elko 79.19 41** *e*P **P 07 38 14.1 -0.4**
comp=Z,15nm,1.4s
**USRK Ussuriysk Ar. 79.36 323** P **P 07 38 14.9 -0.1**
comp=Z,32nm,1.4s,baz=90,slow=5.7,SNR=6.9
USRK LR LR 08 08 10.8
comp=Z,362nm,20.7s,baz=130,slow=32
**CGJI Cibinong 79.59 266** P **P 07 38 16.4 -0.5**
comp=Z,74nm,1.7s,comp=Z,3µm
**G08A Pilot Rock 79.69 36** *e*P **P 07 38 16.4 -0.5**
comp=Z,23nm,0.8s
**A04D Lummi Island 79.93 31** P **P 07 38 18.8 +0.9**
baz=80
**B05A Bryant 79.93 32** P **P 07 38 18.4 +0.4**
baz=80
**MSU Marysvale 79.94 44** *e*P **P 07 38 18.1 -0.5**
MSU pmax pmax
comp=Z,15nm,1.2s
**MSU Marysvale 79.94 44** *e*P **P 07 38 18.1 -0.5**
comp=Z,15nm,1.2s
**121A Cookes Peak, D 80.03 51** P **P 07 38 18.4 -0.7**
baz=80
**HAWA Hanford 80.07 34** *e*P **P 07 38 18.0 -0.8**
comp=Z,3.0nm,0.5s
**MFID Camas Ranch 80.37 38** *e*P **P 07 38 19.6 -1.0**
comp=Z,12nm,1.2s
**DUG Dugway 80.42 42** P **P 07 38 20.6 -0.4**
baz=80
**MDJ Mudanjiang 80.99 323** P **P 07 38 24.7 +1.0**
MDJ pP **pP 07 38 36.0 -1.2**
MDJ sP **sP 07 38 41.7 -0.6**
MDJ S **S 07 48 30.6 +1.2**
MDJ PMZ
comp=Z,16nm,1.3s
MDJ LN
comp=Z,120nm,20.3s
MDJ LE
comp=Z,130nm,19.1s
MDJ LZ
comp=Z,240nm,20.8s
**MDJ Mudanjiang 80.99 323** *e*P **P 07 38 25.2 +1.5**
comp=Z,16nm,1.0s
**MDJ Mudanjiang 80.99 323** pP **P 07 38 24.5 +0.8**
**TMUT Trail Mountain 80.99 44** *e*P **P 07 38 25.6 +1.3**
comp=Z,84nm,1.4s
**KASI Kota Agung 81.04 267** P **P 07 38 24.2 -0.5**
comp=Z,85nm,1.1s
**SPUT South Promonto 81.26 42** *e*P **P 07 38 26.6 +1.1**
comp=Z,12nm,1.2s
**O16A Springville 81.28 43** *e*P **P 07 38 25.6 -0.1**
comp=Z,18nm,1.2s
**HLID Hailey 81.30 39** P **P 07 38 25.1 -0.6**
baz=81
**HLID Hailey 81.30 39** *e*P **P 07 38 23.5 -2.1**
comp=Z,8.3nm,1.0s
**PMR Palmer 81.35 11** *e*P **P 07 38 24.2 -1.1**
comp=Z,27nm,1.3s
**SRU San Rafael 81.35 44** *e*P **P 07 38 25.4 -0.7**
SRU pmax pmax
comp=Z,10.0nm,1.3s
**SRU San Rafael 81.35 44** *e*P **P 07 38 25.4 -0.7**
comp=Z,10nm,1.3s
**LAZ Ladron 81.39 50** *e*P **P 07 38 26.0 -0.4**
**MNTX Cornudas Mount 81.45 53** P **P 07 38 26.1 -0.4**
baz=82
**MNTX Cornudas Mount 81.45 53** *e*P **P 07 38 25.3 -1.2**
comp=Z,4.5nm,0.8s
**LPM Los Pinos Moun 81.72 50** *e*P **P 07 38 29.0 +0.9**
comp=Z,4.6nm,1.0s
**NJ2 Nanjing 81.73 307** *e*P **P 07 38 29.5 +1.6**
NJ2 PMZ
comp=Z,40nm,0.5s
**TX31 Lajitas Ar. Si 81.74 56** *e*P **P 07 38 28.5 +0.3**
**TXAR Lajitas Array 81.74 56** P **P 07 38 26.7 -1.5**
comp=Z,2.2nm,1.1s,baz=221,slow=6.1,SNR=14
TXAR LR LR 08 08 59.7
comp=Z,215nm,18.1s,baz=0.0,slow=32
**PV05 Paradox Valley 81.79 46** *e*P **P 07 38 27.7 -0.8**
**TCUT Toone Canyon 81.82 42** *e*P **P 07 38 29.7 +1.2**
comp=Z,37nm,1.2s
**SCM Sheep Creek Mo 81.92 12** *e*P **P 07 38 30.2 +1.9**
comp=Z,257nm,2.2s
**PV09 Paradox Valley 81.98 45** *e*P **P 07 38 29.3 -0.2**
**HWUT Hardware Ranch 81.98 42** *e*P **P 07 38 28.0 -1.3**
comp=Z,27nm,1.7s
**PV04 Paradox Valley 82.08 46** *e*P **P 07 38 30.2 +0.3**
**ANMO Albuquerque 82.14 50** *e*P **P 07 38 30.5 +0.2**
ANMO pmax pmax
comp=Z,10.0nm,1.1s
**ANMO Albuquerque 82.14 50** *e*P **P 07 38 30.5 +0.2**
comp=Z,10nm,1.1s
**PV01 Paradox Valley 82.18 46** *e*P **P 07 38 29.5 -1.0**
comp=Z,1µm,1.3s
**NEW Newport 82.51 34** P **P 07 38 32.2 +0.5**
baz=83
**TRF Thorofare Moun 82.87 10** *e*P **P 07 38 33.1 -0.3**
comp=Z,15nm,0.9s
**AHID Auburn Hatcher 82.89 41** *e*P **P 07 38 32.8 -1.3**
comp=Z,10nm,0.9s
**MCMT McKenzie Canyo 82.94 39** *e*P **P 07 38 34.7 +0.4**
comp=Z,7.1nm,1.0s
**CN2 Changchun 83.00 320** *e*P **P 07 38 34.9 +0.6**
CN2 *e*pP **pP 07 38 48.3 +0.5**
CN2 PMZ
comp=Z,20nm,0.8s
CN2 PMZ
comp=Z,300nm,7.0s
CN2 LN
comp=Z,400nm,17.0s
CN2 LE
comp=Z,400nm,17.0s
CN2 LZ
comp=Z,400nm,18.0s
**RND Reindeer 83.08 11** *e*P **P 07 38 33.7 -0.7**
comp=Z,30nm,1.1s
**S22A 4UR Ranch, Cre 83.19 47** P **P 07 38 35.3 -0.6**
baz=83
**529A Stev Forest Ra 83.21 56** P **P 07 38 34.9 -0.9**
baz=83
**REDW Red Top Meadow 83.36 41** *e*P **P 07 38 36.0 -0.5**
comp=Z,35nm,1.4s
**MCK McKinley 83.36 11** *e*P **P 07 38 33.9 -1.9**
comp=Z,43nm,1.3s
**TPAW Teton Pass 83.36 40** *e*P **P 07 38 36.1 -0.5**
comp=Z,17nm,1.3s
**DLMT Dillon 83.38 38** *e*P **P 07 38 35.4 -1.0**
comp=Z,9.9nm,1.0s
**O20A White River Ci 83.39 44** P **P 07 38 36.2 -0.5**
baz=84
**FXWY Fox Creek 83.39 40** *e*P **P 07 38 36.5 -0.2**
comp=Z,32nm,1.6s
**MSO Missoula 83.42 36** P **P 07 38 36.4 -0.2**
baz=84
**SNOW Snow King Moun 83.47 41** *e*P **P 07 38 36.9 -0.3**
comp=Z,11nm,0.9s
**BSMT Bassoo Peak 83.53 35** *e*P **P 07 38 36.1 -1.1**
comp=Z,23nm,1.5s
**IMW Indian Meadow 83.58 40** *e*P **P 07 38 37.3 -0.4**
comp=Z,30nm,1.5s
**MOOW Moose Ponds 83.63 40** *e*P **P 07 38 38.4 +0.5**
comp=Z,12nm,1.3s
**LOHW Long Hollow 83.64 40** *e*P **P 07 38 37.2 -0.7**
comp=Z,13nm,1.2s
**429A Davenport Ranc 83.68 55** P **P 07 38 37.6 -0.7**
baz=84
**LRM Limekiln Ridge 83.72 38** *e*P **P 07 38 39.0 +0.7**
comp=Z,77nm,1.0s
**SWMT Swartz Lake 83.77 36** *e*P **P 07 38 36.8 -1.6**
comp=Z,16nm,1.7s
**SMCO Snowmass 83.78 46** *e*P **P 07 38 38.3 -0.7**
comp=Z,18nm,1.1s
**DLBC Dease Lake 83.78 21** *e*P **P 07 38 35.6 -2.5**
comp=Z,24nm,1.6s
**QLMT Earthquake Lak 83.78 39** *e*P **P 07 38 39.5 +0.9**
comp=Z,3.8nm,1.1s
**FLWY Flagg Ranch 83.83 40** *e*P **P 07 38 38.9 0.0**
comp=Z,19nm,1.0s
**BW06 Boulder Array 83.86 42** *e*P **P 07 38 38.0 -1.1**
comp=Z,6.8nm,0.8s
**CHMT Chamberlain Mo 83.86 37** *e*P **P 07 38 39.2 +0.2**
comp=Z,5.7nm,0.9s
**SLMT Seeley Lake 83.91 36** *e*P **P 07 38 36.7 -2.5**
comp=Z,23nm,1.6s
**530A J-C Ranch, Com 83.92 56** P **P 07 38 39.2 -0.3**
baz=84
**YFT Old Faithful 83.94 40** *e*P **P 07 38 40.2 +0.7**
comp=Z,14nm,1.0s
**QIZ Qiongzhong 83.96 292** P **P 07 38 41.4 +1.6**
QIZ pP **pP 07 38 53.3 0.0**
QIZ sP **sP 07 38 58.2 -0.2**
QIZ PP **PP 07 41 55.0 +0.8**
QIZ S **S 07 49 01.0 +0.1**
QIZ sS **sS 07 49 23.7 +0.2**
QIZ PMZ
comp=Z,540nm,3.6s
**329A Wagon Wheel Ra 83.97 54** P **P 07 38 39.6 -0.1**
baz=84
**YMR Madison River 83.98 39** *e*P **P 07 38 39.0 -0.6**
comp=Z,22nm,1.0s
**128A Castleberry Fa 84.06 53** P **P 07 38 39.7 -0.5**
baz=84
**H17A Grant Village 84.07 40** P **P 07 38 40.2 0.0**
baz=84
**BOZ Bozeman (W) 84.10 38** *e*P **P 07 38 40.0 -0.2**
BOZ pmax pmax
comp=Z,12nm,1.0s
**BOZ Bozeman (W) 84.10 38** P **P 07 38 40.0 -0.2**
baz=84

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| BOZ | Bozeman (W) | 84.10 | 38 | eP | P | 07 38 40.0 | -0.2 |
| | comp=Z,12nm,1.0s | | | | | | |
| SDCO | Great Sand Dun | 84.12 | 47 | P | P | 07 38 40.3 | -0.4 |
| | baz=84 | | | | | | |
| SDCO | Great Sand Dun | 84.12 | 47 | eP | P | 07 38 39.6 | -1.0 |
| | comp=Z,7.4nm,1.3s | | | | | | |
| WRH | Wood River Hil | 84.19 | 11 | eP | P | 07 38 38.6 | -1.3 |
| | comp=Z,39nm,1.2s | | | | | | |
| DOT | Dot Lake | 84.22 | 13 | eP | P | 07 38 38.4 | -1.8 |
| | comp=Z,65nm,1.3s | | | | | | |
| 631A | Perdido Creek | 84.22 | 57 | P | P | 07 38 40.7 | -0.3 |
| | baz=84 | | | | | | |
| 832A | Faith Ranch, C | 84.25 | 58 | P | P | 07 38 41.0 | -0.1 |
| | baz=84 | | | | | | |
| LKWY | Lake | 84.27 | 40 | eP | P | 07 38 43.3 | +2.1 |
| LKWY | | | | pmax | pmax | | |
| | comp=Z,38nm,1.3s | | | | | | |
| LKWY | Lake | 84.27 | 40 | eP | P | 07 38 43.3 | +2.1 |
| | comp=Z,38nm,1.3s | | | | | | |
| MLY | Manley | 84.27 | 9 | eP | P | 07 38 38.6 | -1.8 |
| | comp=Z,21nm,1.3s | | | | | | |
| CCB | Clear Creek Bu | 84.40 | 11 | eP | P | 07 38 39.0 | -2.0 |
| | comp=Z,378nm,3.0s | | | | | | |
| Z28A | Tucker Farm, M | 84.42 | 53 | P | P | 07 38 42.1 | +0.1 |
| | baz=84 | | | | | | |
| MSTX | Muleshoe | 84.42 | 52 | P | P | 07 38 41.9 | -0.1 |
| | baz=84 | | | | | | |
| 129A | Stewart Farms, | 84.54 | 53 | P | P | 07 38 42.9 | +0.4 |
| | baz=85 | | | | | | |
| 531A | Rocksprings | 84.55 | 56 | P | P | 07 38 42.6 | 0.0 |
| | baz=85 | | | | | | |
| 933A | Laredo | 84.56 | 59 | P | P | 07 38 42.9 | +0.2 |
| | baz=85 | | | | | | |
| HRY | Holter Researc | 84.56 | 37 | eP | P | 07 38 41.8 | -0.7 |
| | comp=Z,15nm,1.0s | | | | | | |
| WHN | Wuhan | 84.57 | 304 | ⇓iP | P | 07 38 43.2 | +0.6 |
| WHN | | | | S | S | 07 49 14.2 | +7.8 |
| WHN | | | | PMZ | | | |
| | comp=Z,580nm,8.0s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,560nm,21.6s | | | | | | |
| COLA | College | 84.60 | 11 | eP | P | 07 38 40.0 | -2.0 |
| | comp=Z,33nm,1.1s | | | | | | |
| ILAR | Eielson Array | 84.68 | 11 | P | P | 07 38 40.4 | -2.0 |
| | comp=Z,3.0nm,0.7s,baz=224,slow=5.3,SNR=35 | | | | | | |
| ILAR | | | | LR | LR | 08 11 51.6 | |
| | comp=Z,338nm,19.7s,baz=205,slow=32 | | | | | | |
| IL1 | Eielson Array | 84.68 | 11 | eP | P | 07 38 40.2 | -2.2 |
| WALA | Waterton Lakes | 84.70 | 35 | eP | P | 07 38 41.8 | -1.3 |
| | comp=Z,13nm,1.2s | | | | | | |
| 833A | Chaparral WMA, | 84.74 | 58 | P | P | 07 38 43.9 | +0.4 |
| | baz=85 | | | | | | |
| SEY | Seymchan | 84.81 | 345 | P | P | 07 38 42.1 | -0.9 |
| | comp=Z,19nm,1.0s,baz=158,slow=6.2 | | | | | | |
| 034A | Hebbronville | 84.83 | 60 | P | P | 07 38 44.6 | +0.6 |
| | baz=85 | | | | | | |
| TIA | Tai'an | 84.86 | 310 | ⇑P | P | 07 38 45.2 | +1.2 |
| TIA | | | | pP | PcP | 07 38 52.1 | +4.8 |
| TIA | | | | S | S | 07 49 15.0 | +5.8 |
| TIA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| TIA | | | | PMZ | | | |
| | comp=Z,390nm,4.4s | | | | | | |
| TIA | | | | LN | | | |
| | comp=Z,140nm,13.7s | | | | | | |
| TIA | | | | LE | | | |
| | comp=Z,350nm,23.8s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=Z,290nm,17.3s | | | | | | |
| 632A | Uvalde | 84.89 | 57 | P | P | 07 38 44.4 | +0.1 |
| | baz=85 | | | | | | |
| Z29A | Hungry Hill Ra | 84.92 | 53 | P | P | 07 38 44.9 | +0.4 |
| | baz=85 | | | | | | |
| Q24A | Divide | 84.93 | 47 | P | P | 07 38 44.5 | -0.3 |
| | baz=85 | | | | | | |
| ISCO | Idaho Springs | 85.00 | 46 | P | P | 07 38 45.3 | +0.3 |
| | baz=85 | | | | | | |
| 532A | Rocksprings | 85.04 | 56 | P | P | 07 38 45.3 | +0.2 |
| | baz=85 | | | | | | |
| X28A | Dimmitt | 85.09 | 52 | P | P | 07 38 45.3 | 0.0 |
| | baz=85 | | | | | | |
| 331A | San Angelo | 85.11 | 55 | P | P | 07 38 45.5 | +0.1 |
| | baz=85 | | | | | | |
| 934A | Benavides | 85.17 | 59 | P | P | 07 38 46.2 | +0.5 |
| | baz=85 | | | | | | |
| Y29A | Porterfield Fa | 85.20 | 52 | P | P | 07 38 46.4 | +0.5 |
| | baz=85 | | | | | | |
| T26A | Comanche Natio | 85.22 | 49 | P | P | 07 38 45.6 | -0.4 |
| | baz=85 | | | | | | |
| RLMT | Red Lodge | 85.24 | 40 | P | P | 07 38 46.3 | +0.3 |
| | baz=85 | | | | | | |
| RLMT | Red Lodge | 85.24 | 40 | eP | P | 07 38 45.2 | -0.8 |
| | comp=Z,11nm,1.1s | | | | | | |
| N23A | Red Feather La | 85.29 | 45 | P | P | 07 38 46.8 | +0.4 |
| | baz=85 | | | | | | |
| 834A | Tilden | 85.35 | 59 | P | P | 07 38 47.0 | +0.3 |
| | baz=85 | | | | | | |
| Z30A | Sanderson Ranc | 85.38 | 53 | P | P | 07 38 46.9 | +0.1 |
| | baz=85 | | | | | | |
| 432A | Menard | 85.43 | 56 | P | P | 07 38 47.4 | +0.3 |
| | baz=86 | | | | | | |
| U27A | Thompson Grove | 85.44 | 50 | P | P | 07 38 47.5 | +0.4 |
| | baz=86 | | | | | | |
| 231A | Bronte | 85.45 | 55 | P | P | 07 38 47.6 | +0.5 |
| | baz=86 | | | | | | |
| S26A | Kim | 85.50 | 48 | P | P | 07 38 47.9 | +0.5 |
| | baz=86 | | | | | | |
| DAWY | Dawson | 85.62 | 14 | eP | P | 07 38 46.1 | -1.1 |
| | comp=Z,32nm,1.3s | | | | | | |
| AMTX | Amarillo | 85.63 | 51 | P | P | 07 38 48.4 | +0.4 |
| | baz=86 | | | | | | |
| MAW | Mawson | 85.66 | 199 | LR | LR | 08 16 39.8 | |
| | comp=Z,934nm,18.3s,baz=68,slow=35 | | | | | | |
| 332A | Millersview | 85.67 | 55 | P | P | 07 38 49.0 | +0.7 |
| | baz=86 | | | | | | |
| 131A | Roby | 85.69 | 54 | P | P | 07 38 48.9 | +0.6 |
| | baz=86 | | | | | | |
| 533A | Kerrville | 85.71 | 57 | P | P | 07 38 49.0 | +0.6 |
| | baz=86 | | | | | | |
| K22A | Casper | 85.74 | 43 | P | P | 07 38 49.3 | +0.8 |
| | baz=86 | | | | | | |
| W29A | Amraillo | 85.75 | 51 | P | P | 07 38 49.1 | +0.5 |
| | baz=86 | | | | | | |
| Y30A | Stafford Cattl | 85.80 | 53 | P | P | 07 38 49.5 | +0.6 |
| | baz=86 | | | | | | |
| R26A | Arlington | 85.82 | 48 | P | P | 07 38 49.2 | +0.3 |
| | baz=86 | | | | | | |
| EGAK | Eagle | 85.83 | 13 | eP | P | 07 38 46.8 | -1.4 |
| | comp=Z,16nm,0.8s | | | | | | |
| U28A | Mallet | 85.86 | 50 | P | P | 07 38 49.4 | +0.3 |
| | baz=86 | | | | | | |
| 433A | Art | 85.94 | 56 | P | P | 07 38 49.5 | 0.0 |
| | baz=86 | | | | | | |
| 232A | Coleman | 85.95 | 55 | P | P | 07 38 50.3 | +0.7 |
| | baz=86 | | | | | | |
| Q26A | Hugo | 86.05 | 47 | P | P | 07 38 50.6 | +0.5 |
| | baz=86 | | | | | | |
| Z31A | Sharp Cattle R | 86.14 | 53 | P | P | 07 38 50.8 | +0.3 |
| | baz=86 | | | | | | |
| 534A | Blanco | 86.14 | 57 | P | P | 07 38 50.3 | -0.3 |
| | baz=86 | | | | | | |
| 333A | Richland Sprin | 86.25 | 56 | P | P | 07 38 51.2 | +0.1 |
| | baz=86 | | | | | | |
| ABTX | Abilene, Hawle | 86.25 | 54 | P | P | 07 38 51.2 | +0.2 |
| | baz=86 | | | | | | |
| Y31A | Rekieta Farm, | 86.31 | 53 | P | P | 07 38 51.4 | +0.1 |
| | baz=86 | | | | | | |
| COLD | Coldfoot | 86.40 | 9 | eP | P | 07 38 49.8 | -1.2 |
| | comp=Z,9.6nm,1.0s | | | | | | |
| EGMT | Eagleton | 86.45 | 37 | P | P | 07 38 52.5 | +0.8 |
| | baz=86 | | | | | | |
| 233A | Rising Star | 86.58 | 55 | P | P | 07 38 52.6 | -0.1 |
| | baz=87 | | | | | | |
| 434A | Burnet | 86.61 | 56 | P | P | 07 38 53.2 | +0.3 |
| | baz=87 | | | | | | |
| Z32A | Haskell | 86.65 | 54 | P | P | 07 38 53.3 | +0.3 |
| | baz=87 | | | | | | |
| V30A | Spur Ranch, Mi | 86.73 | 51 | P | P | 07 38 53.9 | +0.5 |
| | baz=87 | | | | | | |
| X31A | McDonald Ranch | 86.80 | 52 | P | P | 07 38 54.1 | +0.4 |
| | baz=87 | | | | | | |
| 133A | Hamilton Ranch | 86.80 | 54 | P | P | 07 38 53.9 | +0.2 |
| | baz=87 | | | | | | |
| 334A | Lometa | 86.84 | 56 | P | P | 07 38 54.2 | +0.2 |
| | baz=87 | | | | | | |
| 736A | Circle Diamond | 86.87 | 58 | P | P | 07 38 54.7 | +0.6 |
| | baz=87 | | | | | | |
| Y32A | R-V Farms, Ver | 86.95 | 53 | P | P | 07 38 55.0 | +0.6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=87 | | | | | | |
| R28A | Tribune | 87.00 | 48 | P | P | 07 38 54.9 | +0.2 |
| | baz=87 | | | | | | |
| W31A | Holland Ranch, | 87.05 | 52 | P | P | 07 38 54.9 | -0.1 |
| | baz=87 | | | | | | |
| 234A | Clairette | 87.17 | 55 | P | P | 07 38 55.2 | -0.4 |
| | baz=87 | | | | | | |
| Z33A | Whitaker Ranch | 87.19 | 54 | P | P | 07 38 55.5 | -0.1 |
| | baz=87 | | | | | | |
| BJI | Beijing | 87.21 | 314 | P | P | 07 38 56.5 | +1.0 |
| BJI | | | | pP | pP | 07 39 09.1 | 0.0 |
| BJI | | | | sP | sP | 07 39 14.1 | -0.1 |
| BJI | | | | S | SKKSac | 07 49 26.1 | -2.3 |
| BJI | | | | sS | sS | 07 49 48.2 | -6.5 |
| BJI | | | | SS | SS | 07 55 19.3 | +2.1 |
| BJI | | | | PMZ | | | |
| | comp=Z,28nm,1.6s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,480nm,7.2s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,190nm,18.3s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,250nm,15.7s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,160nm,19.6s | | | | | | |
| X32A | Elmer | 87.24 | 53 | P | P | 07 38 56.3 | +0.5 |
| | baz=87 | | | | | | |
| IPM | Ipoh | 87.35 | 276 | eP | P | 07 38 58.3 | +1.5 |
| | comp=Z,18nm,1.0s | | | | | | |
| EDM | Edmonton | 87.36 | 31 | eP | P | 07 38 54.1 | -1.9 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,117nm,2.0s | | | | | | |
| EDM | Edmonton | 87.36 | 31 | eP | P | 07 38 54.1 | -1.9 |
| | comp=Z,117nm,2.0s | | | | | | |
| V31A | Spring Creek L | 87.36 | 51 | P | P | 07 38 57.2 | +0.8 |
| | baz=87 | | | | | | |
| 134A | White-Moore Ra | 87.44 | 55 | P | P | 07 38 58.1 | +1.3 |
| | baz=88 | | | | | | |
| W32A | Sentinel | 87.55 | 52 | P | P | 07 38 58.1 | +0.8 |
| | baz=88 | | | | | | |
| Y33A | Hilltop Ranch, | 87.58 | 53 | P | P | 07 38 58.1 | +0.7 |
| | baz=88 | | | | | | |
| 436A | Wall Ranch, Ga | 87.77 | 57 | P | P | 07 38 58.6 | +0.3 |
| | baz=88 | | | | | | |
| V32A | Arapaho | 87.94 | 52 | P | P | 07 38 59.6 | +0.4 |
| | baz=88 | | | | | | |
| 336A | Riesel | 87.96 | 56 | P | P | 07 38 59.4 | +0.1 |
| | baz=88 | | | | | | |
| T31A | Randall Ranch, | 88.02 | 50 | P | P | 07 39 00.4 | +0.9 |
| | baz=88 | | | | | | |
| R30A | Dighton | 88.07 | 49 | P | P | 07 39 00.5 | +0.7 |
| | baz=88 | | | | | | |
| I25A | Rochford | 88.18 | 43 | P | P | 07 39 01.2 | +0.8 |
| | baz=88 | | | | | | |
| Y34A | Reagan Ranch, | 88.22 | 54 | P | P | 07 39 01.4 | +0.9 |
| | baz=88 | | | | | | |
| HKT | Hockley | 88.24 | 58 | eP | P | 07 38 58.2 | -2.3 |
| HKT | | | | pmax | pmax | | |
| | comp=Z,61nm,2.2s | | | | | | |
| HKT | Hockley | 88.24 | 58 | eP | P | 07 38 58.2 | -2.3 |
| | comp=Z,62nm,2.2s | | | | | | |
| X34A | Smith Ranch, M | 88.41 | 53 | P | P | 07 39 02.2 | +0.8 |
| | baz=88 | | | | | | |
| 438A | Sam Houston St | 88.82 | 57 | P | P | 07 39 04.2 | +0.9 |
| | baz=89 | | | | | | |
| PSI | Prapat | 88.83 | 273 | P | P | 07 39 04.0 | 0.0 |
| | comp=Z,18nm,1.0s,baz=190,slow=3.8,SNR=16 | | | | | | |
| PSI | Prapat | 88.83 | 273 | eP | P | 07 39 03.7 | -0.3 |
| PSI | | | | pmax | pmax | | |
| | comp=Z,39nm,1.2s | | | | | | |
| PSI | Prapat | 88.83 | 273 | eP | P | 07 39 03.7 | -0.3 |
| | comp=Z,39nm,1.2s | | | | | | |
| J27A | Elkhorn Farm, | 88.97 | 44 | P | P | 07 39 04.7 | +0.8 |
| | baz=89 | | | | | | |
| Z36A | Blue Ridge | 88.98 | 55 | P | P | 07 39 05.0 | +0.9 |
| | baz=89 | | | | | | |
| X35A | Drake | 88.99 | 53 | P | P | 07 39 05.1 | +0.9 |
| | baz=89 | | | | | | |
| Q31A | Ellis | 88.99 | 48 | P | P | 07 39 04.8 | +0.7 |
| | baz=89 | | | | | | |
| GYA | Guiyang | 89.31 | 298 | P | P | 07 39 07.4 | +1.4 |
| GYA | | | | pP | pP | 07 39 21.8 | +2.2 |
| GYA | | | | PP | PP | 07 42 40.5 | +3.1 |
| GYA | | | | SKS | SKSac | 07 49 30.8 | -2.0 |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,130nm,6.2s | | | | | | |
| NONG | Nongkai | 89.62 | 289 | P | P | 07 39 11.0 | +3.6 |
| | comp=Z,35nm,1.5s | | | | | | |
| TRTT | Trang | 89.63 | 278 | P | P | 07 39 10.3 | +2.7 |
| | comp=Z,44nm,1.4s | | | | | | |
| 138A | Matatall Enter | 89.81 | 56 | P | P | 07 39 08.6 | +0.6 |
| | baz=90 | | | | | | |
| Y37A | Hugo | 89.88 | 54 | P | P | 07 39 09.3 | +1.0 |
| | baz=90 | | | | | | |
| SRIT | Nakonsritamara | 89.95 | 279 | P | P | 07 39 12.5 | +3.5 |
| | comp=Z,40nm,1.4s,comp=Z,1μm | | | | | | |
| SYO | Syowa Base | 90.37 | 191 | ⇓eP | P | 07 39 10.0 | +0.1 |
| HHC | Hu-ho-hao-te | 90.75 | 313 | eP | P | 07 39 13.9 | +1.6 |
| HHC | | | | SKS | SKSac | 07 49 39.3 | -1.2 |
| HHC | | | | S | S | 07 50 03.9 | -1.5 |
| HHC | | | | PMZ | | | |
| | comp=Z,23nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,290nm,5.3s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,220nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,220nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,200nm,18.5s | | | | | | |
| PBKT | Sadao Pong | 91.12 | 287 | P | P | 07 39 17.1 | +2.7 |
| | comp=Z,38nm,1.1s | | | | | | |
| LOEI | Loei | 91.14 | 288 | P | P | 07 39 15.4 | +0.9 |
| | comp=Z,10nm,2.1s | | | | | | |
| YAK | Yakutsk | 91.32 | 337 | LR | LR | 08 15 40.1 | |
| | comp=Z,67nm,20.0s,baz=132,slow=32 | | | | | | |
| UTTA | Uttaradit | 91.86 | 288 | P | P | 07 39 20.8 | +3.0 |
| | comp=Z,3.9nm,1.2s | | | | | | |
| UTHA | Uthaitani | 92.21 | 286 | P | P | 07 39 23.5 | +4.0 |
| | comp=Z,3.2nm,0.8s,comp=Z,177nm | | | | | | |
| KMI | Kunming | 92.21 | 296 | P | P | 07 39 21.0 | +1.4 |
| KMI | | | | pP | pP | 07 39 35.4 | +2.2 |
| KMI | | | | sP | sP | 07 39 40.8 | +2.5 |
| KMI | | | | PP | PP | 07 43 02.8 | +2.2 |
| KMI | | | | SKS | SKSac | 07 49 48.7 | -1.1 |
| KMI | | | | S | S | 07 50 17.3 | -2.3 |
| KMI | | | | sS | sS | 07 50 41.3 | -1.2 |
| KMI | | | | SS | SS | 07 56 32.2 | +1.5 |
| KMI | | | | PMZ | | | |
| | comp=Z,15nm,1.2s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,240nm,4.2s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,140nm,6.4s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,140nm,7.5s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,120nm,9.8s | | | | | | |
| CRAI | Chiangrai | 92.78 | 290 | P | P | 07 39 19.8 | -2.3 |
| | comp=Z,13nm,0.8s | | | | | | |
| UMPA | Umpang Tak | 92.94 | 286 | P | P | 07 39 26.5 | +3.6 |
| | comp=Z,4.9nm,1.2s,comp=Z,2μm | | | | | | |
| CD2 | Chengdu | 93.19 | 301 | eP | P | 07 39 23.5 | -0.3 |
| CD2 | | | | pP | pP | 07 39 37.4 | 0.0 |
| CD2 | | | | sP | sP | 07 39 43.0 | +0.5 |
| CD2 | | | | SKS | SKSac | 07 49 52.9 | -1.7 |
| CD2 | | | | S | S | 07 50 26.6 | -1.1 |
| CD2 | | | | sS | sS | 07 50 51.1 | +0.5 |
| CD2 | | | | SS | SS | 07 56 44.3 | +0.1 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,550nm,17.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,370nm,17.1s | | | | | | |
| CM01 | Chiang Mai Arr | 93.51 | 288 | eP | P | 07 39 27.5 | +2.1 |
| CMAR | Chiang Mai Arr | 93.53 | 288 | P | P | 07 39 26.0 | +0.4 |
| | comp=Z,3.7nm,0.8s,baz=107,slow=3.2,SNR=9.2 | | | | | | |
| CMAR | | | | LR | LR | 08 20 29.2 | |
| | comp=Z,152nm,19.5s,baz=114,slow=35 | | | | | | |
| CMAR | Chiang Mai Arr | 93.53 | 288 | P | P | 07 39 26.0 | +0.4 |
| CHTO | Chiang Mai | 93.64 | 288 | P | P | 07 39 28.5 | +2.4 |
| | comp=Z,43nm,1.5s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CHTO | Chiang Mai | 93.64 | 288 | eP | P | 07 39 28.2 | +2.1 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| CHTO | Chiang Mai | 93.64 | 288 | eP | P | 07 39 28.2 | +2.1 |
| | comp=Z,16nm,1.2s | | | | | | |
| CMAI | Chiengmai2 | 93.88 | 290 | P | P | 07 39 30.6 | +3.3 |
| LZH | Lanzhou | 94.76 | 306 | eP | P | 07 39 30.2 | -0.8 |
| LZH | | | | pP | pP | 07 39 44.5 | -0.2 |
| LZH | | | | sP | sP | 07 39 49.7 | -0.1 |
| LZH | | | | PP | PP | 07 43 21.3 | +1.0 |
| LZH | | | | SKS | SKSac | 07 50 00.2 | -3.0 |
| LZH | | | | S | S | 07 50 37.2 | -4.2 |
| LZH | | | | sS | sS | 07 51 00.6 | -3.8 |
| LZH | | | | SS | SS | 07 57 06.2 | -0.5 |
| LZH | | | | PMZ | | | |
| | comp=Z,25nm,1.5s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,180nm,7.6s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,240nm,14.7s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,190nm,15.0s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,340nm,19.6s | | | | | | |
| F36A | Milaca | 95.56 | 44 | P | P | 07 39 35.1 | +0.8 |
| | baz=96 | | | | | | |
| ULM | Lac du Bonnet | 95.60 | 39 | LR | LR | 08 20 18.2 | |
| | comp=Z,842nm,18.1s,baz=264,slow=34 | | | | | | |
| SPMN | St. Paul | 95.83 | 44 | P | P | 07 39 36.3 | +0.8 |
| | baz=96 | | | | | | |
| C36A | Pine Crest Far | 96.64 | 42 | P | P | 07 39 39.4 | +0.3 |
| | baz=97 | | | | | | |
| SONM | Songino Array | 96.71 | 318 | PP | PP | 07 43 41.2 | +6.2 |
| | comp=Z,0.3nm,0.4s,baz=119,slow=8.9,SNR=3.7 | | | | | | |
| SONM | | | | LR | LR | 08 22 16.4 | |
| | comp=Z,100nm,18.1s,baz=98,slow=35 | | | | | | |
| GTA | Gaotai | 98.79 | 308 | eP | P | 07 39 45.4 | -3.7 |
| GTA | | | | pP | pP | 07 39 59.1 | -3.7 |
| GTA | | | | sP | sP | 07 40 04.4 | -3.5 |
| GTA | | | | PP | PP | 07 43 51.1 | -0.1 |
| GTA | Gaotai | 98.79 | 308 | SKS | SKSac | 07 50 18.5 | -5.3 |
| GTA | Gaotai | 98.79 | 308 | S | S | 07 51 09.8 | -6.0 |
| GTA | Gaotai | 98.79 | 308 | sS | sS | 07 51 32.2 | -6.7 |
| GTA | Gaotai | 98.79 | 308 | SS | SS | 07 58 02.2 | -1.2 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,83nm,5.9s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=N,210nm,18.5s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=E,250nm,20.4s | | | | | | |
| GTA | | | | LR | LR | | |
| | comp=Z,320nm,17.6s | | | | | | |
| GTA | Gaotai | 98.79 | 308 | pP | P | 07 39 45.5 | -3.7 |
| LPAZ | La Paz | 98.82 | 110 | LR | LR | 08 15 30.4 | |
| | comp=Z,240nm,19.9s,baz=252,slow=30 | | | | | | |
| ROSC | El Rosal | 99.88 | 88 | LR | LR | 08 17 31.8 | |
| | comp=Z,71nm,18.4s,baz=268,slow=31 | | | | | | |
| WMQ | Urumqi | 108.55 | 311 | Pdif | Pdif | 07 40 35.0 | +2.6 |
| WMQ | | | | PP | PP | 07 45 10.0 | +6.2 |
| WMQ | | | | S | Sdif | 07 52 36.0 | -1.0 |
| WMQ | | | | SS | SS | 08 00 20.0 | +2.7 |
| WMQ | | | | PPMZ | | | |
| | comp=Z,35nm,10.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,110nm,25.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,330nm,20.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,100nm,20.0s | | | | | | |
| ZALV | Zalesovo Beam | 111.18 | 322 | PKiKP | PKiKP | 07 44 41.9 | -0.5 |
| | comp=Z,0.4nm,0.3s,baz=108,slow=4.7,SNR=2.7 | | | | | | |
| MKAR | Makanchi Array | 112.59 | 314 | PKiKP | PKiKP | 07 44 44.2 | -1.2 |
| | comp=Z,1.2nm,0.8s,baz=66,slow=4.9,SNR=5.1 | | | | | | |
| KURK | Kurchatov | 115.01 | 318 | ePKIKP | PKPdf | 07 44 45.9 | -3.9 |
| KURK | | | | | | 07 45 49.1 | |
| KURK | Kurchatov | 115.01 | 318 | ePKPdf | PKPdf | 07 44 45.9 | -3.9 |
| KURK | | | | PP | PP | 07 45 49.0 | -0.7 |
| KURBB | Kurchatov Arra | 115.07 | 318 | PKP | PKPdf | 07 44 49.2 | -0.7 |
| | comp=Z,0.6nm,0.2s,baz=97,slow=1.9,SNR=6.6 | | | | | | |
| KURBB | | | | PP | PP | 07 45 49.0 | -1.1 |
| | comp=Z,0.6nm,0.3s,baz=76,slow=3.9,SNR=9.9 | | | | | | |
| KSH | Kashi | 117.01 | 306 | PKP | PKPdf | 07 44 57.9 | +3.7 |
| KSH | | | | esPKP | | 07 45 12.0 | |
| KSH | | | | ePP | PP | 07 46 15.4 | +11 |
| KSH | | | | PKS | PKSdf | 07 48 32.0 | +1.0 |
| KSH | | | | SKS | SKSdf | 07 52 04.2 | +1.4 |
| KSH | | | | PPMZ | | | |
| | comp=Z,80nm,4.9s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,110nm,6.9s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,96nm,6.1s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,160nm,7.8s | | | | | | |
| AAK | Ala-Archa | 118.12 | 309 | PKP | PKPdf | 07 44 55.8 | -0.5 |
| | comp=Z,0.8nm,0.4s,baz=157,slow=7.7,SNR=3.0 | | | | | | |
| BVAR | Borovoye Array | 119.83 | 321 | PKP | PKPdf | 07 44 58.2 | -0.8 |
| | comp=Z,6.6nm,1.0s,baz=101,slow=1.5,SNR=7.7 | | | | | | |
| BRVK | Borovoye | 119.89 | 321 | ePKIKP | PKPdf | 07 44 58.3 | -0.8 |
| BRVK | Borovoye | 119.89 | 321 | ePKPdf | PKPdf | 07 44 58.3 | -0.8 |
| KBL | Kabul | 122.51 | 300 | ePKIKP | PKPdf | 07 45 05.5 | +0.5 |
| KBL | Kabul | 122.51 | 300 | ePKPdf | PKPdf | 07 45 05.5 | +0.5 |
| ARU | Arti | 125.42 | 328 | PKP | PKPdf | 07 45 09.0 | -0.6 |
| | comp=Z,1.9nm,0.2s,baz=130,slow=19,SNR=1.5 | | | | | | |
| ARCES | ARCESS Array B | 126.93 | 352 | PKP | PKPdf | 07 45 11.4 | -0.8 |
| | comp=Z,3.0nm,0.8s,baz=5.3,slow=5.2,SNR=5.5 | | | | | | |
| ABKAR | Akbulak array | 127.11 | 319 | ePKPdf | PKPdf | 07 45 13.3 | +0.2 |
| AKTO | Aktyubinsk | 127.92 | 321 | PKP | PKPdf | 07 45 13.8 | -0.8 |
| | comp=Z,0.4nm,0.3s,baz=87,slow=1.0,SNR=4.7 | | | | | | |
| GEYT | Alibeck | 131.03 | 305 | PKP | PKPdf | 07 45 21.3 | +0.3 |
| | comp=Z,1.4nm,0.5s,baz=349,slow=2.9,SNR=3.3 | | | | | | |
| GNI | Garni | 140.41 | 312 | PKP | PKPdf | 07 45 38.2 | -0.3 |
| | comp=Z,3.4nm,0.3s,baz=32,slow=19,SNR=1.8 | | | | | | |
| AKASG | Malin Array Be | 142.55 | 337 | PKP | PKPdf | 07 45 42.3 | +0.5 |
| | comp=Z,0.9nm,0.6s,baz=33,slow=2.5,SNR=6.2 | | | | | | |
| RAYN | Ar Rayn | 143.41 | 286 | ePKPdf | PKPbc | 07 45 42.3 | +0.8 |
| BEL | Belsk | 144.22 | 345 | ePKP | PKPbc | 07 45 43.4 | +0.5 |
| LVV | L'vov | 145.11 | 340 | ePKIKP | PKPbc | 07 45 45.1 | -0.8 |
| MALT | Malatya | 145.63 | 313 | ⇓iP | PKPab | 07 45 49.8 | +1.4 |
| KIS | Kishinev | 145.64 | 333 | ePKP | PKPdf | 07 45 47.0 | -0.3 |
| KIS | | | | LRM | MLR | 08 57 24.0 | |
| | comp=Z,300nm,22.0s | | | | | | |
| KIS | Kishinev | 145.64 | 333 | ePKP2 | PKPdf | 07 45 47.0 | -0.3 |
| KWP | Kalwaria Pacla | 145.69 | 342 | ePKP | PKPdf | 07 45 47.3 | 0.0 |
| OJC | Ojcow | 145.95 | 345 | ePKPc | PKPdf | 07 45 48.2 | +0.4 |
| OJC | Ojcow | 145.95 | 345 | ⇑ePKP2 | PKPdf | 07 45 48.2 | +0.4 |
| OJC | Ojcow | 145.95 | 345 | ePKPbc | PKPdf | 07 45 47.5 | -0.2 |
| KSP | Ksiaz | 146.11 | 349 | ePKPc | PKPdf | 07 45 49.2 | +1.2 |
| CLL | Collm | 146.14 | 353 | ⇑iPKPbc | PKPdf | 07 45 48.4 | +0.4 |
| | comp=Z,90nm,1.1s | | | | | | |
| CLL | | | | i PKiKP | PKiKP | 07 45 51.6 | -0.6 |
| CLL | | | | i | | 07 45 55.1 | |
| CLL | | | | Lm | MLR | 08 57 00.0 | |
| | comp=N,200nm,18.2s | | | | | | |
| CLL | | | | Lm | MLR | 08 57 00.0 | |
| | comp=E,100nm,21.4s | | | | | | |
| CLL | | | | Lm | MLR | 08 57 00.0 | |
| | comp=Z,300nm,18.9s | | | | | | |
| CLL | Collm | 146.14 | 353 | ePKPbc | PKPdf | 07 45 47.7 | -0.3 |
| STHS | Stebnicka Huta | 146.31 | 343 | ePKP | PKPab | 07 45 50.3 | -0.1 |
| KOLS | Kolonicke sedl | 146.44 | 341 | ePKP2 | PKPab | 07 45 50.9 | 0.0 |
| KOLS | Kolonicke sedl | 146.44 | 341 | ePKP | PKPab | 07 45 50.9 | 0.0 |
| BRG | Berggiesshubel | 146.45 | 352 | i PKP | PKPbc | 07 45 49.8 | -0.1 |
| | comp=Z,50nm,1.2s | | | | | | |
| BRG | Berggiesshubel | 146.45 | 352 | i PKP2 | PKPbc | 07 45 49.8 | -0.1 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,50nm,1.2s | | | | | | |
| UPC | Upice | 146.48 | 349 | ePKP | PKPbc | 07 45 50.2 | +0.1 |
| UPC | | | | epPKP | pPKPdf | 07 46 01.1 | -1.6 |
| NIE | Niedzica | 146.56 | 344 | ePKPc | | 07 45 50.7 | |
| DPC | Dobruska-Polom | 146.57 | 349 | ePKP | PKPbc | 07 45 50.6 | +0.2 |
| DPC | | | | epPKP | pPKPdf | 07 46 01.8 | -1.2 |
| DPC | | | | AMS | AMS | 08 50 20.0 | |
| | comp=Z,300nm,20.1s | | | | | | |
| BUR04 | Bucovina Ar. S | 146.59 | 337 | ePKPdf | PKPbc | 07 45 50.0 | -0.6 |
| BURAR | Bucovina Array | 146.59 | 337 | ⇓iP | PKPab | 07 45 52.3 | +0.6 |
| OKC | Ostrava-Krasne | 146.69 | 347 | ePKP | PKPbc | 07 45 51.1 | +0.4 |
| OKC | | | | epPKP | pPKPdf | 07 46 04.7 | +1.6 |
| OKC | | | | AMS | AMS | 08 51 20.0 | |
| | comp=Z,300nm,19.1s | | | | | | |
| PVCC | Panska Ves | 146.69 | 351 | ePKP | PKPbc | 07 45 51.1 | +0.4 |
| KRLC | Kraliky | 146.75 | 348 | ePKP | PKPbc | 07 45 51.4 | +0.5 |
| MORC | Moravsky Berou | 146.88 | 347 | ⇓PKP2 | PKPab | 07 45 52.0 | -0.7 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| MORC | Moravsky Berou | 146.88 | 347 | ⇓iP | PKPab | 07 45 52.0 | -0.7 |
| MORC | Moravsky Berou | 146.88 | 347 | ePKPbc | PKPbc | 07 45 51.0 | -0.3 |
| LANS | Liptovska Anna | 147.02 | 345 | ePKP | PKPab | 07 45 53.7 | +0.5 |
| TRPA | Tarpa | 147.07 | 340 | ⇓iP | PKPbc | 07 45 52.1 | +0.3 |
| PRA | Prague | 147.16 | 351 | ePKP | PKPbc | 07 45 52.4 | +0.4 |
| PRU | Pruhonice | 147.22 | 351 | ePKP | PKPbc | 07 45 52.3 | +0.1 |
| PRU | | | | epPKP | pPKPdf | 07 46 03.0 | -1.0 |
| PRU | | | | AMS | AMS | 08 55 40.0 | |
| | comp=Z,300nm,18.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 147.26 | 350 | ePKP | PKPbc | 07 45 52.6 | +0.3 |
| GOPC | | | | epPKP | pPKPdf | 07 46 03.2 | -0.9 |
| GOPC | | | | AMS | AMS | 08 55 30.0 | |
| | comp=Z,300nm,17.4s | | | | | | |
| NKC | Novy Kostel | 147.26 | 353 | ePKP | PKPbc | 07 45 52.8 | +0.5 |
| NKC | | | | epPKP | pPKPdf | 07 46 03.4 | -0.7 |
| CFR | Carcaliu | 147.34 | 332 | ⇓iP | PKPbc | 07 45 53.2 | +0.6 |
| VRI | Vrincioaia | 147.42 | 334 | ⇓iP | PKPbc | 07 45 53.5 | +0.6 |
| VRAC | Vranov | 147.52 | 348 | PKPbc | PKPbc | 07 45 53.0 | 0.0 |
| | comp=Z,2.3nm,0.4s,baz=8.0,slow=4.1,SNR=12 | | | | | | |
| VRAC | Vranov | 147.52 | 348 | ⇓iP | PKPab | 07 45 59.5 | +4.3 |
| VYHS | Vyhne | 147.79 | 345 | ePKP | PKPbc | 07 45 53.1 | -0.7 |
| DOPR | Dopca | 147.89 | 335 | ⇓iP | PKPab | 07 45 57.5 | +0.7 |
| PSZ | Piszkesteto | 148.04 | 343 | ePKP2 | PKPbc | 07 45 54.0 | -0.6 |
| PSZ | Piszkesteto | 148.04 | 343 | ⇓iP | PKPbc | 07 45 55.2 | +0.6 |
| PSZ | Piszkesteto | 148.04 | 343 | ePKPbc | PKPbc | 07 45 54.0 | -0.6 |
| MLR | Muntele Rosu | 148.05 | 334 | PKPbc | PKPbc | 07 45 54.5 | -0.3 |
| | comp=Z,1.1nm,0.9s,baz=203,slow=19,SNR=8.5 | | | | | | |
| MLR | Muntele Rosu | 148.05 | 334 | ⇑iP | PKPbc | 07 45 54.7 | -0.1 |
| BRTR | Keskin Array B | 148.06 | 319 | PKPbc | PKPbc | 07 45 55.3 | +0.2 |
| | comp=Z,18nm,1.0s,baz=93,slow=2.5,SNR=17 | | | | | | |
| ISR | Istrita | 148.10 | 333 | ⇓iP | PKPab | 07 45 58.0 | +0.4 |
| DRGR | | 148.18 | 339 | ⇓iP | PKPab | 07 45 59.6 | +1.6 |
| KHC | Kasperske Hory | 148.20 | 352 | ePKP2 | PKPbc | 07 45 54.9 | 0.0 |
| KHC | Kasperske Hory | 148.20 | 352 | ePKP | PKPbc | 07 45 55.0 | 0.0 |
| KHC | | | | epPKP | pPKPdf | 07 46 06.7 | +1.0 |
| KHC | Kasperske Hory | 148.20 | 352 | ePKPbc | PKPbc | 07 45 54.9 | 0.0 |
| VOIR | | 148.46 | 335 | ⇓iP | PKPbc | 07 45 56.8 | +1.0 |
| GERES | GERESS Array B | 148.46 | 351 | PKPbc | PKPbc | 07 45 55.9 | +0.2 |
| | comp=Z,3.9nm,0.8s,baz=29,slow=3.0,SNR=7.1 | | | | | | |
| ANTO | Ankara | 148.50 | 320 | ⇑iP | PKPbc | 07 45 57.5 | +1.4 |
| ANTO | Ankara | 148.50 | 320 | ePKPbc | PKPbc | 07 45 55.1 | -1.0 |
| BR231 | Keskin MP Arra | 148.53 | 320 | ePKPdf | PKPbc | 07 45 55.9 | -0.2 |
| CONA | Conrad Observa | 148.98 | 348 | ⇓iPKiKP | PKPbc | 07 45 57.6 | +0.6 |
| | comp=Z,42nm,1.4s | | | | | | |
| ASF | Jabal al Asfar | 149.29 | 304 | PKPbc | PKPbc | 07 45 57.6 | -0.7 |
| | comp=Z,3.7nm,0.8s,baz=356,slow=1.8,SNR=7.9 | | | | | | |
| MOA | Molln | 149.34 | 350 | ⇓iPKiKP | PKPbc | 07 45 58.3 | +0.4 |
| | comp=Z,13nm,1.0s | | | | | | |
| BFO | Black Forest | 149.45 | 358 | ePKP2 | PKPbc | 07 45 57.3 | -0.8 |
| BFO | Black Forest | 149.45 | 358 | ePKPbc | PKPbc | 07 45 57.3 | -0.8 |
| ECH | Echery | 149.59 | 360 | ePKPdf | PKPdf | 07 45 54.1 | +0.2 |
| ECH | | | | ePKPbc | PKPbc | 07 45 58.3 | -0.1 |
| ECH | | | | ePKPab | PKPab | 07 46 02.9 | -0.7 |
| MMAI | Mount Meron Ar | 150.15 | 306 | PKPbc | PKPbc | 07 46 01.7 | +1.3 |
| | comp=Z,14nm,0.8s,baz=68,slow=6.6,SNR=11 | | | | | | |
| RETA | Reutte | 150.15 | 355 | ⇓iPKiKP | PKPbc | 07 45 60.0 | +0.1 |
| | comp=Z,18nm,1.3s | | | | | | |
| KBA | Koelnbreinsper | 150.24 | 351 | ⇓iPKPbc | PKPdf | 07 45 56.5 | +1.3 |
| | comp=Z,30nm,1.9s | | | | | | |
| MOTA | Moosalm | 150.25 | 354 | ⇑iPKPbc | PKPbc | 07 45 59.3 | -1.0 |
| | comp=Z,20nm,1.0s | | | | | | |
| WTTA | Wattenberg | 150.28 | 353 | ⇓iPKiKP | PKPbc | 07 46 00.4 | +0.1 |
| | comp=Z,32nm,1.1s | | | | | | |
| SOKA | Soboth | 150.34 | 349 | ⇓iPKPbc | PKPbc | 07 45 58.1 | -2.3 |
| | comp=Z,13nm,1.0s | | | | | | |
| SQTA | Sankt Quirin | 150.37 | 354 | ⇓iPKiKP | PKPbc | 07 46 00.8 | +0.3 |
| DAVA | Damuels | 150.41 | 356 | ⇑iPKiKP | PKiKP | 07 46 01.4 | 0.0 |
| | comp=Z,27nm,1.0s | | | | | | |
| FETA | Feichten | 150.61 | 355 | ⇓iPKiKP | PKPbc | 07 46 01.4 | +0.2 |
| | comp=Z,23nm,1.2s | | | | | | |
| MYKA | Terra Mystica | 150.63 | 350 | ⇓iPKPbc | PKPbc | 07 46 00.3 | -0.7 |
| | comp=Z,3.6nm,0.5s | | | | | | |
| ABTA | Abfaltersbach | 150.68 | 352 | ⇓iPKiKP | PKPbc | 07 46 00.7 | -0.5 |
| | comp=Z,24nm,0.9s | | | | | | |
| CSS | Prodhromos | 150.82 | 311 | ePKPdf | PKPdf | 07 45 57.0 | +0.8 |
| CSS | | | | ePKPbc | PKPbc | 07 46 01.9 | 0.0 |
| CSS | | | | ePKPab | PKPab | 07 46 07.1 | -2.0 |
| DAVOX | Davos/Dischmat | 150.92 | 356 | PKPbc | PKPbc | 07 46 01.7 | -0.2 |
| | comp=Z,8.1nm,0.9s,baz=28,slow=5.5,SNR=4.5 | | | | | | |
| EIL | Elat | 151.71 | 300 | PKP | PKPdf | 07 45 58.6 | +0.9 |
| | comp=Z,2.6nm,0.6s,baz=38,slow=17,SNR=2.7 | | | | | | |
| EIL | | | | PKPbc | PKiKP | 07 46 05.1 | +0.7 |
| | comp=Z,16nm,1.2s,baz=44,slow=2.5,SNR=8.3 | | | | | | |
| BNI | Bardonecchia | 152.76 | 0 | ePKPab | PKPab | 07 46 16.8 | -0.1 |
| KEST | Kesra | 161.93 | 353 | PKP | PKPdf | 07 46 10.1 | -0.5 |
| | comp=Z,7.3nm,0.9s,baz=309,slow=4.7,SNR=7.1 | | | | | | |
| TOA0 | Torodi Ar. Sit | 173.28 | 132 | ePKPab | PKPab | 07 47 46.8 | -0.5 |
| TORD | Torodi Ar. Bea | 173.28 | 132 | PKP | PKPdf | 07 46 16.6 | -2.5 |
| | comp=Z,2.8nm,1.2s,baz=286,slow=0.4,SNR=3.7 | | | | | | |
| TORD | | | | PKPab | PKPab | 07 47 46.2 | -1.1 |
| | comp=Z,4.9nm,1.1s,baz=254,slow=2.4,SNR=9.5 | | | | | | |

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*ISCJB **01** 07:26:15.8±0.1, 18°.81S±0°.02×169°.55E±0°.03, h246km, mb4.8/73, Error ellipse: s-maj=4.1km s-min=3.2km az=10.7*

*MOS **01** 07:26:19.4±1.2, 18°.90S×169°.56E, h289km, mb5.1/25, Error ellipse: s-maj=10.3km s-min=8.6km az=40.9*

*IDC **01** 07:26:19.9±0.9, 18°.93S×169°.54E, h278km±7km, mb4.4/19, mb1 4.6/21, mb1mx4.4/30, mbtmp5.1/21, Error ellipse: s-maj=9.1km s-min=7.4km az=83.0*

*NEIC **01** 07:26:20.7±0.6, 18°.88S×169°.57E, h286km±6km, mb5.0/51, Error ellipse: s-maj=4.9km s-min=4.4km az=103.0*

*NEIC Felt at Port-Vila.*

*BJI **01** 07:26:20.7, 18°.46S×169°.70E, h286km, mb4.9/37, mB4.9/30*

*GCMT **01** 07:26:20.7±0.3, 18°.91S×169°.57E, h283km±3km, MW5.2/62, Moment Tensor Solution. s47,c54; s62,c85; Duration: 1s0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.37±.31; $M_{\theta\theta}$-2.28±.30; $M_{\phi\phi}$0.90±.33; $M_{r\theta}$6.73±.32; $M_{\theta\phi}$-4.70±.25; $M_{\phi r}$-2.88±.34; Best double couple: $M_0$8.80800×$10^{16}$ NP1:$\phi_s$100.00000°, δ85.00000°, λ125.00000°. NP2:$\phi_s$198.00000°, δ36.00000°, λ9.00000°. Principal axes: T 9.6320, Plg40.0000°, Azm42.0000°; N -1.6500, Plg35.0000°, Azm276.0000°; P -7.9850, Plg30.0000°, Azm162.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*AUST **01** 07:26:23.6±2.8, 18°.92S×169°.59E, h314km Error ellipse: s-maj=1.6km s-min=1.1km az=22.0*

**ISC 01 07:26:16.2**±0.3**, 18°.81S**±0°.04×**169°.60E**±0°.05**, h246**km**, n381, σ1s42**/380**, mb4.8**/73**, 14C-11D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 4.40 | 222 | P | Pn | 07 27 28.6 | +3.9 |
| | 34nm,0.3s,baz=360,slow=11,SNR=91 | | | | | | |
| DZM | | | | S | S | 07 28 23.7 | +4.7 |
| | baz=180,slow=19,SNR=2.0 | | | | | | |
| MSVF | Nonsavu | 8.10 | 84 | eP | Pn | 07 28 15.3 | +4.4 |
| MSVF | Nonsavu | 8.10 | 84 | Pn | Pn | 07 28 15.0 | +4.1 |
| | 1µm,0.8s,SNR=20 | | | | | | |
| MSVF | Nonsavu | 8.10 | 84 | ePn | Pn | 07 28 15.3 | +4.4 |
| MSVF | Nonsavu | 8.10 | 84 | ePn | Pn | 07 28 15.3 | +4.4 |
| HNR | Honiara | 13.21 | 314 | eP | P | 07 29 19.0 | +2.5 |
| HNR | Honiara | 13.21 | 314 | ePn | P | 07 29 19.0 | +2.5 |
| RAO | Raoul Island | 15.42 | 135 | P | Pn | 07 29 43.0 | +1.5 |
| | 120nm,0.3s,baz=198,slow=7.8,SNR=5.3 | | | | | | |
| RAO | Raoul Island | 15.42 | 135 | eP | Pn | 07 29 43.4 | +1.8 |
| RAO | | | | pmax | pmax | | |
| | comp=Z,382nm,0.7s | | | | | | |
| RAO | Raoul Island | 15.42 | 135 | eP | Pn | 07 29 43.4 | +1.8 |
| | comp=Z,382nm,0.7s | | | | | | |
| LHI | Lord Howe Isla | 15.84 | 215 | P | Pn | 07 29 48.6 | +2.0 |
| | baz=16,SNR=10 | | | | | | |
| LHI | Lord Howe Isla | 15.84 | 215 | eP | Pn | 07 29 48.3 | +1.7 |
| | comp=Z,129nm,0.6s | | | | | | |
| OUZ | Omahuta | 16.73 | 169 | PN | Pn | 07 29 57.5 | +0.5 |
| OUZ | Omahuta | 16.73 | 169 | eP | Pn | 07 29 57.7 | +0.7 |
| | comp=Z,326nm,1.5s | | | | | | |
| WCZ | Waipu Caves | 17.57 | 167 | PN | Pn | 07 30 07.3 | +0.4 |
| GRZ | Great Barrier | 18.13 | 165 | PN | Pn | 07 30 12.6 | -0.8 |
| EIDS | Eidsvold | 18.36 | 246 | P | Pn | 07 30 15.7 | -0.5 |
| | baz=18,SNR=31 | | | | | | |
| EIDS | Eidsvold | 18.36 | 246 | eP | Pn | 07 30 16.0 | -0.3 |
| | comp=Z,29nm,0.5s | | | | | | |
| WIAZ | Waiheke Island | 18.57 | 166 | PN | P | 07 30 16.9 | +1.8 |
| KUZ | Kuaotunu | 18.66 | 164 | PN | P | 07 30 17.7 | +1.5 |
| MKAZ | Moumakai | 18.88 | 166 | PN | P | 07 30 20.1 | +1.6 |
| TOZ | Tahuroa Road | 19.55 | 166 | PN | P | 07 30 26.9 | +1.4 |
| ARMA | Armidale | 19.99 | 231 | P | P | 07 30 32.6 | +2.1 |
| | baz=20,SNR=34 | | | | | | |
| ARMA | Armidale | 19.99 | 231 | eP | P | 07 30 32.6 | +2.1 |
| | comp=Z,73nm,1.1s | | | | | | |
| HIZ | Hauiti | 20.16 | 168 | eP | P | 07 30 33.2 | +1.0 |
| MXZ | Matakaoa Point | 20.18 | 160 | ePN | P | 07 30 34.0 | +1.6 |
| HAZ | Te Kaha | 20.19 | 161 | PN | P | 07 30 33.9 | +1.4 |
| TARA | Tarawa | 20.30 | 10 | eP | P | 07 30 34.0 | +0.2 |
| | comp=Z,80nm,0.7s | | | | | | |
| WMGZ | Waiomatatini S | 20.45 | 160 | PN | P | 07 30 35.8 | +0.5 |
| URZ | Urewera | 20.46 | 163 | P | P | 07 30 36.4 | +1.0 |
| | comp=Z,37nm,0.3s,baz=301,slow=1.9,SNR=41 | | | | | | |
| URZ | | | | S | S | 07 34 08.7 | -1.1 |
| | comp=Z,7.7nm,0.9s,baz=336,slow=20,SNR=2.6 | | | | | | |
| URZ | | | | ScP | ScP | 07 37 45.3 | -4.0 |
| | comp=Z,9.0nm,0.8s,baz=0.0,slow=5.1,SNR=3.9 | | | | | | |
| URZ | Urewera | 20.46 | 163 | PN | P | 07 30 36.4 | +1.0 |
| URZ | Urewera | 20.46 | 163 | eP | P | 07 30 36.6 | +1.2 |
| | comp=Z,181nm,0.9s | | | | | | |
| URZ | | | | S | S | 07 34 08.7 | -1.1 |
| URZ | | | | ScP | ScP | 07 37 45.3 | -4.0 |
| PUZ | Puketiti | 20.63 | 160 | PN | P | 07 30 37.2 | 0.0 |
| TWGZ | Tauwhareparae | 20.64 | 161 | PN | P | 07 30 38.2 | +0.9 |
| MWZ | Matawai | 20.65 | 162 | PN | P | 07 30 38.1 | +0.7 |
| MWZ | | | | e | | 07 31 06.4 | |
| RMQ | Roma | 20.68 | 245 | P | P | 07 30 40.4 | +2.5 |
| | baz=21,SNR=9.7 | | | | | | |
| SNGZ | Shannon Statio | 21.01 | 163 | PN | P | 07 30 41.9 | +0.8 |
| RIGZ | Rimuhau | 21.06 | 162 | PN | P | 07 30 41.9 | +0.2 |
| BKZ | Black Stump Fm | 21.15 | 165 | PN | P | 07 30 42.8 | +0.3 |
| BKZ | Black Stump Fm | 21.15 | 165 | eP | P | 07 30 43.3 | +0.8 |
| | comp=Z,112nm,1.0s | | | | | | |
| KNZ | Kokohu | 21.33 | 163 | PN | P | 07 30 44.3 | +0.1 |
| BHHZ | Black Hill Sta | 21.36 | 166 | PN | P | 07 30 45.4 | +0.9 |
| ARHZ | Aropaoanui | 21.37 | 164 | PN | P | 07 30 45.2 | +0.6 |
| KRHZ | Kereru | 21.57 | 166 | PN | P | 07 30 46.6 | 0.0 |
| CKHZ | Cape Kidnapper | 21.76 | 164 | PN | P | 07 30 48.0 | -0.2 |
| KAHZ | Kahuranaki | 21.84 | 165 | PN | P | 07 30 49.2 | +0.1 |
| MGCD | Mangrove Creek | 21.91 | 225 | P | P | 07 30 51.2 | +1.6 |
| | baz=22,SNR=47 | | | | | | |
| CTA | Charters Tower | 22.05 | 263 | P | P | 07 30 52.6 | +1.3 |
| | comp=Z,9.7nm,0.5s,baz=95,slow=12,SNR=12 | | | | | | |
| CTA | | | | S | S | 07 34 36.1 | -0.3 |
| | comp=Z,5.1nm,0.9s,baz=210,slow=20,SNR=3.5 | | | | | | |
| CTA | | | | ScP | ScP | 07 37 52.0 | -1.6 |
| | baz=95,slow=5.7 | | | | | | |
| CTAO | Charters Tower | 22.05 | 263 | eP | P | 07 30 52.5 | +1.3 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| CTAO | Charters Tower | 22.05 | 263 | eP | P | 07 30 52.5 | +1.3 |
| | comp=Z,14nm,0.7s | | | | | | |
| PXZ | Pawanui | 22.06 | 165 | PN | P | 07 30 50.6 | -0.4 |
| BFZ | Birch Farm | 22.54 | 167 | PN | P | 07 30 55.3 | -0.1 |
| BFZ | Birch Farm | 22.54 | 167 | eP | P | 07 30 55.8 | +0.5 |
| | comp=Z,93nm,0.9s | | | | | | |
| CAW | Cannon Point | 22.72 | 169 | PN | P | 07 30 56.7 | -0.3 |
| SNZO | South Karori | 22.85 | 170 | eP | P | 07 30 58.4 | +0.2 |
| | comp=Z,77nm,0.8s | | | | | | |
| THZ | Tophouse | 23.06 | 174 | eP | P | 07 31 00.5 | +0.4 |
| PMG | Port Moresby | 23.66 | 290 | ⇑P | P | 07 31 06.7 | +0.8 |
| KHZ | Kahutara | 23.77 | 173 | eP | P | 07 31 07.2 | +0.6 |
| | comp=Z,65nm,1.1s | | | | | | |
| KNTN | Kanton | 24.25 | 51 | eP | P | 07 31 11.8 | +0.6 |
| | comp=Z,166nm,1.4s | | | | | | |
| CNB | Canberra Magne | 24.32 | 223 | P | P | 07 31 12.8 | +1.1 |
| | baz=24,SNR=105 | | | | | | |
| YNG | Young | 24.38 | 227 | P | P | 07 31 13.9 | +1.7 |
| | baz=24,SNR=9.1 | | | | | | |
| OXZ | Oxford | 24.53 | 176 | eP | P | 07 31 14.3 | +0.8 |
| CAN | Canberra | 24.56 | 224 | eP | P | 07 31 15.3 | +1.4 |
| CAN | | | | pmax | pmax | | |
| | comp=Z,80nm,1.5s | | | | | | |
| CAN | Canberra | 24.56 | 224 | eP | P | 07 31 15.2 | +1.4 |
| | comp=Z,80nm,1.5s | | | | | | |
| QLP | Quilpie | 24.62 | 247 | P | P | 07 31 15.7 | +1.2 |
| | baz=25,SNR=9.4 | | | | | | |
| RPZ | Rata Peaks | 24.86 | 178 | P | P | 07 31 15.1 | -1.3 |
| | comp=Z,24nm,0.8s,baz=40,slow=9.8,SNR=4.1 | | | | | | |
| RPZ | | | | S | S | 07 35 18.1 | -2.7 |
| | comp=Z,8.3nm,0.8s,baz=32,slow=13,SNR=3.7 | | | | | | |
| RPZ | Rata Peaks | 24.86 | 178 | PN | P | 07 31 17.3 | +0.8 |
| RPZ | Rata Peaks | 24.86 | 178 | eP | P | 07 31 17.3 | +0.8 |
| | comp=Z,68nm,0.8s | | | | | | |
| RPZ | | | | S | S | 07 35 18.1 | -2.7 |
| MQZ | McQueen's Vall | 24.96 | 175 | eP | P | 07 31 18.0 | +0.7 |
| CMSA | Cobar Meteorol | 25.02 | 235 | P | P | 07 31 18.6 | +0.6 |
| | baz=25,SNR=197 | | | | | | |
| MILA | Mila | 25.54 | 220 | P | P | 07 31 23.6 | +0.9 |
| | baz=26,SNR=18 | | | | | | |
| WKZ | Wanaka | 25.95 | 181 | eP | P | 07 31 27.2 | +1.0 |
| ODZ | Otahua Downs | 26.18 | 178 | eP | P | 07 31 28.6 | +0.4 |
| | comp=Z,146nm,1.7s | | | | | | |
| WHZ | Wether Hill Ro | 27.05 | 183 | eP | P | 07 31 36.8 | +0.8 |
| | comp=Z,26nm,1.0s | | | | | | |
| TOO | Toolangi | 28.17 | 223 | P | P | 07 31 46.8 | +0.8 |
| | baz=28,SNR=40 | | | | | | |
| QIS | Mount Isa | 28.28 | 261 | P | P | 07 31 48.6 | +1.4 |
| | baz=28,SNR=6.5 | | | | | | |
| ARPS | Mount Arapiles | 30.23 | 228 | P | P | 07 32 05.3 | +1.1 |
| | baz=30,SNR=26 | | | | | | |
| MOO | Moorlands | 30.27 | 214 | P | P | 07 32 05.3 | +0.8 |
| | baz=30,SNR=12 | | | | | | |
| HTT | Hallett | 31.02 | 236 | P | P | 07 32 11.1 | -0.2 |
| | baz=31,SNR=32 | | | | | | |
| BBOO | Buckleboo | 33.11 | 238 | P | P | 07 32 30.0 | +0.6 |
| | baz=33,SNR=73 | | | | | | |
| BBOO | Buckleboo | 33.11 | 238 | eP | P | 07 32 29.8 | +0.5 |
| | comp=Z,14nm,0.6s | | | | | | |
| WRAB | Tennant Creek | 33.24 | 262 | ceP | P | 07 32 30.2 | -0.5 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| WRAB | Tennant Creek | 33.24 | 262 | P | P | 07 32 30.0 | -0.7 |
| | comp=Z,67nm,0.3s,SNR=34 | | | | | | |
| WRAB | Tennant Creek | 33.24 | 262 | eP | P | 07 32 30.2 | -0.5 |
| | comp=Z,7.7nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 33.25 | 262 | P | P | 07 32 30.3 | -0.5 |
| | comp=Z,5.9nm,0.5s,baz=95,slow=8.4,SNR=111 | | | | | | |
| WRA | | | | S | S | 07 37 28.8 | -3.8 |
| | comp=Z,5.3nm,0.9s,baz=90,slow=15,SNR=9.4 | | | | | | |
| WRA | | | | ScP | ScP | 07 38 25.9 | -2.1 |
| | comp=Z,5.7nm,1.1s,baz=94,slow=4.2,SNR=5.9 | | | | | | |
| AS01 | Alice Springs | 33.52 | 255 | eP | P | 07 32 33.0 | -0.1 |
| ASAR | Alice Springs | 33.57 | 255 | P | P | 07 32 33.6 | +0.1 |
| | comp=Z,68nm,0.4s,baz=82,slow=9.0,SNR=916 | | | | | | |
| ASAR | | | | S | S | 07 37 33.5 | -3.9 |
| | comp=Z,3.3nm,0.7s,baz=88,slow=15,SNR=5.1 | | | | | | |
| ASAR | | | | ScP | ScP | 07 38 27.1 | -1.9 |
| | comp=Z,7.7nm,0.8s,baz=98,slow=3.7,SNR=10 | | | | | | |
| KDU | Kakadu | 36.20 | 274 | P | P | 07 33 00.0 | +4.0 |
| | baz=36,SNR=3.3 | | | | | | |
| MTN | Manton Dam | 37.43 | 273 | P | P | 07 33 06.9 | +0.6 |
| | baz=37,SNR=7.6 | | | | | | |
| MTN | Manton Dam | 37.43 | 273 | eP | P | 07 33 07.1 | +0.8 |
| | comp=Z,16nm,0.6s | | | | | | |
| WRKA | Warakurna | 38.71 | 253 | P | P | 07 33 17.0 | +0.1 |
| | baz=39,SNR=15 | | | | | | |
| KNRA | Kununurra | 39.07 | 268 | P | P | 07 33 20.4 | +0.5 |
| | baz=39,SNR=3.0 | | | | | | |
| FORT | Forrest | 39.34 | 244 | P | P | 07 33 22.1 | 0.0 |
| | baz=39,SNR=14 | | | | | | |
| FORT | Forrest | 39.34 | 244 | eP | P | 07 33 22.0 | 0.0 |
| | comp=Z,18nm,0.6s | | | | | | |
| GUMO | Guam | 40.38 | 321 | P | P | 07 33 31.6 | +0.9 |
| | comp=Z,19nm,0.4s,baz=192,slow=19 | | | | | | |
| GUMO | Guam | 40.38 | 321 | eP | P | 07 33 32.1 | +1.5 |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,122nm,1.4s | | | | | | |
| GUMO | Guam | 40.38 | 321 | eP | P | 07 33 32.1 | +1.5 |
| | comp=Z,122nm,1.4s | | | | | | |
| FITZ | Fitzroy Crossi | 41.63 | 264 | P | P | 07 33 41.9 | +1.0 |
| | baz=42,SNR=21 | | | | | | |
| FITZ | Fitzroy Crossi | 41.63 | 264 | eP | P | 07 33 42.0 | +1.1 |
| | comp=Z,11nm,0.6s | | | | | | |
| KMBL | Kambalda | 44.68 | 244 | P | P | 07 34 04.9 | -0.2 |
| | baz=45,SNR=11 | | | | | | |
| MBWA | Marble Bar | 46.78 | 258 | eP | P | 07 34 22.1 | +0.5 |
| | comp=Z,30nm,0.5s | | | | | | |
| MEEK | Meekatharra | 47.42 | 251 | P | P | 07 34 26.5 | 0.0 |
| | baz=47,SNR=68 | | | | | | |
| KLBR | Kellerberrin | 48.21 | 244 | P | P | 07 34 32.3 | -0.1 |
| | baz=48,SNR=10.0 | | | | | | |
| NWAO | Narrogin (SRO) | 48.72 | 242 | eP | P | 07 34 36.1 | -0.2 |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| NWAO | Narrogin (SRO) | 48.72 | 242 | eP | P | 07 34 36.1 | -0.2 |
| | comp=Z,28nm,0.9s | | | | | | |
| RKGY | Rocky Gully | 49.05 | 240 | P | P | 07 34 39.0 | +0.2 |
| | baz=49,SNR=20 | | | | | | |
| BLDU | Ballidu | 49.08 | 245 | P | P | 07 34 36.8 | -2.3 |
| | baz=49,SNR=7.5 | | | | | | |
| MORW | Morawa | 49.65 | 248 | P | P | 07 34 43.5 | +0.1 |
| | baz=50,SNR=7.0 | | | | | | |
| POHA | Pohakuloa | 51.36 | 44 | eP | P | 07 34 57.1 | +0.7 |
| | comp=Z,46nm,0.7s | | | | | | |
| GIRL | Giralia | 51.69 | 256 | P | P | 07 35 00.6 | +2.0 |
| | baz=52,SNR=5.1 | | | | | | |
| VNDA | Vanda | 58.87 | 182 | P | P | 07 35 48.2 | -0.6 |
| | comp=Z,6.1nm,0.5s,baz=358,slow=7.8,SNR=65 | | | | | | |
| SBA | Scott Base | 59.10 | 181 | eP | P | 07 35 50.8 | +0.4 |
| SBA | | | | pmax | pmax | | |
| | comp=Z,67nm,0.8s | | | | | | |
| SBA | Scott Base | 59.10 | 181 | eP | P | 07 35 50.8 | +0.4 |
| | comp=Z,66nm,0.8s | | | | | | |
| CASY | Casey | 60.66 | 203 | eP | P | 07 36 00.5 | -0.7 |
| | comp=Z,35nm,1.1s | | | | | | |
| KSM | Kuching | 61.62 | 282 | eP | P | 07 36 09.7 | +1.2 |
| | comp=Z,10nm,0.6s | | | | | | |
| MJAR | Matsushiro Arr | 62.53 | 332 | P | P | 07 36 14.3 | +0.2 |
| | comp=Z,21nm,0.6s,baz=170,slow=7.4,SNR=45 | | | | | | |
| MAJO | Matsushiro | 62.54 | 332 | ⇑iP | P | 07 36 14.5 | +0.4 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,148nm,0.8s | | | | | | |
| MAJO | Matsushiro | 62.54 | 332 | eP | P | 07 36 14.6 | +0.6 |
| | comp=Z,27nm,0.4s | | | | | | |
| MAT | Matsushiro | 62.54 | 332 | P | P | 07 36 14.4 | +0.3 |
| JNU | Nakatsue | 63.52 | 324 | P | P | 07 36 21.5 | +0.9 |
| | comp=Z,22nm,0.9s,baz=92,slow=4.4,SNR=9.8 | | | | | | |
| JNU | Nakatsue | 63.52 | 324 | eP | P | 07 36 21.8 | +1.1 |
| | comp=Z,5.8nm,0.8s | | | | | | |
| KUR | Kuril'sk | 66.73 | 343 | P | P | 07 36 40.2 | -0.7 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,262nm,3.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,73nm,2.2s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,604nm,19.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=E,99nm,19.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,646nm,19.0s | | | | | | |
| ASAJ | Asahikawa | 67.32 | 339 | P | P | 07 36 45.7 | +1.0 |
| | comp=Z,16nm,0.6s,baz=230,slow=13,SNR=7.7 | | | | | | |
| ASAJ | Asahikawa | 67.32 | 339 | eP | P | 07 36 46.3 | +1.7 |
| | comp=Z,8.6nm,0.7s | | | | | | |
| MIR | Mirnyy | 67.57 | 205 | ⇑eP | P | 07 36 55.0 | +9.1 |
| MIR | | | | pmax | pmax | | |
| | comp=Z,50nm,1.5s | | | | | | |
| TJN | Taejon | 67.87 | 324 | ⇑iP | P | 07 36 47.3 | -0.9 |
| KSRS | Korea Array | 68.35 | 325 | P | P | 07 36 52.1 | +1.0 |
| | comp=Z,6.4nm,0.9s,baz=141,slow=6.5,SNR=25 | | | | | | |
| KSAR | Wonju Array Be | 68.36 | 325 | P | P | 07 36 52.2 | +0.9 |
| KSAR | Wonju Array Be | 68.36 | 325 | P | P | 07 36 52.1 | +0.9 |
| YSS | Yuzh-Sakhalins | 69.79 | 341 | i P | P | 07 37 00.4 | +0.6 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,31nm,0.9s | | | | | | |
| NJ2 | Nanjing | 70.14 | 316 | eP | P | 07 37 03.4 | +1.1 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,40nm,0.9s | | | | | | |
| MSHR | Mys Shultsa | 70.61 | 331 | ⇑iP | P | 07 37 05.2 | +0.3 |
| QSPA | South Pole Qui | 71.25 | 180 | eP | P | 07 37 07.8 | -0.8 |
| | comp=Z,95nm,1.0s | | | | | | |
| USRK | Ussuriysk Ar. | 71.51 | 332 | P | P | 07 37 11.9 | +1.7 |
| | comp=Z,10nm,0.9s,baz=147,slow=4.3,SNR=21 | | | | | | |
| ATKA | Atka Island | 72.11 | 10 | eP | P | 07 37 14.2 | +0.7 |
| PET | Petropavlovsk | 72.16 | 353 | ⇓iP | P | 07 37 15.2 | +1.4 |
| PET | | | | eS | S | 07 46 17.4 | +2.0 |
| PET | | | | pmax | pmax | | |
| | comp=Z,60nm,0.6s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,400nm,16.0s | | | | | | |
| PET | Petropavlovsk | 72.16 | 353 | eP | P | 07 37 14.8 | +0.9 |
| | comp=Z,33nm,0.6s | | | | | | |
| PETK | Petropavlovsk- | 72.35 | 353 | P | P | 07 37 16.4 | +1.4 |
| | comp=Z,42nm,0.7s,baz=148,slow=6.0,SNR=56 | | | | | | |
| PSI | Prapat | 72.69 | 279 | P | P | 07 37 17.6 | -0.5 |
| | comp=Z,4.3nm,0.6s,baz=42,slow=1.2,SNR=4.3 | | | | | | |
| MDJ | Mudanjiang | 72.91 | 331 | P | P | 07 37 20.0 | +1.5 |
| MDJ | | | | sP | sP | 07 38 56.9 | +15 |
| MDJ | | | | sS | sS | 07 48 20.6 | +16 |
| MDJ | | | | PMZ | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,130nm,4.4s | | | | | | |
| SKNT | Sakolnakorn | 73.67 | 295 | P | P | 07 37 24.7 | +1.2 |
| | comp=Z,38nm,1.0s,comp=Z,4µm | | | | | | |
| TIA | Tai'an | 73.85 | 318 | ⇓P | P | 07 37 25.3 | +1.1 |
| TIA | | | | PMZ | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| NIKH | Nikolski High | 73.88 | 13 | eP | P | 07 37 24.3 | +0.4 |
| CN2 | Changchun | 74.27 | 328 | eP | P | 07 37 27.2 | +0.8 |
| CN2 | | | | eS | S | 07 46 36.9 | -2.7 |
| CN2 | | | | PMZ | | | |
| | comp=Z,30nm,0.7s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,200nm,5.0s | | | | | | |
| NONG | Nongkai | 74.86 | 295 | P | P | 07 37 31.7 | +1.3 |
| | comp=Z,14nm,0.9s,comp=Z,17µm | | | | | | |
| KLR | Kul'dur | 75.62 | 335 | eP | P | 07 37 31.2 | -2.8 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,70nm,1.8s | | | | | | |
| GYA | Guiyang | 75.86 | 305 | P | P | 07 37 37.2 | +1.2 |
| GYA | | | | pP | pP | 07 38 46.4 | +13 |
| GYA | | | | sP | sP | 07 39 17.7 | +18 |
| GYA | | | | PP | PP | 07 40 33.8 | +3.7 |
| GYA | | | | S | S | 07 46 54.5 | -3.6 |
| GYA | | | | SKS | SKSac | 07 47 14.0 | -9.2 |
| GYA | | | | sS | sS | 07 48 55.3 | +16 |
| GYA | | | | PMZ | | | |
| | comp=Z,30nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,120nm,5.8s | | | | | | |
| PBKT | Sadao Pong | 76.11 | 293 | P | P | 07 37 42.0 | +4.6 |
| | comp=Z,9.9nm,1.0s | | | | | | |
| BJI | Beijing | 76.82 | 321 | P | P | 07 37 42.1 | +1.2 |
| BJI | | | | pP | pP | 07 38 49.9 | +11 |
| BJI | | | | sP | sP | 07 39 19.0 | +14 |
| BJI | | | | S | S | 07 47 06.2 | -1.5 |
| BJI | | | | PMZ | | | |
| | comp=Z,32nm,0.9s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,150nm,6.0s | | | | | | |
| UTTA | Uttaradit | 76.95 | 294 | P | P | 07 37 44.1 | +1.9 |
| | comp=Z,4.2nm,0.9s | | | | | | |
| UTHA | Uthaitani | 77.03 | 292 | P | P | 07 37 45.2 | +2.6 |
| | comp=Z,4.5nm,0.9s | | | | | | |
| UMPA | Umpang Tak | 77.80 | 292 | P | P | 07 37 49.4 | +2.5 |
| | comp=Z,4.1nm,1.0s | | | | | | |
| XAN | Xi'an | 78.08 | 312 | P | P | 07 37 48.9 | +0.8 |
| XAN | | | | S | S | 07 47 17.4 | -4.2 |
| XAN | | | | PMZ | | | |
| | comp=Z,23nm,1.1s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,35nm,6.3s | | | | | | |
| CRAI | Chiangrai | 78.15 | 296 | P | P | 07 37 45.5 | -3.3 |
| | comp=Z,19nm,0.9s | | | | | | |
| KMI | Kunming | 78.34 | 302 | P | P | 07 37 50.3 | +0.3 |
| KMI | | | | PcP | PcP | 07 37 59.5 | +1.2 |
| KMI | | | | pP | pP | 07 39 00.2 | +12 |
| KMI | | | | sP | sP | 07 39 31.3 | +17 |
| KMI | | | | PP | PP | 07 40 54.8 | +3.8 |
| KMI | | | | S | S | 07 47 20.1 | -5.0 |
| KMI | | | | SKS | SKSac | 07 47 32.5 | -8.9 |
| KMI | | | | ScS | SKKSac | 07 47 41.4 | -1.3 |
| KMI | | | | sS | sS | 07 49 22.3 | +15 |
| KMI | | | | SS | SS | 07 52 34.6 | +0.6 |
| KMI | | | | PMZ | | | |
| | comp=Z,26nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,100nm,4.3s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,140nm,5.6s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,130nm,5.9s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,120nm,8.0s | | | | | | |
| CMAR | Chiang Mai Arr | 78.64 | 294 | P | P | 07 37 53.4 | +1.9 |
| | comp=Z,6.6nm,0.7s,baz=130,slow=4.1,SNR=30 | | | | | | |
| CHTO | Chiang Mai | 78.79 | 294 | P | P | 07 37 53.9 | +1.6 |
| | comp=Z,77nm,1.0s | | | | | | |
| CHTO | Chiang Mai | 78.79 | 294 | eP | P | 07 37 54.1 | +1.8 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| CHTO | Chiang Mai | 78.79 | 294 | eP | P | 07 37 54.1 | +1.8 |
| | comp=Z,8.7nm,0.7s | | | | | | |

MAW Mawson 78.96 202 P P 07 37 52.2 -0.1
comp=Z,15nm,0.9s,baz=103,slow=6.3,SNR=31
MAW Mawson 78.96 202 P P 07 37 52.4 +0.1
baz=79,SNR=15
CMAI Chiengmai2 79.16 295 P P 07 37 56.3 +1.8
comp=Z,21nm,0.9s
HHC Hu-ho-hao-te 80.12 319 *e*P P 07 38 00.2 +1.1
HHC pP pP 07 39 09.0 +11
HHC sP sP 07 39 39.7 +16
HHC S S 07 47 40.1 -2.8
HHC PMZ
comp=Z,28nm,0.8s
HHC PMZ
comp=Z,200nm,8.9s
CD2 Chengdu 80.25 307 *e*P P 07 38 00.5 +0.6
CD2 pP pP 07 39 09.0 +11
CD2 sP sP 07 39 40.5 +16
CD2 PP PP 07 41 07.5 +1.0
CD2 S S 07 47 41.5 -3.1
CD2 SKS SKSac 07 47 48.0 -6.1
CD2 SS SS 07 53 01.5 -0.5
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,160nm,5.2s
CD2 LN
comp=Z,550nm,18.0s
CD2 LZ
comp=Z,380nm,18.0s
KDAK Kodiak Island 82.51 19 *i* P P 07 38 12.3 +1.3
SEY Seymchan 82.59 352⇑*i*P P 07 38 11.8 +0.5
LZH Lanzhou 82.70 312 ⇓P P 07 38 15.0 +2.2
LZH pP pP 07 39 24.9 +13
LZH sP sP 07 39 55.6 +18
LZH PP PP 07 41 32.1 +5.5
LZH SKS S 07 48 04.2 -5.5
LZH PMZ
comp=Z,32nm,1.3s
LZH PMZ
comp=Z,160nm,8.5s
SNCC San Nicolas Is 85.11 53 P P 07 38 25.6 +0.8
baz=85
KIPM Iron Peak 85.31 45 *e*P P 07 38 27.5 +1.7
comp=Z,44nm,1.1s
BSC Santa Cruz Isl 85.36 52 P P 07 38 27.1 +1.1
baz=86
SYO Syowa Base 85.44 196⇓*i*P P 07 38 23.4 -2.4
SBC Santa Barbara 85.49 51 P P 07 38 28.0 +1.4
baz=86
PKM Peak Mountain 85.62 51 P P 07 38 28.3 +0.8
baz=86
SMMC Simmler 85.67 51 P P 07 38 28.4 +0.9
baz=86
SCI San Clemente I 85.73 53 P P 07 38 29.2 +1.3
baz=86
BLG Laguna Peak 85.83 52 P P 07 38 29.4 +1.1
baz=86
FMP Fort Macarthur 86.24 53 P P 07 38 31.1 +0.8
baz=86
OSI Osito Adit 86.30 52 P P 07 38 32.0 +1.3
baz=86
WDC Whiskeytown Da 86.31 45 *e*P P 07 38 31.7 +1.2
WDC pmax pmax
comp=Z,17nm,1.2s
WDC Whiskeytown Da 86.31 45 *e*P P 07 38 31.7 +1.2
comp=Z,17nm,1.2s
L02D Cave Junction, 86.37 43 P P 07 38 32.0 +1.2
baz=87
N02D Trinity Center 86.39 45 P P 07 38 32.1 +1.1
baz=87,SNR=9.0
DECC Green Verdugo 86.44 52 P P 07 38 31.7 +0.4
baz=87
ARVC Arvin 86.45 51 P P 07 38 31.9 +0.6
baz=87,SNR=6.8
M02C Callahan 86.49 44 P P 07 38 32.4 +0.9
baz=87,SNR=6.6
PASC Pasadena Art C 86.51 52 *e*P P 07 38 32.3 +0.6
comp=Z,5.5nm,0.4s
YAK Yakutsk 86.56 342 *e*P P 07 38 30.9 -0.3
YAK pmax pmax
comp=Z,14nm,0.8s
VES Vestal, Richgr 86.57 50 P P 07 38 32.3 +0.4
baz=87
CMB Columbia Colle 86.61 48 *e*P P 07 38 32.9 +0.8
CMB pmax pmax
comp=Z,25nm,0.8s
CMB Columbia Colle 86.61 48 *e*P P 07 38 32.9 +0.8
comp=Z,25nm,0.8s
BILL Bilibino 86.63 359*ce*P P 07 38 31.4 0.0
BILL pmax pmax
comp=Z,64nm,1.2s
BILL Bilibino 86.63 359 *e*P P 07 38 32.6 +1.2
comp=Z,20nm,0.4s
RCTC Rector, Farmer 86.66 50 P P 07 38 32.9 +0.6
baz=87
O03D Paynes Creek 86.67 46 P P 07 38 33.1 +0.7
baz=87
ULN Ulaanbaatar 86.73 323*ce*P P 07 38 32.1 -0.5
ULN pmax pmax
comp=Z,27nm,1.2s
ULN Ulaanbaatar 86.73 323 *e*P P 07 38 33.4 +0.9
comp=Z,29nm,1.3s
109C Camp Elliot, M 86.79 54 P P 07 38 33.6 +0.6
baz=87
BFSC Mount Baldy Ra 86.94 52 P P 07 38 33.8 0.0
baz=87,SNR=9.3
ISA Isabella 86.94 51 *e*P P 07 38 34.9 +1.1
ISA pmax pmax
comp=Z,30nm,0.9s
ISA Isabella 86.94 51 P P 07 38 34.3 +0.5
baz=87,SNR=8.3
ISA Isabella 86.94 51 *e*P P 07 38 34.9 +1.1
comp=Z,30nm,0.9s
EDW2 Edwards Air Fo 86.96 52 P P 07 38 34.3 +0.4
baz=87,SNR=6.6
HUMO Hull Mountain 87.01 43 *e*P P 07 38 35.7 +1.8
comp=Z,30nm,0.9s
MURC Murrieta 87.02 53 P P 07 38 34.2 +0.1
baz=87,SNR=6.3
BAR Barrett 87.04 54 *e*P P 07 38 35.1 +0.9
comp=Z,12nm,1.0s
GTA Gaotai 87.08 313 P P 07 38 35.8 +1.4
GTA sP sP 07 40 15.3 +16
GTA PP PP 07 42 07.6 +5.6
GTA SKS SKSac 07 48 34.3 -3.8
GTA S S 07 48 51.4 -1.1
GTA sS sS 07 50 50.9 +14
GTA PMZ
comp=Z,24nm,0.9s
GTA PMZ
comp=Z,130nm,6.9s
GTA LN
comp=Z,140nm,16.6s
GTA LE
comp=Z,230nm,18.0s
GTA LZ
comp=Z,320nm,17.6s
SONM Songino Array 87.08 323 P P 07 38 34.5 +0.3
comp=Z,11nm,0.9s,baz=137,slow=5.3,SNR=43
I03D Drain, OR 87.29 42 P P 07 38 36.2 +1.1
baz=88
MONP Monument Peak 87.32 54 P P 07 38 36.3 +0.5
baz=88,SNR=12
M04C Macdoel 87.35 44 P P 07 38 36.6 +0.9
baz=88
LRMC Laurel Mountai 87.44 51 P P 07 38 36.9 +0.7
baz=88
IBP Imperial Bould 87.47 54 P P 07 38 37.4 +1.0
baz=88
BBRC Big Bear Solar 87.50 53 P P 07 38 37.4 +0.7
baz=88
CWC Cottonwood Cre 87.56 50 P P 07 38 37.3 +0.5
baz=88
PFO Pinyon Flat Ob 87.58 53 P P 07 38 37.2 +0.3
baz=88,SNR=5.5
TIN Tinemaha 87.72 50 P P 07 38 38.1 +0.6
baz=88
SWSC Sam W. Stewart 87.82 54 P P 07 38 38.4 +0.5
baz=88,SNR=6.6
MPMC Manual Prospec 87.83 51 P P 07 38 38.6 +0.4
baz=88
J04D Umpqua Nationa 87.86 43 P P 07 38 38.9 +0.7
baz=88,SNR=5.2
I04A Tendick Farm, 87.93 42 P P 07 38 38.9 +0.7
baz=88
GSC Goldstone 88.02 52 P P 07 38 39.3 +0.4
baz=88
G03D McMinnville, O 88.08 41 P P 07 38 40.3 +1.5
baz=88
BELC Belle Mtn. Jos 88.09 53 P P 07 38 39.6 +0.3
baz=88,SNR=11
HEC Hector,Ludlow 88.18 52 P P 07 38 40.2 +0.5
baz=88
NVAR Mina Array Bea 88.26 48 P P 07 38 40.9 +0.7
comp=Z,7.0nm,0.7s,baz=224,slow=7.6,SNR=14
NVAR PP PP 07 42 10.9 -0.6
comp=Z,0.2nm,0.6s,baz=239,slow=10,SNR=2.6
GRAC Grapevine Rang 88.32 50 P P 07 38 40.9 +0.6
baz=88
BC3 Big Chuckawall 88.37 54 P P 07 38 41.5 +0.9
baz=89,SNR=6.3
J05D Fort Rock, OR 88.44 43 P P 07 38 41.7 +0.9
baz=89
FURC Furnace Creek, 88.47 51 P P 07 38 41.5 +0.7
baz=89,SNR=8.8
GLA Glamis 88.61 54 *e*P P 07 38 43.4 +1.7
GLA pmax pmax
comp=Z,42nm,1.4s
GLA Glamis 88.61 54 P P 07 38 42.2 +0.6
baz=89,SNR=7.0
GLA Glamis 88.61 54 *e*P P 07 38 43.4 +1.7
comp=Z,42nm,1.4s
GMRC Granite Mounta 88.66 53 P P 07 38 42.7 +0.7
baz=89,SNR=5.1
TUQ Turquoise Moun 88.73 52 P P 07 38 42.6 +0.3
baz=89,SNR=6.9
IRM Iron Mountain 88.80 53 P P 07 38 43.3 +0.8
baz=89,SNR=6.7
I05D Terrebonne, OR 88.87 42 P P 07 38 43.6 +0.9
baz=89
VBEM Beaver Butte 89.05 41 P P 07 38 44.8 +1.2
BOD Bodaibo 89.10 334 *e*P P 07 38 40.5 -2.8
BOD pmax pmax
comp=Z,7.0nm,1.8s
TPNV Topopah Spring 89.11 50 P P 07 38 44.8 +0.7
baz=89,SNR=7.8
Y12C Blythe 89.11 54 P P 07 38 44.5 +0.5
baz=89,SNR=9.2
VLL Laurance Lake 89.18 41 P P 07 38 45.6 +1.4
G05D Wamic, OR 89.30 41 P P 07 38 45.1 +0.5
baz=90
NVL N'lazarevskaya 89.33 187 *e*P P 07 38 42.8 -1.5
NVL *e*S S 07 48 57.3 -15
NVL pmax pmax
comp=Z,16nm,0.8s
ASR Mount Adams--S 89.56 40 P P 07 38 47.2 +1.4
SNAA Sanae 89.61 182 *e*P P 07 38 43.4 -2.3
SNAA pmax pmax
comp=Z,13nm,1.3s
SNAA Sanae 89.61 182 *e*P P 07 38 43.4 -2.3
comp=Z,13nm,1.3s
PDMCI Parker Dam,Lak 89.62 54 P P 07 38 47.1 +0.8
baz=90
PGC Sidney 89.65 38 *e*P P 07 38 47.4 +1.4
comp=Z,33nm,1.0s
LON Longmire 89.70 40 *e*P P 07 38 47.3 +0.8
LON pmax pmax
comp=Z,8.0nm,0.7s
LON Longmire 89.70 40 *e*P P 07 38 47.3 +0.8
comp=Z,8.2nm,0.7s
A04D Lummi Island 90.11 38 P P 07 38 49.3 +1.1
baz=90
R11A Troy Canyon, C 90.16 49 P P 07 38 49.6 +0.6
baz=90
B05A Bryant 90.25 38 P P 07 38 49.9 +1.0
baz=90
NAC Naches 90.30 40 P P 07 38 50.2 +1.0
TLY Talaya 90.60 325 *e*P P 07 38 51.5 +1.0
TLY pmax pmax
comp=Z,11nm,0.9s
COLD Coldfoot 90.77 15 *e*P P 07 38 50.8 -0.1
comp=Z,12nm,1.1s
C06D Leavenworth 90.80 39 P P 07 38 52.2 +0.7
baz=91
HAWA Hanford 90.94 41 *e*P P 07 38 53.5 +1.4
comp=Z,29nm,0.8s
WUAZ Wupatki 92.19 53 P P 07 38 58.9 +0.5
baz=92
WUAZ Wupatki 92.19 53 *e*P P 07 39 00.1 +1.7
comp=Z,34nm,1.3s
HLID Hailey 93.05 45 P P 07 39 02.9 +0.7
baz=93
121A Cookes Peak, D 93.93 57 P P 07 39 07.0 +0.4
baz=94
INK Inuvik 96.03 18 S SKSac 07 49 21.1 -5.7
comp=Z,4.0nm,1.3s,baz=30,slow=20,SNR=3.7
TXAR Lajitas Array 96.26 61 P P 07 39 18.0 +0.9
comp=Z,1.5nm,0.8s,baz=231,slow=6.1,SNR=9.1
TXAR Lajitas Array 96.26 61 P P 07 39 18.0 +0.9
WMQ Urumqi 97.16 314 *e*P Pdif 07 39 22.0 +1.2
WMQ S S 07 50 16.0 -6.3
WMQ SS SS 07 57 07.0 +0.7
WMQ PMZ
comp=Z,12nm,1.0s
WMQ LN
comp=Z,100nm,20.0s
WMQ LE
comp=Z,260nm,20.0s
WMQ LZ
comp=Z,97nm,20.0s
YKA Yellowknife Ar 100.13 27 P Pdif 07 39 33.9 +0.5
comp=Z,4.1nm,0.7s,baz=252,slow=4.4,SNR=8.6
YKA Yellowknife Ar 100.13 27 P Pdif 07 39 34.0 +0.5
MKAR Makanchi Array 101.67 316 P Pdif 07 39 42.8 +2.0
comp=Z,3.1nm,0.7s,baz=98,slow=6.2,SNR=18
KURK Kurchatov 104.93 319 P Pdif 07 39 53.1 -2.0
KURK Kurchatov 104.93 319 Pdif Pdif 07 39 53.1 -2.0
KURBB Kurchatov Arra 104.97 319 Pdiff Pdif 07 39 53.1 -2.1
ARU Arti 117.09 324 PKP PKPdf 07 44 30.4 -1.2
comp=Z,1.9nm,0.2s,baz=115,slow=19,SNR=2.1
ARU Arti 117.09 324 *i* PKIKP PKPdf 07 44 30.2 -1.4
ARU 07 45 47.5
ARU 07 50 53.8
ARU SS SS 08 01 34.3 +0.1
ARU Arti 117.09 324 *e*PKPdf PKPdf 07 44 30.6 -1.0
AKTO Aktyubinsk 117.98 318 PKP PKPdf 07 44 32.6 -0.9
comp=Z,1.7nm,0.6s,baz=53,slow=5.1
GEYT Alibeck 118.07 304 PKP PKPdf 07 44 33.1 -1.0
comp=Z,1.4nm,0.5s,baz=274,slow=8.2,SNR=3.1
BOSA Boshof 121.61 217 PKP PKPdf 07 44 40.4 -1.0
comp=Z,1.4nm,0.7s,baz=182,slow=3.7,SNR=4.4
SCHQ Schefferville 124.36 36 PKP PKPdf 07 44 44.2 -1.4
comp=Z,1.8nm,0.6s,baz=208,slow=17,SNR=3.1
ARCES ARCESS Array B 124.74 345 PKP PKPdf 07 44 44.9 -1.0
comp=Z,3.0nm,0.5s,baz=85,slow=2.5,SNR=32
RAYN Ar Rayn 127.93 286 *e*PKPdf PKPdf 07 44 53.6 +0.1
KIV Kislovodsk 129.24 312 *i* PKIKP PKPdf 07 44 52.4 -3.0
KIV pmax pmax
comp=Z,8.0nm,1.0s
BDFB Brasilia 129.57 130 PKP PKPdf 07 44 55.6 -1.2
comp=Z,1.7nm,0.8s,baz=135,slow=11,SNR=3.3
FINES FINESS Array B 130.32 338 PKP PKPdf 07 44 55.6 -1.1
comp=Z,0.9nm,0.6s,baz=70,slow=2.2,SNR=4.0
FINES SKPbc SKPbc 07 47 53.4 -3.2
comp=Z,8.3nm,0.8s,baz=86,slow=4.3,SNR=28
FINES FINESS Array B 130.32 338*c i*PKIKP PKPdf 07 44 55.5 -1.2
FINES pmax pmax
comp=Z,1.0nm,0.6s
NOA NORSAR Array B 135.12 345 PKP PKPdf 07 45 05.2 -0.6
comp=Z,1.2nm,0.8s,baz=32,slow=1.9,SNR=3.8
AKASG Malin Array Be 135.34 325 PKP PKPdf 07 45 05.9 -0.6
comp=Z,0.7nm,0.5s,baz=71,slow=1.5,SNR=4.3
AKASG SKPbc SKPbc 07 48 10.9 -3.2
comp=Z,1.9nm,0.6s,baz=44,slow=3.9,SNR=8.0
AKASG Malin Array Be 135.34 325*c i*PKIKP PKPdf 07 45 06.6 +0.1
AKASG pmax pmax
comp=Z,1.0nm,0.5s
MMAI Mount Meron Ar 136.77 298 PKP PKPdf 07 45 09.7 -0.2
comp=Z,0.6nm,0.3s,baz=82,slow=3.1,SNR=2.6
BRTR Keskin Array B 136.82 308 PKP PKPdf 07 45 09.4 -0.5
comp=Z,0.7nm,0.5s,baz=66,slow=2.7,SNR=3.0
EIL Elat 137.50 294 PKP PKPdf 07 45 09.8 -1.4
comp=Z,3.6nm,0.8s,baz=3.6,slow=16,SNR=2.0
VRAC Vranov 142.63 331 PKhKP PKPpre 07 45 16.8
comp=Z,3.9nm,0.6s,baz=56,slow=3.6,SNR=3.1
BRG Berggiesshubel 142.63 335 *e*PKP PKPdf 07 45 16.1 -3.7
comp=Z,4.5nm,1.2s
BRG Berggiesshubel 142.63 335 *e*PKIKP PKPdf 07 45 16.1 -3.7
BRG pmax pmax
comp=Z,5.0nm,1.2s
CLL Collm 142.67 336 *i* PKIKP PKPdf 07 45 16.2 -3.7
CLL pmax pmax
comp=Z,5.0nm,0.6s
CLL Collm 142.67 336 *i* PKPdf PKPdf 07 45 16.2 -3.7
comp=Z,5.0nm,0.6s
CLL *e*PP PP 07 48 32.0 +1.6
GOPC GO Pecny, Ondr 143.00 333 *e*PKIKP PKPab 07 45 17.4 +1.0
GOPC GO Pecny, Ondr 143.00 333 *e*PKP PKPab 07 45 17.4 +1.0
PRU Pruhonice 143.05 333 *e*PKIKP PKPab 07 45 17.4 +0.8
PRU Pruhonice 143.05 333 *e*PKP PKPab 07 45 17.4 +0.8
EKA Eskdalemuir Ar 143.12 353 PKhKP PKPpre 07 45 17.0
comp=Z,3.2nm,0.6s,baz=352,slow=2.6,SNR=7.2
SCHF Schoenfels 143.40 336 *e*PKPdf PKPab 07 45 18.9 +0.9
baz=37,slow=2.5
TAUT Tautenburg 143.42 336 *e*PKPdf PKPab 07 45 19.1 +1.0
baz=37,slow=2.5
SRS Serrai 143.45 315 P PKPab 07 45 18.4 -0.1
TANN Tannenbergstha 143.58 335 *e*PKPdf PKPab 07 45 19.6 +0.8
baz=37,slow=2.5
GTTG Gvttingen 143.60 339 *e*PKPdf PKPab 07 45 19.7 +1.0
baz=37,slow=2.5
WERD Werda 143.62 335 *e*PKPdf PKPab 07 45 19.5 +0.7
baz=37,slow=2.5
PLN Plauen 143.65 336 *e*PKPdf PKPab 07 45 19.8 +0.9
baz=37,slow=2.5
IBBN Ibbenburen 143.67 341 *e*PKPdf PKPab 07 45 19.6 +0.7
baz=37,slow=2.5
WERN Wernitzgruen 143.72 335 *e*PKPdf PKPab 07 45 19.8 +0.5
baz=37,slow=2.5
MOX Moxa 143.73 336 *e*PKPdf PKPab 07 45 19.8 +0.5
baz=37,slow=2.5
NKC Novy Kostel 143.73 335 *e*PKIKP PKPab 07 45 20.3 +1.0
NKC Novy Kostel 143.73 335 *e*PKP PKPab 07 45 20.3 +1.0
TRIB Obertriebel 143.76 335 *e*PKPdf PKPab 07 45 20.2 +0.7
baz=37,slow=2.5
ROHR Rohrbach 143.78 335 *e*PKPdf PKPab 07 45 20.2 +0.6
baz=37,slow=2.5
ZKR Zakros 143.79 304 P PKPab 07 45 19.9 -0.1
KNT Kendrikon 143.89 315 P PKPab 07 45 19.2 -1.0
CONA Conrad Observa 143.95 330⇓*i*PKPdf PKPab 07 45 21.4 +1.0
comp=Z,21nm,1.6s
KHC Kasperske Hory 144.11 333 *e*PKIKP PKPab 07 45 20.6 -0.2
KHC Kasperske Hory 144.11 333 *e*PKP PKPab 07 45 21.1 +0.3
KHC Kasperske Hory 144.11 333 *e*PKPdf PKPab 07 45 20.6 -0.2
DIVS Divibare 144.19 321 P PKPab 07 45 21.4 0.0
ROTZ Rotzenmuhle 144.19 335 *e*PKPdf PKPab 07 45 21.5 +0.4
baz=37,slow=2.5
GEC2 GERESS Array S 144.27 332 *e*PKPdf PKPab 07 45 21.7 +0.1
baz=37,slow=2.5
GERES GERESS Array B 144.27 332 PKP PKPab 07 45 21.7 +0.1
comp=Z,8.7nm,0.6s,baz=42,slow=4.2,SNR=59
GERES SKPbc SKPbc 07 48 34.6 -3.8
comp=Z,0.4nm,0.3s,baz=354,slow=1.0,SNR=2.7
WET Wettzell 144.40 334 *e*PKPdf PKPab 07 45 22.4 +0.5
baz=37,slow=2.5
XOR Xorichti 144.50 312 P PKPab 07 45 20.4 -2.3
ARSA Arzberg 144.59 329 *i* PKPdf PKPab 07 45 23.1 +0.3
comp=Z,22nm,1.3s,SNR=6.4
GRF Grafenberg Arr 144.64 336 *e*PKPdf PKPab 07 45 23.5 +0.6
baz=37,slow=2.5
MOA Molln 144.75 331 *i* PKPdf PKPbc 07 45 23.8 +0.5
comp=Z,35nm,0.9s,SNR=12
IDI Anoyia 144.77 305 PKP PKPbc 07 45 22.1 -1.7
comp=Z,15nm,0.4s,baz=172,slow=1.7,SNR=18
IDI Anoyia 144.77 305 P PKPbc 07 45 22.5 -1.3
IDI Anoyia 144.77 305 *e*PKPdf PKPbc 07 45 23.4 -0.4
LTK Loutraki 145.22 310 P PKPdf 07 45 23.4 -1.4
LTK Loutraki 145.22 310 P PKPdf 07 45 23.4 -1.4
SOKA Soboth 145.23 329⇑*i*PKPab PKPdf 07 45 24.2 -0.4
comp=Z,16nm,1.1s,SNR=6.9
TNS Taunus Mts 145.23 339 *e*PKPdf PKPdf 07 45 24.9 +0.4
baz=37,slow=2.5
DIDY Didyma 145.26 309 P PKPdf 07 45 22.4 -2.6
KALE Kalithea 145.66 311 P PKPdf 07 45 25.6 0.0
KALE Kalithea 145.66 311 P PKPdf 07 45 25.6 0.0
MEM Membach 145.69 341 PKPbc PKPdf 07 45 25.7 +0.5
GUR Goura 145.71 311 P PKPdf 07 45 25.7 -0.1
GUR Goura 145.71 311 P PKPdf 07 45 25.7 -0.1
SERG Sergoula 145.71 312 P PKPdf 07 45 25.1 -0.5
KBA Koelnbreinsper 145.75 331⇓*i*PKPab PKPdf 07 45 25.8 +0.2
comp=Z,6.4nm,0.5s
KLV Kalavryta, Ach 145.80 311 P PKPdf 07 45 25.8 -0.1
KLV Kalavryta, Ach 145.80 311 P PKPdf 07 45 25.8 -0.1
EFP Efpalio 145.81 312 P PKPdf 07 45 26.2 +0.4
LAKA Lakka 145.84 311 P PKPdf 07 45 26.2 +0.3
LAKA Lakka 145.84 311 P PKPdf 07 45 26.2 +0.3
VLX Vlachokerasia 145.91 310 P PKPdf 07 45 26.8 +0.7
VLX Vlachokerasia 145.91 310 P PKPdf 07 45 26.8 +0.7
MYKA Terra Mystica 145.93 330⇓*i*PKPbc PKPdf 07 45 26.3 +0.5
comp=Z,5.9nm,0.4s
BCLA Clavier 146.06 342 PKP PKPdf 07 45 25.1 -0.7
DRO Drossia 146.16 311 P PKPbc 07 45 28.1 +0.3
PDO Prodromos 146.25 312 P PKPdf 07 45 27.8 +1.3
WATA Walderalm 146.34 333⇑*e*PKPbc PKPdf 07 45 27.1 +0.5
comp=Z,6.6nm,0.4s
ABTA Abfaltersbach 146.37 331⇓*i*PKPdf PKPdf 07 45 25.3 -1.3
comp=Z,2.4nm,0.6s
ABTA *i* PKPbc PKPbc 07 45 27.5 -0.7
comp=Z,12nm,0.7s,SNR=7.7
WTTA Wattenberg 146.37 333 *i* PKPbc PKPdf 07 45 27.9 +1.2
comp=Z,20nm,1.0s,SNR=6.0
SGD Sagiada 146.42 315 P PKPdf 07 45 27.8 +1.0
WLF Walferdange 146.47 340 PKPbc PKPbc 07 45 29.1 +0.8
WLF Walferdange 146.47 340 *e*PKP2 PKPdf 07 45 27.9 +1.4
WLF Walferdange 146.47 340 *e*PKPbc PKPdf 07 45 27.9 +1.4
MOTA Moosalm 146.54 333⇓*i*PKPbc PKPdf 07 45 28.5 +1.6
comp=Z,17nm,0.7s,SNR=7.4
DOU Dourbes 146.56 342 PKPbc PKPbc 07 45 28.8 +0.2
RETA Reutte 146.58 334⇑*e*PKPdf PKPdf 07 45 26.6 -0.3
comp=Z,7.5nm,0.7s
SQTA Sankt Quirin 146.59 333⇓*i*PKPab PKPbc 07 45 28.9 0.0
BFO Black Forest 146.86 337 *i* PKP2 PKPbc 07 45 29.3 -0.2
BFO Black Forest 146.86 337 *e*PKPbc PKPdf 07 45 28.6 +1.3
FETA Feichten 146.96 333⇓*i*PKPbc PKPdf 07 45 28.7 +1.0
comp=Z,14nm,0.6s,SNR=9.4
DAVA Damuels 147.10 334 *i* PKPbc PKPbc 07 45 30.4 0.0
comp=Z,17nm,0.7s,SNR=6.5
ECH Echery 147.38 338 *e*PKP2 PKPdf 07 45 30.1 +1.9
ECH Echery 147.38 338 *e*PKPbc PKPdf 07 45 30.1 +1.9
DAVOX Davos/Dischmat 147.50 334 PKPbc PKPbc 07 45 31.7 +0.2
comp=Z,21nm,0.6s,baz=320,slow=0.7,SNR=38
TUE Stuetta 147.97 334 *e*PKPbc PKPbc 07 45 32.8 0.0
TIP Timpagrande 148.95 317 *e*PKPbc PKPbc 07 45 35.0 -0.3
BNI Bardonecchia 150.21 335 *e*PKIKP PKPbc 07 45 38.3 0.0
BNI Bardonecchia 150.21 335 *e*PKPbc PKPbc 07 45 38.3 0.0
ESDC Sonseca Array 158.47 346 PKPab PKPab 07 46 19.9 -0.5
comp=Z,0.4nm,0.4s,baz=11,slow=2.0,SNR=5.8
DBIC Dimbokro 166.79 205 PKPab PKPab 07 46 56.6 -0.7
comp=Z,4.0nm,0.8s,baz=148,slow=5.1,SNR=5.5
TORD Torodi Ar. Bea 167.09 246 PKP PKPdf 07 45 52.0 -1.4
comp=Z,2.8nm,0.9s,baz=340,slow=0.2,SNR=14
TORD PKPab PKPab 07 46 58.4 -0.6
comp=Z,1.3nm,0.8s,baz=107,slow=5.2,SNR=6.1

**MEX 01 07:37:04.9±0.3, 15.70N×93.99W, h64km±154km, MD3.9, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.74 | 89 | *i* P | Pn | 07 37 18.6 | -1.2 |
| PCIG | | | | *i* S | Sn | 07 37 29.1 | -1.8 |

**BJI 01 07:42:48.0, 30.97N×103.42E, h16km, ML3.5/14, Ms3.5/3, Ms7 3.3/2, 1D, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CD2 | Chengdu | 0.30 | 102 | ⇓*i*Pg | Pg | 07 42 52.3 | -2.1 |
| CD2 | | | | Sg | Sg | 07 42 57.3 | -1.5 |
| CD2 | | | | SMN | | | |
| | 11μm,0.5s | | | | | | |
| CD2 | | | | SME | | | |
| | 13μm,0.6s | | | | | | |
| LZH | Lanzhou | 5.12 | 4 | *e*Pg | Pb | 07 44 20.9 | +3.5 |
| LZH | | | | Sg | Sg | 07 45 27.8 | -4.9 |
| LZH | | | | SMN | | | |
| | 180nm,1.2s | | | | | | |
| LZH | | | | SME | | | |
| | 180nm,1.2s | | | | | | |
| LZH | | | | LN | | | |
| | 260nm,5.6s | | | | | | |
| LZH | | | | LE | | | |
| | 220nm,6.5s | | | | | | |
| LZH | | | | LZ | | | |
| | 270nm,8.0s | | | | | | |
| GYA | Guiyang | 5.32 | 147 | Pn | Pn | 07 44 06.4 | -0.6 |
| GYA | | | | Sn | Sn | 07 45 04.6 | -3.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GYA | | | | Sg | Sg | 07 45 33.9 | -5.3 |
| GYA | | | | SMN | | | |
| | 50nm,1.0s | | | | | | |
| GYA | | | | SME | | | |
| | 70nm,0.8s | | | | | | |
| XAN | Xi'an | 5.56 | 55 | Pn | Pn | 07 44 07.7 | -2.5 |
| XAN | | | | Pg | Pg | 07 44 30.7 | -4.0 |
| XAN | | | | Sn | Sn | 07 45 11.1 | -2.8 |
| XAN | | | | Sg | Sg | 07 45 44.7 | -2.1 |
| XAN | | | | SMN | | | |
| | 98nm,0.8s | | | | | | |
| XAN | | | | SME | | | |
| | 100nm,0.8s | | | | | | |

*ISCJB **01** 07:44:25.1±0.5, 31°.27N±0°.04×115°.64W±0°.04, h6km±7km, Error ellipse: s-maj=7.1km s-min=4.9km az=44.7*
*ECX **01** 07:44:25.9±0.5, 31°.24N×115°.63W, h5km, MD2.3, ML2.5*
*MEX **01** 07:44:26.1±0.4, 31°.03N×115°.76W, h7km±26km, MD3.5*
**ISC 01 07:44:24.9**±0.9**, 31°.26N**±0°.05×**115°.63W**±0°.03**, h15**km±11km**, n12,** σ**0s.33**/23**, 1C, Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SPIG | San Pedro Mart | 0.25 | 146 | iP | Pg | 07 44 30.8 | +0.1 |
| SPIG | | | | eS | Sg | 07 44 34.5 | 0.0 |
| SPIG | San Pedro Mart | 0.25 | 146 | eP | Pg | 07 44 30.7 | +0.1 |
| SPIG | | | | eS | Sg | 07 44 34.5 | 0.0 |
| SPX | San Pedro Mart | 0.26 | 146 | eP | Pg | 07 44 30.7 | 0.0 |
| SPX | | | | eS | Sg | 07 44 34.6 | 0.0 |
| SPX | | | | e | | 07 44 35.6 | |
| SPX | | | | IAML | | 07 44 35.6 | |
| | comp=N,596nm,0.3s | | | | | | |
| ECBX | El Chinero | 0.54 | 67 | eP | Pg | 07 44 35.6 | 0.0 |
| ECBX | | | | eS | Sg | 07 44 42.8 | 0.0 |
| ECBX | | | | eS | Sb | 07 44 43.1 | -0.6 |
| ZAX | El Zacaton | 0.60 | 295 | eP | Pg | 07 44 36.5 | -0.3 |
| ZAX | | | | eS | Sg | 07 44 45.0 | +0.1 |
| ZAX | | | | e | | 07 44 48.3 | |
| ZAX | | | | IAML | | 07 44 48.3 | |
| | comp=E,368nm,0.7s | | | | | | |
| RDX | Rancho Dawling | 0.72 | 338 | eP | Pg | 07 44 39.1 | +0.1 |
| RDX | | | | eS | Sb | 07 44 48.9 | -0.2 |
| RDX | | | | ⇑e | | 07 44 50.0 | |
| RDX | | | | IAML | | 07 44 50.0 | |
| | comp=E,92nm,0.2s | | | | | | |
| ECNX | Esteban Cantu | 0.92 | 296 | eP | Pg | 07 44 42.5 | -0.2 |
| ECNX | | | | eS | Sg | 07 44 54.5 | -0.2 |
| PBX | Punta Banda | 1.05 | 298 | eP | Pb | 07 44 44.5 | -0.3 |
| PBX | | | | eS | Sb | 07 44 58.9 | +0.5 |
| CBX | Cerro Bola | 1.37 | 320 | iP | Pn | 07 44 49.8 | +0.2 |
| CBX | | | | eS | Sb | 07 45 08.2 | +0.4 |
| CBX | Cerro Bola | 1.37 | 320 | eP | Pn | 07 44 49.9 | +0.2 |
| CBX | | | | IAML | | 07 45 13.4 | |
| | comp=N,102nm,0.6s | | | | | | |
| CBX | | | | e | | 07 45 13.4 | |
| RMX | La Rumorosa | 1.39 | 344 | eP | Pb | 07 44 50.8 | 0.0 |
| RMX | | | | eS | Sb | 07 45 09.4 | +0.9 |
| BAR | Barrett | 1.67 | 328 | eP | Pb | 07 44 55.0 | -0.4 |

*BJI **01** 07:58:15.7, 4°.88S×129°.11E, h158km, mb4.9/57, mB4.8/41*
*ISCJB **01** 07:58:22.4±0.3, 4°.17S±0°.02×128°.74E±0°.02, h161km±2km, mb4.7/80, Error ellipse: s-maj=4.1km s-min=3.5km az=161.2*
*AUST **01** 07:58:22.6±0.2, 4°.17S×128°.76E, h151km, Error ellipse: s-maj=0.6km s-min=0.6km az=243.0*
*MOS **01** 07:58:23.3±0.9, 4°.18S×128°.62E, h171km, mb4.8/33, Error ellipse: s-maj=13.3km s-min=5.9km az=113.7*
*IDC **01** 07:58:23.2±1.1, 4°.20S×128°.63E, h154km±9km, mb4.4/29, mb1 4.4/34, mb1mx4.3/52, mbtmp4.9/34, Error ellipse: s-maj=12.9km s-min=8.5km az=79.0*
*DJA **01** 07:58:24.6±0.2, 4°S±3°×12°9E±°, h135km±3km, M4.9/43, mb5.1/43, mB5.4/30, MLv5.3/18, Mw(mB)4.8/30*
*NEIC **01** 07:58:24.2±0.5, 4°.16S×128°.68E, h163km±4km, mb4.8/38, Error ellipse: s-maj=5.7km s-min=4.1km az=58.0*
**ISC 01 07:58:23.6**±0.3**, 4°.17S**±0°.03×**128°.73E**±0°.04**, h159**km±2km**, h159**km**:pP-P, n279,** σ**1s.17**/345**, mb4.8**/79**, 10C-4D, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAI | Ambon | 0.72 | 312 | P | Pn | 07 58 46.0 | -1.2 |
| MSAI | Masohi | 0.84 | 14 | P | Pn | 07 58 46.8 | -1.3 |
| MSAI | | | | S | Sn | 07 59 03.5 | -3.3 |
| BNDI | Bandanaira | 1.22 | 107 | P | Pn | 07 58 51.5 | +0.3 |
| NLAI | Namlea | 1.87 | 300 | P | Pn | 07 58 56.7 | -1.1 |
| SANI | Sanana | 3.45 | 307 | P | Pn | 07 59 16.3 | -0.8 |
| LBMI | Labuha | 3.72 | 341 | P | Pn | 07 59 20.2 | -0.3 |
| FAKI | Fak Fak | 3.73 | 71 | P | Pn | 07 59 20.3 | -0.3 |
| | baz=3.7,SNR=420 | | | | | | |
| FAKI | Fak Fak | 3.73 | 71 | P | Pn | 07 59 20.4 | -0.2 |
| FAKI | Fak Fak | 3.73 | 71 | ePn | Pn | 07 59 20.1 | -0.4 |
| FAKI | | | | eSn | Sn | 08 00 03.4 | -1.5 |
| SIJI | Sorong | 4.14 | 38 | P | Pn | 07 59 24.7 | -1.3 |
| | 70nm,0.3s,baz=192,slow=22,SNR=109 | | | | | | |
| SIJI | | | | S | Sn | 08 00 11.0 | -3.7 |
| | 213nm,0.3s,baz=29,slow=21,SNR=28 | | | | | | |
| SWI | Sorong | 4.14 | 38 | P | Pn | 07 59 24.8 | -1.2 |
| | baz=4.1,SNR=44 | | | | | | |
| SWI | Sorong | 4.14 | 38 | P | Pn | 07 59 24.7 | -1.3 |
| SAUI | Saumlaki | 4.57 | 146 | ePn | Pn | 07 59 33.4 | +1.8 |
| SAUI | | | | eSn | Sn | 08 00 24.1 | -0.5 |
| TNTI | Ternate | 5.09 | 344 | ePn | Pn | 07 59 37.6 | -0.9 |
| KDI | Kendari | 6.10 | 272 | P | Pn | 07 59 51.7 | 0.0 |
| | 762nm,1.1s,6μm2.2nm | | | | | | |
| LUWI | Luwuk | 6.71 | 297 | P | Pn | 07 59 59.8 | -0.1 |
| | baz=6.7,SNR=7.2 | | | | | | |
| LUWI | Luwuk | 6.71 | 297 | P | Pn | 07 59 59.2 | -0.7 |
| | 388nm,1.2s,8μm1.3nm | | | | | | |
| LUWI | Luwuk | 6.71 | 297 | ePn | Pn | 07 59 59.4 | -0.6 |
| SOEI | Soe | 7.10 | 218 | P | Pn | 08 00 07.1 | +2.0 |
| | baz=7.1,SNR=4.6 | | | | | | |
| SOEI | Soe | 7.10 | 218 | P | Pn | 08 00 06.5 | +1.3 |
| | 115nm,1.2s,2μm0.6nm | | | | | | |
| SOEI | Soe | 7.10 | 218 | ePn | Pn | 08 00 07.2 | +2.0 |
| APSI | Ampana | 7.78 | 294 | P | Pn | 08 00 13.5 | -0.6 |
| | 246nm,1.0s,2μm0.8nm | | | | | | |
| MMRI | Maumere | 7.83 | 235 | P | Pn | 08 00 16.0 | +1.2 |
| | 310nm,1.1s,3μm1.1nm | | | | | | |
| MMRI | Maumere | 7.83 | 235 | ePn | Pn | 08 00 16.5 | +1.7 |
| MRSI | Marisa | 8.21 | 304 | P | Pn | 08 00 19.2 | -0.6 |
| | 284nm,0.9s,7μm | | | | | | |
| EDFI | Ende, Flores | 8.34 | 237 | P | Pn | 08 00 23.0 | +1.3 |
| | 164nm,0.9s,1μm | | | | | | |
| BSSI | Bau Bau, Buton | 8.44 | 256 | P | Pn | 08 00 23.9 | +1.1 |
| | 391nm,1.3s,5μm | | | | | | |
| BKSI | Bulukumba | 8.65 | 262 | P | Pn | 08 00 26.4 | +0.7 |
| | 274nm,1.0s,4μm0.8nm | | | | | | |
| MTN | Manton Dam | 8.94 | 165 | P | Pn | 08 00 29.6 | +0.1 |
| | baz=9.0,SNR=7.3 | | | | | | |
| MTN | Manton Dam | 8.94 | 165 | ePn | Pn | 08 00 29.6 | +0.1 |
| SPSI | Sidrap Palu | 8.94 | 271 | P | Pn | 08 00 30.5 | +1.0 |
| | 337nm,1.0s,3μm1.1nm | | | | | | |
| TTSI | Tana Toraja | 8.96 | 277 | P | Pn | 08 00 30.3 | +0.5 |
| | 166nm,1.0s,2μm | | | | | | |
| KAPI | Kappang | 8.99 | 264 | P | Pn | 08 00 29.0 | -1.1 |
| | 5.5nm,0.3s,baz=119,slow=6.3,SNR=19 | | | | | | |
| KAPI | Kappang | 8.99 | 264 | Pn | Pn | 08 00 31.0 | +0.8 |
| | 753nm,1.0s,SNR=6.9 | | | | | | |
| KAPI | Kappang | 8.99 | 264 | P | Pn | 08 00 31.2 | +1.1 |
| | SNR=8.1 | | | | | | |
| KAPI | Kappang | 8.99 | 264 | ePn | Pn | 08 00 31.3 | +1.1 |
| KDU | Kakadu | 9.24 | 157 | P | Pn | 08 00 32.3 | -1.1 |
| | baz=9.3,SNR=48 | | | | | | |
| PCI | Palu | 9.46 | 290 | P | Pn | 08 00 37.3 | +0.9 |
| | 199nm,1.2s,2μm | | | | | | |
| WBSI | Waikabubak, Su | 10.74 | 239 | P | Pn | 08 00 52.3 | -1.1 |
| | 169nm,0.9s,2μm | | | | | | |
| KNRA | Kununurra | 11.44 | 180 | P | Pn | 08 01 01.3 | -1.0 |
| | baz=12,SNR=8.2 | | | | | | |
| GENI | Genyem | 11.53 | 83 | P | P | 08 01 08.1 | -2.6 |
| | 90nm,0.7s | | | | | | |
| KBKI | Kotabaru | 12.57 | 274 | P | Pn | 08 01 18.9 | +1.9 |
| | 44nm,1.1s,13μm | | | | | | |
| TWSI | Taliwang, Sumb | 12.61 | 248 | P | Pn | 08 01 17.4 | -0.2 |
| | 116nm,1.2s,2μm | | | | | | |
| PALU | Palau | 12.79 | 27 | P | Pn | 08 01 20.9 | +0.9 |
| | baz=13,SNR=8.0 | | | | | | |
| MYLDM | Lahad Datu | 13.81 | 312 | ePn | Pn | 08 01 32.7 | -0.1 |
| BBKI | Banjar Baru | 13.88 | 272 | P | P | 08 01 36.4 | -0.4 |
| | 122nm,0.8s,6μm | | | | | | |
| SRBI | Singaraja | 13.99 | 253 | P | Pn | 08 01 35.7 | +0.6 |
| | 230nm,1.1s,2μm | | | | | | |
| FITZ | Fitzroy Crossi | 14.17 | 192 | P | Pn | 08 01 35.4 | -2.0 |
| | 2.8nm,0.3s,baz=19,slow=7.5,SNR=16 | | | | | | |
| FITZ | | | | S | S | 08 04 20.1 | -2.2 |
| | 0.5nm,0.3s,baz=151,slow=17,SNR=10 | | | | | | |
| FITZ | Fitzroy Crossi | 14.17 | 192 | P | Pn | 08 01 36.1 | -1.3 |
| | baz=14,SNR=11 | | | | | | |
| IGBI | Denpasar | 14.26 | 250 | P | Pn | 08 01 39.0 | +0.5 |
| | 167nm,1.0s,3μm | | | | | | |
| ABJI | Asem Bagus | 14.86 | 255 | P | P | 08 01 46.9 | -0.8 |
| | 117nm,1.0s,3μm | | | | | | |
| KMMI | Kalianget | 14.97 | 258 | P | P | 08 01 54.8 | +5.9 |
| JAGI | Jajag, Banyuwa | 15.10 | 253 | P | Pn | 08 01 47.9 | -1.1 |
| | baz=15,SNR=12 | | | | | | |
| JAGI | Jajag, Banyuwa | 15.10 | 253 | eP | Pn | 08 01 47.4 | -1.6 |
| | 115nm,1.0s | | | | | | |
| BLJI | Banyuglugur | 15.46 | 256 | P | Pn | 08 01 53.8 | +0.3 |
| | 149nm,0.7s,2μm | | | | | | |
| KKM | Kota Kinabalu | 16.10 | 309 | P | P | 08 02 02.0 | +0.4 |
| | baz=16,SNR=4.7 | | | | | | |
| KKM | Kota Kinabalu | 16.10 | 309 | eP | Pn | 08 02 01.1 | -0.2 |
| | 43nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 16.60 | 161 | ceP | Pn | 08 02 07.8 | +0.5 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| WRAB | Tennant Creek | 16.60 | 161 | P | P | 08 02 07.0 | +0.1 |
| | comp=Z,110nm,0.4s,SNR=29 | | | | | | |
| WRAB | Tennant Creek | 16.60 | 161 | eP | P | 08 02 07.1 | +0.1 |
| | comp=Z,20nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 16.60 | 161 | P | P | 08 02 06.1 | -0.9 |
| | comp=Z,2.3nm,0.3s,baz=343,slow=13,SNR=65 | | | | | | |
| WRA | | | | S | S | 08 05 01.2 | -10 |
| | comp=Z,1.7nm,0.3s,baz=351,slow=22,SNR=5.6 | | | | | | |
| WRA | | | | ScP | ScP | 08 10 07.0 | -0.8 |
| | comp=Z,0.2nm,0.3s,baz=351,slow=2.9,SNR=7.1 | | | | | | |
| COEN | Coen | 17.25 | 125 | P | Pn | 08 02 15.6 | +0.5 |
| | baz=17,SNR=71 | | | | | | |
| COEN | Coen | 17.25 | 125 | eP | Pn | 08 02 16.2 | +1.0 |
| | comp=Z,56nm,0.6s | | | | | | |
| PWJI | Pagerwojo | 17.26 | 256 | P | P | 08 02 14.3 | +0.1 |
| | comp=Z,98nm,0.7s | | | | | | |
| SBUM | Sibu | 17.76 | 291 | eP | Pn | 08 02 20.8 | -0.4 |
| | comp=Z,71nm,0.9s | | | | | | |
| WOJI | Wonogiri, Jawa | 18.08 | 258 | P | Pn | 08 02 30.1 | +5.2 |
| UGM | Wanagama | 18.48 | 258 | P | P | 08 02 28.4 | +0.8 |
| | baz=18,SNR=5.3 | | | | | | |
| UGM | Wanagama | 18.48 | 258 | eP | Pn | 08 02 29.8 | 0.0 |
| | comp=Z,199nm,1.3s | | | | | | |
| MBWA | Marble Bar | 19.02 | 207 | P | P | 08 02 32.9 | -0.4 |
| | SNR=14 | | | | | | |
| MBWA | Marble Bar | 19.02 | 207 | eP | P | 08 02 32.6 | -0.8 |
| | comp=Z,79nm,0.8s | | | | | | |
| PMG | Port Moresby | 19.02 | 107 | P | P | 08 02 34.1 | +0.6 |
| | comp=Z,1.1nm,0.3s,baz=247,slow=4.4,SNR=2.8 | | | | | | |
| PMG | Port Moresby | 19.02 | 107 | ⇑iP | Pn | 08 02 35.6 | -0.4 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,213nm,1.0s | | | | | | |
| PMG | Port Moresby | 19.02 | 107 | eP | Pn | 08 02 36.2 | +0.2 |
| | comp=Z,52nm,0.9s | | | | | | |
| KSM | Kuching | 19.24 | 287 | P | P | 08 02 36.4 | +0.5 |
| | baz=19,SNR=22 | | | | | | |
| KSM | Kuching | 19.24 | 287 | eP | P | 08 02 36.0 | 0.0 |
| | comp=Z,91nm,0.9s | | | | | | |
| QIS | Mount Isa | 19.43 | 148 | P | P | 08 02 38.8 | +0.9 |
| | baz=20,SNR=54 | | | | | | |
| ASAR | Alice Springs | 20.02 | 166 | P | P | 08 02 44.9 | +0.7 |
| | comp=Z,22nm,0.8s,baz=346,slow=11,SNR=94 | | | | | | |
| ASAR | | | | S | S | 08 06 17.7 | -2.9 |
| | comp=Z,37nm,1.0s,baz=349,slow=23,SNR=25 | | | | | | |
| ASAR | | | | PcP | PcP | 08 06 53.8 | +0.1 |
| | comp=Z,6.0nm,0.6s,baz=347,slow=2.1,SNR=5.0 | | | | | | |
| ASAR | | | | ScP | ScP | 08 10 14.2 | -1.0 |
| | comp=Z,7.9nm,0.6s,baz=350,slow=2.2,SNR=15 | | | | | | |
| AS01 | Alice Springs | 20.03 | 166 | eP | P | 08 02 44.4 | +0.1 |
| WRKA | Warakurna | 20.75 | 181 | P | P | 08 02 52.1 | 0.0 |
| | baz=21,SNR=67 | | | | | | |
| GIRL | Giralia | 23.11 | 216 | P | P | 08 03 15.7 | 0.0 |
| | baz=23,SNR=5.1 | | | | | | |
| CTA | Charters Tower | 23.28 | 134 | P | P | 08 03 18.5 | +1.2 |
| | comp=Z,7.1nm,0.5s,baz=318,slow=13,SNR=7.8 | | | | | | |
| CTAO | Charters Tower | 23.28 | 134 | eP | P | 08 03 19.1 | +1.9 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| CTAO | Charters Tower | 23.28 | 134 | eP | P | 08 03 19.1 | +1.9 |
| | comp=Z,18nm,1.0s | | | | | | |
| MEEK | Meekatharra | 24.35 | 202 | P | P | 08 03 26.6 | -0.4 |
| | baz=24,SNR=12 | | | | | | |
| QLP | Quilpie | 26.77 | 148 | P | P | 08 03 49.7 | +1.0 |
| | baz=27,SNR=7.7 | | | | | | |
| KMBL | Kambalda | 27.81 | 193 | P | P | 08 03 58.1 | +0.1 |
| | baz=28,SNR=6.7 | | | | | | |
| IPM | Ipoh | 28.98 | 287 | eP | P | 08 04 08.3 | -0.2 |
| | comp=Z,60nm,0.6s | | | | | | |
| KLBR | Kellerberrin | 29.16 | 199 | P | P | 08 04 09.4 | -0.6 |
| | baz=29,SNR=6.5 | | | | | | |
| BBOO | Buckleboo | 29.31 | 167 | P | P | 08 04 11.6 | +0.4 |
| | baz=29,SNR=15 | | | | | | |
| KULM | Kulim | 29.58 | 288 | eP | P | 08 04 13.2 | -0.7 |
| | comp=Z,17nm,0.7s | | | | | | |
| QIZ | Qiongzhong | 29.62 | 322 | P | P | 08 04 15.5 | +1.4 |
| QIZ | | | | sP | sP | 08 05 04.8 | -1.1 |
| QIZ | | | | PP | PP | 08 05 25.4 | +1.2 |
| QIZ | | | | S | S | 08 08 59.6 | +1.7 |
| QIZ | | | | sS | sS | 08 09 57.0 | +0.2 |
| QIZ | | | | LZ | | | |
| | comp=Z,270nm,25.9s | | | | | | |
| NWAO | Narrogin (SRO) | 30.56 | 199 | P | P | 08 04 20.9 | -1.4 |
| | comp=Z,6.2nm,0.7s,baz=275,slow=0.7,SNR=3.7 | | | | | | |
| PSI | Prapat | 30.58 | 283 | P | P | 08 04 21.1 | -1.7 |
| | comp=Z,14nm,0.7s,baz=87,slow=5.2,SNR=12 | | | | | | |
| PSI | | | | ScP | ScP | 08 10 44.2 | -1.4 |
| | comp=Z,15nm,1.0s,baz=187,slow=5.1,SNR=7.5 | | | | | | |
| PSI | Prapat | 30.58 | 283 | eP | P | 08 04 21.5 | -1.3 |
| PSI | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| PSI | Prapat | 30.58 | 283 | eP | P | 08 04 21.5 | -1.3 |
| | comp=Z,15nm,0.7s | | | | | | |
| PSI | | | | ScP | ScP | 08 10 44.2 | -1.4 |
| HTT | Hallett | 30.63 | 163 | P | P | 08 04 22.2 | -0.7 |
| | baz=31,SNR=7.5 | | | | | | |
| TRTT | Trang | 31.33 | 292 | P | P | 08 04 29.3 | 0.0 |
| | comp=Z,30nm,1.0s | | | | | | |
| CMSA | Cobar Meteorol | 31.55 | 152 | P | P | 08 04 32.1 | +1.1 |
| | baz=32,SNR=16 | | | | | | |
| SRIT | Nakonsritamara | 31.69 | 294 | P | P | 08 04 32.8 | +0.4 |
| | comp=Z,25nm,1.0s,comp=Z,2μm | | | | | | |
| SKNT | Sakolnakorn | 32.24 | 311 | P | P | 08 04 40.0 | +2.9 |
| | comp=Z,23nm,0.8s | | | | | | |
| KHON | Khomkaen | 32.73 | 309 | P | P | 08 04 42.4 | +0.9 |
| | comp=Z,20nm,0.7s,comp=Z,767nm | | | | | | |
| ARMA | Armidale | 33.90 | 143 | P | P | 08 04 53.6 | +2.0 |
| | baz=34,SNR=14 | | | | | | |
| ARMA | Armidale | 33.90 | 143 | eP | P | 08 04 53.4 | +1.9 |
| | comp=Z,15nm,0.7s | | | | | | |
| ARPS | Mount Arapiles | 34.61 | 161 | P | P | 08 04 58.8 | +1.4 |
| | baz=35,SNR=6.1 | | | | | | |
| LOEI | Loei | 34.63 | 309 | P | P | 08 04 55.9 | -2.0 |
| | comp=Z,10nm,0.6s,comp=Z,376nm | | | | | | |
| UTHA | Uthaitani | 35.00 | 305 | P | P | 08 05 01.2 | +0.2 |
| | comp=Z,9.5nm,0.7s,comp=Z,177nm | | | | | | |
| UTTA | Uttaradit | 35.31 | 309 | P | P | 08 05 04.4 | +0.7 |
| | comp=Z,5.9nm,0.8s,comp=Z,66nm | | | | | | |
| UMPA | Umpang Tak | 35.81 | 305 | P | P | 08 05 08.4 | +0.3 |
| | comp=Z,4.3nm,0.9s,comp=Z,818nm | | | | | | |
| TOO | Toolangi | 36.61 | 157 | P | P | 08 05 16.6 | +2.0 |
| | baz=37,SNR=4.2 | | | | | | |
| CRAI | Chiangrai | 36.93 | 312 | P | P | 08 05 15.7 | -1.7 |
| | comp=Z,10nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 36.97 | 308 | P | P | 08 05 18.4 | +0.6 |
| | comp=Z,8.4nm,0.7s,baz=137,slow=7.3,SNR=40 | | | | | | |
| CMAR | | | | ScP | ScP | 08 11 08.2 | +0.3 |
| | comp=Z,3.5nm,0.9s,baz=158,slow=3.4,SNR=13 | | | | | | |
| CMAR | Chiang Mai Arr | 36.97 | 308 | iP | P | 08 05 18.7 | +0.8 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| JNU | Nakatsue | 37.14 | 3 | P | P | 08 05 19.3 | +0.2 |
| | comp=Z,28nm,0.9s,baz=133,slow=2.9,SNR=11 | | | | | | |
| JNU | Nakatsue | 37.14 | 3 | eP | P | 08 05 19.1 | 0.0 |
| | comp=Z,15nm,1.0s | | | | | | |
| WHN | Wuhan | 37.16 | 339 | ⇓iP | P | 08 05 20.5 | +1.3 |
| WHN | | | | S | S | 08 11 03.6 | +10 |
| WHN | | | | PMZ | | | |
| | comp=Z,64nm,0.8s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,580nm,21.2s | | | | | | |
| CHTO | Chiang Mai | 37.18 | 309 | P | P | 08 05 20.2 | +0.6 |
| | comp=Z,105nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 37.18 | 309 | eP | P | 08 05 20.4 | +0.8 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| CHTO | Chiang Mai | 37.18 | 309 | P | P | 08 05 20.7 | +1.1 |
| | SNR=7.3 | | | | | | |
| CHTO | Chiang Mai | 37.18 | 309 | eP | P | 08 05 20.4 | +0.8 |
| | comp=Z,14nm,0.7s | | | | | | |
| GYA | Guiyang | 37.19 | 326 | P | P | 08 05 22.0 | +2.3 |
| GYA | | | | pP | pP | 08 05 54.5 | +0.5 |
| GYA | | | | sP | sP | 08 06 14.0 | +1.9 |
| GYA | | | | PP | PnPn | 08 06 53.4 | +2.9 |
| GYA | | | | S | S | 08 10 56.2 | +1.3 |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| NJ2 | Nanjing | 37.23 | 346 | eP | P | 08 05 20.3 | +0.6 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,90nm,1.3s | | | | | | |
| CMAI | Chiengmai2 | 37.74 | 310 | P | P | 08 05 25.1 | +0.6 |
| | comp=Z,16nm,0.8s,comp=Z,692nm | | | | | | |
| KMI | Kunming | 38.54 | 320 | P | P | 08 05 32.8 | +1.6 |
| KMI | | | | pP | pP | 08 06 07.4 | +1.8 |
| KMI | | | | sP | sP | 08 06 25.4 | +1.7 |
| KMI | | | | PP | PnPn | 08 07 08.9 | +2.3 |
| KMI | | | | S | S | 08 11 16.9 | +1.5 |
| KMI | | | | sS | sS | 08 12 17.1 | +1.4 |
| KMI | | | | SS | SS | 08 14 07.7 | -4.3 |
| KMI | | | | PMZ | | | |
| | comp=Z,14nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,100nm,4.3s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,150nm,10.7s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,210nm,12.4s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,230nm,11.9s | | | | | | |
| TJN | Taejon | 40.36 | 358 | ⇑iP | P | 08 05 46.6 | +0.9 |
| KSBON | Boeun | 40.47 | 359 | P | P | 08 05 48.3 | +1.6 |
| | SNR=8.2 | | | | | | |
| KSSES | Seosan | 40.80 | 357 | P | P | 08 05 50.8 | +1.4 |
| | SNR=6.5 | | | | | | |
| KSCEA | Cheonan | 40.80 | 358 | P | P | 08 05 50.6 | +1.2 |
| | SNR=12 | | | | | | |
| KSCHJ | Chungju | 40.84 | 359 | P | P | 08 05 50.5 | +0.8 |
| | SNR=5.8 | | | | | | |
| KSSWO | Suwon | 41.26 | 358 | P | P | 08 05 54.7 | +1.6 |
| | SNR=5.6 | | | | | | |
| KSAR | Wonju Array Be | 41.41 | 359 | P | P | 08 05 55.5 | +1.2 |
| KSAR | | | | | | 08 07 50.0 | |
| KSAR | Wonju Array Be | 41.41 | 359 | P | P | 08 05 55.5 | +1.2 |
| KSAR | | | | PcP | PcP | 08 07 50.0 | +0.6 |
| KSAR | | | | ScP | ScP | 08 11 25.4 | +0.8 |
| KSRS | Korea Array | 41.42 | 359 | P | P | 08 05 55.5 | +1.1 |
| | comp=Z,18nm,0.8s,baz=178,slow=9.1,SNR=72 | | | | | | |
| KSRS | | | | PcP | PcP | 08 07 50.0 | +0.6 |
| | comp=Z,2.1nm,0.6s,baz=181,slow=3.3,SNR=5.6 | | | | | | |
| KSRS | | | | ScP | ScP | 08 11 25.4 | +0.8 |
| | comp=Z,2.8nm,0.9s,baz=177,slow=3.8,SNR=9.2 | | | | | | |
| MJAR | Matsushiro Arr | 41.46 | 12 | P | P | 08 05 54.1 | -0.7 |
| | comp=Z,16nm,0.9s,baz=188,slow=10,SNR=32 | | | | | | |
| MJAR | | | | PcP | PcP | 08 07 49.8 | +0.2 |
| | comp=Z,3.4nm,0.8s,baz=168,slow=3.5,SNR=4.1 | | | | | | |
| MAJO | Matsushiro | 41.46 | 12 | ⇑iP | P | 08 05 54.6 | -0.2 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,148nm,0.9s | | | | | | |
| MAJO | Matsushiro | 41.46 | 12 | eP | P | 08 05 54.4 | -0.4 |
| | comp=Z,35nm,1.1s | | | | | | |
| MAT | Matsushiro | 41.46 | 12 | P | P | 08 05 54.1 | -0.7 |
| KSDGY | Daegwallycong | 41.65 | 360 | P | P | 08 05 57.9 | +1.5 |
| | SNR=7.4 | | | | | | |
| KSCHC | Chuncheon | 41.74 | 359 | P | P | 08 05 58.8 | +1.7 |
| | SNR=17 | | | | | | |
| KSJMJ | Jumunjin | 41.84 | 0 | P | P | 08 05 59.4 | +1.6 |
| | SNR=7.1 | | | | | | |
| KSMUS | Musan | 41.88 | 358 | P | P | 08 05 59.9 | +1.7 |
| | SNR=11 | | | | | | |
| KSIJA | INJE | 41.95 | 359 | P | P | 08 06 00.6 | +1.9 |
| | SNR=13 | | | | | | |
| YNCB | YEONCHEON | 42.03 | 358 | P | P | 08 06 01.0 | +1.6 |
| | SNR=7.0 | | | | | | |
| KSCWO | Cheorwon | 42.05 | 359 | P | P | 08 06 01.4 | +1.8 |
| | SNR=7.8 | | | | | | |
| SEHB | SEOHWA | 42.23 | 359 | P | P | 08 06 02.8 | +1.8 |
| | SNR=8.4 | | | | | | |
| CD2 | Chengdu | 42.25 | 327 | eP | P | 08 06 01.6 | +0.2 |
| CD2 | | | | pP | pP | 08 06 35.4 | -1.0 |
| CD2 | | | | sP | sP | 08 06 53.0 | -1.3 |
| CD2 | | | | PcS | PcS | 08 11 44.3 | -0.3 |
| CD2 | | | | S | S | 08 12 11.7 | +1.6 |
| CD2 | | | | SS | SS | 08 15 28.0 | +3.0 |
| CD2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| XAN | Xi'an | 42.36 | 335 | P | P | 08 06 01.4 | -0.8 |
| XAN | | | | sP | sP | 08 06 54.4 | -0.7 |
| XAN | | | | PMZ | | | |
| | comp=Z,22nm,1.1s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,78nm,8.8s | | | | | | |
| BJI | Beijing | 45.48 | 346 | P | P | 08 06 26.2 | -0.7 |
| BJI | | | | pP | pP | 08 06 59.9 | -2.4 |
| BJI | | | | sP | sP | 08 07 18.9 | -1.3 |
| BJI | | | | S | S | 08 12 58.1 | +1.6 |
| BJI | | | | PMZ | | | |
| | comp=Z,38nm,1.0s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,140nm,4.6s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,290nm,17.6s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,270nm,18.0s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,190nm,19.2s | | | | | | |
| LZH | Lanzhou | 46.33 | 332 | eP | P | 08 06 33.0 | -0.8 |
| LZH | | | | pP | pP | 08 07 07.1 | -2.3 |
| LZH | | | | sP | sP | 08 07 25.3 | -1.9 |
| LZH | | | | PP | PP | 08 08 24.1 | -1.2 |
| LZH | | | | eS | S | 08 13 07.0 | -2.1 |
| LZH | | | | PMZ | | | |
| | comp=Z,39nm,1.3s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,150nm,4.1s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,200nm,13.0s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,230nm,13.9s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,400nm,17.0s | | | | | | |
| MSHR | Mys Shultsa | 46.58 | 2 | ⇓iP | P | 08 06 36.2 | +0.7 |
| VLA | Vladivostok | 47.16 | 3 | ⇓iP | P | 08 06 40.5 | +0.6 |
| VLA | | | | pmax | pmax | | |
| | comp=Z,53nm,0.8s | | | | | | |
| HHC | Hu-ho-hao-te | 47.48 | 342 | eP | P | 08 06 44.3 | +1.7 |
| HHC | | | | sP | sP | 08 07 39.1 | +3.0 |
| HHC | | | | S | S | 08 13 25.6 | +0.4 |
| HHC | | | | PMZ | | | |
| | comp=Z,22nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,170nm,7.5s | | | | | | |
| CN2 | Changchun | 47.84 | 357 | eP | P | 08 06 46.1 | +0.9 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| USRK | Ussuriysk Ar. | 48.24 | 3 | P | P | 08 06 49.0 | +0.8 |
| | comp=Z,26nm,0.7s,baz=188,slow=7.2,SNR=70 | | | | | | |
| MDJ | Mudanjiang | 48.57 | 1 | P | P | 08 06 51.5 | +0.8 |
| MDJ | | | | pP | pP | 08 07 25.8 | -0.9 |
| MDJ | | | | sP | sP | 08 07 42.5 | -1.9 |
| MDJ | | | | S | S | 08 13 41.4 | +1.2 |
| MDJ | | | | PMZ | | | |
| | comp=Z,21nm,1.0s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,110nm,4.7s | | | | | | |
| MDJ | Mudanjiang | 48.57 | 1 | eP | P | 08 06 51.6 | +0.8 |
| | comp=Z,5.2nm,0.4s | | | | | | |
| LSA | Lhasa | 49.30 | 316 | eP | P | 08 06 57.6 | +0.4 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| LSA | Lhasa | 49.30 | 316 | eP | P | 08 06 57.6 | +0.4 |
| | comp=Z,13nm,0.8s | | | | | | |
| ASAJ | Asahikawa | 49.66 | 13 | P | P | 08 06 59.5 | +0.5 |
| | comp=Z,21nm,0.7s,baz=215,slow=10.0 | | | | | | |
| ASAJ | Asahikawa | 49.66 | 13 | eP | P | 08 06 59.6 | +0.5 |
| | comp=Z,13nm,0.8s | | | | | | |

**ODAN Odare 50.47 310** *e*P **P 08 07 05.6 -0.2**
comp=Z,19nm,0.5s
**TAPN Taplejung 50.48 311** *e*P **P 08 07 05.7 -0.2**
comp=Z,25nm,0.4s
**GTA Gaotai 50.90 331** *e*P **P 08 07 09.0 +0.3**
GTA pP **pP 08 07 44.7 -0.1**
GTA sP **sP 08 08 01.4 -1.1**
GTA PcP **PcP 08 08 24.3 +1.4**
GTA PP **PP 08 09 09.1 +2.4**
GTA ScP **ScP 08 12 05.4 +1.1**
GTA S **S 08 14 13.9 +0.9**
GTA sS **sS 08 15 18.0 +2.1**
GTA SS **SS 08 17 48.8 -1.3**
GTA PMZ
comp=Z,23nm,1.0s
GTA PMZ
comp=Z,95nm,6.2s
GTA LN
comp=Z,210nm,17.1s
GTA LE
comp=Z,240nm,16.2s
GTA LZ
comp=Z,320nm,16.1s
**RAMN Ramite 51.12 310** *e*P **P 08 07 10.9 +0.2**
comp=Z,69nm,0.5s
**GUN Gumba 52.16 310** *e*P **P 08 07 18.3 -0.2**
comp=Z,42nm,0.4s
**PKI Pulchoki 52.35 310** *e*P **P 08 07 19.2 -0.7**
comp=Z,5.4nm,0.2s
**PKIN Phulchoki 52.36 310** *e*P **P 08 07 19.5 -0.4**
comp=Z,5.3nm,0.3s
**KKN Kakani 52.55 310** *e*P **P 08 07 20.9 -0.4**
comp=Z,32nm,0.4s
**DMN Daman 52.60 310** *e*P **P 08 07 21.4 -0.2**
comp=Z,18nm,0.5s
**HABR Khabarovsk 52.72 5** *e*P **P 08 07 20.4 -1.3**
HABR *e**PP **pP 08 07 59.1 +1.0**
HABR *e* 08 08 27.7
HABR *e* 08 09 21.3
HABR *e*PPP PPP 08 10 30.5
HABR *e*S **S 08 14 35.2 -2.0**
HABR *e**SS **sS 08 15 42.7 +2.3**
HABR *e* 08 16 52.3
HABR *e*SS **SS 08 18 17.2 -1.0**
HABR pmax pmax
comp=Z,97nm,1.8s
HABR pmax pmax
comp=N,55nm,1.8s
HABR pmax pmax
comp=E,26nm,0.9s
HABR MLR MLR
comp=Z,150nm,18.0s
**GKN Gorkha 53.15 310** *e*P **P 08 07 25.1 -0.5**
comp=Z,35nm,0.6s
**KLR Kul'dur 53.25 2** *e*P P 08 07 22.0 -3.6
KLR pmax pmax
comp=Z,57nm,1.6s
**KOLN Koldanda 53.84 309** *e*P **P 08 07 30.5 -0.1**
comp=Z,42nm,0.5s
**HYB Hyderabad 53.96 295** *i* P **P 08 07 29.0 -2.5**
**ULN Ulaanbaatar 55.20 342***c i*P **P 08 07 40.9 +0.9**
ULN pmax pmax
comp=Z,22nm,0.9s
**ULN Ulaanbaatar 55.20 342** P **P 08 07 41.2 +1.2**
SNR=9.4
**ULN Ulaanbaatar 55.20 342** *e*P **P 08 07 40.6 +0.6**
comp=Z,37nm,1.1s
**SONM Songino Array 55.38 342** P **P 08 07 41.8 +0.6**
comp=Z,7.9nm,0.8s,baz=161,slow=7.8,SNR=49
SONM PcP **PcP 08 08 39.8 +0.1**
comp=Z,0.9nm,0.5s,baz=152,slow=5.2,SNR=3.5
SONM ScP **ScP 08 12 24.0 +0.3**
comp=Z,1.7nm,0.7s,baz=157,slow=4.8,SNR=7.0
**TLY Talaya 59.61 342** P **P 08 08 11.3 +0.7**
comp=Z,4.2nm,0.7s,baz=175,slow=10.0,SNR=5.4
**TLY Talaya 59.61 342** *e*P **P 08 08 11.5 +0.9**
TLY pmax pmax
comp=Z,15nm,1.4s
**TLY Talaya 59.61 342** *e*P **P 08 08 11.6 +0.9**
comp=Z,4.7nm,0.8s
**WMQ Urumqi 60.35 327** P P 08 08 06.7 -9.2
WMQ pmax pmax
comp=Z,13nm,1.0s
**WMQ Urumqi 60.35 327** P **P 08 08 16.6 +0.7**
WMQ sP **sP 08 09 10.0 -0.6**
WMQ S **S 08 16 16.0 -2.0**
WMQ PMZ
comp=Z,26nm,0.9s
WMQ LN
comp=Z,110nm,20.0s
WMQ LE
comp=Z,370nm,26.0s
WMQ LZ
comp=Z,89nm,18.0s
**MOY Mondy 60.44 341** *e*P **P 08 08 17.8 +1.4**
MOY pmax pmax
comp=Z,33nm,1.8s
**PETK Petropavlovsk- 62.07 19** P **P 08 08 28.1 +0.9**
comp=Z,20nm,0.9s,baz=192,slow=5.9,SNR=14
PETK PcP **PcP 08 09 06.3 +0.3**
comp=Z,9.6nm,0.9s,baz=196,slow=2.6,SNR=4.6
**BOD Bodaibo 62.92 351** *e*P **P 08 08 32.5 -0.2**
BOD pmax pmax
comp=Z,25nm,1.3s
**CASY Casey 63.30 188** *e*P **P 08 08 34.5 -0.6**
comp=Z,5.3nm,0.8s
**PDGK Podgornoye 64.80 322** P **P 08 08 45.3 0.0**
PDGK pmax pmax
comp=Z,9.0nm,0.8s
**KSH Kashi 65.09 317** P **P 08 08 48.5 +1.0**
KSH *e*pP **pP 08 09 26.6 +1.3**
KSH *e*ScP 08 13 05.3
KSH PcS 08 13 21.3
KSH S **S 08 17 14.6 -2.9**
KSH sS **sS 08 18 24.2 +1.1**
KSH ScS **SKSac 08 18 26.9 -0.5**
KSH PMZ
comp=Z,10.0nm,0.8s
KSH PMZ
comp=Z,98nm,5.0s
KSH LN
comp=Z,130nm,7.6s
KSH LE
comp=Z,84nm,5.8s
KSH LZ
comp=Z,160nm,7.8s
**MK31 Makanchi Array 65.18 327** P **P 08 08 47.9 +0.1**
MK31 pmax pmax
comp=Z,9.0nm,0.4s
**MKAR Makanchi Array 65.18 327** P **P 08 08 47.9 +0.1**
comp=Z,11nm,0.4s,baz=126,slow=7.9,SNR=108
**YAK Yakutsk 66.02 0** P **P 08 08 53.4 +0.7**
comp=Z,17nm,0.6s,baz=352,slow=6.2,SNR=7.5
**YAK Yakutsk 66.02 0** *e*P **P 08 08 52.7 0.0**
YAK pmax pmax
comp=Z,61nm,0.8s
YAK pmax pmax
comp=N,16nm,0.9s
**YAK Yakutsk 66.02 0** *e*P **P 08 08 53.1 +0.4**
comp=N,90nm,0.8s
**KZA Kyzart 66.82 319** P **P 08 08 59.4 +0.6**
SNR=7.4
**SFK Sufi-Kurgan 67.01 317** P **P 08 08 59.8 0.0**
SFK pmax pmax
comp=Z,5.0nm,0.8s
**TKM2 Tokmak 2 67.01 320** P **P 08 08 59.7 -0.1**
TKM2 pmax pmax
comp=Z,6.0nm,0.8s
**TKM2 Tokmak 2 67.01 320** P **P 08 08 59.9 +0.2**
SNR=6.7
**TKM2 Tokmak 2 67.01 320** *e*P **P 08 08 59.6 -0.2**
comp=Z,4.4nm,0.7s
**UCH Uchtor 67.37 319** P **P 08 09 03.0 +0.6**
SNR=8.4
**AAK Ala-Archa 67.58 320** P **P 08 09 03.2 -0.1**
comp=Z,3.0nm,0.6s,baz=127,slow=6.0,SNR=8.8
**AAK Ala-Archa 67.58 320***ce*P **P 08 09 04.0 +0.7**
AAK pmax pmax
comp=Z,12nm,1.0s
**AAK Ala-Archa 67.58 320** *e*P **P 08 09 03.5 +0.2**
comp=Z,6.3nm,1.0s
**AML Almayashu 67.86 319** P **P 08 09 05.7 +0.3**
SNR=9.7
**USP Ospenovka 67.88 320** P **P 08 09 05.5 +0.5**
SNR=5.6
**KBL Kabul 67.99 310** *e*P **P 08 09 06.3 +0.2**

**EKS2 Erkin-Say 68.06 319** *e*P **P 08 09 06.9 +0.7**
EKS2 pmax pmax
comp=Z,6.0nm,0.8s
**EKS2 Erkin-Say 68.06 319** P **P 08 09 07.2 +1.0**
SNR=6.4
**EKS2 Erkin-Say 68.06 319** *e*P **P 08 09 06.9 +0.7**
comp=Z,6.0nm,0.8s
**ZALV Zalesovo Beam 68.50 334** P **P 08 09 08.0 -0.6**
comp=Z,14nm,0.8s,baz=119,slow=4.8,SNR=28
**ZALV Zalesovo Beam 68.50 334** P **P 08 09 08.0 -0.6**
**MNAS Manas 68.81 319** P **P 08 09 10.9 0.0**
MNAS pmax pmax
comp=Z,9.0nm,1.0s
**SEY Seymchan 69.29 11** P **P 08 09 14.4 +1.2**
comp=Z,52nm,0.8s,baz=210,slow=5.1,SNR=66
**SEY Seymchan 69.29 11**⇑*i*P **P 08 09 14.7 +1.5**
**KURBB Kurchatov Arra 69.45 328** P **P 08 09 14.6 +0.1**
comp=Z,16nm,0.6s,baz=130,slow=5.5,SNR=121
**KURK Kurchatov 69.46 329** *e*P **P 08 09 14.5 0.0**
KURK pmax pmax
comp=Z,60nm,0.8s
**KURK Kurchatov 69.46 329** P **P 08 09 14.9 +0.4**
SNR=13
**KURK Kurchatov 69.46 329** P **P 08 09 14.8 +0.3**
comp=Z,219nm,0.7s,SNR=17
**KURK Kurchatov 69.46 329** *e*P **P 08 09 14.5 0.0**
comp=Z,60nm,0.8s
**NVS Novosibirsk 69.79 334** *e*P **P 08 09 15.1 -1.3**
NVS *e*S S 08 18 06.6 -6.1
NVS pmax pmax
comp=Z,26nm,1.1s
NVS pmax pmax
comp=N,5.0nm,0.6s
NVS pmax pmax
comp=E,5.0nm,0.6s
NVS pmax pmax
comp=Z,2.0nm,0.7s
NVS smax smax
comp=N,12nm,1.8s
NVS smax smax
comp=E,21nm,1.8s
**KK31 Karatay Array 70.39 319** *i* P **P 08 09 20.1 -0.4**
KK31 pmax pmax
comp=Z,1.0nm,0.4s
**KKAR Karatay Array 70.39 319** *e*P **P 08 09 20.3 -0.2**
KKAR pmax pmax
comp=Z,1.0nm,0.6s
**KKAR Karatay Array 70.39 319** *e*P **P 08 09 20.3 -0.2**
comp=Z,1.5nm,0.6s
**OTUK Ortayu 71.62 324** P **P 08 09 28.1 +0.3**
OTUK pmax pmax
comp=Z,13nm,0.8s
**VOSK Vostochnaya 74.55 328** P **P 08 09 44.3 -0.5**
VOSK pmax pmax
comp=Z,13nm,0.8s
**BVA0 Borovoye Array 75.01 328** *i* P **P 08 09 47.7 +0.2**
BVA0 pmax pmax
comp=Z,28nm,1.1s
**BVAR Borovoye Array 75.01 328** P **P 08 09 47.4 -0.1**
comp=Z,11nm,0.9s,baz=129,slow=6.3,SNR=39
**BRVK Borovoye 75.08 328** P **P 08 09 48.2 +0.3**
BRVK pmax pmax
comp=Z,38nm,1.2s
**BRVK Borovoye 75.08 328** P **P 08 09 48.0 +0.1**
comp=Z,103nm,0.7s,SNR=5.2
**BRVK Borovoye 75.08 328** P **P 08 09 48.5 +0.6**
SNR=7.3
**BRVK Borovoye 75.08 328** *e*P **P 08 09 47.6 -0.3**
comp=Z,17nm,1.0s
**CHKZ Chkalovo 75.20 329** P **P 08 09 48.2 -0.3**
CHKZ pmax pmax
comp=Z,14nm,0.9s
**VNDA Vanda 75.39 173** P **P 08 09 49.4 +0.2**
comp=Z,1.3nm,0.6s,baz=317,slow=6.7,SNR=11
**ZRNK Zerenda 75.72 327** P **P 08 09 51.7 +0.2**
ZRNK pmax pmax
comp=Z,16nm,0.8s
**SBA Scott Base 76.29 172** *e*P **P 08 09 55.4 +1.1**
SBA pmax pmax
comp=Z,16nm,1.8s
**SBA Scott Base 76.29 172** *e*P **P 08 09 55.4 +1.1**
comp=Z,16nm,1.8s
**BILL Bilibino 76.67 14** *i* P **P 08 09 58.1 +1.5**
BILL pmax pmax
comp=Z,8.0nm,1.0s
**MAW Mawson 77.11 201** P **P 08 09 58.7 -0.3**
comp=Z,3.7nm,1.1s,baz=183,slow=7.6,SNR=4.1
**GEYT Alibeck 77.43 310** P **P 08 10 00.8 -0.8**
comp=Z,2.3nm,0.5s,baz=101,slow=7.5,SNR=3.8
**AB31 Akbulak array 79.52 322** *i* P **P 08 10 12.4 -0.2**
AB31 pmax pmax
comp=Z,13nm,0.8s
**ABKAR Akbulak array 79.52 322** *e*P **P 08 10 12.3 -0.4**
comp=Z,8.3nm,0.7s
**AKTO Aktyubinsk 81.08 322** P **P 08 10 21.1 +0.1**
comp=Z,7.3nm,0.6s,baz=112,slow=7.3
**SVE Sverdlovsk 81.71 329**⇓*e*P **P 08 10 24.3 +0.2**
SVE pmax pmax
comp=Z,29nm,1.0s
**ARU Arti 82.65 328** P **P 08 10 28.6 -0.4**
comp=Z,0.6nm,0.2s,baz=66,slow=20,SNR=2.0
**ARU Arti 82.65 328***c i*P **P 08 10 28.9 -0.1**
ARU 08 13 36.4
ARU S **S 08 20 31.2 -1.8**
ARU pmax pmax
comp=Z,9.0nm,0.7s
**ARU Arti 82.65 328** *e*P **P 08 10 29.1 +0.1**
comp=Z,5.8nm,0.6s
**RAYN Ar Rayn 85.45 294** P **P 08 10 44.0 0.0**
comp=Z,36nm,0.7s,SNR=6.5
**RAYN Ar Rayn 85.45 294** *e*P **P 08 10 43.6 -0.4**
comp=Z,4.8nm,0.8s
**QSPA South Pole Qui 85.79 180** *e*P **P 08 10 45.0 +0.1**
comp=Z,116nm,2.5s
**KIV Kislovodsk 90.02 314** *i* P P 08 11 01.1 -4.3
KIV pmax pmax
comp=Z,9.0nm,1.1s
**MCK McKinley 90.31 26** *e*P **P 08 11 05.8 -0.5**
MCK pmax pmax
comp=Z,9.0nm,1.0s
**MCK McKinley 90.31 26** *e*P **P 08 11 05.8 -0.5**
comp=Z,8.8nm,1.0s
**COLA College 90.95 25** *e*P **P 08 11 08.3 -0.8**
COLA pmax pmax
comp=Z,4.0nm,0.6s
**COLA College 90.95 25** *e*P **P 08 11 08.3 -0.8**
comp=Z,3.6nm,0.6s
**ILAR Eielson Array 91.34 25** P **P 08 11 09.8 -1.2**
comp=Z,2.2nm,0.6s,baz=241,slow=5.0,SNR=48
ILAR PP **PP 08 14 48.8 -1.8**
comp=Z,1.1nm,1.0s,baz=255,slow=7.2,SNR=4.2
**EGAK Eagle 93.79 25** *e*P **P 08 11 22.6 +0.3**
comp=Z,6.1nm,1.0s
**INK Inuvik 96.72 22** P **P 08 11 34.3 -1.2**
comp=Z,5.6nm,1.0s,baz=289,slow=3.9,SNR=9.0
**ARCES ARCESS Array B 98.50 340** P **P 08 11 42.4 -1.2**
comp=Z,3.7nm,0.7s,baz=81,slow=5.6,SNR=12
**FINES FINESS Array B 99.69 332** P **Pdif 08 11 47.3 -1.6**
comp=Z,1.6nm,0.8s,baz=103,slow=3.1,SNR=3.4
**GERES GERESS Array B 109.45 321** PKiKP **PKiKP 08 16 35.1 -0.2**
comp=Z,0.2nm,0.3s,baz=302,slow=2.2,SNR=4.0
**NVAR Mina Array Bea 110.51 51** PKiKP **PKiKP 08 16 36.4 -1.5**
comp=Z,0.3nm,0.6s,baz=259,slow=3.3,SNR=3.9
**HLID Hailey 112.16 44** *e*PKPdf **PKiKP 08 16 42.0 +1.2**
**REDW Red Top Meadow 114.69 44** *e*PKPdf PKPdf 08 16 46.4 +0.8
**SNOW Snow King Moun 114.72 44** *e*PKPdf PKPdf 08 16 46.9 +1.1
**HWUT Hardware Ranch 114.74 46** *e*PKPdf PKPdf 08 16 46.6 +0.8
**ANMO Albuquerque 120.59 52**⇑*i*PKIKP **PKPdf 08 16 59.1 +1.9**
ANMO pmax pmax
comp=Z,11nm,2.5s
**ANMO Albuquerque 120.59 52** *e*PKPdf **PKPdf 08 16 58.1 +0.9**
**TXAR Lajitas Array 124.52 57** PKP **PKPdf 08 17 05.7 +0.9**
comp=Z,1.2nm,0.8s,baz=235,slow=1.5,SNR=13
TXAR PKKPab **PKKPbc 08 26 48.5 0.0**
comp=Z,0.1nm,0.6s,baz=64,slow=4.1,SNR=2.3
**TORD Torodi Ar. Bea 126.98 283** PKP **PKPdf 08 17 09.4 -0.3**
comp=Z,2.0nm,0.7s,baz=72,slow=1.6,SNR=14
TORD SKP 08 20 29.9
comp=Z,1.2nm,0.7s,baz=75,slow=1.9,SNR=4.1
**TOA1 Torodi Ar. Sit 126.98 283** *e*PKP1 SKPdf 08 20 11.3 -19
**MIAR Mount Ida 130.52 47** *e*PKIKP **PKPdf 08 17 17.9 +1.9**
**MIAR Mount Ida 130.52 47** *e*PKPdf **PKPdf 08 17 17.9 +1.9**
**KIC Kosan Boka 133.63 275** *e*PKP1 **SKPbc 08 20 35.5 -1.0**
comp=Z,48nm,1.1s
**DBIC Dimbokro 133.74 275** SKPbc **SKPbc 08 20 35.6 -1.3**
comp=Z,8.7nm,0.7s,baz=81,slow=3.2,SNR=11

**TIC Toumodi 133.90 275** *e*PKP1 **SKPbc 08 20 36.4 -1.0**
**JTS JuntasAbangare 146.06 78***c i*PKP2 **PKPab 08 17 48.0 +1.2**
**JTS JuntasAbangare 146.06 78** *e*PKPbc **PKPab 08 17 46.9 +0.1**
**CPUP Villa Florida 149.12 169** PKPbc **PKPbc 08 17 54.0 +0.1**
comp=Z,7.9nm,0.7s,baz=167,slow=0.7,SNR=20
**CPUP Villa Florida 149.12 169** PKP2 **PKPbc 08 17 54.0 +0.1**
**LPAZ La Paz 153.71 141** PKP **PKPdf 08 17 57.4 -0.2**
comp=Z,0.8nm,0.8s,baz=217,slow=10,SNR=3.9
LPAZ PKPbc **PKiKP 08 18 06.2 +0.6**
comp=Z,1.6nm,0.7s,baz=91,slow=2.0,SNR=10.0
LPAZ PKPab **PKPab 08 18 19.8 +1.0**
comp=Z,3.5nm,0.8s,baz=160,slow=3.8,SNR=11

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*TIR **01** 07:58:27.6, 41°03N×20°30E, h2$^{km}$, ML3.5*
*ATH **01** 07:58:32.5, 41°17N×20°20E, h5$^{km}$±2$^{km}$, MD3.4/17*
*BEO **01** 07:58:34.7±0.7, 40°97N×20°31E, h5$^{km}$±3$^{km}$, ML3.0/6*
*CSEM **01** 07:58:35.2±0.1, 41°06N×20°24E, h2$^{km}$, ML3.5, Error ellipse: s-maj=3.5km s-min=2.3km az=59.0*
*THE **01** 07:58:35.9, 41°07N×20°34E, h2$^{km}$±1$^{km}$, ML3.1/8, Error ellipse: s-maj=1.3km s-min=0.6km az=69.0*
*PDG **01** 07:58:35.2±0.5, 41°09N×20°22E, h8$^{km}$, ML3.2/11, Error ellipse: s-maj=0.5km s-min=0.8km az=0.0*
*SKO **01** 07:58:35.6, 41°01N×20°21E, h4$^{km}$, M2.4, ML3.2*
**ISC 01 07:58:35.0**±1.1, **41°06N**±0°01×**20°26E**±0°02, **h1**$^{km}$±10$^{km}$, **n164**, σ1$^{s}$09/246, **11C-10D, Albania**

Code Station Name Δ° AZ° Phase ID (Op, ISC) Time (h m s) Res (ISC)
**TIR Tirane 0.41 314** *i* PG Pg 07 58 34.4 -8.5
TIR *i* SG **Sg 07 58 43.2 -5.0**
**TIR Tirane 0.41 314** *e*Pg **Pg 07 58 43.4 +0.5**
**TIR Tirane 0.41 314** *e*Pg **Pg 07 58 43.4 +0.5**
**OHR Ohrid 0.41 83** *i* Pg **Pg 07 58 43.8 +0.8**
OHR *i* Sg **Sb 07 58 51.1 -1.0**
OHR *e*Lg Lg 07 58 51.3
comp=N,1μm,0.4s
OHR *e*Lg Lg 07 58 51.5
comp=E,2μm,0.5s
**OHR Ohrid 0.41 83** *i* Pg **Pg 07 58 43.7 +0.8**
OHR *i* Sg **Sb 07 58 51.0 -1.0**
OHR *e*Lg Lg 07 58 51.2
comp=E,1μm,0.4s
**KBN Korca 0.59 137** *i* SG **Pg 07 58 45.9 -0.6**
KBN *i* PG **Sg 07 58 51.4 -2.7**
**PHP Peshkopia 0.64 13** *i* PG **Pg 07 58 47.5 +0.2**
PHP *i* SG **Sb 07 58 57.5 -1.0**
**PHP Peshkopia 0.64 13** *i* Pg **Pg 07 58 47.5 +0.2**
PHP *i* Sg **Sb 07 58 57.5 -1.0**
**NEST Nestorio 0.88 137** *e*PN **Pg 07 58 51.8 -0.1**
NEST *e*SB **Sb 07 59 05.3 -0.2**
**NEST Nestorio 0.88 137** P **Pg 07 58 50.9 -1.0**
NEST S **Sg 07 59 04.5 +1.1**
**NEST Nestorio 0.88 137** P **Pg 07 58 50.9 -1.0**
**NEST Nestorio 0.88 137** *e*Pb **Pg 07 58 51.8 -0.1**
NEST S **Sg 07 59 04.5 +1.1**
NEST *e*Sb **Sb 07 59 05.3 -0.2**
**FNA Florina 0.89 108** *e*PN **Pg 07 58 51.7 -0.4**
FNA *e*SB **Sb 07 59 05.2 -0.6**
**FNA Florina 0.89 108** P **Pg 07 58 51.6 -0.5**
FNA S **Sg 07 59 03.5 -0.2**
**FNA Florina 0.89 108** P **Pg 07 58 51.6 -0.5**
FNA S **Sg 07 59 03.5 -0.2**
FNA *e*Sb **Sb 07 59 05.2 -0.6**
**PUK Puka 1.02 345** *i* PG **Pg 07 58 54.8 +0.3**
PUK *i* SG **Sn 07 59 12.8 +1.3**
**PUK Puka 1.02 345** *i* Pg **Pg 07 58 54.8 +0.3**
**ULC Ulcinj 1.18 320**⇑*i*Pg **Pg 07 58 56.8 -0.8**
ULC *e*Sg **Sb 07 59 13.8 -0.2**
**ULC Ulcinj 1.18 320**⇑*i*Pg **Pg 07 58 56.8 -0.8**
ULC *e*Sg **Sb 07 59 13.8 -0.2**
**SKO Skopje 1.27 44** *i* Pg **Pg 07 59 00.4 +0.9**
SKO *i* Sg **Sn 07 59 18.6 +0.8**
SKO *e*Lg Lg 07 59 19.8
comp=N,46nm,0.4s
SKO *e*Lg Lg 07 59 20.5
comp=E,38nm,0.9s
**SKO Skopje 1.27 44** *e*Pg **Pn 07 58 59.4 -0.5**
SKO *e*Sg **Sg 07 59 15.1 -0.8**
**SKO Skopje 1.27 44** P **Pn 07 58 59.5 -0.5**
SKO S **Sn 07 59 17.8 +0.1**
**SKO Skopje 1.27 44** P **Pn 07 58 59.5 -0.5**
**SKO Skopje 1.27 44** *i* Pg **Pg 07 59 00.3 +0.9**
SKO *i* Sg **Sn 07 59 18.5 +0.8**
SKO *e*Lg Lg 07 59 19.8
comp=E,46nm,0.4s
**BCI Bajram Curri 1.31 354** *i* PG **Pg 07 59 00.9 +0.7**
BCI *i* SG **Sn 07 59 22.6 +3.9**
**BCI Bajram Curri 1.31 354** *i* Pg **Pg 07 59 00.9 +0.7**
**KZN Kozani 1.38 123** *e*PG **Pn 07 59 00.5 -1.0**
KZN *e*SB **Sg 07 59 20.9 +1.7**
**KZN Kozani 1.38 123** P **Pn 07 59 00.4 -1.0**
KZN S **Sg 07 59 20.2 +1.0**
**KZN Kozani 1.38 123** P **Pn 07 59 00.4 -1.0**
KZN S **Sg 07 59 20.2 +1.0**
KZN *e*Sb **Sg 07 59 20.9 +1.7**
**DRME Dracevica, Mon 1.38 325**⇑*i*Pg **Pn 07 59 00.2 -1.3**
DRME *e*Sg **Sn 07 59 21.1 +0.7**
**DRME Dracevica, Mon 1.38 325**⇑*i*Pg **Pn 07 59 00.2 -1.3**
DRME *e*Sg **Sn 07 59 21.1 +0.7**
**KEK Kerkira 1.39 195** *e*PB **Pn 07 59 01.2 -0.4**
KEK *e*SB **Sg 07 59 21.6 +1.9**
**KEK Kerkira 1.39 195** P **Pb 07 59 01.6 -0.2**
KEK S **Sg 07 59 22.3 +2.6**
**KEK Kerkira 1.39 195** *e*Pb **Pn 07 59 01.2 -0.4**
**KEK Kerkira 1.39 195** P **Pb 07 59 01.6 -0.2**
KEK *e*Sb **Sg 07 59 21.6 +1.9**
KEK S **Sg 07 59 22.3 +2.6**
**SGD Sagiada 1.45 181** P **Pb 07 59 02.2 -0.5**
SGD S **Sg 07 59 22.7 +1.2**
**SGD Sagiada 1.45 181** P **Pb 07 59 02.2 -0.5**
SGD S **Sg 07 59 22.7 +1.2**
**JAN Janina 1.48 162** *e*PG **Pn 07 59 01.9 -0.8**
JAN *e*SB **Sg 07 59 25.2 +2.8**
**JAN Janina 1.48 162** P **Pn 07 59 02.0 -0.8**
JAN S **Sg 07 59 22.8 +0.4**
**JAN Janina 1.48 162** P **Pn 07 59 02.0 -0.8**
JAN S **Sg 07 59 22.8 +0.4**
JAN *e*Sb **Sg 07 59 25.2 +2.8**
**IGT Igoumenitsa 1.53 178** *e*PB **Pb 07 59 03.8 -0.3**
IGT *e*SB **Sg 07 59 25.5 +1.4**
**IGT Igoumenitsa 1.53 178** P **Pn 07 59 03.3 -0.2**
IGT S **Sg 07 59 24.7 +0.6**
**IGT Igoumenitsa 1.53 178** P **Pn 07 59 03.3 -0.2**
**IGT Igoumenitsa 1.53 178** *e*Pb **Pb 07 59 03.8 -0.3**
IGT S **Sg 07 59 24.7 +0.6**
IGT *e*Sb **Sg 07 59 25.5 +1.4**
**PVY Plav 1.55 352**⇓*i*Pg **Pn 07 59 03.5 -0.4**
PVY *e*Sg **Sg 07 59 26.4 +1.6**
**PVY Plav 1.55 352**⇓*i*Pg **Pn 07 59 03.5 -0.4**
PVY *e*Sg **Sg 07 59 26.4 +1.6**
**PDG Podgorica 1.56 332** *e*Pg **Pg 07 59 04.7 -0.2**
PDG *e*Sg **Sg 07 59 27.5 +2.4**
**PDG Podgorica 1.56 332** P **Pg 07 59 04.6 -0.3**
PDG S **Sg 07 59 25.7 +0.6**
**PDG Podgorica 1.56 332** *e*Pg **Pg 07 59 04.7 -0.2**
PDG *e*Sg **Sg 07 59 27.5 +2.4**
**TTG Podgorica 1.56 332**⇑*i*Pg **Pn 07 59 02.5 -1.4**
TTG *e*Sg **Sg 07 59 26.9 +1.8**
**BUM Brajici-Budva 1.60 321**⇑*i*Pg **Pn 07 59 03.8 -0.8**
BUM *e*Sg **Sg 07 59 27.4 +0.8**
**BUM Brajici-Budva 1.60 321**⇑*i*Pg **Pn 07 59 03.8 -0.8**
BUM *e*Sg **Sg 07 59 27.4 +0.8**
**GRG Griva 1.63 93** *e*PB **Pn 07 59 04.3 -0.6**
GRG *e*SB **Sg 07 59 27.9 +0.6**
**GRG Griva 1.63 93** P **Pn 07 59 04.1 -0.8**
**GRG Griva 1.63 93** P **Pn 07 59 04.1 -0.8**
GRG *e*Sb **Sg 07 59 27.9 +0.6**
**VAY Valandovo 1.77 81** *i* Pn **Pn 07 59 06.3 -0.5**
VAY *i* Sn **Sg 07 59 32.8 +1.0**
VAY *e*Lg Lg 07 59 37.8
comp=E,111nm,0.6s
VAY *e*Lg Lg 07 59 40.6
comp=N,162nm,0.8s
**VAY Valandovo 1.77 81** *e*Pg **Pn 07 59 05.8 -1.0**
**VAY Valandovo 1.77 81** P **Pn 07 59 05.7 -1.0**
VAY S **Sn 07 59 29.5 -0.3**
**VAY Valandovo 1.77 81** P **Pn 07 59 05.7 -1.0**
**VAY Valandovo 1.77 81** *i* Pn **Pn 07 59 06.2 -0.5**
VAY S **Sn 07 59 29.5 -0.3**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| VAY | | | | i Sn | Sg | 07 59 32.7 | +1.0 |
| VAY | | | | eLg | Lg | 07 59 37.7 | |
| | comp=N,111nm,0.6s | | | | | | |
| BEY | Berane | 1.83 | 352 | ⇑iPn | Pn | 07 59 08.0 | +0.3 |
| BEY | | | | eSn | Sb | 07 59 33.1 | +0.3 |
| IVA | Berane | 1.83 | 352 | ⇑iPn | Pn | 07 59 08.0 | +0.3 |
| IVA | | | | eSn | Sb | 07 59 33.1 | +0.3 |
| HCY | Herceg Novi | 1.91 | 317 | ⇓iPn | Pn | 07 59 08.1 | -0.7 |
| HCY | | | | eSn | Sb | 07 59 34.9 | -0.2 |
| HCY | Herceg Novi | 1.91 | 317 | ⇓iPn | Pn | 07 59 08.1 | -0.7 |
| LIT | Litokhoron | 1.95 | 119 | ePG | Pb | 07 59 11.0 | -0.4 |
| LIT | | | | eSN | Sg | 07 59 38.7 | +0.9 |
| LIT | Litokhoron | 1.95 | 119 | ePg | Pb | 07 59 11.0 | -0.4 |
| NKME | Niksic | 1.96 | 331 | ⇓iPn | Pn | 07 59 09.4 | -0.1 |
| NKME | | | | eSn | Sb | 07 59 35.9 | -0.7 |
| NKME | Niksic | 1.96 | 331 | ⇓iPn | Pn | 07 59 09.4 | -0.1 |
| NKME | | | | eSn | Sb | 07 59 35.9 | -0.7 |
| NKY | Niksic | 1.99 | 332 | ⇑iPn | Pn | 07 59 10.0 | +0.1 |
| NKY | | | | eSn | Sb | 07 59 37.3 | -0.1 |
| NKY | Niksic | 1.99 | 332 | ⇑iPn | Pn | 07 59 10.0 | +0.1 |
| NKY | | | | eSn | Sb | 07 59 37.3 | -0.1 |
| KNT | Kendrikon | 2.00 | 86 | ePG | Pn | 07 59 10.6 | +0.6 |
| KNT | | | | eSN | Sb | 07 59 37.9 | +0.3 |
| KNT | Kendrikon | 2.00 | 86 | P | Pn | 07 59 08.8 | -1.2 |
| KNT | Kendrikon | 2.00 | 86 | P | Pn | 07 59 08.8 | -1.2 |
| KNT | Kendrikon | 2.00 | 86 | ePg | Pn | 07 59 10.6 | +0.6 |
| KNT | | | | eSn | Sb | 07 59 37.9 | +0.3 |
| THL | Klokotos Trika | 2.01 | 137 | ePN | Pb | 07 59 11.3 | -1.1 |
| THL | | | | eSN | Sg | 07 59 39.8 | +0.2 |
| THL | Klokotos Trika | 2.01 | 137 | P | Pn | 07 59 09.6 | -0.5 |
| THL | Klokotos Trika | 2.01 | 137 | P | Pn | 07 59 09.6 | -0.5 |
| THL | Klokotos Trika | 2.01 | 137 | ePn | Pb | 07 59 11.3 | -1.1 |
| BARS | Barje | 2.10 | 33 | ePn | Pn | 07 59 11.6 | +0.2 |
| BARS | | | | eSg | Sg | 07 59 43.6 | +1.0 |
| BARS | Barje | 2.10 | 33 | ePn | Pn | 07 59 11.6 | +0.2 |
| PE1 | Pezze di Greco | 2.16 | 264 | ePn | Pn | 07 59 09.9 | -2.2 |
| PE1 | | | | Sn | Sb | 07 59 42.3 | +0.1 |
| TREB | Trebinje | 2.18 | 320 | ePn | Pn | 07 59 11.8 | -0.7 |
| TREB | | | | eSg | Sg | 07 59 46.1 | +1.0 |
| TREB | Trebinje | 2.18 | 320 | ePn | Pn | 07 59 11.8 | -0.7 |
| HORT | Hortiatis | 2.21 | 101 | ePG | Pb | 07 59 14.2 | -1.6 |
| HORT | Hortiatis | 2.21 | 101 | ePn | Pb | 07 59 14.2 | -1.6 |
| SJES | Sjenica | 2.21 | 355 | ePn | Pb | 07 59 15.0 | -0.8 |
| SJES | | | | eSg | Sg | 07 59 48.4 | +2.4 |
| BRY | Bratogost | 2.24 | 326 | ⇓iPn | Pn | 07 59 13.8 | +0.4 |
| BRY | | | | eSn | Sb | 07 59 42.9 | -1.8 |
| BRY | Bratogost | 2.24 | 326 | ⇓iPn | Pn | 07 59 13.8 | +0.4 |
| BRY | | | | eSn | Sb | 07 59 42.9 | -1.8 |
| SELS | Selova | 2.25 | 16 | ePn | Pn | 07 59 13.2 | -0.2 |
| SELS | | | | eSg | Sg | 07 59 47.5 | +0.2 |
| KKB | Krupnik | 2.27 | 68 | P | Pn | 07 59 14.6 | +0.9 |
| KKB | Krupnik | 2.27 | 68 | P | Pn | 07 59 14.6 | +0.9 |
| TAR1 | Taranto | 2.32 | 258 | ePn | Pn | 07 59 12.6 | -1.7 |
| TAR1 | | | | Sn | Sb | 07 59 46.0 | -0.7 |
| PLE | Pljevlja | 2.36 | 344 | ⇓iPn | Pn | 07 59 14.6 | -0.4 |
| PLE | | | | eSn | Sb | 07 59 45.8 | -2.2 |
| PLE | Pljevlja | 2.36 | 344 | ⇓iPn | Pn | 07 59 14.6 | -0.4 |
| PLE | | | | eSn | Sb | 07 59 45.8 | -2.2 |
| SOH | Sokhos | 2.36 | 95 | ePN | Pn | 07 59 16.3 | +1.4 |
| SOH | Sokhos | 2.36 | 95 | ePn | Pn | 07 59 16.3 | +1.4 |
| UPM | Unac-Piva | 2.36 | 335 | ePn | Pn | 07 59 15.6 | +0.5 |
| UPM | | | | eSn | Sn | 07 59 45.8 | +0.9 |
| UPM | Unac-Piva | 2.36 | 335 | ePn | Pn | 07 59 15.6 | +0.5 |
| UPM | | | | eSn | Sn | 07 59 45.8 | +0.9 |
| EVR | Evrytania | 2.45 | 150 | ePN | Pb | 07 59 18.4 | -1.6 |
| EVR | | | | eSN | Sb | 07 59 51.2 | +0.5 |
| EVR | Evrytania | 2.45 | 150 | ePn | Pb | 07 59 18.4 | -1.6 |
| MAKR | Makrakomi, Fth | 2.50 | 144 | ePN | Pn | 07 59 17.8 | +0.9 |
| MAKR | Makrakomi, Fth | 2.50 | 144 | P | Pn | 07 59 16.6 | -0.3 |
| MAKR | | | | S | Sn | 07 59 48.0 | -0.1 |
| MAKR | Makrakomi, Fth | 2.50 | 144 | P | Pn | 07 59 16.6 | -0.3 |
| MAKR | Makrakomi, Fth | 2.50 | 144 | ePn | Pn | 07 59 17.8 | +0.9 |
| MAKR | | | | S | Sn | 07 59 48.0 | -0.1 |
| IVAS | Ivanjica | 2.52 | 358 | ePn | Pn | 07 59 18.1 | +1.0 |
| IVAS | Ivanjica | 2.52 | 358 | ePn | Pn | 07 59 18.1 | +1.0 |
| PLG | Polygyros | 2.52 | 105 | ePN | Pn | 07 59 17.4 | +0.3 |
| PLG | Polygyros | 2.52 | 105 | ePn | Pn | 07 59 17.4 | +0.3 |
| PDO | Prodromos | 2.56 | 163 | ePN | Pn | 07 59 18.9 | +1.2 |
| PDO | Prodromos | 2.56 | 163 | P | Pn | 07 59 17.8 | +0.1 |
| PDO | Prodromos | 2.56 | 163 | P | Pn | 07 59 17.8 | +0.1 |
| PDO | Prodromos | 2.56 | 163 | ePn | Pn | 07 59 18.9 | +1.2 |
| AGG | Agios Georgios | 2.58 | 141 | ePB | Pn | 07 59 18.8 | +0.8 |
| AGG | | | | eSN | Sb | 07 59 53.5 | -1.0 |
| AGG | Agios Georgios | 2.58 | 141 | P | Pn | 07 59 17.8 | -0.2 |
| AGG | | | | S | Sn | 07 59 50.2 | +0.1 |
| AGG | Agios Georgios | 2.58 | 141 | P | Pn | 07 59 17.8 | -0.2 |
| AGG | Agios Georgios | 2.58 | 141 | ePb | Pn | 07 59 18.8 | +0.8 |
| AGG | | | | S | Sn | 07 59 50.2 | +0.1 |
| STON | Ston | 2.63 | 314 | ePn | Pn | 07 59 17.1 | -1.5 |
| STON | Ston | 2.63 | 314 | ePn | Pn | 07 59 17.1 | -1.5 |
| MMB | Musomiste | 2.67 | 77 | eP | Pg | 07 59 25.4 | -0.7 |
| VTS | Vitosha | 2.69 | 54 | eP | Pn | 07 59 19.9 | +0.4 |
| VTS | Vitosha | 2.69 | 54 | eP | Pn | 07 59 19.9 | +0.4 |
| SG1 | Sgolgore (BA) | 2.72 | 267 | ePn | Pn | 07 59 20.8 | +0.9 |
| NVR | Nevrokopi | 2.74 | 83 | ePN | Pn | 07 59 20.4 | +0.3 |
| NVR | Nevrokopi | 2.74 | 83 | ePn | Pn | 07 59 20.4 | +0.3 |
| BOVS | Bovan | 2.79 | 22 | ePn | Pn | 07 59 21.3 | +0.5 |
| BOVS | Bovan | 2.79 | 22 | ePn | Pn | 07 59 21.3 | +0.5 |
| XOR | Xorichti | 2.81 | 126 | ePB | Pn | 07 59 22.0 | +0.8 |
| XOR | Xorichti | 2.81 | 126 | P | Pn | 07 59 20.9 | -0.3 |
| XOR | Xorichti | 2.81 | 126 | P | Pn | 07 59 20.9 | -0.3 |
| XOR | Xorichti | 2.81 | 126 | ePb | Pn | 07 59 22.0 | +0.8 |
| ZAPS | Zavoj | 2.83 | 38 | ePn | Pn | 07 59 22.2 | +0.8 |
| GRUS | Gruza | 2.85 | 7 | ePn | Pn | 07 59 23.5 | +1.9 |
| GRUS | Gruza | 2.85 | 7 | ePn | Pn | 07 59 23.5 | +1.9 |
| PAIG | Paliouri | 2.85 | 112 | ePB | Pn | 07 59 22.2 | +0.6 |
| PAIG | Paliouri | 2.85 | 112 | ePb | Pn | 07 59 22.2 | +0.6 |
| NEO | Neokhori | 2.87 | 127 | ePB | Pn | 07 59 22.8 | +0.8 |
| NEO | Neokhori | 2.87 | 127 | ePb | Pn | 07 59 22.8 | +0.8 |
| BBLS | Lazići | 2.87 | 348 | ePn | Pn | 07 59 23.8 | +1.8 |
| BBLS | Lazići | 2.87 | 348 | ePn | Pn | 07 59 23.8 | +1.8 |
| CDT | Castel del Mon | 3.01 | 272 | ePn | Pn | 07 59 22.5 | -1.4 |
| KALE | Kalithea | 3.04 | 151 | ePN | Pn | 07 59 26.5 | +2.2 |
| KALE | Kalithea | 3.04 | 151 | ePn | Pn | 07 59 26.5 | +2.2 |
| BOLS | Boljevac | 3.04 | 24 | ePn | Pn | 07 59 23.2 | -1.0 |
| BOLS | Boljevac | 3.04 | 24 | ePn | Pn | 07 59 23.2 | -1.0 |
| DIVS | Divibare | 3.04 | 356 | ePn | Pn | 07 59 25.3 | +0.9 |
| DIVS | Divibare | 3.04 | 356 | P | Pn | 07 59 24.4 | 0.0 |
| DIVS | Divibare | 3.04 | 356 | P | Pn | 07 59 24.4 | 0.0 |
| DIVS | Divibare | 3.04 | 356 | ePn | Pn | 07 59 25.3 | +0.9 |
| LAKA | Lakka | 3.12 | 154 | P | Pn | 07 59 26.1 | +0.8 |
| LAKA | Lakka | 3.12 | 154 | P | Pn | 07 59 26.1 | +0.8 |
| TRUS | Trudelj | 3.16 | 2 | ePn | Pn | 07 59 26.2 | +0.3 |
| TRUS | Trudelj | 3.16 | 2 | ePn | Pn | 07 59 26.2 | +0.3 |
| MS1 | Monte Sant'Ang | 3.31 | 283 | ePn | Pn | 07 59 26.7 | -1.3 |
| KLV | Kalavryta, Ach | 3.35 | 153 | P | Pn | 07 59 29.4 | +0.8 |
| KLV | Kalavryta, Ach | 3.35 | 153 | P | Pn | 07 59 29.4 | +0.8 |
| RZN | Rozhen | 3.42 | 78 | eP | Pn | 07 59 32.4 | +2.8 |
| RZN | Rozhen | 3.42 | 78 | eP | Pn | 07 59 32.4 | +2.8 |
| MPEP | Malo Peshtene | 3.46 | 47 | P | Pg | 07 59 41.3 | 0.0 |
| KUBS | Kucevo | 3.51 | 17 | ePn | Pn | 07 59 29.1 | -1.6 |
| KUBS | Kucevo | 3.51 | 17 | ePn | Pn | 07 59 29.1 | -1.6 |
| TEKS | Tekeris | 3.53 | 352 | ePn | Pn | 07 59 31.5 | +0.5 |
| TEKS | Tekeris | 3.53 | 352 | ePn | Pn | 07 59 31.5 | +0.5 |
| BZS | Buzias | 4.66 | 12 | ePn | Pn | 07 59 45.4 | -1.1 |
| BZS | Buzias | 4.66 | 12 | ePn | Pn | 07 59 45.4 | -1.1 |

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**IDC 01 08:00:34.5±1.1,52°.36N×35°.41E,h0km,mb1 3.8/5, mb1mx3.3/47,mbtmp3.9/5,ML3.3/5,Error ellipse: s-maj=14.1km s-min=11.3km az=109.0,Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OBN | Obninsk | 2.84 | 14 | Pn | Pn | 08 01 21.4 | +0.3 |
| | 27nm,0.3s,baz=80,slow=15,SNR=7.7 | | | | | | |
| OBN | | | | Lg | Lg | 08 02 00.7 | |
| | 4.8nm,0.3s,baz=21,slow=23,SNR=9.0 | | | | | | |
| AKASG | Malin Array Be | 4.20 | 249 | Pn | Pn | 08 01 38.4 | -1.4 |
| | 1.3nm,0.3s,baz=61,slow=15,SNR=4.6 | | | | | | |
| AKASG | | | | Sn | Sn | 08 02 27.1 | -2.5 |
| | 2.1nm,0.3s,baz=59,slow=19,SNR=3.1 | | | | | | |
| AKASG | | | | Lg | Lg | 08 02 47.9 | |
| | 3.8nm,0.3s,baz=69,slow=29,SNR=7.4 | | | | | | |
| I43RU | DUBNA INFRASON | 4.49 | 13 | i | | 08 27 50.0 | |
| | baz=194,slow=322,SNR=14 | | | | | | |
| FINES | FINESS Array B | 10.42 | 334 | Pn | Pn | 08 03 01.5 | -3.6 |
| | 0.2nm,0.3s,baz=150,slow=14,SNR=7.6 | | | | | | |
| FINES | | | | Sn | Sn | 08 04 50.5 | -12 |
| | 0.2nm,0.3s,baz=150,slow=26,SNR=2.5 | | | | | | |
| GNI | Garni | 13.80 | 149 | Pn | Pn | 08 03 49.5 | -2.1 |
| | 1.7nm,0.3s,baz=352,slow=14,SNR=12 | | | | | | |
| HFS | Hagfors | 14.30 | 311 | Pn | Pn | 08 03 50.1 | -8.1 |
| | 0.1nm,0.3s,baz=118,slow=19,SNR=3.0 | | | | | | |
| ARCES | ARCESS Array B | 17.84 | 349 | P | Pn | 08 04 42.0 | -1.9 |
| | 0.4nm,0.3s,baz=161,slow=11,SNR=9.9 | | | | | | |

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*IDC 01 08:16:59.4±0.9,27°.57N×53°.08E,h0km,mb3.9/16, mb1 3.9/17,mb1mx3.7/52,mbtmp3.9/17,ML3.4/1,MS3.8/2, Ms1 3.8/2,ms1mx2.8/55,Error ellipse: s-maj=22.7km s-min=15.5km az=167.0*
*ISCJB 01 08:17:01.1±0.4,27°.69N±0°.03×52°.91E±0°.04,h10km, mb3.8/15,MS4.3/1,Error ellipse: s-maj=6.0km s-min=4.2km az=149.4*
*THR 01 08:17:01.9±0.4,27°.76N×53°.03E,h14km±6km,ML3.7*
*TEH 01 08:17:03.9,27°.62N×52°.95E,h17km,ML3.7*
*CSEM 01 08:17:04.1±0.2,27°.74N×53°.07E,h10km,ML3.7,Error ellipse: s-maj=8.0km s-min=5.1km az=78.0*
*DSN 01 08:17:07.4±6.1,27°.62N×53°.31E,h15km,mb2.9/6,ML4.2/3, Error ellipse: s-maj=66.2km s-min=11.5km az=133.0*
**ISC 01 08:17:01.4±0.6,27°.65N±0°.04×52°.97E±0°.05,h10km,n67, σ1$^s$61/63,mb3.8/15,3D,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GHIR | Ghir-Karzin | 0.63 | 1 | ePg | Pg | 08 17 12.2 | -1.5 |
| GHIR | Ghir-Karzin | 0.63 | 1 | ePg | Pg | 08 17 12.2 | -1.5 |
| ISRV | Sarvestan | 1.73 | 4 | ePn | Pn | 08 17 33.6 | +1.8 |
| ISRV | | | | eSg | Sg | 08 17 58.9 | +1.8 |
| ISRV | | | | e | | 08 18 07.1 | |
| | comp=Z,13µm,0.3s | | | | | | |
| ISRV | Sarvestan | 1.73 | 4 | ePn | Pn | 08 17 33.6 | +1.8 |
| ISRV | | | | eSg | Sg | 08 17 58.9 | +1.8 |
| AHBU | AHRAM | 1.91 | 310 | ePn | Pn | 08 17 35.6 | +1.6 |
| AHBU | | | | eSg | Sb | 08 18 01.4 | +1.2 |
| IPAR | Pars | 2.18 | 2 | ePn | Pn | 08 17 40.6 | +2.5 |
| IPAR | | | | e | | 08 18 15.3 | |
| | comp=Z,4µm,0.4s | | | | | | |
| IPAR | Pars | 2.18 | 2 | ePn | Pn | 08 17 40.6 | +2.5 |
| IKAZ | Kazeroun | 2.34 | 335 | ePn | Pn | 08 17 42.1 | +1.8 |
| IKAZ | | | | e | | 08 18 24.8 | |
| | comp=Z,7µm,0.2s | | | | | | |
| IKAZ | Kazeroun | 2.34 | 335 | ePn | Pn | 08 17 42.1 | +1.8 |
| BNDS | Bandar-Abbas | 2.85 | 94 | ePn | Pn | 08 17 48.5 | +1.4 |
| BNDS | Bandar-Abbas | 2.85 | 94 | ePn | Pn | 08 17 48.5 | +1.4 |
| BANOM | Banah | 3.44 | 119 | i P | Pn | 08 17 57.0 | +1.9 |
| | SNR=17 | | | | | | |
| BANOM | Banah | 3.44 | 119 | P | Pn | 08 17 57.0 | +1.9 |
| | SNR=17 | | | | | | |
| SLWS | | 3.53 | 217 | P | Pb | 08 18 01.7 | -2.2 |
| SLWS | | 3.53 | 217 | P | Pb | 08 18 02.0 | -1.9 |
| NAZ | Nazwa, Dubai | 3.59 | 137 | ⇓P | Pn | 08 17 60.0 | +2.9 |
| NAZ | Nazwa, Dubai | 3.59 | 137 | P | Pn | 08 18 00.0 | +2.9 |
| BOQSS | | 3.67 | 242 | S | Sg | 08 19 07.9 | +8.5 |
| BOQSS | | 3.67 | 242 | P | Pn | 08 18 02.9 | +4.6 |
| BOQSS | | 3.67 | 242 | P | Pn | 08 18 03.0 | +4.8 |
| ASUD | Al Ashush, Dub | 3.68 | 144 | i P | Pn | 08 18 01.7 | +3.3 |
| | SNR=18 | | | | | | |
| ASUD | Al Ashush, Dub | 3.68 | 144 | P | Pn | 08 18 01.7 | +3.3 |
| | SNR=18 | | | | | | |
| FAQ | Al Faqa, Dubai | 3.73 | 140 | ⇓P | Pn | 08 18 01.3 | +2.2 |
| FAQ | Al Faqa, Dubai | 3.73 | 140 | P | Pn | 08 18 01.3 | +2.2 |
| IMEH | Mehriz | 3.99 | 21 | ePn | Pn | 08 18 05.0 | +2.1 |
| IMEH | | | | e | | 08 18 54.7 | |
| | comp=N,1µm,0.2s | | | | | | |
| IMEH | Mehriz | 3.99 | 21 | ePn | Pn | 08 18 05.0 | +2.1 |
| HATD | Hatta, Dubai | 4.00 | 134 | ⇓P | Pn | 08 18 05.0 | +2.2 |
| HATD | Hatta, Dubai | 4.00 | 134 | P | Pn | 08 18 05.0 | +2.2 |
| ASHO | Ashiyiah | 4.05 | 136 | i P | Pn | 08 18 05.8 | +2.2 |
| | SNR=20 | | | | | | |
| ASHO | Ashiyiah | 4.05 | 136 | P | Pn | 08 18 05.8 | +2.2 |
| | SNR=20 | | | | | | |
| KRBR | Kerman | 4.06 | 54 | ePn | Pn | 08 18 04.5 | +0.7 |
| KRBR | | | | AML | AML | 08 18 57.0 | |
| | comp=E,91nm,0.4s | | | | | | |
| KRBR | Kerman | 4.06 | 54 | ePn | Pn | 08 18 04.5 | +0.7 |
| BTHS | | 4.07 | 209 | P | Pn | 08 18 07.9 | +4.2 |
| BTHS | | 4.07 | 209 | P | Pn | 08 18 08.0 | +4.3 |
| KHGB | Koh Gabri | 4.10 | 48 | ePn | Pn | 08 18 05.5 | +1.1 |
| KHGB | Koh Gabri | 4.10 | 48 | ePn | Pn | 08 18 05.4 | +1.1 |
| ISAD | Sadrabad | 4.29 | 8 | ePn | Pn | 08 18 09.2 | +2.1 |
| ISAD | | | | e | | 08 19 00.6 | |
| | comp=Z,638nm,0.2s | | | | | | |
| ISAD | Sadrabad | 4.29 | 8 | ePn | Pn | 08 18 09.2 | +2.1 |
| IBAF | Bafgh | 4.53 | 29 | ePn | Pn | 08 18 11.7 | +1.5 |
| IBAF | | | | e | | 08 19 05.1 | |
| | comp=N,668nm,0.2s | | | | | | |
| IBAF | Bafgh | 4.53 | 29 | ePn | Pn | 08 18 11.7 | +1.5 |
| CHMN | Cheshme madani | 4.58 | 60 | ePn | Pn | 08 18 12.8 | +1.8 |
| CHMN | Cheshme madani | 4.58 | 60 | ePn | Pn | 08 18 12.8 | +1.8 |
| ICHK | Chekchek | 4.75 | 15 | ePn | Pn | 08 18 14.1 | +0.9 |
| ICHK | | | | e | | 08 19 11.7 | |
| | comp=Z,642nm,0.2s | | | | | | |
| ICHK | Chekchek | 4.75 | 15 | ePn | Pn | 08 18 14.1 | +0.9 |
| IGAR | Gharneh | 4.80 | 351 | ePn | Pn | 08 18 15.5 | +1.4 |
| IGAR | | | | e | | 08 18 31.8 | |
| | comp=Z,263nm,0.2s | | | | | | |
| NASN | Na'in | 5.13 | 358 | ePn | Pn | 08 18 19.5 | +0.8 |
| NASN | Na'in | 5.13 | 358 | ePn | Pn | 08 18 19.5 | +0.8 |
| IZEF | Zefreh | 5.26 | 354 | ePn | Pn | 08 18 21.1 | +0.8 |
| IZEF | | | | e | | 08 19 21.4 | |
| | comp=Z,247nm,0.2s | | | | | | |
| IZEF | Zefreh | 5.26 | 354 | ePn | Pn | 08 18 21.1 | +0.8 |
| ASF | Jabal al Asfar | 14.65 | 292 | Pn | Pn | 08 20 28.8 | 0.0 |
| | comp=Z,0.2nm,0.3s,baz=214,slow=7.3,SNR=2.5 | | | | | | |
| ASF | | | | LR | LR | 08 27 23.7 | |
| | comp=Z,112nm,21.3s,baz=184,slow=42 | | | | | | |
| BRTR | Keskin Array B | 20.05 | 312 | P | P | 08 21 36.3 | +1.5 |
| | comp=Z,1.7nm,0.6s,baz=135,slow=12,SNR=8.9 | | | | | | |
| AKTO | Aktyubinsk | 23.08 | 8 | P | P | 08 22 07.3 | +0.3 |
| | comp=Z,0.8nm,0.5s,baz=181,slow=14,SNR=3.3 | | | | | | |
| IDI | Anoyia | 25.07 | 295 | P | P | 08 22 27.7 | +1.5 |
| | comp=Z,5.9nm,0.5s,baz=92,slow=10,SNR=12 | | | | | | |
| BVAR | Borovoye Array | 28.46 | 22 | P | P | 08 22 56.4 | 0.0 |
| | comp=Z,0.3nm,0.3s,baz=234,slow=9.9,SNR=3.3 | | | | | | |
| MKAR | Makanchi Array | 29.91 | 42 | P | P | 08 23 09.0 | -0.4 |
| | comp=Z,0.5nm,0.6s,baz=226,slow=9.4,SNR=3.0 | | | | | | |
| MKAR | | | | PcP | PcP | 08 26 11.7 | -0.3 |
| | comp=Z,0.3nm,0.6s,baz=250,slow=2.6,SNR=3.0 | | | | | | |
| KURBB | Kurchatov Arra | 30.05 | 33 | P | P | 08 23 11.7 | +1.2 |
| | comp=Z,0.6nm,0.6s,baz=233,slow=9.2,SNR=5.6 | | | | | | |
| ZALV | Zalesovo Beam | 35.14 | 33 | P | P | 08 23 54.3 | -0.7 |
| | comp=Z,1.1nm,0.4s,baz=238,slow=10.0,SNR=4.5 | | | | | | |
| FINES | FINESS Array B | 38.28 | 339 | P | P | 08 24 21.5 | -0.2 |
| | comp=Z,2.1nm,0.5s,baz=146,slow=11,SNR=21 | | | | | | |
| NB2 | NORSAR Subarra | 43.50 | 332 | P | P | 08 25 04.1 | -0.7 |
| | comp=Z,1.0nm,0.6s,baz=119,slow=8.6 | | | | | | |
| NOA | NORSAR Array B | 43.50 | 332 | P | P | 08 25 03.9 | -0.9 |
| | comp=Z,1.0nm,0.7s,baz=122,slow=8.3,SNR=3.9 | | | | | | |
| ARCES | ARCESS Array B | 44.85 | 347 | P | P | 08 25 14.4 | -1.0 |
| | comp=Z,0.7nm,0.6s,baz=130,slow=7.0,SNR=4.1 | | | | | | |
| SONM | Songino Array | 45.79 | 49 | P | P | 08 25 23.6 | +0.2 |
| | comp=Z,0.6nm,0.6s,baz=276,slow=8.4,SNR=3.2 | | | | | | |
| TORD | Torodi Ar. Bea | 49.84 | 264 | P | P | 08 25 55.3 | +0.3 |
| | comp=Z,1.3nm,0.6s,baz=60,slow=8.2,SNR=14 | | | | | | |
| DBIC | Dimbokro | 58.50 | 260 | P | P | 08 26 58.7 | +0.4 |
| | comp=Z,2.2nm,0.8s,baz=14,slow=4.2,SNR=3.2 | | | | | | |
| DBIC | | | | LR | LR | 08 56 44.8 | |
| | comp=Z,227nm,18.2s,baz=211,slow=41 | | | | | | |
| KSRS | Korea Array | 62.43 | 60 | P | P | 08 27 23.4 | -1.3 |
| | comp=Z,0.6nm,0.4s,baz=259,slow=7.2,SNR=3.5 | | | | | | |
| WRA | Warramunga Arr | 91.79 | 111 | P | P | 08 30 08.7 | -1.3 |
| | comp=Z,0.2nm,0.6s,baz=314,slow=4.1,SNR=2.8 | | | | | | |
| ASAR | Alice Springs | 93.22 | 115 | P | P | 08 30 14.9 | -1.6 |
| | comp=Z,0.2nm,0.6s,baz=311,slow=5.6,SNR=3.1 | | | | | | |

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**GUC 01 08:21:08.4±0.6,22°.79S×70°.55W,h34km±3km,ML3.8, 1C-4D,Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB04 | IPOC Station P | 0.58 | 40 | ⇓iP | Pn | 08 21 19.9 | -0.6 |
| PB04 | | | | i S | Sb | 08 21 28.7 | -0.3 |
| PB04 | | | | AML | AML | 08 21 29.6 | |
| | comp=E,7µm,0.5s | | | | | | |
| ANCH | Antofagasta | 0.90 | 172 | ⇑iP | Pn | 08 21 17.2 | -7.5 |
| ANCH | | | | i S | Sn | 08 21 29.9 | -6.7 |
| PB06 | IPOC Station P | 0.91 | 85 | ⇓iP | Pn | 08 21 25.1 | +0.1 |
| PB06 | | | | i S | Sn | 08 21 37.4 | +0.3 |
| PB06 | | | | AML | AML | 08 21 39.0 | |
| | comp=N,7µm,0.3s | | | | | | |
| PB07 | IPOC Station P | 1.22 | 31 | ⇓iP | Pn | 08 21 30.1 | +0.7 |
| PB07 | | | | i S | Sb | 08 21 46.8 | -0.1 |
| PB07 | | | | AML | AML | 08 21 48.3 | |
| | comp=E,5µm,0.6s | | | | | | |
| PB01 | IPOC Station P | 2.00 | 30 | ⇓iP | Pn | 08 21 41.7 | +1.8 |
| PB01 | | | | i S | Sb | 08 22 07.5 | -1.3 |
| PB01 | | | | AML | AML | 08 22 12.7 | |
| | comp=E,1µm,0.2s | | | | | | |

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**IDC 01 08:22:40.7±3.5,5°.84S×153°.65E,h0km,mb3.6/2, mb1 3.9/2,mb1mx3.4/37,mbtmp3.6/2,Error ellipse: s-maj=146.7km s-min=42.2km az=121.0,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 23.43 | 231 | P | P | 08 27 52.3 | +0.5 |
| | 3.6nm,0.9s,baz=56,slow=9.7,SNR=14 | | | | | | |
| ASAR | Alice Springs | 25.99 | 225 | P | P | 08 28 14.6 | -0.9 |
| | 0.4nm,0.9s,baz=54,slow=9.5,SNR=5.3 | | | | | | |
| TORD | Torodi Ar. Bea | 151.42 | 287 | PKPbc | PKPbc | 08 42 37.4 | -0.3 |
| | 0.7nm,1.1s,baz=57,slow=2.5,SNR=3.6 | | | | | | |
| TORD | | | | PKPab | PKPab | 08 42 45.9 | 0.0 |
| | 0.8nm,0.7s,baz=84,slow=2.4,SNR=5.5 | | | | | | |

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*IDC 01 08:24:58.4±1.2,19°.58N×121°.54E,h0km,mb3.5/5, mb1 3.6/6,mb1mx3.5/44,mbtmp3.6/6,ML3.9/1,Error ellipse: s-maj=66.1km s-min=20.6km az=70.0*
*ISCJB 01 08:25:03.1±0.9,19°.7N±0°.1×121°.8E±0°.3,h52km,mb3.4/5, Error ellipse: s-maj=37.1km s-min=14.9km az=165.8*
**ISC 01 08:25:05.0±1.2,19°.6N±0°.2×121°.7E±0°.4,h52km,n12, σ0$^s$35/6,mb3.4/5,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSRS | Korea Array | 18.57 | 16 | P | P | 08 29 17.6 | +0.1 |
| | 0.3nm,0.3s,baz=200,slow=12,SNR=4.3 | | | | | | |
| SONM | Songino Array | 30.75 | 340 | P | P | 08 31 15.3 | 0.0 |
| | 0.5nm,0.6s,baz=157,slow=7.8,SNR=2.9 | | | | | | |
| WRA | Warramunga Arr | 41.24 | 162 | P | P | 08 32 44.9 | -0.2 |
| | 0.3nm,0.7s,baz=342,slow=9.2,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 42.00 | 319 | P | P | 08 32 51.4 | +0.3 |
| | 0.6nm,0.6s,baz=115,slow=11,SNR=3.6 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.46 | 84 | T | T | 09 18 35.1 | |
| | baz=280,slow=75,SNR=19 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.47 | 84 | T | T | 09 18 34.9 | |
| | baz=280,slow=75,SNR=16 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.47 | 82 | T | T | 09 18 29.6 | |
| | baz=278,slow=75,SNR=25 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.47 | 82 | T | T | 09 18 29.8 | |
| | baz=278,slow=75,SNR=13 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.47 | 84 | T | T | 09 18 36.3 | |
| | baz=280,slow=75,SNR=14 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.48 | 82 | T | T | 09 18 30.8 | |
| | baz=278,slow=75,SNR=16 | | | | | | |
| ASAR | Alice Springs | 44.66 | 164 | P | P | 08 33 13.0 | +0.2 |
| | 0.2nm,0.4s,baz=343,slow=6.5,SNR=4.8 | | | | | | |
| KURBB | Kurchatov Arra | 45.93 | 323 | P | P | 08 33 22.1 | -0.4 |
| | 0.4nm,0.7s,baz=130,slow=8.6,SNR=4.5 | | | | | | |

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*ISK 01 08:32:41.6,38°.09N×31°.92E,h4km,MD2.8*
*ISCJB 01 08:32:42.1±0.7,38°.08N±0°.04×31°.96E±0°.05,h1km±11km, Error ellipse: s-maj=6.8km s-min=5.5km az=145.1*
*CSEM 01 08:32:42.1±0.2,38°.08N×31°.94E,h8km,MD2.8,Error ellipse: s-maj=5.2km s-min=4.8km az=94.0*
*DDA 01 08:32:42.1,38°.11N×32°.00E,h8km,Md2.6*
**ISC 01 08:32:42.2±1.3,38°.10N±0°.03×31°.95E±0°.03,h3km±16km, n15,σ0$^s$38/24,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KONT | Konya--Tatoy | 0.36 | 116 | ePG | Pg | 08 32 49.1 | 0.0 |
| KONT | Konya--Tatoy | 0.36 | 116 | ePg | Pg | 08 32 49.2 | 0.0 |
| KDHN | Kadinhani | 0.44 | 18 | i P | Pg | 08 32 50.2 | -0.4 |
| KDHN | | | | i S | Sg | 08 32 56.7 | +0.4 |
| KDHN | Kadinhani | 0.44 | 18 | P | Pg | 08 32 50.2 | -0.4 |
| KDHN | | | | S | Sg | 08 32 56.7 | +0.4 |
| KIZT | Kizilcal | 0.78 | 356 | ePG | Pg | 08 32 57.4 | +0.3 |
| KIZT | | | | eSG | Sb | 08 33 08.8 | -0.6 |
| KIZT | Kizilcal | 0.78 | 356 | ePg | Pg | 08 32 57.4 | +0.3 |
| KIZT | | | | eSg | Sb | 08 33 08.8 | -0.6 |
| CHBY | Cihanbeyli | 0.88 | 57 | ePG | Pb | 08 33 00.1 | -0.2 |
| CHBY | | | | eSG | Sb | 08 33 12.9 | +0.4 |
| CHBY | Cihanbeyli | 0.88 | 57 | ePg | Pb | 08 33 00.1 | -0.2 |
| CHBY | | | | eSg | Sb | 08 33 12.9 | +0.4 |
| BAGO | Egridir - ISPA | 0.92 | 263 | P | Pb | 08 33 00.8 | -0.1 |
| BAGO | | | | S | Sb | 08 33 13.9 | +0.4 |
| SUTC | Sutluce-Ispart | 0.98 | 230 | ePG | Pg | 08 33 00.7 | -0.3 |
| SUTC | Sutluce-Ispart | 0.98 | 230 | ePg | Pg | 08 33 00.7 | -0.3 |
| BOLV | Bolvadin | 0.99 | 308 | i P | Pb | 08 33 01.9 | -0.3 |
| BOLV | | | | i S | Sb | 08 33 16.2 | +0.5 |
| BOLV | Bolvadin | 0.99 | 308 | P | Pb | 08 33 01.9 | -0.3 |
| BOLV | | | | S | Sb | 08 33 16.2 | +0.5 |
| HDMB | Hadim | 1.22 | 159 | ePN | Pg | 08 33 05.4 | -0.1 |
| HDMB | Hadim | 1.22 | 159 | ePn | Pg | 08 33 05.4 | -0.1 |

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*CSEM 01 08:36:11.0,40°.16N×29°.94E,h15km,MD2.2,After ISK*
**ISK 01 08:36:11.0,40°.16N×29°.94E,h15km,MD2.2,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CAVI | Cavuskoy | 0.09 | 300 | ePG | Pg | 08 36 14.3 | +0.1 |
| CAVI | | | | eSG | Sg | 08 36 16.9 | +0.7 |
| CAVI | Cavuskoy | 0.09 | 300 | ePg | Pg | 08 36 14.3 | +0.1 |
| CAVI | | | | eSg | Sg | 08 36 17.0 | +0.7 |
| ADVT | Abdulvahap | 0.31 | 331 | ePG | Pg | 08 36 17.8 | +0.2 |
| ADVT | | | | eSG | Sb | 08 36 23.1 | -0.2 |
| ADVT | Abdulvahap | 0.31 | 331 | ePg | Pg | 08 36 17.8 | +0.2 |
| ADVT | | | | eSg | Sb | 08 36 23.1 | -0.2 |
| IZI | Iznik | 0.40 | 297 | ePG | Pb | 08 36 19.6 | -0.3 |
| IZI | Iznik | 0.40 | 297 | ePg | Pb | 08 36 19.6 | -0.3 |
| GULT | Gulveren | 0.52 | 58 | ePG | Pb | 08 36 21.7 | -0.3 |
| GULT | Gulveren | 0.52 | 58 | ePg | Pb | 08 36 21.7 | -0.2 |
| ARMT | Armutlu | 0.92 | 297 | ePG | Pg | 08 36 29.1 | +0.2 |
| ARMT | Armutlu | 0.92 | 297 | ePg | Pg | 08 36 29.1 | +0.2 |

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*ISCJB 01 08:36:25.8±0.4,59°.76N±0°.03×23°.27E±0°.05,h0km,Error ellipse: s-maj=4.6km s-min=3.5km az=168.6*
*IDC 01 08:36:26.2±3.0,59°.54N×23°.38E,h0km,mb1 3.0/3, mb1mx2.9/38,mbtmp2.9/3,ML2.4/3,Error ellipse: s-maj=40.1km s-min=13.7km az=157.0*
*HEL 01 08:36:27.8±0.2,59°.76N×23°.12E,h0km,ML1.8, ML2.0(UPP),Explosion*
*CSEM 01 08:36:28.5±0.5,59°.98N×23°.14E,h2km,ML1.8,Error ellipse: s-maj=14.7km s-min=6.3km az=160.0,Mining explosion.*
*UPP 01 08:36:33.0,59°.85N×22°.44E,h0km,ML2.0,Suspected Mining explosion.*
**ISC 01 08:36:27.0±0.8,59°.78N±0°.04×23°.18E±0°.03,h0km,n34, σ1$^s$39/44,Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MEF | Metsahovi | 0.75 | 54 | eP | Pg | 08 36 42.0 | +0.6 |
| MEF | | | | eS | Sb | 08 36 52.7 | -1.1 |
| MEF | Metsahovi | 0.75 | 54 | P | Pg | 08 36 42.0 | +0.6 |
| MTSE | Matsula | 1.12 | 163 | eP | Pg | 08 36 47.6 | -0.8 |
| MTSE | | | | eS | Sg | 08 37 01.4 | -1.4 |
| RAF | Rauma | 1.43 | 331 | eP | Pn | 08 36 53.1 | -1.1 |
| RAF | | | | MSG | | 08 37 10.1 | |
| | comp=Z,5.3nm,0.2s | | | | | | |
| RAF | Rauma | 1.43 | 331 | P | Pn | 08 36 53.1 | -1.1 |
| PVF | Pernaja | 1.55 | 59 | ePG | Pn | 08 36 56.2 | +0.4 |
| PVF | | | | MSG | | 08 37 15.5 | |
| | comp=Z,8.0nm,0.2s | | | | | | |
| PVF | | | | eSN | Sn | 08 37 17.9 | +1.4 |
| PVF | Pernaja | 1.55 | 59 | Pg | Pn | 08 36 56.1 | +0.4 |
| AAL | Aland | 1.65 | 285 | eP | Pn | 08 36 56.0 | -1.2 |
| AAL | | | | eSN | Sg | 08 37 20.4 | +0.4 |
| AAL | Aland | 1.65 | 285 | P | Pn | 08 36 56.1 | -1.1 |
| AAL | | | | S | Sn | 08 37 17.4 | -1.7 |
| AAL | | | | Sn | Sg | 08 37 20.4 | +0.4 |
| FIA0 | FINESS Array S | 2.20 | 39 | ePB | Pn | 08 37 06.5 | +1.8 |
| FIA0 | | | | eSG | Sg | 08 37 36.4 | -1.2 |
| FIA0 | FINESS Array S | 2.20 | 39 | Pb | Pn | 08 37 06.5 | +1.8 |
| FINES | FINESS Array B | 2.20 | 39 | Pn | Pb | 08 37 07.1 | -0.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.7nm,0.3s,baz=221,slow=16,SNR=55 | | | | | | |
| FINES | | | | Sn | Sb | 08 37 35.1 | -0.2 |
| | comp=Z,1.1nm,0.3s,baz=217,slow=28,SNR=15 | | | | | | |
| VSU | Vasula | 2.26 | 124 | eSG | Sb | 08 37 38.3 | +1.2 |
| NRTU | Norrtaelje | 2.31 | 269 | eP | Pn | 08 37 05.8 | -0.4 |
| NRTU | Norrtaelje | 2.31 | 269 | P | Pn | 08 37 05.8 | -0.4 |
| VJF | Virojoki | 2.32 | 69 | ePG | Pb | 08 37 09.5 | -0.1 |
| VJF | | | | MSG | | 08 37 37.8 | |
| | comp=Z,5.4nm,0.2s | | | | | | |
| VJF | | | | eSG | Sg | 08 37 41.1 | -0.3 |
| GRAU | Graesoe | 2.39 | 285 | eP | Pn | 08 37 08.3 | +0.9 |
| GRAU | Graesoe | 2.39 | 285 | P | Pn | 08 37 08.3 | +0.9 |
| KEF | Keuruu | 2.54 | 18 | ePB | Pb | 08 37 12.3 | -1.0 |
| KEF | | | | MSG | | 08 37 43.2 | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| KEF | | | | eSG | Sb | 08 37 45.8 | +0.8 |
| KEF | Keuruu | 2.54 | 18 | Pb | Pb | 08 37 12.3 | -1.0 |
| FORU | Forsmark | 2.58 | 286 | eP | Pn | 08 37 11.3 | +1.3 |
| FORU | Forsmark | 2.58 | 286 | P | Pn | 08 37 11.2 | +1.3 |
| FLYU | Flymyra | 2.69 | 280 | eP | Pn | 08 37 13.6 | +2.1 |
| FLYU | Flymyra | 2.69 | 280 | P | Pn | 08 37 13.5 | +2.1 |
| NYNU | Nynaeshamn | 2.76 | 256 | eP | Pn | 08 37 14.5 | +2.1 |
| NYNU | Nynaeshamn | 2.76 | 256 | P | Pn | 08 37 14.5 | +2.1 |
| KAF | Kangasniemi | 2.79 | 32 | ePB | Pb | 08 37 16.1 | -1.6 |
| KAF | | | | MSG | | 08 37 51.0 | |
| | comp=Z,2.5nm,0.2s | | | | | | |
| KAF | Kangasniemi | 2.79 | 32 | Pb | Pb | 08 37 16.1 | -1.6 |
| SUF | Sumiainen | 3.28 | 25 | ePB | Pb | 08 37 23.9 | -2.1 |
| VAF | Ylistaro | 3.28 | 356 | ePB | Pb | 08 37 23.7 | -2.4 |
| UMAU | Umeaa | 4.29 | 345 | ePG | Pb | 08 37 45.5 | +2.4 |
| UMAU | Umeaa | 4.29 | 345 | Pg | Pb | 08 37 45.5 | +2.4 |
| NOA | NORSAR Array B | 6.06 | 287 | Pn | Pn | 08 37 56.5 | -1.4 |
| | comp=Z,0.1nm,0.3s,baz=88,slow=13,SNR=2.6 | | | | | | |
| ARCES | ARCESS Array B | 9.85 | 5 | Pn | Pn | 08 38 50.0 | +0.4 |
| | comp=Z,0.1nm,0.3s,baz=182,slow=12,SNR=12 | | | | | | |

**DJA 01 08:51:00.1±0.4, 8°S±3°×10°7E±°, h10km, M3.5/6, MLv3.5/6, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNJI | Cibinong | 0.35 | 29 | P | Pb | 08 51 07.8 | -0.7 |
| CNJI | | | | S | Sg | 08 51 12.2 | +0.4 |
| SKJI | Sukabumi | 0.73 | 327 | P | Pb | 08 51 14.6 | -0.3 |
| SKJI | | | | S | Sb | 08 51 24.5 | -0.5 |
| LEM | Lembang | 1.02 | 40 | P | Pg | 08 51 19.6 | -0.4 |
| CMJI | Cimerak | 1.48 | 96 | P | Pn | 08 51 26.0 | -0.9 |
| CMJI | | | | S | Sn | 08 51 45.1 | -1.2 |
| CGJI | Cibinong | 1.61 | 308 | P | Pn | 08 51 27.4 | -1.2 |

**DDA 01 08:51:10.6, 40°.01N×31°.67E, h7km, Md2.6, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AUMIH | MIHALICIK | 0.20 | 227 | P | Pg | 08 51 14.3 | -0.5 |
| AUMIH | | | | S | Sg | 08 51 18.8 | +1.1 |
| ESKT | Eskisehir | 0.80 | 233 | P | Pg | 08 51 26.3 | +0.2 |
| ESKT | | | | S | Sb | 08 51 37.4 | -0.7 |
| BCAM | Yenicaga | 0.86 | 20 | P | Pg | 08 51 27.5 | +0.1 |
| BCAM | | | | S | Sn | 08 51 44.5 | +2.2 |
| BORA | Eskisehir | 0.95 | 263 | P | Pg | 08 51 28.1 | -0.8 |
| BORA | | | | S | Sb | 08 51 42.6 | +0.3 |

*IDC 01 08:52:43.5±1.9, 0°.22N×125°.91E, h0km, mb3.7/3, mb1 3.9/3, mb1mx3.4/46, mbtmp3.7/3, MS3.1/1, Ms1 3.1/1, ms1mx2.3/36, Error ellipse: s-maj=166.6km s-min=25.5km az=65.0*

*DJA 01 08:52:51.6±1.9, 1°N±6°×12°8E±1°1, h10km, M3.5/2, MLv3.5/2*

**ISC 01 08:52:45.3±1.3, 0°.2N±0°.1×126°.2E±0°.2, h10km, n7, σ1s.44/6, mb3.7/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | Ternate | 1.33 | 66 | P | Pn | 08 53 05.4 | -4.6 |
| TNTI | | | | S | Sn | 08 53 16.7 | -11 |
| LBMI | Labuha | 1.59 | 122 | P | Pn | 08 53 14.8 | +1.2 |
| LBMI | | | | S | Sn | 08 53 32.7 | -1.6 |
| SGSI | Sangihe | 3.50 | 350 | P | Pg | 08 53 52.9 | +0.5 |
| WRA | Warramunga Arr | 21.58 | 159 | P | P | 08 57 35.8 | +0.3 |
| | 1.5nm,0.4s,baz=336,slow=10,SNR=23 | | | | | | |
| PMG | Port Moresby | 23.00 | 115 | LR | LR | 09 10 23.6 | |
| | comp=Z,44nm,20.1s,baz=218,slow=46 | | | | | | |
| ASAR | Alice Springs | 24.91 | 163 | P | P | 08 58 09.4 | +0.6 |
| | 0.5nm,0.4s,baz=353,slow=14,SNR=16 | | | | | | |
| MKAR | Makanchi Array | 60.12 | 327 | P | P | 09 02 51.9 | -1.2 |
| | 0.8nm,0.5s,baz=120,slow=8.8,SNR=5.8 | | | | | | |

*BJI 01 08:55:37.9, 52°.72N×170°.36W, h12km, mb5.0/45, mB5.0/29, Ms4.8/20, Ms7 4.4/17*

*MOS 01 08:55:39.9±0.9, 52°.34N×170°.18W, h29km, mb4.9/54, Error ellipse: s-maj=7.4km s-min=5.7km az=91.2*

*ISCJB 01 08:55:40.4±0.1, 52°.22N±0°.03×170°.04W±0°.02, h33km, mb4.7/143, MS3.9/23, Error ellipse: s-maj=3.7km s-min=1.7km az=173.3*

*NEIC 01 08:55:41.2, 52°.18N×169°.94W, h29km, mb4.6/83, ML4.6(AEIC), After AEIC.*

*IDC 01 08:55:42.0±2.8, 52°.34N×170°.16W, h31km±19km, mb4.4/44, mb1 4.5/46, mb1mx4.4/73, mbtmp4.6/46, ML4.4/2, MS3.9/22, Ms1 3.9/22, ms1mx3.7/49, Error ellipse: s-maj=14.3km s-min=8.7km az=166.0*

**ISC 01 08:55:41.3±0.6, 52°.28N±0°.07×170°.03W±0°.03, h29km±3km, n574, σ1s.09/590, mb4.7/144, MS3.9/23, 26C-4D, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIKH | Nikolski High | 1.00 | 45 | P | Pn | 08 55 59.1 | -0.3 |
| NIKH | | | | S | Sb | 08 56 13.2 | +0.3 |
| OKSO | Okmok South | 1.57 | 46 | P | Pn | 08 56 07.5 | +0.3 |
| OKSO | | | | S | Sb | 08 56 28.7 | -0.4 |
| OKCE | Okmok Cone E | 1.61 | 44 | P | Pn | 08 56 08.6 | +0.8 |
| OKTU | Okmok Mt. Tuli | 1.64 | 47 | P | Pn | 08 56 09.4 | +1.2 |
| OKAK | Okmok | 1.65 | 37 | P | Pn | 08 56 08.2 | -0.1 |
| OKFG | Magazine Ridge | 1.71 | 48 | P | Pn | 08 56 09.8 | +0.6 |
| OKFG | | | | S | Sb | 08 56 32.5 | -0.8 |
| MSOM | Makushin Julie | 2.42 | 49 | P | Pn | 08 56 19.6 | +0.8 |
| MSOM | Makushin Julie | 2.42 | 49 | P | Pn | 08 56 19.6 | +0.8 |
| MGOD | Makushin Gods | 2.44 | 50 | P | Pn | 08 56 20.1 | +1.0 |
| MGOD | | | | S | Sn | 08 56 50.9 | +2.9 |
| KOFP | Korovin Flat P | 2.50 | 272 | P | Pn | 08 56 21.8 | +1.8 |
| MCIR | Makushin Cirqu | 2.53 | 47 | P | Pn | 08 56 22.0 | +1.6 |
| MSW | Makushin Switc | 2.55 | 49 | P | Pn | 08 56 22.1 | +1.4 |
| MSW | | | | S | Sn | 08 56 52.4 | +1.6 |
| KOKL | Mount Kliuchef | 2.56 | 273 | P | Pn | 08 56 23.4 | +2.6 |
| ATKA | Atka Island | 2.56 | 270 | P | Pn | 08 56 21.4 | +0.6 |
| ATKA | | | | S | Sn | 08 56 53.9 | +2.9 |
| KOWE | Korovin West | 2.59 | 274 | P | Pn | 08 56 23.5 | +2.2 |
| UNV | Unalaska Valle | 2.65 | 52 | P | Pn | 08 56 22.6 | +0.6 |
| AKRB | Akutan Reef Bi | 3.02 | 50 | P | Pn | 08 56 28.8 | +1.7 |
| ZRO | Akutan Zero | 3.04 | 52 | P | Pn | 08 56 29.2 | +1.8 |
| AKGG | Akutan Green G | 3.10 | 50 | P | Pn | 08 56 29.7 | +1.6 |
| AKUT | Akutan | 3.17 | 52 | P | Pn | 08 56 30.5 | +1.4 |
| AKUT | | | | S | Sn | 08 57 09.1 | +3.3 |
| GSTR | Great Sitkin T | 3.72 | 270 | ePn | Pn | 08 56 39.0 | +2.3 |
| GSTR | | | | eS | Sn | 08 57 23.8 | +4.3 |
| GSMY | Great Sitkin M | 3.72 | 269 | P | Pn | 08 56 38.3 | +1.5 |
| GSTD | Great Sitkin T | 3.77 | 269 | P | Pn | 08 56 39.3 | +1.7 |
| GSTD | | | | S | Sn | 08 57 25.1 | +4.1 |
| GSCK | Great Sitkin C | 3.79 | 268 | P | Pn | 08 56 39.2 | +1.6 |
| WECS | Westdahl Cape | 3.87 | 52 | P | Pn | 08 56 41.2 | +2.4 |
| WEBT | Westdahl Beart | 3.92 | 52 | P | Pn | 08 56 41.6 | +2.2 |
| ETKA | Kagalaska Isla | 3.96 | 267 | P | Pn | 08 56 41.5 | +1.5 |
| ADAG | Mount Adagdak | 4.06 | 268 | P | Pn | 08 56 43.7 | +2.2 |
| KIRH | Kanaga Island | 4.38 | 268 | P | Pn | 08 56 48.3 | +2.6 |
| KIKV | Kanaga Island | 4.42 | 268 | P | Pn | 08 56 48.2 | +1.8 |
| KICM | Kanaga Island | 4.43 | 268 | P | Pn | 08 56 48.4 | +1.9 |
| FALS | False Pass | 4.71 | 54 | ePn | Pn | 08 56 53.4 | +3.0 |
| TAPA | Tanaga Point A | 4.83 | 268 | P | Pn | 08 56 54.3 | +2.3 |
| TAFL | Tanaga Flats | 4.89 | 267 | P | Pn | 08 56 54.5 | +1.7 |
| SPIA | Saint Paul Isl | 4.92 | 359 | P | Pn | 08 56 56.2 | +3.1 |
| TAFP | Tanaga Falls P | 4.92 | 269 | P | Pn | 08 56 56.3 | +3.0 |
| GAEA | Gareloi East | 5.41 | 268 | P | Pn | 08 57 02.9 | +3.0 |
| GANE | Gareloi Northe | 5.42 | 269 | P | Pn | 08 57 02.3 | +2.2 |
| GALAA | Gareloi Lava P | 5.42 | 268 | P | Pn | 08 57 03.0 | +2.8 |
| CERAA | Semis' Rag'd T | 6.35 | 271 | P | Pn | 08 57 16.6 | +3.7 |
| CEAP | Semis' Anvil P | 6.41 | 272 | P | Pn | 08 57 16.6 | +2.9 |
| CESW | Semis' Southwe | 6.43 | 271 | P | Pn | 08 57 16.6 | +2.7 |
| SDPT | Sand Point | 6.44 | 58 | P | Pn | 08 57 16.1 | +2.1 |
| AMKA | Amchitka | 6.68 | 266 | P | Pn | 08 57 19.2 | +1.9 |
| LSPA | Little Sitkin | 7.03 | 272 | P | Pn | 08 57 25.6 | +3.5 |
| LSNW | Little Sitkin | 7.06 | 272 | P | Pn | 08 57 26.3 | +3.7 |
| LSSA | Little Sitkin | 7.07 | 272 | P | Pn | 08 57 25.4 | +2.7 |
| VNKR | Veniaminof 5 | 7.30 | 55 | P | Pn | 08 57 28.5 | +2.6 |
| CHGN | Chignik | 7.90 | 55 | P | Pn | 08 57 36.0 | +2.0 |
| SMY | Shemya | 9.70 | 279 | eP | Pn | 08 58 00.6 | +1.9 |
| SMY | Shemya | 9.70 | 279 | ePn | Pn | 08 58 00.6 | +1.9 |
| OHAK | Old Harbor | 10.86 | 56 | ePn | Pn | 08 58 14.2 | -0.4 |
| KDAK | Kodiak Island | 11.41 | 54 | Pn | Pn | 08 58 21.6 | -0.5 |
| | 2.0nm,0.3s,baz=253,slow=8.2,SNR=12 | | | | | | |
| KDAK | | | | Sn | Sn | 09 00 24.0 | -4.4 |
| | 0.6nm,0.3s,baz=329,slow=18,SNR=3.4 | | | | | | |
| KDAK | Kodiak Island | 11.41 | 54 | iP | Pn | 08 58 22.2 | +0.1 |
| KDAK | Kodiak Island | 11.41 | 54 | ePn | Pn | 08 58 22.5 | +0.4 |
| KDAK | | | | Sn | Sn | 09 00 24.0 | -4.4 |
| RSO | Redoubt South | 12.57 | 43 | ePn | Pn | 08 58 41.8 | +3.6 |
| TNA | Tin City | 13.37 | 4 | ePn | Pn | 08 58 49.3 | +0.5 |
| SEW | Seward | 13.83 | 47 | ePn | Pn | 08 58 55.4 | +0.2 |
| PPLA | Purkeypile | 14.25 | 35 | eP | P | 08 59 07.1 | -0.9 |
| PMR | Palmer | 14.67 | 42 | eP | Pn | 08 59 08.9 | +2.4 |
| PMR | Palmer | 14.67 | 42 | ePn | Pn | 08 59 08.9 | +2.4 |
| BPAW | Bear Paw Mtn. | 15.45 | 33 | eP | P | 08 59 21.0 | 0.0 |
| | 21nm,0.6s | | | | | | |
| SCM | Sheep Creek Mo | 15.54 | 43 | eP | Pn | 08 59 17.1 | -1.0 |
| SCM | | | | pmax | pmax | | |
| | comp=Z,32nm,0.8s | | | | | | |
| SCM | Sheep Creek Mo | 15.54 | 43 | ePn | Pn | 08 59 17.1 | -1.0 |
| | comp=Z,32nm,0.8s | | | | | | |
| RND | Reindeer | 15.76 | 37 | eP | P | 08 59 24.5 | -0.1 |
| RND | | | | e | | 09 02 24.3 | |
| RND | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| RND | Reindeer | 15.76 | 37 | ePn | P | 08 59 24.5 | -0.1 |
| | comp=Z,12nm,0.8s | | | | | | |
| RND | | | | eSn | S | 09 02 24.3 | -4.3 |
| MCK | McKinley | 15.92 | 36 | eP | P | 08 59 24.8 | -1.5 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| MCK | McKinley | 15.92 | 36 | eP | P | 08 59 24.8 | -1.5 |
| | comp=Z,10nm,0.9s | | | | | | |
| KLU | Klutina | 15.99 | 45 | ePn | Pn | 08 59 23.7 | -0.2 |
| | comp=Z,452nm,2.9s | | | | | | |
| BMRM | Bremner River | 16.38 | 48 | eP | Pn | 08 59 28.1 | -0.7 |
| | comp=Z,34nm,1.2s | | | | | | |
| WRH | Wood River Hil | 16.66 | 34 | ePn | Pn | 08 59 32.4 | +0.1 |
| | comp=Z,48nm,1.7s | | | | | | |
| PAX | Paxson | 16.84 | 41 | eP | P | 08 59 35.9 | -0.7 |
| PAX | | | | pmax | pmax | | |
| | comp=Z,86nm,2.4s | | | | | | |
| PAX | Paxson | 16.84 | 41 | eP | P | 08 59 35.9 | -0.7 |
| | comp=Z,86nm,2.4s | | | | | | |
| CCB | Clear Creek Bu | 16.86 | 34 | ePn | Pn | 08 59 35.1 | +0.2 |
| | comp=Z,14nm,1.0s | | | | | | |
| COLA | College | 16.99 | 33 | ceP | Pn | 08 59 37.2 | +0.8 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| COLA | College | 16.99 | 33 | eP | Pn | 08 59 36.7 | +0.3 |
| | comp=Z,11nm,0.8s | | | | | | |
| ILAR | Eielson Array | 17.26 | 35 | P | Pn | 08 59 39.0 | -0.9 |
| | comp=Z,0.2nm,0.3s,baz=219,slow=11,SNR=13 | | | | | | |
| ILAR | | | | S | Sn | 09 02 51.9 | +1.2 |
| | baz=229,slow=15,SNR=2.4 | | | | | | |
| ILAR | | | | PcP | PcP | 09 04 21.6 | +0.2 |
| | comp=Z,0.2nm,0.3s,baz=276,slow=3.1,SNR=12 | | | | | | |
| MENT | Mentasta | 17.54 | 42 | eP | P | 08 59 44.1 | -0.1 |
| DOT | Dot Lake | 17.72 | 40 | eP | P | 08 59 46.2 | 0.0 |
| | comp=Z,34nm,1.1s | | | | | | |
| COLD | Coldfoot | 17.87 | 25 | eP | P | 08 59 48.1 | +0.2 |
| | comp=Z,102nm,2.6s | | | | | | |
| PET | Petropavlovsk | 18.95 | 285 | eP | P | 09 00 00.4 | +0.7 |
| PET | | | | eS | Sn | 09 03 23.6 | -7.9 |
| PET | | | | MLR | MLR | | |
| | comp=Z,1μm,16.0s | | | | | | |
| PET | Petropavlovsk | 18.95 | 285 | eP | P | 09 00 00.5 | +0.7 |
| | comp=Z,545nm,3.0s | | | | | | |
| EGAK | Eagle | 19.36 | 39 | eP | P | 09 00 04.3 | +0.1 |
| | comp=Z,6.6nm,0.5s | | | | | | |
| PEA0 | Petropavlovsk- | 19.50 | 285 | eP | P | 09 00 06.5 | +0.8 |
| PETK | Petropavlovsk- | 19.50 | 285 | P | P | 09 00 06.4 | +0.6 |
| | comp=Z,17nm,0.3s,baz=91,slow=13,SNR=112 | | | | | | |
| PETK | | | | PcP | PcP | 09 04 26.6 | +1.2 |
| | baz=237,slow=6.9,SNR=3.5 | | | | | | |
| PETK | | | | LR | LR | 09 07 57.9 | |
| | comp=Z,182nm,20.1s,baz=81,slow=38 | | | | | | |
| BILL | Bilibino | 19.50 | 333 | eP | P | 09 00 05.5 | -0.2 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,447nm,18.0s | | | | | | |
| DAWY | Dawson | 19.77 | 41 | eP | P | 09 00 08.9 | +0.2 |
| | comp=Z,8.7nm,0.9s | | | | | | |
| SEY | Seymchan | 22.44 | 313 | P | P | 09 00 37.2 | -0.2 |
| | comp=Z,10nm,0.6s,baz=113,slow=7.6,SNR=12 | | | | | | |
| SEY | | | | PcP | PcP | 09 04 31.3 | +0.5 |
| | comp=Z,5.6nm,0.6s,baz=132,slow=3.1,SNR=11 | | | | | | |
| DLBC | Dease Lake | 23.28 | 59 | P | P | 09 00 48.8 | +2.5 |
| | comp=Z,3.6nm,0.6s,baz=247,slow=8.3,SNR=15 | | | | | | |
| DLBC | | | | LR | LR | 09 10 03.0 | |
| | comp=Z,237nm,18.4s,baz=310,slow=37 | | | | | | |
| DLBC | Dease Lake | 23.28 | 59 | eP | P | 09 00 49.1 | +2.8 |
| | comp=Z,14nm,0.9s | | | | | | |
| INK | Inuvik | 23.65 | 33 | P | P | 09 00 48.6 | -1.0 |
| | comp=Z,5.4nm,0.6s,baz=245,slow=9.2,SNR=32 | | | | | | |
| INK | | | | PcP | PcP | 09 04 33.3 | +0.1 |
| | comp=Z,4.9nm,0.7s,baz=317,slow=2.7,SNR=7.4 | | | | | | |
| INK | Inuvik | 23.65 | 33 | eP | P | 09 00 48.4 | -1.3 |
| INK | | | | | | 09 04 33.3 | |
| INK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| INK | Inuvik | 23.65 | 33 | eP | P | 09 00 48.4 | -1.3 |
| | comp=Z,6.6nm,0.7s | | | | | | |
| INK | | | | PcP | PcP | 09 04 33.3 | +0.1 |
| BBB | Bella Bella | 25.42 | 73 | LR | LR | 09 10 40.0 | |
| | comp=Z,206nm,18.1s,baz=242,slow=35 | | | | | | |
| B05A | Bryant | 30.45 | 78 | P | P | 09 01 52.8 | +1.8 |
| | baz=30 | | | | | | |
| YKA | Yellowknife Ar | 30.61 | 49 | P | P | 09 01 52.4 | +0.2 |
| | comp=Z,0.9nm,0.6s,baz=276,slow=6.7,SNR=10 | | | | | | |
| B08A | Colville Reser | 32.06 | 76 | eP | P | 09 02 06.6 | +1.3 |
| ASAJ | Asahikawa | 32.11 | 274 | P | P | 09 02 05.3 | -0.4 |
| | comp=Z,12nm,0.6s,baz=180,slow=20 | | | | | | |
| ASAJ | | | | LR | LR | 09 14 35.7 | |
| | comp=Z,280nm,21.8s,baz=3.5,slow=35 | | | | | | |
| ASAJ | Asahikawa | 32.11 | 274 | P | P | 09 02 05.3 | -0.4 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,280nm,21.8s | | | | | | |
| HAWA | Hanford | 32.86 | 80 | eP | P | 09 02 13.8 | +1.5 |
| | comp=Z,7.2nm,1.0s | | | | | | |
| ERM | Erimo | 32.92 | 271⇓ | iP | P | 09 02 12.8 | 0.0 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| YAK | Yakutsk | 32.93 | 311 | eP | P | 09 02 11.1 | -1.6 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,11nm,1.2s | | | | | | |
| YBH | Yreka Blue Hor | 33.38 | 89 | LR | LR | 09 12 09.0 | |
| | comp=E,428nm,19.1s,baz=294,slow=30 | | | | | | |
| NEW | Newport | 33.42 | 75 | P | P | 09 02 17.9 | +0.8 |
| | comp=E,1.8nm,0.5s,baz=291,slow=4.9,SNR=6.8 | | | | | | |
| NEW | | | | LR | LR | 09 13 33.8 | |
| | comp=E,115nm,21.2s,baz=274,slow=32 | | | | | | |
| NEW | Newport | 33.42 | 75 | P | P | 09 02 18.0 | +0.8 |
| NEW | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| NEW | Newport | 33.42 | 75 | P | P | 09 02 18.4 | +1.2 |
| | baz=33 | | | | | | |
| NEW | Newport | 33.42 | 75 | eP | P | 09 02 18.6 | +1.4 |
| | comp=Z,5.9nm,0.8s | | | | | | |
| J05D | Fort Rock, OR | 33.43 | 86 | P | P | 09 02 18.6 | +1.2 |
| | baz=33 | | | | | | |
| M02C | Callahan | 33.49 | 90 | P | P | 09 02 19.7 | +1.8 |
| | baz=33 | | | | | | |
| EDM | Edmonton | 33.55 | 65 | eP | P | 09 02 19.7 | +1.4 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| EDM | Edmonton | 33.55 | 65 | eP | P | 09 02 19.7 | +1.4 |
| | comp=Z,10nm,0.6s | | | | | | |
| KMRM | Mail Ridge | 33.65 | 92 | eP | P | 09 02 20.9 | +1.6 |
| | comp=Z,234nm,2.7s | | | | | | |
| N02D | Trinity Center | 33.83 | 90 | P | P | 09 02 22.9 | +2.0 |
| | baz=34 | | | | | | |
| K05A | Summer Lake | 33.94 | 86 | eP | P | 09 02 24.5 | +2.6 |
| I07A | Izee | 34.06 | 83 | eP | P | 09 02 25.2 | +2.4 |
| | comp=Z,10nm,1.2s | | | | | | |
| HABR | Khabarovsk | 34.52 | 286 | eP | P | 09 02 24.7 | -2.0 |
| HABR | | | | e*PP | pP | 09 02 34.0 | -1.3 |
| HABR | | | | e*SP | sP | 09 02 38.5 | -0.4 |
| HABR | | | | e | | 09 03 40.0 | |
| HABR | | | | e | | 09 04 59.1 | |
| HABR | | | | eS | S | 09 07 51.6 | -1.7 |
| HABR | | | | e*SS | sS | 09 08 07.9 | +0.3 |
| HABR | | | | eSS | SnSn | 09 10 05.2 | -0.3 |
| HABR | | | | e | | 09 12 44.6 | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,58nm,1.0s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,25nm,1.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,40nm,1.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,130nm,17.0s | | | | | | |
| O03D | Paynes Creek | 34.78 | 91 | P | P | 09 02 30.8 | +1.6 |
| | baz=35 | | | | | | |
| WALA | Waterton Lakes | 34.96 | 72 | eP | P | 09 02 32.0 | +1.4 |
| | comp=Z,120nm,3.0s | | | | | | |
| BSMT | Bassoo Peak | 35.00 | 75 | eP | P | 09 02 32.2 | +1.1 |
| J08A | Circle Bar Ran | 35.08 | 84 | eP | P | 09 02 33.9 | +2.2 |
| | comp=Z,6.9nm,0.9s | | | | | | |
| BLMT | Blacktail Moun | 35.18 | 74 | eP | P | 09 02 33.1 | +0.5 |
| WVOR | Wild Horse Val | 35.49 | 85 | eP | P | 09 02 36.4 | +1.2 |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,57nm,2.3s | | | | | | |
| WVOR | Wild Horse Val | 35.49 | 85 | eP | P | 09 02 36.4 | +1.2 |
| | comp=Z,57nm,2.3s | | | | | | |
| MSO | Missoula | 36.00 | 76 | P | P | 09 02 40.6 | +1.0 |
| | baz=36 | | | | | | |
| SLMT | Seeley Lake | 36.06 | 75 | eP | P | 09 02 41.0 | +0.8 |
| CHMT | Chamberlain Mo | 36.37 | 75 | eP | P | 09 02 43.5 | +0.6 |
| RES | Resolute Bay | 36.63 | 25 | LR | LR | 09 22 08.0 | |
| | comp=Z,146nm,18.5s,baz=305,slow=43 | | | | | | |
| MFID | Camas Ranch | 36.66 | 82 | eP | P | 09 02 46.3 | +1.1 |
| | comp=Z,4.3nm,0.9s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 37.13 | 218 | T | T | 09 42 29.1 | |
| | baz=24,slow=76,SNR=71 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 37.14 | 218 | T | T | 09 42 17.5 | |
| | baz=24,slow=76,SNR=92 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 37.15 | 218 | T | T | 09 42 22.6 | |
| | baz=24,slow=76,SNR=70 | | | | | | |
| HLID | Hailey | 37.43 | 81 | P | P | 09 02 52.7 | +0.8 |
| | baz=37 | | | | | | |
| HLID | Hailey | 37.43 | 81 | eP | P | 09 02 53.3 | +1.4 |
| | comp=Z,11nm,1.6s | | | | | | |
| MCMT | McKenzie Canyo | 37.69 | 78 | eP | P | 09 02 55.1 | +1.0 |
| EGMT | Eagleton | 37.88 | 72 | P | P | 09 02 56.4 | +0.9 |
| | baz=38 | | | | | | |
| EGMT | Eagleton | 37.88 | 72 | eP | P | 09 02 56.5 | +1.1 |
| | comp=Z,12nm,0.8s | | | | | | |
| BOZ | Bozeman (W) | 37.99 | 76 | eP | P | 09 02 57.6 | +1.1 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,31nm,2.0s | | | | | | |
| BOZ | Bozeman (W) | 37.99 | 76 | P | P | 09 02 57.2 | +0.8 |
| | baz=38,SNR=7.8 | | | | | | |
| BOZ | Bozeman (W) | 37.99 | 76 | eP | P | 09 02 57.6 | +1.1 |
| | comp=Z,31nm,2.0s | | | | | | |
| NV01 | Mina Array Sit | 38.07 | 90 | eP | P | 09 02 59.5 | +2.2 |
| NVAR | Mina Array Bea | 38.07 | 90 | P | P | 09 02 58.9 | +1.5 |
| | comp=Z,2.0nm,0.8s,baz=296,slow=8.4,SNR=18 | | | | | | |
| NVAR | | | | ScP | ScP | 09 08 56.5 | -0.8 |
| | comp=Z,0.2nm,0.3s,baz=256,slow=6.0,SNR=5.4 | | | | | | |
| NVAR | | | | LR | LR | 09 15 24.7 | |
| | comp=Z,196nm,22.0s,baz=272,slow=31 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 38.32 | 217 | T | T | 09 44 02.0 | |
| | baz=23,slow=76,SNR=1965 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 38.34 | 217 | T | T | 09 43 59.5 | |
| | baz=23,slow=76,SNR=2000 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 38.34 | 217 | T | T | 09 44 05.7 | |
| | baz=23,slow=76,SNR=549 | | | | | | |
| USRK | Ussuriysk Ar. | 38.52 | 282 | P | P | 09 02 59.2 | -1.6 |
| | comp=Z,6.5nm,0.9s,baz=54,slow=7.7,SNR=6.1 | | | | | | |
| USRK | | | | PcP | PcP | 09 05 13.6 | +0.6 |
| | comp=Z,3.5nm,0.8s,baz=70,slow=4.2,SNR=7.1 | | | | | | |
| ELK | Elko | 38.54 | 85 | eP | P | 09 03 02.3 | +1.0 |
| ELK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| ELK | Elko | 38.54 | 85 | eP | P | 09 03 02.3 | +1.0 |
| | comp=Z,3.5nm,0.8s | | | | | | |
| MTUM | Tungsten Hills | 38.58 | 92 | eP | P | 09 03 03.7 | +2.1 |
| RCTC | Rector, Farmer | 38.84 | 94 | P | P | 09 03 05.3 | +1.8 |
| | baz=39 | | | | | | |
| GCMT | Greycliff | 39.08 | 75 | eP | P | 09 03 07.2 | +1.6 |
| FFC | Flin Flon | 39.11 | 59 | eP | P | 09 03 08.2 | +2.6 |
| FFC | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| FFC | Flin Flon | 39.11 | 59 | eP | P | 09 03 08.2 | +2.6 |
| | comp=Z,4.0nm,0.8s | | | | | | |
| VLA | Vladivostok | 39.18 | 280⇑ | eP | P | 09 03 05.4 | -0.9 |
| VLA | | | | pmax | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| VES | Vestal, Richgr | 39.24 | 94 | P | P | 09 03 08.0 | +1.1 |
| | baz=39 | | | | | | |
| MAJO | Matsushiro | 39.29 | 267⇑ | iP | P | 09 03 07.2 | -0.1 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| MAJO | Matsushiro | 39.29 | 267 | eP | P | 09 03 07.7 | +0.3 |
| | comp=Z,22nm,0.8s | | | | | | |
| MAT | Matsushiro | 39.29 | 267 | P | P | 09 03 06.4 | -0.9 |
| MJAR | Matsushiro Arr | 39.29 | 267 | P | P | 09 03 07.5 | +0.2 |
| | comp=Z,6.9nm,0.8s,baz=54,slow=7.5,SNR=14 | | | | | | |
| MJAR | | | | PcP | PcP | 09 05 15.9 | +0.3 |
| | comp=Z,4.8nm,0.9s,baz=67,slow=1.1,SNR=7.9 | | | | | | |
| H17A | Grant Village | 39.29 | 77 | P | P | 09 03 08.7 | +1.1 |
| | baz=39 | | | | | | |
| H17A | Grant Village | 39.29 | 77 | eP | P | 09 03 09.5 | +1.9 |
| | comp=Z,6.2nm,1.2s | | | | | | |
| LKWY | Lake | 39.30 | 77 | eP | P | 09 03 09.8 | +2.1 |
| LKWY | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| LKWY | Lake | 39.30 | 77 | eP | P | 09 03 09.8 | +2.1 |
| | comp=Z,5.8nm,0.7s | | | | | | |
| IMW | Indian Meadow | 39.35 | 78 | eP | P | 09 03 09.5 | +1.4 |
| | comp=Z,7.1nm,1.3s | | | | | | |
| HVU | Hansel Valley | 39.44 | 82 | eP | P | 09 03 10.1 | +1.4 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| HVU | Hansel Valley | 39.44 | 82 | eP | P | 09 03 10.1 | +1.4 |
| | comp=Z,4.9nm,0.7s | | | | | | |
| TPAW | Teton Pass | 39.57 | 79 | eP | P | 09 03 11.2 | +1.3 |
| | comp=Z,34nm,2.2s | | | | | | |
| RLMT | Red Lodge | 39.67 | 75 | P | P | 09 03 11.0 | +0.3 |
| | baz=40 | | | | | | |
| RLMT | Red Lodge | 39.67 | 75 | eP | P | 09 03 12.1 | +1.4 |
| | comp=Z,7.3nm,0.9s | | | | | | |
| REDW | Red Top Meadow | 39.70 | 79 | eP | P | 09 03 13.0 | +2.1 |
| | comp=Z,4.3nm,1.2s | | | | | | |
| ISA | Isabella | 39.73 | 94 | eP | P | 09 03 11.8 | +0.7 |
| ISA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| ISA | Isabella | 39.73 | 94 | P | P | 09 03 11.3 | +0.1 |
| | baz=40 | | | | | | |
| ISA | Isabella | 39.73 | 94 | eP | P | 09 03 11.8 | +0.7 |
| | comp=Z,4.4nm,1.0s | | | | | | |
| BGU | Big Grassy Mou | 39.79 | 83 | eP | P | 09 03 12.3 | +0.7 |
| | comp=Z,3.6nm,0.9s | | | | | | |
| R11A | Troy Canyon, C | 39.79 | 88 | P | P | 09 03 12.3 | +0.6 |
| | baz=40,SNR=7.7 | | | | | | |
| SPUT | South Promonto | 39.91 | 82 | eP | P | 09 03 13.5 | +0.8 |
| | comp=Z,3.9nm,0.9s | | | | | | |
| MSHR | Mys Shultsa | 39.93 | 280⇑ | eP | P | 09 03 11.5 | -1.0 |
| MPMC | Manual Prospec | 40.08 | 93 | P | P | 09 03 14.7 | +0.6 |
| | baz=40 | | | | | | |
| FURC | Furnace Creek, | 40.20 | 92 | P | P | 09 03 15.9 | +1.1 |
| | baz=40,SNR=6.5 | | | | | | |
| TPNV | Topopah Spring | 40.26 | 91 | eP | P | 09 03 15.2 | -0.4 |
| TPNV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| TPNV | Topopah Spring | 40.26 | 91 | P | P | 09 03 16.6 | +1.0 |
| | baz=40,SNR=7.3 | | | | | | |
| TPNV | Topopah Spring | 40.26 | 91 | eP | P | 09 03 15.2 | -0.4 |
| | comp=Z,5.5nm,0.7s | | | | | | |
| DUG | Dugway | 40.35 | 84 | eP | P | 09 03 17.4 | +1.1 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| DUG | Dugway | 40.35 | 84 | P | P | 09 03 16.7 | +0.4 |
| | baz=40,SNR=7.9 | | | | | | |
| DUG | Dugway | 40.35 | 84 | eP | P | 09 03 17.4 | +1.1 |
| | comp=Z,6.6nm,1.0s | | | | | | |

EDW2 **Edwards Air Fo** 40.55 94 P P 09 03 17.8 -0.1
baz=40
CTU **Camp Tracy** 40.70 83 eP P 09 03 19.9 +0.7
comp=Z,5.4nm,0.8s
BW06 **Boulder Array** 40.82 79 eP P 09 03 20.9 +0.7
comp=Z,6.3nm,0.8s
DGMT **Dagmar** 40.86 68 P P 09 03 19.5 -0.8
baz=41
NLU **North Lily Min** 40.95 84 eP P 09 03 22.5 +1.2
comp=Z,6.1nm,1.0s
GSC **Goldstone** 40.99 93 eP P 09 03 23.0 +1.4
GSC pmax pmax
comp=Z,9.0nm,0.8s
GSC **Goldstone** 40.99 93 P P 09 03 22.2 +0.6
baz=41,SNR=9.1
GSC **Goldstone** 40.99 93 eP P 09 03 23.0 +1.4
comp=Z,9.5nm,0.8s
BFSC **Mount Baldy Ra** 41.18 95 P P 09 03 23.9 +0.7
baz=41
MPU **Maple Canyon** 41.18 83 eP P 09 03 23.7 +0.5
comp=Z,18nm,1.0s
HEC **Hector,Ludlow** 41.60 93 P P 09 03 27.2 +0.7
baz=41
BBRC **Big Bear Solar** 41.61 94 P P 09 03 27.7 +0.8
baz=41
CCUT **Cedar City** 41.65 88 eP P 09 03 28.4 +1.2
comp=Z,1.9nm,0.7s
BOD **Bodaibo** 41.74 309 eP P 09 03 25.7 -1.6
BOD e 09 05 43.0
BOD pmax pmax
comp=Z,19nm,0.7s
MSU **Marysvale** 41.77 86 eP P 09 03 29.6 +1.5
MSU **Marysvale** 41.77 86 eP P 09 03 29.6 +1.5
TMUT **Trail Mountain** 41.88 84 eP P 09 03 30.5 +1.4
comp=Z,33nm,1.0s
MURC **Murrieta** 41.89 95 P P 09 03 29.5 +0.6
baz=42
P17A **Butcher Ranch,** 42.06 83 eP P 09 03 31.9 +1.5
comp=Z,4.5nm,0.6s
PFO **Pinyon Flat Ob** 42.34 94 P P 09 03 33.3 +0.7
baz=42
BELC **Belle Mtn. Jos** 42.35 94 P P 09 03 33.0 +0.2
baz=42,SNR=5.8
C26A **Wahner Farm, P** 42.40 68 P P 09 03 32.5 -0.3
baz=42
SRU **San Rafael** 42.41 84 eP P 09 03 34.5 +1.2
SRU pmax pmax
comp=Z,7.0nm,0.8s
SRU **San Rafael** 42.41 84 eP P 09 03 34.5 +1.2
comp=Z,6.9nm,0.8s
CN2 **Changchun** 42.65 285 eP P 09 03 33.0 -1.9
CN2 PMZ
comp=Z,200nm,1.0s
K22A **Casper** 42.71 77 P P 09 03 35.9 +0.3
baz=42
IRM **Iron Mountain** 42.77 93 P P 09 03 36.0 0.0
baz=43
A28A **Rude Farm, Bot** 42.85 66 P P 09 03 36.4 -0.1
baz=43
MONP **Monument Peak** 42.85 95 P P 09 03 37.5 +0.6
baz=43
BC3 **Big Chuckawall** 42.92 94 P P 09 03 37.6 +0.2
baz=43
HIA **Hailar** 42.92 295 eP P 09 03 36.4 -0.7
HIA pmax pmax
comp=Z,28nm,1.1s
HIA **Hailar** 42.92 295 eP P 09 03 36.4 -0.7
comp=Z,28nm,1.1s
F26A **Lodgepole** 43.15 71 P P 09 03 39.4 +0.4
baz=43
O20A **White River Ci** 43.17 81 P P 09 03 39.3 -0.2
baz=43,SNR=8.0
O20A **White River Ci** 43.17 81 eP P 09 03 39.9 +0.5
comp=Z,14nm,0.9s
IBP **Imperial Bould** 43.21 95 P P 09 03 40.7 +1.0
baz=43
PDMC **Parker Dam,Lak** 43.29 92 P P 09 03 41.0 +0.8
baz=43
H25A **Fruitdale** 43.30 73 P P 09 03 40.6 +0.4
baz=43
A29A **Manning Farm,** 43.42 65 P P 09 03 41.9 +0.8
baz=43
Y12C **Blythe** 43.43 93 P P 09 03 41.8 +0.5
baz=43,SNR=7.8
G26A **Maurine** 43.50 71 P P 09 03 42.1 +0.2
baz=43
PV09 **Paradox Valley** 43.65 83 eP P 09 03 44.2 +0.8
GLA **Glamis** 43.72 94 P P 09 03 44.3 +0.7
baz=44
PV10 **Paradox Valley** 43.78 83 eP P 09 03 45.1 +0.7
comp=Z,177nm,0.8s
G27A **Dupree** 43.84 71 P P 09 03 45.1 +0.6
baz=44
PV04 **Paradox Valley** 43.85 83 eP P 09 03 45.5 +0.6
PV05 **Paradox Valley** 43.93 84 eP P 09 03 47.7 +2.1
N23A **Red Feather La** 44.10 78 P P 09 03 47.2 +0.2
baz=44
WUAZ **Wupatki** 44.19 88 P P 09 03 47.5 -0.1
baz=44,SNR=6.6
WUAZ **Wupatki** 44.19 88 eP P 09 03 49.0 +1.4
comp=Z,7.9nm,0.8s
PV01 **Paradox Valley** 44.22 83 eP P 09 03 48.5 +0.6
F28A **McLaughlin** 44.23 70 P P 09 03 48.0 +0.3
baz=44
I27A **Quinn** 44.53 72 P P 09 03 49.6 -0.5
baz=44
SMCO **Snowmass** 44.53 81 eP P 09 03 50.5 -0.1
ULM **Lac du Bonnet** 44.55 62 P P 09 03 52.4 +2.3
comp=Z,2.3nm,0.5s,baz=324,slow=7.3,SNR=3.6
ULM LR LR 09 22 34.5
comp=Z,115nm,19.8s,baz=303,slow=36
H28A **Mission Ridge** 44.77 71 P P 09 03 52.1 +0.1
baz=45
MVCO **Mesa Verde** 44.85 84 P P 09 03 53.3 +0.3
baz=45
MVCO **Mesa Verde** 44.85 84 eP P 09 03 53.4 +0.5
comp=Z,12nm,1.3s
C31A **Landman Farms,** 44.88 66 P P 09 03 53.1 +0.3
baz=45
KSRS **Korea Array** 45.01 276 P P 09 03 54.5 +0.6
comp=Z,12nm,0.9s,baz=58,slow=7.5,SNR=39
KSRS **Korea Array** 45.01 276 P P 09 03 54.5 +0.6
KSRS pmax pmax
comp=Z,12nm,0.9s
J27A **Elkhorn Farm,** 45.03 73 P P 09 03 54.5 +0.3
baz=45
KSAR **Wonju Array Be** 45.05 276 P P 09 03 54.5 +0.3
KSAR **Wonju Array Be** 45.05 276 P P 09 03 54.5 +0.3
I28A **Midland** 45.08 72 P P 09 03 54.9 +0.4
baz=45
G29A **Hoven** 45.11 70 P P 09 03 54.1 -0.6
baz=45
B32A **Ashes, Strandq** 45.21 64 P P 09 03 55.7 +0.3
baz=45
K27A **Flueckinger Fa** 45.22 74 P P 09 03 56.5 +0.8
baz=45
H29A **Onida** 45.27 71 P P 09 03 56.3 +0.3
baz=45
J28A **Allard Ranch,** 45.38 73 P P 09 03 57.1 +0.2
baz=45
M26A **McRoberts Ranc** 45.43 76 P P 09 03 57.7 +0.3
baz=45
W18A **Petrified Fore** 45.46 87 P P 09 03 58.3 +0.6
baz=45
S22A **4UR Ranch, Cre** 45.53 83 P P 09 03 59.2 +0.8
baz=45
I29A **Vivian Onida** 45.58 71 P P 09 03 59.6 +1.2
baz=45
G30A **Faulkton** 45.60 69 P P 09 03 58.7 +0.2
baz=45
J29A **Okreek** 45.93 72 P P 09 04 01.5 +0.3
baz=46
TJN **Taejon** 46.05 276 ⇑ iP P 09 04 02.3 +0.2
JNU **Nakatsue** 46.06 270 P P 09 04 02.1 -0.3
comp=Z,18nm,0.8s,baz=13,slow=5.6,SNR=9.2
JNU **Nakatsue** 46.06 270 eP P 09 04 02.5 +0.1
comp=Z,14nm,1.1s
B34A **Aery, Baudette** 46.19 63 P P 09 04 03.5 +0.4
baz=46
D33A **AnnSam, Waubun** 46.30 65 P P 09 04 04.3 +0.3
baz=46
K29A **Lazy Trails An** 46.32 73 P P 09 04 04.7 +0.4
baz=46
SDCO **Great Sand Dun** 46.34 82 P P 09 04 05.0 +0.2
baz=46
SDCO **Great Sand Dun** 46.34 82 eP P 09 04 05.7 +0.9
comp=Z,53nm,2.5s

J30A **Dallas** 46.46 72 P P 09 04 05.3 0.0
baz=46
P26A **Davis Ranch, A** 46.49 78 P P 09 04 06.6 +0.8
baz=46
D34A **Park Rapids** 46.70 65 P P 09 04 07.4 +0.3
baz=46
TUC **Tucson** 46.70 91 eP P 09 04 08.4 +0.9
TUC pmax pmax
comp=Z,6.0nm,0.8s
TUC **Tucson** 46.70 91 eP P 09 04 08.4 +0.9
comp=Z,6.1nm,0.8s
K30A **Basset** 46.78 72 P P 09 04 08.3 +0.3
baz=47
Q26A **Hugo** 46.78 79 P P 09 04 08.1 -0.1
baz=47
M29A **Burnside Ranch** 46.90 74 P P 09 04 08.2 -0.7
baz=47
J31A **Geddes** 46.92 71 P P 09 04 08.7 -0.3
baz=47
H32A **Carlson Farm,** 46.95 69 P P 09 04 09.5 +0.3
baz=47
O28A **Krutsinger Ran** 47.08 77 P P 09 04 10.0 -0.3
baz=47
L30A **Spencer Herefo** 47.16 73 P P 09 04 10.4 -0.5
baz=47
R26A **Arlington** 47.23 80 P P 09 04 11.6 +0.1
baz=47
H33A **Prehn Over Nor** 47.24 69 P P 09 04 11.7 +0.3
baz=47
KSCO **Kaye Shedlock'** 47.27 78 P P 09 04 12.0 +0.2
baz=47
D35A **Remer** 47.33 64 P P 09 04 12.3 +0.2
baz=47
T25A **Trinidad** 47.39 81 P P 09 04 12.4 -0.6
baz=47
J32A **Parkston** 47.39 71 P P 09 04 11.8 -0.8
baz=47
P28A **Saint Francis** 47.44 77 P P 09 04 12.6 -0.5
baz=47
E35A **Pequot Lakes** 47.45 65 P P 09 04 13.3 +0.3
baz=47
LAZ **Ladron** 47.53 86 eP P 09 04 15.5 +1.5
ANMO **Albuquerque** 47.58 85 P P 09 04 14.8 +0.4
comp=Z,1.5nm,0.9s,baz=355,slow=5.0,SNR=4.4
ANMO LR LR 09 22 08.5
comp=Z,133nm,18.5s,baz=303,slow=33
ANMO **Albuquerque** 47.58 85 ⇑ iP P 09 04 15.7 +1.3
ANMO pmax pmax
comp=Z,3.0nm,1.2s
ANMO **Albuquerque** 47.58 85 eP P 09 04 15.2 +0.8
comp=Z,3.7nm,1.2s
I33A **Coleman** 47.59 69 P P 09 04 14.4 +0.3
baz=47
C36A **Pine Crest Far** 47.61 63 P P 09 04 14.5 +0.3
baz=47
R27A **Eads** 47.63 79 P P 09 04 14.1 -0.5
baz=47
S26A **Kim** 47.65 80 P P 09 04 15.2 +0.4
baz=48
F35A **Swanville** 47.77 66 P P 09 04 16.6 +1.1
baz=48
T26A **Comanche Natio** 47.86 81 P P 09 04 16.9 +0.3
baz=48
ECSD **EROS Data Cent** 47.88 69 P P 09 04 16.8 +0.3
baz=48
ECSD **EROS Data Cent** 47.88 69 eP P 09 04 16.0 -0.4
comp=Z,60nm,2.5s
P29A **Atwood** 47.91 77 P P 09 04 16.9 +0.1
baz=48
C37A **Embarrass** 47.98 63 P P 09 04 17.7 +0.6
baz=48
BNM **Barren Site** 48.01 86 eP P 09 04 19.2 +1.4
O30A **MW Ranch, Wils** 48.07 75 P P 09 04 18.3 +0.4
baz=48
EYMN **Ely** 48.23 62 P P 09 04 19.2 +0.2
baz=48
Q29A **Oakley** 48.33 77 P P 09 04 20.4 +0.4
baz=48
P30A **Selden** 48.35 76 P P 09 04 20.6 +0.4
baz=48
121A **Cookes Peak, D** 48.40 89 P P 09 04 21.7 +1.0
baz=48,SNR=5.6
121A **Cookes Peak, D** 48.40 89 eP P 09 04 21.0 +0.3
comp=Z,4.2nm,0.7s
C38A **Sawbill Land.** 48.48 62 P P 09 04 22.1 +1.1
baz=48
S28A **Manter** 48.62 79 P P 09 04 22.9 +0.6
baz=48
T28A **Walsh** 48.79 80 P P 09 04 24.0 +0.4
baz=49
U27A **Thompson Grove** 48.82 81 P P 09 04 23.8 -0.1
baz=49
P31A **Stockton** 48.89 76 P P 09 04 24.7 +0.4
baz=49
J35A **Milford** 48.92 69 P P 09 04 24.3 -0.1
baz=49
S29A **Ulysses** 49.07 79 P P 09 04 25.9 +0.2
baz=49
L34A **Svendsen Farm,** 49.11 71 P P 09 04 26.2 +0.4
baz=49
CBKS **Cedar Bluff** 49.13 77 P P 09 04 25.9 -0.2
baz=49
R30A **Dighton** 49.15 77 P P 09 04 26.0 -0.2
baz=49
V27A **Dan Oppiter Fa** 49.25 82 P P 09 04 27.2 +0.1
baz=49
T29A **Hugoton** 49.27 79 P P 09 04 27.5 +0.3
baz=49
FRB **Frobisher Bay** 49.29 35 LR LR 09 26 28.6
comp=Z,247nm,20.0s,baz=330,slow=38
S30A **Montezuma** 49.45 78 P P 09 04 29.0 +0.4
baz=49
R31A **Burdett** 49.59 77 P P 09 04 29.3 -0.3
baz=49
O33A **Hebron** 49.60 74 P P 09 04 30.0 +0.4
baz=49
Q32A **Meitler Ranch,** 49.72 76 P P 09 04 31.0 +0.4
baz=50
SPITS **Spitsbergen Ar** 49.75 358 P P 09 04 29.2 -1.1
comp=Z,1.6nm,0.4s,baz=24,slow=6.4,SNR=11
DAG **Danmarks Havn** 49.94 8 iP P 09 04 31.2 -0.5
DAG pmax pmax
comp=Z,5.0nm,0.6s
DAG **Danmarks Havn** 49.94 8 iP P 09 04 31.2 -0.5
comp=Z,7.1nm,0.6s
R32A **Long Quarter,** 49.99 76 P P 09 04 32.8 +0.2
baz=50
O34A **Beatrice** 50.05 73 P P 09 04 33.5 +0.4
baz=50
U30A **W K& E Inc. Balk** 50.06 79 P P 09 04 32.9 -0.4
baz=50
TLY **Talaya** 50.07 306 P P 09 04 33.3 +0.2
comp=Z,8.4nm,0.5s,baz=13,slow=6.4,SNR=12
TLY **Talaya** 50.07 306 eP P 09 04 33.3 +0.2
TLY pmax pmax
comp=Z,15nm,0.9s
TLY **Talaya** 50.07 306 eP P 09 04 33.1 0.0
comp=Z,11nm,0.7s
Q33A **Connelly Farm,** 50.14 75 P P 09 04 33.6 -0.2
baz=50
N35A **Tabor** 50.24 72 P P 09 04 34.7 +0.2
baz=50
BJI **Beijing** 50.42 287 P P 09 04 35.8 0.0
BJI PMZ
comp=Z,11nm,0.7s
MNTX **Cornudas Mount** 50.44 88 P P 09 04 36.3 +0.2
baz=50,SNR=6.6
MNTX **Cornudas Mount** 50.44 88 eP P 09 04 37.2 +1.1
comp=Z,3.6nm,0.8s
MSTX **Muleshoe** 50.49 83 P P 09 04 36.8 +0.2
baz=50
MSTX **Muleshoe** 50.49 83 eP P 09 04 36.8 +0.2
comp=Z,13nm,1.1s
ULN **Ulaanbaatar** 50.63 300 ⇓ iP P 09 04 37.3 -0.2
ULN pmax pmax
comp=Z,6.0nm,1.0s
ULN **Ulaanbaatar** 50.63 300 eP P 09 04 36.9 -0.7
comp=Z,7.3nm,0.7s
T32A **Huddler Ranch,** 50.68 78 P P 09 04 39.2 +1.3
baz=50
Q34A **Chapman** 50.72 75 P P 09 04 39.4 +1.3
baz=50
R34A **Isabella, Hill** 50.94 75 P P 09 04 40.3 +0.4
baz=51
SONA1 **Songino Array** 50.99 301 eP P 09 04 39.9 -0.3
SUMG **Summit** 50.99 17 iP P 09 04 40.5 +0.3
SUMG pmax pmax
comp=Z,10.0nm,0.8s

SUMG **Summit** 50.99 17 iP P 09 04 40.5 +0.3
comp=Z,10nm,0.8s
SUMG **Summit** 50.99 17 eP P 09 04 40.7 +0.6
comp=Z,12nm,0.9s
SONM **Songino Array** 51.00 301 P P 09 04 40.4 +0.1
comp=Z,4.0nm,0.5s,baz=58,slow=5.9,SNR=31
SONM PcP PcP 09 05 56.5 +0.5
comp=Z,4.9nm,0.8s,baz=69,slow=2.2,SNR=9.8
SONM ScP ScP 09 09 50.2 +0.2
comp=Z,0.3nm,0.2s,baz=56,slow=2.3,SNR=4.7
SONM LR LR 09 28 01.6
comp=Z,228nm,19.9s,baz=66,slow=38
ZAK **Zakamensk** 51.04 305 eP P 09 04 39.7 -0.8
ZAK pmax pmax
comp=Z,4.0nm,1.2s
Z28A **Tucker Farm, M** 51.19 84 P P 09 04 41.5 -0.4
baz=51,SNR=5.4
Y29A **Porterfield Fa** 51.23 83 P P 09 04 41.8 -0.4
baz=51
P36A **Good Intent, A** 51.29 73 P P 09 04 42.8 +0.4
baz=51
MOY **Mondy** 51.38 307 eP P 09 04 43.4 +0.3
V32A **Arapaho** 51.57 79 P P 09 04 45.2 +0.6
baz=51
128A **Castleberry Fa** 51.58 84 P P 09 04 45.4 +0.6
baz=51
Z29A **Hungry Hill Ra** 51.62 83 P P 09 04 45.2 +0.1
baz=51
U33A **Lingo Farm, Me** 51.66 78 P P 09 04 45.3 +0.1
baz=52
Y30A **Stafford Cattl** 51.69 82 P P 09 04 45.2 -0.3
baz=52
X31A **McDonald Ranch** 51.74 81 P P 09 04 45.5 -0.3
baz=52
T34A **McClaskey Farm** 51.82 77 P P 09 04 46.0 -0.4
baz=52
W32A **Sentinel** 51.85 80 P P 09 04 48.1 +1.4
baz=52
228A **UT Block 9, Go** 51.87 85 P P 09 04 47.1 +0.2
baz=52
S35A **Otter Creek Ra** 51.90 75 P P 09 04 46.6 -0.4
baz=52
129A **Stewart Farms,** 51.95 84 P P 09 04 47.8 +0.3
baz=52
Z30A **Sanderson Ranc** 51.96 83 P P 09 04 47.2 -0.3
baz=52
R36A **Gordon, Harris** 51.96 74 P P 09 04 47.4 -0.1
baz=52
U34A **Anderson Ranch** 52.00 77 P P 09 04 47.9 +0.1
baz=52
X32A **Elmer** 52.30 80 P P 09 04 49.6 -0.5
baz=52
WMOK **Wichita Mounta** 52.39 80 eP P 09 04 50.9 +0.2
WMOK pmax pmax
comp=Z,7.0nm,1.0s
WMOK **Wichita Mounta** 52.39 80 eP P 09 04 50.9 +0.2
comp=Z,6.6nm,1.0s
Y32A **R-V Farms, Ver** 52.49 81 P P 09 04 51.2 -0.3
baz=52
130A **Snyder** 52.53 83 P P 09 04 51.6 -0.2
baz=52
Z31A **Sharp Cattle R** 52.53 82 P P 09 04 51.8 +0.1
baz=52
HHC **Hu-ho-hao-te** 52.58 291 eP P 09 04 53.3 +1.2
HHC sP sP 09 05 03.1 -1.5
HHC S S 09 12 16.2 -0.9
HHC PMZ
comp=Z,27nm,0.9s
HHC PMZ
comp=Z,110nm,8.6s
HHC LN
comp=Z,200nm,19.7s
HHC LE
comp=Z,200nm,18.5s
HHC LZ
comp=Z,210nm,18.5s
329A **Wagon Wheel Ra** 52.68 85 P P 09 04 52.9 0.0
baz=52
GUMO **Guam** 52.71 240 P P 09 04 50.6 -2.6
comp=Z,47nm,0.5s,baz=161,slow=1.4,SNR=7.0
S37A **Fort Scott** 52.73 74 P P 09 04 52.7 -0.4
baz=52
131A **Roby** 52.83 83 P P 09 04 53.9 -0.1
baz=53
Z32A **Haskell** 52.95 82 P P 09 04 54.6 -0.2
baz=53,SNR=5.2
T37A **Cheneyville 18** 53.11 75 P P 09 04 56.6 +0.7
baz=53
TX31 **Lajitas Ar. Si** 53.15 88 eP P 09 04 56.6 +0.1
TXAR **Lajitas Array** 53.15 88 P P 09 04 56.7 +0.2
comp=Z,3.7nm,0.7s,baz=296,slow=5.2,SNR=49
TXAR LR LR 09 24 59.5
comp=Z,106nm,20.4s,baz=0.0,slow=33
330A **Mertzon** 53.23 85 P P 09 04 57.6 +0.6
baz=53
W35A **Tecumseh** 53.26 78 P P 09 04 57.4 +0.3
baz=53
ABTX **Abilene, Hawle** 53.32 82 P P 09 04 57.6 +0.1
baz=53
429A **Davenport Ranc** 53.33 86 P P 09 04 57.5 -0.2
baz=53
231A **Bronte** 53.38 84 P P 09 04 58.2 +0.1
baz=53
Z33A **Whitaker Ranch** 53.39 81 P P 09 04 58.7 +0.6
baz=53
TUL1 **Tulsa** 53.40 77 P P 09 04 58.6 +0.5
baz=53
SSE **Sheshan** 53.40 275 eP P 09 04 58.8 +0.7
SSE PMZ
comp=Z,37nm,1.2s
U37A **Salina** 53.47 76 P P 09 04 58.2 -0.4
baz=53
529A **Stev Forest Ra** 53.48 87 P P 09 04 59.1 +0.3
baz=53
430A **Baggett Ranch,** 53.62 85 P P 09 04 59.5 -0.4
baz=53,SNR=6.0
W36A **Wetumka** 53.66 78 P P 09 05 00.4 +0.4
baz=54
331A **San Angelo** 53.75 84 P P 09 05 00.3 -0.5
baz=54,SNR=5.2
133A **Hamilton Ranch** 53.77 82 P P 09 05 01.5 +0.6
baz=54
V37A **Hulbert** 53.81 76 P P 09 05 01.3 +0.2
baz=54
232A **Coleman** 53.82 83 P P 09 05 00.2 -1.2
baz=54
Z34A **Collier Ranch,** 53.85 80 P P 09 05 01.3 -0.2
baz=54
U38A **Gravette** 53.88 75 P P 09 05 01.2 -0.4
baz=54
530A **J-C Ranch, Com** 54.01 86 P P 09 05 02.2 -0.5
baz=54,SNR=9.3
Y35A **Marietta** 54.02 79 P P 09 05 03.2 +0.6
baz=54
431A **Sonora** 54.08 85 P P 09 05 02.8 -0.4
baz=54,SNR=7.1
332A **Millersview** 54.12 84 P P 09 05 03.2 -0.3
baz=54
W37A **Quinton** 54.14 77 P P 09 05 03.3 -0.3
baz=54
NJ2 **Nanjing** 54.16 278 eP P 09 05 03.9 +0.2
NJ2 PMZ
comp=Z,40nm,0.9s
233A **Rising Star** 54.19 82 P P 09 05 03.8 -0.2
baz=54
V38A **Canehill** 54.26 76 P P 09 05 04.9 +0.5
baz=54
432A **Menard** 54.44 84 P P 09 05 05.8 0.0
baz=54
531A **Rocksprings** 54.48 85 P P 09 05 05.8 -0.4
baz=54
333A **Richland Sprin** 54.62 83 P P 09 05 06.9 -0.2
baz=54
234A **Clairette** 54.66 82 P P 09 05 07.0 -0.4
baz=54
JCT **Junction City** 54.71 84 P P 09 05 07.6 -0.2
baz=54
W38A **Poteau** 54.73 77 P P 09 05 07.2 -0.6
baz=54
Z36A **Blue Ridge** 54.82 80 P P 09 05 07.8 -0.7
baz=55
532A **Rocksprings** 54.90 85 P P 09 05 08.8 -0.4
baz=55
433A **Art** 54.95 84 P P 09 05 09.3 -0.2
baz=55
631A **Perdido Creek** 54.99 86 P P 09 05 09.1 -0.7
baz=55
334A **Lometa** 55.07 83 P P 09 05 10.4 +0.1

baz=55
**434A Burnet** 55.41 83 P P 09 05 12.6 -0.2
baz=55
**533A Kerrville** 55.47 84 P P 09 05 13.9 +0.7
baz=55
**335A Moody** 55.60 82 P P 09 05 14.2 +0.1
baz=55
**MIAR Mount Ida** 55.66 76 P P 09 05 15.0 +0.5
baz=56
**SCHQ Schefferville** 55.78 43 P P 09 05 15.3 +0.2
comp=Z,4.3nm,0.7s,baz=297,slow=8.5,SNR=6.9
SCHQ LR LR 09 30 59.3
comp=Z,121nm,19.4s,baz=348,slow=38
**534A Blanco** 55.84 84 P P 09 05 16.1 +0.1
baz=56
**732A Laxson Ranch,** 55.85 86 P P 09 05 15.8 -0.1
baz=56
**832A Faith Ranch, C** 56.17 86 P P 09 05 18.1 -0.1
baz=56
**833A Chaparral WMA,** 56.49 86 P P 09 05 21.3 +0.8
baz=56
**ZALV Zalesovo Beam** 57.22 317 P P 09 05 23.6 -1.7
comp=Z,0.9nm,0.4s,baz=49,slow=4.4,SNR=2.6
ZALV PcP PcP 09 06 19.8 +0.4
comp=Z,4.1nm,0.7s,baz=44,slow=3.2,SNR=5.9
**WHN Wuhan** 57.96 280 ⇓ *i*P P 09 05 30.9 +0.1
WHN PMZ
comp=Z,52nm,0.7s
**ARCES ARCESS Array B** 57.97 354 P P 09 05 29.9 -0.5
comp=Z,2.6nm,0.5s,baz=20,slow=7.0,SNR=18
ARCES PcP PcP 09 06 22.4 +0.2
comp=Z,5.3nm,0.8s,baz=4.3,slow=4.9,SNR=6.8
ARCES LR LR 09 32 51.6
comp=Z,118nm,18.3s,baz=355,slow=38
**GTA Gaotai** 60.16 297 *e*P P 09 05 45.6 -0.6
GTA pP pP 09 05 51.1 -4.2
GTA sP sP 09 05 54.4 -4.4
GTA PcP PcP **09 06 31.6 0.0**
GTA S S **09 13 56.3 -1.4**
GTA sS sS 09 14 06.3 -6.3
GTA SS SS **09 17 52.7 -1.6**
GTA PMZ
comp=Z,11nm,1.0s
GTA PMZ
comp=Z,64nm,5.5s
GTA LN
comp=Z,230nm,19.0s
GTA LE
comp=Z,170nm,19.0s
GTA LZ
comp=Z,230nm,20.0s
**LZH Lanzhou** 60.25 291 *e*P P 09 05 47.3 +0.4
LZH pP pP **09 05 54.2 -1.8**
LZH sP sP 09 05 57.1 -2.3
LZH PP PP **09 08 02.0 +2.5**
LZH PMZ
comp=Z,21nm,1.1s
LZH PMZ
comp=Z,62nm,7.8s
LZH LN
comp=Z,230nm,14.7s
LZH LE
comp=Z,220nm,15.0s
LZH LZ
comp=Z,290nm,18.1s
**SSPA Standing Stone** 60.37 61 *e*P P 09 05 47.4 0.0
comp=Z,16nm,0.6s
**TKL Tuckaleechee C** 60.62 69 LR LR 09 31 01.8
comp=Z,106nm,21.0s,baz=349,slow=35
**KURK Kurchatov** 62.17 318 P P 09 05 59.8 +0.3
KURK pmax pmax
comp=Z,8.0nm,0.7s
**KURK Kurchatov** 62.17 318 *e*P P 09 05 58.9 -0.5
comp=Z,42nm,1.0s
**KURBB Kurchatov Arra** 62.28 318 P P 09 05 59.8 -0.4
comp=Z,7.6nm,0.7s,baz=44,slow=7.1,SNR=27
**CHKZ Chkalovo** 62.94 324 P P 09 06 03.7 -0.8
CHKZ pmax pmax
comp=Z,9.0nm,1.1s
**WMQ Urumqi** 63.27 308 *e*P P 09 06 09.0 +2.0
WMQ S S **09 14 38.0 +1.2**
WMQ PMZ
comp=Z,11nm,1.0s
WMQ LN
comp=Z,290nm,23.0s
WMQ LE
comp=Z,290nm,23.0s
WMQ LZ
comp=Z,160nm,20.0s
**BVA0 Borovoye Array** 63.54 324 *i*P P 09 06 08.5 -0.1
BVA0 pmax pmax
comp=Z,23nm,0.7s
**BVAR Borovoye Array** 63.54 324 P P 09 06 08.5 -0.1
comp=Z,17nm,0.5s,baz=52,slow=7.3,SNR=82
BVAR PcP PcP 09 06 45.5 +0.6
comp=Z,7.7nm,0.7s,baz=38,slow=2.6,SNR=7.6
**BRVK Borovoye** 63.55 324 P P 09 06 08.2 -0.4
BRVK pmax pmax
comp=Z,34nm,1.0s
**BRVK Borovoye** 63.55 324 *e*P P 09 06 08.6 0.0
comp=Z,19nm,1.1s
**VOSK Vostochnaya** 63.57 324 P P 09 06 08.3 -0.4
VOSK pmax pmax
comp=Z,15nm,1.0s
**MKAR Makanchi Array** 63.58 313 P P 09 06 07.4 -1.5
comp=Z,1.5nm,0.4s,baz=52,slow=6.7,SNR=9.6
MKAR LR LR 09 34 31.5
comp=Z,97nm,21.2s,baz=24,slow=37
**MKAR Makanchi Array** 63.58 313 ⇑ *i*P P 09 06 08.0 -0.9
MKAR pmax pmax
comp=Z,2.0nm,0.4s
**CD2 Chengdu** 64.02 287 *e*P P 09 06 11.0 -1.1
CD2 PMZ
comp=Z,10.0nm,0.5s
**ZRNK Zerenda** 64.10 325 P P 09 06 11.9 -0.3
ZRNK pmax pmax
comp=Z,23nm,0.6s
**ARU Arti** 64.52 333 P P 09 06 14.4 -0.5
comp=Z,0.6nm,0.3s,baz=227,slow=23,SNR=4.1
**ARU Arti** 64.52 333 *c i*P P 09 06 14.3 -0.5
ARU 09 06 46.7
ARU 09 08 32.0
ARU S S **09 14 50.5 -1.2**
ARU pmax pmax
comp=Z,14nm,1.2s
**ARU Arti** 64.52 333 *e*P P 09 06 14.7 -0.2
comp=Z,9.7nm,0.5s
**GYA Guiyang** 65.56 282 ⇑ *i*P P 09 06 22.2 0.0
GYA PMZ
comp=Z,20nm,1.0s
**FINES FINESS Array B** 65.91 352 P P 09 06 22.7 -1.0
comp=Z,3.4nm,0.5s,baz=13,slow=6.9,SNR=22
FINES LR LR 09 37 43.3
comp=Z,48nm,18.8s,baz=312,slow=38
**FINES FINESS Array B** 65.91 352 *i*P P 09 06 23.2 -0.6
FINES pmax pmax
comp=Z,3.0nm,0.5s
**TAOE Nuku Hiva Isla** 66.06 147 *e*T T 10 18 26.9
comp=Z,119nm,0.3s
**OTUK Ortayu** 66.65 320 P P 09 06 28.2 -0.7
OTUK pmax pmax
comp=Z,10.0nm,0.8s
**NB2 NORSAR Subarra** 67.03 359 P P 09 06 30.8 -0.3
comp=Z,1.2nm,0.4s,baz=4.0,slow=6.9
**NOA NORSAR Array B** 67.03 359 P P 09 06 31.0 -0.1
comp=Z,1.6nm,0.5s,baz=2.9,slow=6.6,SNR=9.9
**PDGK Podgornoye** 67.51 312 P P 09 06 34.0 -0.3
PDGK pmax pmax
comp=Z,6.0nm,0.7s
**HFS Hagfors** 67.90 358 P P 09 06 36.0 -0.5
comp=Z,6.4nm,0.3s,baz=8.5,slow=3.0,SNR=65
**KMI Kunming** 68.90 284 P P 09 06 44.1 +0.5
KMI PMZ
comp=Z,17nm,1.0s
KMI PMZ
comp=Z,120nm,4.5s
**QIZ Qiongzhong** 69.19 274 P P 09 06 44.9 -0.2
QIZ S S **09 15 48.3 -0.8**
**TKM2 Tokmak 2** 69.57 314 P P 09 06 47.7 +0.2
TKM2 pmax pmax
comp=Z,6.0nm,1.0s
**TKM2 Tokmak 2** 69.57 314 *e*P P 09 06 47.6 +0.1
comp=Z,12nm,1.3s
**USP Ospenovka** 69.77 315 P P 09 06 48.7 +0.2
SNR=5.1
**AKTO Aktyubinsk** 69.89 330 P P 09 06 48.7 -0.3
comp=Z,16nm,0.5s,baz=54,slow=6.3,SNR=54

**AKTO Aktyubinsk** 69.89 330 P P 09 06 48.9 -0.1
AKTO pmax pmax
comp=Z,15nm,0.6s
**AAK Ala-Archa** 70.28 315 P P 09 06 51.4 -0.4
comp=Z,4.8nm,0.6s,baz=129,slow=3.4,SNR=10
**AAK Ala-Archa** 70.28 315 *ce*P P 09 06 51.2 -0.6
AAK pmax pmax
comp=Z,25nm,1.2s
**AAK Ala-Archa** 70.28 315 P P 09 06 51.7 -0.1
SNR=6.6
**AAK Ala-Archa** 70.28 315 *e*P P 09 06 51.3 -0.6
comp=Z,2.9nm,0.5s
**AB31 Akbulak array** 70.30 328 P P 09 06 51.3 -0.3
AB31 pmax pmax
comp=Z,6.0nm,0.4s
**ABKAR Akbulak array** 70.30 328 *e*P P 09 06 51.5 -0.1
comp=Z,5.0nm,0.4s
**KZA Kyzart** 70.40 314 P P 09 06 53.1 +0.3
SNR=7.8
**EKS2 Erkin-Say** 70.57 315 *e*P P 09 06 53.6 +0.1
EKS2 pmax pmax
comp=Z,4.0nm,0.6s
**EKS2 Erkin-Say** 70.57 315 P P 09 06 53.9 +0.4
SNR=6.7
**EKS2 Erkin-Say** 70.57 315 *e*P P 09 06 53.6 +0.1
comp=Z,3.7nm,0.6s
**OBN Obninsk** 70.73 344 *e*P P **09 06 52.3 -1.7**
OBN *e* 09 07 13.6
OBN *e* 09 09 33.9
OBN pmax pmax
comp=Z,5.0nm,0.9s
OBN MLR MLR
comp=Z,84nm,16.0s
**AML Almayashu** 71.04 315 P P 09 06 57.2 +0.5
SNR=5.8
**MNAS Manas** 71.26 316 P P 09 06 56.7 -1.0
MNAS pmax pmax
comp=Z,3.0nm,0.7s
**PMG Port Moresby** 71.54 225 ⇑ *i*P P 09 06 58.5 -0.9
PMG pmax pmax
comp=Z,68nm,1.0s
**KK31 Karatay Array** 71.59 318 *i*P P 09 06 59.1 -0.4
KK31 pmax pmax
comp=Z,3.0nm,0.7s
**KKAR Karatay Array** 71.59 318 *e*P P 09 06 59.0 -0.5
KKAR pmax pmax
comp=Z,5.0nm,0.6s
**KKAR Karatay Array** 71.59 318 *e*P P 09 06 59.0 -0.5
comp=Z,4.6nm,0.6s
**PPT2 Papeete2** 71.81 159 *e*LR LR 09 29 05.2
comp=Z,80nm,23.5s
**SIJI Sorong** 72.11 244 P P 09 07 02.5 -0.4
comp=Z,24nm,0.8s,baz=27,slow=5.6,SNR=11
**LSA Lhasa** 72.13 295 *e*P P 09 07 04.4 +0.9
LSA pmax pmax
comp=Z,22nm,0.6s
**LSA Lhasa** 72.13 295 *e*P P 09 07 04.4 +0.9
comp=Z,22nm,0.6s
**KSH Kashi** 72.14 312 *e*P P 09 07 06.7 +3.7
KSH PcP PcP **09 07 24.6 +3.3**
KSH S S **09 16 26.5 +3.3**
KSH sS sS 09 16 40.9 +2.4
KSH SKS SKSac **09 17 04.1 -1.1**
KSH PMZ
comp=Z,9.0nm,0.6s
KSH PMZ
comp=Z,53nm,6.3s
KSH LN
comp=Z,86nm,6.0s
KSH LE
comp=Z,77nm,7.0s
KSH LZ
comp=Z,110nm,6.5s
**EKA Eskdalemuir Ar** 72.21 8 P P 09 07 03.2 +0.3
comp=Z,1.4nm,0.3s,baz=331,slow=6.7,SNR=6.8
**SFK Sufi-Kurgan** 72.85 314 P P 09 07 03.3 -0.1
SFK pmax pmax
comp=Z,7.0nm,1.2s
**NONG Nongkai** 74.01 279 P P 09 07 14.6 +0.4
comp=Z,40nm,1.1s,comp=Z,17μm
**SKNT Sakolnakorn** 74.33 277 P P 09 07 16.9 +0.8
comp=Z,25nm,1.8s
**CMAI Chiengmai2** 75.05 283 P P 09 07 20.7 +0.3
comp=Z,22nm,1.1s,comp=Z,851nm
**KHON Khomkaen** 75.53 278 P P 09 07 24.0 +1.0
comp=Z,16nm,1.0s
**LOEI Loei** 75.57 280 P P 09 07 21.7 -1.6
comp=Z,14nm,1.5s
**UTTA Uttaradit** 75.82 281 P P 09 07 24.8 +0.2
comp=Z,14nm,0.8s
**TAPN Taplejung** 75.85 296 *e*P P 09 07 25.0 -0.1
comp=Z,24nm,0.6s
**DZET Dzherino** 75.87 316 P P 09 07 24.6 -0.2
DZET pmax pmax
comp=Z,6.0nm,0.4s
**CHTO Chiang Mai** 75.97 283 P P 09 07 25.3 -0.2
comp=Z,83nm,1.1s
**CHTO Chiang Mai** 75.97 283 *e*P P 09 07 25.0 -0.5
CHTO pmax pmax
comp=Z,14nm,0.8s
**CHTO Chiang Mai** 75.97 283 *e*P P 09 07 25.0 -0.5
comp=Z,14nm,0.8s
**AKASG Malin Array Be** 76.11 348 P P 09 07 24.4 -1.4
comp=Z,2.7nm,0.6s,baz=12,slow=5.5,SNR=14
AKASG LR LR 09 44 26.9
comp=Z,50nm,19.9s,baz=220,slow=38
**AKASG Malin Array Be** 76.11 348 *i*P P 09 07 25.1 -0.7
AKASG pmax pmax
comp=Z,3.0nm,0.6s
**KIEV Kiev** 76.12 348 ⇑ *i*P P 09 07 24.6 -1.3
KIEV pmax pmax
comp=Z,13nm,1.7s
**CMAR Chiang Mai Arr** 76.24 282 P P 09 07 27.5 +0.4
comp=Z,16nm,0.7s,baz=27,slow=6.9,SNR=72
**GUN Gumba** 76.41 298 *e*P P 09 07 28.2 -0.1
comp=Z,42nm,0.5s
**PBKT Sadao Pong** 76.47 280 P P 09 07 28.8 +0.4
comp=Z,14nm,1.0s
**CLL Collm** 76.76 358 *e*P P 09 07 30.0 +0.5
CLL pmax pmax
comp=Z,10.0nm,1.3s
**CLL Collm** 76.76 358 *e*P P 09 07 30.0 +0.5
comp=Z,10.0nm,1.3s
**RAMN Ramite** 76.77 297 *e*P P 09 07 29.9 -0.4
comp=Z,72nm,0.9s
**DZM Mont Dzumac** 76.83 202 *e*LR LR 09 31 19.3
comp=Z,175nm,25.6s
**PKI Pulchoki** 76.93 298 *e*P P 09 07 30.7 -0.6
comp=Z,33nm,1.0s
**PKIN Phulchoki** 76.94 298 *e*P P 09 07 30.9 -0.3
comp=Z,11nm,0.6s
**GKN Gorkha** 77.01 299 *e*P P 09 07 30.9 -0.6
comp=Z,45nm,0.9s
**DMN Daman** 77.07 298 *e*P P 09 07 31.7 -0.2
comp=Z,27nm,0.8s
**BRG Berggiesshubel** 77.17 357 *e*P P 09 07 31.8 0.0
comp=Z,4.5nm,0.9s
**BRG Berggiesshubel** 77.17 357 *e*P P 09 07 31.8 0.0
BRG pmax pmax
comp=Z,5.0nm,0.9s
**DANN Dangsing** 77.20 300 *e*P P 09 07 32.8 +0.1
**LVV L'vov** 77.58 351 *e*P P 09 07 35.1 +1.0
**KOLN Koldanda** 77.75 300 *e*P P 09 07 35.2 -0.5
**UMPA Umpang Tak** 78.03 281 P P 09 07 39.2 +2.0
comp=Z,6.9nm,1.0s
**UTHA Uthaitani** 78.18 280 P P 09 07 38.5 +0.6
**VRAC Vranov** 78.64 356 P P 09 07 41.0 +1.0
comp=Z,5.0nm,0.4s,baz=330,slow=7.0,SNR=6.1
**VRAC Vranov** 78.64 356 *e*P P 09 07 41.0 +1.0
**JTS JuntasAbangare** 78.93 88 ⇑ *i*P P 09 07 41.7 -0.4
JTS pmax pmax
comp=Z,19nm,1.4s
**GERES GERESS Array B** 79.21 357 P P 09 07 43.4 +0.1
comp=Z,2.1nm,0.7s,baz=18,slow=4.8,SNR=14
**KBL Kabul** 79.36 314 *i*P P 09 07 43.8 -0.7
**BURAR Bucovina Array** 79.64 350 ⇑ *i*P P 09 07 44.4 -1.2
**CONA Conrad Observa** 80.05 356 ⇑ *e*P P 09 07 48.6 +0.7
comp=Z,5.0nm,0.8s
**KIV Kislovodsk** 80.08 337 *e*P P 09 07 48.6 +0.5
KIV pmax pmax
comp=Z,11nm,0.8s
**KBZ Khabaz** 80.24 336 P P 09 07 48.6 -0.1
comp=Z,5.1nm,0.8s,baz=149,slow=1.7,SNR=6.8
**WTTA Wattenberg** 80.83 359 ⇑ *i*P P 09 07 52.9 +0.7
comp=Z,5.4nm,0.6s
**GEYT Alibeck** 80.87 323 P P 09 07 52.4 0.0
comp=Z,12nm,1.0s,baz=343,slow=4.6,SNR=9.0

**ZEI Tsey** 80.87 335 *e*P P 09 07 52.2 -0.3
ZEI pmax pmax
comp=Z,91nm,1.5s
**KBA Koelnbreinsper** 80.98 358 ⇑ *i*P P 09 07 54.1 +1.1
comp=Z,13nm,0.6s
**FETA Feichten** 81.08 359 ⇑ *i*P P 09 07 54.2 +0.7
comp=Z,6.4nm,0.7s
**RKT Rikitea** 81.08 148 *e*T T 10 37 12.9
comp=Z,5.4nm,0.3s
**DOPR Dopca** 81.24 349 ⇓ *i*P P 09 07 53.2 -1.0
**DAVOX Davos/Dischmat** 81.32 0 P P 09 07 55.7 +0.9
comp=Z,1.8nm,0.3s,baz=341,slow=23,SNR=5.2
**SOKA Soboth** 81.33 356 ⇑ *e*P P 09 07 55.3 +0.6
comp=Z,13nm,1.1s
**ABTA Abfaltersbach** 81.33 358 ⇑ *e*P P 09 07 55.8 +1.1
comp=Z,6.0nm,1.0s
**MLR Muntele Rosu** 81.65 349 ⇑ *i*P P 09 07 55.7 -0.8
**CFR Carcaliu** 81.67 347 ⇑ *i*P P 09 07 58.0 +1.6
**GZR Gura Zlata** 82.09 351 ⇑ *i*P P 09 07 59.0 +0.3
**BNI Bardonecchia** 83.01 2 *e*P P 09 08 05.5 +1.9
BNI pmax pmax
comp=Z,3.0nm,0.8s
**BNI Bardonecchia** 83.01 2 *e*P P 09 08 05.5 +1.9
comp=Z,3.4nm,0.8s
**BRTR Keskin Array B** 86.09 342 P P 09 08 19.8 +0.5
comp=Z,2.4nm,0.7s,baz=30,slow=3.3,SNR=4.8
BRTR LR LR 09 53 53.3
comp=Z,22nm,18.2s,baz=354,slow=41
**MALT Malatya** 86.44 338 *ce*P P 09 08 22.6 +1.6
**MALT Malatya** 86.44 338 ⇑ *i*P P 09 08 22.7 +1.7
**WRAB Tennant Creek** 86.62 231 ⇑ *i*P P 09 08 21.6 -0.2
WRAB pmax pmax
comp=Z,12nm,2.5s
**WRAB Tennant Creek** 86.62 231 *e*P P 09 08 20.2 -1.5
comp=Z,16nm,1.3s
**WRA Warramunga Arr** 86.63 231 P P 09 08 20.4 -1.5
comp=Z,2.8nm,0.8s,baz=36,slow=5.6,SNR=20
**WRA Warramunga Arr** 86.63 231 *i*P P 09 08 20.3 -1.5
WRA pmax pmax
comp=Z,3.0nm,0.8s
**ESDC Sonseca Array** 87.63 11 P P 09 08 26.9 +0.2
comp=Z,2.9nm,0.6s,baz=350,slow=4.8,SNR=14
**PSI Prapat** 88.45 273 P P 09 08 31.0 0.0
comp=Z,22nm,0.7s,baz=347,slow=2.9,SNR=10
**HYB Hyderabad** 88.83 297 *i*P P 09 08 31.0 -1.6
**ROSC El Rosal** 89.68 83 LR LR 09 51 52.7
comp=Z,29nm,19.0s,baz=126,slow=38
**ASAR Alice Springs** 90.03 230 P P 09 08 37.4 -0.6
comp=Z,7.7nm,0.8s,baz=30,slow=4.7,SNR=90
**EIL Elat** 95.52 339 LR LR 09 55 50.2
comp=Z,29nm,18.6s,baz=62,slow=38
**PALK Pallekele** 95.85 290 P P 09 09 04.7 -0.5
comp=Z,7.6nm,0.7s,baz=279,slow=3.0,SNR=5.1
**PALK Pallekele** 95.85 290 *ce*P P 09 09 05.6 +0.5
**PALK Pallekele** 95.85 290 *e*P P 09 09 04.9 -0.3
comp=Z,15nm,0.9s
**RAYN Ar Rayn** 98.39 327 *e*P P 09 09 15.8 -0.8
comp=Z,8.5nm,1.0s
**TORD Torodi Ar. Bea** 114.46 9 PKP PKPdf 09 14 17.6 -0.8
comp=Z,0.7nm,0.6s,baz=345,slow=2.8,SNR=7.7
**DBIC Dimbokro** 119.93 17 PKP **PKPdf** 09 14 28.3 -0.7
comp=Z,1.2nm,0.4s,baz=59,slow=1.5,SNR=4.0
**MAW Mawson** 150.55 218 PKPbc **PKPbc** 09 15 28.0 -0.6
comp=Z,1.7nm,0.6s,baz=91,slow=9.9,SNR=7.4
**MAW Mawson** 150.55 218 PKIKP **PKPbc** 09 15 28.0 -0.6
**BOSA Boshof** 153.77 328 PKPbc **PKPbc** 09 15 37.7 +0.4
comp=Z,4.5nm,0.6s,baz=19,slow=2.0,SNR=14

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*ISCJB **01** 09:00:26.9±0.6, 41°.20N±0°.07×135°.98E±0°.07, h400km, mb3.2/7, Error ellipse: s-maj=8.9km s-min=7.4km az=12.7*
*JMA **01** 09:00:28.1±0.5, 41°.19N×136°.11E, h399km, M3.6*
*IDC **01** 09:00:28.6±1.1, 41°.43N×135°.51E, h365km±14km, mb3.1/7, mb1 3.2/11, mb1mx3.0/71, mbtmp3.7/11, Error ellipse: s-maj=26.2km s-min=16.4km az=180.0*
**ISC 01 09:00:28.1±0.9, 41°21N±0°.08×136°14E±0°.09, h400km, n19, σ1§15/17, mb3.3/7, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOT** | **Ohata** | **3.70** | **86** | P | **Pn** | **09 01 38.1** | **+0.8** |
| **JKB** | **Kayabe** | **3.73** | **78** | P | **Pn** | **09 01 38.4** | **+0.9** |
| **USRK** | **Ussuriysk Ar.** | **4.28** | **316** | P | Pn | 09 01 37.5 | -5.2 |
| | 4.6nm,0.3s,baz=134,slow=8.6,SNR=114 | | | | | | |
| **JMK** | **Ichinoseki** | **4.50** | **118** | P | **Pn** | **09 01 45.5** | **+0.5** |
| JMK | | | | *e*S | S | **09 02 47.2** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **4.93** | **160** | P | Pn | 09 01 53.1 | +3.7 |
| | 0.4nm,0.3s,baz=323,slow=10,SNR=4.4 | | | | | | |
| **JCH** | **Churui** | **5.57** | **73** | P | **Pn** | **09 01 56.5** | **+0.6** |
| JCH | | | | S | **S** | **09 03 05.7** | **-1.8** |
| **ASAJ** | **Asahikawa** | **5.58** | **56** | P | **Pn** | **09 01 57.0** | **+1.0** |
| | 7.4nm,0.3s,baz=238,slow=8.9,SNR=34 | | | | | | |
| **JRY** | **Ryogami san** | **5.61** | **156** | P | **Pn** | **09 01 57.8** | **+1.2** |
| **JTKR** | **Abashiri--Toko** | **6.36** | **62** | P | **Pn** | **09 02 05.7** | **+1.2** |
| **KSRS** | **Korea Array** | **7.39** | **242** | P | Pn | 09 02 12.4 | -3.6 |
| | 0.3nm,0.3s,baz=49,slow=11,SNR=7.7 | | | | | | |
| **NEM2** | **Nemuro 2** | **7.44** | **70** | P | **Pn** | **09 02 16.9** | **+0.4** |
| NEM2 | | | | S | **S** | **09 03 44.5** | **-0.8** |
| **BSO1** | **Boso 1** | **7.57** | **148** | P | **P** | **09 02 18.5** | **+0.3** |
| BSO1 | | | | S | **S** | **09 03 46.1** | **-1.3** |
| **MKAR** | **Makanchi Array** | **38.50** | **297** | P | **P** | **09 07 12.4** | **-1.2** |
| | 1.0nm,0.6s,baz=82,slow=9.8,SNR=2.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **40.24** | **304** | P | **P** | **09 07 26.0** | **-1.7** |
| | 1.7nm,0.5s,baz=80,slow=8.5,SNR=4.0 | | | | | | |
| **ILAR** | **Eielson Array** | **48.25** | **34** | P | P | 09 08 34.0 | +3.9 |
| | 0.3nm,0.8s,baz=260,slow=5.4,SNR=3.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.62** | **337** | P | **P** | **09 09 45.5** | **+1.3** |
| | 1.0nm,0.8s,baz=66,slow=6.6,SNR=5.1 | | | | | | |
| **FINES** | **FINESS Array B** | **63.18** | **330** | P | **P** | **09 10 15.6** | **+0.9** |
| | 1.0nm,0.8s,baz=93,slow=12,SNR=3.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.68** | **51** | P | P | 09 11 36.9 | +6.0 |
| | 0.5nm,0.6s,baz=302,slow=5.7,SNR=5.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **90.66** | **49** | P | P | 09 12 51.6 | +5.0 |
| | 0.2nm,0.8s,baz=293,slow=2.1,SNR=3.5 | | | | | | |

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*IDC **01** 09:00:43.2±2.5, 64°.62N×32°.58E, h0km, mb1 3.2/4, mb1mx3.0/59, mbtmp3.1/4, ML2.4/4, Error ellipse: s-maj=30.5km s-min=9.5km az=108.0*
*ISCJB **01** 09:00:46.2±0.7, 64°.79N±0°.04×30°.6E±0°.1, h0km, Error ellipse: s-maj=8.1km s-min=4.3km az=27.2*
*KOLA **01** 09:00:47.1, 64°.61N×31°.26E, h0km*
*CSEM **01** 09:00:47.1±0.4, 64°.78N×30°.76E, h2km, ML1.6, Error ellipse: s-maj=9.9km s-min=5.3km az=98.0, Mining explosion.*
*BER **01** 09:00:47.8±3.6, 64°.75N×30°.90E, h0km, ML2.3(NAO), Suspected explosion*
*HEL **01** 09:00:48.7±0.5, 64°.82N×30°.51E, h0km, ML1.6(UPP), Explosion*
*NAO **01** 09:00:48.5±1.5, 64°.82N×30°.53E, ML2.3*
*UPP **01** 09:00:56.0, 64°.87N×29°.23E, h0km, ML1.6, Suspected Mining explosion.*
**ISC 01 09:00:47.1±1.1, 64°78N±0°.03×30°64E±0°.06, h0km, n74, σ1§32/86, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KU6** | **Riekki** | **1.29** | **346** | *e*P | **Pg** | **09 01 10.6** | **-1.2** |
| **KU6** | **Riekki** | **1.29** | **346** | P | **Pg** | **09 01 10.6** | **-1.2** |
| **MSF** | **Maaselka** | **1.32** | **330** | *e*P | **Pg** | **09 01 11.2** | **-1.1** |
| **MSF** | **Maaselka** | **1.32** | **330** | P | **Pg** | **09 01 11.2** | **-1.1** |
| **KJN** | **Kajaani** | **1.45** | **243** | *e*P | **Pn** | **09 01 14.0** | **-0.6** |
| **KJN** | **Kajaani** | **1.45** | **243** | P | **Pn** | **09 01 13.9** | **-0.6** |
| **JOF** | **Joensuu** | **1.89** | **171** | *e*P | **Pn** | **09 01 20.0** | **-0.6** |
| **JOF** | **Joensuu** | **1.89** | **171** | P | **Pn** | **09 01 20.0** | **-0.6** |
| **OUL** | **Oulu** | **2.04** | **281** | *e*P | **Pn** | **09 01 23.9** | **+1.2** |
| **OUL** | **Oulu** | **2.04** | **281** | P | **Pn** | **09 01 23.8** | **+1.2** |
| **SUF** | **Sumiainen** | **2.87** | **226** | SG | **Pb** | **09 01 37.8** | **-1.4** |
| **SUF** | **Sumiainen** | **2.87** | **226** | Sg | **Pb** | **09 01 37.7** | **-1.4** |
| **APA0** | **Apatity Array** | **3.00** | **18** | Pn | **Pn** | **09 01 36.0** | **+0.2** |
| | baz=186,slow=16 | | | | | | |
| APA0 | | | | Lg | Lg | 09 02 21.7 | |
| | baz=202,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **3.00** | **18** | Pn | **Pn** | **09 01 36.0** | **+0.2** |
| | baz=186,slow=16 | | | | | | |
| APA0 | | | | Lg | Lg | 09 02 21.7 | |
| | baz=202,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **3.00** | **18** | P | **Pn** | **09 01 36.4** | **+0.6** |
| APA0 | | | | S | **Sn** | **09 02 13.3** | **+1.0** |
| **APA0** | **Apatity Array** | **3.00** | **18** | Pn | **Pn** | **09 01 36.0** | **+0.2** |
| APA0 | | | | Lg | Lg | 09 02 21.7 | |
| **APA** | **Apatity** | **3.02** | **21** | P | **Pn** | **09 01 36.5** | **+0.4** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| APA | | | | S | Sn | 09 02 13.5 | +0.6 |
| KALU | Kalix | 3.24 | 293 | eP | Pn | 09 01 40.1 | +0.9 |
| KALU | Kalix | 3.24 | 293 | P | Pn | 09 01 40.0 | +0.9 |
| KAF | Kangasniemi | 3.31 | 218 | eP | Pn | 09 01 41.9 | +1.9 |
| KAF | Kangasniemi | 3.31 | 218 | PG | Pn | 09 01 42.1 | +2.0 |
| KAF | Kangasniemi | 3.31 | 218 | Pg | Pn | 09 01 42.0 | +1.9 |
| KAF | Kangasniemi | 3.31 | 218 | P | Pn | 09 01 41.9 | +1.9 |
| KEF | Keuruu | 3.68 | 227 | PB | Pn | 09 01 47.1 | +1.9 |
| KEF | Keuruu | 3.68 | 227 | Pb | Pn | 09 01 47.0 | +1.8 |
| SJUU | Sjulsmark | 3.88 | 285 | eP | Pn | 09 01 48.4 | +0.5 |
| SJUU | Sjulsmark | 3.88 | 285 | P | Pn | 09 01 48.4 | +0.5 |
| ERTU | Ertsjaerv | 3.92 | 301 | eP | Pn | 09 01 49.4 | +0.9 |
| ERTU | Ertsjaerv | 3.92 | 301 | P | Pn | 09 01 49.4 | +0.9 |
| VAF | Ylistaro | 3.93 | 247 | PG | Pg | 09 02 02.5 | +0.2 |
| VAF | | | | MSG | | 09 02 22.0 | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| VAF | Ylistaro | 3.93 | 247 | Pg | Pg | 09 02 02.4 | +0.2 |
| FIA0 | FINESS Array S | 3.94 | 214 | Pn | Pn | 09 01 49.5 | +0.8 |
| | baz=32,slow=12 | | | | | | |
| FIA0 | | | | Pg | Pb | 09 01 56.8 | -0.5 |
| | baz=39,slow=12 | | | | | | |
| FIA0 | | | | Lg | Lg | 09 02 51.8 | |
| | baz=25,slow=37 | | | | | | |
| FIA0 | FINESS Array S | 3.94 | 214 | Pn | Pn | 09 01 49.5 | +0.8 |
| | baz=32,slow=12 | | | | | | |
| FIA0 | | | | Pg | Pb | 09 01 56.8 | -0.5 |
| | baz=39,slow=12 | | | | | | |
| FIA0 | | | | Lg | Lg | 09 02 51.8 | |
| | baz=25,slow=37 | | | | | | |
| FIA0 | FINESS Array S | 3.94 | 214 | PN | Pb | 09 01 57.4 | +0.1 |
| FIA0 | | | | SG | Pg | 09 02 08.5 | +6.0 |
| FIA0 | FINESS Array S | 3.94 | 214 | Pn | Pn | 09 01 49.5 | +0.8 |
| | SNR=1.6 | | | | | | |
| FIA0 | | | | Lg | Lg | 09 02 51.8 | |
| | SNR=4.6 | | | | | | |
| FINES | FINESS Array B | 3.94 | 214 | Pn | Pn | 09 01 49.8 | +1.1 |
| | comp=Z,0.1nm,0.3s,baz=39,slow=13,SNR=7.1 | | | | | | |
| FINES | | | | Sn | Sb | 09 02 43.0 | -2.3 |
| | comp=Z,0.3nm,0.3s,baz=45,slow=20,SNR=3.8 | | | | | | |
| FINES | | | | Lg | Lg | 09 02 59.1 | |
| | comp=Z,1.3nm,0.3s,baz=37,slow=29,SNR=7.3 | | | | | | |
| BURU | Burvik | 3.98 | 271 | eP | Pn | 09 01 49.4 | +0.1 |
| BURU | Burvik | 3.98 | 271 | P | Pn | 09 01 49.4 | +0.1 |
| HARU | Harads | 4.26 | 293 | eP | Pn | 09 01 54.1 | +1.0 |
| HARU | Harads | 4.26 | 293 | P | Pn | 09 01 54.1 | +1.0 |
| MASU | Masugnsbyn | 4.42 | 311 | eP | Pn | 09 01 57.4 | +2.0 |
| MASU | Masugnsbyn | 4.42 | 311 | P | Pn | 09 01 57.3 | +2.0 |
| LILU | Lilltraesk | 4.60 | 281 | eP | Pn | 09 01 58.0 | +0.2 |
| LILU | Lilltraesk | 4.60 | 281 | P | Pn | 09 01 58.0 | +0.2 |
| DUNU | Dundret | 4.74 | 304 | eP | Pn | 09 02 01.3 | +1.6 |
| DUNU | Dundret | 4.74 | 304 | P | Pn | 09 02 01.3 | +1.6 |
| LANU | Lannavaara | 4.78 | 317 | eP | Pn | 09 02 01.5 | +1.3 |
| LANU | Lannavaara | 4.78 | 317 | P | Pn | 09 02 01.5 | +1.3 |
| ARE0 | ARCESS Array S | 5.18 | 340 | eP | Pn | 09 02 05.3 | -0.5 |
| ARE0 | ARCESS Array S | 5.18 | 340 | P | Pn | 09 02 05.2 | -0.5 |
| ARA0 | ARCESS Array S | 5.18 | 340 | Pn | Pn | 09 02 05.5 | -0.2 |
| | baz=154,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 09 03 02.3 | -3.7 |
| | baz=162,slow=16 | | | | | | |
| ARA0 | | | | Lg | Lg | 09 03 26.9 | |
| | baz=156,slow=37 | | | | | | |
| ARA0 | ARCESS Array S | 5.18 | 340 | Pn | Pn | 09 02 05.5 | -0.2 |
| | baz=154,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 09 03 02.3 | -3.7 |
| | baz=162,slow=16 | | | | | | |
| ARA0 | | | | Lg | Lg | 09 03 26.9 | |
| | baz=156,slow=37 | | | | | | |
| ARA0 | ARCESS Array S | 5.18 | 340 | Pn | Pn | 09 02 05.5 | -0.2 |
| | SNR=115 | | | | | | |
| ARCES | ARCESS Array B | 5.18 | 340 | Pn | Pn | 09 02 05.5 | -0.2 |
| | comp=Z,0.2nm,0.3s,baz=152,slow=12,SNR=26 | | | | | | |
| ARCES | | | | Sn | Sn | 09 03 10.2 | +4.2 |
| | comp=Z,0.5nm,0.3s,baz=160,slow=23,SNR=7.7 | | | | | | |
| ARCES | | | | Lg | Lg | 09 03 33.7 | |
| | comp=Z,1.0nm,0.3s,baz=154,slow=32,SNR=8.3 | | | | | | |
| KEV | Kevo | 5.19 | 346 | Pn | Pn | 09 02 05.8 | -0.1 |
| KEV | | | | Lg | Lg | 09 03 27.8 | |
| KEV | Kevo | 5.19 | 346 | Pn | Pn | 09 02 05.8 | -0.1 |
| KEV | | | | Lg | Lg | 09 03 27.8 | |
| KEV | Kevo | 5.19 | 346 | Pn | Pn | 09 02 05.8 | -0.1 |
| HUSU | Husum | 5.22 | 259 | eP | Pn | 09 02 07.2 | +1.0 |
| HUSU | Husum | 5.22 | 259 | P | Pn | 09 02 07.2 | +1.0 |
| SALU | Saltoluokta | 5.58 | 303 | eP | Pn | 09 02 11.9 | +0.6 |
| SALU | Saltoluokta | 5.58 | 303 | P | Pn | 09 02 11.9 | +0.6 |
| NIKU | Nikkaluokta | 5.61 | 309 | eP | Pn | 09 02 12.9 | +1.3 |
| NIKU | Nikkaluokta | 5.61 | 309 | P | Pn | 09 02 12.9 | +1.3 |
| KIF | Kilpisjarvi | 5.74 | 322 | Pn | Pn | 09 02 13.4 | 0.0 |
| KIF | | | | Sn | Sn | 09 03 20.5 | +0.7 |
| KIF | | | | Lg | Lg | 09 03 51.4 | |
| KIF | Kilpisjarvi | 5.74 | 322 | Pn | Pn | 09 02 13.4 | 0.0 |
| KIF | | | | Sn | Sn | 09 03 20.5 | +0.7 |
| KIF | | | | Lg | Lg | 09 03 51.4 | |
| KIF | Kilpisjarvi | 5.74 | 322 | Pn | Pn | 09 02 13.4 | 0.0 |
| | SNR=50 | | | | | | |
| KIF | | | | Sn | Sn | 09 03 20.5 | +0.7 |
| KIF | | | | Lg | Lg | 09 03 51.4 | |
| HFS | Hagfors | 9.11 | 247 | Pn | Pn | 09 02 58.6 | -1.1 |
| | baz=48,slow=14 | | | | | | |
| HFS | Hagfors | 9.11 | 247 | Pn | Pn | 09 02 58.6 | -1.1 |
| | baz=48,slow=14 | | | | | | |
| HFS | Hagfors | 9.11 | 247 | Pn | Pn | 09 03 00.3 | +0.7 |
| | comp=Z,0.1nm,0.3s,baz=52,slow=14,SNR=3.0 | | | | | | |
| HFS | | | | Sn | Sn | 09 04 46.7 | +3.9 |
| | comp=Z,0.1nm,0.3s,baz=37,slow=25,SNR=2.8 | | | | | | |
| HFS | Hagfors | 9.11 | 247 | Pn | Pn | 09 02 58.6 | -1.1 |
| | SNR=50 | | | | | | |
| NB2 | NORSAR Subarra | 9.60 | 256 | Pn | Pn | 09 03 06.0 | -0.4 |
| | baz=58,slow=16 | | | | | | |
| NB2 | NORSAR Subarra | 9.60 | 256 | Pn | Pn | 09 03 06.0 | -0.4 |
| | baz=58,slow=16 | | | | | | |
| NB2 | NORSAR Subarra | 9.60 | 256 | Pn | Pn | 09 03 06.0 | -0.4 |
| | SNR=1.0 | | | | | | |
| NOA | NORSAR Array B | 9.60 | 256 | Pn | Pn | 09 03 08.2 | +1.8 |
| | comp=Z,0.1nm,0.3s,baz=60,slow=14,SNR=2.7 | | | | | | |

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*AUST **01** 09:05:52.9±0.4, 7.°41S×129.°60E, h52km, Error ellipse: s-maj=1.1km s-min=0.7km az=281.0*
*IDC **01** 09:05:52.1±1.8, 7.°17S×129.°55E, h104km±15km, mb3.9/7, mb1 4.1/13, mb1mx3.8/41, mbtmp4.4/13, Error ellipse: s-maj=20.2km s-min=12.2km az=106.0*
*ISCJB **01** 09:05:53.5±0.4, 7.°23S±0.°04×129.°53E±0.°05, h139km, mb3.9/10, Error ellipse: s-maj=6.5km s-min=5.3km az=8.7*
*NEIC **01** 09:05:53.1±0.9, 7.°24S×129.°61E, h116km±9km, mb4.6/7, Error ellipse: s-maj=11.4km s-min=8.6km az=75.0*
**ISC 01 09:05:55.4**±0.5, **7.°11S**±0.°06×**129.°51E**±0.°07, **h139**km, **n41**, σ1s**48**/39, **mb3.9**/10, **Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 4.98 | 33 | P | Pn | 09 07 07.6 | -0.9 |
| | baz=5.2,SNR=11 | | | | | | |
| FAKI | Fak Fak | 4.98 | 33 | ePn | Pn | 09 07 07.5 | -0.9 |
| | 43nm,0.5s | | | | | | |
| FAKI | | | | eSn | Sn | 09 08 02.7 | -2.7 |
| SOEI | Soe | 5.81 | 243 | P | Pn | 09 07 19.4 | -0.2 |
| | baz=5.8,SNR=9.3 | | | | | | |
| SOEI | Soe | 5.81 | 243 | ePn | Pn | 09 07 19.1 | -0.5 |
| | 57nm,0.8s | | | | | | |
| SOEI | | | | eSn | Sn | 09 08 23.1 | -2.2 |
| MTN | Manton Dam | 5.92 | 164 | P | Pn | 09 07 18.9 | -1.9 |
| | baz=5.6,SNR=118 | | | | | | |
| KDU | Kakadu | 6.26 | 152 | P | Pn | 09 07 23.4 | -2.1 |
| | baz=6.0,SNR=217 | | | | | | |
| SIJI | Sorong | 6.45 | 16 | P | Pn | 09 07 26.9 | -1.1 |
| | 3.6nm,0.3s,baz=62,slow=1.8,SNR=11 | | | | | | |
| SIJI | | | | S | Sn | 09 08 37.6 | -2.9 |
| | 4.1nm,0.3s,baz=242,slow=23,SNR=12 | | | | | | |
| SWI | Sorong | 6.45 | 16 | P | Pn | 09 07 28.5 | +0.4 |
| | baz=6.7,SNR=3.4 | | | | | | |
| BATI | Baumata | 6.54 | 242 | P | Pn | 09 07 27.6 | -1.7 |
| | 16nm,0.3s,baz=124,slow=2.9,SNR=6.3 | | | | | | |
| BATI | | | | S | Sn | 09 08 39.2 | -3.6 |
| | 14nm,0.3s,baz=354,slow=18,SNR=3.7 | | | | | | |
| KNRA | Kununurra | 8.54 | 185 | P | Pn | 09 07 52.7 | -3.4 |
| | baz=8.3,SNR=65 | | | | | | |
| KAPI | Kappang | 9.92 | 282 | P | Pn | 09 08 14.1 | -0.4 |
| | 1.1nm,0.3s,baz=126,slow=8.7,SNR=3.0 | | | | | | |
| KAPI | Kappang | 9.92 | 282 | ePn | Pn | 09 08 14.5 | -0.1 |
| FITZ | Fitzroy Crossi | 11.55 | 199 | P | Pn | 09 08 31.5 | -4.7 |
| | 2.9nm,0.3s,baz=29,slow=9.8,SNR=28 | | | | | | |
| FITZ | | | | S | Sn | 09 10 31.3 | -12 |
| | 11nm,0.3s,baz=230,slow=21,SNR=9.7 | | | | | | |
| FITZ | Fitzroy Crossi | 11.55 | 199 | P | Pn | 09 08 31.8 | -4.4 |
| | baz=11,SNR=25 | | | | | | |
| FITZ | Fitzroy Crossi | 11.55 | 199 | ePn | Pn | 09 08 31.4 | -4.8 |
| | 9.6nm,0.5s | | | | | | |
| FITZ | | | | S | Sn | 09 10 31.3 | -12 |
| WRAB | Tennant Creek | 13.58 | 160 | ePn | Pn | 09 08 57.8 | -4.7 |
| | 23nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 13.59 | 160 | P | Pn | 09 08 58.1 | -4.5 |
| | 6.3nm,0.3s,baz=339,slow=13,SNR=116 | | | | | | |
| WRA | | | | S | Sn | 09 11 20.0 | -13 |
| | 3.6nm,0.3s,baz=330,slow=24,SNR=8.2 | | | | | | |
| COEN | Coen | 15.06 | 118 | P | P | 09 09 22.5 | -0.6 |
| | baz=15,SNR=8.4 | | | | | | |
| QIS | Mount Isa | 16.56 | 145 | P | Pn | 09 09 38.7 | -1.0 |
| | baz=16,SNR=9.9 | | | | | | |
| ASAR | Alice Springs | 16.99 | 166 | P | P | 09 09 42.4 | -2.1 |
| | 1.8nm,0.3s,baz=343,slow=14,SNR=63 | | | | | | |
| ASAR | | | | S | S | 09 12 42.5 | -12 |
| | 0.6nm,0.3s,baz=356,slow=29,SNR=4.0 | | | | | | |
| WRKA | Warakurna | 17.86 | 184 | P | P | 09 09 53.1 | -0.9 |
| | baz=18,SNR=17 | | | | | | |
| MEEK | Meekatharra | 22.01 | 207 | P | P | 09 10 38.8 | +0.2 |
| | baz=22,SNR=3.6 | | | | | | |
| FORT | Forrest | 23.58 | 183 | P | P | 09 10 54.5 | +1.0 |
| | baz=23,SNR=11 | | | | | | |
| XMIS | Christmas Isla | 23.80 | 260 | eP | P | 09 10 56.0 | +0.3 |
| QLP | Quilpie | 23.90 | 146 | P | P | 09 10 58.7 | +2.3 |
| | baz=24,SNR=4.4 | | | | | | |
| BBOO | Buckleboo | 26.28 | 167 | P | P | 09 11 19.6 | +1.6 |
| | baz=26,SNR=6.6 | | | | | | |
| BBOO | Buckleboo | 26.28 | 167 | eP | P | 09 11 18.8 | +0.9 |
| | 2.0nm,0.2s | | | | | | |
| ARPS | Mount Arapiles | 31.59 | 161 | P | P | 09 12 06.9 | +2.0 |
| | baz=31,SNR=6.1 | | | | | | |
| CMAR | Chiang Mai Arr | 39.43 | 311 | P | P | 09 13 12.8 | +0.7 |
| | 1.4nm,0.4s,baz=141,slow=8.5,SNR=5.4 | | | | | | |
| SONM | Songino Array | 58.40 | 342 | P | P | 09 15 37.1 | +0.8 |
| | 0.5nm,0.5s,baz=143,slow=8.0,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 68.05 | 327 | P | P | 09 16 40.9 | +0.9 |
| | 4.3nm,0.7s,baz=125,slow=7.7,SNR=21 | | | | | | |
| ZALV | Zalesovo Beam | 71.47 | 334 | P | P | 09 17 00.9 | +0.3 |
| | 2.8nm,0.3s,baz=116,slow=6.6,SNR=6.9 | | | | | | |
| SEY | Seymchan | 72.01 | 11 | P | P | 09 17 04.8 | +1.1 |
| | 3.1nm,0.6s,baz=203,slow=6.0,SNR=8.1 | | | | | | |
| MAW | Mawson | 74.67 | 201 | P | P | 09 17 19.8 | +0.6 |
| | 0.9nm,0.5s,baz=63,slow=14,SNR=3.9 | | | | | | |
| ABKAR | Akbulak array | 82.29 | 322 | eP | P | 09 18 01.8 | +0.4 |
| | 0.6nm,0.4s | | | | | | |
| QSPA | South Pole Qui | 82.86 | 180 | eP | P | 09 18 04.7 | +0.5 |
| | 0.7nm,0.6s | | | | | | |
| ILAR | Eielson Array | 93.66 | 25 | P | P | 09 18 54.9 | -0.9 |
| | 0.3nm,0.7s,baz=242,slow=4.9,SNR=5.1 | | | | | | |
| TXAR | Lajitas Array | 125.41 | 59 | PKP | PKPdf | 09 24 42.3 | +1.5 |
| | 0.1nm,0.5s,baz=204,slow=2.0,SNR=2.5 | | | | | | |
| TORD | Torodi Ar. Bea | 128.35 | 281 | PKP | PKPdf | 09 24 47.2 | +0.7 |
| | 0.4nm,0.6s,baz=90,slow=1.5,SNR=3.7 | | | | | | |
| CPUP | Villa Florida | 146.10 | 169 | PKPbc | PKPab | 09 25 20.8 | +0.1 |
| | 2.8nm,0.9s,baz=16,slow=0.4,SNR=5.1 | | | | | | |
| LPAZ | La Paz | 150.93 | 143 | PKPbc | PKPbc | 09 25 35.1 | +1.6 |
| | 1.5nm,0.4s,baz=22,slow=1.5,SNR=16 | | | | | | |

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*BJI **01** 09:09:29.8, 5.°28N×125.°62E, h98km, mb4.7/33, mB4.9/23*
*ISCJB **01** 09:09:31.7±0.3, 5.°93N±0.°02×125.°66E±0.°03, h79km±3km, mb4.4/40, Error ellipse: s-maj=5.2km s-min=3.0km az=166.5*
*MAN **01** 09:09:32, 6.°00N×125.°60E, h55km, mb5.4, ML4.4, MS4.7*
*MAN INTENSITY II - GENERAL SANTOS CITY; DON MARCELINO DAVAO.*
*IDC **01** 09:09:33.5±1.8, 5.°93N×125.°58E, h88km±17km, mb4.1/17, mb1 4.2/19, mb1mx4.0/44, mbtmp4.5/19, MS3.4/8, Ms1 3.5/8, ms1mx3.2/29, Error ellipse: s-maj=17.3km s-min=10.9km az=89.0*
*NEIC **01** 09:09:34.0±0.9, 5.°95N×125.°66E, h92km±9km, mb4.8/12, Error ellipse: s-maj=8.4km s-min=6.1km az=53.0*
*DJA **01** 09:09:34.0±0.8, 6°N±7°×12°6E±°, h10km, M5.1/18, mb5.2/18, mB5.4/16, MLv5.5/12, Mw(mB)4.9/16*
*AUST **01** 09:09:38.3±1.0, 5.°58N×125.°45E, h109km±10km, Error ellipse: s-maj=10.6km s-min=7.1km az=31.0*
**ISC 01 09:09:33.2**±0.6, **5.°93N**±0.°03×**125.°61E**±0.°04, **h73**km±5km, **n140**, σ1s**81**/148, **mb4.4**/40, **5C-3D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSPH | General Santos | 0.68 | 283⇑ | iP | Pn | 09 09 45.2 | -3.1 |
| GSPH | | | | i S | Sn | 09 09 54.8 | -4.7 |
| KCP | Kidapawan | 1.19 | 334 | i P | Pn | 09 09 53.9 | -0.5 |
| KCP | | | | i S | Sn | 09 10 11.3 | +1.2 |
| MATI | Mati | 1.19 | 32 | eP | Pn | 09 09 53.7 | -0.6 |
| MATI | | | | eS | Sn | 09 10 08.3 | -1.8 |
| CTBH | Cotabato--PC H | 1.87 | 313⇑ | iP | Pn | 09 10 01.8 | -1.4 |
| CTBH | | | | i S | Sn | 09 10 24.5 | -1.4 |
| BUKP | Musuan | 2.01 | 344 | eP | Pn | 09 10 05.5 | +0.4 |
| SGSI | Sangihe | 2.23 | 182 | P | Pn | 09 10 07.1 | -1.0 |
| CGP | Cagayan de Oro | 2.67 | 340 | eP | Pn | 09 10 13.7 | -0.3 |
| CGP | | | | i S | Sn | 09 10 49.2 | +4.0 |
| PAGZ | Pagadian | 2.92 | 311 | eP | Pn | 09 10 16.2 | -1.2 |
| BUTP | Butuan | 3.02 | 0 | eP | Pn | 09 10 19.9 | +1.2 |
| DCPH | Dipolog City | 3.46 | 320 | eP | Pn | 09 10 24.5 | -0.2 |
| SCPH | Surigao | 3.83 | 358⇑ | eP | Pn | 09 10 29.0 | -0.8 |
| SNPH | Sibulan | 4.13 | 325 | eP | Pn | 09 10 40.3 | +6.3 |
| SNPH | | | | eS | Sn | 09 11 32.1 | +11 |
| MSLP | Maasin | 4.24 | 350 | eP | Pn | 09 10 35.7 | +0.3 |
| PLP | Palo | 5.24 | 353⇓ | eP | Pn | 09 10 49.7 | +0.7 |
| PLP | | | | eS | Sn | 09 11 42.0 | -6.1 |
| TNTI | Ternate | 5.42 | 161 | P | Pn | 09 10 51.6 | +0.1 |
| | 355nm,0.8s,5μm1.3nm | | | | | | |
| TNTI | Ternate | 5.42 | 161 | ePn | Pn | 09 10 52.1 | +0.6 |
| TNTI | | | | eSn | Sn | 09 11 53.8 | +1.2 |
| KMSI | Cibinong | 5.57 | 197 | P | Pn | 09 10 53.1 | -0.5 |
| | 1μm,1.1s,11μm3.6nm | | | | | | |
| GTOI | Gorontalo | 5.87 | 206 | P | Pn | 09 10 54.4 | -3.3 |
| | 2μm,0.6s,22μm6.1nm | | | | | | |
| RCP | Roxas | 6.27 | 333⇓ | eP | Pn | 09 11 05.1 | +2.0 |
| MRSI | Marisa | 6.54 | 214 | P | Pn | 09 11 05.3 | -1.6 |
| | 813nm,0.8s,8μm8.8nm | | | | | | |
| LBMI | Labuha | 6.79 | 164 | P | Pn | 09 11 10.1 | -0.2 |
| | 112nm,0.8s,2μm1.2nm | | | | | | |
| MYLDM | Lahad Datu | 7.12 | 264 | ePn | Pn | 09 11 15.9 | +1.1 |
| LUWI | Luwuk | 7.49 | 202 | P | Pn | 09 11 20.6 | +0.8 |
| | baz=7.1,SNR=71 | | | | | | |
| LUWI | Luwuk | 7.49 | 202 | P | Pn | 09 11 20.8 | +1.0 |
| | 1μm,0.8s,14μm4.5nm | | | | | | |
| LUWI | Luwuk | 7.49 | 202 | ePn | Pn | 09 11 20.4 | +0.6 |
| LUWI | | | | eSn | Sn | 09 12 44.0 | +0.7 |
| APSI | Ampana | 7.87 | 210 | P | Pn | 09 11 25.8 | +0.8 |
| | 402nm,0.6s,5μm1.5nm | | | | | | |
| SANI | Sanana | 7.94 | 177 | P | Pn | 09 11 23.3 | -2.7 |
| | 304nm,0.7s,4μm1.1nm | | | | | | |
| MPSI | Mapaga | 7.96 | 226 | P | Pn | 09 11 30.3 | +4.0 |
| SWI | Sorong | 8.79 | 140 | P | Pn | 09 11 40.0 | +2.3 |
| | 40nm,0.8s,1μm0.1nm | | | | | | |
| SIJI | Sorong | 8.80 | 140 | P | Pn | 09 11 38.0 | +0.2 |
| | 2.9nm,0.3s,baz=344,slow=8.7,SNR=7.8 | | | | | | |
| SIJI | | | | S | Sn | 09 13 15.2 | -0.3 |
| | 1.5nm,0.3s,baz=163,slow=19,SNR=4.1 | | | | | | |
| PALU | Palau | 8.91 | 80 | P | Pn | 09 11 46.9 | +7.6 |
| | baz=9.1,SNR=4.4 | | | | | | |
| PCI | Palu | 8.91 | 221 | P | Pn | 09 11 41.5 | +2.2 |
| LQP | Lukban | 9.06 | 334⇑ | eP | Pn | 09 11 43.3 | +1.8 |
| NLAI | Namlea | 9.23 | 171 | P | Pn | 09 11 41.8 | -1.8 |
| | 111nm,0.7s,2μm | | | | | | |
| KKM | Kota Kinabalu | 9.35 | 271 | P | Pn | 09 11 47.2 | +1.9 |
| | baz=9.2,SNR=4.2 | | | | | | |
| KKM | Kota Kinabalu | 9.35 | 271 | ePn | Pn | 09 11 47.1 | +1.7 |
| | 144nm,1.6s | | | | | | |
| KKM | | | | eSn | Sn | 09 13 28.3 | -0.7 |
| AAI | Ambon | 9.90 | 165 | P | Pn | 09 11 58.6 | +5.8 |
| KDI | Kendari | 10.27 | 197 | P | Pn | 09 11 58.4 | +0.6 |
| | 132nm,0.7s,970nm | | | | | | |
| TTSI | Tana Toraja | 10.63 | 213 | P | Pn | 09 12 03.3 | +0.5 |
| | 51nm,0.9s,547nm | | | | | | |
| FAKI | Fak Fak | 11.01 | 143 | P | Pn | 09 12 10.1 | +2.1 |
| | baz=11,SNR=3.5 | | | | | | |
| FAKI | Fak Fak | 11.01 | 143 | P | Pn | 09 12 10.6 | +2.6 |
| | 33nm,0.9s | | | | | | |
| FAKI | Fak Fak | 11.01 | 143 | ePn | Pn | 09 12 07.9 | -0.1 |
| SPSI | Sidrap Palu | 11.43 | 211 | P | Pn | 09 12 17.4 | +3.7 |
| KAPI | Kappang | 12.35 | 208 | P | Pn | 09 12 26.5 | +0.3 |
| | 5.4nm,0.3s,baz=44,slow=4.2,SNR=15 | | | | | | |
| KAPI | Kappang | 12.35 | 208 | ePn | Pn | 09 12 26.6 | +0.4 |
| BKSI | Bulukumba | 12.45 | 206 | P | Pn | 09 12 28.6 | +1.0 |
| | 26nm,1.6s,524nm | | | | | | |
| SBUM | Sibu | 13.80 | 256 | ePn | Pn | 09 12 47.4 | +1.8 |
| SOEI | Soe | 15.64 | 185 | P | Pn | 09 13 09.6 | 0.0 |
| | baz=15 | | | | | | |
| SOEI | Soe | 15.64 | 185 | ePn | Pn | 09 13 09.6 | 0.0 |
| | 96nm,1.2s | | | | | | |
| SOEI | | | | eSn | Sn | 09 16 03.1 | +0.9 |
| KSM | Kuching | 15.90 | 254 | P | Pn | 09 13 13.1 | +0.4 |
| | baz=16,SNR=5.3 | | | | | | |
| DLV | T Lat | 17.94 | 291 | eP | P | 09 13 39.5 | +1.8 |
| | 181nm,1.5s | | | | | | |
| JAGI | Jajag, Banyuwa | 18.31 | 219 | P | P | 09 13 41.4 | -0.3 |
| | baz=18 | | | | | | |
| MTN | Manton Dam | 19.44 | 164 | eP | P | 09 13 52.9 | -1.1 |
| | 24nm,0.6s | | | | | | |
| KDU | Kakadu | 19.71 | 160 | P | P | 09 13 57.1 | +0.2 |
| | baz=20,SNR=7.6 | | | | | | |
| QIZ | Qiongzhong | 20.14 | 312 | P | P | 09 14 02.2 | +0.7 |
| QIZ | | | | pP | pP | 09 14 19.9 | +3.3 |
| QIZ | | | | sP | sP | 09 14 31.5 | +5.7 |
| QIZ | | | | S | S | 09 17 44.4 | +0.6 |
| QIZ | | | | sS | sS | 09 18 14.4 | +5.9 |
| QIZ | | | | PMZ | | | |
| | 28nm,1.4s | | | | | | |
| QIZ | | | | PMZ | | | |
| | 330nm,3.0s | | | | | | |
| GUMO | Guam | 20.43 | 67 | LR | LR | 09 20 27.3 | |
| | comp=Z,128nm,21.0s,baz=211,slow=32 | | | | | | |
| KNRA | Kununurra | 21.70 | 172 | P | P | 09 14 17.3 | -1.0 |
| | baz=22,SNR=17 | | | | | | |
| UBPT | Khong Chiam | 21.85 | 297 | P | P | 09 14 20.2 | +0.2 |
| | 34nm,1.4s | | | | | | |
| LEM | Lembang | 21.98 | 235 | P | P | 09 14 20.1 | -1.5 |
| | 32nm,0.7s,baz=89,slow=6.6,SNR=6.3 | | | | | | |
| MYKOM | Kota Tinggi | 22.10 | 260 | eP | P | 09 14 23.4 | +0.7 |
| | 36nm,0.9s | | | | | | |
| SKNT | Sakolnakorn | 23.84 | 299 | P | P | 09 14 40.9 | +1.0 |
| | 38nm,2.3s | | | | | | |
| FITZ | Fitzroy Crossi | 23.88 | 180 | P | P | 09 14 39.2 | -1.0 |
| | 6.8nm,0.5s,baz=8.7,slow=12,SNR=5.6 | | | | | | |
| FITZ | Fitzroy Crossi | 23.88 | 180 | P | P | 09 14 39.9 | -0.4 |
| | baz=24 | | | | | | |
| FITZ | Fitzroy Crossi | 23.88 | 180 | eP | P | 09 14 39.8 | -0.4 |
| IPM | Ipoh | 24.53 | 268 | eP | P | 09 14 45.4 | -0.9 |
| | 34nm,1.1s | | | | | | |
| KHON | Khomkaen | 24.61 | 297 | P | P | 09 14 48.7 | +1.9 |
| | 14nm,0.8s | | | | | | |
| MNAI | Manna | 24.83 | 246 | P | P | 09 14 49.0 | +0.1 |
| | baz=25 | | | | | | |
| KULM | Kulim | 24.85 | 270 | eP | P | 09 14 49.0 | -0.1 |
| | 68nm,1.3s | | | | | | |
| TRTT | Trang | 25.80 | 276 | P | P | 09 14 59.6 | +1.8 |
| | 25nm,1.2s,418nm | | | | | | |
| SRIT | Nakonsritamara | 25.93 | 277 | P | P | 09 15 00.8 | +1.8 |
| | 19nm,1.3s | | | | | | |
| PBKT | Sadao Pong | 26.34 | 296 | P | P | 09 15 02.5 | -0.1 |
| | 36nm,1.0s | | | | | | |
| COEN | Coen | 26.35 | 139 | P | P | 09 15 05.6 | +2.9 |
| | baz=26 | | | | | | |
| LOEI | Loei | 26.43 | 298 | P | P | 09 15 00.4 | -3.0 |
| | 33nm,1.1s | | | | | | |
| WHN | Wuhan | 26.68 | 338 | P | P | 09 15 08.2 | +2.8 |
| NJ2 | Nanjing | 26.74 | 347 | eP | P | 09 15 16.9 | +11 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,60nm,1.0s | | | | | | |
| PSI | Prapat | 26.79 | 264 | P | P | 09 15 05.7 | -1.1 |
| | comp=Z,3.2nm,0.3s,baz=25,slow=5.3,SNR=4.6 | | | | | | |
| WB0 | Warramunga Arr | 26.96 | 162 | P | P | 09 15 09.6 | +1.5 |
| | baz=27 | | | | | | |
| WB8 | Warramunga Arr | 27.00 | 162 | P | P | 09 15 10.1 | +1.6 |
| | baz=27 | | | | | | |
| WRAB | Tennant Creek | 27.10 | 162 | eP | P | 09 15 11.2 | +1.8 |
| | comp=Z,2.7nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 27.11 | 162 | P | P | 09 15 08.7 | -0.8 |
| | comp=Z,0.9nm,0.3s,baz=339,slow=9.8,SNR=4.6 | | | | | | |
| WRA | | | | ScP | ScP | 09 21 59.0 | -3.9 |
| | comp=Z,0.1nm,0.5s,baz=346,slow=2.8,SNR=3.1 | | | | | | |
| WRA | | | | LR | LR | 09 26 45.2 | |
| | comp=Z,48nm,18.9s,baz=240,slow=38 | | | | | | |
| UTTA | Uttaradit | 27.15 | 298 | P | P | 09 15 12.1 | +2.3 |
| | comp=Z,4.4nm,0.8s,comp=Z,41nm | | | | | | |
| GYA | Guiyang | 27.27 | 321 | P | P | 09 15 13.0 | +2.0 |
| GYA | | | | pP | pP | 09 15 32.4 | +4.2 |
| GYA | | | | sP | sP | 09 15 44.6 | +7.8 |
| GYA | | | | PP | PnPn | 09 16 03.0 | +4.4 |
| GYA | | | | S | S | 09 19 44.9 | -0.3 |
| GYA | | | | sS | sS | 09 20 19.3 | +4.3 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,90nm,4.9s | | | | | | |
| UTHA | Uthaitani | 27.40 | 293 | P | P | 09 15 12.1 | 0.0 |
| | comp=Z,4.5nm,0.8s | | | | | | |
| JNU | Nakatsue | 27.49 | 10 | P | P | 09 15 11.4 | -1.4 |
| | comp=Z,6.8nm,0.8s,baz=31,slow=12,SNR=4.8 | | | | | | |
| UMPA | Umpang Tak | 28.13 | 293 | P | P | 09 15 19.6 | +0.9 |
| | comp=Z,9.0nm,0.7s,comp=Z,1μm | | | | | | |
| CMAR | Chiang Mai Arr | 28.83 | 298 | P | P | 09 15 24.1 | -0.7 |
| | comp=Z,1.9nm,0.8s,baz=116,slow=7.0,SNR=12 | | | | | | |
| CMAR | | | | LR | LR | 09 26 57.0 | |
| | comp=Z,56nm,19.9s,baz=122,slow=36 | | | | | | |
| KMI | Kunming | 29.06 | 313 | P | P | 09 15 29.1 | +2.1 |
| KMI | | | | pP | pP | 09 15 50.0 | +5.6 |
| KMI | | | | sP | sP | 09 16 01.1 | +8.1 |
| KMI | | | | PP | PnPn | 09 16 27.1 | +4.4 |
| KMI | | | | S | S | 09 20 13.5 | -0.1 |
| KMI | | | | sS | sS | 09 20 49.5 | +6.1 |
| KMI | | | | SS | SnSn | 09 21 49.8 | +5.4 |
| KMI | | | | PMZ | | | |
| | comp=Z,11nm,1.1s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,170nm,11.8s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,210nm,10.8s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,160nm,8.2s | | | | | | |
| ASAR | Alice Springs | 30.51 | 165 | P | P | 09 15 38.9 | -0.8 |
| | comp=Z,1.3nm,0.6s,baz=347,slow=7.4,SNR=2.7 | | | | | | |
| ASAR | | | | ScP | ScP | 09 22 11.1 | -2.5 |
| | comp=Z,0.3nm,0.6s,baz=329,slow=3.2,SNR=3.7 | | | | | | |
| KSAR | Wonju Array Be | 31.43 | 3 | P | P | 09 15 47.4 | -0.2 |
| KSRS | Korea Array | 31.45 | 4 | P | P | 09 15 47.4 | -0.3 |
| | comp=Z,2.6nm,0.8s,baz=184,slow=10,SNR=14 | | | | | | |
| CD2 | Chengdu | 32.22 | 323 | eP | P | 09 15 55.0 | +0.3 |
| CD2 | | | | pP | pP | 09 16 15.8 | +3.7 |
| CD2 | | | | sP | sP | 09 16 26.7 | +6.0 |
| CD2 | | | | S | S | 09 21 02.9 | +0.1 |
| CD2 | | | | sS | sS | 09 21 39.6 | +6.9 |
| CD2 | | | | PcS | PcS | 09 22 25.8 | -1.1 |
| CD2 | | | | PMZ | | | |
| | comp=Z,30nm,0.4s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,280nm,13.2s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,240nm,11.3s | | | | | | |
| MAJO | Matsushiro | 32.58 | 19 | eP | P | 09 15 56.7 | -1.0 |
| | comp=Z,25nm,1.1s | | | | | | |
| MAT | Matsushiro | 32.58 | 19 | P | P | 09 15 56.2 | -1.5 |
| MJAR | Matsushiro Arr | 32.58 | 19 | P | P | 09 15 55.7 | -2.0 |
| | comp=Z,11nm,0.8s,baz=194,slow=9.4,SNR=22 | | | | | | |
| MJAR | | | | LR | LR | 09 29 09.7 | |
| | comp=Z,63nm,19.8s,baz=205,slow=36 | | | | | | |
| BJI | Beijing | 35.00 | 347 | P | P | 09 16 19.1 | +0.5 |
| BJI | | | | sP | sP | 09 16 52.8 | +8.1 |
| BJI | | | | S | S | 09 21 46.3 | +0.9 |
| BJI | | | | PMZ | | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,45nm,3.2s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,290nm,16.1s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,140nm,20.0s | | | | | | |
| LZH | Lanzhou | 36.05 | 329 | eP | P | 09 16 29.5 | +1.6 |
| LZH | | | | pP | pP | 09 16 51.0 | +5.4 |
| LZH | | | | sP | sP | 09 17 02.1 | +8.0 |
| LZH | | | | PP | PP | 09 17 55.4 | +4.2 |
| LZH | | | | eS | S | 09 22 02.3 | +0.3 |
| LZH | | | | sS | ScP | 09 22 39.2 | +6.3 |
| LZH | | | | eSS | SnSn | 09 24 31.6 | -2.1 |
| LZH | | | | PMZ | | | |
| | comp=Z,27nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,110nm,4.2s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,350nm,13.0s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LZH | | | | LE | | | |
| | comp=Z,380nm,13.4s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,500nm,16.2s | | | | | | |
| FORT | Forrest | 36.58 | 176 | P | P | 09 16 30.9 | -1.3 |
| | baz=36 | | | | | | |
| HHC | Hu-ho-hao-te | 36.97 | 342 | eP | P | 09 16 36.8 | +1.2 |
| HHC | | | | PP | PnPn | 09 18 06.8 | +4.6 |
| HHC | | | | S | S | 09 22 16.0 | +0.2 |
| HHC | | | | PMZ | | | |
| | comp=Z,20nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,110nm,7.3s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,180nm,14.8s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,130nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,98nm,16.0s | | | | | | |
| KMBL | Kambalda | 37.26 | 185 | P | P | 09 16 36.6 | -1.4 |
| | baz=37 | | | | | | |
| KLBR | Kellerberrin | 38.06 | 191 | P | P | 09 16 43.5 | -1.3 |
| | baz=38 | | | | | | |
| USRK | Ussuriysk Ar. | 38.52 | 7 | P | P | 09 16 48.2 | -0.2 |
| | comp=Z,7.0nm,0.7s,baz=193,slow=6.8,SNR=20 | | | | | | |
| USRK | | | | LR | LR | 09 33 05.1 | |
| | comp=Z,41nm,19.9s,baz=162,slow=37 | | | | | | |
| MDJ | Mudanjiang | 38.69 | 5 | P | P | 09 16 50.2 | +0.3 |
| MDJ | | | | pP | pP | 09 17 11.0 | +3.4 |
| MDJ | | | | S | S | 09 22 41.0 | -0.4 |
| MDJ | | | | PMZ | | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,64nm,4.8s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,75nm,26.4s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,52nm,22.6s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,84nm,25.1s | | | | | | |
| MDJ | Mudanjiang | 38.69 | 5 | eP | P | 09 16 52.6 | +2.7 |
| | comp=Z,16nm,0.9s | | | | | | |
| NWAO | Narrogin (SRO) | 39.46 | 191 | P | P | 09 16 55.2 | -1.2 |
| | comp=Z,9.2nm,0.8s,baz=8.7,slow=0.0,SNR=5.1 | | | | | | |
| NWAO | Narrogin (SRO) | 39.46 | 191 | P | P | 09 16 55.7 | -0.8 |
| | baz=39,SNR=3.9 | | | | | | |
| BBOO | Buckleboo | 39.79 | 166 | P | P | 09 16 58.8 | -0.4 |
| | baz=40,SNR=10 | | | | | | |
| BBOO | Buckleboo | 39.79 | 166 | eP | P | 09 16 58.8 | -0.4 |
| | comp=Z,20nm,0.8s | | | | | | |
| GTA | Gaotai | 40.65 | 329 | eP | P | 09 17 10.7 | +4.3 |
| GTA | | | | pP | pP | 09 17 33.0 | +8.7 |
| GTA | | | | sP | sP | 09 17 44.6 | +12 |
| GTA | | | | S | S | 09 23 16.0 | +4.8 |
| GTA | | | | sS | sS | 09 23 54.9 | +13 |
| GTA | | | | SS | SS | 09 26 16.7 | +2.6 |
| GTA | | | | PMZ | | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,120nm,5.5s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,230nm,19.0s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,180nm,17.1s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,230nm,20.0s | | | | | | |
| HTT | Hallett | 41.13 | 163 | P | P | 09 17 09.8 | -0.5 |
| | baz=41,SNR=9.7 | | | | | | |
| RKGY | Rocky Gully | 41.14 | 191 | P | P | 09 17 10.3 | -0.1 |
| | baz=41 | | | | | | |
| TAPN | Taplejung | 41.84 | 305 | eP | P | 09 17 15.4 | -1.2 |
| | comp=Z,47nm,1.1s | | | | | | |
| H11S3 | WAKE ISLAND Hy | 41.93 | 69 | T | T | 10 01 27.1 | |
| | baz=257,slow=75,SNR=17 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 41.94 | 69 | T | T | 10 01 26.1 | |
| | baz=257,slow=75,SNR=14 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 41.94 | 69 | T | T | 10 01 27.8 | |
| | baz=257,slow=75,SNR=19 | | | | | | |
| RAMN | Ramite | 42.59 | 304 | eP | P | 09 17 21.5 | -1.2 |
| | comp=Z,33nm,1.0s | | | | | | |
| GUN | Gumba | 43.55 | 305 | eP | P | 09 17 29.4 | -1.1 |
| | comp=Z,32nm,0.8s | | | | | | |
| PKI | Pulchoki | 43.81 | 304 | eP | P | 09 17 30.7 | -1.8 |
| | comp=Z,34nm,1.2s | | | | | | |
| PKIN | Phulchoki | 43.82 | 304 | eP | P | 09 17 30.5 | -2.1 |
| | comp=Z,4.3nm,0.4s | | | | | | |
| KKN | Kakani | 43.99 | 304 | eP | P | 09 17 32.1 | -1.8 |
| | comp=Z,5.5nm,0.2s | | | | | | |
| DMN | Daman | 44.07 | 304 | eP | P | 09 17 32.8 | -1.8 |
| | comp=Z,20nm,0.9s | | | | | | |
| GKN | Gorkha | 44.60 | 304 | eP | P | 09 17 36.8 | -1.9 |
| | comp=Z,14nm,0.8s | | | | | | |
| SONM | Songino Array | 44.87 | 342 | P | P | 09 17 38.6 | -1.8 |
| | comp=Z,0.3nm,0.5s,baz=179,slow=8.5,SNR=3.6 | | | | | | |
| ARPS | Mount Arapiles | 45.11 | 162 | P | P | 09 17 42.8 | +0.5 |
| | baz=45 | | | | | | |
| HYB | Hyderabad | 47.35 | 288 | iP | P | 09 17 59.0 | -1.3 |
| WMQ | Urumqi | 50.29 | 325 | eP | P | 09 18 23.0 | +0.5 |
| WMQ | | | | S | S | 09 25 27.0 | -2.8 |
| WMQ | | | | PMZ | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,310nm,20.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,290nm,19.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,190nm,18.0s | | | | | | |
| POO | Poona | 51.94 | 289 | ⇓iP | P | 09 18 31.0 | -4.2 |
| | comp=Z,4.0nm,1.0s | | | | | | |
| PETK | Petropavlovsk- | 53.84 | 23 | P | P | 09 18 48.1 | -0.5 |
| | comp=Z,5.6nm,0.7s,baz=197,slow=4.6,SNR=5.2 | | | | | | |
| PETK | | | | LR | LR | 09 38 49.7 | |
| | comp=Z,20nm,21.7s,baz=171,slow=33 | | | | | | |
| MKAR | Makanchi Array | 55.12 | 325 | P | P | 09 18 56.2 | -1.8 |
| | comp=Z,1.0nm,0.5s,baz=122,slow=7.7,SNR=7.7 | | | | | | |
| KSH | Kashi | 55.71 | 314 | eP | P | 09 19 03.9 | +1.4 |
| KSH | | | | esP | sP | 09 19 38.8 | +9.3 |
| KSH | | | | ePP | PP | 09 21 11.5 | +3.9 |
| KSH | | | | PcS | PcS | 09 23 59.3 | -2.2 |
| KSH | | | | S | S | 09 26 39.9 | -3.9 |
| KSH | | | | SS | SS | 09 30 28.4 | -1.8 |
| KSH | | | | PMZ | | | |
| | comp=Z,76nm,6.7s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,120nm,5.5s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,110nm,6.8s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,130nm,5.6s | | | | | | |
| KKAR | Karatay Array | 60.88 | 317 | eP | P | 09 19 37.5 | -0.8 |
| | comp=Z,5.2nm,0.9s | | | | | | |
| ABKAR | Akbulak array | 69.75 | 320 | eP | P | 09 20 35.0 | -0.6 |
| | comp=Z,0.4nm,0.3s | | | | | | |
| RAYN | Ar Rayn | 78.61 | 293 | eP | P | 09 21 25.4 | -2.3 |
| | comp=Z,1.7nm,0.8s | | | | | | |
| ILAR | Eielson Array | 83.61 | 26 | P | P | 09 21 51.6 | -1.7 |
| | comp=Z,1.3nm,0.9s,baz=246,slow=5.0,SNR=11 | | | | | | |
| ARCES | ARCESS Array B | 88.01 | 340 | P | P | 09 22 11.9 | -3.1 |
| | comp=Z,3.3nm,1.0s,baz=62,slow=11,SNR=3.9 | | | | | | |
| INK | Inuvik | 88.53 | 21 | P | P | 09 22 15.7 | -1.7 |
| | comp=Z,2.5nm,1.0s,baz=252,slow=6.4,SNR=2.5 | | | | | | |
| FINES | FINESS Array B | 89.38 | 332 | P | P | 09 22 18.5 | -3.1 |
| | comp=Z,1.4nm,0.8s,baz=29,slow=4.4,SNR=5.0 | | | | | | |
| FINES | | | | LR | LR | 10 04 39.3 | |
| | comp=Z,40nm,18.5s,baz=52,slow=37 | | | | | | |
| SYO | Syowa Base | 94.07 | 201 | ⇑epP | pP | 09 23 08.2 | +5.0 |
| NOA | NORSAR Array B | 96.33 | 334 | LR | LR | 10 10 58.4 | |
| | comp=Z,40nm,18.6s,baz=90,slow=38 | | | | | | |
| TXAR | Lajitas Array | 121.10 | 51 | PKP | PKPdf | 09 28 18.1 | -0.3 |
| | comp=Z,0.2nm,0.7s,baz=288,slow=0.9,SNR=2.5 | | | | | | |
| TORD | Torodi Ar. Bea | 121.17 | 289 | PKP | PKPdf | 09 28 16.0 | -2.7 |
| | comp=Z,0.3nm,0.7s,baz=76,slow=1.4,SNR=2.6 | | | | | | |

*IDC 01 09:23:29.2±1.1, 52°.23N×169°.42W, h0km, mb3.9/8, mb1 4.1/11, mb1mx3.8/46, mbtmp3.9/11, ML3.8/3, Error ellipse: s-maj=33.4km s-min=17.9km az=163.0*

*NEIC 01 09:23:31.9, 51°.92N×169°.30W, h26km, ML3.6(AEIC), After AEIC.*

**ISC 01 09:23:31.9±2.8, 52°.1N±0°.1×169°.40W±0°.08, h17km±16km, n43, σ1s.14/42, mb3.9/8, Fox Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIKH | Nikolski High | 0.92 | 21 | P | Pn | 09 23 50.5 | +0.5 |
| NIKH | | | | S | Sn | 09 24 04.8 | +2.0 |
| OKSO | Okmok South | 1.45 | 31 | P | Pb | 09 23 58.2 | -0.2 |
| OKSO | | | | S | Sg | 09 24 18.8 | 0.0 |
| OKCE | Okmok Cone E | 1.51 | 29 | P | Pb | 09 23 59.3 | -0.1 |
| OKTU | Okmok Mt. Tuli | 1.52 | 32 | P | Pb | 09 23 59.4 | -0.1 |
| OKFG | Magazine Ridge | 1.58 | 34 | P | Pn | 09 23 59.6 | +0.5 |
| OKFG | | | | S | Sb | 09 24 20.8 | +0.5 |
| OKAK | Okmok | 1.60 | 23 | P | Pn | 09 23 59.2 | 0.0 |
| MSOM | Makushin Julie | 2.26 | 40 | P | Pn | 09 24 09.8 | +1.4 |
| MSOM | | | | S | Sb | 09 24 38.7 | -1.0 |
| MGOD | Makushin Gods | 2.27 | 41 | P | Pn | 09 24 10.1 | +1.5 |
| MSW | Makushin Switc | 2.40 | 40 | P | Pn | 09 24 11.8 | +1.5 |
| MSW | | | | S | Sb | 09 24 44.6 | +0.8 |
| UNV | Unalaska Valle | 2.46 | 44 | P | Pn | 09 24 12.6 | +1.4 |
| UNV | | | | S | Sb | 09 24 44.7 | -0.9 |
| KOFP | Korovin Flat P | 2.90 | 275 | P | Pn | 09 24 18.8 | +1.6 |
| ATKA | Atka Island | 2.96 | 274 | P | Pn | 09 24 17.9 | -0.1 |
| AKUT | Akutan | 2.98 | 46 | P | Pn | 09 24 20.2 | +1.9 |
| KOWE | Korovin West | 2.99 | 277 | P | Pn | 09 24 19.6 | +1.1 |
| GSMY | Great Sitkin M | 4.11 | 272 | P | Pn | 09 24 34.5 | +0.7 |
| GSTD | Great Sitkin T | 4.16 | 272 | P | Pn | 09 24 34.9 | +0.3 |
| GSCK | Great Sitkin C | 4.18 | 271 | P | Pn | 09 24 35.1 | +0.4 |
| ETKA | Kagalaska Isla | 4.34 | 269 | P | Pn | 09 24 37.2 | +0.2 |
| ADAG | Mount Adagdak | 4.45 | 271 | P | Pn | 09 24 39.5 | +1.1 |
| SPIA | Saint Paul Isl | 5.10 | 355 | P | Pn | 09 24 51.1 | +3.8 |
| TAFP | Tanaga Falls P | 5.31 | 271 | P | Pn | 09 24 52.6 | +2.3 |
| GANE | Gareloi Northe | 5.81 | 271 | P | Pn | 09 24 59.3 | +2.1 |
| SDPT | Sand Point | 6.21 | 55 | P | Pn | 09 25 04.4 | +1.9 |
| CERAA | Semis' Rag'd T | 6.75 | 273 | P | Pn | 09 25 11.3 | +1.4 |
| CESW | Semis' Southwe | 6.82 | 273 | P | Pn | 09 25 12.2 | +1.2 |
| AMKA | Amchitka | 7.06 | 268 | P | Pn | 09 25 15.1 | +0.9 |
| KDAK | Kodiak Island | 11.20 | 53 | Pn | Pn | 09 26 11.3 | +0.4 |
| | 0.7nm,0.3s,baz=234,slow=5.6,SNR=4.5 | | | | | | |
| ILAR | Eielson Array | 17.17 | 34 | P | Pn | 09 27 29.1 | -1.5 |
| | 0.1nm,0.3s,baz=230,slow=11,SNR=9.4 | | | | | | |
| PETK | Petropavlovsk- | 19.91 | 286 | P | P | 09 28 01.4 | -1.0 |
| | 1.9nm,0.3s,baz=92,slow=13,SNR=36 | | | | | | |
| INK | Inuvik | 23.57 | 33 | P | P | 09 28 39.7 | -1.3 |
| | 1.1nm,0.5s,baz=247,slow=7.1,SNR=7.6 | | | | | | |
| YKA | Yellowknife Ar | 30.42 | 49 | P | P | 09 29 42.6 | -0.2 |
| | 0.6nm,0.4s,baz=270,slow=8.1,SNR=3.6 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 37.24 | 219 | T | T | 10 10 30.7 | |
| | baz=24,slow=74 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 37.25 | 219 | T | T | 10 10 31.0 | |
| | baz=24,slow=74 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 37.26 | 219 | T | T | 10 10 30.0 | |
| | baz=24 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 38.43 | 218 | T | T | 10 12 05.8 | |
| | baz=23,slow=76,SNR=38 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 38.45 | 218 | T | T | 10 11 56.9 | |
| | baz=23,slow=76,SNR=21 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 38.45 | 218 | T | T | 10 11 56.9 | |
| | baz=23,slow=76,SNR=13 | | | | | | |
| SONM | Songino Array | 51.41 | 301 | P | P | 09 32 35.8 | +0.1 |
| | 0.2nm,0.4s,baz=86,slow=9.1,SNR=3.5 | | | | | | |
| TXAR | Lajitas Array | 52.77 | 89 | P | P | 09 32 46.7 | +0.7 |
| | 0.9nm,0.6s,baz=302,slow=5.5,SNR=22 | | | | | | |
| ARCES | ARCESS Array B | 58.17 | 354 | P | P | 09 33 24.4 | +0.3 |
| | 1.6nm,0.9s,baz=18,slow=8.2,SNR=3.6 | | | | | | |
| FINES | FINESS Array B | 66.12 | 352 | P | P | 09 34 16.5 | -0.9 |
| | 0.9nm,0.8s,baz=168,slow=27,SNR=3.4 | | | | | | |
| CMAR | Chiang Mai Arr | 76.66 | 283 | P | P | 09 35 21.5 | -0.3 |
| | 1.1nm,0.3s,baz=23,slow=7.2,SNR=3.3 | | | | | | |
| ASAR | Alice Springs | 90.22 | 230 | P | P | 09 36 31.0 | -0.3 |
| | 0.7nm,0.9s,baz=39,slow=6.0,SNR=3.6 | | | | | | |

*NIED 01 09:52:00, 37°.30N×140°.00E, h5km, Mw4.2 Best double couple: Mo2.36000×10^15 NP1:φs40.00000°, δ31.00000°, λ90.00000°. NP2:φs220.00000°, δ59.00000°, λ90.00000°.*

*ISCJB 01 09:52:48.3±0.6, 37°.25N±0°.03×140°.06E±0°.05, h12km±3km, mb3.9/14, MS3.5/10, Error ellipse: s-maj=6.8km s-min=4.8km az=34.7*

*JMA 01 09:52:48.4, 37°.25N×140°.01E, h6km±1km, M4.2 Broadband fault plane solution: P waves. NP1: φs213.00000°, δ56.00000°, λ80.00000°. NP2:φs50.00000°, δ36.00000°, λ104.00000°. Principal axes: T Plg77.0000°, Azm91.0000°; N Plg8.0000°, Azm219.0000°; P Plg10.0000°, Azm310.0000°;*

*JMA Felt II J1.*

*IDC 01 09:52:54.2±1.5, 37°.18N×139°.98E, h49km±16km, mb3.7/14, mb1 3.9/19, mb1mx3.7/49, mbtmp4.0/19, ML3.4/3, MS3.4/12, Ms1 3.5/12, ms1mx3.2/37 Error ellipse: s-maj=17.3km s-min=11.2km az=81.0*

**ISC 01 09:52:49.0±1.1, 37°.25N±0°.04×140°.04E±0°.04, h8km±7km, n36, σ1s.22/30, mb4.0/14, MS3.5/10, 1C-2D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JSB | Shiboa | 0.29 | 199 | P | Pg | 09 52 54.7 | -0.2 |
| JSB | | | | eS | Sg | 09 52 58.5 | -0.3 |
| JFY | Yanaizu | 0.31 | 301 | ⇓P | Pg | 09 52 54.3 | -0.9 |
| JFY | | | | S | Sg | 09 52 58.5 | -0.9 |
| JFT | Otama | 0.36 | 41 | ⇑P | Pg | 09 52 55.9 | -0.2 |
| JFT | | | | S | Sg | 09 53 00.9 | +0.1 |
| JFK | Kawauchi | 0.67 | 80 | ⇓P | Pg | 09 53 01.6 | -0.4 |
| MJAR | Matsushiro Arr | 1.63 | 245 | P | Pb | 09 53 18.8 | -0.6 |
| | 35nm,0.3s,baz=77,slow=16,SNR=219 | | | | | | |
| MJAR | | | | S | Sg | 09 53 42.8 | +1.4 |
| | 24nm,0.3s,baz=34,slow=18,SNR=11 | | | | | | |
| MJAR | | | | LR | LR | 09 53 50.4 | |
| | comp=Z,108nm,18.4s,baz=65,slow=37 | | | | | | |
| MAT | Matsushiro | 1.63 | 245 | P | Pn | 09 53 18.2 | +0.1 |
| MAT | | | | S | Sn | 09 53 39.2 | -0.1 |
| JHJ | Hachijo jima 2 | 4.12 | 183 | P | Pn | 09 53 53.8 | +1.4 |
| | 32nm,0.3s,baz=50,slow=23,SNR=5.2 | | | | | | |
| JHJ | | | | S | Sn | 09 54 39.9 | -1.0 |
| | 23nm,0.3s,baz=46,slow=16,SNR=2.6 | | | | | | |
| ASAJ | Asahikawa | 7.13 | 15 | P | Pn | 09 54 35.8 | +2.1 |
| | baz=222,slow=13 | | | | | | |
| JNU | Nakatsue | 8.55 | 244 | P | Pn | 09 54 55.9 | +2.7 |
| | 0.2nm,0.3s,baz=90,slow=10,SNR=3.1 | | | | | | |
| USRK | Ussuriysk Ar. | 9.25 | 321 | P | Pn | 09 55 06.8 | +4.1 |
| | baz=152,slow=41,SNR=2.6 | | | | | | |
| USRK | | | | LR | LR | 09 58 20.9 | |
| | comp=Z,304nm,18.7s,baz=139,slow=35 | | | | | | |
| KSRS | Korea Array | 9.65 | 275 | P | Pn | 09 55 11.0 | +2.8 |
| | 0.5nm,0.3s,baz=90,slow=14,SNR=4.2 | | | | | | |
| KSRS | | | | LR | LR | 09 58 25.2 | |
| | comp=Z,223nm,21.1s,baz=86,slow=34 | | | | | | |
| SONM | Songino Array | 26.76 | 304 | P | P | 09 58 29.8 | +0.5 |
| | 1.0nm,0.6s,baz=109,slow=8.6,SNR=7.2 | | | | | | |
| SONM | | | | LR | LR | 10 09 33.7 | |
| | comp=Z,100nm,18.1s,baz=76,slow=37 | | | | | | |
| SEY | Seymchan | 26.81 | 13 | P | P | 09 58 31.2 | +1.8 |
| | 3.9nm,0.9s,baz=218,slow=12,SNR=4.0 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 29.20 | 119 | T | T | 10 28 50.7 | |
| | baz=312,slow=75,SNR=108 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.21 | 119 | T | T | 10 28 51.0 | |
| | baz=312,slow=75,SNR=65 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.22 | 119 | T | T | 10 28 51.8 | |
| | baz=312,slow=75,SNR=52 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 29.90 | 121 | T | T | 10 29 41.3 | |
| | baz=314,slow=76,SNR=230 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 29.90 | 121 | T | T | 10 29 41.5 | |
| | baz=314,slow=76,SNR=105 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 29.92 | 121 | T | T | 10 29 46.4 | |
| | baz=314,slow=76,SNR=128 | | | | | | |
| CMAR | Chiang Mai Arr | 40.50 | 254 | LR | LR | 10 18 08.7 | |
| | comp=Z,33nm,18.5s,baz=40,slow=38 | | | | | | |
| ZALV | Zalesovo Beam | 40.96 | 312 | P | P | 10 00 30.8 | -1.2 |
| | 1.1nm,0.6s,baz=90,slow=7.4,SNR=4.3 | | | | | | |
| ZALV | | | | LR | LR | 10 18 09.3 | |
| | comp=Z,42nm,19.0s,baz=322,slow=37 | | | | | | |
| MKAR | Makanchi Array | 43.08 | 302 | P | P | 10 00 49.0 | -0.5 |
| | 1.8nm,0.7s,baz=92,slow=9.1,SNR=7.6 | | | | | | |
| MKAR | | | | LR | LR | 10 19 14.8 | |
| | comp=Z,44nm,20.6s,baz=52,slow=37 | | | | | | |
| KURBB | Kurchatov Arra | 45.01 | 308 | P | P | 10 01 04.1 | -0.7 |
| | 6.0nm,0.7s,baz=84,slow=8.2,SNR=53 | | | | | | |
| ILAR | Eielson Array | 49.90 | 32 | P | P | 10 01 43.0 | +0.2 |
| | 1.3nm,0.7s,baz=269,slow=5.8,SNR=14 | | | | | | |
| INK | Inuvik | 54.70 | 27 | P | P | 10 02 17.9 | -0.3 |
| | 2.3nm,0.7s,baz=310,slow=5.3,SNR=7.7 | | | | | | |
| WRA | Warramunga Arr | 57.13 | 186 | P | P | 10 02 34.7 | -1.6 |
| | 1.3nm,0.7s,baz=2.4,slow=7.5,SNR=14 | | | | | | |
| ASAR | Alice Springs | 60.86 | 186 | P | P | 10 03 03.0 | +0.9 |
| | 0.5nm,0.8s,baz=18,slow=8.2,SNR=6.9 | | | | | | |
| ARCES | ARCESS Array B | 63.41 | 339 | LR | LR | 10 34 03.8 | |
| | comp=Z,36nm,18.1s,baz=17,slow=39 | | | | | | |
| OBN | Obninsk | 67.27 | 323 | LR | LR | 10 34 08.3 | |
| | comp=Z,34nm,18.0s,baz=93,slow=37 | | | | | | |
| FINES | FINESS Array B | 68.11 | 332 | P | P | 10 03 48.2 | -0.9 |
| | 1.3nm,0.8s,baz=126,slow=9.7,SNR=4.0 | | | | | | |
| FINES | | | | LR | LR | 10 34 56.4 | |
| | comp=Z,25nm,18.5s,baz=24,slow=37 | | | | | | |
| AKASG | Malin Array Be | 73.45 | 322 | P | P | 10 04 20.4 | -1.4 |
| | 0.9nm,0.6s,baz=50,slow=6.5,SNR=4.8 | | | | | | |
| NOA | NORSAR Array B | 73.56 | 337 | P | P | 10 04 22.1 | -0.2 |
| | 1.1nm,0.8s,baz=45,slow=5.5,SNR=2.3 | | | | | | |
| NOA | | | | LR | LR | 10 39 43.0 | |
| | comp=Z,33nm,18.6s,baz=25,slow=38 | | | | | | |
| NVAR | Mina Array Bea | 75.73 | 53 | P | P | 10 04 36.0 | +0.4 |
| | 0.5nm,0.6s,baz=310,slow=6.4,SNR=4.9 | | | | | | |
| BRTR | Keskin Array B | 77.89 | 311 | LR | LR | 10 43 28.2 | |
| | comp=Z,20nm,18.9s,baz=114,slow=39 | | | | | | |
| GERES | GERESS Array B | 81.95 | 327 | LR | LR | 10 44 58.7 | |
| | comp=Z,25nm,18.3s,baz=18,slow=38 | | | | | | |
| TXAR | Lajitas Array | 90.85 | 52 | P | P | 10 05 53.1 | -0.4 |
| | 0.2nm,0.6s,baz=318,slow=2.4,SNR=3.3 | | | | | | |

**DJA 01 09:59:26.7±1.8, 1°N±18°×12°6E±°, h22km±39km, M3.5/4, MLv3.5/4, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | Ternate | 1.20 | 90 | P | Pn | 09 59 47.4 | -0.7 |
| LBMI | Labuha | 1.94 | 137 | P | Pn | 09 59 58.9 | +0.5 |
| LBMI | | | | S | Sn | 10 00 23.1 | +1.0 |
| KMSI | Cibinong | 2.20 | 265 | S | Sn | 10 00 29.9 | +1.4 |
| SANI | Sanana | 2.82 | 184 | P | Pn | 10 00 10.6 | +0.2 |
| GTOI | Gorontalo | 3.16 | 267 | P | Pn | 10 00 16.9 | +1.7 |

**WEL 01 10:28:31.4±0.7, 35°.77S×179°.05E, h177km±12km, ML3.6/6, 1D, Error ellipse: s-maj=11.0km s-min=10.5km az=0.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 1.88 | 198 | PN | Pn | 10 29 06.1 | -0.9 |
| MXZ | | | | SN | Sn | 10 29 32.5 | -2.2 |
| WMGZ | Waiomatatini S | 2.10 | 194 | PN | Pn | 10 29 09.7 | +0.4 |
| HAZ | Te Kaha | 2.23 | 207 | PN | Pn | 10 29 11.2 | +0.5 |
| HAZ | | | | SN | Sn | 10 29 42.0 | +0.6 |
| PUZ | Puketiti | 2.38 | 195 | ⇓PN | Pn | 10 29 12.3 | -0.3 |
| PUZ | | | | SN | Sn | 10 29 42.9 | -1.8 |
| TWGZ | Tauwhareparae | 2.55 | 199 | PN | Pn | 10 29 15.5 | +1.0 |
| TWGZ | | | | SN | Sn | 10 29 48.0 | -0.2 |
| CNGZ | Carnagh Statio | 2.79 | 194 | PN | Pn | 10 29 17.7 | +0.4 |
| TKGZ | Te Karaka | 2.83 | 199 | PN | Pn | 10 29 18.1 | +0.3 |
| MWZ | Matawai | 2.83 | 205 | PN | Pn | 10 29 18.0 | +0.1 |
| URZ | Urewera | 2.93 | 211 | PN | Pn | 10 29 19.3 | +0.3 |
| RIGZ | Rimuhau | 3.10 | 199 | PN | Pn | 10 29 21.4 | +0.2 |
| SNGZ | Shannon Statio | 3.30 | 204 | PN | Pn | 10 29 24.9 | +1.3 |
| KNZ | Kokohu | 3.42 | 198 | PN | Pn | 10 29 24.7 | -0.4 |
| ARHZ | Aropaoanui | 3.85 | 204 | PN | Pn | 10 29 30.4 | 0.0 |
| BKZ | Black Stump Fm | 3.95 | 210 | PN | Pn | 10 29 31.6 | -0.3 |
| KAHZ | Kahuranaki | 4.37 | 203 | PN | Pn | 10 29 36.8 | -0.4 |
| PXZ | Pawanui | 4.59 | 201 | AML | AML | 10 30 21.4 | |

*HEL 01 10:40:58.4±0.7, 68°.00N×34°.22E, h0km, ML1.9, Explosion*

*NAO 01 10:41:02.3±1.2, 68°.02N×33°.56E, ML3.0*

*CSEM 01 10:41:04.3±0.8, 67°.93N×32°.63E, h2km, ML3.0, Error ellipse: s-maj=23.1km s-min=10.2km az=66.0, Mining explosion.*

**ISC 01 10:40:58.8±2.6, 67°.94N±0°.04×34°.0E±0°.1, h0km, n21, σ1s.02/36, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| APA0 | Apatity Array | 0.49 | 228 | Pg | Pb | 10 41 11.2 | +0.9 |
| | baz=27,slow=16 | | | | | | |
| APA0 | | | | Pg | Pn | 10 41 11.6 | -1.5 |
| APA0 | | | | Lg | Lg | 10 41 17.6 | |
| | baz=25,slow=37 | | | | | | |
| APA0 | | | | Lg | Lg | 10 41 18.4 | |
| APA0 | | | | Rg | Rg | 10 41 19.8 | |
| | baz=30,slow=37 | | | | | | |
| APA0 | Apatity Array | 0.49 | 228 | Pg | Pb | 10 41 11.2 | +0.9 |
| | baz=27,slow=16 | | | | | | |
| APA0 | | | | Pg | Pn | 10 41 11.6 | -1.5 |
| APA0 | | | | Lg | Lg | 10 41 17.6 | |
| | baz=25,slow=37 | | | | | | |
| APA0 | | | | Lg | Lg | 10 41 18.4 | |
| APA0 | | | | Rg | Rg | 10 41 19.8 | |
| | baz=30,slow=37 | | | | | | |
| APA0 | Apatity Array | 0.49 | 228 | Pg | Pb | 10 41 11.2 | +0.9 |
| | SNR=90 | | | | | | |
| APA0 | | | | Lg | Lg | 10 41 17.6 | |
| | SNR=245 | | | | | | |
| KU6 | Riekki | 2.50 | 222 | PG | Pb | 10 41 44.7 | +0.3 |
| KU6 | | | | MSG | | 10 42 15.4 | |
| | comp=Z,3.2nm,0.2s | | | | | | |
| KU6 | | | | SG | Sg | 10 42 18.6 | -0.2 |
| KU6 | Riekki | 2.50 | 222 | Pg | Pb | 10 41 44.7 | +0.3 |
| MSF | Maaselka | 2.81 | 226 | PB | Pb | 10 41 49.2 | -0.5 |
| MSF | | | | SB | Sb | 10 42 25.6 | +1.1 |
| MSF | Maaselka | 2.81 | 226 | Pb | Pb | 10 41 49.2 | -0.5 |
| SGF | Sodankyl | 2.88 | 263 | PB | Pn | 10 41 48.3 | +2.5 |
| SGF | | | | SN | Sb | 10 42 24.2 | -2.3 |
| SGF | Sodankyl | 2.88 | 263 | Pb | Pn | 10 41 48.3 | +2.5 |
| KEV | Kevo | 3.11 | 309 | PN | Pn | 10 41 49.5 | +0.5 |
| KEV | | | | SN | Sn | 10 42 26.8 | +0.1 |
| KEV | | | | MSG | | 10 42 30.9 | |
| | comp=Z,4.8nm,0.2s | | | | | | |
| KEV | Kevo | 3.11 | 309 | Pn | Pn | 10 41 49.4 | +0.5 |
| KEV | | | | Sn | Sn | 10 42 26.8 | +0.1 |
| RNF | Rovaniemi | 3.36 | 250 | PN | Pn | 10 41 53.6 | +1.3 |
| RNF | | | | SN | Sn | 10 42 33.0 | +0.2 |
| RNF | Rovaniemi | 3.36 | 250 | Pn | Pn | 10 41 53.6 | +1.3 |
| ARA0 | ARCESS Array S | 3.47 | 301 | Pn | Pn | 10 41 54.0 | 0.0 |
| | baz=114,slow=14 | | | | | | |
| ARA0 | | | | Pg | Pb | 10 42 01.5 | +0.5 |
| ARA0 | | | | Sn | Sn | 10 42 35.0 | -0.6 |
| | baz=116,slow=37 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 42 45.7 | |
| | baz=125,slow=28 | | | | | | |
| ARA0 | ARCESS Array S | 3.47 | 301 | Pn | Pn | 10 41 54.0 | 0.0 |
| | baz=114,slow=14 | | | | | | |
| ARA0 | | | | Pg | Pb | 10 42 01.5 | +0.5 |
| ARA0 | | | | Sn | Sn | 10 42 35.0 | -0.6 |
| | baz=116,slow=37 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 42 45.7 | |
| | baz=125,slow=28 | | | | | | |
| ARA0 | ARCESS Array S | 3.47 | 301 | Pn | Pn | 10 41 54.0 | 0.0 |
| | SNR=50 | | | | | | |
| ARA0 | ARCESS Array S | 3.47 | 301 | Pg | Pb | 10 42 01.5 | +0.5 |
| | SNR=90 | | | | | | |
| ARA0 | | | | Sn | Sn | 10 42 35.0 | -0.6 |
| | SNR=9.4 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 42 45.7 | |
| | SNR=8.1 | | | | | | |
| ARE0 | ARCESS Array S | 3.47 | 301 | PN | Pn | 10 41 53.4 | -0.5 |
| | baz=116 | | | | | | |
| ARE0 | | | | SN | Sn | 10 42 35.1 | -0.5 |
| ARE0 | ARCESS Array S | 3.47 | 301 | Pn | Pn | 10 41 53.4 | -0.5 |
| ARE0 | | | | Sn | Sn | 10 42 35.1 | -0.5 |
| HEF | Hetta | 3.87 | 282 | PN | Pn | 10 41 58.9 | -0.6 |
| | baz=86 | | | | | | |
| HEF | Hetta | 3.87 | 282 | Pn | Pn | 10 41 58.9 | -0.6 |

*BUL 01 10:44:37.5±4.3, 24°.51S×26°.80E, h15km*

**PRE 01 10:44:14.7±1.7, 26°.10S×29°.58E, h0km, ML2.9, Explosion, South Africa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNON | Benoni | 1.14 | 267 | eP | Pn | 10 44 38.1 | 0.0 |
| BNON | | | | eS | Sg | 10 44 51.7 | -0.1 |
| BNON | | | | AML | AML | 10 44 59.5 | |
| | comp=Z,79nm,0.3s | | | | | | |
| OBSV | Observatory | 1.36 | 266 | eP | Pb | 10 44 42.3 | +1.0 |
| OBSV | | | | eS | Sb | 10 44 59.2 | -0.2 |
| OBSV | | | | AML | AML | 10 45 03.8 | |
| | comp=Z,127nm,0.3s | | | | | | |
| WDLM | Western Deep L | 1.97 | 260 | eP | Pn | 10 44 50.0 | +0.5 |
| WDLM | | | | eS | Sb | 10 45 16.7 | -0.2 |
| WDLM | | | | AML | AML | 10 45 20.4 | |
| | comp=Z,193nm,0.2s | | | | | | |
| PRYS | Parys | 2.15 | 247 | eP | Pn | 10 44 52.1 | 0.0 |
| PRYS | | | | eS | Sn | 10 45 20.4 | +0.7 |
| PRYS | | | | AML | AML | 10 45 37.1 | |
| | comp=Z,50nm,0.4s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **POGA** | **Pongola** | **2.21** | **125** | *e*P | Pn | 10 44 53.9 | +1.2 |
| POGA | | | | *e*S | Sb | 10 45 24.0 | +0.4 |
| POGA | | | | AML | AML | 10 45 28.8 | |
| | comp=Z,149nm,0.6s | | | | | | |
| **KSR** | **Koster** | **2.43** | **275** | *e*P | Pn | 10 44 56.6 | +0.7 |
| KSR | | | | *e*S | Sn | 10 45 26.8 | +0.2 |
| KSR | | | | AML | AML | 10 45 35.9 | |
| | comp=Z,23nm,0.1s | | | | | | |
| **MSNA** | **Messina** | **3.76** | **6** | *e*P | Pn | 10 45 12.7 | -1.4 |
| MSNA | | | | *e*S | Sn | 10 45 55.3 | -3.8 |
| MSNA | | | | AML | AML | 10 46 12.8 | |
| | comp=Z,66nm,0.6s | | | | | | |
| **SWZ** | **Schweizer** | **3.95** | **253** | *e*P | Pn | 10 45 17.5 | +0.6 |
| SWZ | | | | *e*S | Sn | 10 46 04.1 | 0.0 |
| SWZ | | | | AML | AML | 10 46 21.9 | |
| | comp=Z,118nm,0.5s | | | | | | |
| **KSD** | **Kokstad** | **4.42** | **182** | *e*P | Pn | 10 45 23.6 | +0.2 |
| KSD | | | | *e*S | Sn | 10 46 12.7 | -3.0 |
| KSD | | | | AML | AML | 10 46 39.5 | |
| | comp=Z,16nm,0.4s | | | | | | |
| **BOSA** | **Boshof** | **4.59** | **236** | *i* P | Pg | 10 45 41.1 | -1.8 |
| **MATP** | **Matopo** | **5.74** | **350** | *i* P | Pn | 10 45 38.6 | -2.8 |
| **HVD** | **Gariep Dam** | **5.75** | **218** | *e*P | Pn | 10 45 43.2 | +1.6 |
| HVD | | | | *e*S | Sn | 10 46 46.1 | -2.4 |
| HVD | | | | AML | AML | 10 46 59.1 | |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **BLWY** | **Bulawayo** | **6.00** | **351** | *i* P | Pn | 10 45 48.5 | +3.5 |
| **UPI** | **Upington** | **7.75** | **251** | *e*P | Pn | 10 46 09.3 | +0.4 |
| UPI | | | | *e*S | Sn | 10 47 34.1 | -3.4 |
| UPI | | | | AML | AML | 10 47 42.9 | |
| | comp=Z,4.2nm,0.6s | | | | | | |
| **KOMG** | **Komaggas** | **11.31** | **248** | *e*P | Pn | 10 46 58.2 | +0.5 |
| KOMG | | | | *e*S | Sn | 10 48 58.9 | -6.0 |
| KOMG | | | | AML | AML | 10 49 43.8 | |
| | comp=Z,2.0nm,0.7s | | | | | | |

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*NIED **01** 10:45:00,23.°70N×125.°80E,h11km,Mw3.6 Best double couple: $M_0$3.12000×$10^{14}$ NP1:$\phi_s$256.00000°,δ28.00000°, λ137.00000°. NP2:$\phi_s$26.00000°,δ71.00000°,λ69.00000°.*

**JMA 01 10:45:49.4**±0.3**,23.°72N×125.°81E,h14**km**,M3.6, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOGS** | **Gusukube** | **1.10** | **340** | P | Pb | 10 46 09.5 | -0.7 |
| JOGS | | | | S | Sg | 10 46 25.1 | +0.1 |
| **JMJ** | **Miyako jima 2** | **1.19** | **337** | P | Pn | 10 46 11.4 | -0.2 |
| JMJ | | | | S | Sb | 10 46 26.9 | -0.1 |
| **JIRB** | **Irabujima** | **1.25** | **332** | P | Pn | 10 46 12.0 | -0.4 |
| JIRB | | | | S | Sb | 10 46 28.4 | -0.3 |
| **JIKM** | **Ikemajima** | **1.30** | **337** | P | Pn | 10 46 12.8 | -0.4 |
| JIKM | | | | S | Sn | 10 46 30.4 | 0.0 |
| **JTJ** | **Tarama** | **1.36** | **312** | P | Pn | 10 46 13.9 | -0.1 |
| JTJ | | | | S | Sn | 10 46 31.1 | -0.8 |
| **JISG** | **Ishigakijimahi** | **1.62** | **303** | P | Pn | 10 46 18.0 | +0.5 |
| JISG | | | | S | Sn | 10 46 37.1 | -1.1 |
| **JIJ** | **Ishigaki jima** | **1.65** | **293** | P | Pb | 10 46 19.0 | -0.7 |
| JIJ | | | | S | Sn | 10 46 37.6 | -1.5 |
| **JKRS** | **Kuro-shima** | **1.73** | **288** | P | Pn | 10 46 19.8 | +0.8 |
| JKRS | | | | S | Sn | 10 46 40.8 | 0.0 |
| **HATJ** | **Hateruma jima** | **1.87** | **281** | P | Pn | 10 46 20.9 | 0.0 |
| HATJ | | | | S | Sn | 10 46 43.9 | -0.4 |
| **IRIF** | **Iriomote-Funau** | **2.00** | **288** | P | Pn | 10 46 24.0 | +1.3 |
| IRIF | | | | S | Sn | 10 46 48.3 | +0.7 |
| **YOJ** | **Yonaguni jima** | **2.66** | **287** | P | Pn | 10 46 32.4 | +0.5 |
| **JYNG** | **Yonagunijimaku** | **2.72** | **286** | P | Pn | 10 46 32.5 | -0.1 |
| JYNG | | | | S | Sn | 10 47 03.6 | -1.7 |
| **JKE** | **Kume jima 2** | **2.74** | **19** | P | Pn | 10 46 32.9 | -0.1 |
| **JAGN** | **Aguni-jima** | **3.14** | **24** | P | Pn | 10 46 39.5 | +1.1 |
| **JNTH** | **Nagotoyohara** | **3.43** | **35** | P | Pn | 10 46 42.7 | +0.2 |
| **JOW** | **Kunigami** | **3.82** | **35** | P | Pn | 10 46 48.1 | +0.3 |
| **JIH** | **Iheya** | **3.83** | **30** | P | Pn | 10 46 47.9 | -0.1 |
| **JOKE** | **Okinoerabujima** | **4.40** | **34** | P | Pn | 10 46 55.3 | -0.5 |
| **JMZ** | **Minamidaito 2** | **5.34** | **66** | P | Pn | 10 47 07.7 | -1.1 |

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*IDC **01** 10:51:31.9±0.4,58.°73S×25.°24W,h0km,mb4.8/13, mb1 4.8/14,mb1mx4.7/21,mbtmp4.7/14,ML4.5/1,MS4.0/18, Ms1 4.0/18,ms1mx4.0/22,Error ellipse: s-maj=20.0km s-min=13.1km az=56.0*

*ISCJB **01** 10:51:36.0±4.2,58.°76S±0.°07×25.°2W±0.°2,h33km±30km, mb4.7/20,MS4.1/17,Error ellipse: s-maj=14.3km s-min=10.0km az=147.8*

*MOS **01** 10:51:36.9±1.2,58.°84S×25.°16W,h38km,mb4.9/5,Error ellipse: s-maj=30.7km s-min=13.9km az=100.7*

*NEIC **01** 10:51:37.3±0.5,58.°85S×25.°29W,h35km,mb4.7/13,Error ellipse: s-maj=13.3km s-min=9.4km az=48.0*

*GCMT **01** 10:51:37.3±0.4,59.°19S×24.°83W,h42km±1km,MW5.0/49, Moment Tensor Solution. s32,c43; s49,c64; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.58±.29; $M_{\theta\theta}$3.75±.31; $M_{\phi\phi}$-5.33±.20; $M_{r\theta}$-0.80±.29; $M_{\theta\phi}$-0.32±.17; $M_{\phi r}$0.20±.20; Best double couple: $M_0$4.68600×$10^{16}$ NP1:$\phi_s$319.00000°,δ78.00000°,λ14.00000°. NP2: $\phi_s$226.00000°,δ76.00000°,λ168.00000°. Principal axes: T 4.0260, Plg18.0000°, Azm182.0000°; N 1.3190, Plg72.0000°, Azm358.0000°; P -5.3450, Plg1.0000°, Azm92.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 01 10:51:38.2**±1.7**,58.°79S**±0.°07×**25.°22W**±0.°07**,h44**km±15km**, n378,**σ**0.s77**/376**,mb4.8**/19**,MS4.1**/17**,6C,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **7.69** | **301** | *e*P | **Pn** | **10 53 29.1** | **+1.7** |
| **SNAA** | **Sanae** | **15.80** | **154** | Pn | **Pn** | **10 55 16.0** | **-1.4** |
| | 1.9nm,0.3s,baz=358,slow=7.1,SNR=221 | | | | | | |
| SNAA | | | | Sn | Sn | 10 57 56.5 | -15 |
| | 0.5nm,0.3s,baz=321,slow=18,SNR=5.4 | | | | | | |
| SNAA | | | | LR | LR | 10 59 57.9 | |
| | comp=Z,319nm,21.6s,baz=343,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **15.80** | **154** | ⇑*i*P | **Pn** | **10 55 16.4** | **-1.0** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **SNAA** | **Sanae** | **15.80** | **154** | *e*Pn | **Pn** | **10 55 14.8** | **-2.6** |
| | comp=Z,12nm,0.7s | | | | | | |
| SNAA | | | | Sn | Sn | 10 57 56.5 | -15 |
| SNAA | | | | *e*Sn | Sn | 10 57 56.8 | -14 |
| **PMSA** | **Palmer Station** | **19.06** | **235** | P | **Pn** | **10 55 58.5** | **+1.0** |
| | comp=Z,0.6nm,0.3s,baz=77,slow=18,SNR=3.3 | | | | | | |
| PMSA | | | | S | **S** | **10 59 30.2** | **+0.3** |
| | comp=Z,1.9nm,0.3s,baz=120,slow=10,SNR=4.6 | | | | | | |
| **PMSA** | **Palmer Station** | **19.06** | **235** | *e*P | **P** | **10 55 55.4** | **-0.9** |
| | comp=Z,7.3nm,0.6s | | | | | | |
| PMSA | | | | S | **S** | **10 59 30.2** | **+0.3** |
| **EFI** | **East Falkland** | **19.88** | **277** | *ce*P | **Pn** | **10 56 06.8** | **-0.5** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,77nm,1.2s | | | | | | |
| **EFI** | **East Falkland** | **19.88** | **277** | *e*Pn | **Pn** | **10 56 07.0** | **-0.3** |
| | comp=Z,71nm,1.1s | | | | | | |
| EFI | | | | *e*Sn | **Sn** | **10 59 50.2** | **+0.6** |
| **USHA** | **Ushuaia** | **23.67** | **261** | P | **P** | **10 56 44.8** | **-0.5** |
| | comp=Z,33nm,0.8s,baz=105,slow=7.2,SNR=17 | | | | | | |
| **QSPA** | **South Pole Qui** | **31.45** | **180** | P | **P** | **10 57 56.1** | **+0.9** |
| | comp=Z,29nm,0.8s,baz=206,slow=3.8,SNR=183 | | | | | | |
| QSPA | | | | PcP | **PcP** | **11 00 47.6** | **+0.4** |
| | comp=Z,8.9nm,0.8s,baz=197,slow=2.7,SNR=3.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **31.45** | **180** | *e*P | **P** | **10 57 54.9** | **-0.3** |
| | comp=Z,17nm,0.6s | | | | | | |
| QSPA | | | | PcP | **PcP** | **11 00 47.6** | **+0.4** |
| **PLCA** | **Paso Flores** | **33.58** | **282** | *e*P | **P** | **10 58 13.0** | **-0.9** |
| **PLCA** | **Paso Flores** | **33.58** | **282** | *e*P | **P** | **10 58 13.1** | **-0.9** |
| **MAW** | **Mawson** | **37.33** | **141** | P | **P** | **10 58 45.2** | **-0.4** |
| | comp=Z,10nm,0.9s,baz=235,slow=9.3,SNR=18 | | | | | | |
| MAW | | | | PcP | **PcP** | **11 01 04.3** | **+0.5** |
| | comp=Z,1.5nm,0.7s,baz=235,slow=6.9,SNR=4.0 | | | | | | |
| MAW | | | | LR | LR | 11 12 25.4 | |
| | comp=Z,390nm,20.1s,baz=242,slow=34 | | | | | | |
| **MAW** | **Mawson** | **37.33** | **141** | *e*P | **P** | **10 58 45.5** | **-0.1** |
| MAW | | | | | | 11 01 04.3 | |
| MAW | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **37.33** | **141** | *e*P | **P** | **10 58 45.5** | **-0.1** |
| | comp=Z,1.4nm,0.7s | | | | | | |
| MAW | | | | PcP | **PcP** | **11 01 04.3** | **+0.5** |
| **CPUP** | **Villa Florida** | **39.42** | **311** | P | **P** | **10 59 01.5** | **-2.2** |
| | comp=Z,1.7nm,0.5s,baz=163,slow=8.7,SNR=4.7 | | | | | | |
| CPUP | | | | LR | LR | 11 16 07.6 | |
| | comp=Z,176nm,19.5s,baz=158,slow=38 | | | | | | |
| **CFAA** | **Coronel Fontan** | **39.64** | **294** | P | **P** | **10 59 04.8** | **-0.7** |
| | comp=Z,1.5nm,0.7s,baz=156,slow=7.9,SNR=24 | | | | | | |
| CFAA | | | | PcP | **PcP** | **11 01 11.6** | **-0.1** |
| | comp=Z,0.6nm,0.5s,baz=137,slow=4.1,SNR=6.5 | | | | | | |
| **SBA** | **Scott Base** | **43.41** | **184** | *e*P | **P** | **10 59 36.7** | **+0.9** |
| SBA | | | | *e* | | 11 01 25.3 | |
| SBA | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| **SBA** | **Scott Base** | **43.41** | **184** | *e*P | **P** | **10 59 36.7** | **+0.9** |
| | comp=Z,18nm,0.9s | | | | | | |
| SBA | | | | *e*PcP | **PcP** | **11 01 25.2** | **+2.0** |
| **VNDA** | **Vanda** | **43.88** | **182** | P | **P** | **10 59 41.0** | **+1.5** |
| | comp=Z,26nm,0.9s,baz=186,slow=6.6,SNR=148 | | | | | | |
| VNDA | | | | PcP | **PcP** | **11 01 25.9** | **+1.1** |
| | comp=Z,3.9nm,0.9s,baz=262,slow=5.4,SNR=3.5 | | | | | | |
| VNDA | | | | LR | LR | 11 17 46.1 | |
| | comp=Z,93nm,18.5s,baz=188,slow=36 | | | | | | |
| **VNDA** | **Vanda** | **43.88** | **182** | *e*P | **P** | **10 59 41.1** | **+1.5** |
| VNDA | | | | | | 11 01 25.9 | |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **43.88** | **182** | *e*P | **P** | **10 59 41.1** | **+1.5** |
| | comp=Z,22nm,0.8s | | | | | | |
| VNDA | | | | PcP | **PcP** | **11 01 25.9** | **+1.1** |
| **BOSA** | **Boshof** | **45.72** | **71** | LR | LR | 11 15 35.9 | |
| | comp=Z,209nm,19.1s,baz=204,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **46.27** | **329** | P | **P** | **10 59 59.9** | **+0.6** |
| | comp=Z,3.7nm,0.5s,baz=168,slow=7.3,SNR=5.1 | | | | | | |
| BDFB | | | | PcP | **PcP** | **11 01 34.8** | **+0.7** |
| | comp=Z,5.5nm,0.6s,baz=226,slow=5.1,SNR=5.9 | | | | | | |
| BDFB | | | | LR | LR | 11 16 41.3 | |
| | comp=Z,192nm,19.3s,baz=170,slow=33 | | | | | | |
| **LVC** | **Limon Verde** | **47.60** | **300** | P | **P** | **11 00 08.6** | **-1.2** |
| | comp=Z,16nm,0.6s,baz=199,slow=2.8,SNR=7.3 | | | | | | |
| **LVC** | **Limon Verde** | **47.60** | **300** | *e*P | **P** | **11 00 09.3** | **-0.6** |
| | comp=Z,13nm,1.0s | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **50.37** | **14** | T | T | 11 54 53.6 | |
| | baz=188,slow=75,SNR=216 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **50.37** | **14** | T | T | 11 54 49.0 | |
| | baz=188,slow=75,SNR=233 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **50.39** | **14** | T | T | 11 54 54.9 | |
| | baz=188,slow=75,SNR=229 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **51.49** | **14** | T | T | 11 56 17.2 | |
| | baz=182,slow=72,SNR=26 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **51.49** | **14** | T | T | 11 56 21.3 | |
| | baz=182,slow=72,SNR=34 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **51.50** | **14** | T | T | 11 56 18.8 | |
| | baz=182,slow=72,SNR=86 | | | | | | |
| **LPAZ** | **La Paz** | **52.83** | **305** | P | **P** | **11 00 49.1** | **-0.7** |
| | comp=Z,3.6nm,0.6s,baz=157,slow=5.8,SNR=22 | | | | | | |
| LPAZ | | | | LR | LR | 11 25 55.7 | |
| | comp=Z,66nm,19.1s,baz=160,slow=39 | | | | | | |
| **LPAZ** | **La Paz** | **52.83** | **305** | *e*P | **P** | **11 00 48.9** | **-0.9** |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **LPAZ** | **La Paz** | **52.83** | **305** | *e*P | **P** | **11 00 48.9** | **-0.9** |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **SAML** | **Samuel** | **57.48** | **314** | *e*P | **P** | **11 01 21.1** | **-1.6** |
| | comp=Z,4.7nm,0.7s | | | | | | |
| **LSZ** | **Lusaka** | **58.45** | **65** | *e*P | **P** | **11 01 29.9** | **+0.2** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **LSZ** | **Lusaka** | **58.45** | **65** | *e*P | **P** | **11 01 29.9** | **+0.2** |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **PTGA** | **Pitinga** | **63.98** | **321** | LR | LR | 11 32 15.4 | |
| | comp=Z,71nm,18.4s,baz=160,slow=38 | | | | | | |
| **LIC** | **Lamto** | **66.80** | **22** | *e*P | **P** | **11 02 25.8** | **+0.8** |
| | comp=Z,24nm,0.7s | | | | | | |
| **KIC** | **Kosan Boka** | **66.99** | **22** | *e*P | **P** | **11 02 26.9** | **+0.7** |
| | comp=Z,49nm,1.3s | | | | | | |
| **TIC** | **Toumodi** | **67.21** | **22** | *e*P | **P** | **11 02 28.2** | **+0.6** |
| **DBIC** | **Dimbokro** | **67.27** | **22** | P | **P** | **11 02 28.6** | **+0.7** |
| | comp=Z,5.6nm,0.7s,baz=151,slow=8.1,SNR=6.8 | | | | | | |
| DBIC | | | | LR | LR | 11 25 58.6 | |
| | comp=Z,102nm,19.0s,baz=140,slow=31 | | | | | | |
| **ROSC** | **El Rosal** | **74.46** | **309** | LR | LR | 11 37 14.3 | |
| | comp=Z,53nm,21.4s,baz=145,slow=37 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **74.97** | **27** | *e*P | **P** | **11 03 14.2** | **-0.3** |
| **TOA0** | **Torodi Ar. Sit** | **74.97** | **27** | *e*P | **P** | **11 03 15.5** | **+1.0** |
| **TORD** | **Torodi Ar. Bea** | **74.97** | **27** | P | **P** | **11 03 15.5** | **+1.0** |
| | comp=Z,17nm,0.7s,baz=194,slow=6.5,SNR=128 | | | | | | |
| TORD | | | | LR | LR | 11 30 37.4 | |
| | comp=Z,107nm,20.2s,baz=180,slow=31 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **75.75** | **320** | LR | LR | 11 36 57.6 | |
| | comp=Z,110nm,19.1s,slow=36 | | | | | | |
| **RPZ** | **Rata Peaks** | **76.97** | **192** | LR | LR | 11 34 55.5 | |
| | comp=Z,108nm,18.9s,baz=183,slow=34 | | | | | | |
| **BCIP** | **Isla Barro Col** | **80.64** | **305** | *e*P | P | 11 03 41.8 | -4.4 |
| | comp=Z,18nm,0.7s | | | | | | |
| **URZ** | **Urewera** | **81.53** | **198** | LR | LR | 11 34 47.4 | |
| | comp=Z,172nm,21.2s,baz=170,slow=32 | | | | | | |
| **TAM** | **Tamanrasset** | **85.17** | **28** | *e*P | P | 11 04 12.5 | +2.9 |
| TAM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **TAM** | **Tamanrasset** | **85.17** | **28** | *e*P | P | 11 04 12.5 | +2.9 |
| | comp=Z,4.3nm,1.2s | | | | | | |
| **H08N3** | **Diego Garcia H** | **87.84** | **99** | T | T | 12 42 15.6 | |
| | baz=216,slow=76,SNR=11 | | | | | | |
| **H08N1** | **Diego Carcia H** | **87.85** | **99** | T | T | 12 42 14.5 | |
| | baz=216,slow=76,SNR=7.3 | | | | | | |
| **H08N2** | **Diego Garcia H** | **87.86** | **99** | T | T | 12 42 17.2 | |
| | baz=216,slow=76,SNR=9.8 | | | | | | |
| **PPT** | **Papeete** | **91.39** | **232** | LR | LR | 11 38 36.6 | |
| | comp=Z,79nm,18.5s,baz=184,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **96.05** | **161** | P | **P** | **11 05 00.3** | **-0.5** |
| | comp=Z,4.5nm,0.9s,baz=183,slow=4.1,SNR=35 | | | | | | |
| ASAR | | | | PKKPbc | **PKKPbc** | **11 21 46.2** | **+1.0** |
| | comp=Z,0.6nm,0.8s,baz=5.2,slow=1.3,SNR=8.5 | | | | | | |
| ASAR | | | | LR | LR | 11 46 14.6 | |
| | comp=Z,163nm,19.0s,baz=193,slow=34 | | | | | | |
| **AS01** | **Alice Springs** | **96.06** | **161** | *e*P | **P** | **11 04 59.8** | **-1.1** |
| **KEST** | **Kesra** | **98.48** | **28** | LR | LR | 11 44 26.4 | |
| | comp=Z,67nm,19.8s,baz=311,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **99.77** | **161** | P | **Pdif** | **11 05 16.6** | **-0.9** |
| | comp=Z,0.7nm,0.8s,baz=191,slow=3.7,SNR=4.7 | | | | | | |
| WRA | | | | PKKP | **PKKPdf** | **11 21 37.3** | **-0.7** |
| | comp=Z,0.7nm,0.8s,baz=358,slow=2.7,SNR=11 | | | | | | |
| WRA | | | | LR | LR | 11 48 39.2 | |
| | comp=Z,169nm,19.5s,baz=190,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **108.97** | **295** | PKiKP | **PKiKP** | **11 10 02.7** | **+0.3** |
| | comp=Z,0.6nm,0.7s,baz=162,slow=3.2,SNR=7.3 | | | | | | |
| **GERES** | **GERESS Array B** | **111.92** | **27** | PKiKP | **PKiKP** | **11 10 05.1** | **-2.2** |
| | comp=Z,0.3nm,0.3s,baz=238,slow=9.3,SNR=3.7 | | | | | | |
| **Q35A** | **Mercer Eighty,** | **113.57** | **306** | P | **PKiKP** | **11 10 10.8** | **+0.1** |
| | baz=114 | | | | | | |
| **121A** | **Cookes Peak, D** | **113.58** | **294** | P | **PKiKP** | **11 10 11.0** | **-0.1** |
| | baz=114 | | | | | | |
| **R34A** | **Isabella, Hill** | **113.61** | **305** | P | **PKiKP** | **11 10 11.1** | **+0.3** |
| | baz=114 | | | | | | |
| **T31A** | **Randall Ranch,** | **113.65** | **303** | P | **PKiKP** | **11 10 11.1** | **+0.2** |
| | baz=114 | | | | | | |
| **R32A** | **Long Quarter,** | **114.34** | **304** | P | PKPdf | 11 10 12.3 | +0.1 |
| | baz=115 | | | | | | |
| **Q33A** | **Connelly Farm,** | **114.44** | **305** | P | PKPdf | 11 10 12.5 | +0.2 |
| | baz=115 | | | | | | |
| **P34A** | **Walnut Farm, R** | **114.48** | **306** | P | PKPdf | 11 10 12.6 | +0.2 |
| | baz=115 | | | | | | |
| **U27A** | **Thompson Grove** | **114.49** | **300** | P | PKPdf | 11 10 12.6 | -0.1 |
| | baz=115 | | | | | | |
| **R31A** | **Burdett** | **114.58** | **304** | P | PKPdf | 11 10 12.9 | +0.2 |
| | baz=115 | | | | | | |
| **S29A** | **Ulysses** | **114.72** | **302** | P | PKPdf | 11 10 13.1 | +0.1 |
| | baz=115 | | | | | | |
| **R30A** | **Dighton** | **114.90** | **303** | P | PKPdf | 11 10 13.7 | +0.4 |
| | baz=115 | | | | | | |
| **ANMO** | **Albuquerque** | **114.94** | **296** | ⇑*i*PKIKP | PKPdf | 11 10 13.4 | -0.3 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,2.5s | | | | | | |
| **O34A** | **Beatrice** | **114.96** | **307** | P | PKPdf | 11 10 12.9 | -0.4 |
| | baz=115 | | | | | | |
| **CBKS** | **Cedar Bluff** | **115.11** | **304** | P | **PKPdf** | **11 10 13.7** | **+0.1** |
| | baz=115 | | | | | | |
| **P32A** | **Huiting Farm,** | **115.29** | **305** | P | **PKPdf** | **11 10 14.4** | **+0.4** |
| | baz=116 | | | | | | |
| **Q30A** | **Quinter** | **115.45** | **304** | P | **PKPdf** | **11 10 14.6** | **+0.3** |
| | baz=116 | | | | | | |
| **T26A** | **Comanche Natio** | **115.46** | **300** | P | **PKPdf** | **11 10 15.0** | **+0.4** |
| | baz=116 | | | | | | |
| **P31A** | **Stockton** | **115.54** | **304** | P | **PKPdf** | **11 10 14.9** | **+0.4** |
| | baz=116 | | | | | | |
| **R28A** | **Tribune** | **115.62** | **302** | P | **PKPdf** | **11 10 15.3** | **+0.5** |
| | baz=116 | | | | | | |
| **S26A** | **Kim** | **115.77** | **300** | P | **PKPdf** | **11 10 15.7** | **+0.6** |
| | baz=116 | | | | | | |
| **T25A** | **Trinidad** | **115.80** | **299** | P | **PKPdf** | **11 10 15.8** | **+0.5** |
| | baz=116 | | | | | | |
| **R27A** | **Eads** | **116.02** | **301** | P | **PKPdf** | **11 10 15.7** | **+0.2** |
| | baz=116 | | | | | | |
| **O31A** | **Woolen Ranch,** | **116.04** | **305** | P | **PKPdf** | **11 10 15.5** | **+0.1** |
| | baz=116 | | | | | | |
| **L35A** | **Bielow Farm, R** | **116.10** | **309** | P | **PKPdf** | **11 10 16.0** | **+0.6** |
| | baz=116 | | | | | | |
| **P29A** | **Atwood** | **116.28** | **303** | P | **PKPdf** | **11 10 16.0** | **+0.1** |
| | baz=117 | | | | | | |
| **L34A** | **Svendsen Farm,** | **116.32** | **308** | P | **PKPdf** | **11 10 16.1** | **+0.3** |
| | baz=117 | | | | | | |
| **R26A** | **Arlington** | **116.32** | **301** | P | **PKPdf** | **11 10 16.3** | **+0.2** |
| | baz=117 | | | | | | |
| **M33A** | **Taylor Creek F** | **116.33** | **307** | P | **PKPdf** | **11 10 15.9** | **0.0** |
| | baz=117 | | | | | | |
| **O30A** | **MW Ranch, Wils** | **116.38** | **304** | P | **PKPdf** | **11 10 16.1** | **+0.1** |
| | baz=117 | | | | | | |
| **K35A** | **Storm Lake** | **116.48** | **309** | P | **PKPdf** | **11 10 16.4** | **+0.3** |
| | baz=117 | | | | | | |
| **BGNE** | **Belgrade** | **116.59** | **306** | P | **PKPdf** | **11 10 16.5** | **+0.1** |
| | baz=117 | | | | | | |
| **P28A** | **Saint Francis** | **116.61** | **303** | P | **PKPdf** | **11 10 16.9** | **+0.2** |
| | baz=117 | | | | | | |
| **O29A** | **4D Ranch, Culb** | **116.65** | **304** | P | **PKPdf** | **11 10 16.8** | **+0.2** |
| | baz=117 | | | | | | |
| **KIV** | **Kislovodsk** | **116.68** | **48** | *i* PKIKP | **PKPdf** | **11 10 14.4** | **-2.2** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **SDCO** | **Great Sand Dun** | **116.79** | **299** | P | **PKPdf** | **11 10 17.5** | **+0.2** |
| | baz=117 | | | | | | |
| **SDCO** | **Great Sand Dun** | **116.79** | **299** | *e*PKPdf | **PKPdf** | **11 10 17.8** | **+0.5** |
| **Q26A** | **Hugo** | **116.86** | **301** | P | **PKPdf** | **11 10 17.7** | **+0.5** |
| | baz=117 | | | | | | |
| **M31A** | **Lambtecht Ranc** | **116.88** | **306** | P | **PKPdf** | **11 10 17.6** | **+0.6** |
| | baz=117 | | | | | | |
| **P27A** | **Ficken Ranch,** | **116.96** | **302** | P | **PKPdf** | **11 10 17.4** | **+0.1** |
| | baz=117 | | | | | | |
| **J35A** | **Milford** | **117.01** | **310** | P | **PKPdf** | **11 10 17.4** | **+0.3** |
| | baz=117 | | | | | | |
| **N29A** | **Votaw Ranch, W** | **117.15** | **304** | P | **PKPdf** | **11 10 18.2** | **+0.6** |
| | baz=118 | | | | | | |
| **P26A** | **Davis Ranch, A** | **117.31** | **302** | P | **PKPdf** | **11 10 18.6** | **+0.6** |
| | baz=118 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **117.40** | **298** | P | **PKPdf** | **11 10 18.7** | **+0.3** |
| | baz=118 | | | | | | |
| **L31A** | **Butterfield Fa** | **117.51** | **306** | P | **PKPdf** | **11 10 18.4** | **+0.2** |
| | baz=118 | | | | | | |
| **SPMN** | **St. Paul** | **117.62** | **312** | P | **PKPdf** | **11 10 18.2** | **-0.1** |
| | baz=118 | | | | | | |
| **M29A** | **Burnside Ranch** | **117.69** | **305** | P | **PKPdf** | **11 10 19.3** | **+0.7** |
| | baz=118 | | | | | | |
| **L30A** | **Spencer Herefo** | **117.69** | **306** | P | **PKPdf** | **11 10 18.1** | **-0.4** |
| | baz=118 | | | | | | |
| **IBP** | **Imperial Bould** | **117.73** | **288** | P | **PKPdf** | **11 10 18.6** | **-0.3** |
| | baz=118 | | | | | | |
| **WUAZ** | **Wupatki** | **117.73** | **293** | P | **PKPdf** | **11 10 19.6** | **+0.6** |
| | baz=118 | | | | | | |
| **MVCO** | **Mesa Verde** | **117.74** | **296** | P | **PKPdf** | **11 10 19.4** | **+0.3** |
| | baz=118 | | | | | | |
| **AKASG** | **Malin Array Be** | **117.79** | **36** | PKP | **PKPdf** | **11 10 17.6** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=235,slow=1.6,SNR=3.3 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **117.81** | **288** | P | **PKPdf** | **11 10 19.1** | **+0.1** |
| | baz=118 | | | | | | |
| **Y12C** | **Blythe** | **117.83** | **290** | P | **PKPdf** | **11 10 19.4** | **+0.4** |
| | baz=118 | | | | | | |
| **K31A** | **O'Neill** | **117.84** | **307** | P | **PKPdf** | **11 10 18.9** | **+0.1** |
| | baz=118 | | | | | | |
| **O26A** | **Horse Wrangler** | **117.85** | **302** | P | **PKPdf** | **11 10 19.0** | **-0.1** |
| | baz=118 | | | | | | |
| **OGNE** | **Ogallala** | **117.86** | **303** | P | **PKPdf** | **11 10 18.8** | **-0.1** |
| | baz=118 | | | | | | |
| **ECSD** | **EROS Data Cent** | **117.88** | **309** | P | **PKPdf** | **11 10 18.8** | **0.0** |
| | baz=118 | | | | | | |
| **ECSD** | **EROS Data Cent** | **117.88** | **309** | *e*PKPdf | **PKPdf** | **11 10 18.7** | **-0.1** |
| **N27A** | **Anderson Farm,** | **117.97** | **303** | P | **PKPdf** | **11 10 19.1** | **-0.1** |
| | baz=118 | | | | | | |
| **MONP** | **Monument Peak** | **118.07** | **288** | P | **PKPdf** | **11 10 19.8** | **0.0** |
| | baz=118 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **118.08** | **290** | P | **PKPdf** | **11 10 19.7** | **+0.3** |
| | baz=118 | | | | | | |
| **J32A** | **Parkston** | **118.09** | **308** | P | **PKPdf** | **11 10 19.2** | **0.0** |
| | baz=118 | | | | | | |
| **SCHQ** | **Schefferville** | **118.10** | **334** | PKP | **PKPdf** | **11 10 18.4** | **-0.4** |
| | comp=Z,4.4nm,0.8s,baz=231,slow=12,SNR=3.1 | | | | | | |
| **BC3** | **Big Chuckawall** | **118.21** | **289** | P | **PKPdf** | **11 10 19.8** | **-0.1** |
| | baz=118 | | | | | | |
| **I33A** | **Coleman** | **118.22** | **309** | P | **PKPdf** | **11 10 19.7** | **+0.2** |
| | baz=119 | | | | | | |
| **K30A** | **Basset** | **118.25** | **306** | P | **PKPdf** | **11 10 19.9** | **+0.3** |
| | baz=119 | | | | | | |
| **H34A** | **Spellman Lake,** | **118.32** | **310** | P | **PKPdf** | **11 10 19.8** | **+0.2** |
| | baz=119 | | | | | | |
| **J31A** | **Geddes** | **118.39** | **307** | P | **PKPdf** | **11 10 19.8** | **0.0** |
| | baz=119 | | | | | | |
| **F36A** | **Milaca** | **118.44** | **312** | P | **PKPdf** | **11 10 20.3** | **+0.5** |
| | baz=119 | | | | | | |
| **IRM** | **Iron Mountain** | **118.47** | **289** | P | **PKPdf** | **11 10 20.4** | **+0.2** |
| | baz=119 | | | | | | |
| **I32A** | **Karley and Nic** | **118.47** | **309** | P | **PKPdf** | **11 10 20.3** | **+0.4** |
| | baz=119 | | | | | | |
| **ISCO** | **Idaho Springs** | **118.51** | **300** | P | **PKPdf** | **11 10 21.2** | **+0.7** |
| | baz=119 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **118.67** | **288** | P | **PKPdf** | **11 10 21.3** | **+0.5** |
| | baz=119 | | | | | | |
| **H33A** | **Prehn Over Nor** | **118.72** | **310** | P | **PKPdf** | **11 10 20.5** | **+0.1** |
| | baz=119 | | | | | | |
| **J30A** | **Dallas** | **118.73** | **307** | P | **PKPdf** | **11 10 20.4** | **-0.1** |
| | baz=119 | | | | | | |
| **G34A** | **Benson** | **118.74** | **311** | P | **PKPdf** | **11 10 20.2** | **-0.2** |
| | baz=119 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **118.76** | **289** | P | **PKPdf** | **11 10 21.8** | **+0.8** |
| | baz=119 | | | | | | |
| **F35A** | **Swanville** | **118.84** | **312** | P | **PKPdf** | **11 10 20.7** | **+0.1** |
| | baz=119 | | | | | | |
| **H32A** | **Carlson Farm,** | **118.85** | **309** | P | **PKPdf** | **11 10 21.0** | **+0.4** |
| | baz=119 | | | | | | |
| **I31A** | **Royce, Wessing** | **118.91** | **308** | P | **PKPdf** | **11 10 20.7** | **0.0** |
| | baz=119 | | | | | | |
| **D37A** | **Cotton** | **119.10** | **314** | P | **PKPdf** | **11 10 21.7** | **+0.7** |
| | baz=120 | | | | | | |
| **J29A** | **Okreek** | **119.14** | **306** | P | **PKPdf** | **11 10 21.4** | **+0.1** |
| | baz=120 | | | | | | |
| **I30A** | **Oacoma** | **119.19** | **307** | P | **PKPdf** | **11 10 21.5** | **+0.2** |
| | baz=120 | | | | | | |
| **GMRC** | **Granite Mounta** | **119.22** | **289** | P | **PKPdf** | **11 10 22.1** | **+0.3** |
| | baz=120 | | | | | | |
| **H31A** | **Wolsey** | **119.26** | **308** | P | **PKPdf** | **11 10 21.5** | **+0.1** |
| | baz=120 | | | | | | |
| **D36A** | **Goodland** | **119.39** | **313** | P | **PKPdf** | **11 10 21.3** | **-0.3** |
| | baz=120 | | | | | | |
| **EYMN** | **Ely** | **119.42** | **315** | P | **PKPdf** | **11 10 21.0** | **-0.6** |
| | baz=120 | | | | | | |
| **BBRC** | **Big Bear Solar** | **119.42** | **288** | P | **PKPdf** | **11 10 22.6** | **+0.2** |
| | baz=120,SNR=5.6 | | | | | | |
| **SUSD** | **South Dakota S** | **119.42** | **308** | P | **PKPdf** | **11 10 21.3** | **-0.5** |
| | baz=120 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **119.50** | **311** | P | **PKPdf** | **11 10 22.0** | **+0.2** |
| | baz=120 | | | | | | |
| **G32A** | **Webster** | **119.50** | **309** | P | **PKPdf** | **11 10 22.0** | **+0.2** |
| | baz=120,SNR=6.3 | | | | | | |
| **J28A** | **Allard Ranch,** | **119.54** | **306** | P | **PKPdf** | **11 10 22.3** | **+0.2** |
| | baz=120 | | | | | | |
| **N23A** | **Red Feather La** | **119.55** | **301** | P | **PKPdf** | **11 10 22.4** | **0.0** |
| | baz=120 | | | | | | |
| **HEC** | **Hector,Ludlow** | **119.58** | **289** | P | **PKPdf** | **11 10 22.3** | **-0.2** |
| | baz=120 | | | | | | |
| **E34A** | **Wadena** | **119.61** | **312** | P | **PKPdf** | **11 10 21.7** | **-0.4** |
| | baz=120 | | | | | | |
| **D35A** | **Remer** | **119.65** | **313** | P | **PKPdf** | **11 10 22.4** | **+0.4** |
| | baz=120 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **119.77** | **288** | P | **PKPdf** | **11 10 23.0** | **+0.1** |
| | baz=120 | | | | | | |
| **TUQ** | **Turquoise Moun** | **119.87** | **290** | P | **PKPdf** | **11 10 23.2** | **+0.1** |
| | baz=120 | | | | | | |
| **E33A** | **Westby DABS, E** | **119.93** | **311** | P | **PKPdf** | **11 10 22.8** | **+0.2** |
| | baz=120 | | | | | | |
| **O20A** | **White River Ci** | **119.98** | **299** | P | **PKPdf** | **11 10 23.1** | **-0.1** |
| | baz=120 | | | | | | |
| **I28A** | **Midland** | **119.98** | **306** | P | **PKPdf** | **11 10 22.9** | **0.0** |
| | baz=120 | | | | | | |
| **G30A** | **Faulkton** | **120.06** | **308** | P | **PKPdf** | **11 10 23.2** | **+0.2** |
| | baz=120 | | | | | | |
| **H29A** | **Onida** | **120.09** | **307** | P | **PKPdf** | **11 10 23.3** | **+0.2** |
| | baz=120 | | | | | | |
| **D34A** | **Park Rapids** | **120.09** | **312** | P | **PKPdf** | **11 10 23.0** | **+0.1** |
| | baz=120 | | | | | | |
| **GSC** | **Goldstone** | **120.19** | **289** | *e*PKIKP | **PKPdf** | **11 10 24.5** | **+0.9** |
| **GSC** | **Goldstone** | **120.19** | **289** | P | **PKPdf** | **11 10 24.2** | **+0.5** |
| | baz=120 | | | | | | |
| **GSC** | **Goldstone** | **120.19** | **289** | *e*PKPdf | **PKPdf** | **11 10 24.5** | **+0.9** |
| **SRU** | **San Rafael** | **120.21** | **296** | *e*PKIKP | **PKPdf** | **11 10 23.8** | **+0.1** |
| **SRU** | **San Rafael** | **120.21** | **296** | *e*PKPdf | **PKPdf** | **11 10 23.8** | **+0.1** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| F31A | Hecla | 120.30 | 309 | P | PKPdf | 11 10 23.5 | +0.1 |
| | baz=121 | | | | | | |
| CCUT | Cedar City | 120.31 | 293 | *e*PKPdf | PKPdf | 11 10 25.3 | +1.4 |
| SHPR | Sheep Range | 120.35 | 291 | *e*PKPdf | PKPdf | 11 10 25.2 | +1.2 |
| D33A | AnnSam, Waubun | 120.39 | 312 | P | PKPdf | 11 10 23.0 | -0.5 |
| | baz=121 | | | | | | |
| EDW2 | Edwards Air Fo | 120.44 | 288 | P | PKPdf | 11 10 24.8 | +0.7 |
| | baz=121,SNR=14 | | | | | | |
| H28A | Mission Ridge | 120.47 | 307 | P | PKPdf | 11 10 23.3 | -0.5 |
| | baz=121,SNR=8.0 | | | | | | |
| MSU | Marysvale | 120.51 | 295 | *e*PKIKP | PKPdf | 11 10 25.6 | +1.3 |
| MSU | Marysvale | 120.51 | 295 | *e*PKPdf | PKPdf | 11 10 25.6 | +1.3 |
| J25A | Sunshine Ranch | 120.61 | 304 | P | PKPdf | 11 10 23.7 | -0.5 |
| | baz=121 | | | | | | |
| TMUT | Trail Mountain | 120.68 | 296 | *e*PKPdf | PKPdf | 11 10 25.3 | +0.6 |
| I26A | New Underwood | 120.72 | 305 | P | PKPdf | 11 10 24.5 | +0.2 |
| | baz=121 | | | | | | |
| G28A | Parade | 120.75 | 307 | P | PKPdf | 11 10 24.1 | -0.2 |
| | baz=121,SNR=5.7 | | | | | | |
| LRMC | Laurel Mountai | 120.77 | 288 | P | PKPdf | 11 10 24.0 | -0.8 |
| | baz=121,SNR=5.3 | | | | | | |
| H27A | Howes | 120.88 | 306 | P | PKPdf | 11 10 24.6 | 0.0 |
| | baz=121 | | | | | | |
| B34A | Aery, Baudette | 121.04 | 313 | P | PKPdf | 11 10 24.8 | +0.1 |
| | baz=121 | | | | | | |
| E30A | Jud | 121.08 | 309 | P | PKPdf | 11 10 25.0 | +0.1 |
| | baz=121 | | | | | | |
| I25A | Rochford | 121.09 | 304 | P | PKPdf | 11 10 25.2 | 0.0 |
| | baz=121 | | | | | | |
| MPMC | Manual Prospec | 121.14 | 289 | P | PKPdf | 11 10 25.8 | +0.2 |
| | baz=121,SNR=5.8 | | | | | | |
| FURC | Furnace Creek, | 121.15 | 290 | P | PKPdf | 11 10 25.4 | +0.2 |
| | baz=121 | | | | | | |
| H26A | Fairpoint | 121.16 | 305 | P | PKPdf | 11 10 24.8 | -0.3 |
| | baz=122,SNR=9.2 | | | | | | |
| K22A | Casper | 121.21 | 301 | P | PKPdf | 11 10 25.3 | -0.2 |
| | baz=122,SNR=5.5 | | | | | | |
| K22A | Casper | 121.21 | 301 | *e*PKPdf | PKPdf | 11 10 25.2 | -0.2 |
| TPNV | Topopah Spring | 121.23 | 290 | *e*PKIKP | PKPdf | 11 10 26.7 | +1.0 |
| TPNV | Topopah Spring | 121.23 | 290 | P | PKPdf | 11 10 25.7 | 0.0 |
| | baz=122,SNR=8.0 | | | | | | |
| TPNV | Topopah Spring | 121.23 | 290 | *e*PKPdf | PKPdf | 11 10 26.7 | +1.0 |
| RSSD | Black Hills | 121.30 | 304 | *e*PKIKP | PKPdf | 11 10 25.4 | -0.3 |
| RSSD | Black Hills | 121.30 | 304 | *e*PKPdf | PKPdf | 11 10 25.4 | -0.3 |
| ISA | Isabella | 121.31 | 288 | P | PKPdf | 11 10 25.5 | -0.2 |
| | baz=122 | | | | | | |
| F28A | McLaughlin | 121.33 | 308 | P | PKPdf | 11 10 25.0 | -0.3 |
| | baz=122 | | | | | | |
| AGMN | Agassiz Nation | 121.35 | 312 | P | PKPdf | 11 10 25.3 | 0.0 |
| | baz=122 | | | | | | |
| AGMN | Agassiz Nation | 121.35 | 312 | *e*PKPdf | PKPdf | 11 10 25.0 | -0.3 |
| PKM | Peak Mountain | 121.37 | 286 | P | PKPdf | 11 10 25.6 | -0.5 |
| | baz=122 | | | | | | |
| G27A | Dupree | 121.42 | 307 | P | PKPdf | 11 10 25.3 | -0.3 |
| | baz=122,SNR=11 | | | | | | |
| D30A | Buchanan | 121.52 | 310 | P | PKPdf | 11 10 25.7 | 0.0 |
| | baz=122 | | | | | | |
| H25A | Fruitdale | 121.52 | 305 | P | PKPdf | 11 10 26.0 | +0.1 |
| | baz=122,SNR=6.9 | | | | | | |
| G26A | Maurine | 121.63 | 306 | P | PKPdf | 11 10 25.7 | -0.3 |
| | baz=122,SNR=8.4 | | | | | | |
| C31A | Landman Farms, | 121.66 | 311 | P | PKPdf | 11 10 25.6 | -0.3 |
| | baz=122 | | | | | | |
| B32A | Ashes, Strandq | 121.69 | 312 | P | PKPdf | 11 10 25.6 | -0.4 |
| | baz=122 | | | | | | |
| VES | Vestal, Richgr | 121.75 | 288 | P | PKPdf | 11 10 25.9 | -0.6 |
| | baz=122 | | | | | | |
| SMMC | Simmler | 121.79 | 286 | P | PKPdf | 11 10 27.1 | +0.5 |
| | baz=122 | | | | | | |
| GRAC | Grapevine Rang | 121.82 | 290 | P | PKPdf | 11 10 26.6 | 0.0 |
| | baz=122 | | | | | | |
| F27A | Lemmon | 121.85 | 307 | P | PKPdf | 11 10 26.5 | +0.1 |
| | baz=122 | | | | | | |
| E28A | Huff | 121.87 | 308 | P | PKPdf | 11 10 26.5 | +0.1 |
| | baz=122 | | | | | | |
| G25A | Newell | 121.90 | 305 | P | PKPdf | 11 10 26.5 | -0.1 |
| | baz=122,SNR=6.1 | | | | | | |
| R11A | Troy Canyon, C | 122.01 | 292 | P | PKPdf | 11 10 27.6 | +0.4 |
| | baz=122 | | | | | | |
| F26A | Lodgepole | 122.11 | 306 | P | PKPdf | 11 10 27.0 | +0.1 |
| | baz=122,SNR=5.4 | | | | | | |
| E27A | Carson | 122.11 | 307 | P | PKPdf | 11 10 27.1 | +0.3 |
| | baz=122 | | | | | | |
| B31A | Greenbush Farm | 122.14 | 311 | P | PKPdf | 11 10 26.8 | 0.0 |
| | baz=122 | | | | | | |
| DUG | Dugway | 122.15 | 295 | *e*PKIKP | PKPdf | 11 10 27.6 | +0.3 |
| DUG | Dugway | 122.15 | 295 | P | PKPdf | 11 10 26.7 | -0.6 |
| | baz=122,SNR=11 | | | | | | |
| DUG | Dugway | 122.15 | 295 | *e*PKPdf | PKPdf | 11 10 27.6 | +0.3 |
| TCUT | Toone Canyon | 122.22 | 297 | *e*PKPdf | PKPdf | 11 10 28.3 | +0.7 |
| B30A | Myrvik Farm, E | 122.43 | 311 | P | PKPdf | 11 10 26.9 | -0.5 |
| | baz=123 | | | | | | |
| MDND | Maddock | 122.45 | 310 | P | PKPdf | 11 10 26.6 | -0.8 |
| | baz=123 | | | | | | |
| F25A | Bowman | 122.50 | 306 | P | PKPdf | 11 10 26.8 | -0.8 |
| | baz=123 | | | | | | |
| E26A | Carlson Angus | 122.52 | 307 | P | PKPdf | 11 10 27.0 | -0.6 |
| | baz=123 | | | | | | |
| D27A | Center | 122.64 | 308 | P | PKPdf | 11 10 27.6 | -0.3 |
| | baz=123 | | | | | | |
| C28A | Hausauer Farms | 122.66 | 309 | P | PKPdf | 11 10 28.0 | +0.2 |
| | baz=123 | | | | | | |
| HWUT | Hardware Ranch | 122.67 | 297 | *e*PKPdf | PKPdf | 11 10 28.5 | +0.1 |
| NB2 | NORSAR Subarra | 122.81 | 20 | PKPdf | PKPdf | 11 10 27.7 | 0.0 |
| | comp=Z,3.4nm,1.1s,baz=202,slow=1.9 | | | | | | |
| NOA | NORSAR Array B | 122.81 | 20 | PKP | PKPdf | 11 10 27.6 | -0.2 |
| | comp=Z,1.6nm,0.7s,baz=192,slow=1.7,SNR=6.1 | | | | | | |
| A30A | Hoffart Farm, | 122.82 | 311 | P | PKPdf | 11 10 28.3 | +0.2 |
| | baz=123 | | | | | | |
| BGU | Big Grassy Mou | 122.82 | 296 | *e*PKPdf | PKPdf | 11 10 29.5 | +0.9 |
| E25A | Miller Ranch, | 122.93 | 306 | P | PKPdf | 11 10 28.7 | +0.2 |
| | baz=123 | | | | | | |
| ULM | Lac du Bonnet | 122.94 | 314 | PKP | PKPdf | 11 10 27.8 | -0.5 |
| | comp=Z,9.2nm,0.8s,baz=209,slow=0.4,SNR=8.6 | | | | | | |
| D26A | Manning | 122.95 | 307 | P | PKPdf | 11 10 28.9 | +0.4 |
| | baz=123 | | | | | | |
| MLAC | Mammoth Lakes | 123.03 | 289 | P | PKPdf | 11 10 29.0 | -0.2 |
| | baz=123 | | | | | | |
| CM01 | Chiang Mai Arr | 123.08 | 110 | *e*PKPdf | PKPdf | 11 10 29.4 | -0.2 |
| CMAR | Chiang Mai Arr | 123.11 | 110 | PKP | PKPdf | 11 10 29.4 | -0.2 |
| | comp=Z,2.9nm,0.8s,baz=235,slow=3.7,SNR=15 | | | | | | |
| C27A | Sayler Ranch, | 123.11 | 308 | P | PKPdf | 11 10 28.6 | -0.1 |
| | baz=124 | | | | | | |
| A29A | Manning Farm, | 123.17 | 311 | P | PKPdf | 11 10 28.5 | -0.3 |
| | baz=124 | | | | | | |
| HVU | Hansel Valley | 123.37 | 297 | *e*PKIKP | PKPdf | 11 10 30.3 | +0.7 |
| HVU | Hansel Valley | 123.37 | 297 | *e*PKPdf | PKPdf | 11 10 30.2 | +0.7 |
| NV01 | Mina Array Sit | 123.40 | 290 | *e*PKPdf | PKPdf | 11 10 30.7 | +0.9 |
| NVAR | Mina Array Bea | 123.40 | 290 | PKP | PKPdf | 11 10 31.1 | +1.3 |
| | comp=Z,3.7nm,0.6s,baz=139,slow=3.0,SNR=40 | | | | | | |
| D25A | Fairfield | 123.41 | 307 | P | PKPdf | 11 10 30.1 | +0.7 |
| | baz=124 | | | | | | |
| A28A | Rude Farm, Bot | 123.57 | 310 | P | PKPdf | 11 10 29.5 | -0.1 |
| | baz=124 | | | | | | |
| REDW | Red Top Meadow | 123.72 | 299 | *e*PKPdf | PKPdf | 11 10 30.6 | +0.3 |
| ELK | Elko | 123.72 | 294 | *e*PKIKP | PKPdf | 11 10 31.6 | +1.2 |
| ELK | Elko | 123.72 | 294 | *e*PKPdf | PKPdf | 11 10 31.6 | +1.2 |
| LOHW | Long Hollow | 123.81 | 299 | *e*PKPdf | PKPdf | 11 10 30.6 | +0.1 |
| C25A | Freed Ranch, W | 123.83 | 307 | P | PKPdf | 11 10 30.6 | +0.4 |
| | baz=124 | | | | | | |
| TPAW | Teton Pass | 123.87 | 299 | *e*PKPdf | PKPdf | 11 10 31.2 | +0.6 |
| MOOW | Moose Ponds | 123.98 | 299 | *e*PKPdf | PKPdf | 11 10 31.1 | +0.3 |
| A27A | Ledoux Ranch, | 123.99 | 310 | P | PKPdf | 11 10 30.9 | +0.5 |
| | baz=124 | | | | | | |
| FXWY | Fox Creek | 124.02 | 299 | *e*PKPdf | PKPdf | 11 10 31.5 | +0.6 |
| CMB | Columbia Colle | 124.12 | 288 | *e*PKIKP | PKPdf | 11 10 32.2 | +1.2 |
| CMB | Columbia Colle | 124.12 | 288 | *e*PKPdf | PKPdf | 11 10 32.2 | +1.2 |
| IMW | Indian Meadow | 124.18 | 299 | *e*PKPdf | PKPdf | 11 10 32.2 | +0.9 |
| FLWY | Flagg Ranch | 124.22 | 300 | *e*PKPdf | PKPdf | 11 10 31.9 | +0.6 |
| B25A | Knox Farm, Ray | 124.23 | 308 | P | PKPdf | 11 10 31.2 | +0.3 |
| | baz=125 | | | | | | |
| A26A | Wade Farm, Ken | 124.27 | 309 | P | PKPdf | 11 10 31.3 | +0.4 |
| | baz=125 | | | | | | |
| LAO | LASA Array | 124.28 | 305 | P | PKPdf | 11 10 31.3 | +0.3 |
| | baz=125 | | | | | | |
| LAO | LASA Array | 124.28 | 305 | *e*PKPdf | PKPdf | 11 10 31.6 | +0.5 |
| RLMT | Red Lodge | 124.38 | 301 | P | PKPdf | 11 10 31.5 | 0.0 |
| | baz=125 | | | | | | |
| RLMT | Red Lodge | 124.38 | 301 | *e*PKPdf | PKPdf | 11 10 32.1 | +0.5 |
| H17A | Grant Village | 124.40 | 300 | P | PKPdf | 11 10 32.0 | +0.3 |
| | baz=125 | | | | | | |
| H17A | Grant Village | 124.40 | 300 | *e*PKPdf | PKPdf | 11 10 33.0 | +1.3 |
| BMN | Battle Mountai | 124.43 | 292 | *e*PKIKP | PKPdf | 11 10 32.5 | +0.8 |
| BMN | Battle Mountai | 124.43 | 292 | *e*PKPdf | PKPdf | 11 10 32.5 | +0.8 |
| YFT | Old Faithful | 124.56 | 300 | *e*PKPdf | PKPdf | 11 10 33.9 | +2.0 |
| A25A | Svangstu Ranch | 124.74 | 308 | P | PKPdf | 11 10 32.6 | +0.8 |
| | baz=125 | | | | | | |
| YMR | Madison River | 124.79 | 300 | *e*PKPdf | PKPdf | 11 10 33.6 | +1.2 |
| DGMT | Dagmar | 124.82 | 307 | P | PKPdf | 11 10 32.8 | +0.8 |
| | baz=125 | | | | | | |
| DGMT | Dagmar | 124.82 | 307 | *e*PKPdf | PKPdf | 11 10 32.5 | +0.5 |
| GCMT | Greycliff | 125.08 | 302 | *e*PKPdf | PKPdf | 11 10 33.4 | +0.6 |
| QLMT | Earthquake Lak | 125.12 | 300 | *e*PKPdf | PKPdf | 11 10 34.6 | +1.7 |
| HLID | Hailey | 125.52 | 297 | P | PKPdf | 11 10 33.9 | +0.2 |
| | baz=126 | | | | | | |
| HLID | Hailey | 125.52 | 297 | *e*PKPdf | PKPdf | 11 10 34.8 | +1.1 |
| OHCM | Honcut | 125.67 | 288 | *e*PKPdf | PKPdf | 11 10 35.5 | +1.7 |
| MCMT | McKenzie Canyo | 125.77 | 299 | *e*PKPdf | PKPdf | 11 10 35.4 | +1.1 |
| BOZ | Bozeman (W) | 125.84 | 300 | P | PKPdf | 11 10 34.5 | +0.3 |
| | baz=126 | | | | | | |
| DLMT | Dillon | 126.06 | 299 | *e*PKPdf | PKPdf | 11 10 36.0 | +1.3 |
| MFID | Camas Ranch | 126.06 | 296 | *e*PKPdf | PKPdf | 11 10 35.8 | +1.1 |
| FINES | FINESS Array B | 126.31 | 28 | PKP | PKPdf | 11 10 34.5 | +0.1 |
| | comp=Z,3.3nm,0.6s,baz=155,slow=3.6,SNR=14 | | | | | | |
| LRM | Limekiln Ridge | 126.35 | 300 | *e*PKPdf | PKPdf | 11 10 36.6 | +1.3 |
| O03D | Paynes Creek | 126.56 | 289 | P | PKPdf | 11 10 36.0 | +0.3 |
| | baz=127 | | | | | | |
| WVOR | Wild Horse Val | 126.65 | 293 | *e*PKIKP | PKPdf | 11 10 37.5 | +1.6 |
| WVOR | Wild Horse Val | 126.65 | 293 | *e*PKPdf | PKPdf | 11 10 37.5 | +1.6 |
| HRY | Holter Researc | 126.75 | 301 | *e*PKPdf | PKPdf | 11 10 36.9 | +1.1 |
| EGMT | Eagleton | 126.83 | 303 | P | PKPdf | 11 10 36.9 | +1.0 |
| | baz=127 | | | | | | |
| EGMT | Eagleton | 126.83 | 303 | *e*PKPdf | PKPdf | 11 10 36.8 | +0.8 |
| MOD | Modoc | 127.05 | 291 | *e*PKPdf | PKPdf | 11 10 37.6 | +0.9 |
| J08A | Circle Bar Ran | 127.27 | 294 | *e*PKPdf | PKPdf | 11 10 37.7 | +0.7 |
| N02D | Trinity Center | 127.52 | 289 | P | PKPdf | 11 10 38.2 | +0.7 |
| | baz=128 | | | | | | |
| M04C | Macdoel | 127.71 | 290 | P | PKPdf | 11 10 38.5 | +0.6 |
| | baz=128 | | | | | | |
| MSO | Missoula | 127.78 | 300 | P | PKPdf | 11 10 38.5 | +0.6 |
| | baz=128 | | | | | | |
| MSO | Missoula | 127.78 | 300 | *e*PKPdf | PKPdf | 11 10 38.7 | +0.8 |
| M02C | Callahan | 127.91 | 289 | P | PKPdf | 11 10 38.6 | +0.4 |
| | baz=128 | | | | | | |
| K05A | Summer Lake | 127.96 | 292 | *e*PKPdf | PKPdf | 11 10 40.3 | +1.9 |
| ABKAR | Akbulak array | 128.03 | 56 | *e*PKPdf | PKPdf | 11 10 38.2 | +0.2 |
| KSH | Kashi | 128.26 | 75 | *e*PKP | PKPdf | 11 10 40.2 | +1.2 |
| KSH | | | | PPMZ | | | |
| | comp=Z,100nm,5.0s | | | | | | |
| I07A | Izee | 128.31 | 294 | *e*PKPdf | PKPdf | 11 10 40.4 | +1.4 |
| J05D | Fort Rock, OR | 128.54 | 292 | P | PKPdf | 11 10 40.0 | +0.5 |
| | baz=129 | | | | | | |
| L02D | Cave Junction, | 128.85 | 289 | P | PKPdf | 11 10 40.6 | +0.7 |
| | baz=129 | | | | | | |
| J04D | Umpqua Nationa | 128.93 | 291 | P | PKPdf | 11 10 40.9 | +0.7 |
| | baz=129 | | | | | | |
| G08A | Pilot Rock | 128.95 | 295 | *e*PKPdf | PKPdf | 11 10 40.6 | +0.4 |
| I05D | Terrebonne, OR | 129.38 | 293 | P | PKPdf | 11 10 41.8 | +0.9 |
| | baz=130 | | | | | | |
| I04A | Tendick Farm, | 129.49 | 291 | P | PKPdf | 11 10 42.3 | +1.2 |
| | baz=130 | | | | | | |
| AAK | Ala-Archa | 129.86 | 71 | ⇑PKIKP | PKPdf | 11 10 42.2 | +0.2 |
| AAK | Ala-Archa | 129.86 | 71 | *e*PKPdf | PKPdf | 11 10 42.6 | +0.6 |
| G05D | Wamic, OR | 130.04 | 293 | P | PKPdf | 11 10 42.9 | +0.8 |
| | baz=130 | | | | | | |
| NEW | Newport | 130.29 | 299 | P | PKPdf | 11 10 43.5 | +1.0 |
| | baz=131 | | | | | | |
| C09A | Chrisman Ranch | 130.48 | 298 | *e*PKPdf | PKPdf | 11 10 43.4 | +0.5 |
| KMI | Kunming | 130.60 | 110 | PKP | PKPdf | 11 10 44.3 | +0.3 |
| G03D | McMinnville, O | 130.95 | 292 | P | PKPdf | 11 10 44.9 | +1.2 |
| | baz=131 | | | | | | |
| B08A | Colville Reser | 131.38 | 298 | *e*PKPdf | PKPdf | 11 10 45.2 | +0.7 |
| EDM | Edmonton | 132.22 | 306 | *e*PKIKP | PKPdf | 11 10 45.8 | -0.2 |
| EDM | Edmonton | 132.22 | 306 | *e*PKPdf | PKPdf | 11 10 45.8 | -0.2 |
| B05A | Bryant | 132.60 | 296 | P | PKPdf | 11 10 47.3 | +0.6 |
| | baz=133 | | | | | | |
| ARCES | ARCESS Array B | 133.09 | 22 | PKP | PKPdf | 11 10 47.2 | +0.1 |
| | comp=Z,4.6nm,0.7s,baz=209,slow=2.2,SNR=19 | | | | | | |
| ARA0 | ARCESS Array S | 133.09 | 22 | *e*PKPdf | PKPdf | 11 10 47.1 | 0.0 |
| A04D | Lummi Island | 133.21 | 296 | P | PKPdf | 11 10 48.6 | +0.8 |
| | baz=134 | | | | | | |
| BRVK | Borovoye | 135.30 | 59 | ⇑PKIKP | PKPdf | 11 10 51.3 | -0.4 |
| CD2 | Chengdu | 135.88 | 106 | PKP | PKPdf | 11 10 54.5 | +0.9 |
| MKAR | Makanchi Array | 136.71 | 73 | PKhKP | PKPpre | 11 10 45.6 | |
| | comp=Z,0.5nm,0.6s,baz=225,slow=3.9,SNR=3.7 | | | | | | |
| MKAR | | | | PKP | PKPdf | 11 10 53.2 | -1.3 |
| | comp=Z,0.4nm,0.5s,baz=228,slow=2.9,SNR=4.1 | | | | | | |
| WMQ | Urumqi | 137.37 | 80 | *e*PKP | PKPdf | 11 10 54.0 | -1.9 |
| YKA | Yellowknife Ar | 138.90 | 315 | PKP | PKPdf | 11 10 58.4 | +0.4 |
| | comp=Z,13nm,0.6s,baz=128,slow=2.3,SNR=29 | | | | | | |
| LZH | Lanzhou | 140.03 | 102 | *e*PKP | PKPdf | 11 11 02.1 | +0.9 |
| LZH | | | | sPKP | | 11 11 27.5 | |
| LZH | | | | LN | | | |
| | comp=Z,130nm,18.1s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,120nm,17.8s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,160nm,20.2s | | | | | | |
| GTA | Gaotai | 140.48 | 95 | *e*PKP | PKPdf | 11 11 05.1 | +3.2 |
| GTA | | | | sPKP | | 11 11 29.0 | |
| ZALV | Zalesovo Beam | 142.56 | 66 | PKhKP | PKPpre | 11 11 00.1 | |
| | comp=Z,1.5nm,0.5s,baz=231,slow=4.7,SNR=4.0 | | | | | | |
| NJ2 | Nanjing | 143.99 | 122 | *e*PKP | PKPdf | 11 11 09.5 | +1.4 |
| HHC | Hu-ho-hao-te | 147.58 | 104 | *e*PKPbc | PKPbc | 11 11 16.0 | -0.9 |
| HHC | | | | PP | PP | 11 14 49.8 | +5.7 |
| HHC | | | | SS | SS | 11 33 39.2 | -5.3 |
| HHC | | | | PPMZ | | | |
| | comp=Z,62nm,8.6s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,130nm,20.0s | | | | | | |
| INK | Inuvik | 148.57 | 317 | *e*PKP2 | PKPbc | 11 11 18.3 | -0.1 |
| INK | Inuvik | 148.57 | 317 | *e*PKPbc | PKPbc | 11 11 18.3 | -0.1 |
| BJI | Beijing | 149.25 | 110 | PKPbc | PKPbc | 11 11 21.2 | +0.1 |
| BJI | | | | LZ | | | |
| | comp=Z,38nm,24.5s | | | | | | |
| ZAK | Zakamensk | 149.69 | 83 | *e*PKP2 | PKPbc | 11 11 21.9 | -0.1 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| SONM | Songino Array | 149.75 | 90 | PKPbc | PKPbc | 11 11 22.0 | -0.2 |
| | comp=Z,9.4nm,0.9s,baz=219,slow=2.4,SNR=40 | | | | | | |
| SONA1 | Songino Array | 149.76 | 90 | *e*PKPbc | PKPbc | 11 11 21.9 | -0.3 |
| ULN | Ulaanbaatar | 150.11 | 90*c* | *i*PKIKP | PKPbc | 11 11 24.8 | +1.6 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,13nm,1.7s | | | | | | |
| ULN | Ulaanbaatar | 150.11 | 90 | *e*PKPbc | PKPbc | 11 11 22.9 | -0.2 |
| EGAK | Eagle | 150.34 | 309 | *e*PKPbc | PKPbc | 11 11 23.1 | +0.1 |
| BMRM | Bremner River | 150.45 | 300 | *e*PKPbc | PKPbc | 11 11 24.6 | +1.2 |
| BMRM | | | | *e*PKPab | PKPab | 11 11 30.3 | +0.1 |
| TLY | Talaya | 150.63 | 81 | PKPbc | PKPbc | 11 11 24.2 | +0.2 |
| | comp=Z,5.7nm,0.6s,baz=218,slow=3.8,SNR=4.3 | | | | | | |
| MENT | Mentasta | 150.79 | 305 | *e*PKPbc | PKPbc | 11 11 24.8 | +0.7 |
| MENT | | | | *e*PKPab | PKPab | 11 11 31.5 | 0.0 |
| DIV | Divide | 151.03 | 300 | *e*PKPbc | PKPbc | 11 11 25.7 | +0.9 |
| DIV | | | | *e*PKPab | PKPab | 11 11 31.6 | -1.1 |
| DOT | Dot Lake | 151.18 | 306 | *e*PKPbc | PKPbc | 11 11 25.7 | +0.7 |
| HARP | HAARP | 151.23 | 303 | *e*PKPbc | PKPbc | 11 11 26.1 | +1.0 |
| HARP | | | | *e*PKPab | PKPab | 11 11 33.4 | 0.0 |
| KLU | Klutina | 151.24 | 301 | *e*PKPbc | PKPbc | 11 11 26.0 | +0.8 |
| KLU | | | | *e*PKPab | PKPab | 11 11 34.4 | +0.9 |
| PAX | Paxson | 151.55 | 304 | *e*PKIKP | PKPdf | 11 11 20.5 | +0.8 |
| PAX | | | | *e* | | 11 11 26.4 | |
| PAX | Paxson | 151.55 | 304 | *e*PKPdf | PKPdf | 11 11 20.5 | +0.8 |
| PAX | | | | *e*PKPbc | PKiKP | 11 11 26.4 | 0.0 |
| SCM | Sheep Creek Mo | 151.99 | 301 | *e*PKIKP | PKPbc | 11 11 28.1 | +1.1 |
| SCM | Sheep Creek Mo | 151.99 | 301 | *e*PKPbc | PKPbc | 11 11 28.1 | +1.1 |
| SML | Sawmill | 152.43 | 301 | *e*PKIKP | PKPbc | 11 11 28.6 | +0.7 |
| SML | | | | *e* | | 11 11 38.6 | |
| SML | Sawmill | 152.43 | 301 | *e*PKPbc | PKPbc | 11 11 28.6 | +0.7 |
| SML | | | | *e*PKPab | PKPab | 11 11 38.6 | +0.2 |
| KSAR | Wonju Array Be | 152.43 | 129 | PKIKP | PKPbc | 11 11 28.6 | -0.1 |
| KSAR | | | | | | 11 11 39.7 | |
| KSAR | Wonju Array Be | 152.43 | 129 | PKPbc | PKPbc | 11 11 28.6 | -0.1 |
| KSAR | | | | PKPab | PKPab | 11 11 39.7 | +0.7 |
| FYU | Fort Yukon | 152.45 | 312 | *e*PKPbc | PKPbc | 11 11 28.7 | +1.0 |
| KSRS | Korea Array | 152.46 | 129 | PKPbc | PKPbc | 11 11 28.6 | -0.1 |
| | comp=Z,2.0nm,0.7s,baz=203,slow=1.7,SNR=8.7 | | | | | | |
| KSRS | | | | PKPab | PKPab | 11 11 39.7 | +0.6 |
| | comp=Z,4.2nm,0.9s,baz=206,slow=4.2,SNR=11 | | | | | | |
| ILAR | Eielson Array | 152.69 | 307 | PKPbc | PKPbc | 11 11 28.4 | 0.0 |
| | comp=Z,27nm,0.8s,baz=142,slow=6.6,SNR=199 | | | | | | |
| PMR | Palmer | 152.71 | 300 | *e*PKIKP | PKPbc | 11 11 29.0 | +0.6 |
| PMR | | | | *e* | | 11 11 38.3 | |
| PMR | Palmer | 152.71 | 300 | *e*PKPbc | PKPbc | 11 11 29.0 | +0.6 |
| PMR | | | | *e*PKPab | PKPab | 11 11 38.3 | -1.3 |
| COLA | College | 153.11 | 307 | *e*PKIKP | PKPbc | 11 11 29.0 | -0.2 |
| COLA | | | | *e* | | 11 11 41.4 | |
| COLA | College | 153.11 | 307 | *e*PKPbc | PKPbc | 11 11 29.0 | -0.2 |
| COLA | | | | *e*PKPab | PKPab | 11 11 41.4 | +0.3 |
| RND | Reindeer | 153.15 | 304 | *e*PKIKP | PKPbc | 11 11 30.5 | +1.0 |
| RND | Reindeer | 153.15 | 304 | *e*PKPbc | PKPbc | 11 11 30.5 | +1.0 |
| MCK | McKinley | 153.27 | 305 | *e*PKIKP | PKPbc | 11 11 30.3 | +0.6 |
| MCK | McKinley | 153.27 | 305 | *e*PKPbc | PKPbc | 11 11 30.3 | +0.6 |
| BPAW | Bear Paw Mtn. | 154.24 | 305 | *e*PKPdf | PKPdf | 11 11 24.0 | +0.4 |
| BPAW | | | | *e*PKPbc | PKiKP | 11 11 32.3 | +0.4 |
| PPLA | Purkeypile | 154.47 | 302 | *e*PKPbc | PKPbc | 11 11 33.0 | +0.5 |
| PPLA | | | | *e*PKPab | PKPab | 11 11 47.7 | +0.5 |
| COLD | Coldfoot | 154.50 | 312 | *e*PKPbc | PKPbc | 11 11 33.6 | +1.4 |
| MJAR | Matsushiro Arr | 155.24 | 147 | PKPab | PKPab | 11 11 50.2 | -0.8 |
| | comp=Z,1.5nm,0.6s,baz=201,slow=5.0,SNR=5.3 | | | | | | |
| BOD | Bodaibo | 158.78 | 75 | *e*PKIKP | PKPdf | 11 11 27.0 | -2.5 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.6s | | | | | | |
| BILL | Bilibino | 169.41 | 336 | *i* PKIKP | PKPdf | 11 11 35.8 | -3.0 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| PETK | Petropavlovsk- | 174.08 | 197 | PKP | PKPdf | 11 11 41.2 | -0.3 |
| | comp=Z,2.0nm,0.8s,baz=131,slow=4.1,SNR=3.6 | | | | | | |
| PETK | | | | PKPab | PKPab | 11 13 13.2 | 0.0 |
| | comp=Z,3.3nm,0.8s,baz=69,slow=8.4,SNR=4.8 | | | | | | |

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*ISCJB* ***01*** *11:00:53.5±0.6, 24.°59N±0.°04×122.°48E±0.°02, h81km±6km,*
*Error ellipse: s-maj=6.6km s-min=2.8km az=172.3*
*JMA* ***01*** *11:00:53.0±0.1, 24.°51N×122.°45E, h89km±1km, M2.1*
*TAP* ***01*** *11:00:53.4, 24.°62N×122.°42E, h90km, ML3.3, C*
**ISC 01 11:00:54.0**±1.5**, 24.°58N**±0.°05×**122.°48E**±0.°02**, h80**km±10km**,**
**n37, σ0.s68**/71**, 2D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JYNG | Yonagunijimaku | 0.45 | 107 | P | Pn | 11 01 07.5 | +0.3 |
| JYNG | | | | S | Sn | 11 01 18.1 | +1.0 |
| YOJ | Yonaguni jima | 0.50 | 104 | P | Pn | 11 01 07.9 | +0.2 |
| YOJ | | | | S | Sn | 11 01 18.5 | +0.6 |
| EGS | | 0.56 | 298 | *e*P | Pn | 11 01 08.4 | +0.2 |
| | baz=289 | | | | | | |
| TWC | Suao | 0.57 | 273 | *i* P | Pn | 11 01 08.1 | -0.2 |
| | baz=271 | | | | | | |
| TWC | | | | *e*S | Sn | 11 01 18.7 | -0.3 |
| | baz=271 | | | | | | |
| TWB1 | Santiao Chiao | 0.61 | 314 | *e*P | Pn | 11 01 07.9 | -0.8 |
| | baz=312 | | | | | | |
| ENA | Nanau | 0.69 | 257 | *e*P | Pn | 11 01 09.8 | +0.3 |
| | baz=252 | | | | | | |
| ENA | | | | *e*S | Sn | 11 01 21.8 | +0.8 |
| | baz=252 | | | | | | |
| TWE | Neicheng | 0.75 | 281 | P | Pn | 11 01 09.9 | -0.1 |
| | baz=278 | | | | | | |
| TWE | | | | *e*S | Sn | 11 01 20.8 | -1.3 |
| | baz=278 | | | | | | |
| NWF | Wu-fen Shan | 0.80 | 308 | *e*P | Pn | 11 01 10.3 | -0.5 |
| | baz=302 | | | | | | |
| NWF | | | | S | Sn | 11 01 23.1 | -0.2 |
| | baz=302 | | | | | | |
| ENTT | Nioudou | 0.83 | 274 | P | Pn | 11 01 11.3 | +0.3 |
| | baz=269 | | | | | | |
| ENTT | | | | *e*S | Sn | 11 01 24.2 | +0.4 |
| | baz=269 | | | | | | |
| TWA | Mucha | 0.90 | 296 | *e*P | Pn | 11 01 11.6 | -0.3 |
| | baz=287 | | | | | | |
| TWA | | | | S | Sn | 11 01 24.2 | -1.0 |
| | baz=287 | | | | | | |
| TWD | Chiawan | 0.94 | 238 | *i* P | Pn | 11 01 12.0 | -0.3 |
| | baz=230 | | | | | | |
| TWD | | | | *i* S | Sn | 11 01 26.1 | 0.0 |
| | baz=230 | | | | | | |
| NNS | Nan Shan | 1.01 | 262 | *e*P | Pn | 11 01 13.3 | 0.0 |
| | baz=253 | | | | | | |
| NNS | | | | *e*S | Sn | 11 01 27.8 | 0.0 |
| | baz=253 | | | | | | |
| NSK | Sanguang | 1.02 | 275 | ⇓*i*P | Pn | 11 01 13.4 | +0.1 |
| | baz=267 | | | | | | |
| NSK | | | | *e*S | Sn | 11 01 27.7 | -0.1 |
| | baz=267 | | | | | | |
| IRIF | Iriomote-Funau | 1.17 | 102 | P | Pn | 11 01 14.8 | -0.3 |
| IRIF | | | | S | Sn | 11 01 31.3 | +0.4 |
| WHF | Hehuan Shan | 1.19 | 249 | P | Pn | 11 01 15.6 | -0.2 |
| | baz=245 | | | | | | |
| WHF | | | | *e*S | Sn | 11 01 31.6 | -0.4 |
| | baz=245 | | | | | | |
| ESL | Shilin | 1.22 | 231 | *e*P | Pn | 11 01 15.1 | -0.6 |
| | baz=222 | | | | | | |
| ESL | | | | *e*S | Sn | 11 01 31.3 | -0.7 |
| | baz=222 | | | | | | |
| TWT | Tachien | 1.23 | 255 | *e*P | Pn | 11 01 16.4 | +0.4 |
| | baz=252 | | | | | | |
| TWT | | | | S | Sn | 11 01 32.9 | +0.4 |
| | baz=252 | | | | | | |
| HATJ | Hateruma jima | 1.32 | 113 | *e*S | Sn | 11 01 34.2 | -0.1 |
| NSTT | Nanjuang | 1.34 | 272 | *e*P | Pn | 11 01 17.4 | +0.2 |
| | baz=270 | | | | | | |
| NSTT | | | | *e*S | Sn | 11 01 34.4 | -0.4 |
| | baz=270 | | | | | | |
| JKRS | Kuro-shima | 1.44 | 104 | P | Pn | 11 01 18.7 | +0.2 |
| JKRS | | | | S | Sn | 11 01 37.5 | +0.5 |
| WDT | Danda | 1.48 | 236 | ⇓*i*P | Pn | 11 01 19.3 | +0.1 |
| | baz=233 | | | | | | |
| WDT | | | | *e*S | Sn | 11 01 37.6 | -0.7 |
| | baz=233 | | | | | | |
| EHY | Hungye | 1.50 | 225 | P | Pn | 11 01 18.8 | -0.6 |
| | baz=222 | | | | | | |
| EHY | | | | *e*S | Sn | 11 01 37.4 | -1.1 |
| | baz=222 | | | | | | |
| JIJ | Ishigaki jima | 1.54 | 98 | P | Pn | 11 01 19.4 | -0.3 |
| JIJ | | | | S | Sn | 11 01 38.5 | -0.7 |
| TWQ1 | Liyutan | 1.57 | 262 | *e*P | Pn | 11 01 20.5 | +0.3 |
| | baz=259 | | | | | | |
| TWQ1 | | | | *e*S | Sn | 11 01 40.2 | +0.2 |
| | baz=259 | | | | | | |
| SMLT | Sun Moon Lake | 1.60 | 244 | *e*P | Pn | 11 01 21.8 | +1.1 |
| | baz=235 | | | | | | |
| SMLT | | | | *e*S | Sn | 11 01 41.8 | +0.9 |
| | baz=235 | | | | | | |
| TYC | Yuchr | 1.62 | 246 | P | Pn | 11 01 21.8 | +1.0 |
| | baz=237 | | | | | | |
| TYC | | | | *e*S | Sn | 11 01 42.5 | +1.2 |
| | baz=237 | | | | | | |
| TWF1 | Yuli | 1.63 | 222 | *i* P | Pn | 11 01 20.5 | -0.5 |
| | baz=226 | | | | | | |
| TWF1 | | | | *e*S | Sn | 11 01 40.5 | -1.0 |
| | baz=226 | | | | | | |
| JISG | Ishigakijimahi | 1.67 | 89 | P | Pn | 11 01 21.3 | -0.2 |
| JISG | | | | S | Sn | 11 01 42.5 | +0.1 |
| YUS | Yu-Shan | 1.77 | 232 | *e*P | Pn | 11 01 23.1 | -0.1 |
| | baz=224 | | | | | | |
| YUS | | | | *e*S | Sn | 11 01 45.3 | 0.0 |
| | baz=224 | | | | | | |
| ALS | Alishan | 1.86 | 235 | *e*P | Pn | 11 01 24.8 | +0.4 |
| | baz=226 | | | | | | |
| ALS | | | | *e*S | Sn | 11 01 47.6 | +0.3 |
| | baz=226 | | | | | | |
| CHN5 | Tsauling | 1.91 | 239 | *e*P | Pn | 11 01 25.5 | +0.7 |
| | baz=247 | | | | | | |
| CHN5 | | | | *e*S | Sn | 11 01 49.7 | +1.5 |
| | baz=247 | | | | | | |
| ELDTW | Lidau | 1.93 | 224 | *e*P | Pn | 11 01 23.5 | -1.5 |
| | baz=219 | | | | | | |
| ELDTW | | | | *e*S | Sn | 11 01 48.4 | -0.2 |
| | baz=219 | | | | | | |
| JTJ | Tarama | 2.03 | 88 | P | Pn | 11 01 26.1 | -0.1 |
| JTJ | | | | S | Sn | 11 01 50.7 | -0.1 |
| STYT | Tauyuan | 2.11 | 228 | *e*P | Pn | 11 01 27.8 | +0.4 |
| | baz=226 | | | | | | |
| STYT | | | | *e*S | Sn | 11 01 53.6 | +0.7 |
| | baz=226 | | | | | | |
| WTP | Ta-pu | 2.16 | 232 | *e*P | Pn | 11 01 28.0 | -0.1 |
| | baz=230 | | | | | | |
| WTP | | | | *e*S | Sn | 11 01 55.4 | +1.3 |
| | baz=230 | | | | | | |
| TWG | Pinlang | 2.17 | 217 | *e*P | Pn | 11 01 27.3 | -0.9 |
| | baz=219 | | | | | | |
| TWG | | | | *e*S | Sn | 11 01 52.6 | -1.7 |
| | baz=219 | | | | | | |
| CHN1 | Nanshi | 2.26 | 232 | *e*P | Pn | 11 01 30.9 | +1.5 |
| | baz=230 | | | | | | |
| CHN1 | | | | *e*S | Sn | 11 01 56.9 | +0.5 |
| | baz=230 | | | | | | |

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**MEX 01 11:09:18.6**±0.4**, 15.°57N**×**94.°03W, h16**km±999km**, MD3.9,**
**Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.79 | 80 | *i* P | Pb | 11 09 31.2 | -2.7 |
| PCIG | | | | *e*S | Sb | 11 09 40.6 | -3.8 |

**MEX 01 11:11:59.7±0.4, 17°.90N×103°.09W, h6km, MD3.7, Near coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMIG** | **Aquila** | **0.46** | **328** | *i* P | Pg | 11 12 08.0 | -0.6 |
| MMIG | | | | *e*S | Sg | 11 12 15.2 | +0.6 |
| **R15V** | | **1.52** | **326** | *i* P | Pn | 11 12 24.1 | -3.5 |
| R15V | | | | *e*S | Sn | 11 12 43.6 | -4.2 |
| **ZIIG** | **Zihuatanejo** | **1.57** | **100** | *i* P | Pn | 11 12 25.8 | -2.4 |
| ZIIG | | | | *e*S | Sn | 11 12 44.0 | -4.9 |
| **EZ5V** | | **1.65** | **343** | *i* P | Pn | 11 12 26.7 | -2.9 |
| EZ5V | | | | *e*S | Sn | 11 12 46.1 | -5.2 |

*JMA **01** 11:18:12.4±0.1, 23°.97N×121°.74E, h32km±2km, M2.5*
*ISCJB **01** 11:18:13.0±0.3, 23°.98N±0°.02×121°.78E±0°.02, h30km±2km, Error ellipse: s-maj=3.6km s-min=2.3km az=44.8*
*TAP **01** 11:18:13.5, 24°.02N×121°.70E, h33km, ML3.1, C*
**ISC 01 11:18:13.3±0.9, 23°.99N±0°.02×121°.75E±0°.02, h33km±5km, n46, σ0§83/82, 8C-2D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HWA** | **Hwalien** baz=238 | **0.13** | **266** | ⇓*i*P | **Pb** | **11 18 19.5** | **+0.3** |
| HWA | | | | *e*S | Sn | 11 18 23.9 | +2.5 |
| **TWD** | **Chiawan** baz=306 | **0.17** | **304** | ⇓*i*P | **Pb** | **11 18 19.3** | **-0.2** |
| TWD | | | | *i* S | **Sb** | **11 18 23.7** | **-0.1** |
| **ESF** | **Shoufeng Towns** baz=239 | **0.25** | **243** | *e*P | **Pb** | **11 18 21.0** | **+0.6** |
| **TEGC** | **Jichi Village** baz=196 | **0.34** | **215** | *e*P | **Pb** | **11 18 22.1** | **+0.6** |
| **ESL** | **Shilin** baz=236 | **0.34** | **240** | ⇑P | **Pb** | **11 18 21.2** | **-0.3** |
| ESL | | | | *e*S | **Sb** | **11 18 27.1** | **0.0** |
| **ENA** | **Nanau** baz=14 | **0.44** | **359** | *e*P | **Pb** | **11 18 22.6** | **-0.4** |
| ENA | | | | *e*S | **Sb** | **11 18 30.0** | **+0.4** |
| **WHF** | **Hehuan Shan** baz=281 | **0.47** | **290** | *i* P | **Pb** | **11 18 23.0** | **-0.8** |
| WHF | | | | *i* S | **Sb** | **11 18 30.0** | **-1.0** |
| **NNS** | **Nan Shan** baz=320 | **0.57** | **323** | ⇑*i*P | **Pb** | **11 18 24.4** | **-0.7** |
| NNS | | | | *e*S | **Sb** | **11 18 32.2** | **-0.9** |
| **TWT** | **Tachien** baz=290 | **0.59** | **297** | *e*P | **Pb** | **11 18 25.0** | **-0.4** |
| TWT | | | | S | **Sb** | **11 18 33.3** | **-0.4** |
| **WDT** | **Danda** baz=233 | **0.61** | **248** | ⇑*i*P | **Pb** | **11 18 25.5** | **-0.4** |
| WDT | | | | *i* S | **Sb** | **11 18 33.6** | **-0.8** |
| **EHY** | **Hungye** baz=213 | **0.62** | **220** | *e*P | **Pb** | **11 18 24.9** | **-0.9** |
| **TWC** | **Suao** baz=19 | **0.63** | **8** | P | **Pb** | **11 18 25.7** | **-0.3** |
| TWC | | | | S | **Sb** | **11 18 34.4** | **-0.2** |
| **ENTT** | **Nioudou** baz=350 | **0.67** | **346** | P | **Pb** | **11 18 26.2** | **-0.5** |
| ENTT | | | | *i* S | **Sb** | **11 18 35.3** | **-0.6** |
| **TWE** | **Neicheng** baz=354 | **0.74** | **354** | P | **Pn** | **11 18 27.1** | **-0.3** |
| TWE | | | | S | **Sb** | **11 18 37.2** | **-0.4** |
| **TWF1** | **Yuli** baz=219 | **0.76** | **213** | *e*P | **Pn** | **11 18 26.6** | **-1.0** |
| TWF1 | | | | *e*S | **Sb** | **11 18 37.1** | **-1.0** |
| **NSK** | **Sanguang** baz=336 | **0.78** | **333** | P | **Pn** | **11 18 27.7** | **-0.4** |
| NSK | | | | S | **Sb** | **11 18 37.2** | **-1.6** |
| **SMLT** | **Sun Moon Lake** baz=259 | **0.79** | **263** | ⇑*i*P | **Pn** | **11 18 28.2** | **0.0** |
| SMLT | | | | *i* S | **Sb** | **11 18 38.0** | **-1.0** |
| **TYC** | **Yuchr** baz=261 | **0.82** | **265** | ⇑*i*P | **Pn** | **11 18 28.6** | **0.0** |
| TYC | | | | *i* S | **Sn** | **11 18 38.9** | **-0.7** |
| **YUS** | **Yu-Shan** baz=222 | **0.88** | **236** | ⇑*i*P | **Pn** | **11 18 30.2** | **+0.3** |
| YUS | | | | S | **Sn** | **11 18 41.2** | **-0.6** |
| **NSTT** | **Nanjuang** baz=315 | **0.94** | **313** | *i* P | **Pn** | **11 18 30.8** | **+0.6** |
| NSTT | | | | *i* S | **Sn** | **11 18 42.3** | **-0.2** |
| **CHKT** | **Chengkung** baz=185 | **0.95** | **202** | *e*P | **Pn** | **11 18 30.5** | **+0.2** |
| **TWQ1** | **Liyutan** baz=291 | **0.96** | **292** | ⇑*i*P | **Pn** | **11 18 31.5** | **+1.0** |
| TWQ1 | | | | *e*S | **Sn** | **11 18 42.9** | **-0.2** |
| **ALS** | **Alishan** baz=228 | **0.99** | **242** | ⇑*i*P | **Pn** | **11 18 31.8** | **+0.6** |
| ALS | | | | *e*S | **Sn** | **11 18 44.1** | **0.0** |
| **TCU** | **Taichung** baz=278 | **0.99** | **280** | *e*P | **Pn** | **11 18 32.3** | **+1.3** |
| **NSY** | **Sanyi** baz=295 | **1.00** | **296** | *e*P | **Pn** | **11 18 31.7** | **+0.7** |
| **TWA** | **Mucha** baz=345 | **1.00** | **351** | *e*P | **Pn** | **11 18 31.3** | **+0.2** |
| TWA | | | | *e*S | **Sn** | **11 18 44.4** | **+0.3** |
| **ELDTW** | **Lidau** baz=216 | **1.04** | **220** | *e*P | **Pn** | **11 18 31.4** | **-0.3** |
| ELDTW | | | | *e*S | **Sn** | **11 18 44.5** | **-0.6** |
| **TWB1** | **Santiao Chiao** baz=17 | **1.04** | **12** | *e*P | **Pn** | **11 18 32.2** | **+0.6** |
| TWB1 | | | | *e*S | **Sn** | **11 18 46.0** | **+1.0** |
| **CHN5** | **Tsauling** baz=233 | **1.05** | **249** | *e*P | **Pn** | **11 18 32.8** | **+0.9** |
| CHN5 | | | | *e*S | **Sn** | **11 18 46.7** | **+1.2** |
| **NWF** | **Wu-fen Shan** baz=353 | **1.08** | **1** | *e*P | **Pn** | **11 18 33.3** | **+1.0** |
| NWF | | | | *e*S | **Sn** | **11 18 47.9** | **+1.7** |
| **WGK** | **Gukeng** baz=251 | **1.13** | **255** | *e*P | **Pn** | **11 18 33.1** | **+0.3** |
| **TWS1** | **Kuangyinshan** baz=357 | **1.15** | **345** | *e*P | **Pn** | **11 18 33.3** | **+0.2** |
| TWS1 | | | | *e*S | **Sn** | **11 18 49.1** | **+1.4** |
| **JYNG** | **Yonagunijimaku** | **1.19** | **67** | P | **Pn** | **11 18 33.9** | **+0.3** |
| JYNG | | | | S | **Sn** | **11 18 48.7** | **+0.1** |
| **STYT** | **Tauyuan** baz=218 | **1.23** | **228** | *e*P | **Pn** | **11 18 35.1** | **+0.9** |
| STYT | | | | *e*S | **Sn** | **11 18 50.4** | **+0.7** |
| **YOJ** | **Yonaguni jima** | **1.25** | **67** | P | **Pn** | **11 18 34.7** | **+0.3** |
| YOJ | | | | S | **Sn** | **11 18 50.1** | **0.0** |
| **CHY** | **Chiayi** baz=245 | **1.31** | **248** | *e*P | **Pn** | **11 18 37.2** | **+1.9** |
| **TWG** | **Pinlang** baz=205 | **1.32** | **208** | *e*P | **Pn** | **11 18 35.2** | **-0.2** |
| TWG | | | | *e*S | **Sn** | **11 18 50.2** | **-1.6** |
| **TWK** | **Hsinying** baz=235 | **1.36** | **239** | *e*P | **Pn** | **11 18 35.9** | **-0.2** |
| **CHN1** | **Nanshi** baz=232 | **1.38** | **235** | *e*P | **Pn** | **11 18 37.5** | **+1.3** |
| CHN1 | | | | *e*S | **Sb** | **11 18 56.3** | **+0.5** |
| **SGST** | **Jiashian** baz=227 | **1.40** | **230** | *e*P | **Pn** | **11 18 37.8** | **+1.2** |
| SGST | | | | *e*S | **Sn** | **11 18 56.1** | **+2.2** |
| **SSD** | **Sandimen** baz=218 | **1.60** | **220** | *e*P | **Pn** | **11 18 41.1** | **+1.7** |
| SSD | | | | *e*S | **Sn** | **11 19 00.4** | **+1.4** |
| **IRIF** | **Iriomote-Funau** | **1.84** | **79** | P | **Pn** | **11 18 41.6** | **-1.0** |
| IRIF | | | | S | **Sn** | **11 19 05.3** | **+0.5** |
| **JKRS** | **Kuro-shima** | **2.08** | **83** | P | **Pn** | **11 18 47.1** | **+1.2** |
| JKRS | | | | S | **Sn** | **11 19 11.5** | **+0.8** |
| **JIJ** | **Ishigaki jima** | **2.22** | **80** | P | **Pn** | **11 18 48.1** | **+0.3** |
| JIJ | | | | S | **Sn** | **11 19 13.5** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **2.41** | **75** | P | **Pn** | **11 18 50.6** | **+0.1** |
| JISG | | | | S | **Sn** | **11 19 18.4** | **-0.5** |
| **JTJ** | **Tarama** | **2.77** | **76** | P | **Pn** | **11 18 56.1** | **+0.7** |
| JTJ | | | | *e*S | **Sn** | **11 19 28.5** | **+0.8** |

*NIED **01** 11:28:00, 38°.90N×140°.60E, h8km, Mw3.7 Best double couple: M₀4.33000×10¹⁴ NP1:φ₀244.00000°, δ50.00000°, λ140.00000°. NP2:φ₀3.00000°, δ60.00000°, λ48.00000°.*
*ISCJB **01** 11:28:24.3±0.6, 38°.94N±0°.03×140°.60E±0°.03, h12km±3km, mb4.1/17, MS3.0/1, Error ellipse: s-maj=5.0km s-min=4.3km az=153.3*
*JMA **01** 11:28:24.7, 38°.94N×140°.61E, h4km±1km, M3.9*
*JMA Felt II J1.*
*MOS **01** 11:28:28.7±1.1, 38°.95N×140°.38E, h41km, mb4.1/13, Error ellipse: s-maj=15.0km s-min=8.9km az=76.6*
*IDC **01** 11:28:30.2±2.2, 38°.90N×140°.45E, h45km±20km, mb3.7/12, mb1 3.8/16, mb1mx3.6/57, mbtmp3.9/16, ML3.4/3, MS2.6/4, Ms1 2.7/4, ms1mx2.5/37, Error ellipse: s-maj=23.2km s-min=14.9km az=89.0*
**ISC 01 11:28:25.3±1.0, 38°.93N±0°.03×140°.61E±0°.03, h6km±6km, n55, σ1§11/54, mb4.2/17, 15C-2D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYK** | **Kaneyama** | **0.20** | **268** | ⇑P | **Pg** | **11 28 28.7** | **-0.5** |
| JYK | | | | S | **Sg** | **11 28 31.4** | **-0.5** |
| **JRG** | **Rokugo** | **0.47** | **2** | ⇑P | **Pg** | **11 28 33.8** | **-0.6** |
| **JMK** | **Ichinoseki** | **0.48** | **87** | ⇓P | **Pg** | **11 28 33.7** | **-0.8** |
| JMK | | | | S | **Sg** | **11 28 40.2** | **-0.5** |
| **JOU** | **Okura** | **0.56** | **176** | ⇑P | **Pg** | **11 28 35.8** | **-0.3** |
| JOU | | | | S | **Sg** | **11 28 43.4** | **0.0** |
| **JIO** | **Ouri** | **0.74** | **129** | ⇓P | **Pg** | **11 28 38.6** | **-1.0** |
| JIO | | | | S | **Sg** | **11 28 48.9** | **-0.4** |
| **JOM** | **Ohasama** | **0.76** | **44** | ⇑P | **Pg** | **11 28 38.9** | **-1.0** |
| **JYA** | **Atsumi** | **0.78** | **245** | ⇑P | **Pg** | **11 28 39.5** | **-0.7** |
| JYA | | | | S | **Sg** | **11 28 49.9** | **-0.4** |
| **JYS** | **Shirataka** | **0.82** | **211** | ⇑P | **Pg** | **11 28 40.5** | **-0.6** |
| JYS | | | | S | **Sg** | **11 28 51.5** | **-0.3** |
| **MAJO** | **Matsushiro** | **3.05** | **219** | *c i*P | **Pn** | **11 29 14.6** | **+0.6** |
| **MJAR** | **Matsushiro Arr** 13nm,0.3s,baz=27,slow=14,SNR=92 | **3.05** | **219** | P | **Pn** | **11 29 14.6** | **+0.6** |
| MJAR | | | | LR | LR | 11 30 09.6 | |
| | comp=Z,26nm,20.6s,baz=320,slow=34 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **3.05** | **219** | P | **Pn** | **11 29 14.6** | **+0.6** |
| MJAR | comp=Z,13nm,0.3s | | | pmax | pmax | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,27nm,20.6s | | | | | | |
| **MAT** | **Matsushiro** | **3.05** | **219** | P | **Pn** | **11 29 14.5** | **+0.5** |
| MAT | | | | S | **Sb** | **11 29 57.7** | **+0.3** |
| **ERM** | **Erimo** | **3.65** | **31** | *c i*P | Pn | 11 29 25.4 | +3.2 |
| ERM | comp=Z,21nm,0.8s | | | pmax | pmax | | |
| **ASAJ** | **Asahikawa** baz=200,slow=13 | **5.40** | **15** | P | **Pn** | **11 29 48.9** | **+2.7** |
| **USRK** | **Ussuriysk Ar.** comp=Z,1.1nm,0.3s,baz=121,slow=14,SNR=9.7 | **8.34** | **312** | P | **Pn** | **11 30 25.9** | **-0.7** |
| **JNU** | **Nakatsue** comp=Z,67nm,18.5s,baz=124,slow=39 | **9.78** | **237** | LR | LR | 11 34 42.6 | |
| **KSRS** | **Korea Array** comp=Z,0.6nm,0.3s,baz=82,slow=15,SNR=11 | **10.10** | **266** | P | **Pn** | **11 30 52.7** | **+2.0** |
| KSRS | | | | LR | LR | 11 34 18.4 | |
| | comp=Z,34nm,20.1s,baz=70,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **10.10** | **266** | P | **Pn** | **11 30 52.7** | **+2.0** |
| KSRS | comp=Z,1.0nm,0.3s | | | pmax | pmax | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,34nm,20.1s | | | | | | |
| **TJN** | **Taejon** | **10.81** | **261** | ⇑*e*P | **Pn** | **11 31 00.3** | **-0.2** |
| **MA2** | **Magadan** | **21.66** | **14** | *i* P | **P** | **11 33 16.9** | **+0.7** |
| **YAK** | **Yakutsk** | **24.09** | **347** | *e*P | **P** | **11 33 41.9** | **+0.7** |
| YAK | comp=Z,5.0nm,0.7s | | | pmax | pmax | | |
| **H11N2** | **WAKE ISLAND Hy** baz=316,slow=75,SNR=17 | **29.68** | **123** | T | T | 12 04 54.6 | |
| **H11N1** | **WAKE ISLAND Hy** baz=316,slow=75,SNR=23 | **29.69** | **123** | T | T | 12 04 53.4 | |
| **H11N3** | **WAKE ISLAND Hy** baz=316,slow=75,SNR=24 | **29.70** | **123** | T | T | 12 04 54.1 | |
| **H11S1** | **WAKE ISLAND Hy** baz=318,slow=75,SNR=7.9 | **30.43** | **125** | T | T | 12 05 49.0 | |
| **H11S3** | **WAKE ISLAND Hy** baz=318,slow=75,SNR=13 | **30.44** | **125** | T | T | 12 05 52.1 | |
| **H11S2** | **WAKE ISLAND Hy** baz=318,slow=75,SNR=5.3 | **30.45** | **125** | T | T | 12 05 49.0 | |
| **BILL** | **Bilibino** | **32.41** | **18** | ⇑*e*P | **P** | **11 34 58.3** | **+2.8** |
| BILL | comp=Z,4.0nm,1.4s | | | pmax | pmax | | |
| **ZALV** | **Zalesovo Beam** comp=Z,2.3nm,0.7s,baz=84,slow=8.0,SNR=8.4 | **40.19** | **311** | P | **P** | **11 36 01.1** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **40.19** | **311** | P | **P** | **11 36 01.1** | **-1.0** |
| ZALV | comp=Z,3.0nm,0.7s | | | pmax | pmax | | |
| **CMAR** | **Chiang Mai Arr** comp=Z,21nm,19.4s,baz=225,slow=35 | **41.41** | **253** | LR | LR | 11 52 49.1 | |
| **KURK** | **Kurchatov** | **44.28** | **306** | P | **P** | **11 36 34.6** | **-0.9** |
| KURK | comp=Z,5.0nm,1.0s | | | pmax | pmax | | |
| **KURBB** | **Kurchatov Arra** comp=Z,4.3nm,0.7s,baz=81,slow=8.4,SNR=37 | **44.35** | **306** | P | **P** | **11 36 34.7** | **-1.4** |
| **ILAR** | **Eielson Array** comp=Z,0.8nm,0.7s,baz=277,slow=6.5,SNR=7.8 | **48.25** | **33** | P | **P** | **11 37 06.4** | **-0.1** |
| **ILAR** | **Eielson Array** | **48.25** | **33** | P | **P** | **11 37 06.4** | **-0.1** |
| ILAR | comp=Z,1.0nm,0.7s | | | pmax | pmax | | |
| **ARU** | **Arti** | **54.53** | **318** | *c i*P | **P** | **11 37 53.4** | **-0.3** |
| ARU | | | | *PP | pP | 11 38 08.1 | +12 |
| ARU | | | | | | 11 39 51.5 | |
| ARU | | | | S | **S** | **11 45 29.7** | **-3.3** |
| ARU | | | | SS | **SKiKP** | **11 49 03.6** | **+0.1** |
| ARU | comp=Z,16nm,2.5s | | | pmax | pmax | | |
| **AKTO** | **Aktyubinsk** comp=Z,0.6nm,0.4s,baz=83,slow=8.2,SNR=4.0 | **56.95** | **311** | P | **P** | **11 38 11.1** | **-0.1** |
| **AKTO** | **Aktyubinsk** | **56.95** | **311** | P | **P** | **11 38 11.1** | **-0.1** |
| AKTO | comp=Z,1.0nm,0.4s | | | pmax | pmax | | |
| **WRA** | **Warramunga Arr** comp=Z,1.3nm,0.5s,baz=4.1,slow=7.3,SNR=35 | **58.85** | **187** | P | **P** | **11 38 23.4** | **-1.3** |
| **WRA** | **Warramunga Arr** | **58.85** | **187** | *c e*P | P | 11 38 27.8 | +3.1 |
| WRA | comp=Z,1.0nm,0.7s | | | pmax | pmax | | |
| **ARCES** | **ARCESS Array B** comp=Z,0.9nm,0.8s,baz=49,slow=9.7,SNR=4.1 | **62.01** | **339** | P | **P** | **11 38 45.1** | **-0.7** |
| **ARCES** | **ARCESS Array B** | **62.01** | **339** | P | **P** | **11 38 45.1** | **-0.7** |
| ARCES | comp=Z,1.0nm,0.8s | | | pmax | pmax | | |
| **ASAR** | **Alice Springs** comp=Z,0.7nm,0.7s,baz=353,slow=5.4,SNR=14 | **62.58** | **187** | P | **P** | **11 38 49.5** | **-0.6** |
| **ASAR** | **Alice Springs** | **62.58** | **187** | P | **P** | **11 38 49.5** | **-0.6** |
| ASAR | comp=Z,1.0nm,0.7s | | | pmax | pmax | | |
| **FINES** | **FINESS Array B** comp=Z,1.0nm,0.6s,baz=54,slow=9.7,SNR=5.0 | **66.85** | **332** | P | **P** | **11 39 16.8** | **-0.8** |
| **FINES** | **FINESS Array B** | **66.85** | **332** | *c e*P | **P** | **11 39 18.2** | **+0.7** |
| FINES | comp=Z,1.0nm,0.7s | | | pmax | pmax | | |
| **KIV** | **Kislovodsk** | **69.20** | **310** | *e*P | **P** | **11 39 33.0** | **+0.2** |
| KIV | comp=Z,8.0nm,1.0s | | | pmax | pmax | | |
| **HFS** | **Hagfors** comp=Z,0.8nm,0.5s,baz=53,slow=7.4,SNR=4.8 | **72.11** | **335** | P | **P** | **11 39 49.3** | **-0.8** |
| **HFS** | **Hagfors** | **72.11** | **335** | P | **P** | **11 39 49.3** | **-0.8** |
| HFS | comp=Z,1.0nm,0.5s | | | pmax | pmax | | |
| **NOA** | **NORSAR Array B** comp=Z,0.7nm,0.8s,baz=37,slow=7.0,SNR=2.7 | **72.20** | **337** | P | **P** | **11 39 49.5** | **-1.2** |
| **NOA** | **NORSAR Array B** | **72.20** | **337** | P | **P** | **11 39 49.5** | **-1.2** |
| NOA | comp=Z,1.0nm,0.8s | | | pmax | pmax | | |
| **AKASG** | **Malin Array Be** comp=Z,1.0nm,0.5s,baz=44,slow=7.3,SNR=4.0 | **72.42** | **322** | P | **P** | **11 39 51.3** | **-0.8** |
| **AKASG** | **Malin Array Be** | **72.42** | **322** | *c e*P | **P** | **11 39 51.7** | **-0.4** |
| AKASG | comp=Z,1.0nm,0.4s | | | pmax | pmax | | |
| **NVAR** | **Mina Array Bea** comp=Z,0.4nm,0.6s,baz=283,slow=5.1,SNR=4.4 | **74.36** | **53** | P | **P** | **11 40 05.1** | **+1.0** |
| **BRTR** | **Keskin Array B** | **77.13** | **311** | *c e*P | **P** | **11 40 22.0** | **+2.2** |

*KRNET **01** 11:35:08.2±0.1, 39°.23N×74°.99E, mb2.9*
*NNC **01** 11:35:11.3±6.2, 39°.31N×74°.95E, h0km, mb3.7, mpv3.3, Error ellipse: s-maj=50.9km s-min=24.0km az=167.0*
**ISC 01 11:35:12.0±2.8, 39°.3N±0°.1×74°.92E±0°.06, h10km, n21, σ1§84/34, 16C-14D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** 3.3nm,0.2s | **1.31** | **304** | ⇓P | **Pn** | **11 35 35.6** | **-1.0** |
| SFK | | | | ⇑S | **Sg** | **11 35 54.5** | **+0.2** |
| **SFK** | **Sufi-Kurgan** 30nm,0.3s | **1.31** | **304** | ⇓*i*P | **Pn** | **11 35 35.3** | **-1.3** |
| SFK | baz=305 | | | ⇓*i*S | **Sg** | **11 35 55.1** | **+0.8** |
| **ARLS** | **Aral** baz=349 | **2.61** | **350** | ⇑*e*P | **Pn** | **11 35 55.5** | **+1.1** |
| ARLS | | | | ⇑*i*S | **Sb** | **11 36 29.8** | **-1.3** |
| **KZA** | **Kyzart** baz=4.0 | **2.79** | **5** | ⇓*i*P | **Pn** | **11 35 56.7** | **-0.5** |
| KZA | baz=4.0 | | | ⇓*i*S | **Sn** | **11 36 32.6** | **+1.5** |
| **KZA** | **Kyzart** SNR=9.3 | **2.79** | **5** | P | **Pn** | **11 35 56.7** | **-0.5** |
| **UCH** | **Uchtor** baz=353 | **2.95** | **354** | ⇑*i*P | **Pn** | **11 35 59.8** | **+0.5** |
| UCH | baz=353 | | | ⇑*i*S | **Sb** | **11 36 38.1** | **-3.1** |
| **UCH** | **Uchtor** SNR=30 | **2.95** | **354** | P | **Pn** | **11 36 00.1** | **+0.8** |
| **AML** | **Almayashu** baz=341 | **2.98** | **342** | ⇑*i*P | **Pn** | **11 36 01.7** | **+1.9** |
| AML | baz=341 | | | ⇑*i*S | **Sb** | **11 36 40.8** | **-1.4** |
| **AML** | **Almayashu** SNR=6.7 | **2.98** | **342** | P | **Pb** | **11 36 03.4** | **-2.1** |
| **ULHL** | **Ulahol** SNR=6.6 | **3.12** | **18** | P | **Pn** | **11 36 03.4** | **+2.0** |
| **BOOM** | **Boomskoye usch** baz=12 | **3.29** | **13** | ⇑*e*P | **Pn** | **11 36 04.0** | **+0.3** |
| BOOM | baz=12 | | | ⇑*i*S | **Sb** | **11 36 47.2** | **-3.4** |
| **AAK** | **Ala-Archa** 4.6nm,0.8s | **3.35** | **355** | ⇓P | Pn | 11 36 07.0 | +2.4 |
| AAK | 10nm,0.7s | | | ⇑S | **Sn** | **11 36 47.5** | **+2.9** |
| **AAK** | **Ala-Archa** baz=354 | **3.35** | **355** | ⇑*i*P | **Pn** | **11 36 06.1** | **+1.5** |
| AAK | baz=354 | | | ⇑*i*S | **Sn** | **11 36 47.2** | **+2.6** |
| **AAK** | **Ala-Archa** SNR=8.4 | **3.35** | **355** | P | Pn | 11 36 07.4 | +2.7 |
| **ARK** | **Arkit** baz=319 | **3.37** | **319** | ⇑*e*P | **Pn** | **11 36 06.6** | **+1.8** |
| ARK | baz=319 | | | ⇑*i*S | **Sn** | **11 36 47.5** | **+2.6** |
| **EKS** | **Erkin-Say** baz=346 | **3.48** | **346** | ⇓*e*P | **Pn** | **11 36 07.0** | **+0.7** |
| EKS | baz=346 | | | ⇓*e*S | **Sn** | **11 36 50.4** | **+2.8** |
| **TKM2** | **Tokmak 2** 6.8nm,0.3s | **3.66** | **8** | ⇓P | **Pn** | **11 36 09.2** | **+0.3** |
| TKM2 | 20nm,0.7s | | | ⇓S | **Sn** | **11 36 52.3** | **+0.1** |
| **TKM2** | **Tokmak 2** baz=7.0 | **3.66** | **8** | ⇑*i*P | **Pn** | **11 36 08.9** | **0.0** |
| TKM2 | baz=7.0 | | | ⇑*i*S | **Sn** | **11 36 53.4** | **+1.2** |
| **TKM2** | **Tokmak 2** SNR=28 | **3.66** | **8** | P | **Pn** | **11 36 09.0** | **+0.1** |
| **MNAS** | **Manas** baz=331 | **3.68** | **331** | ⇓*e*P | **Pn** | **11 36 10.4** | **+1.3** |
| MNAS | baz=331 | | | ⇓*i*S | **Sn** | **11 36 55.7** | **+3.1** |
| **ANVS** | **Anan'yevo** baz=29 | **4.06** | **30** | ⇓*e*P | **Pn** | **11 36 15.5** | **+1.2** |
| ANVS | baz=29 | | | ⇓*e*S | **Sn** | **11 37 05.2** | **+3.2** |

**MEX 01 11:37:42.5±0.3, 14°.64N×92°.45W, h71km±71km, MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.29** | **325** | *e*P | Pn | 11 38 03.4 | -1.4 |
| PCIG | | | | *e*S | Sn | 11 38 19.8 | -1.7 |

*CSEM **01** 11:45:39.9, 39°.58N×29°.72W, h10km, ML3.0, After PDA*
**PDA 01 11:45:39.9±0.8, 39°.58N×29°.72W, h10km, MD3.5, ML3.0, Error ellipse: s-maj=6.8km s-min=2.2km az=25.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H07S1** | **FLORES T-PHASE** | **1.17** | **260** | *e*P | Pb | 11 45 57.9 | -4.4 |
| H07S1 | | | | *e*S | Sb | 11 46 10.7 | -6.9 |
| **PCED** | **Cedros** | **1.24** | **140** | *e*P | Pn | 11 45 58.6 | -4.6 |
| PCED | | | | *e*S | Sb | 11 46 12.1 | -7.3 |
| PCED | 134nm,0.3s | | | A | A | 11 46 14.5 | |
| **PCED** | **Cedros** | **1.24** | **140** | *e*P | Pn | 11 45 58.6 | -4.6 |
| PCED | | | | *e*S | Sb | 11 46 12.1 | -7.3 |
| **CALA** | **Caldeira** | **1.27** | **141** | *e*P | Pn | 11 45 59.3 | -4.6 |
| CALA | | | | *e*S | Sb | 11 46 13.6 | -7.0 |
| **CALA** | **Caldeira** | **1.27** | **141** | *e*P | Pn | 11 45 59.3 | -4.6 |
| CALA | | | | *e*S | Sb | 11 46 13.6 | -7.0 |
| **HOR** | **Horta** | **1.35** | **141** | *e*P | Pn | 11 46 00.1 | -4.7 |
| HOR | | | | *e*S | Sb | 11 46 15.2 | -7.4 |
| **HOR** | **Horta** | **1.35** | **141** | *e*P | Pn | 11 46 00.1 | -4.7 |
| HOR | | | | *e*S | Sb | 11 46 15.2 | -7.4 |
| **ROSA** | **Rosais** | **1.43** | **126** | *e*P | Pn | 11 46 01.2 | -4.8 |
| ROSA | | | | *e*S | Sn | 11 46 17.6 | -7.3 |
| ROSA | 39nm,0.2s | | | A | A | 11 46 19.4 | |
| **ROSA** | **Rosais** | **1.43** | **126** | *e*P | Pn | 11 46 01.2 | -4.8 |
| ROSA | | | | *e*S | Sn | 11 46 17.6 | -7.3 |
| **PGRA** | **Graciosa** | **1.45** | **112** | *e*S | Sn | 11 46 17.3 | -8.1 |
| PGRA | | | | A | A | 11 46 17.9 | |
| PGRA | 78nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.45** | **112** | *e*S | Sn | 11 46 17.3 | -8.1 |
| **PCAN** | **Candelaria** | **1.47** | **139** | *e*P | Pn | 11 46 01.9 | -4.6 |
| PCAN | | | | *e*S | Sn | 11 46 18.2 | -7.6 |
| PCAN | 192nm,0.3s | | | A | A | 11 46 22.6 | |
| **PCAN** | **Candelaria** | **1.47** | **139** | *e*P | Pn | 11 46 01.9 | -4.6 |
| PCAN | | | | *e*S | Sn | 11 46 18.2 | -7.6 |
| **PICO** | **Pico** | **1.47** | **137** | *e*P | Pn | 11 46 02.0 | -4.6 |
| PICO | | | | *e*S | Sn | 11 46 18.6 | -7.4 |
| **PICO** | **Pico** | **1.47** | **137** | *e*P | Pn | 11 46 02.0 | -4.6 |
| PICO | | | | *e*S | Sn | 11 46 18.6 | -7.4 |
| **PMAN** | **Manadas** | **1.58** | **126** | *e*S | Sn | 11 46 20.8 | -7.7 |
| PMAN | 32nm,0.2s | | | A | A | 11 46 22.9 | |
| **PMAN** | **Manadas** | **1.58** | **126** | *e*S | Sn | 11 46 20.8 | -7.7 |
| **PPNO** | **Prainha do Nor** | **1.58** | **134** | *e*S | Sn | 11 46 21.2 | -7.5 |
| PPNO | 73nm,0.2s | | | A | A | 11 46 23.9 | |
| **PPNO** | **Prainha do Nor** | **1.58** | **134** | *e*S | Sn | 11 46 21.2 | -7.5 |

*ISN **01** 11:53:19.5±2.4, 36°.90N×41°.09E, h0km±10km, ML3.6*
*DDA **01** 11:53:20.0, 36°.27N×40°.99E, h10km, Md3.5*
*ISK **01** 11:53:21.9, 36°.48N×41°.00E, h5km, ML3.7*
*CSEM **01** 11:53:23.5±0.2, 36°.48N×41°.00E, h2km, ML3.6, Error ellipse: s-maj=5.2km s-min=4.2km az=29.0*
*TEH **01** 11:53:23.1, 36°.45N×41°.05E, h2km, ML3.5*
**ISC 01 11:53:19.4±1.3, 36°.26N±0°.02×40°.97E±0°.03, h1km±11km, n62, σ1§23/67, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MZRK** | **Al-Mazaregh** | **0.50** | **211** | *i* P | **Pn** | **11 53 35.2** | **+1.4** |
| MZRK | | | | *e*S | **Sn** | **11 53 44.9** | **+1.7** |
| **SFNV** | **Sufian** 3μm,0.6s | **0.71** | **283** | *i* P | **Pn** | **11 53 36.0** | **-0.8** |
| SFNV | | | | *i* S | **Sn** | **11 53 47.3** | **-1.2** |
| **KBSD** | **Kabsdagh** 2μm,0.3s | **0.82** | **335** | *i* P | **Pb** | **11 53 36.1** | **-0.4** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KBSD | | | | iS | Sg | 11 53 46.6 | +0.9 |
| | 3μm,0.6s | | | | | | |
| MARD | Mardin | 1.06 | 352 | P | Pg | 11 53 40.1 | +0.3 |
| MARD | | | | S | Sb | 11 53 55.1 | -0.1 |
| MAZI | Mazidag | 1.27 | 341 | ePG | Pn | 11 53 43.5 | -1.0 |
| MAZI | | | | eSG | Sb | 11 53 59.1 | -2.1 |
| MAZI | Mazidag | 1.27 | 341 | ePg | Pn | 11 53 43.5 | -1.0 |
| MAZI | | | | eSg | Sb | 11 53 59.1 | -2.1 |
| BEST | Besiri | 1.65 | 8 | P | Pb | 11 53 50.8 | +0.1 |
| BEST | | | | S | Sb | 11 54 11.8 | -0.1 |
| SIRN | S˜–rnak | 1.69 | 43 | iP | Pb | 11 53 51.4 | 0.0 |
| SIRN | | | | iS | Sg | 11 54 13.3 | -0.4 |
| SIRN | S˜–rnak | 1.69 | 43 | P | Pb | 11 53 51.4 | 0.0 |
| SIRN | | | | S | Sg | 11 54 13.3 | -0.4 |
| SIRT | Sirnak | 1.71 | 43 | ePN | Pb | 11 53 51.4 | -0.3 |
| SIRT | | | | eSN | Sb | 11 54 13.1 | -0.7 |
| SIRT | Sirnak | 1.71 | 43 | ePn | Pb | 11 53 51.4 | -0.3 |
| SIRT | | | | eSn | Sb | 11 54 13.1 | -0.7 |
| MSL | Mosul | 1.73 | 85 | ePG | x | 11 53 57.3 | |
| MSL | | | | eSG | x | 11 54 23.0 | |
| DIY | Diyarbakir | 1.74 | 340 | ePn | Pg | 11 53 53.3 | +0.5 |
| DYBB | Diyarbakir | 1.82 | 339 | ePN | Pb | 11 53 53.3 | -0.3 |
| DYBB | | | | eSN | Sn | 11 54 15.1 | -0.7 |
| SVAN | Silvan-Diyarba | 1.90 | 5 | ePN | Pn | 11 53 53.5 | +0.5 |
| SVAN | Silvan-Diyarba | 1.90 | 5 | ePn | Pn | 11 53 53.5 | +0.5 |
| BTMT | Batman | 1.97 | 12 | ePN | Pn | 11 53 53.8 | -0.3 |
| BTMT | Batman | 1.97 | 12 | ePn | Pn | 11 53 53.8 | -0.3 |
| CUKT | Cukurca | 2.33 | 64 | ePN | Pb | 11 54 01.6 | -0.8 |
| CUKT | Cukurca | 2.33 | 64 | ePn | Pb | 11 54 01.6 | -0.8 |
| ATAB | Bozova | 2.46 | 300 | iP | Pb | 11 54 04.9 | +0.3 |
| ATAB | | | | iS | Sg | 11 54 37.5 | -1.1 |
| ATAB | Bozova | 2.46 | 300 | P | Pb | 11 54 04.8 | +0.3 |
| ATAB | | | | S | Sg | 11 54 37.5 | -1.1 |
| SVRC | Sivrice-ELAZID | 2.50 | 328 | ePN | Pn | 11 54 02.7 | +1.3 |
| SVRC | Sivrice-ELAZID | 2.50 | 328 | ePn | Pn | 11 54 02.7 | +1.3 |
| HAKT | HAKKARI | 2.54 | 59 | iP | Pn | 11 54 03.6 | +1.5 |
| HAKT | | | | iS | Sb | 11 54 37.5 | -0.5 |
| HAKT | HAKKARI | 2.54 | 59 | P | Pn | 11 54 03.6 | +1.5 |
| HAKT | | | | S | Sb | 11 54 37.5 | -0.5 |
| HKR | Hakkari | 2.58 | 58 | ePN | Pn | 11 54 03.7 | +1.2 |
| HKR | Hakkari | 2.58 | 58 | ePn | Pn | 11 54 03.7 | +1.2 |
| GEVA | Gevas | 2.64 | 38 | iP | Pn | 11 54 04.6 | +1.3 |
| GEVA | Gevas | 2.64 | 38 | P | Pn | 11 54 04.6 | +1.3 |
| GEVA | | | | S | Sb | 11 54 41.9 | +1.3 |
| BINT | Bingol | 2.64 | 352 | ePn | Pb | 11 54 05.6 | -2.0 |
| BNGB | Bingˆ¶l | 2.74 | 355 | ePN | Pn | 11 54 05.6 | +1.0 |
| IKRK | Kirkuk | 2.87 | 106 | ePN | x | 11 54 09.3 | |
| IKRK | | | | eSN | x | 11 54 44.3 | |
| PTK | Pertek | 2.91 | 335 | ePN | Pn | 11 54 08.4 | +1.3 |
| PTK | Pertek | 2.91 | 335 | ePn | Pn | 11 54 08.4 | +1.3 |
| AKCD | Akcadag | 3.17 | 311 | iP | Pn | 11 54 11.6 | +1.0 |
| AKCD | Akcadag | 3.17 | 311 | P | Pn | 11 54 11.6 | +1.0 |
| AKCD | | | | S | Sg | 11 55 01.1 | -0.3 |
| RTB | Rutbah | 3.27 | 190 | ePN | x | 11 54 23.2 | |
| RTB | | | | eSN | x | 11 55 03.5 | |
| RTB | Rutbah | 3.27 | 190 | ePn | Pg | 11 54 23.2 | +1.2 |
| | SNR=39 | | | | | | |
| RTB | | | | eSn | Sg | 11 55 03.5 | -0.9 |
| | SNR=39 | | | | | | |
| ERZN | Erzincan | 3.47 | 344 | ePN | Pn | 11 54 15.8 | +1.2 |
| KMRS | Kahramanmaras | 3.50 | 292 | ePN | Pb | 11 54 18.4 | -3.7 |
| KMRS | Kahramanmaras | 3.50 | 292 | ePn | Pb | 11 54 18.4 | -3.7 |
| DARE | Darende-Malaty | 3.61 | 311 | ePN | Pn | 11 54 19.1 | +2.5 |
| DARE | Darende-Malaty | 3.61 | 311 | ePn | Pn | 11 54 19.1 | +2.5 |
| EZM | Erzurum | 3.65 | 5 | ePN | Pn | 11 54 18.7 | +1.3 |
| AGRB | Hanur-Agry | 3.67 | 25 | ePN | Pn | 11 54 18.9 | +1.3 |
| AGRB | Hanur-Agry | 3.67 | 25 | ePn | Pn | 11 54 18.9 | +1.3 |
| TAHT | Tahtakopru-Hat | 3.87 | 273 | ePN | Pb | 11 54 24.8 | -3.7 |
| TAHT | Tahtakopru-Hat | 3.87 | 273 | ePn | Pb | 11 54 24.8 | -3.7 |
| BHD | Baghdad | 4.09 | 136 | ePN | x | 11 54 29.6 | |
| BHD | | | | eSN | x | 11 55 20.2 | |
| BHD | Baghdad | 4.09 | 136 | ePn | Pb | 11 54 29.6 | -2.7 |
| | SNR=39 | | | | | | |
| BHD | | | | eSn | Sb | 11 55 20.2 | -2.0 |
| | SNR=39 | | | | | | |
| KOZT | Kozan | 4.30 | 288 | ePN | Pn | 11 54 29.9 | +3.8 |
| KOZT | Kozan | 4.30 | 288 | ePn | Pn | 11 54 29.9 | +3.8 |
| IDHR | Dehrash | 4.68 | 108 | eP | Pn | 11 54 34.8 | +3.3 |
| IDHR | Dehrash | 4.68 | 108 | eP | Pn | 11 54 34.8 | +3.3 |
| SVSK | Karacayir | 4.81 | 321 | ePN | Pn | 11 54 35.1 | +2.1 |
| SVSK | Karacayir | 4.81 | 321 | ePn | Pn | 11 54 35.1 | +2.1 |
| IVIS | Veis | 5.10 | 108 | eP | Pn | 11 54 38.4 | +1.3 |
| IVIS | Veis | 5.10 | 108 | eP | Pn | 11 54 38.4 | +1.3 |
| IBDR | Badra | 5.15 | 126 | ePn | x | 11 54 42.3 | |
| IBDR | | | | eSN | x | 11 55 43.0 | |
| NSR | Nassriya | 6.78 | 139 | ePN | x | 11 55 08.8 | |
| NSR | | | | eSN | x | 11 56 25.8 | |
| NSR | Nassriya | 6.78 | 139 | ePn | Pb | 11 55 08.8 | -9.2 |
| | SNR=39 | | | | | | |
| NSR | | | | eSn | Sn | 11 56 25.8 | +7.9 |
| | SNR=39 | | | | | | |

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**IDC 01 11:56:33.0±9.1, 21°.53S×65°.90W, h174km±61km, mb3.1/2, mb1 3.4/4, mb1mx3.2/20, mbtmp3.8/4, Error ellipse: s-maj=107.1km s-min=24.7km az=21.0, Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 5.62 | 338 | P | Pn | 11 57 56.2 | +0.3 |
| | 2.1nm,0.3s,baz=146,slow=8.3,SNR=40 | | | | | | |
| LPAZ | | | | S | Sn | 11 59 00.9 | 0.0 |
| | baz=278,slow=22,SNR=2.9 | | | | | | |
| BDFB | Brasilia | 17.93 | 74 | P | P | 12 00 28.5 | -1.6 |
| | 0.5nm,0.3s,baz=219,slow=14,SNR=2.8 | | | | | | |
| TXAR | Lajitas Array | 62.30 | 323 | P | P | 12 06 36.7 | -0.3 |
| | 0.1nm,0.4s,baz=164,slow=10,SNR=2.7 | | | | | | |
| TORD | Torodi Ar. Bea | 74.73 | 69 | P | P | 12 07 55.0 | +0.8 |
| | 0.8nm,0.5s,baz=251,slow=5.6,SNR=9.4 | | | | | | |
| MKAR | Makanchi Array | 143.97 | 38 | PKP | PKPab | 12 15 45.3 | -0.1 |
| | 0.5nm,0.4s,baz=318,slow=6.5,SNR=4.1 | | | | | | |

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*ISCJB **01** 11:57:38.7±0.8, 37°.28N±0°.05×22°.11E±0°.06, h19km±9km, Error ellipse: s-maj=9.0km s-min=7.2km az=163.5*
*CSEM **01** 11:57:38.5±0.1, 37°.28N×22°.12E, h15km, ML1.9, Error ellipse: s-maj=3.8km s-min=3.3km az=109.0*
*THE **01** 11:57:38.9, 37°.28N×22°.11E, h17km, ML1.9/2, Error ellipse: s-maj=0.9km s-min=0.4km az=167.0*
*ATH **01** 11:57:39.0, 37°.28N×22°.10E, h15km±1km, MD2.9/6*
**ISC 01 11:57:38.7±1.0, 37°.29N±0°.03×22°.11E±0°.03, h17km±8km, n19, σ0s.18/28, Southern Greece**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ITM | Ithomi | 0.18 | 232 | ePB | Pg | 11 57 43.2 | -0.1 |
| ITM | | | | eSB | Sg | 11 57 46.4 | -0.1 |
| ITM | Ithomi | 0.18 | 232 | P | Pg | 11 57 43.2 | -0.1 |
| ITM | | | | S | Sb | 11 57 46.7 | -0.2 |
| ITM | Ithomi | 0.18 | 232 | P | Pg | 11 57 43.2 | -0.1 |
| ITM | | | | S | Sb | 11 57 46.7 | -0.2 |
| VLX | Vlachokerasia | 0.23 | 70 | ePB | Pg | 11 57 44.3 | +0.2 |
| VLX | | | | eSB | Sb | 11 57 48.3 | 0.0 |
| VLX | Vlachokerasia | 0.23 | 70 | P | Pb | 11 57 44.4 | 0.0 |
| VLX | | | | S | Sb | 11 57 48.3 | 0.0 |
| VLX | Vlachokerasia | 0.23 | 70 | ePb | Pg | 11 57 44.3 | +0.2 |
| VLX | | | | S | Sb | 11 57 48.3 | 0.0 |
| AMT | Artemida-Makis | 0.40 | 307 | ePB | Pg | 11 57 47.0 | +0.1 |
| AMT | | | | eSB | Sb | 11 57 53.3 | +0.3 |
| AMT | Artemida-Makis | 0.40 | 307 | P | Pg | 11 57 46.9 | +0.1 |
| AMT | | | | S | Sb | 11 57 53.4 | +0.4 |
| AMT | Artemida-Makis | 0.40 | 307 | ePb | Pg | 11 57 47.0 | +0.1 |
| AMT | | | | S | Sb | 11 57 53.4 | +0.4 |
| PYL | PYLOS | 0.49 | 216 | ePB | Pb | 11 57 49.0 | +0.1 |
| PYL | PYLOS | 0.49 | 216 | P | Pg | 11 57 48.5 | -0.1 |
| PYL | PYLOS | 0.49 | 216 | P | Pg | 11 57 48.5 | -0.1 |
| PYL | PYLOS | 0.49 | 216 | ePb | Pb | 11 57 49.0 | +0.1 |
| GUR | Goura | 0.67 | 16 | P | Pg | 11 57 51.7 | -0.2 |
| GUR | Goura | 0.67 | 16 | P | Pg | 11 57 51.7 | -0.2 |
| DRO | Drossia | 0.73 | 335 | P | Pb | 11 57 52.7 | -0.2 |
| DRO | Drossia | 0.73 | 335 | P | Pb | 11 57 52.7 | -0.2 |
| VLI | Veliai | 0.88 | 131 | ePN | Pg | 11 57 55.8 | 0.0 |
| VLI | Veliai | 0.88 | 131 | ePn | Pg | 11 57 55.8 | 0.0 |

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*ISCJB **01** 12:12:10.0±1.5, 19°.46N±0°.10×122°.4E±0°.3, h33km, mb3.6/6, MS3.5/5, Error ellipse: s-maj=38.4km s-min=8.7km az=17.8*
*IDC **01** 12:12:09.4±1.4, 19°.72N×122°.10E, h0km, mb3.6/6, mb1 3.7/7, mb1mx3.5/52, mbtmp3.6/7, ML3.4/1, MS3.5/5, Ms1 3.6/5, ms1mx3.0/31, Error ellipse: s-maj=41.9km s-min=25.6km az=71.0*
**ISC 01 12:12:11.6±2.0, 19°.4N±0°.1×122°.4E±0°.3, h35km, n17, σ0s.65/8, mb3.7/6, MS3.5/5, 1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BCPH | Baguio City Da | 3.49 | 210 | ⇑iP | Pn | 12 13 03.3 | -0.2 |
| BCPH | | | | iS | Sn | 12 13 44.2 | +0.5 |
| KSRS | Korea Array | 18.60 | 14 | P | Pn | 12 16 26.9 | +0.6 |
| | 0.1nm,0.3s,baz=172,slow=29,SNR=3.3 | | | | | | |
| CMAR | Chiang Mai Arr | 22.19 | 271 | P | P | 12 17 04.8 | -0.2 |
| | 0.4nm,0.4s,baz=76,slow=8.4,SNR=5.6 | | | | | | |
| CMAR | | | | LR | LR | 12 25 23.9 | |
| | comp=Z,46nm,18.8s,baz=168,slow=36 | | | | | | |
| PSI | Prapat | 28.27 | 237 | LR | LR | 12 28 26.4 | |
| | comp=Z,67nm,18.5s,baz=106,slow=35 | | | | | | |
| SONM | Songino Array | 31.17 | 339 | LR | LR | 12 32 14.5 | |
| | comp=Z,121nm,19.2s,baz=172,slow=39 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 41.82 | 84 | T | T | 13 05 01.3 | |
| | baz=279,slow=75,SNR=100 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 41.83 | 84 | T | T | 13 04 59.0 | |
| | baz=279,slow=75,SNR=107 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 41.84 | 84 | T | T | 13 05 00.4 | |
| | baz=279,slow=75,SNR=86 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 41.84 | 82 | T | T | 13 04 60.0 | |
| | baz=277,slow=75,SNR=233 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.84 | 82 | T | T | 13 05 00.2 | |
| | baz=277,slow=75,SNR=103 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 41.86 | 82 | T | T | 13 05 01.2 | |
| | baz=277,slow=75,SNR=120 | | | | | | |
| MKAR | Makanchi Array | 42.58 | 319 | P | P | 12 20 05.1 | +0.9 |
| | 0.7nm,0.5s,baz=110,slow=10,SNR=4.6 | | | | | | |
| ASAR | Alice Springs | 44.28 | 165 | P | P | 12 20 24.1 | +6.0 |
| | 0.5nm,0.8s,baz=347,slow=7.3,SNR=5.4 | | | | | | |
| ZALV | Zalesovo Beam | 44.85 | 329 | P | P | 12 20 21.8 | -0.5 |
| | 0.9nm,0.6s,baz=114,slow=9.6,SNR=4.0 | | | | | | |
| ZALV | | | | LR | LR | 12 40 17.9 | |
| | comp=Z,52nm,19.1s,baz=70,slow=38 | | | | | | |
| KURBB | Kurchatov Arra | 46.50 | 323 | P | P | 12 20 35.4 | +0.1 |
| | 0.9nm,0.6s,baz=119,slow=7.2,SNR=6.2 | | | | | | |
| FINES | FINESS Array B | 76.10 | 331 | P | P | 12 23 55.0 | -0.5 |
| | 0.7nm,0.7s,baz=84,slow=6.2,SNR=3.4 | | | | | | |
| NOA | NORSAR Array B | 82.94 | 333 | LR | LR | 13 05 15.7 | |
| | comp=Z,60nm,18.2s,baz=55,slow=39 | | | | | | |

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*CSEM **01** 12:15:30.1±0.2, 34°.95N×34°.00E, h30km, ML3.1, Error ellipse: s-maj=8.8km s-min=3.8km az=9.0*
*NIC **01** 12:15:30.8, 34°.81N×33°.91E, h35km, ML3.1*
*NSSC **01** 12:15:31.5±1.8, 34°.91N×34°.44E, h0km±11km, ML1.8*
**ISC 01 12:15:30.0±1.4, 34°.96N±0°.05×33°.99E±0°.04, h43km±30km, n28, σ1s.13/46, 2D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CSS | Prodhromos | 0.55 | 270 | P | Pn | 12 15 41.6 | +0.1 |
| | baz=107 | | | | | | |
| CSS | | | | S | Sn | 12 15 49.7 | +0.1 |
| CSS | Prodhromos | 0.55 | 270 | P | Pn | 12 15 41.6 | +0.1 |
| CSS | | | | S | Sn | 12 15 49.7 | +0.1 |
| MAMC | Mammari | 0.67 | 288 | P | Pn | 12 15 43.9 | +0.8 |
| | baz=122 | | | | | | |
| MAMC | Mammari | 0.67 | 288 | P | Pn | 12 15 43.9 | +0.8 |
| SZAC | Souni-Zanaja | 0.94 | 258 | P | Pn | 12 15 46.6 | -0.1 |
| | baz=86 | | | | | | |
| SZAC | | | | S | Sn | 12 15 58.1 | -0.9 |
| SZAC | Souni-Zanaja | 0.94 | 258 | P | Pn | 12 15 46.6 | -0.1 |
| SZAC | | | | S | Sn | 12 15 58.1 | -0.9 |
| ALFC | Alevga | 1.16 | 280 | ⇓P | Pn | 12 15 50.2 | +0.4 |
| | baz=107 | | | | | | |
| ALFC | Alevga | 1.16 | 280 | ⇓P | Pn | 12 15 50.2 | +0.4 |
| AKMC | Akamas | 1.37 | 273 | P | Pn | 12 15 53.0 | +0.4 |
| | baz=98 | | | | | | |
| AKMC | Akamas | 1.37 | 273 | P | Pn | 12 15 53.0 | +0.4 |
| HWQ | Hawqa | 1.75 | 112 | eP | Pn | 12 15 58.9 | +0.9 |
| HWQ | Hawqa | 1.75 | 112 | eP | Pn | 12 15 58.9 | +0.9 |
| ARNB | Al Arnab | 1.85 | 60 | eP | Pn | 12 16 00.7 | +1.4 |
| ARNB | | | | eS | Sn | 12 16 21.0 | -0.5 |
| ARNB | | | | AML | AML | 12 16 22.8 | |
| | comp=E,33nm,0.2s | | | | | | |
| ARNB | | | | AML | AML | 12 16 23.1 | |
| | comp=N,14nm,0.1s | | | | | | |
| ARNB | Al Arnab | 1.85 | 60 | eP | Pn | 12 16 00.7 | +1.4 |
| ARNB | | | | eS | Sn | 12 16 21.0 | -0.5 |
| | comp=N,14nm,0.1s | | | | | | |
| BIDA | Albida | 1.91 | 88 | eP | Pn | 12 15 59.4 | -0.7 |
| BIDA | | | | eS | Sn | 12 16 20.1 | -2.9 |
| BIDA | | | | AML | AML | 12 16 25.7 | |
| | comp=E,15nm,0.3s | | | | | | |
| BIDA | | | | AML | AML | 12 16 26.1 | |
| | comp=N,42nm,0.5s | | | | | | |
| BIDA | Albida | 1.91 | 88 | eP | Pn | 12 15 59.4 | -0.7 |
| BIDA | | | | eS | Sn | 12 16 20.1 | -2.9 |
| | comp=N,42nm,0.5s | | | | | | |
| HAWK | Haweek | 2.03 | 102 | iP | Pn | 12 16 03.0 | +1.2 |
| HAWK | | | | eS | Sn | 12 16 24.2 | -1.9 |
| HAWK | | | | AML | AML | 12 16 27.6 | |
| | comp=N,17nm,0.3s | | | | | | |
| HAWK | | | | AML | AML | 12 16 27.9 | |
| | comp=E,15nm,0.2s | | | | | | |
| HAWK | Haweek | 2.03 | 102 | iP | Pn | 12 16 03.0 | +1.2 |
| HAWK | | | | eS | Sn | 12 16 24.2 | -1.9 |
| | comp=E,15nm,0.2s | | | | | | |
| WRDH | Warideh | 2.05 | 74 | eP | Pn | 12 16 03.0 | +0.9 |
| WRDH | | | | eS | Sn | 12 16 26.4 | -0.1 |
| WRDH | | | | AML | AML | 12 16 27.7 | |
| | comp=N,35nm,0.3s | | | | | | |
| WRDH | | | | AML | AML | 12 16 28.8 | |
| | comp=E,30nm,0.3s | | | | | | |
| WRDH | Warideh | 2.05 | 74 | eP | Pn | 12 16 03.0 | +0.9 |
| WRDH | | | | eS | Sn | 12 16 26.4 | -0.1 |
| | comp=E,30nm,0.3s | | | | | | |
| RCY | Rachaya | 2.11 | 133 | eP | Pn | 12 16 03.1 | +0.1 |
| RCY | Rachaya | 2.11 | 133 | eP | Pn | 12 16 03.1 | +0.1 |
| BRBR | Barbar | 2.24 | 133 | iP | Pn | 12 16 05.3 | +0.5 |
| BRBR | | | | eS | Sn | 12 16 30.1 | -1.3 |
| BRBR | | | | AML | AML | 12 16 33.1 | |
| | comp=N,20nm,0.2s | | | | | | |
| BRBR | | | | AML | AML | 12 16 47.5 | |
| | comp=E,10.0nm,2.5s | | | | | | |
| BRBR | Barbar | 2.24 | 133 | iP | Pn | 12 16 05.3 | +0.5 |
| BRBR | | | | eS | Sn | 12 16 30.1 | -1.3 |
| | comp=E,10.0nm,2.5s | | | | | | |
| TOTH | TOTAH | 2.57 | 128 | eP | Pn | 12 16 10.8 | +1.6 |
| TOTH | | | | eS | Sn | 12 16 39.5 | +0.2 |
| TOTH | | | | AML | AML | 12 16 42.5 | |
| | comp=N,17nm,0.2s | | | | | | |
| TOTH | | | | AML | AML | 12 16 43.2 | |
| | comp=E,9.9nm,0.5s | | | | | | |
| TOTH | TOTAH | 2.57 | 128 | eP | Pn | 12 16 10.8 | +1.6 |
| TOTH | | | | eS | Sn | 12 16 39.5 | +0.2 |
| | comp=E,10.0nm,0.5s | | | | | | |
| SALA | Sala | 3.20 | 134 | eP | Pn | 12 16 19.5 | +1.6 |
| SALA | | | | eS | Sn | 12 16 54.8 | -0.1 |
| SALA | | | | AML | AML | 12 17 01.0 | |
| | comp=E,1.1nm,0.6s | | | | | | |
| SALA | | | | AML | AML | 12 17 04.2 | |
| | comp=N,11nm,0.4s | | | | | | |
| SALA | Sala | 3.20 | 134 | eP | Pn | 12 16 19.5 | +1.6 |
| SALA | | | | eS | Sn | 12 16 54.8 | -0.1 |
| | comp=N,11nm,0.4s | | | | | | |

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*CSEM **01** 12:31:28.0±0.4, 40°.54N×35°.00E, h8km, MD2.9, Error ellipse: s-maj=8.4km s-min=6.9km az=119.0*
**DDA 01 12:31:28.1, 40°.52N×35°.00E, h7km, Md2.9, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CTKT | Corum | 0.20 | 303 | iP | Pg | 12 31 32.1 | -0.2 |
| CTKT | | | | iS | Sg | 12 31 36.5 | +1.3 |
| CTKT | Corum | 0.20 | 303 | P | Pg | 12 31 32.1 | -0.2 |
| CTKT | | | | S | Sg | 12 31 36.5 | +1.3 |
| HAVZ | Havza | 0.78 | 44 | iP | Pg | 12 31 43.3 | +0.1 |
| HAVZ | | | | iS | Sb | 12 31 54.5 | -0.4 |
| HAVZ | Havza | 0.78 | 44 | P | Pg | 12 31 43.3 | +0.1 |
| HAVZ | | | | S | Sb | 12 31 54.5 | -0.4 |
| BOYT | Boyabat | 0.91 | 355 | iP | Pg | 12 31 44.4 | -1.3 |
| BOYT | Boyabat | 0.91 | 355 | P | Pg | 12 31 44.4 | -1.3 |
| BOYT | | | | S | Sb | 12 31 59.5 | +0.8 |
| YOZ | Yozgat | 0.91 | 164 | ePG | Pg | 12 31 45.4 | -0.4 |
| YOZ | Yozgat | 0.91 | 164 | ePg | Pg | 12 31 45.4 | -0.4 |
| CDAG | Cicekdag | 1.01 | 209 | iP | Pn | 12 31 48.6 | -0.3 |
| CDAG | | | | iS | Sn | 12 32 03.8 | +0.3 |
| CDAG | Cicekdag | 1.01 | 209 | P | Pn | 12 31 48.6 | -0.3 |
| CDAG | | | | S | Sn | 12 32 03.8 | +0.3 |
| ILGA | Ilgaz | 1.11 | 299 | iP | Pg | 12 31 49.2 | -0.6 |
| ILGA | | | | iS | Sb | 12 32 05.5 | +0.5 |
| ILGA | Ilgaz | 1.11 | 299 | P | Pg | 12 31 49.2 | -0.7 |
| ILGA | | | | S | Sb | 12 32 05.5 | +0.5 |
| ELDT | Eldivan | 1.20 | 269 | iP | Pg | 12 31 49.8 | -1.6 |
| ELDT | | | | iS | Sn | 12 32 08.3 | 0.0 |
| ELDT | Eldivan | 1.20 | 269 | P | Pg | 12 31 49.8 | -1.7 |
| ELDT | | | | S | Sn | 12 32 08.3 | 0.0 |

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*ISK **01** 12:43:31.6, 39°.90N×33°.06E, h11km, MD2.5*
*ISCJB **01** 12:43:32.4±0.6, 39°.89N±0°.03×33°.06E±0°.05, h9km±7km, Error ellipse: s-maj=6.7km s-min=5.3km az=178.2*
*DDA **01** 12:43:32.2, 39°.91N×33°.10E, h7km, Md2.4*
*CSEM **01** 12:43:32.0±0.2, 39°.92N×33°.08E, h10km, MD2.5, Error ellipse: s-maj=5.1km s-min=4.2km az=57.0*
**ISC 01 12:43:32.4±1.2, 39°.89N±0°.03×33°.08E±0°.03, h4km±11km, n22, σ1s.15/34, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LOD | Lodumlu | 0.24 | 270 | ePG | Pg | 12 43 36.8 | -0.3 |
| LOD | | | | eSG | Sg | 12 43 40.5 | +0.3 |
| LOD | Lodumlu | 0.24 | 270 | ePg | Pg | 12 43 36.8 | -0.3 |
| LOD | | | | eSg | Sg | 12 43 40.5 | +0.3 |
| BBAL | Bala | 0.35 | 174 | iP | Pg | 12 43 39.5 | +0.3 |
| BBAL | | | | iS | Sb | 12 43 45.9 | -1.4 |
| BBAL | Bala | 0.35 | 174 | P | Pg | 12 43 39.5 | +0.3 |
| BBAL | | | | S | Sb | 12 43 45.9 | -1.4 |
| AFSR | Af¯ar-Bala (A | 0.44 | 180 | ePG | Pg | 12 43 40.9 | -0.1 |
| AFSR | | | | eSG | Sg | 12 43 47.7 | +1.0 |
| AFSR | Af¯ar-Bala (A | 0.44 | 180 | ePg | Pg | 12 43 40.9 | -0.1 |
| AFSR | | | | eSg | Sg | 12 43 47.7 | +1.0 |
| ELDT | Eldivan | 0.66 | 24 | iP | Pg | 12 43 44.9 | -0.1 |
| ELDT | | | | iS | Sb | 12 43 56.0 | -0.1 |
| ELDT | Eldivan | 0.66 | 24 | P | Pg | 12 43 44.9 | -0.1 |
| ELDT | | | | S | Sb | 12 43 56.0 | -0.1 |
| KAMT | Kaman | 0.72 | 136 | ePG | Pg | 12 43 46.1 | -0.1 |
| KAMT | Kaman | 0.72 | 136 | ePg | Pg | 12 43 46.1 | -0.1 |
| SERE | Sereflikochisa | 1.02 | 158 | ePG | Pb | 12 43 52.4 | -0.3 |
| SERE | Sereflikochisa | 1.02 | 158 | ePg | Pb | 12 43 52.4 | -0.3 |
| CDAG | Cicekdag | 1.03 | 105 | iP | Pg | 12 43 51.5 | -0.8 |
| CDAG | Cicekdag | 1.03 | 105 | P | Pg | 12 43 51.5 | -0.8 |
| CDAG | | | | S | Sn | 12 44 10.5 | +1.6 |
| BCAM | Yenicaga | 1.20 | 320 | iP | Pg | 12 43 55.0 | -0.5 |
| BCAM | Yenicaga | 1.20 | 320 | P | Pg | 12 43 55.0 | -0.5 |
| BCAM | | | | S | Sn | 12 44 16.3 | +3.3 |
| SVRH | Sivrihisar-ESK | 1.28 | 250 | ePN | Pn | 12 43 55.8 | -1.4 |
| SVRH | Sivrihisar-ESK | 1.28 | 250 | ePn | Pn | 12 43 55.8 | -1.4 |
| KIZT | Kizilcal | 1.37 | 223 | ePN | Pn | 12 43 57.2 | -1.3 |
| KIZT | Kizilcal | 1.37 | 223 | ePn | Pn | 12 43 57.2 | -1.3 |
| KDHN | Kadinhani | 1.56 | 209 | iP | Pg | 12 44 01.8 | -0.5 |
| KDHN | | | | iS | Sg | 12 44 24.8 | +2.3 |
| KDHN | Kadinhani | 1.56 | 209 | P | Pg | 12 44 01.8 | -0.5 |
| KDHN | | | | S | Sg | 12 44 24.8 | +2.3 |

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**WEL 01 13:02:37.4±0.5, 36°.54S×177°.59E, h154km±5km, ML3.5/14, 1C, Error ellipse: s-maj=7.7km s-min=6.9km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 1.17 | 151 | PN | Pn | 13 03 04.2 | +0.2 |
| MXZ | | | | SN | Sn | 13 03 24.2 | -0.2 |
| HAZ | Te Kaha | 1.22 | 173 | ⇑PN | Pn | 13 03 04.5 | +0.1 |
| HAZ | | | | SN | Sn | 13 03 25.7 | +0.4 |
| WMGZ | Waiomatatini S | 1.44 | 153 | PN | Pn | 13 03 06.6 | 0.0 |
| PUZ | Puketiti | 1.62 | 161 | PN | Pn | 13 03 08.1 | -0.5 |
| TWGZ | Tauwhareparae | 1.66 | 169 | PN | Pn | 13 03 09.5 | +0.5 |
| URZ | Urewera | 1.75 | 192 | PN | Pn | 13 03 10.4 | +0.4 |
| URZ | | | | SN | Sn | 13 03 34.6 | -0.5 |
| URZ | | | | AML | AML | 13 03 38.0 | |
| MWZ | Matawai | 1.79 | 181 | PN | Pn | 13 03 10.3 | -0.1 |
| MWZ | | | | SN | Sn | 13 03 38.8 | +2.9 |
| MWZ | | | | AML | AML | 13 03 39.4 | |
| TKGZ | Te Karaka | 1.90 | 174 | PN | Pn | 13 03 11.7 | +0.1 |
| RAGZ | Rawiri | 1.95 | 184 | PN | Pn | 13 03 12.4 | +0.1 |
| CNGZ | Carnagh Statio | 2.00 | 166 | PN | Pn | 13 03 13.0 | +0.2 |
| RIGZ | Rimuhau | 2.16 | 176 | PN | Pn | 13 03 14.3 | -0.4 |
| SNGZ | Shannon Statio | 2.24 | 185 | PN | Pn | 13 03 16.2 | +0.5 |
| PRGZ | Paritu Road | 2.39 | 174 | PN | Pn | 13 03 16.9 | -0.5 |
| KNZ | Kokohu | 2.47 | 178 | PN | Pn | 13 03 17.7 | -0.6 |
| WHHZ | Waihua | 2.54 | 186 | PN | Pn | 13 03 18.4 | -0.8 |
| MHGZ | Mahia Peninsul | 2.62 | 175 | PN | Pn | 13 03 19.6 | -0.5 |
| NMHZ | Naumai | 2.62 | 193 | PN | Pn | 13 03 22.0 | +1.7 |
| ARHZ | Aropaoanui | 2.75 | 190 | PN | Pn | 13 03 22.6 | +0.7 |
| BKZ | Black Stump Fm | 2.76 | 198 | PN | Pn | 13 03 22.8 | +0.8 |
| BHHZ | Black Hill Sta | 3.18 | 202 | PN | Pn | 13 03 28.0 | +0.8 |
| WNVZ | Wahianoa | 3.19 | 209 | PN | Pn | 13 03 28.8 | +1.2 |
| KRHZ | Kereru | 3.24 | 197 | PN | Pn | 13 03 27.5 | -0.5 |
| KAHZ | Kahuranaki | 3.29 | 190 | PN | Pn | 13 03 28.4 | -0.3 |
| PXZ | Pawanui | 3.53 | 189 | PN | Pn | 13 03 30.0 | -1.6 |
| PNHZ | Pukenui | 3.54 | 198 | PN | Pn | 13 03 31.8 | 0.0 |
| TSZ | Takapari Road | 3.74 | 200 | PN | Pn | 13 03 33.1 | -1.3 |
| MRZ | Mangatainoka R | 4.40 | 200 | PN | Pn | 13 03 41.0 | -2.0 |
| HOWZ | Holdsworth Sta | 4.64 | 200 | PN | Pn | 13 03 43.8 | -2.3 |
| OGWZ | Otaki Gorge | 4.67 | 203 | PN | Pn | 13 03 44.5 | -2.0 |
| KIW | Kapiti Island | 4.79 | 205 | AML | AML | 13 04 42.5 | |
| MTW | Mount Morrison | 4.89 | 199 | PN | Pn | 13 03 46.2 | -3.2 |
| CAW | Cannon Point | 4.96 | 203 | PN | Pn | 13 03 47.3 | -3.1 |
| TCW | Tory Channel | 5.33 | 208 | PN | Pn | 13 03 52.3 | -2.9 |
| PLWZ | Palliser | 5.34 | 199 | PN | Pn | 13 03 52.0 | -3.4 |
| TUWZ | Tuamarina | 5.64 | 209 | PN | Pn | 13 03 56.2 | -3.2 |
| NNZ | Nelson | 5.71 | 214 | PN | Pn | 13 03 58.1 | -2.1 |
| KHZ | Kahutara | 6.65 | 207 | PN | Pn | 13 04 10.2 | -2.5 |
| LTZ | Lake Taylor | 7.46 | 212 | PN | Pn | 13 04 19.6 | -3.9 |
| MQZ | McQueen's Vall | 8.09 | 206 | PN | Pn | 13 04 27.1 | -4.7 |

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*ISCJB **01** 13:06:18.4±0.8, 11°.03N±0°.05×62°.27W±0°.04, h118km±7km, Error ellipse: s-maj=9.1km s-min=5.4km az=145.3*
*FUNV **01** 13:06:21.4, 10°.96N×62°.25W, h109km, MW2.8*
*TRN **01** 13:06:21.5, 11°.15N×62°.12W, h112km, MD3.2*
**ISC 01 13:06:17.1±1.5, 11°.03N±0°.05×62°.25W±0°.04, h134km±9km, n15, σ2s.08/29, 1C-1D, Windward Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUIV | Guiria | 0.38 | 176 | eP | Pn | 13 06 36.5 | +0.5 |
| GUIV | | | | eS | Sn | 13 06 48.5 | -1.9 |
| TCE | Chacachacare | 0.59 | 124 | eP | Pn | 13 06 39.2 | +2.1 |
| TCE | | | | eS | Sn | 13 06 52.3 | -0.1 |
| TRN | Trinidad (W) | 0.91 | 114 | ⇑iP | Pn | 13 06 41.8 | +2.2 |
| TRN | | | | eS | Sn | 13 06 56.1 | -0.6 |
| CRUV | Carupano | 1.03 | 250 | ⇓iP | Pn | 13 06 41.3 | +0.7 |
| CRUV | | | | eS | Sn | 13 06 56.9 | -1.6 |
| GUNV | Guanoco | 1.09 | 218 | eP | Pn | 13 06 42.8 | +1.6 |
| GUNV | | | | eS | Sn | 13 06 58.8 | -0.8 |
| GRGR | Grenville | 1.25 | 28 | eP | Pn | 13 06 43.6 | +0.8 |
| GRGR | | | | eS | Sn | 13 07 00.4 | -2.0 |
| GRW | Mount Saint Ca | 1.27 | 27 | eP | Pn | 13 06 44.7 | +1.6 |
| GRW | | | | eS | Sn | 13 07 00.3 | -2.6 |
| BOT | Bacolet | 1.51 | 84 | eP | Pn | 13 06 47.6 | +2.0 |
| BOT | | | | eS | Sn | 13 07 06.4 | -0.9 |
| TOSP | Speyside | 1.71 | 81 | eP | Pn | 13 06 48.6 | +0.8 |
| TOSP | | | | eS | Sn | 13 07 09.7 | -1.6 |
| ORIV | Oritupano | 2.25 | 211 | eP | Pn | 13 06 56.5 | +2.1 |
| ORIV | | | | eS | Sn | 13 07 21.3 | -1.8 |
| GURV | El Guri | 3.35 | 194 | eP | Pn | 13 07 10.6 | +2.2 |
| GURV | | | | eS | Sn | 13 07 46.4 | -1.7 |
| CUPV | Cœpira | 3.61 | 255 | eP | Pn | 13 07 14.6 | +2.7 |
| CUPV | | | | eS | Sn | 13 07 53.9 | -0.4 |
| BIRV | Birongo | 3.99 | 263 | eP | Pn | 13 07 19.0 | +2.2 |
| LUEV | Luepa | 5.21 | 171 | eP | Pn | 13 07 34.2 | +1.0 |
| LUEV | | | | eS | Sn | 13 08 28.5 | -4.0 |
| BAUV | El Baul | 6.07 | 251 | eP | Pn | 13 07 46.4 | +1.8 |
| BAUV | | | | eS | Sn | 13 08 48.5 | -4.4 |

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*ISCJB **01** 13:10:10.4±0.5, 31°.25N±0°.03×115°.66W±0°.03, h6km±5km, Error ellipse: s-maj=6.0km s-min=4.4km az=26.4*
*ECX **01** 13:10:11.4±0.4, 31°.23N×115°.64W, h6km, MD3.2, ML3.4*
*MEX **01** 13:10:11.4±0.7, 31°.02N×115°.70W, h23km±16km, MD3.7*
**ISC 01 13:10:10.6±1.0, 31°.24N±0°.04×115°.67W±0°.03, h11km±10km, n26, σ0s.69/40, 3C-9D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPIG** | **San Pedro Mart** | **0.26** | **138** | eP | **Pg** | **13 10 16.1** | **+0.1** |
| SPIG | | | | iS | **Sg** | **13 10 19.9** | **+0.1** |
| **SPIG** | **San Pedro Mart** | **0.26** | **138** | ⇓eP | **Pg** | **13 10 16.1** | **+0.1** |
| SPIG | | | | eS | **Sg** | **13 10 19.9** | **+0.1** |
| **SPX** | **San Pedro Mart** | **0.26** | **138** | ⇓eP | **Pg** | **13 10 16.1** | **0.0** |
| SPX | | | | eS | **Sg** | **13 10 20.1** | **+0.2** |
| SPX | | | | ⇓e | | 13 10 20.5 | |
| SPX | | | | IAML | | 13 10 20.5 | |
| | comp=E,4μm,0.2s | | | | | | |
| SPX | | | | e | | 13 10 20.6 | |
| SPX | | | | IAML | | 13 10 20.6 | |
| | comp=N,6μm,0.2s | | | | | | |
| **ECBX** | **El Chinero** | **0.57** | **66** | ⇑eP | **Pg** | **13 10 21.0** | **-0.7** |
| ECBX | | | | eS | **Sg** | **13 10 28.6** | **-0.8** |
| **ZAX** | **El Zacaton** | **0.58** | **298** | ⇑eP | **Pg** | **13 10 21.9** | **-0.1** |
| ZAX | | | | eS | **Sb** | **13 10 30.6** | **-0.7** |
| ZAX | | | | e | | 13 10 33.6 | |
| ZAX | | | | IAML | | 13 10 33.6 | |
| | comp=E,1μm,0.6s | | | | | | |
| **RDX** | **Rancho Dawling** | **0.72** | **341** | ⇓eP | **Pg** | **13 10 24.6** | **-0.1** |
| RDX | | | | eS | **Sg** | **13 10 34.7** | **+0.5** |
| RDX | | | | IAML | | 13 10 35.5 | |
| | comp=E,817nm,0.3s | | | | | | |
| RDX | | | | ⇑e | | 13 10 35.5 | |
| **ECNX** | **Esteban Cantu** | **0.90** | **298** | ⇓eP | **Pg** | **13 10 27.7** | **-0.2** |
| ECNX | | | | eS | **Sb** | **13 10 40.2** | **-0.1** |
| **PBX** | **Punta Banda** | **1.03** | **299** | ⇓eP | **Pg** | **13 10 30.0** | **-0.5** |
| PBX | | | | eS | **Sg** | **13 10 44.0** | **0.0** |
| **CPBX** | **Cerro Prieto** | **1.21** | **15** | eP | **Pn** | **13 10 32.8** | **-0.7** |
| CPBX | | | | eS | **Sb** | **13 10 49.6** | **+0.3** |
| **MBIG** | **Mexicali** | **1.23** | **19** | iP | **Pb** | **13 10 34.1** | **+0.2** |
| MBIG | | | | eS | **Sn** | **13 10 51.1** | **+0.8** |
| **CBX** | **Cerro Bola** | **1.36** | **322** | eP | **Pn** | **13 10 35.0** | **-0.8** |
| CBX | | | | iS | **Sb** | **13 10 52.4** | **-1.4** |
| **CBX** | **Cerro Bola** | **1.36** | **322** | eP | **Pn** | **13 10 35.1** | **-0.6** |
| CBX | | | | ⇓e | | 13 10 58.8 | |
| CBX | | | | IAML | | 13 10 58.8 | |
| | comp=E,543nm,0.6s | | | | | | |
| **RMX** | **La Rumorosa** | **1.40** | **346** | ⇓eP | **Pn** | **13 10 36.3** | **0.0** |
| RMX | | | | eS | **Sn** | **13 10 54.9** | **0.0** |
| **IBP** | **Imperial Bould** | **1.46** | **346** | P | **Pn** | **13 10 37.1** | **+0.1** |
| | baz=1.3 | | | | | | |
| IBP | | | | S | **Sn** | **13 10 55.8** | **-0.5** |
| | baz=1.3 | | | | | | |
| **IBP** | **Imperial Bould** | **1.46** | **346** | eP | **Pn** | **13 10 37.1** | **+0.1** |
| **BAR** | **Barrett** | **1.67** | **329** | ⇓eP | **Pn** | **13 10 40.3** | **+0.5** |
| **SWSC** | **Sam W. Stewart** | **1.70** | **356** | P | **Pn** | **13 10 39.6** | **-0.6** |
| | baz=1.5 | | | | | | |
| **MONP** | **Monument Peak** | **1.76** | **339** | P | **Pn** | **13 10 42.0** | **+0.7** |
| | baz=1.6 | | | | | | |
| MONP | | | | S | **Sn** | **13 11 04.9** | **+1.0** |
| | baz=1.6 | | | | | | |
| **GLA** | **Glamis** | **1.94** | **21** | P | **Pn** | **13 10 42.8** | **-0.8** |
| | baz=1.8 | | | | | | |
| **109C** | **Camp Elliot, M** | **2.05** | **324** | S | **Sb** | **13 11 12.2** | **-1.1** |
| | baz=2.0 | | | | | | |
| **BC3** | **Big Chuckawall** | **2.41** | **4** | P | **Pn** | **13 10 50.0** | **-0.1** |
| | baz=2.2 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **2.45** | **344** | Sb | **Sb** | **13 11 26.3** | **+1.2** |
| | baz=2.3 | | | | | | |
| **MURC** | **Murrieta** | **2.69** | **332** | Sb | **Sb** | **13 11 31.5** | **-0.3** |
| | baz=2.6 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **2.77** | **354** | P | **Pn** | **13 10 55.4** | **+0.3** |
| | baz=2.6 | | | | | | |
| **BBRC** | **Big Bear Solar** | **3.19** | **341** | Sb | **Sb** | **13 11 48.8** | **+2.2** |
| | baz=3.1 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **3.43** | **331** | Sb | **Sb** | **13 11 53.2** | **0.0** |
| | baz=3.3 | | | | | | |

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**PRE 01 13:13:43.5**±1.2**, 26°.63S×27°.83E, h0**$^{km}$**, ML2.2, Explosion, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WDLM** | **Western Deep L** | **0.42** | **299** | eP | Pg | 13 13 50.8 | -1.1 |
| WDLM | | | | eS | Sg | 13 13 57.8 | +0.2 |
| WDLM | | | | AML | AML | 13 14 09.4 | |
| | comp=Z,165nm,0.6s | | | | | | |
| **OBSV** | **Observatory** | **0.50** | **26** | eP | Pg | 13 13 53.8 | +0.5 |
| OBSV | | | | eS | Sg | 13 13 59.8 | -0.1 |
| OBSV | | | | AML | AML | 13 14 08.2 | |
| | comp=Z,81nm,0.7s | | | | | | |
| **PRYS** | **Parys** | **0.51** | **235** | eP | Pg | 13 13 52.8 | -0.8 |
| PRYS | | | | eS | Sg | 13 14 00.8 | +0.4 |
| PRYS | | | | AML | AML | 13 14 06.7 | |
| | comp=Z,52nm,0.8s | | | | | | |
| **BNON** | **Benoni** | **0.64** | **43** | eP | Pg | 13 13 56.2 | 0.0 |
| BNON | | | | eS | Sg | 13 14 04.3 | -0.4 |
| BNON | | | | AML | AML | 13 14 11.2 | |
| | comp=Z,73nm,0.6s | | | | | | |

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*IDC **01** 13:17:14.1±2.0, 5°.09S×134°.83E, h0$^{km}$, mb3.8/3, mb1 3.9/6, mb1mx3.6/26, mbtmp3.8/6, ML3.8/3, Error ellipse: s-maj=59.6km s-min=26.2km az=82.0*
*AUST **01** 13:17:52.6±0.0, 7°.51S×133°.29E, h79$^{km}$, Error ellipse: s-maj=1.9km s-min=0.8km az=278.0*
**ISC 01 13:17:18.8**±1.7**, 5°.23S**±0°.10×**134°.6E**±0°.3**, h35**$^{km}$**, n11, σ2$^s$19**/10**, mb3.9**/4**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.48** | **322** | Pn | **Pn** | **13 18 35.4** | **-2.7** |
| | 2.5nm,0.3s,baz=86,slow=3.3,SNR=26 | | | | | | |
| SIJI | | | | Sn | Sn | 13 19 27.1 | -13 |
| | 6.2nm,0.3s,baz=257,slow=24,SNR=14 | | | | | | |
| **KDU** | **Kakadu** | **7.71** | **196** | P | **Pn** | **13 19 10.1** | **+1.5** |
| | baz=5.2,SNR=24 | | | | | | |
| **MTN** | **Manton Dam** | **8.31** | **204** | P | **Pn** | **13 19 16.9** | **-0.1** |
| | baz=5.7,SNR=18 | | | | | | |
| **KNRA** | **Kununurra** | **11.87** | **209** | P | Pn | 13 20 03.1 | -2.6 |
| | baz=9.3,SNR=23 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.62** | **181** | Pn | **Pn** | **13 20 43.8** | **+0.4** |
| | 0.4nm,0.3s,baz=4.2,slow=13,SNR=44 | | | | | | |
| WRA | | | | Sn | **Sn** | **13 23 20.9** | **-3.5** |
| | 0.3nm,0.3s,baz=2.5,slow=24,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **18.34** | **182** | P | **P** | **13 21 31.2** | **+0.8** |
| | 0.3nm,0.3s,baz=358,slow=13,SNR=18 | | | | | | |
| **WRKA** | **Warakurna** | **20.61** | **197** | P | Pn | 13 21 58.8 | +1.2 |
| | baz=18,SNR=5.3 | | | | | | |
| **LEM** | **Lembang** | **26.91** | **265** | P | **P** | **13 22 59.8** | **+2.7** |
| | 28nm,0.3s,baz=101,slow=10,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.38** | **324** | P | **P** | **13 28 24.8** | **+1.7** |
| | 0.7nm,0.6s,baz=114,slow=7.5,SNR=7.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.13** | **332** | P | **P** | **13 28 39.2** | **-0.4** |
| | 0.5nm,0.4s,baz=96,slow=5.8,SNR=3.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.50** | **327** | P | **P** | **13 28 48.9** | **+1.0** |
| | 0.2nm,0.4s,baz=119,slow=4.7,SNR=6.0 | | | | | | |

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*ISCJB **01** 13:18:12.9±0.3, 40°.66N±0°.02×29°.10E±0°.03, h3$^{km}$±4$^{km}$, Error ellipse: s-maj=3.8km s-min=3.0km az=173.1*
*DDA **01** 13:18:12.8, 40°.65N×29°.09E, h14$^{km}$, Md2.4*
*ISK **01** 13:18:12.6, 40°.66N×29°.10E, h6$^{km}$, ML2.6*
*CSEM **01** 13:18:13.1±0.1, 40°.67N×29°.10E, h8$^{km}$, ML2.6, Error ellipse: s-maj=1.9km s-min=1.8km az=43.0*
**ISC 01 13:18:13.4**±0.8**, 40°.66N**±0°.02×**29°.09E**±0°.02**, h12**$^{km}$±6$^{km}$**, n69, σ0$^s$52**/90**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BUY** | **Buyukada** | **0.19** | **6** | iP | **Pg** | **13 18 17.9** | **+0.3** |
| BUY | | | | iS | **Sg** | **13 18 21.2** | **+0.7** |
| **BUY** | **Buyukada** | **0.19** | **6** | P | **Pg** | **13 18 17.9** | **+0.3** |
| BUY | | | | S | **Sg** | **13 18 21.2** | **+0.7** |
| **ARMT** | **Armutlu** | **0.20** | **241** | ePG | **Pg** | **13 18 17.4** | **-0.3** |
| ARMT | | | | eSG | **Sg** | **13 18 20.4** | **-0.4** |
| **ARMT** | **Armutlu** | **0.20** | **241** | ePg | **Pg** | **13 18 17.4** | **-0.3** |
| ARMT | | | | eSg | **Sg** | **13 18 20.4** | **-0.4** |
| **GEMT** | **Gemlik** | **0.24** | **162** | ePG | **Pg** | **13 18 17.9** | **-0.5** |
| GEMT | | | | eSG | **Sg** | **13 18 21.0** | **-0.7** |
| **GEMT** | **Gemlik** | **0.24** | **162** | ePg | **Pg** | **13 18 17.9** | **-0.5** |
| GEMT | | | | eSg | **Sg** | **13 18 21.0** | **-0.7** |
| **MDNY** | **Mudanya-Bursa** | **0.33** | **209** | ePG | **Pg** | **13 18 19.9** | **-0.2** |
| MDNY | | | | eSG | **Sg** | **13 18 24.8** | **+0.2** |
| **MDNY** | **Mudanya-Bursa** | **0.33** | **209** | ePg | **Pg** | **13 18 19.9** | **-0.2** |
| MDNY | | | | eSg | **Sg** | **13 18 24.8** | **+0.2** |
| **ISK** | **Istanbul-Kandi** | **0.40** | **356** | ePG | **Pg** | **13 18 21.2** | **-0.2** |
| ISK | | | | eSG | **Sg** | **13 18 26.9** | **+0.1** |
| **ISK** | **Istanbul-Kandi** | **0.40** | **356** | ePg | **Pg** | **13 18 21.2** | **-0.2** |
| ISK | | | | eSg | **Sg** | **13 18 26.9** | **+0.1** |
| **IGD** | **Bursa** | **0.41** | **168** | P | **Pg** | **13 18 21.0** | **-0.4** |
| IGD | | | | S | **Sg** | **13 18 26.3** | **-0.5** |
| **IZI** | **Iznik** | **0.43** | **138** | ePG | **Pg** | **13 18 21.6** | **-0.4** |
| **IZI** | **Iznik** | **0.43** | **138** | ePg | **Pg** | **13 18 21.6** | **-0.4** |
| **HRT** | **Hereke** | **0.47** | **70** | ePG | **Pg** | **13 18 21.9** | **-0.6** |
| **HRT** | **Hereke** | **0.47** | **70** | ePg | **Pg** | **13 18 21.9** | **-0.6** |
| **ULDT** | **Uludag** | **0.52** | **176** | iP | **Pg** | **13 18 23.3** | **-0.3** |
| ULDT | | | | iS | **Sg** | **13 18 30.6** | **0.0** |
| **ULDT** | **Uludag** | **0.52** | **176** | P | **Pg** | **13 18 23.3** | **-0.3** |
| ULDT | | | | S | **Sg** | **13 18 30.6** | **0.0** |
| **ADVT** | **Abdulvahap** | **0.54** | **115** | ePG | **Pg** | **13 18 23.4** | **-0.6** |
| **ADVT** | **Abdulvahap** | **0.54** | **115** | ePg | **Pg** | **13 18 23.4** | **-0.6** |
| **BGKT** | **Bogazkoy** | **0.57** | **335** | ePG | **Pg** | **13 18 24.0** | **-0.6** |
| **BGKT** | **Bogazkoy** | **0.57** | **335** | ePg | **Pg** | **13 18 24.0** | **-0.6** |
| **KLYT** | **Kilyos** | **0.59** | **356** | ePG | **Pg** | **13 18 24.8** | **-0.2** |
| **KLYT** | **Kilyos** | **0.59** | **356** | ePg | **Pg** | **13 18 24.8** | **-0.2** |
| **ORLT** | **Orhaneli** | **0.63** | **194** | ePG | **Pg** | **13 18 25.2** | **-0.5** |
| **ORLT** | **Orhaneli** | **0.63** | **194** | ePg | **Pg** | **13 18 25.2** | **-0.5** |
| **SILT** | **Sile** | **0.64** | **40** | ePG | **Pg** | **13 18 25.3** | **-0.6** |
| **SILT** | **Sile** | **0.64** | **40** | ePg | **Pg** | **13 18 25.3** | **-0.6** |
| **KCTX** | **Karacabey (Bur** | **0.69** | **235** | ePG | **Pg** | **13 18 26.5** | **-0.3** |
| **KCTX** | **Karacabey (Bur** | **0.69** | **235** | ePg | **Pg** | **13 18 26.5** | **-0.3** |
| **CTKS** | **Kestanelik-??a** | **0.73** | **322** | ePG | **Pg** | **13 18 26.9** | **-0.5** |
| **CTKS** | **Kestanelik-??a** | **0.73** | **322** | ePg | **Pg** | **13 18 26.9** | **-0.5** |
| **CAVI** | **Cavuskoy** | **0.73** | **129** | ePG | **Pg** | **13 18 27.0** | **-0.6** |
| **CAVI** | **Cavuskoy** | **0.73** | **129** | ePg | **Pg** | **13 18 27.0** | **-0.6** |
| **SPNC** | **Sapanca-Adapaz** | **0.92** | **88** | ePG | **Pg** | **13 18 30.7** | **-0.5** |
| **SPNC** | **Sapanca-Adapaz** | **0.92** | **88** | ePg | **Pg** | **13 18 30.7** | **-0.5** |
| **BNT** | **Bandirma** | **0.95** | **252** | ePG | **Pg** | **13 18 31.5** | **-0.1** |
| **BNT** | **Bandirma** | **0.95** | **252** | ePg | **Pg** | **13 18 31.5** | **-0.1** |
| **EDC** | **Edincik** | **0.99** | **252** | ePG | **Pb** | **13 18 31.5** | **-1.0** |
| **EDC** | **Edincik** | **0.99** | **252** | ePg | **Pb** | **13 18 31.5** | **-1.0** |
| **GPA** | **Golpazari** | **1.00** | **112** | ePG | **Pb** | **13 18 32.3** | **-0.4** |
| **GPA** | **Golpazari** | **1.00** | **112** | ePg | **Pb** | **13 18 32.3** | **-0.4** |
| **CTYL** | **Yal??k??y-??at** | **1.01** | **323** | ePG | **Pb** | **13 18 32.3** | **-0.6** |
| **CTYL** | **Yal??k??y-??at** | **1.01** | **323** | ePg | **Pb** | **13 18 32.3** | **-0.6** |
| **GULT** | **Gulveren** | **1.11** | **102** | ePN | **Pb** | **13 18 34.4** | **-0.1** |
| **GULT** | **Gulveren** | **1.11** | **102** | ePn | **Pb** | **13 18 34.4** | **-0.1** |
| **DST** | **Dursunbey** | **1.12** | **199** | ePN | **Pb** | **13 18 34.4** | **-0.3** |
| **DST** | **Dursunbey** | **1.12** | **199** | ePn | **Pb** | **13 18 34.4** | **-0.3** |
| **MRMT** | **Marmara Adasi** | **1.14** | **268** | ePN | **Pg** | **13 18 35.5** | **+0.1** |
| **MRMT** | **Marmara Adasi** | **1.14** | **268** | ePn | **Pg** | **13 18 35.5** | **+0.1** |
| **DURS** | **Dursunbey** | **1.16** | **204** | iP | **Pn** | **13 18 35.5** | **-0.1** |
| DURS | | | | iS | **Sn** | **13 18 51.5** | **+0.1** |
| **DURS** | **Dursunbey** | **1.16** | **204** | P | **Pn** | **13 18 35.5** | **-0.1** |
| DURS | | | | S | **Sn** | **13 18 51.5** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.24** | **241** | ePN | **Pb** | **13 18 36.8** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.24** | **241** | ePn | **Pb** | **13 18 36.8** | **+0.1** |
| **BORA** | **Eskisehir** | **1.30** | **126** | iP | **Pn** | **13 18 37.6** | **+0.1** |
| BORA | | | | iS | **Sg** | **13 18 55.3** | **0.0** |
| **BORA** | **Eskisehir** | **1.30** | **126** | P | **Pn** | **13 18 37.6** | **+0.1** |
| BORA | | | | S | **Sg** | **13 18 55.3** | **0.0** |
| **KRBG** | **Karabiga-Canak** | **1.40** | **259** | ePN | **Pb** | **13 18 39.1** | **-0.2** |
| **KRBG** | **Karabiga-Canak** | **1.40** | **259** | ePn | **Pb** | **13 18 39.2** | **-0.2** |
| **SART** | **Tekirdag** | **1.46** | **272** | iP | **Pn** | **13 18 38.4** | **-1.2** |
| SART | | | | iS | **Sg** | **13 18 59.9** | **-0.4** |
| **SART** | **Tekirdag** | **1.46** | **272** | P | **Pn** | **13 18 38.4** | **-1.2** |
| SART | | | | S | **Sg** | **13 18 59.9** | **-0.4** |
| **RKY** | **Sarkoy-Tekirda** | **1.46** | **272** | ePN | **Pb** | **13 18 40.1** | **-0.4** |
| **RKY** | **Sarkoy-Tekirda** | **1.46** | **272** | ePn | **Pb** | **13 18 40.1** | **-0.4** |
| **MDUB** | **Mudurnu** | **1.61** | **96** | ePN | **Pn** | **13 18 42.3** | **+0.5** |
| **MDUB** | **Mudurnu** | **1.61** | **96** | ePn | **Pn** | **13 18 42.3** | **+0.5** |
| **DEMI** | **Demirci** | **1.64** | **190** | iP | **Pb** | **13 18 44.1** | **+0.4** |
| DEMI | | | | iS | **Sb** | **13 19 05.3** | **+0.9** |
| **DEMI** | **Demirci** | **1.64** | **190** | P | **Pb** | **13 18 44.1** | **+0.4** |
| DEMI | | | | S | **Sb** | **13 19 05.3** | **+0.9** |
| **GELI** | **Tayfur-Gelibol** | **2.01** | **263** | ePN | **Pn** | **13 18 48.1** | **+0.9** |
| **GELI** | **Tayfur-Gelibol** | **2.01** | **263** | ePn | **Pn** | **13 18 48.1** | **+0.9** |
| **KULA** | **Kula-Manisa** | **2.17** | **189** | ePN | **Pn** | **13 18 50.4** | **+1.0** |
| **KULA** | **Kula-Manisa** | **2.17** | **189** | ePn | **Pn** | **13 18 50.4** | **+1.0** |

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*NIED **01** 13:20:00, 33°.00N×142°.30E, h8$^{km}$, Mw3.7 Best double couple: Mo4.15000×10$^{14}$ NP1:φs189.00000°, δ51.00000°, λ-24.00000°. NP2:φs295.00000°, δ72.00000°, λ-138.00000°.*
*ISCJB **01** 13:20:10.9±1.0, 32°.90N±0°.05×142°.42E±0°.07, h10$^{km}$, mb3.8/2, Error ellipse: s-maj=9.1km s-min=6.9km az=162.2*
*JMA **01** 13:20:12.1±0.4, 33°.01N×142°.29E, h0$^{km}$, M3.6*
*IDC **01** 13:20:19.5±1.4, 31°.94N×138°.67E, h0$^{km}$, mb3.7/2, mb1 3.8/3, mb1mx3.4/35, mbtmp3.5/3, ML3.3/1, Error ellipse: s-maj=59.4km s-min=19.7km az=104.0*
**ISC 01 13:20:11.6**±1.6**, 32°.87N**±0°.07×**142°.4E**±0°.1**, h10**$^{km}$**, n17, σ0$^s$96**/29**, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BSO1** | **Boso 1** | **2.16** | **326** | P | **Pn** | **13 20 47.4** | **+0.3** |
| BSO1 | | | | S | **Sn** | **13 21 14.7** | **+1.0** |
| **JHJ2** | **Mitsune** | **2.21** | **277** | P | **Pn** | **13 20 49.5** | **+1.1** |
| JHJ2 | | | | S | **Sn** | **13 21 16.2** | **+0.4** |
| **JHCJ** | **Hachijojimakas** | **2.23** | **276** | P | **Pn** | **13 20 49.5** | **+0.9** |
| JHCJ | | | | S | **Sn** | **13 21 15.3** | **-0.9** |
| **JHJ** | **Hachijo jima 2** | **2.24** | **277** | Pn | **Pn** | **13 20 48.9** | **0.0** |
| | 17nm,0.3s,baz=340,slow=20,SNR=8.6 | | | | | | |
| JHJ | | | | Sn | **Sn** | **13 21 15.9** | **-0.7** |
| | 28nm,0.3s,baz=83,slow=20,SNR=4.7 | | | | | | |
| **BSO2** | **Boso 2** | **2.34** | **324** | eS | **Sn** | **13 21 18.9** | **+0.3** |
| **BSO3** | **Boso 3** | **2.51** | **321** | P | **Pn** | **13 20 52.7** | **+0.5** |
| BSO3 | | | | eS | **Sn** | **13 21 22.5** | **-0.2** |
| **BSO4** | **Boso 4** | **2.74** | **321** | P | **Pn** | **13 20 56.6** | **+1.0** |
| BSO4 | | | | S | **Sn** | **13 21 28.2** | **-0.6** |
| **JOD2** | **Odawara 2** | **3.66** | **312** | P | **Pn** | **13 21 08.0** | **-0.4** |
| JOD2 | | | | eS | **Sn** | **13 21 51.5** | **-0.2** |
| **JYN** | **Shimob** | **4.16** | **310** | P | **Pn** | **13 21 16.1** | **+0.9** |
| JYN | | | | eS | **Sn** | **13 22 02.3** | **-1.6** |
| **JRY** | **Ryogami san** | **4.29** | **318** | P | **Pn** | **13 21 18.0** | **+1.0** |
| JRY | | | | eS | **Sn** | **13 22 06.7** | **-0.4** |
| **JAG** | **Ashikaga** | **4.32** | **326** | P | **Pn** | **13 21 17.9** | **+0.5** |
| JAG | | | | eS | Sn | 13 22 04.7 | -3.1 |
| **JFT** | **Otama** | **4.95** | **340** | P | **Pn** | **13 21 25.9** | **-0.1** |
| JFT | | | | S | Sn | 13 22 18.3 | -5.0 |
| **MJAR** | **Matsushiro Arr** | **5.05** | **318** | Pn | **Pn** | **13 21 28.7** | **+1.2** |
| | 1.3nm,0.3s,baz=188,slow=18,SNR=13 | | | | | | |
| MJAR | | | | Sn | **Sn** | **13 22 25.4** | **-0.5** |
| | 1.7nm,0.3s,baz=172,slow=20,SNR=6.8 | | | | | | |
| **MAT** | **Matsushiro** | **5.06** | **318** | P | **Pn** | **13 21 28.7** | **+1.2** |
| MAT | | | | S | **Sn** | **13 22 23.5** | **-2.5** |
| **MAT** | **Matsushiro** | **5.06** | **318** | P | **Pn** | **13 21 29.3** | **+1.8** |
| MAT | | | | S | **Sn** | **13 22 25.9** | **-0.1** |
| **WRA** | **Warramunga Arr** | **53.08** | **190** | P | **P** | **13 29 28.9** | **-0.4** |
| | 1.0nm,0.5s,baz=6.8,slow=7.7,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **56.80** | **189** | P | **P** | **13 29 56.0** | **-0.2** |
| | 0.2nm,0.4s,baz=356,slow=5.5,SNR=3.7 | | | | | | |

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*ISCJB **01** 13:40:34.5±0.5, 31°.22N±0°.06×115°.68W±0°.05, h10$^{km}$±8$^{km}$, Error ellipse: s-maj=11.0km s-min=5.7km az=25.6*
*MEX **01** 13:40:34.7±0.4, 30°.96N×115°.74W, h20$^{km}$±13$^{km}$, MD3.6*
*ECX **01** 13:40:35.2±0.4, 31°.23N×115°.65W, h4$^{km}$, MD2.9, ML3.1*
**ISC 01 13:40:34.7**±1.0**, 31°.23N**±0°.06×**115°.68W**±0°.05**, h10**$^{km}$±10$^{km}$**, n18, σ0$^s$80**/31**, 3C-6D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPIG** | **San Pedro Mart** | **0.26** | **135** | iP | **Pg** | **13 40 40.0** | **-0.1** |
| SPIG | | | | iS | **Sg** | **13 40 44.0** | **+0.3** |
| **SPIG** | **San Pedro Mart** | **0.26** | **135** | ⇓eP | **Pg** | **13 40 40.0** | **-0.1** |
| SPIG | | | | eS | **Sg** | **13 40 43.7** | **+0.1** |
| **SPX** | **San Pedro Mart** | **0.26** | **135** | ⇓eP | **Pg** | **13 40 40.0** | **-0.1** |
| SPX | | | | eS | **Sg** | **13 40 43.7** | **0.0** |
| SPX | | | | IAML | | 13 40 44.5 | |
| | comp=E,2μm,0.1s | | | | | | |
| SPX | | | | ⇑e | | 13 40 44.5 | |
| SPX | | | | e | | 13 40 44.7 | |
| SPX | | | | IAML | | 13 40 44.7 | |
| | comp=N,3μm,0.1s | | | | | | |
| **ZAX** | **El Zacaton** | **0.58** | **299** | ⇑eP | **Pg** | **13 40 45.8** | **-0.2** |
| ZAX | | | | eS | **Sg** | **13 40 54.5** | **+0.8** |
| ZAX | | | | IAML | | 13 40 55.0 | |
| | comp=E,1μm,0.7s | | | | | | |
| **RDX** | **Rancho Dawling** | **0.73** | **342** | ⇓eP | **Pg** | **13 40 48.5** | **-0.4** |
| RDX | | | | eS | **Sg** | **13 40 58.6** | **+0.1** |
| RDX | | | | IAML | | 13 40 59.8 | |
| | comp=E,439nm,0.1s | | | | | | |
| RDX | | | | ⇓e | | 13 40 59.8 | |
| **ECNX** | **Esteban Cantu** | **0.89** | **299** | ⇑eP | **Pg** | **13 40 51.7** | **-0.2** |
| ECNX | | | | eS | **Sg** | **13 41 03.8** | **+0.2** |
| **PBX** | **Punta Banda** | **1.03** | **300** | eP | **Pg** | **13 40 53.8** | **-0.7** |
| PBX | | | | eS | **Sg** | **13 41 07.8** | **-0.1** |
| **CBX** | **Cerro Bola** | **1.37** | **322** | eP | **Pn** | **13 40 58.8** | **-1.2** |
| CBX | | | | iS | **Sb** | **13 41 16.4** | **-1.7** |
| **CBX** | **Cerro Bola** | **1.37** | **322** | ⇓eP | **Pn** | **13 40 59.2** | **-0.8** |
| CBX | | | | IAML | | 13 41 20.4 | |
| | comp=E,261nm,0.3s | | | | | | |
| CBX | | | | e | | 13 41 20.4 | |
| **RMX** | **La Rumorosa** | **1.41** | **346** | eP | **Pn** | **13 41 00.1** | **-0.4** |
| RMX | | | | eS | **Sn** | **13 41 18.5** | **-0.9** |
| **IBP** | **Imperial Bould** | **1.47** | **346** | P | **Pn** | **13 41 01.1** | **-0.3** |
| | baz=1.4 | | | | | | |
| IBP | | | | S | **Sn** | **13 41 20.3** | **-0.5** |
| | baz=1.4 | | | | | | |
| **IBP** | **Imperial Bould** | **1.47** | **346** | ⇓eP | **Pn** | **13 41 01.0** | **-0.3** |
| **SWSC** | **Sam W. Stewart** | **1.71** | **357** | Pb | **Pn** | **13 41 05.7** | **+1.1** |
| | baz=1.6 | | | | | | |
| **MONP** | **Monument Peak** | **1.77** | **339** | P | **Pn** | **13 41 05.7** | **+0.1** |
| | baz=1.7 | | | | | | |
| MONP | | | | S | **Sn** | **13 41 28.9** | **+0.6** |
| | baz=1.7 | | | | | | |
| **GLA** | **Glamis** | **1.96** | **21** | P | **Pn** | **13 41 06.6** | **-1.4** |
| | baz=1.8 | | | | | | |
| **109C** | **Camp Elliot, M** | **2.05** | **324** | P | **Pn** | **13 41 10.3** | **+1.0** |
| | baz=2.0 | | | | | | |
| 109C | | | | S | **Sn** | **13 41 36.2** | **+1.3** |
| | baz=2.0 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **2.46** | **345** | Pb | **Pb** | **13 41 19.1** | **0.0** |
| | baz=2.4 | | | | | | |
| PFO | | | | Sb | **Sb** | **13 41 50.7** | **+1.1** |
| | baz=2.4 | | | | | | |
| **BBRC** | **Big Bear Solar** | **3.20** | **341** | Sb | **Sb** | **13 42 12.5** | **+1.6** |
| | baz=3.1 | | | | | | |

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**IDC 01 13:41:35.8**±2.4**, 17°.22S×174°.45W, h90**$^{km}$±25$^{km}$**, mb3.7**/4**, mb1 3.9**/5**, mb1mx3.6**/21**, mbtmp4.0**/5**, Error ellipse: s-maj=49.6km s-min=16.4km az=128.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.18** | **38** | P | Pn | 13 42 39.2 | +1.9 |
| | 9.4nm,0.3s,baz=187,slow=2.9,SNR=29 | | | | | | |
| AFI | | | | S | Sn | 13 43 25.0 | -0.1 |
| | 41nm,0.3s,baz=223,slow=12,SNR=20 | | | | | | |
| **URZ** | **Urewera** | **22.23** | **198** | P | P | 13 46 24.8 | -0.2 |
| | 1.9nm,0.4s,baz=276,slow=1.8,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.47** | **258** | P | P | 13 50 09.2 | -0.5 |
| | 0.6nm,0.5s,baz=97,slow=7.1,SNR=24 | | | | | | |
| **ASAR** | **Alice Springs** | **48.61** | **253** | P | P | 13 50 10.6 | -0.2 |
| | 3.9nm,0.6s,baz=89,slow=8.5,SNR=51 | | | | | | |
| **ILAR** | **Eielson Array** | **84.41** | **11** | P | P | 13 53 57.4 | -0.4 |
| | 0.5nm,0.5s,baz=226,slow=5.9,SNR=16 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.25** | **351** | PKP | PKPdf | 14 00 26.4 | -0.9 |
| | 1.3nm,1.0s,baz=11,slow=0.9,SNR=4.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.88** | **318** | PKPbc | PKPbc | 14 01 08.3 | +0.1 |
| | 0.7nm,0.7s,baz=72,slow=4.7,SNR=3.3 | | | | | | |
| **GERES** | **GERESS Array B** | **147.76** | **350** | PKPbc | PKPbc | 14 01 10.4 | +0.2 |
| | 0.8nm,0.8s,baz=38,slow=2.4,SNR=3.6 | | | | | | |

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*ISK **01** 13:47:54.6, 34°.44N×33°.89E, h19$^{km}$, MD3.2, ML3.0*
*NIC **01** 13:47:56.5, 34°.64N×33°.96E, h10$^{km}$, ML3.5*
*CSEM **01** 13:47:57.7±0.1, 34°.55N×33°.90E, h30$^{km}$, ML3.5, Error ellipse: s-maj=3.8km s-min=2.5km az=64.0*
*NSSC **01** 13:47:59.4±1.3, 34°.59N×34°.09E, h40$^{km}$±999$^{km}$, MD1.2, ML2.4*
*HLW **01** 13:48:01.0, 34°.07N×33°.56E, h6$^{km}$±6$^{km}$, Md3.4*
*GII **01** 13:48:01.4±0.3, 34°.42N×33°.90E, h32$^{km}$, MD2.4/1*
*DDA **01** 13:48:07.0, 35°.16N×34°.39E, h31$^{km}$, Md3.0*
**ISC 01 13:47:56.7**±1.0**, 34°.53N**±0°.02×**33°.93E**±0°.02**, h32**$^{km}$±10$^{km}$**, n97, σ1$^s$64**/151**, 4C-1D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PHNC** | **Paralimni** | **0.48** | **10** | P | **Pb** | **13 48 07.5** | **+0.6** |
| | baz=189 | | | | | | |
| PHNC | | | | S | **Sn** | **13 48 15.4** | **+0.7** |
| **PHNC** | **Paralimni** | **0.48** | **10** | P | **Pb** | **13 48 07.5** | **+0.6** |
| PHNC | | | | S | **Sn** | **13 48 15.4** | **+0.7** |
| **CSS** | **Prodhromos** | **0.66** | **311** | ⇓P | **Pb** | **13 48 08.6** | **-1.2** |
| | baz=121 | | | | | | |
| CSS | | | | S | **Sb** | **13 48 17.2** | **-1.5** |
| **CSS** | **Prodhromos** | **0.66** | **311** | ePG | **Pb** | **13 48 08.8** | **-1.0** |
| CSS | | | | eSG | **Sb** | **13 48 19.1** | **+0.3** |
| **CSS** | **Prodhromos** | **0.66** | **311** | ePg | **Pb** | **13 48 08.8** | **-1.0** |
| CSS | | | | S | **Sb** | **13 48 17.2** | **-1.5** |
| CSS | | | | eSg | **Sb** | **13 48 19.1** | **+0.3** |
| **LFK** | **Lefkose** | **0.82** | **336** | ePG | **Pn** | **13 48 12.4** | **+0.3** |
| LFK | | | | eSG | **Sn** | **13 48 25.4** | **+2.3** |
| **LFK** | **Lefkose** | **0.82** | **336** | ePg | **Pn** | **13 48 12.4** | **+0.3** |
| LFK | | | | eSg | **Sn** | **13 48 25.4** | **+2.3** |
| **MAMC** | **Mammari** | **0.87** | **318** | ⇑P | **Pn** | **13 48 13.4** | **+0.7** |
| | baz=130 | | | | | | |
| **MAMC** | **Mammari** | **0.87** | **318** | ⇑P | **Pn** | **13 48 13.4** | **+0.7** |
| **SZAC** | **Souni-Zanaja** | **0.89** | **285** | P | **Pn** | **13 48 13.7** | **+0.6** |
| | baz=96 | | | | | | |
| SZAC | | | | S | **Sn** | **13 48 25.9** | **+0.9** |
| **SZAC** | **Souni-Zanaja** | **0.89** | **285** | P | **Pn** | **13 48 13.7** | **+0.6** |
| SZAC | | | | S | **Sn** | **13 48 25.9** | **+0.9** |
| **EREN** | **Erenkoy** | **1.02** | **11** | ePN | **Pn** | **13 48 15.8** | **+1.0** |
| **EREN** | **Erenkoy** | **1.02** | **11** | ePn | **Pn** | **13 48 15.8** | **+1.0** |
| **LEF** | **Lefka** | **1.04** | **305** | ePN | **Pn** | **13 48 15.4** | **+0.3** |
| **LEF** | **Lefka** | **1.04** | **305** | ePn | **Pn** | **13 48 15.4** | **+0.3** |
| **AKDN** | **Akdeniz- K˜–br** | **1.10** | **314** | ePN | **Pn** | **13 48 16.4** | **+0.5** |
| **AKDN** | **Akdeniz- K˜–br** | **1.10** | **314** | ePn | **Pn** | **13 48 16.4** | **+0.5** |
| **ALFC** | **Alevga** | **1.26** | **300** | ⇑P | **Pn** | **13 48 19.5** | **+1.3** |
| | baz=114 | | | | | | |
| ALFC | | | | S | **Sb** | **13 48 36.3** | **+0.4** |
| **ALFC** | **Alevga** | **1.26** | **300** | ⇑P | **Pn** | **13 48 19.5** | **+1.3** |
| ALFC | | | | S | **Sb** | **13 48 36.3** | **+0.4** |
| **AKMC** | **Akamas** | **1.41** | **291** | P | **Pn** | **13 48 21.8** | **+1.6** |
| | baz=105 | | | | | | |
| **AKMC** | **Akamas** | **1.41** | **291** | P | **Pn** | **13 48 21.8** | **+1.6** |
| **HWQ** | **Hawqa** | **1.69** | **98** | eP | **Pn** | **13 48 25.8** | **+1.7** |
| **HWQ** | **Hawqa** | **1.69** | **98** | eP | **Pn** | **13 48 25.8** | **+1.7** |
| **RCY** | **Rachaya** | **1.89** | **123** | eP | **Pn** | **13 48 28.0** | **+1.1** |
| **RCY** | **Rachaya** | **1.89** | **123** | eP | **Pn** | **13 48 28.0** | **+1.1** |
| **MMC7** | **Mount Meron ar** | **1.94** | **141** | Pn | **Pn** | **13 48 28.9** | **+1.4** |
| **MMC7** | **Mount Meron ar** | **1.94** | **141** | Pn | **Pn** | **13 48 28.9** | **+1.4** |
| **MMA0B** | **Mount Meron ar** | **1.95** | **141** | Pn | **Pn** | **13 48 28.9** | **+1.3** |
| **MMA0B** | **Mount Meron ar** | **1.95** | **141** | Pn | **Pn** | **13 48 28.9** | **+1.3** |
| **KIZK** | **Mersin** | **1.95** | **5** | iP | **Pn** | **13 48 29.5** | **+1.8** |
| KIZK | | | | iS | **Sn** | **13 48 50.9** | **-0.2** |
| **KIZK** | **Mersin** | **1.95** | **5** | P | **Pn** | **13 48 29.5** | **+1.8** |
| KIZK | | | | S | **Sn** | **13 48 50.9** | **-0.2** |
| **BRBR** | **Barbar** | **2.02** | **123** | eP | **Pn** | **13 48 30.1** | **+1.4** |
| BRBR | | | | eS | **Sn** | **13 48 51.9** | **-1.0** |
| BRBR | | | | AML | AML | 13 48 55.0 | |
| | comp=E,60nm,0.4s | | | | | | |
| BRBR | | | | AML | AML | 13 48 55.3 | |
| | comp=N,43nm,0.2s | | | | | | |
| **BRBR** | **Barbar** | **2.02** | **123** | eP | **Pn** | **13 48 30.1** | **+1.4** |
| BRBR | | | | eS | **Sn** | **13 48 51.9** | **-1.0** |
| | comp=N,43nm,0.2s | | | | | | |
| **BIDA** | **Albida** | **2.03** | **76** | iP | **Pn** | **13 48 29.3** | **+0.6** |
| BIDA | | | | eS | **Sn** | **13 48 51.7** | **-1.3** |
| BIDA | | | | AML | AML | 13 48 54.3 | |
| | comp=E,164nm,0.3s | | | | | | |
| BIDA | | | | AML | AML | 13 48 55.0 | |
| | comp=N,348nm,0.5s | | | | | | |
| **HAWK** | **Haweek** | **2.04** | **90** | eP | **Pn** | **13 48 29.8** | **+0.8** |
| HAWK | | | | eS | **Sn** | **13 48 51.9** | **-1.6** |
| HAWK | | | | AML | AML | 13 48 55.5 | |
| | comp=N,128nm,0.3s | | | | | | |
| HAWK | | | | AML | AML | 13 48 56.5 | |
| | comp=E,74nm,0.2s | | | | | | |
| **HAWK** | **Haweek** | **2.04** | **90** | eP | **Pn** | **13 48 29.8** | **+0.8** |
| HAWK | | | | eS | **Sn** | **13 48 51.8** | **-1.6** |
| | comp=E,74nm,0.2s | | | | | | |
| **OFRI** | **'Ofer** | **2.10** | **155** | Pn | **Pn** | **13 48 30.6** | **+0.9** |
| **OFRI** | **'Ofer** | **2.10** | **155** | Pn | **Pn** | **13 48 30.6** | **+0.9** |
| **ARNB** | **Al Arnab** | **2.13** | **51** | iP | **Pn** | **13 48 30.9** | **+0.7** |
| ARNB | | | | eS | **Sn** | **13 48 52.9** | **-2.8** |
| ARNB | | | | AML | AML | 13 48 55.7 | |
| | comp=E,46nm,0.6s | | | | | | |
| ARNB | | | | AML | AML | 13 49 01.1 | |
| | comp=N,23nm,0.3s | | | | | | |
| **ARNB** | **Al Arnab** | **2.13** | **51** | iP | **Pn** | **13 48 30.9** | **+0.7** |
| ARNB | | | | eS | **Sn** | **13 48 52.9** | **-2.8** |
| | comp=N,23nm,0.3s | | | | | | |
| **KSHT** | **Keshet** | **2.20** | **134** | Pn | **Pn** | **13 48 33.4** | **+2.3** |
| **KSHT** | **Keshet** | **2.20** | **134** | Pn | **Pn** | **13 48 33.4** | **+2.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRDH** | **Warideh** | **2.26** | **64** | *e*P | **Pn** | **13 48 32.6** | **+0.7** |
| WRDH | | | | *e*S | **Sn** | **13 48 56.3** | **-2.4** |
| WRDH | | | | AML | AML | 13 48 59.5 | |
| | comp=E,72nm,0.2s | | | | | | |
| WRDH | | | | AML | AML | 13 49 02.0 | |
| | comp=N,45nm,0.2s | | | | | | |
| **WRDH** | **Warideh** | **2.26** | **64** | *e*P | **Pn** | **13 48 32.6** | **+0.7** |
| WRDH | | | | *e*S | **Sn** | **13 48 56.3** | **-2.4** |
| | comp=N,45nm,0.2s | | | | | | |
| **YAYL** | **Yayladag** | **2.33** | **49** | *i* P | **Pn** | **13 48 33.7** | **+0.8** |
| YAYL | | | | *i* S | **Sn** | **13 48 58.3** | **-2.2** |
| **YAYL** | **Yayladag** | **2.33** | **49** | P | **Pn** | **13 48 33.7** | **+0.8** |
| YAYL | | | | S | **Sn** | **13 48 58.3** | **-2.2** |
| **TOTH** | **TOTAH** | **2.38** | **119** | *e*P | **Pn** | **13 48 36.3** | **+2.7** |
| TOTH | | | | *e*S | **Sn** | **13 49 01.4** | **-0.3** |
| TOTH | | | | AML | AML | 13 49 05.5 | |
| | comp=N,68nm,0.5s | | | | | | |
| TOTH | | | | AML | AML | 13 49 06.2 | |
| | comp=E,34nm,0.2s | | | | | | |
| **TOTH** | **TOTAH** | **2.38** | **119** | *e*P | **Pn** | **13 48 36.3** | **+2.7** |
| TOTH | | | | *e*S | **Sn** | **13 49 01.4** | **-0.3** |
| | comp=E,34nm,0.2s | | | | | | |
| **SLTI** | **Sal'it** | **2.46** | **158** | Pn | **Pn** | **13 48 37.4** | **+2.7** |
| SLTI | | | | Sn | **Sn** | **13 49 02.9** | **-0.8** |
| **SLTI** | **Sal'it** | **2.46** | **158** | Pn | **Pn** | **13 48 37.4** | **+2.7** |
| SLTI | | | | Sn | **Sn** | **13 49 02.9** | **-0.8** |
| **TCHB** | **Talchebab** | **2.52** | **137** | *e*P | **Pn** | **13 48 37.3** | **+1.8** |
| TCHB | | | | *e*S | **Sn** | **13 49 04.1** | **-0.9** |
| TCHB | | | | AML | AML | 13 49 10.3 | |
| | comp=N,70nm,0.5s | | | | | | |
| TCHB | | | | AML | AML | 13 49 18.5 | |
| | comp=E,67nm,0.6s | | | | | | |
| **TCHB** | **Talchebab** | **2.52** | **137** | *e*P | **Pn** | **13 48 37.3** | **+1.8** |
| TCHB | | | | *e*S | **Sn** | **13 49 04.1** | **-0.9** |
| | comp=E,67nm,0.6s | | | | | | |
| **BTCH** | **Batrach** | **2.56** | **53** | *e*P | **Pn** | **13 48 36.7** | **+0.7** |
| BTCH | | | | *e*S | **Sn** | **13 49 03.6** | **-2.5** |
| BTCH | | | | AML | AML | 13 49 10.9 | |
| | comp=N,47nm,0.3s | | | | | | |
| BTCH | | | | AML | AML | 13 49 10.9 | |
| | comp=E,60nm,0.3s | | | | | | |
| **BTCH** | **Batrach** | **2.56** | **53** | *e*P | **Pn** | **13 48 36.7** | **+0.7** |
| BTCH | | | | *e*S | **Sn** | **13 49 03.6** | **-2.5** |
| | comp=E,60nm,0.3s | | | | | | |
| **HMDT** | **Nahal Hemdat** | **2.63** | **149** | Pn | **Pn** | **13 48 39.5** | **+2.5** |
| HMDT | | | | Sn | **Sn** | **13 49 09.2** | **+1.3** |
| **HMDT** | **Nahal Hemdat** | **2.63** | **149** | Pn | **Pn** | **13 48 39.5** | **+2.5** |
| HMDT | | | | Sn | **Sn** | **13 49 09.2** | **+1.3** |
| **ROOS** | **tl_alroos** | **2.80** | **96** | *e*P | **Pn** | **13 48 41.6** | **+2.3** |
| ROOS | | | | *e*S | **Sn** | **13 49 10.6** | **-1.6** |
| ROOS | | | | AML | AML | 13 49 16.4 | |
| | comp=N,83nm,0.2s | | | | | | |
| ROOS | | | | AML | AML | 13 49 18.5 | |
| | comp=E,57nm,0.6s | | | | | | |
| **ROOS** | **tl_alroos** | **2.80** | **96** | *e*P | **Pn** | **13 48 41.7** | **+2.3** |
| ROOS | | | | *e*S | **Sn** | **13 49 10.6** | **-1.6** |
| | comp=E,57nm,0.6s | | | | | | |
| **GULE** | **Gulek** | **2.83** | **14** | *i* P | **Pn** | **13 48 42.3** | **+2.4** |
| GULE | | | | *i* S | **Sn** | **13 49 13.4** | **+0.4** |
| **GULE** | **Gulek** | **2.83** | **14** | P | **Pn** | **13 48 42.3** | **+2.4** |
| GULE | | | | S | **Sn** | **13 49 13.4** | **+0.4** |
| **SALA** | **Sala** | **2.96** | **127** | *e*P | **Pn** | **13 48 44.1** | **+2.4** |
| SALA | | | | *e*S | **Sn** | **13 49 15.0** | **-1.2** |
| SALA | | | | AML | AML | 13 49 21.8 | |
| | comp=E,3.5nm,0.3s | | | | | | |
| SALA | | | | AML | AML | 13 49 23.8 | |
| | comp=N,30nm,0.3s | | | | | | |
| **SALA** | **Sala** | **2.96** | **127** | *e*P | **Pn** | **13 48 44.1** | **+2.4** |
| SALA | | | | *e*S | **Sn** | **13 49 15.0** | **-1.2** |
| | comp=N,30nm,0.3s | | | | | | |
| **DSI** | **Dead Sea** | **3.19** | **157** | Pn | **Pn** | **13 48 46.1** | **+1.4** |
| DSI | | | | Sn | **Sn** | **13 49 22.7** | **+1.0** |
| **DSI** | **Dead Sea** | **3.19** | **157** | Pn | **Pn** | **13 48 46.1** | **+1.4** |
| DSI | | | | Sn | **Sn** | **13 49 22.7** | **+1.0** |
| **ZALF** | **Zalf** | **3.26** | **119** | *e*P | **Pn** | **13 48 47.9** | **+2.3** |
| ZALF | | | | *e*S | **Sn** | **13 49 22.2** | **-1.2** |
| ZALF | | | | AML | AML | 13 49 32.7 | |
| | comp=E,9.0nm,0.4s | | | | | | |
| ZALF | | | | AML | AML | 13 49 36.5 | |
| | comp=N,8.4nm,0.5s | | | | | | |
| **ZALF** | **Zalf** | **3.26** | **119** | *e*P | **Pn** | **13 48 47.9** | **+2.3** |
| ZALF | | | | *e*S | **Sn** | **13 49 22.2** | **-1.2** |
| | comp=N,8.0nm,0.5s | | | | | | |
| **MZDA** | **Masada** | **3.43** | **159** | Pn | **Pn** | **13 48 50.6** | **+2.7** |
| **MZDA** | **Masada** | **3.43** | **159** | Pn | **Pn** | **13 48 50.6** | **+2.7** |
| **KAMA** | **Osmaniye** | **3.46** | **39** | P | **Pn** | **13 48 49.4** | **+0.9** |
| KAMA | | | | S | **Sn** | **13 49 26.3** | **-2.1** |
| **RSH** | | **3.56** | **183** | P | **Pn** | **13 48 50.7** | **+0.9** |
| | baz=177 | | | | | | |
| **RSH** | | **3.56** | **183** | P | **Pn** | **13 48 50.7** | **+0.9** |
| **AYKD** | **Aykdinkavak** | **3.70** | **38** | P | **Pn** | **13 48 53.2** | **+1.4** |
| AYKD | | | | S | **Sn** | **13 49 33.0** | **-1.3** |
| **PRNI** | **Paran** | **4.26** | **167** | Pn | **Pn** | **13 49 01.5** | **+2.0** |
| PRNI | | | | Sn | **Sn** | **13 49 48.1** | **-0.1** |
| **PRNI** | **Paran** | **4.26** | **167** | Pn | **Pn** | **13 49 01.5** | **+2.0** |
| PRNI | | | | Sn | **Sn** | **13 49 48.1** | **-0.1** |
| **KRMI** | **Paran Flat** | **4.45** | **171** | Pn | **Pn** | **13 49 03.8** | **+1.7** |
| **KRMI** | **Paran Flat** | **4.45** | **171** | Pn | **Pn** | **13 49 03.8** | **+1.7** |
| **HNKL** | **Nakhl** | **4.59** | **179** | P | **Pn** | **13 49 05.5** | **+1.6** |
| | baz=174 | | | | | | |
| HNKL | | | | S | **Sn** | **13 49 53.6** | **-2.6** |
| | baz=174 | | | | | | |
| **HNKL** | **Nakhl** | **4.59** | **179** | P | **Pn** | **13 49 05.5** | **+1.6** |
| HNKL | | | | S | **Sn** | **13 49 53.6** | **-2.6** |
| **MBRI** | **Mt Berech** | **4.79** | **170** | Pn | **Pn** | **13 49 09.0** | **+2.2** |
| **MBRI** | **Mt Berech** | **4.79** | **170** | Pn | **Pn** | **13 49 09.0** | **+2.2** |
| **HHAG** | **Hagoal** | **4.82** | **199** | P | **Pn** | **13 49 07.0** | **-0.1** |
| | baz=198 | | | | | | |
| HHAG | | | | S | **Sn** | **13 49 57.6** | **-4.3** |
| | baz=198 | | | | | | |
| **HHAG** | **Hagoal** | **4.82** | **199** | P | **Pn** | **13 49 07.0** | **-0.1** |
| **EIL** | **Elat** | **4.92** | **170** | Pn | **Pn** | **13 49 11.1** | **+2.6** |
| EIL | | | | Sn | **Sn** | **13 50 04.7** | **+0.3** |
| **EIL** | **Elat** | **4.92** | **170** | Pn | **Pn** | **13 49 11.1** | **+2.6** |
| EIL | | | | Sn | **Sn** | **13 50 04.7** | **+0.3** |
| **KOT** | **Kottamia** | **4.92** | **202** | S | **Sn** | **13 50 00.1** | **-4.4** |
| | baz=201 | | | | | | |
| **GLL** | **Jalalah** | **5.29** | **202** | P | **Pn** | **13 49 13.1** | **-0.4** |
| | baz=200 | | | | | | |
| **GLL** | **Jalalah** | **5.29** | **202** | P | **Pn** | **13 49 13.1** | **-0.4** |
| **HDHB** | **Dhahab** | **5.82** | **174** | P | **Pn** | **13 49 22.7** | **+1.9** |
| | baz=170 | | | | | | |
| **HDHB** | **Dhahab** | **5.82** | **174** | P | **Pn** | **13 49 22.7** | **+1.9** |
| **HKAT** | **Jabal Katrina** | **5.99** | **179** | P | **Pn** | **13 49 25.0** | **+1.7** |
| | baz=176 | | | | | | |
| **HKAT** | **Jabal Katrina** | **5.99** | **179** | P | **Pn** | **13 49 25.0** | **+1.7** |
| **TR2** | | **6.13** | **182** | P | **Pn** | **13 49 26.0** | **+0.9** |
| | baz=178 | | | | | | |
| **TR2** | | **6.13** | **182** | P | **Pn** | **13 49 26.0** | **+0.9** |
| **TR1** | | **6.50** | **180** | P | **Pn** | **13 49 31.9** | **+1.7** |
| | baz=176 | | | | | | |
| **TR1** | | **6.50** | **180** | P | **Pn** | **13 49 31.9** | **+1.7** |
| **HMAT** | **Matruh** | **6.70** | **241** | P | **Pn** | **13 49 34.0** | **+1.1** |
| | baz=244 | | | | | | |
| **HMAT** | **Matruh** | **6.70** | **241** | P | **Pn** | **13 49 34.0** | **+1.1** |

**IDC 01 13:56:08.0**±3.1**, 63°.26S**×**149°.22W, h0**km**, mb3.8**/2**, mb1 4.1**/2**, mb1mx3.5**/30**, mbtmp3.8**/2**, Error ellipse: s-maj=651.5km s-min=85.5km az=2.0, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **63.25** | **270** | P | P | 14 06 38.0 | -0.1 |
| | 1.1nm,0.9s,baz=140,slow=6.3,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.29** | **273** | P | P | 14 06 58.0 | +0.1 |
| | 1.0nm,0.9s,baz=148,slow=5.9,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **147.29** | **264** | PKPbc | PKPdf | 14 15 50.8 | +1.0 |
| | 2.1nm,0.8s,baz=68,slow=3.9,SNR=9.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.21** | **277** | PKPbc | PKPbc | 14 16 02.2 | +0.5 |
| | 0.5nm,0.6s,baz=134,slow=4.3,SNR=3.6 | | | | | | |

**MAN 01 14:06:25, 6°.71N**×**126°.59E, h42**km**, mb4.9, ML3.8, MS3.9, 1C-1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **0.41** | **305** | *e*P | Pn | 14 06 36.6 | +1.9 |
| MATI | | | | *e*S | Sn | 14 06 44.8 | +3.3 |
| **KCP** | **Kidapawan** | **1.52** | **281** | *e*P | Pn | 14 06 50.1 | +0.3 |
| KCP | | | | *i* S | Sn | 14 07 08.9 | +0.4 |
| **GSPH** | **General Santos** | **1.75** | **249**⇑ | *i*P | Pn | 14 06 50.1 | -2.9 |
| GSPH | | | | *i* S | Sn | 14 07 08.9 | -5.2 |
| **BUKP** | **Musuan** | **1.91** | **308** | *e*P | Pn | 14 06 57.1 | +1.9 |
| **CTBH** | **Cotabato--PC H** | **2.38** | **282**⇓ | *i*P | Pn | 14 07 02.2 | +0.7 |
| **CGP** | **Cagayan de Oro** | **2.56** | **313** | *e*P | Pn | 14 07 04.9 | +0.9 |
| CGP | | | | *e*S | Sn | 14 07 35.7 | +1.8 |
| **PAGZ** | **Pagadian** | **3.38** | **290** | *e*P | Pn | 14 07 17.4 | +2.1 |

*ISCJB **01** 14:13:10.6±0.4, 37°.20N±0°.02×117°.33W±0°.02, h5km±3km, Error ellipse: s-maj=3.4km s-min=2.8km az=40.4*
*NEIC **01** 14:13:12.7, 37°.15N×117°.38W, h10km, ML3.5(REN), After REN.*
**ISC 01 14:13:12.5**±0.9**, 37°.16N**±0°.02×**117°.38W**±0°.02**, h13**km±7km**, n29,** σ**0**s**.63**/54**, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GRAC** | **Grapevine Rang** | **0.16** | **176** | P | **Pg** | **14 13 16.3** | **-0.1** |
| | baz=0.2 | | | | | | |
| GRAC | | | | S | **Sg** | **14 13 18.9** | **-0.1** |
| | baz=0.2 | | | | | | |
| **TIN** | **Tinemaha** | **0.68** | **261** | P | **Pg** | **14 13 26.0** | **+0.2** |
| | baz=0.7 | | | | | | |
| TIN | | | | S | **Sg** | **14 13 35.0** | **+0.2** |
| | baz=0.7 | | | | | | |
| **FURC** | **Furnace Creek,** | **0.81** | **149** | P | **Pg** | **14 13 27.9** | **-0.2** |
| | baz=0.8 | | | | | | |
| FURC | | | | S | **Sb** | **14 13 38.9** | **-0.3** |
| | baz=0.8 | | | | | | |
| **CWC** | **Cottonwood Cre** | **0.91** | **218** | P | **Pg** | **14 13 29.7** | **-0.5** |
| | baz=0.9 | | | | | | |
| CWC | | | | S | **Sg** | **14 13 42.1** | **0.0** |
| | baz=0.9 | | | | | | |
| **TPNV** | **Topopah Spring** | **0.93** | **103** | P | **Pb** | **14 13 30.3** | **-0.3** |
| | baz=0.9 | | | | | | |
| **MPMC** | **Manual Prospec** | **1.10** | **184** | P | **Pb** | **14 13 33.0** | **-0.5** |
| | baz=1.1 | | | | | | |
| MPMC | | | | S | **Sb** | **14 13 47.7** | **-0.2** |
| | baz=1.1 | | | | | | |
| **MLAC** | **Mammoth Lakes** | **1.25** | **292** | Pg | **Pb** | **14 13 36.5** | **+0.5** |
| | baz=1.3 | | | | | | |
| **LRMC** | **Laurel Mountai** | **1.70** | **188** | Pb | **Pn** | **14 13 42.1** | **+0.2** |
| | baz=1.7 | | | | | | |
| **ISA** | **Isabella** | **1.74** | **211** | Pb | **Pn** | **14 13 43.1** | **+0.7** |
| | baz=1.7 | | | | | | |
| **ISA** | **Isabella** | **1.74** | **211** | *e*Pn | **Pn** | **14 13 43.2** | **+0.8** |
| ISA | | | | *e*Sn | **Sn** | **14 14 04.2** | **-0.3** |
| **R11A** | **Troy Canyon, C** | **1.85** | **50** | Pb | **Pb** | **14 13 46.9** | **+0.6** |
| | baz=1.9 | | | | | | |
| R11A | | | | Sb | **Sg** | **14 14 11.8** | **-0.3** |
| | baz=1.9 | | | | | | |
| **GSC** | **Goldstone** | **1.91** | **166** | P | **Pn** | **14 13 45.3** | **+0.4** |
| | baz=1.9 | | | | | | |
| **TUQ** | **Turquoise Moun** | **2.09** | **145** | P | **Pn** | **14 13 47.6** | **+0.3** |
| | baz=2.1 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **2.33** | **192** | P | **Pn** | **14 13 51.2** | **+0.6** |
| | baz=2.3 | | | | | | |
| **HEC** | **Hector,Ludlow** | **2.48** | **160** | P | **Pn** | **14 13 52.9** | **+0.2** |
| | baz=2.5 | | | | | | |
| **CMB** | **Columbia Colle** | **2.54** | **291** | Pn | **Pn** | **14 13 52.4** | **-1.1** |
| CMB | | | | *e*Sn | **Sn** | **14 14 23.7** | **-0.6** |
| CMB | | | | *e*Sg | **Sg** | **14 14 34.4** | **+0.3** |
| **LDFC** | **Landfair** | **2.78** | **138** | *e*Pn | **Pn** | **14 13 57.4** | **+0.6** |
| LDFC | | | | *e*Sn | **Sn** | **14 14 30.5** | **+0.2** |
| LDFC | | | | *e*Sg | **Sg** | **14 14 41.1** | **-0.6** |
| **CCUT** | **Cedar City** | **3.23** | **82** | *e*Pn | **Pn** | **14 14 03.6** | **+0.6** |
| CCUT | | | | *e*Pg | **Pg** | **14 14 14.4** | **+0.1** |
| CCUT | | | | *e*Sn | **Sn** | **14 14 42.1** | **+0.6** |
| CCUT | | | | *e*Sg | **Sg** | **14 14 55.8** | **-0.3** |
| **BMN** | **Battle Mountai** | **3.27** | **2** | *e*Pn | **Pn** | **14 14 03.5** | **-0.1** |
| BMN | | | | *e*Sn | **Sn** | **14 14 43.0** | **+0.6** |
| BMN | | | | *e*Sg | **Sg** | **14 14 58.6** | **+1.2** |
| **BELC** | **Belle Mtn. Jos** | **3.35** | **160** | P | **Pn** | **14 14 05.3** | **+0.7** |
| | baz=3.3 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **3.62** | **168** | P | **Pn** | **14 14 09.2** | **+0.8** |
| | baz=3.6 | | | | | | |
| **ELK** | **Elko** | **3.95** | **24** | *e*Pn | **Pn** | **14 14 13.5** | **+0.5** |
| ELK | | | | *e*Pg | **Pg** | **14 14 27.6** | **-0.5** |
| **MSU** | **Marysvale** | **4.34** | **70** | Pn | **Pn** | **14 14 18.6** | **+0.3** |
| MSU | | | | *e*Pg | **Pg** | **14 14 35.0** | **-0.5** |
| MSU | | | | *e*Sn | **Sn** | **14 15 08.4** | **-0.4** |
| MSU | | | | *e*Sg | **Sg** | **14 15 31.9** | **+0.2** |
| **GLA** | **Glamis** | **4.60** | **152** | Pn | **Pn** | **14 14 22.0** | **+0.2** |
| GLA | | | | *e*Pg | **Pg** | **14 14 41.0** | **+0.3** |
| GLA | | | | *e*Sn | **Sn** | **14 15 15.1** | **-0.1** |
| **DUG** | **Dugway** | **4.69** | **48** | *e*Pn | **Pn** | **14 14 24.1** | **+1.1** |
| DUG | | | | *e*Pg | **Pg** | **14 14 43.2** | **+1.0** |
| DUG | | | | *e*Sn | **Sn** | **14 15 17.6** | **+0.3** |
| DUG | | | | *e*Sg | **Sg** | **14 15 42.8** | **-0.1** |
| **WUAZ** | **Wupatki** | **5.12** | **107** | Pn | **Pn** | **14 14 29.1** | **+0.1** |
| | 19nm,1.1s | | | | | | |
| **TMUT** | **Trail Mountain** | **5.31** | **64** | Pn | **Pn** | **14 14 30.9** | **-0.8** |
| | 15nm,0.5s | | | | | | |
| **SRU** | **San Rafael** | **5.75** | **68** | Pn | **Pn** | **14 14 38.2** | **+0.5** |
| | 3.3nm,0.5s | | | | | | |
| **HVU** | **Hansel Valley** | **5.83** | **36** | Pg | **Pg** | **14 15 01.6** | **-2.5** |
| | 1.9nm,0.4s | | | | | | |

*ISCJB **01** 14:24:41.5±0.7, 57°.5S±0°.1×147°.8W±0°.2, h10km, mb4.2/9, MS4.6/20, Error ellipse: s-maj=18.8km s-min=15.2km az=20.2*
*IDC **01** 14:24:42.6±0.7, 57°.52S×147°.86W, h0km, mb4.0/7, mb1 4.2/7, mb1mx4.0/36, mbtmp4.0/7, MS4.6/20, Ms1 4.6/20, ms1mx4.5/25, Error ellipse: s-maj=26.4km s-min=20.3km az=3.0*
*NEIC **01** 14:24:44.1±0.5, 57°.63S×147°.74W, h10km, mb4.6/2, Error ellipse: s-maj=16.4km s-min=14.2km az=152.0*
*GCMT **01** 14:24:44.1±0.2, 57°.68S×147°.81W, h12km, MW5.3/94, Moment Tensor Solution. s64,c100; s94,c145; Duration: 1s.0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.03±.02; $M_{\theta\theta}$0.74±.02; $M_{\phi\phi}$-0.71±.01; $M_{r\theta}$-0.44±.04; $M_{\theta\phi}$0.47±.01; $M_{\phi r}$0.01±.04; Best double couple: $M_0$0.95800×$10^{17}$ NP1:$\phi_s$300.00000°, δ82.00000°, λ23.00000°. NP2:$\phi_s$206.00000°, δ68.00000°, λ172.00000°. Principal axes: T 1.0450, Plg21.0000°, Azm165.0000°; N -0.1740, Plg66.0000°, Azm318.0000°; P -0.8710, Plg10.0000°, Azm71.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
**ISC 01 14:24:43.9**±0.6**, 57°.5S**±0°.1×**147°.9W**±0°.2**, h10**km**, n54,** σ**1**s**.43**/25**, mb4.3**/9**, MS4.7**/20**, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **26.26** | **202** | P | **P** | **14 30 19.1** | **+0.5** |
| | 0.4nm,0.8s,baz=60,slow=9.2,SNR=2.1 | | | | | | |
| VNDA | | | | LR | LR | 14 38 27.1 | |
| | comp=Z,1μm,18.4s,baz=75,slow=31 | | | | | | |
| **RPZ** | **Rata Peaks** | **28.99** | **281** | LR | LR | 14 40 27.6 | |
| | comp=Z,2μm,18.0s,baz=130,slow=33 | | | | | | |
| **URZ** | **Urewera** | **29.89** | **295** | LR | LR | 14 40 44.1 | |
| | comp=Z,977nm,19.4s,baz=132,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **32.62** | **180** | P | **P** | **14 31 16.1** | **+0.7** |
| | 2.6nm,0.8s,baz=84,slow=1.9,SNR=15 | | | | | | |
| QSPA | | | | LR | LR | 14 42 27.1 | |
| | comp=Z,2μm,20.0s,baz=56,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **32.62** | **180** | *e*P | **P** | **14 31 14.6** | **-0.8** |
| | 41nm,1.8s | | | | | | |
| **TBI** | **Tubuai** | **34.16** | **357** | *e*LR | LR | 14 40 23.5 | |
| | 3μm,27.8s,baz=185 | | | | | | |
| **TBI** | **Tubuai** | **34.16** | **357** | *e*T | T | 15 07 16.4 | |
| | 31nm,0.3s | | | | | | |
| **RAO** | **Raoul Island** | **35.18** | **311** | LR | LR | 14 43 18.4 | |
| | comp=Z,485nm,21.3s,baz=111,slow=32 | | | | | | |
| **RKT** | **Rikitea** | **35.62** | **21** | *e*LQ | LQ | 14 39 35.7 | |
| | 4μm,34.2s | | | | | | |
| RKT | | | | *e*LR | LR | 14 41 13.6 | |
| | 2μm,27.8s | | | | | | |
| **RKT** | **Rikitea** | **35.62** | **21** | *e*T | T | 15 09 03.8 | |
| | 6.1nm,0.2s | | | | | | |
| **PMSA** | **Palmer Station** | **38.22** | **136** | LR | LR | 14 44 44.6 | |
| | comp=Z,952nm,18.5s,baz=230,slow=32 | | | | | | |
| **MEH** | **Mehetia** | **39.59** | **360** | *e*T | T | 15 14 02.7 | |
| | 48nm,0.3s | | | | | | |
| **TVO** | **Taravao** | **39.69** | **358** | *e*T | T | 15 14 10.9 | |
| | 3.8nm,0.3s | | | | | | |
| **PAE** | **Paea** | **39.82** | **357** | *e*T | T | 15 14 20.2 | |
| | 2.6nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **39.89** | **357** | *e*S | **S** | **14 38 19.7** | **-2.8** |
| | 251nm,27.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 14 43 12.4 | |
| | 3μm,25.5s,baz=183 | | | | | | |
| **PPT2** | **Papeete2** | **39.89** | **357** | *e*T | T | 15 14 26.0 | |
| | 2.9nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **39.91** | **357** | LR | LR | 14 44 05.5 | |
| | comp=Z,1μm,20.3s,baz=196,slow=29 | | | | | | |
| **USHA** | **Ushuaia** | **41.92** | **122** | LR | LR | 14 45 04.3 | |
| | comp=Z,584nm,21.3s,baz=212,slow=29 | | | | | | |
| **VAH** | **Vaihoa** | **42.21** | **0** | *e*T | T | 15 17 19.2 | |
| | 34nm,0.3s | | | | | | |
| **CASY** | **Casey** | **43.44** | **215** | P | **P** | **14 32 46.5** | **+0.3** |
| | 19nm,0.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **48.39** | **297** | *e*LQ | LQ | 14 45 04.9 | |
| | 1μm,29.1s | | | | | | |
| DZM | | | | *e*LR | LR | 14 47 06.7 | |
| | 921nm,25.9s | | | | | | |
| **SNAA** | **Sanae** | **48.78** | **166** | *e*P | **P** | **14 33 26.3** | **-2.1** |
| | 2.8nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **53.13** | **194** | P | **P** | **14 34 01.0** | **0.0** |
| | 1.0nm,0.6s,baz=317,slow=7.5,SNR=3.0 | | | | | | |
| MAW | | | | LR | LR | 14 54 48.5 | |
| | comp=Z,735nm,18.1s,baz=162,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **60.35** | **279** | LR | LR | 14 57 18.2 | |
| | comp=Z,648nm,21.1s,baz=142,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **64.09** | **266** | P | **P** | **14 35 18.2** | **+0.2** |
| | 2.0nm,0.9s,baz=141,slow=6.6,SNR=19 | | | | | | |
| ASAR | | | | LR | LR | 15 01 03.9 | |
| | comp=Z,351nm,18.1s,baz=148,slow=34 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **65.30** | **244** | T | T | 15 47 07.8 | |
| | baz=143,slow=76,SNR=82 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **65.31** | **244** | T | T | 15 47 04.1 | |
| | baz=143,slow=76,SNR=75 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **65.32** | **244** | T | T | 15 47 05.7 | |
| | baz=143,slow=76,SNR=74 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.88** | **269** | P | **P** | **14 35 35.5** | **-0.5** |
| | 2.3nm,0.9s,baz=150,slow=5.5,SNR=9.7 | | | | | | |
| WRA | | | | LR | LR | 15 01 38.6 | |
| | comp=Z,617nm,19.7s,baz=140,slow=33 | | | | | | |
| **CPUP** | **Villa Florida** | **68.47** | **105** | P | **P** | **14 35 45.1** | **-0.8** |
| | 7.5nm,1.1s,baz=222,slow=5.2,SNR=6.9 | | | | | | |
| CPUP | | | | LR | LR | 15 01 33.0 | |
| | comp=Z,218nm,19.4s,baz=208,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **70.91** | **90** | P | **P** | **14 36 02.1** | **+0.3** |
| | 1.9nm,1.1s,baz=223,slow=4.9,SNR=5.7 | | | | | | |
| LPAZ | | | | LR | LR | 15 00 01.8 | |
| | comp=Z,170nm,20.3s,baz=202,slow=30 | | | | | | |
| **SAML** | **Samuel** | **79.66** | **90** | *e*P | **P** | **14 36 50.7** | **-0.8** |
| **BDFB** | **Brasilia** | **82.14** | **107** | LR | LR | 15 10 25.2 | |
| | comp=Z,576nm,18.1s,baz=190,slow=33 | | | | | | |
| **ROSC** | **El Rosal** | **85.32** | **73** | LR | LR | 15 09 10.2 | |
| | comp=Z,306nm,19.2s,baz=206,slow=31 | | | | | | |
| **GUMO** | **Guam** | **89.65** | **296** | LR | LR | 15 12 17.8 | |
| | comp=Z,91nm,20.6s,baz=211,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **94.00** | **174** | LR | LR | 15 15 55.9 | |
| | comp=Z,790nm,20.7s,baz=174,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **94.17** | **38** | LR | LR | 15 11 46.2 | |
| | comp=Z,115nm,19.1s,baz=0.0,slow=30 | | | | | | |
| **NVAR** | **Mina Array Bea** | **98.78** | **23** | LR | LR | 15 13 15.5 | |
| | comp=Z,312nm,21.0s,baz=216,slow=30 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **103.57** | **132** | T | T | 16 35 21.3 | |
| | baz=205,slow=75,SNR=36 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **103.57** | **132** | T | T | 16 35 35.7 | |
| | baz=205,slow=75,SNR=52 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **103.59** | **132** | T | T | 16 35 38.7 | |
| | baz=205,slow=75,SNR=26 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **104.65** | **132** | T | T | 16 36 53.3 | |
| | baz=204,slow=75,SNR=60 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **104.65** | **132** | T | T | 16 36 27.6 | |
| | baz=204,slow=75,SNR=58 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **104.66** | **132** | T | T | 16 36 27.4 | |
| | baz=204,slow=75,SNR=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **117.82** | **261** | PKP | **PKPdf** | **14 43 30.1** | **-0.1** |
| | 0.4nm,0.4s,baz=146,slow=1.8,SNR=4.0 | | | | | | |
| **ILAR** | **Eielson Array** | **121.98** | **0** | PKP | **PKPdf** | **14 43 37.3** | **+0.5** |
| | 0.4nm,0.7s,baz=252,slow=1.6,SNR=5.1 | | | | | | |
| **MDT** | **Midelt** | **144.90** | **119** | PKP | **PKPdf** | **14 44 22.5** | **+1.9** |
| | 5.4nm,1.0s,baz=297,slow=11,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **148.14** | **272** | PKPbc | **PKPbc** | **14 44 29.2** | **+0.4** |
| | 5.9nm,0.7s,baz=104,slow=5.1,SNR=21 | | | | | | |
| **SUMG** | **Summit** | **148.97** | **33** | *i* P | **PKPab** | **14 44 39.5** | **+4.6** |
| **ESDC** | **Sonseca Array** | **150.67** | **112** | PKPbc | **PKPbc** | **14 44 35.6** | **+0.3** |
| | 0.2nm,0.3s,baz=273,slow=1.1,SNR=4.4 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | **14 44 42.5** | **+0.1** |
| | 4.8nm,0.9s,baz=254,slow=1.9,SNR=8.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.75** | **286** | PKPbc | **PKPbc** | **14 44 36.5** | **+1.6** |
| | 0.9nm,0.6s,baz=98,slow=2.9,SNR=4.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **152.39** | **276** | PKPbc | **PKPbc** | **14 44 39.0** | **+0.1** |
| | 2.8nm,0.8s,baz=118,slow=2.1,SNR=10 | | | | | | |
| KURBB | | | | PKPab | **PKPab** | **14 44 48.3** | **-0.8** |
| | 5.5nm,0.9s,baz=114,slow=2.1,SNR=16 | | | | | | |
| **KURK** | **Kurchatov** | **152.39** | **276** | PKPbc | **PKPbc** | **14 44 39.0** | **+0.1** |
| KURK | | | | PKPab | **PKPab** | **14 44 48.3** | **-0.8** |
| **GEYT** | **Alibeck** | **154.01** | **232** | PKPab | **PKPab** | **14 44 56.2** | **-0.2** |
| | 0.9nm,0.5s,baz=17,slow=5.4,SNR=4.4 | | | | | | |

**IDC 01 14:35:49.6**±1.9**, 2°.58N**×**128°.36E, h0**km**, mb3.5**/4**, mb1 3.7**/4**, mb1mx3.3**/39**, mbtmp3.6**/4**, Error ellipse: s-maj=147.3km s-min=20.9km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.14** | **166** | P | P | 14 40 58.1 | +0.4 |
| | 0.8nm,0.6s,baz=346,slow=11,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **26.64** | **169** | P | P | 14 41 29.9 | -0.4 |
| | 0.3nm,0.5s,baz=352,slow=7.6,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.42** | **325** | P | P | 14 45 54.1 | -0.1 |
| | 0.2nm,0.3s,baz=116,slow=8.5,SNR=2.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.58** | **327** | P | P | 14 46 22.1 | 0.0 |
| | 0.2nm,0.3s,baz=128,slow=6.3,SNR=4.6 | | | | | | |

*ISCJB **01** 14:41:14.7±0.8, 57°.5S±0°.2×147°.8W±0°.2, h10km, mb4.2/9, MS4.5/14, Error ellipse: s-maj=28.5km s-min=17.6km az=5.5*
*IDC **01** 14:41:14.4±0.8, 57°.20S×147°.61W, h0km, mb3.9/6, mb1 4.1/6, mb1mx4.0/28, mbtmp3.9/6, MS4.4/14, Ms1 4.4/14, ms1mx4.3/21, Error ellipse: s-maj=31.1km s-min=22.6km az=2.0*
*NEIC **01** 14:41:16.1±0.7, 57°.37S×147°.71W, h10km, mb4.6/3, Error ellipse: s-maj=25.3km s-min=19.2km az=185.0*
*GCMT **01** 14:41:16.1±0.2, 57°.65S×147°.72W, h14km±1km, MW5.2/89, Moment Tensor Solution. s39,c43; s89,c125; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.16±.22; $M_{\theta\theta}$6.35±.27; $M_{\phi\phi}$-5.19±.19; $M_{r\theta}$-3.05±.64; $M_{\theta\phi}$3.10±.16; $M_{\phi r}$0.32±.36; Best double couple: $M_0$7.13100×$10^{16}$ NP1:$\phi_s$301.00000°, δ87.00000°, λ22.00000°. NP2: $\phi_s$209.00000°, δ68.00000°, λ177.00000°. Principal axes: T 8.0390, Plg18.0000°, Azm167.0000°; N -1.8170, Plg68.0000°, Azm307.0000°; P -6.2220, Plg13.0000°, Azm73.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
**ISC 01 14:41:16.1**±0.9**, 57°.4S**±0°.2×**147°.7W**±0°.2**, h10**km**, n40,** σ**1**s**.34**/15**, mb4.2**/9**, MS4.5**/14**, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **26.42** | **202** | P | **P** | **14 46 55.3** | **+2.9** |
| | 0.6nm,0.9s,baz=80,slow=13,SNR=2.7 | | | | | | |
| VNDA | | | | LR | LR | 14 54 49.8 | |
| | comp=Z,713nm,18.3s,baz=75,slow=31 | | | | | | |
| **RPZ** | **Rata Peaks** | **29.05** | **280** | LR | LR | 14 57 02.3 | |
| | comp=Z,1μm,18.1s,baz=129,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **32.76** | **180** | P | **P** | **14 47 49.1** | **+0.3** |
| | 1.2nm,0.7s,baz=139,slow=1.0,SNR=11 | | | | | | |
| **QSPA** | **South Pole Qui** | **32.76** | **180** | *e*P | **P** | **14 47 48.1** | **-0.8** |
| | 31nm,1.8s | | | | | | |
| **TBI** | **Tubuai** | **34.03** | **357** | *e*LR | LR | 14 56 56.6 | |
| | 2μm,29.0s,baz=182 | | | | | | |
| **TBI** | **Tubuai** | **34.03** | **357** | *e*T | T | 15 23 55.0 | |
| | 26nm,0.3s | | | | | | |
| **RAO** | **Raoul Island** | **35.15** | **310** | LR | LR | 14 59 00.1 | |
| | comp=Z,393nm,21.1s,baz=201,slow=30 | | | | | | |
| **RKT** | **Rikitea** | **35.46** | **20** | *e*LR | LR | 14 57 44.0 | |
| | 1μm,28.8s | | | | | | |
| **PPT2** | **Papeete2** | **39.76** | **357** | *e*LR | LR | 14 59 43.5 | |
| | 2μm,25.2s,baz=182 | | | | | | |
| **PPT** | **Papeete** | **39.78** | **357** | LR | LR | 15 00 27.7 | |
| | comp=Z,1μm,20.6s,baz=208,slow=29 | | | | | | |
| **VAH** | **Vaihoa** | **42.08** | **0** | *e*T | T | 14 48 44.4 | |
| | 15nm,0.3s | | | | | | |
| **VAH** | **Vaihoa** | **42.08** | **0** | *e*T | T | 15 33 57.5 | |
| | 37nm,0.3s | | | | | | |
| **AFI** | **Afiamalu** | **47.09** | **327** | LR | LR | 15 05 40.0 | |
| | comp=Z,398nm,19.5s,baz=172,slow=31 | | | | | | |
| **DZM** | **Mont Dzumac** | **48.40** | **297** | *e*LQ | LQ | 15 01 38.0 | |
| | 570nm,27.1s | | | | | | |
| DZM | | | | *e*LR | LR | 15 03 41.6 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 492nm,25.9s | | | | | | |
| SNAA | Sanae | 48.90 | 166 | eP | P | 14 49 59.3 | -2.2 |
| | 2.5nm,1.1s | | | | | | |
| MAW | Mawson | 53.28 | 194 | LR | LR | 15 10 32.7 | |
| | comp=Z,646nm,20.1s,baz=176,slow=33 | | | | | | |
| ASAR | Alice Springs | 64.19 | 266 | P | P | 14 51 51.1 | +0.2 |
| | 0.6nm,0.8s,baz=141,slow=6.1,SNR=9.6 | | | | | | |
| ASAR | | | | LR | LR | 15 17 37.8 | |
| | comp=Z,235nm,18.1s,baz=150,slow=34 | | | | | | |
| LVC | Limon Verde | 65.25 | 94 | P | P | 14 52 00.6 | +2.5 |
| | 19nm,0.3s | | | | | | |
| H01W1 | Cape Leeuwin H | 65.44 | 243 | T | T | 16 03 39.5 | |
| | baz=143,slow=76,SNR=10 | | | | | | |
| H01W2 | Cape Leeuwin H | 65.44 | 243 | T | T | 16 03 39.6 | |
| | baz=143,slow=76,SNR=23 | | | | | | |
| H01W3 | Cape Leeuwin H | 65.45 | 243 | T | T | 16 03 45.1 | |
| | baz=143,slow=76,SNR=10 | | | | | | |
| WRA | Warramunga Arr | 66.96 | 269 | P | P | 14 52 08.8 | 0.0 |
| | 0.7nm,0.8s,baz=141,slow=6.0,SNR=8.4 | | | | | | |
| WRA | | | | LR | LR | 15 18 12.9 | |
| | comp=Z,466nm,19.8s,baz=180,slow=33 | | | | | | |
| WRAB | Tennant Creek | 66.97 | 269 | eP | P | 14 52 08.8 | -0.1 |
| | 5.2nm,1.1s | | | | | | |
| CPUP | Villa Florida | 68.42 | 105 | P | P | 14 52 17.6 | -0.4 |
| | 5.9nm,1.1s,baz=228,slow=6.9,SNR=5.5 | | | | | | |
| CPUP | | | | LR | LR | 15 18 15.2 | |
| | comp=Z,125nm,19.1s,baz=209,slow=32 | | | | | | |
| LPAZ | La Paz | 70.82 | 90 | P | P | 14 52 33.8 | +0.2 |
| | 1.0nm,0.7s,baz=183,slow=3.8,SNR=4.2 | | | | | | |
| LPAZ | | | | LR | LR | 15 16 31.9 | |
| | comp=Z,110nm,19.9s,baz=198,slow=30 | | | | | | |
| BDFB | Brasilia | 82.10 | 107 | LR | LR | 15 26 56.2 | |
| | comp=Z,466nm,18.2s,baz=197,slow=33 | | | | | | |
| ROSC | El Rosal | 85.20 | 73 | LR | LR | 15 24 37.6 | |
| | comp=Z,274nm,20.2s,baz=202,slow=31 | | | | | | |
| TXAR | Lajitas Array | 94.00 | 37 | LR | LR | 15 29 42.7 | |
| | comp=Z,60nm,18.4s,baz=0.0,slow=31 | | | | | | |
| NVAR | Mina Array Bea | 98.62 | 23 | LR | LR | 15 29 37.4 | |
| | comp=Z,311nm,20.3s,baz=224,slow=30 | | | | | | |
| H10S3 | ASCENSION HYDR | 103.60 | 132 | T | T | 16 51 29.6 | |
| | baz=204,slow=75,SNR=7.2 | | | | | | |
| H10S2 | ASCENSION HYDR | 103.60 | 132 | T | T | 16 51 27.4 | |
| | baz=204,slow=75,SNR=7.2 | | | | | | |
| H10S1 | ASCENSION HYDR | 103.62 | 132 | T | T | 16 51 28.5 | |
| | baz=204,slow=75,SNR=8.0 | | | | | | |
| H10N3 | ASCENSION HYDR | 104.67 | 132 | T | T | 16 52 52.2 | |
| | baz=203,slow=75,SNR=8.9 | | | | | | |
| H10N1 | ASCENSION HYDR | 104.68 | 132 | T | T | 16 52 46.1 | |
| | baz=203,slow=75,SNR=10 | | | | | | |
| H10N2 | ASCENSION HYDR | 104.69 | 132 | T | T | 16 52 48.6 | |
| | baz=203,slow=75,SNR=7.8 | | | | | | |
| ILAR | Eielson Array | 121.84 | 0 | PKP | PKPdf | 15 00 08.0 | -0.8 |
| | 0.6nm,0.9s,baz=278,slow=0.4,SNR=6.0 | | | | | | |
| MDT | Midelt | 144.89 | 118 | PKP | PKPab | 15 00 51.8 | -0.3 |
| | 3.4nm,1.0s,baz=200,slow=7.5,SNR=4.9 | | | | | | |
| MKAR | Makanchi Array | 148.22 | 272 | PKPbc | PKPbc | 15 01 01.0 | -0.3 |
| | 1.3nm,0.7s,baz=131,slow=4.6,SNR=3.1 | | | | | | |
| ESDC | Sonseca Array | 150.64 | 111 | PKPbc | PKPbc | 15 01 07.8 | +0.2 |
| | 3.1nm,0.9s,baz=252,slow=1.6,SNR=8.3 | | | | | | |
| ZALV | Zalesovo Beam | 150.79 | 286 | PKPab | PKPab | 15 01 14.2 | -0.5 |
| | 0.5nm,0.4s,baz=124,slow=6.6,SNR=3.5 | | | | | | |

*ISCJB **01** 14:46:48.7±0.8, 40°.12N±0°.03×31°.88E±0°.07, h6$^{km}$±8$^{km}$, Error ellipse: s-maj=9.1km s-min=5.2km az=15.1*
*DDA **01** 14:46:48.6, 40°.13N×31°.80E, h6$^{km}$, Md3.0*
*CSEM **01** 14:46:49.5±0.3, 40°.14N×31°.84E, h20$^{km}$, MD2.6, Error ellipse: s-maj=8.6km s-min=5.3km az=98.0*
*ISK **01** 14:46:50.7, 40°.07N×31°.68E, h20$^{km}$, MD2.6*
**ISC 01 14:46:48.3**±1.6, **40°.16N**±0°.03×**31°.77E**±0°.04, **h3**$^{km}$±13$^{km}$, **n18**, σ**0$^{s}$.81**/29, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AUMIH | MIHALICIK | 0.36 | 217 | P | Pg | 14 46 55.7 | +0.4 |
| AUMIH | | | | S | Sb | 14 47 02.5 | -1.2 |
| MDUB | Mudurnu | 0.53 | 306 | ePG | Pn | 14 47 02.0 | -1.0 |
| MDUB | | | | eSG | Sb | 14 47 10.3 | +1.7 |
| MDUB | Mudurnu | 0.53 | 306 | ePg | Pn | 14 47 02.0 | -1.0 |
| MDUB | | | | eSg | Sb | 14 47 10.3 | +1.7 |
| BCAM | Yenicaga | 0.69 | 19 | i P | Pb | 14 47 02.7 | -0.5 |
| BCAM | | | | i S | Sb | 14 47 12.8 | -0.4 |
| BCAM | Yenicaga | 0.69 | 19 | P | Pb | 14 47 02.7 | -0.5 |
| BCAM | | | | S | Sb | 14 47 12.8 | -0.4 |
| SVRH | Sivrihisar-ESK | 0.74 | 195 | ePG | Pb | 14 47 03.8 | -0.1 |
| SVRH | | | | eSG | Sb | 14 47 13.2 | -1.1 |
| SVRH | Sivrihisar-ESK | 0.74 | 195 | ePg | Pb | 14 47 03.8 | -0.1 |
| SVRH | | | | eSg | Sb | 14 47 13.3 | -1.1 |
| LOD | Lodumlu | 0.81 | 109 | ePG | Pn | 14 47 07.8 | +1.0 |
| ESKT | Eskisehir | 0.95 | 228 | ePG | Pb | 14 47 07.7 | +0.2 |
| ESKT | Eskisehir | 0.95 | 228 | ePg | Pb | 14 47 07.7 | +0.2 |
| ESKT | Eskisehir | 0.95 | 228 | P | Pb | 14 47 07.4 | -0.2 |
| ESKT | | | | S | Sn | 14 47 23.9 | +1.0 |
| SEYT | Eskypehyr | 0.95 | 228 | i P | Pb | 14 47 07.4 | -0.2 |
| SEYT | | | | i S | Sn | 14 47 23.9 | +1.0 |
| GULT | Gulveren | 0.99 | 286 | ePG | Pn | 14 47 09.5 | +0.2 |
| GULT | Gulveren | 0.99 | 286 | ePg | Pn | 14 47 09.5 | +0.2 |
| BORA | Eskisehir | 1.05 | 255 | i P | Pg | 14 47 08.3 | -0.1 |
| BORA | | | | i S | Sn | 14 47 24.6 | -0.5 |
| BORA | Eskisehir | 1.05 | 255 | P | Pg | 14 47 08.3 | -0.1 |
| BORA | | | | S | Sn | 14 47 24.6 | -0.5 |
| KIZT | Kizilcal | 1.28 | 176 | ePN | Pg | 14 47 13.0 | +0.1 |
| KIZT | Kizilcal | 1.28 | 176 | ePn | Pg | 14 47 13.0 | +0.1 |

*DDA **01** 14:52:26.8, 38°.71N×38°.15E, h7$^{km}$, Md2.6*
*ISCJB **01** 14:52:27.6±0.6, 38°.70N±0°.03×38°.17E±0°.04, h9$^{km}$, Error ellipse: s-maj=5.1km s-min=4.2km az=141.3*
*ISK **01** 14:52:27.9, 38°.63N×38°.14E, h21$^{km}$, MD2.5*
*CSEM **01** 14:52:28.3±0.3, 38°.64N×38°.18E, h2$^{km}$, MD2.5, Error ellipse: s-maj=8.1km s-min=6.3km az=168.0*
**ISC 01 14:52:27.0**±0.9, **38°.68N**±0°.03×**38°.16E**±0°.03, **h9**$^{km}$, **n15**, σ**0$^{s}$.69**/24, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MALT | Malatya | 0.42 | 150 | ePG | Pb | 14 52 36.7 | 0.0 |
| MALT | | | | eSG | Sb | 14 52 42.9 | -0.3 |
| MALT | Malatya | 0.42 | 150 | ePg | Pb | 14 52 36.7 | 0.0 |
| MALT | | | | eSg | Sb | 14 52 42.9 | -0.3 |
| AKCD | Akcadag | 0.42 | 206 | i P | Pg | 14 52 34.8 | -0.6 |
| AKCD | Akcadag | 0.42 | 206 | P | Pg | 14 52 34.8 | -0.6 |
| AKCD | | | | S | Sb | 14 52 43.5 | +0.1 |
| DARE | Darende-Malaty | 0.54 | 259 | ePG | Pb | 14 52 38.9 | +0.1 |
| DARE | | | | eSG | Sb | 14 52 46.9 | +0.1 |
| DARE | Darende-Malaty | 0.54 | 259 | ePg | Pb | 14 52 38.9 | +0.1 |
| DARE | | | | eSg | Sb | 14 52 46.9 | +0.1 |
| KEMA | Kemaliye | 0.64 | 23 | i P | Pg | 14 52 38.1 | -1.4 |
| KEMA | | | | i S | Sg | 14 52 49.4 | +1.4 |
| KEMA | Kemaliye | 0.64 | 23 | P | Pg | 14 52 38.1 | -1.4 |
| KEMA | | | | S | Sg | 14 52 49.4 | +1.4 |
| ELZG | Elazig | 0.67 | 105 | i P | Pg | 14 52 39.7 | -0.3 |
| ELZG | | | | i S | Sb | 14 52 50.1 | -0.3 |
| ELZG | Elazig | 0.67 | 105 | P | Pg | 14 52 39.7 | -0.3 |
| ELZG | | | | S | Sb | 14 52 50.1 | -0.3 |
| ILIC | ilic-Erzincan | 0.83 | 22 | ePG | Pn | 14 52 45.6 | +0.5 |
| ILIC | ilic-Erzincan | 0.83 | 22 | ePg | Pn | 14 52 45.6 | +0.5 |
| PTK | Pertek | 0.98 | 77 | ePG | Pn | 14 52 47.2 | 0.0 |
| PTK | Pertek | 0.98 | 77 | ePg | Pn | 14 52 47.2 | 0.0 |
| SARI | SarD1z-Kayseri | 1.39 | 259 | ePN | Pn | 14 52 52.5 | -0.3 |

*DDA **01** 14:57:32.9, 37°.25N×28°.24E, h7$^{km}$, Md2.7*
*ISK **01** 14:57:32.7, 37°.23N×28°.19E, h5$^{km}$, MD2.6*
*ISCJB **01** 14:57:33.4±0.9, 37°.23N±0°.05×28°.20E±0°.06, h7$^{km}$±18$^{km}$, Error ellipse: s-maj=9.4km s-min=5.3km az=41.7*
*CSEM **01** 14:57:33.7±0.3, 37°.22N×28°.19E, h2$^{km}$, MD2.6, Error ellipse: s-maj=9.2km s-min=4.6km az=40.0*
**ISC 01 14:57:32.7**±1.0, **37°.25N**±0°.04×**28°.21E**±0°.04, **h9**$^{km}$±8$^{km}$, **n16**, σ**0$^{s}$.39**/24, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.13 | 152 | ePG | Pg | 14 57 35.3 | -0.3 |
| YER | | | | eSG | Sg | 14 57 37.8 | +0.2 |
| YER | Yerkesik | 0.13 | 152 | ePg | Pg | 14 57 35.3 | -0.3 |
| YER | | | | eSg | Sg | 14 57 37.8 | +0.2 |
| TURN | Turunc | 0.49 | 140 | i P | Pg | 14 57 41.4 | -0.8 |
| TURN | | | | i S | Sb | 14 57 50.9 | +0.2 |
| TURN | Turunc | 0.49 | 140 | P | Pg | 14 57 41.5 | -0.8 |
| TURN | | | | S | Sb | 14 57 50.9 | +0.2 |
| AYDN | Tasoluk | 0.49 | 328 | i P | Pb | 14 57 43.8 | +0.3 |
| AYDN | | | | i S | Sb | 14 57 50.5 | -0.4 |
| AYDN | Tasoluk | 0.49 | 328 | P | Pb | 14 57 43.8 | +0.3 |
| AYDN | | | | S | Sb | 14 57 50.5 | -0.4 |
| DALY | Dalyan (Mu˜la | 0.56 | 140 | ePG | Pb | 14 57 45.0 | +0.4 |
| DALY | Dalyan (Mu˜la | 0.56 | 140 | ePg | Pb | 14 57 45.0 | +0.4 |
| BDRM | Kayabasi | 0.64 | 254 | i P | Pg | 14 57 44.7 | -0.3 |
| BDRM | | | | i S | Sb | 14 57 55.2 | +0.2 |
| BDRM | Kayabasi | 0.64 | 254 | P | Pg | 14 57 44.7 | -0.3 |
| BDRM | | | | S | Sb | 14 57 55.2 | +0.2 |
| BODT | Bodrum | 0.74 | 256 | ePG | Pb | 14 57 47.9 | +0.1 |
| BODT | Bodrum | 0.74 | 256 | ePg | Pb | 14 57 47.9 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 0.74 | 340 | ePG | Pb | 14 57 48.5 | +0.6 |
| AYDB | Zeytinkoy-Aydi | 0.74 | 340 | ePg | Pb | 14 57 48.5 | +0.6 |
| FETY | Fethiye | 0.93 | 131 | ePG | Pn | 14 57 52.0 | 0.0 |
| FETY | Fethiye | 0.93 | 131 | ePg | Pn | 14 57 52.0 | 0.0 |

**IDC 01 15:11:12.4**±1.7, **11°.26S**×**165°.56E**, **h0**$^{km}$, **mb3.6**/3, **mb1 4.0**/4, **mb1mx3.6**/24, **mbtmp3.7**/4, **ML3.9**/1, **1C**, **Error ellipse: s-maj=52.9km s-min=31.3km az=127.0**, **Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 10.78 | 176 | Pn | Pn | 15 13 47.4 | -0.9 |
| | 1.0nm,0.3s,baz=357,slow=6.1,SNR=17 | | | | | | |
| DZM | | | | Sn | Sn | 15 15 43.4 | -6.5 |
| | 0.1nm,0.3s,baz=180,slow=20,SNR=3.3 | | | | | | |
| WRA | Warramunga Arr | 31.23 | 250 | P | P | 15 17 35.0 | +1.1 |
| | 1.6nm,0.9s,baz=77,slow=9.3,SNR=6.7 | | | | | | |
| ASAR | Alice Springs | 32.53 | 243 | P | P | 15 17 44.2 | -1.1 |
| | 0.6nm,1.0s,baz=65,slow=9.3,SNR=4.3 | | | | | | |
| ILAR | Eielson Array | 83.78 | 19 | P | P | 15 23 43.2 | +0.1 |
| | 0.2nm,0.6s,baz=240,slow=5.5,SNR=4.2 | | | | | | |
| SYO | Syowa Base | 91.52 | 197⇑ | eP | P | 15 24 30.4 | +10 |

*ISCJB **01** 15:11:27.4±0.6, 33°.77N±0°.03×35°.77E±0°.04, h2$^{km}$±6$^{km}$, Error ellipse: s-maj=6.2km s-min=4.0km az=157.4*
*GRAL **01** 15:11:27.6±0.3, 33°.78N×35°.78E, h0$^{km}$±57$^{km}$, MD2.8*
*CSEM **01** 15:11:27.4±0.2, 33°.75N×35°.74E, h2$^{km}$, ML2.8, Error ellipse: s-maj=6.7km s-min=3.7km az=77.0*
*NSSC **01** 15:11:28.6±2.1, 33°.76N×35°.82E, h4$^{km}$±10$^{km}$, ML1.4*
**ISC 01 15:11:27.3**±1.1, **33°.78N**±0°.02×**35°.78E**±0°.03, **h3**$^{km}$±11$^{km}$, **n22**, σ**0$^{s}$.41**/40, **Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BHL | Bhannes | 0.17 | 321 | eP | Pg | 15 11 30.5 | -0.1 |
| BHL | | | | eS | Sg | 15 11 32.8 | 0.0 |
| BHL | Bhannes | 0.17 | 321 | eP | Pg | 15 11 30.5 | -0.1 |
| BHL | | | | eS | Sg | 15 11 32.8 | 0.0 |
| DQRL | Deir Qamar | 0.19 | 248 | eP | Pg | 15 11 31.1 | +0.2 |
| DQRL | | | | eS | Sg | 15 11 33.5 | +0.1 |
| DQRL | Deir Qamar | 0.19 | 248 | eP | Pg | 15 11 31.1 | +0.2 |
| DQRL | | | | eS | Sg | 15 11 33.5 | +0.1 |
| RCY | Rachaya | 0.28 | 170 | eP | Pg | 15 11 32.7 | 0.0 |
| RCY | Rachaya | 0.28 | 170 | eP | Pg | 15 11 32.7 | 0.0 |
| HWQ | Hawqa | 0.52 | 16 | eP | Pg | 15 11 36.9 | -0.4 |
| HWQ | Hawqa | 0.52 | 16 | eP | Pg | 15 11 36.9 | -0.4 |
| TOTH | TOTAH | 0.68 | 127 | eP | Pg | 15 11 41.1 | +0.8 |
| TOTH | | | | eS | Sb | 15 11 51.5 | -0.1 |
| TOTH | | | | AML | AML | 15 11 58.1 | |
| | comp=N,15nm,0.7s | | | | | | |
| TOTH | | | | AML | AML | 15 12 13.3 | |
| | comp=E,9.7nm,0.7s | | | | | | |
| TOTH | TOTAH | 0.68 | 127 | eP | Pg | 15 11 41.1 | +0.8 |
| TOTH | | | | eS | Sb | 15 11 51.5 | -0.1 |
| | comp=E,10.0nm,0.7s | | | | | | |
| HAWK | Haweek | 0.91 | 35 | eP | Pb | 15 11 45.8 | +0.1 |
| HAWK | | | | eS | Sb | 15 11 58.3 | +0.1 |
| HAWK | | | | AML | AML | 15 12 03.0 | |
| | comp=E,11nm,0.4s | | | | | | |
| HAWK | | | | AML | AML | 15 12 06.5 | |
| | comp=N,9.9nm,0.4s | | | | | | |
| HAWK | Haweek | 0.91 | 35 | eP | Pb | 15 11 45.8 | +0.1 |
| HAWK | | | | eS | Sb | 15 11 58.3 | +0.1 |
| | comp=N,10.0nm,0.4s | | | | | | |
| BIDA | Albida | 1.31 | 20 | eP | Pb | 15 11 52.8 | +0.2 |
| BIDA | | | | eS | Sg | 15 12 09.8 | +0.2 |
| BIDA | | | | AML | AML | 15 12 14.2 | |
| | comp=E,24nm,0.3s | | | | | | |
| BIDA | | | | AML | AML | 15 12 16.2 | |
| | comp=N,40nm,0.4s | | | | | | |
| BIDA | Albida | 1.31 | 20 | eP | Pb | 15 11 52.8 | +0.2 |
| BIDA | | | | eS | Sg | 15 12 09.8 | +0.2 |
| | comp=N,40nm,0.4s | | | | | | |
| SALA | Sala | 1.33 | 143 | eP | Pg | 15 11 52.1 | -0.7 |
| SALA | | | | eS | Sg | 15 12 10.0 | 0.0 |
| SALA | | | | AML | AML | 15 12 16.0 | |
| | comp=N,11nm,0.4s | | | | | | |
| SALA | | | | AML | AML | 15 12 16.1 | |
| | comp=E,1.6nm,0.3s | | | | | | |
| SALA | Sala | 1.33 | 143 | eP | Pg | 15 11 52.1 | -0.7 |
| SALA | | | | eS | Sg | 15 12 10.0 | 0.0 |
| | comp=E,2.0nm,0.3s | | | | | | |
| ZALF | Zalf | 1.56 | 123 | eP | Pn | 15 11 56.1 | +0.3 |
| ZALF | | | | eS | Sn | 15 12 15.9 | -0.6 |
| ZALF | | | | AML | AML | 15 12 25.9 | |
| | comp=E,6.8nm,0.5s | | | | | | |
| ZALF | | | | AML | AML | 15 12 27.8 | |
| | comp=N,5.5nm,0.4s | | | | | | |
| ZALF | Zalf | 1.56 | 123 | eP | Pn | 15 11 56.1 | +0.3 |
| ZALF | | | | eS | Sn | 15 12 15.9 | -0.6 |
| | comp=N,6.0nm,0.4s | | | | | | |
| WRDH | Warideh | 1.81 | 17 | eP | Pb | 15 12 00.5 | -0.5 |
| WRDH | | | | eS | Sn | 15 12 23.6 | +0.8 |
| WRDH | | | | AML | AML | 15 12 30.1 | |
| | comp=E,17nm,0.7s | | | | | | |
| WRDH | | | | AML | AML | 15 12 34.9 | |
| | comp=N,14nm,0.5s | | | | | | |
| WRDH | Warideh | 1.81 | 17 | eP | Pb | 15 12 00.5 | -0.5 |
| WRDH | | | | eS | Sn | 15 12 23.6 | +0.8 |
| | comp=N,14nm,0.5s | | | | | | |
| ARNB | Al Arnab | 2.09 | 4 | eP | Pb | 15 12 05.4 | -0.4 |
| ARNB | | | | eS | Sb | 15 12 31.8 | -0.4 |
| ARNB | | | | AML | AML | 15 12 38.2 | |
| | comp=E,11nm,0.3s | | | | | | |
| ARNB | | | | AML | AML | 15 12 49.6 | |
| | comp=N,6.2nm,0.6s | | | | | | |
| ARNB | Al Arnab | 2.09 | 4 | eP | Pb | 15 12 05.4 | -0.4 |
| ARNB | | | | eS | Sb | 15 12 31.8 | -0.4 |
| | comp=N,6.0nm,0.6s | | | | | | |

*ISK **01** 15:13:01.8, 39°.93N×29°.11E, h19$^{km}$, MD2.4*
*ISCJB **01** 15:13:02.9±0.5, 40°.02N±0°.04×29°.05E±0°.04, h11$^{km}$±6$^{km}$, Error ellipse: s-maj=7.8km s-min=4.2km az=160.4*
*CSEM **01** 15:13:02.8±0.2, 39°.99N×29°.09E, h10$^{km}$, MD2.4, Error ellipse: s-maj=6.4km s-min=4.4km az=161.0*
*DDA **01** 15:13:03.4, 39°.91N×29°.14E, h7$^{km}$, Md2.7*
**ISC 01 15:13:02.9**±1.0, **39°.96N**±0°.03×**29°.10E**±0°.02, **h18**$^{km}$±4$^{km}$, **n33**, σ**0$^{s}$.60**/43, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ORLT | Orhaneli | 0.18 | 299 | ePG | Pg | 15 13 07.7 | +0.1 |
| ORLT | Orhaneli | 0.18 | 299 | ePg | Pg | 15 13 07.7 | +0.1 |
| IGD | Bursa | 0.31 | 15 | P | Pb | 15 13 10.4 | +0.4 |
| IZI | Iznik | 0.47 | 37 | ePG | Pb | 15 13 12.8 | 0.0 |
| IZI | Iznik | 0.47 | 37 | ePg | Pb | 15 13 12.8 | 0.0 |
| DST | Dursunbey | 0.51 | 226 | ePG | Pg | 15 13 12.1 | -1.1 |
| DST | Dursunbey | 0.51 | 226 | ePg | Pg | 15 13 12.1 | -1.1 |
| DURS | Dursunbey | 0.60 | 233 | i P | Pg | 15 13 14.7 | -0.1 |
| DURS | | | | i S | Sb | 15 13 23.6 | +0.6 |
| DURS | Dursunbey | 0.60 | 233 | P | Pg | 15 13 14.7 | -0.1 |
| DURS | | | | S | Sb | 15 13 23.6 | +0.6 |
| CAVI | Cavuskoy | 0.62 | 67 | ePG | Pg | 15 13 14.5 | -0.7 |
| CAVI | | | | eSG | Sb | 15 13 23.6 | +0.1 |
| CAVI | Cavuskoy | 0.62 | 67 | ePg | Pg | 15 13 14.5 | -0.7 |
| CAVI | | | | eSg | Sb | 15 13 23.6 | +0.1 |
| ARMT | Armutlu | 0.63 | 343 | ePG | Pg | 15 13 14.8 | -0.6 |
| ARMT | Armutlu | 0.63 | 343 | ePg | Pg | 15 13 14.8 | -0.6 |
| KCTX | Karacabey (Bur | 0.64 | 298 | ePG | Pb | 15 13 15.4 | -0.2 |
| KCTX | Karacabey (Bur | 0.64 | 298 | ePg | Pb | 15 13 15.4 | -0.2 |
| HRT | Hereke | 0.96 | 27 | ePG | Pg | 15 13 21.4 | -0.2 |
| HRT | Hereke | 0.96 | 27 | ePg | Pg | 15 13 21.4 | -0.2 |
| BALB | Balikesir | 0.99 | 252 | ePG | Pb | 15 13 21.1 | -0.4 |
| BALB | Balikesir | 0.99 | 252 | ePg | Pb | 15 13 21.1 | -0.4 |
| EDC | Edincik | 1.02 | 293 | ePG | Pb | 15 13 21.8 | -0.2 |
| EDC | Edincik | 1.02 | 293 | ePg | Pb | 15 13 21.8 | -0.2 |
| BORA | Eskisehir | 1.05 | 94 | i P | Pb | 15 13 21.2 | -1.3 |
| BORA | | | | i S | Sg | 15 13 37.8 | +0.8 |
| BORA | Eskisehir | 1.05 | 94 | P | Pb | 15 13 21.2 | -1.3 |
| BORA | | | | S | Sg | 15 13 37.8 | +0.8 |
| ISK | Istanbul-Kandi | 1.10 | 359 | ePN | Pb | 15 13 23.0 | -0.5 |
| ISK | Istanbul-Kandi | 1.10 | 359 | ePn | Pb | 15 13 23.0 | -0.5 |
| GULT | Gulveren | 1.18 | 66 | ePN | Pn | 15 13 24.5 | -0.1 |
| GULT | Gulveren | 1.18 | 66 | ePn | Pn | 15 13 24.5 | -0.1 |
| MRMT | Marmara Adasi | 1.32 | 300 | ePN | Pn | 15 13 26.2 | -0.2 |
| MRMT | Marmara Adasi | 1.32 | 300 | ePn | Pn | 15 13 26.2 | -0.2 |
| ESKT | Eskisehir | 1.42 | 107 | P | Pb | 15 13 29.5 | +0.6 |
| ESKT | | | | S | Sg | 15 13 49.8 | +0.9 |
| SEYT | Eskypehyr | 1.42 | 107 | i P | Pb | 15 13 29.5 | +0.6 |
| SEYT | | | | i S | Sg | 15 13 49.8 | +0.9 |
| MANT | Manisa | 1.53 | 196 | i P | Pg | 15 13 32.2 | -0.1 |
| MANT | | | | i S | Sg | 15 13 52.7 | +0.5 |
| MANT | Manisa | 1.53 | 196 | P | Pg | 15 13 32.2 | -0.1 |
| MANT | | | | S | Sg | 15 13 52.7 | +0.5 |

*CSEM **01** 15:16:00.8±0.3, 38°.27N×38°.09E, h8$^{km}$, MD2.8, Error ellipse: s-maj=8.6km s-min=5.4km az=10.0*
*ISK **01** 15:16:00.2, 38°.26N×38°.05E, h7$^{km}$, MD2.2*
*ISCJB **01** 15:16:01.4±0.6, 38°.35N±0°.05×38°.09E±0°.03, h5$^{km}$±7$^{km}$, Error ellipse: s-maj=8.4km s-min=4.3km az=170.4*
*DDA **01** 15:16:01.1, 38°.27N×38°.12E, h7$^{km}$, Md2.8*
**ISC 01 15:16:01.1**±0.9, **38°.31N**±0°.04×**38°.10E**±0°.03, **h11**$^{km}$±7$^{km}$, **n16**, σ**0$^{s}$.65**/27, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKCD | Akcadag | 0.14 | 264 | i P | Pg | 15 16 04.3 | -0.3 |
| AKCD | | | | i S | Sg | 15 16 07.3 | +0.3 |
| AKCD | Akcadag | 0.14 | 264 | P | Pg | 15 16 04.3 | -0.3 |
| AKCD | | | | S | Sg | 15 16 07.3 | +0.3 |
| MALT | Malatya | 0.26 | 89 | ePG | Pg | 15 16 06.7 | +0.1 |
| MALT | | | | eSG | Sb | 15 16 11.5 | -0.9 |
| MALT | Malatya | 0.26 | 89 | ePg | Pg | 15 16 06.7 | +0.1 |
| MALT | | | | eSg | Sb | 15 16 11.5 | -0.9 |
| DARE | Darende-Malaty | 0.55 | 299 | ePG | Pg | 15 16 11.2 | -0.7 |
| DARE | | | | eSG | Sg | 15 16 19.1 | 0.0 |
| DARE | Darende-Malaty | 0.55 | 299 | ePg | Pg | 15 16 11.2 | -0.7 |
| DARE | | | | eSg | Sg | 15 16 19.2 | 0.0 |
| ELZG | Elazig | 0.72 | 75 | i P | Pg | 15 16 15.0 | -0.2 |
| ELZG | | | | i S | Sb | 15 16 26.1 | +0.4 |
| ELZG | Elazig | 0.72 | 75 | P | Pg | 15 16 15.0 | -0.2 |
| ELZG | | | | S | Sb | 15 16 26.1 | +0.4 |
| KEMA | Kemaliye | 1.01 | 18 | i P | Pg | 15 16 20.2 | -0.4 |
| KEMA | | | | i S | Sn | 15 16 36.3 | +0.9 |
| KEMA | Kemaliye | 1.01 | 18 | P | Pg | 15 16 20.1 | -0.4 |
| KEMA | | | | S | Sn | 15 16 36.3 | +0.9 |
| URFA | Urfa | 1.04 | 146 | ePG | Pg | 15 16 20.2 | -1.0 |
| URFA | Urfa | 1.04 | 146 | ePg | Pg | 15 16 20.2 | -1.0 |
| PTK | Pertek | 1.17 | 60 | ePN | Pb | 15 16 23.4 | 0.0 |
| PTK | Pertek | 1.17 | 60 | ePn | Pb | 15 16 23.4 | 0.0 |
| SARI | SarD1z-Kayseri | 1.32 | 275 | ePN | Pn | 15 16 25.3 | -0.4 |
| AYKD | Aykdinkavak | 1.36 | 229 | P | Pg | 15 16 27.6 | +0.4 |
| AYKD | | | | S | Sg | 15 16 46.5 | +1.6 |

*ISK **01** 15:59:12.9, 37°.00N×35°.72E, h5$^{km}$, MD2.4*
*CSEM **01** 15:59:14.3±0.2, 37°.01N×35°.70E, h2$^{km}$, MD2.4, Error ellipse: s-maj=5.9km s-min=5.6km az=50.0*
*DDA **01** 15:59:15.3, 36°.94N×35°.72E, h7$^{km}$, Md2.7*
**ISC 01 15:59:13.7**±1.1, **37°.02N**±0°.03×**35°.71E**±0°.04, **h2**$^{km}$±9$^{km}$, **n18**, σ**0$^{s}$.76**/22, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CEYT | Ceyhan | 0.03 | 105 | PG | Pg | 15 59 12.9 | -1.4 |
| CEYT | | | | eSG | Sg | 15 59 13.8 | -0.9 |
| CEYT | Ceyhan | 0.03 | 105 | eSg | Sg | 15 59 13.8 | -0.9 |
| YURE | YUREGIR | 0.20 | 199 | i P | Pg | 15 59 18.6 | +1.0 |
| YURE | YUREGIR | 0.20 | 199 | P | Pg | 15 59 18.6 | +1.0 |
| YURE | | | | S | Sg | 15 59 28.4 | +8.2 |
| KOZT | Kozan | 0.47 | 11 | ePG | Pg | 15 59 24.1 | +1.3 |
| KOZT | | | | eSG | Sb | 15 59 31.6 | -0.6 |
| KOZT | Kozan | 0.47 | 11 | ePg | Pg | 15 59 24.1 | +1.3 |
| KOZT | | | | eSg | Sb | 15 59 31.6 | -0.6 |
| KRTS | Karatas | 0.52 | 212 | ePG | Pg | 15 59 24.6 | +0.9 |
| KRTS | Karatas | 0.52 | 212 | ePg | Pg | 15 59 24.6 | +0.9 |
| KARA | Karaisali | 0.58 | 295 | ePG | Pg | 15 59 24.9 | +0.2 |
| KARA | Karaisali | 0.58 | 295 | ePg | Pg | 15 59 25.0 | +0.2 |
| TAHT | Tahtakopru-Hat | 0.74 | 149 | ePG | Pg | 15 59 28.4 | +0.5 |
| TAHT | Tahtakopru-Hat | 0.74 | 149 | ePg | Pg | 15 59 28.4 | +0.5 |
| KMRS | Kahramanmaras | 1.06 | 62 | ePG | Pb | 15 59 34.9 | 0.0 |
| KMRS | Kahramanmaras | 1.06 | 62 | ePg | Pb | 15 59 34.9 | 0.0 |
| KUZU | Kuzuini | 1.12 | 102 | i P | Pb | 15 59 35.8 | 0.0 |
| KUZU | | | | i S | Sn | 15 59 52.4 | -0.1 |
| KUZU | Kuzuini | 1.12 | 102 | P | Pb | 15 59 35.8 | 0.0 |
| KUZU | | | | S | Sn | 15 59 52.4 | -0.1 |
| NIG | Nigde | 1.40 | 322 | ePN | Pb | 15 59 40.7 | 0.0 |
| NIG | Nigde | 1.40 | 322 | ePn | Pb | 15 59 40.7 | 0.0 |

**PRE 01 16:04:11.4**±1.9, **26°.43S**×**27°.47E**, **h2**$^{km}$, **ML2.5**, **South Africa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KLOF | Kloof | 0.14 | 57 | eP | Pg | 16 04 15.3 | +0.8 |
| KLOF | | | | eS | Sg | 16 04 16.7 | +0.1 |
| KLOF | | | | AML | AML | 16 04 17.2 | |
| | comp=Z,4μm,0.3s | | | | | | |
| PRYS | Parys | 0.51 | 192 | eP | Pg | 16 04 21.7 | +0.3 |
| PRYS | | | | eS | Sg | 16 04 27.8 | -0.4 |
| PRYS | | | | AML | AML | 16 04 31.3 | |
| | comp=Z,116nm,0.3s | | | | | | |
| OBSV | Observatory | 0.59 | 66 | eP | Pg | 16 04 22.5 | -0.5 |
| OBSV | | | | eS | Sg | 16 04 30.1 | -0.8 |
| OBSV | | | | AML | AML | 16 04 30.8 | |
| | comp=Z,112nm,0.1s | | | | | | |
| BFSD | Buffelsfontein | 0.75 | 235 | eP | Pb | 16 04 26.9 | -0.6 |
| BFSD | | | | eS | Sg | 16 04 36.2 | +0.1 |
| BFSD | | | | AML | AML | 16 04 37.1 | |
| | comp=Z,116nm,0.2s | | | | | | |
| KSR | Koster | 0.77 | 318 | eP | Pb | 16 04 27.4 | -0.4 |
| KSR | | | | eS | Sg | 16 04 36.3 | -0.4 |
| KSR | | | | AML | AML | 16 04 42.0 | |
| | comp=Z,34nm,0.5s | | | | | | |
| BNON | Benoni | 0.81 | 71 | eP | Pg | 16 04 26.3 | -0.8 |
| BNON | | | | eS | Sg | 16 04 37.1 | -0.6 |
| BNON | | | | AML | AML | 16 04 44.7 | |
| | comp=Z,83nm,0.3s | | | | | | |
| MOAB | Moab Khotsong | 0.82 | 227 | eP | Pg | 16 04 27.7 | +0.3 |
| MOAB | | | | eS | Sg | 16 04 38.3 | +0.1 |
| MOAB | | | | AML | AML | 16 04 45.2 | |
| | comp=Z,92nm,0.3s | | | | | | |
| TLEK | Tau Lekoa | 0.89 | 233 | eP | Pb | 16 04 29.7 | -0.1 |
| TLEK | | | | eS | Sg | 16 04 40.4 | -0.1 |
| TLEK | | | | AML | AML | 16 04 46.4 | |
| | comp=Z,78nm,0.4s | | | | | | |
| SWZ | Schweizer | 2.06 | 248 | eP | Pb | 16 04 48.6 | -1.1 |
| SWZ | | | | eS | Sn | 16 05 13.3 | -0.3 |
| SWZ | | | | AML | AML | 16 05 16.0 | |
| | comp=Z,79nm,0.4s | | | | | | |
| POGA | Pongola | 3.81 | 105 | eP | Pn | 16 05 13.6 | +2.4 |
| POGA | | | | eS | Sn | 16 05 57.9 | +1.3 |
| POGA | | | | AML | AML | 16 06 15.0 | |
| | comp=Z,24nm,0.5s | | | | | | |
| KSD | Kokstad | 4.44 | 158 | eP | Pn | 16 05 21.6 | +1.6 |
| KSD | | | | eS | Sn | 16 06 11.4 | -1.0 |
| KSD | | | | AML | AML | 16 06 35.8 | |
| | comp=Z,5.7nm,0.5s | | | | | | |
| HVD | Gariep Dam | 4.51 | 202 | eP | Pn | 16 05 20.6 | -0.4 |
| HVD | | | | eS | Sn | 16 06 12.8 | -1.4 |
| HVD | | | | AML | AML | 16 06 42.9 | |
| | comp=Z,6.7nm,0.5s | | | | | | |
| UPI | Upington | 5.86 | 249 | eP | Pn | 16 05 39.9 | +0.5 |
| UPI | | | | eS | Sn | 16 06 43.6 | -3.6 |
| UPI | | | | AML | AML | 16 07 21.8 | |
| | comp=Z,6.0nm,0.4s | | | | | | |

*IDC **01** 16:06:11.8±2.2, 27°.98N×138°.50E, h0$^{km}$, mb3.3/2, mb1 3.5/4, mb1mx3.3/33, mbtmp3.3/4, ML3.3/2, Error ellipse: s-maj=110.0km s-min=27.4km az=81.0*
*ISCJB **01** 16:06:35.4±0.6, 30°.24N±0°.06×139°.9E±0°.2, h450$^{km}$, mb2.7/2, Error ellipse: s-maj=21.5km s-min=6.6km az=167.2*
*JMA **01** 16:06:36.7±0.1, 30°.14N×139°.70E, h424$^{km}$, M3.2*

**ISC 01 16:06:36.3±0.9, 30°.29N±0°.09×140°.1E±0°.2, h450km, n12, σ2.s02/14, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CBIJ | Chichi jima | 3.69 | 149 | P | P | 16 07 48.1 | -0.8 |
| JHHJ | Haha-jima-NKT | 4.09 | 152 | P | P | 16 07 51.8 | -0.6 |
| JHHJ | | | | S | S | 16 08 50.9 | -3.3 |
| JIE | Ise | 4.98 | 326 | P | P | 16 08 00.3 | 0.0 |
| JKN2 | Miekihoku | 5.08 | 322 | P | P | 16 08 00.4 | -0.9 |
| JHU | Hanno | 5.59 | 354 | S | S | 16 09 17.1 | -2.8 |
| JRY | Ryogami san | 5.80 | 351 | P | P | 16 08 10.0 | +1.6 |
| JAG | Ashikaga | 6.14 | 355 | P | P | 16 08 13.3 | +1.4 |
| JAG | | | | S | S | 16 09 27.9 | -2.3 |
| JHO | Hitachi | 6.32 | 4 | S | S | 16 09 34.4 | +0.8 |
| MJAR | Matsushiro Arr | 6.43 | 347 | Pn | P | 16 08 16.7 | +1.8 |
| | 0.4nm,0.3s,baz=170,slow=10.0,SNR=5.8 | | | | | | |
| KSRS | Korea Array | 12.35 | 309 | Pn | P | 16 09 17.3 | -1.5 |
| | 0.1nm,0.3s,baz=125,slow=11,SNR=6.4 | | | | | | |
| WRA | Warramunga Arr | 50.24 | 187 | P | P | 16 14 51.8 | +2.0 |
| | 0.2nm,0.4s,baz=6.3,slow=8.4,SNR=9.9 | | | | | | |
| ASAR | Alice Springs | 53.97 | 187 | P | P | 16 15 19.0 | +2.3 |
| | 0.1nm,0.3s,baz=7.3,slow=9.0,SNR=12 | | | | | | |

**WEL 01 16:06:58.6±0.1, 41°.63S×174°.09E, h12km, ML3.6/31, 9C-4D, Error ellipse: s-maj=1.0km s-min=0.9km az=90.0, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMWZ | Cape Campbell | 0.15 | 143 | ⇓PG | Pb | 16 07 03.1 | -0.3 |
| CMWZ | | | | SG | Sg | 16 07 07.0 | +2.3 |
| CMWZ | | | | AML | AML | 16 07 08.9 | |
| BSWZ | Blackbirch Sta | 0.18 | 242 | PG | Pg | 16 07 02.4 | -0.4 |
| BSWZ | | | | SG | Sg | 16 07 05.4 | -0.2 |
| BSWZ | | | | AML | AML | 16 07 05.7 | |
| TUWZ | Tuamarina | 0.23 | 331 | ⇑PG | Pg | 16 07 03.7 | +0.3 |
| TUWZ | | | | SG | Sg | 16 07 07.5 | +0.8 |
| TUWZ | | | | AML | AML | 16 07 07.8 | |
| TCW | Tory Channel | 0.44 | 18 | ⇑PG | Pg | 16 07 07.4 | +0.1 |
| TCW | | | | AML | AML | 16 07 14.9 | |
| TCW | | | | AML | AML | 16 07 15.2 | |
| WEL | Wellington | 0.61 | 56 | ⇑P* | Pb | 16 07 11.1 | -0.2 |
| BHW | Baring Head | 0.62 | 70 | ⇑P* | Pb | 16 07 11.5 | 0.0 |
| BHW | | | | AML | AML | 16 07 24.9 | |
| BHW | | | | AML | AML | 16 07 27.4 | |
| NNZ | Nelson | 0.68 | 307 | ⇓P* | Pg | 16 07 11.1 | -0.7 |
| NNZ | | | | AML | AML | 16 07 23.0 | |
| NNZ | | | | AML | AML | 16 07 23.2 | |
| DUWZ | D'Urville Isla | 0.83 | 351 | ⇑P* | Pg | 16 07 14.2 | -0.7 |
| DUWZ | | | | AML | AML | 16 07 28.6 | |
| DUWZ | | | | AML | AML | 16 07 29.4 | |
| PLWZ | Palliser | 0.87 | 87 | P* | Pb | 16 07 16.0 | +0.1 |
| KHZ | Kahutara | 0.89 | 207 | ⇑P* | Pg | 16 07 15.3 | -0.6 |
| KHZ | | | | SG | Sn | 16 07 29.0 | -0.8 |
| KHZ | | | | AML | AML | 16 07 30.0 | |
| MSWZ | Moikau Station | 0.90 | 77 | P* | Pb | 16 07 16.5 | +0.4 |
| MSWZ | | | | SG | Sn | 16 07 30.8 | +0.8 |
| MSWZ | | | | AML | AML | 16 07 32.0 | |
| CAW | Cannon Point | 0.90 | 55 | P* | Pg | 16 07 15.9 | -0.2 |
| CAW | | | | AML | AML | 16 07 33.5 | |
| CAW | | | | AML | AML | 16 07 33.5 | |
| THZ | Tophouse | 0.90 | 261 | ⇓P* | Pg | 16 07 14.6 | -1.5 |
| THZ | | | | AML | AML | 16 07 28.8 | |
| THZ | | | | AML | AML | 16 07 34.3 | |
| KIW | Kapiti Island | 0.98 | 39 | ⇑P* | Pg | 16 07 16.9 | -0.8 |
| KIW | | | | AML | AML | 16 07 34.5 | |
| KIW | | | | AML | AML | 16 07 34.8 | |
| OGWZ | Otaki Gorge | 1.15 | 45 | ⇑P* | Pb | 16 07 19.8 | -0.6 |
| MTW | Mount Morrison | 1.16 | 67 | P* | Pb | 16 07 20.1 | -0.6 |
| MTW | | | | AML | AML | 16 07 40.3 | |
| MTW | | | | AML | AML | 16 07 40.4 | |
| TRWZ | Traveller | 1.22 | 80 | P* | Pn | 16 07 20.5 | -1.1 |
| TRWZ | | | | AML | AML | 16 07 45.3 | |
| TRWZ | | | | AML | AML | 16 07 45.5 | |
| HOWZ | Holdsworth Sta | 1.30 | 56 | P* | Pn | 16 07 21.6 | -1.1 |
| QRZ | Quartz Range | 1.43 | 304 | PN | Pn | 16 07 24.0 | -0.4 |
| QRZ | | | | AML | AML | 16 07 46.7 | |
| QRZ | | | | AML | AML | 16 07 47.0 | |
| MRZ | Mangatainoka R | 1.48 | 50 | ⇑P* | Pn | 16 07 24.8 | -0.4 |
| MRZ | | | | AML | AML | 16 07 50.5 | |
| MRZ | | | | AML | AML | 16 07 52.9 | |
| TIWZ | Tintock | 1.60 | 58 | PN | Pn | 16 07 25.8 | -1.0 |
| TIWZ | | | | AML | AML | 16 07 55.9 | |
| TIWZ | | | | AML | AML | 16 07 57.3 | |
| DSZ | Denniston Nort | 1.72 | 265 | ⇓PN | Pn | 16 07 28.1 | -0.3 |
| DSZ | | | | AML | AML | 16 07 54.3 | |
| DSZ | | | | AML | AML | 16 07 55.5 | |
| LTZ | Lake Taylor | 1.78 | 229 | PN | Pn | 16 07 28.2 | -1.1 |
| LTZ | | | | AML | AML | 16 08 00.3 | |
| LTZ | | | | AML | AML | 16 08 00.7 | |
| PRWZ | Pori Road | 1.78 | 54 | PN | Pn | 16 07 28.4 | -0.9 |
| WAZ | Wanganui | 1.99 | 20 | PN | Pn | 16 07 33.4 | +1.3 |
| WAZ | | | | AML | AML | 16 08 16.8 | |
| WAZ | | | | AML | AML | 16 08 18.5 | |
| TSZ | Takapari Road | 2.11 | 43 | PN | Pn | 16 07 33.1 | -0.8 |
| TSZ | | | | AML | AML | 16 08 11.0 | |
| KHEZ | Kahui Hut | 2.33 | 359 | PN | Pb | 16 07 39.3 | -1.5 |
| MTVZ | Mangateitei | 2.48 | 26 | AML | AML | 16 08 24.0 | |
| MTVZ | | | | AML | AML | 16 08 26.2 | |
| VRZ | Vera Road | 2.55 | 12 | PN | Pn | 16 07 41.8 | +2.0 |
| VRZ | | | | AML | AML | 16 08 20.7 | |
| VRZ | | | | AML | AML | 16 08 21.3 | |
| TRVZ | Turoa | 2.58 | 26 | AML | AML | 16 08 25.7 | |
| TRVZ | | | | AML | AML | 16 08 27.6 | |
| DRZ | Dome Shelter | 2.60 | 26 | AML | AML | 16 08 29.5 | |
| BHHZ | Black Hill Sta | 2.61 | 36 | PN | Pb | 16 07 45.1 | -0.4 |
| FWVZ | Far West T-bar | 2.62 | 26 | AML | AML | 16 08 24.7 | |
| FWVZ | | | | AML | AML | 16 08 28.5 | |
| WPVZ | Whakapapa | 2.66 | 25 | AML | AML | 16 08 26.0 | |
| WPVZ | | | | AML | AML | 16 08 30.8 | |
| NGZ | Ngauruhoe | 2.71 | 26 | AML | AML | 16 08 31.5 | |
| NGZ | | | | AML | AML | 16 08 34.1 | |
| OTVZ | Oturere | 2.74 | 27 | AML | AML | 16 08 28.2 | |
| OTVZ | | | | AML | AML | 16 08 33.1 | |
| WTVZ | West Tongariro | 2.76 | 25 | AML | AML | 16 07 50.4 | |
| WTVZ | | | | AML | AML | 16 07 50.9 | |
| KRVZ | Karewarewa | 2.79 | 26 | AML | AML | 16 07 50.2 | |
| KRVZ | | | | AML | AML | 16 07 52.1 | |

*THR **01** 16:11:44.9±0.4, 30°.83N×49°.77E, h14km±4km, ML3.5*
*IDC **01** 16:11:45.8±2.7, 31°.27N×49°.76E, h0km, mb3.5/4, mb1 3.5/5, mb1mx3.3/39, mbtmp3.5/5, ML3.4/1, Error ellipse: s-maj=128.2km s-min=24.5km az=149.0*
*ISCJB **01** 16:11:45.5±0.5, 30°.89N±0°.05×49°.73E±0°.05, h10km, mb3.4/4, Error ellipse: s-maj=7.8km s-min=5.6km az=11.1*
*CSEM **01** 16:11:46.1±0.3, 30°.89N×49°.78E, h2km, ML3.5, Error ellipse: s-maj=9.3km s-min=6.6km az=13.0*
*TEH **01** 16:11:49.4, 30°.93N×49°.76E, h26km, ML3.6*
*ISN **01** 16:11:51.2±2.2, 29°.38N×48°.52E, h0km±8km, ML3.6*
**ISC 01 16:11:46.0±0.8, 30°.92N±0°.05×49°.70E±0°.05, h10km, n42, σ1.s48/37, mb3.5/4, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SHGR | Shooshtar-Gavs | 1.41 | 327 | ePg | Pn | 16 12 12.7 | +0.9 |
| SHGR | Shooshtar-Gavs | 1.41 | 327 | eP | Pn | 16 12 12.2 | +0.4 |
| IPIR | Pirpir | 2.03 | 30 | ePn | Pn | 16 12 20.6 | +0.1 |
| IPIR | | | | e | | 16 12 50.5 | |
| | comp=Z,5µm,0.5s | | | | | | |
| IPIR | Pirpir | 2.03 | 30 | ePn | Pn | 16 12 20.6 | +0.1 |
| IKAZ | Kazeroun | 2.17 | 121 | ePn | Pn | 16 12 23.3 | +0.9 |
| IKAZ | | | | e | | 16 13 00.7 | |
| | comp=Z,8µm,0.1s | | | | | | |
| IKAZ | Kazeroun | 2.17 | 121 | ePn | Pn | 16 12 23.3 | +0.9 |
| IRAM | Ramesheh | 2.46 | 68 | ePn | Pn | 16 12 27.1 | +0.8 |
| IRAM | | | | eSn | Sn | 16 12 54.7 | -1.8 |
| IRAM | | | | e | | 16 13 01.6 | |
| | comp=Z,2µm,0.2s | | | | | | |
| IRAM | Ramesheh | 2.46 | 68 | ePn | Pn | 16 12 27.1 | +0.8 |
| AHBU | AHRAM | 2.47 | 146 | ePn | Pn | 16 12 25.2 | -1.1 |
| AHBU | | | | eSg | Sn | 16 12 59.0 | +2.5 |
| IGAR | Gharneh | 2.48 | 53 | ePn | Pn | 16 12 27.8 | +1.1 |
| IGAR | | | | e | | 16 13 05.6 | |
| | comp=Z,2µm,0.2s | | | | | | |
| KHMZ | Khomeyn | 2.82 | 4 | ePn | Pn | 16 12 33.0 | +1.7 |
| IKLH | Kolahrood | 2.87 | 33 | ePn | Pn | 16 12 33.1 | +1.0 |
| IKLH | | | | e | | 16 13 21.2 | |
| | comp=Z,2µm,0.3s | | | | | | |
| IKLH | Kolahrood | 2.87 | 33 | ePn | Pn | 16 12 33.1 | +1.0 |
| IZEF | Zefreh | 2.98 | 48 | ePn | Pn | 16 12 34.4 | +0.9 |
| IZEF | | | | e | | 16 13 26.7 | |
| | comp=Z,922nm,0.4s | | | | | | |
| IZEF | Zefreh | 2.98 | 48 | ePn | Pn | 16 12 34.4 | +0.9 |
| NSR | Nassriya | 3.06 | 273 | ePG | x | 16 12 46.1 | |
| NSR | | | | eSg | x | 16 13 28.1 | |
| NSR | Nassriya | 3.06 | 273 | ePg | Pg | 16 12 46.1 | +1.5 |
| | SNR=90 | | | | | | |
| IPAR | Pars | 3.08 | 110 | ePn | Pn | 16 12 36.2 | +1.2 |
| IPAR | | | | e | | 16 13 29.1 | |
| | comp=Z,1µm,0.4s | | | | | | |
| IPAR | Pars | 3.08 | 110 | ePn | Pn | 16 12 36.2 | +1.2 |
| QAM | Ghamsar | 3.19 | 27 | ePn | Pn | 16 12 38.0 | +1.6 |
| QAM | | | | e | | 16 13 28.8 | |
| | comp=Z,2µm,0.2s | | | | | | |
| NASN | Na'in | 3.24 | 54 | ePn | Pn | 16 12 37.6 | +0.4 |
| NASN | Na'in | 3.24 | 54 | ePn | Pn | 16 12 37.6 | +0.4 |
| ISAD | Sadrabad | 3.54 | 73 | ePn | Pn | 16 12 42.6 | +1.3 |
| ISAD | | | | e | | 16 13 25.4 | |
| | comp=Z,3µm,0.4s | | | | | | |
| ISAD | Sadrabad | 3.54 | 73 | ePn | Pn | 16 12 42.6 | +1.3 |
| IBDR | Badra | 3.88 | 305 | eSN | x | 16 13 46.8 | |
| GHIR | Ghir-Karzin | 3.88 | 132 | ePn | Pn | 16 12 45.1 | -0.7 |
| GHIR | | | | AML | AML | 16 14 09.8 | |
| | comp=N,57nm,0.5s | | | | | | |
| GHIR | Ghir-Karzin | 3.88 | 132 | eP | Pn | 16 12 45.1 | -0.7 |
| ICHK | Chekchek | 4.23 | 71 | ePn | Pn | 16 12 50.7 | +0.1 |
| ICHK | | | | e | | 16 13 41.5 | |
| | comp=Z,1µm,0.3s | | | | | | |
| ICHK | Chekchek | 4.23 | 71 | ePn | Pn | 16 12 50.7 | +0.1 |
| IMEH | Mehriz | 4.23 | 82 | ePn | Pn | 16 12 51.1 | +0.3 |
| IMEH | | | | e | | 16 13 41.5 | |
| | comp=Z,502nm,0.3s | | | | | | |
| IMEH | Mehriz | 4.23 | 82 | ePn | Pn | 16 12 51.1 | +0.3 |
| IBAF | Bafgh | 5.07 | 81 | ePn | Pn | 16 13 01.8 | -0.3 |
| IBAF | | | | e | | 16 14 02.7 | |
| | comp=Z,153nm,0.2s | | | | | | |
| IBAF | Bafgh | 5.07 | 81 | ePn | Pn | 16 13 01.8 | -0.3 |
| BHD | Baghdad | 5.09 | 299 | epN | x | 16 13 12.6 | |
| BHD | | | | eSN | x | 16 14 09.6 | |
| IKRK | Kirkuk | 6.34 | 316 | ePN | x | 16 13 36.4 | |
| IKRK | | | | eSN | x | 16 14 49.7 | |
| RTB | Rutbah | 8.26 | 287 | ePN | x | 16 13 49.5 | |
| RTB | | | | eSN | x | 16 15 13.7 | |
| RTB | Rutbah | 8.26 | 287 | ePn | Pn | 16 13 49.5 | +3.7 |
| | SNR=39 | | | | | | |
| RTB | | | | eSn | Sn | 16 15 13.7 | -5.5 |
| | SNR=39 | | | | | | |
| GEYT | Alibeck | 9.85 | 43 | Pn | Pn | 16 14 07.0 | -0.7 |
| | comp=Z,0.3nm,0.3s,baz=232,slow=11,SNR=5.7 | | | | | | |
| BVAR | Borovoye Array | 26.73 | 28 | P | P | 16 17 23.4 | -2.0 |
| | comp=Z,0.4nm,0.5s,baz=220,slow=8.7,SNR=2.8 | | | | | | |
| MKAR | Makanchi Array | 29.66 | 48 | P | P | 16 17 50.1 | -1.6 |
| | comp=Z,0.3nm,0.4s,baz=236,slow=7.9,SNR=3.6 | | | | | | |
| SONM | Songino Array | 45.91 | 52 | P | P | 16 20 08.2 | -0.6 |
| | comp=Z,0.4nm,0.5s,baz=262,slow=7.1,SNR=4.7 | | | | | | |
| TORD | Torodi Ar. Bea | 47.50 | 259 | P | P | 16 20 23.8 | +2.3 |
| | comp=Z,0.2nm,0.5s,baz=44,slow=8.5,SNR=2.6 | | | | | | |

*ISCJB **01** 16:16:02.6±0.9, 43°.29N±0°.06×45°.72E±0°.03, h107km±7km, Error ellipse: s-maj=9.6km s-min=3.5km az=15.0*
*MOS **01** 16:16:03.8±0.7, 43°.24N×45°.64E, h85km, mb3.9/1, Error ellipse: s-maj=13.1km s-min=9.2km az=23.1*
*CSEM **01** 16:16:03.1, 43°.24N×45°.64E, h85km, mb3.9, After OBN*
**ISC 01 16:16:03.7±1.8, 43°.29N±0°.06×45°.71E±0°.03, h100km±11km, n48, σ1.s05/94, 3C-8D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GROC | Groznyy | 0.10 | 144 | ⇓iP | Pn | 16 16 17.4 | -0.3 |
| GROC | | | | i S | Sn | 16 16 29.7 | +1.6 |
| GROC | Groznyy | 0.10 | 144 | i P | Pn | 16 16 17.4 | -0.3 |
| GROC | | | | i S | Sn | 16 16 29.7 | +1.6 |
| KMGR | Komgaron | 0.66 | 250 | ⇓iP | Pn | 16 16 20.3 | -0.6 |
| KMGR | | | | i S | Sn | 16 16 34.5 | +0.8 |
| KMGR | Komgaron | 0.66 | 250 | i P | Pn | 16 16 20.3 | -0.6 |
| KMGR | | | | i S | Sn | 16 16 34.5 | +0.8 |
| DLMR | Dylym | 0.71 | 108 | eP | Pn | 16 16 21.0 | -0.2 |
| DLMR | | | | i S | Sn | 16 16 33.0 | -1.3 |
| DLMR | Dylym | 0.71 | 108 | eP | Pn | 16 16 21.0 | -0.2 |
| DLMR | | | | i S | Sn | 16 16 33.0 | -1.3 |
| VLKR | Vladikavkaz | 0.79 | 253 | eP | Pn | 16 16 21.5 | -0.6 |
| VLKR | | | | i S | Sn | 16 16 36.3 | +0.5 |
| VLKR | Vladikavkaz | 0.79 | 253 | eP | Pn | 16 16 21.5 | -0.6 |
| VLKR | | | | i S | Sn | 16 16 36.3 | +0.5 |
| TRKR | Terskaya | 0.84 | 302 | ⇓iP | Pn | 16 16 22.2 | -0.2 |
| TRKR | | | | i S | Sn | 16 16 37.9 | +1.5 |
| TRKR | Terskaya | 0.84 | 302 | i P | Pn | 16 16 22.2 | -0.2 |
| TRKR | | | | i S | Sn | 16 16 37.9 | +1.5 |
| BTKR | Batakoyurt | 0.86 | 276 | ⇓iP | Pn | 16 16 22.8 | +0.1 |
| BTKR | | | | eS | Sn | 16 16 38.2 | +1.3 |
| BTKR | Batakoyurt | 0.86 | 276 | i P | Pn | 16 16 22.8 | +0.1 |
| BTKR | | | | eS | Sn | 16 16 38.2 | +1.3 |
| DBC | Dubki | 0.86 | 108 | ⇑iP | Pn | 16 16 21.7 | -1.1 |
| DBC | | | | i S | Sn | 16 16 36.2 | -0.9 |
| DBC | Dubki | 0.86 | 108 | i P | Pn | 16 16 21.7 | -1.1 |
| DBC | | | | i S | Sn | 16 16 36.2 | -0.9 |
| UNCR | Uncukul | 0.98 | 125 | eP | Pn | 16 16 23.0 | -1.0 |
| UNCR | | | | i S | Sn | 16 16 37.0 | -2.2 |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,34nm,0.2s | | | | | | |
| UNCR | Uncukul | 0.98 | 125 | eP | Pn | 16 16 23.0 | -1.0 |
| | comp=Z,34nm,0.2s | | | | | | |
| UNCR | | | | i S | Sn | 16 16 37.0 | -2.2 |
| KRNR | Karanay | 0.99 | 117 | ⇑iP | Pn | 16 16 24.0 | -0.2 |
| KRNR | | | | i S | Sn | 16 16 39.0 | -0.5 |
| KRNR | | | | pmax | pmax | | |
| | comp=Z,52nm,0.1s | | | | | | |
| KRNR | Karanay | 0.99 | 117 | i P | Pn | 16 16 24.0 | -0.2 |
| | comp=Z,52nm,0.1s | | | | | | |
| KRNR | | | | i S | Sn | 16 16 39.0 | -0.5 |
| XNZR | Khunzakh | 1.04 | 135 | eP | Pn | 16 16 24.8 | 0.0 |
| XNZR | | | | eS | Sn | 16 16 41.0 | +0.4 |
| XNZR | Khunzakh | 1.04 | 135 | eP | Pn | 16 16 24.8 | 0.0 |
| XNZR | | | | eS | Sn | 16 16 41.0 | +0.4 |
| BUJR | Buynaksk | 1.12 | 114 | P | Pn | 16 16 25.2 | -0.3 |
| BUJR | | | | eS | Sn | 16 16 42.8 | +0.8 |
| BUJR | Buynaksk | 1.12 | 114 | P | Pn | 16 16 25.2 | -0.3 |
| BUJR | | | | eS | Sn | 16 16 42.8 | +0.8 |
| LACR | Lac | 1.13 | 247 | ⇑iP | Pn | 16 16 24.4 | -1.4 |
| LACR | | | | i S | Sn | 16 16 41.0 | -1.4 |
| LACR | Lac | 1.13 | 247 | i P | Pn | 16 16 24.4 | -1.4 |
| LACR | | | | i S | Sn | 16 16 41.0 | -1.4 |
| PRTR | Priterechnaya | 1.14 | 295 | ⇓iP | Pn | 16 16 25.5 | -0.2 |
| PRTR | | | | i S | Sn | 16 16 43.5 | +1.3 |
| PRTR | Priterechnaya | 1.14 | 295 | i P | Pn | 16 16 25.5 | -0.2 |
| PRTR | | | | i S | Sn | 16 16 43.5 | +1.3 |
| ARKR | Arakani | 1.16 | 126 | eP | Pn | 16 16 26.0 | 0.0 |
| ARKR | | | | eS | Sn | 16 16 43.0 | +0.1 |
| ARKR | Arakani | 1.16 | 126 | eP | Pn | 16 16 26.0 | 0.0 |
| ARKR | | | | eS | Sn | 16 16 43.0 | +0.1 |
| KORR | Kora | 1.22 | 261 | eP | Pn | 16 16 26.2 | -0.5 |
| KORR | | | | eS | Sn | 16 16 44.4 | +0.4 |
| KORR | Kora | 1.22 | 261 | eP | Pn | 16 16 26.2 | -0.5 |
| KORR | | | | eS | Sn | 16 16 44.4 | +0.4 |
| GNBR | Gunib | 1.29 | 134 | ⇓iP | Pn | 16 16 27.6 | +0.1 |
| GNBR | | | | i S | Sn | 16 16 45.7 | +0.3 |
| GNBR | Gunib | 1.29 | 134 | i P | Pn | 16 16 27.6 | +0.1 |
| GNBR | | | | i S | Sn | 16 16 45.7 | +0.3 |
| LSNR | Lesken | 1.38 | 270 | ⇓iP | Pn | 16 16 28.1 | -0.4 |
| LSNR | | | | i S | Sn | 16 16 47.6 | +0.3 |
| LSNR | Lesken | 1.38 | 270 | i P | Pn | 16 16 28.1 | -0.4 |
| LSNR | | | | i S | Sn | 16 16 47.6 | +0.3 |
| DUS | Dusheti | 1.41 | 212 | P | Sn | 16 16 50.9 | +2.9 |
| ZEI | Tsey | 1.42 | 250 | eP | Pn | 16 16 27.3 | -1.9 |
| ZEI | | | | i S | Sn | 16 16 46.4 | -2.0 |
| ZEI | Tsey | 1.42 | 250 | eP | Pn | 16 16 27.3 | -1.9 |
| ZEI | | | | i S | Sn | 16 16 46.4 | -2.0 |
| KMKR | Kumukh | 1.54 | 138 | P | Pn | 16 16 32.5 | +1.8 |
| KMKR | | | | eS | Sn | 16 16 52.0 | +0.8 |
| KMKR | Kumukh | 1.54 | 138 | P | Pn | 16 16 32.5 | +1.8 |
| KMKR | | | | eS | Sn | 16 16 52.0 | +0.8 |
| DIGR | Digorskoe uzhe | 1.61 | 257 | ⇓iP | Pn | 16 16 30.0 | -1.5 |
| DIGR | | | | i S | Sn | 16 16 50.8 | -1.8 |
| DIGR | Digorskoe uzhe | 1.61 | 257 | i P | Pn | 16 16 30.0 | -1.5 |
| DIGR | | | | i S | Sn | 16 16 50.8 | -1.8 |
| TBLG | Delisi | 1.71 | 205 | P | Sn | 16 16 54.3 | -0.4 |
| ONI | Oni | 1.80 | 248 | P | Pn | 16 16 34.0 | +0.2 |
| ONI | | | | S | Sn | 16 16 57.8 | +1.1 |
| ONI | Oni | 1.80 | 248 | P | Pn | 16 16 34.0 | +0.2 |
| ONI | | | | S | Sn | 16 16 57.7 | +1.1 |
| ONI | Oni | 1.80 | 248 | P | Pn | 16 16 34.0 | +0.2 |
| ONI | | | | S | Sn | 16 16 57.7 | +1.1 |
| DGRG | David-gareji | 1.85 | 188 | P | Pn | 16 16 34.3 | -0.2 |
| DGRG | | | | S | Sn | 16 16 58.9 | +1.1 |
| DGRG | David-gareji | 1.85 | 188 | P | Pn | 16 16 34.3 | -0.2 |
| DGRG | | | | S | Sn | 16 16 58.9 | +1.1 |
| DGRG | David-gareji | 1.85 | 188 | P | Pn | 16 16 34.3 | -0.2 |
| DGRG | | | | S | Sn | 16 16 58.9 | +1.1 |

*ISCJB **01** 16:17:58.7±0.3, 24°.28N±0°.02×122°.12E±0°.02, h21km±4km, Error ellipse: s-maj=3.7km s-min=2.3km az=151.5*
*TAP **01** 16:17:58.9, 24°.32N×122°.04E, h27km, ML3.4, C*
*JMA **01** 16:17:58.0±0.1, 24°.22N×122°.04E, h50km±2km, M2.6*
**ISC 01 16:17:58.2±1.1, 24°.32N±0°.02×122°.09E±0°.02, h18km±5km, n52, σ0.s81/96, 5D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ENA | Nanau | 0.33 | 289 | ⇓P | Pb | 16 18 06.3 | +0.6 |
| | baz=297 | | | | | | |
| ENA | | | | S | Sb | 16 18 11.3 | +0.6 |
| | baz=297 | | | | | | |
| TWC | Suao | 0.36 | 323 | i P | Pb | 16 18 06.7 | +0.5 |
| | baz=335 | | | | | | |
| TWC | | | | eS | Sb | 16 18 11.5 | -0.1 |
| | baz=335 | | | | | | |
| TWD | Chiawan | 0.51 | 242 | P | Pb | 16 18 09.2 | +0.6 |
| | baz=237 | | | | | | |
| TWD | | | | eS | Sb | 16 18 15.6 | 0.0 |
| | baz=237 | | | | | | |
| ILA | Ilan | 0.54 | 325 | eP | Pn | 16 18 09.8 | -1.3 |
| | baz=332 | | | | | | |
| ILA | | | | eS | Sn | 16 18 18.4 | -1.3 |
| | baz=332 | | | | | | |
| EGS | | 0.54 | 345 | P | Pn | 16 18 10.2 | -0.9 |
| | baz=352 | | | | | | |
| EGS | | | | S | Sn | 16 18 17.9 | -1.8 |
| | baz=352 | | | | | | |
| TWE | Neicheng | 0.55 | 317 | P | Pn | 16 18 10.0 | -1.3 |
| | baz=326 | | | | | | |
| TWE | | | | eS | Sn | 16 18 18.0 | -2.0 |
| | baz=326 | | | | | | |
| HWA | Hwalien | 0.56 | 232 | eP | Pb | 16 18 10.0 | +0.6 |
| | baz=226 | | | | | | |
| HWA | | | | eS | Sb | 16 18 17.7 | +0.7 |
| | baz=226 | | | | | | |
| ENTT | Nioudou | 0.57 | 304 | ⇓iP | Pb | 16 18 10.3 | +0.5 |
| | baz=308 | | | | | | |
| ENTT | | | | eS | Sn | 16 18 19.8 | -0.7 |
| | baz=308 | | | | | | |
| NNS | Nan Shan | 0.66 | 281 | ⇓iP | Pn | 16 18 11.9 | -0.9 |
| | baz=286 | | | | | | |
| NNS | | | | eS | Sg | 16 18 21.1 | +0.9 |
| | baz=286 | | | | | | |
| TWB1 | Santiao Chiao | 0.69 | 353 | P | Pn | 16 18 12.9 | -0.3 |
| | baz=350 | | | | | | |
| TWB1 | | | | S | Sn | 16 18 23.1 | -0.3 |
| | baz=350 | | | | | | |
| NSK | Sanguang | 0.75 | 298 | ⇓iP | Pn | 16 18 13.3 | -0.8 |
| | baz=307 | | | | | | |
| NSK | | | | S | Sn | 16 18 23.6 | -1.5 |
| | baz=307 | | | | | | |
| WHF | Hehuan Shan | 0.77 | 257 | i P | Pg | 16 18 13.6 | +0.2 |
| | baz=255 | | | | | | |
| WHF | | | | eS | Sg | 16 18 24.2 | +0.5 |
| | baz=255 | | | | | | |
| ESL | Shilin | 0.78 | 230 | eP | Pb | 16 18 12.8 | -0.5 |
| | baz=225 | | | | | | |
| ESL | | | | eS | Sb | 16 18 23.7 | +0.2 |
| | baz=225 | | | | | | |
| JYNG | Yonagunijimaku | 0.79 | 80 | P | Pb | 16 18 13.6 | +0.1 |
| JYNG | | | | S | Sn | 16 18 25.7 | -0.2 |
| NWF | Wu-fen Shan | 0.80 | 340 | P | Pn | 16 18 14.8 | +0.1 |
| | baz=337 | | | | | | |
| NWF | | | | eS | Sn | 16 18 25.8 | -0.4 |
| | baz=337 | | | | | | |
| TWA | Mucha | 0.80 | 325 | i P | Pn | 16 18 15.0 | +0.3 |
| | baz=321 | | | | | | |
| TWA | | | | eS | Sn | 16 18 25.7 | -0.5 |
| | baz=321 | | | | | | |
| TWT | Tachien | 0.83 | 266 | eP | Pn | 16 18 15.5 | +0.2 |
| | baz=265 | | | | | | |
| TWT | | | | eS | Sn | 16 18 26.7 | -0.5 |
| | baz=265 | | | | | | |
| YOJ | Yonaguni jima | 0.85 | 80 | P | Pg | 16 18 15.2 | +0.3 |
| YOJ | | | | S | Sg | 16 18 26.9 | +0.7 |
| TAP1 | Taipei | 0.88 | 325 | eP | Pn | 16 18 16.1 | +0.3 |
| | baz=328 | | | | | | |
| TAP1 | | | | eS | Sn | 16 18 28.8 | +0.7 |
| | baz=328 | | | | | | |
| TWS1 | Kuangyinshan | 0.99 | 322 | eP | Pg | 16 18 17.7 | +0.2 |
| | baz=339 | | | | | | |
| TWS1 | | | | eS | Sn | 16 18 32.2 | +1.4 |
| | baz=339 | | | | | | |
| WDT | Danda | 1.04 | 238 | eP | Pb | 16 18 17.2 | -0.6 |
| | baz=233 | | | | | | |
| WDT | | | | eS | Sb | 16 18 30.8 | -0.4 |
| | baz=233 | | | | | | |
| NSTT | Nanjuang | 1.04 | 288 | ⇓iP | Pg | 16 18 18.4 | 0.0 |
| | baz=289 | | | | | | |
| NSTT | | | | S | Sg | 16 18 32.2 | +0.2 |
| | baz=289 | | | | | | |
| NCU | National Centr | 1.04 | 309 | eP | Pg | 16 18 18.1 | -0.4 |
| | baz=312 | | | | | | |
| NCU | | | | eS | Sg | 16 18 33.2 | +0.9 |
| | baz=312 | | | | | | |
| EHY | Hungye | 1.07 | 221 | eP | Pb | 16 18 16.5 | -1.7 |
| | baz=217 | | | | | | |
| SMLT | Sun Moon Lake | 1.17 | 248 | eP | Pb | 16 18 20.0 | 0.0 |
| | baz=233 | | | | | | |
| SMLT | | | | eS | Sg | 16 18 35.9 | -0.3 |
| | baz=233 | | | | | | |
| TYC | Yuchr | 1.20 | 250 | eP | Pg | 16 18 21.5 | +0.1 |
| | baz=235 | | | | | | |
| TYC | | | | eS | Sn | 16 18 36.1 | +0.2 |
| | baz=235 | | | | | | |
| TWQ1 | Liyutan | 1.20 | 272 | eP | Pg | 16 18 21.1 | -0.3 |
| | baz=271 | | | | | | |
| TWQ1 | | | | eS | Sg | 16 18 36.8 | -0.3 |
| | baz=271 | | | | | | |
| TWF1 | Yuli | 1.20 | 217 | eP | Pn | 16 18 18.4 | -1.8 |
| | baz=230 | | | | | | |
| TWF1 | | | | eS | Sb | 16 18 35.6 | -0.1 |
| | baz=230 | | | | | | |
| NSY | Sanyi | 1.21 | 275 | eP | Pg | 16 18 21.8 | +0.1 |
| | baz=275 | | | | | | |
| NSY | | | | eS | Sg | 16 18 38.1 | +0.5 |
| | baz=275 | | | | | | |
| TCU | Taichung | 1.30 | 263 | eP | Pb | 16 18 22.4 | +0.2 |
| | baz=261 | | | | | | |
| YUS | Yu-Shan | 1.33 | 232 | eP | Pn | 16 18 21.6 | -0.7 |
| | baz=226 | | | | | | |
| YUS | | | | eS | Sb | 16 18 40.2 | +0.4 |
| | baz=226 | | | | | | |
| WNT | Mingjian | 1.35 | 251 | eP | Pg | 16 18 23.7 | -0.7 |
| | baz=248 | | | | | | |
| WNT | | | | eS | Sb | 16 18 40.5 | +0.4 |
| | baz=248 | | | | | | |
| ALS | Alishan | 1.42 | 236 | eP | Pn | 16 18 23.9 | +0.5 |
| | baz=232 | | | | | | |
| CHN5 | Tsauling | 1.48 | 241 | eP | Pn | 16 18 24.4 | +0.4 |
| | baz=221 | | | | | | |
| CHN5 | | | | eS | Sg | 16 18 45.0 | -0.9 |
| | baz=221 | | | | | | |
| ELDTW | Lidau | 1.49 | 221 | eP | Pn | 16 18 23.2 | -1.0 |
| | baz=203 | | | | | | |
| ELDTW | | | | eS | Sn | 16 18 42.3 | -1.1 |
| | baz=203 | | | | | | |
| IRIF | Iriomote-Funau | 1.50 | 89 | P | Pn | 16 18 23.9 | -0.3 |
| IRIF | | | | S | Sn | 16 18 43.3 | -0.1 |
| WGK | Gukeng | 1.53 | 246 | eP | Pn | 16 18 24.7 | 0.0 |
| | baz=242 | | | | | | |
| WGK | | | | eS | Sb | 16 18 46.1 | +1.0 |
| | baz=242 | | | | | | |
| STYT | Tauyuan | 1.68 | 227 | eP | Pn | 16 18 26.9 | +0.1 |
| | baz=207 | | | | | | |
| STYT | | | | eS | Sn | 16 18 48.1 | +0.3 |
| | baz=207 | | | | | | |
| WTP | Ta-pu | 1.72 | 232 | eP | Pn | 16 18 28.0 | +0.7 |
| | baz=225 | | | | | | |
| WTP | | | | eS | Sn | 16 18 48.9 | 0.0 |
| | baz=225 | | | | | | |
| CHY | Chiayi | 1.73 | 242 | eP | Pb | 16 18 28.4 | -1.0 |
| | baz=224 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CHY | | | | eS | Sb | 16 18 50.3 | -0.5 |
| | baz=224 | | | | | | |
| JKRS | Kuro-shima | 1.76 | 92 | P | Pn | 16 18 28.1 | +0.3 |
| JKRS | | | | S | Sn | 16 18 50.3 | +0.6 |
| TWG | Pinlang | 1.76 | 212 | eP | Pn | 16 18 25.4 | -2.4 |
| | baz=207 | | | | | | |
| CHN1 | Nanshi | 1.82 | 232 | eP | Pb | 16 18 30.8 | -0.2 |
| | baz=225 | | | | | | |
| CHN1 | | | | eS | Sn | 16 18 52.4 | +1.1 |
| | baz=225 | | | | | | |
| WSF | Szhu | 1.83 | 249 | eP | Pn | 16 18 29.8 | +0.9 |
| | baz=245 | | | | | | |
| SGST | Jiashian | 1.85 | 229 | eP | Pn | 16 18 30.0 | +0.9 |
| | baz=221 | | | | | | |
| SGST | | | | eS | Sn | 16 18 52.6 | +0.6 |
| | baz=221 | | | | | | |
| JIJ | Ishigaki jima | 1.88 | 88 | P | Pn | 16 18 28.9 | -0.5 |
| JIJ | | | | S | Sn | 16 18 51.6 | -1.1 |
| ECL | Taimali | 2.00 | 211 | eP | Pn | 16 18 30.3 | -0.9 |
| | baz=206 | | | | | | |
| JISG | Ishigakijimahi | 2.04 | 82 | P | Pn | 16 18 31.8 | +0.1 |
| JISG | | | | S | Sn | 16 18 56.5 | -0.3 |
| SSD | Sandimen | 2.06 | 221 | eP | Pn | 16 18 33.0 | +1.0 |
| | baz=197 | | | | | | |
| SSD | | | | eS | Sn | 16 18 58.1 | +1.0 |
| | baz=197 | | | | | | |
| EAST | Anshuo | 2.24 | 211 | eP | Pn | 16 18 35.4 | +1.0 |
| | baz=205 | | | | | | |
| SCZT | Fangliau | 2.36 | 215 | eP | Pn | 16 18 37.0 | +0.9 |
| | baz=191 | | | | | | |
| SCZT | | | | eS | Sn | 16 19 06.3 | +1.7 |
| | baz=191 | | | | | | |
| JTJ | Tarama | 2.41 | 82 | S | Sn | 16 19 05.0 | -0.7 |

*IDC **01** 16:19:02.7±2.9, 55°.55N×110°.69E, h0km, mb3.7/4, mb1 3.8/9, mb1mx3.5/41, mbtmp3.8/9, ML3.3/5, Error ellipse: s-maj=50.5km s-min=13.9km az=113.0*
*MOS **01** 16:19:03.4±1.0, 55°.50N×110°.49E, h5km, mb4.0/1, Error ellipse: s-maj=10.6km s-min=6.0km az=67.7*
*BYKL **01** 16:19:04.2±0.2, 55°.53N×110°.41E*
**ISC 01 16:19:03.5**±1.1**, 55°.47N**±0°.02×**110°.54E**±0°.02**, h3**km±8km**, n68, σ1ˢ.89**/104**, mb3.7**/4**, 7C-12D, Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KMO | Kumora | 0.56 | 42 | ePG | Pg | 16 19 14.4 | +0.2 |
| KMO | | | | e | | 16 19 22.0 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,444nm,0.4s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| KMO | Kumora | 0.56 | 42 | ⇓iPg | Pg | 16 19 14.8 | +0.6 |
| KMO | | | | eSg | Sg | 16 19 22.0 | +0.5 |
| KMO | | | | Pmax | | | |
| | comp=N,469nm,0.4s | | | | | | |
| KMO | | | | Smax | | | |
| | comp=N,3μm,0.8s | | | | | | |
| NIZ | Nizh Angarsk | 0.64 | 299 | ePG | Pg | 16 19 15.7 | -0.1 |
| NIZ | | | | e | | 16 19 23.8 | |
| NIZ | | | | pmax | pmax | | |
| | comp=Z,102nm,0.2s | | | | | | |
| NIZ | | | | smax | smax | | |
| | comp=N,3μm,0.3s | | | | | | |
| NIZ | Nizh Angarsk | 0.64 | 299 | ePg | Pg | 16 19 15.3 | -0.5 |
| NIZ | | | | eSg | Sg | 16 19 22.8 | -1.3 |
| NIZ | | | | Pmax | | | |
| | comp=N,216nm,0.4s | | | | | | |
| NIZ | | | | Smax | | | |
| | comp=N,3μm,0.3s | | | | | | |
| YLYR | Ulyunkhan | 0.69 | 149 | ePG | Pg | 16 19 17.6 | +0.8 |
| YLYR | | | | e | | 16 19 28.5 | |
| YLYR | | | | pmax | pmax | | |
| | comp=Z,247nm,0.3s | | | | | | |
| YLYR | | | | smax | smax | | |
| | comp=E,811nm,0.5s | | | | | | |
| YLYR | Ulyunkhan | 0.69 | 149 | ePg | Pg | 16 19 17.6 | +0.8 |
| YLYR | | | | ⇓i | | 16 19 18.3 | |
| | comp=E,253nm,0.7s | | | | | | |
| YLYR | | | | ⇑i | | 16 19 18.3 | |
| | comp=E,130nm,0.7s | | | | | | |
| YLYR | | | | ⇑i | | 16 19 18.3 | |
| | comp=E,291nm,0.7s | | | | | | |
| YLYR | | | | eSg | Sg | 16 19 28.0 | +2.2 |
| YLYR | | | | max | | | |
| | comp=E,295nm,0.6s | | | | | | |
| YLYR | | | | Smax | | | |
| | comp=E,807nm,0.5s | | | | | | |
| YOA | Uoyan | 0.94 | 45 | ePG | Pb | 16 19 22.6 | +0.1 |
| YOA | | | | e | | 16 19 35.3 | |
| YOA | | | | pmax | pmax | | |
| | comp=Z,537nm,0.3s | | | | | | |
| YOA | | | | smax | smax | | |
| | comp=E,5μm,0.3s | | | | | | |
| YOA | Uoyan | 0.94 | 45 | ePg | Pg | 16 19 21.9 | +0.4 |
| YOA | | | | eSg | Sb | 16 19 34.9 | -0.5 |
| YOA | | | | Pmax | | | |
| | comp=E,580nm,0.4s | | | | | | |
| YOA | | | | Smax | | | |
| | comp=E,4μm,0.3s | | | | | | |
| UKT | Uakit | 1.76 | 88 | ePN | Pb | 16 19 36.8 | +0.4 |
| UKT | | | | e | | 16 20 00.1 | |
| UKT | | | | pmax | pmax | | |
| | comp=Z,250nm,0.3s | | | | | | |
| UKT | | | | smax | smax | | |
| | comp=N,1μm,0.3s | | | | | | |
| UKT | Uakit | 1.76 | 88 | ⇓iPg | Pb | 16 19 36.5 | +0.1 |
| UKT | | | | e | | 16 19 39.3 | |
| UKT | | | | i Sg | Sg | 16 20 01.0 | +1.1 |
| UKT | | | | e | | 16 20 04.2 | |
| UKT | | | | Pmax | | | |
| | comp=N,431nm,0.9s | | | | | | |
| UKT | | | | max | | | |
| | comp=N,1μm,0.3s | | | | | | |
| SVKR | Severomuysk | 1.82 | 68 | ePN | Pb | 16 19 37.8 | +0.3 |
| SVKR | | | | e | | 16 20 03.0 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,415nm,0.3s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,5μm,0.6s | | | | | | |
| SVKR | Severomuysk | 1.82 | 68 | ePg | Pb | 16 19 37.9 | +0.4 |
| SVKR | | | | i Sg | Sg | 16 20 03.2 | +1.1 |
| SVKR | | | | Pmax | | | |
| | comp=N,304nm,0.2s | | | | | | |
| SVKR | | | | Smax | | | |
| | comp=N,4μm,0.5s | | | | | | |
| SYVR | Suvo | 1.84 | 190 | ePN | Pb | 16 19 37.7 | -0.1 |
| SYVR | | | | e | | 16 20 03.9 | |
| SYVR | | | | pmax | pmax | | |
| | comp=Z,125nm,0.9s | | | | | | |
| SYVR | | | | smax | smax | | |
| | comp=E,1μm,1.0s | | | | | | |
| SYVR | Suvo | 1.84 | 190 | ePg | Pb | 16 19 37.8 | -0.1 |
| SYVR | | | | e | | 16 19 45.2 | |
| SYVR | | | | eSg | Sg | 16 20 04.0 | +1.4 |
| SYVR | | | | max | | | |
| | comp=E,112nm,0.8s | | | | | | |
| SYVR | | | | Smax | | | |
| | comp=E,1μm,1.0s | | | | | | |
| OGRR | Ongureny | 2.51 | 224 | ePN | Pn | 16 19 46.8 | +1.6 |
| OGRR | | | | e | | 16 19 50.3 | |
| OGRR | | | | e | | 16 20 21.9 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,57nm,0.4s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=E,342nm,0.9s | | | | | | |
| OGRR | Ongureny | 2.51 | 224 | ePn | Pn | 16 19 46.6 | +1.4 |
| OGRR | | | | ePg | Pb | 16 19 49.5 | +0.4 |
| OGRR | | | | e | | 16 19 53.3 | |
| OGRR | | | | eSg | Sb | 16 20 22.0 | +1.6 |
| OGRR | | | | max | | | |
| | comp=E,57nm,0.5s | | | | | | |
| OGRR | | | | Smax | | | |
| | comp=E,406nm,0.8s | | | | | | |
| BOD | Bodaibo | 3.03 | 38 | ⇑iPN | Pn | 16 19 53.0 | +0.6 |
| BOD | | | | e | | 16 19 58.8 | |
| BOD | | | | e | | 16 20 37.7 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,32nm,0.3s | | | | | | |
| BOD | | | | smax | smax | | |
| | comp=E,330nm,0.7s | | | | | | |
| BOD | Bodaibo | 3.03 | 38 | ⇓iPn | Pn | 16 19 53.4 | +1.0 |
| BOD | | | | ePg | Pb | 16 19 59.0 | +0.9 |
| BOD | | | | eSn | Sn | 16 20 17.7 | -12 |
| BOD | | | | e | | 16 20 31.5 | |
| BOD | | | | i Sg | Sg | 16 20 38.1 | -2.7 |
| BOD | | | | Pmax | | | |
| | comp=E,32nm,0.3s | | | | | | |
| BOD | | | | Smax | | | |
| | comp=E,329nm,0.7s | | | | | | |
| NLYR | Nelyaty | 3.08 | 68 | ePN | Pn | 16 19 54.5 | +1.5 |
| NLYR | | | | e | | 16 20 02.6 | |
| NLYR | | | | e | | 16 20 40.7 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,76nm,0.6s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,529nm,0.8s | | | | | | |
| NLYR | Nelyaty | 3.08 | 68 | ⇑iPn | Pn | 16 19 54.5 | +1.5 |
| NLYR | | | | ePg | Pb | 16 19 59.4 | +0.5 |
| NLYR | | | | e | | 16 20 27.3 | |
| NLYR | | | | e | | 16 20 34.4 | |
| NLYR | | | | eSg | Sg | 16 20 41.0 | -1.2 |
| NLYR | | | | Pmax | | | |
| | comp=N,72nm,0.4s | | | | | | |
| NLYR | | | | Smax | | | |
| | comp=N,528nm,0.7s | | | | | | |
| ZRHB | Zarechye | 3.54 | 216 | ePn | Pn | 16 20 00.7 | +1.4 |
| ZRHB | | | | ePg | Pb | 16 20 07.3 | +0.6 |
| ZRHB | | | | eSn | Sn | 16 20 40.2 | -1.5 |
| ZRHB | | | | eSg | Sg | 16 20 54.8 | -2.2 |
| ZRHB | | | | Pmax | | | |
| | comp=N,118nm,0.6s | | | | | | |
| ZRHB | | | | Smax | | | |
| | comp=N,862nm,0.8s | | | | | | |
| TRG | Tyrgan | 3.67 | 224 | ePN | Pn | 16 20 02.4 | +1.3 |
| TRG | | | | eS | Sn | 16 20 44.4 | -0.5 |
| TRG | | | | eS | Sb | 16 20 57.0 | +3.2 |
| TRG | | | | smax | smax | | |
| | comp=E,198nm,0.7s | | | | | | |
| TRG | Tyrgan | 3.67 | 224 | ⇓iPn | Pn | 16 20 02.2 | +1.1 |
| TRG | | | | ePg | Pb | 16 20 09.9 | +1.0 |
| TRG | | | | eSg | Sb | 16 20 56.9 | +3.2 |
| TRG | | | | Pmax | | | |
| | comp=E,56nm,0.9s | | | | | | |
| TRG | | | | Smax | | | |
| | comp=E,205nm,0.8s | | | | | | |
| CIT | Chita | 3.89 | 151 | e | Pb | 16 20 10.0 | -2.7 |
| CIT | | | | ePg | Pg | 16 20 15.7 | -2.3 |
| CIT | | | | i Sg | Sg | 16 21 07.1 | -1.3 |
| CIT | | | | Pmax | | | |
| | comp=E,86nm,0.6s | | | | | | |
| CIT | | | | Smax | | | |
| | comp=E,350nm,0.6s | | | | | | |
| UUDB | Ulan-Yde | 3.99 | 207 | ⇑iPn | Pn | 16 20 07.3 | +1.7 |
| UUDB | | | | ePg | Pb | 16 20 16.6 | +2.1 |
| UUDB | | | | eSg | Sg | 16 21 09.0 | -2.7 |
| UUDB | | | | Pmax | | | |
| | comp=E,60nm,0.8s | | | | | | |
| UUDB | | | | Smax | | | |
| | comp=E,317nm,1.5s | | | | | | |
| KAB | Kabansk | 4.13 | 216 | ePg | Pb | 16 20 19.0 | +2.2 |
| KAB | | | | eSg | Sg | 16 21 14.0 | -2.0 |
| KAB | | | | Pmax | | | |
| | comp=E,68nm,0.1s | | | | | | |
| KAB | | | | Smax | | | |
| | comp=E,626nm,1.0s | | | | | | |
| HRMR | Khuramsha | 4.40 | 210 | ⇓iPn | Pn | 16 20 12.7 | +1.5 |
| HRMR | | | | e | | 16 20 15.8 | |
| HRMR | | | | ⇓iPg | Pb | 16 20 22.7 | +1.3 |
| HRMR | | | | eSg | Sg | 16 21 21.4 | -3.3 |
| HRMR | | | | Pmax | | | |
| | comp=E,48nm,0.5s | | | | | | |
| HRMR | | | | Smax | | | |
| | comp=E,546nm,0.8s | | | | | | |
| CRS | Chara | 4.55 | 68 | ePN | Pb | 16 20 26.6 | +2.6 |
| CRS | Chara | 4.55 | 68 | ePn | Pn | 16 20 15.1 | +1.9 |
| CRS | | | | ePg | Pb | 16 20 26.9 | +2.9 |
| CRS | | | | eSg | Sg | 16 21 26.1 | -3.4 |
| CRS | | | | Pmax | | | |
| | comp=E,76nm,0.9s | | | | | | |
| CRS | | | | Smax | | | |
| | comp=E,407nm,1.3s | | | | | | |
| IRK | Irkutsk | 4.92 | 231 | ePN | Pn | 16 20 19.7 | +1.4 |
| IRK | | | | e | | 16 20 32.9 | |
| IRK | | | | eS | Sn | 16 21 12.9 | -2.8 |
| IRK | | | | e | | 16 21 36.0 | |
| IRK | | | | pmax | pmax | | |
| | comp=Z,37nm,0.4s | | | | | | |
| IRK | | | | smax | smax | | |
| | comp=N,523nm,0.9s | | | | | | |
| IRK | Irkutsk | 4.92 | 231 | e | Pb | 16 20 25.9 | -4.3 |
| IRK | | | | ePg | Pg | 16 20 30.5 | -7.2 |
| IRK | | | | e | | 16 20 34.5 | |
| IRK | | | | e | | 16 21 16.6 | |
| IRK | | | | eSg | Sb | 16 21 34.6 | +4.8 |
| IRK | | | | max | | | |
| | comp=N,49nm,0.4s | | | | | | |
| IRK | | | | Smax | | | |
| | comp=N,522nm,0.8s | | | | | | |
| LSTR | Listvyanka | 4.95 | 226 | ePN | Pn | 16 20 20.0 | +1.3 |
| LSTR | | | | e | | 16 20 33.1 | |
| LSTR | | | | e | | 16 21 35.8 | |
| LSTR | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| LSTR | | | | smax | smax | | |
| | comp=E,144nm,1.2s | | | | | | |
| LSTR | Listvyanka | 4.95 | 226 | ePn | Pn | 16 20 19.8 | +1.1 |
| LSTR | | | | ePg | Pb | 16 20 33.1 | +2.3 |
| LSTR | | | | e | | 16 21 18.9 | |
| LSTR | | | | eSg | Sg | 16 21 36.8 | -5.6 |
| LSTR | | | | Pmax | | | |
| | comp=E,8.0nm,0.5s | | | | | | |
| LSTR | | | | Smax | | | |
| | comp=E,145nm,1.1s | | | | | | |
| TUP | Tupik | 5.53 | 97 | ePN | Pn | 16 20 27.9 | +1.2 |
| TUP | | | | e | | 16 20 43.6 | |
| TUP | | | | eS | Sn | 16 21 29.5 | -1.2 |
| TUP | | | | e | | 16 21 56.9 | |
| TUP | | | | pmax | pmax | | |
| | comp=Z,28nm,0.7s | | | | | | |
| TUP | | | | smax | smax | | |
| | comp=N,242nm,0.9s | | | | | | |
| TUP | Tupik | 5.53 | 97 | ⇑iPn | Pn | 16 20 27.8 | +1.1 |
| TUP | | | | e | | 16 20 43.5 | |
| TUP | | | | e | | 16 21 33.0 | |
| TUP | | | | i Sg | Sg | 16 21 58.0 | -2.9 |
| TUP | | | | max | | | |
| | comp=N,34nm,0.6s | | | | | | |
| TUP | | | | Smax | | | |
| | comp=N,241nm,0.8s | | | | | | |
| TLY | Talaya | 5.59 | 230 | Pn | Pn | 16 20 28.5 | +1.0 |
| | comp=N,0.0nm,0.3s,baz=54,slow=3.7,SNR=3.8 | | | | | | |
| TLY | | | | Pg | Pb | 16 20 42.2 | +0.5 |
| | comp=N,0.0nm,0.3s,baz=27,slow=6.1,SNR=13 | | | | | | |
| TLY | | | | Sn | Sn | 16 21 33.1 | +0.8 |
| | comp=N,0.0nm,0.3s,baz=234,slow=17,SNR=9.9 | | | | | | |
| TLY | | | | Lg | Lg | 16 21 56.5 | |
| | comp=N,0.1nm,0.3s,baz=102,slow=16,SNR=14 | | | | | | |
| TLY | Talaya | 5.59 | 230 | ePN | Pn | 16 20 27.7 | +0.2 |
| TLY | | | | e | | 16 20 44.4 | |
| TLY | | | | eS | Sn | 16 21 32.7 | +0.4 |
| TLY | | | | e | | 16 21 56.5 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| TLY | Talaya | 5.59 | 230 | ePn | Pn | 16 20 27.2 | -0.3 |
| TLY | | | | ePg | Pb | 16 20 43.9 | +2.2 |
| TLY | | | | e | | 16 21 33.0 | |
| TLY | | | | eSg | Sg | 16 21 57.0 | -5.9 |
| TLY | | | | Pmax | | | |
| | comp=Z,25nm,0.7s | | | | | | |
| TLY | | | | Smax | | | |
| | comp=Z,138nm,1.3s | | | | | | |
| KPC | Khapcheranga | 5.88 | 168 | ePN | Pn | 16 20 32.4 | +0.9 |
| KPC | | | | e | | 16 20 51.6 | |
| KPC | | | | eS | Sn | 16 21 37.0 | -2.6 |
| KPC | | | | e | | 16 22 08.4 | |
| KPC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | |
| KPC | | | | smax | smax | | |
| | comp=E,168nm,1.1s | | | | | | |
| KPC | Khapcheranga | 5.88 | 168 | ePn | Pn | 16 20 32.5 | +0.9 |
| KPC | | | | e | | 16 20 42.7 | |
| KPC | | | | e | | 16 20 52.8 | |
| KPC | | | | i Sn | Sn | 16 21 37.5 | -2.1 |
| KPC | | | | e | | 16 21 52.1 | |
| KPC | | | | eSg | Sg | 16 22 08.4 | -3.9 |
| KPC | | | | max | | | |
| | comp=E,10.0nm,0.5s | | | | | | |
| KPC | | | | Smax | | | |
| | comp=E,168nm,1.0s | | | | | | |
| ARS | Arshan | 5.99 | 237 | ePN | Pn | 16 20 33.3 | +0.3 |
| ARS | | | | eS | Sn | 16 21 40.2 | -1.9 |
| ARS | | | | eS | Sg | 16 22 09.3 | -6.3 |
| ARS | | | | smax | smax | | |
| | comp=E,491nm,0.7s | | | | | | |
| ZAK | Zakamensk | 6.72 | 224 | ePN | Pn | 16 20 45.2 | +2.1 |
| ZAK | | | | e | | 16 21 07.0 | |
| ZAK | | | | e | | 16 22 33.1 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| ZAK | | | | smax | smax | | |
| | comp=E,88nm,1.1s | | | | | | |
| ZAK | Zakamensk | 6.72 | 224 | ePg | Pb | 16 21 05.7 | +4.7 |
| ZAK | | | | i Sg | Sg | 16 22 33.1 | -6.1 |
| ZAK | | | | Pmax | | | |
| | comp=E,5.0nm,0.6s | | | | | | |
| ZAK | | | | Smax | | | |
| | comp=E,88nm,1.1s | | | | | | |
| MOY | Mondy | 6.84 | 240 | ePN | Pn | 16 20 46.6 | +1.8 |
| MOY | | | | e | | 16 21 07.0 | |
| MOY | | | | e | | 16 22 33.1 | |
| MOY | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| MOY | | | | smax | smax | | |
| | comp=N,124nm,1.2s | | | | | | |
| MOY | Mondy | 6.84 | 240 | ⇓iPn | Pn | 16 20 46.2 | +1.4 |
| MOY | | | | ⇓i | | 16 20 54.9 | |
| MOY | | | | eSg | Sb | 16 22 33.6 | +8.5 |
| MOY | | | | max | | | |
| | comp=N,42nm,0.6s | | | | | | |
| MOY | | | | Smax | | | |
| | comp=N,124nm,1.1s | | | | | | |
| ORL | Orlik | 6.97 | 250 | ePN | Pn | 16 20 47.8 | +1.3 |
| ORL | | | | e | | 16 21 09.8 | |
| ORL | | | | e | | 16 22 38.8 | |
| ORL | | | | pmax | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | |
| ORL | | | | smax | smax | | |
| | comp=N,205nm,1.1s | | | | | | |
| ORL | Orlik | 6.97 | 250 | ⇓iPn | Pn | 16 20 47.9 | +1.4 |
| ORL | | | | e | | 16 20 57.1 | |
| ORL | | | | e | | 16 22 07.9 | |
| ORL | | | | eSg | Sg | 16 22 39.9 | -7.2 |
| ORL | | | | Smax | | | |
| | comp=N,198nm,1.1s | | | | | | |
| ULN | Ulaanbaatar | 7.92 | 197 | ⇑iPN | Pn | 16 21 04.0 | +4.4 |
| ULN | Ulaanbaatar | 7.92 | 197 | e | | 16 22 39.9 | |
| ULN | | | | e | | 16 23 00.5 | |
| ULN | | | | eSg | Sg | 16 23 12.6 | -4.9 |
| ULN | | | | e | | 16 23 31.0 | |
| SONM | Songino Array | 8.07 | 200 | Pn | Pn | 16 21 03.9 | +2.3 |
| | comp=N,0.3nm,0.3s,baz=13,slow=13,SNR=7.3 | | | | | | |
| SONM | | | | Lg | Lg | 16 23 19.6 | |
| | comp=N,1.1nm,0.3s,baz=12,slow=29,SNR=14 | | | | | | |
| SONM | Songino Array | 8.07 | 200 | ePN | Pn | 16 21 04.4 | +2.8 |
| HVS | Khovu-Aksy | 10.96 | 254 | ⇓eP | Pn | 16 21 46.8 | +5.6 |
| YAK | Yakutsk | 11.88 | 49 | eP | Pn | 16 21 46.1 | -7.5 |
| ZALV | Zalesovo Beam | 14.92 | 275 | Pn | Pn | 16 22 35.2 | +0.2 |
| | comp=N,0.2nm,0.3s,baz=75,slow=9.6,SNR=24 | | | | | | |
| ZALV | Zalesovo Beam | 14.92 | 275 | eP | Pn | 16 22 36.3 | +1.3 |
| MKAR | Makanchi Array | 19.62 | 256 | P | Pn | 16 23 33.8 | -0.5 |
| | comp=N,0.3nm,0.3s,baz=42,slow=8.9,SNR=12 | | | | | | |
| MKAR | Makanchi Array | 19.62 | 256 | i P | Pn | 16 23 39.2 | +5.0 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| KURK | Kurchatov | 19.64 | 269 | P | Pn | 16 23 34.0 | -0.4 |
| KURBB | Kurchatov Arra | 19.73 | 269 | P | P | 16 23 34.0 | -0.1 |
| | comp=Z,0.2nm,0.3s,baz=66,slow=11,SNR=13 | | | | | | |
| SEY | Seymchan | 22.33 | 53 | ⇓P | P | 16 23 57.6 | -4.3 |
| BVAR | Borovoye Array | 23.36 | 281 | P | P | 16 24 14.9 | +2.1 |
| | comp=Z,0.9nm,0.4s,baz=54,slow=11,SNR=7.0 | | | | | | |
| BRVK | Borovoye | 23.41 | 281 | P | P | 16 24 15.6 | +2.3 |
| ARCES | ARCESS Array B | 38.10 | 325 | P | P | 16 26 21.4 | -1.6 |
| | comp=Z,0.7nm,0.7s,baz=62,slow=11,SNR=4.3 | | | | | | |
| ARCES | ARCESS Array B | 38.10 | 325 | eP | P | 16 26 23.0 | -0.1 |
| FINES | FINESS Array B | 41.64 | 314 | P | P | 16 26 51.8 | -0.8 |
| | comp=Z,0.9nm,0.6s,baz=82,slow=7.4,SNR=9.0 | | | | | | |
| FINES | FINESS Array B | 41.64 | 314 | eP | P | 16 26 51.7 | -0.8 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| AKASG | Malin Array Be | 46.44 | 300 | i P | P | 16 27 31.2 | +0.1 |
| NOA | NORSAR Array B | 47.68 | 319 | P | P | 16 27 40.4 | -0.4 |
| | comp=Z,0.7nm,0.9s,baz=67,slow=5.8,SNR=2.7 | | | | | | |

*IDC **01** 16:19:01.6±1.2, 38°.26S×73°.18W, h0km, mb4.1/5, mb1 4.1/7, mb1mx3.8/24, mbtmp3.9/7, ML3.7/2, MS3.5/4, Ms1 3.5/4, ms1mx3.1/23, Error ellipse: s-maj=40.6km s-min=19.0km az=108.0*
*ISCJB **01** 16:19:03.6±1.1, 38°.2S±0°.1×73°.2W±0°.3, h25km, mb4.0/5, MS3.3/2, Error ellipse: s-maj=32.8km s-min=10.6km az=24.7*
**ISC 01 16:19:05.5**±1.2**, 38°.3S**±0°.1×**73°.1W**±0°.2**, h25**km**, n10, σ0ˢ.35**/8**, mb4.1**/5**, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CFAA | Coronel Fontan | 7.77 | 33 | Pn | Pn | 16 20 57.0 | -0.2 |
| | 0.2nm,0.3s,baz=172,slow=9.3,SNR=9.8 | | | | | | |
| CFAA | | | | Sn | Sn | 16 22 24.5 | +0.2 |
| | 0.1nm,0.3s,baz=298,slow=18,SNR=3.3 | | | | | | |
| CFAA | | | | Lg | Lg | 16 23 09.0 | |
| | 0.0nm,0.3s,baz=206,slow=6.2,SNR=3.0 | | | | | | |
| USHA | Ushuaia | 16.87 | 171 | LR | LR | 16 29 33.3 | |
| | comp=Z,173nm,20.3s,baz=52,slow=37 | | | | | | |
| CPUP | Villa Florida | 17.87 | 53 | P | P | 16 23 13.0 | +0.1 |
| | 0.2nm,0.3s,baz=241,slow=12,SNR=5.1 | | | | | | |
| CPUP | | | | LR | LR | 16 31 00.7 | |
| | comp=Z,278nm,18.0s,baz=215,slow=40 | | | | | | |
| SIV | San Ignacio | 24.61 | 29 | LR | LR | 16 36 10.8 | |
| | comp=Z,86nm,19.1s,baz=185,slow=42 | | | | | | |
| BDFB | Brasilia | 31.59 | 51 | LR | LR | 16 38 52.8 | |
| | comp=Z,65nm,20.4s,baz=236,slow=38 | | | | | | |
| SNAA | Sanae | 48.00 | 156 | P | P | 16 27 42.5 | +0.5 |
| | 1.4nm,0.9s,baz=281,slow=6.2,SNR=11 | | | | | | |
| QSPA | South Pole Qui | 51.97 | 180 | P | P | 16 28 11.9 | -0.3 |
| | 2.2nm,0.8s,baz=143,slow=2.9,SNR=10 | | | | | | |
| TXAR | Lajitas Array | 73.06 | 332 | P | P | 16 30 33.6 | +0.2 |
| | 0.4nm,0.6s,baz=152,slow=6.0,SNR=4.4 | | | | | | |
| DBIC | Dimbokro | 77.40 | 71 | P | P | 16 30 58.6 | 0.0 |
| | 1.3nm,0.5s,baz=192,slow=15,SNR=4.0 | | | | | | |
| TORD | Torodi Ar. Bea | 86.49 | 70 | P | P | 16 31 46.1 | -0.3 |
| | 1.4nm,0.6s,baz=225,slow=4.8,SNR=9.0 | | | | | | |

**MEX 01 16:48:46.4**±0.3**, 26°.34N**×**103°.72W, h10**km**, MD4.0, Northern Mexico**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HPIG | | 1.84 | 289 | i P | Pn | 16 49 14.7 | -3.7 |
| HPIG | | | | i S | Sn | 16 49 37.0 | -4.9 |
| MAIG | Mazatlaan | 3.98 | 219 | eP | Pn | 16 49 45.7 | -1.8 |
| CGIG | | 5.49 | 318 | eP | Pn | 16 50 07.9 | -0.7 |
| CGIG | | | | eS | Sn | 16 51 09.5 | -2.5 |

*ISCJB **01** 17:00:29.4±0.3, 67°.08N±0°.02×21°.03E±0°.06, h0km, Error ellipse: s-maj=3.4km s-min=2.9km az=175.8*
*UPP **01** 17:00:30.1, 67°.06N×20°.96E, h0km, ML2.0, Mining explosion.*
*CSEM **01** 17:00:30.5±0.2, 67°.10N×20°.96E, h2km, ML2.0, Error ellipse: s-maj=4.7km s-min=3.5km az=95.0, Mining explosion.*
*HEL **01** 17:00:30.7±0.1, 67°.08N×20°.98E, h0km, ML2.1, ML2.0(UPP), Explosion*
*IDC **01** 17:00:30.7±1.0, 67°.13N×21°.48E, h0km, mb1 2.8/3, mb1mx2.7/28, mbtmp2.6/3, ML2.2/3, Error ellipse: s-maj=17.1km s-min=7.5km az=108.0*
*NAO **01** 17:00:31.1±0.9, 67°.11N×21°.28E, ML3.7*
*BER **01** 17:00:33.0±4.5, 67°.09N×21°.01E, h0km, ML1.5, ML3.7(NAO), Suspected explosion*
**ISC 01 17:00:30.4**±0.7**, 67°.09N**±0°.02×**21°.01E**±0°.02**, h0**km**, n66, σ0ˢ.94**/97**, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DUNU | Dundret | 0.17 | 282 | i P | Pg | 17 00 33.4 | -0.3 |
| DUNU | | | | i S | Sg | 17 00 36.0 | +0.1 |
| DUNU | Dundret | 0.17 | 282 | P | Pg | 17 00 33.4 | -0.3 |
| DUNU | | | | S | Sg | 17 00 36.0 | +0.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MASU | Masugnsbyn | 0.54 | 45 | *i* P | Pg | 17 00 40.9 | +0.3 |
| MASU | Masugnsbyn | 0.54 | 45 | P | Pg | 17 00 40.9 | +0.3 |
| ERTU | Ertsjaerv | 0.71 | 138 | *e*P | Pg | 17 00 43.1 | -0.8 |
| ERTU | | | | *e*S | Sg | 17 00 54.1 | +1.0 |
| ERTU | Ertsjaerv | 0.71 | 138 | P | Pg | 17 00 43.3 | -0.6 |
| ERTU | | | | S | Sg | 17 00 54.1 | +1.0 |
| HARU | Harads | 0.93 | 181 | *e*P | Pg | 17 00 47.0 | -1.1 |
| HARU | Harads | 0.93 | 181 | P | Pg | 17 00 47.0 | -1.1 |
| SALU | Saltoluokta | 1.02 | 288 | *e*P | Pg | 17 00 49.1 | -0.7 |
| SALU | Saltoluokta | 1.02 | 288 | P | Pg | 17 00 49.1 | -0.7 |
| LANU | Lannavaara | 1.04 | 21 | *e*P | Pg | 17 00 49.5 | -0.7 |
| LANU | | | | *e*SN | Sn | 17 01 06.9 | -0.5 |
| LANU | Lannavaara | 1.04 | 21 | P | Pg | 17 00 49.6 | -0.7 |
| LANU | | | | Sn | Sn | 17 01 06.9 | -0.5 |
| NIKU | Nikkaluokta | 1.09 | 317 | *e*P | Pg | 17 00 50.2 | -1.1 |
| NIKU | Nikkaluokta | 1.09 | 317 | P | Pg | 17 00 50.2 | -1.1 |
| KALU | Kalix | 1.55 | 141 | *e*P | Pn | 17 00 58.2 | -0.9 |
| KALU | | | | *e*SN | Sg | 17 01 21.5 | +1.4 |
| KALU | Kalix | 1.55 | 141 | P | Pn | 17 00 58.2 | -0.9 |
| KALU | | | | Sn | Sg | 17 01 21.5 | +1.4 |
| HEF | Hetta | 1.67 | 36 | *e*P | Pn | 17 01 00.6 | -0.2 |
| | baz=218 | | | | | | |
| HEF | | | | MSG | | 17 01 21.3 | |
| | comp=Z,13nm,0.2s | | | | | | |
| HEF | | | | *e*SN | Sn | 17 01 23.2 | +0.3 |
| HEF | Hetta | 1.67 | 36 | P | Pn | 17 01 00.6 | -0.2 |
| HEF | | | | Sn | Sn | 17 01 23.2 | +0.3 |
| KIF | Kilpisjarvi | 1.93 | 358 | Pn | Pb | 17 01 05.8 | -0.5 |
| KIF | | | | Lg | Lg | 17 01 32.9 | |
| KIF | Kilpisjarvi | 1.93 | 358 | Pn | Pb | 17 01 05.8 | -0.5 |
| KIF | | | | Lg | Lg | 17 01 32.9 | |
| KIF | Kilpisjarvi | 1.93 | 358 | *e*PB | Pb | 17 01 05.7 | -0.6 |
| KIF | | | | MSG | | 17 01 29.6 | |
| | comp=Z,18nm,0.2s | | | | | | |
| KIF | | | | *e*SG | Sg | 17 01 32.8 | +0.5 |
| KIF | Kilpisjarvi | 1.93 | 358 | Pb | Pb | 17 01 05.7 | -0.6 |
| KIF | | | | Sg | Sg | 17 01 32.8 | +0.5 |
| KIF | | | | Lg | Lg | 17 01 32.9 | |
| RNF | Rovaniemi | 2.04 | 101 | *e*PB | Pn | 17 01 06.7 | +0.9 |
| RNF | | | | *e*SG | Sg | 17 01 36.0 | +0.3 |
| RNF | Rovaniemi | 2.04 | 101 | Pb | Pn | 17 01 06.7 | +0.9 |
| RNF | | | | Sg | Sg | 17 01 36.0 | +0.3 |
| KTK1 | Kautokeino | 2.11 | 22 | *e*P | Pn | 17 01 08.1 | +1.2 |
| KTK1 | | | | *e*Sg | Sb | 17 01 37.1 | +1.0 |
| KTK1 | Kautokeino | 2.11 | 22 | *e*P | Pn | 17 01 08.1 | +1.2 |
| | SNR=50 | | | | | | |
| KTK1 | | | | *e*Sg | Sb | 17 01 37.1 | +1.0 |
| | SNR=90 | | | | | | |
| SGF | Sodankyl | 2.17 | 78 | *e*PG | Pb | 17 01 09.4 | -1.1 |
| SGF | | | | *e*SG | Sg | 17 01 39.6 | -0.5 |
| SGF | Sodankyl | 2.17 | 78 | Pg | Pb | 17 01 09.4 | -1.1 |
| SGF | | | | Sg | Sg | 17 01 39.6 | -0.5 |
| BURU | Burvik | 2.52 | 176 | *e*P | Pn | 17 01 12.9 | +0.4 |
| BURU | Burvik | 2.52 | 176 | P | Pn | 17 01 12.8 | +0.4 |
| SVAU | Svanoeiden | 2.67 | 193 | *e*P | Pn | 17 01 14.7 | +0.2 |
| SVAU | Svanoeiden | 2.67 | 193 | P | Pn | 17 01 14.7 | +0.2 |
| TRO | Tromso | 2.67 | 344 | *e*S | Sb | 17 01 52.3 | 0.0 |
| MOR8 | Moi Rana | 2.77 | 254 | *e*Sg | Sn | 17 01 51.9 | +1.7 |
| MOR8 | | | | IAML | | 17 01 55.0 | |
| | comp=Z,4.6nm,0.1s | | | | | | |
| OUL | Oulu | 2.83 | 133 | *e*PG | Pb | 17 01 21.0 | -0.6 |
| OUL | Oulu | 2.83 | 133 | Pg | Pb | 17 01 21.0 | -0.6 |
| ARA0 | ARCESS Array S | 2.98 | 32 | Pn | Pn | 17 01 19.2 | +0.4 |
| | baz=215,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 17 01 55.4 | +0.3 |
| | baz=225,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 17 02 01.6 | |
| | baz=214,slow=28 | | | | | | |
| ARA0 | ARCESS Array S | 2.98 | 32 | Pn | Pn | 17 01 19.2 | +0.4 |
| | baz=215,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 17 01 55.4 | +0.3 |
| | baz=225,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 17 02 01.6 | |
| | baz=214,slow=28 | | | | | | |
| ARA0 | ARCESS Array S | 2.98 | 32 | Pn | Pn | 17 01 19.2 | +0.4 |
| | SNR=50 | | | | | | |
| ARA0 | | | | Sn | Sn | 17 01 55.4 | +0.3 |
| | SNR=50 | | | | | | |
| ARA0 | | | | Lg | Lg | 17 02 01.6 | |
| | SNR=3.6 | | | | | | |
| ARCES | ARCESS Array B | 2.98 | 32 | Pn | Pn | 17 01 19.1 | +0.4 |
| | comp=Z,0.4nm,0.3s,baz=218,slow=14,SNR=39 | | | | | | |
| ARCES | | | | Lg | Lg | 17 01 58.0 | |
| | comp=Z,1.0nm,0.3s,baz=217,slow=30,SNR=8.5 | | | | | | |
| ARE0 | ARCESS Array S | 2.98 | 32 | *e*P | Pn | 17 01 18.8 | +0.1 |
| ARE0 | ARCESS Array S | 2.98 | 32 | P | Pn | 17 01 18.8 | +0.1 |
| UMAU | Umeaa | 3.22 | 183 | *e*P | Pn | 17 01 22.2 | +0.2 |
| UMAU | Umeaa | 3.22 | 183 | P | Pn | 17 01 22.2 | +0.2 |
| MSF | Maaselka | 3.43 | 106 | *e*P | Pn | 17 01 27.3 | +2.3 |
| | baz=289 | | | | | | |
| MSF | Maaselka | 3.43 | 106 | P | Pn | 17 01 27.3 | +2.3 |
| KEV | Kevo | 3.48 | 37 | *e*P | Pn | 17 01 26.4 | +0.8 |
| KEV | | | | *e*S | Sn | 17 02 10.1 | +2.6 |
| KEV | Kevo | 3.48 | 37 | P | Pn | 17 01 26.4 | +0.8 |
| KEV | | | | S | Sn | 17 02 10.0 | +2.6 |
| KU6 | Riekki | 3.71 | 103 | *e*P | Pn | 17 01 30.6 | +1.8 |
| | baz=286 | | | | | | |
| KU6 | Riekki | 3.71 | 103 | P | Pn | 17 01 30.5 | +1.8 |
| VAF | Ylistaro | 4.12 | 169 | *e*P | Pn | 17 01 35.9 | +1.5 |
| | baz=351 | | | | | | |
| VAF | Ylistaro | 4.12 | 169 | P | Pn | 17 01 35.9 | +1.5 |
| APA0 | Apatity Array | 4.67 | 78 | Pn | Pn | 17 01 41.1 | -0.8 |
| | baz=261,slow=12 | | | | | | |
| APA0 | | | | Sn | Sn | 17 02 35.4 | -1.3 |
| | baz=281,slow=28 | | | | | | |
| APA0 | | | | Lg | Lg | 17 02 55.1 | |
| | baz=274,slow=37 | | | | | | |
| APA0 | Apatity Array | 4.67 | 78 | Pn | Pn | 17 01 41.1 | -0.8 |
| | baz=261,slow=12 | | | | | | |
| APA0 | | | | Sn | Sn | 17 02 35.4 | -1.3 |
| | baz=281,slow=28 | | | | | | |
| APA0 | | | | Lg | Lg | 17 02 55.1 | |
| | baz=274,slow=37 | | | | | | |
| APA0 | Apatity Array | 4.67 | 78 | Pn | Pn | 17 01 41.1 | -0.8 |
| | SNR=50 | | | | | | |
| APA0 | | | | Sn | Sn | 17 02 35.4 | -1.3 |
| | SNR=50 | | | | | | |
| APA0 | | | | Lg | Lg | 17 02 55.2 | |
| | SNR=4.4 | | | | | | |
| FIA0 | FINESS Array S | 6.08 | 156 | Pn | Pn | 17 02 01.9 | +0.6 |
| | baz=348,slow=14 | | | | | | |
| FIA0 | | | | Sn | Sn | 17 03 11.5 | 0.0 |
| | baz=344,slow=28 | | | | | | |
| FIA0 | FINESS Array S | 6.08 | 156 | Pn | Pn | 17 02 01.9 | +0.6 |
| | baz=348,slow=14 | | | | | | |
| FIA0 | | | | Sn | Sn | 17 03 11.5 | 0.0 |
| | baz=344,slow=28 | | | | | | |
| FIA0 | FINESS Array S | 6.08 | 156 | Pn | Pn | 17 02 01.9 | +0.6 |
| | SNR=50 | | | | | | |
| FIA0 | | | | Sn | Sn | 17 03 11.5 | 0.0 |
| | SNR=50 | | | | | | |
| FINES | FINESS Array B | 6.08 | 156 | Pn | Pn | 17 02 01.1 | -0.2 |
| | comp=Z,0.1nm,0.3s,baz=346,slow=12,SNR=8.2 | | | | | | |
| FINES | | | | Sn | Sn | 17 03 09.9 | -1.5 |
| | comp=Z,0.2nm,0.3s,baz=348,slow=21,SNR=6.1 | | | | | | |
| FINES | | | | Lg | Lg | 17 03 42.9 | |
| | comp=Z,0.2nm,0.3s,baz=346,slow=33,SNR=3.3 | | | | | | |
| NB2 | NORSAR Subarra | 7.42 | 220 | Pn | Pn | 17 02 20.9 | +1.1 |
| | baz=24,slow=14 | | | | | | |
| NB2 | NORSAR Subarra | 7.42 | 220 | Pn | Pn | 17 02 20.9 | +1.1 |
| | baz=24,slow=14 | | | | | | |
| NB2 | NORSAR Subarra | 7.42 | 220 | Pn | Pn | 17 02 20.9 | +1.1 |
| | SNR=50 | | | | | | |
| NOA | NORSAR Array B | 7.42 | 220 | Pn | Pn | 17 02 20.6 | +0.7 |
| | comp=Z,0.1nm,0.3s,baz=21,slow=12,SNR=1.0 | | | | | | |
| NOA | | | | Sn | Sn | 17 03 44.0 | -0.6 |
| | comp=Z,0.1nm,0.3s,baz=9.6,slow=16,SNR=2.9 | | | | | | |
| HFS | Hagfors | 7.69 | 208 | Pn | Pn | 17 02 23.6 | +0.1 |
| | baz=18,slow=16 | | | | | | |
| HFS | Hagfors | 7.69 | 208 | Pn | Pn | 17 02 23.6 | +0.1 |
| | baz=18,slow=16 | | | | | | |
| HFS | Hagfors | 7.69 | 208 | Pn | Pn | 17 02 23.6 | +0.1 |
| | SNR=50 | | | | | | |

*CSEM **01** 17:10:59.5, 37°.86N×14°.67E, h30km, ML2.5/19, After ROM*

**ROM 01 17:10:59.5**±0.1**, 37°.86N**×**14°.67E, h30**km±2km**, Ml2.5**/19**, Error ellipse: s-maj=1.9km s-min=1.3km az=22.0, Sicily**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ECNV | Catenanuova | 0.26 | 173 | Pg | Pb | 17 11 06.0 | -0.6 |
| ECNV | | | | Sg | Sn | 17 11 12.3 | -0.1 |
| | 677nm,0.6s | | | | | | |
| ECNV | Catenanuova | 0.26 | 173 | Pg | Pb | 17 11 06.0 | -0.6 |
| ECNV | | | | Sg | Sn | 17 11 12.3 | -0.1 |
| | 677nm,0.6s | | | | | | |
| CAGR | Agira | 0.27 | 210 | Pg | Pb | 17 11 06.4 | -0.3 |
| CAGR | | | | Sg | Sn | 17 11 12.9 | +0.2 |
| | 812nm,0.4s | | | | | | |
| CAGR | Agira | 0.27 | 210 | Pg | Pb | 17 11 06.4 | -0.3 |
| CAGR | | | | Sg | Sn | 17 11 12.9 | +0.2 |
| | 812nm,0.4s | | | | | | |
| ESLN | Serra La Nave | 0.29 | 124 | Pg | Pb | 17 11 07.2 | 0.0 |
| ESLN | | | | Sg | Sn | 17 11 13.3 | -0.2 |
| ESLN | Serra La Nave | 0.29 | 124 | Pg | Pb | 17 11 07.2 | 0.0 |
| ESLN | | | | Sg | Sn | 17 11 13.3 | -0.2 |
| PLLN | Pollina | 0.44 | 288 | Pg | Pb | 17 11 08.7 | -0.4 |
| PLLN | | | | Sg | Sn | 17 11 16.5 | -0.3 |
| | 347nm,0.7s | | | | | | |
| PLLN | Pollina | 0.44 | 288 | Pg | Pb | 17 11 08.7 | -0.4 |
| PLLN | | | | Sg | Sn | 17 11 16.5 | -0.3 |
| | 347nm,0.7s | | | | | | |
| MMME | Mongiuffi-Meli | 0.47 | 80 | Pg | Pb | 17 11 09.1 | -0.5 |
| | 259nm,0.5s | | | | | | |
| MMME | Mongiuffi-Meli | 0.47 | 80 | Pg | Pb | 17 11 09.1 | -0.5 |
| | 259nm,0.5s | | | | | | |
| CSLB | Castelbuono | 0.49 | 279 | Pg | Pb | 17 11 09.2 | -0.7 |
| CSLB | | | | Sg | Sn | 17 11 17.7 | -0.4 |
| | 69nm,0.3s | | | | | | |
| CSLB | Castelbuono | 0.49 | 279 | Pg | Pb | 17 11 09.2 | -0.7 |
| CSLB | | | | Sg | Sn | 17 11 17.7 | -0.4 |
| | 69nm,0.3s | | | | | | |
| GIB | Gibilmanna | 0.53 | 285 | Pg | Pb | 17 11 10.1 | -0.4 |
| GIB | | | | Sg | Sn | 17 11 18.8 | -0.3 |
| | 280nm,0.4s | | | | | | |
| GIB | Gibilmanna | 0.53 | 285 | Pg | Pb | 17 11 10.1 | -0.4 |
| GIB | | | | Sg | Sn | 17 11 18.8 | -0.3 |
| | 280nm,0.4s | | | | | | |
| RESU | Resuttano | 0.53 | 247 | Pg | Pb | 17 11 10.2 | -0.3 |
| | 102nm,0.4s | | | | | | |
| RESU | Resuttano | 0.53 | 247 | Pg | Pb | 17 11 10.2 | -0.3 |
| | 102nm,0.4s | | | | | | |
| MILZ | Milazzo | 0.60 | 47 | Pg | Pb | 17 11 11.8 | +0.2 |
| | 170nm,0.4s | | | | | | |
| MILZ | Milazzo | 0.60 | 47 | Pg | Pb | 17 11 11.8 | +0.2 |
| | 170nm,0.4s | | | | | | |
| HCRL | Carlentini | 0.64 | 153 | Pg | Pb | 17 11 11.7 | -0.6 |
| HCRL | | | | Sg | Sn | 17 11 21.8 | +0.1 |
| | 235nm,0.2s | | | | | | |
| HCRL | Carlentini | 0.64 | 153 | Pg | Pb | 17 11 11.7 | -0.6 |
| HCRL | | | | Sg | Sn | 17 11 21.8 | +0.1 |
| | 235nm,0.2s | | | | | | |
| HVZN | Vizzini | 0.68 | 177 | Pg | Pb | 17 11 13.0 | 0.0 |
| | 233nm,0.4s | | | | | | |
| HVZN | Vizzini | 0.68 | 177 | Pg | Pb | 17 11 13.0 | 0.0 |
| | 233nm,0.4s | | | | | | |
| RAFF | Raffo Rosso | 0.68 | 201 | Pg | Pn | 17 11 13.1 | 0.0 |
| RAFF | | | | Sg | Sn | 17 11 23.5 | +0.8 |
| | 147nm,0.6s | | | | | | |
| RAFF | Raffo Rosso | 0.68 | 201 | Pg | Pn | 17 11 13.1 | 0.0 |
| RAFF | | | | Sg | Sn | 17 11 23.5 | +0.8 |
| | 147nm,0.6s | | | | | | |
| IFIL | Filicudi I Eol | 0.71 | 353 | Pg | Pn | 17 11 13.9 | +0.4 |
| | 300nm,0.4s | | | | | | |
| IFIL | Filicudi I Eol | 0.71 | 353 | Pg | Pn | 17 11 13.9 | +0.4 |
| | 300nm,0.4s | | | | | | |
| IACL | Alicudi | 0.72 | 340 | Pg | Pn | 17 11 13.8 | +0.2 |
| | 150nm,0.4s | | | | | | |
| IACL | Alicudi | 0.72 | 340 | Pg | Pn | 17 11 13.8 | +0.2 |
| | 150nm,0.4s | | | | | | |
| AGST | Augusta-Monte | 0.75 | 143 | Pg | Pn | 17 11 13.4 | -0.5 |
| AGST | Augusta-Monte | 0.75 | 143 | Pg | Pn | 17 11 13.4 | -0.5 |
| SSY | Sortino | 0.77 | 155 | Pg | Pn | 17 11 13.8 | -0.6 |
| | 228nm,0.3s | | | | | | |
| SSY | Sortino | 0.77 | 155 | Pg | Pn | 17 11 13.8 | -0.6 |
| | 228nm,0.3s | | | | | | |
| MSRU | Castanea | 0.78 | 58 | Pg | Pn | 17 11 14.4 | 0.0 |
| | 183nm,0.5s | | | | | | |
| MSRU | Castanea | 0.78 | 58 | Pg | Pn | 17 11 14.4 | 0.0 |
| | 183nm,0.5s | | | | | | |
| MTTG | Motta San Giov | 0.82 | 80 | Pg | Pb | 17 11 15.5 | +0.2 |
| | 82nm,0.6s | | | | | | |
| MTTG | Motta San Giov | 0.82 | 80 | Pg | Pb | 17 11 15.5 | +0.2 |
| | 82nm,0.6s | | | | | | |
| HMDC | Modica | 0.90 | 174 | Pg | Pn | 17 11 16.0 | -0.2 |
| HMDC | Modica | 0.90 | 174 | Pg | Pn | 17 11 16.0 | -0.2 |
| MSCL | Scilla | 0.96 | 67 | Pg | Pb | 17 11 17.5 | -0.2 |
| | 152nm,0.5s | | | | | | |
| MSCL | Scilla | 0.96 | 67 | Pg | Pb | 17 11 17.5 | -0.2 |
| | 152nm,0.5s | | | | | | |
| HAVL | Avola | 0.97 | 158 | Pg | Pn | 17 11 17.2 | +0.1 |
| HAVL | | | | Sg | Sb | 17 11 32.0 | +1.8 |
| | 139nm,0.3s | | | | | | |
| HAVL | Avola | 0.97 | 158 | Pg | Pn | 17 11 17.2 | +0.1 |
| HAVL | | | | Sg | Sb | 17 11 32.0 | +1.8 |
| | 139nm,0.3s | | | | | | |
| MPAZ | Palizzi | 1.06 | 84 | Pg | Pb | 17 11 19.5 | +0.2 |
| | 72nm,0.6s | | | | | | |
| MPAZ | Palizzi | 1.06 | 84 | Pg | Pb | 17 11 19.5 | +0.2 |
| | 72nm,0.6s | | | | | | |
| CORL | Corleone | 1.08 | 272 | Pg | Pb | 17 11 19.9 | +0.2 |
| | 31nm,0.7s | | | | | | |
| CORL | Corleone | 1.08 | 272 | Pg | Pb | 17 11 19.9 | +0.2 |
| | 31nm,0.7s | | | | | | |
| SOI | Samo | 1.11 | 79 | Pg | Pb | 17 11 20.2 | 0.0 |
| | 44nm,0.5s | | | | | | |
| SOI | Samo | 1.11 | 79 | Pg | Pb | 17 11 20.2 | 0.0 |
| | 44nm,0.5s | | | | | | |

*CSEM **01** 17:11:51.8, 37°.86N×14°.69E, h30km, ML2.4/16, After ROM*

**ROM 01 17:11:51.8**±0.1**, 37°.86N**×**14°.69E, h30**km±3km**, Ml2.4**/16**, Error ellipse: s-maj=1.9km s-min=1.8km az=136.0, Sicily**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ECNV | Catenanuova | 0.26 | 176 | Pg | Pb | 17 11 58.2 | -0.5 |
| ECNV | | | | Sg | Sn | 17 12 04.4 | -0.4 |
| | 225nm,0.6s | | | | | | |
| ECNV | Catenanuova | 0.26 | 176 | Pg | Pb | 17 11 58.2 | -0.5 |
| ECNV | | | | Sg | Sn | 17 12 04.4 | -0.4 |
| | 225nm,0.6s | | | | | | |
| ESLN | Serra La Nave | 0.28 | 126 | Pg | Pb | 17 11 59.4 | +0.2 |
| ESLN | Serra La Nave | 0.28 | 126 | Pg | Pb | 17 11 59.4 | +0.2 |
| CAGR | Agira | 0.28 | 213 | Pg | Pb | 17 11 58.7 | -0.3 |
| CAGR | | | | Sg | Sn | 17 12 05.6 | +0.4 |
| | 415nm,0.4s | | | | | | |
| CAGR | Agira | 0.28 | 213 | Pg | Pb | 17 11 58.7 | -0.3 |
| CAGR | | | | Sg | Sn | 17 12 05.6 | +0.4 |
| | 415nm,0.4s | | | | | | |
| MMME | Mongiuffi-Meli | 0.45 | 80 | Pg | Pb | 17 12 01.2 | -0.4 |
| | 216nm,0.5s | | | | | | |
| MMME | Mongiuffi-Meli | 0.45 | 80 | Pg | Pb | 17 12 01.2 | -0.4 |
| | 216nm,0.5s | | | | | | |
| PLLN | Pollina | 0.45 | 288 | Pg | Pb | 17 12 01.2 | -0.4 |
| PLLN | | | | Sg | Sn | 17 12 09.0 | -0.7 |
| | 173nm,0.7s | | | | | | |
| PLLN | Pollina | 0.45 | 288 | Pg | Pb | 17 12 01.2 | -0.4 |
| PLLN | | | | Sg | Sn | 17 12 09.0 | -0.7 |
| | 173nm,0.7s | | | | | | |
| CSLB | Castelbuono | 0.51 | 279 | Pg | Pb | 17 12 01.3 | -1.1 |
| | 32nm,0.3s | | | | | | |
| CSLB | Castelbuono | 0.51 | 279 | Pg | Pb | 17 12 01.3 | -1.1 |
| | 32nm,0.3s | | | | | | |
| GIB | Gibilmanna | 0.54 | 284 | Pg | Pn | 17 12 03.5 | -0.2 |
| GIB | | | | Sg | Sb | 17 12 11.1 | +0.4 |
| | 200nm,0.4s | | | | | | |
| GIB | Gibilmanna | 0.54 | 284 | Pg | Pn | 17 12 03.5 | -0.2 |
| GIB | | | | Sg | Sb | 17 12 11.1 | +0.4 |
| | 200nm,0.4s | | | | | | |
| MILZ | Milazzo | 0.59 | 46 | Pg | Pb | 17 12 03.7 | 0.0 |
| MILZ | | | | Sg | Sb | 17 12 12.2 | +0.3 |
| | 92nm,0.4s | | | | | | |
| MILZ | Milazzo | 0.59 | 46 | Pg | Pb | 17 12 03.7 | 0.0 |
| MILZ | | | | Sg | Sb | 17 12 12.2 | +0.3 |
| | 92nm,0.4s | | | | | | |
| HCRL | Carlentini | 0.63 | 155 | Pg | Pb | 17 12 04.0 | -0.4 |
| HCRL | | | | Sg | Sn | 17 12 14.4 | +0.5 |
| | 181nm,0.2s | | | | | | |
| HCRL | Carlentini | 0.63 | 155 | Pg | Pb | 17 12 04.0 | -0.4 |
| HCRL | | | | Sg | Sn | 17 12 14.4 | +0.5 |
| | 181nm,0.2s | | | | | | |
| HVZN | Vizzini | 0.68 | 178 | Pg | Pb | 17 12 04.8 | -0.4 |
| | 233nm,0.4s | | | | | | |
| HVZN | Vizzini | 0.68 | 178 | Pg | Pb | 17 12 04.8 | -0.4 |
| | 233nm,0.4s | | | | | | |
| RAFF | Raffo Rosso | 0.69 | 203 | Pg | Pb | 17 12 05.3 | 0.0 |
| | 80nm,0.6s | | | | | | |
| RAFF | Raffo Rosso | 0.69 | 203 | Pg | Pb | 17 12 05.3 | 0.0 |
| | 80nm,0.6s | | | | | | |
| IFIL | Filicudi I Eol | 0.71 | 352 | Pg | Pn | 17 12 06.3 | +0.4 |
| IFIL | | | | Sg | Sn | 17 12 17.7 | +1.8 |
| | 200nm,0.4s | | | | | | |
| IFIL | Filicudi I Eol | 0.71 | 352 | Pg | Pn | 17 12 06.3 | +0.4 |
| IFIL | | | | Sg | Sn | 17 12 17.7 | +1.8 |
| | 200nm,0.4s | | | | | | |
| IACL | Alicudi | 0.73 | 339 | Pg | Pn | 17 12 06.4 | +0.3 |
| | 71nm,0.4s | | | | | | |
| IACL | Alicudi | 0.73 | 339 | Pg | Pn | 17 12 06.4 | +0.3 |
| | 71nm,0.4s | | | | | | |
| MSRU | Castanea | 0.76 | 58 | Pg | Pn | 17 12 06.6 | 0.0 |
| | 183nm,0.5s | | | | | | |
| MSRU | Castanea | 0.76 | 58 | Pg | Pn | 17 12 06.6 | 0.0 |
| | 183nm,0.5s | | | | | | |
| SSY | Sortino | 0.76 | 157 | Pg | Pb | 17 12 05.9 | -0.7 |
| SSY | | | | Sg | Sn | 17 12 18.5 | +1.3 |
| | 228nm,0.3s | | | | | | |
| SSY | Sortino | 0.76 | 157 | Pg | Pb | 17 12 05.9 | -0.7 |
| SSY | | | | Sg | Sn | 17 12 18.5 | +1.3 |
| | 228nm,0.3s | | | | | | |
| MTTG | Motta San Giov | 0.81 | 79 | Pg | Pb | 17 12 07.4 | +0.1 |
| | 82nm,0.6s | | | | | | |
| MTTG | Motta San Giov | 0.81 | 79 | Pg | Pb | 17 12 07.4 | +0.1 |
| | 82nm,0.6s | | | | | | |
| HAVL | Avola | 0.96 | 159 | Pg | Pn | 17 12 09.4 | +0.1 |
| | 139nm,0.3s | | | | | | |
| HAVL | Avola | 0.96 | 159 | Pg | Pn | 17 12 09.4 | +0.1 |
| | 139nm,0.3s | | | | | | |
| MPAZ | Palizzi | 1.04 | 84 | Pg | Pb | 17 12 12.2 | +0.8 |
| | 72nm,0.6s | | | | | | |
| MPAZ | Palizzi | 1.04 | 84 | Pg | Pb | 17 12 12.2 | +0.8 |
| | 72nm,0.6s | | | | | | |
| SOI | Samo | 1.10 | 78 | Pg | Pb | 17 12 12.1 | -0.1 |
| | 44nm,0.5s | | | | | | |
| SOI | Samo | 1.10 | 78 | Pg | Pb | 17 12 12.1 | -0.1 |
| | 44nm,0.5s | | | | | | |

*ISCJB **01** 17:28:19.7±0.6, 39°.71N±0°.03×38°.85E±0°.05, h9km, Error ellipse: s-maj=5.5km s-min=4.4km az=34.4*
*CSEM **01** 17:28:19.9±0.3, 39°.72N×38°.85E, h8km, MD2.5, Error ellipse: s-maj=9.6km s-min=5.9km az=107.0*
*DDA **01** 17:28:19.0, 39°.69N×38°.85E, h7km, Md2.6*
*ISK **01** 17:28:20.4, 39°.71N×38°.92E, h14km, MD2.5*

**ISC 01 17:28:19.9**±0.9**, 39°.71N**±0°.03×**38°.81E**±0°.03**, h9**km**, n17, σ0s.47**/24**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ILIC | ilic-Erzincan | 0.32 | 217 | *e*PG | Pb | 17 28 28.6 | +0.8 |
| ILIC | ilic-Erzincan | 0.32 | 217 | *e*Pg | Pb | 17 28 28.6 | +0.8 |
| KEMA | Kemaliye | 0.50 | 210 | *i* P | Pg | 17 28 28.7 | -1.0 |
| KEMA | | | | *i* S | Sg | 17 28 36.5 | +0.3 |
| KEMA | Kemaliye | 0.50 | 210 | P | Pg | 17 28 28.7 | -1.0 |
| KEMA | | | | S | Sg | 17 28 36.5 | +0.3 |
| KELT | Kelkit | 0.56 | 37 | *i* P | Pg | 17 28 30.3 | -0.5 |
| KELT | | | | *i* S | Sg | 17 28 38.1 | -0.1 |
| KELT | Kelkit | 0.56 | 37 | P | Pg | 17 28 30.3 | -0.5 |
| KELT | | | | S | Sg | 17 28 38.1 | -0.1 |
| SUSE | Susehri | 0.69 | 317 | *i* P | Pg | 17 28 33.0 | -0.2 |
| SUSE | | | | *i* S | Sb | 17 28 43.6 | -0.3 |
| SUSE | Susehri | 0.69 | 317 | P | Pg | 17 28 33.0 | -0.2 |
| SUSE | | | | S | Sb | 17 28 43.6 | -0.3 |
| ERZN | Erzincan | 0.71 | 99 | *e*PG | Pg | 17 28 33.1 | -0.6 |
| ERZN | | | | *e*SG | Sg | 17 28 42.6 | -0.4 |
| GUMT | Gumushane | 0.91 | 34 | *e*PG | Pg | 17 28 37.5 | 0.0 |
| GUMT | Gumushane | 0.91 | 34 | *e*Pg | Pg | 17 28 37.5 | 0.0 |
| PTK | Pertek | 0.93 | 151 | *e*PG | Pg | 17 28 37.9 | +0.1 |
| PTK | Pertek | 0.93 | 151 | *e*Pg | Pg | 17 28 37.9 | +0.1 |
| SVRC | Sivrice-ELAZID | 1.38 | 164 | *e*PN | Pn | 17 28 45.6 | +0.1 |
| SVRC | Sivrice-ELAZID | 1.38 | 164 | *e*Pn | Pn | 17 28 45.6 | +0.1 |
| MALT | Malatya | 1.42 | 192 | *e*PN | Pb | 17 28 46.8 | +0.1 |
| MALT | Malatya | 1.42 | 192 | *e*Pn | Pb | 17 28 46.8 | +0.1 |

*IDC **01** 17:31:00.7±1.1, 36°.79S×73°.47W, h0km, mb3.8/6, mb1 4.0/9, mb1mx3.9/22, mbtmp3.9/9, ML4.0/3, MS3.5/3, Ms1 3.5/3, ms1mx3.2/24, Error ellipse: s-maj=33.2km s-min=20.4km az=112.0*
*NEIC **01** 17:31:05.6±0.9, 36°.64S×73°.56W, h35km, mb4.4/1, Error ellipse: s-maj=29.3km s-min=13.6km az=106.0*

**ISC 01 17:31:04.3**±0.9**, 36°.57S**±0°.10×**73°.7W**±0°.2**, h27**km**, n16, σ1s.39**/15**, mb3.9**/6**, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CFAA | Coronel Fontan | 6.73 | 44 | Pn | Pn | 17 32 41.8 | +0.4 |
| | 0.4nm,0.3s,baz=7.6,slow=5.7,SNR=16 | | | | | | |
| CFAA | | | | Sn | Sn | 17 33 58.3 | +1.1 |
| | 0.2nm,0.3s,baz=343,slow=18,SNR=2.5 | | | | | | |
| CFAA | | | | Lg | Lg | 17 34 35.6 | |
| | 0.2nm,0.3s,baz=179,slow=16,SNR=2.2 | | | | | | |
| LCO | Las Campanas | 7.96 | 20 | *e*Pn | Pn | 17 32 56.6 | -1.9 |
| LCO | | | | *e*Sn | Sn | 17 34 25.7 | -2.0 |
| LVC | Limon Verde | 14.52 | 18 | Pn | Pn | 17 34 28.2 | -0.1 |
| | 2.4nm,0.3s,baz=339,slow=18,SNR=2.1 | | | | | | |
| CPUP | Villa Florida | 17.30 | 58 | P | Pn | 17 35 04.2 | +0.3 |
| | 0.2nm,0.3s,baz=228,slow=11,SNR=3.5 | | | | | | |
| CPUP | | | | LR | LR | 17 41 52.6 | |
| | comp=Z,76nm,20.1s,baz=236,slow=38 | | | | | | |
| LPAZ | La Paz | 20.80 | 15 | P | Pn | 17 35 47.0 | 0.0 |
| | 2.0nm,0.7s,baz=196,slow=7.0,SNR=8.6 | | | | | | |
| SIV | San Ignacio | 23.38 | 32 | P | P | 17 36 11.3 | +0.3 |
| | 2.4nm,0.8s,baz=230,slow=11,SNR=5.7 | | | | | | |
| RCBR | Riachuelo | 46.17 | 58 | LR | LR | 18 00 11.1 | |
| | comp=Z,90nm,21.2s,baz=204,slow=38 | | | | | | |
| SNAA | Sanae | 49.75 | 157 | P | P | 17 39 52.5 | -1.5 |
| | 0.9nm,1.0s,baz=291,slow=8.2,SNR=6.3 | | | | | | |
| QSPA | South Pole Qui | 53.67 | 180 | *e*P | P | 17 40 23.4 | -0.1 |
| | 4.1nm,1.0s | | | | | | |
| TXAR | Lajitas Array | 71.33 | 333 | P | P | 17 42 24.4 | +2.7 |
| | 0.4nm,0.7s,baz=161,slow=8.4,SNR=3.5 | | | | | | |
| DBIC | Dimbokro | 77.31 | 72 | P | P | 17 42 56.4 | -0.3 |
| | 2.8nm,0.9s,baz=209,slow=6.0,SNR=3.8 | | | | | | |
| ANMO | Albuquerque | 77.40 | 333 | LR | LR | 18 12 54.2 | |
| | comp=Z,52nm,21.5s,baz=127,slow=32 | | | | | | |
| TORD | Torodi Ar. Bea | 86.37 | 71 | P | P | 17 43 44.3 | -0.1 |
| | 1.0nm,0.8s,baz=223,slow=3.8,SNR=4.9 | | | | | | |
| ABKAR | Akbulak array | 144.33 | 54 | *e*PKPdf | PKPbc | 17 50 35.6 | -0.2 |
| BVAR | Borovoye Array | 150.09 | 45 | PKPbc | PKPbc | 17 50 52.7 | +0.8 |
| | 1.0nm,0.8s,baz=289,slow=4.4,SNR=5.9 | | | | | | |
| ZALV | Zalesovo Beam | 157.13 | 34 | PKP | PKPdf | 17 50 55.2 | -1.7 |
| | 0.3nm,0.4s,baz=306,slow=2.8,SNR=2.3 | | | | | | |
| ZALV | | | | PKPab | PKPab | 17 51 28.4 | +0.8 |
| | 0.4nm,0.5s,baz=307,slow=5.4,SNR=3.9 | | | | | | |

*SJA **01** 17:54:02.7±1.1, 24°.24S×67°.21W, h192km±36km, ML2.6*
*ISCJB **01** 17:54:04.2±0.9, 24°.16S±0°.06×67°.24W±0°.07, h184km±6km, mb3.5/1, Error ellipse: s-maj=11.5km s-min=8.1km az=135.2*
*IDC **01** 17:54:05.5±2.7, 24°.05S×67°.09W, h160km±27km, mb3.6/1, mb1 3.6/5, mb1mx3.2/34, mbtmp4.0/5, Error ellipse: s-maj=38.4km s-min=22.2km az=155.0*

**ISC 01 17:54:05.2**±1.3**, 24°.12S**±0°.09×**67°.21W**±0°.08**, h177**km±9km**, n11, σ1s.08**/18**, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SLA | San Lorenzo | 1.67 | 111 | *i* P | Pn | 17 54 38.7 | -0.1 |
| SLA | | | | IAML | | 17 54 39.6 | |
| | comp=Z,108nm,0.6s | | | | | | |
| SLA | | | | *i* S | Sn | 17 55 05.0 | +0.2 |
| HJA | Humahuaca | 1.89 | 62 | *i* P | Pn | 17 54 41.9 | +0.6 |
| HJA | | | | *i* S | Sn | 17 55 10.4 | +1.3 |
| AZAP | Zapla | 1.96 | 94 | *i* P | Pn | 17 54 41.6 | -0.4 |
| AZAP | | | | *i* S | Sn | 17 55 09.5 | -0.9 |
| AZAP | | | | AML | AML | 17 55 13.2 | |
| | comp=Z,25nm,0.8s | | | | | | |
| LVC | Limon Verde | 2.16 | 313 | P | Pn | 17 54 44.5 | +0.3 |
| | comp=Z,224nm,0.3s,baz=141,slow=2.5,SNR=64 | | | | | | |
| LVC | | | | S | Sn | 17 55 13.7 | -0.7 |
| | comp=Z,607nm,0.3s,baz=310,slow=21,SNR=66 | | | | | | |
| FSA | Cafayete | 2.25 | 151 | *i* P | Pn | 17 54 44.2 | -0.8 |
| YJA | Yavi | 2.48 | 39 | *i* P | Pn | 17 54 48.5 | +0.5 |
| YJA | | | | *i* S | Sn | 17 55 22.7 | +1.4 |
| YJA | | | | AML | AML | 17 55 26.6 | |
| | comp=E,18nm,0.7s | | | | | | |
| LPAZ | La Paz | 7.84 | 354 | P | Pn | 17 55 58.5 | +1.4 |
| | comp=E,0.7nm,0.3s,baz=169,slow=7.3,SNR=14 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | | | | S | Sn | 17 57 23.4 | -2.0 |
| | comp=E,0.1nm,0.3s,baz=165,slow=18,SNR=2.8 | | | | | | |
| **SIV** | **San Ignacio** | **9.93** | **37** | P | **Pn** | **17 56 22.6** | **-1.4** |
| | comp=E,0.7nm,0.3s,baz=218,slow=15,SNR=8.7 | | | | | | |
| SIV | | | | S | **Sn** | **17 58 13.5** | **-1.1** |
| | comp=E,0.1nm,0.3s,baz=60,slow=20,SNR=3.1 | | | | | | |
| **BDFB** | **Brasilia** | **19.91** | **68** | P | **P** | **17 58 23.4** | **-0.1** |
| | comp=E,0.9nm,0.3s,baz=247,slow=12,SNR=12 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.79** | **69** | P | **P** | **18 05 38.4** | **+0.6** |
| | comp=E,0.8nm,0.6s,baz=250,slow=5.6,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.74** | **39** | PKPbc | **PKPab** | **18 13 28.2** | **+0.4** |
| | comp=E,0.7nm,0.8s,baz=309,slow=4.6,SNR=3.8 | | | | | | |

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*ISCJB **01** 18:18:45.0±0.7, 51.°48N±0.°03×16.°05E±0.°04, h0km, Error ellipse: s-maj=5.1km s-min=3.3km az=30.1*
*CSEM **01** 18:18:46.2±0.3, 51.°49N×16.°05E, h2km, ML3.0/7, Error ellipse: s-maj=4.9km s-min=4.1km az=34.0*
*VIE **01** 18:18:50.0±0.7, 51.°23N×16.°05E, h0km, mb2.1/2, ml2.4/4, Error ellipse: s-maj=6.5km s-min=5.3km az=166.0, Suspected Mining induced.*
**ISC 01 18:18:45.4**±0.9**, 51.°54N**±0.°03×**16.°10E**±0.°03**, h0**km**, n30,** σ**0.s75**/58**, 3C, Poland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.71** | **170** | *e*Pg | **Pb** | **18 18 59.9** | **-0.7** |
| KSP | | | | *e*Sg | **Sg** | **18 19 08.5** | **+0.3** |
| **KSP** | **Ksiaz** | **0.71** | **170** | *e*Pg | **Pb** | **18 18 59.9** | **-0.7** |
| KSP | | | | *e*Sg | **Sg** | **18 19 08.5** | **+0.3** |
| **UPC** | **Upice** | **1.04** | **183** | *e*PG | **Pg** | **18 19 05.7** | **+0.5** |
| UPC | | | | *e*SG | **Sg** | **18 19 18.0** | **-0.6** |
| | comp=Z,22nm,0.2s | | | | | | |
| **UPC** | **Upice** | **1.04** | **183** | Pg | **Pg** | **18 19 05.7** | **+0.5** |
| UPC | | | | Sg | **Sg** | **18 19 18.0** | **-0.6** |
| | 22nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.20** | **173** | *e*PG | **Pg** | **18 19 08.7** | **+0.3** |
| DPC | | | | *e*SG | **Sg** | **18 19 23.2** | **-0.7** |
| | comp=Z,13nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.20** | **173** | Pg | **Pg** | **18 19 08.7** | **+0.3** |
| DPC | | | | Sg | **Sg** | **18 19 23.2** | **-0.7** |
| | 13nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **1.40** | **224** | *e*PG | **Pb** | **18 19 12.6** | **+0.2** |
| PVCC | | | | *e*SG | **Sn** | **18 19 31.2** | **-0.1** |
| | comp=Z,53nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.40** | **224** | Pg | **Pb** | **18 19 12.6** | **+0.2** |
| PVCC | | | | Sg | **Sn** | **18 19 31.2** | **-0.1** |
| | 53nm,0.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.51** | **245** | PG | **Pg** | **18 19 14.9** | **+0.6** |
| BRG | | | | SG | **Sn** | **18 19 34.6** | **+0.5** |
| | 22nm,0.3s | | | | | | |
| **KRLC** | **Kraliky** | **1.53** | **163** | *e*PG | **Pg** | **18 19 15.0** | **+0.3** |
| KRLC | | | | *e*SG | **Sg** | **18 19 34.2** | **-0.3** |
| **KRLC** | **Kraliky** | **1.53** | **163** | Pg | **Pg** | **18 19 15.0** | **+0.3** |
| KRLC | | | | Sg | **Sg** | **18 19 34.2** | **-0.3** |
| **GOPC** | **GO Pecny, Ondr** | **1.83** | **208** | *e*PG | **Pb** | **18 19 19.9** | **+0.2** |
| GOPC | | | | *e*SG | **Sb** | **18 19 43.2** | **0.0** |
| **GOPC** | **GO Pecny, Ondr** | **1.83** | **208** | Pg | **Pb** | **18 19 19.9** | **+0.2** |
| GOPC | | | | Sg | **Sb** | **18 19 43.2** | **0.0** |
| **PRU** | **Pruhonice** | **1.84** | **213** | *e*PG | **Pb** | **18 19 19.8** | **-0.1** |
| PRU | | | | *e*SG | **Sb** | **18 19 43.5** | **0.0** |
| | comp=Z,6.2nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.84** | **213** | Pg | **Pb** | **18 19 19.8** | **-0.1** |
| PRU | | | | Sg | **Sb** | **18 19 43.5** | **0.0** |
| | 6.2nm,0.3s | | | | | | |
| **CLL** | **Collm** | **1.95** | **264** | *e*Pn | **Pn** | **18 19 19.0** | **-0.7** |
| CLL | | | | *e*Pg | **Pb** | **18 19 22.0** | **+0.2** |
| CLL | | | | *e*Sg | **Sg** | **18 19 48.0** | **0.0** |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.99** | **152** | *e*Pn | **Pn** | **18 19 20.4** | **0.0** |
| MORC | | | | *e*Sg | **Sb** | **18 19 47.9** | **0.0** |
| **OKC** | **Ostrava-Krasne** | **2.15** | **142** | *e*PG | **Pg** | **18 19 27.5** | **+1.0** |
| OKC | | | | *e*SG | **Sg** | **18 19 53.9** | **-0.4** |
| | comp=Z,6.7nm,0.6s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.15** | **142** | Pg | **Pg** | **18 19 27.5** | **+1.0** |
| OKC | | | | Sg | **Sg** | **18 19 53.9** | **-0.4** |
| | comp=Z,6.7nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **2.26** | **172** | *e*Sg | **Sg** | **18 19 57.1** | **-0.8** |
| **NKC** | **Novy Kostel** | **2.66** | **242** | *e*PN | **Pn** | **18 19 30.2** | **+0.7** |
| NKC | | | | *e*PG | **Pg** | **18 19 35.8** | **-0.5** |
| NKC | | | | *e*SG | **Sg** | **18 20 11.9** | **+1.3** |
| | comp=Z,14nm,0.3s | | | | | | |
| **NKC** | **Novy Kostel** | **2.66** | **242** | Pn | **Pn** | **18 19 30.2** | **+0.7** |
| **KHC** | **Kasperske Hory** | **2.90** | **215** | *e*PN | **Pn** | **18 19 33.0** | **+0.1** |
| KHC | | | | *e*PG | **Pb** | **18 19 39.1** | **+1.1** |
| KHC | | | | *e*SN | **Sn** | **18 20 06.9** | **-1.6** |
| KHC | | | | *e*SG | **Sg** | **18 20 17.1** | **-1.5** |
| **KHC** | **Kasperske Hory** | **2.90** | **215** | Pn | **Pn** | **18 19 33.0** | **+0.1** |
| **CONA** | **Conrad Observa** | **3.62** | **182** | ⇑*i*Pn | **Pn** | **18 19 43.7** | **+0.9** |
| | comp=Z,0.2nm,0.1s | | | | | | |
| **CONA** | **Conrad Observa** | **3.62** | **182** | Pn | **Pn** | **18 19 43.7** | **+0.9** |
| | comp=Z,0.2nm,0.1s | | | | | | |
| **BSD** | **Bornholm Skovb** | **3.65** | **349** | *i* P | **Pn** | **18 19 43.6** | **+0.5** |
| BSD | | | | *i* S | **Pb** | **18 19 49.7** | **-1.0** |
| **BSD** | **Bornholm Skovb** | **3.65** | **349** | *i* P | **Pn** | **18 19 43.6** | **+0.5** |
| **MOA** | **Molln** | **3.88** | **199** | ⇑*i*Pn | **Pn** | **18 19 47.1** | **+0.8** |
| | comp=Z,0.8nm,0.1s | | | | | | |
| MOA | | | | ⇑*e*Sg | **Sg** | **18 20 47.9** | **-2.1** |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **MOA** | **Molln** | **3.88** | **199** | Pn | **Pn** | **18 19 47.1** | **+0.8** |
| | comp=Z,0.8nm,0.1s | | | | | | |
| MOA | | | | Sg | **Sg** | **18 20 47.9** | **-2.1** |
| | comp=Z,2.4nm,0.3s | | | | | | |

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**BJI 01 18:56:40.1, 25.°61N×105.°54E, h7**km**, ML3.7**/8**, 1C, Southeastern China**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GYA** | **Guiyang** | **1.32** | **50** | ⇑*i*Pg | Pn | 18 57 02.2 | -2.9 |
| GYA | | | | Sg | Sb | 18 57 17.7 | -4.9 |
| GYA | | | | SMN | | | |
| | 650nm,0.7s | | | | | | |
| GYA | | | | SME | | | |
| | 600nm,0.7s | | | | | | |
| **CD2** | **Chengdu** | **5.51** | **344** | Pn | Pn | 18 58 04.4 | +1.7 |
| CD2 | | | | Sn | Sn | 18 59 06.5 | +0.2 |
| CD2 | | | | Sg | Sg | 18 59 36.6 | -0.6 |
| CD2 | | | | SMN | | | |
| | 80nm,0.8s | | | | | | |
| CD2 | | | | SME | | | |
| | 60nm,1.0s | | | | | | |
| **XAN** | **Xi'an** | **8.90** | **18** | P | Pn | 18 58 49.0 | -0.2 |
| XAN | | | | SMN | | | |
| | 19nm,0.8s | | | | | | |
| XAN | | | | SME | | | |
| | 14nm,0.6s | | | | | | |

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**FUNV 01 18:56:57.3, 9.°24N×61.°06W, h32**km**, MW3.5, 3C-1D, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUIV** | **Guiria** | **1.81** | **321** | ⇑*e*P | Pn | 18 57 25.7 | -0.5 |
| GUIV | | | | *e*S | Sn | 18 57 46.8 | -1.3 |
| **GUNV** | **Guanoco** | **2.07** | **296** | ⇑*e*P | Pn | 18 57 29.0 | -0.8 |
| GUNV | | | | *e*S | Sn | 18 57 52.0 | -2.5 |
| **ORIV** | **Oritupano** | **2.33** | **266** | *e*P | Pn | 18 57 32.6 | -0.8 |
| ORIV | | | | *e*S | Sn | 18 57 59.3 | -1.6 |
| **GURV** | **El Guri** | **2.48** | **234** | *e*P | Pn | 18 57 34.7 | -0.8 |
| GURV | | | | *e*S | Sn | 18 58 02.6 | -2.2 |
| **CRUV** | **Carupano** | **2.57** | **304** | ⇓*e*P | Pn | 18 57 35.2 | -1.5 |
| CRUV | | | | *e*S | Sn | 18 58 02.0 | -5.0 |
| **LUEV** | **Luepa** | **3.40** | **187** | *e*P | Pn | 18 57 47.0 | -1.3 |
| LUEV | | | | *e*S | Sn | 18 58 24.0 | -3.7 |
| **PCRV** | **Puerto La Cruz** | **3.65** | **285** | *e*P | Pn | 18 57 50.4 | -1.2 |
| PCRV | | | | *e*S | Sn | 18 58 28.9 | -4.7 |
| **CUPV** | **Cœpira** | **4.73** | **280** | *e*P | Pn | 18 58 05.4 | -1.2 |
| **BIRV** | **Birongo** | **5.28** | **284** | *e*P | Pn | 18 58 12.4 | -1.5 |
| **TURV** | **Turiamo** | **6.79** | **281** | *e*P | Pn | 18 58 32.0 | -2.8 |
| **BAUV** | **El Baul** | **6.90** | **268** | ⇑*i*P | Pn | 18 58 33.0 | -3.2 |
| BAUV | | | | *e*S | Sn | 18 59 45.5 | -8.2 |

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*ISK **01** 19:33:04.7, 37.°04N×28.°81E, h5km, MD3.3*
*ISCJB **01** 19:33:06.0±0.5, 37.°01N±0.°02×28.°84E±0.°03, h6km±4km, mb3.7/2, Error ellipse: s-maj=3.6km s-min=3.0km az=39.8*
*DDA **01** 19:33:05.8, 37.°04N×28.°80E, h7km, Md3.4*
*ATH **01** 19:33:05.8, 37.°01N×28.°71E, h5km±1km, MD3.5/9*
*IDC **01** 19:33:05.2±1.2, 36.°99N×28.°83E, h0km, mb3.7/2, mb1 3.6/8, mb1mx3.3/42, mbtmp3.5/8, ML3.3/6, Error ellipse: s-maj=18.9km s-min=17.4km az=141.0*
*CSEM **01** 19:33:06.2±0.2, 37.°02N×28.°81E, h5km, MD3.4, Error ellipse: s-maj=4.4km s-min=4.2km az=166.0*
*THE **01** 19:33:08.3, 36.°89N×28.°71E, h1km±3km, ML3.2/2, Error ellipse: s-maj=6.9km s-min=1.6km az=88.0*
**ISC 01 19:33:06.5**±1.0**, 37.°02N**±0.°02×**28.°79E**±0.°02**, h6**km±8km**, n92,** σ**1.s22**/121**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TURN** | **Turunc** | **0.21** | **225** | *i* P | Pg | 19 33 15.0 | +4.4 |
| **TURN** | **Turunc** | **0.21** | **225** | P | Pg | 19 33 15.1 | +4.4 |
| TURN | | | | S | Sg | 19 33 23.8 | +10 |
| **DALY** | **Dalyan (Mu˜la** | **0.23** | **208** | PG | **Pg** | **19 33 10.7** | **-0.3** |
| DALY | | | | *e*SG | **Sg** | **19 33 15.9** | **+1.8** |
| **DALY** | **Dalyan (Mu˜la** | **0.23** | **208** | *i* Pg | **Pg** | **19 33 10.7** | **-0.3** |
| DALY | | | | *e*Sg | **Sg** | **19 33 15.9** | **+1.8** |
| **YER** | **Yerkesik** | **0.42** | **286** | *e*PG | **Pg** | **19 33 14.4** | **-0.2** |
| **FETY** | **Fethiye** | **0.45** | **149** | *e*PG | **Pg** | **19 33 14.6** | **-0.6** |
| FETY | | | | *e*SG | **Sb** | **19 33 22.6** | **-1.1** |
| **FETY** | **Fethiye** | **0.45** | **149** | *e*Pg | **Pg** | **19 33 14.6** | **-0.6** |
| FETY | | | | *e*Sg | **Sb** | **19 33 22.7** | **-1.1** |
| **DNZL** | **Cakiroluk** | **0.70** | **17** | *i* S | **Sg** | **19 33 29.8** | **+0.8** |
| **DNZL** | **Cakiroluk** | **0.70** | **17** | P | **Pg** | **19 33 18.6** | **-1.3** |
| DNZL | | | | S | **Sg** | **19 33 29.8** | **+0.8** |
| **DENT** | **Denizli** | **0.76** | **15** | *e*PG | **Pg** | **19 33 19.6** | **-1.4** |
| **ELL** | **Elmali** | **0.94** | **107** | *e*PG | **Pg** | **19 33 23.4** | **-1.0** |
| **ELL** | **Elmali** | **0.94** | **107** | *e*Pg | **Pg** | **19 33 23.4** | **-1.0** |
| **ARG** | **Arkhangelos** | **0.97** | **214** | *e*PB | **Pg** | **19 33 23.6** | **-1.4** |
| **ARG** | **Arkhangelos** | **0.97** | **214** | P | **Pg** | **19 33 23.6** | **-1.4** |
| ARG | | | | S | **Sg** | **19 33 37.8** | **+0.3** |
| **ARG** | **Arkhangelos** | **0.97** | **214** | P | **Pg** | **19 33 23.6** | **-1.4** |
| ARG | | | | S | **Sg** | **19 33 37.8** | **+0.3** |
| **AYDN** | **Tasoluk** | **0.97** | **312** | *i* P | **Pb** | **19 33 25.3** | **-0.3** |
| AYDN | | | | *i* S | **Sn** | **19 33 40.4** | **-0.3** |
| **AYDN** | **Tasoluk** | **0.97** | **312** | P | **Pb** | **19 33 25.3** | **-0.3** |
| AYDN | | | | S | **Sn** | **19 33 40.4** | **-0.3** |
| **AKAS** | **Kas** | **1.02** | **140** | *i* P | **Pg** | **19 33 25.8** | **-0.3** |
| **AKAS** | **Kas** | **1.02** | **140** | P | **Pg** | **19 33 25.8** | **-0.3** |
| AKAS | | | | S | **Sn** | **19 33 47.0** | **+4.8** |
| **BDRM** | **Kayabasi** | **1.08** | **273** | *i* P | **Pg** | **19 33 27.1** | **-0.1** |
| **BDRM** | **Kayabasi** | **1.08** | **273** | P | **Pg** | **19 33 27.1** | **-0.1** |
| BDRM | | | | S | **Sn** | **19 33 45.2** | **+1.8** |
| **KSL** | **Kastellorizon** | **1.08** | **144** | *e*PB | **Pb** | **19 33 27.1** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.17** | **322** | *e*PN | **Pg** | **19 33 28.1** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.17** | **322** | *e*Pn | **Pg** | **19 33 28.1** | **-0.8** |
| **BODT** | **Bodrum** | **1.19** | **272** | *e*PN | **Pg** | **19 33 28.3** | **-0.9** |
| **BODT** | **Bodrum** | **1.19** | **272** | *e*Pn | **Pg** | **19 33 28.3** | **-0.9** |
| **KORT** | **Korkueli** | **1.25** | **91** | *i* P | **Pn** | **19 33 30.5** | **-0.1** |
| **KORT** | **Korkueli** | **1.25** | **91** | P | **Pn** | **19 33 30.5** | **-0.1** |
| KORT | | | | S | **Sn** | **19 33 51.8** | **+4.0** |
| **NIS1** | **Nisyros Isl.** | **1.36** | **253** | *e*PN | **Pb** | **19 33 32.3** | **0.0** |
| **NIS1** | **Nisyros Isl.** | **1.36** | **253** | *e*PB | **Pn** | **19 33 30.5** | **-1.5** |
| **NIS1** | **Nisyros Isl.** | **1.36** | **253** | P | **Pn** | **19 33 31.3** | **-0.7** |
| NIS1 | | | | S | **Sb** | **19 33 49.5** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **1.36** | **253** | *e*Pb | **Pn** | **19 33 30.5** | **-1.5** |
| **NIS1** | **Nisyros Isl.** | **1.36** | **253** | P | **Pn** | **19 33 31.3** | **-0.7** |
| **NIS1** | **Nisyros Isl.** | **1.36** | **253** | *e*Pn | **Pb** | **19 33 32.3** | **0.0** |
| NIS1 | | | | S | **Sb** | **19 33 49.5** | **-0.5** |
| **NISR** | **Nisiros** | **1.40** | **253** | *e*PB | **Pn** | **19 33 31.3** | **-1.1** |
| **NISR** | **Nisiros** | **1.40** | **253** | *e*Pb | **Pn** | **19 33 31.3** | **-1.1** |
| **GCAM** | **G?zelcaml?** | **1.41** | **299** | *i* P | **Pg** | **19 33 34.0** | **+0.4** |
| GCAM | | | | *i* S | **Sg** | **19 33 53.1** | **+1.2** |
| **GCAM** | **G?zelcaml?** | **1.41** | **299** | P | **Pg** | **19 33 34.0** | **+0.4** |
| GCAM | | | | S | **Sg** | **19 33 53.1** | **+1.2** |
| **KHL** | **Karahalli** | **1.42** | **24** | *e*PN | **Pn** | **19 33 33.0** | **+0.1** |
| **KHL** | **Karahalli** | **1.42** | **24** | *e*Pn | **Pn** | **19 33 33.0** | **+0.1** |
| **KHAL** | **Karahalli** | **1.46** | **22** | *i* P | **Pn** | **19 33 32.1** | **-1.3** |
| KHAL | | | | *i* S | **Sn** | **19 33 52.9** | **0.0** |
| **KHAL** | **Karahalli** | **1.46** | **22** | P | **Pn** | **19 33 32.1** | **-1.3** |
| KHAL | | | | S | **Sn** | **19 33 52.9** | **0.0** |
| **MANT** | **Manisa** | **1.48** | **353** | *i* P | **Pn** | **19 33 33.6** | **-0.2** |
| MANT | | | | *i* S | **Sg** | **19 33 54.1** | **+0.1** |
| **MANT** | **Manisa** | **1.48** | **353** | P | **Pn** | **19 33 33.6** | **-0.2** |
| MANT | | | | S | **Sg** | **19 33 54.1** | **+0.1** |
| **KULA** | **Kula-Manisa** | **1.49** | **356** | *e*PN | **Pn** | **19 33 33.0** | **-0.9** |
| **KULA** | **Kula-Manisa** | **1.49** | **356** | *e*Pn | **Pn** | **19 33 33.0** | **-0.9** |
| **ANTB** | **Antalya** | **1.50** | **94** | *e*PN | **Pn** | **19 33 33.9** | **+0.1** |
| **ANTB** | **Antalya** | **1.50** | **94** | *e*Pn | **Pn** | **19 33 33.9** | **+0.1** |
| **BCK** | **Bucak** | **1.50** | **72** | *e*PN | **Pn** | **19 33 33.9** | **-0.1** |
| **BCK** | **Bucak** | **1.50** | **72** | *e*Pn | **Pn** | **19 33 33.9** | **-0.1** |
| **SMG** | **Samos** | **1.70** | **294** | *e*PG | **Pn** | **19 33 36.5** | **-0.2** |
| **SMG** | **Samos** | **1.70** | **294** | *e*Pg | **Pn** | **19 33 36.5** | **-0.2** |
| **IZM** | **Izmir** | **1.83** | **319** | *e*PN | **Pn** | **19 33 38.5** | **0.0** |
| **IZM** | **Izmir** | **1.83** | **319** | *e*Pn | **Pn** | **19 33 38.5** | **0.0** |
| **KARP** | **Karpathos** | **1.98** | **222** | *e*PN | **Pb** | **19 33 41.8** | **-1.0** |
| KARP | | | | *e*SN | **Sb** | **19 34 08.1** | **+0.4** |
| **KARP** | **Karpathos** | **1.98** | **222** | P | **Pn** | **19 33 40.1** | **-0.4** |
| KARP | | | | S | **Sn** | **19 34 03.0** | **-2.5** |
| **KARP** | **Karpathos** | **1.98** | **222** | P | **Pn** | **19 33 40.1** | **-0.4** |
| **KARP** | **Karpathos** | **1.98** | **222** | *e*Pn | **Pb** | **19 33 41.8** | **-1.0** |
| KARP | | | | S | **Sn** | **19 34 03.0** | **-2.5** |
| KARP | | | | *e*Sn | **Sb** | **19 34 08.1** | **+0.4** |
| **AKS** | **Akhisar** | **2.01** | **338** | *e*PN | **Pn** | **19 33 40.8** | **-0.1** |
| **AKS** | **Akhisar** | **2.01** | **338** | *e*Pn | **Pn** | **19 33 40.8** | **-0.1** |
| **DKL** | **Dikili** | **2.53** | **325** | *e*PN | **Pn** | **19 33 48.2** | **+0.1** |
| **DKL** | **Dikili** | **2.53** | **325** | *e*Pn | **Pn** | **19 33 48.2** | **+0.1** |
| **APE** | **Apeiranthos** | **2.61** | **272** | *e*PN | **Pn** | **19 33 49.8** | **+0.6** |
| **APE** | **Apeiranthos** | **2.61** | **272** | *e*PN | **Pn** | **19 33 50.7** | **+1.5** |
| APE | | | | *e*SG | **Sn** | **19 34 22.7** | **+1.5** |
| **APE** | **Apeiranthos** | **2.61** | **272** | *e*Pn | **Pn** | **19 33 49.8** | **+0.6** |
| APE | | | | *e*Sn | **Sn** | **19 34 22.7** | **+1.5** |
| **SANT** | **Santorini** | **2.76** | **257** | *e*PN | **Pn** | **19 33 52.9** | **+1.7** |
| **SANT** | **Santorini** | **2.76** | **257** | *e*Pn | **Pn** | **19 33 52.9** | **+1.7** |
| **THR3** | **Thira Island,** | **2.79** | **258** | P | **Pn** | **19 33 51.5** | **-0.1** |
| **THR3** | **Thira Island,** | **2.79** | **258** | P | **Pn** | **19 33 51.5** | **-0.1** |
| **ZKR** | **Zakros** | **2.82** | **228** | P | **Pn** | **19 33 51.8** | **-0.3** |
| **ZKR** | **Zakros** | **2.82** | **228** | P | **Pn** | **19 33 51.8** | **-0.3** |
| **THR5** | **Thira Island,** | **2.83** | **259** | *e*PN | **Pn** | **19 33 53.7** | **+1.5** |
| **THR5** | **Thira Island,** | **2.83** | **259** | *e*Pn | **Pn** | **19 33 53.7** | **+1.5** |
| **PRK** | **Paraskevi** | **2.98** | **319** | *e*PN | **Pn** | **19 33 56.2** | **+2.0** |
| **PRK** | **Paraskevi** | **2.98** | **319** | P | **Pn** | **19 33 56.2** | **+2.0** |
| **PRK** | **Paraskevi** | **2.98** | **319** | P | **Pn** | **19 33 56.2** | **+2.0** |
| **NPS** | **Neapolis** | **3.12** | **237** | *e*PB | **Pn** | **19 33 57.2** | **+1.1** |
| NPS | | | | *e*SN | **Sn** | **19 34 35.1** | **+1.4** |
| **NPS** | **Neapolis** | **3.12** | **237** | *e*Pb | **Pn** | **19 33 57.2** | **+1.1** |
| NPS | | | | *e*Sn | **Sn** | **19 34 35.1** | **+1.4** |
| **IDI** | **Anoyia** | **3.60** | **242** | Pn | **Pn** | **19 34 04.1** | **+1.2** |
| | 3.9nm,0.3s,baz=62,slow=20,SNR=36 | | | | | | |
| IDI | | | | Sn | **Sn** | **19 34 47.5** | **+1.8** |
| | 2.5nm,0.3s,baz=30,slow=16,SNR=4.3 | | | | | | |
| **IDI** | **Anoyia** | **3.60** | **242** | *e*PN | **Pn** | **19 34 04.8** | **+2.0** |
| **IDI** | **Anoyia** | **3.60** | **242** | *e*Pn | **Pn** | **19 34 04.8** | **+2.0** |
| **VAM** | **Vamos** | **4.05** | **248** | *e*PN | **Pn** | **19 34 11.4** | **+2.5** |
| **VAM** | **Vamos** | **4.05** | **248** | *e*Pn | **Pn** | **19 34 11.4** | **+2.5** |
| **BRTR** | **Keskin Array B** | **4.67** | **53** | Pn | **Pn** | **19 34 18.7** | **+1.1** |
| | 0.5nm,0.3s,baz=236,slow=17,SNR=14 | | | | | | |
| BRTR | | | | Sn | **Sn** | **19 35 13.6** | **+1.5** |
| | 0.2nm,0.3s,baz=229,slow=25,SNR=3.5 | | | | | | |
| **KYTH** | **Kithira** | **4.69** | **263** | P | **Pn** | **19 34 17.9** | **+0.2** |
| **KYTH** | **Kithira** | **4.69** | **263** | P | **Pn** | **19 34 17.9** | **+0.2** |
| **MMAI** | **Mount Meron Ar** | **6.74** | **124** | Pn | **Pn** | **19 34 44.5** | **-1.4** |
| | 3.1nm,0.3s,baz=307,slow=11,SNR=28 | | | | | | |
| MMAI | | | | Sn | **Sn** | **19 36 03.3** | **+0.2** |
| | 0.8nm,0.3s,baz=305,slow=28,SNR=3.3 | | | | | | |
| **ASF** | **Jabal al Asfar** | **8.25** | **124** | Pn | **Pn** | **19 35 07.5** | **+0.8** |
| | 0.2nm,0.3s,baz=287,slow=11,SNR=2.8 | | | | | | |
| **MLR** | **Muntele Rosu** | **8.73** | **347** | Pn | **Pn** | **19 35 13.6** | **+0.4** |
| | 0.1nm,0.3s,baz=120,slow=14,SNR=4.3 | | | | | | |
| **EIL** | **Elat** | **8.96** | **143** | Pn | **Pn** | **19 35 14.4** | **-1.9** |
| | 1.1nm,0.3s,baz=350,slow=10,SNR=8.7 | | | | | | |
| **FINES** | **FINESS Array B** | **24.50** | **357** | P | **P** | **19 38 27.1** | **+0.8** |
| | 1.7nm,0.8s,baz=159,slow=12,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.95** | **233** | P | **P** | **19 39 49.6** | **-1.0** |
| | 0.4nm,0.4s,baz=34,slow=8.7,SNR=7.7 | | | | | | |

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**BUC 01 19:33:41.8**±0.5**, 45.°01N×23.°22E, h8**km±1km**, MD2.0**/3**, 6C, Error ellipse: s-maj=4.0km s-min=0.5km az=350.0, Romania**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GZR** | **Gura Zlata** | **0.49** | **321** | ⇑*i*P | Pg | 19 33 52.2 | +0.7 |
| GZR | | | | *i* S | Sg | 19 33 57.7 | -0.4 |
| **GZR** | **Gura Zlata** | **0.49** | **321** | ⇑*i*P | Pg | 19 33 52.2 | +0.7 |
| **GZR** | **Gura Zlata** | **0.49** | **321** | S | Sg | 19 33 57.7 | -0.4 |
| **LOT** | **Lotru** | **0.59** | **41** | ⇑*i*P | Pb | 19 33 54.1 | -0.5 |
| LOT | | | | *i* S | Sb | 19 34 02.8 | -0.4 |
| **LOT** | **Lotru** | **0.59** | **41** | ⇑*i*P | Pb | 19 33 54.1 | -0.5 |
| LOT | | | | S | Sb | 19 34 02.8 | -0.4 |
| **BZS** | **Buzias** | **1.28** | **299** | ⇑*i*P | Pg | 19 34 06.7 | +0.3 |
| **BZS** | **Buzias** | **1.28** | **299** | ⇑*i*P | Pg | 19 34 06.7 | +0.3 |
| **VOIR** | | **1.37** | **71** | *i* S | Sg | 19 34 26.6 | +0.6 |
| **VOIR** | | **1.37** | **71** | S | Sg | 19 34 26.6 | +0.6 |

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*ISCJB **01** 19:39:25.8±0.3, 24.°32N±0.°03×122.°10E±0.°02, h26km±4km, Error ellipse: s-maj=5.3km s-min=2.7km az=165.0*
*TAP **01** 19:39:25.6, 24.°34N×122.°04E, h29km, ML2.7, C*
*JMA **01** 19:39:25.0±0.1, 24.°24N×122.°03E, h47km±2km, M1.8*
**ISC 01 19:39:25.6**±1.0**, 24.°36N**±0.°03×**122.°07E**±0.°02**, h28**km±9km**, n32,** σ**0.s62**/58**, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ENA** | **Nanau** | **0.31** | **284** | *i* P | **Pb** | **19 39 33.0** | **+0.1** |
| | baz=293 | | | | | | |
| ENA | | | | *i* S | **Sb** | **19 39 38.4** | **+0.4** |
| | baz=293 | | | | | | |
| **TWC** | **Suao** | **0.32** | **322** | *i* P | **Pn** | **19 39 33.5** | **-1.0** |
| | baz=333 | | | | | | |
| TWC | | | | *i* S | **Sn** | **19 39 38.8** | **-1.5** |
| | baz=333 | | | | | | |
| **ILA** | **Ilan** | **0.50** | **325** | *e*P | **Pn** | **19 39 36.5** | **-0.4** |
| | baz=330 | | | | | | |
| ILA | | | | *e*S | **Sn** | **19 39 44.3** | **-0.3** |
| | baz=330 | | | | | | |
| **EGS** | | **0.50** | **346** | P | **Pn** | **19 39 36.7** | **-0.3** |
| | baz=352 | | | | | | |
| EGS | | | | *i* S | **Sn** | **19 39 44.2** | **-0.5** |
| | baz=352 | | | | | | |
| **TWD** | **Chiawan** | **0.51** | **238** | P | **Pb** | **19 39 36.1** | **0.0** |
| | baz=235 | | | | | | |
| TWD | | | | S | **Sn** | **19 39 44.3** | **-0.5** |
| | baz=235 | | | | | | |
| **TWE** | **Neicheng** | **0.52** | **315** | P | **Pn** | **19 39 36.6** | **-0.5** |
| | baz=321 | | | | | | |
| TWE | | | | S | **Sn** | **19 39 44.5** | **-0.6** |
| | baz=321 | | | | | | |
| **ENTT** | **Nioudou** | **0.54** | **302** | *e*P | **Pn** | **19 39 37.2** | **-0.3** |
| | baz=305 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **19 39 44.8** | **-0.8** |
| | baz=305 | | | | | | |
| **NNS** | **Nan Shan** | **0.64** | **278** | *e*P | **Pb** | **19 39 38.3** | **-0.1** |
| | baz=284 | | | | | | |
| NNS | | | | S | **Sn** | **19 39 47.9** | **-0.4** |
| | baz=284 | | | | | | |
| **NSK** | **Sanguang** | **0.72** | **296** | *i* P | **Pn** | **19 39 40.0** | **0.0** |
| | baz=305 | | | | | | |
| NSK | | | | S | **Sn** | **19 39 50.1** | **-0.1** |
| | baz=305 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.76** | **340** | *e*P | **Pn** | **19 39 41.3** | **+0.7** |
| | baz=336 | | | | | | |
| NWF | | | | *e*S | **Sn** | **19 39 52.2** | **+1.1** |
| | baz=336 | | | | | | |
| **TWA** | **Mucha** | **0.76** | **325** | *e*P | **Pn** | **19 39 41.1** | **+0.5** |
| | baz=321 | | | | | | |
| TWA | | | | *e*S | **Sn** | **19 39 52.1** | **+1.0** |
| | baz=321 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.76** | **254** | *i* P | **Pb** | **19 39 40.2** | **-0.3** |
| | baz=254 | | | | | | |
| WHF | | | | S | **Sn** | **19 39 51.5** | **-0.3** |
| | baz=254 | | | | | | |
| **ESL** | **Shilin** | **0.79** | **227** | *e*P | **Pb** | **19 39 39.8** | **-1.0** |
| | baz=225 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.81** | **83** | P | **Pb** | **19 39 40.8** | **-0.3** |
| JYNG | | | | S | **Sn** | **19 39 52.3** | **+0.1** |
| **TWT** | **Tachien** | **0.82** | **263** | *e*P | **Pn** | **19 39 41.7** | **+0.2** |
| | baz=263 | | | | | | |
| TWT | | | | *e*S | **Sn** | **19 39 53.1** | **+0.3** |
| | baz=263 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.87** | **83** | P | **Pb** | **19 39 41.8** | **-0.3** |
| YOJ | | | | S | **Sn** | **19 39 53.7** | **0.0** |
| **NSTT** | **Nanjuang** | **1.01** | **286** | P | **Pb** | **19 39 44.6** | **+0.1** |
| | baz=287 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **19 39 58.5** | **+1.3** |
| | baz=287 | | | | | | |
| **WDT** | **Danda** | **1.04** | **235** | *e*P | **Pn** | **19 39 44.2** | **-0.5** |
| | baz=232 | | | | | | |
| WDT | | | | *e*S | **Sb** | **19 39 57.9** | **-0.7** |
| | baz=232 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.17** | **246** | *e*P | **Pn** | **19 39 46.6** | **+0.4** |
| | baz=232 | | | | | | |
| SMLT | | | | S | **Sb** | **19 40 02.0** | **0.0** |
| | baz=232 | | | | | | |
| **TWQ1** | **Liyutan** | **1.18** | **270** | *e*P | **Pb** | **19 39 48.5** | **+1.1** |
| | baz=258 | | | | | | |
| **TYC** | **Yuchr** | **1.19** | **248** | *e*P | **Pb** | **19 39 47.9** | **+0.3** |
| | baz=234 | | | | | | |
| TYC | | | | *e*S | **Sb** | **19 40 02.8** | **+0.2** |
| | baz=234 | | | | | | |
| **YUS** | **Yu-Shan** | **1.34** | **230** | *e*P | **Pn** | **19 39 49.0** | **+0.2** |
| | baz=213 | | | | | | |
| YUS | | | | *e*S | **Sn** | **19 40 06.0** | **0.0** |
| | baz=213 | | | | | | |
| **ALS** | **Alishan** | **1.43** | **234** | *e*P | **Pb** | **19 39 51.3** | **-0.5** |
| | baz=218 | | | | | | |
| ALS | | | | *e*S | **Sb** | **19 40 09.9** | **+0.2** |
| | baz=218 | | | | | | |
| **CHN5** | **Tsauling** | **1.48** | **240** | *e*P | **Pn** | **19 39 50.7** | **+0.2** |
| | baz=222 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **19 40 10.7** | **-0.3** |
| | baz=222 | | | | | | |
| **ELDTW** | **Lidau** | **1.51** | **220** | *e*P | **Pn** | **19 39 51.0** | **0.0** |
| | baz=206 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.52** | **90** | P | **Pn** | **19 39 50.7** | **-0.2** |
| IRIF | | | | S | **Sn** | **19 40 10.2** | **+0.5** |
| **STYT** | **Tauyuan** | **1.69** | **226** | *e*P | **Pn** | **19 39 54.1** | **+0.7** |
| | baz=212 | | | | | | |
| **WTP** | **Ta-pu** | **1.73** | **231** | *e*P | **Pn** | **19 39 54.3** | **+0.4** |
| | baz=228 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.78** | **93** | S | **Sn** | **19 40 17.3** | **+1.2** |
| **CHN1** | **Nanshi** | **1.83** | **231** | *e*P | **Pn** | **19 39 54.1** | **-1.1** |
| | baz=226 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **19 40 19.0** | **+1.5** |
| | baz=226 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.89** | **89** | P | **Pn** | **19 39 56.2** | **+0.1** |
| JIJ | | | | S | **Sn** | **19 40 18.3** | **-0.7** |
| **JISG** | **Ishigakijimahi** | **2.06** | **83** | P | **Pn** | **19 39 58.6** | **+0.3** |
| JISG | | | | S | **Sn** | **19 40 23.2** | **+0.1** |

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*CSEM **01** 19:40:16.7±0.2, 40.°15N×28.°88E, h15km, MD2.8, Error ellipse: s-maj=4.7km s-min=3.8km az=138.0*
*ISK **01** 19:40:16.0, 40.°14N×28.°88E, h22km, MD2.8*
*ISCJB **01** 19:40:17.1±0.4, 40.°17N±0.°02×28.°87E±0.°04, h10km±3km, Error ellipse: s-maj=4.7km s-min=4.0km az=23.4*
*DDA **01** 19:40:17.4, 40.°14N×28.°95E, h9km, Md2.7*
**ISC 01 19:40:16.6**±0.8**, 40.°16N**±0.°02×**28.°88E**±0.°02**, h17**km±5km**, n37,** σ**0.s53**/54**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ORLT** | **Orhaneli** | **0.11** | **174** | *e*PG | **Pg** | **19 40 20.5** | **+0.2** |
| ORLT | | | | *e*SG | **Sg** | **19 40 23.5** | **+0.8** |
| **ORLT** | **Orhaneli** | **0.11** | **174** | *e*Pg | **Pg** | **19 40 20.5** | **+0.2** |
| ORLT | | | | *e*Sg | **Sg** | **19 40 23.5** | **+0.8** |
| **ULDT** | **Uludag** | **0.20** | **94** | *i* P | **Pg** | **19 40 21.3** | **-0.2** |
| ULDT | | | | *i* S | **Sg** | **19 40 23.9** | **-1.0** |
| **ULDT** | **Uludag** | **0.20** | **94** | P | **Pg** | **19 40 21.3** | **-0.2** |
| ULDT | | | | S | **Sg** | **19 40 23.9** | **-1.0** |
| **MDNY** | **Mudanya-Bursa** | **0.21** | **1** | *e*PG | **Pg** | **19 40 22.0** | **+0.4** |
| MDNY | | | | *e*SG | **Sb** | **19 40 26.4** | **+0.6** |
| **MDNY** | **Mudanya-Bursa** | **0.21** | **1** | *e*Pg | **Pg** | **19 40 22.0** | **+0.4** |
| MDNY | | | | *e*Sg | **Sb** | **19 40 26.4** | **+0.6** |
| **IGD** | **Bursa** | **0.27** | **67** | P | **Pg** | **19 40 22.5** | **0.0** |
| IGD | | | | S | **Sg** | **19 40 25.7** | **-0.8** |
| **ARMT** | **Armutlu** | **0.41** | **358** | *e*PG | **Pb** | **19 40 25.9** | **+0.4** |
| ARMT | | | | *e*SG | **Sb** | **19 40 32.1** | **+0.6** |
| **ARMT** | **Armutlu** | **0.41** | **358** | *e*Pg | **Pb** | **19 40 25.9** | **+0.4** |
| ARMT | | | | *e*Sg | **Sb** | **19 40 32.1** | **+0.6** |
| **KCTX** | **Karacabey (Bur** | **0.42** | **285** | *e*PG | **Pb** | **19 40 25.5** | **-0.1** |
| **KCTX** | **Karacabey (Bur** | **0.42** | **285** | *e*Pg | **Pb** | **19 40 25.5** | **-0.1** |
| **IZI** | **Iznik** | **0.49** | **68** | *e*PG | **Pg** | **19 40 26.6** | **+0.1** |
| **IZI** | **Iznik** | **0.49** | **68** | *e*Pg | **Pg** | **19 40 26.6** | **+0.1** |
| **DURS** | **Dursunbey** | **0.64** | **209** | *i* P | **Pb** | **19 40 30.1** | **+0.7** |
| DURS | | | | *i* S | **Sb** | **19 40 38.9** | **+0.8** |
| **DURS** | **Dursunbey** | **0.64** | **209** | P | **Pb** | **19 40 30.1** | **+0.7** |
| DURS | | | | S | **Sb** | **19 40 38.9** | **+0.8** |
| **ADVT** | **Abdulvahap** | **0.71** | **67** | *e*PG | **Pb** | **19 40 30.6** | **0.0** |
| **ADVT** | **Abdulvahap** | **0.71** | **67** | *e*Pg | **Pb** | **19 40 30.6** | **0.0** |
| **BUY** | **Buyukada** | **0.72** | **15** | *i* P | **Pg** | **19 40 31.4** | **+0.7** |
| BUY | | | | *i* S | **Sn** | **19 40 42.5** | **-0.2** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BUY** | **Buyukada** | **0.72** | **15** | P | **Pg** | **19 40 31.4** | **+0.7** |
| BUY | | | | S | **Sn** | **19 40 42.5** | **-0.2** |
| **EDC** | **Edincik** | **0.80** | **284** | *e*PG | **Pb** | **19 40 32.2** | **+0.1** |
| **EDC** | **Edincik** | **0.80** | **284** | *e*Pg | **Pb** | **19 40 32.2** | **+0.1** |
| **ISK** | **Istanbul-Kandi** | **0.92** | **8** | *e*PG | **Pb** | **19 40 34.1** | **0.0** |
| **ISK** | **Istanbul-Kandi** | **0.92** | **8** | *e*Pg | **Pb** | **19 40 34.1** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **0.92** | **263** | *e*PG | **Pg** | **19 40 34.6** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **0.92** | **263** | *e*Pg | **Pg** | **19 40 34.6** | **0.0** |
| **BALB** | **Balikesir** | **0.93** | **236** | *e*PG | **Pb** | **19 40 33.8** | **-0.5** |
| **BALB** | **Balikesir** | **0.93** | **236** | *e*Pg | **Pb** | **19 40 33.8** | **-0.5** |
| **MRMT** | **Marmara Adasi** | **1.08** | **295** | *e*PN | **Pb** | **19 40 35.7** | **-1.2** |
| **MRMT** | **Marmara Adasi** | **1.08** | **295** | *e*Pn | **Pb** | **19 40 35.7** | **-1.2** |
| **KLYT** | **Kilyos** | **1.10** | **6** | *e*PN | **Pb** | **19 40 36.9** | **-0.4** |
| **KLYT** | **Kilyos** | **1.10** | **6** | *e*Pn | **Pb** | **19 40 36.9** | **-0.4** |
| **BORA** | **Eskisehir** | **1.24** | **102** | *i* P | **Pb** | **19 40 39.8** | **+0.1** |
| BORA | | | | *i* S | **Sg** | **19 40 57.0** | **+0.2** |
| **BORA** | **Eskisehir** | **1.24** | **102** | P | **Pb** | **19 40 39.8** | **+0.1** |
| BORA | | | | S | **Sg** | **19 40 57.0** | **+0.2** |
| **GULT** | **Gulveren** | **1.28** | **77** | *e*PN | **Pn** | **19 40 39.4** | **-0.5** |
| **GULT** | **Gulveren** | **1.28** | **77** | *e*Pn | **Pn** | **19 40 39.4** | **-0.5** |
| **MANT** | **Manisa** | **1.68** | **189** | *i* P | **Pg** | **19 40 49.0** | **0.0** |
| MANT | | | | *i* S | **Sg** | **19 41 10.5** | **-0.5** |
| **MANT** | **Manisa** | **1.68** | **189** | P | **Pg** | **19 40 49.0** | **0.0** |
| MANT | | | | S | **Sg** | **19 41 10.5** | **-0.5** |

*ISCJB **01** 19:44:21.8±0.8, 5°.6N±0°.2×127°.3E±0°.2, h53km, mb3.8/6, Error ellipse: s-maj=40.4km s-min=9.5km az=148.3*
*IDC **01** 19:44:27.9±4.0, 5°.56N×127°.40E, h98km±39km, mb3.5/6, mb1 3.7/7, mb1mx3.3/35, mbtmp3.8/7, MS2.8/2, Ms1 2.8/2, ms1mx2.4/23, Error ellipse: s-maj=42.5km s-min=19.3km az=60.0*
**ISC 01 19:44:23.7**±0.9**, 5°.7N**±0°.2×**127°.4E**±0°.3**, h53**km**, n9,** σ**1s49**/8**, mb3.6**/6**, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **7.63** | **149** | P | **Pn** | **19 46 13.6** | **+1.2** |
| | 0.2nm,0.3s,baz=122,slow=18,SNR=2.4 | | | | | | |
| SIJI | | | | S | **Sn** | **19 47 38.1** | **+0.5** |
| | 0.5nm,0.3s,baz=180,slow=20,SNR=4.0 | | | | | | |
| **KAPI** | **Kappang** | **13.11** | **216** | LR | LR | 19 52 53.5 | |
| | comp=Z,40nm,21.8s,baz=85,slow=39 | | | | | | |
| **GUMO** | **Guam** | **18.93** | **64** | LR | LR | 19 55 33.7 | |
| | comp=Z,26nm,18.8s,baz=94,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.43** | **165** | P | **P** | **19 49 54.1** | **-1.6** |
| | 0.6nm,0.4s,baz=342,slow=10,SNR=9.9 | | | | | | |
| **ASAR** | **Alice Springs** | **29.91** | **168** | P | **P** | **19 50 25.2** | **-1.6** |
| | 0.4nm,0.3s,baz=340,slow=7.2,SNR=18 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.46** | **297** | P | **P** | **19 50 32.5** | **+0.8** |
| | 0.6nm,0.5s,baz=110,slow=6.9,SNR=5.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.29** | **324** | P | **P** | **19 54 00.2** | **+1.1** |
| | 0.7nm,0.3s,baz=115,slow=7.5,SNR=26 | | | | | | |
| **ILAR** | **Eielson Array** | **83.03** | **26** | P | **P** | **19 56 43.3** | **0.0** |
| | 0.3nm,0.5s,baz=272,slow=5.4,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.79** | **340** | P | **P** | **19 57 10.1** | **-1.5** |
| | 1.2nm,1.0s,baz=79,slow=5.6,SNR=3.3 | | | | | | |

*ISN **01** 19:55:43.9±1.0, 26°.60N×48°.30E, h0km±999km*
**IDC 01 19:54:49.9**±12.0**, 26°.30N×53°.79E, h0**km**, mb3.6**/4**, mb1 3.6**/4**, mb1mx3.2**/43**, mbtmp3.6**/4**, Error ellipse: s-maj=233.6km s-min=41.4km az=3.0, Southern Iran**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NSR** | **Nassriya** | **8.19** | **307** | *e*PN | x | 19 56 57.8 | |
| NSR | | | | *e*SN | x | 19 57 49.3 | |
| **IBDR** | **Badra** | **9.62** | **317** | *e*PN | x | 19 57 26.5 | |
| IBDR | | | | *e*SN | x | 19 58 39.2 | |
| **BHD** | **Baghdad** | **10.72** | **313** | *e*PN | x | 19 57 36.5 | |
| BHD | | | | *e*SN | x | 19 58 54.6 | |
| **BRTR** | **Keskin Array B** | **21.49** | **314** | P | P | 19 59 40.5 | +0.1 |
| | 0.9nm,0.8s,baz=127,slow=10,SNR=5.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **24.31** | **7** | P | P | 20 00 09.1 | -0.1 |
| | 0.4nm,0.3s,baz=180,slow=11,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **30.43** | **40** | P | P | 20 01 04.3 | +0.2 |
| | 1.0nm,0.9s,baz=227,slow=11,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.89** | **31** | P | P | 20 01 51.2 | -0.3 |
| | 0.7nm,0.6s,baz=232,slow=7.1,SNR=3.6 | | | | | | |

*MEX **01** 20:03:00.9±0.9, 32°.55N×115°.07W, h32km±5km, MD4.2*
*ISCJB **01** 20:03:01.6±0.5, 32°.32N±0°.02×115°.39W±0°.03, h12km±4km, Error ellipse: s-maj=4.6km s-min=3.7km az=157.0*
*NEIC **01** 20:03:02.8, 32°.31N×115°.38W, h5km, ML3.2(PAS), ML3.3(ECX), After ECX.*
*ECX **01** 20:03:02.7±0.5, 32°.31N×115°.38W, h5km, MD3.1, ML3.3*
**ISC 01 20:03:01.6**±0.9**, 32°.30N**±0°.02×**115°.39W**±0°.02**, h15**km±7km**, n34,** σ**0s96**/53**, 7C-2D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPBX** | **Cerro Prieto** | **0.14** | **31** | *e*P | **Pg** | **20 03 05.2** | **-0.2** |
| CPBX | | | | *e*P | **Pg** | **20 03 05.4** | **+0.1** |
| CPBX | | | | IAML | | 20 03 09.3 | |
| | comp=N,40μm,0.3s | | | | | | |
| CPBX | | | | ⇑*e* | | 20 03 09.3 | |
| **CPBX** | **Cerro Prieto** | **0.14** | **31** | *e*P | **Pg** | **20 03 05.2** | **-0.2** |
| CPBX | | | | *i* S | **Sb** | **20 03 09.5** | **+0.6** |
| **MBIG** | **Mexicali** | **0.20** | **56** | *e*P | **Pg** | **20 03 06.4** | **+0.2** |
| MBIG | | | | *e*S | **Sg** | **20 03 10.2** | **+1.0** |
| **MBIG** | **Mexicali** | **0.20** | **56** | *e*P | **Pg** | **20 03 06.5** | **+0.4** |
| **SGL** | **Mount Signal** | **0.45** | **321** | ⇑*i*P | **Pg** | **20 03 10.7** | **+0.1** |
| **WESC** | **Westside Schoo** | **0.55** | **328** | ⇑*i*P | **Pg** | **20 03 12.7** | **+0.4** |
| **EMSC** | **East Mesa** | **0.56** | **38** | *e*P | **Pg** | **20 03 12.8** | **+0.2** |
| **YUH** | **Yuha Desert** | **0.57** | **308** | ⇑*i*P | **Pg** | **20 03 12.7** | **-0.2** |
| **RDX** | **Rancho Dawling** | **0.60** | **232** | ⇑*e*P | **Pb** | **20 03 13.9** | **0.0** |
| RDX | | | | *e*S | **Sb** | **20 03 22.2** | **0.0** |
| RDX | | | | IAML | | 20 03 24.1 | |
| | comp=N,1μm,0.2s | | | | | | |
| **COA** | **Coachella** | **0.61** | **22** | *e*P | **Pg** | **20 03 13.4** | **-0.2** |
| **COK** | **Cook Ranch** | **0.62** | **333** | *e*P | **Pg** | **20 03 13.8** | **0.0** |
| **RMX** | **La Rumorosa** | **0.66** | **298** | ⇑*e*P | **Pg** | **20 03 14.3** | **-0.2** |
| RMX | | | | *e*S | **Sg** | **20 03 23.0** | **-0.3** |
| **IBP** | **Imperial Bould** | **0.70** | **302** | P | **Pg** | **20 03 15.1** | **-0.2** |
| | baz=0.7 | | | | | | |
| IBP | | | | S | **Sg** | **20 03 24.4** | **-0.1** |
| | baz=0.7 | | | | | | |
| **IBP** | **Imperial Bould** | **0.70** | **302** | ⇑*i*P | **Pg** | **20 03 15.1** | **-0.2** |
| IBP | | | | *e*S | **Sg** | **20 03 24.6** | **+0.1** |
| **SWSC** | **Sam W. Stewart** | **0.73** | **332** | P | **Pb** | **20 03 15.1** | **-1.0** |
| | baz=0.7 | | | | | | |
| SWSC | | | | S | **Sg** | **20 03 24.8** | **-0.6** |
| | baz=0.7 | | | | | | |
| **ECBX** | **El Chinero** | **0.87** | **161** | *e*P | **Pb** | **20 03 17.5** | **-0.9** |
| ECBX | | | | *e*S | **Sg** | **20 03 30.1** | **+0.2** |
| **GLA** | **Glamis** | **0.89** | **32** | P | **Pb** | **20 03 17.3** | **-1.6** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.89** | **32** | *e*Pg | **Pb** | **20 03 16.7** | **-2.2** |
| GLA | | | | *e*Sg | **Sb** | **20 03 29.1** | **-1.4** |
| **MONP** | **Monument Peak** | **1.05** | **304** | P | **Pb** | **20 03 20.7** | **-1.0** |
| | baz=1.1 | | | | | | |
| MONP | | | | S | **Sb** | **20 03 34.9** | **-0.6** |
| | baz=1.1 | | | | | | |
| **CBX** | **Cerro Bola** | **1.08** | **271** | *i* P | **Pb** | **20 03 22.1** | **-0.1** |
| CBX | | | | *i* S | **Sg** | **20 03 37.3** | **+0.7** |
| **CBX** | **Cerro Bola** | **1.08** | **271** | IAML | | 20 03 37.6 | |
| | comp=N,486nm,0.3s | | | | | | |
| CBX | | | | *e* | | 20 03 37.6 | |
| **CBX** | **Cerro Bola** | **1.08** | **271** | *i* P | **Pb** | **20 03 22.1** | **-0.1** |
| CBX | | | | *i* S | **Sg** | **20 03 37.3** | **+0.7** |
| **BAR** | **Barrett** | **1.15** | **290** | *e*Pg | **Pn** | **20 03 22.1** | **-1.1** |
| BAR | | | | *e*Sg | **Sb** | **20 03 37.5** | **-0.5** |
| **SPIG** | **San Pedro Mart** | **1.25** | **183** | *i* P | **Pn** | **20 03 24.5** | **-0.4** |
| SPIG | | | | *i* S | **Sg** | **20 03 42.6** | **+0.6** |
| **SPIG** | **San Pedro Mart** | **1.25** | **183** | ⇓*e*P | **Pn** | **20 03 24.5** | **-0.4** |
| **SPIG** | **San Pedro Mart** | **1.25** | **183** | *i* P | **Pn** | **20 03 24.5** | **-0.4** |
| SPIG | | | | *i* S | **Sg** | **20 03 42.6** | **+0.6** |
| **SPX** | **San Pedro Mart** | **1.25** | **183** | ⇓*e*P | **Pn** | **20 03 24.5** | **-0.4** |
| **109C** | **Camp Elliot, M** | **1.56** | **293** | Pb | **Pb** | **20 03 29.8** | **-0.5** |
| | baz=1.6 | | | | | | |
| 109C | | | | Sb | **Sb** | **20 03 50.0** | **+0.1** |
| | baz=1.6 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.59** | **326** | P | **Pn** | **20 03 27.8** | **-1.6** |
| | baz=1.6 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.59** | **326** | *e*Pn | **Pn** | **20 03 27.6** | **-1.8** |
| PFO | | | | *e*Sn | **Sb** | **20 03 50.6** | **-0.1** |
| **LDFC** | **Landfair** | **2.78** | **5** | Pn | **Pn** | **20 03 47.5** | **+1.7** |
| LDFC | | | | *e*Pg | **Pg** | **20 03 56.9** | **+1.9** |
| LDFC | | | | *e*Sg | **Sg** | **20 04 33.3** | **+2.2** |
| **MWC** | **Mount Wilson** | **2.95** | **311** | Pn | **Pn** | **20 03 49.4** | **+1.2** |
| MWC | | | | *e*Sg | **Sb** | **20 04 32.7** | **+2.7** |
| **SHPR** | **Sheep Range** | **4.20** | **3** | Pn | Pb | 20 04 11.5 | -3.9 |
| **WUAZ** | **Wupatki** | **4.63** | **45** | *e*Pn | **Pn** | **20 04 11.7** | **+0.4** |

*NSSP **01** 20:13:57.3, 41°.42N×46°.07E, h10km, Ms3.1*
*CSEM **01** 20:13:59.4±1.0, 41°.43N×46°.04E, h8km, ML1.8, Error ellipse: s-maj=19.2km s-min=10.5km az=66.0*
*TIF **01** 20:13:59.0, 41°.45N×46°.12E, h21km±1km*
**ISC 01 20:14:00.6**±1.7**, 41°.39N**±0°.04×**46°.03E**±0°.08**, h16**km±10km**, n20,** σ**0s97**/39**, 10C-5D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DGRG** | **David-gareji** | **0.49** | **277** | P | **Pn** | **20 14 12.5** | **-0.5** |
| DGRG | | | | S | **Sn** | **20 14 22.8** | **+1.5** |
| **DGRG** | **David-gareji** | **0.49** | **277** | P | **Pn** | **20 14 12.5** | **-0.5** |
| DGRG | | | | S | **Sn** | **20 14 22.8** | **+1.5** |
| **TBLG** | **Delisi** | **1.02** | **290** | P | **Pb** | **20 14 19.5** | **-0.4** |
| TBLG | | | | S | **Sg** | **20 14 33.9** | **+0.1** |
| **TBLG** | **Delisi** | **1.02** | **290** | P | **Pb** | **20 14 19.5** | **-0.4** |
| TBLG | | | | S | **Sg** | **20 14 33.9** | **+0.1** |
| **CKLZ** | **Chkalov** | **1.14** | **247** | ⇑*i*P | **Pn** | **20 14 21.0** | **-0.9** |
| CKLZ | | | | ⇓*i*S | **Sg** | **20 14 37.8** | **+0.5** |
| **CKLZ** | **Chkalov** | **1.14** | **247** | ⇑P | **Pn** | **20 14 21.0** | **-0.9** |
| CKLZ | | | | S | **Sg** | **20 14 37.8** | **+0.5** |
| **DUS** | **Dusheti** | **1.21** | **306** | P | **Pb** | **20 14 22.6** | **-0.5** |
| DUS | | | | S | **Sg** | **20 14 40.4** | **+0.6** |
| **DUS** | **Dusheti** | **1.21** | **306** | P | **Pb** | **20 14 22.6** | **-0.5** |
| DUS | | | | S | **Sg** | **20 14 40.4** | **+0.6** |
| **VADZ** | **Vardenis** | **1.24** | **190** | ⇑*i*P | **Pg** | **20 14 24.0** | **-0.5** |
| VADZ | | | | ⇑*i*S | **Sg** | **20 14 42.0** | **+1.3** |
| **VADZ** | **Vardenis** | **1.24** | **190** | ⇑P | **Pg** | **20 14 24.0** | **-0.5** |
| VADZ | | | | S | **Sg** | **20 14 42.0** | **+1.3** |
| **STEZ** | **Stepenevan** | **1.29** | **253** | ⇓*i*P | **Pn** | **20 14 23.7** | **-0.3** |
| STEZ | | | | ⇓*i*S | **Sg** | **20 14 42.4** | **+0.1** |
| **STE** | **Stepanavan** | **1.31** | **253** | ⇓P | **Pn** | **20 14 23.7** | **-0.6** |
| STE | | | | S | **Sb** | **20 14 42.3** | **+0.8** |
| **SPIZ** | **Spitak** | **1.44** | **247** | ⇑*i*P | **Pn** | **20 14 24.8** | **-1.4** |
| SPIZ | | | | ⇓*i*S | **Sn** | **20 14 44.4** | **-0.4** |
| **SPIZ** | **Spitak** | **1.44** | **247** | ⇑P | **Pn** | **20 14 24.8** | **-1.4** |
| SPIZ | | | | S | **Sn** | **20 14 44.4** | **-0.4** |
| **GNI** | **Garni** | **1.58** | **219** | ⇑*i*P | **Pg** | **20 14 30.6** | **-0.4** |
| GNI | | | | ⇑*i*S | **Sg** | **20 14 53.8** | **+2.2** |
| **GNI** | **Garni** | **1.58** | **219** | ⇑P | **Pg** | **20 14 30.6** | **-0.4** |
| **AKH** | **Akhalkalaki** | **1.91** | **271** | P | **Pn** | **20 14 30.6** | **-1.9** |
| AKH | | | | S | **Sb** | **20 14 59.4** | **+0.7** |
| **AKH** | **Akhalkalaki** | **1.91** | **271** | P | **Pn** | **20 14 30.6** | **-1.9** |
| AKH | | | | S | **Sb** | **20 14 59.4** | **+0.7** |
| **ONI** | **Oni** | **2.26** | **303** | P | **Pn** | **20 14 37.9** | **+0.6** |
| ONI | | | | S | **Sb** | **20 15 09.2** | **+0.4** |
| **ONI** | **Oni** | **2.26** | **303** | P | **Pn** | **20 14 37.9** | **+0.6** |
| ONI | | | | S | **Sb** | **20 15 09.2** | **+0.4** |

*ISCJB **01** 20:32:08.6±0.9, 5°.03S±0°.06×133°.4E±0°.1, h25km, mb3.8/2, Error ellipse: s-maj=22.0km s-min=7.4km az=164.8*
*IDC **01** 20:32:10.1±1.4, 5°.25S×133°.41E, h0km, mb3.8/2, mb1 4.1/6, mb1mx3.7/22, mbtmp4.0/6, ML3.6/4, MS3.4/1, Ms1 3.4/1, ms1mx2.5/23, Error ellipse: s-maj=46.0km s-min=24.5km az=79.0*
*AUST **01** 20:32:11.2, 4°.83S×133°.38E, h20km*
**ISC 01 20:32:09.0**±1.2**, 4°.98S**±0°.09×**133°.5E**±0°.2**, h25**km**, n12,** σ**3s34**/9**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.38** | **329** | P | **Pn** | **20 32 46.7** | **+0.1** |
| | baz=2.2,SNR=18 | | | | | | |
| **SIJI** | **Sorong** | **4.64** | **332** | Pn | **Pn** | **20 33 18.6** | **+0.9** |
| | 3.5nm,0.3s,baz=149,slow=18,SNR=17 | | | | | | |
| SIJI | | | | Sn | **Sn** | **20 34 06.3** | **-4.5** |
| | 3.2nm,0.3s,baz=270,slow=23,SNR=9.9 | | | | | | |
| **SWI** | **Sorong** | **4.65** | **332** | P | **Pn** | **20 33 19.9** | **+2.2** |
| | baz=4.5,SNR=4.8 | | | | | | |
| **KDU** | **Kakadu** | **7.72** | **187** | P | Pn | 20 34 03.8 | +3.8 |
| | baz=7.9,SNR=19 | | | | | | |
| **MTN** | **Manton Dam** | **8.15** | **196** | P | Pn | 20 34 11.0 | +5.2 |
| | baz=8.3,SNR=16 | | | | | | |
| **BATI** | **Baumata** | **11.02** | **241** | Pn | **Pn** | **20 34 47.7** | **+2.4** |
| | 0.8nm,0.3s,baz=24,slow=10.0,SNR=2.1 | | | | | | |
| **PMG** | **Port Moresby** | **14.27** | **109** | LR | LR | 20 42 29.2 | |
| | comp=Z,141nm,18.1s,baz=307,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.90** | **177** | Pn | **Pn** | **20 35 36.7** | **-1.5** |
| | 0.2nm,0.3s,baz=358,slow=13,SNR=13 | | | | | | |
| WRA | | | | Sn | Sn | 20 38 13.8 | -8.8 |
| | 0.3nm,0.3s,baz=358,slow=23,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **18.58** | **179** | P | **P** | **20 36 25.4** | **+0.9** |
| | 0.3nm,0.3s,baz=4.3,slow=12,SNR=17 | | | | | | |
| ASAR | | | | S | **Sn** | **20 39 46.8** | **-5.3** |
| | 0.1nm,0.3s,baz=3.5,slow=27,SNR=4.7 | | | | | | |
| **CTA** | **Charters Tower** | **19.50** | **141** | P | **Pn** | **20 36 38.1** | **+2.2** |
| | 0.1nm,0.3s,baz=318,slow=15,SNR=2.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **48.97** | **359** | P | P | 20 41 00.5 | +7.1 |
| | 2.2nm,0.8s,baz=181,slow=5.8,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.51** | **325** | P | P | 20 43 15.1 | +5.8 |
| | 0.2nm,0.4s,baz=107,slow=12,SNR=2.5 | | | | | | |

*IDC **01** 20:58:33.5±1.7, 0°.13N×121°.60E, h0km, mb3.6/3, mb1 3.7/3, mb1mx3.3/44, mbtmp3.6/3, Error ellipse: s-maj=194.6km s-min=26.0km az=63.0*
*ISCJB **01** 20:58:52.7±0.7, 0°.33N±0°.08×122°.04E±0°.06, h183km±5km, mb3.4/3, Error ellipse: s-maj=13.4km s-min=9.3km az=1.0*
*DJA **01** 20:58:55.6±0.8, 0°N±5°×12°2E±°, h150km±9km, M3.5/7, MLv3.5/7*
**ISC 01 20:58:53.5**±0.9**, 0°.30N**±0°.08×**122°.04E**±0°.06**, h174**km±7km**, n11,** σ**1s43**/16**, mb3.4**/3**, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **0.20** | **331** | P | **Pn** | **20 59 16.5** | **-0.2** |
| MRSI | | | | S | **Sn** | **20 59 34.7** | **+0.1** |
| **GTOI** | **Gorontalo** | **1.03** | **71** | P | **Pn** | **20 59 20.7** | **-0.1** |
| **APSI** | **Ampana** | **1.26** | **198** | P | **Pn** | **20 59 24.2** | **+1.4** |
| APSI | | | | S | **Sn** | **20 59 42.8** | **-2.7** |
| **LUWI** | **Luwuk** | **1.52** | **151** | P | **Pn** | **20 59 26.0** | **+0.8** |
| LUWI | | | | S | **Sn** | **20 59 49.9** | **+0.2** |
| **KMSI** | **Cibinong** | **1.96** | **82** | P | **Pn** | **20 59 30.7** | **+1.0** |
| KMSI | | | | S | **Sn** | **20 59 59.9** | **+2.2** |
| **MPSI** | **Mapaga** | **2.14** | **271** | P | **Pn** | **20 59 33.1** | **+1.4** |
| MPSI | | | | S | **Sn** | **21 00 01.8** | **+0.4** |
| **PCI** | **Palu** | **2.51** | **242** | P | **Pn** | **20 59 36.9** | **+0.9** |
| **SPSI** | **Sidrap Palu** | **4.80** | **208** | P | **Pn** | **21 00 06.5** | **+1.7** |
| **WRA** | **Warramunga Arr** | **23.45** | **150** | P | **P** | **21 03 45.6** | **-1.7** |
| | 0.6nm,1.0s,baz=324,slow=11,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **49.26** | **346** | P | **P** | **21 07 24.4** | **-0.1** |
| | 0.7nm,0.7s,baz=162,slow=8.6,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.86** | **329** | P | **P** | **21 08 26.6** | **-0.4** |
| | 0.5nm,0.4s,baz=127,slow=8.3,SNR=7.7 | | | | | | |

*IDC **01** 21:03:53.6±3.1, 4°.59S×102°.41E, h0km, mb3.5/7, mb1 3.6/7, mb1mx3.4/47, mbtmp3.5/7, MS3.4/1, Ms1 3.4/1, ms1mx2.5/22, Error ellipse: s-maj=135.1km s-min=19.5km az=54.0*
**ISC 01 21:04:01.6**±3.5**, 4°.5S**±0°.6×**102°.6E**±0°.8**, h56**km**, n10,** σ**0s35**/7**, mb3.7**/7**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **23.06** | **351** | P | **P** | **21 09 01.9** | **-0.5** |
| | 0.7nm,0.9s,baz=186,slow=7.9,SNR=6.4 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **32.10** | **162** | T | T | 21 44 13.8 | |
| | baz=338,slow=76,SNR=3.1 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **32.11** | **162** | T | T | 21 44 16.8 | |
| | baz=338,slow=76,SNR=4.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **32.12** | **162** | T | T | 21 44 15.8 | |
| | baz=338,slow=76,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.52** | **119** | P | **P** | **21 10 44.7** | **-0.1** |
| | 0.1nm,0.3s,baz=307,slow=8.7,SNR=6.6 | | | | | | |
| **ASAR** | **Alice Springs** | **35.71** | **125** | P | **P** | **21 10 55.0** | **0.0** |
| | 0.3nm,0.5s,baz=300,slow=8.2,SNR=3.6 | | | | | | |
| ASAR | | | | LR | LR | 21 28 43.5 | |
| | comp=Z,49nm,18.0s,baz=162,slow=42 | | | | | | |
| **SONM** | **Songino Array** | **52.18** | **3** | P | **P** | **21 13 07.1** | **+0.4** |
| | 0.6nm,0.6s,baz=188,slow=8.1,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.11** | **343** | P | **P** | **21 13 20.9** | **+0.2** |
| | 0.3nm,0.4s,baz=144,slow=8.0,SNR=3.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.65** | **342** | P | **P** | **21 13 52.9** | **0.0** |
| | 0.3nm,0.3s,baz=160,slow=5.8,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.08** | **348** | P | **P** | **21 14 02.6** | **-0.2** |
| | 1.2nm,0.4s,baz=174,slow=5.5,SNR=7.2 | | | | | | |

*ISN **01** 21:05:02.9±0.9, 37°.84N×42°.23E, h0km±3km, ML3.9*
*AZER **01** 21:05:09.0±5.3, 37°.24N×42°.32E, h2km, Error ellipse: s-maj=73.6km s-min=47.6km az=108.0*
*NSSC **01** 21:05:14.3±1.2, 38°.51N×42°.75E, h37km±999km, ML3.6*
*DDA **01** 21:05:14.3, 38°.23N×42°.52E, h5km, Ml4.0*
*ISK **01** 21:05:14.1, 38°.20N×42°.57E, h5km, ML3.9*
*IDC **01** 21:05:14.6±1.0, 38°.17N×42°.53E, h0km, mb3.6/5, mb1 3.5/13, mb1mx3.4/43, mbtmp3.5/13, ML3.1/7, MS3.1/10, Ms1 3.1/10, ms1mx2.8/42, Error ellipse: s-maj=17.2km s-min=11.0km az=151.0*
*CSEM **01** 21:05:15.8±0.1, 38°.21N×42°.52E, h2km, ML4.0, Error ellipse: s-maj=3.8km s-min=3.3km az=148.0*
*TEH **01** 21:05:18.9, 38°.16N×42°.59E, h10km, ML3.7*
*NSSP **01** 21:05:21.6, 38°.22N×42°.48E, h5km, Ms3.7*
**ISC 01 21:05:15.6**±1.0**, 38°.21N**±0°.02×**42°.55E**±0°.02**, h6**km±8km**, n153,** σ**1s29**/156**, mb3.9**/6**, MS3.0**/8**, 6C-5D, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TATV** | **Tatvan** | **0.37** | **324** | *i* P | **Pg** | **21 05 22.1** | **-0.8** |
| TATV | | | | *i* S | **Sg** | **21 05 27.7** | **-0.1** |
| **TATV** | **Tatvan** | **0.37** | **324** | P | **Pg** | **21 05 22.1** | **-0.8** |
| TATV | | | | S | **Sg** | **21 05 27.8** | **-0.1** |
| **GEVA** | **Gevas** | **0.41** | **75** | *i* P | **Pg** | **21 05 23.3** | **-0.4** |
| GEVA | | | | *i* S | **Sg** | **21 05 29.7** | **+0.6** |
| **GEVA** | **Gevas** | **0.41** | **75** | P | **Pg** | **21 05 23.3** | **-0.4** |
| GEVA | | | | S | **Sg** | **21 05 29.7** | **+0.6** |
| **SIRT** | **Sirnak** | **0.71** | **187** | PG | **Pg** | **21 05 28.9** | **-0.3** |
| SIRT | | | | *e*SG | **Sb** | **21 05 40.2** | **-0.2** |
| **SIRT** | **Sirnak** | **0.71** | **187** | *i* Pg | **Pg** | **21 05 28.9** | **-0.3** |
| SIRT | | | | *e*Sg | **Sb** | **21 05 40.2** | **-0.2** |
| **SIRN** | **S˜–rnak** | **0.72** | **189** | *i* P | **Pg** | **21 05 28.9** | **-0.5** |
| SIRN | | | | *i* S | **Sb** | **21 05 40.6** | **-0.1** |
| **SIRN** | **S˜–rnak** | **0.72** | **189** | P | **Pg** | **21 05 28.9** | **-0.5** |
| SIRN | | | | S | **Sb** | **21 05 40.6** | **-0.1** |
| **TVAN** | **Van** | **0.75** | **64** | *i* S | **Sg** | **21 05 40.7** | **+1.1** |
| **TVAN** | **Van** | **0.75** | **64** | P | **Pg** | **21 05 29.0** | **-0.9** |
| TVAN | | | | S | **Sg** | **21 05 40.7** | **+1.1** |
| **VANB** | **Van** | **0.77** | **59** | *e*PG | **Pg** | **21 05 30.0** | **-0.3** |
| **VANB** | **Van** | **0.77** | **59** | *e*Pg | **Pg** | **21 05 30.0** | **-0.3** |
| **BTMT** | **Batman** | **0.84** | **269** | *e*PG | **Pg** | **21 05 31.5** | **-0.1** |
| **BTMT** | **Batman** | **0.84** | **269** | *e*Pg | **Pg** | **21 05 31.5** | **-0.1** |
| **BEST** | **Besiri** | **1.06** | **253** | P | **Pg** | **21 05 35.5** | **-0.4** |
| BEST | | | | S | **Sb** | **21 05 50.1** | **-0.4** |
| **SVAN** | **Silvan-Diyarba** | **1.07** | **267** | *e*PG | **Pg** | **21 05 35.8** | **-0.2** |
| **SVAN** | **Silvan-Diyarba** | **1.07** | **267** | *e*Pg | **Pg** | **21 05 35.8** | **-0.2** |
| **EKAR** | **Karacoban** | **1.11** | **340** | *i* P | **Pb** | **21 05 36.5** | **-0.9** |
| **EKAR** | **Karacoban** | **1.11** | **340** | P | **Pb** | **21 05 36.5** | **-0.9** |
| EKAR | | | | S | **Sn** | **21 05 54.3** | **+0.6** |
| **HAKT** | **HAKKARI** | **1.12** | **125** | *i* S | **Sn** | **21 05 55.5** | **+1.6** |
| **HAKT** | **HAKKARI** | **1.12** | **125** | P | **Pb** | **21 05 36.8** | **-0.7** |
| HAKT | | | | S | **Sn** | **21 05 55.5** | **+1.6** |
| **HKR** | **Hakkari** | **1.13** | **123** | *e*PN | **Pb** | **21 05 36.6** | **-1.0** |
| **HKR** | **Hakkari** | **1.13** | **123** | *e*Pn | **Pb** | **21 05 36.6** | **-1.0** |
| **TUTA** | **Tutak** | **1.21** | **10** | *i* P | **Pn** | **21 05 37.2** | **-2.0** |
| TUTA | | | | *i* S | **Sb** | **21 05 54.8** | **-0.2** |
| **TUTA** | **Tutak** | **1.21** | **10** | P | **Pn** | **21 05 37.2** | **-2.0** |
| TUTA | | | | S | **Sb** | **21 05 54.9** | **-0.2** |
| **CUKT** | **Cukurca** | **1.27** | **138** | *e*PN | **Pn** | **21 05 39.0** | **-1.0** |
| **CUKT** | **Cukurca** | **1.27** | **138** | *e*Pn | **Pn** | **21 05 39.0** | **-1.0** |
| **VRTB** | **Varto-Mus** | **1.28** | **318** | *e*PN | **Pb** | **21 05 40.0** | **-0.1** |
| **VRTB** | **Varto-Mus** | **1.28** | **318** | *e*Pn | **Pb** | **21 05 40.0** | **-0.1** |
| **BNGL** | **BINGOL** | **1.32** | **305** | P | **Pn** | **21 05 39.1** | **-1.7** |
| BNGL | | | | S | **Sg** | **21 06 01.9** | **+3.7** |
| **AGRB** | **Hanur-Agry** | **1.41** | **14** | *e*PN | **Pb** | **21 05 42.5** | **+0.1** |
| AGRB | | | | *e*SN | **Sg** | **21 06 02.4** | **+1.5** |
| **AGRB** | **Hanur-Agry** | **1.41** | **14** | *e*Pn | **Pb** | **21 05 42.5** | **+0.1** |
| AGRB | | | | *e*Sn | **Sg** | **21 06 02.4** | **+1.5** |
| **CLDR** | **Caldiran** | **1.42** | **48** | *e*PN | **Pn** | **21 05 41.6** | **-0.5** |
| **CLDR** | **Caldiran** | **1.42** | **48** | *e*Pn | **Pn** | **21 05 41.6** | **-0.5** |
| **EATA** | **Eleskirt** | **1.65** | **358** | *i* P | **Pn** | **21 05 45.9** | **+0.5** |
| EATA | | | | *i* S | **Sg** | **21 06 09.5** | **+0.8** |
| **EATA** | **Eleskirt** | **1.65** | **358** | P | **Pn** | **21 05 45.9** | **+0.5** |
| EATA | | | | S | **Sg** | **21 06 09.5** | **+0.8** |
| **BNGB** | **Bingˆ¶l** | **1.66** | **299** | *e*PN | **Pb** | **21 05 45.7** | **-0.9** |
| **MARD** | **Mardin** | **1.66** | **238** | P | **Pn** | **21 05 44.8** | **-0.6** |
| MARD | | | | S | **Sb** | **21 06 07.5** | **-0.4** |
| **BINT** | **Bingol** | **1.75** | **293** | *e*Pn | **Pn** | **21 05 45.7** | **-0.8** |
| **MAZI** | **Mazidag** | **1.82** | **246** | *e*PN | **Pn** | **21 05 47.7** | **+0.1** |
| **MAZI** | **Mazidag** | **1.82** | **246** | *e*Pn | **Pn** | **21 05 47.7** | **+0.1** |
| **DIY** | **Diyarbakir** | **1.86** | **261** | *e*Pn | **Pb** | **21 05 48.6** | **-1.4** |
| **ECAT** | **Cat-ERZURUM** | **1.86** | **319** | *i* P | **Pn** | **21 05 48.6** | **+0.5** |
| **ECAT** | **Cat-ERZURUM** | **1.86** | **319** | P | **Pn** | **21 05 48.6** | **+0.5** |
| ECAT | | | | S | **Sg** | **21 06 16.4** | **+1.1** |
| **HOMI** | **Horasan** | **1.90** | **345** | P | **Pb** | **21 05 50.2** | **-0.6** |
| HOMI | | | | S | **Sg** | **21 06 18.9** | **+2.2** |
| **DYBB** | **Diyarbakir** | **1.92** | **263** | *e*PN | **Pn** | **21 05 48.6** | **-0.2** |
| **EZM** | **Erzurum** | **1.93** | **332** | *e*PN | **Pn** | **21 05 50.0** | **+0.9** |
| **KBSD** | **Kabsdagh** | **2.00** | **234** | *i* P | **Pn** | **21 05 49.9** | **0.0** |
| KBSD | | | | *e*S | **Sb** | **21 06 15.7** | **-1.7** |
| KBSD | | | | AML | AML | 21 06 30.9 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **KBSD** | **Kabsdagh** | **2.00** | **234** | *i* P | **Pn** | **21 05 49.9** | **0.0** |
| KBSD | | | | *e*S | **Sb** | **21 06 15.7** | **-1.7** |
| **DIGO** | **Kars** | **2.29** | **16** | *i* P | **Pn** | **21 05 55.6** | **+1.5** |
| **DIGO** | **Kars** | **2.29** | **16** | P | **Pn** | **21 05 55.6** | **+1.5** |
| **ISHB** | **Shabestar** | **2.42** | **87** | *e*Pn | **Pn** | **21 05 57.4** | **+1.6** |
| ISHB | | | | *e* | | 21 06 47.0 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **KARS** | **Kars** | **2.45** | **9** | *e*PN | **Pn** | **21 05 57.2** | **+1.0** |
| **KARS** | **Kars** | **2.45** | **9** | *e*Pn | **Pn** | **21 05 57.2** | **+1.0** |
| **NAX** | **Nakhchivan** | **2.50** | **66** | ⇑P | **Pn** | **21 05 59.0** | **+2.2** |
| NAX | | | | ⇓S | **Sg** | **21 06 41.1** | **+5.3** |
| **NAX** | **Nakhchivan** | **2.50** | **66** | P | **Pn** | **21 05 59.0** | **+2.2** |
| **IMRD** | **Marand** | **2.53** | **78** | *e*Pn | **Pn** | **21 05 59.4** | **+2.1** |
| IMRD | | | | *e* | | 21 06 46.3 | |
| | comp=Z,8μm,0.4s | | | | | | |
| **IMRD** | **Marand** | **2.53** | **78** | *e*Pn | **Pn** | **21 05 59.4** | **+2.1** |
| **SVRC** | **Sivrice-ELAZID** | **2.56** | **275** | *e*PN | **Pn** | **21 05 57.6** | **-0.1** |
| **SVRC** | **Sivrice-ELAZID** | **2.56** | **275** | *e*Pn | **Pn** | **21 05 57.6** | **-0.1** |
| **PTK** | **Pertek** | **2.57** | **286** | *e*PN | **Pn** | **21 05 58.8** | **+0.9** |
| **PTK** | **Pertek** | **2.57** | **286** | *e*Pn | **Pn** | **21 05 58.8** | **+0.9** |
| **GNI** | **Garni** | **2.58** | **41** | Pn | **Pb** | **21 06 00.6** | **-1.7** |
| | comp=Z,6.4nm,0.3s,baz=306,slow=2.0,SNR=40 | | | | | | |
| GNI | | | | Lg | Lg | 21 06 37.9 | |
| | comp=Z,11nm,0.3s,baz=178,slow=23,SNR=3.8 | | | | | | |
| **ERZN** | **Erzincan** | **2.60** | **303** | *e*PN | **Pn** | **21 05 59.1** | **+0.9** |
| **SFNV** | **Sufian** | **2.64** | **228** | *i* P | **Pn** | **21 05 59.4** | **+0.7** |
| SFNV | | | | *e*S | **Sn** | **21 06 32.4** | **+1.3** |
| **SFNV** | **Sufian** | **2.64** | **228** | *i* P | **Pn** | **21 05 59.4** | **+0.7** |
| SFNV | | | | *e*S | **Sn** | **21 06 32.4** | **+1.3** |
| **DDEM** | **Demirkent** | **2.75** | **347** | *i* P | **Pn** | **21 06 01.6** | **+1.3** |
| **DDEM** | **Demirkent** | **2.75** | **347** | P | **Pn** | **21 06 01.6** | **+1.3** |
| **MZRK** | **Al-Mazaregh** | **2.82** | **213** | *i* P | **Pn** | **21 06 02.6** | **+1.4** |
| MZRK | | | | *e*S | **Sn** | **21 06 36.1** | **+0.7** |
| MZRK | | | | AML | AML | 21 07 07.1 | |
| | comp=Z,301nm,0.6s | | | | | | |
| **MZRK** | **Al-Mazaregh** | **2.82** | **213** | *i* P | **Pn** | **21 06 02.6** | **+1.4** |
| MZRK | | | | *e*S | **Sn** | **21 06 36.1** | **+0.7** |
| **ITBZ** | **Tabriz** | **2.83** | **88** | *e*Pn | **Pn** | **21 06 03.6** | **+2.1** |
| ITBZ | | | | *e* | | 21 06 45.9 | |
| | comp=Z,621nm,0.3s | | | | | | |
| **ITBZ** | **Tabriz** | **2.83** | **88** | *e*Pn | **Pn** | **21 06 03.6** | **+2.1** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **2.87** | **320** | *e*PN | **Pn** | **21 06 03.5** | **+1.5** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **2.87** | **320** | *e*Pn | **Pn** | **21 06 03.5** | **+1.5** |
| **EZC** | **Erzincan** | **2.93** | **303** | *e*Pn | Pn | 21 05 59.1 | -3.7 |
| **URFA** | **Urfa** | **3.05** | **257** | *e*PN | **Pn** | **21 06 06.0** | **+1.6** |
| **URFA** | **Urfa** | **3.05** | **257** | *e*Pn | **Pn** | **21 06 06.0** | **+1.6** |
| **STE** | **Stepanavan** | **3.12** | **26** | P | **Pn** | **21 06 06.0** | **+0.6** |
| STE | | | | S | **Sb** | **21 06 49.0** | **-0.9** |
| **IKRK** | **Kirkuk** | **3.15** | **152** | *e*PG | x | 21 06 08.4 | |
| IKRK | | | | *e*Sg | x | 21 06 55.1 | |
| **MALT** | **Malatya** | **3.25** | **273** | *e*PN | **Pn** | **21 06 08.2** | **+1.2** |
| **MALT** | **Malatya** | **3.25** | **273** | *e*Pn | **Pn** | **21 06 08.3** | **+1.2** |
| **GUMT** | **Gumushane** | **3.27** | **314** | *e*PN | **Pn** | **21 06 08.8** | **+1.3** |
| **GUMT** | **Gumushane** | **3.27** | **314** | *e*Pn | **Pn** | **21 06 08.8** | **+1.3** |
| **BCA** | **Borcka** | **3.31** | **348** | *e*PN | **Pn** | **21 06 09.4** | **+1.5** |
| **BCA** | **Borcka** | **3.31** | **348** | *e*Pn | **Pn** | **21 06 09.4** | **+1.5** |
| **ILIC** | **ilic-Erzincan** | **3.35** | **293** | *e*PN | **Pn** | **21 06 09.9** | **+1.5** |
| **ILIC** | **ilic-Erzincan** | **3.35** | **293** | *e*Pn | **Pn** | **21 06 10.0** | **+1.5** |
| **IBST** | **Bostanabad** | **3.47** | **97** | *e*Pn | **Pn** | **21 06 12.5** | **+2.2** |
| IBST | | | | *e* | | 21 07 23.2 | |
| | comp=Z,923nm,0.6s | | | | | | |
| **IBST** | **Bostanabad** | **3.47** | **97** | *e*Pn | **Pn** | **21 06 12.5** | **+2.2** |
| **KTUT** | **Trabzon** | **3.51** | **323** | *e*PN | **Pn** | **21 06 12.9** | **+2.3** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| KTUT | Trabzon | 3.51 | 323 | ePn | Pn | 21 06 12.9 | +2.3 |
| IHRS | Heris | 3.54 | 87 | ePn | Pn | 21 06 13.8 | +2.6 |
| IHRS | | | | e | | 21 07 41.7 | |
| | comp=Z,751nm,0.5s | | | | | | |
| IHRS | Heris | 3.54 | 87 | ePn | Pn | 21 06 13.8 | +2.6 |
| QZX | Qazax, Azerbai | 3.58 | 37 | ⇓P | Pb | 21 06 18.5 | -0.9 |
| QZX | | | | ⇑S | Sg | 21 07 11.6 | +0.9 |
| GANJ | Ganja | 3.80 | 49 | ⇑P | Pn | 21 06 19.0 | +4.3 |
| GANJ | Ganja | 3.80 | 49 | P | Pn | 21 06 19.0 | +4.3 |
| DGRG | David-gareji | 3.90 | 33 | P | Pn | 21 06 19.4 | +3.3 |
| DGRG | David-gareji | 3.90 | 33 | P | Pn | 21 06 19.4 | +3.3 |
| ISRB | Sarab | 4.06 | 94 | ePn | Pn | 21 06 20.6 | +2.2 |
| ISRB | | | | e | | 21 06 41.5 | |
| | comp=Z,792nm,0.3s | | | | | | |
| ISRB | Sarab | 4.06 | 94 | ePn | Pn | 21 06 20.6 | +2.2 |
| BRDA | Brd | 4.14 | 59 | ⇑P | Pn | 21 06 24.0 | +4.7 |
| BRDA | Brd | 4.14 | 59 | P | Pn | 21 06 24.0 | +4.7 |
| LRK | Lerik | 4.57 | 83 | ⇑P | Pn | 21 06 25.5 | +0.2 |
| LRK | Lerik | 4.57 | 83 | P | Pn | 21 06 25.5 | +0.2 |
| ZKTA | Zakatala | 4.64 | 41 | ⇓P | Pb | 21 06 33.0 | -4.4 |
| IDHR | Dehrash | 4.67 | 137 | ePn | Pn | 21 06 28.1 | +1.3 |
| IDHR | | | | e | | 21 07 57.0 | |
| | comp=Z,1μm,0.4s | | | | | | |
| IDHR | Dehrash | 4.67 | 137 | ePn | Pn | 21 06 28.1 | +1.3 |
| SEKA | Sheki | 4.67 | 49 | ⇑P | Pb | 21 06 33.2 | -4.7 |
| SEKA | Sheki | 4.67 | 49 | P | Pb | 21 06 33.2 | -4.7 |
| IVIS | Veis | 5.05 | 135 | ePn | Pn | 21 06 33.1 | +1.1 |
| IVIS | | | | e | | 21 06 58.7 | |
| | comp=Z,540nm,0.3s | | | | | | |
| IVIS | Veis | 5.05 | 135 | ePn | Pn | 21 06 33.1 | +1.1 |
| BHD | Baghdad | 5.15 | 163 | ePN | x | 21 06 18.7 | |
| BHD | | | | eSN | x | 21 07 11.2 | |
| BHD | Baghdad | 5.15 | 163 | ePn | Pn | 21 06 18.7 | -14 |
| | SNR=39 | | | | | | |
| BHD | | | | eSn | Sn | 21 07 11.2 | -22 |
| | SNR=39 | | | | | | |
| BTCH | Batrach | 5.33 | 248 | i P | Pn | 21 06 35.3 | -0.4 |
| BTCH | Batrach | 5.33 | 248 | i P | Pn | 21 06 35.3 | -0.4 |
| PQL | Pirkuli | 5.34 | 59 | ⇓P | Pn | 21 06 40.6 | +4.7 |
| PQL | Pirkuli | 5.34 | 59 | P | Pn | 21 06 40.6 | +4.7 |
| RTB | Rutbah | 5.48 | 200 | ePN | x | 21 06 21.6 | |
| RTB | | | | eSN | x | 21 07 15.3 | |
| RTB | Rutbah | 5.48 | 200 | ePn | Pn | 21 06 21.6 | -16 |
| | SNR=39 | | | | | | |
| RTB | | | | eSn | Sn | 21 07 15.4 | -26 |
| | SNR=39 | | | | | | |
| KBZ | Khabaz | 5.52 | 3 | Pn | Pn | 21 06 41.2 | +3.0 |
| | comp=Z,0.1nm,0.3s,baz=171,slow=13,SNR=2.6 | | | | | | |
| SIZA | Siyzn | 5.68 | 58 | ⇓P | Pn | 21 06 44.3 | +3.8 |
| SIZA | Siyzn | 5.68 | 58 | P | Pn | 21 06 44.3 | +3.8 |
| IKOM | Komasi | 5.68 | 134 | ePn | Pn | 21 06 42.3 | +1.7 |
| IKOM | | | | e | | 21 07 14.3 | |
| | comp=Z,732nm,0.3s | | | | | | |
| IKOM | Komasi | 5.68 | 134 | ePn | Pn | 21 06 42.3 | +1.7 |
| RABH | Abou Rabah | 5.72 | 231 | i P | Pn | 21 06 42.3 | +1.2 |
| RABH | | | | eS | Sn | 21 07 46.0 | -1.2 |
| RABH | | | | AML | AML | 21 08 28.5 | |
| | comp=E,124nm,0.6s | | | | | | |
| RABH | | | | AMP | | 21 08 30.1 | |
| RABH | Abou Rabah | 5.72 | 231 | i P | Pn | 21 06 42.3 | +1.2 |
| RABH | | | | eS | Sn | 21 07 46.0 | -1.2 |
| ARNB | Al Arnab | 5.76 | 248 | i P | Pn | 21 06 42.2 | +0.6 |
| ARNB | Al Arnab | 5.76 | 248 | i P | Pn | 21 06 42.2 | +0.6 |
| IBDR | Badra | 5.78 | 151 | ePN | x | 21 06 28.1 | |
| IBDR | | | | eSN | x | 21 07 28.8 | |
| BIDA | Albida | 5.94 | 239 | i P | Pn | 21 06 45.1 | +1.1 |
| BIDA | Albida | 5.94 | 239 | i P | Pn | 21 06 45.1 | +1.1 |
| BRTR | Keskin Array B | 7.11 | 285 | Pn | Pn | 21 07 01.6 | +1.5 |
| | comp=E,0.2nm,0.3s,baz=101,slow=12,SNR=8.0 | | | | | | |
| ASF | Jabal al Asfar | 7.59 | 219 | Pn | Pn | 21 07 06.0 | -0.8 |
| | comp=E,0.6nm,0.3s,baz=67,slow=14,SNR=11 | | | | | | |
| ASF | | | | Lg | Lg | 21 09 16.6 | |
| | comp=E,0.9nm,0.3s,baz=221,slow=20,SNR=3.7 | | | | | | |
| NSR | Nassriya | 7.76 | 157 | ePN | x | 21 06 56.4 | |
| NSR | | | | eSN | x | 21 08 15.8 | |
| NSR | Nassriya | 7.76 | 157 | ePn | Pn | 21 06 56.4 | -13 |
| | SNR=39 | | | | | | |
| NSR | | | | eSn | Sn | 21 08 15.8 | -21 |
| | SNR=39 | | | | | | |
| MMAI | Mount Meron Ar | 7.79 | 230 | Pn | Pn | 21 07 09.8 | +0.3 |
| | comp=E,0.8nm,0.3s,baz=60,slow=16,SNR=6.6 | | | | | | |
| MMAI | | | | Lg | Lg | 21 09 11.3 | |
| | comp=E,0.8nm,0.3s,baz=35,slow=30,SNR=3.1 | | | | | | |
| MMAI | | | | LR | LR | 21 09 40.2 | |
| | comp=E,32nm,20.2s,baz=110,slow=34 | | | | | | |
| EIL | Elat | 10.59 | 219 | Lg | Lg | 21 10 52.6 | |
| | comp=E,0.1nm,0.3s,baz=329,slow=18,SNR=2.0 | | | | | | |
| GEYT | Alibeck | 12.28 | 86 | Pn | Pn | 21 08 10.9 | 0.0 |
| | comp=E,0.2nm,0.3s,baz=276,slow=22,SNR=2.9 | | | | | | |
| AKASG | Malin Array Be | 15.67 | 327 | Pn | Pn | 21 08 56.4 | -0.3 |
| | comp=E,0.1nm,0.3s,baz=137,slow=13,SNR=4.6 | | | | | | |
| AKTO | Aktyubinsk | 16.45 | 37 | Pn | Pn | 21 09 05.4 | -1.4 |
| | comp=E,0.1nm,0.3s,baz=228,slow=12,SNR=2.1 | | | | | | |
| OBN | Obninsk | 17.39 | 348 | LR | LR | 21 16 29.6 | |
| | comp=E,39nm,19.5s,baz=90,slow=39 | | | | | | |
| ARU | Arti | 21.12 | 25 | P | P | 21 09 60.0 | -0.8 |
| | comp=E,0.2nm,0.3s,baz=307,slow=20,SNR=2.0 | | | | | | |
| VRAC | Vranov | 21.68 | 309 | LR | LR | 21 21 16.4 | |
| | comp=E,15nm,19.9s,baz=129,slow=44 | | | | | | |
| AAK | Ala-Archa | 24.64 | 70 | LR | LR | 21 20 25.4 | |
| | comp=E,26nm,19.8s,baz=225,slow=37 | | | | | | |
| FINES | FINESS Array B | 25.42 | 341 | P | P | 21 10 43.5 | -0.1 |
| | comp=E,2.8nm,1.0s,baz=144,slow=9.6,SNR=3.8 | | | | | | |
| FINES | | | | LR | LR | 21 22 31.2 | |
| | comp=E,18nm,19.2s,baz=103,slow=41 | | | | | | |
| KURBB | Kurchatov Arra | 28.25 | 52 | P | P | 21 11 09.1 | -0.1 |
| | comp=E,0.8nm,0.2s,baz=259,slow=9.3,SNR=2.6 | | | | | | |
| HFS | Hagfors | 28.53 | 330 | LR | LR | 21 22 48.5 | |
| | comp=E,59nm,18.2s,baz=102,slow=37 | | | | | | |
| NOA | NORSAR Array B | 30.05 | 330 | LR | LR | 21 23 31.4 | |
| | comp=E,26nm,19.6s,baz=120,slow=36 | | | | | | |
| MKAR | Makanchi Array | 30.26 | 61 | P | P | 21 11 27.5 | +0.3 |
| | comp=E,0.3nm,0.4s,baz=267,slow=6.6,SNR=3.3 | | | | | | |
| ZALV | Zalesovo Beam | 32.71 | 47 | P | P | 21 11 48.8 | +0.2 |
| | comp=E,0.5nm,0.4s,baz=269,slow=8.6,SNR=2.4 | | | | | | |
| ZALV | | | | LR | LR | 21 26 29.0 | |
| | comp=E,45nm,18.1s,baz=320,slow=39 | | | | | | |
| CMAR | Chiang Mai Arr | 52.58 | 95 | P | P | 21 14 30.1 | -0.1 |
| | comp=E,1.5nm,0.8s,baz=296,slow=8.7,SNR=11 | | | | | | |
| BBB | Bella Bella | 89.61 | 354 | LR | LR | 22 02 59.1 | |
| | comp=E,45nm,18.3s,baz=112,slow=39 | | | | | | |
| NEW | Newport | 92.03 | 347 | LR | LR | 22 02 46.9 | |
| | comp=E,35nm,19.0s,baz=286,slow=38 | | | | | | |

*NEIC **01** 21:05:19.3, 43°.65S×172°.36E, h5km, ML3.9(WEL), After WEL.*
*NEIC Felt in Canterbury.*

**WEL 01 21:05:19.3**±0.1**, 43°.65S×172°.36E, h5km, ML3.9**/20**, 3C-4D, Error ellipse: s-maj=0.8km s-min=0.6km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.21 | 69 | ⇑PG | Pg | 21 05 23.5 | +0.2 |
| CRLZ | | | | SG | Sg | 21 05 26.3 | +0.3 |
| CRLZ | | | | AML | AML | 21 05 26.6 | |
| CRLZ | | | | AML | AML | 21 05 26.7 | |
| CRLZ | | | | AML | AML | 21 05 26.8 | |
| CRLZ | Canterbury Las | 0.21 | 69 | P* | Pg | 21 05 23.5 | +0.2 |
| CRLZ | | | | Sg | Sg | 21 05 26.3 | +0.3 |
| MQZ | McQueen's Vall | 0.22 | 105 | ⇓PG | Pg | 21 05 23.8 | +0.2 |
| MQZ | | | | SG | Sg | 21 05 27.2 | +0.6 |
| MQZ | | | | AML | AML | 21 05 28.6 | |
| MQZ | McQueen's Vall | 0.22 | 105 | ⇓P* | Pg | 21 05 23.8 | +0.2 |
| MQZ | | | | Sg | Sg | 21 05 27.2 | +0.6 |
| OXZ | Oxford | 0.40 | 324 | PG | Pg | 21 05 27.3 | +0.3 |
| OXZ | | | | SG | Sg | 21 05 33.0 | +0.8 |
| OXZ | Oxford | 0.40 | 324 | P* | Pg | 21 05 27.3 | +0.3 |
| OXZ | | | | S* | Sg | 21 05 33.0 | +0.8 |
| LTZ | Lake Taylor | 0.87 | 356 | P* | Pg | 21 05 35.7 | -0.3 |
| LTZ | | | | S* | Sg | 21 05 47.8 | +0.4 |
| LTZ | | | | AML | AML | 21 05 48.4 | |
| LTZ | Lake Taylor | 0.87 | 356 | P* | Pg | 21 05 35.7 | -0.3 |
| LTZ | | | | S* | Sg | 21 05 47.8 | +0.4 |
| RPZ | Rata Peaks | 0.95 | 266 | P* | Pb | 21 05 37.9 | -0.3 |
| RPZ | | | | AML | AML | 21 05 54.2 | |
| RPZ | | | | AML | AML | 21 05 55.4 | |
| RPZ | Rata Peaks | 0.95 | 266 | P* | Pb | 21 05 37.9 | -0.3 |
| WVZ | Waitaha Valley | 1.31 | 295 | P* | Pn | 21 05 43.3 | -1.0 |
| WVZ | | | | AML | AML | 21 06 04.3 | |
| WVZ | | | | AML | AML | 21 06 04.4 | |
| WVZ | Waitaha Valley | 1.31 | 295 | Pn | Pn | 21 05 43.3 | -1.0 |
| KHZ | Kahutara | 1.51 | 36 | ⇑PN | Pn | 21 05 44.4 | -2.5 |
| KHZ | | | | AML | AML | 21 05 52.1 | |
| KHZ | | | | AML | AML | 21 06 17.3 | |
| KHZ | Kahutara | 1.51 | 36 | Pn | Pn | 21 05 44.4 | -2.5 |
| LBZ | Lake Benmore | 1.73 | 244 | ⇓PN | Pn | 21 05 49.1 | -1.0 |
| LBZ | | | | AML | AML | 21 06 20.9 | |
| LBZ | | | | AML | AML | 21 06 24.7 | |
| LBZ | Lake Benmore | 1.73 | 244 | Pn | Pn | 21 05 49.1 | -1.0 |
| ODZ | Otahua Downs | 1.86 | 221 | PN | Pn | 21 05 50.5 | -1.3 |
| ODZ | | | | AML | AML | 21 06 20.6 | |
| ODZ | | | | AML | AML | 21 06 28.0 | |
| ODZ | Otahua Downs | 1.86 | 221 | Pn | Pn | 21 05 50.5 | -1.3 |
| THZ | Tophouse | 1.93 | 12 | ⇑PN | Pn | 21 05 50.6 | -2.2 |
| THZ | | | | AML | AML | 21 06 28.3 | |
| THZ | | | | AML | AML | 21 06 33.0 | |
| THZ | Tophouse | 1.93 | 12 | Pn | Pn | 21 05 50.6 | -2.2 |
| FOZ | Fox Glacier | 1.94 | 272 | PN | Pn | 21 05 51.6 | -1.2 |
| FOZ | | | | AML | AML | 21 06 27.3 | |
| FOZ | | | | AML | AML | 21 06 31.0 | |
| FOZ | Fox Glacier | 1.94 | 272 | Pn | Pn | 21 05 51.6 | -1.2 |
| DSZ | Denniston Nort | 1.94 | 348 | PN | Pn | 21 05 51.9 | -1.2 |
| DSZ | | | | AML | AML | 21 06 24.2 | |
| DSZ | | | | AML | AML | 21 06 29.2 | |
| DSZ | Denniston Nort | 1.94 | 348 | Pn | Pn | 21 05 51.9 | -1.2 |
| BSWZ | Blackbirch Sta | 2.23 | 31 | PN | Pn | 21 05 55.3 | -1.7 |
| BSWZ | | | | AML | AML | 21 06 26.5 | |
| TUWZ | Tuamarina | 2.51 | 28 | Pn | Pn | 21 05 58.1 | -2.5 |
| NNZ | Nelson | 2.54 | 18 | PN | Pn | 21 05 59.6 | -1.6 |
| NNZ | Nelson | 2.54 | 18 | Pn | Pn | 21 05 59.6 | -1.6 |
| HHSZ | Highcliff Hill | 2.56 | 209 | PN | Pn | 21 06 00.1 | -1.4 |
| HHSZ | Highcliff Hill | 2.56 | 209 | Pn | Pn | 21 06 00.1 | -1.4 |
| JCZ | Jackson Bay | 2.64 | 259 | PN | Pn | 21 06 01.3 | -1.3 |
| JCZ | | | | AML | AML | 21 06 49.4 | |
| JCZ | | | | AML | AML | 21 06 50.4 | |
| JCZ | Jackson Bay | 2.64 | 259 | Pn | Pn | 21 06 01.3 | -1.3 |
| WKZ | Wanaka | 2.67 | 243 | PN | Pn | 21 06 01.8 | -1.2 |
| WKZ | | | | AML | AML | 21 06 52.4 | |
| WKZ | | | | AML | AML | 21 06 54.2 | |
| WKZ | Wanaka | 2.67 | 243 | Pn | Pn | 21 06 01.8 | -1.2 |
| EAZ | Earnscleugh | 2.70 | 233 | ⇓PN | Pn | 21 06 02.0 | -1.3 |
| EAZ | | | | AML | AML | 21 06 47.7 | |
| EAZ | | | | AML | AML | 21 06 50.4 | |
| EAZ | Earnscleugh | 2.70 | 233 | Pn | Pn | 21 06 02.0 | -1.3 |
| QRZ | Quartz Range | 2.82 | 3 | PN | Pn | 21 06 03.6 | -1.4 |
| QRZ | | | | AML | AML | 21 06 52.6 | |
| QRZ | | | | AML | AML | 21 06 54.9 | |
| QRZ | Quartz Range | 2.82 | 3 | Pn | Pn | 21 06 03.6 | -1.4 |
| WEL | Wellington | 2.96 | 38 | PN | Pn | 21 06 04.4 | -2.5 |
| WEL | Wellington | 2.96 | 38 | Pn | Pn | 21 06 04.4 | -2.5 |
| PLWZ | Palliser | 2.98 | 47 | PN | Pn | 21 06 04.1 | -3.2 |
| PLWZ | Palliser | 2.98 | 47 | Pn | Pn | 21 06 04.1 | -3.2 |
| TUZ | Tuapeka | 3.01 | 219 | PN | Pn | 21 06 06.5 | -1.1 |
| TUZ | | | | AML | AML | 21 06 59.7 | |
| TUZ | | | | AML | AML | 21 07 02.0 | |
| TUZ | Tuapeka | 3.01 | 219 | Pn | Pn | 21 06 06.5 | -1.1 |
| MSWZ | Moikau Station | 3.09 | 45 | PN | Pn | 21 06 05.4 | -3.4 |
| MSWZ | Moikau Station | 3.09 | 45 | Pn | Pn | 21 06 05.4 | -3.4 |
| CAW | Cannon Point | 3.24 | 39 | PN | Pn | 21 06 07.5 | -3.3 |
| CAW | | | | AML | AML | 21 06 47.6 | |
| TRWZ | Traveller | 3.33 | 49 | PN | Pn | 21 06 08.7 | -3.4 |
| TRWZ | Traveller | 3.33 | 49 | Pn | Pn | 21 06 08.7 | -3.4 |
| KIW | Kapiti Island | 3.37 | 35 | PN | Pn | 21 06 10.0 | -2.5 |
| KIW | Kapiti Island | 3.37 | 35 | Pn | Pn | 21 06 10.0 | -2.5 |
| MTW | Mount Morrison | 3.41 | 44 | PN | Pn | 21 06 09.5 | -3.5 |
| MTW | Mount Morrison | 3.41 | 44 | Pn | Pn | 21 06 09.6 | -3.5 |
| MLZ | Mavora Lakes | 3.44 | 239 | PN | Pn | 21 06 12.5 | -1.0 |
| MLZ | | | | AML | AML | 21 07 18.6 | |
| MLZ | | | | AML | AML | 21 07 20.8 | |
| MLZ | Mavora Lakes | 3.44 | 239 | Pn | Pn | 21 06 12.6 | -1.0 |
| OGWZ | Otaki Gorge | 3.52 | 37 | PN | Pn | 21 06 11.5 | -3.0 |
| OGWZ | Otaki Gorge | 3.52 | 37 | Pn | Pn | 21 06 11.5 | -3.0 |
| SYZ | Scrubby Hill | 3.68 | 217 | PN | Pn | 21 06 16.1 | -0.7 |
| SYZ | | | | AML | AML | 21 07 27.6 | |
| SYZ | | | | AML | AML | 21 07 30.2 | |
| SYZ | Scrubby Hill | 3.68 | 217 | Pn | Pn | 21 06 16.1 | -0.7 |
| MRZ | Mangatainoka R | 3.83 | 40 | PN | Pn | 21 06 15.4 | -3.4 |
| MRZ | Mangatainoka R | 3.83 | 40 | Pn | Pn | 21 06 15.4 | -3.4 |

**WEL 01 21:43:45.1**±0.2**, 37°.14S×176°.19E, h255km**±3km**, ML3.6**/9**, Error ellipse: s-maj=5.1km s-min=4.8km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 1.34 | 147 | PN | Pn | 21 44 22.9 | +0.3 |
| URZ | | | | SN | S | 21 44 51.9 | -0.4 |
| HAZ | Te Kaha | 1.41 | 116 | PN | Pn | 21 44 23.2 | 0.0 |
| MWZ | Matawai | 1.60 | 139 | PN | Pn | 21 44 24.7 | +0.1 |
| MWZ | | | | SN | S | 21 44 56.1 | +0.2 |
| MXZ | Matakaoa Point | 1.74 | 105 | PN | Pn | 21 44 26.0 | +0.3 |
| MXZ | | | | SN | S | 21 44 57.2 | -0.5 |
| TKGZ | Te Karaka | 1.85 | 135 | PN | Pn | 21 44 26.6 | +0.1 |
| WMGZ | Waiomatatini S | 1.89 | 112 | PN | Pn | 21 44 27.1 | +0.1 |
| RIGZ | Rimuhau | 2.00 | 142 | PN | Pn | 21 44 27.9 | -0.1 |
| NMHZ | Naumai | 2.02 | 166 | PN | Pn | 21 44 29.2 | +1.0 |
| BKZ | Black Stump Fm | 2.04 | 173 | PN | Pn | 21 44 28.4 | +0.1 |
| BKZ | | | | SN | S | 21 45 02.3 | -0.3 |
| WHHZ | Waihua | 2.10 | 157 | PN | Pn | 21 44 28.9 | 0.0 |
| ARHZ | Aropaoanui | 2.21 | 164 | PN | Pn | 21 44 30.0 | +0.1 |
| KNZ | Kokohu | 2.21 | 149 | PN | Pn | 21 44 29.3 | -0.5 |
| WNVZ | Wahianoa | 2.24 | 192 | PN | Pn | 21 44 30.8 | +0.5 |
| MCHZ | McNeill Hill | 2.34 | 170 | PN | Pn | 21 44 31.2 | +0.1 |
| BHHZ | Black Hill Sta | 2.35 | 182 | PN | Pn | 21 44 31.3 | +0.1 |
| MHGZ | Mahia Peninsul | 2.42 | 147 | PN | Pn | 21 44 32.0 | 0.0 |
| KRHZ | Kereru | 2.51 | 177 | PN | Pn | 21 44 32.2 | -0.6 |
| CKHZ | Cape Kidnapper | 2.61 | 165 | PN | Pn | 21 44 33.1 | -0.7 |
| KAHZ | Kahuranaki | 2.71 | 169 | PN | Pn | 21 44 34.1 | -0.7 |
| PNHZ | Pukenui | 2.77 | 180 | PN | Pn | 21 44 34.6 | -0.9 |
| BFZ | Birch Farm | 3.54 | 179 | PN | Pn | 21 44 41.9 | -1.8 |
| HOWZ | Holdsworth Sta | 3.79 | 188 | PN | Pn | 21 44 44.5 | -2.2 |
| KIW | Kapiti Island | 3.85 | 195 | PN | Pn | 21 44 45.4 | -2.0 |
| MTW | Mount Morrison | 4.05 | 187 | PN | Pn | 21 44 46.9 | -2.8 |
| CAW | Cannon Point | 4.06 | 192 | PN | Pn | 21 44 47.8 | -2.0 |
| DUWZ | D'Urville Isla | 4.07 | 205 | PN | Pn | 21 44 48.3 | -1.5 |
| TCW | Tory Channel | 4.33 | 200 | PN | Pn | 21 44 51.0 | -1.9 |
| MSWZ | Moikau Station | 4.33 | 189 | PN | Pn | 21 44 50.0 | -3.0 |
| PLWZ | Palliser | 4.49 | 189 | PN | Pn | 21 44 51.6 | -3.2 |
| NNZ | Nelson | 4.62 | 207 | PN | Pn | 21 44 54.6 | -1.8 |
| TUWZ | Tuamarina | 4.63 | 201 | PN | Pn | 21 44 54.5 | -2.0 |

**GUC 01 21:45:42.7**±0.5**, 34°.21S×72°.22W, h38km**±5km**, ML3.5, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NICH | Los Niches | 1.13 | 134 | i P | Pn | 21 46 03.4 | +1.4 |
| NICH | | | | i S | Sn | 21 46 19.3 | +2.9 |
| NICH | | | | AML | AML | 21 46 26.8 | |
| | comp=E,3μm,0.6s | | | | | | |
| TACH | Talagante | 1.20 | 63 | i P | Pn | 21 46 04.5 | +1.5 |
| TALC | Talca | 1.28 | 158 | i P | Pn | 21 46 06.0 | +2.0 |
| TALC | | | | i S | Sn | 21 46 23.2 | +3.3 |
| TALC | | | | AML | AML | 21 46 30.3 | |
| | comp=N,2μm,0.4s | | | | | | |
| ANTU | Antumapu | 1.46 | 65 | i P | Pn | 21 46 08.8 | +2.2 |
| ANTU | | | | i S | Sn | 21 46 28.6 | +4.0 |
| ROCH | El Roble | 1.59 | 39 | i P | Pn | 21 46 11.0 | +2.4 |
| ROCH | | | | i S | Sn | 21 46 32.5 | +4.3 |
| CLCH | Cerro Calan | 1.62 | 60 | i P | Pn | 21 46 11.2 | +2.4 |
| CLCH | | | | i S | Sn | 21 46 32.7 | +4.3 |
| CLCH | | | | AML | AML | 21 46 43.2 | |
| | comp=E,714nm,0.5s | | | | | | |
| PEL | Peldehue | 1.66 | 51 | i P | Pn | 21 46 11.9 | +2.5 |
| PEL | | | | i S | Sn | 21 46 33.9 | +4.4 |
| PEL | | | | AML | AML | 21 46 40.8 | |
| | comp=E,701nm,0.9s | | | | | | |

*AUST **01** 22:08:13.8, 11°.48S×167°.48E, h100km*
*IDC **01** 22:08:23.8±4.1, 11°.76S×166°.54E, h132km±36km, mb3.8/12, mb1 3.9/13, mb1mx3.8/31, mbtmp4.2/13, Error ellipse: s-maj=21.6km s-min=18.6km az=78.0*
*ISCJB **01** 22:08:24.3±0.6, 11°.77S±0°.05×166°.5E±0°.1, h150km, mb4.2/23, Error ellipse: s-maj=15.0km s-min=7.3km az=179.5*
*NEIC **01** 22:08:25.2±1.8, 11°.78S×166°.53E, h146km±16km, mb4.4/11, Error ellipse: s-maj=10.4km s-min=10.1km az=193.0*

**ISC 01 22:08:25.5**±0.7**, 11°.81S**±0°.07×**166°.6E**±0°.1**, h150km, n41, σ$0^{s}.88$**/47**, mb4.2**/23**, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 10.21 | 181 | P | Pn | 22 10 48.6 | +0.2 |
| | 0.9nm,0.3s,baz=92,slow=2.9,SNR=7.0 | | | | | | |
| DZM | | | | S | Sn | 22 12 40.5 | -1.0 |
| | 0.8nm,0.3s,baz=181,slow=23,SNR=6.6 | | | | | | |
| EIDS | Eidsvold | 19.90 | 225 | P | Pn | 22 12 47.5 | -1.2 |
| | baz=21,SNR=4.3 | | | | | | |
| CTA | Charters Tower | 21.18 | 245 | P | P | 22 12 59.6 | +0.4 |
| | 2.8nm,0.7s,baz=79,slow=10,SNR=4.1 | | | | | | |
| RMQ | Roma | 22.23 | 226 | P | P | 22 13 11.8 | +1.7 |
| | baz=23,SNR=4.5 | | | | | | |
| ARMA | Armidale | 23.13 | 215 | P | P | 22 13 20.3 | +1.7 |
| | baz=24,SNR=7.1 | | | | | | |
| CAN | Canberra | 28.32 | 211 | eP | P | 22 14 05.4 | +0.2 |
| | 6.1nm,1.0s | | | | | | |
| TOO | Toolangi | 31.86 | 213 | P | P | 22 14 37.5 | +1.1 |
| | baz=33,SNR=6.2 | | | | | | |
| WRAB | Tennant Creek | 31.98 | 251 | eP | P | 22 14 36.6 | -1.1 |
| | 4.6nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 31.99 | 251 | P | P | 22 14 37.3 | -0.5 |
| | 1.3nm,0.5s,baz=84,slow=9.1,SNR=7.1 | | | | | | |
| WRA | | | | PcP | PcP | 22 17 24.7 | +0.4 |
| | 0.5nm,0.6s,baz=77,slow=3.4,SNR=3.9 | | | | | | |
| ASAR | Alice Springs | 33.18 | 245 | P | P | 22 14 47.0 | -1.2 |
| | 2.4nm,0.7s,baz=72,slow=9.4,SNR=21 | | | | | | |
| ASAR | | | | pP | pP | 22 15 18.4 | -1.8 |
| | 0.8nm,0.7s,baz=70,slow=9.7,SNR=4.5 | | | | | | |
| ASAR | | | | PcP | PcP | 22 17 27.7 | +0.1 |
| | 1.4nm,0.7s,baz=78,slow=2.9,SNR=14 | | | | | | |
| HTT | Hallett | 33.20 | 225 | P | P | 22 14 47.5 | -0.7 |
| | baz=34,SNR=4.8 | | | | | | |
| BBOO | Buckleboo | 34.91 | 228 | P | P | 22 15 03.4 | +0.5 |
| | baz=36,SNR=18 | | | | | | |
| PALU | Palau | 37.16 | 299 | P | P | 22 15 22.9 | +0.7 |
| | baz=38,SNR=6.7 | | | | | | |
| FORT | Forrest | 40.27 | 236 | eP | P | 22 15 48.1 | +0.1 |
| | 16nm,0.6s | | | | | | |
| KMBL | Kambalda | 45.51 | 237 | P | P | 22 16 30.7 | +0.5 |
| | baz=46,SNR=8.4 | | | | | | |
| MBWA | Marble Bar | 45.72 | 252 | eP | P | 22 16 32.3 | +0.3 |
| | 7.3nm,0.8s | | | | | | |
| MEEK | Meekatharra | 47.34 | 245 | P | P | 22 16 45.0 | +0.4 |
| | baz=48,SNR=9.1 | | | | | | |
| KLBR | Kellerberrin | 48.99 | 238 | P | P | 22 16 57.0 | -0.1 |
| | baz=50,SNR=4.8 | | | | | | |
| KKM | Kota Kinabalu | 53.12 | 287 | eP | P | 22 17 28.5 | +0.2 |
| | 8.7nm,0.6s | | | | | | |
| MJAR | Matsushiro Arr | 55.01 | 332 | P | P | 22 17 40.4 | -1.1 |
| | 1.7nm,1.0s,baz=169,slow=8.5,SNR=4.1 | | | | | | |
| UGM | Wanagama | 55.28 | 269 | P | P | 22 17 44.3 | +0.4 |
| | baz=56,SNR=3.4 | | | | | | |
| KSRS | Korea Array | 60.95 | 325 | P | P | 22 18 23.0 | +0.2 |
| | 1.6nm,0.8s,baz=127,slow=8.0,SNR=5.5 | | | | | | |
| KSAR | Wonju Array Be | 60.97 | 325 | P | P | 22 18 23.0 | +0.1 |
| VNDA | Vanda | 65.75 | 181 | P | P | 22 18 54.6 | +0.8 |
| | 1.5nm,0.7s,baz=358,slow=9.9,SNR=14 | | | | | | |
| IPM | Ipoh | 67.14 | 280 | eP | P | 22 19 04.2 | +0.4 |
| | 20nm,1.3s | | | | | | |
| KULM | Kulim | 67.71 | 281 | eP | P | 22 19 06.7 | -0.6 |
| | 8.7nm,1.1s | | | | | | |
| CMAR | Chiang Mai Arr | 73.15 | 293 | P | P | 22 19 41.1 | +0.9 |
| | 5.5nm,0.7s,baz=125,slow=4.7,SNR=44 | | | | | | |
| CHTO | Chiang Mai | 73.26 | 294 | eP | P | 22 19 41.6 | +0.7 |
| | 4.0nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 78.20 | 180 | eP | P | 22 20 08.6 | +0.3 |
| | 8.9nm,0.9s | | | | | | |
| ULN | Ulaanbaatar | 79.38 | 324 | eP | P | 22 20 15.7 | +0.6 |
| | 2.1nm,0.6s | | | | | | |
| SONM | Songino Array | 79.75 | 324 | P | P | 22 20 17.4 | +0.4 |
| | 1.4nm,0.7s,baz=148,slow=6.3,SNR=10 | | | | | | |
| LSA | Lhasa | 83.44 | 302 | eP | P | 22 20 37.5 | +0.4 |
| | 1.7nm,0.6s | | | | | | |
| YBH | Yreka Blue Hor | 83.85 | 45 | P | P | 22 20 38.7 | +0.2 |
| | 0.4nm,0.3s,baz=254,slow=6.5 | | | | | | |
| ILAR | Eielson Array | 83.98 | 18 | P | P | 22 20 38.3 | -0.3 |
| | 0.5nm,0.6s,baz=255,slow=4.9,SNR=7.3 | | | | | | |
| MKAR | Makanchi Array | 94.62 | 317 | P | P | 22 21 29.6 | +0.1 |
| | 3.9nm,0.6s,baz=91,slow=6.2,SNR=29 | | | | | | |
| ZALV | Zalesovo Beam | 94.64 | 324 | P | P | 22 21 28.8 | -0.5 |
| | 0.8nm,0.6s,baz=107,slow=5.1,SNR=4.6 | | | | | | |
| ARCES | ARCESS Array B | 117.27 | 346 | PKP | PKPdf | 22 26 52.2 | -0.3 |
| | 0.7nm,0.5s,baz=81,slow=1.6,SNR=11 | | | | | | |
| FINES | FINESS Array B | 122.77 | 339 | PKP | PKPdf | 22 27 02.8 | -0.4 |
| | 0.4nm,0.5s,baz=54,slow=2.4,SNR=8.0 | | | | | | |
| KEST | Kesra | 148.50 | 323 | PKPbc | PKPab | 22 27 55.6 | -3.3 |
| | 2.5nm,0.7s,baz=65,slow=1.8,SNR=5.4 | | | | | | |
| ESDC | Sonseca Array | 151.00 | 345 | PKPbc | PKPbc | 22 28 01.4 | +0.3 |
| | 0.2nm,0.5s,baz=2.2,slow=3.8,SNR=3.7 | | | | | | |
| ESDC | | | | PKPab | PKPab | 22 28 09.0 | 0.0 |
| | 0.4nm,0.5s,baz=12,slow=3.8,SNR=7.6 | | | | | | |
| TORD | Torodi Ar. Bea | 165.16 | 277 | PKP | PKPdf | 22 28 12.9 | +0.1 |
| | 0.3nm,0.7s,baz=64,slow=3.4,SNR=3.6 | | | | | | |
| TORD | | | | PKPab | PKPab | 22 29 10.7 | -0.2 |
| | 0.3nm,0.7s,baz=62,slow=4.8,SNR=3.7 | | | | | | |

**IDC 01 22:20:44.5**±5.9**, 21°.07S×174°.51W, h0km, mb3.9**/3**, mb1 4.2**/3**, mb1mx3.8**/20**, mbtmp3.9**/3**, MS3.5**/1**, Ms1 3.5**/1**, ms1mx2.7**/21**, Error ellipse: s-maj=399.7km s-min=33.5km az=154.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PPT | Papeete | 23.78 | 86 | LR | LR | 22 34 51.5 | |
| | comp=Z,96nm,18.4s,baz=186,slow=36 | | | | | | |
| ASAR | Alice Springs | 47.57 | 257 | P | P | 22 29 21.8 | -0.4 |
| | 1.6nm,0.8s,baz=96,slow=8.2,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 47.76 | 262 | P | P | 22 29 24.0 | +0.3 |
| | 0.4nm,0.5s,baz=98,slow=8.6,SNR=4.8 | | | | | | |
| NVAR | Mina Array Bea | 79.23 | 42 | P | P | 22 32 51.9 | 0.0 |
| | 0.9nm,0.7s,baz=219,slow=7.8,SNR=3.8 | | | | | | |

*IDC **01** 22:47:25.7±11.0, 24°.31S×66°.53W, h130km±91km, mb3.0/1, mb1 3.0/3, mb1mx2.9/16, mbtmp3.4/3, ML3.1/1, Error ellipse: s-maj=120.8km s-min=40.9km az=0.0*
*ISCJB **01** 22:47:30.0±1.3, 24°.20S±0°.07×67°.4W±0°.1, h169km, mb3.0/1, Error ellipse: s-maj=14.5km s-min=9.6km az=174.3*
*SJA **01** 22:47:30.9±1.2, 24°.27S×67°.06W, h194km±21km, ML2.8*

**ISC 01 22:47:29.5**±1.5**, 24°.17S**±0°.08×**67°.4W**±0°.1**, h169km, n11, σ$1^{s}.45$**/15**, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SLA | San Lorenzo | 1.79 | 108 | i P | Pn | 22 48 05.0 | +1.3 |
| SLA | | | | i S | Sn | 22 48 30.4 | +0.2 |
| SLA | | | | AML | AML | 22 48 32.3 | |
| | comp=Z,46nm,0.7s | | | | | | |
| HJA | Humahuaca | 2.04 | 62 | i P | Pn | 22 48 08.6 | +1.9 |
| HJA | | | | i S | Sn | 22 48 36.9 | +1.5 |
| AZAP | Zapla | 2.11 | 92 | i P | Pn | 22 48 07.7 | +0.4 |
| AZAP | | | | i S | Sn | 22 48 35.8 | -0.8 |
| AZAP | | | | AML | AML | 22 48 38.6 | |
| | comp=Z,45nm,0.6s | | | | | | |
| FSA | Cafayete | 2.28 | 147 | i P | Pn | 22 48 11.2 | +2.0 |
| FSA | | | | i S | Sn | 22 48 39.4 | -0.6 |
| ASTB | Santa Barbara | 2.66 | 86 | i P | Pn | 22 48 14.0 | +0.4 |
| AHML | Horco Molle | 3.19 | 145 | i P | Pn | 22 48 20.8 | +0.8 |
| AHML | | | | i P | Pn | 22 48 20.8 | +0.8 |
| LPAZ | La Paz | 7.88 | 355 | P | Pn | 22 49 21.5 | -0.3 |
| | comp=Z,0.1nm,0.3s,baz=164,slow=9.9,SNR=2.8 | | | | | | |
| BDFB | Brasilia | 20.07 | 69 | P | P | 22 51 41.8 | -8.2 |
| | baz=228,slow=14,SNR=1.7 | | | | | | |
| TORD | Torodi Ar. Bea | 76.95 | 69 | P | P | 22 59 00.8 | -3.0 |
| | comp=Z,0.2nm,0.5s,baz=252,slow=6.0,SNR=6.3 | | | | | | |
| WRA | Warramunga Arr | 131.31 | 208 | PKP | PKPdf | 23 06 23.4 | +1.1 |
| | comp=Z,0.1nm,0.4s,baz=154,slow=1.5,SNR=3.7 | | | | | | |
| MKAR | Makanchi Array | 146.88 | 39 | PKPbc | PKPdf | 23 06 50.6 | +1.0 |
| | comp=Z,0.2nm,0.2s,baz=299,slow=3.1,SNR=3.6 | | | | | | |

*ISCJB **01** 23:11:50.2±0.4, 40°.66N±0°.02×29°.08E±0°.03, h2km±4km, Error ellipse: s-maj=4.3km s-min=3.5km az=176.1*
*DDA **01** 23:11:50.3, 40°.64N×29°.09E, h13km, Md2.7*
*CSEM **01** 23:11:50.5±0.1, 40°.66N×29°.09E, h5km, MD2.6, Error ellipse: s-maj=2.2km s-min=2.1km az=62.0*
*ISK **01** 23:11:50.0, 40°.66N×29°.10E, h5km, MD2.6*

**ISC 01 23:11:50.7**±0.9**, 40°.66N**±0°.02×**29°.09E**±0°.02**, h11km**±7km**, n62, σ$0^{s}.42$**/77**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARMT | Armutlu | 0.20 | 243 | PG | Pg | 23 11 54.9 | -0.1 |
| ARMT | Armutlu | 0.20 | 243 | *i* Pg | Pg | 23 11 54.9 | -0.1 |
| BUY | Buyukada | 0.20 | 6 | *i* P | Pg | 23 11 55.2 | +0.2 |
| BUY | | | | *i* S | Sg | 23 11 58.3 | +0.4 |
| BUY | Buyukada | 0.20 | 6 | P | Pg | 23 11 55.2 | +0.2 |
| BUY | | | | S | Sg | 23 11 58.3 | +0.4 |
| GEMT | Gemlik | 0.23 | 162 | *e*PG | Pg | 23 11 55.0 | -0.5 |
| GEMT | | | | *e*SG | Sg | 23 11 58.2 | -0.5 |
| GEMT | Gemlik | 0.23 | 162 | *e*Pg | Pg | 23 11 55.1 | -0.5 |
| GEMT | | | | *e*Sg | Sg | 23 11 58.2 | -0.5 |
| MDNY | Mudanya-Bursa | 0.33 | 209 | *e*PG | Pg | 23 11 57.3 | 0.0 |
| MDNY | Mudanya-Bursa | 0.33 | 209 | *e*Pg | Pg | 23 11 57.3 | 0.0 |
| IGD | Bursa | 0.40 | 168 | P | Pg | 23 11 58.4 | -0.2 |
| IGD | | | | S | Sg | 23 12 03.7 | -0.2 |
| ISK | Istanbul-Kandi | 0.41 | 356 | *e*PG | Pg | 23 11 58.8 | -0.1 |
| ISK | Istanbul-Kandi | 0.41 | 356 | *e*Pg | Pg | 23 11 58.8 | -0.1 |
| IZI | Iznik | 0.43 | 138 | *e*PG | Pg | 23 11 58.9 | -0.3 |
| IZI | Iznik | 0.43 | 138 | *e*Pg | Pg | 23 11 58.9 | -0.3 |
| ULDT | Uludag | 0.51 | 176 | *i* P | Pg | 23 12 00.3 | -0.5 |
| ULDT | | | | *i* S | Sg | 23 12 07.8 | +0.2 |
| ULDT | Uludag | 0.51 | 176 | P | Pg | 23 12 00.3 | -0.5 |
| ULDT | | | | S | Sg | 23 12 07.8 | +0.2 |
| ADVT | Abdulvahap | 0.54 | 114 | *e*PG | Pg | 23 12 00.9 | -0.3 |
| ADVT | Abdulvahap | 0.54 | 114 | *e*Pg | Pg | 23 12 00.9 | -0.3 |
| BGKT | Bogazkoy | 0.58 | 335 | *e*PG | Pg | 23 12 01.6 | -0.4 |
| BGKT | Bogazkoy | 0.58 | 335 | *e*Pg | Pg | 23 12 01.6 | -0.4 |
| KLYT | Kilyos | 0.60 | 356 | *e*PG | Pg | 23 12 02.2 | -0.2 |
| KLYT | Kilyos | 0.60 | 356 | *e*Pg | Pg | 23 12 02.2 | -0.2 |
| ORLT | Orhaneli | 0.63 | 194 | *e*PG | Pg | 23 12 02.6 | -0.3 |
| ORLT | Orhaneli | 0.63 | 194 | *e*Pg | Pg | 23 12 02.6 | -0.3 |
| SILT | Sile | 0.65 | 40 | *e*PG | Pg | 23 12 02.5 | -0.8 |
| SILT | Sile | 0.65 | 40 | *e*Pg | Pg | 23 12 02.5 | -0.8 |
| KCTX | Karacabey (Bur | 0.68 | 236 | *e*PG | Pg | 23 12 03.6 | -0.4 |
| KCTX | Karacabey (Bur | 0.68 | 236 | *e*Pg | Pg | 23 12 03.6 | -0.4 |
| CAVI | Cavuskoy | 0.73 | 128 | *e*PG | Pg | 23 12 04.3 | -0.5 |
| CAVI | Cavuskoy | 0.73 | 128 | *e*Pg | Pg | 23 12 04.3 | -0.5 |
| CTKS | Kestanelik-??a | 0.73 | 323 | *e*PG | Pg | 23 12 04.3 | -0.6 |
| CTKS | Kestanelik-??a | 0.73 | 323 | *e*Pg | Pg | 23 12 04.3 | -0.6 |
| SPNC | Sapanca-Adapaz | 0.93 | 88 | *e*PG | Pg | 23 12 08.5 | -0.1 |
| SPNC | Sapanca-Adapaz | 0.93 | 88 | *e*Pg | Pg | 23 12 08.5 | -0.1 |
| EDC | Edincik | 0.99 | 252 | *e*PG | Pg | 23 12 09.3 | -0.4 |
| EDC | Edincik | 0.99 | 252 | *e*Pg | Pg | 23 12 09.3 | -0.4 |
| GPA | Golpazari | 1.00 | 111 | *e*PG | Pb | 23 12 10.1 | 0.0 |
| GPA | Golpazari | 1.00 | 111 | *e*Pg | Pb | 23 12 10.1 | 0.0 |
| CTYL | Yal??k??y-??at | 1.02 | 324 | *e*PG | Pg | 23 12 09.6 | -0.8 |
| CTYL | Yal??k??y-??at | 1.02 | 324 | *e*Pg | Pg | 23 12 09.6 | -0.8 |
| GULT | Gulveren | 1.11 | 101 | *e*PN | Pg | 23 12 11.6 | -0.4 |
| GULT | Gulveren | 1.11 | 101 | *e*Pn | Pg | 23 12 11.6 | -0.4 |
| DST | Dursunbey | 1.11 | 199 | *e*PN | Pg | 23 12 12.0 | -0.1 |
| DST | Dursunbey | 1.11 | 199 | *e*Pn | Pg | 23 12 12.0 | -0.1 |
| MRMT | Marmara Adasi | 1.14 | 268 | *e*PN | Pb | 23 12 12.1 | -0.5 |
| MRMT | Marmara Adasi | 1.14 | 268 | *e*Pn | Pb | 23 12 12.1 | -0.5 |
| DURS | Dursunbey | 1.16 | 204 | *i* P | Pb | 23 12 12.6 | -0.2 |
| DURS | | | | *i* S | Sb | 23 12 27.9 | +0.1 |
| DURS | Dursunbey | 1.16 | 204 | P | Pb | 23 12 12.6 | -0.2 |
| DURS | | | | S | Sb | 23 12 27.9 | +0.1 |
| GONE | Gonen-Balikesi | 1.23 | 241 | *e*PN | Pn | 23 12 14.0 | 0.0 |
| GONE | Gonen-Balikesi | 1.23 | 241 | *e*Pn | Pn | 23 12 14.0 | 0.0 |
| BORA | Eskisehir | 1.30 | 126 | *i* P | Pn | 23 12 14.6 | -0.3 |
| BORA | | | | *i* S | Sn | 23 12 33.1 | +0.7 |
| BORA | Eskisehir | 1.30 | 126 | P | Pn | 23 12 14.6 | -0.3 |
| BORA | | | | S | Sn | 23 12 33.1 | +0.7 |
| BALB | Balikesir | 1.38 | 223 | *e*PN | Pg | 23 12 17.1 | 0.0 |
| BALB | Balikesir | 1.38 | 223 | *e*Pn | Pg | 23 12 17.1 | 0.0 |
| KRBG | Karabiga-Canak | 1.39 | 260 | *e*PN | Pb | 23 12 16.7 | -0.1 |
| KRBG | Karabiga-Canak | 1.39 | 260 | *e*Pn | Pb | 23 12 16.7 | -0.1 |
| BTAS | Taskesti | 1.45 | 93 | *i* P | Pn | 23 12 16.9 | -0.2 |
| BTAS | | | | *i* S | Sg | 23 12 38.4 | +0.9 |
| BTAS | Taskesti | 1.45 | 93 | P | Pn | 23 12 16.9 | -0.2 |
| BTAS | | | | S | Sg | 23 12 38.5 | +0.9 |
| MDUB | Mudurnu | 1.61 | 96 | *e*PN | Pb | 23 12 20.2 | -0.4 |
| MDUB | Mudurnu | 1.61 | 96 | *e*Pn | Pb | 23 12 20.2 | -0.4 |
| DEMI | Demirci | 1.64 | 190 | *i* P | Pb | 23 12 21.3 | +0.3 |
| DEMI | | | | *i* S | Sb | 23 12 42.2 | +0.5 |
| DEMI | Demirci | 1.64 | 190 | P | Pb | 23 12 21.3 | +0.3 |
| DEMI | | | | S | Sb | 23 12 42.2 | +0.5 |
| AUMIH | MIHALICIK | 1.99 | 112 | P | Pn | 23 12 24.0 | -0.6 |

*ISCJB* ***01*** *23:13:48.3±0.3, 45.°83N±0.°03×81.°32E±0.°05, h4km, mb4.3/20, MS2.9/4, Error ellipse: s-maj=4.9km s-min=4.1km az=15.8*

*IDC* ***01*** *23:13:49.4±0.7, 45.°69N×81.°25E, h0km, mb4.0/11, mb1 4.0/17, mb1mx3.9/44, mbtmp3.9/17, ML3.0/6, MS2.9/7, Ms1 2.9/7, ms1mx2.7/36, Error ellipse: s-maj=11.1km s-min=8.1km az=123.0*

*NNC* ***01*** *23:13:51.1±0.7, 45.°69N×81.°36E, h0km, mb4.5, mpv4.1, Error ellipse: s-maj=7.5km s-min=3.9km az=130.0*

*BJI* ***01*** *23:13:51.3, 45.°76N×81.°40E, h11km, mb3.9/5, mB4.4/5, ML4.0/10, Ms3.8/2, Ms7 3.8/1*

*MOS* ***01*** *23:13:52.1±0.9, 45.°79N×81.°30E, h33km, mb4.4/11, Error ellipse: s-maj=9.7km s-min=8.0km az=113.9*

*NEIC* ***01*** *23:13:54.2±0.5, 45.°75N×81.°31E, h36km±5km, mb4.3/6, Error ellipse: s-maj=5.6km s-min=5.0km az=153.0*

**ISC 01 23:13:49.7**±0.4**, 45.°71N**±0.°04×**81.°23E**±0.°04**, h4km, n107, σ1.s61**/116**, mb4.2**/20**, MS3.0**/4**, 25C-17D,**

**Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MK31 | Makanchi Array | 1.31 | 34 | ⇑P | Pb | 23 14 16.4 | +1.4 |
| | 204nm,0.2s,baz=209,slow=16,SNR=6210 | | | | | | |
| MK31 | | | | S | Sg | 23 14 32.4 | +0.6 |
| | 2μm,0.6s,baz=209,slow=29,SNR=100 | | | | | | |
| MKAR | Makanchi Array | 1.31 | 34 | Pg | Pb | 23 14 15.8 | +0.9 |
| | 333nm,0.3s,baz=204,slow=15,SNR=6580 | | | | | | |
| MKAR | | | | Lg | Lg | 23 14 32.7 | |
| | 1μm,0.3s,baz=207,slow=29,SNR=143 | | | | | | |
| MKAR | Makanchi Array | 1.31 | 34 | *e*PG | Pb | 23 14 16.3 | +1.4 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,333nm,0.3s | | | | | | |
| PDGK | Podgornoye | 2.69 | 208 | ⇑Pn | Pn | 23 14 36.4 | +2.6 |
| | comp=Z,6.5nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 23 15 14.9 | |
| | comp=Z,575nm,0.5s | | | | | | |
| AAA | Alma-Ata | 3.92 | 233 | *e*PN | Pg | 23 15 05.4 | +0.6 |
| AAA | | | | *e*S | Sg | 23 15 56.7 | +1.2 |
| AAA | | | | pmax | pmax | | |
| | comp=Z,89nm,0.4s | | | | | | |
| AAA | | | | smax | smax | | |
| | comp=N,238nm,0.3s | | | | | | |
| TKM2 | Tokmak 2 | 4.91 | 237 | ⇑Pn | Pn | 23 15 07.1 | +2.6 |
| | comp=N,6.7nm,0.4s | | | | | | |
| TKM2 | | | | ⇑Pg | Pg | 23 15 24.0 | +0.2 |
| | comp=N,22nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 23 16 25.6 | |
| | comp=N,160nm,0.8s | | | | | | |
| TKM2 | Tokmak 2 | 4.91 | 237 | *e*PN | Pn | 23 15 06.9 | +2.4 |
| TKM2 | Tokmak 2 | 4.91 | 237 | P | Pn | 23 15 07.4 | +2.9 |
| | SNR=10 | | | | | | |
| TKM2 | Tokmak 2 | 4.91 | 237 | *e*Pn | Pn | 23 15 06.9 | +2.4 |
| WMQ | Urumqi | 4.97 | 110 | Pn | Pn | 23 15 05.7 | +0.5 |
| WMQ | | | | Sn | Sn | 23 16 00.7 | -2.5 |
| WMQ | | | | SMN | | | |
| | comp=N,200nm,0.8s | | | | | | |
| WMQ | | | | SME | | | |
| | comp=N,220nm,0.8s | | | | | | |
| ULHL | Ulahol | 5.00 | 228 | P | Pn | 23 15 10.0 | +4.3 |
| | SNR=16 | | | | | | |
| KURBB | Kurchatov Arra | 5.24 | 341 | ⇓Pn | Pn | 23 15 10.6 | +1.8 |
| | comp=N,7.2nm,0.5s,baz=162,slow=12 | | | | | | |
| KURBB | | | | ⇑Pg | Pb | 23 15 17.9 | -3.9 |
| | comp=N,18nm,0.4s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 23 16 09.0 | -0.6 |
| | comp=N,226nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 23 16 39.2 | |
| | comp=N,768nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 5.24 | 341 | Pn | Pn | 23 15 09.5 | +0.7 |
| | comp=N,0.9nm,0.3s,baz=163,slow=13,SNR=32 | | | | | | |
| KURBB | | | | Sn | Sn | 23 16 08.9 | -0.6 |
| | comp=N,5.1nm,0.3s,baz=153,slow=24,SNR=10.0 | | | | | | |
| KURBB | | | | Lg | Lg | 23 16 33.6 | |
| | comp=N,9.1nm,0.3s,baz=173,slow=30,SNR=13 | | | | | | |
| KURK | Kurchatov | 5.30 | 342 | ⇓Pn | Pn | 23 15 11.5 | +1.8 |
| | comp=N,16nm,0.5s | | | | | | |
| KURK | | | | ⇑Pg | Pg | 23 15 29.8 | -1.5 |
| | comp=N,35nm,0.4s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 23 16 10.0 | -1.2 |
| | comp=N,122nm,0.5s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 23 16 38.7 | |
| | comp=N,916nm,0.7s | | | | | | |
| KURK | Kurchatov | 5.30 | 342 | PN | Pn | 23 15 09.5 | -0.2 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KURK | Kurchatov | 5.30 | 342 | Pn | Pn | 23 15 09.5 | -0.2 |
| KURK | | | | Sn | Sn | 23 16 08.9 | -2.3 |
| KURK | | | | Lg | Lg | 23 16 33.6 | |
| CHMS | Chumysh | 5.38 | 242 | P | Pn | 23 15 13.4 | +2.6 |
| | SNR=5.8 | | | | | | |
| USP | Ospenovka | 5.40 | 246 | P | Pn | 23 15 13.6 | +2.5 |
| | SNR=16 | | | | | | |
| KBK | Karagaybulak | 5.45 | 238 | P | Pn | 23 15 15.4 | +3.5 |
| | SNR=22 | | | | | | |
| FRU | Bishkek | 5.55 | 241 | *e*PN | Pg | 23 15 34.5 | -1.6 |
| FRU | | | | *e*S | Sg | 23 16 44.0 | -4.0 |
| FRU | | | | pmax | pmax | | |
| | comp=Z,40nm,1.6s | | | | | | |
| FRU | | | | smax | smax | | |
| | comp=E,170nm,1.6s | | | | | | |
| KZA | Kyzart | 5.64 | 232 | P | Pn | 23 15 20.1 | +5.3 |
| | SNR=15 | | | | | | |
| AAK | Ala-Archa | 5.74 | 240 | Pn | Pn | 23 15 18.6 | +2.8 |
| | comp=E,6.3nm,0.5s | | | | | | |
| AAK | | | | ⇓Pg | Pg | 23 15 37.0 | -2.6 |
| | comp=E,14nm,0.5s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 23 16 48.4 | |
| | comp=E,108nm,0.7s | | | | | | |
| AAK | Ala-Archa | 5.74 | 240 | Pn | Pn | 23 15 18.6 | +2.8 |
| | comp=E,3.9nm,0.3s,baz=78,slow=7.6,SNR=39 | | | | | | |
| AAK | | | | Lg | Lg | 23 16 51.8 | |
| | comp=E,6.0nm,0.3s,baz=311,slow=20,SNR=8.8 | | | | | | |
| AAK | | | | LR | LR | 23 17 48.9 | |
| | comp=E,39nm,21.4s,baz=100,slow=42 | | | | | | |
| AAK | Ala-Archa | 5.74 | 240*c* | *i*PN | Pn | 23 15 18.7 | +2.8 |
| AAK | | | | *i* | | 23 15 39.0 | |
| AAK | Ala-Archa | 5.74 | 240 | P | Pn | 23 15 18.8 | +3.0 |
| | SNR=16 | | | | | | |
| UCH | Uchtor | 5.97 | 237 | P | Pn | 23 15 23.0 | +3.8 |
| | SNR=9.1 | | | | | | |
| EKS2 | Erkin-Say | 6.17 | 243 | *e*PN | Pn | 23 15 24.1 | +2.5 |
| EKS2 | Erkin-Say | 6.17 | 243 | P | Pn | 23 15 24.6 | +2.9 |
| | SNR=34 | | | | | | |
| EKS2 | Erkin-Say | 6.17 | 243 | *e*Pn | Pn | 23 15 24.1 | +2.5 |
| EKS2 | | | | *e*Lg | Lg | 23 17 07.0 | |
| AML | Almayashu | 6.51 | 239 | P | Pn | 23 15 30.8 | +4.1 |
| | SNR=14 | | | | | | |
| MNAS | Manas | 7.06 | 246 | ⇑Pn | Pn | 23 15 36.9 | +2.9 |
| | comp=E,1.5nm,0.4s | | | | | | |
| MNAS | | | | ⇓Pg | Pg | 23 16 04.0 | -0.9 |
| | comp=E,6.0nm,0.6s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 23 17 32.6 | |
| | comp=E,46nm,0.8s | | | | | | |
| KSH | Kashi | 7.30 | 214 | Pn | Pg | 23 16 08.4 | -1.2 |
| KSH | | | | Sn | Sb | 23 17 14.4 | -10 |
| KSH | | | | smax | smax | | |
| | comp=N,21nm,0.8s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,28nm,0.9s | | | | | | |
| KSH | Kashi | 7.30 | 214 | P | Pb | 23 15 50.4 | -6.7 |
| KSH | | | | S | Sb | 23 17 24.4 | -0.2 |
| KSH | | | | SMN | | | |
| | comp=E,21nm,0.8s | | | | | | |
| KSH | | | | SME | | | |
| | comp=E,28nm,0.9s | | | | | | |
| KK31 | Karatay Array | 8.11 | 255 | ⇑Pn | Pn | 23 15 50.0 | +1.8 |
| | comp=E,4.5nm,0.4s,baz=70,slow=12,SNR=175 | | | | | | |
| KK31 | | | | ⇑Pg | Pb | 23 15 59.0 | -12 |
| | comp=E,15nm,0.5s,baz=67,slow=15,SNR=4.7 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 23 18 09.4 | |
| | comp=E,35nm,0.5s | | | | | | |
| KKAR | Karatay Array | 8.11 | 255 | *e*P | Pn | 23 15 49.7 | +1.5 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| KKAR | Karatay Array | 8.11 | 255 | *e*Pn | Pn | 23 15 49.7 | +1.5 |
| | comp=Z,3.0nm,0.3s | | | | | | |
| KKAR | | | | *e*Lg | Lg | 23 18 10.4 | |
| ZALV | Zalesovo Beam | 8.57 | 14 | Pn | Pn | 23 15 55.3 | +0.9 |
| | comp=Z,0.7nm,0.3s,baz=200,slow=13,SNR=9.7 | | | | | | |
| ZALV | | | | Sn | Sn | 23 17 39.5 | +8.1 |
| | comp=Z,2.2nm,0.3s,baz=201,slow=27,SNR=2.6 | | | | | | |
| ZALV | | | | Lg | Lg | 23 18 18.6 | |
| | comp=Z,4.5nm,0.3s,baz=201,slow=29,SNR=5.3 | | | | | | |
| ZALV | | | | LR | LR | 23 19 22.5 | |
| | comp=Z,42nm,20.6s,baz=76,slow=39 | | | | | | |
| ZALV | Zalesovo Beam | 8.57 | 14 | *e*P | Pn | 23 15 55.2 | +0.8 |
| ZALV | | | | *e*S | Sn | 23 17 29.1 | -2.3 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ZALV | | | | smax | smax | | |
| | comp=N,4.0nm,0.3s | | | | | | |
| NVS | Novosibirsk | 9.23 | 7 | *i* P | Pn | 23 16 12.7 | +9.2 |
| VOSK | Vostochnaya | 9.70 | 320 | ⇓Pn | Pn | 23 16 11.5 | +1.5 |
| | comp=N,9.2nm,0.3s | | | | | | |
| VOSK | | | | ⇓Sn | Sn | 23 17 54.1 | -5.3 |
| | comp=N,19nm,0.8s | | | | | | |
| HVS | Khovu-Aksy | 9.90 | 52 | ⇓*e*P | Pn | 23 16 14.0 | +1.1 |
| BVA0 | Borovoye Array | 10.17 | 320 | Pn | Pn | 23 16 17.9 | +1.5 |
| | comp=N,2.1nm,0.2s,baz=130,slow=14,SNR=104 | | | | | | |
| BVA0 | | | | ⇑Sn | Sn | 23 18 06.3 | -4.6 |
| | comp=N,12nm,0.6s | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 23 19 06.2 | |
| | comp=N,84nm,1.0s | | | | | | |
| BVAR | Borovoye Array | 10.17 | 320 | Pn | Pn | 23 16 17.0 | +0.6 |
| | comp=N,3.8nm,0.3s,baz=130,slow=13,SNR=72 | | | | | | |
| BVAR | | | | Sn | Sn | 23 18 06.2 | -4.6 |
| | comp=N,2.1nm,0.3s,baz=129,slow=21,SNR=4.0 | | | | | | |
| BVAR | | | | Lg | Lg | 23 19 11.5 | |
| | comp=N,3.8nm,0.3s,baz=116,slow=24,SNR=4.0 | | | | | | |
| BVAR | Borovoye Array | 10.17 | 320 | P | Pn | 23 16 17.0 | +0.6 |
| BVAR | | | | | | 23 18 06.2 | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| BVAR | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| BRVK | Borovoye | 10.24 | 320 | ⇑Pn | Pn | 23 16 18.5 | +1.2 |
| | comp=N,13nm,0.6s | | | | | | |
| BRVK | | | | ⇑Sn | Sn | 23 18 05.6 | -7.0 |
| | comp=N,28nm,1.0s | | | | | | |
| BRVK | | | | ⇓Lg | Lg | 23 19 13.1 | |
| | comp=N,142nm,0.8s | | | | | | |
| BRVK | Borovoye | 10.24 | 320 | ⇓*i*P | Pn | 23 16 18.8 | +1.4 |
| BRVK | | | | *e*S | Sn | 23 18 12.3 | -0.2 |
| BRVK | Borovoye | 10.24 | 320 | *e*Pn | Pn | 23 16 18.2 | +0.9 |
| BRVK | | | | *e*Lg | Lg | 23 19 06.1 | |
| CHKZ | Chkalovo | 10.52 | 323 | ⇑Pn | Pn | 23 16 21.9 | +0.8 |
| | comp=N,13nm,0.6s | | | | | | |
| CHKZ | | | | ⇓Sn | Sn | 23 18 11.4 | -8.0 |
| | comp=N,7.5nm,0.5s | | | | | | |
| CHKZ | | | | ⇓Lg | Lg | 23 19 18.8 | |
| | comp=N,76nm,0.9s | | | | | | |
| ZRNK | Zerenda | 10.77 | 317 | ⇑Pn | Pn | 23 16 25.4 | +0.8 |
| | comp=N,14nm,0.3s | | | | | | |
| ZRNK | | | | ⇑Sn | Sn | 23 18 17.8 | -7.7 |
| | comp=N,14nm,0.7s | | | | | | |
| AB31 | Akbulak array | 14.82 | 292 | Pn | Pn | 23 17 17.7 | -2.2 |
| | comp=N,3.1nm,0.6s,baz=99,slow=9.3,SNR=68 | | | | | | |
| AB31 | | | | ⇑Pg | P | 23 17 27.0 | +1.1 |
| | comp=N,1.6nm,0.4s,baz=94,slow=11,SNR=9.5 | | | | | | |
| ABKAR | Akbulak array | 14.82 | 292 | *e*Pn | Pn | 23 17 17.9 | -2.0 |
| ZAK | Zakamensk | 15.45 | 64 | *e*P | P | 23 17 40.4 | +7.3 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| TLY | Talaya | 15.93 | 60 | *e*P | Pn | 23 17 34.6 | 0.0 |
| AKTO | Aktyubinsk | 16.20 | 295 | ⇑Pn | Pn | 23 17 37.1 | -0.9 |
| | comp=Z,7.4nm,1.1s | | | | | | |
| AKTO | Aktyubinsk | 16.20 | 295 | Pn | Pn | 23 17 37.6 | -0.4 |
| | comp=Z,0.7nm,0.3s,baz=95,slow=8.0,SNR=10 | | | | | | |
| AKTO | | | | Lg | Lg | 23 22 26.6 | |
| | comp=Z,0.1nm,0.3s,baz=190,slow=20,SNR=4.5 | | | | | | |
| AKTO | | | | LR | LR | 23 24 09.8 | |
| | comp=Z,64nm,19.2s,baz=114,slow=38 | | | | | | |
| SVE | Sverdlovsk | 16.95 | 318 | *e*P | P | 23 17 50.9 | +1.4 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| SONM | Songino Array | 17.35 | 74 | P | Pn | 23 17 53.3 | +0.6 |
| | comp=Z,0.1nm,0.3s,baz=266,slow=11,SNR=2.3 | | | | | | |
| SONM | | | | Lg | Lg | 23 22 58.0 | |
| | comp=Z,0.1nm,0.3s,baz=267,slow=29,SNR=4.4 | | | | | | |
| ARU | Arti | 17.75 | 315 | P | Pn | 23 17 58.5 | +1.0 |
| | comp=Z,0.0nm,0.3s,baz=287,slow=20,SNR=4.9 | | | | | | |
| ARU | | | | LR | LR | 23 25 07.5 | |
| | comp=Z,67nm,18.7s,baz=116,slow=38 | | | | | | |
| ARU | Arti | 17.75 | 315*c* | *i*P | Pn | 23 17 58.5 | +1.0 |
| ARU | | | | S | Sn | 23 21 16.4 | +1.0 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| IMYA | Miami | 18.44 | 247 | *e*P | P | 23 18 05.6 | -0.8 |
| IEMG | Emamgholi | 18.77 | 252 | *e*P | P | 23 18 09.5 | -0.6 |
| GEYT | Alibeck | 18.86 | 254 | P | P | 23 18 10.6 | -0.1 |
| | comp=Z,0.2nm,0.3s,baz=18,slow=11,SNR=3.1 | | | | | | |
| IPAY | Payeh | 19.09 | 249 | *e*P | P | 23 18 14.4 | +0.8 |
| IAKL | Akhelmad | 19.16 | 250 | *e*P | P | 23 18 14.8 | +0.4 |
| IKRD | Kardeh | 19.22 | 250 | *e*P | P | 23 18 06.4 | -8.6 |
| LZH | Lanzhou | 19.55 | 111 | *e*P | P | 23 18 16.9 | -1.6 |
| LZH | | | | *e*PP | PnPn | 23 18 35.0 | +2.1 |
| LZH | | | | PMZ | | | |
| | comp=Z,20nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,65nm,4.0s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,230nm,12.5s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,220nm,12.7s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,270nm,15.0s | | | | | | |
| IMON | Monand | 20.75 | 240 | *e*P | Pn | 23 18 34.2 | +0.2 |
| CD2 | Chengdu | 22.93 | 122 | *e*P | P | 23 18 52.3 | -2.5 |
| GNI | Garni | 27.13 | 271 | P | P | 23 19 35.8 | +1.8 |
| | comp=Z,1.1nm,0.3s,baz=108,slow=9.6,SNR=2.7 | | | | | | |
| GNI | Garni | 27.13 | 271 | *e*P | P | 23 19 35.5 | +1.6 |
| GNI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| GNI | Garni | 27.13 | 271 | *e*P | P | 23 19 35.5 | +1.6 |
| | comp=Z,4.2nm,0.8s | | | | | | |
| KBZ | Khabaz | 27.14 | 280 | P | P | 23 19 34.6 | +0.9 |
| | comp=Z,1.1nm,0.8s,baz=84,slow=9.2,SNR=2.0 | | | | | | |
| KBZ | Khabaz | 27.14 | 280 | P | P | 23 19 34.7 | +0.9 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| KIV | Kislovodsk | 27.22 | 280 | *e*P | P | 23 19 36.5 | +1.9 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| KIV | Kislovodsk | 27.22 | 280 | *e*P | P | 23 19 35.0 | +0.4 |
| | comp=Z,3.1nm,0.7s | | | | | | |
| OBN | Obninsk | 29.51 | 305 | *e*P | P | 23 19 53.1 | -1.7 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,39nm,15.0s | | | | | | |
| CHTO | Chiang Mai | 30.57 | 145 | *e*P | P | 23 20 03.8 | -0.8 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 30.57 | 145 | *e*P | P | 23 20 03.8 | -0.8 |
| | comp=Z,2.7nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 30.90 | 146 | P | P | 23 20 06.8 | -0.5 |
| | comp=Z,4.2nm,0.6s,baz=321,slow=8.8,SNR=36 | | | | | | |
| CMAR | | | | LR | LR | 23 33 57.2 | |
| | comp=Z,12nm,19.4s,baz=150,slow=39 | | | | | | |
| CMAR | Chiang Mai Arr | 30.90 | 146 | *e*P | P | 23 20 07.1 | -0.3 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| AKASG | Malin Array Be | 34.42 | 298 | P | P | 23 20 38.4 | +0.4 |
| | comp=Z,0.9nm,0.3s,baz=65,slow=8.0,SNR=6.4 | | | | | | |
| AKASG | Malin Array Be | 34.42 | 298 | *e*P | P | 23 20 39.1 | +1.1 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| KIEV | Kiev | 34.43 | 298 | *e*P | P | 23 20 37.8 | -0.3 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| KIEV | Kiev | 34.43 | 298 | *e*P | P | 23 20 37.8 | -0.3 |
| | comp=Z,3.5nm,0.6s | | | | | | |
| VSU | Vasula | 34.83 | 311 | ⇓*i*P | P | 23 20 42.3 | +0.9 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| BRTR | Keskin Array B | 35.05 | 277 | P | P | 23 20 44.1 | +0.4 |
| | comp=Z,1.0nm,0.5s,baz=81,slow=8.3,SNR=6.9 | | | | | | |
| BRTR | Keskin Array B | 35.05 | 277 | *e*P | P | 23 20 45.5 | +1.7 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| FINES | FINESS Array B | 35.11 | 317 | P | P | 23 20 43.9 | +0.2 |
| | comp=Z,0.6nm,0.5s,baz=109,slow=9.1,SNR=11 | | | | | | |
| FINES | | | | LR | LR | 23 35 12.2 | |
| | comp=Z,34nm,20.5s,baz=28,slow=36 | | | | | | |
| FINES | FINESS Array B | 35.11 | 317 | *e*P | P | 23 20 44.0 | +0.2 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ARCES | ARCESS Array B | 36.23 | 331 | P | P | 23 20 53.6 | +0.2 |
| | comp=Z,1.7nm,0.5s,baz=91,slow=9.9,SNR=16 | | | | | | |
| ARCES | ARCESS Array B | 36.23 | 331 | *e*P | P | 23 20 53.5 | +0.2 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| BURAR | Bucovina Array | 37.78 | 294 | ⇑*i*P | P | 23 21 08.0 | +1.1 |
| NB2 | NORSAR Subarra | 42.29 | 317 | P | P | 23 21 43.7 | -0.3 |
| | comp=Z,2.5nm,0.5s,baz=78,slow=8.6 | | | | | | |
| NOA | NORSAR Array B | 42.29 | 317 | P | P | 23 21 44.1 | 0.0 |
| | comp=Z,3.4nm,0.6s,baz=78,slow=8.1,SNR=12 | | | | | | |
| NOA | | | | LR | LR | 23 38 04.2 | |
| | comp=Z,12nm,18.2s,baz=65,slow=34 | | | | | | |
| NOA | NORSAR Array B | 42.29 | 317 | P | P | 23 21 44.1 | 0.0 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,12nm,18.2s | | | | | | |
| CLL | Collm | 44.07 | 303 | *i* P | P | 23 21 59.2 | +0.7 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| CLL | Collm | 44.07 | 303 | *i* P | P | 23 21 59.2 | +0.7 |
| | comp=Z,4.0nm,0.5s | | | | | | |
| GERES | GERESS Array B | 44.56 | 300 | P | P | 23 22 02.9 | +0.3 |
| | comp=Z,0.3nm,0.4s,baz=61,slow=8.0,SNR=3.6 | | | | | | |
| KKM | Kota Kinabalu | 49.79 | 132 | *e*P | P | 23 22 43.5 | -0.2 |
| | comp=Z,11nm,1.0s | | | | | | |
| BNI | Bardonecchia | 50.54 | 298 | *e*P | P | 23 22 49.6 | +0.4 |
| BNI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| BNI | Bardonecchia | 50.54 | 298 | *e*P | P | 23 22 49.6 | +0.4 |
| | comp=Z,3.8nm,0.6s | | | | | | |
| BORG | Borgarnes | 54.61 | 329 | *e*P | P | 23 23 18.8 | -0.1 |
| BORG | Borgarnes | 54.61 | 329 | *e*P | P | 23 23 18.8 | -0.1 |
| | comp=Z,1μm,2.9s | | | | | | |
| ILAR | Eielson Array | 63.63 | 21 | P | P | 23 24 19.9 | -1.5 |
| | comp=Z,0.6nm,0.6s,baz=315,slow=5.9,SNR=5.3 | | | | | | |
| ILAR | Eielson Array | 63.63 | 21 | P | P | 23 24 19.9 | -1.5 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| SOEI | Soe | 67.37 | 133 | *e*P | P | 23 24 45.3 | -1.0 |
| TORD | Torodi Ar. Bea | 73.43 | 272 | P | P | 23 25 22.5 | -0.9 |
| | comp=Z,0.8nm,0.5s,baz=43,slow=4.9,SNR=17 | | | | | | |

*DJA* ***01*** *23:27:49.6±0.6, 2°S±5°×13°3E±°, h109km±7km, M4.5/9, mb4.4/3, mB4.7/2, MLv4.5/9, Mw(mB)4.0/2*

*AUST* ***01*** *23:27:52.6, 1.°98S×132.°51E, h35km*

*IDC* ***01*** *23:27:54.8±3.8, 2.°61S×132.°14E, h0km, mb3.5/2, mb1 3.8/3, mb1mx3.5/20, mbtmp3.6/3, ML3.7/1, MS2.8/1, Ms1 3.0/1, ms1mx2.5/15, Error ellipse: s-maj=218.1km s-min=18.7km az=77.0*

**ISC 01 23:27:51.1**±1.0**, 1.°71S**±0.°06×**132.°62E**±0.°04**, h35km, n20, σ2.s52**/25**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 1.25 | 197 | P | Pn | 23 28 14.2 | +2.1 |
| | baz=1.0,SNR=156 | | | | | | |
| FAKI | Fak Fak | 1.25 | 197 | P | Pn | 23 28 14.5 | +2.4 |
| FAKI | | | | S | Sn | 23 28 31.0 | +3.2 |
| RKPI | Ransiki, Papua | 1.57 | 83 | P | Pn | 23 28 16.6 | +0.1 |
| RKPI | | | | S | Sn | 23 28 39.8 | +4.1 |
| SWI | Sorong | 1.60 | 302 | P | Pn | 23 28 17.8 | +0.9 |
| | baz=1.7,SNR=75 | | | | | | |
| SWI | Sorong | 1.60 | 302 | P | Pn | 23 28 17.4 | +0.6 |
| SWI | | | | S | Sn | 23 28 38.8 | +2.6 |
| MSAI | Masohi | 4.03 | 246 | P | Pn | 23 28 46.7 | -3.6 |
| MSAI | | | | S | Sn | 23 29 41.4 | +5.2 |
| AAI | Ambon | 4.83 | 246 | P | Pn | 23 28 59.4 | -2.0 |
| AAI | | | | S | Sn | 23 29 58.7 | +2.5 |
| LBMI | Labuha | 5.22 | 282 | P | Pn | 23 29 05.1 | -1.7 |
| | 48nm,0.8s,1μm0.2nm | | | | | | |
| LBMI | | | | S | Sn | 23 30 05.5 | -0.3 |
| | 48nm,0.8s,1μm0.2nm | | | | | | |
| NLAI | Namlea | 5.72 | 255 | P | Pn | 23 29 12.6 | -0.9 |
| | 26nm,0.6s,819nm0.4nm | | | | | | |
| SMPI | Sarmi | 6.10 | 93 | P | Pn | 23 29 21.9 | +3.1 |
| SANI | Sanana | 6.63 | 267 | P | Pn | 23 29 25.9 | -0.2 |
| SANI | | | | S | Sn | 23 30 39.4 | -1.2 |
| GENI | Genyem | 7.60 | 97 | P | Pn | 23 29 37.2 | -2.2 |
| KDU | Kakadu | 10.90 | 181 | P | Pn | 23 30 24.1 | -0.6 |
| | baz=11,SNR=18 | | | | | | |
| MTN | Manton Dam | 11.16 | 187 | P | Pn | 23 30 27.8 | -0.4 |
| | baz=11,SNR=49 | | | | | | |
| KNRA | Kununurra | 14.39 | 195 | P | Pn | 23 31 10.4 | -1.9 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=14,SNR=11 | | | | | | |
| **COEN** | **Coen** | **16.03** | **140** | P | **Pn** | **23 31 34.0** | **-0.1** |
| | baz=16,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.20** | **175** | P | **Pn** | **23 31 59.1** | **-2.0** |
| | 0.3nm,0.3s,baz=356,slow=13,SNR=3.2 | | | | | | |
| WRA | | | | S | Sn | 23 35 08.8 | -15 |
| | 0.7nm,0.3s,baz=357,slow=23,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **21.86** | **177** | P | **P** | **23 32 41.7** | **+0.8** |
| | 3.0nm,0.6s,baz=356,slow=11,SNR=25 | | | | | | |
| ASAR | | | | S | **S** | **23 36 35.4** | **-5.4** |
| | 0.9nm,0.6s,baz=357,slow=28,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.72** | **303** | LR | LR | 23 54 45.8 | |
| | comp=Z,13nm,18.1s,baz=15,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.36** | **324** | P | P | 23 38 41.7 | +12 |
| | 0.6nm,0.7s,baz=113,slow=8.1,SNR=4.8 | | | | | | |

*CSEM **01** 23:32:13.7, 39°.52N×29°.67W, h10km, ML3.4, After PDA*

**PDA 01 23:32:13.7±1.0, 39°.52N×29°.67W, h10km, MD3.6, ML3.4, Error ellipse: s-maj=9.5km s-min=5.6km az=63.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCED** | **Cedros** | **1.17** | **139** | eP | Pb | 23 32 31.4 | -4.6 |
| PCED | | | | eS | Sb | 23 32 44.1 | -7.1 |
| PCED | | | | A | A | 23 32 46.8 | |
| | 255nm,0.3s | | | | | | |
| **PCED** | **Cedros** | **1.17** | **139** | eP | Pb | 23 32 31.4 | -4.6 |
| PCED | | | | eS | Sb | 23 32 44.1 | -7.1 |
| **H07S1** | **FLORES T-PHASE** | **1.20** | **264** | eP | Pg | 23 32 43.6 | +6.9 |
| **CALA** | **Caldeira** | **1.20** | **141** | eP | Pb | 23 32 32.1 | -4.6 |
| CALA | | | | eS | Sb | 23 32 46.0 | -6.4 |
| **CALA** | **Caldeira** | **1.20** | **141** | eP | Pb | 23 32 32.1 | -4.6 |
| CALA | | | | eS | Sb | 23 32 46.0 | -6.4 |
| **HOR** | **Horta** | **1.28** | **140** | eP | Pn | 23 32 32.7 | -4.9 |
| HOR | | | | eS | Sb | 23 32 47.4 | -7.0 |
| **HOR** | **Horta** | **1.28** | **140** | eP | Pn | 23 32 32.7 | -4.9 |
| HOR | | | | eS | Sb | 23 32 47.4 | -7.0 |
| **ROSA** | **Rosais** | **1.37** | **125** | eP | Pn | 23 32 34.2 | -4.7 |
| ROSA | | | | eS | Sb | 23 32 50.0 | -7.0 |
| ROSA | | | | A | A | 23 32 55.5 | |
| | 154nm,0.4s | | | | | | |
| **ROSA** | **Rosais** | **1.37** | **125** | eP | Pn | 23 32 34.2 | -4.7 |
| ROSA | | | | eS | Sb | 23 32 50.0 | -7.0 |
| **PGRA** | **Graciosa** | **1.40** | **110** | eP | Pn | 23 32 35.0 | -4.3 |
| PGRA | | | | eS | Sn | 23 32 49.9 | -8.0 |
| PGRA | | | | A | A | 23 32 50.6 | |
| | 129nm,0.4s | | | | | | |
| **PGRA** | **Graciosa** | **1.40** | **110** | eP | Pn | 23 32 35.0 | -4.3 |
| PGRA | | | | eS | Sn | 23 32 49.9 | -8.0 |
| **PCAN** | **Candelaria** | **1.40** | **138** | eP | Pn | 23 32 34.5 | -4.9 |
| PCAN | | | | eS | Sn | 23 32 50.4 | -7.5 |
| PCAN | | | | A | A | 23 32 52.4 | |
| | 382nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.40** | **138** | eP | Pn | 23 32 34.5 | -4.9 |
| PCAN | | | | eS | Sn | 23 32 50.4 | -7.5 |
| **PICO** | **Pico** | **1.41** | **136** | eP | Pn | 23 32 34.9 | -4.6 |
| PICO | | | | eS | Sn | 23 32 50.6 | -7.6 |
| **PICO** | **Pico** | **1.41** | **136** | eP | Pn | 23 32 34.9 | -4.6 |
| PICO | | | | eS | Sn | 23 32 50.6 | -7.6 |
| **PPNO** | **Prainha do Nor** | **1.52** | **133** | eS | Sn | 23 32 53.4 | -7.5 |
| PPNO | | | | A | A | 23 32 59.3 | |
| | 166nm,0.2s | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.52** | **133** | eS | Sn | 23 32 53.4 | -7.5 |
| **PMAN** | **Manadas** | **1.52** | **125** | eP | Pn | 23 32 36.0 | -4.9 |
| PMAN | | | | eS | Sn | 23 32 53.2 | -7.5 |
| PMAN | | | | A | A | 23 32 55.3 | |
| | 86nm,0.3s | | | | | | |
| **PMAN** | **Manadas** | **1.52** | **125** | eP | Pn | 23 32 36.0 | -4.9 |
| PMAN | | | | eS | Sn | 23 32 53.2 | -7.5 |

*HEL **01** 23:37:44.5±0.2, 67°.85N×19°.83E, h0km, ML1.8, Explosion*

*CSEM **01** 23:37:45.7±0.3, 67°.86N×20°.26E, h2km, ML1.1, Error ellipse: s-maj=6.4km s-min=5.7km az=155.0, Mining explosion.*

**UPP 01 23:37:46.1, 67°.83N×20°.19E, h0km, ML1.1, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUA** | **Kurravaara** | **0.14** | **23** | P | Pg | 23 37 51.6 | +2.8 |
| **KUA** | **Kurravaara** | **0.14** | **23** | P | Pg | 23 37 49.0 | +0.2 |
| KUA | | | | S | Sg | 23 37 50.9 | +0.3 |
| **NIKU** | **Nikkaluokta** | **0.44** | **276** | P | Pb | 23 37 57.3 | +0.5 |
| **NIKU** | **Nikkaluokta** | **0.44** | **276** | P | Pg | 23 37 54.6 | 0.0 |
| **LANU** | **Lannavaara** | **0.71** | **71** | eP | Pg | 23 37 59.4 | -0.4 |
| LANU | | | | eSB | Sb | 23 38 11.9 | +0.1 |
| **LANU** | **Lannavaara** | **0.71** | **71** | P | Pb | 23 38 02.1 | +0.7 |
| LANU | | | | Sb | Sb | 23 38 11.8 | 0.0 |
| **LANU** | **Lannavaara** | **0.71** | **71** | P | Pg | 23 37 59.4 | -0.4 |
| **DUNU** | **Dundret** | **0.72** | **168** | P | Pb | 23 38 02.4 | +0.8 |
| **DUNU** | **Dundret** | **0.72** | **168** | P | Pg | 23 37 59.6 | -0.4 |
| **MASU** | **Masugnsbyn** | **0.78** | **117** | P | Pn | 23 38 03.6 | -0.8 |
| **MASU** | **Masugnsbyn** | **0.78** | **117** | P | Pg | 23 38 01.0 | -0.2 |
| **SALU** | **Saltoluokta** | **0.79** | **236** | P | Pg | 23 38 00.9 | -0.3 |
| **KIF** | **Kilpisjarvi** | **1.20** | **10** | ePN | Pg | 23 38 09.0 | -0.2 |
| KIF | | | | eSN | Sn | 23 38 27.2 | +0.1 |
| **KIF** | **Kilpisjarvi** | **1.20** | **10** | Pn | Pg | 23 38 08.9 | -0.2 |
| KIF | | | | Sn | Sn | 23 38 27.2 | +0.1 |
| **HEF** | **Hetta** | **1.42** | **64** | ePG | Pn | 23 38 12.2 | -1.0 |
| HEF | | | | MSG | | 23 38 30.6 | |
| | comp=Z,5.3nm,0.2s | | | | | | |
| HEF | | | | eSN | Sn | 23 38 33.4 | +0.7 |
| **HEF** | **Hetta** | **1.42** | **64** | Pg | Pn | 23 38 12.1 | -1.1 |
| HEF | | | | Sn | Sn | 23 38 33.3 | +0.7 |
| **ERTU** | **Ertsjaerv** | **1.50** | **148** | ePG | Pn | 23 38 13.3 | -0.8 |
| ERTU | | | | eSN | Sn | 23 38 35.3 | +0.9 |
| **ERTU** | **Ertsjaerv** | **1.50** | **148** | P | Pn | 23 38 13.4 | -0.8 |
| ERTU | | | | Sn | Sn | 23 38 35.3 | +0.9 |
| **HARU** | **Harads** | **1.70** | **169** | P | Pn | 23 38 16.8 | -0.1 |
| **KALU** | **Kalix** | **2.34** | **146** | ePB | Pn | 23 38 26.8 | +1.1 |
| KALU | | | | eSG | Sb | 23 38 59.2 | +0.9 |
| **KALU** | **Kalix** | **2.34** | **146** | Pb | Pn | 23 38 26.7 | +1.0 |
| **KALU** | **Kalix** | **2.34** | **146** | P | Pn | 23 38 26.8 | +1.1 |
| KALU | | | | Sg | Sb | 23 38 59.2 | +0.8 |
| **SGF** | **Sodankyl** | **2.45** | **96** | ePG | Pb | 23 38 30.9 | -0.1 |
| SGF | | | | eSB | Sb | 23 39 02.8 | +1.0 |
| **SGF** | **Sodankyl** | **2.45** | **96** | Pg | Pb | 23 38 30.9 | -0.1 |
| SGF | | | | Sb | Sb | 23 39 02.7 | +1.0 |
| **RNF** | **Rovaniemi** | **2.57** | **116** | ePB | Pn | 23 38 31.0 | +2.0 |
| RNF | | | | eSB | Sb | 23 39 05.4 | +0.2 |
| **RNF** | **Rovaniemi** | **2.57** | **116** | Pb | Pn | 23 38 31.0 | +2.0 |
| **KEV** | **Kevo** | **3.14** | **49** | ePG | Pb | 23 38 43.3 | +0.6 |
| KEV | | | | MSG | | 23 39 19.3 | |
| | comp=Z,2.7nm,0.2s | | | | | | |
| KEV | | | | eSG | Sb | 23 39 22.4 | +0.9 |
| **KEV** | **Kevo** | **3.14** | **49** | Pg | Pb | 23 38 43.3 | +0.6 |
| KEV | | | | Sg | Sb | 23 39 22.4 | +0.8 |
| **KU6** | **Riekki** | **4.22** | **111** | ePG | Pg | 23 39 04.2 | -2.8 |
| KU6 | | | | eSG | Sg | 23 39 59.5 | -2.1 |

*ISCJB **01** 23:44:07.8±0.7, 45°.08N±0°.03×14°.59E±0°.03, h1km±4km, Error ellipse: s-maj=5.6km s-min=3.6km az=17.2*

*CSEM **01** 23:44:08.7±0.3, 45°.08N×14°.60E, h2km, ML3.0/12, Error ellipse: s-maj=5.0km s-min=3.5km az=7.0*

*VIE **01** 23:44:09.8±0.6, 45°.17N×14°.61E, h10km, mb2.0/3, ml2.9/3, Error ellipse: s-maj=4.2km s-min=2.8km az=166.0*

*ROM **01** 23:44:11.7±0.5, 45°.10N×14°.48E, h10km, Md2.7/6, Ml2.9/1, Error ellipse: s-maj=12.1km s-min=5.3km az=55.0*

**ISC 01 23:44:09.4±1.2, 45°.10N±0°.04×14°.61E±0°.02, h4km±10km, n88, σ0$^s$86/142, 15C-18D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GBRS** | **Gornja Briga** | **0.45** | **18** | ⇓iPg | **Pg** | **23 44 18.1** | **0.0** |
| | 46nm,0.1s | | | | | | |
| **KNDS** | **Knezji Dol** | **0.46** | **340** | i Pg | **Pg** | **23 44 17.7** | **-0.5** |
| KNDS | | | | i Sg | **Sg** | **23 44 24.0** | **-0.1** |
| | comp=Z,125nm,0.2s | | | | | | |
| **KNDS** | **Knezji Dol** | **0.46** | **340** | Pg | **Pg** | **23 44 17.7** | **-0.5** |
| KNDS | | | | i Sg | **Sg** | **23 44 24.0** | **-0.1** |
| | comp=Z,125nm,0.2s | | | | | | |
| **BOJS** | **Bojanci** | **0.61** | **48** | i Pg | **Pg** | **23 44 21.1** | **+0.1** |
| BOJS | | | | eSg | **Sg** | **23 44 29.4** | **+0.5** |
| | comp=Z,69nm,0.1s | | | | | | |
| **BOJS** | **Bojanci** | **0.61** | **48** | i Pg | **Pg** | **23 44 21.1** | **+0.1** |
| BOJS | | | | eSg | **Sg** | **23 44 29.4** | **+0.5** |
| | comp=Z,69nm,0.1s | | | | | | |
| **SKDS** | **Skadanscina** | **0.61** | **317** | i Pg | **Pg** | **23 44 20.2** | **-0.9** |
| SKDS | | | | i Sg | **Sg** | **23 44 28.8** | **-0.3** |
| | comp=Z,50nm,0.1s | | | | | | |
| **SKDS** | **Skadanscina** | **0.61** | **317** | i Pg | **Pg** | **23 44 20.2** | **-0.9** |
| SKDS | | | | i Sg | **Sg** | **23 44 28.8** | **-0.3** |
| | comp=Z,50nm,0.1s | | | | | | |
| **CEY** | **Cerknica** | **0.65** | **349** | i Pg | **Pg** | **23 44 20.9** | **-1.0** |
| CEY | | | | eSg | **Sg** | **23 44 30.4** | **+0.1** |
| | comp=Z,91nm,0.2s | | | | | | |
| **CEY** | **Cerknica** | **0.65** | **349** | i Pg | **Pg** | **23 44 20.9** | **-1.0** |
| CEY | | | | eSg | **Sg** | **23 44 30.4** | **+0.1** |
| | comp=Z,91nm,0.2s | | | | | | |
| **VISS** | **Visnje** | **0.72** | **13** | i Pg | **Pg** | **23 44 22.3** | **-0.9** |
| **VISS** | **Visnje** | **0.72** | **13** | i Pg | **Pg** | **23 44 22.3** | **-0.9** |
| **TRI** | **Trieste** | **0.85** | **316** | Pg | **Pg** | **23 44 25.6** | **-0.1** |
| TRI | | | | eS | **Sg** | **23 44 36.6** | **-0.1** |
| **TRI** | **Trieste** | **0.85** | **316** | Pg | **Pg** | **23 44 25.2** | **-0.5** |
| TRI | | | | Sg | **Sg** | **23 44 36.5** | **-0.2** |
| **TRI** | **Trieste** | **0.85** | **316** | Pg | **Pg** | **23 44 25.2** | **-0.5** |
| **TRI** | **Trieste** | **0.85** | **316** | P | **Pg** | **23 44 25.5** | **-0.1** |
| TRI | | | | eSg | **Sg** | **23 44 36.6** | **-0.1** |
| **JAVS** | **Javornik** | **0.88** | **334** | i Pg | **Pg** | **23 44 25.1** | **-1.1** |
| JAVS | | | | i Sg | **Sg** | **23 44 38.2** | **+0.5** |
| | comp=Z,39nm,0.2s | | | | | | |
| **JAVS** | **Javornik** | **0.88** | **334** | i Pg | **Pg** | **23 44 25.1** | **-1.1** |
| JAVS | | | | i Sg | **Sg** | **23 44 38.2** | **+0.5** |
| | comp=Z,39nm,0.2s | | | | | | |
| **LJU** | **Ljubljana** | **0.94** | **357** | i Pg | **Pg** | **23 44 27.0** | **-0.5** |
| **LJU** | **Ljubljana** | **0.94** | **357** | i Pg | **Pg** | **23 44 27.0** | **-0.5** |
| **LEGS** | **Legarje** | **0.98** | **30** | i Pg | **Pg** | **23 44 28.1** | **-0.1** |
| LEGS | | | | i Sg | **Sg** | **23 44 41.0** | **0.0** |
| **LEGS** | **Legarje** | **0.98** | **30** | i Pg | **Pg** | **23 44 28.1** | **-0.1** |
| LEGS | | | | i Sg | **Sg** | **23 44 41.0** | **0.0** |
| **PDKS** | **Podkum** | **1.00** | **16** | i Pg | **Pg** | **23 44 28.0** | **-0.5** |
| **PDKS** | **Podkum** | **1.00** | **16** | i Pg | **Pg** | **23 44 28.0** | **-0.5** |
| **VNDS** | **Vrh nad Dolski** | **1.00** | **4** | i Pg | **Pg** | **23 44 28.1** | **-0.5** |
| **GCIS** | **Gornji Cirnik** | **1.05** | **43** | ePg | **Pb** | **23 44 29.7** | **-0.4** |
| **GCIS** | **Gornji Cirnik** | **1.05** | **43** | ePg | **Pb** | **23 44 29.7** | **-0.4** |
| **VOJS** | **Vojsko** | **1.06** | **332** | i Pg | **Pg** | **23 44 28.1** | **-1.7** |
| **VOJS** | **Vojsko** | **1.06** | **332** | i Pg | **Pg** | **23 44 28.0** | **-1.7** |
| **SABO** | **M.te Sabotino** | **1.13** | **322** | ePg | **Pg** | **23 44 30.8** | **-0.2** |
| SABO | | | | eSg | **Sb** | **23 44 46.3** | **-0.2** |
| **SABO** | **M.te Sabotino** | **1.13** | **322** | Pg | **Pb** | **23 44 31.7** | **+0.2** |
| SABO | | | | Sg | **Sb** | **23 44 46.4** | **-0.1** |
| **SABO** | **M.te Sabotino** | **1.13** | **322** | ePg | **Pg** | **23 44 30.8** | **-0.2** |
| SABO | | | | eSg | **Sb** | **23 44 46.3** | **-0.2** |
| **MOZS** | **Mozjanca** | **1.20** | **355** | i Pg | **Pg** | **23 44 32.3** | **0.0** |
| **MOZS** | **Mozjanca** | **1.20** | **355** | i Pg | **Pg** | **23 44 32.3** | **0.0** |
| **DOBS** | **Dobrina** | **1.21** | **30** | i Pg | **Pg** | **23 44 32.2** | **-0.4** |
| **DOBS** | **Dobrina** | **1.21** | **30** | i Pg | **Pg** | **23 44 32.2** | **-0.4** |
| **DRE** | **Drenchia** | **1.27** | **328** | ⇑ePg | **Pn** | **23 44 34.0** | **+0.1** |
| DRE | | | | eSg | **Sb** | **23 44 50.8** | **+0.3** |
| **DRE** | **Drenchia** | **1.27** | **328** | ⇑ePg | **Pn** | **23 44 34.0** | **+0.1** |
| DRE | | | | eSg | **Sb** | **23 44 50.8** | **+0.3** |
| **COLI** | **Coloredo** | **1.34** | **321** | ePg | **Pg** | **23 44 35.1** | **0.0** |
| COLI | | | | eSg | **Sn** | **23 44 53.6** | **+0.4** |
| **COLI** | **Coloredo** | **1.34** | **321** | ePg | **Pg** | **23 44 35.1** | **0.0** |
| COLI | | | | eSg | **Sn** | **23 44 53.6** | **+0.4** |
| **ROBS** | **Robic** | **1.38** | **326** | i Pg | **Pg** | **23 44 36.2** | **+0.4** |
| **ROBS** | **Robic** | **1.38** | **326** | i Pg | **Pg** | **23 44 36.2** | **+0.4** |
| **OBKA** | **Obir** | **1.41** | **358** | ⇑ePg | **Pn** | **23 44 35.7** | **-0.2** |
| | comp=Z,5.7nm,0.1s | | | | | | |
| OBKA | | | | ⇑eSg | **Sg** | **23 44 54.4** | **-0.2** |
| | comp=Z,33nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **1.41** | **358** | Pg | **Pn** | **23 44 35.7** | **-0.2** |
| | comp=Z,5.7nm,0.1s | | | | | | |
| OBKA | | | | Sg | **Sg** | **23 44 54.4** | **-0.2** |
| | comp=Z,33nm,0.3s | | | | | | |
| **VINO** | **Villanova** | **1.48** | **322** | ⇓ePg | **Pb** | **23 44 37.7** | **+0.1** |
| VINO | | | | eSg | **Sg** | **23 44 58.0** | **+1.0** |
| **VINO** | **Villanova** | **1.48** | **322** | Pg | **Pb** | **23 44 37.6** | **+0.1** |
| VINO | | | | Sg | **Sg** | **23 44 58.1** | **+1.0** |
| **VINO** | **Villanova** | **1.48** | **322** | Pg | **Pb** | **23 44 37.6** | **+0.1** |
| VINO | | | | eSg | **Sg** | **23 44 58.0** | **+1.0** |
| **BAD** | **Bernadia** | **1.48** | **320** | ⇓ePg | **Pb** | **23 44 37.6** | **+0.1** |
| BAD | | | | eSg | **Sg** | **23 44 58.6** | **+1.5** |
| **BAD** | **Bernadia** | **1.48** | **320** | ⇓ePg | **Pb** | **23 44 37.6** | **+0.1** |
| BAD | | | | eSg | **Sg** | **23 44 58.6** | **+1.5** |
| **BUA** | **Buia** | **1.53** | **318** | ⇓ePg | **Pg** | **23 44 38.6** | **0.0** |
| BUA | | | | eSg | **Sg** | **23 44 60.0** | **+1.6** |
| **BUA** | **Buia** | **1.53** | **318** | ⇓ePg | **Pg** | **23 44 38.6** | **0.0** |
| BUA | | | | eSg | **Sg** | **23 45 00.0** | **+1.6** |
| **LSR** | **Lussari** | **1.57** | **332** | ⇓ePg | **Pb** | **23 44 39.2** | **+0.2** |
| LSR | | | | eSg | **Sg** | **23 45 01.1** | **+1.3** |
| **LSR** | **Lussari** | **1.57** | **332** | ⇓ePg | **Pb** | **23 44 39.2** | **+0.2** |
| LSR | | | | eSg | **Sg** | **23 45 01.1** | **+1.3** |
| **SOKA** | **Soboth** | **1.60** | **11** | ⇑ePg | **Pb** | **23 44 39.1** | **-0.5** |
| | comp=Z,3.8nm,0.2s | | | | | | |
| SOKA | | | | ⇑eSg | **Sn** | **23 44 59.9** | **+0.1** |
| | comp=Z,7.0nm,0.3s | | | | | | |
| **SOKA** | **Soboth** | **1.60** | **11** | Pg | **Pb** | **23 44 39.1** | **-0.5** |
| | comp=Z,3.8nm,0.2s | | | | | | |
| SOKA | | | | Sg | **Sn** | **23 44 59.9** | **+0.1** |
| | comp=Z,7.0nm,0.3s | | | | | | |
| **MPRI** | **Monte Prat** | **1.61** | **316** | ⇑ePg | **Pb** | **23 44 39.5** | **-0.2** |
| **MPRI** | **Monte Prat** | **1.61** | **316** | ⇑ePg | **Pb** | **23 44 39.5** | **-0.2** |
| **ACOM** | **Acomizza, Ital** | **1.64** | **333** | ePg | **Pg** | **23 44 40.6** | **-0.1** |
| ACOM | | | | eSg | **Sg** | **23 45 04.0** | **+2.0** |
| **ACOM** | **Acomizza, Ital** | **1.64** | **333** | Pg | **Pg** | **23 44 40.8** | **0.0** |
| ACOM | | | | Sg | **Sg** | **23 45 04.3** | **+2.3** |
| **ACOM** | **Acomizza, Ital** | **1.64** | **333** | ePg | **Pg** | **23 44 40.6** | **-0.1** |
| ACOM | | | | eSg | **Sg** | **23 45 04.0** | **+2.0** |
| **MYKA** | **Terra Mystica** | **1.67** | **337** | ⇑ePg | **Pb** | **23 44 40.3** | **-0.4** |
| | comp=Z,4.2nm,0.2s | | | | | | |
| MYKA | | | | ⇑Sg | **Sg** | **23 45 03.1** | **0.0** |
| | comp=Z,27nm,0.3s | | | | | | |
| **MYKA** | **Terra Mystica** | **1.67** | **337** | Pg | **Pb** | **23 44 40.3** | **-0.4** |
| | comp=Z,4.2nm,0.2s | | | | | | |
| MYKA | | | | Sg | **Sg** | **23 45 03.1** | **0.0** |
| | comp=Z,27nm,0.3s | | | | | | |
| **FUSE** | **Fusea** | **1.73** | **320** | ePg | **Pb** | **23 44 41.5** | **-0.2** |
| FUSE | | | | eSg | **Sg** | **23 45 04.8** | **-0.1** |
| **FUSE** | **Fusea** | **1.73** | **320** | ePg | **Pb** | **23 44 41.5** | **-0.2** |
| FUSE | | | | eSg | **Sg** | **23 45 04.8** | **-0.1** |
| **MLNI** | **Malnisio** | **1.75** | **308** | ⇑ePg | **Pn** | **23 44 41.2** | **+0.7** |
| MLNI | | | | eSg | **Sg** | **23 45 05.8** | **+0.2** |
| **MLNI** | **Malnisio** | **1.75** | **308** | ⇑ePg | **Pn** | **23 44 41.2** | **+0.7** |
| MLNI | | | | eSg | **Sg** | **23 45 05.8** | **+0.2** |
| **ZOU** | **Zoufplan** | **1.85** | **322** | ePg | **Pn** | **23 44 43.0** | **+0.9** |
| **ZOU** | **Zoufplan** | **1.85** | **322** | ⇑ePg | **Pn** | **23 44 43.0** | **+0.9** |
| **ZOU** | **Zoufplan** | **1.85** | **322** | ePg | **Pn** | **23 44 43.0** | **+0.9** |
| **BLY** | **Banja Luka** | **1.86** | **100** | Pg | **Pg** | **23 44 45.3** | **+0.2** |
| **BLY** | **Banja Luka** | **1.86** | **100** | Pg | **Pg** | **23 44 45.3** | **+0.2** |
| **PIEI** | **Pieia** | **2.16** | **224** | Pg | **Pb** | **23 44 47.8** | **-1.2** |
| **PIEI** | **Pieia** | **2.16** | **224** | Pg | **Pb** | **23 44 47.8** | **-1.2** |
| **KBA** | **Koelnbreinsper** | **2.16** | **336** | ⇑ePn | **Pb** | **23 44 47.9** | **-1.3** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **KBA** | **Koelnbreinsper** | **2.16** | **336** | Pn | **Pb** | **23 44 47.9** | **-1.3** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **ABTA** | **Abfaltersbach** | **2.20** | **319** | ⇓Pn | **Pn** | **23 44 47.7** | **+0.9** |
| | comp=Z,0.7nm,0.1s | | | | | | |
| ABTA | | | | ⇓Sg | **Sg** | **23 45 19.5** | **-0.6** |
| | comp=Z,15nm,0.4s | | | | | | |
| **ABTA** | **Abfaltersbach** | **2.20** | **319** | Pn | **Pn** | **23 44 47.7** | **+0.9** |
| | comp=Z,0.7nm,0.1s | | | | | | |
| ABTA | | | | Sg | **Sg** | **23 45 19.5** | **-0.6** |
| | comp=Z,15nm,0.4s | | | | | | |
| **ARSA** | **Arzberg** | **2.24** | **16** | ⇓ePn | **Pn** | **23 44 47.0** | **-0.3** |
| | comp=Z,1.7nm,0.2s | | | | | | |
| **ARSA** | **Arzberg** | **2.24** | **16** | Pn | **Pn** | **23 44 47.0** | **-0.3** |
| | comp=Z,1.7nm,0.2s | | | | | | |
| **RISI** | **Rein** | **2.55** | **317** | Pg | **Pn** | **23 44 53.3** | **+1.6** |
| | comp=Z,43nm,0.3s | | | | | | |
| **RISI** | **Rein** | **2.55** | **317** | Pg | **Pn** | **23 44 53.3** | **+1.6** |
| | comp=Z,43nm,0.3s | | | | | | |
| **MOA** | **Molln** | **2.76** | **355** | ⇓ePn | **Pn** | **23 44 56.7** | **+2.3** |
| | comp=Z,0.7nm,0.2s | | | | | | |
| MOA | | | | ⇑eSn | **Sn** | **23 45 26.7** | **-1.5** |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **MOA** | **Molln** | **2.76** | **355** | Pn | **Pn** | **23 44 56.7** | **+2.3** |
| | comp=Z,0.7nm,0.2s | | | | | | |
| MOA | | | | Sn | **Sn** | **23 45 26.7** | **-1.5** |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **WTTA** | **Wattenberg** | **2.99** | **317** | ⇓ePn | **Pn** | **23 44 59.1** | **+1.4** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| WTTA | | | | ⇓eSn | **Sn** | **23 45 33.7** | **-0.4** |
| | comp=Z,3.9nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **2.99** | **317** | Pn | **Pn** | **23 44 59.1** | **+1.4** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| WTTA | | | | Sn | **Sn** | **23 45 33.7** | **-0.4** |
| | comp=Z,3.9nm,0.3s | | | | | | |
| **WATA** | **Walderalm** | **3.07** | **318** | ⇓iPn | **Pn** | **23 44 59.8** | **+1.0** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| WATA | | | | ⇓eSn | **Sn** | **23 45 35.0** | **-1.0** |
| | comp=Z,0.1nm,0.1s | | | | | | |
| **WATA** | **Walderalm** | **3.07** | **318** | Pn | **Pn** | **23 44 59.8** | **+1.0** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| WATA | | | | Sn | **Sn** | **23 45 35.0** | **-1.0** |
| | comp=Z,0.1nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **3.31** | **314** | ⇓iPn | **Pn** | **23 45 04.0** | **+1.9** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| MOTA | | | | ⇓Sn | **Sn** | **23 45 40.7** | **-1.2** |
| | comp=Z,1.8nm,0.2s | | | | | | |
| **MOTA** | **Moosalm** | **3.31** | **314** | Pn | **Pn** | **23 45 04.0** | **+1.9** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| MOTA | | | | Sn | **Sn** | **23 45 40.7** | **-1.2** |
| | comp=Z,1.8nm,0.2s | | | | | | |

*IDC **01** 23:50:51.0±5.8, 7°.18S×129°.51E, h105km±51km, mb3.5/3, mb1 3.8/5, mb1mx3.4/28, mbtmp4.0/5, Error ellipse: s-maj=98.5km s-min=24.5km az=66.0*

*AUST **01** 23:50:53.6±0.0, 7°.42S×129°.11E, h103km, Error ellipse: s-maj=1.2km s-min=0.9km az=279.0*

*ISCJB **01** 23:50:55.4±0.4, 7°.54S±0°.04×129°.11E±0°.04, h131km, mb3.8/4, Error ellipse: s-maj=6.2km s-min=5.2km az=172.1*

*DJA **01** 23:50:55.7±0.4, 7°S±5°×12°9E±°, h162km±29km, M4.6/4, mb4.7/2, mB5.7/1, MLv4.5/4, Mw(mB)5.2/1*

**ISC 01 23:50:55.4±0.6, 7°.48S±0°.06×129°.20E±0°.06, h131km, n31, σ2$^s$12/35, mb3.8/4, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **3.89** | **345** | P | **Pn** | **23 51 55.0** | **+1.2** |
| **MSAI** | **Masohi** | **4.11** | **356** | P | **Pn** | **23 51 58.0** | **+1.3** |
| **NLAI** | **Namlea** | **4.70** | **334** | P | **Pn** | **23 52 06.5** | **+2.0** |
| **SOEI** | **Soe** | **5.38** | **245** | P | **Pn** | **23 52 14.4** | **+0.7** |
| | baz=5.3,SNR=22 | | | | | | |
| **SOEI** | **Soe** | **5.38** | **245** | P | **Pn** | **23 52 13.9** | **+0.3** |
| SOEI | | | | S | **Sn** | **23 53 12.6** | **-2.0** |
| **FAKI** | **Fak Fak** | **5.45** | **34** | P | **Pn** | **23 52 13.5** | **-1.0** |
| | baz=5.5,SNR=29 | | | | | | |
| **FAKI** | **Fak Fak** | **5.45** | **34** | P | **Pn** | **23 52 13.6** | **-1.0** |
| FAKI | | | | S | **Sn** | **23 53 12.6** | **-3.7** |
| **MTN** | **Manton Dam** | **5.67** | **161** | P | **Pn** | **23 52 19.2** | **+1.8** |
| | baz=5.8,SNR=108 | | | | | | |
| **KDU** | **Kakadu** | **6.10** | **148** | P | **Pn** | **23 52 25.1** | **+1.8** |
| | baz=6.2,SNR=40 | | | | | | |
| **BATI** | **Baumata** | **6.11** | **243** | P | **Pn** | **23 52 23.8** | **+0.4** |
| BATI | | | | S | **Sn** | **23 53 30.5** | **-1.6** |
| **SWI** | **Sorong** | **6.88** | **17** | P | **Pn** | **23 52 36.8** | **+3.0** |
| | baz=6.9,SNR=3.4 | | | | | | |
| **MMRI** | **Maumere** | **6.99** | **260** | S | **Sn** | **23 53 51.7** | **-1.6** |
| **LBMI** | **Labuha** | **7.00** | **346** | P | **Pn** | **23 52 36.9** | **+1.5** |
| **KNRA** | **Kununurra** | **8.16** | **183** | P | **Pn** | **23 52 51.0** | **0.0** |
| | baz=8.3,SNR=29 | | | | | | |
| **GENI** | **Genyem** | **11.95** | **67** | P | **P** | **23 53 48.8** | **-0.3** |
| **WRA** | **Warramunga Arr** | **13.36** | **159** | P | **Pn** | **23 53 58.0** | **-1.9** |
| | 2.8nm,0.3s,baz=330,slow=13,SNR=26 | | | | | | |
| WRA | | | | S | Sn | 23 56 18.8 | -8.7 |
| | 4.0nm,0.3s,baz=336,slow=23,SNR=9.5 | | | | | | |
| **BBKI** | **Banjar Baru** | **14.83** | **285** | P | **P** | **23 54 21.0** | **-0.2** |
| **QIS** | **Mount Isa** | **16.45** | **143** | P | **P** | **23 54 42.7** | **+3.6** |
| | baz=17,SNR=7.3 | | | | | | |
| **ASAR** | **Alice Springs** | **16.72** | **165** | P | **P** | **23 54 42.4** | **+0.3** |
| | 0.9nm,0.3s,baz=339,slow=9.4,SNR=31 | | | | | | |
| ASAR | | | | S | **Sn** | **23 57 41.2** | **-7.2** |
| | 1.2nm,0.3s,baz=340,slow=25,SNR=7.0 | | | | | | |
| **WRKA** | **Warakurna** | **17.48** | **183** | P | **Pn** | **23 54 52.3** | **+1.1** |
| | baz=18,SNR=6.2 | | | | | | |
| **MEEK** | **Meekatharra** | **21.55** | **207** | P | **P** | **23 55 35.6** | **+1.1** |
| | baz=22,SNR=6.7 | | | | | | |
| **FORT** | **Forrest** | **23.21** | **182** | P | **P** | **23 55 52.6** | **+1.8** |
| | baz=23,SNR=8.0 | | | | | | |
| **BLDU** | **Ballidu** | **25.82** | **205** | P | **P** | **23 56 14.7** | **+0.1** |
| | baz=26,SNR=6.5 | | | | | | |
| **KLBR** | **Kellerberrin** | **26.26** | **202** | P | **P** | **23 56 19.2** | **+0.7** |
| | baz=26,SNR=5.4 | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.36** | **160** | P | **P** | **23 57 05.6** | **+2.1** |
| | baz=32,SNR=6.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.43** | **311** | P | **P** | **23 58 11.3** | **-1.6** |
| | 0.7nm,0.4s,baz=141,slow=6.8,SNR=4.3 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.75** | **343** | eP | **P** | **23 59 44.3** | **+2.2** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,70nm,5.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.19** | **327** | P | **P** | **00 01 39.6** | **-2.0** |
| | comp=Z,0.3nm,0.4s,baz=124,slow=7.6,SNR=5.9 | | | | | | |
| **MAW** | **Mawson** | **74.22** | **201** | P | **P** | **00 02 18.3** | **+0.8** |
| | comp=Z,0.8nm,0.5s,baz=72,slow=3.2,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.12** | **281** | PKP | **PKPdf** | **00 09 46.0** | **-1.1** |
| | comp=Z,0.2nm,0.7s,baz=102,slow=1.7,SNR=3.4 | | | | | | |
| **CPUP** | **Villa Florida** | **145.80** | **170** | PKPbc | **PKPdf** | **00 10 18.6** | **-0.7** |
| | comp=Z,1.8nm,0.7s,baz=164,slow=5.9,SNR=3.9 | | | | | | |

**GUC 01 23:52:52.0±0.6, 35°.68S×72°.29W, h35km±4km, ML3.5, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LNCH** | **Linares** | **0.58** | **107** | eP | Pn | 23 53 02.9 | -1.0 |
| LNCH | | | | i S | Sn | 23 53 11.1 | -1.1 |
| **TALC** | **Talca** | **0.60** | **63** | eP | Pn | 23 53 03.3 | -0.8 |
| TALC | | | | i S | Sn | 23 53 12.1 | -0.5 |
| **CCHI** | **Chillan** | **0.94** | **170** | i P | Pn | 23 53 08.5 | -0.2 |
| CCHI | | | | i S | Sn | 23 53 21.1 | +0.1 |
| **NICH** | **Los Niches** | **1.10** | **53** | i P | Pn | 23 53 10.7 | -0.2 |
| NICH | | | | i S | Sn | 23 53 25.3 | +0.5 |
| **CHCH** | **Chadas Angostu** | **2.20** | **38** | i P | Pn | 23 53 26.6 | +0.5 |
| CHCH | | | | i S | Sn | 23 53 53.8 | +1.7 |
| **PEL** | **Peldehue** | **2.85** | **28** | IAML | | 23 54 32.4 | |
| | comp=E,182nm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **2.90** | **22** | eP | Pn | 23 53 36.1 | +0.1 |
| ROCH | | | | eS | Sn | 23 54 10.3 | +0.6 |
| ROCH | | | | AML | AML | 23 54 25.7 | |
| | comp=N,143nm,0.4s | | | | | | |

**DJA 02 00:15:50.2±0.8, 10°S±5°×11°2E±°, h10km, M3.9/9, MLv3.9/9, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCJI** | **Pacitan** | **1.67** | **343** | P | Pn | 00 16 18.0 | -1.5 |
| PCJI | | | | S | Sb | 00 16 42.1 | 0.0 |
| **PWJI** | **Pagerwojo** | **1.77** | **4** | P | Pn | 00 16 14.9 | -6.0 |
| **WOJI** | **Wonogiri, Jawa** | **2.08** | **339** | P | Pn | 00 16 24.6 | -0.6 |
| WOJI | | | | S | Sn | 00 16 52.1 | +0.8 |
| **UGM** | **Wanagama** | **2.19** | **329** | P | Pn | 00 16 27.0 | +0.2 |
| UGM | | | | S | Sg | 00 17 05.0 | +4.2 |
| **NGJI** | **Ngawi** | **2.43** | **355** | P | Pb | 00 16 33.5 | -0.5 |
| NGJI | | | | S | Sg | 00 17 06.6 | -1.6 |
| **BLJI** | **Banyuglugur** | **2.79** | **43** | P | Pn | 00 16 36.2 | +1.2 |
| BLJI | | | | S | Sn | 00 17 10.8 | +2.1 |
| **TBJI** | **Tambak Boyo** | **2.97** | **3** | P | Pn | 00 16 36.2 | -1.2 |
| **SMRI** | **Semarang** | **2.99** | **336** | P | Pn | 00 16 36.9 | -0.9 |
| **ABJI** | **Asem Bagus** | **3.22** | **52** | P | Pn | 00 16 40.9 | 0.0 |

*IDC **02** 00:29:56.2±2.4, 4°.59S×102°.40E, h0km, mb3.8/7, mb1 4.0/7, mb1mx3.7/24, mbtmp3.8/7, Error ellipse: s-maj=106.2km s-min=21.7km az=54.0*

*ISCJB **02** 00:30:03.1±1.4, 4°.5S±0°.1×102°.5E±0°.1, h67km±9km, mb3.9/10, Error ellipse: s-maj=27.2km s-min=7.3km az=137.6*

*NEIC **02** 00:30:03.8±2.7, 4°.52S×102°.51E, h55km±17km, mb4.1/3, Error ellipse: s-maj=53.0km s-min=10.6km az=52.0*

*DJA **02** 00:30:05.1±0.9, 5°S±7°×10°3E±°, h34km±5km, M3.7/7, MLv3.7/7*

**ISC 02 00:30:03.6±1.9, 4°.6S±0°.1×102°.5E±0°.2, h54km±13km, n22, σ0$^s$68/25, mb4.0/10, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **0.47** | **66** | P | **Pn** | **00 30 15.0** | **+0.2** |
| MNAI | | | | S | **Sn** | **00 30 23.3** | **+0.4** |
| **MNAI** | **Manna** | **0.47** | **66** | ePn | **Pn** | **00 30 15.1** | **+0.3** |
| MNAI | | | | eSn | **Sn** | **00 30 21.7** | **-1.2** |
| **KSI** | **Kapahiang** | **0.90** | **5** | P | **Pn** | **00 30 20.8** | **+0.6** |
| KSI | | | | S | **Sn** | **00 30 32.7** | **+0.4** |
| **LHSI** | **Lahat** | **1.23** | **54** | P | **Pn** | **00 30 25.5** | **+0.9** |
| **LWLI** | **Liwa** | **1.60** | **107** | P | **Pn** | **00 30 30.8** | **+1.1** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| LWLI | | | | S | Sn | 00 30 48.8 | -0.5 |
| MDSI | Maura Dua | 1.65 | 88 | P | Pn | 00 30 30.9 | +0.6 |
| MDSI | | | | S | Sn | 00 30 50.2 | -0.2 |
| KASI | Kota Agung | 2.19 | 116 | P | Pn | 00 30 38.5 | +0.9 |
| KASI | | | | S | Sn | 00 31 02.9 | -0.7 |
| CMAR | Chiang Mai Arr | 23.14 | 351 | P | P | 00 35 05.0 | -0.4 |
| | 2.5nm,0.3s,baz=195,slow=8.1,SNR=4.7 | | | | | | |
| H01W3 | Cape Leeuwin H | 32.04 | 162 | T | T | 01 10 15.5 | |
| | baz=338,slow=76,SNR=7.2 | | | | | | |
| H01W2 | Cape Leeuwin H | 32.05 | 162 | T | T | 01 10 12.4 | |
| | baz=338,slow=76,SNR=7.4 | | | | | | |
| H01W1 | Cape Leeuwin H | 32.06 | 162 | T | T | 01 10 15.1 | |
| | baz=338,slow=76,SNR=7.1 | | | | | | |
| WRA | Warramunga Arr | 34.55 | 119 | P | P | 00 36 47.3 | -0.1 |
| | 0.2nm,0.4s,baz=304,slow=8.9,SNR=2.4 | | | | | | |
| ASAR | Alice Springs | 35.73 | 125 | P | P | 00 36 57.8 | +0.3 |
| | 0.2nm,0.3s,baz=298,slow=7.7,SNR=4.1 | | | | | | |
| SONM | Songino Array | 52.28 | 3 | P | P | 00 39 09.6 | -0.1 |
| | 1.0nm,0.7s,baz=177,slow=9.6,SNR=7.6 | | | | | | |
| EKS2 | Erkin-Say | 53.74 | 334 | eP | P | 00 39 21.3 | +0.7 |
| | 0.6nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 54.17 | 343 | P | P | 00 39 23.6 | 0.0 |
| | 0.6nm,0.4s,baz=152,slow=8.5,SNR=8.7 | | | | | | |
| KURK | Kurchatov | 58.77 | 342 | eP | P | 00 39 55.4 | -0.6 |
| | 1.9nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 60.15 | 348 | P | P | 00 40 04.9 | -0.6 |
| | 1.9nm,0.4s,baz=172,slow=5.7,SNR=12 | | | | | | |
| BRVK | Borovoye | 63.51 | 339 | eP | P | 00 40 27.2 | -0.9 |
| | 0.9nm,0.5s | | | | | | |
| ABKAR | Akbulak array | 65.08 | 331 | eP | P | 00 40 37.6 | -0.9 |
| FINES | FINESS Array B | 87.53 | 332 | P | P | 00 42 45.8 | +0.3 |
| | 0.3nm,0.5s,baz=111,slow=7.7,SNR=3.7 | | | | | | |
| TXAR | Lajitas Array | 145.04 | 42 | PKPbc | PKPdf | 00 49 35.7 | -0.2 |
| | 0.2nm,0.4s,baz=261,slow=1.5,SNR=5.2 | | | | | | |

*ISCJB 02 00:40:54.8±0.5, 40.95N±0.04×22.07E±0.03, h5km±5km, Error ellipse: s-maj=6.4km s-min=3.0km az=161.8*
*CSEM 02 00:40:55.1±0.1, 40.93N×22.09E, h5km, ML1.8, Error ellipse: s-maj=3.0km s-min=1.7km az=152.0*
*THE 02 00:40:55.2, 40.95N×22.07E, h5km, ML1.8/7, Error ellipse: s-maj=1.0km s-min=0.4km az=327.0*
*ATH 02 00:40:55.3, 40.98N×22.07E, h8km±5km, MD2.9/9*
*SKO 02 00:40:55.0, 40.96N×22.08E, h15km, M1.3, ML1.8*
**ISC 02 00:40:55.5±0.9, 40.95N±0.03×22.08E±0.02, h10km±9km, n44, σ0.55/67, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRG | Griva | 0.24 | 88 | ePG | Pg | 00 41 00.2 | -0.3 |
| GRG | | | | eSG | Sg | 00 41 04.2 | +0.4 |
| GRG | Griva | 0.24 | 88 | P | Pg | 00 41 00.1 | -0.4 |
| GRG | | | | S | Sg | 00 41 04.2 | +0.4 |
| GRG | Griva | 0.24 | 88 | P | Pg | 00 41 00.1 | -0.4 |
| GRG | | | | S | Sg | 00 41 04.2 | +0.4 |
| VAY | Valandovo | 0.52 | 45 | ePg | Pg | 00 41 05.8 | +0.2 |
| VAY | | | | eSg | Sb | 00 41 13.2 | -1.1 |
| VAY | | | | eLg | Lg | 00 41 13.3 | |
| | comp=E,26nm,0.4s | | | | | | |
| VAY | | | | eLg | Lg | 00 41 13.9 | |
| | comp=N,35nm,0.4s | | | | | | |
| VAY | Valandovo | 0.52 | 45 | P | Pg | 00 41 05.2 | -0.5 |
| VAY | | | | S | Sg | 00 41 12.8 | +0.2 |
| VAY | Valandovo | 0.52 | 45 | P | Pg | 00 41 05.2 | -0.5 |
| VAY | Valandovo | 0.52 | 45 | ePg | Pg | 00 41 05.8 | +0.2 |
| VAY | | | | S | Sg | 00 41 12.8 | +0.2 |
| VAY | | | | eSg | Sb | 00 41 13.2 | -1.1 |
| VAY | | | | eLg | Lg | 00 41 13.3 | |
| | comp=N,26nm,0.4s | | | | | | |
| FNA | Florina | 0.56 | 253 | ePB | Pg | 00 41 06.2 | -0.2 |
| FNA | | | | eSB | Sg | 00 41 13.6 | -0.2 |
| FNA | Florina | 0.56 | 253 | P | Pg | 00 41 06.0 | -0.4 |
| FNA | | | | S | Sg | 00 41 13.4 | -0.4 |
| FNA | Florina | 0.56 | 253 | P | Pg | 00 41 06.0 | -0.4 |
| FNA | | | | S | Sg | 00 41 13.4 | -0.4 |
| KNT | Kendrikon | 0.65 | 71 | ePB | Pg | 00 41 07.9 | -0.2 |
| KNT | | | | eSB | Sb | 00 41 17.2 | -0.9 |
| KNT | Kendrikon | 0.65 | 71 | P | Pg | 00 41 07.7 | -0.4 |
| KNT | | | | S | Sb | 00 41 17.4 | -0.7 |
| KNT | Kendrikon | 0.65 | 71 | P | Pg | 00 41 07.7 | -0.4 |
| KNT | | | | eSb | Sb | 00 41 17.2 | -0.9 |
| KZN | Kozani | 0.69 | 200 | P | Pg | 00 41 08.1 | -0.6 |
| KZN | | | | S | Sg | 00 41 17.7 | 0.0 |
| KZN | Kozani | 0.69 | 200 | P | Pg | 00 41 08.1 | -0.6 |
| KZN | | | | S | Sg | 00 41 17.7 | 0.0 |
| HORT | Hortiatis | 0.85 | 114 | ePB | Pg | 00 41 12.1 | +0.3 |
| HORT | Hortiatis | 0.85 | 114 | ePb | Pg | 00 41 12.1 | +0.3 |
| NEST | Nestorio | 0.95 | 236 | ePB | Pg | 00 41 13.6 | -0.2 |
| NEST | Nestorio | 0.95 | 236 | ePb | Pg | 00 41 13.6 | -0.2 |
| SOH | Sokhos | 0.97 | 97 | ePG | Pg | 00 41 13.6 | -0.6 |
| SOH | Sokhos | 0.97 | 97 | P | Pg | 00 41 13.3 | -0.9 |
| SOH | | | | S | Sb | 00 41 28.2 | +0.9 |
| SOH | Sokhos | 0.97 | 97 | P | Pg | 00 41 13.3 | -0.9 |
| SOH | Sokhos | 0.97 | 97 | ePg | Pg | 00 41 13.6 | -0.6 |
| SOH | | | | S | Sb | 00 41 28.2 | +0.9 |
| OHR | Ohrid | 0.98 | 280 | ePg | Pg | 00 41 14.1 | -0.3 |
| OHR | | | | eSg | Sb | 00 41 28.1 | +0.4 |
| OHR | | | | eLg | Lg | 00 41 28.6 | |
| | comp=N,20nm,0.5s | | | | | | |
| OHR | | | | eLg | Lg | 00 41 32.1 | |
| | comp=E,17nm,0.5s | | | | | | |
| OHR | Ohrid | 0.98 | 280 | ePg | Pg | 00 41 14.1 | -0.3 |
| OHR | | | | eSg | Sb | 00 41 28.1 | +0.4 |
| OHR | | | | eLg | Lg | 00 41 28.5 | |
| | comp=E,20nm,0.5s | | | | | | |
| SRS | Serrai | 1.15 | 81 | ePG | Pg | 00 41 16.9 | -0.8 |
| SRS | Serrai | 1.15 | 81 | P | Pg | 00 41 16.8 | -0.8 |
| SRS | Serrai | 1.15 | 81 | ePg | Pg | 00 41 16.9 | -0.8 |
| THL | Klokotos Trika | 1.39 | 182 | ePB | Pb | 00 41 21.7 | +0.3 |
| THL | Klokotos Trika | 1.39 | 182 | P | Pn | 00 41 20.8 | 0.0 |
| THL | Klokotos Trika | 1.39 | 182 | P | Pn | 00 41 20.8 | 0.0 |
| THL | Klokotos Trika | 1.39 | 182 | ePb | Pb | 00 41 21.7 | +0.3 |
| MMB | Musomiste | 1.40 | 62 | eP | Pn | 00 41 20.5 | -0.5 |
| MMB | Musomiste | 1.40 | 62 | eP | Pn | 00 41 20.5 | -0.5 |
| NVR | Nevrokopi | 1.40 | 73 | ePG | Pn | 00 41 21.3 | +0.2 |
| NVR | Nevrokopi | 1.40 | 73 | P | Pn | 00 41 20.9 | -0.2 |
| NVR | | | | S | Sg | 00 41 40.5 | -0.1 |
| NVR | Nevrokopi | 1.40 | 73 | P | Pn | 00 41 20.9 | -0.2 |
| NVR | Nevrokopi | 1.40 | 73 | ePg | Pn | 00 41 21.3 | +0.2 |
| NVR | | | | S | Sg | 00 41 40.5 | -0.1 |
| OUR | Ouranopolis | 1.57 | 112 | P | Pn | 00 41 23.3 | -0.1 |
| OUR | | | | S | Sb | 00 41 44.7 | +0.2 |
| OUR | Ouranopolis | 1.57 | 112 | P | Pn | 00 41 23.3 | -0.1 |
| OUR | | | | S | Sb | 00 41 44.7 | +0.2 |
| VTS | Vitosha | 1.84 | 27 | eP | Pn | 00 41 28.0 | +0.7 |
| VTS | Vitosha | 1.84 | 27 | eP | Pn | 00 41 28.0 | +0.7 |
| RZN | Rozhen | 2.12 | 69 | eP | Pn | 00 41 32.3 | +1.2 |
| RZN | Rozhen | 2.12 | 69 | eP | Pn | 00 41 32.3 | +1.2 |

*IDC 02 00:44:00.0±8.5, 37.27N×72.26E, h146km±61km, mb3.0/2, mb1 3.0/4, mb1mx2.8/26, mbtmp3.4/4, Error ellipse: s-maj=80.6km s-min=27.5km az=142.0*
*NNC 02 00:44:08.5±1.9, 37.91N×71.97E, h180km±14km, mb2.5, mpv3.6, Error ellipse: s-maj=17.0km s-min=6.3km az=156.0*
**ISC 02 00:44:02.8±1.7, 37.5N±0.1×72.12E±0.09, h150km, n15, σ1.87/19, 6C-6D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 2.72 | 23 | ⇑P | Pn | 00 44 49.7 | +2.8 |
| | 21nm,0.3s | | | | | | |
| SFK | | | | ⇓S | Sn | 00 45 23.8 | +2.8 |
| | 20nm,0.2s | | | | | | |
| DZET | Dzherino | 2.90 | 298 | ⇓P | Pn | 00 44 52.7 | +3.7 |
| | 7.0nm,0.2s | | | | | | |
| DZET | | | | ⇓S | Sn | 00 45 27.7 | +2.9 |
| | 66nm,0.4s | | | | | | |
| AML | Almayashu | 4.77 | 14 | P | Pn | 00 45 15.2 | +1.7 |
| | SNR=26 | | | | | | |
| MNAS | Manas | 4.98 | 3 | ⇑P | Pn | 00 45 17.7 | +1.6 |
| | 5.0nm,0.4s | | | | | | |
| MNAS | | | | ⇑S | Sn | 00 46 11.1 | -2.1 |
| | 11nm,0.6s | | | | | | |
| UCH | Uchtor | 5.06 | 21 | P | Pn | 00 45 18.9 | +1.4 |
| | SNR=21 | | | | | | |
| KZA | Kyzart | 5.16 | 27 | P | Pn | 00 45 19.4 | +0.7 |
| | SNR=9.0 | | | | | | |
| EKS2 | Erkin-Say | 5.30 | 13 | P | Pn | 00 45 22.7 | +2.4 |
| | SNR=14 | | | | | | |
| AAK | Ala-Archa | 5.43 | 19 | ⇑P | Pn | 00 45 23.7 | +1.6 |
| | 6.5nm,0.5s | | | | | | |
| AAK | | | | ⇑S | Sn | 00 46 23.2 | -0.8 |
| | 6.1nm,0.9s | | | | | | |
| AAK | Ala-Archa | 5.43 | 19 | P | Pn | 00 45 24.0 | +1.9 |
| | SNR=15 | | | | | | |
| KK31 | Karatay Array | 5.72 | 348 | ⇑P | Pn | 00 45 27.6 | +1.8 |
| | 1.4nm,0.3s | | | | | | |
| KK31 | | | | ⇓S | Sn | 00 46 28.4 | -2.2 |
| | 17nm,0.5s | | | | | | |
| GEYT | Alibeck | 11.10 | 276 | P | Pn | 00 46 37.9 | +0.6 |
| | 0.1nm,0.3s,baz=92,slow=16,SNR=2.4 | | | | | | |
| GEYT | | | | S | Sn | 00 48 38.9 | -1.2 |
| | 0.3nm,0.3s,baz=121,slow=26,SNR=3.3 | | | | | | |
| AB31 | Akbulak array | 14.68 | 327 | ⇓P | P | 00 47 25.5 | +0.2 |
| | 0.5nm,0.5s,baz=135,slow=11,SNR=13 | | | | | | |
| AB31 | | | | ⇓S | Sn | 00 49 56.3 | -10 |
| | 1.8nm,0.8s,baz=145,slow=25,SNR=2.5 | | | | | | |
| ZALV | Zalesovo Beam | 18.63 | 24 | P | P | 00 48 07.6 | -1.1 |
| | 0.2nm,0.3s,baz=226,slow=9.9,SNR=2.8 | | | | | | |
| ARCES | ARCESS Array B | 40.56 | 337 | P | P | 00 51 26.8 | -0.2 |
| | 0.6nm,0.7s,baz=112,slow=9.0,SNR=6.0 | | | | | | |
| TORD | Torodi Ar. Bea | 66.64 | 269 | P | P | 00 54 35.9 | -1.7 |
| | 0.2nm,0.5s,baz=51,slow=4.6,SNR=6.2 | | | | | | |

*IDC 02 01:03:52.2±2.0, 0.98N×125.82E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.4/33, mbtmp3.5/3, Error ellipse: s-maj=175.7km s-min=26.4km az=65.0*
*DJA 02 01:04:01.4±1.8, 0°N±7°×12°5E±°, h22km±24km, M3.9/8, mb3.8/1, mB4.7/1, MLv3.9/8, Mw(mB)3.9/1*
*ISCJB 02 01:04:02.2±0.7, 0.35N±0.08×125.43E±0.05, h73km, mb3.4/3, Error ellipse: s-maj=12.6km s-min=5.5km az=23.1*
**ISC 02 01:04:02.1±1.1, 0.44N±0.08×125.47E±0.05, h73km, n12, σ1.75/15, mb3.4/3, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KMSI | Cibinong | 1.49 | 275 | P | Pn | 01 04 26.0 | -1.1 |
| KMSI | | | | S | Sn | 01 04 45.4 | -0.5 |
| TNTI | Ternate | 1.93 | 80 | P | Pn | 01 04 33.5 | +0.6 |
| LBMI | Labuha | 2.30 | 118 | P | Pn | 01 04 38.7 | +0.8 |
| LBMI | | | | S | Sn | 01 05 06.3 | +1.0 |
| GTOI | Gorontalo | 2.46 | 274 | P | Pn | 01 04 42.3 | +2.2 |
| SANI | Sanana | 2.53 | 168 | P | Pn | 01 04 40.7 | -0.3 |
| SANI | | | | S | Sn | 01 05 08.5 | -2.3 |
| MRSI | Marisa | 3.52 | 271 | P | Pn | 01 04 54.2 | -0.3 |
| NLAI | Namlea | 4.00 | 156 | P | Pn | 01 05 01.6 | +0.5 |
| APSI | Ampana | 4.05 | 251 | P | Pn | 01 05 04.1 | +2.4 |
| MPSI | Mapaga | 5.57 | 269 | P | Pn | 01 05 23.6 | +1.1 |
| WRA | Warramunga Arr | 22.05 | 157 | P | P | 01 08 51.2 | +0.2 |
| | 0.8nm,0.5s,baz=337,slow=11,SNR=6.7 | | | | | | |
| ASAR | Alice Springs | 25.33 | 162 | P | P | 01 09 25.5 | +3.2 |
| | 0.7nm,0.5s,baz=335,slow=8.2,SNR=8.6 | | | | | | |
| MKAR | Makanchi Array | 59.56 | 327 | P | P | 01 13 55.9 | -2.3 |
| | 0.2nm,0.4s,baz=127,slow=8.3,SNR=4.7 | | | | | | |

**IDC 02 01:09:05.7±9.4, 12.52S×166.57E, h123km±95km, mb3.6/4, mb1 3.9/5, mb1mx3.4/29, mbtmp4.0/5, ML3.7/1, MS3.0/3, Ms1 3.0/3, ms1mx2.7/26, Error ellipse: s-maj=70.3km s-min=31.6km az=160.0, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HNR | Honiara | 7.19 | 295 | LR | LR | 01 14 00.2 | |
| | comp=Z,84nm,18.0s,baz=348,slow=41 | | | | | | |
| DZM | Mont Dzumac | 9.49 | 181 | P | Pn | 01 11 19.5 | 0.0 |
| | 0.7nm,0.3s,baz=180,slow=16,SNR=6.6 | | | | | | |
| DZM | | | | S | Sn | 01 13 04.3 | -0.2 |
| | 0.1nm,0.3s,baz=180,slow=20,SNR=2.0 | | | | | | |
| PMG | Port Moresby | 19.30 | 277 | LR | LR | 01 19 13.5 | |
| | comp=Z,26nm,20.3s,baz=60,slow=32 | | | | | | |
| WRA | Warramunga Arr | 31.77 | 252 | P | P | 01 15 19.2 | +0.6 |
| | 1.0nm,0.9s,baz=81,slow=8.6,SNR=4.6 | | | | | | |
| ASAR | Alice Springs | 32.88 | 246 | P | P | 01 15 27.9 | -0.5 |
| | 1.4nm,0.7s,baz=70,slow=10.0,SNR=14 | | | | | | |
| ASAR | | | | LR | LR | 01 28 51.9 | |
| | comp=Z,55nm,18.0s,baz=97,slow=36 | | | | | | |
| CMAR | Chiang Mai Arr | 73.44 | 294 | P | P | 01 20 25.3 | +0.2 |
| | 1.6nm,0.3s,baz=115,slow=5.6,SNR=4.4 | | | | | | |
| ILAR | Eielson Array | 84.66 | 18 | P | P | 01 21 25.6 | +0.4 |
| | 0.5nm,0.7s,baz=239,slow=5.1,SNR=6.0 | | | | | | |
| ARCES | ARCESS Array B | 117.96 | 346 | PKP | PKPdf | 01 27 36.2 | -1.1 |
| | 1.0nm,0.9s,baz=56,slow=2.3,SNR=3.9 | | | | | | |

*ISCJB 02 01:12:29.8±0.6, 35.68N±0.05×27.18E±0.05, h13km±6km, Error ellipse: s-maj=9.2km s-min=4.2km az=142.8*
*THE 02 01:12:29.4, 35.57N×27.31E, h14km, ML3.4/1, Error ellipse: s-maj=2.3km s-min=0.6km az=326.0*
*ATH 02 01:12:29.2, 35.72N×27.17E, h5km±4km, MD3.1/5*
*CSEM 02 01:12:30.0±0.3, 35.58N×27.22E, h20km, ML3.4, Error ellipse: s-maj=9.3km s-min=4.0km az=149.0*
*ISK 02 01:12:32.3, 35.70N×27.24E, h32km, MD3.2*
*DDA 02 01:12:32.3, 35.81N×27.48E, h24km, Md2.9*
**ISC 02 01:12:29.5±1.0, 35.60N±0.05×27.22E±0.03, h19km±2km, n51, σ1.08/70, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KARP | Karpathos | 0.07 | 227 | ePG | Pg | 01 12 32.9 | -0.2 |
| KARP | | | | eSG | Sg | 01 12 35.7 | +0.1 |
| KARP | Karpathos | 0.07 | 227 | P | Pg | 01 12 33.0 | -0.2 |
| KARP | | | | S | Sg | 01 12 35.5 | -0.1 |
| KARP | Karpathos | 0.07 | 227 | ePg | Pg | 01 12 32.9 | -0.2 |
| KARP | | | | eSg | Sg | 01 12 35.7 | +0.1 |
| ZKR | Zakros | 0.95 | 240 | P | Pb | 01 12 47.1 | -0.3 |
| ZKR | | | | S | Sg | 01 13 00.9 | +0.3 |
| ZKR | Zakros | 0.95 | 240 | P | Pb | 01 12 47.1 | -0.3 |
| ZKR | | | | S | Sg | 01 13 00.9 | +0.3 |
| ARG | Arkhangelos | 0.96 | 49 | ePB | Pb | 01 12 46.8 | -0.7 |
| ARG | | | | eSB | Sb | 01 12 59.5 | -0.3 |
| ARG | Arkhangelos | 0.96 | 49 | P | Pb | 01 12 46.4 | -1.1 |
| ARG | | | | S | Sb | 01 12 59.0 | -0.8 |
| ARG | Arkhangelos | 0.96 | 49 | P | Pb | 01 12 46.4 | -1.1 |
| ARG | Arkhangelos | 0.96 | 49 | ePb | Pb | 01 12 46.8 | -0.7 |
| ARG | | | | S | Sb | 01 12 59.0 | -0.8 |
| ARG | | | | eSb | Sb | 01 12 59.5 | -0.3 |
| NIS1 | Nisyros Isl. | 1.01 | 358 | ePG | Pg | 01 12 49.7 | +0.6 |
| NIS1 | Nisyros Isl. | 1.01 | 358 | ePg | Pg | 01 12 49.7 | +0.6 |
| NPS | Neapolis | 1.36 | 256 | ePN | Pn | 01 12 53.7 | +0.3 |
| NPS | | | | eSB | Sb | 01 13 12.7 | +1.4 |
| NPS | Neapolis | 1.36 | 256 | ePn | Pn | 01 12 53.7 | +0.3 |
| NPS | | | | eSb | Sb | 01 13 12.7 | +1.4 |
| BODT | Bodrum | 1.47 | 3 | ePN | Pn | 01 12 56.0 | +1.1 |
| BODT | | | | eSN | Sn | 01 13 12.3 | -1.3 |
| BODT | Bodrum | 1.47 | 3 | ePn | Pn | 01 12 56.0 | +1.1 |
| BODT | | | | eSn | Sn | 01 13 12.3 | -1.3 |
| BDRM | Kayabasi | 1.48 | 7 | iP | Pn | 01 12 56.0 | +0.9 |
| BDRM | | | | iS | Sn | 01 13 11.1 | -2.8 |
| BDRM | Kayabasi | 1.48 | 7 | P | Pn | 01 12 56.0 | +0.9 |
| BDRM | | | | S | Sn | 01 13 11.1 | -2.8 |
| SANT | Santorini | 1.63 | 299 | ePG | Pn | 01 12 57.6 | +0.4 |
| SANT | Santorini | 1.63 | 299 | ePg | Pn | 01 12 57.6 | +0.4 |
| THR6 | Thira Island, | 1.67 | 298 | P | Pn | 01 12 57.6 | 0.0 |
| THR6 | Thira Island, | 1.67 | 298 | P | Pn | 01 12 57.6 | 0.0 |
| DALY | Dalyan (Mu˜la | 1.68 | 43 | ePN | Pn | 01 12 59.0 | +1.1 |
| DALY | Dalyan (Mu˜la | 1.68 | 43 | ePn | Pn | 01 12 59.0 | +1.1 |
| THR3 | Thira Island, | 1.69 | 299 | P | Pn | 01 12 58.0 | +0.1 |
| THR3 | Thira Island, | 1.69 | 299 | P | Pn | 01 12 58.0 | +0.1 |
| TURN | Turunc | 1.69 | 41 | P | Pn | 01 12 53.8 | -4.2 |
| TURN | | | | S | Sn | 01 13 12.1 | -7.1 |
| THR5 | Thira Island, | 1.73 | 299 | ePN | Pn | 01 12 59.9 | +1.4 |
| THR5 | Thira Island, | 1.73 | 299 | ePn | Pn | 01 12 59.9 | +1.4 |
| YER | Yerkesik | 1.76 | 29 | ePN | Pn | 01 12 59.5 | +0.6 |
| YER | | | | eSN | Sn | 01 13 19.9 | -1.0 |
| YER | Yerkesik | 1.76 | 29 | ePn | Pn | 01 12 59.6 | +0.6 |
| YER | | | | eSn | Sn | 01 13 19.9 | -1.0 |
| FETY | Fethiye | 1.83 | 55 | ePN | Pn | 01 13 01.3 | +1.4 |
| FETY | Fethiye | 1.83 | 55 | ePn | Pn | 01 13 01.3 | +1.4 |
| IDI | Anoyia | 1.93 | 262 | ePG | Pb | 01 13 03.7 | -0.4 |
| IDI | Anoyia | 1.93 | 262 | P | Pn | 01 13 01.4 | +0.1 |
| IDI | Anoyia | 1.93 | 262 | P | Pn | 01 13 01.4 | +0.1 |
| IDI | Anoyia | 1.93 | 262 | ePg | Pb | 01 13 03.7 | -0.4 |
| APE | Apeiranthos | 2.01 | 318 | ePN | Pn | 01 13 04.0 | +1.6 |
| APE | Apeiranthos | 2.01 | 318 | ePN | Pb | 01 13 05.2 | -0.2 |
| APE | Apeiranthos | 2.01 | 318 | P | Pn | 01 13 01.9 | -0.5 |
| APE | Apeiranthos | 2.01 | 318 | P | Pn | 01 13 01.9 | -0.5 |
| APE | Apeiranthos | 2.01 | 318 | ePn | Pn | 01 13 04.0 | +1.6 |
| AYDN | Tasoluk | 2.13 | 14 | iP | Pn | 01 13 06.4 | +2.3 |
| AYDN | | | | iS | Sn | 01 13 30.3 | +0.3 |
| AYDN | Tasoluk | 2.13 | 14 | P | Pn | 01 13 06.4 | +2.3 |
| AYDN | | | | S | Sn | 01 13 30.3 | +0.3 |
| AYDB | Zeytinkoy-Aydi | 2.41 | 13 | ePN | Pn | 01 13 08.4 | +0.4 |
| AYDB | Zeytinkoy-Aydi | 2.41 | 13 | ePn | Pn | 01 13 08.4 | +0.4 |
| ELL | Elmali | 2.46 | 61 | ePN | Pn | 01 13 10.2 | +1.5 |
| ELL | Elmali | 2.46 | 61 | ePn | Pn | 01 13 10.2 | +1.5 |
| GOLH | Golhisar | 2.50 | 48 | iP | Pn | 01 13 10.8 | +1.6 |
| GOLH | Golhisar | 2.50 | 48 | P | Pn | 01 13 10.8 | +1.6 |
| GOLH | | | | S | Sb | 01 13 45.9 | +1.6 |
| KYTH | Kithira | 3.47 | 283 | P | Pn | 01 13 22.8 | +0.4 |
| KYTH | Kithira | 3.47 | 283 | P | Pn | 01 13 22.8 | +0.4 |

*IDC 02 01:23:39.3±1.0, 35.86N×141.12E, h0km, mb3.8/6, mb1 3.9/9, mb1mx3.6/39, mbtmp3.8/9, ML3.7/3, MS2.3/2, Ms1 2.3/2, ms1mx2.1/36, Error ellipse: s-maj=26.1km s-min=19.6km az=71.0*
*NEIC 02 01:23:44.8±2.3, 36.01N×141.12E, h35km±18km, mb4.3/3, Error ellipse: s-maj=27.0km s-min=12.6km az=65.0*
*ISCJB 02 01:23:51.7±0.5, 35.52N±0.04×140.00E±0.05, h82km±4km, mb3.9/9, Error ellipse: s-maj=8.0km s-min=4.6km az=146.2*
*JMA 02 01:23:52.4±0.2, 35.57N×139.99E, h73km±2km, M3.3 Broadband fault plane solution: P waves. NP1: φs359.00000°, δ88.00000°, λ-98.00000°. NP2: φs259.00000°, δ8.00000°, λ-11.00000°. Principal axes: T Plg43.0000°, Azm97.0000°; N Plg8.0000°, Azm359.0000°; P Plg46.0000°, Azm261.0000°;*
**ISC 02 01:23:52.7±0.9, 35.54N±0.04×139.99E±0.05, h73km±7km, n32, σ0.89/34, mb3.9/9, 4C-2D, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JCN | Nagara | 0.21 | 125 | ⇓P | Pn | 01 24 04.3 | +0.5 |
| JCN | | | | S | Sn | 01 24 13.1 | +1.3 |
| I30JP | ISUMI INFRASON | 0.35 | 131 | Pg | Pn | 01 23 52.3 | -12 |
| I30JP | | | | Lg | Lg | 01 24 16.0 | |
| JOD2 | Odawara 2 | 0.79 | 250 | ⇑P | Pn | 01 24 08.6 | -0.3 |
| JOD2 | | | | S | Sn | 01 24 20.1 | -0.8 |
| BSO3 | Boso 3 | 0.85 | 150 | ⇓P | Pn | 01 24 09.1 | -0.2 |
| BSO3 | | | | S | Sn | 01 24 22.7 | +1.1 |
| JIM2 | Oshima 3 | 0.94 | 209 | P | Pn | 01 24 09.9 | -0.8 |
| JIM2 | | | | S | Sn | 01 24 22.7 | -1.3 |
| JAG | Ashikaga | 0.98 | 334 | ⇑P | Pn | 01 24 11.0 | -0.2 |
| JAG | | | | S | Sn | 01 24 24.7 | -0.3 |
| JRY | Ryogami san | 1.01 | 299 | ⇑P | Pn | 01 24 11.8 | +0.3 |
| JRY | | | | S | Sn | 01 24 26.4 | +0.9 |
| JYN | Shimob | 1.18 | 268 | ⇑P | Pn | 01 24 13.7 | 0.0 |
| JYN | | | | S | Sn | 01 24 29.6 | +0.1 |
| BSO1 | Boso 1 | 1.20 | 137 | P | Pn | 01 24 12.7 | -0.7 |
| BSO1 | | | | S | Sn | 01 24 28.9 | 0.0 |
| JIZS | Izushimoda | 1.23 | 228 | P | Pn | 01 24 14.0 | -0.2 |
| JIZS | | | | S | Sn | 01 24 29.9 | -0.5 |
| JKT | Katashina | 1.36 | 334 | S | Sn | 01 24 33.5 | -0.2 |
| MJAR | Matsushiro Arr | 1.76 | 305 | Pn | Pn | 01 24 20.6 | -0.6 |
| | 18nm,0.3s,baz=113,slow=11,SNR=52 | | | | | | |
| MJAR | | | | Sn | Sn | 01 24 44.5 | +1.6 |
| | 18nm,0.3s,baz=123,slow=14,SNR=15 | | | | | | |
| MJAR | | | | LR | LR | 01 25 17.5 | |
| | comp=Z,48nm,21.4s,baz=100,slow=41 | | | | | | |
| MAJO | Matsushiro | 1.76 | 305 | ePn | Pn | 01 24 21.6 | +0.3 |
| MAT | Matsushiro | 1.76 | 305 | P | Pn | 01 24 21.7 | +0.5 |
| MAT | | | | eS | Sn | 01 24 43.2 | +0.3 |
| JHJ | Hachijo jima 2 | 2.42 | 184 | Pn | Pn | 01 24 26.6 | -3.5 |
| | 8.8nm,0.3s,baz=107,slow=19,SNR=1.8 | | | | | | |
| JHJ | | | | Sn | Sn | 01 24 59.8 | +1.0 |
| | 36nm,0.3s,baz=68,slow=19,SNR=4.5 | | | | | | |
| JHJ2 | Mitsune | 2.43 | 183 | ePn | Pn | 01 24 32.2 | +2.0 |
| JNU | Nakatsue | 7.91 | 255 | Pn | Pn | 01 25 47.0 | +1.8 |
| | 1.0nm,0.3s,baz=57,slow=9.0,SNR=5.5 | | | | | | |
| JNU | | | | LR | LR | 01 29 03.4 | |
| | comp=Z,27nm,18.3s,baz=118,slow=36 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.44 | 116 | T | T | 01 59 26.8 | |
| | baz=308,slow=75,SNR=14 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.45 | 117 | T | T | 01 59 26.8 | |
| | baz=308,slow=75,SNR=10.0 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.46 | 116 | T | T | 01 59 26.8 | |
| | baz=308,slow=75,SNR=10 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 29.08 | 119 | T | T | 02 00 10.5 | |
| | baz=311,slow=75,SNR=3.5 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 29.08 | 119 | T | T | 02 00 10.5 | |
| | baz=311,slow=75,SNR=6.5 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 29.10 | 119 | T | T | 02 00 10.5 | |
| | baz=311,slow=75,SNR=4.3 | | | | | | |
| SLVN | Son La | 34.54 | 256 | eP | P | 01 30 39.1 | +4.8 |
| | 5.2nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 42.09 | 314 | P | P | 01 31 37.2 | -0.1 |
| | 0.7nm,0.4s,baz=93,slow=8.7,SNR=3.3 | | | | | | |
| MKAR | Makanchi Array | 43.96 | 303 | P | P | 01 31 52.5 | +0.1 |
| | 1.0nm,0.5s,baz=86,slow=9.1,SNR=9.2 | | | | | | |
| KURK | Kurchatov | 45.96 | 309 | eP | P | 01 32 07.4 | -0.9 |
| | 1.5nm,0.4s | | | | | | |
| KURBB | Kurchatov Arra | 46.03 | 309 | P | P | 01 32 08.4 | -0.4 |
| | 0.7nm,0.5s,baz=85,slow=7.3,SNR=12 | | | | | | |
| TKM2 | Tokmak 2 | 49.34 | 299 | eP | P | 01 32 35.6 | +0.8 |
| | 1.0nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 55.44 | 186 | P | P | 01 33 18.4 | -1.4 |
| | 0.5nm,0.4s,baz=1.3,slow=7.6,SNR=16 | | | | | | |
| ASAR | Alice Springs | 59.16 | 187 | P | P | 01 33 45.8 | -0.2 |
| | 0.1nm,0.3s,baz=17,slow=9.7,SNR=2.5 | | | | | | |
| NEW | Newport | 72.00 | 43 | P | P | 01 34 58.9 | -10 |
| | 0.9nm,0.5s,baz=270,slow=9.1,SNR=3.4 | | | | | | |

*ISCJB 02 01:34:46.4±0.7, 76.76N±0.09×18.7E±0.2, h17km, Error ellipse: s-maj=14.3km s-min=5.5km az=22.0*
*CSEM 02 01:34:46.0±0.2, 76.95N×18.95E, h10km, ML2.9, Error ellipse: s-maj=6.9km s-min=4.0km az=52.0*
*NAO 02 01:34:47.0±1.2, 76.94N×18.80E, h13km±11km, ML4.5*
*BER 02 01:34:49.4, 77.00N×18.73E, h15km, MD2.0, ML2.9, ML4.5(NAO)*
**ISC 02 01:34:47.1±0.8, 76.84N±0.05×18.72E±0.04, h17km, n23, σ1.58/34, Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HSP | Hornsund | 0.74 | 285 | Pg | Pb | 01 35 01.6 | +0.1 |
| HSP | | | | Lg | Lg | 01 35 11.4 | |
| HSP | Hornsund | 0.74 | 285 | Pg | Pb | 01 35 01.6 | +0.1 |
| HSP | | | | Lg | Lg | 01 35 11.4 | |
| HSPB | Hornsund (broa | 0.74 | 284 | eP | Pb | 01 35 01.4 | -0.1 |
| HSPB | | | | eS | Sb | 01 35 11.2 | -0.1 |
| HSPB | | | | IAML | | 01 35 15.0 | |
| | comp=Z,316nm,0.4s | | | | | | |
| HSPB | Hornsund (broa | 0.74 | 284 | eP | Pb | 01 35 01.4 | -0.1 |
| | SNR=62 | | | | | | |
| HSPB | | | | eS | Sb | 01 35 11.2 | -0.1 |
| | SNR=62 | | | | | | |
| SPA0 | Spitsbergen Ar | 1.44 | 340 | Pn | Pn | 01 35 11.5 | -0.9 |
| | baz=150,slow=18 | | | | | | |
| SPA0 | | | | Lg | Lg | 01 35 28.7 | |
| | baz=165,slow=18 | | | | | | |
| SPA0 | Spitsbergen Ar | 1.44 | 340 | Pn | Pn | 01 35 11.5 | -0.9 |
| | baz=150,slow=18 | | | | | | |
| SPA0 | | | | ePg | Pn | 01 35 12.4 | +0.1 |
| SPA0 | | | | Lg | Lg | 01 35 28.7 | |
| | baz=165,slow=18 | | | | | | |
| SPA0 | | | | IAML | | 01 35 35.5 | |
| | comp=Z,189nm,0.4s | | | | | | |
| SPA0 | Spitsbergen Ar | 1.44 | 340 | Pn | Pn | 01 35 11.5 | -0.9 |
| | SNR=62 | | | | | | |
| SPA0 | Spitsbergen Ar | 1.44 | 340 | ePg | Pn | 01 35 12.4 | +0.1 |
| | SNR=95 | | | | | | |
| SPA0 | | | | Lg | Lg | 01 35 28.7 | |
| | SNR=50 | | | | | | |
| HOPEN | Hopen | 1.50 | 100 | Pn | Pb | 01 35 13.8 | -0.5 |
| HOPEN | | | | Sn | Sn | 01 35 32.6 | +0.5 |
| HOPEN | | | | Lg | Lg | 01 35 34.7 | |
| HOPEN | Hopen | 1.50 | 100 | Pn | Pb | 01 35 13.8 | -0.5 |
| HOPEN | | | | Sn | Sn | 01 35 32.6 | +0.5 |
| HOPEN | | | | IAML | | 01 35 37.3 | |
| | comp=Z,357nm,0.3s | | | | | | |
| HOPEN | Hopen | 1.50 | 100 | Pn | Pb | 01 35 13.8 | -0.5 |
| | SNR=62 | | | | | | |
| HOPEN | | | | Sn | Sn | 01 35 32.6 | +0.5 |
| | SNR=62 | | | | | | |
| HOPEN | | | | Lg | Lg | 01 35 34.7 | |
| BJO | Bjornoya | 2.35 | 177 | Lg | Lg | 01 36 06.2 | |
| BJO | Bjornoya | 2.35 | 177 | ePg | Pg | 01 35 33.1 | +1.0 |
| BJO | | | | eSg | Sg | 01 36 05.4 | +2.8 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| BJO | | | | IAML | | 01 36 10.8 | |
| | comp=Z,115nm,0.4s | | | | | | |
| BJO | Bjornoya | 2.35 | 177 | ePg | Pg | 01 35 33.1 | +1.0 |
| | SNR=92 | | | | | | |
| BJO | | | | eSg | Sg | 01 36 05.4 | +2.8 |
| | SNR=92 | | | | | | |
| BJO | | | | Lg | Lg | 01 36 06.2 | |
| KBS | Kingsbay | 2.54 | 329 | Pn | Pn | 01 35 26.1 | -1.3 |
| KBS | | | | Pg | Pb | 01 35 32.2 | +0.2 |
| KBS | | | | Lg | Lg | 01 36 03.8 | |
| KBS | Kingsbay | 2.54 | 329 | Pn | Pn | 01 35 26.1 | -1.3 |
| KBS | | | | Pg | Pb | 01 35 32.2 | +0.2 |
| KBS | | | | Lg | Lg | 01 36 03.8 | |
| KBS | | | | IAML | | 01 36 07.8 | |
| | comp=Z,204nm,0.4s | | | | | | |
| KBS | Kingsbay | 2.54 | 329 | Pn | Pn | 01 35 26.1 | -1.3 |
| | SNR=62 | | | | | | |
| ARA0 | ARCESS Array S | 7.59 | 162 | Pn | Pn | 01 36 37.8 | +1.0 |
| | baz=352,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 01 37 57.5 | -4.8 |
| | baz=349,slow=22 | | | | | | |
| ARA0 | ARCESS Array S | 7.59 | 162 | P | Pn | 01 36 37.8 | +1.0 |
| | baz=352,slow=14 | | | | | | |
| ARA0 | | | | S | Sn | 01 37 57.5 | -4.8 |
| | baz=349,slow=22 | | | | | | |
| ARA0 | ARCESS Array S | 7.59 | 162 | P | Pn | 01 36 37.8 | +1.0 |
| | SNR=57 | | | | | | |
| APA0 | Apatity Array | 10.20 | 148 | Pn | Pn | 01 37 11.9 | -0.5 |
| | baz=333,slow=16 | | | | | | |
| APA0 | Apatity Array | 10.20 | 148 | P | Pn | 01 37 11.9 | -0.5 |
| | baz=333,slow=16 | | | | | | |
| APA0 | Apatity Array | 10.20 | 148 | P | Pn | 01 37 11.9 | -0.5 |
| | SNR=57 | | | | | | |

**MEX 02 02:15:48.7**±0.2**,18°.06N×101°.66W,h4km,MD3.7, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZIIG | Zihuatanejo | 0.49 | 158 | eP | Pg | 02 15 57.6 | -0.5 |
| ZIIG | | | | eS | Sg | 02 16 04.7 | +0.4 |
| ARIG | Puente Sto Nin | 1.26 | 80 | i P | Pg | 02 16 09.3 | -3.7 |
| ARIG | | | | i S | Sg | 02 16 25.0 | -4.4 |
| CAIG | El Cayaco | 1.66 | 127 | eP | Pn | 02 16 15.7 | -3.0 |
| CAIG | | | | eS | Sn | 02 16 35.4 | -5.1 |
| PLIG | Platanillo | 2.07 | 80 | eP | Pn | 02 16 20.8 | -3.6 |
| PLIG | | | | eS | Sn | 02 16 46.4 | -4.4 |
| TLIG | Tlapa | 2.98 | 99 | eP | Pn | 02 16 34.2 | -2.8 |
| TLIG | | | | eS | Sn | 02 17 09.7 | -3.7 |

*AUST **02** 02:33:50.3±22.0,20°.48S×174°.32W,h0km±1km,Error ellipse: s-maj=2.9km s-min=2.0km az=9.0*
*IDC **02** 02:33:52.7±0.5,21°.84S×174°.37W,h0km,mb4.5/13, mb1 4.7/15,mb1mx4.6/24,mbtmp4.5/15,ML4.1/2,MS3.5/4, Ms1 3.5/4,ms1mx3.1/30,Error ellipse: s-maj=22.2km s-min=15.0km az=112.0*
*ISCJB **02** 02:33:55.5±0.2,21°.92S±0°.06×174°.45W±0°.05,h27km, mb4.9/67,MS3.8/3,Error ellipse: s-maj=8.9km s-min=4.8km az=148.7*
*MOS **02** 02:33:56.6±1.1,21°.91S×174°.52W,h33km,mb5.2/20, Error ellipse: s-maj=14.2km s-min=10.1km az=59.0*
*NEIC **02** 02:33:58.7±1.4,21°.89S×174°.49W,h39km±13km,mb5.0/52, Error ellipse: s-maj=9.5km s-min=5.5km az=156.0*
*BJI **02** 02:34:08.8,21°.45S×175°.23W,h101km,mb4.9/18, mB5.3/12*
**ISC 02 02:33:57.1**±0.4**,21°.96S**±0°.06×**174°.36W**±0°.09**,h27km, n252,**σ**1s.26**/254**,mb5.0**/67**,MS3.5**/3**,14C-6D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIUE | Niue | 5.04 | 56 | P | Pn | 02 35 01.2 | -10 |
| | baz=4.4,SNR=105 | | | | | | |
| RAO | Raoul Island | 7.94 | 203 | Pn | Pn | 02 35 50.7 | -0.1 |
| | 110nm,0.3s,baz=52,slow=20,SNR=3.4 | | | | | | |
| RAO | | | | Sn | Sn | 02 37 16.5 | -3.3 |
| | 55nm,0.3s,baz=90,slow=20,SNR=2.8 | | | | | | |
| MSVF | Nonsavu | 8.29 | 299 | eP | Pn | 02 36 00.4 | +4.7 |
| MSVF | Nonsavu | 8.29 | 299 | ePn | Pn | 02 36 00.4 | +4.7 |
| AFI | Afiamalu | 8.37 | 17 | Pn | Pn | 02 35 49.4 | -7.4 |
| | 8.5nm,0.3s,baz=191,slow=16,SNR=4.5 | | | | | | |
| AFI | | | | Sn | Sn | 02 37 14.8 | -16 |
| | 12nm,0.3s,baz=58,slow=15,SNR=3.0 | | | | | | |
| AFI | Afiamalu | 8.37 | 17 | eP | Pn | 02 35 48.8 | -8.0 |
| AFI | Afiamalu | 8.37 | 17 | ePn | Pn | 02 35 48.8 | -8.0 |
| AFI | | | | Sn | Sn | 02 37 14.8 | -16 |
| RAR | Rarotonga | 13.59 | 90 | Pn | Pn | 02 36 58.6 | -10 |
| | 12nm,0.3s,baz=222,slow=4.8,SNR=9.1 | | | | | | |
| RAR | | | | Sn | Sn | 02 39 19.7 | -19 |
| | 2.5nm,0.3s,baz=216,slow=17,SNR=2.5 | | | | | | |
| RAR | | | | LR | LR | 02 40 59.2 | |
| | comp=Z,281nm,19.3s,baz=272,slow=31 | | | | | | |
| DZM | Mont Dzumac | 17.81 | 266 | P | Pn | 02 38 02.6 | -0.6 |
| | 0.2nm,0.3s,baz=90,slow=20,SNR=2.8 | | | | | | |
| DZM | | | | LR | LR | 02 43 06.3 | |
| | comp=Z,90nm,19.8s,baz=68,slow=31 | | | | | | |
| URZ | Urewera | 17.83 | 202 | P | P | 02 38 05.3 | +1.4 |
| | 1.7nm,0.3s,baz=360,slow=4.5,SNR=7.2 | | | | | | |
| URZ | | | | S | Sn | 02 41 10.7 | -11 |
| | 0.9nm,0.3s,baz=43,slow=20,SNR=5.6 | | | | | | |
| URZ | Urewera | 17.83 | 202 | eP | P | 02 38 05.2 | +1.4 |
| URZ | | | | S | Sn | 02 41 10.7 | -11 |
| URZ | | | | eS | S | 02 41 28.9 | +1.4 |
| BFZ | Birch Farm | 20.30 | 201 | eP | Pn | 02 38 34.4 | +1.5 |
| | 32nm,0.9s | | | | | | |
| TBI | Tubuai | 23.01 | 98 | eLQ | LQ | 02 43 18.2 | |
| | 712nm,26.0s | | | | | | |
| TBI | | | | eLR | LR | 02 44 07.6 | |
| | 220nm,28.0s | | | | | | |
| PAE | Paea | 23.69 | 84 | eT | T | 03 04 22.1 | |
| | 2.3nm,0.3s | | | | | | |
| PPT2 | Papeete2 | 23.71 | 84 | eLR | LR | 02 44 45.6 | |
| | 297nm,23.0s | | | | | | |
| PPT | Papeete | 23.71 | 84 | LR | LR | 02 46 47.0 | |
| | comp=Z,175nm,18.8s,baz=246,slow=33 | | | | | | |
| RPZ | Rata Peaks | 24.85 | 206 | P | P | 02 39 17.2 | -0.1 |
| | 16nm,0.7s,baz=160,slow=1.8,SNR=10 | | | | | | |
| RPZ | Rata Peaks | 24.85 | 206 | eP | P | 02 39 20.9 | +3.6 |
| | 581nm,2.8s | | | | | | |
| EIDS | Eidsvold | 31.79 | 257 | P | P | 02 40 19.8 | +0.4 |
| | baz=32,SNR=3.1 | | | | | | |
| RMQ | Roma | 33.86 | 255 | P | P | 02 40 38.0 | +0.4 |
| | baz=34,SNR=4.6 | | | | | | |
| CTAO | Charters Tower | 36.75 | 266 | eP | P | 02 41 01.0 | -1.5 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| CTAO | Charters Tower | 36.75 | 266 | eP | P | 02 41 01.0 | -1.5 |
| | comp=Z,11nm,0.8s | | | | | | |
| PMG | Port Moresby | 38.98 | 283 | eP | P | 02 41 21.3 | -0.1 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,47nm,1.2s | | | | | | |
| PMG | Port Moresby | 38.98 | 283 | eP | P | 02 41 21.3 | -0.1 |
| | comp=Z,47nm,1.2s | | | | | | |
| COEN | Coen | 41.07 | 274 | eP | P | 02 41 38.5 | -0.2 |
| | comp=Z,8.9nm,0.8s | | | | | | |
| MMPI | Merauke | 45.51 | 280 | P | P | 02 42 25.0 | +10 |
| | baz=45,SNR=3.2 | | | | | | |
| AS01 | Alice Springs | 47.47 | 258 | eP | P | 02 42 27.6 | -2.3 |
| ASAR | Alice Springs | 47.51 | 258 | P | P | 02 42 28.7 | -1.6 |
| | comp=Z,8.3nm,0.9s,baz=94,slow=8.0,SNR=41 | | | | | | |
| ASAR | | | | PcP | PcP | 02 44 00.6 | +0.3 |
| | comp=Z,2.0nm,0.7s,baz=104,slow=3.6,SNR=5.9 | | | | | | |
| JAY | Jayapura | 47.72 | 287 | P | P | 02 42 31.9 | -0.1 |
| | baz=47,SNR=4.3 | | | | | | |
| WRAB | Tennant Creek | 47.77 | 263 | ⇑eP | P | 02 42 30.4 | -1.9 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 47.77 | 263 | eP | P | 02 42 30.5 | -1.9 |
| | comp=Z,9.4nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 47.78 | 263 | P | P | 02 42 30.3 | -2.1 |
| | comp=Z,5.3nm,0.7s,baz=99,slow=8.5,SNR=36 | | | | | | |
| WRA | | | | PcP | PcP | 02 44 01.6 | +0.3 |
| | comp=Z,2.7nm,0.7s,baz=96,slow=3.5,SNR=6.8 | | | | | | |
| FORT | Forrest | 51.86 | 247 | P | P | 02 43 02.1 | -1.2 |
| | baz=52,SNR=9.6 | | | | | | |
| FORT | Forrest | 51.86 | 247 | eP | P | 02 43 01.8 | -1.5 |
| | comp=Z,43nm,0.7s | | | | | | |
| WRKA | Warakurna | 52.35 | 255 | P | P | 02 43 05.5 | -1.6 |
| | baz=53,SNR=12 | | | | | | |
| FITZ | Fitzroy Crossi | 56.21 | 262 | P | P | 02 43 34.0 | -1.2 |
| | baz=56,SNR=5.9 | | | | | | |
| FITZ | Fitzroy Crossi | 56.21 | 262 | eP | P | 02 43 34.0 | -1.2 |
| | comp=Z,23nm,1.5s | | | | | | |
| VNDA | Vanda | 56.80 | 186 | P | P | 02 43 39.5 | +1.1 |
| | comp=Z,2.2nm,0.7s,baz=359,slow=5.7,SNR=13 | | | | | | |
| VNDA | | | | PcP | PcP | 02 44 35.1 | +1.1 |
| | comp=Z,1.3nm,0.8s,baz=39,slow=5.0,SNR=2.6 | | | | | | |
| VNDA | Vanda | 56.80 | 186 | eP | P | 02 43 40.6 | +2.1 |
| VNDA | | | | | | 02 44 35.1 | |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| VNDA | Vanda | 56.80 | 186 | eP | P | 02 43 40.6 | +2.1 |
| | comp=Z,2.8nm,0.8s | | | | | | |
| VNDA | | | | PcP | PcP | 02 44 35.1 | +1.1 |
| SOEI | Soe | 59.94 | 271 | eP | P | 02 44 01.8 | +0.2 |
| | comp=Z,34nm,0.7s | | | | | | |
| KLBR | Kellerberrin | 60.53 | 245 | P | P | 02 44 05.6 | +0.4 |
| | baz=61,SNR=5.0 | | | | | | |
| MBWA | Marble Bar | 60.85 | 257 | eP | P | 02 44 06.4 | -1.1 |
| | comp=Z,59nm,2.0s | | | | | | |
| QSPA | South Pole Qui | 68.12 | 180 | eP | P | 02 44 55.0 | +0.5 |
| | comp=Z,145nm,2.8s | | | | | | |
| KKM | Kota Kinabalu | 73.41 | 284 | eP | P | 02 45 26.0 | -1.5 |
| | comp=Z,7.5nm,0.7s | | | | | | |
| MJAR | Matsushiro Arr | 73.42 | 322 | P | P | 02 45 26.3 | -0.7 |
| | comp=Z,4.8nm,0.6s,baz=157,slow=6.3,SNR=15 | | | | | | |
| MAJO | Matsushiro | 73.42 | 322 | ⇓eP | P | 02 45 26.8 | -0.2 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,41nm,1.0s | | | | | | |
| MAJO | Matsushiro | 73.42 | 322 | eP | P | 02 45 26.3 | -0.7 |
| | comp=Z,7.0nm,0.7s | | | | | | |
| MAT | Matsushiro | 73.42 | 322 | P | P | 02 45 26.3 | -0.7 |
| MAT | | | | eS | S | 02 54 45.6 | -9.0 |
| ERM | Erimo | 74.80 | 329 | ⇑iP | P | 02 45 34.6 | -0.2 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,41nm,1.3s | | | | | | |
| KSM | Kuching | 76.97 | 277 | eP | P | 02 45 47.9 | 0.0 |
| ISA | Isabella | 77.98 | 44 | eP | P | 02 45 53.9 | +0.8 |
| ISA | Isabella | 77.98 | 44 | eP | P | 02 45 53.9 | +0.8 |
| | comp=Z,1μm,0.8s | | | | | | |
| CMB | Columbia Colle | 78.28 | 41 | eP | P | 02 45 54.3 | -0.4 |
| CMB | Columbia Colle | 78.28 | 41 | eP | P | 02 45 54.3 | -0.4 |
| OHCM | Honcut | 78.47 | 39 | eP | P | 02 45 56.4 | +0.7 |
| PETK | Petropavlovsk- | 78.59 | 343 | P | P | 02 45 55.5 | -0.5 |
| | comp=Z,12nm,0.6s,baz=144,slow=9.6,SNR=13 | | | | | | |
| BELC | Belle Mtn. Jos | 78.60 | 46 | P | P | 02 45 56.8 | +0.1 |
| | baz=79 | | | | | | |
| WDC | Whiskeytown Da | 78.68 | 38 | eP | P | 02 45 57.5 | +0.7 |
| WDC | | | | pmax | pmax | | |
| | comp=Z,50nm,2.1s | | | | | | |
| WDC | Whiskeytown Da | 78.68 | 38 | eP | P | 02 45 57.5 | +0.7 |
| | comp=Z,50nm,2.1s | | | | | | |
| CWC | Cottonwood Cre | 78.71 | 43 | P | P | 02 45 56.9 | -0.4 |
| | baz=79 | | | | | | |
| YSS | Yuzh-Sakhalins | 78.75 | 332 | ⇑eP | P | 02 45 57.0 | 0.0 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| GSC | Goldstone | 78.84 | 45 | P | P | 02 45 58.0 | +0.1 |
| | baz=79 | | | | | | |
| MPMC | Manual Prospec | 78.85 | 44 | P | P | 02 45 57.8 | -0.3 |
| | baz=79 | | | | | | |
| N02D | Trinity Center | 78.85 | 37 | P | P | 02 45 57.7 | -0.2 |
| | baz=79 | | | | | | |
| O03D | Paynes Creek | 78.92 | 38 | P | P | 02 45 57.9 | -0.3 |
| | baz=79 | | | | | | |
| DAC | Darwin (Calif) | 78.92 | 44 | eP | P | 02 45 59.8 | +1.3 |
| DAC | | | | pmax | pmax | | |
| | comp=Z,28nm,1.8s | | | | | | |
| DAC | Darwin (Calif) | 78.92 | 44 | eP | P | 02 45 59.8 | +1.3 |
| | comp=Z,28nm,1.8s | | | | | | |
| MTUM | Tungsten Hills | 78.97 | 42 | eP | P | 02 45 59.8 | +1.1 |
| M02C | Callahan | 79.05 | 37 | P | P | 02 45 59.0 | +0.1 |
| | baz=79 | | | | | | |
| IRM | Iron Mountain | 79.26 | 46 | P | P | 02 46 01.0 | +0.8 |
| | baz=80 | | | | | | |
| YBH | Yreka Blue Hor | 79.36 | 37 | eP | P | 02 46 00.9 | +0.3 |
| YBH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| YBH | Yreka Blue Hor | 79.36 | 37 | eP | P | 02 46 00.9 | +0.3 |
| | comp=Z,5.5nm,1.0s | | | | | | |
| GRAC | Grapevine Rang | 79.50 | 43 | P | P | 02 46 01.6 | +0.2 |
| | baz=80 | | | | | | |
| NV01 | Mina Array Sit | 79.80 | 41 | eP | P | 02 46 02.5 | -0.8 |
| NVAR | Mina Array Bea | 79.80 | 41 | P | P | 02 46 02.9 | -0.4 |
| | comp=Z,2.7nm,0.7s,baz=225,slow=8.2,SNR=26 | | | | | | |
| M04C | Macdoel | 79.88 | 37 | P | P | 02 46 03.5 | 0.0 |
| | baz=80 | | | | | | |
| PDMCI | Parker Dam,Lak | 80.02 | 47 | P | P | 02 46 04.7 | +0.4 |
| | baz=80 | | | | | | |
| TPNV | Topopah Spring | 80.19 | 44 | eP | P | 02 46 05.2 | -0.1 |
| TPNV | | | | pmax | pmax | | |
| | comp=Z,45nm,2.3s | | | | | | |
| TPNV | Topopah Spring | 80.19 | 44 | P | P | 02 46 04.6 | -0.7 |
| | baz=80 | | | | | | |
| TPNV | Topopah Spring | 80.19 | 44 | eP | P | 02 46 05.2 | -0.1 |
| | comp=Z,45nm,2.3s | | | | | | |
| KSRS | Korea Array | 80.25 | 317 | P | P | 02 46 06.1 | +0.7 |
| | comp=Z,1.7nm,0.8s,baz=144,slow=7.8,SNR=4.9 | | | | | | |
| KSAR | Wonju Array Be | 80.26 | 317 | P | P | 02 46 06.1 | +0.6 |
| KSAR | Wonju Array Be | 80.26 | 317 | P | P | 02 46 06.1 | +0.6 |
| SHPR | Sheep Range | 80.63 | 45 | eP | P | 02 46 08.4 | +0.7 |
| J04D | Umpqua Nationa | 80.70 | 36 | P | P | 02 46 07.5 | -0.5 |
| | baz=81 | | | | | | |
| MOD | Modoc | 80.82 | 38 | eP | P | 02 46 08.3 | -0.3 |
| | comp=Z,7.2nm,1.0s | | | | | | |
| I04A | Tendick Farm, | 80.91 | 35 | P | P | 02 46 08.3 | -0.6 |
| | baz=81 | | | | | | |
| K05A | Summer Lake | 81.03 | 37 | eP | P | 02 46 09.8 | +0.1 |
| | comp=Z,21nm,1.3s | | | | | | |
| J05D | Fort Rock, OR | 81.21 | 36 | P | P | 02 46 10.6 | 0.0 |
| | baz=82 | | | | | | |
| TUC | Tucson | 81.25 | 50 | eP | P | 02 46 12.0 | +1.0 |
| TUC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| TUC | Tucson | 81.25 | 50 | eP | P | 02 46 12.0 | +1.0 |
| | comp=Z,8.2nm,1.2s | | | | | | |
| MAW | Mawson | 81.33 | 199 | P | P | 02 46 11.7 | +1.0 |
| | comp=Z,1.2nm,0.7s,baz=141,slow=6.1,SNR=10 | | | | | | |
| MAW | Mawson | 81.33 | 199 | eP | P | 02 46 11.9 | +1.2 |
| MAW | Mawson | 81.33 | 199 | P | P | 02 46 11.9 | +1.2 |
| | baz=82,SNR=5.4 | | | | | | |
| MAW | Mawson | 81.33 | 199 | eP | P | 02 46 11.9 | +1.2 |
| R11A | Troy Canyon, C | 81.44 | 43 | P | P | 02 46 11.3 | -0.7 |
| | baz=82 | | | | | | |
| R11A | Troy Canyon, C | 81.44 | 43 | eP | P | 02 46 11.5 | -0.6 |
| | comp=Z,31nm,2.3s | | | | | | |
| USRK | Ussuriysk Ar. | 82.10 | 324 | P | P | 02 46 15.8 | +0.7 |
| | comp=Z,1.7nm,0.7s,baz=50,slow=6.0,SNR=4.7 | | | | | | |
| CCUT | Cedar City | 82.40 | 45 | eP | P | 02 46 18.6 | +1.4 |
| | comp=Z,21nm,2.0s | | | | | | |
| WUAZ | Wupatki | 82.59 | 47 | eP | P | 02 46 19.4 | +1.3 |
| | comp=Z,9.4nm,1.1s | | | | | | |
| I07A | Izee | 82.68 | 36 | eP | P | 02 46 18.1 | -0.2 |
| | comp=Z,89nm,2.6s | | | | | | |
| J08A | Circle Bar Ran | 82.79 | 37 | eP | P | 02 46 19.7 | +0.8 |
| | comp=Z,32nm,1.8s | | | | | | |
| ELK | Elko | 83.09 | 41 | eP | P | 02 46 21.3 | +0.7 |
| ELK | Elko | 83.09 | 41 | eP | P | 02 46 21.3 | +0.7 |
| LON | Longmire | 83.21 | 33 | eP | P | 02 46 20.8 | -0.1 |
| LON | | | | pmax | pmax | | |
| | comp=Z,36nm,2.1s | | | | | | |
| LON | Longmire | 83.21 | 33 | eP | P | 02 46 20.8 | -0.1 |
| | comp=Z,36nm,2.1s | | | | | | |
| NJ2 | Nanjing | 83.43 | 308 | eP | P | 02 46 22.4 | +0.1 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,50nm,0.8s | | | | | | |
| MSU | Marysvale | 83.72 | 44 | eP | P | 02 46 24.1 | +0.2 |
| MSU | Marysvale | 83.72 | 44 | eP | P | 02 46 24.1 | +0.2 |
| G08A | Pilot Rock | 83.75 | 36 | eP | P | 02 46 23.1 | -0.7 |
| | comp=Z,17nm,1.3s | | | | | | |
| B05A | Bryant | 84.08 | 32 | P | P | 02 46 25.2 | 0.0 |
| | baz=84 | | | | | | |
| E07A | Sunnyside | 84.09 | 34 | eP | P | 02 46 25.9 | +0.5 |
| | comp=Z,13nm,0.9s | | | | | | |
| HAWA | Hanford | 84.15 | 35 | eP | P | 02 46 26.4 | +0.7 |
| | comp=Z,16nm,1.4s | | | | | | |
| DUG | Dugway | 84.27 | 43 | eP | P | 02 46 27.2 | +0.6 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| DUG | Dugway | 84.27 | 43 | P | P | 02 46 26.2 | -0.4 |
| | baz=84 | | | | | | |
| DUG | Dugway | 84.27 | 43 | eP | P | 02 46 27.1 | +0.6 |
| | comp=Z,5.4nm,1.3s | | | | | | |
| MFID | Camas Ranch | 84.34 | 39 | eP | P | 02 46 26.4 | -0.4 |
| | comp=Z,11nm,1.3s | | | | | | |
| QIZ | Qiongzhong | 84.55 | 293 | P | P | 02 46 28.3 | 0.0 |
| QIZ | | | | S | S | 02 56 45.6 | -8.3 |
| NLU | North Lily Min | 84.60 | 43 | eP | P | 02 46 29.8 | +1.4 |
| | comp=Z,28nm,2.2s | | | | | | |
| TMUT | Trail Mountain | 84.78 | 44 | eP | P | 02 46 29.4 | 0.0 |
| | comp=Z,32nm,0.9s | | | | | | |
| MNTX | Cornudas Mount | 84.86 | 53 | P | P | 02 46 29.3 | -0.4 |
| | baz=85 | | | | | | |
| MNTX | Cornudas Mount | 84.86 | 53 | eP | P | 02 46 29.2 | -0.4 |
| | comp=Z,8.9nm,1.4s | | | | | | |
| D08A | Wollman Farm, | 84.90 | 34 | eP | P | 02 46 30.4 | +1.0 |
| LAZ | Ladron | 84.94 | 50 | eP | P | 02 46 30.1 | -0.1 |
| | comp=Z,12nm,1.7s | | | | | | |
| TX31 | Lajitas Ar. Si | 85.02 | 56 | eP | P | 02 46 29.7 | -0.9 |
| TXAR | Lajitas Array | 85.02 | 56 | P | P | 02 46 29.4 | -1.1 |
| | comp=Z,1.9nm,0.9s,baz=201,slow=6.7,SNR=17 | | | | | | |
| O16A | Springville | 85.10 | 43 | eP | P | 02 46 29.2 | -1.7 |
| | comp=Z,41nm,1.9s | | | | | | |
| F10A | Beach Ranch, E | 85.12 | 36 | eP | P | 02 46 29.7 | -1.0 |
| | comp=Z,9.3nm,0.9s | | | | | | |
| SRU | San Rafael | 85.13 | 44 | eP | P | 02 46 30.8 | -0.2 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,21nm,1.4s | | | | | | |
| SRU | San Rafael | 85.13 | 44 | eP | P | 02 46 30.8 | -0.2 |
| | comp=Z,21nm,1.4s | | | | | | |
| SPUT | South Promonto | 85.13 | 42 | eP | P | 02 46 31.5 | +0.6 |
| | comp=Z,13nm,1.5s | | | | | | |
| BNM | Barren Site | 85.18 | 50 | eP | P | 02 46 32.1 | +0.6 |
| P17A | Butcher Ranch, | 85.19 | 44 | eP | P | 02 46 33.0 | +1.7 |
| | comp=Z,22nm,1.4s | | | | | | |
| HLID | Hailey | 85.25 | 39 | P | P | 02 46 31.0 | -0.6 |
| | baz=86 | | | | | | |
| HLID | Hailey | 85.25 | 39 | eP | P | 02 46 30.9 | -0.6 |
| | comp=Z,5.0nm,1.0s | | | | | | |
| LPM | Los Pinos Moun | 85.26 | 50 | eP | P | 02 46 31.9 | +0.1 |
| CN2 | Changchun | 85.54 | 321 | eP | P | 02 46 35.1 | +2.4 |
| CN2 | | | | esP | sP | 02 47 16.0 | +31 |
| CN2 | | | | eS | SKSac | 02 56 56.9 | +0.8 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,100nm,4.0s | | | | | | |
| P18A | Preston Nutter | 85.59 | 44 | eP | P | 02 46 34.3 | +0.8 |
| | comp=Z,15nm,1.5s | | | | | | |
| TCUT | Toone Canyon | 85.67 | 42 | eP | P | 02 46 34.0 | +0.2 |
| | comp=Z,79nm,1.9s | | | | | | |
| ANMO | Albuquerque | 85.70 | 50 | deP | P | 02 46 34.0 | 0.0 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| ANMO | Albuquerque | 85.70 | 50 | eP | P | 02 46 33.8 | -0.2 |
| | comp=Z,8.4nm,0.9s | | | | | | |
| SYO | Syowa Base | 86.03 | 192 | ⇓eX | | 02 46 30.7 | |
| SNAA | Sanae | 86.44 | 177 | P | P | 02 46 36.7 | -0.3 |
| SNAA | Sanae | 86.44 | 177 | LR | LR | 03 21 01.1 | |
| | comp=Z,22nm,20.3s,baz=218,slow=33 | | | | | | |
| SNAA | Sanae | 86.44 | 177 | ⇑iP | P | 02 46 36.9 | 0.0 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.6s | | | | | | |
| SNAA | Sanae | 86.44 | 177 | eP | P | 02 46 36.5 | -0.4 |
| | comp=Z,6.4nm,1.5s | | | | | | |
| VNA3 | Neumayer Olymp | 86.44 | 175 | P | P | 02 46 37.0 | +0.1 |
| 529A | Stev Forest Ra | 86.50 | 56 | P | P | 02 46 36.5 | -1.3 |
| | baz=87 | | | | | | |
| S22A | 4UR Ranch, Cre | 86.86 | 47 | eP | P | 02 46 39.6 | -0.2 |
| | comp=Z,44nm,2.3s | | | | | | |
| VNA2 | Neumayer--Watz | 86.92 | 176 | P | P | 02 46 39.7 | +0.5 |
| | baz=198,slow=2.9 | | | | | | |
| 429A | Davenport Ranc | 86.98 | 55 | P | P | 02 46 39.2 | -1.0 |
| | baz=87 | | | | | | |
| VNA1 | Neumayer--Stat | 87.13 | 175 | P | P | 02 46 40.8 | +0.7 |
| 228A | UT Block 9, Go | 87.14 | 54 | P | P | 02 46 39.3 | -1.7 |
| | baz=87 | | | | | | |
| 530A | J-C Ranch, Com | 87.19 | 56 | P | P | 02 46 39.6 | -1.6 |
| | baz=87 | | | | | | |
| 631A | Perdido Creek | 87.44 | 57 | P | P | 02 46 41.1 | -1.3 |
| | baz=88 | | | | | | |
| 128A | Castleberry Fa | 87.46 | 53 | P | P | 02 46 41.9 | -0.6 |
| | baz=88 | | | | | | |
| SMCO | Snowmass | 87.50 | 46 | eP | P | 02 46 42.9 | 0.0 |
| | comp=Z,42nm,2.3s | | | | | | |
| MCK | McKinley | 87.70 | 11 | eP | P | 02 46 42.2 | -0.6 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| MCK | McKinley | 87.70 | 11 | eP | P | 02 46 42.2 | -0.6 |
| | comp=Z,7.6nm,0.8s | | | | | | |
| BW06 | Boulder Array | 87.73 | 42 | eP | P | 02 46 42.8 | -1.0 |
| | comp=Z,56nm,2.6s | | | | | | |
| SDCO | Great Sand Dun | 87.77 | 48 | P | P | 02 46 43.2 | -0.9 |
| | baz=88 | | | | | | |
| 531A | Rocksprings | 87.80 | 56 | P | P | 02 46 43.4 | -0.8 |
| | baz=88 | | | | | | |
| MSTX | Muleshoe | 87.88 | 52 | P | P | 02 46 44.1 | -0.4 |
| | baz=88 | | | | | | |
| MSTX | Muleshoe | 87.88 | 52 | eP | P | 02 46 44.9 | +0.3 |
| PSI | Prapat | 87.99 | 274 | eP | P | 02 46 44.7 | -0.9 |
| PSI | Prapat | 87.99 | 274 | P | P | 02 46 46.7 | +1.1 |
| | baz=88,SNR=4.6 | | | | | | |
| PSI | Prapat | 87.99 | 274 | eP | P | 02 46 44.7 | -0.9 |
| BOZ | Bozeman (W) | 88.08 | 39 | P | P | 02 46 45.3 | 0.0 |
| | baz=88 | | | | | | |
| 632A | Uvalde | 88.10 | 57 | P | P | 02 46 44.7 | -0.9 |
| | baz=88 | | | | | | |
| 532A | Rocksprings | 88.28 | 57 | P | P | 02 46 45.9 | -0.6 |
| | baz=88 | | | | | | |
| WRH | Wood River Hil | 88.53 | 11 | eP | P | 02 46 47.7 | +1.0 |
| 633A | Saathoff Ranch | 88.56 | 57 | P | P | 02 46 47.0 | -0.7 |
| | baz=89 | | | | | | |
| SEY | Seymchan | 88.59 | 345 | ⇓eP | P | 02 46 47.5 | +0.5 |
| CCB | Clear Creek Bu | 88.74 | 11 | eP | P | 02 46 48.0 | +0.4 |
| 533A | Kerrville | 88.94 | 57 | P | P | 02 46 48.2 | -1.3 |
| | baz=89 | | | | | | |
| COLA | College | 88.94 | 11 | ⇓eP | P | 02 46 49.2 | +0.6 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| COLA | College | 88.94 | 11 | eP | P | 02 46 48.8 | +0.3 |
| | comp=Z,7.2nm,0.8s | | | | | | |
| IL1 | Eielson Array | 89.02 | 11 | eP | P | 02 46 47.6 | -1.4 |
| ILAR | Eielson Array | 89.02 | 11 | P | P | 02 46 48.3 | -0.7 |
| | comp=Z,1.8nm,0.9s,baz=210,slow=5.8,SNR=12 | | | | | | |
| S26A | Kim | 89.12 | 49 | P | P | 02 46 49.0 | -1.3 |
| | baz=89 | | | | | | |
| 433A | Art | 89.19 | 56 | P | P | 02 46 49.5 | -1.2 |
| | baz=89 | | | | | | |
| BJI | Beijing | 89.33 | 314 | P | P | 02 46 53.1 | +2.1 |
| BJI | | | | S | S | 02 57 27.7 | -11 |
| BJI | | | | PMZ | | | |
| | comp=Z,12nm,2.1s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,180nm,4.5s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,60nm,21.8s | | | | | | |
| 534A | Blanco | 89.35 | 57 | P | P | 02 46 49.9 | -1.6 |
| | baz=90 | | | | | | |
| R26A | Arlington | 89.46 | 48 | P | P | 02 46 50.7 | -1.2 |
| | baz=90 | | | | | | |
| T28A | Walsh | 89.83 | 50 | P | P | 02 46 52.2 | -1.4 |
| | baz=90 | | | | | | |
| 334A | Lometa | 90.10 | 56 | P | P | 02 46 53.7 | -1.2 |
| | baz=90 | | | | | | |
| GYA | Guiyang | 90.32 | 298 | eP | P | 02 46 56.0 | -0.2 |
| GYA | | | | pP | pP | 02 47 24.4 | +19 |
| GYA | | | | PP | PP | 02 50 33.2 | +2.4 |
| GYA | | | | SKS | SKSac | 02 57 15.5 | -11 |
| GYA | | | | S | SKKSac | 02 57 38.6 | -1.3 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| BILL | Bilibino | 90.86 | 353 | ⇑eP | P | 02 46 54.8 | -2.7 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| HHC | Hu-ho-hao-te | 92.81 | 313 | eP | P | 02 47 09.2 | +1.8 |
| HHC | | | | PP | PP | 02 50 54.8 | +4.7 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,63nm,4.9s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,140nm,18.5s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,100nm,14.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,76nm,16.0s | | | | | | |
| HHC | Hu-ho-hao-te | 92.81 | 313 | eP | P | 02 47 08.4 | +1.0 |
| HHC | | | | PMZ | | | |
| | comp=Z,19nm,0.6s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,60nm,6.9s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,140nm,18.5s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,100nm,14.8s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HHC | | | | LZ | | | |
| | comp=Z,76nm,16.0s | | | | | | |
| KMI | Kunming | 93.04 | 296 | P | P | 02 47 10.8 | +1.9 |
| KMI | | | | pP | pP | 02 47 33.5 | +16 |
| KMI | | | | PMZ | | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| CMAR | Chiang Mai Arr | 93.80 | 288 | P | P | 02 47 13.8 | +1.5 |
| | comp=Z,0.9nm,0.3s,baz=123,slow=3.1,SNR=5.9 | | | | | | |
| CD2 | Chengdu | 94.44 | 301 | eP | P | 02 47 13.5 | -1.5 |
| CD2 | | | | pP | pP | 02 47 41.0 | +17 |
| CD2 | | | | sP | sP | 02 47 52.5 | +26 |
| CD2 | | | | SKS | SKSac | 02 57 38.2 | -11 |
| CD2 | | | | S | SKKSac | 02 58 15.9 | +5.8 |
| CD2 | | | | sS | sS | 02 59 04.4 | +24 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.4s | | | | | | |
| INK | Inuvik | 94.82 | 14 | eP | P | 02 47 15.0 | -0.7 |
| INK | | | | pmax | pmax | | |
| | comp=Z,12nm,1.4s | | | | | | |
| INK | Inuvik | 94.82 | 14 | eP | P | 02 47 15.0 | -0.7 |
| | comp=Z,12nm,1.4s | | | | | | |
| MIAR | Mount Ida | 95.00 | 55 | eP | P | 02 47 16.7 | -0.8 |
| MIAR | Mount Ida | 95.00 | 55 | eP | P | 02 47 16.7 | -0.8 |
| LZH | Lanzhou | 96.36 | 306 | eP | P | 02 47 21.0 | -2.8 |
| LZH | | | | pP | pP | 02 47 48.5 | +16 |
| LZH | | | | sP | sP | 02 48 00.0 | +24 |
| LZH | | | | ePP | PP | 02 51 18.2 | +0.2 |
| LZH | | | | PMZ | | | |
| | comp=Z,17nm,1.6s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,78nm,9.5s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,200nm,17.0s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,200nm,17.5s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,250nm,19.8s | | | | | | |
| ECSD | EROS Data Cent | 96.50 | 45 | eP | P | 02 47 24.1 | 0.0 |
| KURK | Kurchatov | 117.37 | 317 | PKIKP | PKPdf | 02 52 38.6 | -1.3 |
| KURK | Kurchatov | 117.37 | 317 | PKP | PKPdf | 02 52 38.6 | -1.3 |
| KURBB | Kurchatov Arra | 117.42 | 317 | PKP | PKPdf | 02 52 38.6 | -1.5 |
| | comp=Z,0.4nm,0.8s,baz=95,slow=2.3,SNR=5.8 | | | | | | |
| KSH | Kashi | 118.51 | 304 | ePKP | PKPdf | 02 52 45.9 | +3.2 |
| KSH | | | | esPKP | | 02 53 23.5 | |
| KSH | | | | PPMZ | | | |
| | comp=Z,56nm,4.0s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,85nm,5.4s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,100nm,5.2s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,91nm,5.2s | | | | | | |
| BVAR | Borovoye Array | 122.38 | 320 | PKP | PKPdf | 02 52 48.0 | -1.5 |
| | comp=Z,0.3nm,0.4s,baz=90,slow=1.4,SNR=3.7 | | | | | | |
| BVAR | Borovoye Array | 122.38 | 320 | PKIKP | PKPdf | 02 52 48.0 | -1.5 |
| ARCES | ARCESS Array B | 130.92 | 351 | PKP | PKPdf | 02 53 04.8 | -0.5 |
| | comp=Z,1.4nm,0.7s,baz=20,slow=3.9,SNR=5.2 | | | | | | |
| LSZ | Lusaka | 136.90 | 213 | ePKIKP | PKPdf | 02 53 18.9 | +0.6 |
| LSZ | Lusaka | 136.90 | 213 | ePKPdf | PKPdf | 02 53 18.9 | +0.6 |
| FINES | FINESS Array B | 138.07 | 345 | PKP | PKPdf | 02 53 18.9 | -0.1 |
| | comp=Z,1.9nm,0.8s,baz=29,slow=3.2,SNR=6.0 | | | | | | |
| OBN | Obninsk | 139.62 | 333 | i PKIKP | PKPdf | 02 53 19.2 | -2.7 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| AKASG | Malin Array Be | 145.89 | 333 | PKPbc | PKPdf | 02 53 33.4 | +0.2 |
| | comp=Z,4.2nm,0.7s,baz=39,slow=4.2,SNR=19 | | | | | | |
| KIEV | Kiev | 145.90 | 333 | ePKP2 | PKPbc | 02 53 33.7 | -0.2 |
| KIEV | Kiev | 145.90 | 333 | ePKPbc | PKPbc | 02 53 33.7 | -0.2 |
| MBAR | Mbarara | 146.80 | 231 | PKPbc | PKPab | 02 53 38.7 | -0.5 |
| | comp=Z,2.4nm,0.7s,baz=182,slow=3.2,SNR=5.2 | | | | | | |
| MALT | Malatya | 147.51 | 308 | ⇑ iP | PKPab | 02 53 40.1 | -1.1 |
| BURAR | Bucovina Array | 149.94 | 333 | ⇓ iP | PKPbc | 02 53 46.7 | +1.7 |
| KOLS | Kolonicke sedl | 150.00 | 338 | ePKP2 | PKPbc | 02 53 45.5 | +0.5 |
| KOLS | Kolonicke sedl | 150.00 | 338 | ePKP | PKPbc | 02 53 45.5 | +0.5 |
| CLL | Collm | 150.15 | 351 | ePKIKP | PKPbc | 02 53 45.0 | -0.2 |
| CLL | | | | e | | 02 53 50.0 | |
| CLL | Collm | 150.15 | 351 | ePKPbc | PKPbc | 02 53 45.0 | -0.2 |
| CLL | | | | ePKPab | PKPab | 02 53 50.0 | -1.2 |
| CLL | | | | esPKPab | sPKPab | 02 54 09.0 | +5.9 |
| CLL | | | | e | | 02 54 24.0 | |
| UZH | Uzhgorod | 150.25 | 337 | ePKIKP | PKPbc | 02 53 45.8 | +0.2 |
| UZH | | | | e | | 02 53 58.9 | |
| BRTR | Keskin Array B | 150.32 | 313 | PKPbc | PKPbc | 02 53 46.1 | -0.1 |
| | comp=Z,1.3nm,0.9s,baz=128,slow=2.0,SNR=5.8 | | | | | | |
| BRG | Berggiesshubel | 150.41 | 349 | ePKP | PKPbc | 02 53 46.3 | +0.4 |
| | comp=Z,14nm,1.2s | | | | | | |
| BRG | | | | e | | 02 54 00.9 | |
| | comp=Z,26nm,2.0s | | | | | | |
| BRG | Berggiesshubel | 150.41 | 349 | ePKIKP | PKPbc | 02 53 46.3 | +0.4 |
| BRG | | | | e | | 02 54 00.9 | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| DPC | Dobruska-Polom | 150.44 | 346 | ePKIKP | PKPbc | 02 53 45.9 | -0.2 |
| DPC | | | | e | | 02 54 02.7 | |
| DPC | Dobruska-Polom | 150.44 | 346 | ⇑ ePKP | PKPbc | 02 53 45.9 | -0.2 |
| DPC | | | | epPKP | PKPab | 02 54 02.7 | +10 |
| DPC | | | | ex | x | 02 54 13.1 | |
| KRLC | Kraliky | 150.59 | 345 | ePKIKP | PKPbc | 02 53 46.1 | -0.3 |
| KRLC | Kraliky | 150.59 | 345 | ⇑ ePKP | PKPbc | 02 53 46.1 | -0.3 |
| PVCC | Panska Ves | 150.63 | 348 | ePKIKP | PKPbc | 02 53 46.7 | +0.3 |
| PVCC | Panska Ves | 150.63 | 348 | ⇑ ePKP | PKPbc | 02 53 46.7 | +0.3 |
| MORC | Moravsky Berou | 150.69 | 344 | ePKIKP | PKPbc | 02 53 44.1 | -2.6 |
| MORC | Moravsky Berou | 150.69 | 344 | ⇑ iP | PKPbc | 02 53 46.8 | +0.1 |
| MORC | Moravsky Berou | 150.69 | 344 | ePKPbc | PKPbc | 02 53 44.0 | -2.6 |
| LANS | Liptovska Anna | 150.72 | 341 | ePKIKP | PKPbc | 02 53 47.4 | +0.6 |
| LANS | Liptovska Anna | 150.72 | 341 | ePKP | PKPbc | 02 53 47.4 | +0.6 |
| PRA | Prague | 151.10 | 348 | ePKIKP | PKPbc | 02 53 47.2 | -0.3 |
| PRA | Prague | 151.10 | 348 | ⇑ ePKP | PKPbc | 02 53 47.2 | -0.3 |
| PRU | Pruhonice | 151.16 | 348 | ePKIKP | PKPbc | 02 53 47.6 | -0.1 |
| PRU | Pruhonice | 151.16 | 348 | ⇑ ePKP | PKPbc | 02 53 47.6 | -0.1 |
| MLR | Muntele Rosu | 151.24 | 330 | PKPbc | PKPbc | 02 53 47.5 | -0.8 |
| | comp=Z,0.4nm,0.8s,baz=144,slow=7.5,SNR=4.9 | | | | | | |
| MLR | Muntele Rosu | 151.24 | 330 | ⇑ iP | PKPbc | 02 53 49.4 | +1.2 |
| MMAI | Mount Meron Ar | 151.49 | 299 | PKPbc | PKPbc | 02 53 48.9 | -0.2 |
| | comp=Z,2.7nm,0.8s,baz=69,slow=9.3,SNR=3.6 | | | | | | |
| MMAI | | | | PKPab | PKPab | 02 53 56.6 | -0.9 |
| | comp=Z,3.5nm,0.7s,baz=49,slow=5.7,SNR=7.4 | | | | | | |
| VYHS | Vyhne | 151.50 | 341 | ePKIKP | PKPbc | 02 53 47.7 | -0.9 |
| VYHS | Vyhne | 151.50 | 341 | ePKP | PKPbc | 02 53 47.7 | -0.9 |
| KHC | Kasperske Hory | 152.16 | 349 | ePKIKP | PKPdf | 02 53 40.0 | -3.4 |
| KHC | | | | e | | 02 53 50.1 | |
| KHC | Kasperske Hory | 152.16 | 349 | ePKPDF | PKPdf | 02 53 40.0 | -3.4 |
| KHC | | | | ⇑ ePKP | PKPbc | 02 53 50.1 | 0.0 |
| KHC | | | | epPKP | PKPab | 02 54 03.6 | +3.9 |
| KHC | Kasperske Hory | 152.16 | 349 | ePKPbc | PKPbc | 02 53 50.0 | -0.1 |
| GERES | GERESS Array B | 152.41 | 348 | PKPbc | PKPbc | 02 53 50.2 | -0.5 |
| | comp=Z,1.2nm,0.8s,baz=42,slow=2.2,SNR=7.0 | | | | | | |
| CSS | Prodhromos | 152.53 | 304 | ePKPbc | PKPbc | 02 53 50.2 | -1.1 |
| ESDC | Sonseca Array | 160.53 | 23 | PKPab | PKPab | 02 54 34.2 | -1.6 |
| | comp=Z,0.4nm,0.7s,baz=313,slow=4.1,SNR=4.2 | | | | | | |
| TORD | Torodi Ar. Bea | 170.47 | 156 | PKPab | PKPab | 02 55 19.4 | -0.7 |
| | comp=Z,1.1nm,1.1s,baz=230,slow=3.8,SNR=3.9 | | | | | | |

*ISK* ***02*** *02:35:55.3, 37°.36N×38°.59E, h5$^{km}$, MD2.6*
*ISCJB* ***02*** *02:35:57.8±1.0, 37°.46N±0°.05×38°.62E±0°.06, h5$^{km}$±10$^{km}$, Error ellipse: s-maj=9.1km s-min=7.3km az=40.4*
*CSEM* ***02*** *02:35:57.7±0.2, 37°.45N×38°.65E, h8$^{km}$, MD2.6, Error ellipse: s-maj=5.3km s-min=4.5km az=14.0*
*DDA* ***02*** *02:35:58.7, 37°.54N×38°.63E, h7$^{km}$, Md2.8*
**ISC 02 02:35:57.7**±1.1, **37°.46N**±0°.04×**38°.63E**±0°.04, **h7**$^{km}$±11$^{km}$, **n18**, σ0ˢ39/26, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URFA | Urfa | 0.16 | 96 | ePG | Pg | 02 36 00.2 | -0.8 |
| URFA | | | | eSG | Sg | 02 36 04.1 | +0.9 |
| URFA | Urfa | 0.16 | 96 | ePg | Pg | 02 36 00.2 | -0.8 |
| URFA | | | | eSg | Sg | 02 36 04.1 | +0.9 |
| MALT | Malatya | 0.87 | 350 | ePG | Pb | 02 36 15.1 | -0.1 |
| MALT | Malatya | 0.87 | 350 | ePg | Pb | 02 36 15.1 | -0.1 |
| AKCD | Akcadag | 1.00 | 327 | i P | Pb | 02 36 17.4 | -0.1 |
| AKCD | | | | i S | Sg | 02 36 30.1 | 0.0 |
| AKCD | Akcadag | 1.00 | 327 | P | Pb | 02 36 17.4 | -0.1 |
| AKCD | | | | S | Sg | 02 36 30.1 | 0.0 |
| SVRC | Sivrice-ELAZID | 1.06 | 30 | ePN | Pg | 02 36 18.3 | +0.1 |
| SVRC | Sivrice-ELAZID | 1.06 | 30 | ePn | Pg | 02 36 18.3 | +0.1 |
| ELZG | Elazig | 1.07 | 15 | i P | Pg | 02 36 18.4 | +0.1 |
| ELZG | | | | i S | Sb | 02 36 32.9 | -0.2 |
| ELZG | Elazig | 1.07 | 15 | P | Pg | 02 36 18.4 | +0.1 |
| ELZG | | | | S | Sb | 02 36 32.9 | -0.2 |
| KUZU | Kuzuini | 1.42 | 242 | i P | Pn | 02 36 24.1 | +0.2 |
| KUZU | | | | i S | Sb | 02 36 42.9 | +0.2 |
| KUZU | Kuzuini | 1.42 | 242 | P | Pn | 02 36 24.1 | +0.2 |
| KUZU | | | | S | Sb | 02 36 42.9 | +0.2 |
| DARE | Darende-Malaty | 1.43 | 321 | ePN | Pn | 02 36 24.0 | -0.2 |
| DARE | Darende-Malaty | 1.43 | 321 | ePn | Pn | 02 36 24.0 | -0.2 |
| MAZI | Mazidag | 1.45 | 89 | ePN | Pn | 02 36 24.4 | 0.0 |
| MAZI | Mazidag | 1.45 | 89 | ePn | Pn | 02 36 24.4 | 0.0 |
| PTK | Pertek | 1.55 | 23 | ePN | Pb | 02 36 26.9 | 0.0 |
| PTK | Pertek | 1.55 | 23 | ePn | Pb | 02 36 26.9 | 0.0 |

**IDC 02 02:41:21.9**±5.8, **14°.75S**×**74°.96W**, **h88**$^{km}$±48$^{km}$, **mb3.2**/2, **mb1 3.4**/3, **mb1mx3.1**/26, **mbtmp3.5**/3, **ML3.5**/1, **Error ellipse: s-maj=97.6km s-min=32.3km az=28.0, Central Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 6.75 | 104 | P | Pn | 02 43 00.8 | +1.5 |
| | 0.5nm,0.3s,baz=275,slow=7.9,SNR=13 | | | | | | |
| LPAZ | | | | S | Sn | 02 44 13.7 | -1.6 |
| | baz=309,slow=14,SNR=1.9 | | | | | | |
| TXAR | Lajitas Array | 51.86 | 328 | P | P | 02 50 21.0 | -0.5 |
| | 0.2nm,0.5s,baz=155,slow=8.2,SNR=6.1 | | | | | | |
| TORD | Torodi Ar. Bea | 80.77 | 74 | P | P | 02 53 27.2 | +0.8 |
| | 0.5nm,0.7s,baz=267,slow=5.7,SNR=3.5 | | | | | | |
| WRA | Warramunga Arr | 135.07 | 221 | PKP | PKPdf | 03 00 30.9 | -1.1 |
| | 0.3nm,0.8s,baz=130,slow=2.1,SNR=5.0 | | | | | | |

**ROM 02 02:42:05.7**±0.1, **42°.54N**×**13°.21E**, **h6**$^{km}$±1$^{km}$, **Md1.3**/3, **Ml0.6**/1, **1D**, **Error ellipse: s-maj=4.0km s-min=0.4km az=130.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RM33 | Pellescritta ( | 0.03 | 168 | Pg | Pg | 02 42 07.2 | +0.1 |
| RM33 | | | | Sg | Sg | 02 42 08.2 | +0.1 |
| | 82nm,0.1s | | | | | | |
| RM32 | Poggio Cancell | 0.07 | 62 | ⇓ iPg | Pg | 02 42 07.7 | 0.0 |
| RM32 | | | | Sg | Sg | 02 42 09.2 | +0.1 |
| | 23nm,0.2s | | | | | | |
| SMA1 | SAN MARTINO | 0.13 | 45 | Pg | Pg | 02 42 09.0 | +0.3 |
| SMA1 | | | | Sg | Sg | 02 42 11.4 | +0.7 |
| | 16nm,0.3s | | | | | | |

*ISCJB* ***02*** *02:52:35.3±1.1, 22°.12N±0°.04×102°.06E±0°.05, h10$^{km}$, Error ellipse: s-maj=7.6km s-min=4.8km az=146.1*
*PLV* ***02*** *02:52:35.4±1.4, 22°.22N×101°.98E, h0$^{km}$±9$^{km}$, MD3.4, ML3.6*
*BJI* ***02*** *02:52:37.5, 22°.00N×101°.86E, h5$^{km}$, ML4.0/4, Ms3.7/2, Ms7 3.3/2*
**ISC 02 02:52:38.5**±1.9, **22°.13N**±0°.05×**102°.07E**±0°.08, **h10**$^{km}$, **n14**, σ**1ˢ37**/26, **Yunnan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MLVB | Muong La stati | 1.01 | 95 | ePg | Sn | 02 53 14.3 | +1.3 |
| MLVB | | | | eSg | Sb | 02 53 41.5 | +30 |
| MLVB | | | | AML | AML | 02 53 48.9 | |
| | comp=E,280nm,0.6s | | | | | | |
| TGV | Tuan Giao | 1.36 | 113 | ePg | Pg | 02 53 03.7 | -0.9 |
| TGV | | | | eSg | Sg | 02 53 22.6 | +0.2 |
| TGV | | | | AML | AML | 02 53 26.0 | |
| | comp=N,1µm,0.6s | | | | | | |
| SPV | Sa-pa | 1.65 | 82 | ePg | Pg | 02 53 09.0 | -1.2 |
| SPV | | | | eSg | Sb | 02 53 30.4 | +0.4 |
| TTVN | Tram Tau | 2.22 | 107 | ePg | Pg | 02 53 20.7 | -0.5 |
| TTVN | | | | eSg | Sg | 02 53 51.2 | +1.2 |
| TTVN | | | | AML | AML | 02 53 57.2 | |
| | comp=N,212nm,0.5s | | | | | | |
| VTVB | Vinh Tuy | 2.63 | 87 | ePg | Pg | 02 53 27.6 | -1.3 |
| MCVV | Moc Chau | 2.74 | 118 | ePg | Pg | 02 53 29.7 | -1.4 |
| MCVV | | | | eSg | Sg | 02 54 07.8 | +1.1 |
| MCVV | | | | AML | AML | 02 54 14.9 | |
| | comp=N,252nm,0.6s | | | | | | |
| HGVB | Ha Giang | 2.79 | 75 | ePg | Pg | 02 53 30.5 | -1.6 |
| HGVB | | | | eSg | Sg | 02 54 08.2 | -0.2 |
| HGVB | | | | AML | AML | 02 54 13.0 | |
| | comp=N,153nm,0.4s | | | | | | |
| KMI | Kunming | 3.04 | 12 | Pg | Pg | 02 53 35.9 | -1.0 |
| KMI | | | | Sg | Sg | 02 54 18.2 | +1.8 |
| KMI | | | | SMN | | | |
| | comp=N,140nm,1.1s | | | | | | |
| KMI | | | | SME | | | |
| | comp=N,130nm,1.0s | | | | | | |
| KMI | | | | LN | | | |
| | comp=N,260nm,4.8s | | | | | | |
| KMI | | | | LE | | | |
| | comp=N,950nm,6.4s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=N,420nm,8.3s | | | | | | |
| BCVB | Bac Can | 3.44 | 93 | ePg | Pg | 02 53 42.6 | -2.0 |
| BCVB | | | | eSg | Sg | 02 54 30.1 | +0.9 |
| CBVB | Cao Bang | 3.85 | 81 | ePn | Pn | 02 53 37.5 | -0.4 |
| CBVB | | | | ePg | Pg | 02 53 50.2 | -2.2 |
| CBVB | | | | eSg | Sg | 02 54 43.1 | +0.8 |
| CBVB | | | | AML | AML | 02 54 51.6 | |
| | comp=N,154nm,0.6s | | | | | | |
| BGV | Bac-Giang | 3.96 | 101 | ePg | Pg | 02 53 53.1 | -1.2 |
| BGV | | | | eSg | Sg | 02 54 46.9 | +1.2 |
| BGV | | | | AML | AML | 02 54 57.8 | |
| | comp=N,158nm,0.6s | | | | | | |
| CCVB | Con Cuong | 4.04 | 139 | ePg | Pg | 02 53 55.4 | -0.6 |
| LSVB | Lang Son stati | 4.35 | 93 | ePn | Pn | 02 53 43.7 | -1.0 |
| LSVB | | | | eSg | Sg | 02 55 00.3 | +2.0 |
| GYA | Guiyang | 6.01 | 43 | Pn | Pn | 02 54 13.7 | +6.0 |
| GYA | | | | Pg | Pg | 02 54 32.1 | -1.6 |
| GYA | | | | Sn | Sn | 02 55 18.8 | +2.1 |
| GYA | | | | Sg | Sb | 02 55 40.8 | +5.2 |
| GYA | | | | smax | smax | | |
| | comp=N,80nm,1.0s | | | | | | |
| GYA | | | | smax | smax | | |
| | comp=E,80nm,0.9s | | | | | | |

*IDC* ***02*** *02:54:15.5±0.5, 17°.53S×167°.94E, h0$^{km}$, mb4.5/19, mb1 4.6/21, mb1mx4.5/34, mbtmp4.6/21, ML5.0/1, MS4.2/22, Ms1 4.2/22, ms1mx4.1/30, Error ellipse: s-maj=19.4km s-min=13.4km az=92.0*
*ISCJB* ***02*** *02:54:17.8±0.3, 17°.49S±0°.04×168°.02E±0°.06, h27$^{km}$, mb4.8/45, MS4.2/21, Error ellipse: s-maj=8.5km s-min=5.9km az=2.2*
*NEIC* ***02*** *02:54:18.8±3.5, 17°.45S×168°.07E, h24$^{km}$±24$^{km}$, mb5.0/28, Error ellipse: s-maj=9.5km s-min=7.4km az=217.0*
*GCMT* ***02*** *02:54:18.8±0.2, 17°.42S×167°.82E, h19$^{km}$, MW5.0/74, Moment Tensor Solution. s46,c68; s74,c123; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.05±.15; $M_{\theta\theta}$4.09±.12; $M_{\phi\phi}$-1.04±.10; $M_{r\theta}$-1.16±.22; $M_{\theta\phi}$1.73±.08; $M_{\phi r}$1.60±.24; Best double couple: $M_0$4.51400×$10^{16}$ NP1:$\phi_s$102.00000°, δ58.00000°, λ-50.00000°. NP2: $\phi_s$223.00000°, δ50.00000°, λ-137.00000°. Principal axes: T 4.6760, Plg5.0000°, Azm165.0000°; N -0.3250, Plg34.0000°, Azm258.0000°; P -4.3520, Plg56.0000°, Azm67.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*MOS* ***02*** *02:54:20.9±1.2, 17°.44S×167°.80E, h44$^{km}$, mb4.8/25 Error ellipse: s-maj=11.5km s-min=10.1km az=130.8*
*BJI* ***02*** *02:54:23.8, 17°.57S×168°.34E, h85$^{km}$, mb4.7/24, mB5.0/17, Ms5.0/9, Ms7 4.7/7*
*AUST* ***02*** *02:54:23.2, 16°.99S×168°.44E, h100$^{km}$*
**ISC 02 02:54:19.3**±0.4, **17°.50S**±0°.05×**168°.05E**±0°.07, **h27**$^{km}$, **n161**, σ**1ˢ51**/159, **mb4.8**/44, **MS4.2**/21, **6C-7D**, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 4.79 | 198 | ePn | Pn | 02 55 28.7 | -1.1 |
| | 135nm,0.2s | | | | | | |
| DZM | | | | eSn | Sn | 02 56 21.3 | -3.1 |
| | 671nm,0.3s | | | | | | |
| DZM | | | | eLR | LR | 02 56 28.9 | |
| | 4µm,22.6s | | | | | | |
| DZM | Mont Dzumac | 4.79 | 198 | Pn | Pn | 02 55 28.6 | -1.1 |
| | 62nm,0.3s,baz=360,slow=2.6,SNR=139 | | | | | | |
| DZM | | | | Sn | Sn | 02 56 22.6 | -1.8 |
| | 64nm,0.3s,baz=180,slow=22,SNR=13 | | | | | | |
| MSVF | Nonsavu | 9.54 | 93 | eP | Pn | 02 56 41.6 | +6.6 |
| MSVF | Nonsavu | 9.54 | 93 | ePn | Pn | 02 56 41.6 | +6.6 |
| HNR | Honiara | 11.24 | 315 | LR | LR | 03 01 03.9 | |
| | comp=Z,1µm,18.4s,baz=165,slow=36 | | | | | | |
| RAO | Raoul Island | 17.38 | 135 | LR | LR | 03 03 52.8 | |
| | comp=Z,1µm,18.4s,baz=204,slow=33 | | | | | | |
| EIDS | Eidsvold | 17.61 | 241 | P | P | 02 58 26.6 | +2.9 |
| | baz=18,SNR=5.3 | | | | | | |
| EIDS | Eidsvold | 17.61 | 241 | eP | P | 02 58 24.8 | +1.1 |
| | 40nm,1.2s | | | | | | |
| ARMA | Armidale | 19.73 | 226 | eP | Pn | 02 58 49.1 | +0.6 |
| | 27nm,1.3s | | | | | | |
| AFI | Afiamalu | 19.75 | 82 | P | Pn | 02 58 49.5 | +0.6 |
| | baz=268,slow=20,SNR=6.3 | | | | | | |
| AFI | Afiamalu | 19.75 | 82 | eP | P | 02 58 45.6 | -1.7 |
| AFI | | | | pmax | pmax | | |
| | comp=Z,81nm,1.0s | | | | | | |
| AFI | Afiamalu | 19.75 | 82 | eP | P | 02 58 45.5 | -1.7 |
| | comp=Z,81nm,1.0s | | | | | | |
| RMQ | Roma | 19.97 | 240 | P | Pn | 02 58 53.8 | +2.4 |
| | baz=21,SNR=14 | | | | | | |
| CTA | Charters Tower | 20.79 | 259 | P | P | 02 58 58.0 | -0.5 |
| | comp=Z,5.4nm,0.7s,baz=91,slow=16,SNR=1.9 | | | | | | |
| CTA | | | | LR | LR | 03 06 36.0 | |
| | comp=Z,1µm,19.5s,baz=70,slow=36 | | | | | | |
| CTA | Charters Tower | 20.79 | 259 | P | P | 02 58 58.0 | -0.5 |
| CTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| CTA | | | | MLR | MLR | | |
| | comp=Z,1µm,19.5s | | | | | | |
| CTAO | Charters Tower | 20.79 | 259 | eP | P | 02 58 59.0 | +0.5 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,62nm,1.1s | | | | | | |
| CTAO | Charters Tower | 20.79 | 259 | eP | P | 02 58 59.0 | +0.5 |
| | comp=Z,62nm,1.1s | | | | | | |
| PMG | Port Moresby | 21.83 | 289 | LR | LR | 03 06 54.7 | |
| | comp=Z,723nm,18.4s,baz=84,slow=35 | | | | | | |
| URZ | Urewera | 22.15 | 161 | P | P | 02 59 13.4 | +0.5 |
| | comp=Z,17nm,0.9s,baz=24,slow=3.8,SNR=8.5 | | | | | | |
| URZ | | | | LR | LR | 03 06 59.2 | |
| | comp=Z,1µm,19.3s,baz=12,slow=34 | | | | | | |
| URZ | Urewera | 22.15 | 161 | eP | P | 02 59 13.5 | +0.5 |
| | comp=Z,45nm,0.9s | | | | | | |
| BKZ | Black Stump Fm | 22.81 | 163 | eP | P | 02 59 21.2 | +1.2 |
| | comp=Z,22nm,0.7s | | | | | | |
| QLP | Quilpie | 23.82 | 244 | P | P | 02 59 36.0 | +5.9 |
| | baz=24,SNR=10 | | | | | | |
| BFZ | Birch Farm | 24.16 | 165 | eP | P | 02 59 33.7 | +0.5 |
| | comp=Z,30nm,0.9s | | | | | | |
| COEN | Coen | 24.19 | 275 | eP | P | 02 59 33.9 | +0.1 |
| CNB | Canberra Magne | 24.31 | 220 | P | P | 02 59 36.2 | +1.5 |
| | baz=25,SNR=10 | | | | | | |
| CAN | Canberra | 24.54 | 220 | eP | P | 02 59 37.8 | +1.0 |
| CAN | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | |
| CAN | Canberra | 24.54 | 220 | eP | P | 02 59 37.8 | +1.0 |
| | comp=Z,27nm,0.9s | | | | | | |
| CMSA | Cobar Meteorol | 24.61 | 231 | P | P | 02 59 38.4 | +1.0 |
| | baz=25,SNR=17 | | | | | | |
| KHZ | Kahutara | 25.27 | 170 | eP | P | 02 59 44.2 | +0.9 |
| | comp=Z,217nm,1.7s | | | | | | |
| RPZ | Rata Peaks | 26.25 | 175 | P | P | 02 59 52.7 | +0.5 |
| | comp=Z,5.4nm,0.6s,baz=18,slow=6.4,SNR=4.6 | | | | | | |
| RPZ | | | | LR | LR | 03 09 16.7 | |
| | comp=Z,545nm,19.4s,baz=331,slow=34 | | | | | | |
| HTT | Hallett | 30.57 | 233 | P | P | 03 00 31.2 | +0.4 |
| | baz=31,SNR=3.7 | | | | | | |
| WRAB | Tennant Creek | 31.98 | 260 | ⇑ iP | P | 03 00 42.6 | -0.8 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 31.98 | 260 | eP | P | 03 00 41.9 | -1.5 |
| | comp=Z,14nm,1.1s | | | | | | |
| WRA | Warramunga Arr | 31.98 | 260 | P | P | 03 00 42.1 | -1.4 |
| | comp=Z,2.7nm,0.7s,baz=88,slow=8.6,SNR=16 | | | | | | |
| WRA | | | | PcP | PcP | 03 03 32.9 | -0.3 |
| | comp=Z,0.8nm,0.6s,baz=91,slow=3.4,SNR=5.5 | | | | | | |
| WRA | | | | LR | LR | 03 12 59.8 | |
| | comp=Z,604nm,18.5s,baz=85,slow=35 | | | | | | |
| ASAR | Alice Springs | 32.49 | 253 | P | P | 03 00 46.8 | -1.1 |
| | comp=Z,8.4nm,0.6s,baz=80,slow=8.9,SNR=34 | | | | | | |
| ASAR | | | | PcP | PcP | 03 03 33.8 | -0.8 |
| | comp=Z,1.2nm,0.8s,baz=77,slow=3.5,SNR=4.4 | | | | | | |
| ASAR | | | | LR | LR | 03 13 41.7 | |
| | comp=Z,962nm,18.2s,baz=84,slow=36 | | | | | | |
| ASAR | Alice Springs | 32.49 | 253 | P | P | 03 00 46.8 | -1.1 |
| ASAR | | | | | | 03 03 33.8 | |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ASAR | | | | MLR | MLR | | |
| | comp=Z,962nm,18.3s | | | | | | |
| BBOO | Buckleboo | 32.56 | 236 | P | P | 03 00 50.3 | +1.9 |
| | baz=33,SNR=7.2 | | | | | | |
| BBOO | Buckleboo | 32.56 | 236 | eP | P | 03 00 49.5 | +1.1 |
| MTN | Manton Dam | 35.89 | 272 | P | P | 03 01 10.8 | -6.5 |
| | baz=36,SNR=3.6 | | | | | | |
| WRKA | Warakurna | 37.69 | 252 | P | P | 03 01 33.2 | +0.5 |
| | baz=38,SNR=7.6 | | | | | | |
| FAKI | Fak Fak | 37.99 | 288 | P | P | 03 01 34.9 | -0.3 |
| | baz=38,SNR=4.5 | | | | | | |
| FAKI | Fak Fak | 37.99 | 288 | eP | P | 03 01 34.7 | -0.5 |
| | comp=Z,19nm,1.0s | | | | | | |
| FORT | Forrest | 38.60 | 242 | eP | P | 03 01 41.3 | +1.0 |
| | comp=Z,36nm,0.8s | | | | | | |
| TBI | Tubuai | 40.14 | 106 | eLQ | LQ | 03 11 15.9 | |
| | comp=Z,1µm,29.2s | | | | | | |
| TBI | | | | eLR | LR | 03 12 55.3 | |
| | comp=Z,520nm,28.5s | | | | | | |
| FITZ | Fitzroy Crossi | 40.31 | 262 | P | P | 03 01 54.6 | -0.1 |
| | baz=41,SNR=17 | | | | | | |
| FITZ | Fitzroy Crossi | 40.31 | 262 | eP | P | 03 01 54.2 | -0.5 |
| | comp=Z,41nm,0.8s | | | | | | |
| PPT2 | Papeete2 | 40.34 | 97 | eLQ | LQ | 03 11 17.5 | |
| | comp=Z,1µm,30.2s | | | | | | |
| PPT2 | | | | eLR | LR | 03 13 03.6 | |
| | comp=Z,695nm,24.2s | | | | | | |
| PPT | Papeete | 40.35 | 97 | LR | LR | 03 14 19.4 | |
| | comp=Z,491nm,20.5s,baz=262,slow=30 | | | | | | |
| KMBL | Kambalda | 43.93 | 243 | P | P | 03 02 24.3 | +0.2 |
| | baz=44,SNR=4.9 | | | | | | |
| MBWA | Marble Bar | 45.60 | 257 | eP | P | 03 02 37.6 | +0.1 |
| | comp=Z,31nm,0.8s | | | | | | |
| MEEK | Meekatharra | 46.47 | 250 | P | P | 03 02 44.2 | -0.1 |
| | baz=47,SNR=18 | | | | | | |
| NWAO | Narrogin (SRO) | 48.02 | 241 | P | P | 03 02 56.5 | +0.2 |
| | baz=49,SNR=8.0 | | | | | | |
| MORW | Morawa | 48.80 | 246 | P | P | 03 03 10.5 | +8.1 |
| | baz=49,SNR=3.4 | | | | | | |
| KAPI | Kappang | 48.82 | 279 | eP | P | 03 03 02.1 | -0.6 |
| | comp=Z,34nm,1.1s | | | | | | |
| RKT | Rikitea | 53.46 | 106 | eLR | LR | 03 19 06.5 | |
| | comp=Z,418nm,26.8s | | | | | | |
| KKM | Kota Kinabalu | 56.27 | 290 | eP | P | 03 03 57.7 | -0.4 |
| | comp=Z,17nm,1.0s | | | | | | |
| KSM | Kuching | 59.89 | 282 | P | P | 03 04 23.8 | +0.5 |
| | baz=60,SNR=4.5 | | | | | | |
| KSM | Kuching | 59.89 | 282 | eP | P | 03 04 23.3 | 0.0 |
| | comp=Z,23nm,0.8s | | | | | | |
| VNDA | Vanda | 60.12 | 182 | P | P | 03 04 24.4 | +0.5 |
| | comp=Z,2.3nm,0.8s,baz=6.2,slow=6.0,SNR=8.0 | | | | | | |
| VNDA | | | | LR | LR | 03 28 46.5 | |
| | comp=Z,172nm,18.2s,baz=12,slow=34 | | | | | | |
| SBA | Scott Base | 60.38 | 180 | eP | P | 03 04 27.3 | +1.7 |
| SBA | Scott Base | 60.38 | 180 | eP | P | 03 04 27.3 | +1.7 |
| MJAR | Matsushiro Arr | 60.70 | 333 | P | P | 03 04 27.4 | -0.9 |
| | comp=Z,2.9nm,0.8s,baz=169,slow=9.1,SNR=6.7 | | | | | | |
| MJAR | Matsushiro Arr | 60.70 | 333 | P | P | 03 04 27.4 | -0.9 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| MAJO | Matsushiro | 60.70 | 333 | ⇓ eP | P | 03 04 29.2 | +0.9 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,32nm,0.9s | | | | | | |
| MAJO | Matsushiro | 60.70 | 333 | eP | P | 03 04 28.5 | +0.1 |
| | comp=Z,13nm,0.9s | | | | | | |
| CASY | Casey | 61.27 | 203 | eP | P | 03 04 31.6 | -0.2 |
| | comp=Z,4.1nm,0.6s | | | | | | |
| ASAJ | Asahikawa | 65.59 | 340 | P | P | 03 05 01.1 | +0.5 |
| | comp=Z,8.6nm,0.7s,baz=219,slow=5.1,SNR=7.1 | | | | | | |
| ASAJ | Asahikawa | 65.59 | 340 | P | P | 03 05 01.1 | +0.5 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| TJN | Taejon | 65.95 | 325 | ⇓ eP | P | 03 05 03.0 | -0.1 |
| KSRS | Korea Array | 66.44 | 326 | P | P | 03 05 07.4 | +1.2 |
| | comp=Z,1.1nm,0.4s,baz=239,slow=29,SNR=6.4 | | | | | | |
| KSRS | | | | LR | LR | 03 34 11.2 | |
| | comp=Z,62nm,18.3s,baz=120,slow=36 | | | | | | |
| KSRS | Korea Array | 66.44 | 326 | P | P | 03 05 07.4 | +1.2 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| KSRS | | | | MLR | MLR | | |

comp=Z,62nm,18.3s
**KSAR Wonju Array Be 66.45 326** P **P** **03 05 07.4 +1.1**
**KSAR Wonju Array Be 66.45 326** P **P** **03 05 07.4 +1.1**
**QIZ Qiongzhong 67.74 300** P **P** **03 05 15.5 +0.6**
QIZ S **S** **03 14 08.1 -3.2**
**YSS Yuzh-Sakhalins 68.08 342** *e*P **P** **03 05 17.8 +1.4**
YSS pmax pmax
comp=Z,20nm,1.0s
YSS MLR MLR
comp=Z,400nm,19.0s
**NJ2 Nanjing 68.18 316** *e*P **P** **03 05 18.4 +1.1**
NJ2 PMZ
comp=Z,30nm,0.6s
**IPM Ipoh 69.62 282** *e*P **P** **03 05 26.0 -0.8**
comp=Z,13nm,0.8s
**USRK Ussuriysk Ar. 69.68 333** P **P** **03 05 28.2 +1.7**
comp=Z,4.0nm,0.8s,baz=147,slow=8.1,SNR=8.2
**KULM Kulim 70.25 282** *e*P **P** **03 05 30.3 -0.3**
comp=Z,25nm,1.2s
**PET Petropavlovsk 70.70 354** *e*P P 03 05 46.2 +14
**PETK Petropavlovsk- 70.88 353** P **P** **03 05 34.7 +1.1**
comp=Z,4.4nm,0.7s,baz=155,slow=12,SNR=4.1
PETK LR LR 03 32 42.4
comp=Z,78nm,19.0s,baz=165,slow=32
**CN2 Changchun 72.39 329** *e*P **P** **03 05 44.3 +1.4**
CN2 PMZ
comp=Z,10.0nm,0.8s
**QSPA South Pole Qui 72.54 180** *e*P **P** **03 05 43.7 0.0**
comp=Z,14nm,0.9s
**KLR Kul'dur 73.83 336** *e*P **P** **03 05 52.3 +1.0**
**GYA Guiyang 73.90 305** *e*P **P** **03 05 53.7 +1.3**
GYA pP PcP 03 06 16.8 +9.1
GYA PP **PP** **03 08 41.2 +3.5**
GYA S **SKiKP** **03 15 18.0 -1.8**
GYA SKS SKSac 03 15 48.4 -10
GYA PMZ
comp=Z,10.0nm,0.9s
GYA PMZ
comp=Z,90nm,5.4s
**BJI Beijing 74.88 321** P **P** **03 05 58.0 +0.4**
BJI S **S** **03 15 32.1 -1.0**
BJI SS **SS** **03 20 20.3 -1.8**
BJI PMZ
comp=Z,8.0nm,1.3s
BJI PMZ
comp=Z,97nm,5.1s
BJI LN
comp=Z,96nm,26.2s
BJI LE
comp=Z,99nm,19.4s
**RPN Rapa Nui 75.83 114** LR LR 03 34 16.3
comp=Z,65nm,18.9s,baz=16,slow=32
**KMI Kunming 76.40 302** P P 03 06 10.9 +4.0
KMI pP PcP 03 06 31.2 +13
KMI sP sP 03 06 40.8 +22
KMI S **S** **03 15 47.8 -3.2**
KMI PMZ
comp=Z,12nm,0.8s
KMI PMZ
comp=Z,72nm,3.4s
KMI LN
comp=Z,96nm,23.0s
KMI LE
comp=Z,98nm,29.9s
**CMAR Chiang Mai Arr 76.76 294** P **P** **03 06 09.7 +0.9**
comp=Z,2.4nm,0.7s,baz=134,slow=4.8,SNR=8.2
CMAR LR LR 03 42 12.9
comp=Z,31nm,18.7s,baz=105,slow=38
**CMAR Chiang Mai Arr 76.76 294** P **P** **03 06 09.7 +0.9**
CMAR pmax pmax
comp=Z,2.0nm,0.7s
CMAR MLR MLR
comp=Z,31nm,18.7s
**CHTO Chiang Mai 76.90 295** *e*P **P** **03 06 09.5 -0.1**
CHTO pmax pmax
comp=Z,4.0nm,0.5s
**CHTO Chiang Mai 76.90 295** *e*P **P** **03 06 09.5 -0.1**
comp=Z,4.4nm,0.5s
**HHC Hu-ho-hao-te 78.17 320** *e*P P 03 06 20.0 +3.6
HHC sP sP 03 06 53.5 +25
HHC S **S** **03 16 06.0 -3.4**
HHC PMZ
comp=Z,12nm,0.7s
HHC PMZ
comp=Z,76nm,6.7s
HHC LN
comp=Z,160nm,17.2s
HHC LE
comp=Z,330nm,18.5s
**CD2 Chengdu 78.28 308** *e*P **P** **03 06 17.6 +0.4**
CD2 pP PcP 03 06 39.9 +13
CD2 sP sP 03 06 49.6 +21
CD2 S **S** **03 16 06.7 -4.2**
CD2 SKS SKSac 03 16 23.0 -7.2
CD2 sS ScS 03 16 46.0 +10
CD2 SS **SS** **03 21 12.2 -1.9**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.6s
**MAW Mawson 79.61 202** P **P** **03 06 25.0 +1.3**
comp=Z,6.0nm,1.1s,baz=94,slow=4.9,SNR=9.1
MAW LR LR 03 37 09.4
comp=Z,226nm,20.4s,baz=63,slow=32
**MAW Mawson 79.61 202** P **P** **03 06 25.0 +1.3**
MAW pmax pmax
comp=Z,6.0nm,1.1s
**MAW Mawson 79.61 202** P **P** **03 06 25.2 +1.5**
baz=80,SNR=11
**SEY Seymchan 81.11 353** P **P** **03 06 33.2 +1.5**
comp=Z,7.2nm,0.7s,baz=150,slow=4.9,SNR=10
**SEY Seymchan 81.11 353**‖ *e*P **P** **03 06 32.1 +0.4**
**ULN Ulaanbaatar 84.80 324**‖ *e*P **P** **03 06 53.1 +1.7**
ULN pmax pmax
comp=Z,6.0nm,0.9s
**ULN Ulaanbaatar 84.80 324** *e*P **P** **03 06 52.6 +1.2**
comp=Z,16nm,1.0s
**YAK Yakutsk 84.89 343** P **P** **03 06 52.3 +1.1**
comp=Z,7.9nm,0.5s,baz=165,slow=16,SNR=2.9
YAK LR LR 03 40 14.6
comp=Z,203nm,21.5s,baz=155,slow=32
**YAK Yakutsk 84.89 343** *e*P **P** **03 06 48.2 -3.0**
YAK *e* 03 17 18.0
YAK *e*SSS SSS 03 26 17.7
YAK pmax pmax
comp=Z,8.0nm,0.6s
YAK pmax pmax
comp=N,6.0nm,1.1s
YAK pmax pmax
comp=E,5.0nm,1.8s
YAK pmax pmax
comp=Z,130nm,2.8s
YAK pmax pmax
comp=E,65nm,2.8s
YAK pmax pmax
comp=N,284nm,3.2s
**YAK Yakutsk 84.89 343** *e*P **P** **03 06 51.5 +0.3**
comp=N,32nm,0.6s
**GTA Gaotai 85.11 314** *e*P **P** **03 06 55.4 +2.3**
GTA pP pP 03 07 18.6 +17
GTA sP sP 03 07 28.3 +23
GTA PP PP 03 10 16.9 +6.1
GTA SKS **SKSac** **03 17 10.9 -5.4**
GTA S **S** **03 17 19.9 -1.4**
GTA sS sS 03 17 55.3 +20
GTA SS **SS** **03 22 59.6 +3.9**
GTA PMZ
comp=N,5.0nm,1.2s
GTA PMZ
comp=N,66nm,5.5s
GTA LN
comp=N,130nm,17.6s
GTA LE
comp=N,130nm,18.5s
GTA LZ
comp=N,130nm,17.6s
**SONM Songino Array 85.16 323** P **P** **03 06 52.4 -0.7**
comp=N,3.0nm,0.7s,baz=134,slow=4.2,SNR=14
SONM LR LR 03 46 37.9
comp=N,66nm,18.3s,baz=122,slow=37
**BILL Bilibino 85.31 359**‖ *e*P **P** **03 06 51.4 -1.8**
BILL pmax pmax
comp=Z,6.0nm,1.0s
**SYO Syowa Base 86.27 196**↑ *e*P **P** **03 06 57.0 -1.2**
**SYO Syowa Base 86.27 196**‖ *e*PcP **PcP** **03 07 01.9 +1.2**
**BPAW Bear Paw Mtn. 87.25 17** *e*P **P** **03 07 00.6 -2.3**
comp=Z,1.1nm,0.7s
**MCK McKinley 87.55 18** *e*P **P** **03 07 03.9 -0.5**
MCK pmax pmax
comp=Z,37nm,1.8s
**MCK McKinley 87.55 18** *e*P **P** **03 07 03.9 -0.5**
comp=Z,37nm,1.8s
**ZAK Zakamensk 88.23 325** *e*P **P** **03 07 06.5 -1.6**
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**NVAR Mina Array Bea 88.51 49** P **P** **03 07 09.8 -0.1**
comp=Z,0.8nm,0.7s,baz=204,slow=6.5,SNR=4.1
NVAR LR LR 03 38 18.3
comp=Z,250nm,21.0s,baz=253,slow=30
**TLY Talaya 88.69 326** LR LR 03 48 19.9
comp=Z,53nm,18.3s,baz=128,slow=37
**TLY Talaya 88.69 326** *e*P **P** **03 07 11.4 +1.3**
TLY pmax pmax
comp=Z,5.0nm,1.0s
**ILAR Eielson Array 88.92 18** P **P** **03 07 10.0 -0.9**
comp=Z,1.6nm,0.7s,baz=237,slow=5.2,SNR=10
ILAR LR LR 03 42 52.5
comp=Z,250nm,19.0s,baz=233,slow=33
**ILAR Eielson Array 88.92 18** P **P** **03 07 10.0 -0.9**
ILAR pmax pmax
comp=Z,2.0nm,0.7s
**NVL N'lazarevskaya 90.42 188** *e*P P 03 07 24.6 +6.7
NVL pmax pmax
comp=Z,10.0nm,0.9s
**SNAA Sanae 90.83 183** P **P** **03 07 19.5 -0.5**
**SNAA Sanae 90.83 183** *d* P **P** **03 07 18.9 -1.1**
SNAA pmax pmax
comp=Z,5.0nm,1.1s
**SNAA Sanae 90.83 183** *e*P **P** **03 07 18.6 -1.3**
comp=Z,8.3nm,1.3s
**VNA2 Neumayer--Watz 91.74 181** P **P** **03 07 24.2 +0.1**
baz=175,slow=3.3
**VNA1 Neumayer--Stat 92.04 181** P **P** **03 07 23.4 -2.0**
**WMQ Urumqi 95.19 314** *e*P **P** **03 07 41.5 +1.0**
**TXAR Lajitas Array 96.94 62** LR LR 03 46 23.3
comp=Z,65nm,18.1s,baz=0.0,slow=32
**MKAR Makanchi Array 99.71 316** P **Pdif** **03 08 00.9 +0.1**
comp=Z,0.9nm,0.6s,baz=95,slow=6.0,SNR=6.4
MKAR LR LR 03 52 15.8
comp=Z,42nm,21.7s,baz=86,slow=35
**MKAR Makanchi Array 99.71 316** *i* P **Pdif** **03 08 00.2 -0.5**
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**KSH Kashi 102.48 308** *e*P **Pdif** **03 08 17.9 +4.5**
KSH *e*PP **PKiKP** **03 12 34.5 -0.3**
KSH SKS **SKSac** **03 18 46.6 -4.9**
KSH S **Sdif** **03 19 53.4 -2.8**
KSH SS **SS** **03 27 06.8 +2.9**
KSH PMZ
comp=Z,72nm,3.7s
KSH LN
comp=Z,91nm,7.7s
KSH LE
comp=Z,89nm,5.6s
KSH LZ
comp=Z,110nm,5.8s
**SAML Samuel 122.97 113** *e*PKPdf **PKPdf** **03 13 14.1 0.0**
**ARCES ARCESS Array B 123.11 345** PKP **PKPdf** **03 13 11.9 -0.9**
comp=Z,1.4nm,0.5s,baz=92,slow=1.1,SNR=22
**ARCES ARCESS Array B 123.11 345** PKIKP **PKPdf** **03 13 11.9 -0.9**
ARCES pmax pmax
comp=Z,1.0nm,0.5s
**OBN Obninsk 127.43 327** *i* PKIKP **PKPdf** **03 13 23.1 +1.8**
OBN pmax pmax
comp=Z,5.0nm,1.0s
**FINES FINESS Array B 128.56 338** PKP **PKPdf** **03 13 24.4 +1.1**
comp=Z,0.7nm,0.5s,baz=49,slow=1.0,SNR=10
**FINES FINESS Array B 128.56 338** PKIKP **PKPdf** **03 13 24.4 +1.1**
FINES pmax pmax
comp=Z,1.0nm,0.5s
**NOA NORSAR Array B 133.48 345** PKP **PKPdf** **03 13 32.9 +0.1**
comp=Z,1.1nm,0.9s,baz=63,slow=1.9,SNR=2.9
**NOA NORSAR Array B 133.48 345** PKIKP **PKPdf** **03 13 32.9 +0.1**
NOA pmax pmax
comp=Z,1.0nm,0.9s
**KOLS Kolonicke sedl 138.16 326** *e*PKIKP **PKPdf** **03 13 44.2 +2.4**
**KOLS Kolonicke sedl 138.16 326** *e*PKP **PKPdf** **03 13 44.2 +2.4**
**STHS Stebnicka Huta 138.41 327** *e*PKIKP **PKPdf** **03 13 41.2 -1.1**
**STHS Stebnicka Huta 138.41 327** *e*PKP **PKPdf** **03 13 41.2 -1.1**
**GERES GERESS Array B 142.43 332** PKhKP PKPpre 03 13 45.7
comp=Z,0.3nm,0.5s,baz=72,slow=3.2,SNR=4.2
**SOKA Soboth 143.35 328**↑ *e*PKPdf **PKPdf** **03 13 50.6 -0.8**
comp=Z,2.3nm,0.7s
**STU Stuttgart 144.38 336** *e*PKIKP **PKPdf** **03 13 53.4 +0.4**
**STU Stuttgart 144.38 336** *e*PKPdf **PKPdf** **03 13 53.4 +0.4**
**WLF Walferdange 144.74 340** PKP PKPbc 03 13 53.0 +0.5
**WLF Walferdange 144.74 340** *e*PKIKP PKPbc 03 13 52.9 +0.4
**WLF Walferdange 144.74 340** *e*PKPdf PKPbc 03 13 52.9 +0.4
**RETA Reutte 144.75 333**↑ *e*PKPdf **PKPab** **03 13 52.2 -0.4**
comp=Z,16nm,1.7s
**BFO Black Forest 145.08 336** *e*PKIKP **PKPbc** **03 13 52.9 -0.8**
**BFO Black Forest 145.08 336** *e*PKPdf **PKPbc** **03 13 52.9 -0.8**
**FETA Feichten 145.12 333**↑ *e*PKPdf **PKPbc** **03 13 53.8 -0.3**
comp=Z,18nm,0.8s
**DAVA Damuels 145.29 334**↑ *e*PKPdf **PKPbc** **03 13 54.3 -0.3**
comp=Z,22nm,1.1s
**ECH Echery 145.62 337** *e*PKIKP **PKPab** **03 13 56.4 +0.7**
**ECH Echery 145.62 337** *e*PKPbc **PKPab** **03 13 56.4 +0.7**
**TUE Stuetta 146.15 333** *e*PKPbc **PKPdf** **03 13 56.6 +0.2**
**TIP Timpagrande 146.99 317** *e*PKPbc **PKPbc** **03 13 59.3 -0.6**
**BNI Bardonecchia 148.41 334** *e*PKIKP **PKPdf** **03 14 00.9 +0.8**
**BNI Bardonecchia 148.41 334** *e*PKPbc **PKPdf** **03 14 00.9 +0.8**
**ESDC Sonseca Array 156.84 344** PKPab **PKPab** **03 14 43.5 +1.3**
comp=Z,0.9nm,0.5s,baz=15,slow=4.4,SNR=11
**TORD Torodi Ar. Bea 166.14 254** PKP **PKPdf** **03 14 21.5 -1.4**
comp=Z,0.8nm,1.0s,baz=33,slow=1.5,SNR=3.6
TORD PKPab **PKPab** **03 15 22.9 -0.7**
comp=Z,1.0nm,1.1s,baz=94,slow=2.7,SNR=3.1

*JMA **02** 02:55:19.8±0.2,24.66N×122.98E,h35km±3km,M1.9*
*ISCJB **02** 02:55:20.2±0.5,24.55N±0.07×122.95E±0.03,h38km±6km,*
*Error ellipse: s-maj=12.2km s-min=4.7km az=10.1*
*TAP **02** 02:55:21.9,24.44N×122.62E,h1km±1km,ML3.1,D*
**ISC 02 02:55:20.2**±1.9,**24.55N**±0.08×**122.97E**±0.03,**h38**km±2km,
**n27**,σ**1**9**10**/**36**,**Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **YOJ** | **Yonaguni jima** | **0.09** | **154** | P | | **Pn** | | **02 55 26.4** | **-0.2** |
| YOJ | | | | *e*S | | **Sn** | | **02 55 30.6** | **-0.3** |
| **JYNG** | **Yonagunijimaku** | **0.10** | **192** | P | | **Pn** | | **02 55 26.5** | **-0.1** |
| JYNG | | | | *e*S | | **Sn** | | **02 55 31.3** | **+0.3** |
| **IRIF** | **Iriomote-Funau** | **0.73** | **107** | P | | **Pn** | | **02 55 34.2** | **+0.3** |
| **EGS** | baz=302 | **0.99** | **288** | *e*P | | **Pn** | | **02 55 38.2** | **+0.8** |
| EGS | baz=302 | | | *e*S | | **Sn** | | **02 55 48.8** | **-1.4** |
| **JKRS** | **Kuro-shima** | **1.00** | **108** | P | | **Pn** | | **02 55 38.5** | **+0.9** |
| JKRS | | | | *e*S | | **Sn** | | **02 55 50.8** | **+0.3** |
| **TWB1** | **Santiao Chiao** baz=314 | **1.00** | **298** | *e*P | | **Pn** | | **02 55 39.2** | **+1.5** |
| TWB1 | baz=314 | | | *e*S | | **Sn** | | **02 55 51.4** | **+0.9** |
| **TWC** | **Suao** baz=283 | **1.02** | **274** | P | | **Pn** | | **02 55 36.4** | **-1.5** |
| TWC | baz=283 | | | S | | **Sn** | | **02 55 48.5** | **-2.5** |
| **JIJ** | **Ishigaki jima** | **1.09** | **99** | P | | **Pn** | | **02 55 38.7** | **-0.1** |
| **ENA** | **Nanau** baz=268 | **1.12** | **264** | *e*P | | **Pn** | | **02 55 38.2** | **-1.2** |
| ENA | baz=268 | | | *e*S | | **Sn** | | **02 55 52.3** | **-1.3** |
| **TWE** | **Neicheng** baz=287 | **1.20** | **279** | *e*P | | **Pn** | | **02 55 41.0** | **+0.6** |
| **NWF** | **Wu-fen Shan** baz=309 | **1.20** | **296** | *e*P | | **Pn** | | **02 55 41.1** | **+0.6** |
| **JISG** | **Ishigakijimahi** | **1.22** | **88** | P | | **Pn** | | **02 55 40.0** | **-0.7** |
| **ENTT** | **Nioudou** baz=281 | **1.28** | **275** | *e*P | | **Pn** | | **02 55 41.6** | **0.0** |
| ENTT | baz=281 | | | *e*S | | **Sn** | | **02 55 56.4** | **-1.0** |
| **NNS** | **Nan Shan** baz=269 | **1.46** | **266** | *e*P | | **Pn** | | **02 55 44.4** | **+0.4** |
| **NSK** | **Sanguang** baz=281 | **1.47** | **275** | *e*P | | **Pn** | | **02 55 45.1** | **+0.9** |
| NSK | baz=281 | | | *e*S | | **Sn** | | **02 56 02.0** | **-0.2** |
| **ESL** | **Shilin** baz=239 | **1.58** | **243** | *e*P | | **Pn** | | **02 55 46.1** | **+0.5** |
| **WHF** | **Hehuan Shan** baz=256 | **1.60** | **256** | *e*P | | **Pn** | | **02 55 47.5** | **+1.1** |
| **TWT** | **Tachien** baz=261 | **1.66** | **260** | *e*P | | **Pn** | | **02 55 48.9** | **+2.0** |
| **WDT** | **Danda** baz=243 | **1.85** | **245** | *e*P | | **Pn** | | **02 55 51.0** | **+1.4** |
| **TWF1** | **Yuli** baz=227 | **1.94** | **232** | *e*P | | **Pn** | | **02 55 50.4** | **-0.1** |
| **SMLT** | **Sun Moon Lake** baz=250 | **2.00** | **251** | *e*P | | **Pn** | | **02 55 51.8** | **+0.3** |
| **TYC** | **Yuchr** baz=251 | **2.03** | **252** | *e*P | | **Pn** | | **02 55 53.6** | **+1.8** |
| **ALS** | **Alishan** baz=240 | **2.23** | **243** | *e*P | | **Pn** | | **02 55 55.2** | **+0.3** |
| **ELDTW** | **Lidau** baz=229 | **2.24** | **233** | *e*P | | **Pn** | | **02 55 54.7** | **-0.1** |
| **CHN5** | **Tsauling** baz=244 | **2.29** | **246** | *e*P | | **Pn** | | **02 55 56.2** | **+0.6** |
| **WTP** | **Ta-pu** baz=236 | **2.51** | **240** | *e*P | | **Pn** | | **02 56 00.6** | **+2.1** |
| **CHN1** | **Nanshi** baz=236 | **2.61** | **239** | *e*P | | **Pn** | | **02 56 00.9** | **+1.0** |

*CRAAG **02** 02:56:36.1,35.77N×0.51E,Ml3.5*
*ISCJB **02** 02:56:37.9±0.5,35.96N±0.04×0.51E±0.05,h28km±7km,*
*Error ellipse: s-maj=8.5km s-min=5.6km az=140.9*
*CSEM **02** 02:56:38.1±0.2,35.92N×0.53E,h20km,mb3.4,Error*
*ellipse: s-maj=4.8km s-min=3.2km az=9.0*
*MDD **02** 02:56:38.4±1.4,35.86N×0.60E,h20km±6km,mb3.4/17,*
*Error ellipse: s-maj=16.0km s-min=8.7km az=130.0,*
*PRXIMO*
**ISC 02 02:56:37.7**±1.0,**35.89N**±0.04×**0.55E**±0.04,**h24**km±7km,
**n53**,σ**0.95**/**88**,**Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OKGL** | **Djebel Kef Gue** | **0.17** | **27** | P | | **Pb** | | **02 56 43.2** | **+0.2** |
| **OKGL** | **Djebel Kef Gue** 89nm,0.2s,SNR=7.9 | **0.17** | **27** | P | | **Pb** | | **02 56 43.2** | **+0.2** |
| OKGL | 7μm,0.4s,SNR=7.9 | | | S | | **Sb** | | **02 56 46.4** | **-0.2** |
| **OKGL** | **Djebel Kef Gue** 89nm,0.2s,SNR=7.9 | **0.17** | **27** | P | | **Pb** | | **02 56 43.2** | **+0.2** |
| OKGL | 7μm,0.4s,SNR=7.9 | | | S | | **Sb** | | **02 56 46.4** | **-0.2** |
| **OJGS** | **Djebel Guires** | **0.41** | **157** | P | | **Pb** | | **02 56 46.2** | **-0.3** |
| **OJGS** | **Djebel Guires** | **0.41** | **157** | P | | **Pb** | | **02 56 46.2** | **-0.3** |
| **EANR** | **'Ain N'Sour** | **0.45** | **82** | P | | **Pb** | | **02 56 47.1** | **-0.1** |
| **EANR** | **'Ain N'Sour** | **0.45** | **82** | P | | **Pb** | | **02 56 47.1** | **-0.1** |
| **ECHA** | **Ech Chlef** | **0.71** | **68** | P | | **Pb** | | **02 56 52.3** | **+0.8** |
| **ECHA** | **Ech Chlef** | **0.71** | **68** | P | | **Pb** | | **02 56 52.3** | **+0.8** |
| **EBNR** | **Beni Rached** | **0.89** | **63** | P | | **Pb** | | **02 56 55.0** | **+0.4** |
| **EBNR** | **Beni Rached** | **0.89** | **63** | P | | **Pb** | | **02 56 55.0** | **+0.4** |
| **USTO** | **Oran** | **0.91** | **261** | P | | **Pn** | | **02 56 57.0** | **+2.1** |
| **OTSS** | **Djebel Tessala** | **1.25** | **242** | P | | **Pn** | | **02 57 00.5** | **+0.7** |
| **OTSS** | **Djebel Tessala** | **1.25** | **242** | P | | **Pn** | | **02 57 00.5** | **+0.7** |
| **OLHC** | **Oulhaca** | **1.73** | **249** | P | | Pn | | 02 56 45.0 | -21 |
| **EMUR** | **La Murta** 93nm,6.5s,SNR=7.9 | **2.42** | **324** | S | | **Sn** | | **02 57 44.8** | **0.0** |
| **EMUR** | **La Murta** 93nm,6.5s,SNR=7.9 | **2.42** | **324** | S | | **Sn** | | **02 57 44.8** | **0.0** |
| **ENIJ** | **Nijar** 4.1nm,0.3s,SNR=7.9 | **2.47** | **297** | P | | **Pn** | | **02 57 16.6** | **0.0** |
| ENIJ | 14nm,0.3s,SNR=7.9 | | | S | | **Sn** | | **02 57 44.5** | **-1.5** |
| **ENIJ** | **Nijar** 4.1nm,0.3s,SNR=7.9 | **2.47** | **297** | P | | **Pn** | | **02 57 16.6** | **0.0** |
| ENIJ | 14nm,0.3s,SNR=7.9 | | | S | | **Sn** | | **02 57 44.5** | **-1.5** |
| **EBEN** | **Beniarda** 2.1nm,0.4s,SNR=4.0 | **2.88** | **348** | P | | **Pn** | | **02 57 22.4** | **+0.2** |
| EBEN | 4.0nm,0.9s,SNR=7.9 | | | S | | **Sn** | | **02 57 54.1** | **-2.0** |
| **EBEN** | **Beniarda** 2.1nm,0.4s,SNR=4.0 | **2.88** | **348** | P | | **Pn** | | **02 57 22.4** | **+0.2** |
| EBEN | 4.0nm,0.9s,SNR=7.9 | | | S | | **Sn** | | **02 57 54.1** | **-2.0** |
| **EALB** | **Alboran** 1.0nm,0.3s,SNR=7.9 | **2.91** | **272** | P | | **Pn** | | **02 57 22.5** | **0.0** |
| EALB | 4.7nm,0.3s,SNR=7.9 | | | S | | **Sn** | | **02 57 56.6** | **-0.1** |
| **EALB** | **Alboran** 1.0nm,0.3s,SNR=7.9 | **2.91** | **272** | P | | **Pn** | | **02 57 22.5** | **0.0** |
| EALB | 4.7nm,0.3s,SNR=7.9 | | | S | | **Sn** | | **02 57 56.6** | **-0.1** |
| **EBER** | **Berja** 3.4nm,0.2s,SNR=29 | **2.95** | **291** | P | | **Pn** | | **02 57 23.0** | **-0.3** |
| EBER | 21nm,0.8s,SNR=5.0 | | | S | | **Sn** | | **02 57 58.6** | **+0.6** |
| **EBER** | **Berja** 3.4nm,0.2s,SNR=29 | **2.95** | **291** | P | | **Pn** | | **02 57 23.0** | **-0.3** |
| EBER | 21nm,0.8s,SNR=5.0 | | | S | | **Sn** | | **02 57 58.6** | **+0.6** |
| **EHUE** | **Huescar** 1.8nm,0.9s,SNR=7.9 | **3.17** | **308** | P | | **Pn** | | **02 57 26.7** | **+0.5** |
| EHUE | 2.4nm,0.6s,SNR=7.9 | | | S | | **Sn** | | **02 58 03.0** | **-0.3** |
| **EHUE** | **Huescar** 1.8nm,0.9s,SNR=7.9 | **3.17** | **308** | P | | **Pn** | | **02 57 26.7** | **+0.5** |
| EHUE | 2.4nm,0.6s,SNR=7.9 | | | S | | **Sn** | | **02 58 03.0** | **-0.3** |
| **EIBI** | **Ibiza** 3.3nm,0.3s,SNR=7.9 | **3.20** | **11** | P | | **Pn** | | **02 57 27.5** | **+1.0** |
| EIBI | 5.0nm,0.6s,SNR=7.9 | | | S | | **Sn** | | **02 58 03.2** | **-0.7** |
| **EIBI** | **Ibiza** 3.3nm,0.3s,SNR=7.9 | **3.20** | **11** | P | | **Pn** | | **02 57 27.5** | **+1.0** |
| EIBI | 5.0nm,0.6s,SNR=7.9 | | | S | | **Sn** | | **02 58 03.2** | **-0.7** |
| **ETOB** | **Tobarra** 1.4nm,0.3s,SNR=7.4 | **3.22** | **329** | P | | **Pn** | | **02 57 28.0** | **+1.1** |
| ETOB | 4.8nm,0.3s | | | S | | **Sn** | | **02 58 04.3** | **-0.3** |
| **ETOB** | **Tobarra** 1.4nm,0.3s,SNR=7.4 | **3.22** | **329** | P | | **Pn** | | **02 57 28.0** | **+1.1** |
| ETOB | 4.8nm,0.3s | | | S | | **Sn** | | **02 58 04.3** | **-0.3** |
| **GORA** | **Gorafe** 16nm,4.2s,SNR=7.9 | **3.29** | **300** | S | | **Sn** | | **02 58 06.1** | **-0.3** |
| **GORA** | **Gorafe** 16nm,4.2s,SNR=7.9 | **3.29** | **300** | S | | **Sn** | | **02 58 06.1** | **-0.3** |
| **SESP** | **Santiago Espad** 7.1nm,0.2s,SNR=7.9 | **3.33** | **313** | P | | **Pn** | | **02 57 29.4** | **+0.9** |
| SESP | 85nm,0.5s,SNR=7.9 | | | S | | **Sn** | | **02 58 07.3** | **-0.1** |
| **SESP** | **Santiago Espad** 7.1nm,0.2s,SNR=7.9 | **3.33** | **313** | P | | **Pn** | | **02 57 29.4** | **+0.9** |
| SESP | 85nm,0.5s,SNR=7.9 | | | S | | **Sn** | | **02 58 07.3** | **-0.1** |
| **EQUE** | **Quentar** 1.8nm,0.2s,SNR=6.1 | **3.47** | **293** | P | | **Pn** | | **02 57 31.4** | **+1.1** |
| EQUE | 3.7nm,0.6s,SNR=4.0 | | | S | | **Sn** | | **02 58 10.6** | **-0.2** |
| **EQUE** | **Quentar** 1.8nm,0.2s,SNR=6.1 | **3.47** | **293** | P | | **Pn** | | **02 57 31.4** | **+1.1** |
| EQUE | 3.7nm,0.6s,SNR=4.0 | | | S | | **Sn** | | **02 58 10.6** | **-0.2** |
| **EQES** | **Quesada** 1.2nm,0.1s,SNR=34 | **3.48** | **304** | P | | **Pn** | | **02 57 32.2** | **+1.8** |
| EQES | 10nm,0.7s,SNR=7.9 | | | S | | **Sn** | | **02 58 10.4** | **-0.5** |
| **EQES** | **Quesada** 1.2nm,0.1s,SNR=34 | **3.48** | **304** | P | | **Pn** | | **02 57 32.2** | **+1.8** |
| EQES | 10nm,0.7s,SNR=7.9 | | | S | | **Sn** | | **02 58 10.4** | **-0.5** |
| **EVIA** | **Vianos** 2.2nm,0.8s,SNR=7.9 | **3.67** | **319** | P | | **Pn** | | **02 57 34.0** | **+0.9** |
| EVIA | 9.7nm,0.4s,SNR=9.7 | | | S | | **Sn** | | **02 58 15.3** | **-0.4** |
| **EVIA** | **Vianos** 2.2nm,0.8s,SNR=7.9 | **3.67** | **319** | P | | **Pn** | | **02 57 34.0** | **+0.9** |
| EVIA | 9.7nm,0.4s,SNR=9.7 | | | S | | **Sn** | | **02 58 15.3** | **-0.4** |
| **SELV** | **Sierra Elvira** 4.5nm,0.8s,SNR=7.9 | **3.70** | **293** | P | | **Pn** | | **02 57 34.7** | **+1.3** |
| SELV | 16nm,11.4s,SNR=7.9 | | | S | | **Sn** | | **02 58 15.8** | **-0.5** |
| **SELV** | **Sierra Elvira** 4.5nm,0.8s,SNR=7.9 | **3.70** | **293** | P | | **Pn** | | **02 57 34.7** | **+1.3** |
| SELV | 16nm,11.4s,SNR=7.9 | | | S | | **Sn** | | **02 58 15.8** | **-0.5** |
| **EMIJ** | **Mijas** 4.3nm,1.1s,SNR=7.9 | **4.36** | **281** | P | | **Pn** | | **02 57 43.0** | **+0.5** |
| EMIJ | 4.0nm,1.9s,SNR=7.9 | | | S | | **Sn** | | **02 58 31.2** | **-1.2** |
| **EMIJ** | **Mijas** 4.3nm,1.1s,SNR=7.9 | **4.36** | **281** | P | | **Pn** | | **02 57 43.0** | **+0.5** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| EMIJ | | | | S | Sn | 02 58 31.2 | -1.2 |
| | 4.0nm,1.9s,SNR=7.9 | | | | | | |
| EMOS | Mosqueruela | 4.54 | 350 | P | Pn | 02 57 45.7 | +0.6 |
| | 3.3nm,0.5s,SNR=7.9 | | | | | | |
| EMOS | | | | S | Sn | 02 58 35.7 | -1.6 |
| | 1.4nm,0.5s,SNR=4.0 | | | | | | |
| EMOS | Mosqueruela | 4.54 | 350 | P | Pn | 02 57 45.7 | +0.6 |
| | 3.3nm,0.5s,SNR=7.9 | | | | | | |
| EMOS | | | | S | Sn | 02 58 35.7 | -1.6 |
| | 1.4nm,0.5s,SNR=4.0 | | | | | | |
| EADA | Adamuz | 4.69 | 301 | P | Pn | 02 57 48.0 | +1.0 |
| | 1.5nm,1.8s,SNR=7.9 | | | | | | |
| EADA | | | | S | Sn | 02 58 39.4 | -1.3 |
| | 1.3nm,0.8s,SNR=7.9 | | | | | | |
| EADA | Adamuz | 4.69 | 301 | P | Pn | 02 57 48.0 | +1.0 |
| | 1.5nm,1.8s,SNR=7.9 | | | | | | |
| EADA | | | | S | Sn | 02 58 39.4 | -1.3 |
| | 1.3nm,0.8s,SNR=7.9 | | | | | | |
| ESDC | Sonseca Array | 5.20 | 318 | P | Pn | 02 57 54.9 | +0.8 |
| | SNR=7.9 | | | | | | |
| ESDC | | | | S | Sn | 02 58 51.5 | -1.9 |
| | 0.4nm,0.3s,baz=134,slow=22,SNR=5.5 | | | | | | |
| ESDC | Sonseca Array | 5.20 | 318 | P | Pn | 02 57 54.9 | +0.8 |
| | SNR=7.9 | | | | | | |
| ESDC | | | | S | Sn | 02 58 51.5 | -1.9 |
| | 0.4nm,0.3s,baz=134,slow=22,SNR=5.5 | | | | | | |
| ECAB | El Cabril | 5.25 | 296 | P | Pn | 02 57 55.5 | +0.7 |
| | 3.0nm,1.1s,SNR=7.9 | | | | | | |
| ECAB | | | | S | Sn | 02 58 52.6 | -2.0 |
| | 10nm,11.7s,SNR=7.9 | | | | | | |
| ECAB | El Cabril | 5.25 | 296 | P | Pn | 02 57 55.5 | +0.7 |
| | 3.0nm,1.1s,SNR=7.9 | | | | | | |
| ECAB | | | | S | Sn | 02 58 52.6 | -2.0 |
| | 10nm,11.7s,SNR=7.9 | | | | | | |

*KRSC **02** 02:56:39.9±1.4, 54°.61N×161°.73E, h51km±24km, ML4.5*
*IDC **02** 02:56:41.4±0.6, 54°.79N×161°.21E, h40km±6km, mb3.8/20, mb1 4.0/22, mb1mx3.8/50, mbtmp4.0/22, ML3.5/2, MS3.2/3, Ms1 3.1/3, ms1mx2.7/36, Error ellipse: s-maj=19.2km s-min=12.1km az=142.0*
*ISCJB **02** 02:56:42.4±0.5, 54°.67N±0°.03×161°.55E±0°.07, h66km±4km, mb4.0/36, Error ellipse: s-maj=7.5km s-min=3.5km az=21.4*
*MOS **02** 02:56:42.4±0.9, 54°.65N×161°.48E, h66km, mb4.3/21, Error ellipse: s-maj=10.5km s-min=5.6km az=71.0*
*NEIC **02** 02:56:43.7±0.8, 54°.75N×161°.22E, h64km±8km, mb4.2/13, Error ellipse: s-maj=8.8km s-min=5.5km az=149.0*
**ISC 02 02:56:42.5**±0.6**, 54°.65N**±0°.03×**161°.58E**±0°.05**, h54**km±5km**, n130, σ1ˢ30**/158**, mb4.1**/36**, 2C-6D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time (h m s) | Res ISC |
|---|---|---|---|---|---|---|---|
| KZV | Kizimen | 0.88 | 303 | eP | Pn | 02 56 58.3 | -0.5 |
| KZV | | | | eS | Sn | 02 57 11.4 | +0.6 |
| TUMR | Tumrok | 1.04 | 308 | eP | Pn | 02 57 01.0 | 0.0 |
| TUMR | | | | eS | Sn | 02 57 15.7 | +1.1 |
| TUMR | Tumrok | 1.04 | 308 | PN | Pn | 02 57 01.0 | 0.0 |
| TUMR | | | | S | Sn | 02 57 15.7 | +1.1 |
| KMNR | Kamenistaya | 1.35 | 326 | eP | Pn | 02 57 05.9 | +0.8 |
| KMNR | | | | eS | Sn | 02 57 24.1 | +2.1 |
| KMNR | Kamenistaya | 1.35 | 326 | PN | Pn | 02 57 05.9 | +0.8 |
| KMNR | | | | S | Sn | 02 57 24.1 | +2.1 |
| KII | Karymskiy | 1.39 | 245 | eP | Pn | 02 57 05.7 | +0.1 |
| KII | | | | eS | Sn | 02 57 23.3 | +0.4 |
| KII | Karymskiy | 1.39 | 245 | PN | Pn | 02 57 05.7 | +0.1 |
| KII | | | | S | Sn | 02 57 23.3 | +0.4 |
| BZMR | Bezymyannaya | 1.43 | 335 | eP | Pn | 02 57 07.0 | +0.8 |
| BZWR | Bezymyannyi-We | 1.46 | 335 | eP | Pn | 02 57 07.2 | +0.6 |
| KIRR | Kirishev | 1.49 | 332 | eP | Pn | 02 57 06.8 | -0.2 |
| KPT | Kopyto | 1.53 | 330 | eP | Pn | 02 57 08.8 | +1.3 |
| KPT | Kopyto | 1.53 | 330 | PN | Pn | 02 57 08.8 | +1.3 |
| SPN | Mys Shipunski | 1.81 | 211 | eP | Pn | 02 57 10.1 | -1.1 |
| SPN | | | | eS | Sn | 02 57 30.4 | -2.5 |
| SPN | Mys Shipunski | 1.81 | 211 | PN | Pn | 02 57 10.1 | -1.1 |
| SPN | | | | S | Sn | 02 57 30.4 | -2.5 |
| SRDR | Sredinnyy | 1.98 | 328 | eP | Pn | 02 57 14.1 | +0.5 |
| SRDR | | | | eS | Sn | 02 57 37.4 | +0.1 |
| SRDR | Sredinnyy | 1.98 | 328 | PN | Pn | 02 57 14.1 | +0.5 |
| SRDR | | | | S | Sn | 02 57 37.4 | +0.1 |
| NLC | Nalytchevo | 1.99 | 223 | eP | Pn | 02 57 13.7 | +0.1 |
| NLC | | | | eS | Sn | 02 57 37.7 | +0.5 |
| NLC | Nalytchevo | 1.99 | 223 | PN | Pn | 02 57 13.7 | +0.1 |
| NLC | | | | S | Sn | 02 57 37.7 | +0.5 |
| SDLR | Sedlovina | 2.10 | 230 | eP | Pn | 02 57 16.0 | +0.7 |
| SDLR | | | | eS | Sn | 02 57 40.8 | +0.4 |
| SDLR | Sedlovina | 2.10 | 230 | PN | Pn | 02 57 16.0 | +0.7 |
| SDLR | | | | S | Sn | 02 57 40.8 | +0.4 |
| SMAR | Somma | 2.15 | 231 | eP | Pn | 02 57 16.9 | +0.8 |
| SMAR | | | | eS | Sn | 02 57 42.6 | +0.9 |
| SMAR | Somma | 2.15 | 231 | PN | Pn | 02 57 16.9 | +0.8 |
| SMAR | | | | S | Sn | 02 57 42.6 | +0.9 |
| KRX | Arik | 2.16 | 234 | eP | Pn | 02 57 17.0 | +0.9 |
| KRX | | | | eS | Sn | 02 57 43.2 | +1.4 |
| UGLR | Uglovaya | 2.18 | 230 | eP | Pn | 02 57 17.3 | +1.0 |
| UGLR | | | | eS | Sn | 02 57 44.1 | +2.0 |
| AVH | Avacha | 2.18 | 232 | eP | Pn | 02 57 17.3 | +1.0 |
| AVH | | | | eS | Sn | 02 57 44.3 | +2.2 |
| AVH | Avacha | 2.18 | 232 | PN | Pn | 02 57 17.3 | +1.0 |
| AVH | | | | S | Sn | 02 57 44.3 | +2.2 |
| KOK | Koryaka | 2.21 | 233 | eP | Pn | 02 57 17.7 | +1.0 |
| KOK | | | | eS | Sn | 02 57 44.9 | +2.0 |
| KOK | Koryaka | 2.21 | 233 | PN | Pn | 02 57 17.7 | +1.0 |
| KOK | | | | S | Sn | 02 57 44.9 | +2.0 |
| GNL | Ganaly | 2.34 | 247 | eP | Pn | 02 57 19.6 | +1.0 |
| GNL | Ganaly | 2.34 | 247 | PN | Pn | 02 57 19.6 | +1.0 |
| PET | Petropavlovsk | 2.38 | 228 | eP | Pn | 02 57 19.8 | +0.8 |
| PET | | | | eS | Sn | 02 57 48.1 | +1.1 |
| PET | Petropavlovsk | 2.38 | 228 | ePN | Pn | 02 57 20.3 | +1.3 |
| PET | | | | eS | Sn | 02 57 48.3 | +1.4 |
| PET | | | | pmax | pmax | | |
| | comp=Z,173nm,0.4s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,2µm,0.4s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,1µm,0.6s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,300nm,18.0s | | | | | | |
| PET | Petropavlovsk | 2.38 | 228 | ePn | Pn | 02 57 19.4 | +0.5 |
| PET | | | | eSn | Sn | 02 57 48.0 | +1.1 |
| PETK | Petropavlovsk- | 2.77 | 238 | Pn | Pn | 02 57 23.9 | -0.3 |
| | comp=Z,6.5nm,0.3s,baz=73,slow=17,SNR=23 | | | | | | |
| PETK | | | | Sn | Sn | 02 58 02.4 | +5.9 |
| | comp=Z,21nm,0.3s,baz=94,slow=39,SNR=8.9 | | | | | | |
| PETK | | | | LR | LR | 02 58 45.0 | |
| | comp=Z,124nm,21.3s,baz=41,slow=46 | | | | | | |
| PETK | Petropavlovsk- | 2.77 | 238 | PN | Pn | 02 57 24.0 | -0.3 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.3s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,124nm,21.3s | | | | | | |
| RUS | Russkaya | 2.88 | 221 | eP | Pn | 02 57 26.0 | +0.2 |
| RUS | | | | eS | Sn | 02 57 59.6 | +0.5 |
| RUS | Russkaya | 2.88 | 221 | PN | Pn | 02 57 26.0 | +0.2 |
| RUS | | | | S | Sn | 02 57 59.6 | +0.5 |
| MTVR | Mutnovka | 2.97 | 224 | eP | Pn | 02 57 29.3 | +2.1 |
| MTVR | | | | eS | Sn | 02 58 03.8 | +2.2 |
| MIPR | Malaya Ipel'ka | 3.74 | 232 | eP | Pn | 02 57 39.7 | +2.1 |
| OSSR | Ossora | 4.68 | 9 | eP | Pn | 02 57 50.3 | -0.2 |
| SKR | Severo-Kuril's | 5.18 | 222⇑ | ePN | Pn | 02 57 59.3 | +2.0 |
| MA2 | Magadan | 7.68 | 314 | ePN | Pn | 02 58 35.4 | +3.9 |
| KUR | Kuril'sk | 12.89 | 229 | ePN | Pn | 02 59 44.9 | +2.1 |
| UGL | Uglegorsk | 13.27 | 253 | ePN | Pn | 02 59 46.6 | -1.3 |
| BILL | Bilibino | 13.62 | 8 | eP | P | 02 59 58.2 | -1.6 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| ASAJ | Asahikawa | 16.19 | 237 | Pn | Pn | 03 00 25.0 | -1.2 |
| | comp=Z,0.6nm,0.3s,baz=90,slow=12,SNR=5.4 | | | | | | |
| ASAJ | Asahikawa | 16.19 | 237 | P | Pn | 03 00 25.0 | -1.2 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ERM | Erimo | 17.53 | 231⇓ | eP | Pn | 03 00 41.8 | -1.1 |
| HABR | Khabarovsk | 17.55 | 260 | eP | Pn | 03 00 42.0 | -1.0 |
| HABR | | | | eS | Sn | 03 03 56.8 | -0.6 |
| HABR | | | | pmax | pmax | | |
| | comp=N,14nm,1.0s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,24nm,1.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,52nm,17.0s | | | | | | |
| YAK | Yakutsk | 18.14 | 307 | LR | LR | 03 08 22.3 | |
| | comp=Z,68nm,19.5s,baz=74,slow=39 | | | | | | |
| YAK | Yakutsk | 18.14 | 307 | eP | Pn | 03 00 50.8 | +0.6 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| MJA0 | Matsu Arr-Jizo | 24.19 | 231 | eP | P | 03 01 54.5 | +0.8 |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| MAJO | Matsushiro | 24.21 | 231⇓ | eP | P | 03 01 53.4 | -0.5 |
| MAJO | | | | i *PP | pP | 03 02 10.0 | +2.6 |
| MAJO | Matsushiro | 24.21 | 231 | eP | P | 03 01 53.9 | 0.0 |
| | comp=Z,9.7nm,0.6s | | | | | | |
| MAT | Matsushiro | 24.21 | 231 | P | P | 03 01 53.6 | -0.3 |
| MJAR | Matsushiro Arr | 24.21 | 231 | P | P | 03 01 54.2 | +0.3 |
| | comp=Z,2.6nm,0.6s,baz=28,slow=8.4,SNR=9.4 | | | | | | |
| MJAR | Matsushiro Arr | 24.21 | 231 | P | P | 03 01 54.2 | +0.3 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| ILAR | Eielson Array | 27.10 | 47 | P | P | 03 02 19.7 | 0.0 |
| | comp=Z,1.3nm,0.9s,baz=271,slow=8.3,SNR=11 | | | | | | |
| ILAR | Eielson Array | 27.10 | 47 | eP | P | 03 02 19.9 | +0.1 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| TJN | Taejon | 29.73 | 246⇑ | eP | P | 03 02 44.7 | +1.3 |
| INK | Inuvik | 32.10 | 39 | P | P | 03 03 04.6 | +0.7 |
| | comp=Z,2.0nm,0.6s,baz=296,slow=5.1,SNR=8.2 | | | | | | |
| INK | Inuvik | 32.10 | 39 | eP | P | 03 03 04.2 | +0.3 |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| INK | Inuvik | 32.10 | 39 | eP | P | 03 03 04.2 | +0.3 |
| | comp=Z,2.1nm,0.6s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 35.09 | 171 | T | T | 03 40 40.4 | |
| | baz=355,slow=76,SNR=260 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 35.11 | 171 | T | T | 03 40 41.5 | |
| | baz=355,slow=76,SNR=176 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 35.11 | 171 | T | T | 03 40 41.7 | |
| | baz=355,slow=76,SNR=193 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 36.29 | 172 | T | T | 03 42 12.6 | |
| | baz=4.5,slow=71 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 36.30 | 172 | T | T | 03 42 14.5 | |
| | baz=4.5,slow=71 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 36.31 | 172 | T | T | 03 42 15.2 | |
| | baz=4.5,slow=71 | | | | | | |
| YKA | Yellowknife Ar | 41.42 | 44 | P | P | 03 04 24.1 | +1.0 |
| | comp=Z,1.8nm,0.6s,baz=300,slow=8.0,SNR=4.5 | | | | | | |
| YKA | Yellowknife Ar | 41.42 | 44 | P | P | 03 04 24.1 | +1.0 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| SPITS | Spitsbergen Ar | 45.74 | 351 | P | P | 03 04 56.8 | -0.9 |
| | comp=Z,4.2nm,0.7s,baz=60,slow=8.5,SNR=4.9 | | | | | | |
| SPITS | Spitsbergen Ar | 45.74 | 351 | P | P | 03 04 56.8 | -0.9 |
| SPITS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| KURK | Kurchatov | 47.67 | 301 | eP | P | 03 05 11.5 | -1.5 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| KURK | Kurchatov | 47.67 | 301 | eP | P | 03 05 11.5 | -1.5 |
| | comp=Z,3.1nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 47.77 | 301 | P | P | 03 05 11.0 | -2.8 |
| | comp=Z,1.1nm,0.6s,baz=58,slow=7.9,SNR=8.2 | | | | | | |
| MKAR | Makanchi Array | 48.28 | 295 | P | P | 03 05 14.7 | -3.2 |
| | comp=Z,0.5nm,0.6s,baz=60,slow=8.5,SNR=4.1 | | | | | | |
| MKAR | Makanchi Array | 48.28 | 295 | eP | P | 03 05 16.7 | -1.2 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| BSMT | Bassoo Peak | 49.84 | 61 | eP | P | 03 05 31.3 | +1.3 |
| | comp=Z,4.1nm,1.1s | | | | | | |
| BRVK | Borovoye | 50.14 | 308⇓ | eP | P | 03 05 32.6 | +0.6 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| JTMT | Jette | 50.16 | 61 | eP | P | 03 05 33.9 | +1.6 |
| | comp=Z,1.4nm,0.8s | | | | | | |
| ARCES | ARCESS Array B | 52.08 | 342 | P | P | 03 05 45.3 | -1.0 |
| | comp=Z,1.4nm,0.8s,baz=27,slow=10,SNR=3.3 | | | | | | |
| ARCES | ARCESS Array B | 52.08 | 342 | eP | P | 03 05 51.2 | +4.9 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| SUMG | Summit | 52.30 | 7 | iP | P | 03 05 48.9 | +0.5 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| SUMG | Summit | 52.30 | 7 | iP | P | 03 05 48.9 | +0.5 |
| | comp=Z,14nm,0.9s | | | | | | |
| SUMG | Summit | 52.30 | 7 | eP | P | 03 05 48.9 | +0.5 |
| | comp=Z,8.8nm,0.8s | | | | | | |
| ARU | Arti | 52.85 | 317d | iP | P | 03 05 51.5 | -0.6 |
| ARU | | | | | | 03 07 53.4 | |
| ARU | | | | S | S | 03 13 14.9 | -1.6 |
| ARU | | | | SS | SS | 03 16 50.2 | -4.8 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.7s | | | | | | |
| NVAR | Mina Array Bea | 54.40 | 72 | P | P | 03 06 05.3 | +1.3 |
| | comp=Z,0.7nm,0.7s,baz=299,slow=7.6,SNR=5.3 | | | | | | |
| NVAR | | | | pP | pP | 03 06 17.7 | -0.8 |
| | comp=Z,1.1nm,0.7s,baz=303,slow=7.9,SNR=7.5 | | | | | | |
| TPAW | Teton Pass | 54.78 | 63 | eP | P | 03 06 08.0 | +1.2 |
| | comp=Z,2.1nm,0.9s | | | | | | |
| LOHW | Long Hollow | 54.87 | 63 | eP | P | 03 06 09.2 | +1.9 |
| HWUT | Hardware Ranch | 55.79 | 65 | eP | P | 03 06 15.5 | +1.6 |
| | comp=Z,1.8nm,0.8s | | | | | | |
| BW06 | Boulder Array | 56.01 | 63 | eP | P | 03 06 16.7 | +1.1 |
| | comp=Z,1.3nm,0.7s | | | | | | |
| RSSD | Black Hills | 57.82 | 58 | eP | P | 03 06 29.3 | +1.0 |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| RSSD | Black Hills | 57.82 | 58 | eP | P | 03 06 29.3 | +1.0 |
| | comp=Z,2.2nm,0.7s | | | | | | |
| FINES | FINESS Array B | 59.04 | 337 | P | P | 03 06 34.9 | -1.3 |
| | comp=Z,3.0nm,0.7s,baz=41,slow=7.0,SNR=20 | | | | | | |
| FINES | FINESS Array B | 59.04 | 337 | iP | P | 03 06 36.0 | -0.2 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| OBN | Obninsk | 61.67 | 328 | iP | P | 03 06 55.7 | +1.4 |
| OBN | | | | e | | 03 09 09.8 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| NB2 | NORSAR Subarra | 62.29 | 344 | P | P | 03 06 57.8 | -0.6 |
| | comp=Z,1.3nm,0.7s,baz=22,slow=6.9 | | | | | | |
| NOA | NORSAR Array B | 62.29 | 344 | P | P | 03 06 58.0 | -0.5 |
| | comp=Z,1.9nm,0.7s,baz=21,slow=6.5,SNR=5.9 | | | | | | |
| NOA | NORSAR Array B | 62.29 | 344 | eP | P | 03 06 57.9 | -0.5 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| SCHQ | Schefferville | 63.86 | 29 | P | P | 03 07 08.7 | -0.2 |
| | comp=Z,4.9nm,0.8s,baz=263,slow=13,SNR=4.7 | | | | | | |
| WMOK | Wichita Mounta | 67.58 | 61 | eP | P | 03 07 33.7 | +0.5 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| WMOK | Wichita Mounta | 67.58 | 61 | eP | P | 03 07 33.6 | +0.5 |
| | comp=Z,1.6nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 67.72 | 329 | P | P | 03 07 32.4 | -1.4 |
| | comp=Z,0.3nm,0.4s,baz=28,slow=6.6,SNR=2.6 | | | | | | |
| KIV | Kislovodsk | 68.90 | 317⇓ | eP | P | 03 07 42.5 | +1.2 |
| KIV | | | | e | | 03 10 19.0 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| KBZ | Khabaz | 69.00 | 317 | P | P | 03 07 40.6 | -1.2 |
| | comp=Z,0.9nm,0.7s,baz=49,slow=2.4,SNR=3.5 | | | | | | |
| KBZ | | | | LR | LR | 03 41 37.6 | |
| | comp=Z,49nm,18.8s,baz=85,slow=39 | | | | | | |
| KBZ | Khabaz | 69.00 | 317 | P | P | 03 07 40.7 | -1.2 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,49nm,18.8s | | | | | | |
| TXAR | Lajitas Array | 69.23 | 69 | P | P | 03 07 44.9 | +1.3 |
| | comp=Z,1.0nm,0.8s,baz=293,slow=4.5,SNR=11 | | | | | | |
| TXAR | | | | pP | pP | 03 07 56.8 | -1.8 |
| | comp=Z,0.8nm,0.6s,baz=282,slow=4.0,SNR=8.5 | | | | | | |
| IPM | Ipoh | 69.64 | 248 | eP | P | 03 07 44.4 | -1.7 |
| CLL | Collm | 71.20 | 340 | eP | P | 03 07 55.0 | -0.2 |
| CLL | Collm | 71.20 | 340 | eP | P | 03 07 55.0 | -0.2 |
| DPC | Dobruska-Polom | 71.40 | 337 | eP | P | 03 07 58.3 | +1.8 |
| DPC | Dobruska-Polom | 71.40 | 337 | eP | P | 03 07 58.3 | +1.8 |
| WVT | Waverly | 71.80 | 53 | eP | P | 03 07 59.5 | +0.4 |
| WVT | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| WVT | Waverly | 71.80 | 53 | eP | P | 03 07 59.5 | +0.4 |
| | comp=Z,2.1nm,0.7s | | | | | | |
| PRU | Pruhonice | 72.13 | 338 | eP | P | 03 08 02.1 | +1.3 |
| PRU | Pruhonice | 72.13 | 338 | eP | P | 03 08 02.1 | +1.3 |
| KHC | Kasperske Hory | 73.15 | 339 | eP | P | 03 08 07.3 | +0.4 |
| KHC | Kasperske Hory | 73.15 | 339 | eP | P | 03 08 07.3 | +0.4 |
| GERES | GERESS Array B | 73.39 | 338 | P | P | 03 08 08.1 | -0.3 |
| | comp=Z,0.4nm,0.5s,baz=37,slow=5.8,SNR=7.4 | | | | | | |
| GERES | GERESS Array B | 73.39 | 338 | eP | P | 03 08 08.5 | 0.0 |
| BRTR | Keskin Array B | 75.97 | 321 | P | P | 03 08 23.0 | -0.6 |
| | comp=Z,0.5nm,0.8s,baz=73,slow=5.0,SNR=3.1 | | | | | | |
| BRTR | Keskin Array B | 75.97 | 321 | P | P | 03 08 23.0 | -0.6 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| WRAB | Tennant Creek | 77.86 | 206⇓ | eP | P | 03 08 34.3 | +0.2 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| WRAB | Tennant Creek | 77.86 | 206 | eP | P | 03 08 34.2 | +0.2 |
| | comp=Z,2.8nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 77.87 | 206 | P | P | 03 08 34.4 | +0.3 |
| | comp=Z,1.0nm,0.7s,baz=21,slow=6.2,SNR=5.1 | | | | | | |
| WRA | | | | pP | PcP | 03 08 45.9 | +2.1 |
| | comp=Z,1.8nm,0.7s,baz=19,slow=5.9,SNR=7.1 | | | | | | |
| WRA | Warramunga Arr | 77.87 | 206 | iP | P | 03 08 35.2 | +1.1 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| ASAR | Alice Springs | 81.54 | 206 | P | P | 03 08 54.4 | +0.4 |
| | comp=Z,1.5nm,0.7s,baz=11,slow=5.2,SNR=11 | | | | | | |
| ASAR | | | | pP | pP | 03 09 07.2 | -2.1 |
| | comp=Z,1.9nm,0.8s,baz=20,slow=5.4,SNR=7.5 | | | | | | |
| ESDC | Sonseca Array | 85.23 | 349 | P | P | 03 09 13.2 | +0.2 |
| | comp=Z,0.4nm,0.5s,baz=13,slow=4.4,SNR=5.4 | | | | | | |
| QSPA | South Pole Qui | 144.40 | 180 | ePKPdf | PKPab | 03 16 09.0 | -0.4 |

*MOS **02** 02:58:02.4±0.9, 54°.63N×161°.69E, h52km, mb4.3/1, Error ellipse: s-maj=23.0km s-min=9.9km az=63.9*
**KRSC 02 02:58:01.4**±1.2**, 54°.59N**×**161°.65E, h41**km±20km**, ML4.2, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time (h m s) | Res ISC |
|---|---|---|---|---|---|---|---|
| KZV | Kizimen | 0.94 | 304 | eP | Pn | 02 58 18.7 | +0.3 |
| KZV | | | | eS | Sn | 02 58 30.8 | -0.1 |
| TUMR | Tumrok | 1.11 | 309 | eP | Pn | 02 58 21.4 | +0.7 |
| TUMR | Tumrok | 1.11 | 309 | PN | Pn | 02 58 21.4 | +0.7 |
| KII | Karymskiy | 1.41 | 248 | eP | Pn | 02 58 26.2 | +1.6 |
| KII | | | | eS | Sn | 02 58 43.5 | +1.5 |
| KII | Karymskiy | 1.41 | 248 | PN | Pn | 02 58 26.2 | +1.6 |
| KII | | | | S | Sn | 02 58 43.5 | +1.5 |
| KMNR | Kamenistaya | 1.42 | 326 | eP | Pn | 02 58 26.4 | +1.5 |
| KMNR | Kamenistaya | 1.42 | 326 | PN | Pn | 02 58 26.4 | +1.5 |
| KIRR | Kirishev | 1.56 | 332 | eP | Pn | 02 58 29.8 | +3.0 |
| KBTR | Krutoberegovo | 1.75 | 22 | eP | Pn | 02 58 31.1 | +1.8 |
| KBTR | | | | eS | Sn | 02 58 52.6 | +2.2 |
| KBTR | Krutoberegovo | 1.75 | 22 | PN | Pn | 02 58 31.1 | +1.8 |
| KBTR | | | | S | Sn | 02 58 52.6 | +2.2 |
| SPN | Mys Shipunski | 1.78 | 214 | eP | Pn | 02 58 30.4 | +0.8 |
| SPN | | | | eS | Sn | 02 58 50.8 | -0.2 |
| SPN | Mys Shipunski | 1.78 | 214 | PN | Pn | 02 58 30.4 | +0.8 |
| SPN | | | | S | Sn | 02 58 50.8 | -0.2 |
| KLY | Klyuchi | 1.82 | 342 | eP | Pn | 02 58 31.5 | +1.3 |
| KLY | | | | S | Sn | 02 58 53.2 | +1.2 |
| NLC | Nalytchevo | 1.97 | 225 | eP | Pn | 02 58 34.7 | +2.5 |
| NLC | | | | S | Sn | 02 58 58.0 | +2.3 |
| NLC | Nalytchevo | 1.97 | 225 | PN | Pn | 02 58 34.7 | +2.5 |
| NLC | | | | S | Sn | 02 58 58.0 | +2.3 |
| SDLR | Sedlovina | 2.10 | 232 | eP | Pn | 02 58 37.1 | +2.9 |
| SDLR | | | | eS | Sn | 02 59 02.9 | +3.7 |
| SDLR | Sedlovina | 2.10 | 232 | PN | Pn | 02 58 37.1 | +2.9 |
| SDLR | | | | S | Sn | 02 59 02.9 | +3.7 |
| SMAR | Somma | 2.15 | 233 | P | Pn | 02 58 38.2 | +3.2 |
| SMAR | | | | S | Sn | 02 59 04.0 | +3.4 |
| SMAR | Somma | 2.15 | 233 | PN | Pn | 02 58 38.2 | +3.2 |
| SMAR | | | | S | Sn | 02 59 04.0 | +3.4 |
| KRX | Arik | 2.16 | 236 | eP | Pn | 02 58 38.6 | +3.5 |
| KRX | | | | eS | Sn | 02 59 05.1 | +4.3 |
| AVH | Avacha | 2.18 | 234 | P | Pn | 02 58 38.2 | +3.0 |
| AVH | | | | S | Sn | 02 59 04.6 | +3.6 |
| AVH | Avacha | 2.18 | 234 | PN | Pn | 02 58 38.2 | +3.0 |
| AVH | | | | S | Sn | 02 59 04.6 | +3.6 |
| GNL | Ganaly | 2.36 | 249 | eP | Pn | 02 58 41.2 | +3.4 |
| GNL | Ganaly | 2.36 | 249 | PN | Pn | 02 58 41.2 | +3.4 |
| PET | Petropavlovsk | 2.37 | 230 | eP | Pn | 02 58 39.9 | +2.1 |
| PET | | | | eS | Sn | 02 59 07.4 | +1.8 |
| PET | Petropavlovsk | 2.37 | 230 | ePN | Pn | 02 58 40.3 | +2.5 |
| PET | | | | eS | Sn | 02 59 07.8 | +2.2 |
| PET | | | | smax | smax | | |
| | comp=E,270nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,339nm,0.6s | | | | | | |
| RUS | Russkaya | 2.86 | 222 | P | Pn | 02 58 47.5 | +3.0 |
| RUS | | | | eS | Sn | 02 59 21.1 | +3.5 |
| RUS | Russkaya | 2.86 | 222 | PN | Pn | 02 58 47.5 | +3.0 |
| RUS | | | | S | Sn | 02 59 21.1 | +3.5 |
| MTVR | Mutnovka | 2.96 | 226 | eS | Sn | 02 59 23.8 | +3.4 |

*SJA **02** 02:58:51.3±1.2, 33°.16S×70°.92W, h73km±8km, MD2.8*
*ISCJB **02** 02:58:52.7±1.2, 33°.12S±0°.06×71°.0W±0°.1, h74km±7km, Error ellipse: s-maj=15.4km s-min=9.4km az=18.9*
*GUC **02** 02:58:52.9±0.4, 33°.07S×70°.86W, h77km±3km, ML3.2*
**ISC 02 02:58:54.6**±2.2**, 33°.10S**±0°.06×**70°.9W**±0°.1**, h61**km±13km**, n15, σ0ˢ84**/26**, 2C-3D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time (h m s) | Res ISC |
|---|---|---|---|---|---|---|---|
| ROC1 | El Roble | 0.15 | 329 | iP | Pn | 02 59 03.5 | -0.8 |
| ROC1 | | | | iS | Sn | 02 59 11.9 | +0.6 |
| PEL | Peldehue | 0.20 | 101⇓ | iP | Pn | 02 59 03.8 | -0.5 |
| PEL | | | | iS | Sn | 02 59 11.9 | +0.7 |
| PEL | | | | AML | AML | 02 59 12.2 | |
| | comp=E,1µm,0.2s | | | | | | |
| RCDM | Rinconada Maip | 0.40 | 166 | eP | Pn | 02 59 05.2 | -0.5 |
| RCDM | | | | eS | Sn | 02 59 14.7 | +0.9 |
| RCDM | | | | AML | AML | 02 59 15.6 | |
| | comp=N,5µm,0.1s | | | | | | |
| STL | Santa Lucia | 0.41 | 145 | eP | Pn | 02 59 04.7 | -1.1 |
| STL | | | | eS | Sn | 02 59 14.1 | +0.2 |
| SAN | Santiago | 0.41 | 148 | eP | Pn | 02 59 05.3 | -0.5 |
| SAN | | | | iS | Sn | 02 59 14.9 | +0.9 |
| CLCH | Cerro Calan | 0.43 | 132⇑ | iP | Pn | 02 59 05.6 | -0.5 |
| CLCH | | | | iS | Sn | 02 59 15.0 | +0.5 |
| CLCH | | | | AML | AML | 02 59 15.7 | |
| | comp=E,1µm,0.3s | | | | | | |
| LACH | Col Las Americ | 0.48 | 137⇓ | iP | Pn | 02 59 05.4 | -1.1 |
| LACH | | | | iS | Sn | 02 59 15.4 | +0.3 |
| ANTU | Antumapu | 0.52 | 153⇑ | iP | Pn | 02 59 06.5 | -0.5 |
| ANTU | | | | iS | Sn | 02 59 16.7 | +0.8 |
| ANTU | | | | AML | AML | 02 59 17.0 | |
| | comp=E,2µm,0.2s | | | | | | |
| TACH | Talagante | 0.55 | 181⇓ | iP | Pn | 02 59 06.9 | -0.3 |
| TACH | | | | iS | Sn | 02 59 17.4 | +1.1 |
| AUSP | Uspallata | 1.56 | 56 | iP | Pn | 02 59 19.9 | -0.5 |
| AUSP | | | | iS | Sn | 02 59 40.1 | +0.2 |
| RTLS | Leoncito | 1.89 | 47 | iP | Pn | 02 59 24.8 | -0.1 |
| RTLS | | | | iS | Sn | 02 59 49.7 | +1.9 |
| RTCV | Cerro Valdivia | 2.36 | 59 | eP | Pn | 02 59 30.9 | -0.2 |
| CFAA | Coronel Fontan | 2.72 | 57 | iP | Pn | 02 59 35.0 | -0.9 |
| RTLL | Cerro Villicun | 2.73 | 50 | iP | Pn | 02 59 35.3 | -0.7 |
| AMOG | MOGNA | 2.99 | 44 | iP | Pn | 02 59 38.5 | -1.1 |

*IDC **02** 03:00:42.5±0.8, 12°.06S×166°.23E, h0km, mb4.2/12, mb1 4.3/13, mb1mx4.2/34, mbtmp4.2/13, ML3.8/1, MS3.9/2, Ms1 3.9/2, ms1mx3.4/26, Error ellipse: s-maj=34.1km s-min=17.7km az=88.0*
*ISCJB **02** 03:00:45.4±0.6, 12°.14S±0°.06×166°.2E±0°.1, h30km, mb4.4/17, MS4.0/2, Error ellipse: s-maj=17.9km s-min=8.0km az=170.8*
*NEIC **02** 03:00:48.5±1.8, 12°.08S×166°.16E, h38km±15km, mb4.6/5, Error ellipse: s-maj=14.1km s-min=10.0km az=55.0*
**ISC 02 03:00:47.4**±0.7**, 12°.07S**±0°.08×**166°.2E**±0°.2**, h30**km**, n31, σ0ˢ66**/34**, mb4.4**/17**, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time (h m s) | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 9.95 | 179 | Pn | Pn | 03 03 09.2 | +0.7 |
| | 0.9nm,0.3s,baz=0.7,slow=9.2,SNR=16 | | | | | | |
| DZM | | | | Sn | Sn | 03 04 58.8 | -0.5 |
| | 0.7nm,0.3s,baz=0.0,slow=20,SNR=2.4 | | | | | | |
| PMG | Port Moresby | 18.87 | 276 | eP | Pn | 03 05 05.8 | -0.3 |
| | 19nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 31.53 | 252 | eP | P | 03 07 06.8 | -0.5 |
| | 5.2nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 31.55 | 252 | P | P | 03 07 06.7 | -0.6 |
| | 1.3nm,0.8s,baz=82,slow=9.1,SNR=3.5 | | | | | | |
| WRA | | | | PcP | PcP | 03 09 59.5 | -0.3 |
| | 1.7nm,0.9s,baz=75,slow=2.5,SNR=6.9 | | | | | | |
| ASAR | Alice Springs | 32.73 | 245 | P | P | 03 07 17.2 | -0.6 |
| | 1.9nm,0.7s,baz=70,slow=9.0,SNR=8.7 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASAR | | | | PcP | PcP | 03 10 03.1 | +0.2 |
| | 1.5nm,0.8s,baz=72,slow=3.1,SNR=7.1 | | | | | | |
| **SOEI** | **Soe** | **41.19** | **269** | *e*P | **P** | **03 08 29.2** | **-0.6** |
| **PPT** | **Papeete** | **43.05** | **103** | LR | LR | 03 23 02.5 | |
| | comp=Z,158nm,19.4s,baz=249,slow=31 | | | | | | |
| **KKM** | **Kota Kinabalu** | **52.84** | **287** | *e*P | **P** | **03 10 01.7** | **+0.9** |
| | 6.9nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **55.07** | **333** | P | **P** | **03 10 15.5** | **-1.1** |
| | 2.0nm,0.8s,baz=164,slow=11,SNR=4.4 | | | | | | |
| **KSRS** | **Korea Array** | **60.95** | **326** | P | **P** | **03 10 57.9** | **+0.1** |
| | 2.4nm,0.7s,baz=135,slow=6.6,SNR=4.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **60.97** | **326** | P | **P** | **03 10 57.9** | **0.0** |
| **USRK** | **Ussuriysk Ar.** | **64.04** | **333** | P | **P** | **03 11 17.9** | **-0.4** |
| | 4.0nm,0.9s,baz=136,slow=8.0,SNR=6.9 | | | | | | |
| **VNDA** | **Vanda** | **65.48** | **181** | P | **P** | **03 11 27.0** | **-0.2** |
| | 1.2nm,0.6s,baz=354,slow=7.7,SNR=5.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.91** | **294** | P | **P** | **03 12 14.7** | **+0.4** |
| | 1.2nm,0.3s,baz=125,slow=4.5,SNR=3.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **77.94** | **180** | *e*P | **P** | **03 12 42.8** | **+0.3** |
| | 6.6nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **79.37** | **324** | *e*P | **P** | **03 12 52.0** | **+1.3** |
| | 14nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **79.73** | **324** | P | **P** | **03 12 52.8** | **+0.2** |
| | 2.7nm,0.7s,baz=137,slow=5.4,SNR=20 | | | | | | |
| **MAW** | **Mawson** | **83.94** | **202** | P | **P** | **03 13 13.7** | **-0.6** |
| | 1.2nm,0.4s,baz=87,slow=12,SNR=7.3 | | | | | | |
| **ILAR** | **Eielson Array** | **84.34** | **18** | P | **P** | **03 13 15.4** | **-0.9** |
| | 0.4nm,0.7s,baz=255,slow=4.9,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **94.55** | **317** | P | **P** | **03 14 05.8** | **+0.6** |
| | 8.8nm,0.7s,baz=93,slow=6.4,SNR=58 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **94.63** | **324** | P | **P** | **03 14 05.2** | **0.0** |
| | 2.1nm,0.6s,baz=107,slow=5.1,SNR=6.6 | | | | | | |
| ZALV | | | | LR | LR | 03 54 22.9 | |
| | comp=Z,56nm,20.8s,baz=68,slow=34 | | | | | | |
| **KURK** | **Kurchatov** | **97.69** | **320** | P | **P** | **03 14 19.0** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **97.73** | **320** | P | **P** | **03 14 19.0** | **-0.5** |
| | 0.5nm,0.6s,baz=96,slow=3.5,SNR=7.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **103.01** | **322** | Pdiff | **Pdif** | **03 14 41.9** | **-1.1** |
| | 0.7nm,0.7s,baz=77,slow=7.6,SNR=3.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **117.42** | **345** | PKP | **PKPdf** | **03 19 28.9** | **-0.7** |
| | 0.8nm,0.7s,baz=90,slow=2.4,SNR=7.5 | | | | | | |
| **FINES** | **FINESS Array B** | **122.87** | **338** | PKP | **PKPdf** | **03 19 39.8** | **-0.4** |
| | 1.5nm,0.9s,baz=90,slow=1.4,SNR=6.0 | | | | | | |
| **BOSA** | **Boshof** | **124.66** | **222** | PKP | **PKPdf** | **03 19 44.9** | **0.0** |
| | 2.9nm,0.9s,baz=140,slow=3.4,SNR=3.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **129.96** | **312** | PKP | **PKPdf** | **03 19 55.5** | **+0.8** |
| | 0.4nm,0.6s,baz=61,slow=1.4,SNR=3.1 | | | | | | |
| **LSZ** | **Lusaka** | **130.32** | **238** | *e*PKPdf | **PKPdf** | **03 19 57.0** | **+1.0** |
| **KEST** | **Kesra** | **148.48** | **322** | PKPbc | **PKPbc** | **03 20 32.4** | **+0.6** |
| | 3.3nm,0.7s,baz=74,slow=6.6,SNR=6.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **164.81** | **276** | PKP | **PKPdf** | **03 20 48.6** | **-0.9** |
| | 1.4nm,1.1s,baz=17,slow=1.5,SNR=4.2 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **03 21 46.4** | **+0.8** |
| | 0.7nm,0.9s,baz=118,slow=4.0,SNR=3.4 | | | | | | |

*ISCJB **02** 03:10:22.8±0.5, 43°.35N±0°.03×45°.69E±0°.02, h9$^{km}$±3$^{km}$, Error ellipse: s-maj=5.8km s-min=2.5km az=17.6*
*TIF **02** 03:10:22.7, 43°.32N×45°.73E, h17$^{km}$±2$^{km}$*
*CSEM **02** 03:10:23.2±0.3, 43°.32N×45°.65E, h10$^{km}$, mb3.8, Error ellipse: s-maj=7.5km s-min=3.0km az=17.0*
*MOS **02** 03:10:23.5±1.1, 43°.32N×45°.65E, h18$^{km}$, mb3.8/1, Error ellipse: s-maj=9.2km s-min=5.9km az=11.2*
**ISC 02 03:10:23.0**±1.1**, 43°.30N**±0°.03×**45°.66E**±0°.02**, h8**$^{km}$±8$^{km}$**, n56,** σ0$^s$86/106**, 5C-6D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GROC** | **Groznyy** | **0.14** | **134** | ⇓*i*PG | **Pg** | **03 10 25.7** | **-0.4** |
| **GROC** | **Groznyy** | **0.14** | **134** | *i* Pg | **Pg** | **03 10 25.7** | **-0.4** |
| **KMGR** | **Komgaron** | **0.63** | **247** | ⇓*i*PG | **Pg** | **03 10 35.4** | **+0.2** |
| KMGR | | | | *e*S | **Sb** | **03 10 46.0** | **+0.7** |
| **KMGR** | **Komgaron** | **0.63** | **247** | *i* Pg | **Pg** | **03 10 35.4** | **+0.2** |
| KMGR | | | | *e*Sg | **Sb** | **03 10 46.0** | **+0.7** |
| **DLMR** | **Dylym** | **0.75** | **108** | PG | **Pn** | **03 10 40.0** | **+0.1** |
| DLMR | | | | *e*S | **Sn** | **03 10 52.0** | **+0.5** |
| **DLMR** | **Dylym** | **0.75** | **108** | Pg | **Pn** | **03 10 40.0** | **+0.1** |
| DLMR | | | | *e*Sg | **Sn** | **03 10 52.0** | **+0.5** |
| **VLKR** | **Vladikavkaz** | **0.76** | **251** | ⇓*i*PG | **Pg** | **03 10 37.9** | **+0.2** |
| VLKR | | | | *e*S | **Sn** | **03 10 50.6** | **-1.2** |
| **VLKR** | **Vladikavkaz** | **0.76** | **251** | *i* Pg | **Pg** | **03 10 37.9** | **+0.2** |
| VLKR | | | | *e*Sg | **Sn** | **03 10 50.6** | **-1.2** |
| **TRKR** | **Terskaya** | **0.79** | **302** | ⇓*i*PG | **Pg** | **03 10 38.6** | **+0.3** |
| TRKR | | | | *i* S | **Sn** | **03 10 51.8** | **-0.8** |
| **TRKR** | **Terskaya** | **0.79** | **302** | *i* Pg | **Pg** | **03 10 38.6** | **+0.3** |
| TRKR | | | | *i* Sg | **Sn** | **03 10 51.8** | **-0.8** |
| **BTKR** | **Batakoyurt** | **0.82** | **275** | ⇓*i*PG | **Pb** | **03 10 39.5** | **0.0** |
| BTKR | | | | *e*S | **Sn** | **03 10 52.9** | **-0.3** |
| **BTKR** | **Batakoyurt** | **0.82** | **275** | *i* Pg | **Pb** | **03 10 39.5** | **0.0** |
| BTKR | | | | *e*Sg | **Sn** | **03 10 52.9** | **-0.3** |
| **DBC** | **Dubki** | **0.90** | **108** | ⇑*i*PG | **Pg** | **03 10 40.3** | **-0.1** |
| DBC | | | | *i* S | **Sb** | **03 10 53.5** | **+0.3** |
| **DBC** | **Dubki** | **0.90** | **108** | *i* Pg | **Pg** | **03 10 40.3** | **-0.1** |
| DBC | | | | *i* Sg | **Sb** | **03 10 53.5** | **+0.3** |
| **ARNR** | **Ardon** | **1.01** | **264** | *e*PG | **Pn** | **03 10 44.7** | **+1.2** |
| ARNR | | | | *e*S | **Sn** | **03 10 59.5** | **+1.5** |
| **ARNR** | **Ardon** | **1.01** | **264** | *e*Pg | **Pn** | **03 10 44.7** | **+1.2** |
| ARNR | | | | *e*Sg | **Sn** | **03 10 59.5** | **+1.5** |
| **UNCR** | **Uncukul** | **1.02** | **125** | *e*PG | **Pb** | **03 10 43.0** | **0.0** |
| UNCR | | | | *e*S | **Sn** | **03 10 58.5** | **+0.3** |
| **UNCR** | **Uncukul** | **1.02** | **125** | *e*Pg | **Pb** | **03 10 43.0** | **0.0** |
| UNCR | | | | *e*Sg | **Sn** | **03 10 58.5** | **+0.3** |
| **KRNR** | **Karanay** | **1.03** | **117** | *e*PG | **Pg** | **03 10 43.0** | **+0.2** |
| KRNR | | | | *i* S | **Sn** | **03 10 58.5** | **-0.1** |
| **KRNR** | **Karanay** | **1.03** | **117** | *e*Pg | **Pg** | **03 10 43.0** | **+0.2** |
| KRNR | | | | *i* Sg | **Sn** | **03 10 58.5** | **-0.1** |
| **XNZR** | **Khunzakh** | **1.08** | **134** | *e*PG | **Pb** | **03 10 42.5** | **-1.6** |
| XNZR | | | | *e*S | **Sg** | **03 10 57.5** | **-0.3** |
| **XNZR** | **Khunzakh** | **1.08** | **134** | *e*Pg | **Pb** | **03 10 42.5** | **-1.6** |
| XNZR | | | | *e*Sg | **Sg** | **03 10 57.5** | **-0.3** |
| **PRTR** | **Priterechnaya** | **1.10** | **295** | *e*PG | **Pn** | **03 10 44.7** | **0.0** |
| PRTR | | | | *e*S | **Sn** | **03 11 01.8** | **+1.8** |
| **PRTR** | **Priterechnaya** | **1.10** | **295** | *e*Pg | **Pn** | **03 10 44.7** | **0.0** |
| PRTR | | | | *e*Sg | **Sn** | **03 11 01.8** | **+1.8** |
| **LACR** | **Lac** | **1.10** | **245** | ⇑*e*PG | **Pb** | **03 10 43.3** | **-1.2** |
| LACR | | | | *i* S | **Sn** | **03 11 00.1** | **-0.3** |
| **LACR** | **Lac** | **1.10** | **245** | *e*Pg | **Pb** | **03 10 43.3** | **-1.2** |
| LACR | | | | *i* Sg | **Sn** | **03 11 00.1** | **-0.3** |
| **KORR** | **Kora** | **1.18** | **260** | ⇑*i*PG | **Pg** | **03 10 45.8** | **+0.1** |
| KORR | | | | *e*S | **Sn** | **03 11 03.5** | **+1.3** |
| **KORR** | **Kora** | **1.18** | **260** | *i* Pg | **Pg** | **03 10 45.8** | **+0.1** |
| KORR | | | | *e*Sg | **Sn** | **03 11 03.5** | **+1.3** |
| **ARKR** | **Arakani** | **1.21** | **125** | PG | **Pg** | **03 10 46.5** | **+0.4** |
| ARKR | | | | *e*S | **Sn** | **03 11 03.0** | **+0.2** |
| **ARKR** | **Arakani** | **1.21** | **125** | Pg | **Pg** | **03 10 46.5** | **+0.4** |
| ARKR | | | | *e*Sg | **Sn** | **03 11 03.0** | **+0.2** |
| **LSNR** | **Lesken** | **1.34** | **270** | *e*PG | **Pn** | **03 10 47.5** | **-0.6** |
| LSNR | | | | *e*S | **Sg** | **03 11 07.7** | **+1.7** |
| **LSNR** | **Lesken** | **1.34** | **270** | *e*Pg | **Pn** | **03 10 47.5** | **-0.6** |
| LSNR | | | | *e*Sg | **Sg** | **03 11 07.7** | **+1.7** |
| **ZEI** | **Tsey** | **1.39** | **249** | *e*PG | **Pn** | **03 10 47.2** | **-1.7** |
| ZEI | | | | *i* S | **Sn** | **03 11 07.5** | **0.0** |
| **NCK** | **Nalchik** | **1.52** | **278** | *e*PG | **Pn** | **03 10 50.6** | **+0.1** |
| NCK | | | | *e*S | **Sb** | **03 11 10.5** | **-0.3** |
| **NCK** | **Nalchik** | **1.52** | **278** | *e*Pg | **Pn** | **03 10 50.6** | **+0.1** |
| NCK | | | | *e*Sg | **Sb** | **03 11 10.5** | **-0.3** |
| **DIGR** | **Digorskoe uzhe** | **1.57** | **256** | *e*PG | **Pn** | **03 10 50.1** | **-1.4** |
| DIGR | | | | *i* S | **Sb** | **03 11 12.3** | **-0.3** |
| **DIGR** | **Digorskoe uzhe** | **1.57** | **256** | *e*Pg | **Pn** | **03 10 50.1** | **-1.4** |
| DIGR | | | | *i* Sg | **Sb** | **03 11 12.3** | **-0.3** |
| **TBLG** | **Delisi** | **1.71** | **204** | P | **Pb** | **03 10 53.9** | **-0.9** |
| TBLG | | | | S | **Sg** | **03 11 18.2** | **+0.1** |
| **TBLG** | **Delisi** | **1.71** | **204** | PN | **Pb** | **03 10 53.8** | **-0.9** |
| TBLG | | | | S | **Sg** | **03 11 18.1** | **+0.1** |
| **TBLG** | **Delisi** | **1.71** | **204** | Pn | **Pb** | **03 10 53.8** | **-0.9** |
| TBLG | | | | Sg | **Sg** | **03 11 18.1** | **+0.1** |
| **KBTC** | **Kuba-Taba** | **1.71** | **288** | ⇑*e*PN | **Pn** | **03 10 53.8** | **+0.5** |
| KBTC | | | | *e*S | **Sb** | **03 11 16.2** | **-0.3** |
| **KBTC** | **Kuba-Taba** | **1.71** | **288** | *e*Pn | **Pn** | **03 10 53.8** | **+0.5** |
| KBTC | | | | *e*Sg | **Sb** | **03 11 16.2** | **-0.3** |
| **ONI** | **Oni** | **1.77** | **247** | P | **Pn** | **03 10 54.3** | **+0.3** |
| ONI | | | | S | **Sg** | **03 11 19.2** | **-0.6** |
| **ONI** | **Oni** | **1.77** | **247** | PN | **Pn** | **03 10 54.2** | **+0.3** |
| ONI | | | | S | **Sg** | **03 11 19.2** | **-0.6** |
| **ONI** | **Oni** | **1.77** | **247** | P | **Pn** | **03 10 54.3** | **+0.3** |
| ONI | | | | Sg | **Sg** | **03 11 19.2** | **-0.6** |
| **DGRG** | **David-gareji** | **1.86** | **187** | P | **Pb** | **03 10 57.3** | **0.0** |
| DGRG | | | | S | **Sg** | **03 11 25.0** | **+2.2** |
| **DGRG** | **David-gareji** | **1.86** | **187** | PN | **Pb** | **03 10 57.3** | **0.0** |
| DGRG | | | | S | **Sg** | **03 11 25.0** | **+2.2** |
| **DGRG** | **David-gareji** | **1.86** | **187** | Pn | **Pb** | **03 10 57.3** | **0.0** |
| DGRG | | | | Sg | **Sg** | **03 11 25.0** | **+2.2** |
| **PYA1** | **Pyatigorsk** | **2.01** | **293** | ⇑*e*PN | **Pn** | **03 10 57.5** | **+0.2** |
| **PYA1** | **Pyatigorsk** | **2.01** | **293** | *e*Pn | **Pn** | **03 10 57.5** | **+0.2** |
| **NEY** | **Neytrino** | **2.14** | **270** | *e*PN | **Pn** | **03 10 59.3** | **0.0** |
| **NEY** | **Neytrino** | **2.14** | **270** | *e*Pn | **Pn** | **03 10 59.3** | **0.0** |
| **BEYR** | **Belyy Ugol+** | **2.18** | **290** | *e*PN | **Pn** | **03 11 00.6** | **+0.9** |
| BEYR | | | | *e*S | **Sn** | **03 11 25.5** | **-1.4** |
| **BEYR** | **Belyy Ugol+** | **2.18** | **290** | *e*Pn | **Pn** | **03 11 00.6** | **+0.9** |
| BEYR | | | | *e*Sn | **Sn** | **03 11 25.5** | **-1.4** |
| **KIV** | **Kislovodsk** | **2.25** | **288** | ⇓*e*PN | **Pn** | **03 10 59.4** | **-1.3** |
| KIV | | | | *i* S | **Sn** | **03 11 27.6** | **-1.2** |
| **KIV** | **Kislovodsk** | **2.25** | **288** | *e*Pn | **Pn** | **03 10 59.4** | **-1.3** |
| KIV | | | | *i* Sn | **Sn** | **03 11 27.6** | **-1.2** |

*IDC **02** 03:12:09.4±1.1, 31°.81S×71°.85W, h0$^{km}$, mb3.5/3, mb1 3.8/5, mb1mx3.6/20, mbtmp3.5/5, ML3.6/2, Error ellipse: s-maj=45.4km s-min=32.2km az=86.0*
*ISCJB **02** 03:12:14.8±0.7, 31°.76S±0°.03×71°.86W±0°.06, h56$^{km}$±10$^{km}$, mb3.4/3, Error ellipse: s-maj=9.1km s-min=4.9km az=2.1*
*GUC **02** 03:12:15.4±0.6, 31°.73S×71°.52W, h34$^{km}$±3$^{km}$, ML4.0*
**ISC 02 03:12:15.2**±1.4**, 31°.77S**±0°.04×**71°.86W**±0°.07**, h41**$^{km}$±14$^{km}$**, n28,** σ1$^s$24/43**, mb3.4**/3**, 2C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ROCH** | **El Roble** | **1.40** | **149** | *e*P | **Pn** | **03 12 38.6** | **+0.2** |
| ROCH | | | | *e*S | **Sn** | **03 12 56.3** | **+0.5** |
| ROCH | | | | AML | AML | 03 12 59.0 | |
| | comp=N,5μm,0.4s | | | | | | |
| **ROC1** | **El Roble** | **1.40** | **150** | *i* P | **Pn** | **03 12 38.5** | **0.0** |
| ROC1 | | | | *i* S | **Sn** | **03 12 56.6** | **+0.8** |
| **PEL** | **Peldehue** | **1.69** | **144** | ⇓*i*P | **Pn** | **03 12 42.8** | **+0.4** |
| PEL | | | | *i* S | **Sn** | **03 13 03.3** | **+0.5** |
| PEL | | | | AML | AML | 03 13 05.3 | |
| | comp=E,4μm,0.2s | | | | | | |
| **LSCH** | **La Serena** | **1.93** | **16** | *e*P | **Pn** | **03 12 45.6** | **+0.1** |
| LSCH | | | | *i* S | **Sn** | **03 13 09.1** | **+0.6** |
| **RCDM** | **Rinconada Maip** | **1.93** | **153** | *e*P | **Pn** | **03 12 45.4** | **-0.2** |
| RCDM | | | | *i* S | **Sn** | **03 13 08.5** | **-0.2** |
| RCDM | | | | AML | AML | 03 13 20.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.97** | **146** | ⇑*i*P | **Pn** | **03 12 46.6** | **+0.5** |
| CLCH | | | | *i* S | **Sn** | **03 13 09.8** | **+0.1** |
| CLCH | | | | AML | AML | 03 13 17.7 | |
| | comp=E,3μm,0.5s | | | | | | |
| **TACH** | **Talagante** | **2.03** | **158** | ⇑*i*P | **Pn** | **03 12 48.1** | **+1.2** |
| **ANTU** | **Antumapu** | **2.07** | **150** | *e*P | **Pn** | **03 12 48.0** | **+0.5** |
| ANTU | | | | *e*S | **Sn** | **03 13 13.0** | **+0.9** |
| ANTU | | | | AML | AML | 03 13 20.2 | |
| | comp=N,1μm,0.9s | | | | | | |
| **AUSP** | **Uspallata** | **2.15** | **103** | *i* P | **Pn** | **03 12 49.2** | **+0.4** |
| AUSP | | | | *i* S | **Sn** | **03 13 14.7** | **+0.4** |
| **RTLS** | **Leoncito** | **2.18** | **91** | *i* P | **Pn** | **03 12 49.7** | **+0.5** |
| RTLS | | | | *i* S | **Sn** | **03 13 15.4** | **+0.3** |
| **ASAL** | **Salagasta** | **2.69** | **109** | *i* P | **Pn** | **03 12 58.2** | **+2.2** |
| ASAL | | | | *i* P | **Pn** | **03 12 58.2** | **+2.2** |
| **ARCO** | **CERRO ARCO** | **2.70** | **114** | *i* P | **Pn** | **03 12 57.2** | **+0.9** |
| ARCO | | | | *i* S | **Sn** | **03 13 28.4** | **+0.7** |
| ARCO | | | | AML | AML | 03 13 40.5 | |
| | comp=Z,448nm,0.4s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **2.82** | **93** | *i* P | **Pn** | **03 12 59.0** | **+1.1** |
| **SJA** | **San Juan** | **2.82** | **86** | *i* P | **Pn** | **03 12 58.3** | **+0.4** |
| SJA | | | | AML | AML | 03 13 49.2 | |
| | comp=Z,453nm,0.5s | | | | | | |
| **AAGR** | **Agrelo** | **2.88** | **118** | *i* P | **Pn** | **03 13 00.0** | **+1.4** |
| **RTLL** | **Cerro Villicun** | **2.92** | **82** | *i* P | **Pn** | **03 12 59.7** | **+0.5** |
| RTLL | | | | *i* S | **Sn** | **03 13 33.4** | **+0.3** |
| **CFAA** | **Coronel Fontan** | **3.09** | **88** | *i* P | **Pn** | **03 13 02.1** | **+0.6** |
| **VACH** | **Vallenar** | **3.32** | **17** | *e*P | **Pn** | **03 13 04.5** | **-0.2** |
| **AGUA** | **GUANDACOL** | **3.69** | **53** | *i* P | **Pn** | **03 13 11.5** | **+1.7** |
| AGUA | | | | *i* S | **Sn** | **03 13 54.0** | **+1.9** |
| **ACAN** | **Cantantal** | **4.00** | **98** | *i* P | **Pn** | **03 13 13.9** | **-0.1** |
| **VCA** | **Vinchina** | **4.37** | **47** | *i* P | **Pn** | **03 13 21.5** | **+2.2** |
| **CPUP** | **Villa Florida** | **13.81** | **71** | Pn | **Pn** | **03 15 28.8** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=262,slow=19,SNR=2.6 | | | | | | |
| CPUP | | | | Sn | **Sn** | **03 17 56.1** | **-4.3** |
| | comp=Z,0.2nm,0.3s,baz=227,slow=19,SNR=2.3 | | | | | | |
| **LPAZ** | **La Paz** | **15.78** | **13** | Pn | **Pn** | **03 15 53.4** | **-1.8** |
| | comp=Z,0.1nm,0.3s,baz=186,slow=9.2,SNR=3.4 | | | | | | |
| **SNAA** | **Sanae** | **53.59** | **158** | P | **P** | **03 21 32.0** | **+0.1** |
| | comp=Z,0.4nm,1.0s,baz=271,slow=10.0,SNR=7.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.15** | **325** | P | **P** | **03 24 32.9** | **+1.0** |
| | comp=Z,0.1nm,0.4s,baz=157,slow=4.9,SNR=2.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.31** | **70** | P | **P** | **03 24 36.9** | **-1.2** |
| | comp=Z,0.7nm,0.7s,baz=255,slow=4.6,SNR=5.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **122.78** | **210** | PKP | **PKPdf** | **03 31 07.1** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=170,slow=1.7,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.24** | **30** | PKPbc | **PKPbc** | **03 32 05.9** | **-0.1** |
| | comp=Z,1.4nm,0.4s,baz=330,slow=5.2,SNR=4.9 | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **03 32 17.9** | **+2.0** |
| | comp=Z,2.1nm,0.5s,baz=316,slow=4.1,SNR=5.3 | | | | | | |

**WEL 02 03:15:18.5**±0.4**, 36°.22S**×**177°.60E, h254**$^{km}$±4$^{km}$**, ML3.6**/11**, 1C-2D, Error ellipse: s-maj=9.1km s-min=5.4km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.46** | **157** | PN | Pn | 03 15 56.7 | -0.1 |
| MXZ | | | | SN | S | 03 16 26.0 | -1.1 |
| **HAZ** | **Te Kaha** | **1.54** | **174** | PN | Pn | 03 15 57.4 | 0.0 |
| **WMGZ** | **Waiomatatini S** | **1.73** | **158** | PN | Pn | 03 15 59.0 | +0.1 |
| WMGZ | | | | SN | S | 03 16 30.5 | -0.4 |
| **PUZ** | **Puketiti** | **1.93** | **164** | PN | Pn | 03 16 00.7 | +0.1 |
| **TWGZ** | **Tauwhareparae** | **1.98** | **171** | PN | Pn | 03 16 01.7 | +0.6 |
| **URZ** | **Urewera** | **2.08** | **191** | PN | Pn | 03 16 02.1 | +0.2 |
| URZ | | | | AML | AML | 03 16 37.8 | |
| URZ | | | | AML | AML | 03 16 37.8 | |
| **MWZ** | **Matawai** | **2.12** | **181** | ⇓PN | Pn | 03 16 02.7 | +0.4 |
| MWZ | | | | SN | S | 03 16 37.1 | 0.0 |
| MWZ | | | | AML | AML | 03 16 39.1 | |
| **TKGZ** | **Te Karaka** | **2.23** | **175** | PN | Pn | 03 16 03.4 | +0.1 |
| **RAGZ** | **Rawiri** | **2.28** | **184** | PN | Pn | 03 16 04.4 | +0.5 |
| **CNGZ** | **Carnagh Statio** | **2.32** | **168** | PN | Pn | 03 16 04.7 | +0.6 |
| **SNGZ** | **Shannon Statio** | **2.57** | **184** | PN | Pn | 03 16 06.8 | +0.1 |
| **KNZ** | **Kokohu** | **2.80** | **179** | ⇑PN | Pn | 03 16 08.7 | -0.2 |
| **WHHZ** | **Waihua** | **2.87** | **186** | PN | Pn | 03 16 09.9 | +0.2 |
| **MHGZ** | **Mahia Peninsul** | **2.94** | **175** | PN | Pn | 03 16 10.5 | -0.1 |
| **BKZ** | **Black Stump Fm** | **3.07** | **196** | PN | Pn | 03 16 11.1 | -0.9 |
| **ARHZ** | **Aropaoanui** | **3.08** | **189** | PN | Pn | 03 16 12.0 | 0.0 |
| **MCHZ** | **McNeill Hill** | **3.30** | **192** | PN | Pn | 03 16 14.4 | 0.0 |
| **KWHZ** | **Kaweka Forest** | **3.33** | **196** | PN | Pn | 03 16 14.5 | -0.4 |
| **CKHZ** | **Cape Kidnapper** | **3.46** | **187** | PN | Pn | 03 16 15.9 | -0.3 |
| **WNVZ** | **Wahianoa** | **3.49** | **206** | PN | Pn | 03 16 16.3 | -0.4 |
| **KRHZ** | **Kereru** | **3.56** | **195** | PN | Pn | 03 16 16.7 | -0.6 |
| **KAHZ** | **Kahuranaki** | **3.62** | **189** | PN | Pn | 03 16 17.5 | -0.5 |
| **PNHZ** | **Pukenui** | **3.85** | **196** | PN | Pn | 03 16 19.5 | -1.2 |
| **PXZ** | **Pawanui** | **3.85** | **188** | ⇓PN | Pn | 03 16 19.7 | -0.9 |
| **TSZ** | **Takapari Road** | **4.05** | **198** | PN | Pn | 03 16 21.6 | -1.4 |
| **PRHZ** | **Porangahau** | **4.12** | **190** | PN | Pn | 03 16 22.6 | -1.1 |
| **BFZ** | **Birch Farm** | **4.58** | **193** | PN | Pn | 03 16 27.7 | -1.5 |
| **MRZ** | **Mangatainoka R** | **4.71** | **199** | PN | Pn | 03 16 28.7 | -2.1 |
| **HOWZ** | **Holdsworth Sta** | **4.95** | **199** | PN | Pn | 03 16 31.8 | -1.9 |
| **OGWZ** | **Otaki Gorge** | **4.97** | **202** | PN | Pn | 03 16 31.4 | -2.5 |
| **KIW** | **Kapiti Island** | **5.09** | **204** | PN | Pn | 03 16 33.1 | -2.4 |
| **CAW** | **Cannon Point** | **5.27** | **201** | PN | Pn | 03 16 35.1 | -2.5 |
| **TCW** | **Tory Channel** | **5.62** | **206** | AML | AML | 03 18 11.9 | |
| **PLWZ** | **Palliser** | **5.65** | **198** | PN | Pn | 03 16 39.8 | -2.5 |
| **TUWZ** | **Tuamarina** | **5.94** | **208** | PN | Pn | 03 16 43.0 | -2.8 |
| **NNZ** | **Nelson** | **5.98** | **212** | PN | Pn | 03 16 45.3 | -1.1 |
| **THZ** | **Tophouse** | **6.63** | **212** | PN | Pn | 03 16 53.8 | -0.7 |

**CASC 02 03:15:29.4**±2.9**, 10°.28N**×**84°.34W, h89**$^{km}$±13$^{km}$**, MD3.5, 3C-1D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CGA2** | **Cerro Gallo 2** | **0.29** | **206** | ⇑*e*P | Pn | 03 15 42.9 | 0.0 |
| CGA2 | | | | *e*S | Sn | 03 15 53.0 | +0.3 |
| **CEDE** | **Laguna Cedeˆ–o** | **0.41** | **300** | *i* P | Pn | 03 15 43.9 | +0.4 |
| CEDE | | | | *i* S | Sn | 03 15 54.5 | +0.6 |
| **ARE1** | **Arenal 1** | **0.42** | **296** | *i* P | Pn | 03 15 43.9 | +0.5 |
| **CASO** | **Castillo** | **0.42** | **291** | *i* P | Pn | 03 15 43.6 | +0.1 |
| **CHPA** | **Chiripa** | **0.58** | **286** | *i* P | Pn | 03 15 45.1 | +0.2 |
| CHPA | | | | *i* S | Sn | 03 15 57.0 | +0.7 |
| **JTS** | **JuntasAbangare** | **0.60** | **271** | ⇑*i*P | Pn | 03 15 44.4 | -0.5 |
| JTS | | | | *e*S | Sn | 03 15 55.9 | -0.7 |
| **JCR** | **Jicaral** | **0.87** | **241** | ⇑*e*P | Pn | 03 15 46.8 | -0.9 |
| **CUI** | **Cuipilapa** | **0.90** | **295** | *i* P | Pn | 03 15 47.9 | 0.0 |
| **BUS** | **Buena Vista** | **0.92** | **142** | ⇓*e*P | Pn | 03 15 48.7 | 0.0 |
| BUS | | | | *e*S | Sn | 03 16 03.4 | +0.3 |
| **CAO** | **Cobano** | **0.95** | **233** | *e*P | Pn | 03 15 47.2 | -1.2 |
| CAO | | | | *e*S | Sn | 03 16 05.2 | +2.5 |
| **CTCR** | **Cotoan** | **2.08** | **131** | *e*P | Pn | 03 16 03.2 | +0.3 |
| CTCR | | | | *e*S | Sn | 03 16 26.8 | -1.5 |
| **TBS2** | | **2.22** | **132** | *e*P | Pn | 03 16 05.0 | +0.3 |
| TBS2 | | | | *e*S | Sn | 03 16 32.3 | +0.6 |

*ISCJB **02** 03:30:26.6±1.0, 28°.55S±0°.04×71°.43W±0°.07, h10$^{km}$, Error ellipse: s-maj=8.6km s-min=5.5km az=15.0*
*GUC **02** 03:30:26.8±0.7, 28°.63S×71°.33W, h10$^{km}$±3$^{km}$, ML2.8*
**ISC 02 03:30:25.6**±1.8**, 28°.57S**±0°.05×**71°.43W**±0°.08**, h10**$^{km}$**, n18,** σ2$^s$49/26**, 1C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VACH** | **Vallenar** | **0.59** | **91** | ⇓*i*P | **Pb** | **03 30 37.6** | **-0.4** |
| VACH | | | | *i* S | **Sb** | **03 30 45.4** | **-1.0** |
| **LCO** | **Las Campanas** | **0.77** | **125** | *e*P | **Pg** | **03 30 40.1** | **-0.5** |
| LCO | | | | *i* S | **Sb** | **03 30 50.9** | **-1.1** |
| LCO | | | | AML | AML | 03 30 55.0 | |
| | comp=E,862nm,0.2s | | | | | | |
| **LSCH** | **La Serena** | **1.34** | **173** | *e*P | **Pn** | **03 30 49.8** | **-0.5** |
| LSCH | | | | *e*S | **Sb** | **03 31 06.7** | **-1.4** |
| **CPCH** | **Copiapo** | **1.54** | **38** | ⇑*i*P | **Pn** | **03 30 53.3** | **+0.2** |
| CPCH | | | | *i* S | **Sn** | **03 31 14.1** | **+0.9** |
| **AGUA** | **GUANDACOL** | **2.73** | **110** | *e*P | **Pb** | **03 31 13.8** | **-0.7** |
| AGUA | | | | *e*S | **Sg** | **03 31 51.3** | **-1.9** |
| **VCA** | **Vinchina** | **2.84** | **94** | *i* P | **Pb** | **03 31 15.3** | **-1.1** |
| VCA | | | | *e*S | **Sg** | **03 31 53.5** | **-3.2** |
| **AMOG** | **MOGNA** | **3.48** | **133** | *e*P | Pn | 03 31 22.9 | +3.1 |
| AMOG | | | | *e*S | **Sb** | **03 32 08.0** | **-1.6** |
| **RTLS** | **Leoncito** | **3.71** | **151** | ⇓*e*P | Pn | 03 31 26.6 | +3.4 |
| RTLS | | | | *e*S | **Sb** | **03 32 13.6** | **-2.9** |
| **RTLL** | **Cerro Villicun** | **3.76** | **138** | *i* P | **Pn** | **03 31 26.1** | **+2.4** |
| RTLL | | | | *e*S | **Sb** | **03 32 12.6** | **-5.0** |
| **ACLC** | **CERRO LA CRUZ** | **4.01** | **103** | *e*P | **Pn** | **03 31 29.7** | **+2.4** |
| ACLC | | | | *e*S | **Sn** | **03 32 18.4** | **+3.9** |
| **AVFE** | **Valle Fertil** | **4.04** | **122** | *i* P | **Pn** | **03 31 29.5** | **+2.0** |
| AVFE | | | | *e*S | **Sn** | **03 32 18.0** | **+3.1** |
| AVFE | | | | AML | AML | 03 32 27.2 | |
| | comp=Z,97nm,0.4s | | | | | | |
| **CFAA** | **Coronel Fontan** | **4.10** | **138** | *e*P | **Pn** | **03 31 30.8** | **+2.5** |
| CFAA | | | | *e*S | **Sn** | **03 32 20.3** | **+3.9** |
| **RTCV** | **Cerro Valdivia** | **4.12** | **143** | *e*P | Pn | 03 31 32.0 | +3.3 |
| **ASAL** | **Salagasta** | **4.59** | **151** | *e*P | **Pn** | **03 31 38.2** | **+3.1** |
| **CYA** | **Choya** | **4.95** | **90** | *e*P | **Pn** | **03 31 41.8** | **+1.7** |
| **AAGR** | **Agrelo** | **5.02** | **154** | *e*P | Pn | 03 31 46.2 | +5.1 |
| **ACAN** | **Cantantal** | **5.20** | **136** | *e*P | **Pn** | **03 31 45.3** | **+1.8** |
| **AHML** | **Horco Molle** | **5.69** | **73** | *e*P | **Pn** | **03 31 52.8** | **+2.5** |

*NIED **02** 03:35:00, 37°.10N×138°.40E, h14$^{km}$, Mw4.2 Best double couple: $M_0$1.97000×10$^{15}$ NP1:$\phi_s$239.00000°, δ37.00000°, λ96.00000°. NP2:$\phi_s$51.00000°, δ54.00000°, λ85.00000°.*
*BJI **02** 03:35:08.7, 36°.98N×138°.48E, h30$^{km}$, mb4.5/19, mB4.8/15, Ms4.1/15, Ms7 3.8/14*
*IDC **02** 03:35:10.6±0.6, 37°.11N×138°.28E, h21$^{km}$±4$^{km}$, mb3.9/21, mb1 4.1/26, mb1mx4.0/43, mbtmp4.1/26, ML3.6/4, MS3.3/2, Ms1 3.3/2, ms1mx2.9/32, Error ellipse: s-maj=15.0km s-min=7.5km az=90.0*
*JMA **02** 03:35:10.5±0.1, 37°.14N×138°.43E, h22$^{km}$±1$^{km}$, M4.0 Broadband fault plane solution: P waves. NP1: $\phi_s$49.00000°, δ56.00000°, λ76.00000°. NP2:$\phi_s$253.00000°, δ36.00000°, λ109.00000°. Principal axes: T Plg75.0000°, Azm279.0000°; N Plg11.0000°, Azm57.0000°; P Plg10.0000°, Azm149.0000°;*
*JMA Felt IV J1.*
*MOS **02** 03:35:10.3±0.9, 37°.05N×138°.29E, h32$^{km}$, mb4.6/24 Error ellipse: s-maj=9.8km s-min=6.6km az=96.5*
*ISCJB **02** 03:35:10.0±0.3, 37°.14N±0°.02×138°.37E±0°.03, h28$^{km}$±2$^{km}$, mb4.3/42, MS3.2/1, Error ellipse: s-maj=3.5km s-min=3.4km az=40.4*
*NEIC **02** 03:35:12.8±0.5, 37°.00N×138°.29E, h39$^{km}$±4$^{km}$, mb4.5/19, MW4.1(NIED), Error ellipse: s-maj=6.3km s-min=4.7km az=131.0*
*NEIC Felt at Tokyo. Recorded [4 JMA] in Niigata, [3 JMA] in Nagano, [2 JMA] in Gumma and [1 JMA] in Fukushima, Ishikawa and Tochigi. Also recorded [1 JMA] on Sadoga-shima.*
**ISC 02 03:35:11.4**±0.4**, 37°.13N**±0°.02×**138°.42E**±0°.03**, h26**$^{km}$±2$^{km}$**, h25**$^{km}$**:pP-P, n149,** σ1$^s$26/186**, mb4.4**/42**, 12C-14D, Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JJN** | **Nakama** | **0.20** | **262** | P | **Pb** | **03 35 15.8** | **-1.4** |
| JJN | | | | S | **Sb** | **03 35 20.0** | **-1.1** |
| **JIZZ** | **Izumozaki** | **0.46** | **30** | ⇓P | **Pb** | **03 35 20.1** | **-0.9** |
| JIZZ | | | | S | **Sb** | **03 35 27.7** | **+0.1** |
| **JHK** | **Hiroka** | **0.49** | **76** | P | **Pb** | **03 35 19.9** | **-1.6** |
| JHK | | | | S | **Sb** | **03 35 26.8** | **-1.6** |
| **JGK** | **Kuni** | **0.59** | **162** | ⇓P | **Pb** | **03 35 22.5** | **-0.7** |
| JGK | | | | S | **Sb** | **03 35 31.0** | **-0.3** |
| **MAJO** | **Matsushiro** | **0.61** | **196** | *d i*P | **Pb** | **03 35 22.3** | **-1.2** |
| **MAJO** | **Matsushiro** | **0.61** | **196** | *e*Pn | **Pb** | **03 35 22.0** | **-1.5** |
| MAJO | | | | *e*Sn | **Sb** | **03 35 30.7** | **-1.0** |
| **MAT** | **Matsushiro** | **0.61** | **196** | P | **Pb** | **03 35 22.2** | **-1.3** |
| MAT | | | | S | **Sb** | **03 35 30.6** | **-1.1** |
| **MAT** | **Matsushiro** | **0.61** | **196** | P | **Pb** | **03 35 22.1** | **-1.4** |
| MAT | | | | S | **Sb** | **03 35 30.7** | **-1.0** |
| **MJAR** | **Matsushiro Arr** | **0.61** | **196** | Pg | **Pb** | **03 35 22.5** | **-1.0** |
| | 963nm,0.3s,baz=27,slow=16,SNR=4847 | | | | | | |
| MJAR | | | | Lg | Lg | 03 35 30.4 | |
| | 1μm,0.3s,baz=28,slow=24,SNR=48 | | | | | | |
| **JKT** | **Katashina** | **0.76** | **118** | ⇓P | **Pb** | **03 35 24.6** | **-1.4** |
| JKT | | | | S | **Sb** | **03 35 35.0** | **-1.0** |
| **JSZ** | **Suzu** | **0.90** | **291** | ⇓P | **Pb** | **03 35 26.8** | **-1.5** |
| JSZ | | | | S | **Sb** | **03 35 39.0** | **-0.8** |
| **JSD** | **Sado** | **0.91** | **352** | P | **Pb** | **03 35 26.5** | **-2.1** |
| JSD | | | | S | **Sb** | **03 35 38.6** | **-1.7** |
| **JNS** | **Sasagawa** | **0.99** | **46** | ⇓P | **Pb** | **03 35 28.1** | **-1.8** |
| JNS | | | | S | **Sb** | **03 35 41.0** | **-1.6** |
| **JTT** | **Ttatey** | **1.01** | **239** | P | **Pn** | **03 35 30.0** | **+0.1** |
| **JFY** | **Yanaizu** | **1.06** | **75** | ⇓P | **Pn** | **03 35 29.4** | **-1.2** |
| JFY | | | | S | **Sb** | **03 35 43.0** | **-1.7** |
| **JAG** | **Ashikaga** | **1.09** | **130** | ⇓P | **Pn** | **03 35 30.3** | **-0.7** |
| JAG | | | | S | **Sn** | **03 35 44.7** | **-0.5** |
| **JHJ** | **Hachijo jima 2** | **4.16** | **164** | Pn | **Pn** | **03 36 14.1** | **+1.0** |
| | 29nm,0.3s,baz=86,slow=16,SNR=4.5 | | | | | | |
| **ERM** | **Erimo** | **6.10** | **35** | ⇓*i*P | **Pn** | **03 36 41.6** | **+1.8** |
| **ERM** | **Erimo** | **6.10** | **35** | *e*Pn | **Pn** | **03 36 41.5** | **+1.7** |
| | 36nm,0.9s | | | | | | |
| **JNU** | **Nakatsue** | **7.36** | **239** | Pn | **Pn** | **03 36 56.5** | **-0.6** |
| | 0.4nm,0.3s,baz=55,slow=7.4,SNR=5.8 | | | | | | |
| JNU | | | | LR | LR | 03 40 00.2 | |
| | comp=Z,192nm,21.0s,baz=355,slow=40 | | | | | | |
| **ASAJ** | **Asahikawa** | **7.67** | **23** | Pn | **Pn** | **03 37 03.7** | **+2.4** |
| | 1.4nm,0.3s,baz=201,slow=8.8,SNR=9.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **7.67** | **23** | P | **Pn** | **03 37 03.7** | **+2.4** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **7.67** | **23** | *e*Pn | Pn | 03 37 05.7 | +4.4 |
| **KSRS** | **Korea Array** | **8.37** | **275** | Pn | **Pn** | **03 37 11.7** | **+0.8** |
| | comp=Z,1.3nm,0.3s,baz=87,slow=14,SNR=8.6 | | | | | | |
| **KSRS** | **Korea Array** | **8.37** | **275** | P | **Pn** | **03 37 11.7** | **+0.8** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KSAR** | **Wonju Array Be** | **8.40** | **275** | P | **Pn** | **03 37 11.7** | **+0.3** |
| **KSAR** | **Wonju Array Be** | **8.40** | **275** | Pn | **Pn** | **03 37 11.7** | **+0.3** |
| **USRK** | **Ussuriysk Ar.** | **8.58** | **327** | Pn | **Pn** | **03 37 13.9** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=146,slow=14,SNR=2.7 | | | | | | |
| USRK | | | | Sn | **Sn** | **03 38 48.9** | **-0.9** |
| | comp=Z,0.5nm,0.3s,baz=136,slow=23,SNR=4.8 | | | | | | |
| **TJN** | **Taejon** | **8.90** | **268** | ⇑*i*P | **Pn** | **03 37 16.5** | **-1.8** |
| **MDJ** | **Mudanjiang** | **10.02** | **321** | P | **Pn** | **03 37 32.0** | **-1.6** |
| MDJ | | | | PMZ | | | |
| | comp=Z,6.0nm,1.4s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,66nm,4.9s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,180nm,11.4s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,200nm,11.4s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,330nm,11.4s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **10.33** | **17** | *e*P | **Pn** | **03 37 39.5** | **+1.7** |

YSS pmax pmax
comp=N,30nm,1.0s
YSS pmax pmax
comp=Z,30nm,1.0s
**YSS Yuzh-Sakhalins 10.33 17** *eP* **Pn 03 37 40.2 +2.4**
comp=Z,22nm,0.9s
**HABR Khabarovsk 11.60 349** *eP* **Pn 03 37 53.9 -1.2**
HABR *eS* **Sn 03 40 04.3 +0.6**
HABR pmax pmax
comp=Z,42nm,2.3s
HABR MLR MLR
comp=Z,197nm,15.0s
**CN2 Changchun 11.91 308** ⇑P **Pn 03 37 58.6 -0.8**
CN2 *es*P 03 38 10.6
CN2 PMZ
comp=Z,10.0nm,0.6s
CN2 PMZ
comp=Z,200nm,3.0s
CN2 LN
comp=Z,300nm,11.0s
CN2 LE
comp=Z,600nm,11.0s
CN2 LZ
comp=Z,800nm,13.0s
**KLR Kul'dur 13.03 340** *eP* Pn 03 38 19.2 +4.5
**BJI Beijing 17.62 286** P **P 03 39 17.0 +1.2**
BJI S **Sn 03 42 28.9 -1.6**
BJI PMZ
comp=Z,14nm,0.8s
BJI PMZ
comp=Z,69nm,4.1s
BJI LN
comp=Z,65nm,14.0s
BJI LE
comp=Z,220nm,13.6s
**PETK Petropavlovsk- 20.88 34** P Pn 03 39 53.8 -0.1
comp=Z,5.4nm,0.8s,baz=238,slow=8.3,SNR=3.2
**PETK Petropavlovsk- 20.88 34** P Pn 03 39 53.8 -0.1
PETK pmax pmax
comp=Z,5.0nm,0.8s
**HHC Hu-ho-hao-te 21.17 288** *eP* **P 03 39 54.8 +0.1**
HHC PP **PnPn 03 40 17.7 +3.5**
HHC S S 03 43 41.6 -7.2
HHC PMZ
comp=Z,25nm,0.5s
HHC PMZ
comp=Z,130nm,6.5s
HHC LN
comp=Z,140nm,14.8s
HHC LE
comp=Z,360nm,14.9s
HHC LZ
comp=Z,240nm,14.8s
**GUMO Guam 24.14 165** LR LR 03 48 45.9
comp=Z,93nm,20.9s,baz=42,slow=34
**ENH Enshi 24.96 263** *eP* **P 03 40 31.8 -0.9**
comp=Z,11nm,0.9s
**ULN Ulaanbaatar 25.32 305** ⇓*iP* **P 03 40 35.4 -0.7**
ULN *PP **pP** 03 40 47.0 +3.4
ULN pmax pmax
comp=Z,7.0nm,1.2s
**ULN Ulaanbaatar 25.32 305** *eP* **P 03 40 35.6 -0.4**
comp=Z,3.6nm,0.7s
**SONM Songino Array 25.75 305** P **P 03 40 38.9 -1.0**
comp=Z,2.1nm,0.9s,baz=108,slow=8.7,SNR=12
**SONM Songino Array 25.75 305** P **P 03 40 38.9 -1.0**
SONM pmax pmax
comp=Z,2.0nm,0.9s
**SEY Seymchan 27.22 14** P **P 03 40 53.8 +1.0**
comp=Z,4.2nm,0.9s,baz=217,slow=8.5,SNR=5.6
**SEY Seymchan 27.22 14** ⇓*eP* **P 03 40 54.7 +1.9**
**CD2 Chengdu 29.28 268** *eP* **P 03 41 10.2 -1.4**
CD2 pP **pP 03 41 20.2 +1.0**
CD2 sP **sP 03 41 24.5 +2.1**
CD2 S **S 03 46 00.4 -2.7**
CD2 sS **sS 03 46 17.3 +1.6**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**QIZ Qiongzhong 30.82 242** P **P 03 41 23.5 -1.7**
QIZ S **S 03 46 24.9 -2.4**
**KMI Kunming 32.62 259** P **P 03 41 41.2 -0.1**
KMI pP **pP 03 41 47.2 -1.7**
KMI sP **sP 03 41 50.3 -1.8**
KMI PMZ
comp=Z,6.0nm,0.7s
KMI PMZ
comp=Z,71nm,4.5s
KMI LN
comp=Z,100nm,15.0s
KMI LE
comp=Z,120nm,17.5s
KMI LZ
comp=Z,130nm,16.4s
**WMQ Urumqi 38.65 296** *eP* **P 03 42 34.0 +1.3**
**CMAR Chiang Mai Arr 39.22 253** P **P 03 42 38.0 +0.4**
comp=Z,1.1nm,0.3s,baz=46,slow=5.2,SNR=3.7
**CMAR Chiang Mai Arr 39.22 253** P **P 03 42 38.0 +0.4**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**ZALV Zalesovo Beam 40.08 312** P **P 03 42 44.9 +0.5**
comp=Z,0.9nm,0.6s,baz=98,slow=7.4,SNR=2.5
ZALV PcP **PcP 03 44 48.2 -0.4**
comp=Z,1.9nm,0.7s,baz=86,slow=2.8,SNR=6.2
**ZALV Zalesovo Beam 40.08 312** P **P 03 42 44.9 +0.5**
ZALV 03 44 48.2
ZALV pmax pmax
comp=Z,1.0nm,0.6s
ZALV pmax pmax
comp=Z,2.0nm,0.7s
**MKAR Makanchi Array 42.03 302** P **P 03 42 59.4 -1.1**
comp=Z,0.2nm,0.3s,baz=95,slow=9.9,SNR=5.1
MKAR PcP **PcP 03 44 54.6 -0.6**
comp=Z,0.4nm,0.4s,baz=72,slow=4.7,SNR=3.8
**KURK Kurchatov 43.98 308** *i*P **P 03 43 16.2 0.0**
KURK pmax pmax
comp=Z,3.0nm,0.7s
**KURK Kurchatov 43.98 308** *eP* **P 03 43 16.2 0.0**
comp=Z,5.7nm,0.7s
KURK PcP **PcP 03 45 01.2 -0.4**
**KURBB Kurchatov Arra 44.05 308** P **P 03 43 15.0 -1.8**
comp=Z,1.8nm,0.7s,baz=84,slow=8.1,SNR=7.4
KURBB PcP **PcP 03 45 01.2 -0.6**
comp=Z,0.4nm,0.7s,baz=80,slow=4.0,SNR=4.4
**KSH Kashi 48.17 293** *eP* P 03 43 53.7 +4.1
KSH *ep*P pP 03 44 03.5 +6.0
KSH *e*PcP **PcP 03 45 19.7 +3.0**
KSH *e*PP **PP 03 45 46.3 +4.5**
KSH S **S 03 50 51.3 +4.2**
KSH ScS **ScS 03 53 40.6 -0.4**
KSH PMZ
comp=Z,52nm,4.4s
KSH LN
comp=Z,92nm,4.8s
KSH LE
comp=Z,88nm,4.9s
KSH LZ
comp=Z,160nm,6.6s
**KDAK Kodiak Island 48.63 42***ceP* **P 03 43 53.7 +1.1**
**BVAR Borovoye Array 48.73 312** P **P 03 43 53.7 +0.2**
comp=Z,0.5nm,0.5s,baz=74,slow=11,SNR=18
BVAR PcP **PcP 03 45 18.1 -0.1**
comp=Z,1.4nm,0.6s,baz=116,slow=3.4,SNR=6.8
**BVAR Borovoye Array 48.73 312** P **P 03 43 53.7 +0.2**
BVAR 03 45 18.1
BVAR pmax pmax
comp=Z,1.0nm,0.5s
BVAR pmax pmax
comp=Z,1.0nm,0.6s
**ILAR Eielson Array 50.70 32** P **P 03 44 08.3 +0.1**
comp=Z,1.4nm,0.8s,baz=278,slow=4.9,SNR=14
**ILAR Eielson Array 50.70 32** P **P 03 44 08.4 +0.1**
ILAR pmax pmax
comp=Z,1.0nm,0.9s
**SVE Sverdlovsk 53.48 318** *eP* **P 03 44 29.3 +0.2**
SVE pmax pmax
comp=Z,10.0nm,0.9s
**ARU Arti 54.69 318** P **P 03 44 37.5 -0.4**
comp=Z,0.3nm,0.3s,baz=90,slow=20,SNR=2.1
**ARU Arti 54.69 318***c iP* **P 03 44 37.2 -0.7**
ARU S **S 03 52 16.6 +0.3**
ARU SS **SS 03 55 54.5 -4.4**
ARU pmax pmax
comp=Z,13nm,1.7s
**ARU Arti 54.69 318** *eP* **P 03 44 37.3 -0.7**
comp=Z,2.2nm,0.6s
**INK Inuvik 55.39 27** *eP* **P 03 44 43.1 +0.3**
INK pmax pmax
comp=Z,4.0nm,1.0s
**INK Inuvik 55.39 27** *eP* **P 03 44 43.1 +0.3**
comp=Z,4.1nm,1.0s
**ABKAR Akbulak array 56.03 309** *eP* **P 03 44 47.0 -0.7**
**AKTO Aktyubinsk 56.82 311** P **P 03 44 51.9 -1.4**
comp=Z,1.4nm,0.4s,baz=73,slow=12,SNR=6.6
**AKTO Aktyubinsk 56.82 311** P **P 03 44 51.9 -1.4**
AKTO pmax pmax
comp=Z,1.0nm,0.4s
**WRAB Tennant Creek 56.88 185** ⇓*iP* **P 03 44 52.6 -1.4**
WRAB pmax pmax
comp=Z,8.0nm,0.9s
**WRAB Tennant Creek 56.88 185** *eP* **P 03 44 52.6 -1.4**
comp=Z,3.2nm,0.6s
**WRA Warramunga Arr 56.90 185** P **P 03 44 53.0 -1.1**
comp=Z,2.6nm,0.6s,baz=360,slow=7.5,SNR=26
WRA PcP **PcP 03 45 49.8 +0.4**
comp=Z,1.3nm,0.6s,baz=360,slow=4.5,SNR=5.5
**WRA Warramunga Arr 56.90 185** P **P 03 44 53.0 -1.1**
WRA 03 45 49.8
WRA pmax pmax
comp=Z,3.0nm,0.6s
WRA pmax pmax
comp=Z,1.0nm,0.6s
**ASAR Alice Springs 60.62 185** P **P 03 45 18.8 -1.2**
comp=Z,1.1nm,0.8s,baz=12,slow=6.4,SNR=4.8
**ASAR Alice Springs 60.62 185** P **P 03 45 18.8 -1.2**
ASAR pmax pmax
comp=Z,1.0nm,0.9s
**LVZ Lovozero 61.03 335** ⇓P **P 03 45 23.2 +0.9**
LVZ pmax pmax
comp=Z,15nm,1.7s
**ARCES ARCESS Array B 63.05 339** P **P 03 45 35.7 -0.1**
comp=Z,2.3nm,0.7s,baz=62,slow=10,SNR=9.6
ARCES pP **pP 03 45 42.4 -1.5**
comp=Z,1.5nm,0.7s,baz=50,slow=10.0,SNR=3.2
**ARCES ARCESS Array B 63.05 339** P **P 03 45 35.7 -0.1**
ARCES *PP **pP** 03 45 42.4 -1.5
ARCES pmax pmax
comp=Z,2.0nm,0.7s
ARCES pmax pmax
comp=Z,2.0nm,0.7s
**OBN Obninsk 66.57 322** *i* P **P 03 45 57.5 -1.4**
OBN pmax pmax
comp=Z,3.0nm,1.1s
**FINES FINESS Array B 67.59 331** P **P 03 46 04.9 -0.4**
comp=Z,4.2nm,0.7s,baz=83,slow=7.9,SNR=16
**FINES FINESS Array B 67.59 331** P **P 03 46 04.9 -0.4**
FINES pmax pmax
comp=Z,4.0nm,0.7s
**VSU Vasula 69.14 328**⇓*eP* **P 03 46 14.9 -0.1**
**SUMG Summit 70.57 359** *eP* **P 03 46 24.6 +0.5**
SUMG pmax pmax
comp=Z,12nm,0.9s
**SUMG Summit 70.57 359** *eP* **P 03 46 24.6 +0.5**
comp=Z,12nm,0.9s
**AKASG Malin Array Be 72.73 321** P **P 03 46 35.9 -1.1**
comp=Z,3.7nm,0.7s,baz=45,slow=5.8,SNR=17
**AKASG Malin Array Be 72.73 321** P **P 03 46 35.9 -1.1**
AKASG pmax pmax
comp=Z,4.0nm,0.7s
**KIEV Kiev 72.75 321**⇑*iP* **P 03 46 36.3 -0.7**
KIEV pmax pmax
comp=Z,4.0nm,0.8s
**KIEV Kiev 72.75 321** *eP* **P 03 46 36.4 -0.7**
comp=Z,6.3nm,0.8s
**NB2 NORSAR Subarra 73.15 336** P **P 03 46 38.8 -0.5**
comp=Z,2.1nm,0.6s,baz=42,slow=5.9
**NOA NORSAR Array B 73.15 336** P **P 03 46 39.1 -0.3**
comp=Z,3.2nm,0.7s,baz=41,slow=6.0,SNR=13
**NOA NORSAR Array B 73.15 336** P **P 03 46 39.1 -0.3**
NOA pmax pmax
comp=Z,3.0nm,0.7s
**FFC Flin Flon 74.90 31** *eP* **P 03 46 49.3 -0.3**
FFC pmax pmax
comp=Z,13nm,1.3s
**FFC Flin Flon 74.90 31** *eP* **P 03 46 49.3 -0.3**
comp=Z,13nm,1.3s
**HLID Hailey 76.04 46** *eP* **P 03 46 57.7 +1.1**
**BOZ Bozeman (W) 76.29 43** *eP* **P 03 46 59.2 +1.2**
BOZ pmax pmax
comp=Z,4.0nm,1.1s
**BOZ Bozeman (W) 76.29 43** *eP* **P 03 46 59.2 +1.2**
comp=Z,4.4nm,1.1s
**BURAR Bucovina Array 76.73 320**⇑*iP* **P 03 47 00.4 +0.1**
**NVAR Mina Array Bea 76.83 52** P **P 03 47 02.3 +1.1**
comp=Z,1.4nm,0.9s,baz=285,slow=5.5,SNR=9.0
NVAR pP **pP 03 47 08.3 -1.2**
comp=Z,1.1nm,0.7s,baz=285,slow=4.9,SNR=5.9
**BRTR Keskin Array B 76.97 310** P **P 03 47 01.1 -0.8**
comp=Z,1.1nm,0.9s,baz=97,slow=5.0,SNR=4.8
**BRTR Keskin Array B 76.97 310** P **P 03 47 01.1 -0.8**
BRTR pmax pmax
comp=Z,1.0nm,0.9s
**OJC Ojcow 77.60 325** *eP* **P 03 47 04.9 -0.1**
OJC pmax pmax
comp=Z,10.0nm,1.0s
**OJC Ojcow 77.60 325** *eP* **P 03 47 04.9 -0.1**
comp=Z,10.0nm,1.0s
**H17A Grant Village 77.66 43** *eP* **P 03 47 08.4 +2.5**
comp=Z,9.5nm,1.3s
**TRPA Tarpa 77.73 322**⇑*iP* **P 03 47 06.4 +0.6**
**MOOW Moose Ponds 77.99 44** *eP* **P 03 47 08.8 +1.2**
**SNOW Snow King Moun 78.17 44** *eP* **P 03 47 09.7 +1.0**
comp=Z,1.9nm,0.5s
**RAYN Ar Rayn 78.39 291** *eP* **P 03 47 09.9 -0.1**
comp=Z,12nm,1.7s
**HWUT Hardware Ranch 78.91 46** *eP* **P 03 47 13.8 +1.1**
comp=Z,4.3nm,1.2s
**LOT Lotru 78.91 319**⇑*iP* **P 03 47 13.6 +1.0**
**MORC Moravsky Berou 78.94 325** *eP* **P 03 47 12.6 0.0**
MORC pmax pmax
comp=Z,22nm,1.0s
**MORC Moravsky Berou 78.94 325**⇑*iP* **P 03 47 12.4 -0.2**
**MORC Moravsky Berou 78.94 325** *eP* **P 03 47 12.6 0.0**
comp=Z,22nm,1.0s
**KRLC Kraliky 79.07 326** *eP* **P 03 47 13.6 +0.3**
**KRLC Kraliky 79.07 326** *eP* **P 03 47 13.6 +0.3**
**DPC Dobruska-Polom 79.08 326** *eP* **P 03 47 13.7 +0.4**
**DPC Dobruska-Polom 79.08 326** *eP* **P 03 47 13.7 +0.4**
**PSZ Piszkesteto 79.16 323** *eP* **P 03 47 13.9 +0.1**
PSZ pmax pmax
comp=Z,7.0nm,1.0s
**PSZ Piszkesteto 79.16 323** *eP* **P 03 47 13.9 +0.1**
comp=Z,6.6nm,1.0s
**BW06 Boulder Array 79.28 44** *eP* **P 03 47 14.7 -0.1**
comp=Z,1.9nm,0.9s
**GZR Gura Zlata 79.47 320**⇑*iP* **P 03 47 15.6 +0.1**
**PVCC Panska Ves 79.71 327** *eP* **P 03 47 16.8 +0.1**
**PVCC Panska Ves 79.71 327** *eP* **P 03 47 16.8 +0.1**
**CLL Collm 79.79 329** *eP* **P 03 47 17.0 -0.1**
CLL pmax pmax
comp=Z,5.0nm,1.0s
**CLL Collm 79.79 329** *eP* **P 03 47 17.0 -0.1**
comp=Z,5.0nm,1.0s
**GOPC GO Pecny, Ondr 80.07 327** *eP* **P 03 47 19.0 +0.3**
**GOPC GO Pecny, Ondr 80.07 327** *eP* **P 03 47 19.0 +0.3**
**CSS Prodhromos 80.09 306** *eP* **P 03 47 18.6 -0.4**
comp=Z,2.2nm,0.8s
**PRU Pruhonice 80.12 327** *eP* **P 03 47 19.5 +0.6**
**PRU Pruhonice 80.12 327** *eP* **P 03 47 19.5 +0.6**
**NKC Novy Kostel 80.83 328** *eP* **P 03 47 23.3 +0.5**
**NKC Novy Kostel 80.83 328** *eP* **P 03 47 23.3 +0.5**
**KHC Kasperske Hory 81.18 327** *eP* **P 03 47 24.6 0.0**
**KHC Kasperske Hory 81.18 327** *eP* **P 03 47 24.6 0.0**
**GERES GERESS Array B 81.34 327** P **P 03 47 25.3 -0.3**
comp=Z,1.2nm,0.8s,baz=42,slow=4.5,SNR=7.4
**GERES GERESS Array B 81.34 327** P **P 03 47 25.3 -0.3**
GERES pmax pmax
comp=Z,1.0nm,0.8s
**BFO Black Forest 84.02 329***ceP* **P 03 47 40.4 +1.0**
**ANMO Albuquerque 86.33 48**⇑*eP* **P 03 47 51.7 +0.2**
ANMO *PP **pP 03 48 02.3 +2.4**
**TXAR Lajitas Array 91.94 51** P **P 03 48 18.2 +0.3**
comp=Z,0.6nm,0.7s,baz=299,slow=3.3,SNR=6.9
TXAR pP **pP 03 48 25.2 -1.2**
comp=Z,0.5nm,0.8s,baz=289,slow=2.5,SNR=4.7
**TXAR Lajitas Array 91.94 51** P **P 03 48 18.2 +0.3**
TXAR *PP **pP 03 48 25.2 -1.2**
TXAR pmax pmax
comp=Z,1.0nm,0.7s
TXAR pmax pmax
comp=Z,1.0nm,0.8s
**TORD Torodi Ar. Bea 115.53 312** PKP **PKPdf 03 53 50.4 -1.2**
comp=Z,0.3nm,0.6s,baz=30,slow=1.0,SNR=5.6
**SAML Samuel 145.80 40** *e*PKPbc **PKPdf 03 54 48.3 +0.1**
**LPAZ La Paz 148.67 56** PKPbc **PKPbc 03 54 57.6 +0.2**
comp=Z,1.3nm,0.8s,baz=270,slow=4.0,SNR=4.8
**LPAZ La Paz 148.67 56** PKP2 **PKPbc 03 54 57.6 +0.2**
LPAZ pmax pmax
comp=Z,1.0nm,0.8s
**LVC Limon Verde 152.36 66** *e*PKPbc **PKPbc 03 55 06.0 +0.4**

**IDC 02 03:49:20.4±15.0, 16°.08S×72°.21W, h183km±36km, mb3.0/2, mb1 3.2/3, mb1mx3.0/19, mbtmp3.5/3, Error ellipse: s-maj=492.2km s-min=34.7km az=25.0, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPAZ** | **La Paz** | **3.93** | **94** | P | Pn | 03 50 21.4 | -0.2 |
| | 1.9nm,0.3s,baz=271,slow=12,SNR=38 | | | | | | |
| LPAZ | | | | S | Sn | 03 51 22.1 | +13 |
| | baz=163,slow=20,SNR=1.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **54.41** | **326** | P | P | 03 58 28.8 | -0.1 |
| | 0.2nm,0.6s,baz=145,slow=9.6,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.62** | **73** | P | P | 04 01 02.6 | 0.0 |
| | 0.8nm,0.6s,baz=258,slow=5.7,SNR=13 | | | | | | |

**MEX 02 04:06:51.4±0.4, 14°.36N×92°.88W, h42km±87km, MD3.8, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **1.37** | **346** | *e*P | Pn | 04 07 12.4 | -1.8 |
| **CCIG** | **Comitan** | **2.04** | **21** | *e*P | Pn | 04 07 22.0 | -1.6 |

*LDG* ***02*** *04:07:19.8±0.1, 42°.74N×0°.53E, h10km, Md1.3/2, Ml1.2/1, Error ellipse: s-maj=3.2km s-min=1.3km az=29.0*
*MDD* ***02*** *04:07:20.8±0.8, 42°.76N×0°.54E, h0km, mbLg0.6/4, Error ellipse: s-maj=8.0km s-min=3.4km az=42.0, PRXIMO*
**CSEM 02 04:07:19.8±0.1, 42°.77N×0°.54E, h15km, ML0.6, Error ellipse: s-maj=3.0km s-min=1.7km az=30.0, Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EPF** | **Esparros** | **0.30** | **331** | *e*Pg | Pg | 04 07 26.4 | +0.1 |
| EPF | | | | *e*Sg | Sg | 04 07 30.6 | -0.1 |
| | 4.1nm,0.2s | | | | | | |
| **EPF** | **Esparros** | **0.30** | **331** | Pg | Pg | 04 07 26.4 | +0.1 |
| EPF | | | | Lg | Lg | 04 07 30.6 | |
| | 2.0nm,0.2s | | | | | | |
| **EPF** | **Esparros** | **0.30** | **331** | Pg | Pg | 04 07 26.4 | +0.1 |
| EPF | | | | *e*Sg | Sg | 04 07 30.6 | -0.1 |
| | 2.0nm,0.2s | | | | | | |
| **MLS** | **Moulis** | **0.45** | **65** | Pg | Pb | 04 07 29.3 | -0.2 |
| MLS | | | | Lg | Lg | 04 07 35.4 | |
| **MLS** | **Moulis** | **0.45** | **65** | Pg | Pb | 04 07 29.3 | -0.2 |
| MLS | | | | Lg | Lg | 04 07 35.4 | |
| **CEST** | **Esterri de Car** | **0.55** | **107** | Pg | Pg | 04 07 30.7 | -0.2 |
| CEST | | | | Lg | Lg | 04 07 38.2 | |
| **CEST** | **Esterri de Car** | **0.55** | **107** | Pg | Pg | 04 07 30.7 | -0.2 |
| CEST | | | | Lg | Lg | 04 07 38.2 | |
| **CSOR** | **Sort** | **0.59** | **132** | Pg | Pg | 04 07 31.7 | +0.2 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | |
| CSOR | | | | Lg | Lg | 04 07 39.1 | |
| | 1.7nm,0.7s,SNR=7.9 | | | | | | |
| **CSOR** | **Sort** | **0.59** | **132** | Pg | Pg | 04 07 31.7 | +0.1 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | |
| CSOR | | | | Lg | Lg | 04 07 39.1 | |
| | 1.7nm,0.7s,SNR=7.9 | | | | | | |
| **ETSF** | **Etsaut** | **0.82** | **280** | *e*Sg | Sg | 04 07 46.3 | -0.4 |
| | 0.8nm,0.2s | | | | | | |
| **ETSF** | **Etsaut** | **0.82** | **280** | *e*Sg | Sg | 04 07 46.3 | -0.4 |
| | 0.4nm,0.2s | | | | | | |
| **CLLI** | **Llivia** | **1.10** | **105** | Pg | Pg | 04 07 41.4 | +0.2 |
| | 0.3nm,0.6s,SNR=7.9 | | | | | | |
| CLLI | | | | Lg | Lg | 04 07 55.3 | |
| | 1.3nm,0.7s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **1.10** | **105** | Pg | Pg | 04 07 41.4 | +0.2 |
| | 0.3nm,0.6s,SNR=7.9 | | | | | | |
| CLLI | | | | Lg | Lg | 04 07 55.3 | |
| | 1.3nm,0.7s,SNR=7.9 | | | | | | |
| **MTLF** | **Montolieu** | **1.36** | **64** | *e*Pg | Pg | 04 07 45.6 | -0.4 |
| MTLF | | | | *e*Sg | Sg | 04 08 03.5 | -0.2 |
| | 0.4nm,0.2s | | | | | | |
| **MTLF** | **Montolieu** | **1.36** | **64** | Pg | Pg | 04 07 45.6 | -0.4 |
| MTLF | | | | Lg | Lg | 04 08 03.5 | |
| | 0.2nm,0.2s | | | | | | |
| **MTLF** | **Montolieu** | **1.36** | **64** | Pg | Pg | 04 07 45.6 | -0.4 |
| MTLF | | | | *e*Sg | Sg | 04 08 03.5 | -0.2 |
| | 0.2nm,0.2s | | | | | | |
| **CFON** | **Fontmartina** | **1.73** | **125** | Lg | Lg | 04 08 16.9 | |
| | 3.6nm,1.5s,SNR=7.9 | | | | | | |
| **CFON** | **Fontmartina** | **1.73** | **125** | Lg | Lg | 04 08 16.9 | |
| | 3.6nm,1.5s,SNR=7.9 | | | | | | |

*CSEM* ***02*** *04:07:35.5, 42°.82N×1°.33W, h0km, ML0.7, After MDD*
**MDD 02 04:07:35.5±0.2, 42°.82N×1°.33W, h0km, mbLg0.7/6, 1D, Error ellipse: s-maj=3.8km s-min=1.5km az=153.0, PRXIMO, Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IPRE** | **Itoiz** | **0.03** | **231** | Pg | Pg | 04 07 35.9 | -0.3 |
| | 3.0nm,0.1s,SNR=14 | | | | | | |
| IPRE | | | | Lg | Lg | 04 07 36.3 | |
| | 7.6nm,0.1s,SNR=7.9 | | | | | | |
| **IPRE** | **Itoiz** | **0.03** | **231** | Pg | Pg | 04 07 35.9 | -0.2 |
| | 3.0nm,0.1s,SNR=14 | | | | | | |
| IPRE | | | | Lg | Lg | 04 07 36.3 | |
| | 7.6nm,0.1s,SNR=7.9 | | | | | | |
| **IEPA** | **Eparoz** | **0.06** | **136** | Pg | Pg | 04 07 36.2 | -0.6 |
| | 0.5nm,0.0s,SNR=7.9 | | | | | | |
| IEPA | | | | Lg | Lg | 04 07 37.2 | |
| | 12nm,0.1s,SNR=7.9 | | | | | | |
| **IEPA** | **Eparoz** | **0.06** | **136** | Pg | Pg | 04 07 36.2 | -0.6 |
| | 0.5nm,0.0s,SNR=7.9 | | | | | | |
| IEPA | | | | Lg | Lg | 04 07 37.2 | |
| | 12nm,0.1s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **0.07** | **74** | ⇓Pg | Pg | 04 07 36.8 | -0.2 |
| | 0.5nm,0.1s,SNR=18 | | | | | | |
| IELO | | | | Lg | Lg | 04 07 37.8 | |
| | 2.9nm,0.1s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **0.07** | **74** | Pg | Pg | 04 07 36.8 | -0.2 |
| | 0.5nm,0.1s,SNR=18 | | | | | | |
| IELO | | | | Lg | Lg | 04 07 37.8 | |
| | 2.9nm,0.1s,SNR=7.9 | | | | | | |
| **IUNC** | **Unciti** | **0.14** | **242** | Pg | Pg | 04 07 38.9 | +0.5 |
| | 0.6nm,0.1s,SNR=7.9 | | | | | | |
| IUNC | | | | Lg | Lg | 04 07 40.7 | |
| | 3.4nm,0.1s,SNR=7.9 | | | | | | |
| **IUNC** | **Unciti** | **0.14** | **242** | Pg | Pg | 04 07 38.9 | +0.5 |
| | 0.6nm,0.1s,SNR=7.9 | | | | | | |
| IUNC | | | | Lg | Lg | 04 07 40.7 | |
| | 3.4nm,0.1s,SNR=7.9 | | | | | | |
| **YASP** | **Aspurt** | **0.15** | **129** | Pg | Pg | 04 07 38.7 | +0.1 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| YASP | | | | Lg | Lg | 04 07 41.2 | |
| | 2.6nm,0.2s,SNR=7.9 | | | | | | |
| **YASP** | **Aspurt** | **0.15** | **129** | Pg | Pg | 04 07 38.7 | +0.2 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| YASP | | | | Lg | Lg | 04 07 41.2 | |
| | 2.6nm,0.2s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **0.53** | **60** | Lg | Lg | 04 07 51.3 | |
| | 1.9nm,0.2s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **0.53** | **60** | Lg | Lg | 04 07 51.3 | |
| | 1.9nm,0.2s,SNR=7.9 | | | | | | |

*ISCJB* ***02*** *04:09:52.7±0.8, 31°.60S±0°.03×70°.24W±0°.04, h110km±10km, Error ellipse: s-maj=6.7km s-min=4.4km az=32.6*
*SJA* ***02*** *04:09:52.4±0.7, 31°.60S×70°.25W, h99km±6km, ML3.3*
*GUC* ***02*** *04:09:52.6±0.6, 31°.61S×70°.45W, h119km±9km, ML3.6*
**ISC 02 04:09:53.3±1.8, 31°.61S±0°.04×70°.24W±0°.05, h107km±19km, n19, σ0s49/36, 2C-3D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTLS** | **Leoncito** | **0.83** | **104** | *i* P | **Pn** | **04 10 13.2** | **+0.4** |
| RTLS | | | | *i* S | **Sn** | **04 10 27.5** | **0.0** |
| **AUSP** | **Uspallata** | **0.95** | **130** | *i* P | **Pn** | **04 10 14.1** | **+0.1** |
| AUSP | | | | *i* S | **Sn** | **04 10 29.7** | **+0.1** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| SJA | San Juan | 1.44 | 87 | iP | Pn | 04 10 19.2 | 0.0 |
| SJA | | | | iS | Sn | 04 10 38.7 | -0.2 |
| SJA | | | | AML | AML | 04 10 41.5 | |
| | comp=Z,260nm,0.2s | | | | | | |
| RTCV | Cerro Valdivia | 1.47 | 100 | iP | Pn | 04 10 19.2 | -0.4 |
| RTCV | | | | iS | Sn | 04 10 39.6 | 0.0 |
| ROCH | El Roble | 1.51 | 205 | ⇓iP | Pn | 04 10 20.0 | -0.2 |
| ROCH | | | | iS | Sn | 04 10 40.9 | +0.3 |
| ROCH | | | | AML | AML | 04 10 42.0 | |
| | comp=N,1μm,0.4s | | | | | | |
| ROC1 | El Roble | 1.51 | 205 | iP | Pn | 04 10 20.0 | -0.3 |
| ROC1 | | | | iS | Sn | 04 10 40.7 | -0.1 |
| RTLL | Cerro Villicun | 1.54 | 80 | iP | Pn | 04 10 19.9 | -0.5 |
| RTLL | | | | iS | Sn | 04 10 40.5 | -0.5 |
| ASAL | Salagasta | 1.55 | 130 | iP | Pn | 04 10 20.9 | +0.4 |
| PEL | Peldehue | 1.58 | 194 | ⇑iP | Pn | 04 10 20.9 | 0.0 |
| PEL | | | | iS | Sn | 04 10 42.4 | +0.6 |
| PEL | | | | AML | AML | 04 10 44.9 | |
| | comp=N,526nm,0.2s | | | | | | |
| AMOG | MOGNA | 1.64 | 67 | iP | Pn | 04 10 21.6 | 0.0 |
| AMOG | | | | iS | Sn | 04 10 43.2 | -0.1 |
| ARCO | CERRO ARCO | 1.66 | 138 | iP | Pn | 04 10 22.1 | +0.2 |
| ARCO | | | | iS | Sn | 04 10 43.9 | +0.1 |
| ARCO | | | | AML | AML | 04 10 46.6 | |
| | comp=Z,359nm,0.4s | | | | | | |
| CFAA | Coronel Fontan | 1.71 | 90 | iP | Pn | 04 10 22.1 | -0.4 |
| CFAA | | | | iS | Sn | 04 10 44.5 | -0.2 |
| CLCH | Cerro Calan | 1.80 | 188 | ⇓iP | Pn | 04 10 24.0 | +0.3 |
| CLCH | | | | iS | Sn | 04 10 47.7 | +0.9 |
| LSCH | La Serena | 1.90 | 333 | eP | Pn | 04 10 24.4 | -0.4 |
| LSCH | | | | iS | Sn | 04 10 48.5 | -0.4 |
| RCDM | Rinconada Maip | 1.94 | 194 | eP | Pn | 04 10 25.1 | -0.2 |
| RCDM | | | | eS | Sn | 04 10 47.8 | -2.0 |
| RCDM | | | | AML | AML | 04 10 49.2 | |
| | comp=E,623nm,0.1s | | | | | | |
| ANTU | Antumapu | 1.98 | 189 | ⇑iP | Pn | 04 10 26.0 | +0.1 |
| ANTU | | | | iS | Sn | 04 10 51.4 | +0.4 |
| AGUA | GUANDACOL | 2.60 | 36 | iP | Pn | 04 10 34.3 | +0.3 |
| LCO | Las Campanas | 2.62 | 351 | ⇓iP | Pn | 04 10 34.9 | +0.5 |
| LCO | | | | iS | Sn | 04 11 06.4 | +0.5 |
| LCO | | | | AML | AML | 04 11 09.1 | |
| | comp=E,161nm,0.3s | | | | | | |
| VCA | Vinchina | 3.36 | 32 | iP | Pn | 04 10 44.3 | +0.1 |
| VCA | | | | iP | Pn | 04 10 44.3 | +0.1 |

*IDC **02** 04:21:57.5±1.8, 33°.97N×141°.54E, h0km, mb3.5/4, mb1 3.6/5, mb1mx3.4/39, mbtmp3.4/5, ML3.2/1, Error ellipse: s-maj=35.0km s-min=21.2km az=67.0*
*ISCJB **02** 04:21:59.0±1.1, 34°.05N±0°.05×141°.6E±0°.1, h24km, mb3.4/4, Error ellipse: s-maj=13.4km s-min=7.4km az=169.7*
*JMA **02** 04:22:02.0±0.4, 34°.08N×141°.38E, h28km±3km, M2.9*
**ISC 02 04:22:01.2**±1.5, **33°.99N**±0°.06×**141°.5E**±0°.1, **h24**km, **n14**, σ**0s.74**/17, **mb3.5**/4, **Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| BSO1 | Boso 1 | 0.77 | 330 | P | Pb | 04 22 14.6 | -1.0 |
| BSO3 | Boso 3 | 1.12 | 317 | P | Pn | 04 22 20.7 | -0.5 |
| BSO4 | Boso 4 | 1.35 | 318 | P | Pn | 04 22 24.6 | +0.1 |
| JHJ2 | Mitsune | 1.62 | 238 | P | Pb | 04 22 29.9 | -0.5 |
| JHJ | Hachijo jima 2 | 1.64 | 238 | Pn | Pn | 04 22 28.9 | +0.4 |
| | 83nm,0.3s,baz=60,slow=20,SNR=7.8 | | | | | | |
| JHJ | | | | Sn | Sb | 04 22 50.6 | -0.3 |
| | 49nm,0.3s,baz=122,slow=21,SNR=6.4 | | | | | | |
| JHCJ | Hachijojimakas | 1.65 | 237 | P | Pb | 04 22 30.2 | -0.8 |
| JIM2 | Oshima 3 | 1.82 | 294 | P | Pn | 04 22 30.8 | -0.2 |
| KTJJ | Kamata 2 | 2.18 | 296 | P | Pn | 04 22 35.7 | -0.3 |
| MJAR | Matsushiro Arr | 3.67 | 315 | Pn | Pn | 04 22 56.7 | +0.1 |
| | 2.0nm,0.3s,baz=150,slow=12,SNR=7.1 | | | | | | |
| MJAR | | | | Sn | Sn | 04 23 40.2 | +1.0 |
| | 1.1nm,0.3s,baz=143,slow=24,SNR=3.3 | | | | | | |
| MAT | Matsushiro | 3.68 | 315 | P | Pn | 04 22 58.1 | +1.5 |
| MAT | | | | eS | Sn | 04 23 39.4 | +0.2 |
| SONM | Songino Array | 29.60 | 308 | P | P | 04 28 04.1 | -0.5 |
| | 0.3nm,0.6s,baz=107,slow=9.7,SNR=2.5 | | | | | | |
| MKAR | Makanchi Array | 45.81 | 305 | P | P | 04 30 22.3 | +1.2 |
| | 0.2nm,0.2s,baz=91,slow=8.6,SNR=2.2 | | | | | | |
| WRA | Warramunga Arr | 54.05 | 188 | P | P | 04 31 23.3 | -0.5 |
| | 0.3nm,0.5s,baz=5.4,slow=7.9,SNR=5.3 | | | | | | |
| ASAR | Alice Springs | 57.78 | 188 | P | P | 04 31 50.5 | 0.0 |
| | 0.1nm,0.2s,baz=354,slow=8.4,SNR=3.0 | | | | | | |

*ISCJB **02** 04:29:29.2±0.6, 19°.63S±0°.04×70°.41W±0°.07, h44km, mb3.9/8, MS2.6/1, Error ellipse: s-maj=9.8km s-min=5.3km az=3.8*
*NEIC **02** 04:29:29.0, 19°.74S×70°.52W, h36km, mb3.7/2, After GUC.*
*NEIC Felt [IV] at Pisagua, [III] at Alto Hospicio and Iquique and [II] at Huara.*
*GUC **02** 04:29:29.2±0.6, 19°.74S×70°.52W, h36km±60km, ML4.4*
*IDC **02** 04:29:35.5±2.3, 19°.76S×70°.16W, h85km±19km, mb3.7/6, mb1 3.8/9, mb1mx3.7/28, mbtmp4.1/9, MS3.2/3, Ms1 3.1/3, ms1mx3.0/15, Error ellipse: s-maj=25.1km s-min=13.9km az=104.0*
**ISC 02 04:29:30.5**±0.7, **19°.70S**±0°.05×**70°.45W**±0°.08, **h44**km, **n33**, σ**1s.46**/34, **mb3.8**/8, **2C-2D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| MNMC | Minimini | 0.99 | 55 | ⇓iP | Pn | 04 29 48.5 | +0.3 |
| MNMC | | | | iP | Pn | 04 29 48.5 | +0.3 |
| MNMC | | | | eS | Sn | 04 30 02.7 | +1.6 |
| MNMC | | | | AML | AML | 04 30 08.0 | |
| | comp=N,14μm,0.2s | | | | | | |
| PB01 | IPOC Station P | 1.61 | 146 | ⇓iP | Pn | 04 29 57.2 | +0.6 |
| PB01 | | | | eS | Sn | 04 30 18.6 | +2.4 |
| PB01 | | | | AML | AML | 04 30 21.8 | |
| | comp=N,4μm,0.4s | | | | | | |
| PB07 | IPOC Station P | 2.08 | 165 | ⇑iP | Pn | 04 30 03.8 | +0.6 |
| PB07 | | | | eS | Sn | 04 30 29.6 | +1.6 |
| PB07 | | | | AML | AML | 04 30 38.3 | |
| | comp=E,4μm,0.5s | | | | | | |
| PB04 | IPOC Station P | 2.63 | 174 | eP | Pn | 04 30 10.5 | -0.2 |
| PB04 | | | | AML | AML | 04 30 54.8 | |
| | comp=N,2μm,0.8s | | | | | | |
| PB06 | IPOC Station P | 3.10 | 165 | ⇑iP | Pn | 04 30 17.1 | 0.0 |
| PB06 | | | | AML | AML | 04 31 08.0 | |
| | comp=N,1μm,0.4s | | | | | | |
| LVC | Limon Verde | 3.23 | 154 | P | Pn | 04 30 20.9 | +1.9 |
| | comp=N,440nm,0.3s,baz=360,slow=5.4,SNR=76 | | | | | | |
| LVC | | | | S | Sn | 04 30 59.5 | +3.1 |
| | comp=N,1μm,0.3s,baz=306,slow=19,SNR=5.0 | | | | | | |
| LVC | | | | LR | LR | 04 31 45.8 | |
| | comp=N,995nm,21.1s,baz=340,slow=42 | | | | | | |
| LVC | Limon Verde | 3.23 | 154 | ePn | Pn | 04 30 20.3 | +1.3 |
| LVC | | | | eSn | Sn | 04 30 54.7 | -1.7 |
| LPAZ | La Paz | 4.05 | 33 | P | Pn | 04 30 34.5 | +3.8 |
| | comp=N,2.7nm,0.3s,baz=225,slow=5.9,SNR=80 | | | | | | |
| LPAZ | | | | LR | LR | 04 32 27.9 | |
| | comp=N,229nm,20.6s,baz=212,slow=44 | | | | | | |
| LCO | Las Campanas | 9.27 | 181 | ePn | Pn | 04 31 42.0 | +0.1 |
| SIV | San Ignacio | 9.66 | 69 | P | Pn | 04 31 46.9 | -0.2 |
| | comp=N,1.8nm,0.3s,baz=264,slow=12,SNR=16 | | | | | | |
| SIV | | | | S | Sn | 04 33 35.2 | +0.9 |
| | baz=260,slow=19,SNR=1.6 | | | | | | |
| CFAA | Coronel Fontan | 12.02 | 171 | P | Pn | 04 32 21.6 | +2.3 |
| | baz=21,slow=14,SNR=2.5 | | | | | | |
| SAML | Samuel | 12.80 | 34 | ePn | Pn | 04 32 30.5 | +0.5 |
| | comp=N,2.7nm,0.7s | | | | | | |
| CPUP | Villa Florida | 13.76 | 121 | P | Pn | 04 32 43.2 | +0.1 |
| | comp=N,0.1nm,0.3s,baz=313,slow=12,SNR=5.6 | | | | | | |
| TRQA | Tornquist | 19.72 | 160 | eP | P | 04 33 54.6 | -1.8 |
| | comp=N,3.1nm,0.6s | | | | | | |
| OTAV | Otavalo | 21.31 | 337 | eP | P | 04 34 16.0 | +1.7 |
| | comp=N,1.6nm,0.7s | | | | | | |
| PTGA | Pitinga | 21.47 | 30 | P | P | 04 34 13.9 | -1.6 |
| | comp=N,1.8nm,0.3s,baz=199,slow=18,SNR=4.7 | | | | | | |
| BDFB | Brasilia | 21.75 | 83 | P | P | 04 34 16.5 | -2.1 |
| | comp=N,1.8nm,0.5s,baz=267,slow=13,SNR=5.1 | | | | | | |
| BDFB | | | | LR | LR | 04 42 39.9 | |
| | comp=N,26nm,19.6s,baz=214,slow=36 | | | | | | |
| DBIC | Dimbokro | 69.63 | 75 | P | P | 04 40 34.0 | -1.9 |
| | comp=N,6.0nm,1.1s,baz=188,slow=6.9,SNR=3.6 | | | | | | |
| NVAR | Mina Array Bea | 73.20 | 323 | P | P | 04 40 59.2 | +2.1 |
| | comp=N,0.4nm,0.6s,baz=144,slow=7.8,SNR=4.1 | | | | | | |
| SCHQ | Schefferville | 74.30 | 2 | P | P | 04 41 03.7 | +0.7 |
| | comp=N,3.2nm,1.0s,baz=252,slow=20,SNR=2.2 | | | | | | |
| TORD | Torodi Ar. Bea | 78.13 | 71 | P | P | 04 41 25.1 | -0.6 |
| | comp=N,2.8nm,0.6s,baz=250,slow=5.5,SNR=43 | | | | | | |
| VNDA | Vanda | 78.36 | 190 | P | P | 04 41 24.4 | -1.4 |
| | comp=N,0.5nm,0.7s,baz=145,slow=13,SNR=4.4 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 126.20 | 279 | T | T | 07 07 42.5 | |
| | baz=101,slow=74,SNR=239 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 126.21 | 279 | T | T | 07 07 42.5 | |
| | baz=101,slow=74,SNR=340 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 126.22 | 279 | T | T | 07 07 39.2 | |
| | baz=101,slow=74,SNR=304 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 126.24 | 280 | T | T | 07 07 43.4 | |
| | baz=100,slow=74,SNR=99 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 126.25 | 280 | T | T | 07 07 43.5 | |
| | baz=100,slow=74,SNR=93 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 126.25 | 280 | T | T | 07 07 47.5 | |
| | baz=100,slow=74,SNR=76 | | | | | | |
| ASAR | Alice Springs | 130.78 | 210 | PKP | PKPdf | 04 48 37.8 | 0.0 |
| | comp=N,0.3nm,0.3s,baz=113,slow=2.6,SNR=3.2 | | | | | | |
| WRA | Warramunga Arr | 133.71 | 213 | PKP | PKPdf | 04 48 43.2 | -0.2 |
| | comp=N,0.5nm,0.7s,baz=150,slow=1.9,SNR=8.4 | | | | | | |
| ZALV | Zalesovo Beam | 140.91 | 23 | PKP | PKPdf | 04 48 53.2 | -2.3 |
| | comp=N,0.6nm,0.4s,baz=305,slow=5.1,SNR=2.7 | | | | | | |
| MKAR | Makanchi Array | 144.98 | 33 | PKP | PKPdf | 04 49 03.0 | 0.0 |
| | comp=N,2.9nm,0.7s,baz=328,slow=3.8,SNR=21 | | | | | | |
| SONM | Songino Array | 151.82 | 5 | PKPbc | PKPbc | 04 49 21.1 | +0.5 |
| | comp=N,0.3nm,0.4s,baz=338,slow=1.6,SNR=3.8 | | | | | | |
| SONM | | | | PKPab | PKPab | 04 49 30.7 | +1.0 |
| | comp=N,0.4nm,0.5s,baz=357,slow=2.4,SNR=3.0 | | | | | | |

**GUC 02 05:17:18.8**±0.5, **34°.56S**×**72°.03W**, **h15**km±5km, **ML3.5, 4C, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| NICH | Los Niches | 0.79 | 124 | ⇑iP | Pg | 05 17 31.9 | -2.3 |
| NICH | | | | iS | Sg | 05 17 41.7 | -3.0 |
| TALC | Talca | 0.89 | 159 | ⇑iP | Pb | 05 17 33.2 | -2.8 |
| TALC | | | | iS | Sb | 05 17 44.7 | -3.1 |
| TACH | Talagante | 1.28 | 45 | ⇑iP | Pn | 05 17 39.3 | -2.9 |
| RCDM | Rinconada Maip | 1.48 | 44 | ⇑iP | Pn | 05 17 42.5 | -2.3 |
| RCDM | | | | iS | Sn | 05 18 00.5 | -3.4 |
| ANTU | Antumapu | 1.52 | 50 | eP | Pn | 05 17 43.9 | -1.7 |
| ANTU | | | | iS | Sn | 05 18 02.2 | -3.0 |
| ANTU | | | | AML | AML | 05 18 06.6 | |
| | comp=N,1μm,0.3s | | | | | | |
| CLCH | Cerro Calan | 1.70 | 47 | eP | Pn | 05 17 46.6 | -1.4 |
| CLCH | | | | eS | Sn | 05 18 07.3 | -2.3 |
| CLCH | | | | AML | AML | 05 18 13.0 | |
| | comp=E,944nm,0.7s | | | | | | |
| PEL | Peldehue | 1.80 | 39 | eP | Pn | 05 17 48.3 | -1.2 |
| PEL | | | | eS | Sn | 05 18 10.0 | -2.1 |
| PEL | | | | AML | AML | 05 18 15.7 | |
| | comp=N,724nm,0.5s | | | | | | |

*IDC **02** 05:41:44.7±1.1, 6°.02N×127°.43E, h0km, mb3.9/8, mb1 4.0/8, mb1mx3.7/29, mbtmp3.9/8, MS2.6/2, Ms1 2.7/2, ms1mx2.4/35, Error ellipse: s-maj=111.9km s-min=16.5km az=73.0*
*ISCJB **02** 05:41:53.2±1.3, 5°.78N±0°.07×126°.8E±0°.1, h72km±12km, mb3.7/8, Error ellipse: s-maj=17.1km s-min=11.1km az=4.0*
*MAN **02** 05:41:59, 6°.24N×126°.82E, h30km, mb4.7, ML3.6, MS3.6*
**ISC 02 05:41:53.0**±2.0, **5°.76N**±0°.09×**126°.8E**±0°.1, **h58**km±17km, **n19**, σ**1s.87**/23, **mb3.8**/8, **3C-2D, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| MATI | Mati | 1.31 | 334 | eP | Pn | 05 42 15.8 | +0.7 |
| MATI | | | | eS | Sn | 05 42 27.8 | -3.8 |
| DMPH | Davao City--Mi | 1.86 | 315 | ⇑iP | Pn | 05 42 27.7 | +5.1 |
| DMPH | | | | iS | Sn | 05 43 01.8 | +17 |
| GSPH | General Santos | 1.90 | 280 | ⇑iP | Pn | 05 42 22.5 | -0.7 |
| GSPH | | | | iS | Sn | 05 42 45.5 | -0.6 |
| KCP | Kidapawan | 2.13 | 306 | ⇓eP | Pn | 05 42 24.8 | -1.5 |
| KCP | | | | eS | Sn | 05 42 55.8 | +4.2 |
| BIPH | Bislig | 2.45 | 349 | ⇑eP | Pn | 05 42 31.5 | +0.8 |
| BIPH | | | | eS | Sn | 05 42 59.5 | 0.0 |
| BUKP | Musuan | 2.74 | 320 | eP | Pn | 05 42 37.3 | +2.7 |
| BUKP | | | | eS | Sn | 05 43 05.1 | -1.5 |
| CTBH | Cotabato--PC H | 2.95 | 300 | ⇓iP | Pn | 05 42 43.5 | +6.0 |
| CGP | Cagayan de Oro | 3.41 | 322 | eP | Pn | 05 42 46.6 | +2.8 |
| FITZ | Fitzroy Crossi | 23.74 | 183 | P | P | 05 47 01.3 | +1.2 |
| | 1.6nm,0.8s,baz=313,slow=6.3,SNR=6.1 | | | | | | |
| WRA | Warramunga Arr | 26.59 | 164 | P | P | 05 47 26.0 | -0.1 |
| | 1.3nm,0.6s,baz=344,slow=10,SNR=16 | | | | | | |
| WRA | | | | PcP | PcP | 05 50 48.9 | -0.4 |
| | 0.3nm,0.6s,baz=330,slow=2.6,SNR=3.6 | | | | | | |
| CMAR | Chiang Mai Arr | 29.98 | 297 | LR | LR | 06 00 50.0 | |
| | comp=Z,12nm,19.8s,baz=105,slow=38 | | | | | | |
| ASAR | Alice Springs | 30.05 | 167 | P | P | 05 47 57.3 | +0.3 |
| | 0.3nm,0.3s,baz=339,slow=7.1,SNR=8.0 | | | | | | |
| ASAR | | | | PcP | PcP | 05 50 58.5 | +0.7 |
| | 1.0nm,0.6s,baz=347,slow=2.2,SNR=12 | | | | | | |
| KSRS | Korea Array | 31.56 | 2 | LR | LR | 06 06 03.4 | |
| | comp=Z,8.5nm,18.0s,baz=176,slow=47 | | | | | | |
| SONM | Songino Array | 45.42 | 341 | P | P | 05 50 03.9 | -2.3 |
| | 0.3nm,0.5s,baz=172,slow=7.3,SNR=2.0 | | | | | | |
| MKAR | Makanchi Array | 55.96 | 324 | P | P | 05 51 26.1 | +0.6 |
| | 0.7nm,0.4s,baz=115,slow=7.8,SNR=11 | | | | | | |
| MKAR | | | | PcP | PcP | 05 52 22.1 | -1.4 |
| | 0.8nm,0.7s,baz=111,slow=5.7,SNR=4.1 | | | | | | |
| ZALV | Zalesovo Beam | 58.84 | 332 | P | P | 05 51 47.2 | +1.6 |
| | 0.9nm,0.3s,baz=129,slow=8.0,SNR=2.9 | | | | | | |
| ARCES | ARCESS Array B | 88.59 | 340 | P | P | 05 54 38.9 | -0.5 |
| | 0.4nm,0.4s,baz=79,slow=6.3,SNR=6.7 | | | | | | |
| FINES | FINESS Array B | 90.10 | 332 | P | P | 05 54 46.9 | +0.3 |
| | 1.2nm,0.7s,baz=93,slow=3.8,SNR=5.2 | | | | | | |
| TORD | Torodi Ar. Bea | 122.36 | 289 | PKP | PKPdf | 06 00 42.5 | -0.3 |
| | 0.5nm,0.4s,baz=70,slow=1.7,SNR=7.7 | | | | | | |

*IDC **02** 05:45:23.4±1.7, 9°.42N×125°.48E, h0km, mb3.9/6, mb1 4.1/6, mb1mx3.7/29, mbtmp3.9/6, Error ellipse: s-maj=218.8km s-min=20.7km az=69.0*
*ISCJB **02** 05:45:32.1±0.7, 9°.52N±0°.05×126°.10E±0°.07, h73km±6km, mb3.8/6, Error ellipse: s-maj=11.9km s-min=6.4km az=157.1*
*MAN **02** 05:45:34, 9°.50N×125°.96E, h25km, mb4.7, ML3.6, MS3.6*
*AUST **02** 05:46:08.7, 7°.50N×126°.02E, h300km*
**ISC 02 05:45:32.4**±1.1, **9°.53N**±0°.05×**126°.10E**±0°.08, **h65**km±9km, **n31**, σ**1s.25**/30, **mb4.0**/6, **3C-3D, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| SCPH | Surigao | 0.65 | 293 | ⇓iP | Pn | 05 45 45.7 | -0.8 |
| SCPH | | | | iS | Sn | 05 45 55.5 | -1.2 |
| BUTP | Butuan | 0.73 | 220 | eP | Pn | 05 45 47.0 | -0.3 |
| BIPH | Bislig | 1.36 | 169 | ⇑iP | Pn | 05 45 56.0 | +0.6 |
| BIPH | | | | iS | Sn | 05 46 14.0 | +1.4 |
| MSLP | Maasin | 1.36 | 296 | eP | Pn | 05 45 56.2 | +0.8 |
| MSLP | | | | eS | Sn | 05 46 13.6 | +0.9 |
| CGP | Cagayan de Oro | 1.75 | 233 | eP | Pn | 05 46 00.7 | +0.1 |
| CGP | | | | eS | Sn | 05 46 22.2 | +0.2 |
| BUKP | Musuan | 1.93 | 212 | eP | Pn | 05 46 05.0 | +1.9 |
| PLP | Palo | 1.97 | 326 | ⇓eP | Pn | 05 46 05.3 | +1.7 |
| PLP | | | | eS | Sn | 05 46 29.0 | +1.8 |
| DCPH | Dipolog City | 2.87 | 251 | ⇑eP | Pn | 05 46 16.9 | +1.0 |
| DCPH | | | | eS | Sn | 05 46 49.6 | +0.4 |
| CTBH | Cotabato--PC H | 2.93 | 219 | ⇓iP | Pn | 05 46 17.6 | +0.8 |
| PAGZ | Pagadian | 3.16 | 238 | eP | Pn | 05 46 25.2 | +5.4 |
| RCP | Roxas | 3.87 | 302 | ⇑eP | Pn | 05 46 31.7 | +2.2 |
| MTN | Manton Dam | 22.78 | 167 | P | P | 05 50 30.2 | +0.4 |
| | baz=21,SNR=3.9 | | | | | | |
| KDU | Kakadu | 22.96 | 164 | P | P | 05 50 31.2 | -0.3 |
| | baz=21,SNR=3.8 | | | | | | |
| LEM | Lembang | 24.56 | 229 | P | P | 05 50 48.5 | +1.9 |
| | baz=23,SNR=6.0 | | | | | | |
| WRA | Warramunga Arr | 30.39 | 165 | P | P | 05 51 38.0 | -0.6 |
| | 0.7nm,0.6s,baz=342,slow=9.3,SNR=8.5 | | | | | | |
| QIS | Mount Isa | 32.72 | 156 | P | P | 05 51 59.4 | +0.4 |
| | baz=31,SNR=4.0 | | | | | | |
| ASAR | Alice Springs | 33.86 | 167 | P | P | 05 52 09.0 | 0.0 |
| | 0.9nm,0.3s,baz=349,slow=6.9,SNR=18 | | | | | | |
| WRKA | Warakurna | 34.42 | 176 | P | P | 05 52 15.3 | +1.5 |
| | baz=33,SNR=5.7 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 40.30 | 73 | T | T | 06 36 04.6 | |
| | baz=262,slow=75,SNR=13 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 40.31 | 73 | T | T | 06 36 06.3 | |
| | baz=262,slow=75,SNR=11 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 40.31 | 73 | T | T | 06 36 06.8 | |
| | baz=262,slow=75,SNR=15 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.65 | 71 | T | T | 06 36 34.8 | |
| | baz=262,slow=75,SNR=16 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 40.66 | 71 | T | T | 06 36 32.0 | |
| | baz=262,slow=75,SNR=16 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 40.67 | 71 | T | T | 06 36 32.0 | |
| | baz=262,slow=75,SNR=17 | | | | | | |
| BBOO | Buckleboo | 43.16 | 168 | P | P | 05 53 27.9 | +1.0 |
| | baz=41,SNR=24 | | | | | | |
| HTT | Hallett | 44.43 | 165 | P | P | 05 53 37.5 | +0.4 |
| | baz=43,SNR=5.2 | | | | | | |
| MKAR | Makanchi Array | 52.52 | 323 | P | P | 05 54 37.1 | -2.0 |
| | 0.5nm,0.5s,baz=123,slow=7.4,SNR=5.6 | | | | | | |
| ARCES | ARCESS Array B | 84.83 | 340 | P | P | 05 57 59.4 | -0.2 |
| | 1.1nm,0.8s,baz=72,slow=5.4,SNR=5.1 | | | | | | |
| FINES | FINESS Array B | 86.46 | 332 | P | P | 05 58 06.6 | -1.2 |
| | 0.9nm,0.7s,baz=106,slow=4.2,SNR=6.5 | | | | | | |
| VNDA | Vanda | 89.22 | 173 | P | P | 05 58 20.1 | -0.6 |
| | 0.6nm,0.6s,baz=330,slow=6.2,SNR=2.8 | | | | | | |
| TORD | Torodi Ar. Bea | 120.38 | 291 | PKP | PKPdf | 06 04 15.3 | -2.2 |
| | 0.1nm,0.5s,baz=78,slow=1.3,SNR=4.0 | | | | | | |

**MEX 02 05:51:29.7**±0.4, **18°.03N**×**101°.67W**, **h2**km±12km, **MD4.0, Guerrero**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| ZIIG | Zihuatanejo | 0.46 | 155 | iP | Pg | 05 51 38.3 | -0.2 |
| ZIIG | | | | iS | Sg | 05 51 44.9 | +0.3 |
| ARIG | Puente Sto Nin | 1.28 | 78 | eP | Pg | 05 51 50.8 | -3.6 |
| ARIG | | | | iS | Sg | 05 52 07.0 | -4.1 |
| CAIG | El Cayaco | 1.65 | 126 | iP | Pn | 05 51 55.9 | -3.8 |
| CAIG | | | | eS | Sn | 05 52 17.0 | -4.5 |
| MEIG | Mezcala | 1.95 | 93 | eP | Pn | 05 52 01.2 | -2.7 |
| MEIG | | | | iS | Sn | 05 52 25.1 | -4.0 |
| PLIG | Platanillo | 2.09 | 80 | eP | Pn | 05 52 03.6 | -2.2 |
| PLIG | | | | eS | Sn | 05 52 28.6 | -4.0 |
| TLIG | Tlapa | 2.99 | 98 | eP | Pn | 05 52 15.7 | -2.6 |

*IDC **02** 06:04:29.1±1.2, 14°.32S×167°.89E, h0km, mb4.0/8, mb1 4.3/9, mb1mx4.0/28, mbtmp4.0/9, ML3.9/1, MS2.9/2, Ms1 2.9/2, ms1mx2.6/24, Error ellipse: s-maj=37.2km s-min=22.0km az=132.0*
*ISCJB **02** 06:04:32.2±0.9, 14°.41S±0°.07×167°.8E±0°.2, h30km, mb3.9/8, MS2.8/1, Error ellipse: s-maj=24.4km s-min=10.1km az=6.0*
**ISC 02 06:04:33.7**±1.0, **14°.33S**±0°.10×**167°.9E**±0°.2, **h30**km, **n12**, σ**0s.76**/11, **mb4.0**/8, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 7.81 | 190 | Pn | Pn | 06 06 25.5 | 0.0 |
| | 1.8nm,0.3s,baz=270,slow=20,SNR=11 | | | | | | |
| DZM | | | | Sn | Sn | 06 07 53.2 | +0.1 |
| | baz=270,slow=20,SNR=2.4 | | | | | | |
| HNR | Honiara | 9.16 | 301 | LR | LR | 06 10 43.6 | |
| | comp=Z,48nm,18.0s,baz=149,slow=41 | | | | | | |
| PMG | Port Moresby | 20.85 | 281 | LR | LR | 06 16 48.8 | |
| | comp=Z,42nm,18.8s,baz=96,slow=36 | | | | | | |
| WRA | Warramunga Arr | 32.49 | 255 | P | P | 06 11 01.4 | -0.6 |
| | 1.2nm,0.6s,baz=85,slow=9.4,SNR=13 | | | | | | |
| ASAR | Alice Springs | 33.36 | 249 | P | P | 06 11 08.9 | -0.6 |
| | 2.4nm,0.6s,baz=75,slow=9.2,SNR=14 | | | | | | |
| FITZ | Fitzroy Crossi | 40.66 | 259 | P | P | 06 12 12.2 | +0.5 |
| | 2.8nm,0.7s,baz=79,slow=8.9,SNR=9.4 | | | | | | |
| CMAR | Chiang Mai Arr | 75.32 | 294 | P | P | 06 16 15.7 | +0.9 |
| | 0.7nm,0.4s,baz=113,slow=4.2,SNR=3.7 | | | | | | |
| SONM | Songino Array | 82.53 | 323 | P | P | 06 16 54.1 | +0.4 |
| | 0.2nm,0.4s,baz=139,slow=7.0,SNR=4.1 | | | | | | |
| ILAR | Eielson Array | 85.97 | 18 | P | P | 06 17 09.8 | -0.9 |
| | 0.4nm,0.8s,baz=242,slow=4.7,SNR=5.6 | | | | | | |
| NVAR | Mina Array Bea | 86.57 | 49 | P | P | 06 17 15.2 | +0.7 |
| | 0.1nm,0.3s,baz=215,slow=6.2,SNR=3.0 | | | | | | |
| MKAR | Makanchi Array | 97.32 | 316 | P | P | 06 18 03.9 | -0.2 |
| | 1.0nm,0.7s,baz=100,slow=6.3,SNR=5.3 | | | | | | |
| TORD | Torodi Ar. Bea | 166.52 | 267 | PKPab | PKPab | 06 25 38.2 | -1.1 |
| | 0.6nm,0.9s,baz=88,slow=2.5,SNR=3.4 | | | | | | |

*IDC **02** 06:29:17.2±3.9, 7°.02S×106°.44E, h0km, mb3.7/3, mb1 3.9/3, mb1mx3.6/32, mbtmp3.7/3, Error ellipse: s-maj=191.9km s-min=29.5km az=49.0*
*ISCJB **02** 06:29:50.3±0.9, 6°.2S±0°.1×107°.96E±0°.06, h250km, mb3.5/3, Error ellipse: s-maj=20.8km s-min=6.9km az=14.0*
*DJA **02** 06:29:50.6±0.7, 6°S±13°×10°8E±°, h261km±9km, M3.6/11, MLv3.6/11*
**ISC 02 06:29:50.6**±1.3, **6°.3S**±0°.2×**107°.95E**±0°.07, **h250**km, **n13**, σ**1s.44**/17, **mb3.5**/3, **Jawa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| LEM | Lembang | 0.64 | 211 | P | Pn | 06 30 25.4 | +1.2 |
| LEM | | | | S | S | 06 30 53.6 | +3.0 |
| CNJI | Cibinong | 1.31 | 218 | P | Pn | 06 30 28.0 | +0.4 |
| CNJI | | | | S | S | 06 30 57.1 | +0.4 |
| CMJI | Cimerak | 1.58 | 162 | P | Pn | 06 30 30.1 | +0.6 |
| CMJI | | | | S | S | 06 31 00.8 | +0.5 |
| CGJI | Cibinong | 2.27 | 261 | P | Pn | 06 30 36.1 | +0.5 |
| CGJI | | | | S | S | 06 31 08.8 | -2.2 |
| SMRI | Semarang | 2.59 | 107 | P | Pn | 06 30 39.4 | +0.6 |
| UGM | Wanagama | 3.03 | 123 | P | Pn | 06 30 44.8 | +1.3 |
| WOJI | Wonogiri, Jawa | 3.34 | 118 | P | Pn | 06 30 44.6 | -2.2 |
| KASI | Kota Agung | 3.52 | 282 | P | Pn | 06 30 49.9 | +1.1 |
| KASI | | | | S | S | 06 31 34.4 | -0.5 |
| PCJI | Pacitan | 3.73 | 121 | P | Pn | 06 30 51.6 | +0.4 |
| PWJI | Pagerwojo | 4.20 | 115 | P | Pn | 06 30 58.1 | +1.3 |
| WRA | Warramunga Arr | 29.01 | 120 | P | P | 06 35 26.7 | -1.0 |
| | 0.4nm,0.3s,baz=289,slow=11,SNR=14 | | | | | | |
| ASAR | Alice Springs | 30.36 | 127 | P | P | 06 35 38.7 | -0.9 |
| | 0.7nm,0.3s,baz=304,slow=8.3,SNR=23 | | | | | | |
| MKAR | Makanchi Array | 57.53 | 339 | P | P | 06 39 09.7 | -4.4 |
| | 0.3nm,0.4s,baz=144,slow=6.8,SNR=3.4 | | | | | | |

*BJI **02** 06:31:44.8, 19°.36S×169°.45E, h135km, mb4.8/17, mB4.9/15*
*IDC **02** 06:31:47.8±0.9, 18°.85S×168°.96E, h146km±7km, mb3.9/9, mb1 4.2/10, mb1mx3.9/26, mbtmp4.3/10, MS3.5/2, Ms1 3.5/2, ms1mx2.9/17, Error ellipse: s-maj=21.0km s-min=16.3km az=125.0*
*ISCJB **02** 06:31:50.2±1.1, 19°.10S±0°.06×168°.99E±0°.05, h165km±10km, mb4.6/44, Error ellipse: s-maj=10.8km s-min=7.1km az=155.6*
*NEIC **02** 06:31:51.5±1.0, 19°.02S×168°.95E, h170km±9km, mb4.7/42, Error ellipse: s-maj=8.8km s-min=5.8km az=154.0*
*AUST **02** 06:31:54.6, 19°.00S×168°.95E, h200km*
**ISC 02 06:31:48.4**±0.5, **19°.06S**±0°.05×**169°.09E**±0°.07, **h141**km±3km, **h140**km**:pP-P, n105**, σ**1s.47**/129, **mb4.7**/44, **2C-7D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 3.89 | 219 | ePn | Pn | 06 32 48.1 | +1.1 |
| | 155nm,0.3s | | | | | | |
| DZM | | | | eSn | Sn | 06 33 31.4 | -1.1 |
| | 595nm,0.3s | | | | | | |
| DZM | Mont Dzumac | 3.89 | 219 | P | Pn | 06 32 48.2 | +1.1 |
| | 36nm,0.3s,baz=0.0,slow=20,SNR=228 | | | | | | |
| DZM | | | | S | Sn | 06 33 32.3 | -0.2 |
| | 118nm,0.3s,baz=0.0,slow=15,SNR=21 | | | | | | |
| DZM | | | | LR | LR | 06 34 12.4 | |
| | comp=Z,564nm,20.9s,baz=5.5,slow=36 | | | | | | |
| MSVF | Nonsavu | 8.61 | 83 | ePn | Pn | 06 33 54.7 | +4.6 |
| LHI | Lord Howe Isla | 15.35 | 214 | ePn | P | 06 35 19.2 | +0.1 |
| | 173nm,1.3s | | | | | | |
| OUZ | Omahuta | 16.59 | 167 | eP | Pn | 06 35 34.6 | +1.9 |
| | 12nm,0.7s | | | | | | |
| EIDS | Eidsvold | 17.81 | 246 | P | Pn | 06 35 49.6 | +2.1 |
| | baz=18,SNR=5.9 | | | | | | |
| EIDS | Eidsvold | 17.81 | 246 | eP | Pn | 06 35 47.8 | +0.3 |
| | 51nm,1.3s | | | | | | |
| ARMA | Armidale | 19.45 | 231 | eP | Pn | 06 36 05.9 | -1.0 |
| | 58nm,1.4s | | | | | | |
| RMQ | Roma | 20.13 | 245 | P | Pn | 06 36 13.9 | -0.9 |
| | baz=20,SNR=7.2 | | | | | | |
| URZ | Urewera | 20.37 | 162 | P | P | 06 36 15.6 | +1.6 |
| | 11nm,0.7s,baz=0.8,slow=7.4,SNR=13 | | | | | | |
| URZ | Urewera | 20.37 | 162 | eP | P | 06 36 15.5 | +1.6 |
| | 273nm,2.2s | | | | | | |
| BKZ | Black Stump Fm | 21.04 | 164 | eP | P | 06 36 22.3 | +1.1 |
| | 114nm,2.0s | | | | | | |
| CTA | Charters Tower | 21.54 | 263 | P | P | 06 36 27.4 | +0.8 |
| | 2.9nm,0.3s,baz=87,slow=13,SNR=7.0 | | | | | | |
| CTAO | Charters Tower | 21.54 | 263 | eP | P | 06 36 27.4 | +0.8 |
| | 134nm,2.0s | | | | | | |
| THZ | Tophouse | 22.87 | 173 | eP | P | 06 36 40.2 | +0.4 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CNB | Canberra Magne | 23.80 | 223 | P | P | 06 36 49.6 | +1.2 |
| | baz=24,SNR=6.6 | | | | | | |
| YNG | Young | 23.85 | 226 | P | P | 06 36 50.4 | +1.6 |
| | baz=24,SNR=6.8 | | | | | | |
| CAN | Canberra | 24.04 | 224 | eP | P | 06 36 51.1 | +0.6 |
| | 9.1nm,0.8s | | | | | | |
| QLP | Quilpie | 24.07 | 247 | P | P | 06 36 50.7 | -0.2 |
| | baz=24,SNR=11 | | | | | | |
| CMSA | Cobar Meteorol | 24.47 | 235 | P | P | 06 36 55.6 | +1.2 |
| | baz=24,SNR=8.4 | | | | | | |
| BBOO | Buckleboo | 32.56 | 239 | eP | P | 06 38 06.3 | 0.0 |
| | 102nm,2.0s | | | | | | |
| WRA | Warramunga Arr | 32.73 | 263 | P | P | 06 38 05.8 | -2.2 |
| | 2.8nm,0.9s,baz=93,slow=7.9,SNR=11 | | | | | | |
| WRA | | | | pP | pP | 06 38 36.2 | -2.0 |
| | 1.6nm,0.9s,baz=93,slow=7.9,SNR=2.9 | | | | | | |
| AS01 | Alice Springs | 32.99 | 256 | eP | P | 06 38 08.8 | -1.5 |
| ASAR | Alice Springs | 33.03 | 256 | P | P | 06 38 09.2 | -1.5 |
| | 8.1nm,0.4s,baz=81,slow=8.5,SNR=124 | | | | | | |
| ASAR | | | | pP | pP | 06 38 39.1 | -1.7 |
| | 8.8nm,1.0s,baz=84,slow=8.7,SNR=4.6 | | | | | | |
| ASAR | | | | LR | LR | 06 50 23.7 | |
| | comp=Z,87nm,18.9s,baz=102,slow=34 | | | | | | |
| MCQ | Macquarie Isla | 36.22 | 190 | eP | P | 06 38 37.2 | -0.3 |
| | 452nm,1.4s | | | | | | |
| MTN | Manton Dam | 36.96 | 274 | P | P | 06 38 43.7 | -0.6 |
| | baz=37,SNR=3.2 | | | | | | |
| MTN | Manton Dam | 36.96 | 274 | eP | P | 06 38 43.2 | -1.1 |
| | 42nm,1.7s | | | | | | |
| WRKA | Warakurna | 38.17 | 254 | P | P | 06 38 53.6 | -0.8 |
| | baz=38,SNR=7.3 | | | | | | |
| PPT2 | Papeete2 | 39.21 | 95 | eLR | LR | 06 49 11.7 | |
| | 67nm,25.2s | | | | | | |
| FITZ | Fitzroy Crossi | 41.12 | 264 | P | P | 06 39 18.5 | -0.4 |
| | baz=41,SNR=6.3 | | | | | | |
| FITZ | Fitzroy Crossi | 41.12 | 264 | eP | P | 06 39 17.8 | -1.1 |
| | 16nm,1.2s | | | | | | |
| MBWA | Marble Bar | 46.25 | 259 | eP | P | 06 39 58.5 | -1.4 |
| | 18nm,1.2s | | | | | | |
| MEEK | Meekatharra | 46.88 | 251 | P | P | 06 40 04.4 | -0.4 |
| | baz=47,SNR=3.2 | | | | | | |
| VNDA | Vanda | 58.61 | 182 | P | P | 06 41 29.7 | -0.4 |
| | 1.7nm,1.0s,baz=4.7,slow=6.9,SNR=4.1 | | | | | | |
| VNDA | Vanda | 58.61 | 182 | eP | P | 06 41 30.8 | +0.7 |
| | 58nm,2.9s | | | | | | |
| SBA | Scott Base | 58.84 | 181 | eP | P | 06 41 33.5 | +1.8 |
| | 161nm,2.6s | | | | | | |
| QIZ | Qiongzhong | 69.36 | 300 | P | P | 06 42 42.7 | +1.4 |
| QIZ | | | | pP | pP | 06 43 14.6 | -0.9 |
| QIZ | | | | sP | sP | 06 43 28.9 | -1.8 |
| QIZ | | | | S | S | 06 51 39.8 | +2.6 |
| QIZ | | | | ScS | ScS | 06 52 31.4 | +1.7 |
| QIZ | | | | sS | sS | 06 52 35.5 | -0.8 |
| QIZ | | | | PMZ | | | |
| | 250nm,4.1s | | | | | | |
| NJ2 | Nanjing | 69.98 | 316 | eP | P | 06 42 46.1 | +1.3 |
| NJ2 | | | | PMZ | | | |
| | 30nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 71.00 | 180 | eP | P | 06 42 50.3 | -0.3 |
| | 15nm,1.1s | | | | | | |
| CN2 | Changchun | 74.23 | 329 | eP | P | 06 43 13.1 | +3.3 |
| CN2 | | | | esP | sP | 06 44 02.0 | +2.5 |
| CN2 | | | | eS | S | 06 52 34.2 | +2.2 |
| CN2 | | | | PMZ | | | |
| | 20nm,0.8s | | | | | | |
| CN2 | | | | PMZ | | | |
| | 300nm,5.0s | | | | | | |
| GYA | Guiyang | 75.60 | 305 | eP | P | 06 43 20.2 | +1.9 |
| GYA | | | | pP | pP | 06 43 54.8 | +1.8 |
| GYA | | | | sP | sP | 06 44 10.0 | +2.0 |
| GYA | | | | PP | PP | 06 46 12.3 | +2.4 |
| GYA | | | | S | S | 06 52 49.5 | +1.4 |
| GYA | | | | SKS | SKSac | 06 53 11.7 | -3.9 |
| GYA | | | | PMZ | | | |
| | 20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | 120nm,5.4s | | | | | | |
| KMI | Kunming | 78.06 | 302 | P | P | 06 43 36.6 | +4.4 |
| KMI | | | | pP | pP | 06 44 08.6 | +1.4 |
| KMI | | | | sP | sP | 06 44 20.6 | -1.5 |
| KMI | | | | PMZ | | | |
| | 10.0nm,0.6s | | | | | | |
| KMI | | | | PMZ | | | |
| | 57nm,3.5s | | | | | | |
| KMI | | | | LZ | | | |
| | 25nm,20.2s | | | | | | |
| MAW | Mawson | 78.55 | 202 | P | P | 06 43 34.1 | +0.2 |
| | 2.8nm,0.9s,baz=89,slow=6.3,SNR=6.7 | | | | | | |
| MAW | Mawson | 78.55 | 202 | eP | P | 06 43 33.9 | +0.1 |
| | 2.1nm,1.2s | | | | | | |
| HHC | Hu-ho-hao-te | 79.99 | 319 | eP | P | 06 43 44.0 | +1.8 |
| HHC | | | | pP | pP | 06 44 20.8 | +3.4 |
| HHC | | | | PP | PP | 06 46 48.6 | +2.3 |
| HHC | | | | S | S | 06 53 35.6 | +0.9 |
| HHC | | | | PMZ | | | |
| | 15nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | 110nm,6.9s | | | | | | |
| CD2 | Chengdu | 80.01 | 308 | eP | P | 06 43 43.0 | +0.5 |
| CD2 | | | | pP | pP | 06 44 17.3 | -0.3 |
| CD2 | | | | sP | sP | 06 44 32.1 | -0.4 |
| CD2 | | | | S | S | 06 53 36.5 | +1.3 |
| CD2 | | | | sS | sS | 06 54 36.3 | +0.4 |
| CD2 | | | | SS | SS | 06 58 50.6 | +1.8 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| LZH | Lanzhou | 82.50 | 312 | ⇑P | P | 06 43 54.8 | -0.9 |
| LZH | | | | pP | pP | 06 44 29.7 | -1.3 |
| LZH | | | | sP | sP | 06 44 49.6 | +3.7 |
| LZH | | | | PP | PP | 06 47 08.0 | +0.8 |
| LZH | | | | SKS | S | 06 53 56.5 | -4.5 |
| LZH | | | | eS | SKSac | 06 53 59.1 | -4.8 |
| LZH | | | | sS | sS | 06 54 58.2 | -3.8 |
| LZH | | | | SS | SS | 06 59 27.1 | +1.2 |
| LZH | | | | PMZ | | | |
| | 27nm,1.5s | | | | | | |
| LZH | | | | PMZ | | | |
| | 170nm,7.3s | | | | | | |
| SYO | Syowa Base | 85.07 | 196 | ⇓esP | sP | 06 45 10.6 | +12 |
| HOPS | Hopland | 85.72 | 46 | eP | P | 06 44 10.9 | -0.8 |
| | 110nm,1.8s | | | | | | |
| WDC | Whiskeytown Da | 86.83 | 45 | eP | P | 06 44 16.7 | -0.4 |
| | 7.2nm,1.2s | | | | | | |
| GTA | Gaotai | 86.90 | 313 | eP | P | 06 44 17.6 | 0.0 |
| GTA | | | | pP | pP | 06 44 56.2 | +2.9 |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.0s | | | | | | |
| SONM | Songino Array | 86.99 | 323 | P | P | 06 44 16.2 | -1.6 |
| | 1.8nm,1.0s,baz=141,slow=5.7,SNR=8.5 | | | | | | |
| SONM | | | | pP | pP | 06 44 53.1 | -0.4 |
| | 2.5nm,1.1s,baz=132,slow=4.2,SNR=5.8 | | | | | | |
| SONA1 | Songino Array | 86.99 | 323 | eP | P | 06 44 17.2 | -0.7 |
| CMB | Columbia Colle | 87.14 | 48 | eP | P | 06 44 18.6 | -0.2 |
| | 5.3nm,1.1s | | | | | | |
| YBH | Yreka Blue Hor | 87.27 | 44 | eP | P | 06 44 19.8 | +0.5 |
| | 4.7nm,1.0s | | | | | | |
| MTUM | Tungsten Hills | 88.14 | 49 | eP | P | 06 44 23.6 | -0.1 |
| DAC | Darwin (Calif) | 88.39 | 51 | eP | P | 06 44 25.1 | +0.3 |
| | 6.8nm,1.6s | | | | | | |
| GSC | Goldstone | 88.56 | 52 | eP | P | 06 44 26.2 | +0.6 |
| | 2.2nm,0.9s | | | | | | |
| NV01 | Mina Array Sit | 88.79 | 49 | eP | P | 06 44 26.5 | -0.2 |
| NVAR | Mina Array Bea | 88.79 | 49 | P | P | 06 44 25.0 | -1.7 |
| | 1.9nm,1.0s,baz=222,slow=7.3,SNR=10 | | | | | | |
| K05A | Summer Lake | 88.93 | 44 | eP | P | 06 44 28.4 | +1.1 |
| | 48nm,1.9s | | | | | | |
| MOD | Modoc | 88.94 | 45 | eP | P | 06 44 27.4 | +0.1 |
| | 20nm,1.5s | | | | | | |
| GLA | Glamis | 89.15 | 55 | eP | P | 06 44 29.2 | +0.9 |
| | 12nm,1.3s | | | | | | |
| SNAA | Sanae | 89.33 | 183 | P | P | 06 44 27.6 | -1.0 |
| SNAA | Sanae | 89.33 | 183 | eP | P | 06 44 27.5 | -1.1 |
| | 3.8nm,1.3s | | | | | | |
| F04A | Amboy | 89.45 | 40 | eP | P | 06 44 30.3 | +0.9 |
| | 22nm,1.3s | | | | | | |
| TPNV | Topopah Spring | 89.65 | 51 | eP | P | 06 44 31.2 | +0.5 |
| | 6.3nm,1.1s | | | | | | |
| LDFC | Landfair | 89.74 | 53 | eP | P | 06 44 31.8 | +0.7 |
| | 26nm,1.4s | | | | | | |
| ILAR | Eielson Array | 90.10 | 17 | P | P | 06 44 29.1 | -2.9 |
| | 0.4nm,0.5s,baz=227,slow=4.2,SNR=15 | | | | | | |
| ILAR | | | | pP | pP | 06 45 07.6 | -0.1 |
| | 0.6nm,1.0s,baz=247,slow=5.5,SNR=2.5 | | | | | | |
| VNA2 | Neumayer--Watz | 90.22 | 181 | P | P | 06 44 31.8 | -0.8 |
| | baz=152,slow=5.0 | | | | | | |
| SHPR | Sheep Range | 90.27 | 51 | eP | P | 06 44 34.0 | +0.4 |
| | 8.1nm,1.3s | | | | | | |
| WVOR | Wild Horse Val | 90.29 | 45 | eP | P | 06 44 34.0 | +0.4 |
| | 9.9nm,1.1s | | | | | | |
| BMN | Battle Mountai | 90.40 | 47 | eP | P | 06 44 34.5 | +0.4 |
| | 1.4nm,0.7s | | | | | | |
| I07A | Izee | 90.44 | 43 | eP | P | 06 44 34.6 | +0.4 |
| | 11nm,1.1s | | | | | | |
| VNA1 | Neumayer--Stat | 90.51 | 181 | P | P | 06 44 33.2 | -0.7 |
| R11A | Troy Canyon, C | 90.70 | 50 | eP | P | 06 44 35.1 | -0.5 |
| | 4.6nm,1.5s | | | | | | |
| J08A | Circle Bar Ran | 90.80 | 44 | eP | P | 06 44 36.6 | +0.8 |
| | 13nm,1.4s | | | | | | |
| LTY | Liberty | 91.14 | 40 | eP | P | 06 44 37.8 | +0.5 |
| | 14nm,1.4s | | | | | | |
| E07A | Sunnyside | 91.32 | 41 | eP | P | 06 44 38.4 | +0.3 |
| | 76nm,2.5s | | | | | | |
| G08A | Pilot Rock | 91.32 | 42 | eP | P | 06 44 39.0 | +0.7 |
| | 12nm,1.3s | | | | | | |
| HAWA | Hanford | 91.45 | 41 | eP | P | 06 44 38.9 | +0.3 |
| | 14nm,1.3s | | | | | | |
| CCUT | Cedar City | 92.00 | 51 | eP | P | 06 44 42.4 | +0.7 |
| | 1.4nm,0.9s | | | | | | |
| TUC | Tucson | 92.03 | 57 | eP | P | 06 44 42.5 | +0.7 |
| | 8.8nm,1.3s | | | | | | |
| WUAZ | Wupatki | 92.73 | 53 | eP | P | 06 44 45.5 | +0.4 |
| | 8.9nm,1.4s | | | | | | |
| MSU | Marysvale | 93.23 | 50 | eP | P | 06 44 48.2 | +0.8 |
| TXAR | Lajitas Array | 96.81 | 61 | P | P | 06 45 02.5 | -1.3 |
| | 1.0nm,1.1s,baz=216,slow=6.2,SNR=5.2 | | | | | | |
| WMQ | Urumqi | 96.98 | 314 | eP | P | 06 45 06.5 | +2.4 |
| WMQ | | | | PMZ | | | |
| | 14nm,1.0s | | | | | | |
| ARCES | ARCESS Array B | 124.86 | 345 | PKP | PKPdf | 06 50 29.5 | -1.5 |
| | 0.8nm,0.6s,baz=75,slow=1.4,SNR=6.4 | | | | | | |
| CONA | Conrad Observa | 143.91 | 329 | ⇑ePKPdf | PKPdf | 06 51 06.3 | -0.9 |
| | 5.2nm,1.0s | | | | | | |
| KHC | Kasperske Hory | 144.11 | 332 | ePKP | PKPbc | 06 51 05.6 | -0.2 |
| GEC2 | GERESS Array S | 144.26 | 332 | ePKPdf | PKPab | 06 51 05.4 | -0.6 |
| GERES | GERESS Array B | 144.26 | 332 | PKP | PKPab | 06 51 05.0 | -1.0 |
| | 1.6nm,0.8s,baz=58,slow=3.3,SNR=9.6 | | | | | | |
| ARSA | Arzberg | 144.55 | 328 | ⇓ePKPdf | PKPbc | 06 51 07.0 | -0.2 |
| | 8.7nm,1.2s | | | | | | |
| GRF | Grafenberg Arr | 144.67 | 335 | ePKPbc | PKPdf | 06 51 07.8 | -0.5 |
| | baz=38,slow=3.0 | | | | | | |
| MOA | Molln | 144.73 | 330 | ⇓iPKPdf | PKPbc | 06 51 07.7 | 0.0 |
| | 18nm,1.2s | | | | | | |
| RCBR | Riachuelo | 145.11 | 133 | ePKPdf | PKPbc | 06 51 08.7 | -1.3 |
| SOKA | Soboth | 145.18 | 328 | ⇓iPKPdf | PKPbc | 06 51 08.5 | -0.8 |
| | 16nm,1.3s | | | | | | |
| MOTA | Moosalm | 146.54 | 332 | ⇓ePKPab | PKPbc | 06 51 12.6 | -0.9 |
| | 2.0nm,0.5s | | | | | | |
| BFO | Black Forest | 146.89 | 336 | ePKPbc | PKPbc | 06 51 13.1 | -1.1 |
| FETA | Feichten | 146.95 | 332 | ⇓ePKPab | PKPbc | 06 51 14.0 | -0.7 |
| | 5.1nm,0.7s | | | | | | |
| DAVA | Damuels | 147.11 | 334 | ⇓ePKPab | PKPbc | 06 51 14.2 | -0.9 |
| | 13nm,1.2s | | | | | | |
| TUE | Stuetta | 147.98 | 333 | ePKPbc | PKPbc | 06 51 16.8 | -0.7 |
| BNI | Bardonecchia | 150.23 | 334 | ePKPbc | PKPbc | 06 51 22.3 | -0.8 |
| TOA0 | Torodi Ar. Sit | 166.54 | 246 | ePKPdf | PKPdf | 06 51 35.9 | -2.1 |
| TORD | Torodi Ar. Bea | 166.54 | 246 | PKP | PKPdf | 06 51 36.4 | -1.5 |
| | 1.4nm,1.1s,baz=34,slow=1.5,SNR=5.9 | | | | | | |

**CASC 02 06:42:12.4±5.5, 8°.73N×82°.88W, h30km±16km, MD3.6, 1C, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CTCR | Cotoan | 0.21 | 35 | ⇑iP | Pn | 06 42 19.9 | +0.2 |
| BUS | Buena Vista | 1.20 | 314 | eP | Pb | 06 42 40.4 | +5.3 |
| BUS | | | | eS | Sn | 06 42 47.2 | -2.1 |
| CGA2 | Cerro Gallo 2 | 2.02 | 310 | eS | Sn | 06 43 08.7 | -0.3 |
| AZU | Azuero | 2.74 | 110 | eP | Pn | 06 42 53.5 | -0.9 |
| AZU | | | | eS | Sn | 06 43 26.9 | +0.4 |

**CASC 02 07:05:24.4±2.9, 8°.59N×84°.44W, h14km±11km, MD3.9, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BUS | Buena Vista | 1.17 | 35 | eP | Pn | 07 05 45.7 | -1.3 |
| BUS | | | | eS | Sb | 07 06 02.0 | -0.5 |
| CAO | Cobano | 1.28 | 329 | eP | Pn | 07 05 46.2 | -1.8 |
| CAO | | | | eS | Sb | 07 06 02.6 | -2.3 |
| CGA2 | Cerro Gallo 2 | 1.42 | 359 | eP | Pn | 07 05 48.9 | -1.1 |
| JCR | Jicaral | 1.42 | 332 | eP | Pb | 07 05 50.5 | -0.2 |
| CTCR | Cotoan | 1.69 | 79 | eP | Pn | 07 05 54.1 | +0.4 |
| CTCR | | | | eS | Sn | 07 06 15.2 | -0.1 |
| JTS | JuntasAbangare | 1.77 | 343 | eS | Sn | 07 06 16.0 | -0.9 |
| CHPA | Chiripa | 1.90 | 346 | i P | Pn | 07 05 56.2 | -0.4 |
| BANL | Banca Lucia | 1.96 | 349 | i P | Pn | 07 05 58.1 | +0.8 |
| CUI | Cuipilapa | 2.18 | 341 | i P | Pn | 07 06 00.3 | 0.0 |
| CUI | | | | i S | Sn | 07 06 27.9 | +0.7 |
| PTEN | Parque Tenorio | 2.18 | 346 | i P | Pn | 07 06 01.3 | +0.9 |
| MESS | Mesas | 2.26 | 341 | i P | Pn | 07 06 02.0 | +0.5 |

*NNC 02 07:05:59.9±3.0, 53°.90N×86°.27E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=24.4km s-min=19.4km az=0.0*

**IDC 02 07:05:56.5±2.1, 54°.12N×86°.46E, h0km, mb1 3.7/3, mb1mx3.3/36, mbtmp3.7/3, ML3.6/2, 3C-6D, Error ellipse: s-maj=18.2km s-min=10.9km az=66.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 0.98 | 261 | i | | 07 13 40.0 | |
| | baz=80,slow=318,SNR=0.9 | | | | | | |
| ZALV | Zalesovo Beam | 0.98 | 260 | Pg | Pg | 07 06 13.6 | -1.8 |
| | 8.9nm,0.3s,baz=77,slow=16,SNR=56 | | | | | | |
| ZALV | | | | Lg | Lg | 07 06 28.6 | |
| | 13nm,0.3s,baz=77,slow=31,SNR=25 | | | | | | |
| KURK | Kurchatov | 5.88 | 238 | ⇓Pn | Pn | 07 07 25.3 | +0.5 |
| | 4.7nm,0.6s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 07 08 31.6 | -1.3 |
| | 5.5nm,0.7s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 07 09 00.9 | |
| | 18nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 5.99 | 237 | ⇓Pn | Pn | 07 07 26.6 | +0.4 |
| | 6.9nm,0.3s | | | | | | |
| KURBB | | | | ⇓Sn | Sn | 07 08 35.2 | -0.2 |
| | 9.4nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 07 09 02.5 | |
| | 17nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 5.99 | 237 | Pn | Pn | 07 07 27.2 | +0.9 |
| | 0.9nm,0.3s,baz=54,slow=13,SNR=37 | | | | | | |
| KURBB | | | | Sn | Sn | 07 08 37.0 | +1.5 |
| | 0.0nm,0.3s,baz=58,slow=29,SNR=3.1 | | | | | | |
| KURBB | | | | Lg | Lg | 07 09 06.3 | |
| | 0.2nm,0.3s,baz=54,slow=31,SNR=7.2 | | | | | | |
| MK31 | Makanchi Array | 7.80 | 202 | ⇓Pn | Pn | 07 07 51.7 | +0.5 |
| | 0.3nm,0.2s,baz=26,slow=14,SNR=82 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 07 09 18.7 | -1.6 |
| | 0.7nm,0.5s,baz=31,slow=29,SNR=7.5 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 07 10 01.1 | |
| | 4.1nm,0.8s,baz=30,slow=29,SNR=5.5 | | | | | | |
| MKAR | Makanchi Array | 7.80 | 202 | Pn | Pn | 07 07 52.0 | +0.7 |
| | 1.7nm,0.3s,baz=24,slow=14,SNR=69 | | | | | | |
| MKAR | | | | Sn | Sn | 07 09 19.0 | -1.3 |
| | 0.4nm,0.3s,baz=30,slow=29,SNR=9.9 | | | | | | |
| MKAR | | | | Lg | Lg | 07 10 03.1 | |
| | 0.1nm,0.3s,baz=15,slow=25,SNR=6.2 | | | | | | |
| BVAR | Borovoye Array | 9.63 | 270 | Pn | Pn | 07 08 15.6 | -0.6 |
| | baz=78,slow=14,SNR=2.3 | | | | | | |

*NEIC 02 07:08:18.0, 43°.59S×172°.27E, h12km, ML3.8(WEL), After WEL.*
*NEIC Felt in Canterbury.*

**WEL 02 07:08:17.6±0.1, 43°.63S×172°.24E, h5km, ML3.8/20, 4C-4D, Error ellipse: s-maj=0.9km s-min=0.8km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.28 | 80 | ⇓PG | Pg | 07 08 23.5 | +0.3 |
| CRLZ | | | | SG | Sg | 07 08 27.7 | +0.8 |
| CRLZ | | | | AML | AML | 07 08 28.0 | |
| CRLZ | Canterbury Las | 0.28 | 80 | P* | Pg | 07 08 23.1 | -0.1 |
| CRLZ | | | | ⇓P* | Pb | 07 08 23.5 | -1.7 |
| CRLZ | | | | S* | Sg | 07 08 27.7 | +0.8 |
| MQZ | McQueen's Vall | 0.31 | 105 | ⇓PG | Pg | 07 08 24.0 | +0.3 |
| MQZ | | | | SG | Sg | 07 08 28.6 | +0.7 |
| MQZ | | | | AML | AML | 07 08 28.8 | |
| MQZ | McQueen's Vall | 0.31 | 105 | ⇓P* | Pg | 07 08 24.0 | +0.3 |
| OXZ | Oxford | 0.33 | 334 | ⇑PG | Pg | 07 08 24.0 | -0.1 |
| OXZ | | | | SG | Sg | 07 08 28.7 | +0.1 |
| OXZ | Oxford | 0.33 | 334 | ⇑P* | Pg | 07 08 24.0 | -0.1 |
| OXZ | | | | S* | Sg | 07 08 28.7 | +0.1 |
| LTZ | Lake Taylor | 0.84 | 2 | ⇑P* | Pg | 07 08 33.8 | -0.2 |
| LTZ | | | | AML | AML | 07 08 46.0 | |
| LTZ | | | | AML | AML | 07 08 46.5 | |
| LTZ | Lake Taylor | 0.84 | 2 | P* | Pg | 07 08 33.8 | -0.2 |
| RPZ | Rata Peaks | 0.86 | 264 | ⇑P* | Pg | 07 08 34.7 | +0.4 |
| RPZ | | | | AML | AML | 07 08 48.5 | |
| RPZ | | | | AML | AML | 07 08 53.0 | |
| RPZ | Rata Peaks | 0.86 | 264 | P* | Pg | 07 08 34.7 | +0.4 |
| WVZ | Waitaha Valley | 1.22 | 296 | P* | Pg | 07 08 40.3 | -0.8 |
| WVZ | | | | AML | AML | 07 09 01.2 | |
| WVZ | | | | AML | AML | 07 09 04.0 | |
| WVZ | Waitaha Valley | 1.22 | 296 | P* | Pg | 07 08 40.9 | -0.2 |
| KHZ | Kahutara | 1.54 | 39 | PN | Pn | 07 08 43.3 | -2.4 |
| KHZ | | | | AML | AML | 07 09 06.5 | |
| KHZ | | | | AML | AML | 07 09 10.3 | |
| KHZ | Kahutara | 1.54 | 39 | Pn | Pn | 07 08 43.4 | -2.4 |
| LBZ | Lake Benmore | 1.66 | 242 | PN | Pn | 07 08 46.8 | -0.7 |
| LBZ | | | | AML | AML | 07 09 13.6 | |
| LBZ | | | | AML | AML | 07 09 13.7 | |
| LBZ | | | | AML | AML | 07 09 14.8 | |
| LBZ | | | | AML | AML | 07 09 14.8 | |
| LBZ | Lake Benmore | 1.66 | 242 | Pn | Pn | 07 08 46.8 | -0.7 |
| ODZ | Otahua Downs | 1.82 | 218 | PN | Pn | 07 08 48.6 | -1.0 |
| ODZ | | | | AML | AML | 07 09 17.2 | |
| ODZ | | | | AML | AML | 07 09 17.2 | |
| ODZ | | | | AML | AML | 07 09 21.2 | |
| ODZ | | | | AML | AML | 07 09 21.2 | |
| ODZ | Otahua Downs | 1.82 | 218 | Pn | Pn | 07 08 48.6 | -1.0 |
| FOZ | Fox Glacier | 1.85 | 271 | PN | Pn | 07 08 49.3 | -0.7 |
| FOZ | | | | AML | AML | 07 09 20.6 | |
| FOZ | | | | AML | AML | 07 09 20.7 | |
| FOZ | | | | AML | AML | 07 09 26.9 | |
| FOZ | | | | AML | AML | 07 09 27.3 | |
| FOZ | Fox Glacier | 1.85 | 271 | Pn | Pn | 07 08 49.3 | -0.7 |
| DSZ | Denniston Nort | 1.91 | 350 | PN | Pn | 07 08 49.6 | -1.3 |
| DSZ | | | | AML | AML | 07 09 20.4 | |
| DSZ | | | | AML | AML | 07 09 21.1 | |
| DSZ | | | | AML | AML | 07 09 21.1 | |
| DSZ | | | | AML | AML | 07 09 22.9 | |
| DSZ | Denniston Nort | 1.91 | 350 | Pn | Pn | 07 08 49.6 | -1.3 |
| THZ | Tophouse | 1.93 | 15 | PN | Pn | 07 08 49.0 | -2.2 |
| THZ | | | | AML | AML | 07 09 20.5 | |
| THZ | | | | AML | AML | 07 09 28.3 | |
| THZ | Tophouse | 1.93 | 15 | Pn | Pn | 07 08 49.0 | -2.2 |
| BSWZ | Blackbirch Sta | 2.26 | 33 | PN | Pn | 07 08 53.7 | -2.0 |
| BSWZ | | | | AML | AML | 07 09 39.8 | |
| BSWZ | | | | AML | AML | 07 09 41.3 | |
| BSWZ | Blackbirch Sta | 2.26 | 33 | Pn | Pn | 07 08 53.8 | -1.9 |
| TUWZ | Tuamarina | 2.53 | 30 | PN | Pn | 07 08 57.4 | -1.9 |
| TUWZ | Tuamarina | 2.53 | 30 | Pn | Pn | 07 08 57.4 | -1.9 |
| NNZ | Nelson | 2.55 | 20 | PN | Pn | 07 08 58.1 | -1.6 |
| NNZ | Nelson | 2.55 | 20 | Pn | Pn | 07 08 58.1 | -1.5 |
| JCZ | Jackson Bay | 2.56 | 259 | PN | Pn | 07 08 59.5 | -0.4 |
| JCZ | | | | AML | AML | 07 09 43.1 | |
| JCZ | | | | AML | AML | 07 09 44.1 | |
| JCZ | Jackson Bay | 2.56 | 259 | Pn | Pn | 07 08 59.5 | -0.4 |
| WKZ | Wanaka | 2.61 | 241 | AML | AML | 07 09 46.6 | |
| WKZ | | | | AML | AML | 07 09 46.6 | |
| WKZ | | | | AML | AML | 07 09 50.5 | |
| WKZ | | | | AML | AML | 07 09 50.5 | |
| EAZ | Earnscleugh | 2.64 | 232 | PN | Pn | 07 08 59.8 | -1.1 |
| EAZ | | | | AML | AML | 07 09 43.8 | |
| EAZ | | | | AML | AML | 07 09 43.8 | |
| EAZ | | | | AML | AML | 07 09 44.0 | |
| EAZ | | | | AML | AML | 07 09 48.8 | |
| EAZ | Earnscleugh | 2.64 | 232 | Pn | Pn | 07 08 59.8 | -1.1 |
| QRZ | Quartz Range | 2.81 | 5 | PN | Pn | 07 09 01.5 | -1.7 |
| QRZ | | | | AML | AML | 07 09 13.0 | |
| QRZ | | | | AML | AML | 07 09 13.0 | |
| QRZ | | | | AML | AML | 07 09 50.6 | |
| QRZ | | | | AML | AML | 07 09 50.6 | |
| QRZ | Quartz Range | 2.81 | 5 | Pn | Pn | 07 09 01.5 | -1.7 |
| TCW | Tory Channel | 2.85 | 33 | PN | Pn | 07 09 01.4 | -2.3 |
| TCW | Tory Channel | 2.85 | 33 | Pn | Pn | 07 09 01.4 | -2.3 |
| BHW | Baring Head | 2.95 | 42 | PN | Pn | 07 09 02.3 | -2.9 |
| BHW | Baring Head | 2.95 | 42 | Pn | Pn | 07 09 02.3 | -2.9 |
| TUZ | Tuapeka | 2.98 | 218 | PN | Pn | 07 09 04.4 | -1.1 |
| TUZ | | | | AML | AML | 07 09 55.6 | |
| TUZ | | | | AML | AML | 07 10 06.7 | |
| TUZ | Tuapeka | 2.98 | 218 | Pn | Pn | 07 09 04.4 | -1.1 |
| WEL | Wellington | 3.00 | 40 | PN | Pn | 07 09 03.3 | -2.4 |
| WEL | Wellington | 3.00 | 40 | Pn | Pn | 07 09 03.4 | -2.4 |
| PLWZ | Palliser | 3.03 | 48 | PN | Pn | 07 09 03.1 | -3.2 |
| PLWZ | Palliser | 3.03 | 48 | Pn | Pn | 07 09 03.1 | -3.2 |
| DUWZ | D'Urville Isla | 3.09 | 25 | PN | Pn | 07 09 06.9 | -0.2 |
| DUWZ | D'Urville Isla | 3.09 | 25 | Pn | Pn | 07 09 06.9 | -0.2 |
| MSZ | Milford Sound | 3.27 | 250 | PN | Pn | 07 09 08.9 | -0.6 |
| MSZ | | | | AML | AML | 07 10 05.5 | |
| MSZ | | | | AML | AML | 07 10 11.0 | |
| MSZ | Milford Sound | 3.27 | 250 | Pn | Pn | 07 09 08.9 | -0.6 |
| CAW | Cannon Point | 3.28 | 41 | PN | Pn | 07 09 06.5 | -3.1 |
| CAW | | | | AML | AML | 07 09 44.0 | |
| CAW | | | | AML | AML | 07 09 44.6 | |
| CAW | Cannon Point | 3.28 | 41 | Pn | Pn | 07 09 06.5 | -3.1 |
| KIW | Kapiti Island | 3.40 | 37 | PN | Pn | 07 09 09.1 | -2.3 |
| KIW | Kapiti Island | 3.40 | 37 | Pn | Pn | 07 09 09.1 | -2.3 |
| MTW | Mount Morrison | 3.45 | 46 | PN | Pn | 07 09 08.6 | -3.5 |
| MTW | Mount Morrison | 3.45 | 46 | Pn | Pn | 07 09 08.6 | -3.5 |
| OGWZ | Otaki Gorge | 3.55 | 39 | PN | Pn | 07 09 10.6 | -2.8 |
| OGWZ | Otaki Gorge | 3.55 | 39 | Pn | Pn | 07 09 10.6 | -2.8 |
| SYZ | Scrubby Hill | 3.65 | 216 | AML | AML | 07 10 23.2 | |
| SYZ | | | | AML | AML | 07 10 23.5 | |
| KHEZ | Kahui Hut | 4.53 | 18 | PN | Pn | 07 09 27.2 | +0.2 |
| KHEZ | Kahui Hut | 4.53 | 18 | Pn | Pn | 07 09 27.2 | +0.2 |
| NEZ | North Egmont | 4.57 | 18 | PN | Pn | 07 09 27.5 | 0.0 |
| NEZ | North Egmont | 4.57 | 18 | Pn | Pn | 07 09 27.5 | 0.0 |
| PKE | Pukeiti | 4.62 | 17 | PN | Pn | 07 09 27.9 | -0.2 |
| PKE | Pukeiti | 4.62 | 17 | Pn | Pn | 07 09 27.9 | -0.2 |
| WNVZ | Wahianoa | 4.98 | 32 | PN | Pn | 07 09 31.5 | -1.8 |
| WNVZ | Wahianoa | 4.98 | 32 | Pn | Pn | 07 09 31.5 | -1.8 |
| HIZ | Hauiti | 5.48 | 22 | PN | Pn | 07 09 38.7 | -1.2 |
| HIZ | Hauiti | 5.48 | 22 | Pn | Pn | 07 09 38.7 | -1.2 |
| BKZ | Black Stump Fm | 5.49 | 37 | PN | Pn | 07 09 36.3 | -3.8 |
| BKZ | Black Stump Fm | 5.49 | 37 | Pn | Pn | 07 09 36.3 | -3.8 |

**MEX 02 07:10:39.5±0.4, 15°.70N×95°.32W, h16km±9km, MD3.5, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HUIG | Huatulco | 0.76 | 275 | eP | Pb | 07 10 51.6 | -2.8 |
| HUIG | | | | eS | Sg | 07 11 00.9 | -3.6 |
| PCIG | | 2.02 | 90 | eP | Pn | 07 11 09.6 | -3.4 |
| PCIG | | | | eS | Sn | 07 11 33.7 | -4.3 |
| PNIG | Pinotepa | 2.79 | 285 | eP | Pn | 07 11 20.9 | -2.5 |
| PNIG | | | | eS | Sn | 07 11 53.2 | -3.6 |

*NIED 02 07:17:00, 43°.40N×146°.50E, h44km, Mw4.4 Best double couple: $M_0$3.89000×$10^{15}$ NP1:$\phi_s$251.00000°, δ49.00000°, λ-18.00000°. NP2:$\phi_s$353.00000°, δ77.00000°, λ-138.00000°.*
*MOS 02 07:17:28.9±1.0, 43°.50N×146°.66E, h48km, mb4.6/34, Error ellipse: s-maj=7.9km s-min=6.6km az=89.5*
*MOS Felt (IV) at Malokuril'skoye,(III) at Yuzhno-Kuril'sk.*
*IDC 02 07:17:29.9±0.8, 43°.54N×146°.62E, h39km±6km, mb3.9/15, mb1 4.0/21, mb1mx3.9/35, mbtmp4.1/21, ML3.7/6, MS3.4/15, Ms1 3.4/15, ms1mx3.3/33, Error ellipse: s-maj=17.5km s-min=12.0km az=135.0*
*ISCJB 02 07:17:30.0±0.5, 43°.59N±0°.04×146°.59E±0°.05, h54km±3km, mb4.4/58, MS3.5/12, Error ellipse: s-maj=7.3km s-min=4.0km az=141.6*
*SKHL 02 07:17:30.7±0.2, 43°.55N×146°.66E, h60km±3km, mb4.8/11*
*SKHL Felt (III) at Malokurilskoe, Yushno-Kurilsk.*
*JMA 02 07:17:31.8±0.2, 43°.44N×146°.47E, h44km±2km, M4.6*
*JMA Felt I J1.*
*BJI 02 07:17:36.8, 43°.65N×145°.94E, h90km, mb4.7/32, mB4.9/22, Ms4.0/15, Ms7 3.7/16*
*NEIC 02 07:17:43.3±0.9, 43°.70N×145°.18E, h92km±8km, mb4.4/32, Error ellipse: s-maj=11.3km s-min=6.5km az=162.0*

*NEIC Felt [IV] at Shakotan and [III] at Yuzhno-Kuril'sk, Kuril Islands. Recorded [1 JMA] in eastern Hokkaido.*

**ISC 02 07:17:30.6±0.5, 43°.56N±0°.05×146°.64E±0°.04, h45km±3km, h45km:pP-P, n212, σ1s.25/184, mb4.3/43, MS3.5/12, 13C-11D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SHO | Shikotan | 0.34 | 24 | eP | Pn | 07 17 39.6 | -0.2 |
| SHO | | | | AMB | AMB | 07 17 40.0 | |
| | 16µm,0.4s | | | | | | |
| SHO | | | | eS | Sn | 07 17 46.2 | 0.0 |
| SHO | | | | A | A | 07 17 46.6 | |
| | 54µm,0.4s | | | | | | |
| NEM2 | Nemuro 2 | 0.68 | 254 | ⇑P | Pn | 07 17 43.2 | -0.7 |
| NEM2 | | | | eS | Sn | 07 17 51.3 | -2.2 |
| YUK | Yuzh-Kuril'sk | 0.74 | 311 | c iPN | Pn | 07 17 44.9 | +0.2 |
| YUK | | | | iS | Sn | 07 17 55.4 | +0.5 |
| YUK | | | | pmax | pmax | | |
| | comp=N,2µm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,2µm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,6µm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,18µm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,26µm,0.5s | | | | | | |
| YUK | Yuzh-Kuril'sk | 0.74 | 311 | iP | Pn | 07 17 44.9 | +0.2 |
| YUK | | | | AMB | AMB | 07 17 46.6 | |
| | comp=E,2µm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 07 17 46.6 | |
| | comp=E,2µm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 07 17 46.6 | |
| | comp=E,6µm,0.3s | | | | | | |
| YUK | | | | eS | Sn | 07 17 55.4 | +0.5 |
| YUK | | | | A | A | 07 17 56.5 | |
| | comp=E,18µm,0.5s | | | | | | |
| YUK | | | | A | A | 07 17 56.5 | |
| | comp=E,26µm,0.5s | | | | | | |
| JRA | Rausu | 1.17 | 290 | ⇑P | Pn | 07 17 50.9 | +0.4 |
| JRA | | | | eS | Sn | 07 18 05.0 | -0.2 |
| JNK | Nakash | 1.40 | 272 | ⇑P | Pn | 07 17 53.6 | -0.1 |
| JNK | | | | eS | Sn | 07 18 09.6 | -1.3 |
| JAK | Akkeshi | 1.53 | 249 | ⇑P | Pn | 07 17 54.5 | -0.9 |
| KUR | Kuril'sk | 1.89 | 27 | d iPN | Pn | 07 18 00.8 | +0.4 |
| KUR | | | | iS | Sn | 07 18 22.9 | -0.1 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,452nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,165nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,128nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,2µm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,937nm,0.4s | | | | | | |
| KUR | Kuril'sk | 1.89 | 27 | eP | Pn | 07 18 00.8 | +0.4 |
| KUR | | | | AMB | AMB | 07 18 03.8 | |
| | comp=E,57nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 07 18 03.8 | |
| | comp=E,165nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 07 18 03.8 | |
| | comp=E,401nm,0.4s | | | | | | |
| KUR | | | | eS | Sn | 07 18 23.5 | +0.5 |
| KUR | | | | A | A | 07 18 25.5 | |
| | comp=E,1µm,0.3s | | | | | | |
| KUR | | | | A | A | 07 18 25.5 | |
| | comp=E,1µm,0.3s | | | | | | |
| JTKR | Abashiri--Toko | 2.02 | 283 | ⇑P | Pn | 07 18 03.6 | +1.4 |
| JAR | Ashorobuto | 2.11 | 264 | ⇑P | Pn | 07 18 03.8 | +0.4 |
| JAR | | | | eS | Sn | 07 18 27.6 | -0.8 |
| JOB | Onbets | 2.15 | 253 | P | Pn | 07 18 03.9 | -0.1 |
| JOB | | | | eS | Sn | 07 18 27.7 | -1.8 |
| JMP | Maruseppu | 2.42 | 282 | ⇑P | Pn | 07 18 09.1 | +1.4 |
| JKA | Kamikawa-asahi | 2.98 | 282 | eP | Pn | 07 18 16.4 | +1.1 |
| ASAJ | Asahikawa | 2.98 | 282 | Pn | Pn | 07 18 16.4 | +1.0 |
| | comp=E,11nm,0.3s,baz=92,slow=12,SNR=56 | | | | | | |
| ASAJ | | | | LR | LR | 07 19 40.5 | |
| | comp=E,773nm,20.1s,baz=146,slow=44 | | | | | | |
| ASAJ | Asahikawa | 2.98 | 282 | PN | Pn | 07 18 16.4 | +1.0 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,773nm,20.1s | | | | | | |
| ASAJ | Asahikawa | 2.98 | 282 | eP | Pn | 07 18 17.1 | +1.7 |
| ASAJ | Asahikawa | 2.98 | 282 | ePn | Pn | 07 18 17.1 | +1.7 |
| ERM | Erimo | 2.99 | 240 | d iPN | Pn | 07 18 17.3 | +1.8 |
| ERM | Erimo | 2.99 | 240 | eP | Pn | 07 18 17.8 | +2.3 |
| ERM | Erimo | 2.99 | 240 | ePn | Pn | 07 18 17.8 | +2.3 |
| ERM | | | | eSn | Sn | 07 19 02.2 | +12 |
| YSS | Yuzh-Sakhalins | 4.37 | 322 | ⇑ iPN | Pn | 07 18 36.1 | +1.7 |
| YSS | | | | iS | Sn | 07 19 24.0 | +0.1 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,40nm,0.6s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,160nm,1.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,500nm,16.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 4.37 | 322 | eP | Pn | 07 18 35.0 | +0.6 |
| YSS | | | | AMB | AMB | 07 18 36.9 | |
| | comp=Z,40nm,0.6s | | | | | | |
| YSS | | | | eS | Sn | 07 19 23.0 | -0.9 |
| YSS | | | | A | A | 07 19 27.0 | |
| | comp=Z,160nm,0.5s | | | | | | |
| YSS | Yuzh-Sakhalins | 4.37 | 322 | ePn | Pn | 07 18 36.4 | +2.0 |
| UGL | Uglegorsk | 6.37 | 332 | ePN | Pn | 07 19 00.0 | -1.8 |
| UGL | | | | eSS | Sn | 07 20 25.0 | +12 |
| TYV | Tymovskoe | 7.79 | 341 | eP | Pn | 07 19 21.8 | +0.4 |
| TYV | | | | AMB | AMB | 07 19 37.0 | |
| | comp=Z,48nm,1.0s | | | | | | |
| TYV | | | | eS | Sn | 07 20 46.0 | -2.2 |
| TYV | | | | A | A | 07 20 53.5 | |
| | comp=Z,22nm,0.8s | | | | | | |
| HABR | Khabarovsk | 9.44 | 305 | d ePN | Pn | 07 19 42.1 | -1.8 |
| HABR | | | | eSS | Sn | 07 21 40.7 | +12 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,31nm,2.3s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,112nm,16.0s | | | | | | |
| MAJO | Matsushiro | 9.53 | 226 | d iPN | Pn | 07 19 44.4 | -0.8 |
| MAJO | Matsushiro | 9.53 | 226 | eP | Pn | 07 19 44.4 | -0.8 |
| MAJO | Matsushiro | 9.53 | 226 | ePn | Pn | 07 19 44.4 | -0.8 |
| MAT | Matsushiro | 9.53 | 226 | P | Pn | 07 19 44.0 | -1.2 |
| MAT | | | | eS | Sn | 07 21 34.9 | +4.0 |
| MJAR | Matsushiro Arr | 9.53 | 226 | Pn | Pn | 07 19 43.7 | -1.5 |
| | comp=Z,1.7nm,0.3s,baz=31,slow=12,SNR=17 | | | | | | |
| MJAR | Matsushiro Arr | 9.53 | 226 | PN | Pn | 07 19 43.7 | -1.5 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| SKR | Severo-Kuril's | 9.61 | 39 | ⇓ ePN | Pn | 07 19 46.4 | +0.2 |
| SKR | Severo-Kuril's | 9.61 | 39 | eP | Pn | 07 19 49.0 | +2.8 |
| SKR | | | | AMB | AMB | 07 19 50.6 | |
| | comp=Z,80nm,0.5s | | | | | | |
| GRNR | Gornyy | 10.02 | 320 | eP | Pn | 07 19 53.0 | +1.2 |
| GRNR | | | | AMB | AMB | 07 19 59.0 | |
| | comp=Z,25nm,1.0s | | | | | | |
| USRK | Ussuriysk Ar. | 10.60 | 279 | Pn | Pn | 07 20 02.2 | +2.4 |
| | comp=Z,0.3nm,0.3s,baz=80,slow=16,SNR=7.6 | | | | | | |
| USRK | | | | LR | LR | 07 24 14.5 | |
| | comp=Z,209nm,18.7s,baz=100,slow=38 | | | | | | |
| VLA | Vladivostok | 10.76 | 273 | ⇓ ePN | Pn | 07 20 03.3 | +1.3 |
| VLA | Vladivostok | 10.76 | 273 | eP | Pn | 07 20 03.3 | +1.3 |
| MSHR | Mys Shultsa | 11.37 | 270 | ⇑ ePN | Pn | 07 20 13.3 | +3.0 |
| KLR | Kul'dur | 11.74 | 304 | ePN | Pn | 07 20 16.7 | +1.4 |
| KLR | | | | pmax | pmax | | |
| | comp=E,57nm,1.6s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,50nm,1.6s | | | | | | |
| KLR | Kul'dur | 11.74 | 304 | erx | rx | 07 20 16.7 | |
| PETK | Petropavlovsk- | 12.05 | 34 | Pn | Pn | 07 20 20.1 | +0.6 |
| | comp=Z,0.7nm,0.3s,baz=195,slow=13,SNR=14 | | | | | | |
| PETK | Petropavlovsk- | 12.05 | 34 | PN | Pn | 07 20 20.1 | +0.6 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| MDJ | Mudanjiang | 12.31 | 281 | P | Pn | 07 20 22.4 | -0.7 |
| MDJ | | | | PMZ | | | |
| | comp=Z,12nm,1.1s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,71nm,5.2s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,50nm,4.8s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,110nm,8.7s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,170nm,6.5s | | | | | | |
| EKMR | Ekimchan | 13.15 | 321 | eP | Pn | 07 20 34.0 | -0.6 |
| EKMR | | | | AMB | AMB | 07 20 55.9 | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| CN2 | Changchun | 15.34 | 278 | eP | Pn | 07 21 00.6 | -3.3 |
| CN2 | | | | esP | sP | 07 21 26.6 | +2.3 |
| CN2 | | | | eS | Sn | 07 23 36.0 | -17 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,300nm,3.0s | | | | | | |
| KSRS | Korea Array | 15.48 | 253 | Pn | Pn | 07 21 05.4 | -0.3 |
| | comp=Z,0.1nm,0.3s,baz=62,slow=13,SNR=4.5 | | | | | | |
| KSRS | | | | LR | LR | 07 27 00.6 | |
| | comp=Z,44nm,21.4s,baz=75,slow=37 | | | | | | |
| KSAR | Wonju Array Be | 15.51 | 253 | P | Pn | 07 21 05.4 | -0.7 |
| KSAR | Wonju Array Be | 15.51 | 253 | Pn | Pn | 07 21 05.4 | -0.7 |
| BMKR | Bomnak | 16.08 | 320 | eP | Pn | 07 21 13.0 | -0.3 |
| BMKR | | | | AMB | AMB | 07 21 19.0 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| JNU | Nakatsue | 16.14 | 235 | Pn | Pn | 07 21 14.0 | -0.3 |
| | comp=Z,0.2nm,0.3s,baz=326,slow=10.0,SNR=4.8 | | | | | | |
| JNU | | | | LR | LR | 07 28 04.9 | |
| | comp=Z,160nm,19.8s,baz=96,slow=39 | | | | | | |
| TJN | Taejon | 16.41 | 251 | ⇓ eP | Pn | 07 21 18.0 | +0.4 |
| KROS | Kirovskiy | 16.82 | 317 | eP | Pn | 07 21 21.0 | -1.7 |
| KROS | | | | AMB | AMB | 07 21 26.8 | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| KROS | | | | AMB | AMB | 07 21 26.8 | |
| | comp=Z,11nm,1.0s | | | | | | |
| SEY | Seymchan | 19.70 | 8 | P | P | 07 21 55.7 | -0.1 |
| | comp=Z,0.2nm,0.3s,baz=72,slow=20,SNR=3.4 | | | | | | |
| SEY | Seymchan | 19.70 | 8 | ⇑ eP | Pn | 07 21 58.9 | +1.4 |
| YAK | Yakutsk | 21.03 | 337 | LR | LR | 07 30 16.9 | |
| | comp=Z,68nm,18.7s,baz=109,slow=36 | | | | | | |
| YAK | Yakutsk | 21.03 | 337 | eP | P | 07 22 10.4 | +0.2 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,6.0nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,4.0nm,1.2s | | | | | | |
| YAK | Yakutsk | 21.03 | 337 | eP | P | 07 22 10.7 | +0.5 |
| JOW | Kunigami | 22.36 | 228 | P | P | 07 22 25.8 | +1.0 |
| | comp=N,2.0nm,0.9s,baz=40,slow=13,SNR=5.4 | | | | | | |
| BJI | Beijing | 22.92 | 272 | P | P | 07 22 30.3 | -0.2 |
| BJI | | | | S | S | 07 26 26.3 | -11 |
| BJI | | | | PMZ | | | |
| | comp=N,10.0nm,1.2s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=N,64nm,3.8s | | | | | | |
| BJI | | | | LN | | | |
| | comp=N,120nm,16.6s | | | | | | |
| BJI | | | | LE | | | |
| | comp=N,150nm,16.9s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=N,85nm,19.9s | | | | | | |
| TIA | Tai'an | 23.72 | 262 | eP | P | 07 22 39.3 | +0.9 |
| TIA | | | | PMZ | | | |
| | comp=N,30nm,1.3s | | | | | | |
| NJ2 | Nanjing | 24.66 | 252 | eP | P | 07 22 45.8 | -1.2 |
| NJ2 | | | | PMZ | | | |
| | comp=N,30nm,0.6s | | | | | | |
| HHC | Hu-ho-hao-te | 26.01 | 276 | eP | P | 07 22 58.3 | -1.0 |
| HHC | | | | pP | pP | 07 23 24.3 | +13 |
| HHC | | | | S | S | 07 27 11.2 | -16 |
| HHC | | | | PMZ | | | |
| | comp=N,14nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=N,120nm,6.5s | | | | | | |
| HHC | | | | LN | | | |
| | comp=N,180nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=N,150nm,16.2s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=N,72nm,16.0s | | | | | | |
| BILL | Bilibino | 26.65 | 16 | ⇑ eP | P | 07 23 05.6 | +0.9 |
| BILL | | | | e | | 07 23 53.0 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| BILL | Bilibino | 26.65 | 16 | eP | P | 07 23 05.6 | +0.9 |
| ULN | Ulaanbaatar | 27.76 | 293 | d eP | P | 07 23 15.0 | -0.1 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| ULN | Ulaanbaatar | 27.76 | 293 | eP | P | 07 23 15.0 | -0.1 |
| ULN | Ulaanbaatar | 27.76 | 293 | eP | P | 07 23 14.8 | -0.3 |
| | comp=Z,10nm,1.0s | | | | | | |
| SONA1 | Songino Array | 28.20 | 293 | eP | P | 07 23 19.1 | +0.2 |
| SONM | Songino Array | 28.20 | 293 | P | P | 07 23 19.2 | +0.2 |
| | comp=Z,7.4nm,0.9s,baz=89,slow=8.3,SNR=25 | | | | | | |
| SONM | | | | LR | LR | 07 35 40.8 | |
| | comp=Z,136nm,19.3s,baz=76,slow=39 | | | | | | |
| SONM | Songino Array | 28.20 | 293 | P | P | 07 23 19.2 | +0.2 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,136nm,19.3s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 29.20 | 138 | T | T | 07 54 08.9 | |
| | baz=329,slow=76,SNR=6442 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.21 | 138 | T | T | 07 54 11.0 | |
| | baz=329,slow=76,SNR=4795 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.22 | 138 | T | T | 07 54 08.6 | |
| | baz=329,slow=76,SNR=8707 | | | | | | |
| TLY | Talaya | 29.73 | 301 | LR | LR | 07 35 07.6 | |
| | comp=Z,76nm,19.0s,baz=65,slow=36 | | | | | | |
| TLY | Talaya | 29.73 | 301 | eP | pP | 07 23 46.7 | +2.3 |
| TLY | | | | e | | 07 24 46.3 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| H11S1 | WAKE ISLAND Hy | 30.16 | 140 | T | T | 07 55 18.8 | |
| | baz=330,slow=76,SNR=7582 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.16 | 140 | T | T | 07 55 19.6 | |
| | baz=330,slow=76,SNR=7976 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.17 | 140 | T | T | 07 55 20.6 | |
| | baz=330,slow=76,SNR=5689 | | | | | | |
| LZH | Lanzhou | 33.41 | 272 | eP | P | 07 24 01.5 | -3.5 |
| LZH | | | | pP | pP | 07 24 22.1 | +5.0 |
| LZH | | | | sP | sP | 07 24 33.7 | +11 |
| LZH | | | | PP | PnPn | 07 25 12.8 | -4.0 |
| LZH | | | | PMZ | | | |
| | comp=Z,20nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,72nm,4.5s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,310nm,13.2s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,320nm,13.3s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,410nm,17.0s | | | | | | |
| GTA | Gaotai | 34.96 | 280 | eP | P | 07 24 20.2 | +1.8 |
| GTA | | | | pP | pP | 07 24 42.0 | +11 |
| GTA | | | | sP | sP | 07 24 52.9 | +17 |
| GTA | | | | PMZ | | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| CD2 | Chengdu | 36.02 | 264 | eP | P | 07 24 26.0 | -1.4 |
| CD2 | | | | pP | pP | 07 24 46.9 | +7.3 |
| CD2 | | | | sP | sP | 07 24 57.7 | +13 |
| CD2 | | | | S | S | 07 29 51.4 | -12 |
| CD2 | | | | sS | sS | 07 30 28.1 | +4.5 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| QIZ | Qiongzhong | 39.35 | 243 | P | P | 07 24 55.8 | +0.2 |
| QIZ | | | | S | S | 07 30 44.9 | -8.9 |
| CAST | Castle Rocks | 39.61 | 38 | eP | pP | 07 25 10.5 | +0.9 |
| | comp=Z,78nm,2.3s | | | | | | |
| KDAK | Kodiak Island | 39.65 | 47 | P | P | 07 24 57.4 | -0.2 |
| | comp=Z,8.5nm,0.7s,baz=282,slow=9.3,SNR=3.0 | | | | | | |
| KDAK | Kodiak Island | 39.65 | 47 | P | P | 07 24 57.4 | -0.2 |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| KMI | Kunming | 40.11 | 257 | P | P | 07 25 01.2 | -1.0 |
| KMI | | | | pP | pP | 07 25 21.6 | +7.1 |
| KMI | | | | PMZ | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,100nm,4.0s | | | | | | |
| SUA | Susitna One | 40.28 | 41 | eP | pP | 07 25 15.0 | -0.4 |
| | comp=Z,149nm,1.9s | | | | | | |
| COLD | Coldfoot | 40.51 | 32 | eP | pP | 07 25 15.0 | -2.1 |
| | comp=Z,9.6nm,1.2s | | | | | | |
| ZALV | Zalesovo Beam | 40.82 | 307 | PcP | PcP | 07 27 07.8 | +0.2 |
| | comp=Z,2.6nm,0.6s,baz=106,slow=2.5,SNR=6.7 | | | | | | |
| ZALV | | | | LR | LR | 07 43 25.0 | |
| | comp=Z,29nm,18.1s,baz=76,slow=38 | | | | | | |
| SML | Sawmill | 41.41 | 41 | eP | pP | 07 25 23.8 | -0.7 |
| SML | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| SML | Sawmill | 41.41 | 41 | eP | pP | 07 25 23.8 | -0.7 |
| | comp=Z,9.6nm,1.0s | | | | | | |
| COLA | College | 41.45 | 36 | ⇓ eP | P | 07 25 13.8 | +1.4 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| COLA | College | 41.45 | 36 | eP | P | 07 25 13.8 | +1.4 |
| COLA | College | 41.45 | 36 | eP | pP | 07 25 23.6 | -1.1 |
| | comp=Z,8.0nm,0.9s | | | | | | |
| WMQ | Urumqi | 41.82 | 292 | P | P | 07 25 17.0 | +1.1 |
| WMQ | | | | pP | pP | 07 25 40.0 | +12 |
| WMQ | | | | sP | sP | 07 25 52.0 | +18 |
| WMQ | | | | S | S | 07 31 20.0 | -10 |
| WMQ | | | | LN | | | |
| | comp=Z,71nm,16.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,140nm,20.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,89nm,18.0s | | | | | | |
| ILAR | Eielson Array | 41.86 | 36 | P | P | 07 25 16.0 | +0.2 |
| | comp=Z,0.6nm,0.5s,baz=276,slow=8.0,SNR=12 | | | | | | |
| ILAR | | | | pP | pP | 07 25 27.1 | -1.0 |
| | comp=Z,4.1nm,0.9s,baz=274,slow=8.1,SNR=17 | | | | | | |
| ILAR | | | | LR | LR | 07 42 43.0 | |
| | comp=Z,31nm,18.8s,baz=158,slow=36 | | | | | | |
| ILAR | Eielson Array | 41.86 | 36 | P | P | 07 25 16.0 | +0.2 |
| ILAR | | | | *PP | pP | 07 25 27.2 | -1.0 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| ILAR | | | | MLR | MLR | | |
| | comp=Z,31nm,18.8s | | | | | | |
| IL1 | Eielson Array | 41.86 | 36 | eP | pP | 07 25 26.2 | -2.0 |
| SCM | Sheep Creek Mo | 41.88 | 41 | eP | pP | 07 25 28.9 | +0.4 |
| SCM | | | | pmax | pmax | | |
| | comp=Z,221nm,2.0s | | | | | | |
| SCM | Sheep Creek Mo | 41.88 | 41 | eP | pP | 07 25 28.9 | +0.4 |
| | comp=Z,221nm,2.0s | | | | | | |
| MK31 | Makanchi Array | 44.35 | 298 | iP | P | 07 25 35.7 | -0.5 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 44.35 | 298 | P | P | 07 25 36.0 | -0.2 |
| | comp=Z,3.6nm,0.8s,baz=82,slow=9.4,SNR=20 | | | | | | |
| MKAR | | | | LR | LR | 07 45 19.9 | |
| | comp=Z,51nm,19.0s,baz=25,slow=38 | | | | | | |
| MKAR | Makanchi Array | 44.35 | 298 | P | P | 07 25 36.0 | -0.2 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| MKAR | | | | MLR | MLR | | |
| | comp=Z,51nm,19.0s | | | | | | |
| MKAR | Makanchi Array | 44.35 | 298 | eP | P | 07 25 36.0 | -0.2 |
| MKAR | Makanchi Array | 44.35 | 298 | eP | P | 07 25 36.1 | -0.1 |
| MK01 | Makanchi Array | 44.35 | 298 | eP | P | 07 25 35.7 | -0.5 |
| MAKZ | Makanchi | 44.54 | 298 | eP | P | 07 25 37.5 | -0.2 |
| KURK | Kurchatov | 45.33 | 304 | eP | P | 07 25 44.6 | +0.7 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| KURK | Kurchatov | 45.33 | 304 | eP | P | 07 25 44.6 | +0.7 |
| KURK | Kurchatov | 45.33 | 304 | eP | P | 07 25 44.6 | +0.7 |
| | comp=Z,7.5nm,0.5s | | | | | | |
| INK | Inuvik | 46.76 | 30 | P | P | 07 25 55.0 | +0.2 |
| | comp=Z,1.3nm,0.4s,baz=295,slow=5.0,SNR=7.6 | | | | | | |
| INK | Inuvik | 46.76 | 30 | P | P | 07 25 55.0 | +0.2 |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| INK | Inuvik | 46.76 | 30 | eP | P | 07 25 55.0 | +0.2 |
| TKM2 | Tokmak 2 | 50.26 | 295 | eP | P | 07 26 22.9 | +0.5 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| TKM2 | Tokmak 2 | 50.26 | 295 | eP | P | 07 26 22.9 | +0.5 |
| | comp=Z,9.4nm,1.2s | | | | | | |
| DLBC | Dease Lake | 51.07 | 42 | pP | pP | 07 26 39.7 | -1.1 |
| | comp=Z,2.4nm,0.6s,baz=275,slow=5.3,SNR=2.9 | | | | | | |
| AAK | Ala-Archa | 51.11 | 296 | ⇓ eP | P | 07 26 29.2 | +0.4 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| AAK | Ala-Archa | 51.11 | 296 | eP | P | 07 26 29.2 | +0.4 |
| AAK | Ala-Archa | 51.11 | 296 | eP | P | 07 26 28.9 | +0.2 |
| | comp=Z,2.9nm,0.9s | | | | | | |
| EKS2 | Erkin-Say | 51.56 | 296 | eP | P | 07 26 32.9 | +0.8 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| EKS2 | Erkin-Say | 51.56 | 296 | eP | P | 07 26 32.9 | +0.8 |
| | comp=Z,6.3nm,1.1s | | | | | | |
| KSH | Kashi | 51.59 | 291 | eP | P | 07 26 37.2 | +4.8 |
| KSH | | | | epP | pP | 07 27 00.5 | +15 |
| KSH | | | | ePcP | PcP | 07 27 52.6 | +6.9 |
| KSH | | | | eScP | ScP | 07 31 38.6 | +0.1 |
| KSH | | | | S | S | 07 33 45.0 | -5.0 |
| KSH | | | | PMZ | | | |
| | comp=Z,59nm,3.5s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,140nm,7.5s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,120nm,6.3s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,160nm,6.8s | | | | | | |
| MNAS | Manas | 52.48 | 296 | P | P | 07 26 39.3 | +0.3 |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| ARU | Arti | 54.23 | 317 | P | P | 07 26 51.6 | +0.2 |
| ARU | | | | | | 07 28 53.5 | |
| ARU | | | | S | S | 07 34 28.3 | +3.1 |
| ARU | | | | SS | SS | 07 38 06.9 | 0.0 |
| ARU | Arti | 54.23 | 317 | eP | P | 07 26 51.3 | -0.1 |
| YKA | Yellowknife Ar | 56.17 | 34 | P | P | 07 27 05.6 | +0.3 |
| | comp=Z,0.9nm,0.7s,baz=302,slow=7.2,SNR=2.6 | | | | | | |
| YKA | | | | pP | pP | 07 27 15.8 | -2.2 |
| | comp=Z,3.6nm,0.9s,baz=303,slow=7.1,SNR=4.6 | | | | | | |
| YKA | Yellowknife Ar | 56.17 | 34 | P | P | 07 27 05.6 | +0.3 |
| YKA | | | | *PP | pP | 07 27 15.8 | -2.2 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| YKA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| AB31 | Akbulak array | 56.90 | 309 | eP | P | 07 27 10.1 | -0.6 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ABKAR | Akbulak array | 56.90 | 309 | eP | P | 07 27 10.4 | -0.2 |
| | comp=Z,1.6nm,0.5s | | | | | | |
| KBL | Kabul | 58.91 | 290 | eP | P | 07 27 24.3 | -1.0 |
| KBL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| KBL | Kabul | 58.91 | 290 | eP | P | 07 27 24.2 | -1.0 |
| | comp=Z,5.2nm,0.8s | | | | | | |
| LTY | Liberty | 61.35 | 51 | eP | pP | 07 27 53.6 | -0.9 |
| | comp=Z,95nm,3.0s | | | | | | |
| EDM | Edmonton | 61.79 | 42 | eP | pP | 07 27 56.5 | -0.9 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| EDM | Edmonton | 61.79 | 42 | eP | pP | 07 27 56.5 | -0.9 |
| | comp=Z,7.7nm,0.8s | | | | | | |
| C09A | Chrisman Ranch | 62.38 | 49 | eP | pP | 07 28 00.6 | -0.8 |
| | comp=Z,52nm,2.3s | | | | | | |
| WRA | Warramunga Arr | 64.19 | 193 | P | P | 07 27 59.7 | -0.9 |
| | comp=Z,2.6nm,0.9s,baz=15,slow=7.2,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 64.19 | 193 | iP | P | 07 28 00.1 | -0.5 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| GEYT | Alibeck | 64.21 | 299 | LR | LR | 07 58 07.6 | |
| | comp=Z,46nm,18.5s,baz=110,slow=38 | | | | | | |
| SWMT | Swartz Lake | 64.87 | 48 | eP | pP | 07 28 17.2 | -0.8 |
| FINES | FINESS Array B | 64.88 | 333 | P | P | 07 28 03.6 | -1.1 |
| | comp=Z,1.2nm,0.5s,baz=32,slow=5.6,SNR=9.9 | | | | | | |
| FINES | FINESS Array B | 64.88 | 333 | iP | P | 07 28 05.0 | +0.4 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| FINES | FINESS Array B | 64.88 | 333 | eP | P | 07 28 05.0 | +0.4 |
| SLMT | Seeley Lake | 65.31 | 48 | eP | pP | 07 28 20.4 | -0.5 |
| CHMT | Chamberlain Mo | 65.64 | 48 | eP | pP | 07 28 21.9 | -1.3 |
| FFC | Flin Flon | 66.07 | 36 | eP | pP | 07 28 23.6 | -1.9 |
| FFC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| FFC | Flin Flon | 66.07 | 36 | eP | pP | 07 28 23.6 | -1.9 |
| | comp=Z,8.5nm,1.0s | | | | | | |
| HRY | Holter Researc | 66.53 | 47 | eP | pP | 07 28 27.9 | -0.9 |
| LRM | Limekiln Ridge | 66.76 | 48 | eP | pP | 07 28 29.7 | -0.7 |
| CMB | Columbia Colle | 66.95 | 59 | eP | pP | 07 28 31.2 | -0.3 |
| CMB | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| CMB | Columbia Colle | 66.95 | 59 | eP | pP | 07 28 31.2 | -0.3 |
| | comp=Z,3.1nm,1.0s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| DLMT | Dillon | 66.97 | 49 | eP | pP | 07 28 30.6 | -1.0 |
| | comp=Z,2.2nm,0.8s | | | | | | |
| ASAR | Alice Springs | 67.91 | 193 | P | P | 07 28 24.4 | 0.0 |
| | comp=Z,2.8nm,0.7s,baz=7.6,slow=5.5,SNR=28 | | | | | | |
| ASAR | Alice Springs | 67.91 | 193 | P | P | 07 28 24.4 | 0.0 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| NV01 | Mina Array Sit | 67.99 | 58 | eP | pP | 07 28 37.0 | -1.3 |
| NVAR | Mina Array Bea | 67.99 | 58 | P | P | 07 28 26.4 | +1.1 |
| | comp=Z,0.6nm,0.7s,baz=289,slow=9.1,SNR=5.1 | | | | | | |
| NVAR | | | | pP | pP | 07 28 37.0 | -1.3 |
| | comp=Z,1.3nm,0.5s,baz=294,slow=7.5,SNR=8.4 | | | | | | |
| GCMT | Greycliff | 68.27 | 47 | eP | pP | 07 28 39.5 | -0.3 |
| H17A | Grant Village | 68.69 | 49 | eP | pP | 07 28 43.4 | +0.7 |
| | comp=Z,4.2nm,0.9s | | | | | | |
| IMW | Indian Meadow | 68.81 | 49 | eP | pP | 07 28 43.3 | -0.2 |
| | comp=Z,2.5nm,0.6s | | | | | | |
| FXWY | Fox Creek | 68.93 | 49 | eP | pP | 07 28 44.0 | -0.2 |
| | comp=Z,1.9nm,0.7s | | | | | | |
| MOOW | Moose Ponds | 69.02 | 49 | eP | pP | 07 28 44.0 | -0.7 |
| | comp=Z,4.5nm,1.1s | | | | | | |
| TPAW | Teton Pass | 69.07 | 50 | eP | pP | 07 28 45.0 | 0.0 |
| | comp=Z,8.2nm,1.1s | | | | | | |
| HVU | Hansel Valley | 69.15 | 52 | eP | pP | 07 28 44.3 | -1.2 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| HVU | Hansel Valley | 69.15 | 52 | eP | pP | 07 28 44.3 | -1.2 |
| | comp=Z,2.0nm,0.9s | | | | | | |
| LOHW | Long Hollow | 69.18 | 49 | eP | pP | 07 28 45.3 | -0.4 |
| | comp=Z,29nm,2.3s | | | | | | |
| KIV | Kislovodsk | 69.62 | 312 | eP | P | 07 28 36.6 | +1.5 |
| KIV | | | | e | | 07 28 50.2 | |
| KIV | | | | e | | 07 31 04.9 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,57nm,16.0s | | | | | | |
| KIV | Kislovodsk | 69.62 | 312 | eP | P | 07 28 36.6 | +1.5 |
| NB2 | NORSAR Subarra | 69.65 | 339 | P | P | 07 28 34.4 | -0.5 |
| | comp=Z,1.8nm,0.6s,baz=32,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 69.65 | 339 | P | P | 07 28 34.7 | -0.2 |
| | comp=Z,1.5nm,0.8s,baz=15,slow=5.0,SNR=4.5 | | | | | | |
| NOA | | | | LR | LR | 08 02 46.5 | |
| | comp=Z,28nm,18.6s,baz=355,slow=39 | | | | | | |
| NOA | NORSAR Array B | 69.65 | 339 | P | P | 07 28 34.7 | -0.2 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,28nm,18.6s | | | | | | |
| KBZ | Khabaz | 69.65 | 311 | P | P | 07 28 35.4 | +0.3 |
| | comp=Z,2.4nm,0.7s,baz=330,slow=4.7,SNR=6.0 | | | | | | |
| KBZ | | | | LR | LR | 08 02 13.8 | |
| | comp=Z,36nm,19.3s,baz=60,slow=38 | | | | | | |
| KBZ | Khabaz | 69.65 | 311 | P | P | 07 28 35.4 | +0.3 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,36nm,19.3s | | | | | | |
| R11A | Troy Canyon, C | 69.70 | 56 | eP | pP | 07 28 48.5 | -0.5 |
| | comp=Z,2.2nm,1.0s | | | | | | |
| ZEI | Tsey | 69.71 | 310 | eP | P | 07 28 35.2 | -0.6 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,35nm,1.2s | | | | | | |
| ZEI | Tsey | 69.71 | 310 | eP | P | 07 28 35.2 | -0.6 |
| DAC | Darwin (Calif) | 69.79 | 59 | eP | pP | 07 28 48.8 | -0.8 |
| DAC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| DAC | Darwin (Calif) | 69.79 | 59 | eP | pP | 07 28 48.8 | -0.8 |
| | comp=Z,2.8nm,0.9s | | | | | | |
| HWUT | Hardware Ranch | 69.95 | 51 | eP | pP | 07 28 49.9 | -0.5 |
| | comp=Z,2.6nm,0.9s | | | | | | |
| NEY | Neytrino | 70.06 | 311 | ⇑eP | P | 07 28 39.4 | +1.5 |
| NEY | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.2s | | | | | | |
| DUG | Dugway | 70.15 | 53 | eP | pP | 07 28 50.7 | -1.0 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| DUG | Dugway | 70.15 | 53 | eP | pP | 07 28 50.7 | -1.0 |
| | comp=Z,2.9nm,0.9s | | | | | | |
| TPNV | Topopah Spring | 70.19 | 58 | eP | pP | 07 28 51.4 | -0.6 |
| TPNV | | | | pmax | pmax | | |
| | comp=Z,12nm,1.4s | | | | | | |
| TPNV | Topopah Spring | 70.19 | 58 | eP | pP | 07 28 51.4 | -0.6 |
| | comp=Z,12nm,1.4s | | | | | | |
| BW06 | Boulder Array | 70.31 | 49 | eP | pP | 07 28 51.2 | -1.5 |
| | comp=Z,2.7nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 71.52 | 323 | P | P | 07 28 46.0 | -0.4 |
| | comp=Z,0.6nm,0.4s,baz=40,slow=6.1,SNR=6.8 | | | | | | |
| AKASG | Malin Array Be | 71.52 | 323 | P | P | 07 28 46.0 | -0.4 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| KIEV | Kiev | 71.53 | 323 | ⇓eP | P | 07 28 46.3 | -0.1 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| KIEV | Kiev | 71.53 | 323 | eP | P | 07 28 46.3 | -0.1 |
| MSU | Marysvale | 71.63 | 54 | eP | pP | 07 29 01.0 | +0.2 |
| MSU | Marysvale | 71.63 | 54 | eP | pP | 07 29 01.0 | +0.2 |
| SRU | San Rafael | 72.20 | 53 | eP | pP | 07 29 03.5 | -0.6 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| SRU | San Rafael | 72.20 | 53 | eP | pP | 07 29 03.5 | -0.6 |
| | comp=Z,8.7nm,1.1s | | | | | | |
| PV10 | Paradox Valley | 73.55 | 53 | eP | pP | 07 29 11.8 | -0.5 |
| | comp=Z,134nm,0.8s | | | | | | |
| PV01 | Paradox Valley | 73.98 | 52 | eP | pP | 07 29 14.7 | -0.2 |
| | comp=Z,294nm,0.9s | | | | | | |
| S22A | 4UR Ranch, Cre | 75.25 | 52 | eP | pP | 07 29 21.5 | -0.7 |
| | comp=Z,97nm,3.0s | | | | | | |
| BUR04 | Bucovina Ar. S | 75.57 | 323 | eP | P | 07 29 10.7 | +0.2 |
| CLL | Collm | 77.31 | 332 | eP | P | 07 29 20.0 | -0.1 |
| CLL | Collm | 77.31 | 332 | eP | P | 07 29 20.0 | -0.1 |
| BRTR | Keskin Array B | 77.41 | 313 | LR | LR | 08 09 35.5 | |
| | comp=Z,29nm,18.3s,baz=78,slow=40 | | | | | | |
| KHC | Kasperske Hory | 78.95 | 331 | eP | P | 07 29 29.4 | +0.2 |
| KHC | | | | e | | 07 29 45.7 | |
| KHC | Kasperske Hory | 78.95 | 331 | eP | P | 07 29 29.4 | +0.2 |
| KHC | | | | esP | sP | 07 29 45.7 | -2.0 |
| KHC | | | | ex | x | 07 29 53.8 | |
| KHC | Kasperske Hory | 78.95 | 331 | eP | P | 07 29 29.4 | +0.2 |
| TX31 | Lajitas Ar. Si | 83.06 | 56 | eP | P | 07 30 00.8 | +9.3 |
| TXAR | Lajitas Array | 83.06 | 56 | P | P | 07 29 51.9 | +0.4 |
| | comp=Z,0.3nm,0.6s,baz=282,slow=2.8,SNR=5.1 | | | | | | |
| KEST | Kesra | 92.03 | 326 | LR | LR | 08 16 23.3 | |
| | comp=Z,34nm,19.3s,baz=258,slow=38 | | | | | | |
| TORD | Torodi Ar. Bea | 115.12 | 322 | PKP | PKPdf | 07 36 05.7 | -1.5 |
| | comp=Z,0.1nm,0.3s,baz=4.8,slow=1.9,SNR=2.7 | | | | | | |
| SNAA | Sanae | 148.16 | 198 | P | PKPbc | 07 37 09.9 | -0.3 |
| SNAA | Sanae | 148.16 | 198 | ePKP2 | PKPbc | 07 37 10.1 | -0.1 |
| SNAA | Sanae | 148.16 | 198 | ePKPdf | PKPbc | 07 37 10.1 | -0.1 |
| VNA2 | Neumayer--Watz | 149.69 | 197 | P | PKPbc | 07 37 14.4 | +0.4 |
| | baz=103,slow=1.4 | | | | | | |
| VNA1 | Neumayer--Stat | 150.09 | 196 | P | PKPbc | 07 37 15.4 | +0.5 |

*IDC* ***02*** *07:27:38.9±3.4, 44.53N×145.90E, h0km, mb3.8/8, mb1 4.0/8, mb1mx3.6/28, mbtmp3.8/8, MS2.7/1, Ms1 2.7/1, ms1mx2.1/35, Error ellipse: s-maj=89.0km s-min=24.6km az=172.0*

*ISCJB* ***02*** *07:27:49.8±0.7, 44.03N±0.10×146.0E±0.1, h127km±6km, mb3.6/8, Error ellipse: s-maj=16.8km s-min=12.7km az=160.6*

*JMA* ***02*** *07:27:51.9±0.2, 43.98N×146.02E, h114km±2km, M3.2*

**ISC 02 07:27:50.8**±1.0**, 44.0N**±0.1×**146.06E**±0.09**, h119**km±9km**, n24,** σ0.64/21**, mb3.7**/8**, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JRA | Rausu | 0.68 | 264 | P | Pn | 07 28 10.2 | +0.4 |
| JRA | | | | eS | Sn | 07 28 24.1 | -0.1 |
| NEM2 | Nemuro 2 | 0.69 | 200 | P | Pn | 07 28 10.3 | +0.4 |
| NEM2 | | | | eS | Sn | 07 28 23.8 | -0.6 |
| JAK | Akkeshi | 1.43 | 225 | P | Pn | 07 28 17.6 | +0.4 |
| JAK | | | | eS | Sn | 07 28 36.6 | -0.7 |
| JTKR | Abashiri--Toko | 1.56 | 269 | P | Pn | 07 28 19.0 | +0.3 |
| JTKR | | | | eS | Sn | 07 28 40.1 | +0.1 |
| JAR | Ashorobuto | 1.81 | 247 | P | Pn | 07 28 22.6 | +0.8 |
| JMP | Maruseppu | 1.95 | 271 | P | Pn | 07 28 24.0 | +0.5 |
| JOB | Onbets | 1.97 | 236 | P | Pn | 07 28 24.6 | +0.9 |
| JOB | | | | eS | Sn | 07 28 48.9 | 0.0 |
| JKK2 | Kamakawa 2 | 2.40 | 268 | P | Pn | 07 28 30.0 | +0.8 |
| JCH | Churui | 2.42 | 235 | P | Pn | 07 28 29.8 | +0.4 |
| JCH | | | | eS | Sn | 07 28 58.8 | -0.3 |
| KSRS | Korea Array | 15.22 | 251 | LR | LR | 07 36 33.9 | |
| | comp=Z,29nm,18.9s,baz=180,slow=35 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| SONM | Songino Array | 27.64 | 292 | P | P | 07 33 27.2 | 0.0 |
| | 0.3nm,0.3s,baz=85,slow=8.8,SNR=3.6 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 29.82 | 138 | T | T | 08 04 56.2 | |
| | baz=329,slow=75,SNR=25 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.84 | 138 | T | T | 08 04 58.1 | |
| | baz=329,slow=75,SNR=26 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.84 | 138 | T | T | 08 04 57.6 | |
| | baz=329,slow=75,SNR=22 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 30.78 | 139 | T | T | 08 06 04.6 | |
| | baz=331,slow=76,SNR=47 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.78 | 139 | T | T | 08 06 07.2 | |
| | baz=331,slow=76,SNR=34 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.80 | 139 | T | T | 08 06 11.1 | |
| | baz=331,slow=76,SNR=26 | | | | | | |
| ILAR | Eielson Array | 41.74 | 36 | P | P | 07 35 27.8 | +0.2 |
| | 0.7nm,0.7s,baz=261,slow=6.0,SNR=10 | | | | | | |
| MKAR | Makanchi Array | 43.76 | 297 | P | P | 07 35 43.6 | -0.6 |
| | 1.0nm,0.7s,baz=80,slow=7.9,SNR=10 | | | | | | |
| INK | Inuvik | 46.57 | 30 | P | P | 07 36 05.7 | -0.2 |
| | 1.3nm,1.0s,baz=306,slow=8.3,SNR=6.4 | | | | | | |
| ARCES | ARCESS Array B | 58.72 | 339 | P | P | 07 37 33.4 | -2.0 |
| | 1.9nm,0.9s,baz=41,slow=7.3,SNR=5.1 | | | | | | |
| FINES | FINESS Array B | 64.28 | 332 | P | P | 07 38 10.7 | -2.0 |
| | 0.7nm,0.6s,baz=22,slow=6.2,SNR=4.8 | | | | | | |
| NOA | NORSAR Array B | 69.06 | 338 | P | P | 07 38 42.1 | -1.1 |
| | 1.1nm,0.7s,baz=32,slow=6.6,SNR=5.1 | | | | | | |
| TXAR | Lajitas Array | 83.15 | 56 | P | P | 07 40 04.8 | +1.2 |
| | 0.2nm,0.6s,baz=298,slow=3.1,SNR=4.4 | | | | | | |

*IDC* ***02*** *07:39:31.8±1.0, 1.80N×96.96E, h0km, mb4.2/13, mb1 4.2/14, mb1mx3.9/37, mbtmp4.1/14, MS3.6/9, Ms1 3.6/9, ms1mx3.3/32, Error ellipse: s-maj=29.0km s-min=19.5km az=60.0*

*BJI* ***02*** *07:39:34.1, 1.78N×97.08E, h29km, mb4.5/6, mB4.7/3*

*DJA* ***02*** *07:39:35.4±0.8, 2°N±3°×9°7E±°, h22km±9km, M4.4/16, mb4.5/4, mB4.6/2, MLv4.4/16, Mw(mB)3.8/2*

*NEIC* ***02*** *07:39:37.5±1.4, 1.81N×96.99E, h39km±11km, mb4.4/5, Error ellipse: s-maj=14.8km s-min=7.8km az=67.0*

**ISC 02 07:39:36.2**±0.9**, 1.79N**±0.06×**96.81E**±0.07**, h29**km±5km**, n51,** σ1.16/45**, mb4.2**/17**, MS3.5**/8**, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSI | Gunungsitoli | 0.91 | 122 | P | Pn | 07 39 52.3 | -0.6 |
| GSI | | | | S | Sb | 07 40 05.6 | +0.5 |
| GSI | Gunungsitoli | 0.91 | 122 | ePg | Pn | 07 39 51.9 | -1.1 |
| KCSI | Kotacane, Aceh | 1.97 | 29 | P | Pn | 07 40 07.7 | +0.1 |
| KCSI | | | | S | Sn | 07 40 31.9 | +0.5 |
| TSI | Tuntungan | 2.44 | 46 | P | Pn | 07 40 14.0 | -0.1 |
| TSI | | | | S | Sn | 07 40 46.1 | +3.1 |
| MLSI | Meulaboh, Aceh | 2.49 | 351 | P | Pn | 07 40 14.6 | -0.2 |
| MLSI | | | | S | Sn | 07 40 45.1 | +0.8 |
| MNSI | Mandailing Nat | 2.94 | 110 | P | Pn | 07 40 20.3 | -0.6 |
| MNSI | | | | S | Sn | 07 40 58.3 | +3.0 |
| LHMI | Lhok Sumawe | 3.42 | 2 | P | Pn | 07 40 27.5 | 0.0 |
| LHMI | | | | S | Sn | 07 41 09.3 | +2.2 |
| SISI | Saibi | 3.84 | 144 | P | Pn | 07 40 34.4 | +1.0 |
| PPI | Padang Panjang | 4.22 | 122 | P | Pn | 07 40 39.2 | +0.6 |
| BKNI | Bangkinang | 4.47 | 109 | P | Pn | 07 40 43.2 | +1.2 |
| PDSI | Padang | 4.53 | 126 | P | Pn | 07 40 44.1 | +1.2 |
| IPM | Ipoh | 4.99 | 57 | ePn | Pn | 07 40 48.3 | -0.8 |
| KULM | Kulim | 5.17 | 48 | ePn | Pn | 07 40 50.7 | -1.0 |
| | 41nm,0.8s | | | | | | |
| SDSI | Sungai Dareh | 5.35 | 120 | P | Pn | 07 40 59.1 | +5.0 |
| MDSI | Maura Dua | 9.65 | 130 | P | Pn | 07 41 52.6 | -0.5 |
| CMAR | Chiang Mai Arr | 16.70 | 7 | Pn | Pn | 07 43 27.4 | -0.8 |
| | baz=195,slow=13,SNR=7.7 | | | | | | |
| PALK | Pallekele | 16.95 | 289 | LR | LR | 07 50 09.3 | |
| | comp=Z,116nm,18.0s,baz=116,slow=37 | | | | | | |
| KKM | Kota Kinabalu | 19.81 | 77 | eP | P | 07 44 02.6 | -2.1 |
| | 6.0nm,0.4s | | | | | | |
| KAPI | Kappang | 23.89 | 107 | LR | LR | 07 55 20.7 | |
| | comp=Z,76nm,20.2s,baz=324,slow=40 | | | | | | |
| H08S2 | Diego Garcia H | 26.00 | 249 | T | T | 08 12 16.3 | |
| | baz=70,slow=75,SNR=14 | | | | | | |
| H08S3 | Diego Garcia H | 26.01 | 249 | T | T | 08 12 13.5 | |
| | baz=70,slow=75,SNR=2845 | | | | | | |
| H08S1 | Diego Carcia H | 26.02 | 249 | T | T | 08 12 16.2 | |
| | baz=70,slow=75,SNR=10 | | | | | | |
| H08N1 | Diego Carcia H | 26.99 | 252 | T | T | 08 14 27.8 | |
| | baz=146,slow=74,SNR=16 | | | | | | |
| H08N2 | Diego Garcia H | 27.00 | 252 | T | T | 08 14 29.5 | |
| | baz=146,slow=74,SNR=15 | | | | | | |
| H08N3 | Diego Garcia H | 27.01 | 252 | T | T | 08 14 27.3 | |
| | baz=146,slow=74,SNR=13 | | | | | | |
| GTA | Gaotai | 37.54 | 4 | eP | P | 07 46 47.9 | -0.1 |
| GTA | | | | pP | pP | 07 46 56.3 | -0.4 |
| GTA | | | | sP | sP | 07 47 00.5 | +0.2 |
| GTA | | | | PMZ | | | |
| | 5.0nm,1.2s | | | | | | |
| H01W3 | Cape Leeuwin H | 39.94 | 158 | T | T | 08 29 43.1 | |
| | baz=334,slow=76,SNR=16 | | | | | | |
| H01W2 | Cape Leeuwin H | 39.95 | 158 | T | T | 08 29 45.2 | |
| | baz=334,slow=76,SNR=6.9 | | | | | | |
| H01W1 | Cape Leeuwin H | 39.95 | 158 | T | T | 08 29 50.8 | |
| | baz=334,slow=76,SNR=6.5 | | | | | | |
| WRA | Warramunga Arr | 42.68 | 122 | P | P | 07 47 29.6 | -1.1 |
| | 0.6nm,0.5s,baz=301,slow=9.0,SNR=6.1 | | | | | | |
| WRA | | | | LR | LR | 08 06 41.9 | |
| | comp=Z,57nm,18.4s,baz=225,slow=38 | | | | | | |
| WRAB | Tennant Creek | 42.68 | 122 | eP | P | 07 47 29.9 | -0.9 |
| | 13nm,1.5s | | | | | | |
| ASAR | Alice Springs | 44.06 | 127 | P | P | 07 47 41.5 | -0.3 |
| | 0.5nm,0.7s,baz=302,slow=7.6,SNR=7.2 | | | | | | |
| AAK | Ala-Archa | 45.31 | 337 | LR | LR | 08 07 38.9 | |
| | comp=Z,40nm,19.0s,baz=124,slow=37 | | | | | | |
| KSAR | Wonju Array Be | 45.56 | 35 | P | P | 07 47 52.8 | -0.8 |
| KSRS | Korea Array | 45.59 | 35 | P | P | 07 47 52.8 | -1.0 |
| | 4.6nm,1.0s,baz=218,slow=10,SNR=8.4 | | | | | | |
| MKAR | Makanchi Array | 46.58 | 346 | P | P | 07 48 02.1 | +0.7 |
| | 4.8nm,1.0s,baz=157,slow=9.1,SNR=16 | | | | | | |
| MKAR | | | | LR | LR | 08 11 27.5 | |
| | comp=Z,45nm,19.4s,baz=154,slow=41 | | | | | | |
| SONM | Songino Array | 46.61 | 9 | P | P | 07 48 02.3 | +0.5 |
| | 1.4nm,0.5s,baz=187,slow=9.1,SNR=10 | | | | | | |
| SONM | | | | PcP | PcP | 07 49 35.9 | +0.4 |
| | 0.6nm,0.7s,baz=203,slow=4.7,SNR=2.2 | | | | | | |
| SONM | | | | LR | LR | 08 10 24.7 | |
| | comp=Z,120nm,18.1s,baz=194,slow=40 | | | | | | |
| KURK | Kurchatov | 51.13 | 345 | eP | P | 07 48 36.9 | +0.7 |
| | 7.4nm,0.8s | | | | | | |
| MJAR | Matsushiro Arr | 51.52 | 43 | P | P | 07 48 39.4 | -0.1 |
| | 2.1nm,0.8s,baz=224,slow=8.8,SNR=5.8 | | | | | | |
| USRK | Ussuriysk Ar. | 52.47 | 32 | P | P | 07 48 45.6 | -0.8 |
| | 2.0nm,0.6s,baz=240,slow=7.0,SNR=5.8 | | | | | | |
| ZALV | Zalesovo Beam | 52.92 | 351 | P | P | 07 48 50.3 | +0.8 |
| | 26nm,0.9s,baz=179,slow=6.6,SNR=39 | | | | | | |
| ZALV | | | | LR | LR | 08 14 06.5 | |
| | comp=Z,34nm,18.4s,baz=80,slow=39 | | | | | | |
| BRVK | Borovoye | 55.63 | 341 | eP | P | 07 49 09.6 | +0.3 |
| | 2.1nm,0.8s | | | | | | |
| ABKAR | Akbulak array | 56.81 | 332 | eP | P | 07 49 18.4 | +0.6 |
| | 3.2nm,0.8s | | | | | | |
| ASAJ | Asahikawa | 58.43 | 37 | P | P | 07 49 26.9 | -2.4 |
| | 4.4nm,0.7s,baz=259,slow=16,SNR=2.3 | | | | | | |
| SEY | Seymchan | 73.38 | 23 | P | P | 07 51 04.7 | -0.4 |
| | 4.4nm,0.9s,baz=180,slow=14,SNR=4.6 | | | | | | |
| FINES | FINESS Array B | 79.30 | 333 | P | P | 07 51 37.8 | -0.9 |
| | 1.0nm,0.6s,baz=113,slow=5.0,SNR=6.1 | | | | | | |
| ARCES | ARCESS Array B | 81.85 | 340 | P | P | 07 51 52.6 | +0.2 |
| | 0.7nm,0.7s,baz=89,slow=7.3,SNR=2.7 | | | | | | |
| GERES | GERESS Array B | 84.12 | 319 | P | P | 07 52 06.2 | +1.6 |
| | 0.3nm,0.3s,baz=54,slow=6.8,SNR=5.8 | | | | | | |
| VNDA | Vanda | 86.48 | 169 | LR | LR | 08 23 12.7 | |
| | comp=Z,51nm,21.3s,baz=158,slow=30 | | | | | | |
| ILAR | Eielson Array | 99.31 | 23 | LR | LR | 08 42 59.7 | |
| | comp=Z,81nm,20.4s,baz=172,slow=38 | | | | | | |
| CPUP | Villa Florida | 145.17 | 223 | PKPbc | PKPbc | 07 59 10.8 | -0.5 |
| | 1.3nm,0.7s,baz=186,slow=9.2,SNR=3.0 | | | | | | |

*ISCJB* ***02*** *07:45:27.9±0.3, 33.15N±0.02×116.44W±0.03, h6km±3km, Error ellipse: s-maj=4.6km s-min=2.7km az=167.9*

*ECX* ***02*** *07:45:29.8±0.6, 33.11N×116.46W, h5km±2km, MD2.8, ML3.0*

*NEIC* ***02*** *07:45:29.5, 33.11N×116.47W, h11km, ML3.0(PAS), After PAS.*

*NEIC Felt at Borrego Springs, Julian, Santee and Warner Springs.*

*MEX* ***02*** *07:45:31.1±0.3, 33.14N×116.57W, h16km±27km, MD3.7*

**ISC 02 07:45:28.8**±0.9**, 33.11N**±0.02×**116.50W**±0.03**, h14**km±7km**, n32,** σ1.11/55**, 3C-8D, Southern California**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BORC | Borrego Spring | 0.17 | 22 | ⇓iP | Pg | 07 45 32.6 | -0.4 |
| MONP | Monument Peak | 0.23 | 164 | ⇓iP | Pg | 07 45 34.0 | +0.1 |
| MONP | | | | eS | Sg | 07 45 37.3 | -0.1 |
| CBKC | Canebrake | 0.29 | 135 | ⇓iP | Pg | 07 45 34.8 | -0.1 |
| EML | El Monte Cty P | 0.36 | 234 | ⇑iP | Pb | 07 45 36.9 | -0.2 |
| EML | | | | iS | Sb | 07 45 42.2 | -0.4 |
| FRD | Ford Ranch | 0.40 | 347 | ⇓iP | Pg | 07 45 37.1 | +0.2 |
| BAR | Barrett | 0.45 | 199 | ⇓iP | Pg | 07 45 38.1 | +0.3 |
| BAR | Barrett | 0.45 | 199 | ePg | Pg | 07 45 38.1 | +0.3 |
| BAR | | | | eSg | Sg | 07 45 44.4 | +0.5 |
| PFO | Pinyon Flat Ob | 0.50 | 4 | ePg | Pg | 07 45 38.5 | -0.3 |
| PFO | | | | eSg | Sg | 07 45 44.7 | -0.9 |
| CPE | Camp Elliot | 0.56 | 247 | ⇑iP | Pb | 07 45 40.2 | -0.1 |
| IBP | Imperial Bould | 0.56 | 143 | ⇓iP | Pg | 07 45 39.8 | -0.1 |
| IBP | | | | eS | Sg | 07 45 47.1 | -0.2 |
| RMX | La Rumorosa | 0.61 | 145 | eP | Pg | 07 45 39.6 | -1.2 |
| RMX | | | | eS | Sg | 07 45 48.8 | -0.2 |
| WESC | Westside Schoo | 0.73 | 118 | eP | Pg | 07 45 42.7 | -0.3 |
| CBX | Cerro Bola | 0.80 | 190 | i P | Pg | 07 45 44.2 | -0.3 |
| CBX | | | | i S | Sg | 07 45 54.3 | -0.7 |
| CBX | Cerro Bola | 0.80 | 190 | eP | Pg | 07 45 44.1 | -0.3 |
| CBX | | | | eS | Sg | 07 45 55.3 | +0.3 |
| CBX | | | | AML | AML | 07 45 57.0 | |
| | comp=E,511nm,0.6s | | | | | | |
| CBX | | | | ⇑e | | 07 45 57.0 | |
| CBX | Cerro Bola | 0.80 | 190 | i P | Pg | 07 45 44.2 | -0.3 |
| CBX | | | | i S | Sg | 07 45 54.3 | -0.7 |
| CPBX | Cerro Prieto | 1.22 | 124 | i P | Pb | 07 45 51.9 | +0.3 |
| CPBX | | | | i S | Sn | 07 46 08.5 | +0.8 |
| RDX | Rancho Dawling | 1.26 | 158 | ⇓eP | Pn | 07 45 51.9 | -0.4 |
| RDX | | | | AML | AML | 07 46 10.4 | |
| | comp=E,233nm,0.3s | | | | | | |
| RDX | | | | ⇓e | | 07 46 10.4 | |
| MBIG | Mexicali | 1.30 | 122 | eP | Pg | 07 45 56.3 | +2.5 |
| GLA | Glamis | 1.40 | 92 | ePn | Pn | 07 45 51.8 | -2.2 |
| ECNX | Esteban Cantu | 1.45 | 183 | eP | Pn | 07 45 55.0 | +0.2 |
| ECNX | | | | eS | Sg | 07 46 14.9 | -0.6 |
| MWC | Mount Wilson | 1.71 | 311 | ePn | Pn | 07 45 59.7 | +1.2 |
| MWC | | | | eSn | Sb | 07 46 22.1 | +0.3 |
| PASC | Pasadena Art C | 1.77 | 307 | ePn | Pb | 07 46 01.1 | +0.1 |
| PASC | | | | eSn | Sn | 07 46 22.7 | +1.5 |
| GSC | Goldstone | 2.21 | 353 | ePn | Pn | 07 46 05.3 | +0.1 |
| GSC | | | | ePg | Pb | 07 46 09.7 | +1.2 |
| GSC | | | | eSg | Sg | 07 46 38.9 | -0.8 |
| SPIG | San Pedro Mart | 2.23 | 157 | eP | Pn | 07 46 05.3 | -0.4 |
| SPIG | | | | eS | Sn | 07 46 31.8 | -1.5 |
| SPIG | San Pedro Mart | 2.23 | 157 | eP | Pn | 07 46 07.4 | +1.7 |
| SPIG | San Pedro Mart | 2.23 | 157 | eP | Pn | 07 46 05.3 | -0.4 |
| SPIG | | | | eS | Sn | 07 46 31.8 | -1.5 |
| SPX | San Pedro Mart | 2.23 | 157 | eP | Pn | 07 46 07.4 | +1.7 |
| SPX | | | | eS | Sb | 07 46 37.0 | +0.2 |
| SPX | San Pedro Mart | 2.23 | 157 | eP | Pn | 07 46 05.5 | -0.2 |
| SPX | | | | eS | Sn | 07 46 31.7 | -1.6 |
| LDFC | Landfair | 2.28 | 30 | ePg | Pb | 07 46 11.6 | +1.8 |
| LDFC | | | | eSg | Sb | 07 46 40.3 | +2.4 |
| OSI | Osito Adit | 2.39 | 310 | ePn | Pb | 07 46 11.1 | -0.5 |
| OSI | | | | eSg | Sg | 07 46 45.0 | -0.5 |
| DAC | Darwin (Calif) | 3.29 | 344 | ePg | Pb | 07 46 29.0 | +1.9 |
| DAC | | | | eSg | Sg | 07 47 13.5 | -1.1 |
| SHPR | Sheep Range | 3.56 | 18 | ePg | Pg | 07 46 35.2 | -1.9 |
| SHPR | | | | eSg | Sg | 07 47 20.5 | -2.8 |

**DJA 02 07:48:03.3**±0.4**, 0°S**±3°×**9°9E**±°**, h45**km±17km**, M4.2**/11**, mb5.1**/2**, mB6.5**/1**, MLv3.7**/11**, Mw(mB)6.3**/1**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SISI | Saibi | 0.89 | 183 | P | Pn | 07 48 19.6 | +0.1 |
| SISI | | | | S | Sn | 07 48 32.8 | +1.5 |
| PPI | Padang Panjang | 1.27 | 91 | P | Pn | 07 48 24.2 | -0.4 |
| PPI | | | | S | Sn | 07 48 40.6 | +0.2 |
| MNSI | Mandailing Nat | 1.30 | 20 | P | Pn | 07 48 24.8 | -0.2 |
| MNSI | | | | S | Sn | 07 48 41.7 | +0.5 |
| PDSI | Padang | 1.42 | 110 | P | Pn | 07 48 26.2 | -0.4 |
| PDSI | | | | S | Sn | 07 48 44.2 | +0.1 |
| BKNI | Bangkinang | 2.05 | 69 | P | Pn | 07 48 35.7 | +0.3 |
| GSI | Gunungsitoli | 2.32 | 318 | P | Pn | 07 48 38.4 | -0.6 |
| SDSI | Sungai Dareh | 2.35 | 102 | P | Pn | 07 48 39.0 | -0.5 |
| PPSI | Pulau Pagai | 2.48 | 159 | P | Pn | 07 48 40.7 | -0.5 |
| MNAI | Manna | 5.46 | 136 | P | Pn | 07 49 21.6 | -0.6 |
| | 181nm,2.0s,1.3nm | | | | | | |
| TPRI | Tanjung Pinang | 5.56 | 76 | P | Pn | 07 49 24.9 | +1.3 |

*ISCJB* ***02*** *07:48:28.2±0.6, 27.38N±0.05×140.4E±0.1, h400km, mb3.5/11, Error ellipse: s-maj=15.3km s-min=6.4km az=166.9*

*IDC* ***02*** *07:48:28.2±3.0, 27.32N×140.22E, h377km±30km, mb3.3/11, mb1 3.4/12, mb1mx3.1/42, mbtmp4.0/12, Error ellipse: s-maj=20.5km s-min=16.6km az=88.0*

*JMA* ***02*** *07:48:29.7±0.2, 27.50N×140.72E, h395km, M3.9*

**ISC 02 07:48:29.5**±0.8**, 27.40N**±0.08×**140.5E**±0.2**, h400**km**, n22,** σ1.85/27**, mb3.7**/11**, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CBIJ | Chichi jima | 1.50 | 101 | P | Pn | 07 49 21.8 | -0.9 |
| CBIJ | | | | S | S | 07 50 02.2 | -3.4 |
| JHHJ | Haha-jima-NKT | 1.66 | 117 | P | Pn | 07 49 22.9 | -0.6 |
| JHHJ | | | | S | S | 07 50 05.5 | -1.6 |
| BSO1 | Boso 1 | 7.24 | 3 | P | P | 07 50 15.8 | +0.1 |
| BSO1 | | | | eS | S | 07 51 40.3 | -1.3 |
| BSO3 | Boso 3 | 7.37 | 360 | eS | S | 07 51 42.7 | -2.3 |
| BSO4 | Boso 4 | 7.56 | 359 | P | P | 07 50 20.3 | +0.5 |
| BSO4 | | | | eS | S | 07 51 47.2 | -2.0 |
| JHU | Hanno | 8.49 | 353 | P | Pn | 07 50 29.0 | -1.0 |
| JHU | | | | eS | S | 07 52 04.4 | -4.4 |
| JRY | Ryogami san | 8.70 | 351 | P | Pn | 07 50 31.9 | -0.5 |
| JAG | Ashikaga | 9.04 | 354 | P | Pn | 07 50 34.8 | -1.5 |
| JHO | Hitachi | 9.18 | 0 | P | Pn | 07 50 37.9 | 0.0 |
| MJAR | Matsushiro Arr | 9.32 | 348 | P | P | 07 50 38.4 | -1.0 |
| | 0.3nm,0.3s,baz=166,slow=7.5,SNR=4.0 | | | | | | |
| MJAR | | | | S | S | 07 52 23.8 | -2.6 |
| | 0.3nm,0.3s,baz=31,slow=20,SNR=3.4 | | | | | | |
| USRK | Ussuriysk Ar. | 18.12 | 340 | P | P | 07 52 18.2 | +3.2 |
| | 0.3nm,0.3s,baz=155,slow=10,SNR=8.7 | | | | | | |
| WRA | Warramunga Arr | 47.45 | 188 | P | P | 07 56 25.5 | -0.6 |
| | 0.4nm,0.4s,baz=7.1,slow=8.3,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 49.15 | 309 | P | P | 07 56 38.3 | -0.4 |
| | 0.3nm,0.5s,baz=80,slow=12,SNR=3.8 | | | | | | |
| KURBB | Kurchatov Arra | 51.77 | 314 | P | P | 07 56 57.5 | -0.5 |
| | 1.5nm,0.5s,baz=92,slow=8.2,SNR=17 | | | | | | |
| BVAR | Borovoye Array | 56.82 | 317 | P | P | 07 57 33.9 | +0.1 |
| | 1.3nm,0.4s,baz=111,slow=7.5,SNR=9.0 | | | | | | |
| ILAR | Eielson Array | 58.15 | 29 | P | P | 07 57 44.5 | +1.8 |
| | 1.8nm,1.2s,baz=254,slow=6.5,SNR=4.5 | | | | | | |
| INK | Inuvik | 63.36 | 25 | P | P | 07 58 19.6 | +2.3 |
| | 0.9nm,0.5s,baz=286,slow=7.4,SNR=3.7 | | | | | | |
| YKA | Yellowknife Ar | 72.56 | 28 | P | P | 07 59 16.3 | +2.3 |
| | 0.8nm,0.4s,baz=297,slow=6.1,SNR=5.3 | | | | | | |
| ARCES | ARCESS Array B | 72.77 | 341 | P | P | 07 59 16.1 | +1.0 |
| | 1.3nm,0.5s,baz=72,slow=8.0,SNR=13 | | | | | | |
| FINES | FINESS Array B | 77.02 | 333 | P | P | 07 59 39.4 | +0.2 |
| | 1.8nm,0.3s,baz=79,slow=4.9,SNR=36 | | | | | | |
| NVAR | Mina Array Bea | 81.48 | 51 | P | P | 08 00 06.4 | +2.6 |
| | 0.5nm,0.6s,baz=294,slow=4.7,SNR=5.5 | | | | | | |
| NOA | NORSAR Array B | 82.77 | 338 | P | P | 08 00 09.7 | -0.1 |
| | 0.9nm,0.6s,baz=44,slow=5.2,SNR=3.0 | | | | | | |

*BJI* ***02*** *07:51:47.2, 44.23N×129.36W, h5km, mb4.7/2, mB5.0/3, Ms4.6/2, Ms7 4.3/2*

*IDC* ***02*** *07:51:50.5±1.4, 44.54N×129.74W, h0km, mb3.7/8, mb1 4.0/11, mb1mx3.8/39, mbtmp3.7/11, ML3.5/3, MS3.6/19, Ms1 3.6/19, ms1mx3.5/38, Error ellipse: s-maj=35.7km s-min=15.7km az=43.0*

*ISCJB* ***02*** *07:51:52.9±0.4, 44.64N±0.03×129.64W±0.05, h15km, mb4.2/20, MS3.6/13, Error ellipse: s-maj=5.3km s-min=3.8km az=157.0*

*NEIC* ***02*** *07:51:53.0±0.6, 44.61N×129.83W, h10km, mb4.4/30, Error ellipse: s-maj=7.2km s-min=4.6km az=71.0*

*GCMT* ***02*** *07:51:53.0±0.8, 44.17N×130.10W, h28km±2km, MW4.8/69, Moment Tensor Solution. s12,c12; s69,c92; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr0.28±.17;*

*Mθθ-1.31±.14; Mφφ1.03±.12; Mrθ-1.18±.29; Mθφ-1.39±.11; Mφr0.23±.18; Best double couple: Mo2.17300×10[16] NP1:φs288.00000°,δ88.00000°,λ146.00000°. NP2: φs20.00000°,δ56.00000°,λ3.00000°. Principal axes: T 2.0090, Plg25.0000°, Azm238.0000°; N 0.3270, Plg56.0000°, Azm104.0000°; P -2.3370, Plg21.0000°, Azm339.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 02 07:51:53.1**±0.7**, 44°.48N**±0°.10×**129°.79W**±0°.08**, h15**km**,** **n221, σ1°.25**/204**, mb4.4**/20**, MS3.6**/13**, 1D, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KEBM** | **Edson Butte** | **4.27** | **110** | *e*Pn | **Pn** | **07 52 56.1** | **-1.6** |
| **MEGW** | **Megler CREST B** | **4.54** | **65** | P | **Pn** | **07 52 60.0** | **-1.2** |
| **KMOR** | **Kings Mountain** | **4.61** | **73** | ⇓P | **Pn** | **07 53 00.9** | **-1.4** |
| **F03A** | **Seaside** | **4.64** | **70** | *e*Pn | **Pn** | **07 53 01.4** | **-1.2** |
| **COR** | **Corvallis** | **4.64** | **86** | *e*Pn | **Pn** | **07 53 01.2** | **-1.4** |
| **G03D** | **McMinnville, O** | **4.70** | **79** | P | **Pn** | **07 53 02.2** | **-1.3** |
| | baz=4.7,SNR=59 | | | | | | |
| **I03D** | **Drain, OR** | **4.71** | **97** | P | **Pn** | **07 53 01.9** | **-1.7** |
| | baz=4.7,SNR=7.5 | | | | | | |
| **E03A** | **Lebam** | **4.84** | **63** | P | **Pn** | **07 53 04.0** | **-1.3** |
| **F04D** | **Rainier, OR** | **5.05** | **69** | P | **Pn** | **07 53 07.4** | **-0.8** |
| | baz=5.0,SNR=8.4 | | | | | | |
| **NLWA** | **Neilton Lookou** | **5.06** | **53** | *e*Pn | **Pn** | **07 53 06.9** | **-1.5** |
| **OSR** | **Olympics--Salm** | **5.07** | **51** | P | **Pn** | **07 53 07.7** | **-0.9** |
| **L02D** | **Cave Junction,** | **5.08** | **115** | P | **Pn** | **07 53 09.6** | **+1.0** |
| | baz=5.1 | | | | | | |
| **OOW** | **Octopus West** | **5.08** | **48** | P | **Pn** | **07 53 08.1** | **-0.6** |
| **OCP** | **Olym-Cheeka Pk** | **5.23** | **41** | *e*Pn | **Pn** | **07 53 10.6** | **-0.2** |
| **G04A** | **Mulino** | **5.25** | **79** | *e*Pn | **Pn** | **07 53 10.4** | **-0.7** |
| **HUMO** | **Hull Mountain** | **5.31** | **108** | *e*Pn | **Pn** | **07 53 10.9** | **-1.0** |
| **SMW** | **South Mountain** | **5.32** | **55** | P | **Pn** | **07 53 11.0** | **-1.1** |
| **I04A** | **Tendick Farm,** | **5.36** | **95** | P | **Pn** | **07 53 11.7** | **-0.9** |
| | baz=5.4,SNR=15 | | | | | | |
| **F04A** | **Amboy** | **5.41** | **72** | *e*Pn | **Pn** | **07 53 12.4** | **-0.8** |
| **H04A** | **Detroit Lake** | **5.44** | **85** | *e*Pn | **Pn** | **07 53 11.8** | **-1.8** |
| **J04D** | **Umpqua Nationa** | **5.69** | **100** | P | **Pn** | **07 53 17.1** | **-0.2** |
| | baz=5.7,SNR=23 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **5.87** | **115** | Pn | **Pn** | **07 53 20.5** | **+0.9** |
| | 0.2nm,0.3s,baz=275,slow=7.6,SNR=10 | | | | | | |
| YBH | | | | Sn | **Sn** | **07 54 25.4** | **-1.2** |
| | 0.0nm,0.3s,baz=295,slow=18,SNR=1.9 | | | | | | |
| YBH | | | | LR | LR | 07 55 10.4 | |
| | comp=Z,158nm,21.0s,baz=302,slow=34 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **5.87** | **115** | *e*Pn | **Pn** | **07 53 21.1** | **+1.6** |
| YBH | | | | Sn | **Sn** | **07 54 25.4** | **-1.2** |
| **BLN** | **Blyn Mountain** | **5.90** | **51** | *e*Pn | **Pn** | **07 53 19.9** | **-0.1** |
| **M02C** | **Callahan** | **5.96** | **119** | P | **Pn** | **07 53 20.2** | **-0.6** |
| | baz=6.0 | | | | | | |
| **LON** | **Longmire** | **6.04** | **65** | *e*Pn | **Pn** | **07 53 21.6** | **-0.4** |
| **PGC** | **Sidney** | **6.04** | **44** | *e*Pn | **Pn** | **07 53 20.8** | **-1.1** |
| **I05D** | **Terrebonne, OR** | **6.06** | **88** | P | **Pn** | **07 53 21.1** | **-1.0** |
| | baz=6.1 | | | | | | |
| **G05D** | **Wamic, OR** | **6.07** | **80** | P | **Pn** | **07 53 21.8** | **-0.6** |
| | baz=6.1,SNR=17 | | | | | | |
| **J05D** | **Fort Rock, OR** | **6.30** | **98** | P | **Pn** | **07 53 25.1** | **-0.5** |
| | baz=6.3 | | | | | | |
| **A04D** | **Lummi Island** | **6.47** | **47** | P | **Pn** | **07 53 26.5** | **-1.2** |
| | baz=6.4 | | | | | | |
| **C05A** | **Tolt Reservoir** | **6.49** | **57** | *e*Pn | **Pn** | **07 53 27.6** | **-0.4** |
| **B05A** | **Bryant** | **6.53** | **52** | P | **Pn** | **07 53 28.6** | **0.0** |
| | baz=6.5,SNR=32 | | | | | | |
| **JCW** | **Jim Creek** | **6.59** | **53** | *e*Pn | **Pn** | **07 53 29.3** | **-0.1** |
| **WDC** | **Whiskeytown Da** | **6.62** | **124** | *e*Pn | Pn | 07 53 33.7 | +3.8 |
| | 7.0nm,1.2s | | | | | | |
| **K05A** | **Summer Lake** | **6.70** | **102** | *e*Pn | **Pn** | **07 53 32.0** | **+1.0** |
| **LTY** | **Liberty** | **6.95** | **63** | *e*Pn | **Pn** | **07 53 34.1** | **-0.3** |
| **RPW** | **Rockport** | **6.96** | **52** | P | **Pn** | **07 53 34.4** | **-0.1** |
| **A05A** | **Maple Falls** | **6.96** | **47** | *e*Pn | **Pn** | **07 53 34.8** | **+0.3** |
| **VDB** | **Vedder Mountai** | **6.97** | **47** | P | **Pn** | **07 53 34.3** | **-0.3** |
| **C06D** | **Leavenworth** | **7.07** | **58** | P | **Pn** | **07 53 35.8** | **-0.2** |
| | baz=7.0,SNR=17 | | | | | | |
| **O03D** | **Paynes Creek** | **7.24** | **122** | P | **Pn** | **07 53 39.0** | **+0.6** |
| | baz=7.3 | | | | | | |
| **E07A** | **Sunnyside** | **7.29** | **70** | *e*Pn | **Pn** | **07 53 39.3** | **+0.3** |
| **I07A** | **Izee** | **7.40** | **89** | *e*Pn | **Pn** | **07 53 40.3** | **-0.3** |
| **MOD** | **Modoc** | **7.40** | **107** | *e*Pn | **Pn** | **07 53 42.5** | **+1.9** |
| **HAWA** | **Hanford** | **7.47** | **72** | *e*Pn | **Pn** | **07 53 41.6** | **+0.1** |
| **G08A** | **Pilot Rock** | **7.74** | **80** | *e*Pn | **Pn** | **07 53 44.4** | **-0.9** |
| **BBB** | **Bella Bella** | **7.79** | **8** | Pn | **Pn** | **07 53 46.8** | **+1.0** |
| | 0.1nm,0.3s,baz=126,slow=18,SNR=2.6 | | | | | | |
| BBB | | | | LR | LR | 07 56 02.8 | |
| | comp=Z,158nm,20.0s,baz=126,slow=33 | | | | | | |
| **D08A** | **Wollman Farm,** | **8.03** | **67** | *e*Pn | **Pn** | **07 53 48.9** | **-0.3** |
| **J08A** | **Circle Bar Ran** | **8.25** | **94** | *e*Pn | **Pn** | **07 53 55.3** | **+3.0** |
| **WVOR** | **Wild Horse Val** | **8.37** | **100** | *e*Pn | **Pn** | **07 53 55.5** | **+1.6** |
| **C09A** | **Chrisman Ranch** | **8.66** | **63** | *e*Pn | **Pn** | **07 53 56.9** | **-0.9** |
| **F10A** | **Beach Ranch, E** | **9.00** | **76** | *e*Pn | **Pn** | **07 54 05.2** | **+2.7** |
| **NEW** | **Newport** | **9.54** | **62** | Pn | **Pn** | **07 54 08.1** | **-1.8** |
| | 0.4nm,0.3s,baz=258,slow=10,SNR=6.0 | | | | | | |
| NEW | | | | LR | LR | 07 57 41.8 | |
| | comp=Z,716nm,21.1s,baz=257,slow=37 | | | | | | |
| **NEW** | **Newport** | **9.54** | **62** | P | **Pn** | **07 54 08.5** | **-1.4** |
| | baz=9.5 | | | | | | |
| **NEW** | **Newport** | **9.54** | **62** | *e*Pn | **Pn** | **07 54 08.1** | **-1.8** |
| | 5.1nm,0.8s | | | | | | |
| **CMB** | **Columbia Colle** | **9.57** | **129** | *e*Pn | **Pn** | **07 54 10.6** | **+0.3** |
| **BMN** | **Battle Mountai** | **10.13** | **109** | *e*Pn | **Pn** | **07 54 19.5** | **+1.3** |
| | 12nm,1.5s | | | | | | |
| **NV01** | **Mina Array Sit** | **10.53** | **121** | *e*Pn | **Pn** | **07 54 26.7** | **+3.1** |
| **NVAR** | **Mina Array Bea** | **10.53** | **121** | Pn | **Pn** | **07 54 25.0** | **+1.4** |
| | 0.1nm,0.3s,baz=288,slow=13,SNR=11 | | | | | | |
| NVAR | | | | LR | LR | 07 58 15.4 | |
| | comp=Z,332nm,18.4s,baz=304,slow=36 | | | | | | |
| **BSMT** | **Bassoo Peak** | **10.94** | **67** | *e*Pn | **Pn** | **07 54 28.2** | **-1.0** |
| **HLID** | **Hailey** | **11.12** | **89** | P | **Pn** | **07 54 30.9** | **-0.8** |
| | baz=11,SNR=5.5 | | | | | | |
| **HLID** | **Hailey** | **11.12** | **89** | *e*Pn | **Pn** | **07 54 33.7** | **+2.1** |
| | 7.6nm,1.1s | | | | | | |
| **JTMT** | **Jette** | **11.25** | **68** | *e*Pn | **Pn** | **07 54 33.4** | **0.0** |
| **MSO** | **Missoula** | **11.34** | **72** | P | **Pn** | **07 54 33.6** | **-1.1** |
| | baz=11 | | | | | | |
| **MSO** | **Missoula** | **11.34** | **72** | *e*Pn | **Pn** | **07 54 34.4** | **-0.3** |
| **ELK** | **Elko** | **11.36** | **104** | *e*Pn | **Pn** | **07 54 37.9** | **+2.9** |
| **SWMT** | **Swartz Lake** | **11.40** | **69** | *e*Pn | **Pn** | **07 54 35.1** | **-0.3** |
| **YBMT** | **Yellow Bay** | **11.46** | **67** | *e*Pn | **Pn** | **07 54 35.5** | **-0.7** |
| **SLMT** | **Seeley Lake** | **11.70** | **71** | *e*Pn | **Pn** | **07 54 38.8** | **-0.7** |
| **WALA** | **Waterton Lakes** | **11.81** | **62** | *e*Pn | **Pn** | **07 54 40.2** | **-0.8** |
| | 3.1nm,0.7s | | | | | | |
| **CHMT** | **Chamberlain Mo** | **11.82** | **72** | *e*Pn | **Pn** | **07 54 40.9** | **-0.4** |
| **MCMT** | **McKenzie Canyo** | **12.08** | **82** | *e*Pn | **Pn** | **07 54 46.7** | **+1.9** |
| **DLMT** | **Dillon** | **12.23** | **80** | *e*Pn | **Pn** | **07 54 48.3** | **+1.6** |
| **R11A** | **Troy Canyon, C** | **12.29** | **115** | P | **Pn** | **07 54 48.2** | **+0.4** |
| | baz=12,SNR=7.1 | | | | | | |
| **R11A** | **Troy Canyon, C** | **12.29** | **115** | *e*Pn | **Pn** | **07 54 48.8** | **+1.0** |
| | 8.3nm,1.4s | | | | | | |
| **LRM** | **Limekiln Ridge** | **12.32** | **78** | *e*Pn | **Pn** | **07 54 49.3** | **+1.2** |
| | 28nm,0.9s | | | | | | |
| **ISA** | **Isabella** | **12.35** | **132** | *e*Pn | **Pn** | **07 54 50.5** | **+2.2** |
| **HVU** | **Hansel Valley** | **12.72** | **96** | *e*Pn | **Pn** | **07 54 54.3** | **+0.7** |
| | 6.7nm,1.2s | | | | | | |
| **TPNV** | **Topopah Spring** | **12.72** | **122** | P | **Pn** | **07 54 56.0** | **+2.4** |
| | baz=13 | | | | | | |
| **TPNV** | **Topopah Spring** | **12.72** | **122** | *e*Pn | **Pn** | **07 54 56.4** | **+2.8** |
| **HRY** | **Holter Researc** | **12.78** | **74** | *e*Pn | **Pn** | **07 54 54.5** | **+0.2** |
| **BGU** | **Big Grassy Mou** | **12.83** | **100** | *e*Pn | **Pn** | **07 54 56.2** | **+1.2** |
| | 10nm,1.3s | | | | | | |
| **BOZ** | **Bozeman (W)** | **12.90** | **78** | P | **Pn** | **07 54 54.5** | **-1.4** |
| | baz=13 | | | | | | |
| **BOZ** | **Bozeman (W)** | **12.90** | **78** | *e*Pn | **Pn** | **07 54 56.6** | **+0.6** |
| | 21nm,1.6s | | | | | | |
| **QLMT** | **Earthquake Lak** | **13.08** | **82** | *e*Pn | **Pn** | **07 55 01.1** | **+2.6** |
| **DUG** | **Dugway** | **13.27** | **103** | *e*Pn | **Pn** | **07 55 02.4** | **+1.4** |
| | 4.2nm,1.0s | | | | | | |
| **YMR** | **Madison River** | **13.43** | **83** | *e*Pn | Pn | 07 55 06.4 | +3.2 |
| | 45nm,1.6s | | | | | | |
| **FXWY** | **Fox Creek** | **13.53** | **87** | *e*Pn | **Pn** | **07 55 05.1** | **+0.5** |
| **GSC** | **Goldstone** | **13.53** | **128** | *e*Pn | **Pn** | **07 55 06.9** | **+2.4** |
| | 1.9nm,0.7s | | | | | | |
| **IMW** | **Indian Meadow** | **13.55** | **86** | *e*Pn | **Pn** | **07 55 04.4** | **-0.5** |
| **TPAW** | **Teton Pass** | **13.61** | **88** | *e*Pn | **Pn** | **07 55 04.9** | **-0.8** |
| **HWUT** | **Hardware Ranch** | **13.64** | **96** | *e*Pn | **Pn** | **07 55 07.8** | **+1.7** |
| **SHPR** | **Sheep Range** | **13.68** | **121** | *e*Pn | **Pn** | **07 55 09.0** | **+2.4** |
| **FLWY** | **Flagg Ranch** | **13.69** | **85** | *e*Pn | **Pn** | **07 55 08.6** | **+1.8** |
| **REDW** | **Red Top Meadow** | **13.70** | **88** | *e*Pn | **Pn** | **07 55 09.3** | **+2.3** |
| | 7.7nm,1.0s | | | | | | |
| **H17A** | **Grant Village** | **13.74** | **84** | *e*Pn | Pn | 07 55 10.9 | +3.4 |
| **SNOW** | **Snow King Moun** | **13.75** | **88** | *e*Pn | **Pn** | **07 55 07.9** | **+0.2** |
| | 42nm,2.0s | | | | | | |
| **LOHW** | **Long Hollow** | **13.83** | **87** | *e*Pn | **Pn** | **07 55 09.3** | **+0.6** |
| **NLU** | **North Lily Min** | **13.88** | **103** | *e*Pn | **Pn** | **07 55 11.5** | **+2.1** |
| | 9.2nm,1.5s | | | | | | |
| **EDM** | **Edmonton** | **13.89** | **45** | *e*Pn | **Pn** | **07 55 09.6** | **+0.2** |
| | 7.7nm,1.1s | | | | | | |
| **DLBC** | **Dease Lake** | **13.98** | **359** | LR | LR | 07 59 08.9 | |
| | comp=Z,241nm,18.7s,baz=182,slow=32 | | | | | | |
| **CCUT** | **Cedar City** | **14.19** | **114** | *e*Pn | **Pn** | **07 55 15.7** | **+1.9** |
| | 11nm,1.2s | | | | | | |
| **GCMT** | **Greycliff** | **14.27** | **78** | *e*Pn | **Pn** | **07 55 15.1** | **+0.4** |
| GCMT | | | | *e*P | **P** | **07 55 23.1** | **+1.2** |
| **EGMT** | **Eagleton** | **14.31** | **69** | *e*Pn | **Pn** | **07 55 16.1** | **+1.1** |
| EGMT | | | | *e*P | **P** | **07 55 22.5** | **+0.3** |
| **MSU** | **Marysvale** | **14.48** | **108** | *e*Pn | **Pn** | **07 55 20.0** | **+2.4** |
| **GMRC** | **Granite Mounta** | **14.56** | **127** | P | **Pn** | **07 55 21.4** | **+2.8** |
| | baz=15,SNR=7.5 | | | | | | |
| **RLMT** | **Red Lodge** | **14.59** | **80** | *e*Pn | **Pn** | **07 55 20.8** | **+1.7** |
| RLMT | | | | *e*P | **P** | **07 55 27.3** | **+1.7** |
| **LDFC** | **Landfair** | **14.66** | **125** | *e*Pn | **Pn** | **07 55 21.9** | **+1.8** |
| LDFC | | | | *e*P | **P** | **07 55 27.2** | **+0.9** |
| **BW06** | **Boulder Array** | **14.76** | **90** | *e*Pn | **Pn** | **07 55 22.0** | **+0.6** |
| **TMUT** | **Trail Mountain** | **14.77** | **104** | *e*Pn | **Pn** | **07 55 23.4** | **+1.7** |
| **PFO** | **Pinyon Flat Ob** | **14.98** | **132** | *e*P | **P** | **07 55 27.4** | **-2.5** |
| | 11nm,1.4s | | | | | | |
| **IRM** | **Iron Mountain** | **15.29** | **127** | P | **P** | **07 55 32.1** | **-1.1** |
| | baz=15,SNR=16 | | | | | | |
| **SRU** | **San Rafael** | **15.33** | **104** | *e*P | **Pn** | **07 55 30.7** | **+1.6** |
| | 27nm,1.2s | | | | | | |
| **O20A** | **White River Ci** | **16.51** | **98** | P | **Pn** | **07 55 44.4** | **+0.1** |
| | baz=16 | | | | | | |
| **O20A** | **White River Ci** | **16.51** | **98** | *e*P | **P** | **07 55 46.6** | **-0.2** |
| | 19nm,1.2s | | | | | | |
| **PV09** | **Paradox Valley** | **16.58** | **104** | *e*Pn | **Pn** | **07 55 45.8** | **+0.6** |
| **LAO** | **LASA Array** | **16.64** | **74** | *e*P | **Pn** | **07 55 45.8** | **+0.1** |
| | 38nm,1.5s | | | | | | |
| **WUAZ** | **Wupatki** | **16.68** | **116** | *e*P | **P** | **07 55 50.5** | **+1.7** |
| | 26nm,1.5s | | | | | | |
| **PV05** | **Paradox Valley** | **16.80** | **105** | *e*Pn | **P** | **07 55 51.5** | **+1.4** |
| **PV01** | **Paradox Valley** | **17.14** | **104** | *e*P | **P** | **07 55 55.0** | **+1.2** |
| **MVCO** | **Mesa Verde** | **17.64** | **107** | P | **P** | **07 55 59.4** | **-0.1** |
| | baz=18 | | | | | | |
| **MVCO** | **Mesa Verde** | **17.64** | **107** | *e*P | **P** | **07 55 59.2** | **-0.2** |
| | 50nm,1.8s | | | | | | |
| **SMCO** | **Snowmass** | **17.79** | **99** | *e*P | **P** | **07 56 02.2** | **+0.9** |
| | 12nm,1.3s | | | | | | |
| **N23A** | **Red Feather La** | **17.88** | **93** | P | **Pn** | **07 56 01.4** | **0.0** |
| | baz=18 | | | | | | |
| **N23A** | **Red Feather La** | **17.88** | **93** | *e*Pn | **P** | **07 56 03.7** | **+1.7** |
| | 19nm,1.4s | | | | | | |
| **DGMT** | **Dagmar** | **18.05** | **68** | P | **Pn** | **07 56 02.8** | **-0.4** |
| | baz=18 | | | | | | |
| **DGMT** | **Dagmar** | **18.05** | **68** | *e*P | **P** | **07 56 05.0** | **+1.4** |
| | 238nm,2.6s | | | | | | |
| **ISCO** | **Idaho Springs** | **18.51** | **96** | P | **Pn** | **07 56 09.2** | **0.0** |
| | baz=18,SNR=5.6 | | | | | | |
| **ISCO** | **Idaho Springs** | **18.51** | **96** | *e*P | **Pn** | **07 56 10.5** | **+1.3** |
| | 12nm,1.1s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **18.53** | **103** | *e*P | **Pn** | **07 56 10.9** | **+1.4** |
| | 26nm,1.7s | | | | | | |
| **I25A** | **Rochford** | **18.66** | **82** | P | **P** | **07 56 09.5** | **-1.0** |
| | baz=19 | | | | | | |
| **TUC** | **Tucson** | **19.17** | **123** | *e*P | **Pn** | **07 56 16.9** | **-0.1** |
| | 6.0nm,1.2s | | | | | | |
| **KDAK** | **Kodiak Island** | **19.41** | **321** | LR | LR | 08 02 00.6 | |
| | comp=Z,362nm,18.3s,baz=125,slow=32 | | | | | | |
| **SDCO** | **Great Sand Dun** | **19.46** | **102** | *e*P | **Pn** | **07 56 20.7** | **0.0** |
| | 8.1nm,1.3s | | | | | | |
| **I27A** | **Quinn** | **19.84** | **81** | P | **P** | **07 56 23.8** | **+0.5** |
| | baz=20 | | | | | | |
| **B27A** | **Peters Farms,** | **20.00** | **69** | P | **P** | **07 56 25.5** | **+0.5** |
| | baz=20 | | | | | | |
| **YKA** | **Yellowknife Ar** | **20.09** | **21** | P | Pn | 07 56 27.6 | 0.0 |
| | 0.1nm,0.3s,baz=211,slow=11,SNR=3.1 | | | | | | |
| **LAZ** | **Ladron** | **20.12** | **112** | *e*P | Pn | 07 56 27.9 | -0.7 |
| **ANMO** | **Albuquerque** | **20.26** | **110** | P | **P** | **07 56 28.0** | **-0.1** |
| | 2.0nm,1.0s,baz=329,slow=10.0,SNR=6.4 | | | | | | |
| **ANMO** | **Albuquerque** | **20.26** | **110** | *e*P | **P** | **07 56 28.7** | **+0.6** |
| **T25A** | **Trinidad** | **20.51** | **102** | P | Pn | 07 56 32.1 | -0.9 |
| | baz=20,SNR=11 | | | | | | |
| **T25A** | **Trinidad** | **20.51** | **102** | *e*P | Pn | 07 56 32.2 | -0.9 |
| | 16nm,0.9s | | | | | | |
| **LPM** | **Los Pinos Moun** | **20.52** | **112** | *e*P | Pn | 07 56 32.5 | -0.7 |
| **FFC** | **Flin Flon** | **20.60** | **50** | *e*P | **P** | **07 56 31.0** | **-0.5** |
| | 130nm,2.3s | | | | | | |
| **BNM** | **Barren Site** | **20.61** | **112** | *e*P | Pn | 07 56 33.7 | -0.7 |
| **R26A** | **Arlington** | **20.66** | **98** | P | **P** | **07 56 33.0** | **+0.6** |
| | baz=21 | | | | | | |
| **121A** | **Cookes Peak, D** | **20.88** | **117** | P | Pn | 07 56 36.6 | -0.8 |
| | baz=21,SNR=10 | | | | | | |
| **121A** | **Cookes Peak, D** | **20.88** | **117** | *e*P | **P** | **07 56 35.8** | **+1.0** |
| | 20nm,1.3s | | | | | | |
| **T26A** | **Comanche Natio** | **21.07** | **101** | P | **P** | **07 56 37.3** | **+0.4** |
| | baz=21,SNR=8.2 | | | | | | |
| **R27A** | **Eads** | **21.13** | **98** | P | **P** | **07 56 37.7** | **+0.3** |
| | baz=21 | | | | | | |
| **A29A** | **Manning Farm,** | **21.35** | **67** | P | **P** | **07 56 39.9** | **+0.4** |
| | baz=21,SNR=5.7 | | | | | | |
| **E30A** | **Jud** | **21.68** | **74** | P | **P** | **07 56 43.4** | **+0.2** |
| | baz=22 | | | | | | |
| **B30A** | **Myrvik Farm, E** | **21.95** | **68** | P | **P** | **07 56 45.7** | **-0.3** |
| | baz=22,SNR=6.8 | | | | | | |
| **IL1** | **Eielson Array** | **22.46** | **341** | *e*P | **P** | **07 56 50.2** | **-1.1** |
| **ILAR** | **Eielson Array** | **22.46** | **341** | P | **P** | **07 56 50.5** | **-0.9** |
| | 2.1nm,1.1s,baz=148,slow=8.2,SNR=8.8 | | | | | | |
| ILAR | | | | LR | LR | 08 04 06.5 | |
| | comp=Z,209nm,20.7s,baz=166,slow=33 | | | | | | |
| **PPLA** | **Purkeypile** | **22.50** | **333** | *e*P | **P** | **07 56 52.7** | **+0.7** |
| | 34nm,1.3s | | | | | | |
| **MNTX** | **Cornudas Mount** | **22.96** | **115** | *e*P | **P** | **07 56 56.5** | **-0.5** |
| | 30nm,2.2s | | | | | | |
| **B32A** | **Ashes, Strandq** | **23.14** | **68** | P | **P** | **07 56 59.2** | **+0.5** |
| | baz=23,SNR=6.1 | | | | | | |
| **MSTX** | **Muleshoe** | **23.32** | **107** | *e*P | **P** | **07 57 02.1** | **+1.5** |
| | 112nm,2.8s | | | | | | |
| **ULM** | **Lac du Bonnet** | **23.55** | **64** | P | **P** | **07 57 01.9** | **-0.7** |
| | 3.3nm,0.7s,baz=277,slow=8.6,SNR=5.3 | | | | | | |
| ULM | | | | LR | LR | 08 05 57.9 | |
| | comp=Z,251nm,20.4s,baz=282,slow=36 | | | | | | |
| **ULM** | **Lac du Bonnet** | **23.55** | **64** | *e*P | **P** | **07 57 02.0** | **-0.7** |
| | 16nm,1.3s | | | | | | |
| **AMTX** | **Amarillo** | **23.57** | **104** | *e*P | **P** | **07 57 02.7** | **-0.4** |
| | 99nm,1.9s | | | | | | |
| **F33A** | **5 Mile Ranch,** | **23.57** | **75** | P | **P** | **07 57 03.0** | **+0.1** |
| | baz=24,SNR=7.4 | | | | | | |
| **AGMN** | **Agassiz Nation** | **23.60** | **69** | *e*P | **P** | **07 57 02.5** | **-0.7** |
| | 100nm,2.1s | | | | | | |
| **Y28A** | **McKinney Farm,** | **23.71** | **107** | P | **P** | **07 57 06.5** | **+2.0** |
| | baz=24,SNR=6.2 | | | | | | |
| **ECSD** | **EROS Data Cent** | **23.75** | **80** | *e*P | **P** | **07 57 03.5** | **-1.2** |
| | 38nm,1.7s | | | | | | |
| **X29A** | **Tulia** | **23.79** | **105** | P | **P** | **07 57 05.8** | **+0.6** |
| | baz=24 | | | | | | |
| **INK** | **Inuvik** | **23.97** | **357** | LR | LR | 08 06 43.2 | |
| | comp=Z,107nm,19.8s,baz=158,slow=37 | | | | | | |
| **G34A** | **Benson** | **24.12** | **76** | P | **P** | **07 57 08.3** | **+0.1** |
| | baz=24 | | | | | | |
| **H34A** | **Spellman Lake,** | **24.14** | **77** | P | **P** | **07 57 08.6** | **+0.3** |
| | baz=24 | | | | | | |
| **B34A** | **Aery, Baudette** | **24.39** | **68** | P | **P** | **07 57 11.1** | **+0.4** |
| | baz=24,SNR=8.3 | | | | | | |
| **X31A** | **McDonald Ranch** | **24.88** | **103** | P | **P** | **07 57 17.1** | **+1.8** |
| | baz=25,SNR=6.8 | | | | | | |
| **D35A** | **Remer** | **24.93** | **71** | P | **P** | **07 57 16.8** | **+1.3** |
| | baz=25 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **25.05** | **105** | P | **P** | **07 57 19.3** | **+2.6** |
| | baz=25,SNR=5.4 | | | | | | |
| **U33A** | **Lingo Farm, Me** | **25.29** | **98** | P | **P** | **07 57 19.5** | **+0.7** |
| | baz=25 | | | | | | |
| **130A** | **Snyder** | **25.34** | **108** | P | **P** | **07 57 21.6** | **+2.1** |
| | baz=25 | | | | | | |
| **V33A** | **Lossen Ranch,** | **25.46** | **99** | P | **P** | **07 57 22.4** | **+2.0** |
| | baz=25 | | | | | | |
| **X32A** | **Elmer** | **25.48** | **103** | P | **P** | **07 57 22.7** | **+2.1** |
| | baz=26 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **25.64** | **117** | *e*P | **P** | **07 57 21.4** | **-0.7** |
| **TXAR** | **Lajitas Array** | **25.64** | **117** | P | **P** | **07 57 21.8** | **-0.4** |
| | 2.9nm,1.1s,baz=308,slow=6.2,SNR=12 | | | | | | |
| TXAR | | | | LR | LR | 08 07 26.4 | |
| | comp=Z,90nm,19.3s,baz=0.0,slow=36 | | | | | | |
| **WMOK** | **Wichita Mounta** | **25.66** | **102** | *e*P | **P** | **07 57 22.7** | **+0.4** |
| | 83nm,2.3s | | | | | | |
| **W33A** | **Caddo, Fort Co** | **25.67** | **100** | P | **P** | **07 57 23.4** | **+1.1** |
| | baz=26 | | | | | | |
| **131A** | **Roby** | **25.69** | **107** | P | **P** | **07 57 24.3** | **+1.7** |
| | baz=26 | | | | | | |
| **Q35A** | **Mercer Eighty,** | **25.71** | **91** | P | **P** | **07 57 23.5** | **+0.8** |
| | baz=26 | | | | | | |
| **LPIG** | **La Paz** | **25.81** | **136** | LR | LR | 08 07 17.0 | |
| | comp=Z,52nm,20.0s,baz=264,slow=36 | | | | | | |
| **429A** | **Davenport Ranc** | **25.94** | **113** | P | **P** | **07 57 25.1** | **+0.2** |
| | baz=26 | | | | | | |
| **Z32A** | **Haskell** | **25.96** | **105** | P | **P** | **07 57 26.3** | **+1.3** |
| | baz=26,SNR=6.5 | | | | | | |
| **529A** | **Stev Forest Ra** | **26.05** | **114** | P | **P** | **07 57 26.3** | **+0.5** |
| | baz=26,SNR=10 | | | | | | |
| **W34A** | **Bridge Creek,** | **26.12** | **100** | *e*P | **P** | **07 57 25.6** | **-0.8** |
| | 7.3nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **26.23** | **106** | *e*P | **P** | **07 57 27.6** | **+0.2** |
| | 9.2nm,1.4s | | | | | | |
| **530A** | **J-C Ranch, Com** | **26.61** | **113** | P | **P** | **07 57 31.4** | **+0.5** |
| | baz=27 | | | | | | |
| **431A** | **Sonora** | **26.75** | **111** | P | **P** | **07 57 32.9** | **+0.6** |
| | baz=27 | | | | | | |
| **JCT** | **Junction City** | **27.42** | **110** | *e*P | **P** | **07 57 38.2** | **+0.1** |
| | 7.3nm,1.0s | | | | | | |
| **532A** | **Rocksprings** | **27.57** | **111** | P | **P** | **07 57 42.5** | **+2.9** |
| | baz=28 | | | | | | |
| **433A** | **Art** | **27.73** | **109** | P | **P** | **07 57 43.3** | **+2.4** |
| | baz=28,SNR=7.5 | | | | | | |
| **HKT** | **Hockley** | **30.44** | **107** | *e*P | **P** | **07 58 05.5** | **+0.6** |
| | 8.9nm,1.3s | | | | | | |
| **OXF** | **Oxford** | **32.43** | **94** | *e*P | **P** | **07 58 22.2** | **-0.2** |
| | 36nm,1.1s | | | | | | |
| **SCHQ** | **Schefferville** | **40.73** | **52** | LR | LR | 08 16 29.7 | |
| | comp=Z,230nm,18.0s,baz=264,slow=36 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **57.50** | **266** | T | T | 09 03 38.7 | |
| | baz=49,slow=75,SNR=1161 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **57.51** | **266** | T | T | 09 03 36.4 | |
| | baz=49,slow=75,SNR=847 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **57.52** | **266** | T | T | 09 03 34.8 | |
| | baz=49,slow=75,SNR=781 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **58.44** | **265** | T | T | 09 04 51.8 | |
| | baz=48,slow=75,SNR=232 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **58.45** | **265** | T | T | 09 04 50.8 | |
| | baz=48,slow=75,SNR=227 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **58.46** | **265** | T | T | 09 04 53.9 | |
| | baz=48,slow=75,SNR=173 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.17** | **19** | LR | LR | 08 31 54.7 | |
| | comp=Z,31nm,19.6s,baz=330,slow=34 | | | | | | |
| **FINES** | **FINESS Array B** | **72.64** | **12** | LR | LR | 08 35 56.5 | |
| | comp=Z,36nm,19.4s,baz=28,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **75.67** | **325** | P | **P** | **08 03 36.6** | **-1.0** |
| | 0.7nm,0.8s,baz=40,slow=2.5,SNR=3.6 | | | | | | |
| SONM | | | | LR | LR | 08 37 21.2 | |
| | comp=Z,53nm,18.1s,baz=44,slow=36 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **77.59** | **340** | LR | LR | 08 41 19.6 | |
| | comp=Z,24nm,18.7s,baz=78,slow=38 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **78.78** | **317** | *e*P | **P** | **08 03 55.0** | **-0.2** |
| HHC | | | | PMZ | | | |
| | 79nm,4.9s | | | | | | |
| **GERES** | **GERESS Array B** | **81.72** | **23** | P | **P** | **08 04 10.8** | **-0.1** |
| | 0.1nm,0.2s,baz=314,slow=4.9,SNR=3.6 | | | | | | |
| **LPAZ** | **La Paz** | **82.43** | **121** | P | **P** | **08 04 14.5** | **-1.1** |
| | 1.0nm,0.7s,baz=13,slow=6.9,SNR=3.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **83.46** | **13** | P | **P** | **08 04 20.7** | **+1.0** |
| | 0.1nm,0.3s,baz=329,slow=4.9,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **84.80** | **339** | LR | LR | 08 43 56.6 | |
| | comp=Z,41nm,18.9s,baz=18,slow=37 | | | | | | |
| **WMQ** | **Urumqi** | **85.95** | **334** | *e*P | **P** | **08 04 33.0** | **+0.4** |
| **LZH** | **Lanzhou** | **86.23** | **319** | *e*P | **P** | **08 04 33.2** | **-1.0** |
| LZH | | | | pP | **PcP** | **08 04 36.5** | **-0.3** |
| LZH | | | | sP | **sP** | **08 04 38.0** | **-3.0** |
| LZH | | | | *e*PP | **PP** | **08 07 54.5** | **+0.3** |
| LZH | | | | PMZ | | | |
| | 15nm,1.6s | | | | | | |
| LZH | | | | PMZ | | | |
| | 49nm,8.7s | | | | | | |
| LZH | | | | LN | | | |
| | 93nm,17.0s | | | | | | |
| LZH | | | | LE | | | |
| | 100nm,16.8s | | | | | | |
| LZH | | | | LZ | | | |
| | 150nm,19.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **86.26** | **354** | *e*P | **P** | **08 04 35.4** | **+1.6** |
| | 1.5nm,0.9s | | | | | | |
| **CD2** | **Chengdu** | **90.49** | **316** | *e*P | **P** | **08 04 54.0** | **-0.4** |
| **BDFB** | **Brasilia** | **95.08** | **107** | LR | LR | 08 52 41.0 | |
| | comp=Z,32nm,18.4s,baz=326,slow=38 | | | | | | |
| **KMI** | **Kunming** | **95.73** | **314** | P | **P** | **08 05 18.9** | **0.0** |
| KMI | | | | pP | **pP** | **08 05 24.3** | **+0.4** |
| **GEYT** | **Alibeck** | **97.66** | **354** | LR | LR | 08 55 06.0 | |
| | comp=Z,37nm,18.3s,baz=335,slow=39 | | | | | | |

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**JMA 02 08:00:55.9, 37°.24N**×**139°.99E, h7**km±1km**, M1.7, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JFY** | **Yanaizu** | **0.28** | **306** | S | Sg | 08 01 05.7 | +0.4 |
| **JFT** | **Otama** | **0.39** | **45** | P | Pg | 08 01 03.7 | +0.1 |
| JFT | | | | S | Sg | 08 01 08.9 | +0.1 |

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**JMA 02 08:01:12.3**±0.1**, 37°.14N**×**138°.43E, h21**km±1km**, M1.4, Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JJN** | **Nakama** | **0.22** | **260** | P | Pb | 08 01 17.5 | -0.7 |
| JJN | | | | S | Sb | 08 01 21.5 | -0.9 |
| **JIZZ** | **Izumozaki** | **0.45** | **30** | P | Pb | 08 01 21.6 | +0.1 |
| JIZZ | | | | *e*S | Sb | 08 01 29.3 | +1.6 |
| **JHK** | **Hiroka** | **0.48** | **77** | P | Pb | 08 01 21.7 | -0.3 |
| JHK | | | | S | Sb | 08 01 28.4 | -0.3 |
| **MAT** | **Matsushiro** | **0.62** | **197** | P | Pb | 08 01 23.8 | -0.8 |
| MAT | | | | S | Sb | 08 01 32.1 | -0.9 |
| **MAT** | **Matsushiro** | **0.62** | **197** | P | Pb | 08 01 23.9 | -0.7 |
| MAT | | | | S | Sb | 08 01 32.1 | -0.9 |
| **JNG** | **Nsakai** | **0.78** | **200** | P | Pb | 08 01 26.6 | -0.7 |
| JNG | | | | S | Sb | 08 01 36.8 | -0.7 |
| **JSD** | **Sado** | **0.91** | **351** | P | Pb | 08 01 28.2 | -1.1 |
| JSD | | | | S | Sb | 08 01 40.4 | -0.5 |

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**IDC 02 08:13:55.5**±8.1**, 18°.69N**×**147°.25E, h65**km±63km**, mb3.5**/5**, mb1 3.7**/6**, mb1mx3.4**/34**, mbtmp3.9**/6**, ML4.0**/1**, Error ellipse: s-maj=110.5km s-min=28.5km az=81.0, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.56** | **205** | P | Pn | 08 15 16.4 | +0.7 |
| | 4.6nm,0.3s,baz=12,slow=9.3,SNR=3.1 | | | | | | |
| GUMO | | | | S | Sn | 08 16 10.5 | -7.9 |
| | 3.1nm,0.3s,baz=360,slow=19,SNR=1.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **18.42** | **87** | T | T | 08 37 42.8 | |
| | baz=274,slow=74,SNR=5.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **18.43** | **87** | T | T | 08 37 45.9 | |
| | baz=274,slow=74,SNR=5.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **18.44** | **87** | T | T | 08 37 43.3 | |
| | baz=274,slow=74,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.43** | **199** | P | P | 08 21 27.3 | -0.4 |
| | 0.6nm,0.9s,baz=29,slow=8.9,SNR=8.1 | | | | | | |
| **SONM** | **Songino Array** | **44.08** | **321** | P | P | 08 21 56.2 | -1.0 |
| | 0.4nm,0.5s,baz=131,slow=6.5,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.53** | **314** | P | P | 08 23 51.6 | -0.6 |
| | 0.2nm,0.3s,baz=89,slow=8.5,SNR=5.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.95** | **342** | P | P | 08 26 14.6 | +1.5 |
| | 1.9nm,1.0s,baz=39,slow=7.9,SNR=5.4 | | | | | | |
| **FINES** | **FINESS Array B** | **87.51** | **336** | P | P | 08 26 35.9 | 0.0 |
| | 0.7nm,0.5s,baz=83,slow=4.3,SNR=8.6 | | | | | | |

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*ISCJB **02** 08:33:11.8±0.6, 24°.73N±0°.07×122°.56E±0°.03, h23km±6km, Error ellipse: s-maj=12.0km s-min=3.4km az=11.0*
*TAP **02** 08:33:11.3, 24°.72N×122°.53E, h18km±2km, ML2.7, D*
*JMA **02** 08:33:13.0, 24°.55N×122°.55E, h29km±1km, M1.7*
**ISC 02 08:33:11.5**±1.2**, 24°.76N**±0°.08×**122°.56E**±0°.03**, h23**km±13km**,** **n14, σ0°.49**/25**, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.47** | **131** | P | **Pb** | **08 33 21.2** | **+0.1** |
| JYNG | | | | S | **Sb** | **08 33 27.0** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **0.51** | **125** | P | **Pb** | **08 33 22.1** | **+0.3** |
| YOJ | | | | S | **Sb** | **08 33 28.3** | **-0.4** |
| **EGS** | | **0.57** | **279** | *e*P | **Pb** | **08 33 22.2** | **-0.7** |
| | baz=282 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.57** | **296** | *e*P | **Pb** | **08 33 22.8** | **-0.2** |
| | baz=300 | | | | | | |
| TWB1 | | | | S | **Sb** | **08 33 31.6** | **+0.9** |
| | baz=300 | | | | | | |
| **TWC** | **Suao** | **0.66** | **257** | P | **Pb** | **08 33 23.7** | **-0.7** |
| | baz=259 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWC | | | | S | Sb | 08 33 33.3 | +0.2 |
| | baz=259 | | | | | | |
| TWE | Neicheng | 0.81 | 268 | eP | Pn | 08 33 27.5 | 0.0 |
| | baz=269 | | | | | | |
| TWE | | | | eS | Sn | 08 33 38.3 | -0.5 |
| | baz=269 | | | | | | |
| ENA | Nanau | 0.81 | 246 | eP | Pb | 08 33 26.9 | -0.1 |
| | baz=247 | | | | | | |
| ENA | | | | eS | Sb | 08 33 37.4 | -0.1 |
| | baz=247 | | | | | | |
| ENTT | Nioudou | 0.91 | 263 | P | Pn | 08 33 29.1 | +0.2 |
| | baz=264 | | | | | | |
| ENTT | | | | eS | Sb | 08 33 40.8 | +0.5 |
| | baz=264 | | | | | | |
| NNS | Nan Shan | 1.12 | 254 | eP | Pb | 08 33 32.7 | +0.4 |
| | baz=255 | | | | | | |
| NNS | | | | eS | Sn | 08 33 46.5 | -0.2 |
| | baz=255 | | | | | | |
| IRIF | Iriomote-Funau | 1.15 | 111 | P | Pn | 08 33 32.3 | +0.2 |
| IRIF | | | | eS | Sb | 08 33 47.3 | +0.2 |
| WHF | Hehuan Shan | 1.32 | 243 | eP | Pb | 08 33 36.3 | +0.4 |
| | baz=243 | | | | | | |
| WHF | | | | S | Sn | 08 33 51.6 | -0.6 |
| | baz=243 | | | | | | |
| HATJ | Hateruma jima | 1.33 | 121 | eS | Sn | 08 33 51.3 | -0.4 |
| JKRS | Kuro-shima | 1.42 | 111 | P | Pn | 08 33 36.7 | +0.8 |
| JKRS | | | | eS | Sn | 08 33 53.9 | +0.1 |
| JIJ | Ishigaki jima | 1.50 | 105 | P | Pb | 08 33 38.0 | -0.6 |

*ISCJB **02** 08:58:16.0±1.5, 6°.7S±0°.3×150°.5E±0°.3, h33km, mb3.6/4, MS2.2/1, Error ellipse: s-maj=58.8km s-min=11.9km az=41.5*
*IDC **02** 08:58:18.5±1.9, 6°.66S×150°.46E, h32km±9km, mb3.5/5, mb1 3.9/6, mb1mx3.5/38, mbtmp3.8/6, ML1.9/1, MS2.3/1, Ms1 2.3/1, ms1mx2.2/20, Error ellipse: s-maj=55.8km s-min=21.2km az=123.0*
**ISC 02 08:58:17.3**±1.7**, 6°.7S**±0°.3×**150°.6E**±0°.3**, h33**km**, n8, σ0ˢ77**/11**, mb3.8**/4**, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.34 | 232 | Pn | Pn | 08 59 21.6 | +0.6 |
| | 5.5nm,0.3s,baz=55,slow=8.5,SNR=14 | | | | | | |
| PMG | | | | Sn | Sn | 09 00 09.7 | -0.7 |
| | 26nm,0.3s,baz=300,slow=8.4,SNR=10 | | | | | | |
| WRA | Warramunga Arr | 20.55 | 229 | P | P | 09 02 53.0 | -0.3 |
| | 2.4nm,0.6s,baz=53,slow=11,SNR=35 | | | | | | |
| WRA | | | | pP | pP | 09 03 03.0 | +0.9 |
| | 7.5nm,0.8s,baz=53,slow=11,SNR=21 | | | | | | |
| GUMO | Guam | 20.98 | 344 | LR | LR | 09 10 29.3 | |
| | comp=Z,9.1nm,19.7s,baz=152,slow=35 | | | | | | |
| ASAR | Alice Springs | 23.27 | 222 | P | P | 09 03 21.8 | -0.5 |
| | 0.5nm,0.4s,baz=52,slow=9.2,SNR=7.5 | | | | | | |
| ASAR | | | | pP | pP | 09 03 31.8 | +0.5 |
| | 2.1nm,0.8s,baz=56,slow=9.5,SNR=12 | | | | | | |
| FITZ | Fitzroy Crossi | 26.85 | 243 | P | P | 09 03 54.6 | -0.4 |
| | 1.5nm,0.5s,baz=82,slow=6.9,SNR=7.2 | | | | | | |
| FITZ | | | | pP | pP | 09 04 04.8 | +0.3 |
| | 2.7nm,0.6s,baz=66,slow=11,SNR=3.9 | | | | | | |
| SONM | Songino Array | 66.83 | 329 | P | P | 09 09 06.7 | +0.6 |
| | 0.3nm,0.5s,baz=120,slow=5.6,SNR=2.8 | | | | | | |
| ILAR | Eielson Array | 84.76 | 22 | P | P | 09 10 47.7 | -0.2 |
| | 0.7nm,0.7s,baz=246,slow=4.8,SNR=7.4 | | | | | | |
| TORD | Torodi Ar. Bea | 148.76 | 284 | PKPbc | PKPab | 09 18 04.9 | -1.3 |
| | 0.6nm,0.4s,baz=83,slow=2.4,SNR=12 | | | | | | |

**MEX 02 08:58:21.2**±0.4**, 14°.33N**×**93°.09W, h16**km±67km**, MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.37 | 355 | iP | Pn | 08 58 41.9 | -3.8 |
| PCIG | | | | iS | Sn | 08 58 58.5 | -5.2 |
| CCIG | Comitan | 2.15 | 25 | eP | Pn | 08 58 54.1 | -2.5 |
| CCIG | | | | eS | Sn | 08 59 18.7 | -4.5 |

*NIED **02** 08:59:00, 43°.30N×146°.90E, h38km, Mw3.5 Best double couple: Mo1.70000×10^14 NP1:φs182.00000°, δ26.00000°, λ66.00000°. NP2:φs28.00000°, δ66.00000°, λ101.00000°.*
*JMA **02** 08:59:21.9±0.1, 43°.30N×146°.95E, h48km±3km, M3.7*
*MOS **02** 08:59:22.9±1.6, 43°.40N×146°.89E, h58km, mb4.2/4, Error ellipse: s-maj=19.5km s-min=15.8km az=82.5*
*ISCJB **02** 08:59:22.5±0.8, 43°.37N±0°.06×146°.93E±0°.07, h53km±6km, mb3.6/9, Error ellipse: s-maj=11.7km s-min=5.2km az=144.4*
*SKHL **02** 08:59:22.5±0.6, 43°.33N×147°.08E, h58km±6km, mb4.3/4*
*IDC **02** 08:59:27.0±3.9, 43°.33N×146°.78E, h83km±34km, mb3.4/9, mb1 3.6/10, mb1mx3.3/38, mbtmp3.7/10, Error ellipse: s-maj=26.1km s-min=22.1km az=127.0*
**ISC 02 08:59:23.1**±1.5**, 43°.37N**±0°.07×**146°.95E**±0°.06**, h42**km±12km**, n49, σ1ˢ04**/57**, mb3.6**/9**, 1C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SHO | Shikotan | 0.51 | 351 | eP | Pn | 08 59 33.8 | -0.2 |
| SHO | | | | AMB | AMB | 08 59 34.0 | |
| | 90nm,0.2s | | | | | | |
| SHO | | | | eS | Sn | 08 59 41.5 | -0.3 |
| SHO | | | | A | A | 08 59 42.4 | |
| | 8μm,0.5s | | | | | | |
| NEM2 | Nemuro 2 | 0.88 | 270 | P | Pn | 08 59 38.2 | -0.7 |
| NEM2 | | | | eS | Sn | 08 59 50.4 | -0.1 |
| YUK | Yuzh-Kuril'sk | 1.03 | 311c | iPN | Pn | 08 59 40.6 | -0.5 |
| YUK | | | | iS | Sn | 08 59 54.3 | 0.0 |
| YUK | | | | pmax | pmax | | |
| | comp=N,39nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,32nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,441nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,2μm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,1μm,0.2s | | | | | | |
| YUK | Yuzh-Kuril'sk | 1.03 | 311 | eP | Pn | 08 59 40.6 | -0.5 |
| YUK | | | | AMB | AMB | 08 59 41.0 | |
| | comp=N,39nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 08 59 41.0 | |
| | comp=N,32nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 08 59 41.0 | |
| | comp=N,441nm,0.4s | | | | | | |
| YUK | | | | eS | Sn | 08 59 54.3 | 0.0 |
| YUK | | | | A | A | 08 59 54.7 | |
| | comp=N,1μm,0.5s | | | | | | |
| YUK | | | | A | A | 08 59 54.7 | |
| | comp=N,2μm,0.5s | | | | | | |
| JRA | Rausu | 1.44 | 294 | P | Pn | 08 59 46.5 | -0.2 |
| JRA | | | | eS | Sn | 09 00 04.3 | -0.1 |
| JNK | Nakash | 1.64 | 279 | P | Pn | 08 59 48.8 | -0.5 |
| JNK | | | | eS | Sn | 09 00 08.1 | -1.1 |
| JAK | Akkeshi | 1.69 | 258 | P | Pn | 08 59 49.4 | -0.6 |
| JAK | | | | eS | Sn | 09 00 09.9 | -0.5 |
| KUR | Kuril'sk | 1.98 | 19 | ePN | Pn | 08 59 54.2 | +0.1 |
| KUR | | | | iS | Sn | 09 00 18.0 | +0.4 |
| KUR | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.1s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,12nm,0.1s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.1s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,47nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,68nm,0.5s | | | | | | |
| KUR | Kuril'sk | 1.98 | 19 | eP | Pn | 08 59 54.2 | +0.1 |
| KUR | | | | AMB | AMB | 08 59 56.5 | |
| | comp=E,12nm,0.1s | | | | | | |
| KUR | | | | AMB | AMB | 08 59 56.5 | |
| | comp=E,6.0nm,0.1s | | | | | | |
| KUR | | | | eS | Sn | 09 00 18.0 | +0.4 |
| KUR | | | | A | A | 09 00 20.7 | |
| | comp=E,47nm,0.2s | | | | | | |
| KUR | | | | A | A | 09 00 20.7 | |
| | comp=E,68nm,0.2s | | | | | | |
| JTKR | Abashiri--Toko | 2.29 | 286 | P | Pn | 08 59 58.6 | +0.4 |
| JTKR | | | | eS | Sn | 09 00 25.8 | +0.6 |
| JAR | Ashorobuto | 2.32 | 269 | P | Pn | 08 59 58.8 | +0.1 |
| JAR | | | | eS | Sn | 09 00 25.8 | -0.2 |
| JOB | Onbets | 2.32 | 260 | P | Pn | 08 59 58.8 | 0.0 |
| JOB | | | | eS | Sn | 09 00 26.0 | -0.1 |
| JMP | Maruseppu | 2.68 | 285 | P | Pn | 09 00 04.8 | +1.1 |
| JCH | Churui | 2.73 | 255 | P | Pn | 09 00 04.9 | +0.5 |
| JCH | | | | eS | Sn | 09 00 37.3 | +1.1 |
| HRK | Horoka | 2.78 | 273 | eP | Pn | 09 00 06.3 | +1.1 |
| HRK | | | | eS | Sn | 09 00 38.5 | +1.0 |
| ERM | Erimo | 3.10 | 246 | ⇓ePN | Pn | 09 00 11.4 | +1.9 |
| ERM | Erimo | 3.10 | 246 | eP | Pn | 09 00 11.4 | +1.9 |
| JFR | Furan | 3.19 | 268 | P | Pn | 09 00 11.9 | +1.3 |
| JKA | Kamikawa-asahi | 3.24 | 285 | eP | Pn | 09 00 13.5 | +2.2 |
| ASAJ | Asahikawa | 3.24 | 285 | P | Pn | 09 00 13.5 | +2.1 |
| | baz=85,slow=12 | | | | | | |
| JNBK | Urakawa-nobuka | 3.27 | 252 | P | Pn | 09 00 12.1 | +0.3 |
| YSS | Yuzh-Sakhalins | 4.65 | 322 | eP | Pn | 09 00 33.0 | +2.2 |
| YSS | | | | AMB | AMB | 09 00 57.1 | |
| | comp=E,9.0nm,0.1s | | | | | | |
| SONM | Songino Array | 28.48 | 293 | P | P | 09 05 14.9 | +0.7 |
| | comp=E,0.4nm,0.3s,baz=72,slow=9.3,SNR=2.5 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.91 | 138 | T | T | 09 36 03.2 | |
| | baz=329,slow=75,SNR=85 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.92 | 138 | T | T | 09 36 07.0 | |
| | baz=329,slow=75,SNR=55 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.93 | 138 | T | T | 09 36 07.4 | |
| | baz=329,slow=75,SNR=64 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 29.86 | 140 | T | T | 09 37 16.2 | |
| | baz=330,slow=76,SNR=156 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 29.87 | 140 | T | T | 09 37 15.2 | |
| | baz=330,slow=76,SNR=114 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 29.88 | 140 | T | T | 09 37 19.2 | |
| | baz=330,slow=76,SNR=78 | | | | | | |
| ILAR | Eielson Array | 41.89 | 36 | P | P | 09 07 10.3 | +1.5 |
| | comp=E,0.8nm,1.0s,baz=272,slow=9.4,SNR=5.1 | | | | | | |
| ILAR | Eielson Array | 41.89 | 36 | eP | P | 09 07 10.9 | +2.1 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| ILAR | Eielson Array | 41.89 | 36 | eP | P | 09 07 10.9 | +2.1 |
| MKAR | Makanchi Array | 44.63 | 298 | P | P | 09 07 30.4 | -0.8 |
| | comp=Z,0.4nm,0.4s,baz=83,slow=9.4,SNR=5.1 | | | | | | |
| MKAR | Makanchi Array | 44.63 | 298 | iP | P | 09 07 30.1 | -1.1 |
| MKAR | Makanchi Array | 44.63 | 298 | eP | P | 09 07 30.1 | -1.1 |
| INK | Inuvik | 46.81 | 30 | P | P | 09 07 48.1 | +0.1 |
| | comp=Z,0.7nm,0.3s,baz=279,slow=5.6,SNR=7.8 | | | | | | |
| INK | Inuvik | 46.81 | 30 | P | P | 09 07 48.1 | +0.1 |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ARCES | ARCESS Array B | 59.56 | 340 | P | P | 09 09 21.2 | -0.5 |
| | comp=Z,0.4nm,0.4s,baz=41,slow=8.0,SNR=5.7 | | | | | | |
| ARCES | ARCESS Array B | 59.56 | 340 | eP | P | 09 09 21.4 | -0.3 |
| ARCES | ARCESS Array B | 59.56 | 340 | eP | P | 09 09 21.4 | -0.3 |
| WRA | Warramunga Arr | 64.05 | 193 | P | P | 09 09 51.3 | -1.1 |
| | comp=Z,0.2nm,0.6s,baz=8.3,slow=6.6,SNR=2.8 | | | | | | |
| FINES | FINESS Array B | 65.15 | 333 | P | P | 09 09 57.7 | -1.5 |
| | comp=Z,1.4nm,0.6s,baz=54,slow=7.5,SNR=11 | | | | | | |
| FINES | FINESS Array B | 65.15 | 333 | iP | P | 09 09 58.2 | -1.0 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| FINES | FINESS Array B | 65.15 | 333 | eP | P | 09 09 58.2 | -1.0 |
| NB2 | NORSAR Subarra | 69.91 | 339 | P | P | 09 10 28.3 | -1.0 |
| | comp=Z,0.8nm,0.5s,baz=31,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 69.91 | 339 | P | P | 09 10 27.8 | -1.5 |
| | comp=Z,1.5nm,0.7s,baz=33,slow=6.6,SNR=5.3 | | | | | | |
| NOA | NORSAR Array B | 69.91 | 339 | eP | P | 09 10 28.6 | -0.7 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| NOA | NORSAR Array B | 69.91 | 339 | eP | P | 09 10 28.6 | -0.7 |
| TXAR | Lajitas Array | 82.99 | 56 | P | P | 09 11 44.0 | +0.1 |
| | comp=Z,0.1nm,0.5s,baz=309,slow=3.6,SNR=4.5 | | | | | | |

*NIED **02** 09:11:00, 29°.50N×130°.20E, h5km, Mw3.7 Best double couple: Mo4.70000×10^14 NP1:φs331.00000°, δ19.00000°, λ-65.00000°. NP2:φs125.00000°, δ72.00000°, λ-98.00000°.*
*ISCJB **02** 09:11:06.7±1.2, 29°.54N±0°.03×130°.15E±0°.07, h14km±8km, mb3.5/4, Error ellipse: s-maj=10.7km s-min=3.9km az=24.5*
*JMA **02** 09:11:07.0±0.1, 29°.57N×130°.13E, h23km±2km, M3.7*
*JMA Felt I J1.*
*IDC **02** 09:11:11.9±2.1, 29°.59N×129°.94E, h51km±23km, mb3.3/4, mb1 3.5/7, mb1mx3.2/41, mbtmp3.5/7, ML3.1/3, Error ellipse: s-maj=35.0km s-min=13.5km az=101.0*
**ISC 02 09:11:06.6**±1.3**, 29°.56N**±0°.04×**130°.09E**±0°.07**, h11**km±10km**, n15, σ1ˢ15**/22**, mb3.4**/4**, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JNN | Nakanoshima | 0.34 | 326 | P | Pb | 09 11 14.7 | +0.1 |
| JNN | | | | S | Sb | 09 11 19.9 | -0.2 |
| JYAK | Yakushimahirau | 0.77 | 28 | P | Pg | 09 11 20.9 | -0.5 |
| JYAK | | | | S | Sg | 09 11 31.8 | +0.3 |
| JTAJ | Takarajima | 0.88 | 243 | P | Pn | 09 11 24.2 | -0.6 |
| JTAJ | | | | eS | Sn | 09 11 36.4 | -1.1 |
| JKC | Kuchinoerabu | 0.90 | 6 | P | Pg | 09 11 23.6 | -0.4 |
| JKC | | | | S | Sb | 09 11 35.9 | -0.4 |
| JAM | Amami Oshima | 1.22 | 201 | P | Pn | 09 11 28.9 | -0.7 |
| JAM | | | | S | Sn | 09 11 45.6 | -0.4 |
| JZK | Kikaishima | 1.25 | 185 | P | Pg | 09 11 31.4 | +0.9 |
| JTN | Tanegashima 3 | 1.33 | 35 | P | Pn | 09 11 29.8 | -1.4 |
| JTN | | | | S | Sb | 09 11 47.3 | -1.4 |
| JAMN | Amaminishikomi | 1.54 | 212 | P | Pn | 09 11 33.4 | -0.5 |
| JAMN | | | | eS | Sb | 09 11 53.6 | -1.0 |
| JOW | Kunigami | 3.16 | 211 | P | Pn | 09 11 57.7 | +1.5 |
| | 1.6nm,0.3s,baz=104,slow=25,SNR=79 | | | | | | |
| JNU | Nakatsue | 3.61 | 11 | P | Pn | 09 12 04.4 | +1.9 |
| | 4.0nm,0.3s,baz=184,slow=23,SNR=39 | | | | | | |
| JNU | | | | S | Sn | 09 12 47.7 | +2.5 |
| | 1.5nm,0.3s,baz=62,slow=17,SNR=2.9 | | | | | | |
| MJAR | Matsushiro Arr | 9.74 | 42 | P | Pn | 09 13 31.8 | +5.2 |
| | 0.3nm,0.3s,baz=241,slow=13,SNR=3.3 | | | | | | |
| SONM | Songino Array | 25.81 | 322 | P | P | 09 16 37.7 | -0.2 |
| | 0.3nm,0.5s,baz=132,slow=10,SNR=3.3 | | | | | | |
| WRA | Warramunga Arr | 49.38 | 175 | P | P | 09 19 56.6 | +0.3 |
| | 1.2nm,0.7s,baz=355,slow=8.2,SNR=14 | | | | | | |
| ASAR | Alice Springs | 53.05 | 176 | P | P | 09 20 25.1 | +1.4 |
| | 0.5nm,0.7s,baz=6.2,slow=13,SNR=11 | | | | | | |
| ILAR | Eielson Array | 60.74 | 29 | P | P | 09 21 16.9 | -1.0 |
| | 0.2nm,0.8s,baz=292,slow=7.6,SNR=4.2 | | | | | | |

**KRNET 02 09:31:53.5**±0.1**, 39°.54N**×**73°.75E, mb2.3, 2C-4D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 0.51 | 339 | ⇓iP | Pg | 09 32 03.7 | 0.0 |
| | baz=338 | | | | | | |
| SFK | | | | ⇓iS | Sg | 09 32 11.1 | +0.5 |
| | baz=338 | | | | | | |
| ARSB | Arslanbob | 1.88 | 342 | ⇑iP | Pb | 09 32 28.8 | -0.1 |
| | baz=342 | | | | | | |
| ARSB | | | | ⇑iS | Sg | 09 32 54.9 | +0.6 |
| | baz=342 | | | | | | |
| ARLS | Aral | 2.36 | 10 | ⇓iP | Pb | 09 32 36.0 | -1.2 |
| | baz=11 | | | | | | |
| ARLS | | | | ⇓iS | Sb | 09 33 07.7 | +0.6 |
| | baz=11 | | | | | | |

*IDC **02** 09:32:52.4±2.8, 36°.37N×70°.98E, h166km±25km, mb3.4/10, mb1 3.4/15, mb1mx3.2/49, mbtmp3.8/15, Error ellipse: s-maj=19.1km s-min=15.9km az=17.0*
*ISCJB **02** 09:32:54.0±0.4, 36°.55N±0°.03×70°.93E±0°.05, h188km, mb3.6/9, Error ellipse: s-maj=6.3km s-min=3.6km az=160.4*
*NNC **02** 09:33:00.1±2.1, 37°.00N×70°.76E, h196km±14km, mb2.9, mpv3.9, Error ellipse: s-maj=19.5km s-min=9.4km az=164.0*
**ISC 02 09:32:54.6**±0.6**, 36°.57N**±0°.05×**70°.95E**±0°.06**, h188**km**, n43, σ1ˢ50**/53**, mb3.5**/9**, 7C-8D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.79 | 324 | ⇓P | Pn | 09 33 42.2 | +1.0 |
| | 49nm,0.2s | | | | | | |
| DZET | | | | ⇑S | Sn | 09 34 15.9 | -1.9 |
| | 262nm,0.4s | | | | | | |
| CEP | Cherat | 2.85 | 164 | P | Pn | 09 33 43.6 | +1.6 |
| CEP | | | | S | Sn | 09 34 19.0 | 0.0 |
| SFK | Sufi-Kurgan | 3.98 | 30 | ⇓P | Pn | 09 33 58.0 | +2.2 |
| | 3.2nm,0.2s | | | | | | |
| SFK | | | | ⇑S | Sn | 09 34 44.0 | +0.1 |
| | 82nm,0.4s | | | | | | |
| SARP | Sargodha | 4.85 | 162 | P | Pn | 09 34 07.3 | +0.4 |
| AML | Almayashu | 5.94 | 20 | P | Pn | 09 34 22.6 | +1.4 |
| | SNR=40 | | | | | | |
| MNAS | Manas | 6.03 | 11 | ⇑P | Pn | 09 34 23.1 | +1.0 |
| | 6.4nm,0.5s | | | | | | |
| MNAS | | | | ⇓S | Sn | 09 35 29.4 | -1.8 |
| | 58nm,0.4s | | | | | | |
| UCH | Uchtor | 6.28 | 25 | P | Pn | 09 34 27.3 | +1.6 |
| | SNR=9.3 | | | | | | |
| EKS2 | Erkin-Say | 6.46 | 19 | P | Pn | 09 34 29.2 | +1.6 |
| | SNR=9.3 | | | | | | |
| KK31 | Karatay Array | 6.53 | 357 | ⇑P | Pn | 09 34 29.3 | +0.8 |
| | 2.3nm,0.3s,baz=182,slow=12,SNR=40 | | | | | | |
| KK31 | | | | ⇑S | Sn | 09 35 38.8 | -4.1 |
| | 13nm,0.4s,baz=184,slow=22,SNR=20 | | | | | | |
| AAK | Ala-Archa | 6.64 | 23 | ⇓P | Pn | 09 34 31.2 | +1.1 |
| | 2.1nm,0.3s | | | | | | |
| AAK | | | | ⇓S | Sn | 09 35 44.4 | -1.2 |
| | 17nm,0.7s | | | | | | |
| AAK | Ala-Archa | 6.64 | 23 | P | Pn | 09 34 31.9 | +1.8 |
| | 2.6nm,0.3s,baz=157,slow=4.8,SNR=14 | | | | | | |
| AAK | | | | S | Sn | 09 35 45.1 | -0.6 |
| | 1.2nm,0.3s,baz=120,slow=22,SNR=19 | | | | | | |
| AAK | Ala-Archa | 6.64 | 23 | P | Pn | 09 34 31.8 | +1.8 |
| | SNR=7.3 | | | | | | |
| USP | Ospenovka | 7.22 | 21 | P | Pn | 09 34 38.8 | +1.3 |
| | SNR=6.3 | | | | | | |
| TKM2 | Tokmak 2 | 7.28 | 28 | ⇓P | Pn | 09 34 39.6 | +1.1 |
| | 7.1nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | Sn | 09 35 58.8 | -2.0 |
| | 4.7nm,1.1s | | | | | | |
| TKM2 | Tokmak 2 | 7.28 | 28 | P | Pn | 09 34 40.0 | +1.6 |
| | SNR=11 | | | | | | |
| SMLA | Simla | 7.50 | 135 | iP | Pn | 09 34 41.2 | 0.0 |
| SMLA | | | | iS | Sn | 09 36 01.6 | -4.1 |
| SMLA | | | | AML | AML | 09 36 04.5 | |
| | comp=E,464nm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 09 36 06.6 | |
| | comp=N,512nm,0.2s | | | | | | |
| GEYT | Alibeck | 10.32 | 281 | P | Pn | 09 35 17.5 | -0.7 |
| | comp=N,0.7nm,0.3s,baz=65,slow=12,SNR=4.3 | | | | | | |
| MKAR | Makanchi Array | 13.25 | 36 | P | P | 09 35 57.7 | -1.0 |
| | comp=N,0.2nm,0.3s,baz=210,slow=7.0,SNR=3.9 | | | | | | |
| KOLN | Koldanda | 13.84 | 126 | eP | Pn | 09 36 03.8 | +0.6 |
| | comp=N,6.4nm,0.3s | | | | | | |
| GKN | Gorkha | 14.37 | 123 | eP | Pn | 09 36 07.5 | -2.3 |
| | comp=N,18nm,0.3s | | | | | | |
| DMN | Daman | 14.95 | 123 | eP | Pn | 09 36 16.8 | -0.1 |
| | comp=N,12nm,0.3s | | | | | | |
| KKN | Kakani | 14.95 | 122 | eP | Pn | 09 36 16.3 | -0.6 |
| | comp=N,18nm,0.5s | | | | | | |
| AB31 | Akbulak array | 15.00 | 331 | P | Pn | 09 36 16.4 | -0.7 |
| | comp=N,2.4nm,0.6s,baz=145,slow=12,SNR=48 | | | | | | |
| AB31 | | | | ⇓S | Sn | 09 38 57.0 | -7.6 |
| | comp=N,1.3nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 15.06 | 19 | P | Pn | 09 36 17.8 | 0.0 |
| | comp=N,0.0nm,0.3s,baz=209,slow=11,SNR=2.5 | | | | | | |
| PKIN | Phulchoki | 15.16 | 122 | eP | Pn | 09 36 19.1 | -0.5 |
| PKIN | Phulchoki | 15.16 | 122 | eP | Pn | 09 36 19.2 | -0.4 |
| | comp=N,8.3nm,0.3s | | | | | | |
| PKI | Pulchoki | 15.18 | 122 | eP | Pn | 09 36 19.4 | -0.4 |
| | comp=N,13nm,0.4s | | | | | | |
| GUN | Gumba | 15.29 | 120 | eP | Pn | 09 36 20.5 | -0.7 |
| | comp=N,9.7nm,0.4s | | | | | | |
| RAMN | Ramite | 16.39 | 121 | eP | Pn | 09 36 34.5 | +0.1 |
| | comp=N,16nm,0.5s | | | | | | |
| BVAR | Borovoye Array | 16.45 | 359 | P | Pn | 09 36 35.6 | +0.9 |
| | comp=N,0.3nm,0.3s,baz=171,slow=12,SNR=6.1 | | | | | | |
| AKTO | Aktyubinsk | 16.70 | 330 | ⇑P | Pn | 09 36 38.2 | +0.5 |
| | comp=N,5.8nm,0.8s | | | | | | |
| AKTO | | | | ⇓S | S | 09 39 38.9 | -2.3 |
| | comp=N,2.5nm,1.3s | | | | | | |
| AKTO | Aktyubinsk | 16.70 | 330 | P | Pn | 09 36 38.7 | +1.0 |
| | comp=N,0.5nm,0.3s,baz=139,slow=9.7,SNR=15 | | | | | | |
| TAPN | Taplejung | 16.91 | 118 | eP | Pn | 09 36 42.4 | +1.7 |
| | comp=N,16nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 19.86 | 25 | P | P | 09 37 12.1 | +1.0 |
| | comp=N,0.9nm,0.3s,baz=221,slow=11,SNR=4.5 | | | | | | |
| FINES | FINESS Array B | 37.40 | 326 | P | P | 09 39 50.8 | +1.8 |
| | comp=N,0.3nm,0.4s,baz=116,slow=13,SNR=4.2 | | | | | | |
| ARCES | ARCESS Array B | 41.06 | 338 | P | P | 09 40 21.4 | +2.1 |
| | comp=N,0.6nm,0.6s,baz=110,slow=7.8,SNR=4.5 | | | | | | |
| HFS | Hagfors | 42.99 | 322 | P | P | 09 40 36.4 | +1.6 |
| | comp=N,0.5nm,0.3s,baz=116,slow=9.8,SNR=4.5 | | | | | | |
| NOA | NORSAR Array B | 44.30 | 323 | P | P | 09 40 46.3 | +0.9 |
| | comp=N,1.0nm,0.8s,baz=96,slow=7.7,SNR=3.0 | | | | | | |
| TORD | Torodi Ar. Bea | 65.68 | 269 | P | P | 09 43 17.6 | -1.5 |
| | comp=N,0.2nm,0.4s,baz=51,slow=5.4,SNR=6.6 | | | | | | |
| MATP | Matopo | 69.44 | 223 | P | P | 09 43 43.0 | +0.5 |
| | comp=N,1.3nm,0.5s,baz=18,slow=5.4,SNR=5.1 | | | | | | |
| YKA | Yellowknife Ar | 81.17 | 3 | P | P | 09 44 50.3 | +1.6 |
| | comp=N,0.7nm,0.4s,baz=350,slow=5.4,SNR=6.6 | | | | | | |
| WRA | Warramunga Arr | 82.06 | 122 | P | P | 09 44 53.5 | -0.5 |
| | comp=N,0.8nm,0.5s,baz=324,slow=4.9,SNR=18 | | | | | | |
| ASAR | Alice Springs | 84.33 | 125 | P | P | 09 45 05.2 | -0.4 |
| | comp=N,0.9nm,0.6s,baz=310,slow=5.0,SNR=16 | | | | | | |

*IDC **02** 09:37:47.7±0.6, 13°.30N×50°.81E, h0km, mb4.1/22, mb1 4.3/22, mb1mx4.0/52, mbtmp4.1/22, MS3.7/24, Ms1 3.7/24, ms1mx3.5/45, Error ellipse: s-maj=17.9km s-min=14.3km az=106.0*
*ISCJB **02** 09:37:49.3±0.5, 13°.40N±0°.06×50°.59E±0°.04, h21km, mb4.0/24, MS3.6/24, Error ellipse: s-maj=8.2km s-min=5.1km az=169.9*
*CSEM **02** 09:37:49.5±0.2, 13°.35N×50°.69E, h10km, ML3.9, Error ellipse: s-maj=10.3km s-min=7.7km az=146.0*
*NEIC **02** 09:37:49.2±0.4, 13°.31N×50°.82E, h10km, mb4.0/3, Error ellipse: s-maj=11.0km s-min=8.0km az=115.0*
*DHMR **02** 09:37:54.7±1.6, 13°.49N×50°.12E, h6km±282km, ML3.9*
**ISC 02 09:37:51.1**±0.6**, 13°.40N**±0°.08×**50°.62E**±0°.06**, h21**km**, n63, σ1ˢ26**/51**, mb4.1**/24**, MS3.7**/24**, Eastern Gulf of Aden**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MUKL | Al Mukalla | 1.88 | 305 | iP | Pn | 09 38 20.3 | -1.7 |
| MUKL | | | | iS | Sn | 09 38 42.1 | -2.9 |
| MUKL | | | | AML | AML | 09 38 44.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| BDHA | Al Bayda' | 4.95 | 277 | iP | Pn | 09 39 04.9 | +0.4 |
| BDHA | | | | AML | AML | 09 39 05.4 | |
| | comp=E,418nm,0.3s | | | | | | |
| BDHA | | | | iS | Sn | 09 39 59.8 | -1.4 |
| BDHA | Al Bayda' | 4.95 | 277 | iP | Pn | 09 39 04.9 | +0.4 |
| | comp=E,209nm,0.3s | | | | | | |
| BDHA | | | | iS | Sn | 09 39 59.8 | -1.4 |
| LBOS | | 5.25 | 276 | iP | Pn | 09 39 08.8 | +0.1 |
| LBOS | | | | iS | Sn | 09 40 07.4 | -1.3 |
| UDYN | Al 'Udayn | 6.49 | 276 | iP | Pn | 09 39 26.2 | +0.5 |
| UDYN | | | | iS | Sn | 09 40 36.6 | -2.7 |
| IGAR | Gharneh | 18.96 | 4 | eP | Pn | 09 42 11.7 | -0.4 |
| IPIR | Pirpir | 19.20 | 1 | eP | Pn | 09 42 13.3 | -1.7 |
| IPIR | Pirpir | 19.20 | 1 | eP | Pn | 09 42 13.3 | -1.7 |
| IZEF | Zefreh | 19.47 | 4 | eP | Pn | 09 42 17.4 | -0.8 |
| IZEF | Zefreh | 19.47 | 4 | eP | Pn | 09 42 17.4 | -0.8 |
| KMBO | Kilima Mbogo | 19.60 | 224 | eP | Pn | 09 42 19.0 | -0.8 |
| | comp=E,14nm,1.5s | | | | | | |
| KMBO | Kilima Mbogo | 19.60 | 224 | eP | Pn | 09 42 19.0 | -0.8 |
| | comp=E,14nm,1.5s | | | | | | |
| ITEG | Tejag | 20.78 | 20 | eP | Pn | 09 42 31.8 | -1.8 |
| ITEG | Tejag | 20.78 | 20 | eP | Pn | 09 42 31.8 | -1.8 |
| IDAH | Dahanechah | 21.02 | 22 | eP | P | 09 42 34.8 | +1.0 |
| IDAH | Dahanechah | 21.02 | 22 | eP | P | 09 42 34.8 | +1.0 |
| EIL | Elat | 21.75 | 321 | LR | LR | 09 50 40.7 | |
| | comp=E,190nm,19.0s,baz=86,slow=35 | | | | | | |
| ASF | Jabal al Asfar | 22.52 | 328 | P | P | 09 42 52.0 | +2.3 |
| | comp=E,2.0nm,0.6s,baz=45,slow=2.9,SNR=3.0 | | | | | | |
| IAKL | Akhelmad | 24.23 | 16 | eP | P | 09 43 07.8 | +0.9 |
| GEYT | Alibeck | 25.33 | 14 | P | P | 09 43 17.3 | +0.8 |
| | comp=E,6.7nm,0.5s,baz=196,slow=9.2,SNR=6.0 | | | | | | |
| GEYT | | | | LR | LR | 09 55 19.1 | |
| | comp=E,505nm,18.5s,baz=175,slow=41 | | | | | | |
| GNI | Garni | 27.15 | 350 | P | P | 09 43 35.8 | +2.7 |
| | comp=E,5.4nm,0.4s,baz=0.0,slow=20,SNR=4.7 | | | | | | |
| GNI | | | | LR | LR | 09 56 09.9 | |
| | comp=E,289nm,21.1s,baz=174,slow=40 | | | | | | |
| H08N2 | Diego Garcia H | 28.17 | 133 | T | T | 10 12 39.9 | |
| | baz=314,slow=76,SNR=22 | | | | | | |
| H08N3 | Diego Garcia H | 28.18 | 133 | T | T | 10 12 28.9 | |
| | baz=314,slow=76,SNR=22 | | | | | | |
| H08N1 | Diego Carcia H | 28.19 | 133 | T | T | 10 12 30.3 | |
| | baz=314,slow=76,SNR=24 | | | | | | |
| BRTR | Keskin Array B | 30.19 | 333 | LR | LR | 09 56 33.2 | |
| | comp=E,68nm,20.6s,baz=129,slow=37 | | | | | | |
| KBZ | Khabaz | 30.95 | 349 | P | P | 09 44 08.3 | +1.7 |
| | comp=E,3.3nm,0.8s,baz=161,slow=7.5,SNR=7.5 | | | | | | |
| KBZ | | | | LR | LR | 09 58 46.2 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=E,264nm,20.5s,baz=157,slow=40 | | | | | | |
| AAK | Ala-Archa | 35.70 | 31 | P | P | 09 44 49.6 | +1.3 |
| | comp=E,0.7nm,0.3s,baz=243,slow=6.9,SNR=6.4 | | | | | | |
| ABKAR | Akbulak array | 36.57 | 10 | *e*P | P | 09 44 55.5 | +0.1 |
| | comp=E,1.5nm,0.6s | | | | | | |
| ABKAR | Akbulak array | 36.57 | 10 | *e*P | P | 09 44 55.5 | +0.1 |
| | comp=E,1.5nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 37.42 | 8 | P | P | 09 45 03.4 | +0.7 |
| | comp=E,2.1nm,0.8s,baz=152,slow=8.9,SNR=5.2 | | | | | | |
| AKTO | | | | LR | LR | 10 03 45.8 | |
| | comp=E,165nm,18.9s,slow=42 | | | | | | |
| MATP | Matopo | 40.04 | 213 | P | P | 09 45 25.9 | +0.8 |
| | comp=E,2.0nm,0.9s,baz=36,slow=7.4,SNR=4.9 | | | | | | |
| AKASG | Malin Array Be | 41.07 | 339 | P | P | 09 45 33.5 | +0.4 |
| | comp=E,3.3nm,0.7s,baz=150,slow=7.0,SNR=9.7 | | | | | | |
| AKASG | | | | LR | LR | 10 03 42.9 | |
| | comp=E,46nm,21.3s,baz=140,slow=38 | | | | | | |
| BVAR | Borovoye Array | 42.55 | 18 | P | P | 09 45 45.2 | -0.1 |
| | comp=E,2.3nm,0.6s,baz=192,slow=8.3,SNR=12 | | | | | | |
| MKAR | Makanchi Array | 42.58 | 32 | P | P | 09 45 45.2 | -0.4 |
| | comp=E,0.8nm,0.5s,baz=223,slow=8.7,SNR=7.6 | | | | | | |
| MKAR | | | | LR | LR | 10 06 01.4 | |
| | comp=E,43nm,18.7s,baz=236,slow=40 | | | | | | |
| OBN | Obninsk | 43.05 | 348 | LR | LR | 10 07 08.8 | |
| | comp=E,98nm,18.5s,baz=91,slow=41 | | | | | | |
| KURBB | Kurchatov Arra | 43.51 | 26 | P | P | 09 45 52.5 | -0.5 |
| | comp=E,2.4nm,1.1s,baz=228,slow=8.2,SNR=12 | | | | | | |
| KURK | Kurchatov | 43.62 | 26 | P | P | 09 45 52.5 | -1.4 |
| KURK | Kurchatov | 43.62 | 26 | P | P | 09 45 52.5 | -1.4 |
| TAM | Tamanrasset | 43.73 | 289 | *e*P | P | 09 45 56.5 | +1.1 |
| | comp=E,3.1nm,0.9s | | | | | | |
| TAM | Tamanrasset | 43.73 | 289 | *e*P | P | 09 45 56.5 | +1.1 |
| | comp=E,3.1nm,0.9s | | | | | | |
| LBTB | Lobatse | 45.32 | 213 | P | P | 09 46 07.7 | -0.3 |
| | comp=E,4.3nm,0.9s,baz=342,slow=2.2,SNR=4.1 | | | | | | |
| GERES | GERESS Array B | 46.62 | 327 | P | P | 09 46 17.7 | -0.2 |
| | comp=E,0.3nm,0.5s,baz=127,slow=7.5,SNR=3.2 | | | | | | |
| GERES | | | | LR | LR | 10 08 29.8 | |
| | comp=E,37nm,18.0s,baz=95,slow=39 | | | | | | |
| CMAR | Chiang Mai Arr | 46.63 | 77 | P | P | 09 46 16.8 | -1.6 |
| | comp=E,1.3nm,0.4s,baz=276,slow=9.8,SNR=7.1 | | | | | | |
| CMAR | | | | LR | LR | 10 03 34.2 | |
| | comp=E,27nm,20.9s,baz=300,slow=33 | | | | | | |
| TORD | Torodi Ar. Bea | 47.56 | 276 | P | P | 09 46 26.8 | +1.2 |
| | comp=E,1.2nm,0.7s,baz=93,slow=7.8,SNR=9.2 | | | | | | |
| BOSA | Boshof | 48.44 | 210 | LR | LR | 10 07 41.3 | |
| | comp=E,91nm,18.2s,baz=358,slow=37 | | | | | | |
| ZALV | Zalesovo Beam | 48.59 | 26 | P | P | 09 46 31.4 | -1.6 |
| | comp=E,2.2nm,0.7s,baz=234,slow=7.9,SNR=7.5 | | | | | | |
| ZALV | | | | LR | LR | 10 09 45.0 | |
| | comp=E,50nm,19.4s,baz=250,slow=40 | | | | | | |
| FINES | FINESS Array B | 51.15 | 345 | P | P | 09 46 51.9 | -0.5 |
| | comp=E,1.5nm,0.9s,baz=128,slow=12,SNR=4.4 | | | | | | |
| FINES | | | | LR | LR | 10 10 19.1 | |
| | comp=E,75nm,20.4s,baz=152,slow=38 | | | | | | |
| ESDC | Sonseca Array | 54.44 | 309 | P | P | 09 47 18.1 | +0.9 |
| | comp=E,0.4nm,0.5s,baz=97,slow=6.7,SNR=4.7 | | | | | | |
| DBIC | Dimbokro | 54.95 | 269 | LR | LR | 10 11 12.0 | |
| | comp=E,36nm,18.2s,baz=78,slow=36 | | | | | | |
| NOA | NORSAR Array B | 55.45 | 338 | LR | LR | 10 14 59.7 | |
| | comp=E,39nm,19.7s,baz=125,slow=40 | | | | | | |
| SONM | Songino Array | 57.39 | 41 | P | P | 09 47 38.0 | -0.3 |
| | comp=E,2.0nm,1.0s,baz=232,slow=7.3,SNR=7.1 | | | | | | |
| SONM | | | | LR | LR | 10 15 40.3 | |
| | comp=E,52nm,18.5s,baz=280,slow=40 | | | | | | |
| SONM | Songino Array | 57.39 | 41 | P | P | 09 47 38.0 | -0.3 |
| ARCES | ARCESS Array B | 58.30 | 350 | LR | LR | 10 15 32.6 | |
| | comp=E,113nm,19.2s,baz=144,slow=39 | | | | | | |
| SPITS | Spitsbergen Ar | 66.97 | 353 | LR | LR | 10 21 28.8 | |
| | comp=E,83nm,19.0s,baz=145,slow=39 | | | | | | |
| JMIC | Jan Mayen | 67.59 | 342 | LR | LR | 10 23 13.2 | |
| | comp=E,43nm,18.5s,baz=64,slow=40 | | | | | | |
| KSRS | Korea Array | 71.96 | 55 | LR | LR | 10 21 28.6 | |
| | comp=E,32nm,18.1s,baz=270,slow=36 | | | | | | |
| MAW | Mawson | 81.27 | 175 | P | P | 09 50 05.3 | 0.0 |
| | comp=E,1.5nm,1.1s,baz=302,slow=10,SNR=3.6 | | | | | | |
| MAW | | | | LR | LR | 10 19 57.2 | |
| | comp=E,48nm,19.4s,baz=56,slow=31 | | | | | | |
| SFJD | Kangerlussuaq | 82.12 | 337 | LR | LR | 10 27 49.2 | |
| | comp=E,28nm,19.2s,baz=86,slow=36 | | | | | | |
| WRA | Warramunga Arr | 88.73 | 111 | P | P | 09 50 42.2 | -1.6 |
| | comp=E,2.3nm,1.1s,baz=297,slow=3.8,SNR=8.8 | | | | | | |
| ASAR | Alice Springs | 89.28 | 114 | P | P | 09 50 44.7 | -1.7 |
| | comp=E,1.5nm,1.0s,baz=285,slow=4.9,SNR=7.7 | | | | | | |
| PETK | Petropavlovsk- | 89.34 | 35 | LR | LR | 10 33 04.0 | |
| | comp=E,29nm,19.9s,baz=285,slow=37 | | | | | | |
| NVAR | Mina Array Bea | 127.41 | 349 | PKP | PKPdf | 09 56 56.2 | +1.1 |
| | comp=E,0.4nm,0.6s,baz=317,slow=1.2,SNR=4.9 | | | | | | |
| TXAR | Lajitas Array | 130.80 | 330 | PKP | PKPdf | 09 57 01.9 | +0.2 |
| | comp=E,0.1nm,0.4s,baz=94,slow=2.7,SNR=2.6 | | | | | | |

*IDC **02** 09:49:08.4±1.5, 12°.96N×50°.87E, h0km, mb3.8/4, mb1 4.0/4, mb1mx3.5/47, mbtmp3.8/4, MS3.3/7, Ms1 3.3/7, ms1mx3.0/44, Error ellipse: s-maj=41.2km s-min=37.1km az=164.0*

*DHMR **02** 09:49:15.5±1.1, 13°.52N×50°.30E, h14km±531km, ML3.9*

**ISC 02 09:49:15.8**±1.5**, 13°.7N**±0°.2×**50°.50E**±0°.09**, h21km, n17, σ0s.87**/10**, mb3.9**/4**, MS3.4**/7**, 4C, Eastern Gulf of Aden**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MUKL | Al Mukalla | 1.64 | 300 | ⇑*i*P | Pn | 09 49 42.8 | -0.6 |
| MUKL | | | | *i* S | Sb | 09 50 05.0 | -0.7 |
| MUKL | | | | AML | AML | 09 50 06.8 | |
| | comp=N,2μm,0.5s | | | | | | |
| BDHA | Al Bayda' | 4.81 | 274 | ⇑*i*P | Pn | 09 50 27.3 | +0.1 |
| BDHA | | | | *i* S | Sn | 09 51 23.2 | +0.7 |
| LBOS | | 5.11 | 273 | ⇑*i*P | Pn | 09 50 31.3 | -0.1 |
| LBOS | | | | ⇑*i*S | Sn | 09 51 31.0 | +1.1 |
| MMAI | Mount Meron Ar | 23.69 | 327 | LR | LR | 10 04 25.6 | |
| | comp=N,31nm,21.2s,baz=225,slow=38 | | | | | | |
| GEYT | Alibeck | 25.11 | 14 | LR | LR | 10 06 30.5 | |
| | comp=N,151nm,19.6s,baz=50,slow=41 | | | | | | |
| H08N2 | Diego Garcia H | 28.43 | 133 | T | T | 10 24 10.1 | |
| | baz=314,slow=76,SNR=5.9 | | | | | | |
| H08N3 | Diego Garcia H | 28.43 | 133 | T | T | 10 24 05.9 | |
| | baz=314,slow=76,SNR=6.7 | | | | | | |
| H08N1 | Diego Carcia H | 28.45 | 133 | T | T | 10 24 09.0 | |
| | baz=314,slow=76,SNR=7.0 | | | | | | |
| BRTR | Keskin Array B | 29.91 | 333 | LR | LR | 10 07 31.4 | |
| | comp=N,41nm,19.6s,baz=87,slow=36 | | | | | | |
| KBZ | Khabaz | 30.67 | 349 | P | P | 09 55 29.9 | +1.1 |
| | comp=N,1.4nm,0.5s,baz=130,slow=7.9,SNR=4.7 | | | | | | |
| KBZ | | | | LR | LR | 10 09 41.8 | |
| | comp=N,78nm,19.3s,baz=146,slow=39 | | | | | | |
| KURBB | Kurchatov Arra | 43.33 | 26 | P | P | 09 57 16.5 | +0.3 |
| | comp=N,0.3nm,0.4s,baz=211,slow=8.6,SNR=2.3 | | | | | | |
| VRAC | Vranov | 45.14 | 329 | LR | LR | 10 19 14.5 | |
| | comp=N,51nm,19.5s,baz=82,slow=39 | | | | | | |
| CMAR | Chiang Mai Arr | 46.69 | 77 | LR | LR | 10 15 44.0 | |
| | comp=N,22nm,21.4s,baz=290,slow=34 | | | | | | |
| DAVOX | Davos/Dischmat | 47.36 | 323 | LR | LR | 10 21 49.1 | |
| | comp=N,45nm,19.1s,baz=94,slow=41 | | | | | | |
| TORD | Torodi Ar. Bea | 47.42 | 275 | P | P | 09 57 48.3 | -0.9 |
| | comp=N,0.7nm,0.7s,baz=88,slow=7.3,SNR=5.0 | | | | | | |
| ASAR | Alice Springs | 89.49 | 114 | P | P | 10 02 04.2 | -7.8 |
| | comp=N,1.0nm,1.0s,baz=284,slow=4.5,SNR=4.8 | | | | | | |
| NVAR | Mina Array Bea | 127.14 | 349 | PKP | PKPdf | 10 08 18.4 | -0.9 |
| | comp=N,0.4nm,0.7s,baz=270,slow=1.8,SNR=4.1 | | | | | | |

*ISCJB **02** 09:52:19.5±0.3, 38°.28N±0°.03×69°.65E±0°.03, h12km, mb3.9/16, Error ellipse: s-maj=4.6km s-min=3.6km az=170.5*

*IDC **02** 09:52:20.6±0.8, 38°.35N×69°.72E, h0km, mb3.9/15, mb1 4.0/22, mb1mx3.9/46, mbtmp3.9/22, ML2.5/4, Error ellipse: s-maj=16.4km s-min=11.5km az=172.0*

*NNC **02** 09:52:22.7±1.0, 38°.48N×69°.58E, h6km±7km, mb4.5, mpv4.3, Error ellipse: s-maj=11.5km s-min=5.7km az=10.0*

*TEH **02** 09:52:25.2, 38°.62N×69°.53E, h15km, ML4.2*

*NEIC **02** 09:52:26.1±0.5, 38°.49N×69°.67E, h35km, mb4.6/1, Error ellipse: s-maj=9.4km s-min=7.5km az=167.0*

**ISC 02 09:52:21.8**±0.5**, 38°.29N**±0°.04×**69°.59E**±0°.03**, h12km, n75, σ1s.76**/87**, mb4.0**/16**, 21C-12D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 0.79 | 311 | ⇓P | Pg | 09 52 36.0 | -1.2 |
| | 2μm,0.4s | | | | | | |
| DZET | | | | ⇓S | Sg | 09 52 46.4 | -1.3 |
| | 9μm,0.5s | | | | | | |
| SFK | Sufi-Kurgan | 3.50 | 59 | ⇑Pn | Pn | 09 53 17.0 | +0.8 |
| | 8.0nm,0.4s | | | | | | |
| SFK | | | | ⇑Pg | Pb | 09 53 25.4 | +1.6 |
| | 75nm,0.6s | | | | | | |
| SFK | | | | ⇑Sn | Sn | 09 53 59.5 | +1.9 |
| | 72nm,0.4s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 09 54 10.0 | |
| | 300nm,0.8s | | | | | | |
| MNAS | Manas | 4.75 | 27 | ⇓Pn | Pn | 09 53 33.0 | -0.4 |
| | 29nm,0.4s | | | | | | |
| MNAS | | | | ⇑Sn | Sn | 09 54 27.2 | -1.2 |
| | 105nm,0.6s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 09 54 46.9 | |
| CEP | Cherat | 4.83 | 156 | P | Pn | 09 53 39.6 | +5.1 |
| CEP | | | | S | Sb | 09 54 41.0 | -3.7 |
| KK31 | Karatay Array | 4.86 | 8 | Pn | Pn | 09 53 34.9 | 0.0 |
| | 5.4nm,0.3s,baz=195,slow=16,SNR=108 | | | | | | |
| KK31 | | | | ⇓Pg | Pb | 09 53 46.1 | -0.9 |
| | 25nm,0.5s,baz=191,slow=16,SNR=18 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 09 54 48.7 | |
| | 96nm,0.6s,baz=201,slow=34,SNR=6.6 | | | | | | |
| KKAR | Karatay Array | 4.86 | 8 | *e*Pn | Pn | 09 53 33.6 | -1.2 |
| KKAR | | | | *e*Sg | Sb | 09 54 47.0 | +1.5 |
| AML | Almayashu | 4.96 | 38 | P | Pn | 09 53 36.2 | -0.3 |
| | SNR=22 | | | | | | |
| KSH | Kashi | 5.13 | 74 | Pn | Pb | 09 53 49.7 | -1.8 |
| KSH | | | | Sn | Sb | 09 54 49.8 | -3.3 |
| KSH | | | | smax | smax | | |
| | comp=N,250nm,1.0s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,400nm,1.4s | | | | | | |
| KSH | Kashi | 5.13 | 74 | Pn | Pn | 09 53 34.4 | -4.2 |
| KSH | | | | Sn | Sn | 09 54 29.7 | -8.0 |
| KSH | | | | SMN | | | |
| | comp=E,250nm,1.0s | | | | | | |
| KSH | | | | SME | | | |
| | comp=E,400nm,1.4s | | | | | | |
| EKS2 | Erkin-Say | 5.41 | 35 | P | Pn | 09 53 45.3 | +2.8 |
| | SNR=14 | | | | | | |
| EKS2 | Erkin-Say | 5.41 | 35 | *e*Pn | Pn | 09 53 41.2 | -1.3 |
| | comp=E,45nm,0.8s | | | | | | |
| EKS2 | | | | *e*Sn | Sn | 09 54 50.7 | +6.0 |
| UCH | Uchtor | 5.45 | 42 | P | Pn | 09 53 43.0 | -0.3 |
| | SNR=23 | | | | | | |
| AAK | Ala-Archa | 5.73 | 39 | ⇑Pn | Pn | 09 53 46.2 | -0.6 |
| | comp=E,12nm,0.4s | | | | | | |
| AAK | | | | ⇑Pg | Pb | 09 54 04.4 | +2.6 |
| | comp=E,29nm,0.7s | | | | | | |
| AAK | | | | ⇓Sn | Sn | 09 54 52.9 | +0.3 |
| | comp=E,47nm,0.9s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 09 55 19.2 | |
| | comp=E,166nm,1.4s | | | | | | |
| AAK | Ala-Archa | 5.73 | 39 | Pn | Pn | 09 53 46.8 | -0.1 |
| | comp=E,5.2nm,0.3s,baz=199,slow=8.1,SNR=30 | | | | | | |
| AAK | | | | Sn | Sn | 09 54 55.5 | +2.9 |
| | comp=E,1.9nm,0.3s,baz=264,slow=17,SNR=2.5 | | | | | | |
| AAK | Ala-Archa | 5.73 | 39 | P | Pn | 09 53 48.9 | +2.0 |
| | SNR=16 | | | | | | |
| AAK | Ala-Archa | 5.73 | 39 | Pn | Pn | 09 53 46.8 | -0.1 |
| AAK | | | | Sn | Sn | 09 54 55.5 | +2.9 |
| AAK | | | | *e*Sg | Sg | 09 55 24.9 | -0.8 |
| KZA | Kyzart | 5.75 | 47 | P | Pn | 09 53 47.7 | +0.3 |
| | SNR=20 | | | | | | |
| KBK | Karagaybulak | 5.98 | 41 | P | Pn | 09 53 50.4 | +0.2 |
| | SNR=7.8 | | | | | | |
| USP | Ospenovka | 6.21 | 35 | P | Pn | 09 53 55.5 | +2.1 |
| | SNR=8.5 | | | | | | |
| TKM2 | Tokmak 2 | 6.50 | 43 | ⇑Pn | Pn | 09 53 56.6 | -0.9 |
| | comp=E,11nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Sn | Sn | 09 55 13.2 | +1.5 |
| | comp=E,62nm,0.8s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 09 55 38.6 | |
| | comp=E,38nm,0.7s | | | | | | |
| TKM2 | Tokmak 2 | 6.50 | 43 | P | Pn | 09 53 57.0 | -0.6 |
| | SNR=11 | | | | | | |
| TKM2 | Tokmak 2 | 6.50 | 43 | *e*Pn | Pn | 09 53 56.6 | -0.9 |
| | comp=E,21nm,0.5s | | | | | | |
| TKM2 | | | | *e*Sn | Sn | 09 55 14.2 | +2.4 |
| IMYA | Miami | 7.81 | 259 | *e*P | Pn | 09 54 16.4 | +1.0 |
| ISRO | Mashad | 8.30 | 259 | *e*P | Pn | 09 54 22.4 | +0.2 |
| IMOG | Moghan | 8.46 | 258 | *e*P | Pn | 09 54 26.1 | +1.5 |
| IEMG | Emamgholi | 8.70 | 268 | *e*P | Pn | 09 54 28.2 | +0.5 |
| IAKL | Akhelmad | 8.78 | 262 | *e*P | Pn | 09 54 29.9 | +1.1 |
| GEYT | Alibeck | 9.05 | 271 | Pn | Pn | 09 54 33.0 | +0.6 |
| | comp=E,2.2nm,0.3s,baz=96,slow=9.9,SNR=6.1 | | | | | | |
| GEYT | | | | Sn | Sn | 09 56 13.8 | -0.4 |
| | comp=E,2.0nm,0.3s,baz=87,slow=13,SNR=3.3 | | | | | | |
| ISFR | Sfrayin | 9.27 | 266 | *e*P | Pn | 09 54 40.1 | +4.5 |
| ISHV | Shirvan | 9.43 | 269 | *e*P | Pn | 09 54 38.5 | +0.8 |
| MK31 | Makanchi Array | 12.63 | 44 | ⇑Pn | Pn | 09 55 19.8 | -1.5 |
| | comp=E,2.5nm,0.7s,baz=229,slow=14,SNR=10.0 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 58 58.4 | |
| | comp=E,8.7nm,1.1s,baz=220,slow=27,SNR=3.6 | | | | | | |
| MKAR | Makanchi Array | 12.63 | 44 | Pn | Pn | 09 55 20.5 | -0.8 |
| | comp=E,0.2nm,0.3s,baz=225,slow=14,SNR=9.2 | | | | | | |
| MKAR | | | | Lg | Lg | 09 58 53.1 | |
| | comp=E,0.1nm,0.3s,baz=223,slow=25,SNR=2.7 | | | | | | |
| AB31 | Akbulak array | 12.98 | 331 | ⇑Pn | Pn | 09 55 22.3 | -3.7 |
| | comp=E,3.1nm,0.4s,baz=145,slow=11,SNR=87 | | | | | | |
| AB31 | | | | ⇓Sn | Sn | 09 57 44.3 | -6.0 |
| | comp=E,3.9nm,0.6s,baz=154,slow=22,SNR=4.7 | | | | | | |
| AB31 | | | | ⇑Lg | Lg | 09 59 08.9 | |
| | comp=E,12nm,0.8s | | | | | | |
| ABKAR | Akbulak array | 12.98 | 331 | *e*Pn | Pn | 09 55 24.7 | -1.3 |
| | comp=E,6.4nm,0.4s | | | | | | |
| ABKAR | | | | *e*Sn | Sn | 09 57 42.4 | -7.9 |
| KURBB | Kurchatov Arra | 13.87 | 24 | Pn | Pn | 09 55 36.2 | -2.0 |
| | comp=E,0.1nm,0.3s,baz=216,slow=12,SNR=9.5 | | | | | | |
| KURBB | | | | Lg | Lg | 09 59 32.6 | |
| | comp=E,0.1nm,0.3s,baz=214,slow=29,SNR=9.0 | | | | | | |
| KURK | Kurchatov | 13.98 | 24 | Pn | Pn | 09 55 36.2 | -3.5 |
| KURK | | | | Lg | Lg | 09 59 32.6 | |
| VOSK | Vostochnaya | 14.47 | 3 | ⇑Pn | Pn | 09 55 42.9 | -3.5 |
| | comp=E,3.8nm,0.8s | | | | | | |
| VOSK | | | | ⇑Lg | Lg | 09 59 56.3 | |
| | comp=E,15nm,1.3s | | | | | | |
| ZRNK | Zerenda | 14.67 | 359 | ⇑Pn | Pn | 09 55 46.5 | -2.6 |
| | comp=E,5.4nm,0.8s | | | | | | |
| ZRNK | | | | ⇑Lg | Lg | 10 00 03.1 | |
| | comp=E,4.3nm,0.8s | | | | | | |
| AKTO | Aktyubinsk | 14.68 | 330 | ⇓Pn | Pn | 09 55 48.3 | -0.9 |
| | comp=E,14nm,0.8s | | | | | | |
| AKTO | | | | ⇓Sn | Sn | 09 58 24.4 | -7.2 |
| | comp=E,12nm,1.1s | | | | | | |
| AKTO | | | | ⇑Lg | Lg | 10 00 06.0 | |
| | comp=E,20nm,0.9s | | | | | | |
| AKTO | Aktyubinsk | 14.68 | 330 | Pn | Pn | 09 55 47.8 | -1.4 |
| | comp=E,0.6nm,0.3s,baz=141,slow=13,SNR=10.0 | | | | | | |
| AKTO | | | | Sn | Sn | 09 58 21.6 | -10 |
| | comp=E,0.2nm,0.3s,baz=148,slow=19,SNR=2.0 | | | | | | |
| AKTO | | | | Lg | Lg | 10 00 04.1 | |
| | comp=E,0.2nm,0.3s,baz=242,slow=8.4,SNR=4.0 | | | | | | |
| BVA0 | Borovoye Array | 14.75 | 2 | ⇓Pn | Pn | 09 55 48.4 | -1.8 |
| | comp=E,2.2nm,0.5s,baz=168,slow=8.1,SNR=14 | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 10 00 00.4 | |
| | comp=E,11nm,1.2s,baz=160,slow=25,SNR=3.6 | | | | | | |
| BVAR | Borovoye Array | 14.75 | 2 | Pn | Pn | 09 55 48.5 | -1.7 |
| | comp=E,0.6nm,0.3s,baz=163,slow=12,SNR=9.3 | | | | | | |
| BRVK | Borovoye | 14.78 | 2 | ⇑Pn | Pn | 09 55 49.7 | -0.9 |
| | comp=E,6.4nm,0.8s | | | | | | |
| BRVK | Borovoye | 14.78 | 2 | *e*Pn | Pn | 09 55 49.0 | -1.5 |
| | comp=E,5.2nm,0.6s | | | | | | |
| KOLN | Koldanda | 15.73 | 128 | *e*P | Pn | 09 56 01.2 | -2.2 |
| | comp=E,24nm,0.6s | | | | | | |
| GKN | Gorkha | 16.22 | 125 | *e*P | Pn | 09 56 07.8 | -2.0 |
| | comp=E,35nm,0.5s | | | | | | |
| KKN | Kakani | 16.79 | 124 | *e*P | Pn | 09 56 14.9 | -2.1 |
| | comp=E,19nm,0.4s | | | | | | |
| DMN | Daman | 16.80 | 125 | *e*P | Pn | 09 56 14.7 | -2.4 |
| | comp=E,18nm,0.5s | | | | | | |
| PKIN | Phulchoki | 17.01 | 124 | *e*Pn | Pn | 09 56 17.5 | -2.3 |
| | comp=E,9.1nm,0.4s | | | | | | |
| PKI | Pulchoki | 17.02 | 124 | *e*P | Pn | 09 56 17.5 | -2.5 |
| | comp=E,22nm,0.6s | | | | | | |
| GUN | Gumba | 17.10 | 122 | *e*P | Pn | 09 56 18.3 | -2.8 |
| | comp=E,66nm,0.9s | | | | | | |
| RAMN | Ramite | 18.22 | 123 | *e*P | Pn | 09 56 30.9 | -3.9 |
| | comp=E,9.0nm,0.6s | | | | | | |
| ODAN | Odare | 18.80 | 122 | *e*P | P | 09 56 36.5 | -4.9 |
| | comp=E,8.8nm,0.3s | | | | | | |
| ZALV | Zalesovo Beam | 18.82 | 29 | P | P | 09 56 39.0 | -2.2 |
| | comp=E,0.5nm,0.3s,baz=229,slow=15,SNR=4.8 | | | | | | |
| GNI | Garni | 19.33 | 283 | P | Pn | 09 56 50.2 | +2.0 |
| | comp=E,0.8nm,0.3s,baz=250,slow=11,SNR=3.3 | | | | | | |
| ARU | Arti | 19.59 | 342 | P | P | 09 56 49.0 | -0.5 |
| | comp=E,0.0nm,0.3s,baz=307,slow=20,SNR=2.5 | | | | | | |
| KBZ | Khabaz | 20.82 | 294 | P | P | 09 57 03.8 | +0.7 |
| | comp=E,3.6nm,0.7s,baz=103,slow=9.7,SNR=10 | | | | | | |
| GTA | Gaotai | 23.52 | 78 | *e*P | P | 09 57 32.9 | +1.1 |
| GTA | | | | pP | pP | 09 57 37.5 | +2.1 |
| GTA | | | | sP | sP | 09 57 40.0 | +3.1 |
| GTA | | | | PMZ | | | |
| | comp=E,3.0nm,1.0s | | | | | | |
| BRTR | Keskin Array B | 27.86 | 284 | P | P | 09 58 13.8 | +2.3 |
| | comp=E,1.1nm,0.8s,baz=110,slow=9.7,SNR=4.9 | | | | | | |
| SONM | Songino Array | 28.30 | 58 | P | P | 09 58 14.7 | -0.5 |
| | comp=E,0.3nm,0.3s,baz=266,slow=9.8,SNR=3.2 | | | | | | |
| AKASG | Malin Array Be | 30.97 | 307 | P | P | 09 58 38.6 | -0.1 |
| | comp=E,0.6nm,0.4s,baz=80,slow=7.2,SNR=7.0 | | | | | | |
| HHC | Hu-ho-hao-te | 32.24 | 72 | *e*P | P | 09 58 50.8 | +0.7 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,21nm,0.7s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,53nm,4.1s | | | | | | |
| FINES | FINESS Array B | 35.38 | 325 | P | P | 09 59 16.8 | -0.2 |
| | comp=Z,1.7nm,0.6s,baz=104,slow=13,SNR=8.3 | | | | | | |
| ARCES | ARCESS Array B | 39.07 | 337 | P | P | 09 59 48.5 | +0.3 |
| | comp=Z,2.1nm,0.7s,baz=97,slow=6.6,SNR=15 | | | | | | |
| GERES | GERESS Array B | 41.00 | 304 | P | P | 10 00 05.8 | +1.1 |
| | comp=Z,0.8nm,0.6s,baz=66,slow=6.4,SNR=5.2 | | | | | | |
| NB2 | NORSAR Subarra | 42.28 | 322 | P | P | 10 00 13.9 | -1.1 |
| | comp=Z,2.3nm,0.8s,baz=96,slow=8.6 | | | | | | |
| NOA | NORSAR Array B | 42.28 | 322 | P | P | 10 00 14.2 | -0.7 |
| | comp=Z,1.6nm,0.6s,baz=108,slow=7.3,SNR=9.1 | | | | | | |
| ESDC | Sonseca Array | 55.65 | 296 | P | P | 10 01 58.8 | +1.1 |
| | comp=Z,0.1nm,0.3s,baz=59,slow=8.5,SNR=3.2 | | | | | | |
| TORD | Torodi Ar. Bea | 64.67 | 267 | P | P | 10 03 00.9 | +1.1 |
| | comp=Z,0.9nm,0.7s,baz=41,slow=5.4,SNR=7.8 | | | | | | |
| INK | Inuvik | 72.32 | 9 | P | P | 10 03 48.4 | +1.5 |
| | comp=Z,1.1nm,0.5s,baz=20,slow=6.2,SNR=5.6 | | | | | | |
| ILAR | Eielson Array | 73.36 | 15 | P | P | 10 03 54.5 | +1.3 |
| | comp=Z,0.4nm,0.8s,baz=332,slow=4.9,SNR=4.3 | | | | | | |
| YKA | Yellowknife Ar | 79.51 | 2 | P | P | 10 04 28.6 | +0.7 |
| | comp=Z,1.5nm,0.8s,baz=355,slow=5.6,SNR=3.2 | | | | | | |
| WRA | Warramunga Arr | 83.88 | 121 | P | P | 10 04 51.3 | -0.3 |
| | comp=Z,1.0nm,0.8s,baz=326,slow=4.8,SNR=6.9 | | | | | | |
| WRAB | Tennant Creek | 83.88 | 121 | *e*P | P | 10 04 51.4 | -0.2 |
| | comp=Z,5.3nm,1.2s | | | | | | |
| ASAR | Alice Springs | 86.19 | 124 | P | P | 10 05 03.5 | +0.3 |
| | comp=Z,0.3nm,0.5s,baz=308,slow=4.6,SNR=6.3 | | | | | | |

**IDC 02 09:53:57.0**±1.9**, 14°.80S×178°.36W, h0km, mb3.6**/4**, mb1 4.0**/4**, mb1mx3.8**/26**, mbtmp3.6**/4**, Error ellipse: s-maj=117.8km s-min=23.8km az=150.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 45.33 | 256 | P | P | 10 02 17.5 | +0.2 |
| | 0.3nm,0.4s,baz=92,slow=8.2,SNR=8.8 | | | | | | |
| ASAR | Alice Springs | 45.76 | 251 | P | P | 10 02 20.3 | -0.3 |
| | 7.7nm,0.5s,baz=84,slow=8.6,SNR=134 | | | | | | |
| NVAR | Mina Array Bea | 77.17 | 44 | P | P | 10 05 53.8 | +0.7 |
| | 0.5nm,0.6s,baz=230,slow=8.1,SNR=5.3 | | | | | | |
| ILAR | Eielson Array | 82.86 | 13 | P | P | 10 06 22.4 | -0.6 |
| | 0.4nm,0.4s,baz=228,slow=5.7,SNR=8.2 | | | | | | |
| TXAR | Lajitas Array | 84.30 | 58 | P | P | 10 06 31.2 | -0.2 |
| | 0.3nm,0.8s,baz=231,slow=6.0,SNR=4.5 | | | | | | |

*DDA **02** 10:01:29.8, 36°.94N×27°.78E, h7km, Md3.2*

*ISCJB **02** 10:01:29.8±0.5, 36°.90N±0°.02×27°.75E±0°.03, h13km±3km, Error ellipse: s-maj=3.7km s-min=3.6km az=163.1*

*ISK **02** 10:01:30.0, 36°.98N×27°.78E, h11km, ML2.9*

*CSEM **02** 10:01:30.3±0.1, 36°.92N×27°.74E, h15km, MD3.2, Error ellipse: s-maj=3.1km s-min=2.9km az=101.0*

*THE **02** 10:01:30.4, 36°.99N×27°.79E, h13km±3km, ML3.3/3, Error ellipse: s-maj=3.6km s-min=1.4km az=238.0*

*ATH **02** 10:01:30.4, 36°.88N×27°.70E, h39km±1km, MD3.3/6*

**ISC 02 10:01:30.4**±0.9**, 36°.93N**±0°.02×**27°.75E**±0°.02**, h17km**±7km**, n63, σ0s.70**/94**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BDRM | Kayabasi | 0.28 | 300 | *i* P | Pg | 10 01 36.5 | 0.0 |
| BDRM | | | | *i* S | Sg | 10 01 41.0 | +0.3 |
| BDRM | Kayabasi | 0.28 | 300 | P | Pg | 10 01 36.5 | 0.0 |
| BDRM | | | | S | Sg | 10 01 41.0 | +0.3 |
| BODT | Bodrum | 0.38 | 291 | *e*PG | Pg | 10 01 38.0 | -0.2 |
| BODT | | | | *e*SG | Sb | 10 01 44.6 | +0.4 |
| BODT | Bodrum | 0.38 | 291 | *e*Pg | Pg | 10 01 38.0 | -0.2 |
| BODT | | | | *e*Sg | Sb | 10 01 44.6 | +0.4 |
| YER | Yerkesik | 0.47 | 64 | *e*PG | Pg | 10 01 39.1 | -0.8 |
| YER | | | | *e*SG | Sg | 10 01 46.1 | -0.2 |
| YER | Yerkesik | 0.47 | 64 | *e*Pg | Pg | 10 01 39.1 | -0.8 |
| YER | | | | *e*Sg | Sg | 10 01 46.2 | -0.2 |
| NIS1 | Nisyros Isl. | 0.56 | 235 | *e*PN | Pg | 10 01 41.8 | +0.3 |
| NIS1 | | | | *e*SN | Sb | 10 01 50.1 | +0.6 |
| NIS1 | Nisyros Isl. | 0.56 | 235 | P | Pg | 10 01 41.9 | +0.4 |
| NIS1 | | | | S | Sn | 10 01 52.4 | -0.1 |
| NIS1 | Nisyros Isl. | 0.56 | 235 | *e*Pn | Pg | 10 01 41.8 | +0.3 |
| NIS1 | | | | *e*Sn | Sb | 10 01 50.1 | +0.6 |
| NIS1 | | | | S | Sn | 10 01 52.4 | -0.1 |
| NISR | Nisiros | 0.59 | 238 | P | Pg | 10 01 42.2 | +0.2 |
| NISR | | | | S | Sn | 10 01 52.7 | -0.5 |
| NISR | Nisiros | 0.59 | 238 | P | Pg | 10 01 42.2 | +0.2 |
| NISR | | | | S | Sn | 10 01 52.7 | -0.5 |
| TURN | Turunc | 0.69 | 94 | P | Pb | 10 01 37.8 | -6.0 |
| TURN | | | | S | Sg | 10 01 44.1 | -8.9 |
| DALY | Dalyan (Mu˜la | 0.73 | 98 | *e*PG | Pb | 10 01 43.5 | -1.2 |
| DALY | Dalyan (Mu˜la | 0.73 | 98 | *e*Pg | Pb | 10 01 43.5 | -1.2 |
| AYDN | Tasoluk | 0.74 | 8 | *i* P | Pn | 10 01 45.5 | -0.6 |
| AYDN | | | | *i* S | Sg | 10 01 55.5 | +0.8 |
| AYDN | Tasoluk | 0.74 | 8 | P | Pn | 10 01 45.5 | -0.6 |
| AYDN | | | | S | Sg | 10 01 55.5 | +0.8 |
| ARG | Arkhangelos | 0.77 | 157 | *e*PN | Pb | 10 01 45.4 | +0.1 |
| ARG | | | | *e*SN | Sn | 10 01 56.8 | -0.9 |
| ARG | Arkhangelos | 0.77 | 157 | P | Pb | 10 01 45.3 | 0.0 |
| ARG | | | | S | Sn | 10 01 58.0 | +0.3 |
| ARG | Arkhangelos | 0.77 | 157 | P | Pb | 10 01 45.3 | 0.0 |
| ARG | | | | *e*Sn | Sn | 10 01 56.8 | -0.9 |
| ARG | | | | S | Sn | 10 01 58.0 | +0.3 |
| GCAM | G?zelcaml? | 0.88 | 332 | *i* P | Pb | 10 01 47.0 | -0.1 |
| GCAM | | | | *i* S | Sb | 10 01 58.7 | +0.2 |
| GCAM | G?zelcaml? | 0.88 | 332 | P | Pb | 10 01 47.0 | -0.1 |
| GCAM | | | | S | Sb | 10 01 58.7 | +0.2 |
| AYDB | Zeytinkoy-Aydi | 1.02 | 6 | *e*PG | Pb | 10 01 48.9 | -0.9 |
| AYDB | Zeytinkoy-Aydi | 1.02 | 6 | *e*Pg | Pb | 10 01 48.9 | -0.9 |
| SMG | Samos | 1.07 | 317 | *e*PN | Pb | 10 01 50.3 | -0.2 |
| SMG | | | | *e*SN | Sg | 10 02 05.3 | +0.3 |
| SMG | Samos | 1.07 | 317 | P | Pb | 10 01 50.2 | -0.2 |
| SMG | | | | S | Sb | 10 02 03.2 | -0.9 |
| SMG | Samos | 1.07 | 317 | P | Pb | 10 01 50.2 | -0.2 |
| SMG | | | | S | Sb | 10 02 03.2 | -0.9 |
| SMG | | | | *e*Sn | Sg | 10 02 05.3 | +0.3 |
| FETY | Fethiye | 1.11 | 105 | *e*PN | Pg | 10 01 51.4 | -0.4 |
| FETY | Fethiye | 1.11 | 105 | *e*Pn | Pg | 10 01 51.4 | -0.4 |
| DNZL | Cakiroluk | 1.28 | 53 | *i* P | Pb | 10 01 53.9 | -0.3 |
| DNZL | | | | *i* S | Sn | 10 02 10.5 | -0.2 |
| DNZL | Cakiroluk | 1.28 | 53 | P | Pb | 10 01 53.9 | -0.3 |
| DNZL | | | | S | Sn | 10 02 10.5 | -0.2 |
| DENT | Denizli | 1.31 | 51 | *e*PN | Pb | 10 01 54.5 | -0.1 |
| DENT | Denizli | 1.31 | 51 | *e*Pn | Pb | 10 01 54.5 | -0.1 |
| KARP | Karpathos | 1.46 | 199 | *e*PN | Pn | 10 01 55.3 | -0.6 |
| KARP | | | | *e*SN | Sn | 10 02 13.4 | -1.2 |
| KARP | Karpathos | 1.46 | 199 | P | Pn | 10 01 56.2 | +0.3 |
| KARP | | | | S | Sb | 10 02 15.4 | +0.1 |
| KARP | Karpathos | 1.46 | 199 | *e*Pn | Pn | 10 01 55.3 | -0.6 |
| KARP | Karpathos | 1.46 | 199 | P | Pn | 10 01 56.2 | +0.3 |
| KARP | | | | *e*Sn | Sn | 10 02 13.4 | -1.2 |
| KARP | | | | S | Sb | 10 02 15.4 | +0.1 |
| IZM | Izmir | 1.52 | 345 | *e*PN | Pn | 10 01 56.7 | -0.1 |
| IZM | Izmir | 1.52 | 345 | *e*Pn | Pn | 10 01 56.7 | -0.1 |
| AKAS | Kas | 1.65 | 114 | P | Pg | 10 02 02.9 | +0.9 |
| AKAS | | | | S | Sg | 10 02 25.5 | +2.0 |
| URLA | Izmir | 1.70 | 328 | *i* P | Pn | 10 01 59.2 | -0.1 |
| URLA | Izmir | 1.70 | 328 | P | Pn | 10 01 59.2 | -0.1 |
| URLA | | | | S | Sb | 10 02 23.7 | +1.4 |
| ELL | Elmali | 1.74 | 95 | *e*PN | Pb | 10 02 01.3 | -0.6 |
| ELL | Elmali | 1.74 | 95 | *e*Pn | Pb | 10 02 01.3 | -0.6 |
| KULA | Kula-Manisa | 1.74 | 24 | *e*PN | Pn | 10 01 59.9 | 0.0 |
| KULA | Kula-Manisa | 1.74 | 24 | *e*Pn | Pn | 10 01 59.9 | 0.0 |
| APE | Apeiranthos | 1.78 | 275 | *e*PN | Pn | 10 01 59.8 | -0.6 |
| APE | Apeiranthos | 1.78 | 275 | *e*Pn | Pn | 10 01 59.8 | -0.6 |
| AKS | Akhisar | 1.95 | 1 | *e*PN | Pn | 10 02 02.4 | -0.3 |
| AKS | Akhisar | 1.95 | 1 | *e*Pn | Pn | 10 02 02.4 | -0.3 |
| CHOS | Chios island | 1.98 | 318 | *e*PN | Pn | 10 02 03.3 | +0.1 |
| CHOS | Chios island | 1.98 | 318 | *e*Pn | Pn | 10 02 03.3 | +0.1 |
| ZKR | Zakros | 2.19 | 215 | *e*PN | Pn | 10 02 05.0 | -1.0 |
| ZKR | Zakros | 2.19 | 215 | *e*Pn | Pn | 10 02 05.0 | -1.0 |
| DKL | Dikili | 2.24 | 343 | *e*PN | Pn | 10 02 07.7 | +1.0 |
| DKL | Dikili | 2.24 | 343 | *e*Pn | Pn | 10 02 07.7 | +1.0 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **SUTC** | **Sutluce-Ispart** | **2.65** | **77** | *e*PN | **Pn** | **10 02 14.1** | **+1.6** |
| **SUTC** | **Sutluce-Ispart** | **2.65** | **77** | *e*Pn | **Pn** | **10 02 14.1** | **+1.6** |
| **IDI** | **Anoyia** | **2.83** | **236** | *e*PN | **Pn** | **10 02 14.2** | **-0.7** |
| **IDI** | **Anoyia** | **2.83** | **236** | *e*Pn | **Pn** | **10 02 14.2** | **-0.7** |
| **GADA** | **Gvkgeada** | **3.57** | **337** | *e*PN | **Pn** | **10 02 26.3** | **+1.4** |
| **GADA** | **Gvkgeada** | **3.57** | **337** | *e*Pn | **Pn** | **10 02 26.3** | **+1.4** |
| **GELI** | **Tayfur-Gelibol** | **3.61** | **344** | *e*PN | **Pn** | **10 02 26.8** | **+1.3** |
| **GELI** | **Tayfur-Gelibol** | **3.61** | **344** | *e*Pn | **Pn** | **10 02 26.8** | **+1.3** |

*ISCJB* ***02*** *10:13:21.7±0.4, 67°.57N±0°.04×30°.39E±0°.06, h0km, Error ellipse: s-maj=5.8km s-min=3.4km az=172.0*
*CSEM* ***02*** *10:13:22.7±0.5, 67°.63N×30°.42E, h2km, ML3.4, Error ellipse: s-maj=10.4km s-min=8.5km az=74.0, Mining explosion.*
*HEL* ***02*** *10:13:22.2±0.3, 67°.61N×30°.63E, h0km, ML2.1, ML1.6(UPP), Explosion*
*KOLA* ***02*** *10:13:23.9, 67°.63N×30°.42E, h0km*
*NAO* ***02*** *10:13:24.3±0.8, 67°.60N×30°.50E, ML3.4*
*UPP* ***02*** *10:13:26.3, 67°.55N×29°.94E, h0km, ML1.6, Suspected Mining explosion.*
*BER* ***02*** *10:13:26.4±2.9, 67°.56N×30°.56E, h0km, ML3.4(NAO), Suspected explosion*
**ISC 02 10:13:23.1**±0.8**, 67°.58N**±0°.03×**30°.57E**±0°.03**, h0**km**, n47,** σ**1ˢ29**/74**, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APA0** | **Apatity Array** | **0.93** | **87** | Pg | **Pb** | **10 13 41.5** | **-0.5** |
| | baz=270,slow=16 | | | | | | |
| APA0 | | | | Lg | Lg | 10 13 56.6 | |
| | baz=272,slow=28 | | | | | | |
| APA0 | | | | Rg | Rg | 10 14 00.5 | |
| | baz=259,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **0.93** | **87** | Pg | **Pb** | **10 13 41.5** | **-0.5** |
| | baz=270,slow=16 | | | | | | |
| APA0 | | | | Lg | Lg | 10 13 56.6 | |
| | baz=272,slow=28 | | | | | | |
| APA0 | | | | Rg | Rg | 10 14 00.5 | |
| | baz=259,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **0.93** | **87** | P | **Pb** | **10 13 41.5** | **-0.5** |
| APA0 | | | | S | **Sb** | **10 13 54.4** | **-0.5** |
| **APA0** | **Apatity Array** | **0.93** | **87** | Pg | **Pb** | **10 13 41.5** | **-0.5** |
| | SNR=90 | | | | | | |
| APA0 | | | | Lg | Lg | 10 13 56.7 | |
| | SNR=5.7 | | | | | | |
| **APA** | **Apatity** | **1.09** | **89** | P | **Pg** | **10 13 44.2** | **+0.3** |
| APA | | | | S | **Sb** | **10 13 59.1** | **-0.3** |
| **SGF** | **Sodankyl** | **1.56** | **267** | *e*PN | **Pn** | **10 13 51.5** | **-0.6** |
| SGF | | | | *e*SN | **Sg** | **10 14 16.2** | **+3.0** |
| **SGF** | **Sodankyl** | **1.56** | **267** | Pn | **Pn** | **10 13 51.4** | **-0.6** |
| SGF | | | | Sn | **Sg** | **10 14 16.2** | **+3.0** |
| **KU6** | **Riekki** | **1.58** | **190** | *e*PN | **Pn** | **10 13 51.7** | **-0.6** |
| | baz=15 | | | | | | |
| KU6 | | | | MSG | | 10 14 11.6 | |
| | comp=Z,7.8nm,0.2s | | | | | | |
| KU6 | | | | *e*SN | **Sg** | **10 14 15.0** | **+1.1** |
| **KU6** | **Riekki** | **1.58** | **190** | Pn | **Pn** | **10 13 51.7** | **-0.6** |
| KU6 | | | | Sn | **Sg** | **10 14 15.0** | **+1.1** |
| **MSF** | **Maaselka** | **1.78** | **201** | *e*PG | **Pn** | **10 13 55.2** | **+0.1** |
| **MSF** | **Maaselka** | **1.78** | **201** | Pg | **Pn** | **10 13 55.2** | **+0.1** |
| **RNF** | **Rovaniemi** | **2.03** | **243** | *e*PB | **Pn** | **10 13 58.6** | **+0.1** |
| | baz=58 | | | | | | |
| RNF | | | | *e*SG | **Sb** | **10 14 26.5** | **-0.1** |
| **RNF** | **Rovaniemi** | **2.03** | **243** | Pb | **Pn** | **10 13 58.6** | **+0.1** |
| RNF | | | | Sg | **Sb** | **10 14 26.5** | **-0.1** |
| **KEV** | **Kevo** | **2.55** | **331** | *e*PB | **Pn** | **10 14 06.2** | **+0.6** |
| KEV | | | | MSG | | 10 14 35.9 | |
| | comp=Z,13nm,0.2s | | | | | | |
| KEV | | | | *e*SG | **Sb** | **10 14 40.7** | **-0.7** |
| **KEV** | **Kevo** | **2.55** | **331** | Pb | **Pn** | **10 14 06.1** | **+0.6** |
| KEV | | | | Sg | **Sb** | **10 14 40.7** | **-0.7** |
| **ARA0** | **ARCESS Array S** | **2.71** | **319** | Pn | **Pn** | **10 14 08.2** | **+0.4** |
| | baz=138,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sb** | **10 14 43.5** | **-2.5** |
| | baz=134,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 14 48.6 | |
| | baz=133,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.71** | **319** | Pn | **Pn** | **10 14 08.2** | **+0.4** |
| | baz=138,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sb** | **10 14 43.5** | **-2.5** |
| | baz=134,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 14 48.6 | |
| | baz=133,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.71** | **319** | Pn | **Pn** | **10 14 08.2** | **+0.4** |
| | SNR=50 | | | | | | |
| ARA0 | | | | Sn | **Sb** | **10 14 43.5** | **-2.5** |
| | SNR=50 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 14 48.6 | |
| | SNR=2.3 | | | | | | |
| **ARE0** | **ARCESS Array S** | **2.71** | **319** | *e*PB | **Pn** | **10 14 08.2** | **+0.4** |
| ARE0 | | | | *e* | | 10 14 33.9 | |
| **ARE0** | **ARCESS Array S** | **2.71** | **319** | Pb | **Pn** | **10 14 08.2** | **+0.4** |
| **HEF** | **Hetta** | **2.73** | **291** | *e*PB | **Pn** | **10 14 08.8** | **+0.6** |
| HEF | | | | MSG | | 10 14 42.9 | |
| | comp=Z,8.9nm,0.2s | | | | | | |
| HEF | | | | *e*SG | **Sb** | **10 14 45.6** | **-1.2** |
| **HEF** | **Hetta** | **2.73** | **291** | Pb | **Pn** | **10 14 08.7** | **+0.6** |
| HEF | | | | Sg | **Sb** | **10 14 45.6** | **-1.2** |
| **OUL** | **Oulu** | **3.13** | **219** | *e*PG | **Pb** | **10 14 18.4** | **-1.2** |
| | baz=38 | | | | | | |
| **LANU** | **Lannavaara** | **3.29** | **282** | *e*P | **Pn** | **10 14 15.1** | **-0.8** |
| LANU | | | | *e*SG | **Sb** | **10 15 04.0** | **+1.1** |
| **LANU** | **Lannavaara** | **3.29** | **282** | P | **Pn** | **10 14 15.5** | **-0.4** |
| **MASU** | **Masugnsbyn** | **3.30** | **272** | *e*P | **Pn** | **10 14 15.6** | **-0.3** |
| **MASU** | **Masugnsbyn** | **3.30** | **272** | P | **Pn** | **10 14 15.6** | **-0.3** |
| **KALU** | **Kalix** | **3.34** | **242** | *e*P | **Pn** | **10 14 15.7** | **-0.8** |
| **KALU** | **Kalix** | **3.34** | **242** | P | **Pn** | **10 14 15.7** | **-0.8** |
| **ERTU** | **Ertsjaerv** | **3.44** | **256** | *e*P | **Pn** | **10 14 17.8** | **-0.1** |
| ERTU | | | | *e*SB | **Sn** | **10 15 02.0** | **+2.7** |
| **ERTU** | **Ertsjaerv** | **3.44** | **256** | P | **Pn** | **10 14 17.7** | **-0.1** |
| ERTU | | | | Sb | **Sn** | **10 15 01.9** | **+2.7** |
| **DUNU** | **Dundret** | **3.90** | **268** | *e*P | **Pn** | **10 14 23.9** | **-0.3** |
| **DUNU** | **Dundret** | **3.90** | **268** | P | **Pn** | **10 14 23.9** | **-0.3** |
| **KIF** | **Kilpisjarvi** | **3.90** | **296** | *e*P | **Pn** | **10 14 24.6** | **+0.4** |
| | baz=109 | | | | | | |
| KIF | | | | *e* | | 10 15 14.0 | |
| **KIF** | **Kilpisjarvi** | **3.90** | **296** | P | **Pn** | **10 14 24.6** | **+0.4** |
| **NIKU** | **Nikkaluokta** | **4.40** | **279** | *e*P | **Pn** | **10 14 31.3** | **+0.2** |
| **NIKU** | **Nikkaluokta** | **4.40** | **279** | P | **Pn** | **10 14 31.2** | **+0.2** |
| **BURU** | **Burvik** | **4.80** | **236** | *e*P | **Pn** | **10 14 35.9** | **-0.6** |
| BURU | | | | *e*S | **Sn** | **10 15 29.5** | **-3.2** |
| **BURU** | **Burvik** | **4.80** | **236** | P | **Pn** | **10 14 35.9** | **-0.6** |
| BURU | | | | S | **Sn** | **10 15 29.5** | **-3.2** |
| **LILU** | **Lilltraesk** | **4.88** | **247** | *e*P | **Pn** | **10 14 36.6** | **-1.0** |
| **LILU** | **Lilltraesk** | **4.88** | **247** | P | **Pn** | **10 14 36.6** | **-1.0** |
| **SVAU** | **Svanoeiden** | **5.45** | **241** | *e*P | **Pn** | **10 14 44.8** | **-0.6** |
| **SVAU** | **Svanoeiden** | **5.45** | **241** | P | **Pn** | **10 14 44.8** | **-0.6** |
| **UMAU** | **Umeaa** | **5.51** | **232** | *e*P | **Pn** | **10 14 45.9** | **-0.4** |
| **UMAU** | **Umeaa** | **5.51** | **232** | P | **Pn** | **10 14 45.8** | **-0.4** |
| **FIA0** | **FINESS Array S** | **6.46** | **200** | Pn | **Pn** | **10 15 01.0** | **+1.7** |
| | baz=25,slow=11 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **10 16 11.8** | **-1.7** |
| | baz=21,slow=22 | | | | | | |
| FIA0 | | | | Lg | Lg | 10 16 43.9 | |
| | baz=16,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.46** | **200** | Pn | **Pn** | **10 15 01.0** | **+1.7** |
| | baz=25,slow=11 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **10 16 11.8** | **-1.7** |
| | baz=21,slow=22 | | | | | | |
| FIA0 | | | | Lg | Lg | 10 16 43.9 | |
| | baz=16,slow=28 | | | | | | |

**JMA 02 10:35:34.1**±0.4**, 42°.74N**×**148°.94E, h30**km**, M3.6, Off southeast coast of Hokkaido**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NEM2** | **Nemuro 2** | **2.42** | **286** | P | Pn | 10 36 10.5 | -1.1 |
| NEM2 | | | | *e*S | Sn | 10 36 38.1 | -2.2 |
| **JAK** | **Akkeshi** | **3.13** | **276** | P | Pn | 10 36 20.4 | -0.9 |
| JAK | | | | *e*S | Sn | 10 36 54.7 | -3.0 |
| **JNK** | **Nakash** | **3.20** | **287** | P | Pn | 10 36 21.9 | -0.5 |
| JNK | | | | *e*S | Sn | 10 36 56.4 | -3.1 |
| **JOB** | **Onbets** | **3.76** | **274** | P | Pn | 10 36 29.2 | -0.8 |
| **JAR** | **Ashorobuto** | **3.83** | **280** | P | Pn | 10 36 30.2 | -0.8 |
| JAR | | | | *e*S | Sn | 10 37 12.6 | -2.4 |
| **JTKR** | **Abashiri--Toko** | **3.87** | **290** | *e*S | Sn | 10 37 15.0 | -0.9 |
| **JCH** | **Churui** | **4.11** | **270** | P | Pn | 10 36 34.2 | -0.7 |
| JCH | | | | *e*S | Sn | 10 37 18.5 | -3.5 |
| **JNBK** | **Urakawa-nobuka** | **4.60** | **266** | P | Pn | 10 36 40.5 | -1.0 |
| JNBK | | | | *e*S | Sn | 10 37 30.3 | -3.6 |
| **JFR** | **Furan** | **4.68** | **277** | P | Pn | 10 36 42.4 | -0.3 |
| **JBT2** | **Biratori 2** | **4.84** | **273** | P | Pn | 10 36 43.9 | -1.0 |
| JBT2 | | | | *e*S | Sn | 10 37 37.6 | -2.3 |
| **JNB** | **Noboribetsu** | **5.84** | **270** | *e*S | Sn | 10 38 01.0 | -3.4 |
| **JKB** | **Kayabe** | **5.92** | **264** | P | Pn | 10 36 59.2 | -0.5 |
| JKB | | | | *e*S | Sn | 10 38 01.2 | -5.3 |
| **JTH** | **Tanohata** | **6.02** | **245** | *e*S | Sn | 10 37 59.9 | -9.0 |
| **JTM** | **Tenmabayashi** | **6.20** | **254** | *e*S | Sn | 10 38 06.8 | -6.6 |
| **JRG** | **Rokugo** | **7.11** | **245** | *e*S | Sn | 10 38 29.5 | -6.3 |
| **JIO** | **Ouri** | **7.19** | **236** | *e*S | Sn | 10 38 27.1 | -11 |

**IDC 02 10:45:49.8**±2.0**, 9°.21N**×**92°.79E, h0**km**, mb3.4**/4**, mb1 3.6**/5**, mb1mx3.3**/48**, mbtmp3.4**/5**, ML3.8**/1**, Error ellipse: s-maj=74.6km s-min=22.0km az=61.0, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **10.96** | **32** | Pn | Pn | 10 48 28.6 | +0.6 |
| | 0.2nm,0.3s,baz=220,slow=15,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **38.51** | **348** | P | P | 10 53 13.9 | 0.0 |
| | 0.3nm,0.5s,baz=176,slow=9.5,SNR=2.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.94** | **347** | P | P | 10 53 49.8 | -0.5 |
| | 0.2nm,0.6s,baz=146,slow=5.1,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.12** | **126** | P | P | 10 54 47.0 | -0.2 |
| | 0.5nm,0.4s,baz=306,slow=8.3,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **51.79** | **130** | P | P | 10 54 59.9 | +0.2 |
| | 0.1nm,0.3s,baz=304,slow=8.0,SNR=5.4 | | | | | | |

*ISCJB* ***02*** *10:50:13.5±0.3, 39°.68S±0°.03×174°.07E±0°.04, h206km±3km, mb3.8/5, Error ellipse: s-maj=6.4km s-min=3.7km az=41.7*
*IDC* ***02*** *10:50:13.3±1.1, 39°.79S×174°.43E, h192km±13km, mb3.7/4, mb1 4.0/6, mb1mx3.5/29, mbtmp4.4/6, Error ellipse: s-maj=36.1km s-min=15.5km az=145.0*
*NEIC* ***02*** *10:50:15.1, 39°.68S×174°.17E, h203km, MG4.9(WEL), After WEL.*
*WEL* ***02*** *10:50:15.1±0.3, 39°.68S×174°.17E, h203km±2km, ML4.9/23, Error ellipse: s-maj=1.6km s-min=1.1km az=90.0*
*WEL Felt from Manawatu to Marlborough, maximum reported intensity MM 4.*
**ISC 02 10:50:14.6**±0.7**, 39°.72S**±0°.05×**174°.14E**±0°.05**, h204**km±5km**, n235,** σ**1ˢ09**/251**, mb3.8**/5**, 35C-31D, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LREZ** | **Lake Rotokare** | **0.33** | **38** | ⇑PN | **Pn** | **10 50 41.8** | **+0.1** |
| LREZ | | | | SN | **S** | **10 51 02.3** | **-0.5** |
| **NMEZ** | **Namu Road** | **0.37** | **327** | ⇑PN | **Pn** | **10 50 41.9** | **+0.1** |
| NMEZ | | | | SN | **S** | **10 51 02.0** | **-0.9** |
| **NMEZ** | **Namu Road** | **0.37** | **327** | Pn | **Pn** | **10 50 41.9** | **+0.1** |
| NMEZ | | | | Sn | **S** | **10 51 02.0** | **-0.9** |
| **PREZ** | **Palmer Road** | **0.38** | **3** | ⇑PN | **Pn** | **10 50 41.8** | **-0.1** |
| PREZ | | | | SN | **S** | **10 51 01.9** | **-1.2** |
| **PREZ** | **Palmer Road** | **0.38** | **3** | Pn | **Pn** | **10 50 41.8** | **-0.1** |
| PREZ | | | | Sn | **S** | **10 51 01.9** | **-1.2** |
| **KHEZ** | **Kahui Hut** | **0.44** | **347** | ⇑PN | **Pn** | **10 50 42.2** | **0.0** |
| KHEZ | | | | SN | **S** | **10 51 02.0** | **-1.6** |
| **KHEZ** | **Kahui Hut** | **0.44** | **347** | Pn | **Pn** | **10 50 42.2** | **0.0** |
| **NEZ** | **North Egmont** | **0.45** | **356** | PN | **Pn** | **10 50 42.0** | **-0.3** |
| NEZ | | | | SN | **S** | **10 51 03.0** | **-0.6** |
| **NEZ** | **North Egmont** | **0.45** | **356** | Pn | **Pn** | **10 50 42.0** | **-0.3** |
| NEZ | | | | Sn | **S** | **10 51 03.0** | **-0.6** |
| **NWEZ** | **Newall Road** | **0.49** | **335** | ⇑PN | **Pn** | **10 50 42.3** | **+0.1** |
| **NWEZ** | **Newall Road** | **0.49** | **335** | Pn | **Pn** | **10 50 42.3** | **+0.1** |
| **DREZ** | **Durham Road** | **0.54** | **5** | ⇑PN | **Pn** | **10 50 42.2** | **-0.2** |
| DREZ | | | | SN | **S** | **10 51 02.9** | **-1.0** |
| **DREZ** | **Durham Road** | **0.54** | **5** | Pn | **Pn** | **10 50 42.2** | **-0.2** |
| DREZ | | | | Sn | **S** | **10 51 02.9** | **-1.0** |
| **PKE** | **Pukeiti** | **0.54** | **348** | PN | **Pn** | **10 50 42.2** | **-0.2** |
| **PKE** | **Pukeiti** | **0.54** | **348** | Pn | **Pn** | **10 50 42.2** | **-0.2** |
| **WAZ** | **Wanganui** | **0.66** | **93** | PN | **Pn** | **10 50 43.6** | **+0.7** |
| **WAZ** | **Wanganui** | **0.66** | **93** | Pn | **Pn** | **10 50 43.3** | **+0.4** |
| **MHEZ** | **Mangahewa** | **0.66** | **13** | ⇑PN | **Pn** | **10 50 42.9** | **0.0** |
| **MHEZ** | **Mangahewa** | **0.66** | **13** | Pn | **Pn** | **10 50 42.9** | **0.0** |
| **VRZ** | **Vera Road** | **0.77** | **39** | ⇑PN | **Pn** | **10 50 42.8** | **-0.7** |
| **VRZ** | **Vera Road** | **0.77** | **39** | Pn | **Pn** | **10 50 42.8** | **-0.7** |
| **PKVZ** | **Pokaka** | **1.03** | **66** | ⇑PN | **Pn** | **10 50 44.8** | **-0.3** |
| PKVZ | | | | SN | **S** | **10 51 06.3** | **-2.2** |
| **PKVZ** | **Pokaka** | **1.03** | **66** | Pn | **Pn** | **10 50 44.8** | **-0.3** |
| PKVZ | | | | Sn | **S** | **10 51 06.3** | **-2.2** |
| **MTVZ** | **Mangateitei** | **1.08** | **72** | PN | **Pn** | **10 50 45.5** | **0.0** |
| **MTVZ** | **Mangateitei** | **1.08** | **72** | Pn | **Pn** | **10 50 45.5** | **0.0** |
| **DUWZ** | **D'Urville Isla** | **1.09** | **189** | ⇑PN | **Pn** | **10 50 46.0** | **+0.6** |
| **DUWZ** | **D'Urville Isla** | **1.09** | **189** | Pn | **Pn** | **10 50 46.0** | **+0.6** |
| **TRVZ** | **Turoa** | **1.17** | **69** | PN | **Pn** | **10 50 46.2** | **-0.2** |
| **TRVZ** | **Turoa** | **1.17** | **69** | Pn | **Pn** | **10 50 46.2** | **-0.2** |
| **FWVZ** | **Far West T-bar** | **1.19** | **67** | ⇓PN | **Pn** | **10 50 46.1** | **-0.4** |
| **FWVZ** | **Far West T-bar** | **1.19** | **67** | Pn | **Pn** | **10 50 46.1** | **-0.4** |
| **DRZ** | **Dome Shelter** | **1.19** | **68** | PN | **Pn** | **10 50 46.5** | **0.0** |
| **DRZ** | **Dome Shelter** | **1.19** | **68** | Pn | **Pn** | **10 50 46.5** | **0.0** |
| **WNVZ** | **Wahianoa** | **1.20** | **71** | ⇓PN | **Pn** | **10 50 46.4** | **0.0** |
| **WNVZ** | **Wahianoa** | **1.20** | **71** | Pn | **Pn** | **10 50 46.4** | **0.0** |
| **TWVZ** | **Taurewa** | **1.20** | **58** | ⇓PN | **Pn** | **10 50 45.7** | **-0.6** |
| **TWVZ** | **Taurewa** | **1.20** | **58** | Pn | **Pn** | **10 50 45.8** | **-0.6** |
| **COVZ** | **Chateau Observ** | **1.21** | **65** | PN | **Pn** | **10 50 46.2** | **-0.2** |
| **COVZ** | **Chateau Observ** | **1.21** | **65** | Pn | **Pn** | **10 50 46.2** | **-0.2** |
| **WPVZ** | **Whakapapa** | **1.21** | **65** | ⇓PN | **Pn** | **10 50 46.3** | **-0.2** |
| **WPVZ** | **Whakapapa** | **1.21** | **65** | Pn | **Pn** | **10 50 46.3** | **-0.2** |
| **NGZ** | **Ngauruhoe** | **1.26** | **65** | PN | **Pn** | **10 50 46.6** | **-0.2** |
| NGZ | | | | SN | **S** | **10 51 09.0** | **-2.5** |
| **NGZ** | **Ngauruhoe** | **1.26** | **65** | Pn | **Pn** | **10 50 46.6** | **-0.2** |
| NGZ | | | | Sn | **S** | **10 51 09.0** | **-2.5** |
| **TUVZ** | **Tukino** | **1.26** | **69** | PN | **Pn** | **10 50 46.9** | **+0.1** |
| **TUVZ** | **Tukino** | **1.26** | **69** | Pn | **Pn** | **10 50 47.0** | **+0.1** |
| **WTVZ** | **West Tongariro** | **1.28** | **62** | PN | **Pn** | **10 50 46.6** | **-0.4** |
| **WTVZ** | **West Tongariro** | **1.28** | **62** | Pn | **Pn** | **10 50 46.6** | **-0.4** |
| **KIW** | **Kapiti Island** | **1.28** | **153** | ⇑PN | **Pn** | **10 50 47.3** | **+0.5** |
| KIW | | | | AML | AML | 10 51 10.8 | |
| KIW | | | | AML | AML | 10 51 11.9 | |
| **KIW** | **Kapiti Island** | **1.28** | **153** | Pn | **Pn** | **10 50 47.3** | **+0.5** |
| **MOVZ** | **Moawhango** | **1.29** | **76** | PN | **Pn** | **10 50 46.6** | **-0.4** |
| **OTVZ** | **Oturere** | **1.31** | **65** | ⇑PN | **Pn** | **10 50 47.3** | **0.0** |
| **OTVZ** | **Oturere** | **1.31** | **65** | Pn | **Pn** | **10 50 47.3** | **0.0** |
| **KRVZ** | **Karewarewa** | **1.32** | **62** | PN | **Pn** | **10 50 47.1** | **-0.3** |
| **KRVZ** | **Karewarewa** | **1.32** | **62** | Pn | **Pn** | **10 50 47.1** | **-0.3** |
| **HIZ** | **Hauiti** | **1.33** | **25** | PN | **Pn** | **10 50 46.4** | **-0.9** |
| **HIZ** | **Hauiti** | **1.33** | **25** | Pn | **Pn** | **10 50 46.1** | **-1.2** |
| **OGWZ** | **Otaki Gorge** | **1.35** | **144** | ⇑PN | **Pn** | **10 50 48.0** | **+0.7** |
| **OGWZ** | **Otaki Gorge** | **1.35** | **144** | Pn | **Pn** | **10 50 48.0** | **+0.7** |
| **POWZ** | **Post Office Ro** | **1.42** | **119** | PN | **Pn** | **10 50 48.2** | **+0.3** |
| **POWZ** | **Post Office Ro** | **1.42** | **119** | Pn | **Pn** | **10 50 48.2** | **+0.3** |
| **TSZ** | **Takapari Road** | **1.44** | **104** | PN | **Pn** | **10 50 48.3** | **+0.1** |
| TSZ | | | | AML | AML | 10 51 13.3 | |
| TSZ | | | | AML | AML | 10 51 14.4 | |
| **TSZ** | **Takapari Road** | **1.44** | **104** | Pn | **Pn** | **10 50 48.1** | **-0.1** |
| **MRZ** | **Mangatainoka R** | **1.45** | **131** | ⇑PN | **Pn** | **10 50 48.5** | **+0.3** |
| MRZ | | | | AML | AML | 10 51 12.8 | |
| MRZ | | | | AML | AML | 10 51 13.8 | |
| **MRZ** | **Mangatainoka R** | **1.45** | **131** | Pn | **Pn** | **10 50 48.1** | **-0.1** |
| **TCW** | **Tory Channel** | **1.49** | **176** | ⇑PN | **Pn** | **10 50 49.5** | **+1.0** |
| TCW | | | | AML | AML | 10 51 13.7 | |
| TCW | | | | AML | AML | 10 51 16.1 | |
| **TCW** | **Tory Channel** | **1.49** | **176** | Pn | **Pn** | **10 50 49.5** | **+1.0** |
| **BHHZ** | **Black Hill Sta** | **1.51** | **82** | ⇓PN | **Pn** | **10 50 48.2** | **-0.6** |
| **BHHZ** | **Black Hill Sta** | **1.51** | **82** | Pn | **Pn** | **10 50 48.2** | **-0.6** |
| **CAW** | **Cannon Point** | **1.56** | **153** | ⇑PN | **Pn** | **10 50 49.7** | **+0.6** |
| CAW | | | | AML | AML | 10 51 15.5 | |
| CAW | | | | AML | AML | 10 51 17.1 | |
| **CAW** | **Cannon Point** | **1.56** | **153** | Pn | **Pn** | **10 50 49.7** | **+0.6** |
| **HOWZ** | **Holdsworth Sta** | **1.58** | **139** | ⇑PN | **Pn** | **10 50 49.7** | **+0.3** |
| **HOWZ** | **Holdsworth Sta** | **1.58** | **139** | Pn | **Pn** | **10 50 49.7** | **+0.3** |
| **PNHZ** | **Pukenui** | **1.60** | **97** | ⇓PN | **Pn** | **10 50 49.8** | **+0.2** |
| **PNHZ** | **Pukenui** | **1.60** | **97** | Pn | **Pn** | **10 50 49.8** | **+0.2** |
| **NNZ** | **Nelson** | **1.60** | **201** | ⇓PN | **Pn** | **10 50 50.0** | **+0.4** |
| **NNZ** | **Nelson** | **1.60** | **201** | Pn | **Pn** | **10 50 50.0** | **+0.4** |
| **WATZ** | **Wairara** | **1.60** | **51** | PN | **Pn** | **10 50 49.2** | **-0.4** |
| **WATZ** | **Wairara** | **1.60** | **51** | Pn | **Pn** | **10 50 49.2** | **-0.4** |
| **PRWZ** | **Pori Road** | **1.63** | **121** | ⇑PN | **Pn** | **10 50 50.5** | **+0.6** |
| **PRWZ** | **Pori Road** | **1.63** | **121** | Pn | **Pn** | **10 50 50.5** | **+0.6** |
| **WEL** | **Wellington** | **1.63** | **163** | ⇑PN | **Pn** | **10 50 50.3** | **+0.5** |
| WEL | | | | AML | AML | 10 51 16.8 | |
| WEL | | | | AML | AML | 10 51 18.0 | |
| **WEL** | **Wellington** | **1.63** | **163** | Pn | **Pn** | **10 50 50.3** | **+0.5** |
| **QRZ** | **Quartz Range** | **1.65** | **228** | ⇑PN | **Pn** | **10 50 49.8** | **-0.2** |
| **QRZ** | **Quartz Range** | **1.65** | **228** | Pn | **Pn** | **10 50 49.8** | **-0.2** |
| **DVHZ** | **Dannevirke** | **1.66** | **111** | ⇓PN | **Pn** | **10 50 50.4** | **+0.3** |
| **DVHZ** | **Dannevirke** | **1.66** | **111** | Pn | **Pn** | **10 50 50.4** | **+0.3** |
| **TIWZ** | **Tintock** | **1.70** | **129** | PN | **Pn** | **10 50 50.9** | **+0.4** |
| TIWZ | | | | AML | AML | 10 51 17.1 | |
| TIWZ | | | | AML | AML | 10 51 20.4 | |
| **TIWZ** | **Tintock** | **1.70** | **129** | Pn | **Pn** | **10 50 50.9** | **+0.4** |
| **TUWZ** | **Tuamarina** | **1.71** | **185** | ⇑PN | **Pn** | **10 50 51.2** | **+0.6** |
| TUWZ | | | | AML | AML | 10 51 18.8 | |
| TUWZ | | | | AML | AML | 10 51 19.4 | |
| **TUWZ** | **Tuamarina** | **1.71** | **185** | Pn | **Pn** | **10 50 51.2** | **+0.6** |
| **KRHZ** | **Kereru** | **1.73** | **88** | ⇓PN | **Pn** | **10 50 50.8** | **0.0** |
| **TLZ** | **Tolley Road** | **1.77** | **39** | PN | **Pn** | **10 50 49.8** | **-1.5** |
| **TLZ** | **Tolley Road** | **1.77** | **39** | Pn | **Pn** | **10 50 49.8** | **-1.5** |
| **MTW** | **Mount Morrison** | **1.77** | **144** | ⇑PN | **Pn** | **10 50 51.4** | **+0.3** |
| MTW | | | | AML | AML | 10 51 19.0 | |
| MTW | | | | AML | AML | 10 51 21.0 | |
| **MTW** | **Mount Morrison** | **1.77** | **144** | Pn | **Pn** | **10 50 51.4** | **+0.3** |
| **BHW** | **Baring Head** | **1.77** | **162** | ⇑PN | **Pn** | **10 50 51.4** | **+0.3** |
| BHW | | | | AML | AML | 10 51 18.5 | |
| BHW | | | | AML | AML | 10 51 20.7 | |
| **BHW** | **Baring Head** | **1.77** | **162** | Pn | **Pn** | **10 50 51.4** | **+0.3** |
| **KWHZ** | **Kaweka Forest** | **1.79** | **81** | ⇓PN | **Pn** | **10 50 51.6** | **+0.2** |
| **KUTZ** | **Kaahu Road** | **1.80** | **47** | ⇓PN | **Pn** | **10 50 51.1** | **-0.5** |
| **KUTZ** | **Kaahu Road** | **1.80** | **47** | Pn | **Pn** | **10 50 51.1** | **-0.5** |
| **WPHZ** | **Waipukurau** | **1.80** | **102** | PN | **Pn** | **10 50 51.9** | **+0.4** |
| **WPHZ** | **Waipukurau** | **1.80** | **102** | Pn | **Pn** | **10 50 51.9** | **+0.4** |
| **BFZ** | **Birch Farm** | **1.88** | **121** | ⇑PN | **Pn** | **10 50 52.5** | **+0.3** |
| BFZ | | | | AML | AML | 10 51 20.8 | |
| BFZ | | | | AML | AML | 10 51 21.0 | |
| BFZ | | | | AML | AML | 10 51 21.9 | |
| BFZ | | | | AML | AML | 10 51 22.4 | |
| **BFZ** | **Birch Farm** | **1.88** | **121** | Pn | **Pn** | **10 50 52.5** | **+0.3** |
| **MSWZ** | **Moikau Station** | **1.89** | **154** | ⇑PN | **Pn** | **10 50 52.5** | **+0.2** |
| MSWZ | | | | AML | AML | 10 51 21.9 | |
| MSWZ | | | | AML | AML | 10 51 22.1 | |
| **MSWZ** | **Moikau Station** | **1.89** | **154** | Pn | **Pn** | **10 50 52.5** | **+0.2** |
| **BKZ** | **Black Stump Fm** | **1.91** | **74** | PN | **Pn** | **10 50 52.1** | **-0.5** |
| BKZ | | | | AML | AML | 10 51 18.7 | |
| BKZ | | | | AML | AML | 10 51 18.7 | |
| **BKZ** | **Black Stump Fm** | **1.91** | **74** | Pn | **Pn** | **10 50 51.7** | **-0.9** |
| **TMWZ** | **Te Maipa** | **1.92** | **136** | ⇑PN | **Pn** | **10 50 53.0** | **+0.4** |
| **TMWZ** | **Te Maipa** | **1.92** | **136** | Pn | **Pn** | **10 50 53.0** | **+0.4** |
| **ANWZ** | **Angora Road** | **1.94** | **113** | PN | **Pn** | **10 50 53.4** | **+0.6** |
| **CPWZ** | **Castlepoint** | **1.97** | **128** | ⇑PN | **Pn** | **10 50 54.0** | **+0.9** |
| **CPWZ** | **Castlepoint** | **1.97** | **128** | Pn | **Pn** | **10 50 54.0** | **+0.9** |
| **PRHZ** | **Porangahau** | **1.99** | **107** | PN | **Pn** | **10 50 53.9** | **+0.5** |
| **PRHZ** | **Porangahau** | **1.99** | **107** | Pn | **Pn** | **10 50 53.9** | **+0.5** |
| **MCHZ** | **McNeill Hill** | **2.00** | **83** | ⇓PN | **Pn** | **10 50 54.1** | **+0.6** |
| **MCHZ** | **McNeill Hill** | **2.00** | **83** | Pn | **Pn** | **10 50 54.1** | **+0.6** |
| **BSWZ** | **Blackbirch Sta** | **2.00** | **186** | PN | **Pn** | **10 50 54.1** | **+0.8** |
| BSWZ | | | | AML | AML | 10 51 23.6 | |
| BSWZ | | | | AML | AML | 10 51 24.6 | |
| **BSWZ** | **Blackbirch Sta** | **2.00** | **186** | Pn | **Pn** | **10 50 54.1** | **+0.8** |
| **CMWZ** | **Cape Campbell** | **2.02** | **178** | PN | **Pn** | **10 50 54.5** | **+0.9** |
| CMWZ | | | | AML | AML | 10 51 26.0 | |
| CMWZ | | | | AML | AML | 10 51 27.3 | |
| **CMWZ** | **Cape Campbell** | **2.02** | **178** | Pn | **Pn** | **10 50 54.5** | **+0.9** |
| **PLWZ** | **Palliser** | **2.03** | **156** | ⇑PN | **Pn** | **10 50 53.8** | **0.0** |
| **PLWZ** | **Palliser** | **2.03** | **156** | Pn | **Pn** | **10 50 53.8** | **0.0** |
| **TRWZ** | **Traveller** | **2.05** | **145** | ⇑PN | **Pn** | **10 50 54.2** | **+0.3** |
| TRWZ | | | | AML | AML | 10 51 23.7 | |
| TRWZ | | | | AML | AML | 10 51 24.8 | |
| **TRWZ** | **Traveller** | **2.05** | **145** | Pn | **Pn** | **10 50 54.2** | **+0.3** |
| **ALRZ** | **Allen Road** | **2.07** | **57** | PN | **Pn** | **10 50 53.2** | **-1.0** |
| **ALRZ** | **Allen Road** | **2.07** | **57** | Pn | **Pn** | **10 50 53.2** | **-1.0** |
| **KAHZ** | **Kahuranaki** | **2.11** | **93** | ⇓PN | **Pn** | **10 50 55.1** | **+0.5** |
| **KAHZ** | **Kahuranaki** | **2.11** | **93** | Pn | **Pn** | **10 50 55.1** | **+0.5** |
| **PXZ** | **Pawanui** | **2.12** | **99** | ⇓PN | **Pn** | **10 50 55.0** | **+0.4** |
| PXZ | | | | AML | AML | 10 51 26.1 | |
| PXZ | | | | AML | AML | 10 51 26.1 | |
| PXZ | | | | AML | AML | 10 51 26.1 | |
| PXZ | | | | AML | AML | 10 51 26.1 | |
| **PXZ** | **Pawanui** | **2.12** | **99** | Pn | **Pn** | **10 50 55.0** | **+0.4** |
| **HRRZ** | **Handcock Road** | **2.14** | **52** | ⇓PN | **Pn** | **10 50 54.2** | **-0.7** |
| **HRRZ** | **Handcock Road** | **2.14** | **52** | Pn | **Pn** | **10 50 54.2** | **-0.7** |
| **PRRZ** | **Plateau Road** | **2.14** | **56** | PN | **Pn** | **10 50 53.8** | **-1.1** |
| **PRRZ** | **Plateau Road** | **2.14** | **56** | Pn | **Pn** | **10 50 53.8** | **-1.1** |
| **NMHZ** | **Naumai** | **2.16** | **74** | ⇓PN | **Pn** | **10 50 55.5** | **+0.3** |
| **NMHZ** | **Naumai** | **2.16** | **74** | Pn | **Pn** | **10 50 55.5** | **+0.3** |
| **THZ** | **Tophouse** | **2.24** | **204** | ⇑PN | **Pn** | **10 50 56.2** | **+0.2** |
| **THZ** | **Tophouse** | **2.24** | **204** | Pn | **Pn** | **10 50 56.2** | **+0.2** |
| **ARHZ** | **Aropaoanui** | **2.26** | **79** | ⇓PN | **Pn** | **10 50 56.3** | **+0.1** |
| **ARHZ** | **Aropaoanui** | **2.26** | **79** | Pn | **Pn** | **10 50 56.3** | **+0.1** |
| **TOZ** | **Tahuroa Road** | **2.26** | **29** | PN | **Pn** | **10 50 55.0** | **-1.1** |
| **CKHZ** | **Cape Kidnapper** | **2.27** | **89** | ⇓PN | **Pn** | **10 50 56.7** | **+0.5** |
| **CKHZ** | **Cape Kidnapper** | **2.27** | **89** | Pn | **Pn** | **10 50 56.7** | **+0.5** |
| **RRRZ** | **Republican Roa** | **2.31** | **54** | PN | **Pn** | **10 50 55.6** | **-1.2** |
| **RRRZ** | **Republican Roa** | **2.31** | **54** | Pn | **Pn** | **10 50 55.6** | **-1.2** |
| **TARZ** | **Mount Tarawera** | **2.37** | **52** | ⇓PN | **Pn** | **10 50 56.5** | **-0.9** |
| **TARZ** | **Mount Tarawera** | **2.37** | **52** | Pn | **Pn** | **10 50 56.5** | **-0.9** |
| **WHHZ** | **Waihua** | **2.48** | **76** | ⇓PN | **Pn** | **10 50 58.5** | **-0.1** |
| **SNGZ** | **Shannon Statio** | **2.66** | **70** | ⇓PN | **Pn** | **10 50 60.0** | **-0.6** |
| **SNGZ** | **Shannon Statio** | **2.66** | **70** | Pn | **Pn** | **10 50 60.0** | **-0.6** |
| **OPRZ** | **Ohinepanea** | **2.66** | **46** | PN | **Pn** | **10 50 59.3** | **-1.3** |
| **OPRZ** | **Ohinepanea** | **2.66** | **46** | Pn | **Pn** | **10 50 59.3** | **-1.3** |
| **DSZ** | **Denniston Nort** | **2.69** | **221** | PN | **Pn** | **10 51 00.8** | **-0.1** |
| **DSZ** | **Denniston Nort** | **2.69** | **221** | Pn | **Pn** | **10 51 00.8** | **-0.1** |
| **KBAZ** | **Karaka Road Bo** | **2.69** | **13** | ⇑PN | **Pn** | **10 51 00.8** | **-0.1** |
| **KBAZ** | **Karaka Road Bo** | **2.69** | **13** | Pn | **Pn** | **10 51 00.8** | **-0.1** |
| **KHZ** | **Kahutara** | **2.73** | **189** | PN | **Pn** | **10 51 01.5** | **+0.3** |
| KHZ | | | | AML | AML | 10 51 37.2 | |
| KHZ | | | | AML | AML | 10 51 37.3 | |
| **KHZ** | **Kahutara** | **2.73** | **189** | Pn | **Pn** | **10 51 01.5** | **+0.3** |
| **MKAZ** | **Moumakai** | **2.73** | **18** | PN | **Pn** | **10 51 01.0** | **-0.4** |
| **MKAZ** | **Moumakai** | **2.73** | **18** | Pn | **Pn** | **10 51 00.7** | **-0.7** |
| **URZ** | **Urewera** | **2.74** | **59** | PN | **Pn** | **10 50 59.6** | **-1.8** |
| URZ | | | | AML | AML | 10 51 33.3 | |
| URZ | | | | AML | AML | 10 51 34.9 | |
| **URZ** | **Urewera** | **2.74** | **59** | P | **Pn** | **10 50 59.5** | **-2.0** |
| | 122nm,0.3s,baz=252,slow=4.4,SNR=973 | | | | | | |
| URZ | | | | S | **S** | **10 51 32.0** | **-5.4** |
| | 48nm,0.3s,baz=253,slow=7.6,SNR=13 | | | | | | |
| **KNZ** | **Kokohu** | **2.83** | **77** | ⇓PN | **Pn** | **10 51 01.9** | **-0.6** |
| KNZ | | | | AML | AML | 10 51 37.0 | |
| KNZ | | | | AML | AML | 10 51 38.2 | |
| **KNZ** | **Kokohu** | **2.83** | **77** | Pn | **Pn** | **10 51 01.9** | **-0.6** |
| **RAGZ** | **Rawiri** | **2.83** | **65** | ⇓PN | **Pn** | **10 51 01.5** | **-1.1** |
| **RAGZ** | **Rawiri** | **2.83** | **65** | Pn | **Pn** | **10 51 01.5** | **-1.1** |
| **MHGZ** | **Mahia Peninsul** | **2.97** | **80** | ⇓PN | **Pn** | **10 51 03.9** | **-0.2** |
| **MHGZ** | **Mahia Peninsul** | **2.97** | **80** | Pn | **Pn** | **10 51 03.9** | **-0.2** |
| **MWZ** | **Matawai** | **2.98** | **63** | PN | **Pn** | **10 51 02.7** | **-1.7** |
| MWZ | | | | AML | AML | 10 51 41.2 | |
| MWZ | | | | AML | AML | 10 51 41.2 | |
| MWZ | | | | AML | AML | 10 51 46.1 | |
| **MWZ** | **Matawai** | **2.98** | **63** | Pn | **Pn** | **10 51 02.6** | **-1.7** |
| **RIGZ** | **Rimuhau** | **2.99** | **71** | PN | **Pn** | **10 51 03.7** | **-0.8** |
| **PRGZ** | **Paritu Road** | **3.01** | **76** | ⇓PN | **Pn** | **10 51 04.2** | **-0.5** |
| **PRGZ** | **Paritu Road** | **3.01** | **76** | Pn | **Pn** | **10 51 04.2** | **-0.5** |
| **TKGZ** | **Te Karaka** | **3.16** | **67** | ⇓PN | **Pn** | **10 51 05.4** | **-0.9** |
| **TKGZ** | **Te Karaka** | **3.16** | **67** | Pn | **Pn** | **10 51 05.4** | **-0.9** |
| **KUZ** | **Kuaotunu** | **3.22** | **23** | PN | **Pn** | **10 51 06.2** | **-0.9** |
| **KUZ** | **Kuaotunu** | **3.22** | **23** | Pn | **Pn** | **10 51 06.2** | **-0.9** |
| **LTZ** | **Lake Taylor** | **3.37** | **204** | PN | **Pn** | **10 51 08.6** | **-0.2** |
| **LTZ** | **Lake Taylor** | **3.37** | **204** | Pn | **Pn** | **10 51 08.6** | **-0.2** |
| **TWGZ** | **Tauwhareparae** | **3.37** | **64** | ⇓PN | **Pn** | **10 51 07.8** | **-1.2** |
| **TWGZ** | **Tauwhareparae** | **3.37** | **64** | Pn | **Pn** | **10 51 07.8** | **-1.2** |
| **HAZ** | **Te Kaha** | **3.46** | **57** | ⇓PN | **Pn** | **10 51 07.4** | **-2.5** |
| **PUZ** | **Puketiti** | **3.61** | **64** | ⇑PN | **Pn** | **10 51 09.9** | **-1.9** |
| PUZ | | | | AML | AML | 10 51 12.0 | |
| PUZ | | | | AML | AML | 10 51 53.7 | |
| **PUZ** | **Puketiti** | **3.61** | **64** | Pn | **Pn** | **10 51 09.9** | **-1.9** |
| **WMGZ** | **Waiomatatini S** | **3.85** | **62** | ⇓PN | **Pn** | **10 51 12.9** | **-1.8** |
| **WMGZ** | **Waiomatatini S** | **3.85** | **62** | Pn | **Pn** | **10 51 12.9** | **-1.8** |
| **MXZ** | **Matakaoa Point** | **3.91** | **58** | PN | **Pn** | **10 51 13.7** | **-1.7** |
| MXZ | | | | AML | AML | 10 51 15.7 | |
| MXZ | | | | AML | AML | 10 51 16.3 | |
| **MXZ** | **Matakaoa Point** | **3.91** | **58** | Pn | **Pn** | **10 51 13.8** | **-1.7** |
| **OXZ** | **Oxford** | **3.93** | **203** | PN | **Pn** | **10 51 14.7** | **-0.9** |
| **OXZ** | **Oxford** | **3.93** | **203** | Pn | **Pn** | **10 51 14.7** | **-0.9** |
| **CRLZ** | **Canterbury Las** | **4.01** | **196** | PN | **Pn** | **10 51 15.4** | **-1.2** |
| **CRLZ** | **Canterbury Las** | **4.01** | **196** | Pn | **Pn** | **10 51 15.4** | **-1.2** |
| **MQZ** | **McQueen's Vall** | **4.13** | **195** | PN | **Pn** | **10 51 16.5** | **-1.6** |
| **MQZ** | **McQueen's Vall** | **4.13** | **195** | Pn | **Pn** | **10 51 16.5** | **-1.6** |
| **WVZ** | **Waitaha Valley** | **4.21** | **216** | ⇑PN | **Pn** | **10 51 18.2** | **-0.9** |
| **WVZ** | **Waitaha Valley** | **4.21** | **216** | Pn | **Pn** | **10 51 18.2** | **-0.9** |
| **RPZ** | **Rata Peaks** | **4.61** | **209** | ⇓PN | **Pn** | **10 51 23.1** | **-1.0** |
| **RPZ** | **Rata Peaks** | **4.61** | **209** | P | **Pn** | **10 51 23.3** | **-0.8** |
| | 45nm,0.3s,baz=24,slow=1.3,SNR=264 | | | | | | |
| RPZ | | | | S | **S** | **10 52 14.1** | **-4.3** |
| | 39nm,0.3s,baz=256,slow=1.1,SNR=4.8 | | | | | | |
| **RPZ** | **Rata Peaks** | **4.61** | **209** | Pn | **Pn** | **10 51 23.1** | **-1.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FOZ | Fox Glacier | 5.08 | 220 | PN | Pn | 10 51 27.3 | -2.7 |
| FOZ | Fox Glacier | 5.08 | 220 | Pn | Pn | 10 51 27.3 | -2.7 |
| LBZ | Lake Benmore | 5.51 | 211 | ⇑PN | Pn | 10 51 34.1 | -1.4 |
| LBZ | Lake Benmore | 5.51 | 211 | Pn | Pn | 10 51 34.1 | -1.4 |
| ODZ | Otahua Downs | 5.91 | 205 | PN | Pn | 10 51 39.8 | -0.9 |
| ODZ | Otahua Downs | 5.91 | 205 | Pn | Pn | 10 51 39.8 | -0.9 |
| JCZ | Jackson Bay | 5.92 | 221 | ⇓PN | Pn | 10 51 38.9 | -1.9 |
| JCZ | Jackson Bay | 5.92 | 221 | Pn | Pn | 10 51 38.9 | -1.9 |
| WKZ | Wanaka | 6.36 | 215 | PN | Pn | 10 51 44.1 | -2.4 |
| WKZ | Wanaka | 6.36 | 215 | Pn | Pn | 10 51 44.1 | -2.4 |
| EAZ | Earnscleugh | 6.56 | 211 | ⇑PN | Pn | 10 51 46.7 | -2.3 |
| EAZ | Earnscleugh | 6.56 | 211 | Pn | Pn | 10 51 46.8 | -2.3 |
| HHSZ | Highcliff Hill | 6.69 | 202 | PN | Pn | 10 51 51.2 | +0.6 |
| HHSZ | Highcliff Hill | 6.69 | 202 | Pn | Pn | 10 51 51.2 | +0.6 |
| MSZ | Milford Sound | 6.76 | 221 | PN | Pn | 10 51 49.7 | -1.9 |
| MSZ | Milford Sound | 6.76 | 221 | Pn | Pn | 10 51 49.7 | -1.9 |
| TUZ | Tuapeka | 7.05 | 207 | PN | Pn | 10 51 54.2 | -1.2 |
| TUZ | Tuapeka | 7.05 | 207 | Pn | Pn | 10 51 54.2 | -1.2 |
| MLZ | Mavora Lakes | 7.14 | 216 | PN | Pn | 10 51 55.9 | -0.7 |
| MLZ | Mavora Lakes | 7.14 | 216 | Pn | Pn | 10 51 55.9 | -0.7 |
| WHZ | Wether Hill Ro | 7.66 | 214 | PN | Pn | 10 52 00.9 | -2.5 |
| WHZ | Wether Hill Ro | 7.66 | 214 | Pn | Pn | 10 52 00.9 | -2.5 |
| SYZ | Scrubby Hill | 7.73 | 207 | PN | Pn | 10 52 03.0 | -1.1 |
| SYZ | Scrubby Hill | 7.73 | 207 | Pn | Pn | 10 52 03.0 | -1.1 |
| CTZ | Chatham Island | 7.99 | 123 | PN | Pn | 10 52 09.5 | +1.9 |
| CTZ | Chatham Island | 7.99 | 123 | Pn | Pn | 10 52 09.5 | +1.9 |
| ASAR | Alice Springs | 37.45 | 283 | P | P | 10 57 09.9 | +1.5 |
| | 1.2nm,0.5s,baz=130,slow=7.7,SNR=33 | | | | | | |
| WRA | Warramunga Arr | 39.35 | 288 | P | P | 10 57 25.7 | +1.4 |
| | 0.9nm,0.3s,baz=124,slow=8.2,SNR=29 | | | | | | |
| FITZ | Fitzroy Crossi | 46.95 | 283 | P | P | 10 58 26.8 | +1.7 |
| | 2.8nm,0.4s,baz=114,slow=4.0,SNR=34 | | | | | | |
| QSPA | South Pole Qui | 50.40 | 180 | P | P | 10 58 54.4 | +3.5 |
| | 1.1nm,0.4s,baz=215,slow=3.3,SNR=22 | | | | | | |
| KSRS | Korea Array | 87.75 | 325 | P | P | 11 02 42.6 | +2.5 |
| | 2.1nm,0.7s,baz=151,slow=5.5,SNR=6.6 | | | | | | |
| ARCES | ARCESS Array B | 145.84 | 341 | PKPbc | PKPbc | 11 09 29.1 | +0.4 |
| | 2.4nm,0.7s,baz=70,slow=3.3,SNR=22 | | | | | | |
| BRTR | Keskin Array B | 149.79 | 283 | PKPbc | PKPbc | 11 09 40.2 | -0.1 |
| | 1.0nm,1.0s,baz=318,slow=1.9,SNR=2.9 | | | | | | |
| BRTR | | | | PKPab | PKPab | 11 09 47.0 | +0.6 |
| | 1.2nm,0.7s,baz=116,slow=5.6,SNR=5.4 | | | | | | |
| FINES | FINESS Array B | 150.78 | 329 | PKPbc | PKPbc | 11 09 40.7 | -1.0 |
| | 1.2nm,0.7s,baz=18,slow=6.8,SNR=4.0 | | | | | | |
| AKASG | Malin Array Be | 153.20 | 306 | PKPab | PKPab | 11 09 59.0 | -1.2 |
| | 1.1nm,0.6s,baz=68,slow=4.5,SNR=4.2 | | | | | | |

*IDC **02** 10:52:46.1±2.0, 54°.22N×86°.01E, h0$^{km}$, mb1 3.4/3, mb1mx3.1/42, mbtmp3.4/3, ML3.2/3, Error ellipse: s-maj=17.1km s-min=10.0km az=61.0*
*NNC **02** 10:52:50.4±3.0, 54°.11N×85°.43E, h0$^{km}$, mb3.9, mpv3.5, Error ellipse: s-maj=24.0km s-min=17.5km az=57.0*
**ISC 02 10:52:50.8**±4.3**, 54°.2N**±0°.2×**85°.5E**±0°.2**, h10$^{km}$, n10, σ1s.15**/14**, 5C-6D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 0.46 | 243 | i | | 10 58 40.0 | |
| | baz=68,slow=323,SNR=2.0 | | | | | | |
| ZALV | Zalesovo Beam | 0.46 | 243 | Pg | Pg | 10 52 58.9 | -1.0 |
| | 1.9nm,0.3s,baz=64,slow=17,SNR=16 | | | | | | |
| ZALV | | | | Lg | Lg | 10 53 11.4 | |
| | 10nm,0.3s,baz=67,slow=27,SNR=32 | | | | | | |
| KURK | Kurchatov | 5.45 | 233 | ⇑Pn | Pn | 10 54 12.8 | +0.8 |
| | 4.1nm,0.9s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 10 55 42.8 | |
| | 13nm,1.2s | | | | | | |
| KURBB | Kurchatov Arra | 5.55 | 233 | ⇓Pn | Pn | 10 54 14.0 | +0.5 |
| | 3.7nm,0.7s | | | | | | |
| KURBB | | | | ⇓Sn | Sn | 10 55 18.5 | +1.2 |
| | 3.6nm,0.7s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 10 55 46.5 | |
| | 4.4nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 5.55 | 233 | Pn | Pn | 10 54 14.3 | +0.9 |
| | 0.3nm,0.3s,baz=52,slow=14,SNR=27 | | | | | | |
| KURBB | | | | Lg | Lg | 10 55 52.0 | |
| | 0.1nm,0.3s,baz=48,slow=33,SNR=4.6 | | | | | | |
| MK31 | Makanchi Array | 7.66 | 197 | Pn | Pn | 10 54 41.0 | -1.4 |
| | 1.7nm,0.6s,baz=24,slow=13,SNR=25 | | | | | | |
| MK31 | | | | ⇓Sn | Sn | 10 56 09.4 | +0.2 |
| MK31 | | | | ⇑Lg | Lg | 10 56 51.4 | |
| | 1.3nm,0.7s,baz=29,slow=29,SNR=4.4 | | | | | | |
| MKAR | Makanchi Array | 7.66 | 197 | Pn | Pn | 10 54 41.0 | -1.4 |
| | 0.7nm,0.3s,baz=24,slow=12,SNR=24 | | | | | | |
| MKAR | | | | Sn | Sn | 10 56 11.1 | +1.9 |
| | 0.2nm,0.3s,baz=28,slow=25,SNR=4.7 | | | | | | |
| MKAR | | | | Lg | Lg | 10 56 51.6 | |
| | 0.2nm,0.3s,baz=32,slow=30,SNR=5.2 | | | | | | |
| VOSK | Vostochnaya | 8.80 | 266 | ⇓Pn | Pn | 10 54 58.5 | +0.5 |
| | 1.3nm,0.6s | | | | | | |
| VOSK | | | | ⇑Sn | Sn | 10 56 36.0 | -1.1 |
| | 1.8nm,0.7s | | | | | | |
| BVAR | Borovoye Array | 9.07 | 269 | Pn | Pn | 10 55 02.6 | +0.9 |
| | 0.3nm,0.3s,baz=60,slow=14,SNR=4.9 | | | | | | |
| ZRNK | Zerenda | 9.90 | 270 | ⇓Pn | Pn | 10 55 13.8 | +0.8 |
| | 1.9nm,0.5s | | | | | | |
| ZRNK | | | | ⇑Sn | Sn | 10 57 04.2 | 0.0 |
| | 2.2nm,1.2s | | | | | | |

*SJA **02** 10:53:30.5±1.1, 34°.26S×72°.93W, h48$^{km}$±36$^{km}$, ML3.6*
*GUC **02** 10:53:36.6±0.5, 34°.15S×72°.08W, h25$^{km}$±27$^{km}$, ML3.5*
**ISC 02 10:53:35.7**±2.6**, 34°.14S**±0°.06×**72°.2W**±0°.1**, h26$^{km}$**±27$^{km}$**, n14, σ1s.88**/22**, 3C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TACH | Talagante | 1.14 | 65 | ⇑iP | Pn | 10 53 56.1 | +0.1 |
| NICH | Los Niches | 1.16 | 138 | i S | Sb | 10 54 12.3 | +0.6 |
| TALC | Talca | 1.33 | 161 | ⇓iP | Pb | 10 53 59.9 | -0.1 |
| TALC | | | | i S | Sb | 10 54 17.2 | +0.6 |
| ANTU | Antumapu | 1.40 | 66 | ⇓iP | Pb | 10 54 00.8 | -0.5 |
| ANTU | | | | i S | Sb | 10 54 18.6 | -0.2 |
| ANTU | | | | AML | AML | 10 54 23.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| SAN | Santiago | 1.43 | 62 | i S | Sb | 10 54 19.7 | 0.0 |
| ROC1 | El Roble | 1.51 | 40 | i P | Pb | 10 54 04.2 | +1.0 |
| ROC1 | | | | i S | Sb | 10 54 30.1 | +8.0 |
| CLCH | Cerro Calan | 1.55 | 62 | ⇑iP | Pb | 10 54 03.1 | -0.8 |
| CLCH | | | | i S | Sb | 10 54 23.1 | 0.0 |
| CLCH | | | | AML | AML | 10 54 28.1 | |
| | comp=E,1μm,0.8s | | | | | | |
| PEL | Peldehue | 1.59 | 52 | ⇑iP | Pb | 10 54 03.8 | -0.7 |
| PEL | | | | i S | Sb | 10 54 24.5 | +0.3 |
| PEL | | | | AML | AML | 10 54 31.9 | |
| | comp=N,1μm,0.5s | | | | | | |
| AAGR | Agrelo | 2.98 | 70 | i P | Pb | 10 54 26.0 | -2.2 |
| AAGR | | | | i P | Pb | 10 54 26.0 | -2.2 |
| ARCO | CERRO ARCO | 3.00 | 65 | i P | Pb | 10 54 27.6 | -1.1 |
| ARCO | | | | i S | Sb | 10 55 08.6 | +3.7 |
| ARCO | | | | AML | AML | 10 55 18.7 | |
| | comp=Z,53nm,0.7s | | | | | | |
| AUSP | Uspallata | 3.02 | 51 | i P | Pb | 10 54 26.4 | -2.6 |
| AUSP | | | | i S | Sb | 10 55 08.8 | +3.3 |
| ASAL | Salagasta | 3.19 | 62 | i P | Pb | 10 54 30.6 | -1.2 |
| ASAL | | | | i S | Sb | 10 55 13.0 | +2.7 |
| RTLS | Leoncito | 3.36 | 47 | i P | Pb | 10 54 31.8 | -3.0 |
| RTLS | | | | i S | Sb | 10 55 16.4 | +1.1 |
| AVFE | Valle Fertil | 5.29 | 50 | i P | Pn | 10 54 57.5 | +4.3 |
| AVFE | | | | AML | AML | 10 56 10.6 | |
| | comp=Z,39nm,0.6s | | | | | | |

*JMA **02** 11:06:42.0±0.1, 22°.64N×121°.65E, h24$^{km}$, M3.1*
*TAP **02** 11:06:43.7, 22°.64N×121°.59E, h23$^{km}$, ML3.2, C*
**ISC 02 11:06:42.4**±1.2**, 22°.64N**±0°.03×**121°.66E**±0°.03**, h23$^{km}$**±13$^{km}$**, n40, σ0s.75**/63**, 7C-2D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TTN | Taitung | 0.49 | 284 | P | Pb | 11 06 52.2 | -0.1 |
| | baz=285 | | | | | | |
| CHKT | Chengkung | 0.53 | 329 | ⇑iP | Pb | 11 06 53.2 | +0.1 |
| | baz=344 | | | | | | |
| CHKT | | | | i S | Sb | 11 07 00.1 | -0.3 |
| | baz=344 | | | | | | |
| TWG | Pinlang | 0.57 | 289 | eP | Pb | 11 06 53.7 | -0.1 |
| | baz=290 | | | | | | |
| TWG | | | | eS | Sb | 11 07 01.9 | +0.4 |
| | baz=290 | | | | | | |
| LAY | Lan-yu | 0.60 | 190 | ⇑P | Pb | 11 06 54.2 | -0.1 |
| | baz=183 | | | | | | |
| LAY | | | | S | Sb | 11 07 02.2 | -0.3 |
| | baz=183 | | | | | | |
| ECL | Taimali | 0.65 | 267 | ⇑iP | Pb | 11 06 54.9 | -0.3 |
| | baz=265 | | | | | | |
| ECL | | | | S | Sb | 11 07 02.9 | -1.0 |
| | baz=265 | | | | | | |
| TAW | Tawu | 0.76 | 249 | eP | Pb | 11 06 56.8 | -0.2 |
| | baz=260 | | | | | | |
| TWF1 | Yuli | 0.79 | 335 | ⇑iP | Pb | 11 06 57.4 | -0.1 |
| | baz=347 | | | | | | |
| TWF1 | | | | eS | Sb | 11 07 07.8 | +0.1 |
| | baz=347 | | | | | | |
| EAST | Anshuo | 0.79 | 252 | ⇑iP | Pb | 11 06 57.2 | -0.3 |
| | baz=255 | | | | | | |
| EAST | | | | eS | Sb | 11 07 07.1 | -0.8 |
| | baz=255 | | | | | | |
| ELDTW | Lidau | 0.81 | 313 | P | Pb | 11 06 57.2 | -0.7 |
| | baz=326 | | | | | | |
| ELDTW | | | | eS | Sb | 11 07 07.4 | -1.0 |
| | baz=326 | | | | | | |
| EHY | Hungye | 0.92 | 340 | P | Pb | 11 06 59.4 | -0.3 |
| | baz=351 | | | | | | |
| EHY | | | | eS | Sb | 11 07 11.4 | -0.1 |
| | baz=351 | | | | | | |
| SSD | Sandimen | 0.96 | 277 | ⇑iP | Pb | 11 06 59.6 | -0.7 |
| | baz=277 | | | | | | |
| STYT | Tauyuan | 0.98 | 302 | ⇑iP | Pb | 11 07 00.7 | -0.1 |
| | baz=304 | | | | | | |
| STYT | | | | eS | Sb | 11 07 12.8 | -0.6 |
| | baz=304 | | | | | | |
| SCZT | Fangliau | 1.00 | 255 | eP | Pn | 11 07 00.6 | -0.4 |
| | baz=253 | | | | | | |
| TSEB | Hengchuen, Pin | 1.02 | 224 | eP | Pb | 11 07 02.4 | +1.0 |
| | baz=222 | | | | | | |
| TSEB | | | | eS | Sn | 11 07 15.3 | +0.4 |
| | baz=222 | | | | | | |
| TWK1 | Hengchun | 1.05 | 229 | eP | Pn | 11 07 01.5 | -0.3 |
| | baz=225 | | | | | | |
| TWK1 | | | | eS | Sb | 11 07 14.6 | -0.7 |
| | baz=225 | | | | | | |
| HEN | Hengchun | 1.06 | 234 | eP | Pn | 11 07 01.6 | -0.2 |
| | baz=231 | | | | | | |
| YUS | Yu-Shan | 1.07 | 323 | eP | Pn | 11 07 01.8 | -0.7 |
| | baz=320 | | | | | | |
| SGST | Jiashian | 1.09 | 294 | ⇓eP | Pb | 11 07 03.1 | +0.6 |
| | baz=297 | | | | | | |
| SGST | | | | eS | Sn | 11 07 16.7 | +0.1 |
| | baz=297 | | | | | | |
| WTP | Ta-pu | 1.14 | 302 | ⇓P | Pb | 11 07 03.7 | +0.2 |
| | baz=304 | | | | | | |
| WTP | | | | eS | Sn | 11 07 18.2 | +0.2 |
| | baz=304 | | | | | | |
| TWM1 | Shoushan | 1.16 | 279 | eP | Pb | 11 07 04.5 | +0.8 |
| | baz=275 | | | | | | |
| CHN1 | Nanshi | 1.18 | 298 | eP | Pb | 11 07 04.6 | +0.5 |
| | baz=299 | | | | | | |
| CHN1 | | | | eS | Sb | 11 07 20.6 | +1.7 |
| | baz=299 | | | | | | |
| ESL | Shilin | 1.19 | 350 | eP | Pn | 11 07 03.4 | -0.3 |
| | baz=4.0 | | | | | | |
| ESL | | | | eS | Sn | 11 07 18.2 | -0.9 |
| | baz=4.0 | | | | | | |
| WDT | Danda | 1.21 | 337 | eP | Pn | 11 07 04.2 | -0.1 |
| | baz=351 | | | | | | |
| TWK | Hsinying | 1.25 | 300 | eP | Pn | 11 07 04.4 | -0.1 |
| | baz=302 | | | | | | |
| TWK | | | | eS | Sb | 11 07 22.7 | +1.7 |
| | baz=302 | | | | | | |
| CHN5 | Tsauling | 1.31 | 317 | eP | Pb | 11 07 06.8 | +0.3 |
| | baz=319 | | | | | | |
| CHN5 | | | | eS | Sb | 11 07 24.6 | +1.6 |
| | baz=319 | | | | | | |
| CHN2 | Minshiung | 1.41 | 309 | eP | Pb | 11 07 09.0 | +0.9 |
| | baz=312 | | | | | | |
| SMLT | Sun Moon Lake | 1.42 | 331 | eP | Pb | 11 07 08.7 | +0.3 |
| | baz=341 | | | | | | |
| CHY | Chiayi | 1.43 | 307 | eP | Pb | 11 07 08.8 | +0.5 |
| | baz=309 | | | | | | |
| TYC | Yuchr | 1.46 | 330 | eP | Pb | 11 07 08.6 | -0.3 |
| | baz=339 | | | | | | |
| WNT | Mingjian | 1.53 | 324 | eP | Pb | 11 07 10.9 | +0.8 |
| | baz=327 | | | | | | |
| WHF | Hehuan Shan | 1.54 | 346 | eP | Pn | 11 07 09.2 | +0.2 |
| | baz=350 | | | | | | |
| TWQ1 | Liyutan | 1.89 | 335 | eP | Pb | 11 07 15.5 | -0.7 |
| | baz=338 | | | | | | |
| TWQ1 | | | | eS | Sb | 11 07 38.5 | -0.8 |
| | baz=338 | | | | | | |
| WDGT | Dungji | 1.94 | 289 | eP | Pn | 11 07 15.2 | +1.2 |
| | baz=290 | | | | | | |
| JYNG | Yonagunijimaku | 2.16 | 33 | S | Sn | 11 07 42.2 | -0.8 |
| HATJ | Hateruma jima | 2.42 | 54 | P | Pn | 11 07 21.6 | +1.0 |
| HATJ | | | | eS | Sn | 11 07 49.0 | -0.6 |
| JKRS | Kuro-shima | 2.68 | 53 | P | Pn | 11 07 25.4 | +1.2 |
| JKRS | | | | S | Sn | 11 07 55.3 | -0.6 |
| JIJ | Ishigaki jima | 2.85 | 53 | P | Pn | 11 07 27.5 | +1.0 |
| JIJ | | | | eS | Sn | 11 07 59.0 | -1.2 |
| JISG | Ishigakijimahi | 3.11 | 51 | P | Pn | 11 07 30.6 | +0.5 |
| JISG | | | | eS | Sn | 11 08 05.5 | -1.0 |
| JTJ | Tarama | 3.43 | 54 | P | Pn | 11 07 35.2 | +0.8 |
| JTJ | | | | S | Sn | 11 08 13.3 | -1.1 |
| JIRB | Irabujima | 3.89 | 55 | P | Pn | 11 07 42.0 | +1.2 |

*IDC **02** 11:21:04.4±1.2, 15°.39N×122°.58E, h0$^{km}$, mb3.7/6, mb1 3.9/6, mb1mx3.6/32, mbtmp3.7/6, Error ellipse: s-maj=55.9km s-min=19.0km az=64.0*
*MAN **02** 11:21:09, 15°.36N×122°.13E, h9$^{km}$, mb4.7, ML3.6, MS3.6*
**ISC 02 11:21:04.7**±1.6**, 15°.32N**±0°.04×**122°.30E**±0°.05**, h2$^{km}$**±11$^{km}$**, n26, σ1s.29**/24**, mb3.4**/6**, 4C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BALP | Baler | 0.81 | 301 | eP | Pn | 11 21 22.7 | -0.4 |
| BALP | | | | eS | Sn | 11 21 34.7 | -1.0 |
| PCPH | Palayan | 1.18 | 282 | ⇑eP | Pg | 11 21 27.5 | +0.1 |
| PCPH | | | | i S | Sg | 11 21 42.6 | -0.1 |
| LQP | Lukban | 1.41 | 211 | ⇑eP | Pn | 11 21 28.3 | -3.2 |
| GQP | Guinayangan | 1.42 | 174 | ⇑eP | Pn | 11 21 31.7 | +0.3 |
| GQP | | | | eS | Sb | 11 21 50.4 | +0.1 |
| TGY | Tagaytay City | 1.79 | 228 | ⇑iP | Pb | 11 21 38.2 | 0.0 |
| TGY | | | | i S | Sg | 11 22 02.5 | +0.3 |
| AUQP | San Andres | 2.02 | 169 | eP | Pg | 11 21 44.3 | +0.8 |
| AUQP | | | | eS | Sn | 11 21 58.6 | -7.0 |
| SCZP | Santa Cruz | 2.34 | 281 | eP | Pn | 11 21 45.2 | +1.0 |
| PVCP | Virac | 2.49 | 133 | eP | Pg | 11 21 52.1 | -0.2 |
| BOLP | Bolinao | 2.52 | 295 | eP | Pb | 11 21 50.2 | -0.5 |
| LUBP | Lubang | 2.54 | 232 | eP | Pn | 11 21 44.3 | -2.5 |
| APYP | Conner | 2.72 | 338 | eP | Pb | 11 21 52.6 | -1.4 |
| ABRA | Dolores | 2.77 | 327 | eP | Pb | 11 21 54.6 | -0.3 |
| OTRP | Odiongan | 2.95 | 185 | eP | Pb | 11 21 57.8 | -0.2 |
| SJMP | San Jose | 3.06 | 202 | eP | Pb | 11 22 00.0 | +0.1 |
| CMAR | Chiang Mai Arr | 22.56 | 281 | P | P | 11 26 08.4 | +2.1 |
| | 0.4nm,0.3s,baz=90,slow=9.1,SNR=5.5 | | | | | | |
| SONM | Songino Array | 34.99 | 341 | P | P | 11 27 58.2 | -0.3 |
| | 0.3nm,0.5s,baz=163,slow=11,SNR=2.8 | | | | | | |
| WRA | Warramunga Arr | 36.99 | 161 | P | P | 11 28 15.0 | -0.7 |
| | 0.7nm,0.8s,baz=344,slow=9.2,SNR=6.1 | | | | | | |
| ASAR | Alice Springs | 40.38 | 163 | P | P | 11 28 44.6 | +0.4 |
| | 0.6nm,0.9s,baz=339,slow=7.7,SNR=6.4 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.51 | 79 | T | T | 12 14 54.2 | |
| | baz=274,slow=74,SNR=6.4 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.52 | 79 | T | T | 12 14 53.0 | |
| | baz=274,slow=74,SNR=4.1 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.53 | 79 | T | T | 12 14 53.0 | |
| | baz=274,slow=74,SNR=5.9 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.66 | 77 | T | T | 12 15 02.9 | |
| | baz=266 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.67 | 77 | T | T | 12 15 09.6 | |
| | baz=266 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.68 | 77 | T | T | 12 15 09.3 | |
| | baz=266 | | | | | | |
| MKAR | Makanchi Array | 45.69 | 322 | P | P | 11 29 29.4 | +2.4 |
| | 0.9nm,0.7s,baz=127,slow=8.2,SNR=9.2 | | | | | | |
| ZALV | Zalesovo Beam | 48.36 | 331 | P | P | 11 29 47.2 | -0.6 |
| | 0.6nm,0.3s,baz=123,slow=5.3,SNR=3.0 | | | | | | |

*IDC **02** 11:22:02.5±13.0, 15°.66N×122°.93E, h0$^{km}$, mb3.3/3, mb1 3.6/3, mb1mx3.3/32, mbtmp3.3/3, MS4.2/1, Ms1 4.2/1, ms1mx2.9/22, Error ellipse: s-maj=401.0km s-min=29.8km az=38.0*
**ISC 02 11:22:05.9**±2.2**, 15°.3N**±0°.1×**122°.4E**±0°.2**, h10$^{km}$, n6, σ2s.52**/5**, mb3.2**/3**, 1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCPH | Palayan | 1.24 | 283 | ⇑eP | Pn | 11 22 27.6 | -1.7 |
| GQP | Guinayangan | 1.38 | 176 | eP | Pg | 11 22 44.1 | +12 |
| GQP | | | | eS | Sg | 11 22 50.4 | +0.1 |
| CMAR | Chiang Mai Arr | 22.62 | 281 | P | P | 11 27 10.1 | +3.0 |
| | 0.6nm,0.3s,baz=105,slow=7.0,SNR=4.7 | | | | | | |
| WRA | Warramunga Arr | 36.94 | 161 | P | P | 11 29 14.5 | -0.9 |
| | 0.4nm,0.9s,baz=343,slow=9.2,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 40.33 | 164 | P | P | 11 29 44.0 | +0.2 |
| | 0.2nm,0.5s,baz=342,slow=7.1,SNR=4.9 | | | | | | |
| DZM | Mont Dzumac | 56.97 | 130 | LR | LR | 11 53 30.5 | |
| | comp=Z,205nm,19.6s,baz=194,slow=33 | | | | | | |

*MOS **02** 11:29:02.8±1.1, 6°.54S×128°.66E, h227$^{km}$, mb5.5/48, Error ellipse: s-maj=9.8km s-min=5.0km az=108.3*
*BJI **02** 11:29:04.6, 6°.49S×128°.90E, h251$^{km}$, mb5.2/80, mB5.0/44*
*AUST **02** 11:29:04.5±0.4, 6°.60S×128°.66E, h230$^{km}$±4$^{km}$, Error ellipse: s-maj=4.4km s-min=3.6km az=93.0*
*NEIC **02** 11:29:05.5±0.4, 6°.56S×128°.75E, h240$^{km}$±4$^{km}$, mb5.3/53, MW5.5, Error ellipse: s-maj=5.1km s-min=3.2km az=61.0, Moment Tensor Solution. s21 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-1.14; $M_{\theta\theta}$-0.08; $M_{\phi\phi}$1.22; $M_{r\theta}$-1.20; $M_{\theta\phi}$1.06; $M_{\phi r}$0.31; Best double couple: $M_0$2.00000×$10^{17}$ NP1: $\phi_s$178.00000°, δ50.00000°, λ-144.00000°. NP2: $\phi_s$63.00000°, δ63.00000°, λ-46.00000°. Principal axes: T 1.8500, Plg7.0000°, Azm123.0000°; N 0.2900, Plg38.0000°, Azm219.0000°; P -2.1400, Plg51.0000°, Azm24.0000°;*
*NEIC Felt [II] at Darwin, Australia. Also felt at Dili, Timor-Leste.*
*GCMT **02** 11:29:05.5±0.1, 6°.61S×128°.74E, h243$^{km}$±1$^{km}$, MW5.5/120, Moment Tensor Solution. s100,c171; s120,c231; Duration: 1s.4 Moment tensor: Scale $10^{17}$ Nm; $M_{rr}$-0.35±.03; $M_{\theta\theta}$-0.56±.03; $M_{\phi\phi}$0.91±.04; $M_{r\theta}$-1.66±.03; $M_{\theta\phi}$1.70±.03; $M_{\phi r}$0.49±.03; Best double couple: $M_0$2.49100×$10^{17}$ NP1:$\phi_s$76.00000°, δ78.00000°, λ-37.00000°. NP2:$\phi_s$175.00000°, δ54.00000°, λ-165.00000°. Principal axes: T 2.1660, Plg15.0000°, Azm130.0000°; N 0.6490, Plg51.0000°, Azm240.0000°; P -2.8150, Plg34.0000°, Azm29.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*ISCJB **02** 11:29:05.4±0.2, 6°.60S±0°.02×128°.76E±0°.02, h254$^{km}$±2$^{km}$, mb5.2/132 Error ellipse: s-maj=3.2km s-min=2.5km az=161.8*
*IDC **02** 11:29:06.3±0.6, 6°.56S×128°.69E, h248$^{km}$±5$^{km}$, mb4.8/22, mb1 4.8/24, mb1mx4.8/27, mbtmp5.4/24, Error ellipse: s-maj=11.3km s-min=7.3km az=81.0*
*DJA **02** 11:29:06.3±0.1, 7°S±2°×12°9E±°, h219$^{km}$±2$^{km}$, M5.4/85, mb5.4/85, mB5.8/74, MLv6.2/12, Mw(mB)5.3/74, Mwp5.7/4*
**ISC 02 11:29:05.9**±0.2**, 6°.57S**±0°.03×**128°.71E**±0°.03**, h249$^{km}$**±1$^{km}$**, h249$^{km}$:pP-P, n870, σ1s.31**/1023**, mb5.3**/138**, 23C-33D, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNDI | Bandanaira | 2.36 | 30 | P | Pn | 11 29 52.7 | +1.0 |
| BNDI | | | | S | S | 11 30 27.6 | -0.3 |
| AAI | Ambon | 2.91 | 350 | P | Pn | 11 29 58.4 | +1.0 |
| SAUI | Saumlaki | 2.93 | 119 | P | Pn | 11 29 57.4 | -0.2 |
| SAUI | | | | S | S | 11 30 31.0 | -7.4 |
| SAUI | Saumlaki | 2.93 | 119 | ePn | Pn | 11 29 57.1 | -0.5 |
| MSAI | Masohi | 3.21 | 4 | P | Pn | 11 30 01.8 | +1.1 |
| NLAI | Namlea | 3.68 | 334 | P | Pn | 11 30 07.6 | +1.6 |
| FAKI | Fak Fak | 5.06 | 44 | P | Pn | 11 30 20.2 | -2.3 |
| | baz=5.1,SNR=428 | | | | | | |
| FAKI | Fak Fak | 5.06 | 44 | P | Pn | 11 30 20.4 | -2.1 |
| FAKI | | | | S | S | 11 31 18.8 | -4.7 |
| FAKI | Fak Fak | 5.06 | 44 | ePn | Pn | 11 30 20.2 | -2.3 |
| FAKI | | | | eSn | S | 11 31 17.3 | -6.2 |
| SANI | Sanana | 5.25 | 329 | P | Pn | 11 30 27.0 | +2.2 |
| SOEI | Soe | 5.42 | 234 | P | Pn | 11 30 25.6 | -1.3 |
| | baz=5.4,SNR=452 | | | | | | |
| SOEI | Soe | 5.42 | 234 | P | Pn | 11 30 26.1 | -0.9 |
| SOEI | | | | S | S | 11 31 28.8 | -2.8 |
| SOEI | Soe | 5.42 | 234 | ePn | Pn | 11 30 25.6 | -1.3 |
| SOEI | | | | eS | S | 11 31 28.0 | -3.6 |
| LBMI | Labuha | 6.02 | 348 | P | Pn | 11 30 36.0 | +1.7 |
| | 2μm,1.1s,24μm24nm | | | | | | |
| LBMI | | | | S | S | 11 31 42.7 | -2.3 |
| | 2μm,1.1s,24μm24nm | | | | | | |
| BATI | Baumata | 6.16 | 234 | P | Pn | 11 30 35.1 | -1.0 |
| | 2μm,0.3s,baz=108,slow=1.6,SNR=976 | | | | | | |
| BATI | | | | S | S | 11 31 43.2 | -5.1 |
| | 2μm,0.3s,baz=70,slow=21,SNR=14 | | | | | | |
| BATI | Baumata | 6.16 | 234 | P | Pn | 11 30 35.4 | -0.7 |
| BATI | | | | S | S | 11 31 41.5 | -6.8 |
| SWI | Sorong | 6.22 | 24 | P | Pn | 11 30 35.5 | -1.3 |
| | baz=6.3,SNR=318 | | | | | | |
| SWI | Sorong | 6.22 | 24 | P | Pn | 11 30 35.6 | -1.2 |
| | 3μm,1.0s,46μm10nm | | | | | | |
| KDI | Kendari | 6.60 | 293 | P | Pn | 11 30 42.6 | +1.0 |
| | 462nm,1.2s,7μm2.0nm | | | | | | |
| MTN | Manton Dam | 6.67 | 159 | P | Pn | 11 30 40.8 | -1.7 |
| | baz=6.7,SNR=1000 | | | | | | |
| MTN | Manton Dam | 6.67 | 159 | ePn | Pn | 11 30 40.9 | -1.7 |
| MMRI | Maumere | 6.73 | 252 | P | Pn | 11 30 44.3 | +1.0 |
| MMRI | | | | S | S | 11 32 00.8 | -0.6 |
| MMRI | Maumere | 6.73 | 252 | ePn | Pn | 11 30 43.0 | -0.3 |
| MMRI | | | | eS | S | 11 32 00.0 | -1.3 |
| KDU | Kakadu | 7.12 | 149 | P | Pn | 11 30 46.4 | -1.8 |
| | baz=7.2 | | | | | | |
| EDFI | Ende, Flores | 7.29 | 252 | P | Pn | 11 30 51.5 | +1.1 |
| RKPI | Ransiki, Papua | 7.42 | 48 | P | Pn | 11 30 51.4 | -0.5 |
| RKPI | | | | S | S | 11 32 10.9 | -6.2 |
| TNTI | Ternate | 7.42 | 350 | P | Pn | 11 30 53.3 | +1.4 |
| | 2μm,1.2s,22μm6.3nm | | | | | | |
| TNTI | Ternate | 7.42 | 350 | ePn | Pn | 11 30 53.5 | +1.5 |
| TNTI | | | | eS | S | 11 32 15.9 | -1.2 |
| LUWI | Luwuk | 8.08 | 313 | P | Pn | 11 31 02.7 | +2.4 |
| | 2μm,1.1s,21μm5.9nm | | | | | | |
| LUWI | Luwuk | 8.08 | 313 | ePn | Pn | 11 31 02.1 | +1.9 |
| BSSI | Bau Bau, Buton | 8.18 | 273 | P | Pn | 11 31 03.4 | +1.8 |
| | 344nm,1.3s,6μm1.7nm | | | | | | |
| KMSI | Cibinong | 8.52 | 326 | P | Pn | 11 31 07.8 | +1.8 |
| | 2μm,1.0s,18μm6.2nm | | | | | | |
| BKSI | Bulukumba | 8.63 | 278 | P | Pn | 11 31 08.3 | +1.0 |
| | 312nm,1.0s,5μm1.0nm | | | | | | |
| BASI | Baing, Sumba | 8.82 | 245 | P | Pn | 11 31 08.1 | -1.6 |
| BASI | | | | S | S | 11 32 39.5 | -10 |
| WSI | Waingapu | 8.88 | 249 | P | Pn | 11 31 10.5 | +0.1 |
| | 2μm,0.6s,31μm37nm | | | | | | |
| WSI | | | | S | S | 11 32 40.7 | -10 |
| | 2μm,0.6s,31μm37nm | | | | | | |
| APSI | Ampana | 9.01 | 308 | P | Pn | 11 31 14.6 | +2.5 |
| | 1μm,1.3s,16μm9μm | | | | | | |
| KAPI | Kappang | 9.04 | 279 | P | Pn | 11 31 12.7 | +0.1 |
| | 3.1nm,0.3s,baz=107,slow=11,SNR=51 | | | | | | |
| KAPI | Kappang | 9.04 | 279 | Pn | Pn | 11 31 13.0 | +0.5 |
| | 1μm,1.0s,SNR=27 | | | | | | |
| KAPI | Kappang | 9.04 | 279 | P | Pn | 11 31 13.9 | +1.3 |
| | SNR=34 | | | | | | |
| KAPI | Kappang | 9.04 | 279 | ePn | Pn | 11 31 13.8 | +1.3 |
| KNRA | Kununurra | 9.05 | 180 | P | Pn | 11 31 10.7 | -1.8 |
| | baz=9.1 | | | | | | |
| SPSI | Sidrap Palu | 9.27 | 286 | P | Pn | 11 31 16.7 | +1.3 |
| | 337nm,1.2s,6μm | | | | | | |
| TTSI | Tana Toraja | 9.53 | 291 | P | Pn | 11 31 21.1 | +2.5 |
| | 603nm,1.2s,9μm | | | | | | |
| WBSI | Waikabubak, Su | 9.71 | 251 | P | Pn | 11 31 19.3 | -1.8 |
| MRSI | Marisa | 9.73 | 316 | P | Pn | 11 31 23.3 | +2.1 |
| | 2μm,1.0s,15μm | | | | | | |
| PCI | Palu | 10.49 | 302 | P | P | 11 31 34.2 | -1.7 |
| | 865nm,1.2s,9μm | | | | | | |
| SGSI | Sangihe | 10.67 | 343 | P | Pn | 11 31 33.7 | +0.6 |
| | 3μm,0.7s,36μm | | | | | | |
| SGSI | | | | S | S | 11 33 28.3 | -4.5 |
| | 3μm,0.7s,36μm | | | | | | |
| SMPI | Sarmi | 10.96 | 66 | P | Pn | 11 31 36.5 | -0.2 |
| | 288nm,1.3s,4μm | | | | | | |
| MPSI | Mapaga | 11.15 | 308 | P | P | 11 31 42.5 | -0.8 |
| MMPI | Merauke | 11.73 | 100 | P | Pn | 11 31 47.1 | +0.8 |
| | 3μm,1.0s,26μm | | | | | | |
| TWSI | Taliwang, Sumb | 11.92 | 259 | P | Pn | 11 31 47.1 | -1.5 |
| TWSI | | | | S | S | 11 33 49.9 | -12 |
| GENI | Genyem | 12.09 | 71 | P | Pn | 11 31 51.7 | +1.0 |
| | 1μm,1.0s,11μm | | | | | | |
| JAY | Jayapura | 12.62 | 72 | P | Pn | 11 31 58.0 | +0.6 |
| | baz=13,SNR=21 | | | | | | |
| BKB | Balikpapan | 12.91 | 294 | P | P | 11 32 06.0 | +3.2 |
| | 2μm,1.3s,20μm | | | | | | |

KBKI **Kotabaru** 12.91 284 P **P** 11 32 03.2 +0.4
309nm,1.1s,5µm
GSPH **General Santos** 13.12 343 ⇑*i*P **Pn** 11 32 04.1 +0.5
MATI **Mati** 13.65 350 *e*P **P** 11 32 12.2 +1.2
BBKI **Banjar Baru** 14.15 282 P **P** 11 32 19.1 +2.5
667nm,1.9s,14µm71µm
I07AU **WARRAMUNGA INT** 14.36 158 P **Pn** 11 32 17.1 -1.4
I07AU S **S** 11 34 56.0 -1.6
WRAB **Tennant Creek** 14.37 158 *c i*P **Pn** 11 32 16.1 -2.6
WRAB pmax pmax
comp=Z,6µm,1.2s
WRAB **Tennant Creek** 14.37 158 Pn **Pn** 11 32 16.3 -2.4
comp=Z,10µm,0.8s
WRAB **Tennant Creek** 14.37 158 *e*P **Pn** 11 32 16.1 -2.6
comp=Z,2µm,0.9s
WRAB *e*S S 11 34 47.7 -10
WRA **Warramunga Arr** 14.37 158 P **Pn** 11 32 15.9 -2.8
comp=Z,9.9nm,0.3s,baz=331,slow=12,SNR=896
WRA S S 11 34 46.4 -12
comp=Z,21nm,0.3s,baz=334,slow=23,SNR=10.0
CTBH **Cotabato--PC H** 14.41 342 ⇓*i*P **P** 11 32 19.8 +0.4
ABJI **Asem Bagus** 14.41 264 P P 11 32 23.0 +3.5
comp=Z,255nm,0.9s,comp=Z,3µm
KMMI **Kalianget** 14.65 267 P Pn 11 32 25.6 +3.5
comp=Z,207nm,1.0s,comp=Z,3µm
BUKP **Musuan** 14.81 346 *e*P **Pn** 11 32 24.9 +0.8
PALU **Palau** 14.97 23 P **Pn** 11 32 26.9 +0.9
baz=15,SNR=163
BLJI **Banyuglugur** 15.04 265 P **Pn** 11 32 29.4 +2.6
comp=Z,473nm,0.6s,comp=Z,4µm
PAGZ **Pagadian** 15.28 340 *e*P **Pn** 11 32 31.0 +1.4
CGP **Cagayan de Oro** 15.46 345 *e*P **Pn** 11 32 32.3 +0.5
MYLDM **Lahad Datu** 15.50 319 *e*P **Pn** 11 32 35.9 +3.6
comp=Z,263nm,1.0s
BUTP **Butuan** 15.74 349 *e*P **Pn** 11 32 38.2 +3.1
DCPH **Dipolog City** 15.97 340 *e*P **Pn** 11 32 40.1 +2.2
COEN **Coen** 16.01 118 P **P** 11 32 37.6 +0.6
baz=16,SNR=437
COEN **Coen** 16.01 118 *e*P **P** 11 32 37.4 +0.3
comp=Z,972nm,0.8s
COEN *e*S **S** 11 35 26.8 -5.7
GRJI **Gresik** 16.12 268 P **Pn** 11 32 44.2 +4.5
comp=Z,201nm,0.8s
SCPH **Surigao** 16.56 349 ⇓*e*P **Pn** 11 32 45.4 +0.6
TBJI **Tambak Boyo** 16.75 268 P **Pn** 11 32 51.2 +4.1
comp=Z,587nm,1.6s,comp=Z,8µm
PWJI **Pagerwojo** 16.83 264 P **Pn** 11 32 50.2 +2.2
comp=Z,99nm,1.0s
MBWA **Marble Bar** 16.91 210 P **P** 11 32 47.3 +0.5
SNR=30
MBWA **Marble Bar** 16.91 210 *e*P **P** 11 32 46.9 0.0
comp=Z,164nm,0.9s
MBWA *e*S **S** 11 35 45.6 -4.8
NGJI **Ngawi** 17.14 266 P Pn 11 32 56.6 +5.0
comp=Z,111nm,1.5s
PBKI **Pangkalan Bun** 17.41 282 P **Pn** 11 32 55.1 +0.3
comp=Z,943nm,1.0s,comp=Z,9µm
PCJI **Pacitan** 17.46 264 P **Pn** 11 32 57.0 +1.6
comp=Z,128nm,0.5s,comp=Z,3µm
QIS **Mount Isa** 17.46 144 P **P** 11 32 53.4 +0.4
baz=18,SNR=822
KKM **Kota Kinabalu** 17.68 315 P **P** 11 32 56.7 +1.3
baz=18,SNR=18
KKM **Kota Kinabalu** 17.68 315 *e*P **P** 11 32 56.3 +0.9
comp=Z,172nm,1.1s
KKM *e*S **S** 11 36 06.1 0.0
AS15 **Alice Springs** 17.69 164 P **P** 11 32 56.3 +0.9
baz=18
WOJI **Wonogiri, Jawa** 17.69 265 P **Pn** 11 33 00.7 +2.6
comp=Z,146nm,0.8s
ASAR **Alice Springs** 17.71 164 P **P** 11 32 56.2 +0.6
comp=Z,194nm,0.3s,baz=346,slow=12,SNR=9270
ASAR S **S** 11 36 02.5 -4.1
comp=Z,8.8nm,0.3s,baz=344,slow=24,SNR=16
ASAR ScP **ScP** 11 40 32.6 -0.1
comp=Z,2.5nm,0.3s,baz=348,slow=1.5,SNR=3.9
AS01 **Alice Springs** 17.73 164 *e*P **P** 11 32 55.0 -0.8
PLP **Palo** 18.01 348 ⇓*e*P **P** 11 32 58.4 -0.4
WRKA **Warakurna** 18.37 181 P **P** 11 33 03.3 +0.6
baz=18,SNR=1000
PMG **Port Moresby** 18.49 100 P **Pn** 11 33 05.9 -1.6
comp=Z,4.7nm,0.3s,baz=296,slow=4.4,SNR=22
PMG S **S** 11 36 25.4 +3.6
baz=178,slow=20,SNR=7.4
PMG **Port Moresby** 18.49 100 ⇑*e*P **Pn** 11 33 06.5 -1.0
PMG pmax pmax
comp=Z,698nm,0.8s
PMG **Port Moresby** 18.49 100 *e*P **P** 11 33 03.4 -0.6
comp=Z,367nm,0.9s
PMG *e*S **S** 11 36 26.5 +4.7
SBUM **Sibu** 18.74 298 *e*P **P** 11 33 07.6 +0.8
comp=Z,221nm,1.1s
KSM **Kuching** 20.03 293 P **P** 11 33 20.2 -0.3
baz=20,SNR=9.0
KSM **Kuching** 20.03 293 *e*P **P** 11 33 20.1 -0.5
comp=Z,94nm,1.2s
CMJI **Cimerak** 20.14 265 P **P** 11 33 22.6 +0.9
comp=Z,306nm,0.7s
LEM **Lembang** 20.95 268 P **P** 11 33 31.4 +0.9
comp=Z,4µm,0.7s,comp=Z,43µm
GIRL **Giralia** 21.21 220 P **P** 11 33 33.5 +0.7
baz=21,SNR=31
TPI **Tanjungpandan** 21.32 279 P **P** 11 33 37.4 +3.5
comp=Z,151nm,1.8s,comp=Z,3µm
CNJI **Cibinong** 21.43 267 P **P** 11 33 35.1 +0.1
comp=Z,1µm,1.2s,comp=Z,10µm
CTA **Charters Tower** 21.69 130 P **P** 11 33 38.1 +0.7
comp=Z,210nm,1.1s,baz=303,slow=11,SNR=50
CTA pP **pP** 11 34 19.2 +0.8
comp=Z,116nm,0.8s,baz=303,slow=14,SNR=4.0
CTA S **S** 11 37 21.3 +1.4
comp=Z,37nm,0.8s,baz=135,slow=12,SNR=3.2
CTA **Charters Tower** 21.69 130 P **P** 11 33 38.3 +0.9
baz=22
CTAO **Charters Tower** 21.69 130 *e*P **P** 11 33 37.7 +0.3
CTAO pmax pmax
comp=Z,537nm,1.2s
CTAO **Charters Tower** 21.69 130 *e*P **P** 11 33 37.7 +0.3
comp=Z,537nm,1.2s
CBJI **Citeko** 21.72 269 P **P** 11 33 36.7 -1.0
comp=Z,1µm,0.7s
SKJI **Sukabumi** 22.00 268 P **P** 11 33 40.1 -0.2
comp=Z,394nm,0.7s,comp=Z,4µm
MEEK **Meekatharra** 22.15 205 P **P** 11 33 41.2 -0.3
baz=22,SNR=143
CGJI **Cibinong** 22.86 269 P **P** 11 33 47.8 -0.3
comp=Z,443nm,0.9s,comp=Z,4µm
PPBI **Pangkal Pinang** 22.92 280 P **P** 11 33 50.1 +1.4
comp=Z,83nm,0.7s,comp=Z,4µm
XMIS **Christmas Isla** 23.13 259 P **P** 11 33 49.8 -0.8
baz=23,SNR=4.1
FORT **Forrest** 24.09 181 P **P** 11 33 59.1 0.0
baz=24,SNR=356
FORT **Forrest** 24.09 181 *e*P **P** 11 33 59.1 0.0
comp=Z,342nm,0.5s
PMBI **Palembang** 24.12 278 P P 11 34 06.1 +6.5
comp=Z,396nm,1.2s,comp=Z,16µm
MDSI **Maura Dua** 24.50 274 P **P** 11 34 04.6 +1.6
comp=Z,25nm,1.1s
LWLI **Liwa** 24.57 272 P P 11 34 14.9 +11
QLP **Quilpie** 24.79 145 P **P** 11 34 05.8 +0.3
baz=25,SNR=371
LHSI **Lahat** 25.23 275 P **P** 11 34 13.7 +4.1
comp=Z,72nm,1.4s,comp=Z,1µm
MORW **Morawa** 25.37 207 P **P** 11 34 10.7 0.0
baz=25,SNR=36
KMBL **Kambalda** 25.48 194 P **P** 11 34 11.7 +0.1
baz=26,SNR=79
GUMO **Guam** 25.66 39 P **P** 11 34 12.8 -0.6
comp=Z,209nm,0.8s,baz=203,slow=8.8,SNR=18
GUMO **Guam** 25.66 39 *e*P **P** 11 34 13.6 +0.2
GUMO pmax pmax
comp=Z,234nm,0.9s
GUMO **Guam** 25.66 39 *e*P **P** 11 34 13.6 +0.2
comp=Z,234nm,0.9s
MYKOM **Kota Tinggi** 26.17 288 *e*P **P** 11 34 21.4 +3.4
MYKOM *e*pP **pP** 11 35 08.8 +2.1
BLDU **Balliduu** 26.44 204 P **P** 11 34 20.1 -0.1
baz=26,SNR=57
KLBR **Kellerberrin** 26.92 201 P **P** 11 34 24.7 +0.3
baz=27,SNR=142
BBOO **Buckleboo** 26.99 166 P **P** 11 34 25.0 -0.1
baz=27,SNR=182
BBOO **Buckleboo** 26.99 166 *e*P **P** 11 34 25.0 -0.1
comp=Z,138nm,0.8s
RMQ **Roma** 27.51 138 P **P** 11 34 30.4 +0.6
baz=28,SNR=20

NWAO **Narrogin (SRO)** 28.31 201 P **P** 11 34 37.0 +0.2
comp=Z,50nm,0.4s,baz=276,slow=0.0,SNR=104
NWAO pP **pP** 11 35 25.6 -0.1
comp=Z,156nm,0.8s,baz=65,slow=0.0,SNR=14
NWAO **Narrogin (SRO)** 28.31 201 *e*P **P** 11 34 36.9 +0.2
NWAO *PP **pP** 11 35 25.7 -0.1
NWAO pmax pmax
comp=Z,2µm,0.8s
NWAO **Narrogin (SRO)** 28.31 201 P **P** 11 34 37.1 +0.2
baz=28,SNR=72
NWAO **Narrogin (SRO)** 28.31 201 *e*P **P** 11 34 36.9 +0.2
comp=Z,2µm,0.8s
NWAO pP **pP** 11 35 25.6 -0.1
EIDS **Eidsvold** 28.41 134 P **P** 11 34 37.3 -0.5
baz=28,SNR=6.0
EIDS **Eidsvold** 28.41 134 *e*P **P** 11 34 37.4 -0.4
comp=Z,99nm,0.9s
PPI **Padang Panjang** 28.89 281 P **P** 11 34 44.6 +2.4
comp=Z,27nm,1.4s
CMSA **Cobar Meteorol** 29.48 150 P **P** 11 34 47.8 +0.7
baz=30,SNR=99
IPM **Ipoh** 29.74 291 *e*P **P** 11 34 51.3 +1.6
IPM *epP **pP** 11 35 38.3 -0.7
RKGY **Rocky Gully** 29.93 200 P **P** 11 34 52.7 +1.7
baz=30,SNR=27
MNSI **Mandailing Nat** 29.98 283 P **P** 11 34 54.7 +2.9
comp=Z,46nm,1.1s,comp=Z,980nm
KULM **Kulim** 30.39 292 *e*P **P** 11 34 56.4 +1.0
KULM *epP **pP** 11 35 43.3 -1.3
TPUB **Ta-pu** 30.72 345 *e*P **P** 11 34 56.5 -1.7
comp=Z,43nm,0.9s
PSI **Prapat** 31.16 286 *e*P **P** 11 35 03.6 +1.3
PSI *e*PP **pP** 11 35 51.3 -0.4
PSI pmax pmax
comp=Z,66nm,0.9s
PSI **Prapat** 31.16 286 *e*P **P** 11 35 03.6 +1.3
comp=Z,66nm,0.9s
PSI *epP **pP** 11 35 51.3 -0.4
YOJ **Yonaguni jima** 31.34 350 *e*P **P** 11 35 03.3 -0.2
YOJ pmax pmax
comp=Z,132nm,0.6s
YOJ **Yonaguni jima** 31.34 350 *e*P **P** 11 35 03.3 -0.2
comp=Z,132nm,0.6s
QIZ **Qiongzhong** 31.51 324 P **P** 11 35 06.6 +1.5
QIZ pP **pP** 11 35 56.8 +2.2
QIZ PP **PP** 11 36 23.9 +2.0
QIZ sP **sP** 11 36 25.8 +2.5
QIZ S **S** 11 39 56.5 +1.7
QIZ sS **sS** 11 41 27.8 +4.0
QIZ LN
comp=Z,790nm,22.9s
QIZ LE
comp=Z,390nm,18.1s
QIZ LZ
comp=Z,820nm,21.1s
YHNB **Yeheng** 31.86 347 *e*P **P** 11 35 06.9 -1.2
comp=Z,50nm,0.6s
COCO **West Island** 31.92 258 *i* P **P** 11 35 07.6 -1.1
ARMA **Armidale** 32.03 141 P **P** 11 35 10.9 +1.3
baz=32,SNR=19
ARMA **Armidale** 32.03 141 *e*P **P** 11 35 11.2 +1.5
comp=Z,105nm,1.1s
ARPS **Mount Arapiles** 32.36 160 P **P** 11 35 13.3 +1.0
baz=32,SNR=106
PATS **Pohnpei** 32.40 66 P **P** 11 35 14.2 +1.3
baz=32,SNR=5.6
SRIT **Nakonsritamara** 32.70 297 P P 11 35 22.8 +7.3
comp=Z,39nm,0.8s,comp=Z,2µm
QZH **Quanzhou** 32.84 343 ⇑*i*P **P** 11 35 16.8 +0.3
QZH sP **sP** 11 36 33.1 -1.8
QZH S **S** 11 40 12.9 -2.3
QZH SS SS 11 42 29.0 -16
QZH PMZ
comp=Z,130nm,0.9s
YNG **Young** 33.05 149 P **P** 11 35 19.8 +1.4
baz=33,SNR=184
MGCD **Mangrove Creek** 33.69 145 P **P** 11 35 25.8 +1.9
baz=34,SNR=30
MLSI **Meulaboh, Aceh** 34.00 288 P P 11 35 32.5 +5.7
comp=Z,158nm,0.6s
CAN **Canberra** 34.16 150 *e*P **P** 11 35 29.4 +1.5
CAN pmax pmax
comp=Z,341nm,0.8s
CAN **Canberra** 34.16 150 *e*P **P** 11 35 29.4 +1.5
comp=Z,341nm,0.8s
CNB **Canberra Magne** 34.34 149 P **P** 11 35 30.8 +1.4
baz=34,SNR=50
TOO **Toolangi** 34.43 156 P **P** 11 35 32.0 +1.9
baz=34,SNR=64
NONG **Nongkai** 35.16 315 P **P** 11 35 37.9 +1.4
comp=Z,44nm,1.0s,comp=Z,8µm
MILA **Mila** 35.61 151 P **P** 11 35 42.0 +1.6
baz=36,SNR=19
CBIJ **Chichi jima** 35.92 21 *e*P **P** 11 35 41.4 -1.5
comp=Z,239nm,0.7s
UTHA **Uthaitani** 36.38 307 P **P** 11 35 48.1 +1.1
comp=Z,11nm,0.8s,comp=Z,116nm
UTTA **Uttaradit** 36.84 311 P **P** 11 35 52.1 +1.3
comp=Z,8.9nm,0.6s
SLVN **Son La** 36.90 319 *e*P **P** 11 35 52.5 +1.1
CMBY **CAMPBELL BAY** 37.23 291 *e*P **P** 11 35 53.5 -0.7
CMBY AMB AMB 11 35 59.0
comp=Z,48nm,1.4s
SSE **Sheshan** 38.14 350 ⇓P **P** 11 36 01.7 +0.2
SSE sP **sP** 11 37 20.6 -0.1
SSE PP **PP** 11 37 33.9 -0.6
SSE S **ScP** 11 41 34.7 -0.1
SSE PMZ
comp=Z,76nm,0.9s
SSE PMZ
comp=Z,210nm,5.2s
SSE LN
comp=Z,120nm,21.3s
SSE LZ
comp=Z,150nm,18.6s
CM01 **Chiang Mai Arr** 38.45 311 *e*P **P** 11 36 04.6 +0.4
CMAR **Chiang Mai Arr** 38.48 311 P **P** 11 36 05.7 +1.1
comp=Z,8.1nm,0.6s,baz=136,slow=7.0,SNR=50
CMAR pP **pP** 11 36 55.5 +0.1
comp=Z,4.6nm,0.8s,baz=141,slow=7.1,SNR=2.5
CMAR PcP **PcP** 11 38 13.5 +1.3
comp=Z,5.3nm,0.8s,baz=151,slow=3.5,SNR=4.6
CMAR **Chiang Mai Arr** 38.48 311 *ce*P **P** 11 36 06.0 +1.5
CMAR pmax pmax
comp=Z,8.0nm,0.6s
CHTO **Chiang Mai** 38.70 311 P **P** 11 36 07.6 +1.3
comp=Z,160nm,1.2s,comp=Z,2µm
CHTO **Chiang Mai** 38.70 311 *e*P **P** 11 36 07.4 +1.1
CHTO *e*PP **pP** 11 36 55.6 -1.7
CHTO *e* 11 41 45.2
CHTO **Chiang Mai** 38.70 311 P **P** 11 36 08.1 +1.8
SNR=9.3
CHTO **Chiang Mai** 38.70 311 *e*P **P** 11 36 07.3 +1.1
CHTO *epP **pP** 11 36 55.6 -1.7
CHTO *e* 11 41 45.2
GYA **Guiyang** 39.18 328 ⇓*i*P **P** 11 36 10.6 +0.2
GYA pP **pP** 11 37 05.0 +3.5
GYA sP **sP** 11 37 33.8 +4.0
GYA PP **PnPn** 11 37 51.4 -0.2
GYA PcP **PcP** 11 38 17.0 +2.6
GYA ScP **ScP** 11 41 40.5 +1.4
GYA S **S** 11 41 55.2 +3.4
GYA PcS **PcS** 11 42 06.6 +1.8
GYA sS **sS** 11 43 27.0 +4.2
GYA PMZ
comp=Z,30nm,1.0s
GYA PMZ
comp=Z,140nm,6.3s
GYA LN
comp=Z,740nm,14.0s
GYA LE
comp=Z,790nm,14.0s
GYA LZ
comp=Z,430nm,17.2s
WHN **Wuhan** 39.39 340 ⇓P **P** 11 36 12.9 +1.1
WHN pP **pP** 11 37 06.3 +3.3
WHN S **S** 11 41 52.1 -2.3
WHN PMZ
comp=Z,950nm,2.2s
WHN LZ
comp=Z,790nm,21.3s
JNU **Nakatsue** 39.53 3 P **P** 11 36 12.9 -0.1
comp=Z,105nm,0.8s,baz=181,slow=4.2,SNR=50
JNU **Nakatsue** 39.53 3 *e*P **P** 11 36 13.1 +0.1
NJ2 **Nanjing** 39.54 347 *e*P **P** 11 36 13.4 +0.4

NJ2 pP **pP** 11 37 05.2 +1.0
NJ2 sP **sP** 11 37 33.4 +0.8
NJ2 S **S** 11 41 56.0 -0.6
NJ2 sS **sS** 11 43 24.5 -3.3
NJ2 PMZ
comp=Z,280nm,1.1s
NJ2 PMZ
comp=Z,800nm,7.4s
NJ2 LN
comp=Z,980nm,24.2s
NJ2 LE
comp=Z,760nm,21.0s
NJ2 LZ
comp=Z,750nm,25.1s
TAU **Tasmania Unive** 39.74 158 *e*P **P** 11 36 15.6 +1.0
TAU pmax pmax
comp=Z,130nm,1.3s
TAU **Tasmania Unive** 39.74 158 P **P** 11 36 16.0 +1.4
comp=Z,402nm,1.2s,SNR=5.2
TAU **Tasmania Unive** 39.74 158 *e*P **P** 11 36 15.6 +1.0
comp=Z,130nm,1.3s
KSJJU **Jeju** 39.84 357 P **P** 11 36 17.0 +1.4
SNR=6.7
KSJJU **Jeju** 39.84 357 P **P** 11 36 17.0 +1.4
SNR=6.7
PBA **Port Blair** 40.10 297 *e*P P 11 36 17.6 -0.4
PBA AMB AMB 11 36 26.7
comp=Z,64nm,0.0s
KMI **Kunming** 40.39 322 P **P** 11 36 21.5 +1.1
KMI pP **pP** 11 37 12.8 +1.0
KMI sP **sP** 11 37 37.1 -3.0
KMI PP **PP** 11 37 58.5 -0.7
KMI S **S** 11 42 07.5 -2.4
KMI sS **sS** 11 43 42.2 +0.9
KMI SS **SS** 11 45 14.8 -5.3
KMI PMZ
comp=Z,54nm,1.5s
KMI PMZ
comp=Z,270nm,3.1s
KMI LN
comp=Z,380nm,16.9s
KMI LE
comp=Z,390nm,18.7s
KMI LZ
comp=Z,470nm,19.4s
DGPR **DIGLIPUR** 40.60 299 *e*P **P** 11 36 22.0 0.0
DGPR AMB AMB 11 36 32.2
comp=Z,26nm,1.3s
KSWAN **Wando** 40.78 357 P **P** 11 36 24.1 +1.0
SNR=8.3
KSWAN **Wando** 40.78 357 P **P** 11 36 24.1 +1.0
SNR=8.3
KSJDO **Jindo** 40.88 357 P **P** 11 36 24.6 +0.6
SNR=22
KSJDO **Jindo** 40.88 357 P **P** 11 36 25.0 +1.0
SNR=6.8
KSKOH **Goheung** 40.98 358 P **P** 11 36 25.5 +0.8
SNR=5.9
KSKOH **Goheung** 40.98 358 P **P** 11 36 25.8 +1.1
SNR=12
ENH **Enshi** 41.01 334 *e*P **P** 11 36 25.3 +0.1
KSHUK **Heuksando** 41.15 356 P **P** 11 36 27.2 +1.0
SNR=7.1
KSHUK **Heuksando** 41.15 356 P **P** 11 36 27.4 +1.2
SNR=9.7
KSNAH **Namhae** 41.17 359 P **P** 11 36 26.9 +0.6
SNR=9.7
KSNAH **Namhae** 41.17 359 P **P** 11 36 26.9 +0.6
SNR=9.7
KSKWJ **Gwangju** 41.54 358 P **P** 11 36 30.0 +0.7
SNR=13
KSKWJ **Gwangju** 41.54 358 P **P** 11 36 30.0 +0.7
SNR=13
KSBUS **Busan** 41.60 0 P **P** 11 36 30.2 +0.4
SNR=9.3
KSBUS **Busan** 41.60 0 P **P** 11 36 30.2 +0.4
SNR=9.3
KSJEU **Jeongeup** 41.87 358 P **P** 11 36 32.8 +0.7
SNR=11
KSJEU **Jeongeup** 41.87 358 P **P** 11 36 32.8 +0.7
SNR=11
KSDAG **Daegu** 42.12 0 P **P** 11 36 34.6 +0.6
SNR=10
KSDAG **Daegu** 42.12 0 P **P** 11 36 34.6 +0.6
SNR=10
KSJEO **Jeonju** 42.30 358 P **P** 11 36 36.2 +0.7
SNR=17
KSGUS **GUNSAN** 42.42 358 P **P** 11 36 36.8 +0.4
SNR=5.8
KSGUS **GUNSAN** 42.42 358 P **P** 11 36 36.8 +0.4
SNR=5.8
KSCPR **CHUPUNGNYEONG** 42.57 359 P **P** 11 36 38.6 +0.9
SNR=16
KSCPR **CHUPUNGNYEONG** 42.57 359 P **P** 11 36 38.6 +0.9
SNR=16
TJN **Taejon** 42.74 358 *d i*P **P** 11 36 39.6 +0.6
KSSAJ **Sangju** 42.76 359 P **P** 11 36 39.8 +0.7
SNR=15
KSKOJ **Gongju** 42.84 358 P **P** 11 36 40.7 +0.9
SNR=21
KSKOJ **Gongju** 42.84 358 P **P** 11 36 40.7 +0.9
SNR=21
KSBON **Boeun** 42.85 359 P **P** 11 36 41.3 +1.4
SNR=55
KSCEJ **CHEONGJU** 43.00 359 P **P** 11 36 42.4 +1.4
SNR=5.2
KSSES **Seosan** 43.19 357 P **P** 11 36 43.7 +1.2
SNR=16
KSCEA **Cheonan** 43.19 358 P **P** 11 36 43.7 +1.1
SNR=35
KSCHJ **Chungju** 43.22 359 P **P** 11 36 43.7 +0.9
SNR=16
KSTBA **Taebaek** 43.47 0 P **P** 11 36 46.3 +1.5
SNR=13
KSSWO **Suwon** 43.64 358 P **P** 11 36 47.4 +1.3
SNR=11
KSICN **Icheon** 43.65 359 P **P** 11 36 47.4 +1.2
SNR=21
KSWJU **Wonju** 43.75 359 P **P** 11 36 48.3 +1.2
SNR=11
KSJES **JEONGSEON** 43.77 360 P **P** 11 36 48.5 +1.3
SNR=15
KSAR **Wonju Array Be** 43.79 359 P **P** 11 36 48.5 +1.2
KSAR 11 38 30.1
KSAR **Wonju Array Be** 43.79 359 P **P** 11 36 48.5 +1.2
KSAR PcP **PcP** 11 38 30.1 +0.8
KSAR ScP **ScP** 11 41 56.9 -0.2
MJAR **Matsushiro Arr** 43.80 11 P **P** 11 36 46.4 -1.0
comp=Z,90nm,0.9s,baz=188,slow=9.6,SNR=181
MJAR ScP **ScP** 11 41 56.4 -0.8
comp=Z,4.9nm,0.7s,baz=186,slow=5.7,SNR=11
KSRS **Korea Array** 43.80 359 P **P** 11 36 48.5 +1.1
comp=Z,64nm,0.6s,baz=176,slow=9.0,SNR=301
KSRS PcP **PcP** 11 38 30.1 +0.8
comp=Z,5.8nm,0.6s,baz=193,slow=3.0,SNR=5.8
KSRS ScP **ScP** 11 41 56.9 -0.2
comp=Z,3.0nm,0.8s,baz=191,slow=4.4,SNR=4.9
MAJO **Matsushiro** 43.80 11 *d i*P **P** 11 36 46.2 -1.3
MAJO pmax pmax
comp=Z,817nm,0.9s
MAJO **Matsushiro** 43.80 11 *e*P **P** 11 36 46.7 -0.8
comp=Z,157nm,0.9s
MAT **Matsushiro** 43.80 11 P **P** 11 36 46.4 -1.1
MAT S **S** 11 42 56.0 -3.1
KSSEO **Seoul** 43.86 358 P **P** 11 36 49.2 +1.4
SNR=6.7
INCN **Inchon** 43.87 358 *e*P **P** 11 36 48.6 +0.6
comp=Z,824nm,2.5s
TIA **Tai'an** 43.93 346 ⇓P **P** 11 36 48.0 -0.4
TIA S **S** 11 42 57.5 -3.3
TIA SS **ScS** 11 46 19.7 -0.4
TIA PMZ
comp=Z,60nm,1.3s
TIA PMZ
comp=Z,460nm,4.4s
TIA LN
comp=Z,210nm,23.8s
TIA LE
comp=Z,500nm,20.2s
TIA LZ
comp=Z,370nm,18.4s
KSDGY **Daegwallycong** 44.03 360 P **P** 11 36 50.6 +1.2
SNR=12
KSGAH **Ganghwa** 44.10 357 P **P** 11 36 50.9 +1.1
SNR=7.2
KSCHC **Chuncheon** 44.13 359 P **P** 11 36 51.3 +1.3
SNR=15

KSJMJ Jumunjin 44.22 0 P P 11 36 52.3 +1.6
SNR=12
CD2 Chengdu 44.27 329⇑eP P 11 36 51.7 +0.4
CD2 pP pP 11 37 44.3 +0.7
CD2 sP sP 11 38 12.9 +1.3
CD2 S S 11 43 07.7 +1.7
CD2 sS sS 11 44 41.7 +3.0
CD2 PMZ
comp=Z,100nm,0.7s
CD2 PMZ
comp=Z,160nm,4.5s
CD2 LN
comp=Z,790nm,11.3s
CD2 LE
comp=Z,930nm,12.5s
CD2 LZ
comp=Z,390nm,15.2s
KSMUS Musan 44.27 358 P P 11 36 52.6 +1.5
SNR=20
KSDDC Dongducheon 44.27 358 P P 11 36 53.3 +2.2
SNR=6.0
KSIJA INJE 44.33 359 P P 11 36 53.4 +1.8
SNR=11
YNCB YEONCHEON 44.41 358 P P 11 36 54.0 +1.8
SNR=13
KSBAR Backryungdo 44.48 355 P P 11 36 54.7 +2.0
SNR=7.0
XAN Xi'an 44.52 336 P P 11 36 52.4 -0.9
XAN sP sP 11 38 14.5 +0.9
XAN PcP PcP 11 38 32.8 +0.9
XAN PP PP 11 38 40.7 -2.1
XAN ScP ScP 11 41 56.3 -3.9
XAN S S 11 43 03.8 -5.8
XAN SS ScS 11 46 24.1 0.0
XAN PMZ
comp=Z,64nm,1.1s
XAN PMZ
comp=Z,180nm,10.4s
XAN LN
comp=Z,310nm,26.3s
XAN LE
comp=Z,470nm,29.7s
XAN LZ
comp=Z,330nm,21.8s
SEHB SEOHWA 44.61 359 P P 11 36 55.4 +1.5
SNR=27
BJT Baijiatuau 47.78 347 eP P 11 37 18.5 +0.1
BJT pmax pmax
comp=Z,92nm,0.8s
BJT Baijiatuau 47.78 347 eP P 11 37 18.5 +0.1
comp=Z,92nm,0.8s
BJI Beijing 47.80 347 P P 11 37 18.7 +0.2
BJI sP sP 11 38 36.4 -3.0
BJI PcP PcP 11 38 44.6 +1.4
BJI ScP ScP 11 42 14.3 +0.7
BJI S S 11 43 52.7 -3.1
BJI sS sS 11 45 30.1 +0.3
BJI ScS ScS 11 46 47.1 +2.0
BJI PMZ
comp=Z,120nm,0.8s
SHL Shillong 47.97 313 eP P 11 37 20.7 +0.3
SHL AMB AMB 11 37 21.3
comp=Z,37nm,1.4s
SNY Shenyang 48.39 355 ⇓P P 11 37 22.9 -0.1
SNY S S 11 44 02.7 -1.4
SNY ScS ScS 11 46 48.8 -0.2
SNY PMZ
comp=Z,64nm,1.0s
SNY PMZ
comp=Z,300nm,6.3s
LZH Lanzhou 48.43 333 ⇓P P 11 37 24.6 +0.9
LZH pP pP 11 38 18.2 +1.3
LZH sP sP 11 38 45.1 +0.4
LZH PcP PcP 11 38 47.0 +1.1
LZH PP PP 11 39 18.0 -1.0
LZH S S 11 44 04.2 -1.0
LZH sS sS 11 45 37.1 -2.3
LZH SS SS 11 47 37.0 -1.8
LZH PMZ
comp=Z,220nm,1.4s
LZH PMZ
comp=Z,680nm,5.0s
LZH LN
comp=Z,580nm,14.0s
LZH LE
comp=Z,500nm,14.5s
LZH LZ
comp=Z,800nm,18.0s
MSHR Mys Shultsa 48.97 2 *d* *i*P P 11 37 28.3 +0.9
VLA Vladivostok 49.54 3 *d* *i*P P 11 37 32.5 +0.8
VLA pmax pmax
comp=Z,194nm,0.9s
HHC Hu-ho-hao-te 49.75 343 eP P 11 37 34.1 +0.6
HHC sP sP 11 38 50.6 -4.1
HHC S S 11 44 23.0 -0.3
HHC SS SS 11 47 55.3 -4.1
HHC PMZ
comp=Z,45nm,0.9s
HHC PMZ
comp=Z,380nm,4.7s
PALK Pallekele 49.83 285 *i* P P 11 37 37.0 +2.6
OUZ Omahuta 50.09 131 eP P 11 37 38.5 +2.5
comp=Z,64nm,1.3s
ERM Erimo 50.12 14 *c*eP P 11 37 36.8 +0.7
ERM pmax pmax
comp=Z,30nm,0.8s
ERM Erimo 50.12 14 P P 11 37 37.4 +1.3
comp=Z,249nm,0.6s,SNR=5.5
ERM Erimo 50.12 14 eP P 11 37 37.0 +1.0
CN2 Changchun 50.23 357 ⇓P P 11 37 36.4 -0.4
CN2 esP sP 11 38 58.4 +0.3
CN2 eS S 11 44 28.7 -0.7
CN2 PMZ
comp=Z,20nm,0.7s
CN2 PMZ
comp=Z,300nm,6.0s
CHLP Challavanipeta 50.59 300 eP P 11 37 40.2 +0.2
CHLP IAmb IAmb 11 37 41.9
comp=Z,18nm,0.8s
USRK Ussuriysk Ar. 50.62 3 P P 11 37 40.1 +0.4
comp=Z,64nm,0.7s,baz=187,slow=7.2,SNR=141
VIS Vishakhapatnam 50.90 299 eP P 11 37 42.8 +0.5
MDJ Mudanjiang 50.96 1 P P 11 37 42.8 +0.6
MDJ pP pP 11 38 36.8 +0.7
MDJ sP sP 11 39 04.6 +0.9
MDJ PP PP 11 39 42.1 +0.5
MDJ S S 11 44 38.4 -1.1
MDJ sS sS 11 46 14.4 -0.1
MDJ ScS ScS 11 47 05.3 -1.2
MDJ PMZ
comp=Z,110nm,1.8s
MDJ PMZ
comp=Z,360nm,6.8s
MDJ LN
comp=Z,210nm,18.8s
MDJ LE
comp=Z,130nm,16.9s
MDJ LZ
comp=Z,230nm,15.1s
MDJ Mudanjiang 50.96 1 eP P 11 37 42.9 +0.6
comp=Z,102nm,1.0s
LSA Lhasa 51.01 317 eP P 11 37 44.2 +0.7
LSA pmax pmax
comp=Z,40nm,0.6s
LSA Lhasa 51.01 317 eP P 11 37 44.2 +0.7
comp=Z,40nm,0.6s
BOK Bokaro 51.55 307 eP P 11 37 47.0 -0.1
BOK AMB AMB 11 37 48.5
comp=Z,21nm,0.2s
WKZ Wanaka 51.76 144 eP P 11 37 50.1 +1.9
comp=Z,182nm,1.3s
WHZ Wether Hill Ro 51.77 146 eP P 11 37 49.0 +0.7
comp=Z,120nm,0.7s
MDRS Chennai 51.95 292 eP P 11 37 50.3 +0.2
MDRS AMB AMB 11 37 55.9
comp=Z,31nm,0.6s
ASAJ Asahikawa 51.99 13 eP P 11 37 49.8 -0.1
ODAN Odare 52.01 312 eP P 11 37 51.5 +0.8
comp=Z,130nm,0.5s
TAPN Taplejung 52.05 312 eP P 11 37 52.0 +1.0
comp=Z,158nm,0.4s
PVM Polavaram 52.20 298 eP P 11 37 51.6 -0.3
PVM *e* 11 37 57.0
PVM IAmb IAmb 11 37 58.4
comp=Z,19nm,0.9s

RPZ Rata Peaks 52.36 142 eP P 11 37 54.5 +1.7
comp=Z,269nm,0.8s
THZ Tophouse 52.53 139 eP P 11 37 56.0 +1.9
comp=Z,46nm,0.8s
RAMN Ramite 52.65 311 eP P 11 37 56.6 +1.2
comp=Z,227nm,0.5s
SKHT Srikalahasti 52.66 293 eP P 11 37 55.1 -0.2
SKHT *e* 11 37 59.8
SKHT IAmb IAmb 11 38 00.8
comp=Z,21nm,0.9s
YUK Yuzh-Kuril'sk 52.70 16 *d* *i*P P 11 37 55.3 +0.2
YUK *i* 11 38 59.6
YUK *i* S S 11 45 03.8 +0.6
YUK *i* SS SKiKP 11 48 49.2 +1.3
YUK pmax pmax
comp=N,56nm,1.4s
YUK pmax pmax
comp=E,41nm,1.4s
YUK pmax pmax
comp=Z,221nm,1.4s
OXZ Oxford 52.76 141 eP P 11 37 56.4 +0.7
comp=Z,45nm,0.7s
ODZ Otahua Downs 52.83 144 eP P 11 37 57.3 +1.1
comp=Z,80nm,1.2s
GTA Gaotai 52.99 332 ⇓P P 11 37 58.2 +0.7
GTA pP pP 11 38 49.7 -2.0
GTA PcP PcP 11 39 01.2 -1.5
GTA PP PP 11 40 01.5 +1.4
GTA ScP ScP 11 42 37.2 +1.0
GTA PcS PcS 11 42 59.9 -2.0
GTA S S 11 45 07.5 -0.1
GTA ScS ScS 11 47 22.2 +1.0
GTA SS SS 11 48 50.0 -0.7
GTA PMZ
comp=Z,150nm,1.0s
GTA PMZ
comp=Z,430nm,5.5s
GTA LN
comp=Z,260nm,19.5s
GTA LE
comp=Z,370nm,18.5s
GTA LZ
comp=Z,470nm,17.6s
ADKI Addanki 53.15 295 eP P 11 37 58.6 -0.2
ADKI IAmb IAmb 11 37 59.9
comp=Z,16nm,0.6s
ADKI *e* 11 38 03.9
KHZ Kahutara 53.26 139 eP P 11 37 60.0 +0.7
comp=Z,172nm,1.2s
MQZ McQueen's Vall 53.34 141 eP P 11 38 01.2 +1.4
SNZO South Karori 53.51 138 eP P 11 38 01.3 +0.3
GUN Gumba 53.71 312 eP P 11 38 04.0 +0.8
comp=Z,236nm,0.4s
BKZ Black Stump Fm 53.81 134 PN P 11 38 03.7 +0.2
BKZ Black Stump Fm 53.81 134 eP P 11 38 03.8 +0.4
comp=Z,30nm,0.7s
PKI Pulchoki 53.88 311 eP P 11 38 04.9 +0.5
comp=Z,65nm,0.4s
URZ Urewera 53.89 133 eP P 11 38 04.4 +0.5
comp=Z,35nm,1.1s
PKIN Phulchoki 53.89 311 eP P 11 38 04.8 +0.4
comp=Z,58nm,0.4s
NJS Nagarjunasagar 53.99 296 eP P 11 38 04.3 -0.7
NJS *e* 11 38 09.2
NJS IAmb IAmb 11 38 10.9
comp=Z,15nm,0.7s
KKN Kakani 54.09 311 eP P 11 38 06.5 +0.7
comp=Z,112nm,0.6s
DMN Daman 54.12 311 eP P 11 38 07.0 +0.9
MWZ Matawai 54.22 133 PN P 11 38 06.7 +0.3
MWZ SN S 11 45 23.6 -0.5
KUR Kuril'sk 54.36 17 *d* *i*P P 11 38 07.4 +0.3
KUR *i* S S 11 45 26.5 +1.1
KUR pmax pmax
comp=N,45nm,1.4s
KUR pmax pmax
comp=E,46nm,1.4s
KUR pmax pmax
comp=Z,145nm,1.4s
MXZ Matakaoa Point 54.50 132 PN P 11 38 09.1 +0.8
GKN Gorkha 54.69 311 eP P 11 38 10.8 +0.8
comp=Z,212nm,0.4s
YSS Yuzh-Sakhalins 54.73 12 ⇓*i*P P 11 38 10.0 +0.3
YSS eS S 11 45 27.0 -3.3
YSS pmax pmax
comp=N,50nm,0.7s
YSS pmax pmax
comp=Z,70nm,0.7s
YSS pmax pmax
comp=Z,400nm,8.0s
YSS Yuzh-Sakhalins 54.73 12 eP P 11 38 10.2 +0.5
comp=Z,72nm,0.7s
MHGZ Mahia Peninsul 54.81 134 PN P 11 38 10.6 +0.1
RPR Rampur 54.86 298 eP P 11 38 11.1 -0.1
RPR IAmb IAmb 11 38 17.9
comp=Z,31nm,0.9s
RPR *e* 11 38 18.1
HYB Hyderabad 54.98 296 *i* P P 11 38 11.0 -1.1
HYB epP pP 11 39 05.5 -1.2
HYB eS S 11 45 30.0 -4.7
HYB *e* 11 47 06.0
HYB eScS ScS 11 47 32.0 -4.1
HYB eSS SS 11 49 24.0 +1.5
HYB Hyderabad 54.98 296 eP P 11 38 11.8 -0.3
HYBB Hyderabad (bro 54.98 296 eP P 11 38 11.7 -0.4
HYBB IAmb IAmb 11 38 17.6
comp=Z,14nm,0.7s
HYBB epP pP 11 39 05.2 -1.6
HYBB *e* 11 45 27.7
HYBB eS S 11 45 34.2 -0.5
HYBB *e* 11 47 38.1
HYBB eSS SS 11 49 23.2 +0.7
HABR Khabarovsk 55.09 5 *c*eP P 11 38 11.4 -0.9
HABR e*PP pP 11 39 06.1 -0.9
HABR *e* 11 39 08.9
HABR *e* 11 40 17.5
HABR ePPP PPP 11 41 34.8
HABR eS S 11 45 35.0 -0.1
HABR *e* 11 47 33.8
HABR eSS SS 11 49 24.2 +1.0
HABR pmax pmax
comp=N,87nm,1.8s
HABR pmax pmax
comp=Z,272nm,1.8s
HABR pmax pmax
comp=E,52nm,1.8s
HABR MLR MLR
comp=Z,193nm,18.0s
URV Uravakonda 55.30 293 eP P 11 38 14.4 0.0
URV IAmb IAmb 11 38 19.6
comp=Z,13nm,0.8s
KOLN Koldanda 55.34 310 eP P 11 38 15.7 +0.9
DANN Dangsing 55.53 311 eP P 11 38 16.8 +0.7
KLR Kul'dur 55.63 2 eP P 11 38 12.8 -3.3
KLR eS S 11 45 38.0 -4.2
KLR pmax pmax
comp=N,50nm,1.6s
KLR pmax pmax
comp=Z,320nm,1.6s
HIA Hailar 56.16 353 eP P 11 38 20.6 +0.7
HIA pmax pmax
comp=Z,24nm,0.7s
HIA Hailar 56.16 353 eP P 11 38 20.6 +0.7
comp=Z,24nm,0.7s
ULN Ulaanbaatar 57.47 343 *d* *i*P P 11 38 30.0 +0.7
ULN pmax pmax
comp=Z,155nm,1.9s
ULN Ulaanbaatar 57.47 343 P P 11 38 30.8 +1.6
SNR=34
ULN Ulaanbaatar 57.47 343 eP P 11 38 29.7 +0.5
SONM Songino Array 57.64 342 P P 11 38 31.2 +0.8
comp=Z,38nm,0.8s,baz=157,slow=7.0,SNR=181
SONM ScP ScP 11 42 55.4 -1.1
comp=Z,1.5nm,0.7s,baz=151,slow=3.3,SNR=2.7
SONA1 Songino Array 57.65 342 eP P 11 38 30.6 +0.2
BHPL Bhopal 58.20 302 eP P 11 38 35.3 +0.7
POO Poona 59.56 296 eP P 11 38 42.9 -1.2
NDI New Delhi 60.71 308 eP P 11 38 51.5 -0.1
DDI Dehra Dun 60.82 310 eP P 11 38 52.6 +0.2
DDI AMB AMB 11 38 54.1
comp=Z,42nm,0.9s
ZAK Zakamensk 60.85 342 eP P 11 38 52.3 0.0
ZAK pmax pmax
comp=Z,34nm,1.8s

CASY Casey 60.93 188 eP P 11 38 52.9 +0.5
SMLA Simla 61.88 310 *i* P P 11 39 00.5 +1.1
SMLA AMB AMB 11 39 01.4
comp=Z,179nm,0.8s
TLY Talaya 61.88 343 eP P 11 39 00.1 +1.1
TLY eS S 11 47 06.9 +4.4
TLY *e* 11 48 28.7
TLY pmax pmax
comp=Z,24nm,0.6s
TLY MLR MLR
comp=Z,120nm,19.0s
TLY Talaya 61.88 343 P P 11 39 00.9 +1.9
comp=Z,264nm,0.7s,SNR=19
TLY Talaya 61.88 343 P P 11 39 00.7 +1.7
SNR=24
TLY Talaya 61.88 343 eP P 11 39 00.5 +1.5
IRK Irkutsk 62.19 343 eP P 11 39 00.2 -0.9
IRK eS S 11 46 58.9 -7.5
IRK pmax pmax
comp=Z,197nm,1.4s
WMQ Urumqi 62.34 328⇓*i*P P 11 39 03.5 +1.2
WMQ pP pP 11 39 58.0 -0.4
WMQ sP sP 11 40 23.0 -2.4
WMQ S S 11 47 09.0 +0.3
WMQ ScS SKKSac 11 48 25.0 -4.7
WMQ SS SS 11 51 19.0 +1.7
WMQ PMZ
comp=Z,190nm,0.9s
WMQ PMZ
comp=Z,570nm,4.0s
WMQ LN
comp=Z,590nm,23.0s
WMQ LE
comp=Z,340nm,22.0s
WMQ LZ
comp=Z,190nm,21.0s
MOY Mondy 62.69 341 eP P 11 39 06.0 +1.5
MOY pmax pmax
comp=Z,206nm,1.5s
DHRM DHARAMSHALA 63.05 311 eP P 11 39 07.8 +0.4
DHRM AMB AMB 11 39 08.5
comp=Z,174nm,0.8s
CLNS Chul'man 63.27 358 eP P 11 39 08.5 +0.4
CLNS pmax pmax
comp=Z,35nm,0.9s
CLNS pmax pmax
comp=E,10.0nm,1.0s
CLNS pmax pmax
comp=N,31nm,1.1s
PETK Petropavlovsk- 64.33 19 P P 11 39 16.1 +1.1
comp=N,75nm,0.7s,baz=175,slow=4.5,SNR=114
PET Petropavlovsk 64.57 20 eP P 11 39 17.1 +0.6
PET *e* 11 39 49.0
PET eS S 11 47 37.5 +1.9
PET pmax pmax
comp=Z,96nm,1.3s
PET pmax pmax
comp=Z,500nm,13.4s
PET Petropavlovsk 64.57 20 eP P 11 39 17.1 +0.6
MIR Mirnyy 64.72 195⇑eP P 11 39 27.0 +10
MIR pmax pmax
comp=Z,60nm,1.5s
HVS Khovu-Aksy 64.89 336*c*eP P 11 39 19.9 +1.1
HVS pmax pmax
comp=Z,211nm,0.9s
BOD Bodaibo 65.28 351⇑*i*P P 11 39 21.1 +0.1
BOD pmax pmax
comp=Z,67nm,1.4s
PDGK Podgornoye 66.69 323 P P 11 39 31.2 +1.0
PDGK pmax pmax
comp=Z,64nm,0.8s
KSH Kashi 66.84 318⇓*i*P P 11 39 33.1 +1.6
KSH PcP PcP 11 40 00.0 +1.7
KSH esP sP 11 40 58.7 +3.5
KSH PP PP 11 42 05.4 +3.0
KSH S S 11 48 04.2 +0.3
KSH ScS SKSac 11 49 04.1 -0.1
KSH SS SS 11 52 25.2 -2.3
KSH PMZ
comp=Z,55nm,0.7s
KSH LN
comp=Z,160nm,6.4s
KSH LE
comp=Z,92nm,5.1s
KSH LZ
comp=Z,220nm,10.3s
MK31 Makanchi Array 67.17 327 *i* P P 11 39 34.1 +0.8
MK31 pmax pmax
comp=Z,58nm,0.5s
MKAR Makanchi Array 67.17 327 P P 11 39 34.3 +0.9
comp=Z,88nm,0.6s,baz=123,slow=8.0,SNR=974
MKAR Makanchi Array 67.17 327*c*eP P 11 39 34.2 +0.9
MKAR pmax pmax
comp=Z,88nm,0.6s
ULHL Ulahol 68.08 321 P P 11 39 40.5 +1.2
SNR=8.2
MA2 Magadan 68.24 12 *i* P P 11 39 40.6 +1.0
YAK Yakutsk 68.40 0 P P 11 39 40.8 +0.2
comp=Z,9.6nm,0.2s,baz=197,slow=14
YAK S S 11 48 21.0 -0.2
comp=Z,2.4nm,0.3s,baz=99,slow=23,SNR=5.7
YAK Yakutsk 68.40 0*d* *i*P P 11 39 40.7 +0.2
YAK *e* 11 40 04.3
YAK eS S 11 48 17.0 -4.2
YAK *e* 11 48 52.8
YAK pmax pmax
comp=Z,160nm,1.0s
YAK pmax pmax
comp=N,51nm,0.9s
YAK pmax pmax
comp=E,20nm,1.3s
YAK pmax pmax
comp=Z,219nm,2.8s
YAK pmax pmax
comp=E,234nm,3.3s
YAK pmax pmax
comp=N,172nm,3.5s
YAK smax smax
comp=N,75nm,2.3s
YAK smax smax
comp=E,457nm,3.4s
YAK Yakutsk 68.40 0 eP P 11 39 41.0 +0.4
comp=E,171nm,0.8s
YAK ePcP PcP 11 40 04.7 +0.6
YAK S S 11 48 21.0 -0.2
KZA Kyzart 68.62 320 P P 11 39 44.7 +1.8
SNR=19
SFK Sufi-Kurgan 68.74 317 P P 11 39 44.6 +1.1
SFK pmax pmax
comp=Z,33nm,0.8s
TKM2 Tokmak 2 68.84 321 eP P 11 39 45.3 +1.3
TKM2 pmax pmax
comp=Z,50nm,0.8s
TKM2 Tokmak 2 68.84 321 P P 11 39 45.3 +1.3
SNR=49
TKM2 Tokmak 2 68.84 321 eP P 11 39 45.3 +1.3
comp=Z,50nm,0.8s
KBK Karagaybulak 69.11 320 P P 11 39 47.1 +1.5
SNR=12
UCH Uchtor 69.17 320 P P 11 39 48.0 +1.7
SNR=59
AAK Ala-Archa 69.39 320*d* *i*P P 11 39 48.5 +1.2
AAK pmax pmax
comp=Z,122nm,1.1s
AAK Ala-Archa 69.39 320 P P 11 39 48.0 +0.7
comp=Z,341nm,0.8s,SNR=24
AAK Ala-Archa 69.39 320 P P 11 39 49.1 +1.8
SNR=37
AAK Ala-Archa 69.39 320 P P 11 39 48.9 +1.6
SNR=35
AAK Ala-Archa 69.39 320 eP P 11 39 47.5 +0.2
comp=Z,97nm,1.2s
AAK eS S 11 48 36.2 +2.2
CHMS Chumysh 69.41 321 P P 11 39 48.4 +1.1
SNR=12
FRU Bishkek 69.42 320 *i* P P 11 39 48.0 +0.7
FRU *e* 11 40 12.0
FRU *e* 11 48 36.0
FRU pmax pmax
comp=Z,120nm,1.8s
AML Almayashu 69.65 319 P P 11 39 50.9 +1.7
SNR=43
USP Ospenovka 69.71 321 P P 11 39 50.4 +1.3
SNR=32
EKS2 Erkin-Say 69.86 320 eP P 11 39 51.7 +1.6
EKS2 pmax pmax

comp=Z,130nm,1.2s
**EKS2 Erkin-Say 69.86 320 P P 11 39 51.9 +1.8**
SNR=47
**EKS2 Erkin-Say 69.86 320 eP P 11 39 51.7 +1.6**
comp=Z,130nm,1.2s
**MNAS Manas 70.59 319 P P 11 39 55.9 +1.3**
MNAS pmax pmax
comp=Z,81nm,1.0s
**ZALV Zalesovo Beam 70.64 334 P P 11 39 54.4 0.0**
comp=Z,79nm,0.8s,baz=124,slow=4.9,SNR=157
ZALV S S 11 48 39.6 -8.0
comp=Z,1.4nm,0.7s,baz=139,slow=6.8,SNR=3.4
**DZET Dzherino 71.42 315 P P 11 39 59.7 +0.1**
DZET pmax pmax
comp=Z,78nm,0.9s
**KURK Kurchatov 71.49 329 eP P 11 40 00.5 +0.9**
KURK pmax pmax
comp=Z,308nm,0.9s
**KURK Kurchatov 71.49 329 P P 11 40 00.6 +1.1**
SNR=81
**KURK Kurchatov 71.49 329 P P 11 40 00.1 +0.5**
comp=Z,1µm,0.9s,SNR=64
**KURK Kurchatov 71.49 329 eP P 11 40 00.5 +0.9**
comp=Z,308nm,0.9s
**SEY Seymchan 71.63 11 P P 11 40 01.0 +0.8**
comp=Z,73nm,0.7s,baz=208,slow=4.8,SNR=206
**SEY Seymchan 71.63 11⇓ eP P 11 40 01.2 +1.1**
**NVS Novosibirsk 71.93 334⇓ iP P 11 40 02.0 0.0**
NVS e 11 40 25.9
NVS eS S 11 48 58.0 -4.3
NVS pmax pmax
comp=N,82nm,1.5s
NVS pmax pmax
comp=E,83nm,1.5s
NVS pmax pmax
comp=Z,170nm,1.5s
NVS smax smax
comp=N,142nm,2.4s
NVS smax smax
comp=E,202nm,2.2s
**KK31 Karatay Array 72.18 319 i P P 11 40 04.5 +0.6**
KK31 pmax pmax
comp=Z,43nm,1.0s
**KKAR Karatay Array 72.18 319 eP P 11 40 04.6 +0.8**
KKAR pmax pmax
comp=Z,100nm,1.3s
**KKAR Karatay Array 72.18 319 eP P 11 40 04.6 +0.8**
comp=Z,100nm,1.3s
**VNDA Vanda 73.03 173 P P 11 40 08.4 +0.2**
comp=Z,12nm,0.6s,baz=319,slow=6.5,SNR=120
**OTUK Ortayu 73.55 325 P P 11 40 12.9 +1.1**
OTUK pmax pmax
comp=Z,110nm,0.8s
**SBA Scott Base 73.93 172 eP P 11 40 14.6 +1.2**
SBA pmax pmax
comp=Z,21nm,0.8s
**SBA Scott Base 73.93 172 eP P 11 40 14.6 +1.2**
comp=Z,21nm,0.8s
**WBK Wadi Bani Khal 74.07 296 P P 11 40 16.7 +1.4**
SNR=13
**JMDO Jabal Madar 74.79 295 P P 11 40 20.4 +1.0**
SNR=7.0
**MAW Mawson 74.88 201 P P 11 40 20.0 +0.9**
comp=Z,15nm,0.5s,baz=77,slow=5.3,SNR=79
**MAW Mawson 74.88 201 P P 11 40 20.0 +0.9**
**MAW Mawson 74.88 201 P P 11 40 20.1 +1.1**
baz=75,SNR=55
**SMDO Samad 75.00 296 P P 11 40 21.9 +1.1**
SNR=12
**HOQ Hoqain 75.79 296 P P 11 40 26.7 +1.6**
SNR=14
**IDAH Dahanechah 76.05 306 eP P 11 40 28.6 +1.8**
**IMON Monand 76.35 306 eP P 11 40 30.1 +1.7**
**ARQ Araqi 76.43 296 P P 11 40 29.6 +0.8**
SNR=6.0
**VOSK Vostochnaya 76.56 328 P P 11 40 28.9 +0.1**
VOSK pmax pmax
comp=Z,25nm,0.6s
**IMYA Miami 76.97 309 eP P 11 40 32.3 +0.6**
**BVA0 Borovoye Array 77.02 328 P P 11 40 31.7 +0.3**
BVA0 pmax pmax
comp=Z,211nm,2.0s
**BVAR Borovoye Array 77.02 328 P P 11 40 31.5 +0.1**
comp=Z,17nm,0.7s,baz=133,slow=6.5,SNR=68
**UOSS Wadi Hilu 77.09 297 P P 11 40 33.0 +0.6**
comp=Z,133nm,1.4s,SNR=5.1
**BRVK Borovoye 77.09 328** *d iP* **P 11 40 32.2 +0.4**
BRVK pmax pmax
comp=Z,54nm,1.1s
**BRVK Borovoye 77.09 328 P P 11 40 32.7 +0.9**
comp=Z,239nm,1.1s,SNR=10
**BRVK Borovoye 77.09 328 P P 11 40 32.7 +0.9**
SNR=26
**BRVK Borovoye 77.09 328 eP P 11 40 32.2 +0.4**
comp=Z,26nm,0.8s
**HATD Hatta, Dubai 77.12 297⇑ iP P 11 40 33.8 +1.2**
SNR=8.7
**ASHO Ashiyiah 77.16 297 P P 11 40 34.0 +1.2**
SNR=11
**ASHO Ashiyiah 77.16 297** *i* **P P 11 40 33.9 +1.1**
SNR=14
**BANOM Banah 77.23 298 P P 11 40 35.1 +1.8**
SNR=13
**BANOM Banah 77.23 298** *i* **P P 11 40 34.7 +1.5**
SNR=22
**RBK Rabkut 77.33 290 P P 11 40 34.9 +1.0**
SNR=9.3
**ISRO Mashad 77.44 309 eP P 11 40 35.0 +0.7**
**IMOG Moghan 77.48 309 eP P 11 40 35.5 +0.8**
**NAZ Nazwa, Dubai 77.58 297⇑ iP P 11 40 35.8 +0.7**
SNR=5.1
**FAQ Al Faqa, Dubai 77.58 297⇓ iP P 11 40 35.9 +0.8**
SNR=5.2
**ASUD Al Ashush, Dub 77.79 297⇑ iP P 11 40 37.5 +1.2**
SNR=6.5
**IAKL Akhelmad 78.08 309 eP P 11 40 38.3 +0.4**
**ABTO Aybut 78.15 289 P P 11 40 39.2 +0.7**
SNR=9.7
**IEMG Emamgholi 78.40 310 eP P 11 40 41.1 +1.4**
**ISFR Sfrayin 78.79 310 eP P 11 40 43.0 +1.1**
**GEYT Alibeck 78.96 311 P P 11 40 43.3 +0.9**
comp=Z,3.2nm,0.3s,baz=123,slow=4.1,SNR=11
GEYT pP pP 11 41 41.2 0.0
comp=Z,5.0nm,0.7s,baz=92,slow=4.9,SNR=2.5
**BILL Bilibino 79.00 14⇑** *eP* **P 11 40 44.7 +2.8**
BILL *e* 11 40 52.2
BILL *e* 11 43 46.3
BILL pmax pmax
comp=Z,25nm,1.3s
**IBAF Bafgh 79.25 304 eP P 11 40 44.2 0.0**
**ISRV Sarvestan 80.78 301 eP P 11 40 52.8 +0.1**
**ISAD Sadrabad 80.88 304 eP P 11 40 53.3 +0.1**
**IPAR Pars 80.94 302 eP P 11 40 53.1 -0.4**
**AB31 Akbulak array 81.38 322 P P 11 40 55.0 0.0**
AB31 pmax pmax
comp=Z,16nm,0.5s
**ABKAR Akbulak array 81.38 322 eP P 11 40 55.3 +0.3**
comp=Z,12nm,0.5s
**IKAZ Kazeroun 81.95 301 eP P 11 40 58.5 -0.3**
**SYO Syowa Base 83.59 201⇑ eX P 11 41 05.2 -0.8**
**SYO Syowa Base 83.59 201⇑ iX pP 11 42 09.4 +3.9**
**SVE Sverdlovsk 83.74 329** *c iP* **P 11 41 07.4 +0.4**
SVE pmax pmax
comp=Z,97nm,1.5s
**ARU Arti 84.67 328** *d iP* **P 11 41 11.6 0.0**
ARU S S 11 51 11.5 -6.0
ARU pmax pmax
comp=Z,82nm,1.7s
**ARU Arti 84.67 328 P P 11 41 11.1 -0.5**
comp=Z,214nm,1.2s,SNR=5.8
**ARU Arti 84.67 328 eP P 11 41 11.6 0.0**
comp=Z,63nm,1.3s
**RAYN Ar Rayn 86.40 294 P P 11 41 21.0 0.0**
comp=Z,200nm,1.4s,SNR=19
**KDAK Kodiak Island 89.53 32 P P 11 41 35.0 +0.1**
comp=Z,11nm,0.7s,baz=230,slow=6.1,SNR=8.4
**KDAK Kodiak Island 89.53 32** *i P* **P 11 41 36.3 +1.4**
**GNI Garni 89.60 310** *d iP* **P 11 41 36.9 +1.0**
GNI pmax pmax
comp=Z,11nm,1.1s
**ZEI Tsey 90.62 313 eP P 11 41 39.8 -0.8**
ZEI pmax pmax
comp=Z,94nm,1.4s
**PPLA Purkeypile 90.86 27 eP P 11 41 40.7 -0.5**
comp=Z,138nm,1.7s
PPLA *e*PP PP 11 45 20.7 -0.1

**KBZ Khabaz 91.47 314 P P 11 41 42.7 -1.5**
comp=Z,1.8nm,0.7s,baz=92,slow=2.0,SNR=4.9
**NEY Neytrino 91.54 313⇑** *eP* **P 11 41 48.0 +3.2**
NEY pmax pmax
comp=Z,5.0nm,1.6s
**BPAW Bear Paw Mtn. 91.64 26** *eP* **P 11 41 44.8 +0.2**
comp=Z,11nm,1.6s
**KIV Kislovodsk 91.66 314⇓** *eP* **P 11 41 43.7 -1.5**
KIV *e* 11 45 23.2
KIV pmax pmax
comp=Z,4.0nm,1.0s
**NVL N'lazarevskaya 92.38 197 eP P 11 41 46.7 -1.2**
NVL pmax pmax
comp=Z,4.0nm,0.6s
**SML Sawmill 92.42 28 eP P 11 41 48.1 -0.2**
SML pmax pmax
comp=Z,26nm,1.3s
**SML Sawmill 92.42 28 eP P 11 41 48.1 -0.2**
comp=Z,26nm,1.3s
**MCK McKinley 92.47 26 eP P 11 41 47.9 -0.5**
MCK pmax pmax
comp=Z,86nm,1.5s
**MCK McKinley 92.47 26 eP P 11 41 47.9 -0.5**
comp=Z,86nm,1.5s
**COLD Coldfoot 92.57 23 eP P 11 41 49.1 +0.3**
comp=Z,15nm,1.0s
**COLA College 93.12 25⇓** *eP* **P 11 41 49.9 -1.4**
COLA pmax pmax
comp=Z,12nm,1.0s
**COLA College 93.12 25 eP P 11 41 50.1 -1.2**
comp=Z,13nm,0.9s
**ILAR Eielson Array 93.51 25 P P 11 41 51.3 -1.9**
comp=Z,6.6nm,0.8s,baz=268,slow=4.3,SNR=62
ILAR PP PP 11 45 37.1 -4.1
comp=Z,2.3nm,0.9s,baz=257,slow=6.9,SNR=5.5
**DIV Divide 93.54 29 eP P 11 41 53.4 -0.1**
**PAX Paxson 93.90 27 eP P 11 41 54.8 -0.3**
PAX pmax pmax
comp=Z,72nm,1.4s
**PAX Paxson 93.90 27 eP P 11 41 54.8 -0.3**
comp=Z,72nm,1.4s
**MENT Mentasta 94.69 27 eP P 11 41 59.1 +0.4**
**ANN Anapa 95.49 314 eP P 11 42 01.6 -1.0**
ANN pmax pmax
comp=Z,37nm,1.3s
**SNAA Sanae 95.78 194 P P 11 42 04.8 +1.2**
**SNAA Sanae 95.78 194** *c iP* **P 11 42 04.2 +0.7**
SNAA pmax pmax
comp=Z,3.0nm,1.0s
**SNAA Sanae 95.78 194 eP P 11 42 04.3 +0.7**
comp=Z,5.8nm,1.4s
**OBN Obninsk 96.57 325** *ce* **P P 11 42 06.4 -0.9**
OBN *e**PP **pP 11 43 03.1 -4.7**
OBN pmax pmax
comp=Z,13nm,0.5s
**BRTR Keskin Array B 98.05 309 P P 11 42 13.5 -1.1**
comp=Z,0.5nm,0.6s,baz=67,slow=3.7,SNR=3.6
**INK Inuvik 98.94 22 P** Pdif 11 42 16.9 -0.7
comp=Z,6.5nm,1.0s,baz=286,slow=5.5,SNR=5.0
**INK Inuvik 98.94 22 P** Pdif 11 42 17.0 -0.6
**ARCES ARCESS Array B 100.73 340 P Pdif 11 42 24.3 -1.3**
comp=Z,3.9nm,0.7s,baz=86,slow=6.0,SNR=16
**AKASG Malin Array Be 101.06 320 P Pdif 11 42 26.2 -1.3**
comp=Z,1.1nm,0.6s,baz=79,slow=3.5,SNR=6.1
AKASG PP **PKiKP 11 46 46.6 -4.6**
comp=Z,0.4nm,0.4s,baz=83,slow=7.8,SNR=4.5
**AKASG Malin Array Be 101.06 320** *i P* **Pdif 11 42 27.5 0.0**
AKASG pmax pmax
comp=Z,1.0nm,0.6s
**FINES FINESS Array B 101.78 331 P Pdif 11 42 28.8 -1.6**
comp=Z,1.3nm,0.6s,baz=81,slow=3.1,SNR=8.7
**FINES FINESS Array B 101.78 331** *i P* **Pdif 11 42 30.0 -0.4**
FINES pmax pmax
comp=Z,1.0nm,0.6s
**PLOR Plostina 103.08 315⇑** *iP* **PP 11 46 53.4 -1.2**
**MLR Muntele Rosu 103.60 315⇓** *iP* **PP 11 46 59.1 +0.5**
**B05A Bryant 107.63 41 P PKiKP 11 47 04.2 +0.8**
baz=108
**YKA Yellowknife Ar 107.93 26** PKiKP **PKiKP 11 47 03.4 -0.1**
comp=Z,2.0nm,0.7s,baz=294,slow=2.2,SNR=6.6
YKA PKKPbc **PKKPbc 11 58 17.2 -2.5**
comp=Z,1.4nm,0.6s,baz=108,slow=3.4,SNR=4.0
**VYHS Vyhne 108.03 319** *eP* PP 11 47 34.7 +3.9
**YBH Yreka Blue Hor 108.20 48 PP PP** 11 47 30.2 -2.2
comp=Z,5.7nm,1.2s,baz=258,slow=9.3,SNR=5.8
**J04D Umpqua Nationa 108.43 47 P PKiKP 11 47 05.2 -0.1**
baz=108
**J05D Fort Rock, OR 109.06 47 P PKiKP 11 47 05.7 -0.8**
baz=109
**O03D Paynes Creek 109.07 50 P PKiKP 11 47 05.6 -0.9**
baz=109
**NEW Newport 110.88 41 P PKiKP 11 47 08.6 -1.0**
baz=111
**GERES GERESS Array B 111.27 320** PKiKP **PKiKP 11 47 09.4 -1.0**
comp=Z,0.5nm,0.3s,baz=83,slow=4.2,SNR=4.1
**VES Vestal, Richgr 111.80 54 P PKiKP 11 47 10.6 -1.1**
baz=112
**NVAR Mina Array Bea 112.03 51** Pdiff **Pdif 11 43 18.4 +1.5**
comp=Z,0.3nm,0.7s,baz=258,slow=7.0,SNR=2.6
NVAR PKiKP **PKiKP 11 47 13.5 +1.2**
comp=Z,1.5nm,0.9s,baz=260,slow=2.0,SNR=8.6
NVAR PP **PP 11 47 59.4 -0.7**
comp=Z,1.2nm,0.9s,baz=269,slow=6.7,SNR=5.1
NVAR SKP **SKPdf 11 50 24.6 +0.6**
comp=Z,0.8nm,0.7s,baz=279,slow=2.4,SNR=4.0
**SCI San Clemente I 112.61 57 P PKiKP 11 47 12.8 -0.5**
baz=113
**EDW2 Edwards Air Fo 112.82 55 P PKiKP 11 47 15.0 +1.3**
baz=113
**LRMC Laurel Mountai 112.98 54 P PKiKP 11 47 14.9 +0.8**
baz=113
**MPMC Manual Prospec 113.05 54 P PKiKP 11 47 14.5 +0.2**
baz=113
**MSO Missoula 113.33 42 P PKiKP 11 47 13.6 -0.8**
baz=113
**FURC Furnace Creek, 113.48 53 P PKiKP 11 47 14.4 -0.4**
baz=113
**SLMT Seeley Lake 113.51 41** *e*PKPdf **PKiKP 11 47 15.0 +0.1**
**GSC Goldstone 113.72 54 P PKiKP 11 47 15.1 -0.4**
baz=114
**HLID Hailey 113.86 45 P PKiKP 11 47 15.9 +0.3**
baz=114
**TPNV Topopah Spring 113.89 53 P PKiKP 11 47 16.0 +0.1**
baz=114
**ELK Elko 113.92 48** *e*PKIKP **PKiKP 11 47 17.1 +1.2**
**ELK Elko 113.92 48** *e*PKPdf **PKiKP 11 47 17.1 +1.2**
**R11A Troy Canyon, C 114.15 51 P** PKPdf 11 47 15.9 -0.4
baz=114
**HEC Hector,Ludlow 114.18 55 P** PKPdf 11 47 15.7 -0.7
baz=114
**PFO Pinyon Flat Ob 114.26 56 P** PKPdf 11 47 16.6 0.0
baz=114
**MONP Monument Peak 114.39 57 P** PKPdf 11 47 17.1 +0.1
baz=114
**TUQ Turquoise Moun 114.41 54 P** PKPdf 11 47 16.0 -0.8
baz=114
**BELC Belle Mtn. Jos 114.58 56 P** PKPdf 11 47 17.7 +0.5
baz=114,SNR=6.6
**GMRC Granite Mounta 114.73 55 P** PKPdf 11 47 18.2 +0.8
baz=115
**BC3 Big Chuckawall 115.08 56 P PKPdf 11 47 19.1 +0.9**
baz=115
**BOZ Bozeman (W) 115.21 42 P PKPdf 11 47 18.9 +0.8**
baz=115
**IRM Iron Mountain 115.25 55 P PKPdf 11 47 18.9 +0.5**
baz=115
**EGMT Eagleton 115.67 39 P PKPdf 11 47 18.6 -0.2**
baz=116
**Y12C Blythe 115.83 56 P PKPdf 11 47 19.4 0.0**
baz=116
**DUG Dugway 115.85 48 P PKPdf 11 47 19.7 +0.2**
baz=116
**PDMCI Parker Dam,Lak 116.05 55 P PKPdf 11 47 19.4 -0.4**
baz=116
**H17A Grant Village 116.30 43 P PKPdf 11 47 19.4 -1.0**
baz=116
**REDW RedTop Meadow 116.42 45** *e*PKPdf **PKPdf 11 47 21.5 +0.9**
**SNOW Snow King Moun 116.45 44** *e*PKPdf **PKPdf 11 47 22.0 +1.3**
**GCMT Greycliff 116.47 42** *e*PKPdf **PKPdf 11 47 21.2 +0.7**
**LOHW Long Hollow 116.52 44** *e*PKPdf **PKPdf 11 47 21.8 +1.0**
LOHW *e*SKPdf **SKiKP 11 50 33.3 +0.6**
**MSU Marysvale 116.73 50** *e*PKIKP **PKPdf 11 47 22.9 +1.5**
**MSU Marysvale 116.73 50** *e*PKPdf **PKPdf 11 47 22.9 +1.5**
**RLMT Red Lodge 116.95 42 P PKPdf 11 47 21.1 -0.5**
baz=117
**TMUT Trail Mountain 117.27 49** *e*PKPdf **PKPdf 11 47 23.3 +0.8**
**WUAZ Wupatki 118.03 53 P PKPdf 11 47 24.7 +0.8**
baz=118
**WUAZ Wupatki 118.03 53** *e*PKPdf **PKPdf 11 47 25.2 +1.3**
**LAO LASA Array 118.39 40 P PKPdf 11 47 24.5 +0.4**
baz=118
**DGMT Dagmar 118.92 37 P PKPdf 11 47 26.4 +1.4**
baz=119
**TUC Tucson 119.18 57** *e*PKIKP **PKPdf 11 47 27.5 +1.4**
**TUC Tucson 119.18 57** *e*PKPdf **PKPdf 11 47 27.5 +1.4**
TUC *e*SKPdf **SKiKP 11 50 39.4 +1.4**
**O20A White River Ci 119.23 47 P PKPdf 11 47 26.5 +0.4**
baz=119
**O20A White River Ci 119.23 47** *e*PKPdf **PKPdf 11 47 27.1 +1.1**
**PV04 Paradox Valley 119.24 50** *e*PKPdf **PKPdf 11 47 27.7 +1.5**
**A25A Svangstu Ranch 119.37 36 P PKPdf 11 47 26.4 +0.6**
baz=119
**W18A Petrified Fore 119.43 53 P PKPdf 11 47 24.6 -2.0**
baz=119
**PV01 Paradox Valley 119.56 50** *e*PKPdf **PKPdf 11 47 27.7 +0.9**
PV01 *e*SKPdf **SKiKP 11 50 40.4 +1.6**
**B25A Knox Farm, Ray 119.63 37 P PKPdf 11 47 25.8 -0.6**
baz=120
**K22A Casper 119.65 44 P PKPdf 11 47 26.9 +0.1**
baz=120
**K22A Casper 119.65 44** *e*PKPdf **PKPdf 11 47 27.0 +0.2**
**C25A Freed Ranch, W 119.82 38 P PKPdf 11 47 27.5 +0.8**
baz=120
**MVCO Mesa Verde 119.87 51 P PKPdf 11 47 27.2 -0.3**
baz=120,SNR=9.2
**MVCO Mesa Verde 119.87 51** *e*PKPdf **PKPdf 11 47 28.5 +1.0**
MVCO *e*SKPdf **SKiKP 11 50 40.1 +0.7**
**A26A Wade Farm, Ken 120.02 36 P PKPdf 11 47 27.7 +0.6**
baz=120
**D25A Fairfield 120.02 38 P PKPdf 11 47 28.3 +1.1**
baz=120
**E25A Miller Ranch, 120.25 39 P PKPdf 11 47 28.4 +0.7**
baz=120,SNR=6.0
**SMCO Snowmass 120.46 48** *e*PKPdf **PKPdf 11 47 29.9 +1.2**
**A27A Ledoux Ranch, 120.46 36 P PKPdf 11 47 28.5 +0.5**
baz=120
**N23A Red Feather La 120.66 46 P PKPdf 11 47 27.9 -1.0**
baz=121
**G25A Newell 120.78 41 P PKPdf 11 47 28.8 0.0**
baz=121
**RSSD Black Hills 120.80 42** *e*PKIKP **PKPdf 11 47 28.9 -0.1**
**RSSD Black Hills 120.80 42** *e*PKPdf **PKPdf 11 47 28.9 -0.1**
**E26A Carlson Angus 120.84 39 P PKPdf 11 47 28.9 +0.1**
baz=121,SNR=9.4
**F26A Lodgepole 120.98 40 P PKPdf 11 47 28.6 -0.5**
baz=121,SNR=5.2
**S22A 4UR Ranch, Cre 121.00 50 P PKPdf 11 47 30.8 +1.1**
baz=121,SNR=14
**I25A Rochford 121.04 42 P PKPdf 11 47 28.9 -0.5**
baz=121,SNR=9.4
**A28A Rude Farm, Bot 121.04 36 P PKPdf 11 47 29.2 +0.1**
baz=121
**D27A Center 121.14 38 P PKPdf 11 47 30.1 +0.7**
baz=121
**B28A Dugan Ranch, T 121.21 36 P PKPdf 11 47 30.3 +0.9**
baz=121
**J25A Sunshine Ranch 121.24 43 P PKPdf 11 47 30.3 +0.5**
baz=121,SNR=6.5
**ISCO Idaho Springs 121.26 47 P PKPdf 11 47 30.3 +0.2**
baz=121
**G26A Maurine 121.26 40 P PKPdf 11 47 29.4 -0.2**
baz=121,SNR=5.3
**F27A Lemmon 121.38 39 P PKPdf 11 47 30.0 +0.1**
baz=121
**H26A Fairpoint 121.43 41 P PKPdf 11 47 30.2 +0.2**
baz=121,SNR=5.9
**K25A Mack Ranch, Ha 121.49 43 P PKPdf 11 47 30.3 0.0**
baz=121
**C28A Hausauer Farms 121.55 37 P PKPdf 11 47 30.4 +0.3**
baz=122
**121A Cookes Peak, D 121.61 56 P PKPdf 11 47 32.3 +1.4**
baz=122
**I26A New Underwood 121.61 42 P PKPdf 11 47 30.2 -0.2**
baz=122
**A29A Manning Farm, 121.63 35 P PKPdf 11 47 30.4 +0.3**
baz=122,SNR=7.2
**G27A Dupree 121.65 40 P PKPdf 11 47 30.5 +0.2**
baz=122,SNR=22
**LAZ Ladron 121.68 54** *e*PKPdf **PKPdf 11 47 32.2 +1.2**
**J26A Sides Ranch, S 121.76 42 P PKPdf 11 47 30.7 0.0**
baz=122,SNR=6.4
**B29A Wagenman Farm, 121.79 36 P PKPdf 11 47 30.0 -0.5**
baz=122
**H27A Howes 121.88 41 P PKPdf 11 47 30.7 -0.1**
baz=122,SNR=12
**E28A Huff 121.89 38 P PKPdf 11 47 31.3 +0.6**
baz=122
**K26A Motz Farm, Whi 121.93 43 P PKPdf 11 47 31.0 -0.1**
baz=122
**SDCO Great Sand Dun 122.00 49 P PKPdf 11 47 32.1 +0.5**
baz=122,SNR=5.7
**SDCO Great Sand Dun 122.00 49** *e*PKPdf **PKPdf 11 47 32.5 +0.9**
**ANMO Albuquerque 122.08 53** *d iP* KIKP **PKPdf 11 47 32.6 +0.9**
ANMO pmax pmax
comp=Z,12nm,1.2s
**ANMO Albuquerque 122.08 53** *e*PKPdf **PKPdf 11 47 32.7 +0.9**
**I27A Quinn 122.13 41 P PKPdf 11 47 31.7 +0.3**
baz=122,SNR=8.5
**A30A Hoffart Farm, 122.15 35 P PKPdf 11 47 31.0 -0.2**
baz=122
**F28A McLaughlin 122.16 39 P PKPdf 11 47 31.1 -0.2**
baz=122,SNR=6.7
**B30A Myrvik Farm, E 122.39 35 P PKPdf 11 47 31.4 -0.2**
baz=122
**G28A Parade 122.43 40 P PKPdf 11 47 32.5 +0.6**
baz=122,SNR=8.4
**J27A Elkhorn Farm, 122.50 42 P PKPdf 11 47 32.9 +0.8**
baz=122,SNR=8.2
**H28A Mission Ridge 122.54 40 P PKPdf 11 47 32.0 -0.1**
baz=122,SNR=6.6
**K27A Flueckinger Fa 122.56 43 P PKPdf 11 47 31.9 -0.4**
baz=122
**N26A Koester Ranch, 122.61 45 P PKPdf 11 47 33.5 +1.0**
baz=122
**C30A Mose, Pekin 122.68 36 P PKPdf 11 47 32.0 -0.2**
baz=123,SNR=5.1
**I28A Midland 122.73 41 P PKPdf 11 47 32.5 0.0**
baz=123,SNR=11
**O26A Horse Wrangler 122.76 46 P PKPdf 11 47 33.3 +0.5**
baz=123
**F29A Eureka 122.77 39 P PKPdf 11 47 33.2 +0.7**
baz=123
**ULM Lac du Bonnet 122.78 32** PKP **PKPdf 11 47 31.4 -1.0**
comp=Z,5.0nm,0.7s,baz=265,slow=2.7,SNR=8.7
**D30A Buchanan 122.81 37 P PKPdf 11 47 32.3 -0.2**
baz=123
**J28A Allard Ranch, 122.94 42 P PKPdf 11 47 33.1 +0.2**
baz=123,SNR=9.6
**P26A Davis Ranch, A 122.98 47 P PKPdf 11 47 34.1 +0.9**
baz=123,SNR=7.1
**G29A Hoven 123.00 39 P PKPdf 11 47 33.3 +0.3**
baz=123
**E30A Jud 123.01 37 P PKPdf 11 47 32.9 0.0**
baz=123,SNR=7.1
**T25A Trinidad 123.01 50 P PKPdf 11 47 33.4 -0.1**
baz=123,SNR=7.0
**C31A Landman Farms, 123.06 36 P PKPdf 11 47 32.9 0.0**
baz=123,SNR=19
**Q26A Hugo 123.08 47 P PKPdf 11 47 32.9 -0.5**
baz=123
**N27A Anderson Farm, 123.10 45 P PKPdf 11 47 33.2 -0.1**
baz=123
**K28A Ten Mile Ranch 123.15 42 P PKPdf 11 47 32.8 -0.6**
baz=123
**F30A Leola 123.26 38 P PKPdf 11 47 32.8 -0.6**
baz=123
**I29A Vivian Onida 123.29 41 P PKPdf 11 47 33.8 +0.3**
baz=123,SNR=7.7
**R26A Arlington 123.35 48 P PKPdf 11 47 34.1 +0.1**
baz=123
**O27A Beecher Island 123.37 46 P PKPdf 11 47 34.2 +0.3**
baz=123,SNR=9.9
**OGNE Ogallala 123.40 45 P PKPdf 11 47 33.9 0.0**
baz=123
**B32A Ashes, Strandq 123.43 35 P PKPdf 11 47 33.3 -0.3**
baz=123
**D31A Mcclaflin, Tow 123.45 36 P PKPdf 11 47 34.0 +0.3**
baz=123
**G30A Faulkton 123.52 39 P PKPdf 11 47 33.9 0.0**
baz=123,SNR=6.1
**P27A Ficken Ranch, 123.54 46 P PKPdf 11 47 35.3 +1.0**
baz=124
**J29A Okreek 123.54 41 P PKPdf 11 47 34.5 +0.4**
baz=124,SNR=9.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| S26A | Kim | 123.56 | 49 | P | PKPdf | 11 47 34.7 | +0.3 |
| | baz=124,SNR=8.5 | | | | | | |
| E31A | Nome | 123.60 | 37 | P | PKPdf | 11 47 33.7 | -0.3 |
| | baz=124,SNR=5.7 | | | | | | |
| T26A | Comanche Natio | 123.62 | 49 | P | PKPdf | 11 47 35.2 | +0.6 |
| | baz=124,SNR=16 | | | | | | |
| F31A | Hecla | 123.72 | 38 | P | PKPdf | 11 47 34.0 | -0.3 |
| | baz=124 | | | | | | |
| MNTX | Cornudas Mount | 123.79 | 56 | P | PKPdf | 11 47 35.7 | +0.9 |
| | baz=124 | | | | | | |
| MNTX | Cornudas Mount | 123.79 | 56 | *e*PKPdf | PKPdf | 11 47 35.7 | +0.9 |
| MNTX | | | | *e*SKPdf | SKiKP | 11 50 48.3 | +1.1 |
| D32A | Dogwood Acres, | 123.82 | 36 | P | PKPdf | 11 47 34.1 | -0.3 |
| | baz=124 | | | | | | |
| K29A | Lazy Trails An | 123.83 | 42 | P | PKPdf | 11 47 35.0 | +0.3 |
| | baz=124 | | | | | | |
| R27A | Eads | 123.83 | 48 | P | PKPdf | 11 47 35.7 | +0.8 |
| | baz=124,SNR=7.2 | | | | | | |
| N28A | Pribbeno Ranch | 123.84 | 45 | P | PKPdf | 11 47 35.0 | +0.2 |
| | baz=124,SNR=7.3 | | | | | | |
| AGMN | Agassiz Nation | 123.86 | 34 | P | PKPdf | 11 47 33.5 | -1.0 |
| | baz=124 | | | | | | |
| O28A | Krutsinger Ran | 123.90 | 45 | P | PKPdf | 11 47 35.5 | +0.6 |
| | baz=124 | | | | | | |
| I30A | Oacoma | 123.90 | 40 | P | PKPdf | 11 47 35.0 | +0.3 |
| | baz=124 | | | | | | |
| SUSD | South Dakota S | 123.96 | 40 | P | PKPdf | 11 47 35.3 | +0.5 |
| | baz=124 | | | | | | |
| P28A | Saint Francis | 124.12 | 46 | P | PKPdf | 11 47 35.4 | 0.0 |
| | baz=124,SNR=7.4 | | | | | | |
| J30A | Dallas | 124.12 | 41 | P | PKPdf | 11 47 35.3 | +0.1 |
| | baz=124,SNR=6.2 | | | | | | |
| C33A | Trail | 124.21 | 35 | P | PKPdf | 11 47 35.4 | +0.2 |
| | baz=124 | | | | | | |
| Q28A | Sharon Springs | 124.26 | 47 | P | PKPdf | 11 47 36.1 | +0.5 |
| | baz=124,SNR=8.2 | | | | | | |
| T27A | Campo | 124.31 | 49 | P | PKPdf | 11 47 35.9 | 0.0 |
| | baz=124,SNR=7.4 | | | | | | |
| K30A | Basset | 124.33 | 42 | P | PKPdf | 11 47 36.0 | +0.4 |
| | baz=124 | | | | | | |
| N29A | Votaw Ranch, W | 124.43 | 44 | P | PKPdf | 11 47 36.0 | +0.2 |
| | baz=124 | | | | | | |
| B34A | Aery, Baudette | 124.43 | 34 | P | PKPdf | 11 47 35.5 | 0.0 |
| | baz=124 | | | | | | |
| U27A | Thompson Grove | 124.45 | 50 | P | PKPdf | 11 47 36.3 | +0.1 |
| | baz=124,SNR=6.6 | | | | | | |
| D33A | AnnSam, Waubun | 124.50 | 36 | P | PKPdf | 11 47 35.6 | -0.1 |
| | baz=124 | | | | | | |
| R28A | Tribune | 124.54 | 47 | P | PKPdf | 11 47 36.3 | +0.1 |
| | baz=124,SNR=5.8 | | | | | | |
| L30A | Spencer Herefo | 124.58 | 43 | P | PKPdf | 11 47 36.3 | +0.2 |
| | baz=124 | | | | | | |
| O29A | 4D Ranch, Culb | 124.59 | 45 | P | PKPdf | 11 47 36.4 | +0.2 |
| | baz=124 | | | | | | |
| J31A | Geddes | 124.63 | 41 | P | PKPdf | 11 47 36.3 | +0.2 |
| | baz=124 | | | | | | |
| V27A | Dan Oppiter Fa | 124.66 | 51 | P | PKPdf | 11 47 36.3 | -0.3 |
| | baz=125 | | | | | | |
| P29A | Atwood | 124.70 | 46 | P | PKPdf | 11 47 36.2 | -0.3 |
| | baz=125 | | | | | | |
| E33A | Westby DABS, E | 124.74 | 36 | P | PKPdf | 11 47 36.4 | +0.2 |
| | baz=125 | | | | | | |
| S28A | Manter | 124.75 | 48 | P | PKPdf | 11 47 37.1 | +0.4 |
| | baz=125 | | | | | | |
| T28A | Walsh | 124.75 | 49 | P | PKPdf | 11 47 36.8 | +0.2 |
| | baz=125,SNR=18 | | | | | | |
| H32A | Carlson Farm, | 124.89 | 39 | P | PKPdf | 11 47 36.4 | -0.2 |
| | baz=125,SNR=6.1 | | | | | | |
| D34A | Park Rapids | 124.90 | 35 | P | PKPdf | 11 47 36.3 | -0.2 |
| | baz=125 | | | | | | |
| F33A | 5 Mile Ranch, | 124.92 | 37 | P | PKPdf | 11 47 36.4 | -0.1 |
| | baz=125 | | | | | | |
| Q29A | Oakley | 124.94 | 47 | P | PKPdf | 11 47 37.4 | +0.5 |
| | baz=125,SNR=8.4 | | | | | | |
| L31A | Butterfield Fa | 125.07 | 42 | P | PKPdf | 11 47 36.6 | -0.4 |
| | baz=125 | | | | | | |
| O30A | MW Ranch, Wils | 125.08 | 45 | P | PKPdf | 11 47 37.0 | -0.2 |
| | baz=125,SNR=6.2 | | | | | | |
| I32A | Karley and Nic | 125.10 | 40 | P | PKPdf | 11 47 37.6 | +0.6 |
| | baz=125,SNR=5.3 | | | | | | |
| V28A | Channing | 125.13 | 51 | P | PKPdf | 11 47 37.9 | +0.4 |
| | baz=125 | | | | | | |
| P30A | Selden | 125.21 | 46 | P | PKPdf | 11 47 37.3 | -0.1 |
| | baz=125 | | | | | | |
| E34A | Wadena | 125.23 | 36 | P | PKPdf | 11 47 37.4 | +0.2 |
| | baz=125 | | | | | | |
| H33A | Prehn Over Nor | 125.23 | 38 | P | PKPdf | 11 47 37.8 | +0.5 |
| | baz=125 | | | | | | |
| MSTX | Muleshoe | 125.27 | 53 | P | PKPdf | 11 47 38.1 | +0.4 |
| | baz=125,SNR=7.4 | | | | | | |
| S29A | Ulysses | 125.31 | 48 | P | PKPdf | 11 47 38.6 | +0.9 |
| | baz=125 | | | | | | |
| M31A | Lambtecht Ranc | 125.34 | 43 | P | PKPdf | 11 47 37.6 | +0.1 |
| | baz=125 | | | | | | |
| T29A | Hugoton | 125.35 | 49 | P | PKPdf | 11 47 38.5 | +0.7 |
| | baz=125 | | | | | | |
| K32A | Verdigre | 125.42 | 41 | P | PKPdf | 11 47 37.6 | -0.1 |
| | baz=125,SNR=7.2 | | | | | | |
| Q30A | Quinter | 125.45 | 46 | P | PKPdf | 11 47 37.7 | -0.2 |
| | baz=125 | | | | | | |
| X28A | Dimmitt | 125.55 | 52 | P | PKPdf | 11 47 38.7 | +0.4 |
| | baz=126,SNR=6.4 | | | | | | |
| D35A | Remer | 125.56 | 35 | P | PKPdf | 11 47 37.5 | -0.3 |
| | baz=126 | | | | | | |
| O31A | Woolen Ranch, | 125.61 | 45 | P | PKPdf | 11 47 38.4 | +0.3 |
| | baz=126 | | | | | | |
| V29A | Stinnett | 125.63 | 50 | P | PKPdf | 11 47 38.3 | 0.0 |
| | baz=126 | | | | | | |
| R30A | Dighton | 125.68 | 47 | P | PKPdf | 11 47 39.1 | +0.7 |
| | baz=126,SNR=5.5 | | | | | | |
| Y28A | McKinney Farm, | 125.70 | 53 | P | PKPdf | 11 47 38.7 | +0.1 |
| | baz=126,SNR=5.8 | | | | | | |
| ECSD | EROS Data Cent | 125.78 | 39 | P | PKPdf | 11 47 38.4 | 0.0 |
| | baz=126,SNR=8.0 | | | | | | |
| ECSD | EROS Data Cent | 125.78 | 39 | *e*PKPdf | PKPdf | 11 47 38.1 | -0.2 |
| W29A | Amraillo | 125.78 | 51 | P | PKPdf | 11 47 38.2 | -0.4 |
| | baz=126 | | | | | | |
| S30A | Montezuma | 125.79 | 48 | P | PKPdf | 11 47 38.3 | -0.3 |
| | baz=126 | | | | | | |
| TXAR | Lajitas Array | 125.80 | 59 | PKP | PKPdf | 11 47 39.5 | +0.6 |
| | comp=Z,1.4nm,0.6s,baz=240,slow=1.5,SNR=24 | | | | | | |
| TXAR | | | | PP | PP | 11 49 32.6 | -2.2 |
| | comp=Z,1.1nm,0.9s,baz=298,slow=7.7,SNR=4.7 | | | | | | |
| TXAR | | | | SKPbc | SKPbc | 11 50 29.9 | |
| | comp=Z,0.7nm,0.8s,baz=285,slow=3.5,SNR=2.6 | | | | | | |
| P31A | Stockton | 125.83 | 45 | P | PKPdf | 11 47 38.3 | -0.3 |
| | baz=126,SNR=6.6 | | | | | | |
| H34A | Spellman Lake, | 125.83 | 38 | P | PKPdf | 11 47 38.6 | +0.3 |
| | baz=126,SNR=9.2 | | | | | | |
| AMTX | Amarillo | 125.84 | 51 | P | PKPdf | 11 47 38.4 | -0.4 |
| | baz=126 | | | | | | |
| C36A | Pine Crest Far | 125.85 | 34 | P | PKPdf | 11 47 38.2 | -0.1 |
| | baz=126 | | | | | | |
| BGNE | Belgrade | 125.87 | 43 | P | PKPdf | 11 47 38.6 | 0.0 |
| | baz=126 | | | | | | |
| 128A | Castleberry Fa | 125.90 | 54 | P | PKPdf | 11 47 38.9 | -0.1 |
| | baz=126 | | | | | | |
| F35A | Swanville | 125.93 | 36 | P | PKPdf | 11 47 38.5 | 0.0 |
| | baz=126 | | | | | | |
| T30A | Plains | 125.96 | 48 | P | PKPdf | 11 47 39.4 | +0.5 |
| | baz=126 | | | | | | |
| X29A | Tulia | 125.96 | 52 | P | PKPdf | 11 47 39.4 | +0.3 |
| | baz=126,SNR=6.0 | | | | | | |
| D36A | Goodland | 126.00 | 34 | P | PKPdf | 11 47 39.0 | +0.4 |
| | baz=126 | | | | | | |
| N32A | Stulken Farm, | 126.06 | 43 | P | PKPdf | 11 47 39.4 | +0.4 |
| | baz=126 | | | | | | |
| U30A | WK&E Inc. Balk | 126.06 | 49 | P | PKPdf | 11 47 39.5 | +0.3 |
| | baz=126 | | | | | | |
| I34A | Hadley | 126.10 | 39 | P | PKPdf | 11 47 39.7 | +0.8 |
| | baz=126 | | | | | | |
| L33A | Hoskins | 126.11 | 41 | P | PKPdf | 11 47 39.5 | +0.5 |
| | baz=126 | | | | | | |
| Y29A | Porterfield Fa | 126.17 | 53 | P | PKPdf | 11 47 39.8 | +0.3 |
| | baz=126,SNR=10 | | | | | | |
| C37A | Embarrass | 126.22 | 33 | P | PKPdf | 11 47 39.9 | +0.9 |
| | baz=126 | | | | | | |
| R31A | Burdett | 126.22 | 47 | P | PKPdf | 11 47 39.7 | +0.3 |
| | baz=126,SNR=6.3 | | | | | | |
| O32A | Brockman Farm, | 126.29 | 44 | P | PKPdf | 11 47 40.0 | +0.6 |
| | baz=126 | | | | | | |
| ESDC | Sonseca Array | 126.30 | 315 | PKP | PKPdf | 11 47 38.6 | -0.9 |
| | comp=Z,0.2nm,0.3s,baz=42,slow=2.1,SNR=5.3 | | | | | | |
| ESDC | | | | PP | PP | 11 49 35.0 | -2.5 |
| | comp=Z,0.9nm,0.6s,baz=50,slow=5.1,SNR=4.1 | | | | | | |
| G35A | Watkins | 126.32 | 37 | P | PKPdf | 11 47 40.1 | +0.8 |
| | baz=126 | | | | | | |
| P32A | Huiting Farm, | 126.33 | 45 | P | PKPdf | 11 47 39.9 | +0.4 |
| | baz=126,SNR=5.8 | | | | | | |
| Z29A | Hungry Hill Ra | 126.34 | 53 | P | PKPdf | 11 47 40.1 | +0.3 |
| | baz=126,SNR=9.5 | | | | | | |
| 129A | Stewart Farms, | 126.40 | 54 | P | PKPdf | 11 47 40.0 | +0.1 |
| | baz=126,SNR=8.2 | | | | | | |
| D37A | Cotton | 126.42 | 34 | P | PKPdf | 11 47 39.3 | -0.1 |
| | baz=126 | | | | | | |
| M33A | Taylor Creek F | 126.43 | 42 | P | PKPdf | 11 47 39.8 | +0.2 |
| | baz=126 | | | | | | |
| S31A | Mullinville | 126.51 | 47 | P | PKPdf | 11 47 40.3 | +0.4 |
| | baz=126 | | | | | | |
| F36A | Milaca | 126.54 | 36 | P | PKPdf | 11 47 39.5 | -0.2 |
| | baz=126 | | | | | | |
| T31A | Randall Ranch, | 126.57 | 48 | P | PKPdf | 11 47 40.7 | +0.7 |
| | baz=126 | | | | | | |
| X30A | Coker Ranch, T | 126.61 | 52 | P | PKPdf | 11 47 40.7 | +0.5 |
| | baz=126,SNR=11 | | | | | | |
| K34A | Le Mars | 126.62 | 40 | P | PKPdf | 11 47 39.5 | -0.4 |
| | baz=126 | | | | | | |
| Q32A | Meitler Ranch, | 126.63 | 46 | P | PKPdf | 11 47 39.8 | -0.3 |
| | baz=126 | | | | | | |
| 229A | Bryant Ranch, | 126.64 | 55 | P | PKPdf | 11 47 40.8 | +0.4 |
| | baz=127 | | | | | | |
| 329A | Wagon Wheel Ra | 126.64 | 55 | P | PKPdf | 11 47 40.3 | -0.1 |
| | baz=127,SNR=7.5 | | | | | | |
| N33A | J Bar K, Exete | 126.64 | 43 | P | PKPdf | 11 47 40.1 | 0.0 |
| | baz=127 | | | | | | |
| R32A | Long Quarter, | 126.75 | 46 | P | PKPdf | 11 47 40.7 | +0.3 |
| | baz=127,SNR=6.9 | | | | | | |
| Y30A | Stafford Cattl | 126.78 | 52 | P | PKPdf | 11 47 41.8 | +1.2 |
| | baz=127,SNR=11 | | | | | | |
| Z30A | Sanderson Ranc | 126.79 | 53 | P | PKPdf | 11 47 40.8 | +0.2 |
| | baz=127,SNR=6.0 | | | | | | |
| L34A | Svendsen Farm, | 126.79 | 41 | P | PKPdf | 11 47 41.0 | +0.8 |
| | baz=127 | | | | | | |
| 529A | Stev Forest Ra | 126.82 | 57 | P | PKPdf | 11 47 40.7 | 0.0 |
| | baz=127,SNR=12 | | | | | | |
| O33A | Hebron | 126.85 | 44 | P | PKPdf | 11 47 40.6 | +0.1 |
| | baz=127,SNR=11 | | | | | | |
| J35A | Milford | 126.85 | 39 | P | PKPdf | 11 47 40.8 | +0.4 |
| | baz=127 | | | | | | |
| S32A | Newby Ranch, P | 126.88 | 47 | P | PKPdf | 11 47 41.7 | +1.1 |
| | baz=127 | | | | | | |
| V31A | Spring Creek L | 126.94 | 50 | P | PKPdf | 11 47 42.3 | +1.4 |
| | baz=127,SNR=7.0 | | | | | | |
| 429A | Davenport Ranc | 126.96 | 56 | P | PKPdf | 11 47 42.2 | +1.2 |
| | baz=127,SNR=9.8 | | | | | | |
| W31A | Holland Ranch, | 127.07 | 50 | P | PKPdf | 11 47 42.7 | +1.6 |
| | baz=127,SNR=8.0 | | | | | | |
| T32A | Huddler Ranch, | 127.09 | 48 | P | PKPdf | 11 47 41.8 | +0.8 |
| | baz=127 | | | | | | |
| 130A | Snyder | 127.13 | 54 | P | PKPdf | 11 47 42.2 | +1.0 |
| | baz=127 | | | | | | |
| Q33A | Connelly Farm, | 127.14 | 45 | P | PKPdf | 11 47 41.4 | +0.3 |
| | baz=127 | | | | | | |
| K35A | Storm Lake | 127.16 | 40 | P | PKPdf | 11 47 40.9 | 0.0 |
| | baz=127 | | | | | | |
| N34A | Lincoln | 127.24 | 43 | P | PKPdf | 11 47 40.9 | -0.3 |
| | baz=127 | | | | | | |
| X31A | McDonald Ranch | 127.24 | 51 | P | PKPdf | 11 47 42.1 | +0.7 |
| | baz=127,SNR=7.9 | | | | | | |
| Y31A | Rekieta Farm, | 127.25 | 52 | P | PKPdf | 11 47 41.2 | -0.2 |
| | baz=127 | | | | | | |
| I36A | Fitzsimmons Fa | 127.25 | 38 | P | PKPdf | 11 47 41.7 | +0.6 |
| | baz=127 | | | | | | |
| L35A | Bielow Farm, R | 127.26 | 41 | P | PKPdf | 11 47 41.8 | +0.7 |
| | baz=127 | | | | | | |
| SPMN | St. Paul | 127.31 | 36 | P | PKPdf | 11 47 41.4 | +0.3 |
| | baz=127 | | | | | | |
| R33A | Olander Ranch, | 127.32 | 46 | P | PKPdf | 11 47 40.9 | -0.5 |
| | baz=127 | | | | | | |
| 330A | Mertzon | 127.32 | 55 | P | PKPdf | 11 47 41.9 | +0.2 |
| | baz=127 | | | | | | |
| U32A | Winter Ranch, | 127.35 | 49 | P | PKPdf | 11 47 41.8 | +0.3 |
| | baz=127 | | | | | | |
| O34A | Beatrice | 127.41 | 43 | P | PKPdf | 11 47 42.0 | +0.5 |
| | baz=127 | | | | | | |
| 430A | Baggett Ranch, | 127.45 | 56 | P | PKPdf | 11 47 42.0 | 0.0 |
| | baz=127,SNR=16 | | | | | | |
| TORD | Torodi Ar. Bea | 127.47 | 281 | PKP | PKPdf | 11 47 42.0 | -0.3 |
| | comp=Z,4.0nm,0.9s,baz=74,slow=1.7,SNR=16 | | | | | | |
| TORD | | | | SKPbc | SKPbc | 11 50 35.4 | |
| | comp=Z,2.5nm,0.7s,baz=72,slow=4.1,SNR=4.5 | | | | | | |
| TORD | | | | PKKPbc | PKKPbc | 11 57 10.4 | |
| | comp=Z,1.3nm,1.1s,baz=314,slow=2.7,SNR=4.0 | | | | | | |
| M35A | Neola | 127.48 | 42 | P | PKPdf | 11 47 42.1 | +0.5 |
| | baz=127 | | | | | | |
| 530A | J-C Ranch, Com | 127.55 | 57 | P | PKPdf | 11 47 42.1 | 0.0 |
| | baz=128,SNR=11 | | | | | | |
| Z31A | Sharp Cattle R | 127.56 | 53 | P | PKPdf | 11 47 42.2 | +0.2 |
| | baz=128,SNR=5.6 | | | | | | |
| V32A | Arapaho | 127.56 | 49 | P | PKPdf | 11 47 42.3 | +0.3 |
| | baz=128 | | | | | | |
| P34A | Walnut Farm, R | 127.60 | 44 | P | PKPdf | 11 47 42.4 | +0.5 |
| | baz=128,SNR=7.5 | | | | | | |
| W32A | Sentinel | 127.63 | 50 | P | PKPdf | 11 47 42.1 | 0.0 |
| | baz=128 | | | | | | |
| T33A | Patterson Ranc | 127.63 | 48 | P | PKPdf | 11 47 42.4 | +0.3 |
| | baz=128 | | | | | | |
| Q34A | Chapman | 127.80 | 45 | P | PKPdf | 11 47 42.7 | +0.4 |
| | baz=128 | | | | | | |
| N35A | Tabor | 127.80 | 42 | P | PKPdf | 11 47 42.5 | +0.3 |
| | baz=128 | | | | | | |
| X32A | Elmer | 127.85 | 51 | P | PKPdf | 11 47 42.6 | +0.1 |
| | baz=128 | | | | | | |
| R34A | Isabella, Hill | 127.85 | 46 | P | PKPdf | 11 47 42.8 | +0.3 |
| | baz=128 | | | | | | |
| 231A | Bronte | 127.86 | 54 | P | PKPdf | 11 47 42.8 | +0.2 |
| | baz=128,SNR=10 | | | | | | |
| Y32A | R-V Farms, Ver | 127.88 | 52 | P | PKPdf | 11 47 42.9 | +0.3 |
| | baz=128 | | | | | | |
| O35A | Humboldt | 127.90 | 43 | P | PKPdf | 11 47 42.8 | +0.3 |
| | baz=128 | | | | | | |
| KSU1 | Kansas State U | 127.95 | 45 | P | PKPdf | 11 47 43.0 | +0.5 |
| | baz=128 | | | | | | |
| 331A | San Angelo | 127.96 | 55 | P | PKPdf | 11 47 43.3 | +0.4 |
| | baz=128,SNR=6.3 | | | | | | |
| U33A | Lingo Farm, Me | 127.99 | 48 | P | PKPdf | 11 47 43.3 | +0.5 |
| | baz=128 | | | | | | |
| 431A | Sonora | 128.00 | 56 | P | PKPdf | 11 47 43.6 | +0.6 |
| | baz=128,SNR=9.5 | | | | | | |
| Z32A | Haskell | 128.09 | 52 | P | PKPdf | 11 47 43.8 | +0.8 |
| | baz=128,SNR=11 | | | | | | |
| V33A | Lossen Ranch, | 128.09 | 49 | P | PKPdf | 11 47 43.9 | +0.9 |
| | baz=128 | | | | | | |
| P35A | Duane Minner, | 128.17 | 44 | P | PKPdf | 11 47 43.6 | +0.6 |
| | baz=128 | | | | | | |
| ABTX | Abilene, Hawle | 128.18 | 53 | P | PKPdf | 11 47 43.8 | +0.6 |
| | baz=128 | | | | | | |
| 531A | Rocksprings | 128.20 | 57 | P | PKPdf | 11 47 43.8 | +0.4 |
| | baz=128,SNR=10 | | | | | | |
| S34A | Willow Spring | 128.20 | 46 | P | PKPdf | 11 47 43.9 | +0.8 |
| | baz=128 | | | | | | |
| 631A | Perdido Creek | 128.39 | 58 | P | PKPdf | 11 47 44.1 | +0.4 |
| | baz=128,SNR=11 | | | | | | |
| X33A | Lawton | 128.41 | 51 | P | PKPdf | 11 47 44.1 | +0.5 |
| | baz=128,SNR=6.4 | | | | | | |
| U34A | Anderson Ranch | 128.41 | 48 | P | PKPdf | 11 47 44.2 | +0.6 |
| | baz=128 | | | | | | |
| 232A | Coleman | 128.42 | 54 | P | PKPdf | 11 47 44.1 | +0.4 |
| | baz=128,SNR=9.2 | | | | | | |
| T34A | McClaskey Farm | 128.43 | 47 | P | PKPdf | 11 47 44.0 | +0.5 |
| | baz=128 | | | | | | |
| Q35A | Mercer Eighty, | 128.46 | 45 | P | PKPdf | 11 47 44.2 | +0.7 |
| | baz=128 | | | | | | |
| 332A | Millersview | 128.50 | 55 | P | PKPdf | 11 47 44.6 | +0.7 |
| | baz=128,SNR=8.2 | | | | | | |
| Y33A | Hilltop Ranch, | 128.51 | 51 | P | PKPdf | 11 47 44.3 | +0.5 |
| | baz=128 | | | | | | |
| R35A | Emporia Munici | 128.58 | 45 | P | PKPdf | 11 47 44.5 | +0.7 |
| | baz=128 | | | | | | |
| O36A | Bolckow | 128.60 | 43 | P | PKPdf | 11 47 44.6 | +0.8 |
| | baz=128 | | | | | | |
| 432A | Menard | 128.61 | 56 | P | PKPdf | 11 47 44.7 | +0.6 |
| | baz=128,SNR=5.4 | | | | | | |
| Z33A | Whitaker Ranch | 128.65 | 52 | P | PKPdf | 11 47 44.7 | +0.6 |
| | baz=129 | | | | | | |
| V34A | Guthrie | 128.66 | 49 | P | PKPdf | 11 47 44.8 | +0.8 |
| | baz=129,SNR=5.8 | | | | | | |
| P36A | Good Intent, A | 128.68 | 43 | P | PKPdf | 11 47 44.6 | +0.7 |
| | baz=129 | | | | | | |
| JCT | Junction City | 128.72 | 56 | *e*PKIKP | PKPdf | 11 47 44.9 | +0.5 |
| JCT | Junction City | 128.72 | 56 | P | PKPdf | 11 47 44.9 | +0.5 |
| | baz=129,SNR=21 | | | | | | |
| JCT | Junction City | 128.72 | 56 | *e*PKPdf | PKPdf | 11 47 44.9 | +0.5 |
| 532A | Rocksprings | 128.75 | 56 | P | PKPdf | 11 47 45.1 | +0.6 |
| | baz=129,SNR=8.5 | | | | | | |
| 133A | Hamilton Ranch | 128.77 | 53 | P | PKPdf | 11 47 45.2 | +0.9 |
| | baz=129,SNR=7.0 | | | | | | |
| S35A | Otter Creek Ra | 128.78 | 46 | P | PKPdf | 11 47 45.3 | +1.1 |
| | baz=129,SNR=5.4 | | | | | | |
| COWI | Conover | 128.87 | 33 | *e*PKPdf | PKPdf | 11 47 45.2 | +1.1 |
| X34A | Smith Ranch, M | 128.90 | 50 | P | PKPdf | 11 47 45.1 | +0.6 |
| | baz=129 | | | | | | |
| T35A | Sooner Cattle | 128.97 | 47 | P | PKPdf | 11 47 44.9 | +0.3 |
| | baz=129,SNR=5.8 | | | | | | |
| 233A | Rising Star | 128.97 | 54 | P | PKPdf | 11 47 45.3 | +0.5 |
| | baz=129,SNR=5.7 | | | | | | |
| 632A | Uvalde | 129.02 | 57 | P | PKPdf | 11 47 45.3 | +0.4 |
| | baz=129,SNR=10.0 | | | | | | |
| U35A | Pawnee | 129.03 | 48 | P | PKPdf | 11 47 45.3 | +0.6 |
| | baz=129,SNR=8.9 | | | | | | |
| R36A | Gordon, Harris | 129.07 | 45 | P | PKPdf | 11 47 45.3 | +0.6 |
| | baz=129 | | | | | | |
| 732A | Laxson Ranch, | 129.09 | 58 | P | PKPdf | 11 47 45.6 | +0.6 |
| | baz=129,SNR=5.6 | | | | | | |
| 333A | Richland Sprin | 129.13 | 55 | P | PKPdf | 11 47 45.4 | +0.3 |
| | baz=129,SNR=14 | | | | | | |
| Y34A | Reagan Ranch, | 129.20 | 51 | P | PKPdf | 11 47 45.5 | +0.4 |
| | baz=129 | | | | | | |
| V35A | Meyer Ranch, C | 129.20 | 49 | P | PKPdf | 11 47 45.7 | +0.7 |
| | baz=129 | | | | | | |
| 832A | Faith Ranch, C | 129.20 | 59 | P | PKPdf | 11 47 45.6 | +0.3 |
| | baz=129,SNR=10 | | | | | | |
| 433A | Art | 129.22 | 55 | P | PKPdf | 11 47 45.9 | +0.6 |
| | baz=129,SNR=14 | | | | | | |
| S36A | Lake Cedric, C | 129.28 | 46 | P | PKPdf | 11 47 45.6 | +0.5 |
| | baz=129 | | | | | | |
| Z34A | Collier Ranch, | 129.29 | 52 | P | PKPdf | 11 47 46.0 | +0.7 |
| | baz=129 | | | | | | |
| T36A | Boggs Farm, Ca | 129.36 | 47 | P | PKPdf | 11 47 45.5 | +0.1 |
| | baz=129,SNR=6.2 | | | | | | |
| W35A | Tecumseh | 129.42 | 49 | P | PKPdf | 11 47 46.1 | +0.6 |
| | baz=129,SNR=7.6 | | | | | | |
| 134A | White-Moore Ra | 129.44 | 53 | P | PKPdf | 11 47 46.4 | +0.7 |
| | baz=129,SNR=6.6 | | | | | | |
| 533A | Kerrville | 129.48 | 56 | P | PKPdf | 11 47 46.3 | +0.5 |
| | baz=129 | | | | | | |
| 633A | Saathoff Ranch | 129.55 | 57 | P | PKPdf | 11 47 46.6 | +0.7 |
| | baz=130,SNR=5.7 | | | | | | |
| R37A | Teagarden Farm | 129.55 | 45 | P | PKPdf | 11 47 46.3 | +0.6 |
| | baz=130 | | | | | | |
| 234A | Clairette | 129.59 | 54 | P | PKPdf | 11 47 46.9 | +1.0 |
| | baz=130,SNR=5.9 | | | | | | |
| X35A | Drake | 129.63 | 50 | P | PKPdf | 11 47 46.6 | +0.7 |
| | baz=130 | | | | | | |
| 833A | Chaparral WMA, | 129.69 | 59 | P | PKPdf | 11 47 46.9 | +0.7 |
| | baz=130,SNR=5.8 | | | | | | |
| 334A | Lometa | 129.73 | 54 | P | PKPdf | 11 47 46.8 | +0.6 |
| | baz=130,SNR=5.3 | | | | | | |
| U36A | Oologah | 129.75 | 47 | P | PKPdf | 11 47 47.5 | +1.4 |
| | baz=130 | | | | | | |
| PBEJ | Beja | 129.76 | 315 | *i* P | SKPbc | 11 50 45.0 | +0.3 |
| S37A | Fort Scott | 129.80 | 45 | P | PKPdf | 11 47 46.8 | +0.6 |
| | baz=130,SNR=9.0 | | | | | | |
| Z35A | Perchaven, San | 129.82 | 52 | P | PKPdf | 11 47 46.7 | +0.4 |
| | baz=130 | | | | | | |
| V36A | Jenks | 129.85 | 48 | P | PKPdf | 11 47 46.6 | +0.3 |
| | baz=130,SNR=7.6 | | | | | | |
| 434A | Burnet | 129.88 | 55 | P | PKPdf | 11 47 47.2 | +0.7 |
| | baz=130,SNR=14 | | | | | | |
| W36A | Wetumka | 129.91 | 49 | P | PKPdf | 11 47 47.1 | +0.7 |
| | baz=130,SNR=6.4 | | | | | | |
| TUL1 | Tulsa | 129.91 | 48 | P | PKPdf | 11 47 47.1 | +0.7 |
| | baz=130 | | | | | | |
| PVAQ | Vaqueiros | 129.94 | 314 | *i* P | SKPbc | 11 50 47.0 | +1.6 |
| 534A | Blanco | 129.96 | 56 | P | PKPdf | 11 47 47.2 | +0.5 |
| | baz=130,SNR=5.8 | | | | | | |
| 135A | Vickery Place, | 129.98 | 53 | P | PKPdf | 11 47 47.0 | +0.3 |
| | baz=130 | | | | | | |
| 933A | Laredo | 129.98 | 59 | P | PKPdf | 11 47 47.0 | +0.2 |
| | baz=130 | | | | | | |
| T37A | Cheneyville 18 | 130.03 | 46 | P | PKPdf | 11 47 46.9 | +0.4 |
| | baz=130 | | | | | | |
| X36A | Centrahoma | 130.04 | 50 | P | PKPdf | 11 47 47.2 | +0.6 |
| | baz=130,SNR=5.8 | | | | | | |
| PCVE | Castro Verde | 130.06 | 315 | *i* P | SKPbc | 11 50 47.3 | +1.5 |
| MESJ | Messejana | 130.09 | 315 | *i* P | SKPbc | 11 50 46.5 | +0.6 |
| WHTX | Lake Whitney | 130.14 | 53 | P | PKPdf | 11 47 47.0 | +0.1 |
| | baz=130 | | | | | | |
| WHTX | Lake Whitney | 130.14 | 53 | *e*PKPdf | PKPdf | 11 47 47.8 | +0.9 |
| WHTX | | | | *e*PP | PP | 11 50 01.9 | -0.9 |
| PBDV | Barranco-do-Ve | 130.16 | 314 | *i* P | SKPbc | 11 50 47.4 | +1.1 |
| PNCL | Nicolau / Gran | 130.19 | 315 | *i* P | SKPbc | 11 50 45.2 | -1.1 |
| U37A | Salina | 130.20 | 47 | P | PKPdf | 11 47 47.1 | +0.2 |
| | baz=130 | | | | | | |
| 734A | La Parita Cree | 130.24 | 58 | P | PKPdf | 11 47 47.2 | 0.0 |
| | baz=130 | | | | | | |
| SCHQ | Schefferville | 130.28 | 12 | PKP | PKPdf | 11 47 47.2 | +0.7 |
| | comp=Z,7.8nm,0.9s,baz=14,slow=1.9,SNR=5.6 | | | | | | |
| SCHQ | | | | SKPbc | SKPbc | 11 50 46.0 | -0.1 |
| | comp=Z,30nm,0.7s,baz=357,slow=3.6,SNR=25 | | | | | | |
| Y36A | Durant | 130.35 | 51 | P | PKPdf | 11 47 47.5 | +0.2 |
| | baz=130 | | | | | | |
| 335A | Moody | 130.40 | 54 | P | PKPdf | 11 47 47.5 | +0.1 |
| | baz=130 | | | | | | |
| V37A | Hulbert | 130.41 | 48 | P | PKPdf | 11 47 47.4 | 0.0 |
| | baz=130,SNR=13 | | | | | | |
| 834A | Tilden | 130.46 | 58 | P | PKPdf | 11 47 47.5 | -0.1 |
| | baz=130 | | | | | | |
| Z36A | Blue Ridge | 130.48 | 51 | P | PKPdf | 11 47 47.6 | 0.0 |
| | baz=130 | | | | | | |
| W37A | Quinton | 130.51 | 49 | P | PKPdf | 11 47 47.7 | +0.2 |
| | baz=130,SNR=5.7 | | | | | | |
| 034A | Hebbronville | 130.63 | 60 | P | PKPdf | 11 47 48.5 | +0.5 |
| | baz=131,SNR=5.1 | | | | | | |
| MORF | Marmelete | 130.65 | 315 | *i* P | SKPbc | 11 50 49.0 | +0.9 |
| U38A | Gravette | 130.71 | 47 | P | PKPdf | 11 47 48.1 | +0.2 |
| | baz=131 | | | | | | |
| X37A | Clayton | 130.77 | 49 | P | PKPdf | 11 47 48.5 | +0.5 |
| | baz=131 | | | | | | |
| 236A | Katherine and | 130.87 | 53 | P | PKPdf | 11 47 47.8 | -0.5 |
| | baz=131 | | | | | | |
| V38A | Canehill | 130.95 | 47 | P | PKPdf | 11 47 48.2 | -0.2 |
| | baz=131 | | | | | | |
| X38A | Whitesboro | 131.15 | 49 | P | PKPdf | 11 47 49.5 | +0.7 |
| | baz=131,SNR=6.4 | | | | | | |
| W38A | Poteau | 131.21 | 48 | P | PKPdf | 11 47 49.4 | +0.5 |
| | baz=131 | | | | | | |
| 636A | Smothers Creek | 131.30 | 56 | P | PKPdf | 11 47 49.9 | +0.7 |
| | baz=131 | | | | | | |
| 637A | Eagle Lake | 131.91 | 56 | P | PKPdf | 11 47 50.6 | +0.3 |
| | baz=132 | | | | | | |
| Y39A | Lockesburg | 132.01 | 49 | P | PKPdf | 11 47 50.9 | +0.5 |
| | baz=132,SNR=5.5 | | | | | | |
| HDIL | Hopedale | 132.08 | 39 | P | PKPdf | 11 47 50.6 | +0.3 |
| | baz=132 | | | | | | |
| MIAR | Mount Ida | 132.14 | 48 | P | PKPdf | 11 47 50.8 | +0.1 |
| | baz=132 | | | | | | |
| 239A | Gary | 132.49 | 52 | P | PKPdf | 11 47 51.6 | +0.2 |
| | baz=132 | | | | | | |
| KIC | Kosan Boka | 133.76 | 273 | *e*P | SKPbc | 11 50 58.5 | -1.1 |
| | comp=Z,30nm,1.0s | | | | | | |
| OLIL | Olney | 133.87 | 41 | *e*PKPdf | PKPdf | 11 47 55.0 | +1.2 |
| DBIC | Dimbokro | 133.89 | 273 | PKP | PKPdf | 11 47 54.8 | +0.3 |
| | comp=Z,3.2nm,0.8s,baz=80,slow=6.6,SNR=3.4 | | | | | | |
| DBIC | | | | SKPbc | SKPbc | 11 50 59.0 | -1.0 |
| | comp=Z,7.2nm,0.6s,baz=63,slow=4.1,SNR=11 | | | | | | |
| LIC | Lamto | 134.04 | 272 | *e*P | SKPbc | 11 50 59.9 | -0.6 |
| | comp=Z,88nm,1.6s | | | | | | |
| TIC | Toumodi | 134.05 | 273 | *e*P | SKPbc | 11 50 59.4 | -1.2 |
| BLO | Bloomington | 134.62 | 39 | *e*PKIKP | PKPdf | 11 47 56.7 | +1.5 |
| BLO | Bloomington | 134.62 | 39 | *e*PKPdf | PKPdf | 11 47 56.7 | +1.5 |
| LVC | Limon Verde | 146.25 | 150 | *e*PKPdf | PKPbc | 11 48 18.0 | -0.4 |
| JTS | JuntasAbangare | 146.51 | 81 | *e*PKIKP | PKPdf | 11 48 17.8 | +0.6 |
| JTS | | | | *e* | | 11 48 20.1 | |
| JTS | JuntasAbangare | 146.51 | 81 | *e*PKPdf | PKPdf | 11 48 17.8 | +0.6 |
| JTS | | | | *e*PKPbc | PKPab | 11 48 20.1 | -0.5 |
| CPUP | Villa Florida | 146.77 | 170 | PKPbc | PKPbc | 11 48 20.1 | +0.7 |
| | comp=Z,21nm,0.9s,baz=215,slow=2.9,SNR=30 | | | | | | |
| BCIP | Isla Barro Col | 151.61 | 83 | *e*PKPbc | PKPbc | 11 48 31.7 | -0.1 |
| LPAZ | La Paz | 151.83 | 144 | PKP | PKPdf | 11 48 27.3 | +0.9 |
| | comp=Z,1.9nm,0.5s,baz=294,slow=1.5,SNR=11 | | | | | | |
| LPAZ | | | | PKPbc | PKiKP | 11 48 33.4 | +0.1 |
| | comp=Z,3.7nm,0.5s,baz=151,slow=1.7,SNR=9.6 | | | | | | |
| LPAZ | | | | PKPab | PKPab | 11 48 43.1 | +0.2 |
| | comp=Z,3.6nm,0.4s,baz=166,slow=2.8,SNR=7.5 | | | | | | |
| OTAV | Otavalo | 152.18 | 102 | *e*PKPdf | PKPdf | 11 48 27.6 | +0.7 |
| OTAV | | | | *e*PKPbc | PKiKP | 11 48 35.0 | +1.0 |
| BDFB | Brasilia | 157.69 | 188 | PKP | PKPdf | 11 48 32.3 | -1.5 |
| | comp=Z,1.3nm,0.3s,baz=148,slow=9.5,SNR=3.0 | | | | | | |
| BDFB | | | | PKPab | PKPab | 11 49 07.2 | 0.0 |
| | comp=Z,0.8nm,0.3s,baz=207,slow=2.3,SNR=3.3 | | | | | | |
| SAML | Samuel | 160.55 | 142 | *e*PKPdf | PKPdf | 11 48 38.0 | +1.0 |
| SAML | | | | *e*PKPab | PKPab | 11 49 20.5 | +0.9 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SDV | Santo Domingo | 160.70 | 82 | ePKPdf | PKPdf | 11 48 37.5 | 0.0 |
| SDV | | | | ePKPab | PKPab | 11 49 22.2 | +1.4 |
| CRPR | Cabo Rojo, PR | 160.84 | 52 | ePKPdf | PKPdf | 11 48 36.2 | -0.9 |
| CRPR | | | | ePKPab | PKPab | 11 49 20.3 | -0.5 |

**CASC 02 11:30:53.8±2.6, 9°.09N×84°.19W, h23km±7km, MD3.7, 1C-3D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BUS | Buena Vista | 0.63 | 42⇓ | iP | Pb | 11 31 06.7 | -0.1 |
| BUS | | | | eS | Sb | 11 31 15.9 | +0.4 |
| CGA2 | Cerro Gallo 2 | 0.96 | 343 | eP | Pb | 11 31 11.8 | -0.2 |
| CGA2 | | | | eS | Sb | 11 31 24.6 | +0.2 |
| CAO | Cobano | 1.09 | 304⇓ | iP | Pn | 11 31 12.8 | -0.9 |
| CAO | | | | eS | Sb | 11 31 26.1 | -1.7 |
| JCR | Jicaral | 1.18 | 310⇑ | eP | Pn | 11 31 14.6 | -0.4 |
| JTS | JuntasAbangare | 1.41 | 328 | eP | Pn | 11 31 18.0 | -0.1 |
| JTS | | | | eS | Sn | 11 31 35.9 | -0.2 |
| CTCR | Cotoan | 1.42 | 98⇓ | iP | Pb | 11 31 19.4 | -0.6 |
| CHPA | Chiripa | 1.52 | 332 | i P | Pb | 11 31 20.8 | -0.7 |
| TBS2 | | 1.54 | 101 | eP | Pb | 11 31 22.0 | +0.1 |
| TBS2 | | | | eS | Sb | 11 31 42.1 | +0.9 |
| AMAS | Alto Masis | 1.71 | 332 | i P | Pn | 11 31 23.1 | +0.8 |
| CUI | Cuipilapa | 1.83 | 328 | i P | Pn | 11 31 25.2 | +1.2 |
| CUI | | | | i S | Sn | 11 31 47.5 | +0.9 |
| MESS | Mesas | 1.92 | 329 | i P | Pn | 11 31 25.7 | +0.6 |

*ISCJB 02 11:32:35.5±0.9, 25°.65S±0°.05×30°.01E±0°.09, h10km, Error ellipse: s-maj=11.3km s-min=7.3km az=166.7*
*BUL 02 11:32:35.3±4.9, 25°.78S×30°.81E, h15km±945km, MD3.6*
**ISC 02 11:32:36.4±1.1, 25°.61S±0°.05×30°.24E±0°.08, h10km, n7, σ2s.46/12, South Africa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| POGA | Pongola | 2.14 | 145 | eP | Pg | 11 33 17.6 | +0.2 |
| POGA | | | | eS | Sb | 11 33 41.4 | -0.5 |
| POGA | | | | AML | AML | 11 33 59.6 | |
| | comp=Z,24nm,0.6s | | | | | | |
| BOSA | Boshof | 5.35 | 235 | i P | Pn | 11 33 52.0 | -4.4 |
| BOSA | | | | i S | Sn | 11 34 54.3 | -3.9 |
| BOSA | Boshof | 5.35 | 235 | i P | Pn | 11 33 59.4 | +2.9 |
| BOSA | | | | i S | Sn | 11 34 56.8 | -1.4 |
| MATP | Matopo | 5.41 | 342 | i P | Pn | 11 33 59.1 | +1.9 |
| MATP | | | | i S | Sn | 11 35 06.9 | +7.4 |
| MATP | Matopo | 5.41 | 342 | i P | Pn | 11 33 58.4 | +1.2 |
| MATP | | | | i S | Sn | 11 35 02.1 | +2.6 |
| BLWY | Bulawayo | 5.65 | 344 | i P | Pn | 11 33 58.7 | -1.8 |
| BLWY | | | | i S | Sn | 11 35 06.5 | +0.9 |
| BLWY | Bulawayo | 5.65 | 344 | i P | Pn | 11 33 58.9 | -1.7 |
| BLWY | | | | i S | Sn | 11 35 02.6 | -3.0 |

*ISCJB 02 12:23:50.6±0.3, 43°.23N±0°.03×10°.64E±0°.04, h24km±4km, Error ellipse: s-maj=4.9km s-min=3.8km az=142.2*
*CSEM 02 12:23:50.4±0.2, 43°.24N×10°.67E, h10km, ML2.7/16, Error ellipse: s-maj=3.9km s-min=3.0km az=27.0*
*ROM 02 12:23:51.3±0.1, 43°.25N×10°.79E, h8km±1km, Md2.6/21, Ml2.1/16, Error ellipse: s-maj=2.8km s-min=1.5km az=54.0*
*LDG 02 12:23:51.2±0.1, 43°.27N×10°.79E, h10km, Ml2.4/10, Error ellipse: s-maj=2.4km s-min=1.7km az=11.0*
**ISC 02 12:23:50.3±0.8, 43°.23N±0°.02×10°.74E±0°.02, h18km±4km, n59, σ0s.96/92, Central Italy**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SASS | Sassa´´´´´ | 0.04 | 303 | Pg | Pg | 12 23 53.9 | +0.4 |
| SASS | | | | Sg | Sg | 12 23 55.4 | -0.3 |
| | 6µm,0.3s | | | | | | |
| SASS | Sassa´´´´´ | 0.04 | 303 | Pg | Pg | 12 23 53.9 | +0.4 |
| SASS | | | | Sg | Sg | 12 23 55.4 | -0.3 |
| | 6µm,0.3s | | | | | | |
| GRFL | Gerfalco | 0.19 | 116 | Pg | Pg | 12 23 54.9 | -0.2 |
| GRFL | | | | Sg | Sg | 12 23 57.3 | -1.1 |
| GRFL | Gerfalco | 0.19 | 116 | Pg | Pg | 12 23 54.9 | -0.2 |
| CASP | Castiglione de | 0.45 | 168 | Pg | Pb | 12 24 00.5 | +0.7 |
| CASP | | | | Sg | Sb | 12 24 07.3 | +1.1 |
| | 217nm,0.6s | | | | | | |
| CASP | Castiglione de | 0.45 | 168 | Pg | Pb | 12 24 00.5 | +0.7 |
| CASP | | | | Sg | Sb | 12 24 07.3 | +1.1 |
| | 217nm,0.6s | | | | | | |
| PII | Pisa | 0.51 | 342 | Pg | Pb | 12 24 01.7 | +0.9 |
| PII | | | | Sg | Sb | 12 24 09.0 | +1.1 |
| | 198nm,0.2s | | | | | | |
| PII | Pisa | 0.51 | 342 | Pg | Pb | 12 24 01.7 | +0.9 |
| PII | | | | Sg | Sb | 12 24 09.0 | +1.1 |
| | 198nm,0.2s | | | | | | |
| CRMI | Carmignano | 0.58 | 17 | Pg | Pb | 12 24 02.8 | +0.8 |
| CRMI | | | | Sg | Sb | 12 24 10.1 | +0.1 |
| | 180nm,0.3s | | | | | | |
| CRMI | Carmignano | 0.58 | 17 | Pg | Pb | 12 24 02.8 | +0.8 |
| CRMI | | | | Sg | Sb | 12 24 10.1 | +0.1 |
| | 180nm,0.3s | | | | | | |
| ARCI | Arcidosso | 0.66 | 125 | Pg | Pb | 12 24 03.9 | +0.5 |
| ARCI | | | | Sg | Sg | 12 24 11.8 | -0.3 |
| | 71nm,0.4s | | | | | | |
| ARCI | Arcidosso | 0.66 | 125 | Pg | Pb | 12 24 03.9 | +0.5 |
| ARCI | | | | Sg | Sg | 12 24 11.8 | -0.3 |
| | 71nm,0.4s | | | | | | |
| MAIM | Mastiano | 0.70 | 345 | Pg | Pn | 12 24 04.9 | -0.5 |
| MAIM | | | | Sg | Sg | 12 24 14.5 | +1.0 |
| | 120nm,0.5s | | | | | | |
| MAIM | Mastiano | 0.70 | 345 | Pg | Pn | 12 24 04.9 | -0.5 |
| MAIM | | | | Sg | Sg | 12 24 14.5 | +1.0 |
| | 120nm,0.5s | | | | | | |
| MCIV | Monte Civitell | 0.82 | 123 | Pg | Pn | 12 24 06.8 | -0.3 |
| | 56nm,0.4s | | | | | | |
| MCIV | Monte Civitell | 0.82 | 123 | Pg | Pn | 12 24 06.8 | -0.3 |
| | 56nm,0.4s | | | | | | |
| MAON | Monte Argentar | 0.85 | 160 | Pg | Pn | 12 24 08.5 | +1.0 |
| | 69nm,0.3s | | | | | | |
| MAON | Monte Argentar | 0.85 | 160 | Pg | Pn | 12 24 08.5 | +1.0 |
| | 69nm,0.3s | | | | | | |
| VMG | Vicchio | 0.93 | 38 | Pg | Pn | 12 24 09.1 | +0.5 |
| VMG | | | | Sg | Sg | 12 24 20.9 | +0.2 |
| | 66nm,0.2s | | | | | | |
| VMG | Vicchio | 0.93 | 38 | Pg | Pn | 12 24 09.1 | +0.5 |
| VMG | | | | Sg | Sg | 12 24 20.9 | +0.2 |
| | 66nm,0.2s | | | | | | |
| SEI | Scarperia | 0.93 | 28 | Pg | Pn | 12 24 08.7 | +0.1 |
| | 285nm,0.8s | | | | | | |
| SEI | Scarperia | 0.93 | 28 | Pg | Pn | 12 24 08.7 | +0.1 |
| | 285nm,0.8s | | | | | | |
| SACS | San Casciano d | 0.94 | 114 | Pg | Pn | 12 24 09.6 | +0.9 |
| | 41nm,0.9s | | | | | | |
| ASQU | Asqua | 0.95 | 53 | Pg | Pg | 12 24 08.9 | +0.2 |
| | 42nm,0.6s | | | | | | |
| ASQU | Asqua | 0.95 | 53 | Pg | Pg | 12 24 08.9 | +0.2 |
| | 42nm,0.6s | | | | | | |
| VLC | Villacollemand | 0.96 | 345 | Pg | Pg | 12 24 09.9 | +0.9 |
| | 69nm,0.9s | | | | | | |
| VLC | Villacollemand | 0.96 | 345 | Pg | Pg | 12 24 09.9 | +0.9 |
| | 69nm,0.9s | | | | | | |
| CRE | Caprese Michel | 0.96 | 66 | Pg | Pg | 12 24 09.3 | +0.3 |
| | 29nm,0.8s | | | | | | |
| CRE | Caprese Michel | 0.96 | 66 | Pg | Pg | 12 24 09.3 | +0.3 |
| | 29nm,0.8s | | | | | | |
| FNVD | Fontana Vidola | 0.97 | 16 | Pg | Pg | 12 24 09.8 | +0.6 |
| | 102nm,0.3s | | | | | | |
| FNVD | Fontana Vidola | 0.97 | 16 | Pg | Pg | 12 24 09.8 | +0.6 |
| | 102nm,0.3s | | | | | | |
| LATE | Laterza | 1.00 | 128 | Pg | Pg | 12 24 10.9 | +1.3 |
| | 125nm,1.2s | | | | | | |
| LATE | Laterza | 1.00 | 128 | Pg | Pg | 12 24 10.9 | +1.3 |
| | 125nm,1.2s | | | | | | |
| SFI | Santa Sofia | 1.05 | 50 | Pg | Pg | 12 24 10.5 | -0.1 |
| | 327µm,30.0s | | | | | | |
| SFI | Santa Sofia | 1.05 | 50 | Pg | Pg | 12 24 10.5 | -0.1 |
| | 327µm,30.0s | | | | | | |
| MGAB | Montegabbione | 1.05 | 107 | Pg | Pg | 12 24 10.7 | 0.0 |
| | 30nm,0.7s | | | | | | |
| MGAB | Montegabbione | 1.05 | 107 | Pg | Pg | 12 24 10.7 | 0.0 |
| | 30nm,0.7s | | | | | | |
| PARC | Parchiule | 1.17 | 69 | Pg | Pg | 12 24 12.8 | -0.1 |
| | 32nm,0.6s | | | | | | |
| PARC | Parchiule | 1.17 | 69 | Pg | Pg | 12 24 12.8 | -0.1 |
| | 32nm,0.6s | | | | | | |
| ATVO | AVT- Monte Val | 1.23 | 82 | Pg | Pg | 12 24 13.7 | -0.3 |
| | 27nm,0.5s | | | | | | |
| ATVO | AVT- Monte Val | 1.23 | 82 | Pg | Pg | 12 24 13.7 | -0.3 |
| | 27nm,0.5s | | | | | | |
| PGF | Pioggiola | 1.45 | 242 | ePn | Pb | 12 24 16.9 | 0.0 |
| PGF | | | | eSn | Sb | 12 24 35.3 | +0.2 |
| | 29nm,0.4s | | | | | | |
| PGF | Pioggiola | 1.45 | 242 | ePn | Pb | 12 24 16.9 | 0.0 |
| PGF | | | | eSn | Sb | 12 24 35.3 | +0.2 |
| | 15nm,0.4s | | | | | | |
| SBF | Sospel | 2.48 | 286 | ePn | Pn | 12 24 30.8 | +0.8 |
| SBF | | | | eSn | Sn | 12 24 59.0 | -0.9 |
| | 6.0nm,0.4s | | | | | | |
| SBF | Sospel | 2.48 | 286 | ePn | Pn | 12 24 30.8 | +0.8 |
| SBF | | | | eSn | Sn | 12 24 59.0 | -0.9 |
| | 3.0nm,0.4s | | | | | | |
| FRF | La Foret Royal | 3.00 | 278 | ePn | Pn | 12 24 36.8 | -0.2 |
| FRF | | | | eSn | Sn | 12 25 11.3 | -1.2 |
| | 5.9nm,0.4s | | | | | | |
| FRF | La Foret Royal | 3.00 | 278 | ePn | Pn | 12 24 36.8 | -0.2 |
| FRF | | | | eSn | Sn | 12 25 11.3 | -1.2 |
| | 3.0nm,0.4s | | | | | | |
| LMR | La Mourre | 3.09 | 273 | ePn | Pn | 12 24 38.6 | +0.4 |
| LMR | | | | eSn | Sn | 12 25 13.0 | -1.7 |
| | 2.5nm,0.2s | | | | | | |
| LMR | La Mourre | 3.09 | 273 | ePn | Pn | 12 24 38.6 | +0.4 |
| LMR | | | | eSn | Sn | 12 25 13.0 | -1.7 |
| | 1.2nm,0.2s | | | | | | |
| MBDF | Montbardon | 3.23 | 299 | ePn | Pn | 12 24 40.5 | +0.2 |
| MBDF | | | | eSn | Sn | 12 25 16.6 | -1.8 |
| | 3.6nm,0.6s | | | | | | |
| MBDF | Montbardon | 3.23 | 299 | ePn | Pn | 12 24 40.5 | +0.2 |
| MBDF | | | | eSn | Sn | 12 25 16.6 | -1.8 |
| | 1.8nm,0.6s | | | | | | |
| LPG | La Plagne | 3.65 | 310 | ePn | Pn | 12 24 46.1 | -0.1 |
| LPG | | | | eSn | Sn | 12 25 26.8 | -2.1 |
| | 0.9nm,0.3s | | | | | | |
| LPG | La Plagne | 3.65 | 310 | ePn | Pn | 12 24 46.1 | -0.1 |
| LPG | | | | eSn | Sn | 12 25 26.8 | -2.1 |
| | 0.4nm,0.3s | | | | | | |
| LPL | La Plagne | 3.67 | 310 | ePn | Pn | 12 24 46.3 | -0.1 |
| LPL | | | | eSn | Sn | 12 25 27.1 | -2.2 |
| | 0.8nm,0.2s | | | | | | |
| LPL | La Plagne | 3.67 | 310 | ePn | Pn | 12 24 46.3 | -0.1 |
| LPL | | | | eSn | Sn | 12 25 27.1 | -2.2 |
| | 0.4nm,0.2s | | | | | | |
| SMRF | Simiane la Rot | 3.83 | 283 | ePn | Pn | 12 24 48.7 | +0.3 |
| SMRF | | | | eSn | Sn | 12 25 30.9 | -2.0 |
| | 0.8nm,0.3s | | | | | | |
| SMRF | Simiane la Rot | 3.83 | 283 | ePn | Pn | 12 24 48.7 | +0.3 |
| SMRF | | | | eSn | Sn | 12 25 30.9 | -2.0 |
| | 0.4nm,0.3s | | | | | | |
| ORIF | Oris-en-Rattie | 3.89 | 297 | ePn | Pn | 12 24 49.3 | 0.0 |
| ORIF | | | | eSn | Sn | 12 25 32.2 | -2.3 |
| | 2.5nm,0.4s | | | | | | |
| ORIF | Oris-en-Rattie | 3.89 | 297 | ePn | Pn | 12 24 49.3 | 0.0 |
| ORIF | | | | eSn | Sn | 12 25 32.2 | -2.3 |
| | 1.2nm,0.4s | | | | | | |

**KRSC 02 12:42:09.8±2.0, 49°.58N×157°.13E, h16km±42km, ML3.7, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 1.28 | 330 | eP | Pn | 12 42 32.3 | -0.7 |
| SKR | | | | eS | Sb | 12 42 47.9 | -1.8 |
| PAU | Pauzhetka | 1.90 | 354 | eS | Sb | 12 43 07.5 | 0.0 |
| RUS | Russkaya | 2.99 | 16 | eP | Pn | 12 42 59.4 | +3.0 |
| RUS | | | | eS | Sb | 12 43 35.7 | -3.1 |
| SMAR | Somma | 3.83 | 15 | eP | Pb | 12 43 12.9 | -4.4 |
| KOK | Koryaka | 3.83 | 14 | eP | Pb | 12 43 13.1 | -4.1 |
| SDLR | Sedlovina | 3.86 | 16 | eP | Pn | 12 43 12.1 | +3.5 |
| SDLR | | | | eS | Sn | 12 43 57.6 | +3.8 |
| KRX | Arik | 3.90 | 14 | eP | Pn | 12 43 13.6 | +4.4 |
| SPN | Mys Shipunski | 3.96 | 26 | eP | Pn | 12 43 14.0 | +4.2 |
| GNL | Ganaly | 4.15 | 7 | eP | Pn | 12 43 16.7 | +4.1 |
| KBTR | Krutoberegovo | 7.47 | 25 | eP | Pn | 12 44 01.2 | +3.2 |

**MEX 02 12:48:04.4±0.5, 13°.83N×92°.71W, h41km±240km, MD3.8, Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.93 | 345 | eP | Pn | 12 48 33.6 | -1.1 |
| PCIG | | | | i S | Sn | 12 48 56.2 | -1.5 |
| CCIG | Comitan | 2.50 | 13 | eP | Pn | 12 48 41.1 | -1.7 |
| CCIG | | | | i S | Sn | 12 49 10.4 | -1.9 |

*ISCJB 02 13:26:20.4±1.0, 36°.76N±0°.03×39°.03E±0°.03, h9km±7km, Error ellipse: s-maj=5.3km s-min=3.6km az=1.0*
*DDA 02 13:26:20.8, 36°.83N×39°.01E, h8km, Md2.8*
*CSEM 02 13:26:20.2±0.3, 36°.76N×39°.18E, h2km, MD3.1, Error ellipse: s-maj=8.3km s-min=6.9km az=179.0*
*ISK 02 13:26:22.2, 36°.94N×39°.13E, h9km, MD3.1*
*NSSC 02 13:26:22.9±2.2, 36°.72N×39°.12E, h38km±999km, ML2.7*
**ISC 02 13:26:18.3±1.2, 36°.69N±0°.03×39°.06E±0°.02, h3km±10km, n48, σ0s.98/79, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URFA | Urfa | 0.77 | 346 | PG | Pg | 13 26 33.5 | +0.4 |
| URFA | | | | eSG | Sg | 13 26 41.8 | -1.4 |
| URFA | Urfa | 0.77 | 346 | i Pg | Pg | 13 26 33.5 | +0.4 |
| URFA | | | | eSg | Sg | 13 26 41.8 | -1.4 |
| SFNV | Sufian | 0.89 | 107 | i P | Pn | 13 26 39.6 | +1.8 |
| SFNV | | | | i S | Sn | 13 26 51.5 | +0.3 |
| SFNV | | | | AML | AML | 13 26 55.1 | |
| | comp=N,208nm,0.2s | | | | | | |
| SFNV | | | | AML | AML | 13 26 58.5 | |
| | comp=E,344nm,0.2s | | | | | | |
| ATAB | Bozova | 0.99 | 322 | i P | Pg | 13 26 37.7 | +0.4 |
| ATAB | | | | i S | Sg | 13 26 48.8 | -1.3 |
| ATAB | Bozova | 0.99 | 322 | P | Pg | 13 26 37.7 | +0.4 |
| ATAB | | | | S | Sg | 13 26 48.8 | -1.3 |
| KBSD | Kabsdagh | 1.23 | 75 | eP | Pn | 13 26 43.5 | +1.1 |
| KBSD | | | | eS | Sb | 13 26 58.4 | -0.1 |
| KBSD | | | | AML | AML | 13 27 02.7 | |
| | comp=E,379nm,0.2s | | | | | | |
| KBSD | | | | AML | AML | 13 27 02.8 | |
| | comp=N,383nm,0.3s | | | | | | |
| KBSD | Kabsdagh | 1.23 | 75 | eP | Pn | 13 26 43.7 | +1.3 |
| KBSD | | | | i S | Sg | 13 26 57.8 | -0.2 |
| KBSD | | | | AML | AML | 13 27 02.7 | |
| | comp=E,379nm,0.2s | | | | | | |
| KBSD | | | | AML | AML | 13 27 02.9 | |
| | comp=N,383nm,0.3s | | | | | | |
| KBSD | Kabsdagh | 1.23 | 75 | eP | Pn | 13 26 43.7 | +1.3 |
| KBSD | | | | i S | Sg | 13 26 57.8 | -0.2 |
| | comp=N,383nm,0.3s | | | | | | |
| MAZI | Mazidag | 1.35 | 55 | PN | Pg | 13 26 44.9 | +0.7 |
| MAZI | | | | eSN | Sb | 13 27 01.8 | -0.3 |
| MAZI | Mazidag | 1.35 | 55 | i Pn | Pg | 13 26 44.9 | +0.7 |
| MAZI | | | | eSn | Sb | 13 27 01.8 | -0.3 |
| GZT | Gaziantep | 1.37 | 300 | P | Pn | 13 26 44.5 | +0.2 |
| GZT | | | | S | Sb | 13 27 00.5 | -1.9 |
| MARD | Mardin | 1.52 | 65 | P | Pg | 13 26 48.2 | +0.9 |
| MARD | | | | S | Sg | 13 27 07.8 | +0.9 |
| DIY | Diyarbakir | 1.52 | 37 | i Pn | Pb | 13 26 47.1 | -0.1 |
| DYBB | Diyarbakir | 1.53 | 34 | PN | Pb | 13 26 47.1 | -0.2 |
| MZRK | Al-Mazaregh | 1.55 | 123 | eP | Pn | 13 26 45.3 | -1.5 |
| MZRK | | | | i S | Sn | 13 27 05.7 | -1.7 |
| MZRK | | | | AML | AML | 13 27 10.4 | |
| | comp=E,256nm,0.4s | | | | | | |
| MZRK | | | | AML | AML | 13 27 13.9 | |
| | comp=N,217nm,0.4s | | | | | | |
| MZRK | Al-Mazaregh | 1.55 | 123 | eP | Pn | 13 26 46.2 | -0.5 |
| MZRK | | | | i S | Sn | 13 27 05.7 | -1.7 |
| MZRK | | | | AML | AML | 13 27 10.4 | |
| | comp=E,256nm,0.4s | | | | | | |
| MZRK | | | | AML | AML | 13 27 13.9 | |
| | comp=N,217nm,0.4s | | | | | | |
| MZRK | Al-Mazaregh | 1.55 | 123 | eP | Pn | 13 26 46.2 | -0.5 |
| MZRK | | | | i S | Sn | 13 27 05.7 | -1.7 |
| | comp=N,217nm,0.4s | | | | | | |
| KUZU | Kuzuini | 1.59 | 274 | i P | Pg | 13 26 49.8 | +1.0 |
| KUZU | Kuzuini | 1.59 | 274 | P | Pg | 13 26 49.8 | +1.0 |
| KUZU | | | | S | Sb | 13 27 09.9 | +1.0 |
| SVRC | Sivrice-ELAZID | 1.70 | 7 | PN | Pn | 13 26 48.9 | 0.0 |
| SVRC | Sivrice-ELAZID | 1.70 | 7 | i Pn | Pn | 13 26 48.9 | 0.0 |
| ELZG | Elazig | 1.81 | 358 | i P | Pb | 13 26 51.8 | -0.3 |
| ELZG | | | | i S | Sb | 13 27 15.6 | +0.4 |
| ELZG | Elazig | 1.81 | 358 | P | Pb | 13 26 51.8 | -0.3 |
| ELZG | | | | S | Sb | 13 27 15.6 | +0.4 |
| AKCD | Akcadag | 1.84 | 331 | i P | Pg | 13 26 54.1 | +0.5 |
| AKCD | | | | i S | Sn | 13 27 14.9 | +0.2 |
| AKCD | Akcadag | 1.84 | 331 | P | Pg | 13 26 54.1 | +0.5 |
| AKCD | | | | S | Sn | 13 27 14.9 | +0.2 |
| KMRS | Kahramanmaras | 1.91 | 296 | ePN | Pg | 13 26 54.9 | +0.1 |
| KMRS | Kahramanmaras | 1.91 | 296 | ePn | Pg | 13 26 54.9 | +0.1 |
| AYKD | Aykdinkavak | 1.94 | 293 | P | Pn | 13 26 52.6 | +0.5 |
| AYKD | | | | S | Sn | 13 27 14.8 | -2.2 |
| BTCH | Batrach | 2.19 | 254 | eP | Pb | 13 26 59.2 | +0.6 |
| BTCH | | | | eS | Sn | 13 27 23.8 | +0.5 |
| BTCH | | | | AML | AML | 13 27 37.4 | |
| | comp=E,142nm,0.4s | | | | | | |
| BTCH | | | | AML | AML | 13 27 37.8 | |
| | comp=N,139nm,0.4s | | | | | | |
| BTCH | Batrach | 2.19 | 254 | eP | Pb | 13 26 58.2 | -0.4 |
| BTCH | | | | i S | Sn | 13 27 22.3 | -1.0 |
| BTCH | | | | AML | AML | 13 27 37.4 | |
| | comp=E,142nm,0.4s | | | | | | |
| BTCH | | | | AML | AML | 13 27 38.0 | |
| | comp=N,15nm,0.5s | | | | | | |
| BTCH | Batrach | 2.19 | 254 | eP | Pb | 13 26 58.2 | -0.4 |
| BTCH | | | | i S | Sn | 13 27 22.3 | -1.0 |
| | comp=N,15nm,0.5s | | | | | | |
| PTK | Pertek | 2.22 | 7 | ePN | Pn | 13 26 56.6 | +0.5 |
| PTK | Pertek | 2.22 | 7 | ePn | Pn | 13 26 56.6 | +0.5 |
| DARE | Darende-Malaty | 2.26 | 327 | ePN | Pb | 13 26 58.5 | -1.2 |
| DARE | Darende-Malaty | 2.26 | 327 | ePn | Pb | 13 26 58.5 | -1.2 |
| TAHT | Tahtakopru-Hat | 2.33 | 263 | ePN | Pg | 13 27 03.3 | +0.4 |
| TAHT | Tahtakopru-Hat | 2.33 | 263 | ePn | Pg | 13 27 03.3 | +0.4 |
| ANDN | Andirin | 2.34 | 293 | i P | Pg | 13 27 03.3 | +0.1 |
| ANDN | | | | i S | Sb | 13 27 31.7 | +1.2 |
| ANDN | Andirin | 2.34 | 293 | P | Pg | 13 27 03.3 | +0.1 |
| ANDN | | | | S | Sb | 13 27 31.7 | +1.2 |
| WRDH | Warideh | 2.44 | 242 | eP | Pn | 13 27 01.1 | +2.1 |
| WRDH | | | | eS | Sn | 13 27 29.4 | -0.1 |
| WRDH | | | | AML | AML | 13 27 43.2 | |
| | comp=E,98nm,0.5s | | | | | | |
| WRDH | | | | AML | AML | 13 27 44.6 | |
| | comp=N,63nm,0.7s | | | | | | |
| WRDH | Warideh | 2.44 | 242 | eP | Pb | 13 27 02.0 | -0.8 |
| WRDH | | | | eS | Sn | 13 27 28.8 | -0.6 |
| WRDH | | | | AML | AML | 13 27 43.2 | |
| | comp=E,98nm,0.5s | | | | | | |
| WRDH | | | | AML | AML | 13 27 44.6 | |
| | comp=N,63nm,0.7s | | | | | | |
| WRDH | Warideh | 2.44 | 242 | eP | Pb | 13 27 02.0 | -0.8 |
| WRDH | | | | eS | Sn | 13 27 28.8 | -0.6 |
| | comp=N,63nm,0.7s | | | | | | |
| KOZT | Kozan | 2.70 | 288 | ePN | Pb | 13 27 07.2 | 0.0 |
| KOZT | Kozan | 2.70 | 288 | ePn | Pb | 13 27 07.2 | 0.0 |
| RABH | Abou Rabah | 2.71 | 214 | eP | Pb | 13 27 06.2 | -1.1 |
| RABH | | | | eS | Sn | 13 27 36.8 | +0.8 |
| RABH | | | | AML | AML | 13 27 53.7 | |
| | comp=E,23nm,0.5s | | | | | | |
| RABH | | | | AML | AML | 13 27 54.8 | |
| | comp=N,36nm,0.6s | | | | | | |
| RABH | Abou Rabah | 2.71 | 214 | eP | Pb | 13 27 06.2 | -1.1 |
| RABH | | | | eS | Sn | 13 27 36.8 | +0.8 |
| | comp=N,36nm,0.6s | | | | | | |
| SVSK | Karacayir | 3.61 | 334 | ePN | Pn | 13 27 17.1 | +2.1 |
| SVSK | Karacayir | 3.61 | 334 | ePn | Pn | 13 27 17.1 | +2.1 |

*SKO 02 13:29:58.2, 38°.74N×26°.97E, h0km*
*IDC 02 13:30:12.7±0.8, 39°.20N×25°.30E, h0km, mb3.8/15, mb1 3.8/20, mb1mx3.7/47, mbtmp3.8/20, ML3.6/5, MS3.0/12, Ms1 3.0/12, ms1mx2.8/52, Error ellipse: s-maj=16.1km s-min=14.3km az=78.0*
*ISCJB 02 13:30:13.5±0.4, 39°.20N±0°.01×25°.36E±0°.01, h8km±3km, mb3.7/15, MS3.0/7, Error ellipse: s-maj=1.8km s-min=1.7km az=164.7*
*CSEM 02 13:30:13.6±0.1, 39°.18N×25°.35E, h2km, ML3.9, Error ellipse: s-maj=1.6km s-min=1.4km az=153.0*
*ATH 02 13:30:13.9, 39°.17N×25°.37E, h27km, MD3.8/31, ML3.6*
*THE 02 13:30:14.8, 39°.17N×25°.38E, h8km±1km, ML3.9/21, Error ellipse: s-maj=1.6km s-min=0.6km az=83.0*
*ISK 02 13:30:14.1, 39°.23N×25°.36E, h14km, ML4.1*
*DDA 02 13:30:14.0, 39°.22N×25°.35E, h32km, Ml3.9*
**ISC 02 13:30:13.8±1.1, 39°.19N±0°.02×25°.37E±0°.01, h6km±8km, n438, σ0s.81/530, mb3.9/15, MS2.9/7, 20C-25D, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIGR | SIGRI | 0.38 | 86 | ePG | Pb | 13 30 22.4 | -0.5 |
| SIGR | | | | eSG | Sb | 13 30 28.1 | -1.0 |
| SIGR | SIGRI | 0.38 | 86 | ePB | Pb | 13 30 22.4 | -0.5 |
| SIGR | | | | eSB | Sb | 13 30 28.2 | -1.0 |
| SIGR | SIGRI | 0.38 | 86 | P | Pb | 13 30 22.3 | -0.7 |
| SIGR | | | | S | Sb | 13 30 28.1 | -1.0 |
| SIGR | SIGRI | 0.38 | 86 | P | Pb | 13 30 22.3 | -0.7 |
| SIGR | | | | S | Sb | 13 30 28.1 | -1.0 |
| PRK | Paraskevi | 0.71 | 85 | ePN | Pb | 13 30 28.3 | -0.2 |
| PRK | | | | eSN | Sb | 13 30 38.0 | -0.5 |
| PRK | Paraskevi | 0.71 | 85 | P | Pb | 13 30 28.2 | -0.2 |
| PRK | | | | S | Sb | 13 30 38.0 | -0.5 |
| PRK | Paraskevi | 0.71 | 85 | ePn | Pb | 13 30 28.3 | -0.2 |
| PRK | | | | S | Sb | 13 30 38.0 | -0.5 |
| LIA | Limnos Island | 0.72 | 349 | ePN | Pb | 13 30 28.7 | -0.1 |
| LIA | | | | eSN | Sb | 13 30 39.0 | +0.1 |
| LIA | Limnos Island | 0.72 | 349 | P | Pb | 13 30 28.6 | -0.2 |
| LIA | | | | S | Sb | 13 30 39.1 | +0.1 |
| LIA | Limnos Island | 0.72 | 349 | ePn | Pb | 13 30 28.7 | -0.1 |
| LIA | | | | eSn | Sb | 13 30 39.0 | +0.1 |
| BOZC | Bozcaada | 0.84 | 39 | P | Pg | 13 30 30.2 | +0.2 |
| BOZC | | | | S | Sb | 13 30 42.2 | -0.2 |
| CHOS | Chios island | 0.96 | 146 | ePG | Pn | 13 30 34.1 | +0.1 |
| CHOS | Chios island | 0.96 | 146 | ePN | Pb | 13 30 33.1 | +0.1 |
| CHOS | | | | eSN | Sb | 13 30 45.7 | -0.3 |
| CHOS | Chios island | 0.96 | 146 | P | Pb | 13 30 33.0 | +0.1 |
| CHOS | | | | S | Sb | 13 30 46.4 | +0.4 |
| CHOS | Chios island | 0.96 | 146 | P | Pb | 13 30 33.0 | +0.1 |
| CHOS | Chios island | 0.96 | 146 | ePg | Pn | 13 30 34.1 | +0.1 |
| CHOS | | | | eSn | Sb | 13 30 45.7 | -0.3 |
| CHOS | | | | S | Sb | 13 30 46.4 | +0.4 |
| EZN | Ezine | 0.98 | 49 | ePG | Pg | 13 30 32.6 | +0.1 |
| EZN | | | | eSG | Sb | 13 30 46.7 | +0.4 |
| EZN | Ezine | 0.98 | 49 | ePg | Pg | 13 30 32.7 | +0.1 |
| EZN | | | | eSg | Sb | 13 30 46.7 | +0.4 |
| GADA | Gvkgeada | 1.08 | 22 | ePG | Pg | 13 30 34.3 | -0.3 |
| GADA | | | | eSG | Sb | 13 30 49.7 | +0.3 |
| GADA | Gvkgeada | 1.08 | 22 | ePg | Pg | 13 30 34.3 | -0.3 |
| GADA | | | | eSg | Sb | 13 30 49.7 | +0.3 |
| AOS | Alonnisos | 1.16 | 270 | ePN | Pn | 13 30 36.4 | -0.1 |
| AOS | Alonnisos | 1.16 | 270 | ePN | Pb | 13 30 36.2 | 0.0 |
| AOS | | | | eSN | Sn | 13 30 52.1 | -0.5 |
| AOS | Alonnisos | 1.16 | 270 | P | Pg | 13 30 36.1 | +0.1 |
| AOS | | | | S | Sn | 13 30 53.2 | +0.6 |
| AOS | Alonnisos | 1.16 | 270 | P | Pg | 13 30 36.1 | +0.1 |
| AOS | Alonnisos | 1.16 | 270 | ePn | Pn | 13 30 36.4 | -0.1 |
| AOS | | | | eSn | Sn | 13 30 52.1 | -0.5 |
| AOS | | | | S | Sn | 13 30 53.2 | +0.6 |
| DKL | Dikili | 1.20 | 95 | ePN | Pb | 13 30 37.0 | 0.0 |
| DKL | Dikili | 1.20 | 95 | ePn | Pb | 13 30 37.0 | 0.0 |
| URLA | Izmir | 1.27 | 130 | i P | Pn | 13 30 37.8 | -0.3 |
| URLA | | | | i S | Sn | 13 30 56.3 | +0.9 |
| URLA | Izmir | 1.27 | 130 | P | Pn | 13 30 37.8 | -0.3 |
| URLA | | | | S | Sn | 13 30 56.3 | +0.9 |
| SMTH | Samothraki Isl | 1.29 | 6 | ePN | Pn | 13 30 37.8 | -0.6 |
| SMTH | Samothraki Isl | 1.29 | 6 | P | Pn | 13 30 37.4 | -1.0 |
| SMTH | | | | S | Sb | 13 30 55.3 | 0.0 |
| SMTH | Samothraki Isl | 1.29 | 6 | P | Pn | 13 30 37.4 | -1.0 |
| SMTH | Samothraki Isl | 1.29 | 6 | ePn | Pn | 13 30 37.8 | -0.6 |
| SMTH | | | | S | Sb | 13 30 55.3 | 0.0 |
| ZEY | ˜zmir | 1.30 | 136 | P | Pn | 13 30 38.5 | 0.0 |
| ZEY | | | | S | Sn | 13 30 56.6 | +0.4 |
| EREA | Eretria | 1.36 | 236 | ePN | Pn | 13 30 38.8 | -0.6 |
| EREA | Eretria | 1.36 | 236 | P | Pn | 13 30 38.7 | -0.6 |
| EREA | | | | S | Sn | 13 30 58.2 | +0.5 |
| EREA | Eretria | 1.36 | 236 | P | Pn | 13 30 38.7 | -0.6 |
| EREA | | | | S | Sn | 13 30 58.2 | +0.5 |
| KARY | Karystos | 1.36 | 213 | P | Pn | 13 30 38.4 | -1.0 |
| KARY | | | | S | Sn | 13 30 58.2 | +0.4 |
| MRKA | Markates | 1.47 | 251 | ePN | Pn | 13 30 40.1 | -0.7 |
| MRKA | | | | eSN | Sn | 13 31 00.3 | -0.1 |
| MRKA | Markates | 1.47 | 251 | P | Pn | 13 30 40.1 | -0.7 |
| MRKA | | | | S | Sb | 13 31 00.6 | +0.1 |
| MRKA | Markates | 1.47 | 251 | P | Pn | 13 30 40.1 | -0.7 |
| MRKA | | | | eSn | Sn | 13 31 00.3 | -0.1 |
| MRKA | | | | S | Sb | 13 31 00.6 | +0.1 |

SKIA Skiathos 1.48 270 ePB Pn 13 30 40.2 -0.8
SKIA eSN Sn 13 31 00.2 -0.4
SKIA Skiathos 1.48 270 P Pn 13 30 40.8 -0.2
SKIA S Sg 13 31 01.5 +0.2
SKIA Skiathos 1.48 270 ePb Pn 13 30 40.2 -0.8
SKIA Skiathos 1.48 270 P Pn 13 30 40.8 -0.2
SKIA eSn Sn 13 31 00.2 -0.4
SKIA S Sg 13 31 01.5 +0.2
GELI Tayfur-Gelibol 1.48 35 ePN Pn 13 30 40.6 -0.4
GELI Tayfur-Gelibol 1.48 35 ePn Pn 13 30 40.6 -0.4
PAIG Paliouri 1.50 300 ePN Pn 13 30 40.8 -0.4
PAIG Paliouri 1.50 300 P Pn 13 30 41.0 -0.2
PAIG S Sg 13 31 01.8 -0.1
PAIG Paliouri 1.50 300 P Pn 13 30 41.0 -0.2
PAIG S Sg 13 31 01.8 -0.1
OUR Ouranopolis 1.56 317 ePN Pn 13 30 42.4 +0.3
OUR Ouranopolis 1.56 317 ePN Pn 13 30 42.5 +0.3
OUR Ouranopolis 1.56 317 P Pn 13 30 42.3 +0.2
OUR S Sg 13 31 03.8 -0.3
OUR Ouranopolis 1.56 317 P Pn 13 30 42.3 +0.2
OUR S Sg 13 31 03.8 -0.3
LPK Lapseki 1.60 42 ePN Pn 13 30 42.4 -0.2
LPK Lapseki 1.60 42 ePn Pn 13 30 42.4 -0.2
ENEZ Enez 1.66 21 ePN Pn 13 30 42.9 -0.5
ENEZ Enez 1.66 21 ePn Pn 13 30 42.9 -0.5
NEO Neokhori 1.67 275 ePB Pn 13 30 42.8 -0.8
NEO Neokhori 1.67 275 P Pn 13 30 43.1 -0.5
NEO S Sb 13 31 05.9 -0.3
NEO Neokhori 1.67 275 ePb Pn 13 30 42.8 -0.8
NEO Neokhori 1.67 275 P Pn 13 30 43.1 -0.5
NEO S Sb 13 31 05.9 -0.3
XOR Xorichti 1.70 277 ePB Pn 13 30 43.1 -0.5
XOR eSN Sn 13 31 06.2 +0.1
XOR Xorichti 1.70 277 P Pn 13 30 43.1 -0.9
XOR S Sb 13 31 06.8 -0.3
XOR Xorichti 1.70 277 P Pn 13 30 43.1 -0.9
XOR Xorichti 1.70 277 ePb Pn 13 30 43.4 -0.6
XOR eSn Sn 13 31 06.2 +0.1
XOR S Sb 13 31 06.8 -0.3
SMIA Simia 1.71 260 ePN Pn 13 30 43.8 -0.4
SMIA Simia 1.71 260 P Pn 13 30 43.8 -0.4
SMIA S Sn 13 31 06.7 +0.4
SMIA Simia 1.71 260 P Pn 13 30 43.8 -0.4
SMIA S Sn 13 31 06.7 +0.4
ERIK Erikli-Kesan 1.72 30 ePN Pn 13 30 43.9 -0.4
ERIK Erikli-Kesan 1.72 30 ePn Pn 13 30 43.9 -0.4
ATHU Athens Univers 1.74 226 P Pn 13 30 43.7 -0.9
ATHU Athens Univers 1.74 226 P Pn 13 30 43.7 -0.9
ATH Athens Observa 1.77 227 ePN Pn 13 30 44.5 -0.5
ATH Athens Observa 1.77 227 P Pn 13 30 44.5 -0.5
ATH S Sn 13 31 07.5 -0.4
ATH Athens Observa 1.77 227 P Pn 13 30 44.5 -0.5
ATH S Sn 13 31 07.5 -0.4
ALN Alexandroupoli 1.79 17 P Pn 13 30 44.4 -0.8
ALN S Sb 13 31 09.1 -0.4
ALN Alexandroupoli 1.79 17 P Pn 13 30 44.4 -0.8
ALN S Sb 13 31 09.1 -0.4
VLY Voula,Athens 1.82 223 ePB Pn 13 30 44.9 -0.7
VLY Voula,Athens 1.82 223 P Pn 13 30 44.8 -0.8
VLY S Sb 13 31 10.1 -0.4
VLY Voula,Athens 1.82 223 P Pn 13 30 44.8 -0.8
VLY S Sb 13 31 10.1 -0.4
SMG Samos 1.88 142 ePN Pn 13 30 46.0 -0.4
SMG eSN Sn 13 31 10.3 -0.1
SMG Samos 1.88 142 P Pn 13 30 46.3 -0.1
SMG S Sb 13 31 11.3 -0.9
SMG Samos 1.88 142 ePn Pn 13 30 46.3 -0.4
SMG Samos 1.88 142 P Pn 13 30 46.3 -0.1
SMG eSn Sn 13 31 10.3 -0.1
ATAL Atalanti 1.89 256 P Pn 13 30 46.1 -0.6
ATAL S Sn 13 31 11.8 +0.9
ATAL Atalanti 1.89 256 P Pn 13 30 46.1 -0.6
ATAL S Sn 13 31 11.8 +0.9
PLG Polygyros 1.90 309 ePB Pn 13 30 46.7 0.0
PLG Polygyros 1.90 309 P Pn 13 30 46.6 -0.1
PLG S Sn 13 31 11.8 +0.8
PLG Polygyros 1.90 309 P Pn 13 30 46.6 -0.1
PLG S Sn 13 31 11.8 +0.8
FYTO Fytoko, Volos 1.90 277 P Pn 13 30 47.2 +0.5
FYTO S Sn 13 31 11.4 +0.5
FYTO Fytoko, Volos 1.90 277 P Pn 13 30 47.2 +0.5
FYTO S Sn 13 31 11.4 +0.5
VILL Villia 1.91 238 P Pn 13 30 46.2 -0.7
VILL S Sb 13 31 12.5 -0.6
VILL Villia 1.91 238 P Pn 13 30 46.5 -0.4
VILL Villia 1.91 238 ePb Pn 13 30 46.5 -0.4
VILL S Sb 13 31 12.5 -0.6
VIL2 Platees 1.91 240 ePB Pn 13 30 46.5 -0.4
KRBG Karabiga-Canak 1.91 50 ePN Pn 13 30 46.7 -0.3
KRBG Karabiga-Canak 1.91 50 ePn Pn 13 30 46.7 -0.3
KAVA Kavala 1.92 340 P Pn 13 30 46.5 -0.5
KAVA S Sb 13 31 12.8 -0.7
KAVA Kavala 1.92 340 P Pn 13 30 46.5 -0.5
KAVA S Sb 13 31 12.8 -0.7
LKR Lokris 1.92 255 ePN Pn 13 30 46.6 -0.5
LKR Lokris 1.92 255 P Pn 13 30 46.5 -0.5
LKR Lokris 1.92 255 P Pn 13 30 46.5 -0.5
AKHS Akhisar 1.93 98 *i* P Pn 13 30 47.5 +0.3
AKHS Akhisar 1.93 98 P Pn 13 30 47.5 +0.3
AKS Akhisar 1.93 98 ePN Pb 13 30 48.3 -1.1
AKS Akhisar 1.93 98 ePn Pb 13 30 48.3 -1.1
RDO Rodhopi 1.96 4 ePN Pn 13 30 47.2 -0.4
RDO Rodhopi 1.96 4 ePn Pn 13 30 47.2 -0.4
GONE Gonen-Balikesi 1.99 64 ePN Pn 13 30 48.0 +0.1
GONE Gonen-Balikesi 1.99 64 ePn Pn 13 30 48.0 +0.1
BALB Balikesir 2.00 76 ePN Pn 13 30 48.7 +0.6
BALB Balikesir 2.00 76 ePn Pn 13 30 48.7 +0.6
RKY Sarkoy-Tekirda 2.04 42 ePN Pn 13 30 48.7 -0.1
RKY Sarkoy-Tekirda 2.04 42 ePn Pn 13 30 48.7 -0.1
NAIG Nisos Aigina 2.05 226 ePN Pn 13 30 48.0 -0.8
NAIG Nisos Aigina 2.05 226 ePn Pn 13 30 48.0 -0.8
GCAM G?zelcaml? 2.09 135 P Pg 13 30 54.6 +0.8
GCAM S Sg 13 31 22.5 +1.6
APE Apeiranthos 2.12 176 ePN Pn 13 30 50.8 +1.0
APE Apeiranthos 2.12 176 *i* P Pn 13 30 49.4 -0.4
APE S Sn 13 31 15.5 -1.0
APE Apeiranthos 2.12 176 ePN Pn 13 30 49.2 -0.6
APE Apeiranthos 2.12 176 P Pn 13 30 49.3 -0.6
APE S Sn 13 31 16.7 +0.2
APE Apeiranthos 2.12 176 P Pn 13 30 49.3 -0.6
APE S Sn 13 31 16.7 +0.2
SERI Serifos 2.14 199 ePN Pn 13 30 49.6 -0.5
SERI Serifos 2.14 199 ePn Pn 13 30 49.6 -0.5
AXAR Agios Charalam 2.15 260 ePN Pn 13 30 50.2 0.0
AXAR Agios Charalam 2.15 260 P Pn 13 30 49.7 -0.5
AXAR S Sn 13 31 18.6 +1.3
AXAR Agios Charalam 2.15 260 P Pn 13 30 49.7 -0.5
AXAR Agios Charalam 2.15 260 ePn Pn 13 30 50.2 0.0
AXAR S Sn 13 31 18.6 +1.3
LTK Loutraki 2.21 239 ePN Pn 13 30 50.6 -0.5
LTK Loutraki 2.21 239 P Pn 13 30 50.6 -0.5
LTK S Sn 13 31 18.1 -0.6
LTK Loutraki 2.21 239 P Pn 13 30 50.6 -0.5
LTK S Sn 13 31 18.1 -0.6
MRMT Marmara Adasi 2.22 50 ePN Pn 13 30 50.3 -1.0
MRMT Marmara Adasi 2.22 50 ePn Pn 13 30 50.3 -1.0
LOUT Loutraki 2.23 238 ePN Pn 13 30 50.8 -0.4
LOUT Loutraki 2.23 238 P Pn 13 30 50.8 -0.4
LOUT S Sn 13 31 19.8 +0.8
LOUT Loutraki 2.23 238 P Pn 13 30 50.8 -0.4
LOUT S Sn 13 31 19.8 +0.8
HORT Hortiatis 2.24 310 ePN Pn 13 30 51.9 +0.4
HORT Hortiatis 2.24 310 P Pn 13 30 51.8 +0.3
HORT Hortiatis 2.24 310 P Pn 13 30 51.8 +0.3
EDC Edincik 2.25 58 ePN Pn 13 30 51.4 -0.1
EDC Edincik 2.25 58 ePn Pn 13 30 51.4 -0.1
SOH Sokhos 2.25 317 ePB Pn 13 30 52.4 +0.8
SOH Sokhos 2.25 317 P Pn 13 30 52.1 +0.5
SOH S Sn 13 31 20.4 +0.7
SOH Sokhos 2.25 317 P Pn 13 30 52.1 +0.5
SOH Sokhos 2.25 317 ePb Pn 13 30 52.4 +0.8
SOH S Sn 13 31 20.4 +0.7
BNT Bandirma 2.29 59 ePN Pn 13 30 52.4 +0.3
BNT Bandirma 2.29 59 ePn Pn 13 30 52.4 +0.3
AYDB Zeytinkoy-Aydi 2.33 121 ePN Pn 13 30 53.7 +0.8
AYDB Zeytinkoy-Aydi 2.33 121 ePn Pn 13 30 53.7 +0.8
THE Thessaloniki 2.34 309 ePN Pn 13 30 53.3 +0.5
THE Thessaloniki 2.34 309 P Pn 13 30 53.3 +0.5
THE Thessaloniki 2.34 309 P Pn 13 30 53.3 +0.5

DESF Desfina 2.35 252 ePN Pn 13 30 52.5 -0.5
DESF Desfina 2.35 252 ePn Pn 13 30 52.5 -0.5
ACOR Acrocorinthos 2.35 237 P Pn 13 30 53.4 +0.5
SRS Serrai 2.36 325 ePN Pn 13 30 53.2 +0.1
SRS Serrai 2.36 325 P Pn 13 30 53.1 0.0
SRS S Sn 13 31 23.3 +0.9
SRS Serrai 2.36 325 ePn Pn 13 30 53.2 +0.1
SRS S Sn 13 31 23.3 +0.9
AGG Agios Georgios 2.37 267 ePN Pn 13 30 53.5 +0.2
AGG Agios Georgios 2.37 267 ePn Pn 13 30 53.4 +0.2
AGG Agios Georgios 2.37 267 P Pn 13 30 53.5 +0.2
AGG S Sn 13 31 23.3 +0.7
AGG Agios Georgios 2.37 267 P Pn 13 30 53.5 +0.2
AGG S Sn 13 31 23.3 +0.7
DIDY Didyma 2.41 225 ePN Pn 13 30 53.2 -0.6
DIDY Didyma 2.41 225 P Pn 13 30 53.1 -0.7
DIDY Didyma 2.41 225 ePn Pn 13 30 53.2 -0.6
THAL Thalero 2.41 242 ePN Pn 13 30 53.8 0.0
THAL Thalero 2.41 242 P Pn 13 30 54.0 +0.2
THAL Thalero 2.41 242 ePn Pn 13 30 53.8 0.0
DURS Dursunbey 2.44 79 *i* P Pn 13 30 54.4 +0.1
DURS Dursunbey 2.44 79 P Pn 13 30 54.4 +0.1
DURS S Sg 13 31 32.3 0.0
NVR Nevrokopi 2.45 332 ePN Pn 13 30 54.3 0.0
NVR Nevrokopi 2.45 332 P Pn 13 30 54.3 0.0
NVR Nevrokopi 2.45 332 P Pn 13 30 54.3 0.0
TKR Tekirdag 2.45 42 ePN Pn 13 30 54.6 +0.3
TKR Tekirdag 2.45 42 ePn Pn 13 30 54.6 +0.3
AYDN Tasoluk 2.49 127 *i* P Pb 13 30 57.4 -1.6
AYDN Tasoluk 2.49 127 P Pb 13 30 57.5 -1.6
AYDN S Sg 13 31 36.0 +2.1
KRND KRANIDI 2.51 225 ePN Pn 13 30 54.3 -0.8
KRND KRANIDI 2.51 225 P Pn 13 30 54.8 -0.3
KRND KRANIDI 2.51 225 ePn Pn 13 30 54.3 -0.8
KRND KRANIDI 2.51 225 P Pn 13 30 54.8 -0.3
MAKR Makrakomi, Fth 2.52 267 ePN Pn 13 30 55.8 +0.4
MAKR Makrakomi, Fth 2.52 267 P Pn 13 30 56.0 +0.6
MAKR S Sn 13 31 27.6 +1.2
MAKR Makrakomi, Fth 2.52 267 ePn Pn 13 30 55.8 +0.4
KCTX Karacabey (Bur 2.54 64 ePN Pn 13 30 55.3 -0.3
KCTX Karacabey (Bur 2.54 64 ePn Pn 13 30 55.3 -0.3
MHLO Agia Marina, M 2.61 197 ePN Pn 13 30 56.0 -0.5
MHLO Agia Marina, M 2.61 197 P Pn 13 30 56.2 -0.3
MHLO S Sn 13 31 29.0 +0.5
MHLO Agia Marina, M 2.61 197 P Pn 13 30 56.2 -0.3
MHLO S Sn 13 31 29.0 +0.5
DEMI Demirci 2.61 92 *i* P Pn 13 30 57.1 +0.5
DEMI Demirci 2.61 92 P Pn 13 30 57.1 +0.5
DEMI S Sg 13 31 36.3 +1.4
BODT Bodrum 2.62 144 ePN Pn 13 30 57.7 +1.0
BODT Bodrum 2.62 144 ePn Pn 13 30 57.7 +1.0
THL Klokotos Trika 2.62 279 ePN Pn 13 30 56.9 +0.2
THL Klokotos Trika 2.62 279 P Pn 13 30 57.1 +0.4
THL Klokotos Trika 2.62 279 ePn Pn 13 30 56.9 +0.2
KALE Kalithea 2.64 253 ePN Pn 13 30 57.3 +0.2
KALE Kalithea 2.64 253 P Pn 13 30 57.4 +0.3
KALE Kalithea 2.64 253 ePn Pn 13 30 57.3 +0.2
KULA Kula-Manisa 2.66 104 ePN Pn 13 30 57.9 +0.6
KULA Kula-Manisa 2.66 104 ePn Pn 13 30 57.9 +0.6
BDRM Kayabasi 2.68 142 *i* P Pn 13 30 58.5 +1.0
BDRM *i* S Sn 13 31 30.8 +0.5
BDRM Kayabasi 2.68 142 P Pn 13 30 58.5 +1.0
BDRM S Sn 13 31 30.8 +0.5
GUR Goura 2.68 243 ePN Pn 13 30 57.6 0.0
GUR Goura 2.68 243 P Pn 13 30 57.5 0.0
GUR Goura 2.68 243 ePn Pn 13 30 57.6 0.0
SERG Sergoula 2.70 254 P Pn 13 30 58.1 +0.3
SERG Sergoula 2.70 254 P Pn 13 30 58.1 +0.3
KNT Kendrikon 2.73 317 ePN Pn 13 30 58.9 +0.7
KNT Kendrikon 2.73 317 ePN Pn 13 30 59.2 +1.0
KNT Kendrikon 2.73 317 P Pn 13 30 59.2 +1.0
KNT Kendrikon 2.73 317 ePn Pn 13 30 58.9 +0.7
KNT Kendrikon 2.73 317 P Pn 13 30 59.2 +1.0
KLV Kalavryta, Ach 2.77 247 ePN Pn 13 30 58.5 -0.2
KLV Kalavryta, Ach 2.77 247 P Pn 13 30 58.6 -0.2
KLV Kalavryta, Ach 2.77 247 P Pn 13 30 58.6 -0.2
THR5 Thira Island, 2.77 180 ePN Pn 13 31 00.3 +1.6
THR5 Thira Island, 2.77 180 P Pn 13 30 58.4 -0.3
THR5 Thira Island, 2.77 180 P Pn 13 30 58.4 -0.3
THR5 Thira Island, 2.77 180 ePn Pn 13 31 00.3 +1.6
THR3 Thira Island, 2.77 179 P Pn 13 30 58.7 -0.1
THR3 Thira Island, 2.77 179 P Pn 13 30 58.7 -0.1
EVR Evrytania 2.78 266 ePN Pn 13 30 59.5 +0.5
EVR Evrytania 2.78 266 P Pn 13 30 59.5 +0.5
EVR Evrytania 2.78 266 ePn Pn 13 30 59.5 +0.5
EFP Efpalio 2.81 255 ePN Pn 13 30 59.7 +0.5
EFP Efpalio 2.81 255 P Pn 13 30 59.9 +0.7
EFP Efpalio 2.81 255 ePn Pn 13 30 59.7 +0.5
LAKA Lakka 2.81 251 ePN Pn 13 30 59.8 +0.4
LAKA Lakka 2.81 251 P Pn 13 30 59.7 +0.4
LAKA Lakka 2.81 251 P Pn 13 30 59.7 +0.4
SANT Santorini 2.81 178 ePN Pn 13 30 58.8 -0.6
SANT Santorini 2.81 178 P Pn 13 30 59.0 -0.4
SANT Santorini 2.81 178 P Pn 13 30 59.0 -0.4
EDRB Edirne 2.86 21 ePN Pn 13 31 00.1 +0.2
EDRB Edirne 2.86 21 ePn Pn 13 31 00.1 +0.2
GRG Griva 2.88 309 ePN Pn 13 31 01.3 +1.0
GRG Griva 2.88 309 P Pn 13 31 01.4 +1.1
GRG Griva 2.88 309 ePn Pn 13 31 01.3 +1.0
PHSR Pinarhisar 2.94 33 ePN Pn 13 31 01.0 -0.1
PHSR Pinarhisar 2.94 33 ePn Pn 13 31 01.0 -0.1
MDNY Mudanya-Bursa 2.96 65 ePN Pn 13 31 02.1 +0.8
MDNY Mudanya-Bursa 2.96 65 ePn Pn 13 31 02.1 +0.8
VLX Vlachokerasia 2.97 233 ePN Pn 13 31 01.3 -0.3
VLX Vlachokerasia 2.97 233 P Pn 13 31 01.7 +0.1
VLX Vlachokerasia 2.97 233 ePn Pn 13 31 01.3 -0.3
VLX Vlachokerasia 2.97 233 P Pn 13 31 01.7 +0.1
KZN Kozani 2.99 293 ePN Pn 13 31 02.4 +0.6
KZN Kozani 2.99 293 P Pn 13 31 02.6 +0.8
KZN Kozani 2.99 293 ePn Pn 13 31 02.4 +0.6
VAY Valandovo 3.02 316 ePn Pn 13 31 04.7 +2.6
VAY *e*Sn Sg 13 31 53.8 +3.1
VAY Valandovo 3.02 316 ePn Pn 13 31 04.7 +2.6
ARMT Armutlu 3.02 62 ePN Pn 13 31 02.9 +0.7
ARMT Armutlu 3.02 62 ePn Pn 13 31 02.9 +0.7
PVO Paravola 3.05 260 ePN Pn 13 31 03.2 +0.6
PVO Paravola 3.05 260 ePn Pn 13 31 03.2 +0.6
YER Yerkesik 3.08 131 ePN Pn 13 31 04.0 +0.9
YER Yerkesik 3.08 131 ePn Pn 13 31 04.0 +0.9
DRO Drossia 3.12 248 ePN Pn 13 31 04.0 +0.4
DRO Drossia 3.12 248 P Pn 13 31 04.6 +1.0
DRO Drossia 3.12 248 ePn Pn 13 31 04.0 +0.4
DRO Drossia 3.12 248 P Pn 13 31 04.6 +1.0
VLI Veliai 3.12 219 ePN Pn 13 31 02.9 -0.7
VLI Veliai 3.12 219 P Pn 13 31 03.1 -0.5
VLI Veliai 3.12 219 P Pn 13 31 03.1 -0.5
IGD Bursa 3.15 69 P Pn 13 31 05.6 +1.7
IGD S Sg 13 31 53.5 -1.4
CTKS Kestanelik-??a 3.16 49 ePN Pn 13 31 05.1 +1.1
CTKS Kestanelik-??a 3.16 49 ePn Pn 13 31 05.1 +1.1
CTYL Yal??k??y-??at 3.19 43 ePN Pn 13 31 05.1 +0.6
CTYL Yal??k??y-??at 3.19 43 ePn Pn 13 31 05.1 +0.6
GEMT Gemlik 3.20 66 ePN Pn 13 31 05.4 +0.8
GEMT Gemlik 3.20 66 ePn Pn 13 31 05.4 +0.8
DENT Denizli 3.21 115 ePN Pn 13 31 05.8 +0.9
DENT Denizli 3.21 115 ePn Pn 13 31 05.8 +0.9
RLS Riolos of Patr 3.26 251 ePN Pn 13 31 05.7 +0.3
RLS Riolos of Patr 3.26 251 ePn Pn 13 31 05.7 +0.3
BGKT Bogazkoy 3.28 52 ePN Pn 13 31 05.9 +0.2
BGKT Bogazkoy 3.28 52 ePn Pn 13 31 05.9 +0.2
AMT Artemida-Makis 3.32 241 ePN Pn 13 31 06.2 -0.1
AMT Artemida-Makis 3.32 241 ePn Pn 13 31 06.2 -0.1
PDO Prodromos 3.32 261 ePN Pn 13 31 07.5 +1.3
PDO Prodromos 3.32 261 P Pn 13 31 07.9 +1.7
PDO Prodromos 3.32 261 ePn Pn 13 31 07.5 +1.3
PDO Prodromos 3.32 261 P Pn 13 31 07.9 +1.7
KHL Karahalli 3.36 104 ePN Pn 13 31 08.2 +1.2
KHL Karahalli 3.36 104 ePn Pn 13 31 08.2 +1.2
IZI Iznik 3.37 69 ePN Pn 13 31 08.2 +1.2
IZI Iznik 3.37 69 ePn Pn 13 31 08.2 +1.2
ITM Ithomi 3.37 235 ePN Pn 13 31 07.2 +0.2
ITM Ithomi 3.37 235 P Pn 13 31 08.2 +1.2
ITM Ithomi 3.37 235 ePn Pn 13 31 07.2 +0.2
ITM Ithomi 3.37 235 P Pn 13 31 08.2 +1.2
ISK Istanbul-Kandi 3.40 55 ePN Pn 13 31 08.0 +0.7
ISK Istanbul-Kandi 3.40 55 ePn Pn 13 31 08.0 +0.7
KYTH Kithira 3.44 213 ePN Pn 13 31 08.0 0.0
KYTH Kithira 3.44 213 P Pn 13 31 07.7 -0.3

KYTH Kithira 3.44 213 P Pn 13 31 07.7 -0.3
KYTH Kithira 3.44 213 ePn Pn 13 31 08.0 0.0
FNA Florina 3.45 299 ePN Pn 13 31 09.0 +0.8
FNA Florina 3.45 299 P Pn 13 31 09.4 +1.2
FNA Florina 3.45 299 ePn Pn 13 31 09.0 +0.8
FNA Florina 3.45 299 P Pn 13 31 09.4 +1.2
KLYT Kilyos 3.49 53 ePN Pn 13 31 09.3 +0.7
KLYT Kilyos 3.49 53 ePn Pn 13 31 09.3 +0.7
JAN Janina 3.53 279 ePN Pn 13 31 09.6 +0.4
JAN Janina 3.53 279 P Pn 13 31 12.2 +3.0
JAN Janina 3.53 279 ePn Pn 13 31 09.6 +0.4
NEST Nestorio 3.54 292 ePN Pn 13 31 10.0 +0.5
NEST Nestorio 3.54 292 P Pn 13 31 11.1 +1.6
NEST Nestorio 3.54 292 ePn Pn 13 31 10.0 +0.5
NEST Nestorio 3.54 292 P Pn 13 31 11.1 +1.6
ADVT Abdulvahap 3.59 68 ePN Pn 13 31 11.2 +1.2
ADVT Abdulvahap 3.59 68 ePn Pn 13 31 11.2 +1.2
CAVI Cavuskoy 3.60 72 ePN Pn 13 31 11.5 +1.3
CAVI Cavuskoy 3.60 72 ePn Pn 13 31 11.5 +1.3
PYL PYLOS 3.66 232 ePN Pn 13 31 11.4 +0.4
PYL PYLOS 3.66 232 ePn Pn 13 31 11.4 +0.4
ARG Arkhangelos 3.69 143 ePN Pn 13 31 11.9 +0.6
ARG Arkhangelos 3.69 143 P Pn 13 31 11.8 +0.5
ARG Arkhangelos 3.69 143 P Pn 13 31 11.8 +0.5
ANKY Antikythira Is 3.70 207 ePN Pn 13 31 11.6 +0.1
ANKY Antikythira Is 3.70 207 P Pn 13 31 11.3 -0.2
ANKY Antikythira Is 3.70 207 P Pn 13 31 11.3 -0.2
ANKY Antikythira Is 3.70 207 ePn Pn 13 31 11.6 +0.1
KFL Anninata 3.74 255 ePN Pn 13 31 12.5 +0.4
KFL Anninata 3.74 255 ePn Pn 13 31 12.5 +0.4
SILT Sile 3.82 58 ePN Pn 13 31 14.2 +1.1
SILT Sile 3.82 58 ePn Pn 13 31 14.2 +1.1
VLS Valsamata 3.87 256 ePN Pn 13 31 14.5 +0.6
VLS Valsamata 3.87 256 ePn Pn 13 31 14.5 +0.6
IMMV Iera Moni Meta 3.88 197 ePN Pn 13 31 13.7 -0.3
IMMV Iera Moni Meta 3.88 197 ePn Pn 13 31 13.7 -0.3
VAM Vamos 3.89 194 ePN Pn 13 31 14.4 +0.3
VAM Vamos 3.89 194 ePn Pn 13 31 14.4 +0.3
KARP Karpathos 3.91 158 ePN Pn 13 31 14.3 -0.1
KARP Karpathos 3.91 158 P Pn 13 31 14.9 +0.5
KARP Karpathos 3.91 158 ePn Pn 13 31 14.3 -0.1
KARP Karpathos 3.91 158 P Pn 13 31 14.9 +0.5
IDI Anoyia 3.91 186 Pn Pn 13 31 14.4 -0.1
1.8nm,0.3s,baz=337,slow=14,SNR=11
IDI Sn Sn 13 31 59.4 -1.4
2.4nm,0.3s,baz=287,slow=18,SNR=2.4
IDI Lg Lg 13 32 22.3
3.2nm,0.3s,baz=324,slow=21,SNR=3.7
IGT Igoumenitsa 3.92 277 ePN Pn 13 31 14.5 0.0
IGT Igoumenitsa 3.92 277 P Pn 13 31 17.9 +3.4
IGT Igoumenitsa 3.92 277 ePn Pn 13 31 14.5 0.0
NPS Neapolis 3.92 177 ePN Pn 13 31 14.4 -0.2
NPS Neapolis 3.92 177 ePn Pn 13 31 14.4 -0.2
GPA Golpazari 3.97 72 ePN Pn 13 31 15.5 +0.3
GPA Golpazari 3.97 72 ePn Pn 13 31 15.5 +0.3
SGD Sagiada 4.00 278 ePN Pn 13 31 16.7 +1.1
SGD Sagiada 4.00 278 P Pn 13 31 19.2 +3.6
SGD Sagiada 4.00 278 ePn Pn 13 31 16.7 +1.1
ZKR Zakros 4.12 170 ePN Pn 13 31 18.1 +0.8
ZKR Zakros 4.12 170 ePn Pn 13 31 18.1 +0.8
BARS Barje 4.51 325 ⇑*i* Pn 13 31 23.7 +1.0
BOVS Bovan 5.22 329 ePn Pn 13 31 33.0 +0.5
MSAB Monastry St. A 5.23 20 ⇑*i* P Pn 13 31 32.7 +0.1
MSAB Monastry St. A 5.23 20 ⇑*i* P Pn 13 31 32.7 +0.1
BOLS Boljevac 5.30 332 ⇑*i* Pn 13 31 32.7 -0.7
SULR 5.53 7 ⇑*i* P Pn 13 31 38.0 +1.4
SULR 5.53 7 ⇑*i* P Pn 13 31 38.0 +1.4
SRE Strehaia 5.70 344 ⇑*i* P Pn 13 31 39.8 +0.8
SRE Strehaia 5.70 344 ⇑*i* P Pn 13 31 39.8 +0.8
TLB Topalu 5.75 19 ⇓*i* P Pn 13 31 39.5 -0.2
TLB Topalu 5.75 19 ⇓*i* P Pn 13 31 39.5 -0.2
HARR Harsova 5.82 18 ⇓*i* P Pn 13 31 40.7 +0.1
HARR Harsova 5.82 18 ⇓*i* P Pn 13 31 40.7 +0.1
GRUS Gruza 5.85 325 ⇑*i* Pn 13 31 41.5 +0.5
IVAS Ivanjica 5.88 320 ePn Pn 13 31 42.3 +0.8
KUBS Kucevo 5.90 333 *i* Pn Pn 13 31 40.7 -1.1
ISR Istrita 5.99 8 ⇑*i* P Pn 13 31 44.3 +1.3
ISR Istrita 5.99 8 ⇑*i* P Pn 13 31 44.3 +1.3
VOIR 6.25 358 ⇑*i* P Pn 13 31 46.9 +0.3
VOIR 6.25 358 ⇑*i* P Pn 13 31 46.9 +0.3
TRUS Trudelj 6.25 325 ePn Pn 13 31 46.0 -0.6
MLR Muntele Rosu 6.31 4 Pn Pn 13 31 48.3 +0.8
0.4nm,0.3s,baz=205,slow=3.7,SNR=46
MLR Sn Sn 13 32 58.3 -1.7
baz=264,slow=18,SNR=1.6
MLR Lg Lg 13 33 37.8
0.1nm,0.3s,baz=114,slow=20,SNR=2.4
MLR LR LR 13 34 35.3
comp=Z,37nm,20.9s,baz=187,slow=42
MLR Muntele Rosu 6.31 4 ⇓*i* P Pn 13 31 48.9 +1.4
MLR Muntele Rosu 6.31 4 ⇓*i* P Pn 13 31 48.9 +1.4
CFR Carcaliu 6.33 18 ⇓*i* P Pn 13 31 47.7 +0.1
CFR Carcaliu 6.33 18 ⇓*i* P Pn 13 31 47.7 +0.1
DIVS Divibare 6.34 322 ⇓*i* P Pn 13 31 48.8 +0.9
DIVS Divibare 6.34 322 ⇓*i* Pn Pn 13 31 48.6 +0.7
LOT Lotru 6.37 350 ⇓*i* P Pn 13 31 48.4 +0.2
LOT Lotru 6.37 350 ⇓*i* P Pn 13 31 48.4 +0.2
BRTR Keskin Array B 6.42 83 Pn Pn 13 31 50.0 +1.0
2.0nm,0.3s,baz=262,slow=12,SNR=47
BRTR Sn Sn 13 32 59.5 -3.3
baz=258,slow=25,SNR=2.2
BRTR Lg Lg 13 33 44.3
0.2nm,0.3s,baz=269,slow=23,SNR=12
GZR Gura Zlata 6.49 344 ⇓*i* P Pn 13 31 50.1 +0.2
GZR Gura Zlata 6.49 344 ⇓*i* P Pn 13 31 50.1 +0.2
TLCR 6.52 22 ⇓*i* P Pn 13 31 50.5 +0.3
TLCR 6.52 22 ⇓*i* P Pn 13 31 50.5 +0.3
PLOR Plostina 6.73 8 ⇓*i* P Pn 13 31 54.9 +1.8
PLOR Plostina 6.73 8 ⇓*i* P Pn 13 31 54.9 +1.8
VRI Vrincioaia 6.75 8 ⇓*i* P Pn 13 31 54.8 +1.4
VRI Vrincioaia 6.75 8 ⇓*i* P Pn 13 31 54.8 +1.4
DOPR Dopca 6.78 0 ⇑*i* P Pn 13 31 55.2 +1.4
DOPR Dopca 6.78 0 ⇑*i* P Pn 13 31 55.2 +1.4
TEKS Tekeris 6.90 323 ePn Pn 13 31 55.8 +0.3
MDB Medias 6.99 354 ⇑*i* P Pn 13 31 58.9 +2.2
MDB Medias 6.99 354 ⇑*i* P Pn 13 31 58.9 +2.2
BZS Buzias 7.00 338 ⇓*i* P Pn 13 31 56.8 0.0
BZS Buzias 7.00 338 S Sn 13 33 17.1 +0.5
BZS Buzias 7.00 338 ⇓*i* P Pn 13 31 56.8 0.0
DRGR 7.84 347 ⇓*i* P Pn 13 32 08.4 +0.1
DRGR 7.84 347 ⇓*i* P Pn 13 32 08.4 -0.1
BURAR Bucovina Array 8.42 359 ⇓*i* P Pn 13 32 18.5 +2.0
BURAR Bucovina Array 8.42 359 ⇓*i* P Pn 13 32 18.5 +2.0
PSZ Piszkesteto 9.58 337 ⇑*i* P Pn 13 32 32.3 0.0
BOJS Bojanci 9.79 313 *i* Pn Pn 13 32 37.3 +2.3
BOJS Bojanci 9.79 313 *i* Pn Pn 13 32 37.3 +2.3
KOLS Kolonicke sedl 9.99 348 ePN Pn 13 32 40.7 +2.8
KOLS *e*PG 13 32 55.9
KOLS Kolonicke sedl 9.99 348 *e*SG 13 35 37.2
MMAI Mount Meron Ar 10.19 124 Pn Pn 13 32 40.0 -0.6
0.6nm,0.3s,baz=316,slow=12,SNR=3.4
MMAI Sn Sn 13 34 39.6 +4.3
0.9nm,0.3s,baz=294,slow=30,SNR=3.2
VISS Visnje 10.20 314 *i* Pn Pn 13 32 44.2 +3.6
VYHS Vyhne 10.43 335 ePN Pn 13 32 42.9 -0.9
VYHS Vyhne 10.43 335 ePn Pn 13 32 42.9 -0.9
PERS Pernice 10.57 318 *i* Pn Pn 13 32 48.2 +2.3
JAVS Javornik 10.69 312 *i* Pn Pn 13 32 49.0 +1.5
JAVS Javornik 10.69 312 *i* Pn Pn 13 32 49.0 +1.5
AKASG Malin Array Be 11.83 12 Pn Pn 13 33 01.6 -1.4
1.2nm,0.3s,baz=195,slow=12,SNR=4.8
VRAC Vranov 11.90 331 LR LR 13 38 02.6
comp=Z,51nm,19.5s,baz=24,slow=40
DAVOX Davos/Dischmat 13.63 309 LR LR 13 39 46.8
comp=Z,108nm,18.2s,baz=259,slow=42
GNI Garni 14.96 80 LR LR 13 39 17.5
comp=Z,20nm,19.5s,baz=264,slow=36
OBN Obninsk 17.62 22 LR LR 13 41 26.4
comp=Z,97nm,19.4s,baz=269,slow=38
HFS Hagfors 22.22 344 P P 13 35 08.8 -2.0
1.8nm,0.8s,baz=165,slow=12,SNR=2.8
HFS LR LR 13 44 49.1
comp=Z,102nm,18.3s,baz=152,slow=40
FINES FINESS Array B 22.29 1 P P 13 35 09.4 -2.1
2.9nm,0.8s,baz=158,slow=12,SNR=8.4
FINES LR LR 13 45 18.1
comp=Z,65nm,20.9s,baz=188,slow=41
ESDC Sonseca Array 22.62 281 P P 13 35 13.9 -1.4
0.1nm,0.3s,baz=74,slow=10,SNR=4.5
NB2 NORSAR Subarra 23.58 343 P P 13 35 24.7 -0.3
comp=Z,3.6nm,1.1s,baz=152,slow=9.3
NB2 NORSAR Subarra 23.58 343 P P 13 35 24.7 -0.3

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,3.6nm,1.1s,SNR=5.7 | | | | | | |
| NOA | NORSAR Array B | 23.58 | 343 | P | P | 13 35 25.2 | +0.2 |
| | comp=Z,1.6nm,0.8s,baz=146,slow=8.8,SNR=3.3 | | | | | | |
| NOA | | | | LR | LR | 13 46 54.5 | |
| | comp=Z,43nm,18.6s,baz=110,slow=42 | | | | | | |
| AKTO | Aktyubinsk | 25.54 | 53 | P | P | 13 35 43.3 | +0.2 |
| | comp=Z,0.6nm,0.3s,baz=276,slow=9.1,SNR=4.0 | | | | | | |
| AKTO | | | | LR | LR | 13 47 22.8 | |
| | comp=Z,30nm,18.8s,baz=260,slow=40 | | | | | | |
| GEYT | Alibeck | 25.57 | 82 | P | P | 13 35 44.1 | +0.6 |
| | comp=Z,0.8nm,0.5s,baz=275,slow=17,SNR=2.1 | | | | | | |
| GEYT | | | | LR | LR | 13 46 44.2 | |
| | comp=Z,34nm,19.2s,baz=295,slow=39 | | | | | | |
| ARU | Arti | 27.80 | 41 | LR | LR | 13 48 17.0 | |
| | comp=Z,31nm,20.1s,baz=232,slow=39 | | | | | | |
| ARCES | ARCESS Array B | 30.41 | 0 | P | P | 13 36 26.5 | 0.0 |
| | comp=Z,1.3nm,0.8s,baz=179,slow=6.1,SNR=5.4 | | | | | | |
| ARCES | | | | LR | LR | 13 50 53.8 | |
| | comp=Z,36nm,19.4s,baz=243,slow=41 | | | | | | |
| TORD | Torodi Ar. Bea | 33.32 | 225 | P | P | 13 36 52.6 | 0.0 |
| | comp=Z,1.2nm,0.5s,baz=34,slow=9.1,SNR=12 | | | | | | |
| BVAR | Borovoye Array | 33.56 | 51 | P | P | 13 36 55.4 | +1.2 |
| | comp=Z,0.6nm,0.7s,baz=244,slow=6.3,SNR=2.9 | | | | | | |
| KURBB | Kurchatov Arra | 38.56 | 55 | P | P | 13 37 37.5 | +0.4 |
| | comp=Z,2.7nm,1.0s,baz=281,slow=8.7,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 41.52 | 60 | P | P | 13 38 01.8 | 0.0 |
| | comp=Z,0.8nm,0.7s,baz=282,slow=6.6,SNR=5.3 | | | | | | |
| ZALV | Zalesovo Beam | 42.18 | 49 | P | P | 13 38 06.7 | -0.3 |
| | comp=Z,2.7nm,0.7s,baz=270,slow=9.6,SNR=11 | | | | | | |
| SONM | Songino Array | 56.86 | 53 | P | P | 13 39 59.2 | -0.1 |
| | comp=Z,1.1nm,0.8s,baz=280,slow=8.9,SNR=4.4 | | | | | | |
| CMAR | Chiang Mai Arr | 66.01 | 85 | P | P | 13 41 01.5 | 0.0 |
| | comp=Z,0.4nm,0.4s,baz=304,slow=8.5,SNR=3.8 | | | | | | |
| KSRS | Korea Array | 75.72 | 53 | P | P | 13 41 59.9 | -0.3 |
| | comp=Z,1.0nm,0.7s,baz=321,slow=5.5,SNR=2.7 | | | | | | |

*IDC 02 13:43:55.8±1.1, 14.°82S×75.°95W, h0km, mb3.8/6, mb1 4.0/9, mb1mx3.9/31, mbtmp3.9/9, ML3.3/2, MS3.5/6, Ms1 3.5/6, ms1mx3.3/20, Error ellipse: s-maj=36.5km s-min=22.1km az=44.0*

*ISCJB 02 13:43:57.6±1.0, 15.°0S±0.°1×76.°0W±0.°1, h29km, mb3.8/6, MS3.6/4, Error ellipse: s-maj=25.9km s-min=12.4km az=40.4*

**ISC 02 13:43:59.9±0.9, 15.°0S±0.°1×75.°9W±0.°2, h29km, n23, σ1.s30/13, mb3.8/6, MS3.8/4, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 7.58 | 101 | Pn | Pn | 13 45 53.1 | +4.0 |
| | 0.9nm,0.3s,baz=313,slow=9.9,SNR=14 | | | | | | |
| LPAZ | | | | Sn | Sn | 13 47 28.2 | +14 |
| | 0.2nm,0.3s,baz=269,slow=18,SNR=1.7 | | | | | | |
| LPAZ | | | | LR | LR | 13 49 26.6 | |
| | comp=Z,298nm,19.0s,baz=285,slow=43 | | | | | | |
| LVC | Limon Verde | 10.08 | 140 | Pn | Pn | 13 46 23.5 | +0.5 |
| | 57nm,0.3s,baz=303,slow=10,SNR=18 | | | | | | |
| LVC | | | | Sn | Sn | 13 48 12.6 | -2.8 |
| | 25nm,0.3s,baz=90,slow=19,SNR=4.7 | | | | | | |
| LVC | | | | Lg | Lg | 13 49 15.0 | |
| | baz=119,slow=18,SNR=4.9 | | | | | | |
| SIV | San Ignacio | 14.31 | 96 | Pn | Pn | 13 47 20.5 | -0.3 |
| | 0.2nm,0.3s,baz=277,slow=16,SNR=3.0 | | | | | | |
| CFAA | Coronel Fontan | 17.99 | 158 | P | P | 13 48 10.8 | +2.5 |
| | 0.1nm,0.3s,baz=328,slow=11,SNR=7.2 | | | | | | |
| ROSC | El Rosal | 19.74 | 5 | LR | LR | 13 56 02.1 | |
| | comp=Z,40nm,19.2s,baz=200,slow=37 | | | | | | |
| CPUP | Villa Florida | 20.70 | 126 | LR | LR | 13 57 35.9 | |
| | comp=Z,41nm,18.6s,baz=344,slow=39 | | | | | | |
| PTGA | Pitinga | 21.14 | 49 | P | P | 13 48 43.3 | +0.6 |
| | 1.6nm,0.6s,baz=241,slow=11,SNR=3.8 | | | | | | |
| BDFB | Brasilia | 26.88 | 95 | LR | LR | 14 01 30.0 | |
| | comp=Z,206nm,18.1s,baz=266,slow=39 | | | | | | |
| TXAR | Lajitas Array | 51.56 | 329 | P | P | 13 53 03.1 | -0.5 |
| | 0.7nm,0.9s,baz=153,slow=8.4,SNR=5.9 | | | | | | |
| NVAR | Mina Array Bea | 66.31 | 325 | P | P | 13 54 45.3 | -0.8 |
| | 0.1nm,0.3s,baz=140,slow=5.8,SNR=2.2 | | | | | | |
| ULM | Lac du Bonnet | 67.26 | 346 | P | P | 13 54 51.6 | 0.0 |
| | 2.8nm,0.7s,baz=143,slow=9.2,SNR=3.1 | | | | | | |
| DBIC | Dimbokro | 73.58 | 78 | LR | LR | 14 26 42.5 | |
| | comp=Z,68nm,18.3s,baz=235,slow=35 | | | | | | |
| TORD | Torodi Ar. Bea | 81.68 | 74 | P | P | 13 56 16.6 | +0.4 |
| | 2.0nm,0.8s,baz=254,slow=4.4,SNR=9.4 | | | | | | |
| TORD | | | | LR | LR | 14 31 12.1 | |
| | comp=Z,36nm,18.1s,baz=275,slow=35 | | | | | | |
| ESDC | Sonseca Array | 86.07 | 47 | P | P | 13 56 37.5 | -0.7 |
| | 0.3nm,0.3s,baz=289,slow=3.9,SNR=5.4 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 120.15 | 284 | T | T | 16 14 04.0 | |
| | baz=97,slow=74,SNR=51 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 120.17 | 284 | T | T | 16 14 04.9 | |
| | baz=97,slow=74,SNR=67 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 120.17 | 284 | T | T | 16 14 03.9 | |
| | baz=97,slow=74,SNR=43 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 120.21 | 283 | T | T | 16 14 13.4 | |
| | baz=111,slow=74,SNR=18 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 120.22 | 283 | T | T | 16 14 10.0 | |
| | baz=111,slow=74,SNR=16 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 120.22 | 283 | T | T | 16 14 10.9 | |
| | baz=111,slow=74,SNR=16 | | | | | | |
| WRA | Warramunga Arr | 134.33 | 221 | PKP | PKPdf | 14 03 15.8 | -0.3 |
| | 0.7nm,0.7s,baz=138,slow=2.0,SNR=7.4 | | | | | | |
| ZALV | Zalesovo Beam | 138.25 | 17 | PKP | PKPdf | 14 03 22.7 | +0.5 |
| | 0.7nm,0.6s,baz=323,slow=2.2,SNR=3.7 | | | | | | |
| SONM | Songino Array | 147.16 | 357 | PKPbc | PKPbc | 14 03 40.5 | 0.0 |
| | 0.8nm,0.9s,baz=342,slow=2.3,SNR=4.1 | | | | | | |

**IDC 02 13:50:31.1±2.6, 11.°89S×164.°70E, h0km, mb3.6/3, mb1 3.9/4, mb1mx3.5/34, mbtmp3.7/4, ML3.4/1, Error ellipse: s-maj=60.8km s-min=36.6km az=95.0, Santa Cruz Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 10.26 | 171 | Pn | Pn | 13 53 00.0 | +0.2 |
| | 0.3nm,0.3s,baz=0.0,slow=20,SNR=3.1 | | | | | | |
| WRA | Warramunga Arr | 30.23 | 251 | P | P | 13 56 43.9 | +0.1 |
| | 0.7nm,0.7s,baz=84,slow=8.9,SNR=4.9 | | | | | | |
| ASAR | Alice Springs | 31.50 | 244 | P | P | 13 56 54.8 | -0.2 |
| | 0.7nm,0.8s,baz=72,slow=8.9,SNR=6.7 | | | | | | |
| SONM | Songino Array | 78.74 | 324 | P | P | 14 02 35.7 | 0.0 |
| | 0.2nm,0.6s,baz=129,slow=5.7,SNR=2.3 | | | | | | |

*KRNET 02 14:20:49.1±0.1, 42.°19N×77.°27E, h13km, mb2.8*

*NNC 02 14:20:49.2±0.8, 42.°20N×77.°32E, h0km, mb3.4, mpv3.1, Error ellipse: s-maj=7.2km s-min=3.9km az=166.0*

*KNET 02 14:20:51.8±0.6, 42.°20N×77.°14E, h12km±2km, ml2.3, Error ellipse: s-maj=5.2km s-min=3.4km az=168.0*

**ISC 02 14:20:49.7±1.5, 42.°19N±0.°05×77.°24E±0.°04, h4km±11km, n29, σ0.s76/46, 44C-9D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANVS | Anan'yevo | 0.67 | 28 | ⇓iP | Pg | 14 21 02.1 | -0.5 |
| | baz=26 | | | | | | |
| ANVS | | | | ⇓iS | Sg | 14 21 11.1 | -0.2 |
| | baz=26 | | | | | | |
| ULHL | Ulahol | 0.74 | 275 | ⇑iP | Pb | 14 21 04.5 | -0.8 |
| | baz=273 | | | | | | |
| ULHL | | | | ⇑iS | Sb | 14 21 15.2 | -0.8 |
| | baz=273 | | | | | | |
| ULHL | Ulahol | 0.74 | 275 | ⇑P | Pb | 14 21 04.6 | -0.8 |
| | 26nm,0.1s,SNR=14 | | | | | | |
| ULHL | | | | ⇑S | Sb | 14 21 15.3 | -0.6 |
| | 52nm,0.2s | | | | | | |
| BOOM | Boomskoye usch | 1.01 | 288 | ⇑iP | Pg | 14 21 09.1 | 0.0 |
| | baz=287 | | | | | | |
| BOOM | | | | ⇑iS | Sb | 14 21 23.4 | -0.2 |
| | baz=287 | | | | | | |
| KNDC | Almaty | 1.05 | 349 | ⇑P | Pg | 14 21 09.3 | -0.5 |
| KNDC | | | | ⇑S | Sb | 14 21 24.0 | -0.5 |
| NRN | Naryn | 1.20 | 231 | ⇑iP | Pg | 14 21 12.8 | +0.1 |
| | baz=232 | | | | | | |
| NRN | | | | ⇑iS | Sn | 14 21 29.7 | -0.7 |
| | baz=232 | | | | | | |
| TKM2 | Tokmak 2 | 1.42 | 302 | ⇑Pg | Pn | 14 21 16.3 | -0.2 |
| | 11nm,0.3s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 14 21 36.3 | |
| | 7.6nm,0.2s | | | | | | |
| TKM2 | Tokmak 2 | 1.42 | 302 | ⇑iP | Pg | 14 21 16.6 | -0.3 |
| | baz=301 | | | | | | |
| TKM2 | | | | ⇑iS | Sg | 14 21 36.1 | +0.8 |
| | baz=301 | | | | | | |
| TKM2 | Tokmak 2 | 1.42 | 302 | ⇑P | Pg | 14 21 16.7 | -0.1 |
| | 49nm,0.3s,SNR=60 | | | | | | |
| TKM2 | | | | ⇓S | Sg | 14 21 36.7 | +1.4 |
| | 50nm,0.1s | | | | | | |
| KZA | Kyzart | 1.49 | 266 | ⇑iP | Pb | 14 21 18.1 | 0.0 |
| | baz=266 | | | | | | |
| KZA | | | | ⇑iS | Sg | 14 21 38.5 | +1.0 |
| | baz=266 | | | | | | |
| KZA | Kyzart | 1.49 | 266 | ⇓P | Pg | 14 21 18.4 | +0.2 |
| | 8.7nm,0.2s,SNR=7.3 | | | | | | |
| KZA | | | | ⇑S | Sg | 14 21 39.0 | +1.5 |
| | 15nm,0.2s | | | | | | |
| KBK | Karagaybulak | 1.76 | 286 | ⇑iP | Pb | 14 21 22.8 | +0.1 |
| | baz=286 | | | | | | |
| KBK | | | | ⇑iS | Sg | 14 21 46.5 | +0.2 |
| | baz=286 | | | | | | |
| KBK | Karagaybulak | 1.76 | 286 | ⇑P | Pg | 14 21 23.1 | -0.4 |
| | 18nm,0.2s,SNR=14 | | | | | | |
| PDGK | Podgornoye | 2.00 | 55 | ⇓Pg | Pn | 14 21 24.9 | +0.6 |
| | 5.1nm,0.4s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 14 21 51.1 | |
| CHMS | Chumysh | 2.01 | 295 | ⇑iP | Pb | 14 21 26.3 | -0.5 |
| | baz=294 | | | | | | |
| CHMS | | | | ⇑iS | Sb | 14 21 52.9 | +0.8 |
| | baz=294 | | | | | | |
| UCH | Uchtor | 2.03 | 272 | ⇑iP | Pb | 14 21 27.1 | -0.3 |
| | baz=272 | | | | | | |
| UCH | | | | ⇑iS | Sg | 14 21 54.7 | -0.1 |
| | baz=272 | | | | | | |
| UCH | Uchtor | 2.03 | 272 | ⇓P | Pb | 14 21 27.6 | +0.2 |
| | 3.0nm,0.2s,SNR=9.2 | | | | | | |
| AAK | Ala-Archa | 2.08 | 283 | ⇑Pg | Pb | 14 21 28.3 | +0.2 |
| | 6.8nm,0.3s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 14 21 56.4 | |
| | 7.0nm,0.3s | | | | | | |
| AAK | Ala-Archa | 2.08 | 283 | ⇑iP | Pb | 14 21 28.2 | +0.1 |
| | baz=283 | | | | | | |
| AAK | | | | ⇑iS | Sg | 14 21 56.7 | +0.1 |
| | baz=283 | | | | | | |
| AAK | Ala-Archa | 2.08 | 283 | ⇑P | Pb | 14 21 28.4 | +0.3 |
| | 14nm,0.2s,SNR=23 | | | | | | |
| ARLS | Aral | 2.20 | 262 | ⇑iP | Pb | 14 21 28.5 | -1.6 |
| | baz=263 | | | | | | |
| ARLS | | | | ⇑iS | Sg | 14 21 59.4 | -0.9 |
| | baz=263 | | | | | | |
| USP | Ospenovka | 2.29 | 299 | ⇑P | Pb | 14 21 31.3 | -0.2 |
| | 7.1nm,0.2s,SNR=13 | | | | | | |
| EKS | Erkin-Say | 2.60 | 282 | ⇑iP | Pb | 14 21 35.3 | -1.7 |
| | baz=282 | | | | | | |
| EKS | | | | ⇑iS | Sg | 14 22 13.0 | -0.3 |
| | baz=282 | | | | | | |
| EKS2 | Erkin-Say | 2.61 | 282 | ⇑iP | Pb | 14 21 36.2 | -0.9 |
| | baz=282 | | | | | | |
| EKS2 | | | | ⇑iS | Sb | 14 22 10.9 | +1.4 |
| | baz=282 | | | | | | |
| EKS2 | Erkin-Say | 2.61 | 282 | ⇓P | Pb | 14 21 36.8 | -0.3 |
| | 5.9nm,0.2s,SNR=20 | | | | | | |
| AML | Almayashu | 2.64 | 270 | ⇑iP | Pb | 14 21 38.3 | +0.6 |
| | baz=270 | | | | | | |
| AML | | | | ⇑iS | Sg | 14 22 13.5 | -1.0 |
| | baz=270 | | | | | | |
| MNAS | Manas | 3.52 | 276 | ⇑Lg | Lg | 14 22 41.6 | |
| | 2.4nm,0.6s | | | | | | |
| KK31 | Karatay Array | 5.05 | 283 | ⇑Pg | Pb | 14 22 22.2 | +3.6 |
| | 0.5nm,0.4s,baz=98,slow=16,SNR=9.9 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 14 23 29.0 | |
| | 2.0nm,0.7s,baz=88,slow=29,SNR=9.0 | | | | | | |
| MK31 | Makanchi Array | 5.85 | 36 | ⇑Pn | Pn | 14 22 18.6 | +1.5 |
| | 1.6nm,0.9s,baz=216,slow=16,SNR=12 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 14 23 24.4 | -0.2 |
| | 0.2nm,0.3s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 14 23 52.0 | |
| | 0.4nm,0.5s | | | | | | |

*ISCJB 02 14:21:13.4±0.8, 9.°09S±0.°07×124.°50E±0.°08, h50km, mb3.7/2, Error ellipse: s-maj=11.5km s-min=9.5km az=146.6*

*IDC 02 14:21:15.4±3.0, 9.°22S×124.°48E, h69km±29km, mb3.4/2, mb1 3.8/5, mb1mx3.4/31, mbtmp3.9/5, ML4.0/3, Error ellipse: s-maj=35.6km s-min=23.1km az=63.0*

*AUST 02 14:21:24.1, 10.°00S×124.°52E, h35km*

**ISC 02 14:21:14.8±0.9, 9.°11S±0.°08×124.°5E±0.°1, h50km, n15, σ1.s78/13, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOEI | Soe | 0.67 | 198 | P | Pn | 14 21 31.1 | +2.8 |
| | baz=0.3,SNR=154 | | | | | | |
| BATI | Baumata | 1.35 | 216 | P | Pn | 14 21 37.3 | 0.0 |
| | 69nm,0.3s,baz=65,slow=2.4,SNR=120 | | | | | | |
| BATI | | | | S | Sn | 14 21 53.6 | -0.6 |
| | 132nm,0.3s,baz=41,slow=18,SNR=18 | | | | | | |
| KAPI | Kappang | 6.21 | 311 | P | Pn | 14 22 46.8 | +2.9 |
| | 2.7nm,0.3s,baz=127,slow=5.0,SNR=7.1 | | | | | | |
| MTN | Manton Dam | 7.52 | 120 | P | Pn | 14 23 06.4 | +4.6 |
| | baz=7.1,SNR=38 | | | | | | |
| KNRA | Kununurra | 7.75 | 148 | P | Pn | 14 23 06.3 | +1.2 |
| | baz=7.0,SNR=27 | | | | | | |
| KDU | Kakadu | 8.62 | 115 | P | Pn | 14 23 21.9 | +4.9 |
| | baz=8.2,SNR=11 | | | | | | |
| WRA | Warramunga Arr | 14.38 | 140 | P | Pn | 14 24 33.9 | -1.8 |
| | 0.7nm,0.3s,baz=318,slow=13,SNR=26 | | | | | | |
| WRA | | | | S | Sn | 14 27 04.5 | -9.3 |
| | 1.1nm,0.3s,baz=315,slow=24,SNR=9.0 | | | | | | |
| WRKA | Warakurna | 16.25 | 168 | P | P | 14 25 01.0 | -1.1 |
| | baz=16,SNR=9.7 | | | | | | |
| ASAR | Alice Springs | 17.05 | 149 | P | Pn | 14 25 09.2 | -0.7 |
| | 0.5nm,0.3s,baz=321,slow=12,SNR=47 | | | | | | |
| ASAR | | | | S | Sn | 14 28 07.4 | -11 |
| | 0.3nm,0.3s,baz=311,slow=22,SNR=7.2 | | | | | | |
| MEEK | Meekatharra | 18.30 | 197 | P | Pn | 14 25 25.7 | +0.6 |
| | baz=18,SNR=6.5 | | | | | | |
| QIS | Mount Isa | 18.51 | 130 | P | Pn | 14 25 30.8 | +3.0 |
| | baz=18,SNR=6.3 | | | | | | |
| YNG | Young | 33.32 | 142 | P | P | 14 27 49.4 | +1.4 |
| | baz=33,SNR=9.0 | | | | | | |
| CMAR | Chiang Mai Arr | 37.22 | 317 | P | P | 14 28 20.4 | -1.2 |
| | 0.4nm,0.4s,baz=139,slow=6.5,SNR=5.3 | | | | | | |
| MKAR | Makanchi Array | 67.14 | 330 | P | P | 14 32 02.4 | -0.9 |
| | 0.6nm,0.7s,baz=125,slow=7.1,SNR=5.2 | | | | | | |
| TORD | Torodi Ar. Bea | 123.81 | 280 | PKP | PKPdf | 14 40 06.5 | -1.7 |
| | 0.2nm,0.5s,baz=111,slow=2.4,SNR=2.5 | | | | | | |

*IDC 02 14:22:27.3±1.2, 46.°89N×153.°75E, h0km, mb3.8/6, mb1 3.9/9, mb1mx3.6/45, mbtmp3.7/9, ML2.9/3, MS3.3/6, Ms1 3.3/6, ms1mx3.0/35, Error ellipse: s-maj=35.6km s-min=24.4km az=107.0*

*ISCJB 02 14:22:31.2±0.8, 47.°03N±0.°08×153.°6E±0.°1, h31km, mb3.8/6, MS3.4/6, Error ellipse: s-maj=15.5km s-min=4.5km az=44.8*

*MOS 02 14:22:32.3±1.3, 46.°97N×153.°65E, h51km, mb4.2/3, Error ellipse: s-maj=21.1km s-min=10.9km az=61.8*

*SKHL 02 14:22:33.8±0.6, 46.°98N×153.°63E, h55km±3km, mb4.3/6*

**ISC 02 14:22:32.0±0.9, 46.°94N±0.°09×153.°74E±0.°10, h31km, n35, σ1.s72/33, mb3.7/6, MS3.3/6, 2C, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 4.06 | 22 | ePN | Pn | 14 23 34.9 | +2.9 |
| SKR | Severo-Kuril's | 4.06 | 22 | eP | Pn | 14 23 33.3 | +1.3 |
| SKR | | | | AMB | AMB | 14 23 37.3 | |
| | 20nm,0.4s | | | | | | |
| SKR | | | | eS | Sn | 14 24 18.5 | +0.1 |
| SKR | | | | A | A | 14 24 33.1 | |
| | 80nm,0.6s | | | | | | |
| SKR | | | | A | A | 14 24 33.1 | |
| | 60nm,0.6s | | | | | | |
| SKR | | | | A | A | 14 24 33.1 | |
| | 30nm,0.6s | | | | | | |
| KUR | Kuril'sk | 4.43 | 249c | iPN | Pn | 14 23 39.8 | +2.8 |
| KUR | | | | i S | Sn | 14 24 30.8 | +3.3 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,30nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,9.0nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,19nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,33nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,104nm,0.6s | | | | | | |
| KUR | Kuril'sk | 4.43 | 249 | i P | Pn | 14 23 38.5 | +1.5 |
| KUR | | | | AMB | AMB | 14 23 43.2 | |
| | comp=E,19nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 14 23 43.2 | |
| | comp=E,9.0nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 14 23 43.2 | |
| | comp=E,30nm,0.4s | | | | | | |
| KUR | | | | eS | Sn | 14 24 27.0 | -0.5 |
| KUR | | | | A | A | 14 24 46.6 | |
| | comp=E,33nm,0.6s | | | | | | |
| KUR | | | | A | A | 14 24 46.6 | |
| | comp=E,104nm,0.6s | | | | | | |
| PAU | Pauzhetka | 4.96 | 23 | eP | Pn | 14 23 46.9 | +2.6 |
| PAU | | | | AMB | AMB | 14 24 03.3 | |
| | comp=E,15nm,0.4s | | | | | | |
| PAU | | | | eS | Sn | 14 24 41.0 | +0.5 |
| PAU | | | | A | A | 14 24 53.9 | |
| | comp=E,230nm,0.8s | | | | | | |
| SHO | Shikotan | 5.75 | 240 | i PN | Pn | 14 23 54.7 | -0.5 |
| SHO | Shikotan | 5.75 | 240 | eP | Pn | 14 23 56.1 | +0.9 |
| SHO | | | | AMB | AMB | 14 24 01.8 | |
| | comp=E,30nm,0.4s | | | | | | |
| SHO | | | | eS | Sn | 14 24 57.8 | -2.3 |
| SHO | | | | A | A | 14 25 10.7 | |
| | comp=E,121nm,1.0s | | | | | | |
| YUK | Yuzh-Kuril'sk | 6.25 | 245c | iPN | Pn | 14 24 03.2 | +1.1 |
| YUK | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,19nm,0.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,22nm,0.6s | | | | | | |
| YUK | Yuzh-Kuril'sk | 6.25 | 245 | eP | Pn | 14 24 03.5 | +1.4 |
| YUK | | | | AMB | AMB | 14 24 13.7 | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| YUK | | | | AMB | AMB | 14 24 13.7 | |
| | comp=Z,19nm,0.6s | | | | | | |
| YUK | | | | AMB | AMB | 14 24 13.7 | |
| | comp=Z,22nm,0.6s | | | | | | |
| YUK | | | | eS | Sn | 14 25 10.7 | -1.7 |
| YUK | | | | A | A | 14 25 24.2 | |
| | comp=Z,73nm,0.6s | | | | | | |
| YUK | | | | A | A | 14 25 24.2 | |
| | comp=Z,30nm,0.6s | | | | | | |
| PETK | Petropavlovsk- | 6.68 | 21 | Pn | Pn | 14 24 08.3 | +0.4 |
| | comp=Z,0.3nm,0.3s,baz=188,slow=11,SNR=10 | | | | | | |
| PETK | | | | Sn | Sn | 14 25 19.9 | -3.0 |
| | baz=168,slow=22,SNR=1.8 | | | | | | |
| YSS | Yuzh-Sakhalins | 7.52 | 274 | eP | Pn | 14 24 20.5 | +1.0 |
| YSS | | | | AMB | AMB | 14 24 26.0 | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| YSS | | | | eS | Sn | 14 25 41.0 | -2.6 |
| YSS | | | | A | A | 14 25 51.4 | |
| | comp=Z,139nm,0.5s | | | | | | |
| JKA | Kamikawa-asahi | 8.32 | 254 | eP | Pn | 14 24 33.2 | +2.8 |
| ASAJ | Asahikawa | 8.32 | 254 | Pn | Pn | 14 24 33.2 | +2.7 |
| | comp=Z,0.4nm,0.3s,baz=71,slow=10,SNR=8.0 | | | | | | |
| MJAR | Matsushiro Arr | 15.54 | 234 | Pn | Pn | 14 26 08.8 | 0.0 |
| | comp=Z,0.0nm,0.3s,baz=24,slow=8.8,SNR=2.7 | | | | | | |
| SEY | Seymchan | 16.05 | 358 | Pn | Pn | 14 26 14.8 | -0.4 |
| | comp=Z,0.2nm,0.3s,baz=241,slow=17,SNR=5.1 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 29.20 | 154 | T | T | 15 00 15.9 | |
| | baz=340,slow=76,SNR=3.9 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.21 | 154 | T | T | 15 00 18.9 | |
| | baz=340,slow=76,SNR=5.1 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.21 | 154 | T | T | 15 00 19.2 | |
| | baz=340,slow=76,SNR=4.6 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 30.29 | 155 | T | T | 15 01 42.0 | |
| | baz=341,slow=76,SNR=13 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.30 | 155 | T | T | 15 01 41.0 | |
| | baz=341,slow=76,SNR=12 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.31 | 155 | T | T | 15 01 44.3 | |
| | baz=341,slow=76,SNR=14 | | | | | | |
| SONM | Songino Array | 31.68 | 289 | LR | LR | 14 43 19.2 | |
| | comp=Z,53nm,18.6s,baz=28,slow=40 | | | | | | |
| ZALV | Zalesovo Beam | 42.85 | 306 | LR | LR | 14 49 31.6 | |
| | comp=Z,35nm,21.8s,baz=70,slow=38 | | | | | | |
| MKAR | Makanchi Array | 47.24 | 297 | P | P | 14 31 01.3 | -0.6 |
| | comp=Z,0.2nm,0.2s,baz=69,slow=8.5,SNR=3.9 | | | | | | |
| MKAR | | | | LR | LR | 14 52 24.4 | |
| | comp=Z,42nm,18.6s,baz=5.5,slow=38 | | | | | | |
| ARCES | ARCESS Array B | 57.81 | 341 | LR | LR | 15 01 01.8 | |
| | comp=Z,28nm,19.6s,baz=234,slow=40 | | | | | | |
| FINES | FINESS Array B | 64.05 | 335 | P | P | 14 33 02.9 | +0.6 |
| | comp=Z,2.4nm,0.9s,baz=46,slow=8.0,SNR=5.7 | | | | | | |
| FINES | FINESS Array B | 64.05 | 335 | P | P | 14 33 02.9 | +0.6 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| NB2 | NORSAR Subarra | 68.19 | 341 | P | P | 14 33 30.1 | +1.2 |
| | comp=Z,7.2nm,1.1s,baz=30,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 68.19 | 341 | P | P | 14 33 29.9 | +1.0 |
| | comp=Z,1.7nm,0.9s,baz=28,slow=6.0,SNR=3.7 | | | | | | |
| NOA | | | | LR | LR | 15 06 46.4 | |
| | comp=Z,16nm,18.4s,baz=280,slow=39 | | | | | | |
| NOA | NORSAR Array B | 68.19 | 341 | P | P | 14 33 29.9 | +1.0 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,16nm,18.4s | | | | | | |
| KBZ | Khabaz | 71.04 | 314 | LR | LR | 15 11 10.0 | |
| | comp=Z,31nm,19.0s,baz=186,slow=41 | | | | | | |
| AKASG | Malin Array Be | 71.63 | 326 | P | P | 14 33 50.3 | +0.1 |
| | comp=Z,0.2nm,0.3s,baz=34,slow=6.0,SNR=5.0 | | | | | | |
| ASAR | Alice Springs | 72.53 | 199 | P | P | 14 33 55.5 | -0.3 |
| | comp=Z,0.5nm,0.7s,baz=10,slow=5.6,SNR=4.1 | | | | | | |
| ASAR | Alice Springs | 72.53 | 199 | P | P | 14 33 55.5 | -0.3 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 77.02 | 61 | P | P | 14 34 22.1 | 0.0 |
| | comp=Z,0.3nm,0.7s,baz=277,slow=4.5,SNR=4.9 | | | | | | |

*DDA 02 14:26:10.6, 37.°24N×28.°24E, h7km, Md2.6*

*CSEM 02 14:26:10.9±0.2, 37.°21N×28.°22E, h10km, MD2.7, Error ellipse: s-maj=5.5km s-min=3.2km az=44.0*

*ISK 02 14:26:10.2, 37.°23N×28.°21E, h5km, MD2.7*

**ISC 02 14:26:10.6±1.0, 37.°23N±0.°03×28.°23E±0.°03, h11km±7km, n18, σ0.s29/26, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.10 | 155 | ePG | Pg | 14 26 13.1 | -0.2 |
| YER | | | | eSG | Sg | 14 26 15.6 | +0.3 |
| YER | Yerkesik | 0.10 | 155 | ePg | Pg | 14 26 13.1 | -0.2 |
| YER | | | | eSg | Sg | 14 26 15.6 | +0.3 |
| TURN | Turunc | 0.46 | 140 | i P | Pg | 14 26 19.6 | 0.0 |
| TURN | | | | i S | Sb | 14 26 27.0 | -0.5 |
| TURN | Turunc | 0.46 | 140 | P | Pg | 14 26 19.6 | 0.0 |
| TURN | | | | S | Sb | 14 26 27.0 | -0.5 |
| AYDN | Tasoluk | 0.52 | 327 | i P | Pb | 14 26 21.9 | +0.2 |
| AYDN | | | | i S | Sb | 14 26 29.0 | -0.2 |
| AYDN | Tasoluk | 0.52 | 327 | P | Pb | 14 26 21.9 | +0.2 |
| AYDN | | | | S | Sb | 14 26 29.0 | -0.2 |
| DALY | Dalyan (Mu˜la | 0.53 | 140 | ePG | Pg | 14 26 21.4 | +0.5 |
| DALY | Dalyan (Mu˜la | 0.53 | 140 | ePg | Pg | 14 26 21.4 | +0.5 |
| BDRM | Kayabasi | 0.65 | 256 | i P | Pg | 14 26 23.2 | +0.1 |
| BDRM | | | | i S | Sb | 14 26 32.9 | -0.1 |
| BDRM | Kayabasi | 0.65 | 256 | P | Pg | 14 26 23.2 | +0.1 |
| BDRM | | | | S | Sb | 14 26 32.9 | -0.1 |
| BODT | Bodrum | 0.75 | 258 | ePG | Pg | 14 26 24.9 | -0.2 |
| BODT | Bodrum | 0.75 | 258 | ePg | Pg | 14 26 24.9 | -0.2 |
| AYDB | Zeytinkoy-Aydi | 0.77 | 340 | ePG | Pg | 14 26 25.3 | -0.2 |
| AYDB | Zeytinkoy-Aydi | 0.77 | 340 | ePg | Pg | 14 26 25.3 | -0.2 |
| FETY | Fethiye | 0.90 | 131 | ePG | Pg | 14 26 27.6 | -0.3 |
| FETY | Fethiye | 0.90 | 131 | ePg | Pg | 14 26 27.7 | -0.3 |
| KULA | Kula-Manisa | 1.33 | 15 | ePN | Pg | 14 26 36.2 | 0.0 |
| KULA | Kula-Manisa | 1.33 | 15 | ePn | Pg | 14 26 36.2 | 0.0 |

*AUST 02 14:32:37.9, 37.°89S×175.°67E, h60km*

*IDC 02 14:32:39.7±0.7, 37.°70S×176.°74E, h160km±5km, mb3.9/6, mb1 4.0/6, mb1mx3.7/24, mbtmp4.3/6, Error ellipse: s-maj=31.3km s-min=15.5km az=57.0*

*ISCJB 02 14:32:40.7±0.3, 38.°14S±0.°02×176.°35E±0.°04, h171km±2km, mb4.1/9, Error ellipse: s-maj=5.6km s-min=3.9km az=178.4*

*NEIC 02 14:32:41.1±0.2, 38.°18S×176.°35E, h173km±2km, mb4.4/3, Error ellipse: s-maj=5.0km s-min=3.4km az=99.0*

*WEL 02 14:32:42.1±0.2, 38.°07S×176.°39E, h161km±2km, ML5.3/23, Error ellipse: s-maj=1.2km s-min=1.1km az=90.0, MM 4.*

*WEL Felt between Coromandel, Wellington and Gisborne, maximum reported intensity.*

**ISC 02 14:32:41.3±0.6, 38.°19S±0.°04×176.°36E±0.°05, h170km±5km, n271, σ1.s22/281, mb4.1/9, 94C-16D, North Island**

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

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| HLRZ | Highlands Stat | 0.06 | 186 | ⇑PN | Pn | 14 33 03.9 | 0.0 |
| OMRZ | Omania | 0.09 | 6 | ⇑PN | Pn | 14 33 03.4 | -0.6 |
| OMRZ | | | | SN | Sn | 14 33 20.6 | -0.7 |
| OMRZ | Omania | 0.09 | 6 | Pn | Pn | 14 33 03.4 | -0.6 |
| MKRZ | Makatiti | 0.10 | 58 | ⇑PN | Pn | 14 33 04.1 | +0.1 |
| MKRZ | Makatiti | 0.10 | 58 | Pn | Pn | 14 33 04.1 | +0.1 |
| TARZ | Mount Tarawera | 0.12 | 110 | ⇑PN | Pn | 14 33 03.8 | -0.2 |
| TARZ | Mount Tarawera | 0.12 | 110 | Pn | Pn | 14 33 03.8 | -0.2 |
| UTU | Utuhina | 0.13 | 277 | ⇑PN | Pn | 14 33 03.9 | -0.1 |
| UTU | Utuhina | 0.13 | 277 | Pn | Pn | 14 33 03.9 | -0.1 |
| HSRZ | Hossack Road | 0.15 | 217 | ⇑PN | Pn | 14 33 04.0 | 0.0 |
| LIRZ | Lichensteins R | 0.19 | 6 | ⇑PN | Pn | 14 33 03.4 | -0.6 |
| LIRZ | | | | SN | Sn | 14 33 20.3 | -1.1 |
| LIRZ | Lichensteins R | 0.19 | 6 | Pn | Pn | 14 33 03.4 | -0.6 |
| LIRZ | | | | Sn | Sn | 14 33 20.3 | -1.1 |
| RRRZ | Republican Roa | 0.19 | 140 | ⇑PN | Pn | 14 33 03.7 | -0.3 |
| RRRZ | Republican Roa | 0.19 | 140 | ⇑Pn | Pn | 14 33 03.8 | -0.3 |
| KARZ | Kaharoa | 0.19 | 332 | ⇑PN | Pn | 14 33 03.5 | -0.6 |
| KARZ | | | | SN | Sn | 14 33 19.9 | -1.5 |
| KARZ | Kaharoa | 0.19 | 332 | Pn | Pn | 14 33 03.5 | -0.6 |
| KARZ | | | | Sn | Sn | 14 33 19.9 | -1.5 |
| HRRZ | Handcock Road | 0.21 | 197 | ⇑PN | Pn | 14 33 04.0 | 0.0 |
| HRRZ | Handcock Road | 0.21 | 197 | Pn | Pn | 14 33 04.0 | 0.0 |
| GRRZ | Galatos Road | 0.25 | 232 | ⇑PN | Pn | 14 33 04.3 | +0.1 |
| PRRZ | Plateau Road | 0.31 | 175 | ⇑PN | Pn | 14 33 04.2 | -0.1 |
| PRRZ | Plateau Road | 0.31 | 175 | Pn | Pn | 14 33 04.2 | -0.1 |
| EDRZ | Edgecumbe | 0.31 | 74 | ⇑PN | Pn | 14 33 03.5 | -0.9 |
| EDRZ | Edgecumbe | 0.31 | 74 | Pn | Pn | 14 33 03.5 | -0.9 |
| MARZ | Manawahe | 0.32 | 50 | ⇑PN | Pn | 14 33 03.6 | -0.8 |
| MARZ | Manawahe | 0.32 | 50 | Pn | Pn | 14 33 03.6 | -0.8 |
| WPRZ | Whakapapatarin | 0.36 | 205 | PN | Pn | 14 33 04.6 | +0.1 |
| WPRZ | Whakapapatarin | 0.36 | 205 | Pn | Pn | 14 33 04.6 | +0.1 |
| ALRZ | Allen Road | 0.37 | 182 | ⇑PN | Pn | 14 33 04.2 | -0.3 |
| ALRZ | Allen Road | 0.37 | 182 | Pn | Pn | 14 33 04.2 | -0.3 |
| OPRZ | Ohinepanea | 0.38 | 24 | ⇑PN | Pn | 14 33 03.4 | -1.1 |
| OPRZ | | | | SN | Sn | 14 33 20.0 | -2.2 |
| OPRZ | Ohinepanea | 0.38 | 24 | ⇑Pn | Pn | 14 33 03.4 | -1.1 |
| TGRZ | Tauranga | 0.47 | 350 | ⇑PN | Pn | 14 33 03.9 | -1.0 |
| TGRZ | | | | SN | Sn | 14 33 20.9 | -1.9 |
| TGRZ | Tauranga | 0.47 | 350 | Pn | Pn | 14 33 03.9 | -1.0 |
| TGRZ | | | | Sn | Sn | 14 33 20.9 | -1.9 |
| KUTZ | Kaahu Road | 0.52 | 235 | ⇑PN | Pn | 14 33 05.4 | +0.4 |
| KUTZ | Kaahu Road | 0.52 | 235 | Pn | Pn | 14 33 05.4 | +0.4 |
| WHTZ | Whakaora | 0.57 | 214 | ⇑PN | Pn | 14 33 06.1 | +0.7 |
| WHTZ | Whakaora | 0.57 | 214 | Pn | Pn | 14 33 06.1 | +0.7 |
| URZ | Urewera | 0.59 | 97 | ⇑PN | Pn | 14 33 04.5 | -0.8 |
| URZ | | | | SN | Sn | 14 33 21.3 | -2.5 |
| URZ | | | | AML | AML | 14 33 22.2 | |
| URZ | Urewera | 0.59 | 97 | P | Pn | 14 33 04.3 | -1.0 |
| | 1µm,0.3s,baz=269,slow=4.2,SNR=6769 | | | | | | |
| URZ | | | | S | Sn | 14 33 21.3 | -2.5 |
| | 678nm,0.3s,baz=6.8,slow=23,SNR=7.8 | | | | | | |
| TLZ | Tolley Road | 0.66 | 258 | ⇓PN | Pn | 14 33 06.1 | +0.3 |
| TLZ | Tolley Road | 0.66 | 258 | Pn | Pn | 14 33 05.5 | -0.4 |
| WATZ | Wairara | 0.71 | 223 | ⇑PN | Pn | 14 33 06.8 | +0.7 |
| WATZ | Wairara | 0.71 | 223 | Pn | Pn | 14 33 06.8 | +0.7 |
| TOZ | Tahuroa Road | 0.82 | 304 | ⇓PN | Pn | 14 33 06.4 | -0.3 |
| TOZ | Tahuroa Road | 0.82 | 304 | ⇓Pn | Pn | 14 33 06.4 | -0.3 |
| RITZ | Rihia Road | 0.88 | 206 | PN | Pn | 14 33 08.1 | +1.0 |
| RITZ | Rihia Road | 0.88 | 206 | Pn | Pn | 14 33 08.1 | +1.0 |
| RAGZ | Rawiri | 0.88 | 110 | ⇑PN | Pn | 14 33 07.3 | +0.1 |
| RAGZ | Rawiri | 0.88 | 110 | Pn | Pn | 14 33 07.3 | +0.1 |
| MWZ | Matawai | 0.93 | 99 | ⇑PN | Pn | 14 33 07.1 | -0.5 |
| MWZ | | | | AML | AML | 14 33 26.8 | |
| MWZ | | | | AML | AML | 14 33 27.4 | |
| MWZ | Matawai | 0.93 | 99 | ⇑Pn | Pn | 14 33 07.1 | -0.5 |
| WIZ | White Island | 0.93 | 45 | PN | Pn | 14 33 05.9 | -1.6 |
| WIZ | White Island | 0.93 | 45 | Pn | Pn | 14 33 05.9 | -1.6 |
| SNGZ | Shannon Statio | 0.97 | 128 | ⇑PN | Pn | 14 33 08.4 | +0.7 |
| SNGZ | Shannon Statio | 0.97 | 128 | ⇑Pn | Pn | 14 33 08.4 | +0.7 |
| NMHZ | Naumai | 0.97 | 159 | ⇑PN | Pn | 14 33 09.2 | +1.4 |
| NMHZ | Naumai | 0.97 | 159 | Pn | Pn | 14 33 09.2 | +1.4 |
| BKZ | Black Stump Fm | 0.98 | 174 | ⇑PN | Pn | 14 33 08.5 | +0.6 |
| BKZ | | | | AML | AML | 14 33 30.8 | |
| BKZ | | | | AML | AML | 14 33 31.4 | |
| BKZ | Black Stump Fm | 0.98 | 174 | ⇑Pn | Pn | 14 33 08.5 | +0.6 |
| KRVZ | Karewarewa | 1.06 | 212 | ⇑PN | Pn | 14 33 09.5 | +0.8 |
| KRVZ | Karewarewa | 1.06 | 212 | Pn | Pn | 14 33 09.5 | +0.8 |
| WTVZ | West Tongariro | 1.10 | 213 | ⇑PN | Pn | 14 33 09.8 | +0.9 |
| WTVZ | West Tongariro | 1.10 | 213 | Pn | Pn | 14 33 09.8 | +0.9 |
| OTVZ | Oturere | 1.11 | 209 | ⇑PN | Pn | 14 33 10.1 | +1.0 |
| OTVZ | Oturere | 1.11 | 209 | Pn | Pn | 14 33 10.1 | +1.0 |
| WHHZ | Waihua | 1.12 | 142 | ⇑PN | Pn | 14 33 10.0 | +1.0 |
| TWVZ | Taurewa | 1.14 | 219 | PN | Pn | 14 33 10.1 | +0.9 |
| TWVZ | Taurewa | 1.14 | 219 | Pn | Pn | 14 33 10.1 | +0.9 |
| NGZ | Ngauruhoe | 1.15 | 211 | ⇑PN | Pn | 14 33 10.2 | +0.8 |
| NGZ | Ngauruhoe | 1.15 | 211 | Pn | Pn | 14 33 10.2 | +0.8 |
| ARHZ | Aropaoanui | 1.18 | 155 | ⇑PN | Pn | 14 33 10.8 | +1.3 |
| ARHZ | Aropaoanui | 1.18 | 155 | Pn | Pn | 14 33 10.8 | +1.3 |
| COVZ | Chateau Observ | 1.19 | 212 | PN | Pn | 14 33 10.3 | +0.6 |
| COVZ | Chateau Observ | 1.19 | 212 | Pn | Pn | 14 33 10.3 | +0.6 |
| WPVZ | Whakapapa | 1.19 | 212 | PN | Pn | 14 33 10.3 | +0.6 |
| WPVZ | Whakapapa | 1.19 | 212 | Pn | Pn | 14 33 10.3 | +0.6 |
| TKGZ | Te Karaka | 1.20 | 102 | ⇑PN | Pn | 14 33 09.7 | +0.1 |
| TKGZ | Te Karaka | 1.20 | 102 | Pn | Pn | 14 33 09.7 | +0.1 |
| HAZ | Te Kaha | 1.21 | 69 | ⇑PN | Pn | 14 33 08.0 | -1.7 |
| HAZ | | | | SN | Sn | 14 33 27.4 | -4.2 |
| TUVZ | Tukino | 1.21 | 207 | ⇑PN | Pn | 14 33 11.0 | +1.1 |
| TUVZ | Tukino | 1.21 | 207 | Pn | Pn | 14 33 11.0 | +1.1 |
| RIGZ | Rimuhau | 1.21 | 115 | ⇑PN | Pn | 14 33 10.3 | +0.5 |
| HIZ | Hauiti | 1.23 | 254 | ⇓PN | Pn | 14 33 10.7 | +0.8 |
| HIZ | Hauiti | 1.23 | 254 | Pn | Pn | 14 33 10.7 | +0.8 |
| KWHZ | Kaweka Forest | 1.23 | 178 | ⇑PN | Pn | 14 33 11.1 | +1.1 |
| FWVZ | Far West T-bar | 1.23 | 211 | ⇓PN | Pn | 14 33 10.7 | +0.5 |
| FWVZ | Far West T-bar | 1.23 | 211 | Pn | Pn | 14 33 10.7 | +0.5 |
| DRZ | Dome Shelter | 1.25 | 210 | PN | Pn | 14 33 11.3 | +0.9 |
| DRZ | Dome Shelter | 1.25 | 210 | Pn | Pn | 14 33 11.3 | +0.9 |
| MCHZ | McNeill Hill | 1.28 | 168 | ⇑PN | Pn | 14 33 11.9 | +1.6 |
| MCHZ | McNeill Hill | 1.28 | 168 | Pn | Pn | 14 33 11.9 | +1.6 |
| TWGZ | Tauwhareparae | 1.28 | 90 | ⇑PN | Pn | 14 33 10.2 | -0.2 |
| TWGZ | Tauwhareparae | 1.28 | 90 | Pn | Pn | 14 33 10.2 | -0.2 |
| WNVZ | Wahianoa | 1.28 | 207 | ⇑PN | Pn | 14 33 11.5 | +1.0 |
| WNVZ | Wahianoa | 1.28 | 207 | Pn | Pn | 14 33 11.6 | +1.0 |
| MOVZ | Moawhango | 1.30 | 201 | ⇑PN | Pn | 14 33 11.3 | +0.7 |
| MOVZ | Moawhango | 1.30 | 201 | Pn | Pn | 14 33 11.3 | +0.7 |
| BHHZ | Black Hill Sta | 1.31 | 190 | ⇑PN | Pn | 14 33 11.6 | +0.9 |
| BHHZ | Black Hill Sta | 1.31 | 190 | Pn | Pn | 14 33 11.6 | +0.9 |
| KNZ | Kokohu | 1.32 | 129 | PN | Pn | 14 33 11.0 | +0.3 |
| KNZ | | | | AML | AML | 14 33 34.7 | |
| KNZ | | | | AML | AML | 14 33 35.2 | |
| KNZ | Kokohu | 1.32 | 129 | Pn | Pn | 14 33 11.0 | +0.3 |
| PKVZ | Pokaka | 1.35 | 216 | ⇑PN | Pn | 14 33 12.1 | +1.1 |
| PKVZ | Pokaka | 1.35 | 216 | Pn | Pn | 14 33 12.1 | +1.1 |
| MTVZ | Mangateitei | 1.38 | 210 | ⇑PN | Pn | 14 33 12.4 | +1.1 |
| MTVZ | Mangateitei | 1.38 | 210 | Pn | Pn | 14 33 12.4 | +1.1 |
| PRGZ | Paritu Road | 1.40 | 122 | ⇑PN | Pn | 14 33 11.9 | +0.5 |
| PRGZ | Paritu Road | 1.40 | 122 | Pn | Pn | 14 33 11.9 | +0.5 |
| MKAZ | Moumakai | 1.44 | 318 | ⇓PN | Pn | 14 33 11.3 | -0.6 |
| MKAZ | Moumakai | 1.44 | 318 | ⇓Pn | Pn | 14 33 11.3 | -0.6 |
| KRHZ | Kereru | 1.45 | 180 | ⇑PN | Pn | 14 33 13.0 | +1.0 |
| PUZ | Puketiti | 1.50 | 86 | ⇑PN | Pn | 14 33 11.6 | -0.9 |
| PUZ | | | | AML | AML | 14 33 33.9 | |
| PUZ | | | | AML | AML | 14 33 40.8 | |
| PUZ | Puketiti | 1.50 | 86 | ⇑Pn | Pn | 14 33 11.6 | -0.9 |
| KUZ | Kuaotunu | 1.53 | 340 | PN | Pn | 14 33 11.4 | -1.3 |
| KUZ | Kuaotunu | 1.53 | 340 | ⇓Pn | Pn | 14 33 11.9 | -0.8 |
| MHGZ | Mahia Peninsul | 1.54 | 129 | ⇑PN | Pn | 14 33 13.9 | +1.0 |
| MHGZ | Mahia Peninsul | 1.54 | 129 | Pn | Pn | 14 33 13.9 | +1.0 |
| VRZ | Vera Road | 1.56 | 233 | ⇑PN | Pn | 14 33 14.4 | +1.4 |
| VRZ | Vera Road | 1.56 | 233 | ⇑Pn | Pn | 14 33 14.4 | +1.4 |
| CKHZ | Cape Kidnapper | 1.57 | 159 | ⇑PN | Pn | 14 33 14.5 | +1.5 |
| CKHZ | Cape Kidnapper | 1.57 | 159 | Pn | Pn | 14 33 14.5 | +1.5 |
| KBAZ | Karaka Road Bo | 1.60 | 313 | ⇑PN | Pn | 14 33 13.0 | -0.5 |
| KBAZ | Karaka Road Bo | 1.60 | 313 | Pn | Pn | 14 33 13.0 | -0.5 |
| KAHZ | Kahuranaki | 1.65 | 166 | ⇑PN | Pn | 14 33 15.4 | +1.5 |
| KAHZ | Kahuranaki | 1.65 | 166 | Pn | Pn | 14 33 15.4 | +1.5 |
| MXZ | Matakaoa Point | 1.66 | 68 | PN | Pn | 14 33 13.2 | -0.8 |
| MXZ | | | | AML | AML | 14 33 38.2 | |
| MXZ | | | | AML | AML | 14 33 38.6 | |
| MXZ | Matakaoa Point | 1.66 | 68 | Pn | Pn | 14 33 13.2 | -0.8 |
| WMGZ | Waiomatatini S | 1.67 | 78 | ⇑PN | Pn | 14 33 13.3 | -0.8 |
| WMGZ | Waiomatatini S | 1.67 | 78 | Pn | Pn | 14 33 13.3 | -0.8 |
| ETAZ | East Tamaki Re | 1.68 | 317 | ⇓PN | Pn | 14 33 13.6 | -0.6 |
| ETAZ | East Tamaki Re | 1.68 | 317 | Pn | Pn | 14 33 13.6 | -0.6 |
| WIAZ | Waiheke Island | 1.70 | 325 | ⇓PN | Pn | 14 33 13.8 | -0.8 |
| PNHZ | Pukenui | 1.72 | 184 | ⇑PN | Pn | 14 33 15.5 | +0.8 |
| PNHZ | Pukenui | 1.72 | 184 | Pn | Pn | 14 33 15.5 | +0.8 |
| MTAZ | Motutapu | 1.82 | 320 | ⇓PN | Pn | 14 33 15.2 | -0.5 |
| MTAZ | Motutapu | 1.82 | 320 | Pn | Pn | 14 33 15.2 | -0.5 |
| MHEZ | Mangahewa | 1.82 | 240 | PN | Pn | 14 33 17.7 | +2.0 |
| MHEZ | Mangahewa | 1.82 | 240 | Pn | Pn | 14 33 17.7 | +2.0 |
| HBAZ | Herne Bay Bore | 1.86 | 316 | ⇓PN | Pn | 14 33 15.4 | -0.8 |
| HBAZ | Herne Bay Bore | 1.86 | 316 | Pn | Pn | 14 33 15.4 | -0.8 |
| WPHZ | Waipukurau | 1.87 | 178 | ⇑PN | Pn | 14 33 17.2 | +1.0 |
| WPHZ | Waipukurau | 1.87 | 178 | Pn | Pn | 14 33 17.2 | +1.0 |
| PXZ | Pawanui | 1.88 | 168 | ⇑PN | Pn | 14 33 17.4 | +1.1 |
| PXZ | | | | AML | AML | 14 33 46.7 | |
| PXZ | | | | AML | AML | 14 33 46.7 | |
| PXZ | | | | AML | AML | 14 33 47.5 | |
| PXZ | | | | AML | AML | 14 33 47.5 | |
| PXZ | Pawanui | 1.88 | 168 | ⇑Pn | Pn | 14 33 17.4 | +1.1 |
| TSZ | Takapari Road | 1.89 | 189 | ⇑PN | Pn | 14 33 17.3 | +0.8 |
| TSZ | | | | AML | AML | 14 33 46.6 | |
| TSZ | | | | AML | AML | 14 33 46.8 | |
| TSZ | Takapari Road | 1.89 | 189 | ⇑Pn | Pn | 14 33 17.3 | +0.8 |
| WAZ | Wanganui | 1.89 | 214 | PN | Pn | 14 33 17.4 | +0.9 |
| WAZ | Wanganui | 1.89 | 214 | Pn | Pn | 14 33 17.4 | +0.9 |
| WTAZ | Waiatarua | 1.90 | 311 | ⇑PN | Pn | 14 33 16.1 | -0.5 |
| WTAZ | Waiatarua | 1.90 | 311 | Pn | Pn | 14 33 16.1 | -0.5 |
| DREZ | Durham Road | 1.96 | 239 | PN | Pn | 14 33 19.0 | +1.8 |
| LREZ | Lake Rotokare | 1.98 | 230 | ⇑PN | Pn | 14 33 19.2 | +1.7 |
| RVAZ | Riverhead Bore | 2.00 | 315 | ⇓PN | Pn | 14 33 16.8 | -1.0 |
| RVAZ | Riverhead Bore | 2.00 | 315 | Pn | Pn | 14 33 16.8 | -1.0 |
| PREZ | Palmer Road | 2.07 | 236 | PN | Pn | 14 33 20.5 | +2.0 |
| PREZ | Palmer Road | 2.07 | 236 | Pn | Pn | 14 33 20.5 | +2.0 |
| GRZ | Great Barrier | 2.07 | 339 | PN | Pn | 14 33 17.2 | -1.3 |
| NEZ | North Egmont | 2.07 | 238 | ⇑PN | Pn | 14 33 20.4 | +1.8 |
| NEZ | North Egmont | 2.07 | 238 | Pn | Pn | 14 33 20.4 | +1.8 |
| PRHZ | Porangahau | 2.08 | 174 | ⇑PN | Pn | 14 33 19.6 | +1.0 |
| PRHZ | Porangahau | 2.08 | 174 | ⇑Pn | Pn | 14 33 19.6 | +1.0 |
| DVHZ | Dannevirke | 2.11 | 184 | ⇑PN | Pn | 14 33 19.5 | +0.6 |
| DVHZ | Dannevirke | 2.11 | 184 | Pn | Pn | 14 33 19.5 | +0.6 |
| PKE | Pukeiti | 2.11 | 241 | ⇑PN | Pn | 14 33 20.6 | +1.7 |
| PKE | Pukeiti | 2.11 | 241 | Pn | Pn | 14 33 20.6 | +1.7 |
| KHEZ | Kahui Hut | 2.14 | 238 | ⇑PN | Pn | 14 33 21.0 | +1.7 |
| KHEZ | Kahui Hut | 2.14 | 238 | Pn | Pn | 14 33 21.0 | +1.7 |
| POWZ | Post Office Ro | 2.24 | 192 | ⇑PN | Pn | 14 33 21.0 | +0.6 |
| POWZ | Post Office Ro | 2.24 | 192 | Pn | Pn | 14 33 21.0 | +0.6 |
| ANWZ | Angora Road | 2.27 | 178 | ⇑PN | Pn | 14 33 21.7 | +1.0 |
| PRWZ | Pori Road | 2.38 | 187 | ⇑PN | Pn | 14 33 22.8 | +0.8 |
| PRWZ | Pori Road | 2.38 | 187 | Pn | Pn | 14 33 22.8 | +0.8 |
| BFZ | Birch Farm | 2.49 | 182 | ⇑PN | Pn | 14 33 23.7 | +0.5 |
| BFZ | | | | AML | AML | 14 33 57.7 | |
| BFZ | | | | AML | AML | 14 33 59.9 | |
| BFZ | Birch Farm | 2.49 | 182 | ⇑Pn | Pn | 14 33 23.8 | +0.5 |
| MRZ | Mangatainoka R | 2.54 | 194 | ⇑PN | Pn | 14 33 24.2 | +0.3 |
| MRZ | | | | AML | AML | 14 33 58.1 | |
| MRZ | | | | AML | AML | 14 33 58.2 | |
| MRZ | Mangatainoka R | 2.54 | 194 | ⇑Pn | Pn | 14 33 24.1 | +0.3 |
| TIWZ | Tintock | 2.61 | 188 | ⇑PN | Pn | 14 33 25.1 | +0.4 |
| TIWZ | | | | AML | AML | 14 34 01.4 | |
| TIWZ | | | | AML | AML | 14 34 01.4 | |
| TIWZ | Tintock | 2.61 | 188 | Pn | Pn | 14 33 25.1 | +0.4 |
| CPWZ | Castlepoint | 2.71 | 183 | ⇑PN | Pn | 14 33 27.0 | +1.0 |
| CPWZ | Castlepoint | 2.71 | 183 | Pn | Pn | 14 33 27.0 | +1.0 |
| WCZ | Waipu Caves | 2.77 | 324 | ⇓PN | Pn | 14 33 25.9 | -0.7 |
| WCZ | Waipu Caves | 2.77 | 324 | ⇓Pn | Pn | 14 33 25.9 | -0.7 |
| OGWZ | Otaki Gorge | 2.78 | 199 | ⇑PN | Pn | 14 33 26.9 | +0.2 |
| OGWZ | Otaki Gorge | 2.78 | 199 | Pn | Pn | 14 33 26.9 | +0.2 |
| HOWZ | Holdsworth Sta | 2.78 | 193 | ⇑PN | Pn | 14 33 26.7 | 0.0 |
| HOWZ | Holdsworth Sta | 2.78 | 193 | Pn | Pn | 14 33 26.7 | 0.0 |
| KIW | Kapiti Island | 2.89 | 202 | PN | Pn | 14 33 27.8 | -0.3 |
| KIW | | | | AML | AML | 14 34 05.9 | |
| KIW | | | | AML | AML | 14 34 06.4 | |
| KIW | Kapiti Island | 2.89 | 202 | Pn | Pn | 14 33 27.9 | -0.3 |
| TMWZ | Te Maipa | 2.93 | 187 | ⇑PN | Pn | 14 33 28.6 | 0.0 |
| TMWZ | Te Maipa | 2.93 | 187 | Pn | Pn | 14 33 28.6 | 0.0 |
| MTW | Mount Morrison | 3.04 | 192 | ⇑PN | Pn | 14 33 29.5 | -0.4 |
| MTW | | | | AML | AML | 14 34 07.5 | |
| MTW | | | | AML | AML | 14 34 07.8 | |
| MTW | Mount Morrison | 3.04 | 192 | Pn | Pn | 14 33 29.5 | -0.4 |
| CAW | Cannon Point | 3.08 | 198 | ⇑PN | Pn | 14 33 30.1 | -0.3 |
| CAW | | | | AML | AML | 14 34 09.2 | |
| CAW | | | | AML | AML | 14 34 10.4 | |
| CAW | Cannon Point | 3.08 | 198 | Pn | Pn | 14 33 30.1 | -0.3 |
| DUWZ | D'Urville Isla | 3.22 | 215 | PN | Pn | 14 33 31.8 | -0.4 |
| DUWZ | D'Urville Isla | 3.22 | 215 | Pn | Pn | 14 33 31.8 | -0.4 |
| TRWZ | Traveller | 3.24 | 189 | ⇑PN | Pn | 14 33 32.2 | -0.3 |
| TRWZ | | | | AML | AML | 14 34 13.7 | |
| TRWZ | | | | AML | AML | 14 34 15.3 | |
| TRWZ | Traveller | 3.24 | 189 | Pn | Pn | 14 33 32.2 | -0.3 |
| WEL | Wellington | 3.32 | 201 | PN | Pn | 14 33 32.8 | -0.6 |
| WEL | | | | AML | AML | 14 34 15.1 | |
| WEL | | | | AML | AML | 14 34 15.6 | |
| WEL | Wellington | 3.32 | 201 | Pn | Pn | 14 33 33.5 | 0.0 |
| MSWZ | Moikau Station | 3.33 | 195 | ⇑PN | Pn | 14 33 32.9 | -0.6 |
| MSWZ | | | | AML | AML | 14 34 13.0 | |
| MSWZ | | | | AML | AML | 14 34 14.4 | |
| MSWZ | Moikau Station | 3.33 | 195 | Pn | Pn | 14 33 32.9 | -0.6 |
| SNZO | South Karori | 3.36 | 202 | *e*Pn | Pn | 14 33 33.1 | -0.8 |
| SNZO | | | | *e*Sn | Sn | 14 34 12.4 | -2.6 |
| BHW | Baring Head | 3.41 | 199 | ⇑PN | Pn | 14 33 33.8 | -0.7 |
| BHW | | | | AML | AML | 14 34 15.6 | |
| BHW | | | | AML | AML | 14 34 16.6 | |
| BHW | Baring Head | 3.41 | 199 | Pn | Pn | 14 33 33.8 | -0.7 |
| TCW | Tory Channel | 3.42 | 207 | PN | Pn | 14 33 33.8 | -0.8 |
| TCW | | | | AML | AML | 14 34 16.5 | |
| TCW | | | | AML | AML | 14 34 17.3 | |
| TCW | Tory Channel | 3.42 | 207 | Pn | Pn | 14 33 33.9 | -0.8 |
| PLWZ | Palliser | 3.48 | 194 | ⇑PN | Pn | 14 33 34.6 | -0.8 |
| PLWZ | Palliser | 3.48 | 194 | Pn | Pn | 14 33 34.6 | -0.8 |
| OUZ | Omahuta | 3.71 | 322 | PN | Pn | 14 33 37.7 | -0.6 |
| OUZ | Omahuta | 3.71 | 322 | *e*Pn | Pn | 14 33 37.7 | -0.6 |
| TUWZ | Tuamarina | 3.73 | 209 | ⇑PN | Pn | 14 33 37.7 | -0.9 |
| TUWZ | | | | AML | AML | 14 34 23.2 | |
| TUWZ | | | | AML | AML | 14 34 23.7 | |
| TUWZ | Tuamarina | 3.73 | 209 | Pn | Pn | 14 33 37.7 | -0.9 |
| NNZ | Nelson | 3.80 | 216 | PN | Pn | 14 33 38.6 | -0.8 |
| NNZ | Nelson | 3.80 | 216 | Pn | Pn | 14 33 38.6 | -0.8 |
| CMWZ | Cape Campbell | 3.92 | 204 | AML | AML | 14 34 31.3 | |
| CMWZ | | | | AML | AML | 14 34 31.6 | |
| QRZ | Quartz Range | 3.96 | 227 | PN | Pn | 14 33 40.2 | -1.3 |
| QRZ | Quartz Range | 3.96 | 227 | Pn | Pn | 14 33 40.2 | -1.3 |
| BSWZ | Blackbirch Sta | 4.00 | 208 | PN | Pn | 14 33 41.3 | -0.7 |
| BSWZ | | | | AML | AML | 14 34 30.9 | |
| BSWZ | | | | AML | AML | 14 34 31.8 | |
| BSWZ | Blackbirch Sta | 4.00 | 208 | Pn | Pn | 14 33 41.3 | -0.7 |
| THZ | Tophouse | 4.45 | 216 | ⇓PN | Pn | 14 33 46.7 | -1.1 |
| THZ | Tophouse | 4.45 | 216 | Pn | Pn | 14 33 46.7 | -1.1 |
| KHZ | Kahutara | 4.74 | 206 | ⇑PN | Pn | 14 33 51.6 | +0.1 |
| KHZ | | | | AML | AML | 14 34 45.9 | |
| KHZ | | | | AML | AML | 14 34 46.9 | |
| KHZ | Kahutara | 4.74 | 206 | *e*Pn | Pn | 14 33 50.3 | -1.2 |
| DSZ | Denniston Nort | 4.98 | 223 | PN | Pn | 14 33 52.5 | -2.3 |
| DSZ | Denniston Nort | 4.98 | 223 | Pn | Pn | 14 33 52.5 | -2.3 |
| LTZ | Lake Taylor | 5.54 | 213 | PN | Pn | 14 34 00.1 | -2.1 |
| LTZ | Lake Taylor | 5.54 | 213 | Pn | Pn | 14 34 00.1 | -2.1 |
| CRLZ | Canterbury Las | 6.08 | 207 | PN | Pn | 14 34 06.8 | -2.3 |
| CRLZ | Canterbury Las | 6.08 | 207 | Pn | Pn | 14 34 06.8 | -2.3 |
| OXZ | Oxford | 6.09 | 211 | PN | Pn | 14 34 06.7 | -2.6 |
| OXZ | Oxford | 6.09 | 211 | Pn | Pn | 14 34 06.7 | -2.6 |
| MQZ | McQueen's Vall | 6.18 | 206 | PN | Pn | 14 34 07.7 | -2.7 |
| MQZ | McQueen's Vall | 6.18 | 206 | Pn | Pn | 14 34 07.7 | -2.7 |
| WVZ | Waitaha Valley | 6.49 | 219 | PN | Pn | 14 34 11.5 | -3.0 |
| WVZ | Waitaha Valley | 6.49 | 219 | Pn | Pn | 14 34 11.5 | -3.0 |
| RPZ | Rata Peaks | 6.82 | 214 | P | Pn | 14 34 17.1 | -1.9 |
| | 4.9nm,0.3s,baz=349,slow=1.7,SNR=38 | | | | | | |
| RPZ | | | | S | Sn | 14 35 30.0 | -6.0 |
| | 27nm,0.3s,baz=30,slow=20,SNR=24 | | | | | | |
| CTZ | Chatham Island | 7.67 | 138 | PN | Pn | 14 34 32.9 | +2.7 |
| ODZ | Otahua Downs | 8.07 | 210 | PN | Pn | 14 34 33.2 | -2.3 |
| ODZ | Otahua Downs | 8.07 | 210 | Pn | Pn | 14 34 33.2 | -2.3 |
| WKZ | Wanaka | 8.62 | 217 | PN | Pn | 14 34 40.7 | -2.0 |
| WKZ | Wanaka | 8.62 | 217 | Pn | Pn | 14 34 40.7 | -2.0 |
| MSZ | Milford Sound | 9.05 | 222 | PN | Pn | 14 34 47.7 | -0.7 |
| MSZ | Milford Sound | 9.05 | 222 | Pn | Pn | 14 34 47.7 | -0.7 |
| TUZ | Tuapeka | 9.23 | 211 | PN | Pn | 14 34 49.7 | -0.9 |
| TUZ | Tuapeka | 9.23 | 211 | Pn | Pn | 14 34 49.7 | -0.9 |
| DZM | Mont Dzumac | 18.19 | 329 | P | Pn | 14 36 42.8 | -0.5 |
| | 0.5nm,0.3s,baz=179,slow=13,SNR=5.9 | | | | | | |
| CMSA | Cobar Meteorol | 25.95 | 276 | P | P | 14 38 00.8 | +2.9 |
| | baz=25,SNR=6.6 | | | | | | |
| QLP | Quilpie | 29.35 | 284 | P | P | 14 38 30.8 | +2.5 |
| | baz=29,SNR=3.8 | | | | | | |
| CTA | Charters Tower | 31.69 | 296 | P | P | 14 38 50.5 | +1.6 |
| | baz=131,slow=11 | | | | | | |
| QIS | Mount Isa | 36.24 | 288 | P | P | 14 39 29.4 | +1.3 |
| | baz=36,SNR=5.5 | | | | | | |
| COEN | Coen | 38.02 | 300 | P | P | 14 39 44.6 | +1.5 |
| | baz=37,SNR=10 | | | | | | |
| ASAR | Alice Springs | 38.85 | 279 | P | P | 14 39 50.8 | +0.8 |
| | 6.1nm,0.7s,baz=120,slow=8.1,SNR=81 | | | | | | |
| VNDA | Vanda | 39.92 | 185 | P | P | 14 40 02.4 | +4.3 |
| | 1.5nm,0.8s,baz=13,slow=2.8,SNR=8.9 | | | | | | |
| WRAB | Tennant Creek | 40.58 | 285 | *e*P | P | 14 40 04.7 | +0.3 |
| | 3.8nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 40.58 | 285 | P | P | 14 40 04.5 | +0.2 |
| | 3.6nm,0.7s,baz=124,slow=8.4,SNR=60 | | | | | | |
| WRKA | Warakurna | 42.54 | 274 | P | P | 14 40 20.3 | +0.1 |
| | baz=42,SNR=22 | | | | | | |
| KNRA | Kununurra | 47.38 | 285 | P | P | 14 40 59.5 | +1.1 |
| | baz=47,SNR=4.1 | | | | | | |
| MEEK | Meekatharra | 49.39 | 266 | P | P | 14 41 14.1 | +0.3 |
| | baz=49,SNR=3.7 | | | | | | |
| QSPA | South Pole Qui | 51.93 | 180 | P | P | 14 41 36.3 | +3.9 |
| | 14nm,1.0s,baz=31,slow=1.5,SNR=74 | | | | | | |
| QSPA | South Pole Qui | 51.93 | 180 | *e*P | P | 14 41 36.5 | +4.1 |
| | 8.2nm,0.7s | | | | | | |
| MAW | Mawson | 63.36 | 203 | P | P | 14 42 53.9 | +2.1 |
| | 1.1nm,0.5s,baz=96,slow=9.6,SNR=4.6 | | | | | | |
| KSM | Kuching | 72.30 | 286 | *e*P | P | 14 43 48.3 | -0.2 |
| | 5.5nm,0.7s | | | | | | |
| KSRS | Korea Array | 87.53 | 323 | P | P | 14 45 10.8 | +1.2 |
| | 2.5nm,1.0s,baz=149,slow=5.3,SNR=6.2 | | | | | | |
| KSAR | Wonju Array Be | 87.54 | 323 | P | P | 14 45 10.8 | +1.2 |
| CMAR | Chiang Mai Arr | 91.77 | 292 | P | P | 14 45 29.4 | -0.4 |
| | 1.0nm,0.7s,baz=140,slow=3.3,SNR=8.4 | | | | | | |
| KBZ | Khabaz | 144.79 | 294 | PKP | PKPbc | 14 51 55.9 | -1.0 |
| | 2.5nm,0.8s,baz=90,slow=2.4,SNR=6.9 | | | | | | |
| ARCES | ARCESS Array B | 144.93 | 343 | PKP | PKPbc | 14 51 55.4 | -1.2 |
| | 7.3nm,0.9s,baz=41,slow=2.9,SNR=16 | | | | | | |
| FINES | FINESS Array B | 150.32 | 331 | PKPbc | PKPbc | 14 52 10.1 | -1.3 |
| | 1.9nm,0.7s,baz=34,slow=2.8,SNR=7.4 | | | | | | |
| FINES | | | | PKPab | PKPab | 14 52 16.1 | -2.2 |
| | 1.7nm,0.7s,baz=92,slow=4.1,SNR=6.1 | | | | | | |
| BRTR | Keskin Array B | 151.10 | 285 | PKPbc | PKPbc | 14 52 13.2 | -1.0 |
| | 1.6nm,0.9s,baz=101,slow=3.9,SNR=5.1 | | | | | | |
| AKASG | Malin Array Be | 153.65 | 309 | PKPab | PKPab | 14 52 31.6 | -1.1 |
| | 1.0nm,0.7s,baz=61,slow=3.4,SNR=4.8 | | | | | | |
| TORD | Torodi Ar. Bea | 154.61 | 192 | PKP | PKPdf | 14 52 13.0 | -0.7 |
| | 0.5nm,0.8s,baz=119,slow=1.8,SNR=3.2 | | | | | | |
| TORD | | | | PKPbc | PKiKP | 14 52 22.8 | +0.4 |
| | 0.2nm,0.4s,baz=179,slow=2.1,SNR=6.4 | | | | | | |
| TORD | | | | PKPab | PKPab | 14 52 38.0 | +0.5 |
| | 1.1nm,0.5s,baz=165,slow=2.8,SNR=9.9 | | | | | | |

**GUC 02 14:47:09.5**±0.5**, 21°.19S**×**70°.24W, h70**km±5km**, ML3.8, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB07 | IPOC Station P | 0.63 | 148 | *e*P | Pn | 14 47 24.3 | +0.3 |
| PB07 | | | | *e*S | Sn | 14 47 35.4 | +0.9 |
| PB07 | | | | AML | AML | 14 47 36.5 | |
| | comp=E,5µm,0.2s | | | | | | |
| PB01 | IPOC Station P | 0.72 | 78 | *e*P | Pn | 14 47 25.1 | +0.3 |
| PB01 | | | | *e*S | Sn | 14 47 36.7 | +0.6 |
| PB01 | | | | AML | AML | 14 47 37.8 | |
| | comp=E,7µm,0.2s | | | | | | |
| MACH | Maria Elena | 1.10 | 156 | *e*P | Pn | 14 47 30.4 | +0.8 |
| MACH | | | | *e*S | Sn | 14 47 45.9 | +1.4 |
| PB09 | IPOC Station P | 1.11 | 123 | *e*P | Pn | 14 47 31.2 | +1.5 |
| PB09 | | | | *e*S | Sn | 14 47 47.1 | +2.4 |
| PB09 | | | | AML | AML | 14 47 51.6 | |
| | comp=E,4µm,0.3s | | | | | | |
| PB04 | IPOC Station P | 1.14 | 176 | *e*P | Pn | 14 47 30.6 | +0.5 |
| PB04 | | | | *e*S | Sn | 14 47 46.3 | +0.9 |
| PB04 | | | | AML | AML | 14 47 47.5 | |
| | comp=N,2µm,0.1s | | | | | | |
| PB11 | IPOC Station P | 1.52 | 21 | *e*P | Pn | 14 47 34.4 | -0.6 |
| PB11 | | | | *e*S | Sn | 14 47 52.6 | -1.7 |
| PB06 | IPOC Station P | 1.63 | 158 | *e*P | Pn | 14 47 37.3 | +0.8 |
| PB06 | | | | *e*S | Sn | 14 47 58.0 | +1.1 |

*IDC **02** 14:54:03.6±0.8, 4°.23S×76°.14W, h109km±6km, mb4.2/14, mb1 4.3/18, mb1mx4.2/27, mbtmp4.5/18, MS3.3/5, Ms1 3.3/5, ms1mx3.0/23, Error ellipse: s-maj=21.8km s-min=12.1km az=47.0*

*ISCJB **02** 14:54:04.2±1.1, 4°.26S±0°.06×76°.07W±0°.05, h129km±9km, mb4.6/69, Error ellipse: s-maj=11.0km s-min=5.2km az=39.2*

*NEIC **02** 14:54:04.6±0.3, 4°.23S×76°.12W, mb4.8/55, Error ellipse: s-maj=10.2km s-min=5.4km az=51.0*

*BJI **02** 14:54:06.9, 4°.40S×76°.20W, h124km, mB5.1/3*

**ISC 02 14:54:04.0**±0.5**, 4°.37S**±0°.06×**76°.14W**±0°.08**, h116**km±4km**, h117km:pP-P, n386, σ0s.83**/405**, mb4.9**/68**, 1C, Northern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OTAV | Otavalo | 5.13 | 333 | *e*Pn | Pn | 14 55 17.9 | -1.1 |
| OTAV | | | | *e*Sn | Sn | 14 56 15.7 | -1.7 |
| ROSC | El Rosal | 9.34 | 11 | P | Pn | 14 56 14.6 | -1.4 |
| | 1.2nm,0.3s,baz=130,slow=8.7,SNR=7.1 | | | | | | |
| ROSC | | | | S | Sn | 14 58 08.8 | +9.2 |
| | baz=73,slow=19,SNR=1.4 | | | | | | |
| ROSC | | | | LR | LR | 15 00 49.6 | |
| | comp=Z,79nm,20.8s,baz=234,slow=44 | | | | | | |
| ROSC | El Rosal | 9.34 | 11 | *e*Pn | Pn | 14 56 17.6 | +1.5 |
| ROSC | | | | S | Sn | 14 58 08.8 | +9.2 |
| SAML | Samuel | 13.64 | 110 | *e*Pn | Pn | 14 57 09.6 | -3.2 |
| SAML | | | | *e*Sn | Sn | 14 59 42.5 | -0.9 |
| BCIP | Isla Barro Col | 13.94 | 345 | *e*Pn | Pn | 14 57 13.3 | -3.4 |
| | 16nm,0.6s | | | | | | |
| LPAZ | La Paz | 14.22 | 147 | P | P | 14 57 23.4 | -1.2 |
| | 1.0nm,0.3s,baz=354,slow=7.8,SNR=16 | | | | | | |
| LPAZ | | | | S | S | 15 00 10.3 | -0.4 |
| | 0.3nm,0.3s,baz=196,slow=20,SNR=1.9 | | | | | | |
| SDV | Santo Domingo | 14.27 | 23 | Pn | Pn | 14 57 18.9 | -2.1 |
| PTGA | Pitinga | 16.55 | 78 | P | Pn | 14 57 48.9 | -0.5 |
| | 4.3nm,0.3s,baz=254,slow=14,SNR=20 | | | | | | |
| PTGA | | | | S | Sn | 15 00 45.0 | -8.6 |
| | 2.6nm,0.3s,baz=336,slow=20,SNR=4.4 | | | | | | |
| PCRV | Puerto La Cruz | 18.44 | 38 | P | Pn | 14 58 14.5 | +2.4 |
| | 2.4nm,0.3s,baz=310,slow=4.6,SNR=5.9 | | | | | | |
| LVC | Limon Verde | 19.44 | 160 | P | Pn | 14 58 24.0 | -0.1 |
| | 55nm,0.3s,baz=321,slow=6.2,SNR=10 | | | | | | |
| LVC | | | | S | Sn | 15 02 01.9 | -1.1 |
| | 13nm,0.3s,baz=294,slow=20,SNR=3.4 | | | | | | |
| LVC | Limon Verde | 19.44 | 160 | P | Pn | 14 58 24.0 | -0.1 |
| | 6.3nm,0.6s | | | | | | |
| LVC | | | | S | Sn | 15 02 01.9 | -1.1 |
| GTBY | Guantanamo Bay | 24.16 | 2 | *e*P | P | 14 59 09.1 | -0.5 |
| | 70nm,0.9s | | | | | | |
| SJG | San Juan | 24.41 | 24 | P | P | 14 59 11.9 | +0.1 |
| | 39nm,0.6s,baz=186,slow=7.1,SNR=19 | | | | | | |
| SJG | San Juan | 24.41 | 24 | *e*P | P | 14 59 10.9 | -0.9 |
| | 36nm,0.6s | | | | | | |
| CMIG | Matias Romero | 28.24 | 319 | P | P | 14 59 46.1 | -0.2 |
| | 3.2nm,0.8s,baz=19,slow=19,SNR=3.6 | | | | | | |
| CPUP | Villa Florida | 28.30 | 142 | P | P | 14 59 48.2 | +1.5 |
| | 2.5nm,0.9s,baz=307,slow=10,SNR=4.1 | | | | | | |
| CPUP | | | | LR | LR | 15 13 32.7 | |
| | comp=Z,35nm,18.9s,baz=358,slow=41 | | | | | | |
| BDFB | Brasilia | 29.83 | 114 | P | P | 15 00 01.1 | +0.6 |
| | 1.0nm,0.4s,baz=278,slow=14,SNR=4.5 | | | | | | |
| 034A | Hebbronville | 38.10 | 326 | P | P | 15 01 12.0 | +0.2 |
| | baz=38 | | | | | | |
| 934A | Benavides | 38.43 | 327 | P | P | 15 01 14.6 | +0.1 |
| | baz=38 | | | | | | |
| 933A | Laredo | 38.85 | 326 | P | P | 15 01 18.4 | +0.4 |
| | baz=39 | | | | | | |
| 636A | Smothers Creek | 39.19 | 330 | P | P | 15 01 21.0 | +0.2 |
| | baz=39 | | | | | | |
| 439A | Center Grove, | 39.23 | 334 | P | P | 15 01 21.4 | +0.3 |
| | baz=39 | | | | | | |
| 734A | La Parita Cree | 39.44 | 328 | P | P | 15 01 22.9 | 0.0 |
| | baz=40 | | | | | | |
| 535A | Dale | 39.89 | 330 | P | P | 15 01 27.1 | +0.5 |
| | baz=40 | | | | | | |
| 338A | Crockett | 39.96 | 334 | P | P | 15 01 27.4 | +0.2 |
| | baz=40 | | | | | | |
| 732A | Laxson Ranch, | 40.10 | 327 | P | P | 15 01 28.5 | +0.1 |
| | baz=40 | | | | | | |
| 239A | Gary | 40.17 | 336 | P | P | 15 01 29.3 | +0.4 |
| | baz=40 | | | | | | |
| 633A | Saathoff Ranch | 40.25 | 328 | P | P | 15 01 30.2 | +0.6 |
| | baz=40,SNR=5.4 | | | | | | |
| 534A | Blanco | 40.34 | 329 | P | P | 15 01 30.7 | +0.3 |
| | baz=40,SNR=8.0 | | | | | | |
| 632A | Uvalde | 40.61 | 328 | P | P | 15 01 32.9 | +0.3 |
| | baz=41,SNR=9.2 | | | | | | |
| 533A | Kerrville | 40.66 | 329 | P | P | 15 01 33.5 | +0.5 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | baz=41,SNR=8.6 |
| 336A | Riesel | 40.67 | 332 | P | P | 15 01 33.4 | +0.4 | baz=41 |
| 237A | Washetta, Mont | 40.73 | 334 | P | P | 15 01 34.1 | +0.7 | baz=41 |
| 335A | Moody | 40.86 | 332 | P | P | 15 01 35.1 | +0.6 | baz=41 |
| 434A | Burnet | 40.88 | 330 | P | P | 15 01 35.0 | +0.2 | baz=41,SNR=14 |
| 631A | Perdido Creek | 40.97 | 327 | P | P | 15 01 35.9 | +0.4 | baz=41,SNR=7.7 |
| 138A | Matatall Enter | 40.99 | 335 | P | P | 15 01 36.4 | +0.8 | baz=41 |
| 236A | Katherine and | 41.04 | 333 | P | P | 15 01 36.6 | +0.6 | baz=41 |
| 532A | Rocksprings | 41.16 | 328 | P | P | 15 01 37.7 | +0.6 | baz=41,SNR=20 |
| 137A | Heron Place, G | 41.21 | 335 | P | P | 15 01 38.1 | +0.7 | baz=41 |
| 433A | Art | 41.24 | 329 | P | P | 15 01 38.2 | +0.5 | baz=41,SNR=30 |
| 334A | Lometa | 41.29 | 331 | P | P | 15 01 38.4 | +0.3 | baz=41,SNR=20 |
| JCT | Junction City | 41.39 | 328 | P | P | 15 01 39.3 | +0.3 | baz=41 |
| 136A | Ennis | 41.45 | 334 | P | P | 15 01 40.0 | +0.7 | baz=42 |
| Z38A | Mt. Pleasant | 41.45 | 336 | P | P | 15 01 39.9 | +0.5 | baz=42 |
| WHTX | Lake Whitney | 41.46 | 332 | P | P | 15 01 40.2 | +0.7 | baz=42 |
| WHTX | Lake Whitney | 41.46 | 332 | *e*P | P | 15 01 38.9 | -0.5 | 47nm,1.3s |
| 531A | Rocksprings | 41.53 | 327 | P | P | 15 01 41.2 | +1.0 | baz=42,SNR=7.2 |
| 333A | Richland Sprin | 41.65 | 330 | P | P | 15 01 41.4 | +0.3 | baz=42,SNR=9.5 |
| 432A | Menard | 41.70 | 329 | P | P | 15 01 41.9 | +0.4 | baz=42,SNR=5.1 |
| Y39A | Lockesburg | 41.71 | 337 | P | P | 15 01 41.9 | +0.4 | baz=42 |
| WVT | Waverly | 41.75 | 346 | *e*P | P | 15 01 38.2 | -3.6 | 7.3nm,0.9s |
| 234A | Clairette | 41.79 | 331 | P | P | 15 01 42.6 | +0.4 | baz=42 |
| UALR | University of | 41.82 | 340 | *e*P | P | 15 01 41.2 | -1.2 | 13nm,0.9s |
| 530A | J-C Ranch, Com | 41.95 | 327 | P | P | 15 01 44.2 | +0.6 | baz=42,SNR=6.4 |
| 431A | Sonora | 41.97 | 328 | P | P | 15 01 44.4 | +0.6 | baz=42,SNR=5.9 |
| 332A | Millersview | 42.08 | 329 | P | P | 15 01 45.2 | +0.6 | baz=42 |
| 233A | Rising Star | 42.17 | 331 | P | P | 15 01 45.8 | +0.5 | baz=42,SNR=7.3 |
| 134A | White-Moore Ra | 42.23 | 332 | P | P | 15 01 46.5 | +0.7 | baz=42 |
| Y37A | Hugo | 42.35 | 336 | P | P | 15 01 47.4 | +0.7 | baz=42,SNR=6.1 |
| 331A | San Angelo | 42.37 | 329 | P | P | 15 01 47.1 | +0.2 | baz=42 |
| 430A | Baggett Ranch, | 42.39 | 327 | P | P | 15 01 47.4 | +0.3 | baz=42 |
| 529A | Stev Forest Ra | 42.43 | 326 | P | P | 15 01 47.7 | +0.3 | baz=42 |
| 232A | Coleman | 42.44 | 330 | P | P | 15 01 47.8 | +0.3 | baz=42 |
| Z35A | Perchaven, San | 42.49 | 333 | P | P | 15 01 48.5 | +0.6 | baz=42 |
| 429A | Davenport Ranc | 42.63 | 326 | P | P | 15 01 49.6 | +0.5 | baz=43,SNR=7.0 |
| X38A | Whitesboro | 42.64 | 337 | P | P | 15 01 49.9 | +0.9 | baz=43 |
| 133A | Hamilton Ranch | 42.66 | 331 | P | P | 15 01 50.2 | +0.9 | baz=43,SNR=15 |
| TXAR | Lajitas Array | 42.67 | 323 | P | P | 15 01 49.5 | 0.0 | 2.5nm,0.9s,baz=148,slow=8.2,SNR=21 |
| TXAR | | | | pP | pP | 15 02 14.0 | -2.1 | 0.8nm,0.8s,baz=143,slow=9.5,SNR=3.3 |
| TXAR | | | | PcP | PcP | 15 03 39.5 | +0.1 | 1.5nm,0.8s,baz=147,slow=5.3,SNR=7.9 |
| 231A | Bronte | 42.81 | 329 | P | P | 15 01 50.8 | +0.3 | baz=43 |
| Z34A | Collier Ranch, | 42.83 | 333 | P | P | 15 01 51.2 | +0.6 | baz=43 |
| 330A | Mertzon | 42.84 | 328 | P | P | 15 01 51.0 | +0.2 | baz=43 |
| W38A | Poteau | 42.87 | 338 | P | P | 15 01 51.4 | +0.5 | baz=43 |
| Y35A | Marietta | 42.88 | 334 | P | P | 15 01 51.9 | +0.9 | baz=43,SNR=9.9 |
| ABTX | Abilene, Hawle | 43.03 | 330 | P | P | 15 01 52.9 | +0.7 | baz=43,SNR=7.1 |
| ABTX | Abilene, Hawle | 43.03 | 330 | *e*P | P | 15 01 52.9 | +0.7 | 28nm,0.9s |
| Z33A | Whitaker Ranch | 43.15 | 332 | P | P | 15 01 53.9 | +0.8 | baz=43,SNR=9.6 |
| X36A | Centrahoma | 43.16 | 335 | P | P | 15 01 53.5 | +0.3 | baz=43 |
| 230A | Sterling City | 43.19 | 328 | P | P | 15 01 53.7 | +0.1 | baz=43,SNR=6.4 |
| Y34A | Reagan Ranch, | 43.25 | 333 | P | P | 15 01 54.5 | +0.6 | baz=43,SNR=5.8 |
| X35A | Drake | 43.28 | 335 | P | P | 15 01 54.8 | +0.6 | baz=43 |
| W37A | Quinton | 43.28 | 337 | P | P | 15 01 54.7 | +0.5 | baz=43 |
| 329A | Wagon Wheel Ra | 43.34 | 327 | P | P | 15 01 55.3 | +0.5 | baz=43 |
| 131A | Roby | 43.44 | 330 | P | P | 15 01 56.0 | +0.4 | baz=44,SNR=5.2 |
| Z32A | Haskell | 43.50 | 331 | P | P | 15 01 56.7 | +0.6 | baz=44,SNR=9.5 |
| V38A | Canehill | 43.53 | 338 | P | P | 15 01 54.7 | -1.5 | baz=44 |
| W36A | Wetumka | 43.60 | 336 | P | P | 15 01 56.8 | 0.0 | baz=44,SNR=6.8 |
| 130A | Snyder | 43.67 | 329 | P | P | 15 01 57.6 | +0.2 | baz=44,SNR=9.0 |
| Y33A | Hilltop Ranch, | 43.68 | 333 | P | P | 15 01 58.0 | +0.5 | baz=44 |
| X34A | Smith Ranch, M | 43.82 | 334 | P | P | 15 01 58.8 | +0.3 | baz=44,SNR=7.7 |
| V37A | Hulbert | 43.83 | 338 | P | P | 15 01 58.6 | +0.1 | baz=44 |
| Z31A | Sharp Cattle R | 43.84 | 331 | P | P | 15 01 59.0 | +0.3 | baz=44,SNR=12 |
| W35A | Tecumseh | 43.88 | 335 | P | P | 15 01 58.8 | -0.2 | baz=44,SNR=7.1 |
| V36A | Jenks | 44.05 | 337 | P | P | 15 02 00.3 | -0.1 | baz=44 |
| Y32A | R-V Farms, Ver | 44.06 | 332 | P | P | 15 02 00.6 | +0.2 | baz=44 |
| X33A | Lawton | 44.07 | 333 | P | P | 15 02 00.8 | +0.3 | baz=44,SNR=6.6 |
| TUL1 | Tulsa | 44.10 | 337 | P | P | 15 02 01.4 | +0.7 | baz=44 |
| 228A | UT Block 9, Go | 44.15 | 327 | P | P | 15 02 01.2 | -0.1 | baz=44 |
| 129A | Stewart Farms, | 44.16 | 328 | P | P | 15 02 01.5 | +0.1 | baz=44 |
| U37A | Salina | 44.28 | 338 | P | P | 15 02 02.1 | 0.0 | baz=44 |
| Z30A | Sanderson Ranc | 44.30 | 330 | P | P | 15 02 02.7 | +0.2 | baz=44,SNR=14 |
| X32A | Elmer | 44.33 | 332 | P | P | 15 02 03.0 | +0.4 | baz=44 |
| W34A | Bridge Creek, | 44.33 | 334 | P | P | 15 02 03.1 | +0.4 | baz=44 |
| WMOK | Wichita Mounta | 44.36 | 333 | *e*P | P | 15 02 02.4 | -0.4 | 74nm,1.7s |
| BLO | Bloomington | 44.37 | 348 | *e*P | P | 15 02 01.6 | -1.3 | 25nm,0.8s |
| V35A | Meyer Ranch, C | 44.39 | 336 | P | P | 15 02 02.9 | -0.2 | baz=44 |
| Y31A | Rekieta Farm, | 44.41 | 331 | P | P | 15 02 04.1 | +0.8 | baz=44,SNR=8.7 |
| 128A | Castleberry Fa | 44.48 | 328 | P | P | 15 02 04.2 | +0.3 | baz=44 |
| W33A | Caddo, Fort Co | 44.57 | 334 | P | P | 15 02 05.5 | +1.0 | baz=45,SNR=5.1 |
| Z29A | Hungry Hill Ra | 44.57 | 329 | P | P | 15 02 05.3 | +0.6 | baz=45,SNR=6.5 |
| Y30A | Stafford Cattl | 44.66 | 330 | P | P | 15 02 06.3 | +1.0 | baz=45,SNR=18 |
| V34A | Guthrie | 44.73 | 335 | *e*P | P | 15 02 05.2 | -0.6 | 29nm,1.2s |
| X31A | McDonald Ranch | 44.82 | 332 | P | P | 15 02 07.5 | +0.9 | baz=45,SNR=13 |
| T37A | Cheneyville 18 | 44.84 | 339 | P | P | 15 02 06.8 | +0.2 | baz=45 |
| U35A | Pawnee | 44.87 | 336 | P | P | 15 02 07.1 | +0.2 | baz=45 |
| W32A | Sentinel | 44.89 | 333 | P | P | 15 02 07.2 | +0.1 | baz=45,SNR=11 |
| Z28A | Tucker Farm, M | 44.95 | 328 | P | P | 15 02 07.2 | -0.5 | baz=45 |
| Y29A | Porterfield Fa | 45.03 | 330 | P | P | 15 02 08.6 | +0.3 | baz=45,SNR=6.2 |
| V33A | Lossen Ranch, | 45.05 | 334 | P | P | 15 02 08.2 | -0.2 | baz=45 |
| X30A | Coker Ranch, T | 45.10 | 331 | P | P | 15 02 09.1 | +0.3 | baz=45 |
| T36A | Boggs Farm, Ca | 45.14 | 338 | P | P | 15 02 09.0 | 0.0 | baz=45 |
| U34A | Anderson Ranch | 45.26 | 336 | P | P | 15 02 09.7 | -0.2 | baz=45 |
| W31A | Holland Ranch, | 45.26 | 332 | P | P | 15 02 10.1 | 0.0 | baz=45 |
| V32A | Arapaho | 45.30 | 334 | P | P | 15 02 10.4 | +0.1 | baz=45 |
| Y28A | McKinney Farm, | 45.36 | 329 | P | P | 15 02 11.2 | +0.3 | baz=45 |
| S37A | Fort Scott | 45.37 | 339 | P | P | 15 02 10.2 | -0.6 | baz=45 |
| MNTX | Cornudas Mount | 45.41 | 324 | P | P | 15 02 11.3 | +0.1 | baz=46,SNR=10 |
| MNTX | Cornudas Mount | 45.41 | 324 | P | P | 15 02 11.0 | -0.2 | 2.3nm,0.8s |
| U33A | Lingo Farm, Me | 45.49 | 335 | P | P | 15 02 12.0 | +0.2 | baz=46 |
| X29A | Tulia | 45.51 | 330 | P | P | 15 02 12.1 | 0.0 | baz=46,SNR=7.5 |
| T34A | McClaskey Farm | 45.62 | 336 | P | P | 15 02 13.0 | +0.2 | baz=46 |
| MSTX | Muleshoe | 45.68 | 329 | P | P | 15 02 13.7 | +0.3 | baz=46,SNR=6.6 |
| MSTX | Muleshoe | 45.68 | 329 | *e*P | P | 15 02 13.3 | -0.1 | 86nm,1.9s |
| AMTX | Amarillo | 45.85 | 330 | P | P | 15 02 14.9 | +0.2 | baz=46 |
| AMTX | Amarillo | 45.85 | 330 | *e*P | P | 15 02 12.7 | -2.0 | 20nm,0.8s |
| AMTX | | | | *e*pP | pP | 15 02 40.3 | -1.3 | |
| W29A | Amraillo | 46.02 | 331 | P | P | 15 02 16.7 | +0.7 | baz=46 |
| T33A | Patterson Ranc | 46.10 | 335 | P | P | 15 02 16.8 | +0.2 | baz=46 |
| BINY | Binghamton | 46.35 | 0 | *e*P | P | 15 02 18.1 | -0.3 | 595nm,2.5s |
| W28A | Vega | 46.41 | 330 | P | P | 15 02 19.3 | +0.2 | baz=46 |
| S33A | Kaszmaul Farm, | 46.44 | 336 | P | P | 15 02 19.4 | +0.2 | baz=46 |
| T32A | Huddler Ranch, | 46.47 | 335 | P | P | 15 02 20.0 | +0.5 | baz=46 |
| V29A | Stinnett | 46.57 | 331 | P | P | 15 02 20.7 | +0.3 | baz=47 |
| U30A | WK&E Inc. Balk | 46.69 | 333 | P | P | 15 02 21.9 | +0.6 | baz=47 |
| T31A | Randall Ranch, | 46.73 | 334 | P | P | 15 02 22.1 | +0.6 | baz=47 |
| R34A | Isabella, Hill | 46.75 | 337 | P | P | 15 02 21.7 | +0.1 | baz=47 |
| Q35A | Mercer Eighty, | 46.78 | 339 | P | P | 15 02 22.7 | +0.8 | baz=47 |
| V28A | Channing | 46.81 | 331 | P | P | 15 02 23.2 | +1.0 | baz=47 |
| U29A | Oasis Ranch, S | 46.92 | 332 | P | P | 15 02 23.5 | +0.5 | baz=47 |
| S32A | Newby Ranch, P | 46.92 | 335 | P | P | 15 02 23.8 | +0.8 | baz=47 |
| T30A | Plains | 47.07 | 333 | P | P | 15 02 24.7 | +0.6 | baz=47 |
| S31A | Mullinville | 47.08 | 335 | P | P | 15 02 25.0 | +0.8 | baz=47 |
| V27A | Dan Oppiter Fa | 47.12 | 330 | P | P | 15 02 24.7 | +0.1 | baz=47 |
| Q34A | Chapman | 47.17 | 338 | P | P | 15 02 25.4 | +0.5 | baz=47 |
| KSU1 | Kansas State U | 47.21 | 338 | P | P | 15 02 25.8 | +0.7 | baz=47 |
| 121A | Cookes Peak, D | 47.43 | 323 | P | P | 15 02 26.9 | -0.2 | baz=48,SNR=7.0 |
| 121A | Cookes Peak, D | 47.43 | 323 | *e*P | P | 15 02 26.6 | -0.6 | 6.9nm,0.9s |
| R32A | Long Quarter, | 47.44 | 336 | P | P | 15 02 27.3 | +0.3 | baz=48 |
| T29A | Hugoton | 47.50 | 333 | P | P | 15 02 27.9 | +0.4 | baz=48 |
| Q33A | Connelly Farm, | 47.58 | 337 | P | P | 15 02 28.0 | -0.1 | baz=48 |
| U27A | Thompson Grove | 47.63 | 331 | P | P | 15 02 29.2 | +0.5 | baz=48 |
| R31A | Burdett | 47.66 | 335 | P | P | 15 02 29.1 | +0.4 | baz=48 |
| P34A | Walnut Farm, R | 47.68 | 338 | P | P | 15 02 28.6 | -0.2 | baz=48 |
| S29A | Ulysses | 47.80 | 333 | P | P | 15 02 30.8 | +1.0 | baz=48,SNR=5.2 |
| T28A | Walsh | 47.85 | 332 | P | P | 15 02 30.7 | +0.4 | baz=48 |
| Q32A | Meitler Ranch, | 47.86 | 336 | P | P | 15 02 30.8 | +0.5 | baz=48 |
| P33A | Williams Farm, | 47.91 | 337 | P | P | 15 02 31.2 | +0.6 | baz=48 |
| R30A | Dighton | 47.98 | 334 | P | P | 15 02 32.0 | +0.8 | baz=48 |
| T27A | Campo | 48.09 | 331 | P | P | 15 02 32.4 | +0.2 | baz=48,SNR=8.2 |
| S28A | Manter | 48.13 | 332 | P | P | 15 02 33.2 | +0.7 | baz=48,SNR=5.6 |
| CBKS | Cedar Bluff | 48.19 | 335 | P | P | 15 02 33.7 | +0.9 | baz=48 |
| LAZ | Ladron | 48.38 | 325 | *e*P | P | 15 02 35.4 | +0.8 | 4.6nm,1.3s |
| ANMO | Albuquerque | 48.40 | 326 | *e*P | P | 15 02 34.6 | 0.0 | 12nm,0.8s |
| O33A | Hebron | 48.42 | 338 | P | P | 15 02 34.7 | +0.1 | baz=48 |
| R29A | Marienthal | 48.47 | 334 | P | P | 15 02 35.4 | +0.4 | baz=48 |
| Q30A | Quinter | 48.53 | 335 | P | P | 15 02 36.0 | +0.6 | baz=49 |
| T26A | Comanche Natio | 48.61 | 331 | P | P | 15 02 36.5 | +0.2 | baz=49 |
| S27A | Las Animas | 48.68 | 332 | P | P | 15 02 36.7 | +0.1 | baz=49 |
| R28A | Tribune | 48.70 | 333 | P | P | 15 02 37.4 | +0.6 | baz=49,SNR=5.5 |
| S26A | Kim | 48.90 | 331 | P | P | 15 02 38.9 | +0.5 | baz=49,SNR=14 |
| T25A | Trinidad | 48.98 | 330 | P | P | 15 02 39.9 | +0.8 | baz=49,SNR=14 |
| R27A | Eads | 49.11 | 332 | P | P | 15 02 40.2 | +0.3 | baz=49,SNR=6.3 |
| TUC | Tucson | 49.13 | 320 | *e*P | P | 15 02 38.8 | -1.4 | 6.0nm,1.1s |
| TUC | | | | *e*pP | pP | 15 03 06.2 | -1.2 | |
| R26A | Arlington | 49.43 | 332 | P | P | 15 02 42.8 | +0.4 | baz=50,SNR=8.6 |
| N31A | Bailey Ranch, | 49.59 | 337 | P | P | 15 02 44.0 | +0.5 | baz=50 |
| KSCO | Kaye Shedlock' | 49.62 | 333 | P | P | 15 02 44.3 | +0.5 | baz=50 |
| P28A | Saint Francis | 49.69 | 334 | P | P | 15 02 44.9 | +0.6 | baz=50 |
| O29A | 4D Ranch, Culb | 49.74 | 335 | P | P | 15 02 45.3 | +0.7 | baz=50 |
| BGNE | Belgrade | 49.80 | 338 | P | P | 15 02 45.4 | +0.4 | baz=50 |
| Q26A | Hugo | 49.96 | 332 | P | P | 15 02 46.8 | +0.4 | baz=50 |
| SDCO | Great Sand Dun | 50.00 | 330 | P | P | 15 02 47.2 | +0.3 | baz=50,SNR=23 |
| SDCO | Great Sand Dun | 50.00 | 330 | *e*P | P | 15 02 46.3 | -0.6 | 25nm,1.3s |
| SDCO | | | | *e*pP | pP | 15 03 15.7 | +1.4 | |
| P27A | Ficken Ranch, | 50.04 | 333 | P | P | 15 02 47.5 | +0.5 | baz=50 |
| O28A | Krutsinger Ran | 50.16 | 334 | P | P | 15 02 48.7 | +0.9 | baz=50 |
| N29A | Votaw Ranch, W | 50.25 | 336 | P | P | 15 02 48.9 | +0.4 | baz=50 |
| W18A | Petrified Fore | 50.39 | 324 | P | P | 15 02 50.1 | +0.3 | baz=50 |
| N28A | Pribbeno Ranch | 50.52 | 335 | P | P | 15 02 51.3 | +0.8 | baz=51 |
| S22A | 4UR Ranch, Cre | 50.68 | 328 | P | P | 15 02 52.5 | +0.5 | baz=51,SNR=13 |
| L31A | Butterfield Fa | 50.72 | 338 | P | P | 15 02 52.8 | +0.8 | baz=51 |
| Q24A | Divide | 50.77 | 331 | P | P | 15 02 52.8 | +0.1 | baz=51 |
| M29A | Burnside Ranch | 50.80 | 336 | P | P | 15 02 53.2 | +0.5 | baz=51 |
| OGNE | Ogallala | 50.94 | 335 | P | P | 15 02 54.5 | +0.8 | baz=51 |
| M28A | Bar X Bar Ranc | 51.04 | 336 | P | P | 15 02 55.1 | +0.7 | baz=51 |
| N27A | Anderson Farm, | 51.04 | 334 | P | P | 15 02 55.5 | +1.0 | baz=51 |
| MVCO | Mesa Verde | 51.18 | 327 | P | P | 15 02 56.1 | +0.3 | baz=51 |
| L29A | Maesberg Ranch | 51.24 | 337 | P | P | 15 02 56.5 | +0.6 | baz=51 |
| K30A | Basset | 51.44 | 338 | P | P | 15 02 58.0 | +0.7 | baz=52 |
| M27A | Reverse DX Ran | 51.58 | 335 | P | P | 15 02 58.9 | +0.5 | baz=52 |
| L28A | Connealy Angus | 51.61 | 336 | P | P | 15 02 59.5 | +0.8 | baz=52 |
| WUAZ | Wupatki | 51.64 | 323 | P | P | 15 02 59.6 | +0.5 | baz=52,SNR=7.0 |
| WUAZ | Wupatki | 51.64 | 323 | P | P | 15 02 56.5 | -2.6 | 16nm,1.1s |
| WUAZ | | | | *e*pP | pP | 15 03 27.8 | +1.2 | |
| ISCO | Idaho Springs | 51.65 | 331 | P | P | 15 02 59.9 | +0.7 | baz=52,SNR=7.1 |
| ISCO | Idaho Springs | 51.65 | 331 | *e*P | P | 15 02 59.0 | -0.3 | 19nm,1.6s |
| M26A | McRoberts Ranc | 51.85 | 334 | P | P | 15 03 01.3 | +0.8 | baz=52 |
| I32A | Karley and Nic | 51.86 | 341 | P | P | 15 03 01.5 | +1.1 | baz=52 |
| PV01 | Paradox Valley | 51.89 | 327 | *e*P | P | 15 03 00.9 | -0.2 | 2µm,0.9s |
| J30A | Dallas | 51.95 | 338 | P | P | 15 03 01.6 | +0.5 | baz=52 |
| K28A | Ten Mile Ranch | 52.15 | 337 | P | P | 15 03 03.3 | +0.7 | baz=52 |
| M25A | Palm-Egli Farm | 52.22 | 334 | P | P | 15 03 04.0 | +0.7 | baz=52 |
| GLA | Glamis | 52.22 | 318 | P | P | 15 03 03.8 | +0.4 | baz=52 |
| PV04 | Paradox Valley | 52.26 | 327 | *e*P | P | 15 03 04.5 | +0.9 | |
| J28A | Allard Ranch, | 52.69 | 337 | P | P | 15 03 07.1 | +0.5 | baz=53 |
| SUSD | South Dakota S | 52.73 | 340 | P | P | 15 03 06.6 | -0.2 | baz=53 |
| J27A | Elkhorn Farm, | 52.85 | 336 | P | P | 15 03 08.5 | +0.6 | baz=53 |
| K26A | Motz Farm, Whi | 52.87 | 335 | P | P | 15 03 09.0 | +0.9 | baz=53 |
| IRM | Iron Mountain | 53.12 | 319 | P | P | 15 03 10.1 | +0.2 | baz=53 |
| I28A | Midland | 53.16 | 338 | P | P | 15 03 10.0 | 0.0 | baz=53,SNR=7.6 |
| MONP | Monument Peak | 53.19 | 317 | P | P | 15 03 10.2 | -0.5 | baz=53 |
| O20A | White River Ci | 53.20 | 329 | P | P | 15 03 11.2 | +0.6 | baz=53 |
| O20A | White River Ci | 53.20 | 329 | *e*P | P | 15 03 09.8 | -0.8 | 13nm,1.2s |
| J26A | Sides Ranch, S | 53.34 | 336 | P | P | 15 03 12.4 | +1.1 | baz=53,SNR=5.4 |
| I27A | Quinn | 53.56 | 337 | P | P | 15 03 13.3 | +0.3 | baz=54 |
| BELC | Belle Mtn. Jos | 53.58 | 319 | P | P | 15 03 13.5 | +0.2 | baz=54 |
| SRU | San Rafael | 53.65 | 327 | *e*P | P | 15 03 14.3 | +0.4 | 12nm,0.9s |
| H28A | Mission Ridge | 53.68 | 338 | P | P | 15 03 13.8 | 0.0 | baz=54 |
| J25A | Sunshine Ranch | 53.70 | 335 | P | P | 15 03 14.1 | 0.0 | baz=54 |
| G29A | Hoven | 53.72 | 339 | P | P | 15 03 13.9 | -0.2 | baz=54 |
| C37A | Embarrass | 53.76 | 347 | P | P | 15 03 13.4 | -0.9 | baz=54 |
| EYMN | Ely | 53.81 | 347 | P | P | 15 03 15.3 | +0.7 | baz=54 |
| I26A | New Underwood | 53.84 | 336 | P | P | 15 03 15.4 | +0.4 | baz=54 |
| P18A | Preston Nutter | 53.88 | 328 | *e*P | P | 15 03 14.6 | -1.1 | 7.7nm,0.9s |
| D34A | Park Rapids | 53.93 | 344 | P | P | 15 03 16.0 | +0.5 | baz=54 |
| C36A | Pine Crest Far | 53.94 | 346 | P | P | 15 03 16.2 | +0.6 | baz=54 |
| F30A | Leola | 53.98 | 340 | P | P | 15 03 16.3 | +0.4 | baz=54 |
| G28A | Parade | 53.98 | 338 | P | P | 15 03 16.0 | +0.1 | baz=54,SNR=5.3 |
| P17A | Butcher Ranch, | 54.03 | 327 | *e*P | P | 15 03 15.1 | -1.5 | 17nm,0.9s |
| H27A | Howes | 54.04 | 337 | P | P | 15 03 16.8 | +0.3 | baz=54 |
| I25A | Rochford | 54.19 | 336 | P | P | 15 03 18.3 | +0.6 | baz=54,SNR=12 |
| F29A | Eureka | 54.25 | 340 | P | P | 15 03 18.6 | +0.7 | baz=54 |
| HEC | Hector,Ludlow | 54.30 | 319 | P | P | 15 03 18.6 | +0.1 | baz=54 |
| K22A | Casper | 54.30 | 333 | P | P | 15 03 19.3 | +0.8 | baz=54 |
| RSSD | Black Hills | 54.40 | 336 | P | P | 15 03 15.7 | -3.5 | 11nm,1.1s |
| TUQ | Turquoise Moun | 54.41 | 320 | P | P | 15 03 19.4 | 0.0 | baz=54 |
| E30A | Jud | 54.52 | 341 | P | P | 15 03 20.2 | +0.4 | baz=55 |
| SHPR | Sheep Range | 54.60 | 322 | *e*P | P | 15 03 21.3 | +0.5 | 9.1nm,1.3s |
| F28A | McLaughlin | 54.60 | 339 | P | P | 15 03 20.3 | -0.1 | baz=55 |
| G27A | Dupree | 54.61 | 338 | P | P | 15 03 20.6 | 0.0 | baz=55 |
| D31A | Mcclaflin, Tow | 54.63 | 342 | P | P | 15 03 20.8 | +0.2 | baz=55 |
| G26A | Maurine | 54.80 | 337 | P | P | 15 03 21.7 | -0.2 | baz=55 |
| BFSC | Mount Baldy Ra | 54.82 | 318 | P | P | 15 03 22.0 | -0.4 | baz=55 |
| E29A | Napoleon | 54.82 | 340 | P | P | 15 03 22.0 | 0.0 | baz=55 |
| GSC | Goldstone | 54.89 | 319 | P | P | 15 03 22.4 | -0.5 | baz=55 |
| O16A | Springville | 54.96 | 327 | *e*P | P | 15 03 16.1 | -7.3 | 15nm,1.3s |
| F27A | Lemmon | 55.07 | 338 | P | P | 15 03 24.0 | +0.2 | baz=55 |
| NLU | North Lily Min | 55.10 | 327 | *e*P | P | 15 03 25.0 | +0.6 | 5.3nm,1.1s |
| AGMN | Agassiz Nation | 55.22 | 344 | P | P | 15 03 24.3 | -0.5 | baz=55,SNR=5.9 |
| AGMN | Agassiz Nation | 55.22 | 344 | *e*P | P | 15 03 22.9 | -1.9 | 13nm,0.8s |
| F26A | Lodgepole | 55.29 | 338 | P | P | 15 03 25.6 | +0.1 | baz=55 |
| E27A | Carson | 55.37 | 339 | P | P | 15 03 26.3 | +0.3 | baz=55 |
| EDW2 | Edwards Air Fo | 55.42 | 318 | P | P | 15 03 26.4 | -0.2 | baz=56 |
| C30A | Mose, Pekin | 55.45 | 342 | P | P | 15 03 26.7 | +0.2 | baz=56 |
| LRMC | Laurel Mountai | 55.58 | 319 | P | P | 15 03 27.5 | -0.3 | baz=56 |
| DUG | Dugway | 55.67 | 326 | P | P | 15 03 28.3 | -0.1 | baz=56,SNR=16 |
| DUG | Dugway | 55.67 | 326 | *e*P | P | 15 03 28.5 | +0.1 | 10nm,0.8s |
| D28A | Regan | 55.68 | 340 | P | P | 15 03 28.4 | +0.2 | baz=56 |
| E26A | Carlson Angus | 55.74 | 338 | P | P | 15 03 29.0 | +0.4 | baz=56 |
| MPMC | Manual Prospec | 55.80 | 320 | P | P | 15 03 28.8 | -0.7 | baz=56 |
| BW06 | Boulder Array | 55.83 | 331 | *e*P | P | 15 03 29.1 | -0.4 | 11nm,1.2s |
| HWUT | Hardware Ranch | 55.99 | 328 | *e*P | P | 15 03 30.4 | -0.3 | 13nm,0.9s |
| R11A | Troy Canyon, C | 56.04 | 323 | P | P | 15 03 30.8 | -0.3 | baz=56,SNR=7.7 |
| B30A | Myrvik Farm, E | 56.07 | 342 | P | P | 15 03 30.7 | -0.2 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | baz=56 | | | | | | |
| C28A | Hausauer Farms | 56.07 | 340 | P | P | 15 03 31.2 | +0.3 |
| | baz=56 | | | | | | |
| E25A | Miller Ranch, | 56.11 | 338 | P | P | 15 03 31.3 | 0.0 |
| | baz=56 | | | | | | |
| A31A | Linda, St. Vin | 56.16 | 343 | P | P | 15 03 32.5 | +1.0 |
| | baz=56 | | | | | | |
| D26A | Manning | 56.20 | 339 | P | P | 15 03 32.0 | +0.1 |
| | baz=56 | | | | | | |
| B29A | Wagenman Farm, | 56.40 | 342 | P | P | 15 03 33.7 | +0.5 |
| | baz=56,SNR=5.5 | | | | | | |
| CWC | Cottonwood Cre | 56.40 | 320 | P | P | 15 03 33.5 | -0.2 |
| | baz=56 | | | | | | |
| C27A | Sayler Ranch, | 56.45 | 340 | P | P | 15 03 34.2 | +0.5 |
| | baz=56 | | | | | | |
| A30A | Hoffart Farm, | 56.50 | 343 | P | P | 15 03 34.0 | +0.1 |
| | baz=57 | | | | | | |
| D25A | Fairfield | 56.63 | 338 | P | P | 15 03 35.8 | +0.9 |
| | baz=57 | | | | | | |
| B28A | Dugan Ranch, T | 56.70 | 341 | P | P | 15 03 36.1 | +0.7 |
| | baz=57 | | | | | | |
| HVU | Hansel Valley | 56.76 | 328 | eP | P | 15 03 36.1 | 0.0 |
| | 15nm,1.5s | | | | | | |
| A29A | Manning Farm, | 56.76 | 342 | P | P | 15 03 36.8 | +1.0 |
| | baz=57 | | | | | | |
| ULM | Lac du Bonnet | 57.01 | 345 | P | P | 15 03 35.2 | -2.2 |
| | 9.6nm,0.6s,baz=152,slow=7.7,SNR=12 | | | | | | |
| ULM | Lac du Bonnet | 57.01 | 345 | eP | P | 15 03 35.6 | -1.8 |
| TPAW | Teton Pass | 57.05 | 330 | eP | P | 15 03 36.7 | -1.5 |
| | 19nm,1.6s | | | | | | |
| FLWY | Flagg Ranch | 57.36 | 331 | eP | P | 15 03 39.8 | -0.6 |
| | 14nm,1.1s | | | | | | |
| RLMT | Red Lodge | 57.47 | 333 | P | P | 15 03 40.9 | -0.2 |
| | baz=58 | | | | | | |
| B25A | Knox Farm, Ray | 57.51 | 339 | P | P | 15 03 42.2 | +1.1 |
| | baz=58 | | | | | | |
| H17A | Grant Village | 57.53 | 331 | P | P | 15 03 42.2 | +0.5 |
| | baz=58 | | | | | | |
| NVAR | Mina Array Bea | 57.75 | 321 | P | P | 15 03 43.1 | -0.1 |
| | 4.5nm,1.0s,baz=134,slow=6.6,SNR=19 | | | | | | |
| NVAR | | | | pP | pP | 15 04 08.8 | -2.4 |
| | 3.2nm,0.8s,baz=140,slow=6.4,SNR=4.3 | | | | | | |
| NVAR | | | | PcP | PcP | 15 04 34.7 | -0.1 |
| | 1.5nm,0.6s,baz=128,slow=3.9,SNR=5.2 | | | | | | |
| A25A | Svangstu Ranch | 58.06 | 339 | P | P | 15 03 45.6 | +0.6 |
| | baz=58 | | | | | | |
| BMN | Battle Mountai | 58.34 | 324 | eP | P | 15 03 47.0 | -0.2 |
| | 10nm,0.8s | | | | | | |
| HLID | Hailey | 58.86 | 328 | P | P | 15 03 51.2 | +0.4 |
| | baz=59,SNR=9.0 | | | | | | |
| HLID | Hailey | 58.86 | 328 | eP | P | 15 03 50.6 | -0.2 |
| | 10nm,1.2s | | | | | | |
| MCMT | McKenzie Canyo | 58.96 | 330 | eP | P | 15 03 52.2 | +0.6 |
| BOZ | Bozeman (W) | 58.96 | 332 | P | P | 15 03 51.4 | 0.0 |
| | baz=59,SNR=11 | | | | | | |
| BOZ | Bozeman (W) | 58.96 | 332 | eP | P | 15 03 51.3 | -0.1 |
| | 16nm,1.1s | | | | | | |
| SCHQ | Schefferville | 59.50 | 6 | P | P | 15 03 54.9 | +0.2 |
| | 17nm,1.1s,baz=203,slow=2.6,SNR=4.5 | | | | | | |
| MFID | Camas Ranch | 59.52 | 327 | eP | P | 15 03 55.6 | +0.4 |
| | 22nm,0.8s | | | | | | |
| EGMT | Eagleton | 59.91 | 335 | P | P | 15 03 57.9 | 0.0 |
| | baz=60 | | | | | | |
| MSO | Missoula | 60.93 | 331 | P | P | 15 04 04.9 | +0.1 |
| | baz=61,SNR=15 | | | | | | |
| MSO | Missoula | 60.93 | 331 | eP | P | 15 04 04.8 | +0.1 |
| | 20nm,1.1s | | | | | | |
| J08A | Circle Bar Ran | 60.93 | 326 | eP | P | 15 04 04.9 | 0.0 |
| | 4.6nm,0.8s | | | | | | |
| O03D | Paynes Creek | 61.04 | 321 | P | P | 15 04 05.3 | -0.3 |
| | baz=61 | | | | | | |
| JTMT | Jette | 61.74 | 332 | eP | P | 15 04 10.8 | +0.5 |
| K05A | Summer Lake | 61.93 | 324 | eP | P | 15 04 12.4 | +0.7 |
| | 16nm,0.9s | | | | | | |
| M04C | Macdoel | 61.93 | 323 | P | P | 15 04 11.7 | 0.0 |
| | baz=62,SNR=5.8 | | | | | | |
| I07A | Izee | 61.97 | 326 | eP | P | 15 04 12.2 | +0.3 |
| | 14nm,1.0s | | | | | | |
| I07A | | | | epP | pP | 15 04 41.9 | +1.7 |
| J05D | Fort Rock, OR | 62.46 | 324 | P | P | 15 04 15.4 | +0.2 |
| | baz=62,SNR=5.9 | | | | | | |
| J04D | Umpqua Nationa | 62.95 | 324 | P | P | 15 04 18.8 | +0.2 |
| | baz=63,SNR=5.6 | | | | | | |
| I05D | Terrebonne, OR | 63.16 | 325 | P | P | 15 04 20.5 | +0.8 |
| | baz=63,SNR=8.1 | | | | | | |
| L02D | Cave Junction, | 63.22 | 322 | P | P | 15 04 20.1 | 0.0 |
| | baz=63 | | | | | | |
| I04A | Tendick Farm, | 63.45 | 324 | P | P | 15 04 21.4 | -0.2 |
| | baz=64 | | | | | | |
| NEW | Newport | 63.47 | 331 | P | P | 15 04 21.8 | +0.1 |
| | baz=64,SNR=6.5 | | | | | | |
| NEW | Newport | 63.47 | 331 | eP | P | 15 04 21.0 | -0.6 |
| | 6.6nm,0.9s | | | | | | |
| G05D | Wamic, OR | 63.70 | 326 | P | P | 15 04 23.6 | +0.4 |
| | baz=64 | | | | | | |
| B08A | Colville Reser | 64.63 | 330 | eP | P | 15 04 29.2 | 0.0 |
| | 7.0nm,1.0s | | | | | | |
| G03D | McMinnville, O | 64.78 | 325 | P | P | 15 04 30.4 | +0.2 |
| | baz=65 | | | | | | |
| LON | Longmire | 64.90 | 327 | eP | P | 15 04 31.0 | 0.0 |
| | 3.8nm,0.9s | | | | | | |
| EDM | Edmonton | 65.35 | 336 | eP | P | 15 04 33.1 | -0.7 |
| | 25nm,1.1s | | | | | | |
| B05A | Bryant | 65.99 | 328 | P | P | 15 04 38.0 | +0.1 |
| | baz=66 | | | | | | |
| A04D | Lummi Island | 66.59 | 328 | P | P | 15 04 42.5 | +0.8 |
| | baz=67 | | | | | | |
| DBIC | Dimbokro | 71.99 | 82 | P | P | 15 05 16.1 | +0.3 |
| | 8.2nm,0.5s,baz=246,slow=6.0,SNR=12 | | | | | | |
| VNA1 | Neumayer--Stat | 78.67 | 162 | P | P | 15 05 53.9 | +1.0 |
| VNA2 | Neumayer--Watz | 79.03 | 162 | P | P | 15 05 55.3 | +0.5 |
| | baz=307,slow=5.2 | | | | | | |
| TORD | Torodi Ar. Bea | 79.19 | 76 | P | P | 15 05 56.5 | -0.3 |
| | 1.5nm,0.3s,baz=275,slow=5.9,SNR=32 | | | | | | |
| TORD | | | | LR | LR | 15 39 14.1 | |
| | comp=Z,16nm,19.7s,baz=330,slow=34 | | | | | | |
| ESDC | Sonseca Array | 79.19 | 48 | P | P | 15 05 56.6 | +0.1 |
| | 0.9nm,0.7s,baz=254,slow=4.4,SNR=6.8 | | | | | | |
| SUMG | Summit | 80.47 | 11 | i P | P | 15 06 03.6 | +0.6 |
| | 22nm,1.0s | | | | | | |
| SUMG | | | | i | | 15 06 31.1 | |
| SUMG | Summit | 80.47 | 11 | eP | P | 15 06 03.2 | +0.2 |
| | 24nm,1.1s | | | | | | |
| SNAA | Sanae | 80.65 | 162 | P | P | 15 06 03.8 | +0.1 |
| SNAA | Sanae | 80.65 | 162 | eP | P | 15 06 02.1 | -1.5 |
| | 5.7nm,1.3s | | | | | | |
| EGAK | Eagle | 83.57 | 337 | eP | P | 15 06 18.9 | 0.0 |
| | 28nm,1.2s | | | | | | |
| ILAR | Eielson Array | 85.84 | 336 | P | P | 15 06 29.4 | -0.9 |
| | 3.3nm,0.9s,baz=126,slow=3.4,SNR=24 | | | | | | |
| ILAR | | | | pP | pP | 15 06 57.8 | -2.5 |
| | 3.2nm,0.9s,baz=129,slow=3.2,SNR=8.3 | | | | | | |
| ILAR | | | | PP | PP | 15 09 50.5 | -0.8 |
| | 0.9nm,0.9s,baz=96,slow=6.4,SNR=5.4 | | | | | | |
| DAG | Danmarks Havn | 87.14 | 11 | i P | P | 15 06 35.9 | -0.5 |
| | 17nm,1.0s | | | | | | |
| BPAW | Bear Paw Mtn. | 87.34 | 335 | eP | P | 15 06 37.5 | -0.1 |
| | 18nm,0.8s | | | | | | |
| PPLA | Purkeypile | 87.55 | 334 | eP | P | 15 06 34.1 | -4.7 |
| | 25nm,0.8s | | | | | | |
| CAST | Castle Rocks | 87.63 | 334 | eP | P | 15 06 38.9 | -0.1 |
| | 21nm,0.9s | | | | | | |
| CAST | | | | epP | pP | 15 07 08.9 | -0.3 |
| COLD | Coldfoot | 87.89 | 338 | eP | P | 15 06 41.2 | +1.1 |
| | 12nm,1.0s | | | | | | |
| COLD | | | | epP | pP | 15 07 12.9 | +2.6 |
| GERES | GERESS Array B | 93.15 | 41 | LR | LR | 15 47 39.6 | |
| | comp=Z,20nm,18.1s,baz=306,slow=35 | | | | | | |
| BOSA | Boshof | 97.88 | 120 | LR | LR | 15 48 56.6 | |
| | comp=Z,35nm,19.2s,baz=38,slow=34 | | | | | | |
| ARCES | ARCESS Array B | 98.14 | 20 | P | P | 15 07 26.4 | -0.9 |
| | 1.2nm,0.7s,baz=270,slow=2.3,SNR=7.2 | | | | | | |
| FINES | FINESS Array B | 99.66 | 28 | P | Pdif | 15 07 34.2 | 0.0 |
| | 0.7nm,0.8s,baz=14,slow=6.3,SNR=3.2 | | | | | | |
| AKTO | Aktyubinsk | 120.16 | 32 | PKP | PKPdf | 15 12 42.0 | +0.8 |
| | 0.4nm,0.5s,baz=230,slow=5.8,SNR=3.6 | | | | | | |
| ABKAR | Akbulak array | 121.85 | 32 | ePKPdf | PKPdf | 15 12 45.1 | +0.5 |
| BVAR | Borovoye Array | 124.24 | 24 | PKP | PKPdf | 15 12 49.6 | +0.5 |
| | 0.5nm,0.4s,baz=318,slow=2.0,SNR=5.2 | | | | | | |
| ZALV | Zalesovo Beam | 128.18 | 14 | PKP | PKPdf | 15 12 56.2 | -0.4 |
| | 2.1nm,0.6s,baz=260,slow=2.8,SNR=4.4 | | | | | | |
| KURK | Kurchatov | 129.18 | 20 | PKP | PKPdf | 15 12 58.6 | +0.1 |
| KURK | | | | ePKPdf | PKiKP | 15 12 59.0 | -0.3 |
| KURK | | | | pPKP | pPKPdf | 15 13 28.8 | -1.3 |
| KURBB | Kurchatov Arra | 129.23 | 21 | PKP | PKPdf | 15 12 58.6 | 0.0 |
| | 3.6nm,0.9s,baz=319,slow=2.4,SNR=23 | | | | | | |
| KURBB | | | | pPKP | pPKPdf | 15 13 28.8 | -1.4 |
| | 1.5nm,0.8s,baz=326,slow=2.5,SNR=5.6 | | | | | | |
| MKAR | Makanchi Array | 133.80 | 20 | PKP | PKPdf | 15 13 07.0 | -0.5 |
| | 0.8nm,0.6s,baz=333,slow=1.9,SNR=6.3 | | | | | | |
| AAK | Ala-Archa | 133.82 | 30 | PKP | PKPdf | 15 13 09.0 | +1.2 |
| | 0.8nm,0.5s,baz=51,slow=1.4,SNR=5.2 | | | | | | |
| AAK | Ala-Archa | 133.82 | 30 | PKP | PKPdf | 15 13 09.0 | +1.2 |
| AAK | | | | ePKPdf | PKiKP | 15 13 09.2 | 0.0 |
| MJAR | Matsushiro Arr | 135.06 | 320 | PKP | PKPdf | 15 13 09.2 | -0.9 |
| | 0.8nm,0.8s,baz=95,slow=1.7,SNR=4.1 | | | | | | |
| CN2 | Changchun | 136.35 | 337 | ePKP | PKPdf | 15 13 14.8 | +2.5 |
| SONM | Songino Array | 136.64 | 358 | PKP | PKPdf | 15 13 12.9 | 0.0 |
| | 1.0nm,0.7s,baz=336,slow=2.8,SNR=6.5 | | | | | | |
| KSH | Kashi | 136.86 | 32 | PKP | PKPdf | 15 13 15.3 | +1.8 |
| KSH | | | | ePP | PP | 15 16 02.4 | +5.5 |
| KSH | | | | PKS | PKSdf | 15 16 50.9 | +1.0 |
| KSH | | | | SKKS | | 15 22 43.2 | |
| KSH | | | | PPMZ | | | |
| | 110nm,5.7s | | | | | | |
| KSH | | | | LN | | | |
| | 120nm,5.5s | | | | | | |
| KSH | | | | LE | | | |
| | 92nm,5.9s | | | | | | |
| KSH | | | | LZ | | | |
| | 160nm,5.0s | | | | | | |
| ASAR | Alice Springs | 139.57 | 225 | PKhKP | PKPpre | 15 13 10.4 | |
| | 0.4nm,0.6s,baz=124,slow=3.6,SNR=5.4 | | | | | | |
| ASAR | | | | PKP | PKPdf | 15 13 17.4 | -1.5 |
| | 2.4nm,0.9s,baz=119,slow=1.8,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 141.52 | 230 | PKhKP | PKPpre | 15 13 16.2 | |
| | 3.7nm,1.1s,baz=130,slow=2.7,SNR=4.6 | | | | | | |
| WRA | | | | PKP | PKPdf | 15 13 21.2 | -1.2 |
| | 2.2nm,0.7s,baz=126,slow=1.4,SNR=9.4 | | | | | | |
| HHC | Hu-ho-hao-te | 143.03 | 350 | ePKP | PKPdf | 15 13 26.9 | +2.2 |
| GTA | Gaotai | 144.93 | 5 | ⇑PKPbc | PKPab | 15 13 27.2 | -0.2 |
| GTA | | | | pPKP | pPKPdf | 15 14 02.1 | +2.5 |
| GTA | | | | sPKP | | 15 14 17.6 | |
| LZH | Lanzhou | 148.44 | 0 | ePKPbc | PKPbc | 15 13 37.0 | -0.7 |
| LZH | | | | PKPab | PKPab | 15 13 46.1 | +4.9 |
| LZH | | | | pPKP | pPKPdf | 15 14 10.7 | +5.0 |
| LZH | | | | sPKP | | 15 14 24.3 | |
| LZH | | | | LN | | | |
| | 110nm,18.2s | | | | | | |
| LZH | | | | LE | | | |
| | 110nm,18.5s | | | | | | |
| LZH | | | | LZ | | | |
| | 140nm,20.1s | | | | | | |
| NJ2 | Nanjing | 149.08 | 335 | ePKPbc | PKPdf | 15 13 34.3 | -0.7 |
| DANN | Dangsing | 149.44 | 37 | eP | PKPdf | 15 13 35.9 | -0.2 |
| | 8.0nm,0.8s | | | | | | |
| KOLN | Koldanda | 149.76 | 38 | eP | PKPdf | 15 13 35.7 | -0.8 |
| | 22nm,0.9s | | | | | | |
| XAN | Xi'an | 150.11 | 352 | PKPbc | PKPbc | 15 13 41.2 | -0.6 |
| XAN | | | | PPMZ | | | |
| | 67nm,7.5s | | | | | | |
| GKN | Gorkha | 150.21 | 36 | eP | PKPdf | 15 13 37.6 | +0.4 |
| | 63nm,0.9s | | | | | | |
| KKN | Kakani | 150.74 | 35 | eP | PKPdf | 15 13 38.5 | +0.4 |
| | 50nm,1.0s | | | | | | |
| DMN | Daman | 150.78 | 36 | eP | PKPdf | 15 13 38.8 | +0.6 |
| | 27nm,0.9s | | | | | | |
| PKIN | Phulchoki | 150.97 | 35 | eP | PKPdf | 15 13 38.6 | +0.1 |
| PKI | Pulchoki | 150.98 | 35 | eP | PKPdf | 15 13 38.8 | +0.2 |
| | 32nm,1.0s | | | | | | |
| GUN | Gumba | 150.99 | 34 | eP | PKPdf | 15 13 39.2 | +0.6 |
| | 79nm,1.2s | | | | | | |
| RAMN | Ramite | 152.14 | 35 | eP | PKPdf | 15 13 40.5 | +0.3 |
| | 67nm,1.0s | | | | | | |
| TAPN | Taplejung | 152.44 | 32 | eP | PKPdf | 15 13 40.7 | 0.0 |
| | 16nm,0.7s | | | | | | |
| ODAN | Odare | 152.65 | 33 | eP | PKPdf | 15 13 40.9 | -0.1 |
| | 25nm,1.1s | | | | | | |
| CD2 | Chengdu | 153.60 | 0 | PKPbc | PKPdf | 15 13 39.2 | -2.8 |
| KMI | Kunming | 159.34 | 3 | PKP | PKPdf | 15 13 48.6 | -1.2 |
| CMAR | Chiang Mai Arr | 165.19 | 19 | PKP | PKPdf | 15 13 55.5 | -0.1 |
| | 0.9nm,0.8s,baz=304,slow=2.2,SNR=9.4 | | | | | | |
| CMAR | | | | PKPab | PKPab | 15 14 52.6 | -0.4 |
| | 1.9nm,0.8s,baz=328,slow=5.3,SNR=11 | | | | | | |

*IDC **02** 15:05:41.5±5.2, 5°.40S×134°.12E, h0km, mb3.5/2, mb1 3.8/4, mb1mx3.4/34, mbtmp3.6/4, ML3.7/2, Error ellipse: s-maj=303.6km s-min=29.3km az=79.0*

*AUST **02** 15:05:42.7±0.0, 4°.88S×133°.06E, h151km±1km, Error ellipse: s-maj=2.8km s-min=1.5km az=257.0*

**ISC 02 15:05:42.6**±1.8**, 5°.5S**±0°.1×**134°.3E**±0°.3**, h10**km**, n7,** σ1s**90**/7**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDU | Kakadu | 7.37 | 194 | P | Pn | 15 07 33.6 | +3.3 |
| | baz=7.8,SNR=21 | | | | | | |
| MTN | Manton Dam | 7.95 | 203 | P | Pn | 15 07 40.2 | +1.9 |
| | baz=8.2,SNR=37 | | | | | | |
| KNRA | Kununurra | 11.50 | 208 | P | Pn | 15 08 26.7 | -0.3 |
| | baz=12,SNR=18 | | | | | | |
| WRA | Warramunga Arr | 14.35 | 180 | Pn | Pn | 15 09 06.8 | +0.8 |
| | 0.3nm,0.3s,baz=355,slow=13,SNR=22 | | | | | | |
| WRA | | | | Sn | Sn | 15 11 42.9 | -2.6 |
| | 0.2nm,0.3s,baz=356,slow=23,SNR=5.7 | | | | | | |
| ASAR | Alice Springs | 18.07 | 181 | P | P | 15 09 55.9 | +1.6 |
| | 0.3nm,0.3s,baz=9.8,slow=13,SNR=31 | | | | | | |
| MKAR | Makanchi Array | 69.42 | 325 | P | P | 15 16 50.5 | -0.4 |
| | 0.4nm,0.8s,baz=130,slow=6.3,SNR=3.5 | | | | | | |
| KURBB | Kurchatov Arra | 73.56 | 327 | P | P | 15 17 14.9 | -1.0 |
| | 0.3nm,0.7s,baz=119,slow=5.4,SNR=3.2 | | | | | | |

**MAN 02 15:30:34, 10°.46N×125°.07E, h1km, mb4.7, ML3.6, MS3.6, 2D, Leyte**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSLP | Maasin | 0.39 | 213 | eP | Pb | 15 30 42.9 | -0.8 |
| MSLP | | | | eS | Sb | 15 30 50.8 | +0.5 |
| PLP | Palo | 0.70 | 352⇓ | eP | Pb | 15 30 48.5 | -0.6 |
| PLP | | | | eS | Sb | 15 30 59.6 | +0.4 |
| OCLP | Ormoc | 0.74 | 322 | eP | Pb | 15 30 49.6 | -0.1 |
| SCPH | Surigao | 0.79 | 149⇓ | eP | Pg | 15 30 49.8 | +0.6 |
| GUIM | Jordan | 2.45 | 274 | eP | Pn | 15 31 16.0 | +0.9 |
| BUKP | Musuan | 2.57 | 180 | eP | Pb | 15 31 19.1 | -1.9 |
| PAGZ | Pagadian | 3.09 | 213 | eP | Pn | 15 31 26.5 | +2.5 |

*KRSC **02** 15:41:42.0±0.9, 51°.66N×158°.51E, h58km±13km, ML4.4, FELT [III] at lighthouse Krugliy.*

*MOS **02** 15:41:42.6±0.9, 51°.68N×158°.31E, h74km, mb4.0/6, Error ellipse: s-maj=21.9km s-min=6.2km az=80.5*

*ISCJB **02** 15:41:43.5±0.7, 51°.75N±0°.07×158°.3E±0°.1, h81km±6km, mb3.6/9, Error ellipse: s-maj=17.0km s-min=5.3km az=40.4*

*IDC **02** 15:41:46.3±1.8, 51°.91N×158°.05E, h91km±16km, mb3.4/10, mb1 3.6/11, mb1mx3.3/38, mbtmp3.7/11, Error ellipse: s-maj=23.2km s-min=14.5km az=138.0*

**ISC 02 15:41:43.7**±0.9**, 51°.70N**±0°.06×**158°.32E**±0°.07**, h68**km±8km**, n59,** σ1s**34**/72**, mb3.8**/9**, 1C, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RUS | Russkaya | 0.75 | 9 | eP | Pn | 15 41 58.3 | -0.6 |
| RUS | | | | eS | Sn | 15 42 08.9 | -1.2 |
| RUS | Russkaya | 0.75 | 9 | PN | Pn | 15 41 58.3 | -0.6 |
| RUS | | | | S | Sn | 15 42 08.9 | -1.2 |
| MTVR | Mutnovka | 0.79 | 354 | eP | Pn | 15 41 59.6 | 0.0 |
| MTVR | | | | eS | Sn | 15 42 10.9 | -0.5 |
| GRL | Gorelyy | 0.87 | 350 | eP | Pn | 15 42 01.0 | +0.5 |
| GRL | | | | eS | Sn | 15 42 13.5 | +0.5 |
| GRL | Gorelyy | 0.87 | 350 | PN | Pn | 15 42 01.0 | +0.5 |
| GRL | | | | S | Sn | 15 42 13.5 | +0.5 |
| PAU | Pauzhetka | 0.97 | 257 | eP | Pn | 15 42 02.8 | +1.2 |
| PAU | | | | eS | Sn | 15 42 16.8 | +1.9 |
| PAU | Pauzhetka | 0.97 | 257 | PN | Pn | 15 42 02.8 | +1.2 |
| PAU | | | | S | Sn | 15 42 16.8 | +1.9 |
| PET | Petropavlovsk | 1.34 | 9 | eP | Pn | 15 42 06.3 | -0.2 |
| PET | | | | eS | Sn | 15 42 23.2 | -0.4 |
| PET | Petropavlovsk | 1.34 | 9⇑ | iPN | Pn | 15 42 06.3 | -0.2 |
| PET | | | | eS | Sn | 15 42 22.7 | -0.9 |
| PET | | | | pmax | pmax | | |
| | comp=Z,137nm,0.3s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,656nm,0.5s | | | | | | |
| PETK | Petropavlovsk- | 1.46 | 345 | P | Pn | 15 42 08.5 | +0.5 |
| | comp=E,28nm,0.3s,baz=153,slow=17,SNR=405 | | | | | | |
| PETK | | | | S | Sn | 15 42 23.0 | -3.4 |
| | comp=E,40nm,0.3s,baz=144,slow=17,SNR=23 | | | | | | |
| PETK | | | | LR | LR | 15 42 55.4 | |
| | comp=E,49nm,20.2s,baz=189,slow=57 | | | | | | |
| PETK | Petropavlovsk- | 1.46 | 345 | PN | Pn | 15 42 08.5 | +0.5 |
| PETK | | | | S | Sn | 15 42 23.0 | -3.4 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,28nm,0.3s | | | | | | |
| PETK | | | | smax | smax | | |
| | comp=N,40nm,0.3s | | | | | | |
| UGLR | Uglovaya | 1.54 | 11 | eP | Pn | 15 42 09.3 | +0.1 |
| AVH | Avacha | 1.59 | 9 | eP | Pn | 15 42 10.7 | +0.9 |
| AVH | Avacha | 1.59 | 9 | PN | Pn | 15 42 10.7 | +0.9 |
| SMAR | Somma | 1.60 | 10 | eP | Pn | 15 42 10.1 | +0.1 |
| SMAR | Somma | 1.60 | 10 | PN | Pn | 15 42 10.1 | +0.1 |
| KOK | Koryaka | 1.61 | 7 | eP | Pn | 15 42 11.1 | +1.0 |
| KOK | | | | eS | Sn | 15 42 31.4 | +1.4 |
| KOK | Koryaka | 1.61 | 7 | PN | Pn | 15 42 11.1 | +1.0 |
| KOK | | | | S | Sn | 15 42 31.4 | +1.4 |
| SDLR | Sedlovina | 1.62 | 12 | eP | Pn | 15 42 10.1 | -0.2 |
| SDLR | Sedlovina | 1.62 | 12 | PN | Pn | 15 42 10.1 | -0.2 |
| KRX | Arik | 1.68 | 7 | eP | Pn | 15 42 11.7 | +0.7 |
| SKR | Severo-Kuril's | 1.72 | 235 | eP | Pn | 15 42 12.2 | +0.8 |
| SKR | | | | eS | Sn | 15 42 33.4 | +1.0 |
| SKR | Severo-Kuril's | 1.72 | 235 | ePN | Pn | 15 42 08.5 | -2.9 |
| SKR | | | | eS | Sn | 15 42 29.5 | -2.9 |
| SKR | | | | pmax | pmax | | |
| | comp=E,80nm,0.4s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,100nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,2μm,0.2s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,850nm,0.2s | | | | | | |
| SPN | Mys Shipunski | 1.75 | 36 | eP | Pn | 15 42 11.7 | -0.1 |
| SPN | | | | eS | Sn | 15 42 32.6 | -0.6 |
| SPN | Mys Shipunski | 1.75 | 36 | PN | Pn | 15 42 11.7 | -0.1 |
| SPN | | | | S | Sn | 15 42 32.6 | -0.6 |
| GNL | Ganaly | 2.01 | 354 | eP | Pn | 15 42 16.2 | +0.7 |
| GNL | Ganaly | 2.01 | 354 | PN | Pn | 15 42 16.2 | +0.7 |
| KII | Karymskiy | 2.44 | 16 | eP | Pn | 15 42 22.7 | +1.4 |
| KII | | | | eS | Sn | 15 42 52.3 | +2.2 |
| KII | Karymskiy | 2.44 | 16 | PN | Pn | 15 42 22.7 | +1.4 |
| KII | | | | S | Sn | 15 42 52.3 | +2.2 |
| KZV | Kizimen | 3.62 | 18 | eP | Pn | 15 42 39.6 | +2.2 |
| TUMR | Tumrok | 3.75 | 16 | eP | Pn | 15 42 40.0 | +0.8 |
| TUMR | Tumrok | 3.75 | 16 | PN | Pn | 15 42 40.0 | +0.8 |
| SRDR | Sredinnyy | 4.70 | 10 | eP | Pn | 15 42 54.2 | +2.1 |
| SRDR | Sredinnyy | 4.70 | 10 | PN | Pn | 15 42 54.2 | +2.1 |
| KBTR | Krutoberegovo | 5.24 | 29 | eP | Pn | 15 42 59.8 | +0.4 |
| KBTR | Krutoberegovo | 5.24 | 29 | PN | Pn | 15 42 59.8 | +0.4 |
| ASAJ | Asahikawa | 12.97 | 240 | P | Pn | 15 44 46.4 | +1.5 |
| | comp=E,0.2nm,0.3s,baz=63,slow=9.0,SNR=3.3 | | | | | | |
| MJAR | Matsushiro Arr | 20.82 | 231 | P | P | 15 46 20.5 | +1.0 |
| | comp=E,1.0nm,0.5s,baz=31,slow=7.4,SNR=6.5 | | | | | | |
| ILAR | Eielson Array | 30.57 | 44 | P | P | 15 47 49.7 | -0.8 |
| | comp=E,0.9nm,0.7s,baz=256,slow=7.2,SNR=12 | | | | | | |
| ILAR | Eielson Array | 30.57 | 44 | P | P | 15 47 49.7 | -0.8 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 32.60 | 165 | T | T | 16 22 19.5 | |
| | baz=350,slow=76,SNR=207 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 32.62 | 165 | T | T | 16 22 20.6 | |
| | baz=350,slow=76,SNR=119 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 32.62 | 165 | T | T | 16 22 22.0 | |
| | baz=350,slow=76,SNR=112 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 33.77 | 166 | T | T | 16 23 44.9 | |
| | baz=351,slow=76,SNR=49 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 33.78 | 166 | T | T | 16 23 44.9 | |
| | baz=351,slow=76,SNR=49 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 33.79 | 166 | T | T | 16 23 46.9 | |
| | baz=351,slow=76,SNR=33 | | | | | | |
| MKAR | Makanchi Array | 47.78 | 296 | P | P | 15 50 10.8 | -3.1 |
| | comp=Z,0.2nm,0.4s,baz=57,slow=7.1,SNR=2.8 | | | | | | |
| CMAR | Chiang Mai Arr | 56.82 | 257 | P | P | 15 51 21.6 | +0.6 |
| | comp=Z,0.5nm,0.6s,baz=29,slow=6.6,SNR=5.3 | | | | | | |
| CMAR | Chiang Mai Arr | 56.82 | 257 | P | P | 15 51 21.7 | +0.6 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 57.26 | 68 | P | P | 15 51 25.5 | +1.2 |
| | comp=Z,0.6nm,0.5s,baz=302,slow=8.1,SNR=6.3 | | | | | | |
| FINES | FINESS Array B | 60.96 | 336 | P | P | 15 51 47.6 | -1.5 |
| | comp=Z,0.7nm,0.8s,baz=49,slow=6.3,SNR=3.1 | | | | | | |
| FINES | FINESS Array B | 60.96 | 336 | P | P | 15 51 47.6 | -1.5 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| NOA | NORSAR Array B | 64.57 | 343 | P | P | 15 52 12.0 | -1.2 |
| | comp=Z,1.9nm,1.1s,baz=25,slow=6.7,SNR=2.7 | | | | | | |
| NOA | NORSAR Array B | 64.57 | 343 | P | P | 15 52 12.0 | -1.2 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| TXAR | Lajitas Array | 72.20 | 65 | P | P | 15 53 01.9 | +0.5 |
| | comp=Z,0.9nm,0.6s,baz=300,slow=5.1,SNR=16 | | | | | | |
| TXAR | Lajitas Array | 72.20 | 65 | P | P | 15 53 01.9 | +0.5 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 74.36 | 203 | P | P | 15 53 14.1 | +0.2 |
| | comp=Z,0.5nm,0.6s,baz=19,slow=6.4,SNR=2.6 | | | | | | |
| WRA | Warramunga Arr | 74.36 | 203 | P | P | 15 53 14.1 | +0.2 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| ASAR | Alice Springs | 78.04 | 203 | P | P | 15 53 35.3 | +0.6 |
| | comp=Z,0.4nm,0.5s,baz=13,slow=5.7,SNR=3.2 | | | | | | |

*IDC **02** 15:43:09.0±5.0, 5°.47S×132°.47E, h0km, mb3.9/1, mb1 4.2/3, mb1mx3.5/24, mbtmp4.0/3, ML4.1/2, MS3.2/1, Ms1 3.2/1, ms1mx2.5/20, Error ellipse: s-maj=322.3km s-min=31.0km az=75.0*

*ISCJB **02** 15:43:28.2±0.5, 6°.66S±0°.04×130°.17E±0°.07, h146km, mb3.6/1, Error ellipse: s-maj=10.7km s-min=5.6km az=167.6*

*AUST **02** 15:43:28.6±0.0, 6°.66S×130°.16E, h111km, Error ellipse: s-maj=1.2km s-min=0.8km az=277.0*

*DJA **02** 15:43:29.5±0.5, 7°S±3°×13°0E±°, h192km±17km, M4.3/12, mb4.2/8, mB5.2/4, MLv4.3/12, Mw(mB)4.6/4*

**ISC 02 15:43:28.7**±0.8**, 6°.62S**±0°.06×**130°.19E**±0°.08**, h146**km**, n25,** σ**2s15**/24**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SAUI | Saumlaki | 1.75 | 141 | P | Pn | 15 44 04.7 | +4.0 |
| BNDI | Bandanaira | 2.10 | 352 | P | Pn | 15 44 10.0 | +5.1 |
| MSAI | Masohi | 3.49 | 339 | P | Pn | 15 44 24.4 | +2.1 |
| AAI | Ambon | 3.53 | 326 | P | Pn | 15 44 24.3 | +1.5 |
| FAKI | Fak Fak | 4.21 | 29 | P | Pn | 15 44 31.8 | 0.0 |
| | baz=4.3,SNR=17 | | | | | | |
| FAKI | Fak Fak | 4.21 | 29 | P | Pn | 15 44 32.3 | +0.5 |
| FAKI | | | | S | Sn | 15 45 16.8 | -4.0 |
| SWI | Sorong | 5.82 | 11 | P | Pn | 15 44 53.3 | +0.3 |
| | baz=5.9,SNR=5.6 | | | | | | |
| SWI | Sorong | 5.82 | 11 | P | Pn | 15 44 52.6 | -0.5 |
| | 17nm,1.0s,3μm0.5nm | | | | | | |
| SWI | | | | S | Sn | 15 45 50.6 | -8.4 |
| | 17nm,1.0s,3μm0.5nm | | | | | | |
| SANI | Sanana | 6.17 | 317 | P | Pn | 15 44 59.1 | +1.3 |
| | 20nm,0.6s,0.1nm | | | | | | |
| MTN | Manton Dam | 6.25 | 171 | P | Pn | 15 44 59.6 | +0.7 |
| | baz=6.3,SNR=18 | | | | | | |
| KDU | Kakadu | 6.43 | 160 | P | Pn | 15 45 01.8 | +0.5 |
| | baz=6.4,SNR=156 | | | | | | |
| LBMI | Labuha | 6.52 | 336 | P | Pn | 15 45 02.3 | -0.1 |
| | 67nm,0.7s,638nm0.2nm | | | | | | |
| SOEI | Soe | 6.63 | 242 | P | Pn | 15 45 04.8 | +0.8 |
| | baz=6.6,SNR=5.1 | | | | | | |
| SOEI | Soe | 6.63 | 242 | P | Pn | 15 45 04.0 | 0.0 |
| | 38nm,0.9s,0.2nm | | | | | | |
| BATI | Baumata | 7.37 | 241 | P | Pn | 15 45 12.5 | -1.3 |
| | 36nm,0.7s,0.1nm | | | | | | |
| MMRI | Maumere | 8.13 | 255 | P | Pn | 15 45 22.7 | -1.2 |
| | 28nm,1.9s | | | | | | |
| KNRA | Kununurra | 9.11 | 189 | P | Pn | 15 45 35.9 | -1.1 |
| | baz=9.1,SNR=21 | | | | | | |
| WSI | Waingapu | 10.24 | 252 | P | Pn | 15 45 55.9 | +3.8 |
| WRA | Warramunga Arr | 13.84 | 163 | Pn | Pn | 15 46 36.5 | -2.4 |
| | 1.1nm,0.3s,baz=352,slow=13,SNR=56 | | | | | | |
| WRA | | | | Sn | Sn | 15 49 02.6 | -10 |
| | 1.1nm,0.3s,baz=342,slow=21,SNR=6.5 | | | | | | |
| COEN | Coen | 14.71 | 121 | P | P | 15 46 54.8 | +2.7 |
| | baz=15,SNR=4.2 | | | | | | |
| QIS | Mount Isa | 16.59 | 148 | P | Pn | 15 47 15.1 | +2.1 |
| | baz=17,SNR=3.5 | | | | | | |
| ASAR | Alice Springs | 17.32 | 168 | P | Pn | 15 47 22.1 | +0.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 0.6nm,0.3s,baz=358,slow=12,SNR=27 | | | | | | |
| ASAR | | | | S | S | 15 50 27.4 | -6.6 |
| | 0.3nm,0.3s,baz=348,slow=26,SNR=6.0 | | | | | | |
| ASAR | | | | LR | LR | 15 54 38.5 | |
| | comp=Z,72nm,20.2s,baz=132,slow=38 | | | | | | |
| WRKA | Warakurna | 18.40 | 185 | P | Pn | 15 47 34.7 | +0.1 |
| | baz=18,SNR=16 | | | | | | |
| MEEK | Meekatharra | 22.75 | 208 | P | P | 15 48 20.8 | +2.2 |
| | baz=23,SNR=3.3 | | | | | | |
| MKAR | Makanchi Array | 68.01 | 327 | P | P | 15 54 12.2 | -0.1 |
| | 0.6nm,0.5s,baz=130,slow=7.8,SNR=7.1 | | | | | | |

*ISCJB **02** 15:51:45.0±0.5, 17°.19N±0°.06×93°.95W±0°.05, h184km±5km, mb3.6/5, Error ellipse: s-maj=10.9km s-min=6.7km az=16.2*

*NEIC **02** 15:51:44.9±1.2, 16°.99N×93°.92W, h210km±18km, mb4.5/2, Error ellipse: s-maj=23.8km s-min=12.2km az=171.0*

*IDC **02** 15:51:45.5±1.4, 17°.30N×93°.64W, h167km±16km, mb3.4/6, mb1 3.6/7, mb1mx3.3/29, mbtmp3.8/7, Error ellipse: s-maj=36.5km s-min=21.2km az=64.0*

*MEX **02** 15:51:48.6±1.0, 17°.13N×94°.14W, h164km±16km, MD4.4*

**ISC 02 15:51:46.1**±0.7**, 17°.11N**±0°.05×**93°.97W**±0°.04**, h184**km±5km**, n27,** σ1$^s$**66**/44**, mb3.6**/5**, Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMIG | Matias Romero | 0.87 | 269 | P | Pn | 15 52 13.2 | -0.1 |
| | 370nm,0.3s,baz=106,slow=3.9,SNR=3216 | | | | | | |
| CMIG | | | | S | Sn | 15 52 33.0 | -1.4 |
| | 439nm,0.3s,baz=308,slow=19,SNR=73 | | | | | | |
| TGIG | | 0.88 | 112 | i P | Pn | 15 52 13.6 | +0.1 |
| TGIG | | | | i S | Sn | 15 52 33.4 | -1.1 |
| TGIG | | 0.88 | 112 | i P | Pn | 15 52 13.6 | +0.1 |
| TGIG | | | | i S | Sn | 15 52 33.4 | -1.1 |
| PCIG | | 1.57 | 152 | i P | Pn | 15 52 20.3 | +1.1 |
| PCIG | | | | i S | Sn | 15 52 43.3 | -1.5 |
| PCIG | | 1.57 | 152 | i P | Pn | 15 52 20.3 | +1.1 |
| PCIG | | | | i S | Sn | 15 52 43.3 | -1.5 |
| CCIG | Comitan | 1.94 | 115 | i P | Pn | 15 52 23.9 | +0.8 |
| CCIG | | | | eS | Sn | 15 52 50.8 | -0.9 |
| CCIG | Comitan | 1.94 | 115 | i P | Pn | 15 52 23.9 | +0.8 |
| CCIG | | | | eS | Sn | 15 52 50.8 | -0.9 |
| HUIG | Huatulco | 2.44 | 237 | i P | Pn | 15 52 27.0 | -1.4 |
| HUIG | | | | eS | Sn | 15 53 01.0 | -0.4 |
| HUIG | Huatulco | 2.44 | 237 | i P | Pn | 15 52 27.0 | -1.4 |
| HUIG | | | | eS | Sn | 15 53 01.0 | -0.4 |
| OXX | Oaxaca | 2.63 | 270 | eP | Pn | 15 52 32.6 | +1.8 |
| OXX | | | | eS | Sn | 15 53 06.7 | +1.2 |
| OXX | Oaxaca | 2.63 | 270 | eP | Pn | 15 52 32.6 | +1.8 |
| OXX | | | | eS | Sn | 15 53 06.7 | +1.2 |
| SCIG | Sabancuy | 3.23 | 55 | i P | Pn | 15 52 36.8 | -1.0 |
| SCIG | Sabancuy | 3.23 | 55 | i P | Pn | 15 52 36.8 | -1.0 |
| LVIG | Laguna Verde | 3.49 | 319 | i P | Pn | 15 52 43.3 | +2.4 |
| LVIG | | | | eS | Sn | 15 53 21.7 | -2.1 |
| LVIG | Laguna Verde | 3.49 | 319 | i P | Pn | 15 52 43.3 | +2.4 |
| LVIG | | | | eS | Sn | 15 53 21.7 | -2.1 |
| ACX | Acapulco | 5.64 | 268 | i P | Pn | 15 53 07.7 | -0.8 |
| ACX | | | | eS | Sn | 15 54 09.1 | -4.3 |
| ACX | Acapulco | 5.64 | 268 | i P | Pn | 15 53 07.7 | -0.8 |
| ACX | | | | eS | Sn | 15 54 09.1 | -4.3 |
| TXAR | Lajitas Array | 15.07 | 326 | P | P | 15 55 11.6 | +0.6 |
| | 0.1nm,0.3s,baz=147,slow=13,SNR=9.2 | | | | | | |
| MIAR | Mount Ida | 17.37 | 1 | P | P | 15 55 34.9 | -1.2 |
| | 12nm,0.8s | | | | | | |
| AMTX | Amarillo | 19.00 | 340 | P | P | 15 55 51.9 | -2.0 |
| | 14nm,0.8s | | | | | | |
| TKL | Tuckaleechee C | 20.59 | 24 | P | P | 15 56 08.7 | -2.2 |
| | 3.1nm,0.7s,baz=196,slow=15,SNR=3.5 | | | | | | |
| NVAR | Mina Array Bea | 30.08 | 320 | P | P | 15 57 41.4 | +2.9 |
| | 0.3nm,0.6s,baz=137,slow=8.1,SNR=3.6 | | | | | | |
| NVAR | | | | pP | pP | 15 58 17.0 | +0.5 |
| | 0.3nm,0.7s,baz=138,slow=9.6,SNR=2.0 | | | | | | |
| NVAR | | | | sP | sP | 15 58 38.0 | +0.3 |
| | 0.9nm,0.7s,baz=132,slow=9.4,SNR=6.0 | | | | | | |
| LPAZ | La Paz | 41.83 | 141 | P | P | 15 59 19.8 | +0.9 |
| | 0.9nm,0.5s,baz=326,slow=3.6,SNR=3.9 | | | | | | |
| YKA | Yellowknife Ar | 47.59 | 347 | P | P | 16 00 02.0 | -1.0 |
| | 1.6nm,0.5s,baz=132,slow=9.7,SNR=4.3 | | | | | | |
| ILAR | Eielson Array | 59.25 | 337 | P | P | 16 01 28.3 | +0.4 |
| | 0.4nm,0.5s,baz=126,slow=5.6,SNR=7.0 | | | | | | |
| ARCES | ARCESS Array B | 83.79 | 18 | P | P | 16 03 54.1 | -0.3 |
| | 1.3nm,0.6s,baz=300,slow=5.5,SNR=11 | | | | | | |
| ASAR | Alice Springs | 134.81 | 253 | PKP | PKPdf | 16 10 44.7 | +0.9 |
| | 0.3nm,0.8s,baz=76,slow=2.0,SNR=4.1 | | | | | | |

*IDC **02** 16:07:15.8±2.3, 4°.94S×134°.04E, h0km, mb3.3/1, mb1 4.0/5, mb1mx3.6/26, mbtmp3.9/5, ML3.9/4, MS3.3/1, Ms1 3.3/1, ms1mx2.5/14, Error ellipse: s-maj=61.4km s-min=26.4km az=80.0*

*AUST **02** 16:07:21.9, 4°.96S×133°.53E, h60km*

*DJA **02** 16:07:22.4±0.6, 5°S±4°×13°4E±°, h75km±29km, M4.2/8, mb4.3/8, mB4.8/5, MLv4.2/8, Mw(mB)4.0/5*

**ISC 02 16:07:20.6**±1.4**, 4°.85S**±0°.07×**133°.7E**±0°.1**, h28**km**, n19,** σ**2$^s$09**/20**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.38 | 324 | P | Pn | 16 07 58.6 | +0.8 |
| | baz=2.4,SNR=26 | | | | | | |
| FAKI | Fak Fak | 2.38 | 324 | P | Pn | 16 07 58.9 | +1.1 |
| FAKI | | | | S | Sn | 16 08 25.4 | -0.6 |
| BNDI | Bandanaira | 3.76 | 275 | P | Pn | 16 08 19.9 | +3.1 |
| SIJI | Sorong | 4.62 | 329 | Pn | Pn | 16 08 28.9 | +0.3 |
| | 3.6nm,0.3s,baz=242,slow=24,SNR=13 | | | | | | |
| SIJI | | | | Sn | Sn | 16 09 17.7 | -3.7 |
| | 7.0nm,0.3s,baz=262,slow=23,SNR=7.9 | | | | | | |
| SWI | Sorong | 4.63 | 329 | P | Pn | 16 08 30.2 | +1.5 |
| | baz=4.7,SNR=7.6 | | | | | | |
| SWI | Sorong | 4.63 | 329 | P | Pn | 16 08 25.9 | -2.8 |
| SWI | | | | S | Sn | 16 09 20.5 | -1.1 |
| MSAI | Masohi | 4.95 | 287 | P | Pn | 16 08 35.3 | +2.1 |
| | 11nm,0.6s,182nm0.1nm | | | | | | |
| AAI | Ambon | 5.57 | 282 | P | Pn | 16 08 44.9 | +3.2 |
| | 55nm,0.7s,1μm0.2nm | | | | | | |
| NLAI | Namlea | 6.74 | 283 | P | Pn | 16 09 00.5 | +2.8 |
| | 19nm,0.6s,536nm0.1nm | | | | | | |
| KDU | Kakadu | 7.88 | 188 | P | Pn | 16 09 13.9 | +0.5 |
| | baz=7.8,SNR=14 | | | | | | |
| SANI | Sanana | 8.15 | 290 | P | Pn | 16 09 17.5 | +0.4 |
| | 10nm,0.9s | | | | | | |
| MTN | Manton Dam | 8.33 | 197 | P | Pn | 16 09 20.0 | +0.4 |
| | baz=8.2,SNR=43 | | | | | | |
| BATI | Baumata | 11.25 | 241 | Pn | Pn | 16 10 00.8 | +1.2 |
| | 1.9nm,0.3s,baz=76,slow=8.3,SNR=4.1 | | | | | | |
| BATI | | | | Sn | Sn | 16 12 01.9 | -2.7 |
| | 1.0nm,0.3s,baz=128,slow=18,SNR=3.1 | | | | | | |
| BATI | Baumata | 11.25 | 241 | P | Pn | 16 10 02.3 | +2.6 |
| | 14nm,1.3s | | | | | | |
| KNRA | Kununurra | 11.79 | 204 | P | Pn | 16 10 06.6 | -0.5 |
| | baz=12,SNR=24 | | | | | | |
| BSSI | Bau Bau, Buton | 13.17 | 264 | P | Pn | 16 10 30.4 | +4.4 |
| WRA | Warramunga Arr | 15.02 | 178 | Pn | Pn | 16 10 47.0 | -4.1 |
| | 0.3nm,0.3s,baz=0.4,slow=13,SNR=35 | | | | | | |
| WRA | | | | Sn | Sn | 16 13 22.5 | -14 |
| | 0.3nm,0.3s,baz=359,slow=23,SNR=6.0 | | | | | | |
| ASAR | Alice Springs | 18.71 | 179 | P | P | 16 11 35.5 | -1.6 |
| | 0.4nm,0.3s,baz=5.3,slow=13,SNR=15 | | | | | | |
| ASAR | | | | S | Sn | 16 14 52.5 | -14 |
| | 0.0nm,0.3s,baz=1.8,slow=28,SNR=3.0 | | | | | | |
| ASAR | | | | LR | LR | 16 19 30.3 | |
| | comp=Z,88nm,18.3s,baz=240,slow=39 | | | | | | |
| MKAR | Makanchi Array | 68.50 | 325 | P | P | 16 18 22.5 | +1.9 |
| | 0.3nm,0.7s,baz=110,slow=6.3,SNR=3.0 | | | | | | |

*IDC **02** 16:21:13.9±1.2, 8°.34S×106°.49E, h0km, mb3.8/7, mb1 4.0/8, mb1mx3.7/24, mbtmp3.9/8, ML4.5/1, MS2.7/1, Ms1 2.9/1, ms1mx2.4/31, Error ellipse: s-maj=39.6km s-min=18.4km az=54.0*

*ISCJB **02** 16:21:24.3±0.9, 8°.1S±0°.1×107°.23E±0°.05, h88km±7km, mb3.6/7, Error ellipse: s-maj=18.6km s-min=5.0km az=23.2*

*DJA **02** 16:21:25.4±0.4, 8°S±4°×10°7E±°, h43km±15km, M4.4/21, mb4.5/3, MLv4.4/14, MLv4.4/21*

**ISC 02 16:21:24.8**±1.4**, 8°.2S**±0°.1×**107°.19E**±0°.06**, h70**km±11km**, n29,** σ**1$^s$48**/36**, mb3.8**/7**, Jawa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNJI | Cibinong | 0.85 | 356 | P | Pn | 16 21 41.3 | -0.1 |
| CNJI | | | | S | Sn | 16 21 52.7 | -1.0 |
| CMJI | Cimerak | 1.30 | 73 | P | Pn | 16 21 46.7 | -0.5 |
| CMJI | | | | S | Sn | 16 22 02.2 | -1.7 |
| SKJI | Sukabumi | 1.31 | 331 | P | Pn | 16 21 48.3 | +1.0 |
| SKJI | | | | S | Sn | 16 22 04.4 | +0.3 |
| LEM | Lembang | 1.39 | 18 | Pn | Pn | 16 21 49.3 | +0.8 |
| | 469nm,0.3s,baz=316,slow=4.8,SNR=116 | | | | | | |
| LEM | | | | Sn | Sn | 16 22 07.4 | +1.2 |
| | 182nm,0.3s,baz=177,slow=22,SNR=6.8 | | | | | | |
| LEM | | | | LR | LR | 16 22 38.6 | |
| | comp=Z,225nm,19.8s,baz=196,slow=45 | | | | | | |
| LEM | Lembang | 1.39 | 18 | P | Pn | 16 21 49.4 | +0.9 |
| CGJI | Cibinong | 2.14 | 316 | P | Pn | 16 21 59.1 | +0.8 |
| CGJI | | | | S | Sn | 16 22 23.1 | -0.8 |
| SBJI | Serang | 2.28 | 332 | P | Pn | 16 22 02.2 | +1.9 |
| UGM | Wanagama | 3.31 | 86 | P | Pn | 16 22 14.0 | -0.3 |
| UGM | | | | S | Sn | 16 22 52.7 | +0.2 |
| SMRI | Semarang | 3.41 | 71 | P | Pn | 16 22 17.1 | +1.5 |
| KASI | Kota Agung | 3.74 | 314 | P | Pn | 16 22 21.2 | +1.0 |
| KASI | | | | S | Sn | 16 23 01.2 | -1.8 |
| PCJI | Pacitan | 3.95 | 91 | P | Pn | 16 22 21.4 | -1.6 |
| LWLI | Liwa | 4.41 | 315 | P | Pn | 16 22 30.3 | +0.9 |
| PWJI | Pagerwojo | 4.57 | 89 | P | Pn | 16 22 31.2 | -0.3 |
| MDSI | Maura Dua | 4.72 | 320 | P | Pn | 16 22 35.1 | +1.6 |
| TBJI | Tambak Boyo | 4.81 | 74 | P | Pn | 16 22 34.7 | 0.0 |
| TPI | Tanjungpandan | 5.39 | 5 | P | Pn | 16 22 44.5 | +1.8 |
| | 42nm,0.8s,0.1nm | | | | | | |
| MNAI | Manna | 5.65 | 312 | P | Pn | 16 22 47.3 | +1.0 |
| | 260nm,2.0s,1.7nm1.7nm | | | | | | |
| GMJI | Gumukmas | 6.19 | 91 | P | Pn | 16 22 55.1 | +1.4 |
| BATI | Baumata | 16.39 | 98 | P | P | 16 25 15.6 | +3.3 |
| | 1.6nm,0.3s,baz=275,slow=19,SNR=3.2 | | | | | | |
| CMAR | Chiang Mai Arr | 27.67 | 343 | P | P | 16 27 04.1 | -2.3 |
| | 0.6nm,0.8s,baz=181,slow=8.8,SNR=7.3 | | | | | | |
| CMAR | | | | LR | LR | 16 38 36.3 | |
| | comp=Z,16nm,21.8s,baz=195,slow=38 | | | | | | |
| WRA | Warramunga Arr | 28.77 | 117 | P | P | 16 27 17.1 | +0.9 |
| | 0.7nm,0.8s,baz=289,slow=10,SNR=9.7 | | | | | | |
| WRA | | | | PcP | PcP | 16 30 25.8 | +0.8 |
| | 0.2nm,0.5s,baz=304,slow=2.3,SNR=4.5 | | | | | | |
| ASAR | Alice Springs | 29.88 | 124 | P | P | 16 27 27.6 | +1.6 |
| | 0.4nm,0.7s,baz=307,slow=9.0,SNR=6.8 | | | | | | |
| ASAR | | | | PcP | PcP | 16 30 29.4 | +1.6 |
| | 0.1nm,0.4s,baz=316,slow=2.6,SNR=3.0 | | | | | | |
| H08S2 | Diego Garcia H | 34.37 | 268 | T | T | 17 05 03.3 | |
| | baz=92,slow=75,SNR=22 | | | | | | |
| H08S3 | Diego Garcia H | 34.38 | 268 | T | T | 17 05 03.3 | |
| | baz=92,slow=75,SNR=16 | | | | | | |
| H08S1 | Diego Carcia H | 34.38 | 268 | T | T | 17 05 03.3 | |
| | baz=92,slow=75,SNR=9.9 | | | | | | |
| SONM | Songino Array | 55.75 | 359 | P | P | 16 30 53.3 | -1.2 |
| | 0.9nm,0.7s,baz=167,slow=7.2,SNR=5.9 | | | | | | |
| SONM | | | | PcP | PcP | 16 31 54.1 | +1.1 |
| | 0.7nm,0.5s,baz=166,slow=4.2,SNR=6.1 | | | | | | |
| MKAR | Makanchi Array | 59.03 | 340 | P | P | 16 31 14.9 | -2.6 |
| | 0.3nm,0.4s,baz=154,slow=9.2,SNR=2.8 | | | | | | |
| ZALV | Zalesovo Beam | 64.69 | 346 | P | P | 16 31 53.0 | -2.3 |
| | 0.4nm,0.3s,baz=163,slow=7.4,SNR=3.5 | | | | | | |
| PETK | Petropavlovsk- | 74.51 | 29 | P | P | 16 32 55.2 | -0.6 |
| | 2.3nm,0.7s,baz=194,slow=5.7,SNR=5.7 | | | | | | |

*TIR **02** 16:47:33.4±6.6, 41°.06N×20°.08E, h6km±97km, ML2.5*

*ATH **02** 16:47:34.1, 41°.18N×19°.97E, h10km±2km, MD3.2/8*

*PDG **02** 16:47:34.4±0.2, 40°.96N×20°.01E, h10km, ML2.5/9, Error ellipse: s-maj=0.5km s-min=0.5km az=0.0*

*THE **02** 16:47:36.6, 41°.07N×20°.09E, h6km±2km, ML2.5/3, Error ellipse: s-maj=2.9km s-min=0.5km az=37.0*

*CSEM **02** 16:47:36.4±0.2, 41°.07N×20°.04E, h2km, ML2.1, Error ellipse: s-maj=4.7km s-min=2.6km az=72.0*

*SKO **02** 16:47:37.1, 41°.04N×20°.03E, h4km, M1.7, ML2.2*

*BEO **02** 16:47:39.5±0.8, 41°.20N×20°.06E, h6km±2km, ML2.1/5*

**ISC 02 16:47:36.6**±1.1**, 41°.07N**±0°.02×**20°.04E**±0°.02**, h6**km±9km**, n82,** σ**1$^s$01**/144**, 4C-10D, Albania**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TIR | Tirane | 0.30 | 335 | i PG | Pg | 16 47 42.3 | -0.3 |
| TIR | | | | i SG | Sb | 16 47 48.2 | -1.5 |
| TIR | Tirane | 0.30 | 335 | ⇓ iPg | Pg | 16 47 42.2 | -0.3 |
| TIR | | | | eSg | Sb | 16 47 48.2 | -1.5 |
| TIR | Tirane | 0.30 | 335 | P | Pg | 16 47 42.3 | -0.3 |
| TIR | | | | S | Sg | 16 47 47.9 | +1.4 |
| TIR | Tirane | 0.30 | 335 | P | Pg | 16 47 42.3 | -0.3 |
| TIR | | | | S | Sg | 16 47 47.9 | +1.4 |
| TIR | | | | eSg | Sb | 16 47 48.2 | -1.5 |
| OHR | Ohrid | 0.58 | 86 | ePg | Pg | 16 47 47.5 | -0.3 |
| OHR | | | | eSg | Sb | 16 47 57.0 | -0.8 |
| OHR | | | | eLg | Lg | 16 47 59.9 | |
| | comp=E,100nm,0.6s | | | | | | |
| OHR | | | | eLg | Lg | 16 48 00.8 | |
| | comp=N,80nm,0.5s | | | | | | |
| OHR | Ohrid | 0.58 | 86 | ePg | Pg | 16 47 47.4 | -0.3 |
| OHR | | | | eSg | Sb | 16 47 56.9 | -0.8 |
| OHR | | | | eLg | Lg | 16 47 59.9 | |
| | comp=N,100nm,0.6s | | | | | | |
| PHP | Peshkopia | 0.68 | 26 | i PG | Pg | 16 47 48.8 | -0.9 |
| PHP | | | | i SG | Sb | 16 48 00.0 | -0.7 |
| PHP | Peshkopia | 0.68 | 26 | P | Pg | 16 47 48.8 | -0.9 |
| PHP | | | | S | Sg | 16 47 59.3 | +0.7 |
| PHP | Peshkopia | 0.68 | 26 | P | Pg | 16 47 48.8 | -0.9 |
| PHP | | | | S | Sg | 16 47 59.3 | +0.7 |
| PHP | | | | i Sg | Sb | 16 48 00.0 | -0.7 |
| | SNR=97 | | | | | | |
| KBN | Korca | 0.73 | 128 | i PG | Pb | 16 47 51.1 | -0.6 |
| KBN | | | | i SG | Sb | 16 48 01.7 | -0.3 |
| KBN | Korca | 0.73 | 128 | i Pg | Pb | 16 47 51.1 | -0.6 |
| | SNR=97 | | | | | | |
| KBN | | | | i Sg | Sb | 16 48 01.7 | -0.3 |
| | SNR=97 | | | | | | |
| PUK | Puka | 0.97 | 354 | i PG | Pb | 16 47 55.6 | -0.4 |
| PUK | | | | i SG | Sn | 16 48 12.4 | +1.2 |
| PUK | Puka | 0.97 | 354 | i Pg | Pb | 16 47 55.6 | -0.4 |
| | SNR=95 | | | | | | |
| PUK | | | | i Sg | Sn | 16 48 12.4 | +1.2 |
| | SNR=95 | | | | | | |
| NEST | Nestorio | 1.01 | 130 | ePB | Pg | 16 47 55.5 | -0.6 |
| NEST | Nestorio | 1.01 | 130 | P | Pg | 16 47 55.2 | -0.8 |
| NEST | Nestorio | 1.01 | 130 | P | Pg | 16 47 55.2 | -0.8 |
| NEST | Nestorio | 1.01 | 130 | ePn | Pg | 16 47 55.5 | -0.6 |
| FNA | Florina | 1.06 | 105 | ePB | Pg | 16 47 55.9 | -1.0 |
| FNA | | | | eSB | Sg | 16 48 10.8 | +0.2 |
| FNA | Florina | 1.06 | 105 | P | Pg | 16 47 55.9 | -1.0 |
| FNA | | | | S | Sg | 16 48 10.2 | -0.4 |
| FNA | Florina | 1.06 | 105 | P | Pg | 16 47 55.9 | -1.0 |
| FNA | | | | S | Sg | 16 48 10.2 | -0.4 |
| FNA | | | | eSb | Sg | 16 48 10.8 | +0.2 |
| ULC | Ulcinj | 1.07 | 327 | ePg | Pg | 16 47 55.9 | -1.2 |
| ULC | | | | eSg | Sn | 16 48 13.6 | +0.2 |
| ULC | Ulcinj | 1.07 | 327 | ePg | Pg | 16 47 55.9 | -1.2 |
| ULC | | | | eSg | Sn | 16 48 13.6 | +0.2 |
| SRN | Sarande | 1.19 | 181 | i PG | Pn | 16 48 00.1 | +0.3 |
| SRN | | | | i SG | Sn | 16 48 17.1 | +0.7 |
| SRN | Sarande | 1.19 | 181 | P | Pg | 16 47 59.2 | -0.3 |
| SRN | | | | S | Sn | 16 48 16.2 | -0.2 |
| SRN | Sarande | 1.19 | 181 | P | Pg | 16 47 59.2 | -0.3 |
| SRN | Sarande | 1.19 | 181 | i Pg | Pn | 16 48 00.2 | +0.3 |
| | SNR=94 | | | | | | |
| SRN | | | | S | Sn | 16 48 16.2 | -0.2 |
| SRN | | | | i Sg | Sn | 16 48 17.0 | +0.7 |
| | SNR=94 | | | | | | |
| DRME | Dracevica, Mon | 1.28 | 330 | ⇓ iPg | Pn | 16 47 59.6 | -1.5 |
| DRME | | | | eSg | Sn | 16 48 21.1 | +2.4 |
| DRME | Dracevica, Mon | 1.28 | 330 | ⇓ iPg | Pn | 16 47 59.6 | -1.5 |
| DRME | | | | eSg | Sn | 16 48 21.1 | +2.4 |
| BCI | Bajram Curri | 1.29 | 1 | i PG | Pg | 16 48 01.6 | +0.2 |
| BCI | | | | i SG | Sn | 16 48 23.0 | +4.0 |
| BCI | Bajram Curri | 1.29 | 1 | i Pg | Pg | 16 48 01.6 | +0.2 |
| | SNR=93 | | | | | | |
| KEK | Kerkira | 1.37 | 188 | ePG | Pn | 16 48 01.6 | -0.7 |
| KEK | | | | eSB | Sn | 16 48 21.5 | +0.7 |
| KEK | Kerkira | 1.37 | 188 | P | Pn | 16 48 01.2 | -1.1 |
| KEK | | | | S | Sn | 16 48 20.7 | -0.1 |
| KEK | Kerkira | 1.37 | 188 | P | Pn | 16 48 01.2 | -1.1 |
| KEK | Kerkira | 1.37 | 188 | ePg | Pn | 16 48 01.6 | -0.7 |
| KEK | | | | S | Sn | 16 48 20.7 | -0.1 |
| KEK | | | | eSb | Sn | 16 48 21.5 | +0.7 |
| SKO | Skopje | 1.39 | 49 | ePg | Pn | 16 48 01.6 | -0.9 |
| SKO | | | | eSg | Sb | 16 48 20.4 | -0.5 |
| SKO | Skopje | 1.39 | 49 | ePg | Pn | 16 48 01.6 | -0.9 |
| SKO | | | | eSg | Sb | 16 48 20.4 | -0.5 |
| SGD | Sagiada | 1.47 | 174 | P | Pn | 16 48 03.3 | -0.3 |
| SGD | | | | S | Sn | 16 48 23.0 | -0.2 |
| SGD | Sagiada | 1.47 | 174 | P | Pn | 16 48 03.3 | -0.3 |
| SGD | | | | S | Sn | 16 48 23.0 | -0.2 |
| PDG | Podgorica | 1.48 | 337 | ePg | Pn | 16 48 03.8 | 0.0 |
| PDG | | | | eSg | Sn | 16 48 23.2 | -0.2 |
| PDG | Podgorica | 1.48 | 337 | ePg | Pn | 16 48 03.8 | 0.0 |
| PDG | | | | eSg | Sn | 16 48 23.2 | -0.2 |
| TTG | Podgorica | 1.48 | 337 | ⇓ iPg | Pn | 16 48 03.5 | -0.3 |
| TTG | | | | eSg | Sg | 16 48 26.1 | +2.1 |
| BUM | Brajici-Budva | 1.50 | 325 | ⇑ iPn | Pn | 16 48 03.1 | -1.0 |
| BUM | | | | eSn | Sg | 16 48 26.7 | +2.0 |
| BUM | Brajici-Budva | 1.50 | 325 | ⇑ iPn | Pn | 16 48 03.1 | -1.0 |
| BUM | | | | eSn | Sg | 16 48 26.7 | +2.0 |
| PVY | Plav | 1.52 | 358 | ⇓ iPn | Pn | 16 48 03.8 | -0.7 |
| PVY | | | | eSn | Sg | 16 48 28.0 | +2.5 |
| PVY | Plav | 1.52 | 358 | ⇓ iPn | Pn | 16 48 03.8 | -0.7 |
| PVY | | | | eSn | Sg | 16 48 28.0 | +2.5 |
| JAN | Janina | 1.55 | 156 | ePB | Pb | 16 48 05.4 | -0.3 |
| JAN | | | | eSB | Sg | 16 48 28.3 | +2.0 |
| JAN | Janina | 1.55 | 156 | ePb | Pb | 16 48 05.4 | -0.3 |
| JAN | | | | eSb | Sg | 16 48 28.3 | +2.0 |
| IGT | Igoumenitsa | 1.56 | 172 | ePG | Pn | 16 48 05.2 | +0.3 |
| IGT | Igoumenitsa | 1.56 | 172 | ePg | Pn | 16 48 05.2 | +0.3 |
| HCY | Herceg Novi | 1.79 | 320 | ePn | Pn | 16 48 07.2 | -0.9 |
| HCY | | | | eSn | Sb | 16 48 33.4 | +0.8 |
| HCY | Herceg Novi | 1.79 | 320 | ePn | Pn | 16 48 07.2 | -0.9 |
| HCY | | | | eSn | Sb | 16 48 33.4 | +0.8 |
| GRG | Griva | 1.79 | 93 | ePN | Pn | 16 48 07.6 | -0.6 |
| GRG | Griva | 1.79 | 93 | ePn | Pn | 16 48 07.6 | -0.6 |
| BEY | Berane | 1.80 | 357 | ePn | Pn | 16 48 08.5 | +0.2 |
| BEY | | | | eSn | Sg | 16 48 34.6 | +0.1 |
| IVA | Berane | 1.80 | 357 | ePn | Pn | 16 48 08.5 | +0.2 |
| IVA | | | | eSn | Sg | 16 48 34.6 | +0.1 |
| NKME | Niksic | 1.88 | 335 | ePn | Pn | 16 48 08.9 | -0.4 |
| NKME | | | | eSn | Sg | 16 48 36.0 | -0.9 |
| NKME | Niksic | 1.88 | 335 | ePn | Pn | 16 48 08.9 | -0.4 |
| NKME | | | | eSn | Sg | 16 48 36.0 | -0.9 |
| NKY | Niksic | 1.90 | 336 | ⇓ iPn | Pn | 16 48 09.5 | -0.3 |
| NKY | | | | eSn | Sb | 16 48 36.9 | +1.0 |
| NKY | Niksic | 1.90 | 336 | ⇓ iPn | Pn | 16 48 09.5 | -0.3 |
| NKY | | | | eSn | Sb | 16 48 36.9 | +1.0 |
| THL | Klokotos Trika | 2.14 | 134 | ePN | Pn | 16 48 14.1 | +1.3 |
| THL | Klokotos Trika | 2.14 | 134 | ePn | Pn | 16 48 14.1 | +1.3 |
| BRY | Bratogost | 2.14 | 329 | ⇑ iPn | Pn | 16 48 12.4 | -0.7 |
| BRY | | | | eSn | Sb | 16 48 42.4 | -0.4 |
| BRY | Bratogost | 2.14 | 329 | ⇑ iPn | Pn | 16 48 12.4 | -0.7 |
| BRY | | | | eSn | Sb | 16 48 42.4 | -0.4 |
| KNT | Kendrikon | 2.17 | 87 | ePN | Pn | 16 48 13.0 | -0.3 |
| KNT | Kendrikon | 2.17 | 87 | ePn | Pn | 16 48 13.0 | -0.3 |
| SJES | Sjenica | 2.19 | 359 | ePn | Pb | 16 48 15.9 | -0.8 |
| SJES | | | | eSg | Sb | 16 48 45.5 | +1.4 |
| SJES | Sjenica | 2.19 | 359 | ePn | Pb | 16 48 15.9 | -0.8 |
| SJES | | | | eSg | Sb | 16 48 45.5 | +1.4 |
| BARS | Barje | 2.19 | 37 | ePn | Pb | 16 48 15.9 | -0.8 |
| BARS | | | | eSg | Sb | 16 48 45.0 | +0.9 |
| BARS | Barje | 2.19 | 37 | ePn | Pb | 16 48 15.9 | -0.8 |
| BARS | | | | eSg | Sb | 16 48 45.0 | +0.9 |
| UPM | Unac-Piva | 2.29 | 339 | ⇓ iPn | Pn | 16 48 14.7 | -0.4 |
| UPM | | | | eSn | Sb | 16 48 46.2 | -0.9 |
| UPM | Unac-Piva | 2.29 | 339 | ⇓ iPn | Pn | 16 48 14.7 | -0.4 |
| UPM | | | | eSn | Sb | 16 48 46.2 | -0.9 |
| SELS | Selova | 2.29 | 20 | ePn | Pn | 16 48 15.1 | +0.1 |
| STON | Ston | 2.50 | 317 | ePn | Pb | 16 48 21.0 | -1.0 |
| STON | | | | eSn | Sn | 16 48 47.9 | -0.8 |
| IVAS | Ivanjica | 2.50 | 2 | ePn | Pb | 16 48 20.4 | -1.6 |
| IVAS | Ivanjica | 2.50 | 2 | ePn | Pb | 16 48 20.4 | -1.6 |
| EVR | Evrytania | 2.55 | 147 | ePN | Pn | 16 48 19.5 | +0.9 |
| EVR | Evrytania | 2.55 | 147 | ePn | Pn | 16 48 19.5 | +0.9 |
| AGG | Agios Georgios | 2.70 | 139 | ePB | Pn | 16 48 21.5 | +0.8 |
| AGG | Agios Georgios | 2.70 | 139 | ePn | Pn | 16 48 21.5 | +0.8 |
| VLS | Valsamata | 2.92 | 171 | ePN | Pn | 16 48 24.7 | +1.0 |
| VLS | Valsamata | 2.92 | 171 | ePn | Pn | 16 48 24.7 | +1.0 |
| ZAPS | Zavoj | 2.93 | 40 | ePn | Pn | 16 48 24.9 | +1.1 |

**MAN 02 17:12:12, 8°.38N×126°.13E, h59km, mb4.5, ML3.4, MS3.3, 1C-1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BIPH | Bislig | 0.31 | 130 | ⇓ iP | Pn | 17 12 23.5 | +1.5 |
| BIPH | | | | i S | Sn | 17 12 30.5 | +1.2 |
| BUTP | Butuan | 0.77 | 319 | eP | Pn | 17 12 28.3 | +1.3 |
| BUTP | | | | eS | Sn | 17 12 41.7 | +3.6 |
| BUKP | Musuan | 1.17 | 245 | eP | Pn | 17 12 33.1 | +0.8 |
| BUKP | | | | eS | Sn | 17 12 49.4 | +2.0 |
| MATI | Mati | 1.43 | 175 | eP | Pn | 17 12 39.1 | +3.3 |
| CTBH | Cotabato--PC H | 2.19 | 238 | ⇑ iP | Pn | 17 12 46.7 | +0.6 |

**CASC 02 17:20:44.4**±2.2**, 9°.20N**×**84°.21W, h25**km±6km**, MD3.8, 1D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BUS | Buena Vista | 0.57 | 52 | ⇓ iP | Pb | 17 20 55.9 | -0.5 |
| CGA2 | Cerro Gallo 2 | 0.85 | 343 | eP | Pb | 17 21 00.3 | -0.4 |
| CGA2 | | | | eS | Sn | 17 21 12.7 | 0.0 |
| CAO | Cobano | 1.01 | 299 | eP | Pb | 17 21 06.2 | +2.9 |
| JCR | Jicaral | 1.10 | 306 | eP | Pn | 17 21 03.4 | -0.9 |
| JTS | JuntasAbangare | 1.30 | 326 | eP | Pn | 17 21 06.8 | -0.3 |
| JTS | | | | eS | Sn | 17 21 23.2 | -0.6 |
| CHPA | Chiripa | 1.41 | 331 | i P | Pn | 17 21 09.1 | +0.4 |
| CHPA | | | | i S | Sb | 17 21 28.2 | +0.2 |
| CTCR | Cotoan | 1.47 | 102 | eP | Pn | 17 21 08.9 | -0.6 |
| CTCR | | | | eS | Sn | 17 21 27.3 | -0.9 |
| BRU2 | Volcan | 1.56 | 105 | eP | Pn | 17 21 10.6 | -0.2 |
| BRU2 | | | | eS | Sn | 17 21 30.0 | -0.3 |
| PTEN | Parque Tenorio | 1.69 | 333 | i P | Pn | 17 21 13.2 | +0.8 |
| CUI | Cuipilapa | 1.72 | 327 | i P | Pn | 17 21 13.2 | +0.3 |
| CUI | | | | i S | Sn | 17 21 35.3 | +1.1 |
| HORNC | Hornillas | 1.78 | 328 | i P | Pn | 17 21 13.2 | -0.5 |
| MESS | Mesas | 1.81 | 328 | i P | Pn | 17 21 15.1 | +0.9 |
| AZU | Azuero | 4.14 | 110 | eP | Pn | 17 21 47.7 | +1.6 |
| BCIP | Isla Barro Col | 4.32 | 90 | eP | Pn | 17 21 48.9 | +0.4 |
| BCIP | | | | eS | Sn | 17 22 41.0 | +2.8 |

**IDC 02 17:23:32.9**±3.3**, 52°.90N**×**35°.40W, h0**km**, mb3.5**/3**, mb1 3.6**/3**, mb1mx3.2**/44**, mbtmp3.5**/3**, MS3.1**/4**, Ms1 3.1**/4**, ms1mx2.7**/29**, Error ellipse: s-maj=89.8km s-min=47.0km az=43.0, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ESDC | Sonseca Array | 25.20 | 109 | P | P | 17 28 59.6 | -0.4 |
| | 0.1nm,0.3s,baz=317,slow=8.9,SNR=5.1 | | | | | | |
| HFS | Hagfors | 27.46 | 55 | LR | LR | 17 38 10.8 | |
| | comp=Z,62nm,18.7s,baz=300,slow=32 | | | | | | |
| DAVOX | Davos/Dischmat | 29.43 | 84 | LR | LR | 17 41 45.4 | |
| | comp=Z,42nm,18.3s,baz=246,slow=37 | | | | | | |
| GERES | GERESS Array B | 30.76 | 77 | LR | LR | 17 39 27.2 | |
| | comp=Z,23nm,21.6s,baz=314,slow=31 | | | | | | |
| BRTR | Keskin Array B | 47.65 | 77 | P | P | 17 32 11.3 | +0.5 |
| | 1.0nm,0.7s,baz=324,slow=6.1,SNR=5.8 | | | | | | |
| KURBB | Kurchatov Arra | 62.82 | 41 | P | P | 17 33 59.6 | -0.3 |
| | 0.2nm,0.6s,baz=328,slow=6.8,SNR=2.6 | | | | | | |
| KSRS | Korea Array | 88.86 | 13 | LR | LR | 18 17 16.5 | |
| | comp=Z,6.7nm,18.1s,baz=170,slow=36 | | | | | | |
| ASAR | Alice Springs | 149.70 | 20 | PKPbc | PKPbc | 17 43 24.1 | -0.4 |
| | 0.3nm,0.8s,baz=348,slow=2.7,SNR=4.4 | | | | | | |

*IDC **02** 17:28:44.5±8.0, 31°.35S×179°.75W, h450km±97km, mb2.4/2, mb1 2.8/3, mb1mx2.6/26, mbtmp3.6/3, Error ellipse: s-maj=99.5km s-min=40.0km az=8.0*

**ISC 02 17:28:39.5**±2.1**, 31°.0S**±0°.2×**179°.4W**±0°.4**, h400**km**, n21,** σ**1$^s$11**/29**, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 6.79 | 196 | ePN | Pn | 17 30 21.7 | +1.1 |
| MXZ | | | | SN | S | 17 31 44.3 | +1.0 |
| WMGZ | Waiomatatini S | 7.00 | 194 | PN | P | 17 30 24.2 | +0.5 |
| HAZ | Te Kaha | 7.10 | 198 | PN | Pn | 17 30 24.8 | +0.7 |
| HAZ | | | | SN | S | 17 31 51.6 | +1.9 |
| PUZ | Puketiti | 7.28 | 195 | ePN | Pn | 17 30 26.6 | +0.3 |
| PUZ | | | | SN | S | 17 31 53.5 | -0.1 |
| MWZ | Matawai | 7.71 | 198 | PN | Pn | 17 30 31.4 | +0.3 |
| MWZ | | | | SN | S | 17 32 04.2 | +1.8 |
| TKGZ | Te Karaka | 7.73 | 196 | PN | Pn | 17 30 31.1 | -0.1 |
| URZ | Urewera | 7.76 | 201 | P | Pn | 17 30 31.2 | -0.4 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2.8nm,0.3s,baz=0.2,slow=3.0,SNR=38 | | | | | | |
| URZ | | | | S | S | 17 32 03.7 | +0.3 |
| | 5.2nm,0.3s,baz=69,slow=18,SNR=18 | | | | | | |
| URZ | Urewera | 7.76 | 201 | PN | Pn | 17 30 31.3 | -0.4 |
| URZ | | | | eSN | S | 17 32 03.6 | +0.2 |
| RIGZ | Rimuhau | 8.00 | 196 | PN | Pn | 17 30 34.2 | -0.2 |
| SNGZ | Shannon Statio | 8.18 | 198 | PN | Pn | 17 30 35.6 | -0.8 |
| BKZ | Black Stump Fm | 8.78 | 201 | ePN | Pn | 17 30 43.4 | 0.0 |
| WNVZ | Wahianoa | 9.23 | 205 | PN | P | 17 30 49.1 | +0.6 |
| KAHZ | Kahuranaki | 9.25 | 198 | PN | Pn | 17 30 49.1 | +0.3 |
| PXZ | Pawanui | 9.48 | 198 | ePN | P | 17 30 50.5 | -0.6 |
| PXZ | | | | eSN | S | 17 32 37.5 | -2.0 |
| TSZ | Takapari Road | 9.77 | 201 | ePN | P | 17 30 51.7 | -2.6 |
| TSZ | | | | eSN | S | 17 32 44.2 | -1.3 |
| MRZ | Mangatainoka R | 10.43 | 202 | ePN | P | 17 31 00.5 | -1.2 |
| MRZ | | | | eSN | S | 17 32 57.8 | -1.2 |
| NNZ | Nelson | 11.71 | 208 | ePN | P | 17 31 15.1 | -0.7 |
| NNZ | | | | eSN | S | 17 33 26.3 | +1.3 |
| THZ | Tophouse | 12.36 | 208 | eSN | S | 17 33 39.8 | +1.4 |
| ASAR | Alice Springs | 41.87 | 268 | P | P | 17 35 51.7 | -1.1 |
| | 0.4nm,0.9s,baz=106,slow=7.5,SNR=5.9 | | | | | | |
| WRA | Warramunga Arr | 42.92 | 274 | P | P | 17 35 59.8 | -1.3 |
| | 0.2nm,0.4s,baz=111,slow=8.0,SNR=7.7 | | | | | | |
| FINES | FINESS Array B | 145.31 | 339 | PKPbc | PKPdf | 17 47 30.0 | +0.4 |
| | 2.3nm,0.5s,baz=68,slow=3.7,SNR=25 | | | | | | |

**BJI 02 17:30:16.5, 46°.82N×125°.28E, h8km, ML3.9/11, Northeastern China**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MDJ | Mudanjiang | 3.74 | 125 | Pg | Pg | 17 31 26.0 | -2.1 |
| MDJ | | | | Sg | Sg | 17 32 14.2 | -2.4 |
| MDJ | | | | SMN | | | |
| | 250nm,0.6s | | | | | | |
| MDJ | | | | SME | | | |
| | 280nm,0.6s | | | | | | |

**JMA 02 17:36:07.2±0.1, 36°.77N×141°.29E, h47km±2km, M3.3, 3C-2D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ONAJ | Iwakimizuishiy | 0.52 | 310 | ⇑P | Pn | 17 36 18.2 | -0.3 |
| ONAJ | | | | S | Sn | 17 36 26.0 | -0.7 |
| JHO | Hitachi | 0.60 | 255 | ⇓P | Pn | 17 36 19.4 | -0.2 |
| JHO | | | | S | Sn | 17 36 28.5 | +0.1 |
| JFK | Kawauchi | 0.68 | 331 | ⇑P | Pn | 17 36 20.4 | -0.3 |
| JFK | | | | S | Sn | 17 36 29.5 | -0.9 |
| JFT | Otama | 1.07 | 315 | ⇑P | Pn | 17 36 26.9 | +1.1 |
| JFT | | | | S | Sn | 17 36 39.4 | -0.1 |
| JMM | Marumori | 1.16 | 340 | P | Pn | 17 36 27.1 | 0.0 |
| JFY | Yanaizu | 1.42 | 297 | P | Pn | 17 36 32.7 | +2.1 |
| JAG | Ashikaga | 1.52 | 257 | ⇓P | Pn | 17 36 32.7 | +0.8 |
| JAG | | | | S | Sn | 17 36 51.6 | +1.1 |
| MAT | Matsushiro | 2.49 | 266 | P | Pn | 17 36 47.7 | +2.4 |
| MAT | | | | eS | Sn | 17 37 18.7 | +4.2 |

*IDC 02 17:53:25.6±0.7, 30°.33S×178°.06W, h0km, mb4.4/7, mb1 4.5/8, mb1mx4.3/24, mbtmp4.3/8, ML3.6/1, MS3.4/2, Ms1 3.4/2, ms1mx2.8/20, Error ellipse: s-maj=26.7km s-min=15.1km az=105.0*
*NEIC 02 17:53:32.9±1.6, 30°.22S×178°.05W, h51km±14km, mb4.5/7, Error ellipse: s-maj=14.6km s-min=12.5km az=129.0*
*AUST 02 17:54:07.4, 31°.19S×179°.35E, h200km*
**ISC 02 17:53:31.8±0.5, 30°.38S±0°.06×178°.1W±0°.1, h46km, n75, σ1s.75/65, mb4.5/13, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 1.14 | 8 | Pn | Pn | 17 53 49.6 | -1.7 |
| | 323nm,0.3s,baz=80,slow=23,SNR=9.9 | | | | | | |
| RAO | | | | Sn | Sn | 17 54 03.1 | -2.7 |
| | 3μm,0.3s,baz=131,slow=20,SNR=25 | | | | | | |
| RAO | | | | LR | LR | 17 54 23.8 | |
| | comp=Z,263nm,21.4s,baz=213,slow=54 | | | | | | |
| RAO | Raoul Island | 1.14 | 8 | ePn | Pn | 17 53 49.5 | -1.8 |
| RAO | | | | eSn | Sn | 17 54 02.8 | -3.0 |
| HAZ | Te Kaha | 8.11 | 204 | PN | Pn | 17 55 24.8 | -2.0 |
| HAZ | | | | SN | Sn | 17 56 59.0 | +1.9 |
| OUZ | Omahuta | 8.49 | 233 | ePn | Pn | 17 55 39.8 | +7.8 |
| | 40nm,1.2s | | | | | | |
| MWZ | Matawai | 8.71 | 203 | PN | Pn | 17 55 32.0 | -3.2 |
| MWZ | | | | SN | Sn | 17 57 11.3 | -0.8 |
| URZ | Urewera | 8.79 | 205 | Pn | Pn | 17 55 33.3 | -2.9 |
| | 0.6nm,0.3s,baz=41,slow=9.3,SNR=8.1 | | | | | | |
| URZ | | | | Sn | Sn | 17 57 10.0 | -4.0 |
| | 5.4nm,0.3s,baz=16,slow=20,SNR=23 | | | | | | |
| URZ | Urewera | 8.79 | 205 | Pn | Pn | 17 55 33.3 | -2.9 |
| URZ | | | | Sn | Sn | 17 57 10.0 | -4.0 |
| RAGZ | Rawiri | 8.90 | 203 | SN | Sn | 17 57 15.4 | -1.2 |
| RIGZ | Rimuhau | 8.97 | 201 | PN | Pn | 17 55 36.0 | -2.8 |
| WHHZ | Waihua | 9.48 | 203 | SN | Sn | 17 57 29.6 | -1.2 |
| PXZ | Pawanui | 10.47 | 202 | SN | Sn | 17 57 49.2 | -5.8 |
| MRZ | Mangatainoka R | 11.47 | 205 | eSN | Sn | 17 58 11.5 | -8.1 |
| MQZ | McQueen's Vall | 15.19 | 206 | eSN | Sn | 17 59 34.1 | -16 |
| RPZ | Rata Peaks | 15.85 | 210 | LR | LR | 18 03 15.1 | |
| | comp=Z,126nm,20.2s,baz=32,slow=37 | | | | | | |
| DZM | Mont Dzumac | 16.13 | 297 | eLR | LR | 18 01 20.7 | |
| | 249nm,24.9s | | | | | | |
| AFI | Afiamalu | 17.40 | 21 | ePn | Pn | 17 57 22.9 | -8.5 |
| TBI | Tubuai | 26.45 | 82 | eT | T | 18 26 29.7 | |
| | 20nm,0.3s | | | | | | |
| EIDS | Eidsvold | 27.64 | 273 | Pn | P | 17 59 17.8 | +2.6 |
| PAE | Paea | 28.88 | 71 | eT | T | 18 29 02.4 | |
| | 5.4nm,0.3s | | | | | | |
| PPT2 | Papeete2 | 28.92 | 70 | eLR | LR | 18 07 01.5 | |
| | 82nm,24.5s | | | | | | |
| RMQ | Roma | 29.34 | 269 | P | P | 17 59 35.4 | +5.1 |
| | baz=27,SNR=4.4 | | | | | | |
| TOO | Toolangi | 30.89 | 247 | P | P | 17 59 47.5 | +3.6 |
| | baz=28,SNR=4.0 | | | | | | |
| CMSA | Cobar Meteorol | 30.98 | 258 | P | P | 17 59 48.7 | +4.0 |
| | baz=29,SNR=6.7 | | | | | | |
| VAH | Vaihoa | 31.75 | 68 | eT | T | 18 32 31.9 | |
| | 30nm,0.2s | | | | | | |
| QLP | Quilpie | 33.22 | 267 | P | P | 18 00 07.6 | +3.1 |
| | baz=31,SNR=9.1 | | | | | | |
| CTA | Charters Tower | 33.70 | 279 | P | P | 18 00 08.1 | -0.7 |
| | 9.5nm,0.5s,baz=105,slow=12,SNR=1.8 | | | | | | |
| CTA | Charters Tower | 33.70 | 279 | P | P | 18 00 08.1 | -0.7 |
| CTAO | Charters Tower | 33.70 | 279 | eP | P | 18 00 11.8 | +3.1 |
| | 10nm,0.5s | | | | | | |
| HTT | Hallett | 36.42 | 254 | P | P | 18 00 33.4 | +1.3 |
| | baz=34,SNR=12 | | | | | | |
| BBOO | Buckleboo | 38.88 | 254 | P | P | 18 00 55.1 | +2.2 |
| | baz=36,SNR=7.7 | | | | | | |
| ASAR | Alice Springs | 43.02 | 267 | P | P | 18 01 28.2 | +1.2 |
| | 2.7nm,0.7s,baz=103,slow=7.1,SNR=33 | | | | | | |
| ASAR | | | | LR | LR | 18 18 43.4 | |
| | comp=Z,51nm,18.2s,baz=124,slow=35 | | | | | | |
| ASAR | Alice Springs | 43.02 | 267 | P | P | 18 01 28.2 | +1.2 |
| WRAB | Tennant Creek | 44.00 | 272 | eP | P | 18 01 35.9 | +0.9 |
| | 10nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 44.00 | 272 | P | P | 18 01 36.3 | +1.3 |
| | 5.7nm,0.5s,baz=111,slow=8.1,SNR=58 | | | | | | |
| WRA | Warramunga Arr | 44.00 | 272 | P | P | 18 01 36.3 | +1.3 |
| WRKA | Warakurna | 47.39 | 263 | P | P | 18 02 02.1 | +0.4 |
| | baz=45,SNR=7.8 | | | | | | |
| SBA | Scott Base | 48.05 | 184 | P | P | 18 02 09.6 | +3.6 |
| | 4.5nm,0.9s | | | | | | |
| VNDA | Vanda | 48.10 | 186 | P | P | 18 02 08.5 | +2.0 |
| | 0.7nm,0.6s,baz=8.7,slow=8.4,SNR=6.3 | | | | | | |
| VNDA | Vanda | 48.10 | 186 | P | P | 18 02 08.5 | +2.0 |
| KNRA | Kununurra | 50.61 | 274 | P | P | 18 02 27.7 | +1.3 |
| | baz=48,SNR=10 | | | | | | |
| MBWA | Marble Bar | 56.13 | 264 | P | P | 18 03 06.6 | -0.4 |
| | 4.3nm,0.9s | | | | | | |
| MORW | Morawa | 56.45 | 253 | P | P | 18 03 09.5 | +0.4 |
| | baz=54,SNR=4.1 | | | | | | |
| QSPA | South Pole Qui | 59.73 | 180 | eP | P | 18 03 33.6 | +2.0 |
| | 10nm,0.8s | | | | | | |
| MAW | Mawson | 72.29 | 201 | P | P | 18 04 52.9 | +0.9 |
| | 2.5nm,0.7s,baz=139,slow=7.2,SNR=9.5 | | | | | | |
| MAW | Mawson | 72.29 | 201 | P | P | 18 04 52.9 | +0.9 |
| SNAA | Sanae | 78.17 | 178 | P | P | 18 05 26.0 | +0.1 |
| SNAA | Sanae | 78.17 | 178 | eP | P | 18 05 26.0 | +0.1 |
| | 1.7nm,1.1s | | | | | | |
| VNA1 | Neumayer--Stat | 78.99 | 177 | P | P | 18 05 28.4 | -1.8 |
| PETK | Petropavlovsk- | 85.77 | 346 | P | P | 18 06 07.0 | +1.4 |
| | 3.0nm,0.7s,baz=114,slow=6.5,SNR=4.0 | | | | | | |
| PETK | Petropavlovsk- | 85.77 | 346 | P | P | 18 06 07.0 | +1.4 |
| ISA | Isabella | 86.35 | 45 | P | P | 18 06 10.0 | +0.9 |
| | 2.3nm,0.9s | | | | | | |
| CMB | Columbia Colle | 86.81 | 42 | P | P | 18 06 11.6 | +0.4 |
| NVAR | Mina Array Bea | 88.29 | 43 | P | P | 18 06 19.7 | +1.1 |
| | 1.1nm,0.7s,baz=224,slow=7.6,SNR=7.6 | | | | | | |
| NVAR | Mina Array Bea | 88.29 | 43 | P | P | 18 06 19.7 | +1.1 |
| MKAR | Makanchi Array | 117.69 | 310 | PKP | PKPdf | 18 12 11.6 | -1.0 |
| | 0.4nm,0.5s,baz=92,slow=0.5,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 117.69 | 310 | PKP | PKPdf | 18 12 11.6 | -1.0 |
| ZALV | Zalesovo Beam | 117.96 | 318 | PKP | PKPdf | 18 12 12.0 | -0.8 |
| | 0.4nm,0.4s,baz=112,slow=3.6,SNR=2.8 | | | | | | |
| ZALV | Zalesovo Beam | 117.96 | 318 | PKP | PKPdf | 18 12 12.0 | -0.8 |
| BVAR | Borovoye Array | 126.33 | 316 | PKP | PKPdf | 18 12 28.8 | -0.1 |
| | 1.9nm,0.5s,baz=64,slow=3.4,SNR=10 | | | | | | |
| BVAR | Borovoye Array | 126.33 | 316 | PKP | PKPdf | 18 12 28.8 | -0.1 |
| KBZ | Khabaz | 145.03 | 304 | PKPbc | PKPdf | 18 13 03.5 | -0.3 |
| | 3.1nm,0.9s,baz=90,slow=2.0,SNR=5.9 | | | | | | |
| KBZ | Khabaz | 145.03 | 304 | PKPbc | PKPdf | 18 13 03.5 | -0.3 |
| FINES | FINESS Array B | 145.10 | 340 | PKPbc | PKPbc | 18 13 02.6 | -0.3 |
| | 9.6nm,0.5s,baz=71,slow=3.5,SNR=83 | | | | | | |
| FINES | FINESS Array B | 145.10 | 340 | PKPbc | PKPbc | 18 13 02.6 | -0.3 |
| OBN | Obninsk | 145.10 | 325 | PKPdf | PKPdf | 18 13 03.2 | -0.4 |
| NB2 | NORSAR Subarra | 148.72 | 351 | PKP | PKPbc | 18 13 13.0 | -0.4 |
| | comp=Z,1.7nm,0.6s,baz=15,slow=2.7 | | | | | | |
| NOA | NORSAR Array B | 148.72 | 351 | PKPbc | PKPbc | 18 13 13.2 | -0.1 |
| | comp=Z,2.6nm,0.6s,baz=14,slow=4.2,SNR=7.5 | | | | | | |
| NOA | NORSAR Array B | 148.72 | 351 | PKPbc | PKPbc | 18 13 13.2 | -0.1 |
| AKASG | Malin Array Be | 151.23 | 323 | PKPbc | PKPbc | 18 13 19.4 | -0.2 |
| | comp=Z,6.1nm,0.7s,baz=48,slow=2.8,SNR=27 | | | | | | |
| AKASG | Malin Array Be | 151.23 | 323 | PKPbc | PKPbc | 18 13 19.4 | -0.2 |
| BRTR | Keskin Array B | 152.51 | 298 | PKPbc | PKPbc | 18 13 23.1 | -0.1 |
| | comp=Z,1.9nm,0.8s,baz=86,slow=1.9,SNR=8.6 | | | | | | |
| BRTR | Keskin Array B | 152.51 | 298 | PKPbc | PKPbc | 18 13 23.1 | -0.1 |
| CLL | Collm | 157.52 | 342 | ePKPab | PKPab | 18 13 55.0 | +0.6 |
| TORD | Torodi Ar. Bea | 162.85 | 179 | PKPab | PKPab | 18 14 19.3 | +0.9 |
| | comp=Z,2.3nm,0.8s,baz=178,slow=3.5,SNR=14 | | | | | | |
| TORD | Torodi Ar. Bea | 162.85 | 179 | PKPab | PKPab | 18 14 19.3 | +0.9 |

*IDC 02 18:05:33.3±3.0, 4°.87S×134°.67E, h0km, mb3.6/1, mb1 4.0/3, mb1mx3.5/30, mbtmp3.8/3, ML3.7/2, Error ellipse: s-maj=137.5km s-min=31.0km az=79.0*
*ISCJB 02 18:05:37.4±0.8, 5°.08S±0°.06×133°.1E±0°.1, h10km, mb3.6/1, Error ellipse: s-maj=17.9km s-min=9.2km az=177.9*
*AUST 02 18:05:41.1±10.0, 5°.00S×132°.99E, h20km, Error ellipse: s-maj=1.6km s-min=0.9km az=272.0*
**ISC 02 18:05:39.7±1.0, 5°.02S±0°.09×133°.0E±0°.1, h10km, n9, σ1s.51/8, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.22 | 340 | P | Pn | 18 06 16.1 | -0.5 |
| | baz=2.2,SNR=26 | | | | | | |
| SWI | Sorong | 4.48 | 337 | P | Pn | 18 06 47.9 | +0.1 |
| | baz=4.5,SNR=9.8 | | | | | | |
| KDU | Kakadu | 7.64 | 184 | P | Pn | 18 07 31.0 | -0.2 |
| | baz=7.7,SNR=55 | | | | | | |
| MTN | Manton Dam | 8.00 | 193 | P | Pn | 18 07 37.5 | +1.5 |
| | baz=8.1,SNR=33 | | | | | | |
| JAY | Jayapura | 8.07 | 72 | P | Pn | 18 07 37.5 | +0.4 |
| | baz=8.1,SNR=9.8 | | | | | | |
| KNRA | Kununurra | 11.39 | 201 | P | Pn | 18 08 23.9 | +1.4 |
| | baz=12,SNR=26 | | | | | | |
| WRA | Warramunga Arr | 14.89 | 175 | Pn | Pn | 18 09 04.7 | -5.8 |
| | 0.3nm,0.3s,baz=0.4,slow=13,SNR=15 | | | | | | |
| WRA | | | | Sn | Sn | 18 11 41.5 | -14 |
| | 0.2nm,0.3s,baz=355,slow=23,SNR=5.5 | | | | | | |
| ASAR | Alice Springs | 18.56 | 177 | P | P | 18 09 54.3 | -2.6 |
| | 0.4nm,0.3s,baz=1.7,slow=13,SNR=17 | | | | | | |
| ASAR | | | | S | Sn | 18 13 12.4 | -12 |
| | 0.1nm,0.3s,baz=4.0,slow=28,SNR=3.9 | | | | | | |
| MKAR | Makanchi Array | 68.27 | 325 | P | P | 18 16 41.4 | +0.4 |
| | 0.5nm,0.7s,baz=107,slow=7.9,SNR=3.6 | | | | | | |

*IDC 02 18:15:16.8±1.4, 52°.32N×160°.50E, h0km, mb3.7/9, mb1 3.8/9, mb1mx3.6/36, mbtmp3.7/9, MS3.6/2, Ms1 3.6/2, ms1mx2.8/32, Error ellipse: s-maj=30.9km s-min=24.0km az=102.0*
*KRSC 02 18:15:18.4±1.3, 52°.10N×160°.53E, h50km±17km, ML4.1*
*ISCJB 02 18:15:19.9±0.8, 52°.07N±0°.04×160°.48E±0°.08, h51km±6km, mb3.8/12, MS3.6/2, Error ellipse: s-maj=8.8km s-min=5.2km az=36.8*
*MOS 02 18:15:22.8±1.3, 52°.26N×160°.09E, h57km, mb4.2/7, Error ellipse: s-maj=10.8km s-min=6.1km az=100.1*
**ISC 02 18:15:21.6±1.9, 52°.21N±0°.06×160°.28E±0°.07, h32km±11km, n68, σ1s.37/91, mb3.8/12, 3C, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SPN | Mys Shipunski | 0.90 | 350 | eP | Pn | 18 15 37.5 | -0.6 |
| SPN | | | | eS | Sn | 18 15 50.6 | +0.6 |
| SPN | Mys Shipunski | 0.90 | 350 | PN | Pn | 18 15 37.5 | -0.6 |
| SPN | | | | S | Sn | 18 15 50.6 | +0.6 |
| RUS | Russkaya | 1.11 | 282 | eP | Pn | 18 15 41.1 | +0.3 |
| RUS | | | | eS | Sb | 18 15 57.2 | +1.0 |
| RUS | Russkaya | 1.11 | 282 | PN | Pn | 18 15 41.1 | +0.3 |
| RUS | | | | S | Sb | 18 15 57.2 | +1.0 |
| NLC | Nalytchevo | 1.12 | 330 | eP | Pb | 18 15 41.5 | -0.9 |
| NLC | | | | eS | Sb | 18 15 58.1 | +1.5 |
| NLC | Nalytchevo | 1.12 | 330 | PN | Pb | 18 15 41.5 | -0.9 |
| NLC | | | | S | Sb | 18 15 58.1 | +1.5 |
| PET | Petropavlovsk | 1.28 | 310 | eP | Pb | 18 15 44.0 | -1.2 |
| PET | | | | eS | Sb | 18 16 01.4 | +0.1 |
| PET | Petropavlovsk | 1.28 | 310 | ⇑iPN | Pb | 18 15 43.9 | -1.2 |
| PET | | | | eS | Sb | 18 16 01.0 | -0.3 |
| PET | | | | pmax | pmax | | |
| | comp=Z,315nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,1μm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,754nm,0.5s | | | | | | |
| MTVR | Mutnovka | 1.31 | 283 | eP | Pb | 18 15 44.8 | -1.0 |
| MTVR | | | | eS | Sb | 18 16 03.0 | +0.7 |
| UGLR | Uglovaya | 1.34 | 319 | eP | Pb | 18 15 45.3 | -0.8 |
| UGLR | | | | eS | Sb | 18 16 04.3 | +1.4 |
| SDLR | Sedlovina | 1.36 | 322 | eP | Pb | 18 15 45.3 | -1.3 |
| SDLR | | | | eS | Sb | 18 16 04.8 | +1.0 |
| SDLR | Sedlovina | 1.36 | 322 | PN | Pb | 18 15 45.3 | -1.3 |
| SDLR | | | | S | Sb | 18 16 04.8 | +1.0 |
| SMAR | Somma | 1.39 | 320 | eP | Pn | 18 15 45.6 | +0.7 |
| SMAR | | | | eS | Sb | 18 16 05.4 | +0.9 |
| SMAR | Somma | 1.39 | 320 | PN | Pn | 18 15 45.6 | +0.7 |
| SMAR | | | | S | Sb | 18 16 05.4 | +0.9 |
| GRL | Gorelyy | 1.39 | 285 | eP | Pb | 18 15 46.7 | -0.4 |
| GRL | Gorelyy | 1.39 | 285 | PN | Pb | 18 15 46.7 | -0.4 |
| AVH | Avacha | 1.41 | 319 | eP | Pb | 18 15 46.2 | -1.2 |
| AVH | | | | eS | Sb | 18 16 06.6 | +1.5 |
| AVH | Avacha | 1.41 | 319 | PN | Pb | 18 15 46.2 | -1.2 |
| AVH | | | | S | Sb | 18 16 06.6 | +1.5 |
| KOK | Koryaka | 1.47 | 318 | eP | Pb | 18 15 47.1 | -1.4 |
| KOK | Koryaka | 1.47 | 318 | PN | Pb | 18 15 47.1 | -1.4 |
| KRX | Arik | 1.52 | 320 | eP | Pb | 18 15 47.7 | -1.5 |
| KRX | | | | eS | Sb | 18 16 09.4 | +1.2 |
| PETK | Petropavlovsk- | 1.81 | 301 | Pn | Pn | 18 15 51.9 | +1.3 |
| | comp=E,20nm,0.3s,baz=107,slow=19,SNR=496 | | | | | | |
| PETK | | | | Sn | Sb | 18 16 16.9 | +0.6 |
| | comp=E,26nm,0.3s,baz=116,slow=12,SNR=15 | | | | | | |
| KII | Karymskiy | 1.90 | 345 | eP | Pb | 18 15 53.5 | -2.1 |
| KII | | | | eS | Sb | 18 16 19.5 | +0.6 |
| KII | Karymskiy | 1.90 | 345 | PN | Pb | 18 15 53.5 | -2.1 |
| KII | | | | S | Sb | 18 16 19.5 | +0.6 |
| GNL | Ganaly | 2.05 | 317 | eP | Pn | 18 15 55.7 | +1.7 |
| GNL | | | | eS | Sb | 18 16 23.5 | +0.1 |
| GNL | Ganaly | 2.05 | 317 | PN | Pn | 18 15 55.7 | +1.7 |
| PAU | Pauzhetka | 2.27 | 252 | eP | Pn | 18 15 57.7 | +0.8 |
| PAU | Pauzhetka | 2.27 | 252 | PN | Pn | 18 15 57.7 | +0.8 |
| KZV | Kizimen | 2.91 | 0 | eP | Pn | 18 16 06.9 | +1.1 |
| KZV | | | | eS | Sn | 18 16 41.7 | +2.0 |
| SKR | Severo-Kuril's | 3.02 | 241 | eP | Pn | 18 16 08.1 | +1.0 |
| SKR | | | | eS | Sn | 18 16 44.2 | +2.1 |
| SKR | Severo-Kuril's | 3.02 | 241 | ePN | Pn | 18 16 07.5 | +0.4 |
| SKR | | | | eS | Sn | 18 16 39.1 | -3.0 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,30nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,140nm,0.6s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,60nm,0.6s | | | | | | |
| TUMR | Tumrok | 3.08 | 359 | eP | Pn | 18 16 09.7 | +1.6 |
| TUMR | | | | eS | Sn | 18 16 47.1 | +3.2 |
| TUMR | Tumrok | 3.08 | 359 | PN | Pn | 18 16 09.7 | +1.6 |
| TUMR | | | | S | Sn | 18 16 47.1 | +3.2 |
| KMNR | Kamenistaya | 3.55 | 360 | eP | Pn | 18 16 18.2 | +3.6 |
| KMNR | Kamenistaya | 3.55 | 360 | PN | Pn | 18 16 18.2 | +3.6 |
| KBTR | Krutoberegovo | 4.28 | 19 | eP | Pn | 18 16 25.1 | +0.7 |
| KBTR | | | | eS | Sn | 18 17 13.2 | +0.1 |
| KBTR | Krutoberegovo | 4.28 | 19 | PN | Pn | 18 16 25.1 | +0.7 |
| KBTR | | | | S | Sn | 18 17 13.2 | +0.1 |
| KUR | Kuril'sk | 10.76 | 234 | ePN | Pn | 18 17 55.4 | +2.1 |
| UGL | Uglegorsk | 11.97 | 262 | ePN | Pn | 18 18 09.5 | -0.4 |
| YSS | Yuzh-Sakhalins | 12.52 | 252 | ePN | Pn | 18 18 17.0 | -0.3 |
| BILL | Bilibino | 16.14 | 8 | eP | P | 18 19 08.1 | -0.7 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.4s | | | | | | |
| HABR | Khabarovsk | 16.50 | 267 | eP | Pn | 18 19 08.7 | -1.7 |
| HABR | | | | eS | Sn | 18 22 10.8 | -1.6 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,15nm,2.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,48nm,17.0s | | | | | | |
| YAK | Yakutsk | 19.11 | 313 | eP | P | 18 19 38.9 | -2.6 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,4.0nm,1.5s | | | | | | |
| MJA0 | Matsu Arr-Jizo | 22.08 | 233 | eP | P | 18 20 16.2 | +2.4 |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| MJAR | Matsushiro Arr | 22.10 | 234 | P | P | 18 20 15.9 | +1.9 |
| | comp=Z,0.8nm,0.5s,baz=21,slow=11,SNR=5.8 | | | | | | |
| MJAR | | | | LR | LR | 18 29 11.6 | |
| | comp=Z,34nm,19.9s,baz=110,slow=38 | | | | | | |
| MJAR | Matsushiro Arr | 22.10 | 234 | P | P | 18 20 15.9 | +1.9 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,35nm,19.9s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 32.82 | 168 | T | T | 18 57 48.6 | |
| | baz=352,slow=75,SNR=23 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 32.84 | 168 | T | T | 18 57 50.2 | |
| | baz=352,slow=75 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 32.84 | 168 | T | T | 18 57 48.6 | |
| | baz=352,slow=75,SNR=22 | | | | | | |
| SONM | Songino Array | 34.22 | 285 | P | P | 18 22 03.7 | -0.5 |
| | comp=Z,0.2nm,0.3s,baz=67,slow=7.6,SNR=5.1 | | | | | | |
| MKAR | Makanchi Array | 48.64 | 296 | P | P | 18 24 00.6 | -1.6 |
| | comp=Z,0.5nm,0.5s,baz=54,slow=7.0,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 48.64 | 296 | eP | P | 18 24 00.4 | -1.8 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| BRVK | Borovoye | 51.06 | 309 | ⇑eP | P | 18 24 19.2 | -1.2 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| ARU | Arti | 54.13 | 318 | eP | P | 18 24 41.4 | -1.6 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| ARCES | ARCESS Array B | 54.16 | 342 | P | P | 18 24 42.5 | -0.6 |
| | comp=Z,1.5nm,0.8s,baz=35,slow=6.7,SNR=3.9 | | | | | | |
| ARCES | ARCESS Array B | 54.16 | 342 | eP | P | 18 24 42.8 | -0.4 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 58.11 | 259 | P | P | 18 25 13.6 | +1.6 |
| | comp=Z,0.3nm,0.5s,baz=30,slow=7.9,SNR=4.5 | | | | | | |
| CMAR | Chiang Mai Arr | 58.11 | 259 | eP | P | 18 25 14.9 | +2.9 |
| FINES | FINESS Array B | 60.98 | 337 | P | P | 18 25 31.3 | +0.2 |
| | comp=Z,1.5nm,0.4s,baz=37,slow=6.7,SNR=24 | | | | | | |
| FINES | FINESS Array B | 60.98 | 337 | P | P | 18 25 31.3 | +0.2 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| OBN | Obninsk | 63.32 | 328 | P | P | 18 25 45.4 | -1.5 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| VSU | Vasula | 63.40 | 335 | ⇑eP | P | 18 25 47.1 | -0.3 |
| NOA | NORSAR Array B | 64.42 | 344 | P | P | 18 25 54.6 | +0.5 |
| | comp=Z,0.3nm,0.5s,baz=24,slow=6.5,SNR=4.9 | | | | | | |
| NOA | NORSAR Array B | 64.42 | 344 | eP | P | 18 25 55.2 | +1.0 |
| AKASG | Malin Array Be | 69.43 | 329 | P | P | 18 26 25.6 | -0.5 |
| | comp=Z,0.9nm,0.4s,baz=30,slow=6.8,SNR=5.5 | | | | | | |
| AKASG | Malin Array Be | 69.43 | 329 | P | P | 18 26 25.6 | -0.5 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| DZM | Mont Dzumac | 74.16 | 174 | LR | LR | 18 52 05.1 | |
| | comp=Z,208nm,21.9s,baz=301,slow=30 | | | | | | |
| ASAR | Alice Springs | 79.00 | 205 | P | P | 18 27 23.4 | +1.3 |
| | comp=Z,0.3nm,0.6s,baz=21,slow=4.7,SNR=4.6 | | | | | | |

**WEL 02 18:27:57.4±0.5, 40°.81S×178°.73E, h33km, ML3.6/7, 3C-4D, Error ellipse: s-maj=4.4km s-min=3.5km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PXZ | Pawanui | 1.62 | 298 | PN | Pn | 18 28 23.3 | -0.4 |
| PXZ | | | | SN | Sn | 18 28 42.4 | -1.0 |
| PXZ | | | | AML | AML | 18 28 42.8 | |
| PXZ | | | | AML | AML | 18 28 42.9 | |
| PXZ | | | | AML | AML | 18 28 42.9 | |
| PRHZ | Porangahau | 1.68 | 288 | ePN | Pn | 18 28 24.3 | -0.3 |
| CKHZ | Cape Kidnapper | 1.71 | 312 | PN | Pn | 18 28 23.2 | -1.6 |
| KAHZ | Kahuranaki | 1.74 | 305 | PN | Pn | 18 28 23.8 | -1.6 |
| ANWZ | Angora Road | 1.75 | 281 | PN | Pn | 18 28 25.7 | +0.3 |
| MHGZ | Mahia Peninsul | 1.77 | 339 | ⇓PN | Pn | 18 28 25.3 | -0.5 |
| BFZ | Birch Farm | 1.89 | 273 | PN | Pn | 18 28 25.4 | -1.9 |
| WPHZ | Waipukurau | 1.90 | 292 | PN | Pn | 18 28 27.2 | -0.2 |
| CPWZ | Castlepoint | 1.92 | 266 | PN | Pn | 18 28 26.2 | -1.6 |
| KNZ | Kokohu | 1.96 | 335 | PN | Pn | 18 28 27.5 | -0.8 |
| KNZ | | | | SN | Sn | 18 28 47.7 | -4.1 |
| PRGZ | Paritu Road | 1.99 | 341 | ⇓PN | Pn | 18 28 28.3 | -0.6 |
| PRGZ | | | | SN | Sn | 18 28 50.4 | -2.2 |
| DVHZ | Dannevirke | 2.02 | 284 | PN | Pn | 18 28 27.9 | -1.2 |
| ARHZ | Aropaoanui | 2.04 | 319 | PN | Pn | 18 28 28.8 | -0.6 |
| WHHZ | Waihua | 2.08 | 326 | PN | Pn | 18 28 29.2 | -0.8 |
| WHHZ | | | | SN | Sn | 18 28 50.8 | -3.9 |
| PRWZ | Pori Road | 2.11 | 276 | PN | Pn | 18 28 31.3 | +0.8 |
| PNHZ | Pukenui | 2.13 | 294 | PN | Pn | 18 28 29.4 | -1.3 |
| KRHZ | Kereru | 2.15 | 302 | PN | Pn | 18 28 29.6 | -1.4 |
| TIWZ | Tintock | 2.16 | 270 | AML | AML | 18 28 55.5 | |
| RIGZ | Rimuhau | 2.23 | 340 | ⇑PN | Pn | 18 28 31.6 | -0.5 |
| RIGZ | | | | SN | Sn | 18 28 54.9 | -3.7 |
| TSZ | Takapari Road | 2.24 | 289 | PN | Pn | 18 28 30.9 | -1.4 |
| KWHZ | Kaweka Forest | 2.24 | 307 | PN | Pn | 18 28 31.4 | -1.0 |
| NMHZ | Naumai | 2.26 | 319 | PN | Pn | 18 28 31.7 | -0.8 |
| RAHZ | Arahi | 2.27 | 326 | PN | Pn | 18 28 31.9 | -0.7 |
| RAHZ | | | | SN | Sn | 18 28 54.6 | -5.0 |
| SNGZ | Shannon Statio | 2.29 | 332 | PN | Pn | 18 28 32.3 | -0.6 |
| POWZ | Post Office Ro | 2.29 | 279 | PN | Pn | 18 28 32.8 | -0.1 |
| TRWZ | Traveller | 2.37 | 255 | PN | Pn | 18 28 31.8 | -2.3 |
| BKZ | Black Stump Fm | 2.37 | 313 | PN | Pn | 18 28 32.8 | -1.3 |
| MRZ | Mangatainoka R | 2.40 | 272 | PN | Pn | 18 28 32.2 | -2.1 |
| MRZ | | | | AML | AML | 18 29 03.6 | |
| MRZ | | | | AML | AML | 18 29 05.6 | |
| BHHZ | Black Hill Sta | 2.43 | 302 | PN | Pn | 18 28 33.8 | -1.1 |
| HOWZ | Holdsworth Sta | 2.44 | 267 | PN | Pn | 18 28 34.0 | -1.0 |
| TKGZ | Te Karaka | 2.46 | 344 | PN | Pn | 18 28 34.8 | -0.5 |
| MTW | Mount Morrison | 2.47 | 261 | PN | Pn | 18 28 34.2 | -1.1 |
| RAGZ | Rawiri | 2.52 | 336 | ⇑PN | Pn | 18 28 35.5 | -0.7 |
| MWZ | Matawai | 2.64 | 339 | ⇑PN | Pn | 18 28 37.1 | -0.7 |
| MWZ | | | | AML | AML | 18 29 05.5 | |
| MWZ | | | | AML | AML | 18 29 05.5 | |
| MWZ | | | | AML | AML | 18 29 06.5 | |
| TWGZ | Tauwhareparae | 2.69 | 347 | PN | Pn | 18 28 39.2 | +0.7 |
| MSWZ | Moikau Station | 2.70 | 256 | PN | Pn | 18 28 36.6 | -1.9 |
| OGWZ | Otaki Gorge | 2.70 | 269 | ⇓PN | Pn | 18 28 38.3 | -0.2 |
| PLWZ | Palliser | 2.73 | 253 | PN | Pn | 18 28 36.6 | -2.3 |
| CAW | Cannon Point | 2.79 | 263 | PN | Pn | 18 28 37.7 | -2.0 |
| CAW | | | | AML | AML | 18 29 11.7 | |
| TUVZ | Tukino | 2.82 | 302 | PN | Pn | 18 28 40.4 | 0.0 |
| WNVZ | Wahianoa | 2.82 | 301 | ⇓PN | Pn | 18 28 40.2 | -0.2 |
| URZ | Urewera | 2.84 | 333 | PN | Pn | 18 28 39.6 | -0.8 |
| URZ | | | | AML | AML | 18 29 09.8 | |
| OTVZ | Oturere | 2.87 | 304 | PN | Pn | 18 28 40.8 | -0.3 |
| MTVZ | Mangateitei | 2.87 | 299 | PN | Pn | 18 28 41.3 | +0.3 |
| MTVZ | | | | AML | AML | 18 29 20.2 | |
| KIW | Kapiti Island | 2.90 | 268 | PN | Pn | 18 28 41.1 | -0.1 |
| NGZ | Ngauruhoe | 2.90 | 303 | PN | Pn | 18 28 41.1 | -0.4 |
| KRVZ | Karewarewa | 2.92 | 305 | PN | Pn | 18 28 41.4 | -0.3 |
| WTVZ | West Tongariro | 2.94 | 304 | PN | Pn | 18 28 41.9 | -0.2 |
| BHW | Baring Head | 2.97 | 257 | PN | Pn | 18 28 42.7 | +0.5 |
| PKVZ | Pokaka | 3.00 | 299 | PN | Pn | 18 28 42.8 | 0.0 |
| WEL | Wellington | 3.03 | 260 | PN | Pn | 18 28 43.6 | +0.6 |
| WAZ | Wanganui | 3.05 | 289 | PN | Pn | 18 28 44.6 | +1.3 |
| TARZ | Mount Tarawera | 3.09 | 326 | PN | Pn | 18 28 43.5 | -0.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **3.14** | **346** | PN | Pn | 18 28 43.6 | -0.9 |
| **MXZ** | **Matakaoa Point** | **3.26** | **354** | PN | Pn | 18 28 46.5 | +0.4 |
| **TCW** | **Tory Channel** | **3.39** | **262** | PN | Pn | 18 28 47.1 | -0.9 |
| **OPRZ** | **Ohinepanea** | **3.41** | **330** | PN | Pn | 18 28 46.6 | -1.6 |
| **DUWZ** | **D'Urville Isla** | **3.65** | **269** | PN | Pn | 18 28 51.5 | -0.1 |
| **HIZ** | **Hauiti** | **3.77** | **306** | PN | Pn | 18 28 53.0 | -0.1 |
| **NEZ** | **North Egmont** | **3.87** | **292** | PN | Pn | 18 28 55.9 | +1.1 |
| **NNZ** | **Nelson** | **4.07** | **262** | PN | Pn | 18 28 56.8 | -0.5 |
| **KHZ** | **Kahutara** | **4.21** | **246** | PN | Pn | 18 28 56.6 | -2.6 |
| **THZ** | **Tophouse** | **4.49** | **256** | PN | Pn | 18 29 03.6 | +0.4 |
| **CTZ** | **Chatham Island** | **4.53** | **132** | PN | Pb | 18 29 10.0 | -6.1 |
| **QRZ** | **Quartz Range** | **4.70** | **268** | PN | Pn | 18 29 04.9 | -1.1 |
| **LTZ** | **Lake Taylor** | **5.21** | **246** | PN | Pn | 18 29 11.0 | -2.1 |
| **DSZ** | **Denniston Nort** | **5.30** | **258** | PN | Pn | 18 29 14.1 | -0.2 |
| **MQZ** | **McQueen's Vall** | **5.36** | **235** | PN | Pn | 18 29 14.7 | -0.3 |

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**BUL 02 18:32:10.6**±4.9**, 18°.05S×26°.60E, h0km**±612km**, MD3.8, Zimbabwe**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ITZ** | **Itezhi-Tezhi** | **2.36** | **346** | *i* S | Sn | 18 33 11.8 | -8.8 |
| **BLWY** | **Bulawayo** | **2.81** | **138** | *i* P | Pn | 18 32 56.2 | -0.9 |
| BLWY | | | | *i* S | Sn | 18 33 31.0 | -0.8 |
| **MATP** | **Matopo** | **2.96** | **143** | *i* P | Pn | 18 32 56.2 | -2.9 |
| MATP | | | | *i* S | Sn | 18 33 28.2 | -7.3 |
| **BOSA** | **Boshof** | **10.58** | **186** | *i* P | Pn | 18 34 38.0 | -5.8 |
| BOSA | | | | *i* S | Sn | 18 36 29.0 | -14 |

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*IDC **02** 18:40:09.7±0.8, 6°.71S×150°.61E, h0km, mb4.2/14, mb1 4.4/15, mb1mx4.2/37, mbtmp4.2/15, ML2.1/1, MS3.4/9, Ms1 3.4/9, ms1mx3.2/21, Error ellipse: s-maj=25.7km s-min=16.6km az=102.0*

*NEIC **02** 18:40:10.5±3.9, 6°.81S×150°.77E, h13km±24km, mb4.6/10, Error ellipse: s-maj=10.5km s-min=8.5km az=145.0*

*ISCJB **02** 18:40:13.2±0.5, 6°.71S±0°.05×150°.49E±0°.08, h33km, mb4.3/20, MS3.5/7, Error ellipse: s-maj=12.2km s-min=6.3km az=24.8*

*AUST **02** 18:40:13.6, 6°.67S×150°.14E, h0km*

**ISC 02 18:40:15.0**±0.6**, 6°.74S**±0°.07×**150°.50E**±0°.09**, h33km, n49, σ0$^s$.96**/47**, mb4.4**/20**, MS3.5**/7**, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **3.03** | **33** | P | **Pn** | **18 41 02.6** | **+1.9** |
| | baz=3.2,SNR=5.5 | | | | | | |
| **PMG** | **Port Moresby** | **4.23** | **231** | Pn | **Pn** | **18 41 19.0** | **+1.8** |
| | 7.6nm,0.3s,baz=49,slow=8.9,SNR=40 | | | | | | |
| PMG | | | | Sn | **Sn** | **18 42 06.4** | **+0.8** |
| | 28nm,0.3s,baz=38,slow=19,SNR=19 | | | | | | |
| PMG | | | | LR | LR | 18 42 29.3 | |
| | comp=Z,112nm,20.3s,baz=104,slow=32 | | | | | | |
| **PMG** | **Port Moresby** | **4.23** | **231** | P | **Pn** | **18 41 18.1** | **+0.9** |
| | baz=4.0,SNR=31 | | | | | | |
| **PMG** | **Port Moresby** | **4.23** | **231** | *e*Pn | **Pn** | **18 41 18.6** | **+1.3** |
| PMG | | | | *e*Sn | **Sn** | **18 42 06.1** | **+0.5** |
| **HNR** | **Honiara** | **9.73** | **107** | LR | LR | 18 45 57.7 | |
| | comp=Z,95nm,20.7s,baz=272,slow=36 | | | | | | |
| **HNR** | **Honiara** | **9.73** | **107** | Pn | Pn | 18 42 26.2 | -6.5 |
| **QIS** | **Mount Isa** | **17.32** | **216** | P | **P** | **18 44 16.7** | **+1.1** |
| | baz=17,SNR=6.2 | | | | | | |
| **FAKI** | **Fak Fak** | **18.57** | **281** | *e*P | **Pn** | **18 44 30.6** | **+0.7** |
| | 37nm,1.1s | | | | | | |
| **KDU** | **Kakadu** | **18.71** | **250** | P | **P** | **18 44 31.2** | **+0.2** |
| | baz=18,SNR=4.1 | | | | | | |
| **RMQ** | **Roma** | **19.70** | **185** | P | **Pn** | **18 44 43.7** | **+0.4** |
| | baz=20,SNR=4.8 | | | | | | |
| **MTN** | **Manton Dam** | **20.01** | **251** | P | **P** | **18 44 45.7** | **+0.5** |
| | baz=20,SNR=3.6 | | | | | | |
| **SIJI** | **Sorong** | **20.05** | **286** | P | **P** | **18 44 46.3** | **+0.7** |
| | 10.0nm,0.7s,baz=89,slow=9.4,SNR=7.6 | | | | | | |
| **WRAB** | **Tennant Creek** | **20.43** | **229** | *e*P | **P** | **18 44 48.9** | **-0.9** |
| | 41nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.45** | **229** | P | **P** | **18 44 49.5** | **-0.5** |
| | 27nm,0.8s,baz=52,slow=10,SNR=127 | | | | | | |
| WRA | | | | S | **S** | **18 48 34.9** | **-2.4** |
| | 1.7nm,1.0s,baz=56,slow=21,SNR=3.8 | | | | | | |
| **QLP** | **Quilpie** | **20.61** | **196** | P | **P** | **18 44 51.9** | **+0.3** |
| | baz=21,SNR=3.7 | | | | | | |
| **GUMO** | **Guam** | **20.96** | **345** | LR | LR | 18 51 23.0 | |
| | comp=Z,175nm,20.9s,baz=140,slow=32 | | | | | | |
| **KNRA** | **Kununurra** | **23.07** | **246** | P | **P** | **18 45 17.6** | **-0.4** |
| | baz=23,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **23.18** | **222** | P | **P** | **18 45 18.2** | **-0.8** |
| | 4.7nm,0.7s,baz=56,slow=9.0,SNR=68 | | | | | | |
| ASAR | | | | S | **S** | **18 49 28.7** | **-0.1** |
| | 2.2nm,1.0s,baz=38,slow=23,SNR=8.1 | | | | | | |
| ASAR | | | | LR | LR | 18 54 05.0 | |
| | comp=Z,72nm,20.4s,baz=40,slow=36 | | | | | | |
| **BATI** | **Baumata** | **26.76** | **261** | P | **P** | **18 45 52.7** | **+0.6** |
| | 11nm,0.5s,baz=86,slow=14,SNR=2.2 | | | | | | |
| BATI | | | | LR | LR | 18 58 12.2 | |
| | comp=Z,130nm,18.5s,baz=92,slow=40 | | | | | | |
| **WRKA** | **Warakurna** | **27.97** | **227** | P | **P** | **18 46 02.4** | **-0.4** |
| | baz=28,SNR=13 | | | | | | |
| **MBWA** | **Marble Bar** | **33.03** | **241** | *e*P | **P** | **18 46 47.2** | **-0.3** |
| | 6.7nm,0.9s | | | | | | |
| **TAU** | **Tasmania Unive** | **36.13** | **184** | *e*P | **P** | **18 47 15.5** | **+1.4** |
| | 27nm,1.0s | | | | | | |
| **MEEK** | **Meekatharra** | **36.21** | **233** | P | **P** | **18 47 15.2** | **+0.2** |
| | baz=36,SNR=6.2 | | | | | | |
| **KMBL** | **Kambalda** | **36.27** | **224** | P | **P** | **18 47 15.3** | **-0.2** |
| | baz=36,SNR=7.4 | | | | | | |
| **KLBR** | **Kellerberrin** | **39.31** | **227** | P | **P** | **18 47 40.9** | **-0.3** |
| | baz=39,SNR=6.3 | | | | | | |
| **URZ** | **Urewera** | **39.56** | **146** | LR | LR | 19 01 53.2 | |
| | comp=Z,121nm,18.7s,baz=312,slow=33 | | | | | | |
| **YHNB** | **Yeheng** | **42.19** | **319** | *e*P | **P** | **18 48 04.5** | **-0.5** |
| | 27nm,1.1s | | | | | | |
| **JNU** | **Nakatsue** | **43.81** | **336** | P | **P** | **18 48 17.1** | **-0.9** |
| | 7.8nm,0.8s,baz=83,slow=3.7,SNR=3.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.57** | **346** | P | **P** | **18 48 22.7** | **-1.3** |
| | 2.1nm,1.0s,baz=167,slow=8.7,SNR=4.8 | | | | | | |
| MJAR | | | | LR | LR | 19 06 15.9 | |
| | comp=Z,37nm,19.3s,baz=220,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **48.76** | **336** | P | **P** | **18 48 57.3** | **+0.5** |
| | 3.9nm,1.1s,baz=152,slow=9.1,SNR=6.2 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.77** | **336** | P | **P** | **18 48 57.3** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** | **56.67** | **297** | P | **P** | **18 49 57.1** | **+1.4** |
| | 0.8nm,0.8s,baz=125,slow=5.0,SNR=6.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.94** | **5** | LR | LR | 19 10 19.0 | |
| | comp=Z,44nm,20.6s,baz=190,slow=30 | | | | | | |
| **CASY** | **Casey** | **65.50** | **197** | *e*P | **P** | **18 50 52.2** | **-2.5** |
| **ULN** | **Ulaanbaatar** | **66.47** | **330** | P | P | 18 50 56.1 | -5.3 |
| | 5.9nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **66.78** | **329** | P | **P** | **18 51 03.3** | **0.0** |
| | 1.7nm,0.8s,baz=144,slow=6.0,SNR=9.1 | | | | | | |
| **TLY** | **Talaya** | **70.63** | **331** | P | **P** | **18 51 26.5** | **-0.7** |
| | 2.1nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **70.99** | **177** | P | **P** | **18 51 29.7** | **+0.7** |
| | 1.3nm,0.8s,baz=312,slow=6.3,SNR=7.4 | | | | | | |
| VNDA | | | | LR | LR | 19 17 56.2 | |
| | comp=Z,38nm,21.1s,baz=336,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.29** | **320** | P | **P** | **18 52 22.8** | **0.0** |
| | 0.7nm,0.9s,baz=101,slow=8.0,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.51** | **327** | P | **P** | **18 52 27.8** | **-1.2** |
| | 0.8nm,0.7s,baz=126,slow=7.3,SNR=4.7 | | | | | | |
| **MAW** | **Mawson** | **82.91** | **203** | P | **P** | **18 52 35.5** | **-0.6** |
| | 0.6nm,0.3s,baz=81,slow=8.1,SNR=4.0 | | | | | | |
| **KURK** | **Kurchatov** | **83.89** | **323** | *e*P | **P** | **18 52 40.6** | **-0.9** |
| | 5.9nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **84.81** | **22** | P | **P** | **18 52 45.4** | **-0.5** |
| | 3.0nm,0.7s,baz=251,slow=5.3,SNR=23 | | | | | | |
| **EKS2** | **Erkin-Say** | **84.86** | **314** | *e*P | **P** | **18 52 46.1** | **-0.7** |
| | 3.5nm,1.0s | | | | | | |
| **KKAR** | **Karatay Array** | **87.30** | **314** | *e*P | **P** | **18 52 58.4** | **-0.3** |
| | 2.6nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **124.46** | **327** | PKP | **PKPdf** | **18 59 11.5** | **+0.4** |
| | 0.6nm,0.6s,baz=93,slow=2.7,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.64** | **284** | PKPbc | **PKPbc** | **19 00 00.2** | **+0.4** |
| | 2.9nm,0.5s,baz=90,slow=2.7,SNR=62 | | | | | | |
| **BDFB** | **Brasilia** | **151.18** | **141** | PKPbc | **PKPbc** | **19 00 06.5** | **+0.3** |
| | 3.5nm,0.8s,baz=204,slow=9.1,SNR=4.1 | | | | | | |
| **DBIC** | **Dimbokro** | **155.52** | **271** | PKPab | **PKPab** | **19 00 31.4** | **-0.9** |
| | 3.8nm,0.8s,baz=68,slow=1.9,SNR=5.7 | | | | | | |

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**MEX 02 18:53:23.8**±0.3**, 27°.54N×111°.54W, h6km**±19km**, MD3.5, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRIG** | **Santa Rosalia** | **0.66** | **251** | *i* P | Pg | 18 53 35.7 | -0.9 |
| SRIG | | | | *e*S | Sg | 18 53 44.7 | -0.4 |
| **HSIG** | | **1.56** | **19** | *e*P | Pn | 18 53 48.5 | -3.7 |
| HSIG | | | | *i* S | Sn | 18 54 08.0 | -4.7 |

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*ISCJB **02** 19:20:12.1±0.6, 36°.67N±0°.07×73°.3E±0°.1, h42km, Error ellipse: s-maj=15.0km s-min=4.9km az=142.8*

*NNC **02** 19:20:14.2±2.7, 36°.72N×72°.78E, h230km±27km, mb2.3, mpv3.6, Error ellipse: s-maj=26.0km s-min=13.7km az=152.0*

**ISC 02 19:20:14.0**±1.2**, 36°.62N**±0°.10×**73°.2E**±0°.1**, h42km, n13, σ0$^s$.82**/15**, 5C-2D, Northwestern Kashmir**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **3.40** | **4** | ⇑P | Pn | 19 21 09.7 | +5.0 |
| | 14nm,0.7s | | | | | | |
| SFK | | | | ⇓S | Sn | 19 21 53.8 | +10 |
| | 51nm,1.0s | | | | | | |
| **DZET** | **Dzherino** | **4.11** | **303** | ⇑P | **Pn** | **19 21 13.6** | **-0.9** |
| | 16nm,0.7s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **19 22 02.6** | **+1.3** |
| | 62nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **5.89** | **355** | ⇑P | **Pn** | **19 21 39.1** | **+0.3** |
| | 2.8nm,0.5s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **19 22 45.7** | **+0.6** |
| | 9.8nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **6.80** | **343** | P | **Pn** | **19 21 50.9** | **-0.4** |
| | 1.9nm,0.6s,baz=148,slow=11,SNR=38 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **19 23 07.0** | **-0.5** |
| | 1.3nm,0.5s,baz=159,slow=24,SNR=3.6 | | | | | | |
| **KOLN** | **Koldanda** | **12.44** | **132** | *e*P | **Pn** | **19 23 10.6** | **+1.9** |
| | 5.4nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **12.91** | **128** | *e*P | **Pn** | **19 23 15.2** | **+0.1** |
| | 4.3nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **13.47** | **127** | *e*P | **Pn** | **19 23 22.8** | **0.0** |
| | 4.8nm,0.5s | | | | | | |
| **DMN** | **Daman** | **13.48** | **128** | *e*P | **Pn** | **19 23 23.0** | **0.0** |
| | 7.0nm,0.7s | | | | | | |
| **PKIN** | **Phulchoki** | **13.69** | **128** | *e*P | **Pn** | **19 23 25.4** | **-0.4** |
| | 4.1nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **13.69** | **128** | *e*P | **Pn** | **19 23 25.6** | **-0.2** |
| **PKI** | **Pulchoki** | **13.70** | **128** | *e*P | **Pn** | **19 23 25.7** | **-0.3** |
| | 4.9nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **13.78** | **125** | *e*P | **Pn** | **19 23 26.4** | **-0.6** |
| | 6.3nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **14.89** | **127** | *e*P | **Pn** | **19 23 41.2** | **-0.8** |
| | 3.3nm,0.3s | | | | | | |

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*NIED **02** 19:23:00, 24°.30N×121°.70E, h23km, Mw4.6 Best double couple: M0 9.86000×10^15 NP1:φs341.00000°, δ56.00000°, λ146.00000°. NP2:φs92.00000°, δ63.00000°, λ39.00000°.*

*IDC **02** 19:23:09.1±0.6, 24°.36N×121°.80E, h0km, mb4.3/20, mb1 4.4/23, mb1mx4.3/30, mbtmp4.2/23, ML3.0/3, MS3.8/13, Ms1 3.8/13, ms1mx3.7/24, Error ellipse: s-maj=16.1km s-min=15.8km az=81.0*

*BJI **02** 19:23:10.2, 24°.41N×121°.82E, h7km, mb4.4/54, mB4.7/41, ML4.7/11, Ms4.4/64, Ms7 4.3/57*

*JMA **02** 19:23:11.6±0.1, 24°.30N×121°.75E, h27km±3km, M4.8*

*NEIC **02** 19:23:11.9±0.8, 24°.33N×121°.76E, h16km±5km, mb4.8/45, ML5.0(TAP), Error ellipse: s-maj=5.7km s-min=4.4km az=116.0*

*NEIC Felt [II] at Taipei. Also felt at Hua-lien. Recorded [5 TAP] in Hua-lien and I-lan; [4 TAP] in Nan-t'ou; [3 TAP] in T'ai-pei, T'ao-yuan and Yun-lin; [1 TAP] in Hsin-chu and Miao-li.*

*MOS **02** 19:23:12.8±1.2, 24°.40N×121°.84E, h34km, mb4.8/32, Error ellipse: s-maj=8.8km s-min=6.2km az=111.4*

*ISCJB **02** 19:23:12.9±0.2, 24°.40N±0°.01×121°.83E±0°.01, h28km±1km, mb4.6/78, MS3.9/18, Error ellipse: s-maj=2.2km s-min=1.7km az=42.2*

*TAP **02** 19:23:12.4, 24°.36N×121°.80E, h19km, ML5.1, B*

**ISC 02 19:23:12.1**±0.4**, 24°.34N**±0°.01×**121°.83E**±0°.02**, h17km**±1km**, h17km:pP-P, n295, σ1$^s$.62**/392**, mb4.7**/78**, MS3.9**/18**, 41C-32D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.08** | **246** | ⇓*i*P | **Pg** | **19 23 16.8** | **+1.3** |
| | baz=223 | | | | | | |
| EHP | | | | *i* S | **Sg** | **19 23 19.0** | **+1.3** |
| | baz=223 | | | | | | |
| **ENA** | **Nanau** | **0.11** | **318** | ⇓*i*P | **Pb** | **19 23 16.1** | **+0.2** |
| | baz=325 | | | | | | |
| **TWC** | **Suao** | **0.27** | **5** | ⇑*i*P | **Pb** | **19 23 18.4** | **0.0** |
| | baz=7.0 | | | | | | |
| **NACB** | **Ninganchiao** | **0.27** | **231** | *e*Pg | **Pg** | **19 23 17.2** | **-0.9** |
| NACB | | | | *e*Sg | **Sg** | **19 23 21.9** | **-0.2** |
| **TWD** | **Chiawan** | **0.34** | **218** | ⇑*i*P | **Pb** | **19 23 19.5** | **-0.1** |
| | baz=218 | | | | | | |
| **ENTT** | **Nioudou** | **0.38** | **321** | ⇓*i*P | **Pg** | **19 23 20.1** | **+0.2** |
| | baz=323 | | | | | | |
| **TWE** | **Neicheng** | **0.40** | **339** | ⇑*i*P | **Pb** | **19 23 20.8** | **0.0** |
| | baz=336 | | | | | | |
| **HWA** | **Hwalien** | **0.42** | **209** | ⇑P | **Pb** | **19 23 21.4** | **+0.4** |
| | baz=212 | | | | | | |
| **NNS** | **Nan Shan** | **0.42** | **283** | ⇓*i*P | **Pg** | **19 23 20.9** | **+0.1** |
| | baz=282 | | | | | | |
| **ILA** | **Ilan** | **0.42** | **351** | ⇑*i*P | **Pb** | **19 23 21.5** | **+0.3** |
| | baz=354 | | | | | | |
| ILA | | | | S | **Sb** | **19 23 27.4** | **+0.1** |
| | baz=354 | | | | | | |
| **EGS** | | **0.51** | **11** | ⇑*i*P | **Pb** | **19 23 23.0** | **+0.4** |
| | baz=17 | | | | | | |
| **YHNB** | **Yeheng** | **0.52** | **308** | *e*Pg | **Pg** | **19 23 21.6** | **-1.0** |
| YHNB | | | | *e*Sg | **Sg** | **19 23 28.0** | **-1.6** |
| **NSK** | **Sanguang** | **0.54** | **308** | ⇓*i*P | **Pg** | **19 23 22.9** | **0.0** |
| | baz=308 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.55** | **249** | ⇑*i*P | **Pg** | **19 23 23.3** | **+0.2** |
| | baz=252 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.55** | **212** | *e*P | **Pb** | **19 23 24.3** | **+0.9** |
| | baz=220 | | | | | | |
| **TWT** | **Tachien** | **0.60** | **261** | ⇓*i*P | **Pb** | **19 23 24.6** | **+0.4** |
| | baz=260 | | | | | | |
| **ESL** | **Shilin** | **0.64** | **214** | ⇑*i*P | **Pg** | **19 23 24.6** | **-0.1** |
| | baz=217 | | | | | | |
| ESL | | | | *e*S | **Sb** | **19 23 33.6** | **+0.1** |
| | baz=217 | | | | | | |
| **TWA** | **Mucha** | **0.67** | **341** | ⇓*i*P | **Pb** | **19 23 25.6** | **+0.3** |
| | baz=343 | | | | | | |
| TWA | | | | *e*S | **Sg** | **19 23 33.9** | **-0.4** |
| | baz=343 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.68** | **13** | ⇑*i*P | **Pb** | **19 23 25.8** | **+0.3** |
| | baz=15 | | | | | | |
| TWB1 | | | | *i* S | **Sg** | **19 23 34.2** | **-0.3** |
| | baz=15 | | | | | | |
| **TEGC** | **Jichi Village** | **0.68** | **202** | *e*P | **Pn** | **19 23 27.9** | **+0.9** |
| | baz=190 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.72** | **357** | ⇑*i*P | **Pg** | **19 23 27.0** | **+0.6** |
| | baz=358 | | | | | | |
| NWF | | | | *e*S | **Sb** | **19 23 35.4** | **-0.7** |
| | baz=358 | | | | | | |
| **TAP1** | **Taipei** | **0.74** | **338** | ⇓P | **Pg** | **19 23 27.1** | **+0.4** |
| | baz=338 | | | | | | |
| **TAP** | **Taipei** | **0.75** | **337** | ⇓P | **Pg** | **19 23 27.1** | **+0.3** |
| | baz=339 | | | | | | |
| TAP | | | | S | **Sb** | **19 23 36.4** | **-0.3** |
| | baz=339 | | | | | | |
| **NSTT** | **Nanjuang** | **0.80** | **291** | ⇓*i*P | **Pg** | **19 23 27.9** | **+0.2** |
| | baz=284 | | | | | | |
| NSTT | | | | S | **Sb** | **19 23 37.6** | **-0.6** |
| | baz=284 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.84** | **334** | ⇓*i*P | **Pn** | **19 23 29.1** | **0.0** |
| | baz=336 | | | | | | |
| TWS1 | | | | S | **Sn** | **19 23 40.4** | **-0.8** |
| | baz=336 | | | | | | |
| **NCU** | **National Centr** | **0.85** | **317** | ⇓*i*P | **Pn** | **19 23 29.5** | **+0.2** |
| | baz=318 | | | | | | |
| NCU | | | | *i* S | **Sn** | **19 23 41.3** | **-0.1** |
| | baz=318 | | | | | | |
| **HSN** | **Hsinchu** | **0.90** | **301** | ⇓*i*P | **Pn** | **19 23 30.0** | **0.0** |
| | baz=304 | | | | | | |
| HSN | | | | S | **Sn** | **19 23 42.2** | **-0.5** |
| | baz=304 | | | | | | |
| **TWY** | **Chenhua** | **0.95** | **348** | *e*P | **Pn** | **19 23 31.2** | **+0.6** |
| | baz=344 | | | | | | |
| TWY | | | | *e*S | **Sb** | **19 23 42.4** | **-0.1** |
| | baz=344 | | | | | | |
| **EHY** | **Hungye** | **0.95** | **209** | ⇓P | **Pb** | **19 23 29.4** | **-0.7** |
| | baz=217 | | | | | | |
| EHY | | | | *e*S | **Sn** | **19 23 44.8** | **+0.8** |
| | baz=217 | | | | | | |
| **TWQ1** | **Liyutan** | **0.96** | **270** | ⇓*i*P | **Pn** | **19 23 31.2** | **+0.4** |
| | baz=271 | | | | | | |
| TWQ1 | | | | S | **Sg** | **19 23 43.7** | **+0.3** |
| | baz=271 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.96** | **242** | ⇓*i*P | **Pn** | **19 23 31.1** | **+0.1** |
| | baz=241 | | | | | | |
| **SSLB** | **Suanglung** | **0.97** | **235** | *e*Pn | **Pb** | **19 23 30.3** | **-0.2** |
| SSLB | | | | *e*Sn | **Sb** | **19 23 42.3** | **-0.7** |
| **NSY** | **Sanyi** | **0.97** | **274** | ⇓*i*P | **Pn** | **19 23 31.8** | **+0.8** |
| | baz=275 | | | | | | |
| NSY | | | | S | **Sg** | **19 23 44.0** | **+0.2** |
| | baz=275 | | | | | | |
| **TYC** | **Yuchr** | **0.99** | **244** | ⇑P | **Pb** | **19 23 30.8** | **0.0** |
| | baz=243 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.03** | **84** | P | **Pn** | **19 23 31.8** | **+0.1** |
| JYNG | | | | S | **Sn** | **19 23 46.5** | **+0.8** |
| **YULB** | **Yu-li** | **1.06** | **207** | *e*Pn | **Pb** | **19 23 30.3** | **-1.7** |
| **TCU** | **Taichung** | **1.07** | **260** | ⇓*i*P | **Pg** | **19 23 33.8** | **+1.0** |
| | baz=260 | | | | | | |
| TCU | | | | *i* S | **Sg** | **19 23 47.9** | **+1.1** |
| | baz=260 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.09** | **84** | P | **Pb** | **19 23 32.6** | **+0.1** |
| YOJ | | | | S | **Sg** | **19 23 47.8** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **1.09** | **84** | *e*P | **Pb** | **19 23 32.5** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **1.09** | **84** | ⇓*i*P | **Pn** | **19 23 32.9** | **+0.3** |
| | baz=74 | | | | | | |
| YOJ | | | | S | **Sg** | **19 23 47.5** | **+0.1** |
| | baz=74 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.09** | **84** | *e*Pn | **Pb** | **19 23 32.5** | **0.0** |
| **TWF1** | **Yuli** | **1.10** | **206** | ⇓P | **Pb** | **19 23 31.6** | **-1.1** |
| | baz=215 | | | | | | |
| **WNT** | **Mingjian** | **1.14** | **246** | ⇑*i*P | **Pg** | **19 23 34.9** | **+0.7** |
| | baz=245 | | | | | | |
| WNT | | | | S | **Sg** | **19 23 51.2** | **+2.1** |
| | baz=245 | | | | | | |
| **YUS** | **Yu-Shan** | **1.17** | **223** | ⇑*i*P | **Pb** | **19 23 34.5** | **+0.4** |
| | baz=209 | | | | | | |
| YUS | | | | *e*S | **Sb** | **19 23 49.6** | **+0.4** |
| | baz=209 | | | | | | |
| **CHN5** | **Tsauling** | **1.29** | **235** | ⇑*i*P | **Pg** | **19 23 37.0** | **+0.1** |
| | baz=235 | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.30** | **10** | ⇑P | **Pn** | **19 23 35.5** | **0.0** |
| | baz=11 | | | | | | |
| PCYT | | | | *e*S | **Sg** | **19 23 54.9** | **+0.8** |
| | baz=11 | | | | | | |
| **CHKT** | **Chengkung** | **1.31** | **199** | ⇑P | **Pn** | **19 23 35.5** | **-0.1** |
| | baz=181 | | | | | | |
| CHKT | | | | *e*S | **Sg** | **19 23 54.0** | **-0.4** |
| | baz=181 | | | | | | |
| **WGK** | **Gukeng** | **1.33** | **241** | ⇑*i*P | **Pg** | **19 23 38.0** | **+0.2** |
| | baz=240 | | | | | | |
| WGK | | | | *e*S | **Sg** | **19 23 57.0** | **+2.0** |
| | baz=240 | | | | | | |
| **ELDTW** | **Lidau** | **1.37** | **213** | ⇓*e*P | **Pn** | **19 23 36.0** | **-0.6** |
| | baz=201 | | | | | | |
| **CHN2** | **Minshiung** | **1.48** | **237** | *e*P | **Pg** | **19 23 40.4** | **-0.2** |
| | baz=236 | | | | | | |
| CHN2 | | | | *e*S | **Sg** | **19 24 01.6** | **+1.8** |
| | baz=236 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.49** | **252** | *e*P | **Pb** | **19 23 39.1** | **-0.2** |
| | baz=264 | | | | | | |
| WTCT | | | | *e*S | **Sg** | **19 23 59.1** | **-1.1** |
| | baz=264 | | | | | | |
| **TPUB** | **Ta-pu** | **1.51** | **227** | *e*Pn | **Pb** | **19 23 39.7** | **0.0** |
| TPUB | | | | *e*Sn | **Sg** | **19 24 00.0** | **-0.8** |
| **STYT** | **Tauyuan** | **1.53** | **220** | ⇑*i*P | **Pb** | **19 23 39.8** | **-0.2** |
| | baz=218 | | | | | | |
| STYT | | | | *e*S | **Sg** | **19 24 02.2** | **+0.7** |
| | baz=218 | | | | | | |
| **CHY** | **Chiayi** | **1.53** | **237** | ⇑P | **Pg** | **19 23 41.1** | **-0.5** |
| | baz=236 | | | | | | |
| CHY | | | | *e*S | **Sg** | **19 24 01.4** | **-0.2** |
| | baz=236 | | | | | | |
| **WTP** | **Ta-pu** | **1.56** | **226** | ⇑*i*P | **Pb** | **19 23 40.9** | **+0.4** |
| | baz=215 | | | | | | |
| WTP | | | | S | **Sg** | **19 24 02.3** | **-0.1** |
| | baz=215 | | | | | | |
| **WSF** | **Szhu** | **1.63** | **245** | ⇑*i*P | **Pb** | **19 23 42.2** | **+0.5** |
| | baz=254 | | | | | | |
| WSF | | | | *e*S | **Sg** | **19 24 04.2** | **-0.4** |
| | baz=254 | | | | | | |
| **TWK** | **Hsinying** | **1.63** | **229** | *e*P | **Pb** | **19 23 42.3** | **+0.6** |
| | baz=229 | | | | | | |
| **CHN1** | **Nanshi** | **1.66** | **226** | ⇑P | **Pb** | **19 23 42.4** | **+0.2** |
| | baz=225 | | | | | | |
| CHN1 | | | | *e*S | **Sg** | **19 24 06.2** | **+0.7** |
| | baz=225 | | | | | | |
| **TWG** | **Pinlang** | **1.67** | **205** | *e*P | **Pn** | **19 23 39.4** | **-1.1** |
| | baz=192 | | | | | | |
| **TWG** | **Pinlang** | **1.67** | **205** | *e*Pn | **Pn** | **19 23 38.9** | **-1.7** |
| **SGST** | **Jiashian** | **1.69** | **222** | ⇑*i*P | **Pb** | **19 23 43.3** | **+0.4** |
| | baz=221 | | | | | | |
| SGST | | | | *e*S | **Sg** | **19 24 06.8** | **0.0** |
| | baz=221 | | | | | | |
| **TTN** | **Taitung** | **1.70** | **202** | *e*P | **Pn** | **19 23 41.6** | **+0.6** |
| | baz=203 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.74** | **90** | P | **Pn** | **19 23 41.9** | **+0.4** |
| IRIF | | | | S | **Sb** | **19 24 05.1** | **0.0** |
| **CHN8** | **Yiju** | **1.78** | **236** | *e*P | **Pb** | **19 23 43.8** | **-0.5** |
| | baz=219 | | | | | | |
| CHN8 | | | | *e*S | **Sg** | **19 24 08.3** | **-1.2** |
| | baz=219 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.83** | **99** | P | **Pb** | **19 23 44.9** | **-0.2** |
| **CHN3** | **Shinhua** | **1.84** | **227** | *e*P | **Pb** | **19 23 46.0** | **+0.7** |
| | baz=226 | | | | | | |
| CHN3 | | | | *e*S | **Sg** | **19 24 11.2** | **-0.2** |
| | baz=226 | | | | | | |
| **SCLT** | **Jiali** | **1.89** | **232** | ⇑P | **Pb** | **19 23 45.9** | **-0.3** |
| | baz=216 | | | | | | |
| SCLT | | | | S | **Sg** | **19 24 11.6** | **-1.5** |
| | baz=216 | | | | | | |
| **ECL** | **Taimali** | **1.91** | **205** | *e*P | **Pn** | **19 23 43.3** | **-0.7** |
| | baz=194 | | | | | | |
| **SSD** | **Sandimen** | **1.93** | **215** | *e*P | **Pb** | **19 23 46.4** | **-0.4** |
| | baz=214 | | | | | | |
| SSD | | | | *e*S | **Sg** | **19 24 13.0** | **-1.3** |
| | baz=214 | | | | | | |
| **TAI1** | **Yung-k'ang** | **1.96** | **229** | *e*P | **Pb** | **19 23 47.2** | **-0.1** |
| | baz=228 | | | | | | |
| TAI1 | | | | *e*S | **Sb** | **19 24 12.0** | **+0.6** |
| | baz=228 | | | | | | |
| **TWM1** | **Shoushan** | **1.99** | **221** | *e*P | **Pb** | **19 23 48.0** | **+0.2** |
| | baz=221 | | | | | | |
| **JKRS** | **Kuro-shima** | **2.00** | **93** | P | **Pn** | **19 23 46.3** | **+1.2** |
| JKRS | | | | S | **Sb** | **19 24 11.6** | **-1.0** |
| **SGLT** | **Jiouru** | **2.02** | **217** | *e*P | **Pb** | **19 23 48.4** | **0.0** |
| | baz=216 | | | | | | |
| SGLT | | | | *e*S | **Sg** | **19 24 17.2** | **-0.1** |
| | baz=216 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.11** | **89** | P | **Pn** | **19 23 46.8** | **+0.1** |
| JIJ | | | | S | **Sn** | **19 24 13.4** | **+0.8** |
| **EAST** | **Anshuo** | **2.15** | **205** | *e*P | **Pn** | **19 23 46.7** | **-0.5** |
| | baz=197 | | | | | | |
| **TAW** | **Tawu** | **2.15** | **204** | *e*P | **Pb** | **19 23 49.6** | **-1.1** |
| | baz=195 | | | | | | |
| **PNG** | **Penghu** | **2.22** | **250** | ⇓*e*P | **Pn** | **19 23 48.5** | **+0.5** |
| | baz=251 | | | | | | |
| PNG | | | | *e*S | **Sb** | **19 24 17.0** | **-1.8** |
| | baz=251 | | | | | | |
| **KAU** | **Kaohsiung** | **2.25** | **219** | *e*P | **Pb** | **19 23 52.0** | **-0.3** |
| | baz=220 | | | | | | |
| **SCZT** | **Fangliau** | **2.25** | **210** | *e*P | **Pb** | **19 23 51.1** | **-1.2** |
| | baz=197 | | | | | | |
| **WDGT** | **Dungji** | **2.26** | **242** | *e*P | **Pn** | **19 23 50.0** | **+1.3** |
| | baz=242 | | | | | | |
| WDGT | | | | *e*S | **Sn** | **19 24 17.9** | **+1.7** |
| | baz=242 | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.28** | **83** | P | **Pn** | **19 23 49.1** | **+0.2** |
| JISG | | | | S | **Sb** | **19 24 18.8** | **-1.9** |
| **LAY** | **Lan-yu** | **2.31** | **186** | ⇑*i*P | **Pn** | **19 23 48.5** | **-0.9** |
| | baz=177 | | | | | | |
| LAY | | | | *e*S | **Sn** | **19 24 17.0** | **-0.4** |
| | baz=177 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **2.40** | **214** | *e*P | **Pn** | **19 23 52.5** | **+1.9** |
| | baz=215 | | | | | | |
| **HEN** | **Hengchun** | **2.53** | **203** | *e*P | **Pn** | **19 23 54.6** | **+2.2** |
| | baz=194 | | | | | | |
| HEN | | | | *e*S | **Sb** | **19 24 27.2** | **-0.9** |
| | baz=194 | | | | | | |
| **TWK1** | **Hengchun** | **2.57** | **202** | *e*P | **Pn** | **19 23 53.9** | **+0.9** |
| | baz=193 | | | | | | |
| TWK1 | | | | *e*S | **Sn** | **19 24 26.1** | **+2.4** |
| | baz=193 | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **2.58** | **199** | *e*P | **Pn** | **19 23 53.3** | **+0.3** |
| | baz=188 | | | | | | |
| TSEB | | | | *e*S | **Sb** | **19 24 26.8** | **-2.5** |
| | baz=188 | | | | | | |
| **JTJ** | **Tarama** | **2.64** | **83** | P | **Pn** | **19 23 55.1** | **+1.2** |
| JTJ | | | | S | **Sn** | **19 24 27.1** | **+1.6** |

QZH Quanzhou 3.00 282⇑iPn Pn 19 23 58.8 -0.1
QZH Sn Sn 19 24 33.0 -1.5
QZH SMN
3µm,0.6s
QZH SME
2µm,1.0s
QZH LN
5µm,4.1s
QZH LE
6µm,7.6s
QZH LZ
7µm,12.9s
JIRB Irabujima 3.09 80 P Pn 19 24 01.3 +1.2
KNM Kinmen 3.09 272⇓eP Pn 19 24 02.1 +1.9
baz=271
JIKM Ikemajima 3.17 79 P Pn 19 24 01.3 +0.1
JMJ Miyako jima 2 3.19 81 P Pn 19 24 03.3 +1.8
JMJ Miyako jima 2 3.19 81 eP Pn 19 24 04.2 +2.6
baz=78
JOGS Gusukube 3.29 82 P Pn 19 24 04.8 +2.0
JKE Kume jima 2 4.90 65 P Pn 19 24 28.1 +3.0
JAGN Aguni-jima 5.38 64 P Pn 19 24 34.4 +2.8
JJT2 Tamagusuku 2 5.65 70 P Pn 19 24 38.7 +3.3
JNTH Nagotoyohara 6.01 68 P Pn 19 24 42.0 +1.8
JIH Iheya 6.16 63 P Pn 19 24 44.4 +2.1
JOW Kunigami 6.33 66 P Pn 19 24 46.0 +1.3
JOW Kunigami 6.33 66 Pn Pn 19 24 44.6 -0.1
0.5nm,0.3s,baz=108,slow=25,SNR=35
SSE Sheshan 6.75 355 ePn Pn 19 24 43.2 -7.2
SSE Sn Sn 19 26 05.7 -1.2
SSE pmax pmax
comp=Z,14nm,0.7s
SSE pmax pmax
comp=Z,27nm,3.5s
SSE smax smax
comp=N,240nm,1.3s
SSE LR LR
comp=N,1µm,12.8s
SSE LR LR
comp=Z,2µm,12.5s
JOKE Okinoerabujima 6.78 62 P Pn 19 24 52.0 +1.1
SZP Santa 6.88 191 ePn Pn 19 24 54.6 +2.4
comp=Z,252nm,1.1s
SZP eS Sn 19 26 15.9 +5.7
JTK Tokunoshima 7.27 60 P Pn 19 24 58.8 +1.3
JAMN Amaminishikomi 7.65 58 P Pn 19 25 03.5 +0.7
GZH Guangzhou 7.87 263 P Pn 19 25 01.6 -4.2
GZH S Sn 19 26 23.4 -11
GZH smax smax
comp=N,980nm,1.0s
GZH smax smax
comp=E,400nm,0.9s
JAM Amami Oshima 8.07 58 P Pn 19 25 09.4 +0.9
NJ2 Nanjing 8.11 342 eP Pn 19 25 09.0 -0.1
NJ2 S Sn 19 26 40.6 +0.1
NJ2 PMZ
comp=E,50nm,0.8s
NJ2 LN
comp=E,590nm,10.9s
NJ2 LE
comp=E,610nm,10.9s
NJ2 LZ
comp=E,3µm,11.0s
JTAJ Takarajima 8.15 52 P Pn 19 25 13.0 +3.4
WHN Wuhan 9.06 315 ⇑P Pn 19 25 21.3 -0.9
WHN S Sn 19 26 58.0 -5.9
WHN LN
comp=E,4µm,12.9s
WHN LE
comp=E,2µm,10.1s
WHN LZ
comp=E,3µm,11.4s
JNU Nakatsue 11.81 40 Pn Pn 19 26 00.6 +0.7
comp=E,0.1nm,0.3s,baz=185,slow=15,SNR=2.0
JNU LR LR 19 31 02.1
comp=E,415nm,18.4s,baz=216,slow=40
QIZ Qiongzhong 12.33 247 P Pn 19 26 06.6 -0.3
QIZ S Sn 19 28 24.5 +0.5
QIZ LN
comp=E,1µm,16.9s
QIZ LE
comp=E,360nm,16.9s
QIZ LZ
comp=E,980nm,11.3s
ENH Enshi 12.45 301 ePn Pn 19 26 07.1 -1.6
comp=E,10nm,1.0s
GYA Guiyang 13.86 282⇑iP Pn 19 26 28.5 +0.5
GYA PP P 19 26 40.4 +4.1
GYA S Sn 19 28 55.8 -5.9
GYA SS S 19 29 19.5 -4.2
GYA PMZ
comp=E,50nm,0.9s
GYA PMZ
comp=E,80nm,5.9s
GYA LN
comp=E,730nm,9.8s
GYA LE
comp=E,1µm,12.7s
GYA LZ
comp=E,2µm,12.0s
KSAR Wonju Array Be 14.05 20 P Pn 19 26 31.3 +0.9
KSAR Wonju Array Be 14.05 20 Pn Pn 19 26 31.2 +0.9
KSRS Korea Array 14.07 20 Pn Pn 19 26 31.2 +0.6
baz=202,slow=11,SNR=2.4
KSRS LR LR 19 32 22.8
comp=E,337nm,18.0s,baz=202,slow=39
XAN Xi'an 14.83 314 P Pn 19 26 42.0 +0.9
XAN S Sn 19 29 26.9 +1.8
XAN PMZ
comp=E,9.0nm,1.4s
XAN PMZ
comp=E,98nm,5.0s
XAN LN
comp=E,400nm,8.7s
XAN LE
comp=E,730nm,12.7s
XAN LZ
comp=E,940nm,11.7s
BJI Beijing 16.36 344 P P 19 27 04.2 +0.5
BJI S S 19 30 08.7 -5.6
BJI PMZ
comp=E,9.0nm,1.4s
BJI PMZ
comp=E,120nm,4.0s
BJI LN
comp=E,340nm,16.5s
BJI LE
comp=E,1µm,15.5s
BJI LZ
comp=E,240nm,15.5s
SLVN Son La 16.79 263 ePn Pn 19 27 05.6 -1.0
CD2 Chengdu 17.29 296 eP Pn 19 27 12.5 -0.3
CD2 pP P 19 27 16.4 +2.2
CD2 sP sP 19 27 17.8 -3.3
CD2 S Sn 19 30 25.5 +0.7
CD2 PMZ
comp=E,10.0nm,0.5s
CD2 LN
comp=E,900nm,8.6s
CD2 LE
comp=E,1µm,12.3s
CD2 LZ
comp=E,2µm,10.0s
KMI Kunming 17.36 277 P Pn 19 27 14.5 +0.6
KMI pP pP 19 27 18.1 -1.9
KMI sP sP 19 27 20.9 -1.3
KMI PP PnPn 19 27 28.2 +4.2
KMI S Sn 19 30 23.9 -3.0
KMI SS SnSn 19 30 43.5 +3.3
KMI PMZ
comp=E,9.0nm,1.2s
KMI PMZ
comp=E,92nm,3.1s
KMI LN
comp=E,2µm,14.1s
KMI LE
comp=E,370nm,15.0s
KMI LZ
comp=E,2µm,11.1s
SNY Shenyang 17.50 4 ⇓P P 19 27 19.6 +3.3
SNY PMZ
comp=E,140nm,3.6s
SNY LN
comp=E,840nm,13.7s
SNY LE
comp=E,410nm,12.0s
SNY LZ
comp=E,1µm,12.1s
HHC Hu-ho-hao-te 18.57 335 eP Pn 19 27 30.6 +2.1
HHC sP sP 19 27 37.7 +2.4
HHC S Sn 19 30 52.9 -2.8
HHC SS SnSn 19 31 16.1 +6.3
HHC PMZ
comp=E,15nm,0.5s
HHC PMZ
comp=E,120nm,5.7s
HHC LN
comp=E,500nm,13.0s
HHC LE
comp=E,280nm,13.0s
HHC LZ
comp=E,440nm,14.8s
MAJO Matsushiro 18.60 45⇑eP Pn 19 27 30.1 +1.2
MAJO pmax pmax
comp=Z,33nm,1.0s
MAJO Matsushiro 18.60 45 eP Pn 19 27 29.9 +0.9
comp=Z,10nm,1.0s
MJAR Matsushiro Arr 18.61 45 P P 19 27 27.5 -1.2
comp=Z,0.1nm,0.3s,baz=240,slow=11,SNR=5.2
MJAR LR LR 19 35 12.0
comp=Z,305nm,20.5s,baz=210,slow=39
KKM Kota Kinabalu 18.98 197 eP Pn 19 27 34.6 +1.0
comp=Z,47nm,1.3s
MYLDM Lahad Datu 19.32 190 ePn P 19 27 35.5 -1.1
comp=Z,29nm,1.1s
LZH Lanzhou 19.42 311 eP Pn 19 27 40.0 +1.1
LZH pP pP 19 27 44.7 +2.2
LZH sP sP 19 27 48.3 +3.6
LZH PP PnPn 19 27 58.1 +5.9
LZH eS Sn 19 31 12.2 -4.3
LZH sS S 19 31 19.0 +2.2
LZH eSS SnSn 19 31 39.5 +8.8
LZH PMZ
comp=Z,39nm,1.0s
LZH PMZ
comp=Z,180nm,4.0s
LZH LN
comp=Z,470nm,10.3s
LZH LE
comp=Z,630nm,11.5s
LZH LZ
comp=Z,1µm,12.1s
CN2 Changchun 19.64 8 eP Pn 19 27 43.2 +1.9
CN2 esP sP 19 27 51.0 +4.2
CN2 eS S 19 31 20.2 -0.6
CN2 PMZ
comp=Z,10.0nm,0.7s
CN2 PMZ
comp=Z,200nm,3.0s
CN2 LN
comp=Z,700nm,16.0s
CN2 LE
comp=Z,900nm,16.0s
CN2 LZ
comp=Z,1µm,17.0s
MSHR Mys Shultsa 19.76 21⇓eP P 19 27 38.9 -2.3
VLA Vladivostok 20.48 21⇑eP P 19 27 48.8 -0.2
VLA pmax pmax
comp=Z,15nm,0.8s
MDJ Mudanjiang 21.19 15 P P 19 27 58.4 +1.7
MDJ pP pP 19 28 01.1 -0.5
MDJ sP sP 19 28 03.0 -0.8
MDJ S S 19 31 55.1 +3.4
MDJ sS sS 19 32 00.1 +0.7
MDJ ScP ScP 19 35 39.2 +1.1
MDJ PcS PcS 19 35 40.6 +0.8
MDJ PMZ
comp=Z,14nm,1.0s
MDJ PMZ
comp=Z,74nm,4.2s
MDJ LN
comp=Z,770nm,14.0s
MDJ LE
comp=Z,380nm,13.6s
MDJ LZ
comp=Z,1µm,14.9s
MDJ Mudanjiang 21.19 15 eP P 19 27 58.1 +1.4
comp=Z,14nm,1.0s
USRK Ussuriysk Ar. 21.48 20 P P 19 27 58.1 -1.7
comp=Z,2.1nm,0.8s,baz=189,slow=8.0,SNR=3.9
CHTO Chiang Mai 21.97 260 eP P 19 28 05.6 +0.3
CHTO pmax pmax
comp=Z,14nm,1.1s
CHTO Chiang Mai 21.97 260 eP P 19 28 05.6 +0.3
comp=Z,14nm,1.1s
CMAR Chiang Mai Arr 22.08 259 P P 19 28 06.8 +0.3
comp=Z,4.1nm,1.0s,baz=61,slow=8.1,SNR=27
CMAR PcP PcP 19 32 05.2 +1.1
comp=Z,1.9nm,0.8s,baz=55,slow=0.8,SNR=16
CMAR LR LR 19 36 26.3
comp=Z,196nm,18.7s,baz=70,slow=36
CMAR Chiang Mai Arr 22.08 259ceP P 19 28 08.8 +2.3
CMAR pmax pmax
comp=Z,5.0nm,1.0s
SBUM Sibu 23.66 205 eP P 19 28 21.1 -1.8
comp=Z,20nm,1.1s
GTA Gaotai 23.89 314 eP P 19 28 25.5 +0.4
GTA pP pP 19 28 29.5 -0.7
GTA sP sP 19 28 32.0 -0.3
GTA S S 19 32 38.7 -2.0
GTA sS sS 19 32 45.8 -3.3
GTA SS SnSn 19 33 28.8 +8.5
GTA PMZ
comp=Z,5.0nm,1.1s
GTA PMZ
comp=Z,110nm,5.0s
GTA LN
comp=Z,350nm,13.3s
GTA LE
comp=Z,380nm,14.7s
GTA LZ
comp=Z,450nm,14.2s
HIA Hailar 24.93 357 eP P 19 28 35.4 +1.1
HIA pmax pmax
comp=Z,8.0nm,0.7s
HIA Hailar 24.93 357 eP P 19 28 35.4 +1.1
comp=Z,7.8nm,0.7s
KSM Kuching 25.32 208 eP P 19 28 38.4 +0.3
ASAJ Asahikawa 26.02 36 P P 19 28 44.3 0.0
comp=Z,5.4nm,0.9s,baz=261,slow=5.8,SNR=4.6
KLR Kul'dur 26.03 15 eP P 19 28 41.7 -2.6
KLR pmax pmax
comp=Z,36nm,1.0s
KLR MLR MLR
comp=Z,2µm,12.0s
ULN Ulaanbaatar 26.24 337d iP P 19 28 46.9 +0.5
ULN pmax pmax
comp=Z,19nm,1.2s
ULN Ulaanbaatar 26.24 337 eP P 19 28 46.0 -0.4
comp=Z,11nm,0.9s
HABR Khabarovsk 26.25 20 eP P 19 28 43.9 -2.4
HABR e*SP sP 19 28 52.4 -1.1
HABR e 19 29 22.7
HABR e 19 32 10.4
HABR eS S 19 33 15.6 -2.3
HABR eSS SnSn 19 34 16.4 -1.2
HABR e 19 39 38.5
HABR pmax pmax
comp=Z,28nm,2.5s
HABR MLR MLR
comp=Z,369nm,15.0s
SONM Songino Array 26.45 336 P P 19 28 47.2 -1.1
comp=Z,20nm,1.1s,baz=153,slow=7.8,SNR=33
SONM LR LR 19 40 33.3
comp=Z,300nm,18.0s,baz=146,slow=40
LSA Lhasa 27.79 288 P P 19 29 02.1 +1.2
LSA Lhasa 27.79 288 eP P 19 29 02.5 +1.5
LSA pmax pmax
comp=Z,9.0nm,0.8s
LSA Lhasa 27.79 288 eP P 19 29 02.5 +1.5
comp=Z,8.6nm,0.8s
YSS Yuzh-Sakhalins 28.09 31 eP P 19 29 08.0 +5.2
YSS MLR MLR
comp=Z,300nm,14.0s
ZAK Zakamensk 29.71 336 eP P 19 29 14.3 -3.0
ZAK pmax pmax
comp=Z,3.0nm,1.3s
TLY Talaya 30.65 338 eP P 19 29 29.2 +3.7
TLY pmax pmax
comp=Z,5.0nm,0.7s
TLY MLR MLR
comp=Z,138nm,12.0s
TAPN Taplejung 30.79 283 eP P 19 29 28.4 +1.0
comp=Z,47nm,1.0s
ODAN Odare 31.10 282 eP P 19 29 31.2 +1.2
comp=Z,38nm,0.9s
RAMN Ramite 31.80 282 eP P 19 29 37.3 +1.1
comp=Z,29nm,1.0s
GUN Gumba 32.40 284 eP P 19 29 41.7 +0.1
PKI Pulchoki 32.83 284 eP P 19 29 45.4 +0.1
PKIN Phulchoki 32.84 284 eP P 19 29 45.7 +0.4
comp=Z,11nm,1.0s
KKN Kakani 32.93 284 eP P 19 29 46.7 +0.6
DMN Daman 33.09 284 eP P 19 29 48.1 +0.5
comp=Z,19nm,1.0s
GKN Gorkha 33.49 284 eP P 19 29 51.3 +0.4
WMQ Urumqi 33.97 313 P P 19 29 55.0 +0.2
WMQ PP PP 19 31 10.0 -1.7
WMQ S S 19 35 20.0 +0.9
WMQ SS SnSn 19 37 29.0 +3.3
WMQ PMZ
comp=Z,12nm,0.8s
WMQ PMZ
comp=Z,120nm,4.0s
WMQ LN
comp=Z,95nm,16.0s
WMQ LE
comp=Z,120nm,15.0s
WMQ LZ
comp=Z,120nm,14.0s
KOLN Koldanda 34.42 284 eP P 19 29 59.9 +0.9
comp=Z,15nm,0.7s
YAK Yakutsk 38.05 6 eP P 19 30 26.8 -2.5
YAK e 19 32 42.8
YAK eS S 19 36 17.8 -3.1
YAK eSSS SSS 19 39 25.2
YAK pmax pmax
comp=Z,11nm,0.9s
YAK pmax pmax
comp=N,6.0nm,1.4s
YAK pmax pmax
comp=E,3.0nm,1.5s
YAK pmax pmax
comp=Z,72nm,2.8s
YAK pmax pmax
comp=N,72nm,2.8s
YAK pmax pmax
comp=E,99nm,3.5s
YAK smax smax
comp=E,3.0nm,3.5s
YAK smax smax
comp=N,9.0nm,4.2s
YAK MLR MLR
comp=Z,256nm,17.0s
YAK MLR MLR
comp=N,158nm,15.0s
YAK MLR MLR
comp=E,89nm,16.0s
YAK Yakutsk 38.05 6 eP P 19 30 28.0 -1.3
comp=E,13nm,0.8s
MTN Manton Dam 38.06 165 eP P 19 30 28.4 -1.6
comp=E,38nm,1.8s
MKAR Makanchi Array 38.63 316 P P 19 30 33.8 -0.8
comp=E,3.4nm,0.6s,baz=101,slow=11,SNR=27
MKAR PcP PcP 19 32 46.0 -0.6
comp=E,0.9nm,0.8s,baz=111,slow=5.8,SNR=3.5
MKAR ScP ScP 19 36 33.4 -0.6
comp=E,0.3nm,0.6s,baz=108,slow=4.7,SNR=2.4
MKAR LR LR 19 48 03.0
comp=E,139nm,18.8s,baz=106,slow=39
MKAR Makanchi Array 38.63 316ceP P 19 30 34.7 +0.2
MKAR pmax pmax
comp=Z,3.0nm,0.6s
PETK Petropavlovsk- 39.41 34 LR LR 19 46 54.4
comp=Z,107nm,19.8s,baz=219,slow=36
ZALV Zalesovo Beam 40.43 327 P P 19 30 48.2 -1.2
comp=Z,5.7nm,0.8s,baz=119,slow=7.5,SNR=16
ZALV LR LR 19 47 43.4
comp=Z,64nm,19.6s,baz=68,slow=36
KSH Kashi 41.30 303 P P 19 31 01.0 +4.0
KSH esP sP 19 31 09.8 +5.5
KSH PcP PcP 19 32 58.2 +2.8
KSH S S 19 37 16.0 +5.3
KSH sS sS 19 37 25.1 +5.8
KSH SS SS 19 40 14.9 +0.7
KSH PMZ
comp=Z,4.0nm,1.0s
KSH PMZ
comp=Z,100nm,5.5s
KSH LN
comp=Z,120nm,6.6s
KSH LE
comp=Z,110nm,7.3s
KSH LZ
comp=Z,190nm,13.4s
NVS Novosibirsk 41.69 327 eP P 19 30 50.5 -9.2
TKM2 Tokmak 2 42.13 308 P P 19 31 02.3 -1.5
TKM2 pmax pmax
comp=Z,19nm,1.3s
TKM2 Tokmak 2 42.13 308 P P 19 31 02.3 -1.5
comp=Z,19nm,1.3s
KURK Kurchatov 42.35 320 P P 19 31 00.2 -4.9
KURK pmax pmax
comp=Z,14nm,1.0s
KURK Kurchatov 42.35 320 P P 19 31 00.2 -4.9
comp=Z,14nm,1.0s
AAK Ala-Archa 42.87 307deP P 19 31 11.2 +1.4
AAK pmax pmax
comp=Z,4.0nm,0.9s
AAK Ala-Archa 42.87 307 eP P 19 31 10.2 +0.4
comp=Z,3.2nm,0.9s
MBWA Marble Bar 45.28 183 P P 19 31 28.0 -1.0
comp=Z,8.8nm,0.9s
WRAB Tennant Creek 45.67 163⇑eP P 19 31 32.1 0.0
WRAB pmax pmax
comp=Z,5.0nm,0.8s
WRAB Tennant Creek 45.67 163 eP P 19 31 31.0 -1.1
comp=Z,6.6nm,1.0s
WRA Warramunga Arr 45.68 163 P P 19 31 31.2 -1.0
comp=Z,2.4nm,0.5s,baz=344,slow=8.7,SNR=31
WRA LR LR 19 52 12.9
comp=Z,62nm,20.3s,baz=200,slow=38
KKAR Karatay Array 45.84 307 eP P 19 31 32.2 -1.2
KKAR Karatay Array 45.84 307 eP P 19 31 32.2 -1.2
BRVK Borovoye 47.99 320 eP P 19 31 50.3 +0.3
BRVK pmax pmax
comp=Z,6.0nm,0.9s
BRVK Borovoye 47.99 320 eP P 19 31 50.3 +0.3
comp=Z,5.9nm,0.9s
ASAR Alice Springs 49.14 165 P P 19 31 58.5 -0.6
comp=Z,0.9nm,0.5s,baz=341,slow=6.9,SNR=24
CTAO Charters Tower 50.16 150 P P 19 32 07.5 +0.5
CTAO Charters Tower 50.16 150 P P 19 32 07.5 +0.5
BILL Bilibino 51.34 20⇓eP P 19 32 16.9 +1.7
BILL e 19 33 29.6
BILL pmax pmax
comp=Z,7.0nm,1.0s
BILL MLR MLR
comp=Z,192nm,16.0s
ABKAR Akbulak array 53.75 314 eP P 19 32 33.3 -0.1
IMYA Miami 53.79 298 eP P 19 32 36.2 +2.0
SVE Sverdlovsk 54.26 324⇑eP P 19 32 37.1 +0.1
SVE pmax pmax
comp=Z,8.0nm,0.8s
IMOG Moghan 54.43 298 eP P 19 32 41.0 +2.0
IPAY Payeh 54.67 298 eP P 19 32 42.3 +1.7
IKRD Kardeh 55.02 299 eP P 19 32 39.8 -3.4
IKOO Kooshah 55.17 294 eP P 19 32 45.5 +1.2
GEYT Alibeck 55.22 300 P P 19 32 44.8 +0.4
comp=Z,10nm,0.9s,baz=79,slow=3.8,SNR=28
GEYT LR LR 19 59 10.3
comp=Z,86nm,20.0s,baz=20,slow=39
ITEG Tejag 55.31 294 eP P 19 32 46.8 +1.5
ARU Arti 55.33 323c iP P 19 32 45.2 +0.4
ARU S S 19 40 30.9 +2.8
ARU SS SS 19 44 08.6 -3.6
ARU pmax pmax
comp=Z,7.0nm,1.0s
ARU Arti 55.33 323 eP P 19 32 42.7 -2.1
comp=Z,5.8nm,0.9s
IPAR Pars 60.67 292 eP P 19 33 22.9 -0.1
IRAM Ramesheh 60.81 294 eP P 19 33 23.9 0.0
IKAZ Kazeroun 61.71 292 eP P 19 33 30.1 0.0
IPIR Pirpir 61.86 295 eP P 19 33 31.3 +0.2
GNI Garni 65.19 305deP P 19 33 53.5 +0.7
GNI pmax pmax
comp=Z,11nm,1.2s
GNI Garni 65.19 305 eP P 19 33 51.5 -1.3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,6.9nm,0.9s | | | | | | |
| ZEI | Tsey | 65.30 | 308 | eP | P | 19 33 52.8 | -0.7 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,25nm,0.7s | | | | | | |
| VRH | Novokhopyorsk | 65.34 | 317 | eP | P | 19 33 52.3 | -1.0 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.8s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.7s | | | | | | |
| KBZ | Khabaz | 65.84 | 309 | P | P | 19 33 56.4 | -0.3 |
| | comp=E,4.8nm,1.1s,baz=27,slow=3.1,SNR=4.7 | | | | | | |
| KIV | Kislovodsk | 65.94 | 309 | ceP | P | 19 33 58.1 | +0.6 |
| KIV | | | | e | | 19 34 25.2 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,21nm,1.2s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,50nm,14.0s | | | | | | |
| KIV | Kislovodsk | 65.94 | 309 | eP | P | 19 33 55.4 | -2.1 |
| | comp=Z,18nm,1.1s | | | | | | |
| NEY | Neytrino | 66.06 | 308 | ⇑eP | P | 19 33 58.1 | -0.2 |
| NEY | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| LPSR | Galich'ya Gora | 66.82 | 319 | eP | P | 19 34 02.2 | -0.6 |
| LPSR | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.7s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,7.0nm,1.2s | | | | | | |
| VORD | Divnogorie | 66.89 | 317 | eP | P | 19 34 02.5 | -0.8 |
| VORD | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,30nm,0.9s | | | | | | |
| VSR | Storozhevoye | 66.92 | 317 | eP | P | 19 34 02.9 | -0.6 |
| VSR | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.2s | | | | | | |
| OBN | Obninsk | 67.74 | 322 | eP | P | 19 34 07.1 | -1.4 |
| OBN | | | | e | | 19 34 34.7 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,62nm,16.0s | | | | | | |
| MCK | McKinley | 68.13 | 29 | P | P | 19 34 11.6 | +0.6 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| MCK | McKinley | 68.13 | 29 | P | P | 19 34 11.6 | +0.6 |
| | comp=Z,7.1nm,0.9s | | | | | | |
| SML | Sawmill | 68.78 | 31 | P | P | 19 34 14.1 | -1.0 |
| SML | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| SML | Sawmill | 68.78 | 31 | P | P | 19 34 14.1 | -1.0 |
| | comp=Z,5.5nm,1.1s | | | | | | |
| ILAR | Eielson Array | 68.80 | 27 | P | P | 19 34 15.5 | +0.4 |
| | comp=Z,0.5nm,0.7s,baz=297,slow=4.0,SNR=5.9 | | | | | | |
| RAYN | Ar Rayn | 68.86 | 287 | eP | P | 19 34 16.1 | -0.1 |
| | comp=Z,15nm,1.1s | | | | | | |
| ARCES | ARCESS Array B | 69.61 | 338 | P | P | 19 34 19.4 | -0.6 |
| | comp=Z,1.3nm,0.8s,baz=51,slow=6.4,SNR=4.6 | | | | | | |
| ARCES | | | | LR | LR | 20 11 08.8 | |
| | comp=Z,71nm,18.4s,baz=92,slow=41 | | | | | | |
| MALT | Malatya | 70.39 | 304 | ⇑P | P | 19 34 26.9 | +1.4 |
| FINES | FINESS Array B | 71.60 | 330 | P | P | 19 34 31.9 | -0.4 |
| | comp=Z,7.3nm,0.7s,baz=100,slow=7.9,SNR=32 | | | | | | |
| FINES | | | | LR | LR | 20 07 44.0 | |
| | comp=Z,71nm,18.6s,baz=76,slow=37 | | | | | | |
| AKASG | Malin Array Be | 73.14 | 318 | P | P | 19 34 40.8 | -0.9 |
| | comp=Z,0.7nm,0.4s,baz=60,slow=6.3,SNR=6.8 | | | | | | |
| KIEV | Kiev | 73.15 | 318 | ⇓eP | P | 19 34 41.1 | -0.6 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| BRTR | Keskin Array B | 73.55 | 307 | P | P | 19 34 43.6 | -0.9 |
| | comp=Z,6.4nm,0.9s,baz=109,slow=7.1,SNR=27 | | | | | | |
| CSS | Prodhromos | 75.31 | 302 | eP | P | 19 34 54.2 | -0.5 |
| | comp=Z,3.9nm,0.7s | | | | | | |
| SUW | Suwalki | 75.52 | 323 | eP | P | 19 34 54.7 | -0.8 |
| TLB | Topalu | 75.89 | 313 | ⇑P | P | 19 34 57.3 | -0.5 |
| VRI | Vrincioaia | 76.31 | 314 | ⇑P | P | 19 35 01.2 | +1.0 |
| PLOR | Plostina | 76.37 | 314 | ⇓P | P | 19 35 02.6 | +2.0 |
| BURAR | Bucovina Array | 76.65 | 316 | ⇓P | P | 19 35 00.4 | -1.8 |
| MLR | Muntele Rosu | 76.96 | 314 | ⇑P | P | 19 35 05.0 | +1.0 |
| KWP | Kalwaria Pacla | 77.44 | 319 | eP | P | 19 35 06.9 | +0.4 |
| NB2 | NORSAR Subarra | 78.36 | 332 | P | P | 19 35 10.8 | -0.6 |
| | comp=Z,2.9nm,0.8s,baz=58,slow=5.6 | | | | | | |
| NOA | NORSAR Array B | 78.36 | 332 | P | P | 19 35 11.2 | -0.2 |
| | comp=Z,2.6nm,0.8s,baz=58,slow=5.6,SNR=6.0 | | | | | | |
| NOA | | | | LR | LR | 20 15 43.8 | |
| | comp=Z,51nm,18.2s,baz=80,slow=40 | | | | | | |
| STHS | Stebnicka Huta | 78.40 | 319 | eP | P | 19 35 11.0 | -0.8 |
| STHS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| OJC | Ojcow | 78.93 | 320 | eP | P | 19 35 15.0 | +0.3 |
| OJC | Ojcow | 78.93 | 320 | eP | P | 19 35 14.5 | -0.2 |
| | comp=Z,6.7nm,0.9s | | | | | | |
| NIE | Niedzica | 78.96 | 319 | eP | P | 19 35 15.6 | +0.6 |
| VYHS | Vyhne | 80.23 | 319 | eP | P | 19 35 21.9 | +0.1 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.7s | | | | | | |
| KSP | Ksiaz | 80.67 | 322 | eP | P | 19 35 24.5 | +0.4 |
| XMAS | Kiritimati | 80.71 | 92 | eP | P | 19 35 23.4 | -1.6 |
| | comp=Z,0.9nm,0.8s | | | | | | |
| DPC | Dobruska-Polom | 80.88 | 321 | epP | pP | 19 35 30.8 | -0.1 |
| DPC | | | | ex | x | 19 35 38.0 | |
| CLL | Collm | 82.28 | 323 | eP | P | 19 35 30.0 | -2.6 |
| CLL | | | | e*PP | PcP | 19 35 38.0 | +0.1 |
| YKA | Yellowknife Ar | 82.59 | 23 | P | P | 19 35 33.2 | -0.8 |
| | comp=Z,3.0nm,0.8s,baz=315,slow=4.7,SNR=5.6 | | | | | | |
| GERES | GERESS Array B | 83.09 | 321 | P | P | 19 35 36.4 | -0.6 |
| | comp=Z,1.2nm,0.9s,baz=69,slow=4.6,SNR=6.9 | | | | | | |
| E03A | Lebam | 88.03 | 39 | eP | P | 19 36 02.9 | +1.4 |
| | comp=Z,25nm,1.0s | | | | | | |
| D05A | Enumclaw | 88.55 | 38 | eP | P | 19 36 03.6 | -0.4 |
| | comp=Z,21nm,0.8s | | | | | | |
| LON | Longmire | 88.91 | 38 | eP | P | 19 36 06.7 | +0.9 |
| LON | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| LON | Longmire | 88.91 | 38 | eP | P | 19 36 06.7 | +0.9 |
| | comp=Z,10nm,1.1s | | | | | | |
| MPOR | Mary's Peak | 89.17 | 41 | P | P | 19 36 09.7 | +2.5 |
| ETW | Entiat | 89.23 | 37 | P | P | 19 36 07.9 | +0.5 |
| B08A | Colville Reser | 89.31 | 36 | eP | P | 19 36 08.2 | +0.5 |
| | comp=Z,16nm,0.9s | | | | | | |
| TBM | Table Mountain | 89.34 | 37 | P | P | 19 36 08.7 | +0.9 |
| WTV | Waterville | 89.38 | 37 | P | P | 19 36 08.9 | +0.9 |
| SAW | Saint Andrews | 89.67 | 36 | P | P | 19 36 10.1 | +0.8 |
| VFP | Flag Point | 89.93 | 39 | P | P | 19 36 12.3 | +1.5 |
| D08A | Wollman Farm, | 90.32 | 37 | eP | P | 19 36 13.2 | +0.8 |
| | comp=Z,13nm,0.9s | | | | | | |
| NEW | Newport | 90.54 | 35 | eP | P | 19 36 13.6 | +0.2 |
| NEW | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| NEW | Newport | 90.54 | 35 | eP | P | 19 36 13.6 | +0.2 |
| | comp=Z,13nm,1.0s | | | | | | |
| YBH | Yreka Blue Hor | 91.24 | 43 | eP | P | 19 36 16.9 | +0.1 |
| YBH | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| YBH | Yreka Blue Hor | 91.24 | 43 | eP | P | 19 36 16.9 | +0.1 |
| | comp=Z,6.5nm,1.1s | | | | | | |
| K05A | Summer Lake | 91.77 | 41 | eP | P | 19 36 20.5 | +1.1 |
| | comp=Z,26nm,1.1s | | | | | | |
| I07A | Izee | 91.79 | 39 | eP | P | 19 36 21.3 | +1.9 |
| | comp=Z,6.0nm,0.9s | | | | | | |
| WDC | Whiskeytown Da | 92.00 | 43 | eP | P | 19 36 22.0 | +1.8 |
| WDC | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| WDC | Whiskeytown Da | 92.00 | 43 | eP | P | 19 36 22.0 | +1.8 |
| | comp=Z,5.7nm,0.9s | | | | | | |
| BSMT | Bassoo Peak | 92.01 | 34 | eP | P | 19 36 21.4 | +1.0 |
| | comp=Z,4.1nm,0.9s | | | | | | |
| JTMT | Jette | 92.34 | 34 | eP | P | 19 36 22.1 | +0.2 |
| YBMT | Yellow Bay | 92.40 | 34 | eP | P | 19 36 22.4 | +0.3 |
| | comp=Z,5.0nm,1.0s | | | | | | |
| KEST | Kesra | 92.60 | 311 | P | P | 19 36 22.8 | -0.4 |
| | comp=Z,3.4nm,1.1s,baz=87,slow=14,SNR=3.3 | | | | | | |
| MOD | Modoc | 92.61 | 41 | eP | P | 19 36 24.5 | +1.3 |
| | comp=Z,13nm,1.0s | | | | | | |
| SWMT | Swartz Lake | 92.64 | 34 | eP | P | 19 36 23.5 | +0.3 |
| | comp=Z,4.4nm,0.9s | | | | | | |
| FFC | Flin Flon | 92.75 | 24 | eP | P | 19 36 21.9 | -1.5 |
| FFC | Flin Flon | 92.75 | 24 | eP | P | 19 36 21.9 | -1.5 |
| J08A | Circle Bar Ran | 92.82 | 39 | eP | P | 19 36 25.5 | +1.4 |
| | comp=Z,12nm,1.0s | | | | | | |
| SLMT | Seeley Lake | 93.07 | 34 | eP | P | 19 36 25.4 | +0.2 |
| | comp=Z,12nm,1.2s | | | | | | |
| MSO | Missoula | 93.11 | 35 | eP | P | 19 36 24.4 | -1.0 |
| | comp=Z,56nm,2.5s | | | | | | |
| MFID | Camas Ranch | 94.30 | 38 | eP | P | 19 36 32.1 | +1.2 |
| | comp=Z,5.1nm,1.0s | | | | | | |
| CMB | Columbia Colle | 94.83 | 45 | eP | P | 19 36 33.3 | -0.1 |
| CMB | Columbia Colle | 94.83 | 45 | eP | P | 19 36 33.3 | -0.1 |
| HLID | Hailey | 94.99 | 37 | eP | P | 19 36 32.9 | -1.2 |
| | comp=Z,4.4nm,0.9s | | | | | | |
| NVAR | Mina Array Bea | 95.92 | 43 | P | P | 19 36 38.1 | -0.5 |
| | comp=Z,2.9nm,0.9s,baz=283,slow=5.1,SNR=9.2 | | | | | | |
| SDV | Santo Domingo | 144.80 | 22 | ePKPdf | PKPab | 19 42 47.9 | -0.2 |
| ROSC | El Rosal | 146.99 | 31 | PKPbc | PKPbc | 19 42 55.6 | +0.4 |
| | comp=Z,5.7nm,0.5s,baz=128,slow=4.1,SNR=3.9 | | | | | | |
| OTAV | Otavalo | 148.64 | 42 | ePKPbc | PKPbc | 19 43 00.4 | +0.6 |

**IDC 02 19:25:10.5±3.8, 6°.96S×150°.28E, h0km, mb2.8/2, mb1 3.2/2, mb1mx3.0/19, mbtmp2.9/2, Error ellipse: s-maj=153.6km s-min=48.8km az=119.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 20.14 | 229 | P | P | 19 29 45.9 | -0.7 |
| | 0.4nm,0.6s,baz=55,slow=11,SNR=3.5 | | | | | | |
| ASAR | Alice Springs | 22.88 | 222 | P | P | 19 30 16.6 | +0.6 |
| | 0.2nm,0.7s,baz=52,slow=9.8,SNR=4.3 | | | | | | |
| TORD | Torodi Ar. Bea | 148.49 | 284 | PKPbc | PKPbc | 19 44 59.6 | -0.7 |
| | 0.4nm,0.9s,baz=66,slow=2.2,SNR=4.1 | | | | | | |

**IDC 02 19:25:32.4±3.9, 6°.41S×149°.46E, h0km, mb2.7/1, mb1 3.4/2, mb1mx3.2/19, mbtmp3.1/2, ML3.4/1, Error ellipse: s-maj=142.0km s-min=49.8km az=115.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 19.91 | 226 | P | P | 19 30 06.2 | +0.4 |
| | 0.1nm,0.3s,baz=52,slow=11,SNR=7.2 | | | | | | |
| ASAR | Alice Springs | 22.76 | 219 | P | P | 19 30 36.2 | -0.3 |
| | 0.3nm,0.9s,baz=52,slow=9.4,SNR=5.4 | | | | | | |
| TORD | Torodi Ar. Bea | 147.56 | 284 | PKPbc | PKPbc | 19 45 19.0 | -0.7 |
| | 0.1nm,0.3s,baz=92,slow=2.8,SNR=5.5 | | | | | | |

*DDA 02 20:04:11.6, 38°.78N×26°.43E, h7km, Md2.6*
*ISCJB 02 20:04:13.8±0.6, 38°.72N±0°.03×26°.41E±0°.06, h11km, Error ellipse: s-maj=7.5km s-min=4.1km az=161.2*
*CSEM 02 20:04:14.2±0.2, 38°.73N×26°.46E, h2km, MD2.6, Error ellipse: s-maj=6.2km s-min=4.8km az=71.0*
*ISK 02 20:04:14.0, 38°.75N×26°.43E, h8km, MD2.6*
**ISC 02 20:04:13.8±0.9, 38°.72N±0°.03×26°.38E±0°.04, h11km, n21, σ0s.58/26, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URLA | Izmir | 0.40 | 154 | i P | Pg | 20 04 20.3 | -1.4 |
| URLA | | | | i S | Sg | 20 04 27.1 | +0.1 |
| URLA | Izmir | 0.40 | 154 | P | Pg | 20 04 20.3 | -1.4 |
| URLA | | | | S | Sg | 20 04 27.1 | +0.1 |
| CHOS | Chios island | 0.42 | 217 | ePG | Pb | 20 04 23.7 | +0.5 |
| CHOS | Chios island | 0.42 | 217 | ePg | Pb | 20 04 23.7 | +0.5 |
| ZEY | ˜zmir | 0.49 | 168 | P | Pg | 20 04 22.2 | -1.2 |
| ZEY | | | | S | Sg | 20 04 30.4 | +0.4 |
| DKL | Dikili | 0.54 | 50 | ePG | Pg | 20 04 23.7 | -0.6 |
| DKL | Dikili | 0.54 | 50 | ePg | Pg | 20 04 23.7 | -0.6 |
| SIGR | SIGRI | 0.63 | 320 | ePG | Pb | 20 04 26.9 | +0.1 |
| SIGR | | | | eSG | Sb | 20 04 35.9 | +0.2 |
| SIGR | SIGRI | 0.63 | 320 | ePg | Pb | 20 04 26.9 | +0.1 |
| SIGR | | | | eSg | Sb | 20 04 35.9 | +0.2 |
| IZM | Izmir | 0.77 | 115 | ePG | Pg | 20 04 28.7 | +0.1 |
| IZM | Izmir | 0.77 | 115 | ePg | Pg | 20 04 28.7 | +0.1 |
| EZN | Ezine | 1.10 | 358 | ePG | Pn | 20 04 35.5 | +0.3 |
| EZN | Ezine | 1.10 | 358 | ePg | Pn | 20 04 35.5 | +0.3 |
| AKS | Akhisar | 1.14 | 82 | ePN | Pn | 20 04 35.9 | +0.3 |
| AKS | Akhisar | 1.14 | 82 | ePn | Pn | 20 04 35.9 | +0.3 |
| AYDB | Zeytinkoy-Aydi | 1.42 | 123 | ePN | Pg | 20 04 41.4 | +0.3 |
| AYDB | Zeytinkoy-Aydi | 1.42 | 123 | ePn | Pg | 20 04 41.4 | +0.3 |
| BALB | Balikesir | 1.49 | 51 | ePN | Pb | 20 04 41.0 | -0.4 |
| BALB | Balikesir | 1.49 | 51 | ePn | Pb | 20 04 41.0 | -0.4 |
| GONE | Gonen-Balikesi | 1.67 | 37 | ePN | Pn | 20 04 43.0 | +0.1 |
| GONE | Gonen-Balikesi | 1.67 | 37 | ePn | Pn | 20 04 43.0 | +0.1 |

*ISCJB 02 20:04:48.6±0.6, 41°.90N±0°.03×22°.95E±0°.05, h5km±6km, Error ellipse: s-maj=6.2km s-min=4.3km az=151.0*
*CSEM 02 20:04:49.3±0.2, 41°.89N×22°.95E, h10km, ML1.8, Error ellipse: s-maj=4.4km s-min=2.3km az=67.0*
*ATH 02 20:04:49.9, 41°.86N×22°.95E, h4km, MD3.0/6*
*THE 02 20:04:52.1, 41°.76N×23°.00E, h2km±29km, ML1.8/2, Error ellipse: s-maj=29.6km s-min=0.8km az=0.0*
*BEO 02 20:04:52.1±0.8, 41°.86N×22°.76E, h0km, ML1.6/2*
**ISC 02 20:04:49.5±1.2, 41°.88N±0°.03×22°.95E±0°.03, h9km±11km, n26, σ0s.30/48, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VAY | Valandovo | 0.63 | 207 | ePg | Pb | 20 05 02.8 | +0.1 |
| VAY | | | | eSg | Sg | 20 05 09.3 | -0.5 |
| VAY | Valandovo | 0.63 | 207 | P | Pb | 20 05 02.7 | +0.1 |
| VAY | | | | S | Sg | 20 05 10.3 | +0.5 |
| VAY | Valandovo | 0.63 | 207 | P | Pb | 20 05 02.7 | +0.1 |
| VAY | | | | eSg | Sg | 20 05 09.3 | -0.5 |
| VAY | | | | S | Sg | 20 05 10.3 | +0.5 |
| KNT | Kendrikon | 0.72 | 183 | ePB | Pg | 20 05 03.5 | +0.2 |
| KNT | | | | eSG | Sg | 20 05 12.8 | +0.1 |
| KNT | Kendrikon | 0.72 | 183 | P | Pg | 20 05 03.5 | +0.2 |
| KNT | | | | S | Sg | 20 05 12.3 | -0.4 |
| KNT | Kendrikon | 0.72 | 183 | P | Pg | 20 05 03.5 | +0.2 |
| KNT | | | | S | Sg | 20 05 12.3 | -0.4 |
| KNT | | | | eSg | Sg | 20 05 12.8 | +0.1 |
| NVR | Nevrokopi | 0.86 | 127 | ePG | Pg | 20 05 06.0 | 0.0 |
| NVR | | | | eSG | Sg | 20 05 17.4 | +0.1 |
| NVR | Nevrokopi | 0.86 | 127 | P | Pg | 20 05 06.1 | 0.0 |
| NVR | | | | S | Sg | 20 05 17.3 | 0.0 |
| NVR | Nevrokopi | 0.86 | 127 | P | Pg | 20 05 06.1 | 0.0 |
| NVR | | | | S | Sg | 20 05 17.3 | 0.0 |
| SRS | Serrai | 0.90 | 147 | ePG | Pg | 20 05 06.9 | +0.1 |
| SRS | | | | eSG | Sb | 20 05 20.0 | +0.6 |
| SRS | Serrai | 0.90 | 147 | P | Pg | 20 05 06.7 | -0.1 |
| SRS | | | | S | Sg | 20 05 18.2 | -0.3 |
| SRS | Serrai | 0.90 | 147 | P | Pg | 20 05 06.7 | -0.1 |
| SRS | | | | S | Sg | 20 05 18.2 | -0.3 |
| SRS | | | | eSg | Sb | 20 05 20.0 | +0.6 |
| GRG | Griva | 1.01 | 204 | ePG | Pg | 20 05 08.7 | -0.2 |
| GRG | | | | eSG | Sg | 20 05 22.1 | 0.0 |
| GRG | Griva | 1.01 | 204 | P | Pg | 20 05 08.7 | -0.2 |
| GRG | | | | S | Sg | 20 05 22.0 | 0.0 |
| GRG | Griva | 1.01 | 204 | P | Pg | 20 05 08.7 | -0.2 |
| GRG | | | | eSg | Sg | 20 05 22.1 | 0.0 |
| SOH | Sokhos | 1.10 | 164 | ePG | Pb | 20 05 10.3 | -0.4 |
| SOH | Sokhos | 1.10 | 164 | P | Pb | 20 05 10.7 | 0.0 |
| SOH | | | | S | Sg | 20 05 24.4 | -0.5 |
| SOH | Sokhos | 1.10 | 164 | ePg | Pb | 20 05 10.3 | -0.4 |
| SOH | Sokhos | 1.10 | 164 | P | Pb | 20 05 10.7 | 0.0 |
| SOH | | | | S | Sg | 20 05 24.4 | -0.5 |
| BARS | Barje | 1.26 | 318 | ePg | Pg | 20 05 13.6 | -0.1 |
| BARS | | | | eSg | Sn | 20 05 30.0 | -0.4 |
| BARS | Barje | 1.26 | 318 | ePg | Pg | 20 05 13.6 | -0.1 |
| BARS | | | | eSg | Sn | 20 05 30.0 | -0.4 |
| HORT | Hortiatis | 1.28 | 175 | ePB | Pg | 20 05 14.2 | 0.0 |
| HORT | Hortiatis | 1.28 | 175 | P | Pb | 20 05 14.1 | +0.2 |
| HORT | Hortiatis | 1.28 | 175 | ePb | Pg | 20 05 14.2 | 0.0 |
| ZAPS | Zavoj | 1.41 | 351 | ePg | Pg | 20 05 17.2 | +0.6 |
| SELS | Selova | 1.91 | 315 | ePg | Pb | 20 05 24.2 | -0.2 |

**IDC 02 20:12:10.7±1.5, 13°.84N×144°.38E, h113km±79km, mb3.0/3, mb1 3.2/3, mb1mx3.0/29, mbtmp3.4/3, Error ellipse: s-maj=267.1km s-min=26.6km az=81.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | Guam | 0.54 | 118 | P | Pn | 20 12 29.4 | +1.3 |
| | 327nm,0.3s,baz=145,slow=5.0,SNR=496 | | | | | | |
| GUMO | | | | LR | LR | 20 12 37.9 | |
| | comp=Z,28nm,18.2s,baz=148,slow=51 | | | | | | |
| GUMO | | | | S | Sn | 20 12 42.6 | +1.5 |
| | 151nm,0.3s,baz=329,slow=20,SNR=13 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 22.32 | 72 | T | T | 20 39 50.4 | |
| | baz=257,slow=75,SNR=7.1 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 22.32 | 72 | T | T | 20 39 51.3 | |
| | baz=257,slow=75,SNR=6.0 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 22.34 | 72 | T | T | 20 39 51.8 | |
| | baz=257,slow=75,SNR=7.0 | | | | | | |
| WRA | Warramunga Arr | 35.00 | 197 | P | P | 20 18 52.3 | -0.2 |
| | 0.4nm,0.5s,baz=19,slow=8.9,SNR=8.4 | | | | | | |
| ASAR | Alice Springs | 38.66 | 195 | P | P | 20 19 23.4 | -0.1 |
| | 0.2nm,0.3s,baz=18,slow=6.6,SNR=12 | | | | | | |
| MKAR | Makanchi Array | 60.98 | 316 | P | P | 20 22 11.8 | -0.5 |
| | 0.3nm,0.7s,baz=96,slow=7.2,SNR=4.4 | | | | | | |

*ISCJB 02 20:18:23.2±0.3, 32°.68N±0°.02×115°.86W±0°.02, h9km±3km, Error ellipse: s-maj=3.1km s-min=2.8km az=11.4*
*ECX 02 20:18:24.7±0.5, 32°.68N×115°.90W, h2km, MD3.0, ML3.2*
*NEIC 02 20:18:24.4, 32°.68N×115°.89W, h5km, ML3.1(PAS), ML3.2(ECX), After PAS.*
*NEIC Felt at El Cajon.*
*MEX 02 20:18:25.0±0.4, 32°.74N×115°.81W, h16km±14km, MD3.7*
**ISC 02 20:18:23.3±0.8, 32°.68N±0°.02×115°.88W±0°.02, h14km±6km, n45, σ0s.83/68, 9C-3D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YUH | Yuha Desert | 0.05 | 230 | ⇑iP | Pg | 20 18 25.6 | -0.3 |
| IBP | Imperial Bould | 0.18 | 265 | P | Pg | 20 18 27.6 | 0.0 |
| | baz=0.2 | | | | | | |
| IBP | Imperial Bould | 0.18 | 265 | ⇑iP | Pg | 20 18 27.9 | +0.3 |
| RMX | La Rumorosa | 0.18 | 246 | ⇑eP | Pg | 20 18 27.9 | +0.2 |
| RMX | | | | eS | Sg | 20 18 30.6 | -0.1 |
| RMX | | | | e | | 20 18 31.7 | |
| RMX | | | | IAML | | 20 18 31.8 | |
| | comp=N,4μm,0.1s | | | | | | |
| ERPC | Ernies Place | 0.19 | 70 | ⇑iP | Pb | 20 18 28.7 | +0.1 |
| COK | Cook Ranch | 0.21 | 37 | ⇑iP | Pg | 20 18 28.9 | +0.8 |
| CRR | Carrizo Plain | 0.22 | 340 | ⇓iP | Pg | 20 18 28.5 | +0.3 |
| SWSC | Sam W. Stewart | 0.27 | 15 | P | Pg | 20 18 29.5 | +0.4 |
| | baz=0.3 | | | | | | |
| SWSC | | | | S | Sg | 20 18 33.3 | +0.4 |
| | baz=0.3 | | | | | | |
| MONP | Monument Peak | 0.50 | 295 | P | Pg | 20 18 33.6 | +0.4 |
| | baz=0.5 | | | | | | |
| MONP | | | | S | Sg | 20 18 40.1 | +0.1 |
| | baz=0.5 | | | | | | |
| CPBX | Cerro Prieto | 0.55 | 118 | eP | Pb | 20 18 35.4 | +0.7 |
| CPBX | | | | eS | Sb | 20 18 43.1 | +0.6 |
| CPBX | | | | ⇑e | | 20 18 45.7 | |
| CPBX | | | | IAML | | 20 18 45.7 | |
| | comp=N,4μm,0.1s | | | | | | |
| CPBX | Cerro Prieto | 0.55 | 118 | eP | Pb | 20 18 35.0 | +0.2 |
| CPBX | | | | eS | Sb | 20 18 43.2 | +0.7 |
| MBIG | Mexicali | 0.64 | 115 | i P | Pg | 20 18 34.9 | -0.8 |
| MBIG | | | | i S | Sg | 20 18 43.1 | -1.0 |
| BAR | Barrett | 0.67 | 270 | ⇑iP | Pg | 20 18 36.5 | +0.2 |
| BAR | Barrett | 0.67 | 270 | ePg | Pg | 20 18 36.3 | -0.1 |
| BAR | | | | eSg | Sg | 20 18 45.0 | -0.2 |
| RDX | Rancho Dawling | 0.75 | 184 | ⇓eP | Pb | 20 18 38.8 | +0.5 |
| RDX | | | | IAML | | 20 18 50.0 | |
| | comp=N,700nm,0.4s | | | | | | |
| RDX | | | | ⇓e | | 20 18 50.0 | |
| CBX | Cerro Bola | 0.76 | 241 | i P | Pg | 20 18 38.4 | +0.3 |
| CBX | | | | i S | Sg | 20 18 48.4 | +0.4 |
| CBX | Cerro Bola | 0.76 | 241 | ⇑iP | Pg | 20 18 38.3 | +0.3 |
| CBX | | | | eS | Sg | 20 18 48.4 | +0.4 |
| CBX | | | | ⇑e | | 20 18 49.3 | |
| CBX | | | | IAML | | 20 18 49.3 | |
| | comp=N,1μm,0.3s | | | | | | |
| CBX | Cerro Bola | 0.76 | 241 | i P | Pg | 20 18 38.4 | +0.3 |
| CBX | | | | i S | Sg | 20 18 48.4 | +0.4 |
| SDRC | San Diego Road | 0.90 | 274 | eP | Pb | 20 18 40.4 | -0.3 |
| GLA | Glamis | 0.96 | 67 | P | Pb | 20 18 41.3 | -0.5 |
| | baz=1.0 | | | | | | |
| GLA | | | | S | Sb | 20 18 53.7 | -0.7 |
| | baz=1.0 | | | | | | |
| GLA | Glamis | 0.96 | 67 | ePg | Pb | 20 18 41.1 | -0.6 |
| GLA | | | | eSg | Sb | 20 18 54.0 | -0.3 |
| BC3 | Big Chuckawall | 1.04 | 20 | S | Sb | 20 18 57.2 | +0.5 |
| | baz=1.0 | | | | | | |
| PFO | Pinyon Flat Ob | 1.05 | 333 | P | Pb | 20 18 42.7 | -0.6 |
| | baz=1.0 | | | | | | |
| PFO | | | | S | Sb | 20 18 56.9 | 0.0 |
| | baz=1.0 | | | | | | |
| PFO | Pinyon Flat Ob | 1.05 | 333 | ePg | Pb | 20 18 42.7 | -0.6 |
| PFO | | | | eSg | Sb | 20 18 56.1 | -0.8 |
| 109C | Camp Elliot, M | 1.05 | 282 | P | Pb | 20 18 43.0 | -0.3 |
| | baz=1.0 | | | | | | |
| 109C | | | | S | Sb | 20 18 56.4 | -0.6 |
| | baz=1.0 | | | | | | |
| PBX | Punta Banda | 1.18 | 218 | eP | Pn | 20 18 45.6 | +0.2 |
| PBX | | | | eS | Sb | 20 19 01.0 | +0.4 |
| ECNX | Esteban Cantu | 1.19 | 211 | eP | Pn | 20 18 45.7 | +0.1 |
| ECNX | | | | eS | Sn | 20 19 01.5 | 0.0 |
| ZAX | El Zacaton | 1.21 | 196 | eP | Pb | 20 18 46.2 | +0.2 |
| ZAX | | | | eS | Sn | 20 19 02.2 | +0.1 |
| MURC | Murrieta | 1.44 | 310 | Sb | Sn | 20 19 08.5 | +0.8 |
| | baz=1.4 | | | | | | |
| Y12C | Blythe | 1.56 | 46 | P | Pn | 20 18 50.1 | -0.6 |
| | baz=1.6 | | | | | | |
| SPIG | San Pedro Mart | 1.67 | 168 | eP | Pn | 20 18 51.3 | -1.0 |
| SPIG | | | | eS | Sn | 20 19 11.9 | -1.8 |
| SPIG | San Pedro Mart | 1.67 | 168 | eP | Pb | 20 18 53.5 | -0.5 |
| SPIG | | | | eS | Sb | 20 19 16.3 | +1.4 |
| SPIG | San Pedro Mart | 1.67 | 168 | eP | Pn | 20 18 51.3 | -1.0 |
| SPIG | | | | eS | Sn | 20 19 11.9 | -1.8 |
| SPX | San Pedro Mart | 1.67 | 168 | eP | Pb | 20 18 53.6 | -0.4 |
| SPX | | | | eS | Sb | 20 19 16.4 | +1.5 |
| SPX | San Pedro Mart | 1.67 | 168 | eP | Pn | 20 18 51.4 | -1.0 |
| SPX | | | | eS | Sn | 20 19 11.8 | -2.0 |
| BFSC | Mount Baldy Ra | 2.15 | 317 | Sb | Sb | 20 19 29.6 | +0.8 |
| | baz=2.1 | | | | | | |
| MWC | Mount Wilson | 2.39 | 311 | ePn | Pb | 20 19 06.3 | +0.1 |
| MWC | | | | eSn | Sb | 20 19 34.5 | -1.0 |
| PASC | Pasadena Art C | 2.44 | 308 | ePn | Pb | 20 19 06.0 | -0.9 |
| LDFC | Landfair | 2.48 | 15 | Pn | Pb | 20 19 08.0 | +0.3 |
| GSC | Goldstone | 2.73 | 344 | Pn | Pb | 20 19 11.7 | -0.3 |
| OSI | Osito Adit | 3.06 | 310 | Pn | Pn | 20 19 13.9 | +2.6 |
| ISA | Isabella | 3.67 | 325 | ePn | Pn | 20 19 20.5 | +0.8 |
| SHPR | Sheep Range | 3.86 | 9 | Pn | Pb | 20 19 28.5 | -2.8 |
| TUC | Tucson | 4.32 | 94 | ePg | Pg | 20 19 48.2 | +2.1 |
| 121A | Cookes Peak, D | 6.83 | 89 | ePn | Pn | 20 20 03.7 | +0.4 |

**IDC 02 20:29:39.1±2.7, 3°.22S×135°.67E, h0km, mb3.1/2, mb1 3.4/4, mb1mx3.3/21, mbtmp3.3/4, ML3.2/2, Error ellipse: s-maj=87.2km s-min=27.8km az=73.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.98 | 298 | Pn | Pn | 20 30 55.8 | +0.5 |
| | 6.2nm,0.3s,baz=168,slow=7.7,SNR=26 | | | | | | |
| SIJI | | | | Sn | Sn | 20 31 44.3 | -9.3 |
| | 0.5nm,0.3s,baz=180,slow=20,SNR=3.7 | | | | | | |
| WRA | Warramunga Arr | 16.68 | 184 | Pn | Pn | 20 33 32.5 | -1.9 |
| | 0.0nm,0.3s,baz=358,slow=13,SNR=3.9 | | | | | | |
| ASAR | Alice Springs | 20.40 | 185 | P | P | 20 34 18.8 | +0.9 |
| | 0.3nm,0.5s,baz=4.8,slow=12,SNR=7.3 | | | | | | |
| MKAR | Makanchi Array | 68.36 | 324 | P | P | 20 40 42.4 | -0.1 |
| | 0.2nm,0.6s,baz=114,slow=9.6,SNR=3.5 | | | | | | |

*ISCJB 02 20:31:23.4±1.2, 39°.24N±0°.05×44°.8E±0°.2, h7km, Error ellipse: s-maj=19.3km s-min=6.7km az=11.0*
*CSEM 02 20:31:23.3, 39°.27N×44°.69E, h28km, MD3.1, After DDA*
*DDA 02 20:31:23.3, 39°.27N×44°.69E, h28km, Md3.1*
**ISC 02 20:31:22.7±1.4, 39°.25N±0°.04×44°.7E±0°.1, h7km, n8, σ0s.64/15, Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EAK | Akyaka | 1.67 | 329 | i P | Pn | 20 31 53.2 | +0.6 |
| EAK | | | | i S | Sg | 20 32 16.3 | -0.2 |
| EAK | Akyaka | 1.67 | 329 | P | Pn | 20 31 53.2 | +0.6 |
| EAK | | | | S | Sg | 20 32 16.3 | -0.2 |
| HAKT | HAKKARI | 1.87 | 206 | i P | Pn | 20 31 55.3 | -0.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HAKT | | | | i S | Sg | 20 32 23.0 | +0.2 |
| HAKT | HAKKARI | 1.87 | 206 | P | Pn | 20 31 55.3 | -0.1 |
| HAKT | | | | S | Sg | 20 32 23.0 | +0.2 |
| DGRG | David-gareji | 2.25 | 12 | P | Pn | 20 32 00.4 | 0.0 |
| DGRG | | | | S | Sb | 20 32 32.8 | +1.0 |
| DGRG | David-gareji | 2.25 | 12 | i P | Pn | 20 32 00.5 | 0.0 |
| DGRG | | | | i S | Sb | 20 32 31.6 | -0.2 |
| TBLG | Delisi | 2.48 | 0 | P | Sb | 20 32 37.8 | -0.6 |
| TBLG | Delisi | 2.48 | 0 | i P | Pn | 20 32 04.2 | +0.7 |
| TBLG | | | | i S | Sb | 20 32 36.8 | -1.5 |

*ISK **02** 20:38:21.8, 36.°12N×29.°54E, h23km, MD2.7*
*ISCJB **02** 20:38:24.1±1.3, 36.°15N±0.°09×29.°58E±0.°05, h38km±9km, Error ellipse: s-maj=15.1km s-min=7.0km az=3.4*
*DDA **02** 20:38:25.1, 36.°27N×29.°52E, h28km, Ml3.2*
*CSEM **02** 20:38:25.1±0.6, 36.°27N×29.°63E, h25km±4km, ML3.2, Error ellipse: s-maj=17.5km s-min=8.6km az=3.0*
**ISC 02 20:38:25.0**±1.1, **36.°26N**±0.°06×**29.°58E**±0.°03, **h33**km±4km, **n30**, σ0$^{s}$98/41, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKAS | Kas | 0.03 | 138 | i P | Pb | 20 38 30.1 | -0.6 |
| AKAS | | | | i S | Sb | 20 38 35.2 | +0.6 |
| AKAS | Kas | 0.03 | 138 | P | Pb | 20 38 30.1 | -0.6 |
| AKAS | | | | S | Sb | 20 38 35.2 | +0.6 |
| FETY | Fethiye | 0.55 | 314 | ePG | Pb | 20 38 35.1 | -1.2 |
| FETY | | | | eSG | Sn | 20 38 44.3 | -0.3 |
| FETY | Fethiye | 0.55 | 314 | ePg | Pb | 20 38 35.2 | -1.2 |
| FETY | | | | eSg | Sn | 20 38 44.3 | -0.3 |
| ELL | Elmali | 0.56 | 29 | ePG | Pb | 20 38 36.1 | -0.6 |
| ELL | Elmali | 0.56 | 29 | ePg | Pb | 20 38 36.1 | -0.6 |
| DALY | Dalyan (Mu˜la | 0.93 | 307 | ePG | Pn | 20 38 40.9 | -0.9 |
| DALY | Dalyan (Mu˜la | 0.93 | 307 | ePg | Pn | 20 38 40.9 | -0.9 |
| KORT | Korkueli | 0.97 | 40 | i P | Pn | 20 38 42.7 | +0.3 |
| KORT | Korkueli | 0.97 | 40 | P | Pn | 20 38 42.7 | +0.3 |
| KORT | | | | S | Sb | 20 38 57.6 | +1.6 |
| GOLH | Golhisar | 0.98 | 359 | i P | Pn | 20 38 43.1 | +0.5 |
| GOLH | | | | i S | Sb | 20 38 56.4 | +0.2 |
| GOLH | Golhisar | 0.98 | 359 | P | Pn | 20 38 43.1 | +0.5 |
| GOLH | | | | S | Sb | 20 38 56.4 | +0.2 |
| TURN | Turunc | 1.00 | 308 | i P | Pb | 20 38 44.8 | +1.0 |
| TURN | Turunc | 1.00 | 308 | P | Pb | 20 38 44.8 | +1.0 |
| TURN | | | | S | Sb | 20 38 59.7 | +3.1 |
| ANTB | Antalya | 1.08 | 53 | ePN | Pn | 20 38 42.8 | -1.0 |
| ANTB | Antalya | 1.08 | 53 | ePn | Pn | 20 38 42.8 | -1.0 |
| BCK | Bucak | 1.45 | 34 | ePN | Pn | 20 38 49.8 | +0.8 |
| BCK | Bucak | 1.45 | 34 | ePn | Pn | 20 38 49.8 | +0.8 |
| DENT | Denizli | 1.56 | 344 | ePN | Pn | 20 38 49.7 | -0.8 |
| DENT | Denizli | 1.56 | 344 | ePn | Pn | 20 38 49.7 | -0.8 |
| SUTC | Sutluce-Ispart | 1.67 | 43 | ePN | Pn | 20 38 52.4 | +0.3 |
| SUTC | Sutluce-Ispart | 1.67 | 43 | ePn | Pn | 20 38 52.4 | +0.3 |
| BDRM | Kayabasi | 1.90 | 296 | i P | Pn | 20 38 56.3 | +1.2 |
| BDRM | Kayabasi | 1.90 | 296 | P | Pn | 20 38 56.3 | +1.2 |
| BDRM | | | | S | Sn | 20 39 16.7 | -1.1 |
| AYDN | Tasoluk | 1.95 | 316 | i P | Pb | 20 38 59.3 | -0.7 |
| AYDN | | | | i S | Sb | 20 39 23.0 | -1.0 |
| AYDN | Tasoluk | 1.95 | 316 | P | Pb | 20 38 59.4 | -0.7 |
| AYDN | | | | S | Sb | 20 39 23.0 | -1.0 |
| KHL | Karahalli | 2.06 | 359 | ePN | Pn | 20 38 58.5 | +1.0 |
| KHL | Karahalli | 2.06 | 359 | ePn | Pn | 20 38 58.5 | +1.0 |
| HDMB | Hadim | 2.44 | 72 | ePN | Pn | 20 39 03.2 | +0.5 |
| HDMB | Hadim | 2.44 | 72 | ePn | Pn | 20 39 03.3 | +0.5 |

*JMA **02** 20:40:40.8±0.1, 24.°36N×121.°80E, h11km±4km, M2.0*
*ISCJB **02** 20:40:41.5±0.3, 24.°36N±0.°02×121.°82E±0.°02, h16km±5km, Error ellipse: s-maj=3.7km s-min=2.8km az=136.7*
*TAP **02** 20:40:41.2, 24.°37N×121.°78E, h17km, ML2.9, B*
**ISC 02 20:40:41.1**±0.9, **24.°36N**±0.°02×**121.°81E**±0.°02, **h18**km±3km, **n36**, σ0$^{s}$56/60, **2C-4D**, **Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EHP | Heping Village | 0.08 | 230 | eP | Pg | 20 40 45.3 | +0.7 |
| | baz=208 | | | | | | |
| ENA | Nanau | 0.09 | 319 | ⇓iP | Pg | 20 40 44.6 | -0.2 |
| | baz=331 | | | | | | |
| ENA | | | | i S | Sg | 20 40 46.7 | -0.5 |
| | baz=331 | | | | | | |
| TWC | Suao | 0.25 | 9 | ⇑iP | Pb | 20 40 47.0 | 0.0 |
| | baz=10.0 | | | | | | |
| TWC | | | | i S | Sg | 20 40 50.6 | -0.2 |
| | baz=10.0 | | | | | | |
| TWD | Chiawan | 0.34 | 214 | P | Pg | 20 40 48.2 | -0.1 |
| | baz=215 | | | | | | |
| TWD | | | | S | Sg | 20 40 52.8 | -0.4 |
| | baz=215 | | | | | | |
| ENTT | Nioudou | 0.35 | 322 | ⇓iP | Pg | 20 40 48.6 | 0.0 |
| | baz=324 | | | | | | |
| ENTT | | | | eS | Sg | 20 40 53.4 | -0.3 |
| | baz=324 | | | | | | |
| TWE | Neicheng | 0.38 | 341 | P | Pb | 20 40 49.3 | -0.1 |
| | baz=345 | | | | | | |
| TWE | | | | S | Sg | 20 40 54.4 | -0.1 |
| | baz=345 | | | | | | |
| NNS | Nan Shan | 0.40 | 281 | ⇓iP | Pg | 20 40 49.5 | 0.0 |
| | baz=281 | | | | | | |
| NNS | | | | i S | Sg | 20 40 54.4 | -0.8 |
| | baz=281 | | | | | | |
| ILA | Ilan | 0.41 | 353 | eP | Pb | 20 40 50.0 | +0.1 |
| | baz=356 | | | | | | |
| ILA | | | | S | Sb | 20 40 56.0 | +0.3 |
| | baz=356 | | | | | | |
| HWA | Hwalien | 0.42 | 206 | eP | Pb | 20 40 50.2 | +0.1 |
| | baz=209 | | | | | | |
| EGS | | 0.50 | 13 | i P | Pb | 20 40 51.6 | +0.3 |
| | baz=23 | | | | | | |
| NSK | Sanguang | 0.52 | 308 | ⇓P | Pg | 20 40 51.5 | 0.0 |
| | baz=309 | | | | | | |
| NSK | | | | i S | Sg | 20 40 58.0 | -0.6 |
| | baz=309 | | | | | | |
| WHF | Hehuan Shan | 0.54 | 247 | ⇑iP | Pg | 20 40 51.9 | -0.2 |
| | baz=253 | | | | | | |
| WHF | | | | S | Sg | 20 40 58.7 | -0.7 |
| | baz=253 | | | | | | |
| TWT | Tachien | 0.58 | 260 | eP | Pb | 20 40 53.4 | +0.5 |
| | baz=259 | | | | | | |
| TWT | | | | S | Sg | 20 41 00.7 | -0.1 |
| | baz=259 | | | | | | |
| ESL | Shilin | 0.64 | 212 | eP | Pg | 20 40 53.4 | -0.5 |
| | baz=210 | | | | | | |
| TWA | Mucha | 0.65 | 342 | eP | Pn | 20 40 54.9 | -0.5 |
| | baz=344 | | | | | | |
| TWA | | | | eS | Sg | 20 41 02.5 | -0.2 |
| | baz=344 | | | | | | |
| TWB1 | Santiao Chiao | 0.67 | 14 | eP | Pb | 20 40 54.4 | +0.3 |
| | baz=16 | | | | | | |
| TWB1 | | | | S | Sg | 20 41 02.7 | -0.5 |
| | baz=16 | | | | | | |
| NWF | Wu-fen Shan | 0.71 | 358 | eP | Pb | 20 40 55.5 | +0.5 |
| | baz=359 | | | | | | |
| NWF | | | | eS | Sg | 20 41 04.2 | -0.4 |
| | baz=359 | | | | | | |
| NSTT | Nanjuang | 0.78 | 290 | eP | Pn | 20 40 56.9 | -0.3 |
| | baz=281 | | | | | | |
| NSTT | | | | S | Sg | 20 41 06.1 | -0.7 |
| | baz=281 | | | | | | |
| TWS1 | Kuangyinshan | 0.82 | 335 | eP | Pn | 20 40 58.1 | +0.4 |
| | baz=336 | | | | | | |
| TWS1 | | | | eS | Sn | 20 41 10.0 | +0.6 |
| | baz=336 | | | | | | |
| TWQ1 | Liyutan | 0.94 | 269 | eP | Pn | 20 41 00.1 | +0.7 |
| | baz=268 | | | | | | |
| SMLT | Sun Moon Lake | 0.95 | 240 | eP | Pg | 20 40 59.5 | -0.2 |
| | baz=240 | | | | | | |
| SMLT | | | | eS | Sg | 20 41 12.0 | -0.3 |
| | baz=240 | | | | | | |
| EHY | Hungye | 0.96 | 208 | eP | Pb | 20 40 59.1 | -0.1 |
| | baz=217 | | | | | | |
| TYC | Yuchr | 0.98 | 243 | eP | Pg | 20 41 00.0 | -0.1 |
| | baz=241 | | | | | | |
| JYNG | Yonagunijimaku | 1.04 | 85 | P | Pn | 20 41 00.8 | 0.0 |
| JYNG | | | | eS | Sg | 20 41 14.8 | -0.3 |
| YOJ | Yonaguni jima | 1.10 | 85 | P | Pb | 20 41 01.6 | -0.1 |
| YOJ | | | | eS | Sg | 20 41 16.6 | -0.4 |
| YOJ | Yonaguni jima | 1.10 | 85 | eP | Pb | 20 41 01.6 | -0.1 |
| | baz=75 | | | | | | |
| TWF1 | Yuli | 1.11 | 205 | eP | Pb | 20 41 01.4 | -0.3 |
| | baz=214 | | | | | | |
| CHN5 | Tsauling | 1.28 | 234 | eP | Pg | 20 41 06.0 | +0.1 |
| | baz=235 | | | | | | |
| CHN5 | | | | eS | Sg | 20 41 23.2 | +0.5 |
| | baz=235 | | | | | | |
| ELDTW | Lidau | 1.37 | 212 | eP | Pn | 20 41 05.6 | +0.2 |
| | baz=212 | | | | | | |
| STYT | Tauyuan | 1.53 | 219 | eP | Pb | 20 41 09.3 | +0.3 |
| | baz=219 | | | | | | |
| WTP | Ta-pu | 1.56 | 225 | eP | Pb | 20 41 08.9 | -0.5 |
| | baz=216 | | | | | | |
| WTP | | | | eS | Sg | 20 41 31.7 | +0.3 |
| | baz=216 | | | | | | |
| CHN1 | Nanshi | 1.66 | 225 | eP | Pb | 20 41 11.4 | +0.3 |
| | baz=212 | | | | | | |
| IRIF | Iriomote-Funau | 1.75 | 90 | P | Pn | 20 41 10.6 | 0.0 |
| IRIF | | | | S | Sn | 20 41 32.5 | 0.0 |
| JKRS | Kuro-shima | 2.01 | 93 | P | Pn | 20 41 15.7 | +1.5 |
| JKRS | | | | eS | Sn | 20 41 39.2 | +0.3 |
| JIJ | Ishigaki jima | 2.13 | 89 | P | Pn | 20 41 16.7 | +0.9 |
| JIJ | | | | S | Sn | 20 41 39.2 | -2.6 |
| JISG | Ishigakijimahi | 2.29 | 84 | P | Pn | 20 41 18.1 | +0.1 |
| JISG | | | | S | Sn | 20 41 46.4 | +0.6 |

**IDC 02 20:43:40.9**±3.7, **19.°79S**×**169.°56E**, **h288**km±48km, **mb3.8**/3, **mb1 3.9**/4, **mb1mx3.3**/33, **mbtmp4.3**/4, **Error ellipse: s-maj=162.3km s-min=39.9km az=158.0**, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 3.70 | 232 | P | Pn | 20 44 43.2 | -0.1 |
| | 4.0nm,0.3s,baz=360,slow=18,SNR=25 | | | | | | |
| DZM | | | | S | S | 20 45 42.7 | +10 |
| | 1.2nm,0.3s,baz=180,slow=18,SNR=1.7 | | | | | | |
| CTA | Charters Tower | 21.91 | 265 | P | P | 20 48 11.7 | +0.5 |
| | 3.8nm,0.6s,baz=83,slow=7.4,SNR=5.6 | | | | | | |
| WRA | Warramunga Arr | 33.09 | 264 | P | P | 20 49 49.7 | -0.8 |
| | 1.1nm,0.3s,baz=97,slow=8.6,SNR=60 | | | | | | |
| ASAR | Alice Springs | 33.30 | 257 | P | P | 20 49 52.5 | +0.3 |
| | 14nm,0.6s,baz=83,slow=9.1,SNR=258 | | | | | | |
| GERES | GERESS Array B | 145.12 | 332 | PKPbc | PKPdf | 21 02 43.4 | -0.7 |
| | 0.4nm,0.5s,baz=35,slow=4.9,SNR=7.2 | | | | | | |

**IDC 02 20:45:36.4**±1.6, **7.°13S**×**150.°89E**, **h39**km±9km, **mb3.6**/3, **mb1 4.0**/4, **mb1mx3.4**/36, **mbtmp3.9**/4, **ML1.7**/1, **MS2.6**/1, **Ms1 2.6**/1, **ms1mx2.4**/19, **Error ellipse: s-maj=78.7km s-min=21.4km az=130.0**, **New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.34 | 238 | Pn | Pn | 20 46 39.2 | -0.5 |
| | 3.3nm,0.3s,baz=15,slow=6.5,SNR=11 | | | | | | |
| PMG | | | | Sn | Sn | 20 47 29.8 | +0.7 |
| | 9.9nm,0.3s,baz=239,slow=17,SNR=7.1 | | | | | | |
| WRA | Warramunga Arr | 20.50 | 230 | P | P | 20 50 10.9 | -0.4 |
| | 4.6nm,0.7s,baz=56,slow=12,SNR=7.6 | | | | | | |
| WRA | | | | pP | pP | 20 50 20.9 | -0.2 |
| | 3.9nm,0.5s,baz=55,slow=11,SNR=12 | | | | | | |
| GUMO | Guam | 21.43 | 344 | LR | LR | 20 58 39.7 | |
| | comp=Z,15nm,19.0s,baz=106,slow=37 | | | | | | |
| ASAR | Alice Springs | 23.17 | 223 | P | P | 20 50 39.8 | 0.0 |
| | 1.1nm,0.7s,baz=56,slow=9.0,SNR=6.5 | | | | | | |
| ASAR | | | | pP | pP | 20 50 49.5 | -0.2 |
| | 1.8nm,0.7s,baz=59,slow=9.3,SNR=4.6 | | | | | | |
| ILAR | Eielson Array | 85.02 | 22 | P | P | 20 58 07.2 | -0.4 |
| | 0.7nm,0.7s,baz=252,slow=5.4,SNR=7.3 | | | | | | |
| TORD | Torodi Ar. Bea | 149.12 | 284 | PKPbc | PKPbc | 21 05 21.4 | -0.2 |
| | 0.8nm,0.5s,baz=91,slow=2.6,SNR=26 | | | | | | |
| TORD | | | | pPKPbc | pPKPbc | 21 05 33.7 | -0.3 |
| | 0.8nm,0.6s,baz=75,slow=2.5,SNR=5.3 | | | | | | |

*IDC **02** 21:12:17.5±2.3, 28.°13N×52.°42E, h0km, mb3.6/5, mb1 3.6/6, mb1mx3.4/31, mbtmp3.6/6, ML3.3/1, MS2.4/1, Ms1 2.4/1, ms1mx2.1/37, Error ellipse: s-maj=53.6km s-min=26.0km az=156.0*
*ISCJB **02** 21:12:20.3±0.7, 28.°38N±0.°08×52.°55E±0.°05, h15km, mb3.6/5, Error ellipse: s-maj=12.8km s-min=5.4km az=20.2*
*CSEM **02** 21:12:21.4±0.3, 28.°35N×52.°56E, h8km, ML3.1, Error ellipse: s-maj=12.9km s-min=7.8km az=18.0*
**ISC 02 21:12:21.0**±0.8, **28.°32N**±0.°05×**52.°52E**±0.°04, **h15**km, **n16**, σ1$^{s}$53/17, **mb3.6**/5, **Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GHIR | Ghir-Karzin | 0.41 | 94 | ePg | Pg | 21 12 28.3 | -1.0 |
| GHIR | | | | eSg | Sg | 21 12 34.9 | -0.1 |
| AHBU | AHRAM | 1.21 | 297 | ePn | Pg | 21 12 44.2 | -0.2 |
| AHBU | | | | eSg | Sg | 21 13 01.4 | +1.2 |
| BOQSS | | 3.72 | 230 | P | Pg | 21 13 29.7 | -2.6 |
| BOQSS | | 3.72 | 230 | P | Pg | 21 13 30.0 | -2.3 |
| SLWS | | 3.89 | 206 | P | Pg | 21 13 35.6 | +0.1 |
| SLWS | | 3.89 | 206 | P | Pg | 21 13 36.0 | +0.5 |
| NASN | Na'in | 4.47 | 3 | ePn | Pn | 21 13 29.9 | +1.3 |
| BTHS | | 4.51 | 200 | P | Pn | 21 13 31.2 | +2.4 |
| BTHS | | 4.51 | 200 | P | Pn | 21 13 31.0 | +2.2 |
| GEYT | Alibeck | 10.67 | 25 | LR | LR | 21 19 52.5 | |
| | comp=Z,20nm,21.9s,baz=215,slow=42 | | | | | | |
| BRTR | Keskin Array B | 19.31 | 311 | P | P | 21 16 45.8 | +0.1 |
| | 0.1nm,0.3s,baz=138,slow=13,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 29.69 | 44 | P | P | 21 18 27.1 | +0.8 |
| | 0.2nm,0.2s,baz=245,slow=9.4,SNR=2.3 | | | | | | |
| ZALV | Zalesovo Beam | 34.80 | 34 | P | P | 21 19 11.4 | +0.5 |
| | 0.5nm,0.4s,baz=252,slow=6.7,SNR=4.0 | | | | | | |
| FINES | FINESS Array B | 37.52 | 339 | P | P | 21 19 34.1 | 0.0 |
| | 0.8nm,0.5s,baz=146,slow=11,SNR=7.3 | | | | | | |
| NOA | NORSAR Array B | 42.73 | 332 | P | P | 21 20 16.6 | -0.8 |
| | 0.5nm,0.5s,baz=120,slow=8.2,SNR=2.5 | | | | | | |
| TORD | Torodi Ar. Bea | 49.52 | 263 | P | P | 21 21 09.3 | -2.1 |
| | 0.3nm,0.4s,baz=64,slow=8.1,SNR=15 | | | | | | |

*CSEM **02** 21:16:06.2, 42.°56N×20.°14E, h0km, ML1.4, After BEO*
**BEO 02 21:16:06.2**±0.5, **42.°56N**×**20.°14E**, **h0**km, **ML1.4**/4, **Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDG | Podgorica | 0.67 | 259 | ePg | Pg | 21 16 18.3 | -0.7 |
| PDG | | | | eSg | Sg | 21 16 27.1 | -0.5 |
| PDG | Podgorica | 0.67 | 259 | ePg | Pg | 21 16 18.3 | -0.7 |
| PDG | | | | eSg | Sg | 21 16 27.1 | -0.5 |
| SJES | Sjenica | 0.71 | 350 | ePg | Pg | 21 16 18.8 | -1.2 |
| SJES | | | | eSg | Sg | 21 16 28.6 | -0.8 |
| SJES | Sjenica | 0.71 | 350 | ePg | Pg | 21 16 18.8 | -1.2 |
| SJES | | | | eSg | Sg | 21 16 28.6 | -0.8 |
| SELS | Selova | 0.98 | 47 | ePg | Pg | 21 16 24.3 | -0.7 |
| SELS | | | | eSg | Sg | 21 16 37.5 | -0.2 |
| IVAS | Ivanjica | 1.02 | 1 | ePg | Pg | 21 16 23.7 | -2.1 |
| IVAS | | | | eSg | Sg | 21 16 37.9 | -1.2 |
| IVAS | Ivanjica | 1.02 | 1 | ePg | Pg | 21 16 23.7 | -2.1 |
| IVAS | | | | eSg | Sg | 21 16 37.9 | -1.2 |
| BARS | Barje | 1.26 | 78 | ePg | Pg | 21 16 29.7 | -0.7 |
| BARS | Barje | 1.26 | 78 | ePg | Pg | 21 16 29.7 | -0.7 |
| GRUS | Gruza | 1.39 | 17 | eSg | Sn | 21 16 52.1 | +0.1 |
| GRUS | Gruza | 1.39 | 17 | eSg | Sn | 21 16 52.1 | +0.1 |

*IDC **02** 21:25:58.8±0.5, 76.°33N×7.°58E, h0km, mb4.0/22, mb1 4.2/28, mb1mx4.1/47, mbtmp4.1/28, ML3.7/6, MS4.1/31, Ms1 4.1/31, ms1mx4.0/47, Error ellipse: s-maj=12.5km s-min=9.7km az=69.0*
*BJI **02** 21:25:59.3, 76.°50N×7.°90E, h5km, mb4.6/31, mB4.9/23, Ms4.7/19, Ms7 4.5/20*
*MOS **02** 21:25:59.0±1.1, 76.°39N×7.°44E, h10km, mb4.7/40, Error ellipse: s-maj=29.1km s-min=5.1km az=93.7*
*NEIC **02** 21:26:00.7±0.2, 76.°43N×7.°69E, h10km, mb4.9/33, Error ellipse: s-maj=5.3km s-min=4.3km az=94.0*
*BER **02** 21:26:00.8±3.1, 76.°37N×7.°92E, h15km±32km, MD2.8, ML2.7, ML4.7(NAO)*
*ISCJB **02** 21:26:00.7±0.2, 76.°43N±0.°02×8.°0E±0.°1, h20km, mb4.5/85, MS4.1/30, Error ellipse: s-maj=4.0km s-min=3.1km az=14.6*
*CSEM **02** 21:26:01.6±0.1, 76.°41N×7.°82E, h20km, mb4.6/51, Error ellipse: s-maj=5.6km s-min=4.2km az=83.0*
*NAO **02** 21:26:02.4±4.6, 76.°30N×8.°44E, h24km±54km, ML4.7*
*KOLA **02** 21:26:02.7, 74.°20N×3.°99E, h0km*
**ISC 02 21:26:02.0**±0.4, **76.°44N**±0.°04×**7.°78E**±0.°04, **h16**km±2km, **h16**km**:pP-P**, **n400**, σ1$^{s}$66/382, **mb4.6**/94, **MS4.0**/30, **26C-19D**, **Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HSPB | Hornsund (broa | 1.88 | 69 | ePn | Pn | 21 26 29.5 | -3.9 |
| HSPB | | | | eSn | Sn | 21 26 52.1 | -4.5 |
| HSPB | Hornsund (broa | 1.88 | 69 | ePn | Pn | 21 26 29.5 | -3.9 |
| | SNR=55 | | | | | | |
| HSPB | | | | eSn | Sn | 21 26 52.1 | -4.5 |
| | SNR=55 | | | | | | |
| HSP | Hornsund | 1.88 | 69 | Pn | Pn | 21 26 29.5 | -3.9 |
| HSP | | | | Sn | Sn | 21 26 51.9 | -4.8 |
| SPB3 | Spitsbergen Ar | 2.57 | 43 | ePn | Pn | 21 26 41.8 | -1.1 |
| SPB3 | Spitsbergen Ar | 2.57 | 43 | ePn | Pn | 21 26 41.8 | -1.1 |
| SPA3 | Spitsbergen Ar | 2.57 | 43 | ePn | Pn | 21 26 41.8 | -1.1 |
| SPA3 | Spitsbergen Ar | 2.57 | 43 | ePn | Pn | 21 26 41.8 | -1.1 |
| SPB4 | Spitsbergen Ar | 2.57 | 43 | ePn | Pn | 21 26 41.5 | -1.4 |
| SPB4 | Spitsbergen Ar | 2.57 | 43 | ePn | Pn | 21 26 41.5 | -1.4 |
| SPA2 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| SPA2 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| SPA0 | Spitsbergen Ar | 2.58 | 43 | Pn | Pn | 21 26 41.9 | -1.1 |
| | baz=233,slow=12 | | | | | | |
| SPA0 | | | | Sn | Sn | 21 27 12.0 | -1.9 |
| | baz=240,slow=28 | | | | | | |
| SPA0 | Spitsbergen Ar | 2.58 | 43 | Pn | Pn | 21 26 41.9 | -1.1 |
| | baz=233,slow=12 | | | | | | |
| SPA0 | | | | Sn | Sn | 21 27 12.0 | -1.9 |
| | baz=240,slow=28 | | | | | | |
| SPA0 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| SPA0 | Spitsbergen Ar | 2.58 | 43 | Pn | Pn | 21 26 41.8 | -1.1 |
| | SNR=471 | | | | | | |
| SPA0 | | | | Sn | Sn | 21 27 12.0 | -1.9 |
| | SNR=0.6 | | | | | | |
| SPB2 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.7 | -1.3 |
| SPB2 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.7 | -1.3 |
| SPITS | Spitsbergen Ar | 2.58 | 43 | Pn | Pn | 21 26 41.8 | -1.1 |
| | baz=219,slow=16,SNR=1022 | | | | | | |
| SPITS | | | | Sn | Sn | 21 27 11.5 | -2.4 |
| | baz=231,slow=16,SNR=8.1 | | | | | | |
| SPITS | | | | LR | LR | 21 27 43.8 | |
| | comp=Z,2µm,18.9s,baz=235,slow=39 | | | | | | |
| SPA1 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| SPA1 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| SPB5 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| SPB5 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| SPB1 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| SPB1 | Spitsbergen Ar | 2.58 | 43 | ePn | Pn | 21 26 41.9 | -1.1 |
| KBS | Kingsbay | 2.65 | 18 | Pn | Pn | 21 26 41.3 | -2.7 |
| KBS | Kingsbay | 2.65 | 18 | ePn | Pn | 21 26 41.3 | -2.7 |
| KBS | | | | Sn | Sn | 21 27 11.4 | -4.3 |
| KBS | | | | IAML | | 21 27 15.3 | |
| | comp=Z,53nm,0.4s | | | | | | |
| KBS | Kingsbay | 2.65 | 18 | eP | Pn | 21 26 42.3 | -1.7 |
| KBS | Kingsbay | 2.65 | 18 | ePn | Pn | 21 26 42.3 | -1.7 |
| KBS | Kingsbay | 2.65 | 18 | eP | Pn | 21 26 42.3 | -1.7 |
| KBS | | | | Sn | Sn | 21 27 11.4 | -4.3 |
| | SNR=55 | | | | | | |
| BJO | Bjornoya | 3.47 | 118 | Pn | Pn | 21 26 52.1 | -3.1 |
| BJO | | | | Sn | Sn | 21 27 28.2 | -7.6 |
| BJO | Bjornoya | 3.47 | 118 | ePn | Pn | 21 26 51.0 | -4.1 |
| BJO | | | | eSn | Sn | 21 27 28.2 | -7.6 |
| BJO | | | | IAML | | 21 27 30.1 | |
| | comp=Z,26nm,0.2s | | | | | | |
| BJO | Bjornoya | 3.47 | 118 | Pn | Pn | 21 26 52.1 | -3.1 |
| BJO | | | | eSn | Sn | 21 27 28.2 | -7.6 |
| | SNR=55 | | | | | | |
| HOPEN | Hopen | 4.04 | 81 | Pn | Pn | 21 27 01.3 | -1.8 |
| HOPEN | | | | Sn | Sn | 21 27 45.4 | -4.5 |
| HOPEN | Hopen | 4.04 | 81 | ePn | Pn | 21 27 01.1 | -2.0 |
| HOPEN | | | | eS | Sn | 21 27 45.3 | -4.5 |
| HOPEN | | | | IAML | | 21 27 49.2 | |
| | comp=Z,106nm,0.3s | | | | | | |
| HOPEN | Hopen | 4.04 | 81 | Pn | Pn | 21 27 01.3 | -1.8 |
| HOPEN | | | | Sn | Sn | 21 27 45.4 | -4.5 |
| JMIC | Jan Mayen | 7.11 | 228 | LR | LR | 21 29 37.8 | |
| | comp=Z,1µm,20.0s,baz=71,slow=31 | | | | | | |
| HAMF | Hammerfest | 7.34 | 134 | ePn | Pn | 21 27 43.9 | -4.3 |
| TRO | Tromso | 7.56 | 149 | ePn | Pn | 21 27 48.7 | -2.6 |
| TRO | Tromso | 7.56 | 149 | ePn | Pn | 21 27 48.7 | -2.6 |
| | SNR=55 | | | | | | |
| KIF | Kilpisjarvi | 8.39 | 146 | ePn | Pn | 21 27 59.3 | -3.3 |
| KIF | | | | eSn | Sn | 21 29 26.6 | -10 |
| KIF | Kilpisjarvi | 8.39 | 146 | ePn | Pn | 21 27 59.3 | -3.3 |
| | SNR=55 | | | | | | |
| LOF | Lofoten | 8.53 | 165 | ePn | Pn | 21 28 02.2 | -2.4 |
| LOF | Lofoten | 8.53 | 165 | ePn | Pn | 21 28 02.2 | -2.4 |
| | SNR=55 | | | | | | |
| ARA0 | ARCESS Array S | 8.61 | 134 | Pn | Pn | 21 28 01.0 | -4.8 |
| | baz=339,slow=11 | | | | | | |
| ARA0 | | | | Sn | Sn | 21 29 30.8 | -12 |
| | baz=331,slow=18 | | | | | | |
| ARA0 | ARCESS Array S | 8.61 | 134 | Pn | Pn | 21 28 01.0 | -4.8 |
| | baz=339,slow=11 | | | | | | |
| ARA0 | | | | Sn | Sn | 21 29 30.8 | -12 |
| | baz=331,slow=18 | | | | | | |
| ARA0 | ARCESS Array S | 8.61 | 134 | ePn | Pn | 21 28 01.2 | -4.6 |
| ARCES | ARCESS Array B | 8.61 | 134 | Pn | Pn | 21 28 00.9 | -4.8 |
| | comp=Z,1.1nm,0.3s,baz=329,slow=11,SNR=38 | | | | | | |
| ARCES | | | | Sn | Sn | 21 29 31.5 | -11 |
| | comp=Z,1.7nm,0.3s,baz=329,slow=19,SNR=7.0 | | | | | | |
| ARCES | | | | LR | LR | 21 31 25.4 | |
| | comp=Z,1µm,20.3s,baz=328,slow=38 | | | | | | |
| KEV | Kevo | 8.68 | 131 | eP | Pn | 21 28 03.5 | -3.2 |
| KEV | Kevo | 8.68 | 131 | ePn | Pn | 21 28 03.5 | -3.2 |
| KEV | Kevo | 8.68 | 131 | ePn | Pn | 21 28 03.5 | -3.2 |
| MOR8 | Moi Rana | 10.53 | 165 | ePn | Pn | 21 28 29.8 | -2.2 |
| MOR8 | Moi Rana | 10.53 | 165 | ePn | Pn | 21 28 29.8 | -2.2 |
| | SNR=55 | | | | | | |
| APA0 | Apatity Array | 11.65 | 126 | Pn | Pn | 21 28 43.1 | -4.2 |
| | baz=321,slow=16 | | | | | | |
| APA0 | Apatity Array | 11.65 | 126 | Pn | Pn | 21 28 43.1 | -4.2 |
| | baz=321,slow=16 | | | | | | |
| APA0 | Apatity Array | 11.65 | 126 | P | Pn | 21 28 43.1 | -4.2 |
| APA0 | | | | S | Sn | 21 30 45.0 | -12 |
| LVZ | Lovozero | 11.72 | 123 | ⇑iP | Pn | 21 28 42.9 | -5.4 |
| LVZ | Lovozero | 11.72 | 123 | ePn | Pn | 21 28 43.0 | -5.4 |
| APA | Apatity | 11.76 | 126 | ⇑iP | Pn | 21 28 46.4 | -2.4 |
| APA | | | | pmax | pmax | | |
| | comp=Z,126nm,0.6s | | | | | | |
| APA | | | | MLR | MLR | | |
| | comp=Z,1µm,25.0s | | | | | | |
| APA | Apatity | 11.76 | 126 | S | Sn | 21 30 47.3 | -12 |
| APA | Apatity | 11.76 | 126 | i P | Pn | 21 28 46.4 | -2.4 |
| | comp=Z,1µm,25.0s | | | | | | |
| SUMG | Summit | 12.63 | 276 | eP | Pn | 21 28 55.7 | -5.3 |
| SUMG | Summit | 12.63 | 276 | ePn | Pn | 21 28 55.7 | -5.3 |
| BORG | Borgarnes | 14.93 | 234 | LR | LR | 21 33 39.5 | |
| | comp=Z,705nm,20.4s,baz=42,slow=31 | | | | | | |
| NB2 | NORSAR Subarra | 15.52 | 174 | P | Pn | 21 29 38.4 | -1.5 |
| NB2 | NORSAR Subarra | 15.52 | 174 | P | Pn | 21 29 37.5 | -2.4 |
| | comp=Z,44nm,1.4s,baz=357,slow=11 | | | | | | |
| NB2 | NORSAR Subarra | 15.52 | 174 | Pn | Pn | 21 29 38.4 | -1.5 |
| NB2 | NORSAR Subarra | 15.52 | 174 | Pn | Pn | 21 29 38.4 | -1.5 |
| | SNR=55 | | | | | | |
| NOA | NORSAR Array B | 15.52 | 174 | Pn | Pn | 21 29 37.8 | -2.1 |
| | comp=Z,0.2nm,0.3s,baz=352,slow=12,SNR=4.0 | | | | | | |
| NOA | | | | LR | LR | 21 35 01.5 | |
| | comp=Z,385nm,18.9s,baz=355,slow=35 | | | | | | |
| TMCR | Tamitsa | 15.67 | 125 | eP | Pn | 21 29 42.5 | +0.8 |
| TMCR | | | | e | | 21 32 34.6 | |
| TMCR | | | | pmax | pmax | | |
| | comp=Z,53nm,1.0s | | | | | | |
| TMCR | Tamitsa | 15.67 | 125 | eP | Pn | 21 29 42.5 | +0.8 |
| | comp=Z,53nm,1.0s | | | | | | |
| FIA0 | FINESS Array S | 16.29 | 147 | P | Pn | 21 29 45.3 | -4.3 |
| | baz=354,slow=14 | | | | | | |
| FIA0 | FINESS Array S | 16.29 | 147 | Pn | Pn | 21 29 45.3 | -4.3 |
| | baz=354,slow=14 | | | | | | |
| FINES | FINESS Array B | 16.29 | 147 | Pn | Pn | 21 29 45.1 | -4.5 |
| | comp=Z,0.5nm,0.3s,baz=353,slow=14,SNR=18 | | | | | | |
| FINES | | | | LR | LR | 21 36 05.3 | |
| | comp=Z,772nm,20.3s,baz=347,slow=37 | | | | | | |
| FINES | FINESS Array B | 16.29 | 147 | P | Pn | 21 29 45.1 | -4.5 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,772nm,20.3s | | | | | | |
| HFS | Hagfors | 16.51 | 170 | Pn | Pn | 21 29 50.6 | -1.9 |
| | comp=Z,0.2nm,0.3s,baz=9.6,slow=9.8,SNR=15 | | | | | | |
| HFS | | | | LR | LR | 21 35 33.8 | |
| | comp=Z,533nm,18.3s,baz=352,slow=35 | | | | | | |
| KONO | Kongsberg | 16.89 | 177 | eP | P | 21 30 04.8 | +5.6 |
| KONO | | | | pmax | pmax | | |
| | comp=Z,98nm,1.3s | | | | | | |
| KONO | Kongsberg | 16.89 | 177 | ePn | P | 21 30 04.8 | +5.6 |
| | comp=Z,98nm,1.3s | | | | | | |
| VSU | Vasula | 19.27 | 149 | deP | P | 21 30 22.6 | -2.8 |

VSU pmax pmax
comp=Z,70nm,0.9s
**VSU Vasula 19.27 149** *e*P **P 21 30 22.6 -2.8**
comp=Z,70nm,0.9s
**SFJD Kangerlussuaq 19.58 273** P **P 21 30 26.8 -2.0**
comp=Z,0.6nm,0.3s,baz=44,slow=11,SNR=4.1
SFJD LR LR 21 37 11.0
comp=Z,621nm,20.5s,baz=42,slow=34
**SFJD Kangerlussuaq 19.58 273** P **P 21 30 26.8 -2.0**
SFJD pmax pmax
comp=Z,1.0nm,0.3s
SFJD MLR MLR
comp=Z,621nm,20.5s
**SFJD Kangerlussuaq 19.58 273** *e*P **P 21 30 26.3 -2.5**
**EKA Eskdalemuir Ar 21.59 197** P **P 21 30 48.7 -1.9**
comp=Z,3.1nm,0.9s,baz=348,slow=13,SNR=3.3
**EKA Eskdalemuir Ar 21.59 197** P **P**
EKA pmax pmax
comp=Z,3.0nm,0.9s
**KLNR Kaliningrad 22.42 161** *i* P **P 21 30 58.2 -1.3**
**KLNR Kaliningrad 22.42 161** *i* P **P 21 30 58.2 -1.3**
**BSEG Bad Segeberg 22.62 176** *e*P **P 21 31 02.5 +0.9**
comp=Z,150nm,1.3s,baz=358,slow=9.7
BSEG *e*pP **pP 21 31 07.8 +1.5**
**RES Resolute Bay 22.62 318** LR LR 21 39 35.1
comp=Z,463nm,19.6s,baz=86,slow=36
**NACGM Naroch 22.76 151** *e* **P 21 31 01.0 -2.1**
**SUW Suwalki 23.26 157** *e*P **P 21 31 06.5 -1.7**
**SUW Suwalki 23.26 157** *e*P **P 21 31 06.5 -1.7**
**SUW Suwalki 23.26 157** *e*P **P 21 31 06.5 -1.7**
**MNK Minsk 23.28 150** *e*P P 21 31 02.0 -6.4
**MICGM Minsk 23.28 150** *e* P 21 31 02.0 -6.5
**MOS Moscow 23.48 135** *e*P **P 21 31 10.5 0.0**
MOS pmax pmax
comp=Z,50nm,1.0s
**MOS Moscow 23.48 135** *e*P **P 21 31 10.5 0.0**
comp=Z,50nm,1.0s
**OBN Obninsk 23.91 137** P **P 21 31 12.3 -2.3**
comp=Z,6.7nm,0.5s,baz=48,slow=4.7,SNR=5.4
OBN LR LR 21 40 38.9
comp=Z,575nm,19.4s,baz=327,slow=37
**OBN Obninsk 23.91 137**⇑ *e*P **P 21 31 13.9 -0.7**
OBN pmax pmax
comp=Z,89nm,2.5s
**OBN Obninsk 23.91 137** *e*P **P 21 31 18.8 +4.3**
**OBN Obninsk 23.91 137** *e*P **P 21 31 13.9 -0.7**
comp=Z,89nm,2.5s
**CWF Charnwood Fore 24.06 194** *e*P P 21 31 21.1 +5.1
comp=Z,110nm,1.7s
**NRDL Niedersach Rie 24.06 177** *e*P **P 21 31 17.1 +1.2**
comp=Z,277nm,2.0s,baz=358,slow=9.7
NRDL *e*pP **pP 21 31 21.9 +1.0**
**WTSB Winterswijk 24.58 181** *e*P P 21 31 26.7 +5.9
comp=Z,131nm,1.5s
**CLL Collm 25.32 172** *e*P **P 21 31 27.0 -0.4**
CLL *i* *SP **sP 21 31 31.9 -2.5**
CLL pmax pmax
comp=Z,9.0nm,1.2s
CLL MLR MLR
comp=Z,400nm,18.1s
**CLL Collm 25.32 172** *e*P **P 21 31 27.0 -0.4**
comp=Z,9.0nm,1.2s
CLL *i* sP **sP 21 31 31.9 -2.5**
comp=Z,39nm,1.7s
CLL *e*S S 21 36 00.0 +7.6
CLL Lm MLR 21 41 00.0
comp=N,300nm,18.6s
CLL Lm MLR 21 41 00.0
comp=E,100nm,20.6s
CLL Lm MLR 21 41 00.0
comp=Z,400nm,18.1s
**CLL Collm 25.32 172** *e*P **P 21 31 27.0 -0.4**
comp=Z,35nm,1.5s
**CLL Collm 25.32 172** *e*P **P 21 31 27.0 -0.4**
comp=Z,35nm,1.5s
**BRG Berggiesshubel 25.78 171** *e*P **P 21 31 30.6 -1.1**
comp=Z,10nm,1.3s
BRG *i* 21 31 37.2
comp=Z,37nm,1.4s
comp=N,308nm,17.5s
comp=E,219nm,28.7s
comp=Z,458nm,18.4s
**BRG Berggiesshubel 25.78 171** *e*P **P 21 31 30.6 -1.1**
BRG *i* 21 31 37.2
BRG pmax pmax
comp=Z,10.0nm,1.3s
BRG MLR MLR
comp=N,308nm,17.5s
BRG MLR MLR
comp=E,219nm,28.7s
BRG MLR MLR
comp=Z,458nm,18.4s
**BRG Berggiesshubel 25.78 171** *e*P **P 21 31 30.6 -1.1**
comp=Z,10.0nm,1.3s
**HGN Heimansgroeve 25.79 183** *e*P P 21 31 36.8 +5.1
comp=Z,87nm,1.7s
**KSP Ksiaz 25.92 168** *e*P **P 21 31 31.6 -1.3**
**KSP Ksiaz 25.92 168** *e*P **P 21 31 31.7 -1.2**
**KSP Ksiaz 25.92 168** *e*P **P 21 31 31.7 -1.2**
**MOX Moxa 25.94 174** *e*P **P 21 31 33.3 +0.2**
comp=Z,62nm,1.3s,baz=358,slow=9.7
**PVCC Panska Ves 26.15 170** *e*P **P 21 31 38.0 +3.0**
**PVCC Panska Ves 26.15 170** *e*P **P 21 31 38.0 +3.0**
**TANN Tannenbergstha 26.19 173** *e*P **P 21 31 36.5 +1.1**
comp=Z,54nm,1.5s,baz=358,slow=9.7
**UPC Upice 26.24 168** *e*P **P 21 31 39.0 +3.2**
UPC MLR MLR
comp=Z,300nm,17.1s
**UPC Upice 26.24 168** *e*P **P 21 31 39.0 +3.2**
UPC AMS AMS 21 41 30.0
comp=Z,300nm,17.1s
**NKC Novy Kostel 26.38 173** *e*P **P 21 31 36.7 -0.4**
NKC *e* 21 31 43.0
**NKC Novy Kostel 26.38 173** *e*P **P 21 31 36.7 -0.4**
NKC *e*pP **pP 21 31 43.0 +1.0**
**NKC Novy Kostel 26.38 173** P **P 21 31 36.7 -0.4**
**DPC Dobruska-Polom 26.41 168** *e*P **P 21 31 36.7 -0.7**
DPC *e* 21 31 43.7
DPC MLR MLR
comp=Z,300nm,19.5s
**DPC Dobruska-Polom 26.41 168** *e*P **P 21 31 36.7 -0.7**
DPC *e*pP **pP 21 31 43.7 +1.4**
DPC AMS AMS 21 41 30.0
comp=Z,300nm,19.5s
**DPC Dobruska-Polom 26.41 168** P **P 21 31 36.7 -0.7**
**FRB Frobisher Bay 26.47 284** LR LR 21 41 47.3
comp=Z,1µm,21.4s,baz=90,slow=36
**PRA Prague 26.60 170** *e*P P 21 31 45.0 +5.9
**PRA Prague 26.60 170** *e*P P 21 31 45.0 +5.9
**PRU Pruhonice 26.69 170** *e*P **P 21 31 39.5 -0.4**
PRU *e* 21 31 45.6
PRU MLR MLR
comp=Z,300nm,17.3s
**PRU Pruhonice 26.69 170** *e*P **P 21 31 39.5 -0.4**
PRU *e*pP **pP 21 31 45.6 +0.8**
PRU AMS AMS 21 41 30.0
comp=Z,300nm,17.3s
**PRU Pruhonice 26.69 170** *e*P **P 21 31 39.5 -0.4**
comp=Z,300nm,17.3s
**KRLC Kraliky 26.71 167** *e*P **P 21 31 38.8 -1.3**
KRLC *e* 21 31 44.7
**KRLC Kraliky 26.71 167** *e*P **P 21 31 38.8 -1.3**
KRLC *e*pP **pP 21 31 44.7 -0.3**
**KRLC Kraliky 26.71 167** *e*P **P 21 31 38.8 -1.3**
**LPSR Galich'ya Gora 26.72 135** *e*P **P 21 31 39.3 -0.8**
LPSR pmax pmax
comp=Z,10.0nm,1.0s
LPSR pmax pmax
comp=N,5.0nm,0.7s
LPSR pmax pmax
comp=E,10.0nm,0.9s
**LPSR Galich'ya Gora 26.72 135** *e*P **P 21 31 39.3 -0.8**
comp=E,5.0nm,0.7s
**OJC Ojcow 26.75 163** *e*P **P 21 31 40.8 +0.4**
**OJC Ojcow 26.75 163** *e*P **P 21 31 40.8 +0.4**
**OJC Ojcow 26.75 163** *e*P **P 21 31 40.2 -0.3**
comp=E,57nm,1.8s
**OJC Ojcow 26.75 163** *e*P **P 21 31 40.8 +0.4**
**GOPC GO Pecny, Ondr 26.77 170** *e*P **P 21 31 40.1 -0.6**
GOPC *e* 21 31 46.2
**GOPC GO Pecny, Ondr 26.77 170** *e*P **P 21 31 40.1 -0.6**
GOPC *e*pP **pP 21 31 46.2 +0.6**
**GOPC GO Pecny, Ondr 26.77 170** *e*P **P 21 31 40.1 -0.6**
**ROTZ Rotzenmuhle 26.84 174** *e*P **P 21 31 42.3 +1.1**
comp=E,26nm,1.3s,baz=358,slow=9.7

**GRFO Grafenberg 26.89 175** *e*P P 21 31 47.8 +6.1
GRFO pmax pmax
comp=Z,57nm,1.7s
**GRFO Grafenberg 26.89 175** *e*P P 21 31 47.8 +6.1
comp=Z,57nm,1.7s
**ARU Arti 27.02 109** P **P 21 31 42.5 -0.2**
comp=Z,0.2nm,0.3s,baz=180,slow=20,SNR=1.8
ARU LR LR 21 43 08.1
comp=Z,356nm,19.4s,baz=322,slow=38
**ARU Arti 27.02 109***d i*P **P 21 31 43.0 +0.3**
ARU 21 32 23.0
ARU S **S 21 36 22.1 +2.9**
ARU SS SnSn 21 37 35.4 +10
ARU pmax pmax
comp=Z,12nm,1.2s
**ARU Arti 27.02 109** *e*P **P 21 31 43.3 +0.6**
comp=Z,46nm,1.2s
**ARU Arti 27.02 109** *i* P **P 21 31 43.0 +0.3**
comp=Z,12nm,1.2s
**OKC Ostrava-Krasne 27.02 165** *e*P **P 21 31 42.0 -0.9**
OKC *e* 21 31 49.2
**OKC Ostrava-Krasne 27.02 165** *e*P **P 21 31 42.0 -0.9**
OKC *e*pP **pP 21 31 49.2 +1.4**
**OKC Ostrava-Krasne 27.02 165** *e*P **P 21 31 42.0 -0.9**
**MORC Moravsky Berou 27.05 166** ⇓P **P 21 31 42.4 -0.8**
**MORC Moravsky Berou 27.05 166** ⇓*i*P **P 21 31 42.4 -0.8**
**MORC Moravsky Berou 27.05 166** *e*P **P 21 31 42.2 -0.9**
comp=Z,75nm,1.3s
**MORC Moravsky Berou 27.05 166** ⇓*i*P **P 21 31 42.4 -0.8**
**SVE Sverdlovsk 27.12 106***i e*P **P 21 31 44.2 +0.5**
SVE pmax pmax
comp=Z,23nm,1.5s
SVE MLR MLR
comp=Z,848nm,19.0s
**SVE Sverdlovsk 27.12 106** *e*P **P 21 31 44.2 +0.5**
comp=Z,848nm,19.0s
**AKASG Malin Array Be 27.18 149** P **P 21 31 42.5 -1.7**
comp=Z,0.3nm,0.3s,baz=344,slow=9.8,SNR=7.2
AKASG LR LR 21 42 35.6
comp=Z,529nm,20.3s,baz=350,slow=37
**KIEV Kiev 27.18 149**⇓ *e*P **P 21 31 44.9 +0.7**
KIEV pmax pmax
comp=Z,4.0nm,1.1s
**KIEV Kiev 27.18 149** *e*P **P 21 31 44.9 +0.7**
comp=Z,4.0nm,1.1s
**VRAC Vranov 27.46 167** P **P 21 31 45.8 -1.1**
comp=Z,6.5nm,0.8s,baz=1.0,slow=11,SNR=11
VRAC LR LR 21 42 14.9
comp=Z,245nm,18.4s,baz=354,slow=36
**VRAC Vranov 27.46 167** ⇓P **P 21 31 46.7 -0.1**
**VRAC Vranov 27.46 167** ⇓*i*P **P 21 31 46.7 -0.1**
**VRAC Vranov 27.46 167** ⇓*i*P **P 21 31 46.7 -0.1**
**KHC Kasperske Hory 27.51 172** *e*P **P 21 31 48.0 +0.7**
KHC *e* 21 31 53.2
KHC MLR MLR
comp=Z,400nm,17.4s
**KHC Kasperske Hory 27.51 172** *e*P **P 21 31 48.0 +0.7**
KHC *e*pP **pP 21 31 53.2 +0.9**
KHC AMS AMS 21 41 50.0
comp=Z,400nm,17.4s
**KHC Kasperske Hory 27.51 172** *e*P P 21 31 53.1 +5.8
comp=Z,8.3nm,1.5s
**KHC Kasperske Hory 27.51 172** *e*P **P 21 31 48.0 +0.7**
comp=Z,400nm,17.4s
**STHS Stebnicka Huta 27.66 161** *e*P **P 21 31 48.4 -0.2**
STHS pmax pmax
comp=Z,4.0nm,1.2s
**STHS Stebnicka Huta 27.66 161** *e*P **P 21 31 48.4 -0.2**
**STHS Stebnicka Huta 27.66 161** *e*P **P 21 31 48.4 -0.2**
comp=Z,4.0nm,1.2s
**GEC2 GERESS Array S 27.80 172** *e*P **P 21 31 50.7 +0.7**
**GEC2 GERESS Array S 27.80 172** *e*P **P 21 31 50.7 +0.7**
**GEC2 GERESS Array S 27.80 172** *e*P **P 21 31 50.7 +0.7**
**GERES GERESS Array B 27.80 172** P **P 21 31 48.5 -1.5**
comp=Z,1.1nm,0.8s,baz=12,slow=6.8,SNR=9.4
GERES LR LR 21 42 48.3
comp=Z,334nm,18.9s,baz=360,slow=36
**GERES GERESS Array B 27.80 172** P **P 21 31 48.5 -1.5**
GERES pmax pmax
comp=Z,1.0nm,0.8s
GERES MLR MLR
comp=Z,334nm,18.9s
**VSR Storozhevoye 28.09 136** *e*P **P 21 31 50.4 -2.0**
VSR pmax pmax
comp=N,7.0nm,0.8s
VSR pmax pmax
comp=E,6.0nm,0.8s
VSR pmax pmax
comp=Z,6.0nm,0.8s
**VSR Storozhevoye 28.09 136** *e*P **P 21 31 50.4 -2.0**
**BFO Black Forest 28.22 179** *e*P P 21 31 57.6 +4.0
comp=Z,44nm,1.5s,baz=358,slow=9.7
**KOLS Kolonicke sedl 28.22 160** *e*P **P 21 31 53.5 -0.1**
**KOLS Kolonicke sedl 28.22 160** *e*P **P 21 31 53.5 -0.1**
**KOLS Kolonicke sedl 28.22 160** *e*P **P 21 31 53.5 -0.1**
**VYHS Vyhne 28.40 164** *e*P **P 21 31 54.7 -0.5**
VYHS pmax pmax
comp=Z,4.0nm,1.6s
**VYHS Vyhne 28.40 164** *e*P **P 21 31 54.7 -0.5**
**VYHS Vyhne 28.40 164** *e*P **P 21 31 54.7 -0.5**
comp=Z,4.0nm,1.6s
**VRH Novokhopyorsk 28.54 133** *e*P **P 21 31 55.1 -1.3**
VRH pmax pmax
comp=N,10.0nm,1.0s
VRH pmax pmax
comp=E,10.0nm,1.0s
VRH pmax pmax
comp=Z,10.0nm,1.0s
**VRH Novokhopyorsk 28.54 133** *e*P **P 21 31 55.1 -1.3**
**CONA Conrad Observa 28.80 169**⇑ *e*P **P 21 31 58.5 -0.4**
comp=Z,18nm,1.1s
**CONA Conrad Observa 28.80 169** P **P 21 31 58.5 -0.4**
comp=Z,18nm,1.1s
**MOA Molln 28.82 171**⇑ *e*pP **P 21 31 59.9 +0.9**
comp=Z,14nm,1.6s
**TRPA Tarpa 29.04 159**⇓ *i*P **P 21 32 00.6 -0.2**
**PSZ Piszkesteto 29.05 163** ⇑P P 21 32 08.0 +7.0
**PSZ Piszkesteto 29.05 163**⇑ *i*P P 21 32 08.0 +7.0
**PSZ Piszkesteto 29.05 163**⇑ *e*P P 21 32 08.3 +7.3
**PSZ Piszkesteto 29.05 163** *e*P **P 21 32 00.2 -0.8**
comp=Z,30nm,1.6s
**RETA Reutte 29.08 176** ⇑sP P 21 32 04.8 +3.4
comp=Z,12nm,1.5s
**MOTA Moosalm 29.23 175** ⇑sP P 21 32 08.2 +5.5
comp=Z,11nm,1.2s
**DAVA Damuels 29.27 177** ⇑sP P 21 32 08.7 +5.5
comp=Z,16nm,1.5s
**WTTA Wattenberg 29.32 175** ⇑sP P 21 32 07.5 +3.9
comp=Z,19nm,1.8s
**FETA Feichten 29.55 176** ⇑pP **P 21 32 07.9 +2.3**
comp=Z,11nm,1.7s
**KBA Koelnbreinsper 29.56 172**⇑ *e*sP **P 21 32 08.6 +3.0**
comp=Z,13nm,1.4s,SNR=6.5
**DAVOX Davos/Dischmat 29.78 177** LR LR 21 43 01.0
comp=Z,167nm,20.7s,baz=346,slow=34
**BUR04 Bucovina Ar. S 29.78 156** *e*P **P 21 32 06.3 -1.3**
**ABTA Abfaltersbach 29.86 173** ⇑sP P 21 32 13.1 +4.9
comp=Z,6.8nm,1.2s
**MYKA Terra Mystica 30.01 172**⇑ *e*sP P 21 32 13.6 +4.0
comp=Z,16nm,1.6s
**OBKA Obir 30.17 171**⇑ *e*P **P 21 32 11.2 +0.2**
comp=Z,22nm,1.4s,SNR=5.2
**OBKA Obir 30.17 171** P **P 21 32 11.2 +0.2**
comp=Z,22nm,1.4s,SNR=5.2
**TRI Trieste 30.94 172** *e*P P 21 32 23.9 +6.3
TRI pmax pmax
comp=Z,34nm,1.7s
**TRI Trieste 30.94 172** *e*P P 21 32 23.9 +6.3
comp=Z,34nm,1.7s
**BZS Buzias 31.46 161** ⇓P **P 21 32 22.0 -0.3**
**BZS Buzias 31.46 161** ⇓*i*P **P 21 32 22.0 -0.3**
**BZS Buzias 31.46 161** P **P 21 32 22.0 -0.3**
**GZR Gura Zlata 31.77 160** ⇑P P 21 32 31.1 +6.0
**GZR Gura Zlata 31.77 160**⇑ *i*P P 21 32 31.1 +6.0
**VOIR 31.93 157** ⇑P P 21 32 33.9 +7.4
**VOIR 31.93 157**⇑ *i*P P 21 32 33.9 +7.4
**VLC Villacollemand 32.41 176** *e*P P 21 32 37.0 +6.4
comp=Z,46nm,1.6s
**BRVK Borovoye 32.80 99***c i*P **P 21 32 34.9 +0.9**
BRVK pmax pmax
comp=Z,6.0nm,0.8s
**BRVK Borovoye 32.80 99** *i* P **P 21 32 34.9 +0.9**
comp=Z,6.0nm,0.8s
**DIVS Divibare 32.86 164** ⇓*i*P **P 21 32 34.1 -0.5**
**INK Inuvik 33.52 335** P **P 21 32 39.1 -1.0**

comp=Z,4.4nm,0.8s,baz=19,slow=9.7,SNR=7.0
**INK Inuvik 33.52 335** P **P 21 32 39.1 -1.0**
INK pmax pmax
comp=Z,4.0nm,0.8s
**ABKAR Akbulak array 34.01 112** *e*P **P 21 32 44.9 +0.4**
**ABKAR Akbulak array 34.01 112** *e*P **P 21 32 44.9 +0.4**
**SCHQ Schefferville 34.02 274** LR LR 21 45 38.4
comp=Z,323nm,20.7s,baz=51,slow=35
**NVS Novosibirsk 34.21 85** *e*P P 21 32 41.0 -5.2
NVS *e* 21 34 01.4
**BILL Bilibino 35.13 14**⇑ *e*P **P 21 32 54.9 +0.9**
BILL *e* 21 33 02.3
BILL *e* 21 34 13.8
BILL pmax pmax
comp=Z,5.0nm,0.9s
**BILL Bilibino 35.13 14** *e*P **P 21 32 54.9 +0.9**
comp=Z,5.0nm,0.9s
**ZAA0 Zalesovo Array 35.40 84** *e*P **P 21 32 57.0 +0.5**
**ZAA0 Zalesovo Array 35.40 84** *e*P **P 21 32 57.0 +0.5**
**ZALV Zalesovo Beam 35.40 84** P **P 21 32 55.7 -0.8**
comp=Z,3.4nm,0.8s,baz=326,slow=8.9,SNR=18
ZALV PcP **PcP 21 35 25.0 -0.8**
comp=Z,0.3nm,0.3s,baz=316,slow=4.0,SNR=2.3
ZALV LR LR 21 51 35.8
comp=Z,301nm,18.2s,baz=250,slow=43
**ZALV Zalesovo Beam 35.40 84** P **P 21 32 55.7 -0.8**
ZALV 21 35 25.0
ZALV pmax pmax
comp=Z,3.0nm,0.8s
ZALV MLR MLR
comp=Z,301nm,18.2s
**KIV Kislovodsk 35.72 135** *e*P **P 21 32 59.6 +0.2**
KIV *e* 21 34 15.9
KIV pmax pmax
comp=Z,10.0nm,1.2s
**KIV Kislovodsk 35.72 135** *e*P **P 21 32 59.6 +0.2**
comp=Z,10.0nm,1.2s
**KBZ Khabaz 35.98 135** P **P 21 33 00.8 -0.7**
comp=Z,5.7nm,0.9s,baz=334,slow=2.6,SNR=10
KBZ LR LR 21 48 19.2
comp=Z,409nm,19.3s,baz=346,slow=37
**KBZ Khabaz 35.98 135** P **P 21 33 00.8 -0.7**
KBZ pmax pmax
comp=Z,6.0nm,0.9s
KBZ MLR MLR
comp=Z,409nm,19.3s
**CUC Castrocucco 36.72 170** *e*P P 21 33 14.1 +6.1
comp=Z,9.0nm,1.2s
**KURK Kurchatov 36.93 92** *e*P **P 21 33 10.3 +0.7**
KURK pmax pmax
comp=Z,21nm,1.0s
**KURK Kurchatov 36.93 92** *e*P **P 21 33 10.2 +0.7**
comp=Z,21nm,1.0s
**KURK Kurchatov 36.93 92** *e*P **P 21 33 10.3 +0.7**
comp=Z,21nm,1.0s
**YAK Yakutsk 37.04 42** LR LR 21 48 28.5
comp=Z,112nm,21.6s,baz=335,slow=36
**YAK Yakutsk 37.04 42** *e*P **P 21 33 10.1 -0.3**
YAK *e*PPP PPP 21 34 53.6
YAK *i* 21 35 30.5
YAK *e*S **S 21 38 55.2 +0.3**
YAK *e*SS **SnSn 21 41 19.7 -8.4**
YAK pmax pmax
comp=Z,3.0nm,1.2s
YAK pmax pmax
comp=N,1.0nm,1.5s
YAK pmax pmax
comp=E,2.0nm,1.1s
YAK pmax pmax
comp=Z,26nm,10.3s
YAK pmax pmax
comp=E,13nm,10.1s
YAK pmax pmax
comp=N,15nm,10.1s
YAK smax smax
comp=E,57nm,13.6s
YAK smax smax
comp=N,6.0nm,5.9s
**YAK Yakutsk 37.04 42** *e*P **P 21 33 10.1 -0.3**
comp=N,15nm,10.1s
**YAK Yakutsk 37.04 42** *i* PcP **PcP 21 35 30.5 -0.1**
YAK *e*S **S 21 38 55.2 +0.3**
comp=N,6.0nm,5.9s
**ZEI Tsey 37.06 134** *e*P P 21 33 07.5 -3.5
ZEI pmax pmax
comp=Z,28nm,1.2s
**ES19 SONSECA Array 37.20 195** *e*P **P 21 33 12.3 +0.2**
**ESDC Sonseca Array 37.23 195** P **P 21 33 10.6 -1.8**
comp=Z,0.2nm,0.4s,baz=10,slow=9.0,SNR=4.9
**PAB San Pablo 37.38 196** *e*P **P 21 33 14.5 +0.8**
PAB pmax pmax
comp=Z,23nm,1.4s
**PAB San Pablo 37.38 196** *e*P **P 21 33 14.5 +0.8**
comp=Z,22nm,1.4s
**PAB San Pablo 37.38 196** *e*P **P 21 33 14.5 +0.8**
comp=Z,23nm,1.4s
**TIP Timpagrande 37.58 169** *e*P **P 21 33 15.8 +0.6**
TIP *e*pP **pP 21 33 21.3 +1.0**
**EGAK Eagle 37.68 339** *e*P **P 21 33 16.1 +0.4**
comp=Z,136nm,2.5s
**COLA College 38.09 343**⇑ *e*P **P 21 33 21.5 +2.2**
COLA pmax pmax
comp=Z,4.0nm,1.0s
**COLA College 38.09 343** *e*P **P 21 33 21.5 +2.2**
comp=Z,4.0nm,1.0s
**IL1 Eielson Array 38.13 343** *e*P **P 21 33 20.2 +0.6**
**ILAR Eielson Array 38.13 343** P **P 21 33 20.6 +1.0**
comp=Z,2.2nm,0.8s,baz=2.5,slow=6.8,SNR=24
**ILAR Eielson Array 38.13 343** P **P 21 33 20.6 +1.0**
ILAR pmax pmax
comp=Z,2.0nm,0.8s
**BR231 Keskin MP Arra 38.30 148** *e*P **P 21 33 22.8 +1.3**
**CCB Clear Creek Bu 38.32 343** *e*P **P 21 33 22.1 +0.9**
comp=Z,44nm,1.7s
**BRTR Keskin Array B 38.53 147** P **P 21 33 23.6 +0.2**
comp=Z,1.9nm,0.8s,baz=341,slow=6.5,SNR=7.6
BRTR LR LR 21 50 31.1
comp=Z,159nm,21.3s,baz=356,slow=38
**BRTR Keskin Array B 38.53 147** P **P 21 33 23.6 +0.2**
BRTR pmax pmax
comp=Z,2.0nm,0.8s
BRTR MLR MLR
comp=Z,159nm,21.3s
**BWN Browne 38.90 344** *e*P P 21 33 21.2 -4.8
comp=Z,1µm,1.1s
**GNI Garni 39.77 134**⇓ *e*P **P 21 33 32.6 -1.2**
GNI pmax pmax
comp=Z,7.0nm,1.2s
**GNI Garni 39.77 134** *e*P **P 21 33 32.6 -1.2**
comp=Z,7.0nm,1.2s
**CAST Castle Rocks 39.80 346** *e*P **P 21 33 35.3 +1.7**
comp=Z,66nm,1.5s
**HVS Khovu-Aksy 40.07 77**⇑ *e*P **P 21 33 36.5 +0.4**
HVS pmax pmax
comp=Z,17nm,0.9s
**HVS Khovu-Aksy 40.07 77** *e*P **P 21 33 36.5 +0.4**
comp=Z,17nm,0.9s
**MALT Malatya 40.57 142** ⇓P **P 21 33 41.5 +1.2**
**MALT Malatya 40.57 142** ⇓*i*P **P 21 33 41.5 +1.2**
**MALT Malatya 40.57 142** P **P 21 33 41.5 +1.2**
**KEST Kesra 40.81 178** P **P 21 33 41.9 -0.4**
comp=Z,2.6nm,0.9s,baz=32,slow=17,SNR=2.4
KEST LR LR 21 51 02.2
comp=Z,119nm,18.2s,baz=278,slow=37
**MOY Mondy 41.23 71** *e*P P 21 33 53.7 +8.0
MOY pmax pmax
comp=Z,23nm,1.5s
**MKAR Makanchi Array 41.46 91** P **P 21 33 48.3 +0.8**
comp=Z,3.5nm,0.9s,baz=352,slow=7.4,SNR=18
MKAR LR LR 21 54 21.6
comp=Z,565nm,19.7s,baz=338,slow=41
**MKAR Makanchi Array 41.46 91** P **P 21 33 48.3 +0.8**
MKAR pmax pmax
comp=Z,4.0nm,0.9s
MKAR MLR MLR
comp=Z,565nm,19.7s
**MKAR Makanchi Array 41.46 91** *e*P **P 21 33 48.6 +1.1**
**MK01 Makanchi Array 41.49 91** *e*P **P 21 33 48.4 +0.7**
**TLY Talaya 41.80 68** LR LR 21 55 05.5
comp=Z,328nm,18.1s,baz=340,slow=42
**TLY Talaya 41.80 68** *e*P P 21 33 56.2 +6.0
TLY *e*S S 21 40 14.4 +7.8
TLY pmax pmax
comp=Z,4.0nm,1.0s
TLY MLR MLR
comp=Z,262nm,15.0s

KKAR **Karatay Array** 42.20 104 eP P 21 33 55.0 +1.4
KKAR e 21 35 35.1
KKAR **Karatay Array** 42.20 104 eP P 21 33 55.0 +1.4
KKAR ePP PP 21 35 35.1 +4.1
KKAR **Karatay Array** 42.20 104 eP P 21 33 55.0 +1.4
DLBC **Dease Lake** 42.73 329 LR LR 21 52 22.0
comp=Z,340nm,19.6s,baz=46,slow=37
EKS2 **Erkin-Say** 43.37 101 eP P 21 34 05.0 +1.8
EKS2 pmax pmax
comp=Z,6.0nm,0.9s
EKS2 **Erkin-Say** 43.37 101 eP P 21 34 05.0 +1.8
comp=Z,6.0nm,0.9s
EKS2 **Erkin-Say** 43.37 101 eP P 21 34 05.0 +1.8
comp=Z,6.0nm,0.9s
TKM2 **Tokmak 2** 43.55 99 eP P 21 34 07.0 +2.3
TKM2 pmax pmax
comp=Z,8.0nm,1.3s
TKM2 **Tokmak 2** 43.55 99 eP P 21 34 07.0 +2.3
comp=Z,8.0nm,1.3s
TKM2 **Tokmak 2** 43.55 99 eP P 21 34 07.0 +2.3
comp=Z,8.0nm,1.3s
AAK **Ala-Archa** 43.56 100⇓eP P 21 34 05.7 +0.9
AAK pmax pmax
comp=Z,9.0nm,1.1s
AAK **Ala-Archa** 43.56 100 eP P 21 34 06.0 +1.2
AAK **Ala-Archa** 43.56 100 eP P 21 34 05.7 +0.9
comp=Z,9.0nm,1.1s
GEYT **Alibeck** 44.45 120 P P 21 34 11.6 -0.2
comp=Z,7.9nm,0.8s,baz=310,slow=9.2,SNR=18
GEYT LR LR 21 55 08.5
comp=Z,695nm,19.0s,baz=340,slow=39
ULM **Lac du Bonnet** 44.82 298 P P 21 34 15.2 +0.7
comp=Z,2.7nm,0.7s,baz=36,slow=18,SNR=3.3
ULM LR LR 21 53 34.2
comp=Z,775nm,18.7s,baz=5.5,slow=37
ULM **Lac du Bonnet** 44.82 298 P P 21 34 15.2 +0.7
ULM pmax pmax
comp=Z,3.0nm,0.7s
ULM MLR MLR
comp=Z,775nm,18.7s
ULM **Lac du Bonnet** 44.82 298 eP P 21 34 19.3 +4.8
comp=Z,32nm,1.6s
ISFR **Sfrayin** 45.27 120 eP P 21 34 20.3 +1.7
ISFR **Sfrayin** 45.27 120 eP P 21 34 20.3 +1.7
IRAZ **Razeghan** 45.30 130 eP P 21 34 20.1 +1.3
IRAZ **Razeghan** 45.30 130 eP P 21 34 20.1 +1.3
WMQ **Urumqi** 45.54 87 P P 21 34 22.0 +1.6
WMQ PP PP 21 36 10.0 +3.2
WMQ S S 21 41 04.0 +2.6
WMQ SS ScS 21 44 18.0 +2.5
WMQ PMZ
comp=Z,14nm,1.0s
WMQ PMZ
comp=Z,22nm,4.0s
WMQ LN
comp=Z,420nm,18.0s
WMQ LE
comp=Z,330nm,18.0s
WMQ LZ
comp=Z,510nm,18.0s
IGHG **Ghaleghazi** 45.76 134 eP P 21 34 30.4 +7.9
SONM **Songino Array** 46.03 68 P P 21 34 25.0 +0.7
comp=Z,1.0nm,0.9s,baz=337,slow=8.8,SNR=5.7
SONM PP PP 21 36 13.4 +1.5
comp=Z,0.5nm,0.9s,baz=345,slow=11,SNR=2.7
SONM **Songino Array** 46.03 68 P P 21 34 25.0 +0.7
SONM 21 36 13.4
SONM pmax pmax
comp=Z,1.0nm,0.9s
SONM pmax pmax
comp=Z,1.0nm,0.9s
OHAK **Old Harbor** 46.05 346 eP P 21 34 26.2 +2.0
comp=Z,181nm,1.7s
OHAK **Old Harbor** 46.05 346 eP P 21 34 26.2 +2.0
comp=Z,181nm,1.7s
ULN **Ulaanbaatar** 46.14 67⇓eP P 21 34 27.0 +1.7
ULN pmax pmax
comp=Z,8.0nm,1.2s
ULN **Ulaanbaatar** 46.14 67 eP P 21 34 27.0 +1.7
comp=Z,8.0nm,1.2s
KSH **Kashi** 46.87 100 P P 21 34 35.0 +4.0
KSH esP sP 21 34 43.8 +5.7
KSH S S 21 41 24.5 +3.8
KSH sS sS 21 41 34.3 +5.2
KSH SS SS 21 44 42.7 -4.1
KSH PMZ
comp=Z,63nm,4.9s
KSH LN
comp=Z,240nm,8.3s
KSH LE
comp=Z,190nm,8.7s
KSH LZ
comp=Z,430nm,18.0s
IPIR **Pirpir** 48.12 129 eP P 21 34 40.8 -0.3
IPIR **Pirpir** 48.12 129 eP P 21 34 40.8 -0.3
IZEF **Zefreh** 48.19 128 eP P 21 34 42.5 +1.0
IZEF **Zefreh** 48.19 128 eP P 21 34 42.5 +1.0
IRAM **Ramesheh** 49.25 128 eP P 21 34 49.4 -0.2
IRAM **Ramesheh** 49.25 128 eP P 21 34 49.4 -0.2
PET **Petropavlovsk** 49.46 23 eP P 21 34 50.5 -0.2
PET pmax pmax
comp=Z,30nm,1.7s
PET **Petropavlovsk** 49.46 23 eP P 21 34 50.5 -0.2
comp=Z,30nm,1.7s
BSMT **Bassoo Peak** 50.75 313 eP P 21 34 59.9 -0.8
BSMT **Bassoo Peak** 50.75 313 eP P 21 34 59.9 -0.8
SWMT **Swartz Lake** 50.94 312 eP P 21 35 07.2 +5.1
SWMT ePP PP 21 37 02.5 +4.4
ECSD **EROS Data Cent** 51.18 296 eP P 21 35 04.9 +1.1
comp=Z,44nm,1.8s
ECSD **EROS Data Cent** 51.18 296 eP P 21 35 04.9 +1.1
comp=Z,44nm,1.8s
MSO **Missoula** 51.59 312 eP P 21 35 06.0 -0.9
comp=Z,9.2nm,1.0s
MSO **Missoula** 51.59 312 eP P 21 35 06.1 -0.9
comp=Z,9.2nm,1.0s
GTA **Gaotai** 52.56 77 eP P 21 35 16.1 +1.8
GTA pP pP 21 35 21.6 +2.2
GTA sP sP 21 35 24.6 +3.2
GTA PcP PcP 21 36 27.2 +2.8
GTA S S 21 42 42.7 +2.5
GTA sS sS 21 42 50.3 +1.7
GTA PMZ
comp=Z,4.0nm,1.0s
GTA PMZ
comp=Z,92nm,6.4s
GTA LN
comp=Z,190nm,17.6s
GTA LE
comp=Z,250nm,17.6s
GTA LZ
comp=Z,220nm,16.1s
TAM **Tamanrasset** 53.71 183 eP P 21 35 22.6 -0.4
TAM pmax pmax
comp=Z,14nm,1.3s
TAM **Tamanrasset** 53.71 183 eP P 21 35 22.6 -0.4
comp=Z,14nm,1.3s
TAM **Tamanrasset** 53.71 183 eP P 21 35 22.6 -0.4
comp=Z,14nm,1.3s
MDJ **Mudanjiang** 53.74 49 P P 21 35 22.6 -0.2
MDJ pP pP 21 35 25.4 -2.6
MDJ PcP PcP 21 36 29.3 +0.7
MDJ ScP ScP 21 40 27.0 +1.7
MDJ PcS PcS 21 40 28.3 +0.7
MDJ S S 21 42 56.1 +0.2
MDJ PMZ
comp=Z,7.0nm,1.0s
MDJ PMZ
comp=Z,77nm,3.4s
MDJ LN
comp=Z,670nm,13.9s
MDJ LE
comp=Z,460nm,15.1s
MDJ LZ
comp=Z,980nm,13.2s
CN2 **Changchun** 53.78 53 eP P 21 35 24.4 +1.4
HHC **Hu-ho-hao-te** 53.81 66 eP P 21 35 23.4 0.0
HHC S S 21 42 54.0 -3.1
HHC SS SKiKP 21 46 33.8 -1.8
HHC PMZ
comp=Z,9.0nm,0.6s
HHC PMZ
comp=Z,62nm,4.4s
HHC LN
comp=Z,130nm,14.5s
HHC LE
comp=Z,290nm,13.7s
HHC LZ
comp=Z,220nm,14.2s
IMW **Indian Meadow** 53.88 308 eP P 21 35 24.1 -0.1
comp=Z,5.7nm,0.9s
IMW **Indian Meadow** 53.88 308 eP P 21 35 24.1 -0.1
comp=Z,5.7nm,0.9s
BW06 **Boulder Array** 54.71 307 eP P 21 35 31.1 +0.9
BW06 **Boulder Array** 54.71 307 eP P 21 35 31.1 +0.9
BJI **Beijing** 55.56 62 P P 21 35 36.5 +0.5
BJI PP PP 21 37 45.4 +5.7
BJI S S 21 43 19.2 -1.2
BJI PMZ
comp=Z,5.0nm,1.3s
BJI LN
comp=Z,110nm,25.6s
BJI LE
comp=Z,520nm,22.2s
BJI LZ
comp=Z,270nm,28.6s
RAYN **Ar Rayn** 56.16 137 eP P 21 35 40.9 +0.4
comp=Z,7.4nm,1.1s
RAYN **Ar Rayn** 56.16 137 eP P 21 35 40.9 +0.4
comp=Z,7.4nm,1.1s
O20A **White River Ci** 57.00 305 eP P 21 35 46.1 -0.5
comp=Z,128nm,2.1s
O20A **White River Ci** 57.00 305 eP P 21 35 46.1 -0.5
comp=Z,128nm,2.1s
PV01 **Paradox Valley** 59.00 304 eP P 21 36 00.0 -0.7
PV01 **Paradox Valley** 59.00 304 eP P 21 36 00.0 -0.7
S22A **4UR Ranch, Cre** 59.04 303 eP P 21 36 00.5 -0.5
comp=Z,13nm,1.4s
S22A **4UR Ranch, Cre** 59.04 303 eP P 21 36 00.4 -0.5
comp=Z,13nm,1.4s
PV05 **Paradox Valley** 59.16 305 eP P 21 36 02.2 +0.5
PV05 **Paradox Valley** 59.16 305 eP P 21 36 02.2 +0.5
MIAR **Mount Ida** 59.32 290 eP P 21 36 07.7 +5.1
MIAR pmax pmax
comp=Z,19nm,1.4s
MIAR **Mount Ida** 59.32 290 eP P 21 36 07.7 +5.1
comp=Z,19nm,1.4s
MSU **Marysvale** 59.32 308 eP P 21 36 03.0 +0.1
MSU **Marysvale** 59.32 308 eP P 21 36 03.0 +0.1
MSU **Marysvale** 59.32 308 eP P 21 36 03.0 +0.1
R11A **Troy Canyon, C** 60.10 311 eP P 21 36 07.4 -0.8
comp=Z,13nm,1.8s
R11A **Troy Canyon, C** 60.10 311 eP P 21 36 07.4 -0.8
comp=Z,13nm,1.8s
WMOK **Wichita Mounta** 60.27 295 eP P 21 36 08.4 -0.8
WMOK pmax pmax
comp=Z,8.0nm,1.1s
WMOK **Wichita Mounta** 60.27 295 eP P 21 36 08.4 -0.8
comp=Z,7.8nm,1.1s
WMOK **Wichita Mounta** 60.27 295 eP P 21 36 08.4 -0.8
comp=Z,7.8nm,1.1s
NV01 **Mina Array Sit** 60.50 313 eP P 21 36 10.3 -0.7
NV01 **Mina Array Sit** 60.50 313 eP P 21 36 10.3 -0.7
NVAR **Mina Array Bea** 60.50 313 P P 21 36 10.1 -0.8
comp=Z,0.3nm,0.3s,baz=20,slow=4.7,SNR=4.8
CD2 **Chengdu** 61.60 76 eP P 21 36 17.0 -1.3
CD2 pP pP 21 36 23.1 -0.4
CD2 sP sP 21 36 25.5 0.0
CD2 PcS PcS 21 41 01.9 -1.0
CD2 S S 21 44 37.5 -1.8
CD2 sS sS 21 44 47.8 -0.1
CD2 SS SS 21 48 39.5 -0.4
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
DAC **Darwin (Calif)** 62.48 312 eP P 21 36 25.9 +1.6
DAC **Darwin (Calif)** 62.48 312 eP P 21 36 25.9 +1.6
DAC **Darwin (Calif)** 62.48 312 eP P 21 36 25.9 +1.6
MJAR **Matsushiro Arr** 63.07 43 P P 21 36 27.0 -1.0
comp=Z,0.4nm,0.5s,baz=326,slow=6.3,SNR=3.0
MJAR **Matsushiro Arr** 63.07 43 P P 21 36 27.0 -1.0
MJAR **Matsushiro Arr** 63.07 43 P P 21 36 27.0 -1.0
TOA0 **Torodi Ar. Sit** 63.37 187 eP P 21 36 28.2 -1.9
TOA0 **Torodi Ar. Sit** 63.37 187 eP P 21 36 28.2 -1.9
TORD **Torodi Ar. Bea** 63.37 187 P P 21 36 28.6 -1.5
comp=Z,3.3nm,1.0s,baz=359,slow=6.1,SNR=17
TORD LR LR 22 04 42.7
comp=Z,66nm,19.0s,baz=355,slow=37
NJ2 **Nanjing** 63.82 62 eP P 21 36 35.4 +2.4
NJ2 PMZ
comp=Z,30nm,0.5s
LTC **Little Chuckwa** 64.74 309 eP P 21 36 42.3 +3.3
TUC **Tucson** 65.08 305 eP P 21 36 46.1 +4.8
TUC pmax pmax
comp=Z,23nm,1.9s
TUC **Tucson** 65.08 305 eP P 21 36 46.1 +4.8
comp=Z,22nm,1.9s
PLM **Palomar** 65.19 311 eP P 21 36 43.1 +0.9
PLM **Palomar** 65.19 311 eP P 21 36 43.1 +0.9
PLM **Palomar** 65.19 311 eP P 21 36 43.1 +0.9
TX31 **Lajitas Ar. Si** 66.53 298 eP P 21 36 48.6 -2.0
TX31 epP pP 21 36 54.6 -1.4
TX31 **Lajitas Ar. Si** 66.53 298 eP P 21 36 48.7 -2.0
TX31 epP pP 21 36 54.6 -1.4
TXAR **Lajitas Array** 66.53 298 P P 21 36 49.0 -1.7
comp=Z,0.7nm,0.8s,baz=52,slow=4.2,SNR=9.5
TXAR LR LR 22 06 55.4
comp=Z,372nm,18.5s,baz=0.0,slow=37
TXAR **Lajitas Array** 66.53 298 P P 21 36 49.0 -1.7
TXAR pmax pmax
comp=Z,1.0nm,0.8s
TXAR MLR MLR
comp=Z,372nm,18.5s
TXAR **Lajitas Array** 66.53 298 P P 21 36 49.0 -1.7
comp=Z,372nm,18.5s
GYA **Guiyang** 66.55 75 eP P 21 36 52.0 +1.1
GYA PMZ
comp=Z,10.0nm,1.0s
KMI **Kunming** 66.93 79 P P 21 36 58.9 +5.4
KMI PMZ
comp=Z,5.0nm,1.3s
KMI PMZ
comp=Z,52nm,5.8s
DBIC **Dimbokro** 70.07 193 LR LR 22 10 36.2
comp=Z,38nm,18.2s,baz=340,slow=38
CHTO **Chiang Mai** 72.12 84 eP P 21 37 24.7 -0.6
CHTO pmax pmax
comp=Z,6.0nm,1.1s
CHTO **Chiang Mai** 72.12 84 eP P 21 37 24.7 -0.6
comp=Z,6.3nm,1.1s
CHTO **Chiang Mai** 72.12 84 eP P 21 37 24.7 -0.6
comp=Z,6.0nm,1.1s
CMAR **Chiang Mai Arr** 72.47 84 P P 21 37 27.9 +0.5
comp=Z,1.0nm,0.8s,baz=332,slow=6.1,SNR=8.4
CMAR LR LR 22 15 12.5
comp=Z,122nm,19.0s,baz=305,slow=41
CMAR **Chiang Mai Arr** 72.47 84 iP P 21 37 27.8 +0.4
CMAR pmax pmax
comp=Z,1.0nm,0.8s
CMAR **Chiang Mai Arr** 72.47 84 iP P 21 37 27.8 +0.4
comp=Z,1.0nm,0.8s
SYO **Syowa Base** 146.54 160⇓eP PKPdf 21 45 38.5 -0.2
VNA1 **Neumayer--Stat** 147.21 190 P PKPab 21 45 43.6 -0.4
MAW **Mawson** 147.76 144 PKPbc PKPdf 21 45 42.0 +1.2
comp=Z,2.7nm,0.8s,baz=313,slow=12,SNR=7.2
MAW **Mawson** 147.76 144 PKP2 PKPdf 21 45 42.0 +1.2
MAW pmax pmax
comp=Z,3.0nm,0.8s
SNAA **Sanae** 148.05 186 P PKPdf 21 45 42.8 +1.4
SNAA **Sanae** 148.05 186 PKPbc PKPdf 21 45 42.7 +1.3
comp=Z,2.4nm,1.2s,baz=328,slow=1.7,SNR=11
SNAA **Sanae** 148.05 186 PKP2 PKPdf 21 45 42.7 +1.3
SNAA pmax pmax
comp=Z,2.0nm,1.2s
SNAA **Sanae** 148.05 186 ePKPdf PKPdf 21 45 40.8 -0.6
SNAA PKPbc PKPdf 21 45 42.7 +1.3

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*IDC **02** 21:28:00.2±0.5, 11°.12S×161°.70E, h0$^{km}$, mb4.5/22, mb1 4.6/25, mb1mx4.4/40, mbtmp4.5/25, ML4.2/2, MS4.1/17, Ms1 4.1/17, ms1mx4.0/28, Error ellipse: s-maj=18.3km s-min=13.7km az=88.0*
*MOS **02** 21:28:03.7±1.0, 10°.97S×161°.59E, h26$^{km}$, mb5.2/17, Error ellipse: s-maj=11.6km s-min=9.5km az=147.1*
*ISCJB **02** 21:28:03.8±0.2, 11°.12S±0°.04×161°.74E±0°.04, h29$^{km}$, mb5.0/77, MS4.2/13, Error ellipse: s-maj=6.8km s-min=4.5km az=151.7*
*NEIC **02** 21:28:04.7±2.0, 11°.13S×161°.76E, h26$^{km}$±14$^{km}$, mb5.3/33, Error ellipse: s-maj=6.3km s-min=5.2km az=148.0*
*BJI **02** 21:28:04.7, 10°.82S×161°.75E, h31$^{km}$, mb4.8/42, mB5.1/37, Ms5.1/38, Ms7 4.8/38*
*GCMT **02** 21:28:04.7±0.2, 11°.32S×161°.77E, h13$^{km}$, MW5.0/90, Moment Tensor Solution. s44,c56; s90,c139; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.82±.17; $M_{\theta\theta}$-2.13±.11; $M_{\phi\phi}$-1.68±.11; $M_{r\theta}$2.34±.33; $M_{\theta\phi}$1.86±.07; $M_{\phi r}$0.20±.29; Best double couple: $M_0$4.43700×$10^{16}$ NP1:$\phi_s$111.00000°,δ60.00000°,λ69.00000°. NP2: $\phi_s$328.00000°,δ36.00000°,λ121.00000°. Principal axes: T 4.7360, Plg68.0000°, Azm340.0000°; N -0.5870, Plg18.0000°, Azm122.0000°; P -4.1390, Plg13.0000°, Azm216.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*AUST **02** 21:28:05.5±6.0, 11°.12S×161°.70E, h26$^{km}$±1$^{km}$ Error ellipse: s-maj=2.5km s-min=1.2km az=270.0*
**ISC 02 21:28:05.3**±0.4**, 11°.13S**±0°.05×**161°.82E**±0°.06**, h31**$^{km}$±1$^{km}$**, h31**$^{km}$**:pP-P, n216, σ1.62**/257**, mb5.1**/76**, MS4.2**/13**, 3C-5D, Bougainville - Solomon Islands region**

Code Station Name Δ° AZ° Phase ID (Op, ISC) Time (h m s) Res ISC
HNR **Honiara** 2.50 312 LR LR 21 29 15.1
comp=Z,536nm,21.7s,baz=110,slow=31
HNR **Honiara** 2.50 312 eP Pn 21 28 44.2 +0.3
HNR **Honiara** 2.50 312 ePn Pn 21 28 44.2 +0.3
DZM **Mont Dzumac** 11.74 158 ePn Pn 21 30 48.9 -2.0
6.5nm,0.3s
DZM eSn Sn 21 32 52.4 -8.7
1.8nm,0.3s
DZM eLR LR 21 33 27.2
1μm,21.8s
DZM **Mont Dzumac** 11.74 158 Pn Pn 21 30 49.1 -1.8
1.9nm,0.3s,baz=4.3,slow=3.4,SNR=24
DZM LR LR 21 34 43.5
comp=Z,673nm,19.0s,baz=1.5,slow=34
PMG **Port Moresby** 14.53 275 Pn Pn 21 31 23.9 -5.0
0.4nm,0.3s,baz=180,slow=7.1,SNR=3.6
PMG LR LR 21 36 53.1
comp=Z,1μm,19.7s,baz=115,slow=37
PMG **Port Moresby** 14.53 275⇑eP Pn 21 31 27.8 -1.1
TARA **Tarawa** 16.61 42 ePn Pn 21 31 55.7 -0.3
CTA **Charters Tower** 17.42 237 P Pn 21 32 05.4 -0.9
0.6nm,0.3s,baz=81,slow=13,SNR=10.0
CTA LR LR 21 37 47.8
comp=Z,874nm,20.9s,baz=34,slow=34
CTAO **Charters Tower** 17.42 237 eP P 21 32 07.0 -0.3
CTAO pmax pmax
comp=Z,42nm,1.1s
CTAO **Charters Tower** 17.42 237 ePn P 21 32 07.0 -0.3
comp=Z,42nm,1.1s
EIDS **Eidsvold** 17.43 214 ePn P 21 32 07.5 +0.1
comp=Z,166nm,2.0s
PATS **Pohnpei** 18.19 349 P P 21 32 19.1 +3.4
baz=18,SNR=4.2
COEN **Coen** 18.41 259 P P 21 32 17.6 -0.6
baz=18,SNR=20
COEN **Coen** 18.41 259 eP Pn 21 32 23.1 +4.6
comp=Z,41nm,0.9s
RMQ **Roma** 19.62 217 P Pn 21 32 32.3 -0.6
baz=20,SNR=21
QLP **Quilpie** 22.61 225 P P 21 33 03.3 -0.3
baz=23,SNR=7.9
JAY **Jayapura** 22.63 291 P P 21 33 03.3 -0.7
baz=22,SNR=6.9
GENI **Genyem** 23.09 290 P P 21 33 13.2 +4.5
comp=Z,77nm,1.4s
QIS **Mount Isa** 23.31 244 P P 21 33 11.0 +0.1
baz=23,SNR=10
SMPI **Sarmi** 24.66 290 P P 21 33 24.8 +1.2
comp=Z,70nm,1.8s,comp=Z,10μm
CMSA **Cobar Meteorol** 25.20 214 P P 21 33 27.6 -0.7
baz=25,SNR=10
CNB **Canberra Magne** 26.61 203 P P 21 33 41.6 +0.6
baz=27,SNR=4.7
WRAB **Tennant Creek** 27.84 248 d iP P 21 33 51.2 -1.1
WRAB pmax pmax
comp=Z,30nm,1.4s
WRAB **Tennant Creek** 27.84 248 eP P 21 33 50.8 -1.5
comp=Z,51nm,1.4s
WRA **Warramunga Arr** 27.85 248 P P 21 33 50.4 -2.0
comp=Z,9.3nm,1.2s,baz=75,slow=9.1,SNR=16
WRA PcP PcP 21 37 07.5 -0.5
comp=Z,1.5nm,0.9s,baz=81,slow=2.1,SNR=7.2
WRA LR LR 21 44 11.7
comp=Z,1μm,20.5s,baz=70,slow=35
KDU **Kakadu** 28.75 264 P P 21 34 00.0 -0.4
baz=29,SNR=5.1
AS01 **Alice Springs** 29.30 241 eP P 21 34 03.4 -1.9
AS01 ePcP PcP 21 37 11.2 -0.4
AS01 eScP ScP 21 40 53.6 +2.3
ASAR **Alice Springs** 29.34 241 P P 21 34 04.2 -1.4
comp=Z,4.7nm,0.8s,baz=68,slow=9.7,SNR=38
ASAR PcP PcP 21 37 11.2 -0.6
comp=Z,3.1nm,0.9s,baz=88,slow=3.0,SNR=8.2
ASAR ScP ScP 21 40 54.9 +3.4
comp=Z,1.2nm,1.0s,baz=69,slow=3.4,SNR=5.7
ASAR LR LR 21 44 50.6
comp=Z,953nm,21.0s,baz=68,slow=35
GUMO **Guam** 29.76 325 LR LR 21 44 24.0
comp=Z,178nm,21.4s,baz=198,slow=33
MTN **Manton Dam** 30.06 264 P P 21 34 15.7 +3.7
baz=30,SNR=5.3
MTN **Manton Dam** 30.06 264 eP P 21 34 16.0 +4.0
comp=Z,33nm,1.3s
URZ **Urewera** 30.29 156 P P 21 34 13.5 -0.2
comp=Z,2.1nm,0.7s,baz=185,slow=4.4,SNR=3.0
SWI **Sorong** 32.02 286 P P 21 34 24.0 -5.3
baz=32,SNR=3.1
KNRA **Kununurra** 32.45 258 P P 21 34 32.0 -1.1
baz=32,SNR=13
RPZ **Rata Peaks** 33.44 168 LR LR 21 46 30.1
comp=Z,291nm,20.1s,baz=332,slow=33
WRKA **Warakurna** 34.62 242 P P 21 34 49.9 -2.1
baz=34,SNR=14
NLAI **Namlea** 35.30 280 P P 21 35 00.6 +2.7
comp=Z,50nm,1.8s,comp=Z,1μm
LBMI **Labuha** 35.64 285 P P 21 35 02.6 +1.7
comp=Z,96nm,1.8s,comp=Z,2μm
SANI **Sanana** 36.68 282 P P 21 35 11.9 +2.2
comp=Z,82nm,1.1s,comp=Z,1μm
FORT **Forrest** 36.88 233 P P 21 35 11.2 0.0
baz=37,SNR=11
FORT **Forrest** 36.88 233 eP P 21 35 10.1 -1.2
comp=Z,81nm,1.0s
BATI **Baumata** 37.49 268 P P 21 35 17.7 +1.0
comp=Z,39nm,1.1s,comp=Z,671nm
MMRI **Maumere** 39.05 270 P P 21 35 29.6 -0.2
comp=Z,76nm,1.2s,comp=Z,2μm
MMRI **Maumere** 39.05 270 eP P 21 35 29.7 -0.1
comp=Z,107nm,1.2s
KMSI **Cibinong** 39.36 285 P P 21 35 38.8 +6.4
comp=Z,291nm,1.1s
LUWI **Luwuk** 40.04 282 P P 21 35 39.5 +1.5
comp=Z,84nm,1.6s,comp=Z,2μm
LUWI **Luwuk** 40.04 282 eP P 21 35 38.3 +0.3
comp=Z,414nm,2.0s
APSI **Ampana** 41.16 281 P P 21 35 49.0 +1.7
comp=Z,68nm,1.5s,comp=Z,1μm
KAPI **Kappang** 42.06 275 P P 21 35 53.3 -1.4
comp=Z,10nm,1.0s,baz=293,slow=8.3,SNR=4.5
KAPI **Kappang** 42.06 275 eP P 21 35 55.9 +1.2
KAPI epP pP 21 36 01.3 -2.6
PCI **Palu** 42.91 281 P P 21 36 03.0 +1.4
comp=Z,101nm,1.1s,comp=Z,1μmcomp=Z,35μm
MPSI **Mapaga** 43.19 283 P P 21 36 12.0 +8.2
comp=Z,25nm,0.7s,comp=Z,596nm
MEEK **Meekatharra** 43.46 243 P P 21 36 06.2 +0.3
baz=43,SNR=4.7
MYLDM **Lahad Datu** 46.05 288 eP P 21 36 27.0 +0.3
comp=Z,218nm,1.6s
PPT **Papeete** 47.42 104 LR LR 21 56 28.6
comp=Z,142nm,18.3s,baz=236,slow=36
PPT2 **Papeete2** 47.42 104 eS S 21 43 38.6 +8.5
comp=Z,114nm,27.0s
PPT2 eLR LR 21 50 20.0
comp=Z,452nm,29.8s
KKM **Kota Kinabalu** 48.49 288 P P 21 36 45.7 -0.1
baz=48,SNR=9.7
KKM **Kota Kinabalu** 48.49 288 eP P 21 36 45.4 -0.4
comp=Z,95nm,1.3s
SBUM **Sibu** 51.14 282 eP P 21 37 06.3 +0.4
comp=Z,44nm,1.5s
MJAR **Matsushiro Arr** 52.37 336 P P 21 37 12.5 -2.2

comp=Z,2.0nm,0.8s,baz=167,slow=9.1,SNR=6.4
**KSM Kuching 52.72 280** P **P** **21 37 18.0 +0.4**
baz=53,SNR=7.3
**KSM Kuching 52.72 280** *e*P **P** **21 37 18.0 +0.4**
comp=Z,106nm,1.9s
**JNU Nakatsue 52.98 327** P **P** **21 37 17.4 -1.8**
comp=Z,11nm,0.8s,baz=208,slow=13,SNR=5.1
**LEM Lembang 53.65 270** P P 21 37 29.4 +4.7
comp=Z,391nm,1.0s
**CGJI Cibinong 55.57 270** P **P** **21 37 39.8 +1.3**
comp=Z,74nm,1.0s
**SSE Sheshan 57.29 318** *e*P **P** **21 37 51.2 +0.9**
SSE PMZ
comp=Z,21nm,0.8s
SSE PMZ
comp=Z,39nm,5.1s
SSE LN
comp=Z,230nm,18.1s
SSE LZ
comp=Z,220nm,16.6s
**DRV Dumont d'Urvil 57.39 190** S **S** **21 45 48.0 +3.0**
DRV L L 21 52 00.0
DRV R 21 54 00.0
**KUR Kuril'sk 57.50 348** *e*P **P** **21 37 48.6 -2.9**
**ASAJ Asahikawa 57.70 344** P **P** **21 37 52.4 -0.6**
comp=Z,12nm,0.9s,baz=198,slow=7.4,SNR=3.8
**DLV T Lat 57.72 292** *e*P **P** **21 37 53.8 -0.1**
comp=Z,81nm,1.6s
**KSRS Korea Array 57.85 328** P **P** **21 37 53.9 -0.3**
comp=Z,5.1nm,0.9s,baz=145,slow=6.6,SNR=9.7
**KSAR Wonju Array Be 57.86 328** P **P** **21 37 53.9 -0.4**
**KSAR Wonju Array Be 57.86 328** P **P** **21 37 53.9 -0.4**
**KS01 Wonju Array Si 57.88 328** *e*P **P** **21 37 53.5 -0.9**
**NJ2 Nanjing 59.43 318** *e*P **P** **21 38 05.0 -0.3**
NJ2 pP **pP** **21 38 14.8 0.0**
NJ2 sP **sP** **21 38 19.4 +0.9**
NJ2 S **S** **21 46 17.0 +4.4**
NJ2 sS **sS** **21 46 27.5 -0.8**
NJ2 PMZ
comp=Z,30nm,0.8s
NJ2 PMZ
comp=Z,230nm,7.6s
NJ2 LN
comp=Z,580nm,23.9s
NJ2 LE
comp=Z,780nm,24.0s
NJ2 LZ
comp=Z,720nm,24.3s
**USRK Ussuriysk Ar. 61.37 336** P **P** **21 38 18.5 +0.2**
comp=Z,12nm,0.9s,baz=152,slow=6.7,SNR=14
**BKNI Bangkinang 61.44 276** P **P** **21 38 22.1 +2.7**
comp=Z,94nm,1.2s,comp=Z,1μm
**BKNI Bangkinang 61.44 276** *e*P **P** **21 38 19.5 +0.1**
comp=Z,125nm,1.2s
**PPI Padang Panjang 61.90 275** P **P** **21 38 24.8 +2.3**
comp=Z,34nm,1.6s
**IPM Ipoh 62.45 281** *e*P **P** **21 38 26.2 0.0**
comp=Z,103nm,1.4s
**MDJ Mudanjiang 62.70 335** P **P** **21 38 27.0 -0.2**
MDJ pP **pP** **21 38 35.7 -1.1**
MDJ sP **sP** **21 38 40.0 -0.4**
MDJ PMZ
comp=Z,12nm,1.5s
MDJ PMZ
comp=Z,65nm,4.4s
**MNSI Mandailing Nat 62.97 277** P **P** **21 38 29.4 -0.3**
comp=Z,77nm,0.9s
**KULM Kulim 63.02 282** *e*P **P** **21 38 28.6 -1.4**
**CN2 Changchun 63.90 331** *e*P P 21 38 40.1 +4.9
CN2 *es*P sP 21 38 49.1 +0.6
CN2 *e*S **S** **21 47 13.8 +5.0**
CN2 PMZ
comp=Z,10.0nm,0.8s
CN2 PMZ
comp=Z,200nm,4.0s
CN2 LN
comp=Z,800nm,17.0s
CN2 LE
comp=Z,900nm,17.0s
CN2 LZ
comp=Z,1μm,19.0s
**PSI Prapat 64.07 279** *e*P **P** **21 38 37.6 +0.5**
PSI pmax pmax
comp=Z,55nm,1.3s
**PSI Prapat 64.07 279** P **P** **21 38 37.7 +0.5**
baz=64,SNR=7.4
**PSI Prapat 64.07 279** *e*P **P** **21 38 37.6 +0.5**
comp=Z,55nm,1.3s
**PETK Petropavlovsk- 64.08 357** P **P** **21 38 34.9 -1.3**
comp=Z,5.4nm,0.8s,baz=164,slow=6.0,SNR=4.9
PETK LR LR 22 05 50.0
comp=Z,86nm,19.0s,baz=199,slow=35
**TSI Tuntungan 64.58 279** P **P** **21 38 41.8 +1.5**
comp=Z,70nm,1.4s
**TRTT Trang 64.62 284** P **P** **21 38 41.8 +1.3**
comp=Z,39nm,1.6s,comp=Z,821nm
**SRIT Nakonsritamara 64.92 285** P **P** **21 38 43.9 +1.4**
comp=Z,111nm,1.3s,comp=Z,17μm
**CASY Casey 64.93 200** *e*P **P** **21 38 41.3 -0.3**
comp=Z,10nm,1.2s
**GSI Gunungsitoli 65.04 277** P **P** **21 38 45.3 +2.0**
comp=Z,83nm,1.0s
**GSI Gunungsitoli 65.04 277** *e*P **P** **21 38 43.5 +0.2**
**PATY Pattaya 65.04 290** P **P** **21 38 45.8 +2.6**
comp=Z,6.5nm,1.5s,comp=Z,830nm
**GYA Guiyang 65.31 306** *e*P **P** **21 38 46.0 +1.1**
GYA pP **pP** **21 38 56.7 +2.1**
GYA PP **PP** **21 41 12.3 +3.3**
GYA ScP 21 43 17.0
GYA S **S** **21 47 26.0 -1.1**
GYA SKS **SKSac** **21 48 35.5 -2.9**
GYA SS **SS** **21 51 40.9 +0.1**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,130nm,5.6s
GYA LN
comp=Z,530nm,18.9s
GYA LE
comp=Z,510nm,19.2s
GYA LZ
comp=Z,480nm,18.4s
**BJI Beijing 66.18 323** P **P** **21 38 49.0 -1.1**
BJI S **S** **21 47 39.0 +2.1**
BJI PMZ
comp=Z,11nm,1.7s
BJI LN
comp=Z,310nm,16.1s
**VNDA Vanda 66.38 180** P **P** **21 38 50.2 -0.6**
comp=Z,1.8nm,0.9s,baz=301,slow=4.8,SNR=9.1
VNDA LR LR 22 02 05.7
comp=Z,251nm,21.6s,baz=0.0,slow=31
**VNDA Vanda 66.38 180** *e*P **P** **21 38 51.7 +0.9**
VNDA pmax pmax
comp=Z,55nm,2.3s
**VNDA Vanda 66.38 180** *e*P **P** **21 38 51.7 +0.9**
comp=Z,55nm,2.3s
**UTTA Uttaradit 66.95 295** P **P** **21 38 57.7 +2.3**
comp=Z,3.2nm,1.0s
**UTHA Uthaitani 67.20 292** P P 21 39 01.0 +3.9
comp=Z,3.6nm,1.1s
**XAN Xi'an 67.37 314** P **P** **21 38 56.4 -1.5**
XAN sP **sP** **21 39 09.8 -1.4**
XAN PcP **PcP** **21 39 25.4 0.0**
XAN PP **PP** **21 41 25.0 -1.8**
XAN ScP 21 43 24.5
XAN S S 21 47 43.2 -8.5
XAN ScS **SKSac** **21 48 48.7 -4.9**
XAN SS **SS** **21 52 05.4 -7.0**
XAN PMZ
comp=Z,8.0nm,1.2s
XAN LN
comp=Z,480nm,15.9s
XAN LE
comp=Z,170nm,13.9s
XAN LZ
comp=Z,510nm,16.3s
**KMI Kunming 67.90 303** P **P** **21 39 02.4 +0.7**
KMI pP **pP** **21 39 10.1 -1.2**
KMI sP **sP** **21 39 14.9 -0.1**
KMI PP **PP** **21 41 36.8 +5.0**
KMI S **S** **21 47 56.8 -2.0**
KMI sS **sS** **21 48 12.1 -2.6**
KMI SS **SS** **21 52 14.1 -7.2**
KMI PMZ
comp=Z,14nm,1.3s
KMI PMZ
comp=Z,58nm,5.1s
KMI LN
comp=Z,270nm,17.7s
KMI LE
comp=Z,240nm,15.5s
KMI LZ
comp=Z,250nm,16.9s
**CRAI Chiangrai 68.00 297** P P 21 38 57.6 -4.5
**CM01 Chiang Mai Arr 68.60 295** *e*P **P** **21 39 05.7 -0.2**
**CMAR Chiang Mai Arr 68.63 295** P **P** **21 39 04.9 -1.2**
comp=Z,6.2nm,1.0s,baz=122,slow=4.3,SNR=23
**CHTO Chiang Mai 68.75 295** P **P** **21 39 07.4 +0.6**
comp=Z,47nm,2.0s
**CHTO Chiang Mai 68.75 295** *e*P **P** **21 39 06.9 +0.1**
CHTO pmax pmax
comp=Z,37nm,1.8s
**CHTO Chiang Mai 68.75 295** *e*P **P** **21 39 06.9 +0.1**
comp=Z,37nm,1.8s
**HHC Hu-ho-hao-te 69.45 321** *e*P **P** **21 39 13.6 +2.8**
HHC S **S** **21 48 17.9 +1.6**
HHC PMZ
comp=Z,15nm,0.6s
HHC PMZ
comp=Z,100nm,6.8s
HHC LN
comp=Z,190nm,12.4s
HHC LE
comp=Z,480nm,14.6s
HHC LZ
comp=Z,480nm,12.6s
**CD2 Chengdu 69.62 309** *e*P **P** **21 39 12.5 +0.5**
CD2 pP **pP** **21 39 23.4 +1.7**
CD2 sP **sP** **21 39 27.8 +2.4**
CD2 S **S** **21 48 19.2 +0.6**
CD2 sS **sS** **21 48 37.8 +3.2**
CD2 SKS **SKSac** **21 49 10.0 -0.8**
CD2 SS **SS** **21 52 48.7 +1.4**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
CD2 LN
comp=Z,520nm,13.7s
CD2 LE
comp=Z,330nm,14.2s
CD2 LZ
comp=Z,410nm,15.2s
**LZH Lanzhou 72.00 314** *e*P **P** **21 39 25.3 -1.2**
LZH pP **pP** **21 39 36.5 +0.2**
LZH sP **sP** **21 39 41.0 +1.1**
LZH *e*PP **PP** **21 42 07.5 +0.6**
LZH *e*S **S** **21 48 43.5 -2.8**
LZH sS **SKiKP** **21 49 02.0 +0.1**
LZH *e*SS **SS** **21 53 22.5 -1.3**
LZH PMZ
comp=Z,52nm,1.6s
LZH PMZ
comp=Z,140nm,5.8s
LZH LN
comp=Z,340nm,16.0s
LZH LE
comp=Z,470nm,15.6s
LZH LZ
comp=Z,570nm,19.3s
**SEY Seymchan 74.20 356** P **P** **21 39 38.0 -0.7**
comp=Z,4.8nm,0.8s,baz=162,slow=4.5,SNR=9.2
**SEY Seymchan 74.20 356**‖ *e*P **P** **21 39 39.0 +0.3**
**ULN Ulaanbaatar 76.14 325**‖ *i*P **P** **21 39 50.7 +0.2**
ULN pmax pmax
comp=Z,27nm,1.7s
**GTA Gaotai 76.37 315** ⇑P **P** **21 39 52.0 +0.1**
GTA pP **pP** **21 39 57.2 -4.5**
GTA PP **PP** **21 42 44.8 +0.8**
GTA S **S** **21 49 33.8 -1.5**
GTA SKS **SKSac** **21 49 56.2 -5.2**
GTA SS **SS** **21 54 30.0 -0.3**
GTA PMZ
comp=Z,11nm,1.6s
GTA PMZ
comp=Z,84nm,5.0s
GTA LN
comp=Z,200nm,17.1s
GTA LE
comp=Z,220nm,17.1s
GTA LZ
comp=Z,210nm,15.2s
**SONM Songino Array 76.50 325** P **P** **21 39 52.4 0.0**
comp=Z,6.4nm,0.9s,baz=140,slow=5.2,SNR=29
SONM LR LR 22 13 05.9
comp=Z,99nm,20.6s,baz=116,slow=35
**SONA1 Songino Array 76.50 325** *e*P **P** **21 39 52.0 -0.4**
**YAK Yakutsk 77.14 345** *e*P **P** **21 39 53.8 -1.7**
YAK *e* 21 42 47.7
YAK *e*SSS SSS 21 57 58.2
YAK pmax pmax
comp=Z,35nm,0.9s
YAK pmax pmax
comp=E,2.0nm,0.9s
YAK pmax pmax
comp=N,6.0nm,1.3s
YAK pmax pmax
comp=Z,66nm,13.4s
YAK pmax pmax
comp=N,8.0nm,5.3s
YAK pmax pmax
comp=E,34nm,12.4s
**YAK Yakutsk 77.14 345** *e*P **P** **21 39 54.9 -0.6**
comp=E,42nm,0.9s
**QSPA South Pole Qui 78.87 180** *e*P **P** **21 40 06.2 +0.7**
comp=E,209nm,2.8s
**BOD Bodaibo 79.01 336** *e*P **P** **21 40 04.2 -1.8**
BOD pmax pmax
comp=Z,7.0nm,1.4s
**BILL Bilibino 79.03 2**⇑ *e*P **P** **21 40 06.6 +0.7**
BILL *e* 21 40 13.6
BILL *e* 21 43 00.4
BILL pmax pmax
comp=Z,25nm,1.1s
**LSA Lhasa 79.16 303** *e*P **P** **21 40 07.5 -0.6**
LSA pmax pmax
comp=Z,2.0nm,0.4s
**LSA Lhasa 79.16 303** *e*P **P** **21 40 07.5 -0.6**
comp=Z,2.2nm,0.4s
**SVW2 Sparrevohn 79.44 20** *e*P **P** **21 40 09.6 +1.2**
comp=Z,48nm,1.4s
**ZAK Zakamensk 79.59 326** *e*P **P** **21 40 07.7 -1.9**
ZAK pmax pmax
comp=Z,8.0nm,1.6s
**IRK Irkutsk 80.06 328** *e*P **P** **21 40 10.4 -1.5**
IRK pmax pmax
comp=Z,24nm,2.7s
**TLY Talaya 80.09 328** P **P** **21 40 11.2 -0.9**
comp=Z,2.4nm,0.7s,baz=139,slow=5.1,SNR=7.5
**TLY Talaya 80.09 328** *e*P **P** **21 40 11.7 -0.4**
TLY pmax pmax
comp=Z,12nm,1.5s
**TLY Talaya 80.09 328** *e*P **P** **21 40 11.7 -0.4**
comp=Z,6.1nm,1.0s
**CAST Castle Rocks 82.25 19** *e*P **P** **21 40 23.1 -0.3**
comp=Z,17nm,0.9s
**MAW Mawson 83.19 202** P **P** **21 40 27.7 -0.5**
comp=Z,0.6nm,0.4s,baz=104,slow=6.7,SNR=5.9
MAW LR LR 22 11 30.2
comp=Z,101nm,21.9s,baz=62,slow=31
**MAW Mawson 83.19 202** *e*P **P** **21 40 28.9 +0.7**
MAW *e*PP **pP** **21 40 37.5 -0.5**
**MAW Mawson 83.19 202** P **P** **21 40 30.2 +2.1**
baz=83,SNR=4.5
**MAW Mawson 83.19 202** *e*P **P** **21 40 28.9 +0.7**
MAW *e*pP **pP** **21 40 37.5 -0.5**
**MCK McKinley 83.49 20** *e*P **P** **21 40 29.6 -0.2**
MCK pmax pmax
comp=Z,18nm,1.0s
**MCK McKinley 83.49 20** *e*P **P** **21 40 29.6 -0.2**
comp=Z,18nm,1.0s
**MLY Manley 83.80 18** *e*P **P** **21 40 31.6 +0.2**
**WRH Wood River Hil 84.26 20** *e*P **P** **21 40 33.3 -0.4**
comp=Z,12nm,0.9s
**CCB Clear Creek Bu 84.47 19** *e*P **P** **21 40 34.1 -0.5**
**COLA College 84.60 19**‖ *e*P **P** **21 40 34.9 -0.4**
COLA pmax pmax
comp=Z,14nm,0.8s
**COLA College 84.60 19** *e*P **P** **21 40 35.5 +0.1**
**ILAR Eielson Array 84.85 20** P **P** **21 40 35.6 -1.0**
comp=Z,1.5nm,0.8s,baz=248,slow=5.6,SNR=12
ILAR LR LR 22 11 38.9
comp=Z,152nm,21.6s,baz=256,slow=31
**IL1 Eielson Array 84.85 20** *e*P **P** **21 40 35.5 -1.1**
**COLD Coldfoot 85.47 17** *e*P **P** **21 40 41.8 +2.2**
**LRV Little Rabbit 86.42 52** *e*PP PP 21 44 06.5 -0.4
**WMQ Urumqi 86.45 316** *e*P **P** **21 40 46.0 +0.9**
WMQ PP **PP** **21 44 10.0 +3.0**
WMQ S **S** **21 51 18.0 -1.3**
WMQ SS **SS** **21 57 02.0 +1.8**
WMQ PMZ
comp=Z,11nm,1.0s
WMQ PMZ
comp=Z,160nm,7.0s
WMQ LN
comp=Z,110nm,16.0s
WMQ LE
comp=Z,100nm,16.0s
WMQ LZ
comp=Z,130nm,17.0s
**N02D Trinity Center 86.50 47** P **P** **21 40 46.7 +1.2**
baz=87
**M02C Callahan 86.52 47** P **P** **21 40 46.7 +1.2**
baz=87
**YBH Yreka Blue Hor 86.73 47** *e*P **P** **21 40 49.1 +2.5**
YBH pmax pmax
comp=Z,43nm,2.1s
**YBH Yreka Blue Hor 86.73 47** *e*P **P** **21 40 49.1 +2.5**
comp=Z,43nm,2.1s
**EGAK Eagle 86.81 21** *e*P **P** **21 40 46.6 +0.2**
comp=Z,42nm,1.1s
**O03D Paynes Creek 86.95 48** P **P** **21 40 47.9 +0.2**
baz=87
**CMB Columbia Colle 87.36 51** *e*P **P** **21 40 50.0 +0.3**
**CMB Columbia Colle 87.36 51** *e*P **P** **21 40 50.0 +0.3**
**ISA Isabella 88.20 53** P **P** **21 40 54.4 +0.7**
baz=88
**J05D Fort Rock, OR 88.23 45** P **P** **21 40 54.8 +0.9**
baz=88
**EDW2 Edwards Air Fo 88.38 54** P **P** **21 40 55.0 +0.3**
baz=88
**MOD Modoc 88.50 47** *e*P **P** **21 40 55.8 +0.6**
**CWC Cottonwood Cre 88.70 53** P **P** **21 40 56.7 +0.4**
baz=89
**LRMC Laurel Mountai 88.77 54** P **P** **21 40 57.1 +0.5**
baz=89
**NV01 Mina Array Sit 89.04 51** *e*P **P** **21 40 58.0 +0.1**
**NVAR Mina Array Bea 89.04 51** P **P** **21 40 58.5 +0.6**
comp=Z,2.3nm,0.8s,baz=240,slow=7.6,SNR=12
NVAR LR LR 22 20 22.5
comp=Z,159nm,18.2s,baz=270,slow=35
**DAC Darwin (Calif) 89.04 53** *e*P **P** **21 40 58.4 +0.5**
**DAC Darwin (Calif) 89.04 53** *e*P **P** **21 40 58.4 +0.5**
**MPMC Manual Prospec 89.07 53** P **P** **21 40 58.3 +0.2**
baz=89
**MONP Monument Peak 89.16 56** P **P** **21 40 59.0 +0.4**
baz=89
**I07A Izee 89.66 45** *e*P **P** **21 41 01.3 +0.8**
comp=Z,46nm,2.1s
**BELC Belle Mtn. Jos 89.76 55** P **P** **21 41 02.2 +0.9**
baz=90
**LTY Liberty 89.76 42** *e*PP PP 21 44 34.9 +1.4
**WVOR Wild Horse Val 89.83 47** *e*P **P** **21 41 02.3 +0.9**
WVOR pmax pmax
comp=Z,39nm,1.8s
**WVOR Wild Horse Val 89.83 47** *e*P **P** **21 41 02.3 +0.9**
comp=Z,39nm,1.8s
**BC3 Big Chuckawall 90.12 56** P **P** **21 41 01.3 -1.7**
baz=90
**J08A Circle Bar Ran 90.19 46** *e*P **P** **21 41 03.9 +0.9**
comp=Z,15nm,1.3s
**GMRC Granite Mounta 90.22 55** P **P** **21 41 03.0 -0.3**
baz=90
**TPNV Topopah Spring 90.25 52** *e*P **P** **21 41 04.3 +0.7**
TPNV pmax pmax
comp=Z,6.0nm,0.9s
**TPNV Topopah Spring 90.25 52** P **P** **21 41 03.8 +0.3**
baz=90
**TPNV Topopah Spring 90.25 52** *e*P **P** **21 41 04.3 +0.7**
comp=Z,6.1nm,0.9s
**BMN Battle Mountai 90.36 49** *e*P **P** **21 41 04.9 +1.0**
BMN *e*PP **pP** **21 41 13.9 0.0**
**BMN Battle Mountai 90.36 49** *e*P **P** **21 41 04.9 +1.0**
BMN *e*pP **pP** **21 41 13.9 0.0**
**IRM Iron Mountain 90.48 55** P **P** **21 41 05.1 +0.6**
baz=91
**MK01 Makanchi Array 90.95 317** *e*P **P** **21 41 04.8 -1.5**
**MKAR Makanchi Array 90.96 317** P **P** **21 41 05.3 -1.1**
comp=Z,0.8nm,0.6s,baz=106,slow=5.1,SNR=7.8
**MKAR Makanchi Array 90.96 317** *i* P **P** **21 41 08.5 +2.1**
MKAR pmax pmax
comp=Z,1.0nm,0.8s
**MKAR Makanchi Array 90.96 317** *e*P **P** **21 41 06.1 -0.3**
**SHPR Sheep Range 91.00 53** *e*P **P** **21 41 07.9 +0.9**
**R11A Troy Canyon, C 91.09 51** P **P** **21 41 07.5 +0.1**
baz=91
**R11A Troy Canyon, C 91.09 51** *e*P **P** **21 41 08.0 +0.5**
**ZALV Zalesovo Beam 91.39 325** LR LR 22 19 56.9
comp=Z,71nm,21.8s,baz=70,slow=34
**F10A Beach Ranch, E 91.71 44** *e*P **P** **21 41 10.4 +0.4**
**ELK Elko 91.90 49** *e*P **P** **21 41 12.0 +0.8**
**ELK Elko 91.90 49** *e*P **P** **21 41 12.0 +0.8**
**MFID Camas Ranch 92.07 46** *e*P **P** **21 41 12.6 +0.8**
**CCUT Cedar City 92.63 52** *e*P **P** **21 41 16.4 +1.8**
**HLID Hailey 93.11 46** P **P** **21 41 17.6 +0.9**
baz=93
**KSH Kashi 93.82 309** *e*P **P** **21 41 21.7 +1.8**
KSH *e*pP **pP** **21 41 32.4 +2.5**
KSH SKS **SKSac** **21 51 52.2 -0.5**
KSH S **S** **21 52 26.1 -1.7**
KSH sS **sS** **21 52 44.6 +0.3**
KSH PMZ
comp=Z,140nm,4.8s
KSH LN
comp=Z,110nm,6.5s
KSH LE
comp=Z,140nm,8.8s
KSH LZ
comp=Z,200nm,14.9s
**BOZ Bozeman (W) 95.47 45** P **P** **21 41 28.2 +0.8**
baz=96
**SNAA Sanae 96.75 185** P **P** **21 41 32.5 -0.1**
**SNAA Sanae 96.75 185** P **P** **21 41 32.0 -0.6**
comp=Z,0.4nm,0.8s,baz=124,slow=5.4,SNR=3.2
**SNAA Sanae 96.75 185**‖ *e*P **P** **21 41 32.2 -0.4**
SNAA pmax pmax
comp=Z,1.0nm,1.2s
**YKA Yellowknife Ar 96.83 28** P **P** **21 41 33.3 +0.4**
comp=Z,2.1nm,0.8s,baz=250,slow=4.9,SNR=4.3
**TXAR Lajitas Array 99.26 62** P **Pdif** **21 41 46.5 +1.7**
comp=Z,0.4nm,0.9s,baz=235,slow=4.4,SNR=3.9
**BVAR Borovoye Array 99.65 322** LR LR 22 25 34.7
comp=Z,165nm,21.9s,baz=74,slow=35
**OBN Obninsk 118.84 328** *e*PKIKP **PKPdf** **21 46 52.4 +1.9**
OBN pmax pmax
comp=Z,3.0nm,0.9s
**BOSA Boshof 122.36 226** PKP **PKPdf** **21 46 57.5 -0.8**
comp=Z,4.3nm,0.8s,baz=143,slow=4.7,SNR=6.6
**LPAZ La Paz 123.58 118** PKP **PKPdf** **21 47 01.4 -0.1**
comp=Z,1.8nm,0.8s,baz=21,slow=5.7,SNR=5.0
**CPUP Villa Florida 126.76 135** PKP **PKPdf** **21 47 06.2 -0.5**
comp=Z,2.8nm,0.8s,baz=206,slow=8.4,SNR=4.2
**GERES GERESS Array B 133.99 331** PKP **PKPdf** **21 47 19.9 +0.2**
comp=Z,0.3nm,0.6s,baz=256,slow=4.0,SNR=3.5
**GERES GERESS Array B 133.99 331** PKIKP **PKPdf** **21 47 20.0 +0.2**
**BDFB Brasilia 140.25 131** PKP **PKPdf** **21 47 32.3 0.0**
comp=Z,2.7nm,0.8s,baz=293,slow=7.7,SNR=3.0
**KEST Kesra 145.05 319** PKP **PKPbc** **21 47 39.1 -0.5**
comp=Z,4.0nm,0.9s,baz=39,slow=7.4,SNR=4.2
**ESDC Sonseca Array 148.89 338** PKPbc **PKPbc** **21 47 50.6 +0.1**
comp=Z,0.4nm,0.7s,baz=286,slow=26,SNR=5.4
**TORD Torodi Ar. Bea 160.47 278** PKP **PKPdf** **21 48 02.2 -0.8**
comp=Z,1.0nm,1.0s,baz=56,slow=1.5,SNR=5.6
TORD PKPab **PKPab** **21 48 44.5 +0.3**
comp=Z,2.4nm,1.0s,baz=99,slow=2.9,SNR=7.8

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*NIED* ***02*** *21:37:00.37˚.10N×138˚.40E,h17km,Mw4.3 Best double couple: M0 3.74000×10^15 NP1:ϕ=106.00000°,δ=35.00000°, λ=101.00000°. NP2:ϕ=273.00000°,δ=56.00000°,λ=82.00000°.*
*BJI* ***02*** *21:37:48.7,36˚.90N×138˚.42E,h5km,mb4.4/25,mB4.7/21, Ms4.2/24,Ms7 4.0/24*
*ISCJB* ***02*** *21:37:53.0±0.3,37˚.15N±0˚.02×138˚.35E±0˚.02,h24km±2km, mb4.5/63,MS4.0/3,Error ellipse: s-maj=3.7km s-min=3.2km az=171.6*

*JMA **02** 21:37:53.6±0.1, 37.14N×138.42E, h23km±1km, M4.5 Broadband fault plane solution: P waves. NP1: φs251.00000°, δ61.00000°, λ64.00000°. NP2: φs117.00000°, δ38.00000°, λ128.00000°. Principal axes: T Plg64.0000°, Azm116.0000°; N Plg23.0000°, Azm265.0000°; P Plg12.0000°, Azm0.0000°;*

*JMA Felt IV J1.*

*IDC **02** 21:37:53.0±0.7, 37.16N×138.29E, h22km±4km, mb4.1/21, mb1 4.2/25, mb1mx4.1/43, mbtmp4.2/25, ML2.9/3, MS3.6/3, Ms1 3.6/3, ms1mx3.1/48 Error ellipse: s-maj=14.4km s-min=7.5km az=90.0*

*MOS **02** 21:37:53.6±1.2, 37.10N×138.31E, h33km, mb4.7/30, Error ellipse: s-maj=9.4km s-min=5.9km az=98.0*

*NEIC **02** 21:37:54.1±1.0, 37.10N×138.21E, h24km±8km, mb4.8/28, MW4.3(NIED), Error ellipse: s-maj=7.8km s-min=6.1km az=161.0*

*NEIC Felt at Agui, Kashiwazaki, Muika and Tsubame. Recorded [4 JMA] in Niigata; [2 JMA] in Gumma, Nagano and Yamagata; [1 JMA] in Fukushima and Ishikawa. Also recorded [2 JMA] on Sadoga-shima.*

**ISC 02 21:37:53.0**±0.4**, 37.16N**±0.02**×138.39E**±0.02**, h18**km±1km**, h18**km**:pP-P, n222,** σ1.33/268**, mb4.7**/65**, MS4.0**/3**, 27C-22D,**
**Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JJN | Nakama | 0.19 | 253 | ⇑P | Pg | 21 37 58.9 | +1.2 |
| JJN | | | | S | Sg | 21 38 02.9 | +1.9 |
| JIZZ | Izumozaki | 0.45 | 35 | ⇓P | Pb | 21 38 03.1 | +0.7 |
| JHK | Hiroka | 0.51 | 80 | ⇑P | Pg | 21 38 03.0 | -0.3 |
| JHK | | | | S | Sg | 21 38 09.9 | -0.3 |
| JGK | Kuni | 0.63 | 161 | ⇓P | Pg | 21 38 05.6 | +0.1 |
| JGK | | | | S | Sg | 21 38 14.5 | +0.6 |
| MAJO | Matsushiro | 0.63 | 193 | d iP | Pb | 21 38 05.3 | -0.2 |
| MAJO | Matsushiro | 0.63 | 193 | ePg | Pb | 21 38 05.2 | -0.3 |
| MAT | Matsushiro | 0.63 | 193 | P | Pb | 21 38 05.3 | -0.2 |
| MAT | | | | S | Sb | 21 38 13.7 | -0.2 |
| MAT | Matsushiro | 0.63 | 193 | P | Pb | 21 38 05.3 | -0.2 |
| MAT | | | | S | Sb | 21 38 13.8 | -0.2 |
| MJAR | Matsushiro Arr | 0.63 | 193 | Pg | Pb | 21 38 05.3 | -0.2 |
| | 910nm,0.3s,baz=8.9,slow=17,SNR=4812 | | | | | | |
| MJAR | | | | Lg | Lg | 21 38 14.5 | |
| | 685nm,0.3s,baz=13,slow=28,SNR=26 | | | | | | |
| JKT | Katashina | 0.79 | 119 | ⇓P | Pb | 21 38 07.8 | -0.5 |
| JKT | | | | S | Sb | 21 38 18.0 | -0.7 |
| JSZ | Suzu | 0.87 | 290 | ⇓P | Pg | 21 38 09.8 | -0.1 |
| JSZ | | | | S | Sn | 21 38 22.4 | 0.0 |
| JSD | Sado | 0.88 | 353 | ⇓P | Pb | 21 38 09.7 | -0.1 |
| JSD | | | | S | Sg | 21 38 22.1 | +0.3 |
| JNS | Sasagawa | 0.99 | 48 | ⇓P | Pb | 21 38 11.1 | -0.5 |
| JNS | | | | S | Sb | 21 38 24.3 | 0.0 |
| JTT | Ttatey | 1.01 | 237 | ⇓P | Pg | 21 38 12.8 | +0.2 |
| JFY | Yanaizu | 1.08 | 76 | ⇑P | Pb | 21 38 12.5 | -0.6 |
| JFY | | | | S | Sb | 21 38 26.3 | -0.6 |
| JAG | Ashikaga | 1.13 | 130 | P | Pn | 21 38 13.4 | -0.5 |
| JAG | | | | S | Sb | 21 38 28.1 | -0.1 |
| JHJ | Hachijo jima 2 | 4.19 | 164 | Pn | Pn | 21 38 58.7 | +2.7 |
| | 62nm,0.3s,baz=96,slow=20,SNR=11 | | | | | | |
| ERM | Erimo | 6.09 | 36 | ⇑eP | Pn | 21 39 22.7 | +0.7 |
| JNU | Nakatsue | 7.35 | 239 | Pn | Pn | 21 39 38.8 | -0.7 |
| | 0.1nm,0.3s,baz=90,slow=1.0,SNR=1.8 | | | | | | |
| JNU | | | | LR | LR | 21 42 50.3 | |
| | comp=Z,572nm,19.4s,baz=358,slow=41 | | | | | | |
| ASAJ | Asahikawa | 7.65 | 23 | Pn | Pn | 21 39 44.5 | +1.0 |
| | baz=159,slow=15 | | | | | | |
| VLA | Vladivostok | 7.76 | 322 | ⇓eP | Pn | 21 39 46.2 | +1.2 |
| VLA | | | | eS | Sn | 21 41 16.3 | +4.0 |
| KSRS | Korea Array | 8.35 | 275 | Pn | Pn | 21 39 53.5 | +0.5 |
| | 1.3nm,0.3s,baz=88,slow=14,SNR=16 | | | | | | |
| KSRS | | | | LR | LR | 21 43 00.4 | |
| | comp=Z,370nm,19.1s,baz=86,slow=37 | | | | | | |
| KSRS | Korea Array | 8.35 | 275 | P | Pn | 21 39 53.5 | +0.5 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,370nm,19.1s | | | | | | |
| KSAR | Wonju Array Be | 8.38 | 275 | P | Pn | 21 39 53.5 | +0.1 |
| KSAR | Wonju Array Be | 8.38 | 275 | Pn | Pn | 21 39 53.5 | +0.1 |
| USRK | Ussuriysk Ar. | 8.55 | 327 | Pn | Pn | 21 39 55.1 | -0.7 |
| | comp=Z,0.7nm,0.3s,baz=146,slow=13,SNR=10 | | | | | | |
| USRK | | | | Sn | Sn | 21 41 28.2 | -3.5 |
| | comp=Z,0.3nm,0.3s,baz=143,slow=27,SNR=3.2 | | | | | | |
| YUK | Yuzh-Kuril'sk | 8.91 | 37 | eP | Pn | 21 40 01.3 | +0.6 |
| YUK | | | | iS | Sn | 21 41 40.0 | -0.6 |
| YUK | | | | pmax | pmax | | |
| | comp=N,16nm,1.0s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,173nm,3.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,438nm,3.1s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=N,317nm,15.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,381nm,15.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 10.31 | 17 | ⇑iP | Pn | 21 40 23.0 | +3.1 |
| YSS | | | | eS | Sn | 21 42 20.7 | +5.8 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,700nm,14.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,600nm,14.0s | | | | | | |
| HABR | Khabarovsk | 11.57 | 349 | eP | Pn | 21 40 35.0 | -2.1 |
| HABR | | | | eS | Sn | 21 42 44.7 | -1.0 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,20nm,1.5s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,436nm,15.0s | | | | | | |
| CN2 | Changchun | 11.87 | 308 | eP | Pn | 21 40 44.3 | +3.0 |
| CN2 | | | | esP | | 21 40 51.3 | |
| CN2 | | | | eS | Sn | 21 42 56.7 | +3.5 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,100nm,3.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,200nm,11.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,300nm,11.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,600nm,13.0s | | | | | | |
| KLR | Kul'dur | 12.99 | 340 | eP | P | 21 41 05.0 | -2.0 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,45nm,1.6s | | | | | | |
| NJ2 | Nanjing | 16.86 | 258 | eP | Pn | 21 41 48.1 | 0.0 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.6s | | | | | | |
| BJI | Beijing | 17.59 | 286 | P | Pn | 21 41 56.7 | -0.4 |
| BJI | | | | S | Sn | 21 45 12.2 | -0.4 |
| BJI | | | | PMZ | | | |
| | comp=Z,12nm,1.6s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,140nm,12.6s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,230nm,11.6s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,100nm,16.4s | | | | | | |
| PETK | Petropavlovsk- | 20.87 | 34 | P | Pn | 21 42 35.2 | -1.1 |
| | comp=Z,4.5nm,0.6s,baz=209,slow=8.8,SNR=8.6 | | | | | | |
| PETK | Petropavlovsk- | 20.87 | 34 | P | Pn | 21 42 35.3 | -1.1 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| HHC | Hu-ho-hao-te | 21.14 | 288 | eP | P | 21 42 38.2 | +1.2 |
| HHC | | | | PP | PnPn | 21 43 00.9 | +4.7 |
| HHC | | | | S | S | 21 46 26.8 | -4.6 |
| HHC | | | | PMZ | | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,64nm,3.8s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,130nm,11.1s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,280nm,11.7s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,220nm,11.1s | | | | | | |
| ULN | Ulaanbaatar | 25.29 | 305 | ⇓eP | P | 21 43 18.6 | +0.2 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| YAK | Yakutsk | 25.48 | 350 | eP | P | 21 43 18.6 | -1.2 |
| YAK | | | | e | | 21 44 14.1 | |
| YAK | | | | e | | 21 46 50.7 | |
| YAK | | | | eS | S | 21 47 43.5 | -2.4 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,3.0nm,1.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,3.0nm,1.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,98nm,3.4s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,145nm,5.7s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,99nm,3.1s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,130nm,13.4s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,75nm,12.3s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,408nm,17.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,135nm,12.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,210nm,14.0s | | | | | | |
| YAK | Yakutsk | 25.48 | 350 | eP | P | 21 43 19.7 | -0.1 |
| | comp=N,11nm,0.7s | | | | | | |
| SONM | Songino Array | 25.71 | 305 | P | P | 21 43 21.0 | -1.2 |
| | comp=N,1.9nm,0.8s,baz=104,slow=8.3,SNR=6.2 | | | | | | |
| SONM | | | | PcP | PcP | 21 46 51.5 | -0.5 |
| | comp=N,0.6nm,0.7s,baz=120,slow=2.1,SNR=3.8 | | | | | | |
| SONM | Songino Array | 25.71 | 305 | P | P | 21 43 21.0 | -1.2 |
| SONM | | | | | | 21 46 51.5 | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| SEY | Seymchan | 27.20 | 14 | P | P | 21 43 36.1 | +0.8 |
| | comp=Z,2.6nm,0.7s,baz=191,slow=8.8,SNR=7.0 | | | | | | |
| LZH | Lanzhou | 27.66 | 278 | eP | P | 21 43 39.0 | -0.9 |
| LZH | | | | pP | pP | 21 43 44.5 | -0.9 |
| LZH | | | | sP | sP | 21 43 47.8 | +0.1 |
| LZH | | | | ePP | PnPn | 21 44 27.0 | +1.5 |
| LZH | | | | eS | S | 21 48 17.0 | -4.2 |
| LZH | | | | PMZ | | | |
| | comp=Z,25nm,1.2s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,100nm,4.6s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,420nm,12.7s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,490nm,13.0s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,670nm,15.6s | | | | | | |
| CD2 | Chengdu | 29.26 | 268 | eP | P | 21 43 52.6 | -1.5 |
| CD2 | | | | pP | pP | 21 43 58.2 | -1.4 |
| CD2 | | | | sP | sP | 21 44 00.7 | -1.1 |
| CD2 | | | | S | S | 21 48 44.1 | -2.1 |
| CD2 | | | | sS | sS | 21 48 53.8 | -1.4 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| QIZ | Qiongzhong | 30.81 | 242 | P | P | 21 44 09.4 | +1.5 |
| QIZ | | | | S | S | 21 49 11.9 | +1.3 |
| QIZ | | | | LZ | | | |
| | comp=Z,440nm,3.9s | | | | | | |
| KMI | Kunming | 32.60 | 259 | P | P | 21 44 24.3 | +0.5 |
| KMI | | | | pP | pP | 21 44 28.9 | -0.4 |
| KMI | | | | sP | sP | 21 44 31.6 | 0.0 |
| KMI | | | | PMZ | | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,60nm,4.3s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,220nm,16.3s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,250nm,16.3s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,190nm,13.3s | | | | | | |
| WMQ | Urumqi | 38.62 | 296 | eP | P | 21 45 16.0 | +0.9 |
| CMAR | Chiang Mai Arr | 39.21 | 253 | P | P | 21 45 19.1 | -1.1 |
| | comp=Z,0.7nm,0.7s,baz=47,slow=5.9,SNR=6.0 | | | | | | |
| CMAR | | | | PcP | PcP | 21 47 29.6 | +0.3 |
| | comp=Z,1.0nm,0.9s,baz=1.8,slow=1.9,SNR=5.0 | | | | | | |
| CMAR | Chiang Mai Arr | 39.21 | 253 | P | P | 21 45 19.1 | -1.1 |
| CMAR | | | | | | 21 47 29.6 | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| ZAA0 | Zalesovo Array | 40.04 | 312 | ePcP | PcP | 21 47 31.1 | -0.3 |
| ZALV | Zalesovo Beam | 40.04 | 312 | P | P | 21 45 25.6 | -1.2 |
| | comp=Z,0.7nm,0.6s,baz=94,slow=6.4,SNR=3.8 | | | | | | |
| ZALV | | | | PcP | PcP | 21 47 31.4 | +0.1 |
| | comp=Z,3.0nm,0.7s,baz=105,slow=2.3,SNR=13 | | | | | | |
| ZALV | | | | pPcP | | 21 47 38.1 | |
| | comp=Z,4.0nm,0.8s,baz=86,slow=2.8,SNR=11 | | | | | | |
| ZALV | Zalesovo Beam | 40.04 | 312 | P | P | 21 45 25.6 | -1.2 |
| ZALV | | | | | | 21 47 31.5 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| MK01 | Makanchi Array | 41.99 | 302 | ePcP | PcP | 21 47 38.2 | +0.3 |
| MKAR | Makanchi Array | 42.00 | 302 | P | P | 21 45 42.0 | -1.0 |
| | comp=Z,0.7nm,0.6s,baz=96,slow=9.9,SNR=5.2 | | | | | | |
| MKAR | | | | PcP | PcP | 21 47 38.1 | +0.2 |
| | comp=Z,0.3nm,0.3s,baz=69,slow=6.6,SNR=4.9 | | | | | | |
| MKAR | | | | pPcP | | 21 47 44.4 | |
| | comp=Z,1.7nm,0.7s,baz=72,slow=4.0,SNR=7.7 | | | | | | |
| MKAR | Makanchi Array | 42.00 | 302 | c eP | P | 21 45 42.7 | -0.3 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| TAPN | Taplejung | 43.52 | 272 | eP | P | 21 45 56.0 | +0.1 |
| | comp=Z,7.0nm,0.7s | | | | | | |
| KURK | Kurchatov | 43.95 | 308 | P | P | 21 45 57.3 | -1.4 |
| KURK | | | | | | 21 47 44.4 | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| KURK | Kurchatov | 43.95 | 308 | eP | P | 21 45 59.5 | +0.8 |
| | comp=Z,7.2nm,0.8s | | | | | | |
| KURK | | | | PcP | PcP | 21 47 44.4 | 0.0 |
| KURK | | | | pPcP | | 21 47 51.1 | |
| ODAN | Odare | 43.99 | 272 | eP | P | 21 46 00.1 | +0.5 |
| | comp=Z,4.1nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 44.01 | 308 | P | P | 21 45 57.3 | -1.9 |
| | comp=Z,2.0nm,0.7s,baz=84,slow=8.1,SNR=16 | | | | | | |
| KURBB | | | | PcP | PcP | 21 47 44.4 | -0.2 |
| | comp=Z,1.0nm,0.9s,baz=87,slow=3.6,SNR=6.8 | | | | | | |
| KURBB | | | | pPcP | | 21 47 51.1 | |
| | comp=Z,1.5nm,0.8s,baz=88,slow=3.3,SNR=7.5 | | | | | | |
| RAMN | Ramite | 44.58 | 272 | eP | P | 21 46 04.8 | +0.4 |
| | comp=Z,11nm,0.9s | | | | | | |
| GUN | Gumba | 44.73 | 274 | eP | P | 21 46 06.3 | +0.6 |
| | comp=Z,16nm,0.8s | | | | | | |
| KKN | Kakani | 45.26 | 274 | eP | P | 21 46 10.0 | +0.2 |
| | comp=Z,8.5nm,0.8s | | | | | | |
| PKIN | Phulchoki | 45.26 | 274 | eP | P | 21 46 10.5 | +0.7 |
| | comp=Z,6.9nm,0.9s | | | | | | |
| DMN | Daman | 45.48 | 274 | eP | P | 21 46 11.7 | +0.1 |
| | comp=Z,2.7nm,0.4s | | | | | | |
| GKN | Gorkha | 45.68 | 275 | eP | P | 21 46 13.3 | +0.3 |
| | comp=Z,17nm,0.9s | | | | | | |
| KOLN | Koldanda | 46.61 | 275 | eP | P | 21 46 20.8 | +0.4 |
| | comp=Z,7.7nm,0.8s | | | | | | |
| TARA | Tarawa | 47.77 | 130 | ePP | PP | 21 48 17.5 | -3.8 |
| KSH | Kashi | 48.14 | 293 | eP | P | 21 46 35.7 | +3.7 |
| KSH | | | | esP | sP | 21 46 44.9 | +4.9 |
| KSH | | | | eScP | ScP | 21 51 56.0 | +3.0 |
| KSH | | | | S | S | 21 53 32.4 | +2.2 |
| KSH | | | | PMZ | | | |
| | comp=Z,89nm,4.2s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,110nm,5.1s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,120nm,8.2s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,140nm,6.0s | | | | | | |
| AAK | Ala-Archa | 48.29 | 297 | PcP | PcP | 21 48 00.1 | +0.1 |
| | comp=Z,0.6nm,0.4s,baz=160,slow=6.3,SNR=3.3 | | | | | | |
| AAK | | | | pPcP | | 21 48 06.2 | |
| | comp=Z,0.8nm,0.3s,baz=50,slow=4.6,SNR=6.8 | | | | | | |
| KDAK | Kodiak Island | 48.62 | 42 | P | P | 21 46 34.3 | -1.0 |
| | comp=Z,9.7nm,0.8s,baz=255,slow=6.1,SNR=8.2 | | | | | | |
| KDAK | Kodiak Island | 48.62 | 42 | iP | P | 21 46 35.9 | +0.6 |
| EKS2 | Erkin-Say | 48.79 | 298 | ePcP | PcP | 21 48 02.7 | +1.0 |
| ILAR | Eielson Array | 50.68 | 32 | P | P | 21 46 49.9 | -1.1 |
| | comp=Z,2.2nm,0.9s,baz=280,slow=5.9,SNR=16 | | | | | | |
| ILAR | Eielson Array | 50.68 | 32 | P | P | 21 46 49.9 | -1.1 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| SVE | Sverdlovsk | 53.44 | 318 | ⇑iP | P | 21 47 12.4 | +0.8 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=Z,254nm,18.0s | | | | | | |
| ARU | Arti | 54.65 | 318 | c iP | P | 21 47 20.3 | -0.1 |
| ARU | | | | S | S | 21 55 01.5 | +2.2 |
| ARU | | | | SS | SS | 21 58 39.8 | -1.9 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,11nm,1.7s | | | | | | |
| ARU | Arti | 54.65 | 318 | eP | P | 21 47 20.3 | -0.1 |
| | comp=Z,9.3nm,1.2s | | | | | | |
| ABKAR | Akbulak array | 56.00 | 309 | eP | P | 21 47 30.2 | 0.0 |
| WRAB | Tennant Creek | 56.91 | 185 | ⇓eP | P | 21 47 36.1 | -0.9 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | |
| WRA | Warramunga Arr | 56.92 | 185 | P | P | 21 47 34.8 | -2.3 |
| | comp=Z,5.6nm,0.6s,baz=360,slow=7.4,SNR=62 | | | | | | |
| WRA | | | | PcP | PcP | 21 48 32.9 | +0.6 |
| | comp=Z,1.9nm,0.6s,baz=359,slow=4.6,SNR=7.6 | | | | | | |
| WRA | Warramunga Arr | 56.92 | 185 | P | P | 21 47 34.8 | -2.3 |
| WRA | | | | | | 21 48 32.9 | |
| WRA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| WRA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| SPITS | Spitsbergen Ar | 59.92 | 348 | LR | LR | 22 15 48.4 | |
| | comp=Z,49nm,19.7s,baz=40,slow=38 | | | | | | |
| AS01 | Alice Springs | 60.64 | 185 | eP | P | 21 48 02.2 | -0.7 |
| ASAR | Alice Springs | 60.65 | 185 | P | P | 21 48 01.6 | -1.3 |
| | comp=Z,1.9nm,0.9s,baz=14,slow=15,SNR=16 | | | | | | |
| ASAR | | | | PcP | PcP | 21 48 47.8 | +0.8 |
| | comp=Z,0.9nm,0.8s,baz=4.9,slow=3.3,SNR=4.3 | | | | | | |
| ASAR | Alice Springs | 60.65 | 185 | P | P | 21 48 01.6 | -1.3 |
| ASAR | | | | | | 21 48 47.8 | |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| GEYT | Alibeck | 61.65 | 298 | P | P | 21 48 07.9 | -1.8 |
| | comp=Z,1.0nm,0.5s,baz=10,slow=9.1,SNR=3.7 | | | | | | |
| ARCES | ARCESS Array B | 63.01 | 339 | P | P | 21 48 17.1 | -1.2 |
| | comp=Z,3.4nm,0.8s,baz=67,slow=11,SNR=6.7 | | | | | | |
| ARCES | ARCESS Array B | 63.01 | 339 | P | P | 21 48 17.1 | -1.2 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| DAG | Danmarks Havn | 65.42 | 354 | iP | P | 21 48 21.4 | -13 |
| DAG | Danmarks Havn | 65.42 | 354 | iP | P | 21 48 21.4 | -13 |
| VRH | Novokhopyorsk | 65.85 | 317 | eP | P | 21 48 36.7 | -0.4 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,2.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.5s | | | | | | |
| OBN | Obninsk | 66.53 | 322 | eP | P | 21 48 41.1 | -0.3 |
| OBN | | | | e | | 21 49 10.8 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| LPSR | Galich'ya Gora | 66.64 | 319 | eP | P | 21 48 42.8 | +0.6 |
| LPSR | | | | pmax | pmax | | |
| | comp=N,5.0nm,0.7s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,3.0nm,0.4s | | | | | | |
| VSR | Storozhevoye | 67.23 | 318 | eP | P | 21 48 45.4 | -0.5 |
| VSR | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,5.0nm,1.1s | | | | | | |
| VORD | Divnogorie | 67.29 | 317 | eP | P | 21 48 46.5 | +0.2 |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| FINES | FINESS Array B | 67.56 | 331 | P | P | 21 48 47.3 | -0.6 |
| | comp=Z,4.7nm,0.7s,baz=86,slow=7.8,SNR=17 | | | | | | |
| FINES | | | | pP | pP | 21 48 54.0 | +0.3 |
| | comp=Z,2.4nm,0.7s,baz=91,slow=7.9,SNR=4.1 | | | | | | |
| FINES | FINESS Array B | 67.56 | 331 | iP | P | 21 48 48.2 | +0.3 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| GNI | Garni | 69.67 | 305 | d eP | P | 21 49 02.9 | +1.2 |
| GNI | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| B08A | Colville Reser | 70.44 | 44 | eP | P | 21 49 07.3 | +1.2 |
| | comp=Z,21nm,2.0s | | | | | | |
| SUMG | Summit | 70.54 | 359 | eP | P | 21 49 07.0 | +0.3 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,391nm,2.8s | | | | | | |
| SUMG | Summit | 70.54 | 359 | iP | PcP | 21 49 30.3 | +2.4 |
| | comp=Z,15nm,1.0s | | | | | | |
| SUMG | Summit | 70.54 | 359 | eP | P | 21 49 07.0 | +0.3 |
| | comp=Z,391nm,2.8s | | | | | | |
| AKASG | Malin Array Be | 72.70 | 321 | P | P | 21 49 18.7 | -0.9 |
| | comp=Z,4.7nm,0.7s,baz=49,slow=6.3,SNR=18 | | | | | | |
| AKASG | | | | pP | pP | 21 49 26.0 | +0.5 |
| | comp=Z,3.1nm,0.7s,baz=45,slow=5.8,SNR=5.1 | | | | | | |
| AKASG | Malin Array Be | 72.70 | 321 | c eP | P | 21 49 19.3 | -0.3 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| KIEV | Kiev | 72.71 | 321 | ⇓eP | P | 21 49 19.3 | -0.3 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| AK11 | Malin Array Si | 72.74 | 321 | eP | P | 21 49 19.9 | 0.0 |
| NB2 | NORSAR Subarra | 73.11 | 336 | P | P | 21 49 22.0 | +0.1 |
| | comp=Z,2.7nm,0.6s,baz=41,slow=6.2 | | | | | | |
| NOA | NORSAR Array B | 73.11 | 336 | P | P | 21 49 20.8 | -1.1 |
| | comp=Z,3.8nm,0.7s,baz=41,slow=6.0,SNR=14 | | | | | | |
| NOA | NORSAR Array B | 73.11 | 336 | P | P | 21 49 20.8 | -1.1 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| JTMT | Jette | 73.55 | 42 | eP | P | 21 49 26.9 | +2.0 |
| YBMT | Yellow Bay | 73.62 | 42 | eP | P | 21 49 27.6 | +2.3 |
| J08A | Circle Bar Ran | 73.80 | 48 | eP | P | 21 49 28.3 | +1.9 |
| | comp=Z,11nm,1.4s | | | | | | |
| SWMT | Swartz Lake | 73.84 | 42 | eP | P | 21 49 28.0 | +1.4 |
| SLMT | Seeley Lake | 74.28 | 42 | eP | P | 21 49 30.3 | +1.1 |
| LRM | Limekiln Ridge | 75.72 | 43 | eP | P | 21 49 39.2 | +1.6 |
| CMB | Columbia Colle | 75.75 | 53 | eP | P | 21 49 39.1 | +1.4 |
| CMB | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| CMB | Columbia Colle | 75.75 | 53 | eP | P | 21 49 39.1 | +1.4 |
| | comp=Z,3.0nm,0.9s | | | | | | |
| EGMT | Eagleton | 75.75 | 40 | eP | P | 21 49 38.8 | +1.2 |
| | comp=Z,9.9nm,0.9s | | | | | | |
| DLMT | Dillon | 75.93 | 43 | eP | P | 21 49 39.9 | +1.2 |
| | comp=Z,9.1nm,1.0s | | | | | | |
| HLID | Hailey | 76.04 | 46 | eP | P | 21 49 41.2 | +1.8 |
| | comp=Z,2.8nm,1.0s | | | | | | |
| BOZ | Bozeman (W) | 76.28 | 43 | eP | P | 21 49 42.3 | +1.6 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| BOZ | Bozeman (W) | 76.28 | 43 | eP | P | 21 49 42.3 | +1.6 |
| | comp=Z,11nm,1.3s | | | | | | |
| KWP | Kalwaria Pacla | 76.59 | 323 | ePKP | P | 21 49 43.2 | +1.0 |
| KWP | Kalwaria Pacla | 76.59 | 323 | eP | P | 21 49 43.3 | +1.0 |
| BUR04 | Bucovina Ar. S | 76.69 | 320 | eP | P | 21 49 43.4 | +0.5 |
| BURAR | Bucovina Array | 76.69 | 320 | ⇓P | P | 21 49 43.4 | +0.5 |
| BURAR | Bucovina Array | 76.69 | 320 | ⇓iP | P | 21 49 43.4 | +0.5 |
| CFR | Carcaliu | 76.73 | 317 | ⇓P | P | 21 49 43.0 | 0.0 |
| CFR | Carcaliu | 76.73 | 317 | ⇓iP | P | 21 49 43.0 | 0.0 |
| NV01 | Mina Array Sit | 76.83 | 52 | eP | P | 21 49 45.2 | +1.2 |
| NVAR | Mina Array Bea | 76.83 | 52 | P | P | 21 49 44.0 | 0.0 |
| | comp=Z,3.4nm,0.9s,baz=284,slow=5.4,SNR=13 | | | | | | |
| BRTR | Keskin Array B | 76.94 | 310 | P | P | 21 49 43.6 | -0.9 |
| | comp=Z,2.1nm,1.0s,baz=79,slow=6.4,SNR=6.9 | | | | | | |
| BRTR | Keskin Array B | 76.94 | 310 | c eP | P | 21 49 44.7 | +0.2 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| VRI | Vrincioaia | 77.04 | 318 | ⇑P | P | 21 49 46.9 | +2.1 |
| VRI | Vrincioaia | 77.04 | 318 | ⇑iP | P | 21 49 46.9 | +2.1 |
| TLB | Topalu | 77.16 | 317 | ⇓P | P | 21 49 45.5 | +0.1 |
| TLB | Topalu | 77.16 | 317 | ⇓iP | P | 21 49 45.5 | +0.1 |
| BR231 | Keskin MP Arra | 77.39 | 311 | eP | P | 21 49 45.3 | -1.7 |
| OJC | Ojcow | 77.56 | 325 | ePKP | P | 21 49 48.6 | +1.0 |
| OJC | Ojcow | 77.56 | 325 | eP | P | 21 49 48.6 | +1.0 |

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OJC   Ojcow              77.56 325  eP       P       21 49 48.6 +1.0
      comp=Z,10nm,0.9s
TRPA  Tarpa              77.69 322⇓iP        P       21 49 49.8 +1.4
MLR   Muntele Rosu       77.70 318 ⇑P        P       21 49 50.2 +1.5
MLR   Muntele Rosu       77.70 318⇑iP        P       21 49 50.2 +1.5
NIE   Niedzica           77.89 324  ePKP     P       21 49 50.7 +1.2
NIE   Niedzica           77.89 324  eP       P       21 49 50.7 +1.2
FXWY  Fox Creek          77.90  44  eP       P       21 49 52.0 +2.0
      comp=Z,43nm,2.6s
MOOW  Moose Ponds        77.98  44  eP       P       21 49 52.6 +2.2
      comp=Z,55nm,2.6s
TPAW  Teton Pass         78.03  44  eP       P       21 49 52.9 +2.1
      comp=Z,14nm,1.6s
REDW  Red Top Meadow     78.17  44  eP       P       21 49 53.3 +1.8
      comp=Z,53nm,2.8s
RAYN  Ar Rayn            78.36 291  eP       P       21 49 53.3 +0.7
      comp=Z,20nm,1.8s
R11A  Troy Canyon, C     78.57  50  eP       P       21 49 55.2 +1.5
      comp=Z,6.6nm,1.5s
OKC   Ostrava-Krasne     78.59 325  eP       P       21 49 53.9 +0.6
OKC                                 e                21 50 00.0
OKC   Ostrava-Krasne     78.59 325  eP       P       21 49 53.9 +0.6
OKC                                 epP      pP      21 50 00.0 +0.7
KSP   Ksiaz              78.70 327  ePKP     P       21 49 54.5 +0.6
KSP   Ksiaz              78.70 327  eP       P       21 49 54.5 +0.6
LOT   Lotru              78.88 319⇑iP        P       21 49 56.1 +0.9
HWUT  Hardware Ranch     78.90  46  eP       P       21 49 57.8 +2.3
      comp=Z,8.1nm,1.3s
MORC  Moravsky Berou     78.91 325 ⇑P        P       21 49 55.9 +0.7
MORC  Moravsky Berou     78.91 325⇑iP        P       21 49 55.9 +0.7
MORC  Moravsky Berou     78.91 325  eP       P       21 49 55.9 +0.7
      comp=Z,26nm,1.0s
TPNV  Topopah Spring     79.02  52  eP       P       21 49 57.3 +1.1
TPNV                                 pmax    pmax
      comp=Z,91nm,2.9s
TPNV  Topopah Spring     79.02  52  eP       P       21 49 57.3 +1.1
      comp=Z,91nm,2.9s
KRLC  Kraliky            79.03 326  eP       P       21 49 56.8 +0.9
KRLC  Kraliky            79.03 326  eP       P       21 49 56.8 +0.9
DPC   Dobruska-Polom     79.04 326  eP       P       21 49 56.7 +0.8
DPC                                 e                21 50 03.4
DPC   Dobruska-Polom     79.04 326  eP       P       21 49 56.7 +0.8
DPC                                 epP      PcP     21 50 03.4 -1.0
DUG   Dugway             79.08  48  eP       P       21 49 58.2 +1.8
DUG                                  pmax    pmax
      comp=Z,8.0nm,1.4s
DUG   Dugway             79.08  48  eP       P       21 49 58.2 +1.8
      comp=Z,8.0nm,1.4s
PSZ   Piszkesteto        79.12 323 ⇓P        P       21 49 58.1 +1.7
PSZ   Piszkesteto        79.12 323⇓iP        P       21 49 58.1 +1.7
PSZ   Piszkesteto        79.12 323  eP       P       21 49 57.8 +1.4
      comp=Z,12nm,1.1s
BW06  Boulder Array      79.28  44  eP       P       21 49 58.5 +0.9
GZR   Gura Zlata         79.43 320 ⇑P        P       21 49 58.6 +0.5
GZR   Gura Zlata         79.43 320⇑iP        P       21 49 58.6 +0.5
PVCC  Panska Ves         79.67 327  eP       P       21 50 00.4 +1.1
PVCC  Panska Ves         79.67 327  eP       P       21 50 00.4 +1.1
CLL   Collm              79.76 329  eP       P       21 50 00.3 +0.6
CLL                                  pmax    pmax
      comp=Z,54nm,2.1s
CLL   Collm              79.76 329  i P      P       21 49 58.9 -0.8
      comp=Z,23nm,1.8s
CLL                                 i pP     pP      21 50 06.3 +0.7
CLL   Collm              79.76 329  eP       P       21 50 00.3 +0.6
      comp=Z,54nm,2.1s
GOPC  GO Pecny, Ondr     80.03 327  eP       P       21 50 02.0 +0.7
GOPC  GO Pecny, Ondr     80.03 327  eP       P       21 50 02.0 +0.7
PRU   Pruhonice          80.09 327  eP       P       21 50 02.5 +1.0
PRU                                 e                21 50 08.2
PRU   Pruhonice          80.09 327  eP       P       21 50 02.5 +1.0
PRU                                 epP      PcP     21 50 08.2 -0.7
ULM   Lac du Bonnet      80.70  32  P        P       21 50 04.2 -0.6
      comp=Z,7.9nm,1.1s,baz=304,slow=12,SNR=4.2
ULM   Lac du Bonnet      80.70  32  P        P       21 50 04.2 -0.6
ULM                                  pmax    pmax
      comp=Z,8.0nm,1.1s
P18A  Preston Nutter     80.95  47  eP       P       21 50 09.0 +2.2
      comp=Z,65nm,2.6s
CONA  Conrad Observa     81.01 325⇑eP        P       21 50 07.9 +1.3
      comp=Z,8.9nm,1.2s
SRU   San Rafael         81.13  47  eP       P       21 50 09.1 +1.5
SRU                                  pmax    pmax
      comp=Z,35nm,2.4s
SRU   San Rafael         81.13  47  eP       P       21 50 09.1 +1.5
      comp=Z,35nm,2.4s
KHC   Kasperske Hory     81.14 327  eP       P       21 50 08.2 +0.9
KHC                                 e                21 50 13.9
KHC   Kasperske Hory     81.14 327  eP       P       21 50 08.2 +0.9
KHC                                 epP      PcP     21 50 13.9 +0.3
KHC   Kasperske Hory     81.14 327  eP       P       21 50 08.2 +0.9
      comp=Z,1.9nm,1.0s
GERES GERESS Array B     81.30 327  P        P       21 50 07.3 -0.8
      comp=Z,1.3nm,0.8s,baz=46,slow=3.9,SNR=14
GERES                               pP       PcP     21 50 14.4  0.0
      comp=Z,0.8nm,0.7s,baz=40,slow=7.0,SNR=5.0
GERES GERESS Array B     81.30 327  P        P       21 50 07.4 -0.8
GERES                               *PP      PcP     21 50 14.4  0.0
GERES                                pmax    pmax
      comp=Z,1.0nm,0.8s
GERES                                pmax    pmax
      comp=Z,1.0nm,0.7s
GRFO  Grafenberg         81.73 328  eP       P       21 50 11.7 +1.4
GRFO                                 pmax    pmax
      comp=Z,30nm,1.6s
GRFO  Grafenberg         81.73 328  eP       P       21 50 11.7 +1.4
      comp=Z,30nm,1.6s
SOKA  Soboth             82.31 325⇑iP        P       21 50 14.3 +0.7
      comp=Z,12nm,1.1s
PV10  Paradox Valley     82.48  47  eP       P       21 50 17.1 +2.3
PV05  Paradox Valley     82.65  47  eP       P       21 50 17.4 +1.8
KBA   Koelnbreinsper     82.79 326⇑iP        P       21 50 16.5 +0.3
      comp=Z,8.1nm,1.3s
WTTA  Wattenberg         83.41 327⇑iPcP      P       21 50 20.3 +1.0
      comp=Z,6.2nm,1.0s
RETA  Reutte             83.61 327⇑iP        P       21 50 20.7 +0.5
      comp=Z,9.2nm,1.2s
BFO   Black Forest       83.98 329  i P      P       21 50 23.0 +1.0
FETA  Feichten           83.99 327⇑iP        P       21 50 22.6 +0.3
      comp=Z,4.9nm,1.0s
DAVA  Damuels            84.15 328⇑iPcP      P       21 50 24.1 +1.0
      comp=Z,15nm,1.1s
S22A  4UR Ranch, Cre     84.19  46  eP       P       21 50 25.6 +2.0
      comp=Z,26nm,2.3s
ANMO  Albuquerque        86.33  48⇑eP        P       21 50 36.3 +2.0
ANMO                                 pmax    pmax
      comp=Z,5.0nm,2.5s
TX31  Lajitas Ar. Si     91.93  51  eP       P       21 51 01.4 +0.6
TXAR  Lajitas Array      91.94  51  P        P       21 51 01.1 +0.3
      comp=Z,1.1nm,0.7s,baz=299,slow=3.1,SNR=16
TXAR  Lajitas Array      91.94  51  P        P       21 51 01.1 +0.3
TXAR                                 pmax    pmax
      comp=Z,1.0nm,0.7s
TORD  Torodi Ar. Bea    115.49 312  PKP      PKPdf   21 56 33.1 -1.3
      comp=Z,0.4nm,0.6s,baz=20,slow=0.9,SNR=11
BOSA  Boshof            124.23 258  PKP      PKPdf   21 56 49.4 -1.5
      comp=Z,1.9nm,0.7s,baz=157,slow=2.7,SNR=4.1
BOSA  Boshof            124.23 258  PKIKP    PKPdf   21 56 49.4 -1.5
BOSA                                pmax     pmax
      comp=Z,2.0nm,0.7s
DBIC  Dimbokro          124.50 314  PKP      PKPdf   21 56 51.0 -0.7
      comp=Z,2.1nm,0.7s,baz=51,slow=4.4,SNR=4.7
DBIC  Dimbokro          124.50 314  PKIKP    PKPdf   21 56 51.0 -0.7
DBIC                                pmax     pmax
      comp=Z,2.0nm,0.7s
SDV   Santo Domingo     126.73  37  ePKPdf   PKPdf   21 56 56.3 +0.1
QSPA  South Pole Qui    126.90 180  ePKPdf   PKPdf   21 56 54.6 -0.1
SAML  Samuel            145.79  40  ePKPdf   PKPab   21 57 31.7 -0.1
LPAZ  La Paz            148.67  56  PKPbc    PKPbc   21 57 39.1 -1.2
      comp=Z,3.0nm,0.8s,baz=0.2,slow=5.5,SNR=8.4
LPAZ  La Paz            148.67  56  PKP2     PKPbc   21 57 39.1 -1.2
LPAZ                                pmax     pmax
      comp=Z,3.0nm,0.8s
```

*NIED* **02** *21:39:00, 37°.10N×138°.40E, h11km, Mw3.7 Best double couple: M₀4.60000×10¹⁴ NP1:φs274.00000°, δ28.00000°, λ97.00000°. NP2:φs86.00000°, δ62.00000°, λ86.00000°.*

**JMA 02 21:39:12.7**±0.1**, 37°.14N×138°.43E, h22**km±1km**, M3.7, Near west coast of eastern Honshu**

```
Code  Station Name        Δ°   AZ°   Phase ID          Time        Res
                                     Op       ISC      h  m  s     ISC
JJN   Nakama             0.22 260    P        Pb       21 39 18.1 -0.4
JJN                                  S        Sb       21 39 21.9 -0.5
JIZZ  Izumozaki          0.45  30    P        Pb       21 39 22.3 +0.4
JHK   Hiroka             0.48  77    P        Pb       21 39 22.0 -0.5
JHK                                  S        Sb       21 39 28.9 -0.3
JGK   Kuni               0.60 164    P        Pb       21 39 24.7  0.0
JGK                                  S        Sb       21 39 33.2 +0.4
MAT   Matsushiro         0.62 197    P        Pb       21 39 24.1 -0.9
MAT                                  S        Sb       21 39 32.6 -0.7
MAT   Matsushiro         0.62 197    P        Pb       21 39 24.4 -0.6
MAT                                  S        Sb       21 39 32.6 -0.7
JKT   Katashina          0.75 119    P        Pb       21 39 26.9 -0.4
JKT                                  S        Sb       21 39 37.1 -0.1
JSZ   Suzu               0.91 290    P        Pb       21 39 29.0 -0.7
JSZ                                  S        Sb       21 39 41.3  0.0
JSD   Sado               0.91 351    P        Pb       21 39 28.8 -0.9
JSD                                  S        Sb       21 39 41.0 -0.4
JNS   Sasagawa           0.98  46    P        Pb       21 39 30.5 -0.5
JNS                                  S        Sb       21 39 43.4  0.0
JFY   Yanaizu            1.05  75    S        Sb       21 39 45.2 -0.4
JAG   Ashikaga           1.09 131    S        Sn       21 39 47.0  0.0
```

**IDC 02 21:39:14.7**±2.9**, 6°.59S×150°.44E, h0**km**, mb3.5**/2**, mb1 3.9**/3**, mb1mx3.4**/31**, mbtmp3.7**/3**, ML1.7**/1**, Error ellipse: s-maj=117.1km s-min=36.0km az=126.0, New Britain region**

```
Code  Station Name        Δ°   AZ°   Phase ID          Time        Res
                                     Op       ISC      h  m  s     ISC
PMG   Port Moresby       4.29 229    Pn       Pn       21 40 23.1 +1.8
      3.3nm,0.3s,baz=34,slow=7.9,SNR=8.8
PMG                                  Sn       Sn       21 41 13.1 +0.9
      6.5nm,0.3s,baz=227,slow=18,SNR=7.8
WRA   Warramunga Arr    20.51 228    P        P        21 43 54.5 -0.2
      3.7nm,0.7s,baz=53,slow=11,SNR=32
ASAR  Alice Springs     23.26 221    P        P        21 44 22.7 -1.4
      0.9nm,0.8s,baz=53,slow=8.9,SNR=13
TORD  Torodi Ar. Bea   148.55 284    PKPbc    PKPbc    21 59 04.8 +0.1
      0.4nm,0.6s,baz=56,slow=2.6,SNR=8.4
```

*NIED* **02** *21:52:00, 37°.10N×138°.40E, h20km, Mw4.5 Best double couple: M₀5.46000×10¹⁵ NP1:φs12.00000°, δ17.00000°, λ60.00000°. NP2:φs223.00000°, δ75.00000°, λ99.00000°.*

*ISCJB* **02** *21:52:44.3±0.3, 37°.15N±0°.03×138°.40E±0°.03, h28km±2km, mb4.2/37, MS4.0/13, Error ellipse: s-maj=4.4km s-min=3.8km az=150.1*

*NEIC* **02** *21:52:44.0±1.0, 37°.17N×138°.40E, h14km±6km, mb4.6/11, MW4.4(NIED), Error ellipse: s-maj=6.3km s-min=5.8km az=143.0*

*NEIC Recorded [4 JMA] in Niigata; [2 JMA] in Gumma and Nagano; [1 JMA] in Fukushima, Ishikawa, Tochigi and Yamagata. Also recorded [2 JMA] on Sadoga-shima.*

*IDC* **02** *21:52:44.8±0.6, 37°.12N×138°.36E, h19km±3km, mb3.9/27, mb1 4.0/32, mb1mx4.0/59, mbtmp4.0/32, ML3.2/3, MS4.0/13, Ms1 4.0/13, ms1mx3.7/42, Error ellipse: s-maj=13.9km s-min=7.3km az=93.0*

*JMA* **02** *21:52:44.9±0.1, 37°.14N×138°.42E, h24km±1km, M4.6 Broadband fault plane solution: P waves. NP1: φs227.00000°, δ84.00000°, λ88.00000°. NP2:φs65.00000°, δ6.00000°, λ108.00000°. Principal axes: T Plg51.0000°, Azm135.0000°; N Plg2.0000°, Azm227.0000°; P Plg39.0000°, Azm319.0000°;*

*JMA Felt IV J1.*

**ISC 02 21:52:44.8**±0.4**, 37°.14N**±0°.03**×138°.42E**±0°.03**, h20**km±2km**, n118, σ1§28**/125**, mb4.3**/37**, MS4.1**/13**, 7C-10D, Near west coast of eastern Honshu**

```
Code  Station Name        Δ°   AZ°   Phase ID          Time        Res
                                     Op       ISC      h  m  s     ISC
JJN   Nakama             0.21 260 ⇑P          Pb       21 52 50.2 -0.2
JJN                                  S        Sb       21 52 54.2 -0.1
JIZZ  Izumozaki          0.46  30 ⇓P          Pb       21 52 54.5 +0.4
JIZZ                                 S        Sn       21 53 02.3 -1.5
JHK   Hiroka             0.49  77 ⇑P          Pb       21 52 54.3 -0.4
JHK                                  S        Sb       21 53 01.4 -0.1
JGK   Kuni               0.60 163 ⇓P          Pb       21 52 56.9 +0.1
MAJO  Matsushiro         0.62 196    eP       Pb       21 52 56.6 -0.4
MAJO                                 eS       Sb       21 53 03.7 -1.6
MAT   Matsushiro         0.62 196    P        Pb       21 52 56.5 -0.5
MAT                                  S        Sb       21 53 04.9 -0.4
MAT   Matsushiro         0.62 196    P        Pb       21 52 56.5 -0.5
MJAR  Matsushiro Arr     0.62 196    Pg       Pb       21 52 56.1 -0.9
      396nm,0.3s,baz=94,slow=7.3,SNR=2149
MJAR                                 Lg       Lg       21 53 05.4
      2μm,0.3s,baz=357,slow=22,SNR=138
JKT   Katashina          0.76 119    P        Pb       21 52 59.3 -0.1
JKT                                  S        Sb       21 53 09.4  0.0
JSZ   Suzu               0.90 291 ⇓P          Pb       21 53 01.0 -0.7
JSD   Sado               0.91 352 ⇓P          Pb       21 53 01.0 -0.9
JSD                                  S        Sb       21 53 13.2 -0.3
JHJ   Hachijo jima 2     4.16 164    Pn       Pn       21 53 48.8 +1.6
      101nm,0.3s,baz=77,slow=20,SNR=12
JHJ2  Mitsune            4.18 164    ePn      Pn       21 53 49.6 +2.2
KSULJ Uljin              7.23 269    P        Pn       21 54 29.9 +0.6
      SNR=22
JNU   Nakatsue           7.36 239    Pn       Pn       21 54 32.4 +1.2
      0.7nm,0.3s,baz=167,slow=2.4,SNR=8.5
KSTBA Taebaek            7.56 273    P        Pn       21 54 35.7 +1.7
      SNR=6.6
KSTBA Taebaek            7.56 273    P        Pn       21 54 35.7 +1.7
      SNR=6.6
ASAJ  Asahikawa          7.66  23    Pn       Pn       21 54 34.1 -1.0
      0.3nm,0.3s,baz=239,slow=17,SNR=2.8
KSJMJ Jumunjin           7.72 278    P        Pn       21 54 36.9 +1.0
      SNR=8.1
KSJMJ Jumunjin           7.72 278    P        Pn       21 54 36.9 +1.0
      SNR=8.1
KSJES JEONGSEON          7.78 275    P        Pn       21 54 38.8 +1.9
      SNR=12
KSJES JEONGSEON          7.78 275    P        Pn       21 54 38.8 +1.9
      SNR=12
KSDAG Daegu              7.79 263    P        Pn       21 54 38.6 +1.5
      SNR=19
KSDAG Daegu              7.79 263    P        Pn       21 54 39.6 +2.6
      SNR=7.9
KSEUS ULSEONG            7.85 267    P        Pn       21 54 39.7 +1.8
      SNR=12
KSEUS ULSEONG            7.85 267    P        Pn       21 54 39.7 +1.8
      SNR=12
KSYOW Yeongwol           7.96 273    P        Pn       21 54 41.3 +2.0
      SNR=8.6
KSYOW Yeongwol           7.96 273    P        Pn       21 54 41.3 +2.0
      SNR=8.6
SEHB  SEOHWA             8.14 281    P        Pn       21 54 43.1 +1.3
      SNR=17
SEHB  SEOHWA             8.14 281    P        Pn       21 54 43.1 +1.3
      SNR=17
KSIJA INJE               8.23 279    P        Pn       21 54 44.7 +1.7
      SNR=34
KSIJA INJE               8.23 279    P        Pn       21 54 44.7 +1.7
      SNR=34
KSSAJ Sangju             8.27 268    P        Pn       21 54 45.5 +1.9
      SNR=6.7
KSSAJ Sangju             8.27 268    P        Pn       21 54 45.5 +1.9
      SNR=6.7
KSWJU Wonju              8.27 275    P        Pn       21 54 45.9 +2.3
      SNR=17
KSWJU Wonju              8.27 275    P        Pn       21 54 45.9 +2.3
      SNR=17
KSCHJ Chungju            8.36 271    P        Pn       21 54 46.7 +1.9
      SNR=33
KSCHJ Chungju            8.36 271    P        Pn       21 54 46.7 +1.9
      SNR=33
KSRS  Korea Array        8.37 275    Pn       Pn       21 54 45.8 +0.8
      7.7nm,0.3s,baz=89,slow=14,SNR=96
KSAR  Wonju Array Be     8.40 275    Pn       Pn       21 54 45.8 +0.4
KSCPR CHUPUNGNYEONG      8.44 267    P        Pn       21 54 48.2 +2.2
      SNR=40
KSCHC Chuncheon          8.46 278    P        Pn       21 54 49.0 +2.8
      SNR=9.4
KSCHC Chuncheon          8.46 278    P        Pn       21 54 49.0 +2.8
      SNR=9.4
KSBON Boeun              8.54 269    P        Pn       21 54 49.2 +1.9
      SNR=53
USRK  Ussuriysk Ar.      8.58 327    Pn       Pn       21 54 47.9 +0.1
      1.5nm,0.3s,baz=144,slow=13,SNR=18
USRK                                 Sn       Sn       21 56 26.4 +2.5
      0.4nm,0.3s,baz=165,slow=28,SNR=4.3
KSCEA Cheonan            8.94 271    P        Pn       21 54 55.0 +2.3
      SNR=67
KSJEU Jeongeup           9.42 263    P        Pn       21 55 01.9 +2.6
      SNR=5.8
KSKWJ Gwangju            9.45 261    P        Pn       21 55 02.6 +2.8
      SNR=5.1
KSGAH Ganghwa            9.54 277    P        Pn       21 55 03.3 +2.3
      SNR=10
MDJ   Mudanjiang        10.02 321    ePn      Pn       21 55 06.9 -0.6
      31nm,0.9s
YSS   Yuzh-Sakhalins    10.32  17    ePn      Pn       21 55 11.6  0.0
      13nm,0.5s
BJT   Baijiatuau        17.63 286    ePn      Pn       21 56 48.4 -0.7
      22nm,0.9s
PETK  Petropavlovsk-    20.87  34    P        P        21 57 25.1 -0.3
      2.9nm,0.6s,baz=249,slow=11,SNR=2.8
ULN   Ulaanbaatar       25.32 305    eP       P        21 58 09.7 -0.5
      8.9nm,1.1s
YAK   Yakutsk           25.51 350    LR       LR       22 08 24.1
      comp=Z,632nm,18.1s,baz=156,slow=37
SONM  Songino Array     25.75 305    P        P        21 58 13.3 -0.8
      3.4nm,1.0s,baz=108,slow=8.3,SNR=13
SEY   Seymchan          27.21  14    P        P        21 58 28.2 +1.3
      4.2nm,0.9s,baz=217,slow=7.7,SNR=4.4
CMAR  Chiang Mai Arr    39.22 253    P        P        22 00 11.3 -0.5
      0.3nm,0.3s,baz=55,slow=7.8,SNR=4.8
CMAR                                 PcP      PcP      22 02 20.2 -0.6
      0.4nm,0.3s,baz=42,slow=0.6,SNR=4.2
ZALV  Zalesovo Beam     40.07 312    P        P        22 00 18.6 +0.1
      0.6nm,0.5s,baz=54,slow=7.5,SNR=3.7
ZALV                                 PcP      PcP      22 02 22.9  0.0
      1.8nm,0.6s,baz=121,slow=2.8,SNR=7.8
ZALV                                 pPcP              22 02 28.8
      5.2nm,0.8s,baz=97,slow=2.6,SNR=15
MKAR  Makanchi Array    42.03 302    P        P        22 00 33.6 -1.1
      0.2nm,0.3s,baz=96,slow=12,SNR=4.1
MKAR                                 PcP      PcP      22 02 28.6 -0.9
      0.4nm,0.7s,baz=42,slow=4.5,SNR=3.2
MKAR                                 pPcP              22 02 35.5
      1.8nm,0.8s,baz=99,slow=4.0,SNR=9.0
KURK  Kurchatov         43.98 308    P        P        22 00 49.7 -0.7
KURK                                 PcP      PcP      22 02 35.6 -0.3
KURK                                 pPcP              22 02 42.5
KURBB Kurchatov Arra    44.04 308    P        P        22 00 49.7 -1.2
      1.2nm,0.6s,baz=84,slow=8.0,SNR=12
KURBB                                PcP      PcP      22 02 35.6 -0.6
      0.5nm,0.8s,baz=82,slow=3.8,SNR=4.0
KURBB                                pPcP              22 02 42.5
      1.7nm,0.9s,baz=87,slow=3.5,SNR=8.6
AAK   Ala-Archa         48.33 297    pPcP     PcP      22 02 57.7 +6.1
      1.5nm,0.5s,baz=124,slow=4.0,SNR=5.7
KDAK  Kodiak Island     48.62  42    P        P        22 01 26.7 -0.1
      4.6nm,0.7s,baz=276,slow=5.3,SNR=5.1
BVAR  Borovoye Array    48.72 312    PcP      PcP      22 02 53.0 +0.4
      1.2nm,0.6s,baz=57,slow=5.5,SNR=4.8
BVAR                                 pPcP              22 02 58.8
      2.4nm,0.6s,baz=64,slow=3.4,SNR=11
HNR   Honiara           50.54 152    LR       LR       22 23 37.1
      comp=Z,32nm,19.2s,baz=76,slow=37
ILAR  Eielson Array     50.69  32    P        P        22 01 42.8 +0.3
      1.1nm,0.8s,baz=283,slow=6.6,SNR=4.2
ARU   Arti              54.69 318    P        P        22 02 11.9 -0.2
      0.1nm,0.3s,baz=127,slow=20,SNR=2.6
ARU                                  pP       pP       22 02 18.5 -0.1
      0.2nm,0.3s,baz=287,slow=19,SNR=1.5
ARU                                  LR       LR       22 26 17.0
      comp=Z,75nm,18.3s,baz=71,slow=37
ARU   Arti              54.69 318    eP       P        22 02 10.4 -1.8
      9.0nm,0.9s
ARU                                  pP       pP       22 02 18.5 -0.1
ABKAR Akbulak array     56.03 309    eP       P        22 02 20.9 -1.0
      1.3nm,0.5s
AKTO  Aktyubinsk        56.81 311    P        P        22 02 28.4 +0.9
      1.2nm,0.8s,baz=87,slow=11,SNR=4.0
AKTO                                 LR       LR       22 28 50.7
      comp=Z,149nm,20.2s,baz=72,slow=38
WRA   Warramunga Arr    56.90 185    P        P        22 02 27.3 -1.1
      6.7nm,0.7s,baz=0.8,slow=7.4,SNR=74
WRA                                  PcP      PcP      22 03 23.4 -0.3
      1.5nm,0.7s,baz=357,slow=4.3,SNR=5.2
ASAR  Alice Springs     60.63 185    P        P        22 02 54.0 -0.2
      3.0nm,1.0s,baz=6.5,slow=4.9,SNR=17
GEYT  Alibeck           61.68 298    P        P        22 03 02.0 +0.6
      0.7nm,0.4s,baz=336,slow=3.3,SNR=4.0
GEYT                                 LR       LR       22 30 51.6
      comp=Z,88nm,19.4s,baz=30,slow=37
ARCES ARCESS Array B    63.04 339    P        P        22 03 10.2 +0.1
      1.9nm,0.8s,baz=38,slow=12,SNR=4.2
ARCES                                LR       LR       22 33 39.7
      comp=Z,138nm,19.6s,baz=72,slow=39
FINES FINESS Array B    67.59 331    P        P        22 03 39.8 +0.2
      2.5nm,0.7s,baz=46,slow=8.2,SNR=9.3
FINES                                pP       pP       22 03 45.5 -0.7
      3.6nm,0.7s,baz=83,slow=4.8,SNR=7.8
GNI   Garni             69.71 305    LR       LR       22 36 59.0
      comp=Z,95nm,20.6s,baz=69,slow=38
AKASG Malin Array Be    72.73 321    P        P        22 04 11.0 -0.2
      0.8nm,0.4s,baz=49,slow=6.1,SNR=9.0
AKASG                                pP       pP       22 04 17.1 -0.8
      4.4nm,0.7s,baz=48,slow=6.1,SNR=7.9
AKASG                                LR       LR       22 38 49.4
      comp=Z,274nm,18.6s,baz=50,slow=38
KIEV  Kiev              72.74 321    eP       P        22 04 10.4 -0.8
      15nm,1.1s
HFS   Hagfors           72.98 335    P        P        22 04 13.1 +0.5
      1.0nm,0.5s,baz=142,slow=3.6,SNR=4.5
HFS                                  LR       LR       22 37 47.4
      comp=Z,96nm,19.6s,slow=37
NB2   NORSAR Subarra    73.14 336    P        P        22 04 13.6  0.0
      comp=Z,1.7nm,0.6s,baz=42,slow=6.2
NOA   NORSAR Array B    73.14 336    P        P        22 04 13.9 +0.3
      comp=Z,2.0nm,0.6s,baz=41,slow=5.9,SNR=6.2
NOA                                  LR       LR       22 39 48.7
      comp=Z,121nm,20.6s,baz=30,slow=39
SUW   Suwalki           73.49 326    ePKP     P        22 04 21.5 +5.8
JTMT  Jette             73.55  42    eP       P        22 04 16.0 -0.3
      comp=Z,9.5nm,1.4s
SWMT  Swartz Lake       73.84  42    eP       P        22 04 17.4 -0.7
      comp=Z,4.6nm,1.1s
SLMT  Seeley Lake       74.28  42    eP       P        22 04 19.9 -0.8
      comp=Z,13nm,1.3s
MALT  Malatya           74.81 307⇑iP          P        22 04 29.8 +6.0
LRM   Limekiln Ridge    75.72  43    eP       P        22 04 28.6 -0.5
      comp=Z,89nm,1.1s
CMB   Columbia Colle    75.74  53    eP       P        22 04 28.6 -0.6
      comp=Z,11nm,1.3s
DLMT  Dillon            75.93  43    eP       P        22 04 29.9 -0.3
      comp=Z,6.6nm,1.0s
KWP   Kalwaria Pacla    76.63 323    ePKP     P        22 04 35.3 +1.4
BURAR Bucovina Array    76.72 320⇓iP          P        22 04 34.5 -0.1
NVAR  Mina Array Bea    76.82  52    P        P        22 04 35.9 +0.4
      comp=Z,2.8nm,0.9s,baz=289,slow=6.9,SNR=11
BRTR  Keskin Array B    76.97 310    P        P        22 04 36.8 +0.7
      comp=Z,0.6nm,0.9s,baz=23,slow=7.8,SNR=3.1
VRI   Vrincioaia        77.07 318⇑iP          P        22 04 40.8 +4.3
OJC   Ojcow             77.59 325    ePKP     P        22 04 37.3 -2.0
DOPR  Dopca             77.72 319⇑iP          P        22 04 41.4 +1.3
TRPA  Tarpa             77.72 322⇑iP          P        22 04 39.4 -0.6
MLR   Muntele Rosu      77.73 318    P        P        22 04 41.7 +1.3
      comp=Z,0.2nm,0.8s,baz=90,slow=17,SNR=2.4
NIE   Niedzica          77.92 324    ePKP     P        22 04 42.7 +1.5
LOT   Lotru             78.91 319⇓iP          P        22 04 55.4 +8.6
MORC  Moravsky Berou    78.94 325⇓iP          P        22 04 48.5 +1.7
MORC  Moravsky Berou    78.94 325    eP       P        22 04 47.0 +0.2
      comp=Z,16nm,1.1s
PSZ   Piszkesteto       79.16 323⇓iP          P        22 04 45.5 -2.6
GZR   Gura Zlata        79.46 320⇓iP          P        22 04 56.9 +7.1
VRAC  Vranov            79.70 326    P        P        22 04 52.2 +1.3
      comp=Z,1.3nm,0.7s,baz=32,slow=4.6,SNR=3.5
VRAC  Vranov            79.70 326⇓iP          P        22 04 52.6 +1.6
CLL   Collm             79.79 329    eP       P        22 04 52.0 +0.7
      comp=Z,12nm,1.6s
MMAI  Mount Meron Ar    79.93 304    LR       LR       22 43 05.5
      comp=Z,54nm,20.6s,baz=35,slow=38
ULM   Lac du Bonnet     80.71  32    P        P        22 04 56.1 -0.2
      comp=Z,3.5nm,0.9s,baz=318,slow=3.1,SNR=3.4
KHC   Kasperske Hory    81.17 327    epP      pP       22 05 05.5 -0.1
GERES GERESS Array B    81.33 327    P        P        22 04 59.5 -0.3
      comp=Z,0.4nm,0.6s,baz=36,slow=5.0,SNR=4.8
GERES                                pP       pP       22 05 06.5  0.0
      comp=Z,0.9nm,0.6s,baz=39,slow=5.1,SNR=8.9
GERES                                LR       LR       22 43 50.7
      comp=Z,110nm,19.2s,baz=35,slow=38
DIVS  Divibare          81.79 320⇑iP          P        22 05 08.6 +6.3
DAVOX Davos/Dischmat    84.58 327    P        P        22 05 17.4 +0.6
      comp=Z,1.4nm,0.8s,baz=19,slow=10.0,SNR=3.1
TXAR  Lajitas Array     91.93  51    P        P        22 05 53.1 +1.0
      comp=Z,1.0nm,0.8s,baz=298,slow=3.1,SNR=12
TXAR                                 pP       pP       22 05 59.7 +0.7
      comp=Z,1.1nm,0.7s,baz=290,slow=2.4,SNR=8.0
KEST  Kesra             93.46 321    LR       LR       22 50 59.4
      comp=Z,51nm,19.4s,baz=306,slow=37
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| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| TORD | Torodi Ar. Bea | 115.52 | 312 | PKP | PKPdf | 22 11 24.8 | -1.1 |
| | comp=Z,0.2nm,0.7s,baz=21,slow=2.0,SNR=7.6 | | | | | | |
| LPAZ | La Paz | 148.66 | 56 | PKPbc | PKPbc | 22 12 32.5 | +0.8 |
| | comp=Z,1.7nm,0.7s,baz=24,slow=12,SNR=5.6 | | | | | | |

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*CSEM **02** 21:54:56.8, 34°.95N×21°.83E, h17km, MD3.8, After ATH*

**ATH 02 21:54:57.2, 34°.95N×21°.84E, h21km, MD3.8/12, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANKY | Antikythira Is | 1.50 | 52 | ePN | Pb | 21 55 24.9 | +0.5 |
| ANKY | Antikythira Is | 1.50 | 52 | ePn | Pb | 21 55 24.9 | +0.5 |
| VLI | Veliai | 1.98 | 26 | ePN | Pb | 21 55 32.2 | -0.3 |
| VLI | Veliai | 1.98 | 26 | ePn | Pb | 21 55 32.2 | -0.3 |
| VAM | Vamos | 1.99 | 76 | ePN | Pb | 21 55 32.5 | -0.1 |
| VAM | Vamos | 1.99 | 76 | ePn | Pb | 21 55 32.5 | -0.1 |
| VLX | Vlachokerasia | 2.45 | 10 | ePB | Pb | 21 55 39.1 | -1.7 |
| VLX | Vlachokerasia | 2.45 | 10 | ePb | Pb | 21 55 39.1 | -1.7 |
| IDI | Anoyia | 2.52 | 81 | ePN | Pn | 21 55 39.1 | +2.1 |
| IDI | Anoyia | 2.52 | 81 | ePn | Pn | 21 55 39.1 | +2.1 |
| DRO | Drossia | 3.00 | 358 | ePN | Pn | 21 55 45.7 | +2.2 |
| DRO | Drossia | 3.00 | 358 | ePn | Pn | 21 55 45.7 | +2.2 |
| GUR | Goura | 3.01 | 8 | ePN | Pn | 21 55 46.3 | +2.5 |
| GUR | Goura | 3.01 | 8 | ePn | Pn | 21 55 46.3 | +2.5 |
| KLV | Kalavryta, Ach | 3.10 | 5 | ePN | Pn | 21 55 47.0 | +2.0 |
| KLV | Kalavryta, Ach | 3.10 | 5 | ePn | Pn | 21 55 47.0 | +2.0 |
| LAKA | Lakka | 3.29 | 2 | ePN | Pn | 21 55 50.1 | +2.6 |
| LAKA | Lakka | 3.29 | 2 | ePn | Pn | 21 55 50.1 | +2.6 |
| VLS | Valsamata | 3.37 | 343 | ePN | Pn | 21 55 51.0 | +2.3 |
| VLS | Valsamata | 3.37 | 343 | ePn | Pn | 21 55 51.0 | +2.3 |
| KALE | Kalithea | 3.44 | 4 | ePN | Pn | 21 55 52.4 | +2.7 |
| KALE | Kalithea | 3.44 | 4 | ePn | Pn | 21 55 52.4 | +2.7 |
| SERG | Sergoula | 3.46 | 3 | ePN | Pn | 21 55 53.0 | +3.1 |
| SERG | Sergoula | 3.46 | 3 | ePn | Pn | 21 55 53.0 | +3.1 |
| EFP | Efpalio | 3.47 | 1 | ePN | Pn | 21 55 53.0 | +3.0 |
| EFP | Efpalio | 3.47 | 1 | ePn | Pn | 21 55 53.0 | +3.0 |
| LKR | Lokris | 3.81 | 14 | ePN | Pn | 21 55 56.9 | +2.3 |
| LKR | Lokris | 3.81 | 14 | ePn | Pn | 21 55 56.9 | +2.3 |
| AXAR | Agios Charalam | 3.87 | 10 | ePN | Pn | 21 55 57.3 | +1.9 |
| AXAR | Agios Charalam | 3.87 | 10 | ePn | Pn | 21 55 57.3 | +1.9 |
| EVR | Evrytania | 3.96 | 360 | ePN | Pn | 21 56 00.2 | +3.4 |
| EVR | Evrytania | 3.96 | 360 | ePn | Pn | 21 56 00.2 | +3.4 |
| SMIA | Simia | 4.07 | 15 | ePN | Pn | 21 56 00.7 | +2.4 |
| SMIA | Simia | 4.07 | 15 | ePn | Pn | 21 56 00.7 | +2.4 |

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*IDC **02** 22:16:24.4±4.8, 36°.27N×71°.27E, h80km±33km, mb3.4/4, mb1 3.4/10, mb1mx3.1/54, mbtmp3.7/10, Error ellipse: s-maj=51.3km s-min=19.3km az=150.0*

*ISCJB **02** 22:16:27.8±1.2, 36°.60N±0°.08×71°.20E±0°.09, h100km, mb3.5/3, Error ellipse: s-maj=12.8km s-min=8.6km az=149.6*

*NNC **02** 22:16:30.8±2.1, 36°.75N×71°.00E, h153km±21km, mb3.0, mpv3.9, Error ellipse: s-maj=19.7km s-min=9.7km az=164.0*

**ISC 02 22:16:27.3±1.6, 36°.5N±0°.1×71°.13E±0°.08, h100km, n18, σ1s.41/25, mb3.4/3, 7C-7D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.96 | 323 | ⇑P | Pn | 22 17 14.4 | +1.8 |
| | 7.8nm,0.3s | | | | | | |
| DZET | | | | ⇑S | Sn | 22 17 48.6 | +1.1 |
| | 80nm,0.4s | | | | | | |
| SFK | Sufi-Kurgan | 4.00 | 27 | ⇓P | Pn | 22 17 28.5 | +1.8 |
| | 9.1nm,0.3s | | | | | | |
| SFK | | | | ⇓S | Sn | 22 18 15.5 | +2.8 |
| | 8.1nm,0.2s | | | | | | |
| MNAS | Manas | 6.10 | 10 | ⇓P | Pn | 22 17 55.9 | +0.9 |
| | 5.8nm,0.4s | | | | | | |
| MNAS | | | | ⇓S | Sn | 22 19 02.4 | -1.1 |
| | 10nm,0.5s | | | | | | |
| KK31 | Karatay Array | 6.64 | 356 | ⇑P | Pn | 22 18 02.8 | +0.5 |
| | 6.4nm,0.2s,baz=179,slow=13,SNR=383 | | | | | | |
| KK31 | | | | ⇓S | Sn | 22 19 14.8 | -1.6 |
| | 2.2nm,0.3s,baz=186,slow=26,SNR=8.2 | | | | | | |
| AAK | Ala-Archa | 6.68 | 22 | ⇑P | Pn | 22 18 02.8 | -0.1 |
| | 7.4nm,0.5s | | | | | | |
| AAK | | | | ⇑S | Sn | 22 19 16.4 | -1.1 |
| | 11nm,1.2s | | | | | | |
| AAK | Ala-Archa | 6.68 | 22 | P | Pn | 22 18 03.8 | +0.9 |
| | 4.1nm,0.3s,baz=190,slow=6.9,SNR=48 | | | | | | |
| AAK | | | | S | Sn | 22 19 16.5 | -1.0 |
| | 0.7nm,0.3s,baz=315,slow=20,SNR=7.2 | | | | | | |
| TKM2 | Tokmak 2 | 7.30 | 27 | ⇑P | Pn | 22 18 11.2 | -0.2 |
| | 3.5nm,0.7s | | | | | | |
| GEYT | Alibeck | 10.48 | 282 | P | Pn | 22 18 55.8 | +1.3 |
| | 0.5nm,0.3s,baz=98,slow=10,SNR=4.9 | | | | | | |
| GEYT | | | | S | Sn | 22 20 47.9 | -2.1 |
| | 0.7nm,0.3s,baz=104,slow=24,SNR=5.1 | | | | | | |
| MKAR | Makanchi Array | 13.25 | 35 | P | Pn | 22 19 30.4 | -1.1 |
| | 0.1nm,0.3s,baz=225,slow=16,SNR=3.2 | | | | | | |
| KURBB | Kurchatov Arra | 15.11 | 18 | P | P | 22 19 56.6 | -1.6 |
| | 0.1nm,0.3s,baz=206,slow=10.0,SNR=11 | | | | | | |
| AB31 | Akbulak array | 15.16 | 331 | ⇓P | Pn | 22 19 55.2 | -0.6 |
| | 0.7nm,0.5s,baz=157,slow=11,SNR=18 | | | | | | |
| AB31 | | | | ⇑S | Sn | 22 22 34.0 | -9.1 |
| | 1.4nm,0.8s,baz=152,slow=23,SNR=2.8 | | | | | | |
| BVAR | Borovoye Array | 16.56 | 358 | P | Pn | 22 20 13.2 | -0.1 |
| | 0.4nm,0.3s,baz=159,slow=8.9,SNR=6.2 | | | | | | |
| AKTO | Aktyubinsk | 16.86 | 330 | ⇓P | P | 22 20 17.4 | 0.0 |
| | 0.7nm,0.5s | | | | | | |
| AKTO | Aktyubinsk | 16.86 | 330 | P | P | 22 20 17.9 | +0.5 |
| | 0.2nm,0.3s,baz=135,slow=13,SNR=4.3 | | | | | | |
| ZALV | Zalesovo Beam | 19.90 | 24 | P | P | 22 20 50.0 | -0.7 |
| | 2.3nm,0.4s,baz=204,slow=10,SNR=14 | | | | | | |
| FINES | FINESS Array B | 37.56 | 326 | P | P | 22 23 33.7 | +2.1 |
| | 3.3nm,1.0s,baz=101,slow=15,SNR=3.1 | | | | | | |
| NOA | NORSAR Array B | 44.46 | 323 | P | P | 22 24 29.9 | +1.7 |
| | 0.3nm,0.5s,baz=98,slow=8.4,SNR=2.7 | | | | | | |
| TORD | Torodi Ar. Bea | 65.82 | 269 | P | P | 22 27 00.7 | -1.6 |
| | 0.1nm,0.4s,baz=47,slow=6.2,SNR=4.9 | | | | | | |

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*IDC **02** 22:17:17.2±1.4, 38°.73N×21°.12E, h0km, mb3.4/5, mb1 3.4/7, mb1mx3.2/35, mbtmp3.3/7, ML3.0/2, Error ellipse: s-maj=37.8km s-min=20.0km az=113.0*

*ISCJB **02** 22:17:19.6±0.3, 38°.72N±0°.01×21°.28E±0°.02, h3km±2km, mb3.4/5, Error ellipse: s-maj=2.4km s-min=1.8km az=140.6*

*SKO **02** 22:17:19.5, 38°.59N×21°.40E, h4km, M2.7, ML3.3*

*ATH **02** 22:17:19.9, 38°.68N×21°.29E, h19km±1km, ML3.1*

*THE **02** 22:17:20.4, 38°.72N×21°.31E, h0km, ML3.2/32, Error ellipse: s-maj=1.0km s-min=0.4km az=248.0*

*CSEM **02** 22:17:20.0±0.1, 38°.70N×21°.29E, h2km, ML3.2, Error ellipse: s-maj=2.4km s-min=1.7km az=58.0*

*TIR **02** 22:17:26.6, 38°.48N×21°.36E, h3km*

**ISC 02 22:17:20.1±0.8, 38°.70N±0°.01×21°.30E±0°.01, h12km±5km, n233, σ1s.08/335, mb3.5/5, 11C-4D, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDO | Prodromos | 0.14 | 223 | P | Pg | 22 17 23.2 | -0.3 |
| PDO | | | | S | Sg | 22 17 26.8 | +0.8 |
| PDO | Prodromos | 0.14 | 223 | P | Pg | 22 17 23.2 | -0.3 |
| PDO | | | | S | Sg | 22 17 26.8 | +0.8 |
| PVO | Paravola | 0.19 | 116 | P | Pg | 22 17 24.1 | -0.3 |
| PVO | | | | S | Sg | 22 17 27.5 | +0.2 |
| PVO | Paravola | 0.19 | 116 | P | Pg | 22 17 24.1 | -0.3 |
| PVO | | | | S | Sg | 22 17 27.5 | +0.2 |
| EVR | Evrytania | 0.45 | 61 | ePB | Pg | 22 17 29.0 | -0.1 |
| EVR | | | | eSB | Sb | 22 17 36.9 | +0.2 |
| EVR | Evrytania | 0.45 | 61 | P | Pg | 22 17 28.9 | -0.1 |
| EVR | | | | S | Sg | 22 17 35.3 | +0.2 |
| EVR | Evrytania | 0.45 | 61 | P | Pg | 22 17 28.9 | -0.1 |
| EVR | | | | S | Sg | 22 17 35.3 | +0.2 |
| EVR | | | | eSb | Sb | 22 17 36.9 | +0.2 |
| EFP | Efpalio | 0.55 | 120 | ePN | Pg | 22 17 30.7 | -0.1 |
| EFP | | | | eSN | Sg | 22 17 38.9 | +0.9 |
| EFP | Efpalio | 0.55 | 120 | P | Pg | 22 17 30.7 | -0.1 |
| EFP | | | | S | Sg | 22 17 39.1 | +1.1 |
| EFP | Efpalio | 0.55 | 120 | P | Pg | 22 17 30.7 | -0.1 |
| EFP | | | | eSn | Sg | 22 17 38.9 | +0.9 |
| UPR | University Cam | 0.56 | 138 | P | Pg | 22 17 31.6 | +0.5 |
| UPR | University Cam | 0.56 | 138 | P | Pg | 22 17 31.6 | +0.5 |
| RLS | Riolos of Patr | 0.66 | 169 | ePN | Pg | 22 17 32.9 | 0.0 |
| RLS | | | | eSN | Sg | 22 17 41.9 | +0.4 |
| RLS | Riolos of Patr | 0.66 | 169 | P | Pg | 22 17 32.9 | 0.0 |
| RLS | | | | S | Sb | 22 17 44.1 | +1.6 |
| RLS | Riolos of Patr | 0.66 | 169 | P | Pg | 22 17 32.9 | 0.0 |
| RLS | | | | eSn | Sg | 22 17 41.9 | +0.4 |
| SERG | Sergoula | 0.66 | 116 | ePN | Pg | 22 17 32.5 | -0.4 |
| SERG | Sergoula | 0.66 | 116 | P | Pg | 22 17 32.5 | -0.4 |
| SERG | | | | S | Sb | 22 17 43.4 | +0.8 |
| SERG | Sergoula | 0.66 | 116 | P | Pg | 22 17 32.5 | -0.4 |
| SERG | | | | S | Sb | 22 17 43.4 | +0.8 |
| LAKA | Lakka | 0.70 | 131 | ePN | Pg | 22 17 33.7 | 0.0 |
| LAKA | Lakka | 0.70 | 131 | P | Pg | 22 17 33.6 | -0.1 |
| LAKA | | | | S | Sb | 22 17 45.2 | +1.3 |
| LAKA | Lakka | 0.70 | 131 | P | Pg | 22 17 33.6 | -0.1 |
| LAKA | | | | S | Sb | 22 17 45.2 | +1.3 |
| KFL | Anninata | 0.72 | 215 | P | Pg | 22 17 33.6 | -0.5 |
| KFL | | | | S | Sb | 22 17 44.9 | +0.6 |
| KFL | Anninata | 0.72 | 215 | P | Pg | 22 17 33.5 | -0.5 |
| KFL | | | | S | Sb | 22 17 44.9 | +0.6 |
| MAKR | Makrakomi, Fth | 0.72 | 64 | ePN | Pg | 22 17 34.1 | 0.0 |
| MAKR | | | | eSN | Sb | 22 17 45.3 | +0.9 |
| MAKR | Makrakomi, Fth | 0.72 | 64 | P | Pg | 22 17 34.1 | 0.0 |
| MAKR | | | | S | Sg | 22 17 43.9 | +0.4 |
| MAKR | Makrakomi, Fth | 0.72 | 64 | P | Pg | 22 17 34.1 | 0.0 |
| MAKR | | | | S | Sg | 22 17 43.9 | +0.4 |
| MAKR | | | | eSn | Sb | 22 17 45.3 | +0.9 |
| KALE | Kalithea | 0.72 | 115 | ePN | Pg | 22 17 33.7 | -0.5 |
| KALE | Kalithea | 0.72 | 115 | P | Pg | 22 17 33.6 | -0.6 |
| KALE | | | | S | Sb | 22 17 45.6 | +1.0 |
| KALE | Kalithea | 0.72 | 115 | P | Pg | 22 17 33.6 | -0.6 |
| KALE | | | | S | Sb | 22 17 45.6 | +1.0 |
| VLS | Valsamata | 0.77 | 227 | ePN | Pg | 22 17 33.9 | -1.0 |
| VLS | | | | eSN | Sg | 22 17 45.3 | +0.3 |
| VLS | Valsamata | 0.77 | 227 | P | Pg | 22 17 34.0 | -1.0 |
| VLS | | | | S | Sb | 22 17 46.2 | +0.4 |
| VLS | Valsamata | 0.77 | 227 | P | Pg | 22 17 34.0 | -1.0 |
| VLS | | | | eSn | Sg | 22 17 45.3 | +0.3 |
| VLS | | | | S | Sb | 22 17 46.2 | +0.4 |
| DRO | Drossia | 0.81 | 157 | ePN | Pg | 22 17 35.4 | -0.5 |
| DRO | | | | eSN | Sg | 22 17 47.2 | +0.7 |
| DRO | Drossia | 0.81 | 157 | P | Pg | 22 17 35.3 | -0.6 |
| DRO | | | | S | Sb | 22 17 48.5 | +1.4 |
| DRO | Drossia | 0.81 | 157 | P | Pg | 22 17 35.3 | -0.6 |
| DRO | | | | eSn | Sg | 22 17 47.2 | +0.7 |
| DRO | | | | S | Sb | 22 17 48.5 | +1.4 |
| AGG | Agios Georgios | 0.86 | 68 | ePN | Pg | 22 17 36.7 | -0.1 |
| AGG | | | | eSN | Sb | 22 17 49.4 | +0.8 |
| AGG | Agios Georgios | 0.86 | 68 | P | Pg | 22 17 36.7 | -0.1 |
| AGG | | | | S | Sb | 22 17 49.6 | +1.0 |
| AGG | Agios Georgios | 0.86 | 68 | P | Pg | 22 17 36.8 | -0.1 |
| AGG | | | | S | Sb | 22 17 49.6 | +1.0 |
| KLV | Kalavryta, Ach | 0.93 | 134 | ePN | Pg | 22 17 37.3 | -0.9 |
| KLV | Kalavryta, Ach | 0.93 | 134 | P | Pg | 22 17 37.2 | -0.9 |
| KLV | | | | S | Sn | 22 17 52.8 | +0.4 |
| KLV | Kalavryta, Ach | 0.93 | 134 | P | Pg | 22 17 37.2 | -0.9 |
| KLV | | | | S | Sn | 22 17 52.8 | +0.4 |
| DESF | Desfina | 1.00 | 106 | ePB | Pg | 22 17 37.9 | -1.6 |
| DESF | Desfina | 1.00 | 106 | ePb | Pg | 22 17 37.9 | -1.6 |
| JAN | Janina | 1.02 | 340 | ePN | Pg | 22 17 39.4 | -0.4 |
| JAN | | | | eSN | Sn | 22 17 54.3 | -0.2 |
| JAN | Janina | 1.02 | 340 | P | Pg | 22 17 39.4 | -0.4 |
| JAN | | | | S | Sb | 22 17 53.4 | +0.4 |
| JAN | Janina | 1.02 | 340 | P | Pg | 22 17 39.4 | -0.4 |
| JAN | | | | S | Sb | 22 17 53.4 | +0.4 |
| JAN | | | | eSn | Sn | 22 17 54.3 | -0.2 |
| THL | Klokotos Trika | 1.02 | 32 | ePB | Pg | 22 17 39.1 | -0.8 |
| THL | Klokotos Trika | 1.02 | 32 | P | Pg | 22 17 39.1 | -0.8 |
| THL | | | | S | Sb | 22 17 54.2 | +1.0 |
| THL | Klokotos Trika | 1.02 | 32 | P | Pg | 22 17 39.1 | -0.8 |
| THL | | | | S | Sb | 22 17 54.2 | +1.0 |
| AXAR | Agios Charalam | 1.06 | 86 | ePN | Pb | 22 17 40.3 | -0.2 |
| AXAR | | | | eSN | Sn | 22 17 55.9 | +0.4 |
| AXAR | Agios Charalam | 1.06 | 86 | P | Pb | 22 17 40.2 | -0.2 |
| AXAR | | | | S | Sn | 22 17 55.6 | +0.1 |
| AXAR | Agios Charalam | 1.06 | 86 | P | Pb | 22 17 40.2 | -0.2 |
| AXAR | | | | S | Sn | 22 17 55.6 | +0.1 |
| AXAR | | | | eSn | Sn | 22 17 55.9 | +0.4 |
| GUR | Goura | 1.12 | 133 | ePB | Pb | 22 17 40.4 | -1.0 |
| GUR | Goura | 1.12 | 133 | P | Pb | 22 17 40.5 | -1.0 |
| GUR | | | | S | Sn | 22 17 58.3 | +1.3 |
| GUR | Goura | 1.12 | 133 | P | Pb | 22 17 40.5 | -1.0 |
| GUR | | | | S | Sn | 22 17 58.3 | +1.3 |
| IGT | Igoumenitsa | 1.12 | 318 | ePN | Pb | 22 17 41.2 | -0.3 |
| IGT | | | | eSN | Sn | 22 17 57.2 | +0.2 |
| IGT | Igoumenitsa | 1.12 | 318 | P | Pb | 22 17 41.2 | -0.3 |
| IGT | | | | S | Sn | 22 17 57.0 | 0.0 |
| IGT | Igoumenitsa | 1.12 | 318 | P | Pb | 22 17 41.2 | -0.3 |
| IGT | | | | eSn | Sn | 22 17 57.2 | +0.2 |
| AMT | Artemida-Makis | 1.21 | 165 | ePN | Pn | 22 17 42.2 | -0.6 |
| AMT | Artemida-Makis | 1.21 | 165 | P | Pn | 22 17 42.3 | -0.6 |
| AMT | | | | S | Sn | 22 18 01.8 | +2.6 |
| AMT | Artemida-Makis | 1.21 | 165 | P | Pn | 22 17 42.3 | -0.6 |
| AMT | | | | S | Sn | 22 18 02.7 | +3.5 |
| SGD | Sagiada | 1.23 | 318 | ePN | Pn | 22 17 43.4 | +0.2 |
| SGD | Sagiada | 1.23 | 318 | P | Pn | 22 17 43.2 | +0.1 |
| SGD | | | | S | Sn | 22 18 01.9 | +2.2 |
| SGD | Sagiada | 1.23 | 318 | P | Pn | 22 17 43.2 | +0.1 |
| THAL | Thalero | 1.26 | 121 | ePN | Pn | 22 17 43.9 | +0.4 |
| THAL | Thalero | 1.26 | 121 | P | Pn | 22 17 43.9 | +0.4 |
| THAL | | | | S | Sg | 22 18 02.3 | +1.7 |
| THAL | Thalero | 1.26 | 121 | P | Pn | 22 17 43.9 | +0.4 |
| THAL | | | | S | Sg | 22 18 02.3 | +1.7 |
| LKR | Lokris | 1.33 | 92 | ePN | Pn | 22 17 44.5 | +0.1 |
| LKR | Lokris | 1.33 | 92 | P | Pn | 22 17 44.5 | +0.1 |
| LKR | | | | S | Sg | 22 18 04.4 | +1.5 |
| LKR | Lokris | 1.33 | 92 | P | Pn | 22 17 44.5 | +0.1 |
| LKR | | | | S | Sg | 22 18 04.4 | +1.5 |
| ATAL | Atalanti | 1.34 | 90 | P | Pn | 22 17 45.0 | +0.3 |
| ATAL | | | | S | Sg | 22 18 04.9 | +1.5 |
| ATAL | Atalanti | 1.34 | 90 | P | Pn | 22 17 45.0 | +0.3 |
| ATAL | | | | S | Sg | 22 18 04.9 | +1.5 |
| FYTO | Fytoko, Volos | 1.46 | 60 | P | Pn | 22 17 47.0 | +0.8 |
| FYTO | | | | S | Sg | 22 18 07.1 | +0.1 |
| FYTO | Fytoko, Volos | 1.46 | 60 | P | Pn | 22 17 47.0 | +0.8 |
| FYTO | | | | S | Sg | 22 18 07.1 | +0.1 |
| SFD | Strofades | 1.47 | 189 | ePN | Pb | 22 17 47.6 | +0.3 |
| SFD | Strofades | 1.47 | 189 | ePn | Pb | 22 17 47.6 | +0.3 |
| LTK | Loutraki | 1.47 | 117 | ePN | Pb | 22 17 47.5 | 0.0 |
| LTK | Loutraki | 1.47 | 117 | P | Pb | 22 17 47.4 | 0.0 |
| LTK | | | | S | Sg | 22 18 08.5 | +1.0 |
| LTK | Loutraki | 1.47 | 117 | P | Pb | 22 17 47.4 | 0.0 |
| LTK | | | | S | Sg | 22 18 08.5 | +1.0 |
| ACOR | Acrocorinthos | 1.47 | 123 | P | Pb | 22 17 47.7 | +0.3 |
| ACOR | | | | S | Sg | 22 18 08.1 | +0.5 |
| LOUT | Loutraki | 1.49 | 118 | ePN | Pb | 22 17 47.7 | -0.1 |
| LOUT | Loutraki | 1.49 | 118 | P | Pn | 22 17 47.6 | +0.9 |
| LOUT | Loutraki | 1.49 | 118 | ePn | Pb | 22 17 47.7 | -0.1 |
| SMIA | Simia | 1.50 | 83 | ePN | Pn | 22 17 47.5 | +0.7 |
| SMIA | Simia | 1.50 | 83 | P | Pb | 22 17 47.8 | -0.1 |
| SMIA | | | | S | Sg | 22 18 08.4 | 0.0 |
| SMIA | Simia | 1.50 | 83 | ePn | Pn | 22 17 47.5 | +0.7 |
| SMIA | Simia | 1.50 | 83 | P | Pb | 22 17 47.8 | -0.1 |
| SMIA | | | | S | Sg | 22 18 08.4 | 0.0 |
| KEK | Kerkira | 1.55 | 311 | ePN | Pn | 22 17 47.8 | +0.3 |
| KEK | Kerkira | 1.55 | 311 | P | Pn | 22 17 48.0 | +0.5 |
| KEK | | | | S | Sg | 22 18 10.1 | +0.2 |
| KEK | Kerkira | 1.55 | 311 | P | Pn | 22 17 48.0 | +0.5 |
| KEK | | | | S | Sg | 22 18 10.1 | +0.2 |
| SRN | Sarande | 1.55 | 320 | i PN | Pb | 22 17 48.9 | +0.1 |
| SRN | | | | i SN | Sg | 22 18 15.7 | +5.6 |
| SRN | Sarande | 1.55 | 320 | P | Pb | 22 17 48.6 | -0.2 |
| SRN | | | | S | Sg | 22 18 10.0 | -0.1 |
| SRN | Sarande | 1.55 | 320 | P | Pb | 22 17 48.6 | -0.2 |
| SRN | Sarande | 1.55 | 320 | i Pn | Pb | 22 17 48.9 | +0.1 |
| SRN | | | | S | Sg | 22 18 10.0 | -0.1 |
| VLX | Vlachokerasia | 1.58 | 147 | ePN | Pb | 22 17 49.1 | -0.1 |
| VLX | | | | eSN | Sb | 22 18 10.2 | +1.0 |
| VLX | Vlachokerasia | 1.58 | 147 | P | Pn | 22 17 48.7 | +0.7 |
| VLX | | | | S | Sg | 22 18 11.9 | +1.0 |
| VLX | Vlachokerasia | 1.58 | 147 | P | Pn | 22 17 48.7 | +0.7 |
| VLX | Vlachokerasia | 1.58 | 147 | ePn | Pb | 22 17 49.1 | -0.1 |
| VLX | | | | eSn | Sb | 22 18 10.2 | +1.0 |
| VLX | | | | S | Sg | 22 18 11.9 | +1.0 |
| ITM | Ithomi | 1.60 | 162 | ePN | Pn | 22 17 49.0 | +0.8 |
| ITM | Ithomi | 1.60 | 162 | P | Pn | 22 17 48.9 | +0.8 |
| ITM | Ithomi | 1.60 | 162 | ePn | Pn | 22 17 49.0 | +0.8 |
| NEO | Neokhori | 1.61 | 67 | ePN | Pn | 22 17 49.3 | +0.9 |
| NEO | Neokhori | 1.61 | 67 | P | Pn | 22 17 49.4 | +1.0 |
| NEO | Neokhori | 1.61 | 67 | P | Pn | 22 17 49.4 | +1.0 |
| XOR | Xorichti | 1.61 | 65 | ePB | Pn | 22 17 48.9 | +0.5 |
| XOR | Xorichti | 1.61 | 65 | P | Pn | 22 17 49.1 | +0.7 |
| XOR | | | | S | Sg | 22 18 11.8 | -0.3 |
| XOR | Xorichti | 1.61 | 65 | P | Pn | 22 17 49.1 | +0.7 |
| XOR | | | | S | Sg | 22 18 11.8 | -0.3 |
| VIL2 | Platees | 1.62 | 107 | ePN | Pb | 22 17 50.4 | +0.5 |
| KZN | Kozani | 1.64 | 13 | ePN | Pn | 22 17 50.0 | +1.0 |
| KZN | Kozani | 1.64 | 13 | P | Pn | 22 17 49.9 | +1.0 |
| KZN | | | | S | Sb | 22 18 12.1 | +1.0 |
| KZN | Kozani | 1.64 | 13 | P | Pn | 22 17 49.9 | +1.0 |
| KZN | | | | S | Sb | 22 18 12.1 | +1.0 |
| VILL | Villia | 1.67 | 108 | P | Pn | 22 17 50.3 | +1.2 |
| VILL | | | | S | Sb | 22 18 12.8 | +1.1 |
| VILL | Villia | 1.67 | 108 | ePn | Pb | 22 17 50.4 | -0.3 |
| VILL | | | | S | Sb | 22 18 12.8 | +1.1 |
| LIT | Litokhoron | 1.67 | 33 | ePN | Pn | 22 17 50.1 | +0.9 |
| LIT | Litokhoron | 1.67 | 33 | ePn | Pn | 22 17 50.1 | +0.9 |
| NEST | Nestorio | 1.72 | 354 | ePN | Pb | 22 17 52.3 | +0.5 |
| NEST | Nestorio | 1.72 | 354 | P | Pn | 22 17 51.0 | +1.0 |
| NEST | Nestorio | 1.72 | 354 | P | Pn | 22 17 51.0 | +1.0 |
| NEST | Nestorio | 1.72 | 354 | ePn | Pb | 22 17 52.3 | +0.5 |
| MRKA | Markates | 1.79 | 89 | ePB | Pn | 22 17 50.9 | +0.1 |
| MRKA | Markates | 1.79 | 89 | P | Pn | 22 17 51.8 | +1.0 |
| MRKA | | | | S | Sb | 22 18 15.6 | +0.5 |
| MRKA | Markates | 1.79 | 89 | ePb | Pn | 22 17 50.9 | +0.1 |
| MRKA | Markates | 1.79 | 89 | P | Pn | 22 17 51.8 | +1.0 |
| MRKA | | | | S | Sb | 22 18 15.6 | +0.5 |
| PYL | PYLOS | 1.83 | 169 | ePN | Pb | 22 17 53.8 | +0.2 |
| PYL | PYLOS | 1.83 | 169 | P | Pb | 22 17 53.3 | -0.3 |
| PYL | | | | S | Sb | 22 18 18.2 | +1.7 |
| PYL | PYLOS | 1.83 | 169 | P | Pb | 22 17 53.3 | -0.3 |
| PYL | PYLOS | 1.83 | 169 | ePn | Pb | 22 17 53.8 | +0.2 |
| PYL | | | | S | Sb | 22 18 18.2 | +1.7 |
| DIDY | Didyma | 1.94 | 128 | ePN | Pn | 22 17 54.5 | +1.6 |
| DIDY | Didyma | 1.94 | 128 | P | Pn | 22 17 54.6 | +1.6 |
| DIDY | Didyma | 1.94 | 128 | ePn | Pn | 22 17 54.5 | +1.6 |
| KBN | Korca | 1.96 | 348 | i PN | Pb | 22 17 57.1 | +1.3 |
| KBN | | | | i SG | Sg | 22 18 27.3 | +4.1 |
| KBN | Korca | 1.96 | 348 | P | Pn | 22 17 54.6 | +1.4 |
| KBN | Korca | 1.96 | 348 | P | Pn | 22 17 54.6 | +1.4 |
| KBN | Korca | 1.96 | 348 | i Pn | Pb | 22 17 57.1 | +1.3 |
| KBN | | | | i Sg | Sg | 22 18 27.3 | +4.1 |
| NAIG | Nisos Aigina | 1.96 | 118 | ePN | Pb | 22 17 54.9 | -0.8 |
| NAIG | Nisos Aigina | 1.96 | 118 | ePn | Pb | 22 17 54.9 | -0.8 |
| KRND | KRANIDI | 1.96 | 131 | ePN | Pb | 22 17 55.2 | -0.6 |
| KRND | KRANIDI | 1.96 | 131 | P | Pn | 22 17 54.6 | +1.4 |
| KRND | | | | S | Sb | 22 18 20.8 | +0.6 |
| KRND | KRANIDI | 1.96 | 131 | P | Pn | 22 17 54.6 | +1.4 |
| KRND | KRANIDI | 1.96 | 131 | ePn | Pb | 22 17 55.2 | -0.6 |
| KRND | | | | S | Sb | 22 18 20.8 | +0.6 |
| ATH | Athens Observa | 2.03 | 110 | ePN | Pb | 22 17 56.1 | -0.8 |
| ATH | Athens Observa | 2.03 | 110 | ePn | Pb | 22 17 56.1 | -0.8 |
| AOS | Alonnisos | 2.06 | 76 | P | Pn | 22 17 54.7 | +0.1 |
| AOS | | | | S | Sb | 22 18 23.1 | 0.0 |
| AOS | Alonnisos | 2.06 | 76 | P | Pn | 22 17 54.7 | +0.1 |
| AOS | | | | S | Sb | 22 18 23.1 | 0.0 |
| EREA | Eretria | 2.08 | 97 | ePN | Pn | 22 17 56.1 | +1.3 |
| EREA | Eretria | 2.08 | 97 | P | Pn | 22 17 56.2 | +1.4 |
| EREA | | | | S | Sb | 22 18 23.4 | -0.2 |
| EREA | Eretria | 2.08 | 97 | ePn | Pn | 22 17 56.1 | +1.3 |
| EREA | | | | S | Sb | 22 18 23.4 | -0.2 |
| FNA | Florina | 2.08 | 2 | ePN | Pb | 22 17 57.0 | -0.8 |
| FNA | Florina | 2.08 | 2 | P | Pn | 22 17 56.5 | +1.6 |
| FNA | | | | S | Sb | 22 18 24.0 | +0.3 |
| FNA | Florina | 2.08 | 2 | P | Pn | 22 17 56.5 | +1.6 |
| FNA | Florina | 2.08 | 2 | ePn | Pb | 22 17 57.0 | -0.8 |
| FNA | | | | S | Sb | 22 18 24.0 | +0.3 |
| VLY | Voula,Athens | 2.13 | 113 | P | Pn | 22 17 56.5 | +0.9 |
| VLY | | | | S | Sb | 22 18 24.7 | -0.4 |
| VLY | Voula,Athens | 2.13 | 113 | P | Pn | 22 17 56.5 | +0.9 |
| VLY | | | | S | Sb | 22 18 24.7 | -0.4 |
| PAIG | Paliouri | 2.21 | 56 | ePB | Pn | 22 17 57.2 | +0.7 |
| PAIG | Paliouri | 2.21 | 56 | P | Pn | 22 17 57.3 | +0.7 |
| PAIG | Paliouri | 2.21 | 56 | P | Pn | 22 17 57.3 | +0.7 |
| PLG | Polygyros | 2.35 | 44 | ePN | Pn | 22 17 59.2 | +0.6 |
| PLG | Polygyros | 2.35 | 44 | P | Pn | 22 17 58.9 | +0.3 |
| PLG | Polygyros | 2.35 | 44 | P | Pn | 22 17 58.9 | +0.3 |
| PLG | Polygyros | 2.35 | 44 | ePn | Pn | 22 17 59.2 | +0.6 |
| VLI | Veliai | 2.37 | 146 | ePB | Pb | 22 18 01.4 | -1.2 |
| VLI | Veliai | 2.37 | 146 | P | Pb | 22 18 01.1 | -1.5 |
| VLI | Veliai | 2.37 | 146 | P | Pb | 22 18 01.1 | -1.5 |
| VLI | Veliai | 2.37 | 146 | ePb | Pb | 22 18 01.4 | -1.2 |
| GRG | Griva | 2.41 | 20 | P | Pn | 22 18 00.4 | +1.1 |
| GRG | Griva | 2.41 | 20 | P | Pn | 22 18 00.4 | +1.1 |
| OHR | Ohrid | 2.44 | 351 | ePn | Pn | 22 18 02.0 | +2.2 |
| OHR | | | | eSn | Sb | 22 18 34.1 | +0.2 |
| OHR | | | | eLg | Lg | 22 18 43.7 | |
| | comp=E,125nm,0.7s | | | | | | |
| OHR | | | | eLg | Lg | 22 18 43.9 | |
| | comp=N,89nm,0.8s | | | | | | |
| OHR | Ohrid | 2.44 | 351 | ePn | Pn | 22 18 02.0 | +2.2 |
| OHR | | | | eSn | Sb | 22 18 34.1 | +0.2 |
| OHR | | | | eLg | Lg | 22 18 43.8 | |
| | comp=N,89nm,0.8s | | | | | | |
| OUR | Ouranopolis | 2.64 | 51 | ePN | Pn | 22 18 03.5 | +1.1 |
| OUR | Ouranopolis | 2.64 | 51 | P | Pn | 22 18 03.1 | +0.7 |
| OUR | Ouranopolis | 2.64 | 51 | P | Pn | 22 18 03.1 | +0.7 |
| OUR | Ouranopolis | 2.64 | 51 | ePn | Pn | 22 18 03.5 | +1.1 |
| SOH | Sokhos | 2.64 | 36 | ePN | Pn | 22 18 03.7 | +1.1 |
| SOH | Sokhos | 2.64 | 36 | P | Pn | 22 18 03.7 | +1.1 |
| SOH | | | | S | Sn | 22 18 37.1 | +2.5 |
| SOH | Sokhos | 2.64 | 36 | P | Pn | 22 18 03.7 | +1.1 |
| SOH | | | | S | Sn | 22 18 37.1 | +2.5 |
| KNT | Kendrikon | 2.75 | 26 | ePN | Pn | 22 18 05.4 | +1.5 |
| KNT | Kendrikon | 2.75 | 26 | P | Pn | 22 18 05.5 | +1.5 |
| KNT | Kendrikon | 2.75 | 26 | ePn | Pn | 22 18 05.4 | +1.5 |
| KYTH | Kithira | 2.78 | 150 | ePN | Pn | 22 18 06.1 | +1.6 |
| KYTH | Kithira | 2.78 | 150 | ePn | Pn | 22 18 06.1 | +1.6 |
| TIR | Tirane | 2.87 | 338 | i PN | Pb | 22 18 10.6 | -0.6 |
| TIR | Tirane | 2.87 | 338 | i Pn | Pb | 22 18 10.6 | -0.6 |
| SRS | Serrai | 2.99 | 35 | ePN | Pn | 22 18 07.9 | +0.6 |
| SRS | Serrai | 2.99 | 35 | P | Pn | 22 18 08.3 | +1.0 |
| SRS | Serrai | 2.99 | 35 | ePn | Pn | 22 18 07.9 | +0.6 |
| SRS | Serrai | 2.99 | 35 | P | Pn | 22 18 08.3 | +1.0 |
| PHP | Peshkopia | 3.05 | 348 | i PN | Pb | 22 18 12.7 | -1.7 |
| PHP | | | | i SG | Sg | 22 18 59.5 | +1.3 |
| PHP | Peshkopia | 3.05 | 348 | P | Pn | 22 18 09.4 | +1.2 |
| PHP | Peshkopia | 3.05 | 348 | P | Pn | 22 18 09.4 | +1.2 |
| PHP | Peshkopia | 3.05 | 348 | i Pn | Pb | 22 18 12.7 | -1.7 |
| PHP | | | | i Sg | Sg | 22 18 59.5 | +1.3 |
| NVR | Nevrokopi | 3.29 | 36 | ePN | Pn | 22 18 13.2 | +1.7 |
| NVR | Nevrokopi | 3.29 | 36 | ePn | Pn | 22 18 13.2 | +1.7 |
| MMB | Musomiste | 3.43 | 32 | i P | Pn | 22 18 14.5 | +1.1 |
| MMB | Musomiste | 3.43 | 32 | i P | Pn | 22 18 14.5 | +1.1 |
| PUK | Puka | 3.51 | 343 | i PN | Pn | 22 18 17.8 | +3.3 |
| PUK | Puka | 3.51 | 343 | i Pn | Pn | 22 18 17.8 | +3.3 |
| TIP | Timpagrande | 3.58 | 279 | P | Pn | 22 18 15.6 | +0.2 |
| TIP | Timpagrande | 3.58 | 279 | P | Pn | 22 18 15.6 | +0.2 |
| TAR1 | Taranto | 3.60 | 302 | ePn | Pn | 22 18 16.2 | +0.5 |
| PE1 | Pezze di Greco | 3.66 | 306 | ePn | Pn | 22 18 16.5 | +0.1 |
| BCI | Bajram Curri | 3.78 | 346 | i PN | Pn | 22 18 20.0 | +1.8 |
| BCI | Bajram Curri | 3.78 | 346 | i Pn | Pn | 22 18 20.0 | +1.8 |
| RZN | Rozhen | 3.97 | 40 | i P | Pn | 22 18 22.3 | +1.4 |
| RZN | Rozhen | 3.97 | 40 | i P | Pn | 22 18 22.3 | +1.4 |
| BARS | Barje | 4.13 | 5 | ⇓i Pn | Pn | 22 18 24.1 | +1.1 |
| VTS | Vitosha | 4.15 | 20 | i P | Pn | 22 18 25.3 | +1.9 |
| VTS | Vitosha | 4.15 | 20 | i P | Pn | 22 18 25.3 | +1.9 |
| IDI | Anoyia | 4.45 | 139 | Pn | Pn | 22 18 28.2 | +0.7 |
| | comp=N,0.6nm,0.3s,baz=247,slow=10,SNR=20 | | | | | | |
| SJES | Sjenica | 4.67 | 348 | ⇑i Pn | Pn | 22 18 31.6 | +1.2 |
| BOVS | Bovan | 4.94 | 3 | ePn | Pn | 22 18 34.4 | +0.3 |
| IVAS | Ivanjica | 4.95 | 350 | ePn | Pn | 22 18 34.8 | +0.5 |
| GRUS | Gruza | 5.20 | 355 | ⇓i Pn | Pn | 22 18 37.8 | +0.1 |
| BBLS | Lazići | 5.36 | 345 | i Pn | Pn | 22 18 40.1 | +0.2 |
| DIVS | Divibare | 5.48 | 350 | ⇑i P | Pn | 22 18 41.8 | +0.2 |
| DIVS | Divibare | 5.48 | 350 | S | Pg | 22 19 01.2 | -3.9 |
| DIVS | Divibare | 5.48 | 350 | i Pn | Pn | 22 18 41.5 | -0.1 |
| DIVS | Divibare | 5.48 | 350 | ⇑i P | Pn | 22 18 41.8 | +0.2 |
| GZR | Gura Zlata | 6.78 | 9 | ⇑i P | Pn | 22 19 00.4 | +1.0 |
| VOIR | | 7.28 | 21 | ⇑i P | Pn | 22 19 09.0 | +2.6 |
| VOIR | | 7.28 | 21 | ⇑i P | Pn | 22 19 09.0 | +2.6 |
| MLR | Muntele Rosu | 7.61 | 25 | Pn | Pn | 22 19 13.3 | +2.4 |
| | comp=N,0.1nm,0.3s,baz=201,slow=14,SNR=6.9 | | | | | | |
| MLR | Muntele Rosu | 7.61 | 25 | ⇑i P | Pn | 22 19 13.7 | +2.8 |
| MLR | Muntele Rosu | 7.61 | 25 | ⇑i P | Pn | 22 19 13.7 | +2.8 |
| DRGR | | 8.15 | 7 | ⇓i P | Pg | 22 19 54.5 | -1.6 |
| PLOR | Plostina | 8.17 | 27 | ⇑i P | Pn | 22 19 22.5 | +4.0 |
| VRI | Vrincioaia | 8.21 | 28 | ⇓i P | Pn | 22 19 24.1 | +5.1 |
| PSZ | Piszkesteto | 9.27 | 354 | ⇑i P | Pn | 22 19 34.3 | +0.7 |
| PSZ | Piszkesteto | 9.27 | 354 | ⇑i P | Pn | 22 19 34.3 | +0.7 |
| FINES | FINESS Array B | 22.96 | 6 | P | P | 22 22 21.0 | -3.0 |
| | comp=N,1.8nm,0.7s,baz=170,slow=11,SNR=6.9 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TORD | Torodi Ar. Bea | 30.82 | 220 | P | P | 22 23 34.8 | -1.1 |
| | comp=N,0.1nm,0.4s,baz=39,slow=8.9,SNR=6.0 | | | | | | |
| KURBB | Kurchatov Arra | 41.42 | 54 | P | P | 22 25 05.5 | -0.8 |
| | comp=N,0.3nm,0.6s,baz=287,slow=9.7,SNR=4.1 | | | | | | |
| MKAR | Makanchi Array | 44.51 | 59 | P | P | 22 25 30.4 | -0.9 |
| | comp=N,0.2nm,0.2s,baz=263,slow=8.6,SNR=2.2 | | | | | | |
| ZALV | Zalesovo Beam | 44.88 | 49 | P | P | 22 25 33.2 | -0.9 |
| | comp=N,0.7nm,0.5s,baz=284,slow=9.4,SNR=3.8 | | | | | | |

*HYB 02 22:59:29.4±1.3, 17°.13N×73°.78E, h3km, ML3.6*

**ISC 02 22:59:25.2±2.3, 17°.15N±0°.09×73°.6E±0°.1, h9km, n23, σ1s.52/26, 1C, Southern India**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| POO | Poona | 1.40 | 10 | ⇑iPG | Pb | 22 59 51.5 | -0.1 |
| | 44nm,0.5s | | | | | | |
| POO | | | | iSN | Sg | 23 00 13.0 | +2.7 |
| URV | Uravakonda | 4.15 | 121 | ePn | Pn | 23 00 29.4 | +0.5 |
| URV | | | | IAML | | 23 01 36.0 | |
| | comp=Z,156nm,0.4s | | | | | | |
| HYBB | Hyderabad (bro | 4.75 | 86 | ePn | Pn | 23 00 37.1 | 0.0 |
| HYBB | | | | IAML | | 23 01 51.0 | |
| | comp=Z,248nm,0.6s | | | | | | |
| HYB | Hyderabad | 4.75 | 86 | ePn | Pn | 23 00 37.0 | -0.1 |
| HYB | | | | ePg | Pb | 23 00 49.5 | +0.7 |
| HYB | | | | eSn | Sn | 23 01 29.5 | -2.9 |
| HYB | | | | eSg | Sb | 23 01 48.0 | +1.8 |
| NJS | Nagarjunasagar | 5.51 | 95 | ePn | Pn | 23 00 48.0 | +0.5 |
| NJS | | | | IAML | | 23 02 15.8 | |
| | comp=Z,148nm,0.5s | | | | | | |
| RPR | Rampur | 5.69 | 72 | ePn | Pn | 23 00 50.5 | +0.5 |
| RPR | | | | IAML | | 23 02 21.9 | |
| | comp=Z,208nm,0.3s | | | | | | |
| ADKI | Addanki | 6.26 | 101 | ePn | Pn | 23 00 57.8 | 0.0 |
| ADKI | | | | IAML | | 23 02 41.1 | |
| | comp=Z,112nm,0.5s | | | | | | |
| NGP | Nagpur | 6.52 | 52 | ex | Pn | 23 01 04.6 | +3.2 |
| | comp=Z,10nm,0.4s | | | | | | |
| NGP | | | | ex | x | 23 01 05.4 | |
| | comp=Z,10nm,0.4s | | | | | | |
| NGP | | | | ex | x | 23 02 45.3 | |
| SKHT | Srikalahasti | 6.81 | 119 | ePn | Pn | 23 01 07.2 | +1.8 |
| SKHT | | | | IAML | | 23 03 02.5 | |
| | comp=Z,57nm,0.5s | | | | | | |
| PVM | Polavaram | 7.68 | 88 | ePn | Pn | 23 01 18.2 | +0.9 |
| PVM | | | | IAML | | 23 03 41.3 | |
| | comp=Z,62nm,0.7s | | | | | | |
| CHLP | Challavanipeta | 10.06 | 81 | ePn | Pn | 23 01 50.2 | +0.1 |
| CHLP | | | | IAML | | 23 04 33.8 | |
| | comp=Z,47nm,0.6s | | | | | | |
| KOLN | Koldanda | 14.04 | 39 | eP | Pn | 23 02 43.5 | -1.2 |
| | comp=Z,4.1nm,0.3s | | | | | | |
| KOLN | Koldanda | 14.04 | 39 | eP | Pn | 23 02 43.9 | -0.8 |
| | comp=Z,6.6nm,0.4s | | | | | | |
| GKN | Gorkha | 14.85 | 41 | eP | Pn | 23 02 54.1 | -1.6 |
| | comp=Z,4.2nm,0.3s | | | | | | |
| GKN | Gorkha | 14.85 | 41 | eP | Pn | 23 02 53.7 | -2.0 |
| | comp=Z,4.2nm,0.3s | | | | | | |
| PKIN | Phulchoki | 15.06 | 44 | eP | Pn | 23 02 57.4 | -1.1 |
| PKIN | Phulchoki | 15.06 | 44 | eP | Pn | 23 02 57.3 | -1.2 |
| PKIN | Phulchoki | 15.06 | 44 | eP | Pn | 23 02 57.6 | -0.9 |
| | comp=Z,4.2nm,0.4s | | | | | | |
| PKI | Pulchoki | 15.06 | 44 | eP | Pn | 23 02 57.3 | -1.4 |
| | comp=Z,6.2nm,0.4s | | | | | | |
| KKN | Kakani | 15.12 | 44 | eP | Pn | 23 02 57.1 | -2.2 |
| | comp=Z,6.8nm,0.5s | | | | | | |
| KKN | Kakani | 15.12 | 44 | eP | Pn | 23 02 57.3 | -2.0 |
| | comp=Z,5.2nm,0.3s | | | | | | |
| RAMN | Ramite | 15.50 | 49 | eP | Pn | 23 03 02.9 | -1.5 |
| | comp=Z,5.1nm,0.4s | | | | | | |
| RAMN | Ramite | 15.50 | 49 | eP | Pn | 23 03 02.7 | -1.7 |
| | comp=Z,5.1nm,0.4s | | | | | | |

**IDC 02 23:04:08.3±2.8, 4°.89S×135°.48E, h0km, mb3.7/2, mb1 4.1/4, mb1mx3.7/25, mbtmp3.9/4, ML4.0/2, MS3.3/5, Ms1 3.3/5, ms1mx3.0/24, Error ellipse: s-maj=138.7km s-min=28.8km az=82.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 15.00 | 184 | Pn | Pn | 23 07 40.6 | -1.2 |
| | 0.6nm,0.3s,baz=2.4,slow=13,SNR=17 | | | | | | |
| WRA | | | | Sn | Sn | 23 10 18.9 | -10 |
| | 0.3nm,0.3s,baz=351,slow=24,SNR=5.9 | | | | | | |
| WRA | | | | LR | LR | 23 14 10.8 | |
| | comp=Z,137nm,18.1s,baz=10.0,slow=40 | | | | | | |
| KAPI | Kappang | 15.67 | 269 | LR | LR | 23 14 02.4 | |
| | comp=Z,59nm,22.0s,baz=106,slow=38 | | | | | | |
| ASAR | Alice Springs | 18.73 | 185 | P | Pn | 23 08 29.2 | +0.1 |
| | 0.8nm,0.3s,baz=1.4,slow=13,SNR=32 | | | | | | |
| ASAR | | | | LR | LR | 23 16 56.8 | |
| | comp=Z,146nm,19.5s,baz=348,slow=41 | | | | | | |
| MJAR | Matsushiro Arr | 41.30 | 3 | LR | LR | 23 27 00.8 | |
| | comp=Z,45nm,20.2s,baz=185,slow=33 | | | | | | |
| KSRS | Korea Array | 42.71 | 351 | LR | LR | 23 30 14.4 | |
| | comp=Z,27nm,18.6s,baz=182,slow=37 | | | | | | |
| MKAR | Makanchi Array | 69.60 | 324 | P | P | 23 15 21.3 | +1.9 |
| | 0.8nm,0.9s,baz=123,slow=7.1,SNR=4.3 | | | | | | |
| ZALV | Zalesovo Beam | 72.24 | 331 | P | P | 23 15 33.4 | -1.8 |
| | 0.3nm,0.3s,baz=132,slow=6.0,SNR=2.3 | | | | | | |

*IDC 02 23:08:34.0±3.5, 7°.59S×111°.63E, h0km, mb3.8/4, mb1 3.8/4, mb1mx3.4/28, mbtmp3.8/4, Error ellipse: s-maj=168.7km s-min=27.2km az=50.0*

*ISCJB 02 23:08:46.0±0.6, 8°.32S±0°.09×111°.45E±0°.04, h124km±5km, mb3.7/4, Error ellipse: s-maj=14.8km s-min=6.7km az=0.5*

*DJA 02 23:08:48.4±0.5, 8°S±6°×11°2E±°, h101km±4km, M3.7/17, MLv3.7/17*

**ISC 02 23:08:45.9±1.0, 8°.31S±0°.09×111°.45E±0°.04, h127km±6km, n22, σ1s.37/28, mb3.8/4, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCJI | Pacitan | 0.29 | 293 | P | Pn | 23 09 04.4 | +0.8 |
| PCJI | | | | S | Sn | 23 09 16.5 | -0.5 |
| PWJI | Pagerwojo | 0.45 | 51 | P | Pn | 23 09 04.1 | -0.2 |
| PWJI | | | | S | Sn | 23 09 17.0 | -1.2 |
| WOJI | Wonogiri, Jawa | 0.70 | 312 | P | Pn | 23 09 06.5 | +0.5 |
| WOJI | | | | S | Sn | 23 09 20.4 | -0.7 |
| NGJI | Ngawi | 0.94 | 1 | P | Pn | 23 09 09.7 | +1.7 |
| NGJI | | | | S | Sn | 23 09 24.5 | -0.1 |
| UGM | Wanagama | 1.00 | 293 | P | Pn | 23 09 09.3 | +0.7 |
| | baz=22,SNR=12 | | | | | | |
| UGM | Wanagama | 1.00 | 293 | P | Pn | 23 09 09.3 | +0.7 |
| UGM | | | | S | Sn | 23 09 25.5 | -0.2 |
| TBJI | Tambak Boyo | 1.54 | 15 | P | Pn | 23 09 15.3 | +1.1 |
| SMRI | Semarang | 1.60 | 321 | P | Pn | 23 09 16.6 | +1.5 |
| | baz=22,SNR=3.9 | | | | | | |
| GRJI | Gresik | 1.72 | 36 | P | Pn | 23 09 17.0 | +0.6 |
| UWJI | Ujung Watu | 1.94 | 345 | P | Pn | 23 09 19.7 | +0.6 |
| GMJI | Gumukmas | 1.97 | 89 | P | Pn | 23 09 19.1 | -0.3 |
| BLJI | Banyuglugur | 2.20 | 75 | P | Pn | 23 09 23.0 | +0.9 |
| BLJI | | | | S | Sn | 23 09 49.7 | -0.2 |
| KPJI | Karang Pucung | 2.68 | 291 | P | Pn | 23 09 31.1 | +2.8 |
| KMMI | Kalianget | 2.79 | 63 | P | Pn | 23 09 29.0 | -0.7 |
| ABJI | Asem Bagus | 2.80 | 80 | P | Pn | 23 09 31.7 | +1.8 |
| CMJI | Cimerak | 3.02 | 280 | P | Pn | 23 09 32.1 | -0.6 |
| IGBI | Denpasar | 3.69 | 98 | P | Pn | 23 09 43.0 | +1.5 |
| XMIS | Christmas Isla | 6.12 | 249 | P | Pn | 23 10 13.8 | -0.2 |
| | baz=28,SNR=3.7 | | | | | | |
| WRA | Warramunga Arr | 24.99 | 120 | P | P | 23 14 01.6 | +3.5 |
| | 0.5nm,0.8s,baz=295,slow=11,SNR=3.3 | | | | | | |
| SONM | Songino Array | 56.08 | 356 | P | P | 23 18 09.9 | -2.0 |
| | 0.5nm,0.6s,baz=182,slow=6.9,SNR=5.3 | | | | | | |
| MKAR | Makanchi Array | 60.70 | 337 | P | P | 23 18 43.5 | -0.4 |
| | 0.8nm,0.4s,baz=152,slow=7.3,SNR=12 | | | | | | |
| ZALV | Zalesovo Beam | 65.98 | 343 | P | P | 23 19 17.4 | -1.1 |
| | 0.7nm,0.3s,baz=169,slow=5.9,SNR=5.1 | | | | | | |

*ISCJB 02 23:23:28.1±0.8, 34°.3S±0°.1×109°.5W±0°.2, h10km, mb4.2/6, MS4.1/12, Error ellipse: s-maj=20.2km s-min=18.5km az=137.0*

*IDC 02 23:23:28.4±0.7, 34°.28S×109°.48W, h0km, mb4.2/6, mb1 4.3/6, mb1mx4.0/22, mbtmp4.2/6, MS4.0/13, Ms1 4.0/13, ms1mx4.0/19, Error ellipse: s-maj=35.9km s-min=21.8km az=106.0*

**ISC 02 23:23:29.9±0.7, 34°.3S±0°.2×109°.5W±0°.1, h10km, n24, σ0s.53/14, mb4.3/6, MS4.2/12, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RPN | Rapa Nui | 7.15 | 1 | LR | LR | 23 27 17.1 | |
| | comp=Z,458nm,19.6s,baz=164,slow=32 | | | | | | |
| RKT | Rikitea | 24.92 | 290 | eLR | LR | 23 35 10.8 | |
| | 1μm,27.8s,baz=132 | | | | | | |
| TBI | Tubuai | 36.49 | 277 | eLR | LR | 23 40 31.5 | |
| | 2μm,27.5s,baz=105 | | | | | | |
| LVC | Limon Verde | 37.29 | 83 | P | P | 23 30 42.8 | +0.4 |
| | 4.7nm,0.4s,baz=258,slow=9.2,SNR=3.4 | | | | | | |
| PPT2 | Papeete2 | 39.43 | 285 | eS | S | 23 37 02.4 | +0.2 |
| | 112nm,24.5s | | | | | | |
| PPT2 | | | | eLR | LR | 23 41 46.2 | |
| | 1μm,25.8s,baz=118 | | | | | | |
| LPAZ | La Paz | 41.13 | 75 | LR | LR | 23 45 05.1 | |
| | comp=Z,161nm,18.6s,baz=248,slow=32 | | | | | | |
| CPUP | Villa Florida | 45.30 | 95 | LR | LR | 23 47 16.8 | |
| | comp=Z,341nm,20.6s,baz=256,slow=32 | | | | | | |
| ROSC | El Rosal | 51.14 | 47 | P | P | 23 32 33.6 | 0.0 |
| | 1.6nm,0.3s,baz=142,slow=8.6,SNR=4.7 | | | | | | |
| ROSC | | | | LR | LR | 23 50 15.3 | |
| | comp=Z,100nm,18.6s,baz=266,slow=31 | | | | | | |
| QSPA | South Pole Qui | 55.90 | 180 | P | P | 23 33 07.7 | +0.1 |
| | 2.8nm,1.1s,baz=151,slow=2.5,SNR=4.2 | | | | | | |
| QSPA | | | | PcP | PcP | 23 34 06.9 | +0.7 |
| | 5.6nm,1.1s,baz=94,slow=1.7,SNR=6.6 | | | | | | |
| VNDA | Vanda | 56.52 | 195 | P | P | 23 33 11.5 | -0.2 |
| | 3.0nm,1.3s,baz=104,slow=4.2,SNR=4.7 | | | | | | |
| VNDA | | | | LR | LR | 23 52 10.2 | |
| | comp=Z,120nm,20.3s,baz=95,slow=30 | | | | | | |
| BDFB | Brasilia | 57.90 | 88 | LR | LR | 23 55 50.5 | |
| | comp=Z,236nm,18.4s,baz=228,slow=34 | | | | | | |
| TXAR | Lajitas Array | 63.53 | 6 | P | P | 23 34 00.8 | +0.4 |
| | 0.9nm,1.1s,baz=153,slow=8.4,SNR=4.0 | | | | | | |
| TXAR | | | | LR | LR | 23 57 13.8 | |
| | comp=Z,44nm,18.8s,baz=0.0,slow=32 | | | | | | |
| NVAR | Mina Array Bea | 72.83 | 353 | P | P | 23 34 58.9 | 0.0 |
| | 2.7nm,0.8s,baz=196,slow=7.4,SNR=16 | | | | | | |
| NVAR | | | | LR | LR | 00 00 17.2 | |
| | comp=Z,103nm,18.6s,baz=152,slow=30 | | | | | | |
| MAW | Mawson | 78.24 | 177 | LR | LR | 00 07 21.0 | |
| | comp=Z,37nm,19.2s,baz=242,slow=34 | | | | | | |
| HNR | Honiara | 85.24 | 262 | LR | LR | 00 10 46.1 | |
| | comp=Z,338nm,19.3s,baz=101,slow=33 | | | | | | |
| SCHQ | Schefferville | 96.04 | 23 | LR | LR | 00 14 59.0 | |
| | comp=Z,112nm,21.7s,baz=20,slow=32 | | | | | | |
| ASAR | Alice Springs | 96.68 | 236 | LR | LR | 00 14 55.5 | |
| | comp=Z,88nm,20.2s,baz=152,slow=32 | | | | | | |
| WRA | Warramunga Arr | 98.83 | 239 | LR | LR | 00 19 04.3 | |
| | comp=Z,122nm,18.0s,baz=135,slow=34 | | | | | | |
| MLR | Muntele Rosu | 144.44 | 58 | PKP | PKPab | 23 43 04.0 | -0.5 |
| | 0.8nm,1.1s,baz=301,slow=2.2,SNR=3.4 | | | | | | |
| AKASG | Malin Array Be | 145.93 | 49 | PKPbc | PKPdf | 23 43 07.7 | -0.8 |
| | 0.2nm,0.2s,baz=275,slow=3.9,SNR=7.3 | | | | | | |
| OBN | Obninsk | 148.61 | 38 | PKPbc | PKPbc | 23 43 16.4 | -0.1 |
| | 3.5nm,0.4s,baz=213,slow=21,SNR=3.3 | | | | | | |
| SONM | Songino Array | 150.06 | 308 | PKPbc | PKPbc | 23 43 19.7 | -0.8 |
| | 2.7nm,0.9s,baz=151,slow=2.6,SNR=12 | | | | | | |
| CMAR | Chiang Mai Arr | 150.19 | 245 | PKPbc | PKPbc | 23 43 22.4 | +0.8 |
| | 1.0nm,0.4s,baz=177,slow=1.3,SNR=14 | | | | | | |
| BRTR | Keskin Array B | 150.19 | 69 | PKPbc | PKPbc | 23 43 20.8 | -0.4 |
| | 1.1nm,0.9s,baz=132,slow=3.5,SNR=4.3 | | | | | | |

**KRSC 02 23:35:45.0±0.4, 55°.13N×160°.32E, h3km±2km, ML3.5, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KZV | Kizimen | 0.02 | 221 | iP | Pg | 23 35 46.6 | +0.7 |
| TUMR | Tumrok | 0.18 | 328 | iP | Pg | 23 35 49.7 | +0.9 |
| TUMR | | | | iS | Sg | 23 35 51.8 | +0.5 |
| KMNR | Kamenistaya | 0.63 | 356 | eP | Pg | 23 35 58.0 | +0.7 |
| KMNR | | | | eS | Sb | 23 36 08.2 | -0.1 |
| BZMR | Bezymyannaya | 0.82 | 7 | P | Pb | 23 36 01.6 | -0.5 |
| BZMR | | | | S | Sn | 23 36 15.4 | -1.0 |
| KIRR | Kirishev | 0.83 | 1 | P | Pg | 23 36 01.1 | 0.0 |
| KIRR | | | | S | Sb | 23 36 14.9 | +0.9 |
| KPT | Kopyto | 0.84 | 356 | eP | Pb | 23 36 02.1 | -0.4 |
| KPT | | | | eS | Sn | 23 36 15.7 | -1.3 |
| BZWR | Bezymyannyi-We | 0.84 | 7 | P | Pb | 23 36 02.7 | +0.1 |
| ZLN | Zelenaya | 0.93 | 17 | P | Pb | 23 36 03.8 | -0.3 |
| KOZ | Kozyrevsk | 0.97 | 345 | eP | Pn | 23 36 05.6 | 0.0 |
| KOZ | | | | eS | Sn | 23 36 19.9 | 0.0 |
| KII | Karymskiy | 1.20 | 205 | eP | Pb | 23 36 08.5 | -0.1 |
| KLY | Klyuchi | 1.20 | 9 | P | Pg | 23 36 08.0 | -0.1 |
| KLY | | | | S | Sn | 23 36 27.5 | +1.9 |
| SRDR | Sredinnyy | 1.24 | 344 | P | Pg | 23 36 08.3 | -0.6 |
| SRDR | | | | S | Sg | 23 36 23.4 | -1.7 |
| KBTR | Krutoberegovo | 1.79 | 52 | eP | Pn | 23 36 16.2 | -0.6 |
| KBTR | | | | eS | Sg | 23 36 41.8 | -0.6 |
| GNL | Ganaly | 2.00 | 225 | eP | Pn | 23 36 20.9 | +1.1 |
| GNL | | | | eS | Sb | 23 36 47.9 | +0.4 |
| KRX | Arik | 2.02 | 210 | eP | Pb | 23 36 21.5 | -1.2 |
| SDLR | Sedlovina | 2.04 | 205 | eP | Pb | 23 36 21.7 | -1.1 |
| SPN | Mys Shipunski | 2.04 | 185 | eP | Pn | 23 36 19.7 | -0.6 |
| SPN | | | | eS | Sn | 23 36 47.2 | +1.0 |
| SMAR | Somma | 2.07 | 206 | eP | Pn | 23 36 22.2 | +1.2 |
| AVH | Avacha | 2.08 | 207 | P | Pb | 23 36 22.9 | -0.7 |
| UGLR | Uglovaya | 2.11 | 205 | P | Pb | 23 36 22.9 | -1.2 |
| PET | Petropavlovsk | 2.32 | 206 | eP | Pb | 23 36 27.1 | -0.4 |
| RUS | Russkaya | 2.90 | 202 | eP | Pn | 23 36 33.4 | +1.3 |

*CSEM 02 23:36:02.6±0.2, 67°.82N×20°.23E, h2km, ML1.2, Error ellipse: s-maj=3.8km s-min=3.3km az=134.0, Mining explosion.*

*HEL 02 23:36:03.4±0.1, 67°.83N×20°.22E, h0km, ML1.4, ML1.2(UPP), Explosion*

**UPP 02 23:36:02.8, 67°.83N×20°.20E, h0km, ML1.2, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUA | Kurravaara | 0.14 | 23 | iP | Pg | 23 36 05.7 | +0.2 |
| KUA | | | | iS | Sg | 23 36 07.7 | +0.4 |
| KUA | Kurravaara | 0.14 | 23 | P | Pg | 23 36 05.7 | +0.2 |
| KUA | | | | S | Sg | 23 36 07.7 | +0.4 |
| NIKU | Nikkaluokta | 0.44 | 276 | iP | Pg | 23 36 11.3 | 0.0 |
| NIKU | Nikkaluokta | 0.44 | 276 | P | Pg | 23 36 11.3 | 0.0 |
| LANU | Lannavaara | 0.71 | 71 | eP | Pg | 23 36 16.1 | -0.4 |
| | baz=264 | | | | | | |
| LANU | | | | eS | Sg | 23 36 26.2 | +0.4 |
| LANU | Lannavaara | 0.71 | 71 | P | Pg | 23 36 16.3 | -0.2 |
| LANU | | | | S | Sg | 23 36 26.2 | +0.4 |
| DUNU | Dundret | 0.72 | 168 | iP | Pg | 23 36 16.4 | -0.3 |
| DUNU | Dundret | 0.72 | 168 | P | Pg | 23 36 16.4 | -0.3 |
| MASU | Masugnsbyn | 0.78 | 118 | iP | Pg | 23 36 17.6 | -0.2 |
| MASU | Masugnsbyn | 0.78 | 118 | P | Pg | 23 36 17.6 | -0.3 |
| SALU | Saltoluokta | 0.79 | 236 | iP | Pg | 23 36 17.7 | -0.3 |
| SALU | Saltoluokta | 0.79 | 236 | P | Pg | 23 36 17.7 | -0.2 |
| KIF | Kilpisjarvi | 1.20 | 10 | ePB | Pg | 23 36 25.8 | 0.0 |
| KIF | | | | eSB | Sb | 23 36 42.4 | -0.1 |
| KIF | Kilpisjarvi | 1.20 | 10 | Pb | Pg | 23 36 25.7 | -0.1 |
| KIF | | | | Sb | Sb | 23 36 42.4 | -0.1 |
| HEF | Hetta | 1.42 | 64 | ePG | Pn | 23 36 28.9 | -1.0 |
| | baz=243 | | | | | | |
| HEF | | | | MSG | | 23 36 45.9 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| HEF | | | | eSB | Sg | 23 36 47.6 | -1.0 |
| HEF | Hetta | 1.42 | 64 | Pg | Pn | 23 36 28.9 | -1.0 |
| HEF | | | | Sb | Sg | 23 36 47.6 | -1.0 |
| ERTU | Ertsjaerv | 1.50 | 148 | ePG | Pn | 23 36 30.2 | -0.7 |
| | baz=338 | | | | | | |
| ERTU | | | | eSN | Sg | 23 36 50.6 | -0.3 |
| ERTU | Ertsjaerv | 1.50 | 148 | P | Pn | 23 36 30.4 | -0.5 |
| ERTU | | | | Sn | Sg | 23 36 50.6 | -0.3 |
| HARU | Harads | 1.70 | 169 | eP | Pn | 23 36 33.8 | +0.2 |
| HARU | Harads | 1.70 | 169 | P | Pn | 23 36 33.8 | +0.2 |
| KALU | Kalix | 2.34 | 146 | ePB | Pn | 23 36 43.9 | +1.5 |
| | baz=325 | | | | | | |
| KALU | | | | eSG | Sb | 23 37 15.5 | +0.4 |
| KALU | Kalix | 2.34 | 146 | Pb | Pn | 23 36 43.9 | +1.5 |
| KALU | Kalix | 2.34 | 146 | Sg | Sb | 23 37 15.5 | +0.4 |
| SGF | Sodankyl | 2.45 | 96 | ePB | Pb | 23 36 46.4 | -1.3 |
| SGF | | | | eSG | Sb | 23 37 19.9 | +1.4 |
| SGF | Sodankyl | 2.45 | 96 | Pb | Pb | 23 36 46.4 | -1.3 |
| SGF | Sodankyl | 2.45 | 96 | Sg | Sb | 23 37 19.8 | +1.4 |
| RNF | Rovaniemi | 2.57 | 116 | ePB | Pn | 23 36 47.4 | +1.7 |
| RNF | | | | eSG | Sb | 23 37 21.4 | -0.5 |
| RNF | Rovaniemi | 2.57 | 116 | Pb | Pn | 23 36 47.4 | +1.7 |
| RNF | Rovaniemi | 2.57 | 116 | Sg | Sb | 23 37 21.4 | -0.5 |
| ARE0 | ARCESS Array S | 2.59 | 46 | eP | Pn | 23 36 46.3 | +0.4 |
| | baz=228 | | | | | | |
| ARE0 | ARCESS Array S | 2.59 | 46 | P | Pn | 23 36 46.3 | +0.4 |
| KEV | Kevo | 3.14 | 49 | ePB | Pb | 23 36 58.1 | -1.4 |
| KEV | | | | eS | Sn | 23 37 33.0 | +1.4 |
| KEV | | | | MSG | | 23 37 35.6 | |
| | comp=Z,0.8nm,0.2s | | | | | | |
| KEV | Kevo | 3.14 | 49 | Pb | Pb | 23 36 58.0 | -1.4 |
| KEV | Kevo | 3.14 | 49 | S | Sn | 23 37 33.0 | +1.4 |
| | comp=Z,0.8nm,0.2s | | | | | | |

*CSEM 02 23:36:07.3±0.7, 67°.73N×21°.35E, h1km, ML1.4, Error ellipse: s-maj=27.0km s-min=17.7km az=12.0, Mining explosion.*

**UPP 02 23:36:14.2, 67°.83N×20°.29E, h0km, ML1.4, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUA | Kurravaara | 0.13 | 8 | P | Pg | 23 36 17.0 | +0.3 |
| SALU | Saltoluokta | 0.82 | 237 | P | Pg | 23 36 29.0 | -0.9 |

*ISCJB 02 23:37:40.8±0.3, 51°.44N±0°.02×16°.24E±0°.03, h0km, Error ellipse: s-maj=2.8km s-min=2.4km az=158.8*

*CSEM 02 23:37:42.9±0.1, 51°.42N×16°.21E, h2km, ML3.2/10, Error ellipse: s-maj=2.8km s-min=2.2km az=89.0*

*IDC 02 23:37:44.3±0.8, 51°.41N×16°.14E, h0km, mb1 3.2/6, mb1mx3.0/45, mbtmp3.1/6, ML2.6/6, Error ellipse: s-maj=16.9km s-min=7.1km az=99.0*

*VIE 02 23:37:45.3±0.9, 51°.22N×16°.20E, h0km, mb2.4/2, ml2.6/5, Error ellipse: s-maj=7.3km s-min=5.0km az=170.0, Suspected Mining induced.*

*UPP 02 23:37:47.1, 51°.65N×15°.79E, h0km, ML1.8, Suspected Mining explosion.*

**ISC 02 23:37:42.5±0.8, 51°.45N±0°.03×16°.21E±0°.02, h0km, n56, σ0s.91/98, 1C-5D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.61 | 175 | iPg | Pg | 23 37 54.8 | +0.5 |
| KSP | | | | eSg | Sg | 23 38 02.4 | +0.2 |
| KSP | Ksiaz | 0.61 | 175 | ⇓iPg | Pg | 23 37 54.8 | +0.5 |
| KSP | | | | eSg | Sg | 23 38 02.4 | +0.2 |
| UPC | Upice | 0.95 | 187 | ePG | Pg | 23 38 01.1 | +0.3 |
| UPC | | | | eSG | Sg | 23 38 13.4 | +0.2 |
| UPC | Upice | 0.95 | 187 | Pg | Pg | 23 38 01.1 | +0.3 |
| UPC | | | | Sg | Sg | 23 38 13.4 | +0.2 |
| DPC | Dobruska-Polom | 1.11 | 176 | ePG | Pg | 23 38 03.6 | -0.1 |
| DPC | | | | eSG | Sg | 23 38 17.9 | -0.2 |
| | comp=Z,46nm,0.7s | | | | | | |
| DPC | Dobruska-Polom | 1.11 | 176 | Pg | Pg | 23 38 03.6 | -0.1 |
| DPC | | | | Sg | Sg | 23 38 17.9 | -0.2 |
| | 46nm,0.7s | | | | | | |
| PVCC | Panska Ves | 1.39 | 229 | ePG | Pb | 23 38 10.0 | +0.6 |
| PVCC | | | | eSG | Sg | 23 38 27.9 | +0.8 |
| | comp=Z,104nm,0.3s | | | | | | |
| PVCC | Panska Ves | 1.39 | 229 | Pg | Pb | 23 38 10.0 | +0.6 |
| PVCC | | | | Sg | Sg | 23 38 27.9 | +0.8 |
| | 104nm,0.3s | | | | | | |
| KRLC | Kraliky | 1.43 | 165 | ePG | Pn | 23 38 09.6 | -0.1 |
| KRLC | | | | eSG | Sg | 23 38 27.6 | -0.7 |
| KRLC | Kraliky | 1.43 | 165 | Pg | Pn | 23 38 09.6 | -0.1 |
| KRLC | | | | Sg | Sg | 23 38 27.6 | -0.7 |
| PRA | Prague | 1.79 | 220 | ePN | Pn | 23 38 14.5 | -0.1 |
| PRA | | | | ePG | Pb | 23 38 16.7 | +0.6 |
| PRA | | | | eSG | Sb | 23 38 39.5 | +0.5 |
| | comp=Z,23nm,0.4s | | | | | | |
| PRA | Prague | 1.79 | 220 | Pn | Pn | 23 38 14.5 | -0.1 |
| GOPC | GO Pecny, Ondr | 1.79 | 211 | ePN | Pn | 23 38 14.8 | +0.1 |
| GOPC | | | | ePG | Pb | 23 38 16.4 | +0.3 |
| GOPC | | | | eSG | Sb | 23 38 39.5 | +0.4 |
| | comp=Z,25nm,0.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.79 | 211 | Pn | Pn | 23 38 14.8 | +0.1 |
| PRU | Pruhonice | 1.81 | 216 | ePG | Pb | 23 38 16.6 | +0.1 |
| PRU | | | | eSG | Sb | 23 38 40.1 | +0.4 |
| | comp=Z,20nm,0.4s | | | | | | |
| PRU | Pruhonice | 1.81 | 216 | Pg | Pb | 23 38 16.6 | +0.1 |
| PRU | | | | Sg | Sb | 23 38 40.1 | +0.4 |
| | 20nm,0.4s | | | | | | |
| MORC | Moravsky Berou | 1.88 | 153 | ePn | Pn | 23 38 15.7 | -0.3 |
| MORC | | | | eSg | Sn | 23 38 41.7 | +1.3 |
| CLL | Collm | 2.01 | 267 | ePn | Pn | 23 38 18.0 | +0.3 |
| CLL | | | | ePg | Pg | 23 38 21.0 | -0.1 |
| CLL | | | | eSg | Sg | 23 38 48.0 | +0.8 |
| | comp=Z,13nm,0.4s | | | | | | |
| OKC | Ostrava-Krasne | 2.04 | 142 | ePG | Pb | 23 38 20.1 | -0.3 |
| OKC | | | | eSG | Sb | 23 38 46.3 | +0.1 |
| OKC | Ostrava-Krasne | 2.04 | 142 | Pg | Pb | 23 38 20.1 | -0.3 |
| OKC | | | | Sg | Sb | 23 38 46.3 | +0.1 |
| VRAC | Vranov | 2.16 | 173 | Pn | Pn | 23 38 20.1 | +0.3 |
| | comp=Z,1.1nm,0.3s,baz=350,slow=16,SNR=16 | | | | | | |
| VRAC | | | | Sn | Sb | 23 38 49.8 | -0.1 |
| | comp=Z,2.3nm,0.3s,baz=259,slow=22,SNR=11 | | | | | | |
| VRAC | Vranov | 2.16 | 173 | ePn | Pn | 23 38 20.0 | +0.2 |
| VRAC | | | | eSg | Sb | 23 38 50.5 | +0.6 |
| OJC | Ojcow | 2.59 | 117 | ePg | Pb | 23 38 31.3 | +1.5 |
| OJC | | | | eSg | Sg | 23 39 06.7 | +1.0 |
| OJC | Ojcow | 2.59 | 117 | ePg | Pb | 23 38 31.3 | +1.5 |
| OJC | | | | eSg | Sg | 23 39 06.7 | +1.0 |
| NKC | Novy Kostel | 2.68 | 244 | ePN | Pn | 23 38 27.8 | +0.9 |
| NKC | | | | ePG | Pg | 23 38 33.5 | -0.3 |
| NKC | | | | eSG | Sg | 23 39 10.8 | +2.3 |
| | comp=Z,24nm,0.4s | | | | | | |
| NKC | Novy Kostel | 2.68 | 244 | Pn | Pn | 23 38 27.8 | +0.9 |
| KHC | Kasperske Hory | 2.87 | 217 | ePN | Pn | 23 38 29.9 | +0.3 |
| KHC | | | | ePG | Pb | 23 38 36.3 | +1.6 |
| KHC | | | | eSN | Sn | 23 39 03.7 | -1.2 |
| KHC | | | | eSG | Sg | 23 39 13.5 | -1.2 |
| | comp=Z,11nm,0.4s | | | | | | |
| KHC | Kasperske Hory | 2.87 | 217 | Pn | Pn | 23 38 29.9 | +0.3 |
| SMOL | Smolenice | 3.05 | 165 | eSG | Sg | 23 39 20.2 | -0.2 |
| SMOL | Smolenice | 3.05 | 165 | eSg | Sg | 23 39 20.2 | -0.2 |
| GERES | GERESS Array B | 3.07 | 213 | Pn | Pn | 23 38 33.4 | +1.0 |
| | comp=Z,0.3nm,0.3s,baz=33,slow=14,SNR=11 | | | | | | |
| GERES | | | | Pg | Pb | 23 38 39.5 | +1.5 |
| | comp=Z,2.5nm,0.3s,baz=27,slow=18,SNR=39 | | | | | | |
| GERES | | | | Lg | Lg | 23 39 18.5 | |
| | comp=Z,2.9nm,0.3s,baz=33,slow=28,SNR=6.9 | | | | | | |
| LANS | Liptovska Anna | 3.11 | 137 | ePN | Pn | 23 38 34.0 | +1.1 |
| LANS | | | | eSG | Sg | 23 39 21.2 | -1.3 |
| LANS | Liptovska Anna | 3.11 | 137 | ePn | Pn | 23 38 34.0 | +1.1 |
| LANS | | | | eSg | Sg | 23 39 21.2 | -1.3 |
| NIE | Niedzica | 3.32 | 126 | eP | Pg | 23 38 45.4 | -0.7 |
| NIE | | | | eS | Sg | 23 39 29.4 | +0.4 |
| VYHS | Vyhne | 3.41 | 149 | ePG | Pg | 23 38 47.0 | -0.9 |
| VYHS | Vyhne | 3.41 | 149 | ePg | Pg | 23 38 47.0 | -0.9 |
| CONA | Conrad Observa | 3.54 | 184 | ⇓eSg | Sg | 23 39 34.7 | -1.4 |
| | comp=Z,11nm,0.5s | | | | | | |
| CONA | Conrad Observa | 3.54 | 184 | Sg | Sg | 23 39 34.7 | -1.4 |
| | comp=Z,11nm,0.5s | | | | | | |
| STHS | Stebnicka Huta | 3.81 | 120 | ePN | Pn | 23 38 43.3 | +0.8 |
| STHS | | | | ePG | Pg | 23 38 57.0 | +1.5 |
| STHS | | | | eSG | Sg | 23 39 47.2 | +2.3 |
| STHS | Stebnicka Huta | 3.81 | 120 | ePn | Pn | 23 38 43.3 | +0.8 |
| MOA | Molln | 3.82 | 200 | ⇓iPn | Pn | 23 38 43.2 | +0.6 |
| | comp=Z,0.8nm,0.2s | | | | | | |
| MOA | | | | ⇑Sg | Sg | 23 39 44.7 | -0.5 |
| | comp=Z,8.0nm,0.4s | | | | | | |
| MOA | Molln | 3.82 | 200 | Pn | Pn | 23 38 43.2 | +0.6 |
| | comp=Z,0.8nm,0.2s | | | | | | |
| MOA | | | | Sg | Sg | 23 39 44.7 | -0.5 |
| | comp=Z,8.0nm,0.4s | | | | | | |
| ARSA | Arzberg | 4.23 | 186 | ⇓iPn | Pn | 23 38 47.5 | -0.7 |
| | comp=Z,1.4nm,0.2s | | | | | | |
| ARSA | | | | ⇓Sg | Sg | 23 39 57.3 | -1.1 |
| | comp=Z,5.9nm,0.5s | | | | | | |
| ARSA | Arzberg | 4.23 | 186 | Pn | Pn | 23 38 47.5 | -0.7 |
| | comp=Z,1.4nm,0.2s | | | | | | |
| ARSA | | | | Sg | Sg | 23 39 57.3 | -1.1 |
| | comp=Z,5.9nm,0.5s | | | | | | |
| LUNU | Lund | 4.50 | 340 | P | Pn | 23 38 51.6 | -0.3 |
| LUNU | | | | S | Sn | 23 39 42.6 | -2.2 |
| BLEU | Blekinge | 4.87 | 357 | P | Pn | 23 38 57.2 | +0.3 |
| BLEU | | | | S | Sn | 23 39 50.9 | -3.0 |
| OSKU | Oskarshamn | 5.75 | 359 | P | Pn | 23 39 09.7 | +0.6 |
| BYXU | Byxelkrok | 5.87 | 4 | P | Pn | 23 39 11.5 | +0.9 |
| FABU | Falkenberg | 5.92 | 341 | P | Pn | 23 39 11.6 | +0.2 |
| ASPU | Aespoe | 5.98 | 2 | P | Pn | 23 39 13.3 | +1.1 |
| GNOU | Gnosjoe | 6.02 | 347 | P | Pn | 23 39 13.1 | +0.3 |
| EKSU | Eksjoe | 6.16 | 355 | P | Pn | 23 39 15.1 | +0.5 |
| DAVOX | Davos/Dischmat | 6.25 | 224 | Pn | Pn | 23 39 17.4 | +1.2 |
| | comp=Z,0.2nm,0.3s,baz=59,slow=12,SNR=2.8 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| DAVOX | | | | Lg | Lg | 23 41 00.2 | |
| | comp=Z,0.2nm,0.3s,baz=180,slow=20,SNR=2.8 | | | | | | |
| HFS | Hagfors | 8.81 | 352 | Pn | Pn | 23 39 50.9 | -0.2 |
| | comp=Z,0.1nm,0.3s,baz=159,slow=17,SNR=3.7 | | | | | | |
| NOA | NORSAR Array B | 10.00 | 346 | Pn | Pn | 23 40 07.2 | -0.2 |
| | comp=Z,0.1nm,0.3s,baz=166,slow=12,SNR=2.7 | | | | | | |
| FINES | FINESS Array B | 11.39 | 25 | Pn | Pn | 23 40 24.2 | -2.1 |
| | comp=Z,0.1nm,0.3s,baz=209,slow=12,SNR=6.7 | | | | | | |

*ISCJB **02** 23:52:53.7±0.6, 21°.67N±0°.09×143°.1E±0°.2, h311km, mb3.5/10, Error ellipse: s-maj=22.1km s-min=12.1km az=177.4*

*IDC **02** 23:52:54.1±5.7, 21°.67N×143°.13E, h298km±56km, mb3.2/10, mb1 3.4/11, mb1mx3.2/42, mbtmp3.9/11, Error ellipse: s-maj=22.6km s-min=14.2km az=86.0*

**ISC 02 23:52:55.3**±0.7**, 21°.7N**±0°.1×**143°.1E**±0°.2**, h311**km**, n17,** σ0.69/15**, mb3.4**/10**, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MJAR | Matsushiro Arr | 15.44 | 345 | P | P | 23 56 15.7 | -0.8 |
| | 0.5nm,0.3s,baz=162,slow=9.7,SNR=5.1 | | | | | | |
| FAKI | Fak Fak | 26.64 | 205 | P | P | 23 58 13.5 | +7.1 |
| | baz=11,SNR=4.8 | | | | | | |
| RABL | Rabaul | 27.17 | 160 | P | P | 23 58 09.8 | -1.2 |
| | baz=9.2,SNR=6.7 | | | | | | |
| KDU | Kakadu | 35.70 | 198 | P | P | 23 59 26.1 | +1.1 |
| | baz=15,SNR=7.2 | | | | | | |
| MTN | Manton Dam | 36.25 | 200 | P | P | 23 59 35.1 | +5.4 |
| | baz=16,SNR=4.6 | | | | | | |
| CMAR | Chiang Mai Arr | 41.52 | 274 | P | P | 00 00 13.6 | +0.3 |
| | 0.4nm,0.4s,baz=70,slow=7.8,SNR=3.2 | | | | | | |
| WRA | Warramunga Arr | 42.23 | 192 | P | P | 00 00 18.6 | -0.2 |
| | 0.6nm,0.6s,baz=15,slow=9.6,SNR=14 | | | | | | |
| ASAR | Alice Springs | 45.94 | 192 | P | P | 00 00 47.8 | -0.2 |
| | 0.2nm,0.3s,baz=16,slow=14,SNR=4.1 | | | | | | |
| MKAR | Makanchi Array | 54.68 | 313 | P | P | 00 01 52.8 | -0.1 |
| | 0.3nm,0.4s,baz=91,slow=10,SNR=3.0 | | | | | | |
| ILAR | Eielson Array | 62.10 | 27 | P | P | 00 02 43.1 | -0.3 |
| | 0.6nm,0.6s,baz=256,slow=5.6,SNR=6.2 | | | | | | |
| BVAR | Borovoye Array | 62.67 | 320 | P | P | 00 02 47.4 | 0.0 |
| | 2.1nm,0.3s,baz=100,slow=7.8,SNR=23 | | | | | | |
| YKA | Yellowknife Ar | 76.52 | 28 | P | P | 00 04 11.4 | +0.3 |
| | 0.9nm,0.5s,baz=292,slow=6.1,SNR=3.5 | | | | | | |
| ARCES | ARCESS Array B | 78.94 | 341 | P | P | 00 04 24.8 | +0.4 |
| | 1.5nm,0.6s,baz=72,slow=8.0,SNR=14 | | | | | | |
| FINES | FINESS Array B | 83.19 | 334 | P | P | 00 04 45.8 | -0.9 |
| | 1.3nm,0.4s,baz=75,slow=4.7,SNR=25 | | | | | | |
| NVAR | Mina Array Bea | 83.21 | 51 | P | P | 00 04 48.6 | +0.9 |
| | 0.4nm,0.5s,baz=262,slow=6.8,SNR=4.2 | | | | | | |
| TORD | Torodi Ar. Bea | 128.72 | 309 | PKP | PKPdf | 00 11 26.8 | +0.2 |
| | 0.1nm,0.7s,baz=352,slow=2.3,SNR=5.1 | | | | | | |
| LPAZ | La Paz | 150.00 | 85 | PKPbc | PKPbc | 00 12 10.8 | +0.1 |
| | 0.9nm,0.4s,baz=260,slow=3.7,SNR=3.7 | | | | | | |

*ISCJB **03** 00:07:20.6±0.2, 62°.29N±0°.02×151°.24W±0°.05, h98km±2km, mb3.8/19, Error ellipse: s-maj=3.9km s-min=2.9km az=26.5*

*IDC **03** 00:07:21.5±0.8, 62°.34N×151°.44W, h85km±7km, mb3.5/19, mb1 3.7/23, mb1mx3.5/60, mbtmp3.8/23, Error ellipse: s-maj=11.9km s-min=9.6km az=87.0*

*NEIC **03** 00:07:22.4, 62°.29N×151°.30W, h89km, MG3.8(AEIC), After AEIC.*

**ISC 03 00:07:21.5**±0.6**, 62°.30N**±0°.03×**151°.29W**±0°.03**, h87**km±4km**, n104,** σ0.85/121**, mb3.7**/19**, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKT | Skwentna | 0.34 | 200 | P | Pn | 00 07 35.2 | +0.3 |
| SKT | | | | S | Sn | 00 07 45.1 | +0.5 |
| CUT | Chulitna | 0.49 | 77 | P | Pn | 00 07 36.6 | +0.8 |
| TRAP | Trapper Creek | 0.49 | 85 | P | Pn | 00 07 36.6 | +0.8 |
| STLK | Strandline Lak | 0.84 | 198 | P | Pn | 00 07 39.5 | +0.2 |
| SUA | Susitna One | 0.88 | 163 | P | Pn | 00 07 40.4 | +0.7 |
| SUA | | | | S | Sn | 00 07 54.3 | +1.1 |
| NCG | North Capps Gl | 0.99 | 205 | P | Pn | 00 07 41.0 | +0.1 |
| CRP | Crater Peak | 1.11 | 202 | P | Pn | 00 07 42.9 | +0.5 |
| CRP | | | | S | Sn | 00 07 58.9 | +0.7 |
| CKN | Chakachatna No | 1.16 | 202 | P | Pn | 00 07 43.6 | +0.7 |
| BGL | Barrier Glacie | 1.16 | 207 | P | Pn | 00 07 43.6 | +0.7 |
| SPU | Mount Spurr | 1.18 | 198 | P | Pn | 00 07 43.2 | +0.1 |
| CKT | Bend | 1.18 | 202 | P | Pn | 00 07 43.4 | +0.2 |
| CKL | Chakachamna La | 1.21 | 205 | P | Pn | 00 07 43.9 | +0.3 |
| PMR | Palmer | 1.24 | 124 | P | Pn | 00 07 43.9 | +0.1 |
| TRF | Thorofare Moun | 1.25 | 21 | P | Pn | 00 07 44.9 | +0.8 |
| TRF | | | | S | Sn | 00 08 01.9 | +0.9 |
| FIB | Fire Island | 1.25 | 154 | P | Pn | 00 07 45.4 | +1.5 |
| VOGL | Vogel Lake | 1.37 | 162 | P | Pn | 00 07 47.4 | +2.0 |
| RC01 | Rabbit Creek A | 1.42 | 148 | P | Pn | 00 07 46.0 | -0.1 |
| RC01 | | | | S | Sn | 00 08 04.7 | +0.1 |
| SML | Sawmill | 1.48 | 108 | P | Pn | 00 07 47.2 | +0.4 |
| NKA | Nikishka | 1.56 | 179 | P | Pn | 00 07 50.3 | +2.4 |
| RND | Reindeer | 1.58 | 44 | P | Pn | 00 07 48.8 | +0.6 |
| KNK | Knik Glacier | 1.61 | 122 | P | Pn | 00 07 48.6 | +0.1 |
| BGRM | Barrier Glacie | 1.64 | 200 | P | Pn | 00 07 48.8 | -0.2 |
| CHUM | Lake Minchumin | 1.66 | 344 | P | Pn | 00 07 49.5 | +0.5 |
| CHUM | | | | S | Sn | 00 08 10.0 | +0.1 |
| MCK | McKinley | 1.80 | 36 | P | Pn | 00 07 51.7 | +0.8 |
| BPAW | Bear Paw Mtn. | 1.81 | 4 | P | Pn | 00 07 51.4 | +0.2 |
| BPAW | | | | S | Sn | 00 08 12.8 | -0.9 |
| SLKM | Skilak Lake | 1.87 | 164 | P | Pn | 00 07 51.9 | 0.0 |
| NCT | North Crescent | 1.91 | 205 | P | Pn | 00 07 52.9 | +0.4 |
| SCM | Sheep Creek Mo | 1.92 | 102 | P | Pn | 00 07 52.5 | -0.1 |
| RDN | Redoubt North | 1.93 | 202 | P | Pn | 00 07 53.0 | +0.3 |
| REF | Redoubt East F | 1.94 | 201 | P | Pn | 00 07 53.4 | +0.4 |
| REF | | | | S | Sn | 00 08 17.6 | +0.8 |
| DHY | Denali Highway | 1.97 | 65 | P | Pn | 00 07 54.0 | +0.7 |
| DHY | | | | S | Sn | 00 08 18.9 | +1.4 |
| RSO | Redoubt South | 1.97 | 202 | ePn | Pn | 00 07 53.5 | +0.1 |
| PWL | Port Wells | 2.02 | 134 | P | Pn | 00 07 53.2 | -0.7 |
| BWN | Browne | 2.06 | 23 | P | Pn | 00 07 55.2 | +0.9 |
| TT01 | Tatalina | 2.27 | 288 | P | Pn | 00 07 57.2 | +0.1 |
| TTA | Tatalina | 2.27 | 288 | P | Pn | 00 07 57.2 | -0.1 |
| SVW2 | Sparrevohn | 2.37 | 241 | P | Pn | 00 07 58.6 | +0.1 |
| SVW2 | | | | S | Sn | 00 08 26.7 | -0.1 |
| SEW | Seward | 2.38 | 157 | P | Pn | 00 07 58.6 | +0.1 |
| ILW | Iliamna West | 2.42 | 203 | P | Pn | 00 07 60.0 | +0.7 |
| GLI | Glacier Island | 2.46 | 123 | P | Pn | 00 07 58.8 | -0.9 |
| NEA | Nenana | 2.50 | 23 | P | Pn | 00 08 00.1 | 0.0 |
| JPK | Jack Peak | 2.56 | 117 | P | Pn | 00 08 00.8 | -0.2 |
| WRH | Wood River Hil | 2.62 | 32 | P | Pn | 00 08 01.8 | +0.1 |
| VLZ | Valdez | 2.63 | 114 | P | Pn | 00 08 01.2 | -0.8 |
| KLU | Klutina | 2.67 | 105 | P | Pn | 00 08 01.9 | -0.7 |
| MLY | Manley | 2.75 | 5 | P | Pn | 00 08 04.0 | +0.3 |
| PAX | Paxson | 2.77 | 73 | ePn | Pn | 00 08 05.0 | +1.1 |
| FID | Port Fidalgo | 2.78 | 122 | P | Pn | 00 08 02.7 | -1.3 |
| CNPM | China Poot | 2.78 | 179 | P | Pn | 00 08 03.4 | -0.6 |
| OPT | Oil Point | 2.82 | 200 | P | Pn | 00 08 04.9 | +0.4 |
| CCB | Clear Creek Bu | 2.83 | 32 | P | Pn | 00 08 04.6 | 0.0 |
| HARP | HAARP | 2.86 | 85 | P | Pn | 00 08 05.7 | +0.6 |
| DIV | Divide | 2.88 | 112 | P | Pn | 00 08 04.3 | -1.0 |
| HIN | Hinchinbrook I | 2.99 | 127 | P | Pn | 00 08 05.9 | -0.9 |
| MDM | Murphy Dome | 3.00 | 26 | P | Pn | 00 08 07.4 | +0.5 |
| COLA | College | 3.01 | 29 | P | Pn | 00 08 07.4 | +0.5 |
| AUL | Augustine Lava | 3.11 | 201 | P | Pn | 00 08 09.5 | +1.1 |
| ILAR | Eielson Array | 3.17 | 37 | P | Pn | 00 08 09.1 | -0.1 |
| | 11nm,0.3s,baz=220,slow=14,SNR=176 | | | | | | |
| ILAR | | | | S | Sn | 00 08 45.2 | -0.7 |
| | 16nm,0.3s,baz=242,slow=6.8,SNR=5.1 | | | | | | |
| ILB | Eielson Array | 3.17 | 37 | P | Pn | 00 08 09.2 | 0.0 |
| EYAK | Cordova Ski Ar | 3.19 | 121 | P | Pn | 00 08 08.4 | -1.1 |
| RIDG | Independ'e Rid | 3.28 | 61 | P | Pn | 00 08 11.9 | +1.2 |
| WASW | Wrangell South | 3.37 | 93 | P | Pn | 00 08 12.4 | +0.4 |
| BMRM | Bremner River | 3.46 | 110 | P | Pn | 00 08 12.1 | -1.1 |
| MENT | Mentasta | 3.56 | 76 | ePn | Pn | 00 08 14.3 | -0.2 |
| DOT | Dot Lake | 3.57 | 64 | P | Pn | 00 08 14.9 | +0.3 |
| GLB | Gilahina Butte | 3.65 | 100 | P | Pn | 00 08 15.1 | -0.6 |
| FOPK | Fourpeaked Vol | 3.71 | 198 | P | Pn | 00 08 16.7 | +0.1 |
| RAGM | Ragged Mountai | 3.72 | 118 | P | Pn | 00 08 16.1 | -0.5 |
| IM3 | Indian Mountai | 3.85 | 345 | P | Pn | 00 08 18.9 | +0.5 |
| VRDI | Verde Repeater | 3.88 | 103 | P | Pn | 00 08 18.1 | -0.8 |
| KAHC | Katmai Hardscr | 4.10 | 208 | P | Pn | 00 08 21.9 | +0.1 |
| BALM | Baldy | 4.45 | 103 | P | Pn | 00 08 25.5 | -1.1 |
| BCA3 | Beaver Creek A | 4.45 | 76 | P | Pn | 00 08 26.4 | -0.2 |
| KIAG | Kiagna River | 4.48 | 104 | P | Pn | 00 08 26.1 | -1.0 |
| KDAK | Kodiak Island | 4.58 | 189 | P | Pn | 00 08 27.1 | -1.1 |
| | 1.9nm,0.3s,baz=48,slow=8.3,SNR=22 | | | | | | |
| KDAK | | | | S | Sn | 00 09 19.1 | -1.0 |
| | 8.2nm,0.3s,baz=149,slow=20,SNR=2.7 | | | | | | |
| CTGM | Chitina Glacie | 4.94 | 101 | P | Pn | 00 08 33.1 | -0.1 |
| COLD | Coldfoot | 4.97 | 5 | P | Pn | 00 08 34.3 | +0.7 |
| LOGN | Logan Glacier | 5.14 | 102 | P | Pn | 00 08 35.5 | -0.5 |
| EGAK | Eagle | 5.17 | 57 | P | Pn | 00 08 36.3 | 0.0 |
| OHAK | Old Harbor | 5.19 | 192 | P | Pn | 00 08 35.1 | -1.5 |
| DAWY | Dawson | 5.67 | 67 | ePn | Pn | 00 08 43.3 | +0.1 |
| | 17nm,0.6s | | | | | | |
| DAWY | | | | eSn | Sn | 00 09 46.0 | -0.8 |
| PCA | Pinnacle | 5.77 | 108 | P | Pn | 00 08 44.1 | -0.5 |
| BM3 | Burnt Mountain | 5.88 | 26 | P | Pn | 00 08 46.6 | +0.7 |
| INK | Inuvik | 9.54 | 43 | P | Pn | 00 09 36.9 | +1.2 |
| | 0.6nm,0.3s,baz=249,slow=20,SNR=18 | | | | | | |
| DLBC | Dease Lake | 11.19 | 101 | P | Pn | 00 09 59.0 | +0.6 |
| | 0.4nm,0.3s,baz=277,slow=2.8,SNR=5.2 | | | | | | |
| NEW | Newport | 23.64 | 111 | P | P | 00 12 25.7 | +1.0 |
| | 1.8nm,0.8s,baz=312,slow=5.8,SNR=3.9 | | | | | | |
| SEY | Seymchan | 25.22 | 297 | P | P | 00 12 39.2 | +0.5 |
| | 1.5nm,0.6s,baz=77,slow=9.3,SNR=4.8 | | | | | | |
| YBH | Yreka Blue Hor | 26.69 | 127 | P | P | 00 12 54.8 | +2.4 |
| | 2.4nm,0.9s,baz=347,slow=3.2,SNR=4.5 | | | | | | |
| NVAR | Mina Array Bea | 31.23 | 124 | P | P | 00 13 34.3 | +1.5 |
| | 1.9nm,0.7s,baz=316,slow=9.6,SNR=9.0 | | | | | | |
| TXAR | Lajitas Array | 45.09 | 114 | P | P | 00 15 30.2 | +1.3 |
| | 0.9nm,0.9s,baz=342,slow=7.9,SNR=5.3 | | | | | | |
| TXAR | | | | pP | pP | 00 15 50.2 | +0.6 |
| | 0.3nm,0.6s,baz=352,slow=5.5,SNR=2.6 | | | | | | |
| TXAR | | | | sP | sP | 00 15 55.9 | -3.6 |
| | 0.3nm,0.5s,baz=320,slow=5.6,SNR=3.0 | | | | | | |
| ARCES | ARCESS Array B | 48.43 | 2 | P | P | 00 15 53.6 | -0.7 |
| | 0.9nm,0.6s,baz=356,slow=8.5,SNR=7.3 | | | | | | |
| TKL | Tuckaleechee C | 48.80 | 90 | P | P | 00 15 57.7 | +0.1 |
| | 3.1nm,0.7s,baz=243,slow=2.3,SNR=5.5 | | | | | | |
| SONM | Songino Array | 54.12 | 306 | P | P | 00 16 37.8 | +0.6 |
| | 0.6nm,0.7s,baz=21,slow=7.0,SNR=5.5 | | | | | | |
| ZALV | Zalesovo Beam | 56.01 | 324 | P | P | 00 16 49.7 | -0.8 |
| | 0.9nm,0.3s,baz=33,slow=8.6,SNR=5.7 | | | | | | |
| NOA | NORSAR Array B | 56.26 | 10 | P | P | 00 16 52.4 | +0.1 |
| | 0.4nm,0.5s,baz=321,slow=5.6,SNR=2.6 | | | | | | |
| FINES | FINESS Array B | 56.56 | 2 | P | P | 00 16 54.1 | -0.2 |
| | 0.5nm,0.4s,baz=6.4,slow=9.5,SNR=8.0 | | | | | | |
| FINES | | | | pP | pP | 00 17 16.4 | +0.6 |
| | 1.0nm,0.8s,baz=0.8,slow=10,SNR=1.8 | | | | | | |
| ARU | Arti | 59.34 | 341 | P | P | 00 17 13.1 | -0.8 |
| | 0.2nm,0.3s,baz=307,slow=23,SNR=1.7 | | | | | | |
| BVAR | Borovoye Array | 60.41 | 332 | P | P | 00 17 20.9 | -0.4 |
| | 0.4nm,0.6s,baz=46,slow=6.2,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 63.14 | 322 | P | P | 00 17 38.2 | -1.5 |
| | 0.5nm,0.3s,baz=19,slow=4.8,SNR=14 | | | | | | |
| MKAR | | | | pP | pP | 00 18 01.2 | -0.4 |
| | 0.2nm,0.3s,baz=38,slow=7.4,SNR=1.7 | | | | | | |
| AKASG | Malin Array Be | 67.35 | 360 | P | P | 00 18 05.8 | -0.9 |
| | 0.7nm,0.3s,baz=2.6,slow=6.6,SNR=4.6 | | | | | | |
| GERES | GERESS Array B | 68.56 | 11 | P | P | 00 18 15.1 | +0.6 |
| | 0.2nm,0.3s,baz=4.8,slow=7.5,SNR=4.1 | | | | | | |
| ESDC | Sonseca Array | 75.02 | 26 | P | P | 00 18 53.7 | +0.5 |
| | 0.3nm,0.6s,baz=341,slow=6.7,SNR=3.9 | | | | | | |
| BRTR | Keskin Array B | 78.25 | 356 | P | P | 00 19 11.3 | -0.2 |
| | 0.4nm,0.7s,baz=357,slow=5.9,SNR=2.8 | | | | | | |
| PTGA | Pitinga | 91.26 | 89 | P | P | 00 20 16.5 | -0.6 |
| | 1.2nm,0.5s,baz=357,slow=9.7,SNR=4.0 | | | | | | |

*TIR **03** 00:12:41.0±2.7, 42°.55N×20°.12E, h12km±31km, ML2.5*

*CSEM **03** 00:12:42.9±0.1, 42°.54N×20°.11E, h2km, ML2.8, Error ellipse: s-maj=2.5km s-min=2.1km az=78.0*

*PDG **03** 00:12:42.7±0.1, 42°.54N×20°.16E, h10km, MD2.9/3, ML2.8/11, Error ellipse: s-maj=0.1km s-min=0.2km az=0.0*

*BEO **03** 00:12:43.4±0.3, 42°.56N×20°.11E, h0km, ML2.6/1*

*THE **03** 00:12:43.0, 42°.50N×20°.12E, h0km±2km, Error ellipse: s-maj=2.2km s-min=1.0km az=301.0*

*SKO **03** 00:12:43.5, 42°.56N×20°.13E, h3km, M2.7, ML3.0*

**ISC 03 00:12:42.7**±0.9**, 42°.53N**±0°.01×**20°.15E**±0°.02**, h6**km±8km**, n143,** σ1.05/197**, 27C-10D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PVY | Plav | 0.15 | 293 | ⇑iPg | Pg | 00 12 45.8 | 0.0 |
| PVY | | | | eSg | Sg | 00 12 48.6 | +0.7 |
| PVY | Plav | 0.15 | 293 | ⇑iPg | Pg | 00 12 45.8 | 0.0 |
| PVY | | | | eSg | Sg | 00 12 48.6 | +0.7 |
| BCI | Bajram Curri | 0.18 | 200 | i PG | Pg | 00 12 46.3 | +0.1 |
| BCI | | | | i SG | Sg | 00 12 49.5 | +0.9 |
| BCI | Bajram Curri | 0.18 | 200 | i Pg | Pg | 00 12 46.3 | +0.1 |
| | SNR=105 | | | | | | |
| BCI | | | | i Sg | Sg | 00 12 49.5 | +0.9 |
| | SNR=105 | | | | | | |
| BEY | Berane | 0.39 | 331 | ⇑iPg | Pg | 00 12 49.9 | -0.3 |
| BEY | | | | eSg | Sg | 00 12 56.2 | +0.9 |
| IVA | Berane | 0.39 | 331 | ⇑iPg | Pg | 00 12 49.9 | -0.3 |
| IVA | | | | eSg | Sg | 00 12 56.2 | +0.9 |
| PUK | Puka | 0.53 | 201 | i PG | Pg | 00 12 52.6 | -0.2 |
| PUK | | | | i SG | Sg | 00 13 00.8 | +1.1 |
| PUK | Puka | 0.53 | 201 | i Pg | Pg | 00 12 52.6 | -0.2 |
| | SNR=94 | | | | | | |
| PUK | | | | i Sg | Sg | 00 13 00.8 | +1.1 |
| | SNR=94 | | | | | | |
| PDG | Podgorica | 0.67 | 261 | i Pg | Pg | 00 12 55.5 | 0.0 |
| PDG | Podgorica | 0.67 | 261 | P | Pg | 00 12 54.5 | -1.0 |
| PDG | | | | S | Sg | 00 13 04.5 | +0.3 |
| PDG | Podgorica | 0.67 | 261 | P | Pg | 00 12 54.5 | -1.0 |
| PDG | Podgorica | 0.67 | 261 | ⇓iPg | Pg | 00 12 55.1 | -0.4 |
| PDG | | | | S | Sg | 00 13 04.5 | +0.3 |
| PDG | | | | eSg | Sb | 00 13 05.6 | -0.7 |
| TTG | Podgorica | 0.67 | 261 | ⇓iPg | Pg | 00 12 55.1 | -0.4 |
| TTG | | | | eSg | Sb | 00 13 05.6 | -0.7 |
| SJES | Sjenica | 0.74 | 350 | ⇑iPg | Pg | 00 12 56.2 | -0.7 |
| SJES | | | | eSg | Sg | 00 13 04.9 | -1.6 |
| SJES | Sjenica | 0.74 | 350 | ⇑iPg | Pg | 00 12 56.2 | -0.7 |
| SJES | | | | eSg | Sg | 00 13 04.9 | -1.6 |
| DRME | Dracevica, Mon | 0.80 | 244 | ⇑iPg | Pg | 00 12 57.4 | -0.5 |
| DRME | | | | eSg | Sb | 00 13 10.2 | +0.3 |
| DRME | Dracevica, Mon | 0.80 | 244 | ⇑iPg | Pg | 00 12 57.4 | -0.5 |
| DRME | | | | eSg | Sb | 00 13 10.2 | +0.3 |
| PHP | Peshkopia | 0.88 | 166 | i PG | Pg | 00 12 58.4 | -1.0 |
| PHP | | | | i SG | Sb | 00 13 12.9 | +0.6 |
| PHP | Peshkopia | 0.88 | 166 | P | Pg | 00 12 58.4 | -1.0 |
| PHP | | | | S | Sg | 00 13 11.5 | +0.7 |
| PHP | Peshkopia | 0.88 | 166 | P | Pg | 00 12 58.4 | -1.0 |
| PHP | | | | S | Sg | 00 13 11.5 | +0.7 |
| PHP | | | | i Sg | Sb | 00 13 12.9 | +0.6 |
| | SNR=93 | | | | | | |
| ULC | Ulcinj | 0.88 | 230 | ⇑iPg | Pg | 00 12 59.6 | +0.1 |
| ULC | | | | eSg | Sb | 00 13 13.2 | +0.8 |
| ULC | Ulcinj | 0.88 | 230 | ⇑iPg | Pg | 00 12 59.6 | +0.1 |
| NKY | Niksic | 0.90 | 289 | ⇑iPg | Pg | 00 12 59.6 | -0.3 |
| NKY | | | | eSg | Sb | 00 13 13.6 | +0.6 |
| NKY | Niksic | 0.90 | 289 | ⇑iPg | Pg | 00 12 59.6 | -0.3 |
| NKME | Niksic | 0.91 | 285 | ⇑iPg | Pg | 00 12 59.6 | -0.6 |
| NKME | | | | eSg | Sb | 00 13 14.0 | +0.6 |
| NKME | Niksic | 0.91 | 285 | ⇑iPg | Pg | 00 12 59.6 | -0.6 |
| BUM | Brajici-Budva | 0.96 | 256 | ⇑iPg | Pg | 00 13 00.5 | -0.5 |
| BUM | | | | eSg | Sn | 00 13 15.5 | -1.3 |
| BUM | Brajici-Budva | 0.96 | 256 | ⇑iPg | Pg | 00 13 00.5 | -0.5 |
| PLE | Pljevlja | 0.97 | 325 | ⇑iPg | Pg | 00 13 01.1 | -0.2 |
| PLE | | | | eSg | Sn | 00 13 16.1 | -1.1 |
| PLE | Pljevlja | 0.97 | 325 | ⇑iPg | Pg | 00 13 01.1 | -0.2 |
| SELS | Selova | 0.99 | 46 | i Pg | Pg | 00 13 00.8 | -0.8 |
| SELS | | | | eSg | Sg | 00 13 13.8 | -0.7 |
| IVAS | Ivanjica | 1.04 | 0 | i Pg | Pg | 00 13 01.9 | -0.8 |
| IVAS | | | | eSg | Sg | 00 13 15.4 | -0.8 |
| IVAS | Ivanjica | 1.04 | 0 | i Pg | Pg | 00 13 01.9 | -0.8 |
| IVAS | | | | eSg | Sg | 00 13 15.4 | -0.8 |
| SKO | Skopje | 1.11 | 120 | eSn | Sn | 00 13 21.6 | +1.2 |
| SKO | Skopje | 1.11 | 120 | P | Pn | 00 13 04.8 | 0.0 |
| SKO | | | | S | Sn | 00 13 21.7 | +1.2 |
| SKO | Skopje | 1.11 | 120 | P | Pn | 00 13 04.8 | 0.0 |
| SKO | | | | eSn | Sn | 00 13 21.6 | +1.2 |
| UPM | Unac-Piva | 1.13 | 307 | ⇓iPg | Pb | 00 13 03.6 | -1.2 |
| UPM | | | | eSg | Sn | 00 13 21.5 | +0.2 |
| UPM | Unac-Piva | 1.13 | 307 | ⇓iPg | Pb | 00 13 03.6 | -1.2 |
| TIR | Tirane | 1.20 | 190 | i PG | Pb | 00 13 05.6 | -0.3 |
| TIR | | | | i SG | Sn | 00 13 25.4 | +2.7 |
| TIR | Tirane | 1.20 | 190 | ⇑iPg | Pg | 00 13 05.8 | +0.1 |
| TIR | Tirane | 1.20 | 190 | P | Pb | 00 13 05.3 | -0.6 |
| TIR | | | | S | Sb | 00 13 21.3 | -0.4 |
| TIR | Tirane | 1.20 | 190 | P | Pb | 00 13 05.3 | -0.6 |
| TIR | Tirane | 1.20 | 190 | i Pg | Pb | 00 13 05.6 | -0.3 |
| | SNR=92 | | | | | | |
| TIR | | | | S | Sb | 00 13 21.3 | -0.4 |
| TIR | | | | i Sg | Sn | 00 13 25.4 | +2.7 |
| | SNR=92 | | | | | | |
| HCY | Herceg Novi | 1.23 | 267 | ⇑iPg | Pn | 00 13 05.5 | -0.9 |
| HCY | | | | eSg | Sn | 00 13 24.6 | +1.3 |
| HCY | Herceg Novi | 1.23 | 267 | ⇑iPg | Pn | 00 13 05.5 | -0.9 |
| BRY | Bratogost | 1.24 | 288 | ⇓iPg | Pn | 00 13 05.5 | -1.2 |
| BRY | | | | eSg | Sn | 00 13 25.3 | +1.4 |
| BRY | Bratogost | 1.24 | 288 | ⇓iPg | Pn | 00 13 05.5 | -1.2 |
| BARS | Barje | 1.26 | 76 | ⇑iPg | Pn | 00 13 06.0 | -0.9 |
| BARS | | | | eSg | Sn | 00 13 25.0 | +0.8 |
| BARS | Barje | 1.26 | 76 | ⇑iPg | Pn | 00 13 06.0 | -0.9 |
| BARS | | | | eSg | Sn | 00 13 25.0 | +0.8 |
| TREB | Trebinje | 1.34 | 278 | ePn | Pg | 00 13 09.5 | +1.2 |
| TREB | Trebinje | 1.34 | 278 | ePn | Pg | 00 13 09.5 | +1.2 |
| GRUS | Gruza | 1.42 | 17 | i Pn | Pb | 00 13 09.0 | -0.5 |
| GRUS | | | | eSg | Sg | 00 13 29.4 | +1.2 |
| GRUS | Gruza | 1.42 | 17 | i Pn | Pb | 00 13 09.0 | -0.5 |
| GRUS | | | | eSg | Sg | 00 13 29.4 | +1.2 |
| BBLS | Lazići | 1.44 | 338 | ⇓iPn | Pn | 00 13 08.9 | -0.5 |
| BBLS | | | | eSg | Sg | 00 13 28.8 | -0.1 |
| BBLS | Lazići | 1.44 | 338 | ⇓iPn | Pn | 00 13 08.9 | -0.5 |
| BBLS | | | | eSg | Sg | 00 13 28.8 | -0.1 |
| OHR | Ohrid | 1.50 | 161 | ePn | Pg | 00 13 11.9 | +0.5 |
| OHR | | | | eSn | Sg | 00 13 32.4 | +1.5 |
| OHR | | | | eLg | Lg | 00 13 33.1 | |
| | comp=N,171nm,0.5s | | | | | | |
| OHR | | | | eLg | Lg | 00 13 39.6 | |
| | comp=E,218nm,0.7s | | | | | | |
| OHR | Ohrid | 1.50 | 161 | ePn | Pg | 00 13 11.9 | +0.5 |
| OHR | | | | eSn | Sg | 00 13 32.4 | +1.5 |
| OHR | | | | eLg | Lg | 00 13 39.5 | |
| | comp=E,218nm,0.7s | | | | | | |
| DIVS | Divibare | 1.57 | 356 | i Pn | Pn | 00 13 11.1 | -0.1 |
| DIVS | | | | eSg | Sg | 00 13 33.3 | +0.2 |
| DIVS | Divibare | 1.57 | 356 | ⇑iP | Pn | 00 13 11.3 | +0.1 |
| DIVS | | | | S | Sg | 00 13 35.0 | +1.9 |
| DIVS | Divibare | 1.57 | 356 | P | Pn | 00 13 11.1 | -0.1 |
| DIVS | | | | S | Sg | 00 13 34.7 | +1.6 |
| DIVS | Divibare | 1.57 | 356 | P | Pn | 00 13 11.1 | -0.1 |
| DIVS | | | | eSg | Sg | 00 13 33.3 | +0.2 |
| DIVS | | | | S | Sg | 00 13 34.7 | +1.6 |
| BOVS | Bovan | 1.58 | 45 | ePn | Pb | 00 13 12.3 | -0.1 |
| BOVS | Bovan | 1.58 | 45 | ePn | Pb | 00 13 12.3 | -0.1 |
| TRUS | Trudelj | 1.70 | 6 | ePn | Pb | 00 13 14.2 | -0.1 |
| TRUS | Trudelj | 1.70 | 6 | ePn | Pb | 00 13 14.2 | -0.1 |
| STON | Ston | 1.84 | 281 | ePn | Pb | 00 13 16.3 | -0.3 |
| STON | Ston | 1.84 | 281 | ePn | Pb | 00 13 16.3 | -0.3 |
| BOLS | Boljevac | 1.85 | 45 | ePn | Pb | 00 13 17.1 | +0.2 |
| BOLS | Boljevac | 1.85 | 45 | ePn | Pb | 00 13 17.1 | +0.2 |
| KBN | Korca | 1.97 | 166 | i PG | Pg | 00 13 20.3 | -0.1 |
| KBN | | | | i SG | Sg | 00 13 45.6 | -0.3 |
| KBN | Korca | 1.97 | 166 | P | Pn | 00 13 17.1 | +0.5 |
| KBN | | | | S | Sn | 00 13 42.1 | +0.4 |
| KBN | Korca | 1.97 | 166 | P | Pn | 00 13 17.1 | +0.5 |
| KBN | Korca | 1.97 | 166 | i Pg | Pg | 00 13 20.3 | -0.1 |
| | SNR=91 | | | | | | |
| KBN | | | | S | Sn | 00 13 42.1 | +0.4 |
| KBN | | | | i Sg | Sg | 00 13 45.6 | -0.3 |
| | SNR=91 | | | | | | |
| ZAPS | Zavoj | 1.97 | 67 | ePn | Pb | 00 13 17.7 | -1.3 |
| ZAPS | Zavoj | 1.97 | 67 | ePn | Pb | 00 13 17.7 | -1.3 |
| FNA | Florina | 1.98 | 152 | eP | Pb | 00 13 17.8 | -1.3 |
| FNA | Florina | 1.98 | 152 | eP | Pb | 00 13 17.8 | -1.3 |
| FNA | Florina | 1.98 | 152 | P | Pb | 00 13 17.6 | -1.5 |
| FNA | | | | S | Sb | 00 13 43.7 | -0.3 |
| FNA | Florina | 1.98 | 152 | P | Pb | 00 13 17.6 | -1.5 |
| FNA | | | | S | Sb | 00 13 43.7 | -0.3 |
| TEKS | Tekeris | 2.06 | 348 | i Pn | Pn | 00 13 18.0 | +0.1 |
| TEKS | Tekeris | 2.06 | 348 | i Pn | Pn | 00 13 18.0 | +0.1 |
| VAY | Valandovo | 2.17 | 123 | ePn | Pb | 00 13 21.9 | -0.5 |
| VAY | Valandovo | 2.17 | 123 | ePn | Pb | 00 13 21.9 | -0.5 |
| KUBS | Kucevo | 2.18 | 30 | ePn | Pb | 00 13 21.8 | -0.8 |
| KUBS | Kucevo | 2.18 | 30 | ePn | Pb | 00 13 21.8 | -0.8 |
| NEST | Nestorio | 2.22 | 162 | eP | Pb | 00 13 21.5 | -1.8 |
| NEST | Nestorio | 2.22 | 162 | eP | Pb | 00 13 21.5 | -1.8 |
| NEST | Nestorio | 2.22 | 162 | P | Pn | 00 13 20.3 | +0.1 |
| NEST | | | | S | Sb | 00 13 50.0 | -1.1 |
| NEST | Nestorio | 2.22 | 162 | P | Pn | 00 13 20.3 | +0.1 |
| NEST | | | | S | Sb | 00 13 50.0 | -1.1 |
| GRG | Griva | 2.31 | 132 | eP | Pn | 00 13 21.7 | +0.5 |
| GRG | Griva | 2.31 | 132 | eP | Pn | 00 13 21.7 | +0.5 |
| GRG | Griva | 2.31 | 132 | P | Pn | 00 13 21.8 | +0.5 |
| GRG | | | | S | Sb | 00 13 51.2 | -2.3 |
| GRG | Griva | 2.31 | 132 | P | Pn | 00 13 21.8 | +0.5 |
| GRG | | | | S | Sb | 00 13 51.2 | -2.3 |
| KNT | Kendrikon | 2.47 | 123 | eP | Pn | 00 13 23.4 | -0.1 |
| KNT | Kendrikon | 2.47 | 123 | eP | Pn | 00 13 23.4 | -0.1 |
| KZN | Kozani | 2.54 | 151 | eP | Pn | 00 13 25.6 | +1.1 |
| KZN | Kozani | 2.54 | 151 | eP | Pn | 00 13 25.6 | +1.1 |
| KZN | Kozani | 2.54 | 151 | P | Pn | 00 13 25.4 | +0.9 |
| KZN | Kozani | 2.54 | 151 | P | Pn | 00 13 25.4 | +0.9 |
| FGSL | Fruska Gora | 2.63 | 355 | ePn | Pn | 00 13 26.9 | +1.1 |
| FRGS | Fruska Gora | 2.63 | 355 | ePn | Pn | 00 13 26.9 | +1.1 |
| PE1 | Pezze di Greco | 2.67 | 231 | ePn | Pn | 00 13 22.7 | -3.6 |
| MPEP | Malo Peshtene | 2.76 | 71 | i P | Pg | 00 13 36.9 | +1.3 |
| MMB | Musomiste | 2.83 | 108 | eP | Pg | 00 13 36.8 | 0.0 |
| SGD | Sagiada | 2.92 | 179 | eP | Pb | 00 13 32.1 | -3.0 |
| SGD | Sagiada | 2.92 | 179 | eP | Pb | 00 13 32.1 | -3.0 |
| JAN | Janina | 2.92 | 169 | eP | Pb | 00 13 32.7 | -2.5 |
| JAN | Janina | 2.92 | 169 | eP | Pb | 00 13 32.7 | -2.5 |
| SRS | Serrai | 2.94 | 118 | eP | Pn | 00 13 30.0 | +0.1 |
| SRS | Serrai | 2.94 | 118 | eP | Pn | 00 13 30.0 | +0.1 |
| HORT | Hortiatis | 2.94 | 130 | eP | Pn | 00 13 30.6 | +0.6 |
| HORT | Hortiatis | 2.94 | 130 | eP | Pn | 00 13 30.6 | +0.6 |
| IGT | Igoumenitsa | 3.00 | 177 | eP | Pn | 00 13 33.1 | +2.3 |
| IGT | Igoumenitsa | 3.00 | 177 | eP | Pn | 00 13 33.1 | +2.3 |
| IGT | Igoumenitsa | 3.00 | 177 | P | Pn | 00 13 31.9 | +1.1 |
| IGT | | | | S | Sn | 00 14 08.2 | +1.1 |
| IGT | Igoumenitsa | 3.00 | 177 | P | Pn | 00 13 31.9 | +1.1 |
| IGT | | | | S | Sn | 00 14 08.2 | +1.1 |
| NVR | Nevrokopi | 3.01 | 112 | eP | Pg | 00 13 39.8 | -0.6 |
| NVR | Nevrokopi | 3.01 | 112 | eP | Pg | 00 13 39.8 | -0.6 |
| BZS | Buzias | 3.26 | 18 | ⇓iP | Pn | 00 13 35.1 | +0.8 |
| BZS | Buzias | 3.26 | 18 | S | Sg | 00 14 28.7 | +1.4 |
| BZS | Buzias | 3.26 | 18 | ⇓iP | Pn | 00 13 35.1 | +0.8 |
| THL | Klokotos Trika | 3.29 | 154 | eP | Pn | 00 13 35.6 | +0.9 |
| THL | Klokotos Trika | 3.29 | 154 | eP | Pn | 00 13 35.6 | +0.9 |
| THL | Klokotos Trika | 3.29 | 154 | P | Pn | 00 13 35.4 | +0.7 |
| THL | Klokotos Trika | 3.29 | 154 | P | Pn | 00 13 35.4 | +0.7 |
| PLG | Polygyros | 3.29 | 130 | eP | Pn | 00 13 34.0 | -0.7 |
| PLG | Polygyros | 3.29 | 130 | eP | Pn | 00 13 34.0 | -0.7 |
| GZR | Gura Zlata | 3.43 | 33 | ⇑iP | Pn | 00 13 39.8 | +3.0 |
| GZR | Gura Zlata | 3.43 | 33 | S | Sb | 00 14 28.4 | +2.5 |
| GZR | Gura Zlata | 3.43 | 33 | ⇑iP | Pn | 00 13 39.8 | +3.0 |
| RZN | Rozhen | 3.50 | 102 | eP | Pn | 00 13 40.7 | +2.9 |
| RZN | Rozhen | 3.50 | 102 | eP | Pn | 00 13 40.7 | +2.9 |
| MAKR | Makrakomi, Fth | 3.83 | 156 | eP | Pn | 00 13 43.4 | +1.2 |
| MAKR | Makrakomi, Fth | 3.83 | 156 | eP | Pn | 00 13 43.4 | +1.2 |
| EVR | Evrytania | 3.83 | 160 | eP | Pn | 00 13 45.8 | +3.6 |
| EVR | Evrytania | 3.83 | 160 | eP | Pn | 00 13 45.8 | +3.6 |
| AGG | Agios Georgios | 3.88 | 154 | eP | Pn | 00 13 43.6 | +0.7 |
| AGG | Agios Georgios | 3.88 | 154 | eP | Pn | 00 13 43.6 | +0.7 |
| NEO | Neokhori | 3.98 | 143 | eP | Pn | 00 13 41.5 | -2.7 |
| NEO | Neokhori | 3.98 | 143 | eP | Pn | 00 13 41.5 | -2.7 |
| SERG | Sergoula | 4.37 | 160 | eP | Pn | 00 13 48.5 | -1.1 |
| SERG | Sergoula | 4.37 | 160 | eP | Pn | 00 13 48.5 | -1.1 |
| DOPR | Dopca | 5.09 | 46 | ⇑iP | Pn | 00 13 53.4 | -6.2 |

*ISCJB **03** 00:19:19.0±0.5, 38°.37N±0°.02×24°.01E±0°.04, h6km±3km, Error ellipse: s-maj=4.8km s-min=2.7km az=173.3*

*CSEM **03** 00:19:19.1±0.1, 38°.37N×24°.00E, h10km, MD3.0, Error ellipse: s-maj=2.5km s-min=1.8km az=105.0*

*THE **03** 00:19:19.5, 38°.37N×24°.00E, h9km, ML2.3/14, Error ellipse: s-maj=0.8km s-min=0.4km az=76.0*

*ATH **03** 00:19:19.4, 38°.37N×23°.99E, h10km, MD3.0/21, ML2.0*

**ISC 03 00:19:19.3**±0.9**, 38°.38N**±0°.02×**24°.00E**±0°.03**, h11**km±5km**, n77,** σ0.35/138**, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EREA | Eretria | 0.07 | 311 | ePG | Pg | 00 19 21.8 | +0.1 |
| EREA | | | | eSG | Sg | 00 19 23.4 | 0.0 |
| EREA | Eretria | 0.07 | 311 | P | Pg | 00 19 21.7 | +0.1 |
| EREA | | | | S | Sg | 00 19 23.3 | -0.1 |
| EREA | Eretria | 0.07 | 311 | ePg | Pg | 00 19 21.8 | +0.1 |
| EREA | | | | eSg | Sg | 00 19 23.4 | 0.0 |
| ATHU | Athens Univers | 0.44 | 202 | P | Pg | 00 19 28.0 | 0.0 |
| ATHU | | | | S | Sg | 00 19 34.0 | +0.2 |
| ATHU | Athens Univers | 0.44 | 202 | P | Pg | 00 19 28.0 | 0.0 |
| ATHU | | | | S | Sg | 00 19 34.0 | +0.2 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| ATH | Athens Observa | 0.46 | 209 | ePB | Pg | 00 19 28.4 | +0.1 |
| ATH | | | | eSB | Sg | 00 19 34.4 | 0.0 |
| ATH | Athens Observa | 0.46 | 209 | P | Pg | 00 19 28.3 | 0.0 |
| ATH | | | | S | Sg | 00 19 35.0 | +0.6 |
| ATH | Athens Observa | 0.46 | 209 | P | Pg | 00 19 28.3 | 0.0 |
| ATH | | | | eSb | Sg | 00 19 34.4 | 0.0 |
| ATH | | | | S | Sg | 00 19 35.0 | +0.6 |
| MRKA | Markates | 0.46 | 316 | ePB | Pg | 00 19 28.7 | +0.3 |
| MRKA | | | | eSB | Sg | 00 19 34.8 | +0.2 |
| MRKA | Markates | 0.46 | 316 | P | Pg | 00 19 28.3 | -0.1 |
| MRKA | | | | S | Sg | 00 19 34.7 | +0.2 |
| MRKA | Markates | 0.46 | 316 | P | Pg | 00 19 28.3 | -0.1 |
| MRKA | Markates | 0.46 | 316 | ePb | Pg | 00 19 28.7 | +0.3 |
| MRKA | | | | S | Sg | 00 19 34.7 | +0.2 |
| KARY | Karystos | 0.49 | 135 | P | Pg | 00 19 29.1 | +0.3 |
| KARY | | | | S | Sg | 00 19 35.3 | 0.0 |
| VLY | Voula,Athens | 0.55 | 197 | ePB | Pg | 00 19 30.0 | +0.1 |
| VLY | | | | eSB | Sg | 00 19 37.3 | +0.2 |
| VLY | Voula,Athens | 0.55 | 197 | P | Pg | 00 19 30.0 | +0.1 |
| VLY | | | | S | Sg | 00 19 37.5 | +0.4 |
| VLY | Voula,Athens | 0.55 | 197 | P | Pg | 00 19 30.0 | +0.1 |
| VLY | | | | eSb | Sg | 00 19 37.3 | +0.2 |
| VILL | Villia | 0.58 | 249 | P | Pg | 00 19 30.2 | -0.4 |
| VILL | | | | S | Sg | 00 19 38.7 | +0.5 |
| VILL | Villia | 0.58 | 249 | ePb | Pg | 00 19 30.4 | -0.2 |
| VILL | | | | S | Sg | 00 19 38.7 | +0.5 |
| VIL2 | Platees | 0.60 | 254 | ePB | Pg | 00 19 30.4 | -0.5 |
| VIL2 | | | | eSB | Sg | 00 19 38.7 | -0.1 |
| NAIG | Nisos Aigina | 0.73 | 213 | ePB | Pg | 00 19 33.2 | -0.3 |
| NAIG | Nisos Aigina | 0.73 | 213 | ePb | Pg | 00 19 33.2 | -0.3 |
| SMIA | Simia | 0.80 | 309 | ePB | Pg | 00 19 34.5 | -0.2 |
| SMIA | | | | eSB | Sg | 00 19 45.3 | +0.2 |
| SMIA | Simia | 0.80 | 309 | P | Pg | 00 19 34.4 | -0.2 |
| SMIA | | | | S | Sb | 00 19 46.4 | +0.4 |
| SMIA | Simia | 0.80 | 309 | ePb | Pg | 00 19 34.5 | -0.2 |
| SMIA | | | | eSb | Sg | 00 19 45.3 | +0.2 |
| SMIA | | | | S | Sb | 00 19 46.4 | +0.4 |
| AOS | Alonnisos | 0.80 | 353 | ePB | Pg | 00 19 34.8 | 0.0 |
| AOS | | | | eSB | Sb | 00 19 46.0 | -0.1 |
| AOS | Alonnisos | 0.80 | 353 | P | Pg | 00 19 34.5 | -0.3 |
| AOS | | | | S | Sb | 00 19 45.8 | -0.3 |
| AOS | Alonnisos | 0.80 | 353 | P | Pg | 00 19 34.5 | -0.3 |
| AOS | Alonnisos | 0.80 | 353 | ePb | Pg | 00 19 34.8 | 0.0 |
| AOS | | | | S | Sb | 00 19 45.8 | -0.3 |
| ATAL | Atalanti | 0.83 | 293 | P | Pg | 00 19 35.5 | +0.2 |
| ATAL | | | | S | Sb | 00 19 47.7 | +0.8 |
| ATAL | Atalanti | 0.83 | 293 | P | Pg | 00 19 35.5 | +0.2 |
| ATAL | | | | S | Sb | 00 19 47.7 | +0.8 |
| LKR | Lokris | 0.83 | 290 | ePG | Pg | 00 19 34.8 | -0.5 |
| LKR | | | | eSB | Sb | 00 19 46.7 | -0.2 |
| LKR | Lokris | 0.83 | 290 | P | Pg | 00 19 34.8 | -0.5 |
| LKR | | | | S | Sb | 00 19 46.9 | 0.0 |
| LKR | Lokris | 0.83 | 290 | P | Pg | 00 19 34.8 | -0.5 |
| LKR | | | | eSb | Sb | 00 19 46.7 | -0.2 |
| LTK | Loutraki | 0.89 | 247 | ePB | Pg | 00 19 36.3 | -0.1 |
| LTK | | | | eSB | Sg | 00 19 48.3 | +0.4 |
| LTK | Loutraki | 0.89 | 247 | P | Pg | 00 19 36.3 | -0.1 |
| LTK | | | | S | Sb | 00 19 49.3 | +0.8 |
| LTK | Loutraki | 0.89 | 247 | P | Pg | 00 19 36.3 | -0.1 |
| LTK | | | | eSb | Sg | 00 19 48.3 | +0.4 |
| LTK | | | | S | Sb | 00 19 49.3 | +0.8 |
| SKIA | Skiathos | 0.89 | 332 | ePB | Pg | 00 19 36.5 | 0.0 |
| SKIA | | | | eSB | Sb | 00 19 49.6 | +0.8 |
| SKIA | Skiathos | 0.89 | 332 | P | Pg | 00 19 36.6 | 0.0 |
| SKIA | | | | S | Sb | 00 19 49.6 | +0.8 |
| SKIA | Skiathos | 0.89 | 332 | ePg | Pg | 00 19 36.5 | 0.0 |
| SKIA | | | | S | Sb | 00 19 49.6 | +0.8 |
| LOUT | Loutraki | 0.90 | 245 | ePB | Pg | 00 19 36.5 | -0.1 |
| LOUT | | | | eSB | Sb | 00 19 48.6 | -0.2 |
| LOUT | Loutraki | 0.90 | 245 | P | Pg | 00 19 36.4 | -0.1 |
| LOUT | | | | S | Sb | 00 19 49.4 | +0.6 |
| LOUT | Loutraki | 0.90 | 245 | ePb | Pg | 00 19 36.5 | -0.1 |
| LOUT | | | | eSb | Sb | 00 19 48.6 | -0.2 |
| LOUT | | | | S | Sb | 00 19 49.4 | +0.6 |
| ACOR | Acrocorinthos | 1.01 | 242 | P | Pg | 00 19 38.5 | -0.3 |
| ACOR | | | | S | Sb | 00 19 52.9 | +0.7 |
| DID | Didima | 1.06 | 215 | ePB | Pb | 00 19 39.1 | -0.5 |
| DID | | | | eSB | Sg | 00 19 53.4 | +0.1 |
| DID | Didima | 1.06 | 215 | P | Pb | 00 19 39.1 | -0.5 |
| DID | | | | S | Sb | 00 19 54.1 | +0.7 |
| DID | Didima | 1.06 | 215 | P | Pb | 00 19 39.1 | -0.5 |
| DID | | | | eSb | Sg | 00 19 53.4 | +0.1 |
| DID | | | | S | Sb | 00 19 54.1 | +0.7 |
| DIDY | Didyma | 1.09 | 215 | ePN | Pb | 00 19 40.2 | -0.1 |
| DIDY | | | | eSB | Sg | 00 19 54.8 | +0.3 |
| DIDY | Didyma | 1.09 | 215 | P | Pb | 00 19 39.6 | -0.7 |
| DIDY | | | | S | Sn | 00 19 56.0 | +0.2 |
| DIDY | Didyma | 1.09 | 215 | P | Pb | 00 19 39.6 | -0.7 |
| DIDY | Didyma | 1.09 | 215 | ePn | Pb | 00 19 40.2 | -0.1 |
| DIDY | | | | eSb | Sg | 00 19 54.8 | +0.3 |
| DIDY | | | | S | Sn | 00 19 56.0 | +0.2 |
| THAL | Thalero | 1.10 | 253 | ePN | Pg | 00 19 40.6 | +0.1 |
| THAL | Thalero | 1.10 | 253 | P | Pn | 00 19 40.9 | +0.2 |
| THAL | | | | S | Sg | 00 19 55.1 | +0.2 |
| THAL | Thalero | 1.10 | 253 | ePn | Pg | 00 19 40.6 | +0.1 |
| THAL | Thalero | 1.10 | 253 | P | Pn | 00 19 40.9 | +0.2 |
| THAL | | | | S | Sg | 00 19 55.1 | +0.2 |
| AXAR | Agios Charalam | 1.12 | 291 | ePN | Pb | 00 19 40.6 | -0.1 |
| AXAR | Agios Charalam | 1.12 | 291 | P | Pb | 00 19 40.6 | -0.1 |
| AXAR | | | | S | Sn | 00 19 56.0 | -0.4 |
| AXAR | Agios Charalam | 1.12 | 291 | P | Pb | 00 19 40.6 | -0.1 |
| AXAR | | | | S | Sn | 00 19 56.0 | -0.4 |
| DESF | Desfina | 1.15 | 272 | ePN | Pb | 00 19 41.0 | -0.3 |
| DESF | Desfina | 1.15 | 272 | ePb | Pb | 00 19 41.0 | -0.3 |
| XOR | Xorichti | 1.17 | 328 | ePN | Pb | 00 19 41.3 | -0.3 |
| XOR | Xorichti | 1.17 | 328 | P | Pb | 00 19 41.3 | -0.3 |
| XOR | | | | S | Sn | 00 19 58.1 | +0.4 |
| XOR | Xorichti | 1.17 | 328 | P | Pb | 00 19 41.3 | -0.3 |
| XOR | | | | S | Sn | 00 19 58.1 | +0.4 |
| KRND | KRANIDI | 1.20 | 214 | ePN | Pn | 00 19 41.4 | -0.6 |
| KRND | KRANIDI | 1.20 | 214 | P | Pn | 00 19 41.4 | -0.6 |
| KRND | | | | S | Sn | 00 19 58.3 | +0.1 |
| KRND | KRANIDI | 1.20 | 214 | P | Pn | 00 19 41.4 | -0.6 |
| KRND | | | | S | Sn | 00 19 58.3 | +0.1 |
| GUR | Goura | 1.38 | 252 | ePG | Pb | 00 19 45.0 | -0.1 |
| GUR | Goura | 1.38 | 252 | P | Pn | 00 19 44.2 | -0.4 |
| GUR | | | | S | Sb | 00 20 02.7 | -0.1 |
| GUR | Goura | 1.38 | 252 | P | Pn | 00 19 44.2 | -0.4 |
| GUR | Goura | 1.38 | 252 | ePg | Pb | 00 19 45.0 | -0.1 |
| GUR | | | | S | Sb | 00 20 02.7 | -0.1 |
| AGG | Agios Georgios | 1.46 | 297 | ePB | Pb | 00 19 46.6 | +0.2 |
| AGG | Agios Georgios | 1.46 | 297 | ePb | Pb | 00 19 46.6 | +0.2 |
| KALE | Kalithea | 1.46 | 271 | ePG | Pb | 00 19 46.5 | 0.0 |
| KALE | Kalithea | 1.46 | 271 | ePg | Pb | 00 19 46.5 | 0.0 |
| KLV | Kalavryta, Ach | 1.49 | 258 | ePG | Pb | 00 19 46.8 | -0.3 |
| KLV | Kalavryta, Ach | 1.49 | 258 | ePg | Pb | 00 19 46.8 | -0.3 |
| VLI | Veliai | 1.86 | 207 | ePN | Pb | 00 19 53.0 | -0.2 |
| VLI | Veliai | 1.86 | 207 | ePn | Pb | 00 19 53.0 | -0.2 |

*ISCJB **03** 00:20:13.4±0.5, 39°26N±0°02×28°20E±0°04, h4km±6km, Error ellipse: s-maj=5.7km s-min=3.8km az=174.6*
*DDA **03** 00:20:13.1, 39°31N×28°13E, h7km, Md2.9*
*CSEM **03** 00:20:13.8±0.1, 39°26N×28°21E, h10km, MD2.9, Error ellipse: s-maj=3.3km s-min=2.1km az=95.0*
*ISK **03** 00:20:13.1, 39°26N×28°23E, h6km, MD2.7*

**ISC 03 00:20:13.8**±1.0**, 39°26N**±0°02×**28°19E**±0°03**, h12**km±9km**, n33,** $\sigma 0^{s}39$/47**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DURS | Dursunbey | 0.40 | 33 | i P | Pg | 00 20 21.5 | -0.3 |
| DURS | | | | i S | Sg | 00 20 27.1 | -0.2 |
| DURS | Dursunbey | 0.40 | 33 | P | Pg | 00 20 21.5 | -0.3 |
| DURS | | | | S | Sg | 00 20 27.1 | -0.2 |
| BALB | Balikesir | 0.45 | 328 | ePG | Pg | 00 20 22.5 | -0.1 |
| BALB | | | | eSG | Sg | 00 20 29.4 | +0.8 |
| BALB | Balikesir | 0.45 | 328 | ePg | Pg | 00 20 22.5 | -0.1 |
| DEMI | Demirci | 0.46 | 118 | i P | Pg | 00 20 23.3 | +0.4 |
| DEMI | | | | i S | Sg | 00 20 29.7 | +0.6 |
| DEMI | Demirci | 0.46 | 118 | P | Pg | 00 20 23.3 | +0.4 |
| DEMI | | | | S | Sg | 00 20 29.7 | +0.6 |
| DST | Dursunbey | 0.48 | 44 | ePG | Pg | 00 20 22.6 | -0.5 |
| DST | Dursunbey | 0.48 | 44 | ePg | Pg | 00 20 22.6 | -0.5 |
| AKHS | Akhisar | 0.48 | 218 | i P | Pg | 00 20 22.7 | -0.5 |
| AKHS | | | | i S | Sg | 00 20 30.2 | +0.6 |
| AKHS | Akhisar | 0.48 | 218 | P | Pg | 00 20 22.7 | -0.5 |
| AKHS | | | | S | Sg | 00 20 30.2 | +0.6 |
| MANT | Manisa | 0.82 | 159 | i P | Pg | 00 20 29.9 | +0.2 |
| MANT | | | | i S | Sg | 00 20 39.7 | -0.8 |
| MANT | Manisa | 0.82 | 159 | P | Pg | 00 20 29.9 | +0.2 |
| MANT | | | | S | Sg | 00 20 39.7 | -0.8 |
| KULA | Kula-Manisa | 0.83 | 154 | ePG | Pg | 00 20 29.5 | -0.4 |
| KULA | | | | eSG | Sg | 00 20 40.5 | -0.3 |
| KULA | Kula-Manisa | 0.83 | 154 | eSg | Sg | 00 20 40.5 | -0.2 |
| KULA | Kula-Manisa | 0.83 | 154 | ePg | Pg | 00 20 29.5 | -0.4 |
| GONE | Gonen-Balikesi | 0.88 | 334 | ePG | Pb | 00 20 31.1 | +0.3 |
| GONE | Gonen-Balikesi | 0.88 | 334 | ePg | Pb | 00 20 31.2 | +0.3 |
| KCTX | Karacabey (Bur | 1.01 | 7 | ePG | Pb | 00 20 33.1 | -0.1 |
| KCTX | Karacabey (Bur | 1.01 | 7 | ePg | Pb | 00 20 33.1 | -0.1 |
| EDC | Edincik | 1.11 | 347 | ePN | Pn | 00 20 35.0 | -0.1 |
| EDC | Edincik | 1.11 | 347 | ePn | Pn | 00 20 35.1 | -0.1 |
| ULDT | Uludag | 1.14 | 39 | i P | Pb | 00 20 35.2 | -0.3 |
| ULDT | | | | i S | Sb | 00 20 50.5 | +0.1 |
| ULDT | Uludag | 1.14 | 39 | P | Pb | 00 20 35.2 | -0.3 |
| ULDT | | | | S | Sb | 00 20 50.5 | +0.1 |
| MDNY | Mudanya-Bursa | 1.23 | 26 | ePN | Pb | 00 20 36.9 | 0.0 |
| MDNY | Mudanya-Bursa | 1.23 | 26 | ePn | Pb | 00 20 36.9 | 0.0 |
| IGD | Bursa | 1.27 | 38 | P | Pg | 00 20 37.8 | -0.3 |
| IGD | | | | S | Sn | 00 20 54.1 | -0.2 |
| AYDB | Zeytinkoy-Aydi | 1.33 | 190 | ePN | Pg | 00 20 39.4 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 1.33 | 190 | ePn | Pg | 00 20 39.4 | 0.0 |
| ARMT | Armutlu | 1.40 | 21 | ePN | Pb | 00 20 39.8 | 0.0 |
| ARMT | Armutlu | 1.40 | 21 | ePn | Pb | 00 20 39.8 | 0.0 |
| IZI | Iznik | 1.46 | 42 | ePN | Pn | 00 20 40.1 | +0.1 |
| IZI | Iznik | 1.46 | 42 | ePn | Pn | 00 20 40.1 | +0.1 |
| BORA | Eskisehir | 1.85 | 70 | P | Pg | 00 20 49.9 | +0.6 |
| BORA | | | | S | Sg | 00 21 13.9 | +0.5 |

**JMA 03 00:25:42.3, 37°15N×138°42E, h22**km±1km**, M0.9, Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JJN | Nakama | 0.21 | 257 | P | Pb | 00 25 47.8 | -0.2 |
| JJN | | | | S | Sb | 00 25 51.8 | -0.1 |
| MAT | Matsushiro | 0.63 | 196 | P | Pb | 00 25 54.5 | -0.2 |
| MAT | | | | S | Sb | 00 26 02.8 | -0.4 |

*NIED **03** 00:26:00, 37°10N×138°40E, h17km, Mw4.6 Best double couple: $M_0$1.05000×$10^{16}$ NP1:$\phi_s$49.00000°, δ29.00000°, λ99.00000°. NP2:$\phi_s$218.00000°, δ62.00000°, λ85.00000°.*
*IDC **03** 00:26:49.8±0.4, 37°22N×138°33E, h0km, mb4.4/25, mb1 4.6/27, mb1mx4.5/46, mbtmp4.4/27, ML2.7/1, MS4.0/23, Ms1 4.1/23, ms1mx3.8/44, Error ellipse: s-maj=14.2km s-min=6.7km az=93.0*
*ISCJB **03** 00:26:52.3±0.3, 37°15N±0°02×138°38E±0°02, h26km±2km, mb4.8/156, MS4.3/32, Error ellipse: s-maj=3.1km s-min=2.2km az=167.5*
*JMA **03** 00:26:52.8±0.1, 37°14N×138°42E, h22km±1km, M4.7 Broadband fault plane solution: P waves. NP1: $\phi_s$219.00000°, δ57.00000°, λ101.00000°. NP2: $\phi_s$19.00000°, δ34.00000°, λ73.00000°. Principal axes: T Plg75.0000°, Azm161.0000°; N Plg9.0000°, Azm33.0000°; P Plg12.0000°, Azm301.0000°;*
*BJI **03** 00:26:53.7, 37°10N×138°20E, h25km, mb4.6/52, mB4.8/40, Ms4.5/53, Ms7 4.4/53*
*MOS **03** 00:26:53.5±1.1, 37°12N×138°29E, h33km, mb4.9/55, MS4.2/17, Error ellipse: s-maj=7.2km s-min=4.7km az=102.2*
*NEIC **03** 00:26:54.3±0.7, 37°08N×138°18E, h28km±5km, mb5.0/110, MW4.6(NIED), Error ellipse: s-maj=4.2km s-min=3.4km az=147.0*
*NEIC Recorded [5L JMA] in Niigata; [3 JMA] in Nagano; [2 JMA] in Gumma, Ishikawa and Toyama; [1 JMA] in Fukushima and Saitama. Also recorded [2 JMA] on Sadoga-shima.*

**ISC 03 00:26:53.1**±0.3**, 37°14N**±0°02×**138°39E**±0°02**, h22**km±2km**, h22**km**:pP-P, n676,** $\sigma 1^{s}21$/745**, mb4.9**/158**, MS4.2**/32**, 22C-49D, Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JJN | Nakama | 0.18 | 258 | P | Pb | 00 26 58.0 | -0.3 |
| JIZZ | Izumozaki | 0.47 | 33 | P | Pb | 00 27 02.4 | -0.3 |
| JHK | Hiroka | 0.51 | 78 | ⇓P | Pb | 00 27 02.3 | -1.2 |
| JHK | | | | S | Sb | 00 27 09.3 | -1.3 |
| JGK | Kuni | 0.61 | 161 | ⇓P | Pb | 00 27 04.8 | -0.4 |
| JGK | | | | S | Sb | 00 27 12.7 | -0.7 |
| MAJO | Matsushiro | 0.61 | 194 | d iP | Pb | 00 27 04.4 | -0.8 |
| MAJO | Matsushiro | 0.61 | 194 | ePg | Pb | 00 27 04.6 | -0.6 |
| MAJO | | | | eSg | Sb | 00 27 11.8 | -1.6 |
| MAT | Matsushiro | 0.61 | 194 | P | Pb | 00 27 04.3 | -0.9 |
| MAT | | | | S | Sb | 00 27 12.5 | -0.9 |
| MAT | Matsushiro | 0.61 | 194 | P | Pb | 00 27 04.4 | -0.8 |
| MAT | | | | S | Sb | 00 27 12.8 | -0.6 |
| MJAR | Matsushiro Arr | 0.61 | 194 | Pg | Pb | 00 27 04.6 | -0.6 |
| | 735nm,0.3s,baz=15,slow=16,SNR=5601 | | | | | | |
| MJAR | | | | Lg | Lg | 00 27 12.8 | |
| | 4µm,0.3s,baz=345,slow=28,SNR=92 | | | | | | |
| JKT | Katashina | 0.79 | 118 | ⇓P | Pb | 00 27 07.0 | -1.2 |
| JSZ | Suzu | 0.87 | 291 | ⇓P | Pb | 00 27 08.9 | -0.7 |
| JSZ | | | | S | Sb | 00 27 21.3 | +0.5 |
| JSD | Sado | 0.90 | 354 | ⇓P | Pb | 00 27 09.0 | -1.1 |
| JSD | | | | S | Sb | 00 27 21.2 | -0.5 |
| JTT | Ttatey | 1.00 | 238 | ⇓P | Pn | 00 27 11.9 | +0.1 |
| JTT | | | | S | Sn | 00 27 26.1 | +0.9 |
| JNS | Sasagawa | 1.00 | 47 | P | Pb | 00 27 10.5 | -1.3 |
| JNS | | | | S | Sb | 00 27 24.0 | -0.6 |
| JFY | Yanaizu | 1.08 | 75 | ⇓P | Pn | 00 27 11.8 | -1.2 |
| JFY | | | | S | Sb | 00 27 25.7 | -1.3 |
| JAG | Ashikaga | 1.11 | 130 | ⇓P | Pn | 00 27 12.7 | -0.7 |
| JAG | | | | S | Sb | 00 27 27.2 | -0.6 |
| I30JP | ISUMI INFRASON | 2.40 | 139 | i | | 00 42 30.0 | |
| | baz=320,slow=316,SNR=0.4 | | | | | | |
| JHJ | Hachijo jima 2 | 4.17 | 164 | Pn | Pn | 00 27 57.9 | +2.5 |
| | 153nm,0.3s,baz=273,slow=3.6,SNR=28 | | | | | | |
| JHJ | | | | Sn | Sn | 00 28 46.9 | +3.4 |
| | baz=69,slow=21,SNR=1.5 | | | | | | |
| JHJ | | | | LR | LR | 00 29 33.6 | |
| | comp=Z,2µm,18.1s,baz=288,slow=38 | | | | | | |
| JHJ2 | Mitsune | 4.19 | 163 | ePn | Pn | 00 27 58.0 | +2.4 |
| ERM | Erimo | 6.10 | 36 | ⇑eP | Pn | 00 28 23.7 | +1.8 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,83nm,1.7s | | | | | | |
| ERM | Erimo | 6.10 | 36 | ePn | Pn | 00 28 24.9 | +2.9 |
| KSULJ | Uljin | 7.21 | 269 | P | Pn | 00 28 37.9 | +0.8 |
| | SNR=17 | | | | | | |
| JNU | Nakatsue | 7.34 | 239 | Pn | Pn | 00 28 42.1 | +3.1 |
| | comp=Z,1.6nm,0.3s,baz=125,slow=1.3,SNR=13 | | | | | | |
| JNU | | | | LR | LR | 00 31 49.9 | |
| | comp=Z,1µm,18.7s,baz=32,slow=41 | | | | | | |
| JNU | Nakatsue | 7.34 | 239 | ePn | Pn | 00 28 42.2 | +3.2 |
| ASAJ | Asahikawa | 7.67 | 23 | Pn | Pn | 00 28 47.2 | +3.8 |
| | baz=217,slow=9.2 | | | | | | |
| ASAJ | Asahikawa | 7.67 | 23 | ePn | Pn | 00 28 46.8 | +3.4 |
| KSDGY | Daegwallycong | 7.75 | 277 | P | Pn | 00 28 46.6 | +2.0 |
| | SNR=6.1 | | | | | | |
| KSJES | JEONGSEON | 7.76 | 275 | P | Pn | 00 28 46.7 | +2.0 |
| | SNR=9.7 | | | | | | |
| VLA | Vladivostok | 7.77 | 322 | ⇑eP | Pn | 00 28 44.2 | -0.7 |
| KSEUS | ULSEONG | 7.83 | 267 | P | Pn | 00 28 47.6 | +2.0 |
| | SNR=11 | | | | | | |
| KSYOW | Yeongwol | 7.93 | 273 | P | Pn | 00 28 49.0 | +2.0 |
| | SNR=10 | | | | | | |
| KSIJA | INJE | 8.21 | 279 | P | Pn | 00 28 52.7 | +1.9 |
| | SNR=28 | | | | | | |
| KSWJU | Wonju | 8.24 | 275 | P | Pn | 00 28 53.8 | +2.4 |
| | SNR=9.8 | | | | | | |
| KSCHJ | Chungju | 8.34 | 271 | P | Pn | 00 28 54.6 | +2.0 |
| | SNR=23 | | | | | | |
| KSRS | Korea Array | 8.35 | 275 | Pn | Pn | 00 28 55.0 | +2.3 |
| | comp=Z,7.1nm,0.3s,baz=88,slow=14,SNR=97 | | | | | | |
| KSRS | | | | Sn | Sn | 00 30 25.3 | -1.0 |
| | comp=Z,1.5nm,0.3s,baz=92,slow=24,SNR=4.3 | | | | | | |
| KSRS | | | | LR | LR | 00 31 58.4 | |
| | comp=Z,972nm,19.8s,baz=64,slow=37 | | | | | | |
| KSRS | Korea Array | 8.35 | 275 | P | Pn | 00 28 55.0 | +2.3 |
| KSRS | | | | | | 00 30 25.3 | |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.3s | | | | | | |
| KSRS | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,973nm,19.8s | | | | | | |
| KS01 | Wonju Array Si | 8.37 | 275 | ePn | Pn | 00 28 54.1 | +1.0 |
| KSAR | Wonju Array Be | 8.38 | 275 | P | Pn | 00 28 55.0 | +1.8 |
| KSAR | | | | | | 00 30 25.3 | |
| KSAR | Wonju Array Be | 8.38 | 275 | Pn | Pn | 00 28 55.0 | +1.8 |
| KSAR | | | | Sn | Sn | 00 30 25.3 | -1.8 |
| KSCPR | CHUPUNGNYEONG | 8.42 | 267 | P | Pn | 00 28 56.0 | +2.2 |
| | SNR=32 | | | | | | |
| KSCHC | Chuncheon | 8.43 | 278 | P | Pn | 00 28 56.1 | +2.1 |
| | SNR=6.4 | | | | | | |
| KSBON | Boeun | 8.52 | 269 | P | Pn | 00 28 57.1 | +2.0 |
| | SNR=21 | | | | | | |
| USRK | Ussuriysk Ar. | 8.56 | 327 | Pn | Pn | 00 28 55.5 | -0.1 |
| | comp=Z,1.0nm,0.3s,baz=142,slow=13,SNR=12 | | | | | | |
| USRK | | | | Sn | Sn | 00 30 31.0 | -0.5 |
| | comp=Z,0.3nm,0.3s,baz=129,slow=52,SNR=2.1 | | | | | | |
| USRK | | | | LR | LR | 00 32 01.5 | |
| | comp=Z,1µm,19.3s,baz=160,slow=37 | | | | | | |
| KSCWO | Cheorwon | 8.68 | 280 | P | Pn | 00 28 59.6 | +2.3 |
| | SNR=6.4 | | | | | | |
| TJN | Taejon | 8.88 | 268 | ⇓eP | Pn | 00 29 01.8 | +1.7 |
| KSCEA | Cheonan | 8.91 | 271 | P | Pn | 00 29 02.8 | +2.3 |
| | SNR=46 | | | | | | |
| YUK | Yuzh-Kuril'sk | 8.93 | 37 | c iP | Pn | 00 29 01.3 | +0.7 |
| YUK | | | | i S | Sn | 00 30 42.4 | +1.9 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,215nm,2.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,24nm,0.9s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,58nm,0.9s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,57nm,0.9s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,759nm,17.0s | | | | | | |
| MDJ | Mudanjiang | 10.00 | 321 | P | Pn | 00 29 20.7 | +5.3 |
| MDJ | | | | S | Sn | 00 31 07.9 | +1.0 |
| MDJ | | | | PMZ | | | |
| | comp=Z,53nm,1.0s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,94nm,3.8s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,890nm,15.3s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,1µm,13.1s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,2µm,13.6s | | | | | | |
| MDJ | Mudanjiang | 10.00 | 321 | ePn | Pn | 00 29 15.9 | +0.5 |
| YSS | Yuzh-Sakhalins | 10.33 | 17 | eP | Pn | 00 29 21.0 | +1.2 |
| YSS | | | | eS | Sn | 00 31 23.0 | +8.2 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,1µm,12.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,1µm,12.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,1µm,14.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 10.33 | 17 | ePn | Pn | 00 29 21.7 | +1.8 |
| KUR | Kuril'sk | 10.78 | 38 | ⇓iP | Pn | 00 29 26.0 | 0.0 |
| KUR | | | | i S | Sn | 00 31 29.9 | +4.0 |
| KUR | | | | pmax | pmax | | |
| | comp=N,14nm,1.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,11nm,1.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,33nm,1.3s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=E,1µm,15.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,1µm,15.0s | | | | | | |
| HABR | Khabarovsk | 11.59 | 349 | eP | Pn | 00 29 34.8 | -2.2 |
| HABR | | | | eS | Sn | 00 31 44.7 | -0.9 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,1µm,15.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=E,1µm,15.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=N,884nm,13.0s | | | | | | |
| CN2 | Changchun | 11.88 | 308 | eP | Pn | 00 29 42.5 | +1.4 |
| CN2 | | | | PMZ | | | |
| | comp=N,10.0nm,0.5s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=N,100nm,4.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=N,1µm,14.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=N,2µm,14.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=N,2µm,14.0s | | | | | | |
| SNY | Shenyang | 12.36 | 297 | ⇑P | Pn | 00 29 46.2 | -1.4 |
| SNY | | | | PMZ | | | |
| | comp=N,70nm,5.7s | | | | | | |
| SNY | | | | LN | | | |
| | comp=N,900nm,12.6s | | | | | | |
| SNY | | | | LE | | | |
| | comp=N,2µm,12.9s | | | | | | |
| SNY | | | | LZ | | | |
| | comp=N,1µm,13.2s | | | | | | |
| KLR | Kul'dur | 13.01 | 340 | eP | Pn | 00 29 57.2 | +0.7 |
| KLR | | | | pmax | pmax | | |
| | comp=E,35nm,1.8s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,70nm,1.8s | | | | | | |
| JOW | Kunigami | 13.38 | 223 | Pn | P | 00 30 06.3 | -4.7 |
| | comp=Z,0.0nm,0.3s,baz=56,slow=13,SNR=3.6 | | | | | | |
| SSE | Sheshan | 15.46 | 252 | P | P | 00 30 39.3 | +5.2 |
| SSE | | | | S | S | 00 33 34.2 | -1.7 |
| SSE | | | | sS | sS | 00 33 42.6 | -3.1 |
| NJ2 | Nanjing | 16.86 | 258 | eP | Pn | 00 30 47.3 | -0.3 |
| NJ2 | | | | S | Sn | 00 33 54.0 | -0.3 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.7s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=Z,2µm,15.3s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=Z,2µm,15.8s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=Z,4µm,15.9s | | | | | | |
| TIA | Tai'an | 17.08 | 273 | ⇑P | P | 00 30 55.5 | +3.4 |
| TIA | | | | PMZ | | | |
| | comp=Z,20nm,1.1s | | | | | | |
| TIA | | | | LN | | | |
| | comp=Z,670nm,15.0s | | | | | | |
| TIA | | | | LE | | | |
| | comp=Z,920nm,16.0s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=Z,750nm,17.0s | | | | | | |
| BJI | Beijing | 17.60 | 286 | P | Pn | 00 30 56.0 | -0.8 |
| BJI | | | | S | Sn | 00 34 10.4 | -1.7 |
| BJI | | | | PMZ | | | |
| | comp=Z,18nm,1.4s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,140nm,3.6s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,460nm,15.2s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,600nm,10.5s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,280nm,20.5s | | | | | | |
| BJT | Baijiatuau | 17.60 | 286 | eP | P | 00 30 59.4 | +1.6 |
| BJT | | | | pmax | pmax | | |
| | comp=Z,31nm,1.1s | | | | | | |
| BJT | Baijiatuau | 17.60 | 286 | ePn | P | 00 30 59.4 | +1.6 |
| | comp=Z,30nm,1.1s | | | | | | |
| YULB | Yu-li | 20.10 | 232 | eP | P | 00 31 21.3 | -4.0 |
| | comp=Z,39nm,1.7s | | | | | | |
| PETK | Petropavlovsk- | 20.88 | 34 | P | P | 00 31 31.2 | -2.4 |
| | comp=Z,1.6nm,0.4s,baz=233,slow=21,SNR=2.9 | | | | | | |
| PETK | | | | LR | LR | 00 40 00.3 | |
| | comp=Z,274nm,18.8s,baz=220,slow=38 | | | | | | |
| PETK | Petropavlovsk- | 20.88 | 34 | P | P | 00 31 31.2 | -2.4 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,274nm,18.8s | | | | | | |
| WHN | Wuhan | 20.99 | 259 | P | Pn | 00 31 38.4 | +0.8 |
| WHN | | | | S | S | 00 35 27.4 | -0.3 |
| WHN | | | | LN | | | |
| | comp=Z,1µm,11.4s | | | | | | |
| WHN | | | | LE | | | |
| | comp=Z,2µm,13.1s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,2µm,15.0s | | | | | | |
| HHC | Hu-ho-hao-te | 21.14 | 288 | eP | P | 00 31 37.2 | +0.6 |
| HHC | | | | S | S | 00 35 30.2 | -0.6 |
| HHC | | | | sS | Sn | 00 35 35.2 | -2.7 |
| HHC | | | | SS | SnSn | 00 35 57.6 | +4.9 |

HHC ScP **ScP** **00 39 16.5 -0.9**
HHC PMZ
comp=Z,29nm,1.8s
HHC PMZ
comp=Z,67nm,3.7s
HHC LN
comp=Z,400nm,12.4s
HHC LE
comp=Z,770nm,12.9s
HHC LZ
comp=Z,810nm,14.9s
**PET** **Petropavlovsk** **21.26 35** *e*P **P** **00 31 40.9 +3.3**
PET *e*S **S** **00 35 31.0 -1.7**
PET MLR MLR
comp=Z,700nm,19.0s
PET MLR MLR
comp=Z,700nm,20.0s
**CLNS** **Chul'man** **21.67 340** *e*P P 00 31 48.1 +6.1
CLNS pmax pmax
comp=N,8.0nm,1.0s
CLNS pmax pmax
comp=Z,11nm,0.8s
CLNS MLR MLR
comp=E,335nm,12.0s
CLNS MLR MLR
comp=N,285nm,15.0s
CLNS MLR MLR
comp=Z,430nm,14.0s
**MA2** **Magadan** **23.83 16** *e*P **P** **00 32 03.5 -0.8**
**GUMO** **Guam** **24.16 164** LR LR 00 40 31.5
comp=Z,282nm,19.6s,baz=352,slow=34
**ENH** **Enshi** **24.94 263** *e*P **P** **00 32 15.7 +0.9**
comp=Z,14nm,1.1s
**ULN** **Ulaanbaatar** **25.30 305**⇓ *e*P **P** **00 32 17.0 -1.1**
ULN pmax pmax
comp=Z,10.0nm,1.2s
**ULN** **Ulaanbaatar** **25.30 305** *e*P **P** **00 32 17.5 -0.5**
comp=Z,17nm,1.1s
**YAK** **Yakutsk** **25.50 350** P **P** **00 32 19.0 -0.4**
comp=Z,12nm,0.3s,baz=176,slow=0.7,SNR=1.8
YAK LR LR 00 42 24.7
comp=Z,817nm,18.0s,baz=182,slow=37
**YAK** **Yakutsk** **25.50 350** *e*P **P** **00 32 18.3 -1.2**
YAK *e**PP **pP** **00 32 26.4 +0.2**
YAK *e*PPP PPP 00 33 01.2
YAK *e* 00 35 55.5
YAK *e*S **S** **00 36 41.9 -3.4**
YAK *e**SS **sS** **00 36 58.3 +1.9**
YAK *e*SSS SSS 00 37 46.1
YAK pmax pmax
comp=Z,18nm,1.4s
YAK pmax pmax
comp=N,14nm,1.0s
YAK pmax pmax
comp=Z,9.0nm,0.4s
YAK smax smax
comp=N,111nm,2.5s
YAK smax smax
comp=E,79nm,2.7s
YAK MLR MLR
comp=Z,819nm,17.0s
YAK MLR MLR
comp=N,616nm,17.0s
YAK MLR MLR
comp=E,145nm,15.0s
**YAK** **Yakutsk** **25.50 350** *e*P **P** **00 32 18.2 -1.2**
comp=E,23nm,0.8s
**SONA1** **Songino Array** **25.72 305** *e*P **P** **00 32 21.3 -0.5**
**SONM** **Songino Array** **25.73 305** P **P** **00 32 21.3 -0.6**
comp=E,2.3nm,0.7s,baz=106,slow=8.9,SNR=10
SONM PcP **PcP** **00 35 51.7 +0.2**
comp=E,0.7nm,0.7s,baz=129,slow=2.0,SNR=3.2
SONM LR LR 00 42 50.4
comp=E,533nm,19.1s,baz=82,slow=38
**SONM** **Songino Array** **25.73 305** P **P** **00 32 21.3 -0.6**
SONM 00 35 51.7
SONM pmax pmax
comp=Z,2.0nm,0.7s
SONM MLR MLR
comp=Z,533nm,19.1s
**BOD** **Bodaibo** **26.19 330** *e*P **P** **00 32 24.4 -1.4**
BOD pmax pmax
comp=Z,5.0nm,1.2s
**SEY** **Seymchan** **27.21 14** P **P** **00 32 35.2 +0.2**
comp=Z,6.3nm,0.9s,baz=174,slow=5.2,SNR=10
**SEY** **Seymchan** **27.21 14**⇑ *e*P **P** **00 32 37.4 +2.4**
**LZH** **Lanzhou** **27.66 278** *e*P P 00 32 45.0 +5.5
LZH pP pP 00 32 52.0 +5.8
LZH sP sP 00 32 55.8 +6.8
LZH PcP PcP 00 36 03.5 +7.2
LZH *e*S **S** **00 37 23.6 +3.3**
LZH PMZ
comp=Z,47nm,1.4s
LZH PMZ
comp=Z,83nm,4.4s
LZH LN
comp=Z,680nm,14.4s
LZH LE
comp=Z,1μm,17.0s
LZH LZ
comp=Z,1μm,17.5s
**ZAK** **Zakamensk** **28.31 309** *e*P **P** **00 32 47.8 +2.7**
ZAK pmax pmax
comp=Z,4.0nm,1.9s
**TLY** **Talaya** **28.45 312** LR LR 00 44 43.8
comp=Z,422nm,18.4s,baz=60,slow=38
**GYA** **Guiyang** **28.87 258** P **P** **00 32 51.0 +0.8**
GYA pP **pP** **00 32 57.8 +0.8**
GYA PP **PnPn** **00 33 44.2 +2.5**
GYA S **S** **00 37 36.4 -2.9**
GYA sS **sS** **00 37 47.5 -3.0**
GYA SS **SnSn** **00 39 03.8 +1.9**
GYA PMZ
comp=Z,20nm,0.8s
GYA PMZ
comp=Z,120nm,4.9s
GYA LN
comp=Z,490nm,17.2s
GYA LE
comp=Z,460nm,16.8s
GYA LZ
comp=Z,450nm,17.4s
**CD2** **Chengdu** **29.25 268** *e*P **P** **00 32 51.8 -1.8**
CD2 pP **pP** **00 32 59.1 -1.2**
CD2 sP **sP** **00 33 02.3 -0.8**
CD2 S **S** **00 37 42.8 -2.5**
CD2 sS **sS** **00 37 55.3 -1.1**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,160nm,5.2s
CD2 LN
comp=Z,950nm,13.2s
CD2 LE
comp=Z,810nm,14.7s
CD2 LZ
comp=Z,990nm,14.7s
**GTA** **Gaotai** **30.21 286** *e*P **P** **00 33 01.5 -0.6**
GTA pP **pP** **00 33 09.3 +0.4**
GTA sP **sP** **00 33 12.3 +0.6**
GTA PcP **PcP** **00 36 03.2 +0.6**
GTA S **S** **00 37 58.2 -2.2**
GTA sS **sS** **00 38 10.1 -1.4**
GTA SS **SnSn** **00 39 37.3 +2.8**
GTA PMZ
comp=Z,2.0nm,1.3s
GTA PMZ
comp=Z,44nm,5.7s
GTA LN
comp=Z,330nm,13.8s
GTA LE
comp=Z,510nm,13.3s
GTA LZ
comp=Z,510nm,12.8s
**QIZ** **Qiongzhong** **30.80 242** P **P** **00 33 06.8 -0.5**
QIZ S **S** **00 38 09.3 -0.3**
QIZ LN
comp=Z,500nm,5.0s
QIZ LZ
comp=Z,670nm,13.7s
**KMI** **Kunming** **32.60 259** P **P** **00 33 23.7 +0.4**
KMI pP **pP** **00 33 31.4 +1.3**
KMI sP **sP** **00 33 34.0 +1.1**
KMI S **S** **00 38 39.7 +1.7**
KMI SS **SnSn** **00 40 31.8 -1.1**
KMI PMZ
comp=Z,10.0nm,0.9s
KMI PMZ
comp=Z,50nm,3.6s
KMI LN
comp=Z,390nm,14.8s
KMI LE
comp=Z,540nm,13.5s
KMI LZ
comp=Z,590nm,14.0s
**DLV** **T Lat** **36.72 235** *e*P **P** **00 34 00.0 +1.0**
comp=Z,24nm,0.9s
**KKM** **Kota Kinabalu** **36.98 219** *e*P P 00 33 56.5 -4.6
comp=Z,32nm,1.6s
**WMQ** **Urumqi** **38.63 296** *e*P **P** **00 34 16.0 +1.3**
WMQ PP **PnPn** **00 35 47.0 +1.8**
WMQ S **S** **00 40 11.0 +1.1**
WMQ SS **SnSn** **00 42 50.0 -8.2**
WMQ PMZ
comp=Z,11nm,0.8s
WMQ PMZ
comp=Z,18nm,5.0s
WMQ LN
comp=Z,140nm,20.0s
WMQ LE
comp=Z,120nm,18.0s
WMQ LZ
comp=Z,140nm,18.0s
**CHTO** **Chiang Mai** **38.99 253** *e*P P 00 34 14.7 -3.2
CHTO pmax pmax
comp=Z,14nm,1.5s
**CHTO** **Chiang Mai** **38.99 253** *e*P P 00 34 14.7 -3.2
comp=Z,14nm,1.5s
**CMAR** **Chiang Mai Arr** **39.20 253** P **P** **00 34 20.9 +1.2**
comp=Z,1.4nm,0.3s,baz=45,slow=6.4,SNR=5.9
CMAR PcP **PcP** **00 36 30.0 +1.2**
comp=Z,0.9nm,0.3s,baz=20,slow=2.2,SNR=5.3
CMAR LR LR 00 51 07.7
comp=Z,47nm,22.0s,baz=15,slow=37
**CMAR** **Chiang Mai Arr** **39.20 253** P **P** **00 34 20.9 +1.2**
CMAR 00 36 30.0
CMAR pmax pmax
comp=Z,1.0nm,0.4s
CMAR pmax pmax
comp=Z,1.0nm,0.3s
CMAR MLR MLR
comp=Z,47nm,22.0s
**CM01** **Chiang Mai Arr** **39.21 253** *e*P **P** **00 34 19.0 -0.7**
**GAMB** **Gambell** **39.90 32** *e*P **P** **00 34 25.0 +0.1**
comp=Z,1μm,2.6s
**ZAA0** **Zalesovo Array** **40.05 312** *e*P **P** **00 34 27.1 +0.7**
ZAA0 *e*PcP **PcP** **00 36 30.4 -0.4**
**ZALV** **Zalesovo Beam** **40.05 312** P **P** **00 34 25.0 -1.4**
comp=Z,0.9nm,0.6s,baz=102,slow=7.2,SNR=3.8
ZALV PcP **PcP** **00 36 30.4 -0.4**
comp=Z,4.7nm,0.7s,baz=101,slow=2.7,SNR=12
**ZALV** **Zalesovo Beam** **40.05 312** P **P** **00 34 25.0 -1.4**
ZALV 00 36 30.4
ZALV pmax pmax
comp=Z,1.0nm,0.6s
ZALV pmax pmax
comp=Z,5.0nm,0.7s
**MK01** **Makanchi Array** **42.00 302** *e*PcP **PcP** **00 36 37.6 +0.2**
MK01 *e*ScS ScS 00 44 44.0 +0.3
**MKAR** **Makanchi Array** **42.01 302** P **P** **00 34 41.0 -1.6**
comp=Z,1.0nm,0.8s,baz=98,slow=8.9,SNR=8.9
MKAR PcP **PcP** **00 36 37.9 +0.5**
comp=Z,1.7nm,0.9s,baz=87,slow=6.8,SNR=4.6
MKAR LR LR 00 52 45.5
comp=Z,310nm,18.5s,baz=69,slow=37
**MKAR** **Makanchi Array** **42.01 302** P **P** **00 34 41.0 -1.6**
MKAR 00 36 37.9
MKAR pmax pmax
comp=Z,1.0nm,0.8s
MKAR pmax pmax
comp=Z,2.0nm,0.9s
MKAR MLR MLR
comp=Z,310nm,18.5s
**TAPN** **Taplejung** **43.52 272** *e*P **P** **00 34 54.9 -0.5**
comp=Z,19nm,1.0s
**KSM** **Kuching** **43.93 223** *e*P **P** **00 34 57.5 -0.9**
comp=Z,35nm,1.4s
**KURK** **Kurchatov** **43.96 308** *e*P **P** **00 34 56.7 -1.6**
KURK pmax pmax
comp=Z,16nm,0.8s
**KURK** **Kurchatov** **43.96 308** *e*P **P** **00 34 56.7 -1.6**
comp=Z,16nm,0.8s
**ODAN** **Odare** **43.99 272** *e*P **P** **00 34 58.7 -0.5**
comp=Z,4.7nm,0.5s
**SDPT** **Sand Point** **44.45 46** *e*P **P** **00 35 03.2 +1.0**
**RAMN** **Ramite** **44.58 272** *e*P **P** **00 35 03.7 -0.2**
comp=Z,22nm,0.9s
**GUN** **Gumba** **44.73 274** *e*P **P** **00 35 05.1 -0.1**
comp=Z,31nm,0.9s
**KKN** **Kakani** **45.27 274** *e*P **P** **00 35 09.5 +0.2**
comp=Z,5.5nm,0.5s
**PKIN** **Phulchoki** **45.27 274** *e*P **P** **00 35 08.8 -0.6**
**GKN** **Gorkha** **45.69 275** *e*P **P** **00 35 12.6 0.0**
comp=Z,32nm,1.0s
**DANN** **Dangsing** **46.23 276** *e*P **P** **00 35 17.1 +0.1**
comp=Z,1.3nm,0.3s
**KOLN** **Koldanda** **46.61 275** *e*P **P** **00 35 19.8 -0.1**
comp=Z,11nm,0.9s
**PMG** **Port Moresby** **47.03 168** LR LR 00 55 30.0
comp=Z,75nm,19.0s,baz=265,slow=36
**TKM2** **Tokmak 2** **47.44 298** *e*P **P** **00 35 26.9 +0.7**
**TKM2** **Tokmak 2** **47.44 298** *e*P **P** **00 35 26.9 +0.7**
**KSH** **Kashi** **48.15 293** *e*P P 00 35 35.2 +3.6
KSH *e*sP sP 00 35 46.1 +4.8
KSH *e*PcP **PcP** **00 37 01.3 +2.4**
KSH *e*PP **PP** **00 37 26.2 +2.4**
KSH *e*ScP **ScP** **00 40 55.6 +3.6**
KSH PcS **PcS** **00 40 57.8 +3.0**
KSH S **S** **00 42 33.1 +3.8**
KSH sS sS 00 42 45.9 +5.1
KSH ScS **ScS** **00 45 21.7 -1.8**
KSH PMZ
comp=Z,79nm,4.4s
KSH LN
comp=Z,130nm,5.6s
KSH LE
comp=Z,380nm,14.1s
KSH LZ
comp=Z,400nm,14.7s
**AAK** **Ala-Archa** **48.30 297** LR LR 00 56 15.0
comp=Z,475nm,21.1s,baz=24,slow=37
**AAK** **Ala-Archa** **48.30 297**⇓ *e*P **P** **00 35 33.5 +0.7**
AAK pmax pmax
comp=Z,5.0nm,1.1s
**PPLA** **Purkeypile** **48.47 35** *e*P **P** **00 35 33.8 0.0**
comp=Z,69nm,1.6s
**CAST** **Castle Rocks** **48.50 34** *e*P **P** **00 35 35.6 +1.7**
comp=Z,13nm,1.2s
**KDAK** **Kodiak Island** **48.63 42** P **P** **00 35 35.1 +0.2**
comp=Z,3.6nm,0.5s,baz=319,slow=3.9,SNR=5.0
**KDAK** **Kodiak Island** **48.63 42** *i*P **P** **00 35 35.7 +0.8**
**KDAK** **Kodiak Island** **48.63 42** *e*P **P** **00 35 35.3 +0.4**
comp=Z,234nm,2.0s
**BRVK** **Borovoye** **48.76 312**⇓ *e*P **P** **00 35 37.1 +1.1**
BRVK pmax pmax
comp=Z,2.0nm,0.9s
**BPAW** **Bear Paw Mtn.** **48.97 33** *e*P **P** **00 35 38.8 +1.4**
comp=Z,34nm,1.7s
**MLY** **Manley** **49.04 32** *e*P **P** **00 35 39.7 +1.6**
comp=Z,13nm,1.1s
**COLD** **Coldfoot** **49.24 29** *e*P **P** **00 35 40.9 +1.4**
comp=Z,17nm,1.1s
**LHMI** **Lhok Sumawe** **49.38 240** *e*P **P** **00 35 38.5 -2.7**
comp=Z,322nm,1.5s
**WRH** **Wood River Hil** **50.21 33** *e*P **P** **00 35 47.1 +0.3**
WRH *e*PcP **PcP** **00 37 06.6 +0.9**
**COLA** **College** **50.28 32**⇓ *e*P **P** **00 35 48.5 +1.1**
COLA pmax pmax
comp=Z,18nm,1.6s
**IL1** **Eielson Array** **50.70 32** *e*P **P** **00 35 49.0 -1.6**
**ILAR** **Eielson Array** **50.70 32** P **P** **00 35 50.5 -0.1**
comp=Z,3.3nm,0.9s,baz=275,slow=6.0,SNR=23
ILAR LR LR 00 57 16.8
comp=Z,107nm,21.1s,baz=280,slow=36
**ILAR** **Eielson Array** **50.70 32** P **P** **00 35 50.5 -0.1**
ILAR pmax pmax
comp=Z,3.0nm,0.9s
ILAR MLR MLR
comp=Z,107nm,21.1s
**KKAR** **Karatay Array** **50.97 299** *e*P **P** **00 35 52.8 -0.2**
**KKAR** **Karatay Array** **50.97 299** *e*P **P** **00 35 52.8 -0.2**
**COEN** **Coen** **51.02 174** *e*P **P** **00 35 53.2 -0.3**
comp=Z,36nm,1.4s
**FYU** **Fort Yukon** **51.23 30** *e*P **P** **00 35 57.2 +2.7**
comp=Z,153nm,2.0s
**DIV** **Divide** **51.65 37** *e*P **P** **00 35 59.2 +1.4**
comp=Z,35nm,1.1s
**SVE** **Sverdlovsk** **53.46 318**⇑ *i*P **P** **00 36 11.8 +0.6**
SVE pmax pmax
comp=Z,25nm,1.3s
SVE MLR MLR
comp=Z,453nm,15.0s
**ARU** **Arti** **54.67 318** *d i*P **P** **00 36 18.7 -1.3**
ARU 00 37 21.3
ARU 00 38 19.2
ARU S **S** **00 43 58.9 +0.3**
ARU pmax pmax
comp=Z,7.0nm,0.7s
ARU MLR MLR
comp=Z,421nm,17.0s
**ARU** **Arti** **54.67 318** P **P** **00 36 19.8 -0.2**
comp=Z,96nm,1.0s,SNR=5.3
**ARU** **Arti** **54.67 318** *e*P **P** **00 36 18.7 -1.3**
comp=Z,18nm,1.0s
**INK** **Inuvik** **55.39 27** P **P** **00 36 23.1 -1.9**
comp=Z,5.4nm,0.9s,baz=285,slow=7.5,SNR=5.8
**INK** **Inuvik** **55.39 27** P **P** **00 36 23.1 -1.9**
INK pmax pmax
comp=Z,5.0nm,0.9s
**INK** **Inuvik** **55.39 27** *e*P **P** **00 36 26.3 +1.2**
comp=Z,14nm,1.1s
**WRAB** **Tennant Creek** **56.89 185** *ce*P **P** **00 36 35.2 -1.1**
WRAB pmax pmax
comp=Z,108nm,1.7s
**WRAB** **Tennant Creek** **56.89 185** P **P** **00 36 35.6 -0.7**
comp=Z,143nm,0.8s,SNR=9.3
**WRA** **Warramunga Arr** **56.90 185** P **P** **00 36 35.2 -1.2**
comp=Z,22nm,0.9s,baz=358,slow=7.4,SNR=69
WRA PcP **PcP** **00 37 32.1 +0.5**
comp=Z,3.2nm,0.7s,baz=358,slow=4.6,SNR=6.5
**WRA** **Warramunga Arr** **56.90 185** P **P** **00 36 35.2 -1.2**
WRA 00 37 32.2
WRA pmax pmax
comp=Z,22nm,0.9s
WRA pmax pmax
comp=Z,3.0nm,0.7s
**MBWA** **Marble Bar** **60.60 200** *e*P **P** **00 37 01.1 -1.0**
comp=Z,42nm,1.8s
**AS01** **Alice Springs** **60.62 185** *e*P **P** **00 37 01.4 -0.8**
**ASAR** **Alice Springs** **60.63 185** P **P** **00 37 01.5 -0.8**
comp=Z,5.0nm,0.9s,baz=5.1,slow=5.7,SNR=34
ASAR PcP **PcP** **00 37 47.4 +1.0**
comp=Z,2.2nm,0.8s,baz=16,slow=5.5,SNR=5.4
**ASAR** **Alice Springs** **60.63 185** P **P** **00 37 01.5 -0.8**
ASAR 00 37 47.4
ASAR pmax pmax
comp=Z,5.0nm,0.9s
ASAR pmax pmax
comp=Z,2.0nm,0.8s
**TMCR** **Tamitsa** **61.48 331** *e*P **P** **00 37 07.8 +0.2**
TMCR pmax pmax
comp=Z,18nm,1.3s
**APA** **Apatity** **61.58 335**⇑ *i*P **P** **00 37 08.2 0.0**
APA MLR MLR
comp=Z,300nm,18.0s
**GEYT** **Alibeck** **61.65 298** P **P** **00 37 09.2 -0.1**
comp=Z,4.6nm,1.1s,baz=20,slow=4.7,SNR=8.8
GEYT LR LR 01 05 00.3
comp=Z,100nm,18.2s,baz=40,slow=37
**IKRD** **Kardeh** **61.89 296** *e*P P 00 37 07.0 -4.1
**ARA0** **ARCESS Array S** **63.03 339** *e*P **P** **00 37 17.2 -0.7**
**ARCES** **ARCESS Array B** **63.03 339** P **P** **00 37 18.1 +0.2**
comp=Z,3.2nm,0.9s,baz=40,slow=9.6,SNR=5.4
ARCES LR LR 01 07 59.3
comp=Z,240nm,19.3s,baz=74,slow=39
**ARCES** **ARCESS Array B** **63.03 339** P **P** **00 37 18.1 +0.2**
ARCES pmax pmax
comp=Z,3.0nm,0.9s
ARCES MLR MLR
comp=Z,240nm,19.3s
**EIDS** **Eidsvold** **63.31 167** *e*P **P** **00 37 19.8 -0.4**
comp=Z,68nm,1.8s
**ITEG** **Tejag** **63.52 292** *e*P **P** **00 37 22.4 +0.4**
**YKA** **Yellowknife Ar** **64.92 29** P **P** **00 37 30.4 0.0**
comp=Z,2.6nm,1.0s,baz=298,slow=5.4,SNR=3.4
**YKA** **Yellowknife Ar** **64.92 29** P **P** **00 37 30.4 0.0**
YKA pmax pmax
comp=Z,3.0nm,1.0s
**VRH** **Novokhopyorsk** **65.86 317** *e*P **P** **00 37 36.5 -0.2**
VRH pmax pmax
comp=N,10.0nm,0.7s
VRH pmax pmax
comp=E,20nm,0.7s
VRH pmax pmax
comp=Z,6.0nm,0.7s
**OBN** **Obninsk** **66.55 322** *de*P **P** **00 37 40.9 -0.1**
OBN pmax pmax
comp=Z,16nm,1.2s
**LPSR** **Galich'ya Gora** **66.65 319** *e*P **P** **00 37 41.3 -0.4**
LPSR pmax pmax
comp=Z,10.0nm,1.0s
LPSR pmax pmax
comp=N,4.0nm,1.2s
LPSR pmax pmax
comp=E,9.0nm,1.3s
**VSR** **Storozhevoye** **67.24 318** *e*P **P** **00 37 45.1 -0.4**
VSR pmax pmax
comp=Z,10.0nm,1.4s
VSR pmax pmax
comp=N,10.0nm,1.3s
VSR pmax pmax
comp=E,10.0nm,1.5s
**VORD** **Divnogorie** **67.30 317** *e*P **P** **00 37 45.5 -0.4**
VORD pmax pmax
comp=Z,9.0nm,0.9s
VORD pmax pmax
comp=N,10.0nm,0.8s
VORD pmax pmax
comp=E,10.0nm,0.6s
**FINES** **FINESS Array B** **67.58 331** P **P** **00 37 46.8 -0.6**
comp=E,6.3nm,0.9s,baz=79,slow=9.9,SNR=13
FINES LR LR 01 09 10.3
comp=E,110nm,18.6s,baz=38,slow=38
**FINES** **FINESS Array B** **67.58 331** P **P** **00 37 46.8 -0.6**
FINES pmax pmax
comp=Z,6.0nm,0.9s
FINES MLR MLR
comp=Z,110nm,18.6s
**IZEF** **Zefreh** **68.21 295** *e*Pn **P** **00 37 51.9 -0.4**
**FORT** **Forrest** **68.25 190** *e*P **P** **00 37 52.2 +0.2**
comp=Z,17nm,0.8s
**ARMA** **Armidale** **68.34 168** *e*P **P** **00 37 53.0 +0.3**
comp=Z,177nm,2.2s
**NLWA** **Neilton Lookou** **68.41 46** *e*P **P** **00 37 55.0 +2.0**
comp=Z,39nm,1.4s
**B05A** **Bryant** **68.96 45** P **P** **00 37 56.3 0.0**
baz=69
**KBZ** **Khabaz** **68.98 309** P **P** **00 37 56.5 -0.1**
comp=Z,3.1nm,1.1s,baz=49,slow=12,SNR=3.9
**KBZ** **Khabaz** **68.98 309** P **P** **00 37 56.5 -0.1**
KBZ pmax pmax
comp=Z,3.0nm,1.1s
**VSU** **Vasula** **69.12 328** *de*P **P** **00 37 57.2 +0.1**
VSU pmax pmax
comp=Z,32nm,1.2s
**IPAR** **Pars** **69.26 292** *e*P **P** **00 37 58.6 -0.4**
**NEY** **Neytrino** **69.34 309**⇑ *e*P **P** **00 38 00.4 +1.3**
NEY pmax pmax
comp=Z,2.0nm,1.4s
**GNI** **Garni** **69.69 305**⇓ *e*P **P** **00 38 02.1 +0.9**
GNI pmax pmax
comp=Z,5.0nm,1.1s
**IMRD** **Marand** **69.81 304** *e*P P 00 38 10.6 +8.5
**G03D** **McMinnville, O** **69.93 48** P **P** **00 38 02.2 -0.2**
baz=70
**LTY** **Liberty** **70.32 45** *e*P **P** **00 38 05.8 +0.9**
comp=Z,12nm,1.4s
**B08A** **Colville Reser** **70.45 44** *e*P **P** **00 38 06.3 +0.7**
comp=Z,10nm,1.0s
**SUMG** **Summit** **70.56 359** *e*P **P** **00 38 06.0 -0.3**
SUMG pmax pmax
comp=Z,33nm,1.1s
**SUMG** **Summit** **70.56 359** *e*P **P** **00 38 06.0 -0.3**
comp=Z,33nm,1.1s
**I03D** **Drain, OR** **70.70 50** P **P** **00 38 07.0 -0.1**
baz=71
**G05D** **Wamic, OR** **71.06 47** P **P** **00 38 09.1 -0.3**
baz=71
**E07A** **Sunnyside** **71.17 46** *e*P **P** **00 38 11.8 +1.7**

comp=Z,48nm,1.9s
**I04A Tendick Farm, 71.21 49 P P 00 38 10.1 -0.2**
baz=71
**NACGM Naroch 71.28 325 *e* P 00 38 10.0 -0.5**
**C09A Chrisman Ranch 71.35 44 *eP* P 00 38 12.3 +1.2**
comp=Z,12nm,0.8s
**L02D Cave Junction, 71.38 51 P P 00 38 11.2 -0.1**
baz=71
**D08A Wollman Farm, 71.42 45 *eP* P 00 38 12.7 +1.2**
comp=Z,20nm,1.5s
**HAWA Hanford 71.45 46 *eP* P 00 38 13.1 +1.4**
comp=Z,15nm,1.5s
**G06A Carlson Farm, 71.46 47 *eP* P 00 38 11.9 +0.1**
comp=Z,114nm,2.6s
**I05D Terrebonne, OR 71.55 48 P P 00 38 12.0 -0.4**
baz=72
**J04D Umpqua Nationa 71.70 49 P P 00 38 13.0 -0.6**
baz=72
**NEW Newport 71.72 43 *eP* P 00 38 11.5 -1.8**
NEW pmax pmax
comp=Z,39nm,1.8s
**NEW Newport 71.72 43 P P 00 38 13.0 -0.4**
baz=72,SNR=6.2
**NEW Newport 71.72 43 *eP* P 00 38 11.5 -1.8**
comp=Z,39nm,1.8s
**YBH Yreka Blue Hor 72.17 51 P P 00 38 17.4 +1.2**
comp=Z,2.9nm,1.0s,baz=280,slow=5.2,SNR=4.7
**YBH Yreka Blue Hor 72.17 51 P P 00 38 17.4 +1.2**
YBH pmax pmax
comp=Z,3.0nm,1.0s
**J05D Fort Rock, OR 72.21 49 P P 00 38 16.0 -0.4**
baz=72
**M02C Callahan 72.28 51 P P 00 38 16.5 -0.3**
baz=72
**NWAO Narrogin (SRO) 72.45 199 *eP* P 00 38 15.0 -2.6**
NWAO pmax pmax
comp=Z,37nm,1.5s
**NWAO Narrogin (SRO) 72.45 199 *eP* P 00 38 15.0 -2.6**
comp=Z,37nm,1.5s
**N02D Trinity Center 72.60 52 P P 00 38 18.5 -0.3**
baz=72
**M04C Macdoel 72.69 51 P P 00 38 18.8 -0.5**
baz=73
**AKASG Malin Array Be 72.71 321 P P 00 38 18.6 -0.5**
comp=Z,4.1nm,0.7s,baz=47,slow=6.5,SNR=25
AKASG LR LR 01 12 50.1
comp=Z,343nm,19.2s,baz=35,slow=38
**AKASG Malin Array Be 72.71 321 P P 00 38 18.6 -0.5**
AKASG pmax pmax
comp=Z,4.0nm,0.7s
AKASG MLR MLR
comp=Z,343nm,19.2s
**KIEV Kiev 72.72 321 *de*P P 00 38 18.8 -0.4**
KIEV pmax pmax
comp=Z,11nm,1.2s
**KIEV Kiev 72.72 321 *eP* P 00 38 18.2 -0.9**
comp=Z,18nm,1.0s
**K05A Summer Lake 72.73 49 *eP* P 00 38 21.6 +1.9**
comp=Z,22nm,1.1s
**AK11 Malin Array Si 72.75 321 *eP* P 00 38 19.6 +0.2**
**I07A Izee 72.78 48 *eP* P 00 38 21.4 +1.5**
comp=Z,6.6nm,1.1s
**WDC Whiskeytown Da 72.93 52 *eP* P 00 38 21.9 +1.3**
WDC pmax pmax
comp=Z,13nm,1.2s
**WDC Whiskeytown Da 72.93 52 *eP* P 00 38 21.9 +1.3**
comp=Z,12nm,1.2s
**WALA Waterton Lakes 72.96 41 *eP* P 00 38 22.6 +1.7**
comp=Z,11nm,1.1s
**F10A Beach Ranch, E 73.00 45 *eP* P 00 38 23.2 +2.2**
comp=Z,7.6nm,1.1s
**NB2 NORSAR Subarra 73.13 336 P P 00 38 20.8 -0.7**
comp=Z,2.9nm,0.7s,baz=42,slow=6.2
**NOA NORSAR Array B 73.13 336 P P 00 38 21.2 -0.3**
comp=Z,3.4nm,0.7s,baz=41,slow=6.0,SNR=14
NOA LR LR 01 14 07.4
comp=Z,121nm,18.8s,baz=35,slow=39
**NOA NORSAR Array B 73.13 336 P P 00 38 21.2 -0.3**
NOA pmax pmax
comp=Z,3.0nm,0.7s
NOA MLR MLR
comp=Z,121nm,18.8s
**NBO02 NORSAR Array S 73.24 336 *eP* P 00 38 22.2 +0.1**
**BLMT Blacktail Moun 73.36 42 *eP* P 00 38 25.4 +2.1**
**MOD Modoc 73.56 50 *eP* P 00 38 25.8 +1.3**
comp=Z,11nm,1.4s
**JTMT Jette 73.56 42 *eP* P 00 38 25.9 +1.5**
**YBMT Yellow Bay 73.64 42 *eP* P 00 38 26.3 +1.4**
**J08A Circle Bar Ran 73.81 48 *eP* P 00 38 27.7 +1.8**
comp=Z,15nm,1.1s
**SWMT Swartz Lake 73.86 42 *eP* P 00 38 27.4 +1.3**
**SLMT Seeley Lake 74.29 42 *eP* P 00 38 29.3 +0.5**
**MSO Missoula 74.31 43 P P 00 38 28.4 -0.3**
baz=74,SNR=7.9
**MSO Missoula 74.31 43 *eP* P 00 38 29.5 +0.8**
comp=Z,18nm,1.4s
**CHMT Chamberlain Mo 74.62 42 *eP* P 00 38 31.4 +0.7**
**MALT Malatya 74.78 307 ⇑P P 00 38 32.4 +0.7**
**MALT Malatya 74.78 307 ⇑*i*P P 00 38 32.4 +0.7**
**FFC Flin Flon 74.90 31 *eP* P 00 38 32.4 +0.5**
FFC pmax pmax
comp=Z,23nm,1.4s
**FFC Flin Flon 74.90 31 *eP* P 00 38 32.4 +0.5**
comp=Z,23nm,1.4s
**MFID Camas Ranch 75.33 46 *eP* P 00 38 36.2 +1.5**
comp=Z,30nm,1.5s
**HRY Holter Researc 75.52 42 *eP* P 00 38 37.0 +1.3**
**LRM Limekiln Ridge 75.74 43 *eP* P 00 38 38.1 +0.8**
**CMB Columbia Colle 75.76 53 *eP* P 00 38 38.4 +1.2**
CMB pmax pmax
comp=Z,10.0nm,1.0s
**CMB Columbia Colle 75.76 53 *eP* P 00 38 38.4 +1.2**
comp=Z,10nm,1.0s
**EGMT Eagleton 75.77 40 P P 00 38 36.7 -0.4**
baz=76
**EGMT Eagleton 75.77 40 *eP* P 00 38 38.3 +1.1**
comp=Z,34nm,1.4s
**LVV L'vov 75.84 323 *eP* P 00 38 37.6 +0.2**
**DLMT Dillon 75.95 43 *eP* P 00 38 39.7 +1.4**
comp=Z,62nm,1.4s
**HLID Hailey 76.05 46 P P 00 38 38.3 -0.6**
baz=76
**HLID Hailey 76.05 46 *eP* P 00 38 40.5 +1.6**
comp=Z,11nm,1.4s
**BOZ Bozeman (W) 76.30 43 *eP* P 00 38 41.7 +1.4**
BOZ pmax pmax
comp=Z,38nm,1.4s
**BOZ Bozeman (W) 76.30 43 P P 00 38 39.6 -0.7**
baz=76,SNR=27
**BOZ Bozeman (W) 76.30 43 *eP* P 00 38 41.7 +1.4**
comp=Z,38nm,1.4s
**BMN Battle Mountai 76.30 50 *eP* P 00 38 42.1 +1.7**
BMN pmax pmax
comp=Z,14nm,1.2s
**BMN Battle Mountai 76.30 50 *eP* P 00 38 42.1 +1.7**
comp=Z,14nm,1.2s
**KWP Kalwaria Pacla 76.61 323 *eP* P 00 38 42.8 +1.0**
**KWP Kalwaria Pacla 76.61 323 *eP* P 00 38 42.9 +1.1**
**BUR04 Bucovina Ar. S 76.70 320 *eP* P 00 38 42.6 +0.2**
**BURAR Bucovina Array 76.70 320 ⇑P P 00 38 42.8 +0.3**
**BURAR Bucovina Array 76.70 320 ⇑*i*P P 00 38 42.8 +0.3**
**NV01 Mina Array Sit 76.84 52 *eP* P 00 38 44.5 +0.9**
**NVAR Mina Array Bea 76.84 52 P P 00 38 44.7 +1.1**
comp=Z,7.0nm,1.0s,baz=289,slow=5.8,SNR=26
**QLMT Earthquake Lak 76.92 43 *eP* P 00 38 45.5 +1.6**
QLMT *ep*P **pP 00 38 51.6 +0.4**
**BRTR Keskin Array B 76.95 310 P P 00 38 44.9 +0.8**
comp=Z,1.7nm,0.9s,baz=111,slow=5.4,SNR=5.0
BRTR LR LR 01 16 54.6
comp=Z,56nm,18.1s,baz=38,slow=39
**BRTR Keskin Array B 76.95 310 *de*P P 00 38 45.0 +0.9**
BRTR pmax pmax
comp=Z,2.0nm,0.9s
**MLAC Mammoth Lakes 76.98 53 P P 00 38 43.9 -0.6**
baz=77
**VRI Vrincioaia 77.06 318 ⇑P P 00 38 46.1 +1.7**
**VRI Vrincioaia 77.06 318 ⇑*i*P P 00 38 46.0 +1.7**
**GCMT Greycliff 77.26 42 *eP* P 00 38 47.2 +1.5**
**KOLS Kolonicke sedl 77.29 323 *eP* P 00 38 44.9 -0.7**
KOLS pmax pmax
comp=Z,4.0nm,1.0s
**KOLS Kolonicke sedl 77.29 323 *eP* P 00 38 44.9 -0.7**
**ELK Elko 77.31 48 *eP* P 00 38 47.9 +1.7**
ELK pmax pmax
comp=Z,11nm,1.6s
**ELK Elko 77.31 48 *eP* P 00 38 47.9 +1.7**
comp=Z,11nm,1.6s
**BR231 Keskin MP Arra 77.40 311 *eP* P 00 38 45.7 -0.9**
**STHS Stebnicka Huta 77.46 323 *eP* P 00 38 47.6 +1.0**
STHS pmax pmax
comp=Z,6.0nm,0.8s
**STHS Stebnicka Huta 77.46 323 *eP* P 00 38 47.6 +1.0**
**UZH Uzhgorod 77.49 322 *eP* P 00 38 46.3 -0.4**
UZH *e* 00 38 52.3
UZH *e* 00 38 59.3
**OJC Ojcow 77.58 325 *eP* P 00 38 47.8 +0.6**
**OJC Ojcow 77.58 325 *eP* P 00 38 47.8 +0.6**
**OJC Ojcow 77.58 325 *eP* P 00 38 47.7 +0.6**
comp=Z,27nm,1.0s
**SMMC Simmler 77.62 55 P P 00 38 47.5 -0.2**
baz=78
**H17A Grant Village 77.67 43 *eP* P 00 38 51.5 +3.3**
comp=Z,39nm,1.3s
**DOPR Dopca 77.70 319 ⇑*i*P P 00 38 49.1 +1.1**
**TRPA Tarpa 77.70 322 ⇓*i*P P 00 38 49.0 +1.0**
**TRPA Tarpa 77.70 322 ⇓*eP* P 00 38 48.9 +1.0**
**MLR Muntele Rosu 77.72 318 ⇓P P 00 38 48.9 +0.7**
**MLR Muntele Rosu 77.72 318 ⇓*i*P P 00 38 48.9 +0.7**
**IMW Indian Meadow 77.79 44 *eP* P 00 38 51.0 +2.1**
comp=Z,14nm,1.1s
**FLWY Flagg Ranch 77.81 44 *eP* P 00 38 51.2 +2.4**
comp=Z,26nm,1.3s
**NIE Niedzica 77.90 324 *eP* P 00 38 50.0 +1.0**
**NIE Niedzica 77.90 324 *eP* P 00 38 50.1 +1.0**
**RLMT Red Lodge 77.91 42 P P 00 38 48.8 -0.6**
baz=78,SNR=6.1
**RLMT Red Lodge 77.91 42 *eP* P 00 38 51.0 +1.5**
comp=Z,34nm,1.5s
**FXWY Fox Creek 77.91 44 *eP* P 00 38 51.4 +1.9**
comp=Z,12nm,1.3s
**PKM Peak Mountain 77.99 55 P P 00 38 49.7 -0.3**
baz=78
**MOOW Moose Ponds 78.00 44 *eP* P 00 38 51.8 +1.8**
comp=Z,14nm,1.3s
**TPAW Teton Pass 78.05 44 *eP* P 00 38 52.2 +1.9**
comp=Z,18nm,1.2s
**HVU Hansel Valley 78.11 46 *eP* P 00 38 52.2 +1.7**
HVU pmax pmax
comp=Z,6.0nm,1.1s
**HVU Hansel Valley 78.11 46 *eP* P 00 38 52.2 +1.7**
comp=Z,5.8nm,1.1s
**CJR Cluj-Napoca 78.13 320 ⇑P P 00 38 51.6 +1.2**
**CJR Cluj-Napoca 78.13 320 ⇑*i*P P 00 38 51.6 +1.2**
**LOHW Long Hollow 78.16 44 *eP* P 00 38 52.5 +1.6**
comp=Z,24nm,2.0s
**SNOW Snow King Moun 78.18 44 *eP* P 00 38 53.1 +2.1**
comp=Z,7.7nm,0.9s
**CWC Cottonwood Cre 78.19 53 P P 00 38 50.9 -0.2**
baz=78
**REDW Red Top Meadow 78.19 44 *eP* P 00 38 52.7 +1.7**
comp=Z,15nm,1.3s
**VOIR 78.23 319 ⇓P P 00 38 56.5 +5.5**
**VOIR 78.23 319 ⇓*i*P P 00 38 56.5 +5.5**
**DGMT Dagmar 78.24 37 P P 00 38 50.5 -0.4**
baz=78
**GRAC Grapevine Rang 78.30 52 P P 00 38 51.2 -0.3**
baz=78
**RAYN Ar Rayn 78.36 291 P P 00 38 52.9 +0.8**
comp=Z,42nm,1.8s,SNR=6.9
**RAYN Ar Rayn 78.36 291 *eP* P 00 38 52.1 0.0**
comp=Z,42nm,1.8s
**ISA Isabella 78.40 54 P P 00 38 51.8 -0.3**
baz=78
**A25A Svangstu Ranch 78.43 36 P P 00 38 51.5 -0.5**
baz=78
**LAO LASA Array 78.45 39 P P 00 38 51.9 -0.3**
baz=78
**LAO LASA Array 78.45 39 *eP* P 00 38 53.6 +1.4**
comp=Z,52nm,1.6s
**ARVC Arvin 78.50 55 P P 00 38 52.3 -0.2**
baz=78
**DRGR 78.53 321 ⇓P P 00 38 53.4 +0.8**
**DRGR 78.53 321 ⇓*i*P P 00 38 53.4 +0.8**
**R11A Troy Canyon, C 78.58 50 P P 00 38 52.8 -0.5**
baz=78
**R11A Troy Canyon, C 78.58 50 *eP* P 00 38 54.1 +0.8**
comp=Z,16nm,1.4s
**DAC Darwin (Calif) 78.59 53 *eP* P 00 38 54.2 +0.9**
DAC pmax pmax
comp=Z,10.0nm,1.1s
**DAC Darwin (Calif) 78.59 53 *eP* P 00 38 54.2 +0.9**
comp=Z,9.8nm,1.1s
**SPUT South Promonto 78.60 47 *eP* P 00 38 55.3 +2.1**
comp=Z,12nm,1.2s
**OKC Ostrava-Krasne 78.61 325 *eP* P 00 38 53.7 +0.8**
OKC *e**PP **pP 00 38 59.4 -0.8**
OKC MLR MLR
comp=Z,400nm,17.0s
**OKC Ostrava-Krasne 78.61 325 *eP* P 00 38 53.7 +0.8**
OKC *ep*P **pP 00 38 59.4 -0.8**
OKC AMS AMS 01 17 20.0
comp=Z,400nm,17.0s
**BSC Santa Cruz Isl 78.65 56 P P 00 38 53.2 -0.3**
baz=79
**KSP Ksiaz 78.71 327 *eP* P 00 38 54.5 +1.0**
**KSP Ksiaz 78.71 327 *eP* P 00 38 54.5 +1.0**
**MPMC Manual Prospec 78.79 53 P P 00 38 53.8 -0.6**
baz=79
**LOT Lotru 78.89 319 ⇑*i*P P 00 39 00.5 +5.8**
**HWUT Hardware Ranch 78.92 46 *eP* P 00 38 56.6 +1.6**
comp=Z,28nm,1.3s
**MORC Moravsky Berou 78.92 325 ⇓P P 00 38 55.7 +1.0**
**MORC Moravsky Berou 78.92 325 ⇓*i*P P 00 38 55.7 +1.0**
**MORC Moravsky Berou 78.92 325 *eP* P 00 38 55.6 +0.9**
comp=Z,52nm,1.0s
**FURC Furnace Creek, 78.94 53 P P 00 38 54.7 -0.3**
baz=79
**BLG Laguna Peak 78.96 56 P P 00 38 54.9 -0.3**
baz=79
**LRMC Laurel Mountai 79.02 54 P P 00 38 55.1 -0.5**
baz=79
**TPNV Topopah Spring 79.03 52 *eP* P 00 38 57.1 +1.4**
TPNV *e* 00 39 04.0
**TPNV Topopah Spring 79.03 52 P P 00 38 55.4 -0.4**
baz=79
**TPNV Topopah Spring 79.03 52 *eP* P 00 38 57.1 +1.4**
TPNV *ePcP* **PcP 00 39 04.0 -0.2**
**KRLC Kraliky 79.05 326 *eP* P 00 38 56.1 +0.7**
KRLC *e**PP **pP 00 39 02.4 -0.3**
**KRLC Kraliky 79.05 326 *eP* P 00 38 56.1 +0.7**
KRLC *ep*P **pP 00 39 02.4 -0.3**
**DPC Dobruska-Polom 79.06 326 *eP* P 00 38 56.2 +0.8**
DPC *e**PP **pP 00 39 02.7 -0.1**
DPC MLR MLR
comp=Z,400nm,19.6s
**DPC Dobruska-Polom 79.06 326 *eP* P 00 38 56.2 +0.8**
DPC *ep*P **pP 00 39 02.7 -0.1**
DPC AMS AMS 01 18 00.0
comp=Z,400nm,19.6s
**UPC Upice 79.08 327 *eP* P 00 38 56.5 +1.0**
UPC *e**PP **pP 00 39 02.5 -0.3**
UPC MLR MLR
comp=Z,500nm,17.9s
**UPC Upice 79.08 327 *eP* P 00 38 56.5 +1.0**
UPC *ep*P **pP 00 39 02.5 -0.3**
UPC AMS AMS 01 18 20.0
comp=Z,500nm,17.9s
**DUG Dugway 79.09 48 *eP* P 00 38 57.6 +1.6**
DUG pmax pmax
comp=Z,20nm,1.4s
**DUG Dugway 79.09 48 P P 00 38 55.4 -0.5**
baz=79
**DUG Dugway 79.09 48 *eP* P 00 38 57.5 +1.6**
comp=Z,20nm,1.4s
**PSZ Piszkesteto 79.14 323 ⇓P P 00 38 57.0 +1.0**
**PSZ Piszkesteto 79.14 323 ⇓*i*P P 00 38 57.0 +1.0**
**PSZ Piszkesteto 79.14 323 ⇓*eP* P 00 38 56.4 +0.4**
**PSZ Piszkesteto 79.14 323 *eP* P 00 38 56.6 +0.6**
comp=Z,24nm,1.1s
**EDW2 Edwards Air Fo 79.19 54 P P 00 38 56.0 -0.5**
baz=79
**VYHS Vyhne 79.24 324 *eP* P 00 38 57.1 +0.7**
VYHS pmax pmax
comp=Z,11nm,1.6s
**VYHS Vyhne 79.24 324 *eP* P 00 38 57.1 +0.7**
**BW06 Boulder Array 79.29 44 *eP* P 00 38 57.8 +0.6**
**A27A Ledoux Ranch, 79.30 35 P P 00 38 56.2 -0.5**
baz=79
**TCUT Toone Canyon 79.32 46 *eP* P 00 38 59.5 +2.1**
comp=Z,46nm,1.5s
**DECC Green Verdugo 79.36 55 P P 00 38 56.8 -0.6**
baz=79
**GZR Gura Zlata 79.44 320 ⇓P P 00 38 58.2 +0.5**
**GZR Gura Zlata 79.44 320 ⇓*i*P P 00 38 58.2 +0.5**
**D25A Fairfield 79.58 38 P P 00 38 57.5 -0.8**
baz=79
**NLU North Lily Min 79.68 47 *eP* P 00 39 00.8 +1.6**
comp=Z,8.7nm,1.2s
**VRAC Vranov 79.69 326 ⇓P P 00 39 00.3 +1.4**
**VRAC Vranov 79.69 326 ⇓*i*P P 00 39 00.3 +1.4**
**PVCC Panska Ves 79.69 327 *eP* P 00 38 59.8 +1.0**
PVCC *e**PP **pP 00 39 05.6 -0.6**
**PVCC Panska Ves 79.69 327 *eP* P 00 38 59.8 +1.0**
PVCC *ep*P **pP 00 39 05.6 -0.6**
**GSC Goldstone 79.70 53 *eP* P 00 39 00.3 +1.0**
GSC pmax pmax
comp=Z,7.0nm,1.1s
**GSC Goldstone 79.70 53 P P 00 38 58.6 -0.7**
baz=80
**GSC Goldstone 79.70 53 *eP* P 00 39 00.3 +1.0**
comp=Z,7.2nm,1.1s
**BRG Berggiesshubel 79.70 328 *eP* P 00 38 58.9 0.0**
comp=Z,5.3nm,1.0s
BRG *e* 00 39 04.9
comp=Z,9.7nm,1.0s
**BRG Berggiesshubel 79.70 328 *eP* P 00 38 58.9 0.0**
BRG *e* 00 39 04.9
BRG pmax pmax
comp=Z,5.0nm,1.0s
**CLL Collm 79.77 329 *i* P P 00 38 58.7 -0.5**
CLL *i* *PP **pP 00 39 04.8 -1.8**
CLL *eS* **S 00 48 55.0 -5.6**
CLL pmax pmax
comp=Z,29nm,1.7s
**CLL Collm 79.77 329 *i* P P 00 38 58.7 -0.5**
comp=Z,29nm,1.7s
CLL *i* pP **pP 00 39 04.8 -1.8**
comp=Z,16nm,1.1s
CLL *eS* **S 00 48 55.0 -5.6**
**CLL Collm 79.77 329 *eP* P 00 38 59.1 -0.1**
comp=Z,17nm,1.1s
**BFSC Mount Baldy Ra 79.80 55 P P 00 38 59.2 -0.7**
baz=80
**O16A Springville 79.85 47 *eP* P 00 39 07.9 +7.7**
comp=Z,21nm,1.5s
**BZS Buzias 79.89 320 ⇓P P 00 39 00.4 +0.4**
**BZS Buzias 79.89 320 ⇓*i*P P 00 39 00.4 +0.4**
**SHPR Sheep Range 79.99 52 *eP* P 00 39 02.5 +1.5**
**GOPC GO Pecny, Ondr 80.05 327 *eP* P 00 39 01.9 +1.1**
GOPC *e**PP **pP 00 39 07.5 -0.6**
GOPC MLR MLR
comp=Z,400nm,14.5s
**GOPC GO Pecny, Ondr 80.05 327 *eP* P 00 39 01.9 +1.1**
GOPC *ep*P **pP 00 39 07.5 -0.6**
GOPC AMS AMS 01 18 50.0
comp=Z,400nm,14.5s
**B28A Dugan Ranch, T 80.06 35 P P 00 39 00.3 -0.6**
baz=80
**PRA Prague 80.09 327 *eP* P 00 39 01.7 +0.7**
PRA *e**PP **pP 00 39 07.4 -0.9**
PRA MLR MLR
comp=Z,400nm,13.8s
**PRA Prague 80.09 327 *eP* P 00 39 01.7 +0.7**
PRA *ep*P **pP 00 39 07.4 -0.9**
PRA AMS AMS 01 18 50.0
comp=Z,400nm,13.8s
**PRU Pruhonice 80.10 327 *eP* P 00 39 01.9 +0.8**
PRU *e**PP **pP 00 39 07.5 -0.9**
PRU MLR MLR
comp=Z,300nm,13.2s
**PRU Pruhonice 80.10 327 *eP* P 00 39 01.9 +0.8**
PRU *ep*P **pP 00 39 07.5 -0.9**
PRU AMS AMS 01 19 00.0
comp=Z,300nm,13.2s
**TUQ Turquoise Moun 80.18 53 P P 00 39 01.4 -0.6**
baz=80
**TREC Trest 80.20 326 AMS AMS 01 18 20.0**
comp=Z,400nm,13.7s
**A29A Manning Farm, 80.23 34 P P 00 39 01.4 -0.4**
baz=80
**HEC Hector,Ludlow 80.30 54 P P 00 39 02.0 -0.5**
baz=80
**CCUT Cedar City 80.45 50 *eP* P 00 39 05.6 +2.2**
comp=Z,9.9nm,1.4s
**MURC Murrieta 80.50 55 P P 00 39 03.0 -0.5**
baz=80
**B29A Wagenman Farm, 80.51 35 P P 00 39 03.0 -0.3**
baz=80
**MSU Marysvale 80.55 49 *eP* P 00 39 06.1 +2.1**
**MSU Marysvale 80.55 49 *eP* P 00 39 06.1 +2.1**
**TMUT Trail Mountain 80.62 47 *eP* P 00 39 06.5 +2.0**
comp=Z,25nm,1.2s
**A30A Hoffart Farm, 80.64 34 P P 00 39 03.6 -0.4**
baz=80
**ULM Lac du Bonnet 80.72 32 P P 00 39 04.2 -0.1**
comp=Z,9.4nm,0.9s,baz=321,slow=6.9,SNR=7.4
**ULM Lac du Bonnet 80.72 32 *eP* P 00 39 04.5 +0.2**
ULM pmax pmax
comp=Z,18nm,1.0s
**ULM Lac du Bonnet 80.72 32 *eP* P 00 39 04.5 +0.2**
comp=Z,18nm,1.0s
**GMRC Granite Mounta 80.76 53 P P 00 39 04.5 -0.6**
baz=81
**P17A Butcher Ranch, 80.78 47 *eP* P 00 39 07.2 +2.1**
comp=Z,24nm,1.2s
**F26A Lodgepole 80.81 38 P P 00 39 04.3 -0.7**
baz=81
**NKC Novy Kostel 80.81 328 *eP* P 00 39 05.7 +0.8**
NKC *e**PP **PcP 00 39 11.6 +0.1**
**NKC Novy Kostel 80.81 328 *eP* P 00 39 05.7 +0.8**
NKC *ep*P **PcP 00 39 11.6 +0.1**
**MDND Maddock 80.85 35 P P 00 39 04.5 -0.7**
baz=81
**SOP Sopron 80.89 324 ⇓*eP* P 00 39 06.7 +1.4**
**G25A Newell 80.90 39 P P 00 39 05.1 -0.5**
baz=81
**E27A Carson 80.94 37 P P 00 39 05.0 -0.7**
baz=81
**P18A Preston Nutter 80.96 47 *eP* P 00 39 08.0 +1.7**
comp=Z,19nm,1.2s
**PFO Pinyon Flat Ob 80.98 55 *eP* P 00 39 06.9 +0.7**
PFO pmax pmax
comp=Z,14nm,1.4s
**PFO Pinyon Flat Ob 80.98 55 P P 00 39 05.6 -0.6**
baz=81
**PFO Pinyon Flat Ob 80.98 55 *eP* P 00 39 06.9 +0.7**
comp=Z,14nm,1.4s
**B30A Myrvik Farm, E 80.99 34 P P 00 39 05.3 -0.6**
baz=81
**109C Camp Elliot, M 81.00 56 P P 00 39 06.0 -0.1**
baz=81
**CONA Conrad Observa 81.03 325 ⇓*eP* P 00 39 07.5 +1.3**
comp=Z,16nm,1.4s,SNR=6.0
**BELC Belle Mtn. Jos 81.03 54 P P 00 39 06.1 -0.4**
baz=81
**K22A Casper 81.03 43 P P 00 39 05.8 -0.6**
baz=81
**K22A Casper 81.03 43 *eP* P 00 39 07.2 +0.8**
comp=Z,125nm,2.6s
**F27A Lemmon 81.12 38 P P 00 39 06.0 -0.6**
baz=81
**SRU San Rafael 81.14 47 *eP* P 00 39 08.3 +1.2**
SRU pmax pmax
comp=Z,10.0nm,1.0s
**SRU San Rafael 81.14 47 *eP* P 00 39 08.3 +1.2**
comp=Z,9.8nm,1.0s
**KHC Kasperske Hory 81.16 327 *eP* P 00 39 07.5 +0.7**
KHC *e**PP **PcP 00 39 13.3 +0.2**
KHC MLR MLR
comp=Z,400nm,19.0s
**KHC Kasperske Hory 81.16 327 *eP* P 00 39 07.5 +0.7**
KHC *ep*P **PcP 00 39 13.3 +0.2**
KHC AMS AMS 01 19 00.0
comp=Z,400nm,19.0s
**KHC Kasperske Hory 81.16 327 *eP* P 00 39 07.5 +0.7**
comp=Z,7.4nm,1.2s
**H25A Fruitdale 81.21 40 P P 00 39 06.6 -0.6**
baz=81
**G26A Maurine 81.24 39 P P 00 39 06.9 -0.5**
baz=81
**E28A Huff 81.26 37 P P 00 39 06.7 -0.7**
baz=81
**GEC2 GERESS Array S 81.32 327 *eP* P 00 39 08.1 +0.4**
**GEC2 GERESS Array S 81.32 327 *eP* P 00 39 08.1 +0.4**
**GERES GERESS Array B 81.32 327 P P 00 39 07.5 -0.2**
comp=Z,2.0nm,0.8s,baz=46,slow=5.8,SNR=17
GERES LR LR 01 17 12.4

comp=Z,78nm,19.4s,baz=24,slow=37
GERES **GERESS Array B** 81.32 327 P P 00 39 07.5 -0.2
GERES pmax pmax
comp=Z,2.0nm,0.9s
GERES MLR MLR
comp=Z,78nm,19.4s
RSSD **Black Hills** 81.33 40 eP P 00 39 08.8 +0.7
RSSD pmax pmax
comp=Z,27nm,1.8s
RSSD **Black Hills** 81.33 40 eP P 00 39 08.8 +0.7
comp=Z,27nm,1.8s
MONP **Monument Peak** 81.45 55 P P 00 39 08.1 -0.7
baz=81
IRM **Iron Mountain** 81.47 54 P P 00 39 08.3 -0.4
baz=81
G27A **Dupree** 81.51 38 P P 00 39 08.1 -0.6
baz=81
I25A **Rochford** 81.56 40 P P 00 39 08.3 -0.9
baz=81
BC3 **Big Chuckawall** 81.60 54 P P 00 39 08.9 -0.6
baz=82
H26A **Fairpoint** 81.63 39 P P 00 39 08.9 -0.5
baz=82
F28A **McLaughlin** 81.73 37 P P 00 39 09.1 -0.8
baz=82
GRFO **Grafenberg** 81.74 328 eP P 00 39 10.9 +1.0
GRFO pmax pmax
comp=Z,27nm,1.1s
GRFO **Grafenberg** 81.74 328 eP P 00 39 10.9 +1.0
comp=Z,27nm,1.1s
C31A **Landman Farms,** 81.74 34 P P 00 39 09.1 -0.8
baz=82
DIVS **Divibare** 81.77 320 ⇓iP P 00 39 10.6 +0.4
O20A **White River Ci** 81.78 45 P P 00 39 09.7 -0.8
baz=82
O20A **White River Ci** 81.78 45 eP P 00 39 11.6 +1.1
comp=Z,18nm,1.2s
IBP **Imperial Bould** 81.81 55 P P 00 39 10.1 -0.5
baz=82
MOA **Molln** 81.81 326 ⇓eP P 00 39 11.1 +0.8
comp=Z,10nm,1.4s
SWSC **Sam W. Stewart** 81.82 55 P P 00 39 10.0 -0.5
baz=82
A33A **Warroad** 81.92 32 P P 00 39 10.2 -0.6
baz=82
H27A **Howes** 81.97 39 P P 00 39 10.5 -0.7
baz=82
PDMCI **Parker Dam,Lak** 82.03 53 P P 00 39 11.4 -0.2
baz=82
Y12C **Blythe** 82.14 54 P P 00 39 11.9 -0.3
baz=82
E30A **Jud** 82.16 36 P P 00 39 11.5 -0.6
baz=82
AGMN **Agassiz Nation** 82.20 33 P P 00 39 11.6 -0.6
baz=82
F29A **Eureka** 82.21 37 P P 00 39 11.8 -0.6
baz=82
G28A **Parade** 82.23 38 P P 00 39 11.9 -0.6
baz=82
SOKA **Soboth** 82.33 325 ⇓eP P 00 39 13.8 +0.7
comp=Z,20nm,0.9s,SNR=13
PV09 **Paradox Valley** 82.36 47 eP P 00 39 15.8 +2.2
GLA **Glamis** 82.39 54 P P 00 39 13.3 -0.3
baz=82
I27A **Quinn** 82.39 39 P P 00 39 12.7 -0.7
baz=82
J26A **Sides Ranch, S** 82.40 40 P P 00 39 12.9 -0.6
baz=82
H28A **Mission Ridge** 82.47 38 P P 00 39 13.3 -0.5
baz=82
PV10 **Paradox Valley** 82.50 47 eP P 00 39 16.0 +1.6
PHWY **Pilot Hill** 82.54 43 eP P 00 39 15.6 +1.0
comp=Z,18nm,1.4s
N23A **Red Feather La** 82.55 44 P P 00 39 13.6 -1.0
baz=82,SNR=6.0
N23A **Red Feather La** 82.55 44 eP P 00 39 16.1 +1.5
comp=Z,20nm,1.3s
B34A **Aery, Baudette** 82.58 32 P P 00 39 13.4 -0.8
baz=82
PV05 **Paradox Valley** 82.66 47 eP P 00 39 16.7 +1.5
L25A **Engebretsen Ra** 82.75 42 P P 00 39 14.6 -0.8
baz=83
K26A **Motz Farm, Whi** 82.78 41 P P 00 39 14.7 -0.8
baz=83
KBA **Koelnbreinsper** 82.80 326 ⇓eP P 00 39 16.1 +0.5
comp=Z,13nm,1.0s
I28A **Midland** 82.88 39 P P 00 39 15.4 -0.6
baz=83
H29A **Onida** 82.90 38 P P 00 39 15.5 -0.5
baz=83
PV01 **Paradox Valley** 82.93 47 eP P 00 39 17.9 +1.3
WUAZ **Wupatki** 82.98 50 P P 00 39 16.0 -0.8
baz=83
WUAZ **Wupatki** 82.98 50 eP P 00 39 18.3 +1.5
comp=Z,16nm,1.3s
G30A **Faulkton** 83.05 37 P P 00 39 16.0 -0.8
baz=83
J28A **Allard Ranch,** 83.26 39 P P 00 39 17.4 -0.6
baz=83
K27A **Flueckinger Fa** 83.26 40 P P 00 39 17.2 -0.9
baz=83
STU **Stuttgart** 83.30 329 eP P 00 39 18.3 +0.3
STU pmax pmax
comp=Z,29nm,1.4s
STU **Stuttgart** 83.30 329 eP P 00 39 18.3 +0.3
comp=Z,29nm,1.4s
D34A **Park Rapids** 83.41 34 P P 00 39 17.9 -0.7
baz=83
ABTA **Abfaltersbach** 83.43 326 ⇓eP P 00 39 18.1 -0.6
comp=Z,9.8nm,1.0s,SNR=5.0
ISCO **Idaho Springs** 83.49 44 eP P 00 39 20.8 +1.3
ISCO pmax pmax
comp=Z,10.0nm,1.3s
ISCO **Idaho Springs** 83.49 44 P P 00 39 18.5 -1.0
baz=83
ISCO **Idaho Springs** 83.49 44 eP P 00 39 20.8 +1.3
comp=Z,10.0nm,1.3s
E33A **Westby DABS, E** 83.49 34 P P 00 39 18.6 -0.4
baz=83
MOTA **Moosalm** 83.59 327 ⇓eP P 00 39 19.8 +0.1
comp=Z,8.4nm,0.9s,SNR=8.8
MVCO **Mesa Verde** 83.59 48 P P 00 39 19.1 -0.9
baz=84
MVCO **Mesa Verde** 83.59 48 eP P 00 39 21.4 +1.4
comp=Z,30nm,1.6s
RETA **Reutte** 83.63 327 ⇓eP P 00 39 20.4 +0.6
comp=Z,27nm,1.3s,SNR=6.4
SUSD **South Dakota S** 83.65 37 P P 00 39 19.2 -0.7
baz=84
M26A **McRoberts Ranc** 83.67 42 P P 00 39 19.4 -0.7
baz=84
J29A **Okreek** 83.73 39 P P 00 39 19.5 -0.8
baz=84
G32A **Webster** 83.74 36 P P 00 39 19.5 -0.8
baz=84
H31A **Wolsey** 83.85 37 P P 00 39 20.5 -0.4
baz=84
E34A **Wadena** 83.86 34 P P 00 39 20.2 -0.7
baz=84
F33A **5 Mile Ranch,** 83.86 35 P P 00 39 20.3 -0.6
baz=84
C36A **Pine Crest Far** 83.91 32 P P 00 39 20.5 -0.6
baz=84
BFO **Black Forest** 84.00 329 iP P 00 39 22.2 +0.6
BFO **Black Forest** 84.00 329 eP P 00 39 21.1 -0.5
comp=Z,23nm,1.2s
I31A **Royce, Wessing** 84.16 37 P P 00 39 21.8 -0.7
baz=84
DAVA **Damuels** 84.17 328 ⇓ePcP P 00 39 23.0 +0.4
comp=Z,20nm,1.1s
K29A **Lazy Trails An** 84.20 39 P P 00 39 22.0 -0.8
baz=84
J30A **Dallas** 84.21 38 P P 00 39 22.1 -0.7
baz=84
S22A **4UR Ranch, Cre** 84.21 46 P P 00 39 22.4 -0.8
baz=84
S22A **4UR Ranch, Cre** 84.21 46 eP P 00 39 24.9 +1.7
comp=Z,17nm,1.4s
C37A **Embarrass** 84.21 32 P P 00 39 22.0 -0.6
baz=84
D36A **Goodland** 84.23 32 P P 00 39 22.1 -0.7
baz=84
EYMN **Ely** 84.33 31 P P 00 39 22.5 -0.7
baz=84
O26A **Horse Wrangler** 84.44 43 P P 00 39 23.5 -0.7
baz=84
H33A **Prehn Over Nor** 84.53 36 P P 00 39 23.8 -0.6
baz=84
ECH **Echery** 84.57 330 eP P 00 39 24.5 0.0
ECH pmax pmax
comp=Z,19nm,1.3s
ECH **Echery** 84.57 330 eP P 00 39 24.5 0.0
comp=Z,19nm,1.3s
C38A **Sawbill Land.** 84.60 31 P P 00 39 23.9 -0.7
baz=84
J31A **Geddes** 84.60 38 P P 00 39 24.1 -0.7
baz=84
K30A **Basset** 84.62 39 P P 00 39 24.1 -0.8
baz=84
P26A **Davis Ranch, A** 84.91 43 P P 00 39 25.6 -0.9
baz=85
SDCO **Great Sand Dun** 84.97 46 P P 00 39 26.1 -1.0
baz=85,SNR=5.6
SDCO **Great Sand Dun** 84.97 46 eP P 00 39 28.3 +1.3
comp=Z,5.9nm,0.9s
K31A **O'Neill** 85.09 38 P P 00 39 26.6 -0.6
baz=85
ECSD **EROS Data Cent** 85.30 37 P P 00 39 27.4 -0.8
baz=85
ECSD **EROS Data Cent** 85.30 37 eP P 00 39 28.7 +0.4
comp=Z,19nm,1.1s
P27A **Ficken Ranch,** 85.33 43 P P 00 39 27.8 -0.8
baz=85
O28A **Krutsinger Ran** 85.35 42 P P 00 39 28.0 -0.7
baz=85
L31A **Butterfield Fa** 85.38 39 P P 00 39 28.0 -0.7
baz=85
J33A **Davis** 85.44 37 P P 00 39 28.5 -0.4
baz=85
G36A **St. Michael** 85.48 34 P P 00 39 28.3 -0.8
baz=85
R26A **Arlington** 85.74 44 P P 00 39 30.0 -0.7
baz=86,SNR=8.0
P28A **Saint Francis** 85.76 42 P P 00 39 29.9 -0.8
baz=86
H36A **Jessenland, He** 85.91 35 P P 00 39 30.4 -0.8
baz=86
SPMN **St. Paul** 85.91 34 P P 00 39 30.6 -0.6
baz=86
SPMN **St. Paul** 85.91 34 eP P 00 39 31.7 +0.5
comp=Z,34nm,1.4s
L32A **Elgin** 85.92 38 P P 00 39 30.7 -0.7
baz=86
T25A **Trinidad** 86.02 45 P P 00 39 31.3 -0.9
baz=86,SNR=5.1
T25A **Trinidad** 86.02 45 eP P 00 39 33.3 +1.1
comp=Z,16nm,1.1s
Q28A **Sharon Springs** 86.08 43 P P 00 39 31.5 -0.8
baz=86
R27A **Eads** 86.11 44 P P 00 39 31.8 -0.7
baz=86
J35A **Milford** 86.25 36 P P 00 39 32.3 -0.6
baz=86
BGNE **Belgrade** 86.29 39 P P 00 39 32.5 -0.7
baz=86
K34A **Le Mars** 86.34 37 P P 00 39 32.8 -0.6
baz=86
ANMO **Albuquerque** 86.34 48 ⇓eP P 00 39 35.3 +1.5
ANMO pmax pmax
comp=Z,6.0nm,1.2s
ANMO **Albuquerque** 86.34 48 eP P 00 39 35.3 +1.5
comp=Z,9.7nm,1.2s
H37A **Dierke Farm, C** 86.36 34 P P 00 39 32.9 -0.6
baz=86
T26A **Comanche Natio** 86.45 45 P P 00 39 33.4 -0.9
baz=86
R28A **Tribune** 86.61 43 P P 00 39 34.4 -0.6
baz=86
Q29A **Oakley** 86.67 42 P P 00 39 34.5 -0.7
baz=86
L34A **Svendsen Farm,** 86.75 38 P P 00 39 34.7 -0.8
baz=87
PPT **Papeete** 86.86 115 LR LR 01 11 40.5
comp=Z,50nm,20.1s,baz=3.5,slow=31
M34A **Aspy Farms, Fr** 87.00 38 P P 00 39 36.1 -0.5
baz=87
P31A **Stockton** 87.06 41 P P 00 39 36.2 -0.8
baz=87
S28A **Manter** 87.10 44 P P 00 39 36.8 -0.6
baz=87
121A **Cookes Peak, D** 87.19 51 P P 00 39 37.1 -0.8
baz=87
P32A **Huiting Farm,** 87.39 40 P P 00 39 37.9 -0.7
baz=87
U27A **Thompson Grove** 87.42 45 P P 00 39 38.3 -0.6
baz=87
N34A **Lincoln** 87.54 38 P P 00 39 38.7 -0.6
baz=87
U28A **Mallet** 87.79 45 P P 00 39 40.0 -0.7
baz=88
Q32A **Meitler Ranch,** 87.88 41 P P 00 39 40.3 -0.7
baz=88
O34A **Beatrice** 87.94 39 P P 00 39 40.4 -0.8
baz=88
P33A **Williams Farm,** 87.99 40 P P 00 39 40.7 -0.8
baz=88
Q33A **Connelly Farm,** 88.25 40 P P 00 39 41.9 -0.8
baz=88
P34A **Walnut Farm, R** 88.35 39 P P 00 39 42.8 -0.4
baz=88
KSU1 **Kansas State U** 88.80 40 P P 00 39 44.7 -0.6
baz=89
KSU1 **Kansas State U** 88.80 40 eP P 00 39 45.8 +0.5
comp=Z,15nm,0.8s
T32A **Huddler Ranch,** 89.02 42 P P 00 39 45.6 -0.8
baz=89
P36A **Good Intent, A** 89.11 38 P P 00 39 46.2 -0.5
baz=89
AMTX **Amarillo** 89.17 45 P P 00 39 46.4 -0.8
baz=89
MSTX **Muleshoe** 89.20 47 P P 00 39 46.9 -0.5
baz=89
MNTX **Cornudas Mount** 89.24 50 P P 00 39 47.0 -0.5
baz=89
Q35A **Mercer Eighty,** 89.27 39 P P 00 39 46.8 -0.7
baz=89
X29A **Tulia** 89.47 46 P P 00 39 48.1 -0.5
baz=89
V31A **Spring Creek L** 89.56 44 P P 00 39 48.5 -0.5
baz=89
Y29A **Porterfield Fa** 89.91 46 P P 00 39 50.0 -0.8
baz=90
W31A **Holland Ranch,** 89.93 44 P P 00 39 49.9 -0.8
baz=90
R36A **Gordon, Harris** 89.95 39 P P 00 39 49.9 -0.8
baz=90
S35A **Otr Creek Ra** 90.02 40 P P 00 39 50.2 -0.9
baz=90
Q37A **Longview Farm,** 90.06 38 P P 00 39 50.4 -0.8
baz=90
R37A **Teagarden Farm** 90.30 39 P P 00 39 51.6 -0.7
baz=90
X31A **McDonald Ranch** 90.32 45 P P 00 39 51.9 -0.6
baz=90
Z29A **Hungry Hill Ra** 90.33 47 P P 00 39 52.0 -0.6
baz=85,SNR=15
128A **Castleberry Fa** 90.33 47 P P 00 39 52.1 -0.6
baz=90
Y30A **Stafford Cattl** 90.34 46 P P 00 39 52.2 -0.5
baz=90
W32A **Sentinel** 90.36 44 P P 00 39 52.1 -0.6
baz=90
T35A **Sooner Cattle** 90.50 41 P P 00 39 52.8 -0.5
baz=90
228A **UT Block 9, Go** 90.62 48 P P 00 39 53.4 -0.7
baz=90
Y31A **Rekieta Farm,** 90.64 45 P P 00 39 53.4 -0.7
baz=90
T36A **Boggs Farm, Ca** 90.72 40 P P 00 39 53.8 -0.5
baz=91
S37A **Fort Scott** 90.73 39 P P 00 39 53.7 -0.7
baz=91
W33A **Caddo, Fort Co** 90.77 43 P P 00 39 54.0 -0.6
baz=91
V34A **Guthrie** 90.78 42 P P 00 39 54.1 -0.5
baz=91
U35A **Pawnee** 90.80 41 P P 00 39 54.0 -0.7
baz=91
WMOK **Wichita Mounta** 90.91 44 eP P 00 39 56.1 +0.8
WMOK pmax pmax
comp=Z,79nm,2.8s
WMOK **Wichita Mounta** 90.91 44 eP P 00 39 56.1 +0.8
comp=Z,79nm,2.8s
Y32A **R-V Farms, Ver** 91.08 45 P P 00 39 55.5 -0.5
baz=91
T37A **Cheneyville 18** 91.17 40 P P 00 39 55.7 -0.7
baz=91
Z31A **Sharp Cattle R** 91.18 46 P P 00 39 55.9 -0.7
baz=91
229A **Bryant Ranch,** 91.19 48 P P 00 39 56.1 -0.6
baz=91
V35A **Meyer Ranch, C** 91.20 42 P P 00 39 55.8 -0.7
baz=91
130A **Snyder** 91.23 47 P P 00 39 56.6 -0.3
baz=91
329A **Wagon Wheel Ra** 91.44 48 P P 00 39 57.3 -0.5
baz=91,SNR=6.3
X34A **Smith Ranch, M** 91.53 43 P P 00 39 57.6 -0.6
baz=91
Z32A **Haskell** 91.57 45 P P 00 39 57.8 -0.6
baz=92,SNR=6.5
U37A **Salina** 91.61 40 P P 00 39 58.1 -0.3
baz=92
W35A **Tecumseh** 91.64 42 P P 00 39 58.0 -0.6
baz=92
TUL1 **Tulsa** 91.64 41 P P 00 39 58.1 -0.5
baz=92
V36A **Jenks** 91.65 41 P P 00 39 58.1 -0.6
baz=92
230A **Sterling City** 91.66 47 P P 00 39 58.3 -0.6
baz=92
TX31 **Lajitas Ar. Si** 91.95 51 eP P 00 40 00.7 +0.4
TXAR **Lajitas Array** 91.95 51 P P 00 40 01.1 +0.8
comp=Z,2.8nm,0.9s,baz=305,slow=4.4,SNR=17
TXAR PP PP 00 43 40.0 +0.9
comp=Z,0.4nm,0.9s,baz=300,slow=4.0,SNR=3.5
TXAR **Lajitas Array** 91.95 51 P P 00 40 01.1 +0.8
TXAR 00 43 40.0
TXAR pmax pmax
comp=Z,3.0nm,0.9s
U38A **Gravette** 91.97 40 P P 00 39 59.6 -0.5
baz=92
330A **Mertzon** 91.97 48 P P 00 39 59.6 -0.6
baz=92
ABTX **Abilene, Hawle** 91.98 46 P P 00 39 59.6 -0.6
baz=92
V37A **Hulbert** 92.00 41 P P 00 39 59.7 -0.6
baz=92
Y34A **Reagan Ranch,** 92.05 44 P P 00 40 00.2 -0.3
baz=92
231A **Bronte** 92.09 47 P P 00 40 00.2 -0.6
baz=92
429A **Davenport Ranc** 92.11 49 P P 00 40 00.3 -0.6
baz=92
X35A **Drake** 92.15 43 P P 00 40 00.3 -0.6
baz=92
529A **Stev Forest Ra** 92.27 49 P P 00 40 01.1 -0.6
baz=92
X36A **Centrahoma** 92.36 42 P P 00 40 01.3 -0.6
baz=92
430A **Baggett Ranch,** 92.38 48 P P 00 40 01.4 -0.8
baz=92
V38A **Canehill** 92.40 40 P P 00 40 01.4 -0.7
baz=92
Z34A **Collier Ranch,** 92.40 44 P P 00 40 01.7 -0.4
baz=92
331A **San Angelo** 92.48 47 P P 00 40 02.0 -0.7
baz=92
530A **J-C Ranch, Com** 92.78 48 P P 00 40 03.5 -0.5
baz=93,SNR=5.5
332A **Millersview** 92.83 47 P P 00 40 03.6 -0.6
baz=93
431A **Sonora** 92.83 48 P P 00 40 03.7 -0.6
baz=93
233A **Rising Star** 92.85 46 P P 00 40 03.8 -0.4
baz=93
X38A **Whitesboro** 93.09 41 P P 00 40 04.5 -0.8
baz=93
432A **Menard** 93.17 47 P P 00 40 05.2 -0.6
baz=93
531A **Rocksprings** 93.24 48 P P 00 40 05.5 -0.7
baz=93
234A **Clairette** 93.29 45 P P 00 40 05.7 -0.6
baz=93
Z36A **Blue Ridge** 93.29 43 P P 00 40 05.5 -0.8
baz=93
333A **Richland Sprin** 93.31 46 P P 00 40 05.8 -0.6
baz=93,SNR=7.0
JCT **Junction City** 93.45 47 eP P 00 40 07.4 +0.3
JCT pmax pmax
comp=Z,9.0nm,0.9s
JCT **Junction City** 93.45 47 P P 00 40 06.3 -0.8
baz=93
JCT **Junction City** 93.45 47 eP P 00 40 07.4 +0.3
comp=Z,8.7nm,0.9s
532A **Rocksprings** 93.65 48 P P 00 40 07.2 -0.9
baz=94,SNR=6.2
433A **Art** 93.67 47 P P 00 40 07.2 -0.9
baz=94
WHTX **Lake Whitney** 93.69 45 P P 00 40 07.3 -0.8
baz=94
334A **Lometa** 93.73 46 P P 00 40 07.6 -0.7
baz=94
631A **Perdido Creek** 93.77 49 P P 00 40 07.8 -0.8
baz=94,SNR=5.8
MIAR **Mount Ida** 93.85 41 eP P 00 40 09.7 +0.9
MIAR **Mount Ida** 93.85 41 P P 00 40 08.2 -0.6
baz=94
MIAR **Mount Ida** 93.85 41 eP P 00 40 09.7 +0.9
comp=Z,144nm,3.0s
434A **Burnet** 94.10 46 P P 00 40 09.5 -0.5
baz=94
632A **Uvalde** 94.17 48 P P 00 40 10.0 -0.4
baz=94
534A **Blanco** 94.56 47 P P 00 40 11.6 -0.6
baz=94
732A **Laxson Ranch,** 94.63 49 P P 00 40 11.8 -0.7
baz=95
933A **Laredo** 95.86 49 P P 00 40 17.5 -0.6
baz=96
ESDC **Sonseca Array** 96.09 332 LR LR 01 27 58.5
comp=Z,49nm,18.4s,baz=30,slow=38
034A **Hebbronville** 96.62 49 P P 00 40 20.8 -0.8
baz=96
035A **Encino** 97.06 49 P P 00 40 22.9 -0.7
baz=97
TORD **Torodi Ar. Bea** 115.50 312 PKP PKPdf 00 45 32.8 -1.1
comp=Z,0.7nm,0.9s,baz=40,slow=2.0,SNR=3.7
TORD PKKPbc PKKPbc 00 56 07.5 +1.7
comp=Z,0.6nm,0.9s,baz=207,slow=3.0,SNR=3.5
TORD PKKPab PKKPab 00 56 13.1 -1.1
comp=Z,2.0nm,1.2s,baz=206,slow=7.7,SNR=5.0
BOSA **Boshof** 124.22 258 PKP PKPdf 00 45 50.1 -0.2
comp=Z,1.6nm,0.7s,baz=205,slow=4.6,SNR=4.9
BOSA **Boshof** 124.22 258 PKIKP PKPdf 00 45 50.1 -0.2
BOSA pmax pmax
comp=Z,2.0nm,0.7s
DBIC **Dimbokro** 124.51 314 PKP PKPdf 00 45 50.8 -0.3
comp=Z,2.4nm,0.7s,baz=248,slow=5.4,SNR=4.3
DBIC **Dimbokro** 124.51 314 PKIKP PKPdf 00 45 50.8 -0.3
DBIC pmax pmax
comp=Z,2.0nm,0.7s
SDV **Santo Domingo** 126.74 37 ePKPdf PKPdf 00 45 55.3 -0.4
QSPA **South Pole Qui** 126.88 180 ePKPdf PKPdf 00 45 54.3 +0.2
PTGA **Pitinga** 140.00 29 ePKPdf PKPdf 00 46 21.2 +0.9
SAML **Samuel** 145.80 40 ePKPdf PKPbc 00 46 31.1 +0.1
LVC **Limon Verde** 152.38 66 ePKPbc PKPbc 00 46 49.0 +1.1

**IDC 03 00:27:02.4±9.4, 22°84N×144°04E, h94km▽77km, mb3.6/12, mb1 3.7/12, mb1mx3.6/41, mbtmp3.9/12, Error ellipse: s-maj=88.3km s-min=16.3km az=80.0, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSRS** | **Korea Array** | **20.12** | **320** | P | P | 00 31 29.2 | +0.5 |
| | 4.5nm,0.7s,baz=128,slow=13,SNR=5.0 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.52** | **94** | T | T | 00 53 50.5 | |
| | baz=283,slow=74,SNR=19 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.52** | **94** | T | T | 00 53 50.5 | |
| | baz=283,slow=74,SNR=18 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.53** | **94** | T | T | 00 53 50.5 | |
| | baz=283,slow=74,SNR=18 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **21.62** | **97** | T | T | 00 54 05.9 | |
| | baz=292,SNR=5.3 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.63** | **97** | T | T | 00 54 06.7 | |
| | baz=292 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.64** | **97** | T | T | 00 54 05.9 | |
| | baz=292 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **23.51** | **338** | P | P | 00 32 04.3 | +0.5 |
| | 2.1nm,0.6s,baz=150,slow=9.5,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **38.98** | **319** | P | P | 00 34 19.1 | -0.5 |
| | 0.6nm,0.4s,baz=129,slow=11,SNR=2.2 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **43.56** | **193** | P | P | 00 34 57.0 | -0.1 |
| | 0.3nm,0.4s,baz=17,slow=9.1,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **47.26** | **193** | P | P | 00 35 26.2 | -0.2 |
| | 0.2nm,0.3s,baz=8.7,slow=6.8,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.82** | **321** | P | P | 00 36 14.7 | -0.6 |
| | 0.9nm,0.6s,baz=112,slow=6.6,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.52** | **312** | P | P | 00 36 20.7 | +0.1 |
| | 1.0nm,0.8s,baz=99,slow=6.0,SNR=5.2 | | | | | | |
| MKAR | | | | PcP | PcP | 00 37 23.3 | +0.5 |
| | 0.4nm,0.5s,baz=146,slow=1.0,SNR=3.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.10** | **342** | P | P | 00 38 51.3 | +0.7 |
| | 1.9nm,0.8s,baz=52,slow=7.9,SNR=3.9 | | | | | | |
| **KBZ** | **Khabaz** | **82.15** | **314** | P | P | 00 39 13.7 | +0.8 |
| | 4.0nm,0.8s,baz=105,slow=2.7,SNR=5.8 | | | | | | |
| **FINES** | **FINESS Array B** | **82.50** | **335** | P | P | 00 39 13.8 | -0.5 |
| | 0.6nm,0.4s,baz=75,slow=5.4,SNR=5.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **88.17** | **339** | P | P | 00 39 42.0 | -0.6 |
| | 0.9nm,0.8s,baz=54,slow=8.0,SNR=3.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **90.14** | **314** | P | P | 00 39 52.1 | -0.4 |
| | 1.1nm,0.8s,baz=48,slow=2.1,SNR=2.4 | | | | | | |

*IDC **03** 00:33:49.5±1.2, 13°.59N×120°.44E, h0km, mb3.5/6, mb1 3.6/6, mb1mx3.4/37, mbtmp3.5/6, Error ellipse: s-maj=140.1km s-min=18.4km az=65.0*
*ISCJB **03** 00:33:51.1±1.5, 13°.53N±0°.04×120°.00E±0°.08, h18km±12km, mb3.5/6, Error ellipse: s-maj=12.7km s-min=6.3km az=179.9*
*MAN **03** 00:33:51, 13°.55N×120°.08E, h14km, mb4.4, ML3.3, MS3.2*
**ISC 03 00:33:50.2**±1.7**, 13°.51N**±0°.03×**120°.18E**±0°.08**, h4**km±11km**, n15, σ1s.02**/19**, mb3.5**/6**, 1C-1D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LUBP** | **Lubang** | **0.23** | **17** | *e*P | **Pg** | **00 33 55.9** | **+1.2** |
| **TGY** | **Tagaytay City** | **0.94** | **52** | ⇑*i*P | **Pn** | **00 34 10.7** | **+0.5** |
| TGY | | | | *i* S | **Sn** | **00 34 25.4** | **+1.2** |
| **SJMP** | **San Jose** | **1.39** | **139** | *e*P | **Pg** | **00 34 17.8** | **+0.9** |
| SJMP | | | | *e*S | **Sn** | **00 34 36.7** | **+1.5** |
| **BUSP** | **Coron** | **1.50** | **179** | *e*P | **Pn** | **00 34 18.4** | **+0.5** |
| BUSP | | | | *e*S | **Sn** | **00 34 37.1** | **-0.8** |
| **OTRP** | **Odiongan** | **2.13** | **122** | *e*P | **Pg** | **00 34 30.9** | **-0.1** |
| **PCPH** | **Palayan** | **2.22** | **24** | ⇓*e*P | **Pn** | **00 34 28.1** | **+0.3** |
| PCPH | | | | *i* S | **Sn** | **00 34 56.0** | **+0.3** |
| **ENPP** | **El Nido** | **2.41** | **198** | *e*P | **Pn** | **00 34 30.7** | **+0.4** |
| **BALP** | **Baler** | **2.60** | **31** | *e*P | **Pb** | **00 34 34.8** | **-2.5** |
| **CUYO** | **Cuyo Island** | **2.77** | **163** | *e*P | **Pn** | **00 34 36.2** | **+0.8** |
| **WRA** | **Warramunga Arr** | **36.05** | **157** | P | **P** | **00 40 52.2** | **-0.7** |
| | 1.1nm,0.9s,baz=336,slow=9.5,SNR=7.8 | | | | | | |
| **SONM** | **Songino Array** | **36.09** | **344** | P | **P** | **00 40 53.1** | **-0.1** |
| | 0.2nm,0.3s,baz=160,slow=8.9,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **39.31** | **160** | P | **P** | **00 41 20.7** | **+0.1** |
| | 0.4nm,0.6s,baz=343,slow=6.9,SNR=6.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.88** | **324** | P | **P** | **00 42 14.4** | **+0.6** |
| | 0.3nm,0.6s,baz=111,slow=7.9,SNR=2.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.06** | **326** | P | **P** | **00 42 46.5** | **+0.5** |
| | 0.3nm,0.5s,baz=114,slow=9.3,SNR=4.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **55.64** | **326** | P | **P** | **00 43 27.3** | **+0.1** |
| | 0.4nm,0.4s,baz=134,slow=12,SNR=2.6 | | | | | | |

*TIR **03** 00:34:37.0, 43°.19N×18°.72E, h5km, ML3.3*
*CSEM **03** 00:34:41.6±0.2, 42°.98N×18°.83E, h2km, ML2.5, Error ellipse: s-maj=4.7km s-min=3.7km az=92.0*
*SKO **03** 00:34:41.9, 43°.09N×18°.77E, h0km, M2.2*
*PDG **03** 00:34:41.6±0.3, 42°.99N×18°.75E, h3km, MD2.6/4, ML2.5/10, Error ellipse: s-maj=0.3km s-min=0.5km az=0.0*
*BEO **03** 00:34:43.3±0.5, 42°.97N×18°.89E, h13km±4km, ML2.3/1*
**ISC 03 00:34:41.9**±1.1**, 42°.99N**±0°.02×**18°.81E**±0°.02**, h2**km±9km**, n62, σ1s.36**/99**, 13C-9D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NKY** | **Niksic** | **0.22** | **142** | ⇑*i*Pg | **Pg** | **00 34 46.2** | **+0.1** |
| NKY | | | | *e*Sg | **Sg** | **00 34 50.5** | **+1.6** |
| **NKY** | **Niksic** | **0.22** | **142** | ⇑*i*Pg | **Pg** | **00 34 46.2** | **+0.1** |
| NKY | | | | *e*Sg | **Sg** | **00 34 50.5** | **+1.6** |
| **BRY** | **Bratogost** | **0.22** | **248** | ⇓*i*Pg | Pg | 00 34 44.8 | -1.4 |
| BRY | | | | *e*Sg | **Sg** | **00 34 47.6** | **-1.4** |
| **BRY** | **Bratogost** | **0.22** | **248** | ⇓*i*Pg | Pg | 00 34 44.8 | -1.4 |
| BRY | | | | *e*Sg | **Sg** | **00 34 47.6** | **-1.4** |
| **UPM** | **Unac-Piva** | **0.23** | **17** | ⇑*i*Pg | **Pg** | **00 34 45.4** | **-0.9** |
| UPM | | | | *e*Sg | **Sg** | **00 34 50.0** | **+0.7** |
| **UPM** | **Unac-Piva** | **0.23** | **17** | ⇑*i*Pg | **Pg** | **00 34 45.4** | **-0.9** |
| UPM | | | | *e*Sg | **Sg** | **00 34 50.0** | **+0.7** |
| **NKME** | **Niksic** | **0.24** | **155** | ⇑*i*Pg | **Pg** | **00 34 46.5** | **0.0** |
| NKME | | | | *e*Sg | **Sg** | **00 34 51.0** | **+1.4** |
| **NKME** | **Niksic** | **0.24** | **155** | ⇑*i*Pg | **Pg** | **00 34 46.5** | **0.0** |
| NKME | | | | *e*Sg | **Sg** | **00 34 51.0** | **+1.4** |
| **PLE** | **Pljevlja** | **0.55** | **50** | ⇑*i*Pg | **Pg** | **00 34 52.7** | **+0.3** |
| PLE | | | | *e*Sg | **Sb** | **00 35 01.6** | **-1.0** |
| **PLE** | **Pljevlja** | **0.55** | **50** | ⇑*i*Pg | **Pg** | **00 34 52.7** | **+0.3** |
| PLE | | | | *e*Sg | **Sb** | **00 35 01.6** | **-1.0** |
| **HCY** | **Herceg Novi** | **0.59** | **204** | ⇓*i*Pg | **Pg** | **00 34 52.2** | **-0.9** |
| HCY | | | | *e*Sg | **Sg** | **00 35 01.8** | **+1.1** |
| **HCY** | **Herceg Novi** | **0.59** | **204** | ⇓*i*Pg | **Pg** | **00 34 52.2** | **-0.9** |
| **PDG** | **Podgorica** | **0.64** | **149** | *e*Sg | **Sb** | **00 35 04.1** | **-1.2** |
| **PDG** | **Podgorica** | **0.64** | **149** | ⇑*i*Pg | **Pg** | **00 34 53.2** | **-1.0** |
| PDG | | | | *e*Sg | **Sb** | **00 35 04.1** | **-1.2** |
| **TTG** | **Podgorica** | **0.64** | **149** | ⇑*i*Pg | **Pg** | **00 34 53.2** | **-1.0** |
| TTG | | | | *e*Sg | **Sb** | **00 35 04.3** | **-1.0** |
| **BUM** | **Brajici-Budva** | **0.69** | **175** | ⇓*i*Pg | **Pg** | **00 34 54.2** | **-0.8** |
| BUM | | | | *e*Sg | **Sg** | **00 35 05.5** | **+1.6** |
| **BUM** | **Brajici-Budva** | **0.69** | **175** | ⇓*i*Pg | **Pg** | **00 34 54.2** | **-0.8** |
| BUM | | | | *e*Sg | **Sg** | **00 35 05.5** | **+1.6** |
| **BEY** | **Berane** | **0.80** | **98** | ⇑*i*Pg | **Pg** | **00 34 56.8** | **-0.5** |
| BEY | | | | *e*Sg | **Sn** | **00 35 10.6** | **-2.3** |
| **IVA** | **Berane** | **0.80** | **98** | ⇑*i*Pg | **Pg** | **00 34 56.8** | **-0.5** |
| IVA | | | | *e*Sg | **Sn** | **00 35 10.6** | **-2.3** |
| **DRME** | **Dracevica, Mon** | **0.84** | **161** | ⇓*i*Pg | **Pg** | **00 34 57.5** | **-0.6** |
| DRME | | | | *e*Sg | **Sn** | **00 35 11.8** | **-2.0** |
| **DRME** | **Dracevica, Mon** | **0.84** | **161** | ⇓*i*Pg | **Pg** | **00 34 57.5** | **-0.6** |
| **SJES** | **Sjenica** | **0.89** | **72** | ⇑*i*Pg | **Pg** | **00 34 59.0** | **0.0** |
| SJES | | | | *e*Sg | **Sb** | **00 35 11.6** | **-1.1** |
| **PVY** | **Plav** | **0.93** | **114** | ⇓*i*Pg | **Pg** | **00 35 00.2** | **+0.5** |
| PVY | | | | *e*Sg | **Sn** | **00 35 15.2** | **-0.9** |
| **BBLS** | **Lazići** | **0.98** | **26** | *e*Pg | **Pb** | **00 35 01.5** | **-0.2** |
| BBLS | | | | *e*Sg | **Sb** | **00 35 15.0** | **-0.1** |
| **BBLS** | **Lazići** | **0.98** | **26** | *e*Pg | **Pb** | **00 35 01.5** | **-0.2** |
| BBLS | | | | *e*Sg | **Sb** | **00 35 15.0** | **-0.1** |
| **ULC** | **Ulcinj** | **1.07** | **162** | *e*Pg | **Pb** | **00 35 01.6** | **-1.6** |
| ULC | | | | *e*Sg | **Sn** | **00 35 19.0** | **-0.4** |
| **ULC** | **Ulcinj** | **1.07** | **162** | *e*Pg | **Pb** | **00 35 01.6** | **-1.6** |
| **BCI** | **Bajram Curri** | **1.11** | **123** | *i* PN | **Pb** | **00 35 03.2** | **-0.7** |
| BCI | | | | *i* SN | **Sn** | **00 35 22.0** | **+1.5** |
| **BCI** | **Bajram Curri** | **1.11** | **123** | *i* Pn | **Pb** | **00 35 03.2** | **-0.7** |
| **IVAS** | **Ivanjica** | **1.14** | **58** | *e*Pg | **Pb** | **00 35 03.1** | **-1.4** |
| IVAS | | | | *e*Sg | **Sb** | **00 35 18.1** | **-1.7** |
| **IVAS** | **Ivanjica** | **1.14** | **58** | *e*Pg | **Pb** | **00 35 03.1** | **-1.4** |
| IVAS | | | | *e*Sg | **Sb** | **00 35 18.1** | **-1.7** |
| **PUK** | **Puka** | **1.23** | **139** | *i* PN | **Pn** | **00 35 05.2** | **-1.1** |
| PUK | | | | *i* SN | **Sn** | **00 35 27.8** | **+4.2** |
| **PUK** | **Puka** | **1.23** | **139** | *i* Pn | **Pn** | **00 35 05.2** | **-1.1** |
| **DIVS** | **Divibare** | **1.41** | **37** | *e*Pg | **Pn** | **00 35 07.5** | **-1.2** |
| DIVS | | | | *e*Sg | **Sg** | **00 35 28.5** | **+1.5** |
| **DIVS** | **Divibare** | **1.41** | **37** | *e*Pg | **Pn** | **00 35 07.5** | **-1.2** |
| DIVS | | | | *e*Sg | **Sg** | **00 35 28.5** | **+1.5** |
| **TEKS** | **Tekeris** | **1.65** | **18** | *e*Pn | **Pn** | **00 35 12.1** | **+0.2** |
| **TEKS** | **Tekeris** | **1.65** | **18** | *e*Pn | **Pn** | **00 35 12.1** | **+0.2** |
| **GRUS** | **Gruza** | **1.65** | **56** | *e*Pg | **Pn** | **00 35 12.2** | **+0.2** |
| **GRUS** | **Gruza** | **1.65** | **56** | *e*Pg | **Pn** | **00 35 12.2** | **+0.2** |
| **TRUS** | **Trudelj** | **1.69** | **43** | *e*Pg | **Pn** | **00 35 11.7** | **-0.9** |
| **TRUS** | **Trudelj** | **1.69** | **43** | *e*Pg | **Pn** | **00 35 11.7** | **-0.9** |
| **SELS** | **Selova** | **1.71** | **81** | *e*Pg | **Pn** | **00 35 12.1** | **-0.6** |
| **SELS** | **Selova** | **1.71** | **81** | *e*Pg | **Pn** | **00 35 12.1** | **-0.6** |
| **PHP** | **Peshkopia** | **1.77** | **137** | *i* PN | **Pg** | **00 35 16.9** | **+1.0** |
| PHP | | | | *i* SG | Sg | 00 35 45.6 | +6.7 |
| **PHP** | **Peshkopia** | **1.77** | **137** | *i* Pn | **Pg** | **00 35 16.9** | **+1.0** |
| **TIR** | **Tirane** | **1.81** | **154** | *i* PN | **Pb** | **00 35 16.5** | **+0.7** |
| TIR | | | | *i* SN | **Sg** | **00 35 45.1** | **+5.0** |
| **TIR** | **Tirane** | **1.81** | **154** | *e*Pg | **Pb** | **00 35 16.5** | **+0.7** |
| **TIR** | **Tirane** | **1.81** | **154** | *i* Pn | **Pb** | **00 35 16.5** | **+0.7** |
| **BARS** | **Barje** | **2.21** | **93** | *e*Pn | **Pn** | **00 35 19.7** | **0.0** |
| BARS | | | | *e*Sg | **Sb** | **00 35 50.4** | **-0.1** |
| **BARS** | **Barje** | **2.21** | **93** | *e*Pn | **Pn** | **00 35 19.7** | **0.0** |
| BARS | | | | *e*Sg | **Sb** | **00 35 50.4** | **-0.1** |
| **FGSL** | **Fruska Gora** | **2.29** | **18** | *e*Pn | **Pn** | **00 35 19.0** | **-1.7** |
| **FRGS** | **Fruska Gora** | **2.29** | **18** | *e*Pn | **Pn** | **00 35 19.0** | **-1.7** |
| **OHR** | **Ohrid** | **2.38** | **141** | *e*Sn | **Sg** | **00 35 57.6** | **-1.0** |
| OHR | | | | *e*Lg | Lg | 00 35 59.6 | |
| | comp=N,32nm,1.0s | | | | | | |
| OHR | | | | *e*Lg | Lg | 00 36 09.5 | |
| | comp=E,39nm,0.7s | | | | | | |
| **ZAPS** | **Zavoj** | **2.81** | **83** | *e*Pn | **Pn** | **00 35 28.7** | **+0.8** |
| **BOJS** | **Bojanci** | **3.59** | **316** | *i* Pn | **Pn** | **00 35 39.2** | **+0.6** |
| BOJS | | | | *i* Sn | **Sn** | **00 36 23.9** | **+2.3** |
| **BOJS** | **Bojanci** | **3.59** | **316** | Pn | **Pn** | **00 35 39.2** | **+0.6** |
| BOJS | | | | *i* Sn | **Sn** | **00 36 23.9** | **+2.3** |
| **CRES** | **Cresnjev** | **3.72** | **321** | *i* Pn | **Pn** | **00 35 39.9** | **-0.5** |
| CRES | | | | *i* Sn | **Sn** | **00 36 26.1** | **+1.2** |
| **CRES** | **Cresnjev** | **3.72** | **321** | *i* Pn | **Pn** | **00 35 39.9** | **-0.5** |
| CRES | | | | *i* Sn | **Sn** | **00 36 26.1** | **+1.2** |
| **VISS** | **Visnje** | **4.01** | **316** | *i* Pn | **Pn** | **00 35 46.3** | **+2.0** |
| VISS | | | | *i* Sn | **Sn** | **00 36 36.3** | **+4.5** |
| **VISS** | **Visnje** | **4.01** | **316** | *i* Pn | **Pn** | **00 35 46.3** | **+2.0** |
| **PERS** | **Pernice** | **4.50** | **326** | *i* Pn | **Pn** | **00 35 50.7** | **-0.4** |
| PERS | | | | *e*Sn | **Sn** | **00 36 44.2** | **+0.1** |
| **PERS** | **Pernice** | **4.50** | **326** | *i* Pn | **Pn** | **00 35 50.7** | **-0.4** |
| PERS | | | | *e*Sn | **Sn** | **00 36 44.2** | **+0.1** |

*IDC **03** 00:42:42.1±1.9, 49°.44N×91°.28E, h0km, mb1 3.0/3, mb1mx2.8/44, mbtmp3.0/3, ML2.7/3, Error ellipse: s-maj=26.8km s-min=17.8km az=7.0*
*NNC **03** 00:42:49.4±10.0, 48°.40N×91°.01E, h0km±44km, mb3.6, mpv3.2, Error ellipse: s-maj=69.7km s-min=28.3km az=74.0*
**ISC 03 00:42:45.3**±1.3**, 49°.3N**±0°.1×**91°.32E**±0°.09**, h10**km**, n8, σ2s.18**/6**, 1C-4D, Mongolia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **6.14** | **321** | Pg | **Pb** | **00 44 34.0** | **+1.8** |
| | baz=137,slow=15,SNR=2.5 | | | | | | |
| ZALV | | | | Lg | Lg | 00 45 50.0 | |
| | 0.6nm,0.3s,baz=135,slow=26,SNR=3.6 | | | | | | |
| **MK31** | **Makanchi Array** | **6.56** | **251** | Pn | **Pn** | **00 44 20.9** | **-0.9** |
| | 0.7nm,0.7s,baz=70,slow=10,SNR=6.5 | | | | | | |
| MK31 | | | | ⇓Pg | **Pb** | **00 44 41.1** | **+1.6** |
| | 2.4nm,0.5s,baz=74,slow=16,SNR=17 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 00 46 04.9 | |
| | 4.1nm,0.6s,baz=72,slow=24,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **6.56** | **251** | Pn | **Pn** | **00 44 20.9** | **-0.9** |
| | 0.1nm,0.3s,baz=61,slow=16,SNR=5.9 | | | | | | |
| MKAR | | | | Pg | Pb | 00 44 43.0 | +3.6 |
| | 0.5nm,0.3s,baz=73,slow=17,SNR=7.1 | | | | | | |
| MKAR | | | | Lg | Lg | 00 46 10.4 | |
| | 1.1nm,0.3s,baz=70,slow=28,SNR=5.8 | | | | | | |
| **KURK** | **Kurchatov** | **8.29** | **284** | ⇓Lg | Lg | 00 47 12.5 | |
| | 35nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.34** | **284** | ⇓Lg | Lg | 00 47 15.1 | |
| | 25nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.34** | **284** | Pn | **Pn** | **00 44 43.6** | **-2.6** |
| | 0.0nm,0.3s,baz=96,slow=15,SNR=3.7 | | | | | | |
| KURBB | | | | Lg | Lg | 00 47 08.0 | |
| | 0.1nm,0.3s,baz=91,slow=32,SNR=4.6 | | | | | | |
| **SONM** | **Songino Array** | **10.11** | **93** | Pn | **Pn** | **00 45 10.5** | **0.0** |
| | 0.1nm,0.3s,baz=293,slow=14,SNR=2.7 | | | | | | |
| SONM | | | | Pg | | 00 45 42.8 | |
| | 0.1nm,0.3s,baz=284,slow=19,SNR=2.6 | | | | | | |
| SONM | | | | Lg | Lg | 00 48 00.8 | |
| | 0.3nm,0.3s,baz=270,slow=27,SNR=6.1 | | | | | | |
| **PDGK** | **Podgornoye** | **10.14** | **238** | ⇓Lg | Lg | 00 47 53.2 | |
| | 8.8nm,1.1s | | | | | | |

*IDC **03** 01:06:27.5±4.4, 5°.04S×102°.13E, h0km, mb3.6/5, mb1 3.7/5, mb1mx3.5/28, mbtmp3.6/5, MS3.2/1, Ms1 3.2/1, ms1mx2.4/36, Error ellipse: s-maj=191.0km s-min=22.9km az=54.0*
*ISCJB **03** 01:06:33.1±1.0, 4°.91S±0°.07×102°.36E±0°.07, h44km, mb3.7/5, MS3.2/1, Error ellipse: s-maj=11.5km s-min=6.9km az=135.8*
*DJA **03** 01:06:36.6±0.7, 5°S±4°×10°3E±°, h28km±6km, M3.6/9, MLv3.6/9*
**ISC 03 01:06:35.2**±1.2**, 4°.82S**±0°.08×**102°.5E**±0°.1**, h44**km**, n17, σ0s.86**/17**, mb3.8**/5**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **0.68** | **47** | P | **Pn** | **01 06 48.6** | **+0.1** |
| **KSI** | **Kapahiang** | **1.17** | **7** | P | **Pn** | **01 06 56.0** | **+0.8** |
| KSI | | | | S | **Sn** | **01 07 10.9** | **+0.8** |
| **LHSI** | **Lahat** | **1.46** | **47** | P | **Pn** | **01 06 59.8** | **+0.8** |
| **LWLI** | **Liwa** | **1.61** | **97** | P | **Pn** | **01 07 02.3** | **+1.0** |
| LWLI | | | | S | **Sn** | **01 07 20.7** | **-0.2** |
| **MDSI** | **Maura Dua** | **1.75** | **79** | P | **Pn** | **01 07 04.1** | **+1.0** |
| MDSI | | | | S | **Sn** | **01 07 23.6** | **-0.6** |
| **KASI** | **Kota Agung** | **2.15** | **109** | P | **Pn** | **01 07 10.4** | **+1.8** |
| KASI | | | | S | **Sn** | **01 07 33.2** | **-0.9** |
| **CGJI** | **Cibinong** | **3.68** | **119** | P | **Pn** | **01 07 30.3** | **+0.7** |
| **H01W3** | **Cape Leeuwin H** | **31.81** | **162** | T | T | 01 46 42.0 | |
| | baz=340 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **31.82** | **162** | T | T | 01 46 41.4 | |
| | baz=340 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **31.82** | **162** | T | T | 01 46 42.6 | |
| | baz=340 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.48** | **119** | P | **P** | **01 13 19.3** | **+0.1** |
| | 0.2nm,0.4s,baz=297,slow=9.5,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **35.63** | **125** | P | **P** | **01 13 28.3** | **-0.8** |
| | 0.1nm,0.3s,baz=296,slow=5.6,SNR=3.3 | | | | | | |
| **SONM** | **Songino Array** | **52.55** | **3** | P | **P** | **01 15 44.4** | **+0.1** |
| | 0.7nm,0.6s,baz=196,slow=7.4,SNR=4.9 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.01** | **36** | LR | LR | 01 38 02.2 | |
| | comp=Z,26nm,21.9s,baz=90,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.41** | **343** | P | **P** | **01 15 57.5** | **-0.4** |
| | 0.5nm,0.5s,baz=158,slow=8.9,SNR=4.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.40** | **348** | P | **P** | **01 16 39.1** | **-0.8** |
| | 1.4nm,0.4s,baz=166,slow=6.7,SNR=4.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.28** | **42** | PKPbc | **PKPbc** | **01 26 08.6** | **-0.2** |
| | 0.2nm,0.3s,baz=208,slow=0.5,SNR=5.5 | | | | | | |

*ISCJB **03** 01:27:15.0±1.0, 21°.5S±0°.1×179°.4W±0°.1, h604km, mb3.8/7, Error ellipse: s-maj=17.5km s-min=14.1km az=163.0*
*IDC **03** 01:27:17.6±2.0, 21°.32S×179°.45W, h611km±23km, mb3.3/7, mb1 3.5/8, mb1mx3.1/33, mbtmp4.3/8, Error ellipse: s-maj=19.2km s-min=15.1km az=8.0*
**ISC 03 01:27:16.0**±0.9**, 21°.4S**±0°.1×**179°.3W**±0°.1**, h604**km**, n12, σ1s.58**/16**, mb3.8**/7**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **17.07** | **190** | P | **P** | **01 30 42.9** | **+0.2** |
| | 1.0nm,0.3s,baz=282,slow=5.2,SNR=5.9 | | | | | | |
| URZ | | | | S | **S** | **01 33 26.9** | **-4.0** |
| | 0.5nm,0.3s,baz=190,slow=22,SNR=1.7 | | | | | | |
| **CTA** | **Charters Tower** | **32.17** | **266** | P | **P** | **01 32 57.5** | **+1.3** |
| | 3.4nm,0.3s,baz=96,slow=11,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **43.10** | **258** | P | **P** | **01 34 25.5** | **+0.8** |
| | 2.7nm,0.6s,baz=91,slow=7.8,SNR=38 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 36 00.6** | **0.0** |
| | 0.2nm,0.5s,baz=97,slow=5.8,SNR=2.6 | | | | | | |
| ASAR | | | | ScP | **ScP** | **01 38 55.7** | **+0.6** |
| | 0.4nm,0.6s,baz=111,slow=3.8,SNR=5.8 | | | | | | |
| ASAR | | | | S | **S** | **01 40 07.6** | **-1.0** |
| | 0.5nm,0.7s,baz=96,slow=16,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.25** | **263** | P | **P** | **01 34 26.2** | **+0.3** |
| | 1.1nm,0.3s,baz=96,slow=7.8,SNR=83 | | | | | | |
| WRA | | | | S | **S** | **01 40 09.6** | **-1.0** |
| | 0.2nm,0.6s,baz=99,slow=14,SNR=2.6 | | | | | | |
| **SIJI** | **Sorong** | **52.28** | **286** | P | **P** | **01 35 33.6** | **+0.5** |
| | 15nm,0.7s,baz=91,slow=15,SNR=6.4 | | | | | | |
| **VNDA** | **Vanda** | **56.89** | **185** | P | **P** | **01 36 06.6** | **+2.4** |
| | 0.8nm,0.5s,baz=8.1,slow=6.4,SNR=11 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.22** | **325** | P | **P** | **01 37 28.4** | **-1.1** |
| | 1.4nm,0.6s,baz=152,slow=5.5,SNR=7.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **88.60** | **58** | P | **P** | **01 39 06.0** | **-0.2** |
| | 0.5nm,0.8s,baz=221,slow=5.0,SNR=5.8 | | | | | | |
| **FINES** | **FINESS Array B** | **136.28** | **343** | SKPbc | **SKPbc** | **01 48 03.7** | **-2.0** |
| | 2.3nm,1.1s,baz=45,slow=3.0,SNR=3.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.19** | **330** | PKhKP | PKPpre | 01 45 38.6 | |
| | 1.0nm,0.4s,baz=41,slow=4.2,SNR=9.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.51** | **310** | PKPbc | **PKPab** | **01 45 52.9** | **-0.9** |
| | 0.3nm,0.5s,baz=18,slow=1.9,SNR=3.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **171.72** | **187** | PKPab | **PKPab** | **01 47 43.1** | **-0.1** |
| | 0.1nm,0.4s,baz=173,slow=2.5,SNR=4.9 | | | | | | |

*DDA **03** 01:31:06.4, 37°.71N×29°.35E, h7km, Md2.8*
*CSEM **03** 01:31:07.3±0.2, 37°.69N×29°.29E, h8km, MD2.8, Error ellipse: s-maj=6.0km s-min=5.3km az=73.0*
*ISK **03** 01:31:07.7, 37°.68N×29°.22E, h16km, MD2.8*
**ISC 03 01:31:07.2**±1.1**, 37°.71N**±0°.02×**29°.33E**±0°.02**, h1**km±11km**, n28, σ0s.71**/40**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DNZL** | **Cakiroluk** | **0.22** | **266** | *i* P | **Pg** | **01 31 10.9** | **-0.6** |
| DNZL | | | | *i* S | **Sg** | **01 31 15.4** | **+1.0** |
| **DNZL** | **Cakiroluk** | **0.22** | **266** | P | **Pg** | **01 31 10.9** | **-0.6** |
| DNZL | | | | S | **Sg** | **01 31 15.4** | **+1.0** |
| **DENT** | **Denizli** | **0.24** | **282** | *e*PG | **Pg** | **01 31 11.7** | **-0.1** |
| DENT | | | | *e*SG | **Sg** | **01 31 15.7** | **+0.8** |
| **DENT** | **Denizli** | **0.24** | **282** | *e*Pg | **Pg** | **01 31 11.7** | **-0.1** |
| DENT | | | | *e*Sg | **Sg** | **01 31 15.7** | **+0.8** |
| **GOLH** | **Golhisar** | **0.50** | **158** | *i* P | **Pg** | **01 31 15.9** | **-1.0** |
| GOLH | | | | *i* S | **Sg** | **01 31 24.5** | **+1.1** |
| **GOLH** | **Golhisar** | **0.50** | **158** | P | **Pg** | **01 31 15.9** | **-1.0** |
| GOLH | | | | S | **Sg** | **01 31 24.5** | **+1.1** |
| **KHL** | **Karahalli** | **0.64** | **14** | *e*PG | **Pb** | **01 31 21.7** | **+0.5** |
| **KHL** | **Karahalli** | **0.64** | **14** | *e*Pg | **Pb** | **01 31 21.7** | **+0.5** |
| **KHAL** | **Karahalli** | **0.68** | **11** | *i* P | **Pg** | **01 31 18.8** | **-1.3** |
| KHAL | | | | *i* S | **Sg** | **01 31 29.9** | **+1.0** |
| **KHAL** | **Karahalli** | **0.68** | **11** | P | **Pg** | **01 31 18.8** | **-1.3** |
| KHAL | | | | S | **Sg** | **01 31 29.9** | **+1.0** |
| **KULA** | **Kula-Manisa** | **0.96** | **327** | *e*PG | **Pb** | **01 31 26.6** | **-0.1** |
| **KULA** | **Kula-Manisa** | **0.96** | **327** | *e*Pg | **Pb** | **01 31 26.7** | **-0.1** |
| **YER** | **Yerkesik** | **1.01** | **236** | *e*PG | **Pg** | **01 31 25.8** | **-0.7** |
| **YER** | **Yerkesik** | **1.01** | **236** | *e*Pg | **Pg** | **01 31 25.8** | **-0.7** |
| **BCK** | **Bucak** | **1.03** | **103** | *e*PN | **Pn** | **01 31 29.0** | **+0.1** |
| **BCK** | **Bucak** | **1.03** | **103** | *e*Pn | **Pn** | **01 31 29.0** | **+0.1** |
| **FETY** | **Fethiye** | **1.09** | **190** | *e*PG | **Pb** | **01 31 28.5** | **-0.3** |
| **FETY** | **Fethiye** | **1.09** | **190** | *e*Pg | **Pb** | **01 31 28.5** | **-0.3** |
| **AYDN** | **Tasoluk** | **1.15** | **268** | *i* P | **Pb** | **01 31 29.8** | **-0.1** |
| AYDN | | | | *i* S | **Sn** | **01 31 47.2** | **+0.3** |
| **AYDN** | **Tasoluk** | **1.15** | **268** | P | **Pb** | **01 31 29.8** | **-0.1** |
| AYDN | | | | S | **Sn** | **01 31 47.2** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.16** | **282** | *e*PN | **Pg** | **01 31 28.8** | **-0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.16** | **282** | *e*Pn | **Pg** | **01 31 28.8** | **-0.7** |
| **SHUT** | **Suhut-Afyon** | **1.28** | **48** | *e*PN | **Pn** | **01 31 32.8** | **+0.4** |
| **SHUT** | **Suhut-Afyon** | **1.28** | **48** | *e*Pn | **Pn** | **01 31 32.8** | **+0.4** |
| **SUTC** | **Sutluce-Ispart** | **1.35** | **99** | *e*PN | **Pb** | **01 31 33.6** | **+0.2** |
| **SUTC** | **Sutluce-Ispart** | **1.35** | **99** | *e*Pn | **Pb** | **01 31 33.6** | **+0.2** |
| **DEMI** | **Demirci** | **1.42** | **340** | *i* P | **Pn** | **01 31 33.7** | **-0.5** |
| DEMI | | | | *i* S | **Sb** | **01 31 52.8** | **-0.3** |
| **DEMI** | **Demirci** | **1.42** | **340** | P | **Pn** | **01 31 33.7** | **-0.5** |
| DEMI | | | | S | **Sb** | **01 31 52.8** | **-0.3** |

*TIR **03** 01:32:49.0, 43°.32N×18°.95E, h5km, ML3.1*
*ISCJB **03** 01:32:51.8±0.4, 43°.03N±0°.02×18°.71E±0°.03, h10km±5km, Error ellipse: s-maj=3.9km s-min=3.0km az=30.7*
*CSEM **03** 01:32:52.4±0.2, 43°.01N×18°.73E, h5km, ML2.0, Error ellipse: s-maj=3.8km s-min=2.7km az=121.0*
*PDG **03** 01:32:52.4±0.2, 43°.02N×18°.73E, h3km±1km, MD2.1/1, ML2.0/11, Error ellipse: s-maj=0.3km s-min=0.5km az=0.0*
*BEO **03** 01:32:53.1±0.3, 42°.97N×18°.74E, h11km±3km, ML1.9/6*
**ISC 03 01:32:52.7**±1.1**, 43°.01N**±0°.02×**18°.73E**±0°.02**, h3**km±9km**, n52, σ1s.08**/88**, 8C-12D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BRY** | **Bratogost** | **0.18** | **231** | ⇓*i*Pg | **Pg** | **01 32 56.4** | **+0.2** |
| BRY | | | | *e*Sg | **Sg** | **01 32 59.2** | **+0.7** |
| **BRY** | **Bratogost** | **0.18** | **231** | ⇓*i*Pg | **Pg** | **01 32 56.4** | **+0.2** |
| BRY | | | | *e*Sg | **Sg** | **01 32 59.2** | **+0.7** |
| **UPM** | **Unac-Piva** | **0.23** | **34** | ⇓*i*Pg | **Pg** | **01 32 57.0** | **-0.1** |
| UPM | | | | *e*Sg | **Sg** | **01 33 00.7** | **+0.6** |
| **UPM** | **Unac-Piva** | **0.23** | **34** | ⇓*i*Pg | **Pg** | **01 32 57.0** | **-0.1** |
| UPM | | | | *e*Sg | **Sg** | **01 33 00.7** | **+0.6** |
| **NKY** | **Niksic** | **0.28** | **136** | ⇑*i*Pg | **Pg** | **01 32 57.8** | **-0.2** |
| NKY | | | | *e*Sg | **Sg** | **01 33 02.4** | **+0.7** |
| **NKY** | **Niksic** | **0.28** | **136** | ⇑*i*Pg | **Pg** | **01 32 57.8** | **-0.2** |
| NKY | | | | *e*Sg | **Sg** | **01 33 02.4** | **+0.7** |
| **NKME** | **Niksic** | **0.30** | **146** | ⇓*i*Pg | **Pg** | **01 32 58.1** | **-0.3** |
| NKME | | | | *e*Sg | **Sg** | **01 33 03.0** | **+0.8** |
| **NKME** | **Niksic** | **0.30** | **146** | ⇓*i*Pg | **Pg** | **01 32 58.1** | **-0.3** |
| NKME | | | | *e*Sg | **Sg** | **01 33 03.0** | **+0.8** |
| **TREB** | **Trebinje** | **0.41** | **223** | *e*Pg | **Pg** | **01 33 00.4** | **-0.1** |
| **TREB** | **Trebinje** | **0.41** | **223** | *e*Pg | **Pg** | **01 33 00.4** | **-0.1** |
| **PLE** | **Pljevlja** | **0.58** | **57** | ⇑*i*Pg | **Pg** | **01 33 03.4** | **-0.3** |
| PLE | | | | *e*Sg | **Sg** | **01 33 12.7** | **+1.5** |
| **PLE** | **Pljevlja** | **0.58** | **57** | ⇑*i*Pg | **Pg** | **01 33 03.4** | **-0.3** |
| PLE | | | | *e*Sg | **Sg** | **01 33 12.7** | **+1.5** |
| **HCY** | **Herceg Novi** | **0.59** | **197** | ⇑*i*Pg | **Pg** | **01 33 03.5** | **-0.5** |
| HCY | | | | *e*Sg | **Sg** | **01 33 12.9** | **+1.2** |
| **HCY** | **Herceg Novi** | **0.59** | **197** | ⇑*i*Pg | **Pg** | **01 33 03.5** | **-0.5** |
| HCY | | | | *e*Sg | **Sg** | **01 33 12.9** | **+1.2** |
| **PDG** | **Podgorica** | **0.70** | **146** | *e*Pg | **Pg** | **01 33 04.9** | **-1.2** |
| PDG | | | | *e*Sg | **Sg** | **01 33 15.6** | **+0.4** |
| **PDG** | **Podgorica** | **0.70** | **146** | ⇓*i*Pg | **Pg** | **01 33 04.9** | **-1.2** |
| PDG | | | | *e*Sg | **Sg** | **01 33 15.6** | **+0.4** |
| **TTG** | **Podgorica** | **0.70** | **146** | ⇓*i*Pg | **Pg** | **01 33 04.9** | **-1.2** |
| TTG | | | | *e*Sg | **Sb** | **01 33 16.4** | **-1.2** |
| **BUM** | **Brajici-Budva** | **0.72** | **170** | ⇓*i*Pg | **Pg** | **01 33 05.6** | **-0.9** |
| BUM | | | | *e*Sg | **Sb** | **01 33 17.2** | **-1.1** |
| **BUM** | **Brajici-Budva** | **0.72** | **170** | ⇓*i*Pg | **Pg** | **01 33 05.6** | **-0.9** |
| BUM | | | | *e*Sg | **Sb** | **01 33 17.2** | **-1.1** |
| **STON** | **Ston** | **0.77** | **260** | *e*Pg | **Pg** | **01 33 06.8** | **-0.6** |
| STON | | | | *e*Sg | **Sg** | **01 33 17.2** | **-0.1** |
| **STON** | **Ston** | **0.77** | **260** | *e*Pg | **Pg** | **01 33 06.8** | **-0.6** |
| STON | | | | *e*Sg | **Sg** | **01 33 17.2** | **-0.1** |
| **BEY** | **Berane** | **0.87** | **99** | *e*Pg | **Pg** | **01 33 08.4** | **-0.9** |
| BEY | | | | *e*Sg | **Sb** | **01 33 22.0** | **-0.5** |
| **IVA** | **Berane** | **0.87** | **99** | *e*Pg | **Pg** | **01 33 08.4** | **-0.9** |
| IVA | | | | *e*Sg | **Sb** | **01 33 22.0** | **-0.5** |
| **DRME** | **Dracevica, Mon** | **0.89** | **158** | ⇑*i*Pg | **Pg** | **01 33 08.9** | **-0.9** |
| DRME | | | | *e*Sg | **Sb** | **01 33 22.8** | **-0.3** |
| **DRME** | **Dracevica, Mon** | **0.89** | **158** | ⇑*i*Pg | **Pg** | **01 33 08.9** | **-0.9** |
| DRME | | | | *e*Sg | **Sb** | **01 33 22.8** | **-0.3** |
| **SJES** | **Sjenica** | **0.94** | **74** | *e*Pg | **Pg** | **01 33 10.2** | **-0.6** |
| SJES | | | | *e*Sg | **Sg** | **01 33 23.0** | **0.0** |
| **BBLS** | **Lazići** | **0.98** | **30** | *e*Pg | **Pn** | **01 33 13.1** | **-0.4** |
| BBLS | | | | *e*Sg | **Sb** | **01 33 25.8** | **-0.1** |
| **BBLS** | **Lazići** | **0.98** | **30** | *e*Pg | **Pn** | **01 33 13.1** | **-0.4** |
| BBLS | | | | *e*Sg | **Sb** | **01 33 25.8** | **-0.1** |
| **PVY** | **Plav** | **1.00** | **114** | ⇓*i*Pg | **Pg** | **01 33 11.2** | **-0.6** |
| PVY | | | | *e*Sg | **Sb** | **01 33 26.9** | **+0.6** |
| **PVY** | **Plav** | **1.00** | **114** | ⇓*i*Pg | **Pg** | **01 33 11.2** | **-0.6** |
| PVY | | | | *e*Sg | **Sb** | **01 33 26.9** | **+0.6** |
| **ULC** | **Ulcinj** | **1.12** | **160** | *e*Pg | **Pg** | **01 33 12.8** | **-1.3** |
| ULC | | | | *e*Sg | **Sn** | **01 33 30.3** | **-0.9** |
| **ULC** | **Ulcinj** | **1.12** | **160** | *e*Pg | **Pg** | **01 33 12.8** | **-1.3** |
| ULC | | | | *e*Sg | **Sn** | **01 33 30.3** | **-0.9** |
| **BCI** | **Bajram Curri** | **1.18** | **123** | *i* PG | **Pg** | **01 33 14.6** | **-0.7** |
| BCI | | | | *i* SG | **Sn** | **01 33 33.2** | **+0.5** |
| **BCI** | **Bajram Curri** | **1.18** | **123** | *i* Pg | **Pg** | **01 33 14.6** | **-0.7** |
| BCI | | | | *i* Sg | **Sn** | **01 33 33.2** | **+0.5** |
| **IVAS** | **Ivanjica** | **1.18** | **61** | *e*Pg | **Pg** | **01 33 14.2** | **-1.1** |
| IVAS | | | | *e*Sg | **Sg** | **01 33 29.8** | **-0.8** |
| **IVAS** | **Ivanjica** | **1.18** | **61** | *e*Pg | **Pg** | **01 33 14.2** | **-1.1** |
| IVAS | | | | *e*Sg | **Sg** | **01 33 29.8** | **-0.8** |
| **PUK** | **Puka** | **1.30** | **138** | *i* PN | **Pn** | **01 33 16.9** | **-0.9** |
| PUK | | | | *i* SN | **Sn** | **01 33 40.2** | **+4.5** |
| **PUK** | **Puka** | **1.30** | **138** | *i* Pn | **Pn** | **01 33 16.9** | **-0.9** |
| PUK | | | | *i* Sn | **Sn** | **01 33 40.2** | **+4.5** |
| **DIVS** | **Divibare** | **1.42** | **40** | *e*Pg | **Pb** | **01 33 19.6** | **-0.3** |
| **DIVS** | **Divibare** | **1.42** | **40** | *e*Pg | **Pb** | **01 33 19.6** | **-0.3** |
| **TEKS** | **Tekeris** | **1.64** | **20** | *e*Pg | **Pg** | **01 33 24.2** | **+0.1** |
| **TEKS** | **Tekeris** | **1.64** | **20** | *e*Pg | **Pg** | **01 33 24.2** | **+0.1** |
| **TRUS** | **Trudelj** | **1.72** | **45** | *e*Pn | **Pn** | **01 33 21.9** | **-1.6** |
| **TRUS** | **Trudelj** | **1.72** | **45** | *e*Pn | **Pn** | **01 33 21.9** | **-1.6** |
| **SELS** | **Selova** | **1.76** | **83** | *e*Pn | **Pn** | **01 33 22.4** | **-1.8** |
| **SELS** | **Selova** | **1.76** | **83** | *e*Pn | **Pn** | **01 33 22.4** | **-1.8** |
| **PHP** | **Peshkopia** | **1.84** | **136** | *i* PN | **Pg** | **01 33 28.9** | **+1.0** |
| PHP | | | | *i* SN | Sn | 01 33 40.2 | -8.8 |
| **PHP** | **Peshkopia** | **1.84** | **136** | *i* Pn | **Pg** | **01 33 28.9** | **+1.0** |
| **BARS** | **Barje** | **2.28** | **94** | *e*Pn | **Pn** | **01 33 31.1** | **-0.1** |
| **BARS** | **Barje** | **2.28** | **94** | *e*Pn | **Pn** | **01 33 31.1** | **-0.1** |
| **ZAPS** | **Zavoj** | **2.87** | **83** | *e*Pn | **Pn** | **01 33 40.8** | **+1.4** |
| **ZAPS** | **Zavoj** | **2.87** | **83** | *e*Pn | **Pn** | **01 33 40.8** | **+1.4** |

*IDC **03** 02:17:53.9±1.2, 16°.19N×148°.96E, h0km, mb3.8/6, mb1 4.0/7, mb1mx3.6/37, mbtmp3.8/7, ML3.9/1, Error ellipse: s-maj=44.4km s-min=19.2km az=100.0*
*NEIC **03** 02:17:56.6±10.0, 16°.16N×148°.79E, h16km±60km, mb4.1/3, Error ellipse: s-maj=38.7km s-min=11.4km az=94.0*
*ISCJB **03** 02:17:57.8±0.9, 16°.14N±0°.09×148°.7E±0°.1, h33km, mb3.9/9, Error ellipse: s-maj=21.1km s-min=10.0km az=28.3*

**ISC 03 02:17:59.4**±1.2**, 16°.1N**±0°.1×**148°.7E**±0°.2**, h35**km**, n12, σ1s.09**/14**, mb4.0**/9**, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **4.49** | **236** | Pn | **Pn** | **02 19 04.8** | **-0.1** |
| | 4.8nm,0.3s,baz=357,slow=19,SNR=1.9 | | | | | | |
| GUMO | | | | Sn | **Sn** | **02 19 53.9** | **-2.0** |
| | 17nm,0.3s,baz=195,slow=23,SNR=4.0 | | | | | | |
| **GUMO** | **Guam** | **4.49** | **236** | *e*Pn | **Pn** | **02 19 04.1** | **-0.8** |
| GUMO | | | | Pn | Pn | 02 19 04.8 | -0.1 |
| GUMO | | | | *e*Sn | **Sn** | **02 19 57.0** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **22.36** | **337** | P | **P** | **02 22 54.5** | **+0.1** |
| | 1.3nm,0.5s,baz=166,slow=10,SNR=6.8 | | | | | | |
| **MAJO** | **Matsushiro** | **22.36** | **337** | *e*P | **P** | **02 22 55.4** | **+1.0** |
| | 3.3nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **38.52** | **202** | *e*P | **P** | **02 25 19.4** | **+0.8** |
| | 2.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **38.53** | **202** | P | **P** | **02 25 19.9** | **+1.1** |
| | 2.2nm,0.6s,baz=25,slow=9.4,SNR=34 | | | | | | |
| **ASAR** | **Alice Springs** | **42.12** | **200** | P | **P** | **02 25 49.2** | **+0.8** |
| | 0.5nm,0.6s,baz=26,slow=7.7,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **46.92** | **322** | P | **P** | **02 26 27.6** | **+1.0** |
| | 0.5nm,0.5s,baz=134,slow=7.1,SNR=3.3 | | | | | | |
| **ILAR** | **Eielson Array** | **64.69** | **25** | P | **P** | **02 28 32.4** | **-1.2** |
| | 0.3nm,0.6s,baz=244,slow=5.4,SNR=3.1 | | | | | | |
| **AAK** | **Ala-Archa** | **67.70** | **310** | *e*P | **P** | **02 28 53.7** | **+0.2** |
| | 1.1nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **90.38** | **336** | P | **P** | **02 30 55.8** | **-1.1** |
| | 1.7nm,1.0s,baz=139,slow=3.0,SNR=3.9 | | | | | | |
| **DBIC** | **Dimbokro** | **145.37** | **309** | PKPbc | **PKPab** | **02 37 34.9** | **+0.3** |
| | 2.3nm,0.6s,baz=26,slow=4.9,SNR=6.6 | | | | | | |

**IDC 03 02:21:48.6**±2.4**, 60°.55S**×**46°.50W, h0**km**, mb3.5**/1**, mb1 3.5**/1**, mb1mx3.3**/17**, mbtmp3.5**/1**, Error ellipse: s-maj=129.1km s-min=78.2km az=175.0, Scotia Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10S2** | **ASCENSION HYDR** | **56.68** | **39** | T | T | 03 33 08.1 | |
| | baz=200,slow=75,SNR=11 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **56.68** | **39** | T | T | 03 33 08.1 | |
| | baz=200,slow=75,SNR=11 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **56.70** | **39** | T | T | 03 33 10.2 | |
| | baz=200,slow=75,SNR=13 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **57.78** | **38** | T | T | 03 34 31.1 | |
| | baz=199,slow=75,SNR=14 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **57.79** | **38** | T | T | 03 34 31.2 | |
| | baz=199,slow=75,SNR=11 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **57.80** | **38** | T | T | 03 34 32.4 | |
| | baz=199,slow=75,SNR=16 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.85** | **47** | P | P | 02 34 14.6 | 0.0 |
| | 0.4nm,0.8s,baz=202,slow=6.8,SNR=3.5 | | | | | | |
| **ILAR** | **Eielson Array** | **145.45** | **312** | PKPbc | PKPdf | 02 41 26.0 | -0.8 |
| | 0.5nm,0.8s,baz=144,slow=3.1,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **147.60** | **92** | PKPbc | PKPbc | 02 41 33.0 | -0.7 |
| | 0.2nm,0.3s,baz=174,slow=1.3,SNR=3.4 | | | | | | |

**IDC 03 02:24:39.8**±5.4**, 5°.43S**×**133°.19E, h0**km**, mb3.8**/1**, mb1 3.7**/3**, mb1mx3.3**/29**, mbtmp3.6**/3**, ML3.1**/2**, Error ellipse: s-maj=319.1km s-min=29.1km az=77.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.47** | **176** | Pn | Pn | 02 28 05.6 | -0.4 |
| | 0.1nm,0.3s,baz=354,slow=13,SNR=3.8 | | | | | | |
| WRA | | | | Sn | Sn | 02 30 45.7 | -1.7 |
| | 0.1nm,0.3s,baz=11,slow=22,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **18.14** | **178** | P | P | 02 28 54.1 | +0.3 |
| | 0.1nm,0.3s,baz=2.3,slow=11,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.71** | **325** | P | P | 02 35 45.3 | -0.1 |
| | 0.5nm,0.4s,baz=127,slow=8.1,SNR=5.2 | | | | | | |

*ISCJB **03** 02:32:50.3±0.4, 47°.28S±0°.07×100°.1E±0°.1, h11km, mb4.5/15, MS4.2/7, Error ellipse: s-maj=13.0km s-min=9.4km az=12.0*

*IDC **03** 02:32:50.8±0.8, 47°.32S×100°.24E, h0km, mb4.2/8, mb1 4.3/8, mb1mx4.1/24, mbtmp4.2/8, MS4.2/7, Ms1 4.2/7, ms1mx4.2/11, Error ellipse: s-maj=29.7km s-min=16.8km az=119.0*

*NEIC **03** 02:32:51.7±0.4, 47°.24S×99°.98E, h10km, mb4.5/10, Error ellipse: s-maj=13.8km s-min=9.8km az=121.0*

**ISC 03 02:32:52.2**±0.5**, 47°.28S**±0°.09×**100°.0E**±0°.1**, h11**km**, n80, σ1s.09**/77**, mb4.5**/15**, MS4.2**/7**, Southeast Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H01W2** | **Cape Leeuwin H** | **16.29** | **46** | T | T | 02 53 05.1 | |
| | baz=215,slow=74,SNR=270 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **16.31** | **46** | T | T | 02 53 05.6 | |
| | baz=215,slow=74,SNR=444 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **16.31** | **46** | T | T | 02 53 05.6 | |
| | baz=215,slow=74,SNR=413 | | | | | | |
| **CASY** | **Casey** | **19.85** | **167** | *e*P | **Pn** | **02 37 24.0** | **-0.3** |
| | 21nm,1.3s | | | | | | |
| **MAW** | **Mawson** | **27.81** | **210** | P | **P** | **02 38 41.2** | **+0.4** |
| | 2.6nm,0.9s,baz=72,slow=13,SNR=5.0 | | | | | | |
| MAW | | | | LR | LR | 02 46 42.8 | |
| | comp=Z,463nm,21.5s,baz=58,slow=30 | | | | | | |
| **MBWA** | **Marble Bar** | **30.57** | **38** | *e*P | **P** | **02 39 05.9** | **0.0** |
| | 8.8nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **35.86** | **61** | P | **P** | **02 39 50.0** | **-2.0** |
| | 7.3nm,0.9s,baz=217,slow=8.1,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 42 22.4** | **+3.1** |
| | 3.3nm,0.9s,baz=199,slow=2.7,SNR=16 | | | | | | |
| ASAR | | | | LR | LR | 02 52 48.2 | |
| | comp=Z,274nm,18.2s,baz=217,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **38.30** | **162** | P | **P** | **02 40 11.8** | **-0.3** |
| | 4.6nm,1.0s,baz=282,slow=10.0,SNR=16 | | | | | | |
| VNDA | | | | LR | LR | 02 54 45.3 | |
| | comp=Z,1μm,18.4s,baz=294,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **38.99** | **58** | P | **P** | **02 40 16.3** | **-2.3** |
| | 10nm,1.0s,baz=223,slow=8.3,SNR=7.8 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 42 31.6** | **+2.7** |
| | 2.4nm,1.0s,baz=226,slow=3.3,SNR=6.2 | | | | | | |
| WRA | | | | LR | LR | 02 54 22.9 | |
| | comp=Z,474nm,21.0s,baz=215,slow=33 | | | | | | |
| **WRAB** | **Tennant Creek** | **39.01** | **58** | *e*P | **P** | **02 40 20.8** | **+2.1** |
| | 31nm,1.5s | | | | | | |
| **SBA** | **Scott Base** | **39.40** | **162** | *e*P | **P** | **02 40 21.6** | **+0.3** |
| | 12nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **42.86** | **180** | P | **P** | **02 40 49.8** | **-0.4** |
| | 5.6nm,1.0s,baz=315,slow=4.3,SNR=11 | | | | | | |
| **QSPA** | **South Pole Qui** | **42.86** | **180** | *e*P | **P** | **02 40 49.6** | **-0.5** |
| | 10nm,1.0s | | | | | | |
| **H08S2** | **Diego Garcia H** | **45.94** | **320** | T | T | 03 30 09.2 | |
| | baz=154,slow=76,SNR=20 | | | | | | |
| **H08S1** | **Diego Carcia H** | **45.95** | **320** | T | T | 03 30 08.8 | |
| | baz=154,slow=76,SNR=8.2 | | | | | | |
| **H08S3** | **Diego Garcia H** | **45.96** | **320** | T | T | 03 30 10.7 | |
| | baz=154,slow=76,SNR=21 | | | | | | |
| **CTAO** | **Charters Tower** | **46.17** | **70** | *e*P | **P** | **02 41 15.4** | **-1.5** |
| | 18nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **49.69** | **204** | P | **P** | **02 41 43.9** | **+0.3** |
| | 0.9nm,0.9s,baz=138,slow=10,SNR=6.8 | | | | | | |
| **SNAA** | **Sanae** | **49.69** | **204** | *e*P | **P** | **02 41 43.5** | **-0.1** |
| | 3.2nm,1.0s | | | | | | |
| **LUWI** | **Luwuk** | **50.14** | **30** | *e*P | **P** | **02 41 48.1** | **+0.5** |
| **PALK** | **Pallekele** | **56.95** | **337** | *e*P | **P** | **02 42 35.5** | **-2.0** |
| **DZM** | **Mont Dzumac** | **58.27** | **89** | *e*P | **P** | **02 42 46.5** | **-0.4** |
| | 19nm,1.0s | | | | | | |
| **BOSA** | **Boshof** | **59.57** | **260** | P | **P** | **02 42 56.2** | **+0.2** |
| | 3.3nm,0.9s,baz=134,slow=10,SNR=4.2 | | | | | | |
| BOSA | | | | LR | LR | 03 03 31.1 | |
| | comp=Z,265nm,19.7s,baz=165,slow=31 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **65.44** | **359** | P | **P** | **02 43 35.9** | **+1.0** |
| | 3.6nm,0.9s,baz=200,slow=5.1,SNR=11 | | | | | | |
| **LSZ** | **Lusaka** | **66.61** | **273** | *e*P | **P** | **02 43 41.8** | **-1.1** |
| | 5.1nm,1.4s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **70.97** | **290** | *e*P | **P** | **02 44 09.5** | **-0.7** |
| | 5.0nm,1.4s | | | | | | |
| **ODAN** | **Odare** | **74.67** | **348** | *e*P | **P** | **02 44 32.5** | **+0.8** |
| | 27nm,1.2s | | | | | | |
| **RAMN** | **Ramite** | **74.87** | **348** | *e*P | **P** | **02 44 33.3** | **+0.4** |
| | 9.6nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | **75.66** | **347** | *e*P | **P** | **02 44 38.3** | **+0.8** |
| | 14nm,0.9s | | | | | | |
| **GUN** | **Gumba** | **75.92** | **347** | *e*P | **P** | **02 44 38.9** | **-0.1** |
| | 40nm,0.9s | | | | | | |
| **KOLN** | **Koldanda** | **76.15** | **345** | *e*P | **P** | **02 44 41.3** | **+1.1** |
| | 13nm,0.9s | | | | | | |
| **GKN** | **Gorkha** | **76.20** | **346** | *e*P | **P** | **02 44 40.9** | **+0.5** |
| | 25nm,0.9s | | | | | | |
| **PPT** | **Papeete** | **90.40** | **117** | LR | LR | 03 19 23.5 | |
| | comp=Z,63nm,18.6s,baz=218,slow=31 | | | | | | |
| **MKAR** | **Makanchi Array** | **94.96** | **348** | LR | LR | 03 28 35.6 | |
| | comp=Z,83nm,18.1s,baz=164,slow=35 | | | | | | |
| **SBC** | **Santa Barbara** | **147.69** | **99** | P | **PKPbc** | **02 52 36.1** | **-0.4** |
| | baz=148 | | | | | | |
| **BLG** | **Laguna Peak** | **147.94** | **100** | P | **PKPbc** | **02 52 37.1** | **-0.1** |
| | baz=148 | | | | | | |
| **L02D** | **Cave Junction,** | **148.91** | **83** | P | **PKPbc** | **02 52 39.9** | **+0.4** |
| | baz=149 | | | | | | |
| **VES** | **Vestal, Richgr** | **148.91** | **97** | P | **PKPbc** | **02 52 39.5** | **-0.2** |
| | baz=149 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **148.96** | **101** | P | **PKPbc** | **02 52 39.7** | **-0.3** |
| | baz=149 | | | | | | |
| **MONP** | **Monument Peak** | **148.96** | **104** | P | **PKPbc** | **02 52 38.9** | **-1.2** |
| | baz=149 | | | | | | |
| **N02D** | **Trinity Center** | **149.01** | **86** | P | **PKPbc** | **02 52 40.0** | **+0.1** |
| | baz=149 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **149.11** | **100** | P | **PKPbc** | **02 52 39.9** | **-0.3** |
| | baz=149,SNR=5.1 | | | | | | |
| **LRS** | **Lares** | **149.14** | **205** | *e*PKPbc | **PKPbc** | **02 52 40.6** | **-0.1** |
| LRS | | | | *e*PKPab | **PKPab** | **02 52 45.4** | **+0.5** |
| **ISA** | **Isabella** | **149.23** | **98** | *e*PKPbc | **PKPbc** | **02 52 40.2** | **-0.3** |
| ISA | | | | *e*PKPab | **PKPab** | **02 52 45.7** | **+0.7** |
| **O03D** | **Paynes Creek** | **149.32** | **88** | P | **PKPbc** | **02 52 41.2** | **+0.6** |
| | baz=149,SNR=6.3 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **149.38** | **103** | P | **PKPbc** | **02 52 41.4** | **+0.4** |
| | baz=150 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **149.41** | **105** | P | **PKPbc** | **02 52 40.5** | **-0.4** |
| | baz=150 | | | | | | |
| **CWC** | **Cottonwood Cre** | **149.92** | **97** | P | **PKPbc** | **02 52 41.7** | **-0.7** |
| | baz=150,SNR=7.4 | | | | | | |
| **M04C** | **Macdoel** | **149.95** | **85** | P | **PKPbc** | **02 52 41.7** | **-0.5** |
| | baz=150,SNR=5.8 | | | | | | |
| **GLA** | **Glamis** | **150.11** | **106** | P | **PKPbc** | **02 52 42.1** | **-0.7** |
| | baz=150 | | | | | | |
| **MPMC** | **Manual Prospec** | **150.11** | **98** | P | **PKPbc** | **02 52 42.4** | **-0.5** |
| | baz=150 | | | | | | |
| **GSC** | **Goldstone** | **150.14** | **100** | P | **PKPbc** | **02 52 42.3** | **-0.5** |
| | baz=150 | | | | | | |
| **HEC** | **Hector,Ludlow** | **150.19** | **101** | P | **PKPbc** | **02 52 42.6** | **-0.3** |
| | baz=150 | | | | | | |
| **K04D** | **Chiloquin, OR** | **150.35** | **83** | P | **PKPbc** | **02 52 44.1** | **+1.0** |
| | baz=150 | | | | | | |
| **J04D** | **Umpqua Nationa** | **150.35** | **82** | P | **PKPbc** | **02 52 43.3** | **0.0** |
| | baz=150,SNR=5.1 | | | | | | |
| **I04A** | **Tendick Farm,** | **150.36** | **81** | P | **PKPbc** | **02 52 43.3** | **+0.3** |
| | baz=150 | | | | | | |
| **IRM** | **Iron Mountain** | **150.58** | **104** | P | **PKPbc** | **02 52 43.3** | **-0.5** |
| | baz=151 | | | | | | |
| **GMRC** | **Granite Mounta** | **150.61** | **102** | P | **PKPbc** | **02 52 43.3** | **-0.7** |
| | baz=151,SNR=5.4 | | | | | | |
| **GRAC** | **Grapevine Rang** | **150.71** | **97** | P | **PKPbc** | **02 52 44.1** | **0.0** |
| | baz=151,SNR=6.3 | | | | | | |
| **Y12C** | **Blythe** | **150.74** | **105** | P | **PKPbc** | **02 52 44.1** | **-0.1** |
| | baz=151 | | | | | | |
| **F04D** | **Rainier, OR** | **150.74** | **76** | P | **PKPbc** | **02 52 44.1** | **+0.4** |
| | baz=151 | | | | | | |
| **FURC** | **Furnace Creek,** | **150.76** | **98** | P | **PKPbc** | **02 52 44.5** | **+0.4** |
| | baz=151,SNR=5.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **150.81** | **94** | PKPbc | **PKPbc** | **02 52 44.5** | **0.0** |
| | 10nm,0.9s,baz=224,slow=2.9,SNR=19 | | | | | | |
| **TUQ** | **Turquoise Moun** | **150.81** | **101** | P | **PKPbc** | **02 52 44.3** | **-0.2** |
| | baz=151 | | | | | | |
| **J05D** | **Fort Rock, OR** | **150.96** | **83** | P | **PKPbc** | **02 52 44.9** | **+0.3** |
| | baz=151,SNR=9.6 | | | | | | |
| **LDFC** | **Landfair** | **151.15** | **102** | *e*PKPbc | **PKPbc** | **02 52 45.5** | **+0.3** |
| **I05D** | **Terrebonne, OR** | **151.28** | **80** | P | **PKPbc** | **02 52 45.5** | **+0.3** |
| | baz=151,SNR=5.8 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **151.33** | **104** | P | **PKPbc** | **02 52 45.4** | **-0.1** |
| | baz=151 | | | | | | |
| **TPNV** | **Topopah Spring** | **151.43** | **98** | P | **PKPbc** | **02 52 45.5** | **-0.4** |
| | baz=152,SNR=6.5 | | | | | | |
| **G05D** | **Wamic, OR** | **151.60** | **79** | P | **PKPbc** | **02 52 46.2** | **+0.3** |
| | baz=152 | | | | | | |
| **A04D** | **Lummi Island** | **151.66** | **71** | P | **PKPbc** | **02 52 46.6** | **+0.8** |
| | baz=152 | | | | | | |
| **SHPR** | **Sheep Range** | **151.93** | **100** | *e*PKPbc | **PKPbc** | **02 52 46.8** | **-0.3** |
| **B05A** | **Bryant** | **151.95** | **72** | P | **PKPbc** | **02 52 46.9** | **+0.5** |
| | baz=152 | | | | | | |
| **R11A** | **Troy Canyon, C** | **152.62** | **96** | P | **PKPbc** | **02 52 47.5** | **-1.1** |
| | baz=153 | | | | | | |
| **ELK** | **Elko** | **153.99** | **92** | *e*PKPab | **PKPab** | **02 53 05.0** | **0.0** |
| **TXAR** | **Lajitas Array** | **154.36** | **126** | PKPbc | **PKPbc** | **02 52 49.3** | **-3.2** |
| | 0.6nm,1.0s,baz=260,slow=5.4,SNR=2.9 | | | | | | |
| TXAR | | | | PKPab | **PKiKP** | **02 52 57.4** | **+4.8** |
| | 0.5nm,0.7s,baz=188,slow=3.8,SNR=5.0 | | | | | | |
| **HLID** | **Hailey** | **155.68** | **86** | *e*PKPab | **PKPab** | **02 53 12.6** | **+0.5** |
| **TPAW** | **Teton Pass** | **158.01** | **89** | *e*PKPdf | **PKPdf** | **02 52 48.8** | **0.0** |
| **BW06** | **Boulder Array** | **158.70** | **91** | *e*PKPab | **PKPab** | **02 53 24.6** | **-0.6** |
| **ULM** | **Lac du Bonnet** | **169.11** | **68** | PKPab | **PKPab** | **02 54 11.1** | **+0.6** |
| | 4.8nm,1.0s,baz=270,slow=5.1,SNR=3.5 | | | | | | |

*IDC **03** 02:58:04.7±0.6, 13°.95N×93°.01E, h0km, mb4.5/24, mb1 4.6/26, mb1mx4.5/34, mbtmp4.5/26, ML4.6/2, MS3.9/12, Ms1 3.9/12, ms1mx3.7/28, Error ellipse: s-maj=16.8km s-min=13.7km az=37.0*

*BJI **03** 02:58:07.3, 13°.91N×92°.90E, h35km, mb4.8/51, mB4.7/35, Ms4.2/45, Ms7 4.1/41*

*ISCJB **03** 02:58:08.7±0.2, 14°.07N±0°.03×92°.96E±0°.02, h33km, mb4.7/76, MS4.0/13, Error ellipse: s-maj=4.0km s-min=2.9km az=3.0*

*MOS **03** 02:58:08.1±0.8, 13°.95N×93°.08E, h36km, mb5.0/34, Error ellipse: s-maj=8.5km s-min=5.2km az=113.5*

*NEIC **03** 02:58:10.8±0.7, 14°.01N×93°.02E, h39km±6km, mb4.8/26, Error ellipse: s-maj=5.3km s-min=4.2km az=223.0*

*NEIC Felt at Port Blair.*

*BKK **03** 02:58:13.0±0.5, 15°N±5°×9°2E±°, h10km, M4.8/16, mB5.3/8, mb4.6/16, MLv4.8/7, Mw(mB)4.8/8*

*DJA **03** 02:58:20.9±1.2, 15°N±5°×9°3E±°, h96km±16km, M4.7/9, mb4.5/9, mB5.2/3, MLv4.8/2, Mw(mB)4.6/3, Mwp7.0/1*

**ISC 03 02:58:10.1**±0.4**, 13°.99N**±0°.04×**92°.95E**±0°.04**, h33**km±1km**, h33**km**:pP-P, n260, σ1s.56**/296**, mb4.7**/76**, MS4.0**/13**, 13C-26D, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DGPR** | **DIGLIPUR** | **0.81** | **181** | *e*P | **Pb** | **02 58 26.7** | **+1.0** |
| DGPR | | | | *e*S | **Sb** | **02 58 39.9** | **+3.6** |
| DGPR | | | | AML | AML | 02 58 42.4 | |
| | comp=E,36μm,0.9s | | | | | | |
| DGPR | | | | AML | AML | 02 58 43.7 | |
| | comp=N,30μm,0.5s | | | | | | |
| **PBA** | **Port Blair** | **2.33** | **185** | *e*P | Pn | 02 58 47.6 | +1.5 |
| PBA | | | | *e*S | Sb | 02 59 17.2 | -2.5 |
| **CMAR** | **Chiang Mai Arr** | **7.27** | **52** | Pn | **Pn** | **02 59 53.0** | **-1.2** |
| | comp=N,2.4nm,0.3s,baz=240,slow=14,SNR=23 | | | | | | |
| CMAR | | | | Sn | **Sn** | **03 01 10.9** | **-4.7** |
| | comp=N,5.1nm,0.3s,baz=241,slow=29,SNR=13 | | | | | | |
| CMAR | | | | LR | LR | 03 03 30.1 | |
| | comp=N,1μm,18.5s,baz=218,slow=45 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **7.27** | **52** | *i* P | **Pn** | **02 59 53.4** | **-0.7** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.4s | | | | | | |
| **CHTO** | **Chiang Mai** | **7.49** | **49** | P | Pn | 03 00 02.1 | +5.0 |
| | comp=Z,235nm,0.9s,comp=Z,5μmcomp=Z,2.3nm | | | | | | |
| **CHTO** | **Chiang Mai** | **7.49** | **49** | *e*P | **Pn** | **02 59 56.7** | **-0.4** |
| CHTO | | | | *e* | | 03 01 14.8 | |
| **CHTO** | **Chiang Mai** | **7.49** | **49** | *e*Pn | **Pn** | **02 59 56.7** | **-0.4** |
| CHTO | | | | *e*Sn | Sn | 03 01 14.8 | -6.2 |
| **PATY** | **Pattaya** | **7.77** | **97** | P | Pn | 03 00 10.8 | +10 |
| | comp=Z,16nm,0.5s,comp=Z,862nmcomp=Z,0.1nm | | | | | | |
| **PBKT** | **Sadao Pong** | **8.15** | **71** | P | Pn | 03 00 13.7 | +7.5 |
| | comp=Z,41nm,1.0s,comp=Z,0.1nm | | | | | | |
| **UTTA** | **Uttaradit** | **8.21** | **62** | P | Pn | 03 00 14.8 | +7.8 |
| | comp=Z,8.4nm,0.7s,comp=Z,117nmcomp=Z,0.1nm | | | | | | |
| **CMAI** | **Chiengmai2** | **8.30** | **44** | P | **Pn** | **03 00 11.0** | **+2.6** |
| | comp=Z,31nm,0.8s,comp=Z,1μmcomp=Z,0.3nm | | | | | | |
| **CRAI** | **Chiangrai** | **9.43** | **48** | P | Pn | 03 00 32.3 | +8.6 |
| | comp=Z,14nm,1.6s,comp=Z,564nm | | | | | | |
| **CHLP** | **Challavanipeta** | **9.65** | **299** | *e*Pn | **Pn** | **03 00 24.9** | **-1.8** |
| CHLP | | | | *e* | | 03 02 04.1 | |
| CHLP | | | | *e*Sn | **Sn** | **03 02 16.9** | **+2.9** |
| **VIS** | **Vishakhapatnam** | **9.97** | **293** | *e*P | **Pn** | **03 00 30.5** | **-0.7** |
| VIS | | | | AMB | AMB | 03 00 32.1 | |
| | comp=Z,60nm,0.3s | | | | | | |
| VIS | | | | *e*x | x | 03 02 11.8 | |
| VIS | | | | AML | AML | 03 02 16.9 | |
| | comp=N,344nm,0.5s | | | | | | |
| VIS | | | | AML | AML | 03 02 16.9 | |
| | comp=E,191nm,1.2s | | | | | | |
| **PVM** | **Polavaram** | **11.38** | **288** | *e*Pn | **Pn** | **03 00 49.7** | **-0.8** |
| PVM | | | | *e* | | 03 02 44.8 | |
| PVM | | | | *e*Sn | **Sn** | **03 02 59.1** | **+2.5** |
| **KULM** | **Kulim** | **11.50** | **138** | *e*Pn | **Pn** | **03 00 53.3** | **+1.2** |
| | comp=E,52nm,1.4s | | | | | | |
| **SHL** | **Shillong** | **11.56** | **355** | *e*P | **Pn** | **03 00 51.4** | **-1.7** |
| SHL | | | | AMB | AMB | 03 00 53.0 | |
| | comp=Z,26nm,1.1s | | | | | | |
| **BOK** | **Bokaro** | **11.82** | **327** | *e*P | **Pn** | **03 00 56.0** | **-0.5** |
| BOK | | | | AMB | AMB | 03 01 06.6 | |
| | comp=Z,51nm,0.5s | | | | | | |
| **MDRS** | **Chennai** | **12.39** | **267** | *e*P | **Pn** | **03 01 04.2** | **-0.1** |
| MDRS | | | | AMB | AMB | 03 01 06.5 | |
| | comp=Z,22nm,2.3s | | | | | | |
| **ADKI** | **Addanki** | **12.68** | **280** | *e*Pn | **Pn** | **03 01 06.0** | **-2.3** |
| ADKI | | | | *e*P | **Pn** | **03 01 07.0** | **-1.2** |
| ADKI | | | | *e* | | 03 03 13.6 | |
| **SKHT** | **Srikalahasti** | **12.86** | **270** | *e*Pn | Pn | 03 01 07.3 | -3.4 |
| SKHT | | | | *e* | | 03 03 19.9 | |
| SKHT | | | | *e*Sn | **Sn** | **03 03 35.0** | **+2.2** |
| **NJS** | **Nagarjunasagar** | **13.41** | **283** | *e*Pn | **Pn** | **03 01 18.8** | **+0.5** |
| NJS | | | | *e* | | 03 03 35.3 | |
| NJS | | | | *e*Sn | **Sn** | **03 03 46.3** | **0.0** |
| **PALK** | **Pallekele** | **13.76** | **242** | Pn | Pn | 03 01 19.8 | -3.3 |
| | comp=Z,2.8nm,0.3s,baz=113,slow=9.5,SNR=12 | | | | | | |
| PALK | | | | Sn | Sn | 03 03 44.9 | -10 |
| | comp=Z,1.8nm,0.3s,baz=116,slow=9.0,SNR=4.1 | | | | | | |
| **PALK** | **Pallekele** | **13.76** | **242** | *i* P | **Pn** | **03 01 23.1** | **0.0** |
| **PALK** | **Pallekele** | **13.76** | **242** | *e*Pn | **Pn** | **03 01 23.6** | **+0.6** |
| PALK | | | | *e*Sn | Sn | 03 03 47.7 | -7.1 |
| **ODAN** | **Odare** | **13.82** | **339** | *e*P | Pn | 03 01 19.2 | -4.8 |
| | comp=Z,60nm,0.4s | | | | | | |
| **RPR** | **Rampur** | **13.97** | **292** | *e*Pn | **Pn** | **03 01 24.9** | **-0.9** |
| RPR | | | | *e* | | 03 03 46.2 | |
| **TAPN** | **Taplejung** | **14.17** | **341** | *e*P | Pn | 03 01 23.3 | -5.5 |
| | comp=Z,64nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **14.20** | **336** | *e*P | Pn | 03 01 24.4 | -4.8 |
| | comp=Z,52nm,0.4s | | | | | | |
| **HYB** | **Hyderabad** | **14.28** | **286** | *i* P | **Pn** | **03 01 28.5** | **-1.6** |
| HYB | | | | *e* | | 03 03 55.5 | |
| HYB | | | | *e*S | **Sn** | **03 04 11.0** | **+3.6** |
| **HYB** | **Hyderabad** | **14.28** | **286** | *e*P | **Pn** | **03 01 29.5** | **-0.6** |
| **HYBB** | **Hyderabad (bro** | **14.28** | **286** | *e*Pn | **Pn** | **03 01 28.4** | **-1.7** |
| HYBB | | | | *e* | | 03 03 52.3 | |
| HYBB | | | | *e*Sn | **Sn** | **03 04 09.1** | **+1.7** |
| **KMI** | **Kunming** | **14.41** | **38** | P | **P** | **03 01 36.1** | **-2.4** |
| KMI | | | | pP | Pn | 03 01 40.7 | +8.7 |
| KMI | | | | sP | | 03 01 45.3 | |
| KMI | | | | S | **Sn** | **03 04 14.9** | **+4.1** |
| KMI | | | | SS | **S** | **03 04 29.9** | **-0.1** |
| KMI | | | | PMZ | | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,130nm,4.4s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,810nm,18.7s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,320nm,20.8s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,650nm,18.6s | | | | | | |
| **NGP** | **Nagpur** | **15.04** | **300** | *e*P | **Pn** | **03 01 41.8** | **+1.4** |
| NGP | | | | *e*x | x | 03 01 51.5 | |
| | comp=Z,38nm,1.1s | | | | | | |
| NGP | | | | *e*S | **Sn** | **03 04 27.6** | **+1.6** |
| **URV** | **Uravakonda** | **15.23** | **276** | *e*Pn | **Pn** | **03 01 41.3** | **-1.6** |
| URV | | | | *e* | | 03 04 16.6 | |
| **PKI** | **Pulchoki** | **15.24** | **334** | *e*P | **Pn** | **03 01 39.6** | **-3.6** |
| | comp=Z,62nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **15.25** | **334** | *e*P | **Pn** | **03 01 39.9** | **-3.4** |
| | comp=Z,85nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **15.34** | **336** | *e*P | **Pn** | **03 01 40.8** | **-3.8** |
| | comp=Z,58nm,0.8s | | | | | | |
| **DMN** | **Daman** | **15.40** | **333** | *e*P | **Pn** | **03 01 42.6** | **-2.7** |
| | comp=Z,98nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **15.48** | **334** | *e*P | **Pn** | **03 01 42.8** | **-3.5** |
| | comp=Z,46nm,0.6s | | | | | | |
| **LSA** | **Lhasa** | **15.72** | **354** | P | **Pn** | **03 01 47.1** | **-2.6** |
| **LSA** | **Lhasa** | **15.72** | **354** | *e*P | **Pn** | **03 01 50.7** | **+1.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,49nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **15.72** | **354** | *e*Pn | **Pn** | **03 01 50.7** | **+1.0** |
| | comp=Z,49nm,0.8s | | | | | | |
| **BKNI** | **Bangkinang** | **15.76** | **149** | P | **Pn** | **03 01 50.7** | **+0.9** |
| **GKN** | **Gorkha** | **15.95** | **332** | *e*P | **Pn** | **03 01 49.9** | **-2.4** |
| | comp=Z,50nm,0.5s | | | | | | |
| **PPI** | **Padang Panjang** | **16.14** | **152** | P | P | 03 02 07.1 | +10 |
| | comp=Z,28nm,1.4s | | | | | | |
| **KOLN** | **Koldanda** | **16.25** | **329** | *e*P | **Pn** | **03 01 55.0** | **-1.2** |
| | comp=Z,40nm,0.6s | | | | | | |
| **PDSI** | **Padang** | **16.57** | **153** | P | P | 03 02 10.9 | +8.5 |
| | comp=Z,23nm,1.0s,comp=Z,9μmcomp=Z,937μm | | | | | | |
| **QIZ** | **Qiongzhong** | **16.95** | **71** | P | **Pn** | **03 02 05.3** | **+0.4** |
| QIZ | | | | S | **Sn** | **03 05 12.2** | **-0.2** |
| QIZ | | | | LN | | | |
| | comp=Z,560nm,18.0s | | | | | | |
| QIZ | | | | LE | | | |
| | comp=Z,290nm,24.7s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,770nm,15.7s | | | | | | |
| **BHPL** | **Bhopal** | **17.34** | **304** | *e*P | **P** | **03 02 12.1** | **+1.2** |
| BHPL | | | | AMB | AMB | 03 02 12.9 | |
| | comp=Z,18nm,0.4s | | | | | | |
| **GYA** | **Guiyang** | **17.85** | **44** | P | **P** | **03 02 16.8** | **+0.2** |
| GYA | | | | pP | **pP** | **03 02 24.4** | **-0.9** |
| GYA | | | | PP | **PnPn** | **03 02 32.6** | **+5.3** |
| GYA | | | | S | **Sn** | **03 05 31.2** | **-3.2** |
| GYA | | | | sS | **S** | **03 05 45.0** | **+4.7** |
| GYA | | | | SS | **SnSn** | **03 05 54.2** | **+5.9** |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,110nm,4.8s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,480nm,14.8s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,430nm,15.0s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,460nm,14.6s | | | | | | |
| **POO** | **Poona** | **18.88** | **286** | *e*P | **Pn** | **03 02 28.7** | **0.0** |
| **CD2** | **Chengdu** | **19.56** | **29**⇓ | *e*P | **P** | **03 02 34.9** | **-0.3** |
| CD2 | | | | pP | **pP** | **03 02 43.6** | **-0.4** |
| CD2 | | | | sP | **sP** | **03 02 48.1** | **0.0** |
| CD2 | | | | S | **S** | **03 06 13.4** | **-1.0** |
| CD2 | | | | sS | **sS** | **03 06 28.9** | **+0.6** |
| CD2 | | | | PMZ | | | |
| | comp=Z,40nm,0.6s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,130nm,4.1s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,420nm,12.5s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,390nm,11.0s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,500nm,12.5s | | | | | | |
| **NDI** | **New Delhi** | **20.67** | **318** | *e*P | Pn | 03 02 49.0 | -0.7 |
| NDI | | | | *e*x | x | 03 06 08.0 | |
| **DDI** | **Dehra Dun** | **21.28** | **322** | *e*P | **P** | **03 02 55.0** | **+1.1** |
| DDI | | | | AMB | AMB | 03 02 59.9 | |
| | comp=Z,79nm,3.3s | | | | | | |
| **ENH** | **Enshi** | **22.25** | **41** | *e*P | **P** | **03 03 02.8** | **-1.5** |
| | comp=Z,11nm,0.8s | | | | | | |
| **SMLA** | **Simla** | **22.39** | **322** | *e*P | **P** | **03 03 06.8** | **+1.1** |
| SMLA | | | | AMB | AMB | 03 03 09.0 | |
| | comp=Z,46nm,1.3s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **23.71** | **323** | *e*P | **P** | **03 03 20.0** | **+0.6** |
| DHRM | | | | AMB | AMB | 03 03 21.6 | |
| | comp=Z,63nm,2.0s | | | | | | |
| **BHJ** | **Bhuj** | **23.89** | **296** | *e*P | **P** | **03 03 22.7** | **+1.7** |
| **LZH** | **Lanzhou** | **24.08** | **22** | *e*P | **P** | **03 03 22.8** | **0.0** |
| LZH | | | | pP | **pP** | **03 03 31.0** | **-1.2** |
| LZH | | | | sP | **sP** | **03 03 35.1** | **-1.2** |
| LZH | | | | PP | **PnPn** | **03 03 57.0** | **+4.4** |
| LZH | | | | *e*S | **S** | **03 07 37.3** | **-1.0** |
| LZH | | | | sS | **sS** | **03 07 53.0** | **-0.9** |
| LZH | | | | PMZ | | | |
| | comp=Z,52nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,100nm,5.2s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,2μm,14.6s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,1μm,14.0s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,2μm,16.8s | | | | | | |
| **KKM** | **Kota Kinabalu** | **24.21** | **107** | *e*P | **P** | **03 03 24.1** | **-0.1** |
| **XAN** | **Xi'an** | **24.66** | **33** | P | **P** | **03 03 26.6** | **-1.4** |
| XAN | | | | pP | **pP** | **03 03 35.6** | **-1.9** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| XAN | | | | sP | **sP** | **03 03 39.7** | **-1.8** |
| XAN | | | | PP | **PnPn** | **03 04 02.6** | **+2.2** |
| XAN | | | | PcP | **PcP** | **03 07 03.6** | **-1.3** |
| XAN | | | | S | **S** | **03 07 42.7** | **-4.8** |
| XAN | | | | SS | **SnSn** | **03 08 40.4** | **+5.4** |
| XAN | | | | PMZ | | | |
| | comp=Z,37nm,0.8s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,73nm,7.7s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,140nm,15.2s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,340nm,17.4s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,340nm,19.9s | | | | | | |
| **GTA** | **Gaotai** | **26.04** | **12** | ⇑P | **P** | **03 03 40.7** | **+0.2** |
| GTA | | | | pP | **pP** | **03 03 50.8** | **+0.8** |
| GTA | | | | sP | **sP** | **03 03 55.0** | **+1.0** |
| GTA | | | | S | **S** | **03 08 08.3** | **-1.2** |
| GTA | | | | sS | **sS** | **03 08 24.4** | **-0.7** |
| GTA | | | | SS | **SnSn** | **03 09 17.4** | **+8.7** |
| GTA | | | | PMZ | | | |
| | comp=Z,25nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,50nm,5.9s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,280nm,20.0s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,190nm,20.4s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,320nm,18.1s | | | | | | |
| **SSLB** | **Suanglung** | **28.18** | **66** | *e*P | **P** | **03 04 00.5** | **+0.7** |
| | comp=Z,16nm,1.1s | | | | | | |
| **KSH** | **Kashi** | **29.50** | **333** | P | **P** | **03 04 10.4** | **-1.1** |
| KSH | | | | *e*sP | **sP** | **03 04 24.1** | **-0.9** |
| KSH | | | | PP | **PnPn** | **03 05 04.0** | **-2.5** |
| KSH | | | | S | S | 03 08 56.8 | -7.2 |
| KSH | | | | sS | sS | 03 09 13.8 | -5.9 |
| KSH | | | | PcS | **PcS** | **03 11 00.3** | **+0.7** |
| KSH | | | | PMZ | | | |
| | comp=Z,13nm,0.7s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,82nm,4.7s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,92nm,6.3s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,120nm,10.2s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,200nm,6.3s | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.56** | **225** | T | T | 03 35 10.5 | |
| | baz=42,slow=75,SNR=28 | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.57** | **225** | T | T | 03 35 10.2 | |
| | baz=42,slow=75,SNR=28 | | | | | | |
| **H08S1** | **Diego Carcia H** | **29.58** | **225** | T | T | 03 35 07.5 | |
| | baz=42,slow=75,SNR=11 | | | | | | |
| **NJ2** | **Nanjing** | **29.73** | **48** | *e*P | **P** | **03 04 14.0** | **+0.5** |
| NJ2 | | | | S | **S** | **03 09 09.0** | **+1.4** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=Z,1μm,16.6s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=Z,1μm,16.0s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=Z,580nm,24.6s | | | | | | |
| **WMQ** | **Urumqi** | **30.07** | **352** | *e*P | **P** | **03 04 18.0** | **+1.6** |
| WMQ | | | | pP | pP | 03 04 32.0 | +6.1 |
| WMQ | | | | S | **S** | **03 09 13.0** | **+0.2** |
| WMQ | | | | SS | **SnSn** | **03 10 52.0** | **+5.1** |
| WMQ | | | | PMZ | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,27nm,5.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,220nm,12.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,250nm,15.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,240nm,12.0s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **31.04** | **330** | P | **P** | **03 04 25.9** | **+0.7** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.31** | **28** | ⇓P | **P** | **03 04 28.0** | **+0.6** |
| HHC | | | | sP | **sP** | **03 04 40.9** | **-0.1** |
| HHC | | | | PP | **PnPn** | **03 05 33.2** | **+2.8** |
| HHC | | | | S | **S** | **03 09 34.4** | **+2.1** |
| HHC | | | | SS | **SnSn** | **03 11 16.4** | **-0.7** |
| HHC | | | | PMZ | | | |
| | comp=Z,22nm,1.4s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,75nm,6.2s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,290nm,16.2s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,290nm,12.4s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,200nm,17.4s | | | | | | |
| **PDGK** | **Podgornoye** | **31.45** | **341** | P | **P** | **03 04 28.9** | **+0.5** |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **ULHL** | **Ulahol** | **31.66** | **336** | P | **P** | **03 04 31.6** | **+1.0** |
| | SNR=6.0 | | | | | | |
| **UCH** | **Uchtor** | **32.35** | **334** | P | **P** | **03 04 38.1** | **+1.2** |
| | SNR=10 | | | | | | |
| **TKM2** | **Tokmak 2** | **32.48** | **336** | *e*P | **P** | **03 04 38.8** | **+1.0** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **32.48** | **336** | P | **P** | **03 04 38.8** | **+1.0** |
| | SNR=5.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **32.48** | **336** | *e*P | **P** | **03 04 38.8** | **+1.0** |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **AML** | **Almayashu** | **32.63** | **333** | P | **P** | **03 04 40.4** | **+1.1** |
| | SNR=12 | | | | | | |
| **DZET** | **Dzherino** | **32.63** | **324** | P | **P** | **03 04 38.9** | **-0.2** |
| DZET | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **32.69** | **334** | ⇓*e*P | **P** | **03 04 39.4** | **-0.2** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **32.69** | **334** | P | **P** | **03 04 41.3** | **+1.7** |
| | SNR=8.7 | | | | | | |
| **AAK** | **Ala-Archa** | **32.69** | **334** | *e*P | **P** | **03 04 40.0** | **+0.3** |
| | comp=Z,11nm,1.0s | | | | | | |
| **CHMS** | **Chumysh** | **32.88** | **335** | P | **P** | **03 04 42.2** | **+1.0** |
| | SNR=5.4 | | | | | | |
| **BJI** | **Beijing** | **32.99** | **34** | P | **P** | **03 04 42.4** | **+0.4** |
| BJI | | | | S | **S** | **03 09 59.9** | **+1.6** |
| BJI | | | | PMZ | | | |
| | comp=Z,11nm,1.1s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,83nm,3.7s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,220nm,16.5s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,310nm,17.4s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,340nm,21.5s | | | | | | |
| **EKS2** | **Erkin-Say** | **33.02** | **334** | *e*P | **P** | **03 04 43.8** | **+1.3** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **EKS2** | **Erkin-Say** | **33.02** | **334** | P | **P** | **03 04 43.8** | **+1.3** |
| | SNR=12 | | | | | | |
| **EKS2** | **Erkin-Say** | **33.02** | **334** | *e*P | **P** | **03 04 43.8** | **+1.3** |
| | comp=Z,10nm,0.8s | | | | | | |
| **LUWI** | **Luwuk** | **33.10** | **114** | *e*P | **P** | **03 04 43.5** | **+0.2** |
| **USP** | **Ospenovka** | **33.21** | **335** | P | **P** | **03 04 44.8** | **+0.8** |
| | SNR=12 | | | | | | |
| **MNAS** | **Manas** | **33.44** | **332** | P | **P** | **03 04 46.8** | **+0.6** |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **MK01** | **Makanchi Array** | **33.88** | **347** | *e*P | **P** | **03 04 49.8** | **0.0** |
| **MK31** | **Makanchi Array** | **33.91** | **347** | *i* P | **P** | **03 04 50.0** | **0.0** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **33.91** | **347** | P | **P** | **03 04 50.1** | **+0.1** |
| | comp=Z,18nm,0.8s,baz=163,slow=8.9,SNR=98 | | | | | | |
| **MKAR** | **Makanchi Array** | **33.91** | **347** | *e*P | **P** | **03 04 50.2** | **+0.2** |
| **MKAR** | **Makanchi Array** | **33.91** | **347** | *e*P | **P** | **03 04 50.2** | **+0.2** |
| **MAKZ** | **Makanchi** | **33.99** | **346** | *e*P | **P** | **03 04 50.8** | **+0.1** |
| **KK31** | **Karatay Array** | **34.85** | **331** | *i* P | **P** | **03 04 58.4** | **+0.2** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **34.85** | **331** | *e*P | **P** | **03 04 58.9** | **+0.7** |
| **KKAR** | **Karatay Array** | **34.85** | **331** | *e*P | **P** | **03 04 58.9** | **+0.7** |
| **SONM** | **Songino Array** | **35.55** | **16** | P | **P** | **03 05 04.1** | **-0.2** |
| | comp=Z,19nm,1.1s,baz=199,slow=9.2,SNR=54 | | | | | | |
| **SONA1** | **Songino Array** | **35.56** | **16** | *e*P | **P** | **03 05 04.3** | **-0.1** |
| **ULN** | **Ulaanbaatar** | **35.76** | **16***c* | *i*P | **P** | **03 05 05.7** | **-0.4** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **35.76** | **16** | *e*P | **P** | **03 05 04.5** | **-1.6** |
| | comp=Z,29nm,1.4s | | | | | | |
| **ZAK** | **Zakamensk** | **37.26** | **11** | *e*P | **P** | **03 05 17.8** | **-1.0** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **IPAY** | **Payeh** | **37.69** | **313** | *e*P | **P** | **03 05 22.6** | **-0.3** |
| **IAKL** | **Akhelmad** | **37.94** | **313** | *e*P | **P** | **03 05 23.1** | **-1.9** |
| **IKRD** | **Kardeh** | **38.19** | **313** | *e*P | P | 03 05 21.4 | -5.7 |
| **OTUK** | **Ortayu** | **38.19** | **338** | P | **P** | **03 05 26.2** | **-0.4** |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,40nm,1.3s | | | | | | |
| **KURK** | **Kurchatov** | **38.44** | **345** | *e*P | **P** | **03 05 28.7** | **+0.1** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,72nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **38.44** | **345** | *e*P | **P** | **03 05 28.7** | **+0.1** |
| | comp=Z,72nm,1.1s | | | | | | |
| **TLY** | **Talaya** | **38.57** | **11** | P | **P** | **03 05 30.7** | **+1.0** |
| | comp=Z,4.0nm,0.6s,baz=236,slow=5.9,SNR=5.5 | | | | | | |
| **TLY** | **Talaya** | **38.57** | **11** | *e*P | **P** | **03 05 31.0** | **+1.2** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,212nm,19.0s | | | | | | |
| **KSAR** | **Wonju Array Be** | **38.85** | **47** | P | **P** | **03 05 31.1** | **-1.2** |
| **KSAR** | **Wonju Array Be** | **38.85** | **47** | P | **P** | **03 05 31.1** | **-1.2** |
| **KSRS** | **Korea Array** | **38.88** | **47** | P | **P** | **03 05 31.1** | **-1.5** |
| | comp=Z,2.5nm,0.8s,baz=248,slow=8.4,SNR=6.7 | | | | | | |
| **GEYT** | **Alibeck** | **39.01** | **314** | P | **P** | **03 05 35.3** | **+1.6** |
| | comp=Z,11nm,0.7s,baz=134,slow=8.5,SNR=17 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **40.38** | **353** | *e*P | **P** | **03 05 44.2** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **40.38** | **353** | P | **P** | **03 05 44.4** | **-0.4** |
| | comp=Z,18nm,0.7s,baz=177,slow=8.9,SNR=64 | | | | | | |
| **CN2** | **Changchun** | **40.67** | **37** | *e*P | **P** | **03 05 46.9** | **-0.4** |
| **NVS** | **Novosibirsk** | **41.46** | **352** | *e*P | P | 03 05 49.9 | -3.8 |
| NVS | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=N,11nm,1.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **42.87** | **340** | P | **P** | **03 06 04.6** | **-0.7** |
| | comp=N,4.9nm,0.8s,baz=133,slow=8.7,SNR=19 | | | | | | |
| **BRVK** | **Borovoye** | **42.93** | **340***c* | *e*P | **P** | **03 06 05.1** | **-0.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **42.93** | **340** | *e*P | **P** | **03 06 05.3** | **-0.4** |
| | comp=Z,12nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **43.72** | **143** | *e*P | **P** | **03 06 12.9** | **+0.4** |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **AB31** | **Akbulak array** | **44.37** | **329** | *i* P | **P** | **03 06 17.6** | **+0.3** |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **44.37** | **329** | *e*P | **P** | **03 06 17.7** | **+0.3** |
| **AKTO** | **Aktyubinsk** | **46.09** | **329** | P | **P** | **03 06 31.0** | **0.0** |
| | comp=Z,6.2nm,0.6s,baz=126,slow=7.3,SNR=25 | | | | | | |
| **MAJO** | **Matsushiro** | **46.16** | **52** | *e*P | **P** | **03 06 30.8** | **-0.9** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **46.16** | **52** | *e*P | **P** | **03 06 30.8** | **-0.9** |
| | comp=Z,10nm,1.0s | | | | | | |
| **MAT** | **Matsushiro** | **46.16** | **52** | P | **P** | **03 06 30.8** | **-1.0** |
| MAT | | | | *e*S | S | 03 13 47.8 | +32 |
| **MJAR** | **Matsushiro Arr** | **46.16** | **52** | P | **P** | **03 06 31.0** | **-0.8** |
| | comp=Z,4.0nm,0.9s,baz=264,slow=10,SNR=8.2 | | | | | | |
| MJAR | | | | PcP | **PcP** | **03 08 07.6** | **+0.1** |
| | comp=Z,1.0nm,0.6s,baz=225,slow=2.8,SNR=4.1 | | | | | | |
| MJAR | | | | LR | LR | 03 27 49.6 | |
| | comp=Z,215nm,19.3s,baz=265,slow=39 | | | | | | |
| **BOD** | **Bodaibo** | **46.55** | **15** | *e*P | **P** | **03 06 33.8** | **-0.6** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| **SVE** | **Sverdlovsk** | **49.34** | **337** | ⇓*e*P | **P** | **03 06 56.4** | **+0.4** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,38nm,1.1s | | | | | | |
| **GNI** | **Garni** | **49.45** | **311** | P | **P** | **03 06 56.8** | **-0.7** |
| | comp=Z,4.0nm,0.4s,baz=164,slow=5.2,SNR=5.1 | | | | | | |
| **GNI** | **Garni** | **49.45** | **311** | ⇑*e*P | **P** | **03 06 55.3** | **-2.1** |
| GNI | | | | pmax | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | |
| **GNI** | **Garni** | **49.45** | **311** | *e*P | **P** | **03 06 57.2** | **-0.2** |
| | comp=Z,20nm,1.1s | | | | | | |
| **ARU** | **Arti** | **49.85** | **336***d* | *i*P | **P** | **03 06 57.2** | **-2.8** |
| ARU | | | | S | **S** | **03 14 03.8** | **-3.7** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,24nm,1.7s | | | | | | |
| **ARU** | **Arti** | **49.85** | **336** | *e*P | **P** | **03 07 00.1** | **+0.2** |
| | comp=Z,19nm,1.2s | | | | | | |
| **ZEI** | **Tsey** | **50.88** | **314** | *e*P | **P** | **03 07 09.0** | **+0.7** |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,25nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **51.88** | **315** | P | **P** | **03 07 16.5** | **+1.0** |
| | comp=Z,1.8nm,0.8s,baz=128,slow=12,SNR=3.8 | | | | | | |
| KBZ | | | | LR | LR | 03 33 26.0 | |
| | comp=Z,71nm,19.2s,baz=129,slow=41 | | | | | | |
| **KIV** | **Kislovodsk** | **52.10** | **315** | *e*P | **P** | **03 07 18.4** | **+1.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **KIV** | **Kislovodsk** | **52.10** | **315** | *e*P | **P** | **03 07 18.4** | **+1.1** |
| | comp=Z,15nm,0.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **52.83** | **41** | *e*P | **P** | **03 07 21.9** | **-0.5** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,21nm,1.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **52.83** | **41** | *e*P | **P** | **03 07 22.0** | **-0.4** |
| | comp=Z,14nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **52.86** | **129** | P | **P** | **03 07 21.7** | **-1.4** |
| | comp=Z,0.8nm,0.5s,baz=299,slow=9.8,SNR=9.2 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 08 31.9** | **-0.2** |
| | comp=Z,0.6nm,0.4s,baz=318,slow=3.2,SNR=5.2 | | | | | | |
| **WRAB** | **Tennant Creek** | **52.87** | **129** | ⇑*e*P | **P** | **03 07 21.0** | **-2.1** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **52.87** | **129** | *e*P | **P** | **03 07 23.1** | **0.0** |
| | comp=Z,7.8nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **54.65** | **20** | *e*P | **P** | **03 07 33.2** | **-2.3** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,8.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,6.0nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **54.81** | **133** | P | **P** | **03 07 36.0** | **-1.2** |
| | comp=E,1.8nm,0.5s,baz=306,slow=6.7,SNR=38 | | | | | | |
| ASAR | | | | ScP | **ScP** | **03 12 33.9** | **-1.8** |
| | comp=E,0.5nm,0.9s,baz=322,slow=5.9,SNR=3.4 | | | | | | |
| **AS01** | **Alice Springs** | **54.84** | **133** | *e*P | **P** | **03 07 36.6** | **-0.9** |
| **BRTR** | **Keskin Array B** | **57.66** | **308** | P | **P** | **03 07 56.9** | **-0.7** |
| | comp=E,4.8nm,0.8s,baz=120,slow=7.5,SNR=23 | | | | | | |
| **BR231** | **Keskin MP Arra** | **58.33** | **308** | *e*P | P | 03 07 58.1 | -4.2 |
| **OBN** | **Obninsk** | **59.64** | **326***d* | *e*P | **P** | **03 08 10.7** | **-0.2** |
| OBN | | | | *e* | | 03 08 57.4 | |
| OBN | | | | *e* | | 03 10 24.2 | |
| OBN | | | | *e*S | S | 03 16 32.3 | +13 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,112nm,22.0s | | | | | | |
| **MA2** | **Magadan** | **61.97** | **29** | *e*P | **P** | **03 08 25.4** | **-1.3** |
| **CTAO** | **Charters Tower** | **62.41** | **122** | *e*P | **P** | **03 08 28.9** | **-1.3** |
| **CTAO** | **Charters Tower** | **62.41** | **122** | *e*P | **P** | **03 08 28.9** | **-1.3** |
| **CFR** | **Carcaliu** | **62.49** | **314** | ⇓P | **P** | **03 08 30.8** | **+0.4** |
| **CFR** | **Carcaliu** | **62.49** | **314** | ⇓*i*P | **P** | **03 08 30.8** | **+0.4** |
| **AKASG** | **Malin Array Be** | **62.70** | **320** | P | **P** | **03 08 30.6** | **-1.2** |
| | comp=Z,4.1nm,0.8s,baz=86,slow=5.1,SNR=15 | | | | | | |
| AKASG | | | | LR | LR | 03 39 10.1 | |
| | comp=Z,102nm,20.7s,baz=135,slow=39 | | | | | | |
| **KIEV** | **Kiev** | **62.71** | **320***d* | *e*P | **P** | **03 08 31.0** | **-0.8** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **KIEV** | **Kiev** | **62.71** | **320** | *e*P | **P** | **03 08 30.9** | **-0.9** |
| | comp=Z,5.9nm,0.8s | | | | | | |
| **VRI** | **Vrincioaia** | **63.56** | **314** | ⇑P | **P** | **03 08 39.0** | **+1.4** |
| **VRI** | **Vrincioaia** | **63.56** | **314** | ⇑*i*P | **P** | **03 08 39.0** | **+1.4** |
| **PLOR** | **Plostina** | **63.61** | **314** | ⇓P | **P** | **03 08 39.2** | **+1.3** |
| **PLOR** | **Plostina** | **63.61** | **314** | ⇓*i*P | **P** | **03 08 39.2** | **+1.3** |
| **MLR** | **Muntele Rosu** | **64.06** | **314** | ⇓P | **P** | **03 08 42.0** | **+1.0** |
| **MLR** | **Muntele Rosu** | **64.06** | **314** | ⇓*i*P | **P** | **03 08 42.0** | **+1.0** |
| **BURAR** | **Bucovina Array** | **64.80** | **316** | ⇑P | **P** | **03 08 46.1** | **+0.3** |
| **BURAR** | **Bucovina Array** | **64.80** | **316** | ⇑*i*P | **P** | **03 08 46.1** | **+0.3** |
| **BUR04** | **Bucovina Ar. S** | **64.81** | **316** | *e*P | **P** | **03 08 45.8** | **-0.1** |
| **LVV** | **L'vov** | **65.85** | **319** | *e*P | **P** | **03 08 52.4** | **0.0** |
| **DRGR** | | **66.42** | **315** | ⇑P | **P** | **03 08 56.7** | **+0.5** |
| **DRGR** | | **66.42** | **315** | ⇑*i*P | **P** | **03 08 56.7** | **+0.5** |
| **TRPA** | **Tarpa** | **66.65** | **317** | ⇓*i*P | **P** | **03 08 58.3** | **+0.8** |
| **FINES** | **FINESS Array B** | **66.81** | **331** | P | **P** | **03 08 57.6** | **-0.7** |
| | comp=Z,5.4nm,0.5s,baz=109,slow=6.8,SNR=54 | | | | | | |
| FINES | | | | LR | LR | 03 44 02.6 | |
| | comp=Z,87nm,18.5s,baz=124,slow=41 | | | | | | |
| **FINES** | **FINESS Array B** | **66.81** | **331** | *i* P | **P** | **03 08 58.0** | **-0.3** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **66.90** | **317** | *e*P | **P** | **03 08 59.5** | **+0.3** |
| **KOLS** | **Kolonicke sedl** | **66.90** | **317** | *e*P | **P** | **03 08 59.5** | **+0.3** |
| **DIVS** | **Divibare** | **68.19** | **312** | ⇓*i*P | **P** | **03 09 07.6** | **+0.1** |
| **PSZ** | **Piszkesteto** | **68.41** | **316** | ⇓P | **P** | **03 09 09.0** | **+0.2** |
| **PSZ** | **Piszkesteto** | **68.41** | **316** | ⇓*i*P | **P** | **03 09 09.0** | **+0.2** |
| **PSZ** | **Piszkesteto** | **68.41** | **316** | *e*P | **P** | **03 09 08.9** | **+0.2** |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **OJC** | **Ojcow** | **68.61** | **319** | *e*P | **P** | **03 09 10.1** | **+0.2** |
| OJC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **OJC** | **Ojcow** | **68.61** | **319** | *e*P | **P** | **03 09 10.1** | **+0.2** |
| | comp=Z,8.8nm,1.0s | | | | | | |
| **VYHS** | **Vyhne** | **69.14** | **317** | *e*P | **P** | **03 09 13.0** | **-0.3** |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **VYHS** | **Vyhne** | **69.14** | **317** | *e*P | **P** | **03 09 12.9** | **-0.3** |
| **ARCES** | **ARCESS Array B** | **69.16** | **340** | P | **P** | **03 09 13.1** | **+0.1** |
| | comp=Z,4.6nm,0.8s,baz=93,slow=7.3,SNR=14 | | | | | | |
| ARCES | | | | LR | LR | 03 42 08.9 | |
| | comp=Z,67nm,18.2s,baz=112,slow=38 | | | | | | |
| **OKC** | **Ostrava-Krasne** | **69.65** | **318** | *e*P | **P** | **03 09 16.3** | **0.0** |
| **OKC** | **Ostrava-Krasne** | **69.65** | **318** | *e*P | **P** | **03 09 16.3** | **0.0** |
| **MORC** | **Moravsky Berou** | **70.04** | **318** | ⇑P | **P** | **03 09 19.4** | **+0.6** |
| **MORC** | **Moravsky Berou** | **70.04** | **318** | ⇑*i*P | **P** | **03 09 19.4** | **+0.6** |
| **MORC** | **Moravsky Berou** | **70.04** | **318** | *e*P | **P** | **03 09 18.5** | **-0.3** |
| | comp=Z,46nm,1.1s | | | | | | |
| MORC | | | | *e*pP | **pP** | **03 09 28.5** | **-0.5** |
| **LSZ** | **Lusaka** | **70.33** | **248** | *e*P | **P** | **03 09 22.4** | **+1.1** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **LSZ** | **Lusaka** | **70.33** | **248** | *e*P | **P** | **03 09 22.4** | **+1.1** |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **KRLC** | **Kraliky** | **70.54** | **318** | *e*P | **P** | **03 09 22.5** | **+0.6** |
| **KRLC** | **Kraliky** | **70.54** | **318** | *e*P | **P** | **03 09 22.5** | **+0.6** |
| **DPC** | **Dobruska-Polom** | **70.84** | **319** | *e*P | **P** | **03 09 23.8** | **+0.1** |
| DPC | | | | *e* | | 03 09 38.6 | |
| **DPC** | **Dobruska-Polom** | **70.84** | **319** | *e*P | **P** | **03 09 23.8** | **+0.1** |
| DPC | | | | *e*pP | **pP** | **03 09 38.6** | **+4.7** |
| **UPC** | **Upice** | **71.04** | **319** | *e*P | **P** | **03 09 25.5** | **+0.6** |
| **UPC** | **Upice** | **71.04** | **319** | *e*P | **P** | **03 09 25.5** | **+0.6** |
| **SOKA** | **Soboth** | **71.69** | **315** | ⇓*i*P | **P** | **03 09 29.5** | **+0.5** |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **71.82** | **318** | *e*P | **P** | **03 09 30.0** | **+0.4** |
| **GOPC** | **GO Pecny, Ondr** | **71.82** | **318** | *e*P | **P** | **03 09 30.0** | **+0.4** |
| **PVCC** | **Panska Ves** | **71.96** | **319** | *e*P | **P** | **03 09 31.2** | **+0.8** |
| **PVCC** | **Panska Ves** | **71.96** | **319** | *e*P | **P** | **03 09 31.2** | **+0.8** |
| **PRU** | **Pruhonice** | **71.98** | **318** | *e*P | **P** | **03 09 31.1** | **+0.6** |
| **PRU** | **Pruhonice** | **71.98** | **318** | *e*P | **P** | **03 09 31.1** | **+0.6** |
| **OBKA** | **Obir** | **72.03** | **315** | ⇓*i*P | **P** | **03 09 31.5** | **+0.4** |
| **BRG** | **Berggiesshubel** | **72.36** | **319** | *e*P | **P** | **03 09 33.2** | **+0.5** |
| | comp=Z,7.8nm,1.0s | | | | | | |
| BRG | | | | *e* | | 03 09 43.2 | |
| | comp=Z,3.2nm,0.8s | | | | | | |
| **BRG** | **Berggiesshubel** | **72.36** | **319** | *e*P | **P** | **03 09 33.2** | **+0.5** |
| BRG | | | | *e* | | 03 09 43.2 | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **GEC2** | **GERESS Array S** | **72.55** | **317** | *e*P | **P** | **03 09 34.5** | **+0.4** |
| **GEC2** | **GERESS Array S** | **72.55** | **317** | *e*P | **P** | **03 09 34.5** | **+0.5** |
| **GERES** | **GERESS Array B** | **72.55** | **317** | P | **P** | **03 09 34.4** | **+0.4** |
| | comp=Z,5.4nm,0.8s,baz=85,slow=5.8,SNR=54 | | | | | | |
| GERES | | | | LR | LR | 03 45 32.8 | |
| | comp=Z,28nm,19.3s,baz=97,slow=39 | | | | | | |
| **KHC** | **Kasperske Hory** | **72.62** | **317** | *e*P | **P** | **03 09 34.7** | **+0.3** |
| KHC | | | | *e* | | 03 09 45.0 | |
| **KHC** | **Kasperske Hory** | **72.62** | **317** | *e*P | **P** | **03 09 34.7** | **+0.3** |
| KHC | | | | *e*pP | **pP** | **03 09 45.0** | **+0.3** |
| **CLL** | **Collm** | **72.94** | **320** | *e*P | **P** | **03 09 36.0** | **-0.2** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **CLL** | **Collm** | **72.94** | **320** | *e*P | **P** | **03 09 36.0** | **-0.2** |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **ABTA** | **Abfaltersbach** | **73.43** | **315** | ⇓*e*P | **P** | **03 09 38.6** | **-0.7** |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **NB2** | **NORSAR Subarra** | **73.88** | **330** | P | **P** | **03 09 40.6** | **-1.0** |
| | comp=Z,2.5nm,0.7s,baz=88,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **73.88** | **330** | P | **P** | **03 09 40.9** | **-0.7** |
| | comp=Z,3.2nm,0.7s,baz=90,slow=5.8,SNR=11 | | | | | | |
| NOA | | | | LR | LR | 03 45 31.9 | |
| | comp=Z,68nm,19.3s,baz=110,slow=38 | | | | | | |
| **WTTA** | **Wattenberg** | **74.00** | **316** | ⇓*e*P | **P** | **03 09 42.2** | **-0.6** |
| | comp=Z,3.6nm,0.6s | | | | | | |
| **WATA** | **Walderalm** | **74.03** | **316** | ⇓*e*P | **P** | **03 09 42.0** | **-1.0** |
| | comp=Z,1.9nm,0.5s | | | | | | |
| **MOTA** | **Moosalm** | **74.35** | **316** | ⇓*e*P | **P** | **03 09 44.0** | **-0.8** |
| | comp=Z,2.3nm,0.6s | | | | | | |
| **RETA** | **Reutte** | **74.58** | **316** | ⇓*e*P | **P** | **03 09 45.7** | **-0.3** |
| | comp=Z,13nm,1.4s | | | | | | |
| **FETA** | **Feichten** | **74.63** | **315** | ⇓*e*P | **P** | **03 09 45.8** | **-0.6** |
| | comp=Z,6.2nm,1.2s | | | | | | |
| **DAVA** | **Damuels** | **75.19** | **316** | ⇓*i*P | **P** | **03 09 49.6** | **0.0** |
| | comp=Z,16nm,1.2s | | | | | | |
| **KEST** | **Kesra** | **76.84** | **304** | P | **P** | **03 09 59.1** | **-0.1** |
| | comp=Z,3.5nm,0.7s,baz=122,slow=2.2,SNR=4.9 | | | | | | |
| **BNI** | **Bardonecchia** | **77.63** | **314** | *e*P | **P** | **03 10 02.8** | **-0.7** |
| BNI | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **BNI** | **Bardonecchia** | **77.63** | **314** | *e*P | **P** | **03 10 02.8** | **-0.7** |
| | comp=Z,9.1nm,1.0s | | | | | | |
| **BOSA** | **Boshof** | **77.91** | **236** | P | **P** | **03 10 06.1** | **+0.8** |
| | comp=Z,2.1nm,0.4s,baz=77,slow=3.4,SNR=18 | | | | | | |
| BOSA | | | | LR | LR | 03 42 05.7 | |
| | comp=Z,65nm,18.0s,baz=355,slow=34 | | | | | | |
| **TAM** | **Tamanrasset** | **82.37** | **292** | *e*P | **P** | **03 10 30.2** | **+0.6** |
| TAM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **TAM** | **Tamanrasset** | **82.37** | **292** | *e*P | **P** | **03 10 30.2** | **+0.6** |
| | comp=Z,0.8nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **84.26** | **191** | LR | LR | 03 40 25.1 | |
| | comp=Z,59nm,20.6s,baz=62,slow=30 | | | | | | |
| **ESDC** | **Sonseca Array** | **86.41** | **310** | P | **P** | **03 10 49.3** | **-0.3** |
| | comp=Z,1.7nm,0.8s,baz=62,slow=5.1,SNR=8.5 | | | | | | |
| **MLY** | **Manley** | **88.00** | **22** | *e*P | **P** | **03 10 57.4** | **+0.6** |
| **TOA0** | **Torodi Ar. Sit** | **88.08** | **283** | *e*P | **P** | **03 10 58.9** | **+0.8** |
| TOA0 | | | | *e*pP | **pP** | **03 11 08.3** | **-0.2** |
| **TORD** | **Torodi Ar. Bea** | **88.08** | **283** | P | **P** | **03 10 58.6** | **+0.5** |
| | comp=Z,1.8nm,0.9s,baz=84,slow=4.1,SNR=11 | | | | | | |
| **CAST** | **Castle Rocks** | **88.27** | **24** | *e*P | **P** | **03 10 58.8** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **88.37** | **23** | *e*P | **P** | **03 10 59.0** | **+0.5** |
| | comp=Z,12nm,1.0s | | | | | | |
| **MCK** | **McKinley** | **89.34** | **23** | *e*P | **P** | **03 11 02.9** | **-0.2** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,21nm,1.5s | | | | | | |
| **MCK** | **McKinley** | **89.34** | **23** | *e*P | **P** | **03 11 02.9** | **-0.2** |
| | comp=Z,21nm,1.5s | | | | | | |
| **IL1** | **Eielson Array** | **89.54** | **22** | *e*P | **P** | **03 11 02.5** | **-1.5** |
| **ILAR** | **Eielson Array** | **89.54** | **22** | P | **P** | **03 11 02.5** | **-1.5** |
| | comp=Z,2.4nm,0.8s,baz=300,slow=4.3,SNR=27 | | | | | | |
| ILAR | | | | LR | LR | 03 54 19.5 | |
| | comp=Z,115nm,18.3s,baz=316,slow=38 | | | | | | |
| **RC01** | **Rabbit Creek A** | **90.37** | **26** | *e*P | **P** | **03 11 08.0** | **+0.1** |
| | comp=Z,58nm,1.5s | | | | | | |
| **VNDA** | **Vanda** | **99.11** | **168** | LR | LR | 03 53 38.6 | |
| | comp=Z,67nm,18.1s,baz=297,slow=34 | | | | | | |
| **HLID** | **Hailey** | **117.50** | **22** | *e*PKPdf | **PKPdf** | **03 16 53.4** | **+0.4** |
| **SNOW** | **Snow King Moun** | **118.85** | **20** | *e*PKPdf | **PKPdf** | **03 16 55.9** | **+0.1** |
| **PPT2** | **Papeete2** | **119.95** | **102** | *e*LR | LR | 03 15 45.4 | |
| | comp=Z,101nm,22.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **120.20** | **28** | PKP | **PKPdf** | **03 16 59.3** | **+0.8** |
| | comp=Z,0.7nm,0.7s,baz=309,slow=2.5,SNR=7.2 | | | | | | |
| **DUG** | **Dugway** | **121.01** | **23** | *e*PKIKP | **PKPdf** | **03 17 00.5** | **+0.6** |
| **DUG** | **Dugway** | **121.01** | **23** | *e*PKPdf | **PKPdf** | **03 17 00.5** | **+0.6** |
| **MSU** | **Marysvale** | **122.72** | **23** | *e*PKIKP | **PKPdf** | **03 17 04.4** | **+1.0** |
| **MSU** | **Marysvale** | **122.72** | **23** | *e*PKPdf | **PKPdf** | **03 17 04.3** | **+1.0** |
| **WCI** | **Wyandotte Cave** | **128.06** | **359** | *e*PKIKP | **PKPdf** | **03 17 12.0** | **-1.3** |
| **WCI** | **Wyandotte Cave** | **128.06** | **359** | *e*PKPdf | **PKPdf** | **03 17 12.0** | **-1.3** |
| **WMOK** | **Wichita Mounta** | **130.28** | **13** | *e*PKIKP | **PKPdf** | **03 17 17.2** | **-0.4** |
| **WMOK** | **Wichita Mounta** | **130.28** | **13** | *e*PKPdf | **PKPdf** | **03 17 17.2** | **-0.4** |
| **TXAR** | **Lajitas Array** | **134.04** | **20** | PKP | **PKPdf** | **03 17 25.4** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=270,slow=1.3,SNR=5.4 | | | | | | |
| **SDV** | **Santo Domingo** | **152.04** | **323** | *e*PKPdf | **PKPdf** | **03 17 56.3** | **-0.5** |
| SDV | | | | *e*PKPbc | **PKPbc** | **03 18 02.2** | **-1.1** |
| SDV | | | | *e*PKPab | **PKPab** | **03 18 12.4** | **-0.3** |

*ISCJB **03** 02:59:10.0±0.3, 23°.60N±0°.02×121°.63E±0°.02, h39km±7km,*
*Error ellipse: s-maj=3.5km s-min=2.2km az=137.2*

*TAP* ***03*** *02:59:09.9, 23.63N×121.56E, h45km, ML3.7, B*
*JMA* ***03*** *02:59:09.4±0.2, 23.62N×121.54E, h42km±4km, M3.1*
**ISC 03 02:59:09.5**±1.0, **23.59N**±0.02×**121.61E**±0.02, **h29**km±11km, **n56**, σ**s73**/100, **7C-5D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TEGC** | **Jichi Village** baz=339 | **0.13** | **333** | *e*P | **Pn** | **02 59 18.3** | **+2.5** |
| **EHY** | **Hungye** baz=240 | **0.27** | **252** ⇑*i*P | | **Pn** | **02 59 18.0** | **+0.3** |
| EHY | baz=240 | | | *e*S | **Sn** | **02 59 23.2** | **+0.3** |
| **ESL** | **Shilin** baz=329 | **0.28** | **325** ⇑*i*P | | **Pn** | **02 59 17.7** | **0.0** |
| ESL | baz=329 | | | *e*S | **Sn** | **02 59 22.6** | **-0.3** |
| **TWF1** | **Yuli** baz=229 | **0.37** | **230** ⇑*i*P | | **Pn** | **02 59 19.1** | **+0.1** |
| TWF1 | baz=229 | | | *e*S | **Sn** | **02 59 24.6** | **-0.6** |
| **HWA** | **Hwalien** baz=10.0 | **0.39** | **360** *e*P | | **Pn** | **02 59 19.6** | **+0.4** |
| HWA | baz=10.0 | | | *e*S | **Sn** | **02 59 26.6** | **+0.9** |
| **WDT** | **Danda** baz=291 | **0.47** | **291** ⇑*i*P | | **Pn** | **02 59 20.5** | **-0.1** |
| WDT | baz=291 | | | *i* S | **Sn** | **02 59 27.3** | **-0.7** |
| **TWD** | **Chiawan** baz=356 | **0.49** | **359** ⇓P | | **Pb** | **02 59 20.2** | **+0.4** |
| TWD | baz=356 | | | S | **Sn** | **02 59 27.5** | **-0.7** |
| **CHKT** | **Chengkung** baz=190 | **0.54** | **204** *e*P | | **Pn** | **02 59 21.2** | **0.0** |
| CHKT | baz=190 | | | *e*S | **Sn** | **02 59 30.7** | **+1.4** |
| **YUS** | **Yu-Shan** baz=255 | **0.61** | **261** ⇑*i*P | | **Pn** | **02 59 23.0** | **+0.3** |
| YUS | baz=255 | | | *i* S | **Sn** | **02 59 31.6** | **-0.2** |
| **WHF** | **Hehuan Shan** baz=332 | **0.64** | **331** ⇓P | | **Pb** | **02 59 22.3** | **-0.2** |
| WHF | baz=332 | | | *e*S | **Sb** | **02 59 30.8** | **-0.4** |
| **ELDTW** | **Lidau** baz=226 | **0.67** | **234** ⇓*e*P | | **Pb** | **02 59 22.7** | **-0.2** |
| ELDTW | baz=226 | | | *e*S | **Sb** | **02 59 31.8** | **-0.1** |
| **SMLT** | **Sun Moon Lake** baz=292 | **0.71** | **294** ⇑*i*P | | **Pn** | **02 59 23.8** | **+0.1** |
| SMLT | baz=292 | | | *i* S | **Sn** | **02 59 33.3** | **-0.5** |
| **TYC** | **Yuchr** baz=293 | **0.76** | **295** ⇑*i*P | | **Pn** | **02 59 24.3** | **+0.1** |
| TYC | baz=293 | | | *i* S | **Sn** | **02 59 34.5** | **-0.2** |
| **TWT** | **Tachien** baz=331 | **0.77** | **329** P | | **Pn** | **02 59 24.6** | **0.0** |
| TWT | baz=331 | | | S | **Sb** | **02 59 34.0** | **-0.8** |
| **ENA** | **Nanau** baz=2.0 | **0.84** | **8** *e*P | | **Pb** | **02 59 24.8** | **-0.9** |
| **CHN5** | **Tsauling** baz=267 | **0.85** | **271** *e*P | | **Pn** | **02 59 26.1** | **+0.4** |
| CHN5 | baz=267 | | | S | **Sn** | **02 59 37.8** | **+0.5** |
| **NNS** | **Nan Shan** baz=353 | **0.87** | **346** *e*P | | **Pn** | **02 59 25.6** | **-0.5** |
| **STYT** | **Tauyuan** baz=234 | **0.89** | **242** *e*P | | **Pb** | **02 59 26.4** | **0.0** |
| STYT | baz=234 | | | *e*S | **Sn** | **02 59 38.2** | **+0.1** |
| **WNT** | **Mingjian** baz=287 | **0.89** | **289** P | | **Pb** | **02 59 26.6** | **+0.1** |
| WNT | baz=287 | | | S | **Sn** | **02 59 39.5** | **+1.4** |
| **TWG** | **Pinlang** baz=200 | **0.91** | **213** *e*P | | **Pn** | **02 59 25.1** | **-1.3** |
| TWG | baz=200 | | | *e*S | **Sb** | **02 59 36.9** | **-1.6** |
| **WGK** | **Gukeng** baz=273 | **0.96** | **276** *e*P | | **Pb** | **02 59 27.8** | **+0.1** |
| **WTP** | **Ta-pu** baz=245 | **0.97** | **250** *e*P | | **Pb** | **02 59 28.1** | **+0.3** |
| WTP | baz=245 | | | S | **Sn** | **02 59 41.4** | **+1.2** |
| **TCU** | **Taichung** baz=302 | **1.02** | **303** *e*P | | **Pb** | **02 59 28.7** | **+0.1** |
| TCU | baz=302 | | | *e*S | **Sb** | **02 59 42.1** | **+0.5** |
| **CHN2** | **Minshiung** baz=263 | **1.04** | **267** *e*P | | **Pb** | **02 59 28.9** | **-0.1** |
| CHN2 | baz=263 | | | S | **Sb** | **02 59 43.6** | **+1.3** |
| **TWC** | **Suao** baz=23 | **1.04** | **12** *e*P | | **Pn** | **02 59 28.2** | **0.0** |
| TWC | baz=23 | | | S | **Sn** | **02 59 41.5** | **-0.2** |
| **ENTT** | **Nioudou** baz=360 | **1.05** | **358** ⇓*i*P | | **Pn** | **02 59 27.8** | **-0.5** |
| ENTT | baz=360 | | | S | **Sn** | **02 59 41.0** | **-0.9** |
| **SGST** | **Jiashian** baz=250 | **1.07** | **242** *e*P | | **Pb** | **02 59 30.1** | **+0.6** |
| SGST | baz=250 | | | *e*S | **Sb** | **02 59 44.4** | **+1.4** |
| **CHN1** | **Nanshi** baz=244 | **1.07** | **248** ⇓*i*P | | **Pb** | **02 59 29.5** | **0.0** |
| CHN1 | baz=244 | | | *i* S | **Sb** | **02 59 43.9** | **+0.8** |
| **TWQ1** | **Liyutan** baz=314 | **1.07** | **315** *e*P | | **Pn** | **02 59 29.1** | **+0.4** |
| TWQ1 | baz=314 | | | S | **Sb** | **02 59 43.3** | **+0.1** |
| **CHY** | **Chiayi** baz=262 | **1.09** | **265** *e*P | | **Pb** | **02 59 30.1** | **+0.3** |
| CHY | baz=262 | | | S | **Sb** | **02 59 43.8** | **+0.2** |
| **NSK** | **Sanguang** baz=358 | **1.11** | **348** *e*P | | **Pn** | **02 59 28.9** | **-0.3** |
| NSK | baz=358 | | | S | **Sn** | **02 59 42.3** | **-1.2** |
| **TWE** | **Neicheng** baz=5.0 | **1.13** | **3** *e*P | | **Pn** | **02 59 28.8** | **-0.7** |
| TWE | baz=5.0 | | | *e*S | **Sn** | **02 59 42.8** | **-1.1** |
| **NSY** | **Sanyi** baz=316 | **1.13** | **317** *e*P | | **Pb** | **02 59 30.2** | **-0.3** |
| **NSTT** | **Nanjuang** baz=320 | **1.18** | **332** *e*P | | **Pn** | **02 59 30.4** | **+0.3** |
| NSTT | baz=320 | | | *e*S | **Sn** | **02 59 45.4** | **+0.2** |
| **SSD** | **Sandimen** baz=210 | **1.23** | **227** *e*P | | **Pb** | **02 59 31.6** | **-0.6** |
| SSD | baz=210 | | | *e*S | **Sb** | **02 59 48.7** | **+1.1** |
| **EGS** | baz=23 | **1.28** | **13** *e*P | | **Pb** | **02 59 33.1** | **0.0** |
| EGS | baz=23 | | | *e*S | **Sn** | **02 59 48.0** | **+0.2** |
| **TWM1** | **Shoushan** baz=245 | **1.33** | **235** *e*P | | **Pn** | **02 59 32.6** | **+0.4** |
| **TWA** | **Mucha** baz=11 | **1.39** | **359** *e*P | | **Pn** | **02 59 32.8** | **-0.2** |
| **EAST** | **Anshuo** baz=201 | **1.39** | **210** *e*P | | **Pn** | **02 59 32.5** | **-0.6** |
| **TWB1** | **Santiao Chiao** baz=27 | **1.46** | **14** *e*P | | **Pn** | **02 59 33.9** | **0.0** |
| TWB1 | baz=27 | | | *e*S | **Sn** | **02 59 52.2** | **+0.2** |
| **NWF** | **Wu-fen Shan** baz=7.0 | **1.48** | **6** *e*P | | **Pn** | **02 59 33.9** | **-0.5** |
| **JYNG** | **Yonagunijimaku** | **1.50** | **55** P | | **Pn** | **02 59 35.0** | **+0.6** |
| JYNG | | | | S | **Sn** | **02 59 53.6** | **+0.6** |
| **SCZT** | **Fangliau** baz=212 | **1.52** | **217** *e*P | | **Pn** | **02 59 35.4** | **+0.6** |
| SCZT | baz=212 | | | *e*S | **Sb** | **02 59 55.4** | **-0.4** |
| **TWS1** | **Kuangyinshan** baz=7.0 | **1.52** | **354** *e*P | | **Pn** | **02 59 34.9** | **+0.1** |
| **LAY** | **Lan-yu** baz=183 | **1.54** | **182** *e*P | | **Pn** | **02 59 34.7** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **1.55** | **56** P | | **Pn** | **02 59 36.0** | **+0.8** |
| YOJ | | | | S | **Sn** | **02 59 55.0** | **+0.6** |
| **YOJ** | **Yonaguni jima** baz=57 | **1.55** | **56** *e*P | | **Pn** | **02 59 36.0** | **+0.8** |
| YOJ | baz=57 | | | *e*S | **Sb** | **02 59 55.9** | **-0.9** |
| **TWK1** | **Hengchun** baz=197 | **1.80** | **204** *e*P | | **Pn** | **02 59 38.3** | **-0.4** |
| TWK1 | baz=197 | | | *e*S | **Sn** | **02 59 59.9** | **-0.6** |
| **WDGT** | **Dungji** baz=256 | **1.82** | **260** *e*P | | **Pn** | **02 59 38.4** | **-0.4** |
| WDGT | baz=256 | | | *e*S | **Sn** | **02 59 59.1** | **-1.9** |
| **PNG** | **Penghu** baz=267 | **1.88** | **270** *e*P | | **Pn** | **02 59 38.9** | **-0.9** |
| **HATJ** | **Hateruma jima** | **2.07** | **77** P | | **Pn** | **02 59 42.9** | **+0.6** |
| HATJ | | | | S | **Sn** | **03 00 07.6** | **+0.5** |
| **IRIF** | **Iriomote-Funau** | **2.08** | **69** P | | **Pn** | **02 59 43.4** | **+0.9** |
| IRIF | | | | S | **Sn** | **03 00 08.8** | **+1.4** |
| **JKRS** | **Kuro-shima** | **2.29** | **73** P | | **Pn** | **02 59 46.3** | **+0.9** |
| JKRS | | | | S | **Sn** | **03 00 14.1** | **+1.4** |
| **JIJ** | **Ishigaki jima** | **2.44** | **71** P | | **Pn** | **02 59 47.6** | **+0.1** |
| JIJ | | | | S | **Sn** | **03 00 16.0** | **-0.5** |
| **JISG** | **Ishigakijimahi** | **2.66** | **68** P | | **Pn** | **02 59 50.8** | **+0.3** |
| JISG | | | | S | **Sn** | **03 00 21.0** | **-0.8** |
| **JTJ** | **Tarama** | **3.02** | **69** P | | **Pn** | **02 59 54.5** | **-0.9** |
| JTJ | | | | S | **Sn** | **03 00 30.5** | **0.0** |

**GUC 03 02:59:21.8**±0.5, **37.50S**×**74.29W**, **h25**km±5km, **ML4.1, 1C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCSP** | **San Pedro de C** | **1.15** | **55** *e*P | | Pn | 02 59 42.0 | -0.1 |
| CCSP | | | | *i* S | Sn | 02 59 56.9 | -0.2 |
| CCSP | | | | AML | AML | 03 00 01.9 | |
| | comp=N,6μm,0.3s | | | | | | |
| **CCHI** | **Chillan** | **1.98** | **64** ⇑*i*P | | Pn | 02 59 53.1 | -0.6 |
| CCHI | | | | *i* S | Sn | 03 00 18.4 | +0.8 |
| CCHI | | | | AML | AML | 03 00 24.1 | |
| | comp=N,3μm,0.6s | | | | | | |
| **VLCH** | **Valdivia** | **2.44** | **161** *i* S | | Sn | 03 00 31.1 | +2.1 |
| **ROB** | **El Roble** | **5.25** | **32** *e*P | | Pn | 03 00 40.2 | +1.2 |

**MEX 03 03:22:05.4**±0.9, **17.27N**×**101.32W**, **h15**km, **MD3.9, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZIIG** | **Zihuatanejo** | **0.37** | **337** *i* P | | Pg | 03 22 12.6 | -0.3 |
| ZIIG | | | | *i* S | Sg | 03 22 16.8 | -1.2 |
| **ARIG** | **Puente Sto Nin** | **1.37** | **42** *e*P | | Pn | 03 22 26.1 | -3.9 |
| ARIG | | | | *i* S | Sn | 03 22 42.1 | -5.9 |
| **MMIG** | **Aquila** | **2.18** | **298** *i* P | | Pn | 03 22 37.5 | -3.7 |
| MMIG | | | | *e*S | Sn | 03 23 03.9 | -4.1 |
| **EZ5V** | | **3.09** | **316** *e*P | | Pn | 03 22 51.0 | -3.0 |
| EZ5V | | | | *e*S | Sn | 03 23 27.3 | -3.7 |
| **R15V** | | **3.16** | **307** *e*P | | Pn | 03 22 51.2 | -3.6 |
| R15V | | | | *e*S | Sn | 03 23 28.9 | -3.4 |

**KRSC 03 03:41:35.5**±1.0, **54.62N**×**159.02E**, **h333**km±11km, **ML3.7, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TUMR** | **Tumrok** | **0.93** | **44** *e*P | | Pn | 03 42 20.3 | +1.2 |
| **GNL** | **Ganaly** | **1.12** | **215** *e*P | | Pn | 03 42 20.1 | 0.0 |
| **KRX** | **Arik** | **1.28** | **190** *e*P | | Pn | 03 42 22.0 | +1.1 |
| **SDLR** | **Sedlovina** | **1.34** | **183** *e*P | | Pn | 03 42 22.2 | +1.0 |
| **KOK** | **Koryaka** | **1.34** | **190** *e*P | | Pn | 03 42 22.5 | +1.3 |
| **SMAR** | **Somma** | **1.36** | **186** *e*P | | Pn | 03 42 22.8 | +1.4 |
| **AVH** | **Avacha** | **1.36** | **187** *e*P | | Pn | 03 42 22.6 | +1.3 |
| **NLC** | **Nalytchevo** | **1.46** | **172** *e*P | | Pn | 03 42 22.7 | +1.1 |
| NLC | | | | *e*S | S | 03 42 58.6 | 0.0 |
| **MKZ** | **Mys Kozlova** | **1.58** | **91** *e*P | | Pn | 03 42 22.9 | +0.7 |
| MKZ | | | | *e*S | S | 03 42 58.9 | -0.8 |
| **SPN** | **Mys Shipunski** | **1.63** | **158** *e*P | | Pn | 03 42 23.7 | +1.0 |
| SPN | | | | *e*S | S | 03 43 00.4 | -0.1 |
| **RUS** | **Russkaya** | **2.21** | **188** *e*P | | Pn | 03 42 27.1 | +0.4 |
| **KBTR** | **Krutoberegovo** | **2.69** | **52** *e*P | | Pn | 03 42 32.3 | +1.7 |
| KBTR | | | | *e*S | S | 03 43 14.7 | -0.2 |

*ISCJB* ***03*** *03:51:06.4±0.4, 24.02S±0.04×67.12W±0.04, h191km±4km, mb4.0/4, Error ellipse: s-maj=8.0km s-min=4.4km az=41.6*
*IDC* ***03*** *03:51:06.2±1.0, 24.15S×66.98W, h166km±13km, mb3.8/2, mb1 3.8/6, mb1mx3.5/23, mbtmp4.3/6, Error ellipse: s-maj=17.1km s-min=14.2km az=86.0*
*NEIC* ***03*** *03:51:07.4±0.7, 24.04S×67.01W, h179km±8km, mb4.1/2, Error ellipse: s-maj=12.8km s-min=8.8km az=102.0*
*SJA* ***03*** *03:51:07.6±0.8, 24.11S×67.12W, h177km±13km, ML2.6, MW3.0*
*GUC* ***03*** *03:51:09.1±0.3, 23.78S×67.47W, h215km±6km, ML4.5*
**ISC 03 03:51:07.3**±0.7, **24.02S**±0.05×**67.10W**±0.05, **h184**km±7km, **n28**, σ**1s34**/40, **mb4.1**/4, **5C, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.61** | **116** *e*P | | **Pn** | **03 51 42.5** | **+1.6** |
| SLA | | | | IAML | | 03 51 43.0 | |
| | comp=Z,100nm,0.6s | | | | | | |
| SLA | | | | *i* S | **Sn** | **03 52 07.3** | **+0.4** |
| **HJA** | **Humahuaca** | **1.75** | **63** *i* P | | **Pn** | **03 51 44.0** | **+1.5** |
| HJA | | | | *i* S | **Sn** | **03 52 09.7** | **0.0** |
| **AZAP** | **Zapla** | **1.87** | **97** *i* P | | **Pn** | **03 51 44.4** | **+0.8** |
| AZAP | | | | *i* S | **Sn** | **03 52 11.8** | **+0.2** |
| AZAP | | | | AML | AML | 03 52 14.8 | |
| | comp=Z,64nm,0.7s | | | | | | |
| **LVC** | **Limon Verde** | **2.18** | **310** P | | **Pn** | **03 51 48.3** | **+1.4** |
| | comp=Z,1μm,0.3s,baz=132,slow=7.3,SNR=35 | | | | | | |
| LVC | | | | S | **Sn** | **03 52 18.0** | **+0.5** |
| | comp=Z,4μm,0.3s,baz=17,slow=22,SNR=49 | | | | | | |
| **LVC** | **Limon Verde** | **2.18** | **310** ⇑*i*P | | **Pn** | **03 51 48.2** | **+1.4** |
| LVC | | | | *i* S | **Sn** | **03 52 17.7** | **+0.1** |
| **LVC** | **Limon Verde** | **2.18** | **310** *i* P | | **Pn** | **03 51 48.0** | **+1.2** |
| LVC | | | | *i* P | **Pn** | **03 51 48.0** | **+1.2** |
| **FSA** | **Cafayete** | **2.29** | **155** *i* P | | **Pn** | **03 51 48.4** | **+0.4** |
| FSA | | | | *i* S | **Sn** | **03 52 18.3** | **-1.4** |
| FSA | | | | AML | AML | 03 52 23.2 | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **YJA** | **Yavi** | **2.35** | **39** | IAML | | 03 52 24.9 | |
| | comp=E,43nm,0.7s | | | | | | |
| **ASTB** | **Santa Barbara** | **2.40** | **89** *i* P | | **Pn** | **03 51 50.1** | **+0.9** |
| **PB06** | **IPOC Station P** | **2.62** | **299** ⇑*i*P | | **Pn** | **03 51 52.7** | **+0.9** |
| PB06 | | | | *i* S | **Sn** | **03 52 25.6** | **-0.8** |
| PB06 | | | | AML | AML | 03 52 29.1 | |
| | comp=N,1μm,0.3s | | | | | | |
| **AHML** | **Horco Molle** | **3.18** | **150** *i* P | | **Pn** | **03 51 59.0** | **+0.6** |
| AHML | | | | IAML | | 03 52 03.1 | |
| | comp=Z,6.4nm,0.4s | | | | | | |
| AHML | | | | *i* S | **Sn** | **03 52 35.6** | **-2.7** |
| **PB04** | **IPOC Station P** | **3.27** | **300** ⇑*i*P | | **Pn** | **03 51 59.9** | **+0.2** |
| PB04 | | | | *i* S | **Sn** | **03 52 38.4** | **-2.0** |
| PB04 | | | | AML | AML | 03 52 42.3 | |
| | comp=E,716nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **3.44** | **311** ⇑*i*P | | **Pn** | **03 52 02.0** | **+0.3** |
| PB07 | | | | *i* S | **Sn** | **03 52 42.3** | **-1.8** |
| PB07 | | | | AML | AML | 03 52 43.6 | |
| | comp=N,787nm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **3.69** | **323** ⇑*i*P | | **Pn** | **03 52 05.0** | **+0.2** |
| PB01 | | | | *i* S | **Sn** | **03 52 48.1** | **-1.7** |
| **CYA** | **Choya** | **4.55** | **165** | IAML | | 03 53 10.1 | |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **MNMC** | **Minimini** | **5.39** | **334** *e*P | | **Pn** | **03 52 27.7** | **+1.0** |
| MNMC | | | | *i* S | **Sn** | **03 53 27.6** | **-1.6** |
| **CFAA** | **Coronel Fontan** | **7.62** | **187** P | | **Pn** | **03 52 54.4** | **-1.2** |
| | comp=Z,0.1nm,0.3s,baz=20,slow=8.9,SNR=7.5 | | | | | | |
| CFAA | | | | S | Sn | 03 54 14.1 | -7.3 |
| | comp=Z,0.3nm,0.3s,baz=239,slow=20,SNR=11 | | | | | | |
| **CPUP** | **Villa Florida** | **9.14** | **107** P | | **Pn** | **03 53 14.7** | **-0.9** |
| | comp=Z,0.1nm,0.3s,baz=85,slow=20,SNR=3.4 | | | | | | |
| **SIV** | **San Ignacio** | **9.79** | **36** P | | **Pn** | **03 53 23.2** | **-1.0** |
| | comp=Z,1.2nm,0.3s,baz=237,slow=12,SNR=9.5 | | | | | | |
| SIV | | | | S | **Sn** | **03 55 09.1** | **-4.3** |
| | comp=Z,0.2nm,0.3s,baz=150,slow=7.7,SNR=3.3 | | | | | | |
| **TRQA** | **Tornquist** | **14.66** | **164** *e*P | | **P** | **03 54 27.1** | **-0.3** |
| **SAML** | **Samuel** | **15.45** | **15** *e*P | | **Pn** | **03 54 35.6** | **-0.2** |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **BDFB** | **Brasilia** | **19.78** | **69** P | | **P** | **03 55 23.9** | **+0.2** |
| | comp=Z,1.8nm,0.3s,baz=241,slow=10,SNR=44 | | | | | | |
| **SNAA** | **Sanae** | **59.36** | **161** *e*P | | **P** | **04 00 49.1** | **-0.7** |
| | comp=Z,7.7nm,2.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.18** | **180** *e*P | | **P** | **04 01 35.8** | **+0.8** |
| | comp=Z,1.6nm,0.5s | | | | | | |
| **DBIC** | **Dimbokro** | **67.90** | **72** P | | **P** | **04 01 47.5** | **+1.1** |
| | comp=Z,5.3nm,1.1s,baz=198,slow=3.2,SNR=2.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.66** | **69** P | | **P** | **04 02 38.4** | **0.0** |
| | comp=Z,1.0nm,0.6s,baz=261,slow=5.3,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **128.40** | **205** PKP | | **PKPdf** | **04 09 53.3** | **+0.6** |
| | comp=Z,0.3nm,0.6s,baz=148,slow=2.5,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.56** | **207** PKP | | **PKPdf** | **04 09 59.7** | **+0.9** |
| | comp=Z,0.8nm,1.1s,baz=154,slow=1.8,SNR=5.7 | | | | | | |

**IDC 03 03:56:04.0**±2.4, **5.89S**×**131.43E**, **h0**km, **mb3.8**/1, **mb1 3.6**/3, **mb1mx3.4**/21, **mbtmp3.5**/3, **ML3.0**/2, **Error ellipse: s-maj=124.1km s-min=28.3km az=73.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=350,slow=13,SNR=4.8 | **14.26** | **169** | Pn | Pn | 03 59 25.8 | -1.5 |
| WRA | | | | | Sn | 04 02 06.2 | -0.2 |
| | 0.1nm,0.3s,baz=350,slow=24,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** 0.1nm,0.3s,baz=3.7,slow=11,SNR=11 | **17.84** | **173** | P | P | 04 00 15.0 | +0.3 |
| **MKAR** | **Makanchi Array** 0.7nm,0.7s,baz=108,slow=9.3,SNR=3.1 | **68.09** | **326** | P | P | 04 07 05.7 | 0.0 |

*AUST* ***03*** *04:09:00.9±99.0, 5.00S×134.22E, h19km±6km, Error ellipse: s-maj=6.9km s-min=1.3km az=262.0*
*IDC* ***03*** *04:09:02.8±1.3, 5.24S×133.25E, h0km, mb4.0/3, mb1 4.2/7, mb1mx3.9/27, mbtmp4.1/7, ML4.2/4, MS3.4/6, Ms1 3.4/6, ms1mx3.1/38, Error ellipse: s-maj=91.6km s-min=20.0km az=68.0*
*NEIC* ***03*** *04:09:07.3±0.7, 5.38S×133.00E, h35km, mb4.1/1, Error ellipse: s-maj=21.5km s-min=8.7km az=59.0*
**ISC 03 04:09:07.2**±0.7, **5.39S**±0.07×**132.9E**±0.2, **h35**km, **n24**, σ**2s04**/20, **mb4.2**/3, **MS3.4**/3, **Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** baz=2.9,SNR=48 | **2.55** | **344** P | | **Pn** | **04 09 44.9** | **-1.2** |
| **FAKI** | **Fak Fak** | **2.55** | **344** *e*Pn | | **Pn** | **04 09 44.7** | **-1.4** |
| FAKI | | | | *e*Sn | **Sn** | **04 10 15.5** | **-0.4** |
| **SIJI** | **Sorong** 6.9nm,0.3s,baz=66,slow=23,SNR=13 | **4.79** | **340** Pn | | **Pn** | **04 10 15.9** | **-1.0** |
| SIJI | | | | | Sn | | |
| | 13nm,0.3s,baz=220,slow=22,SNR=7.9 | | | | **Sn** | **04 11 06.7** | **-4.6** |
| SIJI | | | | | LR | 04 12 54.3 | |
| | comp=Z,384nm,18.2s,baz=39,slow=48 | | | | | | |
| **SWI** | **Sorong** baz=5.1,SNR=5.6 | **4.80** | **340** P | | **Pn** | **04 10 16.7** | **-0.3** |
| **KDU** | **Kakadu** baz=7.9,SNR=123 | **7.26** | **184** P | | Pn | 04 10 56.2 | +5.3 |
| **MTN** | **Manton Dam** baz=8.4,SNR=70 | **7.62** | **193** P | | Pn | 04 11 02.6 | +6.9 |
| **KNRA** | **Kununurra** baz=12,SNR=60 | **11.01** | **202** P | | Pn | 04 11 48.5 | +6.2 |
| **LUWI** | **Luwuk** | **11.02** | **293** *e*Pn | | **Pn** | **04 11 42.5** | **0.0** |
| **KAPI** | **Kappang** comp=Z,132nm,19.6s,baz=102,slow=44 | **13.13** | **271** LR | | LR | 04 18 50.6 | |
| **COEN** | **Coen** | **13.20** | **131** *e*Pn | | **Pn** | **04 12 12.4** | **+0.1** |
| **WRAB** | **Tennant Creek** 8.5nm,0.6s | **14.52** | **175** *e*Pn | | **Pn** | **04 12 30.4** | **+0.1** |
| **WRA** | **Warramunga Arr** 1.1nm,0.3s,baz=353,slow=13,SNR=41 | **14.53** | **175** Pn | | **Pn** | **04 12 29.7** | **-0.7** |
| WRA | | | | | Sn | | |
| | 0.4nm,0.3s,baz=4.0,slow=23,SNR=4.0 | | | | **Sn** | **04 15 06.0** | **-4.4** |
| **ASAR** | **Alice Springs** 1.1nm,0.3s,baz=1.5,slow=12,SNR=31 | **18.20** | **177** P | | **Pn** | **04 13 18.3** | **+1.1** |
| ASAR | | | | S | **Sn** | **04 16 36.9** | **-2.4** |
| | 0.1nm,0.3s,baz=358,slow=27,SNR=3.7 | | | | | | |
| ASAR | | | | | LR | 04 21 03.9 | |
| | comp=Z,243nm,20.5s,baz=2.0,slow=39 | | | | | | |
| **CTA** | **Charters Tower** 0.4nm,0.3s,baz=308,slow=13,SNR=4.0 | **19.53** | **140** P | | **P** | **04 13 30.4** | **-1.4** |
| **CTAO** | **Charters Tower** 12nm,1.0s | **19.53** | **140** *e*P | | **P** | **04 13 30.8** | **-1.0** |
| **WRKA** | **Warakurna** baz=21,SNR=7.7 | **20.04** | **192** P | | Pn | 04 13 43.1 | +3.8 |
| **QLP** | **Quilpie** baz=24,SNR=6.8 | **23.68** | **154** P | | **P** | **04 14 17.0** | **+1.3** |
| **HNR** | **Honiara** comp=Z,35nm,20.8s,baz=312,slow=37 | **27.08** | **100** LR | | LR | 04 25 43.8 | |
| **MJAR** | **Matsushiro Arr** comp=Z,81nm,19.6s,baz=185,slow=33 | **42.00** | **6** LR | | LR | 04 31 48.9 | |
| **KSRS** | **Korea Array** comp=Z,46nm,20.0s,baz=172,slow=36 | **42.88** | **354** LR | | LR | 04 34 54.2 | |
| **MKAR** | **Makanchi Array** 1.8nm,0.9s,baz=123,slow=7.7,SNR=8.3 | **68.53** | **325** P | | **P** | **04 20 07.8** | **+1.5** |
| **VNDA** | **Vanda** 0.7nm,0.8s,baz=323,slow=6.7,SNR=4.4 | **73.70** | **174** P | | **P** | **04 20 39.6** | **+2.6** |
| **BVAR** | **Borovoye Array** 2.1nm,0.9s,baz=144,slow=5.5,SNR=6.3 | **78.29** | **327** P | | **P** | **04 21 04.6** | **+1.0** |
| **TORD** | **Torodi Ar. Bea** 0.3nm,0.6s,baz=108,slow=2.2,SNR=2.3 | **131.33** | **283** PKP | | **PKPdf** | **04 28 18.6** | **+1.7** |

*JMA* ***03*** *04:20:21.2±0.1, 24.59N×121.93E, h69km±2km, M2.3*
*ISCJB* ***03*** *04:20:22.6±0.5, 24.62N±0.04×122.00E±0.03, h55km±5km, Error ellipse: s-maj=6.2km s-min=3.2km az=161.0*
*TAP* ***03*** *04:20:22.3, 24.62N×121.94E, h56km, ML3.2, C*
**ISC 03 04:20:23.1**±1.3, **24.62N**±0.04×**122.00E**±0.03, **h52**km±8km, **n32**, σ**0s52**/58, **6D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWC** | **Suao** baz=262 | **0.13** | **266** ⇓*i*P | | **Pn** | **04 20 31.3** | **-0.1** |
| TWC | baz=262 | | | S | **Sn** | **04 20 37.7** | **+0.5** |
| **EGS** | baz=7.0 | **0.23** | **346** *e*P | | **Pn** | **04 20 31.8** | **-0.1** |
| **ILA** | **Ilan** baz=311 | **0.27** | **303** *e*P | | **Pn** | **04 20 32.2** | **0.0** |
| ILA | baz=311 | | | *e*S | **Sn** | **04 20 39.6** | **+0.9** |
| **ENA** | **Nanau** baz=222 | **0.30** | **231** ⇓*i*P | | **Pn** | **04 20 32.4** | **-0.1** |
| ENA | baz=222 | | | S | **Sn** | **04 20 39.8** | **+0.6** |
| **TWE** | **Neicheng** baz=293 | **0.32** | **289** ⇓*i*P | | **Pn** | **04 20 32.7** | **+0.2** |
| TWE | baz=293 | | | *i* S | **Sn** | **04 20 39.7** | **+0.3** |
| **TWB1** | **Santiao Chiao** baz=14 | **0.39** | **359** *i* P | | **Pn** | **04 20 33.0** | **-0.3** |
| TWB1 | baz=14 | | | *e*S | **Sn** | **04 20 39.7** | **-0.9** |
| **ENTT** | **Nioudou** baz=277 | **0.39** | **273** ⇓*i*P | | **Pn** | **04 20 33.3** | **0.0** |
| ENTT | baz=277 | | | *e*S | **Sn** | **04 20 41.0** | **+0.3** |
| **NWF** | **Wu-fen Shan** baz=343 | **0.49** | **337** *i* P | | **Pn** | **04 20 34.2** | **-0.3** |
| NWF | baz=343 | | | *i* S | **Sn** | **04 20 42.5** | **-0.2** |
| **TWA** | **Mucha** baz=327 | **0.52** | **314** P | | **Pn** | **04 20 34.4** | **-0.4** |
| TWA | baz=327 | | | *i* S | **Sn** | **04 20 43.1** | **0.0** |
| **NSK** | **Sanguang** baz=271 | **0.58** | **276** ⇓*i*P | | **Pn** | **04 20 35.2** | **-0.4** |
| NSK | baz=271 | | | S | **Sn** | **04 20 43.9** | **-0.6** |
| **NNS** | **Nan Shan** baz=245 | **0.59** | **253** ⇓*i*P | | **Pn** | **04 20 35.4** | **-0.4** |
| NNS | baz=245 | | | S | **Sn** | **04 20 44.5** | **-0.4** |
| **TWD** | **Chiawan** baz=222 | **0.65** | **214** *e*P | | **Pn** | **04 20 35.5** | **-0.8** |
| TWD | baz=222 | | | *e*S | **Sn** | **04 20 45.5** | **-0.3** |
| **WHF** | **Hehuan Shan** baz=231 | **0.82** | **235** P | | **Pn** | **04 20 38.3** | **-0.6** |
| WHF | baz=231 | | | *e*S | **Sn** | **04 20 50.0** | **-0.4** |
| **TWT** | **Tachien** baz=235 | **0.83** | **244** P | | **Pn** | **04 20 39.0** | **+0.1** |
| TWT | baz=235 | | | S | **Sn** | **04 20 50.4** | **+0.1** |
| **JYNG** | **Yonagunijimaku** | **0.88** | **101** P | | **Pn** | **04 20 39.2** | **-0.1** |
| JYNG | | | | S | **Sn** | **04 20 51.6** | **+0.4** |
| **NSTT** | **Nanjuang** baz=281 | **0.91** | **271** *e*P | | **Pn** | **04 20 39.5** | **-0.1** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| NSTT | | | | eS | Sn | 04 20 51.4 | -0.3 |
| | baz=281 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.94** | **99** | P | **Pn** | **04 20 39.6** | **-0.5** |
| YOJ | | | | S | **Sn** | **04 20 52.7** | **+0.2** |
| **ESL** | **Shilin** | **0.95** | **213** | eP | **Pn** | **04 20 38.7** | **-1.5** |
| | baz=217 | | | | | | |
| ESL | | | | eS | **Sn** | **04 20 53.2** | **+0.4** |
| | baz=217 | | | | | | |
| **TWQ1** | **Liyutan** | **1.15** | **257** | eP | **Pn** | **04 20 43.5** | **+0.6** |
| | baz=255 | | | | | | |
| TWQ1 | | | | eS | **Sn** | **04 20 57.5** | **0.0** |
| | baz=255 | | | | | | |
| **WDT** | **Danda** | **1.17** | **223** | eP | **Pn** | **04 20 43.0** | **-0.4** |
| | baz=212 | | | | | | |
| WDT | | | | S | **Sn** | **04 20 57.7** | **-0.8** |
| | baz=212 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.24** | **234** | eP | **Pn** | **04 20 44.1** | **-0.2** |
| | baz=222 | | | | | | |
| **TYC** | **Yuchr** | **1.26** | **236** | eP | **Pn** | **04 20 45.1** | **+0.7** |
| | baz=233 | | | | | | |
| **EHY** | **Hungye** | **1.27** | **209** | eP | **Pn** | **04 20 44.5** | **0.0** |
| | baz=205 | | | | | | |
| EHY | | | | eS | **Sn** | **04 20 59.8** | **-0.6** |
| | baz=205 | | | | | | |
| **TWF1** | **Yuli** | **1.41** | **207** | eP | **Pn** | **04 20 46.0** | **-0.5** |
| | baz=212 | | | | | | |
| **YUS** | **Yu-Shan** | **1.47** | **221** | eP | **Pn** | **04 20 48.0** | **+0.3** |
| | baz=210 | | | | | | |
| YUS | | | | eS | **Sn** | **04 21 05.7** | **-0.5** |
| | baz=210 | | | | | | |
| **CHN5** | **Tsauling** | **1.58** | **230** | eP | **Pn** | **04 20 49.4** | **+0.6** |
| | baz=238 | | | | | | |
| CHN5 | | | | eS | **Sn** | **04 21 09.2** | **+1.1** |
| | baz=238 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.61** | **100** | P | **Pn** | **04 20 48.8** | **-0.3** |
| IRIF | | | | eS | **Sn** | **04 21 09.0** | **+0.3** |
| **WTP** | **Ta-pu** | **1.86** | **223** | eP | **Pn** | **04 20 53.0** | **+0.3** |
| | baz=233 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.87** | **101** | P | **Pn** | **04 20 52.8** | **+0.1** |
| JKRS | | | | S | **Sn** | **04 21 15.8** | **+0.5** |
| **CHN1** | **Nanshi** | **1.96** | **224** | eP | **Pn** | **04 20 54.9** | **+0.9** |
| | baz=234 | | | | | | |
| CHN1 | | | | eS | **Sn** | **04 21 17.8** | **+0.4** |
| | baz=234 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.97** | **97** | P | **Pn** | **04 20 54.5** | **+0.4** |
| JIJ | | | | S | **Sn** | **04 21 17.2** | **-0.5** |
| **JISG** | **Ishigakijimahi** | **2.11** | **90** | eS | **Sn** | **04 21 20.8** | **-0.2** |

*IDC **03** 04:22:27.8±0.8, 56.°14S×26.°60W, h0km, mb3.9/4, mb1 4.0/4, mb1mx3.8/19, mbtmp3.9/4, Error ellipse: s-maj=40.9km s-min=24.4km az=70.0*

*ISCJB **03** 04:22:30.9±0.9, 56.°2S±0.°1×26.°7W±0.°3, h35km, mb4.0/5, Error ellipse: s-maj=23.7km s-min=14.8km az=145.7*

*NEIC **03** 04:22:33.0±0.6, 56.°16S×26.°59W, h35km, mb4.1/3, Error ellipse: s-maj=20.7km s-min=14.6km az=59.0*

**ISC 03 04:22:32.9**±0.8**, 56.°2S**±0.°1×**26.°6W**±0.°2**, h35**km**, n17, σ1.s17**/11**, mb4.0**/5**, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **18.50** | **156** | eP | **Pn** | **04 26 45.7** | **-0.3** |
| | 1.8nm,1.1s | | | | | | |
| **PMSA** | **Palmer Station** | **20.08** | **229** | eP | **P** | **04 27 02.7** | **-0.2** |
| | 14nm,0.9s | | | | | | |
| **TRQA** | **Tornquist** | **29.68** | **293** | eP | **P** | **04 28 35.9** | **+0.7** |
| | 14nm,1.4s | | | | | | |
| **CPUP** | **Villa Florida** | **37.15** | **311** | P | **P** | **04 29 38.4** | **-1.7** |
| | 1.6nm,0.8s,baz=82,slow=15,SNR=4.1 | | | | | | |
| **MAW** | **Mawson** | **39.85** | **143** | P | **P** | **04 30 01.3** | **-1.1** |
| | 0.6nm,0.2s,baz=243,slow=9.0,SNR=2.3 | | | | | | |
| **VNDA** | **Vanda** | **46.47** | **183** | P | **P** | **04 30 56.6** | **+0.9** |
| | 0.4nm,0.6s,baz=195,slow=7.6,SNR=2.6 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **48.02** | **16** | T | T | 05 22 45.8 | |
| | baz=189,slow=75,SNR=22 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **48.02** | **16** | T | T | 05 22 46.1 | |
| | baz=189,slow=75,SNR=23 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **48.03** | **16** | T | T | 05 22 47.1 | |
| | baz=189,slow=75,SNR=21 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **49.13** | **16** | T | T | 05 24 10.5 | |
| | baz=188,slow=75,SNR=4.8 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **49.14** | **16** | T | T | 05 24 10.0 | |
| | baz=188,slow=75,SNR=23 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **49.15** | **16** | T | T | 05 24 11.0 | |
| | baz=188,slow=75,SNR=8.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.99** | **29** | P | **P** | **04 33 59.5** | **+0.7** |
| | 2.0nm,0.8s,baz=198,slow=7.2,SNR=13 | | | | | | |
| **FINES** | **FINESS Array B** | **124.33** | **28** | PKP | **PKPdf** | **04 41 25.3** | **-1.1** |
| | 1.4nm,0.9s,baz=228,slow=3.5,SNR=4.8 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **126.47** | **292** | PKP | **PKPdf** | **04 41 33.2** | **+1.8** |
| | 1.4nm,0.8s,baz=263,slow=7.1,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **150.39** | **86** | PKPbc | **PKPbc** | **04 42 20.2** | **+0.5** |
| | 1.0nm,0.7s,baz=212,slow=3.4,SNR=6.4 | | | | | | |
| **ILAR** | **Eielson Array** | **150.45** | **311** | PKPbc | **PKPbc** | **04 42 19.4** | **+0.3** |
| | 1.1nm,0.8s,baz=113,slow=2.3,SNR=7.1 | | | | | | |

*ISCJB **03** 04:30:13.4±0.3, 47.°29S±0.°06×100.°2E±0.°1, h10km, mb4.7/20, MS5.1/132, Error ellipse: s-maj=10.2km s-min=7.9km az=13.3*

*IDC **03** 04:30:13.4±0.6, 47.°26S×100.°19E, h0km, mb4.5/10, mb1 4.6/10, mb1mx4.2/35, mbtmp4.5/10, MS5.0/21, Ms1 5.0/21, ms1mx4.9/23, Error ellipse: s-maj=22.5km s-min=16.1km az=122.0*

*BJI **03** 04:30:13.9, 47.°30S×100.°30E, h10km, mb4.7/5, mB5.0/4, Ms5.3/2, Ms7 4.8/1*

*NEIC **03** 04:30:15.5±0.2, 47.°29S×100.°25E, h10km, mb5.0/12, MS5.2/110, Error ellipse: s-maj=10.6km s-min=7.4km az=137.0*

*GCMT **03** 04:30:15.5±0.1, 47.°28S×100.°06E, h12km, MW5.5/109, Moment Tensor Solution. s84,c149; s109,c204; Duration: 1.s3 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.02±.02; $M_{\theta\theta}$1.78±.02; $M_{\phi\phi}$-1.75±.02; $M_{r\theta}$0.03±.05; $M_{\theta\phi}$0.78±.02; $M_{\phi r}$0.01±.05; Best double couple: $M_0$1.93100×$10^{17}$ NP1:$\phi_s$123.00000°, δ89.00000°, λ1.00000°. NP2:$\phi_s$33.00000°, δ89.00000°, λ179.00000°. Principal axes: T 1.9460, Plg1.0000°, Azm348.0000°; N -0.0230, Plg89.0000°, Azm167.0000°; P -1.9160, Plg0.0000°, Azm258.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 03 04:30:15.5**±0.4**, 47.°31S**±0.°07×**100.°26E**±0.°10**, h10**km**, n255, σ0.s93**/124**, mb4.7**/20**, MS5.2**/132**, 1D, Southeast Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H01W2** | **Cape Leeuwin H** | **16.19** | **45** | T | T | 04 50 31.7 | |
| | baz=215,slow=74,SNR=497 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **16.20** | **45** | T | T | 04 50 35.0 | |
| | baz=215,slow=74,SNR=779 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **16.20** | **45** | T | T | 04 50 35.0 | |
| | baz=215,slow=74,SNR=654 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **19.30** | **48** | LR | LR | 04 40 14.9 | |
| | comp=Z,20nm,21.3s,baz=100,slow=31 | | | | | | |
| **CASY** | **Casey** | **19.78** | **168** | eP | **P** | **04 34 46.2** | **+0.8** |
| | 86nm,1.7s | | | | | | |
| **PAF** | **Port-aux-Franc** | **20.02** | **253** | PFAKE | | 04 35 00.0 | +10 |
| PAF | | | | LR | LR | | |
| | comp=Z,11µm,22.0s | | | | | | |
| **FORT** | **Forrest** | **26.98** | **62** | eP | **P** | **04 35 58.4** | **+1.0** |
| | comp=Z,13nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **27.87** | **210** | P | **P** | **04 36 03.6** | **-1.3** |
| | comp=Z,4.0nm,0.9s,baz=60,slow=11,SNR=10.0 | | | | | | |
| MAW | | | | LR | LR | 04 44 04.3 | |
| | comp=Z,3µm,20.9s,baz=56,slow=30 | | | | | | |
| **MBWA** | **Marble Bar** | **30.48** | **38** | eP | **P** | **04 36 28.2** | **-0.4** |
| | comp=Z,14nm,1.0s | | | | | | |
| MBWA | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **TAU** | **Tasmania Unive** | **33.10** | **100** | PFAKE | | 04 37 00.0 | +8.6 |
| TAU | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **COCO** | **West Island** | **35.13** | **354** | PFAKE | | 04 37 20.0 | +11 |
| COCO | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| **ASAR** | **Alice Springs** | **35.72** | **60** | P | **P** | **04 37 13.1** | **-1.3** |
| | comp=Z,4.6nm,1.0s,baz=218,slow=7.9,SNR=23 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 39 42.1** | **-0.2** |
| | comp=Z,3.2nm,1.0s,baz=218,slow=2.3,SNR=6.9 | | | | | | |
| ASAR | | | | LR | LR | 04 50 12.7 | |
| | comp=Z,3µm,18.1s,baz=217,slow=34 | | | | | | |
| **SYO** | **Syowa Base** | **36.52** | **212**⇓ | eP | **P** | **04 37 21.8** | **+1.2** |
| **CAN** | **Canberra** | **37.93** | **90** | PFAKE | | 04 37 40.0 | +6.9 |
| CAN | | | | LR | LR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| **VNDA** | **Vanda** | **38.22** | **162** | P | **P** | **04 37 34.8** | **-0.1** |
| | comp=Z,7.3nm,0.9s,baz=286,slow=10,SNR=33 | | | | | | |
| VNDA | | | | LR | LR | 04 52 07.4 | |
| | comp=Z,7µm,18.4s,baz=294,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **38.86** | **57** | P | **P** | **04 37 39.5** | **-1.5** |
| | comp=Z,4.3nm,1.0s,baz=216,slow=9.5,SNR=5.4 | | | | | | |
| WRA | | | | LR | LR | 04 51 48.2 | |
| | comp=Z,4µm,21.1s,baz=215,slow=33 | | | | | | |
| **WRAB** | **Tennant Creek** | **38.87** | **57** | eP | **P** | **04 37 40.0** | **-1.0** |
| | comp=Z,36nm,1.6s | | | | | | |
| WRAB | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| **SBA** | **Scott Base** | **39.32** | **162** | eP | **P** | **04 37 44.9** | **+0.8** |
| | comp=Z,78nm,1.8s | | | | | | |
| SBA | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| **LEM** | **Lembang** | **40.83** | **11** | LR | LR | 04 52 00.6 | |
| | comp=Z,4µm,19.9s,baz=217,slow=32 | | | | | | |
| **BATI** | **Baumata** | **41.95** | **36** | LR | LR | 04 56 24.1 | |
| | comp=Z,1µm,18.1s,baz=154,slow=38 | | | | | | |
| **QSPA** | **South Pole Qui** | **42.83** | **180** | P | **P** | **04 38 12.8** | **-0.6** |
| | comp=Z,13nm,0.8s,baz=302,slow=1.9,SNR=57 | | | | | | |
| **QSPA** | **South Pole Qui** | **42.83** | **180** | eP | **P** | **04 38 12.6** | **-0.8** |
| | comp=Z,37nm,1.2s | | | | | | |
| QSPA | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **RMQ** | **Roma** | **43.18** | **79** | P | **P** | **04 38 17.9** | **+1.4** |
| | baz=32,SNR=4.0 | | | | | | |
| **RER** | **Riviere de l'E** | **44.29** | **290** | PFAKE | | 04 38 40.0 | +14 |
| RER | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **KAPI** | **Kappang** | **45.36** | **28** | PFAKE | | 04 38 50.0 | +16 |
| KAPI | | | | LR | LR | | |
| | comp=Z,934nm,20.0s | | | | | | |
| **CTAO** | **Charters Tower** | **46.01** | **70** | eP | **P** | **04 38 38.0** | **-1.1** |
| | comp=Z,48nm,1.5s | | | | | | |
| CTAO | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **H08S2** | **Diego Garcia H** | **46.08** | **320** | T | T | 05 27 32.4 | |
| | baz=154,slow=76,SNR=49 | | | | | | |
| **H08S1** | **Diego Carcia H** | **46.09** | **320** | T | T | 05 27 31.3 | |
| | baz=154,slow=76,SNR=13 | | | | | | |
| **H08S3** | **Diego Garcia H** | **46.10** | **320** | T | T | 05 27 33.1 | |
| | baz=154,slow=76,SNR=50 | | | | | | |
| **DGAR** | **Diego Garcia** | **46.31** | **320** | PFAKE | | 04 38 50.0 | +8.6 |
| DGAR | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| **RPZ** | **Rata Peaks** | **48.17** | **113** | LR | LR | 04 55 18.1 | |
| | comp=Z,2µm,18.7s,baz=242,slow=31 | | | | | | |
| **KSM** | **Kuching** | **49.38** | **13** | PFAKE | | 04 39 20.0 | +15 |
| KSM | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **SNAA** | **Sanae** | **49.73** | **204** | P | **P** | **04 39 06.5** | **-0.9** |
| **SNAA** | **Sanae** | **49.73** | **204** | P | **P** | **04 39 07.3** | **-0.2** |
| | comp=Z,4.5nm,0.9s,baz=134,slow=7.9,SNR=31 | | | | | | |
| **SNAA** | **Sanae** | **49.73** | **204** | eP | **P** | **04 39 06.2** | **-1.3** |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **ABPO** | **Ambohimpanom** | **51.36** | **285** | PFAKE | | 04 39 30.0 | +10 |
| ABPO | | | | LR | LR | | |
| | comp=Z,587nm,22.0s | | | | | | |
| **SNZO** | **South Karori** | **51.73** | **112** | PFAKE | | 04 39 30.0 | +7.2 |
| SNZO | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **KULM** | **Kulim** | **52.38** | **0** | PFAKE | | 04 39 40.0 | +12 |
| KULM | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **PMG** | **Port Moresby** | **54.71** | **62** | LR | LR | 05 01 51.6 | |
| | comp=Z,2µm,18.0s,baz=220,slow=35 | | | | | | |
| **PMG** | **Port Moresby** | **54.71** | **62** | eP | **P** | **04 39 45.8** | **+0.8** |
| | comp=Z,24nm,1.0s | | | | | | |
| **KKM** | **Kota Kinabalu** | **54.97** | **20** | PFAKE | | 04 40 00.0 | +13 |
| KKM | | | | LR | LR | | |
| | comp=Z,361nm,19.0s | | | | | | |
| **URZ** | **Urewera** | **54.99** | **111** | LR | LR | 04 59 19.7 | |
| | comp=Z,911nm,19.3s,baz=239,slow=32 | | | | | | |
| **PALK** | **Pallekele** | **57.05** | **337** | LR | LR | 05 00 20.6 | |
| | comp=Z,2µm,18.2s,baz=116,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **58.09** | **89** | eLR | LR | 04 57 34.6 | |
| | comp=Z,3µm,25.8s | | | | | | |
| **BOSA** | **Boshof** | **59.74** | **259** | P | **P** | **04 40 19.3** | **-1.4** |
| | comp=Z,2.8nm,0.7s,baz=133,slow=8.3,SNR=5.3 | | | | | | |
| BOSA | | | | LR | LR | 05 01 02.8 | |
| | comp=Z,2µm,19.2s,baz=142,slow=31 | | | | | | |
| **SUR** | **Sutherland** | **60.27** | **253** | eP | **P** | **04 40 24.4** | **+0.1** |
| | comp=Z,25nm,1.0s | | | | | | |
| SUR | | | | LR | LR | | |
| | comp=Z,4µm,22.0s | | | | | | |
| **HNR** | **Honiara** | **62.73** | **73** | LR | LR | 05 05 33.9 | |
| | comp=Z,2µm,20.0s,baz=220,slow=34 | | | | | | |
| **MATP** | **Matopo** | **63.00** | **269** | P | **P** | **04 40 42.2** | **-0.6** |
| | comp=Z,7.2nm,1.1s,baz=147,slow=8.3,SNR=5.3 | | | | | | |
| **SKHT** | **Srikalahasti** | **63.50** | **338** | eP | **P** | **04 40 46.6** | **+0.8** |
| SKHT | | | | IVMs_BB | IVMs_BB | 05 00 18.9 | |
| | comp=Z,501nm,28.6s | | | | | | |
| **RAO** | **Raoul Island** | **63.84** | **105** | LR | LR | 05 04 58.4 | |
| | comp=Z,527nm,18.7s,baz=244,slow=33 | | | | | | |
| **URV** | **Uravakonda** | **65.32** | **335** | eP | **P** | **04 40 57.3** | **-0.4** |
| URV | | | | IVMs_BB | IVMs_BB | 05 01 41.9 | |
| | comp=Z,612nm,28.5s | | | | | | |
| **ADKI** | **Addanki** | **65.45** | **338** | eP | **P** | **04 40 58.2** | **-0.3** |
| ADKI | | | | eS | **S** | **04 49 44.0** | **+0.9** |
| ADKI | | | | IVMs_BB | IVMs_BB | 05 02 55.6 | |
| | comp=Z,595nm,17.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **65.47** | **359** | P | **P** | **04 40 57.8** | **-0.9** |
| | comp=Z,2.2nm,0.7s,baz=190,slow=6.2,SNR=8.3 | | | | | | |
| CMAR | | | | LR | LR | 05 06 33.8 | |
| | comp=Z,2µm,19.4s,baz=196,slow=33 | | | | | | |
| **CHTO** | **Chiang Mai** | **65.83** | **359** | PFAKE | | 04 41 10.0 | +9.0 |
| CHTO | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **NJS** | **Nagarjunasagar** | **66.30** | **338** | eP | **P** | **04 41 04.5** | **+0.4** |
| NJS | | | | eS | **S** | **04 49 55.0** | **+1.6** |
| NJS | | | | IVMs_BB | IVMs_BB | 05 06 40.2 | |
| | comp=Z,634nm,14.8s | | | | | | |
| **PVM** | **Polavaram** | **66.41** | **341** | eP | **P** | **04 41 04.1** | **-0.5** |
| PVM | | | | eS | **S** | **04 49 56.0** | **+1.3** |
| PVM | | | | IVMs_BB | IVMs_BB | 05 02 16.4 | |
| | comp=Z,558nm,25.2s | | | | | | |
| **QIZ** | **Qiongzhong** | **66.59** | **10** | PFAKE | | 04 41 20.0 | +14 |
| QIZ | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **LSZ** | **Lusaka** | **66.80** | **272** | eP | **P** | **04 41 09.3** | **+1.8** |
| | comp=Z,15nm,1.3s | | | | | | |
| LSZ | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **CHLP** | **Challavanipeta** | **67.12** | **343** | IVMs_BB | IVMs_BB | 05 03 22.5 | |
| | comp=Z,814nm,20.2s | | | | | | |
| **HYBB** | **Hyderabad (bro** | **67.32** | **337** | eP | **P** | **04 41 12.2** | **+1.7** |
| HYBB | | | | eS | **S** | **04 50 08.3** | **+2.4** |
| HYBB | | | | IVMs_BB | IVMs_BB | 05 06 35.8 | |
| | comp=Z,485nm,12.9s | | | | | | |
| **PMSA** | **Palmer Station** | **67.58** | **187** | eP | **P** | **04 41 11.7** | **+0.1** |
| | comp=Z,14nm,0.9s | | | | | | |
| PMSA | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| **RPR** | **Rampur** | **68.51** | **339** | eP | **P** | **04 41 17.0** | **-1.0** |
| RPR | | | | eS | **S** | **04 50 20.5** | **+0.5** |
| RPR | | | | IVMs_BB | IVMs_BB | 05 02 35.2 | |
| | comp=Z,330nm,28.4s | | | | | | |
| **MSVF** | **Nonsavu** | **68.96** | **94** | PFAKE | | 04 41 30.0 | +8.9 |
| MSVF | | | | LR | LR | | |
| | comp=Z,667nm,19.0s | | | | | | |
| **POO** | **Poona** | **69.71** | **333** | eP | P | 04 41 29.0 | +3.5 |
| **KMI** | **Kunming** | **72.13** | **2** | P | P | 04 41 49.9 | +10 |
| KMI | | | | pP | **PcP** | **04 41 58.6** | **0.0** |
| KMI | | | | sP | sP | 04 42 03.2 | +18 |
| KMI | | | | S | S | 04 50 53.2 | -9.3 |
| KMI | | | | sS | sS | 04 51 11.5 | +3.6 |
| KMI | | | | SKS | **ScS** | **04 51 48.1** | **+1.6** |
| **KMI** | **Kunming** | **72.13** | **2** | SS | SS | 04 55 19.5 | -21 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,11nm,1.5s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,72nm,3.1s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,650nm,22.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,490nm,19.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,1µm,23.6s | | | | | | |
| **HOPE** | **Hope Point** | **72.36** | **205** | PFAKE | | 04 41 50.0 | +8.8 |
| HOPE | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **YHNB** | **Yeheng** | **74.14** | **20** | PFAKE | | 04 42 00.0 | +8.0 |
| YHNB | | | | LR | LR | | |
| | comp=Z,522nm,21.0s | | | | | | |
| **ODAN** | **Odare** | **74.74** | **348** | eP | **P** | **04 41 57.3** | **+1.7** |
| | comp=Z,34nm,1.4s | | | | | | |
| **RAMN** | **Ramite** | **74.94** | **347** | eP | **P** | **04 41 59.1** | **+2.3** |
| | comp=Z,8.2nm,0.7s | | | | | | |
| **TAPN** | **Taplejung** | **75.17** | **348** | eP | **P** | **04 41 56.5** | **-1.7** |
| | comp=Z,43nm,1.3s | | | | | | |
| **PKI** | **Pulchoki** | **75.73** | **346** | eP | **P** | **04 42 01.4** | **-0.1** |
| | comp=Z,57nm,1.5s | | | | | | |
| **DMN** | **Daman** | **75.82** | **346** | eP | **P** | **04 42 01.0** | **-0.9** |
| | comp=Z,36nm,1.2s | | | | | | |
| **GUN** | **Gumba** | **75.99** | **347** | eP | **P** | **04 42 00.9** | **-2.1** |
| | comp=Z,20nm,0.6s | | | | | | |
| **KOLN** | **Koldanda** | **76.23** | **345** | eP | **P** | **04 42 03.8** | **-0.4** |
| | comp=Z,10nm,0.9s | | | | | | |
| **GKN** | **Gorkha** | **76.28** | **346** | eP | **P** | **04 42 02.4** | **-2.0** |
| | comp=Z,36nm,1.2s | | | | | | |
| **LSA** | **Lhasa** | **77.10** | **352** | PFAKE | | 04 42 20.0 | +11 |
| LSA | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **ENH** | **Enshi** | **77.67** | **8** | PFAKE | | 04 42 20.0 | +8.0 |
| ENH | | | | LR | LR | | |
| | comp=Z,377nm,21.0s | | | | | | |
| **TARA** | **Tarawa** | **79.31** | **76** | PFAKE | | 04 42 30.0 | +8.5 |
| TARA | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| **EFI** | **East Falkland** | **79.65** | **194** | PFAKE | | 04 42 30.0 | +7.2 |
| EFI | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **TBI** | **Tubuai** | **85.87** | **120** | eLQ | LQ | 05 05 57.8 | |
| | comp=Z,1µm,35.2s | | | | | | |
| TBI | | | | eLR | LR | 05 10 09.0 | |
| | comp=Z,1µm,30.8s | | | | | | |
| **RAYN** | **Ar Rayn** | **86.01** | **311** | PFAKE | | 04 43 10.0 | +14 |
| RAYN | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **GTA** | **Gaotai** | **86.34** | **360** | eP | P | 04 43 02.1 | +4.6 |
| GTA | | | | pP | pP | 04 43 08.8 | +8.0 |
| GTA | | | | sP | sP | 04 43 11.9 | +10 |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **INCN** | **Inchon** | **87.66** | **21** | PFAKE | | 04 43 10.0 | +6.3 |
| INCN | | | | LR | LR | | |
| | comp=Z,634nm,21.0s | | | | | | |
| **KSRS** | **Korea Array** | **87.94** | **22** | LR | LR | 05 26 03.9 | |
| | comp=Z,178nm,18.0s,baz=214,slow=38 | | | | | | |
| **BJT** | **Baijiatuau** | **88.10** | **12** | PFAKE | | 04 43 20.0 | +14 |
| BJT | | | | LR | LR | | |
| | comp=Z,884nm,20.0s | | | | | | |
| **SHEL** | **Horse Pasture** | **88.87** | **248** | PFAKE | | 04 43 20.0 | +10 |
| SHEL | | | | LR | LR | | |
| | comp=Z,699nm,19.0s | | | | | | |
| **KSH** | **Kashi** | **89.12** | **341** | eP | **P** | **04 43 08.9** | **-1.9** |
| KSH | | | | S | S | 04 53 50.6 | -8.8 |
| KSH | | | | PMZ | | | |
| | comp=Z,94nm,4.4s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,150nm,10.5s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,200nm,11.7s | | | | | | |
| **MAJO** | **Matsushiro** | **90.13** | **30** | PFAKE | | 04 43 30.0 | +15 |
| MAJO | | | | LR | LR | | |
| | comp=Z,201nm,20.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **90.13** | **30** | LR | LR | 05 22 40.3 | |
| | comp=Z,80nm,21.0s,baz=260,slow=35 | | | | | | |
| **PPT2** | **Papeete2** | **90.21** | **116** | eS | S | 04 53 54.7 | -16 |
| | comp=Z,83nm,26.8s | | | | | | |
| **PPT2** | **Papeete2** | **90.21** | **116** | eLQ | LQ | 05 08 21.4 | |
| | comp=Z,2µm,30.2s | | | | | | |
| PPT2 | | | | eLR | LR | 05 12 13.3 | |
| | comp=Z,787nm,23.0s | | | | | | |
| **AAK** | **Ala-Archa** | **92.42** | **341** | PFAKE | | 04 43 40.0 | +14 |
| AAK | | | | LR | LR | | |
| | comp=Z,601nm,20.0s | | | | | | |
| **TKM2** | **Tokmak 2** | **92.46** | **342** | PFAKE | | 04 43 40.0 | +14 |
| TKM2 | | | | LR | LR | | |
| | comp=Z,563nm,19.0s | | | | | | |
| **EKS2** | **Erkin-Say** | **92.61** | **341** | PFAKE | | 04 43 40.0 | +13 |
| EKS2 | | | | LR | LR | | |
| | comp=Z,529nm,19.0s | | | | | | |
| **GEYT** | **Alibeck** | **92.84** | **328** | P | **P** | **04 43 27.9** | **-0.1** |
| | comp=Z,0.7nm,0.3s,baz=260,slow=34,SNR=2.6 | | | | | | |
| GEYT | | | | LR | LR | 05 20 55.9 | |
| | comp=Z,419nm,19.8s,baz=135,slow=33 | | | | | | |
| **TRQA** | **Tornquist** | **93.54** | **194** | PFAKE | | 04 43 40.0 | +8.4 |
| TRQA | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **RKT** | **Rikitea** | **94.08** | **131** | eLR | LR | 05 13 47.8 | |
| | comp=Z,714nm,25.8s | | | | | | |
| **RKT** | **Rikitea** | **94.08** | **131** | eT | T | 06 28 12.2 | |
| | comp=Z,2.4nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **94.92** | **4** | LR | LR | 05 27 56.9 | |
| | comp=Z,830nm,18.7s,baz=182,slow=36 | | | | | | |
| **ULN** | **Ulaanbaatar** | **94.98** | **5** | PFAKE | | 04 43 50.0 | +12 |
| ULN | | | | LR | LR | | |
| | comp=Z,833nm,20.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **95.03** | **348** | LR | LR | 05 23 13.3 | |
| | comp=Z,545nm,21.1s,baz=179,slow=34 | | | | | | |
| **MDJ** | **Mudanjiang** | **95.12** | **21** | PFAKE | | 04 43 50.0 | +12 |
| MDJ | | | | LR | LR | | |
| | comp=Z,437nm,20.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **95.33** | **22** | LR | LR | 05 29 41.1 | |
| | comp=Z,144nm,18.7s,baz=196,slow=37 | | | | | | |
| **EIL** | **Elat** | **96.52** | **307** | LR | LR | 05 19 27.0 | |
| | comp=Z,437nm,21.2s,baz=149,slow=31 | | | | | | |
| **ERM** | **Erimo** | **96.73** | **31** | PFAKE | | 04 44 00.0 | +14 |
| ERM | | | | LR | LR | | |
| | comp=Z,364nm,21.0s | | | | | | |
| **HIA** | **Hailar** | **97.67** | **13** | PFAKE | | 04 44 00.0 | +10 |
| HIA | | | | LR | LR | | |
| | comp=Z,484nm,21.0s | | | | | | |
| **TLY** | **Talaya** | **98.66** | **2** | PFAKE | | 04 44 10.0 | +16 |
| TLY | | | | LR | LR | | |
| | comp=Z,756nm,19.0s | | | | | | |
| **KURK** | **Kurchatov** | **99.42** | **346** | PFAKE | | 04 44 10.0 | +13 |
| KURK | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **GNI** | **Garni** | **100.10** | **320** | PFAKE | | 04 44 10.0 | +8.9 |
| GNI | | | | LR | LR | | |
| | comp=Z,793nm,22.0s | | | | | | |
| **CSS** | **Prodhromos** | **101.48** | **310** | PFAKE | | 04 44 20.0 | +13 |
| CSS | | | | LR | LR | | |
| | comp=Z,130nm,19.0s | | | | | | |
| **BRVK** | **Borovoye** | **103.21** | **342** | PFAKE | | 04 44 30.0 | +16 |
| BRVK | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **LCO** | **Las Campanas** | **103.59** | **188** | PFAKE | | 04 44 30.0 | +13 |
| LCO | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| **KIV** | **Kislovodsk** | **104.08** | **321** | PFAKE | | 04 44 30.0 | +11 |
| KIV | | | | LR | LR | | |
| | comp=Z,395nm,20.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **105.33** | **273** | PP | PP | 04 48 46.9 | +0.6 |
| | comp=Z,0.3nm,0.9s,baz=139,slow=5.7,SNR=3.5 | | | | | | |
| **MIDW** | **Midway** | **105.36** | **65** | PFAKE | | 04 48 50.0 | |
| MIDW | | | | LR | LR | | |
| | comp=Z,910nm,19.0s | | | | | | |
| **ANTO** | **Ankara** | **105.50** | **312** | PFAKE | | 04 48 50.0 | |
| ANTO | | | | LR | LR | | |
| | comp=Z,431nm,20.0s | | | | | | |
| **SANT** | **Santorini** | **106.78** | **306** | PFAKE | | 04 48 50.0 | |
| SANT | | | | LR | LR | | |
| | comp=Z,228nm,19.0s | | | | | | |
| **ARU** | **Arti** | **109.09** | **337** | PFAKE | | 04 49 00.0 | |
| ARU | | | | LR | LR | | |
| | comp=Z,573nm,21.0s | | | | | | |
| **TAM** | **Tamanrasset** | **109.52** | **283** | PFAKE | | 04 49 00.0 | |
| TAM | | | | LR | LR | | |
| | comp=Z,486nm,21.0s | | | | | | |
| **LVC** | **Limon Verde** | **109.72** | **191** | PFAKE | | 04 49 00.0 | |
| LVC | | | | LR | LR | | |
| | comp=Z,757nm,21.0s | | | | | | |
| **YAK** | **Yakutsk** | **111.52** | **14** | PFAKE | | 04 49 00.0 | |
| YAK | | | | LR | LR | | |
| | comp=Z,318nm,19.0s | | | | | | |
| **WDD** | **Wield Dalam** | **112.73** | **299** | PFAKE | | 04 49 00.0 | |
| WDD | | | | LR | LR | | |
| | comp=Z,343nm,19.0s | | | | | | |
| **TIR** | **Tirane** | **113.38** | **306** | PFAKE | | 04 49 00.0 | |
| TIR | | | | LR | LR | | |
| | comp=Z,313nm,20.0s | | | | | | |
| **TIP** | **Timpagrande** | **113.66** | **303** | PFAKE | | 04 49 10.0 | |
| TIP | | | | LR | LR | | |
| | comp=Z,104nm,19.0s | | | | | | |
| **RCBR** | **Riachuelo** | **114.48** | **229** | PFAKE | | 04 49 10.0 | +14 |

RCBR LR LR
comp=Z,743nm,21.0s
**CUC Castrocucco 114.74 303** PFAKE 04 49 10.0 +14
CUC LR LR
comp=Z,295nm,20.0s
**KIEV Kiev 115.15 318** PFAKE 04 49 10.0 +14
KIEV LR LR
comp=Z,514nm,20.0s
**OBN Obninsk 115.25 325** PFAKE 04 49 10.0 +14
OBN LR LR
comp=Z,429nm,22.0s
**PSZ Piszkesteto 117.75 311** PFAKE 04 49 10.0 +8.7
PSZ LR LR
comp=Z,335nm,19.0s
**VSL Villasalto 118.19 299** PFAKE 04 49 10.0 +7.7
VSL LR LR
comp=Z,389nm,21.0s
**VLC Villacollemand 120.51 303** PFAKE 04 49 20.0 +13
VLC LR LR
comp=Z,404nm,20.0s
**GERES GERESS Array B 121.55 309** PKP **PKPdf 04 49 07.1 -1.5**
comp=Z,0.4nm,0.7s,baz=236,slow=1.4,SNR=3.9
**SAML Samuel 122.08 199** PFAKE 04 49 20.0 +9.3
SAML LR LR
comp=Z,585nm,20.0s
**TUE Stuetta 122.49 305** PFAKE 04 49 20.0 +9.4
TUE LR LR
comp=Z,472nm,22.0s
**BNI Bardonecchia 123.16 302** PFAKE 04 49 20.0 +8.1
BNI LR LR
comp=Z,599nm,22.0s
**BFO Black Forest 124.13 306** PFAKE 04 49 30.0 +17
BFO LR LR
comp=Z,279nm,19.0s
**LVZ Lovozero 124.89 335** PFAKE 04 49 30.0 +16
LVZ LR LR
comp=Z,563nm,19.0s
**BILL Bilibino 125.09 25** PFAKE 04 49 30.0 +15
BILL LR LR
comp=Z,510nm,20.0s
**WLF Walferdange 126.06 307** *e*PKPdf **PKPdf 04 49 17.7 +0.6**
WLF LR LR
comp=Z,331nm,19.0s
**PAB San Pablo 126.69 291** PFAKE 04 49 30.0 +11
PAB LR LR
comp=Z,373nm,19.0s
**KEV Kevo 128.22 335** PFAKE 04 49 30.0 +9.4
KEV LR LR
comp=Z,537nm,21.0s
**KONO Kongsberg 129.44 319** PFAKE 04 49 30.0 +6.8
KONO LR LR
comp=Z,567nm,20.0s
**OTAV Otavalo 133.10 182** *e*PKPdf **PKPdf 04 49 32.6 +0.4**
OTAV LR LR
comp=Z,602nm,20.0s
**KBS Kingsbay 135.65 344** PFAKE 04 49 50.0 +16
KBS LR LR
comp=Z,478nm,19.0s
**COLA College 140.44 38** *e*PKPdf **PKPdf 04 49 43.7 +0.1**
COLA LR LR
comp=Z,424nm,19.0s
**ILAR Eielson Array 140.84 39** PKP **PKPdf 04 49 44.0 -0.3**
comp=Z,0.5nm,0.9s,baz=275,slow=4.3,SNR=3.2
**SDV Santo Domingo 140.93 194** PFAKE 04 50 00.0 +14
SDV LR LR
comp=Z,809nm,20.0s
**BCIP Isla Barro Col 141.98 180** PFAKE 04 50 00.0 +12
BCIP LR LR
comp=Z,421nm,20.0s
**JTS JuntasAbangare 142.84 171** *e*PKPdf **PKPdf 04 49 49.6 +0.1**
JTS LR LR
comp=Z,718nm,20.0s
**EGAK Eagle 143.28 39** PFAKE 04 50 00.0 +11
EGAK LR LR
comp=Z,601nm,19.0s
**INK Inuvik 146.07 33** PKPbc **PKPdf 04 49 52.5 -0.8**
comp=Z,2.7nm,0.8s,baz=271,slow=2.8,SNR=4.0
**ANWB Willy Bob 146.95 213** PFAKE 04 50 10.0 +10
ANWB LR LR
comp=Z,460nm,21.0s
**MWC Mount Wilson 148.50 101** *e*PKPbc **PKPbc 04 50 02.2 -0.2**
**MONP Monument Peak 148.78 104** P **PKPbc 04 50 03.6 +0.4**
baz=149
**SJG San Juan 148.81 206** PFAKE 04 50 10.0 +2.9
SJG LR LR
comp=Z,467nm,22.0s
**N02D Trinity Center 148.84 86** P **PKPbc 04 50 03.1 +0.2**
baz=149
**M02C Callahan 148.92 85** P **PKPbc 04 50 03.4 +0.3**
baz=149
**EDW2 Edwards Air Fo 148.92 100** P **PKPbc 04 50 03.2 -0.1**
baz=149
**ISA Isabella 149.04 98** P **PKPbc 04 50 03.7 +0.1**
baz=149
**ISA Isabella 149.04 98** *e*PKPbc **PKPbc 04 50 03.7 +0.1**
**O03D Paynes Creek 149.14 88** P **PKPbc 04 50 03.2 -0.5**
baz=149
**PFO Pinyon Flat Ob 149.20 103** PFAKE 04 50 10.0 +1.4
PFO LR LR
comp=Z,404nm,21.0s
**LRMC Laurel Mountai 149.47 99** P **PKPbc 04 50 04.0 -0.7**
baz=150
**M04C Macdoel 149.77 85** P **PKPbc 04 50 05.1 -0.1**
baz=150
**MPMC Manual Prospec 149.93 98** P **PKPbc 04 50 06.1 +0.2**
baz=150
**GSC Goldstone 149.96 100** P **PKPbc 04 50 06.4 +0.5**
baz=150
**HEC Hector,Ludlow 150.01 101** P **PKPbc 04 50 06.1 +0.1**
baz=150
**J04D Umpqua Nationa 150.18 82** P **PKPbc 04 50 06.5 +0.1**
baz=150
**I04A Tendick Farm, 150.19 81** P **PKPbc 04 50 06.2 +0.1**
baz=150
**IRM Iron Mountain 150.39 103** P **PKPbc 04 50 07.4 +0.4**
baz=150
**NLWA Neilton Lookou 150.40 73** PFAKE 04 50 10.0 -3.0
NLWA LR LR
comp=Z,607nm,20.0s
**GMRC Granite Mounta 150.42 102** P **PKPbc 04 50 07.6 +0.5**
baz=150
**GRAC Grapevine Rang 150.52 97** P **PKPbc 04 50 07.4 +0.2**
baz=151
**FURC Furnace Creek, 150.58 98** P **PKPbc 04 50 07.7 +0.5**
baz=151
**TUQ Turquoise Moun 150.63 101** P **PKPbc 04 50 07.4 -0.2**
baz=151
**NVAR Mina Array Bea 150.63 93** PKPbc **PKPbc 04 50 07.5 -0.1**
comp=Z,7.5nm,0.9s,baz=221,slow=4.0,SNR=25
**J05D Fort Rock, OR 150.79 82** P **PKPbc 04 50 07.2 -0.5**
baz=151
**MOD Modoc 150.87 86** *e*PKPbc **PKPbc 04 50 08.0 +0.1**
**SDDR Presa de Saban 150.91 197** PFAKE 04 50 10.0 +1.5
SDDR LR LR
comp=Z,299nm,20.0s
**LDFC Landfair 150.96 102** *e*PKPdf **PKPdf 04 50 03.2 +0.6**
LDFC *e*PKPbc **PKiKP 04 50 08.8 -0.1**
LDFC *e*PKPab **PKPab 04 50 16.7 +0.9**
**TPNV Topopah Spring 151.25 98** P **PKPbc 04 50 09.1 +0.1**
baz=151
**SHPR Sheep Range 151.74 99** *e*PKPbc **PKPbc 04 50 11.1 +1.0**
**B05A Bryant 151.78 72** P **PKPbc 04 50 07.9 -1.7**
baz=152
**TUC Tucson 152.06 111** *e*PKPbc **PKPbc 04 50 10.8 -0.1**
TUC LR LR
comp=Z,456nm,21.0s
**TEIG Tepich 152.10 163** PFAKE 04 50 20.0 -0.6
TEIG LR LR
comp=Z,497nm,21.0s
**WVOR Wild Horse Val 152.21 86** *e*PKPbc **PKPbc 04 50 11.7 +0.7**
WVOR LR LR
comp=Z,577nm,20.0s
**GTBY Guantanamo Bay 152.42 189** PFAKE 04 50 20.0 -2.0
GTBY LR LR
comp=Z,491nm,20.0s
**WUAZ Wupatki 153.69 105** PFAKE 04 50 20.0 +5.5
WUAZ LR LR
comp=Z,500nm,19.0s
**ELK Elko 153.81 91** *e*PKPbc **PKPbc 04 50 14.8 +0.1**
ELK *e*PKPab **PKPab 04 50 28.0 +0.2**
**TXAR Lajitas Array 154.19 126** PKP **PKPdf 04 50 06.7 -0.8**
comp=Z,0.4nm,0.9s,baz=229,slow=6.9,SNR=2.7
TXAR PKPbc **PKiKP 04 50 16.2 +0.4**
comp=Z,1.5nm,1.0s,baz=199,slow=5.3,SNR=5.7
TXAR PKPab **PKPab 04 50 30.5 +1.0**
comp=Z,2.0nm,1.0s,baz=206,slow=6.0,SNR=5.9

**MSU Marysvale 154.82 99** *e*PKPbc **PKPbc 04 50 18.2 +1.3**
**MNTX Cornudas Mount 154.97 119** *e*PKPbc **PKPbc 04 50 18.1 +0.9**
MNTX LR LR
comp=Z,521nm,20.0s
**NEW Newport 155.02 74** PFAKE 04 50 20.0 +12
NEW LR LR
comp=Z,516nm,20.0s
**SFJD Kangerlussuaq 155.16 333** PFAKE 04 50 20.0 -12
SFJD LR LR
comp=Z,531nm,19.0s
**DUG Dugway 155.21 95** PFAKE 04 50 20.0 +11
DUG LR LR
comp=Z,540nm,22.0s
**HLID Hailey 155.51 86** *e*PKPbc PKPdf 04 50 18.4 +9.4
HLID LR LR
comp=Z,505nm,19.0s
**KVTX Kingsville 155.67 138** PFAKE 04 50 20.0 +11
KVTX LR LR
comp=Z,750nm,19.0s
**TMUT Trail Mountain 155.86 98** *e*PKPab **PKPab 04 50 38.9 +2.2**
**530A J-C Ranch, Com 156.09 128** P **PKPab 04 50 38.2 +0.7**
baz=156
**429A Davenport Ranc 156.16 126** P **PKPab 04 50 38.4 +0.6**
baz=156
**SRU San Rafael 156.23 99** *e*PKPab **PKPab 04 50 38.4 +0.3**
**ANMO Albuquerque 156.51 112** *e*PKPab **PKPab 04 50 39.3 -0.1**
ANMO LR LR
comp=Z,490nm,19.0s
**531A Rocksprings 156.53 129** P **PKPab 04 50 40.8 +1.4**
baz=157
**MVCO Mesa Verde 156.56 105** PFAKE 04 50 20.0 +9.3
MVCO LR LR
comp=Z,385nm,20.0s
**HWUT Hardware Ranch 156.68 92** *e*PKPdf **PKPdf 04 50 10.5 -0.1**
**JCT Junction City 157.16 130** *e*PKPdf **PKPdf 04 50 12.2 +0.8**
JCT *e*PKPab **PKPab 04 50 42.0 -0.1**
JCT LR LR
comp=Z,490nm,19.0s
**533A Kerrville 157.23 132** P **PKPab 04 50 42.9 +0.5**
baz=157
**AHID Auburn Hatcher 157.47 90** PFAKE 04 50 20.0 +8.4
AHID LR LR
comp=Z,488nm,21.0s
**433A Art 157.75 131** P **PKPab 04 50 43.6 -1.0**
baz=158
**TPAW Teton Pass 157.83 88** *e*PKPdf **PKPdf 04 50 11.8 -0.4**
TPAW *e*PKPab **PKPab 04 50 47.3 +2.3**
**332A Millersview 157.91 129** P **PKPab 04 50 44.9 -0.4**
baz=158
**S22A 4UR Ranch, Cre 157.96 106** P **PKPab 04 50 45.8 0.0**
baz=158
**BOZ Bozeman (W) 158.05 83** *e*PKPdf **PKPdf 04 50 13.1 +0.9**
BOZ *e*PKPab **PKPab 04 50 46.1 +0.3**
BOZ LR LR
comp=Z,861nm,21.0s
**MOOW Moose Ponds 158.06 88** *e*PKPab **PKPab 04 50 45.8 -0.2**
**LOHW Long Hollow 158.11 88** *e*PKPab **PKPab 04 50 45.5 -0.7**
**333A Richland Sprin 158.26 130** P **PKPab 04 50 46.3 -0.5**
baz=158
**BW06 Boulder Array 158.51 91** *e*PKPdf **PKPdf 04 50 12.3 -0.6**
BW06 *e*PKPab **PKPab 04 50 48.5 +0.6**
BW06 LR LR
comp=Z,612nm,21.0s
**LKWY Lake 158.57 86** PFAKE 04 50 20.0 +7.1
LKWY LR LR
comp=Z,724nm,20.0s
**334A Lometa 158.65 132** P **PKPab 04 50 48.3 -0.1**
baz=159
**HKT Hockley 158.66 139** *e*PKPab **PKPab 04 50 48.0 -0.3**
**SDCO Great Sand Dun 158.83 107** P **PKPab 04 50 48.6 -0.9**
baz=159
**SDCO Great Sand Dun 158.83 107** *e*PKPab **PKPab 04 50 48.9 -0.6**
SDCO LR LR
comp=Z,547nm,21.0s
**233A Rising Star 158.85 129** P **PKPab 04 50 49.6 +0.3**
baz=159
**AMTX Amarillo 159.40 119** *e*PKPdf **PKPdf 04 50 14.6 +0.5**
**RLMT Red Lodge 159.50 85** PFAKE 04 50 20.0 +6.0
RLMT LR LR
comp=Z,977nm,22.0s
**EGMT Eagleton 159.83 77** PFAKE 04 50 20.0 +5.9
EGMT LR LR
comp=Z,632nm,20.0s
**ISCO Idaho Springs 159.86 102** PFAKE 04 50 30.0 +15
ISCO LR LR
comp=Z,521nm,20.0s
**NATX Nacogdoches 160.72 138** PFAKE 04 50 30.0 +15
NATX LR LR
comp=Z,544nm,22.0s
**WMOK Wichita Mounta 160.98 124** PFAKE 04 50 30.0 +14
WMOK LR LR
comp=Z,568nm,21.0s
**LAO LASA Array 161.95 82** PFAKE 04 50 30.0 +14
LAO LR LR
comp=Z,653nm,20.0s
**RSSD Black Hills 162.75 92** *e*PKPdf **PKPdf 04 50 19.0 +1.5**
RSSD *e*PKPab **PKPab 04 51 06.9 +0.5**
**BRAL Brewton 162.77 158** PFAKE 04 50 30.0 +12
BRAL LR LR
comp=Z,514nm,19.0s
**OGNE Ogallala 162.81 104** PFAKE 04 50 30.0 +13
OGNE LR LR
comp=Z,572nm,20.0s
**CBKS Cedar Bluff 163.13 113** PFAKE 04 50 30.0 +12
CBKS LR LR
comp=Z,494nm,19.0s
**MIAR Mount Ida 163.54 136** PFAKE 04 50 30.0 +12
MIAR LR LR
comp=Z,551nm,20.0s
**DGMT Dagmar 163.57 77** PFAKE 04 50 30.0 +12
DGMT LR LR
comp=Z,711nm,19.0s
**FFC Flin Flon 164.21 54** PFAKE 04 50 30.0 +12
FFC LR LR
comp=Z,978nm,20.0s
**KSU1 Kansas State U 165.23 118** PFAKE 04 50 30.0 +10
KSU1 LR LR
comp=Z,602nm,20.0s
**NHSC New Hope 165.81 178** PFAKE 04 50 30.0 +10
NHSC LR LR
comp=Z,486nm,20.0s
**GOGA Godfrey 165.83 167** PFAKE 04 50 30.0 +10
GOGA LR LR
comp=Z,720nm,22.0s
**ECSD EROS Data Cent 167.64 101** PFAKE 04 50 30.0 +8.7
ECSD LR LR
comp=Z,693nm,19.0s
**CNNC Cliffs of the 167.86 187** PFAKE 04 50 30.0 +8.3
CNNC LR LR
comp=Z,473nm,21.0s
**SCIA State Center 168.98 114** PFAKE 04 50 30.0 +7.7
SCIA LR LR
comp=Z,951nm,21.0s
**AGMN Agassiz Nation 169.11 79** PFAKE 04 50 30.0 +7.9
AGMN LR LR
comp=Z,739nm,20.0s
**BLA Blacksburg 169.89 177** PFAKE 04 50 30.0 +7.0
BLA LR LR
comp=Z,779nm,19.0s
**HDIL Hopedale 170.35 131** PFAKE 04 50 30.0 +6.9
HDIL LR LR
comp=Z,572nm,19.0s
**CBN Corbin 170.73 192** PFAKE 04 50 30.0 +6.6
CBN LR LR
comp=Z,697nm,19.0s
**JFWS Jewell Farm 171.37 117** PFAKE 04 50 30.0 +6.4
JFWS LR LR
comp=Z,825nm,20.0s
**EYMN Ely 172.03 81** PFAKE 04 50 30.0 +6.3
EYMN LR LR
comp=Z,825nm,20.0s
**ACSO Alum Creek Sta 172.54 161** PFAKE 04 50 30.0 +5.8
ACSO LR LR
comp=Z,632nm,21.0s
**COWI Conover 173.42 97** PFAKE 04 50 30.0 +5.6
COWI LR LR
comp=Z,946nm,22.0s
**AAM Ann Arbor 174.27 150** PFAKE 04 50 40.0 +15
AAM LR LR
comp=Z,723nm,20.0s
**ERPA Erie 174.80 178** PFAKE 04 50 40.0 +15
ERPA LR LR
comp=Z,824nm,22.0s
**LONY Lake Ozonia 175.51 235** PFAKE 04 50 40.0 +15
LONY LR LR
comp=Z,701nm,21.0s

*IDC **03** 04:35:07.2±0.6,53˚59N×163˚74W,h0km, mb4.4/32, mb1 4.5/35,mb1mx4.3/55,mbtmp4.4/35,ML3.9/3,MS3.9/9, Ms1 3.9/9,ms1mx3.6/38,Error ellipse: s-maj=17.1km s-min=10.2km az=164.0*
*NEIC **03** 04:35:09.8,53˚41N×163˚54W,h25km,mb4.8/48,After AEIC.*
*ISCJB **03** 04:35:10.4±0.8,53˚47N±0˚03×163˚61W±0˚03,h33km±5km, mb4.7/111,MS4.1/14,Error ellipse: s-maj=4.8km s-min=2.7km az=173.9*
*MOS **03** 04:35:11.6±0.9,53˚64N×163˚73W,h40km,mb5.1/40, MS4.4/5,Error ellipse: s-maj=10.2km s-min=5.8km az=95.9*
*BJI **03** 04:35:12.5,54˚19N×164˚17W,h32km,mb4.7/36, mB4.9/21,Ms5.1/26,Ms7 4.9/26*
**ISC 03 04:35:12.3±0.4,53˚61N±0˚05×163˚71W±0˚03,h34km±1km, h33km:pP-P,n339,σ1§11/378,mb4.8/113,MS4.0/14, 25C-15D,Unimak Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WESE** | **West Dahl East** | **1.01** | **329** | P | **Pn** | **04 35 30.9** | **+0.7** |
| **BRPK** | **Brown Peak** | **1.04** | **359** | P | **Pn** | **04 35 31.1** | **+0.6** |
| **WESP** | **Westdahl Peak** | **1.07** | **326** | P | **Pb** | **04 35 32.0** | **-0.4** |
| WESP | | | | S | **Sb** | **04 35 48.2** | **+2.0** |
| **WESN** | **West Dahl Nort** | **1.09** | **332** | P | **Pb** | **04 35 32.3** | **-0.4** |
| **ISLZ** | **Isanotski Laza** | **1.12** | **360** | P | **Pn** | **04 35 32.3** | **+0.6** |
| **SSLS** | **Shishaldin Sou** | **1.12** | **351** | P | **Pb** | **04 35 32.7** | **-0.5** |
| **WECS** | **Westdahl Cape** | **1.12** | **326** | P | **Pb** | **04 35 32.8** | **-0.4** |
| **WEBT** | **Westdahl Beart** | **1.16** | **328** | P | **Pb** | **04 35 33.4** | **-0.6** |
| **ISNN** | **Isanotski Nort** | **1.23** | **358** | P | **Pb** | **04 35 34.6** | **-0.4** |
| **FALS** | **False Pass** | **1.26** | **8** | P | **Pn** | **04 35 34.1** | **+0.5** |
| FALS | | | | S | **Sb** | **04 35 52.5** | **+1.0** |
| **AKSA** | **Akutan Strait** | **1.29** | **295** | P | **Pn** | **04 35 34.3** | **+0.3** |
| AKSA | | | | S | **Sb** | **04 35 52.7** | **+0.4** |
| **AKA** | **Akutan** | **1.33** | **294** | P | **Pn** | **04 35 35.2** | **+0.7** |
| AKA | | | | S | **Sb** | **04 35 54.3** | **+0.9** |
| **AKUT** | **Akutan** | **1.33** | **294** | P | **Pn** | **04 35 34.8** | **+0.3** |
| AKUT | | | | S | **Sb** | **04 35 54.0** | **+0.5** |
| **ZRO** | **Akutan Zero** | **1.43** | **291** | P | **Pn** | **04 35 36.0** | **+0.1** |
| **AKGG** | **Akutan Green G** | **1.48** | **295** | P | **Pn** | **04 35 37.2** | **+0.7** |
| AKGG | | | | S | **Sb** | **04 35 57.7** | **+0.1** |
| **LVA** | **Lava Point** | **1.48** | **293** | P | **Pn** | **04 35 37.3** | **+0.7** |
| **AKRB** | **Akutan Reef Bi** | **1.49** | **291** | P | **Pn** | **04 35 37.2** | **+0.4** |
| AKRB | | | | S | **Sb** | **04 35 58.5** | **+0.4** |
| **DRIA** | **Deer Island** | **1.60** | **31** | P | **Pn** | **04 35 37.6** | **-0.6** |
| DRIA | | | | S | **Sn** | **04 35 58.7** | **+0.9** |
| **UNV** | **Unalaska Valle** | **1.68** | **279** | P | **Pn** | **04 35 38.6** | **-0.7** |
| UNV | | | | S | **Sb** | **04 36 01.6** | **-1.7** |
| **DT1** | **Dutton Round H** | **1.72** | **28** | P | **Pn** | **04 35 39.4** | **-0.4** |
| **DTNA** | **Dutton South F** | **1.76** | **28** | P | **Pn** | **04 35 40.5** | **0.0** |
| **MTBL** | **Makushin Table** | **1.80** | **283** | P | **Pn** | **04 35 41.6** | **+0.5** |
| **MSW** | **Makushin Switc** | **1.85** | **281** | P | **Pn** | **04 35 42.0** | **+0.3** |
| **MGOD** | **Makushin Gods** | **1.89** | **277** | P | **Pn** | **04 35 42.7** | **+0.4** |
| **MCIR** | **Makushin Cirqu** | **1.92** | **282** | P | **Pn** | **04 35 43.4** | **+0.7** |
| **MSOM** | **Makushin Julie** | **1.94** | **277** | P | **Pn** | **04 35 43.5** | **+0.6** |
| **MSOM** | **Makushin Julie** | **1.94** | **277** | P | **Pn** | **04 35 43.5** | **+0.6** |
| **HAG** | **Hague Volcano** | **2.01** | **31** | P | **Pn** | **04 35 44.4** | **+0.6** |
| HAG | | | | S | **Sb** | **04 36 10.8** | **-2.0** |
| **HAG** | **Hague Volcano** | **2.01** | **31** | P | **Pn** | **04 35 44.4** | **+0.6** |
| HAG | | | | S | **Sb** | **04 36 10.8** | **-2.0** |
| **PS4A** | **Pavlof South-4** | **2.05** | **31** | P | **Pn** | **04 35 44.8** | **+0.4** |
| **PVV** | **Pavlof Volcano** | **2.09** | **32** | P | **Pn** | **04 35 45.7** | **+0.7** |
| **PS1A** | **Pavlof South-1** | **2.15** | **31** | P | **Pn** | **04 35 46.8** | **+1.1** |
| **OKFG** | **Magazine Ridge** | **2.52** | **267** | P | **Pn** | **04 35 50.5** | **-0.3** |
| **SDPT** | **Sand Point** | **2.57** | **46** | P | **Pn** | **04 35 51.2** | **-0.3** |
| **OKTU** | **Okmok Mt. Tuli** | **2.60** | **267** | P | **Pn** | **04 35 52.3** | **+0.3** |
| **OKCE** | **Okmok Cone E** | **2.67** | **268** | P | **Pn** | **04 35 53.1** | **+0.2** |
| **OKSO** | **Okmok South** | **2.67** | **266** | P | **Pn** | **04 35 52.3** | **-0.7** |
| **OKAK** | **Okmok** | **2.77** | **271** | P | **Pn** | **04 35 55.2** | **+0.9** |
| **NIKH** | **Nikolski High** | **3.15** | **260** | P | **Pn** | **04 35 58.6** | **-1.0** |
| **VNSS** | **Veniaminof 8** | **3.59** | **41** | P | **Pn** | **04 36 06.8** | **+1.0** |
| **VNHG** | **Veniaminof 1** | **3.70** | **43** | P | **Pn** | **04 36 08.4** | **+1.2** |
| **CHGN** | **Chignik** | **4.07** | **46** | P | **Pn** | **04 36 12.0** | **-0.1** |
| **ANPB** | **Aniakchak Plen** | **4.46** | **42** | P | **Pn** | **04 36 17.6** | **+0.1** |
| **ANNE** | **Aniakchak Nort** | **4.62** | **42** | P | **Pn** | **04 36 20.5** | **+0.7** |
| **SII** | **Sitkinak Islan** | **6.22** | **58** | *e*Pn | **Pn** | **04 36 39.7** | **-1.9** |
| **KOFP** | **Korovin Flat P** | **6.42** | **262** | P | **Pn** | **04 36 45.4** | **+0.9** |
| **ATKA** | **Atka Island** | **6.50** | **262** | P | **Pn** | **04 36 45.6** | **+0.1** |
| **OHAK** | **Old Harbor** | **6.95** | **54** | *e*Pn | **Pn** | **04 36 49.5** | **-2.1** |
| OHAK | | | | *e*Lg | Lg | 04 38 42.1 | |
| **KDAK** | **Kodiak Island** | **7.55** | **52** | Pn | **Pn** | **04 36 57.6** | **-2.2** |
| | 2.0nm,0.3s,baz=169,slow=3.7,SNR=28 | | | | | | |
| KDAK | | | | Sn | Sn | 04 38 17.4 | -6.6 |
| | 0.3nm,0.3s,baz=345,slow=23,SNR=6.4 | | | | | | |
| **KDAK** | **Kodiak Island** | **7.55** | **52** | *i* P | **Pn** | **04 36 58.0** | **-1.8** |
| **RSO** | **Redoubt South** | **9.09** | **37** | *e*Pn | **Pn** | **04 37 19.9** | **-1.2** |
| **SPU** | **Mount Spurr** | **9.84** | **35** | *e*Pn | **Pn** | **04 37 31.6** | **+0.3** |
| **SEW** | **Seward** | **10.15** | **44** | *e*Pn | **Pn** | **04 37 34.0** | **-1.4** |
| **AMKA** | **Amchitka** | **10.60** | **265** | *e*Pn | **Pn** | **04 37 41.0** | **-0.7** |
| **RC01** | **Rabbit Creek A** | **10.62** | **40** | *e*Pn | **Pn** | **04 37 39.8** | **-2.1** |
| **CAST** | **Castle Rocks** | **11.54** | **27** | *e*Pn | **Pn** | **04 37 56.6** | **+2.1** |
| **SCM** | **Sheep Creek Mo** | **11.99** | **40** | *e*P | **Pn** | **04 37 57.6** | **-3.1** |
| **SCM** | **Sheep Creek Mo** | **11.99** | **40** | *e*Pn | **Pn** | **04 37 57.6** | **-3.1** |
| **KLU** | **Klutina** | **12.36** | **43** | *e*Pn | **Pn** | **04 38 03.2** | **-2.6** |
| **BPAW** | **Bear Paw Mtn.** | **12.38** | **27** | *e*Pn | **Pn** | **04 38 07.1** | **+1.1** |
| **BMRM** | **Bremner River** | **12.65** | **47** | *e*Pn | **Pn** | **04 38 08.4** | **-1.3** |
| | 52nm,1.3s | | | | | | |
| **MCK** | **McKinley** | **12.69** | **31** | *e*P | **Pn** | **04 38 10.9** | **+0.7** |
| **MCK** | **McKinley** | **12.69** | **31** | *e*Pn | **Pn** | **04 38 10.9** | **+0.7** |
| **MLY** | **Manley** | **13.19** | **25** | *e*Pn | **Pn** | **04 38 17.9** | **+0.9** |
| **CCB** | **Clear Creek Bu** | **13.70** | **30** | *e*Pn | **Pn** | **04 38 23.4** | **-0.4** |
| **COLA** | **College** | **13.85** | **29‖** | *e*P | **Pn** | **04 38 25.2** | **-0.7** |
| **COLA** | **College** | **13.85** | **29** | *e*Pn | **Pn** | **04 38 24.2** | **-1.7** |
| **ILAR** | **Eielson Array** | **14.06** | **31** | Pn | **Pn** | **04 38 26.1** | **-2.8** |
| | 0.2nm,0.3s,baz=217,slow=13,SNR=10 | | | | | | |
| ILAR | | | | LR | LR | 04 44 27.2 | |
| | comp=Z,886nm,18.4s,baz=234,slow=40 | | | | | | |
| **DOT** | **Dot Lake** | **14.28** | **37** | *e*Pn | **Pn** | **04 38 32.8** | **+1.0** |
| **COLD** | **Coldfoot** | **15.14** | **20** | *e*Pn | **Pn** | **04 38 44.4** | **+1.0** |
| | 23nm,1.0s | | | | | | |
| **EGAK** | **Eagle** | **15.97** | **37** | *e*Pn | **P** | **04 38 56.1** | **-1.2** |
| | 12nm,0.7s | | | | | | |
| **DAWY** | **Dawson** | **16.25** | **40** | *e*Pn | **Pn** | **04 38 58.5** | **+0.7** |
| **BESE** | **Bessie Mountai** | **16.77** | **61** | *e*Pn | **Pn** | **04 39 00.2** | **-4.2** |
| | 22nm,0.6s | | | | | | |
| **DLBC** | **Dease Lake** | **19.30** | **62** | P | **Pn** | **04 39 35.2** | **-0.2** |
| | 0.1nm,0.3s,baz=253,slow=13,SNR=6.9 | | | | | | |
| **DLBC** | **Dease Lake** | **19.30** | **62** | *e*P | **Pn** | **04 39 35.9** | **+0.5** |
| | 48nm,1.6s | | | | | | |
| **BILL** | **Bilibino** | **20.25** | **327** | *ce*P | **P** | **04 39 43.4** | **-1.0** |
| BILL | | | | *e* | | 04 40 01.6 | |
| BILL | | | | *e*S | **S** | **04 43 29.1** | **-0.4** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,1μm,16.0s | | | | | | |
| **INK** | **Inuvik** | **20.45** | **32** | P | **P** | **04 39 46.3** | **-0.2** |
| | comp=Z,4.4nm,0.6s,baz=250,slow=11,SNR=13 | | | | | | |
| **INK** | **Inuvik** | **20.45** | **32** | *e*P | **P** | **04 39 47.4** | **+1.0** |
| INK | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **20.45** | **32** | *e*P | **P** | **04 39 47.4** | **+1.0** |
| | comp=Z,11nm,0.8s | | | | | | |
| **PET** | **Petropavlovsk** | **22.33** | **284** | *e*P | **P** | **04 40 06.3** | **-0.5** |
| PET | | | | pmax | pmax | | |
| | comp=Z,25nm,1.3s | | | | | | |
| **PET** | **Petropavlovsk** | **22.33** | **284** | *e*P | **P** | **04 40 08.7** | **+1.9** |
| | comp=Z,389nm,2.7s | | | | | | |
| **PEA0** | **Petropavlovsk-** | **22.86** | **284** | *e*P | **P** | **04 40 12.4** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **22.86** | **284** | P | **P** | **04 40 12.1** | **-0.3** |
| | comp=Z,5.8nm,0.5s,baz=89,slow=12,SNR=24 | | | | | | |
| PETK | | | | LR | LR | 04 48 47.9 | |
| | comp=Z,239nm,21.0s,baz=82,slow=36 | | | | | | |
| **SEY** | **Seymchan** | **24.43** | **310** | P | **P** | **04 40 26.2** | **-1.2** |
| | comp=Z,3.6nm,0.9s,baz=30,slow=20,SNR=5.2 | | | | | | |
| **SEY** | **Seymchan** | **24.43** | **310‖** | *e*P | **P** | **04 40 27.8** | **+0.4** |
| **MA2** | **Magadan** | **25.34** | **302** | *e*P | **P** | **04 40 37.0** | **+1.3** |
| **YKA** | **Yellowknife Ar** | **26.82** | **51** | P | **P** | **04 40 50.1** | **+1.0** |
| | comp=Z,6.3nm,0.9s,baz=276,slow=8.7,SNR=8.5 | | | | | | |
| **B08A** | **Colville Reser** | **28.06** | **83** | *e*P | **P** | **04 41 02.8** | **+2.4** |
| | comp=Z,12nm,1.3s | | | | | | |
| **HAWA** | **Hanford** | **28.90** | **86** | *e*P | **P** | **04 41 08.4** | **+0.6** |
| | comp=Z,152nm,2.8s | | | | | | |
| **NEW** | **Newport** | **29.41** | **81** | P | **P** | **04 41 12.5** | **+0.1** |
| | comp=Z,1.6nm,0.8s,baz=276,slow=10,SNR=4.3 | | | | | | |
| **EDM** | **Edmonton** | **29.51** | **70** | *e*P | **P** | **04 41 14.4** | **+1.2** |
| EDM | | | | *e*PP | **pP** | **04 41 26.2** | **+3.3** |
| **EDM** | **Edmonton** | **29.51** | **70** | *e*P | **P** | **04 41 14.4** | **+1.2** |

EDM epP pP 04 41 26.1 +3.3
**I07A Izee 30.16 90** eP P 04 41 20.7 +1.6
comp=Z,9.1nm,1.2s
**MOD Modoc 30.96 94** eP P 04 41 18.5 -7.8
**BSMT Bassoo Peak 30.98 80** eP P 04 41 26.2 -0.2
comp=Z,4.3nm,1.1s
**J08A Circle Bar Ran 31.19 91** eP P 04 41 30.5 +2.3
comp=Z,7.9nm,1.3s
**JTMT Jette 31.33 80** eP P 04 41 30.1 +0.7
comp=Z,2.5nm,1.1s
**MFID Camas Ranch 32.73 88** eP P 04 41 42.2 +0.5
comp=Z,7.1nm,1.0s
**CMB Columbia Colle 33.38 100** eP P 04 41 47.2 -0.1
CMB pmax pmax
comp=Z,53nm,3.0s
**CMB Columbia Colle 33.38 100** eP P 04 41 47.2 -0.1
comp=Z,53nm,3.0s
**HLID Hailey 33.49 87** eP P 04 41 48.7 +0.3
comp=Z,30nm,2.3s
**MCMT McKenzie Canyo 33.70 84** eP P 04 41 49.4 -0.9
**YUK Yuzh-Kuril'sk 33.90 275**c iP P 04 41 41.7 -10
**YSS Yuzh-Sakhalins 34.14 281** eP P 04 41 49.0 -4.8
YSS pmax pmax
comp=Z,40nm,1.2s
**NV01 Mina Array Sit 34.34 98** eP P 04 41 58.5 +2.6
**NVAR Mina Array Bea 34.34 98** P P 04 41 57.0 +1.1
comp=Z,0.8nm,0.7s,baz=295,slow=10,SNR=8.2
NVAR LR LR 04 53 37.3
comp=Z,186nm,19.4s,baz=265,slow=32
**ELK Elko 34.68 92** eP P 04 42 00.4 +1.5
ELK pmax pmax
comp=Z,3.0nm,0.9s
**ELK Elko 34.68 92** eP P 04 42 00.4 +1.5
comp=Z,3.0nm,0.9s
**YAK Yakutsk 34.94 311** eP P 04 42 01.2 +0.7
YAK pmax pmax
comp=Z,7.0nm,0.5s
**HVU Hansel Valley 35.52 88** eP P 04 42 06.9 +1.0
HVU pmax pmax
comp=Z,52nm,2.7s
**HVU Hansel Valley 35.52 88** eP P 04 42 06.9 +1.0
comp=Z,52nm,2.7s
**ASAJ Asahikawa 35.79 277** P P 04 42 07.9 -0.2
comp=Z,31nm,1.2s,baz=97,slow=7.4,SNR=4.3
**DUG Dugway 36.47 90** eP P 04 42 14.8 +0.7
DUG pmax pmax
comp=Z,8.0nm,1.3s
**DUG Dugway 36.47 90** eP P 04 42 14.8 +0.7
comp=Z,8.2nm,1.3s
**TPNV Topopah Spring 36.54 98** eP P 04 42 16.5 +1.7
TPNV pmax pmax
comp=Z,66nm,2.5s
**TPNV Topopah Spring 36.54 98** eP P 04 42 16.5 +1.7
comp=Z,66nm,2.5s
**HABR Khabarovsk 37.80 288** eP P 04 42 24.1 -0.9
HABR e*PP pP 04 42 33.8 -1.1
HABR e*SP sP 04 42 38.0 -0.9
HABR e 04 43 50.7
HABR e 04 44 39.8
HABR eS S 04 48 13.9 +0.6
HABR e*SS sS 04 48 30.2 +0.7
HABR e 04 52 33.5
HABR pmax pmax
comp=E,19nm,1.0s
HABR pmax pmax
comp=Z,27nm,1.0s
HABR pmax pmax
comp=N,20nm,1.9s
HABR MLR MLR
comp=Z,106nm,19.0s
**TMUT Trail Mountain 37.99 90** eP P 04 42 28.6 +1.4
comp=Z,20nm,1.0s
**P18A Preston Nutter 38.36 89** eP P 04 42 31.7 +1.4
comp=Z,27nm,2.0s
**SRU San Rafael 38.52 90** eP P 04 42 32.3 +0.8
SRU pmax pmax
comp=Z,14nm,1.4s
**SRU San Rafael 38.52 90** eP P 04 42 32.3 +0.8
comp=Z,14nm,1.4s
**BORC Borrego Spring 39.01 102** eP P 04 42 32.4 -3.0
**YUH Yuha Desert 39.74 102** eP P 04 42 41.8 +0.3
**PV09 Paradox Valley 39.75 90** eP P 04 42 42.6 +0.7
**ERPC Ernies Place 39.82 102** eP P 04 42 48.0 +5.9
**PV10 Paradox Valley 39.88 90** eP P 04 42 44.3 +1.3
**PV01 Paradox Valley 40.32 90** eP P 04 42 46.5 -0.1
**ULM Lac du Bonnet 40.53 66** P P 04 42 47.9 0.0
comp=Z,1.5nm,0.6s,baz=26,slow=2.1,SNR=3.4
ULM LR LR 04 58 26.8
comp=Z,98nm,21.9s,baz=268,slow=34
**H11N2 WAKE ISLAND Hy 40.66 225** T T 05 26 35.2
baz=26,slow=76,SNR=68
**H11N3 WAKE ISLAND Hy 40.67 225** T T 05 26 38.2
baz=26,slow=76,SNR=77
**H11N1 WAKE ISLAND Hy 40.68 225** T T 05 26 36.5
baz=26,slow=76,SNR=70
**AGMN Agassiz Nation 41.59 69** eP P 04 42 56.0 -0.7
comp=Z,10nm,1.0s
AGMN epP pP 04 43 08.7 +2.1
**H11S1 WAKE ISLAND Hy 41.84 225** T T 05 27 56.2
baz=26,slow=76,SNR=68
**H11S2 WAKE ISLAND Hy 41.85 225** T T 05 28 03.4
baz=26,slow=76,SNR=47
**H11S3 WAKE ISLAND Hy 41.85 225** T T 05 27 59.2
baz=26,slow=76,SNR=60
**USRK Ussuriysk Ar. 41.95 284** LR LR 05 00 53.3
comp=Z,111nm,20.1s,baz=40,slow=37
**MAJO Matsushiro 43.13 271**ceP P 04 43 10.0 +0.7
MAJO pmax pmax
comp=Z,110nm,1.1s
**MAJO Matsushiro 43.13 271** eP P 04 43 10.2 +0.9
comp=Z,20nm,1.0s
**MAT Matsushiro 43.13 271** P P 04 43 08.7 -0.6
**MJAR Matsushiro Arr 43.13 271** P P 04 43 09.2 -0.1
comp=Z,7.6nm,1.1s,baz=37,slow=6.0,SNR=11
**BOD Bodaibo 43.85 310** eP P 04 43 12.7 -2.1
BOD pmax pmax
comp=Z,8.0nm,1.4s
**JHJ Hachijo jima 2 44.55 266** LR LR 04 58 44.1
comp=Z,72nm,21.6s,baz=297,slow=32
**SPITS Spitsbergen Ar 48.48 360** P P 04 43 50.8 -0.2
comp=Z,6.0nm,0.8s,baz=35,slow=5.3,SNR=3.5
**SUMG Summit 48.54 19** eP P 04 43 52.3 +0.4
SUMG pmax pmax
comp=Z,286nm,3.0s
**SUMG Summit 48.54 19** eP P 04 43 52.3 +0.4
comp=Z,286nm,3.0s
**KSRS Korea Array 48.62 280** P P 04 43 53.0 +0.6
comp=Z,6.4nm,0.8s,baz=62,slow=7.0,SNR=12
**KS01 Wonju Array Si 48.62 280** eP P 04 43 52.5 -0.1
**KSAR Wonju Array Be 48.65 280** P P 04 43 53.1 +0.3
**KSAR Wonju Array Be 48.65 280** P P 04 43 53.0 +0.3
**TX31 Lajitas Ar. Si 49.36 95** eP P 04 43 57.6 -0.8
**TXAR Lajitas Array 49.36 95** P P 04 43 58.0 -0.5
comp=Z,0.8nm,0.6s,baz=300,slow=5.5,SNR=20
TXAR LR LR 05 03 22.5
comp=Z,97nm,18.9s,baz=0.0,slow=34
**TXAR Lajitas Array 49.36 95** P P 04 43 58.0 -0.5
**TJN Taejon 49.68 279**deP P 04 44 01.1 +0.5
**SFJD Kangerlussuaq 49.71 28** P P 04 44 00.7 +0.2
comp=Z,16nm,1.0s,baz=316,slow=8.6,SNR=4.9
**SFJD Kangerlussuaq 49.71 28** iP P 04 44 00.4 -0.1
SFJD pmax pmax
comp=Z,18nm,1.0s
**SFJD Kangerlussuaq 49.71 28** iP P 04 44 00.4 -0.1
comp=Z,18nm,1.0s
**SFJD Kangerlussuaq 49.71 28** eP P 04 44 01.1 +0.6
comp=Z,19nm,1.0s
**JNU Nakatsue 49.85 273** P P 04 44 02.7 +0.6
comp=Z,13nm,1.1s,baz=315,slow=8.6,SNR=2.2
**HDIL Hopedale 50.05 73** eP P 04 44 01.2 -2.2
comp=Z,37nm,0.6s
**JCT Junction City 50.83 90** eP P 04 44 09.3 -0.2
JCT pmax pmax
comp=Z,7.0nm,1.1s
**JCT Junction City 50.83 90** eP P 04 44 09.3 -0.2
comp=Z,7.4nm,1.1s
**OLIL Olney 51.95 74** eP P 04 44 16.4 -1.4
comp=Z,16nm,0.9s
**SCHQ Schefferville 52.14 47** P P 04 44 19.5 +0.5
comp=Z,5.0nm,0.9s,baz=0.0,slow=17,SNR=2.8
**TLY Talaya 52.32 308** eP P 04 44 20.5 +0.2
TLY pmax pmax
comp=Z,16nm,1.0s
TLY MLR MLR
comp=Z,274nm,16.0s
**USIN University of 52.73 75** eP P 04 44 22.0 -1.5
comp=Z,17nm,0.7s
**ULN Ulaanbaatar 53.20 303**c iP P 04 44 26.4 -0.7
ULN pmax pmax
comp=Z,16nm,1.0s
**ULN Ulaanbaatar 53.20 303** eP P 04 44 27.3 +0.2
comp=Z,15nm,1.0s
**ZAK Zakamensk 53.35 307** eP P 04 44 26.3 -1.8
ZAK e 04 45 35.8
ZAK pmax pmax
comp=Z,4.0nm,1.4s
ZAK pmax pmax
comp=Z,3.0nm,1.2s
**SONA1 Songino Array 53.54 303** eP P 04 44 29.5 0.0
**SONM Songino Array 53.55 303** P P 04 44 30.1 +0.5
comp=Z,10nm,1.0s,baz=51,slow=7.1,SNR=33
**MOY Mondy 53.56 310** eP P 04 44 30.0 +0.4
**WVT Waverly 53.90 76** eP P 04 44 30.8 -1.4
WVT pmax pmax
comp=Z,8.0nm,0.8s
**WVT Waverly 53.90 76** eP P 04 44 30.8 -1.4
comp=Z,7.7nm,0.8s
**HHC Hu-ho-hao-te 55.61 294** eP P 04 44 45.4 +0.8
HHC sP sP 04 45 00.2 +1.4
HHC PcS PcS 04 49 42.4 -1.8
HHC S S 04 52 26.4 -1.7
HHC ScS ScS 04 54 29.7 -1.3
HHC PMZ
comp=Z,20nm,1.7s
HHC PMZ
comp=Z,60nm,5.0s
HHC LN
comp=Z,190nm,18.7s
HHC LE
comp=Z,250nm,17.4s
HHC LZ
comp=Z,150nm,17.4s
**ARCES ARCESS Array B 56.98 356** P P 04 44 53.2 -0.7
comp=Z,5.2nm,1.0s,baz=9.6,slow=6.9,SNR=6.1
**SSE Sheshan 57.04 279** P P 04 44 53.6 -1.1
SSE S S 04 52 40.6 -6.3
SSE PMZ
comp=Z,26nm,0.7s
SSE LN
comp=Z,260nm,19.6s
SSE LZ
comp=Z,340nm,22.7s
**NJ2 Nanjing 57.71 281** eP P 04 44 59.0 -0.5
NJ2 PMZ
comp=Z,40nm,0.8s
**LVZ Lovozero 58.04 352**deP P 04 45 01.0 -0.3
LVZ pmax pmax
comp=Z,15nm,1.7s
**NVS Novosibirsk 58.66 321** eP P 04 45 02.8 -3.0
**ZAA0 Zalesovo Array 58.75 320** eP P 04 45 05.9 -0.5
**ZALV Zalesovo Beam 58.75 320** P P 04 45 06.4 0.0
comp=Z,1.9nm,0.5s,baz=19,slow=6.3,SNR=9.2
**TMCR Tamitsa 61.36 349** eP P 04 45 24.1 0.0
TMCR pmax pmax
comp=Z,29nm,1.1s
**GTA Gaotai 62.89 300** eP P 04 45 34.7 -0.3
GTA pP pP 04 45 44.9 -0.4
GTA sP sP 04 45 49.0 -0.2
GTA PP PP 04 47 54.6 +1.5
GTA S S 04 54 00.1 -2.1
GTA sS sS 04 54 17.2 -2.0
GTA SS SS 04 58 07.4 +0.4
GTA PMZ
comp=Z,10.0nm,1.2s
GTA PMZ
comp=Z,86nm,5.2s
GTA LN
comp=Z,820nm,19.9s
GTA LE
comp=Z,360nm,19.5s
GTA LZ
comp=Z,1μm,20.0s
**LZH Lanzhou 63.24 295** eP P 04 45 37.9 +0.5
LZH pP pP 04 45 47.1 -0.6
LZH sP sP 04 45 51.5 -0.1
LZH eS S 04 54 00.0 -6.7
LZH sS sS 04 54 17.2 -6.5
LZH SS SS 04 58 14.2 +1.6
LZH PMZ
comp=Z,24nm,1.1s
LZH PMZ
comp=Z,83nm,4.8s
LZH LN
comp=Z,830nm,15.5s
LZH LE
comp=Z,400nm,15.0s
LZH LZ
comp=Z,1μm,17.1s
**KURK Kurchatov 63.64 321** eP P 04 45 39.5 -0.1
KURK pmax pmax
comp=Z,26nm,1.1s
**KURK Kurchatov 63.64 321** eP P 04 45 39.5 -0.1
comp=Z,26nm,1.1s
**SVE Sverdlovsk 64.11 335**⇑iP P 04 45 43.3 +0.7
SVE pmax pmax
comp=Z,30nm,1.2s
**BVAR Borovoye Array 64.60 327** P P 04 45 46.5 +0.7
comp=Z,5.2nm,0.7s,baz=46,slow=6.6,SNR=29
BVAR LR LR 05 16 45.4
comp=Z,158nm,18.5s,baz=57,slow=39
**BRVK Borovoye 64.61 327**c iP P 04 45 45.9 0.0
BRVK pmax pmax
comp=Z,10.0nm,0.8s
**BRVK Borovoye 64.61 327** eP P 04 45 46.5 +0.6
comp=Z,17nm,1.2s
**ARU Arti 64.99 336**c iP P 04 45 48.0 -0.3
ARU S S 04 54 29.0 +1.5
ARU SS SS 04 58 34.3 -4.3
ARU pmax pmax
comp=Z,18nm,1.2s
**ARU Arti 64.99 336** eP P 04 45 47.6 -0.7
comp=Z,11nm,0.9s
**FINES FINESS Array B 65.03 355** P P 04 45 48.0 -0.5
comp=Z,7.8nm,0.9s,baz=28,slow=5.3,SNR=16
**MKAR Makanchi Array 65.36 316** P P 04 45 50.6 -0.4
comp=Z,0.8nm,0.4s,baz=37,slow=6.2,SNR=13
**MK01 Makanchi Array 65.37 316** eP P 04 45 50.1 -0.9
**WMQ Urumqi 65.38 311** eP P 04 45 54.0 +2.8
WMQ PP PP 04 48 20.0 +5.3
WMQ S S 04 54 34.0 +1.1
WMQ ScS SKSac 04 55 35.0 -8.7
WMQ PMZ
comp=Z,12nm,1.0s
WMQ PMZ
comp=Z,35nm,7.0s
WMQ LN
comp=Z,890nm,22.0s
WMQ LE
comp=Z,410nm,22.0s
WMQ LZ
comp=Z,1μm,25.0s
**NB2 NORSAR Subarra 65.63 3** P P 04 45 52.6 +0.2
comp=Z,13nm,1.1s,baz=358,slow=6.2
**NOA NORSAR Array B 65.63 3** P P 04 45 52.6 +0.2
comp=Z,6.4nm,1.0s,baz=357,slow=6.6,SNR=8.0
**CD2 Chengdu 67.18 291** eP P 04 46 01.6 -1.3
CD2 pP pP 04 46 12.1 -1.2
CD2 sP sP 04 46 16.4 -0.8
CD2 S S 04 54 53.0 -2.0
CD2 sS sS 04 55 10.9 -1.2
CD2 SS SS 04 59 12.9 -1.0
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**VSU Vasula 67.97 354**ceP P 04 46 08.1 +0.8
VSU pmax pmax
comp=Z,37nm,1.7s
**GYA Guiyang 68.94 286** eP P 04 46 15.0 +0.9
GYA PMZ
comp=Z,10.0nm,1.0s
**OBN Obninsk 70.36 348**⇑iP P 04 46 22.3 +0.2
OBN e 04 46 44.6
OBN e 04 48 59.0
OBN pmax pmax
comp=Z,4.0nm,0.4s
OBN MLR MLR
comp=Z,151nm,19.0s
**TKM2 Tokmak 2 71.25 318** eP P 04 46 29.1 +1.0
TKM2 pmax pmax
comp=Z,15nm,1.4s
**TKM2 Tokmak 2 71.25 318** P P 04 46 29.2 +1.0
SNR=6.6
**TKM2 Tokmak 2 71.25 318** eP P 04 46 29.1 +1.0
comp=Z,15nm,1.4s
**USP Ospenovka 71.39 319** P P 04 46 30.1 +1.4
SNR=8.0
**ULHL Ulahol 71.56 317** P P 04 46 31.0 +1.1
SNR=5.6
**FRU Bishkek 71.71 319** iP P 04 46 31.0 +0.3
FRU pmax pmax
comp=Z,63nm,2.0s
**AAK Ala-Archa 71.93 319**c iP P 04 46 32.5 +0.4
AAK pmax pmax
comp=Z,23nm,1.1s
**AAK Ala-Archa 71.93 319** P P 04 46 32.8 +0.7
SNR=7.6
**AAK Ala-Archa 71.93 319** eP P 04 46 32.8 +0.7
**EKS2 Erkin-Say 72.18 319** eP P 04 46 34.3 +0.7
EKS2 pmax pmax
comp=Z,15nm,1.2s
**EKS2 Erkin-Say 72.18 319** P P 04 46 34.4 +0.8
SNR=8.6
**EKS2 Erkin-Say 72.18 319** eP P 04 46 34.3 +0.7
comp=Z,14nm,1.2s
**KMI Kunming 72.21 288** P P 04 46 34.4 +0.3
KMI pP pP 04 46 45.3 +0.7
KMI sP sP 04 46 48.8 +0.3
KMI PMZ
comp=Z,5.0nm,0.9s
KMI LN
comp=Z,690nm,18.9s
KMI LE
comp=Z,760nm,18.9s
KMI LZ
comp=Z,940nm,18.9s
**AML Almayashu 72.67 319** P P 04 46 37.9 +1.0
SNR=7.6
**QIZ Qiongzhong 72.83 279** P P 04 46 37.7 +0.1
QIZ S S 04 56 01.3 0.0
QIZ LN
comp=Z,1μm,19.5s
QIZ LE
comp=Z,320nm,20.9s
QIZ LZ
comp=Z,2μm,20.3s
**KKAR Karatay Array 73.05 322** eP P 04 46 38.5 -0.1
**KKAR Karatay Array 73.05 322** eP P 04 46 38.5 -0.1
**VRH Novokhopyorsk 73.40 344** eP P 04 46 39.1 -1.4
VRH pmax pmax
comp=Z,10.0nm,1.0s
VRH pmax pmax
comp=N,10.0nm,1.2s
VRH pmax pmax
comp=E,10.0nm,1.1s
**VSR Storozhevoye 73.80 345** eP P 04 46 42.0 -0.8
VSR pmax pmax
comp=Z,9.0nm,0.5s
VSR pmax pmax
comp=N,8.0nm,0.9s
VSR pmax pmax
comp=E,6.0nm,0.7s
**KSH Kashi 73.96 316** P P 04 46 48.0 +3.8
KSH eSP sP 04 47 02.4 +3.8
KSH S S 04 56 17.3 +3.4
KSH SKS SKSac 04 56 48.6 -0.2
KSH PMZ
comp=E,15nm,1.1s
KSH PMZ
comp=E,77nm,3.6s
KSH LN
comp=E,210nm,14.5s
KSH LE
comp=E,380nm,15.4s
KSH LZ
comp=E,480nm,19.7s
**VORD Divnogorie 74.02 345** eP P 04 46 42.2 -1.9
VORD pmax pmax
comp=N,20nm,0.3s
VORD pmax pmax
comp=Z,20nm,0.3s
VORD pmax pmax
comp=E,110nm,0.9s
**NRDL Niedersach Rie 74.14 4** eP P 04 46 45.1 +0.4
comp=E,14nm,1.1s,baz=357,slow=6.0
**IBBN Ibbenburen 74.21 5** eP P 04 46 45.9 +0.6
comp=E,32nm,1.5s,baz=357,slow=6.0
**CLZ Clausthal 74.80 4** eP P 04 46 49.4 +0.7
comp=E,15nm,1.1s,baz=357,slow=6.0
**BUG Bochum-Univer 75.05 6** eP P 04 46 50.7 +0.7
comp=E,24nm,1.4s,baz=357,slow=6.0
**GTTG Gvttingen 75.08 4** eP P 04 46 51.1 +0.8
comp=E,16nm,0.9s,baz=357,slow=6.0
**PMG Port Moresby 75.27 230**⇑eP P 04 46 51.8 +0.1
**PMG Port Moresby 75.27 230** eP P 04 46 51.6 -0.1
comp=E,36nm,1.1s
**CLL Collm 75.42 2** eP P 04 46 52.0 -0.2
CLL pmax pmax
comp=Z,10.0nm,1.1s
**CLL Collm 75.42 2** eP P 04 46 52.6 +0.3
comp=Z,10nm,1.1s,baz=357,slow=6.0
CLL epP pP 04 46 58.6 -4.2
**CLL Collm 75.42 2** eP P 04 46 52.0 -0.2
comp=Z,10.0nm,1.1s
**CLL Collm 75.42 2** eP P 04 46 52.8 +0.5
comp=Z,7.4nm,0.9s
**AKASG Malin Array Be 75.50 352** P P 04 46 51.9 -0.7
comp=Z,2.4nm,0.5s,baz=11,slow=5.7,SNR=16
**KIEV Kiev 75.50 352**d iP P 04 46 52.3 -0.4
KIEV pmax pmax
comp=Z,8.0nm,1.1s
**KIEV Kiev 75.50 352** eP P 04 46 52.1 -0.6
**BRG Berggiesshubel 75.87 2** eP P 04 46 55.4 +0.6
comp=Z,5.3nm,1.1s
**BRG Berggiesshubel 75.87 2** eP P 04 46 55.4 +0.6
BRG pmax pmax
comp=Z,5.0nm,1.1s
**MOX Moxa 76.04 3** eP P 04 46 56.3 +0.5
comp=Z,12nm,1.1s,baz=357,slow=6.0
**SIJI Sorong 76.15 249** P P 04 46 56.9 0.0
comp=Z,8.3nm,0.5s,baz=90,slow=20,SNR=3.6
**PVCC Panska Ves 76.22 1** eP P 04 46 57.6 +0.8
**PVCC Panska Ves 76.22 1** eP P 04 46 57.6 +0.8
**UPC Upice 76.26 0** eP P 04 46 58.0 +1.0
**UPC Upice 76.26 0** eP P 04 46 58.0 +1.0
**DPC Dobruska-Polom 76.41 360** eP P 04 46 58.6 +0.6
DPC e*PP PcP 04 47 10.6 +0.9
**DPC Dobruska-Polom 76.41 360** eP P 04 46 58.6 +0.6
DPC ex x 04 47 10.6
**NKC Novy Kostel 76.48 3** eP P 04 46 59.2 +0.9
**NKC Novy Kostel 76.48 3** eP P 04 46 59.2 +0.9
**PRA Prague 76.68 1** eP P 04 47 00.3 +0.9
**PRA Prague 76.68 1** eP P 04 47 00.3 +0.9
**KRLC Kraliky 76.69 360** eP P 04 47 00.3 +0.8
KRLC e*PP PcP 04 47 11.5 +0.6
**KRLC Kraliky 76.69 360** eP P 04 47 00.3 +0.8
KRLC ex x 04 47 11.5
**LVV L'vov 76.74 355** eP P 04 46 59.6 -0.2
**PRU Pruhonice 76.77 1** eP P 04 47 00.1 +0.2
PRU e*PP PcP 04 47 12.3 +1.2
**PRU Pruhonice 76.77 1** eP P 04 47 00.1 +0.2
PRU ex x 04 47 12.3
**GOPC GO Pecny, Ondr 76.84 1** eP P 04 47 01.1 +0.7
GOPC e*PP PcP 04 47 14.2 +2.7
GOPC MLR MLR
comp=Z,400nm,20.4s
**GOPC GO Pecny, Ondr 76.84 1** eP P 04 47 01.1 +0.7
GOPC ex x 04 47 14.2
GOPC AMS AMS 05 39 20.0
comp=Z,400nm,20.4s
**OKC Ostrava-Krasne 76.92 359** eP P 04 47 00.8 0.0
OKC MLR MLR
comp=Z,300nm,18.9s
**OKC Ostrava-Krasne 76.92 359** eP P 04 47 00.8 0.0
OKC AMS AMS 05 41 10.0
comp=Z,300nm,18.9s
**ROTZ Rotzenmuhle 76.94 3** eP P 04 47 01.8 +0.9
comp=Z,12nm,1.3s,baz=357,slow=6.0
**MORC Moravsky Berou 76.98 359** eP P 04 47 01.3 +0.1
MORC pmax pmax
comp=Z,22nm,1.1s
**MORC Moravsky Berou 76.98 359**||iP P 04 47 01.9 +0.7
**MORC Moravsky Berou 76.98 359** eP P 04 47 01.3 +0.1
comp=Z,22nm,1.1s
**GRF Grafenberg Arr 76.98 3** eP P 04 47 02.5 +1.3
comp=Z,32nm,1.5s,baz=357,slow=6.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GRB4 | Grafenberg Arr | 77.22 | 3 | eP | P | 04 47 03.0 | +0.5 |
| | baz=357,slow=6.0 | | | | | | |
| STHS | Stebnicka Huta | 77.26 | 357 | eP | P | 04 47 04.0 | +1.2 |
| STHS | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| STHS | Stebnicka Huta | 77.26 | 357 | eP | P | 04 47 04.0 | +1.2 |
| VRAC | Vranov | 77.46 | 360 | ⇑iP | P | 04 47 04.7 | +0.9 |
| KHC | Kasperske Hory | 77.61 | 2 | iP | P | 04 47 05.3 | +0.6 |
| KHC | | | | e*PP | pP | 04 47 17.3 | +2.0 |
| KHC | Kasperske Hory | 77.61 | 2 | iP | P | 04 47 05.3 | +0.6 |
| KHC | | | | ex | x | 04 47 17.3 | |
| KHC | Kasperske Hory | 77.61 | 2 | eP | P | 04 47 05.5 | +0.8 |
| | comp=Z,3.5nm,1.1s | | | | | | |
| KOLS | Kolonicke sedl | 77.71 | 356 | eP | P | 04 47 05.5 | +0.3 |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| KOLS | Kolonicke sedl | 77.71 | 356 | eP | P | 04 47 05.5 | +0.3 |
| GEC2 | GERESS Array S | 77.90 | 2 | eP | P | 04 47 07.6 | +1.2 |
| GEC2 | GERESS Array S | 77.90 | 2 | eP | P | 04 47 07.6 | +1.2 |
| GERES | GERESS Array B | 77.90 | 2 | P | P | 04 47 07.0 | +0.6 |
| | comp=Z,2.4nm,1.0s,baz=5.7,slow=4.0,SNR=16 | | | | | | |
| GERES | GERESS Array B | 77.90 | 2 | P | P | 04 47 07.0 | +0.6 |
| VYHS | Vyhne | 78.25 | 358 | eP | P | 04 47 08.5 | +0.2 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| VYHS | Vyhne | 78.25 | 358 | eP | P | 04 47 08.5 | +0.2 |
| ECH | Echery | 78.25 | 6 | eP | P | 04 47 08.8 | +0.5 |
| ECH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| ECH | Echery | 78.25 | 6 | eP | P | 04 47 08.8 | +0.5 |
| | comp=Z,8.5nm,1.0s | | | | | | |
| TRPA | Tarpa | 78.50 | 356 | ⇓iP | P | 04 47 10.8 | +1.2 |
| TAPN | Taplejung | 78.58 | 301 | eP | P | 04 47 10.7 | -0.1 |
| | comp=Z,43nm,1.2s | | | | | | |
| PSZ | Piszkesteto | 78.80 | 358 | eP | P | 04 47 12.5 | +1.1 |
| PSZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| PSZ | Piszkesteto | 78.80 | 358 | ⇓iP | P | 04 47 13.0 | +1.6 |
| PSZ | Piszkesteto | 78.80 | 358 | eP | P | 04 47 12.5 | +1.1 |
| | comp=Z,8.0nm,1.0s | | | | | | |
| CONA | Conrad Observa | 78.84 | 0 | ⇑eP | P | 04 47 12.4 | +0.8 |
| | comp=Z,8.9nm,1.1s | | | | | | |
| BUR04 | Bucovina Ar. S | 78.86 | 354 | eP | P | 04 47 11.9 | +0.1 |
| BURAR | Bucovina Array | 78.87 | 354 | ⇓iP | P | 04 47 12.3 | +0.5 |
| GUN | Gumba | 79.05 | 302 | eP | P | 04 47 13.7 | +0.3 |
| | comp=Z,53nm,0.9s | | | | | | |
| KKM | Kota Kinabalu | 79.28 | 266 | eP | P | 04 47 14.8 | +0.4 |
| MOTA | Moosalm | 79.33 | 4 | ⇓eP | P | 04 47 14.7 | +0.3 |
| | comp=Z,5.1nm,0.8s | | | | | | |
| WATA | Walderalm | 79.35 | 3 | ⇑iP | P | 04 47 15.1 | +0.6 |
| | comp=Z,14nm,1.1s | | | | | | |
| WTTA | Wattenberg | 79.42 | 3 | ⇑iP | P | 04 47 15.8 | +0.8 |
| KKN | Kakani | 79.45 | 303 | eP | P | 04 47 15.6 | +0.2 |
| | comp=Z,9.3nm,0.5s | | | | | | |
| RAMN | Ramite | 79.47 | 301 | eP | P | 04 47 15.7 | +0.1 |
| | comp=Z,39nm,0.9s | | | | | | |
| ARSA | Arzberg | 79.51 | 1 | ⇑eP | P | 04 47 16.3 | +1.1 |
| | comp=Z,4.9nm,0.9s | | | | | | |
| PKI | Pulchoki | 79.56 | 303 | eP | P | 04 47 15.9 | -0.3 |
| | comp=Z,54nm,1.2s | | | | | | |
| PKIN | Phulchoki | 79.56 | 303 | eP | P | 04 47 15.9 | -0.2 |
| GKN | Gorkha | 79.59 | 303 | eP | P | 04 47 16.2 | +0.1 |
| | comp=Z,47nm,1.0s | | | | | | |
| CMAR | Chiang Mai Arr | 79.61 | 287 | P | P | 04 47 16.4 | +0.3 |
| | comp=Z,2.9nm,0.6s,baz=18,slow=5.6,SNR=16 | | | | | | |
| CM01 | Chiang Mai Arr | 79.63 | 287 | eP | P | 04 47 16.2 | 0.0 |
| FETA | Feichten | 79.63 | 4 | ⇑eP | P | 04 47 16.8 | +0.8 |
| | comp=Z,9.3nm,1.1s | | | | | | |
| KBA | Koelnbreinsper | 79.66 | 2 | ⇑iP | P | 04 47 17.4 | +1.2 |
| | comp=Z,15nm,1.0s | | | | | | |
| DMN | Daman | 79.68 | 303 | eP | P | 04 47 16.9 | +0.1 |
| | comp=Z,38nm,1.0s | | | | | | |
| DANN | Dangsing | 79.74 | 304 | eP | P | 04 47 17.6 | +0.5 |
| | comp=Z,11nm,0.7s | | | | | | |
| DRGR | | 79.83 | 356 | ⇑iP | P | 04 47 17.1 | +0.1 |
| ABTA | Abfaltersbach | 79.97 | 3 | ⇑eP | P | 04 47 19.3 | +1.5 |
| | comp=Z,10.0nm,1.2s | | | | | | |
| SOKA | Soboth | 80.08 | 1 | ⇑iP | P | 04 47 19.1 | +0.7 |
| | comp=Z,14nm,1.1s | | | | | | |
| KIV | Kislovodsk | 80.21 | 341 | eP | P | 04 47 19.4 | +0.2 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| KIV | Kislovodsk | 80.21 | 341 | eP | P | 04 47 19.4 | +0.2 |
| | comp=Z,8.1nm,0.7s | | | | | | |
| OBKA | Obir | 80.25 | 1 | ⇑iP | P | 04 47 20.1 | +0.8 |
| | comp=Z,14nm,1.2s | | | | | | |
| KOLN | Koldanda | 80.30 | 304 | eP | P | 04 47 20.1 | +0.1 |
| | comp=Z,28nm,0.9s | | | | | | |
| KBZ | Khabaz | 80.39 | 341 | P | P | 04 47 20.9 | +0.9 |
| | comp=Z,6.9nm,0.9s,baz=51,slow=2.3,SNR=8.4 | | | | | | |
| DOPR | Dopca | 80.50 | 354 | ⇓iP | P | 04 47 21.8 | +1.2 |
| BZS | Buzias | 81.05 | 356 | ⇓iP | P | 04 47 24.1 | +0.6 |
| VOIR | | 81.05 | 354 | ⇓iP | P | 04 47 25.0 | +1.4 |
| CFR | Carcaliu | 81.07 | 352 | ⇓iP | P | 04 47 23.6 | 0.0 |
| ZEI | Tsey | 81.09 | 340 | eP | P | 04 47 23.4 | -0.6 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,34nm,0.9s | | | | | | |
| GZR | Gura Zlata | 81.22 | 355 | ⇓iP | P | 04 47 25.1 | +0.6 |
| BNI | Bardonecchia | 81.37 | 7 | eP | P | 04 47 27.5 | +2.1 |
| BNI | Bardonecchia | 81.37 | 7 | eP | P | 04 47 27.5 | +2.1 |
| GEYT | Alibeck | 81.93 | 328 | P | P | 04 47 28.2 | -0.1 |
| | comp=Z,4.4nm,0.9s,baz=64,slow=6.9,SNR=5.2 | | | | | | |
| DIVS | Divibare | 82.62 | 357 | ⇑iP | P | 04 47 33.0 | +1.1 |
| ESDC | Sonseca Array | 85.46 | 16 | P | P | 04 47 45.9 | -0.4 |
| | comp=Z,0.4nm,0.6s,baz=345,slow=5.0,SNR=3.6 | | | | | | |
| BRTR | Keskin Array B | 85.84 | 347 | P | P | 04 47 49.0 | +0.6 |
| | comp=Z,7.0nm,1.0s,baz=17,slow=2.3,SNR=13 | | | | | | |
| BRTR | | | | LR | LR | 05 27 29.3 | |
| | comp=Z,151nm,21.7s,baz=128,slow=37 | | | | | | |
| MALT | Malatya | 86.47 | 343 | ⇑iP | P | 04 47 53.2 | +1.7 |
| OTAV | Otavalo | 86.98 | 94 | eP | P | 04 47 54.6 | -0.1 |
| | comp=Z,3.5nm,1.0s | | | | | | |
| SOEI | Soe | 87.36 | 250 | eP | P | 04 47 56.5 | +0.5 |
| | comp=Z,16nm,0.9s | | | | | | |
| TIP | Timpagrande | 87.58 | 360 | eP | P | 04 47 57.4 | +0.6 |
| | comp=Z,2.2nm,0.8s | | | | | | |
| KULM | Kulim | 89.13 | 278 | eP | P | 04 48 05.4 | +1.0 |
| | comp=Z,31nm,1.5s | | | | | | |
| WRAB | Tennant Creek | 90.49 | 236 | ⇑eP | P | 04 48 09.8 | -0.7 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,25nm,1.6s | | | | | | |
| WRAB | Tennant Creek | 90.49 | 236 | eP | P | 04 48 09.5 | -0.9 |
| | comp=Z,12nm,1.4s | | | | | | |
| WRA | Warramunga Arr | 90.50 | 236 | P | P | 04 48 09.2 | -1.4 |
| | comp=Z,1.2nm,1.0s,baz=41,slow=6.1,SNR=4.7 | | | | | | |
| ASAR | Alice Springs | 93.86 | 235 | P | P | 04 48 25.6 | -0.5 |
| | comp=Z,1.5nm,1.1s,baz=33,slow=3.6,SNR=5.9 | | | | | | |
| TORD | Torodi Ar. Bea | 112.35 | 15 | PKiKP | PKiKP | 04 53 43.5 | -1.2 |
| | comp=Z,0.2nm,0.7s,baz=339,slow=3.3,SNR=3.1 | | | | | | |
| MAW | Mawson | 153.99 | 219 | PKPbc | PKPbc | 04 55 05.7 | -1.0 |
| | comp=Z,1.9nm,0.8s,baz=298,slow=5.0,SNR=5.3 | | | | | | |
| MAW | | | | PKPab | PKPab | 04 55 20.1 | -0.2 |
| | comp=Z,2.0nm,0.9s,baz=88,slow=3.9,SNR=4.7 | | | | | | |
| BOSA | Boshof | 154.17 | 342 | PKPbc | PKPbc | 04 55 08.7 | +0.2 |
| | comp=Z,2.0nm,0.8s,baz=333,slow=2.3,SNR=3.3 | | | | | | |

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*TIR **03** 04:36:53.2, 40°.49N×18°.93E, h34km, ML3.2*
*THE **03** 04:36:54.8, 40°.54N×18°.86E, h3km±1km, ML2.6/7, Error ellipse: s-maj=1.6km s-min=1.1km az=276.0*
*ROM **03** 04:36:55.1±0.3, 40°.47N×18°.87E, h5km, Ml2.8/14, Error ellipse: s-maj=7.1km s-min=4.1km az=5.0*
*CSEM **03** 04:36:56.7±0.2, 40°.51N×18°.89E, h20km, ML2.8, Error ellipse: s-maj=5.7km s-min=3.6km az=178.0*
*BEO **03** 04:36:57.0±1.0, 40°.84N×18°.48E, h0km, ML2.3/4*
**ISC 03 04:36:55.0**±1.1**, 40°.52N**±0°.02×**18°.88E**±0°.02**, h6**km±10km**, n115, σ0.s90**/149**, Adriatic Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MESG | Mesagne | 0.79 | 275 | Pn | Pb | 04 37 10.9 | -0.3 |
| MESG | | | | Sn | Sn | 04 37 23.7 | -1.1 |
| | 44nm,0.3s | | | | | | |
| MESG | Mesagne | 0.79 | 275 | Pn | Pb | 04 37 10.9 | -0.3 |
| MESG | | | | Sn | Sn | 04 37 23.7 | -1.1 |
| | 44nm,0.3s | | | | | | |
| KEK | Kerkira | 1.07 | 139 | ePN | Pb | 04 37 15.9 | -0.1 |
| KEK | Kerkira | 1.07 | 139 | ePN | Pb | 04 37 15.9 | -0.1 |
| KEK | Kerkira | 1.07 | 139 | Pn | Pb | 04 37 15.6 | -0.4 |
| KEK | Kerkira | 1.07 | 139 | P | Pb | 04 37 15.6 | -0.4 |
| KEK | | | | S | Sn | 04 37 31.5 | -0.3 |
| KEK | Kerkira | 1.07 | 139 | P | Pb | 04 37 15.6 | -0.4 |
| KEK | | | | S | Sn | 04 37 31.5 | -0.3 |
| SRN | Sarande | 1.07 | 126 | iPG | Pb | 04 37 15.7 | -0.3 |
| SRN | | | | iSG | Sb | 04 37 30.5 | +0.3 |
| SRN | Sarande | 1.07 | 126 | P | Pg | 04 37 15.3 | -0.3 |
| SRN | | | | S | Sb | 04 37 30.3 | +0.1 |
| SRN | Sarande | 1.07 | 126 | P | Pg | 04 37 15.3 | -0.3 |
| SRN | Sarande | 1.07 | 126 | iPg | Pb | 04 37 15.7 | -0.3 |
| SRN | | | | S | Sb | 04 37 30.3 | +0.1 |
| TIR | Tirane | 1.11 | 42 | iSG | | 04 32 33.2 | |
| TIR | | | | iPG | Pn | 04 37 17.3 | +0.2 |
| TIR | Tirane | 1.11 | 42 | ePg | Pn | 04 37 17.4 | +0.2 |
| TIR | | | | eSg | Sn | 04 37 34.3 | +1.4 |
| TIR | Tirane | 1.11 | 42 | Pn | Pn | 04 37 17.4 | +0.2 |
| TIR | Tirane | 1.11 | 42 | P | Pg | 04 37 15.7 | -0.7 |
| TIR | | | | S | Sb | 04 37 32.1 | +0.6 |
| TIR | Tirane | 1.11 | 42 | P | Pg | 04 37 15.7 | -0.7 |
| TIR | Tirane | 1.11 | 42 | ePg | Pn | 04 37 17.4 | +0.2 |
| TIR | | | | S | Sb | 04 37 32.1 | +0.6 |
| TIR | | | | eSg | Sn | 04 37 34.3 | +1.4 |
| PE1 | Pezze di Greco | 1.15 | 285 | ePg | Pg | 04 37 16.7 | -0.3 |
| PE1 | | | | Sg | Sn | 04 37 35.7 | +2.1 |
| TAR1 | Taranto | 1.22 | 271 | ePg | Pn | 04 37 18.9 | +0.3 |
| TAR1 | | | | Sg | Sn | 04 37 37.5 | +2.1 |
| SGD | Sagiada | 1.38 | 131 | ePN | Pn | 04 37 20.7 | -0.1 |
| SGD | Sagiada | 1.38 | 131 | ePN | Pn | 04 37 20.7 | -0.1 |
| SGD | Sagiada | 1.38 | 131 | P | Pn | 04 37 19.7 | -1.1 |
| SGD | | | | S | Sn | 04 37 40.5 | +1.1 |
| SGD | Sagiada | 1.38 | 131 | P | Pn | 04 37 19.7 | -1.1 |
| SGD | | | | S | Sn | 04 37 40.5 | +1.1 |
| NOCI | Noci | 1.41 | 282 | Pn | Pn | 04 37 20.2 | -1.1 |
| | 232nm,0.4s | | | | | | |
| NOCI | Noci | 1.41 | 282 | Pn | Pn | 04 37 20.2 | -1.1 |
| | 232nm,0.4s | | | | | | |
| KBN | Korca | 1.46 | 85 | P | Pn | 04 37 20.6 | -1.4 |
| KBN | | | | S | Sb | 04 37 41.0 | -0.4 |
| KBN | Korca | 1.46 | 85 | P | Pn | 04 37 20.6 | -1.4 |
| KBN | | | | S | Sb | 04 37 41.0 | -0.4 |
| IGT | Igoumenitsa | 1.49 | 131 | ePN | Pb | 04 37 22.7 | -0.4 |
| IGT | Igoumenitsa | 1.49 | 131 | ePN | Pb | 04 37 22.7 | -0.4 |
| IGT | Igoumenitsa | 1.49 | 131 | P | Pn | 04 37 21.4 | -1.0 |
| IGT | | | | S | Sg | 04 37 43.3 | +0.4 |
| IGT | Igoumenitsa | 1.49 | 131 | P | Pn | 04 37 21.4 | -1.0 |
| IGT | | | | S | Sg | 04 37 43.3 | +0.4 |
| OHR | Ohrid | 1.57 | 67 | iPn | Pn | 04 37 23.4 | -0.1 |
| OHR | | | | eSn | Sn | 04 37 43.2 | -1.1 |
| OHR | Ohrid | 1.57 | 67 | iPn | Pn | 04 37 23.4 | -0.1 |
| OHR | | | | eSn | Sn | 04 37 43.1 | -1.1 |
| LTRZ | Laterza | 1.57 | 274 | Pn | Pb | 04 37 24.5 | -0.1 |
| | 245nm,1.0s | | | | | | |
| LTRZ | Laterza | 1.57 | 274 | Pn | Pb | 04 37 24.5 | -0.1 |
| | 245nm,1.0s | | | | | | |
| BAI | Bari | 1.63 | 292 | ePn | Pb | 04 37 25.2 | -0.3 |
| BAI | | | | Sn | Sg | 04 37 49.0 | +1.6 |
| PHP | Peshkopia | 1.66 | 45 | iPG | Pb | 04 37 26.0 | 0.0 |
| PHP | | | | iSG | Sg | 04 37 48.2 | 0.0 |
| PHP | Peshkopia | 1.66 | 45 | iPg | Pb | 04 37 26.0 | 0.0 |
| PHP | | | | iSg | Sg | 04 37 48.2 | 0.0 |
| NEST | Nestorio | 1.66 | 93 | ePN | Pn | 04 37 25.4 | +0.6 |
| NEST | Nestorio | 1.66 | 93 | ePN | Pn | 04 37 25.4 | +0.6 |
| NEST | Nestorio | 1.66 | 93 | P | Pn | 04 37 23.5 | -1.3 |
| NEST | | | | S | Sb | 04 37 47.7 | +0.5 |
| NEST | Nestorio | 1.66 | 93 | P | Pn | 04 37 23.5 | -1.3 |
| NEST | | | | S | Sb | 04 37 47.7 | +0.5 |
| MATE | Matera | 1.66 | 275 | Pn | Pb | 04 37 26.2 | +0.1 |
| | 96nm,0.4s | | | | | | |
| MATE | Matera | 1.66 | 275 | Pn | Pb | 04 37 26.2 | +0.1 |
| | 96nm,0.4s | | | | | | |
| PUK | Puka | 1.70 | 26 | iPG | Pn | 04 37 26.1 | +0.8 |
| PUK | | | | iSG | Sg | 04 37 50.7 | +1.0 |
| PUK | Puka | 1.70 | 26 | iPg | Pn | 04 37 26.1 | +0.8 |
| PUK | | | | iSg | Sg | 04 37 50.7 | +1.0 |
| SG1 | Sgolgore (BA) | 1.71 | 281 | ePn | Pb | 04 37 26.8 | 0.0 |
| JAN | Janina | 1.74 | 119 | ePN | Pb | 04 37 27.4 | 0.0 |
| JAN | Janina | 1.74 | 119 | ePN | Pb | 04 37 27.4 | 0.0 |
| JAN | Janina | 1.74 | 119 | P | Pn | 04 37 25.9 | 0.0 |
| JAN | | | | S | Sb | 04 37 49.6 | 0.0 |
| JAN | Janina | 1.74 | 119 | P | Pn | 04 37 25.9 | 0.0 |
| JAN | | | | S | Sb | 04 37 49.6 | 0.0 |
| AMUR | Altamura | 1.77 | 283 | Pn | Pn | 04 37 25.2 | -1.1 |
| | 109nm,0.6s | | | | | | |
| AMUR | Altamura | 1.77 | 283 | Pn | Pn | 04 37 25.2 | -1.1 |
| | 109nm,0.6s | | | | | | |
| MIGL | Miglionico | 1.86 | 273 | Pn | Pb | 04 37 29.6 | +0.1 |
| | 555nm,0.9s | | | | | | |
| MIGL | Miglionico | 1.86 | 273 | Pn | Pb | 04 37 29.6 | +0.1 |
| | 555nm,0.9s | | | | | | |
| CRAC | Craco | 1.87 | 266 | Pn | Pg | 04 37 31.1 | +0.2 |
| | 169nm,0.3s | | | | | | |
| FNA | Florina | 1.92 | 81 | ePN | Pn | 04 37 28.5 | +0.2 |
| FNA | Florina | 1.92 | 81 | ePN | Pn | 04 37 28.5 | +0.2 |
| FNA | Florina | 1.92 | 81 | P | Pn | 04 37 28.0 | -0.3 |
| FNA | | | | S | Sn | 04 37 53.6 | +0.8 |
| FNA | Florina | 1.92 | 81 | P | Pn | 04 37 28.0 | -0.3 |
| FNA | | | | S | Sn | 04 37 53.6 | +0.8 |
| PDG | Podgorica | 1.93 | 8 | ePg | Pn | 04 37 26.2 | -2.2 |
| PDG | | | | eSg | Sn | 04 37 50.7 | -2.2 |
| PDG | Podgorica | 1.93 | 8 | ePg | Pn | 04 37 26.2 | -2.2 |
| PDG | | | | eSg | Sn | 04 37 50.7 | -2.2 |
| SALB | San Lorenzo Be | 2.05 | 252 | Pn | Pn | 04 37 29.3 | -0.8 |
| | 35nm,0.3s | | | | | | |
| SALB | San Lorenzo Be | 2.05 | 252 | Pn | Pn | 04 37 29.3 | -0.8 |
| | 35nm,0.3s | | | | | | |
| CDT | Castel del Mon | 2.06 | 287 | ePn | Pg | 04 37 33.7 | -0.8 |
| MRVN | Minervino Murg | 2.11 | 286 | Pn | Pn | 04 37 30.3 | -0.6 |
| | 59nm,0.7s | | | | | | |
| MRVN | Minervino Murg | 2.11 | 286 | Pn | Pn | 04 37 30.3 | -0.6 |
| | 59nm,0.7s | | | | | | |
| TIP | Timpagrande | 2.11 | 231 | Pn | Pn | 04 37 30.7 | -0.3 |
| | 13nm,0.9s | | | | | | |
| TIP | Timpagrande | 2.11 | 231 | P | Pn | 04 37 30.3 | -0.7 |
| TIP | Timpagrande | 2.11 | 231 | P | Pn | 04 37 30.3 | -0.7 |
| TIP | Timpagrande | 2.11 | 231 | Pn | Pn | 04 37 30.7 | -0.3 |
| | 13nm,0.9s | | | | | | |
| SERS | Sersale | 2.25 | 229 | Pn | Pn | 04 37 32.4 | -0.5 |
| SERS | Sersale | 2.25 | 229 | Pn | Pn | 04 37 32.4 | -0.5 |
| PALZ | Palazzo San Ge | 2.26 | 282 | Pn | Pn | 04 37 32.4 | -0.6 |
| | 228nm,0.9s | | | | | | |
| PALZ | Palazzo San Ge | 2.26 | 282 | Pn | Pn | 04 37 32.4 | -0.6 |
| | 228nm,0.9s | | | | | | |
| SIRI | Monte Sirino - | 2.33 | 263 | Pn | Pn | 04 37 34.7 | +0.7 |
| SIRI | Monte Sirino - | 2.33 | 263 | Pn | Pn | 04 37 34.7 | +0.7 |
| MCEL | Monticello | 2.36 | 266 | Pn | Pb | 04 37 37.0 | -1.0 |
| | 38nm,0.6s | | | | | | |
| MCEL | Monticello | 2.36 | 266 | Pn | Pb | 04 37 37.0 | -1.0 |
| | 38nm,0.6s | | | | | | |
| CUC | Castrocucco | 2.40 | 258 | Pn | Pn | 04 37 36.2 | +1.2 |
| CUC | Castrocucco | 2.40 | 258 | Pn | Pn | 04 37 36.2 | +1.2 |
| MSAG | Monte S. Angel | 2.54 | 299 | Pn | Pn | 04 37 35.5 | -1.4 |
| MSAG | Monte S. Angel | 2.54 | 299 | Pn | Pn | 04 37 35.5 | -1.4 |
| MGR | Morigerati | 2.57 | 262 | Pn | Pn | 04 37 37.6 | +0.3 |
| | 37nm,0.7s | | | | | | |
| MGR | Morigerati | 2.57 | 262 | Pn | Pn | 04 37 37.6 | +0.3 |
| | 37nm,0.7s | | | | | | |
| MRLC | Muro Lucano | 2.59 | 276 | Pn | Pn | 04 37 37.6 | 0.0 |
| | 35nm,0.6s | | | | | | |
| MRLC | Muro Lucano | 2.59 | 276 | Pn | Pn | 04 37 37.6 | 0.0 |
| | 35nm,0.6s | | | | | | |
| PDO | Prodromos | 2.62 | 136 | ePN | Pn | 04 37 36.8 | -1.1 |
| PDO | Prodromos | 2.62 | 136 | ePN | Pn | 04 37 36.8 | -1.1 |
| VLS | Valsamata | 2.69 | 150 | ePN | Pn | 04 37 37.4 | -1.5 |
| VLS | Valsamata | 2.69 | 150 | ePN | Pn | 04 37 37.4 | -1.5 |
| GRG | Griva | 2.71 | 80 | ePN | Pn | 04 37 38.1 | -1.1 |
| GRG | Griva | 2.71 | 80 | ePN | Pn | 04 37 38.1 | -1.1 |
| CDRU | Civita di Ruta | 2.73 | 270 | Pn | Pn | 04 37 40.3 | +0.8 |
| CDRU | Civita di Ruta | 2.73 | 270 | Pn | Pn | 04 37 40.3 | +0.8 |
| EVR | Evrytania | 2.77 | 124 | ePN | Pn | 04 37 40.2 | +0.1 |
| EVR | Evrytania | 2.77 | 124 | ePN | Pn | 04 37 40.2 | +0.1 |
| SJES | Sjenica | 2.86 | 16 | ePn | Pn | 04 37 42.8 | +1.5 |
| SJES | Sjenica | 2.86 | 16 | ePn | Pn | 04 37 42.8 | +1.5 |
| MAKR | Makrakomi, Fth | 2.92 | 120 | ePN | Pn | 04 37 43.0 | +0.9 |
| MAKR | Makrakomi, Fth | 2.92 | 120 | ePN | Pn | 04 37 43.0 | +0.9 |
| AGG | Agios Georgios | 3.05 | 118 | ePN | Pn | 04 37 44.4 | +0.5 |
| AGG | Agios Georgios | 3.05 | 118 | ePN | Pn | 04 37 44.4 | +0.5 |
| KNT | Kendrikon | 3.11 | 77 | ePN | Pn | 04 37 43.5 | -1.2 |
| KNT | Kendrikon | 3.11 | 77 | ePN | Pn | 04 37 43.5 | -1.2 |
| EFP | Efpalio | 3.14 | 131 | ePN | Pn | 04 37 46.1 | +1.1 |
| EFP | Efpalio | 3.14 | 131 | ePN | Pn | 04 37 46.1 | +1.1 |
| BARS | Barje | 3.18 | 43 | ePn | Pn | 04 37 47.3 | +1.7 |
| BARS | Barje | 3.18 | 43 | ePn | Pn | 04 37 47.3 | +1.7 |
| IVAS | Ivanjica | 3.20 | 17 | ePn | Pn | 04 37 45.7 | -0.2 |
| IVAS | Ivanjica | 3.20 | 17 | ePn | Pn | 04 37 45.7 | -0.2 |
| SERG | Sergoula | 3.24 | 130 | ePN | Pn | 04 37 47.7 | +1.3 |
| SERG | Sergoula | 3.24 | 130 | ePN | Pn | 04 37 47.7 | +1.3 |
| DIVS | Divibare | 3.67 | 13 | ePn | Pn | 04 37 52.1 | -0.3 |
| DIVS | Divibare | 3.67 | 13 | ePn | Pn | 04 37 52.1 | -0.3 |

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**GUC 03 04:43:56.0**±0.4**, 18°.87S×71°.25W, h20**km**, ML4.1, 3C-1D, Off coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MNMC | Minimini | 1.59 | 100 | ⇓iP | Pn | 04 44 23.4 | 0.0 |
| MNMC | | | | iS | Sb | 04 44 44.3 | -0.7 |
| MNMC | | | | AML | AML | 04 44 48.6 | |
| | comp=N,5μm,0.6s | | | | | | |
| PB01 | IPOC Station P | 2.73 | 143 | ⇑iP | Pn | 04 44 41.1 | +2.3 |
| PB01 | | | | AML | AML | 04 45 32.2 | |
| | comp=E,474nm,0.6s | | | | | | |
| PB07 | IPOC Station P | 3.12 | 156 | eP | Pn | 04 44 46.7 | +2.3 |
| PB07 | | | | iS | Sn | 04 45 22.1 | +0.8 |
| PB07 | | | | AML | AML | 04 45 28.4 | |
| | comp=E,336nm,0.5s | | | | | | |
| PB04 | IPOC Station P | 3.60 | 164 | ⇑iP | Pn | 04 44 53.0 | +2.0 |
| PB06 | IPOC Station P | 4.13 | 158 | ⇑iP | Pn | 04 45 00.1 | +1.9 |
| PB06 | | | | AML | AML | 04 45 51.6 | |
| | comp=E,185nm,0.4s | | | | | | |

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**MEX 03 04:46:48.3**±0.3**, 14°.92N×91°.96W, h138**km±4km**, MD3.8, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CCIG | Comitan | 1.36 | 353 | iP | Pn | 04 47 14.5 | -1.3 |
| CCIG | | | | iS | Sn | 04 47 34.7 | -2.0 |
| PCIG | | 1.44 | 303 | eP | Pn | 04 47 15.2 | -1.1 |
| PCIG | | | | eS | Sn | 04 47 35.8 | -2.0 |

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**IDC 03 04:53:52.4**±5.7**, 15°.34S×173°.19W, h0**km**, mb4.0**/2**, mb1 4.2**/2**, mb1mx3.6**/28**, mbtmp4.0**/2**, Error ellipse: s-maj=296.8km s-min=25.6km az=144.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 1.98 | 44 | Pn | Pn | 04 54 25.8 | -1.4 |
| | 36nm,0.3s,baz=113,slow=0.8,SNR=24 | | | | | | |
| AFI | | | | Sn | Sn | 04 54 45.7 | -7.1 |
| | 157nm,0.3s,baz=73,slow=19,SNR=12 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 39.02 | 329 | T | T | 05 42 55.3 | |
| | baz=149,slow=75,SNR=8.3 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.03 | 329 | T | T | 05 42 51.7 | |
| | baz=149,slow=75,SNR=8.5 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.03 | 329 | T | T | 05 42 53.3 | |
| | baz=149,slow=75,SNR=5.0 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 39.96 | 330 | T | T | 05 44 09.2 | |
| | baz=150,slow=76,SNR=12 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 39.97 | 330 | T | T | 05 44 09.3 | |
| | baz=150,slow=76,SNR=11 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 39.98 | 330 | T | T | 05 44 04.4 | |
| | baz=150,slow=76,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 50.05 | 257 | P | P | 05 02 48.4 | -0.9 |
| | 0.9nm,0.7s,baz=92,slow=7.1,SNR=15 | | | | | | |
| ASAR | Alice Springs | 50.32 | 252 | P | P | 05 02 51.0 | -0.4 |
| | 1.7nm,0.6s,baz=88,slow=8.5,SNR=30 | | | | | | |
| BRTR | Keskin Array B | 146.24 | 321 | PKPbc | PKPab | 05 13 36.4 | +0.4 |
| | 0.7nm,0.8s,baz=84,slow=3.3,SNR=2.5 | | | | | | |

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*GUC **03** 05:01:35.0±0.6, 34°.96S×72°.96W, h39km±4km, ML4.4*
*ISCJB **03** 05:01:36.4±1.0, 34°.96S±0°.05×73°.0W±0°.1, h35km, mb4.0/3, Error ellipse: s-maj=11.9km s-min=7.2km az=0.4*
**ISC 03 05:01:38.5**±1.2**, 35°.01S**±0°.06×**72°.9W**±0°.1**, h35**km**, n14, σ1.s02**/15**, mb4.1**/3**, 8C-4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TALC | Talca | 1.11 | 111 | ⇑iP | Pn | 05 01 56.4 | -1.2 |
| TALC | | | | iS | Sn | 05 02 12.4 | +0.7 |
| CCHI | Chillan | 1.73 | 157 | ⇑iP | Pn | 05 02 05.0 | -1.0 |
| CCHI | | | | iS | Sn | 05 02 28.6 | +1.7 |
| CCHI | | | | AML | AML | 05 02 39.6 | |
| | comp=E,4μm,0.2s | | | | | | |
| TACH | Talagante | 2.12 | 51 | ⇓iP | Pn | 05 02 10.1 | -1.3 |
| RCDM | Rinconada Maip | 2.31 | 50 | eP | Pn | 05 02 12.9 | -1.1 |
| ANTU | Antumapu | 2.37 | 53 | eP | Pn | 05 02 14.3 | -0.6 |
| ANTU | | | | iS | Sn | 05 02 43.8 | +1.1 |
| ANTU | | | | AML | AML | 05 02 59.4 | |
| | comp=E,2μm,0.5s | | | | | | |
| CLCH | Cerro Calan | 2.54 | 51 | ⇑iP | Pn | 05 02 16.8 | -0.4 |
| CLCH | | | | AML | AML | 05 03 12.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| ROCH | El Roble | 2.57 | 38 | ⇑iP | Pn | 05 02 17.1 | -0.7 |
| PEL | Peldehue | 2.62 | 45 | ⇑iP | Pn | 05 02 17.8 | -0.5 |
| PEL | | | | AML | AML | 05 03 04.8 | |
| | comp=N,4μm,0.4s | | | | | | |
| TXAR | Lajitas Array | 70.27 | 332 | P | P | 05 12 48.2 | 0.0 |
| | comp=N,0.6nm,0.8s,baz=146,slow=8.5,SNR=6.8 | | | | | | |
| DBIC | Dimbokro | 76.18 | 72 | P | P | 05 13 22.7 | -0.6 |
| | comp=N,5.1nm,1.0s,baz=183,slow=9.9,SNR=3.5 | | | | | | |
| TORD | Torodi Ar. Bea | 85.22 | 70 | P | P | 05 14 11.8 | +0.1 |
| | comp=N,1.3nm,0.9s,baz=238,slow=5.4,SNR=8.0 | | | | | | |
| KURK | Kurchatov | 142.35 | 35 | ⇓Pn | | 05 24 43.9 | |
| | comp=N,3.4nm,0.8s,baz=56,slow=14 | | | | | | |
| KURK | | | | ⇓Sn | SKiKP | 05 25 52.0 | +18 |
| | comp=N,5.8nm,1.2s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 05 26 25.3 | |
| | comp=N,26nm,1.3s | | | | | | |
| MK31 | Makanchi Array | 146.53 | 39 | ⇑Pn | | 05 25 12.2 | |
| | comp=N,0.1nm,0.3s,baz=24,slow=14 | | | | | | |
| MK31 | | | | ⇑Sn | SKiKP | 05 26 41.2 | +59 |
| | comp=N,0.1nm,0.3s,baz=20,slow=22,SNR=3.5 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 05 27 29.9 | |
| | comp=N,4.2nm,1.1s,baz=20,slow=26,SNR=4.1 | | | | | | |
| ZALV | Zalesovo Beam | 155.46 | 33 | PKP | PKPab | 05 21 54.5 | +1.2 |
| | comp=N,0.6nm,0.5s,baz=292,slow=4.5,SNR=4.4 | | | | | | |

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*DDA **03** 05:07:13.3, 36°.84N×31°.05E, h7km, Md3.0*
*ISCJB **03** 05:07:14.7±0.8, 36°.95N±0°.05×30°.97E±0°.05, h83km±9km, Error ellipse: s-maj=8.3km s-min=6.5km az=2.6*
*CSEM **03** 05:07:14.9±0.2, 36°.96N×30°.99E, h80km, MD2.8, Error ellipse: s-maj=6.9km s-min=4.4km az=179.0*
*ISK **03** 05:07:14.2, 37°.01N×30°.97E, h85km, MD2.8*
**ISC 03 05:07:16.5**±1.4**, 36°.95N**±0°.04×**30°.98E**±0°.03**, h69**km±10km**, n33, σ1.s45**/46**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANTB | Antalya | 0.27 | 260 | ePG | Pn | 05 07 27.5 | +0.1 |
| ANTB | Antalya | 0.27 | 260 | ePg | Pn | 05 07 27.5 | +0.1 |
| KORT | Korkueli | 0.51 | 277 | iP | Pn | 05 07 27.7 | -1.8 |
| KORT | | | | iS | Sn | 05 07 39.0 | 0.0 |
| KORT | Korkueli | 0.51 | 277 | P | Pn | 05 07 27.7 | -1.8 |
| KORT | | | | S | Sn | 05 07 39.0 | 0.0 |
| SUTC | Sutluce-Ispart | 0.53 | 1 | ePG | Pn | 05 07 28.7 | -1.0 |
| SUTC | | | | eSG | Sn | 05 07 39.4 | 0.0 |
| SUTC | Sutluce-Ispart | 0.53 | 1 | ePg | Pn | 05 07 28.7 | -1.0 |
| SUTC | | | | eSg | Sn | 05 07 39.4 | 0.0 |
| BCK | Bucak | 0.60 | 329 | ePG | Pn | 05 07 29.4 | -1.0 |
| BCK | Bucak | 0.60 | 329 | ePg | Pn | 05 07 29.4 | -1.0 |
| ELL | Elmali | 0.88 | 258 | ePG | Pn | 05 07 33.2 | -0.4 |
| ELL | Elmali | 0.88 | 258 | ePg | Pn | 05 07 33.2 | -0.4 |
| BAGO | Egridir - ISPA | 1.06 | 352 | P | Pn | 05 07 34.5 | -1.3 |
| BAGO | | | | S | Sn | 05 07 51.6 | +1.6 |
| GOLH | Golhisar | 1.17 | 285 | iP | Pn | 05 07 36.9 | -0.4 |
| GOLH | | | | iS | Sn | 05 07 56.1 | +3.3 |
| GOLH | Golhisar | 1.17 | 285 | P | Pn | 05 07 36.9 | -0.4 |
| GOLH | | | | S | Sn | 05 07 56.1 | +3.3 |
| HDMB | Hadim | 1.20 | 89 | ePN | Pn | 05 07 36.9 | -0.9 |
| HDMB | Hadim | 1.20 | 89 | ePn | Pn | 05 07 36.9 | -0.9 |
| GAZI | Gazipasa | 1.28 | 123 | iP | Pn | 05 07 36.3 | -2.3 |
| GAZI | | | | iS | Sn | 05 07 56.1 | +0.9 |
| GAZI | Gazipasa | 1.28 | 123 | P | Pn | 05 07 36.3 | -2.3 |
| GAZI | | | | S | Sn | 05 07 56.1 | +0.9 |
| AKAS | Kas | 1.32 | 238 | iP | Pn | 05 07 38.1 | -1.0 |
| AKAS | | | | iS | Sn | 05 07 56.2 | +0.1 |
| AKAS | Kas | 1.32 | 238 | P | Pn | 05 07 38.1 | -1.0 |
| AKAS | | | | S | Sn | 05 07 56.2 | +0.1 |
| KONT | Konya--Tatoy | 1.48 | 47 | ePN | Pn | 05 07 40.7 | -0.5 |
| KONT | Konya--Tatoy | 1.48 | 47 | ePn | Pn | 05 07 40.7 | -0.5 |
| ERMK | Ermenek | 1.58 | 100 | iP | Pn | 05 07 41.8 | -0.9 |
| ERMK | | | | iS | Sn | 05 08 05.4 | +3.0 |
| ERMK | Ermenek | 1.58 | 100 | P | Pn | 05 07 41.8 | -0.9 |
| ERMK | | | | S | Sn | 05 08 05.4 | +3.0 |
| DENT | Denizli | 1.75 | 298 | ePN | Pn | 05 07 43.7 | -1.1 |
| DENT | Denizli | 1.75 | 298 | ePn | Pn | 05 07 43.7 | -1.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHL** | **Karahalli** | **1.80** | **320** | *e*PN | **Pn** | **05 07 43.8** | **-1.7** |
| **KHL** | **Karahalli** | **1.80** | **320** | *e*Pn | **Pn** | **05 07 43.8** | **-1.7** |
| **DALY** | **Dalyan (Mu˜la** | **1.87** | **267** | *e*PN | **Pn** | **05 07 45.4** | **-0.9** |
| **DALY** | **Dalyan (Mu˜la** | **1.87** | **267** | *e*Pn | **Pn** | **05 07 45.4** | **-0.9** |
| **KIZT** | **Kizilcal** | **2.06** | **20** | *e*PN | **Pn** | **05 07 47.6** | **-1.4** |
| **KIZT** | **Kizilcal** | **2.06** | **20** | *e*Pn | **Pn** | **05 07 47.6** | **-1.4** |
| **YER** | **Yerkesik** | **2.17** | **276** | *e*PN | **Pn** | **05 07 49.7** | **-0.8** |
| **YER** | **Yerkesik** | **2.17** | **276** | *e*Pn | **Pn** | **05 07 49.7** | **-0.8** |

*MOS **03** 05:13:04.9±1.4, 49°.75N×156°.65E, h58km, mb4.4/1, Error ellipse: s-maj=42.8km s-min=7.6km az=76.2*
*KRSC **03** 05:13:05.7±1.9, 49°.97N×157°.07E, h15km±17km, ML4.0*
*ISCJB **03** 05:13:06.1±1.0, 49°.87N±0°.07×156°.6E±0°.1, h55km, Error ellipse: s-maj=13.8km s-min=8.1km az=36.4*
**ISC 03 05:13:06.2**±2.4**, 49°.8N**±0°.1×**156°.59E**±0°.09**, h55km, n27, σ1s.53**/35**, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **0.93** | **341** | *i* P | **Pn** | **05 13 21.7** | **-1.4** |
| SKR | | | | *i* S | **Sn** | **05 13 34.1** | **-1.5** |
| **SKR** | **Severo-Kuril's** | **0.93** | **341** | *e*PN | **Pn** | **05 13 21.7** | **-1.4** |
| SKR | | | | *e*S | **Sn** | **05 13 34.0** | **-1.5** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,80µm,0.1s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,2µm,0.2s | | | | | | |
| **PAU** | **Pauzhetka** | **1.67** | **5** | *e*P | **Pn** | **05 13 32.9** | **-0.2** |
| PAU | | | | *e*S | **Sn** | **05 13 52.8** | **-0.6** |
| **PAU** | **Pauzhetka** | **1.67** | **5** | PN | **Pn** | **05 13 32.9** | **-0.2** |
| PAU | | | | S | **Sn** | **05 13 52.8** | **-0.6** |
| **RUS** | **Russkaya** | **2.90** | **24** | *e*P | **Pn** | **05 13 49.4** | **-0.4** |
| RUS | | | | *e*S | **Sn** | **05 14 22.2** | **-1.2** |
| **RUS** | **Russkaya** | **2.90** | **24** | PN | **Pn** | **05 13 49.4** | **-0.4** |
| RUS | | | | S | **Sn** | **05 14 22.2** | **-1.2** |
| **PET** | **Petropavlovsk** | **3.48** | **21** | *e*S | **Sn** | **05 14 38.1** | **+0.6** |
| **PET** | **Petropavlovsk** | **3.48** | **21** | *e*PN | **Pn** | **05 13 57.1** | **-0.6** |
| PET | | | | *e*S | **Sn** | **05 14 36.1** | **-1.4** |
| PET | | | | pmax | pmax | | |
| | comp=E,90µm,1.0s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,2µm,0.3s | | | | | | |
| **AVH** | **Avacha** | **3.72** | **20** | *e*P | **Pn** | **05 14 03.2** | **+2.1** |
| **AVH** | **Avacha** | **3.72** | **20** | PN | **Pn** | **05 14 03.2** | **+2.1** |
| **KOK** | **Koryaka** | **3.72** | **19** | *e*P | **Pn** | **05 14 03.4** | **+2.3** |
| **KOK** | **Koryaka** | **3.72** | **19** | PN | **Pn** | **05 14 03.4** | **+2.3** |
| **SMAR** | **Somma** | **3.73** | **21** | *e*P | **Pn** | **05 14 03.5** | **+2.1** |
| **SMAR** | **Somma** | **3.73** | **21** | PN | **Pn** | **05 14 03.5** | **+2.1** |
| **SDLR** | **Sedlovina** | **3.76** | **21** | *e*P | **Pn** | **05 14 02.4** | **+0.7** |
| **SDLR** | **Sedlovina** | **3.76** | **21** | PN | **Pn** | **05 14 02.4** | **+0.7** |
| **KRX** | **Arik** | **3.79** | **19** | *e*P | **Pn** | **05 14 03.8** | **+1.7** |
| **SPN** | **Mys Shipunski** | **3.94** | **32** | *e*P | **Pn** | **05 14 04.3** | **+0.3** |
| SPN | | | | *e*S | **Sn** | **05 14 48.1** | **-0.8** |
| **SPN** | **Mys Shipunski** | **3.94** | **32** | PN | **Pn** | **05 14 04.3** | **+0.3** |
| SPN | | | | S | **Sn** | **05 14 48.1** | **-0.8** |
| **GNL** | **Ganaly** | **3.99** | **12** | *e*P | **Pn** | **05 14 07.8** | **+3.0** |
| **GNL** | **Ganaly** | **3.99** | **12** | PN | **Pn** | **05 14 07.8** | **+3.0** |
| **MKZ** | **Mys Kozlova** | **5.71** | **32** | *e*P | **Pn** | **05 14 28.0** | **-0.3** |
| **MKZ** | **Mys Kozlova** | **5.71** | **32** | PN | **Pn** | **05 14 28.0** | **-0.3** |
| **KZV** | **Kizimen** | **5.78** | **22** | P | Pn | 05 14 32.9 | +3.5 |
| **KBTR** | **Krutoberegovo** | **7.43** | **28** | P | **Pn** | **05 14 53.5** | **+1.7** |
| **KBTR** | **Krutoberegovo** | **7.43** | **28** | PN | **Pn** | **05 14 53.5** | **+1.7** |
| **KUR** | **Kuril'sk** | **7.47** | **236** | *e*PN | **Pn** | **05 14 54.1** | **+1.8** |

*IDC **03** 05:33:30.6±1.1, 14°.91S×76°.08W, h0km, mb4.0/8, mb1 4.2/9, mb1mx4.0/31, mbtmp4.1/9, ML5.6/1, Error ellipse: s-maj=36.4km s-min=19.1km az=41.0*
*NEIC **03** 05:33:31.9±0.5, 14°.92S×76°.16W, h10km, mb4.3/2, Error ellipse: s-maj=13.0km s-min=9.5km az=55.0*
*ISCJB **03** 05:33:32.5±0.9, 15°.0S±0°.1×76°.0W±0°.1, h29km, mb4.0/9, Error ellipse: s-maj=20.8km s-min=9.5km az=142.2*
**ISC 03 05:33:34.5**±0.8**, 15°.0S**±0°.1×**76°.0W**±0°.1**, h29km, n26, σ1s.55**/21**, mb4.1**/9**, Off coast of Peru**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **10.10** | **139** | Pn | **Pn** | **05 35 59.9** | **+2.0** |
| | 54nm,0.3s,baz=311,slow=13,SNR=14 | | | | | | |
| LVC | | | | Sn | **Sn** | **05 37 49.6** | **-0.8** |
| | 46nm,0.3s,baz=58,slow=20,SNR=7.0 | | | | | | |
| LVC | | | | Lg | Lg | 05 38 54.7 | |
| | 2.1nm,0.3s,baz=156,slow=16,SNR=5.2 | | | | | | |
| **LVC** | **Limon Verde** | **10.10** | **139** | Pn | **Pn** | **05 35 59.9** | **+2.0** |
| | 4.8nm,0.8s | | | | | | |
| LVC | | | | *e*Sn | **Sn** | **05 37 47.4** | **-3.0** |
| LVC | | | | Sn | Sn | 05 37 49.6 | -1.0 |
| LVC | | | | Lg | Lg | 05 38 54.7 | |
| **SAML** | **Samuel** | **13.91** | **66** | Pn | **Pn** | **05 36 50.9** | **+1.1** |
| | 5.6nm,1.0s | | | | | | |
| **SIV** | **San Ignacio** | **14.42** | **96** | Pn | **Pn** | **05 36 54.0** | **-2.8** |
| | 0.3nm,0.3s,baz=271,slow=14,SNR=7.0 | | | | | | |
| **OTAV** | **Otavalo** | **15.36** | **351** | *e*Pn | **Pn** | **05 37 07.2** | **-2.6** |
| | 6.8nm,1.0s | | | | | | |
| **ROSC** | **El Rosal** | **19.82** | **5** | P | Pn | 05 38 10.6 | +5.5 |
| | 0.4nm,0.3s,baz=107,slow=19,SNR=2.3 | | | | | | |
| **PTGA** | **Pitinga** | **21.28** | **50** | P | **P** | **05 38 18.5** | **-0.3** |
| | 8.3nm,1.0s,baz=204,slow=11,SNR=6.6 | | | | | | |
| **SDV** | **Santo Domingo** | **24.34** | **13** | *e*P | **P** | **05 38 50.4** | **+0.1** |
| | 19nm,1.3s | | | | | | |
| **BDFB** | **Brasilia** | **26.99** | **95** | P | **P** | **05 39 15.1** | **+0.8** |
| | 1.7nm,0.6s,baz=170,slow=6.1,SNR=1.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **51.56** | **329** | P | **P** | **05 42 38.8** | **+0.6** |
| | 0.4nm,0.6s,baz=153,slow=8.7,SNR=10 | | | | | | |
| **NVAR** | **Mina Array Bea** | **66.31** | **325** | P | **P** | **05 44 20.6** | **0.0** |
| | 0.4nm,0.7s,baz=123,slow=6.6,SNR=3.6 | | | | | | |
| **ULM** | **Lac du Bonnet** | **67.30** | **346** | P | **P** | **05 44 24.8** | **-1.6** |
| | 1.4nm,0.6s,baz=142,slow=12,SNR=2.7 | | | | | | |
| **SCHQ** | **Schefferville** | **70.01** | **6** | P | **P** | **05 44 42.7** | **-0.5** |
| | 4.3nm,0.8s,baz=221,slow=9.3,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.82** | **74** | P | **P** | **05 45 52.8** | **+1.3** |
| | 3.7nm,0.7s,baz=257,slow=4.6,SNR=29 | | | | | | |
| **ESDC** | **Sonseca Array** | **86.21** | **47** | P | **P** | **05 46 15.1** | **+1.7** |
| | 0.2nm,0.5s,baz=258,slow=5.9,SNR=4.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **120.06** | **284** | T | T | 08 03 38.7 | |
| | baz=97,slow=74,SNR=17 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **120.07** | **284** | T | T | 08 03 44.4 | |
| | baz=97,slow=74,SNR=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **120.08** | **284** | T | T | 08 03 41.8 | |
| | baz=97,slow=74,SNR=13 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **120.11** | **283** | T | T | 08 03 55.3 | |
| | baz=84,slow=79,SNR=11 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **120.12** | **283** | T | T | 08 03 51.3 | |
| | baz=84,slow=79,SNR=11 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **120.13** | **283** | T | T | 08 03 49.8 | |
| | baz=84,slow=79,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **131.69** | **218** | PKP | **PKPdf** | **05 52 45.2** | **-0.4** |
| | 0.2nm,0.5s,baz=139,slow=4.8,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **134.20** | **222** | PKP | **PKPdf** | **05 52 50.3** | **0.0** |
| | 0.6nm,0.7s,baz=138,slow=1.7,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **138.35** | **17** | PKP | **PKPdf** | **05 52 57.6** | **+0.7** |
| | 0.5nm,0.3s,baz=286,slow=5.2,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **143.51** | **25** | PKP | **PKPdf** | **05 53 07.2** | **+0.7** |
| | 0.1nm,0.3s,baz=282,slow=2.8,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **147.22** | **357** | PKPbc | **PKPab** | **05 53 16.4** | **-0.6** |
| | 1.0nm,0.8s,baz=2.4,slow=4.0,SNR=5.4 | | | | | | |

**KRSC 03 05:48:16.1**±0.7**, 55°.79N**×**162°.04E, h60km**±13km**, ML3.6, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBG** | **Krutoberegovo** | **0.60** | **39** | *e*P | Pn | 05 48 30.4 | +1.3 |
| KBG | | | | *e*S | Sn | 05 48 39.9 | +1.3 |
| **KBTR** | **Krutoberegovo** | **0.61** | **46** | *e*P | Pn | 05 48 30.6 | +1.3 |
| KBTR | | | | *e*S | Sn | 05 48 40.3 | +1.4 |
| **ZLN** | **Zelenaya** | **0.73** | **289** | *e*P | Pn | 05 48 31.7 | +0.8 |
| ZLN | | | | *e*S | Sn | 05 48 42.1 | +0.4 |
| **LGNR** | **Loginova** | **0.81** | **292** | *e*P | Pn | 05 48 33.0 | +0.9 |
| LGNR | | | | *e*S | Sn | 05 48 44.7 | +0.8 |
| **SMKR** | **Semkarok** | **0.85** | **338** | *e*P | Pn | 05 48 33.4 | +1.0 |
| SMKR | | | | *e*S | Sn | 05 48 45.3 | +0.9 |
| **BZMR** | **Bezymyannaya** | **0.88** | **280** | *e*P | Pn | 05 48 34.1 | +1.3 |
| BZMR | | | | *e*S | Sn | 05 48 46.1 | +0.9 |
| **BZWR** | **Bezymyannyi-We** | **0.89** | **282** | *e*P | Pn | 05 48 34.2 | +1.3 |
| BZWR | | | | *e*S | Sn | 05 48 46.3 | +1.0 |
| **BDR** | **Baidarnaya** | **0.91** | **330** | *e*P | Pn | 05 48 34.3 | +1.3 |
| BDR | | | | *e*S | Sn | 05 48 46.6 | +1.1 |
| **KLY** | **Klyuchi** | **0.94** | **304** | *e*P | Pn | 05 48 32.8 | -0.5 |
| KLY | | | | *e*S | Sn | 05 48 44.6 | -1.4 |
| **KIRR** | **Kirishev** | **0.97** | **280** | *e*P | Pn | 05 48 35.2 | +1.3 |
| KIRR | | | | *e*S | Sn | 05 48 48.5 | +1.4 |
| **SRKR** | **Sorokina** | **0.99** | **331** | *e*P | Pn | 05 48 35.3 | +1.2 |
| SRKR | | | | *e*S | Sn | 05 48 48.5 | +1.0 |
| **KMNR** | **Kamenistaya** | **1.02** | **269** | *e*P | Pn | 05 48 35.9 | +1.4 |
| KMNR | | | | *e*S | Sn | 05 48 50.7 | +2.6 |
| **KPT** | **Kopyto** | **1.04** | **280** | *e*P | Pn | 05 48 36.1 | +1.4 |
| KPT | | | | *e*S | Sn | 05 48 50.4 | +1.8 |
| **TUMR** | **Tumrok** | **1.19** | **245** | *e*P | Pn | 05 48 38.8 | +2.0 |
| TUMR | | | | *e*S | Sn | 05 48 55.0 | +2.8 |
| **KZV** | **Kizimen** | **1.20** | **236** | *e*P | Pn | 05 48 38.5 | +1.5 |
| KZV | | | | *e*S | Sn | 05 48 54.2 | +1.6 |
| **KOZ** | **Kozyrevsk** | **1.25** | **283** | *e*P | Pn | 05 48 39.8 | +2.4 |
| KOZ | | | | *e*S | Sn | 05 48 56.2 | +2.9 |
| **MKZ** | **Mys Kozlova** | **1.25** | **188** | *e*P | Pn | 05 48 39.0 | +1.6 |
| MKZ | | | | *e*S | Sn | 05 48 55.6 | +2.3 |
| **SRDR** | **Sredinnyy** | **1.40** | **293** | *e*P | Pn | 05 48 41.3 | +1.7 |
| SRDR | | | | *e*S | Sn | 05 48 58.7 | +1.5 |
| **KII** | **Karymskiy** | **2.31** | **221** | *e*P | Pn | 05 48 53.8 | +2.0 |
| **SPN** | **Mys Shipunski** | **2.94** | **204** | *e*P | Pn | 05 49 02.1 | +1.7 |
| SPN | | | | *e*S | Sn | 05 49 34.5 | 0.0 |
| **SDLR** | **Sedlovina** | **3.12** | **217** | *e*P | Pn | 05 49 06.0 | +3.1 |
| SDLR | | | | *e*S | Sn | 05 49 42.0 | +2.9 |
| **KRX** | **Arik** | **3.13** | **220** | *e*P | Pn | 05 49 07.0 | +3.8 |
| KRX | | | | *e*S | Sn | 05 49 43.2 | +3.7 |
| **SMAR** | **Somma** | **3.16** | **218** | *e*P | Pn | 05 49 06.7 | +3.1 |
| SMAR | | | | *e*S | Sn | 05 49 43.3 | +3.0 |
| **GNL** | **Ganaly** | **3.17** | **230** | *e*P | Pn | 05 49 06.3 | +2.7 |
| **AVH** | **Avacha** | **3.18** | **219** | *e*P | Pn | 05 49 07.4 | +3.7 |
| AVH | | | | *e*S | Sn | 05 49 43.5 | +3.0 |
| **KOK** | **Koryaka** | **3.19** | **220** | *e*P | Pn | 05 49 07.4 | +3.4 |
| **PET** | **Petropavlovsk** | **3.41** | **217** | *e*S | Sn | 05 49 49.4 | +3.6 |
| **RUS** | **Russkaya** | **3.95** | **213** | *e*P | Pn | 05 49 16.8 | +2.6 |
| RUS | | | | *e*S | Sn | 05 50 01.6 | +2.4 |

**MEX 03 05:48:48.0**±1.8**, 14°.33N**×**93°.83W, h17km**±999km**, MD4.1, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.49** | **23** | *i* P | Pn | 05 49 10.3 | -3.7 |
| PCIG | | | | *i* S | Sn | 05 49 28.2 | -4.9 |
| **CCIG** | **Comitan** | **2.54** | **40** | *e*P | Pn | 05 49 27.8 | -1.0 |
| CCIG | | | | *i* S | Sn | 05 49 55.3 | -4.2 |

**IDC 03 05:50:07.7**±10.0**, 17°.69S**×**178°.19W, h506km**±107km**, mb3.2**/3**, mb1 3.5**/3**, mb1mx2.9**/28**, mbtmp4.0**/3**, Error ellipse: s-maj=242.7km s-min=35.0km az=156.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.88** | **259** | P | P | 05 57 36.4 | -0.5 |
| | 1.0nm,0.5s,baz=94,slow=6.9,SNR=38 | | | | | | |
| WRA | | | | PcP | PcP | 05 59 07.8 | -0.1 |
| | 0.3nm,0.4s,baz=91,slow=3.6,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **45.05** | **254** | P | P | 05 57 38.4 | +0.1 |
| | 9.1nm,0.5s,baz=89,slow=8.3,SNR=202 | | | | | | |
| ASAR | | | | PcP | PcP | 05 59 08.1 | -0.5 |
| | 0.6nm,0.4s,baz=104,slow=4.0,SNR=6.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.70** | **58** | P | P | 06 01 53.1 | -0.1 |
| | 0.2nm,0.7s,baz=228,slow=3.5,SNR=3.2 | | | | | | |

*ISK **03** 05:50:18.7, 35°.00N×32°.85E, h48km, MD2.9*
*ISCJB **03** 05:50:19.3±1.5, 35°.07N±0°.09×32°.87E±0°.08, h52km±10km, Error ellipse: s-maj=15.0km s-min=10.8km az=15.6*
*CSEM **03** 05:50:19.1±0.3, 35°.03N×32°.85E, h50km±2km, MD2.9, Error ellipse: s-maj=6.1km s-min=4.1km az=178.0*
*NIC **03** 05:50:19.1, 35°.05N×32°.86E, h51km, ML2.6*
**ISC 03 05:50:19.8**±2.3**, 35°.05N**±0°.06×**32°.86E**±0°.05**, h48km**±14km**, n17, σ0s.43**/26**, 2C-2D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LEF** | **Lefka** | **0.07** | **17** | *e*PG | **Pn** | **05 50 26.7** | **-0.6** |
| LEF | | | | *e*SG | **Sn** | **05 50 32.6** | **+0.1** |
| **LEF** | **Lefka** | **0.07** | **17** | *e*Pg | **Pn** | **05 50 26.7** | **-0.6** |
| LEF | | | | *e*Sg | **Sn** | **05 50 32.6** | **+0.1** |
| **ALFC** | **Alevga** | **0.24** | **296** | P | **Pn** | **05 50 27.9** | **-0.4** |
| | baz=115 | | | | | | |
| ALFC | | | | S | **Sn** | **05 50 34.5** | **+0.2** |
| **ALFC** | **Alevga** | **0.24** | **296** | P | **Pn** | **05 50 27.9** | **-0.4** |
| ALFC | | | | S | **Sn** | **05 50 34.5** | **+0.2** |
| **AKDN** | **Akdeniz- K˜–br** | **0.26** | **19** | *e*PG | **Pn** | **05 50 28.4** | **0.0** |
| **AKDN** | **Akdeniz- K˜–br** | **0.26** | **19** | *e*Pg | **Pn** | **05 50 28.4** | **0.0** |
| **SZAC** | **Souni-Zanaja** | **0.29** | **177** | ⇑P | **Pn** | **05 50 28.3** | **-0.4** |
| | baz=356 | | | | | | |
| SZAC | | | | S | **Sn** | **05 50 36.0** | **+1.0** |
| **SZAC** | **Souni-Zanaja** | **0.29** | **177** | ⇑P | **Pn** | **05 50 28.3** | **-0.4** |
| SZAC | | | | S | **Sn** | **05 50 36.0** | **+1.0** |
| **MAMC** | **Mammari** | **0.31** | **67** | P | **Pn** | **05 50 29.1** | **+0.2** |
| | baz=248 | | | | | | |
| **MAMC** | **Mammari** | **0.31** | **67** | P | **Pn** | **05 50 29.1** | **+0.2** |
| **CSS** | **Prodhromos** | **0.39** | **103** | ⇓P | **Pn** | **05 50 29.3** | **-0.4** |
| | baz=283 | | | | | | |
| CSS | | | | S | **Sn** | **05 50 36.9** | **+0.2** |
| **CSS** | **Prodhromos** | **0.39** | **103** | *e*PG | **Pn** | **05 50 29.3** | **-0.4** |
| CSS | | | | *e*SG | **Sn** | **05 50 36.7** | **0.0** |
| **CSS** | **Prodhromos** | **0.39** | **103** | ⇓P | **Pn** | **05 50 29.3** | **-0.4** |
| CSS | | | | *e*Sg | **Sn** | **05 50 36.7** | **0.0** |
| **AKMC** | **Akamas** | **0.44** | **267** | P | **Pn** | **05 50 30.0** | **-0.2** |
| | baz=86 | | | | | | |
| **AKMC** | **Akamas** | **0.44** | **267** | P | **Pn** | **05 50 30.0** | **-0.2** |
| **LFK** | **Lefkose** | **0.59** | **67** | *e*PG | **Pn** | **05 50 31.9** | **-0.2** |
| **LFK** | **Lefkose** | **0.59** | **67** | *e*Pg | **Pn** | **05 50 31.9** | **-0.2** |

**NNC 03 06:17:28.1**±0.7**, 41°.28N**×**70°.08E, h0km, mb3.5, mpv3.2, 7C-5D, Error ellipse: s-maj=6.9km s-min=4.4km az=108.0, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **1.85** | **10** | ⇑Pg | Pn | 06 18 01.8 | +0.6 |
| | 11nm,0.3s,baz=194,slow=16,SNR=272 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 06 18 26.1 | |
| | 6.8nm,0.2s,baz=193,slow=28,SNR=9.6 | | | | | | |
| **MNAS** | **Manas** | **2.18** | **55** | ⇑Pg | Pb | 06 18 08.6 | +0.1 |
| | 7.5nm,0.5s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 06 18 37.4 | |
| | 14nm,0.5s | | | | | | |
| **DZET** | **Dzherino** | **2.65** | **202** | ⇑Pg | Pb | 06 18 16.8 | +0.2 |
| | 9.5nm,0.4s | | | | | | |
| DZET | | | | ⇑Lg | Lg | 06 18 52.2 | |
| | 45nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.89** | **115** | ⇑Pg | Pb | 06 18 19.4 | -1.4 |
| | 1.2nm,0.3s | | | | | | |
| SFK | | | | ⇓Lg | Lg | 06 19 00.0 | |
| | 10.0nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **3.56** | **66** | ⇑Pg | Pb | 06 18 33.3 | +1.2 |
| | 2.4nm,0.5s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 06 19 21.8 | |
| | 18nm,1.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.42** | **66** | ⇓Pg | Pb | 06 18 49.6 | +2.8 |
| | 2.7nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 06 19 47.1 | |
| | 23nm,0.9s | | | | | | |

*BJI **03** 06:29:28.1, 1°.51S×120°.67E, h40km, mb4.9/42, mB5.0/25, Ms4.4/18, Ms7 4.0/22*
*IDC **03** 06:29:28.2±0.5, 0°.85S×120°.56E, h0km, mb4.3/19, mb1 4.5/23, mb1mx4.3/43, mbtmp4.4/23, ML4.4/4, MS3.9/19, Ms1 3.9/19, ms1mx3.8/29, Error ellipse: s-maj=19.0km s-min=10.9km az=73.0*
*MOS **03** 06:29:31.2±0.9, 0°.81S×120°.59E, h33km, mb5.0/21, Error ellipse: s-maj=15.0km s-min=7.2km az=120.0*
*DJA **03** 06:29:32.9±0.7, 1°S±2°×12°0E±°, h22km±7km, M4.9/23, mB5.3/9, mb4.9/23, MLv5.1/16, Mw(mB)4.7/9*
*ISCJB **03** 06:29:32.6±0.4, 0°.90S±0°.02×120°.47E±0°.02, h43km±4km, mb4.6/46, MS3.8/15, Error ellipse: s-maj=4.0km s-min=3.8km az=11.8*
*NEIC **03** 06:29:34.7±0.4, 0°.89S×120°.54E, h45km±4km, mb4.8/17, Error ellipse: s-maj=5.5km s-min=3.7km az=61.0*
*NEIC Felt at Palu.*
*KLM **03** 06:29:34.7, 0°.89S×120°.30E, h40km, mb4.8, ML5.3, MS5.7*
*AUST **03** 06:29:38.6, 1°.00S×120°.50E, h100km*
**ISC 03 06:29:34.4**±0.4**, 0°.90S**±0°.03×**120°.49E**±0°.04**, h40km**±3km**, h40km:pP-P, n209, σ1s.49**/220**, mb4.7**/46**, MS3.8**/15**, 10C-8D, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCI** | **Palu** | **0.65** | **270** | P | Pn | 06 29 39.3 | -8.0 |
| **APSI** | **Ampana** | **1.16** | **90** | P | **Pn** | **06 29 54.3** | **+0.2** |
| **MPSI** | **Mapaga** | **1.37** | **334** | P | Pn | 06 29 49.7 | -7.3 |
| MPSI | | | | S | **Sn** | **06 30 16.3** | **+2.4** |
| **MRSI** | **Marisa** | **2.00** | **47** | P | **Pn** | **06 30 04.7** | **-1.0** |
| **TTSI** | **Tana Toraja** | **2.23** | **198** | P | **Pn** | **06 30 09.0** | **+0.1** |
| **LUWI** | **Luwuk** | **2.29** | **93** | P | **Pn** | **06 30 09.9** | **+0.2** |
| | baz=2.3,SNR=59 | | | | | | |
| **LUWI** | **Luwuk** | **2.29** | **93** | P | **Pn** | **06 30 08.2** | **-1.4** |
| LUWI | | | | S | **Sn** | **06 30 37.9** | **+1.3** |
| **LUWI** | **Luwuk** | **2.29** | **93** | *e*Pn | **Pn** | **06 30 09.9** | **+0.2** |
| **SPSI** | **Sidrap Palu** | **3.13** | **193** | P | **Pn** | **06 30 22.2** | **+1.0** |
| SPSI | | | | S | **Sn** | **06 30 59.2** | **+1.9** |
| **BKB** | **Balikpapan** | **3.61** | **264** | P | **Pn** | **06 30 27.3** | **-0.6** |
| **KDI** | **Kendari** | **3.71** | **145** | P | **Pn** | **06 30 28.4** | **-0.8** |
| **KMSI** | **Cibinong** | **3.79** | **67** | P | **Pn** | **06 30 30.3** | **0.0** |
| **KAPI** | **Kappang** | **4.15** | **190** | Pn | **Pn** | **06 30 35.3** | **0.0** |
| | 38nm,0.3s,baz=36,slow=3.6,SNR=47 | | | | | | |
| KAPI | | | | Sn | **Sn** | **06 31 24.6** | **+2.0** |
| | 35nm,0.3s,baz=180,slow=21,SNR=7.6 | | | | | | |
| KAPI | | | | LR | LR | 06 32 25.0 | |
| | comp=Z,4µm,18.3s,baz=19,slow=42 | | | | | | |
| **KAPI** | **Kappang** | **4.15** | **190** | *e*Pn | **Pn** | **06 30 35.7** | **+0.4** |
| KAPI | | | | Sn | **Sn** | **06 31 24.6** | **+2.0** |
| **BKSI** | **Bulukumba** | **4.41** | **185** | P | **Pn** | **06 30 39.4** | **+0.6** |
| BKSI | | | | S | **Sn** | **06 31 33.6** | **+4.7** |
| **KBKI** | **Kotabaru** | **4.93** | **241** | P | **Pn** | **06 30 45.2** | **-0.9** |
| KBKI | | | | S | **Sn** | **06 31 44.5** | **+2.6** |
| **BBSI** | **Bau Bau** | **5.00** | **156** | P | **Pn** | **06 30 47.6** | **+0.5** |
| | 316nm,0.9s,3µm2.5nm | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.21** | **180** | P | **Pn** | **06 30 50.7** | **+0.9** |
| | 294nm,0.7s,4µm1.4nm | | | | | | |
| BSSI | | | | S | Sn | 06 31 54.9 | +6.2 |
| | 294nm,0.7s,4µm1.4nm | | | | | | |
| **SANI** | **Sanana** | **5.61** | **102** | P | **Pn** | **06 30 55.0** | **-0.4** |
| | 267nm,0.8s,2µm0.9nm | | | | | | |
| **TSM** | **Tawau** | **5.79** | **333** | ⇑P | **Pn** | **06 30 55.4** | **-2.4** |
| **BBKI** | **Banjar Baru** | **6.19** | **246** | P | **Pn** | **06 31 01.4** | **-2.0** |
| BBKI | | | | S | **Sn** | **06 32 10.6** | **-2.4** |
| **MYLDM** | **Lahad Datu** | **6.36** | **342** | ⇑P | **Pn** | **06 31 05.5** | **-0.2** |
| **MYLDM** | **Lahad Datu** | **6.36** | **342** | *e*Pn | **Pn** | **06 31 05.6** | **-0.1** |
| **NLAI** | **Namlea** | **7.00** | **109** | P | **Pn** | **06 31 16.0** | **+1.5** |
| | 102nm,0.8s,2µm0.4nm | | | | | | |
| **LBMI** | **Labuha** | **7.01** | **88** | P | **Pn** | **06 31 14.9** | **+0.2** |
| | 149nm,0.9s,2µm1.5nm | | | | | | |
| LBMI | | | | S | **Sn** | **06 32 34.4** | **+1.2** |
| | 149nm,0.9s,2µm1.5nm | | | | | | |
| **TNTI** | **Ternate** | **7.07** | **76** | *e*Pn | **Pn** | **06 31 15.7** | **+0.2** |
| **SDKM** | **Sandakan** | **7.29** | **333** | ⇑P | **Pn** | **06 31 18.4** | **-0.1** |
| **MMRI** | **Maumere** | **7.88** | **167** | *e*Pn | **Pn** | **06 31 26.4** | **-0.2** |
| **KKM** | **Kota Kinabalu** | **8.12** | **328** | P | Pn | 06 31 34.7 | +4.8 |
| | baz=8.2,SNR=4.5 | | | | | | |
| **KKM** | **Kota Kinabalu** | **8.12** | **328** | ⇑P | **Pn** | **06 31 31.3** | **+1.4** |
| **KKM** | **Kota Kinabalu** | **8.12** | **328** | *e*Pn | **Pn** | **06 31 29.6** | **-0.3** |
| **AAI** | **Ambon** | **8.18** | **110** | P | Pn | 06 31 35.2 | +4.5 |
| **WBSI** | **Waikabubak, Su** | **8.75** | **187** | P | **Pn** | **06 31 39.7** | **+1.2** |
| | 113nm,0.9s,1µm | | | | | | |
| **MSAI** | **Masohi** | **8.77** | **106** | P | Pn | 06 31 42.9 | +4.1 |
| **SBUM** | **Sibu** | **8.91** | **292** | *e*Pn | Pn | 06 31 45.5 | +4.7 |
| **SOEI** | **Soe** | **9.56** | **157** | P | Pn | 06 31 53.1 | +3.3 |
| | baz=9.5,SNR=5.7 | | | | | | |
| **SOEI** | **Soe** | **9.56** | **157** | P | **Pn** | **06 31 50.5** | **+0.7** |
| **SOEI** | **Soe** | **9.56** | **157** | *e*Pn | **Pn** | **06 31 51.0** | **+1.2** |
| **BATI** | **Baumata** | **9.77** | **161** | Pn | **Pn** | **06 31 52.2** | **-0.3** |
| | 2.5nm,0.3s,baz=355,slow=18,SNR=2.5 | | | | | | |
| BATI | | | | LR | LR | 06 35 59.5 | |
| | comp=Z,2µm,20.4s,baz=120,slow=40 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **9.82** | **220** | *e*Pn | **Pn** | **06 31 53.9** | **+0.7** |
| **KSM** | **Kuching** | **10.45** | **283** | ⇓P | Pn | 06 31 57.3 | -4.5 |
| **SWI** | **Sorong** | **10.77** | **90** | P | **Pn** | **06 32 06.8** | **+0.6** |
| **SIJI** | **Sorong** | **10.77** | **90** | Pn | **Pn** | **06 32 04.8** | **-1.5** |
| | 2.3nm,0.3s,baz=261,slow=8.1,SNR=6.6 | | | | | | |
| SIJI | | | | LR | LR | 06 37 20.4 | |
| | comp=Z,556nm,21.9s,baz=334,slow=44 | | | | | | |
| **NGJI** | **Ngawi** | **11.06** | **234** | P | Pn | 06 32 16.9 | +6.8 |
| **WOJI** | **Wonogiri, Jawa** | **11.76** | **234** | P | **Pn** | **06 32 19.2** | **-0.6** |
| **FAKI** | **Fak Fak** | **11.92** | **100** | P | **Pn** | **06 32 21.0** | **-0.9** |
| | baz=12,SNR=8.5 | | | | | | |
| **FAKI** | **Fak Fak** | **11.92** | **100** | P | **Pn** | **06 32 23.9** | **+1.9** |
| **FAKI** | **Fak Fak** | **11.92** | **100** | *e*Pn | **Pn** | **06 32 21.1** | **-0.9** |
| **KPJI** | **Karang Pucung** | **13.18** | **241** | P | **Pn** | **06 32 39.6** | **+0.5** |
| **LEM** | **Lembang** | **14.12** | **245** | Pn | **Pn** | **06 32 52.4** | **+0.2** |
| | 1.2nm,0.3s,baz=324,slow=19,SNR=2.3 | | | | | | |
| LEM | | | | LR | LR | 06 38 46.5 | |
| | comp=Z,857nm,18.3s,baz=94,slow=39 | | | | | | |
| **LEM** | **Lembang** | **14.12** | **245** | ⇑P | **Pn** | **06 32 49.0** | **-3.2** |
| **LEM** | **Lembang** | **14.12** | **245** | P | **Pn** | **06 32 51.2** | **-1.0** |
| **CBJI** | **Citeko** | **14.67** | **248** | P | Pn | 06 32 51.9 | -7.5 |
| **CGJI** | **Cibinong** | **15.81** | **249** | P | **Pn** | **06 33 12.3** | **-2.1** |
| **MTN** | **Manton Dam** | **15.87** | **139** | P | **P** | **06 33 17.6** | **-0.7** |
| | baz=16,SNR=9.4 | | | | | | |
| **MTN** | **Manton Dam** | **15.87** | **139** | *e*Pn | **Pn** | **06 33 15.3** | **+0.1** |
| | 31nm,0.9s | | | | | | |
| **PALU** | **Palau** | **16.18** | **59** | P | **P** | **06 33 23.9** | **+2.1** |
| | baz=16,SNR=4.8 | | | | | | |
| **KASI** | **Kota Agung** | **16.61** | **254** | P | P | 06 33 33.7 | +7.1 |
| **MDSI** | **Maura Dua** | **16.68** | **257** | P | **Pn** | **06 33 22.5** | **-2.8** |
| **KDU** | **Kakadu** | **16.68** | **135** | P | **P** | **06 33 27.5** | **+0.2** |
| | baz=17,SNR=8.5 | | | | | | |
| **KNRA** | **Kununurra** | **16.80** | **151** | P | **Pn** | **06 33 24.3** | **-2.5** |
| | baz=17,SNR=4.5 | | | | | | |
| **LWLI** | **Liwa** | **16.91** | **256** | P | **P** | **06 33 34.3** | **+4.3** |
| **LHSI** | **Lahat** | **17.20** | **260** | P | **P** | **06 33 34.3** | **+1.2** |
| **KGM** | **Kluang** | **17.41** | **280** | ⇓P | **Pn** | **06 33 31.8** | **-2.7** |
| **KSI** | **Kapahiang** | **18.09** | **261** | P | P | 06 33 48.7 | +5.7 |
| **SMPI** | **Sarmi** | **18.25** | **94** | P | Pn | 06 33 53.4 | +8.6 |
| **FRIM** | **Kepong** | **19.30** | **282** | ⇓P | **P** | **06 33 53.0** | **-3.2** |
| **PDSI** | **Padang** | **20.03** | **270** | P | **P** | **06 34 03.4** | **-0.8** |
| **PPI** | **Padang Panjang** | **20.10** | **271** | P | P | 06 33 58.4 | -6.6 |
| | baz=20,SNR=3.4 | | | | | | |
| **PPI** | **Padang Panjang** | **20.10** | **271** | P | Pn | 06 34 06.3 | -0.7 |
| **MBWA** | **Marble Bar** | **20.15** | **182** | *e*P | **P** | **06 34 06.2** | **+0.8** |
| | 18nm,0.8s | | | | | | |
| **IPM** | **Ipoh** | **20.17** | **286** | ⇓P | **P** | **06 34 04.3** | **-1.4** |
| **IPM** | **Ipoh** | **20.17** | **286** | *e*P | **P** | **06 34 06.2** | **+0.5** |
| | 41nm,1.1s | | | | | | |
| **KULM** | **Kulim** | **20.75** | **287** | ⇑P | **P** | **06 34 11.2** | **-0.8** |
| **KULM** | **Kulim** | **20.75** | **287** | *e*P | **P** | **06 34 12.3** | **+0.3** |
| | 55nm,1.4s | | | | | | |
| **MNSI** | **Mandailing Nat** | **20.98** | **275** | P | **P** | **06 34 14.2** | **-0.3** |
| **PSI** | **Prapat** | **21.87** | **280** | P | **P** | **06 34 24.3** | **+0.1** |
| | 9.2nm,0.8s,baz=85,slow=11,SNR=5.9 | | | | | | |
| PSI | | | | LR | LR | 06 43 43.2 | |
| | comp=Z,586nm,20.9s,baz=79,slow=39 | | | | | | |
| **PSI** | **Prapat** | **21.87** | **280** | *e*P | **P** | **06 34 25.2** | **+1.0** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| **PSI** | **Prapat** | **21.87** | **280** | *e*P | **P** | **06 34 25.2** | **+1.0** |
| | comp=Z,19nm,0.9s | | | | | | |
| **QIZ** | **Qiongzhong** | **22.40** | **333** | P | **P** | **06 34 30.5** | **+0.8** |
| QIZ | | | | S | **S** | **06 38 36.0** | **+2.6** |
| QIZ | | | | LZ | | | |
| | comp=Z,540nm,22.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.27** | **145***d* | *i*P | **P** | **06 34 37.7** | **-1.0** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,158nm,1.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.27** | **145** | *e*P | **P** | **06 34 37.8** | **-1.0** |
| | comp=Z,38nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.28** | **145** | P | **P** | **06 34 37.8** | **-1.0** |
| | comp=Z,24nm,0.9s,baz=331,slow=9.9,SNR=66 | | | | | | |
| WRA | | | | LR | LR | 06 45 32.1 | |
| | comp=Z,239nm,19.6s,baz=310,slow=41 | | | | | | |
| **YULB** | **Yu-li** | **24.16** | **2** | *e*P | **P** | **06 34 47.1** | **0.0** |
| | comp=Z,13nm,0.8s | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **24.61** | **282** | P | P | 06 34 56.0 | +4.7 |
| **WRKA** | **Warakurna** | **25.15** | **163** | P | **P** | **06 34 55.6** | **-0.5** |
| | baz=25,SNR=29 | | | | | | |
| **MEEK** | **Meekatharra** | **25.65** | **184** | P | **P** | **06 34 59.2** | **-1.3** |
| | baz=26,SNR=16 | | | | | | |
| **QZH** | **Quanzhou** | **25.76** | **356** | ⇑*i*P | **P** | **06 35 01.6** | **+0.1** |
| QZH | | | | S | **S** | **06 39 26.6** | **-1.4** |
| QZH | | | | LZ | | | |
| | comp=Z,570nm,25.4s | | | | | | |
| **COEN** | **Coen** | **25.92** | **121** | P | **P** | **06 35 03.9** | **+0.8** |
| | baz=26,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **26.10** | **151** | P | **P** | **06 35 04.5** | **-0.3** |
| | comp=Z,6.3nm,0.9s,baz=337,slow=12,SNR=33 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 38 32.1** | **+0.4** |
| | comp=Z,3.5nm,0.6s,baz=339,slow=2.1,SNR=24 | | | | | | |
| ASAR | | | | LR | LR | 06 47 12.2 | |

comp=Z,284nm,18.6s,baz=321,slow=41
**AS01 Alice Springs 26.12 151** *e*P **P 06 35 03.7 -1.2**
AS01 *e*PcP **PcP 06 38 31.5 -0.3**
**LOEI Loei 26.33 315** P **P 06 35 06.2 -0.7**
comp=Z,9.0nm,1.4s,comp=Z,578nm
**QIS Mount Isa 27.03 138** P **P 06 35 12.6 -0.5**
baz=27,SNR=6.0
**CM01 Chiang Mai Arr 28.58 313** *e*P **P 06 35 27.8 +0.7**
CM01 *e*pP **pP 06 35 35.9 -2.1**
**CMAR Chiang Mai Arr 28.62 313** P **P 06 35 27.8 +0.4**
comp=Z,1.0nm,0.3s,baz=135,slow=7.0,SNR=5.7
CMAR LR LR 06 48 52.7
comp=Z,203nm,19.0s,baz=138,slow=41
**CMAR Chiang Mai Arr 28.62 313** *c e*P **P 06 35 28.2 +0.9**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**CMAI Chiengmai2 29.51 316** P P 06 35 42.4 +7.0
**BLDU Ballidu 29.77 187** P **P 06 35 36.6 -0.8**
baz=30,SNR=7.3
**GYA Guiyang 30.30 335** P **P 06 35 44.8 +2.6**
GYA PMZ
comp=Z,10.0nm,0.8s
**KMI Kunming 31.06 328** P **P 06 35 48.4 -0.7**
KMI pP **pP 06 35 56.1 -4.0**
KMI PP **PP 06 36 55.8 -4.0**
KMI S **S 06 40 54.6 +2.6**
KMI PMZ
comp=Z,16nm,0.6s
KMI PMZ
comp=Z,150nm,6.0s
KMI LN
comp=Z,160nm,20.9s
KMI LE
comp=Z,160nm,19.6s
KMI LZ
comp=Z,180nm,28.0s
**CTA Charters Tower 31.60 129** P **P 06 35 52.1 -1.6**
comp=Z,6.1nm,0.8s,baz=325,slow=11,SNR=4.0
**WHN Wuhan 31.81 350** P **P 06 35 58.1 +2.7**
WHN S S 06 41 14.1 +11
WHN LZ
comp=Z,510nm,19.4s
**NWAO Narrogin (SRO) 32.00 185** P **P 06 35 56.0 -1.0**
comp=Z,7.6nm,0.7s,baz=141,slow=0.3,SNR=5.9
**NWAO Narrogin (SRO) 32.00 185** P **P 06 35 56.5 -0.5**
baz=32,SNR=3.8
**QLP Quilpie 34.25 140** P **P 06 36 17.2 +0.4**
baz=34,SNR=16
**JNU Nakatsue 35.23 15** LR LR 06 51 41.9
comp=Z,96nm,19.4s,baz=280,slow=38
**CD2 Chengdu 35.41 335** *e*P **P 06 36 28.0 +1.2**
CD2 pP **pP 06 36 38.5 +0.6**
CD2 sP **sP 06 36 43.3 +0.6**
CD2 S **S 06 42 02.0 +2.9**
CD2 sS **sS 06 42 20.0 +2.5**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**HTT Hallett 36.69 154** P **P 06 36 36.0 -1.8**
baz=37,SNR=7.2
**TIA Tai'an 37.06 355** ⇓P **P 06 36 41.2 +0.5**
TIA PMZ
comp=Z,30nm,0.8s
**JHJ Hachijo jima 2 38.42 26** LR LR 06 50 13.5
comp=Z,144nm,21.3s,baz=314,slow=32
**CMSA Cobar Meteorol 38.68 144** P **P 06 36 55.2 +0.7**
baz=39,SNR=6.9
**KSRS Korea Array 38.78 9** LR LR 06 52 06.0
comp=Z,133nm,21.9s,baz=186,slow=35
**MJAR Matsushiro Arr 40.73 22** P **P 06 37 09.3 -2.2**
comp=Z,1.4nm,0.8s,baz=187,slow=8.9,SNR=3.7
MJAR LR LR 06 51 48.3
comp=Z,90nm,21.8s,baz=105,slow=33
**BJT Baijiatuan 40.92 355** *e*P **P 06 37 13.6 +0.7**
BJT pmax pmax
comp=Z,27nm,0.6s
**BJT Baijiatuan 40.92 355** *e*P **P 06 37 13.6 +0.7**
comp=Z,27nm,0.6s
**BJI Beijing 40.94 355** P **P 06 37 13.4 +0.3**
BJI S **S 06 43 24.9 +2.7**
BJI PMZ
comp=Z,47nm,0.6s
BJI LN
comp=Z,140nm,24.1s
BJI LE
comp=Z,76nm,23.4s
BJI LZ
comp=Z,180nm,22.7s
**LSA Lhasa 41.35 320** *e*P **P 06 37 19.3 +2.0**
LSA pmax pmax
comp=Z,15nm,0.6s
**LSA Lhasa 41.35 320** *e*P **P 06 37 19.3 +2.0**
comp=Z,15nm,0.6s
**ODAN Odare 42.16 313** *e*P **P 06 37 24.6 +0.9**
comp=Z,26nm,0.9s
**TAPN Taplejung 42.22 314** *e*P **P 06 37 24.3 +0.1**
comp=Z,33nm,0.9s
**HHC Hu-ho-hao-te 42.34 350** *e*P **P 06 37 25.5 +0.7**
HHC PP **PP 06 39 08.1 +4.6**
HHC S **S 06 43 46.7 +3.4**
HHC PMZ
comp=Z,25nm,1.4s
HHC PMZ
comp=Z,120nm,5.0s
HHC LN
comp=Z,150nm,14.9s
HHC LE
comp=Z,130nm,11.1s
HHC LZ
comp=Z,140nm,16.2s
**RAMN Ramite 42.79 313** *e*P **P 06 37 29.1 +0.3**
comp=Z,84nm,1.2s
**CAN Canberra 43.32 145** *e*P **P 06 37 33.4 +0.6**
CAN pmax pmax
comp=Z,34nm,1.0s
**CAN Canberra 43.32 145** *e*P **P 06 37 33.4 +0.6**
comp=Z,34nm,1.0s
**GUN Gumba 43.87 313** *e*P **P 06 37 37.6 0.0**
comp=Z,62nm,0.8s
**PKI Pulchoki 44.02 313** *e*P **P 06 37 38.8 0.0**
comp=Z,14nm,0.7s
**PKIN Phulchoki 44.03 313** *e*P **P 06 37 39.2 +0.4**
**KKN Kakani 44.23 313** *e*P **P 06 37 40.3 -0.1**
comp=Z,26nm,1.0s
**DMN Daman 44.26 313** *e*P **P 06 37 40.6 0.0**
comp=Z,24nm,0.8s
**GTA Gaotai 44.37 337** *e*P **P 06 37 42.5 +1.3**
GTA pP **pP 06 37 52.5 0.0**
GTA sP **sP 06 37 56.4 -0.8**
GTA PP **PP 06 39 25.3 0.0**
GTA S **S 06 44 15.6 +2.5**
GTA sS **sS 06 44 32.0 +0.1**
GTA SS **SS 06 47 27.0 -6.1**
GTA PMZ
comp=Z,6.0nm,0.8s
GTA PMZ
comp=Z,120nm,6.2s
GTA LN
comp=Z,100nm,19.9s
GTA LE
comp=Z,110nm,18.1s
GTA LZ
comp=Z,100nm,20.4s
**GKN Gorkha 44.82 313** *e*P **P 06 37 45.0 0.0**
comp=Z,28nm,0.7s
**HYB Hyderabad 45.13 296** *i* P **P 06 37 47.0 -0.5**
**KOLN Koldanda 45.46 312** *e*P **P 06 37 50.4 +0.2**
comp=Z,23nm,0.8s
**USRK Ussuriysk Ar. 46.06 11** P **P 06 37 53.4 -1.0**
comp=Z,2.7nm,0.6s,baz=191,slow=5.4,SNR=5.6
**ASAJ Asahikawa 48.98 21** P **P 06 38 16.3 -0.7**
comp=Z,5.3nm,0.8s,baz=133,slow=12
**ULN Ulaanbaatar 49.96 348** *c i* P **P 06 38 24.8 +0.2**
ULN pmax pmax
comp=Z,34nm,1.7s
**ULN Ulaanbaatar 49.96 348** *e*P **P 06 38 24.9 +0.2**
comp=Z,15nm,0.8s
**SONM Songino Array 50.07 348** P **P 06 38 25.4 -0.1**
comp=Z,7.6nm,0.8s,baz=164,slow=8.8,SNR=42
**SONA1 Songino Array 50.08 348** *e*P **P 06 38 25.5 0.0**
**ZAK Zakamensk 53.17 346** *e*P P 06 38 36.9 -12
ZAK pmax pmax
comp=Z,3.0nm,1.4s
**WMQ Urumqi 53.30 331** *e*P **P 06 38 52.0 +2.4**
WMQ PP **PP 06 40 53.0 +2.8**
WMQ S S 06 46 11.0 -7.5
WMQ SS **SKiKP 06 50 05.0 +1.3**
WMQ PMZ
comp=Z,11nm,1.0s
WMQ PMZ
comp=Z,31nm,6.0s
WMQ LN
comp=Z,160nm,20.0s
WMQ LE
comp=Z,180nm,25.0s
WMQ LZ
comp=Z,130nm,20.0s
**TLY Talaya 54.30 347** P **P 06 38 56.5 -0.2**
comp=Z,1.9nm,0.4s,baz=229,slow=10,SNR=3.0
**KSH Kashi 57.21 320** P **P 06 39 18.6 +0.7**
KSH sP **sP 06 39 33.0 -1.2**
KSH *e*ScP **ScP 06 44 08.7 -0.2**
KSH S **S 06 47 08.8 -2.3**
KSH PMZ
comp=Z,13nm,0.9s
KSH PMZ
comp=Z,110nm,3.7s
KSH LN
comp=Z,98nm,7.9s
KSH LE
comp=Z,110nm,8.2s
KSH LZ
comp=Z,110nm,5.5s
**PDGK Podgornoye 57.32 325** P **P 06 39 17.5 -0.9**
PDGK pmax pmax
comp=Z,12nm,0.9s
**MK01 Makanchi Array 58.08 330** *e*P **P 06 39 23.6 -0.2**
**MK31 Makanchi Array 58.10 330** *i* P **P 06 39 23.6 -0.3**
MK31 pmax pmax
comp=Z,6.0nm,0.7s
**MKAR Makanchi Array 58.10 330** P **P 06 39 24.0 +0.1**
comp=Z,3.9nm,0.7s,baz=134,slow=7.7,SNR=26
**MKAR Makanchi Array 58.10 330** P **P 06 39 24.0 +0.1**
**BOD Bodaibo 58.77 356** *e*P **P 06 39 26.7 -1.6**
BOD pmax pmax
comp=Z,7.0nm,1.1s
**TKM2 Tokmak 2 59.36 323** *e*P **P 06 39 33.0 +0.1**
TKM2 pmax pmax
comp=Z,13nm,1.3s
**TKM2 Tokmak 2 59.36 323** P **P 06 39 33.3 +0.3**
SNR=6.9
**TKM2 Tokmak 2 59.36 323** *e*P **P 06 39 33.0 +0.1**
comp=Z,13nm,1.3s
**KBL Kabul 59.63 312** *e*P **P 06 39 34.6 -0.4**
KBL pmax pmax
comp=Z,14nm,0.7s
**KBL Kabul 59.63 312** *e*P **P 06 39 34.5 -0.4**
comp=Z,14nm,0.7s
**AAK Ala-Archa 59.87 322** P **P 06 39 36.9 +0.6**
comp=Z,3.0nm,0.5s,baz=135,slow=4.9,SNR=13
**AAK Ala-Archa 59.87 322** *c i* P **P 06 39 37.0 +0.6**
AAK pmax pmax
comp=Z,18nm,0.9s
**AAK Ala-Archa 59.87 322** P **P 06 39 37.2 +0.8**
SNR=5.7
**AAK Ala-Archa 59.87 322** *e*P **P 06 39 36.5 +0.1**
comp=Z,5.6nm,0.8s
**AML Almayashu 60.09 321** P **P 06 39 38.7 +0.5**
SNR=10
**USP Ospenovka 60.21 323** P **P 06 39 38.5 -0.1**
SNR=5.8
**EKS2 Erkin-Say 60.32 322** *e*P **P 06 39 39.9 +0.4**
**EKS2 Erkin-Say 60.32 322** P **P 06 39 40.0 +0.4**
SNR=6.8
**EKS2 Erkin-Say 60.32 322** *e*P **P 06 39 39.9 +0.4**
**MNAS Manas 61.02 321** P **P 06 39 44.1 -0.2**
MNAS pmax pmax
comp=Z,13nm,1.1s
**PETK Petropavlovsk- 62.12 24** LR LR 07 04 08.5
comp=Z,43nm,21.6s,baz=176,slow=34
**ZALV Zalesovo Beam 62.13 337** P **P 06 39 50.3 -1.0**
comp=Z,3.6nm,0.8s,baz=126,slow=5.6,SNR=11
**ZALV Zalesovo Beam 62.13 337** *i* P **P 06 39 50.2 -1.0**
ZALV pmax pmax
comp=Z,4.0nm,0.8s
**KURK Kurchatov 62.53 331** *e*P **P 06 39 53.8 -0.2**
KURK pmax pmax
comp=Z,21nm,0.9s
**KURK Kurchatov 62.53 331** *e*P **P 06 39 53.8 -0.2**
comp=Z,22nm,0.9s
**KK31 Karatay Array 62.59 321** *i* P **P 06 39 54.1 -0.6**
KK31 pmax pmax
comp=Z,1.0nm,0.4s
**KKAR Karatay Array 62.59 321** *e*P **P 06 39 54.0 -0.7**
**KKAR Karatay Array 62.59 321** *e*P **P 06 39 54.0 -0.7**
**YAK Yakutsk 63.16 5** *e*P **P 06 39 56.1 -1.9**
YAK pmax pmax
comp=E,4.0nm,1.3s
YAK pmax pmax
comp=Z,17nm,0.9s
YAK pmax pmax
comp=N,5.0nm,1.2s
**NVS Novosibirsk 63.41 337** *e*P P 06 39 54.7 -5.1
**OTUK Ortayu 64.26 326** P **P 06 40 05.0 -0.6**
OTUK pmax pmax
comp=Z,7.0nm,0.9s
**BRVK Borovoye 68.05 330** ⇓*e*P **P 06 40 29.4 -0.4**
BRVK pmax pmax
comp=Z,6.0nm,1.2s
**GEYT Alibeck 69.08 311** P **P 06 40 36.0 -0.6**
comp=Z,2.0nm,0.4s,baz=156,slow=7.8,SNR=5.4
GEYT LR LR 07 16 07.6
comp=Z,48nm,19.1s,baz=335,slow=40
**ISRV Sarvestan 70.85 301** *e*P **P 06 40 46.3 -1.7**
**ISAD Sadrabad 70.93 304** *e*P **P 06 40 45.6 -2.8**
**IPAR Pars 71.00 302** *e*P **P 06 40 47.5 -1.4**
**AB31 Akbulak array 71.92 323** *i* P **P 06 40 52.5 -1.1**
AB31 pmax pmax
comp=Z,1.0nm,0.5s
**ABKAR Akbulak array 71.92 323** *e*P **P 06 40 52.9 -0.7**
comp=Z,1.3nm,0.6s
**IKAZ Kazeroun 72.02 302** *e*P **P 06 40 53.3 -1.8**
**IPIR Pirpir 73.41 304** *e*P **P 06 41 01.1 -2.1**
**SVE Sverdlovsk 74.75 330** *e*P P 06 41 15.5 +5.3
SVE pmax pmax
comp=Z,9.0nm,1.0s
**ARU Arti 75.62 330** P **P 06 41 15.2 +0.1**
ARU S **S 06 50 56.6 +3.3**
ARU SS **SS 06 55 43.9 -1.2**
**RAYN Ar Rayn 76.61 294** *e*P **P 06 41 20.2 -1.4**
comp=Z,15nm,1.4s
**MAW Mawson 77.31 199** P **P 06 41 24.3 -0.2**
comp=Z,1.5nm,0.7s,baz=30,slow=7.8,SNR=6.4
**MAW Mawson 77.31 199** *e*P **P 06 41 25.4 +0.9**
**MAW Mawson 77.31 199** *e*P **P 06 41 25.4 +0.9**
**VNDA Vanda 79.72 172** P **P 06 41 37.9 +0.3**
comp=Z,0.9nm,0.7s,baz=335,slow=5.3,SNR=10.0
VNDA LR LR 07 18 10.7
comp=Z,126nm,18.4s,baz=349,slow=37
**ZEI Tsey 80.79 313** *e*P **P 06 41 43.0 -1.3**
ZEI pmax pmax
comp=Z,74nm,1.5s
**KBZ Khabaz 81.67 314** LR LR 07 24 46.1
comp=Z,30nm,18.9s,baz=92,slow=41
**VRH Novokhopyorsk 83.66 322** *e*P **P 06 41 58.0 -0.9**
VRH pmax pmax
comp=N,6.0nm,0.4s
VRH pmax pmax
comp=E,10.0nm,0.4s
VRH pmax pmax
comp=Z,10.0nm,0.4s
**VSR Storozhevoye 85.26 321** *e*P **P 06 42 04.3 -2.7**
VSR pmax pmax
comp=Z,4.0nm,0.5s
VSR pmax pmax
comp=N,10.0nm,1.0s
VSR pmax pmax
comp=E,8.0nm,0.8s
**LPSR Galich'ya Gora 85.58 323** *e*P **P 06 42 07.0 -1.5**
LPSR pmax pmax
comp=Z,9.0nm,1.1s
LPSR pmax pmax
comp=N,2.0nm,0.5s
LPSR pmax pmax
comp=E,4.0nm,0.5s
**SYO Syowa Base 85.89 201** ⇓*e*P **P 06 42 08.6 -1.2**
**BRTR Keskin Array B 88.14 310** P **P 06 42 20.3 -1.3**
comp=E,1.4nm,0.8s,baz=123,slow=4.6,SNR=4.5
BRTR LR LR 07 27 40.4
comp=E,20nm,20.9s,baz=94,slow=40
**BRTR Keskin Array B 88.14 310** *i* P **P 06 42 24.2 +2.6**
BRTR pmax pmax
comp=Z,1.0nm,0.6s
**QSPA South Pole Qui 89.04 180** *e*P **P 06 42 25.3 +0.2**
**AKASG Malin Array Be 91.50 321** P **P 06 42 34.7 -2.0**
comp=Z,0.1nm,0.3s,baz=79,slow=4.8,SNR=2.8
**ARCES ARCESS Array B 92.59 339** LR LR 07 29 19.3
comp=Z,40nm,18.8s,baz=80,slow=39
**BOSA Boshof 94.17 241** LR LR 07 22 14.3
comp=Z,103nm,18.1s,baz=57,slow=34
**TORD Torodi Ar. Bea 118.21 284** PKP **PKPdf 06 48 17.3 -1.1**
comp=Z,0.3nm,0.9s,baz=118,slow=3.1,SNR=2.5
**TXAR Lajitas Array 129.34 52** PKP **PKPdf 06 48 39.9 +0.3**
comp=Z,0.2nm,0.7s,baz=318,slow=1.2,SNR=3.1
**LCO Las Campanas 148.38 161** *e*PKPdf **PKPdf 06 49 13.3 -1.0**
LCO *e*PKPbc **PKPbc 06 49 17.0 -0.8**
**CPUP Villa Florida 152.84 184** PKPbc **PKPbc 06 49 28.0 0.0**
comp=Z,6.2nm,0.9s,baz=160,slow=5.9,SNR=8.1
**CPUP Villa Florida 152.84 184** PKIKP **PKPbc 06 49 28.0 0.0**
**BDFB Brasilia 160.02 214** PKPab **PKPab 06 50 10.5 +0.4**
comp=Z,2.2nm,0.8s,baz=52,slow=7.0,SNR=3.5

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*GUC **03** 06:41:20.5±0.5, 35°.22S×73°.07W, h0km, ML4.5*
**ISC 03 06:41:12.1±4.4, 35°.3S±0°.1×73°.8W±0°.2, h35km, n11, σ1s39/14, 1C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TALC** | **Talca** | **1.77** | **93** | ⇑*i* | P | | **Pn** | **06 41 42.1** | **+1.8** |
| TALC | | | | *i* | S | | **Sn** | **06 41 58.2** | **-3.4** |
| **ANTU** | **Antumapu** | **3.16** | **57** | *e* | P | | Pn | 06 42 03.1 | +3.7 |
| ANTU | | | | *e* | S | | **Sn** | **06 42 36.3** | **+0.4** |
| **CLCH** | **Cerro Calan** | **3.32** | **55** | *i* | P | | **Pn** | **06 42 02.3** | **+0.6** |
| CLCH | | | | *e* | S | | **Sn** | **06 42 40.5** | **+0.5** |
| CLCH | | | | | AML | | AML | 06 42 53.2 | |
| | comp=E,1μm,0.5s | | | | | | | | |
| **PEL** | **Peldehue** | **3.38** | **51** | *e* | S | | **Sn** | **06 42 42.2** | **+0.7** |
| PEL | | | | | AML | | AML | 06 42 48.7 | |
| | comp=N,2μm,0.4s | | | | | | | | |
| **AUSP** | **Uspallata** | **4.81** | **51** | *i* | P | | **Pn** | **06 42 23.6** | **+1.2** |
| AUSP | | | | *i* | S | | Sn | 06 43 29.0 | +12 |
| **RTLS** | **Leoncito** | **5.16** | **48** | *i* | P | | **Pn** | **06 42 27.8** | **+0.7** |
| RTLS | | | | *i* | S | | Sn | 06 43 38.6 | +13 |
| **RTCV** | **Cerro Valdivia** | **5.59** | **53** | *i* | P | | **Pn** | **06 42 33.4** | **+0.5** |
| RTCV | | | | *i* | S | | Sn | 06 43 48.4 | +12 |
| **CFAA** | **Coronel Fontan** | **5.96** | **53** | *i* | P | | **Pn** | **06 42 37.7** | **-0.2** |
| CFAA | | | | *i* | S | | Sn | 06 43 56.7 | +12 |
| **RTLL** | **Cerro Villicun** | **5.99** | **50** | *i* | P | | **Pn** | **06 42 38.5** | **+0.2** |
| RTLL | | | | *i* | P | | **Pn** | **06 42 38.5** | **+0.2** |
| **AVFE** | **Valle Fertil** | **7.08** | **51** | *i* | P | | **Pn** | **06 42 53.2** | **-0.2** |
| AVFE | | | | *i* | S | | Sn | 06 44 23.8 | +11 |
| AVFE | | | | | AML | | AML | 06 44 28.5 | |
| | comp=Z,35nm,0.8s | | | | | | | | |
| **VCA** | **Vinchina** | **8.12** | **37** | *i* | P | | **Pn** | **06 43 06.0** | **-1.6** |

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*IDC **03** 06:44:48.0±0.6, 49°.58N×158°.64E, h0km, mb4.1/20, mb1 4.2/24, mb1mx4.1/38, mbtmp4.1/24, ML3.3/4, MS3.3/4, Ms1 3.3/4, ms1mx2.9/34, Error ellipse: s-maj=17.7km s-min=12.0km az=144.0*
*KRSC **03** 06:44:49.5±1.7, 49°.65N×158°.91E, h38km±37km, ML4.8*
*ISCJB **03** 06:44:50.2±1.1, 49°.59N±0°.03×158°.69E±0°.07, h26km±8km, mb4.1/26, MS3.6/5, Error ellipse: s-maj=7.6km s-min=4.1km az=17.1*
*MOS **03** 06:44:51.4±0.8, 49°.62N×158°.55E, h36km, mb4.3/16, Error ellipse: s-maj=12.1km s-min=4.3km az=87.3*
*NEIC **03** 06:44:52.2±2.2, 49°.56N±0°.06×158°.63E±0°.05, h33km±15km, n117, σ1s23/138, mb4.2/26, MS3.7/5, 3C-6D, East of Kuril Islands*

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.97** | **306** | *e*P | | | **Pn** | **06 45 22.4** | **-1.3** |
| SKR | | | | *e*S | | | **Sn** | **06 45 46.1** | **-1.1** |
| **SKR** | **Severo-Kuril's** | **1.97** | **306** | *i* PN | | | Pn | 06 45 18.5 | -5.2 |
| SKR | | | | *i* S | | | **Sn** | **06 45 42.0** | **-5.2** |
| SKR | | | | | pmax | pmax | | | |
| | comp=N,270nm,0.3s | | | | | | | | |
| SKR | | | | | pmax | pmax | | | |
| | comp=E,370nm,0.3s | | | | | | | | |
| SKR | | | | | pmax | pmax | | | |
| | comp=Z,920nm,0.3s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=N,4μm,0.5s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=E,5μm,0.5s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=N,5μm,1.0s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=E,8μm,1.0s | | | | | | | | |
| **PAU** | **Pauzhetka** | **2.23** | **329** | *e*P | | | **Pn** | **06 45 27.3** | **0.0** |
| PAU | | | | *e*S | | | **Sn** | **06 45 53.8** | **+0.1** |
| **PAU** | **Pauzhetka** | **2.23** | **329** | PN | | | **Pn** | **06 45 27.5** | **+0.2** |
| PAU | | | | S | | | **Sn** | **06 45 53.8** | **+0.1** |
| **RUS** | **Russkaya** | **2.88** | **359** | *e*P | | | **Pn** | **06 45 34.7** | **-1.5** |
| RUS | | | | *e*S | | | **Sn** | **06 46 06.9** | **-2.7** |
| **RUS** | **Russkaya** | **2.88** | **359** | PN | | | **Pn** | **06 45 34.7** | **-1.5** |
| RUS | | | | S | | | **Sn** | **06 46 06.9** | **-2.7** |
| **MTVR** | **Mutnovka** | **2.94** | **355** | *e*P | | | **Pn** | **06 45 36.0** | **-1.2** |
| MTVR | | | | *e*S | | | **Sn** | **06 46 09.3** | **-2.1** |
| **MIPR** | **Malaya Ipel'ka** | **2.96** | **337** | *e*P | | | **Pn** | **06 45 37.8** | **+0.4** |
| **GRL** | **Gorelyy** | **3.01** | **354** | *e*S | | | **Sn** | **06 46 11.9** | **-1.3** |
| **PET** | **Petropavlovsk** | **3.47** | **0** | *e*P | | | **Pn** | **06 45 43.5** | **-0.8** |
| PET | | | | *e*S | | | **Sn** | **06 46 21.8** | **-2.3** |
| **PET** | **Petropavlovsk** | **3.47** | **0** | *k i*PN | | | **Pn** | **06 45 43.3** | **-1.0** |
| PET | | | | *e*S | | | **Sn** | **06 46 21.6** | **-2.5** |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,200nm,0.4s | | | | | | | | |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,281nm,0.5s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=N,500nm,0.6s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=E,610nm,0.6s | | | | | | | | |
| PET | | | | | smax | smax | | | |
| | comp=N,736nm,0.5s | | | | | | | | |
| PET | | | | | MLR | MLR | | | |
| | comp=Z,200nm,11.0s | | | | | | | | |
| PET | | | | | MLR | MLR | | | |
| | comp=Z,400nm,11.0s | | | | | | | | |
| **PET** | **Petropavlovsk** | **3.47** | **0** | *e*Pn | | | **Pn** | **06 45 43.3** | **-1.0** |
| PET | | | | *e*Sn | | | **Sn** | **06 46 20.6** | **-3.6** |
| **PETK** | **Petropavlovsk-** | **3.60** | **351** | Pn | | | **Pn** | **06 45 46.0** | **-0.1** |
| | comp=Z,5.3nm,0.3s,baz=137,slow=17,SNR=50 | | | | | | | | |
| PETK | | | | | Sn | | **Sn** | **06 46 27.9** | **+0.4** |
| | comp=Z,9.2nm,0.3s,baz=145,slow=16,SNR=6.1 | | | | | | | | |
| PETK | | | | | LR | LR | | 06 47 25.2 | |
| | comp=Z,154nm,18.1s,baz=150,slow=44 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.60** | **351** | PN | | | **Pn** | **06 45 46.0** | **-0.1** |
| PETK | | | | | | | | 06 46 27.9 | |
| PETK | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.3s | | | | | | | | |
| PETK | | | | | smax | smax | | | |
| | comp=N,9.0nm,0.3s | | | | | | | | |
| PETK | | | | | MLR | MLR | | | |
| | comp=Z,154nm,18.1s | | | | | | | | |
| **NLC** | **Nalytchevo** | **3.64** | **7** | *e*P | | | **Pn** | **06 45 44.5** | **-2.2** |
| **NLC** | **Nalytchevo** | **3.64** | **7** | PN | | | **Pn** | **06 45 44.5** | **-2.2** |
| **SPN** | **Mys Shipunski** | **3.65** | **13** | *e*P | | | **Pn** | **06 45 45.6** | **-1.2** |
| SPN | | | | *e*S | | | **Sn** | **06 46 26.3** | **-2.3** |
| **SPN** | **Mys Shipunski** | **3.65** | **13** | PN | | | **Pn** | **06 45 45.7** | **-1.1** |
| SPN | | | | S | | | **Sn** | **06 46 26.3** | **-2.3** |
| **UGLR** | **Uglovaya** | **3.65** | **2** | *e*P | | | **Pn** | **06 45 46.1** | **-0.9** |
| UGLR | | | | *e*S | | | **Sn** | **06 46 28.5** | **-0.5** |
| **SMAR** | **Somma** | **3.71** | **2** | *e*P | | | **Pn** | **06 45 46.9** | **-0.9** |
| SMAR | | | | *e*S | | | **Sn** | **06 46 30.6** | **+0.2** |
| **SMAR** | **Somma** | **3.71** | **2** | PN | | | **Pn** | **06 45 46.9** | **-0.9** |
| SMAR | | | | S | | | **Sn** | **06 46 30.6** | **+0.2** |
| **AVH** | **Avacha** | **3.71** | **1** | *e*P | | | **Pn** | **06 45 47.1** | **-0.6** |
| AVH | | | | *e*S | | | **Sn** | **06 46 30.7** | **+0.4** |
| **AVH** | **Avacha** | **3.71** | **1** | PN | | | **Pn** | **06 45 47.3** | **-0.4** |
| AVH | | | | S | | | **Sn** | **06 46 30.7** | **+0.4** |
| **SDLR** | **Sedlovina** | **3.72** | **2** | *e*P | | | **Pn** | **06 45 46.5** | **-1.5** |
| **SDLR** | **Sedlovina** | **3.72** | **2** | PN | | | **Pn** | **06 45 46.5** | **-1.5** |
| **KOK** | **Koryaka** | **3.73** | **0** | *e*P | | | **Pn** | **06 45 48.0** | **-0.1** |
| KOK | | | | *e*S | | | **Sn** | **06 46 30.5** | **-0.4** |
| **KOK** | **Koryaka** | **3.73** | **0** | PN | | | **Pn** | **06 45 48.0** | **-0.1** |
| KOK | | | | S | | | **Sn** | **06 46 30.5** | **-0.4** |
| **KRX** | **Arik** | **3.80** | **0** | *e*P | | | **Pn** | **06 45 48.5** | **-0.5** |
| KRX | | | | *e*S | | | **Sn** | **06 46 32.9** | **+0.2** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| GNL | Ganaly | 4.16 | 354 | eP | Pn | 06 45 54.5 | +0.6 |
| GNL | | | | eS | Sn | 06 46 42.0 | +0.5 |
| GNL | Ganaly | 4.16 | 354 | PN | Pn | 06 45 54.7 | +0.8 |
| GNL | | | | S | Sn | 06 46 42.0 | +0.5 |
| KII | Karymskiy | 4.51 | 6 | eP | Pn | 06 45 58.5 | -0.2 |
| KII | | | | eS | Sn | 06 46 49.5 | -0.5 |
| KII | Karymskiy | 4.51 | 6 | PN | Pn | 06 45 58.2 | -0.5 |
| KII | | | | S | Sn | 06 46 49.5 | -0.5 |
| MKZ | Mys Kozlova | 5.35 | 20 | PN | Pn | 06 46 08.2 | -2.0 |
| KZV | Kizimen | 5.65 | 10 | eP | Pn | 06 46 14.1 | -0.3 |
| KZV | | | | eS | Sn | 06 47 16.2 | -2.0 |
| TUMR | Tumrok | 5.80 | 9 | eP | Pn | 06 46 16.8 | +0.3 |
| TUMR | Tumrok | 5.80 | 9 | PN | Pn | 06 46 16.8 | +0.3 |
| KMNR | Kamenistaya | 6.28 | 8 | eP | Pn | 06 46 24.2 | +1.2 |
| KMNR | Kamenistaya | 6.28 | 8 | PN | Pn | 06 46 24.2 | +1.2 |
| BZMR | Bezymyannaya | 6.48 | 9 | eP | Pn | 06 46 26.8 | +1.0 |
| KIRR | Kirishev | 6.49 | 9 | eP | Pn | 06 46 26.5 | +0.6 |
| KPT | Kopyto | 6.49 | 8 | eP | Pn | 06 46 26.7 | +0.9 |
| KPT | Kopyto | 6.49 | 8 | PN | Pn | 06 46 26.7 | +0.9 |
| BZWR | Bezymyannyi-We | 6.51 | 9 | P | Pn | 06 46 27.0 | +0.8 |
| KOZ | Kozyrevsk | 6.55 | 6 | eP | Pn | 06 46 27.1 | +0.5 |
| KOZ | Kozyrevsk | 6.55 | 6 | PN | Pn | 06 46 27.1 | +0.5 |
| SRDR | Sredinnyy | 6.80 | 5 | eP | Pn | 06 46 30.1 | 0.0 |
| SRDR | Sredinnyy | 6.80 | 5 | PN | Pn | 06 46 30.1 | 0.0 |
| KLY | Klyuchi | 6.87 | 9 | eP | Pn | 06 46 31.7 | +0.7 |
| KBTR | Krutoberegovo | 7.12 | 19 | eP | Pn | 06 46 33.4 | -1.0 |
| KBTR | | | | eS | Sn | 06 47 50.7 | -3.4 |
| KBTR | Krutoberegovo | 7.12 | 19 | PN | Pn | 06 46 33.4 | -1.0 |
| KBG | Krutoberegovo | 7.14 | 19 | P | Pn | 06 46 34.6 | -0.1 |
| SMKR | Semkarok | 7.24 | 13 | PN | Pn | 06 46 35.9 | -0.2 |
| SRKR | Sorokina | 7.27 | 11 | PN | Pn | 06 46 37.0 | +0.5 |
| KUR | Kuril'sk | 8.49 | 243 | ⇑PN | Pn | 06 47 03.2 | +10 |
| KUR | | | | S | Sn | 06 48 41.2 | +13 |
| KUR | | | | pmax | pmax | | |
| | comp=N,18nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,18nm,0.5s | | | | | | |
| YUK | Yuzh-Kuril'sk | 10.35 | 243 | ⇓PN | Pn | 06 47 30.2 | +12 |
| YUK | | | | S | Sn | 06 49 28.9 | +15 |
| YUK | | | | pmax | pmax | | |
| | comp=N,22nm,0.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,34nm,0.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,45nm,0.6s | | | | | | |
| UGL | Uglegorsk | 10.83 | 274 | PN | Pn | 06 47 25.7 | +0.5 |
| UGL | | | | eSS | Sn | 06 49 37.0 | +12 |
| ASAJ | Asahikawa | 12.25 | 250 | Pn | Pn | 06 47 44.0 | -0.7 |
| | comp=Z,0.6nm,0.3s,baz=83,slow=14,SNR=4.3 | | | | | | |
| ASAJ | Asahikawa | 12.25 | 250 | PN | Pn | 06 47 44.0 | -0.7 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| SEY | Seymchan | 13.83 | 348 | Pn | P | 06 48 10.4 | -3.7 |
| | comp=Z,0.4nm,0.3s,baz=197,slow=12,SNR=9.3 | | | | | | |
| HABR | Khabarovsk | 15.50 | 275 | eP | Pn | 06 48 28.9 | +0.3 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,42nm,1.9s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,55nm,15.0s | | | | | | |
| BILL | Bilibino | 18.92 | 9 | ⇓eP | Pn | 06 49 12.0 | +0.9 |
| BILL | | | | eS | Sn | 06 52 40.2 | -1.5 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,116nm,18.0s | | | | | | |
| USRK | Ussuriysk Ar. | 18.93 | 264 | P | Pn | 06 49 10.9 | -0.5 |
| | comp=Z,0.2nm,0.3s,baz=74,slow=12,SNR=3.9 | | | | | | |
| MJAR | Matsushiro Arr | 19.72 | 236 | P | Pn | 06 49 20.7 | -0.3 |
| | comp=Z,0.1nm,0.3s,baz=19,slow=12,SNR=4.4 | | | | | | |
| YAK | Yakutsk | 20.29 | 319 | P | P | 06 49 24.9 | -0.4 |
| | comp=Z,11nm,0.7s,baz=109,slow=22,SNR=4.6 | | | | | | |
| YAK | | | | LR | LR | 06 57 12.4 | |
| | comp=Z,51nm,20.4s,baz=56,slow=37 | | | | | | |
| YAK | Yakutsk | 20.29 | 319 | eP | P | 06 49 24.0 | -1.3 |
| YAK | | | | e | | 06 53 02.6 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,34nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,17nm,1.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,8.0nm,1.0s | | | | | | |
| KSRS | Korea Array | 25.16 | 253 | P | P | 06 50 15.0 | +0.2 |
| | comp=N,1.4nm,0.8s,baz=45,slow=10,SNR=2.5 | | | | | | |
| KSRS | Korea Array | 25.16 | 253 | P | P | 06 50 15.0 | +0.2 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| KSAR | Wonju Array Be | 25.19 | 253 | P | P | 06 50 15.0 | -0.1 |
| KSAR | Wonju Array Be | 25.19 | 253 | P | P | 06 50 15.0 | -0.1 |
| JNU | Nakatsue | 26.32 | 242 | P | P | 06 50 25.8 | +0.5 |
| | comp=Z,6.8nm,1.0s,baz=152,slow=15,SNR=1.7 | | | | | | |
| KDAK | Kodiak Island | 29.46 | 55 | P | P | 06 50 53.4 | +0.3 |
| | comp=Z,7.0nm,0.8s,baz=270,slow=20,SNR=3.6 | | | | | | |
| KDAK | Kodiak Island | 29.46 | 55 | P | P | 06 50 53.4 | +0.3 |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 30.49 | 165 | T | T | 07 25 18.4 | |
| | baz=348,slow=76,SNR=3.9 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 30.51 | 164 | T | T | 07 25 14.4 | |
| | baz=348,slow=76,SNR=4.9 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 30.51 | 165 | T | T | 07 25 23.8 | |
| | baz=348,slow=76,SNR=3.7 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 31.66 | 165 | T | T | 07 26 48.6 | |
| | baz=351,slow=74 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 31.67 | 165 | T | T | 07 26 43.9 | |
| | baz=351,slow=74 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 31.67 | 165 | T | T | 07 26 43.2 | |
| | baz=351 | | | | | | |
| ILAR | Eielson Array | 32.02 | 41 | P | P | 06 51 15.4 | -0.3 |
| | comp=Z,0.9nm,0.9s,baz=262,slow=8.2,SNR=7.5 | | | | | | |
| ILAR | Eielson Array | 32.02 | 41 | P | P | 06 51 15.4 | -0.3 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| ULN | Ulaanbaatar | 33.53 | 287 | ceP | P | 06 51 32.1 | +2.9 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,2.5s | | | | | | |
| HHC | Hu-ho-hao-te | 33.80 | 273 | eP | P | 06 51 34.5 | +2.9 |
| HHC | | | | PP | PP | 06 52 46.5 | -1.8 |
| HHC | | | | S | S | 06 56 49.4 | -3.9 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,71nm,4.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,120nm,13.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,220nm,14.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,120nm,14.8s | | | | | | |
| INK | Inuvik | 37.27 | 35 | P | P | 06 52 01.1 | +0.2 |
| | comp=Z,5.1nm,0.8s,baz=291,slow=6.5,SNR=7.6 | | | | | | |
| INK | Inuvik | 37.27 | 35 | P | P | 06 52 01.1 | +0.2 |
| INK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| ZALV | Zalesovo Beam | 43.99 | 305 | P | P | 06 52 56.2 | -0.3 |
| | comp=Z,0.4nm,0.3s,baz=43,slow=4.3,SNR=2.7 | | | | | | |
| MKAR | Makanchi Array | 48.92 | 298 | P | P | 06 53 35.9 | +0.6 |
| | comp=Z,0.6nm,0.5s,baz=61,slow=5.1,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 48.92 | 298 | P | P | 06 53 35.9 | +0.6 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| BRVK | Borovoye | 51.94 | 310 | ceP | P | 06 53 59.9 | +1.9 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| ARU | Arti | 55.40 | 318 | d iP | P | 06 54 26.1 | +2.8 |
| ARU | | | | | | 06 56 29.7 | |
| ARU | | | | S | S | 07 02 08.2 | +2.9 |
| ARU | | | | SS | SS | 07 05 48.3 | -1.0 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,12nm,2.5s | | | | | | |
| ARCES | ARCESS Array B | 56.36 | 342 | P | P | 06 54 30.1 | +0.1 |
| | comp=Z,2.1nm,0.8s,baz=10,slow=6.4,SNR=5.3 | | | | | | |
| ARCES | ARCESS Array B | 56.36 | 342 | P | P | 06 54 30.1 | +0.1 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| KKAR | Karatay Array | 57.83 | 300 | eP | P | 06 54 41.3 | +0.5 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| KKAR | Karatay Array | 57.83 | 300 | eP | P | 06 54 41.3 | +0.5 |
| | comp=Z,0.7nm,0.8s | | | | | | |
| NVAR | Mina Array Bea | 57.89 | 67 | P | P | 06 54 41.7 | +0.2 |
| | comp=Z,0.9nm,0.7s,baz=291,slow=8.1,SNR=7.0 | | | | | | |
| ABKAR | Akbulak array | 59.41 | 311 | eP | P | 06 54 51.5 | -0.1 |
| | comp=Z,1.3nm,0.6s | | | | | | |
| ULM | Lac du Bonnet | 61.95 | 45 | P | P | 06 55 09.5 | +0.6 |
| | comp=Z,1.6nm,0.6s,baz=131,slow=9.3,SNR=2.7 | | | | | | |
| ULM | Lac du Bonnet | 61.95 | 45 | P | P | 06 55 09.5 | +0.6 |
| ULM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| FINES | FINESS Array B | 63.00 | 337 | P | P | 06 55 15.9 | +0.1 |
| | comp=Z,2.1nm,0.6s,baz=57,slow=5.2,SNR=7.5 | | | | | | |
| FINES | FINESS Array B | 63.00 | 337 | i P | P | 06 55 15.8 | +0.1 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| OBN | Obninsk | 65.00 | 328 | deP | P | 06 55 29.7 | +0.8 |
| OBN | | | | e | | 06 57 51.1 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.4s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,64nm,19.0s | | | | | | |
| NB2 | NORSAR Subarra | 66.67 | 343 | P | P | 06 55 39.7 | 0.0 |
| | comp=Z,3.8nm,0.7s,baz=23,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 66.67 | 343 | P | P | 06 55 40.0 | +0.3 |
| | comp=Z,3.2nm,0.8s,baz=25,slow=6.4,SNR=3.4 | | | | | | |
| NOA | NORSAR Array B | 66.67 | 343 | P | P | 06 55 40.0 | +0.3 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| GEYT | Alibeck | 68.24 | 303 | P | P | 06 55 50.6 | +0.6 |
| | comp=Z,0.7nm,0.3s,baz=239,slow=37,SNR=3.3 | | | | | | |
| SCHQ | Schefferville | 69.22 | 26 | P | P | 06 55 55.9 | +0.2 |
| | comp=Z,1.9nm,0.5s,baz=18,slow=20,SNR=3.4 | | | | | | |
| AKASG | Malin Array Be | 71.16 | 329 | P | P | 06 56 07.3 | -0.4 |
| | comp=Z,0.5nm,0.3s,baz=36,slow=6.6,SNR=5.7 | | | | | | |
| AKASG | | | | LR | LR | 07 31 24.1 | |
| | comp=Z,38nm,18.2s,baz=295,slow=39 | | | | | | |
| AKASG | Malin Array Be | 71.16 | 329 | P | P | 06 56 07.3 | -0.4 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| AKASG | | | | MLR | MLR | | |
| | comp=Z,38nm,18.2s | | | | | | |
| WRA | Warramunga Arr | 72.48 | 204 | P | P | 06 56 15.5 | -0.4 |
| | comp=Z,1.9nm,0.7s,baz=20,slow=6.3,SNR=9.1 | | | | | | |
| WRA | Warramunga Arr | 72.48 | 204 | P | P | 06 56 15.5 | -0.4 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 72.92 | 65 | P | P | 06 56 19.0 | +0.3 |
| | comp=Z,1.4nm,0.7s,baz=302,slow=5.0,SNR=23 | | | | | | |
| TXAR | Lajitas Array | 72.92 | 65 | P | P | 06 56 19.0 | +0.3 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| ASAR | Alice Springs | 76.15 | 203 | P | P | 06 56 38.2 | +1.0 |
| | comp=Z,0.7nm,0.6s,baz=17,slow=5.6,SNR=9.6 | | | | | | |
| ASAR | Alice Springs | 76.15 | 203 | P | P | 06 56 38.2 | +1.0 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| KHC | Kasperske Hory | 77.19 | 337 | eP | P | 06 56 43.6 | +0.6 |
| KHC | Kasperske Hory | 77.19 | 337 | eP | P | 06 56 43.6 | +0.6 |
| GERES | GERESS Array B | 77.42 | 337 | P | P | 06 56 43.6 | -0.7 |
| | comp=Z,0.3nm,0.6s,baz=29,slow=3.0,SNR=3.7 | | | | | | |
| GERES | | | | LR | LR | 07 37 44.1 | |
| | comp=Z,30nm,18.7s,baz=82,slow=41 | | | | | | |
| SNAA | Sanae | 156.25 | 194 | ePKPdf | PKPdf | 07 04 42.4 | +0.1 |
| SNAA | | | | ePKPab | PKPab | 07 05 08.6 | -2.0 |

*ISCJB **03** 06:49:51.7±0.4, 51°.56N±0°.02×16°.11E±0°.03, h0$^{km}$, Error ellipse: s-maj=3.0km s-min=2.8km az=43.9*
*CSEM **03** 06:49:53.4±0.1, 51°.55N×16°.08E, h2$^{km}$, ML3.4/9, Error ellipse: s-maj=3.6km s-min=2.6km az=92.0*
*VIE **03** 06:49:56.5±0.7, 51°.32N×16°.15E, h0$^{km}$, mb2.3/4, ml2.8/4, Error ellipse: s-maj=6.0km s-min=4.5km az=24.0, Suspected Mining induced.*
*UPP **03** 06:49:59.5, 51°.94N×15°.63E, h0$^{km}$, ML1.8, Suspected Mining explosion.*
**ISC 03 06:49:53.2**±0.8**, 51°.60N**±0°.03×**16°.03E**±0°.02**, h0**$^{km}$**, n45, σ1§20**/88**, 4C-1D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.78 | 168 | i Pg | Pg | 06 50 08.2 | +0.1 |
| KSP | | | | i Sg | Sg | 06 50 17.8 | -0.4 |
| KSP | Ksiaz | 0.78 | 168 | ⇓iPg | Pg | 06 50 08.2 | +0.1 |
| KSP | | | | i Sg | Sg | 06 50 17.8 | -0.4 |
| UPC | Upice | 1.10 | 181 | ePG | Pg | 06 50 14.2 | 0.0 |
| UPC | | | | eSG | Sg | 06 50 27.8 | -0.6 |
| | comp=Z,117nm,0.2s | | | | | | |
| UPC | Upice | 1.10 | 181 | Pg | Pg | 06 50 14.2 | 0.0 |
| UPC | | | | Sg | Sg | 06 50 27.8 | -0.6 |
| | 117nm,0.2s | | | | | | |
| DPC | Dobruska-Polom | 1.27 | 172 | ePG | Pg | 06 50 17.1 | -0.4 |
| DPC | | | | eSG | Sg | 06 50 32.1 | -1.8 |
| | comp=Z,39nm,0.3s | | | | | | |
| DPC | Dobruska-Polom | 1.27 | 172 | Pg | Pg | 06 50 17.1 | -0.4 |
| DPC | | | | Sg | Sg | 06 50 32.1 | -1.8 |
| | 39nm,0.3s | | | | | | |
| PVCC | Panska Ves | 1.42 | 221 | ePG | Pb | 06 50 20.9 | +0.4 |
| PVCC | | | | eSG | Sn | 06 50 39.5 | -0.1 |
| | comp=Z,176nm,0.3s | | | | | | |
| PVCC | Panska Ves | 1.42 | 221 | Pg | Pb | 06 50 20.9 | +0.4 |
| PVCC | | | | Sg | Sn | 06 50 39.5 | -0.1 |
| | 176nm,0.3s | | | | | | |
| BRG | Berggiesshubel | 1.50 | 242 | PN | Pb | 06 50 21.9 | -0.1 |
| BRG | | | | PG | Pg | 06 50 22.7 | +0.7 |
| BRG | | | | SG | Sn | 06 50 42.8 | +1.1 |
| | 62nm,0.5s | | | | | | |
| KRLC | Kraliky | 1.60 | 162 | ePG | Pn | 06 50 23.1 | +0.3 |
| KRLC | | | | eSG | Sn | 06 50 42.7 | -1.5 |
| KRLC | Kraliky | 1.60 | 162 | Pg | Pn | 06 50 23.1 | +0.3 |
| KRLC | | | | Sg | Sn | 06 50 42.7 | -1.5 |
| PRA | Prague | 1.84 | 214 | ePN | Pn | 06 50 25.9 | -0.1 |
| PRA | | | | ePG | Pb | 06 50 27.7 | 0.0 |
| PRA | | | | eSG | Sb | 06 50 51.7 | +0.5 |
| | comp=Z,25nm,0.4s | | | | | | |
| PRA | Prague | 1.84 | 214 | Pn | Pn | 06 50 25.9 | -0.1 |
| GOPC | GO Pecny, Ondr | 1.87 | 206 | ePN | Pn | 06 50 26.0 | -0.4 |
| GOPC | | | | ePG | Pb | 06 50 27.5 | -0.7 |
| GOPC | | | | eSG | Sn | 06 50 51.4 | +0.7 |
| GOPC | GO Pecny, Ondr | 1.87 | 206 | Pn | Pn | 06 50 26.0 | -0.4 |
| PRU | Pruhonice | 1.87 | 211 | ePG | Pb | 06 50 28.3 | 0.0 |
| PRU | | | | eSG | Sb | 06 50 52.3 | +0.1 |
| | comp=Z,43nm,0.2s | | | | | | |
| PRU | Pruhonice | 1.87 | 211 | Pg | Pb | 06 50 28.3 | 0.0 |
| PRU | | | | Sg | Sb | 06 50 52.3 | +0.1 |
| | 43nm,0.2s | | | | | | |
| CLL | Collm | 1.92 | 262 | ePn | Pn | 06 50 27.0 | -0.1 |
| CLL | | | | ePg | Pg | 06 50 30.0 | +0.1 |
| CLL | | | | e | | 06 50 34.0 | |
| CLL | | | | eSg | Sg | 06 50 56.0 | +1.2 |
| | comp=Z,30nm,0.6s | | | | | | |
| MORC | Moravsky Berou | 2.06 | 152 | ePn | Pn | 06 50 28.6 | -0.6 |
| MORC | | | | eSg | Sn | 06 50 56.5 | +0.9 |
| OKC | Ostrava-Krasne | 2.22 | 142 | ePG | Pb | 06 50 33.7 | -0.5 |
| OKC | | | | eSG | Sb | 06 51 02.0 | -0.2 |
| | comp=Z,37nm,0.7s | | | | | | |
| OKC | Ostrava-Krasne | 2.22 | 142 | Pg | Pb | 06 50 33.7 | -0.5 |
| OKC | | | | Sg | Sb | 06 51 02.0 | -0.2 |
| | comp=Z,37nm,0.7s | | | | | | |
| VRAC | Vranov | 2.33 | 171 | ePn | Pn | 06 50 32.5 | -0.2 |
| VRAC | | | | eSg | Sn | 06 51 03.8 | +1.8 |
| OJC | Ojcow | 2.76 | 119 | ePn | Pn | 06 50 36.8 | -1.9 |
| OJC | | | | ePg | Pg | 06 50 46.5 | +0.5 |
| OJC | | | | eSg | Sg | 06 51 21.8 | 0.0 |
| OJC | Ojcow | 2.76 | 119 | ePn | Pn | 06 50 36.8 | -1.9 |
| KHC | Kasperske Hory | 2.93 | 213 | ePN | Pn | 06 50 40.9 | -0.2 |
| KHC | | | | ePG | Pb | 06 50 47.2 | +0.9 |
| KHC | | | | eSN | Sn | 06 51 15.6 | -1.4 |
| KHC | | | | eSG | Sg | 06 51 25.3 | -2.0 |
| | comp=Z,10.0nm,0.4s | | | | | | |
| KHC | Kasperske Hory | 2.93 | 213 | Pn | Pn | 06 50 40.9 | -0.2 |
| LANS | Liptovska Anna | 3.30 | 137 | ePN | Pn | 06 50 44.8 | -1.3 |
| LANS | | | | ePG | Pb | 06 50 54.4 | +1.8 |
| LANS | | | | eSG | Sg | 06 51 37.2 | -1.9 |
| LANS | Liptovska Anna | 3.30 | 137 | ePn | Pn | 06 50 44.8 | -1.3 |
| NIE | Niedzica | 3.49 | 127 | eP | Pg | 06 50 59.7 | -0.4 |
| NIE | | | | eS | Sg | 06 51 44.9 | -0.5 |
| BSD | Bornholm Skovb | 3.58 | 350 | i P | Pn | 06 50 50.1 | +0.2 |
| BSD | | | | i S | Sn | 06 51 31.0 | -1.9 |
| BSD | Bornholm Skovb | 3.58 | 350 | i P | Pn | 06 50 50.1 | +0.2 |
| BSD | | | | i S | Sn | 06 51 31.0 | -1.9 |
| VYHS | Vyhne | 3.60 | 149 | ePN | Pn | 06 50 49.4 | -0.8 |
| VYHS | | | | eSG | Sb | 06 51 45.0 | +3.1 |
| VYHS | Vyhne | 3.60 | 149 | ePn | Pn | 06 50 49.4 | -0.8 |
| VYHS | | | | eSg | Sb | 06 51 45.0 | +3.1 |
| MOA | Molln | 3.93 | 198 | ⇑iPn | Pn | 06 50 55.5 | +0.7 |
| | comp=Z,2.2nm,0.2s | | | | | | |
| MOA | | | | ⇑eSg | Sg | 06 51 57.6 | -1.6 |
| | comp=Z,4.4nm,0.3s | | | | | | |
| MOA | Molln | 3.93 | 198 | Pn | Pn | 06 50 55.5 | +0.7 |
| | comp=Z,2.2nm,0.2s | | | | | | |
| MOA | | | | Sg | Sg | 06 51 57.7 | -1.6 |
| | comp=Z,4.4nm,0.3s | | | | | | |
| STHS | Stebnicka Huta | 3.98 | 121 | ePG | Pg | 06 51 12.6 | +3.1 |
| STHS | | | | eSG | Sg | 06 52 00.0 | -1.1 |
| STHS | Stebnicka Huta | 3.98 | 121 | ePg | Pg | 06 51 12.6 | +3.1 |
| STHS | | | | eSg | Sg | 06 52 00.0 | -1.1 |
| ARSA | Arzberg | 4.37 | 185 | ⇑iPn | Pn | 06 51 01.1 | +0.3 |
| | comp=Z,1.2nm,0.2s | | | | | | |
| ARSA | | | | ⇑Sg | Sg | 06 52 11.7 | -1.8 |
| | comp=Z,8.6nm,0.6s | | | | | | |
| ARSA | Arzberg | 4.37 | 185 | Pn | Pn | 06 51 01.1 | +0.3 |
| | comp=Z,1.2nm,0.2s | | | | | | |
| ARSA | | | | Sg | Sg | 06 52 11.7 | -1.8 |
| | comp=Z,8.6nm,0.6s | | | | | | |
| BLEU | Blekinge | 4.71 | 359 | P | Pn | 06 51 06.0 | +0.5 |
| BLEU | | | | S | Sn | 06 51 57.8 | -3.0 |
| OSKU | Oskarshamn | 5.60 | 0 | P | Pn | 06 51 18.5 | +0.8 |
| BYXU | Byxelkrok | 5.73 | 5 | P | Pn | 06 51 20.2 | +0.8 |
| ASPU | Aespoe | 5.84 | 3 | P | Pn | 06 51 21.8 | +0.9 |
| EKSU | Eksjoe | 6.00 | 356 | P | Pn | 06 51 23.8 | +0.7 |
| VSTU | Vaestervik | 6.08 | 3 | P | Pn | 06 51 25.2 | +1.0 |

*ISCJB **03** 07:30:59.5±2.8, 16°.58S±0°.05×167°.46E±0°.06, h15$^{km}$±20$^{km}$, mb4.8/39, MS4.4/20, Error ellipse: s-maj=9.5km s-min=7.0km az=148.8*
*MOS **03** 07:31:02.0±1.1, 16°.58S×167°.47E, h33$^{km}$, mb5.2/15, Error ellipse: s-maj=13.0km s-min=9.6km az=122.7*
*IDC **03** 07:31:03.0±0.6, 16°.62S×167°.52E, h27$^{km}$±3$^{km}$, mb4.3/19, mb1 4.4/19, mb1mx4.2/33, mbtmp4.5/19, ML5.3/1, MS4.3/20, Ms1 4.3/20, ms1mx4.2/31, Error ellipse: s-maj=20.9km s-min=12.6km az=87.0*
*GCMT **03** 07:31:04.4±0.2, 16°.63S×167°.24E, h31$^{km}$±1$^{km}$, MW5.2/86, Moment Tensor Solution. s60,c86; s86,c135; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$2.26±.20; $M_{\theta\theta}$-2.48±.18; $M_{\phi\phi}$0.22±.18; $M_{r\theta}$-3.59±.27; $M_{\theta\phi}$5.94±.12; $M_{\phi r}$-0.96±.24; Best double couple: $M_0$7.37000×$10^{16}$ NP1:$\phi_s$269.00000°, δ77.00000°, λ35.00000°. NP2: $\phi_s$170.00000°, δ56.00000°, λ164.00000°. Principal axes: T 6.9970, Plg34.0000°, Azm135.0000°; N 0.7520, Plg53.0000°, Azm287.0000°; P -7.7440, Plg13.0000°, Azm35.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC **03** 07:31:04.4±1.0, 16°.65S×167°.51E, h38$^{km}$±9$^{km}$, mb4.9/12 Error ellipse: s-maj=8.5km s-min=6.9km az=72.0*
*BJI **03** 07:31:04.4, 16°.24S×167°.69E, h42$^{km}$, mb4.8/32, mB5.0/23, Ms4.8/18, Ms7 4.5/16*
*AUST **03** 07:31:18.9, 17°.47S×166°.87E, h100$^{km}$*
**ISC 03 07:31:03.2**±0.5**, 16°.71S**±0°.04×**167°.49E**±0°.07**, h30**$^{km}$±3$^{km}$**, h29**$^{km}$**:pP-P, n141, σ1§72**/152**, mb4.9**/38**, MS4.4**/20**, 10C-3D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 5.42 | 190 | ePn | Pn | 07 32 21.6 | -0.6 |
| | 378nm,0.3s | | | | | | |
| DZM | | | | eSn | Sn | 07 33 20.8 | -2.9 |
| | 197nm,0.2s | | | | | | |
| DZM | Mont Dzumac | 5.42 | 190 | Pn | Pn | 07 32 21.5 | -0.8 |
| | 101nm,0.3s,baz=359,slow=2.7,SNR=739 | | | | | | |
| DZM | | | | Sn | Sn | 07 33 21.0 | -2.8 |
| | 44nm,0.3s,baz=360,slow=21,SNR=7.8 | | | | | | |
| DZM | | | | LR | LR | 07 34 20.2 | |
| | comp=Z,5μm,20.4s,baz=1.5,slow=36 | | | | | | |
| DZM | Mont Dzumac | 5.42 | 190 | Pn | Pn | 07 32 21.5 | -0.8 |
| | 22nm,0.6s | | | | | | |
| DZM | | | | eSn | Sn | 07 33 20.3 | -3.4 |
| DZM | | | | Sn | Sn | 07 33 21.0 | -2.8 |
| MSVF | Nonsavu | 10.14 | 97 | eP | Pn | 07 33 28.6 | +1.6 |
| MSVF | Nonsavu | 10.14 | 97 | ePn | Pn | 07 33 28.6 | +1.6 |
| HNR | Honiara | 10.31 | 314 | LR | LR | 07 37 27.7 | |
| | comp=Z,1μm,19.7s,baz=150,slow=38 | | | | | | |
| HNR | Honiara | 10.31 | 314 | eP | Pn | 07 33 29.8 | +0.6 |
| HNR | | | | pmax | pmax | | |
| | comp=Z,778nm,0.9s | | | | | | |
| HNR | Honiara | 10.31 | 314 | eP | Pn | 07 33 28.0 | -1.2 |
| HNR | | | | S | Sn | 07 35 21.0 | -2.9 |
| HNR | Honiara | 10.31 | 314 | ePn | Pn | 07 33 29.8 | +0.6 |
| | comp=Z,778nm,0.9s | | | | | | |
| EIDS | Eidsvold | 17.56 | 238 | P | P | 07 35 07.4 | +0.6 |
| | baz=17,SNR=9.6 | | | | | | |
| EIDS | Eidsvold | 17.56 | 238 | ePn | P | 07 35 08.0 | +1.2 |
| | comp=Z,278nm,2.0s | | | | | | |
| RAO | Raoul Island | 18.32 | 136 | LR | LR | 07 41 01.3 | |
| | comp=Z,1μm,18.2s,baz=318,slow=33 | | | | | | |
| OUZ | Omahuta | 19.23 | 165 | PN | Pn | 07 35 28.0 | +1.9 |
| OUZ | Omahuta | 19.23 | 165 | eP | Pn | 07 35 26.5 | +0.4 |
| | comp=Z,138nm,1.4s | | | | | | |
| ARMA | Armidale | 19.91 | 224 | P | Pn | 07 35 42.3 | +7.9 |
| | baz=19,SNR=17 | | | | | | |
| ARMA | Armidale | 19.91 | 224 | eP | Pn | 07 35 34.7 | +0.3 |
| | comp=Z,52nm,1.3s | | | | | | |
| RMQ | Roma | 19.93 | 238 | P | Pn | 07 35 35.3 | +0.7 |
| | baz=19,SNR=7.9 | | | | | | |
| AFI | Afiamalu | 20.19 | 85 | LR | LR | 07 41 25.6 | |
| | comp=Z,434nm,19.7s,baz=252,slow=31 | | | | | | |
| CTA | Charters Tower | 20.43 | 257 | P | Pn | 07 35 39.4 | -1.1 |
| | comp=Z,4.2nm,0.8s,baz=68,slow=14,SNR=3.4 | | | | | | |
| CTA | | | | LR | LR | 07 42 36.1 | |
| | comp=Z,547nm,21.0s,baz=83,slow=34 | | | | | | |
| PMG | Port Moresby | 21.08 | 288 | LR | LR | 07 43 23.1 | |
| | comp=Z,1μm,18.2s,baz=96,slow=35 | | | | | | |
| KUZ | Kuaotunu | 21.25 | 162 | PN | P | 07 35 48.6 | +1.6 |
| HAZ | Te Kaha | 22.84 | 159 | PN | P | 07 36 05.7 | +1.7 |
| URZ | Urewera | 23.07 | 160 | P | P | 07 36 07.9 | +1.5 |
| | comp=Z,23nm,0.7s,baz=62,slow=0.5,SNR=32 | | | | | | |
| URZ | | | | LR | LR | 07 44 24.5 | |
| | comp=Z,2μm,19.9s,baz=344,slow=35 | | | | | | |
| URZ | Urewera | 23.07 | 160 | eP | P | 07 36 07.1 | +0.7 |
| | comp=Z,645nm,1.9s | | | | | | |
| TKGZ | Te Karaka | 23.48 | 159 | PN | P | 07 36 11.0 | +0.6 |
| COVZ | Chateau Observ | 23.49 | 164 | PN | P | 07 36 13.6 | +3.0 |
| RIGZ | Rimuhau | 23.69 | 160 | PN | P | 07 36 12.8 | +0.3 |
| QLP | Quilpie | 23.71 | 242 | P | P | 07 36 12.4 | -0.3 |
| | baz=23,SNR=5.2 | | | | | | |
| BKZ | Black Stump Fm | 23.72 | 162 | PN | P | 07 36 13.8 | +1.0 |
| BKZ | Black Stump Fm | 23.72 | 162 | eP | P | 07 36 13.2 | +0.4 |
| | comp=Z,271nm,1.6s | | | | | | |
| CMSA | Cobar Meteorol | 24.70 | 229 | P | P | 07 36 22.6 | +0.7 |
| | baz=24,SNR=9.6 | | | | | | |
| CAN | Canberra | 24.82 | 218 | eP | P | 07 36 24.4 | +1.5 |
| CAN | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| CAN | Canberra | 24.82 | 218 | eP | P | 07 36 24.4 | +1.5 |
| | comp=Z,21nm,1.1s | | | | | | |
| BFZ | Birch Farm | 25.06 | 164 | eP | P | 07 36 23.3 | -1.7 |
| | comp=Z,259nm,1.5s | | | | | | |
| RPZ | Rata Peaks | 27.09 | 174 | P | P | 07 36 44.7 | +1.3 |
| | comp=Z,6.6nm,0.7s,baz=90,slow=7.1,SNR=1.9 | | | | | | |
| RPZ | | | | LR | LR | 07 46 18.8 | |
| | comp=Z,1μm,20.9s,baz=350,slow=34 | | | | | | |
| WRAB | Tennant Creek | 31.59 | 259 | ⇓iP | P | 07 37 27.7 | +4.0 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,37nm,1.2s | | | | | | |
| WRAB | Tennant Creek | 31.59 | 259 | eP | P | 07 37 24.6 | +1.0 |
| | comp=Z,10nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 31.61 | 259 | P | P | 07 37 22.8 | -1.0 |
| | comp=Z,4.2nm,1.3s,baz=89,slow=8.3,SNR=5.3 | | | | | | |
| WRA | | | | LR | LR | 07 48 33.3 | |
| | comp=Z,546nm,21.8s,baz=80,slow=33 | | | | | | |
| ASAR | Alice Springs | 32.22 | 252 | P | P | 07 37 28.4 | -0.7 |
| | comp=Z,10nm,1.1s,baz=81,slow=8.8,SNR=34 | | | | | | |
| ASAR | | | | LR | LR | 07 50 00.3 | |
| | comp=Z,814nm,18.1s,baz=84,slow=35 | | | | | | |
| KNRA | Kununurra | 37.17 | 266 | P | P | 07 38 10.5 | -1.4 |
| | baz=36,SNR=4.0 | | | | | | |
| WRKA | Warakurna | 37.44 | 251 | P | P | 07 38 13.7 | -0.5 |
| | baz=37,SNR=14 | | | | | | |
| GUMO | Guam | 37.49 | 322 | LR | LR | 07 52 02.0 | |
| | comp=Z,586nm,21.2s,baz=126,slow=34 | | | | | | |
| TBI | Tubuai | 40.87 | 106 | eLQ | LQ | 07 48 16.7 | |
| | comp=Z,976nm,29.5s | | | | | | |
| TBI | | | | eLR | LR | 07 50 00.0 | |
| | comp=Z,527nm,29.2s | | | | | | |
| PPT2 | Papeete2 | 40.97 | 98 | eLQ | LQ | 07 48 20.4 | |
| | comp=Z,2μm,34.0s | | | | | | |
| PPT2 | | | | eLR | LR | 07 49 48.6 | |
| | comp=Z,386nm,27.0s | | | | | | |
| PPT | Papeete | 40.97 | 98 | LR | LR | 07 52 34.6 | |
| | comp=Z,145nm,21.5s,baz=261,slow=32 | | | | | | |
| BATI | Baumata | 43.04 | 273 | LR | LR | 07 56 36.2 | |
| | comp=Z,650nm,20.1s,baz=123,slow=36 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MBWA** | **Marble Bar** | **45.26** | **257** | *e*P | **P** | **07 39 18.0** | **-0.4** |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **MEEK** | **Meekatharra** | **46.25** | **249** | P | **P** | **07 39 26.3** | **+0.1** |
| | baz=45,SNR=8.6 | | | | | | |
| **KLBR** | **Kellerberrin** | **47.35** | **242** | P | **P** | **07 39 34.5** | **-0.2** |
| | baz=46,SNR=8.0 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.94** | **241** | P | P | 07 39 48.8 | +9.5 |
| | baz=47,SNR=4.4 | | | | | | |
| **KAPI** | **Kappang** | **48.18** | **278** | LR | LR | 08 00 36.0 | |
| | comp=Z,182nm,20.2s,baz=112,slow=37 | | | | | | |
| **MORW** | **Morawa** | **48.63** | **246** | P | **P** | **07 39 44.4** | **-0.3** |
| | baz=48,SNR=3.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **59.75** | **333** | P | **P** | **07 41 03.9** | **-1.5** |
| | comp=Z,6.9nm,1.0s,baz=166,slow=7.0,SNR=11 | | | | | | |
| MJAR | | | | LR | LR | 08 02 45.6 | |
| | comp=Z,125nm,21.9s,baz=170,slow=32 | | | | | | |
| **MAJO** | **Matsushiro** | **59.75** | **333** | *i* P | **P** | **07 41 03.7** | **-1.8** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,123nm,1.6s | | | | | | |
| **MAJO** | **Matsushiro** | **59.75** | **333** | *e*P | **P** | **07 41 05.6** | **+0.1** |
| | comp=Z,12nm,0.9s | | | | | | |
| **MAT** | **Matsushiro** | **59.75** | **333** | P | **P** | **07 41 03.7** | **-1.8** |
| MAT | | | | S | **S** | **07 49 17.8** | **+3.1** |
| **JNU** | **Nakatsue** | **60.65** | **325** | P | **P** | **07 41 10.9** | **-0.8** |
| | comp=Z,14nm,0.9s,baz=123,slow=11,SNR=4.8 | | | | | | |
| **VNDA** | **Vanda** | **60.90** | **181** | P | **P** | **07 41 13.1** | **+0.4** |
| | comp=Z,2.6nm,0.6s,baz=359,slow=7.3,SNR=8.6 | | | | | | |
| VNDA | | | | LR | LR | 08 05 43.6 | |
| | comp=Z,162nm,18.6s,baz=12,slow=34 | | | | | | |
| **SBA** | **Scott Base** | **61.17** | **180** | *e*P | **P** | **07 41 16.0** | **+1.4** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,50nm,1.4s | | | | | | |
| **SBA** | **Scott Base** | **61.17** | **180** | *e*P | **P** | **07 41 16.0** | **+1.4** |
| | comp=Z,50nm,1.4s | | | | | | |
| **ERM** | **Erimo** | **62.60** | **340** | *ce*P | **P** | **07 41 25.1** | **+0.5** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,64nm,1.7s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **63.60** | **343** | *d*P | P | 07 41 25.8 | -5.4 |
| YUK | | | | *i* | | 07 42 02.2 | |
| YUK | | | | *i* S | S | 07 49 55.1 | -8.0 |
| YUK | | | | *i* | | 07 51 11.1 | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,313nm,2.1s | | | | | | |
| **ASAJ** | **Asahikawa** | **64.67** | **340** | P | **P** | **07 41 38.5** | **+0.3** |
| | comp=Z,11nm,0.9s,baz=207,slow=9.0,SNR=3.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **64.67** | **340** | P | **P** | **07 41 38.5** | **+0.3** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **65.49** | **326** | P | **P** | **07 41 43.5** | **-0.1** |
| | comp=Z,2.5nm,0.9s,baz=153,slow=7.3,SNR=7.3 | | | | | | |
| KSRS | | | | LR | LR | 08 06 18.5 | |
| | comp=Z,69nm,21.3s,baz=139,slow=32 | | | | | | |
| **KSAR** | **Wonju Array Be** | **65.50** | **326** | P | **P** | **07 41 43.6** | **-0.2** |
| **KSAR** | **Wonju Array Be** | **65.50** | **326** | P | **P** | **07 41 43.5** | **-0.2** |
| **YSS** | **Yuzh-Sakhalins** | **67.17** | **342** | *e*P | **P** | **07 41 53.2** | **-1.0** |
| YSS | | | | *e* | | 07 42 02.7 | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,40nm,1.1s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **67.17** | **342** | *e*P | **P** | **07 41 55.4** | **+1.1** |
| | comp=Z,21nm,1.0s | | | | | | |
| **NJ2** | **Nanjing** | **67.24** | **316** | *e*P | **P** | **07 41 55.1** | **+0.1** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **68.74** | **333** | P | **P** | **07 42 04.2** | **0.0** |
| | comp=Z,17nm,1.1s,baz=151,slow=4.4,SNR=11 | | | | | | |
| USRK | | | | pP | **pP** | **07 42 13.2** | **-0.3** |
| | comp=Z,6.9nm,0.8s,baz=147,slow=6.0,SNR=5.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **70.04** | **354** | P | **P** | **07 42 11.7** | **-0.4** |
| | comp=Z,15nm,0.9s,baz=142,slow=7.4,SNR=15 | | | | | | |
| PETK | | | | pP | **pP** | **07 42 20.8** | **-0.5** |
| | comp=Z,24nm,0.9s,baz=148,slow=8.7,SNR=13 | | | | | | |
| **MDJ** | **Mudanjiang** | **70.12** | **332** | P | **P** | **07 42 13.3** | **+0.6** |
| MDJ | | | | pP | pP | 07 42 25.3 | +3.3 |
| MDJ | | | | sP | sP | 07 42 31.0 | +5.5 |
| MDJ | | | | PP | **PP** | **07 44 46.6** | **-1.8** |
| MDJ | | | | S | **S** | **07 51 23.1** | **+1.2** |
| MDJ | | | | SS | **SS** | **07 55 51.7** | **-0.8** |
| MDJ | | | | PMZ | | | |
| | comp=Z,28nm,1.1s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,210nm,3.7s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,140nm,24.5s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,82nm,29.3s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,180nm,29.4s | | | | | | |
| **HABR** | **Khabarovsk** | **71.04** | **338** | *e*P | **P** | **07 42 15.9** | **-2.3** |
| HABR | | | | *e**PP | **pP** | **07 42 30.0** | **+2.5** |
| HABR | | | | *e* | | 07 42 35.4 | |
| HABR | | | | *e* | | 07 44 53.6 | |
| HABR | | | | *e*S | **S** | **07 51 29.1** | **-3.3** |
| HABR | | | | *e**SS | **SKiKP** | **07 51 53.2** | **-4.7** |
| HABR | | | | *e* | | 07 52 15.7 | |
| HABR | | | | *e*SS | **SS** | **07 56 04.3** | **-2.2** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,52nm,2.3s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,18nm,1.2s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,29nm,2.3s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,114nm,19.0s | | | | | | |
| **CN2** | **Changchun** | **71.44** | **329** | *e*P | **P** | **07 42 20.6** | **-0.2** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **72.90** | **336** | *e*P | P | 07 42 25.6 | -3.8 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,57nm,1.6s | | | | | | |
| **GYA** | **Guiyang** | **73.02** | **305** | P | **P** | **07 42 31.6** | **+0.8** |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **73.33** | **180** | *e*P | **P** | **07 42 32.5** | **+0.5** |
| | comp=Z,32nm,1.0s | | | | | | |
| **BJI** | **Beijing** | **73.94** | **321** | P | **P** | **07 42 37.0** | **+1.3** |
| BJI | | | | S | **S** | **07 52 07.5** | **+1.6** |
| BJI | | | | SS | **SS** | **07 56 51.8** | **+0.7** |
| BJI | | | | PMZ | | | |
| | comp=Z,12nm,2.3s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,81nm,3.8s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,210nm,27.9s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,300nm,31.0s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,390nm,29.4s | | | | | | |
| **KMI** | **Kunming** | **75.53** | **302** | P | **P** | **07 42 47.4** | **+1.8** |
| KMI | | | | pP | **PcP** | **07 42 59.2** | **+0.7** |
| KMI | | | | sP | sP | 07 43 04.9 | +6.5 |
| KMI | | | | S | **S** | **07 52 28.8** | **+4.0** |
| KMI | | | | sS | sS | 07 52 44.4 | +4.2 |
| KMI | | | | PMZ | | | |
| | comp=Z,12nm,0.9s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,55nm,4.5s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,110nm,21.7s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,120nm,24.1s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,190nm,25.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.95** | **294** | P | **P** | **07 42 49.0** | **+1.2** |
| | comp=Z,1.2nm,0.3s,baz=114,slow=6.4,SNR=5.0 | | | | | | |
| CMAR | | | | pP | **pP** | **07 42 57.9** | **+0.7** |
| | comp=Z,1.5nm,0.4s,baz=128,slow=5.2,SNR=3.4 | | | | | | |
| **MA2** | **Magadan** | **77.22** | **351** | *e*P | **P** | **07 42 51.9** | **-2.2** |
| **HHC** | **Hu-ho-hao-te** | **77.23** | **320** | *e*P | **P** | **07 42 56.4** | **+1.7** |
| HHC | | | | S | **S** | **07 52 43.3** | **+0.7** |
| HHC | | | | SKS | **SKSac** | **07 53 00.0** | **-5.6** |
| HHC | | | | PMZ | | | |
| | comp=Z,15nm,1.3s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,100nm,8.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,170nm,16.2s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,310nm,14.9s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,180nm,17.4s | | | | | | |
| **CD2** | **Chengdu** | **77.38** | **308** | *e*P | **P** | **07 42 56.3** | **+0.6** |
| CD2 | | | | pP | **PcP** | **07 43 09.6** | **+3.4** |
| CD2 | | | | sP | sP | 07 43 15.3 | +6.7 |
| CD2 | | | | S | **S** | **07 52 44.5** | **0.0** |
| CD2 | | | | SKS | **SKSac** | **07 53 04.7** | **-2.3** |
| CD2 | | | | SS | **SS** | **07 57 45.1** | **+1.2** |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,100nm,5.2s | | | | | | |
| **MAW** | **Mawson** | **80.14** | **202** | P | **P** | **07 43 10.6** | **+0.4** |
| | comp=Z,3.2nm,0.7s,baz=96,slow=7.9,SNR=10 | | | | | | |
| MAW | | | | LR | LR | 08 13 28.7 | |
| | comp=Z,261nm,20.7s,baz=63,slow=32 | | | | | | |
| **MAW** | **Mawson** | **80.14** | **202** | P | **P** | **07 43 10.8** | **+0.6** |
| | baz=79,SNR=7.0 | | | | | | |
| **SEY** | **Seymchan** | **80.26** | **353** | ⇓*i*P | **P** | **07 43 08.9** | **-1.8** |
| **ULN** | **Ulaanbaatar** | **83.85** | **324** | *ce*P | **P** | **07 43 30.3** | **+0.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,16nm,2.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **83.85** | **324** | *e*P | **P** | **07 43 30.4** | **+0.3** |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **YAK** | **Yakutsk** | **83.98** | **343** | P | **P** | **07 43 29.4** | **-0.8** |
| | comp=Z,1.8nm,0.3s,baz=216,slow=14,SNR=2.2 | | | | | | |
| **YAK** | **Yakutsk** | **83.98** | **343** | *e*P | **P** | **07 43 28.7** | **-1.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,4.0nm,1.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,4.0nm,1.0s | | | | | | |
| **GTA** | **Gaotai** | **84.19** | **314** | *e*P | **P** | **07 43 33.2** | **+1.2** |
| GTA | | | | pP | **pP** | **07 43 43.6** | **+2.1** |
| GTA | | | | sP | sP | 07 43 47.4 | +2.5 |
| GTA | | | | PP | **PP** | **07 46 50.1** | **+3.2** |
| GTA | | | | SKS | **SKSac** | **07 53 50.3** | **-3.3** |
| GTA | | | | S | **S** | **07 53 55.3** | **-0.1** |
| GTA | | | | sS | **ScS** | **07 54 13.3** | **+5.9** |
| GTA | | | | PMZ | | | |
| | comp=E,4.0nm,1.3s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=E,48nm,6.6s | | | | | | |
| GTA | | | | LN | | | |
| | comp=E,140nm,20.4s | | | | | | |
| GTA | | | | LE | | | |
| | comp=E,130nm,20.0s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=E,180nm,18.5s | | | | | | |
| **SONM** | **Songino Array** | **84.21** | **324** | P | **P** | **07 43 31.7** | **-0.2** |
| | comp=E,2.3nm,1.1s,baz=125,slow=3.9,SNR=10 | | | | | | |
| SONM | | | | pP | **pP** | **07 43 39.8** | **-1.6** |
| | comp=E,4.9nm,1.1s,baz=144,slow=4.1,SNR=9.6 | | | | | | |
| **BILL** | **Bilibino** | **84.51** | **360** | *ce*P | **P** | **07 43 32.2** | **-0.6** |
| BILL | | | | *e* | | 07 46 51.8 | |
| BILL | | | | *e*PPP | PPP | 07 48 41.2 | |
| BILL | | | | *e*SS | SS | 07 59 23.1 | -5.7 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,18nm,1.2s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,3µm,16.0s | | | | | | |
| **BOD** | **Bodaibo** | **86.34** | **334** | *e*P | P | 07 43 35.9 | -6.3 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.7s | | | | | | |
| **SYO** | **Syowa Base** | **86.88** | **197** | ⇑*e*P | **P** | **07 43 43.4** | **-1.4** |
| **SYO** | **Syowa Base** | **86.88** | **197** | ⇑*e*sP | sP | 07 44 00.2 | +2.5 |
| **ISA** | **Isabella** | **87.20** | **52** | *e*P | **P** | **07 43 46.8** | **-0.3** |
| ISA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| **ISA** | **Isabella** | **87.20** | **52** | *e*P | **P** | **07 43 46.8** | **-0.3** |
| | comp=Z,6.1nm,1.3s | | | | | | |
| **ZAK** | **Zakamensk** | **87.28** | **325** | *e*P | **P** | **07 43 46.7** | **-0.4** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.7s | | | | | | |
| **TLY** | **Talaya** | **87.74** | **326** | *e*P | **P** | **07 43 49.7** | **+0.5** |
| TLY | | | | *e*S | S | 07 54 15.2 | -14 |
| TLY | | | | *e* | | 07 55 21.6 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| **BBB** | **Bella Bella** | **88.29** | **34** | LR | LR | 08 16 56.1 | |
| | comp=Z,309nm,19.9s,baz=278,slow=31 | | | | | | |
| **ILAR** | **Eielson Array** | **88.33** | **18** | P | **P** | **07 43 49.6** | **-2.1** |
| | comp=Z,0.6nm,0.7s,baz=242,slow=5.0,SNR=6.8 | | | | | | |
| ILAR | | | | pP | **pP** | **07 43 58.2** | **-2.9** |
| | comp=Z,1.3nm,0.7s,baz=241,slow=5.0,SNR=9.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.40** | **49** | P | **P** | **07 43 51.8** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=224,slow=6.2,SNR=4.0 | | | | | | |
| NVAR | | | | LR | LR | 08 18 28.0 | |
| | comp=Z,370nm,18.5s,baz=284,slow=32 | | | | | | |
| **NVL** | **N'lazarevskaya** | **91.13** | **188** | *e*P | P | 07 43 58.6 | -6.2 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **91.59** | **183** | P | **P** | **07 44 06.6** | **-0.5** |
| **SNAA** | **Sanae** | **91.59** | **183** | *c i*P | **P** | **07 44 06.5** | **-0.6** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **SNAA** | **Sanae** | **91.59** | **183** | *e*P | **P** | **07 44 06.1** | **-1.0** |
| | comp=Z,12nm,1.4s | | | | | | |
| **WMQ** | **Urumqi** | **94.26** | **314** | *e*P | **P** | **07 44 20.0** | **+0.2** |
| WMQ | | | | SKS | **SKSac** | **07 54 54.0** | **+1.1** |
| WMQ | | | | S | **S** | **07 55 26.0** | **-3.4** |
| WMQ | | | | SS | **SS** | **08 01 52.0** | **+0.6** |
| WMQ | | | | PMZ | | | |
| | comp=Z,11nm,1.0s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,14nm,7.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,90nm,22.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,180nm,22.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,210nm,25.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **98.77** | **316** | P | Pdif | 07 44 40.5 | +0.4 |
| | comp=Z,0.2nm,0.6s,baz=86,slow=8.5,SNR=2.8 | | | | | | |
| **KSH** | **Kashi** | **101.58** | **308** | *e*P | **Pdif** | **07 44 56.6** | **+3.6** |
| KSH | | | | *e*PP | **PP** | **07 49 08.0** | **+4.5** |
| KSH | | | | SKS | **SKSac** | **07 55 31.6** | **+1.1** |
| KSH | | | | S | **Sdif** | **07 56 31.6** | **-0.5** |
| KSH | | | | sS | sS | 07 56 54.7 | +6.6 |
| KSH | | | | PMZ | | | |
| | comp=Z,60nm,4.1s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,94nm,5.6s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,60nm,6.6s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,150nm,5.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **122.21** | **345** | PKP | **PKPdf** | **07 49 53.5** | **-1.1** |
| | comp=Z,2.3nm,0.7s,baz=63,slow=1.8,SNR=14 | | | | | | |
| **FINES** | **FINESS Array B** | **127.63** | **338** | PKP | **PKPdf** | **07 50 04.8** | **-0.4** |
| | comp=Z,1.0nm,0.6s,baz=48,slow=2.8,SNR=6.8 | | | | | | |
| FINES | | | | pPKP | **pPKPdf** | **07 50 14.4** | **-0.6** |
| | comp=Z,5.2nm,0.9s,baz=343,slow=6.0,SNR=4.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **132.48** | **325** | PKP | **PKPdf** | **07 50 15.2** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=52,slow=1.5,SNR=3.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **132.48** | **325** | *i* PKIKP | PKPdf | 07 50 21.7 | +7.0 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **137.21** | **326** | *e*PKIKP | **PKPdf** | **07 50 21.2** | **-2.4** |
| **KOLS** | **Kolonicke sedl** | **137.21** | **326** | *e*PKP | **PKPdf** | **07 50 21.2** | **-2.4** |
| **STHS** | **Stebnicka Huta** | **137.46** | **328** | *e*PKIKP | **PKPdf** | **07 50 21.5** | **-2.6** |
| **STHS** | **Stebnicka Huta** | **137.46** | **328** | *e*PKP | **PKPdf** | **07 50 21.5** | **-2.6** |
| **CLL** | **Collm** | **139.94** | **335** | *e*PKIKP | **PKPdf** | **07 50 29.0** | **+0.5** |
| CLL | | | | MLR | MLR | | |
| | comp=Z,200nm,20.6s | | | | | | |
| **CLL** | **Collm** | **139.94** | **335** | *e*PKPdf | **PKPdf** | **07 50 29.0** | **+0.5** |
| CLL | | | | LmV | | 08 55 00.0 | |
| | comp=Z,200nm,20.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **141.33** | **332** | *e*PKIKP | **PKPdf** | **07 50 31.1** | **-0.1** |
| **KHC** | **Kasperske Hory** | **141.33** | **332** | *e*PKPdf | **PKPdf** | **07 50 31.1** | **-0.1** |
| **GERES** | **GERESS Array B** | **141.49** | **332** | PKhKP | PKPpre | 07 50 25.3 | |
| | comp=Z,0.7nm,0.7s,baz=17,slow=1.4,SNR=5.6 | | | | | | |
| **VOJS** | **Vojsko** | **143.42** | **329** | *i* PKPdf | PKPbc | 07 50 31.9 | -0.4 |
| **ABTA** | **Abfaltersbach** | **143.57** | **331** | ⇑*i*PKPdf | PKPab | 07 50 32.0 | +0.2 |
| | comp=Z,13nm,0.6s,SNR=7.0 | | | | | | |
| **MOTA** | **Moosalm** | **143.77** | **333** | ⇑*i*PKPdf | PKPbc | 07 50 33.2 | -0.1 |
| | comp=Z,6.2nm,0.7s,SNR=6.3 | | | | | | |
| **BFO** | **Black Forest** | **144.14** | **336** | *i* PKIKP | PKPbc | 07 50 35.1 | +0.8 |
| **BFO** | **Black Forest** | **144.14** | **336** | *e*PKPdf | PKPbc | 07 50 34.4 | +0.2 |
| **FETA** | **Feichten** | **144.18** | **333** | ⇑*i*PKPdf | PKPbc | 07 50 34.9 | +0.3 |
| | comp=Z,20nm,1.0s,SNR=7.7 | | | | | | |
| **DAVA** | **Damuels** | **144.34** | **334** | ⇑*i*PKPdf | PKPbc | 07 50 35.4 | +0.3 |
| | comp=Z,22nm,1.2s,SNR=6.3 | | | | | | |
| **ECH** | **Echery** | **144.68** | **337** | *e*PKIKP | PKPbc | 07 50 35.9 | -0.1 |
| **ECH** | **Echery** | **144.68** | **337** | *e*PKPdf | PKPbc | 07 50 35.9 | -0.1 |
| **TUE** | **Stuetta** | **145.21** | **333** | *e*PKPbc | **PKPdf** | **07 50 38.2** | **-0.2** |
| **TIP** | **Timpagrande** | **146.05** | **317** | *e*PKPbc | **PKPab** | **07 50 41.0** | **-0.3** |
| **CUC** | **Castrocucco** | **146.20** | **319** | *e*PKPdf | **PKPbc** | **07 50 40.8** | **-0.3** |
| **BNI** | **Bardonecchia** | **147.47** | **334** | *e*PKP2 | **PKPbc** | **07 50 45.0** | **+0.3** |
| **BNI** | **Bardonecchia** | **147.47** | **334** | *e*PKPbc | **PKPbc** | **07 50 45.0** | **+0.3** |
| **KEST** | **Kesra** | **152.85** | **318** | PKPbc | **PKPbc** | **07 50 59.7** | **+1.7** |
| | comp=Z,3.0nm,0.8s,baz=90,slow=9.1,SNR=2.0 | | | | | | |
| **ESDC** | **Sonseca Array** | **155.94** | **344** | PKPab | **PKPab** | **07 51 20.6** | **-1.3** |
| | comp=Z,0.4nm,0.6s,baz=349,slow=1.5,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.82** | **257** | PKP | **PKPdf** | **07 51 07.8** | **+1.6** |
| | comp=Z,0.5nm,1.0s,baz=108,slow=1.8,SNR=2.6 | | | | | | |
| TORD | | | | pPKP | **pPKPdf** | **07 51 15.7** | **-0.4** |
| | comp=Z,0.4nm,0.6s,baz=88,slow=1.5,SNR=3.2 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **07 52 04.3** | **-1.5** |
| | comp=Z,1.6nm,0.9s,baz=102,slow=4.6,SNR=6.8 | | | | | | |
| TORD | | | | pPKPab | **pPKPab** | **07 52 13.8** | **-1.6** |
| | comp=Z,1.8nm,1.0s,baz=98,slow=2.2,SNR=4.5 | | | | | | |

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**NNC 03 07:32:46.0**±1.7**, 42.°16N**×**81.°29E, h0**km**, mb3.8, mpv3.4, 11C-8D, Error ellipse: s-maj=12.6km s-min=7.4km az=162.0, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDGK** | **Podgornoye** | **1.77** | **312** | ⇑P | Pn | 07 33 17.3 | -0.5 |
| | 23nm,0.5s | | | | | | |
| PDGK | | | | ⇑S | Sb | 07 33 42.2 | +0.3 |
| | 84nm,0.4s | | | | | | |
| **KNDC** | **Almaty** | **3.35** | **290** | ⇓Pg | Pb | 07 33 46.7 | +0.2 |
| | 20nm,0.5s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 07 34 30.9 | |
| | 158nm,1.0s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.27** | **282** | ⇑Lg | Lg | 07 34 59.7 | |
| | 30nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **4.69** | **8** | Pn | Pn | 07 33 59.9 | +1.8 |
| | 0.7nm,0.3s,baz=226,slow=14,SNR=26 | | | | | | |
| MK31 | | | | ⇑Pg | Pb | 07 34 10.3 | +1.2 |
| | 1.4nm,0.3s,baz=190,slow=16,SNR=10 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 07 34 52.7 | -0.5 |
| | 5.7nm,0.6s,baz=183,slow=21,SNR=5.6 | | | | | | |
| MK31 | | | | Lg | Lg | 07 35 11.7 | |
| | 8.5nm,0.5s,baz=183,slow=26,SNR=7.1 | | | | | | |
| **AAK** | **Ala-Archa** | **5.05** | **278** | ⇑Pg | Pb | 07 34 17.7 | +2.2 |
| | 2.6nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 07 35 24.2 | |
| | 14nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **6.52** | **276** | ⇓Pg | Pb | 07 34 45.7 | +5.2 |
| | 3.1nm,1.2s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 07 36 11.1 | |
| | 10nm,1.4s | | | | | | |
| **KK31** | **Karatay Array** | **8.00** | **280** | ⇓Pg | Pb | 07 35 11.4 | +5.8 |
| | 1.2nm,0.8s | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 07 36 60.0 | |
| | 1.8nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.67** | **348** | ⇓Lg | Lg | 07 37 21.9 | |
| | 8.8nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **8.75** | **349** | ⇑Pn | Pn | 07 34 56.2 | +2.5 |
| | 4.7nm,1.1s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 07 36 35.0 | +1.9 |
| | 12nm,0.8s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 07 37 25.9 | |
| | 20nm,0.8s | | | | | | |
| **OTUK** | **Ortayu** | **8.77** | **317** | ⇑Pn | Pn | 07 34 54.6 | +0.6 |
| | 2.0nm,0.9s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 07 37 24.6 | |
| | 7.3nm,1.0s | | | | | | |

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*ISCJB **03** 07:44:31.2±0.6, 24.°88N±0.°04×122.°31E±0.°03, h6km±5km, Error ellipse: s-maj=7.0km s-min=3.7km az=16.6*
*JMA **03** 07:44:32.0±0.2, 24.°81N×122.°29E, h6km, M2.3*
*TAP **03** 07:44:32.8, 24.°87N×122.°18E, h6km, ML2.5, D*
**ISC 03 07:44:31.6**±1.1**, 24.°85N**±0.°05×**122.°29E**±0.°03**, h8**km±12km**, n16, σ0.s33**/28**, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.32** | **299** | P | **Pg** | **07 44 37.7** | **-0.1** |
| | baz=309 | | | | | | |
| TWB1 | | | | S | **Sg** | **07 44 41.8** | **-0.3** |
| | baz=309 | | | | | | |
| **EGS** | | **0.33** | **269** | *e*P | **Pg** | **07 44 38.2** | **+0.2** |
| | baz=261 | | | | | | |
| EGS | | | | S | **Sg** | **07 44 41.8** | **-0.6** |
| | baz=261 | | | | | | |
| **TWC** | **Suao** | **0.47** | **239** | *e*P | **Pb** | **07 44 41.6** | **-0.5** |
| | baz=227 | | | | | | |
| TWC | | | | *e*S | **Sb** | **07 44 48.5** | **-0.7** |
| | baz=227 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.51** | **295** | *e*P | **Pg** | **07 44 42.0** | **+0.5** |
| | baz=298 | | | | | | |
| NWF | | | | S | **Sg** | **07 44 48.7** | **+0.4** |
| | baz=298 | | | | | | |
| **TWE** | **Neicheng** | **0.58** | **257** | *e*P | **Pb** | **07 44 43.8** | **-0.2** |
| | baz=251 | | | | | | |
| **TWA** | **Mucha** | **0.66** | **281** | *e*P | **Pg** | **07 44 44.6** | **+0.3** |
| | baz=281 | | | | | | |
| TWA | | | | S | **Sg** | **07 44 53.1** | **+0.3** |
| | baz=281 | | | | | | |
| **ENA** | **Nanau** | **0.66** | **230** | P | **Pb** | **07 44 45.4** | **+0.1** |
| | baz=221 | | | | | | |
| ENA | | | | *e*S | **Sb** | **07 44 54.5** | **0.0** |
| | baz=221 | | | | | | |
| **ENTT** | **Nioudou** | **0.69** | **252** | *e*P | **Pb** | **07 44 45.6** | **-0.3** |
| | baz=246 | | | | | | |
| ENTT | | | | *e*S | **Sb** | **07 44 55.5** | **-0.2** |
| | baz=246 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.72** | **124** | P | **Pg** | **07 44 45.4** | **0.0** |
| JYNG | | | | *e*S | **Sg** | **07 44 54.7** | **-0.1** |
| **YOJ** | **Yonaguni jima** | **0.76** | **121** | P | **Pg** | **07 44 46.6** | **+0.3** |
| YOJ | | | | *e*S | **Sg** | **07 44 56.2** | **0.0** |
| **PCYT** | **Pengchaiyu** | **0.80** | **346** | *e*P | **Pg** | **07 44 47.0** | **0.0** |
| | baz=353 | | | | | | |
| **NSK** | **Sanguang** | **0.87** | **258** | P | **Pb** | **07 44 48.7** | **-0.2** |
| | baz=254 | | | | | | |
| NSK | | | | S | **Sg** | **07 44 59.5** | **-0.1** |
| | baz=254 | | | | | | |
| **NNS** | **Nan Shan** | **0.93** | **244** | *e*P | **Pb** | **07 44 50.2** | **+0.1** |
| | baz=239 | | | | | | |
| NNS | | | | *e*S | **Sb** | **07 45 02.8** | **+0.2** |
| | baz=239 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.17** | **233** | P | **Pg** | **07 44 54.0** | **-0.1** |
| | baz=228 | | | | | | |
| WHF | | | | S | **Sg** | **07 45 09.9** | **+0.5** |
| | baz=228 | | | | | | |
| **WDT** | **Danda** | **1.52** | **224** | *e*P | **Pb** | **07 44 59.9** | **-0.3** |
| | baz=220 | | | | | | |
| **YUS** | **Yu-Shan** | **1.83** | **222** | *e*P | **Pn** | **07 45 04.0** | **+0.3** |
| | baz=218 | | | | | | |

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**IDC 03 07:49:26.8**±6.9**, 5.°94S**×**146.°86E, h167**km±72km**, mb3.0**/2**, mb1 3.4**/4**, mb1mx3.1**/21**, mbtmp3.7**/4**, Error ellipse: s-maj=103.4km s-min=28.4km az=134.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.45** | **175** | P | Pn | 07 50 21.0 | +0.4 |
| | 10nm,0.3s,baz=342,slow=6.5,SNR=37 | | | | | | |
| PMG | | | | S | Sn | 07 51 02.6 | +0.2 |
| | 6.7nm,0.3s,baz=150,slow=22,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.48** | **220** | P | P | 07 53 29.7 | -0.6 |
| | 0.5nm,0.3s,baz=38,slow=11,SNR=35 | | | | | | |
| **ASAR** | **Alice Springs** | **21.59** | **214** | P | P | 07 54 04.0 | +0.4 |
| | 0.7nm,0.4s,baz=48,slow=8.8,SNR=22 | | | | | | |
| **ILAR** | **Eielson Array** | **85.49** | **23** | P | P | 08 01 45.5 | 0.0 |
| | 0.3nm,0.6s,baz=248,slow=4.7,SNR=7.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.94** | **284** | PKP | PKPbc | 08 08 44.2 | -0.5 |
| | 0.5nm,0.7s,baz=57,slow=4.2,SNR=4.7 | | | | | | |

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*ATH **03** 07:56:45.4, 36.°28N×28.°29E, h23km±1km, MD3.0/8*
*CSEM **03** 07:56:48.0±0.2, 36.°25N×28.°04E, h2km, MD3.0, Error ellipse: s-maj=5.2km s-min=4.0km az=160.0*
*DDA **03** 07:56:48.8, 36.°32N×28.°07E, h6km, Md2.8*
*ISK **03** 07:56:48.1, 36.°33N×28.°11E, h5km, MD3.1*
**ISC 03 07:56:47.7**±1.1**, 36.°30N**±0.°02×**28.°07E**±0.°02**, h4**km±10km**, n46, σ1.s14**/69**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARG** | **Arkhangelos** | **0.09** | **153** | *e*PB | **Pg** | **07 56 50.0** | **+0.4** |
| **ARG** | **Arkhangelos** | **0.09** | **153** | *e*Pb | **Pg** | **07 56 50.0** | **+0.4** |
| **DALY** | **Dalyan (Mu˜la** | **0.70** | **42** | *e*PG | **Pg** | **07 57 01.8** | **+0.7** |
| DALY | | | | *e*SG | **Sb** | **07 57 11.6** | **-0.8** |
| **DALY** | **Dalyan (Mu˜la** | **0.70** | **42** | *e*Pg | **Pg** | **07 57 01.8** | **+0.7** |
| DALY | | | | *e*Sg | **Sb** | **07 57 11.6** | **-0.8** |
| **TURN** | **Turunc** | **0.71** | **37** | P | Pg | 07 56 57.5 | -3.9 |
| TURN | | | | S | **Sg** | **07 57 05.8** | **-4.9** |
| **NIS1** | **Nisyros Isl.** | **0.78** | **293** | *e*PG | **Pb** | **07 57 04.4** | **+0.5** |
| NIS1 | | | | *e*SG | **Sn** | **07 57 17.1** | **-0.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NIS1 | Nisyros Isl. | 0.78 | 293 | ePN | Pb | 07 57 04.0 | +0.1 |
| NIS1 | | | | eSN | Sn | 07 57 17.2 | -0.6 |
| NIS1 | Nisyros Isl. | 0.78 | 293 | ePn | Pb | 07 57 04.0 | +0.1 |
| NIS1 | Nisyros Isl. | 0.78 | 293 | ePg | Pb | 07 57 04.4 | +0.5 |
| NIS1 | | | | eSg | Sn | 07 57 17.1 | -0.6 |
| YER | Yerkesik | 0.85 | 11 | ePG | Pb | 07 57 05.3 | +0.2 |
| YER | Yerkesik | 0.85 | 11 | ePg | Pb | 07 57 05.3 | +0.2 |
| FETY | Fethiye | 0.88 | 67 | ePG | Pg | 07 57 04.5 | -0.1 |
| FETY | | | | eSG | Sb | 07 57 18.6 | +0.9 |
| FETY | Fethiye | 0.88 | 67 | ePg | Pg | 07 57 04.5 | -0.1 |
| FETY | | | | eSg | Sb | 07 57 18.6 | +0.9 |
| BDRM | Kayabasi | 0.92 | 327 | iP | Pg | 07 57 05.3 | 0.0 |
| BDRM | | | | iS | Sn | 07 57 20.2 | -0.9 |
| BDRM | Kayabasi | 0.92 | 327 | P | Pg | 07 57 05.3 | 0.0 |
| BDRM | | | | S | Sn | 07 57 20.2 | -0.9 |
| BODT | Bodrum | 0.98 | 321 | ePG | Pb | 07 57 07.6 | +0.4 |
| BODT | Bodrum | 0.98 | 321 | ePg | Pb | 07 57 07.6 | +0.4 |
| KARP | Karpathos | 1.05 | 225 | ePN | Pg | 07 57 07.9 | 0.0 |
| KARP | | | | eSN | Sn | 07 57 24.1 | -0.4 |
| KARP | Karpathos | 1.05 | 225 | ePn | Pg | 07 57 07.9 | 0.0 |
| KARP | | | | eSn | Sn | 07 57 24.1 | -0.4 |
| AKAS | Kas | 1.24 | 93 | iP | Pb | 07 57 12.1 | +0.3 |
| AKAS | | | | iS | Sn | 07 57 30.9 | +1.7 |
| AKAS | Kas | 1.24 | 93 | P | Pb | 07 57 12.1 | +0.3 |
| AKAS | | | | S | Sn | 07 57 30.9 | +1.7 |
| AYDN | Tasoluk | 1.37 | 354 | iP | Pg | 07 57 16.2 | +2.3 |
| AYDN | | | | iS | Sn | 07 57 32.3 | 0.0 |
| AYDN | Tasoluk | 1.37 | 354 | P | Pg | 07 57 16.2 | +2.3 |
| AYDN | | | | S | Sn | 07 57 32.4 | 0.0 |
| ELL | Elmali | 1.54 | 73 | ePN | Pg | 07 57 17.7 | +0.4 |
| ELL | Elmali | 1.54 | 73 | ePn | Pg | 07 57 17.7 | +0.4 |
| DNZL | Cakiroluk | 1.59 | 29 | iP | Pg | 07 57 18.3 | +0.1 |
| DNZL | | | | iS | Sg | 07 57 41.3 | +2.4 |
| DNZL | Cakiroluk | 1.59 | 29 | P | Pg | 07 57 18.3 | +0.1 |
| DNZL | | | | S | Sg | 07 57 41.3 | +2.4 |
| AYDB | Zeytinkoy-Aydi | 1.65 | 355 | ePN | Pn | 07 57 18.1 | +0.5 |
| AYDB | Zeytinkoy-Aydi | 1.65 | 355 | ePn | Pn | 07 57 18.1 | +0.5 |
| SMG | Samos | 1.72 | 325 | ePN | Pn | 07 57 18.1 | -0.4 |
| SMG | | | | eSN | Sn | 07 57 40.9 | 0.0 |
| SMG | Samos | 1.72 | 325 | ePn | Pn | 07 57 18.1 | -0.4 |
| SMG | | | | eSn | Sn | 07 57 40.9 | 0.0 |
| ZKR | Zakros | 1.92 | 233 | ePN | Pn | 07 57 21.1 | -0.1 |
| ZKR | | | | eSN | Sn | 07 57 46.7 | +0.9 |
| ZKR | Zakros | 1.92 | 233 | ePn | Pn | 07 57 21.1 | -0.1 |
| ZKR | | | | eSn | Sn | 07 57 46.7 | +0.9 |
| NPS | Neapolis | 2.25 | 243 | ePN | Pn | 07 57 25.2 | -0.6 |
| NPS | | | | eSN | Sn | 07 57 54.0 | -0.1 |
| NPS | Neapolis | 2.25 | 243 | ePn | Pn | 07 57 25.2 | -0.6 |
| NPS | | | | eSn | Sn | 07 57 54.0 | -0.1 |
| KULA | Kula-Manisa | 2.26 | 12 | ePN | Pb | 07 57 27.9 | -1.3 |
| KULA | Kula-Manisa | 2.26 | 12 | ePn | Pb | 07 57 27.9 | -1.3 |
| AKS | Akhisar | 2.58 | 355 | ePN | Pb | 07 57 33.0 | -1.6 |
| AKS | Akhisar | 2.58 | 355 | ePn | Pb | 07 57 33.0 | -1.6 |
| SUTC | Sutluce-Ispart | 2.62 | 63 | ePN | Pb | 07 57 33.4 | -2.0 |
| SUTC | Sutluce-Ispart | 2.62 | 63 | ePn | Pb | 07 57 33.4 | -2.0 |
| CHOS | Chios island | 2.63 | 323 | ePN | Pn | 07 57 32.2 | +1.2 |
| CHOS | Chios island | 2.63 | 323 | ePN | Pn | 07 57 30.4 | -0.7 |
| CHOS | Chios island | 2.63 | 323 | ePn | Pn | 07 57 32.3 | +1.2 |
| IDI | Anoyia | 2.78 | 250 | ePN | Pn | 07 57 33.3 | +0.2 |
| IDI | Anoyia | 2.78 | 250 | ePn | Pn | 07 57 33.3 | +0.2 |

**JMA 03 07:58:35.0, 33°.86N×132°.53E, h47km, M3.5, 2C-6D Broadband fault plane solution: P waves. NP1:** φs194.00000°, δ66.00000°, λ-45.00000°. **NP2:** φs306.00000°, δ50.00000°, λ-148.00000°. **Principal axes:** T Plg10.0000°, Azm253.0000°; N Plg40.0000°, Azm352.0000°; P Plg48.0000°, Azm152.0000°; **Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHM | Kurahashi | 0.28 | 360 | ⇓P | Pn | 07 58 43.6 | -0.1 |
| JHM | | | | S | Sn | 07 58 49.8 | 0.0 |
| JNA | Nagahama | 0.30 | 188 | ⇓P | Pn | 07 58 43.7 | -0.2 |
| JNA | | | | S | Sn | 07 58 50.0 | -0.2 |
| JET | Tanbara | 0.44 | 100 | ⇑P | Pn | 07 58 45.3 | -0.1 |
| JET | | | | S | Sn | 07 58 52.5 | -0.3 |
| UWA2 | Uwa jima 2 | 0.65 | 173 | ⇓P | Pn | 07 58 48.0 | 0.0 |
| UWA2 | | | | S | Sn | 07 58 57.6 | +0.2 |
| JKU | Kubokawa | 0.71 | 141 | ⇓P | Pn | 07 58 48.8 | 0.0 |
| JKU | | | | S | Sn | 07 58 58.7 | 0.0 |
| JHT | Toyohira | 0.81 | 354 | ⇓P | Pn | 07 58 50.2 | +0.1 |
| JHT | | | | S | Sn | 07 59 01.4 | +0.3 |
| JTO | Tosashimizu | 1.02 | 167 | ⇓P | Pn | 07 58 53.0 | 0.0 |
| JMN | Monobe | 1.13 | 96 | P | Pn | 07 58 54.1 | -0.4 |
| JGT | Gotsu | 1.18 | 352 | P | Pn | 07 58 55.3 | +0.2 |
| JHS | Saijyo | 1.23 | 23 | ⇑P | Pn | 07 58 56.2 | +0.3 |
| JHS | | | | S | Sn | 07 59 12.5 | +1.0 |
| JJS | Sakaide | 1.27 | 66 | P | Pn | 07 58 57.4 | +1.1 |
| MAT | Matsushiro | 5.36 | 58 | P | Pn | 07 59 54.2 | +1.7 |

*NEIC **03** 08:00:17.6, 43°.55S×171°.97E, h5km, ML3.8(WEL), After WEL.*
*NEIC Felt in Canterbury.*
**WEL 03 08:00:17.6**±0.1**, 43°.55S×171°.95E, h5km, ML3.8**/19**, 6C-4D, Error ellipse: s-maj=1.0km s-min=0.9km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OXZ | Oxford | 0.24 | 15 | ⇓PG | Pg | 08 00 22.3 | +0.1 |
| OXZ | | | | SG | Sg | 08 00 25.6 | +0.2 |
| OXZ | Oxford | 0.24 | 15 | ⇓Pg | Pg | 08 00 22.3 | +0.1 |
| OXZ | | | | Sg | Sg | 08 00 25.6 | +0.2 |
| CRLZ | Canterbury Las | 0.48 | 93 | ⇑PG | Pg | 08 00 27.6 | +0.6 |
| CRLZ | Canterbury Las | 0.48 | 93 | ⇑Pg | Pg | 08 00 27.6 | +0.6 |
| MQZ | McQueen's Vall | 0.53 | 107 | ⇑PG | Pg | 08 00 28.1 | +0.4 |
| MQZ | | | | SG | Sg | 08 00 35.9 | +1.2 |
| MQZ | | | | AML | AML | 08 00 38.6 | |
| MQZ | McQueen's Vall | 0.53 | 107 | Pg | Pg | 08 00 28.1 | +0.4 |
| MQZ | | | | Sg | Sg | 08 00 35.9 | +1.2 |
| RPZ | Rata Peaks | 0.67 | 256 | P* | Pg | 08 00 30.9 | +0.3 |
| RPZ | | | | AML | AML | 08 00 42.6 | |
| RPZ | | | | AML | AML | 08 00 45.4 | |
| RPZ | Rata Peaks | 0.67 | 256 | P* | Pg | 08 00 30.9 | +0.3 |
| LTZ | Lake Taylor | 0.81 | 17 | P* | Pg | 08 00 33.1 | 0.0 |
| LTZ | | | | AML | AML | 08 00 45.7 | |
| LTZ | | | | AML | AML | 08 00 45.8 | |
| LTZ | Lake Taylor | 0.81 | 17 | P* | Pg | 08 00 33.1 | 0.0 |
| WVZ | Waitaha Valley | 1.01 | 298 | ⇑P* | Pg | 08 00 37.0 | 0.0 |
| WVZ | | | | S* | Sn | 08 00 52.4 | -0.6 |
| WVZ | | | | AML | AML | 08 00 54.0 | |
| WVZ | Waitaha Valley | 1.01 | 298 | P* | Pg | 08 00 37.0 | 0.0 |
| WVZ | | | | S* | Sn | 08 00 52.4 | -0.6 |
| LBZ | Lake Benmore | 1.52 | 236 | PN | Pn | 08 00 44.4 | -1.1 |
| LBZ | | | | AML | AML | 08 01 07.7 | |
| LBZ | | | | AML | AML | 08 01 11.5 | |
| LBZ | Lake Benmore | 1.52 | 236 | Pn | Pn | 08 00 44.4 | -1.1 |
| KHZ | Kahutara | 1.63 | 46 | PN | Pn | 08 00 44.9 | -2.0 |
| KHZ | | | | SN | Sn | 08 01 05.5 | -2.7 |
| KHZ | Kahutara | 1.63 | 46 | Pn | Pn | 08 00 44.9 | -2.0 |
| KHZ | | | | Sn | Sn | 08 01 05.5 | -2.7 |
| FOZ | Fox Glacier | 1.65 | 269 | PN | Pn | 08 00 46.0 | -1.1 |
| FOZ | | | | AML | AML | 08 01 11.9 | |
| FOZ | | | | AML | AML | 08 01 13.7 | |
| FOZ | Fox Glacier | 1.65 | 269 | Pn | Pn | 08 00 46.0 | -1.1 |
| ODZ | Otahua Downs | 1.76 | 212 | ⇓PN | Pn | 08 00 47.0 | -1.8 |
| ODZ | | | | AML | AML | 08 01 05.4 | |
| ODZ | | | | AML | AML | 08 01 24.1 | |
| ODZ | | | | AML | AML | 08 01 24.1 | |
| ODZ | Otahua Downs | 1.76 | 212 | Pn | Pn | 08 00 47.0 | -1.8 |
| DSZ | Denniston Nort | 1.81 | 356 | PN | Pn | 08 00 48.1 | -1.4 |
| DSZ | | | | AML | AML | 08 01 14.7 | |
| DSZ | | | | AML | AML | 08 01 17.3 | |
| DSZ | Denniston Nort | 1.81 | 356 | Pn | Pn | 08 00 48.1 | -1.4 |
| THZ | Tophouse | 1.92 | 22 | ⇓PN | Pn | 08 00 49.2 | -1.8 |
| THZ | | | | AML | AML | 08 01 17.0 | |
| THZ | | | | AML | AML | 08 01 25.9 | |
| THZ | Tophouse | 1.92 | 22 | Pn | Pn | 08 00 49.2 | -1.8 |
| JCZ | Jackson Bay | 2.37 | 256 | PN | Pn | 08 00 56.2 | -1.1 |
| JCZ | | | | AML | AML | 08 01 41.5 | |
| JCZ | | | | AML | AML | 08 01 43.1 | |
| JCZ | Jackson Bay | 2.37 | 256 | Pn | Pn | 08 00 56.2 | -1.1 |
| WKZ | Wanaka | 2.47 | 238 | AML | AML | 08 01 45.7 | |
| WKZ | | | | AML | AML | 08 01 47.9 | |
| WKZ | | | | AML | AML | 08 01 49.5 | |
| EAZ | Earnscleugh | 2.53 | 228 | PN | Pn | 08 00 57.5 | -1.9 |
| EAZ | | | | AML | AML | 08 01 40.8 | |
| EAZ | | | | AML | AML | 08 01 48.7 | |
| EAZ | | | | AML | AML | 08 01 49.0 | |
| EAZ | | | | AML | AML | 08 01 49.0 | |
| EAZ | Earnscleugh | 2.53 | 228 | Pn | Pn | 08 00 57.5 | -1.9 |
| NNZ | Nelson | 2.56 | 25 | ⇑PN | Pn | 08 00 58.5 | -1.2 |
| NNZ | Nelson | 2.56 | 25 | Pn | Pn | 08 00 58.5 | -1.2 |
| TUWZ | Tuamarina | 2.58 | 35 | PN | Pn | 08 00 58.2 | -1.8 |
| TUWZ | Tuamarina | 2.58 | 35 | Pn | Pn | 08 00 58.2 | -1.8 |
| QRZ | Quartz Range | 2.76 | 9 | PN | Pn | 08 01 00.7 | -1.7 |
| QRZ | | | | AML | AML | 08 01 09.7 | |
| QRZ | | | | AML | AML | 08 01 47.5 | |
| QRZ | Quartz Range | 2.76 | 9 | Pn | Pn | 08 01 00.7 | -1.7 |
| TCW | Tory Channel | 2.90 | 37 | PN | Pn | 08 01 02.2 | -2.3 |
| TCW | Tory Channel | 2.90 | 37 | Pn | Pn | 08 01 02.2 | -2.3 |
| TUZ | Tuapeka | 2.92 | 214 | PN | Pn | 08 01 02.9 | -1.7 |
| TUZ | | | | AML | AML | 08 01 55.2 | |
| TUZ | | | | AML | AML | 08 01 56.7 | |
| TUZ | | | | AML | AML | 08 01 58.8 | |
| TUZ | | | | AML | AML | 08 01 58.8 | |
| TUZ | Tuapeka | 2.92 | 214 | Pn | Pn | 08 01 02.9 | -1.7 |
| MSZ | Milford Sound | 3.11 | 248 | AML | AML | 08 02 02.2 | |
| MSZ | | | | AML | AML | 08 02 04.7 | |
| DUWZ | D'Urville Isla | 3.11 | 29 | PN | Pn | 08 01 06.3 | -1.1 |
| MLZ | Mavora Lakes | 3.25 | 235 | PN | Pn | 08 01 07.6 | -1.6 |
| MLZ | | | | AML | AML | 08 02 10.3 | |
| CAW | Cannon Point | 3.36 | 44 | PN | Pn | 08 01 07.9 | -2.9 |
| CAW | | | | AML | AML | 08 01 51.6 | |
| CAW | | | | AML | AML | 08 01 54.9 | |
| KIW | Kapiti Island | 3.47 | 40 | PN | Pn | 08 01 09.9 | -2.4 |
| MTW | Mount Morrison | 3.56 | 49 | PN | Pn | 08 01 10.3 | -3.1 |
| SYZ | Scrubby Hill | 3.59 | 213 | ⇑PN | Pn | 08 01 12.4 | -1.4 |
| SYZ | | | | AML | AML | 08 02 18.8 | |
| SYZ | | | | AML | AML | 08 02 20.6 | |
| WHZ | Wether Hill Ro | 3.69 | 229 | PN | Pn | 08 01 13.7 | -1.6 |
| HOWZ | Holdsworth Sta | 3.75 | 46 | PN | Pn | 08 01 12.3 | -3.7 |
| MRZ | Mangatainoka R | 3.95 | 44 | PN | Pn | 08 01 15.4 | -3.5 |
| MRZ | | | | AML | AML | 08 02 04.8 | |
| BFZ | Birch Farm | 4.29 | 49 | PN | Pn | 08 01 20.2 | -3.4 |
| APZ | The Paps | 4.31 | 219 | PN | Pn | 08 01 21.8 | -2.1 |
| WAZ | Wanganui | 4.42 | 32 | PN | Pn | 08 01 24.5 | -0.8 |
| PREZ | Palmer Road | 4.52 | 22 | PN | Pn | 08 01 26.3 | -0.5 |
| KHEZ | Kahui Hut | 4.53 | 21 | PN | Pn | 08 01 26.8 | -0.1 |
| TSZ | Takapari Road | 4.60 | 42 | PN | Pn | 08 01 24.2 | -3.6 |
| PNHZ | Pukenui | 4.83 | 43 | PN | Pn | 08 01 27.9 | -3.1 |
| VRZ | Vera Road | 4.90 | 26 | PN | Pn | 08 01 30.8 | -1.1 |
| PKVZ | Pokaka | 4.96 | 32 | PN | Pn | 08 01 32.1 | -0.8 |
| WNVZ | Wahianoa | 5.03 | 34 | PN | Pn | 08 01 32.0 | -1.9 |
| PXZ | Pawanui | 5.08 | 48 | PN | Pn | 08 01 31.0 | -3.4 |
| TUVZ | Tukino | 5.11 | 34 | PN | Pn | 08 01 33.2 | -1.8 |
| HIZ | Hauiti | 5.49 | 25 | PN | Pn | 08 01 38.5 | -1.6 |
| MWZ | Matawai | 6.71 | 41 | PN | Pn | 08 01 52.2 | -4.5 |

**PGC 03 08:06:50.7**±0.0**, 59°.56N×122°.27W, h1km, ML3.5**/19**, 86km Nne of Fort Nelson, Bc British Columbia, British Columbia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNBB | Fort Nelson | 0.77 | 210 | P | Pg | 08 07 04.3 | -1.3 |
| FNBB | | | | S | Sg | 08 07 14.3 | -1.4 |
| MANA | Manning | 3.66 | 136 | Pn | Pn | 08 07 47.4 | -1.0 |
| MANA | | | | Sn | Sn | 08 08 29.9 | -2.4 |
| DLBC | Dease Lake | 4.17 | 258 | Pn | Pn | 08 07 55.1 | -0.4 |
| DLBC | | | | Pg | Pb | 08 08 05.8 | +0.9 |
| DLBC | | | | Sg | Sb | 08 08 59.1 | +3.3 |
| YKR3 | Yellowknife Ar | 4.66 | 48 | Pn | Pn | 08 08 00.6 | -1.5 |
| YKR4 | Yellowknife Ar | 4.67 | 48 | Pn | Pn | 08 08 01.4 | -1.0 |
| WAPA | Wapiti River | 4.69 | 158 | Pn | Pn | 08 08 01.2 | -1.3 |
| WAPA | | | | Sn | Sn | 08 08 53.6 | -4.0 |
| YKR5 | Yellowknife Ar | 4.69 | 48 | Pn | Pn | 08 08 01.3 | -1.3 |
| YKB1 | Yellowknife Ar | 4.70 | 49 | Pn | Pn | 08 08 01.7 | -1.0 |
| YKB2 | Yellowknife Ar | 4.71 | 49 | Pn | Pn | 08 08 01.7 | -1.1 |
| YKR6 | Yellowknife Ar | 4.71 | 48 | Pn | Pn | 08 08 01.7 | -1.1 |
| YKB3 | Yellowknife Ar | 4.72 | 49 | Pn | Pn | 08 08 02.3 | -0.7 |
| YKR7 | Yellowknife Ar | 4.73 | 48 | Pn | Pn | 08 08 02.4 | -0.7 |
| YKB4 | Yellowknife Ar | 4.74 | 49 | Pn | Pn | 08 08 02.4 | -0.8 |
| YKR8 | Yellowknife Ar | 4.75 | 48 | Pn | Pn | 08 08 02.5 | -0.8 |
| YKB6 | Yellowknife Ar | 4.76 | 48 | Pn | Pn | 08 08 02.5 | -1.0 |
| YKW3 | Yellowknife Ar | 4.78 | 48 | Pn | Pn | 08 08 02.6 | -1.2 |
| YKW3 | | | | Sn | Sn | 08 08 55.5 | -4.3 |
| YKB8 | Yellowknife Ar | 4.79 | 48 | Pn | Pn | 08 08 02.8 | -1.1 |
| YKB9 | Yellowknife Ar | 4.80 | 48 | Pn | Pn | 08 08 02.5 | -1.6 |
| YKB0 | Yellowknife Ar | 4.81 | 47 | Pn | Pn | 08 08 03.2 | -1.1 |
| WHY | Whitehorse | 6.40 | 285 | Sg | Sg | 08 10 08.5 | -7.9 |
| UBRB | Upper Baezaeko | 6.76 | 189 | Sg | Sg | 08 10 19.9 | -8.1 |
| HYT | Haines Junctio | 7.70 | 286 | Sg | Sg | 08 10 49.4 | -8.6 |
| CLVN | Colville Lake | 7.70 | 349 | Pn | Pn | 08 08 40.9 | -2.9 |
| MNB | Mounoet Dainar | 7.70 | 162 | Pn | Pn | 08 08 43.4 | -0.8 |
| SNLN | Sandy Lake, NW | 7.80 | 59 | Pn | Pn | 08 08 42.8 | -2.3 |
| DOWB | Downie Slide | 8.34 | 164 | Pn | Pn | 08 08 50.7 | -2.0 |
| SLEB | Sale Mountain | 8.74 | 163 | Pn | Pn | 08 08 57.1 | -1.3 |
| KUKN | Kugluktuk,NWT | 8.88 | 18 | Sn | Sn | 08 10 32.2 | -8.3 |
| DAWY | Dawson | 9.26 | 306 | Sg | Sn | 08 11 37.5 | +47 |
| INK | Inuvik | 10.05 | 335 | Pn | Pn | 08 09 14.7 | -1.3 |

**NNC 03 08:10:00.3**±1.9**, 41°.44N×81°.87E, h0km, mb3.5, mpv3.1, 4C-5D, Error ellipse: s-maj=14.2km s-min=10.3km az=152.0, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDGK | Podgornoye | 2.58 | 318 | ⇓P | Pn | 08 10 43.4 | +0.1 |
| | 7.2nm,0.4s | | | | | | |
| PDGK | | | | ⇑S | Sn | 08 11 17.1 | +1.7 |
| | 25nm,0.4s | | | | | | |
| TKM2 | Tokmak 2 | 4.89 | 290 | ⇓Pn | Pn | 08 11 15.5 | +0.1 |
| | 3.6nm,1.0s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 08 12 33.4 | |
| | 8.0nm,0.6s | | | | | | |
| MK31 | Makanchi Array | 5.36 | 3 | ⇑Pn | Pn | 08 11 21.3 | -0.2 |
| | 0.4nm,0.3s,baz=194,slow=14,SNR=21 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 08 12 25.0 | +1.0 |
| | 2.2nm,0.7s,baz=191,slow=29,SNR=3.6 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 08 12 49.2 | |
| | 1.9nm,0.6s,baz=189,slow=29,SNR=5.5 | | | | | | |
| AAK | Ala-Archa | 5.62 | 285 | ⇓Pg | Pb | 08 11 43.3 | +3.8 |
| | 2.5nm,0.8s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 08 12 58.1 | |
| | 5.0nm,0.8s | | | | | | |

*IDC **03** 08:10:15.6±0.5, 52°.68N×166°.96W, h0km, mb4.6/26, mb1 4.7/27, mb1mx4.7/40, mbtmp4.6/27, ML3.9/1, MS4.3/18, Ms1 4.3/18, ms1mx4.1/34, Error ellipse: s-maj=17.2km s-min=11.4km az=169.0*
*SZGRF **03** 08:10:16.3, 51°.52N×166°.89W, h33km, mb5.2/11(BGR)*
*MOS **03** 08:10:19.3±1.1, 52°.67N×167°.08W, h33km, mb5.0/58, MS4.5/11, Error ellipse: s-maj=9.3km s-min=5.1km az=97.8*
*ISCJB **03** 08:10:19.4±0.4, 52°.61N±0°.03×166°.92W±0°.02, h34km±3km, mb4.8/157, MS4.4/30, Error ellipse: s-maj=5.4km s-min=2.3km az=11.4*
*NEIC **03** 08:10:21.7±0.5, 52°.73N×167°.00W, h36km±3km, mb4.7/82, ML4.3(AEIC), Error ellipse: s-maj=5.7km s-min=2.8km az=175.0*
*GCMT **03** 08:10:21.7±0.2, 52°.56N×166°.94W, h16km, MW5.2/92, Moment Tensor Solution. s63,c85; s92,c158; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$4.48±.17; $M_{\theta\theta}$-3.35±.12; $M_{\phi\phi}$-1.14±.11; $M_{r\theta}$4.56±.39; $M_{\theta\phi}$-1.85±.07; $M_{\phi r}$1.79±.34; Best double couple: $M_0$6.61100×$10^{16}$ NP1: φs66.00000°, δ69.00000°, λ94.00000°. NP2: φs235.00000°, δ21.00000°, λ79.00000°. Principal axes: T 6.6750, Plg66.0000°, Azm344.0000°; N -0.1380, Plg4.0000°, Azm245.0000°; P -6.5470, Plg24.0000°, Azm153.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI **03** 08:10:22.2, 53°.26N×167°.57W, h35km, mb5.0/48, mB5.1/31, Ms5.0/31, Ms7 4.7/32*
**ISC 03 08:10:20.9**±0.5**, 52°.64N**±0°.06**×167°.02W**±0°.03**, h34**km±1km**, h34km:pP-P, n690, σ1s.02**/732**, mb4.8**/161**, MS4.5**/31**, 20C-34D, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKFG | Magazine Ridge | 0.94 | 326 | P | Pn | 08 10 37.4 | -0.2 |
| OKFG | | | | S | Sb | 08 10 53.9 | +2.9 |
| OKTU | Okmok Mt. Tuli | 0.97 | 321 | P | Pn | 08 10 38.3 | +0.2 |
| OKSO | Okmok South | 1.00 | 317 | P | Pn | 08 10 38.5 | +0.1 |
| OKSO | | | | S | Sb | 08 10 56.1 | +3.6 |
| OKCE | Okmok Cone E | 1.05 | 319 | P | Pn | 08 10 39.6 | +0.4 |
| NIKH | Nikolski High | 1.16 | 288 | P | Pn | 08 10 40.2 | -0.4 |
| NIKH | | | | S | Sb | 08 10 57.8 | +0.6 |
| MGOD | Makushin Gods | 1.16 | 4 | P | Pn | 08 10 40.2 | -0.5 |
| MSOM | Makushin Julie | 1.18 | 2 | P | Pn | 08 10 40.4 | -0.6 |
| MSOM | Makushin Julie | 1.18 | 2 | P | Pn | 08 10 40.4 | -0.6 |
| UNV | Unalaska Valle | 1.25 | 14 | P | Pn | 08 10 40.9 | -1.0 |
| MSW | Makushin Switc | 1.29 | 6 | P | Pn | 08 10 42.3 | -0.1 |
| ZRO | Akutan Zero | 1.58 | 23 | P | Pn | 08 10 45.9 | -0.7 |
| AKRB | Akutan Reef Bi | 1.60 | 20 | P | Pn | 08 10 46.7 | 0.0 |
| AKUT | Akutan | 1.68 | 26 | P | Pn | 08 10 47.0 | -0.7 |
| AKGG | Akutan Green G | 1.68 | 21 | P | Pn | 08 10 47.4 | -0.5 |
| WECS | Westdahl Cape | 2.32 | 34 | P | Pn | 08 10 56.7 | 0.0 |
| WEBT | Westdahl Beart | 2.38 | 34 | P | Pn | 08 10 57.8 | +0.3 |
| WESN | West Dahl Nort | 2.42 | 36 | P | Pn | 08 10 57.9 | -0.1 |
| SSLW | Shishaldin Wes | 2.75 | 38 | P | Pn | 08 11 02.2 | -0.3 |
| SSLW | | | | S | Sn | 08 11 36.6 | +2.2 |
| FALS | False Pass | 3.09 | 42 | P | Pn | 08 11 06.6 | -0.4 |
| DT1 | Dutton Round H | 3.74 | 47 | P | Pn | 08 11 15.4 | -0.7 |
| KOFP | Korovin Flat P | 4.34 | 268 | P | Pn | 08 11 26.1 | +1.7 |
| KOKL | Mount Kliuchef | 4.40 | 269 | P | Pn | 08 11 27.1 | +1.9 |
| ATKA | Atka Island | 4.41 | 267 | P | Pn | 08 11 26.0 | +0.7 |
| SDPT | Sand Point | 4.72 | 52 | P | Pn | 08 11 28.5 | -1.0 |
| SPIA | Saint Paul Isl | 4.92 | 339 | P | Pn | 08 11 34.5 | +2.3 |
| GSTR | Great Sitkin T | 5.56 | 268 | ePn | Pn | 08 11 43.9 | +2.7 |
| | 95nm,0.4s | | | | | | |
| GSMY | Great Sitkin M | 5.57 | 267 | P | Pn | 08 11 42.1 | +0.8 |
| CHGN | Chignik | 6.21 | 50 | ePn | Pn | 08 11 48.8 | -1.2 |
| AMKA | Amchitka | 8.54 | 267 | ePn | Pn | 08 12 22.5 | +0.6 |
| | 410nm,0.6s | | | | | | |
| OHAK | Old Harbor | 9.14 | 54 | ePn | Pn | 08 12 28.6 | -1.5 |
| | 102nm,1.4s | | | | | | |
| KDAK | Kodiak Island | 9.72 | 52 | Pn | Pn | 08 12 36.2 | -1.9 |
| | 1.9nm,0.3s,baz=248,slow=7.9,SNR=19 | | | | | | |
| KDAK | | | | Sn | Sn | 08 14 19.1 | -6.8 |
| | baz=216,slow=8.7,SNR=2.5 | | | | | | |
| RSO | Redoubt South | 11.09 | 39 | ePn | Pn | 08 12 57.0 | 0.0 |
| | 33nm,0.8s | | | | | | |
| SEW | Seward | 12.25 | 45 | ePn | Pn | 08 13 11.7 | -0.9 |
| RC01 | Rabbit Creek A | 12.65 | 41 | ePn | Pn | 08 13 18.5 | +0.3 |
| PPLA | Purkeypile | 12.94 | 32 | ePn | Pn | 08 13 21.4 | -0.7 |
| | 65nm,1.0s | | | | | | |
| BPAW | Bear Paw Mtn. | 14.18 | 30 | ePn | Pn | 08 13 39.3 | +0.3 |
| | 5.9nm,0.9s | | | | | | |
| DIV | Divide | 14.33 | 45 | ePn | Pn | 08 13 38.2 | -2.9 |
| | 47nm,1.0s | | | | | | |
| MCK | McKinley | 14.58 | 33 | eP | Pn | 08 13 45.4 | +1.0 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,32nm,1.3s | | | | | | |
| MCK | McKinley | 14.58 | 33 | ePn | Pn | 08 13 45.4 | +1.0 |
| | comp=Z,32nm,1.3s | | | | | | |
| BMRM | Bremner River | 14.78 | 47 | ePn | Pn | 08 13 46.4 | -0.7 |
| | comp=Z,94nm,1.1s | | | | | | |
| COLA | College | 15.70 | 31 | eP | Pn | 08 13 58.1 | -1.0 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| COLA | College | 15.70 | 31 | ePn | Pn | 08 13 58.1 | -1.0 |
| | comp=Z,23nm,0.9s | | | | | | |
| ILAR | Eielson Array | 15.94 | 32 | Pn | Pn | 08 13 59.7 | -2.5 |
| | comp=Z,0.2nm,0.3s,baz=230,slow=9.5,SNR=16 | | | | | | |
| ILAR | | | | LR | LR | 08 20 34.1 | |
| | comp=Z,1μm,21.5s,baz=236,slow=39 | | | | | | |
| ILAR | | | | ScP | ScP | 08 22 32.2 | +2.6 |
| | comp=Z,0.0nm,0.3s,baz=276,slow=2.2,SNR=9.2 | | | | | | |
| MENT | Mentasta | 16.04 | 41 | eP | P | 08 14 06.0 | -0.7 |
| DOT | Dot Lake | 16.27 | 38 | eP | P | 08 14 08.5 | -0.8 |
| | comp=Z,64nm,0.9s | | | | | | |
| COLD | Coldfoot | 16.79 | 23 | ePn | Pn | 08 14 12.9 | 0.0 |
| | comp=Z,59nm,1.0s | | | | | | |
| EGAK | Eagle | 17.95 | 37 | eP | Pn | 08 14 26.4 | -0.9 |
| | comp=Z,27nm,1.0s | | | | | | |
| DAWY | Dawson | 18.29 | 41 | eP | P | 08 14 30.8 | -0.7 |
| | comp=Z,44nm,0.8s | | | | | | |
| BILL | Bilibino | 20.05 | 330 | ⇑eP | Pn | 08 14 52.1 | -0.5 |
| BILL | | | | e | | 08 15 07.2 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,3μm,16.0s | | | | | | |
| BILL | Bilibino | 20.05 | 330 | eP | P | 08 14 50.9 | +0.2 |
| PET | Petropavlovsk | 20.63 | 285 | eP | Pn | 08 15 02.9 | +3.4 |
| PET | | | | eS | S | 08 18 48.1 | +2.6 |
| PET | | | | pmax | pmax | | |
| | comp=Z,400nm,17.6s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,900nm,18.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,800nm,19.0s | | | | | | |
| PETK | Petropavlovsk- | 21.18 | 285 | P | P | 08 15 02.6 | -0.3 |
| | comp=Z,13nm,0.5s,baz=87,slow=12,SNR=18 | | | | | | |
| PETK | | | | LR | LR | 08 23 54.2 | |
| | comp=Z,447nm,20.4s,baz=86,slow=39 | | | | | | |
| DLBC | Dease Lake | 21.51 | 60 | P | P | 08 15 09.6 | +3.0 |
| | comp=Z,16nm,1.0s,baz=268,slow=11,SNR=14 | | | | | | |
| DLBC | | | | LR | LR | 08 23 05.0 | |
| | comp=Z,537nm,21.2s,baz=280,slow=36 | | | | | | |
| INK | Inuvik | 22.34 | 33 | P | P | 08 15 12.8 | -2.5 |
| | comp=Z,43nm,0.9s,baz=233,slow=11,SNR=18 | | | | | | |
| INK | | | | LR | LR | 08 24 20.4 | |
| | comp=Z,873nm,20.9s,baz=237,slow=38 | | | | | | |
| INK | Inuvik | 22.34 | 33 | eP | P | 08 15 13.2 | -2.0 |
| INK | | | | pmax | pmax | | |
| | comp=Z,42nm,0.9s | | | | | | |
| INK | Inuvik | 22.34 | 33 | eP | P | 08 15 13.2 | -2.0 |
| | comp=Z,42nm,0.9s | | | | | | |
| SEY | Seymchan | 23.55 | 312 | P | P | 08 15 26.8 | -1.0 |
| | comp=Z,12nm,0.9s,baz=111,slow=11,SNR=22 | | | | | | |
| SEY | Seymchan | 23.55 | 312 | ⇓iP | P | 08 15 26.6 | -1.1 |
| MA2 | Magadan | 24.19 | 303 | iP | P | 08 15 34.1 | +0.4 |
| A04D | Lummi Island | 28.01 | 80 | P | P | 08 16 08.1 | -0.1 |
| | baz=28 | | | | | | |
| YKA | Yellowknife Ar | 28.98 | 49 | P | P | 08 16 16.9 | +0.1 |
| | comp=Z,1.3nm,0.4s,baz=274,slow=8.1,SNR=5.0 | | | | | | |
| COR | Corvallis | 29.61 | 88 | eP | P | 08 16 23.9 | +1.3 |
| COR | Corvallis | 29.61 | 88 | eP | P | 08 16 23.9 | +1.3 |
| I03D | Drain, OR | 30.06 | 90 | P | P | 08 16 27.1 | +0.6 |
| | baz=30 | | | | | | |
| G05D | Wamic, OR | 30.48 | 85 | P | P | 08 16 31.2 | +0.9 |
| | baz=30 | | | | | | |
| I04A | Tendick Farm, | 30.58 | 89 | P | P | 08 16 32.0 | +0.8 |
| | baz=30 | | | | | | |
| L02D | Cave Junction, | 30.76 | 92 | P | P | 08 16 32.9 | +0.1 |
| | baz=31 | | | | | | |
| I05D | Terrebonne, OR | 30.94 | 87 | P | P | 08 16 35.1 | +0.7 |
| | baz=31 | | | | | | |
| J04D | Umpqua Nationa | 31.06 | 89 | P | P | 08 16 35.2 | -0.5 |
| | baz=31 | | | | | | |
| NEW | Newport | 31.55 | 78 | P | P | 08 16 39.4 | -0.3 |
| | baz=31 | | | | | | |
| J05D | Fort Rock, OR | 31.57 | 89 | P | P | 08 16 39.8 | -0.2 |
| | baz=31 | | | | | | |
| M02C | Callahan | 31.66 | 93 | P | P | 08 16 40.9 | +0.1 |
| | baz=32 | | | | | | |
| EDM | Edmonton | 31.72 | 67 | eP | P | 08 16 41.3 | +0.1 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| EDM | Edmonton | 31.72 | 67 | eP | P | 08 16 41.3 | +0.1 |
| | comp=Z,19nm,0.9s | | | | | | |
| YUK | Yuzh-Kuril'sk | 31.97 | 274 | d iP | P | 08 16 40.9 | -2.5 |
| YUK | | | | i | | 08 19 37.3 | |
| YUK | | | | iS | S | 08 21 48.4 | -3.9 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,364nm,2.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=N,892nm,21.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,587nm,21.0s | | | | | | |
| N02D | Trinity Center | 32.00 | 93 | P | P | 08 16 43.7 | -0.1 |
| | baz=32 | | | | | | |
| MOD | Modoc | 32.92 | 90 | eP | P | 08 16 53.2 | +1.3 |
| | comp=Z,11nm,1.0s | | | | | | |
| MOD | | | | ePcP | PcP | 08 19 37.0 | +1.4 |
| O03D | Paynes Creek | 32.96 | 94 | P | P | 08 16 52.1 | 0.0 |
| | baz=33 | | | | | | |
| JTMT | Jette | 33.48 | 77 | eP | P | 08 16 57.0 | +0.3 |
| | comp=Z,6.4nm,0.8s | | | | | | |
| YBMT | Yellow Bay | 33.59 | 76 | eP | P | 08 16 58.2 | +0.6 |
| | comp=Z,4.8nm,0.7s | | | | | | |
| WVOR | Wild Horse Val | 33.63 | 88 | eP | P | 08 16 58.9 | +0.8 |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| WVOR | Wild Horse Val | 33.63 | 88 | eP | P | 08 16 58.9 | +0.8 |
| | comp=Z,9.1nm,0.9s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| YAK | Yakutsk | 34.08 | 311 | eP | P | 08 16 59.2 | -2.3 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,833nm,17.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,597nm,18.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,484nm,15.0s | | | | | | |
| MSO | Missoula | 34.13 | 78 | P | P | 08 17 01.9 | -0.5 |
| | baz=34 | | | | | | |
| SLMT | Seeley Lake | 34.19 | 77 | eP | P | 08 17 04.4 | +1.4 |
| | comp=E,14nm,1.4s | | | | | | |
| CHMT | Chamberlain Mo | 34.50 | 78 | eP | P | 08 17 05.6 | 0.0 |
| | comp=E,2.6nm,0.9s | | | | | | |
| HRY | Holter Researc | 35.44 | 77 | eP | P | 08 17 15.4 | +1.7 |
| | comp=E,3.4nm,0.8s | | | | | | |
| HLID | Hailey | 35.56 | 83 | P | P | 08 17 13.9 | -0.9 |
| | baz=35 | | | | | | |
| MCMT | McKenzie Canyo | 35.82 | 80 | eP | P | 08 17 17.4 | +0.3 |
| | comp=E,1.8nm,0.7s | | | | | | |
| EGMT | Eagleton | 36.02 | 74 | P | P | 08 17 17.7 | -0.8 |
| | baz=36 | | | | | | |
| EGMT | Eagleton | 36.02 | 74 | eP | P | 08 17 19.2 | +0.7 |
| | comp=E,18nm,0.9s | | | | | | |
| BOZ | Bozeman (W) | 36.11 | 78 | eP | P | 08 17 19.7 | +0.2 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| BOZ | Bozeman (W) | 36.11 | 78 | P | P | 08 17 18.7 | -0.8 |
| | baz=36 | | | | | | |
| BOZ | Bozeman (W) | 36.11 | 78 | eP | P | 08 17 19.7 | +0.2 |
| | comp=Z,4.2nm,0.9s | | | | | | |
| HABR | Khabarovsk | 36.18 | 287 | eP | P | 08 17 17.8 | -2.0 |
| HABR | | | | e*PP | pP | 08 17 27.5 | -2.2 |
| HABR | | | | e*SP | sP | 08 17 31.8 | -2.0 |
| HABR | | | | | | 08 19 43.6 | |
| HABR | | | | e | | 08 27 32.9 | |
| HABR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,46nm,1.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,39nm,1.4s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,434nm,18.0s | | | | | | |
| NVAR | Mina Array Bea | 36.24 | 93 | P | P | 08 17 19.6 | -1.1 |
| | comp=Z,4.9nm,0.7s,baz=298,slow=8.0,SNR=42 | | | | | | |
| NVAR | | | | PcP | PcP | 08 19 45.4 | +0.1 |
| | comp=Z,1.5nm,0.7s,baz=269,slow=5.0,SNR=4.0 | | | | | | |
| NVAR | | | | LR | LR | 08 29 40.1 | |
| | comp=Z,221nm,21.9s,baz=299,slow=32 | | | | | | |
| MLAC | Mammoth Lakes | 36.42 | 95 | P | P | 08 17 22.0 | -0.4 |
| | baz=36 | | | | | | |
| YMR | Madison River | 37.03 | 79 | eP | P | 08 17 28.1 | +0.7 |
| | comp=Z,9.4nm,0.7s | | | | | | |
| RCTC | Rector, Farmer | 37.04 | 97 | P | P | 08 17 26.8 | -0.5 |
| | baz=37 | | | | | | |
| TIN | Tinemaha | 37.16 | 95 | P | P | 08 17 28.4 | -0.1 |
| | baz=37 | | | | | | |
| YNR | Norris Junctio | 37.18 | 79 | eP | P | 08 17 29.5 | +0.9 |
| | comp=Z,17nm,0.8s | | | | | | |
| LKWY | Lake | 37.43 | 79 | eP | P | 08 17 32.0 | +1.2 |
| LKWY | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| LKWY | Lake | 37.43 | 79 | eP | P | 08 17 32.0 | +1.2 |
| | comp=Z,8.2nm,0.8s | | | | | | |
| VES | Vestal, Richgr | 37.45 | 97 | P | P | 08 17 31.0 | +0.3 |
| | baz=37 | | | | | | |
| IMW | Indian Meadow | 37.47 | 80 | eP | P | 08 17 31.5 | +0.3 |
| | comp=Z,6.3nm,0.9s | | | | | | |
| FLWY | Flagg Ranch | 37.51 | 80 | eP | P | 08 17 33.4 | +1.9 |
| | comp=Z,9.8nm,1.1s | | | | | | |
| HVU | Hansel Valley | 37.57 | 85 | eP | P | 08 17 32.8 | +0.9 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| HVU | Hansel Valley | 37.57 | 85 | eP | P | 08 17 32.8 | +0.9 |
| | comp=Z,5.2nm,1.0s | | | | | | |
| PKM | Peak Mountain | 37.64 | 99 | P | P | 08 17 33.5 | +0.9 |
| | baz=38 | | | | | | |
| CWC | Cottonwood Cre | 37.66 | 96 | P | P | 08 17 32.5 | -0.2 |
| | baz=38 | | | | | | |
| KLR | Kul'dur | 37.72 | 290 | eP | P | 08 17 27.8 | -5.1 |
| KLR | | | | MLR | MLR | | |
| | comp=E,900nm,16.0s | | | | | | |
| GRAC | Grapevine Rang | 37.72 | 94 | P | P | 08 17 33.9 | +0.7 |
| | baz=38 | | | | | | |
| RLMT | Red Lodge | 37.80 | 78 | P | P | 08 17 33.8 | -0.1 |
| | baz=38 | | | | | | |
| RLMT | Red Lodge | 37.80 | 78 | eP | P | 08 17 34.1 | +0.2 |
| | comp=E,12nm,0.9s | | | | | | |
| BGU | Big Grassy Mou | 37.92 | 86 | eP | P | 08 17 36.0 | +1.1 |
| | comp=E,14nm,1.5s | | | | | | |
| ISA | Isabella | 37.93 | 97 | eP | P | 08 17 35.3 | +0.3 |
| ISA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| ISA | Isabella | 37.93 | 97 | P | P | 08 17 35.2 | +0.3 |
| | baz=38 | | | | | | |
| ISA | Isabella | 37.93 | 97 | eP | P | 08 17 35.3 | +0.3 |
| | comp=Z,6.1nm,0.9s | | | | | | |
| R11A | Troy Canyon, C | 37.95 | 91 | P | P | 08 17 35.1 | -0.1 |
| | baz=38 | | | | | | |
| DAC | Darwin (Calif) | 38.06 | 95 | eP | P | 08 17 36.7 | +0.6 |
| DAC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| DAC | Darwin (Calif) | 38.06 | 95 | eP | P | 08 17 36.7 | +0.6 |
| | comp=Z,7.4nm,0.9s | | | | | | |
| DAC | | | | ePP | PP | 08 18 59.8 | -3.5 |
| ARVC | Arvin | 38.08 | 98 | P | P | 08 17 36.6 | +0.5 |
| | baz=38 | | | | | | |
| MPMC | Manual Prospec | 38.27 | 96 | P | P | 08 17 37.6 | -0.3 |
| | baz=38,SNR=8.4 | | | | | | |
| FURC | Furnace Creek, | 38.38 | 95 | P | P | 08 17 39.0 | +0.5 |
| | baz=38,SNR=11 | | | | | | |
| TPNV | Topopah Spring | 38.44 | 93 | P | P | 08 17 39.4 | +0.2 |
| | baz=38,SNR=15 | | | | | | |
| DUG | Dugway | 38.49 | 87 | eP | P | 08 17 40.0 | +0.3 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| DUG | Dugway | 38.49 | 87 | P | P | 08 17 39.1 | -0.6 |
| | baz=38 | | | | | | |
| DUG | Dugway | 38.49 | 87 | eP | P | 08 17 40.0 | +0.3 |
| | comp=Z,6.3nm,1.0s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 38.58 | 222 | T | T | 08 59 17.5 | |
| | baz=25,slow=76,SNR=511 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 38.59 | 222 | T | T | 08 59 10.5 | |
| | baz=25,slow=76,SNR=695 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 38.60 | 222 | T | T | 08 59 18.8 | |
| | baz=25,slow=76,SNR=603 | | | | | | |
| BLG | Laguna Peak | 38.63 | 99 | P | P | 08 17 40.9 | +0.2 |
| | baz=38 | | | | | | |
| EDW2 | Edwards Air Fo | 38.75 | 97 | P | P | 08 17 42.2 | +0.4 |
| | baz=39 | | | | | | |
| LAO | LASA Array | 38.76 | 74 | P | P | 08 17 41.1 | -0.6 |
| | baz=39 | | | | | | |
| TCUT | Toone Canyon | 38.79 | 84 | eP | P | 08 17 44.3 | +2.0 |
| | comp=Z,9.2nm,1.0s | | | | | | |
| BW06 | Boulder Array | 38.94 | 81 | eP | P | 08 17 43.5 | 0.0 |
| | comp=Z,6.0nm,0.9s | | | | | | |
| DGMT | Dagmar | 39.01 | 70 | P | P | 08 17 43.5 | -0.3 |
| | baz=39 | | | | | | |
| NLU | North Lily Min | 39.09 | 86 | eP | P | 08 17 47.1 | +2.3 |
| | comp=Z,2.1nm,0.9s | | | | | | |
| GSC | Goldstone | 39.19 | 96 | eP | P | 08 17 46.1 | +0.7 |
| GSC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| GSC | Goldstone | 39.19 | 96 | P | P | 08 17 45.4 | 0.0 |
| | baz=39,SNR=12 | | | | | | |
| GSC | Goldstone | 39.19 | 96 | eP | P | 08 17 46.1 | +0.7 |
| | comp=Z,9.6nm,0.9s | | | | | | |
| FMP | Fort Macarthur | 39.37 | 99 | P | P | 08 17 47.6 | +0.7 |
| | baz=39 | | | | | | |
| BFSC | Mount Baldy Ra | 39.39 | 98 | P | P | 08 17 47.6 | +0.4 |
| | baz=39,SNR=11 | | | | | | |
| SHPR | Sheep Range | 39.39 | 93 | eP | P | 08 17 48.0 | +0.8 |
| | comp=Z,6.0nm,1.3s | | | | | | |
| TUQ | Turquoise Moun | 39.63 | 95 | P | P | 08 17 49.2 | 0.0 |
| | baz=40 | | | | | | |
| B25A | Knox Farm, Ray | 39.71 | 70 | P | P | 08 17 49.0 | -0.6 |
| | baz=40 | | | | | | |
| SCI | San Clemente I | 39.72 | 100 | P | P | 08 17 50.5 | +0.6 |
| | baz=40 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.76 | 221 | T | T | 09 00 42.4 | |
| | baz=24,slow=76,SNR=1378 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 39.78 | 221 | T | T | 09 00 43.3 | |
| | baz=24,slow=76,SNR=487 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.78 | 221 | T | T | 09 00 52.4 | |
| | baz=24,slow=76,SNR=322 | | | | | | |
| HEC | Hector,Ludlow | 39.79 | 96 | P | P | 08 17 50.3 | -0.2 |
| | baz=40 | | | | | | |
| CCUT | Cedar City | 39.81 | 90 | eP | P | 08 17 51.6 | +0.9 |
| | comp=Z,2.6nm,0.8s | | | | | | |
| BBRC | Big Bear Solar | 39.82 | 97 | P | P | 08 17 51.5 | +0.6 |
| | baz=40 | | | | | | |
| MSU | Marysvale | 39.92 | 88 | eP | P | 08 17 52.5 | +0.8 |
| MSU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| MSU | Marysvale | 39.92 | 88 | eP | P | 08 17 52.5 | +0.8 |
| | comp=Z,2.1nm,0.7s | | | | | | |
| C25A | Freed Ranch, W | 39.94 | 71 | P | P | 08 17 51.0 | -0.6 |
| | baz=40 | | | | | | |
| TMUT | Trail Mountain | 40.02 | 87 | eP | P | 08 17 52.6 | 0.0 |
| | comp=Z,24nm,1.0s | | | | | | |
| A26A | Wade Farm, Ken | 40.02 | 68 | P | P | 08 17 52.0 | -0.2 |
| | baz=40 | | | | | | |
| MURC | Murrieta | 40.10 | 98 | P | P | 08 17 53.7 | +0.6 |
| | baz=40 | | | | | | |
| B26A | Jensen Ranch, | 40.18 | 69 | P | P | 08 17 53.3 | -0.3 |
| | baz=40 | | | | | | |
| D25A | Fairfield | 40.20 | 71 | P | P | 08 17 53.6 | -0.2 |
| | baz=40 | | | | | | |
| GMRC | Granite Mounta | 40.23 | 95 | P | P | 08 17 54.5 | +0.2 |
| | baz=40 | | | | | | |
| USRK | Ussuriysk Ar. | 40.24 | 283 | P | P | 08 17 52.9 | -1.1 |
| | comp=Z,3.8nm,0.8s,baz=54,slow=7.2,SNR=7.6 | | | | | | |
| USRK | | | | PcP | PcP | 08 19 55.8 | -1.5 |
| | comp=Z,5.5nm,1.1s,baz=44,slow=4.4,SNR=3.1 | | | | | | |
| USRK | | | | LR | LR | 08 36 03.3 | |
| | comp=Z,411nm,19.4s,baz=59,slow=38 | | | | | | |
| LDFC | Landfair | 40.37 | 95 | eP | P | 08 17 55.5 | +0.2 |
| | comp=Z,14nm,0.6s | | | | | | |
| E25A | Miller Ranch, | 40.51 | 72 | P | P | 08 17 55.6 | -0.7 |
| | baz=40 | | | | | | |
| PFO | Pinyon Flat Ob | 40.55 | 97 | eP | P | 08 17 57.1 | +0.2 |
| PFO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| PFO | Pinyon Flat Ob | 40.55 | 97 | P | P | 08 17 58.0 | +1.2 |
| | baz=40 | | | | | | |
| PFO | Pinyon Flat Ob | 40.55 | 97 | eP | P | 08 17 57.1 | +0.2 |
| | comp=Z,6.3nm,0.9s | | | | | | |
| SRU | San Rafael | 40.55 | 86 | eP | P | 08 17 59.0 | +2.1 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| SRU | San Rafael | 40.55 | 86 | eP | P | 08 17 59.0 | +2.1 |
| | comp=Z,6.7nm,0.8s | | | | | | |
| 109C | Camp Elliot, M | 40.65 | 99 | P | P | 08 17 59.0 | +1.4 |
| | baz=41 | | | | | | |
| F25A | Bowman | 40.79 | 73 | P | P | 08 17 58.8 | +0.2 |
| | baz=41 | | | | | | |
| K22A | Casper | 40.83 | 79 | P | P | 08 17 59.1 | 0.0 |
| | baz=41 | | | | | | |
| IRM | Iron Mountain | 40.96 | 96 | P | P | 08 18 01.1 | +0.9 |
| | baz=41 | | | | | | |
| A28A | Rude Farm, Bot | 41.02 | 67 | P | P | 08 18 00.4 | -0.1 |
| | baz=41 | | | | | | |
| BAR | Barrett | 41.06 | 99 | eP | P | 08 18 01.5 | +0.6 |
| | comp=Z,8.0nm,0.9s | | | | | | |
| MONP | Monument Peak | 41.07 | 98 | P | P | 08 18 01.8 | +0.6 |
| | baz=41 | | | | | | |
| E26A | Carlson Angus | 41.07 | 72 | P | P | 08 18 01.1 | +0.2 |
| | baz=41 | | | | | | |
| MAJO | Matsushiro | 41.14 | 269 | i P | P | 08 18 01.1 | -0.4 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,118nm,0.9s | | | | | | |
| MAJO | Matsushiro | 41.14 | 269 | eP | P | 08 18 01.5 | 0.0 |
| | comp=Z,23nm,0.9s | | | | | | |
| MAT | Matsushiro | 41.14 | 269 | P | P | 08 18 02.4 | +0.9 |
| MAT | | | | S | S | 08 24 19.0 | +6.7 |
| MJAR | Matsushiro Arr | 41.14 | 269 | P | P | 08 18 02.4 | +0.9 |
| | comp=Z,3.6nm,0.6s,baz=38,slow=5.3,SNR=14 | | | | | | |
| MJAR | | | | LR | LR | 08 35 01.2 | |
| | comp=Z,316nm,20.9s,baz=75,slow=36 | | | | | | |
| B28A | Dugan Ranch, T | 41.21 | 68 | P | P | 08 18 01.6 | -0.4 |
| | baz=41 | | | | | | |
| O20A | White River Ci | 41.30 | 83 | P | P | 08 18 03.3 | +0.2 |
| | baz=41 | | | | | | |
| SWSC | Sam W. Stewart | 41.41 | 98 | P | P | 08 18 04.4 | +0.6 |
| | baz=41 | | | | | | |
| IBP | Imperial Bould | 41.42 | 98 | P | P | 08 18 04.4 | +0.4 |
| | baz=41 | | | | | | |
| H25A | Fruitdale | 41.43 | 75 | P | P | 08 18 03.7 | -0.3 |
| | baz=41 | | | | | | |
| PDMCI | Parker Dam,Lak | 41.48 | 95 | P | P | 08 18 05.2 | +0.9 |
| | baz=41 | | | | | | |
| C28A | Hausauer Farms | 41.58 | 69 | P | P | 08 18 05.2 | +0.1 |
| | baz=41 | | | | | | |
| A29A | Manning Farm, | 41.59 | 67 | P | P | 08 18 05.0 | -0.2 |
| | baz=41 | | | | | | |
| E27A | Carson | 41.61 | 71 | P | P | 08 18 05.0 | -0.3 |
| | baz=41 | | | | | | |
| Y12C | Blythe | 41.62 | 96 | P | P | 08 18 05.6 | +0.1 |
| | baz=42 | | | | | | |
| G26A | Maurine | 41.64 | 73 | P | P | 08 18 05.4 | -0.2 |
| | baz=41 | | | | | | |
| F27A | Lemmon | 41.65 | 72 | P | P | 08 18 04.9 | -0.8 |
| | baz=42 | | | | | | |
| B29A | Wagenman Farm, | 41.77 | 68 | P | P | 08 18 06.2 | -0.4 |
| | baz=42 | | | | | | |
| GLA | Glamis | 41.92 | 97 | P | P | 08 18 09.3 | +1.3 |
| | baz=42 | | | | | | |
| H26A | Fairpoint | 41.92 | 74 | P | P | 08 18 07.4 | -0.5 |
| | baz=42 | | | | | | |
| MDND | Maddock | 41.96 | 68 | P | P | 08 18 07.9 | -0.3 |
| | baz=42 | | | | | | |
| G27A | Dupree | 41.98 | 73 | P | P | 08 18 08.7 | +0.3 |
| | baz=42 | | | | | | |
| PV04 | Paradox Valley | 41.98 | 86 | eP | P | 08 18 09.0 | +0.3 |
| E28A | Huff | 42.03 | 71 | P | P | 08 18 08.7 | -0.1 |
| | baz=42 | | | | | | |
| I26A | New Underwood | 42.21 | 75 | P | P | 08 18 09.6 | -0.7 |
| | baz=42 | | | | | | |
| N23A | Red Feather La | 42.23 | 81 | P | P | 08 18 10.5 | -0.2 |
| | baz=42 | | | | | | |
| H27A | Howes | 42.32 | 74 | P | P | 08 18 11.0 | -0.2 |
| | baz=42 | | | | | | |
| WUAZ | Wupatki | 42.35 | 91 | P | P | 08 18 11.7 | 0.0 |
| | baz=42 | | | | | | |
| B30A | Myrvik Farm, E | 42.35 | 67 | P | P | 08 18 10.8 | -0.6 |
| | baz=42 | | | | | | |
| PV01 | Paradox Valley | 42.35 | 86 | eP | P | 08 18 12.7 | +1.0 |
| | comp=Z,504nm,0.7s | | | | | | |
| F28A | McLaughlin | 42.37 | 72 | P | P | 08 18 11.0 | -0.6 |
| | baz=42 | | | | | | |
| D29A | Pettibone, Tap | 42.39 | 69 | P | P | 08 18 11.1 | -0.6 |
| | baz=42 | | | | | | |
| E29A | Napoleon | 42.64 | 70 | P | P | 08 18 13.3 | -0.4 |
| | baz=42 | | | | | | |
| I27A | Quinn | 42.66 | 75 | P | P | 08 18 13.9 | 0.0 |
| | baz=42 | | | | | | |
| C30A | Mose, Pekin | 42.67 | 68 | P | P | 08 18 13.8 | -0.2 |
| | baz=42 | | | | | | |
| G28A | Parade | 42.74 | 73 | P | P | 08 18 14.2 | -0.4 |
| | baz=42 | | | | | | |
| B31A | Greenbush Farm | 42.75 | 67 | P | P | 08 18 14.3 | -0.2 |
| | baz=42 | | | | | | |
| ULM | Lac du Bonnet | 42.75 | 64 | P | P | 08 18 12.0 | -2.5 |
| | comp=Z,3.2nm,0.6s,baz=321,slow=6.5,SNR=3.5 | | | | | | |
| ULM | | | | PcP | PcP | 08 20 07.2 | +1.8 |
| | comp=Z,3.3nm,0.8s,baz=338,slow=5.4,SNR=2.8 | | | | | | |
| ULM | | | | LR | LR | 08 35 59.0 | |
| | comp=Z,490nm,21.1s,baz=292,slow=36 | | | | | | |
| K26A | Motz Farm, Whi | 42.80 | 77 | P | P | 08 18 14.7 | -0.4 |
| | baz=43 | | | | | | |
| D30A | Buchanan | 42.84 | 69 | P | P | 08 18 14.7 | -0.6 |
| | baz=43 | | | | | | |
| BOD | Bodaibo | 42.94 | 310 | eP | P | 08 18 13.6 | -2.3 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| MVCO | Mesa Verde | 42.99 | 87 | P | P | 08 18 17.7 | +0.8 |
| | baz=43 | | | | | | |
| C31A | Landman Farms, | 43.04 | 68 | P | P | 08 18 16.4 | -0.5 |
| | baz=43 | | | | | | |
| ISCO | Idaho Springs | 43.10 | 82 | P | P | 08 18 17.9 | 0.0 |
| | baz=43 | | | | | | |
| J27A | Elkhorn Farm, | 43.16 | 75 | P | P | 08 18 18.1 | +0.1 |
| | baz=43 | | | | | | |
| I28A | Midland | 43.22 | 74 | P | P | 08 18 18.3 | -0.1 |
| | baz=43 | | | | | | |
| G29A | Hoven | 43.25 | 72 | P | P | 08 18 18.4 | -0.3 |
| | baz=43 | | | | | | |
| B32A | Ashes, Strandq | 43.38 | 66 | P | P | 08 18 19.3 | -0.3 |
| | baz=43 | | | | | | |
| H29A | Onida | 43.41 | 73 | P | P | 08 18 19.9 | 0.0 |
| | baz=43 | | | | | | |
| E31A | Nome | 43.65 | 69 | P | P | 08 18 21.3 | -0.5 |
| | baz=43 | | | | | | |
| S22A | 4UR Ranch, Cre | 43.66 | 85 | P | P | 08 18 21.5 | -0.8 |
| | baz=44 | | | | | | |
| I29A | Vivian Onida | 43.71 | 74 | P | P | 08 18 22.4 | 0.0 |
| | baz=44 | | | | | | |
| G30A | Faulkton | 43.74 | 72 | P | P | 08 18 22.9 | +0.3 |
| | baz=44 | | | | | | |
| AGMN | Agassiz Nation | 43.81 | 66 | P | P | 08 18 21.7 | -1.4 |
| | baz=44 | | | | | | |
| AGMN | Agassiz Nation | 43.81 | 66 | eP | P | 08 18 22.4 | -0.7 |
| | comp=Z,7.3nm,0.8s | | | | | | |
| K28A | Ten Mile Ranch | 43.86 | 76 | P | P | 08 18 23.5 | -0.2 |
| | baz=44 | | | | | | |
| J29A | Okreek | 44.06 | 74 | P | P | 08 18 24.5 | -0.8 |
| | baz=44,SNR=5.2 | | | | | | |
| E32A | Braaten, Kindr | 44.09 | 69 | P | P | 08 18 24.6 | -0.7 |
| | baz=44 | | | | | | |
| CN2 | Changchun | 44.32 | 287 | eP | P | 08 18 26.6 | -0.6 |
| CN2 | | | | PMZ | | | |
| | comp=Z,20nm,1.3s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,400nm,16.0s | | | | | | |
| N27A | Anderson Farm, | 44.32 | 79 | P | P | 08 18 27.1 | -0.3 |
| | baz=44 | | | | | | |
| B34A | Aery, Baudette | 44.38 | 65 | P | P | 08 18 26.9 | -0.7 |
| | baz=44 | | | | | | |
| K29A | Lazy Trails An | 44.45 | 75 | P | P | 08 18 28.1 | -0.3 |
| | baz=44 | | | | | | |
| SDCO | Great Sand Dun | 44.47 | 84 | P | P | 08 18 27.8 | -1.0 |
| | baz=44 | | | | | | |
| SDCO | Great Sand Dun | 44.47 | 84 | eP | P | 08 18 29.9 | +1.0 |
| | comp=Z,6.5nm,1.0s | | | | | | |
| D33A | AnnSam, Waubun | 44.47 | 67 | P | P | 08 18 27.9 | -0.6 |
| | baz=44 | | | | | | |
| H31A | Wolsey | 44.51 | 72 | P | P | 08 18 28.7 | -0.1 |
| | baz=44 | | | | | | |
| OGNE | Ogallala | 44.54 | 78 | P | P | 08 18 28.1 | -1.1 |
| | baz=44 | | | | | | |
| J30A | Dallas | 44.60 | 74 | P | P | 08 18 28.6 | -0.9 |
| | baz=44 | | | | | | |
| P26A | Davis Ranch, A | 44.61 | 81 | P | P | 08 18 29.6 | -0.2 |
| | baz=44,SNR=5.2 | | | | | | |
| E33A | Westby DABS, E | 44.74 | 68 | P | P | 08 18 28.8 | -1.8 |
| | baz=44 | | | | | | |
| L29A | Maesberg Ranch | 44.78 | 76 | P | P | 08 18 29.6 | -1.4 |
| | baz=45 | | | | | | |
| D34A | Park Rapids | 44.87 | 67 | P | P | 08 18 30.4 | -1.2 |
| | baz=45 | | | | | | |
| TUC | Tucson | 44.88 | 94 | eP | P | 08 18 32.3 | +0.3 |
| TUC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| TUC | Tucson | 44.88 | 94 | eP | P | 08 18 32.2 | +0.3 |
| | comp=Z,7.7nm,1.2s | | | | | | |
| Q26A | Hugo | 44.91 | 81 | P | P | 08 18 31.0 | -1.2 |
| | baz=45 | | | | | | |
| K30A | Basset | 44.92 | 75 | P | P | 08 18 31.4 | -0.6 |
| | baz=45 | | | | | | |
| F33A | 5 Mile Ranch, | 44.97 | 69 | P | P | 08 18 31.1 | -1.2 |
| | baz=45 | | | | | | |
| M29A | Burnside Ranch | 45.03 | 77 | P | P | 08 18 32.2 | -0.9 |
| | baz=45 | | | | | | |
| J31A | Geddes | 45.06 | 73 | P | P | 08 18 32.3 | -0.9 |
| | baz=45 | | | | | | |
| P27A | Ficken Ranch, | 45.08 | 80 | P | P | 08 18 32.8 | -0.7 |
| | baz=45 | | | | | | |
| H32A | Carlson Farm, | 45.09 | 71 | P | P | 08 18 32.8 | -0.6 |
| | baz=45 | | | | | | |
| R26A | Arlington | 45.35 | 82 | P | P | 08 18 35.8 | +0.1 |
| | baz=45 | | | | | | |
| I32A | Karley and Nic | 45.36 | 72 | P | P | 08 18 33.7 | -1.8 |
| | baz=45 | | | | | | |
| H33A | Prehn Over Nor | 45.39 | 71 | P | P | 08 18 34.8 | -1.0 |
| | baz=45 | | | | | | |
| KSCO | Kaye Shedlock' | 45.39 | 81 | P | P | 08 18 36.3 | +0.3 |
| | baz=45 | | | | | | |
| N29A | Votaw Ranch, W | 45.45 | 77 | P | P | 08 18 35.7 | -0.7 |
| | baz=45 | | | | | | |
| T25A | Trinidad | 45.52 | 84 | P | P | 08 18 37.0 | -0.2 |
| | baz=45 | | | | | | |
| J32A | Parkston | 45.53 | 73 | P | P | 08 18 35.7 | -1.2 |
| | baz=45 | | | | | | |
| P28A | Saint Francis | 45.56 | 79 | P | P | 08 18 36.7 | -0.6 |
| | baz=45 | | | | | | |
| E35A | Pequot Lakes | 45.62 | 67 | P | P | 08 18 36.7 | -0.8 |
| | baz=45 | | | | | | |
| LAZ | Ladron | 45.67 | 89 | eP | P | 08 18 39.0 | +0.6 |
| | comp=Z,8.2nm,1.3s | | | | | | |
| G34A | Benson | 45.69 | 69 | P | P | 08 18 37.2 | -0.9 |
| | baz=46 | | | | | | |
| ANMO | Albuquerque | 45.72 | 88⇓ | iP | P | 08 18 38.7 | 0.0 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| R27A | Eads | 45.75 | 82 | P | P | 08 18 38.8 | 0.0 |
| | baz=46 | | | | | | |
| S26A | Kim | 45.77 | 83 | P | P | 08 18 38.5 | -0.5 |
| | baz=46 | | | | | | |
| C36A | Pine Crest Far | 45.79 | 65 | P | P | 08 18 38.3 | -0.6 |
| | baz=46 | | | | | | |
| Q28A | Sharon Springs | 45.84 | 80 | P | P | 08 18 38.7 | -0.8 |
| | baz=46 | | | | | | |
| K32A | Verdigre | 45.89 | 74 | P | P | 08 18 39.0 | -0.8 |
| | baz=46 | | | | | | |
| F35A | Swanville | 45.93 | 68 | P | P | 08 18 38.8 | -1.2 |
| | baz=46 | | | | | | |
| D36A | Goodland | 45.95 | 66 | P | P | 08 18 38.7 | -1.5 |
| | baz=46 | | | | | | |
| H34A | Spellman Lake, | 45.95 | 70 | P | P | 08 18 39.4 | -0.7 |
| | baz=46 | | | | | | |
| T26A | Comanche Natio | 45.99 | 83 | P | P | 08 18 39.8 | -1.0 |
| | baz=46 | | | | | | |
| ECSD | EROS Data Cent | 46.03 | 72 | P | P | 08 18 39.4 | -1.4 |
| | baz=46 | | | | | | |
| ECSD | EROS Data Cent | 46.03 | 72 | eP | P | 08 18 39.4 | -1.4 |
| | comp=Z,6.2nm,0.8s | | | | | | |
| Y22D | IRIS PASSCAL I | 46.03 | 89 | P | P | 08 18 41.9 | +0.9 |
| | baz=46 | | | | | | |
| P29A | Atwood | 46.03 | 79 | P | P | 08 18 40.7 | -0.3 |
| | baz=46 | | | | | | |
| LPM | Los Pinos Moun | 46.04 | 89 | eP | P | 08 18 42.8 | +1.6 |
| | comp=Z,6.6nm,1.0s | | | | | | |
| C37A | Embarrass | 46.17 | 65 | P | P | 08 18 41.2 | -0.6 |
| | baz=46 | | | | | | |
| R28A | Tribune | 46.31 | 81 | P | P | 08 18 43.3 | +0.1 |
| | baz=46 | | | | | | |
| G35A | Watkins | 46.36 | 69 | P | P | 08 18 43.1 | -0.3 |
| | baz=46 | | | | | | |
| D37A | Cotton | 46.37 | 65 | P | P | 08 18 43.2 | -0.2 |
| | baz=46 | | | | | | |
| EYMN | Ely | 46.42 | 64 | P | P | 08 18 43.4 | -0.4 |
| | baz=46 | | | | | | |
| Q29A | Oakley | 46.46 | 80 | P | P | 08 18 44.6 | +0.2 |
| | baz=46 | | | | | | |
| P30A | Selden | 46.48 | 78 | P | P | 08 18 44.4 | 0.0 |
| | baz=46 | | | | | | |
| F36A | Milaca | 46.52 | 67 | P | P | 08 18 44.4 | -0.2 |
| | baz=46 | | | | | | |
| BGNE | Belgrade | 46.55 | 75 | P | P | 08 18 45.0 | 0.0 |
| | baz=46 | | | | | | |
| 121A | Cookes Peak, D | 46.55 | 91 | P | P | 08 18 45.8 | +0.5 |
| | baz=46 | | | | | | |
| O31A | Woolen Ranch, | 46.65 | 77 | P | P | 08 18 45.2 | -0.6 |
| | baz=46 | | | | | | |
| R29A | Marienthal | 46.66 | 80 | P | P | 08 18 45.2 | -0.8 |
| | baz=46 | | | | | | |
| C38A | Sawbill Land. | 46.68 | 64 | P | P | 08 18 45.4 | -0.4 |
| | baz=46 | | | | | | |
| S28A | Manter | 46.74 | 82 | P | P | 08 18 46.1 | -0.5 |
| | baz=47 | | | | | | |
| G36A | St. Michael | 46.77 | 68 | P | P | 08 18 45.4 | -1.1 |
| | baz=46 | | | | | | |
| KSRS | Korea Array | 46.79 | 278 | P | P | 08 18 46.8 | 0.0 |
| | comp=Z,7.4nm,0.8s,baz=54,slow=7.3,SNR=11 | | | | | | |
| KSRS | | | | PcP | PcP | 08 20 21.0 | +1.5 |
| | comp=Z,3.0nm,0.8s,baz=106,slow=3.4,SNR=3.5 | | | | | | |
| KSRS | | | | LR | LR | 08 38 55.6 | |
| | comp=Z,214nm,19.8s,baz=61,slow=37 | | | | | | |
| KSAR | Wonju Array Be | 46.82 | 278 | P | P | 08 18 46.8 | -0.3 |
| KSAR | | | | | | 08 20 21.0 | |
| KSAR | Wonju Array Be | 46.82 | 278 | P | P | 08 18 46.8 | -0.3 |
| KSAR | | | | PcP | PcP | 08 20 21.0 | +1.3 |
| Q30A | Quinter | 46.86 | 79 | P | P | 08 18 46.5 | -0.9 |
| | baz=47 | | | | | | |
| I35A | Creekview Farm | 46.89 | 70 | P | P | 08 18 46.7 | -0.9 |
| | baz=47 | | | | | | |
| T28A | Walsh | 46.92 | 82 | P | P | 08 18 47.8 | -0.2 |
| | baz=47 | | | | | | |
| U27A | Thompson Grove | 46.95 | 84 | P | P | 08 18 48.2 | -0.1 |
| | baz=47 | | | | | | |
| K34A | Le Mars | 46.97 | 72 | P | P | 08 18 47.6 | -0.6 |
| | baz=47 | | | | | | |

M33A **Taylor Creek F** 47.01 74 P P 08 18 48.3 -0.3
baz=47
J35A **Milford** 47.06 71 P P 08 18 49.0 0.0
baz=47
S29A **Ulysses** 47.20 81 P P 08 18 50.4 +0.3
baz=47
L34A **Svendsen Farm,** 47.25 73 P P 08 18 50.5 +0.1
baz=47
CBKS **Cedar Bluff** 47.25 79 P P 08 18 51.2 +0.7
baz=47
R30A **Dighton** 47.27 80 P P 08 18 51.5 +0.9
baz=47
SPMN **St. Paul** 47.31 68 P P 08 18 51.1 +0.3
baz=47
Q31A **Ellis** 47.33 78 P P 08 18 51.4 +0.2
baz=47
T29A **Hugoton** 47.39 82 P P 08 18 51.6 -0.1
baz=47
P32A **Huiting Farm,** 47.41 77 P P 08 18 51.3 -0.4
baz=47
K35A **Storm Lake** 47.45 72 P P 08 18 51.1 -0.8
baz=47
S30A **Montezuma** 47.58 81 P P 08 18 52.8 -0.2
baz=47
R31A **Burdett** 47.72 79 P P 08 18 53.5 -0.6
baz=48
O33A **Hebron** 47.73 76 P P 08 18 53.4 -0.7
baz=48
V28A **Channing** 47.76 84 P P 08 18 54.1 -0.4
baz=48
TJN **Taejon** 47.84 277⇑ *i*P P 08 18 55.7 +0.7
Q32A **Meitler Ranch,** 47.84 78 P P 08 18 54.4 -0.6
baz=48
U29A **Oasis Ranch, S** 47.87 82 P P 08 18 54.9 -0.4
baz=48
P33A **Williams Farm,** 48.07 77 P P 08 18 55.9 -0.9
baz=48
W28A **Vega** 48.10 84 P P 08 18 56.8 -0.4
baz=48
V29A **Stinnett** 48.10 83 P P 08 18 56.9 -0.3
baz=48
R32A **Long Quarter,** 48.12 79 P P 08 18 57.2 0.0
baz=48
S31A **Mullinville** 48.18 80 P P 08 18 57.6 -0.1
baz=48
O34A **Beatrice** 48.18 75 P P 08 18 58.2 +0.5
baz=48
U30A **WK&E Inc. Balk** 48.19 82 P P 08 18 58.0 +0.2
baz=48
Q33A **Connelly Farm,** 48.27 77 P P 08 18 58.4 +0.1
baz=48
N35A **Tabor** 48.37 74 P P 08 18 59.1 0.0
baz=48
T31A **Randall Ranch,** 48.40 81 P P 08 18 59.5 +0.1
baz=48
MNTX **Cornudas Mount** 48.60 90 P P 08 19 02.0 +1.1
baz=48,SNR=11
MNTX **Cornudas Mount** 48.60 90 *e*P P 08 19 01.8 +0.8
comp=Z,5.3nm,0.8s
X28A **Dimmitt** 48.60 85 P P 08 19 01.6 +0.5
baz=48
MSTX **Muleshoe** 48.62 86 P P 08 19 02.0 +0.8
baz=48
AMTX **Amarillo** 48.67 84 P P 08 19 02.4 +0.9
baz=48
AMTX **Amarillo** 48.67 84 *e*P P 08 19 01.4 -0.1
comp=Z,7.9nm,0.9s
V30A **Spur Ranch, Mi** 48.68 83 P P 08 19 02.2 +0.6
baz=48
COWI **Conover** 48.82 65 *e*P P 08 19 01.8 -0.7
Q34A **Chapman** 48.85 77 P P 08 19 03.5 +0.7
baz=49
P35A **Duane Minner,** 49.00 76 P P 08 19 03.0 -0.9
baz=49
R34A **Isabella, Hill** 49.07 78 P P 08 19 03.7 -0.7
baz=49
V31A **Spring Creek L** 49.18 82 P P 08 19 05.2 -0.3
baz=49
U32A **Winter Ranch,** 49.28 81 P P 08 19 06.3 +0.1
baz=49
DAG **Danmarks Havn** 49.30 9⇑ *i*P P 08 19 04.8 -0.9
DAG pmax pmax
comp=Z,26nm,0.8s
DAG **Danmarks Havn** 49.30 9⇑ *i*P P 08 19 04.8 -0.9
comp=Z,34nm,0.8s
Z28A **Tucker Farm, M** 49.32 86 P P 08 19 06.9 +0.3
baz=49
Y29A **Porterfield Fa** 49.37 85 P P 08 19 07.3 +0.4
baz=49
W31A **Holland Ranch,** 49.52 83 P P 08 19 08.2 +0.3
baz=49
S34A **Willow Spring** 49.54 78 P P 08 19 08.3 +0.2
baz=49
128A **Castleberry Fa** 49.72 87 P P 08 19 09.9 +0.3
baz=50
Z29A **Hungry Hill Ra** 49.76 86 P P 08 19 10.0 +0.1
baz=50
T34A **McClaskey Farm** 49.95 79 P P 08 19 10.7 -0.4
baz=50
W32A **Sentinel** 49.98 82 P P 08 19 11.5 0.0
baz=50
228A **UT Block 9, Go** 50.01 88 P P 08 19 12.0 +0.2
baz=50
S35A **Otter Creek Ra** 50.03 78 P P 08 19 11.8 0.0
baz=50
V33A **Lossen Ranch,** 50.09 81 P P 08 19 12.4 +0.1
baz=50
Z30A **Sanderson Ranc** 50.09 85 P P 08 19 12.6 +0.2
baz=50
R36A **Gordon, Harris** 50.09 77 P P 08 19 12.1 -0.1
baz=50
129A **Stewart Farms,** 50.09 87 P P 08 19 13.1 +0.6
baz=50
SUMG **Summit** 50.09 18 *i*P P 08 19 13.2 +0.9
SUMG pmax pmax
comp=Z,67nm,1.1s
SUMG **Summit** 50.09 18 *i*P P 08 19 13.2 +0.9
comp=Z,67nm,1.1s
SUMG **Summit** 50.09 18 *e*P P 08 19 12.6 +0.3
comp=Z,70nm,1.0s
U34A **Anderson Ranch** 50.13 80 P P 08 19 12.7 +0.1
baz=50
T35A **Sooner Cattle** 50.42 79 P P 08 19 15.2 +0.4
baz=50
W33A **Caddo, Fort Co** 50.43 82 P P 08 19 14.3 -0.6
baz=50
X32A **Elmer** 50.43 83 P P 08 19 14.3 -0.5
baz=50
WMOK **Wichita Mounta** 50.52 82 *e*P P 08 19 14.6 -1.0
WMOK pmax pmax
comp=Z,5.0nm,0.8s
WMOK **Wichita Mounta** 50.52 82 *e*P P 08 19 14.6 -1.0
comp=Z,4.7nm,0.8s
V34A **Guthrie** 50.54 80 P P 08 19 14.9 -0.8
baz=50
Y32A **R-V Farms, Ver** 50.62 83 P P 08 19 16.2 -0.1
baz=50
U35A **Pawnee** 50.65 79 P P 08 19 15.7 -0.8
baz=50
130A **Snyder** 50.66 86 P P 08 19 16.7 0.0
baz=50
Z31A **Sharp Cattle R** 50.66 85 P P 08 19 16.6 -0.1
baz=50
T36A **Boggs Farm, Ca** 50.70 78 P P 08 19 16.3 -0.6
baz=50
329A **Wagon Wheel Ra** 50.82 88 P P 08 19 17.6 -0.3
baz=51
S37A **Fort Scott** 50.86 77 P P 08 19 17.5 -0.6
baz=51
131A **Roby** 50.96 85 P P 08 19 18.6 -0.4
baz=51
V35A **Meyer Ranch, C** 51.00 80 P P 08 19 18.4 -0.8
baz=51
230A **Sterling City** 51.07 87 P P 08 19 19.3 -0.4
baz=51
Z32A **Haskell** 51.08 84 P P 08 19 19.1 -0.6
baz=51
Y33A **Hilltop Ranch,** 51.11 83 P P 08 19 19.5 -0.5
baz=51
T37A **Cheneyville 18** 51.23 77 P P 08 19 20.0 -0.8
baz=51
TXAR **Lajitas Array** 51.31 91 P P 08 19 21.5 -0.2
comp=Z,7.3nm,0.9s,baz=301,slow=5.3,SNR=46
TXAR ScP ScP 08 24 30.9 +1.1
comp=Z,0.6nm,0.9s,baz=323,slow=1.4,SNR=4.5
TXAR LR LR 08 39 06.7
comp=Z,195nm,20.0s,baz=0.0,slow=34
TLY **Talaya** 51.33 307 *e*P P 08 19 21.2 -0.2
TLY *e*S S 08 26 57.4 +19
TLY pmax pmax
comp=Z,6.0nm,0.4s
TLY MLR MLR
comp=Z,313nm,16.0s
TLY **Talaya** 51.33 307 *e*P P 08 19 21.8 +0.3
comp=Z,12nm,0.7s
330A **Mertzon** 51.37 87 P P 08 19 21.5 -0.5
baz=51
W35A **Tecumseh** 51.39 81 P P 08 19 21.3 -0.7
baz=51
ABTX **Abilene, Hawle** 51.45 85 P P 08 19 22.1 -0.5
baz=51
429A **Davenport Ranc** 51.48 88 P P 08 19 22.2 -0.6
baz=51
SFJD **Kangerlussuaq** 51.50 27 *e*P P 08 19 23.4 +1.0
SFJD pmax pmax
comp=Z,36nm,1.0s
SFJD **Kangerlussuaq** 51.50 27 *i* P P 08 19 23.1 +0.7
comp=Z,32nm,1.1s
SFJD **Kangerlussuaq** 51.50 27 *e*P P 08 19 23.4 +1.0
comp=Z,36nm,1.0s
231A **Bronte** 51.52 86 P P 08 19 22.3 -0.8
baz=51
V36A **Jenks** 51.52 79 P P 08 19 22.4 -0.6
baz=51
Z33A **Whitaker Ranch** 51.52 84 P P 08 19 22.5 -0.6
baz=51
TUL1 **Tulsa** 51.52 79 P P 08 19 22.2 -0.9
baz=51
U37A **Salina** 51.59 78 P P 08 19 22.7 -0.9
baz=51
529A **Stev Forest Ra** 51.63 89 P P 08 19 23.9 -0.1
baz=52
Y34A **Reagan Ranch,** 51.67 82 P P 08 19 23.8 -0.4
baz=52
430A **Baggett Ranch,** 51.76 88 P P 08 19 25.3 +0.3
baz=52
W36A **Wetumka** 51.79 80 P P 08 19 24.8 -0.2
baz=52
X35A **Drake** 51.84 81 P P 08 19 25.5 0.0
baz=52
331A **San Angelo** 51.89 87 P P 08 19 25.6 -0.3
baz=52
133A **Hamilton Ranch** 51.90 84 P P 08 19 25.8 -0.1
baz=52
V37A **Hulbert** 51.93 79 P P 08 19 25.8 -0.3
baz=52
232A **Coleman** 51.96 86 P P 08 19 24.7 -1.7
baz=52
Z34A **Collier Ranch,** 51.98 83 P P 08 19 25.4 -1.1
baz=52
U38A **Gravette** 52.01 78 P P 08 19 25.0 -1.7
baz=52
ULN **Ulaanbaatar** 52.03 302 *c i*P P 08 19 26.5 -0.3
ULN pmax pmax
comp=Z,11nm,1.0s
ULN **Ulaanbaatar** 52.03 302 *e*P P 08 19 26.8 0.0
comp=Z,9.1nm,0.8s
BJI **Beijing** 52.06 289 P P 08 19 27.1 +0.1
BJI S S 08 26 47.7 -0.5
BJI PMZ
comp=Z,18nm,0.9s
BJI PMZ
comp=Z,130nm,4.0s
BJI LN
comp=Z,570nm,24.9s
BJI LE
comp=Z,610nm,19.9s
BJI LZ
comp=Z,590nm,21.9s
Y35A **Marietta** 52.14 82 P P 08 19 26.8 -0.9
baz=52
530A **J-C Ranch, Com** 52.15 88 P P 08 19 27.3 -0.6
baz=52
431A **Sonora** 52.22 87 P P 08 19 28.0 -0.4
baz=52
HDIL **Hopedale** 52.25 70 P P 08 19 27.2 -1.2
baz=52
HDIL **Hopedale** 52.25 70 *e*P P 08 19 28.6 +0.2
comp=Z,21nm,0.8s
332A **Millersview** 52.25 86 P P 08 19 27.0 -1.5
baz=52
W37A **Quinton** 52.27 80 P P 08 19 27.2 -1.4
baz=52
233A **Rising Star** 52.32 85 P P 08 19 28.1 -1.0
baz=52
V38A **Canehill** 52.38 78 P P 08 19 28.2 -1.3
baz=52
SONM **Songino Array** 52.39 302 P P 08 19 29.3 -0.2
comp=Z,5.8nm,0.9s,baz=55,slow=7.4,SNR=34
SONM PcP PcP 08 20 40.7 +0.7
comp=Z,4.4nm,1.0s,baz=56,slow=2.4,SNR=4.5
SONM LR LR 08 44 43.4
comp=Z,662nm,18.0s,baz=24,slow=40
134A **White-Moore Ra** 52.43 84 P P 08 19 29.1 -0.7
baz=52
432A **Menard** 52.58 87 P P 08 19 29.9 -1.2
baz=52
Y36A **Durant** 52.60 81 P P 08 19 29.4 -1.7
baz=52
MOY **Mondy** 52.62 308 *e*P P 08 19 31.5 +0.4
531A **Rocksprings** 52.62 88 P P 08 19 30.2 -1.1
baz=52
X37A **Clayton** 52.67 80 P P 08 19 30.2 -1.5
baz=52
333A **Richland Sprin** 52.75 86 P P 08 19 31.2 -1.0
baz=53
234A **Clairette** 52.79 84 P P 08 19 31.4 -1.2
baz=53
JCT **Junction City** 52.85 87 *e*P P 08 19 32.7 -0.4
JCT *e* 08 21 31.5
JCT pmax pmax
comp=Z,8.0nm,0.7s
JCT **Junction City** 52.85 87 P P 08 19 32.0 -1.0
baz=53
JCT **Junction City** 52.85 87 *e*P P 08 19 32.6 -0.4
comp=Z,8.1nm,0.7s
JCT *e*PP PP 08 21 31.5 -1.0
W38A **Poteau** 52.86 79 P P 08 19 32.1 -0.9
baz=53
532A **Rocksprings** 53.04 87 P P 08 19 33.2 -1.3
baz=53
433A **Art** 53.09 86 P P 08 19 34.0 -0.8
baz=53
631A **Perdido Creek** 53.14 88 P P 08 19 34.2 -0.9
baz=53
334A **Lometa** 53.20 85 P P 08 19 34.5 -1.1
baz=53
WHTX **Lake Whitney** 53.22 84 P P 08 19 34.8 -0.8
baz=53
136A **Ennis** 53.44 83 P P 08 19 36.4 -0.8
baz=53
434A **Burnet** 53.55 85 P P 08 19 37.2 -0.9
baz=53
632A **Uvalde** 53.55 88 P P 08 19 37.5 -0.7
baz=53
533A **Kerrville** 53.61 87 P P 08 19 38.0 -0.6
baz=54
MIAR **Mount Ida** 53.78 79 P P 08 19 38.6 -1.1
baz=54
Y39A **Lockesburg** 53.89 80 P P 08 19 38.5 -2.1
baz=54
633A **Saathoff Ranch** 53.96 87 P P 08 19 39.6 -1.6
baz=54
534A **Blanco** 53.98 86 P P 08 19 40.4 -0.9
baz=54
435B **Jarrell** 53.99 85 P P 08 19 40.0 -1.3
baz=54
732A **Laxson Ranch,** 54.00 89 P P 08 19 40.5 -0.9
baz=54
TIA **Tai'an** 54.07 284 *e*P P 08 19 42.4 +0.5
TIA PMZ
comp=Z,20nm,1.2s
TIA LN
comp=Z,610nm,17.0s
TIA LE
comp=Z,680nm,15.0s
TIA LZ
comp=Z,840nm,15.0s
OLIL **Olney** 54.15 71 *e*P P 08 19 42.3 -0.1
comp=Z,47nm,1.4s
HHC **Hu-ho-hao-te** 54.16 292 *e*P P 08 19 43.6 +1.0
HHC pP pP 08 19 53.3 +0.5
HHC sP sP 08 19 59.5 +2.6
HHC S S 08 27 17.2 +0.2
HHC SS SS 08 30 56.1 -2.2
HHC PMZ
comp=Z,24nm,1.6s
HHC LN
comp=Z,490nm,18.7s
HHC LE
comp=Z,600nm,18.7s
HHC LZ
comp=Z,550nm,19.9s
SCHQ **Schefferville** 54.25 45 P P 08 19 42.7 -0.2
comp=Z,23nm,1.0s,baz=344,slow=6.4,SNR=7.4
832A **Faith Ranch, C** 54.31 89 P P 08 19 43.1 -0.6
baz=54
733A **Divot King Ran** 54.42 88 P P 08 19 44.0 -0.5
baz=54
535A **Dale** 54.53 86 P P 08 19 44.9 -0.4
baz=54
238A **Jacksonville** 54.62 82 P P 08 19 45.3 -0.6
baz=54
337A **Centerville** 54.64 83 P P 08 19 45.9 -0.2
baz=54
833A **Chaparral WMA,** 54.64 88 P P 08 19 46.1 0.0
baz=54
734A **La Parita Cree** 54.77 87 P P 08 19 47.4 +0.4
baz=55
536A **Bastrop** 54.80 85 P P 08 19 47.9 +0.6
baz=55
635A **Leesville** 54.86 86 P P 08 19 47.7 +0.1
baz=55
338A **Crockett** 54.96 83 P P 08 19 48.0 -0.3
baz=55
735A **Kenedy** 55.22 87 P P 08 19 50.1 -0.2
baz=55
933A **Laredo** 55.23 89 P P 08 19 50.0 -0.3
baz=55
834A **Tilden** 55.30 88 P P 08 19 50.7 -0.1
baz=55
736A **Circle Diamond** 55.60 86 P P 08 19 52.6 -0.4
baz=56
538A **Harpers Horsep** 55.65 84 P P 08 19 53.2 -0.1
baz=56
934A **Benavides** 55.69 88 P P 08 19 54.3 +0.7
baz=56
NJ2 **Nanjing** 55.92 280 *e*P P 08 19 56.7 +1.4
NJ2 PMZ
comp=Z,20nm,0.5s
034A **Hebbronville** 55.98 89 P P 08 19 56.6 +0.8
baz=56
WVT **Waverly** 56.09 73 *e*P P 08 19 55.4 -1.0
WVT pmax pmax
comp=Z,6.0nm,0.9s
WVT **Waverly** 56.09 73 *e*P P 08 19 55.4 -1.0
comp=Z,6.0nm,0.9s
539A **Cross D Ranch,** 56.20 83 P P 08 19 57.2 0.0
baz=56
OXF **Oxford** 56.28 76 *e*P P 08 19 53.2 -4.6
OXF pmax pmax
comp=Z,24nm,0.9s
OXF **Oxford** 56.28 76 *e*P P 08 19 53.2 -4.6
comp=Z,24nm,0.9s
035A **Encino** 56.43 89 P P 08 19 59.8 +0.8
baz=56
KEV **Kevo** 57.49 354 *e*P P 08 20 05.0 -0.8
KEV pmax pmax
comp=Z,8.0nm,0.6s
KEV **Kevo** 57.49 354 *e*P P 08 20 05.0 -0.8
comp=Z,7.7nm,0.6s
ARCES **ARCESS Array B** 57.80 355 P P 08 20 06.9 -1.1
comp=Z,14nm,0.9s,baz=14,slow=9.1,SNR=30
ARCES LR LR 08 46 53.3
comp=Z,506nm,18.7s,baz=13,slow=38
NVS **Novosibirsk** 58.15 320 *e*P P 08 20 09.3 -1.4
NVS *e* 08 20 56.5
NVS pmax pmax
comp=Z,12nm,1.4s
ZALV **Zalesovo Beam** 58.18 319 P P 08 20 10.2 -0.8
comp=Z,1.6nm,0.4s,baz=40,slow=6.8,SNR=12
ZALV LR LR 08 46 43.1
comp=Z,444nm,19.5s,baz=66,slow=38
ZALV **Zalesovo Beam** 58.18 319 *i* P P 08 20 11.1 +0.2
ZALV pmax pmax
comp=Z,2.0nm,0.4s
SSPA **Standing Stone** 58.58 63 *e*P P 08 20 12.8 -1.1
comp=Z,24nm,0.8s
LVZ **Lovozero** 58.70 351⇓ *e*P P 08 20 14.2 -0.2
LVZ pmax pmax
comp=Z,39nm,1.0s
LVZ **Lovozero** 58.70 351 *e*P P 08 20 13.9 -0.5
comp=Z,52nm,1.1s
WHN **Wuhan** 59.70 282 P P 08 20 22.2 +0.4
WHN LN
comp=Z,920nm,14.6s
WHN LE
comp=Z,1μm,11.0s
WHN LZ
comp=Z,1μm,12.9s
NACB **Ninganchiao** 59.97 271 *e*P P 08 20 14.5 -9.2
XAN **Xi'an** 60.39 288 P P 08 20 27.2 +0.7
XAN pP pP 08 20 37.9 +0.9
XAN sP sP 08 20 41.5 +0.5
XAN PP PP 08 22 40.6 +1.1
XAN S S 08 28 35.5 -3.4
XAN SS SS 08 32 33.2 -3.2
XAN PMZ
comp=Z,12nm,1.2s
XAN PMZ
comp=Z,48nm,9.5s
XAN LN
comp=Z,110nm,22.2s
XAN LE
comp=Z,780nm,23.6s
XAN LZ
comp=Z,460nm,17.6s
GTA **Gaotai** 61.62 298 ⇓P P 08 20 35.4 +0.4
GTA pP pP 08 20 45.5 +0.1
GTA sP sP 08 20 49.4 0.0
GTA PcP PcP 08 21 21.7 +5.4
GTA S S 08 28 54.2 -0.5
GTA sS sS 08 29 10.6 -1.3
GTA PMZ
comp=Z,13nm,1.4s
GTA PMZ
comp=Z,68nm,6.2s
GTA LN
comp=Z,640nm,14.3s
GTA LE
comp=Z,560nm,18.5s
GTA LZ
comp=Z,1μm,17.6s
LZH **Lanzhou** 61.81 293 *e*P P 08 20 37.6 +1.3
LZH pP pP 08 20 47.7 +0.9
LZH sP sP 08 20 52.7 +1.9
LZH PP PP 08 22 55.6 +3.4
LZH *e*S S 08 28 56.6 -0.7
LZH sS sS 08 29 12.1 -2.3
LZH SS SS 08 32 56.7 -2.1
LZH PMZ
comp=Z,59nm,1.1s
LZH PMZ
comp=Z,140nm,4.8s
LZH LN
comp=Z,1μm,15.5s
LZH LE
comp=Z,360nm,13.6s
LZH LZ
comp=Z,1μm,15.6s
KURK **Kurchatov** 63.11 320 *e*P P 08 20 43.8 -0.8
KURK pmax pmax
comp=Z,41nm,1.2s
KURK **Kurchatov** 63.11 320 *e*P P 08 20 43.8 -0.8
comp=Z,41nm,1.2s
CHKZ **Chkalovo** 63.69 326 P P 08 20 47.5 -0.8
CHKZ pmax pmax
comp=Z,13nm,1.4s
SVE **Sverdlovsk** 64.11 333⇑ *i*P P 08 20 51.8 +0.7
SVE pmax pmax
comp=Z,38nm,1.3s
BVA0 **Borovoye Array** 64.31 326 *i* P P 08 20 52.0 -0.4
BVA0 pmax pmax
comp=Z,11nm,0.9s
BRVK **Borovoye** 64.31 326 *e*P P 08 20 52.3 -0.1
BRVK pmax pmax
comp=Z,15nm,1.1s
BRVK **Borovoye** 64.31 326 *e*P P 08 20 52.3 -0.1
comp=Z,15nm,1.1s
VOSK **Vostochnaya** 64.35 325 P P 08 20 51.6 -1.1
VOSK pmax pmax
comp=Z,15nm,1.4s

**WMQ Urumqi 64.48 309** *e*P P 08 20 57.0 +3.2
WMQ S **S** **08 29 30.0 -0.2**
WMQ PMZ
comp=Z,13nm,1.0s
WMQ PMZ
comp=Z,78nm,7.0s
WMQ LN
comp=Z,510nm,20.0s
WMQ LE
comp=Z,540nm,20.0s
WMQ LZ
comp=Z,390nm,20.0s
**MK31 Makanchi Array 64.65 315** *i* P **P** **08 20 54.2 -0.6**
MK31 pmax pmax
comp=Z,5.0nm,0.6s
**MKAR Makanchi Array 64.65 315** P **P** **08 20 53.9 -0.9**
comp=Z,6.6nm,0.7s,baz=48,slow=5.4,SNR=55
MKAR LR LR 08 50 16.2
comp=Z,529nm,18.0s,baz=54,slow=37
**MKAR Makanchi Array 64.65 315** *ce*P **P** **08 20 54.2 -0.6**
MKAR pmax pmax
comp=Z,7.0nm,0.7s
**ARU Arti 65.02 334** *c i*P **P** **08 20 56.8 -0.2**
ARU 08 21 27.5
ARU S **S** **08 29 36.7 +0.4**
ARU pmax pmax
comp=Z,28nm,1.0s
**ARU Arti 65.02 334** *e*P **P** **08 20 56.7 -0.2**
comp=Z,39nm,1.1s
**CD2 Chengdu 65.65 289** *e*P **P** **08 21 01.8 +0.3**
CD2 pP **pP** **08 21 12.1 +0.1**
CD2 sP **sP** **08 21 16.3 +0.3**
CD2 S **S** **08 29 44.4 -0.4**
CD2 sS **sS** **08 30 02.0 -0.1**
CD2 SKS **SKSac** **08 30 54.2 -0.2**
CD2 SS **SS** **08 33 59.2 +0.6**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**FINES FINESS Array B 65.79 353** P **P** **08 21 01.5 -0.4**
comp=Z,21nm,0.7s,baz=24,slow=6.2,SNR=85
**NB2 NORSAR Subarra 66.66 1** P **P** **08 21 07.3 -0.3**
comp=Z,7.8nm,0.7s,baz=360,slow=6.2
**NOA NORSAR Array B 66.66 1** P **P** **08 21 06.9 -0.7**
comp=Z,10.0nm,0.9s,baz=0.2,slow=6.3,SNR=16
**GYA Guiyang 67.27 284** *e*P **P** **08 21 13.8 +1.8**
GYA PMZ
comp=Z,10.0nm,1.0s
**OTUK Ortayu 67.54 322** P **P** **08 21 13.0 -0.3**
OTUK pmax pmax
comp=Z,15nm,1.1s
**PDGK Podgornoye 68.61 314** P **P** **08 21 20.2 +0.2**
PDGK pmax pmax
comp=Z,24nm,0.9s
**VSU Vasula 68.69 352** *d i*P **P** **08 21 20.7 +0.4**
**KMI Kunming 70.58 286** P **P** **08 21 32.9 +0.1**
KMI pP **pP** **08 21 43.3 -0.1**
KMI sP **sP** **08 21 47.8 +0.5**
KMI S **S** **08 30 44.1 -0.1**
KMI sS **sS** **08 31 00.9 -0.7**
KMI SS **SS** **08 35 10.0 -5.4**
KMI PMZ
comp=Z,8.0nm,1.4s
KMI PMZ
comp=Z,130nm,4.2s
KMI LN
comp=Z,290nm,13.3s
KMI LE
comp=Z,360nm,13.3s
KMI LZ
comp=Z,310nm,13.8s
**TKM2 Tokmak 2 70.61 316** *e*P **P** **08 21 32.9 +0.2**
TKM2 pmax pmax
comp=Z,8.0nm,0.8s
**TKM2 Tokmak 2 70.61 316** P **P** **08 21 33.1 +0.4**
SNR=7.6
**TKM2 Tokmak 2 70.61 316** *e*P **P** **08 21 32.9 +0.2**
comp=Z,7.9nm,0.8s
**USP Ospenovka 70.78 317** P **P** **08 21 34.7 +1.2**
SNR=9.0
**OBN Obninsk 70.85 346** *d i*P **P** **08 21 33.4 -0.2**
OBN *e* 08 21 52.5
OBN *e* 08 24 10.8
OBN *e*S **SKiKP** **08 31 09.6 -3.1**
OBN *e*SS **SS** **08 35 17.1 -0.3**
OBN pmax pmax
comp=Z,59nm,1.7s
**ULHL Ulahol 70.88 315** P **P** **08 21 35.2 +0.9**
SNR=7.8
**AB31 Akbulak array 70.95 330** *i* P **P** **08 21 34.3 0.0**
AB31 pmax pmax
comp=Z,2.0nm,0.3s
**ABKAR Akbulak array 70.95 330** *e*P **P** **08 21 34.5 +0.2**
comp=Z,4.2nm,0.6s
**FRU Bishkek 71.09 317** *e*P **P** **08 21 35.5 +0.1**
FRU pmax pmax
comp=Z,50nm,1.0s
**KBK Karagaybulak 71.10 317** P **P** **08 21 36.7 +1.1**
SNR=5.9
**AAK Ala-Archa 71.30 317** *e*P **P** **08 21 37.4 +0.6**
AAK pmax pmax
comp=Z,9.0nm,0.7s
**AAK Ala-Archa 71.30 317** P **P** **08 21 37.8 +0.9**
SNR=11
**AAK Ala-Archa 71.30 317** *e*P **P** **08 21 37.4 +0.6**
comp=Z,8.8nm,0.7s
**IZAR Zarasai 71.42 352** *e*P **P** **08 21 37.7 +0.6**
IZAR IAmb IAmb 08 21 39.6
comp=Z,11nm,0.6s
**PPT Papeete 71.53 162** LR LR 08 44 52.4
comp=Z,191nm,21.8s,baz=335,slow=29
**EKS2 Erkin-Say 71.58 317** *e*P **P** **08 21 39.2 +0.7**
EKS2 pmax pmax
comp=Z,8.0nm,0.7s
**EKS2 Erkin-Say 71.58 317** P **P** **08 21 39.5 +1.0**
SNR=10
**EKS2 Erkin-Say 71.58 317** *e*P **P** **08 21 39.2 +0.7**
comp=Z,8.2nm,0.7s
**ISAL Salakas 71.61 352** *e*P **P** **08 21 38.9 +0.6**
ISAL IAmb IAmb 08 21 41.7
comp=Z,12nm,0.9s
**UCH Uchtor 71.63 317** P **P** **08 21 40.3 +1.1**
SNR=5.9
**IDID Didziasalis 71.81 352** *e*P **P** **08 21 40.1 +0.6**
IDID IAmb IAmb 08 21 40.8
comp=Z,10nm,0.9s
**IIGN Ignalina 71.82 352** *e*P **P** **08 21 40.1 +0.6**
IIGN IAmb IAmb 08 21 42.9
comp=Z,14nm,0.9s
**AML Almayashu 72.05 317** P **P** **08 21 42.6 +0.9**
SNR=11
**NACGM Naroch 72.22 352** *e* **P** **08 21 40.0 -1.9**
**MNAS Manas 72.25 318** P **P** **08 21 42.3 -0.2**
MNAS pmax pmax
comp=Z,7.0nm,1.0s
**KK31 Karatay Array 72.53 320** *i* P **P** **08 21 43.4 -0.6**
KK31 pmax pmax
comp=Z,30nm,1.4s
**KKAR Karatay Array 72.53 320** *e*P **P** **08 21 44.5 +0.5**
KKAR pmax pmax
comp=Z,7.0nm,0.8s
**KKAR Karatay Array 72.53 320** *e*P **P** **08 21 44.5 +0.5**
comp=Z,7.0nm,0.8s
**LPSR Galich'ya Gora 72.90 344** *e*P **P** **08 21 45.1 -0.9**
LPSR pmax pmax
comp=Z,10.0nm,0.7s
LPSR pmax pmax
comp=N,8.0nm,0.6s
LPSR pmax pmax
comp=E,6.0nm,0.5s
**KSH Kashi 73.24 314** P P 08 21 51.9 +3.5
KSH *ep*P **PcP** **08 22 02.7 -2.1**
KSH PP **PP** **08 24 35.6 +4.5**
KSH S **SKiKP** **08 31 15.6 -1.3**
KSH PMZ
comp=E,24nm,1.0s
KSH PMZ
comp=E,99nm,4.3s
KSH LN
comp=E,260nm,14.1s
KSH LE
comp=E,100nm,8.3s
KSH LZ
comp=E,140nm,7.1s
**SUW Suwalki 73.38 354** *e*P **P** **08 21 48.7 -0.1**
**SUW Suwalki 73.38 354** *ep*P **P** **08 21 48.7 -0.1**
**LSA Lhasa 73.61 297** *e*P **P** **08 21 52.0 +0.8**
LSA pmax pmax
comp=Z,17nm,0.7s
**LSA Lhasa 73.61 297** *e*P **P** **08 21 52.0 +0.8**
comp=Z,17nm,0.7s
**VRH Novokhopyorsk 73.73 342** *e*P **P** **08 21 49.5 -1.4**
VRH pmax pmax
comp=Z,20nm,1.3s
VRH pmax pmax
comp=N,3.0nm,0.3s
VRH pmax pmax
comp=E,10.0nm,1.2s
**VSR Storozhevoye 74.19 343** *e*P **P** **08 21 53.2 -0.4**
VSR pmax pmax
comp=Z,20nm,1.3s
VSR pmax pmax
comp=N,10.0nm,0.7s
VSR pmax pmax
comp=E,9.0nm,1.0s
**VORD Divnogorie 74.41 343** *e*P **P** **08 21 54.8 0.0**
VORD pmax pmax
comp=Z,7.0nm,0.5s
VORD pmax pmax
comp=N,10.0nm,0.7s
VORD pmax pmax
comp=E,10.0nm,0.9s
**IBBN Ibbenburen 75.34 3** *e*P **P** **08 22 01.5 +1.4**
comp=E,40nm,1.3s,baz=359,slow=5.5
**WTSB Winterswijk 75.64 4** *e*P **P** **08 22 02.6 +0.7**
comp=E,44nm,1.5s
**BEL Belsk 75.69 355** *e*P **P** **08 22 03.4 +1.2**
**BEL Belsk 75.69 355** *e*P **P** **08 22 03.4 +1.2**
**CLZ Clausthal 75.87 2** *e*P **P** **08 22 04.4 +1.1**
comp=E,26nm,1.2s,baz=359,slow=5.5
**AKASG Malin Array Be 76.12 349** P **P** **08 22 04.3 -0.4**
comp=E,7.0nm,0.5s,baz=13,slow=5.7,SNR=43
**KIEV Kiev 76.13 349** *e*P **P** **08 22 04.2 -0.6**
KIEV pmax pmax
comp=Z,28nm,1.0s
**KIEV Kiev 76.13 349** *e*P **P** **08 22 04.2 -0.6**
comp=Z,28nm,1.0s
**GTTG Gyttingen 76.16 2** *e*P **P** **08 22 05.8 +0.9**
comp=Z,22nm,0.9s,baz=359,slow=5.5
**CLL Collm 76.43 360** *i*P **P** **08 22 06.8 +0.4**
CLL pmax pmax
comp=Z,19nm,1.2s
**CLL Collm 76.43 360** *e*P **P** **08 22 06.8 +0.4**
comp=Z,20nm,1.2s,baz=359,slow=5.5
**CLL Collm 76.43 360** *i*P **P** **08 22 06.8 +0.4**
comp=Z,19nm,1.2s
CLL *e*PP **PP** **08 24 58.0 +0.5**
**HGN Heimansgroeve 76.80 5** *e*P **P** **08 22 09.0 +0.4**
comp=Z,36nm,1.2s
**KSP Ksiaz 76.86 358** *e*P **P** **08 22 09.2 +0.4**
**KSP Ksiaz 76.86 358** *e*P **P** **08 22 09.3 +0.4**
**BRG Berggiesshubel 76.86 359** *e*PKP **P** **08 22 08.8 -0.1**
comp=Z,14nm,1.2s
**BRG Berggiesshubel 76.86 359** *e*P **P** **08 22 08.8 -0.1**
BRG pmax pmax
comp=Z,14nm,1.2s
**BRG Berggiesshubel 76.86 359** *e*P **P** **08 22 09.4 +0.5**
comp=Z,14nm,1.2s,baz=359,slow=5.5
**MEM Membach 76.96 5** P **P** **08 22 10.8 +1.3**
comp=Z,13nm,1.4s
**MOX Moxa 77.09 1** *e*P **P** **08 22 10.8 +0.6**
comp=Z,13nm,1.0s,baz=359,slow=5.5
**BCLA Clavier 77.11 5** P **P** **08 22 11.3 +0.9**
comp=Z,13nm,1.3s
**UPC Upice 77.20 358** *e*P **P** **08 22 11.6 +0.8**
UPC MLR MLR
comp=Z,500nm,17.2s
**UPC Upice 77.20 358** *e*P **P** **08 22 11.6 +0.8**
UPC AMS AMS 08 51 50.0
comp=Z,500nm,17.2s
**PVCC Panska Ves 77.20 359** *e*P **P** **08 22 11.8 +1.0**
PVCC MLR MLR
comp=Z,400nm,19.7s
**PVCC Panska Ves 77.20 359** *e*P **P** **08 22 11.8 +1.0**
PVCC AMS AMS 08 52 00.0
comp=Z,400nm,19.7s
**TAPN Taplejung 77.32 298** *e*P **P** **08 22 12.4 +0.2**
comp=Z,27nm,0.8s
**TANN Tannenbergstha 77.32 0** *e*P **P** **08 22 12.7 +1.2**
comp=Z,170nm,3.0s,baz=359,slow=5.5
**DPC Dobruska-Polom 77.35 358** *e*P **P** **08 22 12.7 +1.0**
DPC MLR MLR
comp=Z,400nm,24.5s
**DPC Dobruska-Polom 77.35 358** *e*P **P** **08 22 12.7 +1.0**
DPC AMS AMS 08 52 00.0
comp=Z,400nm,24.5s
**OJC Ojcow 77.36 356** *e*P **P** **08 22 12.1 +0.4**
**OJC Ojcow 77.36 356** *e*P **P** **08 22 12.2 +0.5**
**DOU Dourbes 77.40 6** P **P** **08 22 12.9 +1.0**
comp=Z,10nm,1.6s
**LVV L'vov 77.49 353** *e*P **P** **08 22 12.2 -0.2**
**KRLC Kraliky 77.61 357** *e*P **P** **08 22 14.3 +1.1**
**KRLC Kraliky 77.61 357** *e*P **P** **08 22 14.3 +1.1**
**PRU Pruhonice 77.74 359** *e*P **P** **08 22 13.4 -0.4**
PRU MLR MLR
comp=Z,300nm,20.4s
**PRU Pruhonice 77.74 359** *e*P **P** **08 22 13.4 -0.4**
PRU AMS AMS 08 52 10.0
comp=Z,300nm,20.4s
**OKC Ostrava-Krasne 77.81 357** *e*P **P** **08 22 15.3 +1.1**
**OKC Ostrava-Krasne 77.81 357** *e*P **P** **08 22 15.3 +1.1**
**GOPC GO Pecny, Ondr 77.81 359** *e*P **P** **08 22 15.2 +0.9**
GOPC MLR MLR
comp=Z,300nm,19.7s
**GOPC GO Pecny, Ondr 77.81 359** *e*P **P** **08 22 15.2 +0.9**
GOPC AMS AMS 08 52 00.0
comp=Z,300nm,19.7s
**GUN Gumba 77.84 300** *e*P **P** **08 22 15.6 +0.4**
comp=Z,70nm,0.9s
**ODAN Odare 77.88 298** *e*P **P** **08 22 15.4 +0.1**
comp=Z,8.4nm,0.7s
**MORC Moravsky Berou 77.89 357** *i*P **P** **08 22 16.1 +1.4**
**MORC Moravsky Berou 77.89 357** *i*P **P** **08 22 16.1 +1.4**
**MORC Moravsky Berou 77.89 357** *e*P **P** **08 22 15.4 +0.7**
comp=Z,36nm,1.1s
**WLF Walferdange 77.91 5** P **P** **08 22 15.8 +1.0**
**WLF Walferdange 77.91 5** *e*P **P** **08 22 15.0 +0.2**
comp=Z,84nm,1.9s,baz=359,slow=5.5
**CMAR Chiang Mai Arr 77.95 284** P **P** **08 22 15.9 +0.4**
comp=Z,2.2nm,0.7s,baz=24,slow=5.4,SNR=15
**ROTZ Rotenmuhle 77.97 1** *e*P **P** **08 22 15.8 +0.6**
comp=Z,13nm,1.1s,baz=359,slow=5.5
**GRF Grafenberg Arr 78.04 1** *e*P **P** **08 22 16.0 +0.4**
comp=Z,27nm,1.1s,baz=359,slow=5.5
**STHS Stebnicka Huta 78.08 354** *e*P **P** **08 22 17.1 +1.3**
STHS pmax pmax
comp=Z,19nm,1.0s
**STHS Stebnicka Huta 78.08 354** *e*P **P** **08 22 17.1 +1.3**
**NIE Niedzica 78.13 355** *e*P **P** **08 22 17.4 +1.4**
**NIE Niedzica 78.13 355** *e*P **P** **08 22 17.5 +1.4**
**RAMN Ramite 78.23 299** *e*P **P** **08 22 17.3 0.0**
comp=Z,41nm,0.7s
**KKN Kakani 78.25 300** *e*P **P** **08 22 17.9 +0.6**
comp=Z,69nm,1.3s
**PKI Pulchoki 78.36 300** *e*P **P** **08 22 17.9 -0.2**
comp=Z,54nm,1.1s
**PKIN Phulchoki 78.36 300** *e*P **P** **08 22 18.5 +0.5**
**VRAC Vranov 78.38 358** *i*P **P** **08 22 18.7 +1.3**
**VRAC Vranov 78.38 358** *i*P **P** **08 22 18.7 +1.3**
**GKN Gorkha 78.42 301** *e*P **P** **08 22 18.5 +0.3**
comp=Z,48nm,0.9s
**TREC Trest 78.42 358** AMS AMS 08 52 50.0
comp=Z,700nm,19.9s
**DMN Daman 78.49 300** *e*P **P** **08 22 19.0 +0.3**
comp=Z,59nm,1.1s
**KOLS Kolonicke sedl 78.50 354** *e*P **P** **08 22 18.9 +0.8**
KOLS pmax pmax
comp=Z,12nm,1.2s
**KOLS Kolonicke sedl 78.50 354** *e*P **P** **08 22 18.9 +0.8**
**WET Wettzell 78.59 0** *e*P **P** **08 22 19.6 +0.9**
comp=Z,12nm,1.3s,baz=359,slow=5.5
**DANN Dangsing 78.60 302** *e*P **P** **08 22 20.2 +0.9**
comp=Z,12nm,0.6s
**KHC Kasperske Hory 78.61 360** *e*P **P** **08 22 19.4 +0.7**
KHC pmax pmax
comp=Z,9.0nm,1.3s
**KHC Kasperske Hory 78.61 360** *e*P **P** **08 22 20.0 +1.3**
KHC AMS AMS 08 52 00.0
comp=Z,300nm,20.3s
**KHC Kasperske Hory 78.61 360** *e*P **P** **08 22 19.4 +0.7**
comp=Z,8.6nm,1.3s
**GERES GERESS Array B 78.89 360** P **P** **08 22 20.5 +0.2**
comp=Z,4.6nm,0.9s,baz=3.8,slow=4.0,SNR=25
**VYHS Vyhne 79.12 356** *e*P **P** **08 22 22.6 +1.1**
VYHS pmax pmax
comp=Z,14nm,1.1s
**VYHS Vyhne 79.12 356** *e*P **P** **08 22 22.6 +1.1**
**KOLN Koldanda 79.15 302** *e*P **P** **08 22 22.4 +0.2**
comp=Z,26nm,0.7s
**TRPA Tarpa 79.28 353** *i*P **P** **08 22 23.8 +1.5**
**BFO Black Forest 79.33 3** *i* P **P** **08 22 24.0 +1.3**
**BFO Black Forest 79.33 3** *e*P **P** **08 22 23.1 +0.4**
comp=Z,9.4nm,1.1s
**ECH Echery 79.40 4** *e*P **P** **08 22 24.2 +1.2**
ECH pmax pmax
comp=Z,14nm,1.0s
**ECH Echery 79.40 4** *e*P **P** **08 22 24.2 +1.2**
comp=Z,14nm,1.0s
**BURAR Bucovina Array 79.58 352** *i*P **P** **08 22 25.1 +1.0**
**BURAR Bucovina Array 79.58 352** *i*P **P** **08 22 25.1 +1.0**
**PSZ Piszkesteto 79.65 355** *i*P **P** **08 22 26.6 +2.1**
**PSZ Piszkesteto 79.65 355** *i*P **P** **08 22 26.6 +2.1**
**PSZ Piszkesteto 79.65 355** *e*P **P** **08 22 25.4 +0.9**
comp=Z,16nm,1.0s
**CONA Conrad Observa 79.78 358** *i*P **P** **08 22 26.9 +1.7**
comp=Z,24nm,1.1s,SNR=7.5
**MOTA Moosalm 80.38 1** *i*P **P** **08 22 29.6 +1.1**
comp=Z,20nm,1.1s,SNR=12
**WATA Walderalm 80.40 1** *i*P **P** **08 22 29.9 +1.3**
comp=Z,22nm,1.2s,SNR=8.0
**ARSA Arzberg 80.47 358** *i*P **P** **08 22 30.6 +1.7**
comp=Z,17nm,1.1s,SNR=9.1
**WTTA Wattenberg 80.47 1** *i*P **P** **08 22 30.7 +1.6**
comp=Z,21nm,1.1s,SNR=6.7
**DRGR 80.60 353** *i*P **P** **08 22 30.5 +0.9**
**DRGR 80.60 353** *i*P **P** **08 22 30.5 +0.9**
**KBZ Khabaz 80.61 339** P **P** **08 22 30.9 +1.3**
comp=Z,2.1nm,0.5s,baz=31,slow=4.1,SNR=5.5
KBZ LR LR 09 04 05.3
comp=Z,293nm,18.3s,baz=21,slow=40
**KBA Koelnbreinsper 80.66 360** *i*PcP **P** **08 22 32.0 +1.9**
comp=Z,59nm,1.1s,SNR=22
**FETA Feichten 80.70 2** *i*P **P** **08 22 31.7 +1.5**
comp=Z,21nm,0.9s,SNR=13
**ABTA Abfaltersbach 80.99 0** *i*P **P** **08 22 33.0 +1.3**
comp=Z,19nm,1.1s,SNR=7.0
**SOKA Soboth 81.05 359** *i*P **P** **08 22 33.5 +1.5**
comp=Z,31nm,1.2s,SNR=18
**PERS Pernice 81.09 359** *i* P **P** **08 22 33.2 +1.0**
**MYKA Terra Mystica 81.11 360** *i*P **P** **08 22 33.3 +1.0**
comp=Z,9.0nm,1.0s
**VRI Vrincioaia 81.17 350** *i*P P 08 22 41.0 +8.4
**VRI Vrincioaia 81.17 350** *i*P P 08 22 41.0 +8.4
**DOPR Dopca 81.20 351** *i*P **P** **08 22 34.6 +1.8**
**TUE Stuetta 81.22 3** *e*P **P** **08 22 34.0 +0.9**
comp=Z,8.1nm,0.9s
**OBKA Obir 81.22 359** *i*P **P** **08 22 34.4 +1.4**
comp=Z,24nm,1.3s,SNR=11
**GROS Grobnik 81.26 358** *i* P **P** **08 22 33.9 +0.8**
**ZEI Tsey 81.27 337** *e*P **P** **08 22 33.5 +0.1**
ZEI pmax pmax
comp=Z,60nm,1.1s
**SOC Sochi 81.42 341** *c i*P **P** **08 22 33.3 -0.6**
SOC *e* 08 25 36.0
SOC *e*PPP PPP 08 27 29.4
SOC *e*S **S** **08 32 39.6 -2.9**
SOC pmax pmax
comp=Z,19nm,0.6s
**MLR Muntele Rosu 81.62 351** P **P** **08 22 37.2 +2.1**
**MLR Muntele Rosu 81.62 351** *i*P **P** **08 22 37.2 +2.1**
**GEYT Alibeck 81.64 325** P **P** **08 22 35.7 +0.4**
comp=Z,14nm,1.1s,baz=322,slow=4.5,SNR=18
**CFR Carcaliu 81.70 349** P P 08 22 46.4 +11
**CFR Carcaliu 81.70 349** *i*P P 08 22 46.4 +11
**VOIR 81.75 351** *i*P **P** **08 22 38.7 +2.9**
**VOIR 81.75 351** *i*P **P** **08 22 38.7 +2.9**
**BZS Buzias 81.84 354** *i*P **P** **08 22 35.6 -0.5**
**BZS Buzias 81.84 354** *i*P **P** **08 22 35.6 -0.5**
**CELP Cerrillos 81.98 71** P **P** **08 22 39.3 +2.0**
**GZR Gura Zlata 81.98 353** *i*P **P** **08 22 37.6 +0.6**
**GZR Gura Zlata 81.98 353** *i*P **P** **08 22 37.6 +0.6**
**BOJS Bojanci 82.22 358** *i* P **P** **08 22 38.7 +0.6**
**BNI Bardonecchia 82.54 4** *e*P **P** **08 22 41.3 +1.3**
BNI pmax pmax
comp=Z,17nm,1.0s
**BNI Bardonecchia 82.54 4** *e*P **P** **08 22 41.3 +1.3**
comp=Z,17nm,1.0s
**DIVS Divibare 83.45 355** *i*P **P** **08 22 45.4 +0.7**
**KSM Kuching 84.38 265** *e*P **P** **08 22 50.5 +0.8**
comp=Z,9.3nm,0.8s
KSM *e*PcP **PcP** **08 22 54.4 +1.1**
**BRTR Keskin Array B 86.28 344** P **P** **08 22 59.8 +0.7**
comp=Z,6.1nm,0.9s,baz=47,slow=2.4,SNR=16
BRTR LR LR 09 07 17.0
comp=Z,81nm,19.1s,baz=24,slow=40
**ESDC Sonseca Array 86.89 13** P **P** **08 23 01.5 -0.4**
comp=Z,2.4nm,0.7s,baz=353,slow=4.9,SNR=11
ESDC LR LR 09 04 32.5
comp=Z,173nm,18.6s,baz=330,slow=38
**WRA Warramunga Arr 88.31 233** P **P** **08 23 08.5 -0.2**
comp=Z,0.6nm,1.0s,baz=35,slow=6.1,SNR=8.3
**TIP Timpagrande 88.50 357** *e*P **P** **08 23 10.6 +1.0**
comp=Z,3.1nm,1.1s
**HYB Hyderabad 90.27 300** *i* P **P** **08 23 20.5 +2.3**
**ASAR Alice Springs 91.68 232** P **P** **08 23 24.3 -0.1**
comp=Z,0.5nm,0.9s,baz=50,slow=3.0,SNR=5.1
**RAYN Ar Rayn 99.03 330** *e*P **Pdif** **08 23 58.7 +0.5**
comp=Z,4.3nm,0.9s
**LCO Las Campanas 116.19 104** *e*PKPdf **PKPdf** **08 29 02.6 +2.2**
**QSPA South Pole Qui 142.40 180** *e*PKPdf **PKPdf** **08 29 45.5 -2.9**
**MAW Mawson 151.98 219** PKPbc **PKPbc** **08 30 10.5 -0.2**
comp=Z,2.4nm,0.7s,baz=100,slow=3.0,SNR=12
MAW PKPab **PKPab** **08 30 20.1 -0.1**
comp=Z,4.1nm,0.9s,baz=73,slow=2.7,SNR=7.6
**BOSA Boshof 154.33 334** PKPbc **PKPbc** **08 30 19.7 +2.4**
comp=Z,3.0nm,1.0s,baz=22,slow=5.4,SNR=4.0
BOSA PKPab **PKPab** **08 30 32.3 +0.9**
comp=Z,5.3nm,0.9s,baz=9.6,slow=4.8,SNR=6.3

*IDC* ***03*** *08:18:39.4±1.1, 14°.90S×76°.01W, h0km, mb3.8/4, mb1 3.9/6, mb1mx3.8/21, mbtmp3.7/6, ML3.1/2, MS3.5/2, Ms1 3.5/2, ms1mx3.1/22, Error ellipse: s-maj=38.0km s-min=23.2km az=44.0*
*NEIC* ***03*** *08:18:40.9±0.5, 14°.90S×75°.95W, h10km, mb4.1/2, Error ellipse: s-maj=11.7km s-min=7.8km az=53.0*
*ISCJB* ***03*** *08:18:41.6±0.8, 14°.93S±0°.08×75°.91W±0°.08, h29km, mb3.8/6, MS3.2, Error ellipse: s-maj=11.9km s-min=10.2km az=34.1*

**ISC 03 08:18:43.3±0.8, 14°.98S±0°.08×75°.93W±0°.09, h29km, n17, σ1§17/18, mb4.0/6, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **LVC** | **Limon Verde** | **10.09** | **140** | Pn | **Pn** | **08 21 07.7** | **+1.1** |
| | 40nm,0.3s,baz=320,slow=10.0,SNR=8.9 | | | | | | |
| LVC | | | | Sn | **Sn** | **08 22 56.8** | **-2.1** |
| | 16nm,0.3s,baz=252,slow=19,SNR=2.3 | | | | | | |
| LVC | | | | Lg | Lg | 08 23 59.6 | |
| | baz=95,slow=20,SNR=3.3 | | | | | | |
| **LVC** | **Limon Verde** | **10.09** | **140** | Pn | **Pn** | **08 21 07.7** | **+1.1** |
| | 11nm,0.4s | | | | | | |
| LVC | | | | Sn | **Sn** | **08 22 56.8** | **-2.1** |
| LVC | | | | Lg | Lg | 08 23 59.6 | |
| **SAML** | **Samuel** | **13.83** | **66** | *e*Pn | **Pn** | **08 21 56.2** | **-1.4** |
| SAML | | | | *e*Sn | **Sn** | **08 24 31.6** | **+1.2** |
| **SIV** | **San Ignacio** | **14.36** | **96** | Pn | **Pn** | **08 22 04.9** | **+0.1** |
| | 0.3nm,0.3s,baz=279,slow=14,SNR=5.3 | | | | | | |
| **OTAV** | **Otavalo** | **15.32** | **350** | Pn | **Pn** | **08 22 17.6** | **-0.6** |
| | 2.4nm,0.6s | | | | | | |
| **CFAA** | **Coronel Fontan** | **17.98** | **158** | P | **P** | **08 22 52.3** | **+0.7** |
| | 0.0nm,0.3s,baz=332,slow=11,SNR=5.4 | | | | | | |
| **CPUP** | **Villa Florida** | **20.72** | **126** | P | Pn | 08 23 28.1 | +4.1 |
| | 2.5nm,0.8s,baz=297,slow=18,SNR=4.9 | | | | | | |
| **PTGA** | **Pitinga** | **21.20** | **50** | P | **P** | **08 23 26.6** | **-0.1** |
| | 2.2nm,0.4s,baz=226,slow=16,SNR=3.3 | | | | | | |
| PTGA | | | | LR | LR | 08 32 41.0 | |
| | comp=Z,136nm,21.2s,baz=234,slow=40 | | | | | | |
| **BDFB** | **Brasilia** | **26.93** | **95** | P | P | 08 24 29.4 | +6.9 |
| | 3.1nm,0.8s,baz=257,slow=13,SNR=5.0 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **27.39** | **25** | LR | LR | 08 35 26.8 | |
| | comp=Z,87nm,20.0s,baz=182,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **51.56** | **329** | P | **P** | **08 27 46.7** | **-0.3** |
| | 0.5nm,0.7s,baz=153,slow=8.3,SNR=12 | | | | | | |
| **SDCO** | **Great Sand Dun** | **59.35** | **333** | *e*P | **P** | **08 28 43.1** | **-0.1** |
| | 4.2nm,1.2s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| SDCO | | | | *e*PcP | **PcP** | **08 29 29.6** | **-1.4** |
| **NVAR** | **Mina Array Bea** | **66.31** | **325** | P | **P** | **08 29 29.7** | **+0.2** |
| | 0.1nm,0.3s,baz=147,slow=5.9,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.74** | **74** | P | **P** | **08 31 01.2** | **+1.3** |
| | 2.4nm,0.8s,baz=255,slow=4.6,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **134.28** | **221** | PKP | **PKPdf** | **08 37 59.4** | **+0.1** |
| | 0.8nm,0.7s,baz=128,slow=2.1,SNR=6.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **138.29** | **17** | PKP | **PKPdf** | **08 38 06.4** | **+0.8** |
| | 0.5nm,0.3s,baz=304,slow=3.3,SNR=3.0 | | | | | | |
| **SONM** | **Songino Array** | **147.18** | **357** | PKPbc | **PKPbc** | **08 38 23.3** | **-0.6** |
| | 0.5nm,0.6s,baz=16,slow=2.8,SNR=3.5 | | | | | | |

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*ISCJB* ***03*** *08:21:23.9±0.7, 6°.73S±0°.03×104°.82E±0°.02, h29km±4km, mb4.8/71, MS4.2/16, Error ellipse: s-maj=4.7km s-min=2.3km az=30.6*

*DJA* ***03*** *08:21:23.7±0.1, 7°S±2°×10°5E±°, h10km, M5.2/46, mb5.2/46, mB5.6/20, MLv5.3/25, Mw(mB)5.2/20, Mwp5.5/1*

*MOS* ***03*** *08:21:25.2±1.4, 6°.38S×105°.07E, h33km, mb5.2/20, Error ellipse: s-maj=11.3km s-min=6.1km az=120.0*

*IDC* ***03*** *08:21:25.5±2.0, 6°.51S×104°.98E, h27km±13km, mb4.5/26, mb1 4.6/29, mb1mx4.6/33, mbtmp4.7/29, ML4.5/3, MS4.0/12, Ms1 4.1/12, ms1mx3.8/33, Error ellipse: s-maj=13.3km s-min=8.1km az=36.0*

*BJI* ***03*** *08:21:26.6, 6°.60S×105°.00E, h33km, mb4.8/29, mB4.8/23, Ms4.9/25, Ms7 4.7/25*

*AUST* ***03*** *08:21:27.2, 6°.85S×104°.90E, h35km*

*NEIC* ***03*** *08:21:28.7±0.6, 6°.53S×105°.00E, h54km±5km, mb5.1/17, Error ellipse: s-maj=7.7km s-min=3.9km az=224.0*

*NEIC Felt [II] on the Semenanjung Ujungkulon, Java. Also felt at Jakarta.*

*GCMT* ***03*** *08:21:28.7±0.2, 6°.72S×104°.88E, h18km, MW5.1/71, Moment Tensor Solution. s34,c45; s71,c108; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.80±.21; $M_{\theta\theta}$1.20±.13; $M_{\phi\phi}$2.59±.15; $M_{r\theta}$2.67±.35; $M_{\theta\phi}$2.53±.10; $M_{\phi r}$0.23±.33; Best double couple: $M_0$4.98600×$10^{16}$ NP1:$\phi_s$240.00000°, δ61.00000°, λ-64.00000°. NP2: $\phi_s$15.00000°, δ38.00000°, λ-129.00000°. Principal axes: T 4.9220, Plg13.0000°, Azm312.0000°; N 0.1180, Plg23.0000°, Azm47.0000°; P -5.0510, Plg64.0000°, Azm195.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*KLM* ***03*** *08:21:31.3, 6°.77S×104°.90E, h62km, mb5.1, ML5.1, MS5.8*

**ISC 03 08:21:24.1**±0.9**, 6°.69S**±0°.03×**104°.84E**±0°.03**, h18**km±5km**, n567,** σ**1**s**.40**/573**, mb4.9**/71**, MS4.3**/16**, 25C-20D, Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CGJI** | **Cibinong** | **0.85** | **85** | P | **Pg** | **08 21 38.5** | **-2.2** |
| CGJI | | | | S | **Sg** | **08 21 49.7** | **-2.3** |
| **KASI** | **Kota Agung** | **1.20** | **343** | P | **Pn** | **08 21 45.6** | **-0.5** |
| KASI | | | | S | **Sb** | **08 21 59.4** | **-2.3** |
| **SBJI** | **Serang** | **1.40** | **66** | P | **Pn** | **08 21 48.5** | **-0.3** |
| SBJI | | | | S | **Sn** | **08 22 07.3** | **+0.4** |
| **SKJI** | **Sukabumi** | **1.73** | **101** | P | **Pn** | **08 21 51.9** | **-1.5** |
| SKJI | | | | S | **Sb** | **08 22 17.4** | **+0.4** |
| **KLI** | **Kotabumi** | **1.81** | **1** | P | **Pn** | **08 21 56.2** | **+1.7** |
| KLI | | | | S | **Sg** | **08 22 24.7** | **+2.2** |
| **LWLI** | **Liwa** | **1.83** | **335** | P | **Pn** | **08 21 56.7** | **+1.8** |
| LWLI | | | | S | **Sg** | **08 22 25.4** | **+2.2** |
| **TNG** | **Tangerang** | **1.86** | **74** | P | **Pn** | **08 21 54.6** | **-0.6** |
| TNG | | | | P | **Pn** | **08 21 55.2** | **0.0** |
| TNG | | | | S | **Sn** | **08 22 19.6** | **+1.2** |
| **CBJI** | **Citeko** | **2.01** | **83** | P | **Pn** | **08 21 58.7** | **+1.4** |
| CBJI | | | | S | **Sn** | **08 22 24.7** | **+2.6** |
| **MDSI** | **Maura Dua** | **2.28** | **343** | P | **Pn** | **08 22 02.7** | **+1.7** |
| **CNJI** | **Cibinong** | **2.35** | **105** | P | **Pn** | **08 22 01.1** | **-0.9** |
| CNJI | | | | S | **Sn** | **08 22 27.6** | **-2.9** |
| **LEM** | **Lembang** | **2.76** | **93** | Pn | **Pn** | **08 22 08.3** | **+0.6** |
| | 259nm,0.3s,baz=50,slow=4.6,SNR=46 | | | | | | |
| LEM | | | | Sn | **Sn** | **08 22 43.5** | **+2.8** |
| | 308nm,0.3s,baz=290,slow=20,SNR=7.6 | | | | | | |
| LEM | | | | LR | LR | 08 23 08.2 | |
| | comp=Z,2μm,20.0s,baz=118,slow=39 | | | | | | |
| **LEM** | **Lembang** | **2.76** | **93** | P | **Pn** | **08 22 09.2** | **+1.5** |
| | baz=2.7,SNR=63 | | | | | | |
| **LEM** | **Lembang** | **2.76** | **93** | P | **Pn** | **08 22 09.0** | **+1.3** |
| LEM | | | | S | **Sn** | **08 22 43.6** | **+2.8** |
| **MNAI** | **Manna** | **2.98** | **321** | P | **Pn** | **08 22 12.5** | **+2.0** |
| | baz=3.2,SNR=60 | | | | | | |
| **MNAI** | **Manna** | **2.98** | **321** | P | **Pn** | **08 22 12.0** | **+1.5** |
| **MNAI** | **Manna** | **2.98** | **321** | *e*Pn | **Pn** | **08 22 12.2** | **+1.6** |
| **LHSI** | **Lahat** | **3.13** | **335** | P | Pn | 08 22 15.6 | +3.0 |
| **PMBI** | **Palembang** | **3.73** | **359** | P | **Pn** | **08 22 24.0** | **+3.0** |
| PMBI | | | | S | **Sg** | **08 23 24.4** | **+0.2** |
| **CMJI** | **Cimerak** | **3.74** | **107** | P | **Pn** | **08 22 20.7** | **-0.4** |
| CMJI | | | | S | **Sn** | **08 23 06.3** | **+1.5** |
| **KSI** | **Kapahiang** | **3.75** | **323** | P | **Pn** | **08 22 23.9** | **+2.6** |
| KSI | | | | S | **Sn** | **08 23 07.7** | **+2.6** |
| **XMI** | **Christmas Isla** | **3.83** | **167** | P | Pn | 08 22 17.9 | -4.5 |
| | baz=3.7,SNR=18 | | | | | | |
| **XMIS** | **Christmas Isla** | **3.86** | **168** | P | Pn | 08 22 18.1 | -4.6 |
| | baz=3.7,SNR=34 | | | | | | |
| **XMIS** | **Christmas Isla** | **3.86** | **168** | *e*Pn | Pn | 08 22 18.4 | -4.3 |
| XMIS | | | | *e*Sn | Sn | 08 22 59.6 | -8.0 |
| **KPJI** | **Karang Pucung** | **4.11** | **99** | P | **Pn** | **08 22 27.9** | **+1.7** |
| KPJI | | | | S | **Sb** | **08 23 28.9** | **+3.4** |
| **MASI** | **Maura Aman, Be** | **4.37** | **324** | P | Pn | 08 22 32.8 | +3.0 |
| MASI | | | | S | **Sb** | **08 23 29.6** | **-3.4** |
| **PPBI** | **Pangkal Pinang** | **4.67** | **16** | P | **Pn** | **08 22 36.0** | **+2.1** |
| PPBI | | | | S | **Sb** | **08 23 46.1** | **+4.4** |
| **TPI** | **Tanjungpandan** | **4.80** | **36** | P | **Pn** | **08 22 36.6** | **+0.9** |
| TPI | | | | S | Sb | 08 23 51.9 | +6.5 |
| **SMRI** | **Semarang** | **5.57** | **94** | P | Pn | 08 22 43.5 | -2.8 |
| | baz=5.5,SNR=5.0 | | | | | | |
| **SMRI** | **Semarang** | **5.57** | **94** | P | **Pn** | **08 22 46.3** | **0.0** |
| | 505nm,0.9s,7μm2.8nm | | | | | | |
| **SMRI** | **Semarang** | **5.57** | **94** | *e*Pn | **Pn** | **08 22 46.9** | **+0.6** |
| **UGM** | **Wanagama** | **5.77** | **103** | P | **Pn** | **08 22 49.2** | **+0.2** |
| | baz=5.7,SNR=61 | | | | | | |
| **UGM** | **Wanagama** | **5.77** | **103** | P | **Pn** | **08 22 50.4** | **+1.4** |
| | 425nm,1.1s,7μm2.4nm | | | | | | |
| UGM | | | | S | **Sn** | **08 23 56.2** | **+1.4** |
| | 425nm,1.1s,7μm2.4nm | | | | | | |
| **UGM** | **Wanagama** | **5.77** | **103** | *e*Pn | **Pn** | **08 22 49.6** | **+0.6** |
| **UWJI** | **Ujung Watu** | **6.07** | **88** | S | **Sg** | **08 24 42.5** | **+3.3** |
| **WOJI** | **Wonogiri, Jawa** | **6.14** | **101** | P | **Pn** | **08 22 56.0** | **+1.9** |
| | 184nm,0.7s,1.7nm | | | | | | |
| **PPSI** | **Pulau Pagai** | **6.19** | **309** | P | **Pn** | **08 22 55.6** | **+0.8** |
| | 611nm,0.6s,9μm13μm4.0nm | | | | | | |
| PPSI | | | | S | **Sb** | **08 24 27.1** | **+1.7** |
| | 611nm,0.6s,9μm13μm4.0nm | | | | | | |
| **PCJI** | **Pacitan** | **6.46** | **104** | P | **Pn** | **08 23 00.8** | **+2.3** |
| | 248nm,1.0s,5μm2.0nm | | | | | | |
| PCJI | | | | S | **Sn** | **08 24 13.6** | **+1.8** |
| | 248nm,1.0s,5μm2.0nm | | | | | | |
| **NGJI** | **Ngawi** | **6.61** | **96** | P | Pn | 08 23 08.3 | +7.8 |
| **SDSI** | **Sungai Dareh** | **6.65** | **329** | P | Pn | 08 23 05.2 | +4.1 |
| **PWJI** | **Pagerwojo** | **7.03** | **101** | P | **Pn** | **08 23 08.0** | **+1.7** |
| | 298nm,0.8s,4μm2.6nm | | | | | | |
| **PDSI** | **Padang** | **7.21** | **323** | P | **Pn** | **08 23 10.0** | **+1.2** |
| | 64nm,0.5s,2μm0.5nm | | | | | | |
| **TPRI** | **Tanjung Pinang** | **7.56** | **358** | P | Pn | 08 23 17.4 | +3.8 |
| **GRJI** | **Gresik** | **7.59** | **92** | P | **Pn** | **08 23 14.7** | **+0.7** |
| | 178nm,0.5s,3μm0.8nm | | | | | | |
| **PPI** | **Padang Panjang** | **7.61** | **324** | P | **Pn** | **08 23 16.4** | **+2.1** |
| | 74nm,1.3s,1μm0.4nm | | | | | | |
| **SISI** | **Saibi** | **7.83** | **313** | P | **Pn** | **08 23 18.4** | **+1.2** |
| | 171nm,0.9s,0.6nm | | | | | | |
| SISI | | | | S | **Sb** | **08 25 10.7** | **-1.7** |
| | 171nm,0.9s,0.6nm | | | | | | |
| **PBKI** | **Pangkalan Bun** | **7.87** | **60** | P | **Pn** | **08 23 20.8** | **+2.9** |
| **BKNI** | **Bangkinang** | **7.93** | **331** | P | **Pn** | **08 23 19.0** | **+0.3** |
| | 136nm,1.1s,0.7nm | | | | | | |
| **BKNI** | **Bangkinang** | **7.93** | **331** | *e*P | **Pn** | **08 23 19.4** | **+0.7** |
| **BTDF** | **Bukit Timah Da** | **8.06** | **352** | P | Pn | 08 23 26.6 | +6.1 |
| | baz=8.3,SNR=6.6 | | | | | | |
| **MYKOM** | **Kota Tinggi** | **8.48** | **353** | ⇑P | Pn | 08 23 31.4 | +5.3 |
| **MYKOM** | **Kota Tinggi** | **8.48** | **353** | *e*Pn | Pn | 08 23 30.7 | +4.5 |
| **GMJI** | **Gumukmas** | **8.68** | **101** | P | **Pn** | **08 23 31.8** | **+2.9** |
| GMJI | | | | S | Sn | 08 25 12.4 | +6.0 |
| **BLJI** | **Banyuglugur** | **8.75** | **97** | P | Pn | 08 23 34.6 | +4.7 |
| **KGM** | **Kluang** | **8.78** | **350** | ⇑P | Pn | 08 23 35.3 | +5.0 |
| **KMMI** | **Kalianget** | **9.07** | **93** | P | **Pn** | **08 23 33.5** | **-0.8** |
| | 134nm,0.7s | | | | | | |
| KMMI | | | | S | **Sn** | **08 25 11.9** | **-4.2** |
| | 134nm,0.7s | | | | | | |
| **MNSI** | **Mandailing Nat** | **9.10** | **325** | P | **Pn** | **08 23 34.8** | **+0.1** |
| | 41nm,1.2s | | | | | | |
| **ABJI** | **Asem Bagus** | **9.38** | **97** | P | Pn | 08 23 42.5 | +3.9 |
| **JAGI** | **Jajag, Banyuwa** | **9.40** | **101** | P | **Pn** | **08 23 40.4** | **+1.5** |
| | baz=9.3,SNR=72 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **9.40** | **101** | P | **Pn** | **08 23 39.8** | **+0.9** |
| | 464nm,0.8s,7μm | | | | | | |
| JAGI | | | | S | **Sn** | **08 25 24.9** | **+0.7** |
| | 464nm,0.8s,7μm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **9.40** | **101** | *e*Pn | **Pn** | **08 23 39.5** | **+0.7** |
| **COCO** | **West Island** | **9.61** | **235** | *i* P | **Pn** | **08 23 43.8** | **+2.2** |
| **KSM** | **Kuching** | **9.77** | **34** | ⇑P | Pn | 08 23 50.8 | +6.8 |
| **FRIM** | **Kepong** | **10.37** | **342** | ⇓P | Pn | 08 23 59.3 | +7.2 |
| **SRBI** | **Singaraja** | **10.38** | **98** | P | **Pn** | **08 23 53.1** | **+0.8** |
| | 334nm,0.8s,4μm | | | | | | |
| **IGBI** | **Denpasar** | **10.43** | **102** | P | **Pn** | **08 23 53.7** | **+0.7** |
| | 727nm,0.8s,9μm | | | | | | |
| IGBI | | | | S | **Sn** | **08 25 50.0** | **+0.5** |
| | 727nm,0.8s,9μm | | | | | | |
| **BBKI** | **Banjar Baru** | **10.46** | **73** | P | **Pn** | **08 23 55.7** | **+2.3** |
| **DNP** | **Denpasar** | **10.47** | **102** | P | **Pn** | **08 23 54.0** | **+0.5** |
| | 1μm,0.5s | | | | | | |
| DNP | | | | S | **Sn** | **08 25 54.3** | **+3.9** |
| | 1μm,0.5s | | | | | | |
| **GSI** | **Gunungsitoli** | **10.75** | **317** | P | **Pn** | **08 23 58.9** | **+1.5** |
| | 79nm,0.9s | | | | | | |
| **GSI** | **Gunungsitoli** | **10.75** | **317** | *e*Pn | **Pn** | **08 23 58.5** | **+1.1** |
| **PSI** | **Prapat** | **11.12** | **328** | Pn | Pn | 08 23 59.8 | -2.8 |
| | 1.7nm,0.3s,baz=235,slow=6.6,SNR=3.4 | | | | | | |
| **SBUM** | **Sibu** | **11.69** | **39** | ⇑P | Pn | 08 24 16.7 | +6.5 |
| **IPM** | **Ipoh** | **11.73** | **341** | ⇑P | Pn | 08 24 18.1 | +7.3 |
| **IPM** | **Ipoh** | **11.73** | **341** | *e*Pn | Pn | 08 24 17.7 | +7.0 |
| **KTGM** | **Kuala Trenggan** | **12.05** | **352** | ⇑P | Pn | 08 24 22.2 | +7.0 |
| **TWSI** | **Taliwang, Sumb** | **12.11** | **100** | P | **Pn** | **08 24 14.5** | **-1.4** |
| TWSI | | | | S | **Sn** | **08 26 30.1** | **-0.5** |
| **KULM** | **Kulim** | **12.61** | **341** | ⇑P | Pn | 08 24 30.9 | +8.1 |
| **LHMI** | **Lhok Sumawe** | **14.22** | **326** | P | **P** | **08 24 51.3** | **-0.8** |
| **WBSI** | **Waikabubak, Su** | **14.70** | **102** | P | **P** | **08 24 58.3** | **+0.8** |
| WBSI | | | | S | Sn | 08 27 24.6 | -10 |
| **KAPI** | **Kappang** | **14.93** | **84** | Pn | **Pn** | **08 24 54.9** | **+0.4** |
| | 1.9nm,0.3s,baz=283,slow=9.3,SNR=9.5 | | | | | | |
| **KAPI** | **Kappang** | **14.93** | **84** | *e*Pn | **Pn** | **08 24 55.1** | **+0.6** |
| **SPSI** | **Sidrap Palu** | **15.11** | **80** | P | **P** | **08 25 02.7** | **+0.7** |
| **BKSI** | **Bulukumba** | **15.26** | **86** | P | **Pn** | **08 25 00.7** | **+1.8** |
| **TTSI** | **Tana Toraja** | **15.35** | **77** | P | **P** | **08 25 04.4** | **-0.4** |
| **BSSI** | **Bau Bau, Buton** | **15.56** | **89** | P | **Pn** | **08 25 03.4** | **+0.5** |
| | 129nm,0.9s,3μm | | | | | | |
| **WSI** | **Waingapu** | **15.58** | **102** | P | **P** | **08 25 07.2** | **-0.1** |
| **BASI** | **Baing, Sumba** | **15.96** | **104** | P | **P** | **08 25 10.3** | **-1.1** |
| **PCI** | **Palu** | **16.02** | **70** | P | **Pn** | **08 25 11.3** | **+2.5** |
| **MPSI** | **Mapaga** | **16.57** | **66** | P | **P** | **08 25 18.2** | **0.0** |
| **EDFI** | **Ende, Flores** | **16.82** | **98** | P | **Pn** | **08 25 16.1** | **-3.0** |
| EDFI | | | | S | **Sn** | **08 28 28.7** | **+2.9** |
| **TSM** | **Tawau** | **16.98** | **50** | ⇑P | **P** | **08 25 26.8** | **+4.1** |
| **KKM** | **Kota Kinabalu** | **16.99** | **42** | P | **P** | **08 25 26.4** | **+3.4** |
| | baz=17,SNR=5.2 | | | | | | |
| **KKM** | **Kota Kinabalu** | **16.99** | **42** | ⇓P | **P** | **08 25 25.6** | **+2.6** |
| **MMRI** | **Maumere** | **17.35** | **98** | P | **Pn** | **08 25 24.2** | **-1.4** |
| | 237nm,0.8s,3μm | | | | | | |
| MMRI | | | | S | **Sn** | **08 28 39.1** | **+0.6** |
| | 237nm,0.8s,3μm | | | | | | |
| **MMRI** | **Maumere** | **17.35** | **98** | *e*Pn | **Pn** | **08 25 24.8** | **-0.9** |
| | 171nm,0.7s | | | | | | |
| MMRI | | | | *e*Sn | **S** | **08 28 49.0** | **+2.0** |
| **SDKM** | **Sandakan** | **17.38** | **45** | ⇑P | **P** | **08 25 29.8** | **+2.6** |
| **APSI** | **Ampana** | **17.72** | **72** | P | **P** | **08 25 32.2** | **+1.2** |
| **KDI** | **Kendari** | **17.91** | **82** | P | **Pn** | **08 25 30.9** | **-1.6** |
| | 53nm,0.9s | | | | | | |
| **MYLDM** | **Lahad Datu** | **18.02** | **49** | ⇓P | P | 08 25 39.4 | +5.1 |
| **MYLDM** | **Lahad Datu** | **18.02** | **49** | *e*Pn | **P** | **08 25 38.9** | **+4.5** |
| **KDM** | **Kudat** | **18.05** | **42** | ⇓P | P | 08 25 40.6 | +6.0 |
| **GIRL** | **Giralia** | **18.27** | **151** | P | **Pn** | **08 25 35.7** | **-1.2** |
| | baz=18,SNR=15 | | | | | | |
| **MRSI** | **Marisa** | **18.49** | **68** | P | **P** | **08 25 40.0** | **+0.5** |
| | 166nm,0.8s,4μm | | | | | | |
| **LUWI** | **Luwuk** | **18.74** | **73** | P | **P** | **08 25 43.0** | **+0.7** |
| | 123nm,0.9s,7μm | | | | | | |
| **LUWI** | **Luwuk** | **18.74** | **73** | *e*P | **P** | **08 25 42.8** | **+0.5** |
| | 91nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **18.94** | **102** | P | **P** | **08 25 44.1** | **-0.4** |
| | 43nm,0.3s,baz=282,slow=2.4,SNR=21 | | | | | | |
| BATI | | | | S | **Sn** | **08 29 17.0** | **-0.1** |
| | 13nm,0.3s,baz=305,slow=20,SNR=8.5 | | | | | | |
| **BATI** | **Baumata** | **18.94** | **102** | P | **Pn** | **08 25 46.1** | **+0.9** |
| BATI | | | | S | **S** | **08 29 21.5** | **+2.2** |
| **SOEI** | **Soe** | **19.47** | **100** | P | **P** | **08 25 50.1** | **-0.3** |
| | baz=19,SNR=19 | | | | | | |
| **SOEI** | **Soe** | **19.47** | **100** | P | **P** | **08 25 50.2** | **-0.2** |
| | 544nm,0.8s,4μm | | | | | | |
| SOEI | | | | S | **Sn** | **08 29 25.0** | **-4.9** |
| | 544nm,0.8s,4μm | | | | | | |
| **SOEI** | **Soe** | **19.47** | **100** | *e*P | **P** | **08 25 50.1** | **-0.3** |
| | 377nm,0.7s | | | | | | |
| SOEI | | | | *e*S | Sn | 08 29 18.4 | -12 |
| **GTOI** | **Gorontalo** | **19.54** | **69** | P | **P** | **08 25 49.9** | **-1.1** |
| | 108nm,0.6s,1μm | | | | | | |
| **MBWA** | **Marble Bar** | **20.36** | **136** | *e*P | **P** | **08 26 00.7** | **+0.7** |
| | 26nm,0.8s | | | | | | |
| **KMSI** | **Cibinong** | **20.42** | **70** | P | Pn | 08 26 12.4 | +10 |
| **SANI** | **Sanana** | **21.58** | **79** | P | **P** | **08 26 12.8** | **-0.3** |
| | 29nm,0.7s,722nm | | | | | | |
| **NLAI** | **Namlea** | **22.43** | **82** | P | **P** | **08 26 22.1** | **-0.3** |
| | 54nm,0.6s,2μm | | | | | | |
| **UTHA** | **Uthaitani** | **22.74** | **346** | P | **P** | **08 26 25.9** | **+0.4** |
| | 4.6nm,1.1s | | | | | | |
| **KHON** | **Khomkaen** | **22.96** | **355** | P | **P** | **08 26 31.0** | **+3.2** |
| | 9.1nm,0.8s | | | | | | |
| **LBMI** | **Labuha** | **23.39** | **76** | P | **P** | **08 26 32.3** | **0.0** |
| | 90nm,0.8s,2μm | | | | | | |
| **PBKT** | **Sadao Pong** | **23.42** | **351** | P | **P** | **08 26 33.0** | **+0.5** |
| | 14nm,1.1s | | | | | | |
| **AAI** | **Ambon** | **23.45** | **84** | P | **P** | **08 26 30.6** | **-2.2** |
| **UMPA** | **Umpang Tak** | **23.50** | **345** | P | **P** | **08 26 33.6** | **+0.3** |
| | 6.7nm,0.6s,717nm | | | | | | |
| **TNTI** | **Ternate** | **23.67** | **73** | P | **P** | **08 26 33.8** | **-1.2** |
| | 243nm,1.2s | | | | | | |
| **TNTI** | **Ternate** | **23.67** | **73** | *e*P | **P** | **08 26 34.4** | **-0.6** |
| | 172nm,0.9s | | | | | | |
| **MEEK** | **Meekatharra** | **23.79** | **148** | P | **P** | **08 26 36.1** | **0.0** |
| | baz=24,SNR=5.5 | | | | | | |
| **UTTA** | **Uttaradit** | **24.64** | **350** | P | **P** | **08 26 48.4** | **+4.5** |
| | 3.2nm,1.0s | | | | | | |
| **MORW** | **Morawa** | **24.65** | **156** | P | **P** | **08 26 44.1** | **+0.1** |
| | baz=25,SNR=4.9 | | | | | | |
| **NONG** | **Nongkai** | **24.65** | **356** | P | **P** | **08 26 45.7** | **+1.7** |
| | 22nm,0.8s,2μm | | | | | | |
| **KNRA** | **Kununurra** | **25.09** | **113** | P | **P** | **08 26 47.0** | **-1.0** |
| | baz=25,SNR=50 | | | | | | |
| **CM01** | **Chiang Mai Arr** | **25.61** | **347** | *e*P | **P** | **08 26 50.5** | **-2.2** |
| **CMAR** | **Chiang Mai Arr** | **25.65** | **347** | P | **P** | **08 26 51.1** | **-2.0** |
| | 5.9nm,0.7s,baz=182,slow=8.3,SNR=24 | | | | | | |
| CMAR | | | | ScP | **ScP** | **08 34 01.5** | **-1.1** |
| | 0.9nm,0.4s,baz=208,slow=3.7,SNR=4.4 | | | | | | |
| CMAR | | | | LR | LR | 08 38 33.7 | |
| | comp=Z,737nm,18.5s,baz=162,slow=40 | | | | | | |
| **CHTO** | **Chiang Mai** | **26.00** | **347** | P | **P** | **08 26 56.2** | **0.0** |
| | 60nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **26.00** | **347** | *e*P | **P** | **08 26 55.4** | **-0.9** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **26.00** | **347** | *e*P | **P** | **08 26 55.4** | **-0.9** |
| | comp=Z,12nm,0.9s | | | | | | |
| **QIZ** | **Qiongzhong** | **26.02** | **11** | P | **P** | **08 26 57.1** | **+0.6** |
| QIZ | | | | S | **S** | **08 31 24.9** | **-1.8** |
| QIZ | | | | LN | | | |
| | comp=Z,1μm,15.7s | | | | | | |
| QIZ | | | | LE | | | |
| | comp=Z,440nm,17.4s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,1μm,17.0s | | | | | | |
| **SWI** | **Sorong** | **26.98** | **79** | P | **P** | **08 27 06.4** | **+1.2** |
| | comp=Z,34nm,1.1s | | | | | | |
| **SIJI** | **Sorong** | **26.98** | **79** | P | **P** | **08 27 03.5** | **-1.8** |
| | comp=Z,15nm,0.7s,baz=307,slow=15,SNR=4.6 | | | | | | |
| **KLBR** | **Kellerberrin** | **27.57** | **156** | P | **P** | **08 27 11.0** | **+0.7** |
| | baz=28,SNR=5.0 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.54** | **158** | P | **P** | **08 27 20.2** | **+1.2** |
| | comp=Z,22nm,1.0s,baz=281,slow=0.4,SNR=6.2 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.54** | **158** | P | **P** | **08 27 20.6** | **+1.6** |
| | baz=28,SNR=4.4 | | | | | | |
| **WRKA** | **Warakurna** | **28.93** | **132** | P | **P** | **08 27 22.2** | **-0.4** |
| | baz=29,SNR=20 | | | | | | |
| **KMBL** | **Kambalda** | **29.28** | **149** | P | **P** | **08 27 25.3** | **-0.3** |
| | baz=29,SNR=17 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **29.34** | **164** | T | T | 08 58 03.7 | |
| | baz=344,slow=76,SNR=1861 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **29.36** | **164** | T | T | 08 57 51.2 | |
| | baz=344,slow=76,SNR=1421 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **29.36** | **164** | T | T | 08 58 02.6 | |
| | baz=344,slow=76,SNR=1298 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.51** | **118** | P | **P** | **08 27 44.5** | **-1.0** |
| | comp=Z,16nm,0.9s,baz=334,slow=19,SNR=111 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 30 37.5** | **-0.9** |
| | comp=Z,3.5nm,0.8s,baz=300,slow=1.9,SNR=5.0 | | | | | | |
| WRA | | | | LR | LR | 08 42 46.5 | |
| | comp=Z,242nm,19.0s,baz=290,slow=41 | | | | | | |
| **WRAB** | **Tennant Creek** | **31.52** | **118** *d* | *i*P | **P** | **08 27 44.8** | **-0.8** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,131nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **31.52** | **118** | P | **P** | **08 27 45.0** | **-0.6** |
| | comp=Z,300nm,1.1s,SNR=40 | | | | | | |
| **WRAB** | **Tennant Creek** | **31.52** | **118** | *e*P | **P** | **08 27 44.7** | **-0.9** |
| | comp=Z,50nm,0.9s | | | | | | |
| **KMI** | **Kunming** | **31.68** | **356** | P | P | 08 27 51.1 | +4.0 |
| KMI | | | | pP | pP | 08 28 00.0 | +7.5 |
| KMI | | | | sP | sP | 08 28 06.2 | +12 |
| KMI | | | | S | **S** | **08 32 58.7** | **+2.6** |
| KMI | | | | PMZ | | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,57nm,3.9s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,560nm,15.3s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,1μm,14.5s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,1μm,13.3s | | | | | | |
| **H08S2** | **Diego Garcia H** | **32.10** | **266** | T | T | 09 01 58.5 | |
| | baz=91,slow=75,SNR=289 | | | | | | |
| **H08S3** | **Diego Garcia H** | **32.12** | **266** | T | T | 09 01 57.7 | |
| | baz=91,slow=75,SNR=322 | | | | | | |
| **H08S1** | **Diego Carcia H** | **32.12** | **266** | T | T | 09 02 01.3 | |
| | baz=91,slow=75,SNR=291 | | | | | | |
| **SKHT** | **Srikalahasti** | **32.16** | **309** | *e*P | **P** | **08 27 51.8** | **+0.7** |
| **FORT** | **Forrest** | **32.38** | **141** | P | **P** | **08 27 53.2** | **+0.3** |
| | baz=32,SNR=9.7 | | | | | | |
| **ASAR** | **Alice Springs** | **32.62** | **124** | P | **P** | **08 27 54.8** | **-0.5** |
| | comp=Z,16nm,0.9s,baz=300,slow=7.8,SNR=77 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 30 41.0** | **-0.4** |
| | comp=Z,2.9nm,0.6s,baz=304,slow=1.7,SNR=8.4 | | | | | | |
| ASAR | | | | S | **S** | **08 33 07.1** | **-3.6** |
| | comp=Z,2.8nm,0.9s,baz=295,slow=16,SNR=6.8 | | | | | | |
| ASAR | | | | LR | LR | 08 44 09.6 | |
| | comp=Z,422nm,18.8s,baz=287,slow=42 | | | | | | |
| **AS01** | **Alice Springs** | **32.66** | **124** | *e*P | **P** | **08 27 54.8** | **-0.9** |
| **GYA** | **Guiyang** | **32.99** | **3** | P | P | 08 28 01.7 | +3.2 |
| GYA | | | | pP | pP | 08 28 10.4 | +6.6 |
| GYA | | | | PP | **PnPn** | **08 29 11.5** | **+3.6** |
| GYA | | | | S | **S** | **08 33 16.0** | **-0.3** |
| GYA | | | | sS | sS | 08 33 31.2 | +6.0 |
| GYA | | | | SS | **SnSn** | **08 35 17.8** | **+3.1** |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,520nm,17.9s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,480nm,18.0s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,510nm,18.6s | | | | | | |
| **PVM** | **Polavaram** | **33.05** | **316** | *e*P | **P** | **08 27 59.1** | **+0.2** |
| **URV** | **Uravakonda** | **34.78** | **308** | *e*P | **P** | **08 28 14.8** | **+0.7** |
| **HYBB** | **Hyderabad (bro** | **35.33** | **313** | *e*P | **P** | **08 28 19.4** | **+0.6** |
| **RPR** | **Rampur** | **35.76** | **316** | *e*P | **P** | **08 28 22.4** | **0.0** |
| **QIS** | **Mount Isa** | **36.39** | **116** | P | **P** | **08 28 27.6** | **-0.3** |
| | baz=36,SNR=12 | | | | | | |
| **ODAN** | **Odare** | **37.39** | **334** | *e*P | **P** | **08 28 34.9** | **-1.6** |
| | comp=Z,31nm,0.5s | | | | | | |
| **CD2** | **Chengdu** | **37.40** | **358** | *e*P | **P** | **08 28 37.3** | **+1.0** |
| CD2 | | | | pP | pP | 08 28 46.6 | +4.9 |
| CD2 | | | | sP | sP | 08 28 50.7 | +6.8 |
| CD2 | | | | S | **S** | **08 34 24.9** | **+1.1** |
| CD2 | | | | sS | **ScP** | **08 34 40.8** | **-0.9** |
| CD2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,160nm,5.4s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,900nm,16.6s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,1μm,16.7s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,920nm,14.2s | | | | | | |
| **TAPN** | **Taplejung** | **37.68** | **335** | *e*P | **P** | **08 28 38.3** | **-0.7** |
| | comp=Z,89nm,0.9s | | | | | | |
| **RAMN** | **Ramite** | **37.82** | **333** | *e*P | **P** | **08 28 39.2** | **-0.9** |
| | comp=Z,24nm,0.3s | | | | | | |
| **COEN** | **Coen** | **38.36** | **104** | P | **P** | **08 28 43.2** | **-1.4** |
| | baz=38,SNR=11 | | | | | | |
| **COEN** | **Coen** | **38.36** | **104** | *e*P | **P** | **08 28 43.2** | **-1.4** |
| | comp=Z,26nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | **38.90** | **332** | *e*P | **P** | **08 28 47.9** | **-1.4** |
| | comp=Z,8.6nm,0.2s | | | | | | |
| **BBOO** | **Buckleboo** | **38.95** | **136** | P | **P** | **08 28 48.9** | **-0.4** |
| | baz=39,SNR=11 | | | | | | |
| **GUN** | **Gumba** | **38.97** | **333** | *e*P | **P** | **08 28 48.8** | **-1.1** |
| | comp=Z,38nm,0.3s | | | | | | |
| **DMN** | **Daman** | **39.07** | **332** | *e*P | **P** | **08 28 49.4** | **-1.3** |
| | comp=Z,16nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **39.14** | **332** | *e*P | **P** | **08 28 49.9** | **-1.3** |
| | comp=Z,57nm,0.9s | | | | | | |
| **POO** | **Poona** | **39.52** | **310** | *e*P | P | 08 28 45.0 | -9.4 |
| **GKN** | **Gorkha** | **39.62** | **331** | *e*P | **P** | **08 28 53.9** | **-1.3** |
| | comp=Z,47nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **39.94** | **330** | *e*P | **P** | **08 28 56.8** | **-1.0** |
| | comp=Z,59nm,0.6s | | | | | | |
| **DANN** | **Dangsing** | **40.34** | **331** | *e*P | **P** | **08 29 00.1** | **-1.2** |
| | comp=Z,7.3nm,0.3s | | | | | | |
| **NJ2** | **Nanjing** | **40.77** | **18** | *e*P | **P** | **08 29 02.7** | **-1.7** |
| NJ2 | | | | S | S | 08 35 10.0 | -4.5 |
| NJ2 | | | | LN | | | |
| | comp=Z,790nm,20.9s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=Z,1μm,26.8s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=Z,1μm,25.3s | | | | | | |
| **HTT** | **Hallett** | **41.29** | **135** | P | **P** | **08 29 07.6** | **-1.3** |
| | baz=41,SNR=15 | | | | | | |
| **PMG** | **Port Moresby** | **41.97** | **97** *c* | *i*P | **P** | **08 29 14.0** | **-0.6** |
| **PMG** | **Port Moresby** | **41.97** | **97** | P | **P** | **08 29 14.0** | **-0.6** |
| | baz=42,SNR=19 | | | | | | |
| **PMG** | **Port Moresby** | **41.97** | **97** | *e*P | **P** | **08 29 14.0** | **-0.6** |
| | comp=Z,175nm,0.8s | | | | | | |
| **CTAO** | **Charters Tower** | **42.30** | **113** | *e*P | **P** | **08 29 16.0** | **-1.2** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,24nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **42.30** | **113** | *e*P | **P** | **08 29 16.0** | **-1.2** |
| | comp=Z,24nm,1.0s | | | | | | |
| **QLP** | **Quilpie** | **42.37** | **123** | P | **P** | **08 29 18.6** | **+0.9** |
| | baz=42,SNR=38 | | | | | | |
| **NDI** | **New Delhi** | **44.11** | **324** | *e*P | **P** | **08 29 30.5** | **-1.2** |
| **GUMO** | **Guam** | **44.55** | **63** | LR | LR | 08 49 57.8 | |
| | comp=Z,69nm,18.2s,baz=254,slow=39 | | | | | | |
| **ARPS** | **Mount Arapiles** | **45.10** | **137** | P | **P** | **08 29 41.5** | **+2.0** |
| | baz=45,SNR=7.8 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **45.43** | **128** | P | **P** | **08 29 43.1** | **+0.8** |
| | baz=45,SNR=10 | | | | | | |
| **GTA** | **Gaotai** | **46.10** | **355** | *e*P | **P** | **08 29 48.2** | **+0.7** |
| GTA | | | | pP | pP | 08 29 58.0 | +5.0 |
| GTA | | | | sP | sP | 08 30 01.8 | +6.6 |
| GTA | | | | PcP | **PcP** | **08 31 22.2** | **-1.4** |
| GTA | | | | PP | **PP** | **08 31 35.7** | **-0.2** |
| GTA | | | | S | **S** | **08 36 33.0** | **+0.4** |
| GTA | | | | sS | sS | 08 36 49.7 | +8.1 |
| GTA | | | | ScS | **ScS** | **08 39 38.7** | **-4.0** |
| GTA | | | | SS | SS | 08 39 49.5 | -8.6 |
| GTA | | | | PMZ | | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,99nm,6.6s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,480nm,17.1s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,520nm,16.6s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,1μm,16.1s | | | | | | |
| **RMQ** | **Roma** | **46.17** | **120** | P | **P** | **08 29 49.3** | **+1.1** |
| | baz=46,SNR=7.0 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **47.70** | **7** | *e*P | **P** | **08 30 02.2** | **+2.2** |
| HHC | | | | pP | pP | 08 30 12.2 | +6.7 |
| HHC | | | | PcS | **PcS** | **08 35 25.5** | **+0.8** |
| HHC | | | | S | **S** | **08 36 57.6** | **+2.2** |
| HHC | | | | PMZ | | | |

HHC PMZ
comp=Z,24nm,1.2s
HHC LN
comp=Z,42nm,2.5s
HHC LE
comp=Z,590nm,16.2s
HHC LZ
comp=Z,520nm,14.9s
**TOO Toolangi 48.01 136** P **P 08 30 05.1 +2.7**
comp=Z,550nm,18.7s
baz=48,SNR=4.9
**YNG Young 48.64 131** P **P 08 30 08.3 +1.0**
baz=48,SNR=14
**KSAR Wonju Array Be 48.89 24** P **P 08 30 08.4 -0.7**
**KSAR Wonju Array Be 48.89 24** P **P 08 30 08.4 -0.7**
**KSRS Korea Array 48.92 24** P **P 08 30 08.4 -0.8**
comp=Z,1.6nm,0.6s,baz=219,slow=7.6,SNR=8.4
KSRS LR LR 08 50 46.5
comp=Z,62nm,19.9s,baz=200,slow=36
**KS01 Wonju Array Si 48.92 24** *e*P **P 08 30 08.7 -0.6**
**CAN Canberra 49.51 131** *e*P **P 08 30 15.4 +1.4**
CAN pmax pmax
comp=Z,62nm,1.2s
**CAN Canberra 49.51 131** *e*P **P 08 30 15.4 +1.4**
comp=Z,62nm,1.2s
**MGCD Mangrove Creek 50.31 128** P **P 08 30 21.6 +1.6**
baz=50,SNR=6.6
**MOO Moorlands 51.60 140** P P 08 30 32.6 +3.0
baz=52,SNR=3.3
**WMQ Urumqi 52.61 344** P **P 08 30 39.0 +1.9**
WMQ S **S 08 38 05.0 +1.3**
WMQ SS **SS 08 41 44.0 +1.6**
WMQ PMZ
comp=Z,14nm,1.0s
WMQ PMZ
comp=Z,54nm,5.0s
WMQ LN
comp=Z,520nm,18.0s
WMQ LE
comp=Z,560nm,20.0s
WMQ LZ
comp=Z,390nm,20.0s
**KBL Kabul 53.15 323** *e*P **P 08 30 40.9 -0.5**
KBL pmax pmax
comp=Z,8.0nm,0.8s
**KBL Kabul 53.15 323** *e*P **P 08 30 40.9 -0.5**
comp=Z,7.9nm,0.8s
**KSH Kashi 53.16 332** P P 08 30 39.2 -2.1
KSH *e*pP pP 08 30 48.7 +1.8
KSH PcP **PcP 08 31 47.8 -1.6**
KSH *e*PP **PP 08 32 37.7 -3.8**
KSH S S 08 38 01.7 -10
KSH sS sS 08 38 19.4 -1.2
KSH ScS ScS 08 40 22.3 -8.2
KSH pmax pmax
comp=Z,18nm,0.8s
KSH pmax pmax
comp=Z,93nm,2.8s
KSH LR LR
comp=N,290nm,14.6s
KSH LR LR
comp=E,540nm,15.0s
KSH LR LR
comp=Z,830nm,18.1s
**MAT Matsushiro 53.16 34** P P 08 30 37.9 -3.4
**MJAR Matsushiro Arr 53.16 34** P P 08 30 37.8 -3.5
comp=Z,2.1nm,0.6s,baz=208,slow=8.6,SNR=11
MJAR PcP **PcP 08 31 48.7 -0.6**
comp=Z,1.6nm,0.6s,baz=201,slow=4.4,SNR=4.2
MJAR LR LR 08 53 45.9
comp=Z,82nm,20.9s,baz=60,slow=37
**WBK Wadi Bani Khal 53.50 304** P **P 08 30 46.1 +2.2**
SNR=6.4
**CN2 Changchun 53.60 18** *e*P **P 08 30 42.4 -1.9**
CN2 pmax pmax
comp=Z,10.0nm,1.0s
CN2 LR LR
comp=Z,700nm,15.0s
**SONM Songino Array 54.30 1** P **P 08 30 48.7 -0.8**
comp=Z,4.6nm,0.8s,baz=186,slow=8.9,SNR=12
SONM PcP **PcP 08 31 52.7 -0.8**
comp=Z,2.1nm,0.6s,baz=182,slow=4.1,SNR=5.6
SONM ScP **ScP 08 35 48.3 -2.9**
comp=Z,1.4nm,0.8s,baz=163,slow=5.4,SNR=5.8
**SONA1 Songino Array 54.31 1** *e*P **P 08 30 48.4 -1.2**
**ULN Ulaanbaatar 54.35 2** *ce*P **P 08 30 49.0 -0.9**
ULN pmax pmax
comp=Z,9.0nm,1.7s
**ULN Ulaanbaatar 54.35 2** *e*P **P 08 30 49.2 -0.8**
comp=Z,4.3nm,0.9s
**SMDO Samad 54.46 304** P **P 08 30 53.2 +2.1**
SNR=8.5
**ULHL Ulahol 55.24 334** P **P 08 30 55.4 -1.2**
SNR=6.4
**HOQ Hoqain 55.30 305** P **P 08 30 59.2 +2.1**
SNR=8.1
**KZA Kyzart 55.54 334** P **P 08 30 58.8 -0.2**
SNR=7.3
**UCH Uchtor 55.99 333** P **P 08 31 01.3 -1.0**
SNR=11
**TKM2 Tokmak 2 56.07 334** *e*P **P 08 31 01.2 -1.3**
TKM2 pmax pmax
comp=Z,17nm,0.8s
**TKM2 Tokmak 2 56.07 334** P **P 08 31 01.3 -1.3**
SNR=20
**TKM2 Tokmak 2 56.07 334** *e*P **P 08 31 01.2 -1.3**
comp=Z,17nm,0.8s
**KBK Karagaybulak 56.14 334** P **P 08 31 02.9 -0.1**
SNR=6.0
**USRK Ussuriysk Ar. 56.26 23** P **P 08 31 02.1 -1.4**
comp=Z,11nm,0.7s,baz=207,slow=5.8,SNR=15
**AML Almayashu 56.28 332** P **P 08 31 03.7 -0.6**
SNR=12
**AAK Ala-Archa 56.32 333** P **P 08 31 03.5 -0.7**
comp=Z,1.7nm,0.3s,baz=130,slow=4.5,SNR=8.1
**AAK Ala-Archa 56.32 333** *i*P **P 08 31 03.3 -1.0**
AAK pmax pmax
comp=Z,21nm,1.1s
**AAK Ala-Archa 56.32 333** P **P 08 31 04.0 -0.2**
SNR=5.7
**AAK Ala-Archa 56.32 333** *e*P **P 08 31 03.8 -0.5**
**FRU Bishkek 56.43 334** *e*P **P 08 31 03.0 -1.8**
**EKS2 Erkin-Say 56.66 333** *e*P **P 08 31 05.8 -0.8**
**EKS2 Erkin-Say 56.66 333** P **P 08 31 06.5 -0.2**
SNR=18
**EKS2 Erkin-Say 56.66 333** *e*P **P 08 31 05.8 -0.8**
**UOSS Wadi Hilu 56.81 306** *e*P **P 08 31 09.3 +1.4**
comp=Z,30nm,1.4s
**HATD Hatta, Dubai 56.82 305** P **P 08 31 09.9 +2.0**
SNR=5.7
**ZAK Zakamensk 56.85 359** *e*P **P 08 31 06.3 -1.5**
ZAK pmax pmax
comp=Z,4.0nm,1.0s
**MK01 Makanchi Array 56.87 342** *e*P **P 08 31 06.1 -1.8**
**MKAR Makanchi Array 56.89 342** P **P 08 31 06.5 -1.5**
comp=Z,6.5nm,0.5s,baz=150,slow=8.4,SNR=79
**MAKZ Makanchi 57.00 341** *e*P **P 08 31 07.6 -1.3**
**IDAH Dahanechah 58.00 315** *e*P P 08 31 13.9 -2.5
**TLY Talaya 58.14 359** *e*P **P 08 31 16.9 +0.1**
TLY pmax pmax
comp=Z,6.0nm,0.9s
TLY MLR MLR
comp=Z,660nm,19.0s
**KKAR Karatay Array 58.53 331** *e*P **P 08 31 18.4 -1.3**
**KKAR Karatay Array 58.53 331** *e*P **P 08 31 18.4 -1.3**
**CASY Casey 59.63 177** *e*P **P 08 31 27.5 +0.6**
**IBAF Bafgh 60.48 312** *e*P **P 08 31 33.6 +0.1**
**IMEH Mehriz 61.09 311** *e*P **P 08 31 36.9 -0.9**
**ISRV Sarvestan 61.28 309** *e*P **P 08 31 40.0 +0.8**
**KURBB Kurchatov Arra 61.44 341** P **P 08 31 38.0 -1.5**
comp=Z,7.9nm,0.9s,baz=159,slow=6.1,SNR=37
**KURK Kurchatov 61.50 341** *e*P **P 08 31 38.1 -1.7**
**KURK Kurchatov 61.50 341** P **P 08 31 38.6 -1.2**
SNR=10
**KURK Kurchatov 61.50 341** P **P 08 31 38.9 -0.9**
comp=Z,78nm,1.3s,SNR=9.9
**KURK Kurchatov 61.50 341** *e*P **P 08 31 38.1 -1.7**
**IPAR Pars 61.54 309** *e*P **P 08 31 41.7 +0.7**
**GEYT Alibeck 62.12 319** P **P 08 31 43.6 -0.7**
comp=Z,8.5nm,0.7s,baz=145,slow=5.4,SNR=18
**IKAZ Kazeroun 62.45 308** *e*P **P 08 31 46.5 -0.6**
**ZAA0 Zalesovo Array 62.72 347** P **P 08 31 46.2 -1.7**
baz=63,SNR=7.8
**ZALV Zalesovo Beam 62.72 347** P **P 08 31 45.9 -2.0**
comp=Z,6.8nm,0.3s,baz=153,slow=5.6,SNR=30
**YSS Yuzh-Sakhalins 63.09 28** *e*P P 08 31 48.2 -2.4
**BOD Bodaibo 64.72 5** *e*P P 08 31 55.8 -5.3
BOD pmax pmax
comp=Z,4.0nm,1.6s
**RAYN Ar Rayn 65.22 300** *e*P **P 08 32 05.8 +0.7**
comp=Z,4.6nm,0.8s
**BVAR Borovoye Array 66.26 338** P **P 08 32 10.2 -0.9**
comp=Z,6.1nm,0.5s,baz=140,slow=7.7,SNR=31
**BRVK Borovoye 66.33 338** *i*P **P 08 32 10.2 -1.4**
BRVK pmax pmax
comp=Z,11nm,1.0s
**BRVK Borovoye 66.33 338** P **P 08 32 10.8 -0.8**
comp=Z,69nm,0.8s,SNR=5.1
**BRVK Borovoye 66.33 338** P **P 08 32 10.2 -1.4**
SNR=5.3
**BRVK Borovoye 66.33 338** *e*P **P 08 32 10.5 -1.1**
**MAW Mawson 67.06 196** P **P 08 32 17.0 +1.0**
comp=Z,13nm,1.0s,baz=33,slow=4.3,SNR=12
MAW LR LR 08 55 53.8
comp=Z,222nm,21.5s,baz=60,slow=31
**MAW Mawson 67.06 196** *e*P **P 08 32 16.9 +0.9**
**MAW Mawson 67.06 196** P **P 08 32 17.0 +0.9**
baz=67,SNR=15
**MAW Mawson 67.06 196** *e*P **P 08 32 16.9 +0.9**
**ABKAR Akbulak array 68.06 330** *e*P **P 08 32 21.9 -0.7**
comp=Z,13nm,0.5s
**YAK Yakutsk 71.16 12** *e*P P 08 32 38.0 -3.5
YAK pmax pmax
comp=N,10.0nm,1.5s
YAK pmax pmax
comp=E,10.0nm,1.6s
YAK pmax pmax
comp=Z,30nm,1.0s
**YAK Yakutsk 71.16 12** *e*P **P 08 32 39.5 -2.0**
**BKZ Black Stump Fm 71.59 129** *e*P **P 08 32 44.6 -0.2**
**SVE Sverdlovsk 72.85 336** *i*P **P 08 32 51.7 -0.1**
SVE pmax pmax
comp=Z,48nm,1.1s
**ARU Arti 73.43 335** *d i*P **P 08 32 54.4 -0.8**
ARU S **S 08 42 22.8 -0.8**
ARU SS SS 08 46 58.5 -7.9
ARU pmax pmax
comp=Z,61nm,1.7s
**ARU Arti 73.43 335** P **P 08 32 54.4 -0.8**
comp=Z,170nm,0.7s,SNR=13
**ARU Arti 73.43 335** *e*P **P 08 32 54.6 -0.5**
**ZEI Tsey 73.92 318** *e*P **P 08 32 57.1 -1.6**
ZEI pmax pmax
comp=Z,128nm,1.5s
**MBAR Mbarara 74.14 271** P **P 08 33 02.4 +1.8**
comp=Z,1.8nm,0.3s,baz=72,slow=6.9,SNR=7.3
**MBAR Mbarara 74.14 271** *e*P **P 08 33 01.7 +1.1**
**MBAR Mbarara 74.14 271** *e*P **P 08 33 01.7 +1.1**
**PETK Petropavlovsk- 74.38 30** P **P 08 32 59.0 -1.9**
comp=Z,6.9nm,0.7s,baz=191,slow=7.2,SNR=7.7
**PETK Petropavlovsk- 74.38 30** P **P 08 32 59.0 -1.9**
**PET Petropavlovsk 74.81 30** *i*P **P 08 33 01.5 -1.8**
PET *e*S **SKiKP 08 42 32.4 +4.6**
PET pmax pmax
comp=Z,41nm,1.6s
**PET Petropavlovsk 74.81 30** *e*P **P 08 33 01.6 -1.8**
**KBZ Khabaz 74.99 319** P **P 08 33 04.8 +0.2**
comp=Z,6.5nm,0.9s,baz=55,slow=1.6,SNR=7.7
**SYO Syowa Base 75.06 200** *e*P P 08 33 00.3 -4.3
**LSZ Lusaka 75.43 256** *e*P **P 08 33 09.7 +1.8**
**LSZ Lusaka 75.43 256** *e*P **P 08 33 09.7 +1.8**
**VNDA Vanda 76.67 169** P **P 08 33 13.9 +0.3**
comp=Z,4.4nm,0.9s,baz=298,slow=5.9,SNR=15
VNDA LR LR 09 04 05.4
comp=Z,154nm,18.3s,baz=312,slow=33
**VNDA Vanda 76.67 169** *e*P **P 08 33 14.0 +0.3**
**BOSA Boshof 77.70 242** P **P 08 33 21.8 +1.2**
comp=Z,2.0nm,0.6s,baz=57,slow=7.1,SNR=3.9
**SEY Seymchan 78.23 20** *i*P **P 08 33 20.7 -1.8**
**VRH Novokhopyorsk 78.89 325** *e*P **P 08 33 26.2 -0.2**
VRH pmax pmax
comp=Z,20nm,0.8s
VRH pmax pmax
comp=N,30nm,0.7s
VRH pmax pmax
comp=E,10.0nm,0.6s
**BRTR Keskin Array B 80.02 312** P **P 08 33 33.0 0.0**
comp=E,4.2nm,0.7s,baz=138,slow=6.3,SNR=18
**BRTR Keskin Array B 80.02 312** *ce*P **P 08 33 33.0 0.0**
BRTR pmax pmax
comp=Z,4.0nm,0.6s
**VORD Divnogorie 80.19 324** *e*P **P 08 33 32.8 -0.7**
VORD pmax pmax
comp=Z,10.0nm,1.5s
VORD pmax pmax
comp=N,10.0nm,0.5s
VORD pmax pmax
comp=E,20nm,1.0s
**VSR Storozhevoye 80.36 324** *e*P **P 08 33 33.8 -0.6**
VSR pmax pmax
comp=Z,20nm,1.1s
VSR pmax pmax
comp=N,10.0nm,0.9s
VSR pmax pmax
comp=E,20nm,1.2s
**LPSR Galich'ya Gora 81.05 326** *e*P **P 08 33 37.7 -0.3**
LPSR pmax pmax
comp=Z,20nm,1.3s
LPSR pmax pmax
comp=N,4.0nm,0.6s
LPSR pmax pmax
comp=E,10.0nm,0.8s
**MOS Moscow 82.98 328** *e*P **P 08 33 47.4 -0.7**
MOS pmax pmax
comp=Z,54nm,1.0s
**OBN Obninsk 83.30 327** *ce*P **P 08 33 50.1 +0.3**
OBN *e* 08 37 03.9
OBN *e*PPP PPP 08 38 52.6
OBN pmax pmax
comp=Z,59nm,1.3s
OBN MLR MLR
comp=Z,163nm,17.0s
**QSPA South Pole Qui 83.30 180** *e*P **P 08 33 50.3 +0.4**
**BILL Bilibino 85.90 19** *e*P P 08 34 00.5 -2.2
BILL *e* 08 37 20.8
BILL *e*SS SS 08 50 13.7 +1.0
BILL pmax pmax
comp=Z,7.0nm,1.1s
BILL MLR MLR
comp=Z,104nm,16.0s
**AKASG Malin Array Be 86.12 322** P **P 08 34 03.3 -0.8**
comp=Z,1.5nm,0.6s,baz=92,slow=3.8,SNR=19
**AKASG Malin Array Be 86.12 322** *ce*P **P 08 34 04.0 -0.1**
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**KIEV Kiev 86.13 322** *i*P **P 08 34 04.2 0.0**
KIEV pmax pmax
comp=Z,11nm,1.5s
**KIEV Kiev 86.13 322** *e*P **P 08 34 04.3 +0.2**
**TMCR Tamitsa 86.13 336** *e*P **P 08 34 03.8 -0.1**
TMCR pmax pmax
comp=Z,27nm,0.9s
**VRI Vrincioaia 86.55 317** P **P 08 34 08.1 +1.7**
**VRI Vrincioaia 86.55 317** *i*P **P 08 34 08.1 +1.7**
**PLOR Plostina 86.60 317** *i*P **P 08 34 08.3 +1.6**
**PLOR Plostina 86.60 317** *i*P **P 08 34 08.3 +1.6**
**MLR Muntele Rosu 87.00 316** *i*P **P 08 34 10.5 +1.7**
**MLR Muntele Rosu 87.00 316** *i*P **P 08 34 10.5 +1.7**
**VOIR 87.60 316** *i*P **P 08 34 13.0 +1.4**
**VOIR 87.60 316** *i*P **P 08 34 13.0 +1.4**
**BURAR Bucovina Array 87.94 318** P **P 08 34 14.9 +1.7**
**BURAR Bucovina Array 87.94 318** *i*P **P 08 34 14.9 +1.7**
**LVV L'vov 89.16 320** *e*P **P 08 34 19.8 +1.0**
**SNAA Sanae 89.18 198** P **P 08 34 19.6 +1.0**
**SNAA Sanae 89.18 198** *e*P **P 08 34 19.7 +1.1**
**SNAA Sanae 89.18 198** *e*P **P 08 34 19.7 +1.1**
**DRGR 89.46 317** P **P 08 34 22.6 +2.2**
**DRGR 89.46 317** *i*P **P 08 34 22.6 +2.2**
**BZS Buzias 90.01 316** *i*P **P 08 34 24.3 +1.5**
**BZS Buzias 90.01 316** *i*P **P 08 34 24.3 +1.5**
**KOLS Kolonicke sedl 90.13 319** *e*P **P 08 34 22.5 -0.8**
KOLS pmax pmax
comp=Z,13nm,1.4s
**KOLS Kolonicke sedl 90.13 319** *e*P **P 08 34 22.5 -0.8**
**FINES FINESS Array B 90.48 332** P **P 08 34 24.2 -0.4**
comp=Z,2.6nm,0.6s,baz=125,slow=6.5,SNR=18
**FINES FINESS Array B 90.48 332** *i*P **P 08 34 25.2 +0.5**
FINES pmax pmax
comp=Z,3.0nm,0.6s
**VNA2 Neumayer--Watz 90.82 198** P P 08 34 32.2 +6.0
baz=278,slow=1.4
**DIVS Divibare 90.91 314** *i*P **P 08 34 29.2 +2.0**
**ARCES ARCESS Array B 92.50 340** P **P 08 34 33.2 -0.7**
comp=Z,3.5nm,0.8s,baz=104,slow=5.8,SNR=14
ARCES LR LR 09 20 35.5
comp=Z,96nm,18.6s,baz=97,slow=38
**MORC Moravsky Berou 93.31 320** P **P 08 34 39.5 +1.4**
**MORC Moravsky Berou 93.31 320** *i*P **P 08 34 39.5 +1.4**
**GERES GERESS Array B 95.73 318** P **P 08 34 48.8 -0.5**
comp=Z,0.3nm,0.5s,baz=100,slow=1.5,SNR=3.8
**HFS Hagfors 96.32 330** LR LR 09 23 15.5
comp=Z,77nm,20.4s,baz=88,slow=39
**NOA NORSAR Array B 97.56 331** LR LR 09 24 50.8
comp=Z,89nm,18.7s,baz=295,slow=39
**TORD Torodi Ar. Bea 104.25 282** PKiKP **PKiKP 08 39 44.9 -0.1**
comp=Z,0.9nm,0.8s,baz=111,slow=2.0,SNR=5.7
**B05A Bryant 122.63 35** P **PKPdf 08 40 18.7 -0.2**
baz=122
**I05D Terrebonne, OR 125.03 39** P **PKPdf 08 40 23.7 -0.1**
baz=125
**J04D Umpqua Nationa 125.06 41** P **PKPdf 08 40 24.0 -0.1**
baz=125
**NEW Newport 125.42 33** P **PKPdf 08 40 24.4 0.0**
baz=125
**J05D Fort Rock, OR 125.60 40** P **PKPdf 08 40 25.1 +0.1**
baz=125
**N02D Trinity Center 125.68 43** P **PKPdf 08 40 24.9 -0.2**
baz=125
**M04C Macdoel 125.90 42** P **PKPdf 08 40 26.0 +0.3**
baz=126
**O03D Paynes Creek 126.59 44** P **PKPdf 08 40 26.5 -0.4**
baz=126
**MSO Missoula 128.00 33** P **PKPdf 08 40 29.5 +0.1**
baz=128
**EGMT Eagleton 129.39 30** P **PKPdf 08 40 32.1 +0.1**
baz=129
**HLID Hailey 129.68 37** P **PKPdf 08 40 33.2 +0.3**
baz=129
**NVAR Mina Array Bea 129.85 44** PKP **PKPdf 08 40 33.9 +0.5**
comp=Z,1.2nm,0.8s,baz=312,slow=2.3,SNR=10
NVAR SKPbc SKPab 08 43 54.8 +0.1
comp=Z,0.5nm,0.7s,baz=272,slow=5.3,SNR=4.0
**BOZ Bozeman (W) 130.00 33** P **PKPdf 08 40 33.8 +0.4**
baz=130
**MPMC Manual Prospec 131.51 47** P **PKPdf 08 40 36.3 -0.3**
baz=131
**RLMT Red Lodge 131.60 32** P **PKPdf 08 40 36.7 +0.2**
baz=131
**LRMC Laurel Mountai 131.62 48** P **PKPdf 08 40 36.5 -0.2**
baz=131
**DGMT Dagmar 131.63 26** P **PKPdf 08 40 36.3 +0.1**
baz=131
**EDW2 Edwards Air Fo 131.66 48** P **PKPdf 08 40 37.0 +0.3**
baz=131
**A25A Svangstu Ranch 131.72 24** P **PKPdf 08 40 37.2 +0.9**
baz=131
**R11A Troy Canyon, C 131.76 43** P **PKPdf 08 40 37.3 +0.3**
baz=132
**FURC Furnace Creek, 131.78 46** P **PKPdf 08 40 37.7 +0.9**
baz=132
**TPNV Topopah Spring 131.99 45** P **PKPdf 08 40 38.1 +0.7**
baz=132
**LAO LASA Array 132.04 29** P **PKPdf 08 40 38.3 +1.3**
baz=132
**A26A Wade Farm, Ken 132.19 24** P **PKPdf 08 40 38.7 +1.5**
baz=132
**GSC Goldstone 132.35 47** P **PKPdf 08 40 39.1 +1.1**
baz=132
**DUG Dugway 132.59 39** P **PKPdf 08 40 39.4 +1.0**
baz=132
**HEC Hector,Ludlow 132.91 48** P **PKPdf 08 40 41.2 +2.1**
baz=133
**ULM Lac du Bonnet 133.24 18** SKP **SKPab 08 44 07.7 -0.7**
comp=Z,8.1nm,0.8s,baz=25,slow=3.3,SNR=6.0
**PFO Pinyon Flat Ob 133.35 49** P **PKPdf 08 40 37.4 -2.6**
baz=133
**GMRC Granite Mounta 133.42 47** P **PKPdf 08 40 37.7 -2.5**
baz=133
**MSU Marysvale 133.94 41** *e*PKIKP **PKPdf 08 40 42.2 +1.0**
**MSU Marysvale 133.94 41** *e*PKPdf **PKPdf 08 40 42.1 +1.0**
**A31A Linda, St. Vin 133.96 20** P **PKPdf 08 40 39.4 -1.1**
baz=134
**B30A Myrvik Farm, E 133.97 21** P **PKPdf 08 40 39.1 -1.5**
baz=134
**MDND Maddock 133.99 23** P **PKPdf 08 40 38.9 -1.8**
baz=134
**D29A Pettibone, Tap 134.64 23** P **PKPdf 08 40 40.0 -2.0**
baz=134
**K22A Casper 134.73 33** P **PKPdf 08 40 40.5 -1.9**
baz=134
**D30A Buchanan 134.93 23** P **PKPdf 08 40 42.1 -0.3**
baz=135
**G27A Dupree 135.00 27** P **PKPdf 08 40 42.2 -0.4**
baz=135
**O20A White River Ci 135.42 37** P **PKPdf 08 40 43.2 -0.6**
baz=135
**I26A New Underwood 135.60 29** P **PKPdf 08 40 42.7 -1.1**
baz=135
**J25A Sunshine Ranch 135.61 30** P **PKPdf 08 40 43.0 -0.9**
baz=135
**I27A Quinn 135.95 28** P **PKPdf 08 40 43.7 -0.8**
baz=136
**WUAZ Wupatki 136.11 44** P **PKPdf 08 40 43.0 -2.2**
baz=136
**D34A Park Rapids 136.23 20** P **PKPdf 08 40 44.0 -0.9**
baz=136
**I28A Midland 136.41 27** P **PKPdf 08 40 44.7 -0.6**
baz=136
**K26A Motz Farm, Whi 136.43 30** P **PKPdf 08 40 44.1 -1.3**
baz=136
**I29A Vivian Onida 136.78 27** P **PKPdf 08 40 45.5 -0.5**
baz=136
**J28A Allard Ranch, 136.82 28** P **PKPdf 08 40 45.7 -0.4**
baz=136
**MVCO Mesa Verde 137.07 40** P **PKPdf 08 40 46.2 -0.8**
baz=137
**ISCO Idaho Springs 137.17 35** P **PKPdf 08 40 47.1 -0.1**
baz=137
**J29A Okreek 137.25 27** P **PKPdf 08 40 46.8 -0.1**
baz=137
**H32A Carlson Farm, 137.60 24** P **PKPdf 08 40 47.3 -0.2**
baz=137
**J30A Dallas 137.69 27** P **PKPdf 08 40 47.4 -0.3**
baz=137
**S22A 4UR Ranch, Cre 137.78 38** P **PKPdf 08 40 48.4 0.0**
baz=138
**F36A Milaca 137.86 19** P **PKPdf 08 40 48.5 +0.6**
baz=138
**ECSD EROS Data Cent 138.57 24** P **PKPdf 08 40 48.7 -0.6**
baz=138
**SDCO Great Sand Dun 138.59 37** P **PKPdf 08 40 49.9 0.0**
baz=138
**K32A Verdigre 138.89 26** P **PKPdf 08 40 49.4 -0.6**
baz=139
**P27A Ficken Ranch, 139.03 33** P **PKPdf 08 40 50.0 -0.4**
baz=139
**R26A Arlington 139.43 35** P **PKPdf 08 40 50.9 -0.3**
baz=139
**J35A Milford 139.43 23** P **PKPdf 08 40 51.8 +1.0**
baz=139
**T25A Trinidad 139.65 37** P **PKPdf 08 40 51.1 -0.6**
baz=139
**R27A Eads 139.80 34** P **PKPdf 08 40 51.3 -0.6**
baz=140
**P29A Atwood 139.86 31** P **PKPdf 08 40 52.1 +0.3**
baz=140
**S26A Kim 139.88 36** P **PKPdf 08 40 52.7 +0.6**
baz=140
**T26A Comanche Natio 140.11 36** P **PKPdf 08 40 52.8 +0.3**
baz=140
**R28A Tribune 140.31 34** P **PKPdf 08 40 53.2 +0.4**
baz=140
**Q29A Oakley 140.36 32** P **PKPdf 08 40 52.3 -0.5**
baz=140
**Q30A Quinter 140.69 31** P **PKPdf 08 40 53.4 0.0**
baz=140
**T27A Campo 140.69 36** P **PKPdf 08 40 53.0 -0.5**
baz=140
**P32A Huiting Farm, 141.01 29** P **PKPdf 08 40 51.8 -2.0**
baz=141
**P33A Williams Farm, 141.60 29** P **PKPdf 08 40 53.2 -1.7**
baz=141
**R32A Long Quarter, 141.89 31** P **PKPdf 08 40 53.6 -1.9**
baz=142
**MNTX Cornudas Mount 142.38 45** P **PKPdf 08 40 55.1 -1.5**
baz=142
**P36A Good Intent, A 142.58 26** P **PKPdf 08 40 56.1 -0.6**
baz=142
**MSTX Muleshoe 142.73 40** P **PKPdf 08 40 55.3 -2.0**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | baz=142 | | | | | | |
| R36A | Gordon, Harris | 143.51 | 27 | P | PKPab | 08 40 54.2 | -0.4 |
| | baz=143,SNR=5.1 | | | | | | |
| W31A | Holland Ranch, | 143.61 | 35 | P | PKPab | 08 40 54.2 | -1.0 |
| | baz=143 | | | | | | |
| S35A | Otter Creek Ra | 143.64 | 29 | P | PKPab | 08 40 55.1 | -0.1 |
| | baz=143 | | | | | | |
| U33A | Lingo Farm, Me | 143.71 | 32 | P | PKPab | 08 40 55.1 | -0.4 |
| | baz=143 | | | | | | |
| T34A | McClaskey Farm | 143.73 | 30 | P | PKPab | 08 40 55.1 | -0.4 |
| | baz=143 | | | | | | |
| V32A | Arapaho | 143.73 | 34 | P | PKPab | 08 40 55.8 | +0.2 |
| | baz=143 | | | | | | |
| R37A | Teagarden Farm | 143.82 | 27 | P | PKPab | 08 40 55.1 | -0.7 |
| | baz=144 | | | | | | |
| S36A | Lake Cedric, C | 143.95 | 28 | P | PKPab | 08 40 55.5 | -0.8 |
| | baz=144,SNR=6.4 | | | | | | |
| Y30A | Stafford Cattl | 143.96 | 38 | P | PKPab | 08 40 56.0 | -0.5 |
| | baz=144 | | | | | | |
| HDIL | Hopedale | 143.98 | 18 | P | PKPab | 08 40 56.0 | -0.3 |
| | baz=144 | | | | | | |
| X31A | McDonald Ranch | 143.98 | 36 | P | PKPab | 08 40 56.5 | -0.1 |
| | baz=144 | | | | | | |
| U34A | Anderson Ranch | 144.01 | 31 | P | PKPab | 08 40 56.4 | -0.2 |
| | baz=144 | | | | | | |
| 228A | UT Block 9, Go | 144.03 | 42 | P | PKPab | 08 40 56.4 | -0.5 |
| | baz=144 | | | | | | |
| W32A | Sentinel | 144.05 | 35 | P | PKPab | 08 40 56.6 | -0.3 |
| | baz=144 | | | | | | |
| V33A | Lossen Ranch, | 144.07 | 33 | P | PKPab | 08 40 56.5 | -0.4 |
| | baz=144 | | | | | | |
| T35A | Sooner Cattle | 144.15 | 30 | P | PKPab | 08 40 55.9 | -1.3 |
| | baz=144,SNR=9.5 | | | | | | |
| 129A | Stewart Farms, | 144.17 | 40 | P | PKPab | 08 40 56.3 | -1.1 |
| | baz=144 | | | | | | |
| Z30A | Sanderson Ranc | 144.21 | 39 | P | PKPab | 08 40 56.4 | -1.2 |
| | baz=144 | | | | | | |
| S37A | Fort Scott | 144.28 | 27 | P | PKPab | 08 40 56.2 | -1.3 |
| | baz=144,SNR=16 | | | | | | |
| Y31A | Rekieta Farm, | 144.28 | 37 | P | PKPab | 08 40 57.2 | -0.5 |
| | baz=144 | | | | | | |
| T36A | Boggs Farm, Ca | 144.35 | 29 | P | PKPab | 08 40 56.8 | -1.0 |
| | baz=144,SNR=14 | | | | | | |
| W33A | Caddo, Fort Co | 144.47 | 34 | P | PKPab | 08 40 58.0 | -0.3 |
| | baz=144,SNR=7.7 | | | | | | |
| U35A | Pawnee | 144.47 | 31 | P | PKPab | 08 40 57.4 | -0.9 |
| | baz=144,SNR=19 | | | | | | |
| V34A | Guthrie | 144.47 | 32 | P | PKPab | 08 40 57.8 | -0.6 |
| | baz=144,SNR=17 | | | | | | |
| X32A | Elmer | 144.53 | 36 | P | PKPab | 08 40 57.6 | -1.0 |
| | baz=144 | | | | | | |
| WMOK | Wichita Mounta | 144.59 | 35 | *e*PKIKP | PKPab | 08 40 57.5 | -1.3 |
| WMOK | Wichita Mounta | 144.59 | 35 | *e*PKPdf | PKPab | 08 40 57.5 | -1.3 |
| Y32A | R-V Farms, Ver | 144.74 | 36 | P | PKPab | 08 40 58.5 | -0.9 |
| | baz=144 | | | | | | |
| T37A | Cheneyville 18 | 144.75 | 28 | P | PKPab | 08 40 58.2 | -1.1 |
| | baz=144,SNR=13 | | | | | | |
| 130A | Snyder | 144.77 | 40 | P | PKPab | 08 40 57.8 | -1.8 |
| | baz=144 | | | | | | |
| SFIN | Scholer Farm | 144.79 | 16 | P | PKPab | 08 40 58.5 | -0.8 |
| | baz=144 | | | | | | |
| W34A | Bridge Creek, | 144.79 | 33 | P | PKPab | 08 40 58.8 | -0.7 |
| | baz=144,SNR=5.8 | | | | | | |
| Z31A | Sharp Cattle R | 144.79 | 38 | P | PKPab | 08 40 58.5 | -1.1 |
| | baz=144 | | | | | | |
| 329A | Wagon Wheel Ra | 144.82 | 42 | P | PKPab | 08 40 59.0 | -0.9 |
| | baz=144 | | | | | | |
| V35A | Meyer Ranch, C | 144.88 | 31 | P | PKPab | 08 40 58.9 | -1.0 |
| | baz=145,SNR=12 | | | | | | |
| X33A | Lawton | 144.90 | 35 | P | PKPab | 08 40 57.8 | -2.1 |
| | baz=145 | | | | | | |
| TXAR | Lajitas Array | 144.94 | 47 | PKP | PKPab | 08 41 00.2 | -0.1 |
| | comp=Z,8.6nm,0.6s,baz=272,slow=1.2,SNR=142 | | | | | | |
| TXAR | | | | SKPbc | SKPbc | 08 44 40.1 | 0.0 |
| | comp=Z,0.6nm,0.8s,baz=232,slow=1.0,SNR=4.5 | | | | | | |
| U36A | Oologah | 144.95 | 30 | P | PKPab | 08 40 59.1 | -0.9 |
| | baz=145,SNR=9.1 | | | | | | |
| 131A | Roby | 145.08 | 39 | P | PKPbc | 08 41 00.2 | -0.5 |
| | baz=145 | | | | | | |
| 230A | Sterling City | 145.14 | 41 | P | PKPbc | 08 41 00.2 | -0.7 |
| | baz=145 | | | | | | |
| BDFB | Brasilia | 145.14 | 230 | PKPbc | PKPdf | 08 41 02.6 | +0.7 |
| | comp=Z,17nm,1.2s,baz=81,slow=2.1,SNR=8.8 | | | | | | |
| Z32A | Haskell | 145.21 | 37 | P | PKPbc | 08 41 00.2 | -0.8 |
| | baz=145 | | | | | | |
| Y33A | Hilltop Ranch, | 145.21 | 35 | P | PKPbc | 08 40 59.4 | -1.6 |
| | baz=145 | | | | | | |
| U37A | Salina | 145.24 | 29 | P | PKPbc | 08 40 59.7 | -1.3 |
| | baz=145,SNR=13 | | | | | | |
| TUL1 | Tulsa | 145.30 | 30 | P | PKPbc | 08 41 00.4 | -0.8 |
| | baz=145,SNR=13 | | | | | | |
| V36A | Jenks | 145.32 | 30 | P | PKPbc | 08 41 00.6 | -0.7 |
| | baz=145,SNR=19 | | | | | | |
| W35A | Tecumseh | 145.33 | 32 | P | PKPbc | 08 41 00.4 | -1.0 |
| | baz=145,SNR=14 | | | | | | |
| 330A | Mertzon | 145.41 | 41 | P | PKPbc | 08 41 00.8 | -1.0 |
| | baz=145 | | | | | | |
| 429A | Davenport Ranc | 145.42 | 43 | P | PKPbc | 08 41 01.1 | -0.8 |
| | baz=145 | | | | | | |
| 529A | Stev Forest Ra | 145.50 | 44 | P | PKPdf | 08 41 01.7 | -0.4 |
| | baz=145 | | | | | | |
| U38A | Gravette | 145.56 | 28 | P | PKPdf | 08 41 00.7 | -1.3 |
| | baz=145,SNR=26 | | | | | | |
| ABTX | Abilene, Hawle | 145.58 | 38 | P | PKPdf | 08 41 01.9 | -0.2 |
| | baz=145 | | | | | | |
| 231A | Bronte | 145.62 | 40 | P | PKPdf | 08 41 01.7 | -0.5 |
| | baz=145 | | | | | | |
| Z33A | Whitaker Ranch | 145.64 | 36 | P | PKPdf | 08 41 01.6 | -0.6 |
| | baz=145 | | | | | | |
| V37A | Hulbert | 145.65 | 29 | P | PKPdf | 08 41 01.5 | -0.6 |
| | baz=145,SNR=16 | | | | | | |
| W36A | Wetumka | 145.68 | 32 | P | PKPdf | 08 41 01.5 | -0.7 |
| | baz=145,SNR=11 | | | | | | |
| Y34A | Reagan Ranch, | 145.74 | 35 | P | PKPdf | 08 41 01.7 | -0.6 |
| | baz=145 | | | | | | |
| 430A | Baggett Ranch, | 145.76 | 42 | P | PKPdf | 08 41 01.9 | -0.6 |
| | baz=146 | | | | | | |
| X35A | Drake | 145.85 | 33 | P | PKPdf | 08 41 01.7 | -0.8 |
| | baz=146 | | | | | | |
| ACSO | Alum Creek Sta | 145.87 | 11 | *e*PKPbc | PKPdf | 08 41 01.8 | -0.6 |
| 331A | San Angelo | 145.96 | 41 | P | PKPdf | 08 41 02.5 | -0.4 |
| | baz=146 | | | | | | |
| V38A | Canehill | 146.01 | 29 | P | PKPdf | 08 41 02.1 | -0.6 |
| | baz=146,SNR=11 | | | | | | |
| OLIL | Olney | 146.02 | 18 | *e*PKPbc | PKPdf | 08 41 02.5 | -0.1 |
| 133A | Hamilton Ranch | 146.03 | 37 | P | PKPdf | 08 41 02.6 | -0.3 |
| | baz=146 | | | | | | |
| X36A | Centrahoma | 146.05 | 32 | P | PKPdf | 08 41 03.0 | +0.1 |
| | baz=146 | | | | | | |
| BLO | Bloomington | 146.07 | 16 | *e*PKP2 | PKPdf | 08 41 02.6 | -0.1 |
| BLO | Bloomington | 146.07 | 16 | *e*PKPbc | PKPdf | 08 41 02.6 | -0.1 |
| 232A | Coleman | 146.07 | 39 | P | PKPdf | 08 41 03.5 | +0.5 |
| | baz=146 | | | | | | |
| Z34A | Collier Ranch, | 146.08 | 35 | P | PKPdf | 08 41 03.1 | +0.2 |
| | baz=146 | | | | | | |
| 530A | J-C Ranch, Com | 146.09 | 43 | P | PKPdf | 08 41 03.3 | +0.2 |
| | baz=146 | | | | | | |
| W37A | Quinton | 146.09 | 31 | P | PKPdf | 08 41 03.0 | +0.1 |
| | baz=146,SNR=6.8 | | | | | | |
| SSPA | Standing Stone | 146.11 | 4 | *e*PKPbc | PKPdf | 08 41 02.5 | -0.3 |
| 431A | Sonora | 146.24 | 42 | P | PKPdf | 08 41 03.8 | +0.5 |
| | baz=146 | | | | | | |
| 332A | Millersview | 146.35 | 40 | P | PKPdf | 08 41 04.0 | +0.5 |
| | baz=146 | | | | | | |
| 233A | Rising Star | 146.45 | 38 | P | PKPdf | 08 41 04.3 | +0.6 |
| | baz=146 | | | | | | |
| Z35A | Perchaven, San | 146.49 | 35 | P | PKPdf | 08 41 04.1 | +0.5 |
| | baz=146 | | | | | | |
| X37A | Clayton | 146.55 | 31 | P | PKPdf | 08 41 03.7 | 0.0 |
| | baz=146 | | | | | | |
| 134A | White-Moore Ra | 146.56 | 37 | P | PKPdf | 08 41 04.8 | +1.1 |
| | baz=146 | | | | | | |
| W38A | Poteau | 146.60 | 30 | P | PKPdf | 08 41 02.9 | -0.9 |
| | baz=146 | | | | | | |
| Y36A | Durant | 146.60 | 33 | P | PKPdf | 08 41 04.1 | +0.4 |
| | baz=146 | | | | | | |
| 531A | Rocksprings | 146.61 | 42 | P | PKPdf | 08 41 04.7 | +0.7 |
| | baz=146 | | | | | | |
| 432A | Menard | 146.65 | 41 | P | PKPdf | 08 41 04.7 | +0.7 |
| | baz=146 | | | | | | |
| X38A | Whitesboro | 146.76 | 30 | P | PKPdf | 08 41 04.4 | +0.4 |
| | baz=146 | | | | | | |
| 333A | Richland Sprin | 146.87 | 39 | P | PKPdf | 08 41 05.3 | +1.0 |
| | baz=147 | | | | | | |
| Y37A | Hugo | 146.89 | 32 | P | PKPdf | 08 41 04.6 | +0.4 |
| | baz=147 | | | | | | |
| JCT | Junction City | 146.91 | 41 | P | PKPdf | 08 41 05.3 | +0.8 |
| | baz=147 | | | | | | |
| 234A | Clairette | 146.92 | 37 | P | PKPdf | 08 41 05.7 | +1.3 |
| | baz=147 | | | | | | |
| 135A | Vickery Place, | 146.96 | 36 | P | PKPdf | 08 41 05.0 | +0.6 |
| | baz=147 | | | | | | |
| Z36A | Blue Ridge | 146.99 | 34 | P | PKPdf | 08 41 05.3 | +0.8 |
| | baz=147 | | | | | | |
| WCI | Wyandotte Cave | 147.01 | 16 | *e*PKP2 | PKPdf | 08 41 05.5 | +1.1 |
| WCI | Wyandotte Cave | 147.01 | 16 | *e*PKPbc | PKPdf | 08 41 05.5 | +1.1 |
| 532A | Rocksprings | 147.06 | 42 | P | PKPdf | 08 41 05.7 | +0.9 |
| | baz=147 | | | | | | |
| 433A | Art | 147.19 | 40 | P | PKPdf | 08 41 05.9 | +1.0 |
| | baz=147 | | | | | | |
| PARMO | Parma | 147.32 | 22 | *e*PKPbc | PKPdf | 08 41 06.6 | +1.7 |
| 334A | Lometa | 147.33 | 38 | P | PKPdf | 08 41 06.6 | +1.5 |
| | baz=147 | | | | | | |
| WHTX | Lake Whitney | 147.34 | 37 | P | PKPdf | 08 41 06.7 | +1.7 |
| | baz=147 | | | | | | |
| Y38A | Idabel | 147.40 | 31 | P | PKPdf | 08 41 06.6 | +1.5 |
| | baz=147 | | | | | | |
| MIAR | Mount Ida | 147.48 | 29 | *e*PKP2 | PKPdf | 08 41 07.0 | +1.8 |
| MIAR | Mount Ida | 147.48 | 29 | P | PKPdf | 08 41 06.8 | +1.6 |
| | baz=147 | | | | | | |
| MIAR | Mount Ida | 147.48 | 29 | *e*PKPbc | PKPdf | 08 41 07.0 | +1.8 |
| Z37A | Pogue Cattle C | 147.49 | 33 | P | PKPdf | 08 41 06.5 | +1.2 |
| | baz=147 | | | | | | |
| 136A | Ennis | 147.53 | 35 | P | PKPdf | 08 41 06.7 | +1.3 |
| | baz=147 | | | | | | |
| 632A | Uvalde | 147.54 | 43 | P | PKPdf | 08 41 07.7 | +2.2 |
| | baz=147 | | | | | | |
| 434A | Burnet | 147.66 | 39 | P | PKPdf | 08 41 06.8 | +1.1 |
| | baz=147 | | | | | | |
| 533A | Kerrville | 147.67 | 41 | P | PKPdf | 08 41 07.9 | +2.2 |
| | baz=147 | | | | | | |
| Y39A | Lockesburg | 147.71 | 30 | P | PKPdf | 08 41 07.5 | +1.8 |
| | baz=147 | | | | | | |
| GNAR | Gosnell | 147.83 | 23 | *e*PKPbc | PKPdf | 08 41 07.9 | +2.2 |
| 335A | Moody | 147.86 | 38 | P | PKPdf | 08 41 07.8 | +1.9 |
| | baz=148 | | | | | | |
| UALR | University of | 147.87 | 27 | *e*PKPbc | PKPdf | 08 41 08.0 | +2.1 |
| 732A | Laxson Ranch, | 147.90 | 44 | P | PKPbc | 08 41 08.7 | -0.4 |
| | baz=148 | | | | | | |
| 633A | Saathoff Ranch | 147.98 | 42 | P | PKPdf | 08 41 08.7 | +2.4 |
| | baz=148 | | | | | | |
| 534A | Blanco | 148.06 | 40 | P | PKPdf | 08 41 08.1 | +1.7 |
| | baz=148 | | | | | | |
| 435B | Jarrell | 148.11 | 38 | P | PKPdf | 08 41 08.5 | +2.1 |
| | baz=148 | | | | | | |
| 336A | Riesel | 148.13 | 37 | P | PKPdf | 08 41 08.7 | +2.3 |
| | baz=148 | | | | | | |
| 832A | Faith Ranch, C | 148.17 | 45 | P | PKPdf | 08 41 09.1 | +2.6 |
| | baz=148 | | | | | | |
| 138A | Matatall Enter | 148.19 | 33 | P | PKPdf | 08 41 08.6 | +2.2 |
| | baz=148 | | | | | | |
| Z39A | Irene McRaven, | 148.22 | 31 | P | PKPbc | 08 41 09.4 | -0.4 |
| | baz=148 | | | | | | |
| 237A | Washetta, Mont | 148.29 | 35 | P | PKPdf | 08 41 09.2 | +2.5 |
| | baz=148 | | | | | | |
| 733A | Divot King Ran | 148.37 | 43 | P | PKPdf | 08 41 09.4 | +2.6 |
| | baz=148 | | | | | | |
| WVT | Waverly | 148.48 | 20 | *e*PKP2 | PKPdf | 08 41 09.5 | +2.7 |
| WVT | Waverly | 148.48 | 20 | *e*PKPbc | PKPdf | 08 41 09.5 | +2.7 |
| WVT | | | | *e*PKPab | PKiKP | 08 41 13.4 | +1.5 |
| 833A | Chaparral WMA, | 148.55 | 44 | P | PKPbc | 08 41 10.2 | -0.6 |
| | baz=148 | | | | | | |
| 436A | Wall Ranch, Ga | 148.60 | 38 | P | PKPbc | 08 41 10.2 | -0.7 |
| | baz=148 | | | | | | |
| 535A | Dale | 148.64 | 39 | P | PKPbc | 08 41 10.1 | -0.9 |
| | baz=148 | | | | | | |
| 337A | Centerville | 148.75 | 36 | P | PKPbc | 08 41 10.4 | -0.8 |
| | baz=148 | | | | | | |
| 734A | La Parita Cree | 148.79 | 42 | P | PKPbc | 08 41 10.6 | -0.8 |
| | baz=148 | | | | | | |
| 635A | Leesville | 148.94 | 41 | P | PKPbc | 08 41 10.9 | -0.9 |
| | baz=149 | | | | | | |
| 239A | Gary | 149.02 | 33 | P | PKPbc | 08 41 11.3 | -0.5 |
| | baz=149 | | | | | | |
| 338A | Crockett | 149.05 | 35 | P | PKPbc | 08 41 11.4 | -0.6 |
| | baz=149 | | | | | | |
| 933A | Laredo | 149.07 | 45 | P | PKPbc | 08 41 12.2 | 0.0 |
| | baz=149 | | | | | | |
| 834A | Tilden | 149.25 | 43 | P | PKPbc | 08 41 11.7 | -0.8 |
| | baz=149 | | | | | | |
| 735A | Kenedy | 149.28 | 41 | P | PKPbc | 08 41 11.9 | -0.7 |
| | baz=149 | | | | | | |
| TZTN | Tazewell | 149.31 | 13 | *e*PKPdf | PKPdf | 08 41 09.1 | +1.0 |
| 636A | Smothers Creek | 149.34 | 40 | P | PKPbc | 08 41 12.1 | -0.6 |
| | baz=149 | | | | | | |
| OXF | Oxford | 149.34 | 23 | *e*PKP2 | PKPbc | 08 41 12.3 | -0.3 |
| OXF | Oxford | 149.34 | 23 | *e*PKPbc | PKPbc | 08 41 12.3 | -0.3 |
| 537A | Green Hill Far | 149.38 | 38 | P | PKPbc | 08 41 12.0 | -0.8 |
| | baz=149 | | | | | | |
| 934A | Benavides | 149.60 | 44 | P | PKPbc | 08 41 12.9 | -0.5 |
| | baz=149 | | | | | | |
| 835A | Beeville | 149.63 | 42 | P | PKPbc | 08 41 13.0 | -0.5 |
| | baz=149 | | | | | | |
| 736A | Circle Diamond | 149.69 | 40 | P | PKPbc | 08 41 13.5 | -0.1 |
| | baz=149 | | | | | | |
| HKT | Hockley | 149.77 | 37 | *e*PKP2 | PKPbc | 08 41 14.1 | +0.4 |
| HKT | Hockley | 149.77 | 37 | *e*PKPbc | PKPbc | 08 41 14.1 | +0.4 |
| 034A | Hebbronville | 149.82 | 45 | P | PKPbc | 08 41 14.6 | +0.6 |
| | baz=150 | | | | | | |
| CPCT | Cooper Cave | 150.11 | 15 | *e*PKPbc | PKPbc | 08 41 13.8 | -0.7 |
| LVC | Limon Verde | 150.25 | 192 | *e*PKPbc | PKPbc | 08 41 17.1 | +1.6 |
| 440A | Kirbyville | 150.27 | 34 | P | PKPbc | 08 41 14.9 | -0.1 |
| | baz=150 | | | | | | |
| 035A | Encino | 150.31 | 45 | P | PKPbc | 08 41 15.1 | 0.0 |
| | baz=150 | | | | | | |
| 035Z | Hargill | 150.62 | 45 | P | PKPbc | 08 41 15.4 | -0.5 |
| | baz=150 | | | | | | |
| VBMS | Vicksburg | 150.84 | 27 | P | PKPbc | 08 41 15.7 | -0.6 |
| | baz=150 | | | | | | |
| KMSC | Kings Mountain | 151.11 | 11 | P | PKPbc | 08 41 16.0 | -0.9 |
| | baz=151 | | | | | | |
| GOGA | Godfrey | 152.31 | 15 | *e*PKIKP | PKPbc | 08 41 19.0 | -0.7 |
| GOGA | | | | *e* | | 08 41 30.0 | |
| GOGA | Godfrey | 152.31 | 15 | *e*PKPbc | PKPbc | 08 41 19.0 | -0.7 |
| GOGA | | | | *e*PKPab | PKPab | 08 41 30.0 | +0.6 |

**MAN 03 08:24:30, 10°.48N×125°.05E, h1km, mb4.2, ML3.0, MS2.8, 1C-2D, Leyte**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSLP | Maasin | 0.39 | 209 | *e*P | Pb | 08 24 39.0 | -0.7 |
| MSLP | | | | *e*S | Sb | 08 24 46.8 | +0.6 |
| PLP | Palo | 0.69 | 354⇓ | *e*P | Pb | 08 24 44.4 | -0.5 |
| PLP | | | | *e*S | Sg | 08 24 53.5 | +1.3 |
| OCLP | Ormoc | 0.72 | 323 | *e*P | Pb | 08 24 44.9 | -0.5 |
| OCLP | | | | *e*S | Sg | 08 24 54.2 | +1.0 |
| SNPH | Sibulan | 2.11 | 238⇓ | *i*P | Pg | 08 25 13.1 | +2.5 |
| RCP | Roxas | 2.51 | 296⇑ | *e*P | Pn | 08 25 13.8 | +1.8 |

**CASC 03 09:04:18.6±2.4, 10°.25N×84°.16W, h91km±8km, MD3.8, 2C-3D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CGA2 | Cerro Gallo 2 | 0.38 | 233⇓ | *e*P | Pn | 09 04 32.6 | -0.1 |
| CGA2 | | | | *e*S | Sn | 09 04 43.2 | 0.0 |
| CHPA | Chiripa | 0.76 | 285 | *i* P | Pn | 09 04 36.4 | +0.4 |
| JTS | JuntasAbangare | 0.78 | 273⇓ | *i*P | Pn | 09 04 35.9 | -0.1 |
| JTS | | | | *e*S | Sn | 09 04 50.6 | +1.5 |
| BUS | Buena Vista | 0.79 | 150⇑ | *e*P | Pn | 09 04 36.7 | 0.0 |
| BUS | | | | *e*S | Sn | 09 04 50.9 | +0.8 |
| JCR | Jicaral | 1.02 | 247⇓ | *e*P | Pn | 09 04 38.6 | -0.1 |
| JCR | | | | *e*S | Sn | 09 04 55.0 | +1.3 |
| CUI | Cuipilapa | 1.07 | 293 | *i* P | Pn | 09 04 39.4 | +0.1 |
| CUI | | | | *i* S | Sn | 09 04 55.2 | +0.5 |
| CAO | Cobano | 1.08 | 240⇑ | *i*P | Pn | 09 04 39.0 | -0.3 |
| CAO | | | | *e*S | Sn | 09 04 55.3 | +0.5 |
| HORNC | Hornillas | 1.10 | 295 | *i* P | Pn | 09 04 39.8 | +0.1 |
| HORNC | | | | *i* S | Sn | 09 04 55.7 | +0.1 |
| COLC | Colonia | 1.11 | 292 | *i* P | Pn | 09 04 39.8 | +0.1 |
| COLC | | | | *i* S | Sn | 09 04 56.0 | +0.5 |
| GB1A | Borinquen Arri | 1.35 | 295 | *i* P | Pn | 09 04 42.9 | +0.3 |
| LAPC | Finca la Perla | 1.36 | 293 | *i* P | Pn | 09 04 42.6 | -0.1 |
| GBS2 | Las Lilas | 1.40 | 295 | *i* P | Pn | 09 04 43.6 | +0.3 |
| GBS2 | | | | *i* S | Sn | 09 05 02.1 | +0.2 |
| CTCR | Cotoan | 1.92 | 134 | *i* P | Pn | 09 04 51.0 | +0.8 |
| CTCR | | | | *e*S | Sn | 09 05 15.0 | +0.9 |
| TBS2 | | 2.07 | 134 | *e*P | Pn | 09 04 53.6 | +1.6 |
| TBS2 | | | | *e*S | Sn | 09 05 18.3 | +0.9 |

*IDC **03** 09:09:05.9±1.5, 23°.51S×178°.18W, h0km, mb4.1/4, mb1 4.3/4, mb1mx3.8/26, mbtmp4.1/4, Error ellipse: s-maj=46.1km s-min=37.9km az=118.0*

**ISC 03 09:09:09.8±1.5, 22°.9S±0°.3×178°.2W±0°.3, h35km, n8, σ2ˢ.09/7, mb3.9/4, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 43.86 | 259 | P | P | 09 17 13.2 | +0.1 |
| | 1.4nm,0.7s,baz=99,slow=7.1,SNR=22 | | | | | | |
| WRA | Warramunga Arr | 44.16 | 265 | P | P | 09 17 15.8 | +0.3 |
| | 2.0nm,0.3s,baz=96,slow=8.4,SNR=70 | | | | | | |
| MJAR | Matsushiro Arr | 72.06 | 324 | P | P | 09 20 36.4 | +5.9 |
| | 1.3nm,0.8s,baz=154,slow=7.3,SNR=4.4 | | | | | | |
| MAW | Mawson | 79.25 | 200 | P | P | 09 21 10.4 | -0.7 |
| | 0.6nm,0.5s,baz=146,slow=8.5,SNR=5.0 | | | | | | |
| ARCES | ARCESS Array B | 131.25 | 349 | PKP | PKPdf | 09 28 19.6 | +2.1 |
| | 1.2nm,0.8s,baz=64,slow=2.1,SNR=4.0 | | | | | | |
| AKASG | Malin Array Be | 145.02 | 329 | PKPbc | PKPdf | 09 28 44.7 | +1.5 |
| | 1.0nm,0.4s,baz=40,slow=3.9,SNR=7.8 | | | | | | |
| BRTR | Keskin Array B | 148.29 | 309 | PKPbc | PKPbc | 09 28 53.0 | +0.3 |
| | 0.5nm,0.4s,baz=142,slow=6.2,SNR=3.4 | | | | | | |
| BRG | Berggiesshubel | 150.54 | 344 | *e*P | PKPab | 09 29 01.2 | -3.2 |
| | 4.0nm,0.9s | | | | | | |

**DJA 03 09:09:22.1±0.3, 1°S±3°×12°0E±°, h10km, M3.6/10, MLv3.6/10, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCI | Palu | 0.50 | 252 | P | Pg | 09 09 31.0 | -0.8 |
| PCI | | | | S | Sb | 09 09 39.9 | -0.4 |
| MPSI | Mapaga | 1.16 | 339 | P | Pb | 09 09 41.9 | -2.3 |
| APSI | Ampana | 1.35 | 97 | P | Pn | 09 09 44.4 | -2.6 |
| APSI | | | | S | Sb | 09 10 03.7 | -1.1 |
| MRSI | Marisa | 2.04 | 53 | P | Pn | 09 09 56.8 | +0.3 |
| TTSI | Tana Toraja | 2.33 | 192 | P | Pn | 09 10 00.1 | -0.4 |
| TTSI | | | | S | Sn | 09 10 29.6 | +0.3 |
| LUWI | Luwuk | 2.48 | 97 | P | Pn | 09 10 03.8 | +1.2 |
| LUWI | | | | S | Sn | 09 10 34.3 | +1.4 |
| GTOI | Gorontalo | 3.03 | 63 | P | Pn | 09 10 09.2 | -1.0 |
| SPSI | Sidrap Palu | 3.24 | 190 | P | Pn | 09 10 12.7 | -0.3 |
| SPSI | | | | S | Sn | 09 10 50.2 | -1.5 |
| KDI | Kendari | 3.93 | 144 | P | Pn | 09 10 22.3 | -0.3 |

**KRSC 03 09:24:00.6±0.8, 53°.31N×160°.58E, h44km±10km, ML3.7, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SPN | Mys Shipunski | 0.40 | 238 | *e*P | Pn | 09 24 11.7 | +1.4 |
| SPN | | | | *e*S | Sn | 09 24 18.3 | +1.2 |
| NLC | Nalytchevo | 0.76 | 260 | *e*P | Pn | 09 24 16.1 | +1.2 |
| NLC | | | | *e*S | Sn | 09 24 26.4 | +1.2 |
| KII | Karymskiy | 0.99 | 318 | *e*P | Pn | 09 24 19.2 | +1.0 |
| KII | | | | *e*S | Sn | 09 24 31.9 | +0.8 |
| SDLR | Sedlovina | 1.02 | 269 | *e*P | Pn | 09 24 20.1 | +1.4 |
| SDLR | | | | *e*S | Sn | 09 24 33.1 | +1.2 |
| UGLR | Uglovaya | 1.06 | 265 | *e*P | Pn | 09 24 20.9 | +1.7 |
| UGLR | | | | S | Sn | 09 24 35.3 | +2.4 |
| SMAR | Somma | 1.07 | 268 | *e*P | Pn | 09 24 20.7 | +1.2 |
| SMAR | | | | S | Sn | 09 24 34.1 | +0.7 |
| AVH | Avacha | 1.11 | 268 | *e*P | Pn | 09 24 21.6 | +1.8 |
| AVH | | | | S | Sn | 09 24 36.1 | +2.1 |
| KRX | Arik | 1.16 | 273 | *e*P | Pn | 09 24 21.9 | +1.3 |
| KRX | | | | S | Sn | 09 24 36.3 | +0.9 |
| KOK | Koryaka | 1.17 | 270 | *e*P | Pn | 09 24 22.2 | +1.5 |
| KOK | | | | *e*S | Sn | 09 24 36.9 | +1.4 |
| PET | Petropavlovsk | 1.20 | 257 | *e*P | Pn | 09 24 22.3 | +1.4 |
| PET | | | | *e*S | Sn | 09 24 36.9 | +1.0 |
| MKZ | Mys Kozlova | 1.42 | 28 | *e*P | Pn | 09 24 25.3 | +1.4 |
| MKZ | | | | *e*S | Sn | 09 24 41.5 | +0.1 |
| RUS | Russkaya | 1.53 | 236 | *e*P | Pn | 09 24 26.7 | +1.2 |
| RUS | | | | *e*S | Sn | 09 24 44.8 | +0.6 |
| GNL | Ganaly | 1.62 | 285 | *e*P | Pn | 09 24 28.9 | +2.0 |
| GNL | | | | *e*S | Sn | 09 24 48.8 | +2.1 |
| MTVR | Mutnovka | 1.67 | 241 | *e*P | Pn | 09 24 29.5 | +1.9 |
| MTVR | | | | *e*S | Sn | 09 24 49.3 | +1.3 |
| KZV | Kizimen | 1.81 | 355 | *e*P | Pn | 09 24 31.9 | +2.3 |
| KZV | | | | *e*S | Sn | 09 24 53.4 | +1.9 |
| TUMR | Tumrok | 1.99 | 353 | *e*P | Pn | 09 24 34.8 | +2.8 |
| TUMR | | | | *e*S | Sn | 09 24 58.7 | +2.9 |
| KMNR | Kamenistaya | 2.46 | 355 | *e*P | Pn | 09 24 42.1 | +3.8 |
| MIPR | Malaya Ipel'ka | 2.54 | 247 | *e*P | Pn | 09 24 42.4 | +3.0 |
| SRDR | Sredinnyy | 3.05 | 351 | *e*P | Pn | 09 24 49.1 | +2.7 |
| KBTR | Krutoberegovo | 3.18 | 23 | *e*P | Pn | 09 24 51.5 | +3.4 |
| KBTR | | | | S | Sn | 09 25 29.9 | +5.2 |

**IDC 03 09:33:03.3±2.3, 15°.42S×76°.45W, h0km, mb3.5/2, mb1 3.8/3, mb1mx3.6/18, mbtmp3.6/3, ML3.7/1, Error ellipse: s-maj=93.5km s-min=33.4km az=25.0, Off coast of Peru**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 8.05 | 97 | Pn | Pn | 09 35 04.1 | +1.6 |
| | 0.4nm,0.3s,baz=273,slow=7.9,SNR=7.3 | | | | | | |
| TXAR | Lajitas Array | 51.68 | 329 | P | P | 09 42 12.6 | +0.3 |
| | 0.1nm,0.6s,baz=138,slow=9.6,SNR=2.6 | | | | | | |
| TORD | Torodi Ar. Bea | 82.34 | 74 | P | P | 09 45 26.8 | -0.9 |
| | 0.9nm,0.7s,baz=252,slow=5.1,SNR=6.9 | | | | | | |
| WRA | Warramunga Arr | 133.62 | 222 | PKP | PKPdf | 09 52 22.7 | -0.2 |
| | 0.5nm,0.8s,baz=127,slow=1.6,SNR=4.6 | | | | | | |

*IDC **03** 09:54:09.2±1.9, 7°.16S×128°.86E, h0km, mb3.8/1, mb1 3.9/3, mb1mx3.4/32, mbtmp3.7/3, ML4.1/3, Error ellipse: s-maj=49.5km s-min=29.4km az=82.0*

*AUST **03** 09:54:25.5±0.0, 7°.91S×128°.42E, h109km, Error ellipse: s-maj=1.4km s-min=1.1km az=321.0*

**ISC 03 09:54:09.9±1.1, 7°.1S±0°.1×128°.9E±0°.1, h10km, n10, σ1ˢ.30/7, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOEI | Soe | 5.27 | 239 | P | Pn | 09 55 28.5 | -0.4 |
| | baz=4.5,SNR=9.2 | | | | | | |
| FAKI | Fak Fak | 5.33 | 40 | P | Pg | 09 55 51.1 | -0.9 |
| | baz=6.3,SNR=7.4 | | | | | | |
| BATI | Baumata | 6.01 | 238 | Pn | Pn | 09 55 37.4 | -1.6 |
| | 29nm,0.3s,baz=114,slow=2.8,SNR=13 | | | | | | |
| BATI | | | | Sn | Sn | 09 56 34.5 | -14 |
| | 7.4nm,0.3s,baz=288,slow=19,SNR=2.9 | | | | | | |
| MTN | Manton Dam | 6.16 | 159 | P | Pn | 09 55 47.6 | +6.6 |
| | baz=5.6,SNR=21 | | | | | | |
| KDU | Kakadu | 6.62 | 148 | P | Pn | 09 55 55.1 | +7.7 |
| | baz=6.2,SNR=61 | | | | | | |
| KNRA | Kununurra | 8.56 | 181 | P | Pn | 09 56 14.7 | +0.7 |
| | baz=7.8,SNR=19 | | | | | | |
| WRA | Warramunga Arr | 13.86 | 158 | Pn | Pn | 09 57 26.5 | -0.1 |
| | 0.6nm,0.3s,baz=344,slow=13,SNR=26 | | | | | | |
| WRA | | | | Sn | Sn | 09 59 49.2 | -12 |
| | 1.7nm,0.3s,baz=332,slow=22,SNR=11 | | | | | | |
| COEN | Coen | 15.65 | 117 | P | P | 09 58 01.2 | +6.3 |
| | baz=16,SNR=6.5 | | | | | | |
| ASAR | Alice Springs | 17.20 | 164 | P | Pn | 09 58 10.4 | -0.1 |
| | 0.2nm,0.3s,baz=341,slow=10,SNR=19 | | | | | | |
| ASAR | | | | S | Sn | 10 01 08.8 | -13 |
| | 0.5nm,0.3s,baz=322,slow=18,SNR=7.7 | | | | | | |
| SONM | Songino Array | 58.15 | 342 | P | P | 10 04 05.6 | +1.6 |
| | 0.9nm,0.8s,baz=167,slow=8.6,SNR=4.1 | | | | | | |

**NEIC 03 10:31:40.2, 56°.82N×158°.94W, h23km, ML3.2(AEIC), After AEIC., Alaska Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANPB | Aniakchak Plen | 0.36 | 92 | P | Pb | 10 31 47.9 | -0.2 |
| AZAC | Aniakchak | 0.40 | 78 | P | Pb | 10 31 48.8 | +0.1 |
| ANNW | Aniakchak Nort | 0.42 | 69 | P | Pb | 10 31 49.6 | +0.4 |
| ANON | Aniakchak | 0.43 | 76 | P | Pb | 10 31 49.4 | +0.1 |
| ANPK | Aniakchak Peak | 0.45 | 86 | P | Pb | 10 31 49.6 | 0.0 |
| CHGN | Chignik | 0.59 | 151 | P | Pb | 10 31 51.9 | 0.0 |
| CHGN | | | | S | Sb | 10 31 59.7 | -0.1 |
| VNHG | Veniaminof 1 | 0.61 | 192 | P | Pn | 10 31 53.5 | 0.0 |
| VNWF | Veniaminof 8 | 0.75 | 208 | P | Pn | 10 31 56.1 | +0.7 |
| PLK1 | Peulik 1 | 1.60 | 51 | P | Pb | 10 32 08.7 | -0.4 |
| PLK5 | Peulik 5 | 1.63 | 42 | P | Pb | 10 32 10.3 | +0.8 |
| SDPT | Sand Point | 1.71 | 211 | P | Pb | 10 32 10.6 | -0.2 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| SDPT | | | | S | Sb | 10 32 33.9 | +2.2 |
| KELA | Mount Kelaz | 2.37 | 45 | P | Pn | 10 32 19.3 | +1.6 |
| KABR | Katmai Barrier | 2.52 | 57 | P | Pn | 10 32 21.5 | +1.8 |
| KAKN | Katmai Knife C | 2.56 | 53 | P | Pn | 10 32 22.4 | +2.0 |
| KAHC | Katmai Hardscr | 2.80 | 47 | P | Pn | 10 32 25.4 | +1.8 |

*IDC 03 10:31:55.4±0.9, 16°.96N×100°.33W, h0km, mb4.0/7, mb1 4.1/10, mb1mx3.9/39, mbtmp3.8/10, ML3.1/3, MS3.6/2, Ms1 3.6/2, ms1mx2.8/29, Error ellipse: s-maj=25.1km s-min=17.0km az=44.0*
*ISCJB 03 10:31:58.6±0.9, 17°.01N±0°.05×100°.35W±0°.03, h29km±6km, mb4.1/29, MS3.9/1, Error ellipse: s-maj=8.0km s-min=5.5km az=174.4*
*NEIC 03 10:32:00.2, 16°.96N×100°.40W, h18km, mb4.0/30, MD4.3(MEX), After MEX.*
*MEX 03 10:32:00.2±0.3, 16°.96N×100°.40W, h18km±7km, MD4.3*
**ISC 03 10:31:59.0±0.9, 16°.98N±0°.06×100°.39W±0°.04, h23km±5km, n64, σ1s39/75, mb4.2/29, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CAIG | El Cayaco | 0.14 | 61 | *i* P | Pb | 10 32 03.5 | -0.2 |
| CAIG | | | | *i* S | Sb | 10 32 06.8 | -0.1 |
| CAIG | El Cayaco | 0.14 | 61 | *i* P | Pb | 10 32 03.5 | -0.2 |
| CAIG | | | | *i* S | Sb | 10 32 06.8 | -0.1 |
| MEIG | Mezcala | 1.19 | 38 | *i* P | Pn | 10 32 19.0 | -1.3 |
| MEIG | | | | *e*S | Sn | 10 32 33.4 | -2.5 |
| MEIG | Mezcala | 1.19 | 38 | *i* P | Pn | 10 32 19.0 | -1.3 |
| MEIG | | | | *e*S | Sn | 10 32 33.4 | -2.5 |
| ZIIG | Zihuatanejo | 1.20 | 301 | *i* P | Pn | 10 32 18.7 | -1.7 |
| ZIIG | | | | *e*S | Sn | 10 32 33.5 | -2.4 |
| ZIIG | Zihuatanejo | 1.20 | 301 | *i* P | Pn | 10 32 18.7 | -1.7 |
| ZIIG | | | | *e*S | Sn | 10 32 33.5 | -2.4 |
| ARIG | Puente Sto Nin | 1.29 | 2 | *i* P | Pn | 10 32 20.4 | -1.3 |
| ARIG | | | | *e*S | Sn | 10 32 35.6 | -2.7 |
| PLIG | Platanillo | 1.64 | 31 | *i* P | Pn | 10 32 25.6 | -0.9 |
| PLIG | | | | *e*S | Sn | 10 32 45.4 | -1.5 |
| PLIG | Platanillo | 1.64 | 31 | *i* P | Pn | 10 32 25.6 | -0.9 |
| PLIG | | | | *e*S | Sn | 10 32 45.4 | -1.5 |
| TLIG | Tlapa | 1.84 | 71 | *i* P | Pn | 10 32 28.5 | -0.7 |
| TLIG | | | | *e*S | Sn | 10 32 49.9 | -1.9 |
| YAIG | Yautepec | 2.26 | 34 | *i* P | Pn | 10 32 33.5 | -1.6 |
| YAIG | | | | *e*S | Sn | 10 33 00.9 | -1.3 |
| YAIG | Yautepec | 2.26 | 34 | *i* P | Pn | 10 32 33.5 | -1.6 |
| YAIG | | | | *e*S | Sn | 10 33 00.9 | -1.3 |
| UNM | Universidad Na | 2.60 | 26 | *i* P | Pn | 10 32 39.6 | -0.3 |
| UNM | | | | *e*S | Sn | 10 33 09.7 | -1.3 |
| UNM | Universidad Na | 2.60 | 26 | *i* P | Pn | 10 32 39.6 | -0.3 |
| UNM | | | | *e*S | Sn | 10 33 09.7 | -1.3 |
| CMIG | Matias Romero | 5.27 | 88 | Pn | Pn | 10 33 16.2 | -0.2 |
| | 1.0nm,0.3s,baz=263,slow=12,SNR=20 | | | | | | |
| CMIG | | | | Sn | Sn | 10 34 12.9 | -3.4 |
| | 8.0nm,0.3s,baz=285,slow=9.9,SNR=5.6 | | | | | | |
| CMIG | | | | Lg | Lg | 10 34 41.1 | |
| | 16nm,0.3s,baz=0.6,slow=22,SNR=11 | | | | | | |
| H06E1 | SOCORRO T-PHAS | 10.19 | 282 | T | T | 10 44 38.0 | |
| | SNR=27 | | | | | | |
| H06S1 | SOCORRO T | 10.21 | 281 | T | T | 10 44 46.6 | |
| | SNR=4.3 | | | | | | |
| TEIG | Tepich | 11.93 | 72 | Pn | Pn | 10 34 48.8 | +1.1 |
| TXAR | Lajitas Array | 12.66 | 347 | Pn | Pn | 10 34 59.7 | +2.0 |
| | 0.0nm,0.3s,baz=162,slow=15,SNR=4.5 | | | | | | |
| TXAR | | | | Lg | Lg | 10 38 37.2 | |
| | 0.0nm,0.3s,baz=161,slow=17,SNR=3.8 | | | | | | |
| TXAR | | | | LR | LR | 10 40 32.6 | |
| | comp=Z,136nm,21.5s,baz=0.0,slow=41 | | | | | | |
| JCT | Junction City | 13.45 | 2 | *e*Pn | Pn | 10 35 09.9 | +1.5 |
| MNTX | Cornudas Mount | 15.34 | 344 | *e*P | P | 10 35 37.3 | -1.3 |
| | 4.5nm,0.9s | | | | | | |
| WMOK | Wichita Mounta | 17.74 | 4 | *e*P | P | 10 36 05.1 | -0.2 |
| | 4.5nm,0.8s | | | | | | |
| AMTX | Amarillo | 17.87 | 357 | *e*P | Pn | 10 36 05.5 | -0.7 |
| | 7.4nm,0.7s | | | | | | |
| TUC | Tucson | 17.93 | 330 | *e*P | P | 10 36 08.6 | +1.2 |
| | 3.8nm,0.9s | | | | | | |
| LAZ | Ladron | 18.37 | 342 | *e*P | Pn | 10 36 13.5 | +1.1 |
| | 2.0nm,0.9s | | | | | | |
| MIAR | Mount Ida | 18.53 | 18 | *e*P | Pn | 10 36 15.9 | +1.8 |
| | 11nm,1.1s | | | | | | |
| ANMO | Albuquerque | 18.70 | 344 | P | Pn | 10 36 17.0 | +0.6 |
| | 0.0nm,0.3s,baz=142,slow=16,SNR=3.4 | | | | | | |
| ANMO | Albuquerque | 18.70 | 344 | *e*P | Pn | 10 36 16.6 | +0.2 |
| | 3.3nm,0.8s | | | | | | |
| WUAZ | Wupatki | 20.89 | 334 | *e*P | Pn | 10 36 41.8 | -0.7 |
| | 8.9nm,0.9s | | | | | | |
| SDCO | Great Sand Dun | 21.17 | 349 | *e*P | P | 10 36 42.0 | -0.9 |
| | 4.4nm,1.0s | | | | | | |
| MVCO | Mesa Verde | 21.39 | 342 | *e*P | P | 10 36 46.9 | +1.7 |
| | 51nm,2.3s | | | | | | |
| PBMO | Poplar Bluff | 21.60 | 22 | *e*P | P | 10 36 48.1 | +0.8 |
| | 7.6nm,0.8s | | | | | | |
| CBKS | Cedar Bluff | 21.76 | 1 | *e*P | P | 10 36 50.4 | +1.4 |
| | 14nm,0.9s | | | | | | |
| WVT | Waverly | 22.09 | 28 | *e*P | P | 10 36 51.5 | -1.1 |
| | 114nm,2.7s | | | | | | |
| SWET | Sewanee | 22.28 | 33 | *e*P | P | 10 36 53.1 | -1.5 |
| | 3.0nm,0.7s | | | | | | |
| KSU1 | Kansas State U | 22.29 | 8 | *e*P | P | 10 36 54.3 | -0.3 |
| | 11nm,0.8s | | | | | | |
| LDFC | Landfair | 22.30 | 327 | *e*P | P | 10 36 57.5 | +2.5 |
| | 2.1nm,0.6s | | | | | | |
| GOGA | Godfrey | 22.36 | 40 | *e*P | P | 10 36 55.1 | -0.3 |
| | 30nm,1.3s | | | | | | |
| SIUC | Southern Illin | 22.88 | 23 | *e*P | P | 10 37 01.1 | +0.2 |
| | 11nm,0.8s | | | | | | |
| ISCO | Idaho Springs | 23.19 | 350 | *e*P | P | 10 37 03.6 | -0.8 |
| | 4.4nm,0.6s | | | | | | |
| SHPR | Sheep Range | 23.44 | 329 | *e*P | P | 10 37 08.3 | +1.5 |
| | 1.2nm,0.9s | | | | | | |
| TKL | Tuckaleechee C | 23.76 | 35 | P | P | 10 37 07.5 | -2.3 |
| | 3.6nm,0.8s,baz=197,slow=15,SNR=4.4 | | | | | | |
| TMUT | Trail Mountain | 24.15 | 339 | *e*P | P | 10 37 14.5 | +0.7 |
| | 8.4nm,0.6s | | | | | | |
| P17A | Butcher Ranch, | 24.16 | 340 | *e*P | P | 10 37 11.3 | -2.3 |
| | 10.0nm,1.1s | | | | | | |
| TZTN | Tazewell | 24.54 | 34 | P | P | 10 37 18.5 | +1.5 |
| | 16nm,1.0s | | | | | | |
| ISA | Isabella | 24.60 | 323 | *e*P | P | 10 37 18.8 | +1.2 |
| | 2.2nm,0.8s | | | | | | |
| HWUT | Hardware Ranch | 26.36 | 341 | *e*P | P | 10 37 34.1 | +0.6 |
| | 1.2nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 26.51 | 327 | P | P | 10 37 36.8 | +1.7 |
| | 3.3nm,0.9s,baz=156,slow=9.1,SNR=21 | | | | | | |
| NVAR | | | | PcP | PcP | 10 40 58.6 | -1.0 |
| | 0.4nm,0.6s,baz=117,slow=3.1,SNR=3.7 | | | | | | |
| ECSD | EROS Data Cent | 26.86 | 6 | *e*P | P | 10 37 38.5 | +0.6 |
| | 64nm,2.5s | | | | | | |
| HVU | Hansel Valley | 26.91 | 339 | *e*P | P | 10 37 38.4 | -0.1 |
| | 1.9nm,0.9s | | | | | | |
| OTAV | Otavalo | 27.27 | 125 | *e*P | P | 10 37 42.2 | -0.1 |
| | 2.2nm,0.9s | | | | | | |
| HLID | Hailey | 29.05 | 339 | *e*P | P | 10 37 57.5 | -0.1 |
| | 1.3nm,0.8s | | | | | | |
| J08A | Circle Bar Ran | 30.45 | 333 | *e*P | P | 10 38 11.3 | +1.4 |
| | 6.4nm,1.1s | | | | | | |
| NEW | Newport | 34.08 | 340 | P | P | 10 38 42.0 | +0.4 |
| | 1.4nm,0.8s,baz=166,slow=10.0,SNR=3.8 | | | | | | |
| LPAZ | La Paz | 45.87 | 134 | P | P | 10 40 21.4 | +0.9 |
| | 0.5nm,0.7s,baz=304,slow=7.3,SNR=3.5 | | | | | | |
| DLBC | Dease Lake | 46.81 | 339 | P | P | 10 40 28.1 | +1.3 |
| | 2.6nm,0.9s,baz=145,slow=3.3,SNR=3.7 | | | | | | |
| DLBC | | | | LR | LR | 11 01 04.3 | |
| | comp=Z,134nm,18.8s,baz=154,slow=37 | | | | | | |
| INK | Inuvik | 55.43 | 346 | P | P | 10 41 30.9 | -0.3 |
| | 2.4nm,0.7s,baz=114,slow=7.4,SNR=5.5 | | | | | | |
| ILAR | Eielson Array | 57.00 | 338 | P | P | 10 41 42.8 | +0.2 |
| | 2.1nm,1.0s,baz=148,slow=5.3,SNR=12 | | | | | | |
| ILAR | | | | PcP | PcP | 10 42 36.8 | -0.7 |
| | 0.6nm,0.7s,baz=152,slow=2.9,SNR=6.2 | | | | | | |
| HHC | Hu-ho-hao-te | 115.27 | 334 | *e*PKP | PKPdf | 10 50 30.6 | -8.5 |
| WMQ | Urumqi | 119.05 | 353 | *e*PKP | PKPdf | 10 50 38.0 | -8.2 |
| CD2 | Chengdu | 127.02 | 334 | PKP | PKPdf | 10 50 52.3 | -10 |
| WRA | Warramunga Arr | 128.19 | 258 | PKP | PKPdf | 10 51 04.0 | -0.3 |
| | 1.0nm,0.8s,baz=85,slow=1.8,SNR=8.5 | | | | | | |
| MAW | Mawson | 128.26 | 172 | PKP | PKPdf | 10 51 02.0 | -0.9 |
| | 1.3nm,0.8s,baz=213,slow=3.3,SNR=4.1 | | | | | | |
| ASAR | Alice Springs | 128.90 | 253 | PKP | PKPdf | 10 51 05.7 | +0.2 |
| | 0.3nm,0.8s,baz=88,slow=2.2,SNR=3.8 | | | | | | |

*ISK 03 10:35:34.8, 39°.93N×35°.02E, h5km, MD3.1*
*CSEM 03 10:35:35.8±0.2, 39°.93N×34°.94E, h2km, MD3.1, Error ellipse: s-maj=6.0km s-min=4.4km az=16.0*
*ISCJB 03 10:35:36.5±0.6, 39°.89N±0°.05×34°.96E±0°.05, h12km, Error ellipse: s-maj=7.8km s-min=4.7km az=20.4*
**ISC 03 10:35:35.4±1.0, 39°.90N±0°.04×34°.97E±0°.03, h12km, n20, σ0s58/26, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YOZ | Yozgat | 0.37 | 134 | *e*PG | Pg | 10 35 43.3 | +0.5 |
| YOZ | | | | *e*SG | Sb | 10 35 49.5 | -0.2 |
| YOZ | Yozgat | 0.37 | 134 | *e*Pg | Pg | 10 35 43.3 | +0.5 |
| YOZ | | | | *e*Sg | Sb | 10 35 49.5 | -0.2 |
| CDAG | Cicekdag | 0.54 | 240 | *i* P | Pg | 10 35 45.6 | -0.3 |
| CDAG | | | | *i* S | Sg | 10 35 52.3 | -0.8 |
| CDAG | Cicekdag | 0.54 | 240 | P | Pg | 10 35 45.6 | -0.3 |
| CDAG | | | | S | Sg | 10 35 52.3 | -0.8 |
| CUSAR | Sarkisla-SIVAS | 1.09 | 116 | P | Pb | 10 35 55.9 | -0.4 |
| KAMT | Kaman | 1.11 | 242 | *e*PN | Pg | 10 35 57.8 | +1.1 |
| KAMT | Kaman | 1.11 | 242 | *e*Pn | Pg | 10 35 57.8 | +1.1 |
| ELDT | Eldivan | 1.32 | 297 | *i* P | Pb | 10 36 00.1 | -0.2 |
| ELDT | | | | *i* S | Sg | 10 36 18.4 | +0.3 |
| ELDT | Eldivan | 1.32 | 297 | P | Pb | 10 36 00.1 | -0.2 |
| ELDT | | | | S | Sg | 10 36 18.4 | +0.3 |
| SERE | Sereflikochisa | 1.45 | 229 | *e*PN | Pg | 10 36 04.2 | +1.0 |
| SERE | Sereflikochisa | 1.45 | 229 | *e*Pn | Pg | 10 36 04.2 | +1.0 |
| SVSK | Karacayir | 1.56 | 89 | *e*PN | Pb | 10 36 04.4 | +0.3 |
| SVSK | Karacayir | 1.56 | 89 | *e*Pn | Pb | 10 36 04.4 | +0.3 |
| GULA | Gulagac | 1.65 | 201 | *e*PN | Pg | 10 36 07.0 | -0.1 |
| GULA | Gulagac | 1.65 | 201 | *e*Pn | Pg | 10 36 07.0 | -0.1 |
| DIKM | Dikmen | 1.76 | 7 | *e*PN | Pb | 10 36 07.1 | -0.6 |
| DIKM | Dikmen | 1.76 | 7 | *e*Pn | Pb | 10 36 07.1 | -0.6 |
| NIG | Nigde | 1.81 | 189 | *e*PN | Pb | 10 36 08.7 | +0.1 |
| NIG | Nigde | 1.81 | 189 | *e*Pn | Pb | 10 36 08.7 | +0.1 |
| SARI | SarD1z-Kayseri | 1.86 | 142 | *e*PN | Pb | 10 36 09.2 | -0.2 |

*NEIC 03 10:55:50.7, 52°.44N×166°.78W, h26km, ML3.0(AEIC), After AEIC.*
*IDC 03 10:56:00.3±7.5, 52°.96N×166°.78W, h84km±70km, mb3.5/7, mb1 3.6/7, mb1mx3.3/31, mbtmp3.8/7, MS2.7/1, Ms1 2.7/1, ms1mx2.1/32, Error ellipse: s-maj=45.2km s-min=22.7km az=5.0*
**ISC 03 10:55:51.5±4.2, 52°.5N±0°.1×166°.81W±0°.10, h28km±23km, n24, σ1s12/21, mb3.8/7, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKFG | Magazine Ridge | 1.16 | 325 | P | Pn | 10 56 10.9 | -0.9 |
| OKFG | | | | S | Sb | 10 56 27.5 | +0.1 |
| OKTU | Okmok Mt. Tuli | 1.18 | 321 | P | Pn | 10 56 12.2 | +0.1 |
| OKSO | Okmok South | 1.21 | 318 | P | Pn | 10 56 11.8 | -0.7 |
| OKSO | | | | S | Sb | 10 56 28.9 | 0.0 |
| OKCE | Okmok Cone E | 1.26 | 320 | P | Pn | 10 56 13.1 | -0.1 |
| MGOD | Makushin Gods | 1.33 | 358 | P | Pn | 10 56 13.8 | -0.4 |
| NIKH | Nikolski High | 1.34 | 293 | P | Pn | 10 56 13.6 | -0.7 |
| NIKH | | | | S | Sn | 10 56 30.6 | -0.5 |
| MSOM | Makushin Julie | 1.35 | 357 | P | Pn | 10 56 13.8 | -0.6 |
| MSOM | | | | S | Sn | 10 56 31.9 | +0.5 |
| UNV | Unalaska Valle | 1.39 | 8 | P | Pn | 10 56 14.7 | -0.3 |
| MSW | Makushin Switc | 1.45 | 1 | P | Pn | 10 56 15.8 | 0.0 |
| MSW | | | | S | Sn | 10 56 34.2 | +0.4 |
| OKAK | Okmok | 1.45 | 321 | P | Pn | 10 56 14.2 | -1.6 |
| PETK | Petropavlovsk- | 21.34 | 286 | P | P | 11 00 39.6 | +3.5 |
| | 1.4nm,0.4s,baz=85,slow=11,SNR=9.4 | | | | | | |
| INK | Inuvik | 22.41 | 32 | P | P | 11 00 46.5 | -0.9 |
| | 0.9nm,0.5s,baz=250,slow=12,SNR=4.9 | | | | | | |
| YAK | Yakutsk | 34.28 | 311 | LR | LR | 11 16 43.2 | |
| | comp=Z,14nm,21.0s,baz=138,slow=37 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 38.54 | 222 | T | T | 11 44 40.2 | |
| | baz=25,slow=76,SNR=12 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 38.55 | 222 | T | T | 11 44 42.5 | |
| | baz=25,slow=76,SNR=13 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 38.56 | 222 | T | T | 11 44 53.5 | |
| | baz=25,slow=76,SNR=7.9 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.72 | 221 | T | T | 11 46 16.0 | |
| | baz=24,slow=75,SNR=5.9 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 39.73 | 221 | T | T | 11 46 20.8 | |
| | baz=24,slow=75,SNR=6.0 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.74 | 221 | T | T | 11 46 18.5 | |
| | baz=24,slow=75,SNR=4.5 | | | | | | |
| TXAR | Lajitas Array | 51.18 | 91 | P | P | 11 04 54.8 | +2.7 |
| | 0.4nm,0.7s,baz=310,slow=4.7,SNR=5.8 | | | | | | |
| ARCES | ARCESS Array B | 57.98 | 355 | P | P | 11 05 39.6 | -1.2 |
| | 1.1nm,0.9s,baz=353,slow=6.4,SNR=3.3 | | | | | | |
| ZALV | Zalesovo Beam | 58.39 | 319 | P | P | 11 05 44.3 | +0.4 |
| | 0.5nm,0.4s,baz=86,slow=7.4,SNR=2.2 | | | | | | |
| MKAR | Makanchi Array | 64.86 | 315 | P | P | 11 06 26.6 | -1.1 |
| | 0.6nm,0.8s,baz=52,slow=4.9,SNR=5.5 | | | | | | |
| FINES | FINESS Array B | 65.97 | 353 | P | P | 11 06 34.7 | +0.2 |
| | 1.3nm,0.5s,baz=15,slow=5.1,SNR=13 | | | | | | |

*NNC 03 11:11:36.2±3.2, 54°.12N×87°.17E, h27km±19km, mb3.7, mpv3.3, Error ellipse: s-maj=23.5km s-min=19.0km az=178.0*
**IDC 03 11:11:29.7±2.8, 54°.32N×87°.29E, h0km, mb1 3.3/2, mb1mx3.1/30, mbtmp3.3/2, ML3.0/2, 8C-1D, Error ellipse: s-maj=23.0km s-min=17.5km az=50.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 1.50 | 257 | *i* | | 11 23 30.0 | |
| | baz=73,slow=320,SNR=0.7 | | | | | | |
| ZALV | Zalesovo Beam | 1.50 | 257 | Pg | Pn | 11 11 57.0 | -0.8 |
| | 9.5nm,0.3s,baz=74,slow=15,SNR=59 | | | | | | |
| ZALV | | | | Lg | Lg | 11 12 17.3 | |
| | 4.2nm,0.3s,baz=77,slow=31,SNR=8.9 | | | | | | |
| KURK | Kurchatov | 6.40 | 239 | ⇑Pn | Pn | 11 13 06.1 | +0.9 |
| | 2.6nm,0.7s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 11 14 18.3 | -0.6 |
| | 1.6nm,0.5s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 11 14 57.0 | |
| | 13nm,1.5s | | | | | | |
| KURBB | Kurchatov Arra | 6.50 | 239 | ⇓Pn | Pn | 11 13 07.4 | +0.7 |
| | 1.2nm,0.2s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 11 14 18.9 | -2.6 |
| | 3.6nm,0.7s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 11 14 56.2 | |
| | 10.0nm,1.2s | | | | | | |
| KURBB | Kurchatov Arra | 6.50 | 239 | Pn | Pn | 11 13 07.7 | +1.1 |
| | 0.3nm,0.3s,baz=54,slow=14,SNR=16 | | | | | | |
| KURBB | | | | Sn | Sn | 11 14 19.6 | -1.9 |
| | 0.0nm,0.3s,baz=51,slow=22,SNR=2.9 | | | | | | |
| KURBB | | | | Lg | Lg | 11 14 55.3 | |
| | 0.0nm,0.3s,baz=58,slow=32,SNR=4.9 | | | | | | |
| MK31 | Makanchi Array | 8.17 | 205 | ⇑Pn | Pn | 11 13 30.4 | +0.8 |
| | 0.4nm,0.5s,baz=29,slow=12,SNR=13 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 11 14 59.9 | -2.8 |
| | 0.4nm,0.6s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 11 15 47.5 | |
| | 0.8nm,0.5s,baz=34,slow=23,SNR=4.7 | | | | | | |
| MKAR | Makanchi Array | 8.17 | 205 | Pn | Pn | 11 13 30.5 | +0.9 |
| | 0.2nm,0.3s,baz=25,slow=13,SNR=8.2 | | | | | | |
| MKAR | | | | Sn | Sn | 11 15 02.4 | -0.3 |
| | 0.2nm,0.3s,baz=25,slow=21,SNR=3.5 | | | | | | |
| MKAR | | | | Lg | Lg | 11 15 48.1 | |
| | 0.3nm,0.3s,baz=14,slow=30,SNR=3.9 | | | | | | |

**MEX 03 11:20:21.4±0.5, 18°.54N×101°.40W, h67km±12km, MD4.0, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZIIG | Zihuatanejo | 0.93 | 184 | *i* P | Pn | 11 20 37.1 | -1.8 |
| ZIIG | | | | *e*S | Sn | 11 20 50.2 | -1.6 |
| ARIG | Puente Sto Nin | 1.03 | 104 | *e*P | Pn | 11 20 38.7 | -1.5 |
| ARIG | | | | *i* S | Sn | 11 20 52.2 | -2.0 |
| MOIG | Morelia | 1.15 | 10 | *i* P | Pn | 11 20 40.8 | -1.3 |
| MOIG | | | | *i* S | Sn | 11 20 55.0 | -2.4 |
| PLIG | Platanillo | 1.81 | 94 | *e*P | Pn | 11 20 49.9 | -0.7 |
| PLIG | | | | *i* S | Sn | 11 21 09.8 | -2.8 |
| MMIG | Aquila | 1.86 | 263 | *e*P | Pn | 11 20 49.5 | -1.6 |
| MMIG | | | | *i* S | Sn | 11 21 11.3 | -2.4 |
| EZ5V | | 2.28 | 295 | *e*P | Pn | 11 20 55.7 | -1.4 |
| EZ5V | | | | *e*S | Sn | 11 21 22.4 | -2.1 |
| R15V | | 2.52 | 285 | *e*P | Pn | 11 20 59.0 | -1.1 |
| R15V | | | | *e*S | Sn | 11 21 28.5 | -1.4 |

*IDC 03 11:25:02.2±1.6, 52°.86N×167°.03W, h0km, mb3.9/13, mb1 4.0/14, mb1mx3.8/46, mbtmp3.8/14, ML3.3/1, Error ellipse: s-maj=38.0km s-min=19.9km az=171.0*
*ISCJB 03 11:25:03.8±1.0, 52°.44N±0°.06×166°.87W±0°.07, h38km±7km, mb4.0/15, Error ellipse: s-maj=11.3km s-min=5.6km az=155.3*
*NEIC 03 11:25:03.3, 52°.47N×166°.84W, h20km, mb4.0/7, ML3.5(AEIC), After AEIC.*
**ISC 03 11:25:04.7±1.8, 52°.60N±0°.08×166°.85W±0°.05, h25km±11km, n47, σ1s23/46, mb4.1/15, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKFG | Magazine Ridge | 1.04 | 322 | P | Pn | 11 25 23.1 | -0.6 |
| OKFG | | | | S | Sn | 11 25 38.8 | +1.5 |
| OKTU | Okmok Mt. Tuli | 1.07 | 318 | P | Pb | 11 25 24.6 | +0.1 |
| OKSO | Okmok South | 1.10 | 314 | P | Pn | 11 25 24.1 | -0.4 |
| OKSO | | | | S | Sn | 11 25 40.2 | +1.2 |
| OKCE | Okmok Cone E | 1.15 | 317 | P | Pb | 11 25 25.4 | -0.5 |
| MGOD | Makushin Gods | 1.20 | 359 | P | Pb | 11 25 26.1 | -0.7 |
| UNV | Unalaska Valle | 1.27 | 9 | P | Pb | 11 25 27.1 | -0.8 |
| UNV | | | | S | Sb | 11 25 46.5 | +2.8 |
| NIKH | Nikolski High | 1.27 | 288 | P | Pn | 11 25 25.9 | -1.0 |
| NIKH | | | | S | Sb | 11 25 43.8 | -0.1 |
| MSW | Makushin Switc | 1.32 | 2 | P | Pb | 11 25 28.1 | -0.7 |
| MSW | | | | S | Sb | 11 25 46.6 | +1.4 |
| OKAK | Okmok | 1.34 | 318 | P | Pn | 11 25 26.5 | -1.3 |
| AKUT | Akutan | 1.67 | 22 | P | Pn | 11 25 33.1 | +0.8 |
| FALS | False Pass | 3.05 | 41 | *e*Pn | Pb | 11 25 56.1 | -2.0 |
| KOFP | Korovin Flat P | 4.45 | 269 | P | Pn | 11 26 11.6 | +1.0 |
| ATKA | Atka Island | 4.52 | 268 | P | Pn | 11 26 12.1 | +0.7 |
| ATKA | | | | S | Sn | 11 27 02.7 | -0.4 |
| KOWE | Korovin West | 4.53 | 270 | P | Pn | 11 26 12.8 | +1.1 |
| SDPT | Sand Point | 4.66 | 51 | *e*Pn | Pn | 11 26 13.0 | -0.4 |
| GSCK | Great Sitkin C | 5.75 | 268 | P | Pn | 11 26 28.8 | +0.5 |
| AMKA | Amchitka | 8.64 | 267 | P | Pn | 11 27 08.1 | +0.1 |
| OHAK | Old Harbor | 9.08 | 54 | *e*Pn | Pn | 11 27 15.8 | +1.9 |
| KDAK | Kodiak Island | 9.66 | 52 | Pn | Pn | 11 27 20.9 | -1.1 |
| | 0.3nm,0.3s,baz=248,slow=5.4,SNR=4.1 | | | | | | |
| BPAW | Bear Paw Mtn. | 14.16 | 29 | *e*Pn | Pn | 11 28 26.6 | +3.2 |
| ILAR | Eielson Array | 15.91 | 32 | Pn | Pn | 11 28 44.2 | -2.5 |
| | 0.0nm,0.3s,baz=222,slow=10,SNR=3.9 | | | | | | |
| DOT | Dot Lake | 16.24 | 38 | *e*P | P | 11 28 52.9 | -0.9 |
| | 6.8nm,1.0s | | | | | | |
| COLD | Coldfoot | 16.78 | 23 | *e*P | P | 11 29 01.0 | +1.3 |
| | 24nm,1.8s | | | | | | |
| EGAK | Eagle | 17.91 | 37 | *e*P | P | 11 29 14.9 | +2.6 |
| | 6.3nm,1.3s | | | | | | |
| DAWY | Dawson | 18.25 | 40 | *e*P | P | 11 29 16.3 | +0.3 |
| | 6.4nm,1.1s | | | | | | |
| PETK | Petropavlovsk- | 21.29 | 286 | P | P | 11 29 48.3 | -0.8 |
| | 3.3nm,0.4s,baz=87,slow=11,SNR=25 | | | | | | |
| INK | Inuvik | 22.32 | 33 | P | P | 11 29 58.0 | -1.9 |
| | 2.0nm,0.7s,baz=198,slow=8.2,SNR=6.9 | | | | | | |
| INK | Inuvik | 22.32 | 33 | *e*P | P | 11 29 59.4 | -0.6 |
| | 12nm,1.3s | | | | | | |
| SEY | Seymchan | 23.66 | 312 | P | P | 11 30 11.5 | -2.3 |
| | 1.6nm,0.7s,baz=75,slow=22,SNR=5.1 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 38.62 | 222 | T | T | 12 13 55.6 | |
| | baz=25,slow=76,SNR=26 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 38.63 | 222 | T | T | 12 13 55.6 | |
| | baz=25,slow=76,SNR=20 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 38.64 | 222 | T | T | 12 13 55.6 | |
| | baz=25,slow=76,SNR=22 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.80 | 221 | T | T | 12 15 23.9 | |
| | baz=25,slow=76,SNR=21 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 39.82 | 221 | T | T | 12 15 23.9 | |
| | baz=25,slow=76,SNR=11 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.82 | 221 | T | T | 12 15 23.9 | |
| | baz=25,slow=76,SNR=12 | | | | | | |
| SUMG | Summit | 50.10 | 18 | *e*P | P | 11 33 58.3 | +0.8 |
| | 20nm,1.5s | | | | | | |
| TXAR | Lajitas Array | 51.21 | 91 | P | P | 11 34 08.0 | +1.9 |
| | 0.3nm,0.5s,baz=292,slow=4.8,SNR=6.2 | | | | | | |
| SONM | Songino Array | 52.49 | 302 | P | P | 11 34 15.5 | 0.0 |
| | 0.5nm,0.5s,baz=55,slow=6.2,SNR=4.2 | | | | | | |
| ARCES | ARCESS Array B | 57.84 | 355 | P | P | 11 34 53.8 | +0.2 |
| | 2.1nm,0.7s,baz=16,slow=6.9,SNR=6.4 | | | | | | |
| BVAR | Borovoye Array | 64.40 | 326 | P | P | 11 35 37.8 | -0.4 |
| | 0.9nm,0.7s,baz=29,slow=6.8,SNR=5.2 | | | | | | |
| MKAR | Makanchi Array | 64.75 | 315 | P | P | 11 35 39.7 | -1.0 |
| | 1.2nm,0.7s,baz=44,slow=5.6,SNR=9.1 | | | | | | |
| ARU | Arti | 65.10 | 334 | *e*P | P | 11 35 42.1 | -0.6 |
| | 4.2nm,0.9s | | | | | | |
| FINES | FINESS Array B | 65.84 | 353 | P | P | 11 35 47.0 | -0.4 |
| | 3.1nm,0.6s,baz=26,slow=6.9,SNR=21 | | | | | | |
| NOA | NORSAR Array B | 66.70 | 1 | P | P | 11 35 53.0 | 0.0 |
| | 1.2nm,0.7s,baz=360,slow=6.1,SNR=2.9 | | | | | | |
| AKASG | Malin Array Be | 76.18 | 350 | P | P | 11 36 49.9 | -0.4 |
| | 0.9nm,0.4s,baz=10.0,slow=5.5,SNR=6.6 | | | | | | |
| CMAR | Chiang Mai Arr | 78.06 | 285 | P | P | 11 37 01.9 | +0.6 |
| | 0.2nm,0.3s,baz=5.4,slow=3.6,SNR=4.3 | | | | | | |
| GERES | GERESS Array B | 78.93 | 360 | P | P | 11 37 06.5 | +0.7 |
| | 0.6nm,0.7s,baz=29,slow=6.1,SNR=4.1 | | | | | | |

*IDC 03 11:26:02.9±1.8, 52°.80N×166°.99W, h0km, mb3.8/12, mb1 4.0/13, mb1mx3.7/45, mbtmp3.8/13, ML3.2/1, Error ellipse: s-maj=42.5km s-min=21.6km az=168.0*
*ISCJB 03 11:26:05.7±1.1, 52°.7N±0°.2×167°.1W±0°.2, h35km, mb3.9/13, Error ellipse: s-maj=24.9km s-min=9.6km az=156.8*
*NEIC 03 11:26:08.0±1.1, 52°.80N×166°.97W, h35km, mb3.8/5, Error ellipse: s-maj=26.2km s-min=9.4km az=157.0*
**ISC 03 11:26:07.1±1.1, 52°.7N±0°.2×166°.9W±0°.1, h35km, n22, σ1s37/21, mb3.9/13, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| UNV | Unalaska Valle | 1.20 | 11 | Pn | Pn | 11 26 27.4 | +0.1 |
| FALS | False Pass | 3.00 | 42 | *e*Pn | Pn | 11 26 49.3 | -2.8 |
| SDPT | Sand Point | 4.63 | 52 | *e*Pn | Pn | 11 27 10.6 | -3.9 |
| AMKA | Amchitka | 8.62 | 267 | *e*Pn | Pn | 11 28 08.8 | -0.4 |
| ILAR | Eielson Array | 15.86 | 32 | Pn | Pn | 11 29 45.7 | -1.7 |
| | 0.0nm,0.3s,baz=221,slow=11,SNR=3.3 | | | | | | |
| DOT | Dot Lake | 16.19 | 38 | *e*P | P | 11 29 53.9 | -0.6 |
| | 18nm,1.4s | | | | | | |
| EGAK | Eagle | 17.87 | 37 | *e*P | P | 11 30 16.2 | +3.3 |
| | 2.2nm,0.8s | | | | | | |
| DAWY | Dawson | 18.20 | 41 | *e*P | P | 11 30 18.2 | +1.5 |
| | 2.9nm,0.9s | | | | | | |
| PETK | Petropavlovsk- | 21.25 | 285 | P | P | 11 30 49.8 | -0.1 |
| | 2.2nm,0.5s,baz=84,slow=12,SNR=6.6 | | | | | | |
| INK | Inuvik | 22.27 | 33 | P | P | 11 30 59.9 | -0.7 |
| | 3.2nm,0.9s,baz=246,slow=7.6,SNR=2.3 | | | | | | |
| INK | Inuvik | 22.27 | 33 | *e*P | P | 11 30 59.9 | -0.7 |
| | 7.0nm,1.2s | | | | | | |
| SEY | Seymchan | 23.59 | 312 | P | P | 11 31 12.7 | -1.5 |
| | 1.2nm,0.7s,baz=117,slow=16,SNR=1.9 | | | | | | |
| TXAR | Lajitas Array | 51.23 | 91 | P | P | 11 35 08.5 | +1.4 |
| | 0.2nm,0.6s,baz=307,slow=6.3,SNR=2.2 | | | | | | |
| SONM | Songino Array | 52.44 | 302 | P | P | 11 35 16.5 | +0.5 |
| | 0.3nm,0.3s,baz=52,slow=6.0,SNR=3.5 | | | | | | |
| ARCES | ARCESS Array B | 57.77 | 355 | P | P | 11 35 55.3 | +1.3 |
| | 4.3nm,1.1s,baz=16,slow=5.3,SNR=3.7 | | | | | | |
| BVAR | Borovoye Array | 64.33 | 326 | P | P | 11 36 39.1 | +0.5 |
| | 0.8nm,0.7s,baz=39,slow=7.8,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 64.69 | 315 | P | P | 11 36 40.8 | -0.4 |
| | 0.8nm,0.7s,baz=52,slow=4.8,SNR=5.2 | | | | | | |
| ARU | Arti | 65.03 | 334 | *e*P | P | 11 36 43.6 | +0.5 |
| | 2.7nm,0.8s | | | | | | |
| FINES | FINESS Array B | 65.77 | 353 | P | P | 11 36 48.0 | +0.2 |
| | 2.0nm,0.6s,baz=25,slow=6.1,SNR=8.1 | | | | | | |
| NOA | NORSAR Array B | 66.63 | 1 | P | P | 11 36 53.8 | +0.3 |
| | 1.7nm,1.1s,baz=18,slow=11,SNR=2.7 | | | | | | |
| AKASG | Malin Array Be | 76.11 | 350 | P | P | 11 37 51.0 | +0.3 |
| | 0.8nm,0.5s,baz=11,slow=5.8,SNR=3.7 | | | | | | |
| CMAR | Chiang Mai Arr | 78.02 | 285 | P | P | 11 38 03.2 | +1.2 |
| | 0.3nm,0.3s,baz=40,slow=7.1,SNR=2.6 | | | | | | |

*ISCJB 03 11:28:02.5±0.3, 7°.05S±0°.03×129°.61E±0°.04, h139km, mb4.1/21, Error ellipse: s-maj=5.2km s-min=3.6km az=179.9*
*AUST 03 11:28:04.3±0.0, 7°.10S×129°.60E, h124km, Error ellipse: s-maj=1.0km s-min=0.8km az=274.0*
*IDC 03 11:28:04.1±1.9, 6°.98S×129°.46E, h139km±15km, mb3.7/9, mb1 3.9/12, mb1mx3.7/32, mbtmp4.2/12, Error ellipse: s-maj=24.0km s-min=13.0km az=123.0*
*BJI 03 11:28:04.5, 7°.00S×129°.60E, h166km, mb4.4/5, mB4.5/1*
*NEIC 03 11:28:06.5±0.5, 7°.02S×129°.56E, h166km±5km, mb4.3/16, Error ellipse: s-maj=7.8km s-min=6.4km az=62.0*
*DJA 03 11:28:09.5±0.4, 7°S±4°×13°0E±°, h139km±9km, M4.3/7, mb4.6/5, mB5.5/2, MLv4.2/7, Mw(mB)5.0/2*
**ISC 03 11:28:03.9±0.4, 7°.09S±0°.04×129°.66E±0°.05, h139km, n78, σ2s00/86, mb4.1/21, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SAUI | Saumlaki | 1.85 | 119 | P | Pn | 11 28 43.0 | +6.4 |
| SAUI | Saumlaki | 1.85 | 119 | ePn | Pn | 11 28 42.6 | +6.0 |
| SAUI | | | | eSn | Sn | 11 29 09.6 | +7.9 |
| BNDI | Bandanaira | 2.56 | 5 | P | Pn | 11 28 50.3 | +5.0 |
| MSAI | Masohi | 3.79 | 349 | P | Pn | 11 29 05.1 | +3.9 |
| MSAI | | | | S | Sn | 11 29 50.1 | +4.5 |
| NLAI | Namlea | 4.60 | 326 | P | Pn | 11 29 14.6 | +2.8 |
| FAKI | Fak Fak | 4.88 | 32 | P | Pn | 11 29 17.4 | +1.7 |
| | baz=4.9,SNR=28 | | | | | | |
| FAKI | Fak Fak | 4.88 | 32 | P | Pn | 11 29 17.7 | +2.1 |
| FAKI | Fak Fak | 4.88 | 32 | ePn | Pn | 11 29 17.3 | +1.7 |
| FAKI | | | | eSn | Sn | 11 30 12.4 | +0.9 |
| MTN | Manton Dam | 5.90 | 166 | P | Pn | 11 29 31.5 | +2.4 |
| | baz=5.9,SNR=71 | | | | | | |
| MTN | Manton Dam | 5.90 | 166 | ePn | Pn | 11 29 31.6 | +2.5 |
| MTN | | | | eSn | Sn | 11 30 33.9 | -1.8 |
| SOEI | Soe | 5.96 | 243 | P | Pn | 11 29 31.4 | +1.3 |
| | baz=5.9,SNR=9.7 | | | | | | |
| SOEI | Soe | 5.96 | 243 | P | Pn | 11 29 31.3 | +1.3 |
| SOEI | | | | S | Sn | 11 30 32.3 | -5.0 |
| SOEI | Soe | 5.96 | 243 | ePn | Pn | 11 29 31.4 | +1.3 |
| SOEI | | | | eSn | Sn | 11 30 34.4 | -3.0 |
| SANI | Sanana | 6.20 | 324 | P | Pn | 11 29 36.6 | +3.3 |
| | 14nm,0.9s,0.1nm | | | | | | |
| KDU | Kakadu | 6.21 | 154 | P | Pn | 11 29 35.8 | +2.4 |
| | baz=6.3,SNR=263 | | | | | | |
| SIJI | Sorong | 6.39 | 15 | P | Pn | 11 29 36.5 | +0.7 |
| | 10nm,0.3s,baz=244,slow=22,SNR=39 | | | | | | |
| SIJI | | | | S | Sn | 11 30 45.1 | -2.5 |
| | 4.5nm,0.3s,baz=88,slow=23,SNR=7.2 | | | | | | |
| SWI | Sorong | 6.39 | 15 | P | Pn | 11 29 36.8 | +1.0 |
| | baz=6.5,SNR=13 | | | | | | |
| SWI | Sorong | 6.39 | 15 | P | Pn | 11 29 35.7 | -0.1 |
| SWI | | | | S | Sn | 11 30 46.4 | -1.2 |
| BATI | Baumata | 6.69 | 242 | P | Pn | 11 29 40.2 | +0.4 |
| | 20nm,0.3s,baz=320,slow=1.5,SNR=12 | | | | | | |
| BATI | | | | S | Sn | 11 30 50.8 | -4.1 |
| | 38nm,0.3s,baz=10,slow=20,SNR=15 | | | | | | |
| LBMI | Labuha | 6.76 | 341 | S | Sn | 11 30 56.4 | -0.2 |
| MMRI | Maumere | 7.51 | 258 | ePn | Pn | 11 29 52.7 | +1.9 |
| MMRI | | | | eSn | Sn | 11 31 13.5 | -1.2 |
| TNTI | Ternate | 8.14 | 344 | ePn | Pn | 11 30 01.2 | +1.9 |
| KNRA | Kununurra | 8.58 | 186 | P | Pn | 11 30 05.2 | +0.1 |
| | baz=8.6,SNR=88 | | | | | | |
| MRSI | Marisa | 10.76 | 314 | P | Pn | 11 30 37.7 | +3.4 |
| | 40nm,0.9s,7µm | | | | | | |
| WRAB | Tennant Creek | 13.55 | 161 | ePn | Pn | 11 31 09.1 | -1.6 |
| | 10nm,0.6s | | | | | | |
| WRAB | | | | eSn | Sn | 11 33 33.8 | -6.7 |
| WRA | Warramunga Arr | 13.56 | 161 | P | Pn | 11 31 09.4 | -1.3 |
| | 1.0nm,0.3s,baz=334,slow=13,SNR=34 | | | | | | |
| WRA | | | | S | Sn | 11 33 31.9 | -8.8 |
| | 5.3nm,0.3s,baz=333,slow=22,SNR=13 | | | | | | |
| COEN | Coen | 14.93 | 118 | P | P | 11 31 31.3 | +1.1 |
| | baz=15,SNR=19 | | | | | | |
| COEN | Coen | 14.93 | 118 | eP | P | 11 31 33.1 | +2.9 |
| | 39nm,1.4s | | | | | | |
| COEN | | | | eS | Sn | 11 34 09.2 | -4.6 |
| BBKI | Banjar Baru | 15.19 | 283 | P | P | 11 31 35.9 | +2.8 |
| QIS | Mount Isa | 16.49 | 145 | P | P | 11 31 50.2 | +2.7 |
| | baz=17,SNR=8.0 | | | | | | |
| MYLDM | Lahad Datu | 16.51 | 317 | eP | P | 11 31 48.1 | +0.4 |
| | 19nm,1.0s | | | | | | |
| MBWA | Marble Bar | 16.96 | 213 | eP | Pn | 11 31 53.3 | +0.3 |
| | 5.0nm,0.5s | | | | | | |
| ASAR | Alice Springs | 16.98 | 167 | P | Pn | 11 31 54.7 | +1.5 |
| | 2.5nm,0.3s,baz=336,slow=9.6,SNR=352 | | | | | | |
| ASAR | | | | S | S | 11 34 50.0 | -13 |
| | 0.5nm,0.3s,baz=329,slow=20,SNR=7.2 | | | | | | |
| AS01 | Alice Springs | 16.99 | 166 | eP | Pn | 11 31 54.9 | +1.6 |
| WRKA | Warakurna | 17.89 | 184 | P | Pn | 11 32 04.3 | +0.1 |
| | baz=18,SNR=52 | | | | | | |
| SBUM | Sibu | 19.82 | 298 | eP | P | 11 32 24.7 | +0.8 |
| | 9.3nm,0.8s | | | | | | |
| KSM | Kuching | 21.10 | 293 | P | P | 11 32 40.3 | +2.7 |
| | baz=21,SNR=3.5 | | | | | | |
| KSM | Kuching | 21.10 | 293 | eP | P | 11 32 37.1 | -0.5 |
| | 8.9nm,0.9s | | | | | | |
| MEEK | Meekatharra | 22.10 | 207 | P | P | 11 32 50.2 | +2.1 |
| | baz=22,SNR=4.7 | | | | | | |
| FORT | Forrest | 23.61 | 183 | P | P | 11 33 04.2 | +1.9 |
| | baz=24,SNR=17 | | | | | | |
| FORT | Forrest | 23.61 | 183 | eP | P | 11 33 03.9 | +1.6 |
| | 28nm,0.6s | | | | | | |
| BBOO | Buckleboo | 26.27 | 168 | P | P | 11 33 30.4 | +4.1 |
| | baz=26,SNR=7.0 | | | | | | |
| BBOO | Buckleboo | 26.27 | 168 | eP | P | 11 33 30.3 | +3.9 |
| | 34nm,1.5s | | | | | | |
| HTT | Hallett | 27.58 | 163 | P | P | 11 33 41.9 | +3.8 |
| | baz=28,SNR=3.4 | | | | | | |
| ARPS | Mount Arapiles | 31.56 | 161 | P | P | 11 34 15.0 | +1.8 |
| | baz=32,SNR=6.7 | | | | | | |
| CM01 | Chiang Mai Arr | 39.50 | 310 | eP | P | 11 35 19.9 | -1.3 |
| CMAR | Chiang Mai Arr | 39.53 | 310 | P | P | 11 35 20.1 | -1.4 |
| | 1.7nm,0.6s,baz=137,slow=6.9,SNR=12 | | | | | | |
| CHTO | Chiang Mai | 39.75 | 311 | eP | P | 11 35 21.9 | -1.3 |
| | 4.0nm,0.8s | | | | | | |
| GYA | Guiyang | 40.13 | 327 | eP | P | 11 35 27.2 | +0.8 |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| KMI | Kunming | 41.38 | 322 | P | P | 11 35 38.3 | +1.5 |
| KMI | | | | PMZ | | | |
| | 6.0nm,1.1s | | | | | | |
| MJAR | Matsushiro Arr | 44.14 | 10 | P | P | 11 35 57.5 | -1.2 |
| | 0.8nm,0.7s,baz=182,slow=10,SNR=3.2 | | | | | | |
| CD2 | Chengdu | 45.20 | 328 | eP | P | 11 36 06.5 | -0.7 |
| HHC | Hu-ho-hao-te | 50.53 | 342 | eP | P | 11 36 48.1 | 0.0 |
| HHC | | | | pP | pP | 11 37 24.2 | +4.0 |
| HHC | | | | S | S | 11 43 49.6 | -2.1 |
| HHC | | | | SS | SS | 11 47 16.1 | -12 |
| HHC | | | | PMZ | | | |
| | 26nm,1.3s | | | | | | |
| HHC | | | | PMZ | | | |
| | 63nm,6.2s | | | | | | |
| SONM | Songino Array | 58.42 | 342 | P | P | 11 37 44.6 | -0.4 |
| | 0.4nm,0.4s,baz=152,slow=6.5,SNR=3.2 | | | | | | |
| WMQ | Urumqi | 63.29 | 327 | eP | P | 11 38 17.0 | -1.0 |
| PETK | Petropavlovsk- | 64.52 | 18 | P | P | 11 38 26.6 | +0.9 |
| | 2.0nm,0.7s,baz=190,slow=7.3,SNR=2.5 | | | | | | |
| MK01 | Makanchi Array | 68.10 | 327 | eP | P | 11 38 48.4 | -0.4 |
| MKAR | Makanchi Array | 68.12 | 327 | P | P | 11 38 48.4 | -0.5 |
| | 3.5nm,0.5s,baz=120,slow=7.9,SNR=39 | | | | | | |
| MAKZ | Makanchi | 68.30 | 327 | eP | P | 11 38 49.6 | -0.3 |
| TKM2 | Tokmak 2 | 69.84 | 321 | eP | P | 11 38 59.2 | -0.7 |
| | 1.0nm,0.4s | | | | | | |
| AAK | Ala-Archa | 70.39 | 320 | eP | P | 11 39 01.6 | -1.5 |
| | 2.0nm,0.9s | | | | | | |
| ZAA0 | Zalesovo Array | 71.52 | 334 | eP | P | 11 39 07.9 | -1.6 |
| ZALV | Zalesovo Beam | 71.52 | 334 | P | P | 11 39 07.9 | -1.6 |
| | 1.5nm,0.6s,baz=133,slow=5.3,SNR=5.7 | | | | | | |
| KURK | Kurchatov | 72.42 | 329 | eP | P | 11 39 13.3 | -1.5 |
| | 7.8nm,0.9s | | | | | | |
| MAW | Mawson | 74.74 | 201 | eP | P | 11 39 27.9 | -0.3 |
| | 10nm,2.3s | | | | | | |
| BVAR | Borovoye Array | 77.96 | 328 | P | P | 11 39 45.2 | -1.4 |
| | 1.7nm,0.9s,baz=122,slow=5.6,SNR=6.9 | | | | | | |
| BRVK | Borovoye | 78.03 | 328 | eP | P | 11 39 45.5 | -1.5 |
| | 2.5nm,0.7s | | | | | | |
| ABKAR | Akbulak array | 82.37 | 322 | eP | P | 11 40 08.9 | -1.4 |
| | 2.8nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 83.94 | 322 | P | P | 11 40 17.2 | -1.2 |
| | 1.2nm,0.5s,baz=222,slow=14,SNR=3.0 | | | | | | |
| ARU | Arti | 85.61 | 328 | eP | P | 11 40 24.6 | -1.9 |
| | 3.6nm,0.8s | | | | | | |
| CHGN | Chignik | 86.00 | 32 | eP | P | 11 40 28.9 | +0.5 |
| TTA | Tatalina | 89.22 | 26 | eP | P | 11 40 42.9 | -1.0 |
| | 88nm,2.7s | | | | | | |
| ILAR | Eielson Array | 93.57 | 25 | P | P | 11 41 02.5 | -1.4 |
| | 0.3nm,0.8s,baz=261,slow=5.1,SNR=5.1 | | | | | | |
| ULM | Lac du Bonnet | 122.71 | 33 | ePKPdf | PKPdf | 11 46 41.6 | -1.7 |
| TOA0 | Torodi Ar. Sit | 128.50 | 281 | ePKPdf | PKPdf | 11 46 54.5 | -0.9 |
| TORD | Torodi Ar. Bea | 128.50 | 281 | PKP | PKPdf | 11 46 54.7 | -0.6 |
| | 0.4nm,0.7s,baz=37,slow=1.0,SNR=3.2 | | | | | | |
| LPAZ | La Paz | 150.85 | 143 | PKPbc | PKPbc | 11 47 42.2 | +0.4 |
| | 0.5nm,0.4s,baz=106,slow=2.8,SNR=6.2 | | | | | | |
| BBSR | BB Station | 151.52 | 26 | ePKPdf | PKPdf | 11 47 34.8 | -1.1 |
| BBSR | | | | ePKPbc | PKPbc | 11 47 40.5 | -1.6 |
| BBSR | | | | ePKPab | PKPab | 11 47 47.9 | -3.0 |

*GUC 03 11:29:58.9±0.5, 34°.94S×71°.57W, h65km±8km, ML3.9*
**ISC 03 11:29:58.0**±1.9, **34°.82S**±0°.05×**71°.5W**±0°.1, **h10**km±13km, **n19**, σ1.s70/29, **2C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TALC | Talca | 0.59 | 190 | ⇑iP | Pn | 11 30 12.9 | +0.4 |
| TALC | | | | iS | Sn | 11 30 22.3 | +0.1 |
| ANTU | Antumapu | 1.44 | 31 | ⇑iP | Pb | 11 30 25.3 | +0.3 |
| ANTU | | | | eS | Sg | 11 30 45.2 | +0.9 |
| ANTU | | | | AML | AML | 11 30 47.6 | |
| | comp=E,2µm,0.7s | | | | | | |
| RCDM | Rinconada Maip | 1.45 | 24 | eP | Pn | 11 30 24.8 | +0.5 |
| RCDM | | | | iS | Sg | 11 30 45.0 | +0.4 |
| PCH | Pirque | 1.45 | 35 | eP | Pg | 11 30 25.6 | -0.2 |
| PCH | | | | iS | Sg | 11 30 45.8 | +1.1 |
| STL | Santa Lucia | 1.55 | 28 | eP | Pn | 11 30 26.6 | +0.7 |
| CLCH | Cerro Calan | 1.63 | 30 | ⇓iP | Pn | 11 30 27.8 | +0.9 |
| CLCH | | | | iS | Sb | 11 30 49.6 | +0.7 |
| CLCH | | | | AML | AML | 11 30 57.8 | |
| | comp=N,1µm,0.5s | | | | | | |
| PEL | Peldehue | 1.80 | 23 | eP | Pn | 11 30 30.3 | +1.1 |
| PEL | | | | iS | Sb | 11 30 54.3 | +0.4 |
| PEL | | | | AML | AML | 11 30 59.7 | |
| | comp=N,2µm,1.1s | | | | | | |
| ROC1 | El Roble | 1.88 | 13 | eP | Pn | 11 30 31.1 | +0.6 |
| ROC1 | | | | eS | Sn | 11 30 53.9 | -0.6 |
| AAGR | Agrelo | 2.82 | 53 | iP | Pb | 11 30 47.1 | -1.5 |
| ARCO | CERRO ARCO | 2.91 | 48 | eP | Pb | 11 30 50.8 | +0.6 |
| ARCO | | | | AML | AML | 11 31 43.5 | |
| | comp=Z,45nm,0.7s | | | | | | |
| CANA | Caviahue | 3.09 | 173 | eP | Pb | 11 30 52.8 | -0.4 |
| AUSP | Uspallata | 3.13 | 35 | eP | Pb | 11 30 51.2 | -2.9 |
| AUSP | | | | eS | Sb | 11 31 33.8 | +1.3 |
| ASAL | Salagasta | 3.15 | 46 | iP | Pb | 11 30 52.1 | -2.0 |
| ASAL | | | | iS | Sg | 11 31 38.5 | -0.6 |
| RTLS | Leoncito | 3.53 | 32 | eP | Pn | 11 30 56.3 | +3.0 |
| CFAA | Coronel Fontan | 4.21 | 41 | eP | Pn | 11 31 04.8 | +2.4 |
| CFAA | | | | eS | Sb | 11 32 02.3 | -1.0 |
| RTLL | Cerro Villicun | 4.31 | 37 | eP | Pn | 11 31 05.7 | +1.9 |
| RTLL | | | | eS | Sb | 11 32 06.3 | +0.3 |
| AMOG | MOGNA | 4.62 | 34 | iP | Pn | 11 31 09.4 | +1.3 |
| AMOG | | | | iS | Sb | 11 32 09.8 | -5.3 |
| AVFE | Valle Fertil | 5.37 | 41 | iP | Pn | 11 31 21.8 | +3.5 |
| AVFE | | | | AML | AML | 11 32 32.8 | |
| | comp=Z,22nm,0.6s | | | | | | |
| MRA | San Martin | 5.39 | 65 | eP | Pn | 11 31 22.1 | +3.5 |

**ROM 03 11:41:36.3**±0.2, **42°.45N**×**13°.30E**, **h8**km±1km, **Md1.4**/5, **Ml0.5**/3, **Error ellipse: s-maj=1.6km s-min=0.5km az=64.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RM33 | Pellescritta ( | 0.09 | 311 | Pg | Pg | 11 41 38.8 | +0.1 |
| RM33 | | | | Sg | Sg | 11 41 40.7 | +0.3 |
| | 16nm,0.2s | | | | | | |
| T0104 | Madonna delle | 0.10 | 164 | Pg | Pg | 11 41 39.1 | +0.3 |
| RM32 | Poggio Cancell | 0.12 | 357 | Pg | Pg | 11 41 39.3 | +0.1 |
| RM32 | | | | Sg | Sg | 11 41 41.7 | +0.4 |
| | 9.0nm,0.2s | | | | | | |
| RM29 | Verrico (Monte | 0.13 | 326 | Pg | Pg | 11 41 39.8 | +0.4 |
| RM29 | | | | Sg | Sg | 11 41 42.3 | +0.7 |
| | 16nm,0.2s | | | | | | |
| T0106 | Roio Piano | 0.16 | 157 | Pg | Pg | 11 41 40.3 | +0.5 |
| T0106 | | | | Sg | Sg | 11 41 43.0 | +0.8 |
| | 14nm,0.5s | | | | | | |

*ATH 03 11:43:15.2, 41°.74N×19°.51E, h6km±1km, MD3.5/10*
*TIR 03 11:43:16.3±0.8, 41°.57N×19°.56E, h22km±4km, ML3.3*
*THE 03 11:43:17.9, 41°.63N×19°.65E, h1km±1km, ML2.8/5, Error ellipse: s-maj=1.8km s-min=0.7km az=282.0*
*BEO 03 11:43:17.9±0.3, 41°.54N×19°.66E, h4km±2km, ML2.9/1*
*PDG 03 11:43:17.6±0.3, 41°.59N×19°.60E, h2km, MD3.2/1, ML3.1/11, Error ellipse: s-maj=0.4km s-min=0.5km az=0.0*
*CSEM 03 11:43:18.0±0.2, 41°.61N×19°.55E, h2km, ML2.9, Error ellipse: s-maj=4.2km s-min=2.4km az=64.0*
**ISC 03 11:43:17.9**±1.1, **41°.59N**±0°.01×**19°.58E**±0°.02, **h2**km±9km, **n173**, σ1.s25/253, **33C-19D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TIR | Tirane | 0.33 | 139 | iPG | Pg | 11 43 23.4 | -0.8 |
| TIR | | | | iSG | Sg | 11 43 28.9 | +0.4 |
| TIR | Tirane | 0.33 | 139 | iPg | Pg | 11 43 23.1 | -1.1 |
| TIR | | | | eSg | Sg | 11 43 27.5 | -1.0 |
| TIR | Tirane | 0.33 | 139 | P | Pg | 11 43 23.3 | -0.9 |
| TIR | | | | S | Sg | 11 43 28.6 | +0.1 |
| TIR | Tirane | 0.33 | 139 | iPg | Pg | 11 43 23.4 | -0.8 |
| | SNR=114 | | | | | | |
| TIR | | | | S | Sg | 11 43 28.6 | +0.1 |
| TIR | | | | iSg | Sg | 11 43 28.9 | +0.4 |
| | SNR=114 | | | | | | |
| ULC | Ulcinj | 0.44 | 326 | ⇓iPg | Pg | 11 43 26.6 | +0.1 |
| ULC | | | | eSg | Sb | 11 43 33.6 | -2.1 |
| ULC | Ulcinj | 0.44 | 326 | P | Pg | 11 43 26.6 | +0.1 |
| ULC | | | | eSg | Sb | 11 43 33.6 | -2.1 |
| PUK | Puka | 0.51 | 28 | iPG | Pg | 11 43 26.8 | -0.8 |
| PUK | | | | iSG | Sg | 11 43 35.6 | +1.4 |
| PUK | Puka | 0.51 | 28 | iPg | Pg | 11 43 26.8 | -0.8 |
| | SNR=97 | | | | | | |
| PUK | | | | iSg | Sg | 11 43 35.6 | +1.4 |
| | SNR=97 | | | | | | |
| PHP | Peshkopia | 0.66 | 82 | iPG | Pg | 11 43 29.5 | -0.9 |
| PHP | | | | iSG | Sg | 11 43 39.6 | +0.6 |
| PHP | Peshkopia | 0.66 | 82 | P | Pg | 11 43 29.6 | -0.9 |
| PHP | | | | S | Sg | 11 43 38.9 | -0.1 |
| PHP | Peshkopia | 0.66 | 82 | P | Pg | 11 43 29.6 | -0.9 |
| PHP | | | | S | Sg | 11 43 38.9 | -0.1 |
| PHP | | | | iSg | Sg | 11 43 39.6 | +0.6 |
| | SNR=94 | | | | | | |
| DRME | Dracevica, Mon | 0.66 | 334 | ⇑iPg | Pg | 11 43 30.2 | -0.4 |
| DRME | | | | eSg | Sb | 11 43 40.5 | -1.4 |
| DRME | Dracevica, Mon | 0.66 | 334 | ⇑iPg | Pg | 11 43 30.2 | -0.4 |
| DRME | | | | eSg | Sb | 11 43 40.5 | -1.4 |
| BCI | Bajram Curri | 0.85 | 25 | iPG | Pg | 11 43 33.1 | -1.1 |
| BCI | | | | iSG | Sb | 11 43 46.7 | -0.8 |
| BCI | Bajram Curri | 0.85 | 25 | iPg | Pg | 11 43 33.2 | -1.1 |
| | SNR=92 | | | | | | |
| BCI | | | | iSg | Sb | 11 43 46.7 | -0.8 |
| | SNR=92 | | | | | | |
| PDG | Podgorica | 0.87 | 344 | iPg | Pg | 11 43 33.8 | -0.8 |
| PDG | | | | eSg | Sn | 11 43 48.4 | -2.1 |
| PDG | Podgorica | 0.87 | 344 | P | Pg | 11 43 33.7 | -0.8 |
| PDG | | | | S | Sb | 11 43 46.8 | -1.0 |
| PDG | Podgorica | 0.87 | 344 | iPg | Pg | 11 43 33.8 | -0.8 |
| PDG | | | | S | Sb | 11 43 46.8 | -1.0 |
| PDG | | | | eSg | Sb | 11 43 47.2 | -0.6 |
| TTG | Podgorica | 0.87 | 344 | ⇑iPg | Pg | 11 43 33.6 | -1.0 |
| TTG | | | | eSg | Sb | 11 43 47.2 | -0.6 |
| BUM | Brajici-Budva | 0.87 | 324 | ⇑iPg | Pg | 11 43 33.8 | -0.8 |
| BUM | | | | eSg | Sb | 11 43 47.4 | -0.6 |
| BUM | Brajici-Budva | 0.87 | 324 | ⇑iPg | Pg | 11 43 33.8 | -0.8 |
| BUM | | | | eSg | Sb | 11 43 47.4 | -0.6 |
| PVY | Plav | 1.04 | 16 | ⇓iPg | Pg | 11 43 36.3 | -1.6 |
| PVY | | | | eSg | Sn | 11 43 53.2 | -1.7 |
| PVY | Plav | 1.04 | 16 | ⇓iPg | Pg | 11 43 36.3 | -1.6 |
| PVY | | | | eSg | Sn | 11 43 53.2 | -1.7 |
| OHR | Ohrid | 1.04 | 117 | iPn | Pg | 11 43 36.1 | -1.8 |
| OHR | | | | iSn | Sb | 11 43 53.2 | +0.3 |
| OHR | Ohrid | 1.04 | 117 | iPn | Pg | 11 43 36.0 | -1.8 |
| OHR | | | | iSn | Sb | 11 43 53.1 | +0.3 |
| PEJK | Peje | 1.17 | 26 | P | Pb | 11 43 38.8 | -2.2 |
| HCY | Herceg Novi | 1.17 | 317 | ⇓iPg | Pb | 11 43 39.8 | -1.2 |
| HCY | | | | eSg | Sn | 11 43 57.9 | -0.1 |
| HCY | Herceg Novi | 1.17 | 317 | ⇓iPg | Pb | 11 43 39.8 | -1.2 |
| HCY | | | | eSg | Sn | 11 43 57.9 | -0.1 |
| NKME | Niksic | 1.26 | 339 | ⇑iPg | Pn | 11 43 40.8 | -1.9 |
| NKME | | | | eSg | Sn | 11 44 00.5 | +0.3 |
| NKME | Niksic | 1.26 | 339 | ⇑iPg | Pn | 11 43 40.8 | -1.9 |
| NKY | Niksic | 1.29 | 341 | ⇑iPg | Pn | 11 43 41.4 | -1.8 |
| NKY | | | | eSg | Sg | 11 44 01.8 | +2.3 |
| NKY | Niksic | 1.29 | 341 | ⇑iPg | Pn | 11 43 41.4 | -1.8 |
| BEY | Berane | 1.30 | 10 | ⇓iPg | Pn | 11 43 41.3 | -1.9 |
| BEY | Berane | 1.30 | 10 | P | Pn | 11 43 41.6 | -1.6 |
| BEY | | | | eSg | Sg | 11 44 01.6 | +2.0 |
| IVA | Berane | 1.30 | 10 | ⇓iPg | Pn | 11 43 41.3 | -1.9 |
| IVA | | | | eSg | Sg | 11 44 01.6 | +2.0 |
| KBN | Korca | 1.33 | 136 | P | Pn | 11 43 42.4 | -1.3 |
| KBN | | | | S | Sg | 11 44 02.1 | +1.3 |
| KBN | Korca | 1.33 | 136 | P | Pn | 11 43 42.4 | -1.3 |
| KBN | | | | S | Sg | 11 44 02.1 | +1.3 |
| SKO | Skopje | 1.44 | 74 | iPn | Pg | 11 43 45.9 | +0.3 |
| SKO | | | | iSn | Sg | 11 44 05.3 | +1.0 |
| SKO | Skopje | 1.44 | 74 | P | Pn | 11 43 44.0 | -1.1 |
| SKO | | | | S | Sb | 11 44 04.4 | 0.0 |
| SKO | Skopje | 1.44 | 74 | P | Pn | 11 43 44.0 | -1.1 |
| SKO | Skopje | 1.44 | 74 | iPn | Pg | 11 43 45.9 | +0.3 |
| SKO | | | | S | Sb | 11 44 04.4 | 0.0 |
| SKO | | | | iSn | Sg | 11 44 05.3 | +1.0 |
| TREB | Trebinje | 1.45 | 321 | ePg | Pg | 11 43 45.7 | +0.1 |
| TREB | | | | eSg | Sg | 11 44 06.9 | +2.5 |
| TREB | Trebinje | 1.45 | 321 | ePg | Pg | 11 43 45.7 | +0.1 |
| BRY | Bratogost | 1.52 | 330 | ⇑iPg | Pb | 11 43 46.2 | -0.7 |
| BRY | | | | eSg | Sg | 11 44 09.5 | +2.8 |
| BRY | Bratogost | 1.52 | 330 | ⇑iPg | Pb | 11 43 46.2 | -0.7 |
| BRY | | | | eSg | Sg | 11 44 09.5 | +2.8 |
| FNA | Florina | 1.58 | 120 | ePG | Pn | 11 43 46.3 | -0.8 |
| FNA | | | | eSN | Sg | 11 44 10.7 | +2.0 |
| FNA | Florina | 1.58 | 120 | P | Pn | 11 43 45.5 | -1.6 |
| FNA | | | | S | Sb | 11 44 08.0 | -0.4 |
| FNA | Florina | 1.58 | 120 | P | Pn | 11 43 45.5 | -1.6 |
| FNA | Florina | 1.58 | 120 | ePg | Pn | 11 43 46.3 | -0.8 |
| FNA | | | | S | Sb | 11 44 08.0 | -0.4 |
| FNA | | | | eSn | Sg | 11 44 10.7 | +2.0 |
| NEST | Nestorio | 1.62 | 136 | ePN | Pb | 11 43 48.7 | 0.0 |
| NEST | | | | eSN | Sg | 11 44 11.9 | +1.9 |
| NEST | Nestorio | 1.62 | 136 | P | Pn | 11 43 46.7 | -1.0 |
| NEST | | | | S | Sn | 11 44 08.5 | -0.7 |
| NEST | Nestorio | 1.62 | 136 | P | Pn | 11 43 46.7 | -1.0 |
| NEST | Nestorio | 1.62 | 136 | ePn | Pb | 11 43 48.7 | 0.0 |
| NEST | | | | S | Sn | 11 44 08.5 | -0.7 |
| NEST | | | | eSn | Sg | 11 44 11.9 | +1.9 |
| GJIK | Gjilan | 1.63 | 57 | P | Pb | 11 43 48.3 | -0.5 |
| GJIK | | | | S | Sg | 11 44 12.1 | +1.7 |
| UPM | Unac-Piva | 1.68 | 343 | ⇑iPn | Pb | 11 43 48.5 | -1.3 |
| UPM | | | | eSn | Sg | 11 44 14.2 | +2.2 |
| UPM | Unac-Piva | 1.68 | 343 | ⇑iPn | Pb | 11 43 48.5 | -1.3 |
| UPM | Unac-Piva | 1.68 | 343 | P | Pb | 11 43 49.6 | -0.2 |
| UPM | | | | eSn | Sg | 11 44 14.2 | +2.2 |
| SJES | Sjenica | 1.69 | 10 | ePg | Pb | 11 43 49.0 | -0.9 |
| SJES | | | | eSg | Sg | 11 44 14.7 | +2.4 |
| SJES | Sjenica | 1.69 | 10 | ePg | Pb | 11 43 49.0 | -0.9 |
| SJES | | | | eSg | Sg | 11 44 14.7 | +2.4 |
| PLE | Pljevlja | 1.74 | 356 | ⇑iPn | Pb | 11 43 50.2 | -0.5 |
| PLE | | | | eSn | Sg | 11 44 15.7 | +1.9 |
| PLE | Pljevlja | 1.74 | 356 | ⇑iPn | Pb | 11 43 50.2 | -0.5 |
| PLE | | | | eSn | Sg | 11 44 15.7 | +1.9 |
| PE1 | Pezze di Greco | 1.81 | 245 | ePn | Pn | 11 43 49.1 | -1.0 |
| KEK | Kerkira | 1.89 | 175 | ePN | Pb | 11 43 52.3 | -0.8 |
| KEK | Kerkira | 1.89 | 175 | P | Pn | 11 43 51.0 | -0.2 |
| KEK | | | | S | Sb | 11 44 17.0 | -0.1 |
| KEK | Kerkira | 1.89 | 175 | P | Pn | 11 43 51.0 | -0.2 |
| KEK | Kerkira | 1.89 | 175 | ePn | Pb | 11 43 52.3 | -0.8 |
| KEK | | | | S | Sb | 11 44 17.0 | -0.1 |
| STON | Ston | 1.89 | 313 | ePg | Pb | 11 43 51.9 | -1.2 |
| STON | Ston | 1.89 | 313 | ePg | Pb | 11 43 51.9 | -1.2 |
| SELS | Selova | 1.99 | 35 | iPn | Pn | 11 43 52.1 | -0.5 |
| IVAS | Ivanjica | 2.03 | 12 | iPn | Pb | 11 43 53.8 | -1.7 |
| IVAS | | | | eSg | Sg | 11 44 23.9 | +0.9 |
| IVAS | Ivanjica | 2.03 | 12 | iPn | Pb | 11 43 53.8 | -1.7 |
| IVAS | | | | eSg | Sg | 11 44 23.9 | +0.9 |
| TAR1 | Taranto | 2.04 | 239 | ePn | Pg | 11 43 57.2 | +0.3 |
| BARS | Barje | 2.06 | 53 | ⇑iPn | Pn | 11 43 53.4 | -0.3 |
| BARS | | | | eSg | Sb | 11 44 22.5 | +0.2 |
| BARS | Barje | 2.06 | 53 | ⇑iPn | Pn | 11 43 53.4 | -0.3 |
| KZN | Kozani | 2.10 | 127 | ePN | Pn | 11 43 55.1 | +0.9 |
| KZN | Kozani | 2.10 | 127 | ePn | Pn | 11 43 55.1 | +0.9 |
| IGT | Igoumenitsa | 2.14 | 164 | ePN | Pn | 11 43 55.4 | +0.7 |
| IGT | | | | eSN | Sb | 11 44 25.1 | +0.7 |
| IGT | Igoumenitsa | 2.14 | 164 | P | Pn | 11 43 54.8 | +0.1 |
| IGT | | | | S | Sb | 11 44 23.0 | -1.4 |
| IGT | Igoumenitsa | 2.14 | 164 | P | Pn | 11 43 54.8 | +0.1 |
| IGT | Igoumenitsa | 2.14 | 164 | ePn | Pn | 11 43 55.4 | +0.7 |
| IGT | | | | eSn | Sb | 11 44 25.1 | +0.7 |
| JAN | Janina | 2.17 | 153 | ePN | Pb | 11 43 56.2 | -1.7 |
| JAN | Janina | 2.17 | 153 | ePn | Pb | 11 43 56.2 | -1.7 |
| GRG | Griva | 2.22 | 106 | ePN | Pn | 11 43 56.3 | +0.4 |
| GRG | | | | eSN | Sb | 11 44 25.9 | -1.0 |
| GRG | Griva | 2.22 | 106 | P | Pn | 11 43 55.0 | -0.9 |
| GRG | Griva | 2.22 | 106 | P | Pn | 11 43 55.0 | -0.9 |
| GRG | Griva | 2.22 | 106 | ePn | Pn | 11 43 56.3 | +0.4 |
| GRG | | | | eSn | Sb | 11 44 25.9 | -1.0 |
| VAY | Valandovo | 2.27 | 96 | iPn | Pn | 11 43 57.3 | +0.8 |
| VAY | | | | eSn | Sb | 11 44 26.2 | -1.9 |
| VAY | Valandovo | 2.27 | 96 | eSg | Sb | 11 44 26.3 | -1.8 |
| VAY | Valandovo | 2.27 | 96 | iPn | Pn | 11 43 57.2 | +0.8 |
| VAY | | | | eSn | Sb | 11 44 26.1 | -1.9 |
| BBLS | Lazići | 2.27 | 357 | ⇑iPn | Pn | 11 43 57.1 | +0.5 |
| BBLS | | | | eSn | Sb | 11 44 26.8 | -1.6 |
| BBLS | Lazići | 2.27 | 357 | ⇑iPn | Pn | 11 43 57.1 | +0.5 |
| BBLS | | | | eSn | Sb | 11 44 26.8 | -1.6 |
| GRUS | Gruza | 2.44 | 20 | ePn | Pn | 11 43 59.1 | +0.3 |
| GRUS | | | | eSn | Sn | 11 44 28.9 | -0.4 |
| GRUS | Gruza | 2.44 | 20 | ePn | Pn | 11 43 59.1 | +0.3 |
| GRUS | | | | eSn | Sn | 11 44 28.9 | -0.4 |
| DIVS | Divibare | 2.52 | 7 | ⇑iPn | Pn | 11 44 00.0 | 0.0 |
| DIVS | Divibare | 2.52 | 7 | ⇑iP | Pn | 11 44 00.3 | +0.3 |
| DIVS | Divibare | 2.52 | 7 | S | Sb | 11 44 34.3 | -1.2 |
| DIVS | Divibare | 2.52 | 7 | P | Pn | 11 43 59.5 | -0.5 |
| DIVS | | | | S | Sn | 11 44 30.4 | -1.0 |
| DIVS | Divibare | 2.52 | 7 | P | Pn | 11 43 59.5 | -0.5 |
| DIVS | Divibare | 2.52 | 7 | ⇑iPn | Pn | 11 44 00.0 | 0.0 |
| DIVS | | | | S | Sn | 11 44 30.4 | -1.0 |
| KNT | Kendrikon | 2.54 | 99 | ePB | Pn | 11 43 59.7 | -0.5 |
| BOVS | Bovan | 2.58 | 37 | eSg | Sb | 11 44 38.5 | +1.5 |
| KKB | Krupnik | 2.64 | 83 | eP | Pn | 11 44 02.8 | +1.2 |
| KKB | Krupnik | 2.64 | 83 | eP | Pn | 11 44 02.8 | +1.2 |
| THE | Thessaloniki | 2.73 | 109 | ePB | Pn | 11 44 03.0 | +0.1 |
| THL | Klokotos Trika | 2.75 | 137 | ePN | Pn | 11 44 04.2 | +1.1 |
| THL | Klokotos Trika | 2.75 | 137 | ePn | Pn | 11 44 04.2 | +1.1 |
| ZAPS | Zavoj | 2.82 | 52 | iPn | Pn | 11 44 04.9 | +0.8 |
| ZAPS | Zavoj | 2.82 | 52 | iPn | Pn | 11 44 04.9 | +0.8 |
| BOLS | Boljevac | 2.84 | 37 | iPn | Pn | 11 44 03.6 | -0.7 |
| BOLS | Boljevac | 2.84 | 37 | iPn | Pn | 11 44 03.6 | -0.7 |
| HORT | Hortiatis | 2.84 | 109 | ePB | Pn | 11 44 04.4 | 0.0 |
| VTS | Vitosha | 2.88 | 69 | eP | Pn | 11 44 05.8 | +0.8 |
| VTS | Vitosha | 2.88 | 69 | eP | Pn | 11 44 05.8 | +0.8 |
| SOH | Sokhos | 2.95 | 104 | ePB | Pn | 11 44 06.7 | +0.8 |
| TEKS | Tekeris | 2.95 | 359 | iPn | Pn | 11 44 06.0 | +0.1 |
| TEKS | Tekeris | 2.95 | 359 | iPn | Pn | 11 44 06.0 | +0.1 |
| SRS | Serrai | 3.06 | 98 | ePN | Pn | 11 44 06.9 | -0.5 |
| SRS | Serrai | 3.06 | 98 | ePn | Pn | 11 44 06.9 | -0.5 |
| MMB | Musomiste | 3.11 | 89 | eP | Pn | 11 44 08.7 | +0.6 |
| MMB | Musomiste | 3.11 | 89 | eP | Pn | 11 44 08.7 | +0.6 |
| PLG | Polygyros | 3.17 | 111 | ePB | Pn | 11 44 09.8 | +0.9 |
| EVR | Evrytania | 3.17 | 147 | ePN | Pn | 11 44 10.1 | +1.1 |
| EVR | Evrytania | 3.17 | 147 | ePn | Pn | 11 44 10.1 | +1.1 |
| KUBS | Kucevo | 3.21 | 28 | iPn | Pn | 11 44 08.3 | -1.1 |
| KUBS | | | | eSn | Sn | 11 44 46.7 | -1.6 |
| KUBS | Kucevo | 3.21 | 28 | iPn | Pn | 11 44 08.3 | -1.1 |
| KUBS | | | | eSn | Sn | 11 44 46.7 | -1.6 |
| NVR | Nevrokopi | 3.23 | 93 | ePB | Pn | 11 44 10.3 | +0.6 |
| MAKR | Makrakomi, Fth | 3.23 | 142 | ePB | Pn | 11 44 11.5 | +1.7 |
| PDO | Prodromos | 3.24 | 157 | ePN | Pn | 11 44 10.8 | +1.0 |
| PDO | Prodromos | 3.24 | 157 | ePn | Pn | 11 44 10.8 | +1.0 |
| AGG | Agios Georgios | 3.32 | 140 | ePN | Pn | 11 44 11.8 | +0.8 |
| AGG | Agios Georgios | 3.32 | 140 | ePn | Pn | 11 44 11.8 | +0.8 |
| XOR | Xorichti | 3.54 | 128 | ePN | Pn | 11 44 15.1 | +1.1 |
| XOR | Xorichti | 3.54 | 128 | ePn | Pn | 11 44 15.1 | +1.1 |
| MPEP | Malo Peshtene | 3.55 | 59 | eP | Pb | 11 44 22.2 | +0.8 |
| PGB | Panagyurishte | 3.55 | 73 | eP | Pn | 11 44 14.3 | +0.2 |
| PGB | Panagyurishte | 3.55 | 73 | eP | Pn | 11 44 14.3 | +0.2 |
| FGSL | Fruska Gora | 3.56 | 3 | ePn | Pn | 11 44 13.9 | -0.4 |
| FRGS | Fruska Gora | 3.57 | 3 | ePn | Pn | 11 44 13.9 | -0.4 |
| EFP | Efpalio | 3.63 | 150 | ePN | Pn | 11 44 16.8 | +1.6 |
| EFP | Efpalio | 3.63 | 150 | ePn | Pn | 11 44 16.8 | +1.6 |
| SERG | Sergoula | 3.71 | 148 | ePN | Pn | 11 44 18.1 | +1.9 |
| SERG | Sergoula | 3.71 | 148 | ePn | Pn | 11 44 18.1 | +1.9 |
| RZN | Rozhen | 3.85 | 87 | eP | Pn | 11 44 19.3 | +0.9 |
| RZN | Rozhen | 3.85 | 87 | eP | Pn | 11 44 19.3 | +0.9 |
| BZS | Buzias | 4.29 | 20 | ⇑iPn | Pn | 11 44 24.4 | +0.3 |
| BZS | | | | eSn | Sn | 11 45 14.8 | +0.1 |
| BZS | Buzias | 4.29 | 20 | ⇑iP | Pn | 11 44 24.5 | +0.3 |
| BZS | Buzias | 4.29 | 20 | S | Sn | 11 45 15.4 | +0.7 |
| BZS | Buzias | 4.29 | 20 | ⇑iPn | Pn | 11 44 24.4 | +0.3 |
| BZS | | | | eSn | Sn | 11 45 14.8 | +0.1 |
| BZS | | | | S | Sn | 11 45 15.4 | +0.7 |
| GZR | Gura Zlata | 4.45 | 30 | ⇑iP | Pn | 11 44 28.1 | +1.5 |
| GZR | Gura Zlata | 4.45 | 30 | S | Sn | 11 45 21.3 | +2.3 |
| GZR | Gura Zlata | 4.45 | 30 | ⇑iP | Pn | 11 44 28.1 | +1.5 |
| GZR | | | | S | Sn | 11 45 21.3 | +2.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LOT | Lotru | 4.91 | 37 | ⇓iP | Pn | 11 44 33.8 | +0.9 |
| LOT | Lotru | 4.91 | 37 | S | Sn | 11 45 34.3 | +3.9 |
| LOT | Lotru | 4.91 | 37 | ⇓iP | Pn | 11 44 33.8 | +0.9 |
| LOT | | | | S | Sn | 11 45 34.3 | +3.9 |
| VOIR | | 5.53 | 44 | ⇑iP | Pn | 11 44 43.0 | +1.6 |
| VOIR | | 5.53 | 44 | S | Sn | 11 45 51.6 | +6.0 |
| VOIR | | 5.53 | 44 | ⇑iP | Pn | 11 44 43.0 | +1.6 |
| DRGR | | 5.66 | 22 | ⇑iP | Pn | 11 44 44.4 | +1.2 |
| DRGR | | 5.66 | 22 | S | Sn | 11 45 48.0 | -0.8 |
| DRGR | | 5.66 | 22 | ⇑iP | Pn | 11 44 44.4 | +1.2 |
| DRGR | | | | S | Sn | 11 45 48.0 | -0.8 |
| MLR | Muntele Rosu | 6.05 | 48 | ⇓iP | Pn | 11 44 50.6 | +2.1 |
| MLR | Muntele Rosu | 6.05 | 48 | S | Sn | 11 46 03.2 | +4.8 |
| MLR | Muntele Rosu | 6.05 | 48 | ⇓iP | Pn | 11 44 50.6 | +2.1 |
| DOPR | Dopca | 6.07 | 42 | ⇓iP | Pn | 11 44 50.0 | +1.3 |
| DOPR | Dopca | 6.07 | 42 | ⇓iP | Pn | 11 44 50.0 | +1.3 |
| PLOR | Plostina | 6.66 | 48 | ⇑iP | Pn | 11 44 58.5 | +1.7 |
| PLOR | Plostina | 6.66 | 48 | ⇑iP | Pn | 11 44 58.5 | +1.7 |
| VRI | Vrincioaia | 6.71 | 48 | ⇓iP | Pn | 11 44 59.7 | +2.2 |
| VRI | Vrincioaia | 6.71 | 48 | ⇓iP | Pn | 11 44 59.7 | +2.2 |
| TLB | Topalu | 6.88 | 61 | ⇓iP | Pn | 11 45 02.9 | +3.1 |
| TLB | Topalu | 6.88 | 61 | ⇓iP | Pn | 11 45 02.9 | +3.1 |
| TLCR | | 7.63 | 59 | ⇓iP | Pn | 11 45 11.9 | +1.9 |
| TLCR | | 7.63 | 59 | ⇓iP | Pn | 11 45 11.9 | +1.9 |

**MAN 03 12:10:27, 11.98N×125.48E, h1km, mb4.6, ML3.5, MS3.4, 1D, Samar**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PLP | Palo | 0.94 | 211 | ⇓eP | Pg | 12 10 45.6 | +0.5 |
| PLP | | | | eS | Sb | 12 10 58.6 | -0.6 |
| CNP | Catarman | 0.96 | 304 | eP | Pb | 12 10 45.9 | -0.5 |
| CNP | | | | eS | Sn | 12 11 04.0 | +2.1 |
| OCLP | Ormoc | 1.25 | 223 | eP | Pn | 12 10 54.4 | +2.7 |
| MSLP | Maasin | 1.93 | 198 | eP | Pn | 12 11 02.0 | +1.0 |
| MSLP | | | | eS | Sg | 12 11 30.8 | +1.7 |
| GUIM | Jordan | 3.14 | 245 | eP | Pn | 12 11 18.8 | +1.3 |

*ISCJB 03 12:35:12.3±0.8, 40.93S±0.03×178.79E±0.08, h35km, mb3.4/2, Error ellipse: s-maj=9.4km s-min=3.7km az=22.6*
*WEL 03 12:35:13.9±0.3, 40.90S×178.76E, h33km, ML4.2/45, Error ellipse: s-maj=2.5km s-min=2.3km az=90.0*
*IDC 03 12:35:15.1±1.6, 40.67S×178.09E, h0km, mb3.5/2, mb1 3.9/4, mb1mx3.6/21, mbtmp3.7/4, ML3.9/2, Error ellipse: s-maj=42.5km s-min=30.8km az=67.0*
**ISC 03 12:35:14.8±1.3, 40.88S±0.06×178.72E±0.09, h35km, n111, σ1.00/112, 7C-6D, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PXZ | Pawanui | 1.65 | 300 | ⇑PN | Pn | 12 35 39.4 | -1.9 |
| PXZ | | | | SN | Sn | 12 36 00.5 | -0.9 |
| PXZ | | | | AML | AML | 12 36 00.9 | |
| PXZ | | | | AML | AML | 12 36 20.5 | |
| PXZ | | | | AML | AML | 12 36 20.5 | |
| PRHZ | Porangahau | 1.70 | 290 | PN | Pn | 12 35 40.4 | -1.7 |
| CKHZ | Cape Kidnapper | 1.75 | 314 | PN | Pn | 12 35 41.9 | -0.8 |
| ANWZ | Angora Road | 1.76 | 283 | PN | Pn | 12 35 42.6 | -0.2 |
| ANWZ | | | | eSN | Sn | 12 36 03.6 | -0.3 |
| KAHZ | Kahuranaki | 1.78 | 307 | PN | Pn | 12 35 41.9 | -1.2 |
| MHGZ | Mahia Peninsul | 1.84 | 340 | ⇑PN | Pn | 12 35 43.2 | -0.7 |
| BFZ | Birch Farm | 1.89 | 275 | PN | Pn | 12 35 43.0 | -1.6 |
| BFZ | | | | AML | AML | 12 36 20.3 | |
| BFZ | | | | AML | AML | 12 36 20.3 | |
| BFZ | | | | AML | AML | 12 36 22.7 | |
| BFZ | | | | AML | AML | 12 36 22.7 | |
| CPWZ | Castlepoint | 1.91 | 268 | PN | Pn | 12 35 43.9 | -0.9 |
| WPHZ | Waipukurau | 1.92 | 294 | PN | Pn | 12 35 44.2 | -0.9 |
| KNZ | Kokohu | 2.03 | 336 | PN | Pn | 12 35 45.5 | -1.0 |
| KNZ | | | | AML | AML | 12 36 06.9 | |
| KNZ | | | | AML | AML | 12 36 16.1 | |
| DVHZ | Dannevirke | 2.03 | 286 | PN | Pn | 12 35 45.7 | -0.9 |
| PRGZ | Paritu Road | 2.06 | 341 | ⇑PN | Pn | 12 35 46.2 | -0.8 |
| ARHZ | Aropaoanui | 2.09 | 320 | PN | Pn | 12 35 47.0 | -0.4 |
| MCHZ | McNeill Hill | 2.12 | 312 | PN | Pn | 12 35 47.2 | -0.5 |
| PRWZ | Pori Road | 2.12 | 278 | PN | Pn | 12 35 47.5 | -0.2 |
| WHHZ | Waihua | 2.13 | 327 | PN | Pn | 12 35 47.3 | -0.7 |
| PNHZ | Pukenui | 2.15 | 296 | PN | Pn | 12 35 47.3 | -1.0 |
| TIWZ | Tintock | 2.15 | 272 | PN | Pn | 12 35 47.2 | -1.1 |
| TIWZ | | | | AML | AML | 12 36 24.1 | |
| TIWZ | | | | AML | AML | 12 36 24.1 | |
| TMWZ | Te Maipa | 2.15 | 263 | PN | Pn | 12 35 46.9 | -1.4 |
| KRHZ | Kereru | 2.18 | 304 | PN | Pn | 12 35 47.5 | -1.2 |
| TSZ | Takapari Road | 2.26 | 290 | PN | Pn | 12 35 48.5 | -1.3 |
| TSZ | | | | AML | AML | 12 36 10.6 | |
| TSZ | | | | AML | AML | 12 36 17.0 | |
| KWHZ | Kaweka Forest | 2.29 | 309 | PN | Pn | 12 35 49.1 | -1.1 |
| RIGZ | Rimuhau | 2.30 | 341 | ⇑PN | Pn | 12 35 49.6 | -0.6 |
| POWZ | Post Office Ro | 2.30 | 281 | PN | Pn | 12 35 49.5 | -0.7 |
| NMHZ | Naumai | 2.31 | 320 | PN | Pn | 12 35 49.8 | -0.6 |
| RAHZ | Arahi | 2.33 | 327 | PN | Pn | 12 35 49.4 | -1.3 |
| TRWZ | Traveller | 2.35 | 256 | PN | Pn | 12 35 49.5 | -1.4 |
| TRWZ | | | | AML | AML | 12 36 27.7 | |
| TRWZ | | | | AML | AML | 12 36 31.1 | |
| SNGZ | Shannon Statio | 2.35 | 333 | PN | Pn | 12 35 50.3 | -0.7 |
| MRZ | Mangatainoka R | 2.40 | 274 | ⇓PN | Pn | 12 35 49.9 | -1.7 |
| MRZ | | | | AML | AML | 12 36 22.9 | |
| MRZ | | | | AML | AML | 12 36 30.2 | |
| BKZ | Black Stump Fm | 2.42 | 314 | ⇓PN | Pn | 12 35 50.6 | -1.4 |
| BKZ | | | | AML | AML | 12 36 23.3 | |
| BKZ | | | | AML | AML | 12 36 25.3 | |
| CNGZ | Carnagh Statio | 2.43 | 350 | PN | Pn | 12 35 51.5 | -0.5 |
| HOWZ | Holdsworth Sta | 2.43 | 269 | PN | Pn | 12 35 51.7 | -0.4 |
| MTW | Mount Morrison | 2.45 | 262 | PN | Pn | 12 35 50.7 | -1.7 |
| MTW | | | | AML | AML | 12 36 19.1 | |
| MTW | | | | AML | AML | 12 36 25.6 | |
| BHHZ | Black Hill Sta | 2.47 | 303 | PN | Pn | 12 35 51.6 | -1.0 |
| TKGZ | Te Karaka | 2.53 | 344 | PN | Pn | 12 35 52.9 | -0.6 |
| RAGZ | Rawiri | 2.59 | 337 | PN | Pn | 12 35 53.5 | -0.8 |
| MSWZ | Moikau Station | 2.67 | 257 | PN | Pn | 12 35 53.9 | -1.5 |
| MSWZ | | | | AML | AML | 12 36 27.0 | |
| MSWZ | | | | AML | AML | 12 36 31.5 | |
| OGWZ | Otaki Gorge | 2.69 | 270 | PN | Pn | 12 35 55.1 | -0.6 |
| PLWZ | Palliser | 2.70 | 254 | PN | Pn | 12 35 54.0 | -1.8 |
| MWZ | Matawai | 2.71 | 340 | PN | Pn | 12 35 55.1 | -0.8 |
| MWZ | | | | AML | AML | 12 36 23.7 | |
| MWZ | | | | AML | AML | 12 36 25.8 | |
| MWZ | | | | AML | AML | 12 36 25.8 | |
| MWZ | | | | AML | AML | 12 36 33.0 | |
| TWGZ | Tauwhareparae | 2.76 | 348 | PN | Pn | 12 35 56.4 | -0.3 |
| CAW | Cannon Point | 2.77 | 264 | PN | Pn | 12 35 55.2 | -1.6 |
| CAW | | | | AML | AML | 12 36 29.2 | |
| CAW | | | | AML | AML | 12 36 33.6 | |
| PUZ | Puketiti | 2.83 | 353 | PN | Pn | 12 35 56.4 | -1.2 |
| PUZ | | | | AML | AML | 12 36 31.6 | |
| PUZ | | | | AML | AML | 12 36 38.7 | |
| TUVZ | Tukino | 2.85 | 303 | PN | Pn | 12 35 58.1 | +0.2 |
| TUVZ | | | | AML | AML | 12 36 30.4 | |
| TUVZ | | | | AML | AML | 12 36 33.2 | |
| WNVZ | Wahianoa | 2.85 | 302 | ⇓PN | Pn | 12 35 58.1 | 0.0 |
| KIW | Kapiti Island | 2.89 | 269 | PN | Pn | 12 35 57.7 | -0.7 |
| KIW | | | | AML | AML | 12 36 31.6 | |
| KIW | | | | AML | AML | 12 36 32.5 | |
| URZ | Urewera | 2.90 | 334 | ⇑PN | Pn | 12 35 57.7 | -0.8 |
| URZ | | | | AML | AML | 12 36 28.0 | |
| URZ | | | | AML | AML | 12 36 31.8 | |
| URZ | Urewera | 2.90 | 334 | Pn | Pn | 12 35 57.7 | -0.8 |
| | 38nm,0.3s,baz=214,slow=5.5,SNR=209 | | | | | | |
| URZ | | | | Sn | Sn | 12 36 25.6 | -6.5 |
| | 36nm,0.3s,baz=33,slow=22,SNR=5.5 | | | | | | |
| URZ | | | | LR | LR | 12 37 11.9 | |
| | comp=Z,92nm,21.2s,baz=22,slow=46 | | | | | | |
| DRZ | Dome Shelter | 2.91 | 302 | PN | Pn | 12 35 58.9 | 0.0 |
| DRZ | | | | AML | AML | 12 36 39.9 | |
| DRZ | | | | AML | AML | 12 36 40.2 | |
| MTVZ | Mangateitei | 2.91 | 300 | PN | Pn | 12 35 58.8 | +0.1 |
| MTVZ | | | | AML | AML | 12 36 28.6 | |
| MTVZ | | | | AML | AML | 12 36 29.6 | |
| OTVZ | Oturere | 2.91 | 305 | ⇓PN | Pn | 12 35 58.7 | 0.0 |
| OTVZ | | | | AML | AML | 12 36 30.9 | |
| OTVZ | | | | AML | AML | 12 36 35.3 | |
| RITZ | Rihia Road | 2.91 | 310 | PN | Pn | 12 35 58.7 | 0.0 |
| RITZ | | | | AML | AML | 12 36 33.9 | |
| RITZ | | | | AML | AML | 12 36 43.4 | |
| FWVZ | Far West T-bar | 2.92 | 303 | PN | Pn | 12 35 58.7 | -0.4 |
| FWVZ | | | | AML | AML | 12 36 29.2 | |
| FWVZ | | | | AML | AML | 12 36 31.0 | |
| NGZ | Ngauruhoe | 2.94 | 304 | ⇓PN | Pn | 12 35 59.1 | -0.1 |
| NGZ | | | | AML | AML | 12 36 34.7 | |
| NGZ | | | | AML | AML | 12 36 36.5 | |
| ALRZ | Allen Road | 2.96 | 321 | PN | Pn | 12 35 59.0 | -0.2 |
| BHW | Baring Head | 2.96 | 258 | PN | Pn | 12 36 00.3 | +1.1 |
| BHW | | | | AML | AML | 12 36 40.2 | |
| BHW | | | | AML | AML | 12 36 43.5 | |
| WPVZ | Whakapapa | 2.96 | 303 | ⇓PN | Pn | 12 35 59.4 | 0.0 |
| WPVZ | | | | AML | AML | 12 36 35.0 | |
| WPVZ | | | | AML | AML | 12 36 44.1 | |
| COVZ | Chateau Observ | 2.96 | 304 | ⇑PN | Pn | 12 35 59.2 | -0.3 |
| KRVZ | Karewarewa | 2.96 | 306 | PN | Pn | 12 35 59.3 | -0.1 |
| KRVZ | | | | AML | AML | 12 36 19.7 | |
| KRVZ | | | | AML | AML | 12 36 25.5 | |
| PRRZ | Plateau Road | 2.98 | 322 | PN | Pn | 12 35 59.2 | -0.5 |
| WTVZ | West Tongariro | 2.98 | 305 | PN | Pn | 12 35 59.6 | -0.2 |
| WTVZ | | | | AML | AML | 12 36 34.9 | |
| WTVZ | | | | AML | AML | 12 36 47.2 | |
| WEL | Wellington | 3.02 | 261 | PN | Pn | 12 35 58.8 | -1.2 |
| WEL | | | | AML | AML | 12 36 32.2 | |
| WEL | | | | AML | AML | 12 36 39.8 | |
| PKVZ | Pokaka | 3.04 | 300 | PN | Pn | 12 36 00.6 | +0.1 |
| PKVZ | | | | AML | AML | 12 36 37.9 | |
| PKVZ | | | | AML | AML | 12 36 41.3 | |
| RRRZ | Republican Roa | 3.06 | 325 | PN | Pn | 12 35 59.8 | -0.9 |
| WMGZ | Waiomatatini S | 3.07 | 355 | PN | Pn | 12 36 00.6 | -0.2 |
| WAZ | Wanganui | 3.07 | 290 | ⇑PN | Pn | 12 36 01.5 | +0.6 |
| WAZ | | | | AML | AML | 12 36 33.4 | |
| WAZ | | | | AML | AML | 12 36 49.7 | |
| WPRZ | Whakapapatarin | 3.08 | 319 | PN | Pn | 12 36 00.4 | -0.6 |
| TWVZ | Taurewa | 3.10 | 305 | PN | Pn | 12 36 01.0 | -0.4 |
| HRRZ | Handcock Road | 3.12 | 322 | PN | Pn | 12 36 00.8 | -0.7 |
| TARZ | Mount Tarawera | 3.15 | 326 | PN | Pn | 12 36 01.4 | -0.6 |
| EDRZ | Edgecumbe | 3.17 | 330 | PN | Pn | 12 36 01.3 | -0.9 |
| EDRZ | | | | AML | AML | 12 36 39.6 | |
| HAZ | Te Kaha | 3.21 | 347 | PN | Pn | 12 36 01.9 | -0.8 |
| KUTZ | Kaahu Road | 3.27 | 316 | PN | Pn | 12 36 02.8 | -0.9 |
| MXZ | Matakaoa Point | 3.33 | 354 | AML | AML | 12 36 41.7 | |
| MXZ | | | | AML | AML | 12 36 41.9 | |
| MXZ | | | | AML | AML | 12 36 42.5 | |
| MXZ | | | | AML | AML | 12 36 46.7 | |
| TCW | Tory Channel | 3.38 | 263 | PN | Pn | 12 36 04.5 | -0.6 |
| TCW | | | | AML | AML | 12 36 42.7 | |
| TCW | | | | AML | AML | 12 36 42.8 | |
| OPRZ | Ohinepanea | 3.47 | 330 | PN | Pn | 12 36 05.0 | -1.3 |
| VRZ | Vera Road | 3.51 | 299 | PN | Pn | 12 36 06.4 | -0.5 |
| VRZ | | | | AML | AML | 12 36 52.5 | |
| TLZ | Tolley Road | 3.54 | 315 | PN | Pn | 12 36 06.3 | -1.1 |
| DUWZ | D'Urville Isla | 3.64 | 270 | PN | Pn | 12 36 08.4 | -0.3 |
| DUWZ | | | | AML | AML | 12 36 47.3 | |
| TUWZ | Tuamarina | 3.65 | 260 | PN | Pn | 12 36 08.0 | -0.8 |
| TUWZ | | | | AML | AML | 12 36 49.6 | |
| TUWZ | | | | AML | AML | 12 36 50.6 | |
| BSWZ | Blackbirch Sta | 3.74 | 256 | PN | Pn | 12 36 08.8 | -1.2 |
| HIZ | Hauiti | 3.81 | 307 | PN | Pn | 12 36 10.3 | -0.7 |
| PREZ | Palmer Road | 3.82 | 292 | PN | Pn | 12 36 12.1 | +0.8 |
| NEZ | North Egmont | 3.90 | 293 | PN | Pn | 12 36 13.2 | +0.9 |
| KHEZ | Kahui Hut | 3.94 | 292 | PN | Pn | 12 36 14.3 | +1.4 |
| NMEZ | Namu Road | 3.99 | 290 | PN | Pn | 12 36 14.5 | +1.0 |
| PKE | Pukeiti | 4.01 | 293 | PN | Pn | 12 36 14.4 | +0.7 |
| PKE | | | | AML | AML | 12 36 58.7 | |
| PKE | | | | AML | AML | 12 37 00.4 | |
| NNZ | Nelson | 4.05 | 264 | PN | Pn | 12 36 14.0 | -0.3 |
| NNZ | | | | AML | AML | 12 37 06.2 | |
| NWEZ | Newall Road | 4.06 | 292 | PN | Pn | 12 36 15.5 | +1.1 |
| KHZ | Kahutara | 4.17 | 247 | PN | Pn | 12 36 14.0 | -1.9 |
| KHZ | | | | AML | AML | 12 37 02.4 | |
| KHZ | | | | AML | AML | 12 37 09.0 | |
| THZ | Tophouse | 4.47 | 257 | PN | Pn | 12 36 20.2 | +0.1 |
| THZ | | | | AML | AML | 12 37 09.2 | |
| THZ | | | | AML | AML | 12 37 21.0 | |
| CTZ | Chatham Island | 4.48 | 131 | PN | Pn | 12 36 28.2 | +8.0 |
| MKAZ | Moumakai | 4.67 | 323 | PN | Pn | 12 36 22.4 | -0.4 |
| QRZ | Quartz Range | 4.70 | 269 | PN | Pn | 12 36 21.8 | -1.4 |
| QRZ | | | | AML | AML | 12 37 15.3 | |
| QRZ | | | | AML | AML | 12 37 15.3 | |
| QRZ | | | | AML | AML | 12 37 31.9 | |
| QRZ | | | | AML | AML | 12 37 31.9 | |
| KUZ | Kuaotunu | 4.75 | 329 | PN | Pn | 12 36 22.9 | -0.9 |
| ETAZ | East Tamaki Re | 4.91 | 322 | PN | Pn | 12 36 25.9 | -0.3 |
| WIAZ | Waiheke Island | 4.95 | 324 | PN | Pn | 12 36 26.2 | -0.5 |
| LTZ | Lake Taylor | 5.18 | 246 | PN | Pn | 12 36 30.6 | +0.7 |
| LTZ | | | | AML | AML | 12 37 24.4 | |
| LTZ | | | | AML | AML | 12 37 25.0 | |
| CRLZ | Canterbury Las | 5.27 | 237 | PN | Pn | 12 36 30.8 | -0.2 |
| DSZ | Denniston Nort | 5.28 | 258 | PN | Pn | 12 36 30.9 | -0.3 |
| DSZ | | | | AML | AML | 12 37 29.6 | |
| DSZ | | | | AML | AML | 12 37 37.2 | |
| DSZ | | | | AML | AML | 12 37 37.2 | |
| MQZ | McQueen's Vall | 5.31 | 236 | PN | Pn | 12 36 31.3 | -0.3 |
| MQZ | | | | AML | AML | 12 37 27.3 | |
| MQZ | | | | AML | AML | 12 37 29.3 | |
| WVZ | Waitaha Valley | 6.34 | 247 | PN | Pn | 12 36 46.5 | +0.7 |
| RPZ | Rata Peaks | 6.35 | 241 | PN | Pn | 12 36 46.2 | +0.3 |
| RPZ | | | | AML | AML | 12 37 52.0 | |
| RPZ | | | | AML | AML | 12 38 02.4 | |
| RPZ | Rata Peaks | 6.35 | 241 | Pn | Pn | 12 36 45.5 | -0.4 |
| | 2.4nm,0.3s,baz=99,slow=3.0,SNR=12 | | | | | | |
| RPZ | | | | Sn | Sn | 12 37 50.4 | -6.8 |
| | 14nm,0.3s,baz=16,slow=23,SNR=26 | | | | | | |
| LBZ | Lake Benmore | 7.20 | 238 | PN | Pn | 12 36 58.3 | +0.7 |
| FOZ | Fox Glacier | 7.22 | 245 | PN | Pn | 12 36 58.3 | +0.5 |
| ODZ | Otahua Downs | 7.24 | 232 | PN | Pn | 12 36 58.4 | +0.4 |
| TUZ | Tuapeka | 8.33 | 230 | PN | Pn | 12 37 13.7 | +0.7 |
| TUZ | | | | AML | AML | 12 39 45.4 | |
| ASAR | Alice Springs | 41.12 | 281 | P | P | 12 42 57.4 | +1.9 |
| | 0.5nm,0.7s,baz=125,slow=7.8,SNR=8.8 | | | | | | |
| ASAR | | | | PcP | PcP | 12 44 57.5 | +2.9 |
| | 0.2nm,0.7s,baz=126,slow=4.7,SNR=3.0 | | | | | | |
| WRA | Warramunga Arr | 43.04 | 285 | P | P | 12 43 11.7 | +0.5 |
| | 0.7nm,0.7s,baz=124,slow=8.3,SNR=8.6 | | | | | | |
| TORD | Torodi Ar. Bea | 152.25 | 186 | PKPbc | PKPab | 12 55 13.5 | -3.4 |
| | 0.6nm,0.6s,baz=146,slow=2.6,SNR=6.4 | | | | | | |
| TORD | | | | PKPab | PKiKP | 12 55 23.3 | +16 |
| | 1.4nm,0.8s,baz=165,slow=3.1,SNR=7.7 | | | | | | |

*ISK 03 12:42:37.8, 37.26N×28.20E, h5km, MD2.7*
*ISCJB 03 12:42:38.9±0.5, 37.24N±0.03×28.21E±0.05, h0km, Error ellipse: s-maj=5.9km s-min=3.3km az=154.3*
*DDA 03 12:42:38.3, 37.22N×28.25E, h7km, Md2.7*
*CSEM 03 12:42:39.0±0.3, 37.25N×28.23E, h2km, MD2.7, Error ellipse: s-maj=7.1km s-min=5.0km az=59.0, Mining explosion.*
**ISC 03 12:42:39.0±0.8, 37.27N±0.02×28.22E±0.03, h0km, n26, σ1.15/39, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.14 | 159 | ePG | Pg | 12 42 41.5 | -0.2 |
| YER | | | | eSG | Sg | 12 42 43.5 | 0.0 |
| YER | Yerkesik | 0.14 | 159 | ePg | Pg | 12 42 41.5 | -0.2 |
| YER | | | | eSg | Sg | 12 42 43.5 | 0.0 |
| AYDN | Tasoluk | 0.48 | 326 | i P | Pb | 12 42 49.9 | -0.4 |
| AYDN | | | | i S | Sb | 12 42 57.3 | -0.6 |
| AYDN | Tasoluk | 0.48 | 326 | P | Pb | 12 42 49.9 | -0.4 |
| AYDN | | | | S | Sb | 12 42 57.3 | -0.6 |
| TURN | Turunc | 0.50 | 142 | i P | Pg | 12 42 46.8 | -1.7 |
| TURN | | | | i S | Sg | 12 42 54.2 | -0.8 |
| TURN | Turunc | 0.50 | 142 | P | Pg | 12 42 46.8 | -1.7 |
| TURN | | | | S | Sg | 12 42 54.2 | -0.8 |
| DALY | Dalyan (Mu˜la | 0.57 | 142 | ePG | Pg | 12 42 50.2 | +0.3 |
| DALY | | | | eSG | Sb | 12 42 59.2 | -1.2 |
| DALY | Dalyan (Mu˜la | 0.57 | 142 | ePg | Pg | 12 42 50.2 | +0.3 |
| DALY | | | | eSg | Sb | 12 42 59.2 | -1.2 |
| BDRM | Kayabasi | 0.65 | 252 | i P | Pg | 12 42 50.5 | -1.0 |
| BDRM | Kayabasi | 0.65 | 252 | P | Pg | 12 42 50.5 | -1.0 |
| AYDB | Zeytinkoy-Aydi | 0.73 | 339 | ePG | Pg | 12 42 53.0 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 0.73 | 339 | ePg | Pg | 12 42 53.0 | +0.1 |
| BODT | Bodrum | 0.75 | 255 | ePG | Pg | 12 42 53.4 | -0.1 |
| BODT | Bodrum | 0.75 | 255 | ePg | Pg | 12 42 53.4 | -0.1 |
| DNZL | Cakiroluk | 0.78 | 57 | i P | Pg | 12 42 53.6 | -0.4 |
| DNZL | Cakiroluk | 0.78 | 57 | P | Pg | 12 42 53.6 | -0.4 |
| FETY | Fethiye | 0.94 | 132 | ePG | Pg | 12 42 57.2 | +0.3 |
| FETY | Fethiye | 0.94 | 132 | ePg | Pg | 12 42 57.2 | +0.3 |
| GOLH | Golhisar | 1.07 | 91 | i P | Pg | 12 42 57.8 | -1.7 |
| GOLH | Golhisar | 1.07 | 91 | P | Pg | 12 42 57.8 | -1.7 |
| MANT | Manisa | 1.25 | 12 | i P | Pg | 12 43 03.3 | +0.3 |
| MANT | | | | i S | Sb | 12 43 20.2 | -0.2 |
| MANT | Manisa | 1.25 | 12 | P | Pg | 12 43 03.3 | +0.3 |
| MANT | | | | S | Sb | 12 43 20.2 | -0.2 |
| KHAL | Karahalli | 1.49 | 42 | i P | Pn | 12 43 06.9 | -0.3 |
| KHAL | | | | i S | Sn | 12 43 28.5 | +1.1 |
| KHAL | Karahalli | 1.49 | 42 | P | Pn | 12 43 06.9 | -0.3 |
| KHAL | | | | S | Sn | 12 43 28.5 | +1.1 |
| AKAS | Kas | 1.52 | 132 | i P | Pg | 12 43 09.0 | +0.9 |
| AKAS | Kas | 1.52 | 132 | P | Pg | 12 43 09.0 | +0.9 |
| AKAS | | | | S | Sn | 12 43 32.9 | +4.9 |

**MAN 03 12:43:49, 9.44N×126.10E, h33km, mb4.3, ML3.2, MS3.0, 1C, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BUTP | Butuan | 0.66 | 225 | eP | Pn | 12 44 02.1 | 0.0 |
| BUTP | | | | eS | Sn | 12 44 13.0 | +1.7 |
| SCPH | Surigao | 0.69 | 300 | eP | Pb | 12 44 03.0 | +0.3 |
| SCPH | | | | eS | Sn | 12 44 15.0 | +2.9 |
| BIPH | Bislig | 1.27 | 168 | ⇑eP | Pn | 12 44 10.4 | -0.1 |
| BIPH | | | | eS | Pn | 12 44 10.4 | -0.1 |
| CGP | Cagayan de Oro | 1.69 | 235 | eP | Pn | 12 44 16.5 | +0.2 |
| BUKP | Musuan | 1.86 | 214 | eP | Pn | 12 44 20.4 | +1.9 |
| BUKP | | | | eS | Sn | 12 44 41.9 | +0.9 |

**DJA 03 12:55:35.7±0.4, 1°N±3°×12°2E±°, h46km±5km, M3.8/10, mb3.9/2, MLv3.8/10, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MRSI | Marisa | 0.12 | 227 | P | Pn | 12 55 43.4 | +0.3 |
| MRSI | | | | S | Sn | 12 55 50.6 | +2.2 |
| GTOI | Gorontalo | 0.98 | 86 | P | Pn | 12 55 45.0 | -8.1 |
| APSI | Ampana | 1.51 | 195 | P | Pn | 12 56 00.4 | +0.1 |
| APSI | | | | S | Sn | 12 56 19.2 | +0.4 |
| LUWI | Luwuk | 1.75 | 155 | P | Pn | 12 56 03.4 | -0.3 |
| LUWI | | | | S | Sn | 12 56 25.3 | +0.4 |
| KMSI | Cibinong | 1.95 | 90 | P | Pn | 12 56 06.6 | +0.3 |
| KMSI | | | | S | Sn | 12 56 30.2 | +0.5 |
| MPSI | Mapaga | 2.14 | 264 | P | Pn | 12 56 09.2 | +0.2 |
| MPSI | | | | S | Sn | 12 56 35.3 | +0.9 |
| PCI | Palu | 2.63 | 236 | P | Pn | 12 56 15.6 | -0.1 |
| TTSI | Tana Toraja | 4.21 | 212 | P | Pn | 12 56 37.2 | -0.2 |
| SPSI | Sidrap Palu | 5.03 | 207 | P | Pn | 12 56 48.7 | 0.0 |
| | 13nm,0.8s,0.1nm | | | | | | |

*MOS 03 13:04:10.5±2.0, 56.10N×113.55E, h6km, mb4.2/1, Error ellipse: s-maj=3.0km s-min=0.0km az=81.7*
**BYKL 03 13:04:10.8±0.2, 56.24N×113.56E, h6km±3km, 8C-5D, East of Lake Baykal**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SVKR | Severomuysk | 0.12 | 180 | ePG | Pg | 13 04 12.1 | -1.4 |
| SVKR | | | | e | | 13 04 13.2 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,13μm,1.4s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,50nm,0.5s | | | | | | |
| SVKR | Severomuysk | 0.12 | 180 | ⇑iPg | Pg | 13 04 12.1 | -1.4 |
| SVKR | | | | eSg | Sg | 13 04 13.5 | -1.8 |
| UKT | Uakit | 0.75 | 177 | ⇑iPg | Pg | 13 04 24.0 | -1.4 |
| UKT | | | | ePb | Pb | 13 04 25.9 | -0.6 |
| UKT | | | | eSg | Sg | 13 04 34.5 | -0.8 |
| UKT | | | | eSb | Sn | 13 04 39.6 | -0.3 |
| UKT | | | | max | | | |
| | comp=N,144nm,0.6s | | | | | | |
| UKT | | | | max | | | |
| | comp=N,223nm,0.3s | | | | | | |
| YOA | Uoyan | 1.03 | 265 | ⇑iPG | Pg | 13 04 29.0 | -1.7 |
| YOA | | | | i | | 13 04 44.1 | |
| YOA | | | | pmax | pmax | | |
| | comp=Z,193nm,0.3s | | | | | | |
| YOA | | | | smax | smax | | |
| | comp=E,849nm,0.5s | | | | | | |
| YOA | Uoyan | 1.03 | 265 | ⇓iPg | Pg | 13 04 29.5 | -1.2 |
| YOA | | | | eSg | Sg | 13 04 44.0 | -0.1 |
| YOA | | | | Pmax | | | |
| | comp=E,194nm,0.3s | | | | | | |
| YOA | | | | Smax | | | |
| | comp=E,842nm,0.5s | | | | | | |
| NLYR | Nelyaty | 1.22 | 77 | ePG | Pg | 13 04 32.5 | -1.7 |
| NLYR | | | | e | | 13 04 49.0 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,259nm,0.7s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,399nm,1.2s | | | | | | |
| NLYR | Nelyaty | 1.22 | 77 | ⇓iPg | Pg | 13 04 32.5 | -1.7 |
| NLYR | | | | ePb | Pn | 13 04 34.6 | +0.2 |
| NLYR | | | | eSg | Sg | 13 04 49.0 | -1.1 |
| NLYR | | | | eSb | Sn | 13 04 52.7 | +1.4 |
| NLYR | | | | max | | | |
| | comp=N,249nm,0.5s | | | | | | |
| NLYR | | | | max | | | |
| | comp=N,399nm,1.1s | | | | | | |
| KMO | Kumora | 1.37 | 256 | ePG | Pn | 13 04 35.4 | -1.1 |
| KMO | | | | e | | 13 04 54.4 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,30nm,0.2s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,664nm,0.6s | | | | | | |
| KMO | Kumora | 1.37 | 256 | ⇓iPg | Pn | 13 04 35.2 | -1.3 |
| KMO | | | | ePb | Pg | 13 04 37.0 | -0.1 |
| KMO | | | | eSg | Sb | 13 04 54.5 | -0.1 |
| KMO | | | | eSb | Sn | 13 04 57.2 | +2.2 |
| KMO | | | | max | | | |
| | comp=N,61nm,0.3s | | | | | | |
| KMO | | | | max | | | |
| | comp=N,663nm,1.0s | | | | | | |
| BOD | Bodaibo | 1.60 | 9 | ⇑iPg | Pn | 13 04 39.1 | -0.5 |
| BOD | | | | eSg | Sn | 13 05 00.6 | 0.0 |
| BOD | | | | eSb | Sg | 13 05 02.5 | +0.2 |
| BOD | | | | Pmax | | | |
| | comp=N,129nm,0.3s | | | | | | |
| BOD | | | | max | | | |
| | comp=N,198nm,0.3s | | | | | | |
| YLYR | Ulyunkhan | 1.93 | 226 | ePN | Pn | 13 04 45.1 | +0.9 |
| YLYR | | | | e | | 13 05 10.8 | |
| YLYR | | | | pmax | pmax | | |
| | comp=Z,30nm,0.1s | | | | | | |
| YLYR | | | | smax | smax | | |
| | comp=E,292nm,0.6s | | | | | | |
| YLYR | Ulyunkhan | 1.93 | 226 | ePg | Pn | 13 04 44.7 | +0.5 |
| YLYR | | | | e | | 13 04 47.8 | |
| YLYR | | | | i Sg | Sb | 13 05 11.0 | +0.2 |
| YLYR | | | | Pmax | | | |
| | comp=E,30nm,0.2s | | | | | | |
| YLYR | | | | Smax | | | |
| | comp=E,287nm,0.2s | | | | | | |
| NIZ | Nizh Angarsk | 2.31 | 260 | ePN | Pn | 13 04 50.0 | +0.7 |
| NIZ | | | | e | | 13 04 53.3 | |
| NIZ | | | | eS | Sn | 13 05 19.4 | +1.4 |
| NIZ | | | | e | | 13 05 23.9 | |
| NIZ | | | | pmax | pmax | | |
| | comp=Z,26nm,0.4s | | | | | | |
| NIZ | | | | smax | smax | | |
| | comp=N,152nm,0.4s | | | | | | |
| NIZ | Nizh Angarsk | 2.31 | 260 | ⇑iPn | Pn | 13 04 50.0 | +0.7 |
| NIZ | | | | ePg | Pb | 13 04 51.9 | -0.9 |
| NIZ | | | | eSg | Sb | 13 05 20.9 | -0.6 |
| NIZ | | | | e | | 13 05 24.0 | |
| NIZ | | | | Pmax | | | |
| | comp=N,27nm,0.6s | | | | | | |
| NIZ | | | | max | | | |
| | comp=N,154nm,0.4s | | | | | | |
| CRS | Chara | 2.69 | 74 | ePN | Pb | 13 04 59.6 | +0.2 |
| CRS | | | | e | | 13 05 34.5 | |
| CRS | | | | pmax | pmax | | |
| | comp=Z,73nm,0.5s | | | | | | |
| CRS | | | | smax | smax | | |
| | comp=N,103nm,0.5s | | | | | | |
| CRS | Chara | 2.69 | 74 | ePn | Pn | 13 04 54.8 | +0.2 |
| CRS | | | | ⇑iPg | Pb | 13 04 59.7 | +0.3 |
| CRS | | | | eSg | Sb | 13 05 34.6 | +2.0 |
| CRS | | | | Pmax | | | |
| | comp=N,127nm,0.6s | | | | | | |
| CRS | | | | Smax | | | |
| | comp=N,193nm,1.4s | | | | | | |
| SYVR | Suvo | 3.30 | 220 | ⇓iPn | Pn | 13 05 03.1 | +0.1 |
| SYVR | | | | ePg | Pb | 13 05 09.6 | -0.2 |
| SYVR | | | | eSg | Sb | 13 05 52.6 | +2.3 |
| SYVR | | | | Pmax | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=N,13nm,0.7s | | | | | | |
| SYVR | | | | Smax | | | |
| | comp=N,145nm,1.5s | | | | | | |
| **KHNR** | **Khani** | **3.62** | **76** | *e*Pn | Pn | 13 05 08.1 | +0.7 |
| KHNR | | | | *e*Pg | Pb | 13 05 15.6 | +0.4 |
| KHNR | | | | *e*Sg | Sb | 13 06 02.8 | +3.5 |
| **TUP** | **Tupik** | **4.08** | **114** | ⇑*i*PN | Pn | 13 05 13.4 | -0.3 |
| TUP | | | | *e* | | 13 05 24.0 | |
| TUP | | | | *e*S | Sn | 13 06 00.7 | -1.1 |
| TUP | | | | *e* | | 13 06 16.6 | |
| TUP | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| TUP | | | | smax | smax | | |
| | comp=N,122nm,0.7s | | | | | | |
| **TUP** | **Tupik** | **4.08** | **114** | ⇑*i*Pn | Pn | 13 05 13.4 | -0.3 |
| TUP | | | | *e*Pg | Pb | 13 05 23.8 | +0.8 |
| TUP | | | | *e*Sn | Sn | 13 05 58.8 | -3.0 |
| TUP | | | | *i* Sg | Sb | 13 06 17.0 | +4.4 |
| TUP | | | | *e* | | 13 06 21.5 | |
| TUP | | | | Pmax | | | |
| | comp=N,16nm,0.2s | | | | | | |
| TUP | | | | max | | | |
| | comp=N,121nm,0.6s | | | | | | |
| **CIT** | **Chita** | **4.23** | **180** | *e*Sg | Sg | 13 06 23.3 | -3.4 |
| CIT | | | | Smax | | | |
| | comp=N,89nm,0.3s | | | | | | |
| **OGRR** | **Ongureny** | **4.31** | **235** | *e* | Pb | 13 05 22.0 | -5.0 |
| OGRR | | | | *e* | | 13 05 26.3 | |
| OGRR | | | | *e* | | 13 06 06.0 | |
| OGRR | | | | *e*Sg | Sb | 13 06 23.8 | +4.5 |
| OGRR | | | | max | | | |
| | comp=N,5.0nm,0.6s | | | | | | |
| OGRR | | | | Smax | | | |
| | comp=N,42nm,0.5s | | | | | | |
| **YKLR** | **Yuktali** | **4.51** | **82** | *e*Pn | Pn | 13 05 19.6 | 0.0 |
| YKLR | | | | *e* | | 13 05 25.1 | |
| YKLR | | | | ⇓*i*Pg | Pb | 13 05 31.1 | +0.8 |
| YKLR | | | | *e* | | 13 05 53.8 | |
| YKLR | | | | *e*Sg | Sg | 13 06 30.3 | -5.3 |
| **ZRHB** | **Zarechye** | **5.26** | **228** | Sg | Sg | 13 06 54.1 | -5.5 |
| ZRHB | | | | Smax | | | |
| | comp=N,177nm,1.2s | | | | | | |
| **TRG** | **Tyrgan** | **5.46** | **233** | *e*Sg | Sb | 13 06 59.0 | +6.7 |
| TRG | | | | Smax | | | |
| | comp=N,23nm,0.4s | | | | | | |
| **UUDB** | **Ulan-Yde** | **5.59** | **221** | *e*Sg | Sg | 13 07 03.6 | -6.7 |
| UUDB | | | | Smax | | | |
| | comp=N,91nm,1.3s | | | | | | |
| **KAB** | **Kabansk** | **5.84** | **227** | Sg | Sg | 13 07 11.6 | -6.6 |
| KAB | | | | Smax | | | |
| | comp=N,179nm,0.8s | | | | | | |
| **HRMR** | **Khuramsha** | **6.04** | **223** | *e*Sg | Sg | 13 07 18.8 | -6.1 |
| HRMR | | | | Smax | | | |
| | comp=N,115nm,0.6s | | | | | | |
| **IENR** | **Iengra** | **6.30** | **85** | *e*Sg | Sg | 13 07 26.2 | -7.0 |
| **LSTR** | **Listvyanka** | **6.75** | **233** | *e*Sg | Sg | 13 07 40.1 | -7.3 |
| **TLY** | **Talaya** | **7.42** | **236** | Sg | Sg | 13 07 59.5 | -9.4 |
| TLY | | | | Smax | | | |
| | comp=N,6.0nm,0.3s | | | | | | |
| **ARS** | **Arshan** | **7.85** | **241** | *e*Sg | Sg | 13 08 13.1 | -10 |
| ARS | | | | *e* | | 13 08 22.4 | |
| ARS | | | | Smax | | | |
| | comp=N,52nm,0.8s | | | | | | |
| **ZAK** | **Zakamensk** | **8.50** | **231** | *e*Sg | Sg | 13 08 33.3 | -10 |
| ZAK | | | | *e* | | 13 08 38.8 | |
| **MOY** | **Mondy** | **8.71** | **244** | *e*Sg | Sg | 13 08 41.1 | -9.3 |
| MOY | | | | Smax | | | |
| | comp=N,30nm,1.4s | | | | | | |
| **ORL** | **Orlik** | **8.84** | **251** | *e* | | 13 08 40.7 | |
| ORL | | | | *e*Sg | Sg | 13 08 44.7 | -10 |
| ORL | | | | Smax | | | |
| | comp=N,16nm,1.4s | | | | | | |
| **UTTA** | **Uttaradit** | **39.67** | **200** | P | P | 13 11 42.4 | -1.0 |
| | comp=N,3.3nm,1.2s,comp=N,46nm | | | | | | |

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*IDC **03** 13:04:39.9±0.5, 5°.82S×127°.44E, h0km, mb4.6/24, mb1 4.7/28, mb1mx4.6/38, mbtmp4.7/28, ML4.9/4, MS4.2/28, Ms1 4.2/28, ms1mx4.1/41, Error ellipse: s-maj=14.0km s-min=10.6km az=60.0*

*BJI **03** 13:04:40.8, 5°.80S×127°.56E, h12km, mb4.7/49, mB5.0/42, Ms4.6/41, Ms7 4.3/41*

*ISCJB **03** 13:04:40.7±0.7, 5°.84S±0°.02×127°.50E±0°.02, h15km±5km, mb4.8/55, MS4.1/22, Error ellipse: s-maj=3.2km s-min=3.0km az=14.3*

*KLM **03** 13:04:43.0, 5°.83S×127°.67E, h23km, mb5.1, MS6.1*

*MOS **03** 13:04:43.7±1.3, 5°.76S×127°.43E, h33km, mb5.1/18, Error ellipse: s-maj=11.5km s-min=7.3km az=116.2*

*GCMT **03** 13:04:43.0±0.1, 5°.76S×127°.39E, h20km, MW5.2/94, Moment Tensor Solution. s69,c105; s94,c173; Duration: 1s0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.24±.02; $M_{\theta\theta}$-0.80±.01; $M_{\phi\phi}$1.04±.02; $M_{r\theta}$0.00±.03; $M_{\theta\phi}$-0.08±.01; $M_{\phi r}$-0.00±.03; Best double couple: $M_0$0.92300×$10^{17}$ NP1:$\phi_s$313.00000°, δ90.00000°, λ-180.00000°. NP2:$\phi_s$223.00000°, δ90.00000°, λ0.00000°. Principal axes: T 1.0430, Plg0.0000°, Azm88.0000°; N -0.2430, Plg90.0000°, Azm343.0000°; P -0.8040, Plg0.0000°, Azm178.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **03** 13:04:43.0±0.8, 5°.81S×127°.50E, h19km±5km, mb5.0/32 Error ellipse: s-maj=5.7km s-min=4.6km az=50.0*

*DJA **03** 13:04:43.3±0.2, 6°S±2°×12°8E±°, h10km, M5.3/37, mb5.5/37, mB5.7/35, MLv5.5/26, Mw(mB)5.2/35, Mwp5.5/2*

*AUST **03** 13:04:45.4±0.3, 5°.93S×127°.54E, h43km, Error ellipse: s-maj=0.7km s-min=0.6km az=25.0*

**ISC 03 13:04:44.0**±0.4, **5°.84S**±0°.03×**127°.49E**±0°.04, **h24**km±2km, **h24**km**:pP-P, n262,** σ1s**53**/302, **mb4.8**/55, **MS4.2**/22, **13C-9D, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **2.25** | **18** | P | **Pn** | **13 05 18.8** | **-1.0** |
| **NLAI** | **Namlea** | **2.61** | **352** | P | **Pn** | **13 05 23.5** | **-1.3** |
| **BNDI** | **Bandanaira** | **2.74** | **62** | P | **Pn** | **13 05 24.6** | **-2.0** |
| BNDI | | | | S | **Sn** | **13 05 59.2** | **+0.2** |
| **MSAI** | **Masohi** | **2.86** | **30** | P | **Pn** | **13 05 27.2** | **-1.0** |
| MSAI | | | | S | **Sn** | **13 06 01.2** | **-0.8** |
| **SANI** | **Sanana** | **4.05** | **338** | P | **Pn** | **13 05 44.6** | **0.0** |
| SANI | | | | S | **Sn** | **13 06 30.6** | **-0.6** |
| **SAUI** | **Saumlaki** | **4.35** | **120** | P | **Pn** | **13 05 49.8** | **+1.1** |
| SAUI | | | | S | **Sn** | **13 06 40.9** | **+2.3** |
| **SAUI** | **Saumlaki** | **4.35** | **120** | *e*Pn | **Pn** | **13 05 51.0** | **+2.3** |
| **SOEI** | **Soe** | **5.03** | **219** | P | **Pn** | **13 05 59.9** | **+1.7** |
| | baz=5.0,SNR=39 | | | | | | |
| **SOEI** | **Soe** | **5.03** | **219** | P | **Pn** | **13 05 59.9** | **+1.7** |
| | 654nm,0.7s,6µm3.5nm | | | | | | |
| SOEI | | | | S | **Sn** | **13 06 58.7** | **+3.0** |
| | 654nm,0.7s,6µm3.5nm | | | | | | |
| **SOEI** | **Soe** | **5.03** | **219** | *e*Pn | **Pn** | **13 05 59.8** | **+1.5** |
| **LBMI** | **Labuha** | **5.17** | **0** | P | **Pn** | **13 05 59.8** | **-0.1** |
| | 762nm,0.9s,8µm6.6nm | | | | | | |
| LBMI | | | | S | **Sn** | **13 06 58.4** | **-0.4** |
| | 762nm,0.9s,8µm6.6nm | | | | | | |
| **KDI** | **Kendari** | **5.20** | **291** | P | **Pn** | **13 05 58.5** | **-1.8** |
| | 162nm,1.1s,2µm0.9nm | | | | | | |
| **FAKI** | **Fak Fak** | **5.56** | **59** | P | **Pn** | **13 06 05.8** | **+0.4** |
| | baz=5.6,SNR=234 | | | | | | |
| **FAKI** | **Fak Fak** | **5.56** | **59** | P | **Pn** | **13 06 05.9** | **+0.4** |
| | 2µm,0.7s,18µm21µm4.5nm | | | | | | |
| FAKI | | | | S | **Sn** | **13 07 09.2** | **+0.5** |
| | 2µm,0.7s,18µm21µm4.5nm | | | | | | |
| **FAKI** | **Fak Fak** | **5.56** | **59** | *e*Pn | **Pn** | **13 06 05.7** | **+0.3** |
| **BATI** | **Baumata** | **5.76** | **221** | Pn | **Pn** | **13 06 09.8** | **+1.6** |
| | 361nm,0.3s,baz=84,slow=2.2,SNR=250 | | | | | | |
| BATI | | | | LR | LR | 13 08 03.1 | |
| | comp=Z,6µm,19.9s,baz=22,slow=35 | | | | | | |
| **BATI** | **Baumata** | **5.76** | **221** | P | **Pn** | **13 06 09.7** | **+1.6** |
| | 886nm,0.5s,8µm3.2nm | | | | | | |
| BATI | | | | S | **Sn** | **13 07 16.4** | **+2.9** |
| | 886nm,0.5s,8µm3.2nm | | | | | | |
| **MMRI** | **Maumere** | **5.90** | **242** | P | **Pn** | **13 06 09.7** | **-0.4** |
| | 594nm,1.0s,6µm2.2nm | | | | | | |
| **MMRI** | **Maumere** | **5.90** | **242** | *e*Pn | **Pn** | **13 06 08.9** | **-1.1** |
| **SIJI** | **Sorong** | **6.21** | **38** | Pn | **Pn** | **13 06 14.5** | **+0.1** |
| | 40nm,0.3s,baz=198,slow=7.4,SNR=131 | | | | | | |
| SIJI | | | | LR | LR | 13 08 53.9 | |
| | comp=Z,6µm,18.9s,baz=206,slow=41 | | | | | | |
| **SWI** | **Sorong** | **6.21** | **37** | P | **Pn** | **13 06 14.5** | **+0.2** |
| | baz=6.3,SNR=94 | | | | | | |
| **SWI** | **Sorong** | **6.21** | **37** | P | **Pn** | **13 06 14.2** | **-0.1** |
| | 1µm,1.1s,10µm4.1nm | | | | | | |
| SWI | | | | S | **Sn** | **13 07 24.5** | **-0.2** |
| | 1µm,1.1s,10µm4.1nm | | | | | | |
| **EDFI** | **Ende, Flores** | **6.43** | **243** | P | **Pn** | **13 06 19.0** | **+1.5** |
| | 273nm,0.7s,9µm1.3nm | | | | | | |
| **TNTI** | **Ternate** | **6.57** | **359** | P | **Pn** | **13 06 19.0** | **-0.2** |
| | 463nm,0.9s,6µm10µm1.7nm | | | | | | |
| TNTI | | | | S | **Sn** | **13 07 33.1** | **-0.3** |
| | 463nm,0.9s,6µm10µm1.7nm | | | | | | |
| **TNTI** | **Ternate** | **6.57** | **359** | *e*Pn | **Pn** | **13 06 19.9** | **+0.8** |
| **LUWI** | **Luwuk** | **6.69** | **315** | P | **Pn** | **13 06 21.1** | **+0.2** |
| | 561nm,1.0s,7µm2.9nm | | | | | | |
| LUWI | | | | S | **Sn** | **13 07 36.9** | **+0.4** |
| | 561nm,1.0s,7µm2.9nm | | | | | | |
| **LUWI** | **Luwuk** | **6.69** | **315** | *e*Pn | **Pn** | **13 06 19.4** | **-1.5** |
| **BSSI** | **Bau Bau, Buton** | **6.96** | **267** | P | **Pn** | **13 06 25.0** | **+0.3** |
| | 1µm,1.0s,8µm3.3nm | | | | | | |
| **KMSI** | **Cibinong** | **7.27** | **331** | P | **Pn** | **13 06 28.8** | **0.0** |
| | 698nm,1.1s,6µm3.6nm | | | | | | |
| **BKSI** | **Bulukumba** | **7.35** | **274** | P | **Pn** | **13 06 30.1** | **+0.2** |
| | 721nm,0.9s,5µm2.1nm | | | | | | |
| **APSI** | **Ampana** | **7.61** | **310** | P | **Pn** | **13 06 33.5** | **0.0** |
| | 295nm,0.9s,4µm2.0nm | | | | | | |
| **KAPI** | **Kappang** | **7.74** | **276** | Pn | **Pn** | **13 06 34.8** | **-0.5** |
| | 26nm,0.3s,baz=115,slow=8.7,SNR=84 | | | | | | |
| KAPI | | | | Sn | **Sn** | **13 08 00.7** | **-1.6** |
| | baz=142,slow=18,SNR=2.4 | | | | | | |
| KAPI | | | | LR | LR | 13 09 33.4 | |
| | comp=Z,11µm,19.0s,baz=66,slow=38 | | | | | | |
| **KAPI** | **Kappang** | **7.74** | **276** | Pn | **Pn** | **13 06 35.2** | **-0.1** |
| | 2µm,0.7s,SNR=24 | | | | | | |
| **KAPI** | **Kappang** | **7.74** | **276** | *e*P | **Pn** | **13 06 35.1** | **-0.3** |
| | 350nm,0.8s | | | | | | |
| KAPI | | | | Sn | **Sn** | **13 08 00.7** | **-1.6** |
| **MTN** | **Manton Dam** | **7.84** | **153** | P | **Pn** | **13 06 35.7** | **-0.9** |
| | baz=7.8,SNR=135 | | | | | | |
| **MTN** | **Manton Dam** | **7.84** | **153** | *e*Pn | **Pn** | **13 06 36.4** | **-0.2** |
| **SPSI** | **Sidrap Palu** | **7.91** | **283** | P | **Pn** | **13 06 38.2** | **+0.6** |
| | 136nm,0.8s,2µm0.4nm | | | | | | |
| **RKPI** | **Ransiki, Papua** | **7.94** | **57** | P | **Pn** | **13 06 38.1** | **0.0** |
| | 927nm,0.9s,9µm3.1nm | | | | | | |
| **WSI** | **Waingapu** | **8.07** | **241** | P | **Pn** | **13 06 41.3** | **+1.4** |
| | 913nm,0.8s,9µm | | | | | | |
| **BASI** | **Baing, Sumba** | **8.11** | **237** | P | **Pn** | **13 06 42.0** | **+1.6** |
| | 680nm,1.1s,6µm | | | | | | |
| **TTSI** | **Tana Toraja** | **8.13** | **290** | P | **Pn** | **13 06 41.0** | **+0.3** |
| | 111nm,0.8s,1µm | | | | | | |
| **MRSI** | **Marisa** | **8.37** | **318** | P | **Pn** | **13 06 44.3** | **+0.4** |
| | 151nm,1.0s,8µm | | | | | | |
| **KDU** | **Kakadu** | **8.40** | **144** | P | **Pn** | **13 06 43.0** | **-1.4** |
| | baz=8.3,SNR=116 | | | | | | |
| **WBSI** | **Waikabubak, Su** | **8.87** | **244** | P | **Pn** | **13 06 52.1** | **+1.3** |
| | 195nm,1.2s,2µm | | | | | | |
| **PCI** | **Palu** | **9.07** | **302** | P | **Pn** | **13 06 53.9** | **+0.3** |
| | 221nm,0.5s,3µm | | | | | | |
| **SGSI** | **Sangihe** | **9.66** | **348** | P | **Pn** | **13 07 01.7** | **0.0** |
| | 1µm,0.8s,11µm | | | | | | |
| **MPSI** | **Mapaga** | **9.75** | **309** | P | **Pn** | **13 07 03.3** | **+0.4** |
| | 79nm,0.6s,898nm | | | | | | |
| **KNRA** | **Kununurra** | **9.86** | **173** | P | **Pn** | **13 07 02.2** | **-2.2** |
| | baz=9.8,SNR=805 | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **10.90** | **254** | P | **Pn** | **13 07 20.0** | **+1.3** |
| | 169nm,0.9s,2µm | | | | | | |
| **SRBI** | **Singaraja** | **12.38** | **259** | P | **Pn** | **13 07 39.7** | **+0.7** |
| | 135nm,0.9s | | | | | | |
| **MATI** | **Mati** | **12.76** | **354** | *e*P | **Pn** | **13 07 44.0** | **-0.1** |
| **BBKI** | **Banjar Baru** | **12.82** | **280** | P | **Pn** | **13 07 46.0** | **+1.0** |
| | 80nm,1.4s,2µm | | | | | | |
| **GENI** | **Genyem** | **13.05** | **76** | P | **Pn** | **13 07 48.5** | **+0.4** |
| **MMPI** | **Merauke** | **13.06** | **102** | P | **Pn** | **13 07 48.7** | **+0.5** |
| | baz=13,SNR=4.5 | | | | | | |
| **CTBH** | **Cotabato--PC H** | **13.37** | **346** | ⇑*i*P | **Pn** | **13 07 51.8** | **-0.6** |
| **JAGI** | **Jajag, Banyuwa** | **13.48** | **258** | P | **Pn** | **13 07 55.6** | **+1.6** |
| | baz=14,SNR=11 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **13.48** | **258** | *e*Pn | **Pn** | **13 07 55.2** | **+1.1** |
| **JAY** | **Jayapura** | **13.59** | **76** | P | **Pn** | **13 07 56.3** | **+0.8** |
| | baz=14,SNR=9.4 | | | | | | |
| **BUKP** | **Musuan** | **13.84** | **350** | *e*P | **Pn** | **13 07 57.7** | **-1.2** |
| **MYLDM** | **Lahad Datu** | **14.15** | **320** | ⇓P | **Pn** | **13 08 03.6** | **+0.5** |
| **MYLDM** | **Lahad Datu** | **14.15** | **320** | *e*Pn | P | 13 08 07.0 | -3.5 |
| **BUTP** | **Butuan** | **14.82** | **353** | *e*P | **Pn** | **13 08 13.5** | **+1.1** |
| **PALU** | **Palau** | **14.83** | **28** | P | **Pn** | **13 08 13.2** | **+0.7** |
| | baz=15,SNR=4.5 | | | | | | |
| **SDKM** | **Sandakan** | **15.35** | **318** | ⇓P | **Pn** | **13 08 20.6** | **+1.2** |
| **WRAB** | **Tennant Creek** | **15.52** | **155***c* | *i*P | Pn | 13 08 16.2 | -5.3 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,207nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.52** | **155** | Pn | Pn | 13 08 16.6 | -4.9 |
| | comp=Z,781nm,1.5s,SNR=35 | | | | | | |
| **WRAB** | **Tennant Creek** | **15.52** | **155** | *e*P | Pn | 13 08 15.9 | -5.6 |
| | comp=Z,86nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.52** | **155** | Pn | Pn | 13 08 15.4 | -6.2 |
| | comp=Z,3.9nm,0.3s,baz=326,slow=13,SNR=94 | | | | | | |
| WRA | | | | Sn | Sn | 13 10 55.2 | -18 |
| | comp=Z,0.8nm,0.3s,baz=328,slow=22,SNR=3.5 | | | | | | |
| WRA | | | | LR | LR | 13 14 47.3 | |
| | comp=Z,1µm,21.5s,baz=335,slow=39 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.52** | **155** | *i* P | Pn | 13 08 15.0 | -6.6 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,28nm,0.7s | | | | | | |
| **KKM** | **Kota Kinabalu** | **16.31** | **316** | ⇑P | **Pn** | **13 08 31.3** | **-0.5** |
| **KKM** | **Kota Kinabalu** | **16.31** | **316** | *e*Pn | **P** | **13 08 35.2** | **+0.7** |
| | comp=Z,136nm,1.3s | | | | | | |
| **KDM** | **Kudat** | **16.54** | **320** | ⇑P | **Pn** | **13 08 34.5** | **0.0** |
| **BTM** | **Bintulu** | **16.95** | **302** | ⇓P | **Pn** | **13 08 40.0** | **+0.1** |
| **UGM** | **Wanagama** | **16.97** | **262** | P | **Pn** | **13 08 40.2** | **+0.2** |
| | baz=17 | | | | | | |
| **SMRI** | **Semarang** | **16.98** | **265** | P | **P** | **13 08 41.4** | **-0.5** |
| | baz=17,SNR=3.7 | | | | | | |
| **SMRI** | **Semarang** | **16.98** | **265** | *e*Pn | **Pn** | **13 08 40.9** | **+0.7** |
| | comp=Z,308nm,1.3s | | | | | | |
| **MBWA** | **Marble Bar** | **16.98** | **206** | *e*Pn | **Pn** | **13 08 36.5** | **-3.7** |
| | comp=Z,50nm,0.9s | | | | | | |
| **SBUM** | **Sibu** | **17.33** | **298** | ⇓P | **P** | **13 08 46.1** | **+0.3** |
| **SBUM** | **Sibu** | **17.33** | **298** | *e*P | **Pn** | **13 08 44.9** | **+0.4** |
| | comp=Z,68nm,1.1s | | | | | | |
| **COEN** | **Coen** | **17.43** | **119** | P | **Pn** | **13 08 43.9** | **-1.9** |
| | baz=17,SNR=20 | | | | | | |
| **COEN** | **Coen** | **17.43** | **119** | *e*Pn | **Pn** | **13 08 43.7** | **-2.1** |
| | comp=Z,77nm,0.8s | | | | | | |
| **KSM** | **Kuching** | **18.63** | **292** | P | **P** | **13 08 59.9** | **-0.2** |
| | baz=19,SNR=17 | | | | | | |
| **KSM** | **Kuching** | **18.63** | **292** | ⇑P | **P** | **13 08 60.0** | **-0.2** |
| **KSM** | **Kuching** | **18.63** | **292** | *e*P | **P** | **13 08 59.6** | **-0.5** |
| | comp=Z,227nm,1.9s | | | | | | |
| **ASAR** | **Alice Springs** | **18.77** | **161** | P | **P** | **13 08 59.5** | **-2.2** |
| | comp=Z,4.8nm,0.3s,baz=332,slow=9.0,SNR=227 | | | | | | |
| ASAR | | | | S | Sn | 13 12 15.4 | -16 |
| | comp=Z,0.3nm,0.3s,baz=342,slow=31,SNR=2.7 | | | | | | |
| ASAR | | | | LR | LR | 13 16 24.3 | |
| | comp=Z,448nm,19.5s,baz=332,slow=38 | | | | | | |
| **QIS** | **Mount Isa** | **18.78** | **142** | P | **P** | **13 08 59.8** | **-1.9** |
| | baz=19,SNR=32 | | | | | | |
| **AS01** | **Alice Springs** | **18.79** | **161** | *e*P | **P** | **13 08 59.1** | **-2.8** |
| **AS03** | **Alice Springs** | **18.79** | **161** | P | **P** | **13 08 58.9** | **-2.9** |
| | baz=19 | | | | | | |
| **AS02** | **Alice Springs** | **18.80** | **161** | P | **P** | **13 08 59.0** | **-2.9** |
| | baz=19 | | | | | | |
| **WRKA** | **Warakurna** | **19.11** | **178** | P | **P** | **13 09 03.1** | **-2.2** |
| | baz=19,SNR=175 | | | | | | |
| **LEM** | **Lembang** | **19.77** | **266** | P | **P** | **13 09 12.8** | **0.0** |
| | comp=Z,2.0nm,0.3s,baz=43,slow=6.3,SNR=17 | | | | | | |
| LEM | | | | LR | LR | 13 17 58.6 | |
| | comp=Z,1µm,18.3s,baz=40,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **19.82** | **102** | P | **Pn** | **13 09 14.2** | **-0.6** |
| | comp=Z,3.8nm,0.3s,baz=319,slow=3.2,SNR=30 | | | | | | |
| PMG | | | | LR | LR | 13 18 39.1 | |
| | comp=Z,1µm,20.6s,baz=266,slow=42 | | | | | | |
| **PMG** | **Port Moresby** | **19.82** | **102***c* | *i*P | **Pn** | **13 09 15.4** | **+0.6** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,1µm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **19.82** | **102** | P | **Pn** | **13 09 16.6** | **+1.8** |
| | baz=20,SNR=20 | | | | | | |
| **PMG** | **Port Moresby** | **19.82** | **102** | *e*P | **Pn** | **13 09 16.1** | **+1.3** |
| | comp=Z,260nm,0.9s | | | | | | |
| **MEEK** | **Meekatharra** | **22.35** | **201** | P | **P** | **13 09 40.1** | **-0.4** |
| | baz=22,SNR=29 | | | | | | |
| **CTA** | **Charters Tower** | **23.09** | **130** | P | **P** | **13 09 49.0** | **+0.7** |
| | comp=Z,19nm,0.7s,baz=305,slow=12,SNR=22 | | | | | | |
| CTA | | | | S | **S** | **13 14 01.3** | **+3.0** |
| | comp=Z,6.7nm,0.9s,baz=238,slow=15,SNR=2.5 | | | | | | |
| CTA | | | | LR | LR | 13 19 27.1 | |
| | comp=Z,1µm,19.6s,baz=314,slow=38 | | | | | | |
| **CTAO** | **Charters Tower** | **23.09** | **130** | *e*P | **P** | **13 09 48.4** | **+0.1** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,48nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **23.09** | **130** | *e*P | **P** | **13 09 48.4** | **+0.1** |
| | comp=Z,48nm,1.0s | | | | | | |
| **BTDF** | **Bukit Timah Da** | **24.73** | **286** | P | **P** | **13 10 04.6** | **+0.6** |
| | baz=25,SNR=4.6 | | | | | | |
| **MYKOM** | **Kota Tinggi** | **24.79** | **287** | ⇑P | **P** | **13 10 05.0** | **+0.6** |
| **MYKOM** | **Kota Tinggi** | **24.79** | **287** | *e*P | **P** | **13 10 03.9** | **-0.5** |
| | comp=Z,82nm,1.0s | | | | | | |
| **FORT** | **Forrest** | **24.82** | **179** | P | **P** | **13 10 05.0** | **+0.6** |
| | baz=25,SNR=19 | | | | | | |
| **FORT** | **Forrest** | **24.82** | **179** | *e*P | **P** | **13 10 03.5** | **-0.9** |
| | comp=Z,130nm,0.7s | | | | | | |
| **KGM** | **Kluang** | **25.36** | **287** | ⇓P | **P** | **13 10 10.1** | **+0.4** |
| **MORW** | **Morawa** | **25.52** | **204** | P | **P** | **13 10 10.6** | **-0.3** |
| | baz=26,SNR=5.5 | | | | | | |
| **GUMO** | **Guam** | **25.89** | **42** | P | **P** | **13 10 12.7** | **-1.7** |
| | comp=Z,139nm,1.1s,baz=180,slow=19,SNR=2.7 | | | | | | |
| GUMO | | | | LR | LR | 13 20 51.7 | |
| | comp=Z,350nm,19.5s,baz=210,slow=38 | | | | | | |
| **GUMO** | **Guam** | **25.89** | **42** | *e*P | **P** | **13 10 12.1** | **-2.3** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,130nm,1.0s | | | | | | |
| **GUMO** | **Guam** | **25.89** | **42** | *e*P | **P** | **13 10 12.1** | **-2.3** |
| | comp=Z,130nm,1.0s | | | | | | |
| **KMBL** | **Kambalda** | **25.94** | **191** | P | **P** | **13 10 13.9** | **-0.7** |
| | baz=26,SNR=12 | | | | | | |
| **QLP** | **Quilpie** | **26.09** | **144** | P | **P** | **13 10 14.2** | **-1.9** |
| | baz=26,SNR=39 | | | | | | |
| **BLDU** | **Ballidu** | **26.65** | **201** | P | **P** | **13 10 20.0** | **-1.1** |
| | baz=27,SNR=9.5 | | | | | | |
| **KTGM** | **Kuala Trenggan** | **26.72** | **294** | ⇑P | **P** | **13 10 21.7** | **-0.2** |
| **KLBR** | **Kellerberrin** | **27.20** | **198** | P | **P** | **13 10 24.9** | **-1.1** |
| | baz=27,SNR=6.6 | | | | | | |
| **FRIM** | **Kepong** | **27.35** | **289** | ⇑P | **P** | **13 10 27.3** | **-0.4** |
| **BBOO** | **Buckleboo** | **28.00** | **164** | P | **P** | **13 10 33.4** | **+0.2** |
| | baz=28,SNR=14 | | | | | | |
| **BBOO** | **Buckleboo** | **28.00** | **164** | *e*P | **P** | **13 10 32.6** | **-0.6** |
| | comp=Z,46nm,0.9s | | | | | | |
| **IPM** | **Ipoh** | **28.34** | **291** | ⇓P | **P** | **13 10 36.9** | **+0.5** |
| **IPM** | **Ipoh** | **28.34** | **291** | *e*P | **P** | **13 10 35.0** | **-1.4** |
| | comp=Z,14nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.60** | **198** | P | **P** | **13 10 37.5** | **-1.0** |
| | comp=Z,15nm,0.7s,baz=104,slow=0.2,SNR=12 | | | | | | |
| NWAO | | | | LR | LR | 13 23 27.1 | |
| | comp=Z,8.3nm,18.4s,baz=312,slow=39 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.60** | **198** | P | **P** | **13 10 37.8** | **-0.7** |
| | baz=29,SNR=8.5 | | | | | | |
| **KULM** | **Kulim** | **28.98** | **292** | ⇑P | **P** | **13 10 41.8** | **-0.4** |
| **KULM** | **Kulim** | **28.98** | **292** | *e*P | **P** | **13 10 40.5** | **-1.7** |
| | comp=Z,21nm,1.1s | | | | | | |
| **HTT** | **Hallett** | **29.44** | **160** | P | **P** | **13 10 45.2** | **-0.9** |
| | baz=30,SNR=7.6 | | | | | | |
| **YULB** | **Yu-li** | **29.67** | **348** | P | **P** | **13 10 47.2** | **-0.9** |
| **PSI** | **Prapat** | **29.79** | **286** | P | **P** | **13 10 47.1** | **-2.3** |
| | comp=Z,20nm,0.9s,baz=132,slow=3.6,SNR=8.1 | | | | | | |
| PSI | | | | LR | LR | 13 23 35.8 | |
| | comp=Z,2µm,19.4s,baz=132,slow=38 | | | | | | |
| **PSI** | **Prapat** | **29.79** | **286** | *e*P | **P** | **13 10 47.3** | **-2.2** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **PSI** | **Prapat** | **29.79** | **286** | P | **P** | **13 10 47.9** | **-1.5** |
| | baz=30,SNR=6.7 | | | | | | |
| **PSI** | **Prapat** | **29.79** | **286** | *e*P | **P** | **13 10 47.3** | **-2.2** |
| | comp=Z,30nm,1.0s | | | | | | |
| **QIZ** | **Qiongzhong** | **30.21** | **325** | P | **P** | **13 10 54.8** | **+1.8** |
| QIZ | | | | S | **S** | **13 15 51.2** | **0.0** |
| QIZ | | | | LN | | | |
| | comp=Z,690nm,17.6s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,310nm,23.0s | | | | | | |
| **GSI** | **Gunungsitoli** | **30.70** | **282** | *e*P | **P** | **13 10 54.7** | **-2.7** |
| | comp=Z,56nm,1.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **30.73** | **149** | P | **P** | **13 10 58.5** | **+1.0** |
| | baz=31,SNR=29 | | | | | | |
| **HNR** | **Honiara** | **32.36** | **98** | LR | LR | 13 25 08.9 | |
| | comp=Z,478nm,20.0s,baz=265,slow=38 | | | | | | |
| **HNR** | **Honiara** | **32.36** | **98** | *e*P | **P** | **13 11 11.8** | **-0.2** |
| HNR | | | | pmax | pmax | | |
| | comp=Z,124nm,1.0s | | | | | | |
| **HNR** | **Honiara** | **32.36** | **98** | P | P | 13 11 08.0 | -4.0 |
| **HNR** | **Honiara** | **32.36** | **98** | *e*P | **P** | **13 11 11.8** | **-0.2** |
| | comp=Z,124nm,1.0s | | | | | | |
| **ARPS** | **Mount Arapiles** | **33.47** | **159** | P | **P** | **13 11 22.8** | **+1.3** |
| | baz=34,SNR=12 | | | | | | |
| **YNG** | **Young** | **34.30** | **148** | P | **P** | **13 11 29.0** | **+0.3** |
| | baz=34,SNR=9.5 | | | | | | |
| **LOEI** | **Loei** | **34.77** | **312** | P | **P** | **13 11 32.0** | **-0.9** |
| | comp=Z,55nm,1.2s,comp=Z,4µm | | | | | | |
| **UTHA** | **Uthaitani** | **34.98** | **308** | P | P | 13 11 40.4 | +5.7 |
| **CAN** | **Canberra** | **35.41** | **149** | *e*P | **P** | **13 11 40.9** | **+2.6** |
| **CAN** | **Canberra** | **35.41** | **149** | *e*P | **P** | **13 11 40.9** | **+2.6** |
| **CM01** | **Chiang Mai Arr** | **37.05** | **311** | *e*P | **P** | **13 11 52.7** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **37.08** | **311** | P | **P** | **13 11 53.2** | **+0.4** |
| | comp=Z,3.8nm,0.9s,baz=142,slow=7.9,SNR=17 | | | | | | |
| CMAR | | | | PcP | **PcP** | **13 14 13.7** | **+0.5** |
| | comp=Z,1.4nm,0.6s,baz=154,slow=3.0,SNR=4.3 | | | | | | |
| CMAR | | | | LR | LR | 13 27 54.5 | |
| | comp=Z,526nm,21.4s,baz=138,slow=38 | | | | | | |
| **CHTO** | **Chiang Mai** | **37.30** | **312** | P | **P** | **13 11 56.0** | **+1.4** |
| | comp=Z,58nm,1.2s | | | | | | |
| **CHTO** | **Chiang Mai** | **37.30** | **312** | *e*P | **P** | **13 11 55.5** | **+0.9** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **37.30** | **312** | *e*P | **P** | **13 11 55.5** | **+0.9** |
| | comp=Z,15nm,0.9s | | | | | | |
| **GYA** | **Guiyang** | **37.92** | **329** | P | **P** | **13 12 01.8** | **+1.9** |
| GYA | | | | PP | **PnPn** | **13 13 31.0** | **+2.8** |
| GYA | | | | S | **S** | **13 17 52.3** | **+1.8** |
| GYA | | | | ScP | **ScP** | **13 18 02.5** | **+0.4** |
| GYA | | | | SS | **SnSn** | **13 20 29.8** | **-3.2** |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,120nm,5.4s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,540nm,17.8s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,510nm,18.2s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,550nm,18.0s | | | | | | |
| **CMAI** | **Chiengmai2** | **37.92** | **313** | P | P | 13 12 04.9 | +4.8 |
| | comp=Z,65nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **38.88** | **5** | P | **P** | **13 12 07.2** | **-0.5** |
| | comp=Z,13nm,0.8s,baz=189,slow=19,SNR=7.8 | | | | | | |
| **JNU** | **Nakatsue** | **38.88** | **5** | *e*P | **P** | **13 12 06.2** | **-1.5** |
| | comp=Z,221nm,2.4s | | | | | | |
| **KMI** | **Kunming** | **39.07** | **323** | P | **P** | **13 12 12.0** | **+2.3** |
| KMI | | | | pP | **pP** | **13 12 19.4** | **+2.4** |
| KMI | | | | sP | **sP** | **13 12 23.2** | **+3.3** |
| KMI | | | | S | **S** | **13 18 09.7** | **+1.6** |
| KMI | | | | sS | **sS** | **13 18 23.2** | **+3.1** |
| KMI | | | | PMZ | | | |
| | comp=Z,17nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,70nm,5.1s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,190nm,17.1s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,470nm,16.7s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,290nm,22.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **40.94** | **117** | *e*S | S | 13 18 52.8 | +17 |
| | comp=Z,212nm,26.7s | | | | | | |
| DZM | | | | *e*LR | LR | 13 24 52.3 | |
| | comp=Z,1µm,31.6s | | | | | | |
| **TJN** | **Taejon** | **41.99** | **360** | *e*P | **P** | **13 12 35.1** | **+1.7** |
| **CD2** | **Chengdu** | **43.02** | **330** | *e*P | **P** | **13 12 42.4** | **+0.5** |
| CD2 | | | | pP | **pP** | **13 12 48.3** | **-0.9** |
| CD2 | | | | PP | **PP** | **13 14 22.7** | **+0.6** |
| CD2 | | | | S | **S** | **13 19 08.4** | **+2.1** |
| CD2 | | | | sS | **sS** | **13 19 18.4** | **+0.1** |
| CD2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,160nm,5.2s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,280nm,13.2s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,490nm,16.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,350nm,14.7s | | | | | | |
| **KSAR** | **Wonju Array Be** | **43.06** | **0** | P | **P** | **13 12 42.1** | **+0.1** |
| **KSAR** | **Wonju Array Be** | **43.06** | **0** | P | **P** | **13 12 42.1** | **+0.1** |
| **KSRS** | **Korea Array** | **43.07** | **1** | P | **P** | **13 12 42.1** | **0.0** |
| | comp=Z,9.6nm,0.7s,baz=177,slow=10,SNR=28 | | | | | | |
| KSRS | | | | LR | LR | 13 32 24.3 | |
| | comp=Z,59nm,20.9s,baz=189,slow=39 | | | | | | |
| **KS01** | **Wonju Array Si** | **43.09** | **0** | *e*P | **P** | **13 12 42.2** | **-0.1** |

**MJAR Matsushiro Arr 43.34 13** P **P** **13 12 43.1 -1.2**
comp=Z,7.3nm,0.9s,baz=186,slow=10.0,SNR=24
MJAR LR LR 13 30 09.4
comp=Z,292nm,20.9s,baz=190,slow=35
**MAJO Matsushiro 43.34 13** *e*P **P** **13 12 45.8 +1.4**
MAJO pmax pmax
comp=Z,62nm,0.9s
**MAJO Matsushiro 43.34 13** *e*P **P** **13 12 43.1 -1.3**
comp=Z,125nm,2.3s
**MAT Matsushiro 43.34 13** P **P** **13 12 42.4 -2.0**
MAT S **S** **13 19 05.4 -5.4**
**XAN Xi'an 43.38 337** P **P** **13 12 43.5 -1.2**
XAN pP **pP** **13 12 51.1 -1.0**
XAN PP **PP** **13 14 25.7 -0.2**
XAN PcP **PcP** **13 14 32.3 -0.8**
XAN S **S** **13 19 08.5 -3.0**
XAN SS SS 13 22 16.7 -9.2
XAN PMZ
comp=Z,8.0nm,0.9s
XAN PMZ
comp=Z,44nm,8.3s
XAN LN
comp=Z,110nm,17.2s
XAN LE
comp=Z,320nm,18.0s
XAN LZ
comp=Z,180nm,20.0s
**BJI Beijing 46.83 348** P **P** **13 13 14.2 +2.2**
BJI S **S** **13 20 06.6 +5.6**
BJI PMZ
comp=Z,22nm,1.2s
BJI PMZ
comp=Z,120nm,3.6s
BJI LN
comp=Z,200nm,15.5s
BJI LE
comp=Z,160nm,11.4s
BJI LZ
comp=Z,220nm,28.1s
**LZH Lanzhou 47.24 334** *e*P P 13 13 20.9 +5.4
LZH pP pP 13 13 25.4 +2.5
LZH sP sP 13 13 27.3 +1.5
LZH PP **PP** **13 15 06.2 -0.6**
LZH *e*S **S** **13 20 12.1 +4.7**
LZH sS sS 13 20 19.4 -0.2
LZH SS **SS** **13 23 32.1 -3.1**
LZH PMZ
comp=Z,58nm,1.2s
LZH PMZ
comp=Z,160nm,4.1s
LZH LN
comp=Z,1μm,14.6s
LZH LE
comp=Z,1μm,14.4s
LZH LZ
comp=Z,1μm,16.7s
**HHC Hu-ho-hao-te 48.70 344** *e*P **P** **13 13 28.7 +2.0**
HHC PP **PP** **13 15 23.0 +3.0**
HHC S **S** **13 20 30.1 +2.1**
HHC sS **sS** **13 20 40.1 -0.1**
HHC ScS **ScS** **13 23 19.2 +1.2**
HHC PMZ
comp=Z,17nm,1.4s
HHC PMZ
comp=Z,46nm,3.7s
HHC LN
comp=Z,210nm,16.2s
HHC LE
comp=Z,190nm,17.4s
HHC LZ
comp=Z,220nm,18.7s
**LSA Lhasa 49.65 317** P **P** **13 13 34.9 +0.3**
LSA pmax pmax
comp=Z,15nm,0.9s
**LSA Lhasa 49.65 317** P **P** **13 13 34.9 +0.3**
comp=Z,15nm,0.9s
**USRK Ussuriysk Ar. 49.97 4** P **P** **13 13 35.4 -0.8**
comp=Z,5.5nm,0.6s,baz=182,slow=6.8,SNR=12
USRK LR LR 13 34 50.3
comp=Z,113nm,18.6s,baz=166,slow=36
**MDJ Mudanjiang 50.26 2** P **P** **13 13 40.7 +2.4**
MDJ PP **PP** **13 15 35.3 +1.3**
MDJ S **S** **13 20 54.3 +4.9**
MDJ PMZ
comp=Z,19nm,1.8s
MDJ PMZ
comp=Z,390nm,4.0s
MDJ LN
comp=Z,230nm,39.1s
MDJ LE
comp=Z,76nm,41.2s
MDJ LZ
comp=Z,310nm,39.1s
**ODAN Odare 50.62 312** *e*P **P** **13 13 42.1 +0.4**
comp=Z,33nm,1.0s
**TAPN Taplejung 50.66 313** *e*P **P** **13 13 42.6 +0.5**
comp=Z,46nm,1.1s
**RAMN Ramite 51.26 311** *e*P **P** **13 13 45.5 -1.0**
comp=Z,64nm,1.0s
**ASAJ Asahikawa 51.56 14** P **P** **13 13 47.7 -0.4**
comp=Z,8.3nm,0.8s,baz=220,slow=9.6,SNR=4.7
ASAJ LR LR 13 35 00.8
comp=Z,250nm,21.1s,baz=176,slow=35
**GTA Gaotai 51.78 333** *e*P **P** **13 13 49.7 -0.4**
GTA pP **pP** **13 13 55.3 -2.2**
GTA sP **sP** **13 13 58.4 -2.0**
GTA ScP **ScP** **13 18 58.8 +0.2**
GTA S **S** **13 21 10.9 0.0**
GTA sS **sS** **13 21 19.2 -4.0**
GTA SS **SS** **13 24 46.3 -1.6**
GTA PMZ
comp=Z,6.0nm,1.1s
GTA PMZ
comp=Z,72nm,5.2s
GTA LN
comp=Z,210nm,18.5s
GTA LE
comp=Z,280nm,18.1s
GTA LZ
comp=Z,260nm,17.6s
**GUN Gumba 52.32 312** *e*P **P** **13 13 53.6 -1.0**
comp=Z,36nm,0.8s
**PKI Pulchoki 52.48 311** *e*P **P** **13 13 54.4 -1.4**
comp=Z,31nm,1.2s
**PKIN Phulchoki 52.49 311** *e*P **P** **13 13 54.3 -1.5**
comp=Z,22nm,1.1s
**KKN Kakani 52.70 312** *e*P **P** **13 13 57.4 +0.2**
comp=Z,14nm,0.7s
**DMN Daman 52.73 311** *e*P **P** **13 13 56.5 -1.0**
comp=Z,31nm,1.0s
**GKN Gorkha 53.29 311** *e*P **P** **13 14 00.4 -1.1**
comp=Z,29nm,0.9s
**RPZ Rata Peaks 53.68 142** LR LR 13 35 53.8
comp=Z,730nm,21.1s,baz=302,slow=35
**KOLN Koldanda 53.95 311** *e*P **P** **13 14 05.4 -1.0**
comp=Z,20nm,0.7s
**KHZ Kahutara 54.61 139** *e*P **P** **13 14 11.3 +0.6**
comp=Z,42nm,0.8s
**KLR Kul'dur 54.96 3** *e*P **P** **13 14 11.0 -2.1**
KLR pmax pmax
comp=Z,67nm,2.0s
**BKZ Black Stump Fm 55.19 134** *e*P **P** **13 14 15.4 +0.3**
comp=Z,14nm,0.7s
**URZ Urewera 55.27 133** *e*P **P** **13 14 15.3 -0.4**
comp=Z,14nm,0.8s
**ULN Ulaanbaatar 56.42 344***d i*P **P** **13 14 23.6 -0.2**
ULN pmax pmax
comp=Z,12nm,1.0s
**ULN Ulaanbaatar 56.42 344** *e*P **P** **13 14 23.1 -0.8**
comp=Z,14nm,1.1s
**SONM Songino Array 56.58 343** P **P** **13 14 24.4 -0.5**
comp=Z,8.5nm,0.9s,baz=157,slow=7.0,SNR=21
SONM LR LR 13 42 52.3
comp=Z,118nm,19.0s,baz=174,slow=40
**SONA1 Songino Array 56.59 343** *e*P **P** **13 14 24.4 -0.6**
**ZAK Zakamensk 59.78 342** *e*P P 13 14 43.7 -3.5
ZAK pmax pmax
comp=Z,4.0nm,1.2s
**TLY Talaya 60.82 343** *e*P P 13 14 59.6 +5.4
TLY *e* 13 15 44.4
TLY *e*S **S** **13 23 06.8 -3.5**
TLY pmax pmax
comp=Z,7.0nm,0.8s
**TLY Talaya 60.82 343** *e*pP pP 13 14 59.1 -2.8
**WMQ Urumqi 61.08 328** P **P** **13 14 58.0 +1.8**
WMQ PP **PP** **13 17 11.0 0.0**
WMQ S **S** **13 23 15.0 +1.1**
WMQ ScS **SKKSac** **13 24 40.0 -6.0**
WMQ SS **SS** **13 27 12.0 -2.1**
WMQ PMZ
comp=Z,14nm,1.0s
WMQ PMZ
comp=Z,16nm,6.0s
WMQ LN
comp=Z,400nm,16.0s
WMQ LE
comp=Z,210nm,18.0s
WMQ LZ
comp=Z,220nm,17.0s
**IRK Irkutsk 61.15 344** *e*P **P** **13 14 58.1 +1.7**
IRK pmax pmax
comp=Z,25nm,2.9s
**MOY Mondy 61.61 342** *e*P **P** **13 15 00.0 +0.3**
**HVS Khovu-Aksy 63.74 337** *e*P **P** **13 15 12.3 -1.6**
HVS pmax pmax
comp=Z,20nm,0.9s
**PETK Petropavlovsk- 64.04 20** P **P** **13 15 16.3 +0.6**
comp=Z,6.1nm,0.8s,baz=164,slow=2.1,SNR=10
PETK LR LR 13 38 37.3
comp=Z,85nm,21.9s,baz=202,slow=32
**BOD Bodaibo 64.38 352** *e*P **P** **13 15 17.2 -0.6**
BOD pmax pmax
comp=Z,11nm,0.9s
**KSH Kashi 65.49 318** *e*P **P** **13 15 28.3 +2.7**
KSH *e*pP **pP** **13 15 34.1 +0.9**
KSH *e*sP **sP** **13 15 37.4 +1.3**
KSH *e*PcP **PcP** **13 16 00.0 +2.7**
KSH PP **PP** **13 17 55.0 +5.0**
KSH *e*ScP 13 19 58.7
KSH S **S** **13 24 09.9 +0.6**
KSH ScS **ScS** **13 25 21.0 +1.0**
KSH PMZ
comp=Z,86nm,3.5s
KSH LN
comp=Z,94nm,7.5s
KSH LE
comp=Z,76nm,5.0s
KSH LZ
comp=Z,270nm,19.8s
**MKAR Makanchi Array 65.90 328** P **P** **13 15 26.9 -1.1**
comp=Z,4.1nm,0.8s,baz=136,slow=7.2,SNR=19
**MKAR Makanchi Array 65.90 328** *i* P **P** **13 15 26.8 -1.2**
MKAR pmax pmax
comp=Z,4.0nm,0.9s
**MKAR Makanchi Array 65.90 328** P **P** **13 15 27.3 -0.7**
baz=66
**MKAR Makanchi Array 65.90 328** *e*P **P** **13 15 27.3 -0.7**
**MAKZ Makanchi 66.08 328** *e*P **P** **13 15 29.1 -0.1**
**TKM2 Tokmak 2 67.51 321** *e*P **P** **13 15 40.0 +1.4**
**TKM2 Tokmak 2 67.51 321** *e*P **P** **13 15 40.0 +1.4**
**YAK Yakutsk 67.69 1** P **P** **13 15 38.2 -0.7**
comp=Z,6.8nm,0.6s,baz=170,slow=5.7,SNR=6.9
**YAK Yakutsk 67.69 1** *e*P **P** **13 15 38.5 -0.5**
YAK *e**PP **pP** **13 15 46.8 +0.1**
YAK *e* 13 16 07.1
YAK *e*S S 13 24 28.0 -6.8
YAK *e*SSS SSS 13 31 59.5
YAK pmax pmax
comp=Z,48nm,0.9s
YAK pmax pmax
comp=E,4.0nm,0.9s
YAK pmax pmax
comp=N,17nm,1.0s
YAK pmax pmax
comp=Z,7.0nm,0.4s
YAK smax smax
comp=E,38nm,17.1s
YAK smax smax
comp=N,90nm,16.3s
**YAK Yakutsk 67.69 1** *e*P **P** **13 15 38.4 -0.6**
**MA2 Magadan 67.78 13** *i* P **P** **13 15 40.3 +0.6**
**AAK Ala-Archa 68.05 321** P **P** **13 15 41.6 -0.4**
comp=N,3.6nm,0.8s,baz=143,slow=3.6,SNR=9.6
**AAK Ala-Archa 68.05 321** *e*P P 13 15 37.8 -4.2
AAK pmax pmax
comp=Z,10.0nm,0.9s
**AAK Ala-Archa 68.05 321** P **P** **13 15 41.3 -0.7**
**KBL Kabul 68.11 311** *e*P **P** **13 15 43.2 +0.7**
**KBL Kabul 68.11 311** *e*P **P** **13 15 43.2 +0.7**
**EKS2 Erkin-Say 68.52 320** *e*P **P** **13 15 44.7 -0.2**
**EKS2 Erkin-Say 68.52 320** *e*P **P** **13 15 44.7 -0.2**
**ZALV Zalesovo Beam 69.46 335** P **P** **13 15 49.0 -1.2**
comp=Z,4.2nm,0.8s,baz=128,slow=4.5,SNR=8.5
**KURBB Kurchatov Arra 70.23 329** P **P** **13 15 54.0 -1.1**
comp=Z,4.8nm,1.0s,baz=133,slow=5.2,SNR=21
**KURK Kurchatov 70.24 329** *e*P **P** **13 15 53.4 -1.7**
**KURK Kurchatov 70.24 329** *e*P **P** **13 15 53.4 -1.7**
**NVS Novosibirsk 70.74 335** *e*P **P** **13 15 56.8 -1.3**
NVS pmax pmax
comp=Z,13nm,1.4s
NVS pmax pmax
comp=N,8.0nm,1.5s
**KKAR Karatay Array 70.83 319** *e*P **P** **13 15 58.7 -0.3**
KKAR pmax pmax
comp=Z,3.0nm,0.8s
**KKAR Karatay Array 70.83 319** *e*P **P** **13 15 58.7 -0.3**
comp=Z,2.8nm,0.8s
**SEY Seymchan 71.16 12** P **P** **13 16 00.8 +0.4**
comp=Z,15nm,0.7s,baz=215,slow=4.7,SNR=69
**SEY Seymchan 71.16 12**⇑*i*P **P** **13 16 01.3 +0.9**
**VNDA Vanda 73.90 173** P **P** **13 16 17.7 +1.0**
comp=Z,1.2nm,0.7s,baz=329,slow=5.9,SNR=3.4
VNDA LR LR 13 47 09.2
comp=Z,355nm,21.2s,baz=348,slow=34
**MAW Mawson 75.12 201** P **P** **13 16 23.7 -0.2**
comp=Z,1.9nm,0.9s,baz=91,slow=7.3,SNR=3.6
MAW LR LR 13 47 14.9
comp=Z,352nm,19.7s,baz=60,slow=34
**MAW Mawson 75.12 201** *e*P **P** **13 16 24.6 +0.8**
**MAW Mawson 75.12 201** *e*P **P** **13 16 24.6 +0.8**
**BVAR Borovoye Array 75.76 328** P **P** **13 16 27.0 -0.8**
comp=Z,2.1nm,0.8s,baz=126,slow=7.5,SNR=8.0
**BRVK Borovoye 75.83 328***c i*P **P** **13 16 26.8 -1.4**
BRVK pmax pmax
comp=Z,6.0nm,1.2s
**BRVK Borovoye 75.83 328** P **P** **13 16 28.8 +0.6**
comp=Z,9.7nm,1.1s
**GEYT Alibeck 77.56 311** P **P** **13 16 37.8 -0.5**
comp=Z,5.7nm,1.0s,baz=116,slow=6.8,SNR=8.2
**OPO Ambohidratompo 78.99 252** LR LR 13 48 02.9
comp=Z,49nm,19.0s,baz=66,slow=33
**ISAD Sadrabad 79.46 304** *e*P **P** **13 16 47.5 -1.8**
**ABKAR Akbulak array 80.06 322** *e*P **P** **13 16 50.6 -1.1**
comp=Z,3.7nm,0.8s
**PPT2 Papeete2 81.55 107** *e*S S 13 26 50.6 -21
comp=Z,82nm,26.8s
**PPT Papeete 81.55 107** LR LR 13 49 35.2
comp=Z,56nm,21.2s,baz=265,slow=33
**AKTO Aktyubinsk 81.64 323** P **P** **13 16 59.4 -0.8**
comp=Z,6.5nm,0.8s,baz=112,slow=5.6,SNR=17
**SVE Sverdlovsk 82.49 329**‖*e*P **P** **13 17 06.0 +1.5**
SVE pmax pmax
comp=Z,18nm,1.2s
**ARU Arti 83.41 329** P **P** **13 17 08.2 -1.1**
comp=Z,0.3nm,0.2s,baz=107,slow=19,SNR=1.9
**ARU Arti 83.41 329***d i*P **P** **13 17 09.9 +0.6**
ARU 13 20 19.4
ARU PPP PPP 13 22 09.7
ARU S **S** **13 27 31.8 +2.8**
ARU SS **SS** **13 32 53.6 -1.3**
ARU pmax pmax
comp=Z,10.0nm,1.0s
**ARU Arti 83.41 329** *e*P **P** **13 17 10.1 +0.8**
comp=Z,9.7nm,1.0s
**SYO Syowa Base 83.83 201**⇑*e*pP pP 13 17 17.4 -1.7
**RAYN Ar Rayn 84.99 294** *e*P **P** **13 17 17.1 -1.1**
comp=Z,16nm,1.4s
**KBZ Khabaz 90.09 314** LR LR 14 06 52.0
comp=Z,51nm,18.4s,baz=96,slow=41
**COLA College 92.97 25** *e*P **P** **13 17 54.7 -0.3**
COLA pmax pmax
comp=Z,3.0nm,1.1s
**ILAR Eielson Array 93.37 25** P **P** **13 17 54.9 -2.1**
comp=Z,1.1nm,0.7s,baz=258,slow=5.4,SNR=17
ILAR LR LR 13 57 33.6
comp=Z,47nm,19.6s,baz=245,slow=34
**BRTR Keskin Array B 96.65 309** LR LR 14 08 41.4
comp=Z,75nm,19.3s,baz=102,slow=40
**LSZ Lusaka 97.39 254** *e*P **P** **13 18 15.4 -1.1**
LSZ pmax pmax
comp=Z,4.0nm,0.9s
**LSZ Lusaka 97.39 254** *e*P **P** **13 18 15.4 -1.1**
comp=Z,3.9nm,0.9s
**BOSA Boshof 97.88 240** LR LR 13 55 19.5
comp=Z,107nm,21.4s,baz=160,slow=31
**AKASG Malin Array Be 99.72 320** LR LR 14 09 46.4
comp=Z,70nm,19.8s,baz=90,slow=39
**TORD Torodi Ar. Bea 126.13 282** PKP **PKPdf** **13 23 44.5 -1.0**
comp=Z,2.0nm,1.1s,baz=60,slow=1.0,SNR=8.2
**TXAR Lajitas Array 126.45 58** PKP **PKPdf** **13 23 44.8 -1.1**
comp=Z,0.5nm,1.0s,baz=283,slow=4.5,SNR=3.6
**LVC Limon Verde 147.49 151** *e*PKPdf **PKPdf** **13 24 23.7 -1.1**
LVC *e*PKPbc **PKPbc** **13 24 27.7 +0.3**
**CPUP Villa Florida 147.68 172** PKPbc **PKPbc** **13 24 26.8 -0.6**
comp=Z,12nm,1.1s,baz=203,slow=4.0,SNR=9.6
**LPAZ La Paz 153.13 145** PKP **PKPdf** **13 24 34.2 0.0**
comp=Z,1.1nm,1.1s,baz=291,slow=8.6,SNR=2.6
LPAZ PKPbc **PKPbc** **13 24 41.2 -0.3**
comp=Z,1.8nm,0.6s,baz=203,slow=0.5,SNR=6.9

*IDC **03** 13:18:03.3±3.2, 10°.98S×118°.68E, h0km, mb3.5/2, mb1 3.5/4, mb1mx3.4/30, mbtmp3.3/4, ML3.4/2, Error ellipse: s-maj=169.3km s-min=26.5km az=51.0*
*ISCJB **03** 13:18:04.3±0.8, 11°.3S±0°.1×118°.4E±0°.1, h33km, mb3.5/2, Error ellipse: s-maj=19.1km s-min=10.2km az=139.2*
*AUST **03** 13:18:04.1, 10°.99S×118°.44E, h60km*
**ISC 03 13:18:06.4±0.9, 11°.4S±0°.1×118°.3E±0°.1, h33km, n9, σ0.59/9, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JAGI** | **Jajag, Banyuwa** baz=4.9,SNR=9.5 | **5.01** | **304** | P | | **Pn** | **13 19 19.0** | **-0.4** |
| **KNRA** | **Kununurra** baz=11,SNR=6.8 | **11.02** | **114** | P | | **Pn** | **13 20 41.4** | **-0.4** |
| **MEEK** | **Meekatharra** baz=16,SNR=10 | **15.21** | **179** | P | | **Pn** | **13 21 38.6** | **-0.3** |
| **WRKA** | **Warakurna** baz=17,SNR=8.3 | **16.57** | **147** | P | | **Pn** | **13 21 56.3** | **-0.1** |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=298,slow=13,SNR=12 | **17.61** | **121** | P | | **Pn** | **13 22 08.4** | **-1.1** |
| WRA | | | | S | | Sn | 13 25 10.2 | -15 |
| **MORW** | **Morawa** baz=18,SNR=7.7 | 0.1nm,0.3s,baz=304,slow=26,SNR=4.7 | **17.76** | **187** | P | | **Pn** | **13 22 11.4** | **+0.3** |
| **ASAR** | **Alice Springs** 0.1nm,0.3s,baz=314,slow=12,SNR=10 | **19.23** | **132** | P | | **Pn** | **13 22 29.8** | **+0.6** |
| ASAR | | | | S | | Sn | 13 25 51.1 | -13 |
| **SONM** | **Songino Array** 0.3nm,0.7s,baz=157,slow=9.4,SNR=2.3 | 0.0nm,0.3s,baz=309,slow=24,SNR=4.2 | **59.87** | **351** | P | | **P** | **13 28 09.1** | **+0.2** |
| **MKAR** | **Makanchi Array** 0.3nm,0.5s,baz=145,slow=5.3,SNR=4.4 | **66.25** | **334** | P | | **P** | **13 28 51.6** | **+0.3** |

**IDC 03 13:20:45.3±4.8, 22°.08S×178°.13W, h327km±50km, mb3.2/4, mb1 3.5/4, mb1mx3.0/25, mbtmp3.9/4, Error ellipse: s-maj=62.4km s-min=26.0km az=171.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** 154nm,0.3s,baz=349,slow=19,SNR=5.6 | **7.14** | **178** | P | | Pn | 13 22 29.0 | +0.2 |
| **CTA** | **Charters Tower** 1.8nm,0.3s,baz=96,slow=11,SNR=6.8 | **33.24** | **267** | P | | P | 13 26 54.4 | +1.5 |
| **ASAR** | **Alice Springs** 0.7nm,0.4s,baz=94,slow=7.3,SNR=12 | **44.06** | **258** | P | | P | 13 28 21.2 | -0.9 |
| ASAR | | | | PcP | | PcP | 13 30 00.2 | -0.9 |
| **WRA** | **Warramunga Arr** 0.6nm,0.3s,baz=102,slow=8.4,SNR=36 | **44.28** | **264** | P | | P | 13 28 22.9 | -0.9 |
| WRA | | | | PcP | | PcP | 13 30 01.7 | -0.2 |
| **ILAR** | **Eielson Array** 0.2nm,0.6s,baz=215,slow=5.5,SNR=3.6 | **89.88** | **13** | P | | P | 13 33 05.8 | -1.2 |
| **AKASG** | **Malin Array Be** 1.6nm,0.5s,baz=42,slow=4.3,SNR=6.8 | **144.32** | **330** | PKP | | PKPdf | 13 39 42.1 | -0.3 |
| **BRTR** | **Keskin Array B** 0.6nm,0.5s,baz=152,slow=6.5,SNR=2.9 | **147.79** | **310** | PKPbc | | PKPbc | 13 39 52.8 | +0.6 |

*IDC **03** 13:28:05.6±0.5, 3°.71N×126°.76E, h0km, mb4.6/28, mb1 4.6/29, mb1mx4.5/42, mbtmp4.5/29, ML4.2/1, MS3.6/7, Ms1 3.6/7, ms1mx3.3/27, Error ellipse: s-maj=21.0km s-min=11.9km az=69.0*
*BJI **03** 13:28:06.4, 3°.17N×127°.24E, h58km, mb4.6/37, mB4.9/22, Ms4.6/13, Ms7 4.3/13*
*MOS **03** 13:28:08.9±1.0, 3°.73N×126°.82E, h33km, mb5.1/23, Error ellipse: s-maj=15.3km s-min=6.5km az=116.4*
*DJA **03** 13:28:09.2±1.0, 4°.1N±7°×12°.7E±°, h10km, M4.7/10, mb5.0/8, mB5.1/5, MLv4.7/10, Mw(mB)4.4/5*
*ISCJB **03** 13:28:11.2±0.5, 3°.74N±0°.03×126°.99E±0°.04, h55km±4km, mb4.7/63, MS3.6/7, Error ellipse: s-maj=7.4km s-min=4.0km az=154.1*
*NEIC **03** 13:28:11.9±1.0, 3°.76N×126°.90E, h45km±10km, mb4.7/18, Error ellipse: s-maj=9.7km s-min=6.7km az=73.0*
*MAN **03** 13:28:17, 4°.05N×126°.65E, h32km, mb5.2, ML4.2, MS4.4*
*AUST **03** 13:28:18.0±0.4, 3°.53N×127°.01E, h102km, Error ellipse: s-maj=1.0km s-min=1.0km az=32.0*
**ISC 03 13:28:13.5±0.4, 3.74N±0°.04×126°.98E±0°.06, h58km±2km, n187, σ1.9/39/213, mb4.7/63, MS3.5/7, 13C-8D, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **1.45** | **268** | P | | **Pn** | **13 28 34.5** | **-3.0** |
| SGSI | | | | S | | **Sn** | **13 29 00.3** | **+4.7** |
| **TNTI** | **Ternate** | **2.98** | **173** | P | | **Pn** | **13 28 56.7** | **-1.6** |
| TNTI | | | | S | | **Sn** | **13 29 35.8** | **+3.0** |
| **TNTI** | **Ternate** | **2.98** | **173** | *e*P | | **Pn** | **13 28 56.9** | **-1.4** |
| **GSPH** | **General Santos** | **3.09** | **319**⇑*i*P | | | **Pn** | **13 28 57.1** | **-2.8** |
| **MATI** | **Mati** | **3.26** | **347** | *e*P | | **Pn** | **13 29 02.0** | **-0.2** |
| MATI | | | | *e*S | | Sn | 13 29 31.2 | -8.6 |
| **LBMI** | **Labuha** | **4.38** | **173** | P | | **Pn** | **13 29 17.1** | **-0.5** |
| **CTBH** | **Cotabato--PC H** | **4.40** | **322**⇑ | *e*P | | **Pn** | **13 29 16.9** | **-0.9** |
| **BUKP** | **Musuan** | **4.53** | **335** | *e*P | | **Pn** | **13 29 19.4** | **-0.3** |
| **GTOI** | **Gorontalo** 136nm,0.8s,1μm0.4nm | **5.03** | **232** | P | | **Pn** | **13 29 27.0** | **+0.6** |
| **BUTP** | **Butuan** | **5.37** | **345** | *e*P | | Pn | 13 29 34.9 | +3.8 |
| **PAGZ** | **Pagadian** | **5.43** | **319** | *e*P | | **Pn** | **13 29 31.7** | **-0.2** |
| **SANI** | **Sanana** 33nm,0.9s,0.1nm | **5.84** | **190** | P | | **Pn** | **13 29 37.7** | **+0.2** |
| **MRSI** | **Marisa** 136nm,0.6s,0.5nm | **5.99** | **237** | P | | **Pn** | **13 29 40.0** | **+0.4** |
| **SWI** | **Sorong** 79nm,0.7s,908nm0.3nm | **6.26** | **137** | P | | **Pn** | **13 29 41.2** | **-2.1** |
| **SIJI** | **Sorong** 4.8nm,0.3s,baz=330,slow=17,SNR=19 | **6.27** | **137** | Pn | | **Pn** | **13 29 43.0** | **-0.5** |
| SIJI | | | | Sn | | **Sn** | **13 30 55.4** | **+1.5** |
| SIJI | 2.0nm,0.3s,baz=144,slow=19,SNR=3.5 | | | LR | | LR | 13 32 35.0 | |
| **LUWI** | **Luwuk** baz=6.2,SNR=6.3 | comp=Z,407nm,18.7s,baz=314,slow=42 | **6.35** | **222** | P | | Pn | 13 29 48.4 | +3.9 |
| **LUWI** | **Luwuk** 259nm,0.9s,5μm0.9nm | **6.35** | **222** | P | | **Pn** | **13 29 45.9** | **+1.4** |
| **LUWI** | **Luwuk** 232nm,0.9s | **6.35** | **222** | *e*P | | **Pn** | **13 29 47.0** | **+2.5** |
| **MSLP** | **Maasin** | **6.69** | **342** | *e*P | | **Pn** | **13 29 50.4** | **+1.2** |
| **NLAI** | **Namlea** 53nm,0.7s,0.2nm | **6.94** | **179** | P | | **Pn** | **13 29 52.4** | **-0.2** |
| **APSI** | **Ampana** 198nm,0.7s,2μm0.6nm | **7.05** | **229** | P | | **Pn** | **13 29 55.6** | **+1.4** |
| **MPSI** | **Mapaga** | **7.84** | **245** | P | | **Pn** | **13 30 06.5** | **+1.5** |
| **PALU** | **Palau** baz=8.4,SNR=3.6 | **8.27** | **64** | P | | Pn | 13 30 15.9 | +5.1 |
| **FAKI** | **Fak Fak** baz=8.3,SNR=8.3 | **8.46** | **141** | P | | **Pn** | **13 30 13.3** | **-0.1** |
| **FAKI** | **Fak Fak** 24nm,0.7s | **8.46** | **141** | *e*P | | **Pn** | **13 30 13.3** | **-0.1** |
| **JAY** | **Jayapura** baz=15,SNR=3.8 | **15.06** | **114** | P | | **P** | **13 31 48.1** | **+1.0** |
| **KSM** | **Kuching** baz=17,SNR=6.6 | **16.81** | **263** | P | | **P** | **13 32 07.1** | **+0.6** |
| **KSM** | **Kuching** 18nm,0.9s | **16.81** | **263** | *e*P | | **P** | **13 32 06.1** | **-0.4** |
| **MTN** | **Manton Dam** baz=17,SNR=16 | **16.98** | **166** | P | | **Pn** | **13 32 04.5** | **-2.8** |
| **KDU** | **Kakadu** baz=17,SNR=5.6 | **17.21** | **162** | P | | **Pn** | **13 32 10.1** | **0.0** |
| **KNRA** | **Kununurra** baz=19,SNR=51 | **19.37** | **175** | P | | **P** | **13 32 33.2** | **-1.5** |

GUMO **Guam** 20.19 60 P P 13 32 44.8 +1.2
30nm,0.8s,baz=223,slow=14,SNR=2.5
YULB **Yu-li** 20.29 345 eP P 13 32 41.3 -3.4
12nm,0.4s
TPUB **Ta-pu** 20.39 343 eP P 13 32 42.4 -3.3
28nm,0.6s
LEM **Lembang** 22.00 242 LR LR 13 41 36.8
comp=Z,179nm,20.4s,baz=36,slow=37
QIZ **Qiongzhong** 22.61 314 P P 13 33 10.1 +0.5
QIZ pP pP 13 33 21.1 -1.4
QIZ sP sP 13 33 28.2 -1.6
QIZ S S 13 37 14.1 +0.6
QIZ sS sS 13 37 35.7 -0.4
QIZ PMZ
62nm,1.9s
PMBI **Palembang** 23.16 254 P P 13 33 25.9 +11
baz=23,SNR=5.0
PMG **Port Moresby** 23.98 123 LR LR 13 42 27.3
comp=Z,157nm,21.3s,baz=296,slow=36
UBPT **Khong Chiam** 24.08 300 P P 13 33 22.7 -1.1
42nm,1.4s
WRAB **Tennant Creek** 24.62 163c iP P 13 33 27.2 -1.4
WRAB pmax pmax
comp=Z,247nm,1.0s
WRAB **Tennant Creek** 24.62 163 eP P 13 33 27.1 -1.5
comp=Z,87nm,0.8s
WRA **Warramunga Arr** 24.62 163 P P 13 33 27.1 -1.6
comp=Z,54nm,0.8s,baz=342,slow=10,SNR=131
SKNT **Sakolnakorn** 26.12 302 P P 13 33 42.6 +0.3
comp=Z,75nm,1.0s
KHON **Khomkaen** 26.84 299 P P 13 33 50.4 +1.7
comp=Z,9.0nm,1.0s,comp=Z,437nm
QIS **Mount Isa** 27.14 153 P P 13 33 50.9 -0.5
baz=27,SNR=5.4
ASAR **Alice Springs** 28.07 166 P P 13 33 58.4 -1.3
comp=Z,1.9nm,0.4s,baz=345,slow=7.0,SNR=16
ASAR PcP PcP 13 37 13.4 +0.2
comp=Z,1.7nm,0.8s,baz=350,slow=3.1,SNR=5.9
ASAR LR LR 13 46 02.5
comp=Z,146nm,18.0s,baz=16,slow=38
PBKT **Sadao Pong** 28.55 298 P P 13 34 03.9 -0.1
comp=Z,12nm,1.5s
WRKA **Warakurna** 28.64 178 P P 13 34 04.4 -0.3
baz=29,SNR=39
LOEI **Loei** 28.68 300 P P 13 34 01.2 -4.1
NJ2 **Nanjing** 29.18 346 eP P 13 34 08.9 -0.5
NJ2 PMZ
comp=Z,20nm,0.5s
UTTA **Uttaradit** 29.39 300 P P 13 34 11.6 0.0
comp=Z,3.0nm,1.1s
JNU **Nakatsue** 29.45 7 P P 13 34 11.1 -0.9
comp=Z,5.3nm,0.8s,baz=1.6,slow=7.1,SNR=4.7
GYA **Guiyang** 29.82 321 eP P 13 34 17.0 +1.6
GYA PMZ
comp=Z,10.0nm,0.8s
CRAI **Chiangrai** 30.67 304 P P 13 34 17.7 -5.2
CMAR **Chiang Mai Arr** 31.08 300 P P 13 34 24.9 -1.5
comp=Z,4.2nm,0.8s,baz=118,slow=7.1,SNR=24
CMAR LR LR 13 47 53.2
comp=Z,93nm,18.7s,baz=178,slow=38
CMAR **Chiang Mai Arr** 31.08 300 P P 13 34 25.0 -1.5
CHTO **Chiang Mai** 31.23 301 P P 13 34 27.1 -0.7
comp=Z,50nm,1.0s
CHTO **Chiang Mai** 31.23 301 eP P 13 34 25.8 -2.0
CHTO pmax pmax
comp=Z,7.0nm,0.8s
CHTO **Chiang Mai** 31.23 301 eP P 13 34 25.8 -2.0
comp=Z,6.6nm,0.8s
MEEK **Meekatharra** 31.27 195 P P 13 34 27.4 -0.6
baz=31,SNR=5.3
KMI **Kunming** 31.55 315 P P 13 34 33.6 +2.8
KMI pP pP 13 34 44.3 -1.0
KMI sP sP 13 34 48.7 -3.5
KMI PMZ
comp=Z,9.0nm,0.7s
KMI PMZ
comp=Z,130nm,4.7s
KSAR **Wonju Array Be** 33.55 1 P P 13 34 47.6 -0.2
KSAR **Wonju Array Be** 33.55 1 P P 13 34 47.6 -0.2
KSRS **Korea Array** 33.56 1 P P 13 34 47.6 -0.3
comp=Z,1.2nm,0.6s,baz=187,slow=9.5,SNR=3.8
MJAR **Matsushiro Arr** 34.24 16 LR LR 13 48 38.6
comp=Z,56nm,20.5s,baz=170,slow=36
FORT **Forrest** 34.34 178 P P 13 34 55.0 +0.2
baz=34,SNR=9.6
QLP **Quilpie** 34.46 152 P P 13 34 55.2 -0.6
baz=34,SNR=4.5
XAN **Xi'an** 34.52 333 P P 13 34 54.2 -2.2
XAN pP pP 13 35 08.7 -2.3
XAN sP sP 13 35 16.3 -1.5
XAN PMZ
comp=Z,5.0nm,0.7s
CD2 **Chengdu** 34.78 324 eP P 13 34 58.0 -0.7
CD2 pP pP 13 35 12.6 -0.7
CD2 sP sP 13 35 19.8 -0.4
CD2 S S 13 40 25.6 +0.3
CD2 sS sS 13 40 51.2 +1.1
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
KMBL **Kambalda** 35.25 188 P P 13 35 02.0 -0.6
baz=35,SNR=5.3
HNR **Honiara** 35.36 112 LR LR 13 48 52.5
comp=Z,106nm,20.5s,baz=293,slow=35
BBOO **Buckleboo** 37.36 167 P P 13 35 20.6 0.0
baz=37,SNR=15
BJT **Baijiatuau** 37.41 346 eP P 13 35 21.6 +0.6
BJT pmax pmax
comp=Z,30nm,0.8s
BJT **Baijiatuau** 37.41 346 eP P 13 35 21.6 +0.6
comp=Z,30nm,0.8s
NWAO **Narrogin (SRO)** 37.62 193 P P 13 35 22.8 0.0
baz=38,SNR=4.5
LZH **Lanzhou** 38.62 329 eP P 13 35 33.8 +2.4
LZH pP pP 13 35 45.7 -0.5
LZH sP sP 13 35 50.8 -2.2
LZH PMZ
comp=Z,33nm,1.2s
LZH PMZ
comp=Z,130nm,4.0s
HTT **Hallett** 38.66 164 P P 13 35 31.3 -0.3
baz=39,SNR=3.0
HHC **Hu-ho-hao-te** 39.47 342 eP P 13 35 39.7 +1.3
HHC S S 13 41 38.9 +2.5
HHC sS sS 13 42 03.8 +2.4
HHC PMZ
comp=Z,16nm,1.2s
HHC PMZ
comp=Z,63nm,3.7s
HHC LN
comp=Z,210nm,14.9s
HHC LE
comp=Z,230nm,14.9s
HHC LZ
comp=Z,150nm,16.2s
USRK **Ussuriysk Ar.** 40.53 6 P P 13 35 47.9 +0.9
comp=Z,3.4nm,0.9s,baz=195,slow=7.4,SNR=4.3
ASAJ **Asahikawa** 42.51 17 P P 13 36 03.5 +0.4
comp=Z,6.3nm,0.8s,baz=162,slow=3.2,SNR=3.5
ARPS **Mount Arapiles** 42.62 162 P P 13 36 04.7 +0.6
baz=43,SNR=9.7
LSA **Lhasa** 42.62 311 eP P 13 36 04.7 -0.2
LSA pmax pmax
comp=Z,10.0nm,0.6s
LSA **Lhasa** 42.62 311 eP P 13 36 04.7 -0.2
comp=Z,10nm,0.6s
GTA **Gaotai** 43.22 329 eP P 13 36 11.1 +1.9
GTA pP pP 13 36 28.4 +4.3
GTA PcP PcP 13 37 59.7 +2.0
GTA S S 13 42 34.9 +2.8
GTA sS sS 13 42 59.1 +1.7
GTA SS SS 13 45 43.0 -4.0
GTA PMZ
comp=Z,4.0nm,1.1s
GTA PMZ
comp=Z,94nm,6.9s
GTA LN
comp=Z,170nm,16.1s
GTA LE
comp=Z,190nm,19.5s
GTA LZ
comp=Z,210nm,16.6s
TAPN **Taplejung** 44.21 306 eP P 13 36 16.1 -1.5
comp=Z,25nm,1.0s
ODAN **Odare** 44.27 305 eP P 13 36 16.3 -1.6
comp=Z,15nm,0.7s
RAMN **Ramite** 44.95 305 eP P 13 36 22.1 -1.3
comp=Z,18nm,0.8s
GUN **Gumba** 45.92 306 eP P 13 36 29.6 -1.6
comp=Z,35nm,0.9s
PKI **Pulchoki** 46.17 305 eP P 13 36 31.5 -1.6
comp=Z,9.9nm,0.7s
PKIN **Phulchoki** 46.18 305 eP P 13 36 31.0 -2.1
PKIN **Phulchoki** 46.18 305 eP P 13 36 31.3 -1.8
comp=Z,3.9nm,0.4s
DMN **Daman** 46.43 305 eP P 13 36 33.6 -1.5
comp=Z,23nm,1.1s
GKN **Gorkha** 46.97 305 eP P 13 36 37.3 -1.9
comp=Z,12nm,0.9s
ULN **Ulaanbaatar** 47.19 342c iP P 13 36 40.6 +0.1
ULN pmax pmax
comp=Z,15nm,1.0s
ULN **Ulaanbaatar** 47.19 342 eP P 13 36 41.0 +0.5
comp=Z,18nm,1.1s
SONM **Songino Array** 47.37 341 P P 13 36 42.0 +0.1
comp=Z,3.8nm,0.6s,baz=159,slow=8.9,SNR=20
SONM PcP PcP 13 38 12.8 +0.9
comp=Z,6.1nm,0.8s,baz=153,slow=3.8,SNR=14
KOLN **Koldanda** 47.72 305 eP P 13 36 43.7 -1.4
comp=Z,15nm,0.4s
DANN **Dangsing** 47.81 305 eP P 13 36 44.6 -1.3
comp=Z,3.4nm,0.5s
ZAK **Zakamensk** 50.60 341 eP P 13 37 06.5 0.0
ZAK pmax pmax
comp=Z,2.0nm,1.2s
TLY **Talaya** 51.60 342 eP P 13 37 15.6 +1.7
TLY pmax pmax
comp=Z,14nm,1.3s
MOY **Mondy** 52.46 340 eP P 13 37 21.6 +1.2
WMQ **Urumqi** 52.86 325 eP P 13 37 23.0 -0.5
HVS **Khovu-Aksy** 54.83 335 eP P 13 37 36.4 -1.4
HVS pmax pmax
comp=Z,14nm,1.1s
BOD **Bodaibo** 54.89 352 eP P 13 37 37.0 -0.9
BOD pmax pmax
comp=Z,5.0nm,1.7s
PETK **Petropavlovsk-** 55.32 22 P P 13 37 41.8 +0.6
comp=Z,3.5nm,0.8s,baz=205,slow=6.4,SNR=2.9
MK31 **Makanchi Array** 57.69 325 eP P 13 37 57.2 -1.0
MK31 pmax pmax
comp=Z,4.0nm,0.5s
MKAR **Makanchi Array** 57.69 325 P P 13 37 57.8 -0.4
comp=Z,4.2nm,0.5s,baz=127,slow=8.2,SNR=46
MKAR PcP PcP 13 38 50.4 -0.2
comp=Z,4.9nm,0.9s,baz=121,slow=4.7,SNR=4.4
YAK **Yakutsk** 58.19 1 eP P 13 38 01.1 -0.2
YAK pmax pmax
comp=Z,23nm,0.9s
YAK pmax pmax
comp=N,10.0nm,1.1s
YAK **Yakutsk** 58.19 1 eP P 13 38 00.9 -0.4
comp=N,31nm,0.9s
KSH **Kashi** 58.21 315 P P 13 38 02.8 +0.7
KSH epP pP 13 38 18.7 +1.0
KSH esP sP 13 38 25.7 +1.4
KSH ePP PP 13 40 13.7 +2.1
KSH S S 13 45 56.6 -3.3
KSH LN
comp=N,71nm,6.0s
KSH LE
comp=N,55nm,5.7s
KSH LZ
comp=N,100nm,5.1s
KZA **Kyzart** 59.78 317 P P 13 38 14.6 +1.3
SNR=9.1
TKM2 **Tokmak 2** 59.90 318 eP P 13 38 13.6 -0.3
TKM2 pmax pmax
comp=Z,5.0nm,0.9s
TKM2 **Tokmak 2** 59.90 318 eP P 13 38 13.6 -0.3
comp=Z,5.2nm,0.9s
UCH **Uchtor** 60.34 317 P P 13 38 17.1 0.0
SNR=16
AAK **Ala-Archa** 60.52 318 P P 13 38 16.5 -1.5
comp=Z,2.2nm,0.7s,baz=125,slow=6.6,SNR=2.6
AAK PcP PcP 13 39 01.0 -1.1
comp=Z,2.2nm,0.7s,baz=72,slow=3.2,SNR=2.5
AAK **Ala-Archa** 60.52 318 eP P 13 38 16.5 -1.5
AAK pmax pmax
comp=Z,6.0nm,0.9s
AAK **Ala-Archa** 60.52 318 eP P 13 38 16.8 -1.2
comp=Z,6.3nm,1.1s
AAK PcP PcP 13 39 01.0 -1.1
ZALV **Zalesovo Beam** 60.69 333 P P 13 38 17.6 -1.1
comp=Z,2.2nm,0.6s,baz=122,slow=6.4,SNR=13
ZALV PcP PcP 13 39 01.2 -1.1
comp=Z,1.4nm,0.6s,baz=222,slow=2.0,SNR=4.3
USP **Ospenovka** 60.78 318 P P 13 38 19.3 -0.3
SNR=7.5
AML **Almayashu** 60.85 317 P P 13 38 20.6 0.0
SNR=12
EKS2 **Erkin-Say** 61.01 318 eP P 13 38 20.8 -0.5
EKS2 pmax pmax
comp=Z,6.0nm,0.8s
EKS2 **Erkin-Say** 61.01 318 P P 13 38 21.3 0.0
SNR=7.6
EKS2 **Erkin-Say** 61.01 318 eP P 13 38 20.8 -0.5
comp=Z,6.2nm,0.8s
KURBB **Kurchatov Arra** 61.87 327 P P 13 38 26.2 -0.6
comp=Z,5.2nm,0.6s,baz=128,slow=6.2
KURK **Kurchatov** 61.87 327 eP P 13 38 26.4 -0.3
KURK pmax pmax
comp=Z,21nm,0.8s
KURK **Kurchatov** 61.87 327 eP P 13 38 26.4 -0.3
comp=Z,21nm,0.8s
SEY **Seymchan** 61.96 13 eP P 13 38 27.6 +0.5
NVS **Novosibirsk** 61.97 333 eP P 13 38 26.1 -1.3
NVS pmax pmax
comp=E,3.0nm,0.9s
NVS pmax pmax
comp=Z,7.0nm,0.9s
NVS pmax pmax
comp=N,4.0nm,0.8s
KK31 **Karatay Array** 63.40 317 i P P 13 38 36.3 -0.8
KK31 pmax pmax
comp=Z,3.0nm,0.7s
KKAR **Karatay Array** 63.40 317 eP P 13 38 35.8 -1.3
KKAR pmax pmax
comp=Z,6.0nm,0.8s
KKAR **Karatay Array** 63.40 317 eP P 13 38 35.8 -1.3
comp=Z,5.9nm,0.8s
BVA0 **Borovoye Array** 67.45 327 P P 13 39 01.5 -1.6
BVA0 pmax pmax
comp=Z,9.0nm,1.2s
BRVK **Borovoye** 67.52 327c iP P 13 39 03.1 -0.4
BRVK pmax pmax
comp=Z,12nm,1.2s
BRVK **Borovoye** 67.52 327 eP P 13 39 02.7 -0.8
comp=Z,5.4nm,0.8s
GEYT **Alibeck** 71.08 309 P P 13 39 25.5 -0.5
comp=Z,2.0nm,0.6s,baz=208,slow=8.4,SNR=3.9
AB31 **Akbulak array** 72.30 321 P P 13 39 32.0 -0.9
AB31 pmax pmax
comp=Z,2.0nm,0.5s
ABKAR **Akbulak array** 72.30 321 eP P 13 39 32.4 -0.5
comp=Z,4.1nm,0.7s
SVE **Sverdlovsk** 74.08 328⇑ eP P 13 39 43.4 +0.1
SVE pmax pmax
comp=Z,20nm,1.1s
ARU **Arti** 75.06 328d iP P 13 39 48.1 -0.9
ARU 13 42 39.9
ARU PPP PPP 13 44 29.2
ARU S S 13 49 25.9 +3.3
ARU SS SS 13 54 08.7 -3.7
ARU pmax pmax
comp=Z,14nm,1.2s
ARU **Arti** 75.06 328 eP P 13 39 47.8 -1.2
comp=Z,17nm,1.1s
RAYN **Ar Rayn** 80.71 293 eP P 13 40 19.6 -1.5
comp=Z,3.1nm,0.8s
OPO **Ambohidratompo** 81.54 251 P P 13 40 25.7 0.0
comp=Z,2.0nm,0.3s,baz=68,slow=5.4,SNR=3.0
ABPO **Ambohimpanom** 81.55 250 P P 13 40 24.0 -1.8
ABPO **Ambohimpanom** 81.55 250 P P 13 40 24.0 -1.8
KBZ **Khabaz** 83.15 313 P P 13 40 33.6 +0.2
comp=Z,1.2nm,0.8s,baz=52,slow=12,SNR=2.3
VNDA **Vanda** 83.41 173 P P 13 40 34.5 +0.4
comp=Z,2.5nm,0.9s,baz=314,slow=5.5,SNR=13
MAW **Mawson** 83.85 200 P P 13 40 36.6 +0.1
comp=Z,1.3nm,0.8s,baz=64,slow=6.8,SNR=4.0
MCK **McKinley** 84.04 26 eP P 13 40 37.8 +0.2
MCK **McKinley** 84.04 26 eP P 13 40 37.8 +0.2
VRH **Novokhopyorsk** 84.13 321 eP P 13 40 37.7 -0.6
VRH pmax pmax
comp=N,20nm,0.7s
VRH pmax pmax
comp=Z,20nm,0.7s
VRH pmax pmax
comp=E,10.0nm,0.6s
ILAR **Eielson Array** 84.98 25 P P 13 40 42.5 +0.2
comp=E,1.1nm,1.0s,baz=256,slow=4.1,SNR=5.9
VORD **Divnogorie** 85.66 321 eP P 13 40 45.6 -0.4
VORD pmax pmax
comp=Z,10.0nm,0.4s
VORD pmax pmax
comp=N,30nm,0.6s
VORD pmax pmax
comp=E,40nm,1.0s
VSR **Storozhevoye** 85.74 321 eP P 13 40 45.9 -0.5
VSR pmax pmax
comp=Z,20nm,0.9s
VSR pmax pmax
comp=N,6.0nm,1.0s
VSR pmax pmax
comp=E,10.0nm,1.1s
LPSR **Galich'ya Gora** 85.87 322 eP P 13 40 47.2 +0.2
LPSR pmax pmax
comp=Z,30nm,0.8s
LPSR pmax pmax
comp=N,3.0nm,0.6s
LPSR pmax pmax
comp=E,10.0nm,1.1s
TMCR **Tamitsa** 86.20 334 eP P 13 40 48.1 -0.2
TMCR pmax pmax
comp=Z,20nm,0.7s
MALT **Malatya** 86.57 308⇓ iP P 13 40 52.3 +1.4
MOS **Moscow** 86.57 325 eP P 13 40 50.0 -0.4
MOS pmax pmax
comp=Z,47nm,0.9s
OBN **Obninsk** 87.20 325 P P 13 40 53.0 -0.4
comp=Z,16nm,0.4s,baz=60,slow=9.8,SNR=5.9
OBN **Obninsk** 87.20 325⇑ eP P 13 40 53.3 -0.1
OBN pmax pmax
comp=Z,51nm,1.7s
OBN MLR MLR
comp=Z,97nm,17.0s
BRTR **Keskin Array B** 90.21 310 P P 13 41 07.5 -0.8
comp=Z,3.2nm,0.8s,baz=106,slow=4.6,SNR=11
ARCES **ARCESS Array B** 90.52 340 P P 13 41 08.6 -0.3
comp=Z,9.1nm,0.7s,baz=79,slow=6.3,SNR=35
FINES **FINESS Array B** 91.94 332 P P 13 41 15.2 -0.4
comp=Z,1.5nm,0.6s,baz=67,slow=5.6,SNR=14
AKASG **Malin Array Be** 92.04 321 P P 13 41 15.1 -1.2
comp=Z,3.3nm,0.6s,baz=68,slow=4.8,SNR=16
KIEV **Kiev** 92.05 321d iP P 13 41 15.6 -0.7
KIEV pmax pmax
comp=Z,7.0nm,1.0s
TESR **Tescani** 94.40 317⇑ iP P 13 41 27.1 -0.2
VRI **Vrincioaia** 94.46 316⇑ iP P 13 41 28.4 +0.8
PLOR **Plostina** 94.52 316⇑ iP P 13 41 28.0 +0.2
MLR **Muntele Rosu** 95.07 316 P P 13 41 30.7 +0.3
comp=Z,1.6nm,0.9s,baz=291,slow=2.2,SNR=8.1
MLR **Muntele Rosu** 95.07 316⇓ iP P 13 41 30.9 +0.4
BURAR **Bucovina Array** 95.16 318⇑ iP P 13 41 31.2 +0.4
TRPA **Tarpa** 96.81 319⇓ iP P 13 41 37.7 -0.5
UZH **Uzhgorod** 96.86 320⇑ iP P 13 41 38.5 +0.2
GZR **Gura Zlata** 97.27 316⇓ iP Pdif 13 41 40.8 +0.3
BZS **Buzias** 98.01 317⇓ iP P 13 41 43.4 -0.3
HFS **Hagfors** 98.12 332 P P 13 41 43.2 -0.7
comp=Z,6.0nm,0.9s,baz=90,slow=4.4,SNR=5.7
NB2 **NORSAR Subarra** 98.89 334 P P 13 41 46.4 -0.8
comp=Z,2.0nm,0.7s,baz=66,slow=4.6
NOA **NORSAR Array B** 98.89 334 P P 13 41 46.5 -0.8
comp=Z,5.1nm,0.9s,baz=66,slow=4.5,SNR=6.9
DIVS **Divibare** 99.50 316⇑ iP Pdif 13 41 50.8 +0.3
MORC **Moravsky Berou** 99.55 322⇓ iP Pdif 13 41 51.1 +0.6
BRG **Berggiesshubel** 101.38 324 ePKP Pdif 13 41 59.7 +1.1
comp=Z,23nm,1.9s
BRG **Berggiesshubel** 101.38 324 eP Pdif 13 41 59.7 +1.1
BRG pmax pmax
comp=Z,23nm,1.9s
GERES **GERESS Array B** 102.23 322 P Pdif 13 42 03.0 +0.4
comp=Z,0.9nm,0.9s,baz=44,slow=5.8,SNR=6.1
GERES **GERESS Array B** 102.23 322 P Pdif 13 42 03.0 +0.4
TXAR **Lajitas Array** 121.39 52 PKP PKPdf 13 47 02.4 +1.3
comp=Z,0.4nm,0.9s,baz=221,slow=1.0,SNR=4.1
TORD **Torodi Ar. Bea** 123.15 288 PKP PKPdf 13 47 05.2 +0.5
comp=Z,2.5nm,0.8s,baz=55,slow=1.7,SNR=17
DBIC **Dimbokro** 130.82 282 PKP PKPdf 13 47 20.5 +1.1
comp=Z,2.0nm,0.6s,baz=108,slow=3.2,SNR=2.4
LPAZ **La Paz** 160.61 131 PKP PKPdf 13 48 09.8 +1.1
comp=Z,1.6nm,1.0s,baz=307,slow=2.7,SNR=4.0
LPAZ PKPab PKPab 13 48 53.1 +2.8
comp=Z,1.2nm,0.9s,baz=273,slow=5.7,SNR=4.1

*JMA* ***03*** *13:39:13.6,23.°16N×121.°55E,h46km±2km,M3.7*
*ISCJB* ***03*** *13:39:14.1±0.3,23.°16N±0.°01×121.°66E±0.°01,h29km±2km,*
*Error ellipse: s-maj=2.7km s-min=1.9km az=137.6*
*TAP* ***03*** *13:39:14.8,23.°18N×121.°56E,h38km,ML3.8,C*
**ISC 03 13:39:14.7**±0.9**,23.°16N**±0.°02×**121.°63E**±0.°02**,h31**km±7km**,**n76,σ0s91/145,12C-1D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| CHKT | **Chengkung** baz=244 | 0.25 | 256 | ⇓iP | | Pb | 13 39 21.8 | +0.3 |
| CHKT | | | | *i*S | | Sb | 13 39 26.8 | +0.6 |
| TWF1 | **Yuli** baz=307 | 0.36 | 303 | ⇑iP | | Pb | 13 39 23.0 | 0.0 |
| TWF1 | | | | *e*S | | Sb | 13 39 28.6 | -0.2 |
| EHY | **Hungye** baz=314 | 0.45 | 321 | ⇑iP | | Pb | 13 39 23.9 | -0.4 |
| EHY | | | | S | | Sb | 13 39 30.7 | -0.2 |
| TEGC | **Jichi Village** baz=7.0 | 0.55 | 352 | *e*P | | Pb | 13 39 26.2 | +0.1 |
| ELDTW | **Lidau** baz=270 | 0.56 | 273 | ⇑iP | | Pb | 13 39 25.2 | -1.0 |
| ELDTW | | | | *e*S | | Sb | 13 39 32.2 | -1.9 |
| TTN | **Taitung** baz=234 | 0.60 | 228 | *e*P | | Pb | 13 39 27.0 | +0.3 |
| TTN | | | | *e*S | | Sb | 13 39 35.9 | +1.0 |
| TWG | **Pinlang** baz=242 | 0.61 | 237 | ⇑iP | | Pb | 13 39 26.1 | -0.8 |
| TWG | | | | *e*S | | Sb | 13 39 34.2 | -1.2 |
| ESL | **Shilin** baz=340 | 0.68 | 345 | *e*P | | Pb | 13 39 26.7 | -1.3 |
| ESL | | | | *e*S | | Sb | 13 39 37.1 | -0.1 |
| YUS | **Yu-Shan** baz=299 | 0.70 | 298 | ⇑iP | | Pn | 13 39 28.1 | -0.9 |
| YUS | | | | S | | Sb | 13 39 36.8 | -1.6 |
| STYT | **Tauyuan** baz=269 | 0.80 | 271 | ⇑iP | | Pn | 13 39 29.1 | -0.8 |
| STYT | | | | *e*S | | Sn | 13 39 39.2 | -1.7 |
| HWA | **Hwalien** baz=12 | 0.81 | 359 | *e*P | | Pn | 13 39 29.3 | -0.8 |
| HWA | | | | *e*S | | Sn | 13 39 40.7 | -0.4 |
| ECL | **Taimali** baz=224 | 0.83 | 228 | *e*P | | Pn | 13 39 28.8 | -1.6 |
| ECL | | | | *e*S | | Sn | 13 39 37.7 | -3.9 |
| TWD | **Chiawan** baz=349 | 0.92 | 358 | *i*P | | Pn | 13 39 30.7 | -0.8 |
| TWD | | | | S | | Sn | 13 39 42.4 | -1.2 |
| WTP | **Ta-pu** baz=268 | 0.94 | 276 | ⇑iP | | Pn | 13 39 31.8 | 0.0 |
| WTP | | | | S | | Sn | 13 39 44.5 | +0.3 |
| SGST | **Jiashian** baz=264 | 0.96 | 266 | ⇑iP | | Pn | 13 39 32.5 | +0.4 |
| SGST | | | | S | | Sn | 13 39 44.9 | 0.0 |
| CHN5 | **Tsauling** baz=298 | 0.97 | 297 | ⇑iP | | Pn | 13 39 32.5 | +0.1 |
| CHN5 | | | | *i*S | | Sn | 13 39 45.5 | +0.3 |
| SMLT | **Sun Moon Lake** baz=324 | 0.98 | 317 | ⇑iP | | Pn | 13 39 32.3 | -0.2 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SMLT | | | | S | Sn | 13 39 44.1 | -1.3 |
| | baz=324 | | | | | | |
| SSD | Sandimen | 1.00 | 246 | eP | Pn | 13 39 32.4 | -0.3 |
| | baz=243 | | | | | | |
| SSD | | | | eS | Sn | 13 39 46.4 | +0.6 |
| | baz=243 | | | | | | |
| CHN1 | Nanshi | 1.01 | 272 | ⇑iP | Pn | 13 39 33.3 | +0.5 |
| | baz=271 | | | | | | |
| CHN1 | | | | S | Sn | 13 39 46.8 | +0.8 |
| | baz=271 | | | | | | |
| TYC | Yuchr | 1.02 | 317 | ⇑iP | Pn | 13 39 33.0 | +0.1 |
| | baz=328 | | | | | | |
| TYC | | | | iS | Sn | 13 39 46.4 | +0.1 |
| | baz=328 | | | | | | |
| WHF | Hehuan Shan | 1.04 | 341 | eP | Pn | 13 39 32.5 | -1.1 |
| | baz=345 | | | | | | |
| WHF | | | | eS | Sn | 13 39 45.4 | -1.8 |
| | baz=345 | | | | | | |
| TAW | Tawu | 1.04 | 220 | eP | Pn | 13 39 32.6 | -0.6 |
| | baz=215 | | | | | | |
| TWK | Hsinying | 1.05 | 276 | eP | Pn | 13 39 33.7 | +0.3 |
| | baz=275 | | | | | | |
| TWK | | | | eS | Sn | 13 39 47.8 | +0.7 |
| | baz=275 | | | | | | |
| EAST | Anshuo | 1.05 | 223 | eP | Pn | 13 39 32.5 | -0.9 |
| | baz=218 | | | | | | |
| WGK | Gukeng | 1.11 | 298 | eP | Pn | 13 39 34.5 | +0.4 |
| | baz=311 | | | | | | |
| WGK | | | | eS | Sn | 13 39 49.2 | +0.7 |
| | baz=311 | | | | | | |
| LAY | Lan-yu | 1.12 | 184 | iP | Pn | 13 39 33.4 | -0.9 |
| | baz=173 | | | | | | |
| LAY | | | | eS | Sn | 13 39 47.3 | -1.3 |
| | baz=173 | | | | | | |
| CHN2 | Minshiung | 1.12 | 290 | P | Pn | 13 39 34.9 | +0.6 |
| | baz=276 | | | | | | |
| CHN2 | | | | eS | Sn | 13 39 49.3 | +0.6 |
| | baz=276 | | | | | | |
| WNT | Mingjian | 1.12 | 310 | P | Pn | 13 39 34.8 | +0.5 |
| | baz=313 | | | | | | |
| WNT | | | | eS | Sn | 13 39 49.4 | +0.7 |
| | baz=313 | | | | | | |
| SGLT | Jiouru | 1.13 | 248 | eP | Pn | 13 39 35.2 | +0.8 |
| | baz=245 | | | | | | |
| SGLT | | | | eS | Sb | 13 39 50.8 | +0.7 |
| | baz=245 | | | | | | |
| CHY | Chiayi | 1.16 | 287 | iP | Pn | 13 39 35.1 | +0.3 |
| | baz=288 | | | | | | |
| CHY | | | | S | Sn | 13 39 49.9 | +0.3 |
| | baz=288 | | | | | | |
| TWM1 | Shoushan | 1.16 | 254 | eP | Pb | 13 39 36.5 | +0.4 |
| | baz=251 | | | | | | |
| TWM1 | | | | eS | Sb | 13 39 52.7 | +1.9 |
| | baz=251 | | | | | | |
| CHN3 | Shinhua | 1.17 | 266 | eP | Pn | 13 39 36.1 | +1.3 |
| | baz=265 | | | | | | |
| CHN3 | | | | eS | Sb | 13 39 51.9 | +0.9 |
| | baz=265 | | | | | | |
| TWT | Tachien | 1.17 | 339 | eP | Pn | 13 39 34.6 | -0.5 |
| | baz=350 | | | | | | |
| TWT | | | | eS | Sn | 13 39 48.6 | -1.4 |
| | baz=350 | | | | | | |
| SCZT | Fangliau | 1.22 | 230 | eP | Pn | 13 39 35.9 | +0.3 |
| | baz=226 | | | | | | |
| SCZT | | | | eS | Sn | 13 39 52.4 | +1.5 |
| | baz=226 | | | | | | |
| ENA | Nanau | 1.27 | 5 | P | Pn | 13 39 35.8 | -0.6 |
| | baz=18 | | | | | | |
| ENA | | | | eS | Sn | 13 39 51.2 | -1.1 |
| | baz=18 | | | | | | |
| TAI1 | Yung-k'ang | 1.29 | 265 | eP | Pn | 13 39 37.8 | +1.2 |
| | baz=264 | | | | | | |
| TAI1 | | | | eS | Sn | 13 39 53.2 | +0.3 |
| | baz=264 | | | | | | |
| NNS | Nan Shan | 1.30 | 350 | eP | Pn | 13 39 37.3 | +0.4 |
| | baz=2.0 | | | | | | |
| NNS | | | | eS | Sn | 13 39 52.3 | -0.9 |
| | baz=2.0 | | | | | | |
| TCU | Taichung | 1.31 | 319 | eP | Pn | 13 39 38.4 | +1.5 |
| | baz=309 | | | | | | |
| TCU | | | | eS | Sn | 13 39 54.4 | +0.9 |
| | baz=309 | | | | | | |
| CHN8 | Yiju | 1.32 | 278 | eP | Pn | 13 39 37.5 | +0.5 |
| | baz=278 | | | | | | |
| CHN8 | | | | eS | Sn | 13 39 54.4 | +0.9 |
| | baz=278 | | | | | | |
| SCLT | Jiali | 1.32 | 271 | eP | Pn | 13 39 38.0 | +1.0 |
| | baz=270 | | | | | | |
| SCLT | | | | eS | Sn | 13 39 55.1 | +1.6 |
| | baz=270 | | | | | | |
| KAU | Kaohsiung | 1.35 | 244 | eP | Pn | 13 39 37.7 | +0.3 |
| | baz=259 | | | | | | |
| KAU | | | | eS | Sn | 13 39 55.7 | +1.4 |
| | baz=259 | | | | | | |
| WSF | Szhu | 1.38 | 291 | eP | Pn | 13 39 37.7 | -0.1 |
| | baz=291 | | | | | | |
| WSF | | | | S | Sn | 13 39 55.2 | +0.3 |
| | baz=291 | | | | | | |
| HEN | Hengchun | 1.41 | 216 | eP | Pn | 13 39 39.3 | +1.0 |
| | baz=201 | | | | | | |
| HEN | | | | S | Sn | 13 39 56.2 | +0.3 |
| | baz=201 | | | | | | |
| TWP | Hsiaoliuchiu | 1.42 | 236 | eP | Pb | 13 39 40.6 | +0.1 |
| | baz=233 | | | | | | |
| TWQ1 | Liyutan | 1.42 | 327 | eP | Pn | 13 39 39.6 | +1.2 |
| | baz=331 | | | | | | |
| TWQ1 | | | | eS | Sn | 13 39 57.2 | +1.1 |
| | baz=331 | | | | | | |
| TSEB | Hengchuen, Pin | 1.42 | 208 | eP | Pn | 13 39 38.7 | +0.3 |
| | baz=207 | | | | | | |
| TSEB | | | | eS | Sn | 13 39 56.6 | +0.6 |
| | baz=207 | | | | | | |
| WTCT | Ta-ch'eng | 1.42 | 300 | P | Pn | 13 39 38.5 | +0.1 |
| | baz=301 | | | | | | |
| WTCT | | | | eS | Sn | 13 39 56.4 | +0.3 |
| | baz=301 | | | | | | |
| TWK1 | Hengchun | 1.43 | 212 | eP | Pn | 13 39 38.2 | -0.3 |
| | baz=198 | | | | | | |
| TWK1 | | | | eS | Sn | 13 39 55.6 | -0.6 |
| | baz=198 | | | | | | |
| TWC | Suao | 1.46 | 8 | P | Pn | 13 39 39.0 | 0.0 |
| | baz=11 | | | | | | |
| TWC | | | | S | Sn | 13 39 57.4 | +0.3 |
| | baz=11 | | | | | | |
| ENTT | Nioudou | 1.48 | 358 | eP | Pn | 13 39 39.0 | -0.2 |
| | baz=1.0 | | | | | | |
| ENTT | | | | eS | Sn | 13 39 57.2 | -0.3 |
| | baz=1.0 | | | | | | |
| NSY | Sanyi | 1.48 | 328 | eP | Pn | 13 39 40.1 | +0.8 |
| | baz=332 | | | | | | |
| NSY | | | | eS | Sn | 13 39 59.7 | +2.0 |
| | baz=332 | | | | | | |
| NSK | Sanguang | 1.53 | 351 | iP | Pn | 13 39 40.3 | +0.3 |
| | baz=355 | | | | | | |
| NSK | | | | S | Sn | 13 39 58.0 | -0.9 |
| | baz=355 | | | | | | |
| TWE | Neicheng | 1.56 | 1 | eP | Pn | 13 39 40.9 | +0.6 |
| | baz=356 | | | | | | |
| TWE | | | | eS | Sn | 13 39 58.9 | -0.5 |
| | baz=356 | | | | | | |
| NSTT | Nanjuang | 1.57 | 339 | eP | Pn | 13 39 41.5 | +0.9 |
| | baz=343 | | | | | | |
| NSTT | | | | eS | Sn | 13 40 00.4 | +0.5 |
| | baz=343 | | | | | | |
| ILA | Ilan | 1.60 | 4 | eP | Pn | 13 39 40.1 | -0.8 |
| | baz=357 | | | | | | |
| ILA | | | | eS | Sn | 13 40 00.6 | 0.0 |
| | baz=357 | | | | | | |
| EGS | | 1.70 | 9 | eP | Pn | 13 39 43.6 | +1.4 |
| | baz=22 | | | | | | |
| EGS | | | | eS | Sn | 13 40 03.3 | +0.3 |
| | baz=22 | | | | | | |
| HSN | Hsinchu | 1.74 | 340 | eP | Pn | 13 39 44.7 | +1.9 |
| | baz=346 | | | | | | |
| HSN | | | | eS | Sn | 13 40 04.2 | +0.1 |
| | baz=346 | | | | | | |
| JYNG | Yonagunijimaku | 1.77 | 43 | P | Pn | 13 39 43.9 | +0.8 |
| JYNG | | | | eS | Sn | 13 40 05.0 | +0.4 |
| WDGT | Dungji | 1.81 | 274 | eP | Pn | 13 39 43.2 | -0.5 |
| | baz=273 | | | | | | |
| WDGT | | | | eS | Sn | 13 40 03.1 | -2.7 |
| | baz=273 | | | | | | |
| YOJ | Yonaguni jima | 1.81 | 44 | P | Pn | 13 39 44.6 | +0.8 |
| YOJ | | | | eS | Sn | 13 40 06.0 | +0.2 |
| TWA | Mucha | 1.81 | 359 | eP | Pn | 13 39 44.0 | +0.1 |
| | baz=1.0 | | | | | | |
| TWA | | | | eS | Sn | 13 40 05.8 | 0.0 |
| | baz=1.0 | | | | | | |
| NCU | National Centr | 1.85 | 348 | eP | Pn | 13 39 44.6 | +0.3 |
| | baz=351 | | | | | | |
| NCU | | | | eS | Sn | 13 40 07.1 | +0.5 |
| | baz=351 | | | | | | |
| TWB1 | Santiao Chiao | 1.87 | 10 | eP | Pn | 13 39 45.3 | +0.7 |
| | baz=24 | | | | | | |
| TWB1 | | | | eS | Sn | 13 40 06.8 | -0.4 |
| | baz=24 | | | | | | |
| NWF | Wu-fen Shan | 1.91 | 4 | eP | Pn | 13 39 46.1 | +0.9 |
| | baz=354 | | | | | | |
| NWF | | | | eS | Sn | 13 40 08.0 | -0.2 |
| | baz=354 | | | | | | |
| TWS1 | Kuangyinshan | 1.94 | 354 | eP | Pn | 13 39 46.9 | +1.3 |
| | baz=7.0 | | | | | | |
| TWS1 | | | | eS | Sn | 13 40 09.3 | +0.3 |
| | baz=7.0 | | | | | | |
| PNG | Penghu | 1.95 | 282 | eP | Pn | 13 39 44.8 | -0.8 |
| | baz=282 | | | | | | |
| HATJ | Hateruma jima | 2.19 | 65 | P | Pn | 13 39 49.5 | +0.5 |
| HATJ | | | | eS | Sn | 13 40 15.3 | +0.3 |
| IRIF | Iriomote-Funau | 2.25 | 58 | P | Pn | 13 39 50.5 | +0.6 |
| IRIF | | | | eS | Sn | 13 40 17.6 | +0.9 |
| JKRS | Kuro-shima | 2.43 | 63 | P | Pn | 13 39 52.9 | +0.6 |
| JKRS | | | | eS | Sn | 13 40 22.1 | +1.0 |
| JIJ | Ishigaki jima | 2.60 | 62 | P | Pn | 13 39 54.7 | +0.1 |
| JIJ | | | | eS | Sn | 13 40 24.5 | -0.7 |
| JISG | Ishigakijimahi | 2.84 | 59 | P | Pn | 13 39 57.8 | -0.1 |
| JISG | | | | eS | Sn | 13 40 30.0 | -1.1 |
| JTJ | Tarama | 3.18 | 62 | P | Pn | 13 40 02.9 | +0.3 |
| JTJ | | | | eS | Sn | 13 40 40.0 | +0.6 |
| KNM | Kinmen | 3.18 | 294 | eP | Pn | 13 40 02.0 | -0.6 |
| | baz=292 | | | | | | |
| JIRB | Irabujima | 3.64 | 62 | P | Pn | 13 40 09.2 | +0.2 |
| JIKM | Ikemajima | 3.75 | 61 | P | Pn | 13 40 10.6 | +0.2 |
| JIKM | | | | eS | Sn | 13 40 52.6 | -0.9 |
| JOGS | Gusukube | 3.81 | 64 | P | Pn | 13 40 12.0 | +0.8 |
| JOGS | | | | eS | Sn | 13 40 55.7 | +0.7 |

**IDC 03 13:42:40.8±8.5, 6°.32S×147°.35E, h0km, mb3.2/2, mb1 3.5/3, mb1mx3.3/20, mbtmp3.3/3, ML3.0/1, Error ellipse: s-maj=269.2km s-min=34.4km az=105.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 18.52 | 222 | P | Pn | 13 47 00.1 | +0.9 |
| | 0.1nm,0.3s,baz=40,slow=12,SNR=6.0 | | | | | | |
| ASAR | Alice Springs | 21.56 | 215 | P | P | 13 47 31.2 | -0.9 |
| | 0.8nm,1.0s,baz=48,slow=7.7,SNR=5.3 | | | | | | |
| MKAR | Makanchi Array | 77.97 | 320 | P | P | 13 54 41.2 | +0.1 |
| | 0.1nm,0.4s,baz=111,slow=6.8,SNR=3.2 | | | | | | |

*NEIC **03** 13:44:58.9, 17°.48N×94°.70W, h132km, MD4.1(MEX), After MEX.*

**MEX 03 13:44:58.9±0.8, 17°.48N×94°.70W, h132km±26km, MD4.1, Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TGIG | | 1.66 | 114 | iP | Pn | 13 45 28.0 | -1.0 |
| TGIG | | | | iS | Sn | 13 45 49.9 | -2.1 |
| TGIG | | 1.66 | 114 | iP | Pn | 13 45 28.0 | -1.0 |
| TGIG | | | | iS | Sn | 13 45 49.9 | -2.1 |
| OXX | Oaxaca | 1.97 | 259 | iP | Pn | 13 45 32.3 | -0.6 |
| OXX | | | | iS | Sn | 13 45 57.1 | -1.8 |
| OXX | Oaxaca | 1.97 | 259 | iP | Pn | 13 45 32.3 | -0.6 |
| OXX | | | | iS | Sn | 13 45 57.1 | -1.8 |
| HUIG | Huatulco | 2.17 | 219 | eP | Pn | 13 45 33.1 | -2.0 |
| HUIG | | | | iS | Sn | 13 46 01.7 | -1.1 |
| HUIG | Huatulco | 2.17 | 219 | eP | Pn | 13 45 33.1 | -2.0 |
| HUIG | | | | iS | Sn | 13 46 01.7 | -1.1 |
| PCIG | | 2.26 | 141 | iP | Pn | 13 45 35.2 | -1.0 |
| PCIG | | | | eS | Sn | 13 46 02.7 | -2.1 |
| PCIG | | 2.26 | 141 | iP | Pn | 13 45 35.2 | -1.0 |
| PCIG | | | | eS | Sn | 13 46 02.7 | -2.1 |
| PNIG | Pinotepa | 3.46 | 252 | eP | Pn | 13 45 49.9 | -1.7 |
| PNIG | | | | iS | Sn | 13 46 30.6 | -1.7 |
| PNIG | Pinotepa | 3.46 | 252 | eP | Pn | 13 45 49.9 | -1.7 |
| PNIG | | | | iS | Sn | 13 46 30.6 | -1.7 |

**IDC 03 13:58:09.3±1.5, 2°.40N×127°.54E, h0km, mb3.3/4, mb1 3.4/4, mb1mx3.2/32, mbtmp3.3/4, Error ellipse: s-maj=128.3km s-min=22.2km az=70.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 23.19 | 164 | P | P | 14 03 17.8 | -0.1 |
| | 0.6nm,0.8s,baz=344,slow=10,SNR=5.6 | | | | | | |
| ASAR | Alice Springs | 26.64 | 167 | P | P | 14 03 49.6 | -0.3 |
| | 0.2nm,0.7s,baz=353,slow=8.4,SNR=3.1 | | | | | | |
| SONM | Songino Array | 48.80 | 341 | P | P | 14 06 56.9 | +0.4 |
| | 0.4nm,0.6s,baz=134,slow=4.2,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 59.10 | 325 | P | P | 14 08 11.3 | -0.3 |
| | 0.2nm,0.4s,baz=130,slow=8.0,SNR=6.9 | | | | | | |

*ISCJB **03** 14:01:11.6±1.0, 35°.01N±0°.07×33°.63E±0°.05, h66km±9km, Error ellipse: s-maj=12.3km s-min=7.3km az=171.9*
*CSEM **03** 14:01:12.4±0.3, 35°.02N×33°.61E, h60km, ML2.9, Error ellipse: s-maj=14.0km s-min=6.4km az=176.0*
*NSSC **03** 14:01:12.1±1.6, 35°.03N×33°.58E, h39km±999km, ML1.7*
*NIC **03** 14:01:14.1, 34°.95N×33°.54E, h46km, ML2.9*
**ISC 03 14:01:11.7±1.5, 35°.03N±0°.06×33°.59E±0°.04, h66km±9km, n18, σ1s17/32, 4D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CSS | Prodhromos | 0.22 | 253 | P | Pn | 14 01 21.6 | -0.4 |
| | baz=93 | | | | | | |
| CSS | | | | S | Sn | 14 01 27.4 | -2.1 |
| CSS | Prodhromos | 0.22 | 253 | P | Pn | 14 01 21.6 | -0.4 |
| CSS | | | | S | Sn | 14 01 27.4 | -2.1 |
| MAMC | Mammari | 0.33 | 296 | P | Pn | 14 01 23.7 | +1.0 |
| | baz=130 | | | | | | |
| MAMC | Mammari | 0.33 | 296 | P | Pn | 14 01 23.7 | +1.0 |
| PHNC | Paralimni | 0.37 | 93 | ⇓P | Pn | 14 01 24.0 | +1.0 |
| | baz=262 | | | | | | |
| PHNC | | | | S | Sn | 14 01 32.3 | +1.1 |
| PHNC | Paralimni | 0.37 | 93 | ⇓P | Pn | 14 01 24.0 | +1.0 |
| PHNC | | | | S | Sn | 14 01 32.3 | +1.1 |
| SZAC | Souni-Zanaja | 0.64 | 245 | ⇓P | Pn | 14 01 26.1 | +0.4 |
| | baz=70 | | | | | | |
| SZAC | | | | S | Sn | 14 01 35.9 | 0.0 |
| SZAC | Souni-Zanaja | 0.64 | 245 | ⇓P | Pn | 14 01 26.1 | +0.4 |
| SZAC | | | | S | Sn | 14 01 35.9 | 0.0 |
| ALFC | Alevga | 0.82 | 280 | P | Pn | 14 01 29.0 | +1.2 |
| | baz=104 | | | | | | |
| ALFC | Alevga | 0.82 | 280 | P | Pn | 14 01 29.0 | +1.2 |
| ARNB | Al Arnab | 2.12 | 66 | eP | Pn | 14 01 44.3 | -0.7 |
| ARNB | | | | eS | Sn | 14 02 08.9 | -1.5 |
| ARNB | | | | AML | AML | 14 02 12.8 | |
| | comp=N,6.2nm,0.3s | | | | | | |
| ARNB | | | | AML | AML | 14 02 14.3 | |
| | comp=E,10nm,0.2s | | | | | | |
| ARNB | Al Arnab | 2.12 | 66 | eP | Pn | 14 01 44.3 | -0.7 |
| ARNB | | | | eS | Sn | 14 02 08.9 | -1.5 |
| HAWK | Haweek | 2.38 | 101 | eP | Pn | 14 01 49.8 | +1.3 |
| HAWK | | | | eS | Sn | 14 02 16.3 | -0.3 |
| HAWK | | | | AML | AML | 14 02 17.8 | |
| | comp=N,13nm,0.6s | | | | | | |
| HAWK | | | | AML | AML | 14 02 18.3 | |
| | comp=E,6.3nm,0.5s | | | | | | |
| HAWK | Haweek | 2.38 | 101 | eP | Pn | 14 01 49.8 | +1.3 |
| HAWK | | | | eS | Sn | 14 02 16.3 | -0.3 |
| BRBR | Barbar | 2.54 | 129 | eP | Pn | 14 01 51.5 | +0.7 |
| BRBR | | | | eS | Sn | 14 02 19.0 | -1.7 |
| BRBR | | | | AML | AML | 14 02 20.9 | |
| | comp=E,7.7nm,0.7s | | | | | | |
| BRBR | | | | AML | AML | 14 02 23.0 | |
| | comp=N,5.7nm,0.3s | | | | | | |
| BRBR | Barbar | 2.54 | 129 | eP | Pn | 14 01 51.5 | +0.7 |
| BRBR | | | | eS | Sn | 14 02 19.0 | -1.7 |
| BTCH | Batrach | 2.55 | 66 | eP | Pn | 14 01 52.0 | +1.1 |
| BTCH | | | | eS | Sn | 14 02 20.1 | -0.8 |
| BTCH | | | | AML | AML | 14 02 26.0 | |
| | comp=E,15nm,0.2s | | | | | | |
| BTCH | | | | AML | AML | 14 02 30.5 | |
| | comp=N,12nm,0.6s | | | | | | |
| BTCH | Batrach | 2.55 | 66 | eP | Pn | 14 01 52.0 | +1.1 |
| BTCH | | | | eS | Sn | 14 02 20.0 | -0.8 |

*ISCJB **03** 14:03:50.8±0.4, 41°.37N±0°.03×142°.19E±0°.06, h82km±4km, mb3.6/9, Error ellipse: s-maj=7.9km s-min=3.9km az=30.0*
*JMA **03** 14:03:51.8±0.1, 41°.36N×142°.18E, h76km±2km, M3.4*
*JMA Felt I J1.*
*IDC **03** 14:03:52.6±2.2, 41°.29N×142°.11E, h83km±20km, mb3.4/9, mb1 3.5/12, mb1mx3.3/40, mbtmp3.7/12, MS3.2/1, Ms1 3.2/1, ms1mx2.4/20, Error ellipse: s-maj=21.8km s-min=15.8km az=98.0*
**ISC 03 14:03:51.8±0.9, 41°.37N±0°.04×142°.20E±0°.05, h75km±8km, n33, σ0s82/38, mb3.7/9, 5C, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOT | Ohata | 0.87 | 271 | P | Pn | 14 04 09.0 | +0.1 |
| JOT | | | | S | Sn | 14 04 21.5 | -0.1 |
| JEM | Erimo | 0.97 | 48 | P | Pn | 14 04 10.3 | +0.2 |
| JEM | | | | S | Sn | 14 04 23.7 | 0.0 |
| JNBK | Urakawa-nobuka | 1.00 | 24 | ⇑P | Pn | 14 04 10.7 | +0.2 |
| JNBK | | | | S | Sn | 14 04 26.1 | +1.6 |
| JKB | Kayabe | 1.02 | 301 | P | Pn | 14 04 10.4 | -0.3 |
| JKB | | | | S | Sn | 14 04 24.1 | -0.7 |
| JTM | Tenmabayashi | 1.03 | 236 | ⇑P | Pn | 14 04 11.1 | +0.2 |
| JTM | | | | S | Sn | 14 04 25.0 | -0.2 |
| JANG | Nango | 1.12 | 208 | ⇑P | Pn | 14 04 11.6 | -0.4 |
| JANG | | | | S | Sn | 14 04 26.5 | -0.6 |
| JCH | Churui | 1.52 | 34 | P | Pn | 14 04 17.3 | +0.2 |
| JCH | | | | S | Sn | 14 04 35.9 | -0.3 |
| JEW | Eniwo | 1.57 | 339 | ⇑P | Pn | 14 04 18.1 | +0.2 |
| JEW | | | | S | Sn | 14 04 37.8 | +0.2 |
| JFR | Furan | 1.82 | 9 | P | Pn | 14 04 21.3 | +0.2 |
| JOM | Ohasama | 2.01 | 200 | ⇑P | Pn | 14 04 23.6 | -0.1 |
| JOM | | | | eS | Sn | 14 04 47.5 | -0.5 |
| JOSM | Okushiri--Mats | 2.16 | 290 | P | Pn | 14 04 25.5 | -0.2 |
| JAR | Ashorobuto | 2.25 | 31 | P | Pn | 14 04 26.4 | -0.5 |
| JAR | | | | S | Sn | 14 04 52.0 | -1.8 |
| JSK | Shakotan | 2.36 | 328 | P | Pn | 14 04 28.9 | +0.6 |
| ASAJ | Asahikawa | 2.76 | 6 | P | Pn | 14 04 34.3 | +0.5 |
| | 28nm,0.3s,baz=203,slow=16,SNR=348 | | | | | | |
| ASAJ | | | | S | Sn | 14 05 05.3 | -0.8 |
| | 1.3nm,0.3s,baz=253,slow=19,SNR=3.0 | | | | | | |
| MAT | Matsushiro | 5.73 | 214 | P | Pn | 14 05 15.0 | +0.7 |
| MAT | | | | eS | Sn | 14 06 20.9 | +2.1 |
| MJAR | Matsushiro Arr | 5.73 | 214 | P | Pn | 14 05 15.6 | +1.3 |
| | 0.7nm,0.3s,baz=26,slow=14,SNR=10 | | | | | | |
| USRK | Ussuriysk Ar. | 8.03 | 294 | P | Pn | 14 05 46.1 | +0.5 |
| | 0.1nm,0.3s,baz=186,slow=12,SNR=2.8 | | | | | | |
| JNU | Nakatsue | 12.20 | 231 | LR | LR | 14 10 42.6 | |
| | comp=Z,109nm,19.5s,baz=288,slow=34 | | | | | | |
| SONM | Songino Array | 26.13 | 296 | P | P | 14 09 19.1 | +0.3 |
| | 0.4nm,0.5s,baz=94,slow=9.1,SNR=3.6 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 30.10 | 128 | T | T | 14 41 44.3 | |
| | baz=318,slow=75 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 30.11 | 128 | T | T | 14 41 45.0 | |
| | baz=318,slow=75 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 30.12 | 128 | T | T | 14 41 41.1 | |
| | baz=318,slow=75 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 30.94 | 130 | T | T | 14 42 45.1 | |
| | baz=316,slow=76 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.95 | 130 | T | T | 14 42 44.1 | |
| | baz=316,slow=76 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.96 | 130 | T | T | 14 42 44.1 | |
| | baz=316,slow=76 | | | | | | |
| ZALV | Zalesovo Beam | 39.57 | 309 | P | P | 14 11 15.4 | 0.0 |
| | 0.9nm,0.4s,baz=97,slow=8.4,SNR=4.7 | | | | | | |
| MKAR | Makanchi Array | 42.47 | 298 | P | P | 14 11 39.0 | -0.3 |
| | 0.8nm,0.6s,baz=87,slow=9.3,SNR=9.8 | | | | | | |
| ILAR | Eielson Array | 45.55 | 35 | P | P | 14 12 05.4 | +1.7 |
| | 0.4nm,0.7s,baz=265,slow=6.5,SNR=6.6 | | | | | | |
| BVAR | Borovoye Array | 48.20 | 310 | P | P | 14 12 24.0 | -0.5 |
| | 0.8nm,0.3s,baz=85,slow=8.9,SNR=6.1 | | | | | | |
| INK | Inuvik | 50.28 | 29 | P | P | 14 12 40.9 | +0.8 |
| | 2.7nm,0.9s,baz=287,slow=6.5,SNR=8.5 | | | | | | |
| WRA | Warramunga Arr | 61.43 | 188 | P | P | 14 13 59.0 | -1.2 |
| | 0.4nm,0.9s,baz=7.1,slow=6.8,SNR=2.9 | | | | | | |
| ASAR | Alice Springs | 65.16 | 188 | P | P | 14 14 24.0 | -0.9 |
| | 0.2nm,0.8s,baz=2.6,slow=7.1,SNR=2.9 | | | | | | |
| FINES | FINESS Array B | 65.28 | 332 | P | P | 14 14 24.9 | -0.4 |
| | 1.4nm,0.8s,baz=59,slow=5.4,SNR=5.1 | | | | | | |

*CSEM **03** 14:04:20.4±0.5, 79°.89N×20°.45E, h10km, ML3.1, Error ellipse: s-maj=8.4km s-min=5.0km az=16.0*
*NAO **03** 14:04:21.7±3.7, 79°.92N×20°.42E, h15km±18km, ML3.1*
*BER **03** 14:04:23.4±3.3, 80°.00N×20°.31E, h23km±21km, MD2.2, ML1.8, ML3.1(NAO)*
**ISC 03 14:04:19.5±2.6, 80°.1N±0°.1×20°.44E±0°.08, h10km, n12, σ1s39/22, Svalbard region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KBS | Kingsbay | 1.93 | 238 | Pn | Pn | 14 04 51.9 | -0.4 |
| KBS | | | | Pg | Pb | 14 04 55.8 | +1.0 |
| KBS | | | | Lg | Lg | 14 05 20.0 | |
| KBS | Kingsbay | 1.93 | 238 | Pn | Pn | 14 04 51.9 | -0.4 |
| KBS | | | | Pg | Pb | 14 04 55.8 | +1.0 |
| KBS | | | | eSg | Sb | 14 05 19.1 | +0.2 |
| KBS | | | | IAML | | 14 05 21.6 | |
| | comp=Z,22nm,0.2s | | | | | | |
| KBS | Kingsbay | 1.93 | 238 | Pn | Pn | 14 04 51.9 | -0.4 |
| KBS | Kingsbay | 1.93 | 238 | Pg | Pb | 14 04 55.8 | +1.0 |
| KBS | | | | eSg | Sb | 14 05 19.1 | +0.2 |
| | SNR=94 | | | | | | |
| KBS | | | | Lg | Lg | 14 05 20.0 | |
| SPA0 | Spitsbergen Ar | 2.05 | 204 | Pn | Pn | 14 04 53.2 | -0.8 |
| | baz=31,slow=16 | | | | | | |
| SPA0 | | | | Pg | Pb | 14 04 57.1 | +0.4 |
| | baz=30,slow=14 | | | | | | |
| SPA0 | | | | Lg | Lg | 14 05 22.2 | |
| SPA0 | Spitsbergen Ar | 2.05 | 204 | Pn | Pn | 14 04 53.2 | -0.8 |
| | baz=31,slow=16 | | | | | | |
| SPA0 | | | | Pg | Pb | 14 04 57.1 | +0.4 |
| | baz=30,slow=14 | | | | | | |
| SPA0 | | | | eSg | Sb | 14 05 22.3 | 0.0 |
| SPA0 | | | | IAML | | 14 05 28.9 | |
| | comp=Z,10nm,0.4s | | | | | | |
| SPA0 | Spitsbergen Ar | 2.05 | 204 | Pn | Pn | 14 04 53.2 | -0.8 |
| | SNR=394 | | | | | | |
| SPA0 | Spitsbergen Ar | 2.05 | 204 | Pg | Pb | 14 04 57.2 | +0.4 |
| | SNR=0.9 | | | | | | |
| SPA0 | | | | Lg | Lg | 14 05 22.2 | |
| SPA0 | | | | eSg | Sb | 14 05 22.3 | 0.0 |
| | SNR=93 | | | | | | |
| HSPB | Hornsund (broa | 3.23 | 200 | eSg | Sb | 14 05 58.5 | +2.3 |
| HSPB | | | | IAML | | 14 06 03.6 | |
| | comp=Z,6.9nm,0.5s | | | | | | |
| HSPB | Hornsund (broa | 3.23 | 200 | eSg | Sb | 14 05 58.5 | +2.3 |
| | SNR=92 | | | | | | |
| HOPEN | Hopen | 3.69 | 163 | Pn | Pn | 14 05 15.8 | -0.8 |
| HOPEN | | | | Pg | Pb | 14 05 27.3 | +2.6 |
| HOPEN | | | | Sn | Sn | 14 05 56.6 | -3.5 |
| HOPEN | | | | Lg | Lg | 14 06 14.2 | |
| HOPEN | Hopen | 3.69 | 163 | Pn | Pn | 14 05 15.8 | -0.8 |

*IDC **03** 14:11:04.9±2.8, 19°.68S×175°.90W, h178km±31km, mb3.9/3, mb1 3.9/5, mb1mx3.3/30, mbtmp4.3/5, Error ellipse: s-maj=38.7km s-min=24.2km az=128.0*
*NEIC **03** 14:11:05.2±1.7, 19°.64S×175°.90W, h184km±26km, mb4.3/2, Error ellipse: s-maj=30.5km s-min=17.2km az=113.0*
**ISC 03 14:11:03.1±1.1, 19°.8S±0°.2×175°.8W±0°.2, h150km, n12, σ2s37/14, mb4.2/4, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 7.03 | 34 | P | Pn | 14 12 44.6 | +1.0 |
| | 0.8nm,0.3s,baz=214,slow=11,SNR=3.9 | | | | | | |
| AFI | | | | S | Sn | 14 13 55.9 | -6.5 |
| | 3.8nm,0.3s,baz=90,slow=6.6,SNR=4.5 | | | | | | |
| DZM | Mont Dzumac | 16.73 | 259 | P | Pn | 14 14 52.5 | +3.7 |
| | 1.1nm,0.3s,baz=358,slow=15,SNR=12 | | | | | | |
| DZM | Mont Dzumac | 16.73 | 259 | eP | Pn | 14 14 53.0 | +4.2 |
| URZ | Urewera | 19.39 | 197 | P | P | 14 15 18.3 | +0.9 |
| | 0.8nm,0.3s,baz=330,slow=7.1,SNR=5.0 | | | | | | |
| URZ | | | | S | S | 14 18 38.9 | -10 |
| | 0.1nm,0.3s,baz=16,slow=18,SNR=2.2 | | | | | | |
| URZ | Urewera | 19.39 | 197 | eP | P | 14 15 18.6 | +1.3 |
| URZ | | | | S | S | 14 18 38.9 | -10 |
| EIDS | Eidsvold | 31.01 | 254 | eP | P | 14 17 05.8 | -0.9 |
| CTA | Charters Tower | 35.61 | 263 | P | P | 14 17 46.0 | -0.6 |
| | 7.6nm,0.5s,baz=90,slow=10,SNR=26 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTAO** | **Charters Tower** | **35.61** | **263** | *e*P | **P** | **14 17 45.6** | **-1.0** |
| | 7.6nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.68** | **256** | P | **P** | **14 19 15.3** | **-1.7** |
| | 4.8nm,0.6s,baz=90,slow=8.5,SNR=98 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 20 46.0** | **-2.4** |
| | 0.1nm,0.4s,baz=115,slow=4.6,SNR=3.5 | | | | | | |
| **WRAB** | **Tennant Creek** | **46.72** | **261** | *e*P | **P** | **14 19 15.1** | **-2.3** |
| | 1.5nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.73** | **261** | P | **P** | **14 19 15.1** | **-2.4** |
| | 0.7nm,0.4s,baz=96,slow=7.0,SNR=42 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 20 46.4** | **-2.1** |
| | 0.6nm,1.1s,baz=100,slow=4.8,SNR=2.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.86** | **315** | PKPbc | **PKPdf** | **14 30 28.9** | **+1.1** |
| | 1.5nm,1.0s,baz=176,slow=3.7,SNR=4.4 | | | | | | |

*IDC **03** 14:37:13.2±1.4, 2°.04N×96°.73E, h0km, mb3.8/8, mb1 3.9/9, mb1mx3.7/29, mbtmp3.8/9, ML4.0/1, MS2.9/1, Ms1 2.9/1, ms1mx2.5/39, Error ellipse: s-maj=40.5km s-min=18.5km az=49.0*

*DJA **03** 14:37:21.3±1.0, 2°N±5°×9°7E±°, h59km±16km, M3.6/6, MLv3.6/6*

**ISC 03 14:37:18.3**±0.9**, 2°.14N**±0°.05×**96°.87E**±0°.08**, h28km, n20, σ0s.99**/17**, mb3.9**/8**, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **1.09** | **139** | P | **Pb** | **14 37 39.2** | **+0.7** |
| GSI | | | | S | **Sb** | **14 37 52.8** | **+0.5** |
| **KCSI** | **Kotacane, Aceh** | **1.65** | **33** | P | **Pb** | **14 37 48.9** | **+0.9** |
| KCSI | | | | S | **Sb** | **14 38 10.9** | **+2.6** |
| **PSI** | **Prapat** | **2.16** | **72** | Pn | **Pn** | **14 37 52.7** | **+0.2** |
| | 0.8nm,0.3s,baz=290,slow=12,SNR=2.7 | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **2.17** | **348** | P | **Pb** | **14 37 56.8** | **0.0** |
| **TSI** | **Tuntungan** | **2.17** | **51** | P | **Pb** | **14 37 55.2** | **-1.7** |
| TSI | | | | S | **Sb** | **14 38 23.1** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** | **16.35** | **7** | Pn | **Pn** | **14 41 05.9** | **-0.1** |
| | 0.2nm,0.3s,baz=198,slow=12,SNR=26 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.19** | **248** | T | T | 15 09 28.2 | |
| | baz=69,slow=75,SNR=528 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.19** | **248** | T | T | 15 09 27.0 | |
| | baz=69,slow=75,SNR=485 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.20** | **248** | T | T | 15 09 27.0 | |
| | baz=69,slow=75,SNR=462 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.23** | **158** | T | T | 15 27 37.2 | |
| | baz=329 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.24** | **158** | T | T | 15 27 35.6 | |
| | baz=329,slow=74 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.25** | **158** | T | T | 15 27 35.6 | |
| | baz=329,slow=74 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.81** | **123** | P | **P** | **14 45 13.5** | **-0.6** |
| | 0.7nm,0.7s,baz=301,slow=9.3,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **44.23** | **128** | P | **P** | **14 45 25.2** | **-0.2** |
| | 0.6nm,0.9s,baz=292,slow=7.8,SNR=5.7 | | | | | | |
| **KSRS** | **Korea Array** | **45.27** | **35** | P | **P** | **14 45 33.4** | **-0.1** |
| | 1.6nm,0.9s,baz=225,slow=8.4,SNR=4.0 | | | | | | |
| KSRS | | | | LR | LR | 15 06 50.2 | |
| | comp=Z,15nm,19.1s,baz=232,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.26** | **346** | P | **P** | **14 45 41.0** | **-0.1** |
| | 1.9nm,0.7s,baz=164,slow=7.3,SNR=21 | | | | | | |
| **SONM** | **Songino Array** | **46.26** | **9** | P | **P** | **14 45 41.8** | **+0.5** |
| | 1.0nm,0.8s,baz=186,slow=8.4,SNR=6.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.59** | **351** | P | **P** | **14 46 28.5** | **-0.8** |
| | 2.2nm,0.7s,baz=183,slow=7.0,SNR=12 | | | | | | |
| **BVAR** | **Borovoye Array** | **55.26** | **341** | P | **P** | **14 46 47.7** | **-1.2** |
| | 0.9nm,0.8s,baz=142,slow=7.3,SNR=3.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **58.25** | **332** | P | **P** | **14 47 10.2** | **0.0** |
| | 0.3nm,0.3s,baz=150,slow=8.1,SNR=2.0 | | | | | | |

*KRNET **03** 14:42:37.2±0.1, 38°.33N×75°.39E, mb2.0*

*NNC **03** 14:42:43.9±4.7, 38°.68N×75°.44E, h14km±24km, mb3.5, mpv3.1, Error ellipse: s-maj=36.9km s-min=27.0km az=29.0*

**ISC 03 14:42:41.5**±3.6**, 38°.5N**±0°.2×**75°.4E**±0°.1**, h26km, n13, σ1s.51**/18**, 8C-6D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **2.13** | **317** | ⇑Pn | **Pb** | **14 43 17.8** | **-1.7** |
| | 1.4nm,0.1s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 14 43 47.7 | |
| | 13nm,0.2s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.13** | **317** | ⇓*e*P | **Pb** | **14 43 17.9** | **-1.7** |
| | baz=320 | | | | | | |
| SFK | | | | ⇓*e*S | **Sb** | **14 43 47.5** | **+1.9** |
| | baz=320 | | | | | | |
| **NRN** | **Naryn** | **3.00** | **9** | ⇓*e*P | **Pn** | **14 43 29.9** | **+2.2** |
| | baz=8.0 | | | | | | |
| NRN | | | | ⇓*e*S | **Sb** | **14 44 09.1** | **-1.7** |
| | baz=8.0 | | | | | | |
| **ARLS** | **Aral** | **3.49** | **347** | ⇑*e*P | **Pn** | **14 43 34.9** | **+0.6** |
| | baz=347 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sn** | **14 44 13.7** | **-1.1** |
| | baz=347 | | | | | | |
| **KZA** | **Kyzart** | **3.61** | **358** | P | **Pn** | **14 43 37.0** | **+0.9** |
| | SNR=12 | | | | | | |
| **UCH** | **Uchtor** | **3.82** | **350** | P | **Pn** | **14 43 40.2** | **+1.2** |
| | SNR=15 | | | | | | |
| **AML** | **Almayashu** | **3.88** | **341** | P | **Pn** | **14 43 41.6** | **+1.7** |
| | SNR=9.7 | | | | | | |
| **KBK** | **Karagaybulak** | **4.20** | **356** | P | **Pn** | **14 43 45.1** | **+1.1** |
| | SNR=6.9 | | | | | | |
| **AAK** | **Ala-Archa** | **4.22** | **351** | ⇑Pn | **Pn** | **14 43 45.6** | **+1.3** |
| | 1.5nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.45** | **2** | ⇓Pn | **Pn** | **14 43 48.2** | **+0.6** |
| | 2.9nm,0.4s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 14 45 00.6 | |
| | 1.2nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.45** | **2** | P | **Pn** | **14 43 48.6** | **+1.0** |
| | SNR=7.3 | | | | | | |
| **MNAS** | **Manas** | **4.58** | **332** | ⇓Pn | **Pn** | **14 43 50.1** | **+0.9** |
| | 2.2nm,0.4s | | | | | | |
| MNAS | | | | ⇑Sn | **Sn** | **14 44 44.0** | **+2.4** |
| | 1.6nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **5.93** | **323** | Pn | **Pn** | **14 44 07.3** | **-0.4** |
| | 0.4nm,0.2s,baz=140,slow=12,SNR=23 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **14 45 14.5** | **-0.2** |
| | 0.3nm,0.2s,baz=133,slow=24,SNR=6.4 | | | | | | |

**IDC 03 14:50:48.4**±2.4**, 10°.37S**×**123°.90E, h0km, mb3.5**/1**, mb1 3.5**/3**, mb1mx3.3**/18**, mbtmp3.3**/3**, ML3.3**/2**, Error ellipse: s-maj=253.7km s-min=33.3km az=53.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.85** | **135** | Pn | Pn | 14 54 06.1 | -0.1 |
| | 0.1nm,0.3s,baz=315,slow=13,SNR=9.5 | | | | | | |
| WRA | | | | Sn | Sn | 14 56 34.6 | -6.2 |
| | 0.2nm,0.3s,baz=308,slow=24,SNR=7.3 | | | | | | |
| **ASAR** | **Alice Springs** | **16.30** | **145** | Pn | Pn | 14 54 39.0 | 0.0 |
| | 0.1nm,0.3s,baz=317,slow=12,SNR=14 | | | | | | |
| ASAR | | | | Sn | Sn | 14 57 33.3 | -7.4 |
| | 0.0nm,0.3s,baz=321,slow=22,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.95** | **331** | P | P | 15 01 49.2 | 0.0 |
| | 0.2nm,0.4s,baz=145,slow=6.9,SNR=4.5 | | | | | | |

**MEX 03 14:59:44.7**±0.6**, 14°.24N**×**92°.16W, h25km, MD3.7, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.78** | **325** | *e*P | Pn | 15 00 12.1 | -1.8 |
| PCIG | | | | *i* S | Sn | 15 00 32.5 | -3.2 |
| **CCIG** | **Comitan** | **2.03** | **1** | *i* P | Pn | 15 00 15.8 | -1.8 |
| CCIG | | | | *i* S | Sn | 15 00 39.8 | -2.6 |

*ISCJB **03** 15:18:03.0±0.4, 37°.11N±0°.01×21°.82E±0°.02, h2km±3km, mb3.7/4, Error ellipse: s-maj=3.0km s-min=2.4km az=151.8*

*CSEM **03** 15:18:03.6±0.1, 37°.12N×21°.82E, h2km, ML3.2, Error ellipse: s-maj=2.5km s-min=1.9km az=44.0*

*ATH **03** 15:18:03.1, 37°.13N×21°.82E, h15km, MD3.2/21, ML3.0*

*THE **03** 15:18:03.8, 37°.13N×21°.83E, h0km, ML3.2/14, Error ellipse: s-maj=0.9km s-min=0.4km az=171.0*

*IDC **03** 15:18:03.7±4.6, 37°.56N×22°.20E, h0km, mb3.8/4, mb1 3.8/5, mb1mx3.4/46, mbtmp3.8/5, ML2.9/1, Error ellipse: s-maj=151.9km s-min=23.0km az=59.0*

**ISC 03 15:18:03.7**±0.8**, 37°.13N**±0°.02×**21°.83E**±0°.02**, h9km**±5km**, n187, σ1s.06**/258**, mb3.9**/4**, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ITM** | **Ithomi** | **0.09** | **56** | *e*PB | **Pg** | **15 18 06.2** | **+0.1** |
| ITM | | | | *e*SB | **Sg** | **15 18 08.6** | **+0.7** |
| **ITM** | **Ithomi** | **0.09** | **56** | P | **Pg** | **15 18 05.9** | **-0.2** |
| ITM | | | | S | **Sg** | **15 18 07.3** | **-0.6** |
| **ITM** | **Ithomi** | **0.09** | **56** | P | **Pg** | **15 18 05.9** | **-0.2** |
| **ITM** | **Ithomi** | **0.09** | **56** | *e*Pb | **Pg** | **15 18 06.2** | **+0.1** |
| ITM | | | | S | **Sg** | **15 18 07.3** | **-0.6** |
| ITM | | | | *e*Sb | **Sg** | **15 18 08.6** | **+0.7** |
| **PYL** | **PYLOS** | **0.24** | **197** | *e*PB | **Pg** | **15 18 08.2** | **-0.4** |
| PYL | | | | *e*SB | **Sg** | **15 18 12.4** | **+0.5** |
| **PYL** | **PYLOS** | **0.24** | **197** | P | **Pg** | **15 18 08.1** | **-0.5** |
| PYL | | | | S | **Sg** | **15 18 12.1** | **+0.2** |
| **PYL** | **PYLOS** | **0.24** | **197** | P | **Pg** | **15 18 08.1** | **-0.5** |
| PYL | | | | S | **Sg** | **15 18 12.1** | **+0.2** |
| PYL | | | | *e*Sb | **Sg** | **15 18 12.4** | **+0.5** |
| **AMT** | **Artemida-Makis** | **0.42** | **347** | *e*PB | **Pg** | **15 18 12.3** | **+0.5** |
| AMT | | | | *e*SB | **Sg** | **15 18 18.0** | **+0.6** |
| **AMT** | **Artemida-Makis** | **0.42** | **347** | P | **Pg** | **15 18 11.8** | **0.0** |
| AMT | | | | S | **Sg** | **15 18 17.9** | **+0.6** |
| **AMT** | **Artemida-Makis** | **0.42** | **347** | P | **Pg** | **15 18 11.8** | **0.0** |
| **AMT** | **Artemida-Makis** | **0.42** | **347** | *e*Pb | **Pg** | **15 18 12.3** | **+0.5** |
| AMT | | | | *e*Sb | **Sg** | **15 18 18.0** | **+0.6** |
| **VLX** | **Vlachokerasia** | **0.50** | **61** | *e*PN | **Pg** | **15 18 13.3** | **-0.1** |
| VLX | | | | *e*SN | **Sg** | **15 18 20.5** | **+0.4** |
| **VLX** | **Vlachokerasia** | **0.50** | **61** | P | **Pg** | **15 18 13.3** | **-0.1** |
| VLX | | | | S | **Sg** | **15 18 20.3** | **+0.2** |
| **VLX** | **Vlachokerasia** | **0.50** | **61** | P | **Pg** | **15 18 13.4** | **0.0** |
| VLX | | | | S | **Sg** | **15 18 20.2** | **+0.2** |
| VLX | | | | *e*Sn | **Sg** | **15 18 20.5** | **+0.4** |
| **SFD** | **Strofades** | **0.66** | **281** | *e*PN | **Pg** | **15 18 16.8** | **+0.4** |
| SFD | | | | *e*SN | **Sg** | **15 18 24.5** | **-0.6** |
| **SFD** | **Strofades** | **0.66** | **281** | P | **Pg** | **15 18 16.5** | **+0.1** |
| SFD | | | | S | **Sb** | **15 18 26.4** | **-0.2** |
| **SFD** | **Strofades** | **0.66** | **281** | P | **Pg** | **15 18 16.8** | **+0.4** |
| SFD | | | | *e*Sn | **Sg** | **15 18 24.5** | **-0.6** |
| SFD | | | | S | **Sb** | **15 18 26.4** | **-0.2** |
| **DRO** | **Drossia** | **0.83** | **353** | *e*PN | **Pg** | **15 18 19.5** | **-0.1** |
| DRO | | | | *e*SN | **Sg** | **15 18 30.6** | **+0.1** |
| **DRO** | **Drossia** | **0.83** | **353** | P | **Pg** | **15 18 19.5** | **-0.1** |
| **DRO** | **Drossia** | **0.83** | **353** | *e*Pn | **Pg** | **15 18 19.5** | **-0.1** |
| DRO | | | | *e*Sn | **Sg** | **15 18 30.6** | **+0.1** |
| DRO | | | | S | **Sb** | **15 18 32.2** | **+0.7** |
| **GUR** | **Goura** | **0.91** | **27** | *e*PN | **Pg** | **15 18 20.1** | **-1.0** |
| **GUR** | **Goura** | **0.91** | **27** | P | **Pg** | **15 18 20.2** | **-0.9** |
| GUR | | | | S | **Sb** | **15 18 34.1** | **+0.3** |
| **GUR** | **Goura** | **0.91** | **27** | *e*Pn | **Pg** | **15 18 20.1** | **-1.0** |
| **GUR** | **Goura** | **0.91** | **27** | P | **Pg** | **15 18 20.4** | **-0.7** |
| GUR | | | | S | **Sb** | **15 18 34.1** | **+0.3** |
| **KLV** | **Kalavryta, Ach** | **0.95** | **15** | *e*PN | **Pg** | **15 18 20.9** | **-1.0** |
| **KLV** | **Kalavryta, Ach** | **0.95** | **15** | P | **Pg** | **15 18 21.1** | **-0.8** |
| KLV | | | | S | **Sb** | **15 18 35.2** | **+0.2** |
| **KLV** | **Kalavryta, Ach** | **0.95** | **15** | P | **Pg** | **15 18 21.1** | **-0.8** |
| KLV | | | | S | **Sb** | **15 18 35.2** | **+0.2** |
| **RLS** | **Riolos of Patr** | **0.97** | **343** | *e*PN | **Pg** | **15 18 22.1** | **-0.3** |
| **RLS** | **Riolos of Patr** | **0.97** | **343** | P | **Pg** | **15 18 21.8** | **-0.6** |
| RLS | | | | S | **Sb** | **15 18 36.4** | **+0.8** |
| **RLS** | **Riolos of Patr** | **0.97** | **343** | P | **Pg** | **15 18 21.9** | **-0.5** |
| RLS | | | | S | **Sb** | **15 18 36.4** | **+0.8** |
| **VLI** | **Veliai** | **0.98** | **114** | *e*PN | **Pg** | **15 18 21.8** | **-0.7** |
| **VLI** | **Veliai** | **0.98** | **114** | P | **Pg** | **15 18 21.7** | **-0.7** |
| VLI | | | | S | **Sn** | **15 18 37.4** | **-0.1** |
| **VLI** | **Veliai** | **0.98** | **114** | P | **Pg** | **15 18 21.7** | **-0.7** |
| **KRND** | **KRANIDI** | **1.08** | **76** | *e*PN | **Pg** | **15 18 24.0** | **-0.6** |
| KRND | | | | *e*SN | **Sg** | **15 18 38.4** | **-0.2** |
| **KRND** | **KRANIDI** | **1.08** | **76** | P | **Pg** | **15 18 23.9** | **-0.6** |
| KRND | | | | S | **Sb** | **15 18 39.7** | **+0.9** |
| **KRND** | **KRANIDI** | **1.08** | **76** | P | **Pg** | **15 18 23.9** | **-0.6** |
| KRND | | | | *e*Sn | **Sg** | **15 18 38.4** | **-0.2** |
| KRND | | | | S | **Sb** | **15 18 39.7** | **+0.9** |
| **LAKA** | **Lakka** | **1.12** | **6** | *e*PN | **Pg** | **15 18 24.6** | **-0.5** |
| **LAKA** | **Lakka** | **1.12** | **6** | P | **Pg** | **15 18 24.4** | **-0.7** |
| LAKA | | | | S | **Sn** | **15 18 41.2** | **+0.2** |
| **LAKA** | **Lakka** | **1.12** | **6** | P | **Pg** | **15 18 24.4** | **-0.7** |
| LAKA | | | | S | **Sn** | **15 18 41.2** | **+0.2** |
| **ACOR** | **Acrocorinthos** | **1.12** | **47** | P | **Pg** | **15 18 24.3** | **-1.0** |
| ACOR | | | | S | **Sn** | **15 18 41.8** | **+0.6** |
| **THAL** | **Thalero** | **1.12** | **36** | P | **Pg** | **15 18 25.1** | **-0.2** |
| THAL | | | | S | **Sn** | **15 18 41.1** | **0.0** |
| **THAL** | **Thalero** | **1.12** | **36** | P | **Pg** | **15 18 25.1** | **-0.2** |
| THAL | | | | S | **Sn** | **15 18 41.1** | **0.0** |
| **UPR** | **University Cam** | **1.16** | **358** | P | **Pb** | **15 18 25.7** | **-0.1** |
| **UPR** | **University Cam** | **1.16** | **358** | P | **Pb** | **15 18 25.7** | **-0.1** |
| **DIDY** | **Didyma** | **1.16** | **72** | *e*PN | **Pb** | **15 18 25.1** | **-0.8** |
| **DIDY** | **Didyma** | **1.16** | **72** | P | **Pb** | **15 18 25.0** | **-0.8** |
| DIDY | | | | S | **Sn** | **15 18 42.7** | **+0.6** |
| **DIDY** | **Didyma** | **1.16** | **72** | P | **Pb** | **15 18 25.0** | **-0.8** |
| DIDY | | | | S | **Sn** | **15 18 42.7** | **+0.6** |
| **LOUT** | **Loutraki** | **1.25** | **46** | *e*PN | **Pn** | **15 18 26.9** | **-0.4** |
| **LOUT** | **Loutraki** | **1.25** | **46** | P | **Pn** | **15 18 26.9** | **-0.4** |
| **LOUT** | **Loutraki** | **1.25** | **46** | P | **Pn** | **15 18 26.9** | **-0.4** |
| **LTK** | **Loutraki** | **1.27** | **45** | *e*PN | **Pn** | **15 18 27.2** | **-0.4** |
| **LTK** | **Loutraki** | **1.27** | **45** | P | **Pn** | **15 18 27.0** | **-0.6** |
| LTK | | | | S | **Sn** | **15 18 46.8** | **+2.0** |
| **LTK** | **Loutraki** | **1.27** | **45** | P | **Pn** | **15 18 27.0** | **-0.6** |
| LTK | | | | S | **Sn** | **15 18 46.8** | **+2.0** |
| **KFL** | **Anninata** | **1.28** | **320** | P | **Pn** | **15 18 26.6** | **-1.1** |
| KFL | | | | S | **Sn** | **15 18 46.4** | **+1.3** |
| **KFL** | **Anninata** | **1.28** | **320** | P | **Pn** | **15 18 26.6** | **-1.1** |
| KFL | | | | S | **Sn** | **15 18 46.4** | **+1.3** |
| **KALE** | **Kalithea** | **1.28** | **11** | *e*PN | **Pn** | **15 18 27.8** | **0.0** |
| **KALE** | **Kalithea** | **1.28** | **11** | P | **Pn** | **15 18 27.5** | **-0.3** |
| KALE | | | | S | **Sn** | **15 18 46.9** | **+1.7** |
| **KALE** | **Kalithea** | **1.28** | **11** | P | **Pn** | **15 18 27.5** | **-0.3** |
| **KALE** | **Kalithea** | **1.28** | **11** | *e*Pn | **Pn** | **15 18 27.8** | **0.0** |
| KALE | | | | S | **Sn** | **15 18 46.9** | **+1.7** |
| **KYTH** | **Kithira** | **1.29** | **131** | *e*PN | **Pn** | **15 18 27.9** | **+0.1** |
| **KYTH** | **Kithira** | **1.29** | **131** | P | **Pn** | **15 18 27.6** | **-0.2** |
| **KYTH** | **Kithira** | **1.29** | **131** | P | **Pn** | **15 18 27.6** | **-0.2** |
| **KYTH** | **Kithira** | **1.29** | **131** | *e*Pn | **Pn** | **15 18 27.9** | **+0.1** |
| **SERG** | **Sergoula** | **1.30** | **8** | *e*PN | **Pb** | **15 18 28.5** | **+0.3** |
| **SERG** | **Sergoula** | **1.30** | **8** | P | **Pn** | **15 18 27.9** | **-0.1** |
| SERG | | | | S | **Sn** | **15 18 46.8** | **+1.4** |
| **SERG** | **Sergoula** | **1.30** | **8** | P | **Pn** | **15 18 27.9** | **-0.1** |
| **SERG** | **Sergoula** | **1.30** | **8** | *e*Pn | **Pb** | **15 18 28.5** | **+0.3** |
| SERG | | | | S | **Sn** | **15 18 46.8** | **+1.4** |
| **EFP** | **Efpalio** | **1.30** | **3** | *e*PN | **Pb** | **15 18 28.3** | **0.0** |
| **EFP** | **Efpalio** | **1.30** | **3** | P | **Pb** | **15 18 28.2** | **0.0** |
| EFP | | | | S | **Sn** | **15 18 47.1** | **+1.7** |
| **EFP** | **Efpalio** | **1.30** | **3** | P | **Pb** | **15 18 28.2** | **0.0** |
| EFP | | | | S | **Sn** | **15 18 47.1** | **+1.7** |
| **VLS** | **Valsamata** | **1.44** | **317** | *e*PN | **Pn** | **15 18 29.4** | **-0.5** |
| **VLS** | **Valsamata** | **1.44** | **317** | P | **Pn** | **15 18 29.0** | **-0.9** |
| VLS | | | | S | **Sg** | **15 18 51.2** | **+1.3** |
| **VLS** | **Valsamata** | **1.44** | **317** | P | **Pn** | **15 18 29.0** | **-0.9** |
| **VLS** | **Valsamata** | **1.44** | **317** | *e*Pn | **Pn** | **15 18 29.4** | **-0.5** |
| VLS | | | | S | **Sg** | **15 18 50.3** | **+0.4** |
| **NAIG** | **Nisos Aigina** | **1.46** | **64** | *e*PN | **Pb** | **15 18 31.1** | **+0.1** |
| **NAIG** | **Nisos Aigina** | **1.46** | **64** | *e*Pn | **Pb** | **15 18 31.1** | **+0.1** |
| **PVO** | **Paravola** | **1.51** | **351** | P | **Pb** | **15 18 31.8** | **0.0** |
| PVO | | | | S | **Sg** | **15 18 53.0** | **+0.9** |
| **PVO** | **Paravola** | **1.51** | **351** | P | **Pb** | **15 18 31.8** | **0.0** |
| PVO | | | | S | **Sg** | **15 18 53.0** | **+0.9** |
| **PDO** | **Prodromos** | **1.56** | **341** | *e*PN | **Pb** | **15 18 33.0** | **+0.4** |
| **PDO** | **Prodromos** | **1.56** | **341** | P | **Pn** | **15 18 32.1** | **+0.6** |
| PDO | | | | S | **Sg** | **15 18 54.5** | **+0.8** |
| **PDO** | **Prodromos** | **1.56** | **341** | P | **Pn** | **15 18 32.1** | **+0.6** |
| **PDO** | **Prodromos** | **1.56** | **341** | *e*Pn | **Pb** | **15 18 33.0** | **+0.4** |
| PDO | | | | S | **Sg** | **15 18 54.5** | **+0.8** |
| **VILL** | **Villia** | **1.57** | **48** | P | **Pn** | **15 18 32.4** | **+0.7** |
| VILL | | | | S | **Sg** | **15 18 54.4** | **+0.3** |
| **VILL** | **Villia** | **1.57** | **48** | P | **Pn** | **15 18 32.4** | **+0.7** |
| **VILL** | **Villia** | **1.57** | **48** | *e*Pn | **Pb** | **15 18 32.9** | **+0.1** |
| VILL | | | | S | **Sg** | **15 18 54.4** | **+0.3** |
| **VIL2** | **Platees** | **1.57** | **46** | *e*PN | **Pb** | **15 18 32.9** | **0.0** |
| **ATH** | **Athens Observa** | **1.72** | **60** | *e*PN | **Pn** | **15 18 34.6** | **+0.8** |
| **ATH** | **Athens Observa** | **1.72** | **60** | P | **Pn** | **15 18 34.5** | **+0.8** |
| ATH | | | | S | **Sb** | **15 18 57.4** | **+0.3** |
| **ATH** | **Athens Observa** | **1.72** | **60** | *e*Pn | **Pn** | **15 18 34.6** | **+0.8** |
| ATH | | | | S | **Sb** | **15 18 57.4** | **+0.3** |
| **VLY** | **Voula,Athens** | **1.72** | **65** | *e*PN | **Pn** | **15 18 34.3** | **+0.5** |
| VLY | | | | *e*SN | **Sb** | **15 18 58.0** | **+0.8** |
| **VLY** | **Voula,Athens** | **1.72** | **65** | P | **Pn** | **15 18 34.3** | **+0.5** |
| VLY | | | | S | **Sb** | **15 18 57.3** | **+0.1** |
| **VLY** | **Voula,Athens** | **1.72** | **65** | P | **Pn** | **15 18 34.3** | **+0.5** |
| VLY | | | | S | **Sb** | **15 18 57.3** | **+0.1** |
| VLY | | | | *e*Sn | **Sb** | **15 18 58.0** | **+0.8** |
| **ANKY** | **Antikythira Is** | **1.73** | **136** | P | **Pn** | **15 18 34.7** | **+0.8** |
| ANKY | | | | S | **Sb** | **15 18 58.3** | **+0.9** |
| **ANKY** | **Antikythira Is** | **1.73** | **136** | P | **Pn** | **15 18 34.7** | **+0.8** |
| ANKY | | | | S | **Sb** | **15 18 58.3** | **+0.9** |
| **AXAR** | **Agios Charalam** | **1.76** | **22** | *e*PN | **Pn** | **15 18 34.6** | **+0.2** |
| **AXAR** | **Agios Charalam** | **1.76** | **22** | P | **Pn** | **15 18 34.6** | **+0.2** |
| **AXAR** | **Agios Charalam** | **1.76** | **22** | P | **Pn** | **15 18 34.6** | **+0.2** |
| **ATHU** | **Athens Univers** | **1.77** | **61** | P | **Pn** | **15 18 34.6** | **+0.2** |
| **ATHU** | **Athens Univers** | **1.77** | **61** | P | **Pn** | **15 18 34.6** | **+0.2** |
| **LKR** | **Lokris** | **1.78** | **31** | *e*PN | **Pb** | **15 18 36.0** | **-0.4** |
| **LKR** | **Lokris** | **1.78** | **31** | P | **Pn** | **15 18 35.7** | **+1.1** |
| **LKR** | **Lokris** | **1.78** | **31** | P | **Pn** | **15 18 35.7** | **+1.1** |
| **LKR** | **Lokris** | **1.78** | **31** | *e*Pn | **Pb** | **15 18 36.0** | **-0.4** |
| **EVR** | **Evrytania** | **1.79** | **359** | *e*PN | **Pb** | **15 18 36.0** | **-0.6** |
| **EVR** | **Evrytania** | **1.79** | **359** | *e*Pn | **Pb** | **15 18 36.0** | **-0.6** |
| **ATAL** | **Atalanti** | **1.82** | **31** | P | **Pn** | **15 18 36.3** | **+1.1** |
| **ATAL** | **Atalanti** | **1.82** | **31** | P | **Pn** | **15 18 36.3** | **+1.1** |
| **MAKR** | **Makrakomi, Fth** | **1.90** | **7** | P | **Pn** | **15 18 36.9** | **+0.7** |
| **MAKR** | **Makrakomi, Fth** | **1.90** | **7** | P | **Pn** | **15 18 36.9** | **+0.7** |
| **AGG** | **Agios Georgios** | **1.93** | **12** | P | **Pb** | **15 18 38.2** | **-0.9** |
| **AGG** | **Agios Georgios** | **1.93** | **12** | P | **Pb** | **15 18 38.2** | **-0.9** |
| **SMIA** | **Simia** | **2.06** | **32** | *e*PN | **Pn** | **15 18 39.9** | **+1.4** |
| **SMIA** | **Simia** | **2.06** | **32** | *e*Pn | **Pn** | **15 18 39.9** | **+1.4** |
| **MRKA** | **Markates** | **2.10** | **41** | *e*PN | **Pn** | **15 18 40.5** | **+1.5** |
| **MRKA** | **Markates** | **2.10** | **41** | *e*Pn | **Pn** | **15 18 40.5** | **+1.5** |
| **EREA** | **Eretria** | **2.11** | **52** | *e*PN | **Pn** | **15 18 40.3** | **+1.2** |
| **EREA** | **Eretria** | **2.11** | **52** | P | **Pn** | **15 18 40.1** | **+1.0** |
| **EREA** | **Eretria** | **2.11** | **52** | *e*Pn | **Pn** | **15 18 40.3** | **+1.2** |
| **MHLO** | **Agia Marina, M** | **2.11** | **101** | *e*PN | **Pn** | **15 18 40.4** | **+1.3** |
| **MHLO** | **Agia Marina, M** | **2.11** | **101** | P | **Pn** | **15 18 40.1** | **+1.0** |
| **MHLO** | **Agia Marina, M** | **2.11** | **101** | P | **Pn** | **15 18 40.1** | **+1.0** |
| **MHLO** | **Agia Marina, M** | **2.11** | **101** | *e*Pn | **Pn** | **15 18 40.4** | **+1.3** |
| **SERI** | **Serifos** | **2.12** | **88** | *e*PN | **Pn** | **15 18 40.2** | **+0.9** |
| SERI | | | | *e*SN | **Sn** | **15 19 07.2** | **+1.4** |
| **SERI** | **Serifos** | **2.12** | **88** | *e*Pn | **Pn** | **15 18 40.2** | **+0.9** |
| SERI | | | | *e*Sn | **Sn** | **15 19 07.2** | **+1.4** |
| **KARY** | **Karystos** | **2.26** | **66** | P | **Pn** | **15 18 41.7** | **+0.5** |
| **IMMV** | **Iera Moni Meta** | **2.41** | **133** | *e*PN | **Pn** | **15 18 45.2** | **+2.0** |
| **IMMV** | **Iera Moni Meta** | **2.41** | **133** | *e*Pn | **Pn** | **15 18 45.2** | **+2.0** |
| **SKIA** | **Skiathos** | **2.41** | **32** | *e*PN | **Pn** | **15 18 45.2** | **+1.9** |
| **SKIA** | **Skiathos** | **2.41** | **32** | *e*Pn | **Pn** | **15 18 45.2** | **+1.9** |
| **NEO** | **Neokhori** | **2.44** | **26** | *e*PN | **Pn** | **15 18 45.1** | **+1.5** |
| **NEO** | **Neokhori** | **2.44** | **26** | *e*Pn | **Pn** | **15 18 45.1** | **+1.5** |
| **THL** | **Klokotos Trika** | **2.44** | **3** | *e*PN | **Pb** | **15 18 46.0** | **-1.6** |
| **THL** | **Klokotos Trika** | **2.44** | **3** | P | **Pn** | **15 18 44.9** | **+1.3** |
| **THL** | **Klokotos Trika** | **2.44** | **3** | P | **Pn** | **15 18 44.9** | **+1.3** |
| **THL** | **Klokotos Trika** | **2.44** | **3** | *e*Pn | **Pb** | **15 18 46.0** | **-1.6** |
| **FYTO** | **Fytoko, Volos** | **2.44** | **21** | S | **Sn** | **15 19 15.7** | **+2.1** |
| **FYTO** | **Fytoko, Volos** | **2.44** | **21** | S | **Sn** | **15 19 15.7** | **+2.1** |
| **XOR** | **Xorichti** | **2.48** | **25** | *e*PN | **Pn** | **15 18 45.8** | **+1.6** |
| **XOR** | **Xorichti** | **2.48** | **25** | *e*Pn | **Pn** | **15 18 45.8** | **+1.6** |
| **VAM** | **Vamos** | **2.57** | **131** | *e*PN | **Pn** | **15 18 47.1** | **+1.6** |
| **VAM** | **Vamos** | **2.57** | **131** | *e*Pn | **Pn** | **15 18 47.1** | **+1.6** |
| **AOS** | **Alonnisos** | **2.60** | **38** | *e*PB | **Pn** | **15 18 47.4** | **+1.5** |
| **AOS** | **Alonnisos** | **2.60** | **38** | *e*Pb | **Pn** | **15 18 47.4** | **+1.5** |
| **JAN** | **Janina** | **2.64** | **343** | *e*PN | **Pn** | **15 18 47.4** | **+1.0** |
| **JAN** | **Janina** | **2.64** | **343** | *e*Pn | **Pn** | **15 18 47.4** | **+1.0** |
| **IGT** | **Igoumenitsa** | **2.67** | **334** | *e*PB | **Pn** | **15 18 48.2** | **+1.3** |
| **IGT** | **Igoumenitsa** | **2.67** | **334** | P | **Pn** | **15 18 47.9** | **+1.0** |
| IGT | | | | S | **Sn** | **15 19 21.9** | **+2.5** |
| **IGT** | **Igoumenitsa** | **2.67** | **334** | P | **Pn** | **15 18 47.9** | **+1.0** |
| **IGT** | **Igoumenitsa** | **2.67** | **334** | *e*Pb | **Pn** | **15 18 48.2** | **+1.3** |
| IGT | | | | S | **Sn** | **15 19 21.9** | **+2.5** |
| **SGD** | **Sagiada** | **2.78** | **334** | *e*PB | **Pn** | **15 18 49.8** | **+1.5** |
| **SGD** | **Sagiada** | **2.78** | **334** | P | **Pn** | **15 18 49.4** | **+1.1** |
| **SGD** | **Sagiada** | **2.78** | **334** | P | **Pn** | **15 18 49.4** | **+1.1** |
| **SGD** | **Sagiada** | **2.78** | **334** | *e*Pb | **Pn** | **15 18 49.8** | **+1.5** |
| **GVD** | **Gavdhos** | **2.93** | **141** | *e*PN | **Pn** | **15 18 51.8** | **+1.5** |
| **GVD** | **Gavdhos** | **2.93** | **141** | *e*Pn | **Pn** | **15 18 51.8** | **+1.5** |
| **APE** | **Apeiranthos** | **2.96** | **90** | *e*PN | **Pn** | **15 18 51.7** | **+0.9** |
| **APE** | **Apeiranthos** | **2.96** | **90** | *e*Pn | **Pn** | **15 18 51.7** | **+0.9** |
| **KEK** | **Kerkira** | **3.04** | **329** | *e*PN | **Pn** | **15 18 53.0** | **+1.2** |
| **KEK** | **Kerkira** | **3.04** | **329** | P | **Pn** | **15 18 52.4** | **+0.6** |
| **KEK** | **Kerkira** | **3.04** | **329** | P | **Pn** | **15 18 52.4** | **+0.6** |
| **KEK** | **Kerkira** | **3.04** | **329** | *e*Pn | **Pn** | **15 18 53.0** | **+1.2** |
| **IDI** | **Anoyia** | **3.08** | **126** | Pn | **Pn** | **15 18 54.6** | **+2.1** |
| | 1.4nm,0.3s,baz=309,slow=14,SNR=10 | | | | | | |
| IDI | | | | Sn | **Sn** | **15 19 33.3** | **+3.8** |
| | 3.4nm,0.3s,baz=353,slow=8.6,SNR=4.5 | | | | | | |
| **PAIG** | **Paliouri** | **3.15** | **27** | *e*PN | **Pn** | **15 18 55.2** | **+1.8** |
| **PAIG** | **Paliouri** | **3.15** | **27** | *e*Pn | **Pn** | **15 18 55.2** | **+1.8** |
| **NEST** | **Nestorio** | **3.34** | **350** | P | **Pn** | **15 18 58.0** | **+1.9** |
| **NEST** | **Nestorio** | **3.34** | **350** | P | **Pn** | **15 18 58.0** | **+1.9** |
| **CHOS** | **Chios island** | **3.58** | **68** | *e*PN | **Pn** | **15 19 00.5** | **+1.1** |
| **CHOS** | **Chios island** | **3.58** | **68** | *e*Pn | **Pn** | **15 19 00.5** | **+1.1** |
| **HORT** | **Hortiatis** | **3.60** | **16** | *e*PN | **Pn** | **15 19 01.2** | **+1.5** |
| **HORT** | **Hortiatis** | **3.60** | **16** | *e*Pn | **Pn** | **15 19 01.2** | **+1.5** |
| **OUR** | **Ouranopolis** | **3.62** | **27** | *e*PN | **Pn** | **15 19 01.4** | **+1.6** |
| **OUR** | **Ouranopolis** | **3.62** | **27** | *e*Pn | **Pn** | **15 19 01.4** | **+1.6** |
| **FNA** | **Florina** | **3.67** | **355** | *e*PN | **Pn** | **15 19 01.6** | **+1.0** |
| **FNA** | **Florina** | **3.67** | **355** | *e*Pn | **Pn** | **15 19 01.6** | **+1.0** |
| **GRG** | **Griva** | **3.85** | **6** | *e*PN | **Pn** | **15 19 04.3** | **+1.2** |
| **GRG** | **Griva** | **3.85** | **6** | *e*Pn | **Pn** | **15 19 04.3** | **+1.2** |
| **SOH** | **Sokhos** | **3.88** | **17** | *e*PN | **Pn** | **15 19 05.3** | **+1.9** |
| **SOH** | **Sokhos** | **3.88** | **17** | *e*Pn | **Pn** | **15 19 05.3** | **+1.9** |
| **KNT** | **Kendrikon** | **4.11** | **11** | *e*PN | **Pn** | **15 19 07.9** | **+1.2** |
| **KNT** | **Kendrikon** | **4.11** | **11** | *e*Pn | **Pn** | **15 19 07.9** | **+1.2** |
| **SRS** | **Serrai** | **4.21** | **18** | *e*PN | **Pn** | **15 19 09.4** | **+1.4** |
| **SRS** | **Serrai** | **4.21** | **18** | *e*Pn | **Pn** | **15 19 09.4** | **+1.4** |
| **HFS** | **Hagfors** | **23.61** | **350** | P | **P** | **15 23 12.3** | **-2.3** |
| | 2.6nm,0.6s,baz=151,slow=13,SNR=10 | | | | | | |
| **FINES** | **FINESS Array B** | **24.49** | **5** | P | **P** | **15 23 19.7** | **-3.1** |
| | 1.4nm,0.7s,baz=188,slow=11,SNR=7.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **24.86** | **348** | P | **P** | **15 23 24.1** | **-2.1** |
| | comp=Z,0.3nm,0.5s,baz=151,slow=11 | | | | | | |
| **NOA** | **NORSAR Array B** | **24.86** | **348** | P | **P** | **15 23 23.9** | **-2.4** |
| | comp=Z,1.2nm,0.8s,baz=156,slow=9.0,SNR=3.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.53** | **2** | P | **P** | **15 24 32.5** | **-1.9** |
| | comp=Z,3.5nm,1.1s,baz=187,slow=10,SNR=13 | | | | | | |

*TRN **03** 15:20:32.1, 15°.83N×60°.09W, h26km, MD4.2, M3.9(FDF)*

*IDC **03** 15:20:33.6±3.2, 15°.86N×60°.02W, h38km±28km, mb3.9/12, mb1 4.1/14, mb1mx3.8/51, mbtmp4.1/14, ML3.8/2, MS3.4/4, Ms1 3.4/4, ms1mx3.0/42, Error ellipse: s-maj=26.7km s-min=14.2km az=77.0*

*NEIC **03** 15:20:33.5±0.9, 15°.90N×59°.98W, h38km±8km, mb4.1/2, MD4.2(TRN), Error ellipse: s-maj=11.8km s-min=4.9km az=72.0*

**ISC 03 15:20:31.9**±2.2**, 15°.86N**±0°.03×**59°.99W**±0°.06**, h26km**±16km**, n88, σ1s.08**/116**, mb4.1**/14**, 18C-2D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H05N1** | **Guadeloupe/Mar** | **1.12** | **294** | Pn | **Pn** | **15 20 51.5** | **-0.6** |
| H05N1 | | | | Sn | **Sn** | **15 21 06.4** | **-0.4** |
| | SNR=7575 | | | | | | |
| **MGG** | **Marie-Galante** | **1.28** | **273** | ⇑*i*P | **Pn** | **15 20 54.1** | **-0.1** |
| MGG | | | | *e*S | **Sn** | **15 21 11.1** | **+0.5** |
| **MGG** | **Marie-Galante** | **1.28** | **273** | ⇑*i*P | **Pn** | **15 20 54.1** | **-0.1** |
| MGG | | | | *e*S | **Sn** | **15 21 11.1** | **+0.5** |
| **DBCT** | **Belle View Cho** | **1.44** | **246** | ⇑*i*P | **Pn** | **15 20 57.6** | **+1.1** |
| DBCT | | | | *e*S | **Sn** | **15 21 14.1** | **-0.4** |
| **DBCT** | **Belle View Cho** | **1.44** | **246** | ⇑*i*P | **Pn** | **15 20 57.6** | **+1.1** |
| DBCT | | | | *e*S | **Sn** | **15 21 14.1** | **-0.4** |
| **MDN** | **Morne-Daniel** | **1.46** | **248** | *e*P | **Pn** | **15 20 57.9** | **+1.2** |
| MDN | | | | *e*S | **Sn** | **15 21 14.8** | **-0.2** |
| **MDN** | **Morne-Daniel** | **1.46** | **248** | *e*P | **Pn** | **15 20 58.1** | **+1.4** |
| MDN | | | | *e*S | **Sn** | **15 21 14.8** | **-0.2** |
| **BBL** | **Barber's Block** | **1.47** | **257** | *e*P | **Pn** | **15 20 56.5** | **-0.3** |
| BBL | | | | *e*S | **Sn** | **15 21 14.7** | **-0.5** |
| **BBL** | **Barber's Block** | **1.47** | **257** | *e*P | **Pn** | **15 20 56.5** | **-0.3** |
| BBL | | | | *e*S | **Sn** | **15 21 14.7** | **-0.5** |
| **DSHT** | **Scott's Head** | **1.48** | **244** | *e*P | **Pn** | **15 20 58.3** | **+1.3** |
| DSHT | | | | *e*S | **Sn** | **15 21 14.8** | **-0.8** |
| **DSHT** | **Scott's Head** | **1.48** | **244** | *e*P | **Pb** | **15 20 58.6** | **-0.3** |
| DSHT | | | | *e*S | **Sn** | **15 21 14.8** | **-0.8** |
| **SVN** | **Savane Anatole** | **1.53** | **229** | *e*P | **Pn** | **15 20 58.2** | **+0.5** |
| **BVM** | **Bellevue** | **1.53** | **223** | *e*P | **Pn** | **15 20 58.3** | **+0.6** |
| **BAMF** | **Morne Balai** | **1.53** | **227** | ⇑*e*P | **Pn** | **15 20 58.3** | **+0.6** |
| **CXM** | **Morne La Croix** | **1.55** | **228** | ⇑*e*P | **Pn** | **15 20 58.4** | **+0.4** |
| CXM | | | | *e*S | **Sn** | **15 21 18.0** | **+0.6** |
| **GBMF** | **Grand Be** | **1.55** | **227** | ⇑*e*P | **Pn** | **15 20 58.5** | **+0.4** |
| **SEG** | **Port Louis** | **1.56** | **290** | ⇑*e*P | **Pn** | **15 20 58.3** | **+0.3** |
| **MVM** | **Montagne Vaucl** | **1.57** | **214** | *e*P | **Pn** | **15 20 58.3** | **+0.1** |
| **PCM** | **Pelee Case Pet** | **1.57** | **229** | ⇑*e*P | **Pn** | **15 20 58.9** | **+0.6** |
| **PCM** | **Pelee Case Pet** | **1.57** | **229** | ⇑*e*P | **Pn** | **15 20 59.1** | **+0.8** |
| **DOG** | **Dongo Capester** | **1.58** | **276** | ⇑*e*P | **Pn** | **15 20 58.8** | **+0.4** |
| **PML** | **Morne Lenard** | **1.58** | **227** | *e*P | **Pn** | **15 20 58.9** | **+0.5** |
| **FDF** | **Fort de France** | **1.59** | **225** | ⇑*i*P | **Pn** | **15 20 58.6** | **+0.1** |
| **FDF** | **Fort de France** | **1.59** | **225** | *e*P | **Pn** | **15 20 58.8** | **+0.3** |

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FDF | | | | eS | Sn | 15 21 19.1 | +0.9 |
| FDF | | | | eS | Sn | 15 21 19.7 | +1.5 |
| LPMF | Morne Lapointe | 1.59 | 217 | eP | Pn | 15 20 58.4 | -0.1 |
| TBG | Guadaloupe-3 | 1.60 | 270 | ⇑iP | Pn | 15 20 58.6 | +0.1 |
| TBG | | | | eS | Sn | 15 21 19.0 | +0.6 |
| PHG | Guadaloupe-2 | 1.60 | 276 | ⇑iP | Pn | 15 20 59.2 | +0.5 |
| ECG | Echelle | 1.61 | 277 | eP | Pn | 15 20 59.4 | +0.5 |
| CRG | Carmichael | 1.62 | 277 | eP | Pn | 15 20 59.6 | +0.6 |
| ZAM | Aeronautique | 1.63 | 218 | ⇑eP | Pn | 15 20 59.0 | 0.0 |
| SCG | Saint Claude | 1.64 | 276 | eP | Pn | 15 20 59.7 | +0.5 |
| SSG | Sans Toucher | 1.64 | 278 | ⇓iP | Pn | 15 20 59.9 | +0.6 |
| FNG | Fond-Bernard | 1.65 | 277 | ⇓eP | Pn | 15 20 59.8 | +0.4 |
| H05S1 | Guadeloupe/Mar | 1.65 | 210 | Pn | Pn | 15 20 59.9 | +0.6 |
| H05S1 | | | | Sn | Sn | 15 21 19.2 | -0.4 |
| | SNR=4994 | | | | | | |
| HMG | Houelmont | 1.65 | 274 | ⇑eP | Pn | 15 20 59.8 | +0.4 |
| HMG | | | | eS | Sn | 15 21 20.3 | +0.5 |
| MLG | Mont-d'or | 1.67 | 277 | ⇑eP | Pn | 15 21 00.2 | +0.6 |
| TRMF | Trois Ilets | 1.67 | 218 | eP | Pn | 15 20 59.3 | -0.3 |
| BIM | Bigot | 1.70 | 218 | ⇑eP | Pn | 15 21 00.6 | +0.5 |
| BIM | | | | eS | Sn | 15 21 21.9 | +0.9 |
| LZG | Guadaloupe-1 | 1.74 | 279 | eP | Pn | 15 21 01.3 | +0.8 |
| BPA | Boggy Peak | 2.15 | 304 | eP | Pn | 15 21 07.0 | +0.9 |
| BPA | | | | eS | Sn | 15 21 32.9 | +0.9 |
| BPA | Boggy Peak | 2.15 | 304 | eP | Pn | 15 21 07.0 | +0.9 |
| BPA | | | | eS | Sn | 15 21 32.9 | +0.9 |
| MLYT | Lee's Yard | 2.28 | 292 | eP | Pn | 15 21 09.7 | +1.6 |
| MLYT | | | | eS | Sn | 15 21 36.2 | +0.8 |
| MCLT | Moule a Chique | 2.33 | 203 | eP | Pn | 15 21 08.8 | +0.1 |
| MCLT | | | | eS | Sn | 15 21 37.0 | +0.5 |
| MCLT | Moule a Chique | 2.33 | 203 | eP | Pn | 15 21 08.8 | +0.1 |
| MCLT | | | | eS | Sn | 15 21 37.0 | +0.5 |
| ANWB | Willy Bob | 2.49 | 316 | eS | Sn | 15 21 42.4 | +2.0 |
| ANWB | Willy Bob | 2.49 | 316 | ePn | Pn | 15 21 10.1 | -0.7 |
| BBGH | Gun Hill | 2.73 | 171 | eP | Pn | 15 21 15.3 | +1.1 |
| BBGH | | | | eS | Sn | 15 21 48.1 | +1.6 |
| BBGH | Gun Hill | 2.73 | 171 | ePn | Pn | 15 21 15.5 | +1.2 |
| SVV | Soufriere Volc | 2.80 | 205 | eP | Pn | 15 21 16.1 | +1.0 |
| SVV | Soufriere Volc | 2.80 | 205 | eP | Pn | 15 21 16.1 | +1.0 |
| SVB | Belmont | 2.85 | 206 | eP | Pn | 15 21 17.1 | +1.3 |
| SVB | | | | eS | Sn | 15 21 49.7 | +0.2 |
| SVB | Belmont | 2.85 | 206 | eP | Pn | 15 21 17.1 | +1.3 |
| SVB | | | | eS | Sn | 15 21 50.5 | +1.1 |
| FCV | Fort Charlotte | 2.95 | 205 | eP | Pn | 15 21 18.7 | +1.4 |
| FCV | | | | eS | Sn | 15 21 52.8 | +0.9 |
| FCV | Fort Charlotte | 2.95 | 205 | eP | Pn | 15 21 18.7 | +1.4 |
| FCV | | | | eS | Sn | 15 21 53.5 | +1.6 |
| SKI | Saint Kitts | 3.02 | 299 | eP | Pn | 15 21 19.0 | +0.9 |
| SKI | | | | eS | Sn | 15 21 53.5 | 0.0 |
| SKI | Saint Kitts | 3.02 | 299 | eP | Pn | 15 21 19.0 | +0.9 |
| SKI | | | | eS | Sn | 15 21 53.5 | 0.0 |
| GRGR | Grenville | 4.05 | 204 | eP | Pn | 15 21 34.0 | +1.7 |
| GRGR | Grenville | 4.05 | 204 | ePn | Pn | 15 21 33.7 | +1.4 |
| TOSP | Speyside | 4.57 | 187 | eP | Pn | 15 21 40.8 | +1.3 |
| TOSP | Speyside | 4.57 | 187 | eS | Sn | 15 22 31.4 | -0.3 |
| SJG | San Juan | 6.31 | 292 | Pn | Pn | 15 22 05.4 | +2.1 |
| | 2.7nm,0.3s,baz=119,slow=20,SNR=12 | | | | | | |
| SJG | | | | Sn | Sn | 15 23 18.4 | +3.8 |
| | 0.8nm,0.3s,baz=350,slow=19,SNR=1.1 | | | | | | |
| SJG | | | | LR | LR | 15 24 53.5 | |
| | comp=Z,263nm,18.3s,baz=84,slow=41 | | | | | | |
| SJG | San Juan | 6.31 | 292 | ePn | Pn | 15 22 04.5 | +1.2 |
| | 16nm,0.6s | | | | | | |
| SJG | | | | Sn | Sn | 15 23 18.4 | +3.8 |
| CELP | Cerrillos | 6.68 | 290 | ePn | Pn | 15 22 09.3 | +0.8 |
| OBIP | Obispado Ponce | 6.70 | 290 | ePn | Pn | 15 22 09.6 | +0.9 |
| LRS | Lares | 6.99 | 291 | ePn | Pn | 15 22 13.5 | +0.7 |
| PCRV | Puerto La Cruz | 7.24 | 219 | Pn | Pn | 15 22 18.3 | +2.0 |
| | 1.5nm,0.3s,baz=3.5,slow=2.3,SNR=13 | | | | | | |
| PCRV | | | | Sn | Sn | 15 23 38.4 | +0.6 |
| | 1.3nm,0.3s,baz=104,slow=7.4,SNR=1.6 | | | | | | |
| PCRV | | | | LR | LR | 15 25 53.1 | |
| | comp=Z,215nm,18.2s,baz=46,slow=44 | | | | | | |
| SDDR | Presa de Saban | 11.22 | 288 | eP | Pn | 15 23 11.3 | +0.4 |
| | 19nm,0.6s | | | | | | |
| GRTK | Grand Turk | 11.96 | 300 | eP | Pn | 15 23 17.1 | -3.8 |
| PTGA | Pitinga | 16.49 | 180 | Pn | Pn | 15 24 18.0 | -3.7 |
| | 1.2nm,0.3s,baz=348,slow=22,SNR=11 | | | | | | |
| PTGA | | | | Sn | Sn | 15 27 09.2 | -15 |
| | 1.2nm,0.3s,baz=70,slow=22,SNR=5.4 | | | | | | |
| ROSC | El Rosal | 17.84 | 234 | P | P | 15 24 42.3 | +2.8 |
| | 1.9nm,0.3s,baz=102,slow=12,SNR=8.6 | | | | | | |
| ROSC | | | | LR | LR | 15 32 46.7 | |
| | comp=Z,45nm,18.4s,baz=261,slow=41 | | | | | | |
| OTAV | Otavalo | 23.94 | 231 | eP | P | 15 25 43.4 | -1.4 |
| | 6.7nm,0.8s | | | | | | |
| SAML | Samuel | 24.85 | 188 | eP | P | 15 25 53.3 | +0.7 |
| | 4.0nm,0.7s | | | | | | |
| LPAZ | La Paz | 32.94 | 194 | P | P | 15 27 05.5 | +0.2 |
| | 2.3nm,0.8s,baz=1.1,slow=10,SNR=11 | | | | | | |
| SCHQ | Schefferville | 39.25 | 354 | P | P | 15 27 57.8 | -0.4 |
| | 2.7nm,0.7s,baz=187,slow=8.1,SNR=3.8 | | | | | | |
| CPUP | Villa Florida | 42.02 | 176 | P | P | 15 28 20.2 | -1.2 |
| | 2.0nm,0.8s,baz=352,slow=15,SNR=3.4 | | | | | | |
| TXAR | Lajitas Array | 42.26 | 296 | P | P | 15 28 23.1 | -0.5 |
| | 0.3nm,0.6s,baz=146,slow=6.1,SNR=6.0 | | | | | | |
| H10N3 | ASCENSION HYDR | 50.82 | 114 | T | T | 16 25 07.8 | |
| | baz=296,slow=75,SNR=13 | | | | | | |
| H10N2 | ASCENSION HYDR | 50.83 | 114 | T | T | 16 25 08.7 | |
| | baz=296,slow=75,SNR=11 | | | | | | |
| H10N1 | ASCENSION HYDR | 50.84 | 114 | T | T | 16 25 02.7 | |
| | baz=296,slow=75,SNR=12 | | | | | | |
| NVAR | Mina Array Bea | 55.59 | 306 | P | P | 15 30 06.6 | +0.8 |
| | 1.5nm,0.7s,baz=88,slow=7.9,SNR=10 | | | | | | |
| YBH | Yreka Blue Hor | 59.32 | 309 | P | P | 15 30 31.1 | -0.9 |
| | 1.0nm,0.6s,baz=90,slow=5.1,SNR=3.6 | | | | | | |
| YKA | Yellowknife Ar | 60.05 | 334 | P | P | 15 30 35.8 | -0.6 |
| | 2.2nm,0.6s,baz=101,slow=7.2,SNR=4.4 | | | | | | |
| INK | Inuvik | 69.29 | 338 | P | P | 15 31 36.4 | -0.3 |
| | 2.2nm,0.8s,baz=157,slow=3.5,SNR=5.4 | | | | | | |
| ARCES | ARCESS Array B | 73.69 | 21 | P | P | 15 32 03.7 | +0.5 |
| | 1.4nm,0.7s,baz=276,slow=4.4,SNR=2.9 | | | | | | |
| FINES | FINESS Array B | 74.34 | 30 | P | P | 15 32 07.3 | +0.3 |
| | 3.1nm,0.8s,baz=222,slow=2.6,SNR=3.6 | | | | | | |
| ILAR | Eielson Array | 74.47 | 334 | P | P | 15 32 08.2 | +0.3 |
| | 1.3nm,0.8s,baz=78,slow=7.5,SNR=14 | | | | | | |
| MLR | Muntele Rosu | 76.05 | 46 | LR | LR | 16 01 29.5 | |
| | comp=Z,54nm,19.4s,baz=128,slow=32 | | | | | | |
| BRTR | Keskin Array B | 82.76 | 51 | P | P | 15 32 54.4 | +0.2 |
| | 1.5nm,0.8s,baz=290,slow=4.2,SNR=3.9 | | | | | | |

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*BJI **03** 15:20:55.1, 34.°72N×25.°92E, h28km, mb5.2/64, mB5.2/41, Ms4.9/47, Ms7 4.6/46*

*ATH **03** 15:20:56.3, 34.°78N×26.°52E, h17km±1km, MD4.1/34, ML5.1*

*GCMT **03** 15:20:57.8±0.3, 34.°90N×26.°39E, h12km, MW5.3/52, Moment Tensor Solution. s50,c57; s52,c65; Duration: 1s1 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.35±.02; $M_{\theta\theta}$0.15±.02; $M_{\phi\phi}$0.20±.02; $M_{r\theta}$1.23±.05; $M_{\theta\phi}$0.08±.02; $M_{\phi r}$0.12±.05; Best double couple: $M_0$1.26500×$10^{17}$ NP1:$\phi_s$263.00000°,δ84.00000°,λ-86.00000°. NP2: $\phi_s$49.00000°,δ7.00000°,λ-124.00000°. Principal axes: T 1.1760, Plg39.0000°, Azm349.0000°; N 0.1810, Plg4.0000°, Azm83.0000°; P -1.3550, Plg51.0000°, Azm177.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **03** 15:20:57.8±0.2, 34.°93N×26.°54E, h10km, mb5.3/105, ML5.0(THE) Error ellipse: s-maj=4.4km s-min=2.9km az=29.0*

*NEIC Felt at Ierapetra, Karpathos, Neapolis and Siteia.*

*ISCJB **03** 15:20:58.6±0.3, 34.°93N±0.°01×26.°49E±0.°01, h26km±2km, mb5.2/188, MS4.6/34, Error ellipse: s-maj=2.0km s-min=1.4km az=17.9*

*NSSC **03** 15:20:58.0±1.5, 34.°31N×26.°83E, h0km±180km, ML4.6*

*CSEM **03** 15:20:58.4±0.1, 34.°92N×26.°50E, h10km, mb5.3/99, Ms4.9, Error ellipse: s-maj=2.9km s-min=2.0km az=19.0*

*IDC **03** 15:20:59.9±2.6, 35.°12N×26.°46E, h20km±15km, mb4.8/34, mb1 4.8/41, mb1mx4.8/48, mbtmp4.9/41, ML4.5/6, MS4.6/36, Ms1 4.6/36, ms1mx4.4/53, Error ellipse: s-maj=12.5km s-min=9.3km az=170.0*

*THE **03** 15:20:59.2, 35.°00N×26.°52E, h1km, ML5.0/11, Error ellipse: s-maj=2.1km s-min=0.5km az=162.0*

*ISK **03** 15:21:00.3, 35.°28N×26.°47E, h5km, ML5.1*

*NIC **03** 15:21:00.1, 34.°72N×26.°51E, h25km, mb5.3, ML5.0*

*MOS **03** 15:21:00.0±1.1, 35.°04N×26.°43E, h33km, mb5.4/82, MS4.7/42, Error ellipse: s-maj=4.6km s-min=2.6km az=97.4*

*HLW **03** 15:21:00.4, 35.°03N×26.°60E, h40km±40km, Md4.4, Ml4.3*

*PDG **03** 15:21:02.4±0.2, 35.°01N×25.°64E, h10km±2km, ML4.9/11, Error ellipse: s-maj=9.4km s-min=7.2km az=90.0*

*SFS **03** 15:21:02.0, 35.°11N×26.°46E, h38km, ML5.2*

*SZGRF **03** 15:21:09.9, 35.°93N×25.°57E, h15km, mb5.0/10(BGR), Ms4.2/2(BGR)*

*DDA **03** 15:21:16.4, 35.°36N×27.°48E, h8km, Ml4.9*

**ISC 03 15:20:59.2**±0.4**, 34.°97N**±0.°02×**26.°52E**±0.°01**, h17**km±2km**,**
**n1702,**σ1s44/1771**, mb5.2**/190**, MS4.6**/34**, 52C-54D, Crete**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZKR | Zakros | 0.28 | 300 | P | Pg | 15 21 03.9 | -1.5 |
| ZKR | | | | S | Sg | 15 21 09.2 | -0.4 |
| ZKR | Zakros | 0.28 | 300 | P | Pg | 15 21 03.9 | -1.5 |
| KARP | Karpathos | 0.78 | 42 | ePN | Pb | 15 21 14.2 | -0.2 |
| KARP | | | | eSN | Sn | 15 21 26.8 | 0.0 |
| KARP | Karpathos | 0.78 | 42 | P | Pg | 15 21 13.4 | -1.1 |
| KARP | | | | S | Sn | 15 21 26.4 | -0.4 |
| KARP | Karpathos | 0.78 | 42 | P | Pg | 15 21 13.4 | -1.1 |
| KARP | | | | S | Sn | 15 21 26.4 | -0.4 |
| KARP | Karpathos | 0.78 | 42 | ePn | Pb | 15 21 14.2 | -0.2 |
| KARP | | | | S | Sn | 15 21 26.4 | -0.4 |
| KARP | | | | eSn | Sn | 15 21 26.8 | 0.0 |
| NPS | Neapolis | 0.79 | 292 | ePN | Pg | 15 21 13.4 | -1.3 |
| NPS | | | | eSN | Sb | 15 21 25.8 | +0.7 |
| NPS | Neapolis | 0.79 | 292 | ePn | Pg | 15 21 13.4 | -1.3 |
| NPS | | | | eSn | Sb | 15 21 25.8 | +0.7 |
| IACM | Heraklion | 1.23 | 286 | ePN | Pn | 15 21 21.3 | -0.3 |
| IACM | Heraklion | 1.23 | 286 | ePn | Pn | 15 21 21.3 | -0.3 |
| IDI | Anoyia | 1.37 | 284 | Pn | Pb | 15 21 24.1 | -0.2 |
| | 214nm,0.3s,baz=153,slow=9.5,SNR=250 | | | | | | |
| IDI | | | | Sn | Sn | 15 21 41.8 | +0.5 |
| | 936nm,0.3s,baz=356,slow=18,SNR=13 | | | | | | |
| IDI | | | | LR | LR | 15 22 15.9 | |
| | comp=Z,18µm,18.4s,baz=92,slow=59 | | | | | | |
| IDI | Anoyia | 1.37 | 284 | ePN | Pn | 15 21 23.5 | -0.1 |
| IDI | Anoyia | 1.37 | 284 | P | Pn | 15 21 23.0 | -0.6 |
| IDI | | | | S | Sg | 15 21 42.7 | -0.7 |
| IDI | Anoyia | 1.37 | 284 | eP | Pn | 15 21 23.5 | -0.1 |
| IDI | | | | Sn | Sn | 15 21 41.8 | +0.5 |
| IDI | | | | S | Sg | 15 21 42.7 | -0.7 |
| IDI | Anoyia | 1.37 | 284 | P | Pn | 15 21 23.0 | -0.6 |
| IDI | Anoyia | 1.37 | 284 | ePn | Pn | 15 21 23.5 | -0.1 |
| IDI | | | | Sn | Sn | 15 21 41.8 | +0.5 |
| IDI | | | | S | Sg | 15 21 42.7 | -0.7 |
| THR1 | Thera Island | 1.64 | 329 | ePN | Pn | 15 21 27.8 | +0.5 |
| THR1 | Thera Island | 1.64 | 329 | P | Pn | 15 21 27.4 | +0.1 |
| THR1 | Thera Island | 1.64 | 329 | P | Pn | 15 21 27.4 | +0.1 |
| THR1 | Thera Island | 1.64 | 329 | ePn | Pn | 15 21 27.8 | +0.5 |
| SANT | Santorini | 1.64 | 329 | ePN | Pb | 15 21 28.8 | -0.2 |
| SANT | | | | eSN | Sg | 15 21 52.6 | +0.5 |
| SANT | Santorini | 1.64 | 329 | P | Pn | 15 21 26.9 | -0.4 |
| SANT | | | | S | Sb | 15 21 50.4 | +1.0 |
| SANT | Santorini | 1.64 | 329 | eP | Pn | 15 21 27.4 | +0.1 |
| SANT | | | | S | Sb | 15 21 50.4 | +1.0 |
| SANT | Santorini | 1.64 | 329 | eP | Pn | 15 21 27.4 | +0.1 |
| SANT | Santorini | 1.64 | 329 | ePn | Pb | 15 21 28.8 | -0.2 |
| SANT | | | | S | Sb | 15 21 50.4 | +1.0 |
| SANT | | | | eSn | Sg | 15 21 52.6 | +0.5 |
| THR6 | Thira Island, | 1.65 | 327 | P | Pn | 15 21 27.4 | 0.0 |
| THR6 | Thira Island, | 1.65 | 327 | P | Pn | 15 21 27.4 | 0.0 |
| THR6 | Thira Island, | 1.65 | 327 | P | Pn | 15 21 27.4 | 0.0 |
| THR7 | Fira-Santorini | 1.70 | 329 | P | Pn | 15 21 28.5 | +0.5 |
| THR7 | Fira-Santorini | 1.70 | 329 | P | Pn | 15 21 28.5 | +0.5 |
| THR3 | Thira Island, | 1.70 | 328 | P | Pn | 15 21 28.7 | +0.7 |
| THR3 | Thira Island, | 1.70 | 328 | P | Pn | 15 21 28.7 | +0.7 |
| THR3 | Thira Island, | 1.70 | 328 | P | Pn | 15 21 28.7 | +0.7 |
| NISR | Nisiros | 1.71 | 17 | ePB | Pn | 15 21 29.0 | +0.8 |
| NISR | | | | eSN | Sg | 15 21 55.4 | +1.1 |
| NISR | Nisiros | 1.71 | 17 | P | Pn | 15 21 28.3 | +0.1 |
| NISR | | | | S | Sn | 15 21 50.7 | +1.0 |
| NISR | Nisiros | 1.71 | 17 | P | Pn | 15 21 28.3 | +0.1 |
| NISR | | | | S | Sn | 15 21 50.7 | +1.0 |
| NISR | Nisiros | 1.71 | 17 | P | Pn | 15 21 28.3 | +0.1 |
| NISR | Nisiros | 1.71 | 17 | ePb | Pn | 15 21 29.0 | +0.8 |
| NISR | | | | S | Sn | 15 21 50.7 | +1.0 |
| NISR | | | | eSn | Sg | 15 21 55.4 | +1.1 |
| NIS1 | Nisyros Isl. | 1.71 | 18 | ePN | Pn | 15 21 29.1 | +0.8 |
| NIS1 | Nisyros Isl. | 1.71 | 18 | ePB | Pn | 15 21 29.0 | +0.8 |
| NIS1 | Nisyros Isl. | 1.71 | 18 | P | Pn | 15 21 28.7 | +0.4 |
| NIS1 | | | | S | Sb | 15 21 51.8 | +0.3 |
| NIS1 | Nisyros Isl. | 1.71 | 18 | P | Pn | 15 21 28.7 | +0.4 |
| NIS1 | | | | S | Sb | 15 21 51.8 | +0.3 |
| NIS1 | Nisyros Isl. | 1.71 | 18 | P | Pn | 15 21 28.7 | +0.4 |
| NIS1 | Nisyros Isl. | 1.71 | 18 | ePn | Pn | 15 21 29.1 | +0.8 |
| NIS1 | | | | S | Sb | 15 21 51.8 | +0.3 |
| THR5 | Thira Island, | 1.73 | 327 | ePN | Pn | 15 21 28.9 | +0.4 |
| THR5 | Thira Island, | 1.73 | 327 | P | Pn | 15 21 28.8 | +0.3 |
| THR5 | Thira Island, | 1.73 | 327 | ePn | Pn | 15 21 28.9 | +0.4 |
| ARG | Arkhangelos | 1.81 | 46 | P | Pn | 15 21 30.2 | +0.6 |
| ARG | | | | S | Sn | 15 21 53.0 | +0.9 |
| ARG | Arkhangelos | 1.81 | 46 | ePN | Pb | 15 21 31.8 | 0.0 |
| ARG | Arkhangelos | 1.81 | 46 | P | Pn | 15 21 30.2 | +0.6 |
| ARG | | | | S | Sn | 15 21 53.0 | +0.9 |
| ARG | Arkhangelos | 1.81 | 46 | P | Pn | 15 21 30.2 | +0.6 |
| ARG | | | | S | Sn | 15 21 53.0 | +0.9 |
| ARG | Arkhangelos | 1.81 | 46 | P | Pn | 15 21 30.2 | +0.6 |
| ARG | Arkhangelos | 1.81 | 46 | ePn | Pb | 15 21 31.8 | 0.0 |
| ARG | | | | S | Sn | 15 21 53.0 | +0.9 |
| VAM | Vamos | 1.94 | 284 | P | Pn | 15 21 32.5 | +1.1 |
| VAM | | | | S | Sb | 15 21 57.7 | -0.5 |
| VAM | Vamos | 1.94 | 284 | ePN | Pn | 15 21 31.5 | +0.1 |
| VAM | | | | eSN | Sb | 15 21 58.3 | +0.1 |
| VAM | Vamos | 1.94 | 284 | P | Pn | 15 21 32.5 | +1.1 |
| VAM | | | | S | Sb | 15 21 57.7 | -0.5 |
| VAM | Vamos | 1.94 | 284 | P | Pn | 15 21 32.5 | +1.1 |
| VAM | | | | S | Sb | 15 21 57.7 | -0.5 |
| VAM | Vamos | 1.94 | 284 | ePn | Pn | 15 21 31.5 | +0.1 |
| VAM | Vamos | 1.94 | 284 | P | Pn | 15 21 32.5 | +1.1 |
| VAM | | | | eSn | Sb | 15 21 58.3 | +0.1 |
| IMMV | Iera Moni Meta | 2.13 | 284 | ePN | Pn | 15 21 34.6 | +0.6 |
| IMMV | | | | eSN | Sn | 15 22 02.3 | +2.2 |
| IMMV | Iera Moni Meta | 2.13 | 284 | ePn | Pn | 15 21 34.6 | +0.6 |
| IMMV | | | | eSn | Sn | 15 22 02.3 | +2.2 |
| BODT | Bodrum | 2.18 | 17 | ePN | Pn | 15 21 35.1 | +0.3 |
| BODT | | | | eSN | Sn | 15 22 00.7 | -0.7 |
| BODT | Bodrum | 2.18 | 17 | ePn | Pn | 15 21 35.1 | +0.3 |
| BODT | | | | eSn | Sn | 15 22 00.7 | -0.7 |
| APE | Apeiranthos | 2.24 | 339 | ePN | Pn | 15 21 35.8 | +0.3 |
| APE | Apeiranthos | 2.24 | 339c | iP | Pn | 15 21 35.7 | +0.1 |
| APE | Apeiranthos | 2.24 | 339 | ⇓iP | Pn | 15 21 36.5 | +0.9 |
| APE | | | | S | Sn | 15 22 03.5 | +0.7 |
| APE | Apeiranthos | 2.24 | 339 | ePB | Pn | 15 21 36.7 | +1.1 |
| APE | | | | eSN | Sb | 15 22 08.3 | +1.6 |
| APE | Apeiranthos | 2.24 | 339 | P | Pn | 15 21 34.9 | -0.7 |
| APE | | | | S | Sn | 15 22 04.0 | +1.2 |
| APE | Apeiranthos | 2.24 | 339 | P | Pn | 15 21 34.9 | -0.7 |
| APE | Apeiranthos | 2.24 | 339 | ePn | Pn | 15 21 35.8 | +0.3 |
| APE | Apeiranthos | 2.24 | 339 | ePb | Pn | 15 21 36.7 | +1.1 |
| APE | | | | S | Sn | 15 22 04.0 | +1.2 |
| MHLO | Agia Marina, M | 2.43 | 316 | ePN | Pn | 15 21 39.1 | +1.0 |
| MHLO | Agia Marina, M | 2.43 | 316 | P | Pn | 15 21 38.8 | +0.7 |
| MHLO | | | | S | Sn | 15 22 08.4 | +1.0 |
| MHLO | Agia Marina, M | 2.43 | 316 | P | Pn | 15 21 38.8 | +0.7 |
| MHLO | Agia Marina, M | 2.43 | 316 | ePn | Pn | 15 21 39.1 | +1.0 |
| MHLO | | | | S | Sn | 15 22 08.4 | +1.0 |
| DALY | Dalyan (Mu˜la | 2.53 | 43 | ePN | Pb | 15 21 42.0 | -2.2 |
| DALY | Dalyan (Mu˜la | 2.53 | 43 | ePn | Pb | 15 21 42.0 | -2.2 |
| TURN | Turunc | 2.54 | 41 | iP | Pn | 15 21 37.8 | -1.8 |
| TURN | Turunc | 2.54 | 41 | P | Pn | 15 21 37.9 | -1.8 |
| TURN | | | | S | Sn | 15 22 04.9 | -5.3 |
| YER | Yerkesik | 2.59 | 33 | ePN | Pb | 15 21 42.6 | -2.6 |
| YER | Yerkesik | 2.59 | 33 | ePn | Pb | 15 21 42.6 | -2.6 |
| FETY | Fethiye | 2.67 | 51 | ePN | Pb | 15 21 43.8 | -2.7 |
| FETY | Fethiye | 2.67 | 51 | ePn | Pb | 15 21 43.8 | -2.7 |
| SERI | Serifos | 2.73 | 324 | ePN | Pn | 15 21 43.6 | +1.3 |
| SERI | Serifos | 2.73 | 324 | ePn | Pn | 15 21 43.6 | +1.3 |
| SMG | Samos | 2.74 | 5 | P | Pn | 15 21 42.6 | +0.1 |
| SMG | | | | S | Sn | 15 22 16.5 | +1.3 |
| SMG | Samos | 2.74 | 5 | P | Pn | 15 21 42.6 | +0.1 |
| SMG | | | | S | Sn | 15 22 16.5 | +1.3 |
| SMG | Samos | 2.74 | 5 | P | Pn | 15 21 42.6 | +0.1 |
| SMG | | | | S | Sn | 15 22 16.5 | +1.3 |
| KSL | Kastellorizon | 2.76 | 64 | ePN | Pn | 15 21 43.9 | +1.2 |
| ANKY | Antikythira Is | 2.77 | 290 | ePN | Pn | 15 21 43.6 | +0.8 |
| ANKY | Antikythira Is | 2.77 | 290 | P | Pn | 15 21 44.3 | +1.5 |
| ANKY | | | | S | Sn | 15 22 18.4 | +2.5 |
| ANKY | Antikythira Is | 2.77 | 290 | P | Pn | 15 21 44.3 | +1.5 |
| ANKY | | | | S | Sn | 15 22 18.4 | +2.5 |
| ANKY | Antikythira Is | 2.77 | 290 | ePn | Pn | 15 21 43.6 | +0.8 |
| ANKY | Antikythira Is | 2.77 | 290 | P | Pn | 15 21 44.3 | +1.5 |
| GCAM | G?zelcaml? | 2.78 | 12 | iP | Pn | 15 21 43.4 | +0.4 |
| GCAM | G?zelcaml? | 2.78 | 12 | P | Pn | 15 21 43.4 | +0.4 |
| AKAS | Kas | 2.81 | 63 | iP | Pn | 15 21 44.9 | +1.4 |
| AKAS | Kas | 2.81 | 63 | P | Pn | 15 21 44.9 | +1.4 |
| AYDN | Tasoluk | 2.90 | 22 | iP | Pb | 15 21 47.8 | -2.7 |
| AYDN | Tasoluk | 2.90 | 22 | P | Pb | 15 21 47.8 | -2.7 |
| KYTH | Kithira | 3.12 | 296 | ePN | Pn | 15 21 48.8 | +1.2 |
| KYTH | Kithira | 3.12 | 296 | P | Pn | 15 21 48.5 | +0.9 |
| KYTH | Kithira | 3.12 | 296 | P | Pn | 15 21 48.5 | +0.9 |
| KYTH | Kithira | 3.12 | 296 | P | Pn | 15 21 48.5 | +0.9 |
| KYTH | Kithira | 3.12 | 296 | ePn | Pn | 15 21 48.8 | +1.2 |
| AYDB | Zeytinkoy-Aydi | 3.17 | 20 | ePN | Pn | 15 21 49.8 | +1.4 |
| AYDB | Zeytinkoy-Aydi | 3.17 | 20 | ePn | Pn | 15 21 49.8 | +1.4 |
| ZEY | ˜zmir | 3.26 | 360 | P | Pn | 15 21 49.5 | 0.0 |
| ZEY | | | | S | Sg | 15 22 43.5 | -0.4 |
| ELL | Elmali | 3.28 | 56 | ePN | Pn | 15 21 52.2 | +2.3 |
| ELL | Elmali | 3.28 | 56 | ePn | Pn | 15 21 52.2 | +2.3 |
| URLA | Izmir | 3.38 | 1 | iP | Pn | 15 21 51.6 | +0.3 |
| URLA | Izmir | 3.38 | 1 | P | Pn | 15 21 51.5 | +0.3 |
| VLI | Veliai | 3.39 | 302 | ePN | Pn | 15 21 52.5 | +1.2 |
| VLI | | | | eSN | Sn | 15 22 33.3 | +2.2 |
| VLI | Veliai | 3.39 | 302 | P | Pn | 15 21 51.1 | -0.2 |
| VLI | | | | S | Sn | 15 22 33.7 | +2.6 |
| VLI | Veliai | 3.39 | 302 | P | Pn | 15 21 51.1 | -0.2 |
| VLI | | | | S | Sn | 15 22 33.7 | +2.6 |
| VLI | Veliai | 3.39 | 302 | P | Pn | 15 21 51.1 | -0.2 |
| VLI | Veliai | 3.39 | 302 | ePn | Pn | 15 21 52.5 | +1.2 |
| VLI | | | | eSn | Sn | 15 22 33.3 | +2.2 |
| DNZL | Cakiroluk | 3.40 | 36 | iP | Pn | 15 21 53.1 | +1.5 |
| DNZL | Cakiroluk | 3.40 | 36 | P | Pn | 15 21 53.1 | +1.5 |
| DNZL | | | | S | Sb | 15 22 42.0 | +1.9 |
| CHOS | Chios island | 3.43 | 354 | ePN | Pn | 15 21 52.0 | +0.1 |
| CHOS | Chios island | 3.43 | 354 | ePN | Pn | 15 21 53.4 | +1.5 |
| CHOS | Chios island | 3.43 | 354 | P | Pn | 15 21 51.5 | -0.4 |
| CHOS | | | | S | Sn | 15 22 32.7 | +0.5 |
| CHOS | Chios island | 3.43 | 354 | P | Pn | 15 21 51.5 | -0.4 |
| CHOS | | | | S | Sn | 15 22 32.7 | +0.5 |
| CHOS | Chios island | 3.43 | 354 | P | Pn | 15 21 51.5 | -0.4 |
| CHOS | Chios island | 3.43 | 354 | ePn | Pn | 15 21 53.4 | +1.5 |
| CHOS | | | | S | Sn | 15 22 32.7 | +0.5 |
| DENT | Denizli | 3.44 | 35 | ePN | Pn | 15 21 53.9 | +1.8 |
| DENT | Denizli | 3.44 | 35 | ePn | Pn | 15 21 53.9 | +1.8 |
| IZM | Izmir | 3.47 | 10 | ePN | Pn | 15 21 53.2 | +0.7 |
| IZM | Izmir | 3.47 | 10 | ePn | Pn | 15 21 53.2 | +0.7 |
| KARY | Karystos | 3.48 | 332 | P | Pn | 15 21 53.1 | +0.5 |
| KARY | | | | S | Sn | 15 22 34.9 | +1.5 |
| VLY | Voula,Athens | 3.62 | 323 | ePN | Pn | 15 21 55.9 | +1.5 |
| VLY | Voula,Athens | 3.62 | 323 | P | Pn | 15 21 55.5 | +1.1 |
| VLY | | | | S | Sn | 15 22 38.7 | +2.0 |
| VLY | Voula,Athens | 3.62 | 323 | P | Pn | 15 21 55.5 | +1.1 |
| VLY | | | | S | Sn | 15 22 38.7 | +2.0 |
| VLY | Voula,Athens | 3.62 | 323 | P | Pn | 15 21 55.5 | +1.1 |
| VLY | Voula,Athens | 3.62 | 323 | ePn | Pn | 15 21 55.9 | +1.5 |
| VLY | | | | S | Sn | 15 22 38.7 | +2.0 |
| LTBQ | Tobruq | 3.63 | 217 | iP | Pn | 15 21 56.3 | +1.7 |
| | SNR=23 | | | | | | |
| KRND | KRANIDI | 3.63 | 312 | ePN | Pn | 15 21 56.5 | +1.9 |
| KRND | KRANIDI | 3.63 | 312 | P | Pn | 15 21 55.4 | +0.8 |
| KRND | | | | S | Sn | 15 22 39.0 | +1.9 |
| KRND | KRANIDI | 3.63 | 312 | P | Pn | 15 21 55.4 | +0.8 |
| KRND | KRANIDI | 3.63 | 312 | ePn | Pn | 15 21 56.5 | +1.9 |
| KRND | | | | S | Sn | 15 22 39.0 | +1.9 |
| SLUM | | 3.64 | 198 | P | Pn | 15 21 55.6 | +1.0 |
| | baz=199 | | | | | | |
| SLUM | | | | S | Sn | 15 22 37.2 | 0.0 |
| | baz=199 | | | | | | |
| SLUM | | 3.64 | 198 | P | Pn | 15 21 55.7 | +1.0 |
| SLUM | | | | S | Sn | 15 22 37.2 | 0.0 |
| DIDY | Didyma | 3.66 | 314 | ePN | Pn | 15 21 56.5 | +1.4 |
| DIDY | Didyma | 3.66 | 314 | P | Pn | 15 21 54.9 | -0.2 |
| DIDY | | | | S | Sn | 15 22 38.8 | +0.9 |
| DIDY | Didyma | 3.66 | 314 | P | Pn | 15 21 54.9 | -0.2 |
| DIDY | Didyma | 3.66 | 314 | ePn | Pn | 15 21 56.5 | +1.4 |
| DIDY | | | | S | Sn | 15 22 38.8 | +0.9 |
| MATC | Matruh | 3.67 | 170 | P | Pn | 15 21 55.4 | +0.3 |
| | baz=171 | | | | | | |
| NAIG | Nisos Aigina | 3.70 | 320 | ePN | Pn | 15 21 57.9 | +2.3 |
| NAIG | Nisos Aigina | 3.70 | 320 | ePn | Pn | 15 21 57.9 | +2.3 |
| ATHU | Athens Univers | 3.71 | 324 | P | Pn | 15 21 56.8 | +1.1 |
| ATHU | Athens Univers | 3.71 | 324 | P | Pn | 15 21 56.8 | +1.1 |
| ATHU | Athens Univers | 3.71 | 324 | P | Pn | 15 21 56.8 | +1.1 |
| KORT | Korkueli | 3.71 | 56 | iP | Pn | 15 21 58.0 | +2.2 |
| KORT | Korkueli | 3.71 | 56 | P | Pn | 15 21 58.0 | +2.2 |
| ATH | Athens Observa | 3.75 | 324 | P | Pn | 15 21 57.6 | +1.4 |
| ATH | | | | S | Sn | 15 22 42.3 | +2.3 |
| ATH | Athens Observa | 3.75 | 324 | ePN | Pn | 15 21 58.1 | +1.9 |
| ATH | Athens Observa | 3.75 | 324 | P | Pn | 15 21 57.6 | +1.4 |
| ATH | | | | S | Sn | 15 22 42.3 | +2.3 |
| ATH | Athens Observa | 3.75 | 324 | P | Pn | 15 21 57.6 | +1.4 |
| ATH | | | | S | Sn | 15 22 42.3 | +2.3 |
| ATH | Athens Observa | 3.75 | 324 | P | Pn | 15 21 57.6 | +1.4 |
| ATH | Athens Observa | 3.75 | 324 | ePn | Pn | 15 21 58.1 | +1.9 |
| ATH | | | | S | Sn | 15 22 42.3 | +2.3 |
| ANTB | Antalya | 3.87 | 59 | ePN | Pn | 15 22 01.6 | +3.7 |
| ANTB | Antalya | 3.87 | 59 | ePn | Pn | 15 22 01.6 | +3.7 |
| MANT | Manisa | 3.88 | 24 | iP | Pn | 15 22 00.2 | +2.0 |
| MANT | | | | iS | Sn | 15 22 45.9 | +2.4 |
| MANT | Manisa | 3.88 | 24 | P | Pn | 15 22 00.2 | +2.0 |
| MANT | | | | S | Sn | 15 22 45.9 | +2.4 |
| HMAT | Matruh | 3.90 | 173 | P | Pn | 15 21 59.1 | +0.8 |
| | baz=173 | | | | | | |
| HMAT | Matruh | 3.90 | 173 | P | Pn | 15 21 59.1 | +0.8 |
| KULA | Kula-Manisa | 3.93 | 25 | ePN | Pn | 15 22 01.0 | +2.1 |
| KULA | Kula-Manisa | 3.93 | 25 | ePn | Pn | 15 22 01.0 | +2.1 |
| EREA | Eretria | 4.02 | 330 | ePN | Pn | 15 22 01.8 | +1.8 |
| EREA | Eretria | 4.02 | 330 | P | Pn | 15 22 00.9 | +0.9 |
| EREA | Eretria | 4.02 | 330 | P | Pn | 15 22 00.9 | +0.9 |
| EREA | Eretria | 4.02 | 330 | ePn | Pn | 15 22 01.8 | +1.8 |
| AKHS | Akhisar | 4.04 | 15 | iP | Pn | 15 22 01.6 | +1.4 |
| AKHS | Akhisar | 4.04 | 15 | P | Pn | 15 22 01.6 | +1.4 |
| AKS | Akhisar | 4.04 | 15 | ePN | Pn | 15 22 02.3 | +2.1 |
| AKS | Akhisar | 4.04 | 15 | ePn | Pn | 15 22 02.3 | +2.1 |
| VILL | Villia | 4.10 | 322 | P | Pn | 15 22 01.8 | +0.7 |
| VILL | | | | S | Sn | 15 22 50.7 | +2.0 |
| VILL | Villia | 4.10 | 322 | P | Pn | 15 22 01.8 | +0.7 |
| VILL | Villia | 4.10 | 322 | ePn | Pn | 15 22 03.0 | +1.9 |
| VILL | | | | S | Sn | 15 22 50.7 | +2.0 |
| DKL | Dikili | 4.10 | 4 | ePN | Pn | 15 22 01.9 | +0.8 |
| DKL | Dikili | 4.10 | 4 | ePn | Pn | 15 22 01.9 | +0.8 |
| VLX | Vlachokerasia | 4.11 | 307 | ePN | Pn | 15 22 03.1 | +1.7 |
| VLX | Vlachokerasia | 4.11 | 307 | P | Pn | 15 22 02.6 | +1.2 |
| VLX | | | | S | Sn | 15 22 51.3 | +2.2 |
| VLX | Vlachokerasia | 4.11 | 307 | P | Pn | 15 22 02.6 | +1.2 |
| VLX | | | | S | Sn | 15 22 51.3 | +2.2 |
| VLX | Vlachokerasia | 4.11 | 307 | P | Pn | 15 22 02.6 | +1.2 |
| VLX | Vlachokerasia | 4.11 | 307 | ePn | Pn | 15 22 03.1 | +1.7 |
| VLX | | | | S | Sn | 15 22 51.3 | +2.2 |
| BCK | Bucak | 4.13 | 52 | ePN | Pn | 15 22 04.5 | +3.0 |
| BCK | Bucak | 4.13 | 52 | ePn | Pn | 15 22 04.5 | +3.0 |
| KHL | Karahalli | 4.13 | 35 | ePN | Pn | 15 22 03.2 | +1.7 |
| KHL | Karahalli | 4.13 | 35 | ePn | Pn | 15 22 03.2 | +1.7 |
| ACOR | Acrocorinthos | 4.14 | 316 | P | Pn | 15 22 02.7 | +1.1 |
| LOUT | Loutraki | 4.15 | 318 | ePN | Pn | 15 22 04.2 | +2.5 |
| LOUT | Loutraki | 4.15 | 318 | P | Pn | 15 22 02.5 | +0.8 |
| LOUT | Loutraki | 4.15 | 318 | P | Pn | 15 22 02.5 | +0.8 |
| LOUT | Loutraki | 4.15 | 318 | ePn | Pn | 15 22 04.2 | +2.5 |
| KHAL | Karahalli | 4.15 | 34 | iP | Pn | 15 22 02.7 | +0.8 |
| KHAL | Karahalli | 4.15 | 34 | P | Pn | 15 22 02.7 | +0.8 |
| VIL2 | Platees | 4.16 | 322 | ePN | Pn | 15 22 03.0 | +1.1 |
| LTK | Loutraki | 4.18 | 318 | ePN | Pn | 15 22 04.3 | +2.2 |
| LTK | Loutraki | 4.18 | 318 | P | Pn | 15 22 03.0 | +0.9 |
| LTK | Loutraki | 4.18 | 318 | P | Pn | 15 22 03.0 | +0.9 |
| LTK | Loutraki | 4.18 | 318 | P | Pn | 15 22 03.0 | +0.9 |
| LTK | Loutraki | 4.18 | 318 | ePn | Pn | 15 22 04.3 | +2.2 |
| SIGR | SIGRI | 4.26 | 353 | ePN | Pn | 15 22 03.9 | +0.6 |
| SIGR | SIGRI | 4.26 | 353 | P | Pn | 15 22 03.3 | 0.0 |
| SIGR | | | | S | Sn | 15 22 55.5 | +2.8 |
| SIGR | SIGRI | 4.26 | 353 | P | Pn | 15 22 03.3 | 0.0 |
| SIGR | | | | S | Sn | 15 22 55.5 | +2.8 |
| SIGR | SIGRI | 4.26 | 353 | P | Pn | 15 22 03.3 | 0.0 |
| SIGR | SIGRI | 4.26 | 353 | ePn | Pn | 15 22 03.9 | +0.6 |
| SIGR | | | | S | Sn | 15 22 55.5 | +2.8 |
| PRK | Paraskevi | 4.27 | 357 | P | Pn | 15 22 03.6 | +0.2 |
| PRK | Paraskevi | 4.27 | 357 | P | Pn | 15 22 03.6 | +0.2 |
| PRK | Paraskevi | 4.27 | 357 | P | Pn | 15 22 03.6 | +0.2 |
| PRK | Paraskevi | 4.27 | 357 | P | Pn | 15 22 03.6 | +0.2 |
| ITM | Ithomi | 4.32 | 302 | ePN | Pn | 15 22 06.7 | +2.6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ITM | Ithomi | 4.32 | 302 | P | Pn | 15 22 05.0 | +0.9 |
| ITM | Ithomi | 4.32 | 302 | P | Pn | 15 22 05.0 | +0.9 |
| ITM | Ithomi | 4.32 | 302 | P | Pn | 15 22 05.0 | +0.9 |
| ITM | Ithomi | 4.32 | 302 | *e*Pn | Pn | 15 22 06.7 | +2.6 |
| PYL | PYLOS | 4.32 | 298 | *e*PN | Pn | 15 22 05.7 | +1.6 |
| PYL | PYLOS | 4.32 | 298 | P | Pn | 15 22 04.5 | +0.4 |
| PYL | PYLOS | 4.32 | 298 | P | Pn | 15 22 04.5 | +0.4 |
| PYL | PYLOS | 4.32 | 298 | P | Pn | 15 22 04.5 | +0.4 |
| PYL | PYLOS | 4.32 | 298 | *e*Pn | Pn | 15 22 05.7 | +1.6 |
| AYVA | Ayvalik | 4.33 | 2 | *i* P | Pn | 15 22 04.8 | +0.6 |
| AYVA | Ayvalik | 4.33 | 2 | P | Pn | 15 22 04.8 | +0.6 |
| THAL | Thalero | 4.36 | 316 | *e*PN | Pn | 15 22 06.9 | +2.3 |
| THAL | Thalero | 4.36 | 316 | P | Pn | 15 22 05.2 | +0.6 |
| THAL | Thalero | 4.36 | 316 | P | Pn | 15 22 05.2 | +0.6 |
| THAL | Thalero | 4.36 | 316 | *e*Pn | Pn | 15 22 06.9 | +2.3 |
| SUTC | Sutluce-Ispart | 4.40 | 54 | *e*PN | Pn | 15 22 08.9 | +3.5 |
| SUTC | Sutluce-Ispart | 4.40 | 54 | *e*Pn | Pn | 15 22 08.9 | +3.5 |
| MRKA | Markates | 4.41 | 329 | *e*PN | Pn | 15 22 07.0 | +1.7 |
| MRKA | Markates | 4.41 | 329 | P | Pn | 15 22 06.7 | +1.4 |
| MRKA | Markates | 4.41 | 329 | P | Pn | 15 22 06.7 | +1.4 |
| MRKA | Markates | 4.41 | 329 | *e*Pn | Pn | 15 22 07.0 | +1.7 |
| DEMI | Demirci | 4.43 | 23 | *i* P | Pn | 15 22 07.7 | +2.0 |
| DEMI | | | | *i* S | Sn | 15 23 01.1 | +4.2 |
| DEMI | Demirci | 4.43 | 23 | P | Pn | 15 22 07.7 | +2.0 |
| DEMI | | | | S | Sn | 15 23 01.1 | +4.2 |
| GUR | Goura | 4.48 | 313 | *e*PN | Pn | 15 22 08.3 | +1.9 |
| GUR | Goura | 4.48 | 313 | P | Pn | 15 22 07.2 | +0.8 |
| GUR | | | | S | Sn | 15 23 00.6 | +2.4 |
| GUR | Goura | 4.48 | 313 | P | Pn | 15 22 07.2 | +0.8 |
| GUR | Goura | 4.48 | 313 | P | Pn | 15 22 07.2 | +0.8 |
| GUR | Goura | 4.48 | 313 | *e*Pn | Pn | 15 22 08.3 | +1.9 |
| GUR | | | | S | Sn | 15 23 00.6 | +2.4 |
| BAGO | Egridir - ISPA | 4.58 | 48 | P | Pn | 15 22 08.9 | +1.2 |
| LKR | Lokris | 4.63 | 324 | *e*PN | Pn | 15 22 10.3 | +2.0 |
| LKR | Lokris | 4.63 | 324 | P | Pn | 15 22 09.2 | +0.9 |
| LKR | Lokris | 4.63 | 324 | P | Pn | 15 22 09.2 | +0.9 |
| LKR | Lokris | 4.63 | 324 | P | Pn | 15 22 09.2 | +0.9 |
| LKR | Lokris | 4.63 | 324 | *e*Pn | Pn | 15 22 10.3 | +2.0 |
| AMT | Artemida-Makis | 4.65 | 305 | *e*PN | Pn | 15 22 10.6 | +1.9 |
| AMT | Artemida-Makis | 4.65 | 305 | P | Pn | 15 22 10.5 | +1.9 |
| AMT | Artemida-Makis | 4.65 | 305 | P | Pn | 15 22 10.5 | +1.9 |
| ATAL | Atalanti | 4.65 | 324 | P | Pn | 15 22 09.5 | +0.8 |
| ATAL | Atalanti | 4.65 | 324 | P | Pn | 15 22 09.5 | +0.8 |
| ATAL | Atalanti | 4.65 | 324 | P | Pn | 15 22 09.5 | +0.8 |
| KLV | Kalavryta, Ach | 4.66 | 312 | *e*PN | Pn | 15 22 11.2 | +2.3 |
| KLV | Kalavryta, Ach | 4.66 | 312 | P | Pn | 15 22 09.0 | +0.1 |
| KLV | Kalavryta, Ach | 4.66 | 312 | P | Pn | 15 22 09.0 | +0.1 |
| KLV | Kalavryta, Ach | 4.66 | 312 | P | Pn | 15 22 09.0 | +0.1 |
| KLV | Kalavryta, Ach | 4.66 | 312 | *e*Pn | Pn | 15 22 11.2 | +2.3 |
| AOS | Alonnisos | 4.69 | 334 | *e*PN | Pn | 15 22 11.3 | +2.2 |
| AOS | Alonnisos | 4.69 | 334 | *e*PN | Pn | 15 22 11.2 | +2.0 |
| AOS | Alonnisos | 4.69 | 334 | P | Pn | 15 22 10.6 | +1.4 |
| AOS | Alonnisos | 4.69 | 334 | P | Pn | 15 22 10.6 | +1.4 |
| AOS | Alonnisos | 4.69 | 334 | P | Pn | 15 22 10.6 | +1.4 |
| AOS | Alonnisos | 4.69 | 334 | *e*Pn | Pn | 15 22 11.2 | +2.0 |
| DESF | Desfina | 4.69 | 318 | *e*PN | Pn | 15 22 11.6 | +2.3 |
| DESF | Desfina | 4.69 | 318 | *e*Pn | Pn | 15 22 11.6 | +2.3 |
| SMIA | Simia | 4.71 | 327 | *e*PN | Pn | 15 22 11.9 | +2.4 |
| SMIA | Simia | 4.71 | 327 | P | Pn | 15 22 10.9 | +1.4 |
| SMIA | Simia | 4.71 | 327 | P | Pn | 15 22 10.9 | +1.4 |
| SMIA | Simia | 4.71 | 327 | *e*Pn | Pn | 15 22 11.9 | +2.4 |
| AKMC | Akamas | 4.77 | 88 | P | Pn | 15 22 09.9 | -0.5 |
| | baz=267 | | | | | | |
| AKMC | Akamas | 4.77 | 88 | P | Pn | 15 22 09.9 | -0.5 |
| BALB | Balikesir | 4.79 | 13 | *e*PN | Pn | 15 22 12.2 | +1.7 |
| BALB | Balikesir | 4.79 | 13 | *e*Pn | Pn | 15 22 12.2 | +1.7 |
| SHUT | Suhut-Afyon | 4.82 | 41 | *e*PN | Pn | 15 22 13.6 | +2.4 |
| SHUT | Suhut-Afyon | 4.82 | 41 | *e*Pn | Pn | 15 22 13.6 | +2.4 |
| SKIA | Skiathos | 4.84 | 331 | *e*PN | Pn | 15 22 13.8 | +2.5 |
| SKIA | Skiathos | 4.84 | 331 | P | Pn | 15 22 13.0 | +1.7 |
| SKIA | Skiathos | 4.84 | 331 | P | Pn | 15 22 13.0 | +1.7 |
| SKIA | Skiathos | 4.84 | 331 | *e*Pn | Pn | 15 22 13.8 | +2.5 |
| EZN | Ezine | 4.85 | 358 | *e*PN | Pn | 15 22 12.6 | +1.2 |
| EZN | Ezine | 4.85 | 358 | *e*Pn | Pn | 15 22 12.6 | +1.2 |
| BOZC | Bozcaada | 4.88 | 356 | P | Pn | 15 22 12.4 | +0.7 |
| BOZC | | | | P | Pn | 15 22 12.4 | +0.7 |
| DURS | Dursunbey | 4.88 | 18 | *i* P | Pn | 15 22 13.1 | +1.2 |
| DURS | Dursunbey | 4.88 | 18 | P | Pn | 15 22 13.1 | +1.2 |
| DRO | Drossia | 4.88 | 309 | *e*PN | Pn | 15 22 14.5 | +2.6 |
| DRO | Drossia | 4.88 | 309 | P | Pn | 15 22 13.4 | +1.5 |
| DRO | Drossia | 4.88 | 309 | P | Pn | 15 22 13.4 | +1.5 |
| DRO | Drossia | 4.88 | 309 | *e*Pn | Pn | 15 22 14.5 | +2.6 |
| AXAR | Agios Charalam | 4.89 | 322 | *e*PN | Pn | 15 22 14.8 | +2.9 |
| AXAR | Agios Charalam | 4.89 | 322 | P | Pn | 15 22 13.1 | +1.2 |
| AXAR | Agios Charalam | 4.89 | 322 | P | Pn | 15 22 13.1 | +1.2 |
| AXAR | Agios Charalam | 4.89 | 322 | P | Pn | 15 22 13.1 | +1.2 |
| AXAR | Agios Charalam | 4.89 | 322 | *e*Pn | Pn | 15 22 14.8 | +2.9 |
| GAZI | Gazipasa | 4.89 | 73 | *i* P | Pn | 15 22 12.2 | +0.2 |
| GAZI | Gazipasa | 4.89 | 73 | P | Pn | 15 22 12.2 | +0.2 |
| LAKA | Lakka | 4.89 | 313 | *e*PN | Pn | 15 22 14.6 | +2.6 |
| LAKA | Lakka | 4.89 | 313 | P | Pn | 15 22 13.1 | +1.1 |
| LAKA | Lakka | 4.89 | 313 | P | Pn | 15 22 13.1 | +1.1 |
| LAKA | Lakka | 4.89 | 313 | P | Pn | 15 22 13.1 | +1.1 |
| LAKA | Lakka | 4.89 | 313 | *e*Pn | Pn | 15 22 14.6 | +2.6 |
| KALE | Kalithea | 4.90 | 315 | *e*PN | Pn | 15 22 14.5 | +2.4 |
| KALE | Kalithea | 4.90 | 315 | P | Pn | 15 22 12.6 | +0.5 |
| KALE | Kalithea | 4.90 | 315 | P | Pn | 15 22 12.6 | +0.5 |
| KALE | Kalithea | 4.90 | 315 | P | Pn | 15 22 12.6 | +0.5 |
| KALE | Kalithea | 4.90 | 315 | *e*Pn | Pn | 15 22 14.5 | +2.4 |
| DST | Dursunbey | 4.92 | 19 | *e*PN | Pn | 15 22 14.7 | +2.3 |
| DST | Dursunbey | 4.92 | 19 | *e*Pn | Pn | 15 22 14.7 | +2.3 |
| SERG | Sergoula | 4.96 | 315 | *e*PN | Pn | 15 22 15.4 | +2.4 |
| SERG | Sergoula | 4.96 | 315 | P | Pn | 15 22 13.4 | +0.4 |
| SERG | Sergoula | 4.96 | 315 | P | Pn | 15 22 13.4 | +0.4 |
| SERG | Sergoula | 4.96 | 315 | *e*Pn | Pn | 15 22 15.4 | +2.4 |
| ALFC | Alevga | 4.99 | 86 | P | Pn | 15 22 13.0 | -0.4 |
| | baz=266 | | | | | | |
| ALFC | | | | S | Sn | 15 23 10.3 | -0.5 |
| ALFC | Alevga | 4.99 | 86 | P | Pn | 15 22 13.0 | -0.4 |
| ALFC | | | | S | Sn | 15 23 10.3 | -0.5 |
| LIA | Limnos Island | 5.03 | 348 | P | Pn | 15 22 14.4 | +0.6 |
| LIA | Limnos Island | 5.03 | 348 | P | Pn | 15 22 14.4 | +0.6 |
| LIA | Limnos Island | 5.03 | 348 | P | Pn | 15 22 14.4 | +0.6 |
| EFP | Efpalio | 5.06 | 314 | *e*PN | Pn | 15 22 16.6 | +2.3 |
| EFP | Efpalio | 5.06 | 314 | P | Pn | 15 22 15.5 | +1.2 |
| EFP | Efpalio | 5.06 | 314 | P | Pn | 15 22 15.5 | +1.2 |
| EFP | Efpalio | 5.06 | 314 | *e*Pn | Pn | 15 22 16.6 | +2.3 |
| NEO | Neokhori | 5.06 | 330 | *e*PN | Pn | 15 22 16.4 | +2.1 |
| NEO | Neokhori | 5.06 | 330 | P | Pn | 15 22 15.8 | +1.5 |
| NEO | Neokhori | 5.06 | 330 | P | Pn | 15 22 15.8 | +1.5 |
| NEO | Neokhori | 5.06 | 330 | P | Pn | 15 22 15.8 | +1.5 |
| NEO | Neokhori | 5.06 | 330 | *e*Pn | Pn | 15 22 16.4 | +2.1 |
| RLS | Riolos of Patr | 5.10 | 309 | *e*PN | Pn | 15 22 17.5 | +2.7 |
| RLS | Riolos of Patr | 5.10 | 309 | P | Pn | 15 22 16.8 | +2.0 |
| RLS | Riolos of Patr | 5.10 | 309 | P | Pn | 15 22 16.8 | +2.0 |
| RLS | Riolos of Patr | 5.10 | 309 | P | Pn | 15 22 16.8 | +2.0 |
| RLS | Riolos of Patr | 5.10 | 309 | *e*Pn | Pn | 15 22 17.5 | +2.7 |
| XOR | Xorichti | 5.13 | 330 | *e*PN | Pn | 15 22 17.1 | +1.9 |
| XOR | Xorichti | 5.13 | 330 | P | Pn | 15 22 15.8 | +0.6 |
| XOR | Xorichti | 5.13 | 330 | P | Pn | 15 22 15.8 | +0.6 |
| XOR | Xorichti | 5.13 | 330 | P | Pn | 15 22 15.8 | +0.6 |
| XOR | Xorichti | 5.13 | 330 | *e*Pn | Pn | 15 22 17.1 | +1.9 |
| GONE | Gonen-Balikesi | 5.15 | 10 | *e*PN | Pn | 15 22 16.5 | +1.0 |
| GONE | Gonen-Balikesi | 5.15 | 10 | *e*Pn | Pn | 15 22 16.5 | +1.0 |
| BOLV | Bolvadin | 5.16 | 42 | *i* P | Pn | 15 22 17.6 | +1.8 |
| BOLV | Bolvadin | 5.16 | 42 | P | Pn | 15 22 17.6 | +1.8 |
| HBRG | Burj al ‘Arab | 5.20 | 147 | P | Pn | 15 22 17.2 | +1.0 |
| | baz=147 | | | | | | |
| GADA | Gvkgeada | 5.23 | 355 | *e*PN | Pn | 15 22 17.6 | +0.9 |
| GADA | Gvkgeada | 5.23 | 355 | *e*Pn | Pn | 15 22 17.6 | +0.9 |
| HDMB | Hadim | 5.24 | 66 | *e*PN | Pn | 15 22 21.2 | +4.3 |
| HDMB | Hadim | 5.24 | 66 | *e*Pn | Pn | 15 22 21.2 | +4.3 |
| SZAC | Souni-Zanaja | 5.24 | 91 | P | Pn | 15 22 16.1 | -0.7 |
| | baz=271 | | | | | | |
| SZAC | | | | S | Sn | 15 23 16.0 | -0.8 |
| SZAC | Souni-Zanaja | 5.24 | 91 | P | Pn | 15 22 16.1 | -0.7 |
| SZAC | | | | S | Sn | 15 23 16.0 | -0.8 |
| AGG | Agios Georgios | 5.25 | 322 | P | Pn | 15 22 17.7 | +0.8 |
| AGG | Agios Georgios | 5.25 | 322 | *e*PN | Pn | 15 22 19.7 | +2.8 |
| AGG | Agios Georgios | 5.25 | 322 | P | Pn | 15 22 17.7 | +0.8 |
| AGG | Agios Georgios | 5.25 | 322 | P | Pn | 15 22 17.7 | +0.8 |
| AGG | Agios Georgios | 5.25 | 322 | P | Pn | 15 22 17.7 | +0.8 |
| AGG | Agios Georgios | 5.25 | 322 | *e*Pn | Pn | 15 22 19.7 | +2.8 |
| FYTO | Fytoko, Volos | 5.27 | 328 | P | Pn | 15 22 18.8 | +1.7 |
| FYTO | Fytoko, Volos | 5.27 | 328 | P | Pn | 15 22 18.8 | +1.7 |
| FYTO | Fytoko, Volos | 5.27 | 328 | P | Pn | 15 22 18.8 | +1.7 |
| MAKR | Makrakomi, Fth | 5.34 | 320 | *e*PN | Pn | 15 22 21.9 | +3.7 |
| MAKR | Makrakomi, Fth | 5.34 | 320 | P | Pn | 15 22 19.6 | +1.4 |
| MAKR | Makrakomi, Fth | 5.34 | 320 | P | Pn | 15 22 19.6 | +1.4 |
| MAKR | Makrakomi, Fth | 5.34 | 320 | P | Pn | 15 22 19.6 | +1.4 |
| MAKR | Makrakomi, Fth | 5.34 | 320 | *e*Pn | Pn | 15 22 21.9 | +3.7 |
| GELI | Tayfur-Gelibol | 5.42 | 360 | *e*PN | Pn | 15 22 20.1 | +1.0 |
| GELI | Tayfur-Gelibol | 5.42 | 360 | *e*Pn | Pn | 15 22 20.1 | +1.0 |
| PAIG | Paliouri | 5.44 | 336 | P | Pn | 15 22 21.0 | +1.6 |
| PAIG | Paliouri | 5.44 | 336 | *e*PN | Pn | 15 22 21.4 | +2.0 |
| PAIG | Paliouri | 5.44 | 336 | P | Pn | 15 22 21.0 | +1.6 |
| PAIG | Paliouri | 5.44 | 336 | P | Pn | 15 22 21.0 | +1.6 |
| PAIG | Paliouri | 5.44 | 336 | P | Pn | 15 22 21.0 | +1.6 |
| PAIG | Paliouri | 5.44 | 336 | *e*Pn | Pn | 15 22 21.4 | +2.0 |
| KRBG | Karabiga-Canak | 5.45 | 6 | *e*PN | Pn | 15 22 20.7 | +1.1 |
| KRBG | Karabiga-Canak | 5.45 | 6 | *e*Pn | Pn | 15 22 20.7 | +1.1 |
| EVR | Evrytania | 5.45 | 318 | *e*PN | Pn | 15 22 22.9 | +3.2 |
| EVR | Evrytania | 5.45 | 318 | P | Pn | 15 22 21.8 | +2.1 |
| EVR | Evrytania | 5.45 | 318 | P | Pn | 15 22 21.8 | +2.1 |
| EVR | Evrytania | 5.45 | 318 | P | Pn | 15 22 21.8 | +2.1 |
| EVR | Evrytania | 5.45 | 318 | *e*Pn | Pn | 15 22 22.9 | +3.2 |
| EDC | Edincik | 5.47 | 11 | *e*PN | Pn | 15 22 21.4 | +1.5 |
| EDC | Edincik | 5.47 | 11 | *e*Pn | Pn | 15 22 21.4 | +1.5 |
| KCTX | Karacabey (Bur | 5.48 | 15 | *e*PN | Pn | 15 22 21.3 | +1.2 |
| KCTX | Karacabey (Bur | 5.48 | 15 | *e*Pn | Pn | 15 22 21.3 | +1.2 |
| BNT | Bandirma | 5.49 | 11 | *e*PN | Pn | 15 22 22.1 | +1.9 |
| BNT | Bandirma | 5.49 | 11 | *e*Pn | Pn | 15 22 22.1 | +1.9 |
| SMTH | Samothraki Isl | 5.54 | 352 | P | Pn | 15 22 21.2 | +0.3 |
| SMTH | Samothraki Isl | 5.54 | 352 | P | Pn | 15 22 21.2 | +0.3 |
| SMTH | Samothraki Isl | 5.54 | 352 | P | Pn | 15 22 21.2 | +0.3 |
| ULDT | Uludag | 5.56 | 21 | *i* P | Pn | 15 22 23.7 | +2.3 |
| ULDT | Uludag | 5.56 | 21 | P | Pn | 15 22 23.7 | +2.3 |
| KONT | Konya--Tatoy | 5.57 | 56 | *e*PN | Pn | 15 22 26.0 | +4.7 |
| KFL | Anninata | 5.57 | 306 | P | Pn | 15 22 24.0 | +2.7 |
| KFL | Anninata | 5.57 | 306 | P | Pn | 15 22 24.0 | +2.7 |
| CSS | Prodhromos | 5.60 | 88 | P | Pn | 15 22 21.6 | -0.1 |
| | baz=269 | | | | | | |
| CSS | | | | S | Sn | 15 23 25.2 | -0.4 |
| CSS | Prodhromos | 5.60 | 88 | *e*PN | Pn | 15 22 21.9 | +0.2 |
| CSS | | | | *e*SN | Sn | 15 23 25.1 | -0.5 |
| CSS | Prodhromos | 5.60 | 88 | P | Pn | 15 22 21.2 | -0.5 |
| CSS | | | | S | Sn | 15 23 28.2 | +2.6 |
| CSS | Prodhromos | 5.60 | 88 | *e*P | Pn | 15 22 20.9 | -0.8 |
| CSS | | | | S | Sn | 15 23 28.2 | +2.6 |
| CSS | Prodhromos | 5.60 | 88 | *e*P | Pn | 15 22 20.9 | -0.8 |
| CSS | Prodhromos | 5.60 | 88 | *e*Pn | Pn | 15 22 21.9 | +0.2 |
| CSS | | | | *e*Sn | Sn | 15 23 25.1 | -0.5 |
| CSS | | | | S | Sb | 15 23 28.2 | -15 |
| PDO | Prodromos | 5.60 | 312 | *e*PN | Pn | 15 22 25.0 | +3.3 |
| PDO | Prodromos | 5.60 | 312 | P | Pn | 15 22 23.4 | +1.7 |
| PDO | Prodromos | 5.60 | 312 | P | Pn | 15 22 23.4 | +1.7 |
| PDO | Prodromos | 5.60 | 312 | *e*Pn | Pn | 15 22 25.0 | +3.3 |
| MRMT | Marmara Adasi | 5.69 | 8 | *e*PN | Pn | 15 22 24.2 | +1.2 |
| MRMT | Marmara Adasi | 5.69 | 8 | *e*Pn | Pn | 15 22 24.2 | +1.2 |
| ERIK | Erikli-Kesan | 5.69 | 360 | *e*PN | Pn | 15 22 24.4 | +1.5 |
| ERIK | Erikli-Kesan | 5.69 | 360 | *e*Pn | Pn | 15 22 24.4 | +1.5 |
| IGD | Bursa | 5.70 | 21 | P | Pn | 15 22 25.1 | +2.1 |
| ESKT | Eskisehir | 5.71 | 36 | *e*PN | Pn | 15 22 26.9 | +3.6 |
| ESKT | Eskisehir | 5.71 | 36 | *e*Pn | Pn | 15 22 26.9 | +3.6 |
| ESKT | Eskisehir | 5.71 | 36 | P | Pn | 15 22 24.4 | +1.2 |
| SEYT | Eskypehyr | 5.71 | 36 | *i* P | Pn | 15 22 24.4 | +1.2 |
| OUR | Ouranopolis | 5.72 | 340 | P | Pn | 15 22 24.4 | +1.1 |
| OUR | Ouranopolis | 5.72 | 340 | P | Pn | 15 22 24.4 | +1.1 |
| OUR | Ouranopolis | 5.72 | 340 | P | Pn | 15 22 24.4 | +1.1 |
| OUR | Ouranopolis | 5.72 | 340 | P | Pn | 15 22 24.4 | +1.1 |
| KDHN | Kadinhani | 5.72 | 50 | *i* P | Pn | 15 22 24.7 | +1.2 |
| KDHN | Kadinhani | 5.72 | 50 | P | Pn | 15 22 24.7 | +1.2 |
| RKY | Sarkoy-Tekirda | 5.73 | 5 | *e*PN | Pn | 15 22 25.2 | +1.7 |
| RKY | Sarkoy-Tekirda | 5.73 | 5 | *e*Pn | Pn | 15 22 25.2 | +1.7 |
| SART | Tekirdag | 5.73 | 5 | *i* P | Pn | 15 22 24.8 | +1.2 |
| SART | Tekirdag | 5.73 | 5 | P | Pn | 15 22 24.8 | +1.2 |
| VLS | Valsamata | 5.74 | 306 | P | Pn | 15 22 25.0 | +1.4 |
| VLS | Valsamata | 5.74 | 306 | *e*PN | Pn | 15 22 26.3 | +2.7 |
| VLS | Valsamata | 5.74 | 306 | P | Pn | 15 22 25.0 | +1.4 |
| VLS | Valsamata | 5.74 | 306 | P | Pn | 15 22 25.0 | +1.4 |
| VLS | Valsamata | 5.74 | 306 | P | Pn | 15 22 25.0 | +1.4 |
| VLS | Valsamata | 5.74 | 306 | *e*Pn | Pn | 15 22 26.3 | +2.7 |
| ENEZ | Enez | 5.76 | 357 | *e*PN | Pn | 15 22 25.5 | +1.6 |
| ENEZ | Enez | 5.76 | 357 | *e*Pn | Pn | 15 22 25.5 | +1.6 |
| SWA2 | | 5.78 | 189 | P | Pn | 15 22 25.0 | +0.8 |
| | baz=190 | | | | | | |
| SWA2 | | 5.78 | 189 | P | Pn | 15 22 25.0 | +0.8 |
| KIZT | Kizilcal | 5.80 | 46 | *e*PN | Pn | 15 22 28.1 | +3.6 |
| KIZT | Kizilcal | 5.80 | 46 | *e*Pn | Pn | 15 22 28.2 | +3.6 |
| BORA | Eskisehir | 5.82 | 31 | *i* P | Pn | 15 22 26.3 | +1.6 |
| BORA | Eskisehir | 5.82 | 31 | P | Pn | 15 22 26.3 | +1.6 |
| THL | Klokotos Trika | 5.82 | 323 | *e*PN | Pn | 15 22 27.5 | +2.8 |
| THL | Klokotos Trika | 5.82 | 323 | P | Pn | 15 22 24.3 | -0.4 |
| THL | Klokotos Trika | 5.82 | 323 | P | Pn | 15 22 24.3 | -0.4 |
| THL | Klokotos Trika | 5.82 | 323 | *e*Pn | Pn | 15 22 27.5 | +2.8 |
| IZI | Iznik | 5.85 | 23 | *e*PN | Pn | 15 22 27.6 | +2.5 |
| IZI | Iznik | 5.85 | 23 | *e*Pn | Pn | 15 22 27.6 | +2.5 |
| CAVI | Cavuskoy | 5.85 | 26 | *e*PN | Pn | 15 22 28.4 | +3.3 |
| CAVI | Cavuskoy | 5.85 | 26 | *e*Pn | Pn | 15 22 28.5 | +3.3 |
| GEMT | Gemlik | 5.85 | 20 | *e*PN | Pn | 15 22 28.1 | +3.0 |
| GEMT | Gemlik | 5.85 | 20 | *e*Pn | Pn | 15 22 28.1 | +3.0 |
| ARMT | Armutlu | 5.88 | 18 | *e*PN | Pn | 15 22 27.1 | +1.5 |
| ARMT | Armutlu | 5.88 | 18 | *e*Pn | Pn | 15 22 27.1 | +1.5 |
| PLG | Polygyros | 5.92 | 337 | P | Pn | 15 22 27.7 | +1.6 |
| PLG | Polygyros | 5.92 | 337 | *e*PN | Pn | 15 22 28.5 | +2.4 |
| PLG | Polygyros | 5.92 | 337 | P | Pn | 15 22 27.7 | +1.6 |
| PLG | Polygyros | 5.92 | 337 | P | Pn | 15 22 27.7 | +1.6 |
| PLG | Polygyros | 5.92 | 337 | P | Pn | 15 22 27.7 | +1.6 |
| PLG | Polygyros | 5.92 | 337 | *e*Pn | Pn | 15 22 28.5 | +2.4 |
| ALN | Alexandroupoli | 5.93 | 357 | P | Pn | 15 22 26.3 | +0.1 |
| ALN | Alexandroupoli | 5.93 | 357 | P | Pn | 15 22 26.3 | +0.1 |
| ALN | Alexandroupoli | 5.93 | 357 | P | Pn | 15 22 26.3 | +0.1 |
| ALN | Alexandroupoli | 5.93 | 357 | P | Pn | 15 22 26.3 | +0.1 |
| SVRH | Sivrihisar-ESK | 5.99 | 40 | *e*PN | Pn | 15 22 30.5 | +3.3 |
| SVRH | Sivrihisar-ESK | 5.99 | 40 | *e*Pn | Pn | 15 22 30.5 | +3.3 |
| ADVT | Abdulvahap | 6.02 | 24 | *e*PN | Pn | 15 22 30.2 | +2.7 |
| ADVT | Abdulvahap | 6.02 | 24 | *e*Pn | Pn | 15 22 30.2 | +2.7 |
| LIT | Litokhoron | 6.04 | 329 | *e*PN | Pn | 15 22 30.7 | +3.0 |
| LIT | Litokhoron | 6.04 | 329 | *e*Pn | Pn | 15 22 30.7 | +3.0 |
| TKR | Tekirdag | 6.06 | 7 | *e*PN | Pn | 15 22 29.5 | +1.5 |
| TKR | Tekirdag | 6.06 | 7 | *e*Pn | Pn | 15 22 29.5 | +1.5 |
| GPA | Golpazari | 6.10 | 28 | *e*PN | Pn | 15 22 31.4 | +2.8 |
| GPA | Golpazari | 6.10 | 28 | *e*Pn | Pn | 15 22 31.4 | +2.8 |
| RDO | Rodhopi | 6.21 | 353 | *e*PN | Pn | 15 22 33.8 | +3.7 |
| RDO | Rodhopi | 6.21 | 353 | *e*Pn | Pn | 15 22 33.8 | +3.7 |
| KAVA | Kavala | 6.22 | 346 | P | Pn | 15 22 30.9 | +0.7 |
| KAVA | Kavala | 6.22 | 346 | P | Pn | 15 22 30.9 | +0.7 |
| KAVA | Kavala | 6.22 | 346 | P | Pn | 15 22 30.9 | +0.7 |
| BUY | Buyukada | 6.22 | 19 | *i* P | Pn | 15 22 31.1 | +0.9 |
| BUY | Buyukada | 6.22 | 19 | P | Pn | 15 22 31.1 | +0.9 |
| HORT | Hortiatis | 6.23 | 335 | *e*PN | Pn | 15 22 32.7 | +2.2 |
| HORT | Hortiatis | 6.23 | 335 | P | Pn | 15 22 31.5 | +1.0 |
| HORT | Hortiatis | 6.23 | 335 | P | Pn | 15 22 31.5 | +1.0 |
| HORT | Hortiatis | 6.23 | 335 | P | Pn | 15 22 31.5 | +1.0 |
| HORT | Hortiatis | 6.23 | 335 | *e*Pn | Pn | 15 22 32.7 | +2.2 |
| AUMIH | MIHALICIK | 6.29 | 38 | P | Pn | 15 22 32.8 | +1.6 |
| GULT | Gulveren | 6.31 | 29 | *e*PN | Pn | 15 22 33.5 | +2.0 |
| GULT | Gulveren | 6.31 | 29 | *e*Pn | Pn | 15 22 33.5 | +2.0 |
| HMYD | Mayadein | 6.31 | 144 | P | Pn | 15 22 31.1 | -0.3 |
| | baz=144 | | | | | | |
| HMYD | Mayadein | 6.31 | 144 | P | Pn | 15 22 31.1 | -0.3 |
| THE | Thessaloniki | 6.31 | 335 | P | Pn | 15 22 32.8 | +1.4 |
| THE | Thessaloniki | 6.31 | 335 | *e*PN | Pn | 15 22 34.2 | +2.8 |
| THE | Thessaloniki | 6.31 | 335 | P | Pn | 15 22 32.8 | +1.4 |
| THE | Thessaloniki | 6.31 | 335 | P | Pn | 15 22 32.8 | +1.4 |
| THE | Thessaloniki | 6.31 | 335 | P | Pn | 15 22 32.8 | +1.4 |
| THE | Thessaloniki | 6.31 | 335 | *e*Pn | Pn | 15 22 34.2 | +2.8 |
| SOH | Sokhos | 6.35 | 338 | P | Pn | 15 22 33.3 | +1.2 |
| SOH | Sokhos | 6.35 | 338 | *e*PN | Pn | 15 22 34.8 | +2.7 |
| SOH | Sokhos | 6.35 | 338 | P | Pn | 15 22 33.3 | +1.2 |
| SOH | Sokhos | 6.35 | 338 | P | Pn | 15 22 33.3 | +1.2 |
| SOH | Sokhos | 6.35 | 338 | P | Pn | 15 22 33.3 | +1.2 |
| SOH | Sokhos | 6.35 | 338 | *e*Pn | Pn | 15 22 34.8 | +2.7 |
| HNAT | Natroun | 6.36 | 146 | P | Pn | 15 22 32.1 | 0.0 |
| | baz=146 | | | | | | |
| HNAT | Natroun | 6.36 | 146 | P | Pn | 15 22 32.1 | 0.0 |
| KIZK | Mersin | 6.39 | 74 | *i* P | Pn | 15 22 32.9 | +0.4 |
| KIZK | Mersin | 6.39 | 74 | P | Pn | 15 22 32.9 | +0.4 |
| ISK | Istanbul-Kandi | 6.41 | 18 | *e*PN | Pn | 15 22 35.2 | +2.5 |
| ISK | Istanbul-Kandi | 6.41 | 18 | *e*Pn | Pn | 15 22 35.2 | +2.5 |
| SPNC | Sapanca-Adapaz | 6.45 | 27 | *e*PN | Pn | 15 22 37.0 | +3.7 |
| SPNC | Sapanca-Adapaz | 6.45 | 27 | *e*Pn | Pn | 15 22 37.0 | +3.7 |
| JAN | Janina | 6.50 | 318 | P | Pn | 15 22 35.7 | +1.6 |
| JAN | Janina | 6.50 | 318 | *e*PN | Pn | 15 22 37.1 | +3.0 |
| JAN | Janina | 6.50 | 318 | P | Pn | 15 22 35.7 | +1.6 |
| JAN | Janina | 6.50 | 318 | P | Pn | 15 22 35.7 | +1.6 |
| JAN | Janina | 6.50 | 318 | P | Pn | 15 22 35.7 | +1.6 |
| JAN | Janina | 6.50 | 318 | *e*Pn | Pn | 15 22 37.1 | +3.0 |
| FYM | Al Fayyum | 6.51 | 143 | P | Pn | 15 22 35.2 | +1.0 |
| | baz=143 | | | | | | |
| FYM | Al Fayyum | 6.51 | 143 | P | Pn | 15 22 35.2 | +1.0 |
| KZN | Kozani | 6.52 | 326 | P | Pn | 15 22 37.0 | +2.6 |
| KZN | Kozani | 6.52 | 326 | *e*PN | Pn | 15 22 37.8 | +3.4 |
| KZN | Kozani | 6.52 | 326 | P | Pn | 15 22 37.0 | +2.6 |
| KZN | Kozani | 6.52 | 326 | P | Pn | 15 22 37.0 | +2.6 |
| KZN | Kozani | 6.52 | 326 | P | Pn | 15 22 37.0 | +2.6 |
| KZN | Kozani | 6.52 | 326 | *e*Pn | Pn | 15 22 37.8 | +3.4 |
| SRS | Serrai | 6.55 | 340 | P | Pn | 15 22 36.3 | +1.5 |
| SRS | Serrai | 6.55 | 340 | P | Pn | 15 22 36.3 | +1.5 |
| SRS | Serrai | 6.55 | 340 | P | Pn | 15 22 36.3 | +1.5 |
| SRS | Serrai | 6.55 | 340 | P | Pn | 15 22 36.3 | +1.5 |
| BTAS | Taskesti | 6.62 | 31 | *i* P | Pn | 15 22 37.1 | +1.3 |
| BTAS | Taskesti | 6.62 | 31 | P | Pn | 15 22 37.0 | +1.3 |
| LJBD | Adjabya | 6.67 | 234 | *i* P | Pn | 15 22 37.8 | +1.3 |
| | SNR=22 | | | | | | |
| LJBD | | | | *e*S | Sn | 15 23 52.3 | +0.2 |
| | SNR=22 | | | | | | |
| NVR | Nevrokopi | 6.70 | 343 | P | Pn | 15 22 38.3 | +1.5 |
| NVR | Nevrokopi | 6.70 | 343 | P | Pn | 15 22 38.3 | +1.5 |
| NVR | Nevrokopi | 6.70 | 343 | P | Pn | 15 22 38.3 | +1.5 |
| IGT | Igoumenitsa | 6.71 | 315 | P | Pn | 15 22 36.2 | -0.7 |
| IGT | Igoumenitsa | 6.71 | 315 | P | Pn | 15 22 36.2 | -0.7 |
| IGT | Igoumenitsa | 6.71 | 315 | P | Pn | 15 22 36.2 | -0.7 |
| IGT | Igoumenitsa | 6.71 | 315 | P | Pn | 15 22 36.2 | -0.7 |
| KDZ | Kurdzhali | 6.72 | 353 | P | Pn | 15 22 38.0 | +0.9 |
| KOT | Kottamia | 6.74 | 137 | P | Pn | 15 22 36.9 | -0.5 |
| | baz=137 | | | | | | |
| KOT | Kottamia | 6.74 | 137 | P | Pn | 15 22 36.9 | -0.5 |
| GRG | Griva | 6.80 | 333 | P | Pn | 15 22 39.6 | +1.4 |
| GRG | Griva | 6.80 | 333 | *e*PN | Pn | 15 22 41.5 | +3.3 |
| GRG | Griva | 6.80 | 333 | P | Pn | 15 22 39.6 | +1.4 |
| GRG | Griva | 6.80 | 333 | P | Pn | 15 22 39.6 | +1.4 |
| GRG | Griva | 6.80 | 333 | P | Pn | 15 22 39.6 | +1.4 |
| GRG | Griva | 6.80 | 333 | *e*Pn | Pn | 15 22 41.5 | +3.3 |
| KNT | Kendrikon | 6.81 | 336 | P | Pn | 15 22 39.5 | +1.2 |
| KNT | Kendrikon | 6.81 | 336 | *e*PN | Pn | 15 22 41.2 | +2.9 |
| KNT | Kendrikon | 6.81 | 336 | P | Pn | 15 22 39.5 | +1.2 |
| KNT | Kendrikon | 6.81 | 336 | P | Pn | 15 22 39.5 | +1.2 |
| KNT | Kendrikon | 6.81 | 336 | P | Pn | 15 22 39.5 | +1.2 |
| KNT | Kendrikon | 6.81 | 336 | *e*Pn | Pn | 15 22 41.2 | +2.9 |
| SGD | Sagiada | 6.82 | 315 | P | Pn | 15 22 38.4 | 0.0 |
| SGD | Sagiada | 6.82 | 315 | P | Pn | 15 22 38.4 | 0.0 |
| HSAF | As Saff | 6.83 | 140 | P | Pn | 15 22 38.7 | +0.1 |
| | baz=140 | | | | | | |
| HSAF | As Saff | 6.83 | 140 | P | Pn | 15 22 38.7 | +0.1 |
| RZN | Rozhen | 6.85 | 349 | P | Pn | 15 22 40.5 | +1.4 |
| HHAG | Hagoal | 6.88 | 135 | P | Pn | 15 22 39.1 | -0.2 |
| | baz=136 | | | | | | |
| HHAG | Hagoal | 6.88 | 135 | P | Pn | 15 22 39.1 | -0.2 |
| AWBH | | 6.94 | 162 | P | Pn | 15 22 40.3 | +0.3 |
| | baz=163 | | | | | | |
| AWBH | | 6.94 | 162 | P | Pn | 15 22 40.3 | +0.3 |
| GLL | Jalalah | 6.95 | 139 | P | Pn | 15 22 39.8 | -0.4 |
| | baz=140 | | | | | | |
| GLL | Jalalah | 6.95 | 139 | P | Pn | 15 22 39.8 | -0.4 |
| NEST | Nestorio | 6.95 | 323 | *e*PN | Pn | 15 22 43.2 | +2.9 |
| NEST | Nestorio | 6.95 | 323 | P | Pn | 15 22 42.5 | +2.2 |
| NEST | Nestorio | 6.95 | 323 | P | Pn | 15 22 42.5 | +2.2 |
| NEST | Nestorio | 6.95 | 323 | *e*Pn | Pn | 15 22 43.2 | +2.9 |
| MMB | Musomiste | 6.96 | 342 | P | Pn | 15 22 41.8 | +1.4 |
| BBAL | Bala | 6.97 | 47 | P | Pn | 15 22 39.9 | -0.7 |
| ANTO | Ankara | 6.99 | 44 | *e*P | Pn | 15 22 42.5 | +1.7 |
| ANTO | Ankara | 6.99 | 44⇑ | *i*P | Pn | 15 22 42.5 | +1.7 |
| ANTO | Ankara | 6.99 | 44 | P | Pn | 15 22 43.0 | +2.2 |
| | SNR=39 | | | | | | |
| ANTO | Ankara | 6.99 | 44 | *e*P | Pn | 15 22 42.5 | +1.7 |
| ANTO | Ankara | 6.99 | 44 | *e*P | Pn | 15 22 42.5 | +1.7 |
| ANTO | Ankara | 6.99 | 44 | Pn | Pn | 15 22 43.0 | +2.2 |
| | SNR=39 | | | | | | |
| VAY | Valandovo | 7.06 | 335 | *i* Pn | Pn | 15 22 44.4 | +2.7 |
| VAY | Valandovo | 7.06 | 335 | P | Pn | 15 22 44.4 | +2.7 |
| VAY | Valandovo | 7.06 | 335 | P | Pn | 15 22 44.4 | +2.7 |
| VAY | Valandovo | 7.06 | 335 | P | Pn | 15 22 44.4 | +2.7 |
| VAY | Valandovo | 7.06 | 335 | P | Pn | 15 22 44.4 | +2.7 |
| FNA | Florina | 7.08 | 327 | P | Pn | 15 22 43.8 | +1.7 |
| FNA | Florina | 7.08 | 327 | *e*PN | Pn | 15 22 44.8 | +2.7 |
| FNA | Florina | 7.08 | 327 | P | Pn | 15 22 43.8 | +1.7 |
| FNA | Florina | 7.08 | 327 | P | Pn | 15 22 43.8 | +1.7 |
| FNA | Florina | 7.08 | 327 | P | Pn | 15 22 43.8 | +1.7 |
| FNA | Florina | 7.08 | 327 | *e*Pn | Pn | 15 22 44.8 | +2.7 |
| DIM | Dimitrovgrad | 7.11 | 354 | *e*P | Pn | 15 22 43.5 | +1.1 |
| SRN | Sarande | 7.13 | 315 | P | Pn | 15 22 43.2 | +0.5 |
| SRN | Sarande | 7.13 | 315 | P | Pn | 15 22 43.2 | +0.5 |
| SRN | Sarande | 7.13 | 315 | P | Pn | 15 22 43.2 | +0.5 |
| KEK | Kerkira | 7.14 | 313 | P | Pn | 15 22 42.1 | -0.7 |
| KEK | Kerkira | 7.14 | 313 | P | Pn | 15 22 42.1 | -0.7 |
| KEK | Kerkira | 7.14 | 313 | P | Pn | 15 22 42.1 | -0.7 |
| HBNS | Bani Suwayf | 7.21 | 145 | P | Pn | 15 22 44.9 | +1.1 |
| | baz=145 | | | | | | |
| HBNS | Bani Suwayf | 7.21 | 145 | P | Pn | 15 22 44.9 | +1.1 |
| KBN | Korca | 7.24 | 323 | P | Pn | 15 22 47.2 | +3.0 |
| KBN | Korca | 7.24 | 323 | P | Pn | 15 22 47.2 | +3.0 |
| KBN | Korca | 7.24 | 323 | P | Pn | 15 22 47.2 | +3.0 |
| KBN | Korca | 7.24 | 323 | P | Pn | 15 22 47.2 | +3.0 |
| BCAM | Yenicaga | 7.30 | 35 | *i* P | Pn | 15 22 46.2 | +1.1 |
| BCAM | Yenicaga | 7.30 | 35 | P | Pn | 15 22 46.2 | +1.1 |
| BRTR | Keskin Array B | 7.39 | 48 | Pn | Pn | 15 22 47.5 | +1.0 |
| | 3.1nm,0.3s,baz=220,slow=12,SNR=41 | | | | | | |
| BRTR | | | | Sn | Sn | 15 24 13.4 | +3.4 |
| | 3.2nm,0.3s,baz=217,slow=24,SNR=6.0 | | | | | | |
| BRTR | | | | LR | LR | 15 26 42.6 | |
| | comp=Z,6µm,19.7s,baz=232,slow=47 | | | | | | |
| BRTR | Keskin Array B | 7.39 | 48 | P | Pn | 15 22 47.5 | +1.0 |
| BRTR | | | | | | 15 24 13.4 | |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| BRTR | | | | smax | smax | | |
| | comp=N,3.0nm,0.3s | | | | | | |
| BRTR | | | | MLR | MLR | | |
| | comp=Z,6µm,19.7s | | | | | | |
| NBNS | Bani Suef | 7.52 | 146 | P | Pn | 15 22 48.2 | +0.1 |
| | baz=146 | | | | | | |
| NBNS | Bani Suef | 7.52 | 146 | P | Pn | 15 22 48.2 | +0.1 |
| DQRL | Deir Qamar | 7.60 | 97 | *e*P | Pn | 15 22 48.7 | -0.5 |
| OHR | Ohrid | 7.61 | 325 | *e*Pn | Pn | 15 22 51.1 | +1.8 |
| BHL | Bhannes | 7.63 | 95 | *e*P | Pn | 15 22 49.5 | -0.1 |
| YURE | YUREGIR | 7.63 | 73 | *i* P | Pn | 15 22 50.3 | +0.7 |
| YURE | YUREGIR | 7.63 | 73 | P | Pn | 15 22 50.3 | +0.7 |
| MMAI | Mount Meron Ar | 7.63 | 102 | Pn | Pn | 15 22 48.6 | -1.1 |
| | comp=Z,28nm,0.3s,baz=325,slow=14,SNR=21 | | | | | | |
| MMAI | | | | Sn | Sn | 15 24 18.8 | +2.9 |
| | comp=Z,75nm,0.3s,baz=314,slow=21,SNR=9.3 | | | | | | |
| ELDT | Eldivan | 7.77 | 43 | *i* P | Pn | 15 22 53.5 | +1.9 |
| ELDT | Eldivan | 7.77 | 43 | P | Pn | 15 22 53.5 | +1.9 |
| ARNB | Al Arnab | 7.77 | 81 | *e*P | Pn | 15 22 51.9 | +0.3 |
| ARNB | | | | *e*S | Sn | 15 24 14.8 | -4.5 |
| ARNB | | | | AML | AML | 15 24 28.9 | |
| | comp=E,451nm,0.6s | | | | | | |
| ARNB | | | | AML | AML | 15 24 35.2 | |
| | comp=N,263nm,0.7s | | | | | | |
| ARNB | Al Arnab | 7.77 | 81 | *e*P | Pn | 15 22 51.9 | +0.3 |
| ARNB | | | | *e*S | Sn | 15 24 14.8 | -4.5 |
| | comp=N,263nm,0.7s | | | | | | |
| CDAG | Cicekdag | 7.79 | 51 | *i* P | Pn | 15 22 53.0 | +1.1 |
| CDAG | Cicekdag | 7.79 | 51 | P | Pn | 15 22 53.0 | +1.1 |
| HWQ | Hawqa | 7.81 | 92 | *e*P | Pn | 15 22 51.6 | -0.5 |
| RCY | Rachaya | 7.86 | 98 | *e*P | Pn | 15 22 51.9 | -1.0 |
| BRBR | Barbar | 7.97 | 99 | *e*P | Pn | 15 22 51.8 | -2.7 |
| BRBR | | | | *e*S | Sn | 15 24 13.3 | -11 |
| BRBR | | | | AML | AML | 15 24 27.2 | |
| | comp=E,506nm,0.5s | | | | | | |
| BRBR | | | | AML | AML | 15 24 36.1 | |
| | comp=N,717nm,0.7s | | | | | | |
| BRBR | Barbar | 7.97 | 99 | *e*P | Pn | 15 22 51.8 | -2.7 |
| BRBR | | | | *e*S | Sn | 15 24 13.4 | -11 |
| | comp=N,717nm,0.7s | | | | | | |
| VTS | Vitosha | 8.03 | 342 | P | Pn | 15 22 57.9 | +2.7 |
| SKO | Skopje | 8.04 | 332 | *e*Pn | Pn | 15 22 57.6 | +2.4 |
| HAWK | Haweek | 8.15 | 90 | *e*P | Pn | 15 22 55.4 | -1.4 |
| HAWK | | | | *e*S | Sn | 15 24 19.7 | -9.0 |
| HAWK | | | | AML | AML | 15 24 39.4 | |
| | comp=N,477nm,0.5s | | | | | | |
| HAWK | | | | AML | AML | 15 24 42.5 | |
| | comp=E,270nm,0.5s | | | | | | |
| HAWK | Haweek | 8.15 | 90 | *e*P | Pn | 15 22 55.4 | -1.4 |
| HAWK | | | | *e*S | Sn | 15 24 19.7 | -9.0 |
| | comp=E,270nm,0.5s | | | | | | |
| BTCH | Batrach | 8.18 | 80 | *e*P | Pn | 15 22 57.0 | -0.2 |
| BTCH | | | | *e*S | Sn | 15 24 24.8 | -4.5 |
| BTCH | | | | AML | AML | 15 24 47.5 | |
| | comp=N,750nm,0.5s | | | | | | |
| BTCH | | | | AML | AML | 15 24 48.9 | |

comp=Z,792nm,0.7s
**BTCH Batrach 8.18 80** *e*P **Pn 15 22 57.0 -0.2**
BTCH *e*S **Sn 15 24 24.8 -4.5**
comp=Z,792nm,0.7s
**FKH Fakeheb 8.19 92** *e*P **Pn 15 22 56.7 -0.7**
**TCHB Talchebab 8.20 104** *e*P Pn 15 22 54.2 -3.2
TCHB *e*S Sn 15 24 18.6 -11
TCHB AML AML 15 24 37.5
comp=N,1μm,0.6s
TCHB AML AML 15 24 39.3
comp=E,965nm,0.6s
**TCHB Talchebab 8.20 104** *e*P Pn 15 22 54.2 -3.2
TCHB *e*S Sn 15 24 18.6 -11
comp=E,965nm,0.6s
**TIR Tirane 8.24 323** *i* PN Pn 15 23 04.6 +6.7
**TIR Tirane 8.24 323** *e*P **Pn 15 22 59.3 +1.4**
**TIR Tirane 8.24 323** *e*PN Pn 15 23 01.5 +3.6
**TIR Tirane 8.24 323** *e*P **Pn 15 22 59.3 +1.4**
**TIR Tirane 8.24 323** *e*P **Pn 15 22 59.3 +1.4**
**TIR Tirane 8.24 323** *e*Pn Pn 15 23 01.5 +3.6
**PRD Provadia 8.25 5** *e*P **Pn 15 22 59.0 +1.0**
**PVL Pavlikeni 8.29 354** *e*P **Pn 15 22 59.8 +1.3**
**SZH Strazhica 8.30 357** *e*P **Pn 15 23 00.8 +2.1**
**ANDN Andirin 8.35 69** *i* P **Pn 15 23 00.6 +1.0**
**ANDN Andirin 8.35 69** P **Pn 15 23 00.6 +1.0**
**KFRA Kufra 8.43 85** *e*P **Pn 15 23 00.0 -0.6**
KFRA *e*S Sn 15 24 28.0 -7.5
KFRA AML AML 15 24 48.8
comp=E,2μm,0.6s
KFRA AML AML 15 24 51.6
comp=N,648nm,0.6s
**KFRA Kufra 8.43 85** *e*P **Pn 15 23 00.0 -0.6**
KFRA *e*S Sn 15 24 28.0 -7.5
comp=N,648nm,0.6s
**CTKT Corum 8.64 47** *i* P **Pn 15 23 06.2 +2.6**
**CTKT Corum 8.64 47** P **Pn 15 23 06.2 +2.6**
**MPEP Malo Peshtene 8.64 346** P **Pn 15 23 05.3 +1.8**
**PUK Puka 8.76 326** *i* PN Pn 15 23 09.8 +4.7
**TIP Timpagrande 8.85 301** P **Pn 15 23 04.3 -2.1**
**TIP Timpagrande 8.85 301** *e*P **Pn 15 23 05.4 -1.0**
**TIP Timpagrande 8.85 301** *e*P **Pn 15 23 05.4 -1.0**
**EIL Elat 8.88 124** Pn **Pn 15 23 06.2 -0.5**
comp=N,7.8nm,0.3s,baz=261,slow=1.3,SNR=58
EIL Sn **Sn 15 24 43.0 -3.4**
comp=N,30nm,0.3s,baz=302,slow=20,SNR=9.7
**CUSAR Sarkisla-SIVAS 8.94 57** P **Pn 15 23 08.1 +0.4**
**MANR Mangalia 8.98 10**⇓ *i*P **Pn 15 23 10.7 +2.7**
**ULC Ulcinj 9.01 323** *e*Pn **Pn 15 23 07.9 -0.6**
ULC *e*Sn Sn 15 24 42.7 -6.9
**ULC Ulcinj 9.01 323** *e*Pn **Pn 15 23 07.9 -0.6**
**ASF Jabal al Asfar 9.10 105** Pn **Pn 15 23 10.8 +0.9**
comp=N,2.7nm,0.3s,baz=230,slow=11,SNR=18
ASF Sn **Sn 15 24 52.7 +0.8**
comp=N,4.5nm,0.3s,baz=283,slow=11,SNR=3.6
**ASF Jabal al Asfar 9.10 105** P **Pn 15 23 10.8 +0.9**
ASF 15 24 52.7
ASF pmax pmax
comp=Z,3.0nm,0.3s
ASF smax smax
comp=N,5.0nm,0.3s
**MSAB Monastry St. A 9.16 6**⇓ *i*P **Pn 15 23 12.7 +2.2**
**PVY Plav 9.17 328**⇓ *i*Pn **Pn 15 23 12.2 +1.4**
PVY *e*Sn Sn 15 24 47.8 -5.8
**PVY Plav 9.17 328**⇓ *i*Pn **Pn 15 23 12.2 +1.4**
**DRME Dracevica, Mon 9.21 324**⇓ *i*Pn **Pn 15 23 10.8 -0.4**
DRME *e*Sn Sn 15 24 47.5 -6.9
**DRME Dracevica, Mon 9.21 324**⇓ *i*Pn **Pn 15 23 10.8 -0.4**
**CUALT Altinyayla-SIV 9.24 59** P **Pn 15 23 09.0 -2.7**
**GZT Gaziantep 9.25 72** P **Pn 15 23 11.8 0.0**
**PDG Podgorica 9.36 325**⇓ *i*Pn **Pn 15 23 13.1 -0.1**
**TTG Podgorica 9.36 325**⇓ *i*Pn **Pn 15 23 13.1 -0.1**
TTG *e*Sn Sn 15 24 51.9 -6.1
**BEY Berane 9.42 329**⇓ *i*Pn **Pn 15 23 15.2 +1.0**
**IVA Berane 9.42 329**⇓ *i*Pn **Pn 15 23 15.2 +1.0**
IVA *e*Sn Sn 15 24 54.2 -5.6
**BUM Brajici-Budva 9.44 323**⇓ *i*Pn **Pn 15 23 14.1 -0.3**
BUM *e*Sn Sn 15 24 52.3 -7.8
**BUM Brajici-Budva 9.44 323**⇓ *i*Pn **Pn 15 23 14.1 -0.3**
**HUMR Humele 9.62 353**⇑ *i*P Pn 15 23 20.6 +3.8
**AMRR Amara 9.65 4**⇑ *i*P **Pn 15 23 19.6 +2.4**
**SULR 9.70 359**⇑ *i*P Pn 15 23 21.5 +3.6
**HCY Herceg Novi 9.74 322**⇓ *i*Pn **Pn 15 23 18.3 -0.2**
HCY *e*Sn Sn 15 25 00.0 -7.5
**HCY Herceg Novi 9.74 322**⇓ *i*Pn **Pn 15 23 18.3 -0.2**
**AKCD Akcadag 9.75 67** *i* P **Pn 15 23 20.3 +1.5**
**AKCD Akcadag 9.75 67** P **Pn 15 23 20.3 +1.5**
**CUKAN kangal_SIVAS 9.76 60** P **Pn 15 23 18.4 -0.5**
**NKME Niksic 9.76 325**⇑ *i*Pn **Pn 15 23 18.8 0.0**
NKME *e*Sn Sn 15 25 00.6 -7.4
**NKME Niksic 9.76 325**⇑ *i*Pn **Pn 15 23 18.8 0.0**
**HARR Harsova 9.77 6**⇓ *i*P **Pn 15 23 20.7 +1.9**
**NKY Niksic 9.78 325**⇑ *i*Pn **Pn 15 23 19.1 0.0**
NKY *e*Sn Sn 15 25 01.9 -6.6
**NKY Niksic 9.78 325**⇑ *i*Pn **Pn 15 23 19.1 0.0**
**WDD Wield Dalam 9.83 279** *e*P **Pn 15 23 20.1 +0.4**
**WDD Wield Dalam 9.83 279** *e*P **Pn 15 23 20.1 +0.4**
**CUC Castrocucco 9.87 304** *e*P **Pn 15 23 19.3 -1.0**
**CUC Castrocucco 9.87 304** *e*P **Pn 15 23 19.3 -1.0**
**LZLA Zalla 9.95 232** *i* P **Pn 15 23 22.9 +1.5**
SNR=22
**PLE Pljevlja 10.01 329**⇓ *i*Pn **Pn 15 23 23.6 +1.3**
PLE *e*Sn Sn 15 25 08.1 -6.1
**PLE Pljevlja 10.01 329**⇓ *i*Pn **Pn 15 23 23.6 +1.3**
**SECR 10.06 358**⇓ *i*P Pn 15 23 25.7 +2.9
**BRY Bratogost 10.06 324**⇓ *i*Pn **Pn 15 23 23.4 +0.4**
BRY *e*Sn Sn 15 25 07.7 -7.8
**BRY Bratogost 10.06 324**⇓ *i*Pn **Pn 15 23 23.4 +0.4**
**UPM Unac-Piva 10.12 327**⇓ *i*Pn **Pn 15 23 24.1 +0.2**
UPM *e*Sn Sn 15 25 10.2 -6.9
**UPM Unac-Piva 10.12 327**⇓ *i*Pn **Pn 15 23 24.1 +0.2**
**ISR Istrita 10.13 0**⇑ *i*P Pn 15 23 27.0 +3.1
**MALT Malatya 10.14 67**⇑ *i*P Pn 15 23 28.1 +4.1
**CUZAR Zara_SIVAS 10.21 58** P **Pn 15 23 25.0 0.0**
**CFR Carcaliu 10.27 6**⇓ *i*P **Pn 15 23 27.5 +1.8**
**MTUR Matau 10.30 354**⇑ *i*P Pn 15 23 29.8 +3.5
**TLCR 10.35 9**⇑ *i*P Pn 15 23 30.2 +3.4
**GRER 10.40 2**⇑ *i*P Pn 15 23 31.2 +3.7
**DIVS Divibare 10.41 333**⇑ *i*P **Pn 15 23 29.1 +1.4**
**DIVS Divibare 10.41 333** P **Pn 15 23 28.2 +0.5**
**DIVS Divibare 10.41 333** P **Pn 15 23 28.2 +0.5**
**KEMA Kemaliye 10.48 62** P **Pn 15 23 26.0 -2.8**
**VOIR 10.51 354**⇑ *i*P Pn 15 23 32.2 +3.1
**MLR Muntele Rosu 10.52 358** Pn **Pn 15 23 31.5 +2.3**
comp=N,0.9nm,0.3s,baz=176,slow=4.5,SNR=60
**MLR Muntele Rosu 10.52 358** P **Pn 15 23 31.5 +2.3**
MLR pmax pmax
comp=Z,1.0nm,0.3s
**MLR Muntele Rosu 10.52 358**⇑ *i*P **Pn 15 23 30.9 +1.7**
**LOT Lotru 10.67 350**⇑ *i*P **Pn 15 23 32.9 +1.6**
**GZR Gura Zlata 10.79 346**⇓ *i*P **Pn 15 23 34.2 +1.2**
**LJFR Jufra 10.80 240** *i* P **Pn 15 23 34.5 +1.4**
SNR=22
**PLOR Plostina 10.87 1**⇓ *i*P **Pn 15 23 36.5 +2.5**
**VRI Vrincioaia 10.88 1**⇓ *i*P **Pn 15 23 35.9 +1.7**
**DOPR Dopca 11.02 356**⇓ *i*P **Pn 15 23 38.4 +2.4**
**LKFR Kufra 11.15 196** *i* P Pn 15 23 40.6 +2.7
SNR=22
LKFR *e*S **Sn 15 25 41.5 -0.7**
SNR=22
**BZS Buzias 11.27 342**⇑ *i*P **Pn 15 23 40.6 +1.2**
**MDB Medias 11.28 352**⇓ *i*P Pn 15 23 44.6 +5.1
**KELT Kelkit 11.35 59** *i* P **Pn 15 23 42.9 +2.1**
**KELT Kelkit 11.35 59** P **Pn 15 23 42.9 +2.1**
**TESR Tescani 11.53 0**⇑ *i*P **Pn 15 23 45.5 +2.5**
**SIM Simferopol' 11.54 28** *e*P Pn 15 23 47.0 +3.9
SIM *e*S Sn 15 25 59.0 +7.5
SIM pmax pmax
comp=Z,211nm,1.0s
SIM MLR MLR
comp=Z,3μm,15.0s
**SIM Simferopol' 11.54 28** *e*P Pn 15 23 47.0 +3.9
comp=Z,211nm,1.0s
**RTB Rutbah 11.61 96** *e*PN x 15 24 53.8
RTB *e*SN x 15 26 40.0
**CJR Cluj-Napoca 11.94 350**⇑ *i*P Pn 15 23 53.3 +4.8
**KIS Kishinev 12.14 8** *e*P **Pn 15 23 52.0 +0.7**
comp=Z,600nm,2.0s
**KIS Kishinev 12.14 8** *e*PP Pn 15 24 04.0 +13
KIS *e*S **Sn 15 26 04.0 -2.2**
KIS LRM MLR 15 30 04.0
comp=Z,10μm,14.0s
**KIS Kishinev 12.14 8** *e*P **Pn 15 23 52.0 +0.7**
KIS *e*S **Sn 15 26 04.0 -2.2**
KIS pmax pmax
comp=Z,550nm,2.0s
KIS pmax pmax
comp=Z,830nm,2.5s
KIS MLR MLR
comp=Z,10μm,14.0s
KIS MLR MLR
comp=Z,10μm,14.0s
**KIS Kishinev 12.14 8** *e*P **Pn 15 23 52.0 +0.7**
comp=Z,830nm,2.5s
**ARCR ARCALIA 12.21 353**⇓ *i*P **Pn 15 23 54.4 +2.1**
**BURAR Bucovina Array 12.67 356**⇓ *i*P **Pn 15 24 01.2 +2.6**
**BMR Baia Mare 12.89 351**⇑ *i*P **Pn 15 24 04.1 +2.6**
**ANN Anapa 12.90 37** *e*P **Pn 15 24 02.9 +1.3**
ANN *e*S **Sn 15 26 29.9 +5.2**
ANN pmax pmax
comp=Z,80nm,1.5s
**ANN Anapa 12.90 37** *e*P **Pn 15 24 02.9 +1.3**
comp=Z,80nm,1.5s
**EKAR Karacoban 13.12 66** P P 15 24 10.2 -5.0
**SOC Sochi 13.35 46** *e*P **Pn 15 24 08.0 +0.2**
SOC *e* 15 26 38.7
SOC pmax pmax
comp=Z,32nm,0.9s
SOC MLR MLR
comp=Z,3μm,15.0s
**SOC Sochi 13.35 46** *e*P **Pn 15 24 08.0 +0.2**
comp=Z,32nm,0.9s
SOC *e*S **Sn 15 26 38.7 +2.9**
comp=Z,3μm,15.0s
**LUMB Murzuk 13.41 232** *i* P **Pn 15 24 10.9 +2.1**
SNR=45
**TRPA Tarpa 13.48 349**⇓ *i*P Pn 15 24 12.4 +2.9
**MSL Mosul 13.57 79** *e*PN x 15 24 10.3
MSL *e*SN x 15 25 29.9
MSL *e*SN x 15 25 30.0
**BOJS Bojanci 13.57 324** *i* Pn **Pn 15 24 10.8 -0.1**
**PSZ Piszkesteto 13.85 341** *e*P **Pn 15 24 15.0 +0.3**
**PSZ Piszkesteto 13.85 341**⇑ *i*P Pn 15 24 18.3 +3.6
**PSZ Piszkesteto 13.85 341** *e*P **Pn 15 24 15.0 +0.3**
**PSZ Piszkesteto 13.85 341** *e*P **Pn 15 24 15.0 +0.3**
**VISS Visnje 13.99 324** *i* Pn **Pn 15 24 13.6 -3.0**
**UZH Uzhgorod 14.00 348** *e*P **Pn 15 24 18.5 +1.8**
UZH *e*S **Sn 15 26 54.3 +2.6**
UZH MLR MLR
comp=N,8μm,11.0s
UZH MLR MLR
comp=E,2μm,11.0s
UZH MLR MLR
comp=Z,5μm,11.0s
**KEST Kesra 14.04 278** Pn Pn 15 24 20.7 +3.4
comp=Z,0.5nm,0.3s,baz=267,slow=7.1,SNR=8.1
KEST LR LR 15 30 34.6
comp=Z,2μm,20.7s,baz=34,slow=41
**KOLS Kolonicke sedl 14.30 349** *e*P **Pn 15 24 23.6 +2.8**
**KOLS Kolonicke sedl 14.30 349** *e* **Pn 15 24 23.6 +2.8**
KOLS *e* 15 29 02.2
**KOLS Kolonicke sedl 14.30 349** *e*Pn **Pn 15 24 23.6 +2.8**
**CHVG Ch'k'valeri 14.38 53** P **P 15 24 26.1 -2.7**
**CHVG Ch'k'valeri 14.38 53**⇓ *i*P P 15 24 34.5 +5.7
**VSL Villasalto 14.38 293** *e*P **Pn 15 24 22.5 +0.6**
**VSL Villasalto 14.38 293** *e*P **Pn 15 24 22.5 +0.6**
**DIGO Kars 14.41 63** P **Pn 15 24 22.4 -0.2**
**JAVS Javornik 14.43 323** *i* Pn **Pn 15 24 19.8 -3.0**
**TRI Trieste 14.46 322** *e*P **Pn 15 24 21.2 -1.7**
**TRI Trieste 14.46 322** *e*P **Pn 15 24 21.2 -1.7**
**TRI Trieste 14.46 322** *e*P **Pn 15 24 21.2 -1.7**
**PERS Pernice 14.48 327** *i* Pn **Pn 15 24 23.4 +0.1**
**SOKA Soboth 14.55 327**⇑ *i*Pn **Pn 15 24 22.3 -2.0**
comp=Z,38nm,1.1s
**IKRK Kirkuk 14.59 83** *e*PN x 15 24 27.8
IKRK *e*SN x 15 26 00.9
**OBKA Obir 14.64 326**⇑ *e*Pn **Pn 15 24 25.2 -0.4**
comp=Z,48nm,1.2s
**OBKA Obir 14.64 326** Pn **Pn 15 24 25.2 -0.4**
comp=Z,48nm,1.2s
**VYHS Vyhne 14.66 339** *e*P **Pn 15 24 24.4 -1.4**
VYHS MLR MLR
comp=Z,4μm,12.5s
**VYHS Vyhne 14.66 339** *e*PN **Pn 15 24 24.4 -1.4**
VYHS *e* 15 29 08.2
**ARSA Arzberg 14.78 329**⇑ *e*Pn **Pn 15 24 27.2 -0.2**
comp=Z,73nm,1.3s,SNR=12
**ARSA Arzberg 14.78 329** Pn **Pn 15 24 27.2 -0.2**
comp=Z,73nm,1.3s,SNR=12
**AKH Akhalkalaki 14.81 59** P P 15 24 38.7 +4.8
**AKH Akhalkalaki 14.81 59** P **P** 15 24 38.6 +4.8
**AKH Akhalkalaki 14.81 59**⇑ *i*P **P 15 24 32.1 -1.7**
**BHD Baghdad 14.90 91** *e*PN x 15 24 56.2
BHD *e*SN x 15 26 49.8
**KWP Kalwaria Pacla 14.91 350** *e*P **P 15 24 32.8 -1.9**
KWP *e*S **S 15 27 34.6 +2.8**
**KWP Kalwaria Pacla 14.91 350** *e*P **P 15 24 32.9 -1.8**
**KWP Kalwaria Pacla 14.91 350** *e*P **P 15 24 32.9 -1.8**
**STHS Stebnicka Huta 14.95 347** *e*P **P 15 24 35.2 +0.1**
**STHS Stebnicka Huta 14.95 347** *e*P **P 15 24 35.2 +0.1**
**STHS Stebnicka Huta 14.95 347** *e*P **P 15 24 35.2 +0.1**
**LVV L'vov 14.95 354** *e*P **Pn 15 24 31.9 +2.3**
LVV *e*S **Sn 15 27 16.2 +1.5**
LVV MLR MLR
comp=N,8μm,11.0s
LVV MLR MLR
comp=E,4μm,11.0s
LVV MLR MLR
comp=Z,9μm,11.0s
**LANS Liptovska Anna 15.09 342** *e*P **P 15 24 35.1 -1.7**
**LANS Liptovska Anna 15.09 342** *e*P **P 15 24 35.1 -1.7**
**LANS Liptovska Anna 15.09 342** *e*P **P 15 24 35.1 -1.7**
**NIE Niedzica 15.14 344** *e*P **Pn 15 24 34.6 +2.3**
**NIE Niedzica 15.14 344** *e*P **Pn 15 24 34.6 +2.3**
**MYKA Terra Mystica 15.16 324**⇓ *e*Pn **Pn 15 24 32.9 +0.4**
comp=Z,24nm,0.8s,SNR=6.0
**MYKA Terra Mystica 15.16 324** Pn **Pn 15 24 32.9 +0.4**
comp=Z,24nm,0.8s,SNR=6.0
**CONA Conrad Observa 15.19 332**⇑ *e*Pn **Pn 15 24 31.8 -1.1**
comp=Z,47nm,1.3s,SNR=6.3
**CONA Conrad Observa 15.19 332** Pn **Pn 15 24 31.8 -1.1**
comp=Z,47nm,1.3s,SNR=6.3
**LGHD Ghdames 15.23 256** *i* P **Pn 15 24 34.1 +0.6**
SNR=45
**ONI Oni 15.23 55** P **Pn 15 24 35.1 +1.7**
**ONI Oni 15.23 55** P **Pn 15 24 35.1 +1.7**
**GNI Garni 15.35 65** Pn **P 15 24 37.3 -2.4**
comp=Z,1.0nm,0.3s,baz=329,slow=6.6,SNR=9.6
GNI LR LR 15 32 02.1
comp=Z,4μm,20.5s,baz=268,slow=43
**GNI Garni 15.35 65** *d* **iP P 15 24 37.9 -1.8**
GNI pmax pmax
comp=Z,90nm,1.7s
**GNI Garni 15.35 65**⇓ *i*P **Pn 15 24 36.9 +1.8**
SNR=6.5
**GNI Garni 15.35 65** *e*P **Pn 15 24 36.1 +1.0**
comp=Z,114nm,1.0s
**GNI Garni 15.35 65** *e*P **Pn 15 24 36.1 +1.0**
comp=Z,114nm,1.0s
**KIV Kislovodsk 15.36 49** *e*P **P 15 24 38.5 -1.3**
KIV pmax pmax
comp=Z,288nm,1.7s
**KIV Kislovodsk 15.36 49** P **P 15 24 41.5 +1.7**
comp=Z,1μm,0.9s,SNR=14
**KIV Kislovodsk 15.36 49** P **P 15 24 40.9 +1.2**
SNR=29
**KIV Kislovodsk 15.36 49**⇓ *i*P **Pn 15 24 35.8 +0.7**
SNR=18
**KIV Kislovodsk 15.36 49** *e*P **P 15 24 38.2 -1.6**
comp=Z,264nm,0.9s
**KIV Kislovodsk 15.36 49** P **P 15 24 40.9 +1.2**
SNR=29
**KBZ Khabaz 15.38 50** Pn **P 15 24 39.4 -0.4**
comp=Z,0.4nm,0.3s,baz=249,slow=8.5,SNR=30
**VLC Villacollemand 15.43 311** *e*P **Pn 15 24 38.2 +2.1**
comp=Z,31nm,0.9s
**VLC Villacollemand 15.43 311** *e*P **Pn 15 24 38.2 +2.1**
comp=Z,31nm,0.9s
**ABSA Djebel Ababsia 15.54 280** P **Pn 15 24 38.8 +1.2**
**CMAH Djebel Manchou 15.59 282** P **Pn 15 24 39.8 +1.7**
**ZEI Tsey 15.61 55** *e*P **Pn 15 24 38.7 +0.1**
ZEI pmax pmax
comp=Z,612nm,1.3s
**NCK Nalchik 15.71 52** *e*P **P 15 24 43.4 -0.3**
**NCK Nalchik 15.71 52** *e*P **P 15 24 43.4 -0.3**
**MOA Molln 15.78 328**⇑ *i*Pn **Pn 15 24 40.7 +0.1**
comp=Z,91nm,1.3s,SNR=9.5
**MOA Molln 15.78 328** Pn **Pn 15 24 40.7 +0.1**
comp=Z,91nm,1.3s,SNR=9.5
**TBLG Delisi 15.79 59** P **P 15 24 42.9 -1.7**
**TBLG Delisi 15.79 59** P **P 15 24 42.8 -1.7**
**ABTA Abfaltersbach 15.80 322**⇑ *e*Pn **Pn 15 24 38.1 -2.8**
comp=Z,24nm,0.7s,SNR=8.0
**KIEV Kiev 15.84 6** *e*P **Pn 15 24 42.2 +1.0**
KIEV pmax pmax
comp=Z,43nm,1.0s
**KIEV Kiev 15.84 6** *e*P **Pn 15 24 40.7 -0.5**
comp=Z,71nm,0.7s
**KIEV Kiev 15.84 6** *e*P **Pn 15 24 40.7 -0.5**
comp=Z,71nm,0.7s
**AKASG Malin Array Be 15.84 6** Pn **Pn 15 24 39.2 -2.1**
comp=Z,7.2nm,0.3s,baz=194,slow=11,SNR=38
AKASG Sn **S 15 27 45.9 -4.9**
baz=192,slow=22,SNR=7.6
AKASG LR LR 15 31 06.2
comp=Z,3μm,20.1s,baz=190,slow=39
**DUS Dusheti 15.89 58** P **P 15 24 45.3 -0.5**
**DUS Dusheti 15.89 58** P **P 15 24 45.2 -0.5**
**DUS Dusheti 15.89 58** P **P 15 24 45.2 -0.5**
**OJC Ojcow 16.01 344** *e*P **Pn 15 24 43.7 +0.2**
OJC *e* 15 24 47.8
OJC *e*S **S 15 27 52.0 -2.2**
**OJC Ojcow 16.01 344** *e*P **Pn 15 24 43.7 +0.2**
**CAEH 'Ain El Ouahch 16.04 282** P **P 15 24 47.2 -0.2**
**CAEH 'Ain El Ouahch 16.04 282** P **P 15 24 47.2 -0.2**
**OKC Ostrava-Krasne 16.07 340** *e*P **Pn 15 24 44.1 -0.2**
OKC MLR MLR
comp=Z,7μm,11.1s
**OKC Ostrava-Krasne 16.07 340** *e*P **Pn 15 24 44.1 -0.2**
OKC *ex* x 15 24 53.2
OKC AMS AMS 15 32 00.0
comp=Z,7μm,11.1s
**VRAC Vranov 16.08 336** Pn **Pn 15 24 45.0 +0.6**
comp=Z,1.8nm,0.3s,baz=153,slow=10.0,SNR=23
VRAC LR LR 15 32 09.5
comp=Z,2μm,19.5s,baz=150,slow=42
**VRAC Vranov 16.08 336** P **Pn 15 24 45.0 +0.6**
VRAC pmax pmax
comp=Z,2.0nm,0.3s
VRAC MLR MLR
comp=Z,2μm,19.5s
**VRAC Vranov 16.08 336**⇓ *i*P **Pn 15 24 46.2 +1.8**
**VRAC Vranov 16.08 336**⇓ *i*P **Pn 15 24 46.2 +1.8**
**CKFL Kef-Lekhel 16.15 281** P **P 15 24 49.8 +1.2**
**CKFL Kef-Lekhel 16.15 281** P **P 15 24 49.8 +1.2**
**MORC Moravsky Berou 16.19 339** *e*P **Pn 15 24 45.0 -0.9**
MORC pmax pmax
comp=Z,294nm,1.1s
**MORC Moravsky Berou 16.19 339**⇑ *i*P **Pn 15 24 46.0 +0.1**
**MORC Moravsky Berou 16.19 339** *e*P **Pn 15 24 45.0 -0.9**
comp=Z,294nm,1.1s
**MORC Moravsky Berou 16.19 339** *e*P **Pn 15 24 45.0 -0.9**
comp=Z,294nm,1.1s
**IBDR Badra 16.20 91** *e*PN x 15 25 05.4
IBDR *e*SN x 15 27 03.3
**IDHR Dehrash 16.32 85** *e*P **P 15 24 50.4 -0.3**
**IDHR Dehrash 16.32 85** *e*P **P 15 24 50.4 -0.3**
**CASM Ain Smara 16.34 280** P P 15 24 56.1 +5.4
**RJOB Jochberg 16.36 325** *e*P **Pn 15 24 47.1 -0.9**
comp=Z,285nm,2.9s,baz=138,slow=11
**CTEI Djebel Teioual 16.41 280** P **P 15 24 52.8 +1.2**
**CTEI Djebel Teioual 16.41 280** P **P 15 24 52.8 +1.2**
**TREC Trest 16.46 334** AMS AMS 15 32 30.0
comp=Z,4μm,10.6s
**IGHG Ghaleghazi 16.52 86** *e*P **P 15 24 54.8 +1.9**
**IGHG Ghaleghazi 16.52 86** *e*P **P 15 24 54.8 +1.9**
**WTTA Wattenberg 16.59 322**⇑ *e*Pn **Pn 15 24 50.0 -1.1**
comp=Z,172nm,1.8s,SNR=14
**WTTA Wattenberg 16.59 322** Pn **Pn 15 24 50.0 -1.1**
comp=Z,172nm,1.8s,SNR=14
**KRLC Kraliky 16.69 338** *e*P **Pn 15 24 52.0 -0.2**
**KRLC Kraliky 16.69 338** *e*P **Pn 15 24 52.0 -0.2**
**IVIS Veis 16.72 86** *e*P **P 15 24 55.2 +0.2**
**IVIS Veis 16.72 86** *e*P **P 15 24 55.2 +0.2**
**ILIN Lien 16.77 84** *e*P **P 15 24 54.9 -0.8**
**ILIN Lien 16.77 84** *e*P **P 15 24 54.9 -0.8**
**GEC2 GERESS Array S 16.79 330** *e*P **Pn 15 24 53.3 -0.2**
comp=Z,55nm,1.2s,baz=138,slow=11
**GERES GERESS Array B 16.79 330** Pn **Pn 15 24 53.1 -0.4**
comp=Z,0.5nm,0.3s,baz=145,slow=12,SNR=29
GERES LR LR 15 33 03.0
comp=Z,3μm,19.2s,baz=139,slow=43
GERES ScP **ScP 15 33 14.3 -0.9**
comp=Z,0.1nm,0.3s,baz=186,slow=5.4,SNR=4.1
**DFRA Djebel Bou Aff 16.83 281** P **P 15 24 58.1 +1.9**
**DFRA Djebel Bou Aff 16.83 281** P **P 15 24 58.1 +1.9**
**FETA Feichten 16.90 320**⇑ *i*Pn **Pn 15 24 54.0 -1.0**
comp=Z,42nm,1.4s,SNR=12
**FETA Feichten 16.90 320** Pn **Pn 15 24 54.0 -1.0**
comp=Z,42nm,1.4s,SNR=12
**MOTA Moosalm 16.92 322**⇑ *e*Pn **Pn 15 24 54.7 -0.5**
comp=Z,32nm,0.8s,SNR=7.1
**MOTA Moosalm 16.92 322** Pn **Pn 15 24 54.7 -0.5**
comp=Z,32nm,0.8s,SNR=7.1
**NSR Nassriya 16.93 98** *e*PN x 15 25 34.5
NSR *e*SN x 15 27 51.2
**KHC Kasperske Hory 17.07 330** *e*P **Pn 15 24 54.4 -2.5**
KHC MLR MLR
comp=Z,5μm,14.3s
**KHC Kasperske Hory 17.07 330** *e*P **Pn 15 24 54.4 -2.5**
KHC *ex* x 15 24 59.4
KHC *ex* x 15 25 06.0
KHC *e*S **S 15 28 15.5 -0.3**
KHC AMS AMS 15 32 30.0
comp=Z,5μm,14.3s
**KHC Kasperske Hory 17.07 330** *e*P **Pn 15 24 54.2 -2.7**
comp=Z,14nm,0.8s
**KHC Kasperske Hory 17.07 330** *e*P **Pn 15 24 54.2 -2.7**
comp=Z,14nm,0.8s
**DPC Dobruska-Polom 17.07 337** *e*P **Pn 15 24 55.9 -1.1**
DPC *e*S **Sn 15 28 11.1 +4.7**
DPC MLR MLR
comp=Z,3μm,15.3s
**DPC Dobruska-Polom 17.07 337** *e*P **Pn 15 24 55.9 -1.1**
DPC *e*S **Sn 15 28 11.1 +4.7**
DPC AMS AMS 15 32 40.0
comp=Z,3μm,15.3s
**CKHR Kef el Ahmar 17.14 280** P **P 15 25 02.0 +2.4**
**CKHR Kef el Ahmar 17.14 280** P **P 15 25 02.0 +2.4**
**RETA Reutte 17.18 321**⇓ *e*Pn **Pn 15 24 58.5 0.0**
comp=Z,103nm,1.4s,SNR=11
**RETA Reutte 17.18 321** Pn **Pn 15 24 58.5 0.0**
comp=Z,103nm,1.4s,SNR=11
**DAVOX Davos/Dischmat 17.20 318** P **P 15 25 00.2 -0.1**
comp=Z,0.5nm,0.3s,baz=133,slow=15,SNR=10
DAVOX LR LR 15 32 58.2
comp=Z,3μm,18.7s,baz=102,slow=42
**DAVOX Davos/Dischmat 17.20 318** P **P 15 25 00.2 -0.1**
DAVOX pmax pmax
comp=Z,1.0nm,0.3s
DAVOX MLR MLR
comp=Z,3μm,18.7s
**DAVOX Davos/Dischmat 17.20 318** P **P 15 25 00.2 -0.1**
comp=Z,3μm,18.7s
**SET Setif 17.22 280** P **P 15 25 02.0 +1.5**
**SET Setif 17.22 280** P **P 15 25 02.0 +1.5**
**GOPC GO Pecny, Ondr 17.23 334** *e*P **Pn 15 24 56.6 -2.3**
GOPC MLR MLR
comp=Z,5μm,10.6s
**GOPC GO Pecny, Ondr 17.23 334** *e*P **Pn 15 24 56.6 -2.3**
GOPC *ex* x 15 25 07.5
GOPC AMS AMS 15 33 00.0
comp=Z,5μm,10.6s
**AUTN L'Aution 17.24 307** *e*P **P 15 25 01.8 +1.0**
**LUCF Luceram 17.25 307** *e*P **P 15 25 00.9 +0.1**
**UPC Upice 17.31 337** *e*P **Pn 15 24 59.3 -0.6**
UPC MLR MLR
comp=Z,5μm,12.9s
**UPC Upice 17.31 337** *e*P **Pn 15 24 59.3 -0.6**
UPC *ex* x 15 25 08.9
UPC AMS AMS 15 32 40.0
comp=Z,5μm,12.9s
**TUE Stuetta 17.32 317** *e*P **Pn 15 24 59.9 -0.4**
comp=Z,30nm,0.8s
**TUE Stuetta 17.32 317** *e*P **Pn 15 24 59.8 -0.4**
comp=Z,30nm,0.8s
**BEL Belsk 17.35 348** *e*P **Pn 15 25 00.5 +0.1**
BEL *e*S **S 15 28 21.1 -0.4**
**BEL Belsk 17.35 348** *e*P **Pn 15 25 00.5 +0.1**
**BEL Belsk 17.35 348** *e*P **Pn 15 25 00.5 +0.1**
BEL *e*S **S 15 28 21.2 -0.3**

**WET Wettzell 17.37 329** *e*P Pn **15 24 59.3 -1.4**
comp=Z,183nm,2.0s,baz=138,slow=11
**PRU Pruhonice 17.38 333** *e*P Pn **15 24 59.3 -1.4**
PRU MLR MLR
comp=Z,5μm,11.2s
**PRU Pruhonice 17.38 333** *e*P Pn **15 24 59.3 -1.4**
PRU *e*S **S 15 28 21.3 -0.7**
PRU AMS AMS 15 33 10.0
comp=Z,5μm,11.2s
**MVIF Mont Vial 17.38 307** *e*P **P 15 25 03.1 +0.8**
**FUR Furstenfeldbru 17.39 324** *e*P **P 15 25 01.8 -0.3**
comp=Z,173nm,1.7s,baz=138,slow=11
**PRA Prague 17.48 333** *e*P Pn **15 25 01.7 -0.4**
PRA MLR MLR
comp=Z,4μm,11.7s
**PRA Prague 17.48 333** *e*P Pn **15 25 01.7 -0.4**
PRA *ex* x 15 25 11.3
PRA AMS AMS 15 33 10.0
comp=Z,4μm,11.7s
**PRA Prague 17.48 333** *e*P Pn **15 25 01.7 -0.4**
comp=Z,4μm,11.7s
**CALN Calern 17.50 306** *e*P **P 15 25 04.2 +0.7**
**KSP Ksiaz 17.51 338** *e*P Pn **15 25 01.0 -1.4**
KSP *e*S **S 15 28 24.2 -0.6**
**KSP Ksiaz 17.51 338** *e*P Pn **15 25 01.1 -1.4**
**DAVA Damuels 17.52 320**⇑ *e*PPn Pn **15 25 01.9 -0.8**
comp=Z,45nm,0.6s
**DAVA Damuels 17.52 320** Pn Pn **15 25 01.9 -0.8**
comp=Z,45nm,0.6s
**PVCC Panska Ves 17.81 334** *e*P Pn **15 25 05.5 -0.7**
PVCC MLR MLR
comp=Z,3μm,10.8s
**PVCC Panska Ves 17.81 334** *e*P Pn **15 25 05.5 -0.7**
PVCC *ex* x 15 25 14.4
PVCC AMS AMS 15 32 50.0
comp=Z,3μm,10.8s
**PVCC Panska Ves 17.81 334** *e*P Pn **15 25 05.5 -0.7**
comp=Z,3μm,10.8s
**ROTZ Rotzenmuhle 18.13 329** *e*P Pn **15 25 09.1 -0.9**
comp=Z,73nm,1.9s,baz=138,slow=11
**MAK Makhachkala 18.14 58** *e*P **P 15 25 10.0 -0.4**
MAK *e*S **S 15 28 36.7 -0.8**
MAK pmax pmax
comp=Z,258nm,1.0s
MAK MLR MLR
comp=Z,2μm,14.0s
**MAK Makhachkala 18.14 58** *e*P **P 15 25 10.0 -0.4**
comp=Z,258nm,1.0s
MAK *e*S **S 15 28 36.7 -0.8**
comp=Z,2μm,14.0s
**BNI Bardonecchia 18.18 310** *e*P **P 15 25 11.5 +0.4**
BNI pmax pmax
comp=Z,60nm,1.0s
**BNI Bardonecchia 18.18 310** *e*P **P 15 25 11.5 +0.4**
comp=Z,60nm,1.0s
**BNI Bardonecchia 18.18 310** *e*P **P 15 25 11.5 +0.4**
comp=Z,60nm,1.0s
**BRG Berggiesshubel 18.32 334** *i* P Pn **15 25 12.1 -0.3**
comp=Z,15nm,0.9s
BRG *i* 15 25 29.6
comp=Z,43nm,1.0s
BRG S **S 15 28 41.0 -0.2**
comp=N,2μm,17.0s
comp=E,2μm,11.3s
comp=Z,3μm,13.7s
**BRG Berggiesshubel 18.32 334** *i* P Pn **15 25 12.1 -0.3**
BRG S **S 15 28 41.0 -0.2**
BRG pmax pmax
comp=Z,15nm,0.9s
BRG MLR MLR
comp=N,2μm,17.0s
BRG MLR MLR
comp=E,2μm,11.3s
BRG MLR MLR
comp=Z,3μm,13.7s
**BRG Berggiesshubel 18.32 334** *e*P Pn **15 25 11.8 -0.6**
comp=Z,260nm,2.6s,baz=138,slow=11
**BRG Berggiesshubel 18.32 334** *i* P Pn **15 25 12.1 -0.3**
comp=Z,15nm,0.9s
BRG S **S 15 28 41.0 -0.2**
comp=Z,3μm,13.7s
**MAHO Mahon 18.32 292** *i* P Pn **15 25 11.7 -0.8**
MAHO *i* S **S 15 28 41.5 +0.1**
**VORD Divnogorie 18.48 26** *e*P **P 15 25 13.3 -0.8**
VORD pmax pmax
comp=N,30nm,0.9s
VORD pmax pmax
comp=Z,40nm,0.9s
VORD pmax pmax
comp=E,40nm,1.0s
VORD MLR MLR
comp=E,1μm,13.0s
VORD MLR MLR
comp=Z,2μm,13.0s
VORD MLR MLR
comp=N,2μm,14.0s
**VORD Divnogorie 18.48 26** *e*P **P 15 25 13.3 -0.8**
comp=N,2μm,14.0s
**GRF Grafenberg Arr 18.50 327** *e*P **P 15 25 12.8 -1.6**
comp=N,6μm,5.8s,baz=138,slow=11
GRF *e*L L 15 34 24.7
comp=N,2μm,20.3s
**GRFO Grafenberg 18.50 327** *e*P **P 15 25 12.5 -1.9**
GRFO pmax pmax
comp=Z,155nm,1.3s
**GRFO Grafenberg 18.50 327** *e*P **P 15 25 12.4 -1.9**
comp=Z,155nm,1.3s
**GRFO Grafenberg 18.50 327** *e*P **P 15 25 12.4 -1.9**
comp=Z,155nm,1.3s
**TANN Tannenbergstha 18.52 331** *e*P **P 15 25 13.5 -1.2**
comp=Z,175nm,2.0s,baz=138,slow=11
**GDM Grand'Maison 18.61 309** *e*P Pn **15 25 16.2 +0.1**
**VSR Storozhevoye 18.64 26** *e*P **P 15 25 15.0 -0.8**
VSR pmax pmax
comp=Z,20nm,0.5s
VSR pmax pmax
comp=N,20nm,0.7s
VSR pmax pmax
comp=E,20nm,1.2s
VSR MLR MLR
comp=N,2μm,12.0s
VSR MLR MLR
comp=Z,3μm,12.0s
VSR MLR MLR
comp=E,2μm,13.0s
**VSR Storozhevoye 18.64 26** *e*P **P 15 25 15.0 -0.8**
comp=E,20nm,0.7s
**STU Stuttgart 18.82 322** *e*P **P 15 25 16.6 -1.4**
STU pmax pmax
comp=Z,65nm,0.9s
**STU Stuttgart 18.82 322** *e*P **P 15 25 16.6 -1.4**
comp=Z,65nm,0.9s
**STU Stuttgart 18.82 322** *e*P **P 15 25 16.5 -1.4**
comp=Z,65nm,0.9s
**GRN Grenoble 18.86 309** *e*P **P 15 25 18.1 -0.4**
**FELD Feldberg im Sc 18.88 319** *e*P **P 15 25 16.7 -2.1**
**BBS Basel-Blauen 18.92 317** *e*P **P 15 25 18.9 -0.1**
**BFO Black Forest 18.98 320** *i* P **P 15 25 19.3 -0.5**
**BFO Black Forest 18.98 320** *e*P **P 15 25 18.2 -1.5**
comp=Z,98nm,1.9s,baz=138,slow=11
**BFO Black Forest 18.98 320** *e*P **P 15 25 18.0 -1.8**
comp=Z,30nm,0.8s
**BFO Black Forest 18.98 320** *i* P **P 15 25 19.3 -0.5**
**CLL Collm 19.02 333** *e*P **P 15 25 19.0 -1.1**
CLL *e*S **Sn 15 28 52.0 -1.4**
CLL MLR MLR
comp=Z,2μm,18.5s
**CLL Collm 19.02 333** *e*P **P 15 25 18.7 -1.4**
comp=Z,118nm,1.8s,baz=138,slow=11
**CLL Collm 19.02 333** *e*P **P 15 25 19.0 -1.1**
CLL *e*pP **pP 15 25 23.0 -1.9**
CLL *e* 15 25 29.0
CLL *e* 15 25 49.0
CLL *e*S **Sn 15 28 52.0 -1.4**
CLL Lmax 15 34 00.0
CLL Lm MLR 15 34 00.0
comp=Z,2μm,18.5s
**CLL Collm 19.02 333** *e*P **P 15 25 19.0 -1.1**
CLL *e*S **Sn 15 28 52.0 -1.4**
comp=Z,2μm,18.5s
**VORR Voronezh 19.03 25** *e*P **Pn 15 25 22.0 +1.1**
VORR pmax pmax
comp=Z,300nm,1.2s
**VORR Voronezh 19.03 25** *e*P **Pn 15 25 22.0 +1.1**
comp=Z,300nm,1.2s
**MOX Moxa 19.04 330** *e*P **P 15 25 19.5 -0.9**
comp=Z,292nm,2.3s,baz=138,slow=11
MOX *e*L L 15 34 08.3
comp=Z,1μm,20.2s
**IRAZ Razeghan 19.14 82** *e*P **Pn 15 25 23.5 +0.8**
**IRAZ Razeghan 19.14 82** *e*P **Pn 15 25 23.5 +0.8**
**SUW Suwalki 19.18 354** *e*P **P 15 25 20.8 -1.0**
SUW *e*S **Sn 15 28 57.5 +0.4**
**SUW Suwalki 19.18 354** *e*P **P 15 25 20.8 -1.0**
SUW *e*S **Sn 15 28 57.6 +0.4**
**SUW Suwalki 19.18 354** *e*P **P 15 25 20.8 -1.0**
SUW *e*S **Sn 15 28 57.6 +0.4**
**LOMF Lomont 19.24 316**‖ *e*P **P 15 25 21.9 -0.7**
**IGZV Ghazvin 19.30 79** *e*P **Pn 15 25 26.2 +1.6**
**IGZV Ghazvin 19.30 79** *e*P **Pn 15 25 26.2 +1.6**
**MOF Molkenrain 19.35 318**‖ *e*P **Pn 15 25 25.0 +0.1**
**GKP Gorka Klasztor 19.44 343** *e*P **P 15 25 23.6 -1.0**
GKP *e*S S 15 29 10.8 +7.2
**GKP Gorka Klasztor 19.44 343** *e*P **P 15 25 23.6 -1.0**
**GKP Gorka Klasztor 19.44 343** *e*P **P 15 25 23.6 -1.0**
**ECH Echery 19.54 318** *e*P **P 15 25 24.4 -1.5**
ECH pmax pmax
comp=Z,45nm,1.0s
**ECH Echery 19.54 318** *e*P **P 15 25 24.4 -1.5**
comp=Z,45nm,1.0s
**ECH Echery 19.54 318**‖ *e*P **Pn 15 25 27.3 +0.1**
**MNK Minsk 19.55 2** *e*P **P 15 25 22.0 -3.8**
MNK *e*S S 15 28 56.0 -10
MNK pmax pmax
comp=Z,470nm,1.0s
MNK pmax pmax
comp=E,820nm,1.5s
MNK MLR MLR
comp=Z,6μm,13.0s
**MICGM Minsk 19.55 2** *e*P **P 15 25 22.0 -3.9**
**TOD Tromm 19.56 324** *e*P **P 15 25 25.0 -1.1**
**VRH Novokhopyorsk 19.59 29** *e*P **P 15 25 26.0 -0.3**
VRH pmax pmax
comp=Z,110nm,0.7s
VRH pmax pmax
comp=N,80nm,1.1s
VRH pmax pmax
comp=E,40nm,0.9s
VRH MLR MLR
comp=Z,1μm,13.0s
VRH MLR MLR
comp=N,410nm,11.0s
VRH MLR MLR
comp=E,1μm,18.0s
**VRH Novokhopyorsk 19.59 29** *e*P **P 15 25 26.0 -0.3**
comp=E,410nm,11.0s
**SSB Saint Sauveur 19.65 308** *e*P **P 15 25 26.4 -0.7**
SSB pmax pmax
comp=Z,31nm,0.8s
**SSB Saint Sauveur 19.65 308** *e*P **P 15 25 26.4 -0.7**
comp=Z,31nm,0.8s
**SSB Saint Sauveur 19.65 308**‖ *e*P **P 15 25 26.4 -0.7**
**LANF Langenberg 19.66 321**‖ *e*P **P 15 25 27.2 +0.1**
**IR5 Iran Long-Peri 19.69 82** *e*P **Pn 15 25 29.5 +0.3**
**IR5 Iran Long-Peri 19.69 82** *e*P **Pn 15 25 29.5 +0.3**
**IMHD Mahdasht 19.71 81** *e*P **Pn 15 25 30.7 +1.3**
**IMHD Mahdasht 19.71 81** *e*P **Pn 15 25 30.7 +1.3**
**LPSR Galich'ya Gora 19.72 23** *e*P **P 15 25 27.7 0.0**
LPSR pmax pmax
comp=Z,80nm,1.5s
LPSR pmax pmax
comp=N,70nm,1.2s
LPSR pmax pmax
comp=E,30nm,1.0s
LPSR MLR MLR
comp=N,1μm,14.0s
LPSR MLR MLR
comp=Z,1μm,14.0s
LPSR MLR MLR
comp=E,890nm,11.0s
**LPSR Galich'ya Gora 19.72 23** *e*P **P 15 25 27.7 0.0**
comp=E,70nm,1.2s
**RUE Ruedersdorf 19.72 336** P **P 15 25 26.4 -1.3**
comp=E,40nm,1.0s
**RUE Ruedersdorf 19.72 336** P **P 15 25 26.4 -1.3**
comp=E,40nm,1.0s
**KTD Kalmit 19.73 322** *e*P **Pn 15 25 30.3 +0.8**
**NACGM Naroch 19.93 0** *e*P **P 15 25 26.0 -4.0**
**IR3 Iran Long-Peri 20.02 81** *e*P Pn 15 25 32.8 -0.3
**IR3 Iran Long-Peri 20.02 81** *e*P Pn 15 25 32.8 -0.3
**RAYN Ar Rayn 20.08 120** Pn Pn 15 25 35.4 +1.6
comp=E,356nm,1.0s,SNR=16
**RAYN Ar Rayn 20.08 120** *e*P Pn 15 25 33.6 -0.1
comp=E,119nm,1.3s
**RAYN Ar Rayn 20.08 120** *e*P Pn 15 25 33.7 -0.1
comp=E,119nm,1.3s
**TNS Taunus Mts 20.15 325** *e*P **P 15 25 30.6 -1.9**
comp=E,57nm,1.1s,baz=138,slow=11
**THEF They Montfort 20.19 317**‖ *e*P **P 15 25 32.3 -0.7**
**COLF Collangettes 20.29 308**‖ *e*P **P 15 25 33.2 -0.9**
**EBNR Beni Rached 20.34 281** P **P 15 25 35.5 +0.8**
**EBNR Beni Rached 20.34 281** P **P 15 25 35.5 +0.8**
**IDID Didziasalis 20.34 0** *e*P **P 15 25 32.7 -1.8**
IDID IAmb IAmb 15 25 43.3
comp=Z,53nm,1.3s
**IDID Didziasalis SNR=34 20.34 0** *e*P **P 15 25 32.7 -1.8**
**ABH Alteburg 20.36 323** *e*P **P 15 25 34.3 -0.5**
**IPIR Pirpir 20.37 89** *e*P Pn 15 25 35.9 -1.6
**IPIR Pirpir 20.37 89** *e*P Pn 15 25 35.9 -1.6
**IIGN Ignalina 20.38 360** *e*P **P 15 25 33.4 -1.5**
IIGN IAmb IAmb 15 25 40.8
comp=Z,30nm,0.5s
**IIGN Ignalina SNR=34 20.38 360** *e*P **P 15 25 33.4 -1.5**
**GTTG Gyttingen 20.41 329** *e*P **P 15 25 33.7 -1.5**
comp=Z,155nm,1.2s,baz=138,slow=11
**CLZ Clausthal 20.46 330** *e*P **P 15 25 33.7 -2.2**
comp=Z,967nm,4.1s,baz=138,slow=11
**VALF Valcebollere 20.47 299** *e*P **P 15 25 36.0 -0.1**
**RUP Ruppelstein 20.49 322** *e*P **P 15 25 34.9 -1.3**
**QAM Ghamsar 20.60 86** *e*P Pn 15 25 38.5 -1.5
**ISAL Salakas 20.60 359** *e*P **P 15 25 35.8 -1.5**
ISAL IAmb IAmb 15 25 42.4
comp=Z,31nm,0.6s
**ISAL Salakas SNR=33 20.60 359** *e*P **P 15 25 35.8 -1.5**
**ETRT Tiaret 20.60 278** P Pn 15 25 39.0 -1.0
**ETRT Tiaret 20.60 278** P Pn 15 25 39.0 -1.0
**EANR 'Ain N'Sour 20.71 280** P **P 15 25 38.5 -0.2**
**EANR 'Ain N'Sour 20.71 280** P **P 15 25 38.5 -0.2**
**IZAR Zarasai 20.78 360** *e*P **P 15 25 37.6 -1.6**
IZAR IAmb IAmb 15 25 43.0
comp=Z,31nm,0.8s
**IZAR Zarasai SNR=33 20.78 360** *e*P **P 15 25 37.6 -1.6**
**IKLH Kolahrood 20.80 87** *e*P Pn 15 25 41.0 -1.5
**IKLH Kolahrood 20.80 87** *e*P Pn 15 25 41.0 -1.4
**IDMV Damavand 20.83 81** *e*P Pn 15 25 41.8 -1.0
**IDMV Damavand 20.83 81** *e*P Pn 15 25 41.8 -1.0
**WLF Walferdange 20.93 321** P **P 15 25 40.0 -0.9**
comp=Z,56nm,1.1s
**WLF Walferdange 20.93 321** *e*P **P 15 25 39.6 -1.3**
WLF pmax pmax
comp=Z,80nm,0.9s
**WLF Walferdange 20.93 321** *e*P **P 15 25 39.6 -1.3**
comp=Z,80nm,0.9s
**WLF Walferdange 20.93 321** *e*P **P 15 25 39.6 -1.3**
comp=Z,80nm,0.9s
**FRNF Fournols 20.98 307**‖ *e*P **P 15 25 41.6 +0.1**
**IPRN Peran 21.02 79** *e*P P 15 25 47.0 +4.8
**OBN Obninsk 21.32 16** P **P 15 25 43.8 -1.2**
comp=Z,50nm,0.7s,baz=175,slow=3.6,SNR=6.5
OBN LR LR 15 34 44.7
comp=Z,3μm,21.5s,baz=235,slow=39
**OBN Obninsk 21.32 16***d i*P **P 15 25 46.5 +1.5**
OBN *e* 15 26 08.8
OBN *i* S **S 15 29 36.9 -4.0**
OBN pmax pmax
comp=Z,127nm,1.7s
OBN MLR MLR
comp=Z,3μm,16.0s
**OBN Obninsk 21.32 16** P **P 15 25 46.4 +1.5**
comp=Z,780nm,1.2s,SNR=6.5
**OBN Obninsk 21.32 16** P **P 15 25 44.7 -0.2**
comp=Z,279nm,1.3s
**OBN Obninsk 21.32 16** P **P 15 25 44.7 -0.2**
comp=Z,279nm,1.3s
**IGAR Gharneh 21.38 90** *e*P **P 15 25 48.3 +2.1**
**IFIR Firoozkooh 21.41 81** *e*P **P 15 25 49.2 +2.7**
**IFIR Firoozkooh 21.41 81** *e*P **P 15 25 49.2 +2.7**
**IALA Alasht 21.41 79** *e*P **P 15 25 50.6 +4.0**
**IZEF Zefreh 21.50 88** *e*P **P 15 25 48.6 +1.1**
**IZEF Zefreh 21.50 88** *e*P **P 15 25 48.6 +1.1**
**MEM Membach 21.59 323** P **P 15 25 47.0 -0.9**
comp=Z,70nm,1.5s
**BSD Bornholm Skovb 21.69 342** *i* P **P 15 25 47.2 -1.8**
**BSD Bornholm Skovb 21.69 342** *i* P **P 15 25 47.2 -1.8**
**BSD Bornholm Skovb 21.69 342** *i* P **P 15 25 47.2 -1.8**
**HGN Heimansgroeve 21.72 323** *e*P **P 15 25 49.1 -0.3**
comp=Z,298nm,2.2s
HGN *e*S **S 15 29 48.2 -0.8**
HGN *e*L L 15 35 26.9
comp=Z,2μm,18.9s
**HGN Heimansgroeve 21.72 323** *e*P **P 15 25 49.1 -0.3**
comp=Z,298nm,2.2s
HGN *e*S **S 15 29 48.2 -0.8**
**IRAM Ramesheh 21.81 91** *e*P **P 15 25 51.7 +0.9**
**IRAM Ramesheh 21.81 91** *e*P **P 15 25 51.7 +0.9**
**BCLA Clavier 21.83 321** P **P 15 25 49.1 -1.3**
comp=Z,69nm,1.2s
**BEBN Eben Emael 21.87 323** P **P 15 25 53.2 +2.3**
**TAM Tamanrasset 21.97 242** *e*P **P 15 25 53.8 +1.3**
TAM pmax pmax
comp=Z,46nm,1.0s
**TAM Tamanrasset 21.97 242** *e*P **P 15 25 53.8 +1.3**
comp=Z,46nm,1.0s
**TAM Tamanrasset 21.97 242** *e*P **P 15 25 53.8 +1.3**
comp=Z,46nm,1.0s
**DOU Dourbes 22.00 320** P **P 15 25 50.7 -1.7**
comp=Z,64nm,2.0s
**WTSB Winterswijk 22.09 326** *e*P **P 15 25 50.9 -2.5**
comp=Z,178nm,1.8s
**MOS Moscow 22.13 17** *e*P **P 15 25 50.7 -3.0**
MOS *e* 15 26 14.0
MOS *e*S **S 15 29 53.0 -3.8**
MOS pmax pmax
comp=Z,156nm,1.5s
MOS pmax pmax
comp=Z,500nm,2.0s
MOS MLR MLR
comp=Z,4μm,13.0s
MOS MLR MLR
comp=N,3μm,14.0s
**IGLO Ghaloghah 22.20 78** *e*P **P 15 25 57.2 +2.3**
**SNF Seneffe 22.40 321** P **P 15 25 55.1 -1.6**
**UCC Uccle 22.53 321** P **P 15 25 57.6 -0.5**
**VSU Vasula 23.50 0***d i*P **P 15 26 06.4 -1.5**
VSU pmax pmax
comp=Z,441nm,2.5s
**VSU Vasula 23.50 0** *i* P **P 15 26 06.4 -1.5**
comp=Z,441nm,2.5s
**MENF Mencas 23.56 319** *e*P **P 15 26 06.8 -1.8**
**LCHF La Chataignera 23.58 308** *e*P **P 15 26 09.6 +0.7**
**MUD Monsted U'grnd 24.52 337** *e*P P 15 26 24.1 +6.5
**MUD Monsted U'grnd 24.52 337** *i* P P 15 26 24.1 +6.5
**ESDC Sonseca Array 24.62 290** P **P 15 26 18.2 -0.6**
comp=Z,14nm,0.6s,baz=82,slow=9.5,SNR=93
**PAB San Pablo 24.92 290** *e*P **P 15 26 20.9 -0.6**
PAB pmax pmax
comp=Z,66nm,1.3s
**PAB San Pablo 24.92 290** *e*P **P 15 26 20.9 -0.6**
comp=Z,66nm,1.3s
**PAB San Pablo 24.92 290** *e*P **P 15 26 20.9 -0.6**
comp=Z,66nm,1.3s
**EMAL Malaga-Limoner 25.09 283** *i* P **P 15 26 23.8 +0.9**
**ISHV Shirvan 25.22 75** *e*P **P 15 26 25.4 +1.0**
ISHV *e*P **pP 15 26 27.4 -2.1**
**GEYT Alibeck 25.53 74** P **P 15 26 27.3 +0.4**
comp=Z,31nm,0.8s,baz=316,slow=8.3,SNR=45
**ABKT Ailbek 25.53 74** P **P 15 26 27.7 +0.7**
comp=Z,635nm,0.5s,SNR=17
**WOL Wolverton 25.79 318** *e*P **P 15 26 27.6 -1.5**
WOL AMB AMB 15 26 31.7
comp=Z,132nm,1.7s
**WOL Wolverton 25.79 318** *e*P **P 15 26 27.6 -1.5**
**LIJA Lijar 25.86 284** *i* P **P 15 26 30.0 0.0**
**MDT Midelt 25.88 274** P **P 15 26 30.5 +0.3**
comp=Z,16nm,0.9s,baz=78,slow=12,SNR=3.7
MDT LR LR 15 38 56.6
comp=Z,1μm,20.8s,baz=88,slow=42
**DAMY Dhamar 25.92 137** *e*P **P 15 26 31.7 +0.8**
comp=Z,105nm,1.1s
**DAMY Dhamar 25.92 137** *e*P **P 15 26 31.7 +0.8**
comp=Z,105nm,1.1s
**IKRD Kardeh 25.93 77** *e*P P 15 26 39.5 +8.6
**IEMG Emamgholi 25.99 75** *e*P **P 15 26 32.0 +0.6**
**IEMG Emamgholi 25.99 75** *e*P **P 15 26 32.0 +0.6**
**IAKL Akhelmad 26.14 77** *e*P **P 15 26 33.9 +1.1**
**IPAY Payeh 26.35 77** *e*P **P 15 26 36.3 +1.7**
**IPAY Payeh 26.35 77** *e*P **P 15 26 36.3 +1.7**
**FINES FINESS Array B 26.49 360** P **P 15 26 33.4 -1.9**
comp=Z,5.5nm,0.5s,baz=161,slow=11,SNR=36
FINES PcP **PcP 15 29 59.9 +0.1**
comp=Z,5.9nm,0.7s,baz=160,slow=3.0,SNR=3.7
FINES LR LR 15 37 44.9
comp=Z,1μm,20.3s,baz=176,slow=38
**FINES FINESS Array B 26.49 360** *i* P **P 15 26 34.2 -1.1**
FINES pmax pmax
comp=Z,6.0nm,0.5s
**FINES FINESS Array B 26.49 360** *i* P **P 15 26 34.2 -1.1**
comp=Z,6.0nm,0.5s
**HFS Hagfors 26.52 346** P **P 15 26 33.2 -2.5**
comp=Z,6.4nm,0.5s,baz=134,slow=11,SNR=36
HFS LR LR 15 38 42.0
comp=Z,3μm,19.7s,baz=158,slow=40
**HFS Hagfors 26.52 346** P **P 15 26 33.2 -2.5**
HFS pmax pmax
comp=Z,6.0nm,0.5s
HFS MLR MLR
comp=Z,3μm,19.7s
**STRD Stroud 26.52 318** *e*P **P 15 26 34.2 -1.5**
**STRD Stroud 26.52 318** *e*P **P 15 26 34.2 -1.5**
**CWF Charnwood Fore 26.54 321** *e*P **P 15 26 33.3 -2.6**
CWF AMB AMB 15 26 37.4
comp=Z,26nm,1.1s
**IMOG Moghan 26.67 78** *e*P **P 15 26 37.9 +0.3**
**IMOG Moghan 26.67 78** *e*P **P 15 26 37.9 +0.3**
**ISRO Mashad 26.75 77** *e*P **P 15 26 37.7 -0.4**
**ISRO Mashad 26.75 77** *e*P **P 15 26 37.7 -0.4**
**ITEG Tejag 26.77 85** *e*P **P 15 26 39.7 +1.4**
**ITEG Tejag 26.77 85** *e*P **P 15 26 39.7 +1.4**
**PBRG Braganca 26.83 295** *e*P **P 15 26 38.3 -0.4**
comp=Z,116nm,1.4s
**ASUD Al Ashush, Dub 26.96 105**‖ P **P 15 26 41.1 +1.1**
**ASUD Al Ashush, Dub 26.96 105** P P **P 15 26 41.1 +1.1**
**MVO Moncorvo 27.01 293** *e*P **P 15 26 40.1 -0.2**
comp=Z,92nm,2.0s
MVO *e*S S 15 31 36.4 +19
**PBAR Barrancos 27.05 287** *e*P **P 15 26 40.2 -0.5**
comp=Z,122nm,1.6s
PBAR *e*S **S 15 31 22.8 +5.0**
**NAZ Nazwa, Dubai 27.05 104** P **P 15 26 42.4 +1.7**
SNR=23
**NAZ Nazwa, Dubai 27.05 104**⇑ *i*P **P 15 26 41.9 +1.1**
SNR=12
**NAZ Nazwa, Dubai 27.05 104** P **P 15 26 41.9 +1.1**
SNR=12
**KONO Kongsberg 27.06 341** *e*P **P 15 26 41.3 +0.8**
KONO *e*S **S 15 31 16.6 -0.8**
**KONO Kongsberg 27.06 341** *e*P **P 15 26 41.3 +0.8**
SNR=28
KONO *e*S **S 15 31 16.6 -0.8**
SNR=28
**IKOO Kooshah 27.09 86** *e*P **P 15 26 43.8 +2.5**
**IKOO Kooshah 27.09 86** *e*P **P 15 26 43.8 +2.5**
**FAQ Al Faqa, Dubai 27.11 104**⇑ *i*P **P 15 26 42.3 +1.0**
SNR=8.8
**FAQ Al Faqa, Dubai 27.11 104** P **P 15 26 42.3 +1.0**
SNR=8.8
**BANOM Banah 27.13 101** P P 15 26 51.6 +10
SNR=9.9
**BANOM Banah 27.13 101**⇑ *i*P **P 15 26 43.5 +1.9**
SNR=10.0
**BANOM Banah 27.13 101** P **P 15 26 43.5 +1.9**
SNR=10.0
**LHO Holmfirth 27.24 322** *e*P **P 15 26 40.1 -2.1**
**LHO Holmfirth 27.24 322** *e*P **P 15 26 40.1 -2.1**
**IMYA Miami 27.25 77** *e*P **P 15 26 43.1 +0.4**
**IMYA Miami 27.25 77** *e*P **P 15 26 43.1 +0.4**
**PMRV Marv??o 27.27 289** *e*P **P 15 26 41.9 -0.8**
comp=Z,71nm,2.3s
**MTE Manteigas 27.38 292** *e*P **P 15 26 42.5 -1.2**
comp=Z,98nm,1.9s
MTE *e*S S 15 31 36.9 +14
**HATD Hatta, Dubai 27.50 104** P **P 15 26 46.1 +1.3**

SNR=7.6
**HATD Hatta, Dubai 27.50 104** *i* P **P** **15 26 45.8 +0.9**
SNR=10
**HATD Hatta, Dubai 27.50 104** P **P** **15 26 45.8 +0.9**
SNR=10
**UOSS Wadi Hilu 27.51 103** P **P** **15 26 45.9 +1.0**
comp=Z,156nm,0.6s,SNR=6.5
**ASHO Ashiyiah 27.51 104** P P 15 26 49.7 +4.8
SNR=9.9
**ASHO Ashiyiah 27.51 104**⇑ *i*P **P** **15 26 45.6 +0.6**
SNR=7.8
**ASHO Ashiyiah 27.51 104** P **P** **15 26 45.6 +0.6**
SNR=7.8
**NC602 NORSAR Array S 27.53 344** *e*P **P** **15 26 42.6 -2.0**
**PVRL Vila Real 27.53 293** *e*P **P** **15 26 44.6 -0.4**
comp=Z,93nm,1.7s
**AKTK Aktyubinsk 27.57 46** P **P** **15 26 44.5 -0.7**
comp=Z,75nm,0.9s
**AKTO Aktyubinsk 27.57 46** P **P** **15 26 44.5 -0.7**
**AKTO Aktyubinsk 27.57 46** P **P** **15 26 45.0 -0.2**
comp=Z,23nm,0.5s,baz=250,slow=10.0,SNR=93
AKTO LR LR 15 40 54.8
comp=Z,692nm,20.7s,baz=242,slow=43
**AKTO Aktyubinsk 27.57 46** P **P** **15 26 44.5 -0.7**
AKTO pmax pmax
comp=Z,75nm,0.9s
**AKTO Aktyubinsk 27.57 46** P **P** **15 26 45.0 -0.2**
**POLO Lamas de Olo 27.59 294** *e*P **P** **15 26 45.4 -0.2**
comp=Z,40nm,1.3s
**FOEL Foel Wylfa 27.61 320** *e*P **P** **15 26 44.5 -1.1**
**FOEL Foel Wylfa 27.61 320** *e*P **P** **15 26 44.5 -1.1**
**PVAQ Vaqueiros 27.65 285** *e*P **P** **15 26 45.1 -0.9**
comp=Z,60nm,1.0s
PVAQ *e*S **S** **15 31 31.4 +4.2**
**PVIS Viseu 27.65 292** *e*P **P** **15 26 44.7 -1.4**
comp=Z,159nm,1.7s
**PBEJ Beja 27.71 286** *e*P **P** **15 26 46.6 0.0**
comp=Z,73nm,2.0s
**IDAH Dahanechah 27.72 85** *e*P **P** **15 26 48.4 +1.4**
**IDAH Dahanechah 27.72 85** *e*P **P** **15 26 48.4 +1.4**
**BLS5 Blasjo 27.78 338** *e*P **P** **15 26 45.8 -1.2**
**BLS5 Blasjo 27.78 338** *e*P **P** **15 26 45.8 -1.2**
SNR=28
**EVO Evora 27.80 288** *e*P **P** **15 26 48.2 +0.9**
comp=Z,39nm,1.5s
**PBDV Barranco-do-Ve 27.83 285** *e*P **P** **15 26 47.2 -0.5**
comp=Z,106nm,1.3s
PBDV *e*S **S** **15 31 36.3 +6.1**
**NB2 NORSAR Subarra 27.87 344** P **P** **15 26 45.4 -2.4**
comp=Z,11nm,1.0s,baz=156,slow=9.3
**NB2 NORSAR Subarra 27.87 344** P **P** **15 26 45.4 -2.4**
baz=156,slow=9.3
**NOA NORSAR Array B 27.87 344** P **P** **15 26 45.8 -2.0**
comp=Z,1.7nm,0.8s,baz=147,slow=9.0,SNR=11
NOA PcP **PcP** **15 30 02.8 -0.4**
comp=Z,2.3nm,0.8s,baz=137,slow=3.3,SNR=3.6
NOA LR LR 15 38 49.2
comp=Z,912nm,20.9s,baz=155,slow=39
**NOA NORSAR Array B 27.87 344** P **P** **15 26 45.8 -2.0**
NOA 15 30 02.8
NOA pmax pmax
comp=Z,2.0nm,0.8s
NOA pmax pmax
comp=Z,2.0nm,0.8s
NOA MLR MLR
comp=Z,912nm,20.9s
**PCVE Castro Verde 27.88 286** *e*S **S** **15 31 35.0 +4.1**
**MESJ Messejana 28.01 286** *e*P **P** **15 26 49.0 -0.2**
comp=Z,99nm,1.5s
**PTOM Tomar 28.06 290** *e*P **P** **15 26 49.1 -0.5**
comp=Z,125nm,1.5s
**PCAS Casmilo, Conde 28.11 291** *e*S S 15 31 54.5 +20
**PNCL Nicolau / Gran 28.23 287** *e*S **S** **15 31 39.0 +2.7**
**YRE Yr Eifl 28.31 319** *e*P **P** **15 26 51.3 -0.5**
**YRE Yr Eifl 28.31 319** *e*P **P** **15 26 51.3 -0.5**
**AB31 Akbulak array 28.34 49** *e*P **P** **15 26 52.3 +0.2**
AB31 pmax pmax
comp=Z,7.0nm,0.4s
**AB31 Akbulak array 28.34 49** *e*P **P** **15 26 52.3 +0.2**
comp=Z,7.0nm,0.4s
**ABKAR Akbulak array 28.34 49** *e*P **P** **15 26 52.0 -0.1**
comp=Z,13nm,0.4s
**ABKAR Akbulak array 28.34 49** *e*P **P** **15 26 52.0 -0.1**
comp=Z,13nm,0.4s
**PFVI Vila Bisbo 28.56 285** *e*S **S** **15 31 45.7 +4.2**
**BBO1 Bothel 28.57 323** *e*P **P** **15 26 52.2 -1.8**
**BBO1 Bothel 28.57 323** *e*P **P** **15 26 52.2 -1.8**
**BHH Howats Hill 28.74 324** *e*P **P** **15 26 53.3 -2.2**
**ECK Cauldkaine Hil 28.74 324** *e*P **P** **15 26 53.3 -2.3**
**PMAFR Mafra 28.76 289** *e*S **S** **15 31 45.9 +1.2**
**EKA Eskdalemuir Ar 28.84 324** P **P** **15 26 54.7 -1.7**
comp=Z,8.3nm,0.5s,baz=134,slow=11,SNR=59
EKA PcP **PcP** **15 30 06.0 +0.3**
comp=Z,1.4nm,0.6s,baz=104,slow=3.0,SNR=3.9
**EKA Eskdalemuir Ar 28.84 324** P **P** **15 26 54.7 -1.7**
EKA 15 30 06.0
EKA pmax pmax
comp=Z,8.0nm,0.5s
EKA pmax pmax
comp=Z,1.0nm,0.6s
**ESK Eskdalemuir 28.85 324** *e*P **P** **15 26 54.9 -1.6**
ESK AMB AMB 15 27 04.2
comp=Z,73nm,1.9s
**ESK Eskdalemuir 28.85 324** *e*P **P** **15 26 54.9 -1.6**
ESK pmax pmax
comp=Z,154nm,1.5s
**ESK Eskdalemuir 28.85 324** P **P** **15 26 55.9 -0.6**
comp=Z,239nm,1.3s,SNR=9.0
**ESK Eskdalemuir 28.85 324** *e*P **P** **15 26 54.9 -1.6**
comp=Z,154nm,1.5s
**ESK Eskdalemuir 28.85 324** *e*P **P** **15 26 54.9 -1.6**
**ESY Stoneypath 28.90 325** *e*P **P** **15 26 55.3 -1.7**
**ESY Stoneypath 28.90 325** *e*P **P** **15 26 55.3 -1.7**
**BWH Wardlaw 29.00 324** *e*P **P** **15 26 55.8 -2.0**
**BWH Wardlaw 29.00 324** *e*P **P** **15 26 55.8 -2.0**
**HOQ Hoqain 29.05 105** P **P** **15 26 59.3 +0.7**
SNR=15
**HOQ Hoqain 29.05 105** P **P** **15 26 59.3 +0.7**
SNR=15
**EDI Edinburgh 29.17 325** *e* **P** **15 26 58.0 -1.3**
**EDI Edinburgh 29.17 325** *e*P **P** **15 26 57.5 -1.9**
EDI AMB AMB 15 27 04.1
comp=Z,106nm,1.9s
**EDI Edinburgh 29.17 325** *e*P **P** **15 26 57.5 -1.9**
**DRUM Mains of Drumt 29.42 327** *e*P **P** **15 26 59.2 -2.3**
**EAB Aberfoyle 29.86 325** *e*P **P** **15 27 03.1 -2.3**
**SMDO Samad 29.90 105** P **P** **15 27 07.2 +0.9**
SNR=22
**SMDO Samad 29.90 105** P **P** **15 27 07.2 +0.9**
SNR=22
**TMCR Tamitsa 30.06 10** *e*P P 15 27 19.7 +13
TMCR pmax pmax
comp=Z,16nm,0.6s
**ARU Arti 30.55 35** LR LR 15 42 06.5
comp=Z,919nm,18.8s,baz=246,slow=42
**ARU Arti 30.55 35** *c i*P **P** **15 27 11.1 -0.5**
ARU 15 28 05.8
ARU 15 30 04.4
ARU S **S** **15 32 14.4 +2.0**
ARU SS **SnSn** **15 33 47.9 -1.3**
ARU pmax pmax
comp=Z,56nm,1.7s
ARU MLR MLR
comp=Z,1μm,15.0s
**ARU Arti 30.55 35** P **P** **15 27 10.2 -1.4**
comp=Z,123nm,0.7s,SNR=9.7
**ARU Arti 30.55 35** *e*P **P** **15 27 10.4 -1.2**
comp=Z,28nm,0.9s
**ARU Arti 30.55 35** *e*P **P** **15 27 10.4 -1.2**
comp=Z,28nm,0.9s
**NSS Namsos 30.89 348** *e*P **P** **15 27 12.2 -2.2**
**TOA0 Torodi Ar. Sit 31.23 232** *e*P **P** **15 27 17.1 -0.9**
**TORD Torodi Ar. Bea 31.23 232** P **P** **15 27 18.0 0.0**
comp=Z,21nm,0.6s,baz=36,slow=8.2,SNR=158
TORD ScP **ScP** **15 33 52.6 -2.1**
comp=Z,1.4nm,0.9s,baz=4.1,slow=4.6,SNR=4.6
TORD LR LR 15 43 06.2
comp=Z,1μm,19.1s,baz=45,slow=42
**SVE Sverdlovsk 31.75 36**⇑ *i*P **P** **15 27 22.0 -0.1**
SVE *e* 15 28 21.7
SVE *e*S **S** **15 32 26.5 -4.6**
SVE pmax pmax
comp=Z,54nm,1.3s
SVE MLR MLR
comp=Z,1μm,14.0s
**SVE Sverdlovsk 31.75 36** *i* P **P** **15 27 22.0 -0.1**
comp=Z,54nm,1.3s

**MOR8 Moi Rana 32.04 351** *e*P **P** **15 27 23.1 -1.5**
MOR8 IAmb IAmb 15 27 28.6
comp=Z,23nm,1.2s
**MOR8 Moi Rana 32.04 351** *e*P **P** **15 27 23.1 -1.5**
SNR=27
**FLOS Flostrand 32.35 350** *e*P **P** **15 27 24.9 -2.3**
**KONS Konsvik 32.53 350** *e*P **P** **15 27 26.8 -2.1**
**APA Apatity 32.88 5**⇑ *i*P **P** **15 27 30.2 -1.7**
APA *i* 15 28 38.0
APA *i* 15 30 12.0
APA *i*S S 15 32 42.0 -6.5
APA pmax pmax
comp=Z,12nm,0.5s
APA MLR MLR
comp=Z,3μm,13.0s
**APA Apatity 32.88 5** *i*P **P** **15 27 30.2 -1.7**
comp=Z,12nm,0.5s
**LVZ Lovozero 33.30 6** *e*P **P** **15 27 35.3 -0.3**
LVZ pmax pmax
comp=Z,14nm,1.0s
**LVZ Lovozero 33.30 6** *e*P **P** **15 27 35.3 -0.3**
comp=Z,14nm,1.0s
**STEI Steigen 33.63 352** *e*P **P** **15 27 36.3 -2.1**
**DZET Dzherino 33.84 71** P **P** **15 27 41.5 +0.7**
DZET pmax pmax
comp=Z,68nm,1.2s
**DZET Dzherino 33.84 71** P **P** **15 27 41.5 +0.7**
comp=Z,68nm,1.2s
**KTK1 Kautokeino 34.14 358** *e*P **P** **15 27 40.0 -2.8**
**ARCES ARCESS Array B 34.62 359** P **P** **15 27 44.3 -2.7**
comp=Z,12nm,0.6s,baz=177,slow=8.6,SNR=46
ARCES PcP **PcP** **15 30 21.2 +0.2**
comp=Z,1.2nm,0.3s,baz=186,slow=4.3,SNR=5.8
ARCES LR LR 15 42 14.1
comp=Z,525nm,18.4s,baz=174,slow=37
**ARCES ARCESS Array B 34.62 359** P **P** **15 27 44.3 -2.7**
ARCES 15 30 21.2
ARCES pmax pmax
comp=Z,12nm,0.6s
ARCES pmax pmax
comp=Z,1.0nm,0.3s
ARCES MLR MLR
comp=Z,525nm,18.4s
**ARE0 ARCESS Array S 34.62 359** *e*P **P** **15 27 44.4 -2.6**
**KKAR Karatay Array 34.80 63** *e*P **P** **15 27 49.2 +0.3**
KKAR pmax pmax
comp=Z,61nm,0.9s
**KKAR Karatay Array 34.80 63** *e*P **P** **15 27 49.2 +0.3**
comp=Z,61nm,0.9s
**KKAR Karatay Array 34.80 63** *e*P **P** **15 27 49.2 +0.3**
comp=Z,61nm,0.9s
**KEV Kevo 34.84 0** *e*P **P** **15 27 47.4 -1.5**
KEV pmax pmax
comp=Z,19nm,0.9s
**KEV Kevo 34.84 0** *e*P **P** **15 27 47.4 -1.5**
comp=Z,20nm,0.9s
**KEV Kevo 34.84 0** *e*P **P** **15 27 47.4 -1.5**
comp=Z,20nm,0.9s
**TRO Tromso 34.97 355** *e*P P 15 27 45.7 -4.2
TRO IAmb IAmb 15 27 53.8
comp=Z,16nm,1.4s
**MBAR Mbarara 35.61 173** P **P** **15 27 56.0 -0.2**
comp=Z,34nm,1.1s,SNR=7.9
**BRVK Borovoye 35.62 46** *c i*P **P** **15 27 56.0 +0.2**
BRVK pmax pmax
comp=Z,95nm,1.7s
**BRVK Borovoye 35.62 46** P **P** **15 27 56.7 +0.9**
comp=Z,236nm,0.7s,SNR=21
**BRVK Borovoye 35.62 46** P **P** **15 27 56.3 +0.4**
SNR=32
**BRVK Borovoye 35.62 46** *e*P **P** **15 27 56.2 +0.3**
comp=Z,125nm,1.4s
**BRVK Borovoye 35.62 46** P **P** **15 27 56.3 +0.4**
SNR=32
**BVA0 Borovoye Array 35.68 46** P **P** **15 27 56.3 0.0**
BVA0 pmax pmax
comp=Z,80nm,1.2s
**BVA0 Borovoye Array 35.68 46** P **P** **15 27 56.3 0.0**
comp=Z,80nm,1.2s
**BVAR Borovoye Array 35.68 46** LR LR 15 46 06.3
comp=Z,1μm,18.9s,slow=42
**HAMF Hammerfest 35.76 358** *e*P **P** **15 27 57.9 +1.1**
**HAMF Hammerfest 35.76 358** *e*P **P** **15 27 57.9 +1.1**
SNR=27
**PMAR Madeira 35.93 279** *e*P **P** **15 28 00.0 +1.0**
comp=Z,163nm,2.4s
**CHKZ Chkalovo 35.95 45** P **P** **15 27 58.6 -0.1**
CHKZ pmax pmax
comp=Z,109nm,1.2s
**CHKZ Chkalovo 35.95 45** P **P** **15 27 58.6 -0.1**
comp=Z,109nm,1.2s
**OTUK Ortayu 36.20 54** P **P** **15 28 01.4 +0.5**
OTUK pmax pmax
comp=Z,124nm,1.1s
**OTUK Ortayu 36.20 54** P **P** **15 28 01.4 +0.5**
comp=Z,124nm,1.1s
**MNAS Manas 36.29 64** P **P** **15 28 01.9 0.0**
MNAS pmax pmax
comp=Z,27nm,1.2s
**MNAS Manas 36.29 64** P **P** **15 28 01.9 0.0**
comp=Z,27nm,1.2s
**AML Almayashu 37.20 64** P **P** **15 28 11.4 +1.5**
SNR=16
**AML Almayashu 37.20 64** P **P** **15 28 10.6 +0.7**
SNR=16
**EKS2 Erkin-Say 37.22 64** *e*P **P** **15 28 10.9 +1.1**
EKS2 pmax pmax
comp=Z,56nm,1.0s
**EKS2 Erkin-Say 37.22 64** P **P** **15 28 11.1 +1.3**
SNR=56
**EKS2 Erkin-Say 37.22 64** *e*P **P** **15 28 10.9 +1.1**
comp=Z,56nm,1.0s
**EKS2 Erkin-Say 37.22 64** *e*P **P** **15 28 10.9 +1.1**
comp=Z,56nm,1.0s
**SFK Sufi-Kurgan 37.28 68** P **P** **15 28 11.3 +0.8**
SFK pmax pmax
comp=Z,58nm,0.7s
**SFK Sufi-Kurgan 37.28 68** P **P** **15 28 11.3 +0.8**
comp=Z,58nm,0.7s
**USP Ospenovka 37.70 63** P **P** **15 28 14.7 +0.9**
SNR=9.6
**AAK Ala-Archa 37.75 64** LR LR 15 46 58.9
comp=Z,704nm,18.4s,baz=280,slow=41
**AAK Ala-Archa 37.75 64** *c i*P **P** **15 28 15.6 +1.3**
AAK pmax pmax
comp=Z,121nm,1.2s
**AAK Ala-Archa 37.75 64** P **P** **15 28 15.9 +1.6**
comp=Z,332nm,0.8s,SNR=32
**AAK Ala-Archa 37.75 64** P **P** **15 28 16.6 +2.3**
SNR=51
**AAK Ala-Archa 37.75 64** P **P** **15 28 15.7 +1.3**
SNR=40
**AAK Ala-Archa 37.75 64** *e*P **P** **15 28 15.5 +1.2**
comp=Z,195nm,1.4s
**AAK Ala-Archa 37.75 64** *e*P **P** **15 28 15.5 +1.3**
comp=Z,195nm,1.4s
**UCH Uchtor 37.80 64** P **P** **15 28 15.7 +0.7**
SNR=16
**FRU Bishkek 37.82 63** *i*P **P** **15 28 17.0 +2.2**
FRU *e* 15 34 11.0
FRU pmax pmax
comp=Z,320nm,1.8s
**FRU Bishkek 37.82 63** *i*P **P** **15 28 17.0 +2.2**
comp=Z,320nm,1.8s
**CHMS Chumysh 37.91 63** P **P** **15 28 16.9 +1.4**
SNR=32
**KBK Karagaybulak 38.08 64** P **P** **15 28 18.9 +1.8**
SNR=16
**KZA Kyzart 38.35 64** P **P** **15 28 21.3 +1.6**
SNR=52
**TKM2 Tokmak 2 38.53 63** *e*P **P** **15 28 21.5 +0.5**
TKM2 pmax pmax
comp=Z,39nm,0.8s
**TKM2 Tokmak 2 38.53 63** P **P** **15 28 21.8 +0.9**
SNR=21
**TKM2 Tokmak 2 38.53 63** *e*P **P** **15 28 21.5 +0.5**
comp=Z,39nm,0.8s
**TKM2 Tokmak 2 38.53 63** *e*P **P** **15 28 21.5 +0.5**
comp=Z,39nm,0.8s
**ULHL Ulahol 39.07 64** P **P** **15 28 26.8 +1.3**
SNR=49
**KSH Kashi 39.24 68** P **P** **15 28 26.1 -0.7**
KSH pP pP 15 28 35.8 +3.7
KSH sP sP 15 28 39.9 +5.7
KSH S **ScP** **15 34 23.2 -0.2**
KSH SS **SS** **15 37 12.0 -7.8**

KSH ScS **ScS** **15 38 32.8 -2.4**
KSH PMZ
comp=Z,51nm,1.0s
KSH LN
comp=Z,220nm,11.4s
KSH LE
comp=Z,290nm,10.9s
KSH LZ
comp=Z,540nm,18.3s
**BJO Bjornoya 39.78 357** *e*P **P** **15 28 28.5 -2.2**
**DBIC Dimbokro 40.33 233** P **P** **15 28 35.4 -0.5**
comp=Z,6.1nm,0.5s,baz=23,slow=8.8,SNR=27
DBIC LR LR 15 48 31.4
comp=Z,831nm,18.4s,baz=20,slow=41
**DBIC Dimbokro 40.33 233** P **P** **15 28 35.4 -0.5**
DBIC pmax pmax
comp=Z,6.0nm,0.5s
DBIC MLR MLR
comp=Z,831nm,18.4s
**KURK Kurchatov 40.44 51** *e*P **P** **15 28 37.0 +0.5**
KURK pmax pmax
comp=Z,95nm,0.6s
**KURK Kurchatov 40.44 51** P **P** **15 28 36.7 +0.2**
SNR=52
**KURK Kurchatov 40.44 51** P **P** **15 28 37.3 +0.8**
comp=Z,556nm,1.2s,SNR=10
**KURK Kurchatov 40.44 51** *e*P **P** **15 28 37.0 +0.5**
comp=Z,95nm,0.6s
**KURK Kurchatov 40.44 51** *e*P **P** **15 28 37.0 +0.5**
comp=Z,95nm,0.6s
**TIC Toumodi 40.46 233** *e*P **P** **15 28 37.4 +0.4**
**KIC Kosan Boka 40.48 233** *e*P **P** **15 28 37.0 -0.3**
comp=Z,61nm,0.8s
**LIC Lamto 40.77 233** *e*P **P** **15 28 39.3 -0.3**
comp=Z,45nm,0.8s
**PDGK Podgornoye 41.32 62** P **P** **15 28 43.9 +0.1**
PDGK pmax pmax
comp=Z,35nm,0.8s
**PDGK Podgornoye 41.32 62** P **P** **15 28 43.9 +0.1**
comp=Z,35nm,0.8s
**HOPEN Hopen 41.64 359** *e*P **P** **15 28 43.5 -2.5**
**SMLA Simla 42.27 80** *i*P **P** **15 28 52.4 +0.7**
**HSPB Hornsund (broa 42.42 356** *e*P **P** **15 28 51.5 -0.9**
HSPB *e*PP **PP** **15 30 30.9 +0.4**
HSPB *e*ScP **ScP** **15 34 36.1 +1.1**
HSPB *e*SS **SS** **15 38 25.8 +4.1**
**HSPB Hornsund (broa 42.42 356** *e*P **P** **15 28 51.5 -0.9**
SNR=25
**MK31 Makanchi Array 42.95 56** P **P** **15 28 57.6 +0.4**
MK31 pmax pmax
comp=Z,22nm,0.5s
**MK31 Makanchi Array 42.95 56** P **P** **15 28 57.6 +0.4**
comp=Z,22nm,0.5s
**MKAR Makanchi Array 42.95 56** P **P** **15 28 57.7 +0.5**
comp=Z,30nm,0.8s,baz=272,slow=6.3,SNR=233
MKAR LR LR 15 49 32.4
comp=Z,390nm,21.6s,baz=270,slow=40
**MKAR Makanchi Array 42.95 56** P **P** **15 28 57.7 +0.5**
MKAR pmax pmax
comp=Z,30nm,0.8s
MKAR MLR MLR
comp=Z,390nm,21.6s
**NDI New Delhi 43.16 84** *e*P **P** **15 28 59.0 0.0**
**NVS Novosibirsk 43.44 45**⇑ *i*P **P** **15 29 01.6 +0.7**
NVS *e* 15 30 42.6
NVS *e*S **S** **15 35 25.6 -2.7**
NVS *e* 15 38 55.9
NVS pmax pmax
comp=Z,114nm,1.2s
NVS pmax pmax
comp=N,27nm,1.3s
NVS pmax pmax
comp=E,60nm,1.4s
NVS pmax pmax
comp=Z,55nm,1.6s
NVS pmax pmax
comp=N,25nm,2.0s
NVS smax smax
comp=N,105nm,2.0s
NVS smax smax
comp=E,14nm,1.5s
**NVS Novosibirsk 43.44 45** *i*P **P** **15 29 01.6 +0.7**
comp=E,27nm,1.3s
**SPA0 Spitsbergen Ar 43.53 357** *e*P **P** **15 28 58.7 -2.7**
**SPITS Spitsbergen Ar 43.53 357** LR LR 15 48 48.7
comp=E,999nm,18.1s,baz=200,slow=38
**ZALV Zalesovo Beam 44.33 46** P **P** **15 29 07.8 -0.3**
comp=E,34nm,0.4s,baz=266,slow=10.0,SNR=170
ZALV LR LR 15 52 22.2
comp=E,537nm,18.0s,baz=251,slow=42
**ZALV Zalesovo Beam 44.33 46** P **P** **15 29 07.9 -0.3**
ZALV pmax pmax
comp=Z,34nm,0.4s
ZALV MLR MLR
comp=Z,537nm,18.0s
**KBS Kingsbay 44.48 356** *e*P **P** **15 29 07.1 -1.9**
KBS IAmb IAmb 15 29 13.9
comp=Z,38nm,0.8s
**KBS Kingsbay 44.48 356** *e*P **P** **15 29 07.4 -1.6**
KBS pmax pmax
comp=Z,83nm,1.3s
**KBS Kingsbay 44.48 356** *e*P **P** **15 29 07.3 -1.6**
comp=Z,83nm,1.3s
**KBS Kingsbay 44.48 356** *e*P **P** **15 29 07.3 -1.7**
comp=Z,83nm,1.3s
**DAG Danmarks Havn 46.48 347** *i*P **P** **15 29 23.0 -1.9**
**DAG Danmarks Havn 46.48 347** *i*P **P** **15 29 23.0 -1.9**
**WMQ Urumqi 47.14 60** P **P** **15 29 32.0 +1.4**
WMQ pP pP 15 29 42.0 +6.1
WMQ PP **PP** **15 31 23.0 +1.7**
WMQ ScP **ScP** **15 34 54.0 -1.2**
WMQ ScS **ScS** **15 39 22.0 -2.1**
WMQ PMZ
comp=Z,32nm,1.2s
WMQ PMZ
comp=Z,18nm,5.0s
WMQ LN
comp=Z,440nm,17.0s
WMQ LE
comp=Z,360nm,18.0s
WMQ LZ
comp=Z,440nm,18.0s
**DANN Dangsing 48.61 81** *e*P **P** **15 29 43.4 +0.9**
comp=Z,23nm,0.8s
**KOLN Koldanda 48.71 82** *e*P **P** **15 29 43.6 +0.5**
comp=Z,39nm,0.6s
**KRAR Krasnoyarsk 48.92 43** *e*P **P** **15 29 45.7 +1.6**
KRAR pmax pmax
comp=Z,46nm,1.2s
**KRAR Krasnoyarsk 48.92 43** *e*P **P** **15 29 45.7 +1.6**
comp=Z,46nm,1.2s
**RPR Rampur 49.18 95** *e*P **P** **15 29 46.3 -0.2**
**HYBB Hyderabad (bro 49.30 97** *e*P **P** **15 29 47.6 0.0**
**HYB Hyderabad 49.30 97** *i*P **P** **15 29 47.0 -0.5**
HYB *e*sP **sP** **15 29 53.0 -2.0**
**GKN Gorkha 49.46 81** *e*P **P** **15 29 49.1 +0.3**
comp=Z,104nm,0.9s
**SUMG Summit 49.55 339** *e*P **P** **15 29 47.3 -1.9**
SUMG pmax pmax
comp=Z,13nm,0.5s
**SUMG Summit 49.55 339** *i*P **P** **15 29 47.4 -1.7**
comp=Z,11nm,0.5s
**SUMG Summit 49.55 339** *e*P **P** **15 29 47.3 -1.9**
comp=Z,12nm,0.5s
**URV Urawakonda 49.57 100** *e*P **P** **15 29 49.3 -0.2**
**HVS Khovu-Aksy 49.93 49**⇑ *i*P **P** **15 29 53.2 +1.2**
HVS pmax pmax
comp=Z,49nm,0.9s
**HVS Khovu-Aksy 49.93 49** *i*P **P** **15 29 53.2 +1.2**
comp=Z,49nm,0.9s
**LSZ Lusaka 49.99 178** *e*P **P** **15 29 54.0 +1.2**
LSZ pmax pmax
comp=Z,20nm,1.1s
**LSZ Lusaka 49.99 178** P **P** **15 29 55.2 +2.4**
SNR=5.2
**LSZ Lusaka 49.99 178** *e*P **P** **15 29 54.0 +1.2**
comp=Z,20nm,1.1s
**LSZ Lusaka 49.99 178** *e*P **P** **15 29 54.0 +1.2**
comp=Z,20nm,1.1s
**DMN Daman 50.00 81** *e*P **P** **15 29 53.5 +0.5**
comp=Z,161nm,1.0s
**KKN Kakani 50.07 81** *e*P **P** **15 29 53.7 +0.2**
comp=Z,65nm,0.8s
**PKIN Phulchoki 50.25 81** *e*P **P** **15 29 55.0 +0.1**
comp=Z,26nm,0.5s
**PKI Pulchoki 50.26 81** *e*P **P** **15 29 55.1 0.0**

NJS Nagarjunasagar 50.37 97 eP P 15 29 56.1 +0.5
GUN Gumba 50.50 81 eP P 15 29 57.2 +0.2
comp=Z,218nm,1.1s
ADKI Addanki 51.28 98 eP P 15 30 02.3 -0.2
RAMN Ramite 51.48 81 eP P 15 30 03.7 -0.5
comp=Z,80nm,1.0s
PVM Polavaram 51.90 95 eP P 15 30 07.0 -0.1
ODAN Odare 52.16 81 eP P 15 30 08.8 -0.4
comp=Z,71nm,1.0s
SKHT Srikalahasti 52.21 100 eP P 15 30 09.8 +0.4
TAPN Taplejung 52.21 80 eP P 15 30 09.7 0.0
comp=Z,63nm,0.9s
CHLP Challavanipeta 53.26 92 eP P 15 30 16.7 -0.5
SFJD Kangerlussuaq 53.38 331 P P 15 30 16.1 -1.2
comp=Z,13nm,0.8s,baz=12,slow=8.0,SNR=4.5
LSA Lhasa 54.03 76 eP P 15 30 23.6 +0.3
LSA pmax pmax
comp=Z,15nm,0.8s
LSA Lhasa 54.03 76 eP P 15 30 23.6 +0.3
comp=Z,15nm,0.8s
LSA Lhasa 54.03 76 eP P 15 30 23.5 +0.3
comp=Z,15nm,0.8s
MOY Mondy 54.32 48 eP P 15 30 26.4 +1.8
MOY pmax pmax
comp=Z,61nm,1.9s
MOY Mondy 54.32 48 eP P 15 30 26.4 +1.8
comp=Z,61nm,1.9s
TLY Talaya 55.92 47 d iP P 15 30 37.9 +1.8
TLY e 15 32 41.4
TLY eS S 15 38 24.8 +1.8
TLY e 15 40 23.4
TLY pmax pmax
comp=Z,55nm,1.6s
TLY MLR MLR
comp=Z,663nm,17.0s
TLY Talaya 55.92 47 P P 15 30 38.5 +2.4
comp=Z,150nm,1.0s,SNR=6.0
TLY Talaya 55.92 47 P P 15 30 38.3 +2.2
SNR=10
TLY Talaya 55.92 47 i P P 15 30 37.9 +1.8
comp=Z,55nm,1.6s
ZAK Zakamensk 56.03 49 eP P 15 30 38.0 +1.0
ZAK pmax pmax
comp=Z,29nm,1.6s
ZAK Zakamensk 56.03 49 eP P 15 30 38.0 +1.0
comp=Z,29nm,1.6s
IRK Irkutsk 56.15 46 eP P 15 30 35.4 -2.3
IRK e 15 32 51.7
IRK pmax pmax
comp=Z,93nm,1.6s
GTA Gaotai 57.07 62 eP P 15 30 45.5 +0.9
GTA pP pP 15 30 57.2 +7.2
GTA sP sP 15 31 03.0 +11
GTA PP PP 15 32 55.3 +4.1
GTA S S 15 38 36.4 -2.4
GTA sS sS 15 38 53.5 +5.8
GTA SS SS 15 42 26.5 -0.7
GTA PMZ
comp=Z,22nm,1.0s
GTA PMZ
comp=Z,120nm,5.2s
GTA LN
comp=Z,320nm,16.6s
GTA LE
comp=Z,270nm,17.6s
GTA LZ
comp=Z,260nm,19.9s
ABPO Ambohimpanom 57.19 157 eP P 15 30 47.3 +1.8
ABPO pmax pmax
comp=Z,61nm,1.2s
ABPO Ambohimpanom 57.19 157 eP P 15 30 47.3 +1.8
comp=Z,61nm,1.2s
ABPO Ambohimpanom 57.19 157 eP P 15 30 47.3 +1.8
comp=Z,61nm,1.2s
SONM Songino Array 58.74 51 P P 15 30 57.0 +0.8
comp=Z,18nm,0.7s,baz=284,slow=8.3,SNR=110
SONM Songino Array 58.74 51 P P 15 30 57.0 +0.8
SONM pmax pmax
comp=Z,18nm,0.7s
ULN Ulaanbaatar 59.15 51 c iP P 15 30 59.9 +0.8
ULN pmax pmax
comp=Z,28nm,1.0s
ULN Ulaanbaatar 59.15 51 P P 15 31 00.4 +1.3
SNR=17
ULN Ulaanbaatar 59.15 51 eP P 15 30 59.4 +0.3
comp=Z,37nm,1.0s
ULN Ulaanbaatar 59.15 51 eP P 15 30 59.4 +0.3
comp=Z,37nm,1.0s
BOD Bodaibo 59.92 38 eP P 15 31 02.8 -1.2
BOD pmax pmax
comp=Z,17nm,1.0s
BOD Bodaibo 59.92 38 eP P 15 31 02.8 -1.2
comp=Z,17nm,1.0s
LZH Lanzhou 61.28 64 eP P 15 31 14.9 +1.0
LZH pP pP 15 31 26.3 +7.0
LZH sP sP 15 31 30.6 +9.2
LZH PcP PcP 15 31 51.9 -4.4
LZH eS S 15 39 31.1 -2.4
LZH sS sS 15 39 50.0 +7.5
LZH SS SS 15 43 32.3 -1.2
LZH PMZ
comp=Z,48nm,1.0s
LZH PMZ
comp=Z,260nm,4.0s
LZH LN
comp=Z,1μm,14.5s
LZH LE
comp=Z,1μm,16.5s
LZH LZ
comp=Z,1μm,16.9s
BOSA Boshof 63.25 181 P P 15 31 28.1 +1.3
comp=Z,17nm,1.0s,baz=350,slow=6.7,SNR=25
BOSA LR LR 16 00 41.6
comp=Z,345nm,19.2s,baz=355,slow=38
BOSA Boshof 63.25 181 P P 15 31 28.2 +1.3
BOSA pmax pmax
comp=Z,17nm,1.0s
BOSA MLR MLR
comp=Z,345nm,19.2s
CD2 Chengdu 63.42 70 eP P 15 31 27.2 -0.9
CD2 pP pP 15 31 38.6 +5.0
CD2 sP sP 15 31 43.3 +7.7
CD2 PcS 15 36 02.0
CD2 S S 15 39 56.9 -3.4
CD2 sS sS 15 40 16.4 +7.1
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,160nm,5.6s
CD2 LN
comp=Z,370nm,17.6s
CD2 LZ
comp=Z,320nm,14.7s
SCHQ Schefferville 64.05 320 P P 15 31 31.0 -0.8
comp=Z,16nm,0.5s,baz=62,slow=5.7,SNR=32
SCHQ LR LR 15 59 39.0
comp=Z,269nm,18.2s,baz=96,slow=36
HHC Hu-ho-hao-te 64.82 57 ⇓P P 15 31 38.9 +1.7
HHC PP PP 15 34 00.9 +1.4
HHC PcS 15 36 15.2
HHC S S 15 40 16.4 -1.1
HHC PMZ
comp=Z,58nm,1.5s
HHC PMZ
comp=Z,220nm,3.7s
HHC LN
comp=Z,530nm,16.2s
HHC LE
comp=Z,390nm,16.2s
HHC LZ
comp=Z,450nm,18.7s
CMAI Chiengmai2 64.83 83 P P 15 31 45.5 +7.8
comp=Z,20nm,2.3s
KMI Kunming 65.28 76 P P 15 31 40.8 +0.2
KMI pP pP 15 31 52.2 +6.1
KMI sP sP 15 31 56.4 +8.3
KMI S S 15 40 22.1 -1.8
KMI sS sS 15 40 39.5 +6.6
KMI SS SS 15 44 39.5 +3.0
KMI PMZ
comp=Z,13nm,1.0s
KMI LN
comp=Z,260nm,17.7s
KMI LE
comp=Z,190nm,19.2s
KMI LZ
comp=Z,220nm,20.7s
CHTO Chiang Mai 65.31 84 P P 15 31 40.7 +0.1
comp=Z,91nm,1.1s
CHTO Chiang Mai 65.31 84 eP P 15 31 40.0 -0.6
CHTO pmax pmax
comp=Z,44nm,1.4s
CHTO Chiang Mai 65.31 84 P P 15 31 40.8 +0.1
SNR=8.5
CHTO Chiang Mai 65.31 84 eP P 15 31 40.0 -0.6
comp=Z,44nm,1.4s
CHTO Chiang Mai 65.31 84 eP P 15 31 40.0 -0.6
comp=Z,44nm,1.4s
YAK Yakutsk 65.48 30 eP P 15 31 39.6 -1.4
YAK e*PP pP 15 31 51.2 +4.7
YAK e 15 32 17.4
YAK e 15 34 03.0
YAK eS S 15 40 25.6 +0.9
YAK e*SS sS 15 40 46.8 +13
YAK e 15 41 33.3
YAK pmax pmax
comp=Z,12nm,0.9s
YAK pmax pmax
comp=E,10.0nm,1.3s
YAK pmax pmax
comp=N,4.0nm,1.0s
YAK pmax pmax
comp=Z,9.0nm,0.8s
YAK smax smax
comp=E,138nm,3.3s
YAK smax smax
comp=N,76nm,2.3s
YAK MLR MLR
comp=E,383nm,17.0s
YAK MLR MLR
comp=Z,575nm,18.0s
YAK MLR MLR
comp=N,335nm,18.0s
YAK Yakutsk 65.48 30 eP P 15 31 39.2 -1.8
comp=N,16nm,0.6s
YAK Yakutsk 65.48 30 eP P 15 31 39.2 -1.8
comp=N,16nm,0.6s
CMAR Chiang Mai Arr 65.49 84 P P 15 31 41.7 -0.1
comp=N,15nm,0.9s,baz=298,slow=8.2,SNR=82
CMAR LR LR 16 06 08.9
comp=N,99nm,19.9s,baz=296,slow=41
CRAI Chiangrai 65.76 82 P P 15 31 38.6 -4.9
XAN Xi'an 65.92 64 P P 15 31 44.8 +0.4
XAN pP pP 15 31 55.0 +5.1
XAN PMZ
comp=N,8.0nm,0.9s
XAN PMZ
comp=N,56nm,3.8s
HIA Hailar 66.37 46 eP P 15 31 47.3 +0.3
HIA pmax pmax
comp=Z,91nm,1.4s
HIA Hailar 66.37 46 eP P 15 31 47.3 +0.3
comp=Z,91nm,1.4s
HIA Hailar 66.37 46 eP P 15 31 47.3 +0.3
comp=Z,91nm,1.4s
UMPA Umpang Tak 66.58 86 P P 15 31 49.8 +1.0
comp=Z,17nm,0.9s,comp=Z,187nm
UTTA Uttaradit 67.17 84 P P 15 31 52.5 0.0
comp=Z,12nm,0.8s,comp=Z,76nm
UTHA Uthaitani 67.39 86 P P 15 31 54.2 +0.3
comp=Z,10nm,0.9s,comp=Z,76nm
GYA Guiyang 67.74 73 ⇑ iP P 15 31 56.4 +0.2
GYA pP pP 15 32 07.8 +6.1
GYA PP PP 15 34 28.2 +2.8
GYA ScP 15 36 21.0
GYA S S 15 40 48.9 -4.6
GYA PMZ
comp=Z,40nm,1.1s
GYA PMZ
comp=Z,150nm,5.2s
GYA LN
comp=Z,520nm,18.8s
GYA LE
comp=Z,480nm,19.0s
GYA LZ
comp=Z,470nm,18.6s
ENH Enshi 68.09 68 eP P 15 31 58.3 +0.1
comp=Z,14nm,0.8s
ENH Enshi 68.09 68 eP P 15 31 58.3 +0.1
comp=Z,14nm,0.8s
PBKT Sadao Pong 68.11 85 P P 15 31 58.8 +0.3
comp=Z,29nm,1.1s,comp=Z,1μm
BJT Baijiatuau 68.33 56 eP P 15 31 59.7 +0.2
BJT pmax pmax
comp=Z,37nm,0.9s
BJT Baijiatuau 68.33 56 eP P 15 31 59.7 +0.2
comp=Z,37nm,0.9s
BJT Baijiatuau 68.33 56 eP P 15 31 59.7 +0.2
comp=Z,36nm,0.9s
NONG Nongkai 69.11 82 P P 15 32 13.8 +9.1
KHON Khomkaen 69.75 84 P P 15 32 09.0 +0.3
comp=Z,25nm,0.8s,comp=Z,610nm
TIA Tai'an 70.82 59 ⇓P P 15 32 15.8 +0.8
TIA PMZ
comp=Z,40nm,0.9s
TRTT Trang 71.77 93 P P 15 32 21.5 +0.5
comp=Z,26nm,1.3s
CN2 Changchun 72.47 49 eP P 15 32 25.4 +0.6
CN2 PMZ
comp=Z,20nm,1.0s
CN2 LZ
comp=Z,600nm,14.0s
FRNY Flat Rock 72.64 313 eP P 15 32 25.1 -0.7
comp=Z,23nm,1.0s
FRNY Flat Rock 72.64 313 eP P 15 32 25.1 -0.7
comp=Z,23nm,1.0s
MDV Middlebury 72.83 312 eP P 15 32 26.2 -0.7
MDV Middlebury 72.83 312 eP P 15 32 26.2 -0.7
BILL Bilibino 72.97 15 ⇑ eP P 15 32 26.3 -1.0
BILL e 15 35 06.6
BILL pmax pmax
comp=Z,23nm,1.1s
KLR Kul'dur 73.18 41 eP P 15 32 24.8 -4.1
KLR pmax pmax
comp=E,28nm,1.6s
KLR pmax pmax
comp=Z,68nm,1.6s
SEY Seymchan 73.31 23 P P 15 32 29.1 -0.2
comp=Z,7.3nm,0.6s,baz=302,slow=6.1,SNR=27
SEY Seymchan 73.31 23 eP P 15 32 28.9 -0.5
LONY Lake Ozonia 73.35 313 eP P 15 32 30.0 0.0
comp=Z,13nm,0.8s
LONY Lake Ozonia 73.35 313 eP P 15 32 30.0 0.0
comp=Z,13nm,0.8s
ACCN Adirondack Com 73.46 312 eP P 15 32 31.3 +0.6
comp=Z,25nm,0.9s
ACCN Adirondack Com 73.46 312 eP P 15 32 31.3 +0.6
comp=Z,25nm,0.9s
KULM Kulim 73.99 95 eP P 15 32 32.9 -1.3
comp=Z,24nm,0.9s
KULM Kulim 73.99 95 eP P 15 32 32.9 -1.3
comp=Z,24nm,0.9s
QIZ Qiongzhong 74.03 78 P P 15 32 34.4 0.0
QIZ S S 15 42 05.4 -1.1
NJ2 Nanjing 74.17 62 eP P 15 32 34.9 -0.1
NJ2 PMZ
comp=Z,20nm,0.6s
MDJ Mudanjiang 74.53 46 P P 15 32 36.0 -0.9
MDJ S SKiKP 15 42 06.9 +4.7
MDJ PMZ
comp=Z,26nm,2.1s
MDJ PMZ
comp=Z,220nm,3.7s
MDJ LN
comp=Z,150nm,20.7s
MDJ LE
comp=Z,140nm,17.9s
MDJ LZ
comp=Z,250nm,16.6s
MA2 Magadan 75.17 26 eP P 15 32 39.9 -0.4
INK Inuvik 75.95 352 P P 15 32 43.8 -0.8
comp=Z,3.3nm,0.5s,baz=33,slow=3.5,SNR=16
INK Inuvik 75.95 352 P P 15 32 43.8 -0.8
INK pmax pmax
comp=Z,3.0nm,0.5s
SADO Sadowa 75.96 315 LR LR 16 07 38.9
comp=Z,210nm,19.1s,slow=37
USRK Ussuriysk Ar. 76.18 46 P P 15 32 46.0 -0.3
comp=Z,21nm,0.7s,baz=289,slow=4.8,SNR=44
USRK LR LR 16 10 28.1
comp=Z,149nm,19.1s,baz=310,slow=39
KSAR Wonju Array Be 77.49 53 P P 15 32 54.1 +0.2
KSAR Wonju Array Be 77.49 53 P P 15 32 54.1 +0.2
KSAR Wonju Array Be 77.49 53 P P 15 32 54.1 +0.2
KSRS Korea Array 77.51 53 P P 15 32 54.1 +0.1
comp=Z,13nm,0.7s,baz=305,slow=4.4,SNR=38
KSRS LR LR 16 12 19.0
comp=Z,284nm,18.7s,baz=308,slow=40
SSPA Standing Stone 77.60 311 eP P 15 32 54.0 -0.5
comp=Z,97nm,1.2s
SSPA Standing Stone 77.60 311 eP P 15 32 54.0 -0.5
comp=Z,97nm,1.2s
YKA Yellowknife Ar 77.96 343 P P 15 32 55.3 -0.7
comp=Z,6.6nm,0.7s,baz=32,slow=5.2,SNR=10
YKA Yellowknife Ar 77.96 343 P P 15 32 55.3 -0.7
YKA pmax pmax
comp=Z,7.0nm,0.7s
COLD Coldfoot 78.09 359 eP P 15 32 56.0 -0.7
comp=Z,30nm,1.2s
COLD Coldfoot 78.09 359 eP P 15 32 56.0 -0.7
comp=Z,30nm,1.2s
C39A Grand Marais 80.02 322 P P 15 33 05.9 -1.8
baz=80
EGAK Eagle 80.11 355 eP P 15 33 07.2 -0.6
comp=Z,52nm,1.5s
EGAK Eagle 80.11 355 eP P 15 33 07.2 -0.6
comp=Z,52nm,1.5s
FFC Flin Flon 80.31 333 eP P 15 33 07.9 -1.2
FFC pmax pmax
comp=Z,31nm,1.1s
FFC Flin Flon 80.31 333 eP P 15 33 07.9 -1.2
comp=Z,32nm,1.1s
FFC Flin Flon 80.31 333 eP P 15 33 07.9 -1.2
comp=Z,32nm,1.1s
COLA College 80.39 358 eP P 15 33 08.1 -1.1
COLA pmax pmax
comp=Z,13nm,1.1s
YSS Yuzh-Sakhalins 80.39 39 eP P 15 33 09.4 -0.2
YSS e 15 33 15.2
YSS pmax pmax
comp=Z,40nm,1.1s
ILAR Eielson Array 80.45 357 P P 15 33 08.4 -1.2
comp=Z,4.8nm,0.6s,baz=342,slow=3.8,SNR=46
ILAR PKKPbc PKKPbc 15 51 49.0 -2.1
comp=Z,0.5nm,0.7s,baz=218,slow=1.9,SNR=5.8
ILAR Eielson Array 80.45 357 P P 15 33 08.4 -1.2
ILAR 15 51 49.1
ILAR pmax pmax
comp=Z,5.0nm,0.6s
ILAR pmax pmax
comp=Z,1.0nm,0.7s
EYMN Ely 80.61 323 P P 15 33 10.1 -0.7
baz=80
EYMN Ely 80.61 323 eP P 15 33 10.2 -0.7
comp=Z,12nm,1.0s
EYMN Ely 80.61 323 eP P 15 33 10.2 -0.6
comp=Z,12nm,1.0s
COWI Conover 80.65 321 eP P 15 33 10.2 -0.9
comp=Z,29nm,0.9s
COWI Conover 80.65 321 eP P 15 33 10.2 -0.9
comp=Z,29nm,0.9s
C38A Sawbill Land. 80.66 323 P P 15 33 10.1 -1.0
baz=80
ACSO Alum Creek Sta 80.95 313 P P 15 33 12.1 -0.7
comp=Z,24nm,0.9s
ACSO Alum Creek Sta 80.95 313 P P 15 33 12.1 -0.7
comp=Z,24nm,0.9s
ULM Lac du Bonnet 81.08 327 P P 15 33 12.1 -1.2
comp=Z,5.5nm,0.5s,baz=48,slow=5.4,SNR=10.0
ULM LR LR 16 10 50.4
comp=Z,428nm,18.9s,baz=66,slow=37
ULM Lac du Bonnet 81.08 327 P P 15 33 12.1 -1.2
ULM pmax pmax
comp=Z,6.0nm,0.5s
ULM MLR MLR
comp=Z,428nm,18.9s
C37A Embarrass 81.10 323 P P 15 33 12.5 -1.0
baz=81
BPAW Bear Paw Mtn. 81.24 359 eP P 15 33 12.6 -1.3
comp=Z,5.5nm,1.0s
BPAW Bear Paw Mtn. 81.24 359 eP P 15 33 12.6 -1.3
comp=Z,5.4nm,1.0s
C36A Pine Crest Far 81.40 324 P P 15 33 14.1 -1.0
baz=81
DOT Dot Lake 81.43 356 eP P 15 33 14.6 -0.3
comp=Z,72nm,1.0s
DOT Dot Lake 81.43 356 eP P 15 33 14.6 -0.3
comp=Z,72nm,1.0s
MCK McKinley 81.56 358 eP P 15 33 14.9 -0.7
MCK pmax pmax
comp=Z,61nm,1.2s
MCK McKinley 81.56 358 eP P 15 33 14.9 -0.7
comp=Z,61nm,1.2s
MCK McKinley 81.56 358 eP P 15 33 14.9 -0.7
comp=Z,61nm,1.2s
D37A Cotton 81.61 323 P P 15 33 14.6 -1.5
baz=81
B34A Aery, Baudette 81.77 325 P P 15 33 15.8 -1.1
baz=82
A33A Warroad 81.79 326 P P 15 33 15.3 -1.8
baz=82
TRF Thorofare Moun 81.88 359 eP P 15 33 15.9 -1.6
comp=Z,18nm,0.8s
TRF Thorofare Moun 81.88 359 eP P 15 33 15.9 -1.6
comp=Z,18nm,0.8s
SJG San Juan 81.95 286 LR LR 16 05 22.0
comp=Z,78nm,20.1s,baz=78,slow=32
C35A Jirik Farms, M 81.99 324 P P 15 33 16.4 -1.7
baz=82
MENT Mentasta 82.11 356 eP P 15 33 17.7 -0.8
MENT Mentasta 82.11 356 eP P 15 33 17.7 -0.8
ASAJ Asahikawa 82.20 41 P P 15 33 19.5 +0.2
comp=Z,6.4nm,0.7s,baz=271,slow=9.5,SNR=4.8
ASAJ Asahikawa 82.20 41 P P 15 33 19.5 +0.2
ASAJ pmax pmax
comp=Z,6.0nm,0.7s
ASAJ Asahikawa 82.20 41 eP P 15 33 18.6 -0.7
ASAJ Asahikawa 82.20 41 eP P 15 33 18.6 -0.7
CELP Cerrillos 82.31 287 eP P 15 33 21.0 +0.7
CELP Cerrillos 82.31 287 eP P 15 33 21.0 +0.7
OBIP Obispado Ponce 82.35 287 eP P 15 33 20.3 -0.2
comp=Z,27nm,0.9s
OBIP Obispado Ponce 82.35 287 eP P 15 33 20.3 -0.2
comp=Z,27nm,0.9s
ICMP Isla Caja de M 82.38 286 P P 15 33 20.3 -0.3
ICMP Isla Caja de M 82.38 286 P P 15 33 20.3 -0.3
D35A Remer 82.47 324 P P 15 33 19.7 -1.0
baz=82
AGMN Agassiz Nation 82.47 325 eP P 15 33 20.0 -0.6
comp=Z,27nm,1.1s
AGMN Agassiz Nation 82.47 325 eP P 15 33 20.0 -0.6
comp=Z,27nm,1.1s
PETK Petropavlovsk- 82.58 27 P P 15 33 19.9 -1.2
comp=Z,4.7nm,0.9s,baz=29,slow=7.6,SNR=6.2
PETK LR LR 16 14 38.5
comp=Z,229nm,18.7s,baz=316,slow=39
PETK Petropavlovsk- 82.58 27 P P 15 33 19.9 -1.2
PETK pmax pmax
comp=Z,5.0nm,0.9s
PETK MLR MLR
comp=Z,229nm,18.7s
A31A Linda, St. Vin 82.62 326 P P 15 33 20.9 -0.5
baz=82
B32A Ashes, Strandq 82.71 326 P P 15 33 21.1 -0.8
baz=82
CRPR Cabo Rojo, PR 82.77 287 eP P 15 33 23.1 +0.5
comp=Z,33nm,1.1s
CRPR Cabo Rojo, PR 82.77 287 eP P 15 33 23.1 +0.5
comp=Z,32nm,1.1s
C33A Trail 82.81 325 P P 15 33 21.5 -0.9
baz=83
E35A Pequot Lakes 83.01 323 P P 15 33 22.7 -0.8
baz=83
F36A Milaca 83.06 322 P P 15 33 23.0 -0.7
baz=83
KMSC Kings Mountain 83.07 308 P P 15 33 24.1 +0.1
baz=83
JFWS Jewell Farm 83.37 319 P P 15 33 23.7 -1.7
JFWS Jewell Farm 83.37 319 P P 15 33 23.7 -1.7
JFWS Jewell Farm 83.37 319 P P 15 33 23.7 -1.7
B30A Myrvik Farm, E 83.49 327 P P 15 33 25.3 -0.6
baz=83
A29A Manning Farm, 83.55 327 P P 15 33 25.3 -0.9
baz=83
F35A Swanville 83.58 323 P P 15 33 25.8 -0.6
baz=83
TZTN Tazewell 83.61 310 eP P 15 33 26.8 +0.1
TZTN Tazewell 83.61 310 eP P 15 33 26.8 +0.1

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| PMR | Palmer | 83.71 | 358 | eP | P | 15 33 26.8 | 0.0 |
| PMR | | | | pmax | pmax | | |
| | comp=Z,68nm,1.2s | | | | | | |
| PMR | Palmer | 83.71 | 358 | eP | P | 15 33 26.8 | 0.0 |
| | comp=Z,68nm,1.2s | | | | | | |
| PMR | Palmer | 83.71 | 358 | eP | P | 15 33 26.8 | 0.0 |
| | comp=Z,68nm,1.2s | | | | | | |
| BLO | Bloomington | 83.73 | 314 | eP | P | 15 33 26.8 | -0.6 |
| BLO | | | | pmax | pmax | | |
| | comp=Z,22nm,0.7s | | | | | | |
| BLO | Bloomington | 83.73 | 314 | eP | P | 15 33 26.8 | -0.6 |
| | comp=Z,22nm,0.7s | | | | | | |
| BLO | Bloomington | 83.73 | 314 | eP | P | 15 33 26.8 | -0.6 |
| | comp=Z,22nm,0.7s | | | | | | |
| B29A | Wagenman Farm, | 83.94 | 327 | P | P | 15 33 27.9 | -0.4 |
| | baz=84 | | | | | | |
| YUK | Yuzh-Kuril'sk | 83.98 | 39c | iP | P | 15 33 37.8 | +9.4 |
| YUK | | | | i | | 15 33 46.1 | |
| YUK | | | | | | 15 36 37.8 | |
| YUK | | | | SS | SS | 15 49 18.6 | -0.1 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,667nm,2.4s | | | | | | |
| KSM | Kuching | 84.07 | 92 | eP | P | 15 33 29.7 | +0.3 |
| | comp=Z,33nm,1.3s | | | | | | |
| KSM | Kuching | 84.07 | 92 | eP | P | 15 33 29.7 | +0.3 |
| | comp=Z,33nm,1.3s | | | | | | |
| WCI | Wyandotte Cave | 84.21 | 313 | eP | P | 15 33 29.4 | -0.4 |
| WCI | | | | pmax | pmax | | |
| | comp=Z,209nm,1.3s | | | | | | |
| WCI | Wyandotte Cave | 84.21 | 313 | eP | P | 15 33 29.4 | -0.4 |
| | comp=Z,210nm,1.3s | | | | | | |
| WCI | Wyandotte Cave | 84.21 | 313 | eP | P | 15 33 29.4 | -0.4 |
| | comp=Z,210nm,1.3s | | | | | | |
| RC01 | Rabbit Creek A | 84.23 | 358 | eP | P | 15 33 29.0 | -0.5 |
| | comp=Z,46nm,1.0s | | | | | | |
| RC01 | Rabbit Creek A | 84.23 | 358 | eP | P | 15 33 29.0 | -0.5 |
| | comp=Z,46nm,1.0s | | | | | | |
| TKL | Tuckaleechee C | 84.30 | 310 | LR | LR | 16 12 09.6 | |
| | comp=Z,542nm,19.6s,baz=97,slow=36 | | | | | | |
| HDIL | Hopedale | 84.43 | 316 | P | P | 15 33 30.1 | -0.7 |
| | baz=84 | | | | | | |
| F33A | 5 Mile Ranch, | 84.44 | 324 | P | P | 15 33 30.0 | -0.8 |
| | baz=84 | | | | | | |
| MAJO | Matsushiro | 84.62 | 49c | iP | P | 15 33 32.0 | +0.1 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,129nm,1.1s | | | | | | |
| MAJO | Matsushiro | 84.62 | 49 | eP | P | 15 33 31.8 | -0.1 |
| | comp=Z,22nm,1.0s | | | | | | |
| MAJO | Matsushiro | 84.62 | 49 | eP | P | 15 33 31.8 | -0.1 |
| | comp=Z,22nm,1.0s | | | | | | |
| MAT | Matsushiro | 84.62 | 49 | P | P | 15 33 31.5 | -0.4 |
| MAT | | | | S | S | 15 43 55.6 | -2.9 |
| MJAR | Matsushiro Arr | 84.62 | 49 | P | P | 15 33 32.1 | +0.2 |
| | comp=Z,14nm,0.9s,baz=302,slow=4.8,SNR=38 | | | | | | |
| MJAR | | | | LR | LR | 16 16 15.1 | |
| | comp=Z,131nm,19.0s,baz=310,slow=39 | | | | | | |
| D30A | Buchanan | 84.68 | 326 | P | P | 15 33 31.2 | -0.8 |
| | baz=84 | | | | | | |
| E31A | Nome | 84.68 | 325 | P | P | 15 33 31.2 | -0.8 |
| | baz=84 | | | | | | |
| B27A | Peters Farms, | 84.82 | 328 | P | P | 15 33 32.0 | -0.7 |
| | baz=85 | | | | | | |
| DLBC | Dease Lake | 84.89 | 348 | P | P | 15 33 33.0 | +0.1 |
| | comp=Z,4.6nm,0.7s,baz=10.0,slow=6.8,SNR=12 | | | | | | |
| CPCT | Cooper Cave | 84.91 | 310 | eP | P | 15 33 33.6 | +0.2 |
| CPCT | Cooper Cave | 84.91 | 310 | eP | P | 15 33 33.6 | +0.2 |
| OLIL | Olney | 84.95 | 314 | eP | P | 15 33 33.0 | -0.5 |
| | comp=Z,37nm,0.9s | | | | | | |
| OLIL | Olney | 84.95 | 314 | eP | P | 15 33 33.0 | -0.5 |
| | comp=Z,37nm,0.9s | | | | | | |
| C28A | Hausauer Farms | 84.96 | 327 | P | P | 15 33 32.5 | -1.0 |
| | baz=85 | | | | | | |
| USIN | University of | 85.20 | 314 | P | P | 15 33 33.9 | -0.9 |
| USIN | University of | 85.20 | 314 | P | P | 15 33 33.9 | -0.9 |
| A25A | Svangstu Ranch | 85.20 | 329 | P | P | 15 33 34.3 | -0.3 |
| | baz=85 | | | | | | |
| B26A | Jensen Ranch, | 85.27 | 329 | P | P | 15 33 33.9 | -1.1 |
| | baz=85 | | | | | | |
| SDDR | Presa de Saban | 85.47 | 290 | eP | P | 15 33 37.9 | +1.4 |
| | comp=Z,43nm,1.1s | | | | | | |
| SDDR | Presa de Saban | 85.47 | 290 | eP | P | 15 33 37.9 | +1.4 |
| | comp=Z,43nm,1.1s | | | | | | |
| EDM | Edmonton | 85.50 | 337 | eP | P | 15 33 35.2 | -0.9 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,72nm,1.1s | | | | | | |
| EDM | Edmonton | 85.50 | 337 | eP | P | 15 33 35.2 | -0.9 |
| | comp=Z,72nm,1.1s | | | | | | |
| EDM | Edmonton | 85.50 | 337 | eP | P | 15 33 35.2 | -0.9 |
| | comp=Z,72nm,1.1s | | | | | | |
| GOGA | Godfrey | 85.53 | 308 | eP | P | 15 33 36.7 | +0.2 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| GOGA | Godfrey | 85.53 | 308 | eP | P | 15 33 36.7 | +0.2 |
| | comp=Z,12nm,0.9s | | | | | | |
| GOGA | Godfrey | 85.53 | 308 | eP | P | 15 33 36.7 | +0.2 |
| | comp=Z,12nm,0.9s | | | | | | |
| SCIA | State Center | 85.66 | 319 | eP | P | 15 33 36.3 | -0.7 |
| | comp=Z,25nm,0.7s | | | | | | |
| SCIA | State Center | 85.66 | 319 | eP | P | 15 33 36.3 | -0.7 |
| | comp=Z,25nm,0.7s | | | | | | |
| SWET | Sewanee | 85.94 | 311 | P | P | 15 33 37.8 | -0.8 |
| | comp=Z,3.7nm,0.9s | | | | | | |
| SWET | Sewanee | 85.94 | 311 | P | P | 15 33 37.8 | -0.8 |
| | comp=Z,3.7nm,0.9s | | | | | | |
| DGMT | Dagmar | 86.02 | 330 | P | P | 15 33 38.6 | -0.2 |
| | baz=86 | | | | | | |
| ECSD | EROS Data Cent | 86.12 | 323 | P | P | 15 33 38.7 | -0.6 |
| | baz=86 | | | | | | |
| ECSD | EROS Data Cent | 86.12 | 323 | eP | P | 15 33 38.3 | -1.0 |
| | comp=Z,13nm,0.8s | | | | | | |
| ECSD | EROS Data Cent | 86.12 | 323 | eP | P | 15 33 38.3 | -1.0 |
| | comp=Z,13nm,0.8s | | | | | | |
| SLM | Saint Louis | 86.26 | 316 | P | P | 15 33 39.4 | -0.6 |
| SLM | Saint Louis | 86.26 | 316 | P | P | 15 33 39.4 | -0.6 |
| SLM | Saint Louis | 86.26 | 316 | P | P | 15 33 39.4 | -0.6 |
| SIUC | Southern Illin | 86.28 | 314 | eP | P | 15 33 39.6 | -0.6 |
| | comp=Z,37nm,0.8s | | | | | | |
| SIUC | Southern Illin | 86.28 | 314 | eP | P | 15 33 39.6 | -0.6 |
| | comp=Z,37nm,0.8s | | | | | | |
| D26A | Manning | 86.39 | 328 | P | P | 15 33 40.2 | -0.4 |
| | baz=86 | | | | | | |
| WVT | Waverly | 86.51 | 312 | eP | P | 15 33 40.0 | -1.3 |
| WVT | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| WVT | Waverly | 86.51 | 312 | eP | P | 15 33 40.0 | -1.3 |
| | comp=Z,13nm,0.9s | | | | | | |
| WVT | Waverly | 86.51 | 312 | eP | P | 15 33 40.0 | -1.3 |
| | comp=Z,13nm,0.9s | | | | | | |
| BDFB | Brasilia | 86.67 | 248 | P | P | 15 33 43.8 | +1.4 |
| | comp=Z,4.7nm,0.7s,baz=152,slow=2.9,SNR=4.5 | | | | | | |
| BDFB | | | | LR | LR | 16 13 36.9 | |
| | comp=Z,573nm,20.4s,baz=31,slow=36 | | | | | | |
| BDFB | Brasilia | 86.67 | 248 | P | P | 15 33 43.8 | +1.4 |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| BDFB | | | | MLR | MLR | | |
| | comp=Z,573nm,20.4s | | | | | | |
| L35A | Bielow Farm, R | 86.74 | 321 | P | P | 15 33 41.3 | -1.0 |
| | baz=86 | | | | | | |
| F27A | Lemmon | 87.09 | 327 | P | P | 15 33 43.0 | -1.0 |
| | baz=87 | | | | | | |
| WRAK | Wrangell Islan | 87.21 | 348 | eP | P | 15 33 44.5 | +0.2 |
| | comp=Z,71nm,1.2s | | | | | | |
| WRAK | Wrangell Islan | 87.21 | 348 | eP | P | 15 33 44.5 | +0.2 |
| | comp=Z,71nm,1.2s | | | | | | |
| E25A | Miller Ranch, | 87.22 | 328 | P | P | 15 33 44.5 | -0.1 |
| | baz=87 | | | | | | |
| F26A | Lodgepole | 87.40 | 327 | P | P | 15 33 44.7 | -0.8 |
| | baz=87 | | | | | | |
| KDAK | Kodiak Island | 87.60 | 360 | P | P | 15 33 46.1 | 0.0 |
| | comp=Z,25nm,1.1s,baz=7.9,slow=1.3,SNR=6.8 | | | | | | |
| KDAK | Kodiak Island | 87.60 | 360 | iP | P | 15 33 46.9 | +0.8 |
| F25A | Bowman | 87.69 | 328 | P | P | 15 33 46.2 | -0.7 |
| | baz=87 | | | | | | |
| G26A | Maurine | 87.80 | 327 | P | P | 15 33 46.5 | -1.0 |
| | baz=88 | | | | | | |
| M33A | Taylor Creek F | 87.98 | 321 | P | P | 15 33 47.6 | -0.8 |
| | baz=88 | | | | | | |
| H27A | Howes | 88.06 | 326 | P | P | 15 33 47.7 | -1.0 |
| | baz=88 | | | | | | |
| N34A | Lincoln | 88.16 | 320 | P | P | 15 33 48.2 | -1.0 |
| | baz=88 | | | | | | |
| J29A | Okreek | 88.18 | 324 | P | P | 15 33 48.3 | -1.0 |
| | baz=88 | | | | | | |
| G25A | Newell | 88.24 | 327 | P | P | 15 33 48.9 | -0.6 |
| | baz=88 | | | | | | |
| LAO | LASA Array | 88.27 | 330 | P | P | 15 33 50.0 | +0.3 |
| | baz=88 | | | | | | |
| LAO | LASA Array | 88.27 | 330 | eP | P | 15 33 50.1 | +0.4 |
| | comp=Z,98nm,1.5s | | | | | | |
| LAO | LASA Array | 88.27 | 330 | eP | P | 15 33 50.1 | +0.4 |
| | comp=Z,98nm,1.5s | | | | | | |
| K30A | Basset | 88.38 | 323 | P | P | 15 33 50.2 | -0.1 |
| | baz=88 | | | | | | |
| H26A | Fairpoint | 88.40 | 326 | P | P | 15 33 49.5 | -0.8 |
| | baz=88 | | | | | | |
| BGNE | Belgrade | 88.59 | 322 | P | P | 15 33 50.9 | -0.4 |
| | baz=88 | | | | | | |
| EGMT | Eagleton | 88.59 | 332 | P | P | 15 33 50.3 | -1.0 |
| | baz=88 | | | | | | |
| EGMT | Eagleton | 88.59 | 332 | eP | P | 15 33 50.2 | -1.0 |
| | comp=Z,45nm,1.1s | | | | | | |
| EGMT | Eagleton | 88.59 | 332 | eP | P | 15 33 50.2 | -1.0 |
| | comp=Z,45nm,1.1s | | | | | | |
| K29A | Lazy Trails An | 88.66 | 324 | P | P | 15 33 51.0 | -0.6 |
| | baz=88 | | | | | | |
| N33A | J Bar K, Exete | 88.72 | 321 | P | P | 15 33 50.9 | -1.0 |
| | baz=88 | | | | | | |
| O34A | Beatrice | 88.73 | 320 | P | P | 15 33 51.5 | -0.4 |
| | baz=88 | | | | | | |
| H25A | Fruitdale | 88.76 | 327 | P | P | 15 33 51.1 | -1.0 |
| | baz=88 | | | | | | |
| I26A | New Underwood | 88.89 | 326 | P | P | 15 33 51.6 | -1.1 |
| | baz=89 | | | | | | |
| R37A | Teagarden Farm | 89.07 | 318 | P | P | 15 33 52.4 | -1.1 |
| | baz=89 | | | | | | |
| WALA | Waterton Lakes | 89.23 | 335 | eP | P | 15 33 53.0 | -1.2 |
| | comp=Z,28nm,1.2s | | | | | | |
| WALA | Waterton Lakes | 89.23 | 335 | eP | P | 15 33 53.0 | -1.2 |
| | comp=Z,28nm,1.2s | | | | | | |
| P34A | Walnut Farm, R | 89.26 | 320 | P | P | 15 33 54.3 | -0.1 |
| | baz=89 | | | | | | |
| I25A | Rochford | 89.29 | 327 | P | P | 15 33 54.3 | -0.4 |
| | baz=89 | | | | | | |
| RSSD | Black Hills | 89.35 | 327 | eP | P | 15 33 54.8 | -0.2 |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| RSSD | Black Hills | 89.35 | 327 | eP | P | 15 33 54.8 | -0.2 |
| | comp=Z,30nm,1.3s | | | | | | |
| RSSD | Black Hills | 89.35 | 327 | eP | P | 15 33 54.8 | -0.2 |
| | comp=Z,30nm,1.3s | | | | | | |
| BRAL | Brewton | 89.39 | 308 | eP | P | 15 33 56.1 | +0.9 |
| | comp=Z,98nm,1.0s | | | | | | |
| BRAL | Brewton | 89.39 | 308 | eP | P | 15 33 56.1 | +0.9 |
| | comp=Z,98nm,1.0s | | | | | | |
| N31A | Bailey Ranch, | 89.43 | 322 | P | P | 15 33 54.1 | -1.1 |
| | baz=89 | | | | | | |
| R36A | Gordon, Harris | 89.43 | 318 | P | P | 15 33 54.9 | -0.3 |
| | baz=89 | | | | | | |
| S37A | Fort Scott | 89.46 | 317 | P | P | 15 33 54.5 | -0.9 |
| | baz=89 | | | | | | |
| KSU1 | Kansas State U | 89.47 | 319 | P | P | 15 33 54.9 | -0.6 |
| | baz=89 | | | | | | |
| J26A | Sides Ranch, S | 89.54 | 326 | P | P | 15 33 54.9 | -0.8 |
| | baz=89 | | | | | | |
| T37A | Cheneyville 18 | 89.97 | 317 | P | P | 15 33 57.0 | -0.8 |
| | baz=90 | | | | | | |
| U38A | Gravette | 90.15 | 316 | P | P | 15 33 58.1 | -0.6 |
| | baz=90 | | | | | | |
| Q33A | Connelly Farm, | 90.20 | 320 | P | P | 15 33 58.4 | -0.4 |
| | baz=90 | | | | | | |
| BLMT | Blacktail Moun | 90.29 | 335 | eP | P | 15 33 59.5 | +0.2 |
| | comp=Z,30nm,1.1s | | | | | | |
| BLMT | Blacktail Moun | 90.29 | 335 | eP | P | 15 33 59.5 | +0.2 |
| | comp=Z,30nm,1.1s | | | | | | |
| YBMT | Yellow Bay | 90.29 | 335 | eP | P | 15 33 58.6 | -0.6 |
| | comp=Z,38nm,1.2s | | | | | | |
| YBMT | Yellow Bay | 90.29 | 335 | eP | P | 15 33 58.6 | -0.6 |
| | comp=Z,38nm,1.2s | | | | | | |
| S35A | Otter Creek Ra | 90.34 | 318 | P | P | 15 33 58.9 | -0.6 |
| | baz=90 | | | | | | |
| GCMT | Greycliff | 90.40 | 331 | P | P | 15 34 02.1 | +2.3 |
| | comp=Z,11nm,1.4s | | | | | | |
| GCMT | Greycliff | 90.40 | 331 | P | P | 15 34 02.1 | +2.3 |
| | comp=Z,11nm,1.4s | | | | | | |
| HRY | Holter Researc | 90.47 | 333 | eP | P | 15 33 59.7 | -0.4 |
| | comp=Z,4.0nm,0.6s | | | | | | |
| HRY | Holter Researc | 90.47 | 333 | eP | P | 15 33 59.7 | -0.4 |
| | comp=Z,4.0nm,0.6s | | | | | | |
| JTMT | Jette | 90.48 | 335 | eP | P | 15 34 00.1 | 0.0 |
| | comp=Z,43nm,1.3s | | | | | | |
| JTMT | Jette | 90.48 | 335 | eP | P | 15 34 00.1 | 0.0 |
| | comp=Z,43nm,1.3s | | | | | | |
| T36A | Boggs Farm, Ca | 90.55 | 318 | P | P | 15 33 59.8 | -0.6 |
| | baz=90 | | | | | | |
| BSMT | Bassoo Peak | 90.57 | 335 | eP | P | 15 33 59.6 | -1.0 |
| | comp=Z,17nm,1.2s | | | | | | |
| BSMT | Bassoo Peak | 90.57 | 335 | eP | P | 15 33 59.6 | -1.0 |
| | comp=Z,17nm,1.2s | | | | | | |
| V38A | Canehill | 90.57 | 316 | P | P | 15 34 00.5 | -0.1 |
| | baz=90 | | | | | | |
| SWMT | Swartz Lake | 90.59 | 334 | eP | P | 15 34 00.1 | -0.5 |
| | comp=Z,32nm,1.0s | | | | | | |
| SWMT | Swartz Lake | 90.59 | 334 | eP | P | 15 34 00.1 | -0.5 |
| | comp=Z,32nm,1.0s | | | | | | |
| SLMT | Seeley Lake | 90.63 | 334 | eP | P | 15 33 59.6 | -1.3 |
| | comp=Z,22nm,1.3s | | | | | | |
| SLMT | Seeley Lake | 90.63 | 334 | eP | P | 15 33 59.6 | -1.3 |
| | comp=Z,22nm,1.3s | | | | | | |
| RLMT | Red Lodge | 90.79 | 330 | P | P | 15 34 01.3 | -0.4 |
| | baz=90 | | | | | | |
| CHMT | Chamberlain Mo | 90.82 | 334 | eP | P | 15 34 00.5 | -1.3 |
| | comp=Z,11nm,1.3s | | | | | | |
| CHMT | Chamberlain Mo | 90.82 | 334 | eP | P | 15 34 00.5 | -1.3 |
| | comp=Z,11nm,1.3s | | | | | | |
| U36A | Oologah | 90.94 | 317 | P | P | 15 34 02.0 | -0.3 |
| | baz=91 | | | | | | |
| V37A | Hulbert | 90.98 | 316 | P | P | 15 34 01.8 | -0.7 |
| | baz=91 | | | | | | |
| NEW | Newport | 91.00 | 337 | P | P | 15 34 02.4 | 0.0 |
| | comp=Z,5.6nm,0.7s,baz=47,slow=6.2,SNR=14 | | | | | | |
| NEW | Newport | 91.00 | 337 | eP | P | 15 34 01.2 | -1.2 |
| NEW | | | | pmax | pmax | | |
| | comp=Z,28nm,1.2s | | | | | | |
| NEW | Newport | 91.00 | 337 | P | P | 15 34 02.4 | 0.0 |
| | baz=91 | | | | | | |
| NEW | Newport | 91.00 | 337 | eP | P | 15 34 01.2 | -1.2 |
| | comp=Z,28nm,1.2s | | | | | | |
| NEW | Newport | 91.00 | 337 | eP | P | 15 34 01.2 | -1.2 |
| | comp=Z,28nm,1.2s | | | | | | |
| T35A | Sooner Cattle | 91.00 | 318 | P | P | 15 34 01.9 | -0.7 |
| | baz=91 | | | | | | |
| MIAR | Mount Ida | 91.02 | 314 | eP | P | 15 34 02.6 | -0.1 |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| MIAR | Mount Ida | 91.02 | 314 | P | P | 15 34 02.5 | -0.1 |
| | baz=91 | | | | | | |
| MIAR | Mount Ida | 91.02 | 314 | eP | P | 15 34 02.6 | -0.1 |
| | comp=Z,16nm,1.1s | | | | | | |
| MIAR | Mount Ida | 91.02 | 314 | eP | P | 15 34 02.6 | -0.1 |
| | comp=Z,16nm,1.1s | | | | | | |
| MSO | Missoula | 91.15 | 334 | P | P | 15 34 02.1 | -1.1 |
| | baz=91 | | | | | | |
| BOZ | Bozeman (W) | 91.28 | 332 | eP | P | 15 34 03.9 | 0.0 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| BOZ | Bozeman (W) | 91.28 | 332 | P | P | 15 34 04.1 | +0.1 |
| | baz=91 | | | | | | |
| BOZ | Bozeman (W) | 91.28 | 332 | eP | P | 15 34 03.9 | 0.0 |
| | comp=Z,7.3nm,0.9s | | | | | | |
| BOZ | Bozeman (W) | 91.28 | 332 | eP | P | 15 34 03.9 | 0.0 |
| | comp=Z,7.3nm,0.9s | | | | | | |
| TUL1 | Tulsa | 91.33 | 317 | P | P | 15 34 03.4 | -0.7 |
| | baz=91 | | | | | | |
| LRM | Limekiln Ridge | 91.45 | 333 | eP | P | 15 34 03.9 | -1.0 |
| | comp=Z,69nm,1.1s | | | | | | |
| LRM | Limekiln Ridge | 91.45 | 333 | eP | P | 15 34 03.8 | -1.0 |
| | comp=Z,69nm,1.1s | | | | | | |
| M25A | Palm-Egli Farm | 91.46 | 325 | P | P | 15 34 04.3 | -0.5 |
| | baz=91 | | | | | | |
| U35A | Pawnee | 91.52 | 318 | P | P | 15 34 04.3 | -0.6 |
| | baz=91 | | | | | | |
| R31A | Burdett | 91.61 | 320 | P | P | 15 34 04.5 | -0.9 |
| | baz=91 | | | | | | |
| K22A | Casper | 91.62 | 327 | P | P | 15 34 04.6 | -1.0 |
| | baz=91 | | | | | | |
| X38A | Whitesboro | 91.66 | 315 | P | P | 15 34 05.7 | 0.0 |
| | baz=92 | | | | | | |
| W37A | Quinton | 91.67 | 316 | P | P | 15 34 04.9 | -0.8 |
| | baz=92 | | | | | | |
| QLMT | Earthquake Lak | 91.89 | 332 | eP | P | 15 34 03.4 | -3.4 |
| | comp=Z,1.4nm,1.1s | | | | | | |
| DLMT | Dillon | 91.89 | 332 | eP | P | 15 34 06.2 | -0.6 |
| | comp=Z,10.0nm,1.0s | | | | | | |
| DLMT | Dillon | 91.89 | 332 | eP | P | 15 34 06.2 | -0.6 |
| | comp=Z,10.0nm,1.0s | | | | | | |
| X37A | Clayton | 92.03 | 315 | P | P | 15 34 06.8 | -0.6 |
| | baz=92 | | | | | | |
| PHWY | Pilot Hill | 92.21 | 326 | eP | P | 15 34 07.9 | -0.6 |
| | comp=Z,17nm,0.8s | | | | | | |
| PHWY | Pilot Hill | 92.21 | 326 | eP | P | 15 34 07.9 | -0.6 |
| | comp=Z,17nm,0.8s | | | | | | |
| MCMT | McKenzie Canyo | 92.44 | 332 | eP | P | 15 34 09.6 | +0.2 |
| | comp=Z,4.9nm,1.2s | | | | | | |
| MCMT | McKenzie Canyo | 92.44 | 332 | eP | P | 15 34 09.6 | +0.2 |
| | comp=Z,4.9nm,1.2s | | | | | | |
| IMW | Indian Meadow | 92.47 | 331 | eP | P | 15 34 10.3 | +0.7 |
| | comp=Z,6.0nm,0.9s | | | | | | |
| IMW | Indian Meadow | 92.47 | 331 | eP | P | 15 34 10.3 | +0.7 |
| | comp=Z,6.0nm,0.9s | | | | | | |
| N23A | Red Feather La | 92.76 | 326 | P | P | 15 34 10.2 | -0.8 |
| | baz=92 | | | | | | |
| TPAW | Teton Pass | 92.82 | 330 | eP | P | 15 34 11.2 | -0.1 |
| | comp=Z,6.0nm,0.8s | | | | | | |
| TPAW | Teton Pass | 92.82 | 330 | eP | P | 15 34 11.1 | -0.1 |
| | comp=Z,6.0nm,0.8s | | | | | | |
| ISCO | Idaho Springs | 93.47 | 325 | eP | P | 15 34 13.1 | -1.3 |
| ISCO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| ISCO | Idaho Springs | 93.47 | 325 | P | P | 15 34 13.5 | -0.9 |
| | baz=93 | | | | | | |
| ISCO | Idaho Springs | 93.47 | 325 | eP | P | 15 34 13.1 | -1.3 |
| | comp=Z,7.4nm,1.0s | | | | | | |
| ISCO | Idaho Springs | 93.47 | 325 | eP | P | 15 34 13.1 | -1.3 |
| | comp=Z,7.4nm,1.0s | | | | | | |
| R26A | Arlington | 93.60 | 323 | P | P | 15 34 14.0 | -0.8 |
| | baz=93 | | | | | | |
| WMOK | Wichita Mounta | 93.85 | 318 | eP | P | 15 34 15.0 | -0.8 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| WMOK | Wichita Mounta | 93.85 | 318 | eP | P | 15 34 15.0 | -0.8 |
| | comp=Z,8.3nm,1.0s | | | | | | |
| WMOK | Wichita Mounta | 93.85 | 318 | eP | P | 15 34 15.0 | -0.8 |
| | comp=Z,8.3nm,1.0s | | | | | | |
| HWUT | Hardware Ranch | 94.64 | 330 | eP | P | 15 34 18.2 | -1.3 |
| | comp=Z,11nm,0.9s | | | | | | |
| HWUT | Hardware Ranch | 94.64 | 330 | eP | P | 15 34 18.2 | -1.3 |
| | comp=Z,11nm,0.9s | | | | | | |
| MFID | Camas Ranch | 94.76 | 333 | eP | P | 15 34 19.7 | -0.2 |
| | comp=Z,11nm,1.0s | | | | | | |
| MFID | Camas Ranch | 94.76 | 333 | eP | P | 15 34 19.7 | -0.2 |
| | comp=Z,11nm,1.0s | | | | | | |
| SDCO | Great Sand Dun | 95.04 | 324 | P | P | 15 34 20.2 | -1.4 |
| | baz=95 | | | | | | |
| SDCO | Great Sand Dun | 95.04 | 324 | eP | P | 15 34 19.8 | -1.8 |
| | comp=Z,5.6nm,1.1s | | | | | | |
| SDCO | Great Sand Dun | 95.04 | 324 | eP | P | 15 34 19.8 | -1.8 |
| | comp=Z,5.6nm,1.1s | | | | | | |
| Z31A | Sharp Cattle R | 95.66 | 318 | P | P | 15 34 23.4 | -0.7 |
| | baz=95 | | | | | | |
| S22A | 4UR Ranch, Cre | 95.68 | 325 | P | P | 15 34 23.3 | -1.2 |
| | baz=95 | | | | | | |
| ABTX | Abilene, Hawle | 95.90 | 317 | P | P | 15 34 24.2 | -1.1 |
| | baz=96 | | | | | | |
| PV01 | Paradox Valley | 96.18 | 326 | eP | P | 15 34 25.5 | -1.2 |
| | comp=Z,797nm,1.3s | | | | | | |
| PV01 | Paradox Valley | 96.18 | 326 | eP | P | 15 34 25.5 | -1.2 |
| | comp=Z,797nm,1.3s | | | | | | |
| SRU | San Rafael | 96.26 | 328 | eP | P | 15 34 25.2 | -1.8 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| SRU | San Rafael | 96.26 | 328 | eP | P | 15 34 25.2 | -1.8 |
| | comp=Z,3.1nm,0.6s | | | | | | |
| SRU | San Rafael | 96.26 | 328 | eP | P | 15 34 25.2 | -1.8 |
| | comp=Z,3.0nm,0.6s | | | | | | |
| DUG | Dugway | 96.33 | 330 | P | P | 15 34 24.8 | -2.4 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| DUG | Dugway | 96.33 | 330 | P | P | 15 34 26.2 | -1.0 |
| | baz=96 | | | | | | |
| DUG | Dugway | 96.33 | 330 | P | P | 15 34 24.8 | -2.4 |
| | comp=Z,3.6nm,0.8s | | | | | | |
| DUG | Dugway | 96.33 | 330 | P | P | 15 34 24.8 | -2.4 |
| | comp=Z,3.6nm,0.8s | | | | | | |
| 232A | Coleman | 96.45 | 316 | P | P | 15 34 27.4 | -0.3 |
| | baz=96 | | | | | | |
| I04A | Tendick Farm, | 96.65 | 338 | P | P | 15 34 27.9 | -0.6 |
| | baz=96 | | | | | | |
| MSU | Marysvale | 97.48 | 329 | eP | P | 15 34 32.2 | -0.3 |
| MSU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| MSU | Marysvale | 97.48 | 329 | eP | P | 15 34 32.2 | -0.3 |
| | comp=Z,4.0nm,1.0s | | | | | | |
| MSU | Marysvale | 97.48 | 329 | eP | P | 15 34 32.2 | -0.3 |
| | comp=Z,4.0nm,1.0s | | | | | | |
| CPUP | Villa Florida | 99.94 | 245 | LR | LR | 16 23 24.5 | |
| | comp=Z,286nm,18.2s,baz=42,slow=38 | | | | | | |
| NVAR | Mina Array Bea | 100.02 | 333 | P | Pdif | 15 34 43.9 | -0.1 |
| | comp=Z,0.6nm,0.7s,baz=35,slow=4.9,SNR=4.3 | | | | | | |
| NVAR | | | | LR | LR | 16 24 03.7 | |
| | comp=Z,811nm,18.2s,baz=49,slow=38 | | | | | | |
| TXAR | Lajitas Array | 100.64 | 317 | P | Pdif | 15 34 46.4 | -0.3 |
| | comp=Z,0.2nm,0.5s,baz=38,slow=4.6,SNR=3.7 | | | | | | |
| TXAR | | | | PP | PP | 15 39 02.6 | +10 |
| | comp=Z,1.4nm,1.1s,baz=47,slow=7.3,SNR=4.5 | | | | | | |
| TXAR | Lajitas Array | 100.64 | 317 | P | Pdif | 15 34 46.4 | -0.3 |
| TXAR | | | | | | 15 39 02.6 | |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| SYO | Syowa Base | 104.12 | 175⇑ | epPdiff | pPdif | 15 35 16.6 | +10 |
| WRA | Warramunga Arr | 115.47 | 97 | PKP | PKPdf | 15 39 39.6 | -0.9 |
| | comp=Z,0.6nm,0.7s,baz=325,slow=1.8,SNR=8.3 | | | | | | |
| WRA | | | | PP | PP | 15 40 46.5 | +4.1 |
| | comp=Z,1.2nm,0.9s,baz=311,slow=7.0,SNR=5.1 | | | | | | |
| WRA | Warramunga Arr | 115.47 | 97 | PKIKP | PKPdf | 15 39 39.6 | -0.9 |
| WRA | | | | | | 15 40 46.6 | |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| ASAR | Alice Springs | 116.92 | 101 | PKP | PKPdf | 15 39 42.4 | -0.9 |
| | comp=Z,0.6nm,0.4s,baz=305,slow=1.3,SNR=20 | | | | | | |
| ASAR | | | | PKKPbc | PKKPab | 15 50 12.0 | -0.1 |
| | comp=Z,0.3nm,0.7s,baz=125,slow=4.0,SNR=8.2 | | | | | | |
| CTA | Charters Tower | 125.29 | 91 | PKP | PKPdf | 15 39 59.4 | 0.0 |
| | comp=Z,4.8nm,1.0s,baz=90,slow=2.0,SNR=2.6 | | | | | | |
| CTA | Charters Tower | 125.29 | 91 | PKIKP | PKPdf | 15 39 59.4 | 0.0 |
| CTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| VNDA | Vanda | 133.16 | 168 | PKP | PKPdf | 15 40 12.4 | -0.3 |
| | comp=Z,0.5nm,0.7s,baz=248,slow=3.6,SNR=2.9 | | | | | | |
| VNDA | | | | SKPbc | SKPbc | 15 43 39.5 | -0.3 |
| | comp=Z,3.1nm,1.1s,baz=241,slow=5.3,SNR=6.1 | | | | | | |
| VNDA | Vanda | 133.16 | 168 | PKIKP | PKPdf | 15 40 12.4 | -0.3 |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| VNDA | | | | pmax | pmax | | |
| | comp=N,3.0nm,1.1s | | | | | | |
| SBA | Scott Base | 133.74 | 169 | ePKIKP | PKPdf | 15 40 15.7 | +1.9 |
| SBA | Scott Base | 133.74 | 169 | ePKPdf | PKPdf | 15 40 15.7 | +1.9 |
| SBA | Scott Base | 133.74 | 169 | ePKIKP | PKPdf | 15 40 15.7 | +1.9 |
| MSVF | Nonsavu | 149.41 | 63 | ePKP2 | PKPbc | 15 40 49.1 | +1.2 |
| MSVF | Nonsavu | 149.41 | 63 | ePKPbc | PKPbc | 15 40 49.1 | +1.2 |
| MSVF | Nonsavu | 149.41 | 63 | ePKPbc | PKPbc | 15 40 49.1 | +1.2 |

*PGC **03** 15:25:50.4±4.8, 49.°12N×129.°66W, h10km, ML3.3/13, Mw4.3, 238km southwest of Pt. Hardy, Bc Vancouver Island Region*

*IDC **03** 15:25:54.2±2.1, 49.°44N×129.°17W, h0km, mb3.7/3, mb1 4.0/7, mb1mx3.6/55, mbtmp3.7/7, ML3.3/5, MS3.4/6, Ms1 3.4/6, ms1mx3.1/50, Error ellipse: s-maj=34.3km s-min=12.0km az=74.0*

*NEIC **03** 15:25:57.3±1.2, 49.°48N×128.°97W, h10km, mb4.4/3, MW4.3(OTT), Error ellipse: s-maj=19.6km s-min=9.2km az=64.0*

**ISC 03 15:25:55.9**±2.7, **49.°42N**±0.°06×**129.°07W**±0.°07, **h3**km±16km, **n74**, σ**1.°56**/76, **mb4.3**/5, **Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EDB | Eliza Dome | 1.34 | 70 | Pn | Pn | 15 26 19.7 | -1.9 |
| EDB | | | | Sn | Sn | 15 26 40.6 | +0.7 |
| EDB | Eliza Dome | 1.34 | 70 | Pn | Pn | 15 26 19.7 | -1.9 |
| EDB | | | | Sn | Sn | 15 26 40.6 | +0.7 |
| PHC | Port Hardy | 1.66 | 39 | Pn | Pn | 15 26 24.6 | -1.4 |
| PHC | | | | Sn | Sg | 15 26 48.8 | -0.6 |
| PHC | Port Hardy | 1.66 | 39 | Pn | Pn | 15 26 24.6 | -1.4 |
| PHC | | | | Sn | Sg | 15 26 48.8 | -0.6 |
| WOSB | Woss | 1.78 | 64 | Pn | Pn | 15 26 27.0 | -0.6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TLCB** | **Telegraph Cove** | **1.83** | **51** | Pn | **Pn** | **15 26 27.4** | **-0.7** |
| TLCB | | | | Sn | **Sg** | **15 26 54.4** | **-0.3** |
| **TOFB** | **Tofino** | **2.09** | **96** | Pn | **Pn** | **15 26 28.9** | **-2.8** |
| **NCRB** | **Newcastle Ridg** | **2.18** | **62** | Pn | **Pn** | **15 26 32.9** | **-0.3** |
| **BTB** | **Buttle Lake** | **2.31** | **87** | Pn | **Pn** | **15 26 33.0** | **-2.0** |
| BTB | | | | Sn | **Sn** | **15 27 04.4** | **+0.3** |
| **OZB** | **Mount Ozzard** | **2.39** | **100** | Pn | **Pn** | **15 26 32.9** | **-3.0** |
| **CBB** | **Campbell River** | **2.48** | **74** | Pn | **Pn** | **15 26 35.8** | **-1.4** |
| CBB | | | | Sn | **Sb** | **15 27 09.6** | **-2.3** |
| **BBB** | **Bella Bella** | **2.83** | **12** | Pn | **Pn** | **15 26 39.6** | **-2.4** |
| | 1.7nm,0.3s,baz=222,slow=6.2,SNR=26 | | | | | | |
| BBB | | | | Sn | **Sn** | **15 27 13.8** | **-2.7** |
| | 4.8nm,0.3s,baz=321,slow=20,SNR=3.1 | | | | | | |
| **BBB** | **Bella Bella** | **2.83** | **12** | Pn | **Pn** | **15 26 40.1** | **-1.8** |
| BBB | | | | Sn | **Sn** | **15 27 15.6** | **-1.0** |
| **MGB** | **Mount Grey** | **2.90** | **97** | Pn | **Pn** | **15 26 40.5** | **-2.5** |
| MGB | | | | Sn | **Sn** | **15 27 16.6** | **-1.8** |
| **TXB** | **Texada** | **3.03** | **83** | Pn | **Pn** | **15 26 43.3** | **-1.4** |
| **YOUB** | **Youbou, Lake C** | **3.20** | **98** | Pn | **Pn** | **15 26 44.8** | **-2.3** |
| YOUB | | | | Sn | **Sn** | **15 27 24.4** | **-1.3** |
| **SHB** | **Sechelt** | **3.39** | **85** | Pn | **Pn** | **15 26 49.3** | **-0.4** |
| **LZB** | **Mount Lazard** | **3.54** | **101** | Pn | **Pn** | **15 26 49.7** | **-2.2** |
| LZB | | | | Sn | **Sn** | **15 27 33.2** | **-1.1** |
| **PGC** | **Sidney** | **3.77** | **100** | Pn | **Pn** | **15 26 53.5** | **-1.4** |
| **NLWA** | **Neilton Lookou** | **4.01** | **118** | *e*Pn | **Pn** | **15 26 55.7** | **-2.5** |
| **UBRB** | **Upper Baezaeko** | **4.68** | **40** | Pn | **Pn** | **15 27 08.5** | **+1.0** |
| **B05A** | **Bryant** | **4.75** | **101** | P | **Pn** | **15 27 05.7** | **-2.6** |
| | baz=5.1 | | | | | | |
| **LLLB** | **Lillooet** | **4.78** | **73** | Pn | **Pn** | **15 27 09.7** | **+0.8** |
| **LON** | **Longmire** | **5.55** | **116** | *e*Pn | **Pn** | **15 27 17.8** | **-1.5** |
| | 3.7nm,0.7s | | | | | | |
| **PNT** | **Penticton** | **6.17** | **87** | Pn | **Pn** | **15 27 27.7** | **-0.2** |
| **NEW** | **Newport** | **7.97** | **94** | Pn | **Pn** | **15 27 52.4** | **-0.2** |
| | 0.3nm,0.3s,baz=280,slow=15,SNR=4.6 | | | | | | |
| NEW | | | | LR | LR | 15 31 04.4 | |
| | comp=Z,364nm,20.3s,baz=266,slow=39 | | | | | | |
| **NEW** | **Newport** | **7.97** | **94** | P | **Pn** | **15 27 51.9** | **-0.7** |
| | baz=8.3 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **8.88** | **148** | Pn | **Pn** | **15 28 04.7** | **-0.5** |
| | 0.1nm,0.3s,baz=2.7,slow=12,SNR=7.6 | | | | | | |
| YBH | | | | LR | LR | 15 31 05.7 | |
| | comp=Z,119nm,20.3s,baz=336,slow=35 | | | | | | |
| **M02C** | **Callahan** | **9.14** | **149** | P | **Pn** | **15 28 08.2** | **-0.4** |
| | baz=9.1 | | | | | | |
| **N02D** | **Trinity Center** | **9.56** | **150** | P | **Pn** | **15 28 13.0** | **-1.5** |
| | baz=9.5 | | | | | | |
| **MSO** | **Missoula** | **10.44** | **99** | P | **Pn** | **15 28 25.9** | **-0.6** |
| | baz=11 | | | | | | |
| **SLMT** | **Seeley Lake** | **10.60** | **96** | *e*Pn | **Pn** | **15 28 27.7** | **-1.0** |
| | 15nm,1.5s | | | | | | |
| **BOZ** | **Bozeman (W)** | **12.37** | **101** | P | **Pn** | **15 28 50.5** | **-2.4** |
| | baz=13 | | | | | | |
| **NVAR** | **Mina Array Bea** | **13.43** | **141** | Pn | **Pn** | **15 29 09.2** | **+1.7** |
| | 0.1nm,0.3s,baz=325,slow=10,SNR=5.0 | | | | | | |
| **H17A** | **Grant Village** | **13.59** | **105** | P | **P** | **15 29 21.8** | **+2.8** |
| | baz=14 | | | | | | |
| **IMW** | **Indian Meadow** | **13.61** | **107** | P | **Pn** | **15 29 10.9** | **+1.0** |
| | 13nm,1.1s | | | | | | |
| **MOOW** | **Moose Ponds** | **13.81** | **107** | *e*P | Pn | 15 29 16.1 | +3.5 |
| | 14nm,1.1s | | | | | | |
| **TPAW** | **Teton Pass** | **13.81** | **109** | P | **Pn** | **15 29 15.2** | **+2.5** |
| | 16nm,1.1s | | | | | | |
| TPAW | | | | *e* | | 15 29 23.4 | |
| **LOHW** | **Long Hollow** | **13.96** | **108** | *e*P | **Pn** | **15 29 16.3** | **+1.6** |
| | 12nm,1.3s | | | | | | |
| LOHW | | | | *e* | | 15 29 24.9 | |
| **RLMT** | **Red Lodge** | **14.11** | **100** | P | **P** | **15 29 27.1** | **+2.5** |
| | baz=14 | | | | | | |
| **DUG** | **Dugway** | **14.74** | **123** | P | **P** | **15 29 33.4** | **+1.8** |
| | baz=15 | | | | | | |
| **DUG** | **Dugway** | **14.74** | **123** | P | **Pn** | **15 29 26.8** | **+1.4** |
| | 6.3nm,1.1s | | | | | | |
| DUG | | | | *e* | | 15 29 33.6 | |
| **KDAK** | **Kodiak Island** | **16.20** | **310** | LR | LR | 15 34 26.1 | |
| | comp=Z,128nm,20.0s,baz=122,slow=32 | | | | | | |
| **FFC** | **Flin Flon** | **17.42** | **62** | *e*P | **P** | **15 30 00.9** | **-0.1** |
| | 33nm,1.0s | | | | | | |
| **G25A** | **Newell** | **17.87** | **94** | P | **P** | **15 30 06.8** | **+0.7** |
| | baz=18 | | | | | | |
| **D26A** | **Manning** | **17.87** | **88** | P | **P** | **15 30 06.9** | **+0.7** |
| | baz=18 | | | | | | |
| **ILAR** | **Eielson Array** | **18.07** | **335** | P | **P** | **15 30 07.7** | **-0.4** |
| | 0.0nm,0.3s,baz=147,slow=10,SNR=8.1 | | | | | | |
| **F26A** | **Lodgepole** | **18.11** | **91** | P | **P** | **15 30 10.1** | **+1.4** |
| | baz=18 | | | | | | |
| **I25A** | **Rochford** | **18.15** | **98** | P | **P** | **15 30 09.9** | **+0.6** |
| | baz=18 | | | | | | |
| **N23A** | **Red Feather La** | **18.34** | **109** | P | **P** | **15 30 12.7** | **+1.1** |
| | baz=19 | | | | | | |
| **G26A** | **Maurine** | **18.36** | **93** | P | **P** | **15 30 12.3** | **+0.8** |
| | baz=19 | | | | | | |
| **PV01** | **Paradox Valley** | **18.55** | **120** | *e*P | **P** | **15 30 13.5** | **-0.3** |
| | 521nm,1.0s | | | | | | |
| **B28A** | **Dugan Ranch, T** | **18.84** | **82** | P | **Pn** | **15 30 19.5** | **+2.4** |
| | baz=19 | | | | | | |
| **INK** | **Inuvik** | **19.07** | **355** | P | **Pn** | **15 30 21.0** | **+1.2** |
| | 0.0nm,0.3s,baz=192,slow=7.4,SNR=3.6 | | | | | | |
| INK | | | | LR | LR | 15 37 11.4 | |
| | comp=Z,84nm,21.6s,baz=104,slow=36 | | | | | | |
| **MVCO** | **Mesa Verde** | **19.24** | **122** | P | **P** | **15 30 20.9** | **-0.5** |
| | baz=19 | | | | | | |
| **A29A** | **Manning Farm,** | **19.46** | **80** | P | **Pn** | **15 30 25.4** | **+0.7** |
| | baz=20 | | | | | | |
| **B30A** | **Myrvik Farm, E** | **20.15** | **81** | P | Pn | 15 30 32.0 | -0.9 |
| | baz=20 | | | | | | |
| **D30A** | **Buchanan** | **20.25** | **85** | P | **P** | **15 30 32.3** | **+0.2** |
| | baz=21 | | | | | | |
| **B32A** | **Ashes, Strandq** | **21.32** | **80** | P | **P** | **15 30 43.8** | **+0.1** |
| | baz=22 | | | | | | |
| **ULM** | **Lac du Bonnet** | **21.33** | **75** | P | **P** | **15 30 43.8** | **0.0** |
| | 14nm,0.9s,baz=282,slow=12,SNR=8.0 | | | | | | |
| ULM | | | | LR | LR | 15 39 18.8 | |
| | comp=Z,222nm,21.8s,baz=60,slow=38 | | | | | | |
| **AGMN** | **Agassiz Nation** | **21.78** | **80** | P | **P** | **15 30 48.1** | **-0.5** |
| | baz=22 | | | | | | |
| **AGMN** | **Agassiz Nation** | **21.78** | **80** | *e*P | **P** | **15 30 47.5** | **-1.1** |
| | 23nm,1.2s | | | | | | |
| **ANMO** | **Albuquerque** | **22.02** | **123** | P | **P** | **15 30 52.4** | **+0.9** |
| | 1.5nm,0.9s,baz=355,slow=12,SNR=3.0 | | | | | | |
| **T26A** | **Comanche Natio** | **22.10** | **114** | P | **P** | **15 30 48.9** | **-3.4** |
| | baz=22 | | | | | | |
| **EYMN** | **Ely** | **24.69** | **79** | *e*P | **P** | **15 31 17.3** | **-0.6** |
| | 7.5nm,0.8s | | | | | | |
| **C38A** | **Sawbill Land.** | **24.90** | **79** | P | **P** | **15 31 18.1** | **-1.7** |
| | baz=25 | | | | | | |
| **TXAR** | **Lajitas Array** | **27.84** | **127** | P | **P** | **15 31 46.0** | **-0.6** |
| | 0.7nm,1.1s,baz=301,slow=9.4,SNR=2.9 | | | | | | |
| **ASAJ** | **Asahikawa** | **57.38** | **301** | LR | LR | 15 56 36.6 | |
| | comp=Z,60nm,20.2s,slow=32 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **58.43** | **264** | T | T | 16 38 43.0 | |
| | baz=43,slow=76,SNR=20 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **58.44** | **264** | T | T | 16 38 40.2 | |
| | baz=43,slow=76,SNR=25 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **58.45** | **264** | T | T | 16 38 36.8 | |
| | baz=43,slow=76,SNR=17 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **59.45** | **263** | T | T | 16 40 00.6 | |
| | baz=349,slow=74,SNR=3.5 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **59.46** | **263** | T | T | 16 40 08.3 | |
| | baz=340,slow=74,SNR=3.8 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **59.47** | **263** | T | T | 16 39 52.1 | |

*IDC **03** 15:25:59.9±1.2, 4.°56S×131.°35E, h0km, mb3.8/4, mb1 4.2/7, mb1mx3.8/39, mbtmp4.1/7, ML4.1/3, MS3.5/5, Ms1 3.5/5, ms1mx3.0/33, Error ellipse: s-maj=40.2km s-min=19.9km az=67.0*
*ISCJB **03** 15:26:03.5±0.4, 4.°52S±0.°03×131.°22E±0.°04, h33km, mb3.8/4, MS3.9/3, Error ellipse: s-maj=5.6km s-min=4.7km az=36.8*
*NEIC **03** 15:26:05.8±1.1, 4.°56S×131.°27E, h43km±14km, mb4.1/2, Error ellipse: s-maj=13.6km s-min=11.2km az=90.0*
*DJA **03** 15:26:06.9±0.3, 4°S±2°×13°1E±°, h71km±9km, M4.5/12, mb4.6/7, mB4.9/3, MLv4.5/12, Mw(mB)4.2/3*
**ISC 03 15:26:04.5**±0.7**, 4.°51S**±0.°04×**131.°20E**±0.°05**, h35**km**, n32, σ2.°19**/34**, mb3.8**/4**, MS3.9**/3**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDI** | **Bandanaira** | **1.29** | **270** | P | **Pn** | **15 26 28.3** | **+2.2** |
| BNDI | | | | S | **Sn** | **15 26 44.5** | **+2.3** |
| **FAKI** | **Fak Fak** | **1.90** | **33** | P | **Pn** | **15 26 36.4** | **+2.0** |
| FAKI | | | | S | **Sn** | **15 26 58.4** | **+1.3** |
| **FAKI** | **Fak Fak** | **1.90** | **33** | *e*P | **Pn** | **15 26 36.2** | **+1.9** |
| **MSAI** | **Masohi** | **2.55** | **297** | P | **Pn** | **15 26 44.2** | **+0.8** |
| **AAI** | **Ambon** | **3.11** | **285** | P | **Pn** | **15 26 52.8** | **+1.7** |
| AAI | | | | S | **Sn** | **15 27 26.7** | **-0.4** |
| **SAUI** | **Saumlaki** | **3.45** | **178** | P | Pn | 15 27 02.6 | +6.9 |
| SAUI | | | | S | **Sn** | **15 27 38.2** | **+2.8** |
| **SIJI** | **Sorong** | **3.62** | **1** | Pn | **Pn** | **15 26 58.5** | **+0.3** |
| | 15nm,0.3s,baz=211,slow=6.1,SNR=82 | | | | | | |
| SIJI | | | | Sn | **Sn** | **15 27 37.0** | **-2.7** |
| | 54nm,0.3s,baz=108,slow=23,SNR=7.2 | | | | | | |
| SIJI | | | | LR | LR | 15 28 53.8 | |
| | comp=Z,133nm,20.9s,baz=206,slow=47 | | | | | | |
| **SWI** | **Sorong** | **3.63** | **1** | P | **Pn** | **15 26 58.7** | **+0.5** |
| SWI | | | | S | **Sn** | **15 27 38.4** | **-1.4** |
| **RKPI** | **Ransiki, Papua** | **4.21** | **45** | P | **Pn** | **15 27 08.3** | **+2.1** |
| RKPI | | | | S | **Sn** | **15 27 54.9** | **+0.7** |
| **NLAI** | **Namlea** | **4.29** | **287** | P | Pn | 15 27 12.2 | +5.0 |
| **LBMI** | **Labuha** | **5.34** | **316** | P | **Pn** | **15 27 22.5** | **+0.8** |
| | 46nm,1.0s,749nm0.3nm | | | | | | |
| LBMI | | | | S | **Sn** | **15 28 19.9** | **-2.2** |
| | 46nm,1.0s,749nm0.3nm | | | | | | |
| **SANI** | **Sanana** | **5.75** | **295** | P | **Pn** | **15 27 27.8** | **+0.4** |
| | 23nm,0.5s,626nm0.2nm | | | | | | |
| **TNTI** | **Ternate** | **6.50** | **324** | P | **Pn** | **15 27 37.8** | **+0.1** |
| | 28nm,0.8s,0.1nm | | | | | | |
| **TNTI** | **Ternate** | **6.50** | **324** | *e*P | **Pn** | **15 27 38.7** | **+1.0** |
| | 18nm,0.6s | | | | | | |
| **SOEI** | **Soe** | **8.63** | **233** | P | **Pn** | **15 28 09.5** | **+2.4** |
| | 45nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **8.63** | **233** | *e*P | **Pn** | **15 28 09.5** | **+2.4** |
| | 29nm,0.8s | | | | | | |
| **GENI** | **Genyem** | **9.15** | **78** | P | **Pn** | **15 28 16.2** | **+2.1** |
| | 33nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **9.37** | **232** | Pn | **Pn** | **15 28 19.2** | **+2.0** |
| | 7.7nm,0.3s,baz=102,slow=3.1,SNR=14 | | | | | | |
| **BATI** | **Baumata** | **9.37** | **232** | P | **Pn** | **15 28 19.0** | **+1.8** |
| **WRAB** | **Tennant Creek** | **15.63** | **169** | *e*P | **Pn** | **15 29 39.1** | **-3.2** |
| | 9.5nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.64** | **169** | Pn | Pn | 15 29 36.8 | -5.6 |
| | 0.6nm,0.3s,baz=353,slow=14,SNR=36 | | | | | | |
| WRA | | | | Sn | Sn | 15 32 23.2 | -11 |
| | 1.2nm,0.3s,baz=341,slow=21,SNR=5.9 | | | | | | |
| **PMG** | **Port Moresby** | **16.56** | **108** | LR | LR | 15 37 59.5 | |
| | comp=Z,52nm,19.5s,baz=224,slow=44 | | | | | | |
| **ASAR** | **Alice Springs** | **19.22** | **172** | P | **P** | **15 30 23.8** | **-1.9** |
| | 0.2nm,0.3s,baz=343,slow=13,SNR=8.2 | | | | | | |
| ASAR | | | | S | **Sn** | **15 33 54.9** | **-6.5** |
| | 0.3nm,0.3s,baz=354,slow=21,SNR=5.0 | | | | | | |
| **MBWA** | **Marble Bar** | **19.95** | **213** | *e*P | **P** | **15 30 30.4** | **-3.2** |
| **CTA** | **Charters Tower** | **21.32** | **138** | P | **P** | **15 30 49.1** | **+0.6** |
| | 7.4nm,0.8s,baz=343,slow=12,SNR=5.4 | | | | | | |
| **CTAO** | **Charters Tower** | **21.32** | **138** | *e*P | **P** | **15 30 48.9** | **+0.4** |
| | 8.7nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.14** | **307** | P | **P** | **15 33 31.4** | **+2.3** |
| | 0.6nm,0.6s,baz=133,slow=7.4,SNR=2.3 | | | | | | |
| **PALK** | **Pallekele** | **51.74** | **283** | LR | LR | 15 59 48.7 | |
| | comp=Z,341nm,18.2s,baz=296,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.84** | **326** | P | **P** | **15 36 53.5** | **+0.7** |
| | 0.7nm,0.5s,baz=154,slow=9.1,SNR=4.2 | | | | | | |
| **RAR** | **Rarotonga** | **68.83** | **111** | LR | LR | 16 04 30.8 | |
| | comp=Z,21nm,18.3s,baz=158,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **74.76** | **173** | P | **P** | **15 37 40.5** | **0.0** |
| | 0.5nm,0.6s,baz=329,slow=8.3,SNR=4.8 | | | | | | |
| **OBN** | **Obninsk** | **96.33** | **325** | LR | LR | 16 26 21.6 | |
| | comp=Z,36nm,19.5s,baz=275,slow=38 | | | | | | |

*BJI **03** 15:35:29.8, 34.°74N×25.°82E, h35km, mb4.7/14, mB4.8/9, Ms4.6/5, Ms7 4.3/4*
*NSSC **03** 15:35:31.7±2.8, 35.°67N×27.°24E, h0km±302km, ML3.2*
*CSEM **03** 15:35:33.9±0.1, 34.°92N×26.°58E, h10km, mb4.4/31, Error ellipse: s-maj=4.4km s-min=2.5km az=9.0*
*ATH **03** 15:35:33.6, 34.°95N×26.°51E, h22km±1km, MD3.7/22, ML4.2*
*NEIC **03** 15:35:33.6±0.3, 34.°94N×26.°55E, h10km, mb4.3/10, ML4.1(THE), Error ellipse: s-maj=5.9km s-min=3.6km az=194.0*
*DDA **03** 15:35:34.3, 35.°23N×26.°63E, h6km, Ml4.0*
*MOS **03** 15:35:34.7±1.1, 34.°96N×26.°50E, h33km, mb4.6/29, Error ellipse: s-maj=7.1km s-min=4.4km az=83.1*
*THE **03** 15:35:36.0, 35.°08N×26.°49E, h2km±1km, ML4.1/17, Error ellipse: s-maj=3.1km s-min=0.8km az=161.0*
*IDC **03** 15:35:36.5±2.8, 35.°12N×26.°43E, h33km±22km, mb4.2/25, mb1 4.2/33, mb1mx4.1/51, mbtmp4.3/33, ML3.8/8, Error ellipse: s-maj=13.8km s-min=10.2km az=176.0*
*ISK **03** 15:35:36.3, 35.°26N×26.°55E, h8km, ML3.9*
**ISC 03 15:35:34.4**±0.5**, 34.°97N**±0.°02×**26.°56E**±0.°01**, h16**km±2km**, n597, σ1.°30**/640**, mb4.5**/48**, 15C-11D, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **0.32** | **298** | P | **Pg** | **15 35 39.4** | **-1.6** |
| ZKR | | | | S | **Sg** | **15 35 43.8** | **-1.8** |
| **ZKR** | **Zakros** | **0.32** | **298** | P | **Pg** | **15 35 39.4** | **-1.6** |
| ZKR | | | | S | **Sg** | **15 35 43.8** | **-1.8** |
| **ZKR** | **Zakros** | **0.32** | **298** | P | **Pg** | **15 35 39.4** | **-1.6** |
| ZKR | | | | S | **Sg** | **15 35 43.8** | **-1.8** |
| **KARP** | **Karpathos** | **0.76** | **40** | *e*PB | **Pb** | **15 35 48.3** | **-0.9** |
| KARP | | | | *e*SN | **Sn** | **15 36 01.1** | **-0.5** |
| **KARP** | **Karpathos** | **0.76** | **40** | P | **Pb** | **15 35 48.4** | **-0.8** |
| KARP | | | | S | **Sg** | **15 36 00.4** | **+1.1** |
| **KARP** | **Karpathos** | **0.76** | **40** | P | **Pb** | **15 35 48.4** | **-0.8** |
| **KARP** | **Karpathos** | **0.76** | **40** | P | **Pb** | **15 35 48.4** | **-0.8** |
| KARP | | | | S | **Sg** | **15 36 00.4** | **+1.1** |
| KARP | | | | *e*Sn | **Sn** | **15 36 01.1** | **-0.5** |
| **NPS** | **Neapolis** | **0.83** | **291** | *e*PN | **Pb** | **15 35 48.9** | **-1.5** |
| NPS | | | | *e*SN | **Sb** | **15 36 00.5** | **-0.8** |
| **NPS** | **Neapolis** | **0.83** | **291** | *e*Pn | **Pb** | **15 35 48.9** | **-1.5** |
| NPS | | | | *e*Sn | **Sb** | **15 36 00.5** | **-0.8** |
| **IACM** | **Heraklion** | **1.26** | **286** | *e*PN | **Pb** | **15 35 57.5** | **-0.3** |
| IACM | | | | *e*SN | **Sg** | **15 36 14.7** | **-0.5** |
| **IACM** | **Heraklion** | **1.26** | **286** | *e*Pn | **Pb** | **15 35 57.5** | **-0.3** |
| IACM | | | | *e*Sn | **Sg** | **15 36 14.7** | **-0.5** |
| **IDI** | **Anoyia** | **1.40** | **284** | Pn | **Pn** | **15 35 59.2** | **-0.1** |
| | 112nm,0.3s,baz=148,slow=9.7,SNR=347 | | | | | | |
| IDI | | | | Sn | **Sg** | **15 36 18.9** | **-0.8** |
| | 212nm,0.3s,baz=14,slow=13,SNR=16 | | | | | | |
| **IDI** | **Anoyia** | **1.40** | **284** | *e*PN | **Pb** | **15 35 59.7** | **-0.5** |
| IDI | | | | *e*SN | **Sg** | **15 36 19.2** | **-0.5** |
| **IDI** | **Anoyia** | **1.40** | **284** | P | **Pn** | **15 35 59.2** | **-0.1** |
| IDI | | | | S | **Sg** | **15 36 19.0** | **-0.7** |
| **IDI** | **Anoyia** | **1.40** | **284** | *e*Pn | **Pb** | **15 35 59.7** | **-0.5** |
| IDI | | | | S | **Sg** | **15 36 19.0** | **-0.7** |
| **SANT** | **Santorini** | **1.66** | **328** | *e*PB | **Pn** | **15 36 02.7** | **-0.1** |
| **SANT** | **Santorini** | **1.66** | **328** | P | **Pn** | **15 36 02.5** | **-0.3** |
| SANT | | | | S | **Sn** | **15 36 24.1** | **+0.3** |
| **SANT** | **Santorini** | **1.66** | **328** | P | **Pn** | **15 36 02.5** | **-0.3** |
| SANT | | | | S | **Sn** | **15 36 24.1** | **+0.3** |
| **SANT** | **Santorini** | **1.66** | **328** | P | **Pn** | **15 36 02.5** | **-0.3** |
| SANT | | | | S | **Sn** | **15 36 24.1** | **+0.3** |
| **THR6** | **Thira Island,** | **1.68** | **326** | P | **Pn** | **15 36 02.8** | **-0.2** |
| **THR6** | **Thira Island,** | **1.68** | **326** | P | **Pn** | **15 36 02.8** | **-0.2** |
| **THR6** | **Thira Island,** | **1.68** | **326** | P | **Pn** | **15 36 02.8** | **-0.2** |
| **NISR** | **Nisiros** | **1.70** | **16** | *e*PB | **Pn** | **15 36 04.0** | **+0.6** |
| **NISR** | **Nisiros** | **1.70** | **16** | P | **Pn** | **15 36 03.8** | **+0.4** |
| **NISR** | **Nisiros** | **1.70** | **16** | P | **Pn** | **15 36 03.8** | **+0.4** |
| **NISR** | **Nisiros** | **1.70** | **16** | P | **Pn** | **15 36 03.8** | **+0.4** |
| **NIS1** | **Nisyros Isl.** | **1.71** | **17** | *e*PN | **Pn** | **15 36 03.0** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **1.71** | **17** | *e*PB | **Pn** | **15 36 04.0** | **+0.5** |
| **NIS1** | **Nisyros Isl.** | **1.71** | **17** | P | **Pn** | **15 36 03.9** | **+0.5** |
| NIS1 | | | | S | **Sb** | **15 36 26.1** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **1.71** | **17** | P | **Pn** | **15 36 03.9** | **+0.5** |
| NIS1 | | | | S | **Sb** | **15 36 26.1** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **1.71** | **17** | *e*Pn | **Pn** | **15 36 03.0** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **1.71** | **17** | P | **Pn** | **15 36 03.9** | **+0.5** |
| NIS1 | | | | S | **Sb** | **15 36 26.1** | **-0.5** |
| **THR7** | **Fira-Santorini** | **1.72** | **328** | P | **Pn** | **15 36 03.5** | **-0.1** |
| **THR7** | **Fira-Santorini** | **1.72** | **328** | P | **Pn** | **15 36 03.5** | **-0.1** |
| **THR3** | **Thira Island,** | **1.72** | **327** | P | **Pn** | **15 36 03.5** | **-0.1** |
| **THR3** | **Thira Island,** | **1.72** | **327** | P | **Pn** | **15 36 03.5** | **-0.1** |
| **THR3** | **Thira Island,** | **1.72** | **327** | P | **Pn** | **15 36 03.5** | **-0.1** |
| **THR2** | **Thira island,** | **1.73** | **329** | P | **Pn** | **15 36 04.0** | **+0.2** |
| **THR2** | **Thira island,** | **1.73** | **329** | P | **Pn** | **15 36 04.0** | **+0.2** |
| **THR2** | **Thira island,** | **1.73** | **329** | P | **Pn** | **15 36 04.0** | **+0.2** |
| **THR5** | **Thira Island,** | **1.75** | **326** | *e*PN | **Pn** | **15 36 04.5** | **+0.5** |
| **THR5** | **Thira Island,** | **1.75** | **326** | P | **Pn** | **15 36 03.7** | **-0.3** |
| **THR5** | **Thira Island,** | **1.75** | **326** | P | **Pn** | **15 36 03.7** | **-0.3** |
| **THR5** | **Thira Island,** | **1.75** | **326** | *e*Pn | **Pn** | **15 36 04.5** | **+0.5** |
| **ARG** | **Arkhangelos** | **1.78** | **45** | P | **Pb** | **15 36 06.8** | **+0.1** |
| ARG | | | | S | **Sb** | **15 36 29.1** | **+0.3** |
| **ARG** | **Arkhangelos** | **1.78** | **45** | *e*PN | **Pb** | **15 36 07.1** | **+0.4** |
| ARG | | | | *e*SN | **Sb** | **15 36 30.1** | **+1.3** |
| **ARG** | **Arkhangelos** | **1.78** | **45** | P | **Pb** | **15 36 06.8** | **+0.1** |
| ARG | | | | S | **Sb** | **15 36 29.1** | **+0.3** |
| **ARG** | **Arkhangelos** | **1.78** | **45** | P | **Pb** | **15 36 06.8** | **+0.1** |
| ARG | | | | S | **Sb** | **15 36 29.1** | **+0.3** |
| **ARG** | **Arkhangelos** | **1.78** | **45** | P | **Pb** | **15 36 06.8** | **+0.1** |
| **ARG** | **Arkhangelos** | **1.78** | **45** | *e*Pn | **Pb** | **15 36 07.1** | **+0.4** |
| ARG | | | | S | **Sb** | **15 36 29.1** | **+0.3** |
| ARG | | | | *e*Sn | **Sb** | **15 36 30.1** | **+1.3** |
| **VAM** | **Vamos** | **1.98** | **283** | P | **Pb** | **15 36 08.6** | **-1.4** |
| VAM | | | | S | **Sn** | **15 36 32.2** | **+0.6** |
| **VAM** | **Vamos** | **1.98** | **283** | *e*PN | **Pb** | **15 36 08.8** | **-1.2** |
| VAM | | | | *e*SN | **Sb** | **15 36 32.9** | **-1.5** |
| **VAM** | **Vamos** | **1.98** | **283** | P | **Pb** | **15 36 08.6** | **-1.4** |
| VAM | | | | S | **Sn** | **15 36 32.2** | **+0.6** |
| **VAM** | **Vamos** | **1.98** | **283** | P | **Pb** | **15 36 08.6** | **-1.4** |
| VAM | | | | S | **Sn** | **15 36 32.2** | **+0.6** |
| **VAM** | **Vamos** | **1.98** | **283** | *e*Pn | **Pb** | **15 36 08.8** | **-1.2** |
| VAM | | | | S | **Sn** | **15 36 32.2** | **+0.6** |
| VAM | | | | *e*Sn | **Sb** | **15 36 32.9** | **-1.5** |
| **GVD** | **Gavdhos** | **2.03** | **267** | *e*PN | **Pn** | **15 36 08.6** | **+0.7** |
| **GVD** | **Gavdhos** | **2.03** | **267** | *e*Pn | **Pn** | **15 36 08.6** | **+0.7** |
| **IMMV** | **Iera Moni Meta** | **2.17** | **284** | *e*PN | **Pb** | **15 36 11.4** | **-1.8** |
| **IMMV** | **Iera Moni Meta** | **2.17** | **284** | *e*Pn | **Pb** | **15 36 11.4** | **-1.8** |
| **BODT** | **Bodrum** | **2.18** | **16** | *e*PN | **Pn** | **15 36 09.7** | **-0.2** |
| BODT | | | | *e*SN | **Sn** | **15 36 34.4** | **-2.1** |
| **BODT** | **Bodrum** | **2.18** | **16** | *e*Pn | **Pn** | **15 36 09.7** | **-0.2** |
| BODT | | | | *e*Sn | **Sn** | **15 36 34.4** | **-2.1** |
| **BDRM** | **Kayabasi** | **2.21** | **19** | *i* P | **Pn** | **15 36 10.6** | **+0.2** |
| **BDRM** | **Kayabasi** | **2.21** | **19** | P | **Pn** | **15 36 10.6** | **+0.2** |
| **APE** | **Apeiranthos** | **2.25** | **339** | *e*PN | **Pn** | **15 36 10.9** | **-0.2** |
| **APE** | **Apeiranthos** | **2.25** | **339** | *d i*P | **Pn** | **15 36 10.8** | **-0.2** |
| **APE** | **Apeiranthos** | **2.25** | **339** | *e*PN | **Pn** | **15 36 11.1** | **+0.1** |
| **APE** | **Apeiranthos** | **2.25** | **339** | P | **Pn** | **15 36 10.8** | **-0.2** |
| APE | | | | S | **Sn** | **15 36 38.3** | **-0.2** |
| **APE** | **Apeiranthos** | **2.25** | **339** | P | **Pn** | **15 36 10.8** | **-0.2** |
| APE | | | | S | **Sn** | **15 36 38.3** | **-0.2** |
| **APE** | **Apeiranthos** | **2.25** | **339** | P | **Pn** | **15 36 10.8** | **-0.2** |
| **APE** | **Apeiranthos** | **2.25** | **339** | *e*Pn | **Pn** | **15 36 11.1** | **+0.1** |
| APE | | | | S | **Sn** | **15 36 38.3** | **-0.2** |
| **MHLO** | **Agia Marina, M** | **2.45** | **315** | *e*PN | **Pn** | **15 36 14.5** | **+0.8** |
| **MHLO** | **Agia Marina, M** | **2.45** | **315** | P | **Pn** | **15 36 14.6** | **+0.8** |
| MHLO | | | | S | **Sn** | **15 36 42.9** | **-0.4** |
| **MHLO** | **Agia Marina, M** | **2.45** | **315** | *e*Pn | **Pn** | **15 36 14.5** | **+0.8** |
| MHLO | | | | S | **Sn** | **15 36 42.9** | **-0.4** |
| **DALY** | **Dalyan (Mu˜la** | **2.51** | **42** | *e*PN | **Pn** | **15 36 15.4** | **+1.0** |
| **DALY** | **Dalyan (Mu˜la** | **2.51** | **42** | *e*Pn | **Pn** | **15 36 15.5** | **+1.0** |
| **TURN** | **Turunc** | **2.52** | **41** | *i* P | **Pn** | **15 36 12.8** | **-1.8** |
| TURN | | | | *i* S | **Sn** | **15 36 40.3** | **-4.7** |
| **TURN** | **Turunc** | **2.52** | **41** | P | **Pn** | **15 36 12.8** | **-1.8** |
| TURN | | | | S | **Sn** | **15 36 40.3** | **-4.7** |
| **YER** | **Yerkesik** | **2.57** | **32** | *e*PN | **Pn** | **15 36 16.7** | **+1.3** |
| **YER** | **Yerkesik** | **2.57** | **32** | *e*Pn | **Pn** | **15 36 16.7** | **+1.3** |
| **FETY** | **Fethiye** | **2.64** | **50** | *e*PN | **Pn** | **15 36 17.6** | **+1.3** |
| **FETY** | **Fethiye** | **2.64** | **50** | *e*Pn | **Pn** | **15 36 17.6** | **+1.3** |
| **KSL** | **Kastellorizon** | **2.73** | **64** | *e*PN | **Pn** | **15 36 18.8** | **+1.3** |
| **KSL** | **Kastellorizon** | **2.73** | **64** | *e*Pn | **Pn** | **15 36 18.8** | **+1.3** |
| **SMG** | **Samos** | **2.74** | **5** | *e*PN | **Pn** | **15 36 18.1** | **+0.4** |
| **SMG** | **Samos** | **2.74** | **5** | P | **Pn** | **15 36 17.8** | **+0.1** |
| SMG | | | | S | **Sn** | **15 36 50.9** | **+0.4** |
| **SMG** | **Samos** | **2.74** | **5** | P | **Pn** | **15 36 17.8** | **+0.1** |
| SMG | | | | S | **Sn** | **15 36 50.9** | **+0.4** |
| **SMG** | **Samos** | **2.74** | **5** | P | **Pn** | **15 36 17.8** | **+0.1** |
| **SMG** | **Samos** | **2.74** | **5** | *e*Pn | **Pn** | **15 36 18.1** | **+0.4** |
| SMG | | | | S | **Sn** | **15 36 50.9** | **+0.4** |
| **SERI** | **Serifos** | **2.76** | **323** | *e*PN | **Pn** | **15 36 18.5** | **+0.6** |
| **SERI** | **Serifos** | **2.76** | **323** | *e*Pn | **Pn** | **15 36 18.5** | **+0.6** |
| **GCAM** | **G?zelcaml?** | **2.78** | **11** | *i* P | **Pn** | **15 36 18.7** | **+0.5** |
| **GCAM** | **G?zelcaml?** | **2.78** | **11** | P | **Pn** | **15 36 18.7** | **+0.5** |
| **AKAS** | **Kas** | **2.79** | **62** | *i* P | **Pn** | **15 36 18.6** | **+0.2** |
| AKAS | | | | *i* S | **Sn** | **15 36 53.8** | **+2.0** |
| **AKAS** | **Kas** | **2.79** | **62** | P | **Pn** | **15 36 18.6** | **+0.2** |
| AKAS | | | | S | **Sn** | **15 36 53.8** | **+2.0** |
| **ANKY** | **Antikythira Is** | **2.81** | **290** | *e*PN | **Pn** | **15 36 19.6** | **+1.0** |
| **ANKY** | **Antikythira Is** | **2.81** | **290** | P | **Pn** | **15 36 19.5** | **+1.0** |
| **ANKY** | **Antikythira Is** | **2.81** | **290** | P | **Pn** | **15 36 19.5** | **+1.0** |
| **ANKY** | **Antikythira Is** | **2.81** | **290** | P | **Pn** | **15 36 19.5** | **+1.0** |
| **AYDN** | **Tasoluk** | **2.89** | **21** | *i* P | **Pb** | **15 36 23.0** | **-2.6** |
| **AYDN** | **Tasoluk** | **2.89** | **21** | P | **Pb** | **15 36 22.9** | **-2.6** |
| **KYTH** | **Kithira** | **3.15** | **296** | *e*PN | **Pn** | **15 36 24.0** | **+0.6** |
| **KYTH** | **Kithira** | **3.15** | **296** | P | **Pn** | **15 36 23.9** | **+0.6** |
| **KYTH** | **Kithira** | **3.15** | **296** | P | **Pn** | **15 36 23.9** | **+0.6** |
| **KYTH** | **Kithira** | **3.15** | **296** | P | **Pn** | **15 36 23.9** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **3.16** | **20** | *e*PN | **Pn** | **15 36 24.5** | **+0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **3.16** | **20** | *e*Pn | **Pn** | **15 36 24.5** | **+0.9** |
| **ELL** | **Elmali** | **3.25** | **56** | *e*PN | **Pn** | **15 36 26.5** | **+1.7** |
| **ELL** | **Elmali** | **3.25** | **56** | *e*Pn | **Pn** | **15 36 26.5** | **+1.7** |
| **ZEY** | **˜zmir** | **3.26** | **359** | P | **Pn** | **15 36 24.2** | **-0.6** |
| **GOLH** | **Golhisar** | **3.32** | **46** | *i* P | **Pn** | **15 36 27.7** | **+1.9** |
| GOLH | | | | *i* S | **Sb** | **15 37 11.8** | **-1.4** |
| **GOLH** | **Golhisar** | **3.32** | **46** | P | **Pn** | **15 36 27.7** | **+1.9** |
| GOLH | | | | S | **Sb** | **15 37 11.8** | **-1.4** |
| **DNZL** | **Cakiroluk** | **3.38** | **36** | *i* P | **Pn** | **15 36 27.6** | **+1.0** |
| **DNZL** | **Cakiroluk** | **3.38** | **36** | P | **Pn** | **15 36 27.6** | **+1.0** |
| **URLA** | **Izmir** | **3.38** | **1** | *i* P | **Pn** | **15 36 26.4** | **-0.2** |
| **URLA** | **Izmir** | **3.38** | **1** | P | **Pn** | **15 36 26.4** | **-0.2** |
| **VLI** | **Veliai** | **3.42** | **302** | *e*PN | **Pn** | **15 36 27.3** | **+0.2** |
| **VLI** | **Veliai** | **3.42** | **302** | P | **Pn** | **15 36 27.2** | **+0.2** |
| VLI | | | | S | **Sn** | **15 37 07.0** | **-0.2** |
| **VLI** | **Veliai** | **3.42** | **302** | P | **Pn** | **15 36 27.2** | **+0.2** |
| **VLI** | **Veliai** | **3.42** | **302** | P | **Pn** | **15 36 27.2** | **+0.2** |
| VLI | | | | S | **Sn** | **15 37 07.0** | **-0.2** |
| **DENT** | **Denizli** | **3.42** | **35** | *e*PN | **Pn** | **15 36 28.4** | **+1.3** |
| **DENT** | **Denizli** | **3.42** | **35** | *e*Pn | **Pn** | **15 36 28.4** | **+1.3** |
| **CHOS** | **Chios island** | **3.44** | **353** | *e*PN | **Pn** | **15 36 27.2** | **-0.1** |
| **CHOS** | **Chios island** | **3.44** | **353** | *e*PN | **Pn** | **15 36 27.9** | **+0.6** |
| **CHOS** | **Chios island** | **3.44** | **353** | P | **Pn** | **15 36 27.4** | **+0.1** |
| CHOS | | | | S | **Sn** | **15 37 08.5** | **+0.8** |
| **CHOS** | **Chios island** | **3.44** | **353** | P | **Pn** | **15 36 27.4** | **+0.1** |
| **CHOS** | **Chios island** | **3.44** | **353** | P | **Pn** | **15 36 27.4** | **+0.1** |
| **CHOS** | **Chios island** | **3.44** | **353** | *e*Pn | **Pn** | **15 36 27.9** | **+0.6** |
| CHOS | | | | S | **Sn** | **15 37 08.5** | **+0.8** |
| **IZM** | **Izmir** | **3.47** | **9** | *e*PN | **Pn** | **15 36 27.6** | **-0.1** |
| **IZM** | **Izmir** | **3.47** | **9** | *e*Pn | **Pn** | **15 36 27.6** | **-0.1** |
| **KARY** | **Karystos** | **3.50** | **331** | P | **Pn** | **15 36 28.6** | **+0.5** |
| KARY | | | | S | **Sn** | **15 37 10.1** | **+0.9** |
| **VLY** | **Voula,Athens** | **3.64** | **323** | *e*PN | **Pn** | **15 36 31.2** | **+1.2** |
| **VLY** | **Voula,Athens** | **3.64** | **323** | P | **Pn** | **15 36 30.9** | **+0.9** |
| VLY | | | | S | **Sn** | **15 37 12.4** | **-0.2** |
| **VLY** | **Voula,Athens** | **3.64** | **323** | P | **Pn** | **15 36 30.9** | **+0.9** |
| VLY | | | | S | **Sn** | **15 37 12.4** | **-0.2** |
| **VLY** | **Voula,Athens** | **3.64** | **323** | P | **Pn** | **15 36 30.9** | **+0.9** |
| **VLY** | **Voula,Athens** | **3.64** | **323** | *e*Pn | **Pn** | **15 36 31.2** | **+1.2** |
| VLY | | | | S | **Sn** | **15 37 12.4** | **-0.2** |
| **LTBQ** | **Tobruq** | **3.65** | **218** | *i* P | **Pn** | **15 36 31.6** | **+1.5** |
| | SNR=102 | | | | | | |
| **KRND** | **KRANIDI** | **3.66** | **312** | *e*PN | **Pn** | **15 36 31.8** | **+1.5** |
| KRND | | | | *e*SN | **Sn** | **15 37 14.0** | **+0.9** |
| **KRND** | **KRANIDI** | **3.66** | **312** | P | **Pn** | **15 36 31.5** | **+1.2** |
| KRND | | | | S | **Sn** | **15 37 14.2** | **+1.1** |
| **KRND** | **KRANIDI** | **3.66** | **312** | P | **Pn** | **15 36 31.5** | **+1.2** |
| **KRND** | **KRANIDI** | **3.66** | **312** | *e*Pn | **Pn** | **15 36 31.8** | **+1.5** |
| KRND | | | | *e*Sn | **Sn** | **15 37 14.0** | **+0.9** |
| **DIDY** | **Didyma** | **3.68** | **314** | *e*PN | **Pn** | **15 36 31.8** | **+1.1** |
| DIDY | | | | *e*SN | **Sn** | **15 37 14.7** | **+0.8** |
| **DIDY** | **Didyma** | **3.68** | **314** | P | **Pn** | **15 36 31.8** | **+1.1** |
| DIDY | | | | S | **Sn** | **15 37 13.3** | **-0.6** |
| **DIDY** | **Didyma** | **3.68** | **314** | P | **Pn** | **15 36 31.8** | **+1.1** |
| DIDY | | | | S | **Sn** | **15 37 13.3** | **-0.6** |
| DIDY | | | | *e*Sn | **Sn** | **15 37 14.7** | **+0.8** |
| **KORT** | **Korkueli** | **3.68** | **56** | *i* P | **Pn** | **15 36 32.4** | **+1.6** |
| KORT | | | | *i* S | **Sn** | **15 37 17.4** | **+3.5** |
| **KORT** | **Korkueli** | **3.68** | **56** | P | **Pn** | **15 36 32.4** | **+1.6** |
| KORT | | | | S | **Sn** | **15 37 17.4** | **+3.5** |
| **ATHU** | **Athens Univers** | **3.73** | **324** | P | **Pn** | **15 36 32.4** | **+1.1** |
| **ATHU** | **Athens Univers** | **3.73** | **324** | P | **Pn** | **15 36 32.4** | **+1.1** |
| **ATHU** | **Athens Univers** | **3.73** | **324** | P | **Pn** | **15 36 32.4** | **+1.1** |
| **ATH** | **Athens Observa** | **3.77** | **323** | P | **Pn** | **15 36 32.8** | **+1.0** |
| ATH | | | | S | **Sn** | **15 37 16.1** | **+0.3** |
| **ATH** | **Athens Observa** | **3.77** | **323** | *e*PN | **Pn** | **15 36 33.0** | **+1.2** |
| **ATH** | **Athens Observa** | **3.77** | **323** | P | **Pn** | **15 36 32.8** | **+1.0** |
| ATH | | | | S | **Sn** | **15 37 16.1** | **+0.3** |
| **ATH** | **Athens Observa** | **3.77** | **323** | P | **Pn** | **15 36 32.8** | **+1.0** |
| ATH | | | | S | **Sn** | **15 37 16.1** | **+0.3** |
| **ATH** | **Athens Observa** | **3.77** | **323** | *e*Pn | **Pn** | **15 36 33.0** | **+1.2** |
| ATH | | | | S | **Sn** | **15 37 16.1** | **+0.3** |
| **ANTB** | **Antalya** | **3.84** | **59** | *e*PN | **Pn** | **15 36 35.8** | **+3.0** |
| **ANTB** | **Antalya** | **3.84** | **59** | *e*Pn | **Pn** | **15 36 35.8** | **+3.0** |
| **MANT** | **Manisa** | **3.87** | **24** | *i* P | **Pn** | **15 36 34.7** | **+1.4** |
| **MANT** | **Manisa** | **3.87** | **24** | P | **Pn** | **15 36 34.7** | **+1.4** |
| **KULA** | **Kula-Manisa** | **3.92** | **25** | *e*PN | **Pn** | **15 36 35.0** | **+1.1** |
| **KULA** | **Kula-Manisa** | **3.92** | **25** | *e*Pn | **Pn** | **15 36 35.1** | **+1.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AKHS | Akhisar | 4.03 | 14 | iP | Pn | 15 36 36.4 | +1.0 |
| AKHS | Akhisar | 4.03 | 14 | P | Pn | 15 36 36.4 | +1.0 |
| AKS | Akhisar | 4.03 | 14 | ePN | Pn | 15 36 36.4 | +1.0 |
| AKS | Akhisar | 4.03 | 14 | ePN | Pn | 15 36 36.4 | +1.0 |
| EREA | Eretria | 4.04 | 329 | ePN | Pn | 15 36 36.7 | +1.2 |
| EREA | Eretria | 4.04 | 329 | P | Pn | 15 36 36.6 | +1.1 |
| EREA | Eretria | 4.04 | 329 | ePn | Pn | 15 36 36.7 | +1.2 |
| BCK | Bucak | 4.10 | 51 | ePN | Pn | 15 36 38.9 | +2.5 |
| BCK | Bucak | 4.10 | 51 | ePn | Pn | 15 36 38.9 | +2.5 |
| DKL | Dikili | 4.10 | 4 | ePN | Pn | 15 36 37.0 | +0.6 |
| DKL | Dikili | 4.10 | 4 | ePn | Pn | 15 36 37.0 | +0.6 |
| KHL | Karahalli | 4.11 | 35 | ePN | Pn | 15 36 37.7 | +1.1 |
| KHL | Karahalli | 4.11 | 35 | ePn | Pn | 15 36 37.7 | +1.1 |
| VILL | Villia | 4.12 | 322 | P | Pn | 15 36 37.9 | +1.2 |
| VILL | | | | S | Sn | 15 37 25.4 | +0.8 |
| VILL | Villia | 4.12 | 322 | P | Pn | 15 36 37.9 | +1.2 |
| VILL | Villia | 4.12 | 322 | ePn | Pn | 15 36 38.5 | +1.8 |
| VILL | | | | S | Sn | 15 37 25.4 | +0.8 |
| KHAL | Karahalli | 4.13 | 34 | iP | Pn | 15 36 36.9 | 0.0 |
| KHAL | Karahalli | 4.13 | 34 | P | Pn | 15 36 36.9 | 0.0 |
| VLX | Vlachokerasia | 4.14 | 307 | ePN | Pn | 15 36 38.5 | +1.5 |
| VLX | Vlachokerasia | 4.14 | 307 | P | Pn | 15 36 38.5 | +1.5 |
| VLX | | | | S | Sn | 15 37 25.6 | +0.4 |
| VLX | Vlachokerasia | 4.14 | 307 | P | Pn | 15 36 38.5 | +1.5 |
| VLX | | | | S | Sn | 15 37 25.6 | +0.4 |
| VLX | Vlachokerasia | 4.14 | 307 | P | Pn | 15 36 38.5 | +1.5 |
| VLX | | | | S | Sn | 15 37 25.6 | +0.4 |
| ACOR | Acrocorinthos | 4.16 | 316 | P | Pn | 15 36 38.5 | +1.3 |
| ACOR | | | | S | Sn | 15 37 26.7 | +1.1 |
| LOUT | Loutraki | 4.17 | 317 | ePN | Pn | 15 36 39.7 | +2.4 |
| LOUT | Loutraki | 4.17 | 317 | P | Pn | 15 36 38.7 | +1.4 |
| LOUT | Loutraki | 4.17 | 317 | P | Pn | 15 36 38.7 | +1.4 |
| LOUT | Loutraki | 4.17 | 317 | ePn | Pn | 15 36 39.7 | +2.4 |
| VIL2 | Platees | 4.18 | 322 | ePN | Pn | 15 36 38.5 | +1.0 |
| LTK | Loutraki | 4.20 | 318 | ePN | Pn | 15 36 40.3 | +2.5 |
| LTK | Loutraki | 4.20 | 318 | P | Pn | 15 36 39.1 | +1.3 |
| LTK | Loutraki | 4.20 | 318 | P | Pn | 15 36 39.1 | +1.3 |
| LTK | Loutraki | 4.20 | 318 | P | Pn | 15 36 39.1 | +1.3 |
| LTK | Loutraki | 4.20 | 318 | ePn | Pn | 15 36 40.3 | +2.5 |
| SIGR | SIGRI | 4.27 | 353 | ePN | Pn | 15 36 39.8 | +1.1 |
| SIGR | SIGRI | 4.27 | 353 | P | Pn | 15 36 38.8 | +0.1 |
| SIGR | | | | S | Sn | 15 37 28.1 | -0.1 |
| SIGR | SIGRI | 4.27 | 353 | P | Pn | 15 36 38.8 | +0.1 |
| SIGR | | | | S | Sn | 15 37 28.1 | -0.1 |
| SIGR | SIGRI | 4.27 | 353 | P | Pn | 15 36 38.8 | +0.1 |
| SIGR | SIGRI | 4.27 | 353 | ePn | Pn | 15 36 39.8 | +1.1 |
| SIGR | | | | S | Sn | 15 37 28.1 | -0.1 |
| PRK | Paraskevi | 4.28 | 357 | P | Pn | 15 36 38.9 | +0.2 |
| PRK | | | | S | Sn | 15 37 29.2 | +0.9 |
| PRK | Paraskevi | 4.28 | 357 | P | Pn | 15 36 38.9 | +0.2 |
| PRK | | | | S | Sn | 15 37 29.2 | +0.9 |
| PRK | Paraskevi | 4.28 | 357 | P | Pn | 15 36 38.9 | +0.2 |
| PRK | | | | S | Sn | 15 37 29.2 | +0.9 |
| PRK | Paraskevi | 4.28 | 357 | P | Pn | 15 36 38.9 | +0.2 |
| PRK | | | | S | Sn | 15 37 29.2 | +0.9 |
| ITM | Ithomi | 4.35 | 302 | ePN | Pn | 15 36 41.8 | +2.0 |
| ITM | Ithomi | 4.35 | 302 | P | Pn | 15 36 40.2 | +0.4 |
| ITM | Ithomi | 4.35 | 302 | P | Pn | 15 36 40.2 | +0.4 |
| ITM | Ithomi | 4.35 | 302 | P | Pn | 15 36 40.2 | +0.4 |
| ITM | Ithomi | 4.35 | 302 | P | Pn | 15 36 40.2 | +0.4 |
| ITM | Ithomi | 4.35 | 302 | ePn | Pn | 15 36 41.8 | +2.0 |
| PYL | PYLOS | 4.35 | 298 | ePN | Pn | 15 36 42.0 | +2.2 |
| PYL | PYLOS | 4.35 | 298 | P | Pn | 15 36 39.8 | 0.0 |
| PYL | | | | S | Sn | 15 37 30.5 | +0.3 |
| PYL | PYLOS | 4.35 | 298 | P | Pn | 15 36 39.8 | 0.0 |
| PYL | | | | S | Sn | 15 37 30.5 | +0.3 |
| PYL | PYLOS | 4.35 | 298 | P | Pn | 15 36 39.8 | 0.0 |
| PYL | PYLOS | 4.35 | 298 | ePn | Pn | 15 36 42.0 | +2.2 |
| PYL | | | | S | Sn | 15 37 30.5 | +0.3 |
| SUTC | Sutluce-Ispart | 4.38 | 54 | ePN | Pn | 15 36 43.3 | +3.0 |
| SUTC | Sutluce-Ispart | 4.38 | 54 | ePn | Pn | 15 36 43.3 | +3.0 |
| THAL | Thalero | 4.38 | 315 | ePN | Pn | 15 36 42.2 | +2.0 |
| THAL | Thalero | 4.38 | 315 | P | Pn | 15 36 42.3 | +2.0 |
| THAL | | | | S | Sn | 15 37 31.1 | +0.2 |
| THAL | Thalero | 4.38 | 315 | ePN | Pn | 15 36 42.2 | +2.0 |
| THAL | | | | S | Sn | 15 37 31.1 | +0.2 |
| DEMI | Demirci | 4.42 | 22 | iP | Pn | 15 36 41.9 | +1.1 |
| DEMI | | | | iS | Sn | 15 37 34.4 | +2.5 |
| DEMI | Demirci | 4.42 | 22 | P | Pn | 15 36 42.0 | +1.1 |
| DEMI | | | | S | Sn | 15 37 34.5 | +2.5 |
| MRKA | Markates | 4.42 | 328 | ePN | Pn | 15 36 42.5 | +1.7 |
| MRKA | Markates | 4.42 | 328 | P | Pn | 15 36 41.9 | +1.1 |
| MRKA | Markates | 4.42 | 328 | P | Pn | 15 36 41.9 | +1.1 |
| MRKA | Markates | 4.42 | 328 | ePn | Pn | 15 36 42.5 | +1.7 |
| GUR | Goura | 4.51 | 312 | ePN | Pn | 15 36 43.8 | +1.8 |
| GUR | Goura | 4.51 | 312 | P | Pn | 15 36 43.3 | +1.3 |
| GUR | | | | S | Sn | 15 37 33.8 | -0.3 |
| GUR | Goura | 4.51 | 312 | P | Pn | 15 36 43.3 | +1.3 |
| GUR | | | | S | Sn | 15 37 33.8 | -0.3 |
| GUR | Goura | 4.51 | 312 | P | Pn | 15 36 43.3 | +1.3 |
| GUR | Goura | 4.51 | 312 | ePn | Pn | 15 36 43.8 | +1.8 |
| GUR | | | | S | Sn | 15 37 33.8 | -0.3 |
| LKR | Lokris | 4.65 | 323 | ePN | Pn | 15 36 45.3 | +1.4 |
| LKR | Lokris | 4.65 | 323 | P | Pn | 15 36 45.3 | +1.4 |
| LKR | Lokris | 4.65 | 323 | P | Pn | 15 36 45.3 | +1.4 |
| LKR | Lokris | 4.65 | 323 | P | Pn | 15 36 45.3 | +1.4 |
| ATAL | Atalanti | 4.67 | 324 | P | Pn | 15 36 45.7 | +1.5 |
| ATAL | Atalanti | 4.67 | 324 | P | Pn | 15 36 45.7 | +1.5 |
| ATAL | Atalanti | 4.67 | 324 | P | Pn | 15 36 45.7 | +1.5 |
| KLV | Kalavryta, Ach | 4.69 | 312 | ePN | Pn | 15 36 46.7 | +2.2 |
| KLV | Kalavryta, Ach | 4.69 | 312 | P | Pn | 15 36 45.6 | +1.1 |
| KLV | Kalavryta, Ach | 4.69 | 312 | P | Pn | 15 36 45.6 | +1.1 |
| KLV | Kalavryta, Ach | 4.69 | 312 | P | Pn | 15 36 45.6 | +1.1 |
| KLV | Kalavryta, Ach | 4.69 | 312 | ePn | Pn | 15 36 46.7 | +2.2 |
| AOS | Alonnisos | 4.71 | 334 | ePN | Pn | 15 36 46.4 | +1.7 |
| AOS | Alonnisos | 4.71 | 334 | P | Pn | 15 36 46.4 | +1.7 |
| DESF | Desfina | 4.72 | 318 | ePN | Pn | 15 36 46.6 | +1.7 |
| DESF | Desfina | 4.72 | 318 | P | Pn | 15 36 46.6 | +1.7 |
| SMIA | Simia | 4.74 | 326 | ePN | Pn | 15 36 47.8 | +2.7 |
| SMIA | Simia | 4.74 | 326 | ePn | Pn | 15 36 47.8 | +2.7 |
| BALB | Balikesir | 4.78 | 12 | ePN | Pn | 15 36 47.0 | +1.3 |
| BALB | Balikesir | 4.78 | 12 | ePn | Pn | 15 36 47.0 | +1.3 |
| SHUT | Suhut-Afyon | 4.80 | 41 | ePN | Pn | 15 36 49.2 | +3.1 |
| SHUT | Suhut-Afyon | 4.80 | 41 | ePn | Pn | 15 36 49.2 | +3.1 |
| GAZI | Gazipasa | 4.86 | 73 | iP | Pn | 15 36 46.6 | -0.2 |
| GAZI | | | | iS | Sn | 15 37 36.6 | -6.1 |
| GAZI | Gazipasa | 4.86 | 73 | P | Pn | 15 36 46.6 | -0.2 |
| GAZI | | | | S | Sn | 15 37 36.6 | -6.1 |
| SKIA | Skiathos | 4.86 | 330 | ePN | Pn | 15 36 48.3 | +1.5 |
| SKIA | Skiathos | 4.86 | 330 | P | Pn | 15 36 47.8 | +1.0 |
| SKIA | Skiathos | 4.86 | 330 | P | Pn | 15 36 47.8 | +1.0 |
| SKIA | Skiathos | 4.86 | 330 | ePn | Pn | 15 36 48.3 | +1.5 |
| DURS | Dursunbey | 4.87 | 18 | iP | Pn | 15 36 48.3 | +1.3 |
| DURS | Dursunbey | 4.87 | 18 | P | Pn | 15 36 48.3 | +1.3 |
| DST | Dursunbey | 4.91 | 19 | ePN | Pn | 15 36 48.9 | +1.4 |
| DST | Dursunbey | 4.91 | 19 | ePn | Pn | 15 36 48.9 | +1.4 |
| DRO | Drossia | 4.91 | 309 | ePN | Pn | 15 36 50.1 | +2.6 |
| DRO | Drossia | 4.91 | 309 | P | Pn | 15 36 48.9 | +1.4 |
| DRO | Drossia | 4.91 | 309 | P | Pn | 15 36 48.9 | +1.4 |
| DRO | Drossia | 4.91 | 309 | ePn | Pn | 15 36 50.1 | +2.6 |
| AXAR | Agios Charalam | 4.91 | 322 | ePN | Pn | 15 36 49.8 | +2.3 |
| AXAR | Agios Charalam | 4.91 | 322 | ePn | Pn | 15 36 49.8 | +2.3 |
| LAKA | Lakka | 4.92 | 313 | ePN | Pn | 15 36 49.8 | +2.1 |
| LAKA | | | | eSN | Sn | 15 37 45.5 | +1.2 |
| LAKA | Lakka | 4.92 | 313 | P | Pn | 15 36 48.7 | +1.0 |
| LAKA | Lakka | 4.92 | 313 | P | Pn | 15 36 48.7 | +1.0 |
| LAKA | Lakka | 4.92 | 313 | P | Pn | 15 36 48.7 | +1.0 |
| LAKA | Lakka | 4.92 | 313 | ePn | Pn | 15 36 49.8 | +2.1 |
| KALE | Kalithea | 4.93 | 315 | ePN | Pn | 15 36 49.5 | +1.8 |
| KALE | Kalithea | 4.93 | 315 | P | Pn | 15 36 49.6 | +1.8 |
| KALE | Kalithea | 4.93 | 315 | P | Pn | 15 36 49.6 | +1.8 |
| KALE | Kalithea | 4.93 | 315 | ePn | Pn | 15 36 49.5 | +1.8 |
| SERG | Sergoula | 4.99 | 315 | ePN | Pn | 15 36 51.3 | +2.7 |
| SERG | Sergoula | 4.99 | 315 | P | Pn | 15 36 50.4 | +1.8 |
| SERG | Sergoula | 4.99 | 315 | P | Pn | 15 36 50.4 | +1.8 |
| SERG | Sergoula | 4.99 | 315 | ePn | Pn | 15 36 51.3 | +2.7 |
| NEO | Neokhori | 5.08 | 329 | ePN | Pn | 15 36 51.7 | +1.8 |
| NEO | Neokhori | 5.08 | 329 | ePn | Pn | 15 36 51.7 | +1.8 |
| EFP | Efpalio | 5.09 | 314 | ePN | Pn | 15 36 52.1 | +2.2 |
| EFP | Efpalio | 5.09 | 314 | P | Pn | 15 36 51.3 | +1.4 |
| EFP | Efpalio | 5.09 | 314 | P | Pn | 15 36 51.3 | +1.4 |
| EFP | Efpalio | 5.09 | 314 | ePn | Pn | 15 36 52.1 | +2.2 |
| RLS | Riolos of Patr | 5.13 | 308 | ePN | Pn | 15 36 52.7 | +2.2 |
| RLS | Riolos of Patr | 5.13 | 308 | ePn | Pn | 15 36 52.7 | +2.2 |
| XOR | Xorichti | 5.15 | 330 | ePN | Pn | 15 36 53.2 | +2.5 |
| XOR | Xorichti | 5.15 | 330 | P | Pn | 15 36 51.9 | +1.2 |
| XOR | Xorichti | 5.15 | 330 | P | Pn | 15 36 51.9 | +1.2 |
| XOR | Xorichti | 5.15 | 330 | P | Pn | 15 36 51.9 | +1.2 |
| XOR | Xorichti | 5.15 | 330 | ePn | Pn | 15 36 53.2 | +2.5 |
| AGG | Agios Georgios | 5.27 | 321 | ePN | Pn | 15 36 54.8 | +2.3 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AGG | Agios Georgios | 5.27 | 321 | ePn | Pn | 15 36 54.8 | +2.3 |
| MAKR | Makrakomi, Fth | 5.37 | 320 | ePN | Pn | 15 36 56.9 | +3.1 |
| MAKR | Makrakomi, Fth | 5.37 | 320 | ePn | Pn | 15 36 56.9 | +3.1 |
| PAIG | Paliouri | 5.45 | 336 | ePN | Pn | 15 36 56.5 | +1.6 |
| PAIG | Paliouri | 5.45 | 336 | ePn | Pn | 15 36 56.5 | +1.6 |
| EVR | Evrytania | 5.47 | 317 | ePN | Pn | 15 36 57.7 | +2.4 |
| EVR | Evrytania | 5.47 | 317 | ePn | Pn | 15 36 57.7 | +2.4 |
| CSS | Prodhromos | 5.56 | 88 | ePn | Pn | 15 36 56.5 | +0.1 |
| CSS | Prodhromos | 5.56 | 88 | ePn | Pn | 15 36 56.5 | +0.1 |
| PDO | Prodromos | 5.63 | 312 | ePN | Pn | 15 36 58.4 | +1.0 |
| PDO | Prodromos | 5.63 | 312 | P | Pn | 15 36 57.9 | +0.5 |
| PDO | Prodromos | 5.63 | 312 | P | Pn | 15 36 57.9 | +0.5 |
| PDO | Prodromos | 5.63 | 312 | ePn | Pn | 15 36 58.4 | +1.0 |
| IGD | Bursa | 5.69 | 21 | P | Pn | 15 36 59.3 | +1.2 |
| OUR | Ouranopolis | 5.73 | 340 | ePN | Pn | 15 37 01.3 | +2.6 |
| OUR | Ouranopolis | 5.73 | 340 | ePn | Pn | 15 37 01.3 | +2.6 |
| SART | Tekirdag | 5.73 | 5 | iP | Pn | 15 36 59.3 | +0.5 |
| SART | Tekirdag | 5.73 | 5 | P | Pn | 15 36 59.3 | +0.5 |
| VLS | Valsamata | 5.77 | 305 | ePN | Pn | 15 37 02.5 | +3.2 |
| VLS | Valsamata | 5.77 | 305 | ePn | Pn | 15 37 02.5 | +3.2 |
| THL | Klokotos Trika | 5.84 | 323 | ePN | Pn | 15 37 02.7 | +2.4 |
| THL | Klokotos Trika | 5.84 | 323 | P | Pn | 15 37 01.9 | +1.6 |
| THL | Klokotos Trika | 5.84 | 323 | P | Pn | 15 37 01.9 | +1.6 |
| THL | Klokotos Trika | 5.84 | 323 | ePn | Pn | 15 37 02.7 | +2.4 |
| PLG | Polygyros | 5.93 | 336 | ePN | Pn | 15 37 03.0 | +1.4 |
| PLG | Polygyros | 5.93 | 336 | ePn | Pn | 15 37 03.0 | +1.4 |
| HORT | Hortiatis | 6.25 | 335 | ePN | Pn | 15 37 08.3 | +2.3 |
| HORT | Hortiatis | 6.25 | 335 | ePn | Pn | 15 37 08.3 | +2.3 |
| THE | Thessaloniki | 6.33 | 334 | ePN | Pn | 15 37 09.6 | +2.7 |
| THE | Thessaloniki | 6.33 | 334 | ePn | Pn | 15 37 09.6 | +2.7 |
| SOH | Sokhos | 6.37 | 338 | ePN | Pn | 15 37 09.9 | +2.4 |
| SOH | Sokhos | 6.37 | 338 | ePn | Pn | 15 37 09.9 | +2.4 |
| JAN | Janina | 6.52 | 317 | ePN | Pn | 15 37 11.6 | +1.9 |
| JAN | Janina | 6.52 | 317 | ePn | Pn | 15 37 11.6 | +1.9 |
| KZN | Kozani | 6.54 | 326 | ePN | Pn | 15 37 12.8 | +2.8 |
| KZN | Kozani | 6.54 | 326 | ePn | Pn | 15 37 12.8 | +2.8 |
| SRS | Serrai | 6.57 | 340 | ePN | Pn | 15 37 13.8 | +3.5 |
| SRS | Serrai | 6.57 | 340 | ePn | Pn | 15 37 13.8 | +3.5 |
| LJBD | Adjabya | 6.70 | 235 | iP | Pn | 15 37 10.9 | -1.2 |
| | SNR=95 | | | | | | |
| LJBD | | | | eS | Sn | 15 38 22.7 | -5.4 |
| | SNR=95 | | | | | | |
| NVR | Nevrokopi | 6.71 | 342 | ePN | Pn | 15 37 15.3 | +3.0 |
| NVR | Nevrokopi | 6.71 | 342 | ePn | Pn | 15 37 15.3 | +3.0 |
| KDZ | Kurdzhali | 6.73 | 353 | eP | Pn | 15 37 12.3 | -0.2 |
| GRG | Griva | 6.82 | 332 | ePN | Pn | 15 37 15.7 | +2.0 |
| GRG | Griva | 6.82 | 332 | ePn | Pn | 15 37 15.7 | +2.0 |
| KNT | Kendrikon | 6.82 | 336 | ePN | Pn | 15 37 16.2 | +2.5 |
| KNT | Kendrikon | 6.82 | 336 | ePn | Pn | 15 37 16.2 | +2.5 |
| SGD | Sagiada | 6.85 | 314 | P | Pn | 15 37 14.5 | +0.5 |
| SGD | Sagiada | 6.85 | 314 | P | Pn | 15 37 14.5 | +0.5 |
| RZN | Rozhen | 6.86 | 348 | eP | Pn | 15 37 15.5 | +1.0 |
| ANTO | Ankara | 6.97 | 44 | eP | Pn | 15 37 16.6 | +0.8 |
| ANTO | Ankara | 6.97 | 44⇓ | iP | Pn | 15 37 19.2 | +3.4 |
| ANTO | Ankara | 6.97 | 44 | eP | Pn | 15 37 16.6 | +0.8 |
| ANTO | Ankara | 6.97 | 44 | eP | Pn | 15 37 16.6 | +0.8 |
| NEST | Nestorio | 6.97 | 323 | ePN | Pn | 15 37 19.4 | +3.5 |
| NEST | Nestorio | 6.97 | 323 | ePn | Pn | 15 37 19.4 | +3.5 |
| MMB | Musomiste | 6.97 | 342 | eP | Pn | 15 37 16.6 | +0.8 |
| VAY | Valandovo | 7.08 | 335 | ePn | Pn | 15 37 19.6 | +2.4 |
| FNA | Florina | 7.10 | 326 | ePN | Pn | 15 37 21.1 | +3.5 |
| FNA | Florina | 7.10 | 326 | ePn | Pn | 15 37 21.1 | +3.5 |
| BRTR | Keskin Array B | 7.37 | 48 | Pn | Pn | 15 37 21.6 | +0.2 |
| | 0.7nm,0.3s,baz=218,slow=15,SNR=19 | | | | | | |
| BRTR | Keskin Array B | 7.37 | 48 | iP | Pn | 15 37 24.6 | +3.2 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| BRTR | Keskin Array B | 7.37 | 48 | iP | Pn | 15 37 24.6 | +3.2 |
| | comp=Z,4.0nm,0.5s | | | | | | |
| YURE | YUREGIR | 7.59 | 73 | iP | Pn | 15 37 25.1 | +0.7 |
| YURE | YUREGIR | 7.59 | 73 | P | Pn | 15 37 25.1 | +0.7 |
| MMAI | Mount Meron Ar | 7.60 | 102 | Pn | Pn | 15 37 26.0 | +1.5 |
| | comp=Z,4.1nm,0.3s,baz=298,slow=11,SNR=8.9 | | | | | | |
| MMAI | | | | Sn | Sn | 15 38 49.2 | -1.1 |
| | comp=Z,5.1nm,0.3s,baz=263,slow=35,SNR=3.4 | | | | | | |
| OHR | Ohrid | 7.63 | 325 | ePn | Pn | 15 37 27.5 | +2.6 |
| ARNB | Al Arnab | 7.74 | 81 | eP | Pn | 15 37 16.6 | -10 |
| ARNB | | | | eS | Sn | 15 38 35.5 | -18 |
| ARNB | | | | AML | AML | 15 39 04.0 | |
| | comp=E,33nm,0.5s | | | | | | |
| ARNB | | | | AML | AML | 15 39 09.7 | |
| | comp=N,17nm,0.5s | | | | | | |
| ARNB | Al Arnab | 7.74 | 81 | eP | Pn | 15 37 16.6 | -10 |
| ARNB | | | | eS | Sn | 15 38 35.5 | -18 |
| | comp=N,17nm,0.5s | | | | | | |
| BRBR | Barbar | 7.94 | 99 | eP | Pn | 15 37 24.3 | -4.9 |
| BRBR | | | | eS | Sn | 15 38 45.6 | -13 |
| BRBR | | | | AML | AML | 15 39 01.8 | |
| | comp=N,49nm,0.7s | | | | | | |
| BRBR | | | | AML | AML | 15 39 09.0 | |
| | comp=E,41nm,0.7s | | | | | | |
| BRBR | Barbar | 7.94 | 99 | eP | Pn | 15 37 24.3 | -4.9 |
| BRBR | | | | eS | Sn | 15 38 45.6 | -13 |
| | comp=E,41nm,0.7s | | | | | | |
| BIDA | Albida | 8.01 | 87 | eP | Pn | 15 37 24.1 | -6.1 |
| BIDA | | | | eS | Sn | 15 38 43.6 | -17 |
| BIDA | | | | AML | AML | 15 39 01.5 | |
| | comp=E,40nm,0.6s | | | | | | |
| BIDA | | | | AML | AML | 15 39 01.9 | |
| | comp=N,77nm,0.5s | | | | | | |
| BIDA | Albida | 8.01 | 87 | eP | Pn | 15 37 24.1 | -6.1 |
| BIDA | | | | eS | Sn | 15 38 43.6 | -17 |
| | comp=N,77nm,0.5s | | | | | | |
| VTS | Vitosha | 8.05 | 342 | eP | Pn | 15 37 32.8 | +2.1 |
| WRDH | Warideh | 8.08 | 83 | eP | Pn | 15 37 23.7 | -7.4 |
| WRDH | | | | eS | Sn | 15 38 42.0 | -20 |
| WRDH | | | | AML | AML | 15 39 16.5 | |
| | comp=E,33nm,0.5s | | | | | | |
| WRDH | Warideh | 8.08 | 83 | eP | Pn | 15 37 23.7 | -7.4 |
| WRDH | | | | eS | Sn | 15 38 42.0 | -20 |
| | comp=E,33nm,0.5s | | | | | | |
| HAWK | Haweek | 8.12 | 90 | eP | Pn | 15 37 23.3 | -8.3 |
| HAWK | | | | eS | Sn | 15 38 47.4 | -16 |
| HAWK | | | | AML | AML | 15 39 09.6 | |
| | comp=E,21nm,0.7s | | | | | | |
| HAWK | | | | AML | AML | 15 39 10.3 | |
| | comp=N,39nm,0.7s | | | | | | |
| HAWK | Haweek | 8.12 | 90 | eP | Pn | 15 37 23.3 | -8.3 |
| HAWK | | | | eS | Sn | 15 38 47.4 | -16 |
| | comp=N,39nm,0.7s | | | | | | |
| TCHB | Talchebab | 8.16 | 104 | eP | Pn | 15 37 26.8 | -5.3 |
| TCHB | | | | eS | Sn | 15 38 52.7 | -11 |
| TCHB | | | | AML | AML | 15 39 11.7 | |
| | comp=E,84nm,0.6s | | | | | | |
| TCHB | | | | AML | AML | 15 39 14.7 | |
| | comp=N,86nm,0.6s | | | | | | |
| TCHB | Talchebab | 8.16 | 104 | eP | Pn | 15 37 26.8 | -5.3 |
| TCHB | | | | eS | Sn | 15 38 52.7 | -11 |
| | comp=N,86nm,0.6s | | | | | | |
| MPEP | Malo Peshtene | 8.66 | 346 | eP | Pn | 15 37 40.2 | +1.3 |
| SALA | Sala | 8.76 | 102 | eP | Pn | 15 37 34.8 | -5.7 |
| SALA | | | | eS | Sn | 15 39 06.5 | -13 |
| SALA | | | | AML | AML | 15 39 26.8 | |
| | comp=E,2.3nm,0.5s | | | | | | |
| SALA | | | | AML | AML | 15 39 46.8 | |
| | comp=N,21nm,0.6s | | | | | | |
| SALA | Sala | 8.76 | 102 | eP | Pn | 15 37 34.8 | -5.7 |
| SALA | | | | eS | Sn | 15 39 06.5 | -13 |
| | comp=N,21nm,0.6s | | | | | | |
| RABH | Abou Rabah | 8.79 | 90 | eP | Pn | 15 37 35.1 | -5.7 |
| RABH | | | | eS | Sn | 15 39 01.3 | -18 |
| RABH | | | | AML | AML | 15 39 28.2 | |
| | comp=N,15nm,0.5s | | | | | | |
| RABH | | | | AML | AML | 15 39 38.6 | |
| | comp=E,14nm,0.5s | | | | | | |
| RABH | Abou Rabah | 8.79 | 90 | eP | Pn | 15 37 35.1 | -5.7 |
| RABH | | | | eS | Sn | 15 39 01.3 | -18 |
| | comp=E,14nm,0.5s | | | | | | |
| EIL | Elat | 8.85 | 124 | Pn | Pn | 15 37 42.7 | +1.1 |
| | comp=E,1.3nm,0.3s,baz=258,slow=2.4,SNR=11 | | | | | | |
| EIL | | | | Sn | Sn | 15 39 18.9 | -2.1 |
| | comp=E,4.3nm,0.3s,baz=127,slow=22,SNR=6.5 | | | | | | |
| ROOS | tl_alroos | 8.89 | 92 | eP | Pn | 15 37 36.5 | -5.7 |
| ROOS | | | | eS | Sn | 15 39 05.3 | -17 |
| ROOS | | | | AML | AML | 15 39 29.9 | |
| | comp=N,42nm,0.6s | | | | | | |
| ROOS | | | | AML | AML | 15 39 38.3 | |
| | comp=E,44nm,0.5s | | | | | | |
| ROOS | tl_alroos | 8.89 | 92 | eP | Pn | 15 37 36.5 | -5.7 |
| ROOS | | | | eS | Sn | 15 39 05.3 | -17 |
| | comp=E,44nm,0.5s | | | | | | |
| ASF | Jabal al Asfar | 9.07 | 105 | Pn | Pn | 15 37 46.3 | +1.7 |
| | comp=E,0.3nm,0.3s,baz=252,slow=6.4,SNR=2.3 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MSAB | Monastry St. A | 9.16 | 6⇓ | iP | Pn | 15 37 47.4 | +1.6 |
| ZALF | Zalf | 9.18 | 100 | eP | Pn | 15 37 42.6 | -3.6 |
| ZALF | | | | eS | Sn | 15 39 13.8 | -15 |
| ZALF | | | | AML | AML | 15 39 54.4 | |
| | comp=N,9.8nm,0.6s | | | | | | |
| ZALF | | | | AML | AML | 15 40 00.0 | |
| | comp=E,12nm,0.6s | | | | | | |
| ZALF | Zalf | 9.18 | 100 | eP | Pn | 15 37 42.6 | -3.6 |
| ZALF | | | | eS | Sn | 15 39 13.8 | -15 |
| | comp=E,13nm,0.6s | | | | | | |
| TLB | Topalu | 9.67 | 6⇑ | iP | Pn | 15 37 55.2 | +2.4 |
| SULR | | 9.70 | 359⇑ | iP | Pn | 15 37 54.2 | +1.0 |
| HARR | Harsova | 9.77 | 6⇑ | iP | Pn | 15 37 56.1 | +2.0 |
| CUC | Castrocucco | 9.90 | 304 | ePn | Pn | 15 37 54.2 | -1.8 |
| SECR | | 10.06 | 358⇓ | iP | Pn | 15 38 03.3 | +5.2 |
| CFR | Carcaliu | 10.27 | 6⇑ | iP | Pn | 15 38 01.8 | +0.9 |
| TLCR | | 10.35 | 9⇓ | iP | Pn | 15 38 04.3 | +2.2 |
| DIVS | Divibare | 10.43 | 333⇓ | iP | Pn | 15 38 04.8 | +1.6 |
| VOIR | | 10.52 | 354⇑ | iP | Pn | 15 38 04.2 | -0.3 |
| MLR | Muntele Rosu | 10.52 | 358 | Pn | Pn | 15 38 06.7 | +2.1 |
| | comp=E,0.1nm,0.3s,baz=240,slow=5.1,SNR=15 | | | | | | |
| MLR | Muntele Rosu | 10.52 | 358⇓ | iP | Pn | 15 38 06.6 | +2.1 |
| GZR | Gura Zlata | 10.80 | 346⇓ | iP | Pn | 15 38 08.9 | +0.5 |
| PLOR | Plostina | 10.87 | 0⇓ | iP | Pn | 15 38 10.7 | +1.5 |
| VRI | Vrincioaia | 10.89 | 1⇑ | iP | Pn | 15 38 11.7 | +2.3 |
| DOPR | Dopca | 11.02 | 356⇓ | iP | Pn | 15 38 13.0 | +1.7 |
| BZS | Buzias | 11.28 | 342⇑ | iP | Pn | 15 38 15.4 | +0.6 |
| TESR | Tescani | 11.53 | 0⇑ | iP | Pn | 15 38 20.3 | +2.1 |
| BURAR | Bucovina Array | 12.68 | 356⇑ | iP | Pn | 15 38 35.5 | +1.5 |
| UZH | Uzhgorod | 14.01 | 348 | eP | Pn | 15 38 53.1 | +1.0 |
| KOLS | Kolonicke sedl | 14.31 | 349 | eP | Pn | 15 38 58.2 | +2.0 |
| KOLS | Kolonicke sedl | 14.31 | 349 | ePN | Pn | 15 38 58.2 | +2.0 |
| KOLS | Kolonicke sedl | 14.31 | 349 | ePn | Pn | 15 38 58.2 | +2.0 |
| STHS | Stebnicka Huta | 14.96 | 346 | eP | P | 15 39 10.4 | -0.1 |
| STHS | Stebnicka Huta | 14.96 | 346 | eP | P | 15 39 10.4 | -0.1 |
| STHS | Stebnicka Huta | 14.96 | 346 | eP | P | 15 39 10.4 | -0.1 |
| KIV | Kislovodsk | 15.33 | 49 | P | Pn | 15 39 12.3 | +2.2 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| KIV | Kislovodsk | 15.33 | 49 | P | P | 15 39 13.2 | -1.6 |
| | comp=Z,13nm,0.6s | | | | | | |
| KIV | Kislovodsk | 15.33 | 49 | P | P | 15 39 13.2 | -1.6 |
| | comp=Z,13nm,0.6s | | | | | | |
| KBZ | Khabaz | 15.35 | 50 | Pn | P | 15 39 15.6 | +0.7 |
| | comp=Z,0.3nm,0.3s,baz=262,slow=5.7,SNR=7.8 | | | | | | |
| ZEI | Tsey | 15.58 | 55 | eP | P | 15 39 17.8 | +0.1 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,45nm,0.6s | | | | | | |
| ZEI | Tsey | 15.58 | 55 | eP | P | 15 39 17.8 | +0.1 |
| | comp=Z,45nm,0.6s | | | | | | |
| NCK | Nalchik | 15.69 | 52 | eP | P | 15 39 17.9 | -0.8 |
| NCK | Nalchik | 15.69 | 52 | eP | P | 15 39 17.9 | -0.8 |
| KIEV | Kiev | 15.84 | 6 | eP | Pn | 15 39 16.3 | -0.2 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| KIEV | Kiev | 15.84 | 6 | eP | Pn | 15 39 17.9 | +1.4 |
| AKASG | Malin Array Be | 15.84 | 6 | Pn | Pn | 15 39 18.1 | +1.5 |
| | comp=E,2.9nm,0.3s,baz=194,slow=11,SNR=26 | | | | | | |
| AKASG | | | | Sn | S | 15 42 21.9 | -4.2 |
| | baz=190,slow=22,SNR=5.6 | | | | | | |
| OKC | Ostrava-Krasne | 16.09 | 340 | eP | P | 15 39 22.7 | -0.3 |
| OKC | Ostrava-Krasne | 16.09 | 340 | eP | P | 15 39 22.7 | -0.3 |
| OKC | Ostrava-Krasne | 16.09 | 340 | eP | P | 15 39 22.7 | -0.3 |
| VRAC | Vranov | 16.10 | 336 | Pn | Pn | 15 39 19.9 | 0.0 |
| | comp=Z,0.2nm,0.3s,baz=150,slow=10,SNR=3.1 | | | | | | |
| MORC | Moravsky Berou | 16.21 | 339⇑ | iP | Pn | 15 39 20.7 | -0.6 |
| MORC | Moravsky Berou | 16.21 | 339 | ePn | Pn | 15 39 20.7 | -0.6 |
| KRLC | Kraliky | 16.70 | 338 | eP | P | 15 39 28.7 | -1.2 |
| KRLC | Kraliky | 16.70 | 338 | eP | P | 15 39 28.7 | -1.2 |
| KRLC | Kraliky | 16.70 | 338 | eP | P | 15 39 28.7 | -1.2 |
| ILIN | Lien | 16.73 | 84 | eP | P | 15 39 30.4 | -0.1 |
| ILIN | Lien | 16.73 | 84 | eP | P | 15 39 30.5 | -0.1 |
| GERES | GERESS Array B | 16.81 | 329 | Pn | Pn | 15 39 28.7 | -0.4 |
| | comp=Z,0.2nm,0.3s,baz=143,slow=11,SNR=16 | | | | | | |
| KHC | Kasperske Hory | 17.09 | 330 | eP | P | 15 39 33.3 | -0.8 |
| KHC | Kasperske Hory | 17.09 | 330 | eP | P | 15 39 33.3 | -0.8 |
| KHC | | | | ex | x | 15 39 49.1 | |
| KHC | Kasperske Hory | 17.09 | 330 | eP | Pn | 15 39 33.0 | +0.6 |
| | comp=Z,3.6nm,1.1s | | | | | | |
| KHC | Kasperske Hory | 17.09 | 330 | eP | P | 15 39 33.3 | -0.8 |
| DPC | Dobruska-Polom | 17.09 | 337 | eP | P | 15 39 34.1 | -0.1 |
| DPC | Dobruska-Polom | 17.09 | 337 | eP | P | 15 39 34.1 | -0.1 |
| DPC | | | | ex | x | 15 39 53.2 | |
| DPC | Dobruska-Polom | 17.09 | 337 | eP | P | 15 39 34.1 | -0.1 |
| DAVOX | Davos/Dischmat | 17.23 | 318 | P | Pn | 15 39 34.3 | -0.1 |
| | comp=Z,0.1nm,0.3s,baz=164,slow=15,SNR=2.8 | | | | | | |
| GOPC | GO Pecny, Ondr | 17.24 | 334 | eP | Pn | 15 39 33.9 | -0.5 |
| GOPC | GO Pecny, Ondr | 17.24 | 334 | eP | Pn | 15 39 33.9 | -0.5 |
| GOPC | GO Pecny, Ondr | 17.24 | 334 | eP | Pn | 15 39 33.9 | -0.5 |
| PRU | Pruhonice | 17.39 | 333 | eP | Pn | 15 39 35.5 | -0.7 |
| PRU | Pruhonice | 17.39 | 333 | eP | Pn | 15 39 35.5 | -0.7 |
| PRA | Prague | 17.50 | 333 | eP | Pn | 15 39 36.7 | -0.9 |
| PRA | Prague | 17.50 | 333 | eP | Pn | 15 39 36.7 | -0.9 |
| PRA | Prague | 17.50 | 333 | eP | Pn | 15 39 36.7 | -0.9 |
| BRG | Berggiesshubel | 18.34 | 334 | eP | Pn | 15 39 46.3 | -1.6 |
| | comp=Z,3.3nm,1.0s | | | | | | |
| BRG | | | | e | | 15 39 49.0 | |
| | comp=Z,7.3nm,1.1s | | | | | | |
| BRG | Berggiesshubel | 18.34 | 334 | eP | Pn | 15 39 46.3 | -1.6 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| BRG | Berggiesshubel | 18.34 | 334 | eP | Pn | 15 39 46.3 | -1.6 |
| | comp=Z,3.0nm,1.0s | | | | | | |
| VSR | Storozhevoye | 18.62 | 25 | eP | Pn | 15 39 54.9 | +3.6 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.0s | | | | | | |
| CLL | Collm | 19.04 | 333 | eP | P | 15 39 55.0 | -0.6 |
| CLL | Collm | 19.04 | 333 | eP | P | 15 39 55.0 | -0.6 |
| CLL | | | | esP | sP | 15 40 01.0 | -1.3 |
| CLL | Collm | 19.04 | 333 | eP | P | 15 39 55.0 | -0.6 |
| VRH | Novokhopyorsk | 19.58 | 29 | eP | P | 15 40 00.5 | -1.0 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,20nm,0.7s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.7s | | | | | | |
| VRH | Novokhopyorsk | 19.58 | 29 | eP | P | 15 40 00.5 | -1.0 |
| | comp=E,10.0nm,0.5s | | | | | | |
| LPSR | Galich'ya Gora | 19.71 | 23 | eP | P | 15 40 02.6 | -0.3 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,7.0nm,1.0s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.7s | | | | | | |
| LPSR | Galich'ya Gora | 19.71 | 23 | eP | P | 15 40 02.6 | -0.3 |
| | comp=E,7.0nm,1.0s | | | | | | |
| IPIR | Pirpir | 20.34 | 90 | eP | Pn | 15 40 11.8 | -0.6 |
| IPIR | Pirpir | 20.34 | 90 | eP | Pn | 15 40 11.8 | -0.6 |
| IKLH | Kolahrood | 20.76 | 87 | eP | Pn | 15 40 16.2 | -1.1 |
| IKLH | Kolahrood | 20.76 | 87 | eP | Pn | 15 40 16.2 | -1.1 |
| OBN | Obninsk | 21.31 | 16⇑ | eP | P | 15 40 21.0 | +0.9 |
| OBN | | | | e | | 15 40 43.1 | |
| OBN | | | | eS | S | 15 44 04.0 | -12 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,182nm,16.0s | | | | | | |
| OBN | Obninsk | 21.31 | 16 | eP | P | 15 40 21.0 | +0.9 |
| | comp=Z,14nm,0.8s | | | | | | |
| IGAR | Gharneh | 21.34 | 90 | eP | P | 15 40 23.0 | +1.9 |
| IZEF | Zefreh | 21.47 | 88 | eP | P | 15 40 22.0 | -0.4 |
| IZEF | Zefreh | 21.47 | 88 | eP | P | 15 40 22.0 | -0.4 |
| MEM | Membach | 21.61 | 323 | P | P | 15 40 21.7 | -1.8 |
| | comp=Z,12nm,1.4s | | | | | | |
| IRAM | Ramesheh | 21.77 | 91 | eP | P | 15 40 26.4 | +0.8 |
| IRAM | Ramesheh | 21.77 | 91 | eP | P | 15 40 26.5 | +0.8 |
| BCLA | Clavier | 21.85 | 321 | P | P | 15 40 23.9 | -2.2 |
| | comp=Z,12nm,1.4s | | | | | | |
| TAM | Tamanrasset | 22.00 | 242 | eP | P | 15 40 29.6 | +1.5 |
| | comp=Z,6.9nm,0.9s | | | | | | |
| TAM | Tamanrasset | 22.00 | 242 | eP | P | 15 40 29.6 | +1.5 |
| | comp=Z,6.9nm,0.9s | | | | | | |
| IMEH | Mehriz | 23.72 | 91 | eP | P | 15 40 46.6 | +0.7 |
| IMEH | Mehriz | 23.72 | 91 | eP | P | 15 40 46.6 | +0.7 |
| ESDC | Sonseca Array | 24.66 | 290 | P | P | 15 40 53.2 | -1.2 |
| | comp=Z,2.7nm,0.6s,baz=81,slow=9.4,SNR=15 | | | | | | |
| ISFR | Sfrayin | 25.46 | 76 | eP | P | 15 41 01.8 | -0.1 |
| ISFR | Sfrayin | 25.46 | 76 | eP | P | 15 41 01.8 | -0.1 |

GEYT **Alibeck** 25.50 74 P **P** 15 41 02.3 +0.4
comp=Z,6.8nm,0.7s,baz=280,slow=9.8,SNR=11
IKRD **Kardeh** 25.90 77 *e*P P 15 41 12.8 +6.9
IPAY **Payeh** 26.32 77 *e*P **P** 15 41 08.5 -1.1
IPAY **Payeh** 26.32 77 *e*P **P** 15 41 08.5 -1.1
FINES **FINESS Array B** 26.50 359 P **P** 15 41 07.8 -2.8
comp=Z,1.9nm,0.8s,baz=168,slow=9.8,SNR=8.7
FINES PcP **PcP** 15 44 35.2 +0.2
comp=Z,1.5nm,0.8s,baz=191,slow=3.1,SNR=3.6
FINES **FINESS Array B** 26.50 359 P **P** 15 41 07.8 -2.8
FINES 15 44 35.3
FINES pmax pmax
comp=Z,2.0nm,0.8s
FINES pmax pmax
comp=Z,2.0nm,0.8s
HFS **Hagfors** 26.53 346 P **P** 15 41 07.5 -3.5
comp=Z,1.6nm,0.6s,baz=144,slow=11,SNR=4.2
HFS **Hagfors** 26.53 346 P **P** 15 41 07.5 -3.5
HFS pmax pmax
comp=Z,2.0nm,0.6s
IMYA **Miami** 27.22 77 *e*P **P** 15 41 19.4 +1.7
IMYA **Miami** 27.22 77 *e*P **P** 15 41 19.4 +1.7
AKTK **Aktyubinsk** 27.55 46 P **P** 15 41 19.2 -1.1
comp=Z,10.0nm,0.8s
AKTO **Aktyubinsk** 27.55 46 P **P** 15 41 19.7 -0.5
comp=Z,9.2nm,0.7s,baz=253,slow=9.8,SNR=26
AKTO **Aktyubinsk** 27.55 46 P **P** 15 41 19.2 -1.1
AKTO pmax pmax
comp=Z,10.0nm,0.8s
NOA **NORSAR Array B** 27.89 344 P **P** 15 41 21.7 -1.5
comp=Z,1.2nm,0.7s,baz=153,slow=8.7,SNR=3.3
NOA **NORSAR Array B** 27.89 344 P **P** 15 41 21.7 -1.5
NOA pmax pmax
comp=Z,1.0nm,0.7s
AB31 **Akbulak array** 28.32 49 P **P** 15 41 26.7 -0.4
AB31 pmax pmax
comp=Z,1.0nm,0.3s
AB31 **Akbulak array** 28.32 49 P **P** 15 41 26.7 -0.4
comp=Z,1.0nm,0.3s
ABKAR **Akbulak array** 28.32 49 *e*P **P** 15 41 26.2 -0.9
comp=Z,2.4nm,0.5s
ABKAR **Akbulak array** 28.32 49 *e*P **P** 15 41 26.2 -0.9
comp=Z,2.4nm,0.5s
EKA **Eskdalemuir Ar** 28.86 324 P **P** 15 41 29.6 -2.3
comp=Z,1.2nm,0.5s,baz=127,slow=10,SNR=10.0
EKA **Eskdalemuir Ar** 28.86 324 P **P** 15 41 29.6 -2.3
EKA pmax pmax
comp=Z,1.0nm,0.5s
ARU **Arti** 30.54 35*d i*P **P** 15 41 45.4 -1.3
ARU 15 42 43.6
ARU S **S** 15 46 51.9 +4.4
ARU SS **ScP** 15 48 31.7 +4.6
ARU pmax pmax
comp=Z,8.0nm,1.7s
ARU **Arti** 30.54 35 *e*P **P** 15 41 45.0 -1.8
comp=Z,4.5nm,0.8s
ARU **Arti** 30.54 35 *i* P **P** 15 41 45.4 -1.3
comp=Z,8.0nm,1.7s
TOA0 **Torodi Ar. Sit** 31.26 232 *e*P **P** 15 41 53.1 -0.4
TORD **Torodi Ar. Bea** 31.26 232 P **P** 15 41 53.4 -0.1
comp=Z,4.8nm,0.6s,baz=35,slow=8.6,SNR=41
SVE **Sverdlovsk** 31.73 36 *i*P **P** 15 41 56.6 -0.6
SVE pmax pmax
comp=Z,14nm,0.9s
SVE **Sverdlovsk** 31.73 36 *i* P **P** 15 41 56.6 -0.6
comp=Z,14nm,0.9s
ARCES **ARCESS Array B** 34.62 359 P **P** 15 42 19.2 -3.2
comp=Z,1.9nm,0.7s,baz=183,slow=9.5,SNR=16
ARCES **ARCESS Array B** 34.62 359 P **P** 15 42 19.2 -3.2
ARCES pmax pmax
comp=Z,2.0nm,0.7s
KK31 **Karatay Array** 34.77 63 *i* P **P** 15 42 24.1 +0.2
KK31 pmax pmax
comp=Z,7.0nm,0.8s
KK31 **Karatay Array** 34.77 63 *i* P **P** 15 42 24.1 +0.2
comp=Z,7.0nm,0.8s
KKAR **Karatay Array** 34.77 63 *e*P **P** 15 42 24.4 +0.5
KKAR pmax pmax
comp=Z,8.0nm,0.8s
KKAR **Karatay Array** 34.77 63 *e*P **P** 15 42 24.4 +0.5
comp=Z,7.9nm,0.8s
KKAR **Karatay Array** 34.77 63 *e*P **P** 15 42 24.4 +0.5
comp=Z,7.9nm,0.8s
BRVK **Borovoye** 35.60 46*c i*P **P** 15 42 30.8 -0.1
BRVK pmax pmax
comp=Z,5.0nm,0.8s
BRVK **Borovoye** 35.60 46 *e*P **P** 15 42 30.7 -0.2
comp=Z,4.8nm,0.8s
BRVK **Borovoye** 35.60 46 *i* P **P** 15 42 30.8 -0.1
comp=Z,5.0nm,0.8s
BVA0 **Borovoye Array** 35.65 46 *i* P **P** 15 42 31.0 -0.4
BVA0 pmax pmax
comp=Z,11nm,1.3s
BVA0 **Borovoye Array** 35.65 46 *i* P **P** 15 42 31.0 -0.4
comp=Z,11nm,1.3s
BVAR **Borovoye Array** 35.65 46 P **P** 15 42 31.7 +0.3
comp=Z,4.0nm,0.8s,baz=263,slow=5.8,SNR=23
BVAR **Borovoye Array** 35.65 46 P **P** 15 42 31.7 +0.3
BVAR pmax pmax
comp=Z,4.0nm,0.8s
OTUK **Ortayu** 36.18 54 P **P** 15 42 35.7 -0.3
OTUK pmax pmax
comp=Z,15nm,0.7s
OTUK **Ortayu** 36.18 54 P **P** 15 42 35.7 -0.3
comp=Z,15nm,0.7s
EKS2 **Erkin-Say** 37.19 64 *e*P **P** 15 42 45.5 +0.7
EKS2 pmax pmax
comp=Z,4.0nm,0.9s
EKS2 **Erkin-Say** 37.19 64 *e*P **P** 15 42 45.5 +0.7
comp=Z,4.0nm,0.9s
EKS2 **Erkin-Say** 37.19 64 *e*P **P** 15 42 45.5 +0.7
comp=Z,4.0nm,0.9s
SFK **Sufi-Kurgan** 37.25 68 P **P** 15 42 45.8 +0.3
SFK pmax pmax
comp=Z,6.0nm,0.7s
SFK **Sufi-Kurgan** 37.25 68 P **P** 15 42 45.8 +0.3
comp=Z,6.0nm,0.7s
AAK **Ala-Archa** 37.72 64 P **P** 15 42 50.0 +0.7
comp=Z,2.4nm,0.5s,baz=222,slow=4.3,SNR=6.8
AAK **Ala-Archa** 37.72 64 *e*P **P** 15 42 49.7 +0.4
AAK pmax pmax
comp=Z,13nm,1.0s
AAK **Ala-Archa** 37.72 64 *e*P **P** 15 42 49.8 +0.5
comp=Z,6.0nm,0.9s
AAK **Ala-Archa** 37.72 64 *e*P **P** 15 42 49.7 +0.4
comp=Z,13nm,1.0s
FRU **Bishkek** 37.79 63 *e*P **P** 15 42 51.0 +1.2
FRU **Bishkek** 37.79 63 *e*P **P** 15 42 51.0 +1.2
KSH **Kashi** 39.21 68 *e*P **P** 15 43 01.0 -0.9
KSH *e*pP **pP** 15 43 10.7 +3.8
KSH S **S** 15 48 56.2 -5.4
KSH PMZ
comp=Z,94nm,6.3s
KSH LN
comp=Z,160nm,10.6s
KSH LE
comp=Z,120nm,7.5s
KURBB **Kurchatov Arra** 40.35 51 P **P** 15 43 11.2 +0.1
comp=Z,14nm,0.6s,baz=277,slow=8.8,SNR=132
KURBB PcP **PcP** 15 45 14.4 +0.2
comp=Z,1.1nm,0.6s,baz=273,slow=4.3,SNR=4.9
DBIC **Dimbokro** 40.35 233 P **P** 15 43 10.8 -0.6
comp=Z,4.7nm,0.8s,baz=26,slow=8.7,SNR=7.2
DBIC **Dimbokro** 40.35 233 P **P** 15 43 10.9 -0.6
DBIC pmax pmax
comp=Z,5.0nm,0.8s
KURK **Kurchatov** 40.41 51 *e*P **P** 15 43 11.5 -0.1
KURK 15 45 14.4
KURK **Kurchatov** 40.41 51 *e*P **P** 15 43 11.5 -0.1
KURK PcP **PcP** 15 45 14.4 +0.1
KURK **Kurchatov** 40.41 51 *e*P **P** 15 43 11.5 -0.1
TIC **Toumodi** 40.48 233 *e*P **P** 15 43 11.7 -0.8
KIC **Kosan Boka** 40.51 233 *e*P **P** 15 43 11.5 -1.3
comp=Z,18nm,0.9s
MK31 **Makanchi Array** 42.92 56 *i* P **P** 15 43 32.2 0.0
MK31 pmax pmax
comp=Z,10.0nm,0.6s
MK31 **Makanchi Array** 42.92 56 *i* P **P** 15 43 32.2 0.0
comp=Z,10.0nm,0.6s
MKAR **Makanchi Array** 42.92 56 P **P** 15 43 32.5 +0.2
comp=Z,9.2nm,0.6s,baz=274,slow=7.3,SNR=55
MKAR PcP **PcP** 15 45 22.5 -0.3
comp=Z,0.8nm,0.6s,baz=266,slow=4.5,SNR=2.5
MKAR **Makanchi Array** 42.92 56 P **P** 15 43 32.5 +0.2
MKAR 15 45 22.5
MKAR pmax pmax
comp=Z,9.0nm,0.6s
MKAR pmax pmax
comp=Z,1.0nm,0.6s
NVS **Novosibirsk** 43.42 45⇑ *i*P **P** 15 43 36.0 0.0
NVS pmax pmax
comp=Z,30nm,1.4s
NVS pmax pmax
comp=N,3.0nm,0.6s
NVS pmax pmax
comp=E,6.0nm,0.7s
NVS **Novosibirsk** 43.42 45 *i* P **P** 15 43 36.0 0.0
comp=E,3.0nm,0.6s
SPITS **Spitsbergen Ar** 43.53 357 P **P** 15 43 35.8 -0.9
comp=E,1.3nm,0.5s,baz=153,slow=7.5,SNR=5.5
SPITS **Spitsbergen Ar** 43.53 357 P **P** 15 43 35.8 -0.9
SPITS pmax pmax
comp=Z,1.0nm,0.5s
ZALV **Zalesovo Beam** 44.31 46 P **P** 15 43 42.6 -0.7
comp=Z,13nm,0.4s,baz=267,slow=8.9,SNR=59
ZALV **Zalesovo Beam** 44.31 46 *i* P **P** 15 43 42.5 -0.7
ZALV pmax pmax
comp=Z,13nm,0.4s
WMQ **Urumqi** 47.11 60 *e*P **P** 15 44 06.0 +0.4
KOLN **Koldanda** 48.67 82 *e*P **P** 15 44 17.7 -0.4
comp=Z,8.5nm,0.7s
GKN **Gorkha** 49.42 81 *e*P **P** 15 44 24.1 +0.3
comp=Z,9.4nm,0.6s
HVS **Khovu-Aksy** 49.91 49 *e*P **P** 15 44 27.2 +0.1
HVS pmax pmax
comp=Z,15nm,0.9s
HVS **Khovu-Aksy** 49.91 49 *e*P **P** 15 44 27.2 +0.1
comp=Z,15nm,0.9s
DMN **Daman** 49.96 81 *e*P **P** 15 44 27.8 -0.2
comp=Z,22nm,0.9s
LSZ **Lusaka** 49.99 178 P **P** 15 44 28.8 +0.8
comp=Z,0.5nm,0.3s,baz=355,slow=12,SNR=3.5
LSZ **Lusaka** 49.99 178 P **P** 15 44 28.8 +0.8
LSZ pmax pmax
comp=Z,1.0nm,0.3s
KKN **Kakani** 50.03 81 *e*P **P** 15 44 28.2 -0.3
comp=Z,12nm,0.7s
PKIN **Phulchoki** 50.21 81 *e*P **P** 15 44 29.6 -0.3
comp=Z,5.3nm,0.6s
PKI **Pulchoki** 50.22 81 *e*P **P** 15 44 29.6 -0.5
comp=Z,15nm,0.8s
GUN **Gumba** 50.47 81 *e*P **P** 15 44 31.9 -0.1
comp=Z,11nm,0.5s
RAMN **Ramite** 51.45 81 *e*P **P** 15 44 38.8 -0.4
comp=Z,12nm,0.8s
MOY **Mondy** 54.29 48 *e*P **P** 15 45 00.4 +0.6
MOY **Mondy** 54.29 48 *e*P **P** 15 45 00.4 +0.6
TLY **Talaya** 55.89 47 P **P** 15 45 11.7 +0.5
comp=Z,2.0nm,0.8s,baz=253,slow=6.8,SNR=5.1
TLY **Talaya** 55.89 47 *e*P **P** 15 45 11.9 +0.7
TLY pmax pmax
comp=Z,3.0nm,0.7s
TLY MLR MLR
comp=Z,122nm,15.0s
ZAK **Zakamensk** 56.01 49 *e*P **P** 15 45 11.7 -0.4
ZAK pmax pmax
comp=Z,5.0nm,1.0s
ZAK **Zakamensk** 56.01 49 *e*P **P** 15 45 11.7 -0.4
comp=Z,5.0nm,1.0s
GTA **Gaotai** 57.04 62 *e*P **P** 15 45 19.9 +0.2
GTA pP **pP** 15 45 25.5 +0.6
GTA S **S** 15 53 11.1 -2.7
GTA SS **SS** 15 57 01.5 -0.6
GTA PMZ
comp=Z,4.0nm,1.1s
GTA PMZ
comp=Z,130nm,6.2s
GTA LN
comp=Z,200nm,17.1s
GTA LE
comp=Z,210nm,15.7s
GTA LZ
comp=Z,130nm,16.1s
SONM **Songino Array** 58.72 51 P **P** 15 45 31.7 +0.4
comp=Z,3.8nm,0.7s,baz=284,slow=8.3,SNR=19
SONM **Songino Array** 58.72 51 P **P** 15 45 31.7 +0.4
SONM pmax pmax
comp=Z,4.0nm,0.7s
ULN **Ulaanbaatar** 59.13 51*c i*P **P** 15 45 34.2 0.0
ULN pmax pmax
comp=Z,14nm,2.5s
ULN **Ulaanbaatar** 59.13 51 *e*P **P** 15 45 34.1 -0.1
comp=Z,3.7nm,0.8s
ULN **Ulaanbaatar** 59.13 51 *i* P **P** 15 45 34.2 0.0
comp=Z,14nm,2.5s
BOD **Bodaibo** 59.90 38 *e*P **P** 15 45 37.0 -2.1
BOD pmax pmax
comp=Z,4.0nm,1.9s
CD2 **Chengdu** 63.38 70 *e*P **P** 15 46 01.5 -1.7
CD2 PMZ
comp=Z,10.0nm,0.5s
SCHQ **Schefferville** 64.07 320 P **P** 15 46 05.8 -1.5
comp=Z,6.0nm,0.8s,baz=78,slow=11,SNR=4.7
HHC **Hu-ho-hao-te** 64.79 57 *e*P **P** 15 46 11.9 -0.4
HHC S **S** 15 54 50.2 -2.3
HHC SS **SS** 15 59 02.6 -0.7
HHC PMZ
comp=Z,19nm,1.5s
HHC PMZ
comp=Z,110nm,5.0s
HHC LN
comp=Z,530nm,14.9s
HHC LE
comp=Z,380nm,18.7s
HHC LZ
comp=Z,450nm,18.7s
KMI **Kunming** 65.25 76 P **P** 15 46 16.6 +0.9
KMI PMZ
comp=Z,8.0nm,0.8s
CMAR **Chiang Mai Arr** 65.45 84 P **P** 15 46 16.7 -0.1
comp=Z,2.2nm,0.7s,baz=300,slow=8.5,SNR=17
CMAR **Chiang Mai Arr** 65.45 84 P **P** 15 46 16.7 -0.1
CMAR pmax pmax
comp=Z,2.0nm,0.7s
SEY **Seymchan** 73.30 23 *e*P **P** 15 47 03.4 -1.2
SEY **Seymchan** 73.30 23 *e*P **P** 15 47 03.4 -1.2
USRK **Ussuriysk Ar.** 76.16 46 P **P** 15 47 20.8 -0.8
comp=Z,3.9nm,0.7s,baz=301,slow=4.6,SNR=9.6
KSAR **Wonju Array Be** 77.47 53 P **P** 15 47 28.9 -0.1
KSAR **Wonju Array Be** 77.47 53 P **P** 15 47 28.9 -0.1
KSAR **Wonju Array Be** 77.47 53 P **P** 15 47 28.9 -0.1
KSRS **Korea Array** 77.48 53 P **P** 15 47 28.9 -0.2
comp=Z,2.9nm,0.7s,baz=311,slow=4.9,SNR=11
KSRS **Korea Array** 77.48 53 P **P** 15 47 28.9 -0.2
KSRS pmax pmax
comp=Z,3.0nm,0.7s
ILAR **Eielson Array** 80.45 357 P **P** 15 47 44.1 -0.8
comp=Z,1.1nm,0.8s,baz=352,slow=4.3,SNR=12
ILAR **Eielson Array** 80.45 357 P **P** 15 47 44.2 -0.8
ILAR pmax pmax
comp=Z,1.0nm,0.8s
MJAR **Matsushiro Arr** 84.59 49 P **P** 15 48 06.1 -1.0
comp=Z,1.8nm,0.8s,baz=298,slow=4.4,SNR=5.8
MJAR **Matsushiro Arr** 84.59 49 P **P** 15 48 06.1 -1.0
MJAR pmax pmax
comp=Z,2.0nm,0.8s
ASAR **Alice Springs** 116.89 101 PKP **PKPdf** 15 54 17.1 -1.4
comp=Z,0.3nm,0.8s,baz=298,slow=1.0,SNR=5.3

*ISCJB **03** 15:43:39.7±0.5, 51°.40N±0°.03×16°.22E±0°.03, h0km, Error ellipse: s-maj=4.0km s-min=2.7km az=177.8*
*CSEM **03** 15:43:40.5±0.3, 51°.45N×16°.18E, h2km, ML3.5/14, Error ellipse: s-maj=4.5km s-min=3.4km az=168.0*
*IPEC **03** 15:43:40.0±0.3, 51°.50N×16°.31E, h0km, ML2.5/3, Error ellipse: s-maj=3.2km s-min=1.7km az=67.0*
*PRU **03** 15:43:42.4, 51°.38N×16°.14E, h0km*
*IDC **03** 15:43:42.3±0.9, 51°.42N×16°.11E, h0km, mb1 3.4/6, mb1mx3.2/49, mbtmp3.2/6, ML3.0/6, Error ellipse: s-maj=14.6km s-min=7.8km az=117.0*
*VIE **03** 15:43:43.8±0.7, 51°.23N×16°.31E, h0km, mb2.5/5, ml3.0/5, Error ellipse: s-maj=5.6km s-min=5.3km az=88.0, Suspected Mining induced.*
**ISC 03 15:43:39.1±0.7, 51°.53N±0°.03×16°.18E±0°.02, h0km, n48, σ1°22/92, 3C-4D, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KSP | **Ksiaz** | 0.69 | 174 | *i* Pg | **Pg** | 15 43 52.9 | +0.7 |
| KSP | | | | *e*Sg | **Sg** | 15 44 00.8 | -0.3 |

KSP *e* 15 44 04.4
**KSP Ksiaz** 0.69 174 ⇓*i*Pg **Pg** 15 43 52.9 +0.7
KSP *e*Sg **Sg** 15 44 00.8 -0.3
**UPC Upice** 1.02 186 *e*PG **Pg** 15 43 59.1 +0.4
UPC *e*SG **Sg** 15 44 10.3 -1.7
comp=Z,191nm,0.5s
**UPC Upice** 1.02 186 Pg **Pg** 15 43 59.1 +0.4
UPC Sg **Sg** 15 44 10.3 -1.7
191nm,0.5s
**DPC Dobruska-Polom** 1.18 176 *e*PG **Pg** 15 44 01.6 -0.1
DPC *e*SG **Sg** 15 44 15.8 -1.2
comp=Z,87nm,0.5s
**DPC Dobruska-Polom** 1.18 176 Pg **Pg** 15 44 01.6 -0.1
DPC Sg **Sg** 15 44 15.8 -1.2
87nm,0.5s
**PVCC Panska Ves** 1.43 226 *e*PG **Pb** 15 44 07.2 +0.7
PVCC *e*SG **Sn** 15 44 26.1 +0.4
comp=Z,267nm,0.4s
**PVCC Panska Ves** 1.43 226 Pg **Pb** 15 44 07.2 +0.7
PVCC Sg **Sn** 15 44 26.1 +0.4
267nm,0.4s
**KRLC Kraliky** 1.50 165 *e*PG **Pn** 15 44 07.5 +0.2
KRLC *e*SG **Sg** 15 44 26.6 -0.7
**KRLC Kraliky** 1.50 165 Pg **Pn** 15 44 07.5 +0.2
KRLC Sg **Sg** 15 44 26.6 -0.7
**BRG Berggiesshubel** 1.55 246 PN **Pn** 15 44 08.4 +0.4
BRG PG **Pg** 15 44 10.5 +1.7
BRG SG **Sg** 15 44 30.6 +1.7
74nm,0.5s
**PRA Prague** 1.83 218 *e*PN **Pn** 15 44 12.3 +0.5
PRA *e*PG **Pb** 15 44 13.8 +0.4
PRA *e*SG **Sb** 15 44 37.3 +0.4
comp=Z,67nm,0.8s
**PRA Prague** 1.83 218 Pn **Pn** 15 44 12.3 +0.5
**GOPC GO Pecny, Ondr** 1.84 209 *e*PN **Pn** 15 44 13.0 +1.0
GOPC *e*PG **Pg** 15 44 14.8 +0.5
GOPC *e*SG **Sb** 15 44 37.3 +0.1
comp=Z,48nm,0.5s
**GOPC GO Pecny, Ondr** 1.84 209 Pn **Pn** 15 44 13.0 +1.0
**PRU Pruhonice** 1.86 215 *e*PG **Pb** 15 44 14.1 +0.2
PRU *e*SG **Sb** 15 44 38.4 +0.8
comp=Z,67nm,0.5s
**PRU Pruhonice** 1.86 215 Pg **Pb** 15 44 14.1 +0.2
PRU Sg **Sb** 15 44 38.4 +0.8
67nm,0.5s
**MORC Moravsky Berou** 1.95 153 *e*Pn **Pn** 15 44 13.5 0.0
MORC *e*Sg **Sn** 15 44 39.4 +0.6
25nm,0.4s
**OKC Ostrava-Krasne** 2.10 143 *e*PG **Pb** 15 44 18.5 +0.4
OKC *e*SG **Sb** 15 44 44.4 -0.3
comp=Z,64nm,0.7s
**OKC Ostrava-Krasne** 2.10 143 Pg **Pb** 15 44 18.5 +0.4
OKC Sg **Sb** 15 44 44.4 -0.3
64nm,0.7s
**VRAC Vranov** 2.23 173 Pn **Pn** 15 44 18.6 +1.2
2.2nm,0.3s,baz=341,slow=13,SNR=15
VRAC Lg Lg 15 44 49.0
5.8nm,0.3s,baz=263,slow=22,SNR=12
**VRAC Vranov** 2.23 173 *e*Pn **Pn** 15 44 17.9 +0.5
VRAC *e*Sg **Sb** 15 44 49.1 +0.6
30nm,0.5s
**KRUC Moravsky** 2.47 177 *e*Pn **Pn** 15 44 21.1 +0.5
KRUC *e*Sg **Sb** 15 44 56.5 +1.2
19nm,0.5s
**OJC Ojcow** 2.64 118 *e*Pg **Pg** 15 44 30.3 +0.7
OJC *e*Sg **Sg** 15 45 04.3 +0.5
**OJC Ojcow** 2.64 118 *e*Pg **Pg** 15 44 30.3 +0.7
OJC *e*Sg **Sg** 15 45 04.3 +0.5
**KHC Kasperske Hory** 2.92 216 *e*PN **Pn** 15 44 27.5 +0.7
KHC *e*PG **Pb** 15 44 33.7 +1.7
KHC *e*SN **Sn** 15 45 00.0 -2.6
KHC *e*SG **Sb** 15 45 10.5 +2.2
comp=Z,21nm,0.4s
**KHC Kasperske Hory** 2.92 216 Pn **Pn** 15 44 27.5 +0.7
**GERES GERESS Array B** 3.12 212 Pn **Pn** 15 44 31.2 +1.6
0.9nm,0.3s,baz=34,slow=13,SNR=24
GERES Pg **Pb** 15 44 37.3 +1.8
7.3nm,0.3s,baz=30,slow=18,SNR=81
GERES Lg Lg 15 45 19.7
6.7nm,0.3s,baz=28,slow=29,SNR=10.0
**NIE Niedzica** 3.37 127 *e*P **Pg** 15 44 43.7 0.0
NIE *e*S **Sg** 15 45 27.2 -0.2
**VYHS Vyhne** 3.48 150 *e*PN **Pn** 15 44 34.4 -0.1
VYHS *e*PG **Pg** 15 44 46.2 +0.4
VYHS *e*SG **Sg** 15 45 29.4 -1.6
**VYHS Vyhne** 3.48 150 *e*Pn **Pn** 15 44 34.4 -0.1
**BSD Bornholm Skovb** 3.67 349 *i* P **Pn** 15 44 38.5 +1.4
BSD *i* S **Sn** 15 45 20.2 -0.9
**BSD Bornholm Skovb** 3.67 349 *i* P **Pn** 15 44 38.5 +1.4
BSD *i* S **Sn** 15 45 20.2 -0.9
**STHS Stebnicka Huta** 3.86 121 *e*PN **Pn** 15 44 41.4 +1.7
STHS *e*PG **Pg** 15 44 54.5 +1.4
STHS *e*SG **Sg** 15 45 47.6 +4.5
**STHS Stebnicka Huta** 3.86 121 *e*Pn **Pn** 15 44 41.4 +1.7
**MOA Molln** 3.88 199 ⇓*i*Pn **Pn** 15 44 41.4 +1.3
2.4nm,0.3s
MOA ⇑Sg **Sg** 15 45 42.1 -1.7
24nm,0.6s
**MOA Molln** 3.88 199 Pn **Pn** 15 44 41.4 +1.3
2.4nm,0.3s
MOA Sg **Sg** 15 45 42.1 -1.7
24nm,0.6s
**ARSA Arzberg** 4.30 186 ⇓*i*Pn **Pn** 15 44 46.5 +0.7
ARSA ⇑Sg **Sg** 15 45 56.5 -0.7
11nm,0.5s
**ARSA Arzberg** 4.30 186 Pn **Pn** 15 44 46.5 +0.7
ARSA Sg **Sg** 15 45 56.5 -0.7
11nm,0.5s
**KOLS Kolonicke sedl** 4.69 121 *e*PN **Pn** 15 44 50.8 -0.4
KOLS *e*PG Pg 15 45 13.2 +4.2
KOLS *e*SG **Sg** 15 46 12.6 +2.8
**KOLS Kolonicke sedl** 4.69 121 *e*Pn **Pn** 15 44 50.8 -0.4
**KBA Koelnbreinsper** 4.82 204 ⇑*i*Pn **Pn** 15 44 54.5 +1.4
1.9nm,0.3s
KBA ⇓Sg **Sg** 15 46 15.4 +1.5
21nm,0.8s
**KBA Koelnbreinsper** 4.82 204 Pn **Pn** 15 44 54.5 +1.4
1.9nm,0.3s
KBA Sg **Sg** 15 46 15.4 +1.5
21nm,0.8s
**DAVOX Davos/Dischmat** 6.29 223 Pn **Pn** 15 45 15.0 +1.8
0.2nm,0.3s,baz=103,slow=18,SNR=2.9
**AKASG Malin Array Be** 8.25 91 Pn **Pn** 15 45 40.9 +0.9
0.5nm,0.3s,baz=279,slow=12,SNR=3.6
**FINES FINESS Array B** 11.33 25 Pn **Pn** 15 46 21.5 -0.5
0.2nm,0.3s,baz=210,slow=12,SNR=5.9
FINES Sn **Sn** 15 48 26.2 -3.0
0.2nm,0.3s,baz=207,slow=24,SNR=4.4
**EKA Eskdalemuir Ar** 12.14 296 Pn **Pn** 15 46 31.2 -2.0
baz=106,slow=18,SNR=3.2
**ARCES ARCESS Array B** 18.60 10 Pn **P** 15 47 55.9 -1.6
0.3nm,0.3s,baz=192,slow=12,SNR=11

*IDC **03** 15:44:07.9±1.5, 34°.94N×26°.55E, h0km, mb3.8/4, mb1 3.8/4, mb1mx3.4/43, mbtmp3.8/4, Error ellipse: s-maj=48.2km s-min=17.5km az=169.0*
*ISCJB **03** 15:44:10.2±1.0, 35°.01N±0°.06×26°.53E±0°.04, h9km±5km, mb3.7/4, Error ellipse: s-maj=11.0km s-min=4.3km az=166.2*
*CSEM **03** 15:44:11.9±0.3, 35°.16N×26°.48E, h0km, MD3.5, Error ellipse: s-maj=8.6km s-min=3.1km az=157.0*
*THE **03** 15:44:12.4, 35°.12N×26°.48E, h0km±1km, ML3.4/2, Error ellipse: s-maj=3.8km s-min=1.0km az=161.0*
*ATH **03** 15:44:12.0, 35°.19N×26°.45E, h14km, MD3.5/12*
**ISC 03 15:44:11.5±1.2, 35°.08N±0°.07×26°.49E±0°.03, h10km±7km, n84, σ1°09/108, mb3.7/4, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZKR** | **Zakros** | 0.23 | 279 | *e*Pg | **Pg** | 15 44 16.1 | -0.1 |
| **ZKR** | **Zakros** | 0.23 | 279 | P | **Pg** | 15 44 15.8 | -0.4 |
| ZKR | | | | S | **Sg** | 15 44 20.6 | +1.1 |
| **ZKR** | **Zakros** | 0.23 | 279 | P | **Pg** | 15 44 15.8 | -0.4 |
| **ZKR** | **Zakros** | 0.23 | 279 | *e*Pg | **Pg** | 15 44 16.1 | -0.1 |
| ZKR | | | | S | **Sg** | 15 44 20.6 | +1.1 |
| **KARP** | **Karpathos** | 0.72 | 49 | *e*PB | **Pg** | 15 44 25.2 | -0.2 |
| KARP | | | | *e*SB | **Sg** | 15 44 34.8 | 0.0 |
| **KARP** | **Karpathos** | 0.72 | 49 | P | **Pg** | 15 44 25.2 | -0.2 |
| KARP | | | | S | **Sb** | 15 44 37.1 | +1.1 |
| **KARP** | **Karpathos** | 0.72 | 49 | P | **Pg** | 15 44 25.2 | -0.2 |
| KARP | | | | *e*Sb | **Sg** | 15 44 34.8 | 0.0 |
| KARP | | | | S | **Sb** | 15 44 37.1 | +1.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NPS | Neapolis | 0.74 | 284 | ePG | Pg | 15 44 25.0 | -0.9 |
| NPS | | | | eSB | Sg | 15 44 34.2 | -1.4 |
| NPS | Neapolis | 0.74 | 284 | ePg | Pg | 15 44 25.0 | -0.9 |
| NPS | | | | eSb | Sg | 15 44 34.2 | -1.4 |
| IACM | Heraklion | 1.19 | 281 | ePN | Pg | 15 44 33.2 | -1.1 |
| IACM | Heraklion | 1.19 | 281 | ePn | Pg | 15 44 33.2 | -1.1 |
| IDI | Anoyia | 1.33 | 279 | Pn | Pn | 15 44 34.8 | -1.3 |
| | 24nm,0.3s,baz=92,slow=14,SNR=14 | | | | | | |
| IDI | | | | Sn | Sn | 15 44 55.2 | +1.2 |
| | 38nm,0.3s,baz=46,slow=22,SNR=6.4 | | | | | | |
| IDI | Anoyia | 1.33 | 279 | ePB | Pn | 15 44 36.2 | 0.0 |
| IDI | | | | eSB | Sg | 15 44 54.1 | -0.2 |
| IDI | Anoyia | 1.33 | 279 | P | Pn | 15 44 36.0 | -0.2 |
| IDI | | | | S | Sn | 15 44 55.9 | +1.9 |
| IDI | Anoyia | 1.33 | 279 | P | Pn | 15 44 36.0 | -0.2 |
| IDI | | | | eSb | Sg | 15 44 54.1 | -0.2 |
| IDI | | | | S | Sn | 15 44 55.9 | +1.9 |
| SANT | Santorini | 1.54 | 327 | ePB | Pn | 15 44 39.0 | 0.0 |
| SANT | Santorini | 1.54 | 327 | ePb | Pn | 15 44 39.0 | 0.0 |
| THR6 | Thira Island, | 1.56 | 325 | P | Pn | 15 44 39.1 | -0.1 |
| THR6 | Thira Island, | 1.56 | 325 | P | Pn | 15 44 39.1 | -0.1 |
| THR3 | Thira Island, | 1.60 | 326 | P | Pn | 15 44 40.2 | +0.4 |
| THR3 | Thira Island, | 1.60 | 326 | P | Pn | 15 44 40.2 | +0.4 |
| THR2 | Thira island, | 1.61 | 328 | P | Pn | 15 44 40.5 | +0.5 |
| THR2 | Thira island, | 1.61 | 328 | P | Pn | 15 44 40.5 | +0.5 |
| NIS1 | Nisyros Isl. | 1.62 | 20 | ePG | Pn | 15 44 40.2 | +0.1 |
| NIS1 | Nisyros Isl. | 1.62 | 20 | P | Pn | 15 44 40.6 | +0.5 |
| NIS1 | | | | S | Sn | 15 45 02.4 | +1.4 |
| NIS1 | Nisyros Isl. | 1.62 | 20 | ePg | Pn | 15 44 40.2 | +0.1 |
| NIS1 | Nisyros Isl. | 1.62 | 20 | P | Pn | 15 44 40.6 | +0.5 |
| NIS1 | | | | S | Sn | 15 45 02.4 | +1.4 |
| THR5 | Thira Island, | 1.63 | 325 | P | Pn | 15 44 40.1 | -0.1 |
| THR5 | Thira Island, | 1.63 | 325 | P | Pn | 15 44 40.1 | -0.1 |
| ARG | Arkhangelos | 1.75 | 49 | ePN | Pb | 15 44 43.3 | -0.3 |
| ARG | Arkhangelos | 1.75 | 49 | P | Pn | 15 44 42.7 | +0.8 |
| ARG | | | | S | Sb | 15 45 06.1 | +0.5 |
| ARG | Arkhangelos | 1.75 | 49 | P | Pn | 15 44 42.7 | +0.8 |
| ARG | Arkhangelos | 1.75 | 49 | ePn | Pb | 15 44 43.3 | -0.3 |
| ARG | | | | S | Sb | 15 45 06.1 | +0.5 |
| VAM | Vamos | 1.91 | 281 | ePN | Pn | 15 44 45.6 | +1.6 |
| VAM | Vamos | 1.91 | 281 | P | Pb | 15 44 46.0 | -0.4 |
| VAM | | | | S | Sn | 15 45 09.2 | +1.1 |
| VAM | Vamos | 1.91 | 281 | ePn | Pn | 15 44 45.6 | +1.6 |
| VAM | | | | S | Sn | 15 45 09.2 | +1.1 |
| IMMV | Iera Moni Meta | 2.09 | 281 | ePN | Pn | 15 44 48.5 | +1.9 |
| IMMV | Iera Moni Meta | 2.09 | 281 | ePn | Pn | 15 44 48.5 | +1.9 |
| APE | Apeiranthos | 2.13 | 339 | ePN | Pn | 15 44 48.2 | +1.0 |
| APE | Apeiranthos | 2.13 | 339 | P | Pn | 15 44 47.9 | +0.7 |
| APE | | | | S | Sn | 15 45 14.1 | +0.3 |
| APE | Apeiranthos | 2.13 | 339 | P | Pn | 15 44 47.9 | +0.7 |
| APE | Apeiranthos | 2.13 | 339 | ePn | Pn | 15 44 48.2 | +1.0 |
| APE | | | | S | Sn | 15 45 14.1 | +0.3 |
| MHLO | Agia Marina, M | 2.34 | 314 | ePN | Pn | 15 44 51.4 | +1.4 |
| MHLO | Agia Marina, M | 2.34 | 314 | P | Pn | 15 44 50.5 | +0.5 |
| MHLO | | | | S | Sn | 15 45 20.4 | +1.6 |
| MHLO | Agia Marina, M | 2.34 | 314 | P | Pn | 15 44 50.5 | +0.5 |
| MHLO | Agia Marina, M | 2.34 | 314 | ePn | Pn | 15 44 51.4 | +1.4 |
| MHLO | | | | S | Sn | 15 45 20.4 | +1.6 |
| SMG | Samos | 2.64 | 6 | ePB | Pn | 15 44 54.7 | +0.6 |
| SMG | Samos | 2.64 | 6 | P | Pn | 15 44 54.4 | +0.3 |
| SMG | Samos | 2.64 | 6 | P | Pn | 15 44 54.4 | +0.3 |
| ANKY | Antikythira Is | 2.72 | 288 | ePN | Pn | 15 44 56.3 | +1.1 |
| ANKY | Antikythira Is | 2.72 | 288 | P | Pn | 15 44 56.5 | +1.3 |
| ANKY | | | | S | Sn | 15 45 28.7 | +0.5 |
| ANKY | Antikythira Is | 2.72 | 288 | P | Pn | 15 44 56.5 | +1.3 |
| ANKY | | | | S | Sn | 15 45 28.7 | +0.5 |
| KYTH | Kithira | 3.06 | 294 | ePN | Pn | 15 45 01.5 | +1.6 |
| KYTH | Kithira | 3.06 | 294 | P | Pn | 15 45 01.1 | +1.2 |
| KYTH | Kithira | 3.06 | 294 | P | Pn | 15 45 01.1 | +1.2 |
| KYTH | Kithira | 3.06 | 294 | ePn | Pn | 15 45 01.5 | +1.6 |
| VLI | Veliai | 3.32 | 301 | ePN | Pn | 15 45 04.2 | +0.7 |
| VLI | Veliai | 3.32 | 301 | P | Pn | 15 45 03.4 | -0.1 |
| VLI | Veliai | 3.32 | 301 | P | Pn | 15 45 03.4 | -0.1 |
| VLI | Veliai | 3.32 | 301 | ePn | Pn | 15 45 04.2 | +0.7 |
| CHOS | Chios island | 3.32 | 354 | P | Pn | 15 45 03.8 | +0.2 |
| CHOS | Chios island | 3.32 | 354 | P | Pn | 15 45 03.8 | +0.2 |
| VLY | Voula,Athens | 3.52 | 323 | ePN | Pn | 15 45 07.2 | +1.0 |
| VLY | Voula,Athens | 3.52 | 323 | ePn | Pn | 15 45 07.2 | +1.0 |
| KRND | KRANIDI | 3.55 | 311 | P | Pn | 15 45 07.8 | +1.2 |
| KRND | KRANIDI | 3.55 | 311 | P | Pn | 15 45 07.8 | +1.2 |
| DIDY | Didyma | 3.57 | 313 | ePN | Pn | 15 45 08.6 | +1.6 |
| DIDY | Didyma | 3.57 | 313 | ePn | Pn | 15 45 08.6 | +1.6 |
| VILL | Villia | 4.00 | 321 | ePn | Pn | 15 45 14.5 | +1.6 |
| LOUT | Loutraki | 4.06 | 317 | ePN | Pn | 15 45 14.4 | +0.8 |
| LOUT | Loutraki | 4.06 | 317 | ePn | Pn | 15 45 14.4 | +0.8 |
| VIL2 | Platees | 4.06 | 321 | ePN | Pn | 15 45 14.5 | +0.8 |
| LTK | Loutraki | 4.09 | 317 | ePN | Pn | 15 45 16.2 | +2.2 |
| LTK | Loutraki | 4.09 | 317 | ePn | Pn | 15 45 16.2 | +2.2 |
| ITM | Ithomi | 4.25 | 301 | ePN | Pn | 15 45 18.6 | +2.3 |
| ITM | Ithomi | 4.25 | 301 | ePn | Pn | 15 45 18.6 | +2.3 |
| PYL | PYLOS | 4.26 | 297 | ePN | Pn | 15 45 17.8 | +1.4 |
| PYL | PYLOS | 4.26 | 297 | ePn | Pn | 15 45 17.8 | +1.4 |
| GUR | Goura | 4.39 | 312 | ePN | Pn | 15 45 19.8 | +1.4 |
| GUR | Goura | 4.39 | 312 | ePn | Pn | 15 45 19.8 | +1.4 |
| TORD | Torodi Ar. Bea | 31.29 | 232 | P | P | 15 50 29.3 | -2.5 |
| | 0.2nm,0.4s,baz=44,slow=8.5,SNR=2.4 | | | | | | |
| KURBB | Kurchatov Arra | 40.32 | 51 | P | P | 15 51 47.2 | -1.7 |
| | 1.4nm,0.6s,baz=276,slow=8.8,SNR=9.0 | | | | | | |
| MKAR | Makanchi Array | 42.91 | 57 | P | P | 15 52 08.7 | -1.5 |
| | 0.7nm,0.5s,baz=273,slow=7.9,SNR=9.1 | | | | | | |
| ZALV | Zalesovo Beam | 44.27 | 46 | P | P | 15 52 19.0 | -2.0 |
| | 1.5nm,0.4s,baz=259,slow=8.7,SNR=8.2 | | | | | | |

*ISCJB **03** 15:49:53.0±0.3, 1°.59N±0°.03×126°.75E±0°.04, h50km, mb4.3/18, Error ellipse: s-maj=5.6km s-min=3.8km az=158.9*
*KLM **03** 15:49:54.6, 1°.84N×127°.04E, h78km, mb4.8, ML4.6, MS5.3*
*NEIC **03** 15:49:56.5±0.8, 1°.52N×126°.80E, h78km±7km, mb4.6/5, Error ellipse: s-maj=10.3km s-min=6.9km az=61.0*
*IDC **03** 15:49:57.4±1.8, 1°.47N×126°.74E, h85km±16km, mb3.9/13, mb1 4.0/15, mb1mx3.8/40, mbtmp4.2/15, MS3.0/1, Ms1 3.0/1, ms1mx2.5/30, Error ellipse: s-maj=18.1km s-min=8.5km az=68.0*
*DJA **03** 15:49:57.3±0.5, 2°N±4°×12°7E±°, h66km±10km, M4.6/16, mb4.8/11, mB5.0/6, MLv4.8/16, Mw(mB)4.3/6*

**ISC 03 15:49:54.9±0.4, 1°.52N±0°.04×126°.71E±0°.06, h50km, n76, σ2s06/77, mb4.3/18, 5C-4D, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | Ternate | 0.99 | 138 | P | Pn | 15 50 15.8 | +3.3 |
| TNTI | | | | S | Sn | 15 50 29.8 | +4.3 |
| TNTI | Ternate | 0.99 | 138 | ePn | Pn | 15 50 15.1 | +2.6 |
| TNTI | | | | eSn | Sn | 15 50 30.2 | +4.6 |
| LBMI | Labuha | 2.29 | 160 | P | Pn | 15 50 34.7 | +4.5 |
| LBMI | | | | S | Sn | 15 51 00.2 | +3.0 |
| KMSI | Cibinong | 2.88 | 251 | P | Pn | 15 50 41.2 | +2.9 |
| SANI | Sanana | 3.62 | 191 | P | Pn | 15 50 49.3 | +0.8 |
| GTOI | Gorontalo | 3.80 | 257 | P | Pn | 15 50 54.2 | +3.3 |
| LUWI | Luwuk | 4.69 | 237 | P | Pn | 15 51 08.6 | +5.5 |
| LUWI | Luwuk | 4.69 | 237 | ePn | Pn | 15 51 06.5 | +3.4 |
| NLAI | Namlea | 4.75 | 175 | P | Pn | 15 51 06.0 | +2.1 |
| MRSI | Marisa | 4.88 | 258 | P | Pn | 15 51 08.4 | +2.7 |
| SWI | Sorong | 5.13 | 117 | P | Pn | 15 51 12.1 | +2.9 |
| | 46nm,0.8s,0.2nm | | | | | | |
| SIJI | Sorong | 5.14 | 117 | P | Pn | 15 51 11.8 | +2.4 |
| | 3.1nm,0.3s,baz=245,slow=23,SNR=19 | | | | | | |
| SIJI | | | | S | Sn | 15 52 09.7 | +2.3 |
| | baz=221,slow=20,SNR=1.7 | | | | | | |
| SIJI | | | | LR | LR | 15 53 12.3 | |
| | comp=Z,144nm,19.1s,baz=216,slow=38 | | | | | | |
| AAI | Ambon | 5.38 | 164 | P | Pn | 15 51 14.7 | +2.0 |
| | 78nm,0.7s,0.3nm | | | | | | |
| MATI | Mati | 5.41 | 355 | eP | Pn | 15 51 14.4 | +1.4 |
| APSI | Ampana | 5.61 | 245 | P | Pn | 15 51 18.4 | +2.7 |
| | 202nm,0.7s,2μm1.6nm | | | | | | |
| DMPH | Davao City--Mi | 5.65 | 348 | ⇓eP | Pn | 15 51 21.1 | +4.7 |
| DMPH | | | | eS | Sn | 15 52 24.1 | +4.1 |
| CTBH | Cotabato--PC H | 6.17 | 337 | ⇑iP | Pn | 15 51 24.6 | +1.1 |
| BUKP | Musuan | 6.53 | 346 | eP | Pn | 15 51 29.3 | +0.9 |
| KDI | Kendari | 6.80 | 217 | P | Pn | 15 51 32.8 | +0.6 |
| | 80nm,0.8s,1μm0.4nm | | | | | | |
| MPSI | Mapaga | 6.91 | 260 | P | Pn | 15 51 37.1 | +3.5 |
| | 29nm,0.9s,547nm0.1nm | | | | | | |
| PAGZ | Pagadian | 7.11 | 332 | eP | Pn | 15 51 37.3 | +1.0 |
| IPIL | Ipil | 7.47 | 327 | eP | Pn | 15 51 42.4 | +1.1 |
| TTSI | Tana Toraja | 8.25 | 237 | P | Pn | 15 51 52.8 | +0.9 |
| | 42nm,0.6s | | | | | | |
| MSLP | Maasin | 8.75 | 348 | eP | Pn | 15 51 59.4 | +0.6 |
| SPSI | Sidrap Palu | 8.82 | 232 | P | Pn | 15 52 01.0 | +1.2 |
| | 40nm,0.6s,554nm | | | | | | |
| MYLDM | Lahad Datu | 8.96 | 294 | ⇓P | Pn | 15 52 05.8 | +4.1 |
| TSM | Tawau | 9.24 | 288 | ⇑P | Pn | 15 52 07.3 | +1.6 |
| BKSI | Bulukumba | 9.46 | 224 | P | Pn | 15 52 10.3 | +1.7 |
| | 37nm,0.6s,501nm | | | | | | |
| KAPI | Kappang | 9.51 | 227 | P | Pn | 15 52 10.6 | +1.3 |
| | 9.3nm,0.3s,baz=350,slow=2.6,SNR=19 | | | | | | |
| BSSI | Bau Bau, Buton | 9.82 | 219 | P | Pn | 15 52 14.1 | +0.5 |
| SDKM | Sandakan | 10.34 | 294 | ⇑P | Pn | 15 52 22.3 | +1.7 |
| KDM | Kudat | 11.21 | 299 | ⇓P | Pn | 15 52 33.6 | +1.1 |
| KKM | Kota Kinabalu | 11.39 | 294 | ⇓P | Pn | 15 52 36.9 | +1.7 |
| KKM | Kota Kinabalu | 11.39 | 294 | P | Pn | 15 52 36.8 | +1.7 |
| | 36nm,0.9s | | | | | | |
| SOEI | Soe | 11.46 | 192 | eP | Pn | 15 52 42.4 | +6.3 |
| | 107nm,1.0s | | | | | | |
| KSM | Kuching | 16.39 | 270 | ⇑P | P | 15 53 45.0 | +1.1 |
| KSM | Kuching | 16.39 | 270 | eP | P | 15 53 44.5 | +0.7 |
| | 35nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 22.60 | 161 | eP | P | 15 54 49.6 | -1.9 |
| | 58nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 22.61 | 161 | P | P | 15 54 49.7 | -1.8 |
| | 37nm,0.5s,baz=338,slow=11,SNR=67 | | | | | | |
| WRA | | | | S | S | 15 58 50.3 | -5.6 |
| | 2.4nm,0.8s,baz=345,slow=17,SNR=7.1 | | | | | | |
| KTGM | Kuala Trenggan | 23.83 | 280 | ⇑P | P | 15 55 02.7 | -0.9 |
| QIZ | Qiongzhong | 24.00 | 318 | P | P | 15 55 04.6 | -0.5 |
| QIZ | | | | pP | pP | 15 55 22.4 | +4.6 |
| QIZ | | | | S | S | 15 59 17.4 | -1.4 |
| QIZ | | | | sS | sS | 15 59 49.5 | +9.2 |
| QIZ | | | | PMZ | | | |
| | 26nm,1.7s | | | | | | |
| QIZ | | | | PMZ | | | |
| | 440nm,4.1s | | | | | | |
| ASAR | Alice Springs | 26.00 | 165 | P | P | 15 55 22.0 | -1.3 |
| | 10nm,0.5s,baz=349,slow=14,SNR=64 | | | | | | |
| ASAR | | | | S | S | 15 59 48.0 | -2.6 |
| | 0.5nm,0.8s,baz=331,slow=13,SNR=3.8 | | | | | | |
| NJ2 | Nanjing | 31.26 | 347 | eP | P | 15 56 08.1 | -1.9 |
| NJ2 | | | | PMZ | | | |
| | 20nm,0.6s | | | | | | |
| GYA | Guiyang | 31.40 | 324 | eP | P | 15 56 12.0 | +0.5 |
| GYA | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 32.01 | 303 | P | P | 15 56 15.2 | -1.6 |
| | 0.9nm,1.1s,baz=123,slow=6.8,SNR=5.0 | | | | | | |
| KMI | Kunming | 32.95 | 317 | P | P | 15 56 25.3 | +0.1 |
| KMI | | | | PMZ | | | |
| | 8.0nm,0.6s | | | | | | |
| NWAO | Narrogin (SRO) | 35.41 | 194 | P | P | 15 56 45.0 | -1.2 |
| | 13nm,0.8s,baz=329,slow=0.0 | | | | | | |
| KSAR | Wonju Array Be | 35.76 | 2 | P | P | 15 56 48.3 | -0.8 |
| KSRS | Korea Array | 35.77 | 2 | P | P | 15 56 48.3 | -0.9 |
| | 1.9nm,0.6s,baz=178,slow=9.7,SNR=10 | | | | | | |
| CD2 | Chengdu | 36.42 | 326 | eP | P | 15 56 54.5 | -0.4 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| MJAR | Matsushiro Arr | 36.44 | 16 | P | P | 15 56 52.9 | -2.0 |
| | 0.5nm,0.5s,baz=189,slow=9.5,SNR=4.7 | | | | | | |
| LZH | Lanzhou | 40.40 | 331 | eP | P | 15 57 28.2 | -0.2 |
| LZH | | | | pP | pP | 15 57 45.8 | +4.2 |
| LZH | | | | sP | sP | 15 57 54.9 | +7.4 |
| LZH | | | | PMZ | | | |
| | 14nm,1.0s | | | | | | |
| HHC | Hu-ho-hao-te | 41.48 | 343 | eP | P | 15 57 38.6 | +1.4 |
| HHC | | | | pP | pP | 15 57 57.8 | +7.4 |
| HHC | | | | sP | sP | 15 58 07.7 | +11 |
| HHC | | | | S | S | 16 03 48.4 | -0.8 |
| HHC | | | | sS | sS | 16 04 22.0 | +10 |
| HHC | | | | PMZ | | | |
| | 23nm,1.5s | | | | | | |
| HHC | | | | PMZ | | | |
| | 87nm,5.0s | | | | | | |
| HHC | | | | LN | | | |
| | 200nm,14.9s | | | | | | |
| HHC | | | | LE | | | |
| | 200nm,14.9s | | | | | | |
| HHC | | | | LZ | | | |
| | 150nm,14.9s | | | | | | |
| GTA | Gaotai | 44.98 | 330 | eP | P | 15 58 07.4 | +1.9 |
| GTA | | | | pP | pP | 15 58 27.7 | +8.8 |
| GTA | | | | sP | sP | 15 58 38.3 | +14 |
| GTA | | | | PMZ | | | |
| | 3.0nm,1.1s | | | | | | |
| ODAN | Odare | 45.35 | 307 | eP | P | 15 58 06.9 | -1.9 |
| | 16nm,1.0s | | | | | | |
| RAMN | Ramite | 46.02 | 307 | eP | P | 15 58 12.6 | -1.5 |
| | 12nm,0.9s | | | | | | |
| GUN | Gumba | 47.02 | 308 | eP | P | 15 58 20.0 | -2.0 |
| | 10nm,0.5s | | | | | | |
| PKI | Pulchoki | 47.25 | 307 | eP | P | 15 58 21.8 | -1.9 |
| | 3.3nm,0.3s | | | | | | |
| PKIN | Phulchoki | 47.26 | 307 | eP | P | 15 58 21.6 | -2.2 |
| | 3.7nm,0.6s | | | | | | |
| KKN | Kakani | 47.45 | 307 | eP | P | 15 58 23.4 | -1.8 |
| | 3.6nm,0.4s | | | | | | |
| DMN | Daman | 47.51 | 307 | eP | P | 15 58 23.8 | -1.9 |
| | 5.0nm,0.3s | | | | | | |
| GKN | Gorkha | 48.05 | 307 | eP | P | 15 58 27.6 | -2.2 |
| | 2.2nm,0.3s | | | | | | |
| KOLN | Koldanda | 48.78 | 306 | eP | P | 15 58 32.4 | -3.1 |
| | 13nm,0.6s | | | | | | |
| SONM | Songino Array | 49.37 | 342 | P | P | 15 58 39.6 | 0.0 |
| | 1.0nm,0.6s,baz=155,slow=9.1,SNR=6.6 | | | | | | |
| WMQ | Urumqi | 54.52 | 326 | eP | P | 15 59 19.0 | +1.1 |
| PETK | Petropavlovsk- | 57.47 | 22 | P | P | 15 59 38.1 | -0.6 |
| | 1.7nm,0.8s,baz=186,slow=2.9,SNR=2.5 | | | | | | |
| MKAR | Makanchi Array | 59.35 | 326 | P | P | 15 59 50.9 | -1.1 |
| | 1.7nm,0.3s,baz=125,slow=7.7,SNR=21 | | | | | | |
| KSH | Kashi | 59.59 | 316 | eP | P | 15 59 58.3 | +4.4 |
| KSH | | | | epP | pP | 16 00 18.0 | +10 |
| KSH | | | | esP | sP | 16 00 26.3 | +13 |
| KSH | | | | S | S | 16 08 03.5 | +2.8 |
| KSH | | | | PMZ | | | |
| | 150nm,8.4s | | | | | | |
| KSH | | | | LN | | | |
| | 76nm,4.4s | | | | | | |
| KSH | | | | LE | | | |
| | 84nm,6.0s | | | | | | |
| KSH | | | | LZ | | | |
| | 87nm,7.9s | | | | | | |
| ZALV | Zalesovo Beam | 62.54 | 334 | P | P | 16 00 12.1 | -1.3 |
| | 0.5nm,0.4s,baz=130,slow=6.4,SNR=4.1 | | | | | | |
| KURK | Kurchatov | 63.59 | 328 | eP | P | 16 00 19.1 | -1.3 |
| | 9.2nm,0.6s | | | | | | |
| BRVK | Borovoye | 69.22 | 327 | eP | P | 16 00 54.1 | -2.3 |
| | 2.0nm,0.4s | | | | | | |
| ABKAR | Akbulak array | 73.84 | 321 | eP | P | 16 01 22.9 | -1.4 |
| | 2.7nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 75.37 | 322 | P | P | 16 01 32.3 | -0.9 |
| | 4.2nm,0.7s,baz=102,slow=7.9,SNR=17 | | | | | | |
| VNDA | Vanda | 81.25 | 173 | P | P | 16 02 03.8 | -1.3 |
| | 1.5nm,0.8s,baz=310,slow=6.1,SNR=8.3 | | | | | | |
| MAW | Mawson | 81.69 | 200 | P | P | 16 02 07.0 | -0.5 |
| | 1.1nm,0.5s,baz=95,slow=5.0,SNR=7.5 | | | | | | |
| QSPA | South Pole Qui | 91.44 | 180 | P | P | 16 02 54.8 | -0.8 |
| | 1.0nm,0.8s,baz=315,slow=1.8,SNR=6.2 | | | | | | |

**IDC 03 15:50:09.3±10.0, 4°.29S×142°.71E, h191km±109km, mb3.4/2, mb1 3.7/4, mb1mx3.1/33, mbtmp4.0/4, MS3.4/1, Ms1 3.4/1, ms1mx2.7/12, Error ellipse: s-maj=100.0km s-min=25.0km az=138.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 6.74 | 139 | P | Pn | 15 51 47.8 | +1.7 |
| | 0.9nm,0.3s,baz=241,slow=2.2,SNR=2.6 | | | | | | |
| PMG | | | | S | Sn | 15 53 01.7 | -1.0 |
| | 0.7nm,0.3s,baz=352,slow=17,SNR=1.4 | | | | | | |
| WRA | Warramunga Arr | 17.57 | 207 | P | P | 15 54 00.4 | -0.7 |
| | 1.4nm,0.3s,baz=25,slow=12,SNR=51 | | | | | | |
| BATI | Baumata | 19.78 | 252 | LR | LR | 16 03 16.8 | |
| | comp=Z,96nm,18.1s,baz=131,slow=40 | | | | | | |
| ASAR | Alice Springs | 21.06 | 203 | P | P | 15 54 38.8 | +0.1 |
| | 1.4nm,0.5s,baz=29,slow=11,SNR=31 | | | | | | |
| ILAR | Eielson Array | 85.63 | 24 | P | P | 16 02 25.7 | -0.3 |
| | 0.9nm,0.6s,baz=256,slow=4.6,SNR=14 | | | | | | |
| DBIC | Dimbokro | 147.63 | 276 | PKPbc | PKPbc | 16 09 32.2 | -0.1 |
| | 0.8nm,0.4s,baz=112,slow=6.9,SNR=1.3 | | | | | | |

*IDC **03** 15:59:10.3±4.8, 16°.74N×85°.27W, h0km, mb3.5/3, mb1 4.1/5, mb1mx3.7/29, mbtmp3.7/5, ML4.0/2, MS4.0/1, Ms1 4.0/1, ms1mx2.8/21, Error ellipse: s-maj=86.9km s-min=45.2km az=151.0*

**ISC 03 15:59:17.2±2.5, 16°.9N±0°.3×85°.6W±0°.2, h35km, n7, σ1s41/7, North of Honduras**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMIG | Matias Romero | 8.92 | 273 | Pn | Pn | 16 01 24.2 | +0.5 |
| | 2.1nm,0.3s,baz=51,slow=11,SNR=15 | | | | | | |
| CMIG | | | | Sn | Sn | 16 03 01.6 | -1.4 |
| | 1.1nm,0.3s,baz=227,slow=20,SNR=3.7 | | | | | | |
| TKL | Tuckaleechee C | 18.77 | 5 | P | Pn | 16 03 33.0 | -1.1 |
| | 0.3nm,0.3s,baz=186,slow=9.2,SNR=2.7 | | | | | | |
| TXAR | Lajitas Array | 20.72 | 310 | P | P | 16 03 55.3 | +0.4 |
| | 1.2nm,0.8s,baz=126,slow=11,SNR=14 | | | | | | |
| ANMO | Albuquerque | 25.92 | 318 | LR | LR | 16 17 47.0 | |
| | comp=Z,311nm,21.1s,baz=52,slow=43 | | | | | | |
| NVAR | Mina Array Bea | 35.79 | 313 | P | P | 16 06 15.3 | +1.8 |
| | 0.5nm,0.7s,baz=116,slow=8.1,SNR=3.7 | | | | | | |
| ILAR | Eielson Array | 62.76 | 335 | P | P | 16 09 38.1 | -0.6 |
| | 0.7nm,0.8s,baz=114,slow=4.7,SNR=6.8 | | | | | | |
| ASAR | Alice Springs | 142.46 | 253 | PKP | PKPdf | 16 18 46.4 | -0.8 |
| | 0.8nm,1.2s,baz=98,slow=2.4,SNR=2.3 | | | | | | |

**WEL 03 16:14:46.1±0.1, 43°.56S×172°.37E, h5km, ML3.6/17, 7C-2D, Error ellipse: s-maj=0.9km s-min=0.8km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.18 | 94 | ⇓PG | Pg | 16 14 49.8 | +0.1 |
| CRLZ | | | | SG | Sg | 16 14 52.6 | +0.6 |
| CRLZ | | | | AML | AML | 16 14 52.8 | |
| CRLZ | | | | AML | AML | 16 14 52.9 | |
| CRLZ | | | | AML | AML | 16 14 52.9 | |
| MQZ | McQueen's Vall | 0.25 | 125 | ⇓PG | Pg | 16 14 51.1 | +0.2 |
| MQZ | | | | SG | Sg | 16 14 54.8 | +0.6 |
| MQZ | | | | AML | AML | 16 14 55.2 | |
| OXZ | Oxford | 0.34 | 315 | PG | Pg | 16 14 52.7 | 0.0 |
| OXZ | | | | SG | Sg | 16 14 57.8 | +0.6 |
| LTZ | Lake Taylor | 0.79 | 355 | ⇑P* | Pg | 16 15 01.4 | +0.2 |
| LTZ | | | | S* | Sg | 16 15 12.3 | +0.8 |
| LTZ | | | | AML | AML | 16 15 13.4 | |
| RPZ | Rata Peaks | 0.97 | 261 | ⇑P* | Pg | 16 15 04.9 | +0.2 |
| RPZ | | | | AML | AML | 16 15 20.8 | |
| RPZ | | | | AML | AML | 16 15 25.3 | |
| WVZ | Waitaha Valley | 1.29 | 292 | P* | Pn | 16 15 09.8 | -0.9 |
| WVZ | | | | AML | AML | 16 15 33.5 | |
| WVZ | | | | AML | AML | 16 15 33.7 | |
| KHZ | Kahutara | 1.43 | 37 | ⇑PN | Pn | 16 15 10.6 | -2.1 |
| KHZ | | | | SN | Sb | 16 15 29.2 | -2.5 |
| KHZ | | | | AML | AML | 16 15 39.7 | |
| LBZ | Lake Benmore | 1.78 | 242 | PN | Pn | 16 15 16.4 | -1.2 |
| LBZ | | | | AML | AML | 16 15 51.2 | |
| LBZ | | | | AML | AML | 16 15 55.6 | |
| THZ | Tophouse | 1.84 | 13 | ⇑PN | Pn | 16 15 16.6 | -1.9 |
| THZ | | | | AML | AML | 16 15 51.0 | |
| THZ | | | | AML | AML | 16 15 54.3 | |
| DSZ | Denniston Nort | 1.86 | 347 | PN | Pn | 16 15 17.1 | -1.6 |
| DSZ | | | | AML | AML | 16 15 49.0 | |
| DSZ | | | | AML | AML | 16 15 50.8 | |
| ODZ | Otahua Downs | 1.93 | 219 | ⇑PN | Pn | 16 15 17.9 | -1.7 |
| ODZ | | | | AML | AML | 16 15 50.6 | |
| ODZ | | | | AML | AML | 16 15 50.7 | |
| ODZ | | | | AML | AML | 16 15 50.7 | |
| ODZ | | | | AML | AML | 16 16 00.7 | |
| FOZ | Fox Glacier | 1.95 | 269 | PN | Pn | 16 15 19.0 | -0.8 |
| FOZ | | | | AML | AML | 16 15 52.0 | |
| FOZ | | | | AML | AML | 16 15 53.3 | |
| BSWZ | Blackbirch Sta | 2.16 | 32 | PN | Pn | 16 15 20.9 | -1.7 |
| NNZ | Nelson | 2.46 | 18 | ⇑PN | Pn | 16 15 25.6 | -1.2 |
| JCZ | Jackson Bay | 2.66 | 258 | PN | Pn | 16 15 28.5 | -1.2 |
| JCZ | | | | AML | AML | 16 16 18.9 | |
| JCZ | | | | AML | AML | 16 16 21.5 | |
| WKZ | Wanaka | 2.72 | 241 | PN | Pn | 16 15 29.2 | -1.3 |
| WKZ | | | | AML | AML | 16 16 21.4 | |
| WKZ | | | | AML | AML | 16 16 25.4 | |
| QRZ | Quartz Range | 2.74 | 3 | PN | Pn | 16 15 28.8 | -1.8 |
| QRZ | | | | AML | AML | 16 15 39.0 | |
| QRZ | | | | AML | AML | 16 15 39.0 | |
| QRZ | | | | AML | AML | 16 16 20.2 | |
| QRZ | | | | AML | AML | 16 16 20.2 | |
| EAZ | Earnscleugh | 2.76 | 232 | ⇑PN | Pn | 16 15 29.3 | -1.6 |
| EAZ | | | | AML | AML | 16 16 15.5 | |
| EAZ | | | | AML | AML | 16 16 15.5 | |
| EAZ | | | | AML | AML | 16 16 21.3 | |
| EAZ | | | | AML | AML | 16 16 21.3 | |
| WEL | Wellington | 2.89 | 39 | PN | Pn | 16 15 30.7 | -2.0 |
| TUZ | Tuapeka | 3.09 | 218 | PN | Pn | 16 15 33.6 | -1.8 |
| TUZ | | | | AML | AML | 16 16 29.4 | |
| TUZ | | | | AML | AML | 16 16 30.1 | |
| CAW | Cannon Point | 3.17 | 40 | PN | Pn | 16 15 33.7 | -2.9 |
| KIW | Kapiti Island | 3.29 | 36 | PN | Pn | 16 15 36.2 | -2.1 |
| MLZ | Mavora Lakes | 3.49 | 238 | PN | Pn | 16 15 40.1 | -1.0 |
| SYZ | Scrubby Hill | 3.75 | 216 | PN | Pn | 16 15 43.5 | -1.0 |
| SYZ | | | | AML | AML | 16 17 02.8 | |
| MRZ | Mangatainoka R | 3.76 | 41 | PN | Pn | 16 15 41.7 | -2.9 |
| WHZ | Wether Hill Ro | 3.92 | 232 | PN | Pn | 16 15 44.2 | -2.7 |
| BFZ | Birch Farm | 4.08 | 46 | PN | Pn | 16 15 45.9 | -3.1 |
| PREZ | Palmer Road | 4.43 | 18 | PN | Pn | 16 15 53.4 | -0.5 |
| NWEZ | Newall Road | 4.43 | 15 | PN | Pn | 16 15 54.2 | +0.3 |
| KHEZ | Kahui Hut | 4.44 | 17 | PN | Pn | 16 15 54.0 | -0.2 |
| NEZ | North Egmont | 4.48 | 17 | PN | Pn | 16 15 54.3 | -0.4 |
| VRZ | Vera Road | 4.79 | 23 | PN | Pn | 16 15 57.8 | -0.9 |
| WNVZ | Wahianoa | 4.88 | 31 | PN | Pn | 16 15 59.8 | -0.4 |
| BKZ | Black Stump Fm | 5.38 | 37 | PN | Pn | 16 16 03.2 | -3.8 |

*IDC **03** 16:15:31.7±1.0, 35°.02N×26°.52E, h0km, mb3.9/8, mb1 3.8/12, mb1mx3.7/35, mbtmp3.7/12, ML3.4/4, Error ellipse: s-maj=25.6km s-min=13.6km az=176.0*
*ISCJB **03** 16:15:32.1±0.9, 34°.88N±0°.04×26°.55E±0°.03, h11km±5km, mb3.8/9, Error ellipse: s-maj=6.9km s-min=3.9km az=176.1*
*CSEM **03** 16:15:33.2±0.5, 34°.93N×26°.54E, h2km, ML3.6, Error ellipse: s-maj=10.9km s-min=3.8km az=164.0*
*ATH **03** 16:15:33.3, 34°.98N×26°.48E, h21km, MD3.7/19, ML3.7*
*THE **03** 16:15:35.4, 35°.10N×26°.46E, h1km±1km, ML3.6/3, Error ellipse: s-maj=4.3km s-min=0.9km az=164.0*

**ISC 03 16:15:32.9±1.4, 34°.95N±0°.06×26°.55E±0°.03, h7km±9km, n151, σ1s19/171, mb3.8/9, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZKR | Zakros | 0.32 | 302 | ePB | Pg | 16 15 39.5 | +0.3 |
| ZKR | | | | eSB | Sg | 16 15 43.7 | +0.3 |
| ZKR | Zakros | 0.32 | 302 | P | Pg | 16 15 39.4 | +0.3 |
| ZKR | | | | S | Sg | 16 15 43.5 | +0.1 |
| ZKR | Zakros | 0.32 | 302 | ePb | Pg | 16 15 39.5 | +0.3 |
| ZKR | | | | eSb | Sg | 16 15 43.7 | +0.3 |
| KARP | Karpathos | 0.78 | 40 | ePN | Pb | 16 15 48.8 | -0.1 |
| KARP | | | | eSN | Sb | 16 16 00.3 | +0.6 |
| KARP | Karpathos | 0.78 | 40 | P | Pb | 16 15 48.7 | -0.1 |
| KARP | | | | S | Sb | 16 16 00.1 | +0.4 |
| KARP | Karpathos | 0.78 | 40 | P | Pb | 16 15 48.7 | -0.2 |
| KARP | | | | S | Sb | 16 16 00.1 | +0.4 |
| NPS | Neapolis | 0.83 | 293 | ePN | Pg | 16 15 48.0 | -0.8 |
| NPS | | | | eSN | Sg | 16 15 58.0 | -1.6 |
| NPS | Neapolis | 0.83 | 293 | ePn | Pg | 16 15 48.0 | -0.8 |
| IACM | Heraklion | 1.26 | 287 | ePN | Pg | 16 15 56.7 | -0.4 |
| IACM | | | | eSN | Sg | 16 16 12.6 | -0.9 |
| IACM | Heraklion | 1.26 | 287 | ePn | Pg | 16 15 56.7 | -0.4 |
| IACM | | | | eSn | Sg | 16 16 12.6 | -0.9 |
| IDI | Anoyia | 1.40 | 285 | Pn | Pn | 16 15 59.2 | +0.3 |
| | 31nm,0.3s,baz=96,slow=13,SNR=87 | | | | | | |
| IDI | | | | Sn | Sn | 16 16 19.2 | +1.5 |
| | 40nm,0.3s,baz=246,slow=23,SNR=8.8 | | | | | | |
| IDI | Anoyia | 1.40 | 285 | ePN | Pn | 16 15 58.9 | 0.0 |
| IDI | | | | eSN | Sg | 16 16 17.5 | -0.4 |
| IDI | Anoyia | 1.40 | 285 | P | Pn | 16 15 59.1 | +0.2 |
| IDI | | | | S | Sg | 16 16 17.2 | -0.7 |
| IDI | Anoyia | 1.40 | 285 | P | Pn | 16 15 59.1 | +0.2 |
| IDI | | | | S | Sg | 16 16 17.2 | -0.7 |
| IDI | | | | eSn | Sg | 16 16 17.5 | -0.4 |
| SANT | Santorini | 1.67 | 328 | ePN | Pn | 16 16 02.5 | -0.2 |
| SANT | | | | eSN | Sn | 16 16 23.7 | -0.8 |
| SANT | Santorini | 1.67 | 328 | P | Pn | 16 16 02.5 | -0.2 |
| SANT | | | | S | Sn | 16 16 22.3 | -2.2 |
| SANT | Santorini | 1.67 | 328 | P | Pn | 16 16 02.5 | -0.2 |
| SANT | | | | eSn | Sn | 16 16 23.7 | -0.8 |
| THR6 | Thira Island, | 1.69 | 327 | P | Pn | 16 16 02.3 | -0.6 |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| THR6 | Thira Island, | 1.69 | 327 | P | Pn | 16 16 02.3 | -0.6 |
| NISR | Nisiros | 1.73 | 16 | ePN | Pn | 16 16 03.7 | +0.3 |
| NISR | Nisiros | 1.73 | 16 | P | Pn | 16 16 03.7 | +0.3 |
| NISR | Nisiros | 1.73 | 16 | P | Pn | 16 16 03.7 | +0.3 |
| NIS1 | Nisyros Isl. | 1.73 | 17 | ePN | Pn | 16 16 04.3 | +0.9 |
| NIS1 | Nisyros Isl. | 1.73 | 17 | P | Pn | 16 16 03.1 | -0.3 |
| NIS1 | | | | S | Sn | 16 16 26.2 | +0.4 |
| NIS1 | Nisyros Isl. | 1.73 | 17 | P | Pn | 16 16 03.1 | -0.3 |
| NIS1 | Nisyros Isl. | 1.73 | 17 | ePn | Pn | 16 16 04.3 | +0.9 |
| NIS1 | | | | S | Sn | 16 16 26.2 | +0.4 |
| THR3 | Thira Island, | 1.73 | 328 | P | Pn | 16 16 03.3 | -0.1 |
| THR3 | Thira Island, | 1.73 | 328 | P | Pn | 16 16 03.3 | -0.1 |
| THR5 | Thira Island, | 1.76 | 327 | P | Pn | 16 16 03.5 | -0.4 |
| THR5 | Thira Island, | 1.76 | 327 | P | Pn | 16 16 03.5 | -0.4 |
| ARG | Arkhangelos | 1.81 | 45 | ePN | Pb | 16 16 05.9 | -0.4 |
| ARG | | | | eSN | Sb | 16 16 29.7 | +0.6 |
| ARG | Arkhangelos | 1.81 | 45 | P | Pb | 16 16 06.1 | -0.2 |
| ARG | | | | S | Sb | 16 16 29.4 | +0.3 |
| ARG | Arkhangelos | 1.81 | 45 | P | Pb | 16 16 06.1 | -0.2 |
| ARG | | | | S | Sb | 16 16 29.4 | +0.3 |
| ARG | | | | eSn | Sg | 16 16 29.7 | -1.3 |
| VAM | Vamos | 1.98 | 284 | ePN | Pn | 16 16 07.7 | +0.9 |
| VAM | Vamos | 1.98 | 284 | P | Pn | 16 16 07.9 | +1.1 |
| VAM | Vamos | 1.98 | 284 | P | Pn | 16 16 07.9 | +1.1 |
| IMMV | Iera Moni Meta | 2.16 | 284 | ePN | Pn | 16 16 09.6 | +0.2 |
| IMMV | Iera Moni Meta | 2.16 | 284 | ePn | Pn | 16 16 09.6 | +0.2 |
| APE | Apeiranthos | 2.27 | 339 | ePB | Pn | 16 16 10.8 | -0.2 |
| APE | Apeiranthos | 2.27 | 339 | P | Pn | 16 16 10.7 | -0.2 |
| APE | Apeiranthos | 2.27 | 339 | ePb | Pn | 16 16 10.8 | -0.2 |
| MHLO | Agia Marina, M | 2.46 | 316 | ePB | Pn | 16 16 14.7 | +1.2 |
| MHLO | Agia Marina, M | 2.46 | 316 | ePb | Pn | 16 16 14.7 | +1.2 |
| KSL | Kastellorizon | 2.75 | 63 | ePN | Pn | 16 16 18.5 | +1.0 |
| SERI | Serifos | 2.77 | 324 | ePN | Pn | 16 16 17.7 | 0.0 |
| SERI | Serifos | 2.77 | 324 | ePn | Pn | 16 16 17.7 | 0.0 |
| ANKY | Antikythira Is | 2.81 | 290 | ePN | Pn | 16 16 18.6 | +0.4 |
| ANKY | Antikythira Is | 2.81 | 290 | ePn | Pn | 16 16 18.6 | +0.4 |
| KYTH | Kithira | 3.15 | 296 | ePN | Pn | 16 16 24.0 | +1.0 |
| KYTH | Kithira | 3.15 | 296 | ePn | Pn | 16 16 24.0 | +1.0 |
| VLI | Veliai | 3.42 | 302 | ePN | Pn | 16 16 27.3 | +0.6 |
| VLI | Veliai | 3.42 | 302 | ePn | Pn | 16 16 27.3 | +0.6 |
| CHOS | Chios island | 3.46 | 354 | ePN | Pn | 16 16 27.2 | 0.0 |
| CHOS | Chios island | 3.46 | 354 | ePn | Pn | 16 16 27.2 | 0.0 |
| VLY | Voula,Athens | 3.65 | 323 | ePN | Pn | 16 16 30.8 | +0.9 |
| VLY | Voula,Athens | 3.65 | 323 | ePn | Pn | 16 16 30.8 | +0.9 |
| KRND | KRANIDI | 3.67 | 312 | ePN | Pn | 16 16 31.5 | +1.4 |
| KRND | KRANIDI | 3.67 | 312 | ePn | Pn | 16 16 31.5 | +1.4 |
| DIDY | Didyma | 3.69 | 314 | ePN | Pn | 16 16 31.5 | +1.0 |
| DIDY | Didyma | 3.69 | 314 | ePn | Pn | 16 16 31.5 | +1.0 |
| ATH | Athens Observa | 3.78 | 324 | ePN | Pn | 16 16 32.4 | +0.8 |
| ATH | Athens Observa | 3.78 | 324 | ePn | Pn | 16 16 32.4 | +0.8 |
| EREA | Eretria | 4.05 | 330 | ePN | Pn | 16 16 36.8 | +1.4 |
| EREA | Eretria | 4.05 | 330 | ePn | Pn | 16 16 36.8 | +1.4 |
| VILL | Villia | 4.13 | 322 | ePn | Pn | 16 16 37.5 | +1.0 |
| VLX | Vlachokerasia | 4.15 | 307 | ePN | Pn | 16 16 38.3 | +1.5 |
| VLX | Vlachokerasia | 4.15 | 307 | ePn | Pn | 16 16 38.3 | +1.5 |
| LOUT | Loutraki | 4.18 | 318 | ePN | Pn | 16 16 38.8 | +1.6 |
| LOUT | Loutraki | 4.18 | 318 | ePn | Pn | 16 16 38.8 | +1.6 |
| VIL2 | Platees | 4.19 | 322 | ePN | Pn | 16 16 37.5 | +0.2 |
| LTK | Loutraki | 4.21 | 318 | ePN | Pn | 16 16 39.1 | +1.5 |
| LTK | Loutraki | 4.21 | 318 | ePn | Pn | 16 16 39.1 | +1.5 |
| SIGR | SIGRI | 4.29 | 353 | ePN | Pn | 16 16 39.1 | +0.5 |
| SIGR | SIGRI | 4.29 | 353 | ePn | Pn | 16 16 39.1 | +0.5 |
| ITM | Ithomi | 4.36 | 302 | ePN | Pn | 16 16 40.7 | +1.2 |
| ITM | Ithomi | 4.36 | 302 | ePn | Pn | 16 16 40.7 | +1.2 |
| PYL | PYLOS | 4.36 | 298 | ePN | Pn | 16 16 39.5 | 0.0 |
| PYL | PYLOS | 4.36 | 298 | ePn | Pn | 16 16 39.5 | 0.0 |
| THAL | Thalero | 4.39 | 316 | ePN | Pn | 16 16 41.1 | +1.1 |
| THAL | Thalero | 4.39 | 316 | ePn | Pn | 16 16 41.1 | +1.1 |
| MRKA | Markates | 4.44 | 329 | ePN | Pn | 16 16 42.1 | +1.4 |
| MRKA | Markates | 4.44 | 329 | ePn | Pn | 16 16 42.1 | +1.4 |
| GUR | Goura | 4.51 | 313 | ePN | Pn | 16 16 43.6 | +1.8 |
| GUR | Goura | 4.51 | 313 | ePn | Pn | 16 16 43.6 | +1.8 |
| LKR | Lokris | 4.67 | 323 | ePN | Pn | 16 16 45.7 | +1.9 |
| LKR | Lokris | 4.67 | 323 | ePn | Pn | 16 16 45.7 | +1.9 |
| KLV | Kalavryta, Ach | 4.70 | 312 | ePN | Pn | 16 16 46.0 | +1.7 |
| KLV | Kalavryta, Ach | 4.70 | 312 | ePn | Pn | 16 16 46.0 | +1.7 |
| AOS | Alonnisos | 4.72 | 334 | ePN | Pn | 16 16 46.1 | +1.5 |
| AOS | Alonnisos | 4.72 | 334 | ePn | Pn | 16 16 46.1 | +1.5 |
| DESF | Desfina | 4.73 | 318 | ePN | Pn | 16 16 46.1 | +1.4 |
| DESF | Desfina | 4.73 | 318 | ePn | Pn | 16 16 46.1 | +1.4 |
| SMIA | Simia | 4.75 | 327 | ePN | Pn | 16 16 46.9 | +2.0 |
| SMIA | Simia | 4.75 | 327 | ePn | Pn | 16 16 46.9 | +2.0 |
| DRO | Drossia | 4.92 | 309 | ePN | Pn | 16 16 49.0 | +1.7 |
| DRO | Drossia | 4.92 | 309 | ePn | Pn | 16 16 49.0 | +1.7 |
| AXAR | Agios Charalam | 4.92 | 322 | ePN | Pn | 16 16 49.4 | +2.1 |
| AXAR | Agios Charalam | 4.92 | 322 | ePn | Pn | 16 16 49.4 | +2.1 |
| LAKA | Lakka | 4.93 | 313 | ePN | Pn | 16 16 48.5 | +1.1 |
| LAKA | Lakka | 4.93 | 313 | ePn | Pn | 16 16 48.5 | +1.1 |
| KALE | Kalithea | 4.94 | 315 | ePN | Pn | 16 16 48.9 | +1.4 |
| KALE | Kalithea | 4.94 | 315 | ePn | Pn | 16 16 48.9 | +1.4 |
| SERG | Sergoula | 5.00 | 315 | ePN | Pn | 16 16 50.0 | +1.6 |
| SERG | Sergoula | 5.00 | 315 | ePn | Pn | 16 16 50.0 | +1.6 |
| LIA | Limnos Island | 5.06 | 348 | ePN | Pn | 16 16 49.6 | +0.4 |
| LIA | Limnos Island | 5.06 | 348 | ePn | Pn | 16 16 49.6 | +0.4 |
| EFP | Efpalio | 5.10 | 314 | ePN | Pn | 16 16 51.0 | +1.3 |
| EFP | Efpalio | 5.10 | 314 | ePn | Pn | 16 16 51.0 | +1.3 |
| XOR | Xorichti | 5.16 | 330 | ePN | Pn | 16 16 52.8 | +2.2 |
| XOR | Xorichti | 5.16 | 330 | ePn | Pn | 16 16 52.8 | +2.2 |
| AGG | Agios Georgios | 5.29 | 322 | ePN | Pn | 16 16 53.8 | +1.5 |
| AGG | Agios Georgios | 5.29 | 322 | ePn | Pn | 16 16 53.8 | +1.5 |
| MAKR | Makrakomi, Fth | 5.38 | 320 | ePN | Pn | 16 16 55.4 | +1.8 |
| MAKR | Makrakomi, Fth | 5.38 | 320 | ePn | Pn | 16 16 55.4 | +1.8 |
| PAIG | Paliouri | 5.47 | 336 | ePN | Pn | 16 16 55.8 | +1.0 |
| PAIG | Paliouri | 5.47 | 336 | ePn | Pn | 16 16 55.8 | +1.0 |
| EVR | Evrytania | 5.49 | 318 | ePN | Pn | 16 16 57.0 | +1.9 |
| EVR | Evrytania | 5.49 | 318 | ePn | Pn | 16 16 57.0 | +1.9 |
| SMTH | Samothraki Isl | 5.57 | 352 | ePN | Pn | 16 16 56.5 | +0.2 |
| SMTH | Samothraki Isl | 5.57 | 352 | ePn | Pn | 16 16 56.5 | +0.2 |
| PDO | Prodromos | 5.64 | 312 | ePN | Pn | 16 16 58.6 | +1.4 |
| PDO | Prodromos | 5.64 | 312 | ePn | Pn | 16 16 58.6 | +1.4 |
| VLS | Valsamata | 5.78 | 306 | ePN | Pn | 16 17 00.2 | +1.1 |
| VLS | Valsamata | 5.78 | 306 | ePn | Pn | 16 17 00.2 | +1.1 |
| ALN | Alexandroupoli | 5.95 | 356 | ePN | Pn | 16 17 02.4 | +1.0 |
| ALN | Alexandroupoli | 5.95 | 356 | ePn | Pn | 16 17 02.4 | +1.0 |
| HORT | Hortiatis | 6.27 | 335 | ePN | Pn | 16 17 08.3 | +2.5 |
| HORT | Hortiatis | 6.27 | 335 | ePn | Pn | 16 17 08.3 | +2.5 |
| IGT | Igoumenitsa | 6.75 | 315 | ePN | Pn | 16 17 14.4 | +2.0 |
| IGT | Igoumenitsa | 6.75 | 315 | ePn | Pn | 16 17 14.4 | +2.0 |
| GRG | Griva | 6.83 | 333 | ePN | Pn | 16 17 15.8 | +2.2 |
| GRG | Griva | 6.83 | 333 | ePn | Pn | 16 17 15.8 | +2.2 |
| KNT | Kendrikon | 6.84 | 336 | ePN | Pn | 16 17 16.2 | +2.6 |
| KNT | Kendrikon | 6.84 | 336 | ePn | Pn | 16 17 16.2 | +2.6 |
| NEST | Nestorio | 6.98 | 323 | ePN | Pn | 16 17 17.5 | +1.8 |
| NEST | Nestorio | 6.98 | 323 | ePn | Pn | 16 17 17.5 | +1.8 |
| BRTR | Keskin Array B | 7.39 | 48 | Pn | Pn | 16 17 24.1 | +2.8 |
| | 0.2nm,0.3s,baz=225,slow=14,SNR=4.3 | | | | | | |
| MMAI | Mount Meron Ar | 7.60 | 102 | Pn | Pn | 16 17 24.5 | +0.2 |
| | 1.3nm,0.3s,baz=289,slow=11,SNR=5.1 | | | | | | |
| EIL | Elat | 8.85 | 124 | Pn | Pn | 16 17 41.1 | -0.1 |
| | 0.6nm,0.3s,baz=8.8,slow=3.2,SNR=6.8 | | | | | | |
| MLR | Muntele Rosu | 10.54 | 358 | Pn | Pn | 16 18 08.5 | +4.0 |
| | 0.1nm,0.3s,baz=140,slow=13,SNR=3.8 | | | | | | |
| AKASG | Malin Array Be | 15.87 | 6 | Pn | Pn | 16 19 17.6 | +1.0 |
| | 0.9nm,0.3s,baz=194,slow=11,SNR=6.6 | | | | | | |
| GERES | GERESS Array B | 16.83 | 330 | Pn | Pn | 16 19 29.6 | +0.6 |
| | 0.1nm,0.3s,baz=145,slow=14,SNR=4.5 | | | | | | |
| ESDC | Sonseca Array | 24.66 | 290 | P | P | 16 20 52.7 | -1.6 |
| | 1.0nm,0.6s,baz=84,slow=8.7,SNR=5.9 | | | | | | |
| FINES | FINESS Array B | 26.52 | 359 | P | P | 16 21 10.3 | -0.5 |
| | 2.0nm,1.0s,baz=190,slow=31,SNR=1.5 | | | | | | |
| AKTO | Aktyubinsk | 27.57 | 46 | P | P | 16 21 19.0 | -1.4 |
| | 0.7nm,0.3s,baz=235,slow=6.3,SNR=4.6 | | | | | | |
| EKA | Eskdalemuir Ar | 28.88 | 324 | P | P | 16 21 29.2 | -2.8 |
| | 1.0nm,0.7s,baz=127,slow=10,SNR=3.7 | | | | | | |
| TORD | Torodi Ar. Bea | 31.24 | 232 | P | P | 16 21 53.5 | +0.2 |
| | 0.6nm,0.6s,baz=38,slow=8.5,SNR=6.2 | | | | | | |
| ARCES | ARCESS Array B | 34.65 | 359 | P | P | 16 22 19.3 | -3.3 |
| | 1.7nm,0.9s,baz=178,slow=9.7,SNR=5.5 | | | | | | |
| MKAR | Makanchi Array | 42.94 | 56 | P | P | 16 23 32.8 | +0.3 |
| | 1.0nm,0.5s,baz=273,slow=7.2,SNR=15 | | | | | | |
| ZALV | Zalesovo Beam | 44.33 | 46 | P | P | 16 23 42.6 | -0.8 |
| | 2.2nm,0.4s,baz=267,slow=9.1,SNR=13 | | | | | | |
| SONM | Songino Array | 58.74 | 51 | P | P | 16 25 31.7 | +0.2 |
| | 0.6nm,0.6s,baz=291,slow=8.5,SNR=6.3 | | | | | | |

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*GUC* ***03*** *16:20:49.5±0.5, 20°.66S×68°.95W, h110km±4km, ML3.7*
*ISCJB* ***03*** *16:20:50.6±1.1, 20°.68S±0°.04×69°.0W±0°.2, h110km±16km, mb3.8/1, Error ellipse: s-maj=29.8km s-min=5.8km az=2.2*
*IDC* ***03*** *16:20:51.3±8.9, 20°.77S×68°.14W, h110km±73km, mb3.8/1, mb1 3.5/2, mb1mx3.2/17, mbtmp3.9/2, ML3.5/1, Error ellipse: s-maj=115.2km s-min=71.9km az=87.0*
**ISC 03 16:20:49.9**±1.1**, 20°.68S**±0°.04×**69°.0W**±0°.2**, h114**km±13km**, n10, σ1.36**/17**, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB01 | IPOC Station P | 0.60 | 232 | eP | Pn | 16 21 07.6 | -0.5 |
| PB01 | | | | eS | Sn | 16 21 21.6 | -0.1 |
| PB01 | | | | AML | AML | 16 21 22.9 | |
| | comp=E,4μm,0.1s | | | | | | |
| PB11 | IPOC Station P | 1.11 | 325 | eP | Pn | 16 21 12.3 | -0.5 |
| PB11 | | | | eS | Sn | 16 21 30.0 | -0.1 |
| PB09 | IPOC Station P | 1.14 | 192 | eP | Pn | 16 21 13.4 | +0.2 |
| PB09 | | | | eS | Sn | 16 21 31.0 | +0.3 |
| PB09 | | | | AML | AML | 16 21 35.3 | |
| | comp=N,3μm,0.3s | | | | | | |
| PB07 | IPOC Station P | 1.34 | 219 | eP | Pn | 16 21 15.5 | +0.2 |
| PB07 | | | | eS | Sn | 16 21 35.5 | +0.8 |
| PB07 | | | | AML | AML | 16 21 37.8 | |
| | comp=E,1μm,0.7s | | | | | | |
| MNMC | Minimini | 1.64 | 339 | eP | Pn | 16 21 19.3 | +0.2 |
| MNMC | | | | eS | Sn | 16 21 41.5 | +0.4 |
| MNMC | | | | AML | AML | 16 21 46.9 | |
| | comp=E,1μm,0.2s | | | | | | |
| PB04 | IPOC Station P | 1.98 | 213 | eP | Pn | 16 21 23.9 | +0.9 |
| PB04 | | | | eS | Sn | 16 21 51.4 | +3.2 |
| PB04 | | | | AML | AML | 16 21 57.0 | |
| | comp=N,684nm,0.2s | | | | | | |
| PB06 | IPOC Station P | 2.09 | 195 | eP | Pn | 16 21 24.8 | +0.3 |
| PB06 | | | | eS | Sn | 16 21 51.1 | +0.2 |
| PB06 | | | | AML | AML | 16 21 57.9 | |
| | comp=E,382nm,0.3s | | | | | | |
| LPAZ | La Paz | 4.44 | 11 | P | Pn | 16 21 57.4 | +1.5 |
| | comp=E,1.6nm,0.3s,baz=171,slow=5.3,SNR=27 | | | | | | |
| LPAZ | | | | S | Sn | 16 22 49.1 | +2.2 |
| | baz=197,slow=21,SNR=1.1 | | | | | | |
| TORD | Torodi Ar. Bea | 77.14 | 71 | P | P | 16 32 29.5 | -2.0 |
| | comp=E,1.5nm,0.8s,baz=254,slow=5.7,SNR=10 | | | | | | |
| MKAR | Makanchi Array | 145.01 | 35 | PKP | PKPbc | 16 40 14.1 | +0.8 |
| | comp=E,0.5nm,0.7s,baz=290,slow=0.8,SNR=4.3 | | | | | | |

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*ISCJB* ***03*** *16:38:52.1±1.1, 19°.34S±0°.05×69°.6W±0°.3, h124km±7km, mb3.9/2, Error ellipse: s-maj=39.6km s-min=7.6km az=3.4*
*IDC* ***03*** *16:38:53.3±3.0, 19°.39S×69°.58W, h124km±19km, mb3.6/4, mb1 3.5/6, mb1mx3.3/28, mbtmp4.0/6, Error ellipse: s-maj=69.7km s-min=15.8km az=92.0*
*GUC* ***03*** *16:38:54.0±0.3, 19°.38S×69°.37W, h103km±3km, ML3.9*
**ISC 03 16:38:52.5**±1.5**, 19°.33S**±0°.06×**69°.7W**±0°.3**, h117**km±9km**, n12, σ1.04**/17**, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MNMC | Minimini | 0.22 | 23 | eP | Pn | 16 39 09.7 | +0.4 |
| MNMC | | | | eS | Sn | 16 39 21.6 | -0.2 |
| MNMC | | | | AML | AML | 16 39 23.4 | |
| | comp=E,11μm,0.3s | | | | | | |
| PB11 | IPOC Station P | 0.43 | 176 | eP | Pn | 16 39 10.4 | +0.5 |
| PB11 | | | | eS | Sn | 16 39 22.8 | -0.4 |
| PB01 | IPOC Station P | 1.71 | 174 | eP | Pn | 16 39 23.1 | +0.7 |
| PB01 | | | | eS | Sn | 16 39 45.2 | 0.0 |
| PB01 | | | | AML | AML | 16 39 46.1 | |
| | comp=E,1μm,0.2s | | | | | | |
| PB07 | IPOC Station P | 2.39 | 184 | eP | Pn | 16 39 32.9 | +1.9 |
| PB07 | | | | eS | Sn | 16 39 59.4 | -1.1 |
| PB07 | | | | AML | AML | 16 40 08.9 | |
| | comp=N,423nm,0.4s | | | | | | |
| PB09 | IPOC Station P | 2.49 | 170 | eP | Pn | 16 39 33.2 | +1.0 |
| PB09 | | | | eS | Sn | 16 40 03.6 | +0.9 |
| PB09 | | | | AML | AML | 16 40 06.9 | |
| | comp=E,820nm,0.5s | | | | | | |
| LVC | Limon Verde | 3.34 | 168 | P | Pn | 16 39 44.2 | +0.7 |
| | comp=E,183nm,0.3s,baz=8.2,slow=6.3,SNR=38 | | | | | | |
| LVC | | | | S | Sn | 16 40 22.3 | -0.6 |
| | comp=E,461nm,0.3s,baz=239,slow=24,SNR=12 | | | | | | |
| LPAZ | La Paz | 3.37 | 26 | P | Pn | 16 39 46.0 | +1.8 |
| | comp=E,1.1nm,0.3s,baz=194,slow=5.2,SNR=27 | | | | | | |
| SIV | San Ignacio | 8.86 | 69 | P | Pn | 16 40 52.3 | -5.4 |
| | comp=E,2.0nm,0.3s,baz=267,slow=11,SNR=18 | | | | | | |
| PTGA | Pitinga | 20.80 | 28 | P | P | 16 43 23.2 | -1.4 |
| | comp=E,1.5nm,0.4s,baz=198,slow=19,SNR=3.3 | | | | | | |
| BDFB | Brasilia | 20.99 | 83 | P | P | 16 43 26.4 | -0.4 |
| | comp=E,3.3nm,0.5s,baz=274,slow=9.7,SNR=6.8 | | | | | | |
| DBIC | Dimbokro | 68.84 | 75 | P | P | 16 49 44.7 | -0.1 |
| | comp=E,2.3nm,0.9s,baz=225,slow=4.3,SNR=1.7 | | | | | | |
| TORD | Torodi Ar. Bea | 77.33 | 71 | P | P | 16 50 34.7 | -0.1 |
| | comp=E,0.7nm,0.4s,baz=264,slow=5.1,SNR=5.3 | | | | | | |

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*ISCJB* ***03*** *16:42:46.9±0.6, 32°.47S±0°.04×179°.66W±0°.06, h93km±5km, mb5.0/42, Error ellipse: s-maj=8.7km s-min=5.4km az=26.8*
*BJI* ***03*** *16:42:47.0, 32°.50S×179°.18W, h111km, mb5.3/27, mB5.5/22*
*NEIC* ***03*** *16:42:51.8±1.5, 32°.34S×179°.56W, h130km±12km, mb5.0/21, Error ellipse: s-maj=12.5km s-min=9.4km az=154.0*
*MOS* ***03*** *16:42:53.0±1.1, 32°.28S×179°.76W, h147km, mb4.9/8, Error ellipse: s-maj=13.9km s-min=11.4km az=105.1*
*IDC* ***03*** *16:42:55.8±2.0, 32°.35S×179°.67W, h163km±17km, mb4.6/20, mb1 4.7/21, mb1mx4.6/29, mbtmp5.0/21, MS3.6/1, Ms1 3.6/1, ms1mx2.9/27, Error ellipse: s-maj=12.4km s-min=10.8km az=55.0*
**ISC 03 16:42:48.8**±0.5**, 32°.53S**±0°.05×**179°.43W**±0°.07**, h109**km±2km**, n400, σ1.38**/379**, mb5.0**/42**, 27C-14D, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 3.51 | 22 | P | Pn | 16 43 39.9 | -1.6 |
| | 352nm,0.3s,baz=71,slow=23,SNR=6.0 | | | | | | |
| RAO | | | | S | Sn | 16 44 20.6 | -1.8 |
| | 774nm,0.3s,baz=87,slow=22,SNR=7.6 | | | | | | |
| MXZ | Matakaoa Point | 5.36 | 200 | PN | Pn | 16 44 07.7 | +1.3 |
| MXZ | | | | SN | Sn | 16 45 06.3 | -0.5 |
| WMGZ | Waiomatatini S | 5.57 | 198 | PN | Pn | 16 44 10.9 | +1.6 |
| GRZ | Great Barrier | 5.63 | 227 | PN | Pn | 16 44 16.1 | +6.1 |
| HAZ | Te Kaha | 5.70 | 203 | PN | Pn | 16 44 12.1 | +1.2 |
| WIZ | White Island | 5.71 | 208 | PN | Pn | 16 44 13.6 | +2.5 |
| KUZ | Kuaotunu | 5.81 | 222 | PN | Pn | 16 44 18.3 | +5.9 |
| PUZ | Puketiti | 5.85 | 198 | PN | Pn | 16 44 13.6 | +0.5 |
| PUZ | | | | SN | Sn | 16 45 18.7 | -0.1 |
| MYRZ | Mayor Island | 5.93 | 216 | ePN | Pn | 16 44 19.7 | +5.5 |
| TWGZ | Tauwhareparae | 6.02 | 200 | PN | Pn | 16 44 16.3 | +0.9 |
| WIAZ | Waiheke Island | 6.18 | 225 | PN | Pn | 16 44 23.8 | +6.3 |
| WCZ | Waipu Caves | 6.18 | 235 | PN | Pn | 16 44 23.5 | +5.9 |
| ABAZ | Army Bay | 6.24 | 228 | PN | Pn | 16 44 24.9 | +6.6 |
| OPRZ | Ohinepanea | 6.25 | 211 | PN | Pn | 16 44 20.6 | +2.3 |
| CNGZ | Carnagh Statio | 6.25 | 197 | PN | Pn | 16 44 19.1 | +0.6 |
| TGRZ | Tauranga | 6.28 | 213 | ePN | Pn | 16 44 22.4 | +3.5 |
| TKGZ | Te Karaka | 6.30 | 200 | PN | Pn | 16 44 18.9 | -0.3 |
| MWZ | Matawai | 6.31 | 202 | PN | Pn | 16 44 19.4 | +0.1 |
| MKAZ | Moumakai | 6.38 | 223 | PN | Pn | 16 44 25.9 | +5.7 |
| URZ | Urewera | 6.38 | 205 | P | Pn | 16 44 20.1 | -0.1 |
| | 45nm,0.3s,baz=274,slow=4.1,SNR=174 | | | | | | |
| URZ | | | | S | Sn | 16 45 30.5 | -1.1 |
| | 84nm,0.3s,baz=128,slow=8.3,SNR=3.1 | | | | | | |
| URZ | Urewera | 6.38 | 205 | ePN | Pn | 16 44 20.4 | +0.2 |
| URZ | | | | SN | Sn | 16 45 33.7 | +2.1 |
| URZ | Urewera | 6.38 | 205 | eP | Pn | 16 44 20.9 | +0.7 |
| | 512nm,0.3s | | | | | | |
| URZ | | | | S | Sn | 16 45 30.5 | -1.1 |
| EDRZ | Edgecumbe | 6.39 | 208 | PN | Pn | 16 44 24.4 | +3.9 |
| OUZ | Omahuta | 6.40 | 243 | PN | Pn | 16 44 25.7 | +5.3 |
| OUZ | Omahuta | 6.40 | 243 | eP | Pn | 16 44 25.7 | +5.3 |
| | 258nm,1.2s | | | | | | |
| ETAZ | East Tamaki Re | 6.41 | 225 | PN | Pn | 16 44 27.0 | +6.4 |
| LIRZ | Lichensteins R | 6.45 | 211 | PN | Pn | 16 44 26.5 | +5.3 |
| RAGZ | Rawiri | 6.49 | 202 | PN | Pn | 16 44 22.1 | +0.4 |
| OMRZ | Omania | 6.54 | 210 | PN | Pn | 16 44 26.2 | +3.7 |
| RIGZ | Rimuhau | 6.58 | 200 | PN | Pn | 16 44 22.6 | -0.3 |
| RIGZ | | | | SN | Sn | 16 45 36.4 | -0.1 |
| TOZ | Tahuroa Road | 6.65 | 217 | PN | Pn | 16 44 28.0 | +4.1 |
| HLRZ | Highlands Stat | 6.67 | 210 | PN | Pn | 16 44 28.3 | +4.0 |
| PRGZ | Paritu Road | 6.75 | 198 | PN | Pn | 16 44 25.1 | -0.2 |
| SNGZ | Shannon Statio | 6.77 | 202 | PN | Pn | 16 44 25.6 | 0.0 |
| KNZ | Kokohu | 6.90 | 199 | PN | Pn | 16 44 25.8 | -1.4 |
| MHGZ | Mahia Peninsul | 6.96 | 197 | PN | Pn | 16 44 27.5 | -0.5 |
| RAHZ | Arahi | 6.98 | 203 | PN | Pn | 16 44 28.3 | 0.0 |
| WHHZ | Waihua | 7.08 | 202 | PN | Pn | 16 44 29.5 | -0.2 |
| NMHZ | Naumai | 7.24 | 204 | PN | Pn | 16 44 31.4 | -0.5 |
| ARHZ | Aropaoanui | 7.32 | 202 | PN | Pn | 16 44 32.3 | -0.7 |
| BKZ | Black Stump Fm | 7.41 | 205 | PN | Pn | 16 44 33.3 | -0.9 |
| RITZ | Rihia Road | 7.49 | 209 | ePN | Pn | 16 44 35.9 | +0.6 |
| HIZ | Hauiti | 7.58 | 216 | PN | Pn | 16 44 39.8 | +3.3 |
| MCHZ | McNeill Hill | 7.58 | 203 | PN | Pn | 16 44 35.4 | -1.1 |
| CKHZ | Cape Kidnapper | 7.66 | 201 | PN | Pn | 16 44 36.4 | -1.2 |
| KWHZ | Kaweka Forest | 7.66 | 205 | PN | Pn | 16 44 36.6 | -1.0 |
| OTVZ | Oturere | 7.73 | 210 | PN | Pn | 16 44 38.6 | -0.1 |
| TWVZ | Taurewa | 7.75 | 211 | PN | Pn | 16 44 39.7 | +0.8 |
| NGZ | Ngauruhoe | 7.77 | 210 | PN | Pn | 16 44 39.9 | +0.7 |
| KAHZ | Kahuranaki | 7.85 | 201 | PN | Pn | 16 44 38.8 | -1.3 |
| BHHZ | Black Hill Sta | 7.85 | 206 | PN | Pn | 16 44 39.2 | -1.0 |
| FWVZ | Far West T-bar | 7.85 | 210 | ePN | Pn | 16 44 39.8 | -0.6 |
| DRZ | Dome Shelter | 7.87 | 210 | PN | Pn | 16 44 41.4 | +0.7 |
| WNVZ | Wahianoa | 7.90 | 209 | PN | Pn | 16 44 39.9 | -1.1 |
| MOVZ | Moawhango | 7.90 | 208 | PN | Pn | 16 44 42.7 | +1.8 |
| PXZ | Pawanui | 8.07 | 201 | PN | Pn | 16 44 40.6 | -2.5 |
| PNHZ | Pukenui | 8.18 | 204 | ePN | Pn | 16 44 41.8 | -2.8 |
| WPHZ | Waipukurau | 8.23 | 203 | ePN | Pn | 16 44 42.2 | -3.1 |
| PRHZ | Porangahau | 8.35 | 201 | PN | Pn | 16 44 44.3 | -2.6 |
| TSZ | Takapari Road | 8.39 | 205 | PN | Pn | 16 44 44.7 | -2.8 |
| WAZ | Wanganui | 8.51 | 210 | PN | Pn | 16 44 48.4 | -0.8 |
| PKE | Pukeiti | 8.53 | 217 | ePN | Pn | 16 44 52.6 | +3.1 |
| NEZ | North Egmont | 8.54 | 216 | PN | Pn | 16 44 52.4 | +2.9 |
| PREZ | Palmer Road | 8.56 | 216 | PN | Pn | 16 44 54.6 | +4.7 |
| POWZ | Post Office Ro | 8.75 | 205 | PN | Pn | 16 44 51.1 | -1.3 |
| BFZ | Birch Farm | 8.85 | 202 | PN | Pn | 16 44 50.1 | -3.6 |
| TIWZ | Tintock | 9.05 | 203 | PN | Pn | 16 44 53.8 | -2.7 |
| MRZ | Mangatainoka R | 9.06 | 205 | ePN | Pn | 16 44 52.0 | -4.5 |
| HOWZ | Holdsworth Sta | 9.29 | 204 | PN | Pn | 16 44 56.1 | -3.6 |
| OGWZ | Otaki Gorge | 9.34 | 206 | ePN | Pn | 16 44 56.9 | -3.5 |
| TMWZ | Te Maipa | 9.35 | 202 | PN | Pn | 16 44 56.2 | -4.3 |
| KIW | Kapiti Island | 9.48 | 207 | PN | Pn | 16 44 58.8 | -3.5 |
| MTW | Mount Morrison | 9.53 | 204 | PN | Pn | 16 44 58.5 | -4.4 |
| CAW | Cannon Point | 9.63 | 206 | PN | Pn | 16 45 00.4 | -4.0 |
| TRWZ | Traveller | 9.68 | 202 | ePN | Pn | 16 45 01.2 | -3.7 |
| MSWZ | Moikau Station | 9.84 | 204 | PN | Pn | 16 45 03.3 | -3.8 |
| SNZO | South Karori | 9.94 | 206 | eP | Pn | 16 45 05.2 | -3.3 |
| | 198nm,0.4s | | | | | | |
| PLWZ | Palliser | 9.98 | 204 | PN | Pn | 16 45 04.3 | -4.7 |
| TCW | Tory Channel | 10.03 | 208 | PN | Pn | 16 45 05.5 | -4.2 |
| NNZ | Nelson | 10.41 | 212 | PN | Pn | 16 45 10.4 | -4.4 |
| QRZ | Quartz Range | 10.50 | 216 | PN | Pn | 16 45 12.1 | -4.0 |
| THZ | Tophouse | 11.06 | 211 | PN | Pn | 16 45 18.5 | -5.2 |
| KHZ | Kahutara | 11.34 | 207 | PN | Pn | 16 45 21.8 | -5.6 |
| KHZ | Kahutara | 11.34 | 207 | eP | Pn | 16 45 22.5 | -4.9 |
| | 399nm,0.4s | | | | | | |
| CTZ | Chatham Island | 11.41 | 170 | ePN | Pn | 16 45 31.2 | +3.0 |
| DSZ | Denniston Nort | 11.55 | 215 | ePN | Pn | 16 45 25.0 | -5.3 |
| LTZ | Lake Taylor | 12.16 | 210 | PN | Pn | 16 45 33.0 | -5.3 |
| CRLZ | Canterbury Las | 12.68 | 207 | ePN | Pn | 16 45 39.0 | -6.0 |
| OXZ | Oxford | 12.71 | 210 | PN | Pn | 16 45 38.6 | -6.8 |
| MQZ | McQueen's Vall | 12.78 | 207 | PN | Pn | 16 45 39.5 | -6.8 |
| WVZ | Waitaha Valley | 13.08 | 214 | ePN | Pn | 16 45 44.8 | -5.5 |
| RPZ | Rata Peaks | 13.44 | 211 | P | Pn | 16 45 51.0 | -4.0 |
| | 23nm,0.3s,baz=246,slow=2.0,SNR=77 | | | | | | |
| RPZ | | | | S | Sn | 16 48 12.1 | -11 |
| | 11nm,0.3s,baz=61,slow=1.1,SNR=13 | | | | | | |
| RPZ | Rata Peaks | 13.44 | 211 | eP | Pn | 16 45 49.4 | -5.7 |
| | 64nm,0.4s | | | | | | |
| RPZ | | | | S | Sn | 16 48 12.1 | -11 |
| ODZ | Otahua Downs | 14.69 | 209 | eP | Pn | 16 46 06.5 | -4.5 |
| | 40nm,0.4s | | | | | | |
| MSVF | Nonsavu | 14.90 | 351 | eP | Pn | 16 46 14.3 | +0.3 |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,32nm,0.8s | | | | | | |
| MSVF | Nonsavu | 14.90 | 351 | eP | Pn | 16 46 14.2 | +0.3 |
| | comp=Z,32nm,0.8s | | | | | | |
| WKZ | Wanaka | 15.22 | 213 | PN | Pn | 16 46 12.4 | -5.4 |
| DZM | Mont Dzumac | 16.30 | 306 | P | P | 16 46 33.7 | +1.3 |
| | comp=Z,1.6nm,0.3s,baz=180,slow=7.4,SNR=18 | | | | | | |
| WHZ | Wether Hill Ro | 16.52 | 212 | eP | Pn | 16 46 28.5 | -5.4 |
| | comp=Z,18nm,0.3s | | | | | | |
| RAR | Rarotonga | 20.80 | 62 | P | Pn | 16 47 24.0 | -0.9 |
| | comp=Z,95nm,0.9s,baz=211,slow=7.0,SNR=5.1 | | | | | | |
| RAR | Rarotonga | 20.80 | 62 | P | Pn | 16 47 24.0 | -0.9 |
| ARMA | Armidale | 24.75 | 267 | eP | P | 16 48 02.9 | +2.5 |
| PPT | Papeete | 30.74 | 68 | LR | LR | 16 59 29.8 | |
| | comp=Z,111nm,19.3s,baz=255,slow=32 | | | | | | |
| CTA | Charters Tower | 33.02 | 283 | P | P | 16 49 14.4 | +0.7 |
| | comp=Z,78nm,0.5s,baz=96,slow=11,SNR=48 | | | | | | |
| CTAO | Charters Tower | 33.02 | 283 | eP | P | 16 49 14.0 | +0.2 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,84nm,0.6s | | | | | | |
| CTAO | Charters Tower | 33.02 | 283 | eP | P | 16 49 14.0 | +0.2 |
| | comp=Z,84nm,0.6s | | | | | | |
| BBOO | Buckleboo | 37.26 | 257 | eP | P | 16 49 50.2 | +0.1 |
| | comp=Z,12nm,0.6s | | | | | | |
| PMG | Port Moresby | 38.49 | 299 | P | P | 16 49 59.6 | -0.9 |
| | comp=Z,22nm,0.8s,baz=111,slow=2.5,SNR=3.9 | | | | | | |
| PMG | Port Moresby | 38.49 | 299 | iP | P | 16 49 56.0 | -4.5 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,100nm,0.9s | | | | | | |
| ASAR | Alice Springs | 41.83 | 270 | P | P | 16 50 27.4 | -0.7 |
| | comp=Z,18nm,0.7s,baz=109,slow=7.6,SNR=180 | | | | | | |
| ASAR | | | | PcP | PcP | 16 52 20.9 | -1.3 |
| | comp=Z,4.6nm,0.5s,baz=134,slow=4.9,SNR=6.7 | | | | | | |
| ASAR | | | | PKiKP | PKiKP | 16 59 26.5 | -1.9 |
| | comp=Z,0.3nm,0.6s,baz=113,slow=1.4,SNR=6.7 | | | | | | |
| WRAB | Tennant Creek | 43.01 | 275d | iP | P | 16 50 34.8 | -2.9 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,84nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 43.01 | 275 | P | P | 16 50 36.6 | -1.0 |
| | comp=Z,258nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 43.01 | 275 | eP | P | 16 50 36.6 | -1.0 |
| | comp=Z,30nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 43.02 | 275 | P | P | 16 50 36.9 | -0.9 |
| | comp=Z,22nm,0.4s,baz=113,slow=8.0,SNR=151 | | | | | | |
| WRA | | | | PcP | PcP | 16 52 25.2 | -0.9 |
| | comp=Z,7.1nm,0.9s,baz=120,slow=3.3,SNR=7.4 | | | | | | |
| WRA | | | | ScP | ScP | 16 56 00.5 | -6.8 |
| | comp=Z,1.6nm,0.7s,baz=112,slow=3.8,SNR=5.1 | | | | | | |
| WRA | | | | S | S | 16 56 50.2 | -5.1 |
| | comp=Z,1.2nm,0.9s,baz=114,slow=13,SNR=3.9 | | | | | | |
| WRA | | | | PKiKP | PKiKP | 16 59 27.6 | -1.9 |
| | comp=Z,0.6nm,0.6s,baz=178,slow=0.3,SNR=7.9 | | | | | | |
| FORT | Forrest | 44.36 | 258 | eP | P | 16 50 48.0 | -0.3 |
| | comp=Z,68nm,0.6s | | | | | | |
| SBA | Scott Base | 45.83 | 184 | eP | P | 16 51 04.5 | +5.2 |
| SBA | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| SBA | Scott Base | 45.83 | 184 | eP | P | 16 51 04.5 | +5.2 |
| | comp=Z,20nm,1.1s | | | | | | |
| VNDA | Vanda | 45.87 | 186 | P | P | 16 51 03.6 | +4.0 |
| | comp=Z,1.2nm,0.5s,baz=354,slow=7.1,SNR=8.3 | | | | | | |
| VNDA | | | | PcP | PcP | 16 52 36.6 | +1.8 |
| | comp=Z,3.5nm,0.6s,baz=336,slow=4.7,SNR=9.8 | | | | | | |
| VNDA | | | | ScP | ScP | 16 56 15.1 | -2.8 |
| | comp=Z,1.3nm,0.8s,baz=357,slow=3.4,SNR=5.3 | | | | | | |
| CASY | Casey | 52.70 | 209 | eP | P | 16 51 51.0 | -0.6 |
| | comp=Z,8.6nm,0.6s | | | | | | |
| MBWA | Marble Bar | 54.82 | 266 | eP | P | 16 52 07.9 | +0.1 |
| | comp=Z,27nm,1.0s | | | | | | |
| SOEI | Soe | 56.49 | 280 | eP | P | 16 52 21.6 | +1.6 |
| | comp=Z,107nm,0.8s | | | | | | |
| GUMO | Guam | 57.17 | 318 | P | P | 16 52 24.2 | -0.2 |
| | comp=Z,39nm,0.7s,baz=200,slow=23,SNR=4.3 | | | | | | |
| QSPA | South Pole Qui | 57.59 | 180 | P | P | 16 52 30.4 | +3.4 |
| | comp=Z,43nm,0.6s,baz=334,slow=0.3,SNR=380 | | | | | | |
| MMRI | Maumere | 58.78 | 280 | eP | P | 16 52 36.7 | +0.8 |
| | comp=Z,199nm,1.3s | | | | | | |
| MAW | Mawson | 69.89 | 201 | P | P | 16 53 48.4 | +1.0 |
| | comp=Z,8.8nm,0.7s,baz=125,slow=7.9,SNR=25 | | | | | | |
| LEM | Lembang | 72.00 | 273 | P | P | 16 54 01.3 | 0.0 |
| | comp=Z,18nm,0.7s,baz=354,slow=12,SNR=5.4 | | | | | | |
| SYO | Syowa Base | 74.77 | 194⇑ | eP | P | 16 54 15.4 | -1.0 |
| SNAA | Sanae | 76.06 | 179 | P | P | 16 54 25.6 | +1.7 |
| SNAA | Sanae | 76.06 | 179 | P | P | 16 54 25.8 | +1.9 |
| | comp=Z,17nm,1.0s,baz=208,slow=6.6,SNR=221 | | | | | | |
| SNAA | Sanae | 76.06 | 179d | iP | P | 16 54 21.7 | -2.2 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| SNAA | Sanae | 76.06 | 179 | eP | P | 16 54 25.4 | +1.5 |
| | comp=Z,19nm,1.0s | | | | | | |
| VNA3 | Neumayer Olymp | 76.27 | 177 | P | P | 16 54 27.0 | +2.0 |
| NVL | N'lazarevskaya | 76.69 | 184⇓ | iP | P | 16 54 29.7 | +2.4 |
| NVL | | | | eS | S | 17 03 55.0 | -10 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| VNA2 | Neumayer--Watz | 76.69 | 177 | P | P | 16 54 30.0 | +2.7 |
| | baz=288,slow=1.7 | | | | | | |
| VNA1 | Neumayer--Stat | 76.92 | 177 | P | P | 16 54 30.9 | +2.3 |
| JOW | Kunigami | 77.21 | 314 | P | P | 16 54 31.0 | +0.1 |
| | comp=Z,1.3nm,0.7s,baz=56,slow=14,SNR=3.6 | | | | | | |
| MJAR | Matsushiro Arr | 79.31 | 326 | P | P | 16 54 41.8 | -0.5 |

comp=Z,4.1nm,0.8s,baz=157,slow=4.9,SNR=12
**MAJO Matsushiro 79.31 326** *e*P P 16 54 38.9 -3.4
MAJO pmax pmax
comp=Z,62nm,1.1s
**MAT Matsushiro 79.31 326** P **P** **16 54 41.2 -1.1**
**TJN Taejon 84.70 320** *e*P **P** **16 55 07.5 -2.9**
**QIZ Qiongzhong 84.82 296** P **P** **16 55 11.5 +0.1**
QIZ pP **pP** **16 55 38.2 -1.4**
QIZ sP **sP** **16 55 49.0 -2.1**
QIZ PP **PP** **16 58 29.6 +0.1**
QIZ S **SKKSac** **17 05 33.1 +0.9**
QIZ sS **sS** **17 06 18.1 -1.2**
QIZ PMZ
comp=Z,42nm,1.9s
**KSRS Korea Array 85.19 321** P **P** **16 55 13.6 +0.8**
comp=Z,18nm,0.7s,baz=137,slow=5.8,SNR=71
**KSAR Wonju Array Be 85.20 321** P **P** **16 55 13.6 +0.7**
**KSAR Wonju Array Be 85.20 321** P **P** **16 55 13.6 +0.7**
**YSS Yuzh-Sakhalins 86.14 335**⇑ *i*P **P** **16 55 18.0 +0.8**
**TRTT Trang 86.55 281** P **P** **16 55 19.8 -0.3**
comp=Z,34nm,0.9s
**NJ2 Nanjing 86.72 311** *e*P **P** **16 55 21.2 +0.7**
NJ2 PMZ
comp=Z,20nm,0.6s
**PKM Peak Mountain 87.33 45** P **P** **16 55 25.0 +1.4**
baz=88
**PETK Petropavlovsk- 87.58 346** P **P** **16 55 23.7 -0.4**
comp=Z,7.1nm,0.6s,baz=133,slow=6.5,SNR=26
**MONP Monument Peak 88.08 49** P **P** **16 55 29.2 +1.9**
baz=88
**IBP Imperial Bould 88.14 49** P **P** **16 55 29.6 +2.2**
baz=88
**SKNT Sakolnakorn 88.16 291** P **P** **16 55 28.7 +1.0**
comp=Z,62nm,1.0s
**BFSC Mount Baldy Ra 88.20 47** P **P** **16 55 29.4 +1.7**
baz=88
**USRK Ussuriysk Ar. 88.27 327** P **P** **16 55 28.4 +0.8**
comp=Z,11nm,0.7s,baz=140,slow=3.3,SNR=22
**EDW2 Edwards Air Fo 88.43 46** P **P** **16 55 30.2 +1.6**
baz=89
**PFO Pinyon Flat Ob 88.53 48** P **P** **16 55 29.9 +0.6**
PFO pmax pmax
comp=Z,5.0nm,0.8s
**PFO Pinyon Flat Ob 88.53 48** P **P** **16 55 31.2 +1.9**
baz=89
**PFO Pinyon Flat Ob 88.53 48** P **P** **16 55 29.9 +0.6**
comp=Z,5.3nm,0.8s
**ISA Isabella 88.66 45** *e*P **P** **16 55 31.0 +1.3**
ISA pmax pmax
comp=Z,7.0nm,0.8s
**ISA Isabella 88.66 45** P **P** **16 55 31.6 +1.9**
baz=89
**ISA Isabella 88.66 45** *e*P **P** **16 55 31.0 +1.3**
comp=Z,6.7nm,0.8s
**KHON Khomkaen 88.71 290** P **P** **16 55 31.2 +0.9**
comp=Z,18nm,0.9s
**LRMC Laurel Mountai 89.01 46** P **P** **16 55 33.3 +1.8**
baz=89
**CMB Columbia Colle 89.15 43** *e*P **P** **16 55 33.0 +1.0**
CMB pmax pmax
comp=Z,24nm,1.5s
**CMB Columbia Colle 89.15 43** *e*P **P** **16 55 33.0 +1.0**
comp=Z,24nm,1.5s
**GLA Glamis 89.21 49** P **P** **16 55 34.7 +2.4**
baz=89
**NONG Nongkai 89.43 292** P **P** **16 55 34.4 +0.8**
comp=Z,73nm,0.9s
**GSC Goldstone 89.43 47** P **P** **16 55 35.2 +1.8**
baz=90
**MPMC Manual Prospec 89.52 46** P **P** **16 55 34.6 +0.6**
baz=90
**MDJ Mudanjiang 89.70 326** P **P** **16 55 35.0 +0.7**
MDJ PMZ
comp=Z,19nm,1.0s
MDJ PMZ
comp=Z,270nm,4.0s
**IRM Iron Mountain 89.72 48** P **P** **16 55 36.9 +2.2**
baz=90
**Y12C Blythe 89.85 49** P **P** **16 55 37.6 +2.3**
baz=90
**O03D Paynes Creek 89.93 40** P **P** **16 55 36.8 +1.2**
baz=90
**GRAC Grapevine Rang 90.21 45** P **P** **16 55 38.7 +1.7**
baz=90
**CHGN Chignik 90.27 12** *e*P **P** **16 55 37.8 +1.2**
**PBKT Sadao Pong 90.31 289** P **P** **16 55 39.8 +2.0**
**HABR Khabarovsk 90.32 332** *ce*P **P** **16 55 35.2 -1.8**
HABR *e* 16 59 08.0
HABR *e*SS SS 17 12 24.5 -0.7
HABR *e*SSS SSS 17 16 00.2
HABR pmax pmax
comp=Z,36nm,2.0s
HABR pmax pmax
comp=N,28nm,2.0s
HABR pmax pmax
comp=E,41nm,2.3s
HABR MLR MLR
comp=Z,95nm,22.0s
**LDFC Landfair 90.33 48** *e*P **P** **16 55 40.0 +2.3**
comp=Z,12nm,0.6s
**YBH Yreka Blue Hor 90.45 39** P **P** **16 55 39.7 +1.7**
comp=Z,3.1nm,0.7s,baz=337,slow=2.7
**TIA Tai'an 90.54 314** *e*P **P** **16 55 39.4 +1.0**
TIA PMZ
comp=Z,40nm,0.7s
**NVAR Mina Array Bea 90.62 43** P **P** **16 55 40.5 +1.5**
comp=Z,2.8nm,0.7s,baz=216,slow=7.6,SNR=19
**TPNV Topopah Spring 90.85 46** P **P** **16 55 41.7 +1.6**
baz=91
**M04C Macdoel 90.95 39** P **P** **16 55 42.0 +1.6**
baz=91
**CN2 Changchun 91.11 324** *e*P **P** **16 55 40.9 0.0**
CN2 PMZ
comp=Z,50nm,0.8s
CN2 PMZ
comp=Z,200nm,6.0s
CN2 LZ
comp=Z,600nm,16.0s
**TUC Tucson 91.38 52** *e*P **P** **16 55 43.8 +1.2**
TUC pmax pmax
comp=Z,4.0nm,0.7s
**TUC Tucson 91.38 52** *e*P **P** **16 55 43.8 +1.2**
comp=Z,4.0nm,0.7s
**I03D Drain, OR 91.51 37** P **P** **16 55 44.6 +1.9**
baz=92
**GYA Guiyang 91.56 300**⇑ *i*P **P** **16 55 43.5 -0.1**
GYA pP **pP** **16 56 11.8 -0.2**
GYA sP **sP** **16 56 24.3 +0.8**
GYA PP **PP** **16 59 27.4 +3.9**
GYA SKS **SKSac** **17 06 04.5 -1.8**
GYA S **S** **17 06 32.3 -2.3**
GYA PMZ
comp=Z,20nm,0.9s
GYA PMZ
comp=Z,120nm,6.2s
**J04D Umpqua Nationa 91.83 38** P **P** **16 55 46.1 +1.5**
baz=92
**I04A Tendick Farm, 92.06 37** P **P** **16 55 46.5 +1.1**
baz=92
**R11A Troy Canyon, C 92.17 45** P **P** **16 55 47.0 +0.8**
baz=92
**J05D Fort Rock, OR 92.32 38** P **P** **16 55 48.7 +2.0**
baz=92
**KDAK Kodiak Island 92.75 14** P **P** **16 55 49.3 +1.2**
comp=Z,12nm,0.8s,baz=80,slow=13,SNR=3.7
**CMAR Chiang Mai Arr 92.96 290** P **P** **16 55 50.5 +0.4**
comp=Z,1.6nm,0.8s,baz=151,slow=3.8,SNR=8.2
CMAR PP **PP** **16 59 35.9 +1.3**
comp=Z,0.9nm,0.8s,baz=146,slow=6.8,SNR=5.7
CMAR PKKP **PKKPbc** **17 13 01.6 +2.7**
comp=Z,0.7nm,0.7s,baz=257,slow=3.1,SNR=4.6
**I05D Terrebonne, OR 93.00 38** P **P** **16 55 50.9 +1.2**
baz=93
**BJI Beijing 93.59 316** P **P** **16 55 53.8 +1.4**
BJI S **S** **17 06 54.7 +3.0**
BJI SS **SS** **17 13 17.0 +4.4**
BJI PMZ
comp=Z,9.0nm,0.8s
BJI PMZ
comp=Z,110nm,3.5s
BJI LN
comp=Z,430nm,16.0s
BJI LE
comp=Z,250nm,17.3s
BJI LZ
comp=Z,240nm,26.2s

**KMI Kunming 93.70 297** P **P** **16 55 54.2 +0.6**
KMI S **S** **17 06 55.1 +1.2**
KMI PMZ
comp=Z,10.0nm,0.8s
KMI PMZ
comp=Z,76nm,3.7s
KMI LN
comp=Z,140nm,17.5s
KMI LE
comp=Z,110nm,17.9s
KMI LZ
comp=Z,91nm,17.9s
**TXAR Lajitas Array 94.55 58** P **P** **16 55 59.0 +1.7**
comp=Z,0.3nm,0.7s,baz=206,slow=5.4,SNR=4.6
**TMUT Trail Mountain 95.41 46** P **P** **16 56 03.0 +1.8**
comp=Z,5.7nm,0.6s
**ANMO Albuquerque 95.85 52** *e*P **P** **16 56 00.9 -2.3**
ANMO pmax pmax
comp=Z,1.0nm,1.0s
**529A Stev Forest Ra 96.03 58** P **P** **16 56 04.7 +0.7**
baz=96
**CD2 Chengdu 96.20 303** *e*P **P** **16 56 05.2 +0.5**
CD2 sP **sP** **16 56 44.3 -0.4**
CD2 SKS **SKSac** **17 06 31.7 +0.5**
CD2 S **ScS** **17 07 16.1 +0.7**
CD2 sS **sS** **17 08 04.6 +0.3**
CD2 SS **SS** **17 13 52.8 +2.7**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,140nm,5.6s
CD2 LN
comp=Z,500nm,10.3s
CD2 LZ
comp=Z,270nm,10.0s
**HLID Hailey 96.20 42** P **P** **16 56 05.7 +1.2**
baz=96
**429A Davenport Ranc 96.55 58** P **P** **16 56 06.7 +0.4**
baz=97
**HHC Hu-ho-hao-te 96.84 314** *e*P **P** **16 56 09.7 +2.3**
HHC pP **pP** **16 56 36.7 +0.8**
HHC SKS **SKSac** **17 06 34.8 +0.6**
HHC S **ScS** **17 07 22.1 +1.6**
HHC PMZ
comp=Z,25nm,1.1s
HHC PMZ
comp=Z,130nm,6.2s
HHC LN
comp=Z,240nm,18.7s
HHC LE
comp=Z,210nm,16.2s
HHC LZ
comp=Z,250nm,18.7s
**SEY Seymchan 97.77 347** P **P** **16 56 10.4 -0.5**
comp=Z,1.1nm,0.6s,baz=168,slow=11,SNR=5.3
**LZH Lanzhou 99.02 307** *e*P **Pdif** **16 56 19.1 +1.7**
LZH pP **pP** **16 56 46.8 +0.9**
LZH sP **sP** **16 56 57.8 +0.4**
LZH PMZ
comp=Z,31nm,1.3s
LZH PMZ
comp=Z,120nm,4.3s
LZH LN
comp=Z,360nm,19.1s
LZH LE
comp=Z,510nm,19.1s
LZH LZ
comp=Z,470nm,20.0s
**ILAR Eielson Array 100.27 14** P **Pdif** **16 56 22.0 0.0**
comp=Z,0.8nm,0.7s,baz=222,slow=6.2,SNR=13
**WMQ Urumqi 113.57 308** *e*PKP **PKiKP** **17 01 15.0 +1.0**
**BOSA Boshof 114.83 204** PKP PKPdf 17 01 16.9 -0.2
comp=Z,2.4nm,0.6s,baz=115,slow=1.6,SNR=9.5
BOSA PKKPab **PKKPab** **17 12 02.2 -1.2**
comp=Z,2.8nm,0.6s,baz=341,slow=6.0,SNR=7.4
**MKAR Makanchi Array 118.19 310** PKP **PKPdf** **17 01 21.1 -1.7**
comp=Z,2.1nm,0.6s,baz=179,slow=0.7,SNR=23
**ZALV Zalesovo Beam 118.80 318** PKP **PKPdf** **17 01 21.4 -2.2**
comp=Z,4.1nm,0.6s,baz=143,slow=1.8,SNR=21
**NVS Novosibirsk 119.93 319** *e*PKIKP **PKPdf** **17 01 23.8 -2.0**
NVS pmax pmax
comp=Z,5.0nm,0.7s
NVS pmax pmax
comp=E,4.0nm,0.5s
**KSH Kashi 120.26 300** *e*PKP **PKPdf** **17 01 27.0 -0.1**
KSH *es*PKP 17 02 04.0
KSH PKS **PKSdf** **17 05 03.0 -0.8**
KSH SKS **SKSdf** **17 08 24.9 -4.3**
KSH SKKS **SKKSac** **17 09 38.3 -5.2**
KSH SS **SKKSdf** **17 19 11.3 +1.4**
KSH PPMZ
comp=E,100nm,6.4s
KSH LN
comp=E,56nm,5.6s
KSH LE
comp=E,83nm,6.4s
KSH LZ
comp=E,96nm,6.5s
**ULHL Ulahol 120.91 303** P **PKPdf** **17 01 27.4 -1.0**
SNR=8.9
**TKM2 Tokmak 2 121.56 304** *e*PKIKP **PKPdf** **17 01 27.9 -1.7**
**TKM2 Tokmak 2 121.56 304** P **PKPdf** **17 01 28.3 -1.3**
SNR=8.9
**TKM2 Tokmak 2 121.56 304** *e*PKPdf **PKPdf** **17 01 27.9 -1.7**
**KZA Kyzart 121.57 303** P **PKPdf** **17 01 29.1 -0.8**
SNR=12
**KURK Kurchatov 121.62 313** *i* PKIKP **PKPdf** **17 01 27.2 -2.0**
KURK pmax pmax
comp=Z,14nm,1.0s
**KURK Kurchatov 121.62 313** *e*PKPdf **PKPdf** **17 01 27.6 -1.6**
**KBK Karagaybulak 121.95 303** P **PKPdf** **17 01 28.4 -1.9**
SNR=6.4
**UCH Uchtor 122.13 303** P **PKPdf** **17 01 30.3 -0.8**
SNR=11
**AAK Ala-Archa 122.26 303** *e*PKIKP **PKPdf** **17 01 29.8 -1.1**
**AAK Ala-Archa 122.26 303** *e*PKPdf **PKPdf** **17 01 29.8 -1.1**
**AML Almayashu 122.69 302** P **PKPdf** **17 01 31.4 -0.7**
SNR=15
**EKS2 Erkin-Say 122.78 303** *e*PKIKP **PKPdf** **17 01 30.9 -0.9**
**EKS2 Erkin-Say 122.78 303** P **PKPdf** **17 01 31.1 -0.7**
SNR=7.1
**EKS2 Erkin-Say 122.78 303** *e*PKPdf **PKPdf** **17 01 30.9 -0.9**
**KKAR Karatay Array 125.21 303** *e*PKIKP **PKPdf** **17 01 35.1 -1.3**
**KKAR Karatay Array 125.21 303** *e*PKPdf **PKPdf** **17 01 35.1 -1.3**
**LSZ Lusaka 125.61 213** *e*PKIKP **PKPdf** **17 01 38.4 +0.3**
**LSZ Lusaka 125.61 213** *e*PKPdf **PKPdf** **17 01 38.4 +0.3**
**BRVK Borovoye 127.12 315** *c* PKIKP **PKPdf** **17 01 38.7 -0.9**
BRVK pmax pmax
comp=Z,12nm,1.0s
**BRVK Borovoye 127.12 315** *e*PKPdf **PKPdf** **17 01 38.0 -1.6**
**GEYT Alibeck 133.32 293** PKP **PKPdf** **17 01 50.9 -1.1**
comp=Z,3.4nm,0.7s,baz=222,slow=2.0,SNR=8.1
**SPA0 Spitsbergen Ar 133.73 356** *e*PKPdf **PKPdf** **17 01 52.6 +1.1**
**ARU Arti 133.93 319** *i* PKIKP **PKPdf** **17 01 52.4 0.0**
ARU 17 04 21.6
ARU SS SS 17 21 55.3 -7.8
**ARCES ARCESS Array B 140.38 347** PKhKP PKPpre 17 01 56.1
comp=Z,3.7nm,0.3s,baz=52,slow=2.9,SNR=74
**ARE0 ARCESS Array S 140.38 347** *e*PKPdf PKPpre 17 01 56.2
**KTK1 Kautokeino 141.26 347** *e*PKPdf PKPpre 17 01 59.2
**TRO Tromso 141.44 350** *e*PKPdf PKPpre 17 01 59.9
**DGRG David-gareji 143.47 297** P PKPbc 17 02 07.9 -0.1
**DGRG David-gareji 143.47 297** PKIKP PKPbc 17 02 07.9 -0.1
**STEI Steigen 143.54 351** *e*PKPdf PKPbc 17 02 07.4 +0.1
**LOF Lofoten 143.57 352** *e*PKPdf PKPbc 17 02 07.4 0.0
**GNI Garni 143.92 295** *i* PKIKP PKPab 17 02 07.9 -1.0
**TBLG Delisi 143.94 298** P PKPab 17 02 08.2 -0.5
**TBLG Delisi 143.94 298** PKIKP PKPab 17 02 08.2 -0.6
**ZEI Tsey 144.54 299** *e*PKIKP **PKPab** **17 02 09.9 -1.3**
ZEI pmax pmax
comp=Z,88nm,0.6s
**VRH Novokhopyorsk 144.70 314** *e*PKIKP **PKPab** **17 02 10.3 -0.9**
VRH pmax pmax
comp=E,20nm,0.7s
VRH pmax pmax
comp=Z,30nm,0.7s
VRH pmax pmax
comp=N,10.0nm,0.6s
**NCK Nalchik 144.73 301**⇑ *i*PKIKP **PKPab** **17 02 10.8 -0.9**
**AKH Akhalkalaki 144.88 297** P PKPbc 17 02 12.3 -0.2
**AKH Akhalkalaki 144.88 297**⇓ PKIKP **PKPdf** **17 02 13.0 -0.1**
**AKH Akhalkalaki 144.88 297**⇓ *i*P **PKPdf** **17 02 13.0 -0.1**
**ONI Oni 144.88 299** P **PKPdf** **17 02 12.8 -0.2**
**ONI Oni 144.88 299** PKIKP **PKPdf** **17 02 12.7 -0.2**
**KONS Konsvik 145.17 351** *e*PKPdf **PKPbc** **17 02 11.5 -0.9**

**KBZ Khabaz 145.22 301** PKP **PKPbc** **17 02 12.7 -0.5**
comp=N,41nm,0.9s,baz=93,slow=2.6,SNR=40
**FLOS Flostrand 145.30 351** *e*PKPdf **PKPdf** **17 02 11.9 -0.8**
**MOR8 Moi Rana 145.30 350** *e*PKPdf **PKPdf** **17 02 10.7 -2.1**
MOR8 IAmb IAmb 17 02 13.7
comp=Z,68nm,0.7s
**STOK Stokkvaagen 145.34 351** *e*PKPdf **PKPab** **17 02 13.3 +0.2**
**MOS Moscow 145.35 323** *e*PKIKP **PKPdf** **17 02 12.5 -0.6**
MOS *e* 17 02 48.2
MOS pmax pmax
comp=Z,209nm,0.9s
**KIV Kislovodsk 145.36 302** *e*PKIKP **PKPdf** **17 02 13.4 -0.3**
**KIV Kislovodsk 145.36 302** *e*PKPdf **PKPdf** **17 02 13.4 -0.3**
**CHVG Ch'k'valeri 145.88 299** P **PKPdf** **17 02 14.2 -0.4**
**LPSR Galich'ya Gora 145.91 318** *e*PKP2 **PKPbc** **17 02 15.1 +0.1**
LPSR pmax pmax
comp=Z,170nm,0.7s
LPSR pmax pmax
comp=N,20nm,0.6s
LPSR pmax pmax
comp=E,20nm,0.8s
**OBN Obninsk 146.17 323** *i* PKP2 **PKPab** **17 02 21.5 +4.9**
**OBN Obninsk 146.17 323** *e*PKPdf **PKPdf** **17 02 14.8 +0.3**
**VSR Storozhevoye 146.23 315** *e*PKP2 **PKPbc** **17 02 15.5 -0.6**
VSR pmax pmax
comp=Z,140nm,1.2s
VSR pmax pmax
comp=N,20nm,0.8s
VSR pmax pmax
comp=E,60nm,0.9s
**VORD Divnogorie 146.24 315** *e*PKP2 **PKPbc** **17 02 15.5 -0.6**
VORD pmax pmax
comp=Z,50nm,0.7s
VORD pmax pmax
comp=N,8.0nm,0.4s
VORD pmax pmax
comp=E,30nm,0.8s
**FINES FINESS Array B 146.69 338** PKPbc **PKPdf** **17 02 15.6 +0.4**
comp=E,95nm,0.5s,baz=65,slow=3.2,SNR=614
**MZRK Al-Mazaregh 146.84 287** *e*P **PKPbc** **17 02 18.2 -0.2**
**SFNV Sufian 147.33 288** *e*P **PKPbc** **17 02 20.2 +0.4**
**VSU Vasula 148.62 334** *i* PKP2 **PKPbc** **17 02 21.5 -0.9**
**TBLU Trondheim 148.65 352** *e*PKPdf **PKPbc** **17 02 21.8 -0.5**
**MALT Malatya 148.77 291**⇑ PKP2 **PKPbc** **17 02 23.4 -0.2**
**MALT Malatya 148.77 291**⇑ *i*P **PKPbc** **17 02 23.4 -0.2**
**ANN Anapa 148.98 304** *i* PKP2 **PKPbc** **17 02 23.2 -0.5**
ANN pmax pmax
comp=Z,49nm,0.6s
**ZALF Zalf 149.17 281** *e*P **PKPdf** **17 02 21.6 +1.3**
**ROOS tl_alroos 149.39 283** *e*P **PKPbc** **17 02 24.4 -0.8**
**RABH Abou Rabah 149.49 284** *e*P **PKPbc** **17 02 25.0 -0.5**
**SALA Sala 149.63 280** *e*P **PKPbc** **17 02 24.5 -1.5**
**DOMB Dombas 149.97 352** *e*PKPdf **PKPbc** **17 02 24.9 -0.7**
**AKN Aaknes 150.05 354** *e*PKPdf **PKPbc** **17 02 26.6 +0.7**
**HAWK Haweek 150.16 284** *e*P **PKPbc** **17 02 25.1 -2.0**
**WRDH Warideh 150.25 286** *e*P **PKPbc** **17 02 26.1 -1.1**
**TCHB Talchebab 150.26 280** *e*P **PKPbc** **17 02 25.7 -1.6**
**BIDA Albida 150.28 285** *e*P **PKPbc** **17 02 25.1 -2.2**
**BRBR Barbar 150.39 281** *e*P **PKPdf** **17 02 24.5 +2.1**
**ARNB Al Arnab 150.63 286** *e*P **PKPbc** **17 02 26.8 -1.4**
**NB2 NORSAR Subarra 150.64 349** PKP **PKPbc** **17 02 26.4 -0.9**
baz=17,slow=2.6
**NOA NORSAR Array B 150.64 349** PKPbc **PKPbc** **17 02 26.1 -1.2**
comp=Z,8.2nm,0.6s,baz=49,slow=1.8,SNR=59
**IZAR Zarasai 150.68 330** *e*P **PKPbc** **17 02 26.0 -1.5**
IZAR IAmb IAmb 17 02 35.4
comp=Z,22nm,0.6s
**IDID Didziasalis 150.75 329** *e*P **PKPbc** **17 02 26.9 -0.8**
IDID IAmb IAmb 17 02 29.3
comp=Z,16nm,0.8s
**ISAL Salakas 150.84 330** *e*P **PKPbc** **17 02 27.6 -0.3**
ISAL IAmb IAmb 17 02 36.2
comp=Z,13nm,0.8s
**NC602 NORSAR Array S 150.88 349** *e*PKPdf **PKPbc** **17 02 26.4 -1.4**
**IIGN Ignalina 150.95 329** *e*P **PKPbc** **17 02 27.8 -0.4**
IIGN IAmb IAmb 17 02 36.5
comp=Z,18nm,0.6s
**NACGM Naroch 151.00 328** *e* **PKPbc** **17 02 26.0 -2.2**
**HYA Hoyanger 151.12 354** *e*PKPdf **PKPbc** **17 02 28.8 +0.5**
**SIM Simferopol' 151.25 305** *e*PKIKP **PKPbc** **17 02 29.3 +0.1**
SIM pmax pmax
comp=Z,29nm,0.7s
**ASK Askoy 151.87 355** *e*PKPdf **PKPbc** **17 02 29.6 -0.5**
**AKASG Malin Array Be 152.18 319** PKPbc **PKPbc** **17 02 29.8 -1.3**
comp=Z,18nm,0.6s,baz=47,slow=2.9,SNR=69
**KIEV Kiev 152.19 319** *e*PKIKP **PKPbc** **17 02 29.8 -1.3**
**KIEV Kiev 152.19 319** *e*PKPbc **PKPbc** **17 02 29.8 -1.3**
**KONO Kongsberg 152.21 350** *e*PKPdf **PKPbc** **17 02 30.4 -0.5**
**KONO Kongsberg 152.21 350** *e*PKIKP **PKPbc** **17 02 31.1 +0.2**
**KONO Kongsberg 152.21 350** *e*PKPbc **PKPbc** **17 02 31.1 +0.2**
**BRTR Keskin Array B 152.45 295** PKPbc **PKPbc** **17 02 30.7 -1.6**
comp=Z,12nm,0.5s,baz=144,slow=4.1,SNR=65
BRTR PKPab **PKPab** **17 02 41.9 -1.2**
comp=Z,12nm,0.9s,baz=123,slow=4.6,SNR=17
**CSS Prodhromos 152.72 284** *e*PKPbc **PKPbc** **17 02 31.7 -1.2**
**BLS5 Blasjo 152.81 353** *e*PKPdf **PKPbc** **17 02 32.3 0.0**
**ANTO Ankara 153.09 295** *e*PKIKP **PKPbc** **17 02 32.5 -1.1**
**ANTO Ankara 153.09 295** *e*PKPbc **PKPbc** **17 02 32.5 -1.1**
**SUW Suwalki 153.16 330** *e*P **PKPab** **17 02 44.3 -0.9**
**KIC Kosan Boka 153.50 168** *e*PKIKP **PKPdf** **17 02 28.4 +1.0**
comp=Z,34nm,0.7s
**TIC Toumodi 153.73 167** *e*PKIKP **PKPdf** **17 02 28.1 +0.3**
**DBIC Dimbokro 153.78 168** PKP **PKPdf** **17 02 28.5 +0.7**
comp=Z,5.1nm,0.7s,baz=194,slow=1.9,SNR=12
DBIC PKPbc **PKiKP** **17 02 36.2 +0.4**
comp=Z,6.0nm,0.5s,baz=159,slow=3.3,SNR=11
**BSD Bornholm Skovb 155.26 340** *i* P PKPdf 17 02 38.0 +9.5
**LVV L'vov 155.46 322** *e*PKP2 **PKPab** **17 02 54.4 -0.8**
**TESR Tescani 155.65 313**⇑ *i*P **PKPab** **17 02 56.1 -0.1**
**BEL Belsk 155.72 329** *e*P **PKPab** **17 02 56.3 +0.1**
**BEL Belsk 155.72 329** *e*PKP2 **PKPab** **17 02 56.3 +0.1**
**VRI Vrincioaia 155.88 311**⇑ *i*P **PKPab** **17 02 57.6 +0.4**
**PLOR Plostina 155.93 311**⇓ *i*P **PKPab** **17 02 57.4 0.0**
**BURAR Bucovina Array 156.00 316**⇓ *i*P **PKPab** **17 02 57.9 +0.1**
**GKP Gorka Klasztor 156.06 335** *e*P **PKPab** **17 02 57.1 -0.5**
**KWP Kalwaria Pacla 156.26 323** *e*P **PKPab** **17 02 58.0 -0.7**
**MLR Muntele Rosu 156.53 311**⇓ *i*P **PKPab** **17 03 00.6 +0.4**
**SECR 156.64 310**⇓ *i*P **PKPab** **17 02 59.2 -1.3**
**DOPR Dopca 156.68 312**⇑ *i*P **PKPab** **17 03 00.0 -0.6**
**BMR Baia Mare 156.96 318**⇑ *i*P **PKPab** **17 03 02.8 +1.1**
**VOIR 157.12 311**⇓ *i*P **PKPab** **17 03 01.8 -0.8**
**TRPA Tarpa 157.24 320**⇓ *i*P **PKPab** **17 03 02.4 -0.5**
**OJC Ojcow 157.30 327** *e*P **PKPab** **17 03 02.4 -0.7**
**BSEG Bad Segeberg 157.50 345** *e*PKPab **PKPab** **17 03 03.8 +0.1**
baz=29,slow=4.4
**NIE Niedzica 157.60 325** *e*P **PKPab** **17 03 04.4 -0.1**
**DRGR 157.89 317**⇑ *i*P **PKPab** **17 03 06.0 +0.1**
**LOT Lotru 157.92 312**⇓ *i*P **PKPab** **17 03 06.7 +0.6**
**OKC Ostrava-Krasne 158.32 328** *e*PKPAB **PKPab** **17 03 06.1 -1.4**
**KSP Ksiaz 158.34 332** *e*P **PKPab** **17 03 07.3 -0.3**
**MORC Moravsky Berou 158.63 329**⇑ *i*P **PKPab** **17 03 08.5 -0.4**
**DPC Dobruska-Polom 158.71 331** *e*PKPAB **PKPab** **17 03 09.3 0.0**
**UPC Upice 158.71 332** *e*PKPAB **PKPab** **17 03 09.2 0.0**
**KRLC Kraliky 158.73 330** *e*PKPAB **PKPab** **17 03 09.3 -0.1**
**PSZ Piszkesteto 158.78 322**⇑ *i*P **PKPab** **17 03 09.4 -0.3**
**CLL Collm 159.13 338** *e*PKPab **PKPab** **17 03 10.7 -0.2**
baz=29,slow=4.4
**CLL Collm 159.13 338** *e*PKPdiff PKPdf 17 02 47.0 +13
CLL *i* PKPab **PKPab** **17 03 09.9 -1.0**
comp=Z,31nm,0.6s
**BZS Buzias 159.16 315**⇓ *i*P **PKPab** **17 03 11.0 -0.3**
**BRG Berggiesshubel 159.19 336** *i* P **PKPab** **17 03 11.1 -0.1**
comp=Z,200nm,0.7s
*e* 17 03 16.9
comp=Z,7.5nm,1.0s
*e* 17 03 28.5
comp=Z,6.0nm,1.0s
comp=N,549nm,12.7s
comp=E,432nm,16.2s
comp=Z,441nm,11.8s
**BRG Berggiesshubel 159.19 336** *e*PKPab **PKPab** **17 03 11.1 -0.1**
baz=29,slow=4.4
**PVCC Panska Ves 159.25 334** *e*PKPAB **PKPab** **17 03 11.8 +0.3**
**FBE Freiberg 159.35 337** *e*PKPab **PKPab** **17 03 12.0 +0.1**
baz=29,slow=4.4
**VRAC Vranov 159.39 329**⇑ *i*P **PKPab** **17 03 10.9 -1.3**
**WIMM Wimmelburg 159.40 340** *e*PKPab **PKPab** **17 03 11.9 -0.1**
baz=29,slow=4.4
**IBBN Ibbenburen 159.55 347** *e*PKPab **PKPab** **17 03 12.9 +0.2**
baz=29,slow=4.4
**NEUB Neuenburg 159.60 339** *e*PKPab **PKPab** **17 03 12.9 0.0**
baz=29,slow=4.4
**GOPC GO Pecny, Ondr 159.66 333** *e*PKPAB **PKPab** **17 03 13.6 +0.2**
**PRU Pruhonice 159.70 333** *e*PKPAB **PKPab** **17 03 12.9 -0.6**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| HKWD | Heukewalde | 159.78 | 338 | *e*PKPab | **PKPab** | **17 03 14.0** | **+0.2** |
| | baz=29,slow=4.4 | | | | | | |
| GTTG | Gvttingen | 159.79 | 343 | *e*PKPab | **PKPab** | **17 03 13.8** | **0.0** |
| | baz=29,slow=4.4 | | | | | | |
| TAUT | Tautenburg | 159.82 | 339 | *e*PKPab | **PKPab** | **17 03 13.8** | **-0.2** |
| | baz=29,slow=4.4 | | | | | | |
| SCHF | Schoenfels | 159.87 | 338 | *e*PKPab | **PKPab** | **17 03 14.4** | **+0.2** |
| | baz=29,slow=4.4 | | | | | | |
| TANN | Tannenbergstha | 160.08 | 337 | *e*PKPab | **PKPab** | **17 03 15.1** | **-0.1** |
| | baz=29,slow=4.4 | | | | | | |
| WERD | Werda | 160.10 | 338 | *e*PKPab | **PKPab** | **17 03 15.2** | **0.0** |
| | baz=29,slow=4.4 | | | | | | |
| PLN | Plauen | 160.11 | 338 | *e*PKPab | **PKPab** | **17 03 15.1** | **-0.2** |
| | baz=29,slow=4.4 | | | | | | |
| MOX | Moxa | 160.14 | 339 | *e*PKPab | **PKPab** | **17 03 15.1** | **-0.3** |
| | baz=29,slow=4.4 | | | | | | |
| WERN | Wernitzgruen | 160.21 | 337 | *e*PKPab | **PKPab** | **17 03 16.0** | **+0.2** |
| | baz=29,slow=4.4 | | | | | | |
| TRIB | Obertriebel | 160.24 | 338 | *e*PKPab | **PKPab** | **17 03 16.0** | **+0.2** |
| | baz=29,slow=4.4 | | | | | | |
| ROHR | Rohrbach | 160.28 | 337 | *e*PKPab | **PKPab** | **17 03 16.1** | **+0.1** |
| | baz=29,slow=4.4 | | | | | | |
| TOA0 | Torodi Ar. Sit | 160.68 | 183 | *e*PKIKP | **PKPdf** | **17 02 35.9** | **-0.5** |
| TORD | Torodi Ar. Bea | 160.68 | 183 | PKP | **PKPdf** | **17 02 36.3** | **-0.2** |
| | comp=Z,5.3nm,1.0s,baz=269,slow=1.1,SNR=22 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **17 03 19.3** | **+0.7** |
| | comp=Z,7.6nm,0.6s,baz=175,slow=4.0,SNR=22 | | | | | | |
| ROTZ | Rotzenmuhle | 160.72 | 337 | *e*PKPab | **PKPab** | **17 03 18.4** | **+0.5** |
| | baz=29,slow=4.4 | | | | | | |
| CONA | Conrad Observa | 160.75 | 327⇑ | *i*PKPab | **PKPab** | **17 03 18.3** | **+0.1** |
| | comp=Z,17nm,0.8s,SNR=9.2 | | | | | | |
| KHC | Kasperske Hory | 160.76 | 333 | *e*PKPDF | **PKPdf** | **17 02 35.1** | **-0.5** |
| KHC | | | | *e*PKPAB | **PKPab** | **17 03 17.3** | **-0.9** |
| DIVS | Divibare | 160.93 | 313⇓ | *i*P | **PKPab** | **17 03 19.1** | **-0.1** |
| GEC2 | GERESS Array S | 160.95 | 333 | *e*PKPab | **PKPab** | **17 03 18.4** | **-0.7** |
| | baz=29,slow=4.4 | | | | | | |
| GERES | GERESS Array B | 160.95 | 333 | PKPab | **PKPab** | **17 03 18.8** | **-0.3** |
| | comp=Z,7.1nm,0.8s,baz=40,slow=5.4,SNR=31 | | | | | | |
| WET | Wettzell | 161.01 | 335 | *e*PKPab | **PKPab** | **17 03 19.2** | **-0.1** |
| | baz=29,slow=4.4 | | | | | | |
| GRF | Grafenberg Arr | 161.10 | 338 | *e*PKPab | **PKPab** | **17 03 20.1** | **+0.5** |
| | baz=29,slow=4.4 | | | | | | |
| HGN | Heimansgroeve | 161.35 | 349 | *e*P | **PKPab** | **17 03 19.2** | **-1.4** |
| | comp=Z,11nm,0.7s | | | | | | |
| ARSA | Arzberg | 161.40 | 327⇑ | *e*PKPab | **PKPab** | **17 03 20.7** | **-0.3** |
| | comp=Z,6.5nm,0.7s | | | | | | |
| MEM | Membach | 161.49 | 349 | PKPab | **PKPab** | **17 03 22.0** | **+0.8** |
| MOA | Molln | 161.51 | 330⇑ | *i*PKPab | **PKPab** | **17 03 21.3** | **-0.2** |
| | comp=Z,19nm,1.6s,SNR=5.1 | | | | | | |
| BCLA | Clavier | 161.78 | 350 | APKPab | **PKPab** | **17 03 21.7** | **-0.8** |
| SNF | Seneffe | 161.82 | 352 | PKPab | **PKPab** | **17 03 23.2** | **+0.6** |
| PERS | Pernice | 162.04 | 326 | *i* PKPdf | **PKPab** | **17 03 23.1** | **-0.8** |
| SOKA | Soboth | 162.05 | 326⇑ | *i*PKPab | **PKPab** | **17 03 23.4** | **-0.6** |
| | comp=Z,6.9nm,0.8s,SNR=5.6 | | | | | | |
| DOU | Dourbes | 162.19 | 352 | PKPab | **PKPab** | **17 03 23.8** | **-0.5** |
| RJOB | Jochberg | 162.20 | 332 | *e*PKPab | **PKPab** | **17 03 24.4** | **-0.2** |
| | baz=29,slow=4.4 | | | | | | |
| OBKA | Obir | 162.40 | 327⇑ | *e*PKPab | **PKPab** | **17 03 25.1** | **-0.5** |
| | comp=Z,5.6nm,0.9s | | | | | | |
| FUR | Furstenfeldbru | 162.41 | 336 | *e*PKPab | **PKPab** | **17 03 25.7** | **+0.3** |
| | baz=29,slow=4.4 | | | | | | |
| LEGS | Legarje | 162.43 | 324 | *i* PKPdf | **PKPab** | **17 03 24.5** | **-1.1** |
| STU | Stuttgart | 162.52 | 341 | *e*PKPab | **PKPab** | **17 03 25.9** | **+0.1** |
| | baz=29,slow=4.4 | | | | | | |
| WTTA | Wattenberg | 163.04 | 333⇑ | *e*PKPab | **PKPab** | **17 03 27.5** | **-0.9** |
| | comp=Z,6.0nm,0.5s | | | | | | |
| ABTA | Abfaltersbach | 163.11 | 331⇑ | *e*sPKPdf | **PKPab** | **17 03 27.2** | **-1.4** |
| | comp=Z,7.9nm,0.6s | | | | | | |
| BFO | Black Forest | 163.16 | 342 | *e*PKPab | **PKPab** | **17 03 28.5** | **-0.2** |
| | baz=29,slow=4.4 | | | | | | |
| MOTA | Moosalm | 163.16 | 335⇑ | *e*PKPab | **PKPab** | **17 03 28.4** | **-0.5** |
| | comp=Z,15nm,0.8s,SNR=12 | | | | | | |
| RETA | Reutte | 163.17 | 336⇑ | *i*PKPab | **PKPab** | **17 03 28.8** | **0.0** |
| | comp=Z,17nm,0.6s,SNR=7.2 | | | | | | |
| FETA | Feichten | 163.57 | 335⇑ | *e*PKPab | **PKPab** | **17 03 30.4** | **-0.3** |
| | comp=Z,21nm,1.1s,SNR=6.6 | | | | | | |
| DAVA | Damuels | 163.64 | 337⇑ | *i*PKPab | **PKPab** | **17 03 30.9** | **-0.1** |
| | comp=Z,16nm,0.6s,SNR=5.9 | | | | | | |

**MAN 03 16:47:16, 15°.03N×120°.36E, h27km, mb4.6, ML3.5, MS3.4, 2C-1D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SCZP | Santa Cruz | 0.86 | 330 | *e*P | Pn | 16 47 33.1 | +0.8 |
| PCPH | Palayan | 0.88 | 53⇓ | *e*P | Pn | 16 47 31.4 | -1.2 |
| PCPH | | | | *i* S | Sb | 16 47 43.9 | -0.3 |
| TGY | Tagaytay City | 1.08 | 149⇑ | *i*P | Pn | 16 47 35.1 | -0.4 |
| TGY | | | | *i* S | Sb | 16 47 50.0 | +0.1 |
| LUBP | Lubang | 1.29 | 185 | *e*P | Pn | 16 47 37.5 | -0.9 |
| BCPH | Baguio City Da | 1.36 | 9⇑ | *i*P | Pn | 16 47 40.0 | +0.6 |
| BCPH | | | | *i* S | Sn | 16 47 57.0 | +0.2 |
| BALP | Baler | 1.37 | 59 | *e*P | Pn | 16 47 39.3 | 0.0 |
| BALP | | | | *e*S | Sb | 16 47 57.9 | -0.1 |
| SJMP | San Jose | 2.66 | 164 | *e*P | Pn | 16 47 58.5 | +1.3 |

*IDC **03** 16:54:11.4±0.6, 51°.34N×175°.27W, h0km, mb4.2/24, mb1 4.4/26, mb1mx4.3/40, mbtmp4.2/26, ML4.4/2, MS4.0/21, Ms1 4.0/21, ms1mx3.8/40, Error ellipse: s-maj=19.9km s-min=12.0km az=166.0*

*MOS **03** 16:54:14.8±0.9, 51°.37N×175°.30W, h33km, mb4.5/33, Error ellipse: s-maj=10.2km s-min=7.8km az=104.5*

*ISCJB **03** 16:54:16.2±0.6, 51°.32N±0°.06×175°.30W±0°.03, h45km±3km, mb4.5/70, MS4.0/21, Error ellipse: s-maj=10.1km s-min=3.1km az=170.3*

*NEIC **03** 16:54:17.5±0.4, 51°.36N×175°.33W, h42km±3km, mb4.6/34, ML4.4(AEIC), Error ellipse: s-maj=7.4km s-min=2.4km az=170.0*

*BJI **03** 16:54:18.4, 52°.15N×175°.57W, h46km, mb4.8/38, mB5.0/30, Ms4.8/25, Ms7 4.5/25*

**ISC 03 16:54:18.7**±0.5**, 51°.46N**±0°.08×**175°.33W**±0°.03**, h47**km±2km**, h46km:pP-P, n226,** σ1s**.39**/242**, mb4.5**/70**, MS4.1**/21**, 2D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.74 | 323 | P | **Pn** | **16 54 32.2** | **-0.7** |
| GSCK | Great Sitkin C | 0.76 | 317 | P | **Pn** | **16 54 32.3** | **-0.8** |
| ETKA | Kagalaska Isla | 0.79 | 302 | P | **Pn** | **16 54 32.2** | **-1.3** |
| GSTR | Great Sitkin T | 0.79 | 325 | *e*P | **Pn** | **16 54 33.1** | **-0.4** |
| GSTD | Great Sitkin T | 0.79 | 320 | P | **Pn** | **16 54 32.9** | **-0.7** |
| ADAG | Mount Adagdak | 0.95 | 304 | P | **Pn** | **16 54 35.5** | **-0.2** |
| ATKA | Atka Island | 1.03 | 43 | P | **Pn** | **16 54 34.9** | **-1.8** |
| ATKA | | | | S | **Sn** | **16 54 51.1** | **+1.2** |
| KOKL | Mount Kliuchef | 1.12 | 38 | P | **Pn** | **16 54 37.6** | **-0.4** |
| KOFP | Korovin Flat P | 1.12 | 42 | P | **Pn** | **16 54 37.5** | **-0.6** |
| KOWE | Korovin West | 1.13 | 36 | P | **Pn** | **16 54 38.0** | **-0.1** |
| KIRH | Kanaga Island | 1.19 | 293 | P | **Pn** | **16 54 37.7** | **-1.2** |
| KOSE | Korovin Southe | 1.19 | 41 | P | **Pn** | **16 54 39.1** | **+0.1** |
| KINC | Kanaga Island | 1.22 | 294 | P | **Pn** | **16 54 38.5** | **-0.8** |
| KIKV | Kanaga Island | 1.22 | 291 | P | **Pn** | **16 54 38.1** | **-1.3** |
| KICM | Kanaga Island | 1.25 | 293 | P | **Pn** | **16 54 38.8** | **-0.9** |
| TAPA | Tanaga Point A | 1.59 | 284 | P | **Pn** | **16 54 43.0** | **-1.4** |
| TAFL | Tanaga Flats | 1.63 | 282 | P | **Pn** | **16 54 43.8** | **-1.1** |
| TAFP | Tanaga Falls P | 1.71 | 286 | P | **Pn** | **16 54 45.2** | **-0.9** |
| TASE | Tanaga Southea | 1.73 | 284 | P | **Pn** | **16 54 45.2** | **-1.1** |
| GAEA | Gareloi East | 2.16 | 280 | P | **Pn** | **16 54 51.4** | **-0.7** |
| GALAA | Gareloi Lava P | 2.17 | 279 | P | **Pn** | **16 54 51.3** | **-1.0** |
| GANE | Gareloi Northe | 2.18 | 281 | P | **Pn** | **16 54 51.6** | **-0.9** |
| CERAA | Semis' Rag'd T | 3.14 | 280 | P | **Pn** | **16 55 04.7** | **-0.9** |
| CESW | Semis' Southwe | 3.21 | 280 | P | **Pn** | **16 55 05.0** | **-1.5** |
| AMKA | Amchitka | 3.36 | 271 | P | **Pn** | **16 55 06.0** | **-2.7** |
| LSPA | Little Sitkin | 3.83 | 280 | P | **Pn** | **16 55 13.9** | **-1.2** |
| LSNW | Little Sitkin | 3.86 | 280 | P | **Pn** | **16 55 14.1** | **-1.4** |
| LSSA | Little Sitkin | 3.86 | 280 | P | **Pn** | **16 55 14.6** | **-1.0** |
| NIKH | Nikolski High | 4.26 | 67 | P | **Pn** | **16 55 19.9** | **-1.2** |
| NIKH | | | | S | **Sn** | **16 56 09.8** | **+0.3** |
| OKFG | Magazine Ridge | 4.94 | 64 | P | **Pn** | **16 55 31.2** | **+0.9** |
| OKFG | | | | S | **Sn** | **16 56 28.8** | **+2.7** |
| MSOM | Makushin Julie | 5.62 | 62 | P | **Pn** | **16 55 40.0** | **+0.3** |
| MSOM | Makushin Julie | 5.62 | 62 | P | **Pn** | **16 55 40.0** | **+0.3** |
| UNV | Unalaska Valle | 5.88 | 63 | P | **Pn** | **16 55 43.3** | **+0.1** |
| AKRB | Akutan Reef Bi | 6.22 | 61 | P | **Pn** | **16 55 48.4** | **+0.5** |
| SPIA | Saint Paul Isl | 6.46 | 25 | P | Pn | 16 55 54.4 | +3.3 |
| SMY | Shemya | 6.64 | 285 | P | **Pn** | **16 55 55.1** | **+1.5** |
| SMY | Shemya | 6.64 | 285 | P | **Pn** | **16 55 55.0** | **+1.5** |
| KDAK | Kodiak Island | 14.58 | 55 | Pn | Pn | 16 57 37.9 | -3.9 |
| | 1.5nm,0.3s,baz=200,slow=3.9,SNR=15 | | | | | | |
| KDAK | | | | Sn | **Sn** | **17 00 17.1** | **-4.7** |
| | 0.1nm,0.3s,baz=140,slow=23,SNR=2.1 | | | | | | |
| KDAK | Kodiak Island | 14.58 | 55 | *i* P | **Pn** | **16 57 41.1** | **-0.7** |
| KDAK | Kodiak Island | 14.58 | 55 | *e*P | **Pn** | **16 57 41.4** | **-0.4** |
| KDAK | | | | Sn | **Sn** | **17 00 17.1** | **-4.7** |
| TNA | Tin City | 14.65 | 12 | *e*P | **P** | **16 57 46.9** | **-1.1** |
| PETK | Petropavlovsk- | 16.55 | 286 | Pn | **Pn** | **16 58 07.6** | **+0.3** |
| | 1.4nm,0.3s,baz=96,slow=15,SNR=26 | | | | | | |
| PETK | | | | LR | LR | 17 04 04.8 | |
| | comp=Z,609nm,21.6s,baz=101,slow=36 | | | | | | |
| PETK | Petropavlovsk- | 16.55 | 286 | P | **Pn** | **16 58 07.6** | **+0.3** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,609nm,21.6s | | | | | | |
| SEW | Seward | 16.84 | 49 | *e*P | **Pn** | **16 58 07.2** | **-3.6** |
| PPLA | Purkeypile | 16.87 | 38 | *e*P | **P** | **16 58 15.0** | **+2.1** |
| | comp=Z,96nm,1.4s | | | | | | |
| RC01 | Rabbit Creek A | 17.06 | 46 | *e*P | **Pn** | **16 58 12.9** | **-0.7** |
| TRF | Thorofare Moun | 17.90 | 38 | *e*P | **P** | **16 58 24.6** | **+0.4** |
| | comp=Z,139nm,1.7s | | | | | | |
| SKR | Severo-Kuril's | 17.92 | 279 | *e*P | P | 16 58 29.0 | +4.7 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,50nm,0.5s | | | | | | |
| BPAW | Bear Paw Mtn. | 17.98 | 36 | *e*P | **P** | **16 58 25.9** | **+1.0** |
| | comp=Z,2.4nm,0.4s | | | | | | |
| MCK | McKinley | 18.56 | 38 | *e*P | **P** | **16 58 30.7** | **-0.7** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| MCK | McKinley | 18.56 | 38 | *e*P | **P** | **16 58 30.7** | **-0.7** |
| | comp=Z,17nm,0.8s | | | | | | |
| BILL | Bilibino | 18.90 | 338*d* | *i*P | **Pn** | **16 58 36.7** | **+0.8** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,416nm,20.0s | | | | | | |
| BILL | Bilibino | 18.90 | 338 | *e*P | **Pn** | **16 58 36.8** | **+0.8** |
| | comp=Z,23nm,0.5s | | | | | | |
| BMRM | Bremner River | 19.38 | 49 | *e*P | **P** | **16 58 36.6** | **-3.8** |
| COLA | College | 19.54 | 36 | *e*P | **Pn** | **16 58 42.3** | **-1.3** |
| COLA | College | 19.54 | 36 | *e*P | **Pn** | **16 58 42.5** | **-1.1** |
| | comp=Z,9.7nm,0.7s | | | | | | |
| ILAR | Eielson Array | 19.85 | 37 | P | **P** | **16 58 43.3** | **-2.1** |
| | comp=Z,1.7nm,0.3s,baz=225,slow=9.2,SNR=48 | | | | | | |
| ILAR | | | | ScP | **ScP** | **17 06 39.2** | **+6.2** |
| | comp=Z,0.1nm,0.3s,baz=290,slow=3.6,SNR=4.3 | | | | | | |
| COLD | Coldfoot | 20.11 | 29 | *e*P | Pn | 16 58 49.1 | -1.2 |
| | comp=Z,40nm,1.2s | | | | | | |
| MENT | Mentasta | 20.38 | 44 | P | **P** | **16 58 50.5** | **-0.7** |
| DOT | Dot Lake | 20.49 | 41 | *e*P | **P** | **16 58 51.1** | **-1.3** |
| | comp=Z,45nm,0.5s | | | | | | |
| SEY | Seymchan | 20.67 | 316 | P | **P** | **16 58 54.8** | **+0.6** |
| | comp=Z,2.3nm,0.5s,baz=98,slow=9.1,SNR=14 | | | | | | |
| SEY | | | | ScP | **ScP** | **17 06 41.5** | **+6.5** |
| | comp=Z,0.7nm,0.2s,baz=71,slow=23,SNR=4.3 | | | | | | |
| SEY | Seymchan | 20.67 | 316 | P | **P** | **16 58 55.1** | **+0.8** |
| EGAK | Eagle | 22.08 | 40 | *e*P | **P** | **16 59 08.3** | **-1.1** |
| | comp=Z,27nm,0.7s | | | | | | |
| DAWY | Dawson | 22.58 | 42 | *e*P | **P** | **16 59 13.4** | **-1.4** |
| | comp=Z,9.0nm,0.6s | | | | | | |
| INK | Inuvik | 26.16 | 34 | P | **P** | **16 59 48.2** | **0.0** |
| | comp=Z,1.8nm,0.3s,baz=244,slow=6.1,SNR=21 | | | | | | |
| INK | | | | LR | LR | 17 11 27.8 | |
| | comp=Z,440nm,18.5s,baz=225,slow=40 | | | | | | |
| INK | Inuvik | 26.16 | 34 | P | **P** | **16 59 48.2** | **0.0** |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| INK | | | | MLR | MLR | | |
| | comp=Z,440nm,18.5s | | | | | | |
| INK | Inuvik | 26.16 | 34 | *e*P | **P** | **16 59 47.8** | **-0.3** |
| DLBC | Dease Lake | 26.50 | 57 | P | **P** | **16 59 53.0** | **+1.5** |
| | comp=Z,6.0nm,0.9s,baz=272,slow=10,SNR=6.0 | | | | | | |
| ASAJ | Asahikawa | 28.88 | 272 | P | **P** | **17 00 13.4** | **+0.7** |
| | comp=Z,6.3nm,0.7s,baz=70,slow=15,SNR=5.7 | | | | | | |
| ASAJ | | | | LR | LR | 17 13 08.0 | |
| | comp=Z,198nm,18.7s,baz=95,slow=39 | | | | | | |
| ASAJ | Asahikawa | 28.88 | 272 | P | **P** | **17 00 13.4** | **+0.7** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,198nm,18.7s | | | | | | |
| YAK | Yakutsk | 31.00 | 311 | *e*P | **P** | **17 00 29.7** | **-1.6** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| KLR | Kul'dur | 33.24 | 287 | *e*P | P | 17 00 46.7 | -4.4 |
| KLR | | | | pmax | pmax | | |
| | comp=E,50nm,1.8s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,70nm,1.8s | | | | | | |
| YKA | Yellowknife Ar | 33.60 | 47 | P | **P** | **17 00 54.8** | **+0.8** |
| | comp=Z,1.0nm,0.4s,baz=279,slow=8.8,SNR=6.1 | | | | | | |
| YKA | Yellowknife Ar | 33.60 | 47 | P | **P** | **17 00 54.8** | **+0.8** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.61 | 210 | T | T | 17 37 47.6 | |
| | baz=18,slow=76,SNR=286 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.62 | 210 | T | T | 17 37 48.2 | |
| | baz=18,slow=76,SNR=253 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.63 | 210 | T | T | 17 37 54.0 | |
| | baz=18,slow=76,SNR=231 | | | | | | |
| USRK | Ussuriysk Ar. | 35.43 | 279 | P | **P** | **17 01 09.4** | **-0.7** |
| | comp=Z,3.2nm,0.5s,baz=56,slow=9.9,SNR=16 | | | | | | |
| USRK | | | | LR | LR | 17 16 48.9 | |
| | comp=Z,141nm,20.1s,baz=46,slow=38 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.82 | 210 | T | T | 17 40 15.0 | |
| | baz=312,slow=74,SNR=233 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.83 | 210 | T | T | 17 40 16.2 | |
| | baz=17,slow=74,SNR=130 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.83 | 210 | T | T | 17 39 22.1 | |
| | SNR=54 | | | | | | |
| MAJO | Matsushiro | 35.95 | 264 | *e*P | P | 17 01 09.7 | -4.9 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,42nm,1.0s | | | | | | |
| MAT | Matsushiro | 35.95 | 264 | P | **P** | **17 01 14.0** | **-0.6** |
| MJAR | Matsushiro Arr | 35.95 | 264 | P | **P** | **17 01 14.1** | **-0.5** |
| | comp=Z,1.9nm,0.6s,baz=48,slow=7.8,SNR=12 | | | | | | |
| MJAR | | | | LR | LR | 17 14 11.0 | |
| | comp=Z,224nm,21.8s,baz=70,slow=33 | | | | | | |
| MJAR | Matsushiro Arr | 35.95 | 264 | P | **P** | **17 01 14.1** | **-0.5** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,224nm,21.8s | | | | | | |
| HAWA | Hanford | 36.25 | 75 | *e*P | **P** | **17 01 17.2** | **+0.2** |
| | comp=Z,5.5nm,0.6s | | | | | | |
| MDJ | Mudanjiang | 36.70 | 281 | P | **P** | **17 01 19.8** | **-1.1** |
| MDJ | | | | PMZ | | | |
| | comp=Z,720nm,4.4s | | | | | | |
| NEW | Newport | 36.81 | 71 | *e*P | **P** | **17 01 20.4** | **-1.5** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| NEW | Newport | 36.81 | 71 | *e*P | **P** | **17 01 20.4** | **-1.5** |
| | comp=Z,4.8nm,0.6s | | | | | | |
| EDM | Edmonton | 36.87 | 62 | *e*P | **P** | **17 01 22.5** | **+0.2** |
| EDM | | | | pmax | pmax | | |
| | comp=Z,31nm,0.8s | | | | | | |
| EDM | Edmonton | 36.87 | 62 | *e*P | **P** | **17 01 22.5** | **+0.2** |
| | comp=Z,30nm,0.8s | | | | | | |
| WALA | Waterton Lakes | 38.33 | 69 | *e*P | **P** | **17 01 34.4** | **-0.4** |
| | comp=Z,6.4nm,0.8s | | | | | | |
| BSMT | Bassoo Peak | 38.39 | 71 | P | P | 17 01 31.3 | -4.1 |
| | comp=Z,7.2nm,0.7s | | | | | | |
| BLMT | Blacktail Moun | 38.56 | 70 | *e*P | P | 17 01 33.4 | -3.5 |
| | comp=Z,13nm,0.8s | | | | | | |
| SLMT | Seeley Lake | 39.45 | 71 | *e*P | **P** | **17 01 43.8** | **-0.5** |
| | comp=Z,4.3nm,0.8s | | | | | | |
| CHMT | Chamberlain Mo | 39.76 | 71 | *e*P | **P** | **17 01 45.1** | **-1.8** |
| | comp=Z,2.1nm,0.7s | | | | | | |
| MCMT | McKenzie Canyo | 41.08 | 74 | *e*P | **P** | **17 01 57.2** | **-0.6** |
| | comp=Z,2.5nm,0.5s | | | | | | |
| BOZ | Bozeman (W) | 41.37 | 72 | *e*P | **P** | **17 01 59.3** | **-0.8** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| BOZ | Bozeman (W) | 41.37 | 72 | *e*P | **P** | **17 01 59.3** | **-0.8** |
| | comp=Z,3.5nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 41.38 | 85 | P | **P** | **17 02 00.3** | **-0.1** |
| | comp=Z,0.9nm,0.8s,baz=289,slow=9.1,SNR=5.1 | | | | | | |
| NVAR | | | | ScP | **ScP** | **17 07 45.4** | **+1.8** |
| | comp=Z,0.4nm,0.7s,baz=289,slow=4.5,SNR=4.7 | | | | | | |
| NVAR | | | | LR | LR | 17 16 32.9 | |
| | comp=Z,209nm,19.5s,baz=269,slow=32 | | | | | | |
| KSRS | Korea Array | 41.81 | 273 | P | **P** | **17 02 03.5** | **-0.1** |
| | comp=Z,2.2nm,0.6s,baz=53,slow=7.6,SNR=14 | | | | | | |
| KSRS | | | | LR | LR | 17 18 55.2 | |
| | comp=Z,94nm,20.7s,baz=58,slow=35 | | | | | | |
| KSRS | Korea Array | 41.81 | 273 | P | **P** | **17 02 03.5** | **-0.1** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,94nm,20.7s | | | | | | |
| KSAR | Wonju Array Be | 41.84 | 273 | P | **P** | **17 02 03.5** | **-0.3** |
| KSAR | Wonju Array Be | 41.84 | 273 | P | **P** | **17 02 03.5** | **-0.3** |
| FLWY | Flagg Ranch | 42.78 | 73 | P | **P** | **17 02 11.8** | **+0.1** |
| RLMT | Red Lodge | 43.06 | 71 | *e*P | **P** | **17 02 13.2** | **-0.8** |
| | comp=Z,7.4nm,0.8s | | | | | | |
| DUG | Dugway | 43.73 | 79 | *e*P | **P** | **17 02 19.1** | **-0.2** |
| DUG | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| DUG | Dugway | 43.73 | 79 | *e*P | **P** | **17 02 19.1** | **-0.2** |
| | comp=Z,4.6nm,0.9s | | | | | | |
| MSU | Marysvale | 45.14 | 81 | P | **P** | **17 02 30.3** | **-0.4** |
| MSU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| MSU | Marysvale | 45.14 | 81 | P | **P** | **17 02 30.3** | **-0.4** |
| | comp=Z,2.1nm,0.7s | | | | | | |
| PV04 | Paradox Valley | 47.23 | 79 | *e*P | **P** | **17 02 46.8** | **-0.2** |
| PV01 | Paradox Valley | 47.59 | 79 | *e*P | **P** | **17 02 49.6** | **-0.3** |
| ULM | Lac du Bonnet | 47.81 | 58 | P | **P** | **17 02 50.5** | **-0.6** |
| | comp=Z,1.9nm,0.4s,baz=310,slow=12,SNR=4.5 | | | | | | |
| ULM | | | | LR | LR | 17 23 45.9 | |
| | comp=Z,184nm,19.7s,baz=313,slow=37 | | | | | | |
| ULM | Lac du Bonnet | 47.81 | 58 | P | **P** | **17 02 50.5** | **-0.6** |
| ULM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| ULM | | | | MLR | MLR | | |
| | comp=Z,184nm,19.7s | | | | | | |
| TLY | Talaya | 47.84 | 304 | *e*P | **P** | **17 02 50.5** | **-0.9** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,342nm,19.0s | | | | | | |
| ULN | Ulaanbaatar | 48.16 | 298 | *e*P | **P** | **17 02 53.4** | **-0.7** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| ULN | Ulaanbaatar | 48.16 | 298 | *e*P | **P** | **17 02 53.5** | **-0.7** |
| | comp=Z,3.7nm,0.9s | | | | | | |
| SONM | Songino Array | 48.54 | 298 | P | **P** | **17 02 56.8** | **-0.2** |
| | comp=Z,2.5nm,0.8s,baz=54,slow=8.0,SNR=14 | | | | | | |
| SONM | | | | ScP | **ScP** | **17 08 18.8** | **+6.0** |
| | comp=Z,0.8nm,0.6s,baz=40,slow=2.9,SNR=5.8 | | | | | | |
| SONM | | | | LR | LR | 17 25 16.0 | |
| | comp=Z,415nm,19.2s,baz=57,slow=38 | | | | | | |
| SONM | Songino Array | 48.54 | 298 | P | **P** | **17 02 56.8** | **-0.2** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| SONM | | | | pmax | pmax | | |
| | comp=N,1.0nm,0.6s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,415nm,19.2s | | | | | | |
| ZAK | Zakamensk | 48.76 | 303 | *e*P | P | 17 02 55.2 | -3.4 |
| ZAK | | | | *e* | | 17 04 18.8 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.5s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.5s | | | | | | |
| HHC | Hu-ho-hao-te | 49.74 | 288 | *e*P | **P** | **17 03 07.2** | **+0.9** |
| HHC | | | | ScP | **ScP** | **17 08 21.6** | **+3.5** |
| HHC | | | | S | **S** | **17 10 13.5** | **+1.5** |
| HHC | | | | sS | **sS** | **17 10 32.1** | **-1.4** |
| HHC | | | | PMZ | | | |
| | comp=Z,28nm,1.4s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,110nm,3.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,270nm,14.9s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,200nm,14.9s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,240nm,18.7s | | | | | | |
| NJ2 | Nanjing | 50.98 | 274 | *e*P | **P** | **17 03 15.9** | **+0.4** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| ECSD | EROS Data Cent | 51.23 | 66 | *e*P | **P** | **17 03 15.6** | **-1.8** |
| EYMN | Ely | 51.49 | 59 | *e*P | **P** | **17 03 17.7** | **-1.5** |
| HVS | Khovu-Aksy | 53.19 | 308 | *e*P | **P** | **17 03 30.3** | **-1.6** |
| HVS | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| ZALV | Zalesovo Beam | 55.53 | 315 | P | **P** | **17 03 48.0** | **-0.7** |
| | comp=Z,1.6nm,0.4s,baz=45,slow=6.1,SNR=10 | | | | | | |
| ZALV | | | | PcP | **PcP** | **17 04 48.1** | **0.0** |
| | comp=Z,0.8nm,0.4s,baz=48,slow=4.6,SNR=4.8 | | | | | | |
| ZALV | | | | LR | LR | 17 29 46.5 | |
| | comp=Z,300nm,18.9s,baz=70,slow=38 | | | | | | |
| ZALV | Zalesovo Beam | 55.53 | 315 | P | **P** | **17 03 48.0** | **-0.7** |
| ZALV | | | | | | 17 04 48.1 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ZALV | | | | MLR | MLR | | |
| | comp=Z,300nm,18.9s | | | | | | |
| WMOK | Wichita Mounta | 55.78 | 76 | *e*P | **P** | **17 03 50.2** | **-0.6** |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| WMOK | Wichita Mounta | 55.78 | 76 | *e*P | **P** | **17 03 50.2** | **-0.6** |
| | comp=Z,4.8nm,1.0s | | | | | | |
| TXAR | Lajitas Array | 56.49 | 84 | P | **P** | **17 03 55.2** | **-0.8** |
| | comp=Z,1.5nm,0.7s,baz=301,slow=5.5,SNR=18 | | | | | | |
| TXAR | Lajitas Array | 56.49 | 84 | P | **P** | **17 03 55.2** | **-0.8** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| LZH | Lanzhou | 57.44 | 288 | *e*P | **P** | **17 04 04.1** | **+1.4** |
| LZH | | | | pP | **pP** | **17 04 16.3** | **+0.5** |
| LZH | | | | sP | **sP** | **17 04 21.7** | **+0.5** |
| LZH | | | | *e*S | **S** | **17 11 53.3** | **-3.1** |
| LZH | | | | sS | sS | 17 12 10.4 | -7.8 |
| LZH | | | | SS | **SS** | **17 15 40.1** | **-5.9** |
| LZH | | | | PMZ | | | |
| | comp=Z,22nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,79nm,5.1s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,1μm,15.1s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,2μm,15.1s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,1μm,17.0s | | | | | | |
| GTA | Gaotai | 57.54 | 294 | *e*P | **P** | **17 04 04.1** | **+0.7** |
| GTA | | | | pP | **pP** | **17 04 18.4** | **+1.9** |
| GTA | | | | sP | **sP** | **17 04 24.5** | **+2.7** |
| GTA | | | | PcP | **PcP** | **17 04 57.1** | **+0.7** |
| GTA | | | | S | **S** | **17 11 57.8** | **+0.2** |
| GTA | | | | sS | **sS** | **17 12 19.4** | **0.0** |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,120nm,5.9s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,320nm,20.0s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,340nm,19.5s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,410nm,19.5s | | | | | | |
| ARCES | ARCESS Array B | 58.36 | 352 | P | **P** | **17 04 07.8** | **-0.7** |
| | comp=Z,1.4nm,0.8s,baz=22,slow=7.8,SNR=5.5 | | | | | | |
| ARCES | | | | PcP | **PcP** | **17 04 59.1** | **+0.2** |
| | comp=Z,2.5nm,0.5s,baz=24,slow=4.7,SNR=9.2 | | | | | | |
| ARCES | | | | LR | LR | 17 31 25.0 | |
| | comp=Z,43nm,18.4s,baz=262,slow=38 | | | | | | |
| ARCES | ARCESS Array B | 58.36 | 352 | P | **P** | **17 04 07.8** | **-0.7** |
| ARCES | | | | | | 17 04 59.1 | |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| ARCES | | | | MLR | MLR | | |
| | comp=Z,43nm,18.4s | | | | | | |
| SCHQ | Schefferville | 58.57 | 40 | LR | LR | 17 30 43.3 | |
| | comp=Z,275nm,18.7s,baz=292,slow=37 | | | | | | |
| MIAR | Mount Ida | 59.04 | 72 | *e*P | **P** | **17 04 13.0** | **-0.8** |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| MIAR | Mount Ida | 59.04 | 72 | *e*P | **P** | **17 04 13.0** | **-0.8** |
| | comp=Z,7.8nm,0.9s | | | | | | |
| KURK | Kurchatov | 60.52 | 315 | P | **P** | **17 04 22.7** | **-0.9** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,22nm,0.6s | | | | | | |
| KURK | Kurchatov | 60.52 | 315 | *e*P | **P** | **17 04 22.9** | **-0.7** |
| | comp=Z,24nm,0.6s | | | | | | |
| CD2 | Chengdu | 61.08 | 284 | *e*P | **P** | **17 04 26.0** | **-1.8** |
| CD2 | | | | pP | **pP** | **17 04 40.2** | **-0.8** |
| CD2 | | | | sP | **sP** | **17 04 46.4** | **+0.1** |
| CD2 | | | | PcS | **PcS** | **17 09 11.7** | **-1.7** |
| CD2 | | | | S | **S** | **17 12 40.9** | **-2.4** |
| CD2 | | | | sS | **sS** | **17 13 05.4** | **+0.1** |
| CD2 | | | | SS | **SS** | **17 16 42.1** | **-0.9** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| WMQ | Urumqi | 61.10 | 305 | P | P | 17 04 28.0 | +0.2 |
| WMQ | | | | pP | pP | 17 04 41.0 | 0.0 |
| WMQ | | | | sP | sP | 17 04 46.0 | -0.4 |
| WMQ | | | | PcP | PcP | 17 05 11.0 | +0.6 |
| WMQ | | | | PP | PP | 17 06 45.0 | +2.7 |
| WMQ | | | | PcS | PcS | 17 09 14.0 | +0.8 |
| WMQ | | | | S | S | 17 12 42.0 | -1.4 |
| WMQ | | | | SS | SS | 17 16 42.0 | -0.9 |
| WMQ | | | | PMZ | | | |
| | comp=Z,17nm,1.0s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,39nm,6.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,360nm,20.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,200nm,18.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,220nm,20.0s | | | | | | |
| MK31 | Makanchi Array | 61.66 | 310 | i P | P | 17 04 30.6 | -0.9 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| MKAR | Makanchi Array | 61.66 | 310 | P | P | 17 04 30.6 | -0.8 |
| | comp=Z,2.0nm,0.4s,baz=43,slow=5.6,SNR=23 | | | | | | |
| MKAR | | | | LR | LR | 17 33 40.7 | |
| | comp=Z,112nm,18.1s,baz=29,slow=38 | | | | | | |
| MKAR | Makanchi Array | 61.66 | 310 | P | P | 17 04 30.7 | -0.8 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| MKAR | | | | MLR | MLR | | |
| | comp=Z,112nm,18.1s | | | | | | |
| BVA0 | Borovoye Array | 62.21 | 322 | i P | P | 17 04 35.4 | +0.4 |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| BRVK | Borovoye | 62.22 | 322 | eP | P | 17 04 36.2 | +1.1 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.5s | | | | | | |
| BRVK | Borovoye | 62.22 | 322 | eP | P | 17 04 35.7 | +0.6 |
| | comp=Z,5.1nm,0.5s | | | | | | |
| GYA | Guiyang | 62.47 | 279 | eP | P | 17 04 38.9 | +1.6 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| ZRNK | Zerenda | 62.80 | 322 | P | P | 17 04 38.7 | -0.3 |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| SSPA | Standing Stone | 63.62 | 57 | eP | P | 17 04 44.6 | +0.1 |
| | comp=Z,27nm,0.4s | | | | | | |
| OTUK | Ortayu | 65.08 | 317 | P | P | 17 04 54.3 | +0.2 |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| PDGK | Podgornoye | 65.56 | 309 | P | P | 17 04 56.8 | -0.3 |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| KMI | Kunming | 65.86 | 280 | P | P | 17 05 14.1 | +14 |
| KMI | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| KMI | Kunming | 65.86 | 280 | P | P | 17 05 01.1 | +1.4 |
| KMI | | | | pP | pP | 17 05 14.1 | +1.1 |
| KMI | | | | sP | sP | 17 05 21.1 | +2.8 |
| KMI | | | | PMZ | | | |
| | comp=Z,9.0nm,1.5s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,51nm,4.5s | | | | | | |
| QIZ | Qiongzhong | 65.94 | 271 | P | P | 17 04 59.3 | -0.6 |
| QIZ | | | | S | S | 17 13 43.0 | -0.9 |
| QIZ | | | | PMZ | | | |
| | comp=Z,38nm,2.8s | | | | | | |
| FINES | FINESS Array B | 66.16 | 349 | P | P | 17 05 00.0 | -0.7 |
| | comp=Z,3.8nm,1.0s,baz=359,slow=7.0,SNR=4.3 | | | | | | |
| FINES | | | | LR | LR | 17 37 19.8 | |
| | comp=Z,68nm,18.6s,baz=24,slow=39 | | | | | | |
| FINES | FINESS Array B | 66.16 | 349 | P | P | 17 05 00.0 | -0.7 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,68nm,18.6s | | | | | | |
| TKM2 | Tokmak 2 | 67.72 | 311 | eP | P | 17 05 10.7 | -0.5 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| TKM2 | Tokmak 2 | 67.72 | 311 | eP | P | 17 05 10.7 | -0.5 |
| | comp=Z,6.4nm,1.0s | | | | | | |
| NOA | NORSAR Array B | 67.73 | 357 | P | P | 17 05 10.7 | -0.1 |
| | comp=Z,1.6nm,0.5s,baz=352,slow=5.5,SNR=8.8 | | | | | | |
| NOA | | | | LR | LR | 17 32 38.8 | |
| | comp=Z,38nm,22.0s,baz=15,slow=34 | | | | | | |
| NOA | NORSAR Array B | 67.73 | 357 | P | P | 17 05 10.7 | -0.1 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,38nm,22.0s | | | | | | |
| USP | Ospenovka | 67.97 | 312 | P | P | 17 05 13.1 | +0.5 |
| | SNR=8.8 | | | | | | |
| KBK | Karagaybulak | 68.23 | 312 | P | P | 17 05 14.6 | +0.2 |
| | SNR=11 | | | | | | |
| AAK | Ala-Archa | 68.46 | 312 | P | P | 17 05 16.2 | +0.4 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| AAK | Ala-Archa | 68.46 | 312 | P | P | 17 05 16.3 | +0.4 |
| | SNR=15 | | | | | | |
| AAK | Ala-Archa | 68.46 | 312 | eP | P | 17 05 15.1 | -0.7 |
| | comp=Z,7.4nm,0.5s | | | | | | |
| KZA | Kyzart | 68.53 | 311 | P | P | 17 05 17.1 | +0.5 |
| | SNR=15 | | | | | | |
| EKS2 | Erkin-Say | 68.77 | 312 | eP | P | 17 05 18.2 | +0.5 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.4s | | | | | | |
| EKS2 | Erkin-Say | 68.77 | 312 | P | P | 17 05 18.6 | +0.8 |
| | SNR=6.0 | | | | | | |
| EKS2 | Erkin-Say | 68.77 | 312 | eP | P | 17 05 18.2 | +0.5 |
| | comp=Z,6.8nm,0.4s | | | | | | |
| AKTO | Aktyubinsk | 68.85 | 327 | P | P | 17 05 18.1 | +0.2 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| AB31 | Akbulak array | 69.16 | 325 | eP | P | 17 05 19.9 | +0.1 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ABKAR | Akbulak array | 69.16 | 325 | eP | P | 17 05 19.5 | -0.3 |
| | comp=Z,2.6nm,0.6s | | | | | | |
| AML | Almayashu | 69.22 | 312 | P | P | 17 05 21.8 | +1.0 |
| | SNR=11 | | | | | | |
| LSA | Lhasa | 69.44 | 292 | eP | P | 17 05 23.2 | +0.7 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| LSA | Lhasa | 69.44 | 292 | eP | P | 17 05 23.2 | +0.7 |
| | comp=Z,15nm,0.8s | | | | | | |
| MNAS | Manas | 69.49 | 313 | P | P | 17 05 22.1 | -0.1 |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| KK31 | Karatay Array | 69.91 | 315 | eP | P | 17 05 24.3 | -0.3 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| KKAR | Karatay Array | 69.91 | 315 | eP | P | 17 05 24.4 | -0.2 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,11nm,0.4s | | | | | | |
| KKAR | Karatay Array | 69.91 | 315 | eP | P | 17 05 24.4 | -0.2 |
| | comp=Z,10nm,0.4s | | | | | | |
| KSH | Kashi | 70.17 | 309 | P | P | 17 05 29.9 | +3.5 |
| KSH | | | | esP | sP | 17 05 48.4 | +3.3 |
| KSH | | | | S | S | 17 14 36.0 | +1.8 |
| KSH | | | | sS | sS | 17 14 59.9 | +3.2 |
| KSH | | | | SKS | SKSac | 17 15 23.5 | -0.3 |
| KSH | | | | PMZ | | | |
| | comp=Z,76nm,4.1s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,45nm,4.0s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,160nm,6.8s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,190nm,7.5s | | | | | | |
| PMOR | Pomariorio Ree | 70.37 | 152 | eT | T | 18 22 52.0 | |
| | comp=Z,4.0nm,0.2s | | | | | | |
| OBN | Obninsk | 70.53 | 341 | deP | P | 17 05 29.4 | +1.3 |
| OBN | | | | e | | 17 05 48.0 | |
| OBN | | | | e | | 17 08 05.5 | |
| OBN | | | | eS | SKiKP | 17 15 09.5 | +2.2 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| PPT2 | Papeete2 | 72.35 | 154 | eLR | LR | 17 27 23.9 | |
| | comp=Z,173nm,21.5s | | | | | | |
| PPT2 | Papeete2 | 72.35 | 154 | eT | T | 18 25 18.2 | |
| | comp=Z,6.5nm,0.3s | | | | | | |
| PAE | Paea | 72.42 | 154 | eT | T | 18 25 22.8 | |
| | comp=Z,1.3nm,0.3s | | | | | | |
| CMAR | Chiang Mai Arr | 73.16 | 279 | P | P | 17 05 44.7 | +0.2 |
| | comp=Z,0.7nm,0.3s,baz=33,slow=7.8,SNR=7.2 | | | | | | |
| CMAR | Chiang Mai Arr | 73.16 | 279 | i P | P | 17 05 45.2 | +0.7 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| TAPN | Taplejung | 73.20 | 293 | eP | P | 17 05 45.7 | +0.7 |
| ESK | Eskdalemuir | 73.39 | 5 | i P | P | 17 05 37.7 | -7.6 |
| ODAN | Odare | 73.76 | 293 | eP | P | 17 05 48.7 | +0.5 |
| GUN | Gumba | 73.82 | 294 | eP | P | 17 05 49.4 | +0.7 |
| DZET | Dzherino | 74.11 | 313 | P | P | 17 05 50.0 | 0.0 |
| DZET | | | | pmax | pmax | | |
| | comp=Z,15nm,0.5s | | | | | | |
| RAMN | Ramite | 74.14 | 293 | eP | P | 17 05 51.0 | +0.5 |
| KKN | Kakani | 74.26 | 295 | eP | P | 17 05 51.7 | +0.6 |
| PKI | Pulchoki | 74.35 | 295 | eP | P | 17 05 52.2 | +0.4 |
| PKIN | Phulchoki | 74.35 | 295 | eP | P | 17 05 52.4 | +0.7 |
| GKN | Gorkha | 74.46 | 295 | eP | P | 17 05 52.6 | +0.4 |
| DMN | Daman | 74.49 | 295 | eP | P | 17 05 53.2 | +0.7 |
| KOLN | Koldanda | 75.22 | 296 | eP | P | 17 05 56.9 | +0.2 |
| AKASG | Malin Array Be | 76.11 | 344 | P | P | 17 06 00.3 | -0.7 |
| | comp=Z,2.0nm,0.4s,baz=18,slow=6.2,SNR=8.5 | | | | | | |
| AKASG | | | | LR | LR | 17 45 45.7 | |
| | comp=Z,126nm,18.1s,baz=185,slow=41 | | | | | | |
| AKASG | Malin Array Be | 76.11 | 344 | P | P | 17 06 00.4 | -0.7 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| AKASG | | | | MLR | MLR | | |
| | comp=Z,126nm,18.1s | | | | | | |
| CLL | Collm | 77.37 | 355 | eP | P | 17 06 08.0 | -0.2 |
| | comp=Z,5.0nm,0.5s | | | | | | |
| CLL | | | | epP | pP | 17 06 22.0 | +0.2 |
| CLL | | | | LmV | | 17 51 00.0 | |
| | comp=Z,100nm,20.1s | | | | | | |
| GEYT | Alibeck | 79.47 | 320 | P | P | 17 06 20.9 | +0.8 |
| | comp=Z,6.1nm,0.9s,baz=347,slow=6.1,SNR=10 | | | | | | |
| GEYT | | | | LR | LR | 17 45 45.5 | |
| | comp=Z,138nm,18.7s,baz=25,slow=39 | | | | | | |
| KHC | Kasperske Hory | 79.50 | 354 | eP | P | 17 06 21.4 | +1.3 |
| KHC | Kasperske Hory | 79.50 | 354 | eP | P | 17 06 21.4 | +1.3 |
| KBZ | Khabaz | 79.57 | 333 | LR | LR | 17 48 02.1 | |
| | comp=Z,101nm,18.6s,baz=328,slow=40 | | | | | | |
| GERES | GERESS Array B | 79.78 | 354 | P | P | 17 06 21.7 | +0.1 |
| | comp=Z,0.5nm,0.5s,baz=20,slow=4.3,SNR=3.4 | | | | | | |
| GERES | GERESS Array B | 79.78 | 354 | P | P | 17 06 21.7 | +0.1 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| BATI | Baumata | 80.72 | 241 | LR | LR | 17 35 45.6 | |
| | comp=Z,146nm,21.8s,baz=300,slow=31 | | | | | | |
| WRA | Warramunga Arr | 83.61 | 227 | P | P | 17 06 39.4 | -2.5 |
| | comp=Z,0.7nm,0.6s,baz=32,slow=5.8,SNR=7.5 | | | | | | |
| WRA | | | | LR | LR | 17 41 11.1 | |
| | comp=Z,66nm,20.2s,baz=265,slow=34 | | | | | | |
| WRA | Warramunga Arr | 83.61 | 227 | i P | P | 17 06 38.7 | -3.3 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| BRTR | Keskin Array B | 85.73 | 338 | P | P | 17 06 52.8 | 0.0 |
| | comp=Z,1.1nm,0.6s,baz=58,slow=1.8,SNR=5.0 | | | | | | |
| BRTR | Keskin Array B | 85.73 | 338 | i P | P | 17 06 52.7 | 0.0 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| ASAR | Alice Springs | 87.05 | 225 | P | P | 17 06 58.0 | -1.1 |
| | comp=Z,0.6nm,0.5s,baz=26,slow=5.0,SNR=15 | | | | | | |
| ASAR | Alice Springs | 87.05 | 225 | P | P | 17 06 58.0 | -1.1 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ESDC | Sonseca Array | 88.93 | 7 | P | P | 17 07 08.2 | +0.2 |
| | comp=Z,0.3nm,0.4s,baz=342,slow=4.5,SNR=3.6 | | | | | | |
| PCRV | Puerto La Cruz | 94.63 | 68 | LR | LR | 17 48 16.8 | |
| | comp=Z,95nm,22.0s,slow=34 | | | | | | |
| TORD | Torodi Ar. Bea | 115.62 | 3 | PKP | PKPdf | 17 12 55.3 | -0.6 |
| | comp=Z,0.6nm,0.4s,baz=358,slow=2.1,SNR=5.0 | | | | | | |
| DBIC | Dimbokro | 121.53 | 11 | PKP | PKPdf | 17 13 06.0 | -1.2 |
| | comp=Z,1.3nm,0.4s,baz=315,slow=2.4,SNR=6.7 | | | | | | |
| DBIC | Dimbokro | 121.53 | 11 | PKIKP | PKPdf | 17 13 06.0 | -1.2 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| MAW | Mawson | 147.87 | 218 | PKPbc | PKPbc | 17 13 56.3 | -0.7 |
| | comp=Z,2.2nm,0.7s,baz=118,slow=3.9,SNR=8.3 | | | | | | |
| MAW | Mawson | 147.87 | 218 | PKP2 | PKPbc | 17 13 56.3 | -0.7 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| BOSA | Boshof | 152.45 | 318 | PKPbc | PKPbc | 17 14 09.8 | +0.2 |
| | comp=Z,3.4nm,0.5s,baz=18,slow=2.5,SNR=12 | | | | | | |
| BOSA | Boshof | 152.45 | 318 | PKIKP | PKPbc | 17 14 09.8 | +0.2 |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |

**IDC 03 17:04:52.9**±6.0**, 4°.97S**×**133°.76E, h0**km**, mb3.9**/1**, mb1 4.4**/3**, mb1mx3.8**/22**, mbtmp4.1**/3**, ML4.1**/2**, MS3.2**/2**, Ms1 3.2**/2**, ms1mx2.8**/28**, Error ellipse: s-maj=348.1km s-min=30.5km az=77.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.78 | 329 | Pn | Pn | 17 06 03.2 | -2.9 |
| | 4.5nm,0.3s,baz=147,slow=22,SNR=20 | | | | | | |
| SIJI | | | | Sn | Sn | 17 06 53.6 | -8.6 |
| | 5.8nm,0.3s,baz=206,slow=22,SNR=9.8 | | | | | | |
| PMG | Port Moresby | 14.00 | 109 | LR | LR | 17 15 25.5 | |
| | comp=Z,98nm,19.3s,baz=274,slow=45 | | | | | | |
| WRA | Warramunga Arr | 14.89 | 178 | Pn | Pn | 17 08 22.7 | -2.1 |
| | 0.8nm,0.3s,baz=356,slow=13,SNR=27 | | | | | | |
| ASAR | Alice Springs | 18.59 | 180 | P | Pn | 17 09 12.4 | +0.6 |
| | 0.9nm,0.3s,baz=4.4,slow=10,SNR=36 | | | | | | |
| ASAR | | | | LR | LR | 17 16 58.5 | |
| | comp=Z,76nm,21.4s,baz=28,slow=39 | | | | | | |
| MKAR | Makanchi Array | 68.66 | 325 | P | P | 17 15 58.2 | 0.0 |
| | 1.3nm,0.8s,baz=130,slow=7.3,SNR=9.6 | | | | | | |

*NEIC **03** 17:10:11.7, 37°.14N×117°.39W, h8km, ML3.7(REN), After REN.*

**ISC 03 17:10:11.5**±1.0**, 37°.16N**±0°.02×**117°.39W**±0°.04**, h14**km±8km**, n28,** σ**0s.92**/52**, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRAC | Grapevine Rang | 0.15 | 175 | P | Pg | 17 10 15.2 | -0.1 |
| | baz=0.1 | | | | | | |
| TIN | Tinemaha | 0.68 | 262 | P | Pb | 17 10 25.0 | -0.2 |
| | baz=0.7 | | | | | | |
| FURC | Furnace Creek, | 0.80 | 148 | P | Pg | 17 10 26.9 | -0.1 |
| | baz=0.8 | | | | | | |
| FURC | | | | S | Sb | 17 10 37.9 | 0.0 |
| | baz=0.8 | | | | | | |
| CWC | Cottonwood Cre | 0.91 | 218 | S | Sg | 17 10 40.7 | -0.1 |
| | baz=0.9 | | | | | | |
| TPNV | Topopah Spring | 0.93 | 102 | P | Pg | 17 10 29.3 | -0.2 |
| | baz=0.9 | | | | | | |
| MPMC | Manual Prospec | 1.10 | 184 | P | Pg | 17 10 32.1 | -0.5 |
| | baz=1.1 | | | | | | |
| MPMC | | | | S | Sb | 17 10 46.9 | +0.3 |
| | baz=1.1 | | | | | | |
| MLAC | Mammoth Lakes | 1.25 | 293 | P | Pb | 17 10 35.4 | +0.4 |
| | baz=1.2 | | | | | | |
| LRMC | Laurel Mountai | 1.69 | 188 | P | Pn | 17 10 41.2 | +0.5 |
| | baz=1.7 | | | | | | |
| LRMC | | | | Sb | Sg | 17 11 05.6 | -0.3 |
| | baz=1.7 | | | | | | |
| ISA | Isabella | 1.73 | 211 | P | Pn | 17 10 42.1 | +0.9 |
| | baz=1.7 | | | | | | |
| R11A | Troy Canyon, C | 1.86 | 50 | Pb | Pb | 17 10 45.9 | +0.5 |
| | baz=1.9 | | | | | | |
| R11A | | | | Sb | Sg | 17 11 10.9 | -0.5 |
| | baz=1.9 | | | | | | |
| GSC | Goldstone | 1.91 | 166 | P | Pn | 17 10 44.3 | +0.6 |
| | baz=1.9 | | | | | | |
| TUQ | Turquoise Moun | 2.08 | 145 | P | Pn | 17 10 46.5 | +0.4 |
| | baz=2.1 | | | | | | |
| TUQ | | | | S | Sn | 17 11 13.0 | +1.0 |
| | baz=2.1 | | | | | | |
| HEC | Hector,Ludlow | 2.47 | 159 | P | Pn | 17 10 51.9 | +0.5 |
| | baz=2.5 | | | | | | |
| OSI | Osito Adit | 2.76 | 204 | ePn | Pn | 17 10 55.9 | +0.5 |
| OSI | | | | ePg | Pg | 17 11 04.0 | -0.3 |
| MWC | Mount Wilson | 2.98 | 191 | ePn | Pn | 17 10 58.2 | -0.2 |
| MWC | | | | ePg | Pg | 17 11 08.5 | 0.0 |
| MWC | | | | eSn | Sn | 17 11 33.3 | -0.8 |
| MWC | | | | eSg | Sg | 17 11 46.6 | -0.5 |
| PASC | Pasadena Art C | 3.05 | 193 | ePn | Pn | 17 10 59.0 | -0.4 |
| PASC | | | | ePg | Pg | 17 11 09.7 | -0.2 |
| PASC | | | | eSn | Sn | 17 11 35.1 | -0.5 |
| BMN | Battle Mountai | 3.27 | 2 | ePn | Pn | 17 11 03.4 | +0.8 |
| BMN | | | | eSg | Sg | 17 11 56.7 | +0.1 |
| PFO | Pinyon Flat Ob | 3.62 | 168 | ePn | Pn | 17 11 07.7 | +0.4 |
| PFO | | | | eSn | Sn | 17 11 50.7 | +0.8 |
| ELK | Elko | 3.96 | 24 | ePn | Pn | 17 11 16.1 | +4.0 |
| ELK | | | | ePg | Pg | 17 11 26.6 | -0.7 |
| ELK | | | | eSg | Sg | 17 12 16.1 | -2.5 |
| BAR | Barrett | 4.50 | 172 | ePn | Pn | 17 11 20.4 | +1.1 |
| BAR | | | | eSn | Sn | 17 12 10.8 | -0.8 |
| DUG | Dugway | 4.69 | 48 | Pn | Pn | 17 11 23.5 | +1.4 |
| DUG | | | | ePg | Pg | 17 11 41.7 | +0.3 |
| DUG | | | | eSn | Sn | 17 12 16.7 | +0.3 |
| NLU | North Lily Min | 5.01 | 54 | ePn | Pn | 17 11 26.9 | +0.3 |
| | 4.3nm,0.6s | | | | | | |
| NLU | | | | ePg | Pg | 17 11 47.5 | 0.0 |
| NLU | | | | eSg | Sg | 17 12 52.7 | +0.2 |
| BGU | Big Grassy Mou | 5.07 | 41 | Pn | Pn | 17 11 27.4 | +0.1 |
| | 7.7nm,0.8s | | | | | | |
| TMUT | Trail Mountain | 5.31 | 64 | Pn | Pn | 17 11 31.3 | +0.6 |
| | 26nm,0.5s | | | | | | |
| TMUT | | | | eSn | Sn | 17 12 28.1 | -3.9 |
| WVOR | Wild Horse Val | 5.36 | 350 | Pn | Pn | 17 11 32.2 | +1.0 |
| | 6.4nm,0.9s | | | | | | |
| WVOR | | | | ePg | Pg | 17 11 53.9 | -0.2 |
| HVU | Hansel Valley | 5.83 | 36 | Pn | Pn | 17 11 38.5 | +0.7 |
| | 5.6nm,0.7s | | | | | | |
| HVU | | | | eSg | Sg | 17 13 20.2 | +1.5 |
| HLID | Hailey | 6.79 | 19 | Pn | Pn | 17 11 49.5 | -1.4 |
| | 3.8nm,0.6s | | | | | | |
| HLID | | | | ePg | Pg | 17 12 21.4 | -0.1 |
| HLID | | | | eSg | Sg | 17 13 50.7 | +1.3 |
| TUC | Tucson | 7.27 | 130 | ePn | Pn | 17 11 57.2 | -0.2 |
| | 2.4nm,0.4s | | | | | | |

*BJI **03** 17:20:48.5, 7°.54S×104°.78E, h75km, mb4.6/19, mB4.9/14, Ms4.6/8, Ms7 4.2/8*

*DJA **03** 17:20:50.6±0.3, 7°S±3°×10°5E±°, h10km, M4.9/33, mb4.7/14, MLv5.0/6, MLv4.8/33*

*ISCJB **03** 17:20:52.1±0.6, 6°.73S±0°.05×104°.87E±0°.04, h49km±4km, mb4.3/25, MS3.4/2, Error ellipse: s-maj=9.0km s-min=3.9km az=37.4*

*AUST **03** 17:20:54.4, 6°.85S×104°.90E, h35km*

*IDC **03** 17:20:54.7±3.3, 6°.52S×104°.94E, h50km±31km, mb3.9/17, mb1 4.0/18, mb1mx3.9/37, mbtmp4.2/18, ML4.7/2, MS3.3/3, Ms1 3.3/3, ms1mx2.9/36, Error ellipse: s-maj=19.6km s-min=12.0km az=53.0*

*NEIC **03** 17:20:56.6±1.6, 6°.57S×105°.06E, h72km±13km, mb4.7/8, Error ellipse: s-maj=17.3km s-min=7.9km az=49.0*

**ISC 03 17:20:53.8**±1.1**, 6°.67S**±0°.06×**104°.87E**±0°.05**, h45**km±9km**, n104,** σ**1s.47**/106**, mb4.4**/25**, Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CGJI | Cibinong | 0.82 | 86 | P | Pn | 17 21 05.4 | -3.6 |
| CGJI | | | | S | Sn | 17 21 16.6 | -3.4 |
| KASI | Kota Agung | 1.20 | 342 | P | Pn | 17 21 12.6 | -1.5 |
| KASI | | | | S | Sn | 17 21 30.9 | +1.7 |
| SBJI | Serang | 1.36 | 67 | P | Pn | 17 21 15.4 | -1.0 |
| SBJI | | | | S | Sn | 17 21 34.1 | +0.8 |
| SKJI | Sukabumi | 1.71 | 101 | P | Pn | 17 21 20.1 | -1.0 |
| SKJI | | | | S | Sn | 17 21 43.4 | +1.6 |
| LWLI | Liwa | 1.83 | 334 | P | Pn | 17 21 23.9 | +1.0 |
| TNG | Tangerang | 1.83 | 74 | P | Pn | 17 21 22.9 | +0.1 |
| TNG | | | | P | Pn | 17 21 23.2 | +0.4 |
| TNG | | | | S | Sn | 17 21 49.0 | +4.2 |
| CBJI | Citeko | 1.98 | 83 | P | Pn | 17 21 25.3 | +0.4 |
| MDSI | Maura Dua | 2.27 | 342 | P | Pn | 17 21 29.8 | +0.9 |
| CNJI | Cibinong | 2.33 | 106 | P | Pn | 17 21 27.2 | -2.5 |
| LEM | Lembang | 2.73 | 93 | P | Pn | 17 21 35.6 | +0.3 |
| | 27nm,0.3s,baz=325,slow=22,SNR=34 | | | | | | |
| LEM | | | | S | Sn | 17 22 12.4 | +5.2 |
| | 57nm,0.3s,baz=36,slow=17,SNR=2.5 | | | | | | |
| LEM | Lembang | 2.73 | 93 | P | Pn | 17 21 35.5 | +0.1 |
| | baz=2.7,SNR=15 | | | | | | |
| LEM | Lembang | 2.73 | 93 | P | Pn | 17 21 34.8 | -0.5 |
| MNAI | Manna | 2.98 | 320 | P | Pn | 17 21 39.2 | +0.6 |
| | baz=3.2,SNR=19 | | | | | | |
| LHSI | Lahat | 3.12 | 334 | P | Pn | 17 21 41.9 | +1.3 |
| CMJI | Cimerak | 3.72 | 108 | P | Pn | 17 21 47.5 | -1.2 |
| KSI | Kapahiang | 3.76 | 323 | P | Pn | 17 21 50.2 | +0.8 |
| XMIS | Christmas Isla | 3.87 | 169 | P | Pn | 17 21 45.1 | -5.7 |
| | baz=3.7,SNR=14 | | | | | | |
| KPJI | Karang Pucung | 4.08 | 100 | P | Pn | 17 21 53.0 | -0.8 |
| PPBI | Pangkal Pinang | 4.65 | 16 | P | Pn | 17 22 03.6 | +2.0 |
| TPI | Tanjungpandan | 4.77 | 36 | P | Pn | 17 22 05.0 | +1.7 |
| JMBI | JAMBI | 5.15 | 346 | P | Pn | 17 22 10.0 | +1.6 |
| | 444nm,0.4s,2.2nm | | | | | | |
| SMRI | Semarang | 5.54 | 94 | P | Pn | 17 22 13.5 | -0.3 |
| | 170nm,0.9s,0.7nm | | | | | | |
| UGM | Wanagama | 5.74 | 103 | P | Pn | 17 22 17.2 | +0.6 |
| | baz=5.7,SNR=18 | | | | | | |
| UGM | Wanagama | 5.74 | 103 | P | Pn | 17 22 15.6 | -1.0 |
| | 162nm,1.1s,0.8nm | | | | | | |
| UWJI | Ujung Watu | 6.04 | 88 | P | Pn | 17 22 23.2 | +2.5 |
| PPSI | Pulau Pagai | 6.21 | 308 | P | Pn | 17 22 23.7 | +0.8 |
| | 299nm,1.4s,1.1nm1.1nm | | | | | | |
| PCJI | Pacitan | 6.43 | 104 | P | Pn | 17 22 24.8 | -1.3 |
| | 95nm,1.3s,0.5nm | | | | | | |
| PWJI | Pagerwojo | 7.01 | 101 | P | Pn | 17 22 33.4 | -0.5 |
| | 70nm,1.3s,0.6nm | | | | | | |
| PDSI | Padang | 7.21 | 322 | P | Pn | 17 22 36.9 | +0.1 |
| | 31nm,1.6s,0.1nm0.1nm | | | | | | |
| TPRI | Tanjung Pinang | 7.54 | 357 | P | Pn | 17 22 43.2 | +1.9 |
| | 33nm,1.3s,0.3nm0.3nm | | | | | | |
| PPI | Padang Panjang | 7.62 | 324 | P | Pn | 17 22 43.2 | +0.9 |
| | 20nm,1.1s,0.2nm0.2nm | | | | | | |
| SISI | Saibi | 7.84 | 312 | P | Pn | 17 22 45.6 | +0.3 |
| | 77nm,1.1s,0.4nm0.4nm | | | | | | |
| MYKOM | Kota Tinggi | 8.46 | 353 | ePn | Pn | 17 22 58.2 | +4.3 |
| GMJI | Gumukmas | 8.65 | 101 | P | Pn | 17 22 55.4 | -1.1 |
| JAGI | Jajag, Banyuwa | 9.37 | 102 | P | Pn | 17 23 07.4 | +1.0 |
| | baz=9.3,SNR=30 | | | | | | |
| JAGI | Jajag, Banyuwa | 9.37 | 102 | ePn | Pn | 17 23 04.4 | -2.0 |
| | 69nm,0.6s | | | | | | |
| KAPI | Kappang | 14.89 | 84 | LR | LR | 17 31 20.6 | |
| | comp=Z,82nm,21.3s,baz=280,slow=42 | | | | | | |
| LUWI | Luwuk | 18.71 | 73 | P | Pn | 17 25 08.5 | -1.0 |
| | baz=19,SNR=7.9 | | | | | | |
| BATI | Baumata | 18.92 | 102 | P | Pn | 17 25 11.9 | -0.1 |
| | 11nm,0.3s,baz=328,slow=2.0,SNR=25 | | | | | | |
| BATI | | | | S | S | 17 28 44.2 | +0.4 |
| | 3.7nm,0.3s,baz=117,slow=7.6,SNR=5.8 | | | | | | |
| SOEI | Soe | 19.44 | 100 | P | P | 17 25 16.8 | -0.1 |
| | baz=19,SNR=11 | | | | | | |
| SOEI | Soe | 19.44 | 100 | eP | P | 17 25 15.1 | -1.8 |
| | 106nm,0.8s | | | | | | |
| TNTI | Ternate | 23.64 | 73 | eP | P | 17 26 00.8 | -0.4 |
| | 91nm,1.3s | | | | | | |
| KNRA | Kununurra | 25.07 | 113 | P | P | 17 26 14.5 | +0.2 |
| | baz=25,SNR=16 | | | | | | |
| CMAR | Chiang Mai Arr | 25.64 | 347 | P | P | 17 26 19.4 | 0.0 |
| | 3.5nm,1.0s,baz=181,slow=8.3,SNR=11 | | | | | | |
| CHTO | Chiang Mai | 25.99 | 347 | eP | P | 17 26 19.4 | -3.2 |
| | 33nm,2.2s | | | | | | |
| QIZ | Qiongzhong | 26.00 | 11 | P | P | 17 26 22.8 | +0.1 |
| QIZ | | | | S | S | 17 30 49.6 | -0.9 |
| MTN | Manton Dam | 26.59 | 105 | P | P | 17 26 31.5 | +3.4 |
| | baz=26,SNR=6.8 | | | | | | |
| MTN | Manton Dam | 26.59 | 105 | eP | P | 17 26 26.8 | -1.2 |
| | 107nm,1.9s | | | | | | |
| PALK | Pallekele | 27.80 | 299 | LR | LR | 17 37 22.2 | |
| | comp=Z,58nm,20.2s,baz=116,slow=36 | | | | | | |
| KDU | Kakadu | 27.84 | 105 | P | P | 17 26 43.2 | +3.8 |
| | baz=28,SNR=3.8 | | | | | | |
| WRKA | Warakurna | 28.91 | 132 | P | P | 17 26 50.7 | +1.9 |
| | baz=29,SNR=4.9 | | | | | | |
| H01W3 | Cape Leeuwin H | 29.35 | 164 | T | T | 17 57 30.6 | |
| | baz=343,slow=76,SNR=95 | | | | | | |
| H01W1 | Cape Leeuwin H | 29.36 | 164 | T | T | 17 57 31.0 | |
| | baz=343,slow=76,SNR=135 | | | | | | |
| H01W2 | Cape Leeuwin H | 29.36 | 164 | T | T | 17 57 35.9 | |
| | baz=343,slow=76,SNR=117 | | | | | | |
| WRA | Warramunga Arr | 31.49 | 118 | P | P | 17 27 11.8 | 0.0 |
| | 5.0nm,0.8s,baz=288,slow=13,SNR=22 | | | | | | |
| WRA | | | | PcP | PcP | 17 30 04.5 | +0.4 |
| | 0.8nm,0.6s,baz=320,slow=2.2,SNR=5.7 | | | | | | |
| WRAB | Tennant Creek | 31.50 | 118 | P | P | 17 27 09.9 | -1.9 |
| | 7.9nm,0.9s | | | | | | |
| KMI | Kunming | 31.67 | 356 | P | P | 17 27 15.8 | +2.5 |
| KMI | | | | sP | sP | 17 27 42.2 | +12 |
| KMI | | | | PMZ | | | |
| | 7.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | 40nm,4.3s | | | | | | |
| H08S2 | Diego Garcia H | 32.14 | 266 | T | T | 18 01 10.0 | |
| | baz=90,slow=75,SNR=88 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S3 | Diego Garcia H | 32.15 | 266 | T | T | 18 01 28.8 | |
| | baz=90,slow=75,SNR=98 | | | | | | |
| H08S1 | Diego Carcia H | 32.16 | 266 | T | T | 18 01 23.4 | |
| | baz=90,slow=75,SNR=79 | | | | | | |
| ASAR | Alice Springs | 32.61 | 124 | P | P | 17 27 21.6 | 0.0 |
| | 3.7nm,1.0s,baz=300,slow=7.7,SNR=22 | | | | | | |
| ASAR | | | | PcP | PcP | 17 30 08.2 | +1.1 |
| | 1.4nm,0.9s,baz=307,slow=1.7,SNR=7.8 | | | | | | |
| GYA | Guiyang | 32.98 | 3 | eP | P | 17 27 25.9 | +1.2 |
| GYA | | | | pP | pP | 17 27 43.4 | +6.7 |
| GYA | | | | sP | sP | 17 27 52.8 | +11 |
| GYA | | | | S | S | 17 32 38.0 | -2.1 |
| GYA | | | | sS | sS | 17 33 10.2 | +10 |
| GYA | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| CD2 | Chengdu | 37.38 | 358 | eP | P | 17 28 03.0 | +0.6 |
| CD2 | | | | pP | pP | 17 28 20.9 | +6.3 |
| CD2 | | | | sP | sP | 17 28 29.9 | +10 |
| CD2 | | | | S | S | 17 33 47.2 | -0.3 |
| CD2 | | | | sS | sS | 17 34 18.5 | +11 |
| CD2 | | | | SS | SS | 17 36 35.5 | +2.8 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| ODAN | Odare | 37.39 | 334 | eP | P | 17 28 01.7 | -1.1 |
| | 8.3nm,0.5s | | | | | | |
| TAPN | Taplejung | 37.67 | 335 | eP | P | 17 28 04.3 | -1.0 |
| | 23nm,0.8s | | | | | | |
| RAMN | Ramite | 37.82 | 333 | eP | P | 17 28 06.1 | -0.4 |
| | 7.1nm,0.4s | | | | | | |
| LSA | Lhasa | 38.49 | 341 | eP | P | 17 28 11.8 | -0.6 |
| | 4.8nm,0.7s | | | | | | |
| GUN | Gumba | 38.97 | 333 | eP | P | 17 28 15.5 | -0.7 |
| | 8.6nm,0.3s | | | | | | |
| DMN | Daman | 39.07 | 332 | eP | P | 17 28 16.9 | -0.1 |
| | 17nm,0.9s | | | | | | |
| KKN | Kakani | 39.14 | 332 | eP | P | 17 28 16.7 | -0.8 |
| | 7.9nm,0.5s | | | | | | |
| GKN | Gorkha | 39.62 | 331 | eP | P | 17 28 21.1 | -0.4 |
| | 8.1nm,0.3s | | | | | | |
| KOLN | Koldanda | 39.94 | 330 | eP | P | 17 28 23.7 | -0.4 |
| | 9.1nm,0.5s | | | | | | |
| NJ2 | Nanjing | 40.75 | 18 | eP | P | 17 28 28.9 | -1.6 |
| NJ2 | | | | PMZ | | | |
| | 20nm,0.5s | | | | | | |
| PMG | Port Moresby | 41.94 | 97 | P | P | 17 28 40.4 | -0.2 |
| | 41nm,0.8s,baz=259,slow=7.6,SNR=4.8 | | | | | | |
| PMG | | | | LR | LR | 17 47 38.2 | |
| | comp=Z,68nm,18.4s,baz=320,slow=38 | | | | | | |
| PMG | Port Moresby | 41.94 | 97 | P | P | 17 28 40.7 | 0.0 |
| | baz=42,SNR=5.2 | | | | | | |
| QLP | Quilpie | 42.35 | 123 | P | P | 17 28 45.6 | +1.8 |
| | baz=42,SNR=6.8 | | | | | | |
| LZH | Lanzhou | 42.54 | 359 | eP | P | 17 28 46.2 | +0.9 |
| LZH | | | | pP | pP | 17 29 05.7 | +8.1 |
| LZH | | | | sP | sP | 17 29 13.5 | +11 |
| LZH | | | | PMZ | | | |
| | 19nm,1.1s | | | | | | |
| CMSA | Cobar Meteorol | 45.42 | 128 | P | P | 17 29 10.2 | +1.7 |
| | baz=45,SNR=8.7 | | | | | | |
| GTA | Gaotai | 46.08 | 355 | eP | P | 17 29 18.4 | +4.8 |
| GTA | | | | pP | pP | 17 29 37.1 | +11 |
| GTA | | | | sP | sP | 17 29 46.0 | +15 |
| GTA | | | | S | S | 17 36 03.8 | +7.6 |
| GTA | | | | sS | sS | 17 36 34.9 | +18 |
| GTA | | | | SS | SS | 17 39 23.6 | +1.6 |
| GTA | | | | PMZ | | | |
| | 5.0nm,0.8s | | | | | | |
| GTA | | | | PMZ | | | |
| | 280nm,5.2s | | | | | | |
| GTA | | | | LN | | | |
| | 120nm,14.7s | | | | | | |
| GTA | | | | LE | | | |
| | 130nm,15.7s | | | | | | |
| GTA | | | | LZ | | | |
| | 180nm,15.7s | | | | | | |
| HHC | Hu-ho-hao-te | 47.68 | 7 | eP | P | 17 29 29.6 | +3.6 |
| HHC | | | | S | S | 17 36 20.0 | +1.0 |
| HHC | | | | sS | sS | 17 36 52.3 | +13 |
| HHC | | | | PMZ | | | |
| | 34nm,1.5s | | | | | | |
| HHC | | | | PMZ | | | |
| | 130nm,5.0s | | | | | | |
| HHC | | | | LN | | | |
| | 210nm,13.7s | | | | | | |
| HHC | | | | LE | | | |
| | 220nm,17.4s | | | | | | |
| HHC | | | | LZ | | | |
| | 150nm,14.9s | | | | | | |
| WMQ | Urumqi | 52.60 | 344 | eP | P | 17 30 04.0 | +0.8 |
| MJAR | Matsushiro Arr | 53.13 | 34 | P | P | 17 30 04.6 | -2.7 |
| | 1.7nm,0.9s,baz=210,slow=7.9,SNR=5.1 | | | | | | |
| KSH | Kashi | 53.16 | 332 | P | P | 17 30 06.0 | -1.5 |
| KSH | | | | esP | sP | 17 30 33.7 | +8.4 |
| KSH | | | | PcP | PcP | 17 31 14.3 | -0.9 |
| KSH | | | | S | S | 17 37 26.2 | -9.0 |
| KSH | | | | PMZ | | | |
| | 60nm,4.5s | | | | | | |
| KSH | | | | LN | | | |
| | 99nm,5.6s | | | | | | |
| KSH | | | | LE | | | |
| | 77nm,5.1s | | | | | | |
| KSH | | | | LZ | | | |
| | 150nm,5.4s | | | | | | |
| SONM | Songino Array | 54.28 | 1 | P | P | 17 30 15.1 | -0.4 |
| | 0.3nm,0.4s,baz=178,slow=9.3,SNR=5.4 | | | | | | |
| USRK | Ussuriysk Ar. | 56.24 | 23 | P | P | 17 30 28.5 | -1.0 |
| | 2.6nm,0.6s,baz=214,slow=5.6,SNR=5.5 | | | | | | |
| EKS2 | Erkin-Say | 56.66 | 333 | eP | P | 17 30 32.1 | -0.7 |
| | 24nm,2.6s | | | | | | |
| MKAR | Makanchi Array | 56.88 | 342 | P | P | 17 30 33.4 | -0.7 |
| | 1.2nm,0.4s,baz=148,slow=8.7,SNR=25 | | | | | | |
| GEYT | Alibeck | 62.12 | 319 | P | P | 17 31 10.5 | 0.0 |
| | 1.7nm,0.6s,baz=187,slow=12,SNR=5.6 | | | | | | |
| ZALV | Zalesovo Beam | 62.71 | 347 | P | P | 17 31 13.0 | -1.0 |
| | 1.2nm,0.3s,baz=150,slow=5.4,SNR=9.4 | | | | | | |
| BRVK | Borovoye | 66.32 | 338 | eP | P | 17 31 36.3 | -1.3 |
| MAW | Mawson | 67.08 | 196 | P | P | 17 31 43.7 | +1.5 |
| | 4.5nm,1.0s,baz=32,slow=7.7,SNR=11 | | | | | | |
| MAW | Mawson | 67.08 | 196 | P | P | 17 31 43.9 | +1.7 |
| | baz=67,SNR=7.1 | | | | | | |
| ABKAR | Akbulak array | 68.06 | 330 | eP | P | 17 31 48.3 | -0.4 |
| ARU | Arti | 73.42 | 335 | eP | P | 17 32 20.4 | -0.8 |
| PETK | Petropavlovsk- | 74.35 | 30 | P | P | 17 32 25.5 | -1.1 |
| | 4.9nm,1.1s,baz=217,slow=6.9,SNR=4.2 | | | | | | |
| VNDA | Vanda | 76.68 | 169 | P | P | 17 32 40.2 | +0.5 |
| | 1.5nm,0.9s,baz=302,slow=7.2,SNR=6.3 | | | | | | |
| BOSA | Boshof | 77.74 | 242 | P | P | 17 32 47.1 | +0.4 |
| | 1.2nm,0.6s,baz=258,slow=3.6,SNR=3.3 | | | | | | |
| BRTR | Keskin Array B | 80.03 | 312 | P | P | 17 32 59.5 | +0.4 |
| | 1.0nm,0.6s,baz=141,slow=6.6,SNR=3.6 | | | | | | |
| AKASG | Malin Array Be | 86.13 | 322 | P | P | 17 33 30.2 | +0.1 |
| | 0.2nm,0.3s,baz=90,slow=4.6,SNR=7.0 | | | | | | |
| SNAA | Sanae | 89.21 | 198 | P | P | 17 33 46.8 | +2.1 |
| SNAA | Sanae | 89.21 | 198 | eP | P | 17 33 44.2 | -0.4 |
| | 2.4nm,1.3s | | | | | | |
| FINES | FINESS Array B | 90.48 | 332 | P | P | 17 33 51.4 | +0.8 |
| | 2.2nm,0.9s,baz=256,slow=7.7,SNR=4.3 | | | | | | |
| ARCES | ARCESS Array B | 92.49 | 340 | P | P | 17 33 59.5 | -0.3 |
| | 1.2nm,0.7s,baz=96,slow=2.4,SNR=4.0 | | | | | | |
| TXAR | Lajitas Array | 144.90 | 47 | PKP | PKPdf | 17 40 27.0 | +0.1 |
| | 4.0nm,0.8s,baz=280,slow=1.3,SNR=51 | | | | | | |

**MAN 03 17:22:35, 19°.76N×122°.10E, h11km, mb5.0, ML3.9, MS4.0, 1C-1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGCP | Mt. Cagua | 1.51 | 182 | eP | Pn | 17 23 01.4 | -0.6 |
| SGCP | | | | eS | Sg | 17 23 23.2 | -0.5 |
| PIP | Pasuquin | 2.00 | 225 | ⇓iP | Pn | 17 23 10.1 | +1.3 |
| PIP | | | | eS | Sb | 17 23 37.0 | +0.6 |
| APYP | Conner | 2.06 | 203 | eP | Pn | 17 23 09.9 | +0.4 |
| APYP | | | | eS | Sn | 17 23 31.8 | -3.4 |
| ABRA | Dolores | 2.48 | 212 | eP | Pn | 17 23 16.5 | +1.2 |
| PALP | Palanan | 2.70 | 173 | eP | Pn | 17 23 20.0 | +1.6 |
| PALP | | | | eS | Sn | 17 23 53.5 | +2.4 |
| CAUP | Cauayan | 2.81 | 185 | eP | Pb | 17 23 23.2 | -2.1 |
| BCPH | Baguio City Da | 3.66 | 204 | ⇑iP | Pb | 17 23 39.0 | -1.0 |
| BCPH | | | | i S | Sn | 17 24 09.1 | -6.1 |
| BALP | Baler | 4.03 | 187 | eP | Pn | 17 23 38.5 | +1.8 |

*ISCJB **03** 17:35:05.4±0.6, 23°.54S±0°.05×66°.82W±0°.05, h209km±6km, mb3.9/2, Error ellipse: s-maj=9.7km s-min=4.8km az=42.0*
*SJA **03** 17:35:05.8±1.2, 23°.56S×66°.63W, h222km±16km, ML2.7*
*IDC **03** 17:35:06.8±1.5, 23°.43S×66°.85W, h208km±20km, mb3.6/2, mb1 3.7/6, mb1mx3.4/27, mbtmp4.2/6, Error ellipse: s-maj=27.8km s-min=24.8km az=126.0*
*GUC **03** 17:35:07.8±0.4, 23°.42S×67°.72W, h280km±9km, ML4.6*
**ISC 03 17:35:06.1**±1.0**, 23°.52S**±0°.07×**66°.80W**±0°.06**, h206**km±10km**, n18, σ1ˢ14**/29**, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HJA | Humahuaca | 1.32 | 77 | i P | Pn | 17 35 40.0 | +0.7 |
| SLA | San Lorenzo | 1.68 | 136 | i P | Pn | 17 35 43.6 | +1.4 |
| SLA | | | | IAML | | 17 35 44.4 | |
| | comp=Z,74nm,0.4s | | | | | | |
| SLA | | | | i S | S | 17 36 09.9 | 0.0 |
| AZAP | Zapla | 1.74 | 114 | i P | Pn | 17 35 42.9 | +0.1 |
| AZAP | | | | IAML | | 17 35 44.0 | |
| | comp=Z,295nm,0.3s | | | | | | |
| AZAP | | | | i S | S | 17 36 10.4 | -0.5 |
| YJA | Yavi | 1.79 | 42 | i P | Pn | 17 35 44.4 | +0.8 |
| YJA | | | | i P | Pn | 17 35 44.4 | +0.8 |
| LVC | Limon Verde | 2.14 | 294 | P | Pn | 17 35 47.8 | +1.0 |
| | comp=Z,844nm,0.3s,baz=136,slow=8.6,SNR=172 | | | | | | |
| LVC | | | | S | S | 17 36 18.3 | +0.3 |
| | comp=Z,2μm,0.3s,baz=232,slow=21,SNR=50 | | | | | | |
| ASTB | Santa Barbara | 2.17 | 102 | i P | Pn | 17 35 47.4 | +0.5 |
| ASTB | | | | i S | S | 17 36 17.1 | -1.3 |
| FSA | Cafayete | 2.66 | 165 | i P | Pn | 17 35 53.3 | +0.9 |
| FSA | | | | IAML | | 17 35 53.5 | |
| | comp=Z,15nm,0.3s | | | | | | |
| FSA | | | | i S | S | 17 36 27.9 | -0.2 |
| PB06 | IPOC Station P | 2.68 | 287 | i P | Pn | 17 35 52.8 | +0.2 |
| PB06 | | | | i S | S | 17 36 27.3 | -0.9 |
| PB06 | | | | AML | AML | 17 36 27.7 | |
| | comp=N,1μm,0.2s | | | | | | |
| PB09 | IPOC Station P | 2.83 | 307 | i P | Pn | 17 35 55.7 | +1.3 |
| PB09 | | | | i S | S | 17 36 31.9 | +0.4 |
| PB09 | | | | AML | AML | 17 36 34.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| PB07 | IPOC Station P | 3.36 | 301 | i S | S | 17 36 40.0 | -2.7 |
| PB07 | | | | AML | AML | 17 36 42.5 | |
| | comp=E,986nm,0.3s | | | | | | |
| PB01 | IPOC Station P | 3.50 | 314 | i P | Pn | 17 36 02.6 | +0.5 |
| PB01 | | | | i S | S | 17 36 44.1 | -1.4 |
| PB01 | | | | AML | AML | 17 36 46.8 | |
| | comp=N,390nm,0.3s | | | | | | |
| AHML | Horco Molle | 3.51 | 158 | i P | Pn | 17 36 02.1 | -0.1 |
| AHML | | | | i S | S | 17 36 43.3 | -2.5 |
| CYA | Choya | 4.98 | 170 | i P | Pn | 17 36 19.9 | -0.6 |
| LPAZ | La Paz | 7.30 | 350 | P | Pn | 17 36 51.6 | +0.6 |
| | comp=N,0.8nm,0.3s,baz=138,slow=2.6,SNR=38 | | | | | | |
| LPAZ | | | | S | S | 17 38 12.6 | -1.6 |
| | comp=N,0.2nm,0.3s,baz=241,slow=24,SNR=2.4 | | | | | | |
| SIV | San Ignacio | 9.23 | 37 | P | Pn | 17 37 14.1 | -1.3 |
| | comp=N,2.5nm,0.3s,baz=229,slow=11,SNR=29 | | | | | | |
| BDFB | Brasilia | 19.34 | 70 | P | P | 17 39 17.2 | +0.9 |
| | comp=N,0.6nm,0.3s,baz=226,slow=11,SNR=13 | | | | | | |
| PTGA | Pitinga | 23.60 | 17 | P | P | 17 39 58.4 | -0.1 |
| | comp=N,1.8nm,0.3s,baz=184,slow=10,SNR=7.6 | | | | | | |
| TORD | Torodi Ar. Bea | 76.23 | 69 | P | P | 17 46 32.6 | +0.4 |
| | comp=N,0.4nm,0.3s,baz=258,slow=5.7,SNR=11 | | | | | | |

*AUST **03** 17:34:49.9±99.0, 0°.90S×135°.37E, h0km±5km, Error ellipse: s-maj=9.8km s-min=1.9km az=232.0*
*IDC **03** 17:35:43.8±3.2, 4°.79S×135°.26E, h0km, mb3.6/1, mb1 3.9/3, mb1mx3.4/32, mbtmp3.7/3, ML3.7/2, Error ellipse: s-maj=138.8km s-min=32.4km az=80.0*
**ISC 03 17:35:46.8**±2.6**, 5°.1S**±0°.1×**134°.8E**±0°.6**, h10**km**, n6, σ2ˢ18**/6**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDU | Kakadu | 7.93 | 197 | P | Pn | 17 37 43.8 | +1.5 |
| | baz=12,SNR=14 | | | | | | |
| MTN | Manton Dam | 8.54 | 205 | P | Pn | 17 37 51.1 | +0.4 |
| | baz=13,SNR=38 | | | | | | |
| KNRA | Kununurra | 12.11 | 209 | P | Pn | 17 38 36.1 | -3.4 |
| | baz=16,SNR=52 | | | | | | |
| WRA | Warramunga Arr | 14.81 | 182 | Pn | Pn | 17 39 16.9 | +0.4 |
| | 0.2nm,0.3s,baz=2.6,slow=13,SNR=14 | | | | | | |
| WRA | | | | Sn | Sn | 17 41 58.2 | -2.7 |
| | 0.2nm,0.3s,baz=1.6,slow=22,SNR=5.0 | | | | | | |
| ASAR | Alice Springs | 18.53 | 183 | P | Pn | 17 40 05.8 | +1.9 |
| | 0.3nm,0.3s,baz=3.4,slow=6.7,SNR=28 | | | | | | |
| MKAR | Makanchi Array | 69.31 | 324 | P | P | 17 46 53.6 | -0.9 |
| | 0.3nm,0.5s,baz=116,slow=6.6,SNR=4.3 | | | | | | |

*ISCJB **03** 17:39:49.2±0.8, 51°.48N±0°.04×16°.14E±0°.04, h0km, Error ellipse: s-maj=5.9km s-min=3.3km az=12.6*
*CSEM **03** 17:39:50.6±0.5, 51°.47N×16°.13E, h2km, ML3.1/7, Error ellipse: s-maj=8.0km s-min=4.3km az=177.0*
*PRU **03** 17:39:51.9, 51°.44N×16°.12E, h0km*
**ISC 03 17:39:50.7**±1.2**, 51°.49N**±0°.06×**16°.13E**±0°.03**, h0**km**, n26, σ0ˢ51**/52**, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.66 | 171 | ePg | Pg | 17 40 03.7 | +0.5 |
| KSP | | | | eSg | Sg | 17 40 12.8 | +1.1 |
| KSP | Ksiaz | 0.66 | 171 | ePg | Pg | 17 40 03.7 | +0.5 |
| KSP | | | | eSg | Sg | 17 40 12.8 | +1.1 |
| UPC | Upice | 0.99 | 184 | ePG | Pg | 17 40 09.8 | +0.2 |
| UPC | | | | eSG | Sg | 17 40 22.9 | +0.5 |
| | comp=Z,25nm,0.2s | | | | | | |
| UPC | Upice | 0.99 | 184 | Pg | Pg | 17 40 09.8 | +0.2 |
| UPC | | | | Sg | Sg | 17 40 22.9 | +0.5 |
| | 25nm,0.2s | | | | | | |
| DPC | Dobruska-Polom | 1.15 | 174 | ePG | Pg | 17 40 12.5 | -0.2 |
| DPC | | | | eSG | Sg | 17 40 27.8 | +0.3 |
| | comp=Z,12nm,0.2s | | | | | | |
| DPC | Dobruska-Polom | 1.15 | 174 | Pg | Pg | 17 40 12.5 | -0.2 |
| DPC | | | | Sg | Sg | 17 40 27.8 | +0.3 |
| | 12nm,0.2s | | | | | | |
| PVCC | Panska Ves | 1.38 | 226 | ePG | Pb | 17 40 17.4 | +0.1 |
| PVCC | | | | eSG | Sg | 17 40 34.8 | -0.1 |
| | comp=Z,54nm,0.2s | | | | | | |
| PVCC | Panska Ves | 1.38 | 226 | Pg | Pb | 17 40 17.4 | +0.1 |
| PVCC | | | | Sg | Sg | 17 40 34.8 | -0.1 |
| | 54nm,0.2s | | | | | | |
| KRLC | Kraliky | 1.48 | 163 | ePG | Pn | 17 40 18.5 | -0.1 |
| KRLC | | | | eSG | Sg | 17 40 37.3 | -0.8 |
| KRLC | Kraliky | 1.48 | 163 | Pg | Pn | 17 40 18.5 | -0.1 |
| KRLC | | | | Sg | Sg | 17 40 37.3 | -0.8 |
| BRG | Berggiesshubel | 1.51 | 247 | PG | Pb | 17 40 19.5 | 0.0 |
| BRG | | | | SG | Sn | 17 40 39.8 | +0.5 |
| | 23nm,0.5s | | | | | | |
| PRA | Prague | 1.79 | 218 | ePG | Pg | 17 40 25.3 | +0.4 |
| PRA | | | | eSG | Sg | 17 40 47.6 | -0.4 |
| PRA | Prague | 1.79 | 218 | Pg | Pg | 17 40 25.3 | +0.4 |
| PRA | | | | Sg | Sg | 17 40 47.6 | -0.4 |
| GOPC | GO Pecny, Ondr | 1.80 | 209 | ePN | Pn | 17 40 22.6 | -0.3 |
| GOPC | | | | ePG | Pb | 17 40 24.6 | +0.2 |
| GOPC | | | | eSG | Sg | 17 40 48.0 | -0.3 |
| | comp=Z,5.4nm,0.2s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.80 | 209 | Pn | Pn | 17 40 22.6 | -0.3 |
| PRU | Pruhonice | 1.81 | 214 | ePG | Pb | 17 40 24.7 | 0.0 |
| PRU | | | | eSG | Sg | 17 40 48.6 | -0.2 |
| | comp=Z,16nm,0.4s | | | | | | |
| PRU | Pruhonice | 1.81 | 214 | Pg | Pb | 17 40 24.7 | 0.0 |
| PRU | | | | Sg | Sg | 17 40 48.6 | -0.2 |
| | 16nm,0.4s | | | | | | |
| MORC | Moravsky Berou | 1.94 | 152 | ePn | Pn | 17 40 24.3 | -0.6 |
| MORC | | | | eSg | Sb | 17 40 51.6 | 0.0 |
| CLL | Collm | 1.97 | 266 | ePg | Pb | 17 40 27.0 | -0.3 |
| CLL | | | | i | | 17 40 31.3 | |
| CLL | | | | eSg | Sg | 17 40 54.0 | +0.1 |
| | comp=Z,8.0nm,0.4s | | | | | | |
| CLL | | | | Lm | MLR | 17 59 00.0 | |
| | comp=Z,300nm,18.7s | | | | | | |
| OKC | Ostrava-Krasne | 2.10 | 141 | ePG | Pb | 17 40 29.1 | -0.4 |
| OKC | | | | eSG | Sg | 17 40 57.2 | -0.7 |
| | comp=Z,7.1nm,0.3s | | | | | | |
| OKC | Ostrava-Krasne | 2.10 | 141 | Pg | Pb | 17 40 29.1 | -0.4 |
| OKC | | | | Sg | Sg | 17 40 57.2 | -0.7 |
| | comp=Z,7.1nm,0.3s | | | | | | |
| VRAC | Vranov | 2.21 | 172 | ePn | Pn | 17 40 28.2 | -0.3 |
| VRAC | | | | eSg | Sb | 17 40 59.0 | -0.3 |
| OJC | Ojcow | 2.65 | 117 | ePg | Pg | 17 40 41.5 | +0.1 |
| OJC | | | | eSg | Sg | 17 41 16.7 | +0.9 |
| OJC | Ojcow | 2.65 | 117 | ePg | Pg | 17 40 41.5 | +0.1 |
| OJC | | | | eSg | Sg | 17 41 16.7 | +0.9 |
| KHC | Kasperske Hory | 2.87 | 216 | ePN | Pn | 17 40 37.8 | 0.0 |
| KHC | | | | ePG | Pb | 17 40 43.4 | +0.6 |
| KHC | | | | eSG | Sg | 17 41 21.3 | -1.7 |
| | comp=Z,3.8nm,0.2s | | | | | | |
| KHC | Kasperske Hory | 2.87 | 216 | Pn | Pn | 17 40 37.8 | 0.0 |

*IDC **03** 17:46:10.1±1.0, 2°.97N×128°.39E, h0km, mb3.7/5, mb1 3.9/6, mb1mx3.5/42, mbtmp3.7/6, ML3.3/1, Error ellipse: s-maj=55.5km s-min=17.5km az=73.0*
*ISCJB **03** 17:46:12.9±0.9, 3°.1N±0°.1×128°.9E±0°.3, h33km, mb3.7/5, Error ellipse: s-maj=43.9km s-min=9.9km az=155.1*
**ISC 03 17:46:14.9**±1.1**, 3°.0N**±0°.2×**128°.7E**±0°.3**, h35**km**, n6, σ1ˢ00**/7**, mb3.7**/5**, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.60 | 147 | Pn | Pn | 17 47 22.4 | +0.3 |
| | 1.3nm,0.3s,baz=113,slow=12,SNR=18 | | | | | | |
| SIJI | | | | Sn | Sn | 17 48 13.2 | -1.1 |
| | 2.5nm,0.3s,baz=178,slow=21,SNR=4.1 | | | | | | |
| WRA | Warramunga Arr | 23.45 | 167 | P | P | 17 51 21.4 | 0.0 |
| | 0.6nm,0.4s,baz=342,slow=11,SNR=20 | | | | | | |
| ASAR | Alice Springs | 26.97 | 169 | P | P | 17 51 54.9 | +1.3 |
| | 0.3nm,0.5s,baz=356,slow=7.9,SNR=13 | | | | | | |
| MJAR | Matsushiro Arr | 34.51 | 14 | P | P | 17 53 00.5 | +0.6 |
| | 0.9nm,0.5s,baz=184,slow=10,SNR=6.9 | | | | | | |
| SONM | Songino Array | 48.65 | 340 | P | P | 17 54 54.9 | -0.7 |
| | 0.4nm,0.6s,baz=156,slow=7.4,SNR=4.1 | | | | | | |
| MKAR | Makanchi Array | 59.30 | 325 | P | P | 17 56 13.0 | -0.3 |
| | 1.1nm,0.5s,baz=124,slow=8.0,SNR=17 | | | | | | |

*IDC **03** 17:46:51.7±0.7, 18°.36S×172°.46W, h0km, mb4.1/10, mb1 4.4/10, mb1mx4.1/33, mbtmp4.1/10, MS3.2/5, Ms1 3.2/5, ms1mx3.0/23, Error ellipse: s-maj=29.3km s-min=18.4km az=144.0*
*ISCJB **03** 17:46:54.9±0.6, 18°.3S±0°.1×172°.6W±0°.1, h35km, mb4.3/16, MS3.2/3, Error ellipse: s-maj=20.5km s-min=13.6km az=30.4*
*NEIC **03** 17:46:56.6±0.6, 18°.21S×172°.49W, h35km, mb4.5/3, Error ellipse: s-maj=20.3km s-min=13.1km az=118.0*
**ISC 03 17:46:57.0**±0.7**, 18°.4S**±0°.1×**172°.5W**±0°.2**, h35**km**, n40, σ0ˢ95**/21**, mb4.4**/16**, MS3.4**/3**, 1D, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 4.48 | 9 | Pn | Pn | 17 47 56.8 | -5.6 |
| | 4.6nm,0.3s,baz=230,slow=13,SNR=8.1 | | | | | | |
| AFI | | | | Sn | Sn | 17 48 42.7 | -11 |
| | 77nm,0.3s,baz=144,slow=22,SNR=15 | | | | | | |
| AFI | | | | LR | LR | 17 49 35.7 | |
| | comp=Z,146nm,18.1s,baz=197,slow=37 | | | | | | |
| RAR | Rarotonga | 12.30 | 105 | Pn | Pn | 17 49 39.2 | -10 |
| | 5.5nm,0.3s,baz=237,slow=14,SNR=3.6 | | | | | | |
| RAR | | | | LR | LR | 17 53 02.2 | |
| | comp=Z,143nm,19.6s,baz=250,slow=30 | | | | | | |
| PAE | Paea | 21.79 | 92 | eT | T | 18 13 41.3 | |
| | 23nm,0.3s | | | | | | |
| PPT2 | Papeete2 | 21.80 | 92 | eLR | LR | 17 56 28.7 | |
| | 215nm,28.5s | | | | | | |
| PPT2 | Papeete2 | 21.80 | 92 | eT | T | 18 13 42.9 | |
| | 13nm,0.4s | | | | | | |
| PPT | Papeete | 21.81 | 92 | LR | LR | 17 58 10.4 | |
| | comp=Z,32nm,18.3s,baz=244,slow=31 | | | | | | |
| URZ | Urewera | 21.81 | 202 | P | P | 17 51 45.7 | -0.3 |
| | 6.8nm,0.7s,baz=273,slow=2.1,SNR=3.0 | | | | | | |
| URZ | Urewera | 21.81 | 202 | eP | P | 17 51 46.7 | +0.7 |
| TBI | Tubuai | 22.07 | 107 | eLR | LR | 17 56 42.1 | |
| | 220nm,34.0s | | | | | | |
| TBI | Tubuai | 22.07 | 107 | eT | T | 18 14 03.8 | |
| | 8.4nm,0.3s | | | | | | |
| SNZO | South Karori | 25.37 | 203 | eP | P | 17 52 20.4 | -0.4 |
| | 14nm,0.9s | | | | | | |
| HNR | Honiara | 28.16 | 285 | LR | LR | 18 02 05.7 | |
| | comp=Z,104nm,21.8s,baz=184,slow=32 | | | | | | |
| RPZ | Rata Peaks | 28.83 | 205 | P | P | 17 52 59.6 | +7.7 |
| | 5.6nm,0.5s,baz=125,slow=21,SNR=3.0 | | | | | | |
| CTA | Charters Tower | 38.93 | 261 | P | P | 17 54 18.9 | -0.9 |
| | 4.1nm,0.6s,baz=77,slow=11,SNR=11 | | | | | | |
| CTAO | Charters Tower | 38.93 | 261 | eP | P | 17 54 18.5 | -1.3 |
| H11S2 | WAKE ISLAND Hy | 41.94 | 330 | T | T | 18 40 19.8 | |
| | baz=149,slow=76,SNR=32 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 41.96 | 330 | T | T | 18 40 08.7 | |
| | baz=149,slow=76,SNR=26 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 41.96 | 330 | T | T | 18 40 19.0 | |
| | baz=149,slow=76,SNR=27 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.91 | 331 | T | T | 18 41 28.5 | |
| | baz=150,slow=76,SNR=34 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.91 | 331 | T | T | 18 41 28.8 | |
| | baz=150,slow=76,SNR=31 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.92 | 331 | T | T | 18 41 29.8 | |
| | baz=150,slow=76,SNR=33 | | | | | | |
| WRAB | Tennant Creek | 50.07 | 259 | eP | P | 17 55 48.4 | -0.4 |
| | 1.7nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 50.08 | 259 | P | P | 17 55 48.0 | -0.8 |
| | 3.0nm,0.9s,baz=96,slow=7.6,SNR=46 | | | | | | |
| ASAR | Alice Springs | 50.09 | 254 | P | P | 17 55 48.6 | -0.3 |
| | 4.3nm,0.6s,baz=88,slow=7.1,SNR=47 | | | | | | |
| VNDA | Vanda | 60.54 | 186 | P | P | 17 57 03.8 | +0.6 |
| | 0.7nm,0.9s,baz=16,slow=9.7,SNR=3.8 | | | | | | |
| H06S1 | SOCORRO T | 70.79 | 62 | T | T | 19 15 23.2 | |
| | SNR=4.7 | | | | | | |
| H06E1 | SOCORRO T-PHAS | 70.83 | 62 | T | T | 19 15 21.4 | |
| | SNR=14 | | | | | | |
| QSPA | South Pole Qui | 71.70 | 180 | eP | P | 17 58 14.7 | -0.6 |
| | 6.1nm,1.1s | | | | | | |
| NVAR | Mina Array Bea | 75.95 | 41 | P | P | 17 58 40.1 | -0.5 |
| | 0.8nm,0.8s,baz=235,slow=11,SNR=6.2 | | | | | | |
| LEM | Lembang | 78.32 | 267 | P | P | 17 58 56.0 | +1.5 |
| | 31nm,0.8s,baz=327,slow=11,SNR=8.0 | | | | | | |
| KSM | Kuching | 78.33 | 275 | P | P | 17 58 53.3 | -1.0 |
| | 28nm,1.1s | | | | | | |
| USRK | Ussuriysk Ar. | 80.26 | 323 | LR | LR | 18 27 01.0 | |
| | comp=Z,17nm,20.8s,baz=55,slow=30 | | | | | | |
| TXAR | Lajitas Array | 81.55 | 55 | P | P | 17 59 11.9 | +0.4 |
| | 1.3nm,0.8s,baz=220,slow=9.6,SNR=13 | | | | | | |
| ILAR | Eielson Array | 85.17 | 11 | P | P | 17 59 28.7 | -0.4 |
| | 1.3nm,0.9s,baz=219,slow=4.2,SNR=7.1 | | | | | | |
| MAW | Mawson | 85.28 | 198 | P | P | 17 59 30.2 | +0.4 |
| | 2.2nm,0.6s,baz=110,slow=6.8,SNR=6.8 | | | | | | |
| CMAR | Chiang Mai Arr | 94.36 | 288 | P | P | 18 00 15.9 | +2.2 |
| | 0.3nm,0.9s,baz=333,slow=4.0,SNR=4.2 | | | | | | |
| CLL | Collm | 146.84 | 354 | ⇓iPKPbc | PKPab | 18 06 35.9 | -0.8 |
| | comp=Z,7.0nm,0.9s | | | | | | |
| BRTR | Keskin Array B | 148.97 | 319 | PKPbc | PKPbc | 18 06 42.2 | +0.5 |
| | comp=Z,3.0nm,0.7s,baz=121,slow=2.7,SNR=13 | | | | | | |
| GERES | GERESS Array B | 149.18 | 352 | PKPbc | PKPbc | 18 06 42.5 | +0.6 |
| | comp=Z,1.6nm,0.7s,baz=5.7,slow=4.0,SNR=11 | | | | | | |
| TORD | Torodi Ar. Bea | 172.37 | 132 | PKPab | PKPab | 18 08 26.5 | -1.0 |
| | comp=Z,0.6nm,0.7s,baz=265,slow=4.9,SNR=4.9 | | | | | | |

*ISN **03** 17:48:26.7±0.3, 47°.09N×28°.98E, h6km±999km*
*ATH **03** 17:49:01.2, 40°.83N×28°.27E, h25km, MD3.9/17*
*NEIC **03** 17:49:03.0, 40°.85N×28°.11E, h11km, mb4.4/5, ML4.4(ISK), ML4.5(DDA), After ISK.*
*NEIC Felt at Istanbul, Ortakoy, Sultanbeyli and Yalova. Also felt at Likion, Greece.*
*ISCJB **03** 17:49:02.2±0.3, 40°.85N±0°.01×28°.11E±0°.02, h5km±2km, mb3.8/23, MS3.5/17, Error ellipse: s-maj=2.3km s-min=1.9km az=173.9*
*MOS **03** 17:49:03.0±1.7, 40°.85N×28°.27E, h12km, mb4.0/14, Error ellipse: s-maj=6.6km s-min=3.6km az=84.9*
*THE **03** 17:49:03.6, 40°.87N×28°.23E, h15km±3km, ML3.9/8, Error ellipse: s-maj=3.5km s-min=0.5km az=66.0*
*CSEM **03** 17:49:03.1±0.1, 40°.85N×28°.12E, h5km, mb4.0/15, Error ellipse: s-maj=2.1km s-min=1.8km az=161.0*
*IDC **03** 17:49:04.4±0.8, 40°.87N×28°.54E, h0km, mb3.6/13, mb1 3.8/18, mb1mx3.7/39, mbtmp3.6/18, ML3.4/5, MS3.4/25, Ms1 3.4/25, ms1mx3.3/40, Error ellipse: s-maj=16.7km s-min=9.9km az=41.0*
*SOF **03** 17:49:04.8, 40°.95N×27°.90E, h2km, MD4.0*
*DDA **03** 17:49:04.1, 40°.82N×28°.19E, h7km, Ml4.5*
*PRU **03** 17:49:04.8, 41°.51N×29°.35E, h0km, M4.4*
*BJI **03** 17:49:06.7, 40°.80N×28°.20E, h2km, mb4.4/7, mB4.7/3*
**ISC 03 17:49:03.5**±1.0**, 40°.83N**±0°.02×**28°.18E**±0°.01**, h3**km±7km**, n433, σ1ˢ44**/430**, mb3.9**/23**, MS3.5**/17**, 44C-20D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SLVT | Silivri | 0.40 | 4 | *i* P | Pg | 17 49 09.7 | -1.4 |
| SLVT | | | | *i* S | Sg | 17 49 13.7 | -2.6 |
| CRLT | Corlu | 0.45 | 312 | Pg | Pg | 17 49 10.7 | -1.3 |
| CRLT | Corlu | 0.45 | 312 | Pg | Pg | 17 49 10.7 | -1.3 |
| CTKS | Kestanelik-??a | 0.47 | 32 | Pg | Pg | 17 49 13.3 | +0.7 |
| CTKS | Kestanelik-??a | 0.47 | 32 | Pg | Pg | 17 49 13.3 | +0.7 |
| MRMT | Marmara Adasi | 0.50 | 243 | Pg | Pg | 17 49 12.3 | -0.7 |
| MRMT | Marmara Adasi | 0.50 | 243 | Pg | Pg | 17 49 12.3 | -0.7 |
| TKR | Tekirdag | 0.51 | 288 | Pg | Pg | 17 49 12.9 | -0.3 |
| TKR | Tekirdag | 0.51 | 288 | Pg | Pg | 17 49 12.9 | -0.3 |
| BNT | Bandirma | 0.51 | 202 | P | Pg | 17 49 13.7 | +0.4 |
| BNT | Bandirma | 0.51 | 202 | Pg | Pg | 17 49 13.7 | +0.4 |
| BNT | Bandirma | 0.51 | 202 | P | Pg | 17 49 13.7 | +0.4 |
| EDC | Edincik | 0.54 | 206 | P | Pg | 17 49 14.1 | +0.3 |
| EDC | Edincik | 0.54 | 206 | Pg | Pg | 17 49 14.1 | +0.3 |
| EDC | Edincik | 0.54 | 206 | P | Pg | 17 49 14.1 | +0.3 |
| BGKT | Bogazkoy | 0.57 | 52 | Pg | Pb | 17 49 15.3 | -0.8 |
| BGKT | Bogazkoy | 0.57 | 52 | Pg | Pb | 17 49 15.3 | -0.8 |
| ARMT | Armutlu | 0.58 | 117 | Pg | Pb | 17 49 15.8 | -0.6 |
| ARMT | Armutlu | 0.58 | 117 | Pg | Pb | 17 49 15.8 | -0.6 |
| CTYL | Yal??k??y-??at | 0.65 | 8 | Pg | Pg | 17 49 16.1 | +0.2 |
| CTYL | Yal??k??y-??at | 0.65 | 8 | Pg | Pg | 17 49 16.1 | +0.2 |
| ISK | Istanbul-Kandi | 0.71 | 71 | P | Pb | 17 49 17.8 | -0.6 |
| ISK | Istanbul-Kandi | 0.71 | 71 | P | Pg | 17 49 16.6 | -0.4 |
| ISK | | | | S | Sg | 17 49 26.0 | -0.2 |
| ISK | Istanbul-Kandi | 0.71 | 71 | Pg | Pb | 17 49 17.8 | -0.6 |
| ISK | Istanbul-Kandi | 0.71 | 71 | P | Pb | 17 49 17.8 | -0.6 |
| ISK | | | | S | Sg | 17 49 26.0 | -0.2 |
| BUY | Buyukada | 0.71 | 88 | *i* P | Pb | 17 49 18.0 | -0.5 |
| BUY | Buyukada | 0.71 | 88 | P | Pb | 17 49 18.0 | -0.5 |
| BUY | | | | P | Pn | 17 49 28.1 | +7.7 |
| SART | Tekirdag | 0.77 | 260 | *i* P | Pg | 17 49 17.5 | -0.7 |
| SART | | | | *i* S | Sg | 17 49 28.0 | -0.2 |
| SART | Tekirdag | 0.77 | 260 | P | Pg | 17 49 17.5 | -0.7 |
| SART | | | | S | Sg | 17 49 28.0 | -0.2 |
| RKY | Sarkoy-Tekirda | 0.77 | 260 | Pg | Pg | 17 49 17.5 | -0.8 |
| RKY | Sarkoy-Tekirda | 0.77 | 260 | Pg | Pg | 17 49 17.5 | -0.8 |
| KRBG | Karabiga-Canak | 0.80 | 237 | Pg | Pg | 17 49 18.3 | -0.5 |
| KRBG | Karabiga-Canak | 0.80 | 237 | Pg | Pg | 17 49 18.3 | -0.5 |
| GEMT | Gemlik | 0.87 | 117 | Pg | Pb | 17 49 20.8 | -0.4 |
| GEMT | Gemlik | 0.87 | 117 | Pg | Pb | 17 49 20.8 | -0.4 |
| GONE | Gonen-Balikesi | 0.87 | 206 | Pg | Pg | 17 49 20.1 | 0.0 |
| GONE | Gonen-Balikesi | 0.87 | 206 | Pg | Pg | 17 49 20.1 | 0.0 |
| GBZT | Gebze | 0.96 | 92 | P | Pb | 17 49 22.4 | -0.4 |
| GBZT | | | | S | Sb | 17 49 35.7 | -0.2 |
| GBZT | Gebze | 0.96 | 92 | P | Pb | 17 49 22.4 | -0.4 |
| GBZT | | | | S | Sb | 17 49 35.7 | -0.2 |
| IGD | Bursa | 0.97 | 126 | P | Pb | 17 49 22.4 | -0.4 |
| IGD | | | | S | Sb | 17 49 36.0 | 0.0 |
| ULDT | Uludag | 1.01 | 133 | *i* P | Pg | 17 49 23.0 | +0.3 |
| ULDT | | | | *i* S | Sg | 17 49 35.8 | 0.0 |
| ULDT | Uludag | 1.01 | 133 | P | Pg | 17 49 23.0 | +0.3 |
| ULDT | | | | S | Sg | 17 49 35.8 | 0.0 |
| IZI | Iznik | 1.10 | 116 | Pn | Pb | 17 49 25.2 | 0.0 |
| IZI | Iznik | 1.10 | 116 | Pn | Pb | 17 49 25.2 | 0.0 |
| SILT | Sile | 1.16 | 73 | Pn | Pb | 17 49 25.8 | -0.3 |
| SILT | Sile | 1.16 | 73 | Pn | Pb | 17 49 25.8 | -0.3 |
| DURS | Dursunbey | 1.25 | 169 | *i* P | Pg | 17 49 27.5 | +0.1 |
| DURS | | | | *i* S | Sb | 17 49 44.4 | +0.1 |
| DURS | Dursunbey | 1.25 | 169 | P | Pg | 17 49 27.5 | +0.1 |
| DURS | | | | S | Sb | 17 49 44.4 | +0.1 |
| ADVT | Abdulvahap | 1.25 | 108 | Pn | Pg | 17 49 27.4 | -0.1 |
| ADVT | Abdulvahap | 1.25 | 108 | Pn | Pg | 17 49 27.4 | -0.1 |
| DST | Dursunbey | 1.27 | 164 | P | Pn | 17 49 28.5 | +0.3 |
| DST | Dursunbey | 1.27 | 164 | Pn | Pn | 17 49 28.5 | +0.3 |
| DST | Dursunbey | 1.27 | 164 | P | Pn | 17 49 28.5 | +0.3 |
| ALN | Alexandroupoli | 1.62 | 273 | *e*PN | Pn | 17 49 31.1 | -1.8 |
| ALN | Alexandroupoli | 1.62 | 273 | P | Pn | 17 49 31.0 | -1.8 |
| ALN | | | | S | Sn | 17 49 52.2 | -2.0 |
| ALN | Alexandroupoli | 1.62 | 273 | *e*Pn | Pn | 17 49 31.1 | -1.8 |
| ALN | | | | S | Sn | 17 49 52.2 | -2.0 |
| EZN | Ezine | 1.74 | 235 | P | Pn | 17 49 33.2 | -1.3 |
| EZN | Ezine | 1.74 | 235 | Pn | Pn | 17 49 33.2 | -1.3 |
| EZN | Ezine | 1.74 | 235 | P | Pn | 17 49 33.2 | -1.3 |
| DEMI | Demirci | 1.83 | 167 | *i* P | Pn | 17 49 35.2 | -0.8 |
| DEMI | | | | *i* S | Sn | 17 49 59.2 | -0.5 |
| DEMI | Demirci | 1.83 | 167 | P | Pn | 17 49 35.2 | -0.8 |
| DEMI | | | | S | Sn | 17 49 59.2 | -0.5 |
| BOZC | Bozcaada | 1.90 | 239 | P | Pn | 17 49 36.1 | -0.6 |
| BOZC | | | | P | Pn | 17 49 36.1 | -0.6 |
| BOZC | | | | S | Sb | 17 50 02.4 | -0.5 |
| BOZC | | | | S | Sb | 17 50 02.4 | -0.5 |
| AYVA | Ayvalik | 1.90 | 217 | *i* P | Pn | 17 49 35.5 | -1.3 |
| AYVA | | | | *i* S | Sb | 17 50 03.8 | +0.9 |
| AYVA | Ayvalik | 1.90 | 217 | P | Pn | 17 49 35.5 | -1.3 |
| AYVA | | | | S | Sb | 17 50 03.8 | +0.9 |
| AKHS | Akhisar | 1.97 | 188 | *i* P | Pn | 17 49 36.5 | -1.2 |
| AKHS | | | | *i* S | Sb | 17 50 05.6 | +0.7 |
| AKHS | Akhisar | 1.97 | 188 | P | Pn | 17 49 36.5 | -1.2 |
| AKHS | | | | S | Sb | 17 50 05.5 | +0.7 |
| BORA | Eskisehir | 1.98 | 118 | *i* P | Pn | 17 49 38.3 | +0.3 |
| BORA | | | | *i* S | Sg | 17 50 06.4 | -0.7 |
| BORA | Eskisehir | 1.98 | 118 | P | Pn | 17 49 38.3 | +0.3 |
| BORA | | | | S | Sg | 17 50 06.4 | -0.7 |
| RDO | Rodhopi | 2.02 | 280 | *e*PB | Pn | 17 49 37.2 | -1.2 |
| RDO | Rodhopi | 2.02 | 280 | P | Pn | 17 49 37.0 | -1.4 |
| RDO | | | | S | Sn | 17 50 02.4 | -1.8 |
| RDO | Rodhopi | 2.02 | 280 | P | Pn | 17 49 37.0 | -1.4 |
| RDO | | | | S | Sn | 17 50 02.4 | -1.8 |
| JMB | Yambol | 2.02 | 324 | P | Pn | 17 49 38.0 | -0.4 |
| JMB | | | | Pg | Pg | 17 49 42.0 | -0.2 |
| JMB | Yambol | 2.02 | 324 | P | Pn | 17 49 38.0 | -0.4 |
| SMTH | Samothraki Isl | 2.04 | 261 | *e*PN | Pn | 17 49 37.1 | -1.7 |
| SMTH | Samothraki Isl | 2.04 | 261 | P | Pn | 17 49 36.8 | -2.0 |
| SMTH | | | | S | Sn | 17 50 03.1 | -1.7 |
| SMTH | Samothraki Isl | 2.04 | 261 | P | Pn | 17 49 36.8 | -2.0 |
| SMTH | Samothraki Isl | 2.04 | 261 | *e*Pn | Pn | 17 49 37.1 | -1.7 |
| SMTH | | | | S | Sn | 17 50 03.1 | -1.7 |
| PRK | Paraskevi | 2.16 | 223 | *e*PB | Pn | 17 49 39.1 | -1.1 |
| PRK | Paraskevi | 2.16 | 223 | P | Pn | 17 49 38.9 | -1.3 |
| PRK | | | | S | Sn | 17 50 06.6 | -0.9 |
| PRK | Paraskevi | 2.16 | 223 | P | Pn | 17 49 38.9 | -1.3 |
| PRK | | | | S | Sn | 17 50 06.6 | -0.9 |
| BTAS | Taskesti | 2.16 | 96 | *i* P | Pn | 17 49 41.5 | +1.1 |
| BTAS | Taskesti | 2.16 | 96 | P | Pn | 17 49 41.5 | +1.1 |
| BTAS | | | | S | Sg | 17 50 12.4 | -0.6 |
| KDZ | Kurdzhali | 2.23 | 292 | P | Pn | 17 49 40.7 | -0.7 |
| KDZ | | | | Pg | Pg | 17 49 45.6 | -0.7 |
| KDZ | Kurdzhali | 2.23 | 292 | P | Pn | 17 49 40.7 | -0.7 |
| DIM | Dimitrovgrad | 2.33 | 302 | P | Pn | 17 49 42.0 | -0.7 |
| DIM | | | | Pg | Pb | 17 49 46.0 | -0.1 |
| DIM | Dimitrovgrad | 2.33 | 302 | P | Pn | 17 49 42.0 | -0.7 |
| ROIA | ROIAK | 2.34 | 346 | P | Pn | 17 49 42.9 | +0.1 |
| SIGR | SIGRI | 2.41 | 228 | *e*PN | Pn | 17 49 42.4 | -1.3 |
| SIGR | SIGRI | 2.41 | 228 | P | Pn | 17 49 42.2 | -1.5 |
| SIGR | | | | S | Sn | 17 50 12.5 | -1.2 |
| SIGR | SIGRI | 2.41 | 228 | *e*Pn | Pn | 17 49 42.4 | -1.3 |
| SIGR | | | | S | Sn | 17 50 12.5 | -1.2 |
| PRD | Provadia | 2.44 | 347 | P | Pb | 17 49 48.5 | +0.6 |
| LIA | Limnos Island | 2.47 | 249 | *e*PN | Pn | 17 49 42.9 | -1.7 |
| LIA | Limnos Island | 2.47 | 249 | P | Pn | 17 49 42.9 | -1.7 |
| LIA | | | | S | Sn | 17 50 13.7 | -1.5 |
| LIA | Limnos Island | 2.47 | 249 | P | Pn | 17 49 42.9 | -1.7 |
| LIA | | | | S | Sn | 17 50 13.7 | -1.5 |
| IZM | Izmir | 2.53 | 196 | P | Pn | 17 49 45.2 | -0.3 |
| IZM | Izmir | 2.53 | 196 | Pn | Pn | 17 49 45.2 | -0.3 |
| IZM | Izmir | 2.53 | 196 | P | Pn | 17 49 45.2 | -0.3 |
| KHAL | Karahalli | 2.66 | 157 | *i* P | Pn | 17 49 46.5 | -0.8 |
| KHAL | Karahalli | 2.66 | 157 | P | Pn | 17 49 46.5 | -0.8 |
| KHAL | | | | S | Sb | 17 50 26.4 | +1.5 |
| AUMIH | MIHALICIK | 2.71 | 110 | P | Pn | 17 49 47.6 | -0.3 |
| AUMIH | | | | S | Sg | 17 50 29.0 | -1.4 |
| RZN | Rozhen | 2.75 | 289 | P | Pn | 17 49 47.2 | -1.3 |
| RZN | | | | Pg | Pb | 17 49 53.7 | +0.4 |
| RZN | Rozhen | 2.75 | 289 | P | Pn | 17 49 47.2 | -1.3 |
| KAVA | Kavala | 2.78 | 275 | P | Pn | 17 49 47.5 | -1.3 |
| KAVA | | | | S | Sn | 17 50 20.9 | -2.0 |
| KAVA | Kavala | 2.78 | 275 | P | Pn | 17 49 47.5 | -1.3 |
| KAVA | | | | S | Sn | 17 50 20.9 | -2.0 |
| PSN | Preselentsi | 2.85 | 0 | P | Pn | 17 49 50.0 | +0.2 |
| PSN | Preselentsi | 2.85 | 0 | P | Pn | 17 49 50.0 | +0.2 |
| PLD | Plovdiv | 2.90 | 297 | Pg | Pb | 17 49 55.3 | -0.5 |
| PLD | Plovdiv | 2.90 | 297 | Pg | Pb | 17 49 55.3 | -0.5 |
| CHOS | Chios island | 2.94 | 215 | *e*PN | Pn | 17 49 49.6 | -1.5 |
| CHOS | Chios island | 2.94 | 215 | P | Pn | 17 49 49.2 | -1.9 |
| CHOS | | | | S | Sn | 17 50 26.1 | -0.9 |
| CHOS | Chios island | 2.94 | 215 | P | Pn | 17 49 49.2 | -1.9 |
| CHOS | Chios island | 2.94 | 215 | *e*Pn | Pn | 17 49 49.6 | -1.5 |
| CHOS | | | | S | Sn | 17 50 26.1 | -0.9 |
| SZH | Strazhica | 2.95 | 326 | P | Pn | 17 49 51.1 | -0.1 |
| SZH | Strazhica | 2.95 | 326 | P | Pn | 17 49 51.1 | -0.1 |
| BCAM | Yenicaga | 2.95 | 89 | *i* P | Pn | 17 49 52.2 | +0.9 |
| BCAM | Yenicaga | 2.95 | 89 | P | Pn | 17 49 52.2 | +0.9 |
| BCAM | | | | S | Sg | 17 50 35.9 | -2.4 |
| MANR | Mangalia | 3.00 | 6 | ⇓*i*P | Pn | 17 49 52.6 | +0.8 |
| MANR | Mangalia | 3.00 | 6 | ⇓*i*P | Pn | 17 49 52.6 | +0.8 |
| BOLV | Bolvadin | 3.00 | 134 | *i* P | Pn | 17 49 52.8 | +0.7 |
| BOLV | Bolvadin | 3.00 | 134 | P | Pn | 17 49 52.8 | +0.7 |
| BOLV | | | | S | Sg | 17 50 38.3 | -1.7 |
| AYDN | Tasoluk | 3.18 | 184 | *i* P | Pn | 17 49 54.0 | -0.4 |
| AYDN | Tasoluk | 3.18 | 184 | P | Pn | 17 49 54.0 | -0.4 |
| AYDN | | | | S | Sb | 17 50 41.8 | +2.2 |
| PVL | Pavlikeni | 3.19 | 319 | P | Pn | 17 49 54.1 | -0.3 |
| PVL | Pavlikeni | 3.19 | 319 | P | Pn | 17 49 54.1 | -0.3 |
| OUR | Ouranopolis | 3.23 | 263 | P | Pn | 17 49 53.5 | -1.6 |
| OUR | Ouranopolis | 3.23 | 263 | *e*PN | Pn | 17 49 54.4 | -0.6 |
| OUR | Ouranopolis | 3.23 | 263 | Pn | Pn | 17 49 53.5 | -1.6 |
| OUR | Ouranopolis | 3.23 | 263 | P | Pn | 17 49 53.5 | -1.6 |
| OUR | Ouranopolis | 3.23 | 263 | *e*Pn | Pn | 17 49 54.4 | -0.6 |
| EFOR | EFORIE | 3.26 | 6 | ⇓*i*P | Pg | 17 50 07.9 | +1.9 |
| SMG | Samos | 3.29 | 199 | *e*PN | Pn | 17 49 53.8 | -2.0 |
| SMG | Samos | 3.29 | 199 | *e*Pn | Pn | 17 49 53.8 | -2.0 |
| NVR | Nevrokopi | 3.30 | 280 | *e*PN | Pn | 17 49 54.8 | -1.3 |
| NVR | Nevrokopi | 3.30 | 280 | P | Pn | 17 49 54.8 | -1.3 |
| NVR | | | | S | Sn | 17 50 34.8 | -1.0 |
| NVR | Nevrokopi | 3.30 | 280 | P | Pn | 17 49 54.8 | -1.3 |
| NVR | | | | S | Sn | 17 50 34.8 | -1.0 |
| MMB | Musomiste | 3.44 | 284 | Pg | Pg | 17 50 08.9 | -0.5 |
| MMB | Musomiste | 3.44 | 284 | Pg | Pg | 17 50 08.9 | -0.5 |
| CVD | Cernavoda | 3.48 | 358 | ⇓P | Pn | 17 49 53.5 | -5.0 |
| CVD | Cernavoda | 3.48 | 358 | ⇓*i*P | Pn | 17 49 53.5 | -5.0 |
| CVD | Cernavoda | 3.48 | 358 | P | Pn | 17 49 53.5 | -5.0 |
| SRS | Serrai | 3.48 | 276 | *e*PN | Pn | 17 49 57.1 | -1.4 |
| SRS | Serrai | 3.48 | 276 | P | Pn | 17 49 56.9 | -1.6 |
| SRS | Serrai | 3.48 | 276 | *e*Pn | Pn | 17 49 57.1 | -1.4 |
| PAIG | Paliouri | 3.55 | 257 | *e*PN | Pn | 17 49 58.7 | -0.7 |
| PAIG | Paliouri | 3.55 | 257 | *e*Pn | Pn | 17 49 58.7 | -0.7 |
| TIRR | Tirgusor | 3.63 | 3 | *e*P | Pn | 17 49 59.3 | -1.2 |
| TIRR | Tirgusor | 3.63 | 3 | *e*Pn | Pn | 17 49 59.3 | -1.2 |
| TIRR | Tirgusor | 3.63 | 3 | *e*P | Pn | 17 49 59.3 | -1.2 |
| PLG | Polygyros | 3.63 | 264 | *e*PN | Pn | 17 49 59.2 | -1.4 |
| PLG | Polygyros | 3.63 | 264 | P | Pn | 17 49 59.5 | -1.1 |
| ANTO | Ankara | 3.66 | 104 | ⇑P | Pb | 17 50 05.2 | -3.6 |
| ANTO | Ankara | 3.66 | 104 | ⇑*i*P | Pb | 17 50 05.2 | -3.6 |
| ANTO | Ankara | 3.66 | 104 | Pn | Pn | 17 49 58.9 | -2.1 |
| ANTO | | | | *e*Sg | Sg | 17 51 05.1 | +4.1 |
| ANTO | Ankara | 3.66 | 104 | Pn | Pn | 17 49 58.9 | -2.1 |
| ANTO | Ankara | 3.66 | 104 | P | Pb | 17 50 05.2 | -3.6 |
| SOH | Sokhos | 3.66 | 271 | *e*PN | Pn | 17 49 59.6 | -1.4 |
| SOH | Sokhos | 3.66 | 271 | P | Pn | 17 49 59.8 | -1.2 |
| AOS | Alonnisos | 3.69 | 245 | *e*PN | Pn | 17 50 00.5 | -0.9 |
| AOS | Alonnisos | 3.69 | 245 | Pn | Pn | 17 50 01.7 | +0.3 |
| AOS | Alonnisos | 3.69 | 245 | *e*Pn | Pn | 17 50 00.5 | -0.9 |
| YER | Yerkesik | 3.69 | 179 | P | Pn | 17 50 02.3 | +0.8 |
| YER | Yerkesik | 3.69 | 179 | Pn | Pn | 17 50 02.3 | +0.8 |
| YER | Yerkesik | 3.69 | 179 | P | Pn | 17 50 02.3 | +0.8 |
| TLB | Topalu | 3.75 | 359 | ⇑P | Pn | 17 50 02.1 | -0.1 |
| TLB | Topalu | 3.75 | 359 | ⇑*i*P | Pn | 17 50 02.1 | -0.1 |
| TLB | Topalu | 3.75 | 359 | S | Sg | 17 51 05.9 | +1.9 |
| TLB | Topalu | 3.75 | 359 | P | Pn | 17 50 02.1 | -0.1 |
| BODT | Bodrum | 3.83 | 190 | Pn | Pn | 17 50 04.2 | +0.9 |
| BODT | Bodrum | 3.83 | 190 | Pn | Pn | 17 50 04.2 | +0.9 |
| AMRR | Amara | 3.83 | 351 | S | Sg | 17 51 06.0 | -0.3 |
| HORT | Hortiatis | 3.87 | 268 | *e*PN | Pn | 17 50 02.8 | -1.1 |
| HORT | Hortiatis | 3.87 | 268 | *e*Pn | Pn | 17 50 02.8 | -1.1 |
| BVCR | Bucharest-Old | 3.91 | 338 | ⇓*i*P | Sg | 17 51 12.5 | +3.6 |
| KKB | Krupnik | 3.97 | 287 | Pg | Pb | 17 50 16.6 | +2.5 |
| KKB | Krupnik | 3.97 | 287 | Pg | Pb | 17 50 16.6 | +2.5 |
| KNT | Kendrikon | 4.01 | 276 | P | Pn | 17 50 06.0 | +0.2 |
| KNT | Kendrikon | 4.01 | 276 | *e*PN | Pn | 17 50 04.9 | -0.8 |
| KNT | Kendrikon | 4.01 | 276 | P | Pn | 17 50 04.8 | -0.9 |
| KNT | Kendrikon | 4.01 | 276 | Pn | Pn | 17 50 06.0 | +0.2 |
| KNT | Kendrikon | 4.01 | 276 | P | Pn | 17 50 04.8 | -0.9 |
| EREA | Eretria | 4.07 | 235 | *e*PN | Pn | 17 50 05.1 | -1.5 |
| XOR | Xorichti | 4.09 | 251 | *e*PN | Pn | 17 50 06.5 | -0.4 |
| XOR | Xorichti | 4.09 | 251 | *e*Pn | Pn | 17 50 06.5 | -0.4 |
| SULR | | 4.10 | 340 | ⇑*i*P | Pb | 17 50 14.6 | -1.6 |
| SULR | | 4.10 | 340 | S | Sg | 17 51 22.1 | +7.1 |
| VTS | Vitosha | 4.11 | 297 | P | Pn | 17 50 07.2 | -0.1 |
| VTS | Vitosha | 4.11 | 297 | P | Pn | 17 50 07.2 | -0.1 |
| MRKA | Markates | 4.12 | 240 | *e*PN | Pn | 17 50 06.9 | -0.5 |
| MRKA | Markates | 4.12 | 240 | *e*Pn | Pn | 17 50 06.9 | -0.5 |
| MPEP | Malo Peshtene | 4.15 | 309 | P | Pn | 17 50 07.5 | -0.2 |
| VAY | Valandovo | 4.26 | 278 | *e*Pn | Pn | 17 50 02.9 | -6.4 |
| VAY | | | | *e*Sn | Sg | 17 51 18.2 | -2.2 |
| APE | Apeiranthos | 4.29 | 210 | ⇑P | Pn | 17 50 09.4 | -0.2 |
| APE | Apeiranthos | 4.29 | 210 | ⇑*i*P | Pn | 17 50 09.4 | -0.2 |
| APE | Apeiranthos | 4.29 | 210 | *e*PN | Pn | 17 50 08.2 | -1.4 |
| APE | Apeiranthos | 4.29 | 210 | *e*Pn | Pn | 17 50 08.2 | -1.4 |
| APE | Apeiranthos | 4.29 | 210 | P | Pn | 17 50 09.4 | -0.2 |
| SMIA | Simia | 4.29 | 245 | *e*PN | Pn | 17 50 08.6 | -1.1 |
| SMIA | Simia | 4.29 | 245 | *e*Pn | Pn | 17 50 08.6 | -1.1 |
| BRTR | Keskin Array B | 4.32 | 103 | Pn | Pn | 17 50 09.4 | -0.8 |
| | 0.6nm,0.3s,baz=353,slow=11,SNR=16 | | | | | | |
| BRTR | | | | Lg | Lg | 17 51 24.3 | |
| | 4.7nm,0.3s,baz=292,slow=25,SNR=2.8 | | | | | | |
| BRTR | | | | LR | LR | 17 51 50.5 | |
| | comp=Z,181nm,19.2s,baz=278,slow=41 | | | | | | |
| BRTR | Keskin Array B | 4.32 | 103 | *i* P | Pn | 17 50 10.0 | -0.2 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| BRTR | Keskin Array B | 4.32 | 103 | *i* P | Pn | 17 50 10.0 | -0.2 |
| | comp=Z,2.0nm,0.7s | | | | | | |
| CFR | Carcaliu | 4.34 | 360 | ⇑P | Pn | 17 50 08.0 | -2.3 |
| CFR | Carcaliu | 4.34 | 360 | ⇑*i*P | Pn | 17 50 08.0 | -2.3 |
| CFR | Carcaliu | 4.34 | 360 | S | Sg | 17 51 20.7 | -2.2 |
| CFR | Carcaliu | 4.34 | 360 | P | Pn | 17 50 08.0 | -2.3 |
| GRG | Griva | 4.38 | 274 | P | Pn | 17 50 10.2 | -0.7 |
| GRG | Griva | 4.38 | 274 | *e*PN | Pn | 17 50 09.7 | -1.2 |
| GRG | Griva | 4.38 | 274 | P | Pn | 17 50 09.9 | -1.0 |
| GRG | Griva | 4.38 | 274 | Pn | Pn | 17 50 10.2 | -0.7 |
| GRG | Griva | 4.38 | 274 | *e*Pn | Pn | 17 50 09.7 | -1.2 |
| HUMR | Humele | 4.38 | 329 | ⇑*i*P | Pn | 17 50 15.9 | +5.1 |
| ISR | Istrita | 4.45 | 345 | ⇑P | Pn | 17 50 13.4 | +1.6 |
| ISR | Istrita | 4.45 | 345 | ⇑*i*P | Pn | 17 50 13.4 | +1.6 |
| ISR | Istrita | 4.45 | 345 | P | Pn | 17 50 13.4 | +1.6 |
| SECR | | 4.48 | 340 | ⇓*i*P | Pn | 17 50 15.8 | +3.6 |
| SECR | | 4.48 | 340 | S | Sg | 17 51 27.1 | -0.1 |
| VLY | Voula,Athens | 4.52 | 230 | *e*PN | Pn | 17 50 11.3 | -1.4 |
| VLY | Voula,Athens | 4.52 | 230 | *e*Pn | Pn | 17 50 11.3 | -1.4 |
| VIL2 | Platees | 4.61 | 237 | *e*PN | Pn | 17 50 12.6 | -1.4 |
| VILL | Villia | 4.61 | 236 | *e*Pn | Pn | 17 50 12.6 | -1.5 |
| GRER | | 4.63 | 349 | ⇑*i*P | Pn | 17 50 16.5 | +2.2 |
| GRER | | 4.63 | 349 | ⇑*i*P | Pn | 17 50 16.5 | +2.2 |
| GOLR | | 4.65 | 331 | ⇑*i*P | Pg | 17 50 31.1 | -1.4 |
| GOLR | | 4.65 | 331 | S | Sg | 17 51 39.2 | +6.4 |
| SERI | Serifos | 4.66 | 219 | *e*PN | Pn | 17 50 13.6 | -1.1 |
| SERI | Serifos | 4.66 | 219 | *e*Pn | Pn | 17 50 13.6 | -1.1 |
| AGG | Agios Georgios | 4.84 | 250 | *e*PN | Pn | 17 50 16.6 | -0.7 |
| AGG | Agios Georgios | 4.84 | 250 | *e*Pn | Pn | 17 50 16.6 | -0.7 |
| THL | Klokotos Trika | 4.88 | 257 | *e*PN | Pn | 17 50 16.8 | -1.0 |
| THL | Klokotos Trika | 4.88 | 257 | *e*Pn | Pn | 17 50 16.8 | -1.0 |
| LTK | Loutraki | 4.91 | 237 | *e*PN | Pn | 17 50 17.2 | -1.0 |
| LTK | Loutraki | 4.91 | 237 | *e*Pn | Pn | 17 50 17.2 | -1.0 |
| MLR | Muntele Rosu | 4.93 | 341 | Pn | Pn | 17 50 20.1 | +1.5 |
| | comp=Z,0.7nm,0.3s,baz=70,slow=2.5,SNR=78 | | | | | | |
| MLR | | | | Lg | Lg | 17 51 43.7 | |
| | comp=Z,1.4nm,0.3s,baz=226,slow=22,SNR=10 | | | | | | |
| MLR | Muntele Rosu | 4.93 | 341 | ⇑*i*P | Pn | 17 50 20.1 | +1.5 |
| MLR | Muntele Rosu | 4.93 | 341 | S | Sg | 17 51 46.7 | +4.8 |
| PETR | Petresti | 4.94 | 352 | ⇓*i*P | Pn | 17 50 24.1 | +5.6 |
| DESF | Desfina | 4.98 | 243 | *e*PN | Pn | 17 50 18.1 | -1.1 |
| DESF | Desfina | 4.98 | 243 | *e*Pn | Pn | 17 50 18.1 | -1.1 |
| MAKR | Makrakomi, Fth | 4.99 | 251 | *e*PN | Pn | 17 50 18.5 | -0.8 |
| MAKR | Makrakomi, Fth | 4.99 | 251 | *e*Pn | Pn | 17 50 18.5 | -0.8 |
| DIDY | Didyma | 5.11 | 231 | *e*PN | Pn | 17 50 19.5 | -1.5 |
| DIDY | Didyma | 5.11 | 231 | *e*Pn | Pn | 17 50 19.5 | -1.5 |
| PLOR | Plostina | 5.14 | 348 | ⇑P | Pn | 17 50 22.1 | +0.8 |
| PLOR | Plostina | 5.14 | 348 | ⇑*i*P | Pn | 17 50 22.1 | +0.8 |
| PLOR | Plostina | 5.14 | 348 | ⇑*i*P | Pn | 17 50 22.1 | +0.8 |
| VOIR | | 5.14 | 335 | ⇑P | Pn | 17 50 20.9 | -0.4 |
| VOIR | | 5.14 | 335 | ⇑*i*P | Pn | 17 50 20.9 | -0.4 |
| VOIR | | 5.14 | 335 | S | Sg | 17 51 51.5 | +3.0 |
| VOIR | | 5.14 | 335 | P | Pn | 17 50 20.9 | -0.4 |
| VRI | Vrincioaia | 5.14 | 349 | ⇓P | Pn | 17 50 19.4 | -1.9 |
| VRI | Vrincioaia | 5.14 | 349 | ⇓*i*P | Pn | 17 50 19.4 | -1.9 |
| VRI | Vrincioaia | 5.14 | 349 | S | Sg | 17 51 55.8 | +7.3 |
| VRI | Vrincioaia | 5.14 | 349 | ⇓*i*P | Pn | 17 50 19.4 | -1.9 |
| FNA | Florina | 5.16 | 272 | *e*PN | Pn | 17 50 21.2 | -0.4 |
| FNA | Florina | 5.16 | 272 | *e*Pn | Pn | 17 50 21.2 | -0.4 |
| SKO | Skopje | 5.19 | 285 | *e*Pn | Pb | 17 50 31.7 | -3.2 |
| SKO | | | | *e*Sn | Sg | 17 51 48.6 | -1.6 |
| KALE | Kalithea | 5.26 | 244 | *e*PN | Pn | 17 50 22.5 | -0.5 |
| KALE | Kalithea | 5.26 | 244 | *e*Pn | Pn | 17 50 22.5 | -0.5 |
| SERG | Sergoula | 5.31 | 245 | *e*PN | Pn | 17 50 23.0 | -0.6 |
| SERG | Sergoula | 5.31 | 245 | *e*Pn | Pn | 17 50 23.0 | -0.6 |
| GUR | Goura | 5.37 | 239 | *e*PN | Pn | 17 50 23.7 | -0.8 |
| GUR | Goura | 5.37 | 239 | *e*Pn | Pn | 17 50 23.7 | -0.8 |
| EFP | Efpalio | 5.40 | 246 | *e*PN | Pn | 17 50 24.1 | -0.8 |
| EFP | Efpalio | 5.40 | 246 | *e*Pn | Pn | 17 50 24.1 | -0.8 |
| KLV | Kalavryta, Ach | 5.43 | 241 | *e*PN | Pn | 17 50 24.7 | -0.7 |
| KLV | Kalavryta, Ach | 5.43 | 241 | *e*Pn | Pn | 17 50 24.7 | -0.7 |
| NEST | Nestorio | 5.44 | 268 | *e*PN | Pn | 17 50 25.0 | -0.5 |
| NEST | Nestorio | 5.44 | 268 | *e*Pn | Pn | 17 50 25.0 | -0.5 |
| LAKA | Lakka | 5.45 | 244 | *e*PN | Pn | 17 50 25.2 | -0.3 |
| LAKA | Lakka | 5.45 | 244 | *e*Pn | Pn | 17 50 25.2 | -0.3 |
| SEV | Sevastopol' | 5.49 | 46 | ⇓*e*P | Pn | 17 50 24.6 | -1.5 |
| SEV | | | | *e*S | Sn | 17 51 24.3 | -5.4 |
| SEV | Sevastopol' | 5.49 | 46 | *e*P | Pn | 17 50 24.6 | -1.5 |
| BOLS | Boljevac | 5.50 | 305 | *e*Pn | Pn | 17 50 24.1 | -2.1 |
| DOPR | Dopca | 5.52 | 339 | ⇑*i*P | Pn | 17 50 27.0 | +0.5 |
| DOPR | Dopca | 5.52 | 339 | ⇑*i*P | Pn | 17 50 27.0 | +0.5 |
| BOVS | Bovan | 5.56 | 302 | *e*Pn | Pn | 17 50 26.7 | -0.3 |
| OHR | Ohrid | 5.59 | 275 | *e*Pn | Pn | 17 50 24.8 | -2.8 |
| OHR | Ohrid | 5.59 | 275 | *e*Pn | Pn | 17 50 24.7 | -2.8 |
| LOT | Lotru | 5.63 | 327 | ⇑*i*P | Pn | 17 50 34.7 | +6.6 |
| VLX | Vlachokerasia | 5.68 | 234 | *e*PN | Pn | 17 50 28.0 | -0.8 |
| VLX | Vlachokerasia | 5.68 | 234 | *e*Pn | Pn | 17 50 28.0 | -0.8 |
| YAL | Yalta | 5.72 | 48 | ⇓*e*P | Pn | 17 50 28.8 | -0.5 |
| YAL | | | | *e*S | Sn | 17 51 30.8 | -4.6 |
| YAL | Yalta | 5.72 | 48 | *e*P | Pn | 17 50 28.8 | -0.5 |
| SELS | Selova | 5.77 | 297 | *i* Pn | Pn | 17 50 28.9 | -1.1 |
| DRO | Drossia | 5.78 | 242 | *e*PN | Pn | 17 50 29.3 | -0.7 |
| DRO | Drossia | 5.78 | 242 | *e*Pn | Pn | 17 50 29.3 | -0.7 |
| TESR | Tescani | 5.78 | 349 | ⇑*i*P | Pn | 17 50 30.0 | -0.1 |
| TESR | Tescani | 5.78 | 349 | ⇑*i*P | Pn | 17 50 30.0 | -0.1 |
| VLI | Veliai | 5.80 | 227 | *e*PN | Pn | 17 50 29.6 | -0.7 |
| VLI | Veliai | 5.80 | 227 | *e*Pn | Pn | 17 50 29.6 | -0.7 |
| MDB | Medias | 5.98 | 334 | ⇑P | Pn | 17 50 39.9 | +7.1 |
| MDB | Medias | 5.98 | 334 | ⇑*i*P | Pn | 17 50 39.8 | +7.0 |
| KUBS | Kucevo | 5.98 | 309 | *i* Pn | Pn | 17 50 29.9 | -3.0 |
| ALU | Alushta | 5.98 | 48 | ⇓*i*P | Pn | 17 50 31.6 | -1.2 |
| ALU | | | | *e*S | Sn | 17 51 35.7 | -6.1 |
| ALU | Alushta | 5.98 | 48 | *i* P | Pn | 17 50 31.6 | -1.2 |
| SIM | Simferopol' | 6.00 | 45 | *e*P | Pn | 17 50 32.7 | -0.3 |
| SIM | | | | *i* S | Sn | 17 51 38.0 | -4.2 |
| SIM | | | | pmax | pmax | | |
| | comp=Z,66nm,0.8s | | | | | | |
| SIM | Simferopol' | 6.00 | 45 | *e*P | Pn | 17 50 32.7 | -0.3 |
| | comp=Z,66nm,0.8s | | | | | | |
| GZR | Gura Zlata | 6.03 | 321 | ⇑*i*P | Pn | 17 50 32.9 | -0.7 |
| GZR | Gura Zlata | 6.03 | 321 | ⇑*i*P | Pn | 17 50 32.9 | -0.7 |
| KYTH | Kithira | 6.07 | 223 | *e*PN | Pn | 17 50 33.6 | -0.5 |
| KYTH | Kithira | 6.07 | 223 | *e*Pn | Pn | 17 50 33.6 | -0.5 |
| IDI | Anoyia | 6.11 | 206 | LR | LR | 17 53 21.2 | |
| | comp=Z,233nm,21.8s,baz=19,slow=41 | | | | | | |
| KIS | Kishinev | 6.18 | 4 | *e*P | Pn | 17 50 40.0 | +4.4 |
| KIS | | | | *e*S | Sn | 17 51 45.0 | -1.7 |
| KIS | | | | *e*L | L | 17 52 30.0 | |
| KIS | | | | QM | | 17 52 50.0 | |
| | comp=Z,2μm,12.0s | | | | | | |
| KIS | | | | LRM | MLR | 17 52 56.0 | |
| | comp=Z,900nm,13.0s | | | | | | |
| KIS | Kishinev | 6.18 | 4 | *e*P | Pn | 17 50 40.0 | +4.4 |
| KIS | | | | *e*S | Sn | 17 51 45.0 | -1.7 |
| KIS | | | | MLR | MLR | | |
| | comp=Z,900nm,13.0s | | | | | | |
| GRUS | Gruza | 6.31 | 301 | ⇓*i*Pn | Pn | 17 50 36.0 | -1.4 |
| SUDU | Sudak | 6.45 | 49 | ⇑*e*P | Pn | 17 50 38.4 | -0.8 |
| SUDU | | | | *e*S | Sn | 17 51 48.0 | -5.3 |
| SUDU | Sudak | 6.45 | 49 | *e*P | Pn | 17 50 38.4 | -0.8 |
| IVAS | Ivanjica | 6.56 | 297 | *e*Pn | Pn | 17 50 38.3 | -2.5 |
| TRUS | Trudelj | 6.67 | 303 | ⇓*i*Pn | Pn | 17 50 39.9 | -2.3 |
| CJR | Cluj-Napoca | 6.75 | 332 | ⇑P | Pn | 17 50 46.6 | +3.2 |
| CJR | Cluj-Napoca | 6.75 | 332 | ⇑*i*P | Pn | 17 50 46.6 | +3.2 |
| FEO | Feodosiya | 6.75 | 49 | *e*P | Pn | 17 50 42.1 | -1.2 |
| FEO | | | | *e*S | Sn | 17 51 56.3 | -4.3 |
| FEO | Feodosiya | 6.75 | 49 | *e*P | Pn | 17 50 42.1 | -1.2 |
| BZS | Buzias | 6.77 | 317 | ⇓P | Pn | 17 50 47.9 | +4.3 |
| BZS | Buzias | 6.77 | 317 | ⇓*i*P | Pn | 17 50 47.8 | +4.2 |
| ARCR | ARCALIA | 6.83 | 337 | ⇑*i*P | Pn | 17 50 46.2 | +1.7 |
| DIVS | Divibare | 6.88 | 301 | ⇑*i*P | Pn | 17 50 44.1 | -1.1 |
| DIVS | Divibare | 6.88 | 301 | *e*Pn | Pn | 17 50 43.5 | -1.7 |
| DIVS | Divibare | 6.88 | 301 | ⇑*i*P | Pn | 17 50 44.1 | -1.1 |
| BURAR | Bucovina Array | 7.11 | 344 | ⇑P | Pn | 17 50 49.7 | +1.3 |
| BURAR | Bucovina Array | 7.11 | 344 | ⇑*i*P | Pn | 17 50 49.7 | +1.3 |
| BURAR | Bucovina Array | 7.11 | 344 | ⇑*i*P | Pn | 17 50 49.7 | +1.3 |
| DRGR | | 7.15 | 328 | ⇑*i*P | Pn | 17 50 55.2 | +6.3 |
| BBLS | Lazići | 7.17 | 298 | *e*Pn | Pn | 17 50 46.4 | -2.8 |
| FGSL | Fruska Gora | 7.50 | 308 | ⇓*i*Pn | Pn | 17 50 52.6 | -1.1 |
| BMR | Baia Mare | 7.62 | 335 | ⇑P | Pn | 17 50 58.0 | +2.7 |
| BMR | Baia Mare | 7.62 | 335 | ⇑*i*P | Pn | 17 50 58.0 | +2.7 |
| ANN | Anapa | 7.87 | 57 | *e*P | Pn | 17 50 49.6 | -9.2 |
| ANN | | | | *e*S | Sn | 17 52 20.7 | -7.7 |
| ANN | | | | pmax | pmax | | |
| | comp=Z,109nm,2.0s | | | | | | |
| UZH | Uzhgorod | 8.85 | 334 | *e*P | Pn | 17 51 16.5 | +4.4 |
| UZH | | | | *e*S | Sn | 17 52 57.3 | +5.0 |
| UZH | | | | MLR | MLR | | |
| | comp=N,150nm,11.0s | | | | | | |
| UZH | | | | MLR | MLR | | |
| | comp=E,140nm,11.0s | | | | | | |
| UZH | | | | MLR | MLR | | |
| | comp=Z,100nm,11.0s | | | | | | |
| KOLS | Kolonicke sedl | 9.12 | 335 | *e*P | Pn | 17 51 20.3 | +4.5 |
| KOLS | Kolonicke sedl | 9.12 | 335 | *e*PN | Pn | 17 51 20.3 | +4.5 |
| KOLS | | | | *e* | | 17 51 42.6 | |
| KOLS | | | | *e* | | 17 53 52.3 | |
| CUC | Castrocucco | 9.47 | 269 | *e*Pn | Pn | 17 51 18.8 | -1.9 |
| CUC | Castrocucco | 9.47 | 269 | *e*Pn | Pn | 17 51 18.8 | -1.9 |
| MMAI | Mount Meron Ar | 9.71 | 141 | Pn | Pn | 17 51 23.7 | -0.3 |
| | comp=Z,0.6nm,0.3s,baz=329,slow=16,SNR=4.5 | | | | | | |
| MMAI | | | | LR | LR | 17 55 39.4 | |
| | comp=Z,129nm,19.1s,baz=0.0,slow=41 | | | | | | |
| STHS | Stebnicka Huta | 9.88 | 333 | *e*P | Pn | 17 51 30.0 | +3.7 |
| STHS | Stebnicka Huta | 9.88 | 333 | *e*PN | Pn | 17 51 30.0 | +3.7 |
| KIEV | Kiev | 9.89 | 4 | *i* P | Pn | 17 51 24.3 | -2.1 |
| KIEV | Kiev | 9.89 | 4 | *i* P | Pn | 17 51 24.3 | -2.1 |
| AKASG | Malin Array Be | 9.90 | 4 | Pn | Pn | 17 51 26.4 | -0.1 |
| | comp=Z,2.0nm,0.3s,baz=177,slow=12,SNR=6.5 | | | | | | |
| AKASG | | | | Sn | Sn | 17 53 13.6 | -4.4 |
| | comp=Z,2.2nm,0.3s,baz=184,slow=22,SNR=4.1 | | | | | | |
| AKASG | | | | Lg | Lg | 17 54 19.8 | |
| | baz=184,slow=28,SNR=5.0 | | | | | | |
| AKASG | Malin Array Be | 9.90 | 4 | P | Pn | 17 51 26.4 | -0.1 |
| AKASG | | | | | | 17 53 13.6 | |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| AKASG | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| VYHS | Vyhne | 10.14 | 322 | *e*P | Pn | 17 51 33.0 | +3.1 |
| VYHS | Vyhne | 10.14 | 322 | *e*PN | Pn | 17 51 33.0 | +3.1 |
| OKC | Ostrava-Krasne | 11.43 | 325 | AMS | AMS | 17 57 00.0 | |
| | comp=N,600nm,13.2s | | | | | | |
| VRAC | Vranov | 11.77 | 320 | LR | LR | 17 57 23.1 | |
| | comp=N,208nm,18.6s,baz=123,slow=42 | | | | | | |
| DPC | Dobruska-Polom | 12.61 | 323 | AMS | AMS | 17 57 40.0 | |
| | comp=N,500nm,11.4s | | | | | | |
| GNI | Garni | 12.63 | 88 | LR | LR | 17 57 04.4 | |
| | comp=N,112nm,19.7s,baz=178,slow=39 | | | | | | |
| UPC | Upice | 12.87 | 323 | AMS | AMS | 17 57 50.0 | |
| | comp=N,500nm,11.8s | | | | | | |
| VSR | Storozhevoye | 12.87 | 33 | *e*P | Pn | 17 52 05.1 | -2.1 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.7s | | | | | | |
| VSR | Storozhevoye | 12.87 | 33 | *e*P | Pn | 17 52 05.1 | -2.1 |
| | comp=E,10.0nm,0.8s | | | | | | |
| GERES | GERESS Array B | 13.01 | 313 | Pn | Pn | 17 52 13.6 | +4.4 |
| | comp=E,0.1nm,0.3s,baz=137,slow=13,SNR=3.5 | | | | | | |
| GERES | | | | LR | LR | 17 57 38.6 | |
| | comp=E,157nm,20.2s,baz=103,slow=39 | | | | | | |
| GOPC | GO Pecny, Ondr | 13.06 | 319 | AMS | AMS | 17 58 00.0 | |
| | comp=E,300nm,13.2s | | | | | | |
| PRU | Pruhonice | 13.23 | 318 | AMS | AMS | 17 58 30.0 | |
| | comp=E,300nm,11.8s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| IKRK | Kirkuk | 13.83 | 108 | ePN | x | 17 52 16.1 | |
| IKRK | | | | eSn | x | 17 54 56.9 | |
| **LPSR** | **Galich'ya Gora** | **13.87** | **28** | eP | **Pn** | **17 52 19.4** | **-1.4** |
| LPSR | | | | pmax | pmax | | |
| | comp=E,9.0nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.6s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **13.87** | **28** | eP | **Pn** | **17 52 19.4** | **-1.4** |
| | comp=N,6.0nm,0.6s | | | | | | |
| **VRH** | **Novokhopyorsk** | **13.98** | **38** | eP | **Pn** | **17 52 21.9** | **-0.4** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,20nm,0.8s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,40nm,0.8s | | | | | | |
| **VRH** | **Novokhopyorsk** | **13.98** | **38** | eP | **Pn** | **17 52 21.9** | **-0.4** |
| | comp=E,10.0nm,0.6s | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **14.47** | **300** | LR | LR | 17 58 42.5 | |
| | comp=E,123nm,18.4s,baz=86,slow=39 | | | | | | |
| **BHD** | **Baghdad** | **14.97** | **115** | ePn | x | 17 52 41.0 | |
| BHD | | | | eSn | x | 17 55 38.0 | |
| **OBN** | **Obninsk** | **15.34** | **18** | LR | LR | 17 58 39.4 | |
| | comp=E,126nm,21.1s,baz=246,slow=38 | | | | | | |
| **OBN** | **Obninsk** | **15.34** | **18**⇑ | eP | **Pn** | **17 52 38.1** | **-2.5** |
| OBN | | | | eS | **Sn** | **17 55 29.4** | **-1.5** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,156nm,17.0s | | | | | | |
| **IBDR** | **Badra** | **16.13** | **113** | ePN | x | 17 52 52.7 | |
| IBDR | | | | eSn | x | 17 55 59.8 | |
| **MOS** | **Moscow** | **16.16** | **19** | eP | **P** | **17 52 59.2** | **+4.5** |
| **NSR** | **Nassriya** | **17.51** | **118** | ePN | x | 17 53 19.7 | |
| NSR | | | | eSN | x | 17 56 44.1 | |
| **VSU** | **Vasula** | **17.67** | **358** | eP | **Pn** | **17 53 07.2** | **-3.2** |
| VSU | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **20.68** | **357** | P | Pn | 17 53 46.6 | +0.1 |
| | comp=Z,1.9nm,0.9s,baz=168,slow=14,SNR=3.0 | | | | | | |
| FINES | | | | LR | LR | 18 01 42.9 | |
| | comp=Z,195nm,19.7s,baz=175,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **20.68** | **357** | P | Pn | 17 53 46.6 | +0.1 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,195nm,19.7s | | | | | | |
| **HFS** | **Hagfors** | **21.32** | **340** | P | **P** | **17 53 54.6** | **+3.5** |
| | comp=Z,3.0nm,0.8s,baz=136,slow=12,SNR=3.6 | | | | | | |
| HFS | | | | LR | LR | 18 02 33.2 | |
| | comp=Z,142nm,18.7s,baz=145,slow=38 | | | | | | |
| **HFS** | **Hagfors** | **21.32** | **340** | P | **P** | **17 53 54.6** | **+3.5** |
| HFS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| HFS | | | | MLR | MLR | | |
| | comp=Z,142nm,18.7s | | | | | | |
| **IRAM** | **Ramesheh** | **21.43** | **107** | eP | **P** | **17 53 53.1** | **+0.3** |
| **IKAZ** | **Kazeroun** | **22.17** | **112** | eP | **P** | **17 54 00.3** | **-0.7** |
| **RAYN** | **Ar Rayn** | **22.58** | **135** | P | **P** | **17 54 05.8** | **+0.7** |
| | comp=Z,25nm,1.1s | | | | | | |
| RAYN | | | | e | | 17 54 13.1 | |
| **RAYN** | **Ar Rayn** | **22.58** | **135** | P | **P** | **17 54 05.8** | **+0.7** |
| | comp=Z,25nm,1.1s | | | | | | |
| **NOA** | **NORSAR Array B** | **22.75** | **338** | P | **P** | **17 54 08.3** | **+1.8** |
| | comp=Z,1.5nm,0.8s,baz=146,slow=11,SNR=2.6 | | | | | | |
| NOA | | | | LR | LR | 18 03 27.7 | |
| | comp=Z,70nm,19.0s,baz=165,slow=38 | | | | | | |
| **NOA** | **NORSAR Array B** | **22.75** | **338** | P | **P** | **17 54 08.3** | **+1.8** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,70nm,19.0s | | | | | | |
| **AKTK** | **Aktyubinsk** | **22.83** | **55** | P | **P** | **17 54 07.6** | **+0.1** |
| | comp=Z,69nm,20.2s | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.83** | **55** | P | **P** | **17 54 07.5** | **+0.1** |
| | comp=Z,2.1nm,0.7s,baz=253,slow=10,SNR=4.3 | | | | | | |
| AKTO | | | | LR | LR | 18 05 38.0 | |
| | comp=Z,69nm,20.2s,baz=240,slow=44 | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.83** | **55** | P | **P** | **17 54 07.6** | **+0.1** |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| AKTO | | | | MLR | MLR | | |
| | comp=Z,69nm,20.2s | | | | | | |
| **GEYT** | **Alibeck** | **23.27** | **87** | P | **P** | **17 54 13.3** | **+1.1** |
| | comp=Z,14nm,1.1s,baz=284,slow=12,SNR=4.6 | | | | | | |
| GEYT | | | | LR | LR | 18 05 38.8 | |
| | comp=Z,113nm,18.4s,baz=40,slow=43 | | | | | | |
| **ISRV** | **Sarvestan** | **23.30** | **112** | eP | **P** | **17 54 13.4** | **+0.6** |
| **ABKAR** | **Akbulak array** | **23.83** | **59** | eP | **P** | **17 54 16.8** | **-0.8** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **23.83** | **59** | eP | **P** | **17 54 16.8** | **-0.8** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **IAKL** | **Akhelmad** | **24.17** | **90** | eP | P | 17 54 26.8 | +5.6 |
| **ESDC** | **Sonseca Array** | **24.49** | **278** | P | P | 17 54 28.9 | +5.1 |
| | comp=Z,0.9nm,0.8s,baz=70,slow=9.9,SNR=5.8 | | | | | | |
| **ARU** | **Arti** | **25.15** | **41** | LR | LR | 18 05 44.7 | |
| | comp=Z,196nm,18.4s,baz=248,slow=40 | | | | | | |
| **ARU** | **Arti** | **25.15** | **41** | d iP | **P** | **17 54 27.4** | **-2.1** |
| ARU | | | | S | **S** | **17 58 53.7** | **-1.2** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,12nm,1.2s | | | | | | |
| **ARU** | **Arti** | **25.15** | **41** | eP | **P** | **17 54 28.4** | **-1.1** |
| | comp=Z,10nm,1.1s | | | | | | |
| **ARU** | **Arti** | **25.15** | **41** | eP | **P** | **17 54 28.4** | **-1.1** |
| | comp=Z,10nm,1.1s | | | | | | |
| ARU | | | | S | **S** | **17 58 53.7** | **-1.2** |
| **EKA** | **Eskdalemuir Ar** | **25.20** | **316** | P | **P** | **17 54 31.9** | **+1.9** |
| | comp=Z,2.2nm,0.8s,baz=110,slow=27,SNR=3.4 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **25.20** | **316** | P | **P** | **17 54 31.9** | **+1.9** |
| EKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **SOKR** | **Solikamsk** | **25.89** | **34**⇑ | iP | **P** | **17 54 36.5** | **+0.3** |
| SOKR | | | | pmax | pmax | | |
| | comp=Z,20nm,1.5s | | | | | | |
| **MDT** | **Midelt** | **27.32** | **264** | LR | LR | 18 05 58.9 | |
| | comp=Z,57nm,20.7s,baz=360,slow=37 | | | | | | |
| **ARCES** | **ARCESS Array B** | **28.80** | **358** | P | **P** | **17 55 05.0** | **+2.8** |
| | comp=Z,2.4nm,0.9s,baz=185,slow=6.1,SNR=5.8 | | | | | | |
| ARCES | | | | LR | LR | 18 06 32.7 | |
| | comp=Z,197nm,18.3s,baz=174,slow=36 | | | | | | |
| **ARCES** | **ARCESS Array B** | **28.80** | **358** | P | **P** | **17 55 05.1** | **+2.8** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| ARCES | | | | MLR | MLR | | |
| | comp=Z,197nm,18.3s | | | | | | |
| **BRVK** | **Borovoye** | **30.79** | **52** | eP | **P** | **17 55 19.2** | **-0.8** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.2s | | | | | | |
| **BRVK** | **Borovoye** | **30.79** | **52** | eP | **P** | **17 55 19.2** | **-0.8** |
| | comp=Z,1.0nm,1.2s | | | | | | |
| **KKAR** | **Karatay Array** | **31.32** | **72** | eP | **P** | **17 55 26.6** | **+1.7** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **31.32** | **72** | eP | **P** | **17 55 26.6** | **+1.7** |
| | comp=Z,0.8nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **31.32** | **72** | eP | **P** | **17 55 26.6** | **+1.7** |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **34.28** | **71** | eP | **P** | **17 55 51.1** | **+0.1** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **AAK** | **Ala-Archa** | **34.28** | **71** | eP | **P** | **17 55 51.3** | **+0.3** |
| | comp=Z,11nm,1.4s | | | | | | |
| **AAK** | **Ala-Archa** | **34.28** | **71** | eP | **P** | **17 55 51.1** | **+0.1** |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **FRU** | **Bishkek** | **34.32** | **71** | eP | P | 17 55 55.0 | +3.8 |
| **KURK** | **Kurchatov** | **35.91** | **57** | eP | **P** | **17 56 03.5** | **-1.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **KURK** | **Kurchatov** | **35.91** | **57** | eP | **P** | **17 56 03.5** | **-1.2** |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **36.02** | **228** | P | P | 17 56 09.6 | +3.7 |
| | comp=Z,0.8nm,0.7s,baz=35,slow=9.2,SNR=4.8 | | | | | | |
| TORD | | | | LR | LR | 18 14 26.6 | |
| | comp=Z,59nm,18.9s,baz=30,slow=42 | | | | | | |
| **MKAR** | **Makanchi Array** | **38.84** | **63** | P | **P** | **17 56 29.4** | **-0.3** |
| | comp=Z,0.9nm,0.7s,baz=274,slow=6.0,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **38.84** | **63** | iP | **P** | **17 56 30.2** | **+0.5** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **38.84** | **63** | iP | **P** | **17 56 30.2** | **+0.5** |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.47** | **51** | P | **P** | **17 56 32.8** | **-1.9** |
| | comp=Z,0.3nm,0.5s,baz=252,slow=6.8,SNR=3.6 | | | | | | |
| ZALV | | | | LR | LR | 18 14 17.1 | |
| | comp=Z,51nm,20.8s,baz=250,slow=39 | | | | | | |
| **KOLN** | **Koldanda** | **46.89** | **88** | eP | P | 17 57 39.7 | +4.4 |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **47.55** | **87** | eP | P | 17 57 44.1 | +3.6 |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **DMN** | **Daman** | **48.11** | **87** | eP | P | 17 57 49.7 | +4.8 |
| | comp=Z,9.6nm,0.7s | | | | | | |
| **KKN** | **Kakani** | **48.15** | **87** | eP | P | 17 57 49.0 | +3.8 |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **PKIN** | **Phulchoki** | **48.35** | **87** | eP | P | 17 57 51.2 | +4.4 |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **PKI** | **Pulchoki** | **48.36** | **87** | eP | P | 17 57 51.3 | +4.4 |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **GUN** | **Gumba** | **48.54** | **87** | eP | P | 17 57 52.0 | +3.7 |
| | comp=Z,12nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **49.59** | **87** | eP | P | 17 58 02.3 | +6.0 |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **TAPN** | **Taplejung** | **50.22** | **86** | eP | P | 17 58 05.8 | +4.7 |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **ODAN** | **Odare** | **50.23** | **87** | eP | P | 17 58 07.4 | +6.2 |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **ZAK** | **Zakamensk** | **51.30** | **52** | eP | P | 17 58 14.2 | +5.5 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| **GTA** | **Gaotai** | **53.34** | **66** | eP | P | 17 58 29.3 | +5.2 |
| GTA | | | | pP | pP | 17 58 36.4 | +11 |
| GTA | | | | sP | sP | 17 58 39.9 | +14 |
| GTA | | | | PMZ | | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **54.15** | **54** | P | **P** | **17 58 29.1** | **-0.8** |
| | comp=Z,0.5nm,0.9s,baz=286,slow=7.6,SNR=3.6 | | | | | | |
| SONM | | | | LR | LR | 18 25 27.4 | |
| | comp=Z,59nm,19.3s,baz=284,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **54.15** | **54** | P | **P** | **17 58 29.1** | **-0.8** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,59nm,19.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **54.54** | **54** | eP | **P** | **17 58 31.9** | **-0.9** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **54.54** | **54** | eP | **P** | **17 58 31.9** | **-0.9** |
| | comp=Z,3.0nm,1.2s | | | | | | |
| **SCHQ** | **Schefferville** | **60.47** | **319** | LR | LR | 18 24 59.7 | |
| | comp=Z,40nm,18.2s,baz=284,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **63.75** | **88** | P | **P** | **17 59 34.9** | **-1.9** |
| | comp=Z,0.3nm,1.0s,baz=308,slow=6.5,SNR=2.7 | | | | | | |
| CMAR | | | | LR | LR | 18 32 14.9 | |
| | comp=Z,15nm,18.4s,baz=195,slow=41 | | | | | | |
| **KSRS** | **Korea Array** | **73.01** | **55** | LR | LR | 18 35 35.6 | |
| | comp=Z,25nm,18.2s,baz=314,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **74.66** | **358** | P | **P** | **18 00 44.6** | **+0.9** |
| | comp=Z,0.2nm,0.7s,baz=348,slow=4.0,SNR=2.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.79** | **29** | LR | LR | 18 37 03.9 | |
| | comp=Z,54nm,19.4s,baz=317,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **79.82** | **50** | LR | LR | 18 41 20.4 | |
| | comp=Z,29nm,18.7s,baz=325,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **97.15** | **319** | LR | LR | 18 46 14.1 | |
| | comp=Z,28nm,21.7s,baz=0.0,slow=35 | | | | | | |

**IDC 03 18:00:15.7**±16.0**, 19°.81S×177°.08W, h0km, mb3.8**/3**, mb1 4.0**/3**, mb1mx3.6**/22**, mbtmp3.8**/3**, Error ellipse: s-maj=405.1km s-min=51.2km az=121.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **45.52** | **256** | P | P | 18 08 37.4 | -0.1 |
| | 1.4nm,0.6s,baz=96,slow=8.2,SNR=55 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.56** | **261** | P | P | 18 08 37.4 | -0.3 |
| | 0.2nm,0.3s,baz=96,slow=7.4,SNR=5.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.18** | **323** | P | P | 18 11 30.2 | -0.1 |
| | 1.0nm,0.7s,baz=155,slow=6.4,SNR=5.3 | | | | | | |

**IDC 03 18:02:13.2**±5.2**, 18°.42N×145°.42E, h216km**±22km**, mb2.9**/2**, mb1 3.2**/4**, mb1mx2.8**/26**, mbtmp3.6**/4**, Error ellipse: s-maj=230.5km s-min=17.6km az=87.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **4.83** | **186** | P | Pn | 18 03 25.7 | -0.3 |
| | 1.0nm,0.3s,baz=21,slow=19,SNR=1.6 | | | | | | |
| GUMO | | | | S | S | 18 04 24.1 | +0.8 |
| | 2.5nm,0.3s,baz=41,slow=22,SNR=1.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.14** | **342** | P | P | 18 06 20.0 | -0.2 |
| | 0.2nm,0.3s,baz=138,slow=14,SNR=3.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.65** | **196** | P | P | 18 09 24.4 | +0.1 |
| | 0.3nm,0.3s,baz=18,slow=8.3,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **43.32** | **195** | P | P | 18 09 53.5 | -0.5 |
| | 0.3nm,0.7s,baz=11,slow=6.3,SNR=4.5 | | | | | | |

**WEL 03 18:04:47.1**±0.6**, 35°.51S×178°.38E, h203km**±8km**, ML3.8**/11**, 1C-1D, Error ellipse: s-maj=12.4km s-min=9.6km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **2.05** | **182** | PN | Pn | 18 05 26.3 | 0.0 |
| MXZ | | | | SN | S | 18 05 55.9 | -0.6 |
| **HAZ** | **Te Kaha** | **2.29** | **192** | PN | Pn | 18 05 29.0 | +0.2 |
| HAZ | | | | SN | S | 18 06 01.7 | +0.7 |
| **WMGZ** | **Waiomatatini S** | **2.30** | **179** | PN | Pn | 18 05 29.6 | +0.6 |
| **PUZ** | **Puketiti** | **2.56** | **182** | PN | Pn | 18 05 31.8 | -0.1 |
| PUZ | | | | SN | S | 18 06 05.9 | -0.4 |
| PUZ | | | | AML | AML | 18 06 21.8 | |
| **TWGZ** | **Tauwhareparae** | **2.68** | **187** | PN | Pn | 18 05 34.0 | +0.7 |
| TWGZ | | | | SN | S | 18 06 10.3 | +1.5 |
| **MWZ** | **Matawai** | **2.90** | **193** | ⇑PN | Pn | 18 05 36.3 | +0.5 |
| MWZ | | | | AML | AML | 18 06 23.7 | |
| MWZ | | | | AML | AML | 18 06 32.5 | |
| **URZ** | **Urewera** | **2.92** | **200** | PN | Pn | 18 05 36.4 | +0.4 |
| URZ | | | | SN | S | 18 06 15.2 | +1.5 |
| URZ | | | | AML | AML | 18 06 22.5 | |
| **TKGZ** | **Te Karaka** | **2.95** | **188** | ⇓PN | Pn | 18 05 36.6 | +0.3 |
| **RAGZ** | **Rawiri** | **3.08** | **194** | PN | Pn | 18 05 38.5 | +0.6 |
| **RIGZ** | **Rimuhau** | **3.23** | **189** | PN | Pn | 18 05 39.5 | -0.1 |
| RIGZ | | | | SN | S | 18 06 20.9 | +0.7 |
| **PRGZ** | **Paritu Road** | **3.43** | **186** | PN | Pn | 18 05 41.8 | -0.2 |
| **KNZ** | **Kokohu** | **3.55** | **189** | PN | Pn | 18 05 42.9 | -0.5 |
| **MHGZ** | **Mahia Peninsul** | **3.66** | **186** | PN | Pn | 18 05 44.5 | -0.2 |
| **NMHZ** | **Naumai** | **3.79** | **199** | PN | Pn | 18 05 46.8 | +0.3 |
| **ARHZ** | **Aropaoanui** | **3.90** | **196** | PN | Pn | 18 05 47.7 | 0.0 |
| **KWHZ** | **Kaweka Forest** | **4.20** | **201** | PN | Pn | 18 05 51.3 | -0.3 |
| **BHHZ** | **Black Hill Sta** | **4.38** | **204** | PN | Pn | 18 05 53.7 | 0.0 |
| **KRHZ** | **Kereru** | **4.42** | **201** | PN | Pn | 18 05 53.3 | -1.0 |
| **PXZ** | **Pawanui** | **4.67** | **194** | PN | Pn | 18 05 55.7 | -1.6 |
| **PRHZ** | **Porangahau** | **4.94** | **196** | PN | Pn | 18 05 59.6 | -1.3 |
| **DVHZ** | **Dannevirke** | **5.09** | **199** | PN | Pn | 18 06 02.0 | -0.7 |
| **BFZ** | **Birch Farm** | **5.43** | **197** | PN | Pn | 18 06 05.3 | -1.7 |
| **MRZ** | **Mangatainoka R** | **5.60** | **202** | PN | Pn | 18 06 07.3 | -1.9 |
| **TIWZ** | **Tintock** | **5.61** | **200** | PN | Pn | 18 06 08.0 | -1.5 |
| **HOWZ** | **Holdsworth Sta** | **5.83** | **202** | PN | Pn | 18 06 10.2 | -2.0 |
| **OGWZ** | **Otaki Gorge** | **5.87** | **205** | PN | Pn | 18 06 10.3 | -2.3 |
| **KIW** | **Kapiti Island** | **6.00** | **206** | PN | Pn | 18 06 12.3 | -2.1 |
| **MTW** | **Mount Morrison** | **6.07** | **201** | PN | Pn | 18 06 12.9 | -2.4 |
| **CAW** | **Cannon Point** | **6.16** | **204** | PN | Pn | 18 06 14.0 | -2.5 |
| **TCW** | **Tory Channel** | **6.54** | **208** | PN | Pn | 18 06 18.7 | -2.6 |
| **TUWZ** | **Tuamarina** | **6.86** | **209** | PN | Pn | 18 06 23.1 | -2.3 |
| **NNZ** | **Nelson** | **6.92** | **213** | PN | Pn | 18 06 24.0 | -2.3 |

*DDA **03** 18:26:13.7, 36°.89N×27°.72E, h7km, Md2.8*
*CSEM **03** 18:26:14.9±0.2, 36°.94N×27°.74E, h2km, MD2.8, Error ellipse: s-maj=6.0km s-min=4.2km az=2.0*
*ISK **03** 18:26:14.2, 36°.98N×27°.74E, h13km, MD2.6*
**ISC 03 18:26:14.6**±1.1**, 36°.91N**±0°.04×**27°.74E**±0°.03**, h7km**±11km**, n21, σ0.65**/30**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BDRM** | **Kayabasi** | **0.28** | **303** | i P | **Pg** | **18 26 19.7** | **-0.5** |
| BDRM | | | | i S | **Sg** | **18 26 24.6** | **+0.7** |
| **BDRM** | **Kayabasi** | **0.28** | **303** | P | **Pg** | **18 26 19.7** | **-0.5** |
| BDRM | | | | S | **Sg** | **18 26 24.6** | **+0.7** |
| **BODT** | **Bodrum** | **0.37** | **294** | ePG | **Pg** | **18 26 21.6** | **-0.3** |
| BODT | | | | eSG | **Sg** | **18 26 27.5** | **+0.6** |
| **BODT** | **Bodrum** | **0.37** | **294** | ePg | **Pg** | **18 26 21.6** | **-0.3** |
| BODT | | | | eSg | **Sg** | **18 26 27.5** | **+0.6** |
| **YER** | **Yerkesik** | **0.49** | **63** | ePG | **Pg** | **18 26 23.6** | **-0.5** |
| **YER** | **Yerkesik** | **0.49** | **63** | ePg | **Pg** | **18 26 23.6** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **0.55** | **236** | ePG | **Pb** | **18 26 26.1** | **-0.4** |
| **NIS1** | **Nisyros Isl.** | **0.55** | **236** | ePg | **Pb** | **18 26 26.1** | **-0.4** |
| **TURN** | **Turunc** | **0.69** | **93** | P | Pg | 18 26 22.0 | -6.0 |
| TURN | | | | S | Sg | 18 26 29.2 | -7.8 |
| **DALY** | **Dalyan (Mu˜la** | **0.74** | **97** | ePG | **Pb** | **18 26 29.5** | **-0.3** |
| **DALY** | **Dalyan (Mu˜la** | **0.74** | **97** | ePg | **Pb** | **18 26 29.5** | **-0.3** |
| **AYDN** | **Tasoluk** | **0.76** | **9** | i P | **Pb** | **18 26 30.1** | **-0.1** |
| **AYDN** | **Tasoluk** | **0.76** | **9** | P | **Pb** | **18 26 30.1** | **-0.1** |
| AYDN | | | | S | **Sb** | **18 26 41.2** | **+0.5** |
| **GCAM** | **G?zelcaml?** | **0.89** | **333** | i P | **Pg** | **18 26 31.3** | **-0.3** |
| GCAM | | | | i S | **Sb** | **18 26 44.0** | **-0.3** |
| **GCAM** | **G?zelcaml?** | **0.89** | **333** | P | **Pg** | **18 26 31.3** | **-0.3** |
| GCAM | | | | S | **Sb** | **18 26 44.0** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.04** | **7** | ePG | **Pg** | **18 26 33.5** | **-1.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.04** | **7** | ePg | **Pg** | **18 26 33.5** | **-1.1** |
| **DNZL** | **Cakiroluk** | **1.30** | **53** | i P | **Pg** | **18 26 39.0** | **-0.6** |
| DNZL | | | | i S | **Sn** | **18 26 57.6** | **+0.5** |
| **DNZL** | **Cakiroluk** | **1.30** | **53** | P | **Pg** | **18 26 39.0** | **-0.6** |
| DNZL | | | | S | **Sn** | **18 26 57.6** | **+0.5** |
| **AKAS** | **Kas** | **1.65** | **114** | i P | **Pg** | **18 26 45.5** | **-0.7** |
| **AKAS** | **Kas** | **1.65** | **114** | P | **Pg** | **18 26 45.5** | **-0.7** |
| AKAS | | | | S | **Sg** | **18 27 09.2** | **+1.6** |

*IDC **03** 18:28:43.6±5.3, 22°.88S×68°.61W, h0km, mb4.2/1, mb1 4.0/2, mb1mx3.5/21, mbtmp3.9/2, ML3.7/1, Error ellipse: s-maj=153.4km s-min=55.0km az=71.0*
*ISCJB **03** 18:29:03.5±1.0, 21°.48S±0°.06×68°.6W±0°.2, h140km±15km, mb3.7/1, Error ellipse: s-maj=33.4km s-min=10.2km az=4.1*
*GUC **03** 18:29:03.5±0.7, 21°.45S×68°.61W, h135km±6km, ML3.8*
**ISC 03 18:29:04.2**±1.2**, 21°.49S**±0°.07×**68°.7W**±0°.2**, h140km**±15km**, n10, σ0.68**/15**, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **0.63** | **240** | eP | **Pn** | **18 29 25.2** | **-0.1** |
| PB09 | | | | eS | **Sn** | **18 29 41.3** | **-0.2** |
| PB09 | | | | AML | AML | 18 29 42.3 | |
| | comp=N,3µm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **0.89** | **299** | eP | **Pn** | **18 29 26.9** | **-0.3** |
| PB01 | | | | eS | **Sn** | **18 29 44.4** | **-0.3** |
| PB01 | | | | AML | AML | 18 29 46.2 | |
| | comp=E,1µm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.17** | **258** | eP | **Pn** | **18 29 30.3** | **+0.5** |
| PB07 | | | | eS | **Sn** | **18 29 50.0** | **+0.7** |
| PB07 | | | | AML | AML | 18 29 51.2 | |
| | comp=E,2µm,0.2s | | | | | | |
| **MACH** | **Maria Elena** | **1.24** | **235** | eP | **Pn** | **18 29 30.9** | **+0.3** |
| MACH | | | | eS | **Sn** | **18 29 51.6** | **+0.9** |
| **PB06** | **IPOC Station P** | **1.48** | **215** | eP | **Pn** | **18 29 32.9** | **-0.1** |
| PB06 | | | | eS | **Sn** | **18 29 55.7** | **+0.6** |
| PB06 | | | | AML | AML | 18 29 56.4 | |
| | comp=E,1µm,0.4s | | | | | | |
| **PB11** | **IPOC Station P** | **1.96** | **331** | eP | **Pn** | **18 29 38.2** | **-0.2** |
| PB11 | | | | eS | **Sn** | **18 30 04.3** | **-0.3** |
| **ANCH** | **Antofagasta** | **2.72** | **216** | eP | Pn | 18 29 39.1 | -8.5 |
| ANCH | | | | eS | Sn | 18 30 11.9 | -9.2 |
| **LPAZ** | **La Paz** | **5.20** | **6** | Pn | **Pn** | **18 30 22.1** | **+1.5** |
| | comp=E,0.8nm,0.3s,baz=169,slow=3.4,SNR=17 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.13** | **70** | P | **P** | **18 40 42.0** | **-0.7** |
| | comp=E,1.2nm,0.6s,baz=252,slow=5.4,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.48** | **36** | PKPbc | **PKPab** | **18 48 26.2** | **-0.1** |
| | comp=E,0.2nm,0.5s,baz=324,slow=4.6,SNR=3.3 | | | | | | |

*ISCJB **03** 18:33:30.0±0.8, 6°.92N±0°.07×72°.95W±0°.07, h166km, mb3.0/1, Error ellipse: s-maj=11.6km s-min=7.1km az=136.8*
*FUNV **03** 18:33:29.6, 6°.77N×73°.14W, h167km, MW4.0*
*IDC **03** 18:33:35.0±6.8, 4°.75N×76°.54W, h112km±74km, mb2.8/1, mb1 3.3/2, mb1mx3.0/23, mbtmp3.3/2, ML2.3/1, Error ellipse: s-maj=100.7km s-min=36.3km az=43.0*
**ISC 03 18:33:29.5**±1.1**, 6°.84N**±0°.08×**72°.99W**±0°.08**, h166km, n17, σ1.36**/27**, 1C, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAPV** | **Capacho** | **1.22** | **33**⇑ | iP | **Pn** | **18 33 58.8** | **+0.9** |
| CAPV | | | | eS | **Sn** | **18 34 20.3** | **+0.5** |
| **ROSC** | **El Rosal** | **2.38** | **214** | P | **Pn** | **18 34 10.8** | **+0.4** |
| | 18nm,0.3s,baz=276,slow=18,SNR=51 | | | | | | |
| ROSC | | | | S | **Sn** | **18 34 39.3** | **-2.8** |
| | 43nm,0.3s,baz=269,slow=19,SNR=14 | | | | | | |
| **SOCV** | **Socops** | **2.56** | **56** | eP | **Pn** | **18 34 13.6** | **+1.5** |
| SOCV | | | | eS | **Sn** | **18 34 45.5** | **+0.3** |
| **VIGV** | **El Vigia** | **2.56** | **39** | eP | **Pn** | **18 34 13.3** | **+1.1** |
| VIGV | | | | eS | **Sn** | **18 34 45.0** | **-0.3** |
| **VIRV** | **Villa del Rosa** | **3.69** | **9** | eP | **Pn** | **18 34 25.6** | **-0.6** |
| VIRV | | | | eS | **Sn** | **18 35 08.0** | **-2.4** |
| **QARV** | **Quebrada Arrib** | **4.14** | **36** | eP | **Pn** | **18 34 33.2** | **+1.1** |
| QARV | | | | eS | **Sn** | **18 35 20.1** | **-0.9** |
| **SANV** | **Sanarito** | **4.32** | **52** | eP | **Pn** | **18 34 35.2** | **+0.7** |
| SANV | | | | eS | **Sn** | **18 35 23.1** | **-2.2** |
| **CURV** | **Curarigua** | **4.35** | **43** | eP | **Pn** | **18 34 35.5** | **+0.7** |
| CURV | | | | eS | **Sn** | **18 35 23.6** | **-2.2** |
| **DABV** | **Dabajuro** | **4.67** | **30** | eP | **Pn** | **18 34 39.8** | **+0.8** |
| DABV | | | | eS | **Sn** | **18 35 31.4** | **-2.0** |
| **BAUV** | **El Baul** | **5.33** | **67** | eP | **Pn** | **18 34 47.1** | **-0.4** |
| BAUV | | | | eS | **Sn** | **18 35 46.3** | **-2.4** |
| **MONV** | **Montecano** | **5.89** | **30** | eP | **Pn** | **18 34 54.5** | **-0.5** |
| **TURV** | **Turiamo** | **6.23** | **54** | eP | **Pn** | **18 34 60.0** | **+0.6** |
| **BIRV** | **Birongo** | **7.56** | **61** | eP | **Pn** | **18 35 16.9** | **-0.2** |
| **CUPV** | **Cœpira** | **7.81** | **65** | eP | **Pn** | **18 35 20.4** | **-0.1** |
| **TXAR** | **Lajitas Array** | **36.55** | **312** | P | **P** | **18 40 20.9** | **+1.4** |
| | 0.2nm,0.5s,baz=108,slow=8.6,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **149.23** | **234** | PKPbc | **PKPbc** | **18 52 59.8** | **+0.4** |
| | 0.3nm,0.5s,baz=116,slow=3.7,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **150.46** | **241** | PKPbc | **PKPbc** | **18 53 02.5** | **0.0** |
| | 0.4nm,0.4s,baz=107,slow=2.8,SNR=17 | | | | | | |

**SJA 03 19:09:13.1**±0.5**, 28°.11S×68°.70W, h131km**±3km**, ML3.7, La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VCA** | **Vinchina** | **0.76** | **145** | i P | Pn | 19 09 34.9 | +0.7 |
| VCA | | | | i S | Sn | 19 09 50.8 | +0.6 |
| VCA | | | | IAML | | 19 09 51.9 | |
| | comp=Z,2µm,0.4s | | | | | | |
| **AGUA** | **GUANDACOL** | **1.38** | **173** | i P | Pn | 19 09 40.9 | +0.8 |
| AGUA | | | | i S | Sn | 19 10 02.5 | +1.8 |
| **ACLC** | **CERRO LA CRUZ** | **2.01** | **131** | i P | Pn | 19 09 48.4 | +0.9 |
| ACLC | | | | i S | Sn | 19 10 14.2 | +0.4 |
| **CYA** | **Choya** | **2.57** | **98** | i P | Pn | 19 09 55.3 | +1.0 |
| CYA | | | | IAML | | 19 09 55.4 | |
| | comp=Z,214nm,0.2s | | | | | | |
| **AVFE** | **Valle Fertil** | **2.76** | **157** | i P | Pn | 19 09 57.9 | +1.1 |
| AVFE | | | | i S | Sn | 19 10 30.6 | +0.2 |
| AVFE | | | | IAML | | 19 10 32.6 | |
| | comp=Z,156nm,0.5s | | | | | | |
| **AMOG** | **MOGNA** | **2.82** | **176** | i P | Pn | 19 09 58.3 | +0.7 |
| AMOG | | | | i S | Sn | 19 10 31.8 | 0.0 |
| **APLL** | **PUNTA DE LOS L** | **2.96** | **141** | i P | Pn | 19 10 00.3 | +1.0 |
| APLL | | | | i S | Sn | 19 10 35.6 | +0.6 |
| **RTLL** | **Cerro Villicun** | **3.21** | **177** | i P | Pn | 19 10 03.8 | +1.2 |
| RTLL | | | | i S | Sn | 19 10 41.1 | +0.3 |
| **AHML** | **Horco Molle** | **3.27** | **67** | i P | Pn | 19 10 04.0 | +0.8 |

*IDC **03** 19:12:14.7±2.4, 27°.49N×56°.58E, h0km, mb3.7/9, mb1 3.8/9, mb1mx3.5/46, mbtmp3.7/9, Error ellipse: s-maj=54.0km s-min=21.9km az=161.0*
*ISCJB **03** 19:12:17.5±0.6, 27°.78N±0°.05×56°.6E±0°.1, h18km, mb3.6/9, Error ellipse: s-maj=13.6km s-min=7.0km az=9.0*
*DSN **03** 19:12:21.7±1.1, 27°.45N×56°.71E, h10km, mb3.0/8, ML3.6/6, Error ellipse: s-maj=36.0km s-min=8.9km az=114.0*
*CSEM **03** 19:12:22.0±0.3, 27°.59N×56°.42E, h20km, ML3.3, Error ellipse: s-maj=12.1km s-min=7.3km az=108.0*
**ISC 03 19:12:18.7**±0.8**, 27°.69N**±0°.06×**56°.6E**±0°.1**, h18km, n25, σ1.16**/25**, mb3.8**/9**, 3C-2D, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDS** | **Bandar-Abbas** | **0.49** | **234** | ePg | **Pg** | **19 12 28.1** | **-0.6** |
| **BANOM** | **Banah** | **1.78** | **189**⇑ | eP | **Pn** | **19 12 49.1** | **+0.5** |
| | SNR=134 | | | | | | |
| **BANOM** | **Banah** | **1.78** | **189** | P | **Pn** | **19 12 49.1** | **+0.5** |
| | SNR=134 | | | | | | |
| **KRBR** | **Kerman** | **2.29** | **3** | ePn | **Pb** | **19 12 59.8** | **+0.2** |
| KRBR | | | | eSg | **Sg** | **19 13 32.1** | **-0.2** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NAZ | Nazwa, Dubai | 2.83 | 198 | ⇓P | Pn | 19 13 04.9 | +2.0 |
| NAZ | Nazwa, Dubai | 2.83 | 198 | P | Pn | 19 13 04.9 | +2.0 |
| HATD | Hatta, Dubai | 2.89 | 189 | ⇑P | Pn | 19 13 05.2 | +1.4 |
| HATD | Hatta, Dubai | 2.89 | 189 | P | Pn | 19 13 05.2 | +1.4 |
| ASHO | Ashiyiah | 3.04 | 190 | eP | Pn | 19 13 06.9 | +1.0 |
| | SNR=19 | | | | | | |
| ASHO | Ashiyiah | 3.04 | 190 | P | Pn | 19 13 06.9 | +1.0 |
| | SNR=19 | | | | | | |
| FAQ | Al Faqa, Dubai | 3.08 | 198 | ⇑eP | Pn | 19 13 07.3 | +0.9 |
| | SNR=25 | | | | | | |
| FAQ | Al Faqa, Dubai | 3.08 | 198 | P | Pn | 19 13 07.3 | +0.9 |
| | SNR=25 | | | | | | |
| ASUD | Al Ashush, Dub | 3.27 | 201 | ⇓iP | Pn | 19 13 10.4 | +1.4 |
| | SNR=26 | | | | | | |
| ASUD | Al Ashush, Dub | 3.27 | 201 | P | Pn | 19 13 10.4 | +1.4 |
| | SNR=26 | | | | | | |
| GHIR | Ghir-Karzin | 3.27 | 281 | ePn | Pn | 19 13 10.8 | +1.7 |
| ZHSF | Zahedan | 4.12 | 61 | ePn | Pb | 19 13 27.5 | -3.3 |
| BRTR | Keskin Array B | 22.50 | 308 | P | P | 19 17 18.3 | +0.9 |
| | 1.0nm,0.7s,baz=107,slow=9.3,SNR=5.3 | | | | | | |
| MKAR | Makanchi Array | 27.75 | 40 | P | P | 19 18 07.0 | +0.8 |
| | 0.2nm,0.6s,baz=238,slow=8.3,SNR=2.8 | | | | | | |
| KURBB | Kurchatov Arra | 28.31 | 30 | P | P | 19 18 11.9 | +0.8 |
| | 0.2nm,0.3s,baz=231,slow=8.1,SNR=5.3 | | | | | | |
| AKASG | Malin Array Be | 30.97 | 325 | P | P | 19 18 33.8 | -0.9 |
| | 0.6nm,0.4s,baz=133,slow=8.3,SNR=4.3 | | | | | | |
| ZALV | Zalesovo Beam | 33.41 | 30 | P | P | 19 18 55.8 | -0.2 |
| | 0.7nm,0.3s,baz=247,slow=11,SNR=5.8 | | | | | | |
| GERES | GERESS Array B | 39.10 | 315 | P | P | 19 19 44.2 | -0.7 |
| | 0.5nm,0.8s,baz=126,slow=5.0,SNR=4.0 | | | | | | |
| DAVOX | Davos/Dischmat | 41.11 | 310 | P | P | 19 20 01.2 | -0.5 |
| | 0.8nm,0.4s,baz=84,slow=10,SNR=4.4 | | | | | | |
| HFS | Hagfors | 43.52 | 330 | P | P | 19 20 21.3 | +0.4 |
| | 6.4nm,1.0s,baz=124,slow=12,SNR=3.3 | | | | | | |
| TORD | Torodi Ar. Bea | 53.07 | 266 | P | P | 19 21 33.7 | -1.5 |
| | 0.7nm,0.5s,baz=64,slow=6.9,SNR=17 | | | | | | |

*ISCJB **03** 19:20:04.1±0.6, 37°.17N±0°.02×117°.39W±0°.03, h5km±4km, Error ellipse: s-maj=4.7km s-min=4.0km az=26.2*
*NEIC **03** 19:20:05.6, 37°.14N×117°.39W, h9km, ML3.1(REN), After REN.*
**ISC 03 19:20:05.5**±1.0**, 37°.14N**±0°.03×**117°.39W**±0°.03**, h12**km±7km**,** **n17,** σ0s**50**/31**, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRAC | Grapevine Rang | 0.14 | 175 | P | Pg | 19 20 09.1 | +0.1 |
| | baz=0.1 | | | | | | |
| GRAC | | | | S | Sg | 19 20 11.7 | +0.3 |
| | baz=0.1 | | | | | | |
| FURC | Furnace Creek, | 0.79 | 148 | P | Pg | 19 20 20.7 | -0.1 |
| | baz=0.8 | | | | | | |
| FURC | | | | S | Sb | 19 20 31.7 | -0.1 |
| | baz=0.8 | | | | | | |
| DAC | Darwin (Calif) | 0.88 | 191 | ePg | Pg | 19 20 22.3 | -0.3 |
| DAC | | | | eSg | Sg | 19 20 33.4 | -0.6 |
| CWC | Cottonwood Cre | 0.90 | 219 | S | Sg | 19 20 34.9 | +0.3 |
| | baz=0.9 | | | | | | |
| TPNV | Topopah Spring | 0.93 | 102 | P | Pg | 19 20 23.2 | -0.3 |
| | baz=0.9 | | | | | | |
| MPMC | Manual Prospec | 1.08 | 184 | P | Pb | 19 20 25.8 | -0.5 |
| | baz=1.1 | | | | | | |
| MPMC | | | | S | Sb | 19 20 40.4 | -0.1 |
| | baz=1.1 | | | | | | |
| MLAC | Mammoth Lakes | 1.25 | 293 | Pg | Pn | 19 20 29.2 | +0.1 |
| | baz=1.3 | | | | | | |
| ISA | Isabella | 1.72 | 211 | ePn | Pn | 19 20 36.0 | +0.7 |
| ISA | | | | eSn | Sn | 19 20 57.1 | -0.1 |
| R11A | Troy Canyon, C | 1.87 | 49 | Pb | Pb | 19 20 39.7 | -0.1 |
| | baz=1.9 | | | | | | |
| R11A | | | | Sb | Sb | 19 21 04.0 | +0.8 |
| | baz=1.9 | | | | | | |
| GSC | Goldstone | 1.89 | 165 | ePn | Pn | 19 20 37.7 | -0.1 |
| GSC | | | | eSn | Sn | 19 21 01.4 | -0.2 |
| GSC | | | | eSg | Sg | 19 21 06.1 | -0.3 |
| SHPR | Sheep Range | 1.90 | 109 | ePn | Pn | 19 20 38.9 | +1.0 |
| SHPR | | | | ePg | Pg | 19 20 41.9 | 0.0 |
| SHPR | | | | eSn | Sn | 19 21 02.3 | +0.5 |
| CMB | Columbia Colle | 2.54 | 291 | ePn | Pn | 19 20 47.4 | +0.7 |
| CMB | | | | eSg | Sg | 19 21 27.2 | -0.1 |
| CCUT | Cedar City | 3.23 | 82 | ePn | Pn | 19 20 56.3 | 0.0 |
| CCUT | | | | ePg | Pg | 19 21 07.2 | -0.3 |
| CCUT | | | | eSg | Sg | 19 21 48.8 | -0.6 |
| BMN | Battle Mountai | 3.29 | 2 | ePn | Pn | 19 20 56.7 | -0.3 |
| ELK | Elko | 3.97 | 24 | ePn | Pn | 19 21 05.4 | -1.0 |
| MSU | Marysvale | 4.34 | 70 | ePn | Pb | 19 21 22.3 | +0.3 |
| MSU | | | | eSn | Sn | 19 22 03.2 | +0.9 |
| DUG | Dugway | 4.70 | 48 | Pn | Pn | 19 21 16.0 | -0.4 |

*ISCJB **03** 19:24:51.4±0.5, 37°.15N±0°.02×117°.32W±0°.03, h5km±3km, Error ellipse: s-maj=3.9km s-min=2.9km az=43.6*
*NEIC **03** 19:24:52.7, 37°.14N×117°.38W, h9km, ML3.5(REN), After REN.*
*NEIC Felt at Las Vegas and Searchlight. Also felt at Death Valley, California.*
**ISC 03 19:24:52.8**±0.9**, 37°.14N**±0°.02×**117°.38W**±0°.02**, h12**km±7km**,** **n28,** σ0s**62**/55**, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRAC | Grapevine Rang | 0.14 | 176 | P | Pg | 19 24 56.3 | +0.1 |
| | baz=0.1 | | | | | | |
| GRAC | | | | S | Sg | 19 24 59.0 | +0.3 |
| | baz=0.1 | | | | | | |
| TIN | Tinemaha | 0.68 | 263 | P | Pg | 19 25 06.0 | -0.1 |
| | baz=0.7 | | | | | | |
| TIN | | | | S | Sg | 19 25 15.1 | +0.1 |
| | baz=0.7 | | | | | | |
| FURC | Furnace Creek, | 0.79 | 148 | P | Pg | 19 25 08.0 | 0.0 |
| | baz=0.8 | | | | | | |
| DAC | Darwin (Calif) | 0.87 | 191 | ePg | Pg | 19 25 09.1 | -0.6 |
| DAC | | | | eSg | Sg | 19 25 21.0 | -0.2 |
| CWC | Cottonwood Cre | 0.89 | 219 | P | Pg | 19 25 10.0 | 0.0 |
| | baz=0.9 | | | | | | |
| CWC | | | | S | Sg | 19 25 22.2 | +0.5 |
| | baz=0.9 | | | | | | |
| TPNV | Topopah Spring | 0.93 | 101 | P | Pg | 19 25 10.4 | -0.3 |
| | baz=0.9 | | | | | | |
| MPMC | Manual Prospec | 1.08 | 185 | P | Pb | 19 25 12.9 | -0.5 |
| | baz=1.1 | | | | | | |
| MPMC | | | | S | Sb | 19 25 27.7 | +0.1 |
| | baz=1.1 | | | | | | |
| MLAC | Mammoth Lakes | 1.26 | 294 | P | Pn | 19 25 16.4 | 0.0 |
| | baz=1.3 | | | | | | |
| LRMC | Laurel Mountai | 1.67 | 189 | P | Pn | 19 25 22.2 | +0.2 |
| | baz=1.7 | | | | | | |
| LRMC | | | | Sb | Sg | 19 25 46.4 | -0.2 |
| | baz=1.7 | | | | | | |
| RCTC | Rector, Farmer | 1.71 | 242 | Sb | Sg | 19 25 46.8 | -0.8 |
| | baz=1.7 | | | | | | |
| ISA | Isabella | 1.71 | 211 | P | Pn | 19 25 23.0 | +0.5 |
| | baz=1.7 | | | | | | |
| ISA | Isabella | 1.71 | 211 | ePn | Pn | 19 25 22.9 | +0.3 |
| ISA | | | | eSn | Sn | 19 25 44.1 | -0.2 |
| R11A | Troy Canyon, C | 1.87 | 49 | Pb | Pb | 19 25 26.7 | -0.2 |
| | baz=1.9 | | | | | | |
| R11A | | | | Sb | Sb | 19 25 51.7 | +1.3 |
| | baz=1.9 | | | | | | |
| GSC | Goldstone | 1.89 | 166 | P | Pn | 19 25 25.2 | +0.3 |
| | baz=1.9 | | | | | | |
| GSC | Goldstone | 1.89 | 166 | ePn | Pn | 19 25 25.3 | +0.3 |
| GSC | | | | eSn | Sn | 19 25 48.8 | +0.1 |
| GSC | | | | eSg | Sg | 19 25 53.3 | -0.3 |
| SHPR | Sheep Range | 1.89 | 109 | ePn | Pn | 19 25 25.8 | +0.8 |
| SHPR | | | | eSn | Sn | 19 25 48.6 | -0.2 |
| SHPR | | | | eSg | Sg | 19 25 53.1 | -0.6 |
| CMB | Columbia Colle | 2.55 | 292 | ePn | Pn | 19 25 35.1 | +1.2 |
| CMB | | | | eSg | Sg | 19 26 13.1 | -1.6 |
| LDFC | Landfair | 2.76 | 137 | Pn | Pn | 19 25 37.8 | +0.9 |
| LDFC | | | | ePg | Pg | 19 25 45.5 | -0.1 |
| LDFC | | | | eSg | Sg | 19 26 21.2 | -0.2 |
| MWC | Mount Wilson | 2.96 | 191 | ePn | Pn | 19 25 39.9 | +0.2 |
| MWC | | | | ePg | Pg | 19 25 48.9 | -0.6 |
| MWC | | | | eSn | Sn | 19 26 15.7 | +0.5 |
| MWC | | | | eSg | Sg | 19 26 27.9 | +0.1 |
| PASC | Pasadena Art C | 3.03 | 193 | ePn | Pn | 19 25 39.3 | -1.3 |
| PASC | | | | ePg | Pg | 19 25 51.8 | +1.0 |
| CCUT | Cedar City | 3.23 | 81 | ePn | Pn | 19 25 43.5 | 0.0 |
| CCUT | | | | ePg | Pg | 19 25 54.5 | -0.2 |
| CCUT | | | | eSg | Sg | 19 26 36.5 | -0.1 |
| BMN | Battle Mountai | 3.29 | 2 | ePn | Pn | 19 25 45.2 | +0.9 |
| BMN | | | | eSn | Sn | 19 26 24.1 | +0.6 |
| PFO | Pinyon Flat Ob | 3.60 | 168 | ePn | Pn | 19 25 48.2 | -0.3 |
| PFO | | | | eSn | Sn | 19 26 31.6 | +0.6 |
| ELK | Elko | 3.97 | 24 | ePn | Pn | 19 25 53.3 | -0.4 |
| ELK | | | | ePg | Pg | 19 26 09.0 | +0.1 |
| MSU | Marysvale | 4.34 | 70 | Pn | Pn | 19 25 60.0 | +1.1 |
| MSU | | | | eSn | Sn | 19 26 49.4 | -0.1 |
| DUG | Dugway | 4.70 | 48 | Pn | Pn | 19 26 02.1 | -1.6 |
| DUG | | | | eSn | Sn | 19 26 58.0 | -0.2 |
| WUAZ | Wupatki | 5.11 | 107 | ePn | Pn | 19 26 09.6 | +0.2 |
| | 35nm,1.1s | | | | | | |
| TMUT | Trail Mountain | 5.32 | 64 | Pn | Pn | 19 26 11.7 | -0.6 |
| | 25nm,0.5s | | | | | | |
| TMUT | | | | eSn | Sn | 19 27 13.9 | +0.3 |

*ISCJB **03** 19:29:18.1±0.8, 23°.50S±0°.04×69°.5W±0°.1, h95km±16km, Error ellipse: s-maj=17.3km s-min=7.1km az=3.6*
*GUC **03** 19:29:20.0±0.3, 23°.24S×69°.26W, h101km±3km, ML3.5*
**ISC 03 19:29:18.7**±1.7**, 23°.46S**±0°.05×**69°.5W**±0°.1**, h96**km±22km**,** **n11,** σ1s**46**/18**, Northern Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB06 | IPOC Station P | 0.75 | 357 | eP | Pn | 19 29 37.2 | +0.7 |
| PB06 | | | | eS | Sn | 19 29 50.3 | +0.6 |
| PB06 | | | | AML | AML | 19 29 51.6 | |
| | comp=E,4μm,0.1s | | | | | | |
| ANCH | Antofagasta | 0.83 | 254 | eP | Pn | 19 29 34.6 | -2.5 |
| ANCH | | | | eS | Sn | 19 29 50.4 | -0.4 |
| PB04 | IPOC Station P | 1.26 | 333 | eP | Pn | 19 29 43.7 | +1.7 |
| PB04 | | | | eS | Sn | 19 30 01.8 | +2.2 |
| PB04 | | | | AML | AML | 19 30 04.6 | |
| | comp=N,1μm,0.2s | | | | | | |
| MACH | Maria Elena | 1.28 | 351 | eP | Pn | 19 29 43.0 | +0.6 |
| MACH | | | | eS | Sn | 19 30 00.2 | +0.1 |
| PB07 | IPOC Station P | 1.76 | 349 | eP | Pn | 19 29 48.7 | +0.4 |
| PB07 | | | | eS | Sn | 19 30 10.4 | -0.2 |
| PB07 | | | | AML | AML | 19 30 11.9 | |
| | comp=E,576nm,0.2s | | | | | | |
| PB01 | IPOC Station P | 2.41 | 1 | eP | Pn | 19 29 55.9 | -0.7 |
| PB01 | | | | eS | Sn | 19 30 23.8 | -1.8 |
| PB01 | | | | AML | AML | 19 30 26.6 | |
| | comp=E,294nm,1.0s | | | | | | |
| AZAP | Zapla | 4.16 | 101 | iP | Pn | 19 30 19.2 | -1.1 |
| AZAP | | | | IAML | | 19 30 20.6 | |
| | comp=Z,14nm,0.4s | | | | | | |
| VCA | Vinchina | 5.39 | 167 | iP | Pn | 19 30 39.1 | +2.3 |
| VCA | | | | IAML | | 19 30 42.0 | |
| | comp=Z,6.1nm,0.2s | | | | | | |
| AGUA | GUANDACOL | 6.07 | 171 | iP | Pn | 19 30 47.8 | +1.6 |
| ACLC | CERRO LA CRUZ | 6.38 | 159 | iP | Pn | 19 30 50.6 | +0.3 |
| ACLC | | | | iS | Sn | 19 32 00.4 | -1.3 |
| CFAA | Coronel Fontan | 8.19 | 172 | iP | Pn | 19 31 14.7 | -0.3 |

**NEIC 03 19:39:28.0, 19°.21N×155°.53W, h5km, ML3.9**(HVO)**, After HVO., Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| POHA | Pohakuloa | 0.54 | 360 | ePn | Pg | 19 39 38.4 | -0.4 |
| KIP | Kipapa | 3.21 | 314 | ePn | Pn | 19 40 13.5 | -5.6 |
| KIP | | | | eSn | Sn | 19 40 49.3 | -8.3 |

**IDC 03 20:10:20.4**±5.9**, 5°.17S×133°.62E, h0km, mb3.4**/1**, mb1 3.5**/3**, mb1mx3.3**/23**, mbtmp3.3**/3**, ML3.3**/2**, Error ellipse: s-maj=341.8km s-min=31.4km az=77.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 14.70 | 177 | Pn | Pn | 20 13 48.3 | -1.5 |
| | 0.1nm,0.3s,baz=355,slow=13,SNR=11 | | | | | | |
| WRA | | | | Sn | Sn | 20 16 24.9 | -8.6 |
| | 0.1nm,0.3s,baz=1.3,slow=23,SNR=3.3 | | | | | | |
| ASAR | Alice Springs | 18.39 | 179 | P | P | 20 14 37.5 | +0.4 |
| | 0.2nm,0.3s,baz=3.0,slow=11,SNR=9.2 | | | | | | |
| MKAR | Makanchi Array | 68.75 | 325 | P | P | 20 21 26.2 | 0.0 |
| | 0.1nm,0.3s,baz=112,slow=7.6,SNR=2.0 | | | | | | |

**IDC 03 20:12:55.2**±7.6**, 22°.38S×179°.03W, h0km, mb3.8**/2**, mb1 4.1**/2**, mb1mx3.6**/18**, mbtmp3.8**/2**, Error ellipse: s-maj=377.7km s-min=63.4km az=152.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 43.18 | 259 | P | P | 20 20 58.0 | -0.2 |
| | 0.7nm,0.7s,baz=90,slow=7.6,SNR=8.0 | | | | | | |
| WRA | Warramunga Arr | 43.42 | 264 | P | P | 20 21 00.0 | -0.1 |
| | 0.8nm,0.4s,baz=102,slow=8.1,SNR=64 | | | | | | |
| BRTR | Keskin Array B | 147.34 | 310 | PKPbc | PKPbc | 20 32 40.5 | -0.8 |
| | 0.5nm,0.6s,baz=92,slow=3.5,SNR=2.9 | | | | | | |

**MEX 03 20:17:42.3**±0.3**, 15°.39N×93°.80W, h67**km±9km**, MD4.0, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.64 | 61 | eP | Pn | 20 17 54.9 | -1.4 |
| PCIG | | | | eS | Sn | 20 18 04.9 | -1.6 |
| CCIG | Comitan | 1.82 | 61 | eP | Pn | 20 18 10.6 | -1.2 |
| CCIG | | | | iS | Sn | 20 18 31.8 | -2.4 |

*ISCJB **03** 20:19:34.6±0.6, 37°.13N±0°.04×28°.67E±0°.05, h14km, Error ellipse: s-maj=6.4km s-min=5.1km az=21.8*
*ISK **03** 20:19:34.2, 37°.12N×28°.67E, h20km, MD2.9*
*DDA **03** 20:19:35.0, 37°.17N×28°.56E, h7km, Md2.7*
*CSEM **03** 20:19:35.0±0.2, 37°.13N×28°.65E, h23km±3km, MD2.9, Error ellipse: s-maj=7.6km s-min=6.7km az=117.0*
**ISC 03 20:19:34.7**±0.9**, 37°.13N**±0°.03×**28°.65E**±0°.03**, h14**km**, n20,** σ0s**57**/27**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TURN | Turunc | 0.26 | 189 | iP | Pn | 20 19 43.8 | -0.2 |
| TURN | Turunc | 0.26 | 189 | P | Pn | 20 19 43.8 | -0.2 |
| TURN | | | | S | Sn | 20 19 51.7 | +1.9 |
| YER | Yerkesik | 0.30 | 272 | ePG | Pb | 20 19 41.4 | -0.4 |
| YER | | | | eSG | Sb | 20 19 46.5 | -0.1 |
| YER | Yerkesik | 0.30 | 272 | ePg | Pb | 20 19 41.4 | -0.4 |
| YER | | | | eSg | Sb | 20 19 46.5 | -0.1 |
| DALY | Dalyan (Mu˜la | 0.31 | 180 | ePG | Pg | 20 19 41.0 | +0.1 |
| DALY | | | | eSG | Sb | 20 19 46.4 | -0.4 |
| DALY | Dalyan (Mu˜la | 0.31 | 180 | ePg | Pg | 20 19 41.1 | +0.1 |
| DALY | | | | eSg | Sb | 20 19 46.4 | -0.4 |
| DNZL | Cakiroluk | 0.64 | 29 | iP | Pg | 20 19 47.5 | +0.2 |
| DNZL | | | | iS | Sb | 20 19 57.3 | +0.5 |
| DNZL | Cakiroluk | 0.64 | 29 | P | Pg | 20 19 47.5 | +0.2 |
| DNZL | | | | S | Sb | 20 19 57.3 | +0.5 |
| DENT | Denizli | 0.70 | 26 | ePG | Pg | 20 19 48.6 | +0.3 |
| DENT | Denizli | 0.70 | 26 | ePg | Pg | 20 19 48.6 | +0.3 |
| AYDB | Zeytinkoy-Aydi | 1.02 | 324 | ePG | Pb | 20 19 53.9 | -0.3 |
| AYDB | Zeytinkoy-Aydi | 1.02 | 324 | ePg | Pb | 20 19 53.9 | -0.3 |
| ELL | Elmali | 1.07 | 110 | ePG | Pb | 20 19 54.6 | -0.5 |
| ELL | Elmali | 1.07 | 110 | ePg | Pb | 20 19 54.6 | -0.5 |
| BODT | Bodrum | 1.07 | 267 | ePN | Pb | 20 19 55.0 | -0.1 |
| BODT | Bodrum | 1.07 | 267 | ePn | Pb | 20 19 55.0 | -0.1 |
| KULA | Kula-Manisa | 1.39 | 0 | ePN | Pn | 20 19 58.9 | -0.8 |
| KULA | Kula-Manisa | 1.39 | 0 | ePn | Pn | 20 19 58.9 | -0.8 |
| IZM | Izmir | 1.68 | 319 | ePN | Pn | 20 20 03.2 | -0.5 |
| IZM | Izmir | 1.68 | 319 | ePn | Pn | 20 20 03.2 | -0.5 |

**IDC 03 20:27:09.5**±1.3**, 15°.50S×174°.92W, h277**km±13km**, mb3.2**/6**, mb1 3.5**/7**, mb1mx3.3**/22**, mbtmp3.8**/7**, Error ellipse: s-maj=37.4km s-min=14.6km az=147.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 3.43 | 63 | P | Pn | 20 28 08.7 | +0.3 |
| | 6.8nm,0.3s,baz=152,slow=5.9,SNR=6.5 | | | | | | |
| AFI | | | | S | S | 20 28 55.5 | +0.3 |
| | 18nm,0.3s,baz=18,slow=20,SNR=9.3 | | | | | | |
| WRA | Warramunga Arr | 48.39 | 257 | P | P | 20 35 24.0 | -0.4 |
| | 0.6nm,0.4s,baz=91,slow=7.3,SNR=27 | | | | | | |
| ASAR | Alice Springs | 48.69 | 252 | P | P | 20 35 26.6 | -0.1 |
| | 3.2nm,0.5s,baz=88,slow=8.0,SNR=56 | | | | | | |
| VNDA | Vanda | 63.13 | 186 | P | P | 20 37 07.7 | 0.0 |
| | 0.6nm,0.8s,baz=30,slow=4.7,SNR=3.5 | | | | | | |
| NVAR | Mina Array Bea | 75.39 | 43 | P | P | 20 38 23.6 | +0.2 |
| | 0.8nm,0.7s,baz=233,slow=8.9,SNR=8.5 | | | | | | |
| TXAR | Lajitas Array | 81.89 | 57 | P | P | 20 38 58.5 | -0.3 |
| | 0.3nm,0.8s,baz=206,slow=6.0,SNR=3.2 | | | | | | |
| ILAR | Eielson Array | 82.83 | 12 | P | P | 20 39 01.9 | -0.8 |
| | 0.4nm,0.8s,baz=215,slow=5.4,SNR=5.6 | | | | | | |
| BRTR | Keskin Array B | 145.29 | 320 | PKPbc | PKPab | 20 46 15.5 | -0.2 |
| | 0.7nm,0.8s,baz=13,slow=1.9,SNR=3.2 | | | | | | |
| GERES | GERESS Array B | 146.00 | 350 | PKPbc | PKPdf | 20 46 16.0 | +0.4 |
| | 0.3nm,0.6s,baz=90,slow=3.4,SNR=2.9 | | | | | | |

**JMA 03 20:28:48.2**±0.4**, 25°.57N×122°.76E, h228km, M2.9, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IRIF | Iriomote-Funau | 1.51 | 144 | P | Pn | 20 29 24.2 | -0.4 |
| IRIF | | | | eS | S | 20 29 53.1 | +0.2 |
| JISG | Ishigakijimahi | 1.71 | 125 | P | Pn | 20 29 26.3 | +0.1 |
| JISG | | | | eS | S | 20 29 56.5 | +0.6 |
| JIJ | Ishigaki jima | 1.74 | 133 | P | Pn | 20 29 26.6 | +0.1 |
| JIJ | | | | eS | S | 20 29 55.7 | -0.6 |
| JKRS | Kuro-shima | 1.75 | 139 | P | Pn | 20 29 27.0 | +0.5 |
| JKRS | | | | eS | S | 20 29 56.7 | +0.3 |
| JTJ | Tarama | 1.99 | 117 | P | Pn | 20 29 29.5 | +0.7 |
| JTJ | | | | S | S | 20 30 00.9 | +0.5 |
| JIRB | Irabujima | 2.31 | 108 | P | Pn | 20 29 32.0 | +0.1 |
| JIRB | | | | eS | S | 20 30 05.6 | -0.4 |

**TAP 03 20:29:32.0, 24°.11N×121°.69E, h12km, ML1.9, 1C, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWD | Chiawan | 0.09 | 249 | ⇑iP | Pg | 20 29 35.0 | +0.3 |
| | baz=250 | | | | | | |
| TWD | | | | iS | Sg | 20 29 36.9 | +0.2 |
| | baz=250 | | | | | | |
| HWA | Hwalien | 0.15 | 210 | eP | Pg | 20 29 35.9 | +0.3 |
| | baz=216 | | | | | | |
| HWA | | | | eS | Sg | 20 29 38.5 | +0.3 |
| | baz=216 | | | | | | |
| ENA | Nanau | 0.32 | 9 | P | Pg | 20 29 38.6 | +0.2 |
| | baz=7.0 | | | | | | |
| ENA | | | | S | Sg | 20 29 43.2 | +0.4 |
| | baz=7.0 | | | | | | |
| ESL | Shilin | 0.38 | 218 | eP | Pb | 20 29 40.5 | -0.1 |
| | baz=226 | | | | | | |
| WHF | Hehuan Shan | 0.39 | 275 | iP | Pg | 20 29 40.2 | -0.1 |
| | baz=275 | | | | | | |
| WHF | | | | S | Sg | 20 29 45.3 | -0.6 |
| | baz=275 | | | | | | |
| NNS | Nan Shan | 0.44 | 319 | P | Pg | 20 29 41.0 | +0.2 |
| | baz=318 | | | | | | |
| NNS | | | | S | Sg | 20 29 47.1 | +0.4 |
| | baz=318 | | | | | | |
| TWT | Tachien | 0.49 | 287 | eP | Pb | 20 29 42.5 | -0.2 |
| | baz=289 | | | | | | |
| TWC | Suao | 0.52 | 16 | eP | Pb | 20 29 42.5 | -0.4 |
| | baz=8.0 | | | | | | |
| TWC | | | | eS | Sg | 20 29 49.3 | +0.3 |
| | baz=8.0 | | | | | | |
| ENTT | Nioudou | 0.54 | 348 | P | Pb | 20 29 43.0 | -0.3 |
| | baz=346 | | | | | | |
| ENTT | | | | iS | Sg | 20 29 50.4 | +0.7 |
| | baz=346 | | | | | | |
| NSK | Sanguang | 0.64 | 332 | eP | Pg | 20 29 44.6 | +0.1 |
| | baz=331 | | | | | | |
| NSK | | | | eS | Sg | 20 29 53.4 | +0.4 |
| | baz=331 | | | | | | |
| TWB1 | Santiao Chiao | 0.93 | 17 | eP | Pg | 20 29 49.2 | -0.8 |
| | baz=8.0 | | | | | | |

*CSEM **03** 20:30:20.0±0.2, 43°.94N×11°.84E, h10km, ML2.5/11, Error ellipse: s-maj=5.9km s-min=2.8km az=36.0*
**ROM 03 20:30:19.4**±0.2**, 43°.95N×11°.83E, h8**km±1km**, Md2.4**/16**, Ml1.7**/11**, Error ellipse: s-maj=2.5km s-min=1.1km az=38.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFI | Santa Sofia | 0.05 | 165 | Pg | Pg | 20 30 21.3 | +0.2 |
| SFI | | | | Sg | Sg | 20 30 22.6 | +0.3 |
| | 633nm,0.2s | | | | | | |
| SFI | Santa Sofia | 0.05 | 165 | Pg | Pg | 20 30 21.3 | +0.2 |
| SFI | | | | Sg | Sg | 20 30 22.6 | +0.3 |
| | 633nm,0.2s | | | | | | |
| ASQU | Asqua | 0.16 | 190 | Pg | Pg | 20 30 23.3 | +0.5 |
| ASQU | | | | Sg | Sg | 20 30 26.4 | +1.3 |
| | 729nm,0.2s | | | | | | |
| ASQU | Asqua | 0.16 | 190 | Pg | Pg | 20 30 23.3 | +0.5 |
| ASQU | | | | Sg | Sg | 20 30 26.4 | +1.3 |
| | 729nm,0.2s | | | | | | |
| VMG | Vicchio | 0.21 | 273 | Pg | Pg | 20 30 24.3 | +0.7 |
| VMG | | | | Sg | Sg | 20 30 28.2 | +1.7 |
| | 202nm,0.2s | | | | | | |
| VMG | Vicchio | 0.21 | 273 | Pg | Pg | 20 30 24.3 | +0.7 |
| VMG | | | | Sg | Sg | 20 30 28.2 | +1.7 |
| | 202nm,0.2s | | | | | | |
| FAEN | Faenza | 0.34 | 6 | Pg | Pb | 20 30 27.7 | 0.0 |
| FAEN | Faenza | 0.34 | 6 | Pg | Pb | 20 30 27.7 | 0.0 |
| CRE | Caprese Michel | 0.34 | 165 | Pg | Pg | 20 30 26.7 | +0.4 |
| CRE | | | | Sg | Sb | 20 30 32.7 | -1.1 |
| | 120nm,0.2s | | | | | | |
| CRE | Caprese Michel | 0.34 | 165 | Pg | Pg | 20 30 26.7 | +0.4 |
| CRE | | | | Sg | Sb | 20 30 32.7 | -1.1 |
| | 120nm,0.2s | | | | | | |
| SEI | Scarperia | 0.36 | 287 | Pg | Pg | 20 30 26.9 | +0.4 |
| SEI | | | | Sg | Sb | 20 30 33.0 | -1.0 |
| | 584nm,0.3s | | | | | | |
| SEI | Scarperia | 0.36 | 287 | Pg | Pg | 20 30 26.9 | +0.4 |
| SEI | | | | Sg | Sb | 20 30 33.0 | -1.0 |
| | 584nm,0.3s | | | | | | |
| IMOL | Imola, Italy | 0.41 | 351 | Pg | Pb | 20 30 29.0 | 0.0 |
| | 19nm,0.7s | | | | | | |
| IMOL | Imola, Italy | 0.41 | 351 | Pg | Pb | 20 30 29.0 | 0.0 |
| | 19nm,0.7s | | | | | | |
| PARC | Parchiule | 0.42 | 136 | Pg | Pg | 20 30 28.0 | +0.3 |
| PARC | | | | Sg | Sb | 20 30 35.4 | -0.5 |
| | 48nm,0.5s | | | | | | |
| PARC | Parchiule | 0.42 | 136 | Pg | Pg | 20 30 28.0 | +0.3 |
| PARC | | | | Sg | Sb | 20 30 35.4 | -0.5 |
| | 48nm,0.5s | | | | | | |
| BADI | Badiali | 0.54 | 146 | Pg | Pg | 20 30 29.9 | +0.1 |
| BADI | | | | Sg | Sb | 20 30 38.8 | -0.3 |
| | 44nm,0.3s | | | | | | |
| BADI | Badiali | 0.54 | 146 | Pg | Pg | 20 30 29.9 | +0.1 |
| BADI | | | | Sg | Sb | 20 30 38.8 | -0.3 |
| | 44nm,0.3s | | | | | | |
| FNVD | Fontana Vidola | 0.55 | 293 | Pg | Pg | 20 30 30.6 | +0.4 |
| FNVD | | | | Sg | Sb | 20 30 39.4 | -0.3 |
| | 56nm,0.5s | | | | | | |
| FNVD | Fontana Vidola | 0.55 | 293 | Pg | Pg | 20 30 30.6 | +0.4 |
| FNVD | | | | Sg | Sb | 20 30 39.4 | -0.3 |
| | 56nm,0.5s | | | | | | |
| CRMI | Carmignano | 0.64 | 256 | Pg | Pg | 20 30 32.1 | +0.3 |
| CRMI | | | | Sg | Sb | 20 30 41.7 | -0.4 |
| CRMI | Carmignano | 0.64 | 256 | Pg | Pg | 20 30 32.1 | +0.3 |
| CRMI | | | | Sg | Sb | 20 30 41.7 | -0.4 |
| ATPI | Pietralunga - | 0.65 | 140 | Pg | Pg | 20 30 32.1 | 0.0 |
| ATPI | | | | Sg | Sb | 20 30 42.9 | +0.4 |
| | 28nm,0.4s | | | | | | |
| ATPI | Pietralunga - | 0.65 | 140 | Pg | Pg | 20 30 32.1 | 0.0 |
| ATPI | | | | Sg | Sb | 20 30 42.9 | +0.4 |
| | 28nm,0.4s | | | | | | |
| ATPC | Poggio Castell | 0.66 | 136 | Pg | Pg | 20 30 32.1 | 0.0 |
| ATPC | | | | Sg | Sb | 20 30 43.4 | +0.8 |
| | 33nm,0.4s | | | | | | |
| ATPC | Poggio Castell | 0.66 | 136 | Pg | Pg | 20 30 32.1 | 0.0 |
| ATPC | | | | Sg | Sb | 20 30 43.4 | +0.8 |
| | 33nm,0.4s | | | | | | |
| PIEI | Pieia | 0.66 | 129 | Pg | Pg | 20 30 32.2 | 0.0 |
| | 23nm,0.9s | | | | | | |
| PIEI | Pieia | 0.66 | 129 | Pg | Pg | 20 30 32.2 | 0.0 |
| | 23nm,0.9s | | | | | | |
| ATVO | AVT- Monte Val | 0.71 | 144 | Pg | Pg | 20 30 33.0 | -0.1 |
| ATVO | | | | Sg | Sb | 20 30 44.7 | +0.6 |
| | 35nm,0.4s | | | | | | |
| ATVO | AVT- Monte Val | 0.71 | 144 | Pg | Pg | 20 30 33.0 | -0.1 |
| ATVO | | | | Sg | Sb | 20 30 44.7 | +0.6 |
| | 35nm,0.4s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FSSB | Fossombrone | 0.73 | 110 | Pg | Pg | 20 30 33.6 | 0.0 |
| | 39nm,0.5s | | | | | | |
| FSSB | Fossombrone | 0.73 | 110 | Pg | Pg | 20 30 33.6 | 0.0 |
| | 39nm,0.5s | | | | | | |
| MGAB | Montegabbione | 1.06 | 169 | Pg | Pb | 20 30 40.1 | 0.0 |
| MGAB | Montegabbione | 1.06 | 169 | Pg | Pb | 20 30 40.1 | 0.0 |

*ROM **03** 20:31:17.2±0.1, 44°.38N×7°.30E, h5km, Md1.4/3, Ml1.2/3, Error ellipse: s-maj=2.2km s-min=0.5km az=71.0*
*STR **03** 20:31:17.5±0.5, 44°.40N×7°.34E, h5km, Ml2.1, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*LDG **03** 20:31:17.6±0.1, 44°.41N×7°.34E, h2km, Md1.8/3, Ml1.8/9, Error ellipse: s-maj=1.5km s-min=0.7km az=72.0*
*GEN **03** 20:31:17.2, 44°.39N×7°.34E, h6km, ML0.9*
**CSEM 03 20:31:16.8±0.1, 44°.41N×7°.35E, h10km, ML1.7/11, Error ellipse: s-maj=3.5km s-min=1.7km az=71.0, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DOI | San Damiano | 0.12 | 324 | Pg | Pg | 20 31 20.4 | +0.5 |
| DOI | | | | Sg | Sg | 20 31 22.5 | +0.5 |
| | 83nm,0.2s | | | | | | |
| DOI | San Damiano | 0.12 | 324 | Pg | Pg | 20 31 20.4 | +0.5 |
| DOI | | | | Sg | Sg | 20 31 22.5 | +0.5 |
| | 83nm,0.2s | | | | | | |
| STV | Sant Anna di V | 0.16 | 185 | Pg | Pg | 20 31 20.6 | +0.1 |
| STV | | | | Sg | Sg | 20 31 22.5 | -0.5 |
| | 23nm,0.2s | | | | | | |
| STV | Sant Anna di V | 0.16 | 185 | Pg | Pg | 20 31 20.6 | +0.1 |
| STV | | | | S | Sg | 20 31 22.5 | -0.5 |
| ENR | Entracque | 0.19 | 163 | P | Pg | 20 31 20.8 | -0.1 |
| ENR | | | | S | Sg | 20 31 23.3 | -0.5 |
| PZZ | Stroppo | 0.19 | 301 | Pg | Pg | 20 31 21.4 | +0.3 |
| PZZ | | | | Sg | Sg | 20 31 24.6 | +0.6 |
| | 59nm,0.3s | | | | | | |
| PZZ | Stroppo | 0.19 | 301 | P | Pg | 20 31 21.4 | +0.3 |
| PZZ | | | | S | Sg | 20 31 24.3 | +0.3 |
| PZZ | | | | Sg | Sg | 20 31 24.6 | +0.6 |
| | 59nm,0.3s | | | | | | |
| BHB | Bricherasio | 0.44 | 352 | P | Pg | 20 31 25.8 | +0.3 |
| BHB | | | | S | Sg | 20 31 31.7 | +0.3 |
| OG22 | Abries | 0.51 | 326 | Pg | Pb | 20 31 27.6 | -0.5 |
| OG22 | | | | Sg | Sg | 20 31 34.3 | +0.5 |
| LUCF | Luceram | 0.51 | 180 | Pg | Pg | 20 31 27.4 | +0.4 |
| LUCF | | | | Sg | Sg | 20 31 34.6 | +0.7 |
| LUCF | Luceram | 0.51 | 180 | Pg | Pg | 20 31 27.4 | +0.4 |
| LUCF | | | | Sg | Sg | 20 31 34.6 | +0.7 |
| MBDF | Montbardon | 0.52 | 308 | *e*Pg | Pg | 20 31 27.4 | +0.2 |
| MBDF | | | | *e*Sg | Sg | 20 31 34.5 | +0.3 |
| | 9.2nm,0.3s | | | | | | |
| MBDF | Montbardon | 0.52 | 308 | *e*Pg | Pg | 20 31 27.4 | +0.2 |
| MBDF | | | | *e*Sg | Sg | 20 31 34.5 | +0.3 |
| | 4.6nm,0.3s | | | | | | |
| MVIF | Mont Vial | 0.53 | 195 | Pg | Pg | 20 31 27.3 | 0.0 |
| MVIF | | | | Sg | Sg | 20 31 34.8 | +0.3 |
| SBF | Sospel | 0.55 | 173 | *e*Pg | Pb | 20 31 28.3 | -0.3 |
| SBF | | | | *e*Sg | Sg | 20 31 35.2 | +0.3 |
| | 9.0nm,0.2s | | | | | | |
| SBF | Sospel | 0.55 | 173 | *e*Pg | Pb | 20 31 28.3 | -0.3 |
| SBF | | | | *e*Sg | Sg | 20 31 35.2 | +0.3 |
| | 4.5nm,0.2s | | | | | | |
| RORO | Rocca Rossa | 0.60 | 119 | P | Pg | 20 31 28.5 | +0.1 |
| RORO | Rocca Rossa | 0.60 | 119 | S | Sg | 20 31 36.3 | +0.1 |
| REVF | Revere | 0.67 | 179 | Pg | Pg | 20 31 29.3 | -0.5 |
| REVF | | | | Sg | Sb | 20 31 40.1 | +0.1 |
| REVF | Revere | 0.67 | 179 | Pg | Pg | 20 31 29.3 | -0.5 |
| REVF | | | | Sg | Sb | 20 31 40.1 | +0.1 |
| FRF | La Foret Royal | 0.98 | 211 | *e*Pg | Pn | 20 31 36.4 | -0.3 |
| FRF | | | | *e*Sg | Sg | 20 31 48.7 | +0.1 |
| | 4.7nm,0.2s | | | | | | |
| FRF | La Foret Royal | 0.98 | 211 | *e*Pg | Pn | 20 31 36.4 | -0.3 |
| FRF | | | | *e*Sg | Sg | 20 31 48.7 | +0.1 |
| | 2.3nm,0.2s | | | | | | |
| ORIF | Oris-en-Rattie | 1.16 | 297 | *e*Pg | Pg | 20 31 39.5 | +0.2 |
| ORIF | | | | *e*Sg | Sb | 20 31 54.3 | -0.1 |
| | 1.2nm,0.2s | | | | | | |
| ORIF | Oris-en-Rattie | 1.16 | 297 | *e*Pg | Pg | 20 31 39.5 | +0.2 |
| ORIF | | | | *e*Sg | Sb | 20 31 54.3 | -0.1 |
| | 0.6nm,0.2s | | | | | | |
| LPG | La Plagne | 1.17 | 339 | *e*Pg | Pg | 20 31 39.8 | +0.1 |
| LPG | | | | *e*Sg | Sb | 20 31 54.9 | -0.1 |
| | 1.9nm,0.3s | | | | | | |
| LPG | La Plagne | 1.17 | 339 | *e*Pg | Pg | 20 31 39.8 | +0.1 |
| LPG | | | | *e*Sg | Sb | 20 31 54.9 | -0.1 |
| | 0.9nm,0.3s | | | | | | |
| LPL | La Plagne | 1.19 | 339 | *e*Pg | Pg | 20 31 40.1 | +0.1 |
| LPL | | | | *e*Sg | Sb | 20 31 55.6 | +0.1 |
| | 1.9nm,0.4s | | | | | | |
| LPL | La Plagne | 1.19 | 339 | *e*Pg | Pg | 20 31 40.1 | +0.1 |
| LPL | | | | *e*Sg | Sb | 20 31 55.6 | +0.1 |
| | 0.9nm,0.4s | | | | | | |
| LMR | La Mourre | 1.23 | 210 | *e*Pg | Pg | 20 31 40.5 | 0.0 |
| LMR | | | | *e*Sg | Sg | 20 31 56.4 | -0.1 |
| | 4.5nm,0.3s | | | | | | |
| LMR | La Mourre | 1.23 | 210 | *e*Pg | Pg | 20 31 40.5 | 0.0 |
| LMR | | | | *e*Sg | Sg | 20 31 56.4 | -0.1 |
| | 2.2nm,0.3s | | | | | | |
| SMRF | Simiane la Rot | 1.34 | 252 | *e*Pg | Pg | 20 31 42.6 | -0.1 |
| SMRF | | | | *e*Sg | Sn | 20 31 59.9 | +0.2 |
| | 2.1nm,0.3s | | | | | | |
| SMRF | Simiane la Rot | 1.34 | 252 | *e*Pg | Pg | 20 31 42.6 | -0.1 |
| SMRF | | | | *e*Sg | Sn | 20 31 59.9 | +0.2 |
| | 1.0nm,0.3s | | | | | | |
| VIVF | Saint-Julien-l | 1.96 | 284 | *e*Pn | Pn | 20 31 48.5 | -1.7 |
| VIVF | | | | *e*Sn | Sn | 20 32 12.2 | -2.7 |
| | 2.2nm,0.6s | | | | | | |
| VIVF | Saint-Julien-l | 1.96 | 284 | *e*Pn | Pn | 20 31 48.5 | -1.7 |
| VIVF | | | | *e*Sn | Sn | 20 32 12.2 | -2.7 |
| | 1.1nm,0.6s | | | | | | |
| PGF | Pioggiola | 2.21 | 146 | *e*Pn | Pn | 20 31 53.7 | 0.0 |
| PGF | | | | *e*Sn | Sn | 20 32 20.3 | -1.0 |
| | 1.0nm,0.3s | | | | | | |
| PGF | Pioggiola | 2.21 | 146 | *e*Pn | Pn | 20 31 53.7 | 0.0 |
| PGF | | | | *e*Sn | Sn | 20 32 20.3 | -1.0 |
| | 0.5nm,0.3s | | | | | | |

*AUST **03** 20:34:02.4, 19°.87S×171°.92W, h0km*
*ISCJB **03** 20:35:50.6±0.9, 23°.57S±0°.10×180°.0E±0°.1, h532km, mb3.8/4, Error ellipse: s-maj=17.5km s-min=13.1km az=178.1*
*IDC **03** 20:35:50.9±2.4, 23°.47S×179°.95W, h522km±23km, mb3.3/4, mb1 3.6/5, mb1mx3.1/20, mbtmp4.2/5, Error ellipse: s-maj=38.6km s-min=20.3km az=164.0*
**ISC 03 20:35:51.4±0.9, 23°.7S±0°.1×179°.9W±0°.2, h532km, n13, σ1s.27/16, mb3.9/4, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 14.72 | 189 | P | P | 20 38 59.5 | +1.5 |
| | 1.0nm,0.3s,baz=114,slow=14,SNR=4.8 | | | | | | |
| URZ | | | | S | S | 20 41 29.4 | -2.5 |
| | 0.3nm,0.3s,baz=151,slow=19,SNR=1.9 | | | | | | |
| EIDS | Eidsvold | 26.40 | 260 | P | P | 20 40 47.0 | +1.4 |
| | baz=34,SNR=7.1 | | | | | | |
| ASAR | Alice Springs | 42.13 | 260 | P | P | 20 42 57.8 | +0.4 |
| | 2.9nm,0.4s,baz=94,slow=7.5,SNR=62 | | | | | | |
| ASAR | | | | ScP | ScP | 20 47 39.9 | +0.3 |
| | 0.8nm,0.7s,baz=110,slow=4.1,SNR=7.7 | | | | | | |
| WRA | Warramunga Arr | 42.49 | 266 | P | P | 20 42 59.9 | -0.2 |
| | 4.2nm,0.3s,baz=102,slow=8.3,SNR=264 | | | | | | |
| WRA | | | | ScP | ScP | 20 47 41.9 | +1.0 |
| | 0.4nm,0.8s,baz=100,slow=3.4,SNR=3.3 | | | | | | |
| KDU | Kakadu | 46.34 | 275 | P | P | 20 43 30.0 | +0.1 |
| | baz=54,SNR=4.5 | | | | | | |
| WRKA | Warakurna | 46.94 | 257 | P | P | 20 43 34.6 | +0.2 |
| | baz=55,SNR=10.0 | | | | | | |
| MTN | Manton Dam | 47.51 | 274 | P | P | 20 43 36.3 | -2.4 |
| | baz=55,SNR=3.8 | | | | | | |
| KNRA | Kununurra | 48.76 | 270 | P | P | 20 43 48.1 | +0.1 |
| | baz=56,SNR=5.2 | | | | | | |
| MORW | Morawa | 57.00 | 250 | P | P | 20 44 46.8 | +0.2 |
| | baz=65,SNR=4.9 | | | | | | |
| LUWI | Luwuk | 59.85 | 283 | P | P | 20 45 05.0 | -1.1 |
| | baz=66,SNR=3.3 | | | | | | |
| NVAR | Mina Array Bea | 84.58 | 44 | P | P | 20 47 27.9 | -1.1 |
| | 0.3nm,0.6s,baz=225,slow=4.6,SNR=3.1 | | | | | | |
| TXAR | Lajitas Array | 90.28 | 58 | P | P | 20 47 56.4 | +0.5 |
| | 0.5nm,0.7s,baz=213,slow=6.5,SNR=7.7 | | | | | | |
| TORD | Torodi Ar. Bea | 169.38 | 189 | PKPab | PKPab | 20 56 15.6 | +0.9 |
| | 0.2nm,0.7s,baz=168,slow=3.6,SNR=3.0 | | | | | | |

**KRSC 03 21:00:33.5±1.8, 49°.41N×156°.70E, h8km±26km, ML3.6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 1.32 | 344 | *e*P | Pn | 21 00 58.0 | -0.3 |
| SKR | | | | *e*S | Sb | 21 01 14.4 | -1.3 |
| MIPR | Malaya Ipel'ka | 2.87 | 1 | P | Pn | 21 01 21.2 | +1.7 |
| RUS | Russkaya | 3.23 | 20 | *e*P | Pn | 21 01 27.2 | +2.7 |
| RUS | | | | *e*S | Sb | 21 02 07.8 | -2.8 |
| AVH | Avacha | 4.06 | 18 | *e*P | Pn | 21 01 40.7 | +4.6 |
| SMAR | Somma | 4.07 | 18 | P | Pn | 21 01 40.8 | +4.4 |
| SDLR | Sedlovina | 4.10 | 19 | *e*P | Pn | 21 01 40.1 | +3.4 |
| KRX | Arik | 4.13 | 16 | *e*P | Pn | 21 01 41.2 | +4.1 |
| SPN | Mys Shipunski | 4.24 | 28 | *e*P | Pn | 21 01 41.8 | +3.5 |
| GNL | Ganaly | 4.36 | 10 | *e*P | Pn | 21 01 44.3 | +4.1 |

*KRNET **03** 21:17:24.9±0.1, 39°.62N×73°.53E, mb2.3*
*NNC **03** 21:17:24.4±0.8, 39°.63N×73°.70E, h0km, mb2.9, mpv2.6, Error ellipse: s-maj=11.7km s-min=4.3km az=74.0*
*ISCJB **03** 21:17:27.9±1.7, 39°.56N±0°.10×73°.4E±0°.1, h10km, Error ellipse: s-maj=14.9km s-min=10.8km az=151.2*
**ISC 03 21:17:25.6±2.1, 39°.60N±0°.09×73°.58E±0°.07, h10km, n13, σ1s.72/23, 20C-6D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 0.41 | 352 | ⇓P | Pg | 21 17 32.7 | -1.1 |
| | 6.9nm,0.3s | | | | | | |
| SFK | | | | ⇓S | Sg | 21 17 38.4 | -1.0 |
| | 89nm,0.4s | | | | | | |
| SFK | Sufi-Kurgan | 0.41 | 352 | ⇑*i*P | Pg | 21 17 32.7 | -1.1 |
| | baz=357 | | | | | | |
| SFK | | | | ⇑*i*S | Sg | 21 17 38.4 | -1.0 |
| | baz=357 | | | | | | |
| ARSB | Arslanbob | 1.78 | 345 | ⇓*e*P | Pg | 21 17 58.9 | -0.8 |
| | baz=346 | | | | | | |
| ARSB | | | | ⇓*i*S | Sg | 21 18 23.0 | +0.2 |
| | baz=346 | | | | | | |
| BTK | Batken | 2.17 | 283 | ⇑*i*P | Pb | 21 18 04.0 | -1.1 |
| | baz=283 | | | | | | |
| BTK | | | | ⇑*i*S | Sg | 21 18 32.7 | -2.8 |
| | baz=283 | | | | | | |
| ARLS | Aral | 2.33 | 14 | ⇑*i*P | Pb | 21 18 05.4 | -2.3 |
| | baz=15 | | | | | | |
| ARLS | | | | ⇑*i*S | Sb | 21 18 36.5 | -0.1 |
| | baz=15 | | | | | | |
| AML | Almayashu | 2.53 | 2 | ⇑*i*P | Pb | 21 18 10.7 | -0.6 |
| | baz=2.0 | | | | | | |
| AML | | | | ⇑*i*S | Sg | 21 18 44.9 | -2.0 |
| | baz=2.0 | | | | | | |
| UCH | Uchtor | 2.72 | 15 | ⇑*i*P | Pb | 21 18 13.6 | -1.0 |
| | baz=16 | | | | | | |
| UCH | | | | ⇑*i*S | Sg | 21 18 50.8 | -2.1 |
| | baz=16 | | | | | | |
| KZA | Kyzart | 2.78 | 27 | ⇑*i*P | Pb | 21 18 16.1 | +0.5 |
| | baz=27 | | | | | | |
| KZA | | | | ⇑*i*S | Sg | 21 18 54.9 | 0.0 |
| | baz=27 | | | | | | |
| MNAS | Manas | 2.99 | 345 | ⇑Lg | Lg | 21 18 59.0 | |
| | 3.4nm,0.6s | | | | | | |
| AAK | Ala-Archa | 3.11 | 13 | ⇑Pg | Pb | 21 18 18.6 | -2.4 |
| | 1.0nm,0.5s | | | | | | |
| AAK | | | | Lg | Lg | 21 19 01.8 | |
| | 2.6nm,0.6s | | | | | | |
| KBK | Karagaybulak | 3.22 | 18 | ⇑*i*P | Pb | 21 18 24.1 | +1.1 |
| | baz=19 | | | | | | |
| KBK | | | | ⇑*i*S | Sb | 21 19 05.4 | +3.0 |
| | baz=19 | | | | | | |
| DZET | Dzherino | 3.78 | 259 | ⇑Pg | Pb | 21 18 33.0 | +0.5 |
| | 2.3nm,0.4s | | | | | | |
| DZET | | | | ⇑Lg | Lg | 21 19 28.1 | |
| | 12nm,0.6s | | | | | | |
| KK31 | Karatay Array | 4.19 | 328 | ⇑Pn | Pn | 21 18 30.3 | +0.7 |
| | 0.1nm,0.2s | | | | | | |
| KK31 | | | | ⇓Pg | Pb | 21 18 40.8 | +1.4 |
| | 0.7nm,0.7s,baz=150,slow=16,SNR=4.9 | | | | | | |
| KK31 | | | | ⇓Sn | Sn | 21 19 21.9 | +3.3 |
| | 0.4nm,0.4s | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 21 19 36.7 | |
| | 0.5nm,0.3s,baz=143,slow=29,SNR=4.1 | | | | | | |

*ISCJB **03** 21:19:19.5±0.9, 32°.14S±0°.06×69°.74W±0°.08, h121km±9km, Error ellipse: s-maj=14.1km s-min=4.6km az=42.7*
*SJA **03** 21:19:19.3±0.7, 32°.14S×69°.71W, h119km±6km, ML3.0*
*GUC **03** 21:19:19.8±0.5, 32°.07S×70°.01W, h122km±12km, ML3.4*
**ISC 03 21:19:19.9±1.8, 32°.16S±0°.06×69°.72W±0°.07, h122km±13km, n16, σ0s.66/30, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AUSP | Uspallata | 0.29 | 104 | *i* P | Pn | 21 19 37.2 | -0.2 |
| AUSP | | | | *i* S | Sn | 21 19 49.3 | -1.4 |
| RTLS | Leoncito | 0.51 | 46 | *i* P | Pn | 21 19 38.4 | -0.1 |
| RTLS | | | | *i* S | Sn | 21 19 54.9 | +2.4 |
| ASAL | Salagasta | 0.87 | 120 | *i* P | Pn | 21 19 41.1 | +0.1 |
| ASAL | | | | *i* S | Sn | 21 19 56.8 | -0.1 |
| RTCV | Cerro Valdivia | 1.04 | 74 | *i* P | Pn | 21 19 42.4 | -0.2 |
| RTCV | | | | *i* S | Sn | 21 19 59.4 | -0.4 |
| AAGR | Agrelo | 1.20 | 141 | *i* P | Pn | 21 19 45.0 | +0.7 |
| AAGR | | | | *i* S | Sn | 21 20 02.8 | +0.1 |
| PEL | Peldehue | 1.28 | 219 | *e*P | Pn | 21 19 44.7 | -0.3 |
| PEL | | | | *e*S | Sn | 21 20 03.7 | -0.5 |
| PEL | | | | AML | AML | 21 20 05.4 | |
| | comp=N,922nm,0.3s | | | | | | |
| RTLL | Cerro Villicun | 1.34 | 52 | *i* P | Pn | 21 19 45.6 | -0.2 |
| RTLL | | | | *i* S | Sn | 21 20 05.6 | +0.2 |
| CFAA | Coronel Fontan | 1.38 | 67 | *i* P | Pn | 21 19 45.8 | -0.4 |
| CFAA | | | | *i* S | Sn | 21 20 05.7 | -0.4 |
| CLCH | Cerro Calan | 1.42 | 209 | *e*P | Pn | 21 19 47.2 | +0.6 |
| CLCH | | | | *e*S | Sn | 21 20 07.4 | +0.5 |
| CLCH | | | | AML | AML | 21 20 10.6 | |
| | comp=E,587nm,0.4s | | | | | | |
| STL | Santa Lucia | 1.49 | 211 | *e*P | Pn | 21 19 46.7 | -0.8 |
| STL | | | | *e*S | Sn | 21 20 08.0 | -0.5 |
| AMOG | MOGNA | 1.60 | 41 | *i* P | Pn | 21 19 48.6 | -0.2 |
| AMOG | | | | *i* S | Sn | 21 20 10.4 | -0.4 |
| ANTU | Antumapu | 1.61 | 208 | *e*P | Pn | 21 19 48.8 | 0.0 |
| ANTU | | | | *e*S | Sn | 21 20 11.0 | +0.2 |
| RCDM | Rinconada Maip | 1.61 | 214 | *e*P | Pn | 21 19 49.0 | +0.2 |
| RCDM | | | | *e*S | Sn | 21 20 11.0 | +0.1 |
| TACH | Talagante | 1.81 | 214 | *e*P | Pn | 21 19 51.0 | -0.2 |
| AVFE | Valle Fertil | 2.44 | 53 | *i* P | Pn | 21 19 59.0 | -0.2 |
| AVFE | | | | AML | AML | 21 20 30.8 | |
| | comp=Z,62nm,0.7s | | | | | | |
| AGUA | GUANDACOL | 2.86 | 22 | *i* P | Pn | 21 20 04.9 | +0.3 |
| AGUA | | | | *i* P | Pn | 21 20 04.9 | +0.3 |

*TIF **03** 21:20:05.7, 40°.72N×43°.20E, h13km±1km*
*ISK **03** 21:20:05.8, 40°.75N×43°.19E, h5km, MD2.5*
*DDA **03** 21:20:06.1, 40°.74N×43°.19E, h7km, Md2.9*
*CSEM **03** 21:20:06.1±0.2, 40°.74N×43°.14E, h2km, MD2.5, Error ellipse: s-maj=4.6km s-min=3.7km az=130.0*
**ISC 03 21:20:06.2±0.9, 40°.75N±0°.02×43°.16E±0°.02, h10km±7km, n26, σ0s.56/42, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KARS | Kars | 0.14 | 207 | PG | Pg | 21 20 09.5 | 0.0 |
| KARS | | | | *e*SG | Sg | 21 20 12.0 | +0.2 |
| KARS | Kars | 0.14 | 207 | *i* Pg | Pg | 21 20 09.5 | 0.0 |
| KARS | | | | *e*Sg | Sg | 21 20 12.0 | +0.2 |
| EAK | Akyaka | 0.34 | 100 | *i* P | Pg | 21 20 12.8 | -0.3 |
| EAK | | | | *i* S | Sg | 21 20 17.9 | +0.1 |
| EAK | Akyaka | 0.34 | 100 | P | Pg | 21 20 12.8 | -0.3 |
| EAK | | | | S | Sg | 21 20 17.9 | +0.1 |
| DIGO | Kars | 0.37 | 154 | *i* P | Pg | 21 20 12.9 | -0.8 |
| DIGO | | | | *i* S | Sg | 21 20 18.0 | -0.6 |
| DIGO | Kars | 0.37 | 154 | P | Pg | 21 20 12.9 | -0.8 |
| DIGO | | | | S | Sg | 21 20 18.0 | -0.6 |
| AKH | Akhalkalaki | 0.71 | 21 | *e*PG | Pg | 21 20 20.0 | 0.0 |
| AKH | | | | *e*SG | Sg | 21 20 29.8 | +0.6 |
| AKH | Akhalkalaki | 0.71 | 21 | P | Pg | 21 20 20.1 | +0.2 |
| AKH | | | | S | Sg | 21 20 29.8 | +0.6 |
| AKH | Akhalkalaki | 0.71 | 21 | P | Pg | 21 20 20.1 | +0.2 |
| AKH | | | | S | Sg | 21 20 29.8 | +0.6 |
| DAGI | Agillar | 1.00 | 290 | P | Pn | 21 20 26.3 | -0.1 |
| DAGI | | | | S | Sn | 21 20 40.1 | -0.4 |
| DDEM | Demirkent | 1.08 | 278 | *i* P | Pb | 21 20 26.8 | -0.2 |
| DDEM | | | | *i* S | Sg | 21 20 40.1 | -1.0 |
| DDEM | Demirkent | 1.08 | 278 | P | Pb | 21 20 26.8 | -0.2 |
| DDEM | | | | S | Sg | 21 20 40.1 | -1.0 |
| AGRB | Hanur-Agry | 1.18 | 186 | *e*PN | Pb | 21 20 28.7 | -0.1 |
| AGRB | Hanur-Agry | 1.18 | 186 | *e*Pn | Pb | 21 20 28.7 | -0.1 |
| BCA | Borcka | 1.35 | 301 | *e*PN | Pg | 21 20 32.2 | 0.0 |
| BCA | Borcka | 1.35 | 301 | *e*Pn | Pg | 21 20 32.2 | 0.0 |
| TUTA | Tutak | 1.37 | 191 | *i* P | Pb | 21 20 32.3 | +0.2 |
| TUTA | | | | *i* S | Sg | 21 20 51.8 | +1.5 |
| TUTA | Tutak | 1.37 | 191 | P | Pb | 21 20 32.3 | +0.2 |
| TUTA | | | | S | Sg | 21 20 51.9 | +1.5 |
| TBLG | Delisi | 1.54 | 50 | *e*PN | Pb | 21 20 34.9 | 0.0 |
| TBLG | Delisi | 1.54 | 50 | P | Sg | 21 20 55.0 | -0.8 |
| TBLG | Delisi | 1.54 | 50 | *e*Pn | Pb | 21 20 34.9 | 0.0 |
| EZM | Erzurum | 1.61 | 239 | *e*PN | Pb | 21 20 36.1 | -0.1 |
| DGRG | David-gareji | 1.81 | 67 | P | Pb | 21 20 39.1 | -0.4 |
| DGRG | | | | S | Sg | 21 21 05.0 | +0.5 |
| DGRG | David-gareji | 1.81 | 67 | P | Pb | 21 20 39.1 | -0.4 |
| DGRG | | | | S | Sg | 21 21 05.0 | +0.5 |
| VRTB | Varto-Mus | 2.06 | 220 | *e*PN | Pn | 21 20 41.5 | +0.6 |
| VRTB | Varto-Mus | 2.06 | 220 | *e*Pn | Pn | 21 20 41.5 | +0.6 |

*CSEM **03** 21:34:04.7, 37°.57N×25°.21W, h0km, ML3.7, After PDA*
**PDA 03 21:34:04.7±0.9, 37°.57N×25°.21W, h0km±4km, MD3.9, ML3.7, Error ellipse: s-maj=3.0km s-min=2.3km az=73.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BART | Pico Bartolome | 0.21 | 8 | *e*P | Pg | 21 34 08.8 | -0.1 |
| BART | | | | *e*S | Sg | 21 34 11.9 | +0.1 |
| BART | | | | A | A | 21 34 13.1 | |
| | 18μm,0.2s | | | | | | |
| BART | Pico Bartolome | 0.21 | 8 | *e*P | Pg | 21 34 08.8 | -0.1 |
| BART | | | | *e*S | Sg | 21 34 11.9 | +0.1 |
| PDA | Ponta Delgada | 0.41 | 296 | *i* P | Pg | 21 34 11.9 | -0.6 |
| PDA | | | | *e*S | Sg | 21 34 17.5 | -0.2 |
| PDA | | | | A | A | 21 34 17.7 | |
| | 5μm,0.2s | | | | | | |
| PDA | Ponta Delgada | 0.41 | 296 | *i* P | Pg | 21 34 11.9 | -0.6 |
| PDA | | | | *e*S | Sg | 21 34 17.5 | -0.2 |
| PSET | Sete Cidades | 0.48 | 302 | *i* P | Pg | 21 34 13.2 | -0.8 |
| PSET | | | | *e*S | Sg | 21 34 19.9 | -0.4 |
| PSET | | | | A | A | 21 34 28.3 | |
| | 5μm,0.5s | | | | | | |
| PSET | Sete Cidades | 0.48 | 302 | *i* P | Pg | 21 34 13.2 | -0.8 |
| PSET | | | | *e*S | Sg | 21 34 19.9 | -0.4 |
| PSMA | Santa Maria | 0.57 | 174 | *i* P | Pg | 21 34 14.8 | -0.9 |
| PSMA | | | | *e*S | Sg | 21 34 22.8 | -0.4 |
| PSMA | | | | A | A | 21 34 23.8 | |
| | 1μm,0.2s | | | | | | |
| PSMN | Pico do Norte, | 0.57 | 169 | *i* P | Pg | 21 34 14.8 | -0.9 |
| PSMN | | | | *e*S | Sg | 21 34 22.3 | -0.9 |
| PSMN | | | | A | A | 21 34 25.0 | |
| | 628nm,0.2s | | | | | | |
| PSMN | Pico do Norte, | 0.57 | 169 | *i* P | Pg | 21 34 14.8 | -0.9 |
| PSMN | | | | *e*S | Sg | 21 34 22.3 | -0.9 |
| ADH | Angra Heroismo | 1.93 | 305 | *e*P | Pn | 21 34 34.2 | -4.6 |
| ADH | | | | *e*S | Sn | 21 34 56.0 | -7.8 |
| ADH | | | | A | A | 21 35 00.3 | |
| | 149nm,0.3s | | | | | | |
| ADH | Angra Heroismo | 1.93 | 305 | *e*P | Pn | 21 34 34.2 | -4.6 |
| ADH | | | | *e*S | Sn | 21 34 56.0 | -7.8 |
| PMAN | Manadas | 2.51 | 296 | *e*P | Pn | 21 34 42.4 | -4.3 |
| PMAN | | | | *e*S | Sn | 21 35 09.8 | -8.2 |
| PMAN | | | | A | A | 21 35 16.2 | |
| | 35nm,0.3s | | | | | | |
| PMAN | Manadas | 2.51 | 296 | *e*P | Pn | 21 34 42.4 | -4.3 |
| PMAN | | | | *e*S | Sn | 21 35 09.8 | -8.2 |
| PGRA | Graciosa | 2.63 | 305 | *e*P | Pn | 21 34 43.6 | -4.7 |
| PGRA | | | | *e*S | Sn | 21 35 12.8 | -8.1 |
| PGRA | | | | A | A | 21 35 16.8 | |
| | 25nm,0.3s | | | | | | |
| PGRA | Graciosa | 2.63 | 305 | *e*P | Pn | 21 34 43.6 | -4.7 |
| PGRA | | | | *e*S | Sn | 21 35 12.8 | -8.1 |
| ROSA | Rosais | 2.66 | 297 | *e*P | Pn | 21 34 44.3 | -4.4 |
| ROSA | | | | *e*S | Sn | 21 35 13.9 | -7.7 |
| ROSA | | | | A | A | 21 35 16.3 | |
| | 33nm,0.2s | | | | | | |
| ROSA | Rosais | 2.66 | 297 | *e*P | Pn | 21 34 44.3 | -4.4 |
| ROSA | | | | *e*S | Sn | 21 35 13.9 | -7.7 |
| PICO | Pico | 2.71 | 291 | *e*P | Pn | 21 34 45.0 | -4.5 |
| PICO | | | | *e*S | Sn | 21 35 14.9 | -8.2 |
| PICO | Pico | 2.71 | 291 | *e*P | Pn | 21 34 45.0 | -4.5 |
| PICO | | | | *e*S | Sn | 21 35 14.9 | -8.2 |
| PCAN | Candelaria | 2.74 | 290 | *e*P | Pn | 21 34 45.2 | -4.7 |
| PCAN | | | | *e*S | Sn | 21 35 15.5 | -8.3 |
| PCAN | | | | A | A | 21 35 16.4 | |
| | 38nm,0.2s | | | | | | |
| PCAN | Candelaria | 2.74 | 290 | *e*P | Pn | 21 34 45.2 | -4.7 |
| PCAN | | | | *e*S | Sn | 21 35 15.5 | -8.3 |
| CALA | Caldeira | 2.94 | 291 | *e*P | Pn | 21 34 48.4 | -4.3 |
| CALA | | | | *e*S | Sn | 21 35 20.4 | -8.4 |
| CALA | Caldeira | 2.94 | 291 | *e*P | Pn | 21 34 48.4 | -4.3 |
| CALA | | | | *e*S | Sn | 21 35 20.4 | -8.4 |

**MAN 03 21:38:32, 7°.02N×123°.67E, h13km, mb3.6, ML2.3, MS1.8, 1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CTBH | Cotabato--PC H | 0.61 | 70 | ⇓*i*P | Pb | 21 38 44.4 | -0.1 |
| CTBH | | | | *i* S | Sg | 21 38 51.9 | 0.0 |
| PAGZ | Pagadian | 0.88 | 341 | *e*P | Pg | 21 38 48.5 | -0.4 |
| PAGZ | | | | *e*S | Sg | 21 38 54.4 | -6.0 |
| IPIL | Ipil | 1.33 | 305 | *e*P | Pb | 21 38 57.0 | +0.2 |
| IPIL | | | | *e*S | Sb | 21 39 13.8 | -0.2 |
| BUKP | Musuan | 1.62 | 58 | *e*P | Pn | 21 39 00.2 | -0.2 |

*DDA **03** 21:51:31.1, 35°.17N×26°.24E, h5km, Md3.5*
*IDC **03** 21:51:33.0±0.9, 34°.95N×26°.49E, h0km, mb3.9/13, mb1 3.9/20, mb1mx3.7/45, mbtmp3.8/20, ML3.4/6, MS2.9/3, Ms1 2.9/3, ms1mx2.5/31, Error ellipse: s-maj=19.4km s-min=13.0km az=2.0*
*ISCJB **03** 21:51:35.3±0.6, 34°.93N±0°.03×26°.54E±0°.02, h23km±4km, mb3.8/14, MS2.6/1, Error ellipse: s-maj=4.9km s-min=2.8km az=175.7*
*CSEM **03** 21:51:35.9±0.2, 35°.03N×26°.48E, h2km, ML3.7, Error ellipse: s-maj=6.1km s-min=2.9km az=164.0*
*THE **03** 21:51:36.1, 35°.04N×26°.46E, h0km±1km, ML3.7/6, Error ellipse: s-maj=3.8km s-min=0.8km az=167.0*
*ATH **03** 21:51:37.3, 35°.21N×26°.44E, h18km±1km, MD3.8/44, ML3.5*
*ISK **03** 21:51:42.1, 35°.52N×26°.54E, h17km, MD3.6*
**ISC 03 21:51:35.3±1.2, 35°.09N±0°.03×26°.49E±0°.02, h13km±8km, n210, σ1s.73/195, mb3.8/14, 6C-8D, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZKR | Zakros | 0.23 | 277 | P | Pb | 21 51 40.4 | -0.9 |
| ZKR | | | | S | Sb | 21 51 44.6 | -0.7 |
| ZKR | Zakros | 0.23 | 277 | P | Pb | 21 51 40.4 | -0.9 |
| ZKR | | | | S | Sb | 21 51 44.6 | -0.7 |
| KARP | Karpathos | 0.71 | 50 | *e*PB | Pb | 21 51 50.1 | +0.4 |
| KARP | | | | *e*SN | Sg | 21 52 00.5 | +1.8 |
| KARP | Karpathos | 0.71 | 50 | P | Pb | 21 51 50.0 | +0.4 |
| KARP | | | | S | Sn | 21 52 02.4 | +0.4 |
| KARP | Karpathos | 0.71 | 50 | P | Pb | 21 51 50.0 | +0.4 |
| KARP | | | | *e*Sn | Sg | 21 52 00.5 | +1.8 |
| NPS | Neapolis | 0.74 | 284 | *e*PB | Pb | 21 51 50.1 | 0.0 |
| NPS | | | | *e*SN | Sg | 21 52 00.0 | +0.5 |
| NPS | Neapolis | 0.74 | 284 | *e*Pb | Pb | 21 51 50.1 | 0.0 |
| NPS | | | | *e*Sn | Sg | 21 52 00.0 | +0.5 |
| LAST | Lasithi | 0.83 | 275 | P | Pb | 21 51 51.2 | -0.5 |
| LAST | | | | S | Sn | 21 52 04.4 | -0.6 |
| LAST | Lasithi | 0.83 | 275 | P | Pb | 21 51 51.2 | -0.5 |
| LAST | | | | S | Sn | 21 52 04.4 | -0.6 |
| IACM | Heraklion | 1.18 | 281 | *e*PN | Pb | 21 51 58.5 | +0.9 |
| IACM | | | | *e*SN | Sg | 21 52 14.4 | +0.9 |
| IACM | Heraklion | 1.18 | 281 | *e*Pn | Pb | 21 51 58.5 | +0.9 |
| IACM | | | | *e*Sn | Sg | 21 52 14.4 | +0.9 |
| IDI | Anoyia | 1.33 | 279 | Pg | Pn | 21 51 59.5 | -0.1 |
| | 25nm,0.3s,baz=159,slow=9.6,SNR=138 | | | | | | |
| IDI | | | | Lg | Lg | 21 52 20.1 | |
| | 58nm,0.3s,baz=14,slow=15,SNR=11 | | | | | | |
| IDI | | | | LR | LR | 21 52 50.0 | |
| | comp=Z,539nm,18.1s,baz=88,slow=57 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IDI | Anoyia | 1.33 | 279 | ePB | Pn | 21 52 00.3 | +0.7 |
| IDI | | | | eSN | Sg | 21 52 19.0 | +0.8 |
| IDI | Anoyia | 1.33 | 279 | P | Pn | 21 52 00.3 | +0.7 |
| IDI | | | | S | Sg | 21 52 18.9 | +0.8 |
| IDI | Anoyia | 1.33 | 279 | P | Pn | 21 52 00.3 | +0.7 |
| IDI | | | | S | Sg | 21 52 18.9 | +0.8 |
| SANT | Santorini | 1.53 | 327 | ePN | Pg | 21 52 04.0 | -0.7 |
| SANT | Santorini | 1.53 | 327 | ePn | Pg | 21 52 04.0 | -0.7 |
| THR6 | Thira Island, | 1.55 | 325 | P | Pg | 21 52 04.2 | -0.8 |
| THR6 | Thira Island, | 1.55 | 325 | P | Pg | 21 52 04.2 | -0.8 |
| THR3 | Thira Island, | 1.59 | 326 | P | Pb | 21 52 04.5 | 0.0 |
| THR3 | Thira Island, | 1.59 | 326 | P | Pb | 21 52 04.5 | 0.0 |
| NIS1 | Nisyros Isl. | 1.61 | 20 | ePN | Pb | 21 52 05.5 | +0.6 |
| NIS1 | Nisyros Isl. | 1.61 | 20 | ePN | Pb | 21 52 05.4 | +0.5 |
| NIS1 | Nisyros Isl. | 1.61 | 20 | P | Pb | 21 52 04.9 | 0.0 |
| NIS1 | | | | S | Sg | 21 52 27.9 | +0.7 |
| NIS1 | Nisyros Isl. | 1.61 | 20 | P | Pb | 21 52 04.9 | 0.0 |
| NIS1 | Nisyros Isl. | 1.61 | 20 | ePn | Pb | 21 52 05.5 | +0.6 |
| NIS1 | | | | S | Sg | 21 52 27.9 | +0.7 |
| THR5 | Thira Island, | 1.62 | 325 | ePN | Pg | 21 52 06.5 | +0.1 |
| THR5 | Thira Island, | 1.62 | 325 | P | Pb | 21 52 04.6 | -0.5 |
| THR5 | Thira Island, | 1.62 | 325 | P | Pb | 21 52 04.6 | -0.5 |
| THR5 | Thira Island, | 1.62 | 325 | ePn | Pg | 21 52 06.5 | +0.1 |
| ARG | Arkhangelos | 1.74 | 49 | ePN | Pb | 21 52 08.8 | +1.6 |
| ARG | Arkhangelos | 1.74 | 49 | P | Pb | 21 52 07.8 | +0.6 |
| ARG | | | | S | Sg | 21 52 31.4 | 0.0 |
| ARG | Arkhangelos | 1.74 | 49 | P | Pb | 21 52 07.8 | +0.6 |
| ARG | Arkhangelos | 1.74 | 49 | ePn | Pb | 21 52 08.8 | +1.6 |
| ARG | | | | S | Sg | 21 52 31.4 | 0.0 |
| VAM | Vamos | 1.90 | 280 | ePN | Pb | 21 52 10.1 | +0.2 |
| VAM | Vamos | 1.90 | 280 | ePn | Pb | 21 52 10.1 | +0.2 |
| BODT | Bodrum | 2.08 | 18 | ePN | Pn | 21 52 10.9 | +1.0 |
| BODT | | | | eSN | Sn | 21 52 32.4 | -3.3 |
| BODT | Bodrum | 2.08 | 18 | ePn | Pn | 21 52 10.9 | +1.0 |
| IMMV | Iera Moni Meta | 2.09 | 281 | ePN | Pb | 21 52 13.1 | +0.1 |
| IMMV | Iera Moni Meta | 2.09 | 281 | ePn | Pb | 21 52 13.1 | +0.1 |
| BDRM | Kayabasi | 2.12 | 21 | iS | Sb | 21 52 39.7 | -0.1 |
| BDRM | Kayabasi | 2.12 | 21 | P | Pn | 21 52 05.8 | -4.6 |
| BDRM | | | | S | Sb | 21 52 39.7 | -0.1 |
| APE | Apeiranthos | 2.12 | 339 | ePN | Pb | 21 52 12.4 | -1.3 |
| APE | Apeiranthos | 2.12 | 339 | ePN | Pb | 21 52 12.4 | -1.3 |
| APE | Apeiranthos | 2.12 | 339 | P | Pb | 21 52 12.0 | -1.7 |
| APE | | | | S | Sg | 21 52 40.2 | -3.4 |
| APE | Apeiranthos | 2.12 | 339 | P | Pb | 21 52 12.0 | -1.7 |
| APE | Apeiranthos | 2.12 | 339 | ePn | Pb | 21 52 12.4 | -1.3 |
| APE | | | | S | Sg | 21 52 40.2 | -3.4 |
| MHLO | Agia Marina, M | 2.33 | 314 | ePN | Pb | 21 52 16.6 | -0.6 |
| MHLO | Agia Marina, M | 2.33 | 314 | P | Pb | 21 52 15.5 | -1.7 |
| MHLO | | | | S | Sb | 21 52 45.1 | -0.8 |
| MHLO | Agia Marina, M | 2.33 | 314 | P | Pb | 21 52 15.5 | -1.7 |
| MHLO | Agia Marina, M | 2.33 | 314 | ePn | Pb | 21 52 16.6 | -0.6 |
| MHLO | | | | S | Sb | 21 52 45.1 | -0.8 |
| DALY | Dalyan (Mu˜la | 2.46 | 45 | ePN | Pb | 21 52 18.4 | -1.0 |
| DALY | Dalyan (Mu˜la | 2.46 | 45 | ePn | Pb | 21 52 18.4 | -1.0 |
| TURN | Turunc | 2.47 | 43 | iP | Pn | 21 52 14.7 | -0.6 |
| TURN | | | | iS | Sn | 21 52 44.5 | -0.8 |
| TURN | Turunc | 2.47 | 43 | P | Pn | 21 52 14.7 | -0.6 |
| TURN | | | | S | Sn | 21 52 44.5 | -0.8 |
| YER | Yerkesik | 2.50 | 35 | ePN | Pn | 21 52 18.4 | +2.6 |
| YER | Yerkesik | 2.50 | 35 | ePn | Pn | 21 52 18.4 | +2.6 |
| FETY | Fethiye | 2.61 | 53 | ePN | Pb | 21 52 21.1 | -0.9 |
| FETY | Fethiye | 2.61 | 53 | ePn | Pb | 21 52 21.1 | -0.9 |
| SERI | Serifos | 2.63 | 322 | ePN | Pn | 21 52 18.7 | +1.2 |
| SERI | Serifos | 2.63 | 322 | ePn | Pn | 21 52 18.7 | +1.2 |
| SMG | Samos | 2.63 | 6 | ePN | Pn | 21 52 19.3 | +1.8 |
| SMG | Samos | 2.63 | 6 | ePn | Pn | 21 52 19.3 | +1.8 |
| ANKY | Antikythira Is | 2.72 | 288 | ePN | Pn | 21 52 21.5 | +2.8 |
| ANKY | Antikythira Is | 2.72 | 288 | P | Pn | 21 52 19.9 | +1.2 |
| ANKY | Antikythira Is | 2.72 | 288 | P | Pn | 21 52 19.9 | +1.2 |
| ANKY | Antikythira Is | 2.72 | 288 | ePn | Pn | 21 52 21.5 | +2.8 |
| AKAS | Kas | 2.78 | 65 | iP | Pn | 21 52 20.1 | +0.4 |
| AKAS | Kas | 2.78 | 65 | P | Pn | 21 52 20.1 | +0.4 |
| AKAS | | | | S | Sn | 21 52 54.6 | +1.5 |
| KYTH | Kithira | 3.05 | 294 | ePN | Pn | 21 52 25.2 | +1.9 |
| KYTH | Kithira | 3.05 | 294 | ePn | Pn | 21 52 25.2 | +1.9 |
| AYDB | Zeytinkoy-Aydi | 3.07 | 21 | ePN | Pn | 21 52 25.7 | +2.1 |
| AYDB | Zeytinkoy-Aydi | 3.07 | 21 | ePn | Pn | 21 52 25.7 | +2.1 |
| ELL | Elmali | 3.23 | 58 | ePN | Pn | 21 52 30.0 | +4.1 |
| ELL | Elmali | 3.23 | 58 | ePn | Pn | 21 52 30.0 | +4.1 |
| GOLH | Golhisar | 3.28 | 48 | iP | Pn | 21 52 29.2 | +2.7 |
| GOLH | | | | iS | Sb | 21 53 11.3 | -2.1 |
| GOLH | Golhisar | 3.28 | 48 | P | Pn | 21 52 29.2 | +2.7 |
| GOLH | | | | S | Sb | 21 53 11.3 | -2.1 |
| CHOS | Chios island | 3.31 | 354 | ePN | Pn | 21 52 28.9 | +2.0 |
| CHOS | Chios island | 3.31 | 354 | ePn | Pn | 21 52 28.9 | +2.0 |
| VLI | Veliai | 3.31 | 300 | ePN | Pn | 21 52 28.4 | +1.6 |
| VLI | Veliai | 3.31 | 300 | P | Pn | 21 52 28.3 | +1.5 |
| VLI | | | | S | Sn | 21 53 08.3 | +2.2 |
| VLI | Veliai | 3.31 | 300 | ePn | Pn | 21 52 28.4 | +1.6 |
| VLI | | | | S | Sn | 21 53 08.3 | +2.2 |
| DNZL | Cakiroluk | 3.31 | 38 | iP | Pn | 21 52 29.2 | +2.1 |
| DNZL | | | | iS | Sb | 21 53 12.8 | -1.6 |
| DNZL | Cakiroluk | 3.31 | 38 | P | Pn | 21 52 29.2 | +2.1 |
| DNZL | | | | S | Sb | 21 53 12.8 | -1.6 |
| DENT | Denizli | 3.36 | 37 | ePN | Pn | 21 52 30.4 | +2.8 |
| DENT | Denizli | 3.36 | 37 | ePn | Pn | 21 52 30.4 | +2.8 |
| IZM | Izmir | 3.36 | 10 | ePN | Pn | 21 52 29.8 | +2.2 |
| IZM | Izmir | 3.36 | 10 | ePn | Pn | 21 52 29.8 | +2.2 |
| VLY | Voula,Athens | 3.51 | 323 | ePN | Pn | 21 52 32.3 | +2.7 |
| VLY | Voula,Athens | 3.51 | 323 | ePn | Pn | 21 52 32.3 | +2.7 |
| KRND | KRANIDI | 3.54 | 311 | ePN | Pn | 21 52 32.8 | +2.8 |
| KRND | KRANIDI | 3.54 | 311 | P | Pn | 21 52 31.6 | +1.6 |
| KRND | | | | S | Sn | 21 53 14.1 | +2.4 |
| KRND | KRANIDI | 3.54 | 311 | P | Pn | 21 52 31.6 | +1.6 |
| KRND | KRANIDI | 3.54 | 311 | ePn | Pn | 21 52 32.8 | +2.8 |
| KRND | | | | S | Sn | 21 53 14.1 | +2.4 |
| DIDY | Didyma | 3.56 | 313 | ePN | Pn | 21 52 33.2 | +2.8 |
| DIDY | Didyma | 3.56 | 313 | ePn | Pn | 21 52 33.2 | +2.8 |
| ATH | Athens Observa | 3.64 | 323 | ePN | Pn | 21 52 33.5 | +2.1 |
| ATH | Athens Observa | 3.64 | 323 | ePn | Pn | 21 52 33.5 | +2.1 |
| KORT | Korkueli | 3.66 | 58 | iP | Pn | 21 52 31.4 | -0.4 |
| KORT | | | | iS | Sn | 21 53 16.8 | +1.9 |
| KORT | Korkueli | 3.66 | 58 | P | Pn | 21 52 31.4 | -0.4 |
| KORT | | | | S | Sn | 21 53 16.8 | +1.9 |
| LTBQ | Tobruq | 3.71 | 216 | iP | Pn | 21 52 33.6 | +1.3 |
| | SNR=76 | | | | | | |
| LTBQ | | | | eS | Sn | 21 53 16.5 | +0.6 |
| | 21nm,0.7s,SNR=76 | | | | | | |
| KULA | Kula-Manisa | 3.84 | 26 | ePN | Pn | 21 52 36.2 | +2.0 |
| KULA | Kula-Manisa | 3.84 | 26 | ePn | Pn | 21 52 36.2 | +2.0 |
| EREA | Eretria | 3.91 | 329 | ePN | Pn | 21 52 38.4 | +3.3 |
| EREA | Eretria | 3.91 | 329 | ePn | Pn | 21 52 38.4 | +3.3 |
| AKS | Akhisar | 3.93 | 15 | ePN | Pn | 21 52 37.7 | +2.3 |
| AKS | Akhisar | 3.93 | 15 | ePn | Pn | 21 52 37.7 | +2.3 |
| VILL | Villia | 3.99 | 321 | ePn | Pn | 21 52 40.0 | +3.7 |
| VLX | Vlachokerasia | 4.03 | 306 | ePN | Pn | 21 52 39.5 | +2.7 |
| VLX | Vlachokerasia | 4.03 | 306 | P | Pn | 21 52 38.3 | +1.5 |
| VLX | | | | S | Sn | 21 53 26.8 | +2.9 |
| VLX | Vlachokerasia | 4.03 | 306 | P | Pn | 21 52 38.3 | +1.5 |
| VLX | Vlachokerasia | 4.03 | 306 | ePn | Pn | 21 52 39.5 | +2.7 |
| VLX | | | | S | Sn | 21 53 26.8 | +2.9 |
| KHL | Karahalli | 4.04 | 36 | ePN | Pn | 21 52 39.6 | +2.6 |
| KHL | Karahalli | 4.04 | 36 | ePn | Pn | 21 52 39.6 | +2.6 |
| LOUT | Loutraki | 4.05 | 317 | ePN | Pn | 21 52 40.5 | +3.5 |
| LOUT | Loutraki | 4.05 | 317 | ePn | Pn | 21 52 40.5 | +3.5 |
| VIL2 | Platees | 4.05 | 321 | ePN | Pn | 21 52 40.0 | +2.9 |
| BCK | Bucak | 4.07 | 53 | ePN | Pn | 21 52 41.6 | +4.3 |
| BCK | Bucak | 4.07 | 53 | ePn | Pn | 21 52 41.6 | +4.3 |
| LTK | Loutraki | 4.08 | 317 | ePN | Pn | 21 52 41.0 | +3.6 |
| LTK | Loutraki | 4.08 | 317 | P | Pn | 21 52 39.6 | +2.2 |
| LTK | Loutraki | 4.08 | 317 | P | Pn | 21 52 39.6 | +2.2 |
| LTK | Loutraki | 4.08 | 317 | ePn | Pn | 21 52 41.0 | +3.6 |
| SIGR | SIGRI | 4.15 | 353 | ePN | Pn | 21 52 40.2 | +1.9 |
| SIGR | SIGRI | 4.15 | 353 | ePN | Pn | 21 52 39.9 | +1.6 |
| SIGR | SIGRI | 4.15 | 353 | ePn | Pn | 21 52 40.2 | +1.9 |
| PRK | Paraskevi | 4.15 | 358 | ePN | Pn | 21 52 40.7 | +2.3 |
| PRK | Paraskevi | 4.15 | 358 | ePn | Pn | 21 52 40.7 | +2.3 |
| ITM | Ithomi | 4.24 | 301 | ePN | Pn | 21 52 42.2 | +2.5 |
| ITM | Ithomi | 4.24 | 301 | ePn | Pn | 21 52 42.2 | +2.5 |
| THAL | Thalero | 4.26 | 315 | ePN | Pn | 21 52 42.9 | +3.0 |
| THAL | Thalero | 4.26 | 315 | ePn | Pn | 21 52 42.9 | +3.0 |
| SUTC | Sutluce-Ispart | 4.35 | 56 | ePN | Pn | 21 52 45.1 | +3.9 |
| SUTC | Sutluce-Ispart | 4.35 | 56 | ePn | Pn | 21 52 45.2 | +3.9 |
| GUR | Goura | 4.39 | 312 | ePN | Pn | 21 52 44.9 | +3.2 |
| GUR | Goura | 4.39 | 312 | P | Pn | 21 52 43.7 | +2.0 |
| GUR | Goura | 4.39 | 312 | P | Pn | 21 52 43.7 | +2.0 |
| GUR | Goura | 4.39 | 312 | ePn | Pn | 21 52 44.9 | +3.2 |
| LKR | Lokris | 4.52 | 323 | ePN | Pn | 21 52 47.0 | +3.5 |
| LKR | Lokris | 4.52 | 323 | ePn | Pn | 21 52 47.0 | +3.5 |
| AMT | Artemida-Makis | 4.57 | 304 | ePN | Pn | 21 52 47.1 | +3.0 |
| AMT | Artemida-Makis | 4.57 | 304 | ePn | Pn | 21 52 47.1 | +3.0 |
| KLV | Kalavryta, Ach | 4.57 | 311 | ePN | Pn | 21 52 47.8 | +3.6 |
| KLV | Kalavryta, Ach | 4.57 | 311 | ePn | Pn | 21 52 47.8 | +3.6 |
| DESF | Desfina | 4.59 | 317 | ePN | Pn | 21 52 48.1 | +3.6 |
| DESF | Desfina | 4.59 | 317 | ePn | Pn | 21 52 48.1 | +3.6 |
| SMIA | Simia | 4.61 | 326 | ePN | Pn | 21 52 47.6 | +2.9 |
| SMIA | Simia | 4.61 | 326 | ePn | Pn | 21 52 47.6 | +2.9 |
| BALB | Balikesir | 4.68 | 13 | ePN | Pn | 21 52 47.9 | +2.3 |
| BALB | Balikesir | 4.68 | 13 | ePn | Pn | 21 52 47.9 | +2.3 |
| EZN | Ezine | 4.73 | 358 | ePN | Pn | 21 52 48.6 | +2.3 |
| EZN | Ezine | 4.73 | 358 | ePn | Pn | 21 52 48.6 | +2.3 |
| SHUT | Suhut-Afyon | 4.75 | 42 | ePN | Pn | 21 52 50.3 | +3.5 |
| SHUT | Suhut-Afyon | 4.75 | 42 | ePn | Pn | 21 52 50.3 | +3.5 |
| AXAR | Agios Charalam | 4.78 | 321 | ePN | Pn | 21 52 51.5 | +4.4 |
| AXAR | Agios Charalam | 4.78 | 321 | ePn | Pn | 21 52 51.5 | +4.4 |
| DRO | Drossia | 4.79 | 308 | ePN | Pn | 21 52 51.0 | +3.7 |
| DRO | Drossia | 4.79 | 308 | ePn | Pn | 21 52 51.0 | +3.7 |
| LAKA | Lakka | 4.80 | 312 | ePN | Pn | 21 52 51.2 | +3.9 |
| LAKA | Lakka | 4.80 | 312 | ePn | Pn | 21 52 51.2 | +3.9 |
| KALE | Kalithea | 4.80 | 315 | ePN | Pn | 21 52 50.8 | +3.4 |
| KALE | Kalithea | 4.80 | 315 | ePn | Pn | 21 52 50.8 | +3.4 |
| DST | Dursunbey | 4.81 | 20 | ePN | Pn | 21 52 49.8 | +2.2 |
| DST | Dursunbey | 4.81 | 20 | ePn | Pn | 21 52 49.8 | +2.2 |
| EFP | Efpalio | 4.96 | 313 | ePN | Pn | 21 52 52.9 | +3.3 |
| EFP | Efpalio | 4.96 | 313 | ePn | Pn | 21 52 52.9 | +3.3 |
| GONE | Gonen-Balikesi | 5.04 | 11 | ePN | Pn | 21 52 53.0 | +2.4 |
| GONE | Gonen-Balikesi | 5.04 | 11 | ePn | Pn | 21 52 53.0 | +2.4 |
| AGG | Agios Georgios | 5.15 | 321 | ePN | Pn | 21 52 56.5 | +4.4 |
| AGG | Agios Georgios | 5.15 | 321 | ePn | Pn | 21 52 56.5 | +4.4 |
| EVR | Evrytania | 5.35 | 317 | ePN | Pn | 21 52 59.1 | +4.1 |
| EVR | Evrytania | 5.35 | 317 | ePn | Pn | 21 52 59.1 | +4.1 |
| LJBD | Adjabya | 6.73 | 234 | iP | Pn | 21 53 14.4 | +0.6 |
| | SNR=70 | | | | | | |
| LJBD | | | | eS | Sn | 21 54 24.3 | -6.0 |
| | SNR=70 | | | | | | |
| BRTR | Keskin Array B | 7.33 | 49 | Pn | Pn | 21 53 26.0 | +3.7 |
| | 0.2nm,0.3s,baz=217,slow=15,SNR=5.5 | | | | | | |
| BRTR | | | | Sn | Sn | 21 54 49.2 | +3.8 |
| | 0.0nm,0.3s,baz=212,slow=24,SNR=3.4 | | | | | | |
| MMAI | Mount Meron Ar | 7.68 | 103 | Pn | Pn | 21 53 25.4 | -1.5 |
| | 0.7nm,0.3s,baz=271,slow=9.9,SNR=5.3 | | | | | | |
| MMAI | | | | Sn | Sn | 21 54 53.6 | -0.3 |
| | 1.8nm,0.3s,baz=260,slow=17,SNR=4.6 | | | | | | |
| EIL | Elat | 8.96 | 125 | Pn | Pn | 21 53 43.6 | -0.8 |
| | 0.6nm,0.3s,baz=324,slow=3.3,SNR=7.1 | | | | | | |
| EIL | | | | Sn | Sn | 21 55 17.8 | -7.6 |
| | 0.7nm,0.3s,baz=2.7,slow=21,SNR=5.7 | | | | | | |
| ASF | Jabal al Asfar | 9.15 | 106 | Pn | Pn | 21 53 46.3 | -0.8 |
| | 0.1nm,0.3s,baz=270,slow=2.0,SNR=2.0 | | | | | | |
| ASF | | | | Sn | Sn | 21 55 26.5 | -3.5 |
| | 0.0nm,0.3s,baz=170,slow=17,SNR=1.9 | | | | | | |
| DIVS | Divibare | 10.30 | 333 | ⇑iP | Pn | 21 54 06.7 | +3.9 |
| DIVS | Divibare | 10.30 | 333 | ⇑iP | Pn | 21 54 06.7 | +3.9 |
| VOIR | | 10.39 | 354 | ⇓iP | Pn | 21 54 06.4 | +2.3 |
| VOIR | | 10.39 | 354 | ⇓iP | Pn | 21 54 06.4 | +2.3 |
| MLR | Muntele Rosu | 10.40 | 358 | Pn | Pn | 21 54 07.9 | +3.7 |
| | baz=144,slow=17 | | | | | | |
| MLR | Muntele Rosu | 10.40 | 358 | ⇑iP | Pn | 21 54 08.4 | +4.2 |
| MLR | Muntele Rosu | 10.40 | 358 | ⇑iP | Pn | 21 54 08.4 | +4.2 |
| GZR | Gura Zlata | 10.68 | 346 | ⇓iP | Pn | 21 54 10.6 | +2.7 |
| GZR | Gura Zlata | 10.68 | 346 | ⇓iP | Pn | 21 54 10.6 | +2.7 |
| PLOR | Plostina | 10.75 | 1 | ⇑iP | Pn | 21 54 13.0 | +4.0 |
| PLOR | Plostina | 10.75 | 1 | ⇑iP | Pn | 21 54 13.0 | +4.0 |
| DOPR | Dopca | 10.90 | 356 | ⇓iP | Pn | 21 54 14.2 | +3.2 |
| DOPR | Dopca | 10.90 | 356 | ⇓iP | Pn | 21 54 14.2 | +3.2 |
| BZS | Buzias | 11.15 | 342 | ⇓iP | Pn | 21 54 17.2 | +2.8 |
| BZS | Buzias | 11.15 | 342 | ⇓iP | Pn | 21 54 17.2 | +2.8 |
| AKASG | Malin Array Be | 15.73 | 6 | Pn | Pn | 21 55 18.2 | +1.7 |
| | 0.8nm,0.3s,baz=194,slow=11,SNR=11 | | | | | | |
| GERES | GERESS Array B | 16.68 | 329 | Pn | P | 21 55 30.9 | -0.2 |
| | 0.1nm,0.3s,baz=141,slow=13,SNR=5.1 | | | | | | |
| GERES | | | | LR | LR | 22 03 35.3 | |
| | comp=Z,45nm,18.4s,baz=65,slow=43 | | | | | | |
| DAVOX | Davos/Dischmat | 17.10 | 318 | LR | LR | 22 03 10.1 | |
| | comp=Z,38nm,19.8s,baz=43,slow=40 | | | | | | |
| ESDC | Sonseca Array | 24.57 | 290 | P | P | 21 56 54.5 | -0.5 |
| | 0.9nm,0.6s,baz=81,slow=9.3,SNR=6.8 | | | | | | |
| GEYT | Alibeck | 25.52 | 74 | P | P | 21 57 03.9 | +0.3 |
| | 1.0nm,0.5s,baz=298,slow=6.4,SNR=3.6 | | | | | | |
| FINES | FINESS Array B | 26.38 | 360 | P | P | 21 57 11.1 | +0.1 |
| | 2.4nm,0.9s,baz=126,slow=7.1,SNR=3.0 | | | | | | |
| AKTO | Aktyubinsk | 27.50 | 46 | P | P | 21 57 21.1 | -0.2 |
| | 1.4nm,0.6s,baz=249,slow=10,SNR=7.1 | | | | | | |
| NOA | NORSAR Array B | 27.76 | 344 | LR | LR | 22 09 54.9 | |
| | comp=Z,15nm,19.8s,baz=350,slow=40 | | | | | | |
| EKA | Eskdalemuir Ar | 28.73 | 324 | P | P | 21 57 31.1 | -1.2 |
| | 1.6nm,0.8s,baz=129,slow=10,SNR=3.7 | | | | | | |
| TORD | Torodi Ar. Bea | 31.29 | 232 | P | P | 21 57 54.7 | -0.5 |
| | 0.4nm,0.4s,baz=35,slow=8.8,SNR=15 | | | | | | |
| ARCES | ARCESS Array B | 34.51 | 359 | P | P | 21 58 20.1 | -2.7 |
| | 2.9nm,1.0s,baz=186,slow=7.2,SNR=3.9 | | | | | | |
| BVAR | Borovoye Array | 35.61 | 46 | P | P | 21 58 33.2 | +0.7 |
| | 0.4nm,0.4s,baz=245,slow=6.2,SNR=4.3 | | | | | | |
| AAK | Ala-Archa | 37.71 | 64 | P | P | 21 58 51.8 | +1.1 |
| | 0.8nm,0.4s,baz=270,slow=13,SNR=2.9 | | | | | | |
| KURBB | Kurchatov Arra | 40.32 | 51 | P | P | 21 59 12.4 | +0.2 |
| | 2.8nm,0.6s,baz=277,slow=8.7,SNR=33 | | | | | | |
| MKAR | Makanchi Array | 42.90 | 57 | P | P | 21 59 33.9 | +0.4 |
| | 2.0nm,0.6s,baz=273,slow=7.2,SNR=17 | | | | | | |
| ZALV | Zalesovo Beam | 44.27 | 46 | P | P | 21 59 44.0 | -0.4 |
| | 2.7nm,0.4s,baz=266,slow=9.4,SNR=16 | | | | | | |
| SONM | Songino Array | 58.69 | 51 | P | P | 22 01 33.2 | +0.7 |
| | 0.7nm,0.6s,baz=283,slow=8.3,SNR=7.2 | | | | | | |
| CMAR | Chiang Mai Arr | 65.50 | 84 | P | P | 22 02 17.4 | -1.2 |
| | 0.3nm,0.5s,baz=298,slow=8.4,SNR=3.5 | | | | | | |

**SKHL 03 22:04:31.7±0.3, 53.°81N×125.°54E, h6km±1km, mb3.7/4, Priamurye-Northeastern China border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZEA | Zeya | 1.02 | 93 | ePg | Pg | 22 04 50.7 | -0.5 |
| ZEA | | | | AMB | AMB | 22 04 51.1 | |
| | 30nm,0.3s | | | | | | |
| ZEA | | | | sPg | sPg | 22 04 53.3 | |
| ZEA | | | | eSg | Sg | 22 05 04.2 | -0.3 |
| ZEA | | | | A | A | 22 05 05.0 | |
| | 100nm,0.5s | | | | | | |
| ZEA | | | | A | A | 22 05 05.4 | |
| | 150nm,0.3s | | | | | | |
| ZEA | | | | A | A | 22 05 05.4 | |
| | 210nm,0.3s | | | | | | |
| KROS | Kirovskiy | 1.05 | 53 | iPg | Pg | 22 04 50.4 | -1.5 |
| KROS | | | | AMB | AMB | 22 04 51.5 | |
| | 24nm,0.4s | | | | | | |
| KROS | | | | sPg | sPg | 22 04 52.6 | |
| KROS | | | | eSg | Sg | 22 05 04.2 | -1.3 |
| KROS | | | | A | A | 22 05 05.7 | |
| | 180nm,0.5s | | | | | | |
| TUP | Tupik | 3.34 | 283 | ePn | Pn | 22 05 24.9 | +0.3 |
| TUP | | | | ePg | Pb | 22 05 32.3 | +0.9 |
| TUP | | | | AMB | AMB | 22 05 35.4 | |
| | 6.0nm,0.3s | | | | | | |
| TUP | | | | eSg | Sg | 22 06 16.3 | -2.9 |
| TUP | | | | A | A | 22 06 20.4 | |
| | 34nm,0.5s | | | | | | |
| EKMR | Ekimchan | 4.49 | 97 | ePn | Pn | 22 05 40.0 | -0.3 |
| EKMR | | | | sPn | Pn | 22 05 42.5 | +2.2 |
| EKMR | | | | eSg | Sg | 22 06 52.4 | -3.6 |
| EKMR | | | | A | A | 22 06 58.9 | |
| | 16nm,0.5s | | | | | | |
| EKMR | | | | A | A | 22 06 58.9 | |
| | 5.0nm,0.5s | | | | | | |
| EKMR | | | | A | A | 22 06 58.9 | |
| | 8.0nm,0.5s | | | | | | |

*IDC 03 22:08:49.5±0.8, 5.°05S×133.°59E, h0km, mb3.9/6, mb1 4.0/9, mb1mx3.8/30, mbtmp4.0/9, ML4.3/3, MS3.5/8, Ms1 3.5/8, ms1mx3.2/23, Error ellipse: s-maj=40.3km s-min=18.4km az=73.0*

*ISCJB 03 22:08:51.0±0.5, 5.°13S±0.°05×133.°48E±0.°07, h25km, mb3.9/6, MS3.4/5, Error ellipse: s-maj=10.7km s-min=6.7km az=174.7*

*AUST 03 22:08:53.2±0.0, 5.°10S×133.°50E, h45km, Error ellipse: s-maj=1.6km s-min=0.7km az=248.0*

**ISC 03 22:08:52.7±0.7, 5.°03S±0.°07×133.°54E±0.°10, h25km, n29, σ1.s54/23, mb4.0/6, MS3.3/5, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.47 | 328 | P | Pn | 22 09 30.6 | -0.8 |
| | baz=2.5,SNR=74 | | | | | | |
| SIJI | Sorong | 4.72 | 331 | Pn | Pn | 22 10 02.5 | +0.1 |
| | 7.9nm,0.3s,baz=131,slow=23,SNR=10 | | | | | | |
| SIJI | | | | Sn | Sn | 22 10 51.8 | -4.6 |
| | 13nm,0.3s,baz=188,slow=23,SNR=9.2 | | | | | | |
| SWI | Sorong | 4.73 | 331 | P | Pn | 22 10 03.7 | +1.3 |
| | baz=4.8,SNR=5.3 | | | | | | |
| KDU | Kakadu | 7.68 | 188 | P | Pn | 22 10 42.8 | -0.2 |
| | baz=7.7,SNR=39 | | | | | | |
| MTN | Manton Dam | 8.12 | 197 | P | Pn | 22 10 46.8 | -2.2 |
| | baz=8.1,SNR=22 | | | | | | |
| BATI | Baumata | 11.06 | 242 | Pn | Pn | 22 11 29.7 | +0.3 |
| | 2.9nm,0.3s,baz=63,slow=11,SNR=2.6 | | | | | | |
| BATI | | | | Sn | Sn | 22 13 32.9 | +0.5 |
| | 3.6nm,0.3s,baz=65,slow=21,SNR=5.8 | | | | | | |
| KNRA | Kununurra | 11.57 | 204 | P | Pn | 22 11 35.8 | -0.6 |
| | baz=12,SNR=48 | | | | | | |
| PALU | Palau | 12.33 | 4 | P | P | 22 12 04.0 | +5.3 |
| | baz=12,SNR=3.8 | | | | | | |
| COEN | Coen | 12.99 | 134 | P | Pn | 22 11 51.4 | -4.3 |
| | baz=13,SNR=7.2 | | | | | | |
| KAPI | Kappang | 13.74 | 269 | LR | LR | 22 18 36.1 | |
| | comp=Z,130nm,18.8s,baz=115,slow=43 | | | | | | |
| WRA | Warramunga Arr | 14.84 | 177 | Pn | Pn | 22 12 16.2 | -4.8 |
| | 1.3nm,0.3s,baz=3.8,slow=13,SNR=42 | | | | | | |
| WRA | | | | Sn | Sn | 22 14 51.6 | -13 |
| | 0.7nm,0.3s,baz=350,slow=24,SNR=5.6 | | | | | | |
| WRA | | | | LR | LR | 22 18 45.1 | |
| | comp=Z,226nm,18.6s,baz=0.0,slow=40 | | | | | | |
| QIS | Mount Isa | 16.52 | 160 | P | P | 22 12 44.9 | -0.4 |
| | baz=17,SNR=3.9 | | | | | | |
| ASAR | Alice Springs | 18.53 | 179 | P | P | 22 13 04.5 | -3.0 |
| | 1.5nm,0.3s,baz=9.6,slow=12,SNR=49 | | | | | | |
| ASAR | | | | S | Sn | 22 16 20.6 | -14 |
| | 0.2nm,0.3s,baz=358,slow=28,SNR=3.0 | | | | | | |
| ASAR | | | | LR | LR | 22 20 59.5 | |
| | comp=Z,179nm,20.5s,baz=353,slow=39 | | | | | | |
| CTA | Charters Tower | 19.41 | 142 | P | Pn | 22 13 17.5 | -1.0 |
| | 0.6nm,0.3s,baz=320,slow=14,SNR=5.9 | | | | | | |
| WRKA | Warakurna | 20.52 | 194 | P | P | 22 13 29.7 | +0.5 |
| | baz=21,SNR=12 | | | | | | |
| QLP | Quilpie | 23.74 | 156 | P | P | 22 14 03.6 | +0.5 |
| | baz=24,SNR=9.5 | | | | | | |
| LEM | Lembang | 25.85 | 265 | LR | LR | 22 25 27.7 | |
| | comp=Z,78nm,21.4s,baz=126,slow=39 | | | | | | |
| XMI | Christmas Isla | 28.11 | 257 | P | P | 22 14 34.5 | -8.4 |
| | baz=28,SNR=3.5 | | | | | | |
| MJAR | Matsushiro Arr | 41.59 | 6 | LR | LR | 22 31 26.5 | |
| | comp=Z,61nm,20.4s,baz=190,slow=33 | | | | | | |
| KSRS | Korea Array | 42.59 | 353 | LR | LR | 22 33 05.8 | |
| | comp=Z,37nm,19.5s,baz=188,slow=34 | | | | | | |
| USRK | Ussuriysk Ar. | 49.03 | 359 | P | P | 22 17 38.5 | +1.0 |
| | 1.9nm,0.6s,baz=180,slow=9.8,SNR=3.7 | | | | | | |
| SONM | Songino Array | 57.80 | 339 | P | P | 22 18 43.6 | +1.5 |
| | 0.2nm,0.4s,baz=142,slow=7.3,SNR=3.0 | | | | | | |
| SONM | | | | LR | LR | 22 46 55.6 | |
| | comp=Z,24nm,18.4s,baz=190,slow=40 | | | | | | |
| MKAR | Makanchi Array | 68.59 | 325 | P | P | 22 19 55.0 | +1.5 |
| | 1.4nm,0.9s,baz=152,slow=5.5,SNR=5.5 | | | | | | |
| ZALV | Zalesovo Beam | 71.45 | 332 | P | P | 22 20 10.9 | +0.1 |
| | 0.9nm,0.7s,baz=119,slow=8.9,SNR=3.5 | | | | | | |
| VNDA | Vanda | 73.99 | 174 | P | P | 22 20 26.1 | +0.4 |
| | 1.1nm,0.9s,baz=322,slow=8.9,SNR=4.0 | | | | | | |
| VNDA | | | | LR | LR | 22 52 06.2 | |
| | comp=Z,56nm,18.4s,baz=348,slow=35 | | | | | | |
| MAW | Mawson | 78.06 | 202 | P | P | 22 20 50.0 | +1.1 |
| | 0.9nm,0.6s,baz=63,slow=2.3,SNR=3.6 | | | | | | |
| TORD | Torodi Ar. Bea | 131.85 | 283 | PKP | PKPdf | 22 28 04.8 | 0.0 |
| | 0.2nm,0.7s,baz=31,slow=3.9,SNR=2.3 | | | | | | |
| CPUP | Villa Florida | 147.09 | 162 | PKPbc | PKPab | 22 28 35.5 | -0.2 |
| | 1.1nm,0.8s,baz=194,slow=19,SNR=2.8 | | | | | | |
| LPAZ | La Paz | 149.86 | 135 | PKPbc | PKPbc | 22 28 41.6 | -0.9 |
| | 1.4nm,0.9s,baz=288,slow=3.2,SNR=5.0 | | | | | | |

*ISCJB 03 22:16:56.7±1.3, 23.°6S±0.°1×180.°0W±0.°2, h518km, mb3.5/4, Error ellipse: s-maj=25.0km s-min=15.7km az=174.2*

*IDC 03 22:16:58.0±5.4, 23.°99S×179.°87W, h523km±56km, mb3.0/4, mb1 3.2/5, mb1mx2.9/27, mbtmp4.0/5, Error ellipse: s-maj=46.8km s-min=28.3km az=21.0*

**ISC 03 22:16:57.2±1.1, 23.°8S±0.°1×179.°9W±0.°2, h518km, n9, σ0.s94/10, mb3.5/4, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 14.62 | 190 | P | P | 22 20 02.4 | -0.6 |
| | 0.8nm,0.3s,baz=23,slow=18,SNR=9.7 | | | | | | |
| URZ | | | | S | S | 22 22 37.3 | +1.1 |
| | 0.2nm,0.3s,baz=131,slow=20,SNR=2.1 | | | | | | |
| CTA | Charters Tower | 31.61 | 270 | P | P | 22 22 38.1 | +0.6 |
| | 1.2nm,0.3s,baz=74,slow=7.4,SNR=4.1 | | | | | | |
| ASAR | Alice Springs | 42.18 | 261 | P | P | 22 24 04.5 | 0.0 |
| | 1.0nm,0.7s,baz=99,slow=7.1,SNR=7.9 | | | | | | |
| WRA | Warramunga Arr | 42.55 | 266 | P | P | 22 24 06.8 | -0.5 |
| | 0.6nm,0.3s,baz=95,slow=8.5,SNR=27 | | | | | | |
| TXAR | Lajitas Array | 90.28 | 58 | P | P | 22 29 03.6 | +0.7 |
| | 0.3nm,0.7s,baz=224,slow=6.2,SNR=3.9 | | | | | | |
| AKASG | Malin Array Be | 144.98 | 327 | PKPbc | PKPdf | 22 35 34.8 | -0.2 |
| | 0.6nm,0.4s,baz=38,slow=4.0,SNR=5.5 | | | | | | |
| BRTR | Keskin Array B | 147.64 | 307 | PKPbc | PKPbc | 22 35 42.6 | -1.0 |
| | 1.0nm,1.0s,baz=78,slow=3.5,SNR=2.9 | | | | | | |
| MMAI | Mount Meron Ar | 147.80 | 294 | PKPbc | PKPbc | 22 35 45.2 | +1.1 |
| | 3.7nm,0.7s,baz=64,slow=6.7,SNR=12 | | | | | | |
| TORD | Torodi Ar. Bea | 169.28 | 188 | PKPab | PKPab | 22 37 20.2 | -1.2 |
| | 0.3nm,0.7s,baz=178,slow=3.6,SNR=3.8 | | | | | | |

*ISCJB 03 22:18:08.4±0.4, 32.°18N±0.°02×115.°22W±0.°03, h22km±5km, Error ellipse: s-maj=5.0km s-min=3.8km az=26.8*

*NEIC 03 22:18:09.5, 32.°17N×115.°24W, h6km, ML2.9(PAS), ML3.1(ECX), After ECX.*

*ECX 03 22:18:09.5±0.6, 32.°16N×115.°24W, h8km, MD3.0, ML3.2*

*MEX 03 22:18:13.0±0.3, 32.°08N×115.°45W, h5km, MD3.6*

**ISC 03 22:18:07.7±3.2, 32.°17N±0.°02×115.°24W±0.°03, h14km±24km, n25, σ0.s64/42, 4C-5D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EMSC | East Mesa | 0.60 | 21 | ⇓iP | Pb | 22 18 20.6 | +0.5 |
| SGL | Mount Signal | 0.63 | 319 | ⇑iP | Pb | 22 18 21.1 | +0.5 |
| RDX | Rancho Dawling | 0.64 | 248 | eP | Pb | 22 18 20.9 | 0.0 |
| RDX | | | | eS | Sb | 22 18 29.9 | 0.0 |
| RDX | | | | IAML | | 22 18 31.4 | |
| | comp=N,1μm,0.4s | | | | | | |
| COA | Coachella | 0.70 | 8 | ⇓iP | Pb | 22 18 21.9 | +0.2 |
| YMD | Yuma Desert | 0.70 | 57 | ⇓iP | Pb | 22 18 21.5 | -0.3 |
| ECBX | El Chinero | 0.72 | 167 | eP | Pb | 22 18 21.9 | -0.1 |
| ECBX | | | | eS | Sb | 22 18 31.7 | -0.1 |
| YUH | Yuha Desert | 0.75 | 310 | ⇑iP | Pb | 22 18 22.9 | +0.3 |
| RMX | La Rumorosa | 0.83 | 301 | eP | Pb | 22 18 23.6 | -0.5 |
| RMX | | | | eS | Sb | 22 18 34.5 | -0.6 |
| RMX | | | | IAML | | 22 18 36.1 | |
| | comp=N,634nm,0.1s | | | | | | |
| RMX | | | | ⇓e | | 22 18 36.1 | |
| IBP | Imperial Bould | 0.87 | 304 | eP | Pb | 22 18 25.1 | +0.3 |
| GLA | Glamis | 0.94 | 22 | eP | Pb | 22 18 25.4 | -0.6 |
| GLA | | | | eS | Sb | 22 18 37.6 | -0.8 |
| ZAX | El Zacaton | 1.10 | 233 | eP | Pn | 22 18 27.9 | -0.9 |
| ZAX | | | | eS | Sb | 22 18 43.0 | +0.1 |
| ZAX | | | | IAML | | 22 18 46.2 | |
| | comp=E,580nm,0.4s | | | | | | |
| ZAX | | | | ⇓e | | 22 18 46.2 | |
| SPIG | San Pedro Mart | 1.14 | 190 | eP | Pb | 22 18 30.3 | +0.8 |
| SPIG | | | | iS | Sb | 22 18 43.9 | -0.4 |
| SPIG | San Pedro Mart | 1.14 | 190 | eP | Pn | 22 18 29.1 | -0.5 |
| SPIG | | | | eS | Sn | 22 18 44.8 | -0.5 |
| SPIG | San Pedro Mart | 1.14 | 190 | eP | Pb | 22 18 30.3 | +0.8 |
| SPIG | | | | iS | Sb | 22 18 43.9 | -0.4 |
| SPX | San Pedro Mart | 1.14 | 190 | eP | Pn | 22 18 29.6 | -0.1 |
| SPX | | | | eS | Sn | 22 18 45.2 | -0.1 |
| SPX | San Pedro Mart | 1.14 | 190 | iP | Pb | 22 18 30.3 | +0.8 |
| SPX | | | | iS | Sb | 22 18 43.8 | -0.5 |
| CBX | Cerro Bola | 1.21 | 277 | eP | Pn | 22 18 30.4 | 0.0 |
| CBX | | | | iS | Sb | 22 18 44.8 | -1.4 |
| CBX | Cerro Bola | 1.21 | 277 | ⇑eP | Pn | 22 18 30.5 | 0.0 |
| CBX | | | | eS | Sn | 22 18 47.7 | +0.9 |
| CBX | | | | IAML | | 22 18 48.6 | |
| | comp=E,633nm,0.3s | | | | | | |
| CBX | Cerro Bola | 1.21 | 277 | eP | Pn | 22 18 30.4 | 0.0 |
| CBX | | | | iS | Sb | 22 18 44.8 | -1.4 |
| ECNX | Esteban Cantu | 1.26 | 246 | eP | Pn | 22 18 31.1 | -0.1 |
| ECNX | | | | eS | Sb | 22 18 48.4 | +0.7 |
| BAR | Barrett | 1.31 | 293 | ⇑eP | Pn | 22 18 31.9 | +0.1 |
| BAR | Barrett | 1.31 | 293 | ePn | Pn | 22 18 31.7 | 0.0 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BAR | | | | eSn | Sb | 22 18 50.3 | +1.3 |
| PBX | Punta Banda | 1.33 | 252 | eP | Pn | 22 18 31.4 | -0.6 |
| PBX | | | | eS | Sn | 22 18 49.5 | -0.2 |
| PFO | Pinyon Flat Ob | 1.76 | 325 | ePn | Pn | 22 18 37.4 | -0.6 |
| WUAZ | Wupatki | 4.63 | 43 | ePn | Pn | 22 19 18.2 | +0.6 |
| WUAZ | | | | eSn | Sn | 22 20 12.1 | +0.8 |

*ISCJB **03** 22:21:36.3±0.8, 5°.91S±0°.06×146°.8E±0°.1, h78km, mb3.8/7, Error ellipse: s-maj=21.2km s-min=8.4km az=172.7*

*IDC **03** 22:21:39.9±3.2, 5°.97S×146°.78E, h98km±32km, mb3.6/7, mb1 3.7/10, mb1mx3.6/27, mbtmp4.0/10, Error ellipse: s-maj=34.5km s-min=22.7km az=103.0*

**ISC 03 22:21:37.9±0.8, 5°.93S±0°.08×146°.8E±0°.2, h78km, n12, σ1s.14/14, mb4.0/7, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 3.48 | 174 | P | Pn | 22 22 31.4 | +1.6 |
| | 47nm,0.3s,baz=51,slow=5.8,SNR=90 | | | | | | |
| PMG | | | | S | Sn | 22 23 09.4 | -0.4 |
| | 27nm,0.3s,baz=167,slow=22,SNR=7.5 | | | | | | |
| CTA | Charters Tower | 14.09 | 182 | P | P | 22 24 58.0 | -1.2 |
| | 1.4nm,0.3s,baz=359,slow=15,SNR=10 | | | | | | |
| SIJI | Sorong | 16.28 | 287 | P | Pn | 22 25 22.0 | +0.1 |
| | 0.8nm,0.3s,baz=105,slow=20,SNR=2.2 | | | | | | |
| WRA | Warramunga Arr | 18.45 | 220 | P | P | 22 25 47.4 | -0.1 |
| | 0.3nm,0.3s,baz=45,slow=12,SNR=16 | | | | | | |
| WRA | | | | PcP | PcP | 22 30 16.1 | +0.9 |
| | 0.1nm,0.3s,baz=31,slow=2.1,SNR=4.6 | | | | | | |
| ASAR | Alice Springs | 21.56 | 214 | P | P | 22 26 21.3 | +0.2 |
| | 0.8nm,0.5s,baz=56,slow=9.5,SNR=17 | | | | | | |
| KSRS | Korea Array | 46.60 | 339 | P | P | 22 29 59.3 | +1.0 |
| | 0.9nm,0.4s,baz=160,slow=9.8,SNR=3.2 | | | | | | |
| PETK | Petropavlovsk- | 59.53 | 8 | P | P | 22 31 34.1 | +1.0 |
| | 2.3nm,0.7s,baz=150,slow=6.7,SNR=2.8 | | | | | | |
| SONM | Songino Array | 64.23 | 331 | P | P | 22 32 05.6 | +0.7 |
| | 0.4nm,0.3s,baz=136,slow=5.5,SNR=6.4 | | | | | | |
| MKAR | Makanchi Array | 77.30 | 321 | P | P | 22 33 23.6 | -0.5 |
| | 0.4nm,0.4s,baz=132,slow=5.1,SNR=3.8 | | | | | | |
| ZALV | Zalesovo Beam | 78.83 | 328 | P | P | 22 33 30.8 | -1.5 |
| | 1.2nm,0.6s,baz=116,slow=5.8,SNR=5.3 | | | | | | |
| ILAR | Eielson Array | 85.50 | 23 | P | P | 22 34 05.4 | -1.6 |
| | 1.0nm,0.6s,baz=253,slow=5.0,SNR=15 | | | | | | |
| TORD | Torodi Ar. Bea | 144.86 | 284 | PKP | PKPab | 22 41 05.1 | -1.1 |
| | 1.1nm,0.5s,baz=71,slow=3.2,SNR=10 | | | | | | |

**IDC 03 22:35:55.2±4.4, 0°.43S×14°.80W, h0km, mb3.5/2, mb1 3.7/3, mb1mx3.4/39, mbtmp3.7/3, ML3.8/1, MS2.7/1, Ms1 2.7/1, ms1mx2.3/20, Error ellipse: s-maj=339.3km s-min=33.6km az=145.0, North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H10N2 | ASCENSION HYDR | 7.36 | 178 | T | T | 22 44 14.3 | |
| | baz=352,slow=73,SNR=21 | | | | | | |
| H10N3 | ASCENSION HYDR | 7.37 | 178 | T | T | 22 44 07.4 | |
| | baz=352,slow=73,SNR=39 | | | | | | |
| H10N1 | ASCENSION HYDR | 7.38 | 178 | T | T | 22 44 14.3 | |
| | baz=352,slow=73,SNR=32 | | | | | | |
| H10S1 | ASCENSION HYDR | 8.46 | 179 | T | T | 22 45 55.3 | |
| | baz=354,slow=75 | | | | | | |
| H10S3 | ASCENSION HYDR | 8.47 | 179 | T | T | 22 45 39.3 | |
| | baz=354,slow=75 | | | | | | |
| H10S2 | ASCENSION HYDR | 8.48 | 179 | T | T | 22 45 58.3 | |
| | baz=354,slow=75 | | | | | | |
| DBIC | Dimbokro | 12.17 | 54 | Pn | Pn | 22 38 50.1 | +0.1 |
| | 0.6nm,0.3s,baz=228,slow=15,SNR=22 | | | | | | |
| DBIC | | | | Sn | Sn | 22 41 08.7 | +2.2 |
| | 0.2nm,0.3s,baz=148,slow=19,SNR=3.1 | | | | | | |
| TORD | Torodi Ar. Bea | 21.20 | 50 | P | P | 22 40 43.2 | +0.6 |
| | 2.0nm,0.8s,baz=230,slow=11,SNR=11 | | | | | | |
| TORD | | | | S | S | 22 44 40.3 | +0.9 |
| | 0.3nm,0.6s,baz=226,slow=20,SNR=2.6 | | | | | | |
| TORD | | | | LR | LR | 22 48 01.4 | |
| | comp=Z,23nm,21.0s,baz=355,slow=34 | | | | | | |
| BRTR | Keskin Array B | 59.54 | 42 | P | P | 22 46 00.6 | -0.2 |
| | 0.2nm,0.3s,baz=251,slow=9.0,SNR=2.8 | | | | | | |

**MEX 03 23:07:11.7±1.0, 19°.48N×103°.52W, h6km±7km, MD4.0, Jalisco**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MMIG | Aquila | 1.20 | 172 | eP | Pg | 23 07 31.0 | -3.7 |
| MMIG | | | | eS | Sg | 23 07 46.5 | -3.7 |
| ANIG | Ahuacatlan | 1.82 | 329 | eP | Pn | 23 07 39.5 | -4.3 |
| ANIG | | | | eS | Sn | 23 08 03.0 | -4.4 |
| PUVA | Puert Vallarta | 1.96 | 306 | eP | Pn | 23 07 41.8 | -3.8 |
| PUVA | | | | i S | Sn | 23 08 05.4 | -5.1 |

**MEX 03 23:17:35.9±0.3, 19°.32N×103°.97W, h20km, MD4.0, Jalisco**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MMIG | Aquila | 1.18 | 150 | eP | Pn | 23 17 54.0 | -3.2 |
| MMIG | | | | i S | Sb | 23 18 08.3 | -4.2 |
| ZIIG | Zihuatanejo | 2.92 | 125 | eP | Pn | 23 18 19.4 | -1.8 |
| ARIG | Puente Sto Nin | 3.58 | 106 | i P | Pn | 23 18 28.1 | -2.3 |
| ARIG | | | | i S | Sn | 23 19 08.9 | -3.4 |

*CSEM **03** 23:20:23.6±0.3, 67°.85N×20°.30E, h1km±3km, ML1.2, Error ellipse: s-maj=5.9km s-min=5.4km az=71.0, Mining explosion.*

*HEL **03** 23:20:24.3±0.1, 67°.85N×20°.23E, h0km, ML1.4, ML1.2(UPP), Explosion*

**UPP 03 23:20:23.8, 67°.85N×20°.20E, h0km, ML1.2, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUA | Kurravaara | 0.12 | 25 | i P | Pg | 23 20 26.3 | +0.2 |
| KUA | | | | i S | Sg | 23 20 28.0 | +0.3 |
| KUA | Kurravaara | 0.12 | 25 | P | Pg | 23 20 26.3 | +0.2 |
| KUA | | | | S | Sg | 23 20 28.0 | +0.3 |
| NIKU | Nikkaluokta | 0.44 | 273 | i P | Pg | 23 20 32.4 | 0.0 |
| NIKU | Nikkaluokta | 0.44 | 273 | P | Pg | 23 20 32.3 | 0.0 |
| LANU | Lannavaara | 0.70 | 72 | eP | Pg | 23 20 37.0 | -0.3 |
| LANU | | | | eS | Sg | 23 20 43.0 | -3.5 |
| LANU | Lannavaara | 0.70 | 72 | P | Pn | 23 20 43.1 | +2.1 |
| LANU | Lannavaara | 0.70 | 72 | P | Pg | 23 20 37.1 | -0.2 |
| LANU | | | | S | Sg | 23 20 43.0 | -3.5 |
| DUNU | Dundret | 0.74 | 169 | i P | Pg | 23 20 37.7 | -0.4 |
| DUNU | Dundret | 0.74 | 169 | P | Pg | 23 20 37.7 | -0.4 |
| MASU | Masugnsbyn | 0.79 | 119 | i P | Pg | 23 20 38.8 | -0.2 |
| MASU | Masugnsbyn | 0.79 | 119 | P | Pg | 23 20 38.8 | -0.2 |
| KIF | Kilpisjarvi | 1.18 | 10 | ePB | Pg | 23 20 46.5 | 0.0 |
| | baz=192 | | | | | | |
| KIF | | | | eSB | Sb | 23 21 02.5 | -0.4 |
| KIF | Kilpisjarvi | 1.18 | 10 | Pb | Pg | 23 20 46.5 | 0.0 |
| KIF | | | | Sb | Sb | 23 21 02.5 | -0.4 |
| HEF | Hetta | 1.41 | 65 | ePG | Pn | 23 20 49.7 | -1.0 |
| | baz=246 | | | | | | |
| HEF | | | | MSG | | 23 21 06.2 | |
| | comp=Z,3.5nm,0.2s | | | | | | |
| HEF | Hetta | 1.41 | 65 | Pg | Pn | 23 20 49.7 | -1.0 |
| ERTU | Ertsjaerv | 1.51 | 148 | ePG | Pn | 23 20 51.3 | -0.7 |
| ERTU | | | | eSN | Sn | 23 21 13.8 | +1.3 |
| ERTU | Ertsjaerv | 1.51 | 148 | P | Pn | 23 20 51.4 | -0.7 |
| ERTU | | | | Sn | Sn | 23 21 13.8 | +1.3 |
| KALU | Kalix | 2.35 | 147 | ePB | Pn | 23 21 04.7 | +1.1 |
| | baz=335 | | | | | | |
| KALU | | | | eSG | Sb | 23 21 36.4 | -0.1 |
| KALU | Kalix | 2.35 | 147 | Pb | Pn | 23 21 04.6 | +1.0 |
| SGF | Sodankyl | 2.45 | 97 | ePG | Pb | 23 21 07.5 | -1.1 |
| SGF | | | | eSG | Sb | 23 21 40.5 | +1.1 |
| SGF | Sodankyl | 2.45 | 97 | Pg | Pb | 23 21 07.5 | -1.2 |
| ARE0 | ARCESS Array S | 2.57 | 46 | ePB | Pn | 23 21 08.0 | +1.3 |
| | baz=230 | | | | | | |
| ARE0 | | | | eSB | Sn | 23 21 40.8 | +2.1 |
| ARE0 | ARCESS Array S | 2.57 | 46 | Pb | Pn | 23 21 08.0 | +1.3 |
| ARE0 | | | | Sb | Sn | 23 21 40.8 | +2.1 |
| RNF | Rovaniemi | 2.58 | 116 | ePB | Pn | 23 21 08.4 | +1.7 |
| RNF | | | | eSG | Sb | 23 21 42.6 | -0.5 |
| RNF | Rovaniemi | 2.58 | 116 | Pb | Pn | 23 21 08.4 | +1.7 |

*CSEM **03** 23:20:25.5±0.4, 67°.73N×20°.85E, h1km, ML1.2, Error ellipse: s-maj=15.0km s-min=8.1km az=26.0, Mining explosion.*

**UPP 03 23:20:29.9, 67°.86N×20°.19E, h0km, ML1.2, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUA | Kurravaara | 0.11 | 30 | P | Pg | 23 20 32.2 | +0.2 |
| NIKU | Nikkaluokta | 0.44 | 271 | P | Pg | 23 20 38.3 | 0.0 |

**MEX 03 23:48:09.9±1.2, 19°.31N×103°.93W, h14km±17km, MD4.0, Jalisco**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MMIG | Aquila | 1.15 | 151 | eP | Pb | 23 48 26.9 | -4.7 |
| MMIG | | | | eS | Sb | 23 48 42.4 | -4.1 |
| PUVA | Puert Vallarta | 1.79 | 317 | eP | Pn | 23 48 37.6 | -2.8 |
| PUVA | | | | eS | Sn | 23 48 57.7 | -5.2 |
| ANIG | Ahuacatlan | 1.82 | 342 | eP | Pn | 23 48 37.3 | -3.8 |
| ANIG | | | | eS | Sn | 23 48 59.0 | -5.1 |
| MOIG | Morelia | 2.61 | 81 | eP | Pn | 23 48 49.4 | -2.6 |
| MOIG | | | | i S | Sn | 23 49 19.3 | -4.5 |

*SJA **03** 23:59:58.4±0.6, 37°.48S×72°.31W, h33km, ML3.7*

*IDC **04** 00:00:06.7±2.6, 36°.65S×71°.04W, h0km, mb3.2/3, mb1 3.6/3, mb1mx3.5/18, mbtmp3.3/3, MS3.0/1, Ms1 3.0/1, ms1mx2.8/4, Error ellipse: s-maj=78.7km s-min=45.6km az=37.0*

**ISC 03 23:59:45.5±3.9, 38°.8S±0°.3×72°.4W±0°.4, h35km, n13, σ1s.68/12, Central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ROC1 | El Roble | 5.90 | 11 | eP | Pn | 00 01 09.9 | -0.8 |
| ROC1 | | | | eS | Sn | 00 02 02.4 | -15 |
| AAGR | Agrelo | 6.38 | 28 | eP | Pn | 00 01 17.8 | +0.6 |
| ARCO | CERRO ARCO | 6.56 | 27 | AML | AML | 00 02 46.1 | |
| | comp=Z,42nm,0.6s | | | | | | |
| ASAL | Salagasta | 6.83 | 26 | eP | Pn | 00 01 24.3 | +1.1 |
| ASAL | | | | eS | Sn | 00 02 39.0 | -0.8 |
| AUSP | Uspallata | 6.99 | 22 | eP | Pn | 00 01 25.7 | 0.0 |
| AUSP | | | | eS | Sn | 00 02 42.9 | -1.2 |
| RTLS | Leoncito | 7.42 | 21 | eP | Pn | 00 01 30.8 | -0.7 |
| RTLS | | | | eS | Sn | 00 02 57.3 | +2.8 |
| CFAA | Coronel Fontan | 7.93 | 27 | eP | Pn | 00 01 36.7 | -1.7 |
| RTLL | Cerro Villicun | 8.10 | 25 | eP | Pn | 00 01 39.0 | -1.8 |
| AMOG | MOGNA | 8.46 | 23 | eP | Pn | 00 01 43.4 | -2.3 |
| TCA | Tanti | 9.80 | 43 | eP | Pn | 00 02 06.8 | +2.7 |
| CPUP | Villa Florida | 17.74 | 50 | LR | LR | 00 10 48.4 | |
| | comp=Z,51nm,18.9s,baz=200,slow=41 | | | | | | |
| LPAZ | La Paz | 22.72 | 11 | P | P | 00 04 46.4 | +1.3 |
| | comp=Z,0.8nm,0.8s,baz=206,slow=9.1,SNR=2.4 | | | | | | |
| TORD | Torodi Ar. Bea | 86.12 | 70 | P | P | 00 12 40.0 | +17 |
| | comp=Z,0.1nm,0.5s,baz=219,slow=4.7,SNR=2.1 | | | | | | |

*ISCJB **04** 00:04:05.5±0.6, 33°.79N±0°.02×35°.72E±0°.06, h18km±5km, Error ellipse: s-maj=8.3km s-min=3.7km az=174.9*

*GRAL **04** 00:04:05.5±0.4, 33°.78N×35°.67E, h19km±4km, MD2.8*

*CSEM **04** 00:04:05.1±0.1, 33°.79N×35°.75E, h12km, ML2.8, Error ellipse: s-maj=4.0km s-min=1.9km az=88.0*

*NSSC **04** 00:04:05.4±1.0, 33°.79N×35°.76E, h13km±3km, MD1.2, ML1.2*

**ISC 04 00:04:05.4±0.9, 33°.79N±0°.02×35°.77E±0°.05, h15km±7km, n26, σ0s.40/50, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BHL | Bhannes | 0.15 | 321 | eP | Pg | 00 04 09.5 | 0.0 |
| BHL | | | | eS | Sg | 00 04 12.1 | 0.0 |
| BHL | Bhannes | 0.15 | 321 | eP | Pg | 00 04 09.5 | 0.0 |
| BHL | | | | eS | Sg | 00 04 12.1 | 0.0 |
| RCY | Rachaya | 0.29 | 169 | eP | Pg | 00 04 11.7 | +0.1 |
| RCY | | | | eS | Sb | 00 04 16.7 | -0.5 |
| RCY | Rachaya | 0.29 | 169 | eP | Pg | 00 04 11.7 | +0.1 |
| RCY | | | | eS | Sb | 00 04 16.7 | -0.5 |
| BRBR | Barbar | 0.40 | 158 | eP | Pg | 00 04 13.6 | 0.0 |
| BRBR | | | | eS | Sb | 00 04 19.8 | -0.6 |
| BRBR | | | | AML | AML | 00 04 22.6 | |
| | comp=E,29nm,0.9s | | | | | | |
| BRBR | | | | AML | AML | 00 04 22.9 | |
| | comp=N,35nm,0.5s | | | | | | |
| BRBR | Barbar | 0.40 | 158 | eP | Pg | 00 04 13.6 | 0.0 |
| BRBR | | | | eS | Sb | 00 04 19.8 | -0.6 |
| HWQ | Hawqa | 0.51 | 16 | eP | Pg | 00 04 15.5 | -0.1 |
| HWQ | Hawqa | 0.51 | 16 | eP | Pg | 00 04 15.5 | -0.1 |
| TOTH | TOTAH | 0.69 | 127 | eP | Pg | 00 04 19.1 | +0.2 |
| TOTH | | | | eS | Sb | 00 04 29.8 | +1.2 |
| TOTH | | | | AML | AML | 00 04 37.9 | |
| | comp=E,7.9nm,0.6s | | | | | | |
| TOTH | | | | AML | AML | 00 04 38.4 | |
| | comp=N,8.0nm,0.4s | | | | | | |
| TOTH | TOTAH | 0.69 | 127 | eP | Pg | 00 04 19.1 | +0.2 |
| TOTH | | | | eS | Sb | 00 04 29.8 | +1.2 |
| HAWK | Haweek | 0.90 | 35 | eP | Pg | 00 04 22.5 | -0.4 |
| HAWK | | | | eS | Sg | 00 04 34.5 | -0.3 |
| HAWK | | | | AML | AML | 00 04 38.7 | |
| | comp=E,6.4nm,0.4s | | | | | | |
| HAWK | | | | AML | AML | 00 04 46.0 | |
| | comp=N,5.6nm,0.5s | | | | | | |
| HAWK | Haweek | 0.90 | 35 | eP | Pg | 00 04 22.5 | -0.4 |
| HAWK | | | | eS | Sg | 00 04 34.5 | -0.3 |
| TCHB | Talchebab | 1.12 | 171 | eP | Pb | 00 04 26.4 | -0.1 |
| TCHB | | | | eS | Sb | 00 04 40.7 | -0.3 |
| TCHB | | | | AML | AML | 00 04 49.6 | |
| | comp=N,14nm,0.4s | | | | | | |
| TCHB | | | | AML | AML | 00 04 49.8 | |
| | comp=E,18nm,0.4s | | | | | | |
| TCHB | Talchebab | 1.12 | 171 | eP | Pb | 00 04 26.4 | -0.1 |
| TCHB | | | | eS | Sb | 00 04 40.7 | -0.3 |
| BIDA | Albida | 1.31 | 20 | eP | Pn | 00 04 29.6 | +0.4 |
| BIDA | | | | eS | Sn | 00 04 46.8 | +0.3 |
| BIDA | | | | AML | AML | 00 04 52.9 | |
| | comp=E,10nm,0.4s | | | | | | |
| BIDA | | | | AML | AML | 00 04 56.9 | |
| | comp=N,24nm,0.5s | | | | | | |
| BIDA | Albida | 1.31 | 20 | eP | Pn | 00 04 29.6 | +0.4 |
| BIDA | | | | eS | Sn | 00 04 46.8 | +0.3 |
| ROOS | tl_alroos | 1.32 | 73 | eP | Pn | 00 04 28.8 | -0.6 |
| ROOS | | | | eS | Sb | 00 04 46.9 | +0.2 |
| ROOS | | | | AML | AML | 00 04 59.9 | |
| | comp=N,8.4nm,0.4s | | | | | | |
| ROOS | | | | AML | AML | 00 05 01.5 | |
| | comp=E,10nm,0.4s | | | | | | |
| ROOS | tl_alroos | 1.32 | 73 | eP | Pn | 00 04 28.8 | -0.6 |
| ROOS | | | | eS | Sb | 00 04 46.8 | +0.2 |
| SALA | Sala | 1.34 | 143 | eP | Pn | 00 04 30.2 | +0.4 |
| SALA | | | | eS | Sb | 00 04 47.0 | -0.4 |
| SALA | | | | AML | AML | 00 04 52.2 | |
| | comp=N,5.7nm,0.5s | | | | | | |
| SALA | | | | AML | AML | 00 04 52.7 | |
| | comp=E,0.5nm,0.3s | | | | | | |
| SALA | Sala | 1.34 | 143 | eP | Pn | 00 04 30.2 | +0.4 |
| SALA | | | | eS | Sb | 00 04 47.0 | -0.4 |
| RABH | Abou Rabah | 1.36 | 61 | eP | Pb | 00 04 30.4 | 0.0 |
| RABH | | | | eS | Sn | 00 04 47.8 | +0.1 |
| RABH | | | | AML | AML | 00 04 58.6 | |
| | comp=E,4.1nm,0.4s | | | | | | |
| RABH | | | | AML | AML | 00 04 59.0 | |
| | comp=N,3.1nm,0.8s | | | | | | |
| RABH | Abou Rabah | 1.36 | 61 | eP | Pb | 00 04 30.5 | 0.0 |
| RABH | | | | eS | Sn | 00 04 47.8 | +0.1 |
| ZALF | Zalf | 1.57 | 123 | eP | Pb | 00 04 33.9 | -0.2 |
| ZALF | | | | eS | Sn | 00 04 52.8 | +0.1 |
| ZALF | | | | AML | AML | 00 05 03.5 | |
| | comp=E,4.2nm,0.4s | | | | | | |
| ZALF | | | | AML | AML | 00 05 06.8 | |
| | comp=N,3.5nm,0.6s | | | | | | |
| ZALF | Zalf | 1.57 | 123 | eP | Pb | 00 04 33.9 | -0.2 |
| ZALF | | | | eS | Sn | 00 04 52.8 | +0.1 |
| WRDH | Warideh | 1.80 | 17 | eP | Pn | 00 04 36.4 | +0.5 |
| WRDH | | | | eS | Sn | 00 04 58.7 | +0.1 |
| WRDH | | | | AML | AML | 00 05 07.4 | |
| | comp=E,5.9nm,0.6s | | | | | | |
| WRDH | Warideh | 1.80 | 17 | eP | Pn | 00 04 36.4 | +0.5 |
| WRDH | | | | eS | Sn | 00 04 58.7 | +0.1 |

*IDC **04** 00:05:54.6±0.6, 30°.21S×177°.88W, h0km, mb4.6/9, mb1 4.8/11, mb1mx4.6/24, mbtmp4.6/11, ML4.1/2, MS4.1/17, Ms1 4.1/17, ms1mx4.0/27, Error ellipse: s-maj=25.4km s-min=14.5km az=105.0*

*ISCJB **04** 00:06:00.8±0.2, 30°.60S±0°.03×177°.85W±0°.05, h50km, mb4.8/22, MS4.1/15, Error ellipse: s-maj=7.4km s-min=3.8km az=31.5*

*NEIC **04** 00:06:01.6±1.2, 30°.13S×177°.98W, h47km±10km, mb5.0/14, Error ellipse: s-maj=12.2km s-min=7.6km az=125.0*

*GCMT **04** 00:06:01.6±0.3, 30°.19S×177°.55W, h54km±1km, MW5.0/65, Moment Tensor Solution. s59,c76; s65,c85; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr4.33±.17; Mθθ0.24±.15; Mφφ-4.58±.12; Mrθ-0.53±.10; Mθφ-1.38±.12; Mφr-0.09±.11; Best double couple: M0 4.67600×10^16 NP1:φs202.00000°,δ47.00000°,λ100.00000°. NP2: φs7.00000°,δ44.00000°,λ79.00000°. Principal axes: T 4.3990, Plg82.0000°, Azm185.0000°; N 0.5470, Plg7.0000°, Azm15.0000°; P -4.9520, Plg1.0000°, Azm285.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*AUST **04** 00:06:12.7±3.6, 30°.55S×177°.93W, h133km±20km Error ellipse: s-maj=36.2km s-min=16.7km az=74.0*

**ISC 04 00:06:01.7±0.4, 30°.37S±0°.05×177°.76W±0°.07, h50km, n152, σ1s.75/136, mb4.9/22, MS4.0/15, 1D, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 1.13 | 353 | Pn | Pn | 00 06 17.1 | -4.0 |
| | 1μm,0.3s,baz=26,slow=20,SNR=25 | | | | | | |
| RAO | | | | Sn | Sn | 00 06 28.7 | -6.9 |
| | 13μm,0.3s,baz=338,slow=19,SNR=45 | | | | | | |
| RAO | Raoul Island | 1.13 | 353 | Pn | Pn | 00 06 17.1 | -4.0 |
| RAO | | | | Sn | Sn | 00 06 28.7 | -6.9 |
| RAO | | | | eSn | Sn | 00 06 30.0 | -5.6 |
| MXZ | Matakaoa Point | 7.88 | 203 | PN | Pn | 00 07 51.6 | -2.0 |
| MXZ | | | | SN | Sn | 00 09 23.2 | +1.8 |
| WMGZ | Waiomatatini S | 8.07 | 202 | PN | Pn | 00 07 55.1 | -1.2 |
| WMGZ | | | | SN | Sn | 00 09 27.6 | +1.4 |
| HAZ | Te Kaha | 8.24 | 205 | PN | Pn | 00 07 56.8 | -1.8 |
| HAZ | | | | SN | Sn | 00 09 33.4 | +3.2 |
| PUZ | Puketiti | 8.36 | 202 | PN | Pn | 00 07 56.8 | -3.4 |
| PUZ | | | | SN | Sn | 00 09 31.7 | -1.5 |
| TWGZ | Tauwhareparae | 8.54 | 203 | PN | Pn | 00 08 00.3 | -2.5 |
| OUZ | Omahuta | 8.73 | 234 | PN | Pn | 00 08 12.5 | +7.2 |
| OUZ | Omahuta | 8.73 | 234 | ePn | Pn | 00 08 12.7 | +7.4 |
| | 164nm,1.1s | | | | | | |
| TKGZ | Te Karaka | 8.82 | 203 | PN | Pn | 00 08 03.6 | -3.0 |
| MWZ | Matawai | 8.84 | 205 | PN | Pn | 00 08 03.7 | -3.3 |
| MWZ | | | | SN | Sn | 00 09 44.9 | -0.3 |
| URZ | Urewera | 8.93 | 207 | Pn | Pn | 00 08 05.1 | -3.1 |
| | 2.0nm,0.3s,baz=263,slow=3.9,SNR=28 | | | | | | |
| URZ | | | | Sn | Sn | 00 09 46.4 | -1.0 |
| | 36nm,0.3s,baz=229,slow=22,SNR=18 | | | | | | |
| URZ | Urewera | 8.93 | 207 | PN | Pn | 00 08 05.1 | -3.1 |
| RAGZ | Rawiri | 9.03 | 205 | ePN | Pn | 00 08 06.6 | -2.9 |
| RIGZ | Rimuhau | 9.09 | 203 | ePN | Pn | 00 08 07.7 | -2.6 |
| SNGZ | Shannon Statio | 9.31 | 204 | ePN | Pn | 00 08 10.4 | -2.9 |
| ARHZ | Aropaoanui | 9.86 | 204 | ePN | Pn | 00 08 17.8 | -2.9 |
| ARHZ | | | | eSN | Sn | 00 10 06.8 | -3.1 |
| BKZ | Black Stump Fm | 9.96 | 207 | PN | Pn | 00 08 18.2 | -4.0 |
| DVHZ | Dannevirke | 11.07 | 205 | SN | Sn | 00 10 33.2 | -6.5 |
| BFZ | Birch Farm | 11.38 | 204 | eSN | Sn | 00 10 38.4 | -8.8 |
| MRZ | Mangatainoka R | 11.61 | 206 | PN | Pn | 00 08 38.1 | -6.5 |
| MRZ | | | | SN | Sn | 00 10 43.2 | -10 |
| CTZ | Chatham Island | 13.37 | 176 | eSN | Sn | 00 11 23.3 | -12 |
| THZ | Tophouse | 13.63 | 211 | ePN | Pn | 00 09 08.8 | -3.5 |
| THZ | | | | eSN | Sn | 00 11 32.9 | -9.4 |
| KHZ | Kahutara | 13.90 | 208 | ePn | Pn | 00 09 16.5 | +0.6 |
| | 32nm,0.5s | | | | | | |
| LTZ | Lake Taylor | 14.73 | 210 | eSN | Sn | 00 11 55.6 | -13 |
| RPZ | Rata Peaks | 16.01 | 211 | Pn | Pn | 00 09 40.5 | -3.0 |
| | 0.9nm,0.3s,baz=37,slow=1.4,SNR=4.6 | | | | | | |
| RPZ | | | | Sn | Sn | 00 12 23.8 | -16 |
| | 1.8nm,0.3s,baz=163,slow=19,SNR=7.9 | | | | | | |
| DZM | Mont Dzumac | 16.39 | 297 | ePn | P | 00 09 53.9 | +3.2 |
| | 112nm,1.3s | | | | | | |
| DZM | | | | eLR | LR | 00 13 49.0 | |
| | 4μm,25.4s | | | | | | |
| DZM | Mont Dzumac | 16.39 | 297 | LR | LR | 00 14 51.2 | |
| | comp=Z,2μm,19.5s,baz=190,slow=33 | | | | | | |
| DZM | Mont Dzumac | 16.39 | 297 | ePn | Pn | 00 09 49.3 | +0.7 |
| | 32nm,1.1s | | | | | | |
| ODZ | Otahua Downs | 17.25 | 209 | ePn | P | 00 10 00.3 | +0.3 |
| | 18nm,0.7s | | | | | | |
| RAR | Rarotonga | 18.57 | 65 | LR | LR | 00 15 43.6 | |
| | comp=Z,586nm,21.9s,baz=248,slow=32 | | | | | | |
| TBI | Tubuai | 26.16 | 81 | eS | S | 00 15 58.9 | -0.9 |
| | 506nm,30.8s | | | | | | |
| TBI | | | | eLR | LR | 00 18 00.3 | |
| | 2μm,27.8s,baz=248 | | | | | | |
| TBI | Tubuai | 26.16 | 81 | eT | T | 00 38 02.3 | |
| | 75nm,0.4s | | | | | | |
| ARMA | Armidale | 26.36 | 262 | P | P | 00 11 36.8 | +3.4 |
| | baz=26,SNR=6.0 | | | | | | |
| MGCD | Mangrove Creek | 26.56 | 256 | P | P | 00 11 36.7 | +1.7 |
| | baz=26,SNR=7.5 | | | | | | |
| EIDS | Eidsvold | 27.94 | 273 | P | P | 00 11 49.2 | +1.7 |
| | baz=28,SNR=5.3 | | | | | | |
| CAN | Canberra | 28.28 | 251 | P | P | 00 11 51.1 | +0.6 |
| | baz=28 | | | | | | |
| PPT2 | Papeete2 | 28.64 | 70 | eS | S | 00 16 39.3 | +0.2 |
| | 303nm,29.5s | | | | | | |
| PPT2 | | | | eLQ | LQ | 00 17 50.4 | |
| | 618nm,25.0s | | | | | | |
| PPT2 | | | | eLR | LR | 00 19 04.8 | |
| | 2μm,27.0s,baz=244 | | | | | | |
| PPT2 | Papeete2 | 28.64 | 70 | eT | T | 00 41 06.1 | |
| | 16nm,0.3s | | | | | | |
| PPT | Papeete | 28.65 | 70 | LR | LR | 00 20 33.9 | |
| | comp=Z,262nm,20.5s,baz=211,slow=31 | | | | | | |
| YNG | Young | 28.78 | 253 | P | P | 00 11 55.1 | +0.2 |
| | baz=28,SNR=6.7 | | | | | | |
| TVO | Taravao | 28.80 | 71 | eT | T | 00 41 17.9 | |
| | 4.9nm,0.3s | | | | | | |
| HNR | Honiara | 29.44 | 310 | LR | LR | 00 21 47.8 | |
| | comp=Z,392nm,21.2s,baz=142,slow=33 | | | | | | |
| RMQ | Roma | 29.63 | 269 | P | P | 00 12 04.8 | +2.2 |
| | baz=29,SNR=12 | | | | | | |
| TAU | Tasmania Unive | 30.46 | 236 | eP | P | 00 12 07.5 | -2.1 |
| TOO | Toolangi | 31.16 | 247 | P | P | 00 12 16.2 | +0.2 |
| | baz=31,SNR=4.3 | | | | | | |
| CMSA | Cobar Meteorol | 31.27 | 258 | P | P | 00 12 19.1 | +2.2 |
| | baz=31,SNR=24 | | | | | | |
| PMOR | Pomariorio Ree | 31.39 | 68 | eT | T | 00 44 31.2 | |
| | 7.5nm,0.3s | | | | | | |
| VAH | Vaihoa | 31.48 | 68 | eT | T | 00 44 37.4 | |
| | 94nm,0.2s | | | | | | |
| QLP | Quilpie | 33.52 | 267 | P | P | 00 12 38.7 | +2.0 |
| | baz=33,SNR=4.7 | | | | | | |
| CTA | Charters Tower | 34.00 | 279 | P | P | 00 12 42.4 | +1.5 |
| | baz=34 | | | | | | |
| CTAO | Charters Tower | 34.00 | 279 | eP | P | 00 12 41.2 | +0.3 |
| | 57nm,0.9s | | | | | | |
| ARPS | Mount Arapiles | 34.07 | 248 | P | P | 00 12 41.1 | -0.3 |
| | baz=34 | | | | | | |
| HTT | Hallett | 36.71 | 254 | P | P | 00 13 03.6 | -0.5 |
| | baz=36,SNR=46 | | | | | | |
| RKT | Rikitea | 38.71 | 90 | eLR | LR | 00 23 50.7 | |
| | 939nm,28.0s | | | | | | |
| RKT | Rikitea | 38.71 | 90 | eT | T | 00 53 46.5 | |
| | 5.7nm,0.3s | | | | | | |
| PMG | Port Moresby | 38.78 | 295 | LR | LR | 00 26 32.1 | |
| | comp=Z,526nm,21.6s,baz=126,slow=32 | | | | | | |
| BBOO | Buckleboo | 39.17 | 254 | P | P | 00 13 25.1 | +0.3 |
| | baz=39,SNR=32 | | | | | | |
| BBOO | Buckleboo | 39.17 | 254 | eP | P | 00 13 25.9 | +1.1 |
| | 39nm,0.9s | | | | | | |
| COEN | Coen | 39.46 | 286 | P | P | 00 13 28.4 | +1.0 |
| | baz=39 | | | | | | |
| QIS | Mount Isa | 39.52 | 274 | P | P | 00 13 28.5 | +0.7 |
| | baz=39,SNR=7.4 | | | | | | |
| ASAR | Alice Springs | 43.31 | 267 | P | P | 00 13 58.4 | -0.6 |
| | 6.5nm,0.4s,baz=104,slow=7.5,SNR=44 | | | | | | |
| ASAR | | | | ScP | ScP | 00 19 39.8 | +5.4 |
| | 2.5nm,0.9s,baz=118,slow=4.1,SNR=8.7 | | | | | | |
| WRAB | Tennant Creek | 44.30 | 272 | eP | P | 00 14 05.4 | -1.5 |
| | 36nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 44.30 | 272 | P | P | 00 14 05.9 | -1.0 |
| | 15nm,0.3s,baz=110,slow=8.1,SNR=170 | | | | | | |
| WRA | | | | ScP | ScP | 00 19 45.5 | +7.1 |
| | 2.4nm,1.1s,baz=106,slow=3.8,SNR=5.1 | | | | | | |
| WRA | | | | S | S | 00 20 34.3 | -3.3 |
| | 1.3nm,0.9s,baz=111,slow=14,SNR=3.9 | | | | | | |
| WRA | | | | LR | LR | 00 32 35.8 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,564nm,18.1s,baz=110,slow=36 | | | | | | |
| FORT | Forrest | 46.25 | 255 | P | P | 00 14 22.1 | -0.1 |
| | baz=46,SNR=11 | | | | | | |
| FORT | Forrest | 46.25 | 255 | eP | P | 00 14 21.7 | -0.6 |
| | 21nm,0.7s | | | | | | |
| SBA | Scott Base | 48.08 | 184 | eP | P | 00 14 38.4 | +2.6 |
| | 20nm,0.9s | | | | | | |
| VNDA | Vanda | 48.14 | 186 | LR | LR | 00 30 57.3 | |
| | comp=Z,111nm,21.3s,baz=24,slow=31 | | | | | | |
| KDU | Kakadu | 49.11 | 280 | P | P | 00 14 45.0 | +0.5 |
| | baz=49,SNR=4.1 | | | | | | |
| KLBR | Kellerberrin | 54.55 | 251 | P | P | 00 15 24.0 | -0.9 |
| | baz=54,SNR=6.4 | | | | | | |
| CASY | Casey | 55.26 | 208 | eP | P | 00 15 29.9 | +0.4 |
| | 33nm,0.9s | | | | | | |
| MEEK | Meekatharra | 55.39 | 257 | P | P | 00 15 30.4 | -0.7 |
| | baz=55,SNR=3.8 | | | | | | |
| MBWA | Marble Bar | 56.43 | 264 | eP | P | 00 15 37.2 | -1.4 |
| QSPA | South Pole Qui | 59.73 | 180 | P | P | 00 16 04.3 | +3.1 |
| | 13nm,0.9s,baz=12,slow=2.6,SNR=41 | | | | | | |
| MAW | Mawson | 72.40 | 201 | P | P | 00 17 23.3 | +1.2 |
| | 10.0nm,0.9s,baz=119,slow=7.3,SNR=22 | | | | | | |
| MAW | | | | LR | LR | 00 47 49.5 | |
| | comp=Z,263nm,20.9s,baz=63,slow=35 | | | | | | |
| LEM | Lembang | 73.32 | 272 | LR | LR | 00 48 32.9 | |
| | comp=Z,224nm,22.0s,baz=104,slow=35 | | | | | | |
| LEM | Lembang | 73.32 | 272 | P | P | 00 17 30.5 | +1.8 |
| | baz=73,SNR=5.4 | | | | | | |
| SYO | Syowa Base | 77.19 | 193 | ⇓iP | P | 00 17 49.7 | -0.1 |
| SNAA | Sanae | 78.17 | 178 | P | P | 00 17 56.8 | +1.4 |
| SNAA | Sanae | 78.17 | 178 | eP | P | 00 17 56.6 | +1.2 |
| | 6.1nm,1.0s | | | | | | |
| VNA3 | Neumayer Olymp | 78.32 | 176 | P | P | 00 17 57.4 | +1.3 |
| MJAR | Matsushiro Arr | 78.34 | 325 | P | P | 00 17 54.8 | -1.8 |
| | 2.0nm,0.6s,baz=166,slow=6.3,SNR=4.3 | | | | | | |
| MJAR | | | | LR | LR | 00 48 48.4 | |
| | comp=Z,37nm,20.2s,baz=130,slow=33 | | | | | | |
| VNA2 | Neumayer--Watz | 78.75 | 177 | P | P | 00 18 00.3 | +1.8 |
| | baz=174,slow=5.4 | | | | | | |
| VNA1 | Neumayer--Stat | 78.98 | 176 | P | P | 00 18 01.8 | +2.1 |
| ASAJ | Asahikawa | 82.51 | 332 | LR | LR | 00 50 17.2 | |
| | comp=Z,179nm,20.6s,slow=32 | | | | | | |
| KSRS | Korea Array | 84.46 | 320 | LR | LR | 00 55 47.7 | |
| | comp=Z,42nm,18.3s,baz=148,slow=36 | | | | | | |
| BFSC | Mount Baldy Ra | 85.69 | 46 | P | P | 00 18 36.9 | +1.5 |
| | baz=86 | | | | | | |
| PETK | Petropavlovsk- | 85.84 | 345 | P | P | 00 18 34.2 | -1.3 |
| | 6.5nm,0.7s,baz=141,slow=7.3,SNR=8.8 | | | | | | |
| PETK | | | | LR | LR | 00 51 48.3 | |
| | comp=Z,56nm,20.5s,baz=160,slow=32 | | | | | | |
| EDW2 | Edwards Air Fo | 85.91 | 45 | P | P | 00 18 38.0 | +1.6 |
| | baz=86 | | | | | | |
| PFO | Pinyon Flat Ob | 86.04 | 47 | P | P | 00 18 38.8 | +1.6 |
| | baz=86 | | | | | | |
| ISA | Isabella | 86.14 | 45 | P | P | 00 18 39.0 | +1.4 |
| | baz=86 | | | | | | |
| ISA | Isabella | 86.14 | 45 | eP | P | 00 18 39.1 | +1.6 |
| | 4.6nm,0.9s | | | | | | |
| BELC | Belle Mtn. Jos | 86.58 | 47 | P | P | 00 18 41.3 | +1.5 |
| | baz=87 | | | | | | |
| CMB | Columbia Colle | 86.61 | 42 | eP | P | 00 18 40.5 | +0.8 |
| | 2.5nm,0.8s | | | | | | |
| HEC | Hector,Ludlow | 86.91 | 46 | P | P | 00 18 43.0 | +1.6 |
| | baz=87 | | | | | | |
| GSC | Goldstone | 86.92 | 46 | P | P | 00 18 42.9 | +1.5 |
| | baz=87 | | | | | | |
| MPMC | Manual Prospec | 87.00 | 45 | P | P | 00 18 43.1 | +1.2 |
| | baz=87 | | | | | | |
| IRM | Iron Mountain | 87.22 | 47 | P | P | 00 18 44.4 | +1.6 |
| | baz=87 | | | | | | |
| USRK | Ussuriysk Ar. | 87.25 | 326 | LR | LR | 00 52 26.7 | |
| | comp=Z,71nm,18.7s,baz=140,slow=32 | | | | | | |
| M02C | Callahan | 87.57 | 38 | P | P | 00 18 46.2 | +1.9 |
| | baz=88 | | | | | | |
| GRAC | Grapevine Rang | 87.69 | 44 | P | P | 00 18 46.8 | +1.8 |
| | baz=88 | | | | | | |
| NVAR | Mina Array Bea | 88.08 | 43 | P | P | 00 18 47.5 | +0.4 |
| | 3.1nm,0.8s,baz=221,slow=6.4,SNR=22 | | | | | | |
| TPNV | Topopah Spring | 88.33 | 45 | P | P | 00 18 49.3 | +1.1 |
| | baz=88 | | | | | | |
| TUC | Tucson | 88.94 | 51 | eP | P | 00 18 51.8 | +0.8 |
| | 14nm,1.3s | | | | | | |
| R11A | Troy Canyon, C | 89.64 | 44 | P | P | 00 18 56.0 | +1.7 |
| | baz=90 | | | | | | |
| TXAR | Lajitas Array | 92.20 | 57 | P | P | 00 19 08.1 | +1.7 |
| | 1.3nm,1.0s,baz=209,slow=4.6,SNR=8.6 | | | | | | |
| TXAR | | | | LR | LR | 00 55 27.3 | |
| | comp=Z,56nm,18.3s,baz=0.0,slow=32 | | | | | | |
| TMUT | Trail Mountain | 92.90 | 45 | eP | P | 00 19 10.1 | +0.5 |
| | 6.1nm,0.7s | | | | | | |
| HVU | Hansel Valley | 93.48 | 43 | eP | P | 00 19 12.4 | +0.4 |
| | 3.9nm,0.9s | | | | | | |
| CMAR | Chiang Mai Arr | 93.59 | 289 | P | P | 00 19 13.7 | +0.8 |
| | 0.6nm,0.4s,baz=150,slow=4.0,SNR=5.8 | | | | | | |
| CMAR | | | | LR | LR | 01 00 14.8 | |
| | comp=Z,35nm,21.6s,baz=162,slow=35 | | | | | | |
| HLID | Hailey | 93.65 | 41 | P | P | 00 19 13.8 | +1.0 |
| | baz=94 | | | | | | |
| 429A | Davenport Ranc | 94.19 | 57 | P | P | 00 19 16.5 | +1.0 |
| | baz=94 | | | | | | |
| 530A | J-C Ranch, Com | 94.34 | 58 | P | P | 00 19 16.7 | +0.6 |
| | baz=95 | | | | | | |
| ILAR | Eielson Array | 97.86 | 13 | P | P | 00 19 30.4 | -0.8 |
| | 0.6nm,0.7s,baz=223,slow=5.4,SNR=6.5 | | | | | | |
| ILAR | | | | PKKPbc | PKKPbc | 00 36 08.2 | +0.2 |
| | 0.5nm,1.0s,baz=357,slow=4.5,SNR=4.4 | | | | | | |
| LPAZ | La Paz | 97.97 | 114 | LR | LR | 00 55 01.2 | |
| | comp=Z,71nm,21.9s,baz=260,slow=30 | | | | | | |
| MKAR | Makanchi Array | 117.91 | 310 | PKP | PKPdf | 00 24 41.1 | -1.4 |
| | 1.8nm,0.9s,baz=184,slow=1.1,SNR=8.2 | | | | | | |
| ZALV | Zalesovo Beam | 118.15 | 318 | PKP | PKPdf | 00 24 41.2 | -1.4 |
| | 0.7nm,0.5s,baz=193,slow=2.0,SNR=5.9 | | | | | | |
| KURK | Kurchatov | 121.18 | 314 | ePKPdf | PKPdf | 00 24 48.0 | -0.6 |
| AAK | Ala-Archa | 122.27 | 304 | ePKPdf | PKPdf | 00 24 51.2 | -0.1 |
| EKS2 | Erkin-Say | 122.79 | 304 | ePKPdf | PKPdf | 00 24 52.0 | -0.2 |
| KKAR | Karatay Array | 125.23 | 304 | ePKPdf | PKPdf | 00 24 56.0 | -0.7 |
| BRVK | Borovoye | 126.60 | 316 | ePKPdf | PKPdf | 00 24 58.3 | -0.6 |
| LSZ | Lusaka | 128.19 | 213 | ePKPdf | PKPdf | 00 25 04.4 | +1.1 |
| GEYT | Alibeck | 133.73 | 295 | PKP | PKPdf | 00 25 11.8 | -1.2 |
| | 3.3nm,1.0s,baz=222,slow=2.0,SNR=7.4 | | | | | | |
| GEYT | | | | SKPbc | SKPab | 00 28 41.4 | +1.2 |
| | 9.4nm,1.2s,baz=64,slow=5.0,SNR=4.0 | | | | | | |
| ARCES | ARCESS Array B | 138.61 | 348 | PKhKP | PKPpre | 00 25 12.5 | |
| | 0.8nm,0.5s,baz=72,slow=4.0,SNR=4.2 | | | | | | |
| ARCES | | | | PKP | PKPdf | 00 25 19.2 | -1.9 |
| | 2.0nm,0.7s,baz=90,slow=1.2,SNR=6.9 | | | | | | |
| GNI | Garni | 144.24 | 298 | ePKPdf | PKPbc | 00 25 31.0 | +0.3 |
| FINES | FINESS Array B | 145.19 | 340 | PKPbc | PKPbc | 00 25 31.3 | -1.4 |
| | 28nm,0.7s,baz=83,slow=3.3,SNR=188 | | | | | | |
| KBZ | Khabaz | 145.27 | 304 | PKPbc | PKPbc | 00 25 33.0 | -0.5 |
| | 5.0nm,0.9s,baz=79,slow=0.9,SNR=4.6 | | | | | | |
| OBN | Obninsk | 145.27 | 325 | ePKPbc | PKPbc | 00 25 32.4 | -0.8 |
| MZRK | Al-Mazaregh | 147.51 | 290 | eP | PKPbc | 00 25 40.7 | +0.3 |
| KBSD | Kabsdagh | 147.61 | 292 | eP | PKPbc | 00 25 40.0 | -0.7 |
| SFNV | Sufian | 147.96 | 291 | eP | PKPbc | 00 25 42.7 | +1.0 |
| NB2 | NORSAR Subarra | 148.76 | 352 | PKP | PKPbc | 00 25 41.8 | -1.1 |
| | comp=Z,17nm,1.0s,baz=15,slow=2.8 | | | | | | |
| NOA | NORSAR Array B | 148.76 | 352 | PKPbc | PKPbc | 00 25 42.1 | -0.8 |
| | comp=Z,8.7nm,0.8s,baz=14,slow=4.4,SNR=15 | | | | | | |
| ZALF | Zalf | 150.10 | 284 | eP | PKPdf | 00 25 42.6 | +0.5 |
| ROOS | tl_alroos | 150.21 | 287 | eP | PKPdf | 00 25 43.0 | +0.7 |
| SALA | Sala | 150.58 | 284 | eP | PKPdf | 00 25 44.8 | +1.8 |
| BTCH | Batrach | 150.91 | 290 | eP | PKPbc | 00 25 48.3 | -0.8 |
| HAWK | Haweek | 150.95 | 287 | eP | PKPbc | 00 25 46.5 | -2.7 |
| WRDH | Warideh | 150.96 | 289 | eP | PKPbc | 00 25 46.7 | -2.4 |
| BIDA | Albida | 151.03 | 288 | eP | PKPbc | 00 25 47.4 | -2.0 |
| TCHB | Talchebab | 151.22 | 283 | eP | PKPdf | 00 25 45.9 | +2.1 |
| BRBR | Barbar | 151.29 | 285 | eP | PKPdf | 00 25 46.9 | +2.8 |
| ARNB | Al Arnab | 151.31 | 290 | eP | PKPbc | 00 25 50.1 | +0.1 |
| AKASG | Malin Array Be | 151.40 | 323 | PKPbc | PKPbc | 00 25 48.5 | -1.1 |
| | comp=Z,5.2nm,0.4s,baz=46,slow=3.1,SNR=36 | | | | | | |
| KIEV | Kiev | 151.42 | 323 | ePKPdf | PKPdf | 00 25 43.5 | +0.1 |
| KIEV | | | | ePKPbc | PKPbc | 00 25 48.6 | -1.0 |
| BRTR | Keskin Array B | 152.77 | 299 | PKP | PKPdf | 00 25 46.7 | +0.6 |
| | comp=Z,1.1nm,1.0s,baz=190,slow=6.3,SNR=3.7 | | | | | | |
| BRTR | | | | PKPbc | PKPbc | 00 25 52.1 | -1.1 |
| | comp=Z,2.6nm,0.5s,baz=115,slow=1.2,SNR=12 | | | | | | |
| ANTO | Ankara | 153.38 | 299 | ePKPbc | PKPbc | 00 25 54.9 | +0.4 |
| CSS | Prodhromos | 153.49 | 288 | ePKPdf | PKPdf | 00 25 45.8 | -1.3 |
| CLL | Collm | 157.60 | 342 | i PKPab | PKPab | 00 26 22.6 | -1.7 |
| CLL | | | | epPKPab | pPKPab | 00 26 37.0 | -2.0 |
| GERES | GERESS Array B | 159.59 | 338 | PKPab | PKPab | 00 26 31.2 | -1.9 |
| | comp=Z,0.9nm,0.6s,baz=56,slow=3.6,SNR=4.8 | | | | | | |
| TORD | Torodi Ar. Bea | 162.85 | 178 | PKP | PKPdf | 00 25 59.5 | +0.5 |
| | comp=Z,0.9nm,0.9s,baz=62,slow=1.2,SNR=4.5 | | | | | | |
| TORD | | | | PKPab | PKPab | 00 26 49.1 | +1.1 |
| | comp=Z,6.3nm,0.8s,baz=180,slow=3.3,SNR=20 | | | | | | |
| TORD | | | | PP | PP | 00 30 29.8 | -1.5 |
| | comp=Z,0.8nm,1.0s,baz=145,slow=7.2,SNR=3.5 | | | | | | |
| ESDC | Sonseca Array | 169.42 | 27 | PKPab | PKPab | 00 27 14.9 | -1.7 |
| | comp=Z,1.2nm,0.8s,baz=300,slow=5.2,SNR=3.3 | | | | | | |

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*JMA **04** 00:13:55.6±0.2, 24°.69N×121°.93E, h77km±3km, M3.1*
*ISCJB **04** 00:13:56.4±0.5, 24°.75N±0°.04×122°.00E±0°.02, h71km±4km, Error ellipse: s-maj=6.1km s-min=3.2km az=169.5*
*TAP **04** 00:13:56.7, 24°.71N×121°.94E, h69km, ML3.9, B*
**ISC 04 00:13:57.1**±1.4**, 24°.73N**±0°.04×**122°.00E**±0°.03**, h68**km±7km**,** **n49, σ0s.75**/80**, 2C-10D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EGS | | 0.13 | 331 | P | Pn | 00 14 07.4 | +0.2 |
| | baz=9.0 | | | | | | |
| TWC | Suao | 0.18 | 229 | iP | Pn | 00 14 07.4 | 0.0 |
| | baz=215 | | | | | | |
| TWC | | | | S | Sn | 00 14 15.0 | +0.2 |
| | baz=215 | | | | | | |
| ILA | Ilan | 0.23 | 279 | eP | Pn | 00 14 07.8 | +0.2 |
| | baz=298 | | | | | | |
| ILA | | | | iS | Sn | 00 14 15.9 | +0.7 |
| | baz=298 | | | | | | |
| TWB1 | Santiao Chiao | 0.28 | 358 | ⇑iP | Pn | 00 14 07.9 | 0.0 |
| | baz=15 | | | | | | |
| TWB1 | | | | iS | Sn | 00 14 15.6 | -0.1 |
| | baz=15 | | | | | | |
| TWE | Neicheng | 0.30 | 268 | ⇓iP | Pn | 00 14 08.3 | +0.2 |
| | baz=277 | | | | | | |
| TWE | | | | S | Sn | 00 14 16.1 | +0.1 |
| | baz=277 | | | | | | |
| ENA | Nanau | 0.38 | 218 | ⇓iP | Pn | 00 14 08.8 | +0.1 |
| | baz=211 | | | | | | |
| ENA | | | | S | Sn | 00 14 18.1 | +1.0 |
| | baz=211 | | | | | | |
| NWF | Wu-fen Shan | 0.39 | 330 | P | Pn | 00 14 08.8 | -0.1 |
| | baz=339 | | | | | | |
| NWF | | | | eS | Sn | 00 14 16.4 | -1.0 |
| | baz=339 | | | | | | |
| ENTT | Nioudou | 0.41 | 257 | ⇓iP | Pn | 00 14 09.2 | +0.3 |
| | baz=261 | | | | | | |
| ENTT | | | | eS | Sn | 00 14 18.3 | +0.8 |
| | baz=261 | | | | | | |
| TWA | Mucha | 0.45 | 303 | ⇓iP | Pn | 00 14 09.2 | -0.1 |
| | baz=317 | | | | | | |
| TWA | | | | S | Sn | 00 14 17.8 | -0.4 |
| | baz=317 | | | | | | |
| EHP | Heping Village | 0.48 | 209 | eP | Pn | 00 14 09.8 | +0.3 |
| | baz=195 | | | | | | |
| TAP1 | Taipei | 0.53 | 305 | iP | Pn | 00 14 09.7 | -0.3 |
| | baz=318 | | | | | | |
| TAP1 | | | | iS | Sn | 00 14 19.0 | -0.5 |
| | baz=318 | | | | | | |
| TAP | Taipei | 0.54 | 304 | eP | Pn | 00 14 09.7 | -0.4 |
| | baz=311 | | | | | | |
| NSK | Sanguang | 0.59 | 265 | ⇓iP | Pn | 00 14 10.4 | -0.3 |
| | baz=266 | | | | | | |
| NSK | | | | iS | Sn | 00 14 19.9 | -0.7 |
| | baz=266 | | | | | | |
| NNS | Nan Shan | 0.64 | 243 | ⇓iP | Pn | 00 14 11.4 | 0.0 |
| | baz=248 | | | | | | |
| NNS | | | | eS | Sn | 00 14 20.9 | -0.8 |
| | baz=248 | | | | | | |
| TWS1 | Kuangyinshan | 0.65 | 305 | ⇓iP | Pn | 00 14 11.3 | 0.0 |
| | baz=319 | | | | | | |
| TWS1 | | | | iS | Sn | 00 14 21.7 | +0.1 |
| | baz=319 | | | | | | |
| TWD | Chiawan | 0.74 | 210 | eP | Pn | 00 14 11.4 | -1.0 |
| | baz=213 | | | | | | |
| NCU | National Centr | 0.78 | 288 | ⇓iP | Pn | 00 14 12.6 | -0.1 |
| | baz=282 | | | | | | |
| NCU | | | | iS | Sn | 00 14 24.6 | +0.4 |
| | baz=282 | | | | | | |
| HWA | Hwalien | 0.83 | 206 | eP | Pn | 00 14 12.7 | -0.8 |
| | baz=190 | | | | | | |
| WHF | Hehuan Shan | 0.89 | 229 | eP | Pn | 00 14 14.0 | -0.6 |
| | baz=219 | | | | | | |
| WHF | | | | eS | Sn | 00 14 26.4 | -1.0 |
| | baz=219 | | | | | | |
| TWT | Tachien | 0.89 | 238 | ⇓eP | Pn | 00 14 14.5 | +0.2 |
| | baz=227 | | | | | | |
| TWT | | | | iS | Sn | 00 14 27.1 | +0.1 |
| | baz=227 | | | | | | |
| JYNG | Yonagunijimaku | 0.90 | 108 | P | Pn | 00 14 14.1 | -0.2 |
| JYNG | | | | S | Sn | 00 14 26.9 | -0.1 |
| NSTT | Nanjuang | 0.91 | 264 | P | Pn | 00 14 13.8 | -0.6 |
| | baz=264 | | | | | | |
| NSTT | | | | S | Sn | 00 14 26.6 | -0.7 |
| | baz=264 | | | | | | |
| HSN | Hsinchu | 0.94 | 275 | P | Pn | 00 14 13.9 | -0.8 |
| | baz=278 | | | | | | |
| HSN | | | | S | Sn | 00 14 26.8 | -1.0 |
| | baz=278 | | | | | | |
| YOJ | Yonaguni jima | 0.96 | 106 | P | Pn | 00 14 14.8 | -0.2 |
| YOJ | | | | S | Sn | 00 14 28.1 | -0.1 |
| YOJ | Yonaguni jima | 0.96 | 106 | ⇓iP | Pn | 00 14 14.8 | -0.2 |
| | baz=99 | | | | | | |
| YOJ | | | | eS | Sn | 00 14 28.3 | +0.1 |
| | baz=99 | | | | | | |
| ESL | Shilin | 1.05 | 210 | eP | Pn | 00 14 13.8 | -2.3 |
| | baz=212 | | | | | | |
| NSY | Sanyi | 1.17 | 255 | eP | Pn | 00 14 17.5 | -0.2 |
| | baz=253 | | | | | | |
| NSY | | | | S | Sn | 00 14 33.0 | -0.1 |
| | baz=253 | | | | | | |
| TWQ1 | Liyutan | 1.18 | 251 | eP | Pn | 00 14 17.8 | 0.0 |
| | baz=249 | | | | | | |
| TWQ1 | | | | S | Sn | 00 14 32.9 | -0.4 |
| | baz=249 | | | | | | |
| SMLT | Sun Moon Lake | 1.31 | 230 | eP | Pn | 00 14 19.8 | +0.1 |
| | baz=218 | | | | | | |
| SMLT | | | | S | Sn | 00 14 37.3 | +0.8 |
| | baz=218 | | | | | | |
| TYC | Yuchr | 1.33 | 232 | ⇑P | Pn | 00 14 19.7 | 0.0 |
| | baz=227 | | | | | | |
| TYC | | | | S | Sn | 00 14 36.7 | 0.0 |
| | baz=227 | | | | | | |
| TCU | Taichung | 1.34 | 245 | eP | Pn | 00 14 19.5 | -0.4 |
| | baz=243 | | | | | | |
| EHY | Hungye | 1.37 | 207 | eP | Pn | 00 14 18.1 | -2.1 |
| | baz=202 | | | | | | |
| TWF1 | Yuli | 1.52 | 205 | eP | Pn | 00 14 20.2 | -2.1 |
| | baz=206 | | | | | | |
| YUS | Yu-Shan | 1.56 | 218 | eP | Pn | 00 14 23.1 | -0.3 |
| | baz=207 | | | | | | |
| IRIF | Iriomote-Funau | 1.62 | 104 | P | Pn | 00 14 22.9 | -0.7 |
| IRIF | | | | S | Sn | 00 14 42.1 | -1.6 |
| CHN5 | Tsauling | 1.65 | 227 | eP | Pn | 00 14 24.0 | -0.2 |
| | baz=233 | | | | | | |
| CHN5 | | | | eS | Sn | 00 14 44.5 | 0.0 |
| | baz=233 | | | | | | |
| HATJ | Hateruma jima | 1.78 | 112 | P | Pn | 00 14 26.4 | +0.7 |
| ELDTW | Lidau | 1.78 | 211 | eP | Pn | 00 14 25.0 | -0.9 |
| | baz=199 | | | | | | |
| JKRS | Kuro-shima | 1.90 | 105 | P | Pn | 00 14 27.6 | +0.3 |
| JKRS | | | | S | Sn | 00 14 50.7 | +0.5 |
| STYT | Tauyuan | 1.93 | 216 | eP | Pn | 00 14 28.4 | +0.6 |
| | baz=199 | | | | | | |
| STYT | | | | eS | Sn | 00 14 52.2 | +1.0 |
| | baz=199 | | | | | | |
| WTP | Ta-pu | 1.95 | 221 | eP | Pn | 00 14 28.6 | +0.5 |
| | baz=227 | | | | | | |
| WTP | | | | eS | Sn | 00 14 53.1 | +1.5 |
| | baz=227 | | | | | | |
| JIJ | Ishigaki jima | 1.98 | 100 | P | Pn | 00 14 28.6 | +0.1 |
| JIJ | | | | S | Sn | 00 14 51.4 | -1.0 |
| TWK | Hsinying | 2.01 | 224 | eP | Pn | 00 14 30.2 | +1.3 |
| | baz=218 | | | | | | |
| CHN1 | Nanshi | 2.04 | 221 | eP | Pn | 00 14 29.6 | +0.2 |
| | baz=228 | | | | | | |
| CHN1 | | | | eS | Sn | 00 14 55.7 | +1.8 |
| | baz=228 | | | | | | |
| SGST | Jiashian | 2.09 | 219 | eP | Pn | 00 14 29.8 | -0.2 |
| | baz=225 | | | | | | |
| JISG | Ishigakijimahi | 2.11 | 93 | P | Pn | 00 14 30.4 | +0.2 |
| SSD | Sandimen | 2.34 | 213 | eP | Pn | 00 14 34.0 | +0.7 |
| | baz=206 | | | | | | |
| JTJ | Tarama | 2.46 | 92 | P | Pn | 00 14 36.1 | +1.2 |
| KNM | Kinmen | 3.26 | 265 | eP | Pn | 00 14 46.1 | +0.2 |
| | baz=264 | | | | | | |

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*DDA **04** 00:32:40.2, 36°.89N×27°.54E, h7km, Md2.6*
*ISCJB **04** 00:32:41.4±0.5, 37°.08N±0°.06×27°.66E±0°.04, h9km±7km, Error ellipse: s-maj=9.9km s-min=4.9km az=7.5*
*CSEM **04** 00:32:41.5±0.2, 37°.10N×27°.64E, h12km, MD2.6, Error ellipse: s-maj=6.4km s-min=4.7km az=176.0*
*ISK **04** 00:32:41.0, 37°.12N×27°.64E, h14km, MD2.7*
**ISC 04 00:32:40.7**±0.9**, 37°.06N**±0°.04×**27°.63E**±0°.03**, h17**km±7km**,** **n25, σ0s.30**/31**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BDRM | Kayabasi | 0.15 | 274 | iP | Pg | 00 32 44.9 | 0.0 |
| BDRM | | | | iS | Sg | 00 32 47.5 | -0.2 |
| BDRM | Kayabasi | 0.15 | 274 | P | Pg | 00 32 44.9 | 0.0 |
| BDRM | | | | S | Sg | 00 32 47.5 | -0.2 |
| BODT | Bodrum | 0.26 | 272 | PG | Pg | 00 32 46.9 | +0.4 |
| BODT | | | | eSG | Sb | 00 32 51.3 | +0.2 |
| BODT | Bodrum | 0.26 | 272 | iPg | Pg | 00 32 46.9 | +0.4 |
| BODT | | | | eSg | Sb | 00 32 51.3 | +0.2 |
| YER | Yerkesik | 0.53 | 81 | ePG | Pb | 00 32 51.6 | 0.0 |
| YER | | | | eSG | Sb | 00 32 59.2 | +0.3 |
| YER | Yerkesik | 0.53 | 81 | ePg | Pb | 00 32 51.6 | 0.0 |
| YER | | | | eSg | Sb | 00 32 59.2 | +0.3 |
| NIS1 | Nisyros Isl. | 0.58 | 219 | ePG | Pn | 00 32 54.2 | 0.0 |
| NIS1 | Nisyros Isl. | 0.58 | 219 | ePg | Pn | 00 32 54.2 | 0.0 |
| GCAM | G?zelcaml? | 0.72 | 334 | iP | Pn | 00 32 56.4 | +0.3 |
| GCAM | G?zelcaml? | 0.72 | 334 | P | Pn | 00 32 56.4 | +0.3 |
| GCAM | | | | S | Sn | 00 33 06.4 | -0.3 |
| TURN | Turunc | 0.80 | 103 | P | Pg | 00 32 51.5 | -4.8 |
| TURN | | | | S | Sg | 00 33 00.3 | -6.6 |
| DALY | Dalyan (Mu˜la | 0.85 | 106 | ePG | Pn | 00 32 58.4 | +0.5 |
| DALY | Dalyan (Mu˜la | 0.85 | 106 | ePg | Pn | 00 32 58.4 | +0.5 |
| AYDB | Zeytinkoy-Aydi | 0.91 | 13 | ePG | Pg | 00 32 58.4 | -0.1 |
| AYDB | Zeytinkoy-Aydi | 0.91 | 13 | ePg | Pg | 00 32 58.4 | -0.1 |
| FETY | Fethiye | 1.24 | 109 | ePN | Pg | 00 33 04.6 | -0.1 |
| FETY | Fethiye | 1.24 | 109 | ePn | Pg | 00 33 04.6 | -0.1 |
| DENT | Denizli | 1.32 | 58 | ePN | Pb | 00 33 05.0 | 0.0 |
| DENT | Denizli | 1.32 | 58 | ePn | Pb | 00 33 05.0 | 0.0 |
| IZM | Izmir | 1.37 | 348 | ePN | Pn | 00 33 05.0 | -0.2 |
| IZM | Izmir | 1.37 | 348 | ePn | Pn | 00 33 05.0 | -0.2 |
| KULA | Kula-Manisa | 1.67 | 29 | ePN | Pn | 00 33 09.7 | +0.4 |
| KULA | Kula-Manisa | 1.67 | 29 | ePn | Pn | 00 33 09.7 | +0.4 |
| ELL | Elmali | 1.85 | 99 | ePN | Pb | 00 33 13.6 | -0.6 |
| ELL | Elmali | 1.85 | 99 | ePn | Pb | 00 33 13.6 | -0.6 |

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**MEX 04 00:35:42.9**±0.4**, 13°.82N**×**91°.56W, h20**km**, MD3.8, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 2.47 | 320 | eP | Pn | 00 36 20.1 | -1.9 |
| PCIG | | | | iS | Sn | 00 36 47.8 | -3.8 |
| CCIG | Comitan | 2.51 | 347 | eP | Pn | 00 36 20.5 | -2.3 |
| CCIG | | | | iS | Sn | 00 36 49.7 | -3.3 |

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**IDC 04 00:45:08.0**±1.6**, 10°.73N**×**94°.02E, h0**km**, mb3.8**/5**, mb1 4.0**/5**, mb1mx3.5**/41**, mbtmp3.8**/5**, MS3.2**/3**, Ms1 3.3**/3**, ms1mx2.8**/44**, Error ellipse: s-maj=91.3km s-min=21.2km az=53.0, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 9.04 | 31 | LR | LR | 00 50 40.4 | |
| | comp=Z,55nm,21.5s,baz=100,slow=37 | | | | | | |
| H08S3 | Diego Garcia H | 28.14 | 230 | T | T | 01 19 54.8 | |
| | baz=49,slow=75,SNR=5.6 | | | | | | |
| H08S2 | Diego Garcia H | 28.15 | 230 | T | T | 01 19 52.7 | |
| | baz=49,slow=75,SNR=7.1 | | | | | | |
| H08S1 | Diego Carcia H | 28.16 | 230 | T | T | 01 19 54.1 | |
| | baz=49,slow=75,SNR=4.9 | | | | | | |
| MKAR | Makanchi Array | 37.30 | 347 | P | P | 00 52 21.7 | -0.1 |
| | 0.4nm,0.8s,baz=153,slow=7.7,SNR=1.5 | | | | | | |
| MKAR | | | | LR | LR | 01 10 29.7 | |
| | comp=Z,38nm,21.4s,baz=84,slow=41 | | | | | | |
| GEYT | Alibeck | 42.04 | 316 | P | P | 00 53 01.7 | +0.2 |
| | 3.6nm,0.8s,baz=133,slow=8.3,SNR=6.5 | | | | | | |
| ZALV | Zalesovo Beam | 43.73 | 352 | P | P | 00 53 14.4 | -0.5 |
| | 1.0nm,0.6s,baz=160,slow=6.5,SNR=5.5 | | | | | | |
| WRA | Warramunga Arr | 50.04 | 127 | P | P | 00 54 05.0 | +0.1 |
| | 2.1nm,1.0s,baz=302,slow=9.0,SNR=8.4 | | | | | | |
| ASAR | Alice Springs | 51.86 | 132 | P | P | 00 54 18.2 | -0.3 |
| | 0.9nm,1.0s,baz=304,slow=7.2,SNR=6.4 | | | | | | |
| VRAC | Vranov | 73.75 | 318 | LR | LR | 01 34 44.4 | |
| | comp=Z,48nm,19.5s,baz=352,slow=40 | | | | | | |

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*NEIC **04** 00:49:41.8, 37°.89S×176°.15E, h185km, MG4.0(WEL), After WEL.*
**WEL 04 00:49:41.8**±0.3**, 37°.89S**×**176°.15E, h185**km±3km**, ML4.0**/18**, 13C-11D, Error ellipse: s-maj=1.8km s-min=1.6km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OPRZ | Ohinepanea | 0.32 | 82 | PN | Pn | 00 50 06.6 | 0.0 |
| TARZ | Mount Tarawera | 0.44 | 141 | PN | Pn | 00 50 08.3 | +1.2 |
| URZ | Urewera | 0.84 | 116 | ⇑PN | Pn | 00 50 08.5 | -0.5 |
| URZ | | | | SN | Sn | 00 50 29.4 | -0.6 |
| URZ | | | | AML | AML | 00 50 33.3 | |
| URZ | Urewera | 0.84 | 116 | ePn | Pn | 00 50 08.8 | -0.2 |
| URZ | | | | eSn | Sn | 00 50 29.4 | -0.5 |
| MKAZ | Moumakai | 1.10 | 315 | ⇓PN | Pn | 00 50 11.1 | +0.3 |
| RAGZ | Rawiri | 1.16 | 121 | PN | Pn | 00 50 11.5 | +0.1 |
| RAGZ | | | | SN | Sn | 00 50 33.7 | -0.6 |
| MWZ | Matawai | 1.17 | 112 | PN | Pn | 00 50 11.2 | -0.2 |
| MWZ | | | | SN | Sn | 00 50 34.1 | -0.3 |
| MWZ | | | | AML | AML | 00 50 34.7 | |
| MWZ | | | | AML | AML | 00 50 35.7 | |
| MWZ | | | | AML | AML | 00 50 35.7 | |
| RAHZ | Arahi | 1.26 | 145 | PN | Pn | 00 50 12.6 | +0.4 |
| RAHZ | | | | SN | Sn | 00 50 36.2 | +0.5 |
| SNGZ | Shannon Statio | 1.29 | 134 | PN | Pn | 00 50 12.1 | -0.3 |
| SNGZ | | | | SN | Sn | 00 50 35.7 | -0.5 |
| WTVZ | West Tongariro | 1.30 | 200 | PN | Pn | 00 50 12.6 | +0.1 |
| BKZ | Black Stump Fm | 1.30 | 168 | ⇑PN | Pn | 00 50 12.3 | -0.2 |
| BKZ | | | | SN | Sn | 00 50 35.2 | -1.3 |
| BKZ | | | | AML | AML | 00 50 35.6 | |
| HAZ | Te Kaha | 1.30 | 84 | PN | Pn | 00 50 12.2 | -0.3 |
| TWVZ | Taurewa | 1.30 | 205 | PN | Pn | 00 50 12.8 | +0.2 |
| NMHZ | Naumai | 1.31 | 157 | PN | Pn | 00 50 13.2 | +0.6 |
| NMHZ | | | | SN | Sn | 00 50 37.3 | +0.7 |
| OTVZ | Oturere | 1.32 | 197 | PN | Pn | 00 50 13.2 | +0.3 |
| COVZ | Chateau Observ | 1.39 | 200 | PN | Pn | 00 50 13.3 | 0.0 |
| WPVZ | Whakapapa | 1.39 | 200 | PN | Pn | 00 50 13.4 | 0.0 |
| TUVZ | Tukino | 1.43 | 196 | PN | Pn | 00 50 13.8 | +0.1 |
| TKGZ | Te Karaka | 1.45 | 113 | PN | Pn | 00 50 13.9 | +0.2 |
| WHHZ | Waihua | 1.46 | 145 | PN | Pn | 00 50 14.1 | +0.3 |
| TWGZ | Tauwhareparae | 1.47 | 102 | PN | Pn | 00 50 14.3 | +0.2 |
| WNVZ | Wahianoa | 1.50 | 197 | ⇓PN | Pn | 00 50 14.4 | 0.0 |
| RIGZ | Rimuhau | 1.50 | 123 | PN | Pn | 00 50 14.5 | +0.2 |
| ARHZ | Aropaoanui | 1.52 | 154 | ⇑PN | Pn | 00 50 14.7 | +0.4 |
| PKVZ | Pokaka | 1.53 | 204 | PN | Pn | 00 50 14.6 | 0.0 |
| KWHZ | Kaweka Forest | 1.54 | 172 | ⇑PN | Pn | 00 50 14.6 | -0.1 |
| MOVZ | Moawhango | 1.54 | 191 | PN | Pn | 00 50 14.3 | -0.4 |
| MTVZ | Mangateitei | 1.58 | 199 | ⇓PN | Pn | 00 50 15.1 | 0.0 |
| BHHZ | Black Hill Sta | 1.59 | 182 | ⇑PN | Pn | 00 50 14.7 | -0.5 |
| KNZ | Kokohu | 1.64 | 134 | PN | Pn | 00 50 15.5 | 0.0 |
| KNZ | | | | AML | AML | 00 50 42.6 | |
| KNZ | | | | AML | AML | 00 50 43.2 | |
| PUZ | Puketiti | 1.68 | 97 | PN | Pn | 00 50 15.5 | -0.4 |
| PUZ | | | | AML | AML | 00 50 48.1 | |
| PUZ | | | | AML | AML | 00 50 52.9 | |
| PRGZ | Paritu Road | 1.71 | 128 | PN | Pn | 00 50 16.3 | +0.1 |
| MXZ | Matakaoa Point | 1.74 | 80 | PN | Pn | 00 50 16.9 | +0.4 |
| MXZ | | | | AML | AML | 00 50 55.1 | |
| WMGZ | Waiomatatini S | 1.79 | 88 | PN | Pn | 00 50 16.8 | -0.3 |
| MHGZ | Mahia Peninsul | 1.87 | 133 | PN | Pn | 00 50 18.0 | +0.2 |
| CKHZ | Cape Kidnapper | 1.91 | 158 | ⇓PN | Pn | 00 50 18.4 | +0.2 |
| KAHZ | Kahuranaki | 1.98 | 164 | ⇑PN | Pn | 00 50 19.1 | 0.0 |
| PNHZ | Pukenui | 2.02 | 179 | PN | Pn | 00 50 18.7 | -0.8 |
| WAZ | Wanganui | 2.07 | 206 | PN | Pn | 00 50 19.6 | -0.4 |
| PKE | Pukeiti | 2.14 | 232 | PN | Pn | 00 50 21.6 | +0.8 |
| TSZ | Takapari Road | 2.17 | 184 | ⇑PN | Pn | 00 50 20.2 | -0.8 |
| TSZ | | | | AML | AML | 00 50 20.8 | |
| TSZ | | | | AML | AML | 00 50 21.3 | |
| WPHZ | Waipukurau | 2.18 | 174 | PN | Pn | 00 50 20.6 | -0.6 |
| PXZ | Pawanui | 2.21 | 166 | ⇑PN | Pn | 00 50 20.9 | -0.5 |
| PXZ | | | | AML | AML | 00 50 53.8 | |
| PXZ | | | | AML | AML | 00 50 53.8 | |
| PXZ | | | | AML | AML | 00 50 54.0 | |
| PXZ | | | | AML | AML | 00 50 54.0 | |
| PRHZ | Porangahau | 2.40 | 171 | PN | Pn | 00 50 22.9 | -0.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DVHZ | Dannevirke | 2.40 | 180 | ⇑PN | Pn | 00 50 22.5 | -1.2 |
| POWZ | Post Office Ro | 2.51 | 187 | ⇓PN | Pn | 00 50 23.7 | -1.3 |
| ANWZ | Angora Road | 2.58 | 174 | ⇑PN | Pn | 00 50 24.7 | -0.9 |
| PRWZ | Pori Road | 2.66 | 183 | ⇓PN | Pn | 00 50 25.5 | -1.1 |
| BFZ | Birch Farm | 2.79 | 178 | PN | Pn | 00 50 26.4 | -1.7 |
| BFZ | | | | AML | AML | 00 51 03.2 | |
| MRZ | Mangatainoka R | 2.80 | 189 | ⇑PN | Pn | 00 50 26.4 | -1.9 |
| MRZ | | | | AML | AML | 00 51 03.3 | |
| MRZ | | | | AML | AML | 00 51 03.9 | |
| TIWZ | Tintock | 2.89 | 184 | PN | Pn | 00 50 27.5 | -1.8 |
| TIWZ | | | | AML | AML | 00 51 06.1 | |
| TIWZ | | | | AML | AML | 00 51 07.1 | |
| CPWZ | Castlepoint | 3.01 | 179 | ⇓PN | Pn | 00 50 29.7 | -1.1 |
| OGWZ | Otaki Gorge | 3.02 | 194 | ⇓PN | Pn | 00 50 29.0 | -1.9 |
| HOWZ | Holdsworth Sta | 3.04 | 189 | ⇑PN | Pn | 00 50 28.9 | -2.3 |
| KIW | Kapiti Island | 3.12 | 198 | PN | Pn | 00 50 29.7 | -2.4 |
| KIW | | | | AML | AML | 00 51 10.1 | |
| TMWZ | Te Maipa | 3.22 | 183 | PN | Pn | 00 50 30.9 | -2.4 |
| MTW | Mount Morrison | 3.30 | 189 | PN | Pn | 00 50 31.6 | -2.7 |
| MTW | | | | AML | AML | 00 51 13.6 | |
| MTW | | | | AML | AML | 00 51 14.0 | |
| CAW | Cannon Point | 3.32 | 194 | ⇑PN | Pn | 00 50 32.2 | -2.3 |
| CAW | | | | AML | AML | 00 51 14.0 | |
| CAW | | | | AML | AML | 00 51 15.2 | |
| DUWZ | D'Urville Isla | 3.38 | 210 | PN | Pn | 00 50 32.8 | -2.5 |
| TRWZ | Traveller | 3.52 | 186 | ⇓PN | Pn | 00 50 34.5 | -2.5 |
| TRWZ | | | | AML | AML | 00 51 17.1 | |
| TRWZ | | | | AML | AML | 00 51 18.5 | |
| MSWZ | Moikau Station | 3.58 | 191 | ⇓PN | Pn | 00 50 34.9 | -2.9 |
| MSWZ | | | | AML | AML | 00 51 18.9 | |
| MSWZ | | | | AML | AML | 00 51 19.1 | |
| SNZO | South Karori | 3.59 | 198 | Pn | Pn | 00 50 28.2 | -10 |
| SNZO | | | | eSn | Sn | 00 51 12.3 | -9.5 |
| TCW | Tory Channel | 3.62 | 203 | PN | Pn | 00 50 35.5 | -2.7 |
| TCW | | | | AML | AML | 00 51 21.0 | |
| TCW | | | | AML | AML | 00 51 21.3 | |
| PLWZ | Palliser | 3.74 | 190 | PN | Pn | 00 50 36.5 | -3.2 |
| TUWZ | Tuamarina | 3.92 | 205 | PN | Pn | 00 50 39.2 | -2.9 |
| TUWZ | | | | AML | AML | 00 51 27.3 | |
| TUWZ | | | | AML | AML | 00 51 27.6 | |
| NNZ | Nelson | 3.95 | 212 | PN | Pn | 00 50 39.2 | -3.2 |
| QRZ | Quartz Range | 4.06 | 223 | PN | Pn | 00 50 40.4 | -3.3 |
| BSWZ | Blackbirch Sta | 4.20 | 204 | PN | Pn | 00 50 42.8 | -2.7 |
| THZ | Tophouse | 4.60 | 212 | PN | Pn | 00 50 47.5 | -3.3 |
| KHZ | Kahutara | 4.94 | 203 | PN | Pn | 00 50 51.7 | -3.3 |
| KHZ | Kahutara | 4.94 | 203 | ePn | Pn | 00 50 50.9 | -4.1 |
| KHZ | | | | eSn | Sn | 00 51 38.8 | -14 |
| DSZ | Denniston Nort | 5.10 | 220 | PN | Pn | 00 50 54.8 | -2.4 |
| LTZ | Lake Taylor | 5.71 | 210 | PN | Pn | 00 51 01.0 | -4.1 |
| OXZ | Oxford | 6.26 | 209 | PN | Pn | 00 51 07.6 | -4.6 |
| MQZ | McQueen's Vall | 6.38 | 203 | ⇓PN | Pn | 00 51 08.6 | -5.2 |
| RPZ | Rata Peaks | 6.98 | 212 | ePn | Pn | 00 51 17.7 | -3.9 |
| FOZ | Fox Glacier | 7.49 | 219 | PN | Pn | 00 51 23.2 | -5.1 |
| ODZ | Otahua Downs | 8.25 | 208 | PN | Pn | 00 51 34.0 | -4.3 |
| ODZ | Otahua Downs | 8.25 | 208 | Pn | Pn | 00 51 30.9 | -7.4 |
| JCZ | Jackson Bay | 8.33 | 220 | PN | Pn | 00 51 34.7 | -4.7 |

**GUC 04 01:02:27.1**±0.6**, 34°.90S×72°.24W, h30**km±7km**, ML3.8, 2C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TALC | Talca | 0.70 | 135 | iP | Pn | 01 02 41.2 | +0.2 |
| TALC | | | | iS | Sn | 01 02 51.2 | +0.4 |
| RCDM | Rinconada Maip | 1.84 | 41 | ⇑iP | Pb | 01 02 58.9 | -1.3 |
| ANTU | Antumapu | 1.88 | 46 | iP | Pb | 01 03 00.8 | -0.1 |
| CLCH | Cerro Calan | 2.06 | 44 | ⇑iP | Pb | 01 03 02.6 | -1.4 |
| CLCH | | | | iS | Sb | 01 03 30.3 | +0.9 |
| CLCH | | | | AML | AML | 01 03 33.1 | |
| | comp=N,851nm,0.4s | | | | | | |
| PEL | Peldehue | 2.18 | 37 | ⇓iP | Pn | 01 03 03.6 | +2.3 |
| PEL | | | | iS | Sb | 01 03 32.4 | -0.3 |
| PEL | | | | AML | AML | 01 03 38.1 | |
| | comp=N,927nm,0.4s | | | | | | |

*TIR **04** 01:29:21.2, 38°.67N×20°.54E, h27km, ML3.6*
*CSEM **04** 01:29:22.8±0.2, 38°.77N×20°.56E, h8km, MD3.4, Error ellipse: s-maj=4.7km s-min=2.2km az=49.0*
*ATH **04** 01:29:22.3, 38°.78N×20°.59E, h9km±1km, MD3.4/35*
*IDC **04** 01:29:22.6±1.3, 38°.94N×20°.56E, h0km, mb3.6/4, mb1 3.6/8, mb1mx3.4/43, mbtmp3.4/8, ML3.1/3, Error ellipse: s-maj=23.6km s-min=18.8km az=94.0*
*THE **04** 01:29:23.2, 38°.77N×20°.56E, h0km±2km, ML3.5/14, Error ellipse: s-maj=2.3km s-min=0.6km az=250.0*
*ISCJB **04** 01:29:23.1±0.4, 38°.81N±0°.02×20°.50E±0°.03, h16km±4km, mb3.7/4, Error ellipse: s-maj=4.2km s-min=2.1km az=144.3*
*PDG **04** 01:29:25.8±1.1, 38°.93N×20°.58E, h23km±2km, ML3.5/9, Error ellipse: s-maj=1.6km s-min=1.6km az=0.0*

**ISC 04 01:29:22.5**±1.0**, 38°.78N**±0°.01×**20°.56E**±0°.02**, h7**km±8km**, n191, σ1s06**/283**, mb3.9**/4**, 6C-18D, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDO | Prodromos | 0.52 | 110 | ePB | Pg | 01 29 32.3 | -0.2 |
| PDO | | | | eSB | Sg | 01 29 38.4 | -0.8 |
| PDO | Prodromos | 0.52 | 110 | P | Pg | 01 29 32.5 | 0.0 |
| PDO | | | | S | Sb | 01 29 41.0 | -0.6 |
| PDO | Prodromos | 0.52 | 110 | P | Pg | 01 29 32.5 | 0.0 |
| PDO | | | | S | Sb | 01 29 41.0 | -0.6 |
| VLS | Valsamata | 0.60 | 178 | ePB | Pg | 01 29 34.2 | +0.1 |
| VLS | | | | eSB | Sg | 01 29 42.2 | +0.3 |
| VLS | Valsamata | 0.60 | 178 | P | Pg | 01 29 34.2 | +0.1 |
| VLS | | | | S | Sb | 01 29 43.6 | -0.5 |
| VLS | Valsamata | 0.60 | 178 | P | Pg | 01 29 34.0 | -0.1 |
| VLS | | | | eSb | Sg | 01 29 42.2 | +0.3 |
| VLS | | | | S | Sb | 01 29 43.5 | -0.5 |
| KFL | Anninata | 0.69 | 165 | P | Pg | 01 29 35.7 | -0.1 |
| KFL | | | | S | Sb | 01 29 46.7 | 0.0 |
| KFL | Anninata | 0.69 | 165 | P | Pg | 01 29 35.7 | -0.1 |
| KFL | | | | S | Sb | 01 29 46.5 | -0.2 |
| PVO | Paravola | 0.77 | 102 | P | Pg | 01 29 37.4 | +0.1 |
| PVO | | | | S | Sb | 01 29 49.7 | +0.8 |
| PVO | Paravola | 0.77 | 102 | P | Pg | 01 29 37.4 | +0.1 |
| PVO | | | | S | Sb | 01 29 49.6 | +0.7 |
| IGT | Igoumenitsa | 0.77 | 347 | ePB | Pg | 01 29 37.0 | -0.3 |
| IGT | | | | eSB | Sb | 01 29 48.9 | -0.1 |
| IGT | Igoumenitsa | 0.77 | 347 | P | Pg | 01 29 37.4 | +0.1 |
| IGT | | | | S | Sb | 01 29 49.3 | +0.3 |
| IGT | Igoumenitsa | 0.77 | 347 | ePb | Pg | 01 29 37.0 | -0.3 |
| IGT | Igoumenitsa | 0.77 | 347 | P | Pg | 01 29 37.4 | +0.1 |
| IGT | | | | eSb | Sb | 01 29 48.9 | -0.1 |
| IGT | | | | S | Sb | 01 29 49.3 | +0.3 |
| SGD | Sagiada | 0.87 | 343 | ePB | Pg | 01 29 39.2 | 0.0 |
| SGD | | | | eSB | Sg | 01 29 50.5 | 0.0 |
| SGD | Sagiada | 0.87 | 343 | P | Pg | 01 29 39.5 | +0.3 |
| SGD | | | | S | Sb | 01 29 52.4 | +0.6 |
| SGD | Sagiada | 0.87 | 343 | ePb | Pg | 01 29 39.2 | 0.0 |
| SGD | Sagiada | 0.87 | 343 | P | Pg | 01 29 39.5 | +0.3 |
| SGD | | | | eSb | Sg | 01 29 50.5 | 0.0 |
| SGD | | | | S | Sb | 01 29 52.4 | +0.6 |
| JAN | Janina | 0.90 | 14 | ePB | Pg | 01 29 40.0 | +0.2 |
| JAN | | | | eSB | Sg | 01 29 52.3 | +0.7 |
| JAN | Janina | 0.90 | 14 | P | Pg | 01 29 40.2 | +0.4 |
| JAN | | | | S | Sn | 01 29 54.7 | -0.3 |
| JAN | Janina | 0.90 | 14 | P | Pg | 01 29 40.2 | +0.4 |
| JAN | | | | eSb | Sg | 01 29 52.3 | +0.7 |
| JAN | | | | S | Sn | 01 29 54.5 | -0.5 |
| EVR | Evrytania | 0.98 | 82 | ePB | Pg | 01 29 40.9 | -0.4 |
| EVR | | | | eSB | Sg | 01 29 54.5 | +0.4 |
| EVR | Evrytania | 0.98 | 82 | P | Pg | 01 29 40.8 | -0.5 |
| EVR | | | | S | Sb | 01 29 56.1 | +1.0 |
| EVR | Evrytania | 0.98 | 82 | P | Pg | 01 29 40.8 | -0.5 |
| EVR | | | | eSb | Sg | 01 29 54.5 | +0.4 |
| EVR | | | | S | Sb | 01 29 56.1 | +1.0 |
| RLS | Riolos of Patr | 1.01 | 135 | ePB | Pg | 01 29 41.2 | -0.7 |
| RLS | | | | eSB | Sg | 01 29 55.4 | +0.4 |
| RLS | Riolos of Patr | 1.01 | 135 | P | Pg | 01 29 41.5 | -0.4 |
| RLS | | | | S | Sn | 01 29 57.8 | +0.2 |
| RLS | Riolos of Patr | 1.01 | 135 | ePb | Pg | 01 29 41.2 | -0.7 |
| RLS | Riolos of Patr | 1.01 | 135 | P | Pg | 01 29 41.5 | -0.4 |
| RLS | | | | eSb | Sg | 01 29 55.4 | +0.4 |
| RLS | | | | S | Sn | 01 29 57.8 | +0.2 |
| KEK | Kerkira | 1.10 | 328 | ePN | Pb | 01 29 44.1 | +0.2 |
| KEK | | | | eSB | Sg | 01 29 58.0 | 0.0 |
| KEK | Kerkira | 1.10 | 328 | P | Pn | 01 29 44.3 | -0.1 |
| KEK | | | | S | Sn | 01 30 00.7 | +0.8 |
| KEK | Kerkira | 1.10 | 328 | ePn | Pb | 01 29 44.1 | +0.2 |
| KEK | | | | eSb | Sg | 01 29 58.0 | 0.0 |
| KEK | | | | S | Sn | 01 30 00.7 | +0.8 |
| EFP | Efpalio | 1.11 | 108 | ePG | Pg | 01 29 42.5 | -1.3 |
| EFP | | | | eSB | Sg | 01 29 57.7 | -0.5 |
| EFP | Efpalio | 1.11 | 108 | ePg | Pg | 01 29 42.5 | -1.3 |
| EFP | | | | eSb | Sg | 01 29 57.7 | -0.5 |
| SRN | Sarande | 1.18 | 338 | iPN | Pn | 01 29 46.3 | +0.8 |
| SRN | | | | iSN | Sn | 01 30 04.5 | +2.8 |
| SRN | Sarande | 1.18 | 338 | P | Pn | 01 29 46.2 | +0.8 |
| SRN | | | | S | Sn | 01 30 02.8 | +1.0 |
| SRN | Sarande | 1.18 | 338 | P | Pn | 01 29 46.2 | +0.8 |
| SRN | | | | S | Sn | 01 30 02.8 | +1.0 |
| SRN | | | | iSn | Sn | 01 30 04.6 | +2.8 |
| DRO | Drossia | 1.22 | 132 | ePN | Pb | 01 29 44.7 | -1.3 |
| DRO | | | | eSB | Sg | 01 30 02.0 | +0.2 |
| DRO | Drossia | 1.22 | 132 | P | Pb | 01 29 44.6 | -1.4 |
| DRO | | | | S | Sn | 01 30 03.2 | +0.3 |
| DRO | Drossia | 1.22 | 132 | ePn | Pb | 01 29 44.7 | -1.3 |
| DRO | | | | eSb | Sg | 01 30 02.0 | +0.2 |
| DRO | | | | S | Sn | 01 30 03.2 | +0.3 |
| SERG | Sergoula | 1.23 | 107 | ePG | Pb | 01 29 44.9 | -1.1 |
| SERG | | | | eSB | Sg | 01 30 01.1 | -0.8 |
| SERG | Sergoula | 1.23 | 107 | P | Pb | 01 29 44.9 | -1.1 |
| SERG | | | | S | Sn | 01 30 04.5 | +1.6 |
| SERG | Sergoula | 1.23 | 107 | P | Pb | 01 29 44.9 | -1.1 |
| SERG | | | | eSb | Sg | 01 30 01.1 | -0.8 |
| SERG | | | | S | Sn | 01 30 04.5 | +1.6 |
| LAKA | Lakka | 1.23 | 115 | ePN | Pb | 01 29 44.7 | -1.4 |
| LAKA | | | | eSB | Sg | 01 30 01.2 | -1.0 |
| LAKA | Lakka | 1.23 | 115 | P | Pb | 01 29 45.0 | -1.1 |
| LAKA | | | | S | Sn | 01 30 03.8 | +0.7 |
| LAKA | Lakka | 1.23 | 115 | ePn | Pb | 01 29 44.7 | -1.4 |
| LAKA | Lakka | 1.23 | 115 | P | Pb | 01 29 45.0 | -1.1 |
| LAKA | | | | eSb | Sg | 01 30 01.2 | -1.0 |
| LAKA | | | | S | Sn | 01 30 03.8 | +0.7 |
| MAKR | Makrakomi, Fth | 1.25 | 79 | ePB | Pn | 01 29 45.7 | -0.7 |
| MAKR | | | | eSB | Sg | 01 30 02.5 | 0.0 |
| MAKR | Makrakomi, Fth | 1.25 | 79 | P | Pn | 01 29 45.9 | -0.5 |
| MAKR | | | | S | Sn | 01 30 05.5 | +2.1 |
| MAKR | Makrakomi, Fth | 1.25 | 79 | P | Pn | 01 29 45.9 | -0.5 |
| MAKR | | | | eSb | Sg | 01 30 02.5 | 0.0 |
| MAKR | | | | S | Sn | 01 30 05.5 | +2.1 |
| KALE | Kalithea | 1.29 | 107 | ePG | Pn | 01 29 46.2 | -0.9 |
| KALE | | | | eSB | Sb | 01 30 03.6 | -0.5 |
| KALE | Kalithea | 1.29 | 107 | P | Pn | 01 29 46.2 | -0.9 |
| KALE | | | | S | Sn | 01 30 06.5 | +1.8 |
| KALE | Kalithea | 1.29 | 107 | P | Pn | 01 29 46.2 | -0.9 |
| KALE | | | | eSb | Sb | 01 30 03.6 | -0.5 |
| KALE | | | | S | Sn | 01 30 06.5 | +1.8 |
| THL | Klokotos Trika | 1.37 | 55 | ePG | Pn | 01 29 47.7 | -0.4 |
| THL | | | | eSB | Sb | 01 30 05.4 | -0.8 |
| THL | Klokotos Trika | 1.37 | 55 | P | Pn | 01 29 47.6 | -0.5 |
| THL | Klokotos Trika | 1.37 | 55 | P | Pn | 01 29 47.6 | -0.5 |
| THL | | | | eSb | Sb | 01 30 05.4 | -0.8 |
| AGG | Agios Georgios | 1.40 | 80 | ePG | Pn | 01 29 48.3 | -0.2 |
| AGG | | | | eSB | Sg | 01 30 08.2 | +0.7 |
| AGG | Agios Georgios | 1.40 | 80 | P | Pn | 01 29 48.4 | -0.1 |
| AGG | | | | S | Sg | 01 30 10.1 | +2.6 |
| AGG | Agios Georgios | 1.40 | 80 | P | Pn | 01 29 48.4 | -0.1 |
| AGG | | | | eSb | Sg | 01 30 08.2 | +0.7 |
| AGG | | | | S | Sg | 01 30 10.1 | +2.6 |
| KLV | Kalavryta, Ach | 1.45 | 120 | ePN | Pn | 01 29 48.0 | -1.2 |
| KLV | Kalavryta, Ach | 1.45 | 120 | P | Pn | 01 29 48.0 | -1.2 |
| AMT | Artemida-Makis | 1.54 | 144 | ePG | Pn | 01 29 50.7 | +0.3 |
| AMT | Artemida-Makis | 1.54 | 144 | P | Pn | 01 29 50.8 | +0.3 |
| AMT | Artemida-Makis | 1.54 | 144 | ePg | Pn | 01 29 50.7 | +0.3 |
| SFD | Strofades | 1.57 | 167 | ePB | Pg | 01 29 52.6 | +0.1 |
| GUR | Goura | 1.63 | 121 | ePN | Pn | 01 29 51.2 | -0.5 |
| GUR | Goura | 1.63 | 121 | P | Pn | 01 29 51.3 | -0.5 |
| GUR | | | | S | Sg | 01 30 15.8 | +0.8 |
| GUR | Goura | 1.63 | 121 | ePn | Pn | 01 29 51.2 | -0.5 |
| GUR | | | | S | Sg | 01 30 15.8 | +0.8 |
| AXAR | Agios Charalam | 1.64 | 90 | ePB | Pb | 01 29 53.3 | +0.3 |
| AXAR | Agios Charalam | 1.64 | 90 | P | Pb | 01 29 53.3 | +0.3 |
| AXAR | | | | S | Sg | 01 30 15.4 | +0.3 |
| AXAR | Agios Charalam | 1.64 | 90 | P | Pb | 01 29 53.3 | +0.3 |
| AXAR | | | | S | Sg | 01 30 15.4 | +0.3 |
| NEST | Nestorio | 1.67 | 13 | ePB | Pg | 01 29 54.3 | -0.3 |
| NEST | Nestorio | 1.67 | 13 | P | Pg | 01 29 54.4 | -0.2 |
| NEST | Nestorio | 1.67 | 13 | ePb | Pg | 01 29 54.3 | -0.3 |
| KZN | Kozani | 1.79 | 31 | ePN | Pb | 01 29 55.9 | +0.3 |
| KZN | Kozani | 1.79 | 31 | P | Pb | 01 29 55.9 | +0.3 |
| KZN | Kozani | 1.79 | 31 | P | Pb | 01 29 55.9 | +0.3 |
| THAL | Thalero | 1.81 | 114 | ePN | Pb | 01 29 55.2 | -0.7 |
| THAL | Thalero | 1.81 | 114 | ePn | Pb | 01 29 55.2 | -0.7 |
| KBN | Korca | 1.85 | 5 | iPN | Pg | 01 29 57.8 | -0.1 |
| KBN | | | | iSN | Sg | 01 30 22.7 | +0.8 |
| KBN | Korca | 1.85 | 5 | iPn | Pg | 01 29 57.8 | -0.1 |
| KBN | | | | iSn | Sg | 01 30 22.7 | +0.8 |
| LKR | Lokris | 1.91 | 93 | ePG | Pb | 01 29 57.8 | +0.2 |
| LKR | Lokris | 1.91 | 93 | P | Pb | 01 29 56.9 | -0.7 |
| LKR | Lokris | 1.91 | 93 | P | Pb | 01 29 56.9 | -0.7 |
| LKR | Lokris | 1.91 | 93 | ePg | Pb | 01 29 57.8 | +0.2 |
| ITM | Ithomi | 1.93 | 146 | ePG | Pb | 01 29 58.4 | +0.4 |
| VLX | Vlachokerasia | 2.01 | 134 | ePG | Pb | 01 29 58.9 | -0.5 |
| VLX | Vlachokerasia | 2.01 | 134 | P | Pb | 01 29 58.5 | -0.9 |
| VLX | Vlachokerasia | 2.01 | 134 | P | Pb | 01 29 58.5 | -0.9 |
| LTK | Loutraki | 2.03 | 111 | ePN | Pb | 01 29 58.9 | -0.9 |
| LTK | Loutraki | 2.03 | 111 | ePn | Pb | 01 29 58.9 | -0.9 |
| LOUT | Loutraki | 2.05 | 112 | ePN | Pb | 01 29 59.4 | -0.7 |
| SMIA | Simia | 2.07 | 86 | ePG | Pb | 01 29 59.8 | -0.6 |
| SMIA | Simia | 2.07 | 86 | P | Pb | 01 29 59.4 | -1.0 |
| SMIA | Simia | 2.07 | 86 | P | Pb | 01 29 59.4 | -1.0 |
| SMIA | Simia | 2.07 | 86 | ePg | Pb | 01 29 59.8 | -0.6 |
| FNA | Florina | 2.10 | 17 | ePN | Pb | 01 29 59.9 | -1.0 |
| FNA | Florina | 2.10 | 17 | P | Pb | 01 29 59.9 | -1.0 |
| FNA | Florina | 2.10 | 17 | P | Pb | 01 29 59.9 | -1.0 |
| PYL | PYLOS | 2.10 | 153 | ePN | Pn | 01 29 59.4 | +1.3 |
| PYL | PYLOS | 2.10 | 153 | P | Pb | 01 29 59.7 | -1.2 |
| PYL | PYLOS | 2.10 | 153 | P | Pb | 01 29 59.7 | -1.2 |
| XOR | Xorichti | 2.13 | 73 | ePN | Pb | 01 30 00.6 | -0.8 |
| XOR | Xorichti | 2.13 | 73 | ePn | Pb | 01 30 00.6 | -0.8 |
| NEO | Neokhori | 2.14 | 75 | ePN | Pn | 01 30 00.1 | +1.5 |
| NEO | Neokhori | 2.14 | 75 | ePn | Pn | 01 30 00.1 | +1.5 |
| VIL2 | Platees | 2.20 | 104 | ePN | Pb | 01 30 01.5 | -1.1 |
| VILL | Villia | 2.24 | 105 | P | Pn | 01 30 01.4 | +1.3 |
| VILL | Villia | 2.24 | 105 | P | Pn | 01 30 01.4 | +1.3 |
| OHR | Ohrid | 2.33 | 4 | iPn | Pb | 01 30 03.6 | -1.3 |
| OHR | | | | eSn | Sb | 01 30 33.2 | -0.9 |
| OHR | Ohrid | 2.33 | 4 | iPn | Pb | 01 30 03.6 | -1.3 |
| OHR | | | | eSn | Sb | 01 30 33.1 | -0.9 |
| DIDY | Didyma | 2.46 | 121 | ePN | Pb | 01 30 05.8 | -1.3 |
| DID | Didima | 2.46 | 120 | ePN | Pn | 01 30 05.1 | +2.0 |
| DID | Didima | 2.46 | 120 | P | Pn | 01 30 04.6 | +1.5 |
| DID | | | | S | Sb | 01 30 36.7 | -0.9 |
| DID | Didima | 2.46 | 120 | P | Pn | 01 30 04.6 | +1.5 |
| KRND | KRANIDI | 2.47 | 124 | ePN | Pn | 01 30 04.9 | +1.7 |
| NAIG | Nisos Aigina | 2.52 | 113 | ePN | Pn | 01 30 05.7 | +1.9 |
| GRG | Griva | 2.59 | 32 | ePB | Pn | 01 30 05.8 | +0.9 |
| GRG | Griva | 2.59 | 32 | ePb | Pn | 01 30 05.8 | +0.9 |
| THE | Thessaloniki | 2.62 | 44 | ePB | Pn | 01 30 06.4 | +1.2 |
| THE | Thessaloniki | 2.62 | 44 | ePb | Pn | 01 30 06.4 | +1.2 |
| TIR | Tirane | 2.62 | 348 | iPN | Pn | 01 30 06.6 | +1.4 |
| TIR | Tirane | 2.62 | 348 | iPn | Pn | 01 30 06.6 | +1.4 |
| EREA | Eretria | 2.66 | 97 | ePN | Pb | 01 30 08.3 | -2.2 |
| HORT | Hortiatis | 2.67 | 46 | ePB | Pn | 01 30 07.2 | +1.2 |
| HORT | Hortiatis | 2.67 | 46 | ePb | Pn | 01 30 07.2 | +1.2 |
| VLY | Voula,Athens | 2.71 | 109 | ePB | Pn | 01 30 06.8 | +0.4 |
| VLY | Voula,Athens | 2.71 | 109 | ePb | Pn | 01 30 06.8 | +0.4 |
| PLG | Polygyros | 2.74 | 54 | ePN | Pn | 01 30 07.5 | +0.6 |
| PLG | Polygyros | 2.74 | 54 | ePn | Pn | 01 30 07.5 | +0.6 |
| PHP | Peshkopia | 2.90 | 358 | iPN | Pn | 01 30 11.4 | +2.2 |
| PHP | Peshkopia | 2.90 | 358 | iPn | Pn | 01 30 11.4 | +2.2 |
| VAY | Valandovo | 2.97 | 31 | ePn | Pn | 01 30 05.4 | -4.7 |
| VAY | Valandovo | 2.97 | 31 | ePn | Pn | 01 30 05.3 | -4.7 |
| KNT | Kendrikon | 2.98 | 36 | ePN | Pn | 01 30 11.2 | +1.0 |
| KNT | Kendrikon | 2.98 | 36 | ePn | Pn | 01 30 11.2 | +1.0 |
| TAR1 | Taranto | 3.07 | 306 | ePn | Pn | 01 30 12.7 | +1.3 |
| PE1 | Pezze di Greco | 3.15 | 311 | ePn | Pn | 01 30 13.6 | +1.1 |
| KYTH | Kithira | 3.18 | 141 | ePB | Pn | 01 30 15.8 | +2.9 |
| PUK | Puka | 3.30 | 351 | iPN | Pn | 01 30 15.6 | +1.0 |
| PUK | Puka | 3.30 | 351 | iPn | Pn | 01 30 15.6 | +1.0 |
| ULC | Ulcinj | 3.33 | 343 | ePn | Pn | 01 30 14.9 | -0.2 |
| ULC | | | | eSn | Sn | 01 30 53.6 | -1.4 |
| ULC | Ulcinj | 3.33 | 343 | ePn | Pn | 01 30 14.9 | -0.2 |
| ULC | | | | eSn | Sn | 01 30 53.6 | -1.4 |
| DRME | Dracevica, Mon | 3.56 | 343 | ⇓iPn | Pn | 01 30 18.5 | +0.3 |
| DRME | | | | eSn | Sn | 01 30 59.1 | -1.4 |
| DRME | Dracevica, Mon | 3.56 | 343 | ⇓iPn | Pn | 01 30 18.5 | +0.3 |
| DRME | | | | eSn | Sn | 01 30 59.1 | -1.4 |
| NVR | Nevrokopi | 3.60 | 44 | ePN | Pn | 01 30 19.5 | +0.7 |
| NVR | Nevrokopi | 3.60 | 44 | ePn | Pn | 01 30 19.5 | +0.7 |
| SG1 | Sgolgore (BA) | 3.63 | 306 | ePn | Pn | 01 30 20.0 | +0.9 |
| BAI | Bari | 3.66 | 311 | ePn | Pn | 01 30 20.3 | +0.8 |
| BUM | Brajici-Budva | 3.74 | 341 | ⇓iPn | Pn | 01 30 20.6 | -0.1 |
| BUM | | | | eSn | Sn | 01 31 03.8 | -1.2 |
| BUM | Brajici-Budva | 3.74 | 341 | ⇓iPn | Pn | 01 30 20.6 | -0.1 |
| BUM | | | | eSn | Sn | 01 31 03.8 | -1.2 |
| PDG | Podgorica | 3.78 | 345 | ⇑iPn | Pn | 01 30 21.1 | 0.0 |
| PDG | | | | eSn | Sn | 01 31 04.2 | -1.7 |
| TTG | Podgorica | 3.78 | 345 | ⇑iPn | Pn | 01 30 21.1 | 0.0 |
| TTG | | | | eSn | Sn | 01 31 04.2 | -1.7 |
| PVY | Plav | 3.84 | 353 | ⇓iPn | Pn | 01 30 22.8 | +0.7 |
| PVY | | | | eSn | Sn | 01 31 05.5 | -2.0 |
| PVY | Plav | 3.84 | 353 | ⇓iPn | Pn | 01 30 22.8 | +0.7 |
| PVY | | | | eSn | Sn | 01 31 05.5 | -2.0 |
| HCY | Herceg Novi | 3.99 | 337 | ⇓iPn | Pn | 01 30 23.6 | -0.4 |
| HCY | | | | eSn | Sn | 01 31 09.5 | -1.5 |
| HCY | Herceg Novi | 3.99 | 337 | ⇓iPn | Pn | 01 30 23.6 | -0.4 |
| HCY | | | | eSn | Sn | 01 31 09.5 | -1.5 |
| CDT | Castel del Mon | 4.02 | 306 | iPn | Pn | 01 30 25.3 | +0.8 |
| BEY | Berane | 4.12 | 353 | ⇓iPn | Pn | 01 30 26.4 | +0.5 |
| BEY | | | | eSn | Sn | 01 31 12.4 | -2.0 |
| IVA | Berane | 4.12 | 353 | ⇓iPn | Pn | 01 30 26.4 | +0.5 |
| IVA | | | | eSn | Sn | 01 31 12.4 | -2.0 |
| BARS | Barje | 4.14 | 13 | iPn | Pn | 01 30 26.9 | +0.7 |
| NKME | Niksic | 4.17 | 343 | ⇓iPn | Pn | 01 30 26.5 | 0.0 |
| NKME | | | | eSn | Sn | 01 31 13.8 | -1.7 |
| NKME | Niksic | 4.17 | 343 | ⇓iPn | Pn | 01 30 26.5 | 0.0 |
| NKME | | | | eSn | Sn | 01 31 13.8 | -1.7 |
| NKY | Niksic | 4.20 | 344 | ⇑iPn | Pn | 01 30 27.6 | +0.5 |
| NKY | | | | eSn | Sn | 01 31 14.3 | -2.1 |
| NKY | Niksic | 4.20 | 344 | ⇑iPn | Pn | 01 30 27.6 | +0.5 |
| NKY | | | | eSn | Sn | 01 31 14.3 | -2.1 |
| BRY | Bratogost | 4.39 | 340 | ⇓iPn | Pn | 01 30 29.8 | +0.1 |
| BRY | | | | eSn | Sn | 01 31 19.4 | -1.8 |
| BRY | Bratogost | 4.39 | 340 | ⇓iPn | Pn | 01 30 29.8 | +0.1 |
| BRY | | | | eSn | Sn | 01 31 19.4 | -1.8 |
| SJES | Sjenica | 4.50 | 354 | iPn | Pn | 01 30 32.0 | +0.8 |
| MS1 | Monte Sant'Ang | 4.59 | 311 | ePn | Pn | 01 30 33.7 | +1.4 |
| UPM | Unac-Piva | 4.59 | 345 | ePn | Pn | 01 30 32.9 | +0.4 |
| UPM | | | | eSn | Sn | 01 31 23.6 | -2.6 |
| UPM | Unac-Piva | 4.59 | 345 | ePn | Pn | 01 30 32.9 | +0.4 |
| UPM | | | | eSn | Sn | 01 31 23.6 | -2.6 |
| IVAS | Ivanjica | 4.80 | 356 | iPn | Pn | 01 30 35.7 | +0.4 |
| IDI | Anoyia | 4.91 | 134 | Pn | Pn | 01 30 39.6 | +2.8 |
| | 0.2nm,0.3s,baz=13,slow=19,SNR=5.7 | | | | | | |
| IDI | | | | Sn | Sn | 01 31 33.6 | -0.4 |
| | 0.5nm,0.3s,baz=63,slow=16,SNR=3.7 | | | | | | |
| GRUS | Gruza | 5.11 | 1 | iPn | Pn | 01 30 39.7 | +0.3 |
| BBLS | Lazići | 5.16 | 351 | iPn | Pn | 01 30 43.9 | +3.8 |
| DIVS | Divibare | 5.33 | 356 | ⇓iP | Sn | 01 31 40.8 | -3.4 |
| VOIR | | 7.44 | 25 | ⇓iP | Pn | 01 31 12.4 | +0.9 |
| VOIR | | 7.44 | 25 | ⇓iP | Pn | 01 31 12.4 | +0.9 |
| MLR | Muntele Rosu | 7.80 | 29 | Pn | Pn | 01 31 18.0 | +1.5 |
| | baz=282,slow=9.3 | | | | | | |
| MLR | Muntele Rosu | 7.80 | 29 | ⇑iP | Pn | 01 31 24.6 | +8.0 |
| SKDS | Skadanscina | 8.32 | 326 | iP | Pn | 01 31 22.5 | -1.1 |
| SKDS | Skadanscina | 8.32 | 326 | P | Pn | 01 31 22.5 | -1.1 |
| PLOR | Plostina | 8.38 | 31 | ⇑iP | Pn | 01 31 30.1 | +5.8 |
| VRI | Vrincioaia | 8.42 | 31 | ⇓iP | Pn | 01 31 30.0 | +5.1 |
| PERS | Pernice | 8.81 | 335 | iP | Pn | 01 31 29.1 | -1.2 |
| PERS | Pernice | 8.81 | 335 | iP | Pn | 01 31 29.1 | -1.2 |
| BRTR | Keskin Array B | 10.19 | 81 | Pn | Pn | 01 31 53.4 | +4.1 |
| | 0.1nm,0.3s,baz=256,slow=11,SNR=5.1 | | | | | | |
| GERES | GERESS Array B | 11.21 | 336 | Pn | Pn | 01 32 02.8 | -0.3 |
| | 0.1nm,0.3s,baz=160,slow=14,SNR=5.4 | | | | | | |
| HFS | Hagfors | 21.81 | 351 | P | P | 01 34 14.6 | -0.4 |
| | 15nm,1.2s,baz=171,slow=9.8,SNR=3.2 | | | | | | |
| FINES | FINESS Array B | 22.95 | 7 | P | P | 01 34 26.5 | -0.5 |
| | 2.1nm,0.7s,baz=185,slow=9.6,SNR=4.2 | | | | | | |
| TORD | Torodi Ar. Bea | 30.52 | 218 | P | P | 01 35 39.1 | +2.7 |
| | 0.1nm,0.6s,baz=34,slow=9.9,SNR=2.8 | | | | | | |
| ZALV | Zalesovo Beam | 45.27 | 49 | P | P | 01 37 39.0 | -1.4 |
| | 1.0nm,0.5s,baz=280,slow=8.8,SNR=4.0 | | | | | | |

**IDC 04 01:32:40.9**±1.6**, 0°.98S×126°.20E, h0**km**, mb3.4**/4**, mb1 3.6**/4**, mb1mx3.4**/43**, mbtmp3.5**/4**, Error ellipse: s-maj=172.4km s-min=22.7km az=65.0, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 20.46 | 158 | P | P | 01 37 20.6 | +0.3 |
| | 0.5nm,0.5s,baz=336,slow=11,SNR=5.4 | | | | | | |
| ASAR | Alice Springs | 23.75 | 162 | P | P | 01 37 55.0 | -0.3 |
| | 0.3nm,0.4s,baz=346,slow=12,SNR=5.4 | | | | | | |
| MKAR | Makanchi Array | 61.15 | 327 | P | P | 01 42 57.5 | +0.2 |
| | 0.3nm,0.5s,baz=119,slow=8.9,SNR=3.4 | | | | | | |
| KURBB | Kurchatov Arra | 65.43 | 329 | P | P | 01 43 25.4 | -0.2 |
| | 0.2nm,0.3s,baz=133,slow=6.8,SNR=3.3 | | | | | | |

*ISCJB **04** 01:38:26.8±0.6, 19°.28N±0°.01×122°.22E±0°.02, h22km±4km, mb5.3/210, MS5.5/258, Error ellipse: s-maj=3.3km s-min=2.3km az=7.0*
*IDC **04** 01:38:27.9±1.5, 19°.28N×122°.17E, h19km±8km, mb4.8/40, mb1 4.8/43, mb1mx4.8/55, mbtmp4.9/43, ML3.9/3, MS5.2/34, Ms1 5.2/34, ms1mx5.1/42, Error ellipse: s-maj=11.1km s-min=7.8km az=88.0*
*BJI **04** 01:38:28.0, 19°.40N×122°.00E, h10km, mb5.1/76, mB5.5/60, Ms5.9/96, Ms7 5.7/84*
*MOS **04** 01:38:28.2±1.1, 19°.23N×122°.24E, h33km, mb5.7/65, MS5.5/49, Error ellipse: s-maj=7.0km s-min=4.1km az=112.2*
*MAN **04** 01:38:28, 19°.22N×122°.02E, h14km, MS5.8*
*MAN INTENSITY IV - CALAYAN ISLAND; INTENSITY III - CAMALANIUGAN AND APARRI CAGAYAN.*
*GCMT **04** 01:38:29.4±0.1, 19°.42N×121°.99E, h12km, MW5.5/117, Moment Tensor Solution. s90,c161; s117,c288; Duration: 1s4 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$0.55±.03; $M_{\theta\theta}$-1.07±.02; $M_{\phi\phi}$0.52±.03; $M_{r\theta}$-0.49±.07; $M_{\theta\phi}$-2.30±.02; $M_{\phi r}$-0.50±.07; Best double couple: $M_0$2.50800×$10^{17}$ NP1:$\phi_s$9.00000°,δ85.00000°, λ-11.00000°. NP2:$\phi_s$100.00000°,δ79.00000°, λ-175.00000°. Principal axes: T 2.1690, Plg5.0000°, Azm55.0000°; N 0.6740, Plg78.0000°, Azm167.0000°; P -2.8480, Plg11.0000°, Azm324.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*NEIC **04** 01:38:29.4±2.9, 19°.35N×122°.16E, h30km±3km, mb5.6/106, MS5.4/253, MW5.5 Error ellipse: s-maj=12.6km s-min=8.9km az=103.0, Moment Tensor Solution. s20 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.01; $M_{\theta\theta}$-2.11; $M_{\phi\phi}$2.12; $M_{r\theta}$-0.98; $M_{\theta\phi}$-0.98; $M_{\phi r}$0.51; Best double couple: $M_0$2.60000×$10^{17}$ NP1:$\phi_s$32.00000°,δ65.00000°, λ-2.00000°. NP2:$\phi_s$123.00000°,δ88.00000°, λ-155.00000°. Principal axes: T 2.5400, Plg16.0000°, Azm255.0000°; N 0.0700, Plg65.0000°, Azm126.0000°; P -2.6100, Plg19.0000°, Azm350.0000°;*
*NEIC Felt [IV PIVS] on Calayan Island and [III PIVS] at Camalaniugan, Luzon. Also felt at Aparri.*
*BKK **04** 01:38:29.5±0.3, 19°N±4°×12°2E±°, h10km, M5.5/35, mB5.9/28, mb5.2/35, Mw(mB)5.5/28*
*KLM **04** 01:38:31.9, 19°.31N×121°.92E, h27km, mb5.6, ML5.7, MS6.1*
*AUST **04** 01:38:42.3, 18°.92N×121°.93E, h152km*

**ISC 04 01:38:29.3**±0.3**, 19°.26N**±0°.02×**122°.18E**±0°.03**, h26**km±1km**, h26**km**:pP-P, n912, σ1s85**/860**, mb5.4**/218**, MS5.5**/258**, 43C-53D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGCP | Mt. Cagua | 1.02 | 187 | eP | Pn | 01 38 46.7 | -1.2 |
| SGCP | | | | eS | Sb | 01 38 56.9 | -4.3 |
| CVP | Callao Caves | 1.58 | 192 | ⇑iP | Pn | 01 38 55.3 | -0.4 |
| APYP | Conner | 1.65 | 213 | eP | Pn | 01 38 55.4 | -1.1 |
| APYP | | | | eS | Sn | 01 39 11.1 | -5.8 |
| PIP | Pasuquin | 1.74 | 238 | ⇑iP | Pn | 01 38 55.3 | -2.6 |
| PIP | | | | eS | Sb | 01 39 21.1 | -1.1 |
| SIPP | Brgy, Tapao | 2.10 | 231 | ⇓eP | Pn | 01 39 02.4 | -0.4 |
| SIPP | | | | eS | Sb | 01 39 37.4 | +4.9 |
| ABRA | Dolores | 2.12 | 221 | eP | Pn | 01 39 02.4 | -0.6 |

ABRA eS Sn 01 39 23.1 -5.4
**PALP Palanan 2.19 174** eP Pn 01 39 05.7 +1.6
**SZP Santa 2.36 224** ePn Pn 01 39 08.1 +1.8
SZP eSn Sn 01 39 32.8 -1.6
**BCPH Baguio City Da 3.24 208**⇑iP Pb 01 39 23.5 -2.8
BCPH i S Sn 01 39 58.3 +1.8
**BOLP Bolinao 3.58 217** eP Pn 01 39 24.2 +1.0
**TWG Pinlang 3.69 344** ePn Pn 01 39 21.9 -2.9
TWG eSn Sn 01 39 56.5 -11
**PCPH Palayan 3.82 196**⇓eP Pn 01 39 29.1 +2.6
PCPH eS Sb 01 40 20.5 -1.3
**YULB Yu-li 4.20 349** ePn Pn 01 39 28.6 -3.1
YULB eSn Sn 01 40 14.0 -6.0
**TPUB Ta-pu 4.28 341** ePn Pn 01 39 32.9 +0.1
TPUB eSn Sn 01 40 12.4 -9.5
**SSLB Suanglung 4.65 346** ePn Pn 01 39 37.4 -0.5
SSLB eSn Sn 01 40 26.0 -5.1
**NACB Ninganchiao 4.92 354** ePn Pn 01 39 38.6 -3.1
NACB eSn Sn 01 40 24.5 -13
**LQP Lukban 5.15 187**⇓eP Pn 01 39 44.3 -0.7
**YOJ Yonaguni jima 5.24 8** eP Pn 01 39 44.3 -1.7
YOJ e 01 40 42.3
**YOJ Yonaguni jima 5.24 8** ePn Pn 01 39 44.3 -1.7
YOJ eSn Sn 01 40 42.3 -3.2
**GQP Guinayangan 5.33 177**⇓eP Pn 01 39 48.4 +1.1
GQP eS Sn 01 40 48.6 +0.9
**YHNB Yeheng 5.44 352** ePn Pn 01 39 46.9 -2.0
YHNB eSn Sn 01 40 45.1 -5.5
**AUQP San Andres 5.92 175** eP Pb 01 40 04.5 -7.3
**QZH Quanzhou 6.56 330** i Pn Pn 01 40 02.0 -2.2
QZH Sn Sn 01 41 14.3 -3.9
QZH LN
37µm,14.6s
QZH LE
156µm,14.4s
QZH LZ
86µm,14.1s
**HKC Hong Kong Obse 8.08 293** i P Pn 01 40 23.0 -2.0
**PLP Palo 8.48 161**⇓eP Pn 01 40 31.1 +0.5
**GZH Guangzhou 9.08 296** P Pn 01 40 34.6 -4.2
GZH S Sn 01 42 13.2 -7.0
GZH LN
97µm,14.1s
GZH LE
52µm,14.5s
**JOW Kunigami 9.40 36** Pn Pn 01 40 42.0 -1.1
0.8nm,0.3s,baz=113,slow=27,SNR=17
**PAGZ Pagadian 11.40 174** eP Pn 01 41 18.4 +7.9
**BUKP Musuan 11.65 166** eP Pn 01 41 20.6 +6.6
**QIZ Qiongzhong 11.66 271** P Pn 01 41 13.3 -0.9
QIZ S Sn 01 43 23.7 +0.1
QIZ PMZ
100nm,0.7s
QIZ LN
28µm,12.5s
QIZ LZ
21µm,12.6s
**QIZ Qiongzhong 11.66 271** ePn Pn 01 41 10.9 -3.3
QIZ eSn Sn 01 43 13.8 -10
**SSE Sheshan 11.82 356** P Pn 01 41 15.0 -1.3
SSE S Sn 01 43 29.8 +2.4
SSE PMZ
43nm,0.8s
SSE PMZ
720nm,10.8s
SSE LN
16µm,15.9s
SSE LZ
23µm,16.4s
**CTBH Cotabato--PC H 12.13 170**⇑eP P 01 41 31.8 -1.2
**NJ2 Nanjing 13.09 347** eP Pn 01 41 33.5 -0.1
NJ2 pP P 01 41 39.1 -4.4
NJ2 sP 01 41 43.5
NJ2 S Sn 01 43 57.0 -1.3
NJ2 sS sS 01 44 06.5
NJ2 PMZ
50nm,0.6s
NJ2 PMZ
2µm,6.4s
NJ2 LN
84µm,11.8s
NJ2 LE
56µm,10.3s
NJ2 LZ
34µm,12.8s
**WHN Wuhan 13.29 329** P Pn 01 41 34.2 -2.1
WHN S Sn 01 44 08.8 +5.6
WHN LN
67µm,13.8s
WHN LE
107µm,15.1s
WHN LZ
66µm,10.8s
**KDM Kudat 13.32 204**⇓P Pn 01 41 39.5 +2.6
**KKM Kota Kinabalu 14.36 205** P P 01 41 55.7 -2.2
baz=14,SNR=3.0
**KKM Kota Kinabalu 14.36 205**⇑P Pn 01 41 53.7 +2.5
**KKM Kota Kinabalu 14.36 205** ePn Pn 01 41 52.1 +0.9
**SDKM Sandakan 14.38 200**⇑P Pn 01 41 53.6 +2.3
**MYLDM Lahad Datu 14.44 195**⇓P P 01 41 56.0 -2.7
**MYLDM Lahad Datu 14.44 195** ePn Pn 01 41 54.9 +2.7
**DLV T Lat 15.05 243** ePn Pn 01 42 00.0 -0.6
62nm,0.8s
**TSM Tawau 15.45 196**⇑P P 01 42 10.3 +0.3
**JNU Nakatsue 15.85 28** Pn Pn 01 42 11.1 +0.3
0.6nm,0.3s,baz=186,slow=7.3,SNR=4.8
JNU Sn Sn 01 45 12.7 +7.0
baz=185,slow=11,SNR=1.5
JNU LR LR 01 48 40.8
comp=Z,8µm,19.9s,baz=219,slow=39
**JNU Nakatsue 15.85 28** ePn Pn 01 42 11.6 +0.8
414nm,1.3s
JNU Sn Sn 01 45 12.7 +7.0
**ENH Enshi 15.90 316** ePn Pn 01 42 12.4 +1.1
166nm,1.3s
**GYA Guiyang 15.99 299**⇑iP Pn 01 42 13.6 +0.9
GYA pP pP 01 42 20.0 -3.0
GYA sP sP 01 42 26.2 -0.2
GYA S Sn 01 45 09.2 -0.1
GYA sS S 01 45 20.4 -2.3
GYA SS SnSn 01 45 27.8 +5.4
GYA PcP PcP 01 47 10.6 +1.3
GYA PMZ
100nm,1.0s
GYA PMZ
1µm,8.1s
GYA LN
32µm,14.8s
GYA LE
15µm,13.1s
GYA LZ
16µm,15.1s
**PALU Palau 16.82 133** P P 01 42 28.2 +3.1
baz=17,SNR=9.3
**SLVN Son La 17.27 280** ePn Pn 01 42 28.5 -0.4
**TIA Tai'an 17.47 346**⇓P Pn 01 42 30.2 -0.9
TIA S S 01 45 51.6 -1.0
TIA PMZ
50nm,1.3s
TIA PMZ
5µm,12.0s
TIA LN
9µm,20.0s
TIA LE
34µm,15.0s
TIA LZ
10µm,16.0s
**TJN Taejon 17.66 14**⇑iP P 01 42 35.0 +0.8
**KSBON Boeun 17.88 15** P P 01 42 45.3 +8.6
SNR=5.3
**NONG Nongkai 18.07 269** P P 01 42 41.7 +2.7
186nm,1.1s,11µm
**BTM Bintulu 18.27 210**⇑P P 01 42 41.6 +0.4
**KSCHJ Chungju 18.27 15** P P 01 42 48.6 +7.5
SNR=5.9
**GTOI Gorontalo 18.52 177** P P 01 42 43.5 -0.4
417nm,1.6s,10µm
**INCN Inchon 18.57 11** P Pn 01 42 47.6 +2.9
SNR=6.8
**KHON Khomkaen 18.66 264** P Pn 01 42 47.1 +1.2
83nm,1.1s,2µm
**MRSI Marisa 18.66 181** P Pn 01 42 48.8 +2.9
259nm,1.8s,7µm
**KSYOW Yeongwol 18.68 16** P Pn 01 42 53.2 +7.2
SNR=7.2
**KSAR Wonju Array Be 18.79 14** P Pn 01 42 47.4 0.0
**KSAR Wonju Array Be 18.79 14** P Pn 01 42 47.4 0.0
KSAR ScP ScP 01 50 47.4 -0.2
**KSRS Korea Array 18.82 14** P Pn 01 42 47.4 -0.2
3.3nm,0.3s,baz=198,slow=11,SNR=49
KSRS ScP ScP 01 50 47.4 -0.2
0.2nm,0.3s,baz=204,slow=2.7,SNR=4.3
KSRS LR LR 01 51 08.0
comp=Z,7µm,18.1s,baz=198,slow=40
**KS01 Wonju Array Si 18.83 14** eP Pn 01 42 48.3 +0.5
**KMI Kunming 18.92 291** P Pn 01 42 49.7 +0.5
KMI pP pP 01 42 57.1 +1.5
KMI sP sP 01 43 01.5 +2.6
KMI PP PnPn 01 43 05.0 +3.2
KMI PMZ
70nm,1.7s
KMI PMZ
2µm,4.8s
KMI LN
13µm,10.3s
KMI LE
14µm,11.2s
KMI LZ
16µm,11.5s
**MPSI Mapaga 18.93 187** P P 01 42 46.4 -2.0
**KSMUS Musan 18.99 11** P Pn 01 42 52.6 +2.9
SNR=7.5
**TNTI Ternate 19.06 164** eP P 01 42 49.3 -0.5
1µm,1.6s
**YNCB YEONCHEON 19.17 11** P Pn 01 42 55.5 +3.7
SNR=6.5
**KSCWO Cheorwon 19.33 13** P Pn 01 42 56.4 +2.6
SNR=11
**SBUM Sibu 19.34 211**⇑P Pn 01 42 53.8 -0.2
**SBUM Sibu 19.34 211** eP P 01 42 52.9 0.0
318nm,1.4s
**KSIJA INJE 19.37 14** P Pn 01 42 57.8 +3.5
SNR=5.2
**KSJMJ Jumunjin 19.43 16** P Pn 01 42 59.0 +4.0
SNR=11
**DL2 Dalian 19.59 359** P Pn 01 43 01.4 +4.5
DL2 S Sn 01 46 40.5 +4.5
DL2 PMZ
130nm,1.6s
DL2 PMZ
2µm,12.9s
DL2 LN
13µm,13.1s
DL2 LE
10µm,12.2s
DL2 LZ
9µm,12.6s
**LOEI Loei 19.93 268** P P 01 42 57.2 -2.1
114nm,1.4s,9µm
**APSI Ampana 20.05 182** P Pn 01 43 03.7 +1.2
363nm,1.2s,6µm
**PCI Palu 20.17 187** P Pn 01 43 03.2 -0.7
206nm,1.5s,5µm
**LUWI Luwuk 20.18 178** P P 01 43 02.2 +0.1
baz=20,SNR=13
**LUWI Luwuk 20.18 178** P Pn 01 43 03.9 -0.1
733nm,1.5s,10µm
**LUWI Luwuk 20.18 178** eP P 01 43 01.7 -0.4
2µm,1.5s
LUWI LR LR
comp=Z,12µm,19.0s
**TIY Taiyuan 20.26 337** eP P 01 43 02.0 -0.9
TIY S S 01 46 45.3 -3.7
TIY PMZ
comp=Z,2µm,6.1s
TIY LN
comp=Z,20µm,12.5s
TIY LE
comp=Z,43µm,13.8s
TIY LZ
comp=Z,22µm,15.5s
**CD2 Chengdu 20.29 308**⇓P P 01 43 03.2 0.0
CD2 pP Pn 01 43 06.5 +1.2
CD2 sP sP 01 43 08.2 -5.5
CD2 S Sn 01 46 53.8 +0.5
CD2 sS sS 01 46 56.0 -4.9
CD2 PMZ
comp=Z,280nm,1.0s
CD2 PMZ
comp=Z,5µm,6.2s
CD2 LN
comp=Z,48µm,12.3s
CD2 LE
comp=Z,45µm,14.0s
CD2 LZ
comp=Z,24µm,16.6s
**LBMI Labuha 20.45 165** P P 01 43 05.0 0.0
comp=Z,259nm,1.4s,comp=Z,8µm
**CRAI Chiangrai 20.55 276** P P 01 43 02.9 -3.2
comp=Z,203nm,1.6s
**UTTA Uttaradit 20.56 269** P Pn 01 43 07.4 -1.2
comp=Z,26nm,1.0s,comp=Z,279nm
**JHJ Hachijo jima 2 20.94 45** P Pn 01 43 12.8 +0.1
comp=Z,434nm,1.0s,baz=198,slow=5.8,SNR=4.9
JHJ S Sn 01 47 06.9 -1.8
comp=Z,51nm,0.6s,baz=66,slow=20,SNR=1.8
JHJ LR LR 01 49 25.6
comp=Z,6µm,20.8s,baz=270,slow=31
**JHJ2 Mitsune 20.95 45** eP P 01 43 09.2 -1.1
comp=Z,1µm,1.5s
JHJ2 LR LR
comp=Z,9µm,18.0s
**BKB Balikpapan 21.04 195** P P 01 43 15.9 +4.5
**KSM Kuching 21.16 215** P P 01 43 14.2 +1.5
baz=21,SNR=6.9
**KSM Kuching 21.16 215**⇓P P 01 43 14.3 +1.7
**KSM Kuching 21.16 215** eP P 01 43 14.0 +1.3
comp=Z,194nm,1.1s
KSM LR LR
comp=Z,7µm,21.0s
**BJT Baijiatuau 21.33 347** eP P 01 43 12.9 -1.4
BJT pmax pmax
comp=Z,544nm,1.7s
BJT MLR MLR
comp=Z,11µm,18.0s
**BJT Baijiatuau 21.33 347** eP P 01 43 12.9 -1.4
comp=Z,544nm,1.7s
BJT LR LR
comp=Z,11µm,18.0s
**BJI Beijing 21.35 347** P P 01 43 14.2 -0.3
BJI S S 01 47 09.3 -1.0
BJI PMZ
comp=Z,34nm,0.6s
BJI PMZ
comp=Z,1µm,9.3s
BJI LN
comp=Z,18µm,13.1s
BJI LE
comp=Z,17µm,15.2s
BJI LZ
comp=Z,6µm,30.0s
**PATY Pattaya 21.41 256** P P 01 43 17.6 +2.2
comp=Z,59nm,1.4s,comp=Z,1µm
**SANI Sanana 21.50 170** P P 01 43 16.1 -0.2
comp=Z,162nm,1.0s,comp=Z,2µm
**STKI Sintang 21.77 210** P P 01 43 18.8 -0.4
comp=Z,106nm,1.2s,comp=Z,10µm
**CMAI Chiengmai2 21.80 276** P P 01 43 27.2 +7.4
**SWI Sorong 21.89 155** P P 01 43 24.8 +4.3
baz=22,SNR=5.0
**SWI Sorong 21.89 155** P P 01 43 22.1 +1.6
comp=Z,251nm,1.2s,comp=Z,4µm
**SIJI Song 21.90 155** P P 01 43 20.8 +0.1
comp=Z,96nm,1.0s,baz=347,slow=11,SNR=18
SIJI S Sn 01 47 27.1 -4.9
comp=Z,3.7nm,0.4s,baz=60,slow=20,SNR=2.2
SIJI LR LR 01 54 11.5
comp=Z,4µm,18.0s,baz=339,slow=43
**CHTO Chiang Mai 21.97 273** P P 01 43 22.2 +0.8
comp=Z,759nm,1.3s,comp=Z,16µm
**CHTO Chiang Mai 21.97 273** eP P 01 43 21.7 +0.3
CHTO pmax pmax
comp=Z,590nm,1.5s
CHTO MLR MLR
comp=Z,4µm,20.0s
**CHTO Chiang Mai 21.97 273** P P 01 43 22.8 +1.4
SNR=44
**CHTO Chiang Mai 21.97 273** eP P 01 43 21.7 +0.3
comp=Z,590nm,1.5s
CHTO LR LR
comp=Z,4µm,20.0s
**CM01 Chiang Mai Arr 21.99 272** eP P 01 43 22.3 +0.7
**UTHA Uthaitani 22.00 264** P P 01 43 23.2 +1.5
comp=Z,64nm,1.2s,comp=Z,718nm
**CMAR Chiang Mai Arr 22.00 272** P P 01 43 22.9 +1.1
comp=Z,35nm,0.9s,baz=77,slow=8.4,SNR=61
CMAR PcP PcP 01 47 20.7 +0.9
comp=Z,3.8nm,0.6s,baz=77,slow=1.1,SNR=5.5
CMAR ScP ScP 01 50 55.5 -0.1
comp=Z,2.9nm,0.5s,baz=90,slow=0.9,SNR=12
CMAR LR LR 01 53 26.4
comp=Z,4µm,18.4s,baz=84,slow=41
**MAJO Matsushiro 22.24 36**⇓iP P 01 43 24.6 +0.4
MAJO pmax pmax
comp=Z,947nm,1.9s
**MAJO Matsushiro 22.24 36** eP P 01 43 24.4 +0.2
comp=Z,195nm,1.2s
**MAT Matsushiro 22.24 36** P P 01 43 24.8 +0.6
MAT S S 01 47 30.0 +2.3
**MJAR Matsushiro Arr 22.24 36** P P 01 43 23.8 -0.4
comp=Z,39nm,1.1s,baz=221,slow=9.7,SNR=31
MJAR ScP ScP 01 50 56.0 +0.1
comp=Z,3.6nm,0.9s,baz=224,slow=2.6,SNR=9.1
**TTSI Tana Toraja 22.28 186** P P 01 43 27.1 +2.4
comp=Z,128nm,1.2s,comp=Z,3µm
**UMPA Umpang Tak 22.41 266** P P 01 43 28.3 +2.1
comp=Z,60nm,1.2s,comp=Z,1µm
**GUMO Guam 22.47 101** P P 01 43 27.9 +1.1
comp=Z,220nm,1.0s,baz=273,slow=3.6,SNR=5.2
GUMO S Sn 01 47 47.8 +2.1
comp=Z,20nm,0.3s,baz=18,slow=20,SNR=2.1
**GUMO Guam 22.47 101** eP P 01 43 26.0 -0.8
GUMO pmax pmax
comp=Z,691nm,1.3s
GUMO MLR MLR
comp=Z,4µm,19.0s
**GUMO Guam 22.47 101** eP P 01 43 26.0 -0.8
comp=Z,691nm,1.3s
GUMO S Sn 01 47 47.8 +2.1
GUMO LR LR
comp=Z,4µm,19.0s
**SNY Shenyang 22.53 3**⇑P P 01 43 27.2 0.0
SNY S S 01 47 26.5 -6.3
SNY PMZ
comp=Z,39nm,0.7s
SNY PMZ
comp=Z,1µm,5.9s
SNY LN
comp=Z,8µm,12.5s
SNY LE
comp=Z,25µm,13.5s
SNY LZ
comp=Z,12µm,13.9s
**NLAI Namlea 22.87 167** P P 01 43 31.9 +0.9
comp=Z,165nm,1.3s,comp=Z,3µm
**KDI Kendari 23.07 179** P P 01 43 32.5 -0.5
comp=Z,72nm,1.5s,comp=Z,3µm
**KTGM Kuala Trenggan 23.15 236**⇓P P 01 43 33.7 -0.2
**KBKI Kotabaru 23.18 195** P P 01 43 33.8 -0.3
comp=Z,81nm,1.9s
**SPSI Sidrap Palu 23.20 186** P P 01 43 34.3 0.0
comp=Z,53nm,1.3s,comp=Z,3µm
**LZH Lanzhou 23.27 320** eP P 01 43 36.0 +0.9
LZH pP pP 01 43 45.7 +3.2
LZH PP PnPn 01 44 05.0 +3.7
LZH eS S 01 47 41.0 -5.0
LZH sS sS 01 47 56.3 -2.4
LZH SS SnSn 01 48 24.1 +2.9
LZH PMZ
comp=Z,180nm,1.1s
LZH PMZ
comp=Z,1µm,4.1s
LZH LN
comp=Z,9µm,13.1s
LZH LE
comp=Z,14µm,14.2s
LZH LZ
comp=Z,16µm,16.0s
**HHC Hu-ho-hao-te 23.36 339**⇓P P 01 43 35.1 -0.8
HHC pP pP 01 43 45.7 +2.4
HHC PP PnPn 01 44 08.1 +5.6
HHC S S 01 47 47.5 +0.2
HHC sS sS 01 47 58.1 -1.9
HHC PcS PcS 01 50 59.7 -1.9
HHC PMZ
comp=Z,69nm,1.1s
HHC PMZ
comp=Z,1µm,5.0s
HHC LN
comp=Z,27µm,13.5s
HHC LE
comp=Z,31µm,15.6s
HHC LZ
comp=Z,19µm,17.4s
**MSAI Masohi 23.42 163** P P 01 43 35.6 -0.9
comp=Z,72nm,1.2s,comp=Z,1µm
**AAI Ambon 23.55 165** P P 01 43 38.7 +0.9
comp=Z,243nm,1.2s,comp=Z,4µm
**BTO Baotou 23.70 336** eP P 01 43 38.4 -0.7
BTO S S 01 47 52.3 -0.4
BTO LN
comp=Z,3µm,10.8s
**BBKI Banjar Baru 23.70 198** P P 01 43 37.9 -1.4
comp=Z,295nm,1.2s,comp=Z,8µm
**FAKI Fak Fak 24.16 155** P P 01 43 43.5 -0.1
baz=24,SNR=4.6
**FAKI Fak Fak 24.16 155** P P 01 43 42.5 -1.1
comp=Z,223nm,1.5s,comp=Z,4µm
**FAKI Fak Fak 24.16 155** eP P 01 43 43.2 -0.4
comp=Z,432nm,1.4s
FAKI LR LR
comp=Z,5µm,19.0s
**KAPI Kappang 24.23 186** P P 01 43 43.2 -1.0
comp=Z,18nm,0.9s,baz=23,slow=12,SNR=7.1
KAPI S S 01 48 05.9 +4.5
comp=Z,6.3nm,0.8s,baz=81,slow=19,SNR=2.2
KAPI LR LR 01 54 44.7
comp=Z,7µm,19.6s,baz=7.8,slow=40
**KAPI Kappang 24.23 186** P P 01 43 45.1 +0.9
comp=Z,414nm,1.1s,SNR=5.5
**KAPI Kappang 24.23 186** P P 01 43 46.8 +2.6
SNR=9.4
**KAPI Kappang 24.23 186** eP P 01 43 41.7 -2.5
comp=Z,154nm,1.2s
KAPI S S 01 48 05.9 +4.5
KAPI LR LR
comp=Z,6µm,19.0s
**BKSI Bulukumba 24.51 185** P P 01 43 43.9 -2.8
comp=Z,36nm,0.7s,comp=Z,1µm
**CN2 Changchun 24.63 6** eP P 01 43 47.8 +0.2
CN2 epP pP 01 43 58.3 +3.0
CN2 eS S 01 48 04.0 -3.3
CN2 PMZ
comp=Z,20nm,0.8s
CN2 PMZ
comp=Z,800nm,8.0s
CN2 LN
comp=Z,4µm,16.0s
CN2 LE
comp=Z,30µm,16.0s
CN2 LZ
comp=Z,15µm,16.0s
**MYKOM Kota Tinggi 24.97 228**⇓P P 01 43 52.9 +2.0
**MYKOM Kota Tinggi 24.97 228** eP P 01 43 51.2 +0.3
comp=Z,1µm,2.1s
MYKOM LR LR
comp=Z,10µm,20.0s
**TPRI Tanjung Pinang 25.13 226** P P 01 43 52.9 +0.5
comp=Z,190nm,1.5s
**KULM Kulim 25.16 239**⇓P P 01 43 54.2 +1.5
**KULM Kulim 25.16 239** eP P 01 43 51.8 -0.9
comp=Z,144nm,1.0s
KULM LR LR
comp=Z,8µm,19.0s
**VLA Vladivostok 25.16 17**⇑iP P 01 43 53.8 +1.4
VLA pmax pmax
comp=Z,115nm,1.9s
**KGM Kluang 25.19 229**⇑P P 01 43 55.5 +2.5
**BSSI Bau Bau, Buton 25.29 184** P P 01 43 53.6 -0.2
comp=Z,96nm,1.5s,comp=Z,2µm
**IPM Ipoh 25.33 237**⇓P P 01 43 54.2 0.0
**IPM Ipoh 25.33 237** eP P 01 43 52.8 -1.5
comp=Z,341nm,1.4s
IPM LR LR
comp=Z,8µm,19.0s
**FRIM Kepong 25.63 234**⇓P P 01 43 58.4 +1.4
**MDJ Mudanjiang 26.03 12** P P 01 44 00.1 -0.2

MDJ pP **pP** **01 44 08.8 +0.8**
MDJ sP **sP** **01 44 12.7 +1.5**
MDJ PcP **PcP** **01 47 27.3 -0.6**
MDJ S **S** **01 48 29.0 -0.7**
MDJ sS **sS** **01 48 39.3 -3.1**
MDJ ScP **ScP** **01 51 05.5 -0.5**
MDJ PMZ
comp=Z,10.0nm,0.8s
MDJ PMZ
comp=Z,210nm,5.0s
MDJ LN
comp=Z,10μm,16.0s
MDJ LE
comp=Z,26μm,15.7s
MDJ LZ
comp=Z,16μm,14.2s
**MDJ Mudanjiang 26.03 12** *e*P **P** **01 44 01.0 +0.7**
comp=Z,310nm,2.0s
MDJ LR LR
comp=Z,6μm,18.0s
**TPI Tanjungpandan 26.12 215** P **P** **01 43 56.7 -4.7**
**USRK Ussuriysk Ar. 26.19 16** P **P** **01 44 01.2 -0.5**
comp=Z,18nm,0.9s,baz=200,slow=8.5,SNR=21
USRK LR LR 01 55 01.6
comp=Z,6μm,18.3s,baz=183,slow=38
**PPBI Pangkal Pinang 26.49 218** P **P** **01 44 00.3 -4.4**
**SMPI Sarmi 26.64 141** P P 01 43 56.7 -9.4
**MMRI Maumere 27.71 180** P **P** **01 44 14.9 -0.8**
comp=Z,232nm,1.4s,comp=Z,4μm
**MMRI Maumere 27.71 180** *e*P **P** **01 44 14.2 -1.5**
comp=Z,403nm,1.3s
**EDFI Ende, Flores 27.83 181** P **P** **01 44 13.9 -3.0**
comp=Z,143nm,1.1s,comp=Z,6μm
**GTA Gaotai 27.86 321** ⇑P **P** **01 44 18.8 +1.8**
GTA pP **pP** **01 44 28.3 +3.6**
GTA sP **sP** **01 44 32.3 +4.4**
GTA PcP PcP 01 47 39.8 +7.2
GTA S **S** **01 48 59.4 +0.5**
GTA ScP **ScP** **01 51 12.7 +0.9**
GTA PcS **PcS** **01 51 15.1 +0.4**
GTA PMZ
comp=Z,13nm,1.2s
GTA PMZ
comp=Z,1μm,7.8s
GTA LN
comp=Z,8μm,11.9s
GTA LE
comp=Z,15μm,15.7s
GTA LZ
comp=Z,14μm,16.6s
**BKNI Bangkinang 27.99 230** PFAKE 01 44 30.0 +12
BKNI LR LR
comp=Z,11μm,18.0s
**GENI Genyem 28.00 139** P **P** **01 44 16.5 -1.8**
comp=Z,93nm,1.6s,comp=Z,3μm
**PSI Prapat 28.01 237** P **P** **01 44 18.9 +0.4**
comp=Z,18nm,0.8s,baz=322,slow=5.2,SNR=5.7
PSI S **S** **01 49 03.0 +1.3**
comp=Z,2.3nm,0.3s,baz=270,slow=4.0,SNR=1.8
PSI ScP **ScP** **01 51 12.3 -0.3**
comp=Z,7.1nm,0.8s,baz=48,slow=2.9,SNR=4.4
PSI LR LR 01 55 17.0
comp=Z,6μm,19.2s,baz=70,slow=36
**PSI Prapat 28.01 237** *e*P **P** **01 44 16.9 -1.7**
PSI S **S** **01 49 03.0 +1.3**
PSI pmax pmax
comp=Z,594nm,2.6s
PSI MLR MLR
comp=Z,7μm,18.0s
**PSI Prapat 28.01 237** P P 01 44 21.9 +3.3
baz=28,SNR=4.4
**PSI Prapat 28.01 237** *e*P **P** **01 44 16.9 -1.7**
comp=Z,594nm,2.6s
PSI S **S** **01 49 03.0 +1.3**
PSI ScP **ScP** **01 51 12.3 -0.3**
PSI LR LR
comp=Z,7μm,18.0s
**BLJI Banyuglugur 28.13 198** P **P** **01 44 18.5 -0.9**
comp=Z,92nm,1.5s
**TWSI Taliwang, Sumb 28.30 191** P P 01 44 17.5 -3.4
comp=Z,28nm,1.3s,comp=Z,1μm
**NGJI Ngawi 28.49 203** P **P** **01 44 24.2 +1.6**
comp=Z,145nm,1.3s,comp=Z,5μm
**KCSI Kotacane, Aceh 28.51 240** P **P** **01 44 20.6 -2.3**
comp=Z,56nm,1.0s,comp=Z,3μm
**SMRI Semarang 28.58 205** P **P** **01 44 21.6 -1.9**
comp=Z,208nm,1.8s,comp=Z,6μm
**SMRI Semarang 28.58 205** *e*P **P** **01 44 23.8 +0.3**
comp=Z,753nm,1.8s
**SDSI Sungai Dareh 28.59 228** P **P** **01 44 23.7 +0.1**
comp=Z,47nm,1.5s,comp=Z,26μm
**SHL Shillong 28.66 288** *e*P **P** **01 44 24.0 -0.4**
**DGPR DIGLIPUR 28.70 262** *e*P **P** **01 44 24.5 -0.1**
**MNSI Mandailing Nat 28.76 233** P **P** **01 44 23.4 -1.7**
comp=Z,53nm,1.1s
**ERM Erimo 28.84 34** PFAKE 01 44 40.0 +14
ERM LR LR
comp=Z,7μm,19.0s
**SOEI Soe 28.90 176** P **P** **01 44 24.9 -1.5**
baz=29,SNR=3.1
**SOEI Soe 28.90 176** P P 01 44 29.8 +3.4
**SOEI Soe 28.90 176** *e*P **P** **01 44 27.9 +1.5**
comp=Z,141nm,1.2s
SOEI LR LR
comp=Z,6μm,19.0s
**PWJI Pagerwojo 28.97 202** P **P** **01 44 26.5 -0.4**
comp=Z,87nm,1.3s
**PPI Padang Panjang 29.00 230** P **P** **01 44 27.5 +0.3**
comp=Z,104nm,1.9s,comp=Z,2μm
**WOJI Wonogiri, Jawa 29.12 203** P **P** **01 44 30.1 +1.9**
comp=Z,199nm,1.5s
**BATI Baumata 29.31 177** P **P** **01 44 31.4 +1.4**
comp=Z,34nm,0.6s,baz=319,slow=1.8,SNR=4.4
BATI PcP **PcP** **01 47 35.5 -0.9**
comp=Z,26nm,0.3s,baz=284,slow=4.2,SNR=4.4
BATI LR LR 01 56 58.1
comp=Z,3μm,21.8s,baz=345,slow=38
**BATI Baumata 29.31 177** P **P** **01 44 32.1 +2.1**
comp=Z,48nm,1.1s,comp=Z,849nm
**PBA Port Blair 29.33 259** *e*P P 01 44 30.6 +0.5
PBA AMB AMB 01 44 53.8
comp=Z,79nm,5.8s
**UGM Wanagama 29.34 204** P P 01 44 39.2 +9.0
baz=29,SNR=3.4
**UGM Wanagama 29.34 204** PFAKE 01 44 40.0 +10
UGM LR LR
comp=Z,4μm,21.0s
**LHSI Lahat 29.38 221** P **P** **01 44 28.5 -2.0**
comp=Z,94nm,1.8s,comp=Z,3μmcomp=Z,50μm
**MDSI Maura Dua 29.50 219** P **P** **01 44 33.7 +2.0**
comp=Z,60nm,1.5s,comp=Z,1μm
**LEM Lembang 29.62 210** P **P** **01 44 32.4 -0.5**
comp=Z,22nm,0.6s,baz=162,slow=20,SNR=2.5
LEM LR LR 01 57 11.1
comp=Z,3μm,20.1s,baz=48,slow=38
**LEM Lembang 29.62 210** P **P** **01 44 32.1 -0.8**
comp=Z,816nm,1.6s,comp=Z,27μm
**CBJI Citeko 29.65 212** P P 01 44 37.8 +4.9
**KSI Kapahiang 29.82 222** P **P** **01 44 36.0 +1.4**
comp=Z,210nm,2.2s,comp=Z,6μm
**GSI Gunungsitoli 29.98 236** PFAKE 01 44 50.0 +14
GSI LR LR
comp=Z,6μm,20.0s
**LWLI Liwa 30.00 218** P **P** **01 44 36.8 +0.6**
comp=Z,132nm,1.4s,comp=Z,9μm
**LSA Lhasa 30.01 296** P **P** **01 44 37.3 +0.6**
LSA pP **pP** **01 44 42.9 -1.4**
LSA sP **sP** **01 44 46.5 -1.0**
LSA S **S** **01 49 38.7 +5.1**
LSA LN
comp=Z,7μm,15.4s
LSA LE
comp=Z,6μm,15.4s
LSA LZ
comp=Z,5μm,15.4s
**LSA Lhasa 30.01 296** *e*P **P** **01 44 37.2 +0.6**
LSA pmax pmax
comp=Z,297nm,2.0s
LSA MLR MLR
comp=Z,4μm,18.0s
**LSA Lhasa 30.01 296** *e*P **P** **01 44 37.2 +0.6**
comp=Z,297nm,2.0s
LSA LR LR
comp=Z,4μm,18.0s
**ASAJ Asahikawa 30.10 30** P **P** **01 44 36.1 -0.6**
comp=Z,10nm,0.9s,baz=196,slow=19,SNR=2.4
ASAJ LR LR 01 56 14.5
comp=Z,6μm,21.9s,baz=240,slow=36
**ASAJ Asahikawa 30.10 30** *e*P **P** **01 44 36.4 -0.4**
comp=Z,525nm,2.3s
ASAJ LR LR
comp=Z,6μm,22.0s
**MNAI Manna 30.14 221** PFAKE 01 44 50.0 +13
MNAI LR LR
comp=Z,6μm,18.0s
**KASI Kota Agung 30.16 217** P **P** **01 44 36.8 -0.6**
comp=Z,80nm,1.1s,comp=Z,2μm
**CGJI Cibinong 30.41 214** P **P** **01 44 40.1 +0.5**
comp=Z,61nm,1.4s,comp=Z,2μm
**SISI Saibi 30.54 230** P **P** **01 44 40.9 +0.1**
comp=Z,102nm,1.4s
**KLR Kul'dur 30.88 12** *e*P **P** **01 44 42.0 -1.5**
KLR MLR MLR
comp=Z,16μm,12.0s
**HABR Khabarovsk 30.95 17** *e*P **P** **01 44 43.1 -1.0**
HABR *e**SP **sP** **01 44 51.7 -3.4**
HABR *e* 01 45 44.9
HABR *e*S **S** **01 49 48.7 +1.7**
HABR *e*SS **SnSn** **01 51 31.8 +3.7**
HABR *e*SSS SSS 01 51 46.5
HABR *e* 01 55 15.6
HABR pmax pmax
comp=N,34nm,2.0s
HABR pmax pmax
comp=E,92nm,2.2s
HABR pmax pmax
comp=Z,65nm,2.0s
HABR MLR MLR
comp=N,5μm,20.0s
HABR MLR MLR
comp=E,8μm,19.0s
HABR MLR MLR
comp=Z,6μm,19.0s
**ULN Ulaanbaatar 31.08 340** ⇓*i*P **P** **01 44 45.3 -0.2**
ULN pmax pmax
comp=Z,24nm,1.4s
**ULN Ulaanbaatar 31.08 340** P **P** **01 44 45.5 0.0**
SNR=31
**ULN Ulaanbaatar 31.08 340** *e*P **P** **01 44 45.5 0.0**
comp=Z,120nm,1.6s
ULN LR LR
comp=Z,15μm,19.0s
**SONM Songino Array 31.27 339** P **P** **01 44 46.0 -1.1**
comp=Z,5.6nm,0.5s,baz=155,slow=10,SNR=33
SONM S S 01 49 46.0 -6.2
comp=Z,0.8nm,1.0s,baz=160,slow=21,SNR=2.1
SONM ScP **ScP** **01 51 22.2 -0.3**
comp=Z,7.8nm,1.2s,baz=225,slow=1.9,SNR=9.2
SONM LR LR 01 58 34.6
comp=Z,19μm,18.8s,baz=150,slow=39
**YUK Yuzh-Kuril'sk 31.67 33** *d*P **P** **01 44 49.9 -0.6**
YUK *i*S **S** **01 50 00.6 +2.3**
YUK pmax pmax
comp=Z,655nm,1.6s
YUK pmax pmax
comp=N,384nm,1.5s
YUK pmax pmax
comp=E,663nm,1.5s
YUK MLR MLR
comp=N,2μm,22.0s
YUK MLR MLR
comp=E,3μm,22.0s
YUK MLR MLR
comp=Z,3μm,22.0s
**YSS Yuzh-Sakhalins 32.36 27** *e*P **P** **01 44 59.0 +2.5**
YSS *e* 01 45 04.9
YSS *e* 01 47 50.0
YSS *e*S **S** **01 50 06.0 -3.0**
YSS *e*SSS SSS 01 52 26.0
YSS MLR MLR
comp=N,6μm,18.0s
YSS MLR MLR
comp=Z,4μm,18.0s
YSS MLR MLR
comp=E,4μm,16.0s
**YSS Yuzh-Sakhalins 32.36 27** *e*P **P** **01 44 55.3 -1.2**
comp=E,77nm,1.0s
YSS LR LR
comp=Z,2μm,20.0s
**MANU Manus Island 32.57 128** PFAKE 01 45 10.0 +11
MANU LR LR
comp=Z,4μm,18.0s
**TAPN Taplejung 32.59 291** *e*P **P** **01 44 59.7 +0.6**
comp=Z,691nm,1.6s
**ODAN Odare 32.81 290** *e*P **P** **01 45 01.5 +0.4**
comp=Z,700nm,1.5s
**MTN Manton Dam 33.09 164** *e*P **P** **01 45 03.4 +0.1**
comp=Z,115nm,1.8s
**RAMN Ramite 33.52 290** *e*P **P** **01 45 07.6 +0.3**
comp=Z,241nm,1.0s
**KUR Kuril'sk 33.53 34***c i*P **P** **01 45 07.5 +0.7**
KUR *i*S **S** **01 50 31.3 +4.0**
KUR *i* 01 55 27.5
KUR pmax pmax
comp=Z,513nm,2.9s
KUR pmax pmax
comp=N,84nm,1.4s
KUR pmax pmax
comp=E,73nm,1.4s
KUR pmax pmax
comp=Z,201nm,1.4s
KUR MLR MLR
comp=N,1μm,19.0s
KUR MLR MLR
comp=E,1μm,19.0s
KUR MLR MLR
comp=Z,3μm,19.0s
**BOK Bokaro 34.00 284** *e*P **P** **01 45 11.4 +0.2**
BOK AMB AMB 01 45 27.1
comp=Z,120nm,2.3s
**GUN Gumba 34.26 291** *e*P **P** **01 45 13.7 -0.1**
comp=Z,491nm,1.1s
**ZAK Zakamensk 34.51 339** *e*P **P** **01 45 14.4 -1.0**
ZAK pmax pmax
comp=Z,18nm,1.3s
**PKI Pulchoki 34.64 291** *e*P **P** **01 45 16.5 -0.6**
comp=Z,75nm,1.1s
**PKIN Phulchoki 34.65 291** *e*P **P** **01 45 16.7 -0.4**
comp=Z,56nm,1.0s
**KKN Kakani 34.78 291** *e*P **P** **01 45 17.5 -0.6**
comp=Z,74nm,0.8s
**DMN Daman 34.91 291** *e*P **P** **01 45 18.7 -0.7**
comp=Z,86nm,0.9s
**GKN Gorkha 35.37 291** *e*P **P** **01 45 22.3 -0.8**
comp=Z,69nm,0.8s
**TLY Talaya 35.49 340** P **P** **01 45 22.5 -1.3**
comp=Z,8.8nm,0.7s,baz=176,slow=4.7,SNR=8.5
TLY S **S** **01 50 54.5 -2.9**
comp=Z,1.2nm,0.3s,baz=75,slow=20,SNR=2.0
TLY ScP **ScP** **01 51 36.6 -0.5**
comp=Z,1.8nm,0.4s,baz=169,slow=6.3,SNR=5.4
TLY LR LR 02 01 12.1
comp=Z,13μm,19.1s,baz=140,slow=38
**TLY Talaya 35.49 340** *e*P **P** **01 45 23.5 -0.2**
TLY *e*PPP PPP 01 47 06.7
TLY *e* 01 47 56.9
TLY *e*S **S** **01 50 55.1 -2.3**
TLY pmax pmax
comp=Z,78nm,2.4s
TLY MLR MLR
comp=Z,12μm,19.0s
**TLY Talaya 35.49 340** P **P** **01 45 22.0 -1.7**
comp=Z,84nm,1.0s,SNR=5.6
**TLY Talaya 35.49 340** P **P** **01 45 24.3 +0.6**
SNR=22
**TLY Talaya 35.49 340** *e*P **P** **01 45 22.4 -1.3**
comp=Z,58nm,1.3s
TLY S **S** **01 50 54.5 -2.9**
TLY ScP **ScP** **01 51 36.6 -0.5**
TLY LR LR
comp=Z,13μm,19.0s
**IRK Irkutsk 35.78 341** *e*P **P** **01 45 26.4 +0.2**
IRK *e* 01 47 57.0
IRK pmax pmax
comp=Z,98nm,2.1s
**CHLP Challavanipeta 36.03 275** *e*P **P** **01 45 27.8 -0.9**
CHLP *e*S **S** **01 51 04.5 -1.8**
**DANN Dangsing 36.17 292** *e*P **P** **01 45 29.8 -0.4**
comp=Z,100nm,1.4s
**KOLN Koldanda 36.26 291** *e*P **P** **01 45 30.2 -0.6**
comp=Z,412nm,1.5s
**VIS Vishakhapatnam 36.83 274** *e*P **P** **01 45 35.7 +0.2**
**FITZ Fitzroy Crossi 37.28 175** P **P** **01 45 38.0 -1.2**
comp=Z,8.4nm,1.0s,baz=28,slow=13,SNR=8.9
**FITZ Fitzroy Crossi 37.28 175** P **P** **01 45 37.7 -1.5**
baz=37,SNR=8.9
**FITZ Fitzroy Crossi 37.28 175** *e*P **P** **01 45 37.8 -1.5**
comp=Z,24nm,1.1s
**CLNS Chul'man 37.58 2** *e*P P 01 45 46.0 +4.5
CLNS pmax pmax
comp=E,8.0nm,1.1s
CLNS pmax pmax
comp=N,12nm,1.0s
CLNS pmax pmax
comp=Z,15nm,1.0s
CLNS MLR MLR
comp=E,14μm,15.0s
CLNS MLR MLR
comp=Z,8μm,14.0s
CLNS MLR MLR
comp=N,7μm,12.0s
**PMG Port Moresby 37.65 137** PFAKE 01 45 50.0 +7.5
PMG LR LR
comp=Z,4μm,19.0s
**WMQ Urumqi 37.83 318** P **P** **01 45 46.0 +2.2**
WMQ sP **sP** **01 45 53.0 -1.8**
WMQ PP **PnPn** **01 47 15.0 +3.3**
WMQ PcP **PcP** **01 48 03.0 +3.0**
WMQ S **S** **01 51 36.0 +2.6**
WMQ PcS **PcS** **01 51 51.0 +2.2**
WMQ SS **SnSn** **01 54 10.0 -5.0**
WMQ PMZ
comp=Z,56nm,1.0s
WMQ PMZ
comp=Z,1μm,4.0s
WMQ LN
comp=Z,13μm,14.0s
WMQ LE
comp=Z,10μm,14.0s
WMQ LZ
comp=Z,7μm,14.0s
**PVM Polavaram 38.51 274** *e*P **P** **01 45 49.0 -0.8**
PVM *e*S **S** **01 51 42.0 -2.1**
**HVS Khovu-Aksy 38.94 331** ⇑*i*P **P** **01 45 54.8 +1.7**
HVS pmax pmax
comp=Z,29nm,0.9s
**COEN Coen 38.95 146** PFAKE 01 46 10.0 +17
COEN LR LR
comp=Z,5μm,21.0s
**BOD Bodaibo 38.98 353** *e*P **P** **01 45 51.4 -1.8**
BOD pmax pmax
comp=Z,21nm,1.3s
**MBWA Marble Bar 40.24 184** *e*P **P** **01 46 03.1 -1.0**
comp=Z,42nm,1.2s
**ADKI Addanki 40.32 272** *e*P **P** **01 46 05.1 +0.2**
ADKI *e*S **S** **01 52 11.9 +0.6**
**NGP Nagpur 40.43 280** *ex* P 01 46 01.7 -4.2
NGP *ex* **S** **01 52 18.1 +5.1**
**RPR Rampur 40.46 277** *e*P **P** **01 46 04.8 -1.3**
RPR *e*S **S** **01 52 12.5 -0.9**
**MDRS Chennai 40.67 268** *e*P **P** **01 46 06.7 -1.1**
**WRAB Tennant Creek 40.73 162***ce*P **P** **01 46 06.3 -1.9**
WRAB pmax pmax
comp=Z,293nm,1.7s
**WRAB Tennant Creek 40.73 162** P **P** **01 46 07.4 -0.8**
comp=Z,303nm,1.6s,SNR=6.3
**WRA Warramunga Arr 40.74 162** P **P** **01 46 06.2 -2.0**
comp=Z,18nm,0.9s,baz=345,slow=7.9,SNR=25
WRA ScP **ScP** **01 51 57.9 +0.5**
comp=Z,7.5nm,1.2s,baz=338,slow=4.0,SNR=9.3
WRA LR LR 02 03 59.6
comp=Z,2μm,19.6s,baz=5.0,slow=38
**NJS Nagarjunasagar 40.81 273** *e*P **P** **01 46 08.0 -1.0**
NJS *e*S **S** **01 52 17.2 -1.5**
**SKHT Srikalahasti 41.01 269** *e*P **P** **01 46 10.6 0.0**
SKHT *e*S **S** **01 52 22.8 +1.1**
**DDI Dehra Dun 41.32 294** *e*P **P** **01 46 13.2 +0.1**
DDI AMB AMB 01 46 35.4
comp=Z,237nm,6.5s
**HYB Hyderabad 41.37 275** *i*P **P** **01 46 12.5 -1.1**
HYB *e*sP **sP** **01 46 26.0 +1.3**
HYB *e*S **S** **01 52 28.0 +0.9**
**HYB Hyderabad 41.37 275** *e*P **P** **01 46 13.7 0.0**
**HYBB Hyderabad (bro 41.37 275** *e*P **P** **01 46 12.9 -0.7**
HYBB *e*S **S** **01 52 27.2 0.0**
**BHPL Bhopal 41.78 284** *e*P **P** **01 46 15.4 -1.5**
BHPL AMB AMB 01 46 32.0
comp=Z,85nm,0.9s
**NDI New Delhi 41.94 292** *e*P **P** **01 46 17.0 -1.1**
**PALK Pallekele 41.98 259** P **P** **01 46 18.5 -0.1**
comp=Z,20nm,0.9s,baz=118,slow=6.9,SNR=7.7
PALK LR LR 02 03 14.1
comp=Z,2μm,20.1s,baz=116,slow=35
**PALK Pallekele 41.98 259** P **P** **01 46 18.5 -0.1**
PALK MLR MLR
comp=Z,3μm,18.0s
**PALK Pallekele 41.98 259** P **P** **01 46 18.5 -0.1**
PALK LR LR
comp=Z,3μm,18.0s
**H11S3 WAKE ISLAND Hy 42.03 83** T T 02 31 27.6
baz=276,slow=75,SNR=7833
**H11S1 WAKE ISLAND Hy 42.05 83** T T 02 31 29.8
baz=276,slow=75,SNR=4979
**H11S2 WAKE ISLAND Hy 42.05 83** T T 02 31 28.9
baz=276,slow=75,SNR=3776
**H11N1 WAKE ISLAND Hy 42.06 82** T T 02 31 19.5
baz=277,slow=75
**H11N2 WAKE ISLAND Hy 42.06 82** T T 02 31 19.8
baz=277,slow=75,SNR=9359
**H11N3 WAKE ISLAND Hy 42.08 82** T T 02 31 20.3
baz=277,slow=75,SNR=7713
**SMLA Simla 42.15 295** *i*P **P** **01 46 19.2 -0.6**
SMLA AMB AMB 01 46 22.1
comp=Z,152nm,0.6s
SMLA *i*x x 01 52 39.6
**MK31 Makanchi Array 42.59 319** P **P** **01 46 23.0 -0.2**
MK31 pmax pmax
comp=Z,88nm,0.9s
**MKAR Makanchi Array 42.59 319** P **P** **01 46 23.3 +0.1**
comp=Z,41nm,0.8s,baz=115,slow=9.2,SNR=121
MKAR ScP **ScP** **01 52 03.4 -1.0**
comp=Z,0.4nm,0.4s,baz=132,slow=4.3,SNR=4.8
MKAR LR LR 02 05 03.2
comp=Z,6μm,18.1s,baz=118,slow=38
**KRAR Krasnoyarsk 42.78 336** ⇑*i*P **P** **01 46 26.0 +1.4**
KRAR pmax pmax
comp=Z,31nm,0.5s
**MAKZ Makanchi 42.79 319** *e*P **P** **01 46 25.0 +0.2**
MAKZ LR LR
comp=Z,16μm,19.0s
**BHK Bhakra 42.82 296** *e*P **P** **01 46 25.0 -0.3**
**PDGK Podgornoye 43.04 314** P **P** **01 46 27.1 +0.3**
PDGK pmax pmax
comp=Z,112nm,1.3s
**YAK Yakutsk 43.06 5** *e*P **P** **01 46 25.7 -1.0**
YAK *e*PP **pP** **01 46 34.9 +0.3**
YAK *e* 01 48 04.7
YAK *e* 01 48 14.4
YAK *e*PPP PPP 01 48 39.0
YAK *e*S **S** **01 52 49.1 -1.6**
YAK *e*SS **SS** **01 56 02.7 -0.6**
YAK *e* 01 56 27.6
YAK pmax pmax
comp=Z,15nm,1.0s
YAK pmax pmax
comp=N,10.0nm,1.1s
YAK pmax pmax
comp=E,7.0nm,1.0s
YAK pmax pmax
comp=Z,280nm,4.2s
YAK pmax pmax
comp=N,24nm,1.2s
YAK pmax pmax
comp=E,110nm,2.6s
YAK smax smax
comp=N,145nm,3.4s
YAK smax smax
comp=E,85nm,3.1s
YAK MLR MLR
comp=Z,9μm,15.0s
YAK MLR MLR
comp=N,8μm,16.0s
YAK MLR MLR
comp=E,2μm,15.0s
**YAK Yakutsk 43.06 5** PFAKE 01 46 40.0 +13
YAK LR LR
comp=Z,2μm,20.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| URV | Uravakonda | 43.06 | 271 | eP | P | 01 46 26.7 | -0.7 |
| URV | | | | eS | S | 01 52 52.2 | +0.2 |
| QIS | Mount Isa | 43.09 | 156 | P | P | 01 46 26.2 | -1.2 |
| | baz=43,SNR=33 | | | | | | |
| PEA0 | Petropavlovsk- | 43.52 | 31 | eP | P | 01 46 30.1 | -0.4 |
| PETK | Petropavlovsk- | 43.52 | 31 | P | P | 01 46 33.1 | +2.5 |
| | comp=Z,15nm,0.6s,baz=224,slow=3.5,SNR=9.3 | | | | | | |
| PETK | | | | LR | LR | 02 03 50.1 | |
| | comp=Z,2µm,21.9s,baz=227,slow=35 | | | | | | |
| PET | Petropavlovsk | 43.93 | 31 | eP | P | 01 46 31.8 | -2.1 |
| PET | | | | eS | S | 01 52 57.7 | -6.1 |
| PET | | | | eSS | SS | 01 56 24.6 | +3.9 |
| PET | | | | pmax | pmax | | |
| | comp=Z,500nm,11.1s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,300nm,11.1s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,60nm,2.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| PET | Petropavlovsk | 43.93 | 31 | PFAKE | | 01 46 40.0 | +6.1 |
| PET | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| ASAR | Alice Springs | 44.17 | 164 | P | P | 01 46 34.4 | -1.8 |
| | comp=Z,5.8nm,0.8s,baz=339,slow=6.5,SNR=29 | | | | | | |
| ASAR | | | | ScP | ScP | 01 52 12.2 | +1.1 |
| | comp=Z,5.0nm,1.1s,baz=358,slow=3.8,SNR=9.1 | | | | | | |
| ASAR | | | | LR | LR | 02 07 37.4 | |
| | comp=Z,1µm,18.5s,baz=347,slow=40 | | | | | | |
| AS01 | Alice Springs | 44.18 | 164 | eP | P | 01 46 33.7 | -2.5 |
| WRKA | Warakurna | 44.43 | 172 | P | P | 01 46 36.3 | -1.8 |
| | baz=44,SNR=6.3 | | | | | | |
| KSH | Kashi | 44.48 | 307 | P | P | 01 46 41.7 | +3.0 |
| KSH | | | | epP | pP | 01 46 51.6 | +5.0 |
| KSH | | | | ePcP | PP | 01 48 24.5 | +1.9 |
| KSH | | | | PcS | PcS | 01 52 18.2 | +2.9 |
| KSH | | | | S | S | 01 53 15.3 | +2.8 |
| KSH | | | | ScS | ScS | 01 56 35.2 | -0.1 |
| KSH | | | | PMZ | | | |
| | comp=Z,66nm,1.2s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,600nm,4.4s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,8µm,13.9s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,6µm,14.6s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,7µm,15.5s | | | | | | |
| AAA | Alma-Ata | 44.78 | 313 | eP | P | 01 46 43.5 | +2.6 |
| AAA | | | | eS | S | 01 53 16.1 | -0.4 |
| AAA | | | | pmax | pmax | | |
| | comp=Z,1µm,2.8s | | | | | | |
| AAA | | | | smax | smax | | |
| | comp=E,2µm,8.5s | | | | | | |
| AAA | | | | MLR | MLR | | |
| | comp=Z,8µm,18.0s | | | | | | |
| ZAA0 | Zalesovo Array | 44.91 | 329 | P | P | 01 46 41.0 | -0.6 |
| | baz=45,SNR=7.1 | | | | | | |
| ZAA0 | Zalesovo Array | 44.91 | 329 | eP | P | 01 46 40.2 | -1.4 |
| ZALV | Zalesovo Beam | 44.91 | 329 | P | P | 01 46 40.3 | -1.4 |
| | comp=Z,27nm,0.6s,baz=119,slow=7.5,SNR=83 | | | | | | |
| ZALV | | | | ScP | ScP | 01 52 12.5 | -1.2 |
| | comp=Z,1.0nm,0.6s,baz=141,slow=7.0,SNR=3.3 | | | | | | |
| ZALV | | | | LR | LR | 02 06 46.0 | |
| | comp=Z,6µm,18.4s,baz=128,slow=38 | | | | | | |
| ULHL | Ulahol | 44.97 | 311 | P | P | 01 46 44.9 | +2.2 |
| | SNR=23 | | | | | | |
| MA2 | Magadan | 45.22 | 20 | i P | P | 01 46 46.0 | +1.9 |
| POO | Poona | 45.61 | 277 | eP | P | 01 46 46.8 | -1.1 |
| POO | | | | AMB | AMB | 01 47 02.4 | |
| | comp=Z,62nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 45.62 | 312 | eP | P | 01 46 48.9 | +1.1 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,191nm,1.9s | | | | | | |
| TKM2 | | | | MLR | MLR | | |
| | comp=Z,9µm,21.0s | | | | | | |
| TKM2 | Tokmak 2 | 45.62 | 312 | P | P | 01 46 49.9 | +2.1 |
| | SNR=14 | | | | | | |
| TKM2 | Tokmak 2 | 45.62 | 312 | eP | P | 01 46 48.9 | +1.1 |
| | comp=Z,191nm,1.9s | | | | | | |
| TKM2 | | | | LR | LR | | |
| | comp=Z,9µm,21.0s | | | | | | |
| KZA | Kyzart | 45.64 | 310 | P | P | 01 46 50.1 | +1.9 |
| | SNR=18 | | | | | | |
| CTA | Charters Tower | 45.67 | 148 | P | P | 01 46 47.5 | -0.6 |
| | comp=Z,20nm,1.1s,baz=333,slow=12,SNR=9.7 | | | | | | |
| CTAO | Charters Tower | 45.67 | 148 | eP | P | 01 46 48.3 | +0.2 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,70nm,1.3s | | | | | | |
| CTAO | | | | MLR | MLR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| CTAO | Charters Tower | 45.67 | 148 | eP | P | 01 46 48.3 | +0.2 |
| | comp=Z,70nm,1.3s | | | | | | |
| CTAO | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| MEEK | Meekatharra | 45.75 | 184 | P | P | 01 46 47.2 | -1.4 |
| | baz=46,SNR=4.1 | | | | | | |
| KBK | Karagaybulak | 46.01 | 311 | P | P | 01 46 52.2 | +1.4 |
| | SNR=15 | | | | | | |
| NVS | Novosibirsk | 46.18 | 330 | eP | P | 01 46 51.7 | 0.0 |
| NVS | | | | e | | 01 48 43.8 | |
| NVS | | | | eS | S | 01 53 34.3 | -1.9 |
| NVS | | | | pmax | pmax | | |
| | comp=Z,224nm,2.1s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=N,140nm,2.0s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,113nm,2.0s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,72nm,1.9s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=N,51nm,2.2s | | | | | | |
| NVS | | | | smax | smax | | |
| | comp=E,63nm,2.0s | | | | | | |
| NVS | | | | smax | smax | | |
| | comp=N,32nm,2.1s | | | | | | |
| GOA | Goa | 46.19 | 273 | eP | P | 01 46 50.1 | -2.2 |
| UCH | Uchtor | 46.21 | 310 | P | P | 01 46 54.3 | +1.6 |
| | SNR=52 | | | | | | |
| CHMS | Chumysh | 46.24 | 312 | P | P | 01 46 53.9 | +1.4 |
| | SNR=12 | | | | | | |
| FRU | Bishkek | 46.29 | 311⇓ | iP | P | 01 46 53.5 | +0.6 |
| FRU | | | | pmax | pmax | | |
| | comp=Z,113nm,2.0s | | | | | | |
| AAK | Ala-Archa | 46.32 | 311 | P | P | 01 46 53.9 | +0.6 |
| | comp=Z,7.3nm,0.7s,baz=115,slow=5.8,SNR=26 | | | | | | |
| AAK | Ala-Archa | 46.32 | 311 | P | P | 01 46 55.3 | +2.0 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,39nm,1.6s | | | | | | |
| AAK | Ala-Archa | 46.32 | 311 | P | P | 01 46 54.9 | +1.6 |
| | comp=Z,85nm,1.0s,SNR=8.6 | | | | | | |
| AAK | Ala-Archa | 46.32 | 311 | P | P | 01 46 56.0 | +2.7 |
| | SNR=14 | | | | | | |
| AAK | Ala-Archa | 46.32 | 311 | P | P | 01 46 55.0 | +1.6 |
| | SNR=11 | | | | | | |
| AAK | Ala-Archa | 46.32 | 311 | eP | P | 01 46 54.5 | +1.2 |
| | comp=Z,316nm,2.2s | | | | | | |
| AAK | | | | LR | LR | | |
| | comp=Z,9µm,19.0s | | | | | | |
| SFK | Sufi-Kurgan | 46.45 | 307 | P | P | 01 46 54.8 | +0.4 |
| SFK | | | | pmax | pmax | | |
| | comp=Z,54nm,0.8s | | | | | | |
| USP | Ospenovka | 46.49 | 312 | P | P | 01 46 55.5 | +1.1 |
| | SNR=7.6 | | | | | | |
| KURK | Kurchatov | 46.51 | 323 | P | P | 01 46 54.7 | +0.3 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,237nm,1.4s | | | | | | |
| KURK | Kurchatov | 46.51 | 323 | P | P | 01 46 54.3 | -0.1 |
| | SNR=46 | | | | | | |
| KURK | Kurchatov | 46.51 | 323 | P | P | 01 46 54.0 | -0.3 |
| | comp=Z,258nm,1.3s,SNR=23 | | | | | | |
| KURK | Kurchatov | 46.51 | 323 | eP | P | 01 46 53.6 | -0.7 |
| | comp=Z,344nm,1.4s | | | | | | |
| KURK | | | | LR | LR | | |
| | comp=Z,8µm,19.0s | | | | | | |
| KURBB | Kurchatov Arra | 46.52 | 323 | P | P | 01 46 54.0 | -0.5 |
| | comp=Z,55nm,0.9s,baz=122,slow=7.5,SNR=179 | | | | | | |
| AML | Almayashu | 46.77 | 310 | P | P | 01 46 59.2 | +2.1 |
| | SNR=54 | | | | | | |
| EKS2 | Erkin-Say | 46.84 | 311 | eP | P | 01 46 58.4 | +1.1 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,267nm,2.1s | | | | | | |
| EKS2 | | | | MLR | MLR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| EKS2 | Erkin-Say | 46.84 | 311 | P | P | 01 46 58.0 | +0.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | SNR=15 | | | | | | |
| EKS2 | Erkin-Say | 46.84 | 311 | eP | P | 01 46 58.4 | +1.1 |
| | comp=Z,267nm,2.1s | | | | | | |
| EKS2 | | | | LR | LR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| HNR | Honiara | 46.88 | 124 | PFAKE | | 01 47 10.0 | +12 |
| HNR | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| MNAS | Manas | 47.72 | 310 | P | P | 01 47 04.4 | +0.3 |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,63nm,1.5s | | | | | | |
| SEY | Seymchan | 48.32 | 18c | eP | P | 01 47 07.8 | -0.4 |
| BHJ | Bhuj | 48.90 | 284 | eP | P | 01 47 13.8 | +0.4 |
| KBL | Kabul | 49.24 | 299 | eP | P | 01 47 17.3 | +1.2 |
| KBL | | | | pmax | pmax | | |
| | comp=Z,156nm,1.6s | | | | | | |
| KBL | | | | MLR | MLR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| KBL | Kabul | 49.24 | 299 | eP | P | 01 47 17.3 | +1.2 |
| | comp=Z,156nm,1.6s | | | | | | |
| KBL | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| KK31 | Karatay Array | 49.28 | 311 | P | P | 01 47 16.0 | 0.0 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,89nm,1.4s | | | | | | |
| KKAR | Karatay Array | 49.28 | 311 | eP | P | 01 47 16.1 | +0.1 |
| KKAR | Karatay Array | 49.28 | 311 | eP | P | 01 47 16.1 | +0.1 |
| OTUK | Ortayu | 49.38 | 318 | P | P | 01 47 16.6 | -0.1 |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,51nm,0.8s | | | | | | |
| DZET | Dzherino | 49.82 | 305 | P | P | 01 47 20.4 | +0.1 |
| DZET | | | | pmax | pmax | | |
| | comp=Z,75nm,0.9s | | | | | | |
| FORT | Forrest | 50.07 | 173 | eP | P | 01 47 20.5 | -1.4 |
| | comp=Z,50nm,0.8s | | | | | | |
| KMBL | Kambalda | 50.33 | 180 | P | P | 01 47 23.0 | -1.0 |
| | baz=50,SNR=5.4 | | | | | | |
| QLP | Quilpie | 50.34 | 154 | P | P | 01 47 24.3 | +0.2 |
| | baz=50,SNR=6.4 | | | | | | |
| NWAO | Narrogin (SRO) | 52.10 | 185 | P | P | 01 47 36.5 | -0.7 |
| | baz=52,SNR=3.7 | | | | | | |
| BRVK | Borovoye | 52.17 | 323d | iP | P | 01 47 37.5 | -0.1 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,91nm,1.7s | | | | | | |
| BRVK | Borovoye | 52.17 | 323 | P | P | 01 47 38.4 | +0.8 |
| | comp=Z,266nm,1.1s,SNR=20 | | | | | | |
| BRVK | Borovoye | 52.17 | 323 | P | P | 01 47 38.2 | +0.6 |
| | SNR=37 | | | | | | |
| BRVK | Borovoye | 52.17 | 323 | eP | P | 01 47 37.1 | -0.5 |
| | comp=Z,121nm,1.4s | | | | | | |
| BRVK | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| EIDS | Eidsvold | 52.52 | 147 | eP | P | 01 47 41.0 | +0.6 |
| | comp=Z,56nm,1.6s | | | | | | |
| EIDS | | | | LR | LR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| BBOO | Buckleboo | 53.45 | 165 | P | P | 01 47 46.6 | -0.6 |
| | baz=54,SNR=12 | | | | | | |
| BBOO | Buckleboo | 53.45 | 165 | eP | P | 01 47 46.4 | -0.8 |
| | comp=Z,88nm,1.2s | | | | | | |
| HTT | Hallett | 54.77 | 163 | P | P | 01 47 56.7 | -0.3 |
| | baz=55,SNR=4.4 | | | | | | |
| CMSA | Cobar Meteorol | 55.31 | 156 | P | P | 01 48 00.6 | -0.2 |
| | baz=55,SNR=8.4 | | | | | | |
| BILL | Bilibino | 56.02 | 18d | iP | P | 01 48 05.9 | +0.5 |
| BILL | | | | i | | 01 48 11.4 | |
| BILL | | | | i | | 01 50 11.4 | |
| BILL | | | | i S | S | 01 55 51.9 | 0.0 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,29nm,0.9s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,5µm,18.0s | | | | | | |
| BILL | Bilibino | 56.02 | 18 | PFAKE | | 01 48 20.0 | +15 |
| BILL | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| IMYA | Miami | 56.59 | 301 | eP | P | 01 48 10.7 | +0.4 |
| ISRO | Mashad | 57.10 | 301 | eP | P | 01 48 13.9 | +0.1 |
| IMOG | Moghan | 57.21 | 301 | eP | P | 01 48 14.7 | -0.2 |
| IPAY | Payeh | 57.48 | 301 | eP | P | 01 48 17.9 | +1.2 |
| AB31 | Akbulak array | 57.59 | 317 | P | P | 01 48 16.4 | -0.5 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,66nm,1.1s | | | | | | |
| ABKAR | Akbulak array | 57.59 | 317 | eP | P | 01 48 16.2 | -0.7 |
| IAKL | Akhelmad | 57.67 | 302 | eP | P | 01 48 20.8 | +2.8 |
| IEMG | Emamgholi | 57.75 | 303 | eP | P | 01 48 19.0 | +0.4 |
| IKRD | Kardeh | 57.87 | 302 | eP | P | 01 48 14.8 | -4.6 |
| ABKT | Ailbek | 58.17 | 303 | P | P | 01 48 22.8 | +1.6 |
| | comp=Z,214nm,1.3s,SNR=6.6 | | | | | | |
| GEYT | Alibeck | 58.17 | 303 | P | P | 01 48 21.4 | +0.2 |
| | comp=Z,12nm,0.9s,baz=106,slow=3.2,SNR=14 | | | | | | |
| GEYT | | | | LR | LR | 02 15 52.6 | |
| | comp=Z,2µm,20.0s,baz=80,slow=39 | | | | | | |
| ISFR | Sfrayin | 58.27 | 302 | eP | P | 01 48 22.4 | +0.1 |
| SVE | Sverdlovsk | 58.58 | 326 | eP | P | 01 48 22.9 | -0.8 |
| SVE | | | | e | | 01 50 33.1 | |
| SVE | | | | eS | S | 01 56 21.1 | -4.9 |
| SVE | | | | eSS | SS | 02 00 15.0 | -3.6 |
| SVE | | | | e | | 02 02 46.3 | |
| SVE | | | | pmax | pmax | | |
| | comp=Z,134nm,1.5s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=Z,4µm,14.0s | | | | | | |
| WBK | Wadi Bani Khal | 58.75 | 285 | P | P | 01 48 26.0 | +0.5 |
| | SNR=9.2 | | | | | | |
| ATKA | Atka Island | 58.89 | 40 | PFAKE | | 01 48 40.0 | +14 |
| ATKA | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| AKTO | Aktyubinsk | 58.98 | 318 | P | P | 01 48 26.9 | +0.3 |
| | comp=Z,10nm,0.7s,baz=97,slow=9.7,SNR=21 | | | | | | |
| SMDO | Samad | 59.51 | 286 | P | P | 01 48 34.1 | +3.2 |
| | SNR=9.6 | | | | | | |
| JMDO | Jabal Madar | 59.58 | 285 | P | P | 01 48 31.1 | -0.2 |
| | SNR=9.9 | | | | | | |
| ARU | Arti | 59.62 | 325c | iP | P | 01 48 30.1 | -0.8 |
| ARU | | | | | | 01 49 16.5 | |
| ARU | | | | | | 01 50 44.4 | |
| ARU | | | | S | S | 01 56 41.5 | +2.1 |
| ARU | | | | SS | SS | 02 00 38.9 | +4.0 |
| ARU | | | | SSS | SSS | 02 03 12.5 | |
| ARU | | | | pmax | pmax | | |
| | comp=Z,61nm,1.7s | | | | | | |
| ARU | Arti | 59.62 | 325 | P | P | 01 48 30.8 | -0.1 |
| | comp=Z,290nm,1.4s,SNR=14 | | | | | | |
| ARU | Arti | 59.62 | 325 | eP | P | 01 48 30.1 | -0.8 |
| | comp=Z,43nm,0.9s | | | | | | |
| ARU | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| DZM | Mont Dzumac | 59.66 | 131 | eP | P | 01 48 34.6 | +2.8 |
| | comp=Z,125nm,1.5s | | | | | | |
| DZM | | | | eS | S | 01 56 46.7 | +5.6 |
| | comp=Z,2µm,26.6s | | | | | | |
| DZM | | | | eLQ | LQ | 02 03 55.4 | |
| | comp=Z,4µm,28.4s | | | | | | |
| DZM | | | | eLR | LR | 02 06 28.2 | |
| | comp=Z,5µm,29.3s | | | | | | |
| DZM | Mont Dzumac | 59.66 | 131 | PFAKE | | 01 48 40.0 | +8.2 |
| DZM | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| CNB | Canberra Magne | 60.09 | 154 | P | P | 01 48 34.5 | +0.1 |
| | baz=60,SNR=5.8 | | | | | | |
| IBAF | Bafgh | 60.60 | 296 | eP | P | 01 48 38.0 | -0.3 |
| TOO | Toolangi | 60.64 | 159 | P | P | 01 48 38.0 | -0.1 |
| | baz=61,SNR=4.5 | | | | | | |
| BANOM | Banah | 60.65 | 289 | ⇓P | P | 01 48 44.9 | +6.3 |
| UOSS | Wadi Hilu | 60.88 | 288 | PFAKE | | 01 48 50.0 | +10 |
| UOSS | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| HATD | Hatta, Dubai | 60.96 | 288 | ⇑P | P | 01 48 46.4 | +5.8 |
| SOKR | Solikamsk | 61.16 | 328d | iP | P | 01 48 42.0 | +0.7 |
| SOKR | | | | S | S | 01 56 58.3 | -0.7 |
| SOKR | | | | pmax | pmax | | |
| | comp=Z,40nm,1.5s | | | | | | |
| SOKR | | | | MLR | MLR | | |
| | comp=Z,5µm,15.0s | | | | | | |
| NAZ | Nazwa, Dubai | 61.36 | 288 | ⇓P | P | 01 48 48.7 | +5.4 |
| ICHK | Chekchek | 61.52 | 297 | ePn | P | 01 48 43.0 | -1.6 |
| IGLO | Ghaloghah | 61.64 | 302 | eP | P | 01 48 45.6 | +0.3 |
| NIKH | Nikolski High | 62.22 | 40 | PFAKE | | 01 49 00.0 | +11 |
| NIKH | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| GAMB | Gambell | 62.38 | 27 | PFAKE | | 01 49 00.0 | +11 |
| GAMB | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| IALA | Alasht | 62.49 | 301 | eP | P | 01 48 51.7 | +0.5 |
| IPRN | Peran | 62.86 | 301 | ePn | P | 01 48 53.0 | -0.4 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IDMV | Damavand | 63.16 | 301 | eP | P | 01 48 54.5 | -1.2 |
| RBK | Rabkut | 64.15 | 281 | P | P | 01 49 02.0 | -0.1 |
| | SNR=17 | | | | | | |
| TNA | Tin City | 64.33 | 26 | PFAKE | | 01 49 10.0 | +7.6 |
| TNA | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| IGZV | Ghazvin | 64.55 | 302 | eP | P | 01 49 04.2 | -0.5 |
| IRAZ | Razeghan | 64.89 | 301 | eP | P | 01 49 05.8 | -1.1 |
| ABTO | Aybut | 65.02 | 281 | P | P | 01 49 07.6 | -0.2 |
| | SNR=11 | | | | | | |
| MAK | Makhachkala | 66.05 | 309 | eP | P | 01 49 10.5 | -3.5 |
| MAK | | | | e | | 01 49 44.5 | |
| MAK | | | | ePPP | PPP | 01 53 10.8 | |
| MAK | | | | eS | S | 01 57 58.1 | -2.4 |
| MAK | | | | e | | 01 59 06.1 | |
| MAK | | | | eSS | SS | 02 02 15.4 | -0.5 |
| MAK | | | | pmax | pmax | | |
| | comp=Z,312nm,1.4s | | | | | | |
| MAK | | | | MLR | MLR | | |
| | comp=Z,4µm,14.0s | | | | | | |
| ISRB | Sarab | 66.42 | 304 | eP | P | 01 49 15.2 | -1.5 |
| IHRS | Heris | 66.86 | 304 | ePn | P | 01 49 18.4 | -1.1 |
| IBST | Bostanabad | 67.05 | 304 | ePn | P | 01 49 19.3 | -1.5 |
| IAZR | Azarshahr | 67.77 | 304 | eP | P | 01 49 25.2 | -0.1 |
| DGRG | David-gareji | 67.77 | 308 | P | P | 01 49 33.0 | +8.0 |
| DGRG | | | | S | SKiKP | 01 59 00.0 | -21 |
| TBLG | Delisi | 68.21 | 308 | P | P | 01 49 31.1 | +3.3 |
| TBLG | | | | S | SKiKP | 01 58 56.9 | -24 |
| GNI | Garni | 68.41 | 306 | i P | P | 01 49 30.8 | +1.6 |
| GNI | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| GNI | Garni | 68.41 | 306 | eP | P | 01 49 30.0 | +0.8 |
| | comp=Z,189nm,1.8s | | | | | | |
| GNI | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| ZEI | Tsey | 68.70 | 309 | eP | P | 01 49 29.6 | -1.5 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,121nm,0.8s | | | | | | |
| ONI | Oni | 69.06 | 309 | P | P | 01 49 34.3 | +1.2 |
| ONI | | | | S | S | 01 58 37.7 | +0.8 |
| ONI | Oni | 69.06 | 309 | P | P | 01 49 34.3 | +1.2 |
| ONI | | | | S | S | 01 58 37.6 | +0.8 |
| AKH | Akhalkalaki | 69.18 | 308 | P | P | 01 49 35.2 | +1.1 |
| AKH | | | | S | S | 01 58 42.8 | +4.2 |
| AKH | Akhalkalaki | 69.18 | 308 | P | P | 01 49 35.1 | +1.1 |
| AKH | | | | S | S | 01 58 42.7 | +4.2 |
| EAK | Akyaka | 69.19 | 307 | P | P | 01 49 26.1 | -8.0 |
| VRH | Novokhopyorsk | 69.31 | 318 | eP | P | 01 49 33.7 | -0.6 |
| VRH | | | | eS | S | 01 58 35.5 | -3.8 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.6s | | | | | | |
| VRH | | | | smax | smax | | |
| | comp=N,420nm,4.4s | | | | | | |
| VRH | | | | smax | smax | | |
| | comp=Z,210nm,3.7s | | | | | | |
| VRH | | | | smax | smax | | |
| | comp=E,120nm,1.9s | | | | | | |
| VRH | | | | MLR | MLR | | |
| | comp=Z,2µm,15.0s | | | | | | |
| VRH | | | | MLR | MLR | | |
| | comp=N,880nm,8.0s | | | | | | |
| VRH | | | | MLR | MLR | | |
| | comp=E,1µm,12.0s | | | | | | |
| KBZ | Khabaz | 69.32 | 310 | P | P | 01 49 34.5 | 0.0 |
| | comp=E,18nm,1.0s,baz=112,slow=3.6,SNR=11 | | | | | | |
| KBZ | | | | LR | LR | 02 23 04.9 | |
| | comp=E,3µm,18.1s,baz=81,slow=39 | | | | | | |
| TTA | Tatalina | 69.32 | 29 | eP | P | 01 49 35.8 | +1.4 |
| TTA | | | | pmax | pmax | | |
| | comp=Z,36nm,1.2s | | | | | | |
| TTA | Tatalina | 69.32 | 29 | eP | P | 01 49 35.8 | +1.4 |
| | comp=Z,36nm,1.2s | | | | | | |
| KIV | Kislovodsk | 69.44 | 311 | i P | P | 01 49 35.8 | +0.3 |
| KIV | | | | i | | 01 50 00.5 | |
| KIV | | | | i | | 01 52 11.9 | |
| KIV | | | | i S | S | 01 58 36.8 | -4.6 |
| KIV | | | | i SS | SS | 02 03 12.4 | +3.8 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,51nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| KIV | Kislovodsk | 69.44 | 311 | P | P | 01 49 39.5 | +4.0 |
| | SNR=8.0 | | | | | | |
| KIV | Kislovodsk | 69.44 | 311⇓ | iP | P | 01 49 36.0 | +0.6 |
| | SNR=8.5 | | | | | | |
| KIV | Kislovodsk | 69.44 | 311 | eP | P | 01 49 35.1 | -0.3 |
| | comp=Z,77nm,1.0s | | | | | | |
| KIV | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| HAKT | HAKKARI | 69.57 | 304 | P | P | 01 49 37.4 | +0.8 |
| GEVA | Gevas | 69.96 | 305 | P | P | 01 49 39.3 | +0.4 |
| EATA | Eleskirt | 70.16 | 306 | P | P | 01 49 43.1 | +2.8 |
| TMCR | Tamitsa | 70.31 | 332 | eP | P | 01 49 40.0 | -0.3 |
| TMCR | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | |
| ARTV | Artvin | 70.38 | 308 | P | P | 01 49 45.8 | +4.3 |
| DAGI | Agillar | 70.41 | 308 | P | P | 01 49 42.4 | +0.9 |
| HOMI | Horasan | 70.57 | 307 | P | P | 01 49 45.0 | +2.3 |
| EKAR | Karacoban | 70.58 | 306 | P | P | 01 49 44.0 | +1.3 |
| SIRN | S˜–rnak | 70.60 | 304 | P | P | 01 49 42.9 | +0.2 |
| RAYN | Ar Rayn | 70.73 | 289 | P | P | 01 49 43.8 | +0.1 |
| | comp=Z,212nm,1.0s,SNR=11 | | | | | | |
| RAYN | Ar Rayn | 70.73 | 289 | eP | P | 01 49 43.3 | -0.4 |
| | comp=Z,98nm,1.4s | | | | | | |
| RAYN | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| LPSR | Galich'ya Gora | 70.88 | 320 | eP | P | 01 49 43.6 | -0.4 |
| LPSR | | | | eS | S | 01 58 52.5 | -5.2 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,9.0nm,0.7s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.7s | | | | | | |
| LPSR | | | | smax | smax | | |
| | comp=E,620nm,6.3s | | | | | | |
| LPSR | | | | smax | smax | | |
| | comp=N,280nm,4.7s | | | | | | |
| LPSR | | | | smax | smax | | |
| | comp=Z,170nm,4.7s | | | | | | |
| LPSR | | | | MLR | MLR | | |
| | comp=Z,1µm,15.0s | | | | | | |
| LPSR | | | | MLR | MLR | | |
| | comp=N,1µm,12.0s | | | | | | |
| LPSR | | | | MLR | MLR | | |
| | comp=E,3µm,13.0s | | | | | | |
| VSR | Storozhevoye | 70.90 | 319 | eP | P | 01 49 43.6 | -0.5 |
| VSR | | | | eS | S | 01 58 51.6 | -6.4 |
| VSR | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.9s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.9s | | | | | | |
| VSR | | | | smax | smax | | |
| | comp=E,310nm,7.7s | | | | | | |
| VSR | | | | smax | smax | | |
| | comp=Z,230nm,4.7s | | | | | | |
| VSR | | | | smax | smax | | |
| | comp=N,170nm,3.7s | | | | | | |
| VSR | | | | MLR | MLR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| VSR | | | | MLR | MLR | | |
| | comp=N,3µm,17.0s | | | | | | |
| VSR | | | | MLR | MLR | | |
| | comp=E,2µm,25.0s | | | | | | |
| CAST | Castle Rocks | 71.07 | 28 | eP | P | 01 49 45.2 | +0.2 |
| | comp=E,44nm,1.0s | | | | | | |
| PPLA | Purkeypile | 71.07 | 29 | eP | P | 01 49 43.8 | -1.4 |
| | comp=E,117nm,1.5s | | | | | | |
| OHAK | Old Harbor | 71.09 | 35 | eP | P | 01 49 44.5 | -0.6 |
| | comp=E,49nm,0.9s | | | | | | |
| MOS | Moscow | 71.27 | 324 | eP | P | 01 49 46.5 | +0.2 |
| MOS | | | | e | | 01 50 03.8 | |
| MOS | | | | e | | 01 52 27.6 | |
| MOS | | | | eS | S | 01 59 05.4 | +3.3 |
| MOS | | | | eSS | SS | 02 03 44.0 | +8.1 |
| MOS | | | | pmax | pmax | | |
| | comp=Z,35nm,0.9s | | | | | | |
| MOS | | | | pmax | pmax | | |
| | comp=Z,300nm,2.2s | | | | | | |

MOS MLR MLR
comp=E,4µm,15.0s
MOS MLR MLR
comp=Z,4µm,15.0s
**BNGL BINGOL 71.33 306** P P 01 49 43.6 -3.6
**ECAT Cat-ERZURUM 71.35 306** P P 01 49 52.5 +5.1
**KDAK Kodiak Island 71.41 34** P **P 01 49 47.1 +0.1**
comp=Z,21nm,0.6s,baz=304,slow=7.2,SNR=9.8
**KDAK Kodiak Island 71.41 34** *i P* **P 01 49 47.7 +0.7**
**KDAK Kodiak Island 71.41 34** *eP* **P 01 49 46.9 -0.2**
comp=Z,90nm,1.2s
**BPAW Bear Paw Mtn. 71.49 28** *eP* **P 01 49 49.1 +1.5**
comp=Z,126nm,1.6s
BPAW LR LR
comp=Z,2µm,20.0s
**COLD Coldfoot 71.50 24** *eP* **P 01 49 49.4 +1.9**
comp=Z,39nm,1.4s
COLD LR LR
comp=Z,800nm,22.0s
**MLY Manley 71.50 27** *eP* **P 01 49 47.6 0.0**
comp=Z,38nm,1.0s
**SOC Sochi 71.62 311** *eP* **P 01 49 47.6 -1.1**
SOC *e* 01 52 24.9
SOC *e*PPP PPP 01 54 11.7
SOC *e*S **S 01 59 07.6 +1.0**
SOC pmax pmax
comp=Z,47nm,1.0s
SOC MLR MLR
comp=Z,3µm,16.0s
**SUA Susitna One 71.90 30** *eP* **P 01 49 50.3 +0.2**
comp=Z,703nm,2.6s
**MARD Mardin 71.91 304** P **P 01 49 50.9 +0.2**
**OBN Obninsk 71.95 323** *i P* **P 01 49 48.0 -2.3**
OBN *i* 01 50 05.4
OBN *i* 01 52 30.6
OBN *e*S **S 01 59 06.2 -3.7**
OBN *i* SS **SS 02 03 48.9 +2.6**
OBN pmax pmax
comp=Z,53nm,1.7s
OBN MLR MLR
comp=Z,4µm,16.0s
**OBN Obninsk 71.95 323** *eP* **P 01 49 49.0 -1.3**
comp=Z,65nm,1.3s
OBN LR LR
comp=Z,4µm,18.0s
**MCK McKinley 72.44 28** *eP* **P 01 49 51.3 -1.9**
MCK pmax pmax
comp=Z,100nm,1.4s
**MCK McKinley 72.44 28** *eP* **P 01 49 51.3 -1.9**
comp=Z,100nm,1.4s
**RND Reindeer 72.52 28** *eP* **P 01 49 51.2 -2.6**
RND pmax pmax
comp=Z,41nm,0.9s
RND MLR MLR
comp=Z,2µm,18.0s
**RND Reindeer 72.52 28** *eP* **P 01 49 51.2 -2.6**
comp=Z,40nm,0.9s
RND LR LR
comp=Z,2µm,18.0s
**MDM Murphy Dome 72.57 26** PFAKE 01 50 00.0 +6.0
MDM LR LR
comp=Z,2µm,21.0s
**PMR Palmer 72.65 30** *eP* **P 01 49 53.5 -0.9**
PMR pmax pmax
comp=Z,562nm,2.7s
PMR MLR MLR
comp=Z,2µm,21.0s
**PMR Palmer 72.65 30** *eP* **P 01 49 53.5 -0.9**
comp=Z,562nm,2.7s
PMR LR LR
comp=Z,2µm,21.0s
**WRH Wood River Hil 72.70 27** *eP* **P 01 49 53.8 -0.9**
comp=Z,149nm,2.1s
**COLA College 72.74 27** *i*P **P 01 49 56.0 +1.1**
COLA pmax pmax
comp=Z,44nm,1.9s
**CCB Clear Creek Bu 72.80 27** *eP* **P 01 49 56.0 +0.7**
comp=Z,36nm,1.4s
**ANN Anapa 73.03 312** *eP* **P 01 49 58.0 +1.0**
ANN *e*S **S 01 59 22.7 0.0**
ANN pmax pmax
comp=Z,60nm,0.9s
ANN MLR MLR
comp=N,2µm,16.0s
ANN MLR MLR
comp=Z,2µm,16.0s
ANN MLR MLR
comp=E,2µm,16.0s
**ELZG Elazig 73.08 305** P **P 01 49 59.0 +1.4**
**IL1 Eielson Array 73.17 27** *eP* **P 01 49 58.1 +0.7**
**ILAR Eielson Array 73.17 27** P **P 01 49 56.2 -1.2**
comp=E,1.5nm,0.5s,baz=267,slow=4.7,SNR=23
ILAR LR LR 02 22 54.9
comp=E,1µm,20.4s,baz=308,slow=36
**HDA Harding Lake 73.20 27** PFAKE 01 50 10.0 +12
HDA LR LR
comp=Z,2µm,21.0s
**SCM Sheep Creek Mo 73.46 30** *eP* **P 01 49 59.3 -0.1**
SCM pmax pmax
comp=Z,64nm,0.8s
**SCM Sheep Creek Mo 73.46 30** *eP* **P 01 49 59.3 -0.1**
comp=Z,64nm,0.8s
**FYU Fort Yukon 73.54 25** *eP* **P 01 49 59.1 -0.5**
comp=Z,62nm,1.3s
**KEV Kevo 73.88 339** PFAKE 01 50 10.0 +8.5
KEV LR LR
comp=Z,2µm,21.0s
**AKCD Akcadag 73.94 305** P **P 01 50 04.1 +1.4**
**DAMY Dhamar 74.01 280** *eP* **P 01 50 01.9 -1.8**
comp=Z,696nm,2.9s
DAMY LR LR
comp=Z,1µm,19.0s
**CUKAN kangal_SIVAS 74.07 307** P P 01 49 55.4 -8.2
**PAX Paxson 74.10 28** *eP* **P 01 50 02.7 -0.4**
PAX pmax pmax
comp=Z,60nm,1.4s
**PAX Paxson 74.10 28** *eP* **P 01 50 02.7 -0.4**
comp=Z,60nm,1.4s
**KLU Klutina 74.18 30** *eP* **P 01 50 02.7 -0.9**
comp=Z,470nm,2.8s
**DIV Divide 74.32 30** *eP* **P 01 50 04.3 -0.1**
comp=Z,81nm,1.2s
**CUGUR Gurin_S~VAS 74.35 306** P **P 01 50 06.4 +1.3**
**ARA0 ARCESS Array S 74.44 339** *eP* **P 01 50 03.1 -1.8**
**ARCES ARCESS Array B 74.44 339** P **P 01 50 04.9 +0.1**
comp=Z,6.8nm,0.8s,baz=69,slow=8.4,SNR=20
ARCES LR LR 02 26 23.2
comp=Z,2µm,18.8s,baz=78,slow=39
**SPB1 Spitsbergen Ar 74.47 348** *eP* **P 01 50 03.6 -1.3**
**SPB2 Spitsbergen Ar 74.47 348** *eP* **P 01 50 03.6 -1.3**
**SPB5 Spitsbergen Ar 74.47 348** *eP* **P 01 50 04.6 -0.3**
**SPA2 Spitsbergen Ar 74.47 348** *eP* **P 01 50 04.7 -0.3**
**SPITS Spitsbergen Ar 74.47 348** P **P 01 50 04.4 -0.5**
comp=Z,2.4nm,0.5s,baz=76,slow=7.0,SNR=8.6
**SPB3 Spitsbergen Ar 74.48 348** *eP* **P 01 50 04.7 -0.3**
**SPB4 Spitsbergen Ar 74.48 348** *eP* **P 01 50 03.6 -1.4**
**MRIV Mauritius Mete 74.56 242** *eP* **P 01 50 05.9 -0.5**
**DOT Dot Lake 74.59 28** *eP* **P 01 50 02.9 -2.9**
comp=Z,51nm,0.9s
**CUALT Altinyayla-SIV 74.62 307** P **P 01 50 04.6 -2.1**
**KUZU Kuzuini 74.92 304** P **P 01 50 05.6 -2.7**
**CUSAR Sarkisla-SIVAS 74.98 307** P P 01 50 05.1 -3.7
**AYKD Aykdinkavak 74.99 305** P **P 01 50 07.4 -1.3**
**HAVZ Havza 75.01 309** P P 01 50 12.2 +3.5
**PINB Pinarbasi 75.02 306** P **P 01 50 06.0 -3.1**
**KBS Kingsbay 75.02 349** PFAKE 01 50 20.0 +12
KBS LR LR
comp=Z,4µm,19.0s
**ANDN Andirin 75.31 305** P P 01 50 03.7 -6.9
**SIM Simferopol'** **75.32 313** *eP* **P 01 50 11.2 +0.8**
SIM *e*S **S 01 59 45.0 -3.4**
SIM pmax pmax
comp=Z,35nm,0.9s
**EGAK Eagle 75.57 26** *eP* **P 01 50 11.5 +0.1**
comp=Z,472nm,3.0s
EGAK LR LR
comp=Z,2µm,19.0s
**HIZ Hauiti 75.75 140** *eP* **P 01 50 13.0 +0.1**
comp=Z,213nm,1.5s
HIZ LR LR
comp=Z,1µm,20.0s
**CTKT Corum 75.80 308** P **P 01 50 13.0 -0.5**
**YAYL Yayladag 75.85 303** P **P 01 50 11.3 -2.5**
**FINES FINESS Array B 76.16 331** P **P 01 50 13.3 -1.5**
comp=Z,12nm,0.8s,baz=63,slow=4.8,SNR=45
FINES LR LR 02 27 38.6
comp=Z,4µm,18.8s,baz=76,slow=39
**DAWY Dawson 76.50 27** *eP* **P 01 50 15.9 -0.9**
comp=Z,30nm,1.0s
DAWY LR LR
comp=Z,2µm,18.0s
**VSU Vasula 76.60 327** *ceP* **P 01 50 16.9 -0.5**
VSU pmax pmax
comp=Z,92nm,1.3s
**BR131 Keskin Array S 76.86 308** P P 01 50 26.3 +6.8
baz=77,SNR=3.1
**BRTR Keskin Array B 76.86 308** P **P 01 50 19.3 -0.2**
comp=Z,7.8nm,1.1s,baz=111,slow=6.8,SNR=12
BRTR LR LR 02 29 32.8
comp=Z,1µm,19.9s,baz=64,slow=40
**BRTR Keskin Array B 76.86 308** *i* P P 01 50 22.8 +3.3
BRTR pmax pmax
comp=Z,8.0nm,1.1s
**MICGM Minsk 77.00 323** *eP* **P 01 50 19.0 -0.7**
**RPZ Rata Peaks 77.01 146** *eP* **P 01 50 18.9 -1.0**
comp=Z,67nm,1.3s
**MNK Minsk 77.03 323** *eP* **P 01 50 19.0 -0.9**
MNK *e* 01 53 20.0
MNK *e*S **S 02 00 10.0 +3.2**
MNK *e*PS PnS 02 01 08.0 +21
MNK MLR MLR
comp=Z,6µm,16.0s
MNK MLR MLR
comp=E,5µm,16.0s
**BKZ Black Stump Fm 77.16 140** *eP* **P 01 50 20.1 -0.8**
comp=E,248nm,2.5s
**AKASG Malin Array Be 77.17 319** P **P 01 50 19.5 -1.3**
comp=E,5.2nm,0.7s,baz=64,slow=5.5,SNR=16
AKASG LR LR 02 27 46.1
comp=E,3µm,18.6s,baz=65,slow=38
**AKASG Malin Array Be 77.17 319** *i* P **P 01 50 19.3 -1.5**
AKASG pmax pmax
comp=Z,5.0nm,0.7s
**KIEV Kiev 77.18 319**⇑ *i*P **P 01 50 19.8 -1.0**
KIEV pmax pmax
comp=Z,8.0nm,0.9s
**KIEV Kiev 77.18 319** *eP* **P 01 50 18.8 -2.0**
comp=Z,258nm,2.6s
KIEV LR LR
comp=Z,2µm,19.0s
**AK11 Malin Array Si 77.21 319** *eP* P 01 50 17.7 -3.3
**IDID Didziasalis 77.42 324** *eP* **P 01 50 21.3 -0.8**
IDID IAmb IAmb 01 50 36.9
comp=Z,19nm,1.0s
**INK Inuvik 77.43 22** P **P 01 50 21.1 -0.8**
comp=Z,9.0nm,0.8s,baz=302,slow=7.2,SNR=13
**INK Inuvik 77.43 22** *eP* **P 01 50 20.6 -1.3**
INK pmax pmax
comp=Z,55nm,1.4s
INK MLR MLR
comp=Z,2µm,18.0s
**INK Inuvik 77.43 22** *eP* **P 01 50 20.6 -1.3**
comp=Z,55nm,1.4s
INK LR LR
comp=Z,2µm,18.0s
**ANTO Ankara 77.46 308**⇓ P **P 01 50 24.7 +1.9**
**ANTO Ankara 77.46 308**⇓ *i*P **P 01 50 24.7 +1.9**
**ANTO Ankara 77.46 308** *eP* **P 01 50 19.9 -2.9**
comp=Z,65nm,1.4s
ANTO LR LR
comp=Z,1µm,21.0s
**BR231 Keskin MP Arra 77.48 308** *eP* P 01 50 19.2 -3.7
**NACGM Naroch 77.51 324** *eP* **P 01 50 21.0 -1.6**
**IZAR Zarasai 77.57 325** *eP* **P 01 50 22.2 -0.8**
IZAR IAmb IAmb 01 50 38.0
comp=Z,15nm,1.1s
**ISAL Salakas 77.69 325** *eP* **P 01 50 22.7 -0.9**
ISAL IAmb IAmb 01 50 43.2
comp=Z,7.3nm,0.8s
**IIGN Ignalina 77.70 324** *eP* **P 01 50 22.8 -0.9**
IIGN IAmb IAmb 01 50 41.4
comp=Z,10.0nm,0.8s
**MQZ McQueen's Vall 77.86 145** PFAKE 01 50 40.0 +15
MQZ LR LR
comp=Z,2µm,22.0s
**BFZ Birch Farm 77.95 141** *eP* **P 01 50 24.3 -0.8**
comp=Z,282nm,1.9s
**ERMK Ermenek 78.20 305** P **P 01 50 27.9 +0.8**
**CSS Prodhromos 78.31 303** *eP* **P 01 50 27.4 -0.1**
comp=Z,21nm,0.9s
CSS LR LR
comp=Z,400nm,21.0s
**EIL Elat 78.39 297** P **P 01 50 29.8 +1.8**
baz=78,SNR=3.7
**KIS Kishinev 78.40 316** *eP* **P 01 50 30.0 +2.3**
**KIS Kishinev 78.40 316** *ePS* **PnS 02 01 12.0 +6.9**
KIS LRM MLR 02 28 16.0
comp=Z,3µm,21.0s
**KIS Kishinev 78.40 316** *eP* **P 01 50 30.0 +2.3**
KIS *e* 01 50 39.0
KIS *e*S **S 02 00 20.0 -1.9**
KIS *e*PS **PnS 02 01 12.0 +6.9**
KIS MLR MLR
comp=Z,3µm,21.0s
KIS MLR MLR
comp=Z,3µm,19.0s
**GAZI Gazipasa 78.77 304** P **P 01 50 29.1 -0.9**
**BOLV Bolvadin 79.14 307** P **P 01 50 31.0 -1.2**
**BORA Eskisehir 79.19 308** P P 01 50 24.1 -8.3
**CFR Carcaliu 79.36 314**⇓ P **P 01 50 33.6 +0.6**
**CFR Carcaliu 79.36 314**⇓ *i*P **P 01 50 33.6 +0.6**
**TIRR Tirgusor 79.38 313** PFAKE 01 50 40.0 +6.9
TIRR LR LR
comp=Z,2µm,21.0s
**TLB Topalu 79.59 314**⇑ P **P** 01 50 30.1 -4.2
**TLB Topalu 79.59 314**⇑ *i*P **P** 01 50 30.1 -4.2
**SUW Suwalki 79.78 324** *eP* **P 01 50 33.7 -1.4**
**SUW Suwalki 79.78 324** *eP* **P 01 50 33.7 -1.4**
**MSAB Monastry St. A 79.89 313**⇓ *i*P **P 01 50 35.8 -0.1**
**TESR Tescani 79.97 316**⇓ *i*P **P 01 50 36.1 -0.2**
**VRI Vrincioaia 80.11 315**⇓ P **P 01 50 36.6 -0.5**
**VRI Vrincioaia 80.11 315**⇓ *i*P **P 01 50 36.6 -0.5**
**PLOR Plostina 80.16 315**⇓ P **P 01 50 38.2 +0.8**
**PLOR Plostina 80.16 315**⇓ *i*P **P 01 50 38.2 +0.8**
**BURAR Bucovina Array 80.57 317**⇑ P **P 01 50 38.8 -0.9**
**BURAR Bucovina Array 80.57 317**⇑ *i*P **P 01 50 38.8 -0.9**
**BUR04 Bucovina Ar. S 80.57 317** *eP* **P 01 50 38.2 -1.5**
**LVV L'vov 80.62 319** *eP* **P 01 50 38.9 -0.8**
LVV *e* 01 53 42.3
LVV *e*S **S 02 00 46.3 +1.0**
LVV *e* 02 01 27.3
**JOSR Joseni 80.65 316**⇓ *i*P **P 01 50 40.6 +0.5**
**DEMI Demirci 80.72 308** P **P 01 50 37.9 -2.7**
**MLR Muntele Rosu 80.74 315**⇑ P **P 01 50 39.8 -0.9**
**MLR Muntele Rosu 80.74 315**⇑ *i*P **P 01 50 39.8 -0.9**
**SULR 80.78 314**⇑ *i*P **P 01 50 41.1 +0.4**
**DOPR Dopca 80.97 315**⇓ *i*P **P 01 50 40.7 -1.0**
**FURI Furi 81.02 276** *eP* **P 01 50 42.7 -0.3**
comp=Z,144nm,1.6s
FURI LR LR
comp=Z,1µm,20.0s
**VOIR 81.36 315**⇓ P **P 01 50 42.5 -1.4**
**VOIR 81.36 315**⇓ *i*P **P 01 50 42.5 -1.4**
**KWP Kalwaria Pacla 81.49 320** *eP* **P 01 50 44.1 -0.3**
**KWP Kalwaria Pacla 81.49 320** *eP* **P 01 50 44.2 -0.2**
**HUMR Humele 81.70 314**⇓ *i*P **P 01 50 44.1 -1.5**
**AYDN Tasoluk 81.77 307** P P 01 50 50.5 +4.3
**CJR Cluj-Napoca 81.90 317**⇓ P **P 01 50 48.0 +1.3**
**CJR Cluj-Napoca 81.90 317**⇓ *i*P **P 01 50 48.0 +1.3**
**KOLS Kolonicke sedl 82.00 319** *eP* **P 01 50 44.7 -2.4**
**KOLS Kolonicke sedl 82.00 319** *eP* **P 01 50 44.7 -2.4**
**UZH Uzhgorod 82.09 319** *eP* **P 01 50 47.0 -0.5**
UZH *e* 01 50 53.4
UZH *e* 01 53 55.6
UZH *e*S **S 02 00 55.8 -4.8**
UZH *e*PS **PnS 02 01 44.6 -6.5**
**TRPA Tarpa 82.10 318**⇓ *i*P **P 01 50 47.3 -0.3**
**LOT Lotru 82.21 315**⇓ P **P 01 50 48.5 +0.1**
**DRGR 82.45 317**⇓ P **P 01 50 49.8 +0.2**
**DRGR 82.45 317**⇓ *i*P **P 01 50 49.8 +0.2**
**STHS Stebnicka Huta 82.46 320** *eP* **P 01 50 51.8 +2.3**
**STHS Stebnicka Huta 82.46 320** *eP* **P 01 50 51.8 +2.3**
**PLD Plovdiv 82.67 312** *eP* **P 01 50 51.5 +0.7**
**DLBC Dease Lake 82.71 30** P **P 01 50 51.3 +0.6**
comp=Z,8.5nm,1.1s,baz=301,slow=5.1,SNR=6.3
**DLBC Dease Lake 82.71 30** *eP* **P 01 50 50.7 0.0**
comp=Z,153nm,2.1s
**ABPO Ambohimpanom 82.77 247** *eP* **P 01 50 50.8 -1.0**
ABPO pmax pmax
comp=Z,185nm,1.1s
ABPO MLR MLR
comp=Z,7µm,18.0s
**ABPO Ambohimpanom 82.77 247** *eP* **P 01 50 50.8 -1.0**
comp=Z,185nm,1.1s
ABPO LR LR
comp=Z,7µm,18.0s
**GZR Gura Zlata 82.89 316**⇓ P **P 01 50 51.8 -0.1**
**GZR Gura Zlata 82.89 316**⇓ *i*P **P 01 50 51.8 -0.1**
**PGB Panagyurishte 82.90 312** *eP* **P 01 50 50.3 -1.7**
**MPEP Malo Peshtene 82.93 313** *eP* **P 01 50 52.0 -0.1**
**NB2 NORSAR Subarra 83.00 333** P **P 01 50 50.2 -1.9**
comp=Z,144nm,2.5s,baz=54,slow=5.6
**NB2 NORSAR Subarra 83.00 333** P **P 01 50 50.2 -1.9**
baz=54,slow=5.6
**NOA NORSAR Array B 83.00 333** P **P 01 50 50.4 -1.7**
comp=Z,4.2nm,0.6s,baz=62,slow=5.0,SNR=12
NOA LR LR 02 31 27.2
comp=Z,9µm,18.7s,baz=60,slow=38
**NIE Niedzica 83.03 320** *eP* **P 01 50 52.6 +0.1**
**NIE Niedzica 83.03 320** *eP* **P 01 50 52.6 +0.1**
**OJC Ojcow 83.04 321** *eP* **P 01 50 52.0 -0.5**
**OJC Ojcow 83.04 321** *eP* **P 01 50 51.0 -1.6**
OJC pmax pmax
comp=Z,248nm,2.2s
**OJC Ojcow 83.04 321** *eP* **P 01 50 51.0 -1.6**
comp=Z,248nm,2.2s
**NBO02 NORSAR Array S 83.15 333** *eP* **P 01 50 52.3 -0.6**
**RES Resolute Bay 83.35 9** P **P 01 50 53.9 +0.2**
comp=Z,12nm,0.8s,baz=333,slow=10,SNR=3.2
**RES Resolute Bay 83.35 9** P **P 01 50 53.9 +0.2**
RES MLR MLR
comp=Z,2µm,19.0s
**RES Resolute Bay 83.35 9** P **P 01 50 53.9 +0.2**
RES LR LR
comp=Z,2µm,19.0s
**NVR Nevrokopi 83.52 311** P **P 01 50 53.5 -1.7**
**VTS Vitosha 83.55 313** *eP* **P 01 50 55.3 -0.2**
**PSZ Piszkesteto 83.84 319**⇑ P **P 01 50 55.9 -0.9**
**PSZ Piszkesteto 83.84 319**⇑ *i*P **P 01 50 55.9 -0.9**
**PSZ Piszkesteto 83.84 319** *eP* **P 01 50 55.8 -1.0**
comp=Z,202nm,2.5s
PSZ LR LR
comp=Z,3µm,21.0s
**BSD Bornholm Skovb 83.84 327** *i* P P 01 51 07.4 +11
comp=Z,71nm,1.1s
comp=Z,7µm,16.0s
**SANT Santorini 84.01 306** PFAKE 01 51 10.0 +12
SANT LR LR
comp=Z,1µm,20.0s
**PAIG Paliouri 84.14 310** P **P 01 50 58.9 +0.6**
**OKC Ostrava-Krasne 84.17 321** *eP* **P 01 50 57.5 -0.8**
OKC *e* 01 51 10.7
OKC *e* 02 01 24.6
OKC *e* 02 02 07.4
OKC MLR MLR
comp=Z,2µm,17.2s
**OKC Ostrava-Krasne 84.17 321** *eP* **P 01 50 57.5 -0.8**
OKC *ex* x 01 51 10.7
OKC *e*SKS **S 02 01 24.6 +2.9**
OKC *ex* x 02 02 07.4
OKC AMS AMS 02 32 30.0
comp=Z,2µm,17.2s
**KNT Kendrikon 84.27 312** P **P 01 51 00.3 +1.3**
**VYHS Vyhne 84.28 319** *eP* **P 01 50 58.0 -0.9**
VYHS pmax pmax
comp=Z,48nm,2.3s
**VYHS Vyhne 84.28 319** *eP* **P 01 50 58.0 -0.9**
**HORT Hortiatis 84.32 311** P **P 01 51 01.0 +1.6**
**KONO Kongsberg 84.37 332** PFAKE 01 51 10.0 +11
KONO LR LR
comp=Z,6µm,19.0s
**THE Thessaloniki 84.40 311** P **P 01 51 01.4 +1.7**
**VAY Valandovo 84.44 312** *eP* **P 01 50 58.9 -0.9**
**VAY Valandovo 84.44 312** P **P 01 50 59.2 -0.7**
**EREA Eretria 84.47 309** P P 01 51 11.4 +11
**MORC Moravsky Berou 84.56 321**⇑ P **P 01 50 59.0 -1.3**
**MORC Moravsky Berou 84.56 321**⇑ *i*P **P 01 50 59.0 -1.3**
**MORC Moravsky Berou 84.56 321** *eP* **P 01 50 59.2 -1.1**
comp=Z,834nm,2.5s
MORC LR LR
comp=Z,9µm,20.0s
**GRG Griva 84.69 311** P **P 01 51 00.5 -0.7**
**IDI Anoyia 84.81 305** PFAKE 01 51 10.0 +8.1
IDI LR LR
comp=Z,900nm,21.0s
**KSP Ksiaz 84.86 322** *eP* **P 01 51 01.0 -0.7**
**KSP Ksiaz 84.86 322** *eP* **P 01 51 01.1 -0.7**
**RGN Rugen 84.92 326** PFAKE 01 51 10.0 +8.1
RGN LR LR
comp=Z,5µm,19.0s
**SKO Skopje 85.00 313** *i* P **P 01 51 04.0 +1.3**
**SKO Skopje 85.00 313** P **P 01 51 02.9 +0.2**
**DPC Dobruska-Polom 85.05 322** *eP* **P 01 51 02.8 0.0**
DPC *e* 01 51 15.2
DPC *e* 02 01 21.5
DPC MLR MLR
comp=Z,5µm,17.4s
**DPC Dobruska-Polom 85.05 322** *eP* **P 01 51 02.8 0.0**
DPC *ex* x 01 51 15.2
DPC *e*SKS **SKSac 02 01 21.5 -4.3**
DPC AMS AMS 02 32 30.0
comp=Z,5µm,17.4s
**LKR Lokris 85.07 309** P P 01 50 58.3 -4.8
**UPC Upice 85.16 322** *eP* **P 01 51 03.2 -0.1**
UPC *e* 02 01 25.5
UPC MLR MLR
comp=Z,5µm,17.9s
**UPC Upice 85.16 322** *eP* **P 01 51 03.2 -0.1**
UPC *e*SKS **SKSac 02 01 25.5 -1.0**
UPC *ex* x 02 02 16.3
UPC AMS AMS 02 32 30.0
comp=Z,5µm,17.9s
**DIVS Divibare 85.20 315**⇑ *i*P **P 01 51 02.1 -1.7**
**DIVS Divibare 85.20 315** P **P 01 51 03.9 +0.1**
**VAM Vamos 85.30 306** P P 01 50 59.5 -4.8
**VRAC Vranov 85.31 321**⇓ P **P 01 51 04.3 +0.2**
**VRAC Vranov 85.31 321**⇓ *i*P **P 01 51 04.3 +0.2**
**LTK Loutraki 85.32 309** P P 01 51 00.6 -3.8
**KZN Kozani 85.37 311** P **P 01 51 02.7 -2.0**
**AGG Agios Georgios 85.43 310** *eP* P 01 51 00.8 -4.1
AGG pmax pmax
comp=Z,35nm,1.1s
AGG MLR MLR
comp=Z,1µm,19.0s
**AGG Agios Georgios 85.43 310** *eP* P 01 51 00.8 -4.1
comp=Z,35nm,1.1s
AGG LR LR
comp=Z,1µm,19.0s
**FNA Florina 85.48 312** P **P 01 51 03.2 -2.0**
**KMBO Kilima Mbogo 85.58 267** LR LR 02 26 57.4
comp=Z,1µm,21.3s,slow=34
**KMBO Kilima Mbogo 85.58 267** *eP* **P 01 51 06.7 +0.4**
KMBO pmax pmax
comp=Z,52nm,1.4s
KMBO MLR MLR
comp=Z,1µm,21.0s
**KMBO Kilima Mbogo 85.58 267** *eP* **P 01 51 06.7 +0.4**
comp=Z,52nm,1.4s
KMBO LR LR
comp=Z,1µm,21.0s
**MAKR Makrakomi, Fth 85.58 310** P P 01 50 56.3 -9.4
**RUE Ruedersdorf 85.58 324** PFAKE 01 51 20.0 +15
RUE LR LR
comp=Z,4µm,20.0s
**CASY Casey 85.72 185** *eP* **P 01 51 05.6 +0.1**
comp=Z,83nm,1.4s
**OHR Ohrid 85.76 312** *eP* **P 01 51 08.4 +1.9**
**KALE Kalithea 85.80 309** P **P 01 51 05.0 -1.8**
**VLI Veliai 85.80 307** P **P 01 51 04.6 -2.2**
**PHP Peshkopia 85.80 313** P **P 01 51 07.1 +0.4**
**NEST Nestorio 85.84 311** P P 01 51 11.1 +4.1
**EVR Evrytania 85.85 310** P **P 01 51 07.4 +0.3**
**SERG Sergoula 85.85 309** P **P 01 51 07.4 +0.4**
**KLV Kalavryta, Ach 85.91 309** P **P 01 51 07.9 +0.5**
**KBN Korca 85.95 312** P **P 01 51 08.7 +1.2**
**LAKA Lakka 85.97 309** P **P 01 51 07.8 +0.2**
**TREC Trest 85.98 321** AMS AMS 02 33 00.0
comp=Z,4µm,15.8s
**VLX Vlachokerasia 85.98 308** P P 01 51 03.4 -4.4
**PVCC Panska Ves 85.99 322** *eP* **P 01 51 08.3 +0.9**
PVCC *e* 01 51 25.7
PVCC MLR MLR
comp=Z,3µm,17.8s
**PVCC Panska Ves 85.99 322** *eP* **P 01 51 08.3 +0.9**

PVCC ex x 01 51 25.7
PVCC AMS AMS 02 33 20.0
comp=Z,3µm,17.8s
**MUD Monsted U'grnd 86.12 329** *i* P **P 01 51 06.7 -1.2**
MUD pmax pmax
comp=Z,49nm,1.2s
MUD MLR MLR
comp=Z,8µm,18.0s
**MUD Monsted U'grnd 86.12 329** *i* P **P 01 51 06.7 -1.2**
comp=Z,49nm,1.2s
comp=Z,8µm,18.0s
**GOPC GO Pecny, Ondr 86.13 322** *e*P **P 01 51 08.0 -0.1**
GOPC *e* 01 51 22.2
GOPC *e* 02 01 31.7
GOPC MLR MLR
comp=Z,4µm,16.8s
**GOPC GO Pecny, Ondr 86.13 322** *e*P **P 01 51 08.0 -0.1**
GOPC *ex* x 01 51 22.2
GOPC *ex* x 01 51 43.5
GOPC *e*SKS **SKSac 02 01 31.7 -0.9**
GOPC *ex* x 02 02 20.7
GOPC AMS AMS 02 33 30.0
comp=Z,4µm,16.8s
**PRU Pruhonice 86.24 322** *e*P **P 01 51 09.3 +0.7**
PRU *e* 01 51 22.6
PRU *e* 02 01 30.8
PRU MLR MLR
comp=Z,4µm,18.2s
**PRU Pruhonice 86.24 322** *e*P **P 01 51 09.3 +0.7**
PRU *ex* x 01 51 22.6
PRU *e*SKS **SKSac 02 01 30.8 -2.4**
PRU *ex* x 02 02 22.5
PRU AMS AMS 02 33 30.0
comp=Z,4µm,18.2s
**PRA Prague 86.27 322** *e*P **P 01 51 09.3 +0.5**
PRA MLR MLR
comp=Z,4µm,18.4s
**PRA Prague 86.27 322** *e*P **P 01 51 09.3 +0.5**
PRA *ex* x 02 02 26.1
PRA AMS AMS 02 33 30.0
comp=Z,4µm,18.4s
**JAN Janina 86.27 311** P **P 01 51 09.0 -0.1**
**DRO Drossia 86.27 309** P **P 01 51 10.8 +1.7**
**CONA Conrad Observa 86.33 320**⇑ *e*PcP **P 01 51 09.9 +0.7**
comp=Z,29nm,1.5s
**TIR Tirane 86.33 313** *e*P **P 01 51 09.6 +0.3**
TIR pmax pmax
comp=Z,92nm,1.3s
TIR MLR MLR
comp=Z,2µm,21.0s
**TIR Tirane 86.33 313** P **P 01 51 06.6 -2.7**
**TIR Tirane 86.33 313** *e*P **P 01 51 09.6 +0.3**
comp=Z,92nm,1.3s
TIR LR LR
comp=Z,2µm,21.0s
**PDG Podgorica 86.33 314** P **P 01 51 09.4 +0.1**
**ITM Ithomi 86.39 308** P P 01 51 04.5 -5.2
**RLS Riolos of Patr 86.41 309** P **P 01 51 06.6 -3.1**
**PDO Prodromos 86.42 310** P **P 01 51 08.8 -1.0**
**CLL Collm 86.54 324**⇑ *i*P **P 01 51 10.8 +0.7**
CLL *e* 01 51 24.0
CLL *e* 01 54 35.0
CLL *e*S **S 02 01 41.0 -4.0**
CLL pmax pmax
comp=Z,52nm,1.9s
CLL pmax pmax
comp=Z,38nm,1.9s
CLL MLR MLR
comp=Z,6µm,18.1s
**CLL Collm 86.54 324** *e*P **P 01 51 10.8 +0.7**
comp=Z,52nm,1.9s,baz=62,slow=5.4
**CLL Collm 86.54 324**⇑ *i*P **P 01 51 10.8 +0.7**
comp=Z,52nm,1.9s
CLL *e* 01 51 24.0
CLL *e* 01 54 21.0
CLL *e*PP **PP 01 54 35.0 +3.5**
comp=Z,38nm,1.9s
CLL *e*S **S 02 01 41.0 -4.0**
CLL *e* 02 02 28.0
CLL *e*PPS PPS 02 03 18.0
CLL *e* 02 03 30.0
CLL *e*SS **SS 02 07 32.0 +7.1**
CLL *e*SSS SSS 02 10 54.0
CLL *e* 02 12 12.0
CLL LmV 02 33 00.0
comp=Z,6µm,18.1s
**CLL Collm 86.54 324** *e*P **P 01 51 09.3 -0.7**
comp=Z,25nm,1.1s
CLL LR LR
comp=Z,7µm,18.0s
**PYL PYLOS 86.63 308** P **P 01 51 08.5 -2.4**
**IGT Igoumenitsa 86.68 311** P P 01 51 07.6 -3.5
**DRV Dumont d'Urvil 86.70 173** S **S 02 01 45.0 -0.5**
DRV L L 02 15 00.0
DRV R 02 19 00.0
**SGD Sagiada 86.72 311** P **P 01 51 10.2 -1.0**
**SRN Sarande 86.79 311** P **P 01 51 10.2 -1.3**
**KEK Kerkira 87.00 311** P **P 01 51 11.2 -1.4**
**VLS Valsamata 87.01 309** P **P 01 51 10.8 -1.9**
**YKA Yellowknife Ar 87.13 23** P **P 01 51 11.3 -1.4**
comp=Z,12nm,0.7s,baz=307,slow=4.7,SNR=31
**KHC Kasperske Hory 87.18 321** *e*P **P 01 51 11.9 -1.4**
KHC *e* 01 51 28.6
KHC *e* 02 01 42.4
KHC MLR MLR
comp=Z,4µm,17.9s
**KHC Kasperske Hory 87.18 321** *e*P **P 01 51 11.9 -1.4**
KHC *ex* x 01 51 28.6
KHC *ex* x 01 52 20.1
KHC *e*SKS **SKSac 02 01 42.4 +3.2**
KHC *ex* x 02 02 27.0
KHC AMS AMS 02 33 50.0
comp=Z,4µm,17.9s
**KHC Kasperske Hory 87.18 321** *e*P **P 01 51 11.2 -2.2**
comp=Z,10nm,1.6s
KHC LR LR
comp=Z,1µm,20.0s
**GEC2 GERESS Array S 87.23 321** *e*P **P 01 51 12.4 -1.2**
**GEC2 GERESS Array S 87.23 321** *e*P **P 01 51 13.4 -0.3**
comp=Z,35nm,2.3s,baz=62,slow=5.4
**GEC2 GERESS Array S 87.23 321** *e*P **P 01 51 12.3 -1.3**
**GERES GERESS Array B 87.23 321** P **P 01 51 12.4 -1.2**
comp=Z,1.9nm,0.6s,baz=63,slow=4.9,SNR=21
GERES LR LR 02 33 15.8
comp=Z,2µm,18.6s,baz=63,slow=38
**TANN Tannenbergstha 87.25 323** *e*P **P 01 51 16.2 +2.5**
comp=Z,142nm,3.1s,baz=62,slow=5.4
**MOA Molln 87.33 320**⇑ PcP **P 01 51 13.6 -0.4**
comp=Z,14nm,1.2s
**SOKA Soboth 87.37 319**⇑ *e*PcP **P 01 51 13.2 -1.1**
comp=Z,16nm,1.4s
**SUMG Summit 87.47 354** *i* P **P 01 51 14.5 -0.2**
SUMG pmax pmax
comp=Z,27nm,1.2s
**SUMG Summit 87.47 354** *i* P **P 01 51 14.5 -0.2**
comp=Z,27nm,1.2s
**SUMG Summit 87.47 354** *e*P **P 01 51 13.6 -1.1**
comp=Z,407nm,2.9s
**NRDL Niedersach Rie 87.57 325** *e*P **P 01 51 18.1 +3.1**
comp=Z,86nm,2.0s,baz=62,slow=5.4
**BOJS Bojanci 87.73 318** *i* P **P 01 51 16.2 +0.2**
**VISS Visnje 87.86 318** *i* P **P 01 51 16.6 -0.1**
**RJOB Jochberg 88.27 320** *e*P **P 01 51 18.1 -0.5**
comp=Z,68nm,3.0s,baz=62,slow=5.4
**GRFO Grafenberg 88.29 323** PFAKE 01 51 30.0 +11
GRFO LR LR
comp=Z,3µm,19.0s
**JAVS Javornik 88.31 318** *e*P **P 01 51 17.9 -1.0**
**TRI Trieste 88.58 318** PFAKE 01 51 30.0 +10
TRI LR LR
comp=Z,2µm,20.0s
**ABTA Abfaltersbach 88.89 320**⇑ *e*PcP **P 01 51 21.1 -0.5**
comp=Z,13nm,1.1s
**WTTA Wattenberg 89.18 320**⇓ *e*P **P 01 51 21.2 -1.9**
comp=Z,6.5nm,1.0s
**TIP Timpagrande 89.37 311** *e*P **P 01 51 21.2 -2.8**
comp=Z,66nm,2.1s
TIP LR LR
comp=Z,1µm,21.0s
**MOTA Moosalm 89.47 321**⇓ *e*PcP **P 01 51 23.2 -1.2**
comp=Z,2.4nm,0.8s
**CUC Castrocucco 89.69 313** PFAKE 01 51 40.0 +15
CUC LR LR
comp=Z,900nm,20.0s
**STU Stuttgart 89.90 322** PFAKE 01 51 40.0 +14
STU LR LR
comp=Z,4µm,18.0s
**BFO Black Forest 90.62 322** PFAKE 01 51 40.0 +10
BFO LR LR
comp=Z,4µm,19.0s
**MEM Membach 90.74 325** P **P 01 51 29.6 -0.4**
**MEM Membach 90.74 325** PFAKE 01 51 40.0 +10
MEM LR LR
comp=Z,3µm,18.0s
**TUE Stuetta 90.94 320** *e*P **P 01 51 29.7 -1.7**
comp=Z,34nm,1.4s
TUE LR LR
comp=Z,2µm,19.0s
**WLF Walferdange 91.16 324** P **P 01 51 31.2 -0.8**
comp=Z,21nm,1.7s
**WLF Walferdange 91.16 324** *e*P **P 01 51 31.3 -0.7**
WLF pmax pmax
comp=Z,35nm,1.1s
WLF MLR MLR
comp=Z,3µm,18.0s
**WLF Walferdange 91.16 324** *e*P **P 01 51 31.3 -0.7**
comp=Z,35nm,1.1s
WLF LR LR
comp=Z,3µm,18.0s
**BCLA Clavier 91.22 325** P **P 01 51 30.9 -1.4**
**ECH Echery 91.35 323** PFAKE 01 51 40.0 +7.0
ECH LR LR
comp=Z,5µm,18.0s
**VLC Villacollemand 91.42 318** PFAKE 01 51 40.0 +6.6
VLC LR LR
comp=Z,2µm,20.0s
**DOU Dourbes 91.77 325** P **P 01 51 33.3 -1.5**
**EDI Edinburgh 92.11 333** PFAKE 01 51 50.0 +14
EDI LR LR
comp=Z,4µm,20.0s
**WDD Wield Dalam 92.38 309** PFAKE 01 51 50.0 +12
WDD LR LR
comp=Z,800nm,21.0s
**ESK Eskdalemuir 92.51 332** PFAKE 01 51 50.0 +12
ESK LR LR
comp=Z,8µm,19.0s
**B08A Colville Reser 93.23 36** *e*P **P 01 51 41.9 +0.3**
comp=Z,93nm,2.5s
**CWF Charnwood Fore 93.25 329** PFAKE 01 51 50.0 +8.4
CWF LR LR
comp=Z,3µm,20.0s
**BNI Bardonecchia 93.27 320** *e*pP **pP 01 51 50.6 +0.1**
BNI LR LR
comp=Z,5µm,18.0s
**I03D Drain, OR 93.34 41** P **P 01 51 42.0 -0.1**
baz=93
**I04A Tendick Farm, 93.87 41** P **P 01 51 44.9 +0.2**
baz=94
**PPT Papeete 94.06 107** LR LR 02 28 39.0
comp=Z,327nm,19.8s,baz=281,slow=32
**PPT2 Papeete2 94.06 107** *e*S **S 02 02 50.8 -4.8**
comp=Z,288nm,26.0s
**PPT2 Papeete2 94.06 107** *e*LR LR 02 22 07.9
comp=Z,560nm,23.0s
**D08A Wollman Farm, 94.18 37** *e*P **P 01 51 45.2 -0.8**
comp=Z,50nm,2.0s
**G06A Carlson Farm, 94.19 39** *e*P **P 01 51 47.0 +0.8**
comp=Z,64nm,1.9s
**VSL Villasalto 94.34 314** PFAKE 01 52 00.0 +13
VSL LR LR
comp=Z,700nm,20.0s
**SSB Saint Sauveur 94.43 321** PFAKE 01 52 00.0 +13
SSB LR LR
comp=Z,3µm,18.0s
**NEW Newport 94.50 35** P **P 01 51 48.5 +1.0**
comp=Z,0.8nm,0.5s,baz=225,slow=2.9,SNR=3.5
**NEW Newport 94.50 35** *e*P **P 01 51 46.1 -1.4**
NEW pmax pmax
comp=Z,65nm,2.6s
**NEW Newport 94.50 35** P **P 01 51 46.8 -0.7**
baz=94
**NEW Newport 94.50 35** *e*P **P 01 51 46.1 -1.4**
comp=Z,65nm,2.6s
**YBH Yreka Blue Hor 94.74 43** P **P 01 51 51.1 +2.2**
comp=Z,0.8nm,0.4s,baz=343,slow=2.6,SNR=3.3
**J05D Fort Rock, OR 94.86 41** P **P 01 51 48.6 -0.8**
baz=95
**DSB Dublin 95.27 332** PFAKE 01 52 00.0 +9.2
DSB LR LR
comp=Z,4µm,19.0s
**M04C Macdoel 95.27 42** P **P 01 51 51.2 -0.1**
baz=95
**K05A Summer Lake 95.37 41** *e*pP pP 01 52 00.1 -0.3
**I07A Izee 95.49 40** *e*P **P 01 51 50.9 -1.4**
comp=Z,15nm,0.7s
**WALA Wiserton Lakes 95.73 33** *e*P **P 01 51 50.6 -2.6**
comp=Z,19nm,1.3s
**TBI Tubuai 95.99 113** *e*LQ LQ 02 18 37.0
comp=Z,1µm,33.0s
TBI *e*LR LR 02 23 10.4
comp=Z,838nm,26.0s
**KEST Kesra 96.18 311** LR LR 02 42 30.9
comp=Z,824nm,19.1s,baz=356,slow=40
**MOD Modoc 96.18 42** *e*P **P 01 51 55.0 -0.5**
comp=Z,9.5nm,1.0s
**J08A Circle Bar Ran 96.51 40** *e*P **P 01 51 56.5 -0.4**
comp=Z,109nm,2.6s
**MAW Mawson 96.78 199** P **P 01 51 55.9 -1.2**
comp=Z,2.8nm,0.8s,baz=66,slow=5.3,SNR=8.9
MAW LR LR 02 32 13.0
comp=Z,466nm,20.2s,baz=57,slow=33
**MAW Mawson 96.78 199** *e*P **P 01 51 56.4 -0.7**
MAW pmax pmax
comp=Z,1.0nm,1.0s
MAW MLR MLR
comp=Z,100nm,20.0s
**MAW Mawson 96.78 199** P **P 01 51 56.2 -0.9**
baz=97,SNR=5.2
**MAW Mawson 96.78 199** *e*P **P 01 51 56.4 -0.7**
comp=Z,1.4nm,1.0s
MAW LR LR
comp=Z,100nm,20.0s
**EGMT Eagleton 98.51 32** PFAKE 01 52 20.0 +14
EGMT LR LR
comp=Z,900nm,19.0s
**LSZ Lusaka 98.59 257** *e*P **P 01 52 04.1 -2.6**
LSZ pmax pmax
comp=Z,6.0nm,0.9s
LSZ MLR MLR
comp=Z,2µm,19.0s
**LSZ Lusaka 98.59 257** *e*P **P 01 52 04.1 -2.6**
comp=Z,5.7nm,0.9s
LSZ LR LR
comp=Z,2µm,19.0s
**HLID Hailey 98.80 38** PFAKE 01 52 20.0 +13
HLID LR LR
comp=Z,2µm,18.0s
**BOZ Bozeman (W) 99.07 35** PFAKE 01 52 20.0 +12
BOZ LR LR
comp=Z,1µm,19.0s
**VNDA Vanda 99.31 172** P **Pdif 01 52 12.2 +3.8**
comp=Z,3.5nm,1.2s,baz=316,slow=9.0,SNR=6.4
VNDA LR LR 02 36 33.3
comp=Z,554nm,21.2s,baz=338,slow=35
**VNDA Vanda 99.31 172** *e*P **Pdif 01 52 07.6 -0.8**
VNDA pmax pmax
comp=Z,6.0nm,1.1s
**VNDA Vanda 99.31 172** *e*P **Pdif 01 52 07.6 -0.8**
comp=Z,5.9nm,1.1s
**NV01 Mina Array Sit 99.36 44** *e*P **Pdif 01 52 07.8 -2.1**
**NVAR Mina Array Bea 99.36 44** P **Pdif 01 52 10.9 +1.0**
comp=Z,0.3nm,0.5s,baz=289,slow=2.6,SNR=6.2
NVAR LR LR 02 34 50.0
comp=Z,397nm,18.6s,baz=305,slow=34
**LKWY Lake 100.43 35** PFAKE 01 52 30.0 +15
LKWY LR LR
comp=Z,2µm,18.0s
**H17A Grant Village 100.45 35** PFAKE 01 52 30.0 +15
H17A LR LR
comp=Z,1µm,18.0s
**ISA Isabella 100.76 46** PFAKE 01 52 30.0 +14
ISA LR LR
comp=Z,1µm,20.0s
**DGMT Dagmar 100.90 29** PFAKE 01 52 30.0 +14
DGMT LR LR
comp=Z,1µm,21.0s
**LAO LASA Array 101.19 32** PFAKE 01 52 30.0 +12
LAO LR LR
comp=Z,1µm,20.0s
**AHID Auburn Hatcher 101.20 37** PFAKE 01 52 30.0 +12
AHID LR LR
comp=Z,1µm,19.0s
**TPNV Topopah Spring 101.54 44** PFAKE 01 52 30.0 +10
TPNV LR LR
comp=Z,1µm,22.0s
**TCUT Toone Canyon 102.06 38** PFAKE 01 52 30.0 +8.0
TCUT LR LR
comp=Z,1µm,20.0s
**GSC Goldstone 102.10 46** PFAKE 01 52 30.0 +8.0
GSC LR LR
comp=Z,900nm,19.0s
**ULM Lac du Bonnet 103.08 24** PFAKE 01 52 40.0 +14
ULM LR LR
comp=Z,1µm,20.0s
**PFO Pinyon Flat Ob 103.28 47** PFAKE 01 52 40.0 +13
PFO LR LR
comp=Z,2µm,19.0s
**LDFC Landfair 103.37 45** PFAKE 01 52 40.0 +12
LDFC LR LR
comp=Z,1µm,20.0s
**MDND Maddock 103.43 27** PFAKE 01 52 40.0 +12
MDND LR LR
comp=Z,1µm,18.0s
**P17A Butcher Ranch, 103.49 39** PFAKE 01 52 40.0 +12
P17A LR LR
comp=Z,900nm,18.0s
**P18A Preston Nutter 103.69 39** PFAKE 01 52 40.0 +11
P18A LR LR
comp=Z,900nm,20.0s
**SRU San Rafael 103.85 40** PFAKE 01 52 40.0 +10
SRU LR LR
comp=Z,600nm,20.0s
**RSSD Black Hills 104.09 32** PFAKE 01 52 40.0 +9.1
RSSD LR LR
comp=Z,900nm,20.0s
**AGMN Agassiz Nation 104.64 25** PFAKE 01 52 40.0 +7.1
AGMN LR LR
comp=Z,1µm,19.0s
**TAM Tamanrasset 105.36 301** PFAKE 01 57 00.0
TAM LR LR
comp=Z,700nm,18.0s
**ISCO Idaho Springs 106.26 36** PFAKE 01 57 00.0
ISCO LR LR
comp=Z,800nm,19.0s
**MVCO Mesa Verde 106.29 40** PFAKE 01 57 00.0
MVCO LR LR
comp=Z,800nm,20.0s
**EYMN Ely 106.61 23** PFAKE 01 57 00.0
EYMN LR LR
comp=Z,2µm,19.0s
**W18A Petrified Fore 106.86 42** PFAKE 01 57 00.0
W18A LR LR
comp=Z,1µm,22.0s
**OGNE Ogallala 107.39 34** PFAKE 01 57 00.0
OGNE LR LR
comp=Z,1µm,21.0s
**SDCO Great Sand Dun 107.72 38** PFAKE 01 57 10.0
SDCO LR LR
comp=Z,1µm,21.0s
**TUC Tucson 107.91 45** PFAKE 01 57 10.0
TUC LR LR
comp=Z,1µm,20.0s
**ECSD EROS Data Cent 107.94 29** PFAKE 01 57 10.0
ECSD LR LR
comp=Z,1µm,19.0s
**RTC Rabat Centre 108.18 317** PFAKE 01 57 10.0
RTC LR LR
comp=Z,5µm,20.0s
**SPMN St. Paul 108.37 25** PFAKE 01 57 10.0
SPMN LR LR
comp=Z,1µm,20.0s
**KSCO Kaye Shedlock' 108.46 35** PFAKE 01 57 10.0
KSCO LR LR
comp=Z,900nm,21.0s
**RKT Rikitea 108.75 109** *e*LR LR 02 29 02.7
comp=Z,682nm,25.2s
**T25A Trinidad 108.77 38** PFAKE 01 57 10.0
T25A LR LR
comp=Z,900nm,20.0s
**ANMO Albuquerque 109.02 41** *e*PKiKP **PKiKP 01 56 54.3 -3.1**
ANMO LR LR
comp=Z,2µm,22.0s
**QSPA South Pole Qui 109.07 180** PFAKE 01 57 10.0
QSPA LR LR
comp=Z,800nm,18.0s
**CBKS Cedar Bluff 110.16 34** PFAKE 01 57 10.0
CBKS LR LR
comp=Z,1µm,20.0s
**SCIA State Center 110.90 28** PFAKE 01 57 10.0
SCIA LR LR
comp=Z,1µm,19.0s
**JFWS Jewell Farm 111.31 25** PFAKE 01 57 10.0
JFWS LR LR
comp=Z,1µm,22.0s
**KSU1 Kansas State U 111.53 32** PFAKE 01 57 10.0
KSU1 LR LR
comp=Z,1µm,20.0s
**MSTX Muleshoe 111.92 39** PFAKE 01 57 10.0
MSTX LR LR
comp=Z,1µm,20.0s
**AMTX Amarillo 111.92 38** PFAKE 01 57 10.0
AMTX LR LR
comp=Z,900nm,21.0s
**U34A Anderson Ranch 113.09 34** PFAKE 01 57 20.0
U34A LR LR
comp=Z,1µm,18.0s
**TOA0 Torodi Ar. Sit 113.13 294** *e*PKiKP **PKiKP 01 57 04.7 -0.6**
**TORD Torodi Ar. Bea 113.13 294** PKiKP **PKiKP 01 57 03.8 -1.6**
comp=Z,0.7nm,0.6s,baz=16,slow=2.4,SNR=6.8
TORD PKKPab **PKKPab 02 08 03.6 +3.8**
comp=Z,0.9nm,0.9s,baz=260,slow=3.5,SNR=4.7
**SADO Sadowa 113.38 16** PFAKE 01 57 20.0
SADO LR LR
comp=Z,2µm,22.0s
**V34A Guthrie 113.55 34** PFAKE 01 57 20.0
V34A LR LR
comp=Z,1µm,18.0s
**HDIL Hopedale 113.68 26** PFAKE 01 57 20.0
HDIL LR LR
comp=Z,1µm,22.0s
**W34A Bridge Creek, 113.86 35** PFAKE 01 57 20.0
W34A LR LR
comp=Z,1µm,19.0s
**AAM Ann Arbor 114.27 21** PFAKE 01 57 20.0 +13
AAM LR LR
comp=Z,1µm,22.0s
**TUL1 Tulsa 114.40 33** PFAKE 01 57 20.0 +13
TUL1 LR LR
comp=Z,1µm,20.0s
**TX31 Lajitas Ar. Si 114.51 44** *e*PKiKP **PKiKP 01 57 06.0 -1.8**
**TXAR Lajitas Array 114.51 44** PKP PKPdf 01 57 07.3 -0.5
comp=Z,1.0nm,0.7s,baz=236,slow=0.6,SNR=10
TXAR PKKPab **PKKPbc 02 07 49.9 +3.2**
comp=Z,1.0nm,1.0s,baz=137,slow=7.0,SNR=6.0
**LONY Lake Ozonia 114.62 13** PFAKE 01 57 20.0 +13
LONY LR LR
comp=Z,1µm,19.0s
**ABTX Abilene, Hawle 114.72 38** PFAKE 01 57 20.0 +12
ABTX LR LR
comp=Z,1µm,21.0s
**429A Davenport Ranc 114.77 41** P PKPdf 01 57 07.1 -1.2
baz=114
**SLM Saint Louis 114.88 28** PFAKE 01 57 20.0 +12
SLM LR LR
comp=Z,1µm,20.0s
**X35A Drake 114.92 35** P PKPdf 01 57 07.5 -0.8
baz=115
**V38A Canehill 115.15 32** P **PKPdf 01 57 07.0 -1.7**
baz=115
**530A J-C Ranch, Com 115.44 41** P **PKPdf 01 57 07.9 -1.6**
baz=115
**332A Millersview 115.55 39** P **PKPdf 01 57 08.4 -1.3**
baz=115
**ERPA Erie 115.59 18** PFAKE 01 57 20.0 +11
ERPA LR LR
comp=Z,1µm,19.0s
**H06E1 SOCORRO T-PHAS 115.62 57** T T 04 03 18.0
SNR=15
**OLIL Olney 115.71 26** PFAKE 01 57 20.0 +10
OLIL LR LR
comp=Z,1µm,22.0s
**EMMW East Machias 115.74 8** PFAKE 01 57 20.0 +10
EMMW LR LR
comp=Z,7µm,20.0s
**BLO Bloomington 115.97 25** PFAKE 01 57 20.0 +10
BLO LR LR
comp=Z,1µm,20.0s
**ACCN Adirondack Com 115.99 13** PFAKE 01 57 20.0 +10

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| ACCN | | | | LR | LR | | |
| | comp=Z,500nm,19.0s | | | | | | |
| SIUC | Southern Illin | 116.09 | 27 | PFAKE | | 01 57 20.0 | +10 |
| SIUC | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| JCT | Junction City | 116.16 | 40 | ePKIKP | PKPdf | 01 57 09.4 | -1.5 |
| JCT | | | | MLR | MLR | | |
| | comp=Z,900nm,18.0s | | | | | | |
| JCT | Junction City | 116.16 | 40 | ePKPdf | PKPdf | 01 57 09.4 | -1.5 |
| JCT | | | | LR | LR | | |
| | comp=Z,900nm,18.0s | | | | | | |
| ACSO | Alum Creek Sta | 116.34 | 21 | PFAKE | | 01 57 20.0 | +9.1 |
| ACSO | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| 433A | Art | 116.39 | 39 | P | PKPdf | 01 57 08.6 | -2.6 |
| | baz=116 | | | | | | |
| WHTX | Lake Whitney | 116.45 | 37 | PFAKE | | 01 57 20.0 | +8.7 |
| WHTX | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| USIN | University of | 116.54 | 26 | PFAKE | | 01 57 20.0 | +8.7 |
| USIN | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| BINY | Binghamton | 116.59 | 15 | PFAKE | | 01 57 20.0 | +8.7 |
| BINY | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| MIAR | Mount Ida | 116.60 | 33 | PFAKE | | 01 57 20.0 | +8.5 |
| MIAR | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| UALR | University of | 117.04 | 32 | PFAKE | | 01 57 20.0 | +7.6 |
| UALR | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| SSPA | Standing Stone | 117.56 | 17 | PFAKE | | 01 57 20.0 | +6.8 |
| SSPA | | | | LR | LR | | |
| | comp=Z,6µm,19.0s | | | | | | |
| 832A | Faith Ranch, C | 117.59 | 42 | P | PKPdf | 01 57 12.5 | -1.1 |
| | baz=117 | | | | | | |
| MCWV | Mont Chateau | 117.89 | 19 | PFAKE | | 01 57 20.0 | +6.1 |
| MCWV | | | | LR | LR | | |
| | comp=Z,700nm,19.0s | | | | | | |
| MET | Memphis--Engin | 117.92 | 30 | PFAKE | | 01 57 20.0 | +6.0 |
| MET | | | | LR | LR | | |
| | comp=Z,800nm,21.0s | | | | | | |
| ODNJ | Ogdensburg | 117.98 | 14 | PFAKE | | 01 57 20.0 | +6.0 |
| ODNJ | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| WVT | Waverly | 118.03 | 27 | ePKIKP | PKPdf | 01 57 12.4 | -1.8 |
| WVT | | | | MLR | MLR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| WVT | Waverly | 118.03 | 27 | ePKPdf | PKPdf | 01 57 12.4 | -1.8 |
| WVT | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| YLE | Yale | 118.13 | 13 | PFAKE | | 01 57 30.0 | +16 |
| YLE | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| PAL | Palisades | 118.21 | 14 | PFAKE | | 01 57 30.0 | +16 |
| PAL | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| LUPA | Lehigh Univers | 118.25 | 15 | PFAKE | | 01 57 30.0 | +15 |
| LUPA | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| 933A | Laredo | 118.50 | 42 | P | PKPdf | 01 57 14.4 | -1.0 |
| | baz=118 | | | | | | |
| MVL | Millersville | 118.57 | 16 | PFAKE | | 01 57 30.0 | +15 |
| MVL | | | | LR | LR | | |
| | comp=Z,600nm,22.0s | | | | | | |
| OXF | Oxford | 118.66 | 30 | PFAKE | | 01 57 30.0 | +15 |
| OXF | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| SNAA | Sanae | 118.85 | 197 | P | PKPdf | 01 57 12.9 | -1.8 |
| SNAA | Sanae | 118.85 | 197 | ePKIKP | PKPdf | 01 57 12.9 | -1.8 |
| SNAA | | | | MLR | MLR | | |
| | comp=Z,400nm,20.0s | | | | | | |
| SNAA | Sanae | 118.85 | 197 | ePKPdf | PKPdf | 01 57 12.9 | -1.8 |
| SNAA | | | | LR | LR | | |
| | comp=Z,400nm,20.0s | | | | | | |
| HKT | Hockley | 118.89 | 38 | PFAKE | | 01 57 30.0 | +14 |
| HKT | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| BLA | Blacksburg | 119.93 | 21 | PFAKE | | 01 57 30.0 | +12 |
| BLA | | | | LR | LR | | |
| | comp=Z,800nm,19.0s | | | | | | |
| CBN | Corbin | 119.96 | 18 | PFAKE | | 01 57 30.0 | +12 |
| CBN | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| TKL | Tuckaleechee C | 120.10 | 24 | PKP | PKPdf | 01 57 16.9 | -1.3 |
| | comp=Z,4.8nm,0.8s,baz=222,slow=2.1,SNR=5.8 | | | | | | |
| VNA2 | Neumayer--Watz | 120.50 | 197 | P | PKPdf | 01 57 16.9 | -1.0 |
| | baz=59,slow=1.2 | | | | | | |
| VNA1 | Neumayer--Stat | 120.89 | 197 | P | PKPdf | 01 57 17.8 | -0.7 |
| VNA3 | Neumayer Olymp | 120.94 | 196 | P | PKPdf | 01 57 17.4 | -1.3 |
| KMSC | Kings Mountain | 121.47 | 23 | PFAKE | | 01 57 30.0 | +9.1 |
| KMSC | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| DBIC | Dimbokro | 121.83 | 291 | PKP | PKPdf | 01 57 20.3 | -1.8 |
| | comp=Z,7.7nm,1.2s,baz=341,slow=6.2,SNR=2.7 | | | | | | |
| GOGA | Godfrey | 122.19 | 25 | PFAKE | | 01 57 30.0 | +7.7 |
| GOGA | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| JSC | Jenkinsville | 122.27 | 23 | PFAKE | | 01 57 30.0 | +7.6 |
| JSC | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| BRAL | Brewton | 122.67 | 30 | PFAKE | | 01 57 30.0 | +6.7 |
| BRAL | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| NHSC | New Hope | 123.72 | 23 | PFAKE | | 01 57 40.0 | +15 |
| NHSC | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| TIGA | Tifton | 123.85 | 27 | PFAKE | | 01 57 40.0 | +14 |
| TIGA | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| TEIG | Tepich | 130.70 | 39 | PFAKE | | 01 57 50.0 | +11 |
| TEIG | | | | LR | LR | | |
| | comp=Z,800nm,19.0s | | | | | | |
| SNET | Serv Nac Est T | 134.96 | 46 | PFAKE | | 01 58 00.0 | +13 |
| SNET | | | | LR | LR | | |
| | comp=Z,700nm,21.0s | | | | | | |
| TGUH | Tegucigalpa,Un | 135.99 | 43 | PFAKE | | 01 58 00.0 | +11 |
| TGUH | | | | LR | LR | | |
| | comp=Z,600nm,18.0s | | | | | | |
| GTBY | Guantanamo Bay | 137.53 | 24 | PFAKE | | 01 58 00.0 | +8.3 |
| GTBY | | | | LR | LR | | |
| | comp=Z,700nm,21.0s | | | | | | |
| MTDJ | Mount Denham | 138.02 | 29 | PFAKE | | 01 58 00.0 | +7.2 |
| MTDJ | | | | LR | LR | | |
| | comp=Z,900nm,20.0s | | | | | | |
| LGNH | LØogne | 139.76 | 22 | PFAKE | | 01 58 10.0 | +14 |
| LGNH | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| SDDR | Presa de Saban | 139.77 | 20 | PFAKE | | 01 58 10.0 | +14 |
| SDDR | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| PAPH | Port-au-Prince | 139.86 | 22 | PFAKE | | 01 58 10.0 | +14 |
| PAPH | | | | LR | LR | | |
| | comp=Z,700nm,22.0s | | | | | | |
| CRPR | Cabo Rojo, PR | 141.86 | 14 | PFAKE | | 01 58 10.0 | +10 |
| CRPR | | | | LR | LR | | |
| | comp=Z,600nm,21.0s | | | | | | |
| SJG | San Juan | 141.97 | 13 | PFAKE | | 01 58 10.0 | +10 |
| SJG | | | | LR | LR | | |
| | comp=Z,600nm,20.0s | | | | | | |
| STVI | Saint Thomas | 141.98 | 11 | PFAKE | | 01 58 10.0 | +10 |
| STVI | | | | LR | LR | | |
| | comp=Z,500nm,19.0s | | | | | | |
| CPD | Cerro la Pandu | 142.10 | 13 | PFAKE | | 01 58 10.0 | +10 |
| CPD | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| BCIP | Isla Barro Col | 144.38 | 39 | ePKPdf | PKPab | 01 58 01.9 | -0.3 |
| BCIP | | | | LR | LR | | |
| | comp=Z,600nm,21.0s | | | | | | |
| EFI | East Falkland | 147.65 | 180 | ePKP2 | PKPbc | 01 58 11.1 | -0.2 |
| EFI | East Falkland | 147.65 | 180 | ePKPbc | PKPbc | 01 58 11.1 | -0.2 |
| SDV | Santo Domingo | 149.32 | 25 | ePKPbc | PKPbc | 01 58 15.2 | -1.8 |
| SDV | | | | LR | LR | | |
| | comp=Z,800nm,19.0s | | | | | | |
| ROSC | El Rosal | 151.05 | 36 | PKPbc | PKPbc | 01 58 20.9 | -0.6 |
| | comp=Z,25nm,0.9s,baz=288,slow=3.2,SNR=9.9 | | | | | | |
| ROSC | El Rosal | 151.05 | 36 | ePKPbc | PKPbc | 01 58 19.7 | -1.7 |
| OTAV | Otavalo | 151.98 | 49 | ePKPdf | PKPdf | 01 58 15.7 | -1.5 |
| OTAV | | | | ePKPbc | PKPbc | 01 58 21.8 | -1.9 |
| OTAV | | | | LR | LR | | |
| | comp=Z,600nm,20.0s | | | | | | |
| RCBR | Riachuelo | 154.83 | 299 | PFAKE | | 01 58 30.0 | +0.6 |
| RCBR | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| SAML | Samuel | 168.51 | 28 | ePKPdf | PKPdf | 01 58 34.2 | -0.5 |
| SAML | | | | ePKPab | PKPab | 01 59 43.0 | -0.9 |
| LPAZ | La Paz | 169.75 | 75 | PKP | PKPdf | 01 58 36.4 | +0.1 |
| | comp=Z,4.6nm,1.1s,baz=8.7,slow=5.5,SNR=9.8 | | | | | | |
| LPAZ | La Paz | 169.75 | 75 | ePKIKP | PKPdf | 01 58 36.8 | +0.6 |
| LPAZ | La Paz | 169.75 | 75 | ePKPdf | PKPdf | 01 58 36.8 | +0.6 |
| BDFB | Brasilia | 169.97 | 289 | PKP | PKPdf | 01 58 38.5 | +2.8 |
| | comp=Z,2.4nm,0.7s,baz=106,slow=7.4,SNR=3.5 | | | | | | |
| CPUP | Villa Florida | 172.94 | 184 | PKP | PKPdf | 01 58 38.4 | +1.7 |
| | comp=Z,5.2nm,1.2s,baz=174,slow=6.0,SNR=3.2 | | | | | | |
| CPUP | | | | PKPab | PKPab | 02 00 03.5 | +0.3 |
| | comp=Z,8.7nm,1.1s,baz=152,slow=5.6,SNR=4.2 | | | | | | |
| CPUP | Villa Florida | 172.94 | 184 | ePKIKP | PKPdf | 01 58 37.8 | +1.0 |
| CPUP | Villa Florida | 172.94 | 184 | ePKPdf | PKPdf | 01 58 37.8 | +1.0 |
| CPUP | | | | ePKPab | PKPab | 02 00 04.7 | +1.5 |

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*IDC **04** 01:48:09.2±0.8, 19°.35N×122°.49E, h0km, mb3.9/12, mb1 4.1/12, mb1mx3.9/45, mbtmp3.9/12, Error ellipse: s-maj=31.9km s-min=17.5km az=65.0*
*ISCJB **04** 01:48:13.8±0.5, 19°.28N±0°.04×122°.13E±0°.08, h44km, mb3.9/14, Error ellipse: s-maj=10.9km s-min=6.0km az=12.4*
*MAN **04** 01:48:13, 19°.40N×121°.84E, h34km, mb4.3, ML3.1, MS4.2*
*NEIC **04** 01:48:14.2±0.6, 19°.33N×122°.31E, h35km, mb4.2/2, Error ellipse: s-maj=16.0km s-min=10.6km az=76.0*
**ISC 04 01:48:15.8**±0.7, **19°.29N**±0°.05×**122°.04E**±0°.09, **h44km, n31, σ1s.55**/25, **mb3.9**/14, **1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CVP | Callao Caves | 1.59 | 187 | eP | Pn | 01 48 41.1 | -0.4 |
| APYP | Conner | 1.61 | 208 | eP | Pn | 01 48 40.5 | -1.2 |
| APYP | | | | eS | Sn | 01 48 59.1 | -2.1 |
| PIP | Pasuquin | 1.65 | 235⇑ | iP | Pn | 01 48 39.9 | -2.4 |
| PIP | | | | eS | Sn | 01 49 04.2 | +1.8 |
| ABRA | Dolores | 2.06 | 218 | eP | Pn | 01 48 41.7 | -6.2 |
| PALP | Palanan | 2.24 | 171 | eP | Pn | 01 48 51.4 | +1.0 |
| TWG | Pinlang | 3.63 | 346 | ePn | Pn | 01 49 07.4 | -2.1 |
| SSLB | Suanglung | 4.59 | 347 | Pn | Pn | 01 49 22.4 | -0.3 |
| YOJ | Yonaguni jima | 5.23 | 10 | ePn | Pn | 01 49 26.6 | -4.9 |
| QIZ | Qiongzhong | 11.53 | 271 | ePn | Pn | 01 50 57.1 | -0.8 |
| CMAR | Chiang Mai Arr | 21.87 | 272 | P | P | 01 53 08.3 | +3.3 |
| | 2.7nm,0.8s,baz=79,slow=8.6,SNR=7.0 | | | | | | |
| SONM | Songino Array | 31.19 | 339 | P | P | 01 54 30.6 | -0.2 |
| | 1.0nm,0.7s,baz=157,slow=9.4,SNR=5.2 | | | | | | |
| WRAB | Tennant Creek | 40.80 | 162 | eP | P | 01 55 51.8 | -1.3 |
| WRA | Warramunga Arr | 40.81 | 162 | P | P | 01 55 51.6 | -1.6 |
| | 0.5nm,0.4s,baz=345,slow=8.7,SNR=3.7 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.16 | 83 | T | T | 02 41 08.7 | |
| | baz=279,slow=75,SNR=15 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.17 | 83 | T | T | 02 41 05.1 | |
| | baz=279,slow=75,SNR=16 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.18 | 83 | T | T | 02 41 08.4 | |
| | baz=279,slow=75,SNR=12 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.19 | 82 | T | T | 02 41 08.6 | |
| | baz=277,slow=75,SNR=17 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.19 | 82 | T | T | 02 41 09.5 | |
| | baz=277,slow=75,SNR=12 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.20 | 82 | T | T | 02 41 08.7 | |
| | baz=277,slow=75,SNR=18 | | | | | | |
| MKAR | Makanchi Array | 42.48 | 319 | P | P | 01 56 08.1 | +1.4 |
| | 1.2nm,0.5s,baz=119,slow=8.0,SNR=13 | | | | | | |
| ASAR | Alice Springs | 44.23 | 164 | P | P | 01 56 20.2 | -0.8 |
| | 0.6nm,0.3s,baz=344,slow=7.1,SNR=7.0 | | | | | | |
| ZALV | Zalesovo Beam | 44.81 | 330 | P | P | 01 56 25.4 | +0.2 |
| | 4.1nm,0.7s,baz=111,slow=7.7,SNR=9.1 | | | | | | |
| KURK | Kurchatov | 46.40 | 323 | P | P | 01 56 38.9 | +1.0 |
| KURBB | Kurchatov Arra | 46.41 | 323 | P | P | 01 56 38.9 | +0.9 |
| | 2.4nm,0.8s,baz=119,slow=7.6,SNR=9.2 | | | | | | |
| KKAR | Karatay Array | 49.16 | 311 | eP | P | 01 57 00.7 | +1.2 |
| | 2.0nm,0.7s | | | | | | |
| BVAR | Borovoye Array | 52.00 | 323 | P | P | 01 57 21.8 | +1.1 |
| | 0.8nm,0.6s,baz=125,slow=12,SNR=3.4 | | | | | | |
| ABKAR | Akbulak array | 57.47 | 317 | eP | P | 01 58 01.0 | +0.7 |
| | 0.8nm,0.4s | | | | | | |
| ILAR | Eielson Array | 73.20 | 27 | P | P | 01 59 39.8 | -2.0 |
| | 0.2nm,0.5s,baz=280,slow=5.4,SNR=3.1 | | | | | | |
| ARCES | ARCESS Array B | 74.36 | 339 | P | P | 01 59 50.4 | +1.8 |
| | 1.7nm,0.9s,baz=81,slow=5.6,SNR=2.5 | | | | | | |
| FINES | FINESS Array B | 76.06 | 331 | P | P | 01 59 58.2 | -0.2 |
| | 1.6nm,0.8s,baz=33,slow=4.5,SNR=3.7 | | | | | | |
| YKA | Yellowknife Ar | 87.15 | 23 | P | P | 02 00 56.3 | -0.6 |
| | 1.5nm,0.7s,baz=307,slow=4.9,SNR=3.4 | | | | | | |

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*IDC **04** 01:49:57.9±0.8, 19°.38N×122°.32E, h0km, mb4.0/15, mb1 4.1/16, mb1mx4.0/43, mbtmp4.0/16, ML3.6/1, MS4.5/1, Ms1 4.5/1, ms1mx3.8/37, Error ellipse: s-maj=30.2km s-min=17.0km az=67.0*
*MAN **04** 01:50:00, 19°.41N×122°.21E, h55km, MS4.5*
*ISCJB **04** 01:50:01.3±0.4, 19°.39N±0°.03×122°.22E±0°.07, h33km, mb4.0/19, MS4.5/1, Error ellipse: s-maj=9.4km s-min=3.6km az=12.3*
*NEIC **04** 01:50:02.5±2.9, 19°.38N×122°.33E, h30km±20km, mb4.5/4, Error ellipse: s-maj=13.5km s-min=9.9km az=75.0*
**ISC 04 01:50:03.3**±0.6, **19°.36N**±0°.04×**122°.19E**±0°.08, **h35km, n37, σ1s.05**/37, **mb4.1**/19, **1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGCP | Mt. Cagua | 1.11 | 187 | eP | Pn | 01 50 21.5 | -0.9 |
| SGCP | | | | eS | Sn | 01 50 36.4 | -0.2 |
| APYP | Conner | 1.73 | 211 | eP | Pn | 01 50 29.9 | -1.1 |
| APYP | | | | eS | Sn | 01 50 52.3 | +0.5 |
| PIP | Pasuquin | 1.81 | 236⇑ | iP | Pn | 01 50 29.5 | -2.4 |
| PIP | | | | eS | Sn | 01 50 53.3 | -0.4 |
| ABRA | Dolores | 2.20 | 220 | eP | Pn | 01 50 36.2 | -1.2 |
| ABRA | | | | eS | Sn | 01 51 02.7 | -0.7 |
| PALP | Palanan | 2.29 | 174 | eP | Pn | 01 50 37.5 | -1.2 |
| TWG | Pinlang | 3.60 | 343 | ePn | Pn | 01 50 55.7 | -0.9 |
| TWG | | | | eS | Sn | 01 51 35.2 | -2.9 |
| SSLB | Suanglung | 4.56 | 346 | ePn | Pn | 01 51 10.0 | +0.2 |
| SSLB | | | | eS | Sn | 01 52 01.9 | +0.3 |
| YOJ | Yonaguni jima | 5.14 | 8 | ePn | Pn | 01 51 16.6 | -1.2 |
| YOJ | | | | eS | Sn | 01 52 15.3 | -0.5 |
| KSAR | Wonju Array Be | 18.70 | 14 | P | Pn | 01 54 18.4 | -0.8 |
| KSRS | Korea Array | 18.72 | 14 | P | P | 01 54 18.4 | -0.4 |
| | 0.2nm,0.3s,baz=198,slow=12,SNR=6.9 | | | | | | |
| CHTO | Chiang Mai | 21.98 | 272 | eP | P | 01 55 00.1 | +5.7 |
| CMAR | Chiang Mai Arr | 22.01 | 272 | P | P | 01 54 56.2 | +1.5 |
| | 0.8nm,0.3s,baz=63,slow=10,SNR=4.1 | | | | | | |
| SONM | Songino Array | 31.18 | 339 | P | P | 01 56 19.0 | -0.1 |
| | 0.5nm,0.4s,baz=146,slow=10,SNR=2.3 | | | | | | |
| WRA | Warramunga Arr | 40.83 | 162 | P | P | 01 57 41.4 | -0.4 |
| | 1.6nm,0.8s,baz=344,slow=8.9,SNR=3.9 | | | | | | |
| PALK | Pallekele | 42.00 | 259 | LR | LR | 02 13 49.0 | |
| | comp=Z,610nm,19.2s,baz=116,slow=34 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.01 | 84 | T | T | 02 42 50.8 | |
| | baz=278,slow=75,SNR=83 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.02 | 84 | T | T | 02 42 51.7 | |
| | baz=278,slow=75,SNR=77 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.03 | 84 | T | T | 02 42 52.2 | |
| | baz=278,slow=75,SNR=61 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.04 | 82 | T | T | 02 42 54.4 | |
| | baz=277,slow=74,SNR=160 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.04 | 82 | T | T | 02 42 52.8 | |
| | baz=277,slow=74,SNR=84 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.05 | 82 | T | T | 02 42 53.9 | |
| | baz=277,slow=74,SNR=116 | | | | | | |
| MKAR | Makanchi Array | 42.52 | 319 | P | P | 01 57 56.5 | +1.1 |
| | 6.0nm,0.6s,baz=116,slow=9.3,SNR=20 | | | | | | |
| MKAR | | | | PcP | PcP | 01 59 48.8 | +1.2 |
| | 0.5nm,0.6s,baz=108,slow=4.7,SNR=2.0 | | | | | | |
| ASAR | Alice Springs | 44.26 | 165 | P | P | 01 58 09.5 | -0.1 |
| | 0.3nm,0.4s,baz=355,slow=6.7,SNR=3.4 | | | | | | |
| ZALV | Zalesovo Beam | 44.83 | 329 | P | P | 01 58 14.3 | +0.5 |
| | 2.8nm,0.4s,baz=119,slow=7.9,SNR=9.7 | | | | | | |
| KURK | Kurchatov | 46.43 | 323 | eP | P | 01 58 27.8 | +1.3 |
| | 6.9nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 46.45 | 323 | P | P | 01 58 27.3 | +0.7 |
| | 4.4nm,0.6s,baz=115,slow=7.7,SNR=35 | | | | | | |
| KKAR | Karatay Array | 49.23 | 311 | eP | P | 01 58 50.0 | +1.6 |
| | 1.0nm,0.5s | | | | | | |
| BVAR | Borovoye Array | 52.03 | 323 | P | P | 01 59 09.8 | +0.5 |
| | 1.6nm,0.5s,baz=104,slow=7.8,SNR=7.7 | | | | | | |
| BRVK | Borovoye | 52.10 | 323 | eP | P | 01 59 10.2 | +0.3 |
| | 11nm,1.1s | | | | | | |
| ABKAR | Akbulak array | 57.52 | 317 | eP | P | 01 59 49.9 | +0.7 |
| | 1.4nm,0.5s | | | | | | |
| ILAR | Eielson Array | 73.07 | 27 | P | P | 02 01 29.5 | -0.1 |
| | 0.3nm,0.5s,baz=269,slow=4.4,SNR=4.1 | | | | | | |
| ARCES | ARCESS Array B | 74.35 | 339 | P | P | 02 01 36.7 | -0.3 |
| | 0.7nm,0.6s,baz=70,slow=8.8,SNR=3.5 | | | | | | |
| FINES | FINESS Array B | 76.08 | 331 | P | P | 02 01 46.5 | -0.6 |
| | 2.7nm,0.8s,baz=77,slow=4.1,SNR=7.5 | | | | | | |
| AKASG | Malin Array Be | 77.10 | 319 | P | P | 02 01 52.2 | -0.9 |
| | 0.2nm,0.3s,baz=60,slow=5.5,SNR=2.8 | | | | | | |
| NOA | NORSAR Array B | 82.92 | 333 | P | P | 02 02 22.9 | -1.4 |
| | 0.5nm,0.7s,baz=76,slow=7.7,SNR=2.5 | | | | | | |
| YKA | Yellowknife Ar | 87.04 | 23 | P | P | 02 02 45.5 | +0.5 |
| | 1.1nm,0.6s,baz=308,slow=4.5,SNR=5.3 | | | | | | |
| GERES | GERESS Array B | 87.16 | 321 | P | P | 02 02 46.5 | +0.5 |
| | 0.5nm,0.6s,baz=28,slow=6.0,SNR=3.8 | | | | | | |

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*IDC **04** 01:52:36.6±3.7, 19°.84N×122°.83E, h0km, mb3.8/4, mb1 3.8/4, mb1mx3.4/43, mbtmp3.8/4, Error ellipse: s-maj=332.6km s-min=25.1km az=65.0*
**ISC 04 01:52:44.3**±1.6, **19°.3N**±0°.2×**121°.7E**±0°.3, **h44km, n5, σ0s.88**/5, **mb3.7**/4, **1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PIP | Pasuquin | 1.40 | 226⇑ | iP | Pn | 01 53 07.2 | -0.2 |
| PIP | | | | eS | Sn | 01 53 33.4 | +8.6 |
| MKAR | Makanchi Array | 42.25 | 320 | P | P | 02 00 34.1 | +0.9 |
| | 1.2nm,0.7s,baz=119,slow=9.0,SNR=4.0 | | | | | | |
| ASAR | Alice Springs | 44.34 | 164 | P | P | 02 00 50.5 | +0.1 |
| | 0.2nm,0.2s,baz=348,slow=7.1,SNR=2.9 | | | | | | |
| ZALV | Zalesovo Beam | 44.63 | 330 | P | P | 02 00 51.4 | -0.8 |
| | 0.6nm,0.4s,baz=107,slow=4.8,SNR=3.0 | | | | | | |
| KURBB | Kurchatov Arra | 46.20 | 323 | P | P | 02 01 04.8 | +0.1 |
| | 1.6nm,0.7s,baz=121,slow=7.9,SNR=6.1 | | | | | | |

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*IDC **04** 01:54:00.9±3.0, 19°.78N×123°.42E, h0km, mb3.8/6, mb1 3.9/6, mb1mx3.6/40, mbtmp3.8/6, Error ellipse: s-maj=264.5km s-min=18.7km az=64.0*
*ISCJB **04** 01:54:05.6±0.9, 19°.27N±0°.10×122°.3E±0°.1, h33km, mb3.8/6, Error ellipse: s-maj=16.5km s-min=11.5km az=41.4*
**ISC 04 01:54:07.6**±1.3, **19°.2N**±0°.1×**122°.3E**±0°.1, **h35km, n13, σ1s.11**/8, **mb3.9**/6, **1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PIP | Pasuquin | 1.81 | 240⇑ | iP | Pn | 01 54 35.6 | -0.6 |
| PIP | | | | eS | Sn | 01 54 58.5 | +0.5 |
| WRA | Warramunga Arr | 40.70 | 162 | P | P | 02 01 43.7 | -1.3 |
| | 0.8nm,0.9s,baz=345,slow=8.9,SNR=2.2 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 41.95 | 83 | T | T | 02 45 27.5 | |
| | baz=279,slow=75,SNR=34 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 41.96 | 83 | T | T | 02 45 36.5 | |
| | baz=279,slow=75,SNR=27 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 41.97 | 83 | T | T | 02 45 41.2 | |
| | baz=279,slow=75,SNR=20 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 41.98 | 82 | T | T | 02 45 35.4 | |
| | baz=277,slow=74,SNR=42 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.98 | 82 | T | T | 02 45 32.9 | |
| | baz=277,slow=74,SNR=32 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.00 | 82 | T | T | 02 45 41.9 | |
| | baz=277,slow=74,SNR=42 | | | | | | |
| MKAR | Makanchi Array | 42.66 | 319 | P | P | 02 02 01.2 | +0.4 |
| | 3.3nm,0.9s,baz=112,slow=9.3,SNR=6.1 | | | | | | |
| ASAR | Alice Springs | 44.13 | 165 | P | P | 02 02 14.4 | +1.6 |
| | 0.3nm,0.3s,baz=349,slow=9.5,SNR=2.8 | | | | | | |
| ZALV | Zalesovo Beam | 44.96 | 329 | P | P | 02 02 18.5 | -0.7 |
| | 1.0nm,0.5s,baz=112,slow=7.8,SNR=3.0 | | | | | | |
| KURBB | Kurchatov Arra | 46.58 | 323 | P | P | 02 02 31.9 | -0.1 |
| | 1.6nm,0.7s,baz=115,slow=7.7,SNR=6.3 | | | | | | |
| BVAR | Borovoye Array | 52.17 | 323 | P | P | 02 03 15.5 | +0.9 |
| | 0.8nm,0.7s,baz=98,slow=8.9,SNR=3.3 | | | | | | |

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*ISCJB **04** 02:09:22.9±0.5, 19°.40N±0°.05×122°.19E±0°.08, h10km, mb3.8/10, MS4.4/2, Error ellipse: s-maj=11.9km s-min=6.5km az=21.8*
*IDC **04** 02:09:22.1±0.9, 19°.28N×122°.06E, h0km, mb3.9/9, mb1 4.1/10, mb1mx3.9/39, mbtmp3.9/10, ML4.2/1, MS4.3/3, Ms1 4.3/3, ms1mx3.7/46, Error ellipse: s-maj=34.5km s-min=18.4km az=75.0*
*MAN **04** 02:09:23, 19°.47N×122°.14E, h14km, mb4.6, ML3.4, MS3.3*
**ISC 04 02:09:24.3**±0.7, **19°.37N**±0°.06×**122°.15E**±0°.09, **h10km, n28, σ1s.37**/19, **mb3.8**/10, **3C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGCP | Mt. Cagua | 1.12 | 185 | eP | Pb | 02 09 44.2 | -1.7 |
| SGCP | | | | eS | Sg | 02 09 51.4 | -9.2 |
| APYP | Conner | 1.73 | 210 | eP | Pn | 02 09 53.7 | -0.7 |
| PIP | Pasuquin | 1.78 | 235⇑ | iP | Pn | 02 09 53.8 | -1.4 |
| PIP | | | | eS | Sn | 02 10 18.1 | +0.2 |
| ABRA | Dolores | 2.19 | 219 | eP | Pn | 02 09 51.6 | -9.1 |
| PALP | Palanan | 2.31 | 173 | eP | Pn | 02 10 03.0 | +0.6 |
| BCPH | Baguio City Da | 3.32 | 207⇑ | iP | Pn | 02 10 10.3 | -6.2 |
| BCPH | | | | i S | Pg | 02 10 29.1 | +1.1 |
| BALP | Baler | 3.65 | 189 | eP | Pb | 02 10 24.6 | -4.3 |
| BOLP | Bolinao | 3.65 | 216 | eP | Pn | 02 10 22.3 | +1.3 |
| PCPH | Palayan | 3.92 | 195⇑ | eP | Pn | 02 10 26.2 | +1.7 |
| KSRS | Korea Array | 18.71 | 14 | P | Pn | 02 13 44.2 | +0.9 |
| | 0.7nm,0.3s,baz=197,slow=12,SNR=5.2 | | | | | | |
| KSRS | | | | LR | LR | 02 20 56.0 | |
| | comp=Z,603nm,19.0s,baz=200,slow=37 | | | | | | |
| CMAR | Chiang Mai Arr | 21.97 | 271 | P | P | 02 14 21.5 | +2.9 |
| | 1.3nm,0.2s,baz=67,slow=8.8,SNR=6.0 | | | | | | |
| MJAR | Matsushiro Arr | 22.17 | 36 | P | P | 02 14 22.4 | +1.9 |
| | 0.8nm,0.3s,baz=224,slow=8.8,SNR=4.6 | | | | | | |
| SONM | Songino Array | 31.15 | 339 | P | P | 02 15 43.2 | -0.2 |
| | 0.5nm,0.5s,baz=164,slow=11,SNR=3.8 | | | | | | |
| WRA | Warramunga Arr | 40.85 | 162 | P | P | 02 17 05.7 | -0.8 |
| | 1.3nm,0.8s,baz=344,slow=9.1,SNR=4.1 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.05 | 84 | T | T | 03 02 14.5 | |
| | baz=276,slow=74,SNR=60 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.06 | 84 | T | T | 03 02 16.1 | |
| | baz=276,slow=74,SNR=75 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.07 | 84 | T | T | 03 02 15.9 | |
| | baz=276,slow=74,SNR=57 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.07 | 82 | T | T | 03 02 15.4 | |
| | baz=277,slow=74,SNR=97 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.08 | 82 | T | T | 03 02 15.7 | |
| | baz=277,slow=74,SNR=69 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.09 | 82 | T | T | 03 02 16.7 | |
| | baz=277,slow=74,SNR=85 | | | | | | |
| MKAR | Makanchi Array | 42.48 | 319 | P | P | 02 17 20.2 | +0.5 |
| | 6.1nm,0.8s,baz=122,slow=8.8,SNR=18 | | | | | | |
| ASAR | Alice Springs | 44.28 | 164 | P | P | 02 17 33.2 | -1.2 |
| | 0.6nm,0.7s,baz=342,slow=6.9,SNR=5.5 | | | | | | |
| ZALV | Zalesovo Beam | 44.79 | 329 | P | P | 02 17 37.8 | -0.3 |
| | 1.1nm,0.6s,baz=113,slow=6.9,SNR=5.7 | | | | | | |
| AKTO | Aktyubinsk | 58.88 | 318 | LR | LR | 02 44 19.7 | |
| | comp=Z,236nm,18.2s,slow=36 | | | | | | |
| ILAR | Eielson Array | 73.08 | 27 | P | P | 02 20 54.4 | -0.1 |
| | 0.3nm,0.7s,baz=288,slow=5.4,SNR=3.3 | | | | | | |
| FINES | FINESS Array B | 76.05 | 331 | P | P | 02 21 10.3 | -1.4 |
| | 4.5nm,0.9s,baz=64,slow=3.2,SNR=4.5 | | | | | | |
| ASF | Jabal al Asfar | 76.06 | 299 | LR | LR | 02 57 54.5 | |
| | comp=Z,272nm,21.1s,baz=116,slow=38 | | | | | | |
| YKA | Yellowknife Ar | 87.04 | 23 | P | P | 02 22 08.7 | -1.1 |
| | 1.3nm,0.7s,baz=305,slow=4.6,SNR=4.6 | | | | | | |

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*MOS **04** 02:24:41.5±2.6, 49°.71N×157°.10E, h15km, mb4.3/1, Error ellipse: s-maj=40.3km s-min=8.1km az=82.7*
**KRSC 04 02:24:42.8**±2.3, **49°.78N×157°.08E, h17km**±45km, **ML4.2, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 1.10 | 326 | eP | Pb | 02 25 01.5 | -1.8 |
| SKR | | | | eS | Sb | 02 25 15.3 | -2.1 |
| SKR | Severo-Kuril's | 1.10 | 326 | ePN | Pb | 02 24 57.5 | -5.8 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,90nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=N,80nm,0.4s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=E,50nm,0.4s | | | | | | |
| PAU | Pauzhetka | 1.70 | 354 | eP | Pb | 02 25 13.0 | -0.6 |
| PAU | | | | eS | Sb | 02 25 35.4 | +0.7 |
| PAU | Pauzhetka | 1.70 | 354 | PN | Pb | 02 25 13.0 | -0.6 |
| PAU | | | | S | Sb | 02 25 35.4 | +0.7 |
| MIPR | Malaya Ipel'ka | 2.51 | 355 | eP | Pn | 02 25 24.5 | +1.6 |
| MTVR | Mutnovka | 2.80 | 14 | eP | Pb | 02 25 30.0 | -2.5 |
| MTVR | | | | eS | Sb | 02 26 03.9 | -2.7 |
| RUS | Russkaya | 2.81 | 18 | eP | Pn | 02 25 29.2 | +2.3 |
| RUS | | | | eS | Sb | 02 26 04.2 | -2.4 |
| RUS | Russkaya | 2.81 | 18 | PN | Pn | 02 25 29.2 | +2.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RUS | | | | S | Sb | 02 26 04.2 | -2.4 |
| UGLR | Uglovaya | 3.61 | 17 | eP | Pb | 02 25 42.9 | -3.3 |
| AVH | Avacha | 3.65 | 16 | eP | Pn | 02 25 42.6 | +4.1 |
| AVH | Avacha | 3.65 | 16 | PN | Pn | 02 25 42.6 | +4.1 |
| KOK | Koryaka | 3.65 | 15 | eP | Pn | 02 25 41.5 | +2.9 |
| KOK | Koryaka | 3.65 | 15 | PN | Pn | 02 25 41.5 | +2.9 |
| SMAR | Somma | 3.65 | 16 | eP | Pb | 02 25 43.6 | -3.6 |
| SMAR | Somma | 3.65 | 16 | PN | Pb | 02 25 43.6 | -3.6 |
| NLC | Nalytchevo | 3.68 | 22 | eP | Pn | 02 25 42.5 | +3.6 |
| NLC | | | | eS | Sn | 02 26 24.4 | +2.6 |
| NLC | Nalytchevo | 3.68 | 22 | PN | Pn | 02 25 42.5 | +3.6 |
| NLC | | | | S | Sn | 02 26 24.4 | +2.6 |
| SDLR | Sedlovina | 3.68 | 17 | eP | Pn | 02 25 42.3 | +3.2 |
| SDLR | Sedlovina | 3.68 | 17 | PN | Pn | 02 25 42.3 | +3.2 |
| KRX | Arik | 3.72 | 15 | eP | Pb | 02 25 44.5 | -3.7 |
| SPN | Mys Shipunski | 3.80 | 28 | eP | Pn | 02 25 44.0 | +3.5 |
| SPN | | | | eS | Sb | 02 26 30.1 | -5.0 |
| SPN | Mys Shipunski | 3.80 | 28 | PN | Pn | 02 25 44.0 | +3.5 |
| SPN | | | | S | Sb | 02 26 30.1 | -5.0 |
| GNL | Ganaly | 3.96 | 7 | eP | Pn | 02 25 47.3 | +4.4 |
| GNL | Ganaly | 3.96 | 7 | PN | Pn | 02 25 47.3 | +4.4 |
| MKZ | Mys Kozlova | 5.58 | 29 | eP | Pn | 02 26 07.9 | +3.0 |
| MKZ | Mys Kozlova | 5.58 | 29 | PN | Pn | 02 26 07.9 | +3.0 |

**CASC 04 02:29:15.0±3.2, 9.18°N×83.78°W, h41km±28km, MD4.2, 2D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BUS | Buena Vista | 0.38 | 4 | ⇓iP | Pn | 02 29 25.1 | +0.2 |
| BUS | | | | ⇓iP | Pn | 02 29 25.1 | +0.2 |
| BUS | | | | eS | Sn | 02 29 33.0 | +1.3 |
| ACR | Cerro Adams | 0.80 | 130 | eP | Pn | 02 29 30.3 | +0.4 |
| ACR | | | | eS | Sn | 02 29 42.2 | +1.5 |
| CTCR | Cotoan | 1.05 | 105 | eP | Pn | 02 29 33.4 | -0.1 |
| CGA2 | Cerro Gallo 2 | 1.07 | 321 | eP | Pn | 02 29 33.5 | -0.3 |
| CGA2 | | | | eP | Pn | 02 29 33.5 | -0.3 |
| CGA2 | | | | eS | Sn | 02 29 49.1 | +1.5 |
| BRU2 | Volcan | 1.14 | 109 | eP | Pn | 02 29 34.8 | 0.0 |
| BRU2 | | | | eS | Sn | 02 29 50.2 | +0.8 |
| TBS2 | | 1.18 | 109 | eS | Sn | 02 29 51.6 | +1.4 |
| CAO | Cobano | 1.40 | 292 | eP | Pn | 02 29 38.4 | +0.3 |
| JCR | Jicaral | 1.47 | 297 | eP | Pn | 02 29 38.2 | -1.0 |
| JCR | | | | eS | Sn | 02 29 55.5 | -1.7 |
| JCR | | | | eS | Sn | 02 29 56.8 | -0.5 |
| CEDE | Laguna Cedeˆ–o | 1.59 | 325 | i P | Pn | 02 29 41.4 | +0.6 |
| CEDE | | | | i S | Sn | 02 30 02.4 | +2.2 |
| JTS | JuntasAbangare | 1.60 | 314 | eP | Pn | 02 29 40.5 | -0.3 |
| JTS | | | | eS | Sn | 02 29 59.2 | -1.1 |
| CHPA | Chiripa | 1.68 | 319 | i P | Pn | 02 29 42.6 | +0.6 |
| BANL | Banca Lucia | 1.69 | 322 | i P | Pn | 02 29 42.9 | +0.7 |
| CUI | Cuipilapa | 2.00 | 317 | i P | Pn | 02 29 46.7 | +0.3 |
| LIM1 | Limonal | 2.09 | 316 | i P | Pn | 02 29 48.8 | +1.1 |
| LIM1 | | | | i S | Sn | 02 30 12.7 | +0.1 |
| GPS3 | Bodega del ICE | 2.21 | 315 | i P | Pn | 02 29 51.5 | +2.2 |
| GB1A | Borinquen Arri | 2.28 | 316 | i P | Pn | 02 29 52.2 | +1.9 |
| GBS2 | Las Lilas | 2.33 | 315 | i P | Pn | 02 29 52.7 | +1.8 |
| AZU | Azuero | 3.73 | 111 | eP | Pn | 02 30 11.8 | +1.7 |
| AZU | | | | eS | Sn | 02 30 55.0 | +2.0 |
| BCIP | Isla Barro Col | 3.90 | 90 | eP | Pn | 02 30 12.8 | +0.4 |
| BCIP | | | | eS | Sn | 02 30 54.4 | -2.6 |

*ISCJB **04** 02:46:30.9±0.2, 29.68°N±0.02°×51.56°E±0.03°, h20km, mb4.1/30, Error ellipse: s-maj=3.9km s-min=3.1km az=12.8*
*TEH **04** 02:46:30.0, 29.56°N×51.43°E, h5km, ML3.8*
*DSN **04** 02:46:31.8±2.0, 29.69°N×51.59°E, h15km, mb3.6/8, Ms4.1/7, Error ellipse: s-maj=32.5km s-min=6.5km az=89.0*
*THR **04** 02:46:32.7±0.4, 29.73°N×51.56°E, h36km±4km, ML4.1*
*CSEM **04** 02:46:32.0±0.1, 29.73°N×51.59°E, h15km, mb4.3/10, Ms4.1, Error ellipse: s-maj=4.3km s-min=3.7km az=90.0*
*NEIC **04** 02:46:32.7, 29.72°N×51.56°E, h37km, mb3.8/5, ML4.1(THR), After THR.*
*IDC **04** 02:46:35.9±3.0, 29.93°N×51.43°E, h37km±23km, mb3.8/19, mb1 3.9/25, mb1mx3.7/55, mbtmp4.0/25, ML3.7/5, Error ellipse: s-maj=22.5km s-min=12.3km az=155.0*
*VIE **04** 02:46:36.9, 29.88°N×51.58°E, h45km, mb4.2/8, ML4.2/9*
**ISC 04 02:46:32.6**±0.5, **29.69°N**±0.04°×**51.54°E**±0.04°, **h20**km, **n150**, σ1s**22**/160, **mb4.1**/30, **10C-18D, Southern Iran**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IKAZ | Kazeroun | 0.28 | 70 | ePg | Pb | 02 46 35.7 | -3.5 |
| IKAZ | | | | e | | 02 46 41.3 | |
| | comp=Z,7µm,0.1s | | | | | | |
| IKAZ | Kazeroun | 0.28 | 70 | ePg | Pb | 02 46 35.7 | -3.5 |
| AHBU | AHRAM | 0.85 | 195 | ePg | Pn | 02 46 49.5 | +0.1 |
| AHBU | | | | eSg | Sn | 02 47 02.0 | +0.7 |
| GHIR | Ghir-Karzin | 1.88 | 137 | ePN5 | Pn | 02 47 04.6 | +0.8 |
| GHIR | | | | eSg | Sb | 02 47 31.9 | +2.3 |
| GHIR | | | | AML | AML | 02 47 50.9 | |
| | comp=E,2µm,0.5s | | | | | | |
| GHIR | | | | AML | AML | 02 47 54.9 | |
| | comp=N,1µm,0.5s | | | | | | |
| GHIR | Ghir-Karzin | 1.88 | 137 | eP | Pn | 02 47 04.6 | +0.8 |
| GHIR | | | | eSg | Sb | 02 47 31.9 | +2.3 |
| IRAM | Ramesheh | 2.24 | 19 | eSg | Sb | 02 47 44.5 | +4.6 |
| IRAM | | | | ePn | Pn | 02 47 09.6 | +0.9 |
| IRAM | | | | e | | 02 47 51.4 | |
| | comp=Z,5µm,0.3s | | | | | | |
| IGAR | Gharneh | 2.74 | 9 | ePn | Pn | 02 47 16.8 | +1.1 |
| IGAR | | | | e | | 02 48 06.7 | |
| | comp=Z,2µm,0.2s | | | | | | |
| ISAD | Sadrabad | 2.89 | 39 | ePn | Pn | 02 47 18.8 | +1.1 |
| ISAD | | | | e | | 02 48 13.0 | |
| | comp=Z,4µm,0.4s | | | | | | |
| ISAD | Sadrabad | 2.89 | 39 | ePn | Pn | 02 47 18.8 | +1.1 |
| IPIR | Pirpir | 3.04 | 350 | ePn | Pn | 02 47 19.5 | -0.4 |
| IPIR | | | | e | | 02 48 00.6 | |
| | comp=Z,3µm,0.2s | | | | | | |
| IPIR | Pirpir | 3.04 | 350 | ePn | Pn | 02 47 19.5 | -0.4 |
| IMEH | Mehriz | 3.15 | 57 | ePn | Pn | 02 47 22.1 | +0.7 |
| IMEH | | | | e | | 02 48 19.0 | |
| | comp=Z,2µm,0.4s | | | | | | |
| IMEH | Mehriz | 3.15 | 57 | ePn | Pn | 02 47 22.0 | +0.7 |
| NASN | Na'in | 3.29 | 19 | ePn | Pn | 02 47 23.4 | +0.1 |
| NASN | Na'in | 3.29 | 19 | eP | Pn | 02 47 23.4 | +0.1 |
| SHGR | Shooshtar-Gavs | 3.37 | 316 | ePn | Pn | 02 47 24.8 | +0.6 |
| SHGR | | | | AML | AML | 02 48 09.1 | |
| | comp=N,494nm,0.7s | | | | | | |
| SHGR | | | | AML | AML | 02 48 09.7 | |
| | comp=E,364nm,0.7s | | | | | | |
| SHGR | Shooshtar-Gavs | 3.37 | 316 | eP | Pn | 02 47 24.7 | +0.6 |
| KFJS | | 3.49 | 246 | S | Sn | 02 48 10.4 | +3.8 |
| KFJS | | 3.49 | 246 | P | Pn | 02 47 28.3 | +2.5 |
| KFJS | | 3.49 | 246 | P | Pn | 02 47 28.0 | +2.2 |
| KFJS | | | | S | Sn | 02 48 10.0 | +3.4 |
| ICHK | Chekchek | 3.54 | 43 | ePn | Pn | 02 47 27.4 | +0.6 |
| ICHK | | | | e | | 02 48 32.2 | |
| | comp=Z,1µm,0.4s | | | | | | |
| ICHK | Chekchek | 3.54 | 43 | ePn | Pn | 02 47 27.4 | +0.6 |
| IKLH | Kolahrood | 3.62 | 0 | ePn | Pn | 02 47 28.2 | +0.4 |
| IKLH | | | | e | | 02 48 44.8 | |
| | comp=Z,1µm,0.3s | | | | | | |
| IKLH | Kolahrood | 3.62 | 0 | ePn | Pn | 02 47 28.2 | +0.4 |
| IBAF | Bafgh | 3.95 | 60 | ePn | Pn | 02 47 32.7 | +0.4 |
| IBAF | | | | e | | 02 48 47.8 | |
| | comp=Z,1µm,0.4s | | | | | | |
| IBAF | Bafgh | 3.95 | 60 | ePn | Pn | 02 47 32.7 | +0.4 |
| QAM | Ghamsar | 4.06 | 359 | ePn | Pn | 02 47 34.7 | +0.8 |
| QAM | | | | e | | 02 47 36.5 | |
| | comp=Z,2µm,0.1s | | | | | | |
| QAM | | | | eSn | Sn | 02 48 21.1 | +0.1 |
| BOQSS | | 4.26 | 207 | S | Sn | 02 48 27.5 | +1.9 |
| BOQSS | | 4.26 | 207 | P | Pn | 02 47 39.2 | +2.8 |
| BOQSS | | 4.26 | 207 | P | Pn | 02 47 39.0 | +2.6 |
| BOQSS | | | | S | Sn | 02 48 27.0 | +1.5 |
| KHMZ | Khomeyn | 4.26 | 342 | ePn | Pn | 02 47 37.0 | +0.4 |
| KHMZ | Khomeyn | 4.26 | 342 | eP | Pn | 02 47 37.0 | +0.4 |
| KRBR | Kerman | 4.54 | 85 | ePn | Pn | 02 47 41.1 | +0.6 |
| KRBR | Kerman | 4.54 | 85 | eP | Pn | 02 47 41.1 | +0.6 |
| SLWS | | 4.94 | 190 | S | Sn | 02 48 43.0 | +0.9 |
| SLWS | | 4.94 | 190 | P | Pn | 02 47 47.4 | +1.8 |
| SLWS | | 4.94 | 190 | P | Pn | 02 47 47.0 | +1.3 |
| SLWS | | | | S | Sn | 02 48 43.0 | +0.9 |
| BANOM | Banah | 5.64 | 131 | ⇓P | Pn | 02 47 54.6 | -0.8 |
| BANOM | Banah | 5.64 | 131 | P | Pn | 02 47 54.6 | -0.8 |
| BTHS | | 5.65 | 186 | S | Sn | 02 49 00.6 | +0.8 |
| BTHS | | 5.65 | 186 | P | Pn | 02 47 56.9 | +1.4 |
| BTHS | | 5.65 | 186 | P | Pn | 02 47 57.0 | +1.4 |
| BTHS | | | | S | Sn | 02 49 01.0 | +1.1 |
| DAMV | Damavand | 5.94 | 3 | ePn | Pn | 02 47 59.9 | +0.3 |
| DAMV | Damavand | 5.94 | 3 | eP | Pn | 02 48 00.0 | +0.3 |
| NAZ | Nazwa, Dubai | 5.94 | 141 | ⇓P | Pn | 02 47 59.3 | -0.2 |
| NAZ | Nazwa, Dubai | 5.94 | 141 | P | Pn | 02 47 59.3 | -0.2 |
| FAQ | Al Faqa, Dubai | 6.10 | 143 | ⇓P | Pn | 02 48 01.3 | -0.4 |
| FAQ | Al Faqa, Dubai | 6.10 | 143 | P | Pn | 02 48 01.3 | -0.4 |
| HATD | Hatta, Dubai | 6.33 | 139 | ⇓P | Pn | 02 48 05.1 | +0.2 |
| HATD | Hatta, Dubai | 6.33 | 139 | P | Pn | 02 48 05.1 | +0.2 |
| ASHO | Ashiyiah | 6.40 | 140 | ⇓iP | Pn | 02 48 05.3 | -0.6 |
| | SNR=12 | | | | | | |
| ASHO | Ashiyiah | 6.40 | 140 | P | Pn | 02 48 05.3 | -0.6 |
| | SNR=12 | | | | | | |
| SNGE | Sanandaj | 6.45 | 328 | ePn | Pn | 02 48 07.3 | +0.6 |
| SNGE | Sanandaj | 6.45 | 328 | eP | Pn | 02 48 07.3 | +0.6 |
| ASYS | | 6.69 | 253 | S | Sn | 02 49 24.2 | -1.4 |
| ASYS | | 6.69 | 253 | P | Pn | 02 48 10.5 | +0.6 |
| ASYS | | 6.69 | 253 | P | Pn | 02 48 11.0 | +1.1 |
| RAYN | Ar Rayn | 8.18 | 223 | ePn | Pn | 02 48 30.5 | +0.2 |
| | comp=Z,67nm,0.6s | | | | | | |
| RAYN | | | | eS | Sn | 02 50 01.5 | -0.7 |
| RAYN | Ar Rayn | 8.18 | 223 | ePn | Pn | 02 48 30.5 | +0.2 |
| | comp=Z,67nm,0.6s | | | | | | |
| GEYT | Alibeck | 9.87 | 32 | Pn | Pn | 02 48 54.7 | +1.3 |
| | baz=196,slow=14,SNR=2.5 | | | | | | |
| ASF | Jabal al Asfar | 12.82 | 285 | Pn | Pn | 02 49 31.7 | -2.1 |
| | comp=Z,0.7nm,0.3s,baz=22,slow=5.5,SNR=8.1 | | | | | | |
| ASF | | | | Sn | Sn | 02 51 44.9 | -11 |
| | comp=Z,0.4nm,0.3s,baz=43,slow=18,SNR=2.9 | | | | | | |
| MMAI | Mount Meron Ar | 14.19 | 288 | Pn | Pn | 02 49 50.0 | -2.5 |
| | comp=Z,1.0nm,0.3s,baz=98,slow=10,SNR=5.7 | | | | | | |
| EIL | Elat | 14.43 | 274 | Pn | Pn | 02 49 56.2 | +0.5 |
| | comp=Z,0.1nm,0.3s,baz=80,slow=18,SNR=2.5 | | | | | | |
| KBZ | Khabaz | 15.62 | 336 | Pn | Pn | 02 50 13.1 | +1.6 |
| | comp=Z,0.1nm,0.3s,baz=172,slow=11,SNR=4.5 | | | | | | |
| BRTR | Keskin Array B | 17.77 | 309 | P | Pn | 02 50 39.0 | 0.0 |
| | comp=Z,0.2nm,0.3s,baz=133,slow=12,SNR=11 | | | | | | |
| BRTR | Keskin Array B | 17.77 | 309 | P | Pn | 02 50 39.0 | 0.0 |
| KKAR | Karatay Array | 20.25 | 43 | eP | P | 02 51 05.5 | -1.1 |
| | comp=Z,2.1nm,0.6s | | | | | | |
| KKAR | Karatay Array | 20.25 | 43 | eP | P | 02 51 05.5 | -1.1 |
| | comp=Z,2.1nm,0.6s | | | | | | |
| ABKAR | Akbulak array | 20.57 | 16 | eP | P | 02 51 08.8 | -1.2 |
| | comp=Z,2.4nm,0.6s | | | | | | |
| ABKAR | Akbulak array | 20.57 | 16 | eP | P | 02 51 08.8 | -1.2 |
| | comp=Z,2.4nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 21.29 | 11 | P | P | 02 51 17.1 | -0.7 |
| | comp=Z,3.7nm,0.7s,baz=198,slow=12,SNR=16 | | | | | | |
| AML | Almayashu | 21.75 | 49 | P | P | 02 51 22.8 | -0.4 |
| | SNR=5.9 | | | | | | |
| EKS2 | Erkin-Say | 22.05 | 48 | eP | P | 02 51 25.2 | -1.0 |
| | comp=Z,2.5nm,0.6s | | | | | | |
| EKS2 | Erkin-Say | 22.05 | 48 | eP | P | 02 51 25.2 | -1.0 |
| | comp=Z,2.5nm,0.6s | | | | | | |
| AAK | Ala-Archa | 22.51 | 49 | P | P | 02 51 32.5 | +1.3 |
| | comp=Z,2.3nm,0.6s,baz=206,slow=9.0,SNR=6.8 | | | | | | |
| AAK | Ala-Archa | 22.51 | 49 | eP | P | 02 51 30.1 | -1.0 |
| | comp=Z,3.7nm,0.8s | | | | | | |
| AAK | Ala-Archa | 22.51 | 49 | eP | P | 02 51 30.1 | -1.0 |
| | comp=Z,3.7nm,0.8s | | | | | | |
| IDI | Anoyia | 23.13 | 291 | P | P | 02 51 37.1 | -0.5 |
| | comp=Z,8.3nm,0.9s,baz=180,slow=20,SNR=3.4 | | | | | | |
| DID | Didima | 24.77 | 296 | eP | P | 02 51 53.5 | +0.4 |
| DID | Didima | 24.77 | 296 | eP | P | 02 51 53.5 | +0.4 |
| DIDY | Didyma | 24.78 | 296 | eP | P | 02 51 53.3 | 0.0 |
| DIDY | Didyma | 24.78 | 296 | eP | P | 02 51 53.3 | 0.0 |
| VLI | Veliai | 24.88 | 294 | eP | P | 02 51 54.5 | +0.4 |
| VLI | Veliai | 24.88 | 294 | eP | P | 02 51 54.5 | +0.4 |
| VRI | Vrincioaia | 25.26 | 317 | ⇑iP | P | 02 51 58.1 | +0.7 |
| VRI | Vrincioaia | 25.26 | 317 | ⇑iP | P | 02 51 58.1 | +0.7 |
| PLOR | Plostina | 25.30 | 316 | ⇑iP | P | 02 51 59.0 | +1.2 |
| PLOR | Plostina | 25.30 | 316 | ⇑iP | P | 02 51 59.0 | +1.2 |
| VLX | Vlachokerasia | 25.42 | 295 | eP | P | 02 51 58.9 | -0.1 |
| VLX | Vlachokerasia | 25.42 | 295 | eP | P | 02 51 58.9 | -0.1 |
| GUR | Goura | 25.54 | 297 | eP | P | 02 52 00.9 | +0.7 |
| GUR | Goura | 25.54 | 297 | eP | P | 02 52 00.9 | +0.7 |
| MLR | Muntele Rosu | 25.55 | 315 | P | P | 02 52 01.7 | +1.6 |
| | comp=Z,1.7nm,0.6s,baz=176,slow=1.6,SNR=15 | | | | | | |
| MLR | Muntele Rosu | 25.55 | 315 | ⇑iP | P | 02 52 01.0 | +0.9 |
| TESR | Tescani | 25.64 | 318 | ⇓iP | P | 02 52 01.3 | +0.4 |
| TESR | Tescani | 25.64 | 318 | ⇓iP | P | 02 52 01.3 | +0.4 |
| KLV | Kalavryta, Ach | 25.71 | 297 | eP | P | 02 52 02.7 | +1.1 |
| KLV | Kalavryta, Ach | 25.71 | 297 | eP | P | 02 52 02.7 | +1.1 |
| ITM | Ithomi | 25.75 | 295 | eP | P | 02 52 02.1 | +0.2 |
| ITM | Ithomi | 25.75 | 295 | eP | P | 02 52 02.1 | +0.2 |
| PYL | PYLOS | 25.86 | 294 | eP | P | 02 52 02.3 | -0.6 |
| PYL | PYLOS | 25.86 | 294 | eP | P | 02 52 02.3 | -0.6 |
| DRO | Drossia | 26.04 | 296 | eP | P | 02 52 06.2 | +1.6 |
| DRO | Drossia | 26.04 | 296 | eP | P | 02 52 06.2 | +1.6 |
| VOIR | | 26.07 | 314 | ⇓iP | P | 02 52 06.1 | +1.2 |
| VOIR | | 26.07 | 314 | ⇓iP | P | 02 52 06.1 | +1.2 |
| DOPR | Dopca | 26.12 | 316 | ⇓iP | P | 02 52 06.0 | +0.8 |
| DOPR | Dopca | 26.12 | 316 | ⇓iP | P | 02 52 06.0 | +0.8 |
| AKASG | Malin Array Be | 26.85 | 328 | P | P | 02 52 11.4 | -0.3 |
| | comp=Z,0.3nm,0.3s,baz=110,slow=7.0,SNR=6.0 | | | | | | |
| LOT | Lotru | 26.88 | 313 | ⇑iP | P | 02 52 08.1 | -4.1 |
| BURAR | Bucovina Array | 27.06 | 319 | ⇑iP | P | 02 52 14.1 | +0.3 |
| BURAR | Bucovina Array | 27.06 | 319 | ⇑iP | P | 02 52 14.1 | +0.3 |
| BVAR | Borovoye Array | 27.11 | 25 | P | P | 02 52 14.3 | +0.2 |
| | comp=Z,3.7nm,0.8s,baz=219,slow=6.9,SNR=13 | | | | | | |
| KURBB | Kurchatov Arra | 29.10 | 36 | P | P | 02 52 31.7 | -0.1 |
| | comp=Z,2.0nm,0.8s,baz=237,slow=9.2,SNR=19 | | | | | | |
| KURK | Kurchatov | 29.20 | 36 | P | P | 02 52 31.7 | -1.0 |
| KURK | Kurchatov | 29.20 | 36 | P | P | 02 52 31.7 | -1.0 |
| MKAR | Makanchi Array | 29.33 | 46 | P | P | 02 52 33.4 | -0.5 |
| | comp=Z,0.9nm,0.7s,baz=242,slow=7.5,SNR=5.4 | | | | | | |
| MOA | Molln | 33.84 | 313 | ⇓iP | P | 02 53 13.8 | +0.2 |
| | comp=Z,2.4nm,0.7s | | | | | | |
| MOA | Molln | 33.84 | 313 | P | P | 02 53 13.8 | +0.2 |
| | comp=Z,2.4nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 34.16 | 35 | P | P | 02 53 15.4 | -0.8 |
| | comp=Z,3.0nm,0.8s,baz=254,slow=8.6,SNR=12 | | | | | | |
| KBA | Koelnbreinsper | 34.20 | 311 | ⇓iP | P | 02 53 17.2 | +0.3 |
| | comp=Z,4.2nm,0.6s | | | | | | |
| KBA | Koelnbreinsper | 34.20 | 311 | P | P | 02 53 17.2 | +0.3 |
| | comp=Z,4.2nm,0.6s | | | | | | |
| GERES | GERESS Array B | 34.52 | 314 | P | P | 02 53 18.9 | -0.7 |
| | comp=Z,0.4nm,0.5s,baz=103,slow=4.7,SNR=6.1 | | | | | | |
| ABTA | Abfaltersbach | 34.66 | 310 | ⇓iP | P | 02 53 20.8 | 0.0 |
| | comp=Z,4.0nm,0.8s | | | | | | |
| ABTA | Abfaltersbach | 34.66 | 310 | P | P | 02 53 20.8 | 0.0 |
| | comp=Z,4.0nm,0.8s | | | | | | |
| WTTA | Wattenberg | 35.37 | 311 | ⇓eP | P | 02 53 26.5 | -0.5 |
| | comp=Z,5.5nm,0.6s | | | | | | |
| WTTA | Wattenberg | 35.37 | 311 | P | P | 02 53 26.5 | -0.5 |
| | comp=Z,5.5nm,0.6s | | | | | | |
| WATA | Walderalm | 35.43 | 311 | ⇓iP | P | 02 53 26.9 | -0.6 |
| | comp=Z,3.0nm,0.4s | | | | | | |
| WATA | Walderalm | 35.43 | 311 | P | P | 02 53 26.9 | -0.6 |
| | comp=Z,3.0nm,0.4s | | | | | | |
| MOTA | Moosalm | 35.74 | 311 | ⇑iP | P | 02 53 29.0 | -1.2 |
| | comp=Z,3.1nm,0.4s | | | | | | |
| MOTA | Moosalm | 35.74 | 311 | P | P | 02 53 29.0 | -1.2 |
| | comp=Z,3.1nm,0.4s | | | | | | |
| FETA | Feichten | 35.91 | 310 | ⇓iP | P | 02 53 31.5 | -0.1 |
| | comp=Z,4.9nm,0.6s | | | | | | |
| FETA | Feichten | 35.91 | 310 | P | P | 02 53 31.5 | -0.1 |
| | comp=Z,4.9nm,0.6s | | | | | | |
| FINES | FINESS Array B | 35.94 | 339 | P | P | 02 53 29.9 | -1.6 |
| | comp=Z,2.5nm,0.8s,baz=148,slow=9.0,SNR=5.5 | | | | | | |
| RETA | Reutte | 36.00 | 311 | ⇑iP | P | 02 53 31.4 | -0.9 |
| RETA | Reutte | 36.00 | 311 | P | P | 02 53 31.4 | -0.9 |
| DAVOX | Davos/Dischmat | 36.42 | 310 | P | P | 02 53 35.8 | -0.2 |
| | comp=Z,2.6nm,0.4s,baz=137,slow=3.3,SNR=11 | | | | | | |
| DAVA | Damuels | 36.53 | 311 | ⇓iP | P | 02 53 36.0 | -1.0 |
| DAVA | Damuels | 36.53 | 311 | P | P | 02 53 36.0 | -1.0 |
| BNI | Bardonecchia | 38.30 | 306 | eP | P | 02 53 51.2 | -0.8 |
| | comp=Z,5.3nm,0.8s | | | | | | |
| BNI | Bardonecchia | 38.30 | 306 | eP | P | 02 53 51.2 | -0.8 |
| | comp=Z,5.3nm,0.8s | | | | | | |
| HFS | Hagfors | 39.60 | 331 | P | P | 02 54 01.1 | -1.4 |
| | comp=Z,1.1nm,0.4s,baz=143,slow=9.5,SNR=7.8 | | | | | | |
| GTA | Gaotai | 40.51 | 63 | eP | P | 02 54 10.6 | +0.1 |
| GTA | | | | pP | pP | 02 54 19.0 | +2.3 |
| GTA | | | | sP | sP | 02 54 23.1 | +3.9 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| ARCES | ARCESS Array B | 42.59 | 347 | P | P | 02 54 25.5 | -1.4 |
| | comp=Z,1.7nm,0.8s,baz=144,slow=8.4,SNR=7.3 | | | | | | |
| SONM | Songino Array | 45.44 | 51 | P | P | 02 54 49.7 | -0.6 |
| | comp=Z,0.4nm,0.6s,baz=270,slow=7.2,SNR=2.5 | | | | | | |
| TORD | Torodi Ar. Bea | 48.86 | 261 | P | P | 02 55 16.6 | -0.5 |
| | comp=Z,0.8nm,0.4s,baz=58,slow=8.3,SNR=33 | | | | | | |
| TORD | | | | ScP | ScP | 03 00 34.6 | -1.0 |
| | comp=Z,0.6nm,0.9s,baz=20,slow=2.5,SNR=3.5 | | | | | | |
| SPITS | Spitsbergen Ar | 51.04 | 351 | P | P | 02 55 32.2 | -0.7 |
| | comp=Z,2.0nm,0.5s,baz=147,slow=9.8,SNR=6.0 | | | | | | |
| DBIC | Dimbokro | 57.64 | 258 | P | P | 02 56 21.5 | -0.3 |
| | comp=Z,4.0nm,1.0s,baz=59,slow=4.5,SNR=4.6 | | | | | | |
| BOSA | Boshof | 63.18 | 206 | P | P | 02 57 03.3 | +3.8 |
| | comp=Z,3.1nm,0.8s,baz=29,slow=6.4,SNR=5.7 | | | | | | |
| ILAR | Eielson Array | 84.76 | 8 | P | P | 02 59 03.6 | -1.5 |
| | comp=Z,0.4nm,0.8s,baz=345,slow=5.8,SNR=3.8 | | | | | | |

*NIED **04** 02:47:00, 42.90°N×145.50°E, h35km, Mw4.1 Best double couple: $M_0$1.44000×10^15 NP1:$\phi_s$211.00000°, δ16.00000°, λ82.00000°. NP2:$\phi_s$39.00000°, δ75.00000°, λ92.00000°.*
*ISCJB **04** 02:47:34.9±0.6, 42.88°N±0.05°×145.56°E±0.05°, h46km±4km, mb4.1/27, MS4.4/1, Error ellipse: s-maj=8.9km s-min=4.8km az=141.8*
*MOS **04** 02:47:35.1±1.2, 42.91°N×145.46°E, h47km, mb4.4/18, Error ellipse: s-maj=9.9km s-min=7.3km az=91.0*
*JMA **04** 02:47:36.1±0.1, 42.93°N×145.49°E, h45km±1km, M4.0*
*JMA Felt III J1.*
*SKHL **04** 02:47:36.9±0.2, 42.91°N×145.55°E, h55km±4km, mb4.6/5*
*NEIC **04** 02:47:37.2±1.0, 42.87°N×145.52°E, h52km±9km, mb4.6/2, MW4.0(NIED), Error ellipse: s-maj=10.2km s-min=9.1km az=124.0*
*NEIC Recorded [3 JMA] in eastern Hokkaido.*
*IDC **04** 02:47:37.4±2.7, 42.91°N×145.48°E, h52km±24km, mb3.8/23, mb1 4.0/26, mb1mx3.8/51, mbtmp4.1/26, ML4.1/2, MS3.8/2, Ms1 3.8/2, ms1mx3.0/41, Error ellipse: s-maj=19.4km s-min=15.3km az=158.0*
**ISC 04 02:47:36.9**±0.9, **42.95°N**±0.06°×**145.54°E**±0.05°, **h45**km±7km, **n100**, σ1s**14**/102, **mb4.2**/27, **1C-9D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NEM2 | Nemuro 2 | 0.44 | 20 | ⇑P | Pn | 02 47 46.5 | -0.6 |
| NEM2 | | | | eS | Sn | 02 47 53.8 | -0.6 |
| JAK | Akkeshi | 0.62 | 274 | ⇓P | Pn | 02 47 48.1 | -1.3 |
| JAK | | | | eS | Sn | 02 47 56.9 | -1.5 |
| JNK | Nakash | 0.87 | 317 | ⇓P | Pn | 02 47 51.7 | -1.1 |
| JNK | | | | eS | Sn | 02 48 02.6 | -1.8 |
| JRA | Rausu | 1.03 | 343 | ⇓P | Pn | 02 47 54.3 | -0.6 |
| JRA | | | | eS | Sn | 02 48 07.9 | -0.3 |
| YUK | Yuzh-Kuril'sk | 1.11 | 12 | d iPN | Pn | 02 47 55.5 | -0.5 |
| YUK | | | | i S | Sn | 02 48 09.3 | -0.8 |
| YUK | | | | pmax | pmax | | |
| | comp=N,107nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,123nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,536nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,2µm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,4µm,0.4s | | | | | | |
| YUK | Yuzh-Kuril'sk | 1.11 | 12 | eP | Pn | 02 47 55.5 | -0.5 |
| YUK | | | | AMB | AMB | 02 47 56.5 | |
| | comp=E,107nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 02 47 56.5 | |
| | comp=E,123nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 02 47 56.5 | |
| | comp=E,536nm,0.2s | | | | | | |
| YUK | | | | eS | Sn | 02 48 09.3 | -0.8 |
| YUK | | | | A | A | 02 48 10.3 | |
| | comp=E,2µm,0.5s | | | | | | |
| YUK | | | | A | A | 02 48 10.3 | |
| | comp=E,4µm,0.5s | | | | | | |
| JOB | Onbets | 1.25 | 268 | ⇓P | Pn | 02 47 56.6 | -1.4 |
| SHO | Shikotan | 1.31 | 45 | eP | Pn | 02 47 57.8 | -1.0 |
| SHO | | | | AMB | AMB | 02 48 02.9 | |
| | comp=E,800nm,0.5s | | | | | | |
| SHO | | | | eS | Sn | 02 48 13.7 | -1.4 |
| SHO | | | | A | A | 02 48 16.6 | |
| | comp=E,2µm,0.2s | | | | | | |
| JAR | Ashorobuto | 1.34 | 285 | ⇓P | Pn | 02 47 58.2 | -1.0 |
| JTKR | Abashiri--Toko | 1.56 | 311 | ⇓P | Pn | 02 48 02.0 | -0.2 |
| ERM | Erimo | 2.00 | 243 | ePN | Pn | 02 48 09.1 | +0.9 |
| ERM | Erimo | 2.00 | 243 | eP | Pn | 02 48 09.1 | +0.9 |
| ERM | Erimo | 2.00 | 243 | ePn | Pn | 02 48 09.1 | +0.9 |
| ERM | | | | eS | Sn | 02 48 39.0 | +7.0 |
| JKA | Kamikawa-asahi | 2.43 | 300 | eP | Pn | 02 48 15.0 | +0.8 |
| ASAJ | Asahikawa | 2.44 | 300 | P | Pn | 02 48 15.0 | +0.8 |
| | comp=E,41nm,0.3s,baz=124,slow=10,SNR=60 | | | | | | |
| ASAJ | | | | S | Sn | 02 48 46.5 | +3.7 |
| | comp=E,24nm,0.3s,baz=356,slow=31,SNR=9.1 | | | | | | |
| ASAJ | | | | LR | LR | 02 49 30.4 | |
| | comp=E,500nm,18.6s,baz=150,slow=47 | | | | | | |
| ASAJ | Asahikawa | 2.44 | 300 | PN | Pn | 02 48 15.0 | +0.8 |
| ASAJ | | | | S | Sn | 02 48 46.5 | +3.7 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,41nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,24nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,500nm,18.6s | | | | | | |
| KUR | Kuril'sk | 2.83 | 36 | d iPN | Pn | 02 48 21.6 | +2.0 |
| KUR | | | | i S | Sn | 02 48 55.5 | +3.1 |
| KUR | | | | pmax | pmax | | |
| | comp=N,13nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,17nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,42nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,242nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,48nm,0.2s | | | | | | |
| KUR | Kuril'sk | 2.83 | 36 | eP | Pn | 02 48 20.8 | +1.2 |
| KUR | | | | AMB | AMB | 02 48 21.7 | |
| | comp=E,13nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 02 48 21.7 | |
| | comp=E,17nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 02 48 21.7 | |
| | comp=E,42nm,0.3s | | | | | | |
| KUR | | | | eS | Sn | 02 48 53.0 | +0.6 |
| KUR | | | | A | A | 02 48 56.7 | |
| | comp=E,242nm,0.2s | | | | | | |
| KUR | | | | A | A | 02 48 56.7 | |
| | comp=E,48nm,0.2s | | | | | | |
| YSS | Yuzh-Sakhalins | 4.46 | 335 | eP | Pn | 02 48 43.0 | +1.0 |
| UGL | Uglegorsk | 6.58 | 340 | PN | Pn | 02 49 09.9 | -1.2 |
| TYV | Tymovskoe | 8.15 | 347 | eP | Pn | 02 49 37.0 | +4.4 |
| TYV | | | | AMB | AMB | 02 49 44.8 | |
| | comp=E,11nm,0.8s | | | | | | |
| MJA0 | Matsu Arr-Jizo | 8.52 | 224 | ePN | Pn | 02 49 36.5 | -1.2 |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| MAJO | Matsushiro | 8.54 | 224 | ePN | Pn | 02 49 36.6 | -1.3 |
| MAJO | Matsushiro | 8.54 | 224 | ePn | Pn | 02 49 36.5 | -1.3 |
| MJAR | Matsushiro Arr | 8.54 | 224 | P | Pn | 02 49 36.1 | -1.8 |
| | comp=Z,1.1nm,0.3s,baz=32,slow=13,SNR=8.0 | | | | | | |
| MJAR | Matsushiro Arr | 8.54 | 224 | PN | Pn | 02 49 36.1 | -1.8 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| MJAR | Matsushiro Arr | 8.54 | 224 | eP | Pn | 02 49 36.5 | -1.4 |
| HABR | Khabarovsk | 9.18 | 311 | ePN | Pn | 02 49 45.1 | -1.5 |
| HABR | | | | pmax | pmax | | |
| | comp=E,88nm,1.6s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,61nm,1.6s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,56nm,1.6s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,276nm,14.0s | | | | | | |
| USRK | Ussuriysk Ar. | 9.92 | 282 | P | Pn | 02 49 59.4 | +2.7 |
| | comp=Z,0.2nm,0.3s,baz=74,slow=14,SNR=4.3 | | | | | | |
| KLR | Kul'dur | 11.44 | 308 | ePN | Pn | 02 50 21.0 | +3.4 |
| KLR | Kul'dur | 11.44 | 308 | eP | Pn | 02 50 21.0 | +3.4 |
| EKMR | Ekimchan | 13.15 | 325 | eP | Pn | 02 50 41.0 | +0.1 |
| KSRS | Korea Array | 14.53 | 254 | P | Pn | 02 50 59.3 | -0.3 |
| | baz=60,slow=15,SNR=3.6 | | | | | | |
| KSAR | Wonju Array Be | 14.57 | 254 | P | Pn | 02 50 59.3 | -0.8 |
| KSAR | Wonju Array Be | 14.57 | 254 | P | Pn | 02 50 59.3 | -0.8 |
| KROS | Kirovskiy | 16.74 | 320 | eP | P | 02 51 29.0 | -0.7 |
| KROS | | | | AMB | AMB | 02 51 31.5 | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| ULN | Ulaanbaatar | 27.26 | 294 | ⇓iP | P | 02 53 16.7 | -0.2 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,2.7s | | | | | | |
| ULN | Ulaanbaatar | 27.26 | 294 | eP | P | 02 53 16.7 | -0.2 |
| SONM | Songino Array | 27.71 | 294 | P | P | 02 53 20.7 | -0.1 |
| | comp=Z,4.3nm,0.9s,baz=86,slow=8.8,SNR=16 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SONM | Songino Array | 27.71 | 294 | P | P | 02 53 20.7 | -0.1 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 29.31 | 136 | T | T | 03 24 28.5 | |
| | baz=328,slow=76,SNR=2552 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.32 | 136 | T | T | 03 24 31.8 | |
| | baz=328,slow=76,SNR=2055 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.33 | 136 | T | T | 03 24 33.9 | |
| | baz=328,slow=76,SNR=1556 | | | | | | |
| ZAK | Zakamensk | 29.61 | 299 | eP | P | 02 53 27.4 | -10 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| H11S1 | WAKE ISLAND Hy | 30.24 | 137 | T | T | 03 25 31.7 | |
| | baz=329,slow=76,SNR=3149 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.24 | 137 | T | T | 03 25 32.3 | |
| | baz=329,slow=76,SNR=1712 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.26 | 137 | T | T | 03 25 33.0 | |
| | baz=329,slow=76,SNR=1978 | | | | | | |
| ZALV | Zalesovo Beam | 40.55 | 308 | PcP | PcP | 02 57 12.9 | -0.1 |
| | comp=Z,1.4nm,0.5s,baz=93,slow=3.4,SNR=4.5 | | | | | | |
| ILAR | Eielson Array | 42.82 | 36 | P | P | 02 55 30.2 | +0.2 |
| | comp=Z,0.9nm,0.5s,baz=273,slow=8.7,SNR=16 | | | | | | |
| ILAR | Eielson Array | 42.82 | 36 | eP | P | 02 55 31.9 | +1.9 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ILAR | Eielson Array | 42.82 | 36 | eP | P | 02 55 31.9 | +1.9 |
| MKAR | Makanchi Array | 43.92 | 298 | P | P | 02 55 38.5 | -0.5 |
| | comp=Z,4.1nm,0.8s,baz=85,slow=8.4,SNR=21 | | | | | | |
| MKAR | Makanchi Array | 43.92 | 298 | eP | P | 02 55 38.5 | -0.5 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| KURK | Kurchatov | 45.00 | 304 | P | P | 02 55 47.9 | +0.3 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| KURK | Kurchatov | 45.00 | 304 | eP | P | 02 55 47.9 | +0.3 |
| KURK | Kurchatov | 45.00 | 304 | P | P | 02 55 47.9 | +0.3 |
| KURBB | Kurchatov Arra | 45.09 | 304 | P | P | 02 55 47.9 | -0.4 |
| | comp=Z,2.9nm,0.6s,baz=73,slow=8.6,SNR=12 | | | | | | |
| CMAR | Chiang Mai Arr | 46.17 | 253 | P | P | 02 55 57.8 | +0.5 |
| | comp=Z,1.0nm,0.3s,baz=40,slow=7.4,SNR=3.4 | | | | | | |
| CMAR | Chiang Mai Arr | 46.17 | 253 | P | P | 02 55 57.8 | +0.5 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| INK | Inuvik | 47.68 | 30 | P | P | 02 56 08.8 | +0.4 |
| | comp=Z,1.3nm,0.4s,baz=275,slow=5.4,SNR=18 | | | | | | |
| INK | Inuvik | 47.68 | 30 | P | P | 02 56 08.8 | +0.4 |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| INK | Inuvik | 47.68 | 30 | eP | P | 02 56 08.5 | +0.2 |
| | comp=Z,1.4nm,0.3s | | | | | | |
| BVAR | Borovoye Array | 49.10 | 309 | P | P | 02 56 19.1 | -0.4 |
| | comp=Z,2.1nm,0.4s,baz=81,slow=8.4,SNR=17 | | | | | | |
| BVAR | Borovoye Array | 49.10 | 309 | P | P | 02 56 19.1 | -0.4 |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| ABKAR | Akbulak array | 56.64 | 309 | eP | P | 02 57 15.0 | -0.2 |
| | comp=Z,4.0nm,0.4s | | | | | | |
| YKA | Yellowknife Ar | 57.11 | 33 | P | P | 02 57 19.4 | +1.1 |
| | comp=Z,0.8nm,0.8s,baz=298,slow=7.0,SNR=3.0 | | | | | | |
| YKA | Yellowknife Ar | 57.11 | 33 | P | P | 02 57 19.4 | +1.1 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| AKTO | Aktyubinsk | 57.16 | 311 | P | P | 02 57 18.5 | -0.4 |
| | comp=Z,0.9nm,0.4s,baz=67,slow=8.1,SNR=6.2 | | | | | | |
| AKTO | Aktyubinsk | 57.16 | 311 | P | P | 02 57 18.5 | -0.4 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ARCES | ARCESS Array B | 59.58 | 339 | P | P | 02 57 35.0 | -0.4 |
| | comp=Z,2.1nm,0.9s,baz=45,slow=7.0,SNR=4.1 | | | | | | |
| ARCES | ARCESS Array B | 59.58 | 339 | eP | P | 02 57 35.8 | +0.4 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| ARCES | ARCESS Array B | 59.58 | 339 | eP | P | 02 57 35.8 | +0.4 |
| WRA | Warramunga Arr | 63.43 | 192 | P | P | 02 58 00.9 | -1.0 |
| | comp=Z,0.4nm,0.8s,baz=6.9,slow=6.7,SNR=3.1 | | | | | | |
| FINES | FINESS Array B | 65.05 | 333 | P | P | 02 58 11.5 | -0.5 |
| | comp=Z,3.1nm,0.4s,baz=51,slow=7.0,SNR=28 | | | | | | |
| FINES | FINESS Array B | 65.05 | 333 | P | P | 02 58 11.5 | -0.5 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| NVAR | Mina Array Bea | 69.00 | 57 | P | P | 02 58 39.0 | +1.1 |
| | comp=Z,0.4nm,0.7s,baz=288,slow=5.8,SNR=4.6 | | | | | | |
| KBZ | Khabaz | 69.44 | 311 | P | P | 02 58 40.2 | +0.1 |
| | comp=Z,4.6nm,0.8s,baz=128,slow=0.5,SNR=6.1 | | | | | | |
| KBZ | Khabaz | 69.44 | 311 | P | P | 02 58 40.3 | +0.1 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| NB2 | NORSAR Subarra | 69.91 | 338 | P | P | 02 58 42.1 | -0.8 |
| | comp=Z,1.0nm,0.3s,baz=33,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 69.91 | 338 | P | P | 02 58 42.3 | -0.6 |
| | comp=Z,2.0nm,0.7s,baz=37,slow=5.8,SNR=16 | | | | | | |
| NOA | NORSAR Array B | 69.91 | 338 | eP | P | 02 58 42.2 | -0.6 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| HFS | Hagfors | 69.96 | 337 | P | P | 02 58 42.4 | -0.7 |
| | comp=Z,2.3nm,0.4s,baz=39,slow=7.6,SNR=32 | | | | | | |
| HFS | Hagfors | 69.96 | 337 | P | P | 02 58 42.4 | -0.7 |
| HFS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| AKASG | Malin Array Be | 71.52 | 323 | P | P | 02 58 52.0 | -0.8 |
| | comp=Z,3.6nm,0.5s,baz=41,slow=5.9,SNR=23 | | | | | | |
| AKASG | Malin Array Be | 71.52 | 323 | eP | P | 02 58 51.9 | -0.8 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| MLR | Muntele Rosu | 76.85 | 321 | P | P | 02 59 24.3 | +0.2 |
| | comp=Z,0.5nm,0.8s,baz=158,slow=16,SNR=3.9 | | | | | | |
| MLR | Muntele Rosu | 76.85 | 321 | P | P | 02 59 24.3 | +0.2 |
| MLR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| BRTR | Keskin Array B | 77.23 | 313 | P | P | 02 59 26.4 | 0.0 |
| | comp=Z,1.0nm,0.8s,baz=95,slow=1.2,SNR=5.7 | | | | | | |
| BRTR | Keskin Array B | 77.23 | 313 | i P | P | 02 59 26.3 | 0.0 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| CLL | Collm | 77.47 | 332 | eP | P | 02 59 27.0 | -0.3 |
| CLL | | | | e*PP | pP | 02 59 43.0 | +2.5 |
| CLL | Collm | 77.47 | 332 | eP | P | 02 59 27.0 | -0.3 |
| CLL | Collm | 77.47 | 332 | eP | P | 02 59 27.0 | -0.3 |
| CLL | | | | epP | pP | 02 59 43.0 | +2.5 |
| EKA | Eskdalemuir Ar | 78.54 | 342 | P | P | 02 59 32.7 | -0.4 |
| | comp=Z,0.7nm,0.4s,baz=25,slow=5.1,SNR=3.6 | | | | | | |
| EKA | Eskdalemuir Ar | 78.54 | 342 | P | P | 02 59 32.7 | -0.4 |
| EKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| GERES | GERESS Array B | 79.27 | 330 | P | P | 02 59 36.9 | -0.5 |
| | comp=Z,0.4nm,0.7s,baz=32,slow=3.8,SNR=4.3 | | | | | | |
| GERES | GERESS Array B | 79.27 | 330 | eP | P | 02 59 37.9 | +0.5 |
| GERES | GERESS Array B | 79.27 | 330 | eP | P | 02 59 37.9 | +0.5 |
| MMAI | Mount Meron Ar | 81.04 | 307 | P | P | 02 59 47.6 | +0.5 |
| | comp=Z,2.2nm,0.6s,baz=54,slow=7.3,SNR=5.5 | | | | | | |
| TXAR | Lajitas Array | 84.07 | 55 | P | P | 03 00 01.7 | -1.3 |
| | comp=Z,0.3nm,0.7s,baz=271,slow=4.3,SNR=3.2 | | | | | | |
| MDT | Midelt | 99.79 | 335 | LR | LR | 03 51 49.1 | |
| | comp=Z,120nm,19.2s,slow=39 | | | | | | |

*ISCJB* ***04*** *02:52:16.4±1.0, 38°.17N±0°.05×26°.62E±0°.09, h9$^{km}$±4$^{km}$, Error ellipse: s-maj=12.2km s-min=7.5km az=165.3*
*CSEM* ***04*** *02:52:16.5±0.3, 38°.17N×26°.62E, h11$^{km}$, MD2.9, Error ellipse: s-maj=9.7km s-min=5.1km az=65.0*
*DDA* ***04*** *02:52:16.6, 38°.21N×26°.62E, h7$^{km}$, Md2.5*
*ATH* ***04*** *02:52:16.7, 38°.14N×26°.57E, h29$^{km}$, MD2.9/5*
**ISC 04 02:52:16.4**±1.2**, 38°.16N**±0°.04×**26°.63E**±0°.07**, h10**$^{km}$±7$^{km}$**, n13,** σ**0$^{s}$34**/21**, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZEY | ˜zmir | 0.12 | 309 | P | Pg | 02 52 19.1 | -0.2 |
| ZEY | | | | S | Sg | 02 52 21.1 | -0.2 |
| URLA | Izmir | 0.20 | 353 | i S | Sg | 02 52 24.1 | +0.6 |
| URLA | Izmir | 0.20 | 353 | P | Pg | 02 52 20.2 | -0.4 |
| URLA | | | | S | Sg | 02 52 24.1 | +0.6 |
| SMG | Samos | 0.48 | 160 | ePB | Pb | 02 52 27.1 | +0.2 |
| SMG | Samos | 0.48 | 160 | ePb | Pb | 02 52 27.1 | +0.2 |
| CHOS | Chios island | 0.50 | 297 | ePB | Pg | 02 52 26.6 | +0.4 |
| CHOS | | | | eSB | Sb | 02 52 34.5 | -0.3 |
| CHOS | Chios island | 0.50 | 297 | ePb | Pg | 02 52 26.6 | +0.4 |
| CHOS | | | | eSb | Sb | 02 52 34.5 | -0.3 |
| PRK | Paraskevi | 1.12 | 346 | ePN | Pn | 02 52 38.2 | +0.1 |
| PRK | | | | eSN | Sn | 02 52 53.6 | 0.0 |
| PRK | Paraskevi | 1.12 | 346 | ePn | Pn | 02 52 38.2 | +0.1 |
| PRK | | | | eSn | Sn | 02 52 53.6 | 0.0 |
| SIGR | SIGRI | 1.21 | 330 | ePN | Pn | 02 52 39.0 | -0.4 |
| SIGR | | | | eSN | Sg | 02 52 55.3 | 0.0 |
| SIGR | SIGRI | 1.21 | 330 | ePn | Pn | 02 52 39.0 | -0.4 |
| SIGR | | | | eSn | Sg | 02 52 55.3 | 0.0 |
| APE | Apeiranthos | 1.39 | 219 | ePN | Pn | 02 52 41.7 | -0.2 |
| APE | Apeiranthos | 1.39 | 219 | ePn | Pn | 02 52 41.7 | -0.2 |

**IDC 04 03:02:36.7**±1.2**, 55°.69S**×**28°.11W, h0**$^{km}$**, mb3.7**/3**, mb1 3.7**/4**, mb1mx3.6**/25**, mbtmp3.6**/4**, ML3.3**/1**, Error ellipse: s-maj=52.1km s-min=24.9km az=59.0, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SNAA | Sanae | 19.28 | 156 | P | P | 03 07 03.1 | +0.3 |
| | 0.1nm,0.3s,baz=300,slow=11,SNR=19 | | | | | | |
| MAW | Mawson | 40.75 | 144 | P | P | 03 10 18.4 | -0.3 |
| | 0.7nm,0.6s,baz=240,slow=8.1,SNR=4.0 | | | | | | |
| H10S2 | ASCENSION HYDR | 47.81 | 18 | T | T | 04 03 09.9 | |
| | baz=196,slow=74,SNR=5.9 | | | | | | |
| H10S3 | ASCENSION HYDR | 47.81 | 18 | T | T | 04 03 12.6 | |
| | baz=196,slow=74,SNR=3.6 | | | | | | |
| H10S1 | ASCENSION HYDR | 47.83 | 18 | T | T | 04 03 14.2 | |
| | baz=196 | | | | | | |
| LPAZ | La Paz | 49.75 | 306 | P | P | 03 11 31.4 | -0.2 |
| | 1.5nm,0.6s,baz=180,slow=5.1,SNR=8.7 | | | | | | |
| TORD | Torodi Ar. Bea | 73.00 | 30 | P | P | 03 14 08.1 | +0.1 |
| | 0.2nm,0.5s,baz=196,slow=6.8,SNR=7.3 | | | | | | |

*IDC* ***04*** *03:09:29.1±3.5, 19°.77N×122°.15E, h0$^{km}$, mb3.8/6, mb1 4.0/6, mb1mx3.6/48, mbtmp3.9/6, MS3.6/15, Ms1 3.6/15, ms1mx3.4/41, Error ellipse: s-maj=72.5km s-min=34.8km az=164.0*
*ISCJB* ***04*** *03:09:30.4±1.1, 19°.26N±0°.09×122°.2E±0°.1, h44$^{km}$, mb3.8/6, MS3.6/13, Error ellipse: s-maj=22.2km s-min=7.3km az=29.4*
**ISC 04 03:09:32.8**±1.2**, 19°.3N**±0°.1×**122°.0E**±0°.2**, h44**$^{km}$**, n27,** σ**1$^{s}$69**/11**, mb3.9**/6**, MS3.8**/13**, 2C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PIP | Pasuquin | 1.67 | 234 | ⇑iP | Pn | 03 09 57.4 | -2.2 |
| PIP | | | | eS | Sn | 03 10 21.7 | +1.8 |
| BCPH | Baguio City Da | 3.24 | 206 | ⇑iP | Pn | 03 10 22.6 | +1.3 |
| BCPH | | | | i S | Sn | 03 10 56.4 | -2.3 |
| JNU | Nakatsue | 15.86 | 28 | LR | LR | 03 19 31.0 | |
| | comp=Z,158nm,18.4s,baz=217,slow=39 | | | | | | |
| KSRS | Korea Array | 18.79 | 15 | P | Pn | 03 13 49.7 | +0.5 |
| | 0.3nm,0.3s,baz=208,slow=15,SNR=3.7 | | | | | | |
| KSRS | | | | LR | LR | 03 21 08.6 | |
| | comp=Z,175nm,18.0s,baz=200,slow=38 | | | | | | |
| CMAR | Chiang Mai Arr | 21.87 | 272 | P | P | 03 14 24.1 | +2.1 |
| | 0.8nm,0.3s,baz=69,slow=9.9,SNR=8.4 | | | | | | |
| CMAR | | | | LR | LR | 03 21 56.1 | |
| | comp=Z,30nm,18.9s,baz=40,slow=34 | | | | | | |
| MJAR | Matsushiro Arr | 22.27 | 36 | LR | LR | 03 21 29.0 | |
| | comp=Z,66nm,20.1s,baz=285,slow=33 | | | | | | |
| GUMO | Guam | 22.61 | 101 | LR | LR | 03 22 53.0 | |
| | comp=Z,76nm,19.8s,baz=124,slow=36 | | | | | | |
| LEM | Lembang | 29.61 | 210 | LR | LR | 03 27 59.5 | |
| | comp=Z,138nm,18.3s,baz=190,slow=37 | | | | | | |
| ASAJ | Asahikawa | 30.11 | 30 | LR | LR | 03 27 32.5 | |
| | comp=Z,66nm,18.6s,baz=340,slow=36 | | | | | | |
| SONM | Songino Array | 31.16 | 339 | P | P | 03 15 46.5 | -1.1 |
| | 0.3nm,0.6s,baz=157,slow=7.8,SNR=2.0 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.15 | 84 | T | T | 04 02 22.3 | |
| | baz=276,slow=75,SNR=315 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.16 | 84 | T | T | 04 02 19.5 | |
| | baz=276,slow=75,SNR=163 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.17 | 84 | T | T | 04 02 20.0 | |
| | baz=276,slow=75,SNR=157 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.18 | 82 | T | T | 04 02 19.0 | |
| | baz=277,slow=74,SNR=464 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.18 | 82 | T | T | 04 02 23.0 | |
| | baz=277,slow=74,SNR=284 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.19 | 82 | T | T | 04 02 20.3 | |
| | baz=277,slow=74,SNR=257 | | | | | | |
| MKAR | Makanchi Array | 42.46 | 319 | P | P | 03 17 24.2 | +0.8 |
| | 3.8nm,0.8s,baz=112,slow=9.7,SNR=26 | | | | | | |
| ZALV | Zalesovo Beam | 44.78 | 329 | P | P | 03 17 40.8 | -1.2 |
| | 1.8nm,0.6s,baz=126,slow=8.0,SNR=7.4 | | | | | | |
| ZALV | | | | LR | LR | 03 37 34.7 | |
| | comp=Z,100nm,18.0s,baz=200,slow=38 | | | | | | |
| KURBB | Kurchatov Arra | 46.39 | 323 | P | P | 03 17 55.1 | +0.3 |
| | 3.4nm,0.7s,baz=121,slow=7.5,SNR=24 | | | | | | |
| ILAR | Eielson Array | 73.17 | 27 | P | P | 03 20 58.7 | +0.1 |
| | 0.2nm,0.8s,baz=297,slow=4.0,SNR=2.5 | | | | | | |
| ASF | Jabal al Asfar | 75.99 | 299 | LR | LR | 03 57 14.8 | |
| | comp=Z,123nm,19.5s,baz=61,slow=38 | | | | | | |
| MMAI | Mount Meron Ar | 77.01 | 301 | LR | LR | 03 59 13.7 | |
| | comp=Z,43nm,18.9s,baz=250,slow=39 | | | | | | |
| EIL | Elat | 78.25 | 297 | LR | LR | 04 00 10.7 | |
| | comp=Z,62nm,18.8s,baz=244,slow=39 | | | | | | |
| MLR | Muntele Rosu | 80.61 | 315 | LR | LR | 04 00 13.7 | |
| | comp=Z,20nm,20.2s,baz=276,slow=38 | | | | | | |
| HFS | Hagfors | 82.19 | 331 | LR | LR | 04 01 51.5 | |
| | comp=Z,87nm,18.0s,slow=38 | | | | | | |
| NOA | NORSAR Array B | 82.89 | 333 | LR | LR | 04 02 03.8 | |
| | comp=Z,37nm,19.8s,baz=205,slow=38 | | | | | | |
| KMBO | Kilima Mbogo | 85.45 | 267 | LR | LR | 04 00 19.2 | |
| | comp=Z,72nm,19.8s,baz=210,slow=36 | | | | | | |

*IDC* ***04*** *03:13:59.9±2.3, 19°.79N×123°.38E, h0$^{km}$, mb4.0/5, mb1 4.1/5, mb1mx3.6/47, mbtmp4.0/5, Error ellipse: s-maj=208.5km s-min=24.2km az=64.0*
*MAN* ***04*** *03:14:06, 19°.83N×121°.28E, h49$^{km}$, mb4.8, ML3.7, MS3.7*
*ISCJB* ***04*** *03:14:08.2±1.2, 19°.28N±0°.06×121°.8E±0°.2, h44$^{km}$, mb3.9/5, Error ellipse: s-maj=26.7km s-min=7.9km az=8.6*
**ISC 04 03:14:08.3**±1.2**, 19°.23N**±0°.09×**121°.9E**±0°.1**, h44**$^{km}$**, n17,** σ**1$^{s}$68**/12**, mb4.0**/5**, 1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| APYP | Conner | 1.50 | 204 | eP | Pn | 03 14 32.7 | 0.0 |
| APYP | | | | eS | Sn | 03 14 50.3 | -0.7 |
| PIP | Pasuquin | 1.51 | 233 | ⇑iP | Pn | 03 14 33.4 | +0.5 |
| CVP | Callao Caves | 1.52 | 183 | eP | Pn | 03 14 35.1 | +2.0 |
| ABRA | Dolores | 1.93 | 216 | eP | Pn | 03 14 40.3 | +1.6 |
| ABRA | | | | eS | Sn | 03 15 00.0 | -1.8 |
| PALP | Palanan | 2.21 | 167 | eP | Pn | 03 14 52.1 | +10 |
| BOLP | Bolinao | 3.40 | 214 | eP | Pn | 03 15 02.0 | +3.0 |
| WRA | Warramunga Arr | 40.80 | 162 | P | P | 03 21 44.1 | -1.5 |
| | 0.8nm,1.0s,baz=345,slow=9.2,SNR=2.8 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.31 | 83 | T | T | 04 07 01.6 | |
| | baz=276,slow=74,SNR=149 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.32 | 83 | T | T | 04 07 02.4 | |
| | baz=276,slow=74,SNR=122 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.32 | 83 | T | T | 04 07 02.9 | |
| | baz=276,slow=74,SNR=86 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.33 | 82 | T | T | 04 06 55.0 | |
| | baz=277,slow=74,SNR=259 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.34 | 82 | T | T | 04 06 55.4 | |
| | baz=277,slow=74,SNR=136 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.35 | 82 | T | T | 04 06 56.2 | |
| | baz=277,slow=74,SNR=152 | | | | | | |
| MKAR | Makanchi Array | 42.43 | 320 | P | P | 03 22 00.2 | +1.4 |
| | 1.8nm,0.8s,baz=114,slow=9.8,SNR=10 | | | | | | |
| ZALV | Zalesovo Beam | 44.79 | 330 | P | P | 03 22 17.4 | -0.2 |
| | 0.9nm,0.4s,baz=106,slow=11,SNR=6.2 | | | | | | |
| KURBB | Kurchatov Arra | 46.37 | 323 | P | P | 03 22 31.1 | +0.9 |
| | 1.8nm,0.7s,baz=118,slow=7.5,SNR=14 | | | | | | |
| FINES | FINESS Array B | 76.05 | 330 | P | P | 03 25 49.9 | -1.0 |
| | 2.5nm,0.8s,baz=110,slow=1.6,SNR=3.7 | | | | | | |

**WEL 04 03:17:31.9**±0.1**, 43°.48S**×**172°.72E, h12**$^{km}$**, ML3.5**/10**, 5C-3D, Error ellipse: s-maj=1.4km s-min=0.6km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.12 | 217 | PG | Pg | 03 17 35.1 | 0.0 |
| CRLZ | | | | SG | Sg | 03 17 37.5 | +0.2 |
| CRLZ | | | | AML | AML | 03 17 38.9 | |
| MQZ | McQueen's Vall | 0.23 | 193 | ⇑P* | Pg | 03 17 37.1 | +0.2 |
| MQZ | | | | S* | Sg | 03 17 41.0 | +0.7 |
| MQZ | | | | AML | AML | 03 17 41.2 | |
| OXZ | Oxford | 0.52 | 287 | ⇓P* | Pg | 03 17 42.0 | -0.2 |
| OXZ | | | | S* | Sg | 03 17 49.4 | +0.2 |
| LTZ | Lake Taylor | 0.77 | 334 | ⇓P* | Pg | 03 17 46.8 | -0.2 |
| LTZ | | | | AML | AML | 03 17 59.0 | |
| LTZ | | | | AML | AML | 03 18 04.4 | |
| KHZ | Kahutara | 1.22 | 30 | P* | Pn | 03 17 53.8 | -0.9 |
| RPZ | Rata Peaks | 1.24 | 258 | ⇑P* | Pn | 03 17 54.1 | -1.0 |
| RPZ | | | | AML | AML | 03 18 12.6 | |
| RPZ | | | | AML | AML | 03 18 18.0 | |
| THZ | Tophouse | 1.72 | 5 | PN | Pn | 03 18 01.0 | -0.8 |
| THZ | | | | AML | AML | 03 18 25.1 | |
| DSZ | Denniston Nort | 1.86 | 338 | ⇑PN | Pn | 03 18 03.2 | -0.4 |
| DSZ | | | | SN | Sn | 03 18 25.6 | -1.5 |
| DSZ | | | | AML | AML | 03 18 35.7 | |
| LBZ | Lake Benmore | 2.05 | 243 | PN | Pn | 03 18 06.1 | -0.1 |
| LBZ | | | | AML | AML | 03 18 40.0 | |
| LBZ | | | | AML | AML | 03 18 40.3 | |
| ODZ | Otahua Downs | 2.17 | 223 | ⇑PN | Pn | 03 18 07.1 | -0.7 |
| ODZ | | | | AML | AML | 03 18 46.4 | |
| ODZ | | | | AML | AML | 03 18 48.8 | |
| FOZ | Fox Glacier | 2.21 | 267 | PN | Pn | 03 18 08.0 | -0.4 |
| EAZ | Earnscleugh | 3.01 | 233 | ⇓PN | Pn | 03 18 18.8 | -0.6 |
| EAZ | | | | AML | AML | 03 19 09.5 | |
| EAZ | | | | AML | AML | 03 19 10.4 | |
| TUZ | Tuapeka | 3.32 | 221 | ⇑PN | Pn | 03 18 22.9 | -0.7 |
| TUZ | | | | AML | AML | 03 19 26.5 | |
| TUZ | | | | AML | AML | 03 19 27.4 | |
| SYZ | Scrubby Hill | 3.98 | 218 | PN | Pn | 03 18 32.4 | -0.3 |

*IDC* ***04*** *03:46:09.4±1.8, 19°.68N×123°.13E, h0$^{km}$, mb3.7/4, mb1 3.9/4, mb1mx3.5/38, mbtmp3.7/4, Error ellipse: s-maj=58.5km s-min=26.1km az=59.0*
*ISCJB* ***04*** *03:46:15.0±1.1, 19°.3N±0°.1×122°.2E±0°.1, h44$^{km}$, mb3.6/4, Error ellipse: s-maj=18.0km s-min=12.7km az=34.4*
**ISC 04 03:46:16.7**±1.4**, 19°.3N**±0°.1×**122°.1E**±0°.1**, h44**$^{km}$**, n12,** σ**1$^{s}$58**/6**, mb3.6**/4**, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CVP | Callao Caves | 1.57 | 189 | eP | Pn | 03 46 42.0 | -0.1 |
| PIP | Pasuquin | 1.66 | 236 | i P | Pn | 03 46 41.6 | -1.8 |
| PIP | | | | eS | Sn | 03 47 05.2 | +1.7 |
| CMAR | Chiang Mai Arr | 21.90 | 272 | P | P | 03 51 15.2 | +8.9 |
| | 1.0nm,0.3s,baz=64,slow=7.1,SNR=3.5 | | | | | | |
| WRA | Warramunga Arr | 40.78 | 162 | P | P | 03 53 53.3 | -0.6 |
| | 0.2nm,0.4s,baz=342,slow=8.6,SNR=2.8 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.13 | 83 | T | T | 04 39 07.8 | |
| | baz=279,slow=75,SNR=35 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.15 | 83 | T | T | 04 39 05.7 | |
| | baz=279,slow=75,SNR=49 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.15 | 83 | T | T | 04 39 06.7 | |
| | baz=279,slow=75,SNR=39 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.16 | 82 | T | T | 04 39 05.6 | |
| | baz=277,slow=75,SNR=84 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.16 | 82 | T | T | 04 39 04.8 | |
| | baz=277,slow=75,SNR=44 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.18 | 82 | T | T | 04 39 05.3 | |
| | baz=277,slow=75,SNR=45 | | | | | | |
| MKAR | Makanchi Array | 42.52 | 319 | P | P | 03 54 09.0 | +1.1 |
| | 0.5nm,0.5s,baz=133,slow=8.5,SNR=5.8 | | | | | | |
| ZALV | Zalesovo Beam | 44.85 | 330 | P | P | 03 54 26.7 | +0.2 |
| | 1.5nm,0.7s,baz=122,slow=6.4,SNR=4.1 | | | | | | |

**MAN 04 04:27:15, 11°.69N**×**124°.34E, h44**$^{km}$**, mb3.9, ML2.7, MS2.4, 1C-1D, Leyte**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OCLP | Ormoc | 0.69 | 157 | eP | Pn | 04 27 28.9 | +0.5 |
| OCLP | | | | eS | Sn | 04 27 41.2 | +3.3 |
| PLP | Palo | 0.81 | 130 | ⇓eP | Pn | 04 27 32.4 | +2.3 |
| PLP | | | | eS | Sn | 04 27 45.4 | +4.3 |
| CNP | Catarman | 0.88 | 21 | eP | Pn | 04 27 31.9 | +1.0 |
| RCP | Roxas | 1.57 | 266 | ⇑eP | Pn | 04 27 41.6 | +1.2 |
| RCP | | | | eS | Sn | 04 28 01.9 | +2.4 |
| PVCP | Virac | 1.91 | 355 | eP | Pn | 04 27 47.4 | +2.4 |

**IDC 04 04:41:00.2**±7.8**, 30°.38S**×**177°.32W, h0**$^{km}$**, mb3.7**/2**, mb1 4.0**/2**, mb1mx3.6**/30**, mbtmp3.7**/2**, Error ellipse: s-maj=326.3km s-min=60.5km az=155.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 43.70 | 267 | P | P | 04 49 07.0 | -0.3 |
| | 0.3nm,0.5s,baz=106,slow=6.8,SNR=3.2 | | | | | | |
| WRA | Warramunga Arr | 44.68 | 272 | P | P | 04 49 15.2 | 0.0 |
| | 1.7nm,0.8s,baz=111,slow=8.1,SNR=6.6 | | | | | | |
| FINES | FINESS Array B | 145.33 | 340 | PKPbc | PKPbc | 05 00 38.3 | -0.8 |
| | 1.8nm,0.8s,baz=100,slow=5.8,SNR=4.1 | | | | | | |

*AUST* ***04*** *04:52:36.5±1.7, 2°.58S×100°.45E, h51$^{km}$, Error ellipse: s-maj=2.7km s-min=0.7km az=238.0*
*ISCJB* ***04*** *04:52:38.8±0.3, 2°.27S±0°.03×100°.79E±0°.03, h78$^{km}$±3$^{km}$, mb4.5/28, Error ellipse: s-maj=5.6km s-min=3.2km az=135.6*
*DJA* ***04*** *04:52:39.6±0.5, 2°S±2°×10°1E±°, h28$^{km}$±6$^{km}$, M4.8/31, mb4.6/20, mB5.5/6, MLv4.8/31, Mw(mB)5.0/6, Mwp5.7/1*
*NEIC* ***04*** *04:52:40.1±0.7, 2°.22S×100°.86E, h74$^{km}$±6$^{km}$, mb4.7/9, Error ellipse: s-maj=12.7km s-min=4.8km az=56.0*
*NEIC Felt [II] at Mukomuko, Sumatra.*
*IDC* ***04*** *04:52:41.3±2.6, 2°.17S×100°.95E, h83$^{km}$±22$^{km}$, mb4.1/21, mb1 4.2/23, mb1mx4.0/39, mbtmp4.4/23, MS3.4/7, Ms1 3.4/7, ms1mx3.1/33, Error ellipse: s-maj=22.4km s-min=9.5km az=50.0*
*KLM* ***04*** *04:52:42.6, 2°.16S×101°.01E, h69$^{km}$, mb4.5, ML4.3, MS5.1*
**ISC 04 04:52:39.7**±0.8**, 2°.29S**±0°.04×**100°.77E**±0°.04**, h70**$^{km}$±7$^{km}$**, n115,** σ**1$^{s}$07**/117**, mb4.6**/28**, 5C-3D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PPSI | Pulau Pagai | 0.90 | 238 | P | Pn | 04 52 55.3 | -1.6 |
| PPSI | | | | S | Sn | 04 53 11.1 | +1.5 |
| PDSI | Padang | 1.40 | 347 | P | Pn | 04 53 01.4 | -2.0 |
| PDSI | | | | S | Sn | 04 53 20.9 | -0.3 |
| SDSI | Sungai Dareh | 1.50 | 26 | P | Pn | 04 53 03.9 | -0.7 |
| SDSI | | | | S | Sn | 04 53 22.6 | -0.8 |
| MASI | Maura Aman, Be | 1.69 | 120 | P | Pn | 04 53 06.5 | -0.8 |
| MASI | | | | S | Sn | 04 53 29.3 | +1.2 |
| SISI | Saibi | 1.93 | 300 | P | Pn | 04 53 09.6 | -0.8 |
| SISI | | | | S | Sn | 04 53 35.5 | +1.6 |
| KSI | Kapahiang | 2.27 | 127 | P | Pn | 04 53 16.1 | +1.1 |
| KSI | | | | S | Sn | 04 53 43.6 | +1.6 |
| BKNI | Bangkinang | 2.61 | 6 | P | Pn | 04 53 21.0 | +1.3 |
| | baz=3.0,SNR=5.9 | | | | | | |
| BKNI | Bangkinang | 2.61 | 6 | P | Pn | 04 53 19.2 | -0.4 |
| BKNI | | | | S | Sn | 04 53 50.4 | +0.1 |
| BKNI | Bangkinang | 2.61 | 6 | ePn | Pn | 04 53 19.2 | -0.4 |
| JMBI | JAMBI | 2.94 | 77 | P | Pn | 04 53 24.1 | 0.0 |
| JMBI | | | | S | Sn | 04 53 58.9 | +0.6 |
| MNAI | Manna | 3.00 | 133 | P | Pn | 04 53 25.2 | +0.3 |
| | baz=3.1,SNR=9.5 | | | | | | |
| MNAI | Manna | 3.00 | 133 | P | Pn | 04 53 25.2 | +0.3 |
| MNAI | Manna | 3.00 | 133 | ePn | Pn | 04 53 25.2 | +0.3 |
| MNAI | | | | eS | Sn | 04 53 60.0 | +0.3 |
| LHSI | Lahat | 3.14 | 119 | P | Pn | 04 53 27.7 | +0.9 |
| MNSI | Mandailing Nat | 3.29 | 339 | P | Pn | 04 53 29.0 | +0.2 |
| MDSI | Maura Dua | 4.04 | 123 | P | Pn | 04 53 40.1 | +1.0 |
| PMBI | Palembang | 4.04 | 99 | P | Pn | 04 53 38.7 | -0.5 |
| LWLI | Liwa | 4.25 | 130 | P | Pn | 04 53 43.1 | +1.0 |
| BTDF | Bukit Timah Da | 4.71 | 40 | P | Pn | 04 53 48.6 | +0.4 |
| | baz=5.1,SNR=20 | | | | | | |
| GSI | Gunungsitoli | 4.79 | 318 | P | Pn | 04 53 50.2 | +0.8 |
| GSI | Gunungsitoli | 4.79 | 318 | ePn | Pn | 04 53 49.1 | -0.2 |
| GSI | | | | eS | Sn | 04 54 44.5 | +0.9 |
| KLI | Kotabumi | 4.81 | 122 | P | Pn | 04 53 50.6 | +0.9 |
| KASI | Kota Agung | 4.91 | 131 | P | Pn | 04 53 50.8 | -0.2 |
| TPRI | Tanjung Pinang | 4.92 | 50 | P | Pn | 04 53 51.3 | +0.1 |
| KGM | Kluang | 4.98 | 31 | ⇓P | Pn | 04 53 52.2 | +0.3 |
| MYKOM | Kota Tinggi | 5.09 | 37 | ⇑P | Pn | 04 53 53.4 | -0.1 |
| PSI | Prapat | 5.38 | 340 | P | Pn | 04 53 56.0 | -1.6 |
| | 1.8nm,0.3s,baz=165,slow=11,SNR=12 | | | | | | |
| PSI | | | | LR | LR | 04 56 26.8 | |
| | comp=Z,384nm,21.3s,baz=150,slow=43 | | | | | | |
| PSI | Prapat | 5.38 | 340 | P | Pn | 04 53 59.9 | +2.3 |
| | baz=5.5,SNR=8.4 | | | | | | |
| FRIM | Kepong | 5.55 | 9 | ⇑P | Pn | 04 54 00.5 | +0.7 |
| SNSI | Sinabang, Aceh | 6.44 | 316 | P | Pn | 04 54 12.9 | +0.9 |
| | 173nm,1.3s,1.0nm | | | | | | |
| KCSI | Kotacane, Aceh | 6.50 | 333 | P | Pn | 04 54 13.5 | +0.7 |
| | 25nm,1.0s,3μm0.4nm | | | | | | |
| CGJI | Cibinong | 6.52 | 131 | P | Pn | 04 54 11.1 | -1.9 |
| IPM | Ipoh | 6.73 | 2 | ⇑P | Pn | 04 54 16.9 | +1.0 |
| IPM | Ipoh | 6.73 | 2 | ePn | Pn | 04 54 17.9 | +2.0 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 20nm,0.6s | | | | | | |
| TPI | Tanjungpandan | 6.89 | 94 | P | Pn | 04 54 17.8 | -0.3 |
| | 21nm,0.7s,0.1nm | | | | | | |
| KULM | Kulim | 7.53 | 359 | ⇑P | Pn | 04 54 28.4 | +1.6 |
| KULM | Kulim | 7.53 | 359 | *e*Pn | Pn | 04 54 26.8 | -0.1 |
| | 26nm,0.9s | | | | | | |
| KTGM | Kuala Trenggan | 7.92 | 17 | ⇓P | Pn | 04 54 33.3 | +1.1 |
| CNJI | Cibinong | 8.06 | 128 | P | Pn | 04 54 31.4 | -2.7 |
| LEM | Lembang | 8.18 | 124 | LR | LR | 04 57 41.6 | |
| | comp=Z,196nm,21.0s,baz=210,slow=37 | | | | | | |
| CMJI | Cimerak | 9.39 | 126 | P | Pn | 04 54 49.8 | -2.5 |
| | 53nm,1.4s | | | | | | |
| UGM | Wanagama | 11.20 | 120 | P | Pn | 04 55 15.6 | -1.5 |
| | baz=11,SNR=3.6 | | | | | | |
| JAGI | Jajag, Banyuwa | 14.66 | 115 | P | Pn | 04 56 02.4 | -1.1 |
| | baz=15,SNR=3.1 | | | | | | |
| KKM | Kota Kinabalu | 17.50 | 62 | ⇑P | Pn | 04 56 38.6 | -0.7 |
| SDKM | Sandakan | 18.20 | 64 | ⇓P | Pn | 04 56 47.9 | +0.1 |
| TTSI | Tana Toraja | 19.04 | 93 | P | Pn | 04 56 58.0 | +0.2 |
| | 23nm,1.1s | | | | | | |
| KAPI | Kappang | 19.13 | 99 | P | P | 04 56 58.0 | +0.6 |
| | 2.3nm,0.3s,baz=287,slow=12,SNR=9.3 | | | | | | |
| KAPI | Kappang | 19.13 | 99 | *e*P | P | 04 56 58.0 | +0.6 |
| | 26nm,0.8s | | | | | | |
| MPSI | Mapaga | 19.30 | 82 | P | Pn | 04 57 02.5 | +1.6 |
| | 16nm,1.2s,6μm | | | | | | |
| BKSI | Bulukumba | 19.54 | 99 | P | Pn | 04 57 02.8 | -0.9 |
| | 60nm,0.8s,545nm11μm | | | | | | |
| CMAR | Chiang Mai Arr | 20.69 | 355 | P | P | 04 57 12.0 | -2.3 |
| | 3.8nm,0.8s,baz=191,slow=8.7,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 05 04 55.0 | |
| | comp=Z,91nm,20.8s,baz=176,slow=36 | | | | | | |
| APSI | Ampana | 20.91 | 87 | P | Pn | 04 57 18.8 | -1.1 |
| | 57nm,1.0s | | | | | | |
| MRSI | Marisa | 21.34 | 83 | P | P | 04 57 21.8 | +0.5 |
| | 36nm,1.0s,7μm | | | | | | |
| LUWI | Luwuk | 22.02 | 87 | P | P | 04 57 32.5 | +3.9 |
| | 33nm,1.2s,2μm | | | | | | |
| GTOI | Gorontalo | 22.42 | 83 | P | P | 04 57 33.7 | +0.8 |
| H08S2 | Diego Garcia H | 28.66 | 258 | T | T | 05 27 44.7 | |
| | baz=82,slow=75,SNR=406 | | | | | | |
| H08S3 | Diego Garcia H | 28.67 | 258 | T | T | 05 27 39.5 | |
| | baz=82,slow=75,SNR=304 | | | | | | |
| H08S1 | Diego Carcia H | 28.68 | 258 | T | T | 05 27 46.3 | |
| | baz=82,slow=75,SNR=458 | | | | | | |
| FITZ | Fitzroy Crossi | 29.01 | 124 | P | P | 04 58 32.1 | -1.1 |
| | 1.2nm,0.5s,baz=314,slow=8.7,SNR=8.7 | | | | | | |
| FITZ | Fitzroy Crossi | 29.01 | 124 | P | P | 04 58 32.5 | -0.7 |
| | baz=29,SNR=5.6 | | | | | | |
| FITZ | Fitzroy Crossi | 29.01 | 124 | *e*P | P | 04 58 31.9 | -1.3 |
| | 1.4nm,0.6s | | | | | | |
| ODAN | Odare | 31.73 | 337 | *e*P | P | 04 58 58.2 | +0.8 |
| | 54nm,0.6s | | | | | | |
| TAPN | Taplejung | 32.04 | 338 | *e*P | P | 04 59 01.0 | +0.8 |
| | 45nm,0.5s | | | | | | |
| RAMN | Ramite | 32.12 | 336 | *e*P | P | 04 59 01.7 | +0.8 |
| | 22nm,0.6s | | | | | | |
| PKI | Pulchoki | 33.17 | 335 | *e*P | P | 04 59 10.9 | +0.8 |
| | 9.8nm,0.5s | | | | | | |
| PKIN | Phulchoki | 33.18 | 335 | *e*P | P | 04 59 11.2 | +1.1 |
| | 6.4nm,0.3s | | | | | | |
| GUN | Gumba | 33.27 | 336 | *e*P | P | 04 59 11.5 | +0.5 |
| | 76nm,0.6s | | | | | | |
| DMN | Daman | 33.33 | 334 | *e*P | P | 04 59 12.4 | +1.0 |
| | 18nm,0.7s | | | | | | |
| KKN | Kakani | 33.42 | 335 | *e*P | P | 04 59 12.7 | +0.6 |
| | 20nm,0.5s | | | | | | |
| GKN | Gorkha | 33.88 | 334 | *e*P | P | 04 59 16.8 | +0.7 |
| | 18nm,0.3s | | | | | | |
| KOLN | Koldanda | 34.15 | 332 | *e*P | P | 04 59 19.2 | +0.7 |
| | 30nm,0.7s | | | | | | |
| H01W3 | Cape Leeuwin H | 34.73 | 161 | T | T | 05 36 05.6 | |
| | baz=336,slow=76,SNR=16 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.75 | 161 | T | T | 05 35 58.9 | |
| | baz=336,slow=76,SNR=14 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.75 | 161 | T | T | 05 36 06.3 | |
| | baz=336,slow=76,SNR=13 | | | | | | |
| WRKA | Warakurna | 34.86 | 133 | P | P | 04 59 25.0 | +0.5 |
| | baz=35,SNR=6.9 | | | | | | |
| WRA | Warramunga Arr | 37.18 | 121 | P | P | 04 59 43.3 | -1.1 |
| | 6.3nm,0.5s,baz=300,slow=9.1,SNR=34 | | | | | | |
| WRA | | | | PcP | PcP | 05 02 03.2 | -0.1 |
| | 1.2nm,0.6s,baz=310,slow=2.5,SNR=4.9 | | | | | | |
| WRAB | Tennant Creek | 37.19 | 121 | *e*P | P | 04 59 43.0 | -1.4 |
| | 3.0nm,0.4s | | | | | | |
| FORT | Forrest | 38.33 | 140 | *e*P | P | 04 59 54.1 | +0.2 |
| | 20nm,1.2s | | | | | | |
| ASAR | Alice Springs | 38.46 | 126 | P | P | 04 59 54.8 | -0.3 |
| | 15nm,0.7s,baz=304,slow=8.0,SNR=127 | | | | | | |
| ASAR | | | | PcP | PcP | 05 02 07.5 | +0.3 |
| | 2.0nm,0.6s,baz=303,slow=2.7,SNR=7.9 | | | | | | |
| ASAR | | | | S | S | 05 05 42.6 | -3.0 |
| | 1.7nm,1.0s,baz=296,slow=15,SNR=9.6 | | | | | | |
| KSRS | Korea Array | 46.88 | 30 | LR | LR | 05 20 31.2 | |
| | comp=Z,30nm,20.2s,baz=234,slow=36 | | | | | | |
| HTT | Hallett | 47.25 | 135 | P | P | 05 01 05.0 | -1.1 |
| | baz=47,SNR=5.1 | | | | | | |
| SONM | Songino Array | 50.16 | 5 | P | P | 05 01 28.3 | 0.0 |
| | 3.9nm,0.8s,baz=185,slow=8.9,SNR=22 | | | | | | |
| SONM | | | | PcP | PcP | 05 02 46.5 | -0.2 |
| | 1.3nm,0.8s,baz=179,slow=5.0,SNR=3.0 | | | | | | |
| TKM2 | Tokmak 2 | 50.41 | 336 | *e*P | P | 05 01 30.7 | +0.4 |
| | 4.3nm,0.4s | | | | | | |
| AAK | Ala-Archa | 50.62 | 335 | P | P | 05 01 31.9 | 0.0 |
| | 1.3nm,0.4s,baz=159,slow=8.6,SNR=6.4 | | | | | | |
| AAK | Ala-Archa | 50.62 | 335 | *e*P | P | 05 01 32.3 | +0.4 |
| | 3.1nm,1.0s | | | | | | |
| EKS2 | Erkin-Say | 50.95 | 334 | *e*P | P | 05 01 35.1 | +0.8 |
| | 11nm,0.8s | | | | | | |
| CMSA | Cobar Meteorol | 51.33 | 129 | P | P | 05 01 38.0 | +0.7 |
| | baz=52,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 51.52 | 344 | P | P | 05 01 38.0 | -0.3 |
| | 15nm,0.6s,baz=150,slow=8.1,SNR=141 | | | | | | |
| MJAR | Matsushiro Arr | 52.02 | 38 | LR | LR | 05 24 50.5 | |
| | comp=Z,21nm,18.5s,baz=40,slow=37 | | | | | | |
| USRK | Ussuriysk Ar. | 54.05 | 27 | P | P | 05 01 56.2 | -0.7 |
| | 6.3nm,0.8s,baz=225,slow=6.4,SNR=9.8 | | | | | | |
| KURBB | Kurchatov Arra | 56.05 | 343 | P | P | 05 02 10.8 | -0.4 |
| | 7.1nm,0.8s,baz=161,slow=7.0,SNR=53 | | | | | | |
| KURK | Kurchatov | 56.10 | 343 | *e*P | P | 05 02 11.3 | -0.3 |
| | 22nm,0.8s | | | | | | |
| GEYT | Alibeck | 56.16 | 320 | P | P | 05 02 12.4 | -0.1 |
| | 3.8nm,0.3s,baz=130,slow=6.6,SNR=3.3 | | | | | | |
| ZAA0 | Zalesovo Array | 57.59 | 349 | P | P | 05 02 21.9 | -0.3 |
| | baz=58,SNR=6.6 | | | | | | |
| ZALV | Zalesovo Beam | 57.59 | 349 | P | P | 05 02 21.8 | -0.4 |
| | 20nm,0.7s,baz=170,slow=5.4,SNR=59 | | | | | | |
| ZALV | | | | LR | LR | 05 29 21.7 | |
| | comp=Z,30nm,21.0s,baz=78,slow=38 | | | | | | |
| BVAR | Borovoye Array | 60.72 | 339 | P | P | 05 02 42.8 | -1.0 |
| | 1.3nm,0.3s,baz=144,slow=8.4,SNR=9.7 | | | | | | |
| ABKAR | Akbulak array | 62.26 | 331 | *e*P | P | 05 02 53.6 | -0.7 |
| | 5.0nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 63.98 | 331 | P | P | 05 03 04.6 | -1.0 |
| | 1.2nm,0.3s,baz=128,slow=7.4,SNR=6.2 | | | | | | |
| KBZ | Khabaz | 69.03 | 319 | P | P | 05 03 38.6 | +0.7 |
| | 4.9nm,0.8s,baz=139,slow=7.0,SNR=6.3 | | | | | | |
| MAW | Mawson | 70.20 | 194 | P | P | 05 03 46.0 | +1.3 |
| | 1.2nm,0.9s,baz=9.4,slow=6.0,SNR=4.0 | | | | | | |
| BRTR | Keskin Array B | 74.08 | 312 | P | P | 05 04 08.4 | -0.3 |
| | 2.0nm,0.7s,baz=130,slow=6.8,SNR=9.4 | | | | | | |
| RPZ | Rata Peaks | 74.23 | 135 | LR | LR | 05 35 30.7 | |
| | comp=Z,84nm,20.1s,baz=324,slow=35 | | | | | | |
| AKASG | Malin Array Be | 80.18 | 322 | P | P | 05 04 41.7 | -0.7 |
| | 0.6nm,0.6s,baz=101,slow=4.8,SNR=5.2 | | | | | | |
| VNDA | Vanda | 81.73 | 169 | P | P | 05 04 50.9 | +0.7 |
| | 0.7nm,0.7s,baz=344,slow=7.1,SNR=5.4 | | | | | | |
| FINES | FINESS Array B | 84.72 | 332 | P | P | 05 05 06.3 | +0.5 |
| | 2.4nm,0.8s,baz=116,slow=4.4,SNR=4.6 | | | | | | |
| ARCES | ARCESS Array B | 87.00 | 340 | P | P | 05 05 17.2 | +0.3 |
| | 1.3nm,0.5s,baz=100,slow=5.2,SNR=14 | | | | | | |
| GERES | GERESS Array B | 89.77 | 319 | P | P | 05 05 31.7 | +1.0 |
| | 0.3nm,0.3s,baz=72,slow=4.3,SNR=5.0 | | | | | | |
| BDFB | Brasilia | 144.36 | 239 | PKP | PKPdf | 05 12 09.1 | 0.0 |
| | 2.8nm,0.6s,baz=86,slow=5.1,SNR=7.2 | | | | | | |
| TXAR | Lajitas Array | 144.45 | 38 | PKP | PKPbc | 05 12 08.2 | +0.6 |
| | 6.0nm,0.7s,baz=310,slow=1.3,SNR=92 | | | | | | |
| CPUP | Villa Florida | 144.54 | 215 | PKP | PKPdf | 05 12 09.3 | +0.3 |
| | 5.3nm,0.8s,baz=146,slow=2.8,SNR=14 | | | | | | |
| CFAA | Coronel Fontan | 144.71 | 196 | PKP | PKPdf | 05 12 09.4 | +0.2 |
| | 0.8nm,0.7s,baz=168,slow=3.9,SNR=21 | | | | | | |
| MIAR | Mount Ida | 145.23 | 21 | *e*PKPdf | PKPbc | 05 12 09.3 | -0.3 |
| WVT | Waverly | 145.40 | 12 | *e*PKPdf | PKPbc | 05 12 09.1 | -1.0 |
| JCT | Junction City | 145.85 | 33 | *e*PKPdf | PKPbc | 05 12 11.6 | -0.2 |
| LVC | Limon Verde | 153.28 | 202 | PKPbc | PKPbc | 05 12 31.7 | +0.7 |
| | 9.6nm,0.7s,baz=258,slow=5.8,SNR=4.3 | | | | | | |

*ISCJB **04** 05:01:48.8±0.5, 44.°31N±0.°04×82.°01E±0.°05, h10km, mb3.9/7, MS3.7/1, Error ellipse: s-maj=5.9km s-min=4.5km az=150.1*
*IDC **04** 05:01:49.2±0.9, 44.°29N×82.°07E, h0km, mb3.9/5, mb1 4.0/8, mb1mx3.7/33, mbtmp3.8/8, ML3.3/3, MS3.0/2, Ms1 3.0/2, ms1mx2.4/36, Error ellipse: s-maj=25.7km s-min=10.4km az=78.0*
*BJI **04** 05:01:50.8, 44.°34N×82.°31E, h7km, ML3.6/10*
*NEIC **04** 05:01:51.2±0.6, 44.°16N×82.°09E, h10km, mb4.5/2, Error ellipse: s-maj=11.9km s-min=10.3km az=194.0*
*NNC **04** 05:01:53.5±0.3, 44.°47N×81.°94E, h0km, mb4.2, mpv3.8, Error ellipse: s-maj=3.5km s-min=1.7km az=125.0*
**ISC 04 05:01:50.8**±0.6**, 44.°28N**±0.°04×**82.°08E**±0.°05**, h10km, n37,** σ**1.s70**/38**, mb3.9**/7**, 20C-8D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDGK | Podgornoye | 2.10 | 244 | ⇑Pn | Pg | 05 02 30.3 | -0.9 |
| | 180nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 05 03 00.6 | |
| | 644nm,0.9s | | | | | | |
| MK31 | Makanchi Array | 2.52 | 3 | ⇓Pn | Pn | 05 02 33.6 | +1.7 |
| | 2.7nm,0.3s,baz=186,slow=14,SNR=755 | | | | | | |
| MK31 | | | | ⇑Pg | Pb | 05 02 36.3 | +0.2 |
| | 14nm,0.3s,baz=186,slow=18,SNR=7.8 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 05 03 08.0 | |
| | 35nm,0.2s,baz=184,slow=26,SNR=15 | | | | | | |
| MKAR | Makanchi Array | 2.52 | 3 | Pn | Pn | 05 02 33.6 | +1.8 |
| | 27nm,0.3s,baz=185,slow=18,SNR=75 | | | | | | |
| MKAR | | | | Pg | Pb | 05 02 36.9 | +0.8 |
| | 27nm,0.3s,baz=180,slow=17,SNR=118 | | | | | | |
| MKAR | | | | LR | LR | 05 03 01.3 | |
| | comp=Z,54nm,18.0s,baz=106,slow=29 | | | | | | |
| MKAR | | | | Lg | Lg | 05 03 05.0 | |
| | 36nm,0.3s,baz=187,slow=27,SNR=11 | | | | | | |
| WMQ | Urumqi | 4.08 | 95 | Pn | Pn | 05 02 48.8 | -4.5 |
| WMQ | | | | Sn | Sn | 05 03 33.0 | -8.1 |
| WMQ | | | | SMN | | | |
| | 160nm,0.8s | | | | | | |
| WMQ | | | | SME | | | |
| | 140nm,0.8s | | | | | | |
| TKM2 | Tokmak 2 | 4.90 | 256 | ⇓Pg | Pg | 05 03 21.0 | -3.6 |
| | 25nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 05 04 27.2 | |
| | 69nm,0.7s | | | | | | |
| TKM2 | Tokmak 2 | 4.90 | 256 | *e*Pn | Pn | 05 03 05.5 | +0.8 |
| TKM2 | | | | *e*Sn | Sn | 05 04 00.8 | -0.7 |
| TKM2 | | | | *e*Sg | Sg | 05 04 30.3 | +2.3 |
| AAK | Ala-Archa | 5.76 | 256 | ⇑Pg | Pg | 05 03 37.7 | -3.4 |
| | 19nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 05 04 55.2 | |
| | 44nm,0.8s | | | | | | |
| AAK | Ala-Archa | 5.76 | 256 | Pg | Pb | 05 03 34.5 | +3.1 |
| | 2.2nm,0.3s,baz=82,slow=9.5,SNR=11 | | | | | | |
| AAK | | | | Lg | Lg | 05 04 51.2 | |
| | 1.8nm,0.3s,baz=232,slow=19,SNR=2.9 | | | | | | |
| AAK | Ala-Archa | 5.76 | 256 | *e*Pn | Pn | 05 03 15.4 | -1.1 |
| | 17nm,0.5s | | | | | | |
| AAK | | | | Pg | Pb | 05 03 34.5 | +3.1 |
| AAK | | | | *e*Pg | Pg | 05 03 37.0 | -4.1 |
| AAK | | | | *e*Sn | Sn | 05 04 22.6 | 0.0 |
| AAK | | | | Lg | Lg | 05 04 51.2 | |
| AAK | | | | *e*Sg | Sg | 05 04 51.5 | -4.2 |
| EKS2 | Erkin-Say | 6.25 | 258 | *e*Pn | Pn | 05 03 21.5 | -1.7 |
| | 13nm,0.8s | | | | | | |
| EKS2 | | | | *e*Pg | Pg | 05 03 47.1 | -3.4 |
| EKS2 | | | | *e*Sg | Sg | 05 05 12.8 | +1.3 |
| KSH | Kashi | 6.59 | 226 | *e*Pn | Pb | 05 03 37.1 | -8.4 |
| KSH | | | | Sn | Sb | 05 04 59.9 | -4.4 |
| KSH | | | | SMN | | | |
| | 9.0nm,0.8s | | | | | | |
| KSH | | | | SME | | | |
| | 25nm,1.3s | | | | | | |
| KURBB | Kurchatov Arra | 6.78 | 341 | ⇑Pn | Pn | 05 03 31.2 | +0.8 |
| | 2.1nm,0.3s | | | | | | |
| KURBB | | | | ⇑Pg | Pb | 05 03 53.1 | +4.4 |
| | 4.3nm,0.4s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 05 04 47.5 | -0.1 |
| | 27nm,0.7s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 05 05 22.1 | |
| | 86nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 6.78 | 341 | Pn | Pn | 05 03 30.3 | -0.1 |
| | 0.3nm,0.3s,baz=233,slow=13,SNR=12 | | | | | | |
| KURBB | | | | Sn | Sn | 05 04 46.1 | -1.5 |
| | 1.0nm,0.3s,baz=159,slow=21,SNR=7.5 | | | | | | |
| KURBB | | | | Lg | Lg | 05 05 25.4 | |
| | 1.1nm,0.3s,baz=165,slow=32,SNR=7.3 | | | | | | |
| KURK | Kurchatov | 6.85 | 341 | ⇓Pn | Pn | 05 03 32.1 | +0.8 |
| | 3.8nm,0.7s | | | | | | |
| KURK | | | | ⇑Pg | Pb | 05 03 53.9 | +4.0 |
| | 7.4nm,0.6s | | | | | | |
| KURK | | | | ⇓Sn | Sn | 05 04 49.2 | 0.0 |
| | 28nm,0.8s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 05 05 23.7 | |
| | 95nm,0.6s | | | | | | |
| KURK | Kurchatov | 6.85 | 341 | *e*Pn | Pn | 05 03 32.0 | +0.8 |
| KURK | | | | *e*Sn | Sn | 05 04 50.9 | +1.7 |
| KURK | | | | Lg | Lg | 05 05 25.4 | |
| MNAS | Manas | 7.20 | 259 | ⇑Pg | Pg | 05 04 03.2 | -5.5 |
| | 3.7nm,0.7s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 05 05 40.1 | |
| | 18nm,1.0s | | | | | | |
| OTUK | Ortayu | 7.83 | 304 | ⇑Pn | Pn | 05 03 46.0 | +1.3 |
| | 1.7nm,0.6s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 05 05 55.3 | |
| | 40nm,0.9s | | | | | | |
| KK31 | Karatay Array | 8.46 | 266 | ⇑Pn | Pn | 05 03 56.6 | +3.1 |
| | 0.6nm,0.4s,baz=342,slow=40,SNR=4.7 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 05 06 19.1 | |
| | 7.3nm,0.6s,baz=75,slow=26,SNR=8.7 | | | | | | |
| ZALV | Zalesovo Beam | 9.84 | 10 | Pn | Pn | 05 04 12.3 | +0.1 |
| | 0.8nm,0.3s,baz=188,slow=15,SNR=4.4 | | | | | | |
| ZALV | | | | Sn | Sn | 05 05 56.6 | -6.1 |
| | 1.0nm,0.3s,baz=193,slow=25,SNR=4.4 | | | | | | |
| ZALV | | | | Lg | Lg | 05 07 00.8 | |
| | 0.4nm,0.3s,baz=198,slow=26,SNR=5.5 | | | | | | |
| VOSK | Vostochnaya | 11.19 | 323 | ⇓Lg | Lg | 05 07 41.9 | |
| | 24nm,1.0s | | | | | | |
| BVA0 | Borovoye Array | 11.66 | 323 | ⇓Lg | Lg | 05 07 56.8 | |
| | 11nm,0.9s,baz=120,slow=26,SNR=6.0 | | | | | | |
| BVAR | Borovoye Array | 11.66 | 323 | Pn | Pn | 05 04 41.9 | +4.7 |
| | 0.3nm,0.3s,baz=138,slow=15,SNR=4.0 | | | | | | |
| BVAR | | | | Lg | Lg | 05 08 03.1 | |
| | 0.7nm,0.3s,baz=128,slow=26,SNR=8.0 | | | | | | |
| BRVK | Borovoye | 11.73 | 323 | ⇑Lg | Lg | 05 07 57.8 | |
| | 54nm,1.0s | | | | | | |
| CHKZ | Chkalovo | 12.03 | 325 | ⇑Lg | Lg | 05 08 09.0 | |
| | 24nm,1.4s | | | | | | |
| ZRNK | Zerenda | 12.23 | 320 | ⇓Lg | Lg | 05 08 14.2 | |
| | 17nm,0.8s | | | | | | |
| GTA | Gaotai | 14.08 | 104 | *e*P | P | 05 05 18.0 | -0.3 |
| GTA | | | | pP | pP | 05 05 21.4 | |
| GTA | | | | sP | sP | 05 05 24.7 | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| ABKAR | Akbulak array | 15.94 | 296 | *e*P | P | 05 05 38.0 | -0.7 |
| SONM | Songino Array | 17.23 | 70 | P | P | 05 05 53.7 | +0.6 |
| | comp=Z,0.1nm,0.3s,baz=273,slow=12,SNR=6.8 | | | | | | |
| SONM | | | | Lg | Lg | 05 11 10.6 | |
| | comp=Z,0.1nm,0.3s,baz=267,slow=26,SNR=4.0 | | | | | | |
| CD2 | Chengdu | 21.67 | 121 | *e*P | P | 05 06 40.5 | -1.1 |
| ENH | Enshi | 25.76 | 114 | *e*P | P | 05 07 21.1 | -0.6 |
| | comp=Z,6.0nm,0.3s | | | | | | |
| CMAR | Chiang Mai Arr | 29.38 | 146 | P | P | 05 07 55.2 | +1.1 |
| | comp=Z,0.6nm,0.3s,baz=328,slow=8.8,SNR=4.8 | | | | | | |
| NOA | NORSAR Array B | 43.74 | 318 | P | P | 05 09 56.9 | +0.8 |
| | comp=Z,0.6nm,0.5s,baz=78,slow=7.9,SNR=2.4 | | | | | | |
| TORD | Torodi Ar. Bea | 74.09 | 273 | P | P | 05 13 27.8 | +0.5 |
| | comp=Z,0.3nm,0.4s,baz=41,slow=5.3,SNR=12 | | | | | | |
| WRAB | Tennant Creek | 79.77 | 131 | *e*P | P | 05 13 58.8 | -0.3 |
| | comp=Z,1.8nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 79.77 | 131 | P | P | 05 13 58.6 | -0.5 |
| | comp=Z,0.8nm,0.6s,baz=327,slow=4.9,SNR=5.4 | | | | | | |
| ASAR | Alice Springs | 82.57 | 133 | P | P | 05 14 12.9 | -1.1 |
| | comp=Z,0.9nm,0.7s,baz=325,slow=7.4,SNR=6.4 | | | | | | |
| HNR | Honiara | 87.96 | 105 | LR | LR | 05 53 08.8 | |
| | comp=Z,30nm,18.6s,baz=236,slow=35 | | | | | | |

**JMA 04 05:04:56.2**±0.4**, 33.°15N**×**142.°18E, h0km, M3.8, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BSO1 | Boso 1 | 1.80 | 327 | P | Pb | 05 05 29.2 | -0.2 |
| BSO1 | | | | S | Sg | 05 05 53.3 | +0.3 |
| JHJ2 | Mitsune | 1.98 | 270 | P | Pn | 05 05 31.8 | +0.8 |
| JHU | Hanno | 3.60 | 319 | P | Pn | 05 05 55.5 | +2.2 |
| JHU | | | | S | Sn | 05 06 37.4 | +0.8 |
| JYN | Shimob | 3.81 | 309 | P | Pn | 05 05 58.5 | +2.2 |
| JYN | | | | S | Sn | 05 06 45.2 | +3.3 |
| JRY | Ryogami san | 3.94 | 318 | P | Pn | 05 06 00.1 | +2.2 |
| JRY | | | | S | Sn | 05 06 48.1 | +3.2 |
| JAG | Ashikaga | 3.96 | 326 | P | Pn | 05 05 59.3 | +1.0 |
| MAT | Matsushiro | 4.70 | 317 | P | Pn | 05 06 11.2 | +2.7 |
| MAT | | | | *e*S | Sn | 05 07 02.4 | -1.4 |

*IDC **04** 05:11:27.2±0.5, 14.°81S×75.°93W, h0km, mb4.6/21, mb1 4.7/23, mb1mx4.7/29, mbtmp4.6/23, ML3.8/2, MS4.5/21, Ms1 4.5/21, ms1mx4.5/27, Error ellipse: s-maj=18.2km s-min=12.7km az=71.0*
*ISCJB **04** 05:11:29.5±0.2, 14.°85S±0.°03×76.°03W±0.°05, h29km, mb4.8/69, MS4.5/17, Error ellipse: s-maj=6.8km s-min=4.1km az=150.9*
*NEIC **04** 05:11:30.1±2.8, 14.°81S×75.°91W, h20km±17km, mb4.9/45, Error ellipse: s-maj=8.8km s-min=4.9km az=65.0*
*NEIC Felt at Los Aquijes.*
*GCMT **04** 05:11:31.1±0.3, 15.°01S×76.°30W, h20km, MW5.2/69, Moment Tensor Solution. s50,c64; s69,c107; Duration: 1.s0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$0.55±.02; $M_{\theta\theta}$0.00±.01; $M_{\phi\phi}$-0.55±.02; $M_{r\theta}$0.15±.03; $M_{\theta\phi}$0.22±.01; $M_{\phi r}$-0.64±.05; Best double couple: $M_0$0.88200×$10^{17}$ NP1:$\phi_s$166.00000°,δ69.00000°,λ94.00000°. NP2: $\phi_s$335.00000°,δ21.00000°,λ79.00000°. Principal axes: T 0.8440, Plg66.0000°, Azm83.0000°; N 0.0760, Plg4.0000°, Azm344.0000°; P -0.9200, Plg24.0000°, Azm253.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI **04** 05:11:33.5, 14.°80S×75.°90W, h45km, mB5.0/7, Ms5.2/6, Ms7 5.1/6*
**ISC 04 05:11:31.2**±0.3**, 14.°86S**±0.°05×**75.°93W**±0.°06**, h29km, n159,** σ**1.s46**/158**, mb4.9**/69**, MS4.4**/17**, 2C-1D, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARE | Arequipa | 4.56 | 111 | *e*P | Pn | 05 12 38.0 | -0.7 |
| ARE | | | | *e*S | Sb | 05 13 39.0 | -6.5 |
| MNMC | Minimini | 7.40 | 126 | ⇑*i*P | Pn | 05 13 17.8 | +0.2 |
| LPAZ | La Paz | 7.65 | 102 | Pn | Pn | 05 13 24.8 | +3.5 |
| | 5.2nm,0.3s,baz=280,slow=8.6,SNR=145 | | | | | | |
| LPAZ | | | | LR | LR | 05 16 52.2 | |
| | comp=Z,3μm,21.3s,baz=284,slow=42 | | | | | | |
| LPAZ | La Paz | 7.65 | 102 | *e*Pn | Pn | 05 13 24.4 | +3.0 |
| PB01 | IPOC Station P | 8.68 | 136 | *e*P | Pn | 05 13 34.0 | -1.0 |
| PB07 | IPOC Station P | 8.92 | 141 | *e*P | Pn | 05 13 36.7 | -1.7 |
| PB04 | IPOC Station P | 9.23 | 144 | *e*P | Pn | 05 13 41.0 | -1.7 |
| LVC | Limon Verde | 10.18 | 140 | Pn | Pn | 05 13 56.3 | +0.6 |
| | 253nm,0.3s,baz=311,slow=9.2,SNR=134 | | | | | | |
| LVC | | | | Sn | Sn | 05 15 45.2 | -3.9 |
| | 188nm,0.3s,baz=63,slow=20,SNR=6.7 | | | | | | |
| LVC | | | | LR | LR | 05 17 19.4 | |
| | comp=Z,9μm,20.5s,baz=310,slow=34 | | | | | | |
| LVC | Limon Verde | 10.18 | 140 | *e*Pn | Pn | 05 13 56.1 | +0.3 |
| LVC | | | | *e*Sn | Sn | 05 15 47.1 | -2.0 |
| SAML | Samuel | 13.79 | 66 | *e*Pn | Pn | 05 14 42.8 | -2.1 |
| | 2.0nm,0.6s | | | | | | |
| SAML | | | | *e*Sn | Sn | 05 17 20.5 | +3.5 |
| SIV | San Ignacio | 14.37 | 96 | Pn | Pn | 05 14 50.2 | -2.7 |
| | 0.5nm,0.3s,baz=283,slow=11,SNR=16 | | | | | | |
| SIV | | | | LR | LR | 05 20 56.7 | |
| | comp=Z,5μm,18.6s,baz=288,slow=40 | | | | | | |
| LCO | Las Campanas | 14.89 | 162 | *e*Pn | Pn | 05 15 00.5 | +0.4 |
| LCO | | | | *e*Sn | Sn | 05 17 48.0 | +3.7 |
| OTAV | Otavalo | 15.21 | 350 | *e*Pn | Pn | 05 15 05.0 | +0.5 |
| | 16nm,0.8s | | | | | | |
| OTAV | | | | *e*Sn | Sn | 05 17 51.6 | -0.7 |
| CFAA | Coronel Fontan | 18.09 | 158 | P | Pn | 05 15 40.4 | -0.2 |
| | 0.3nm,0.3s,baz=332,slow=11,SNR=44 | | | | | | |
| CFAA | | | | LR | LR | 05 21 21.8 | |
| | comp=Z,87nm,21.4s,baz=338,slow=33 | | | | | | |
| ROSC | El Rosal | 19.65 | 5 | LR | LR | 05 25 02.4 | |
| | comp=Z,2μm,20.0s,baz=202,slow=42 | | | | | | |
| ROSC | El Rosal | 19.65 | 5 | *e*P | Pn | 05 16 02.4 | +2.6 |
| ROSC | | | | *e*sP | sP | 05 16 08.9 | -0.9 |
| CPUP | Villa Florida | 20.79 | 126 | P | P | 05 16 11.1 | +0.9 |
| | 14nm,0.7s,baz=297,slow=10,SNR=15 | | | | | | |
| CPUP | | | | LR | LR | 05 25 32.8 | |
| | comp=Z,741nm,19.6s,baz=299,slow=41 | | | | | | |
| CPUP | Villa Florida | 20.79 | 126 | *e*P | P | 05 16 09.9 | -0.3 |
| PTGA | Pitinga | 21.12 | 50 | P | P | 05 16 13.7 | -0.1 |
| | 17nm,0.7s,baz=216,slow=12,SNR=42 | | | | | | |
| PTGA | | | | LR | LR | 05 25 26.7 | |
| | comp=Z,2μm,19.4s,baz=234,slow=40 | | | | | | |
| PTGA | Pitinga | 21.12 | 50 | *e*P | P | 05 16 13.6 | -0.3 |
| | 51nm,1.2s | | | | | | |
| SDV | Santo Domingo | 24.17 | 13 | P | P | 05 16 46.2 | +0.8 |
| | 24nm,0.8s | | | | | | |
| TRQA | Tornquist | 26.20 | 154 | *e*P | P | 05 17 02.9 | -0.6 |
| | 17nm,1.1s | | | | | | |
| BDFB | Brasilia | 26.94 | 95 | P | P | 05 17 10.4 | -0.1 |
| | 7.0nm,0.7s,baz=247,slow=13,SNR=13 | | | | | | |
| BDFB | | | | LR | LR | 05 29 05.9 | |
| | comp=Z,3μm,20.3s,baz=264,slow=39 | | | | | | |
| BDFB | Brasilia | 26.94 | 95 | *e*P | P | 05 17 09.2 | -1.3 |
| | 20nm,0.8s | | | | | | |
| PCRV | Puerto La Cruz | 27.28 | 25 | P | P | 05 17 14.4 | +1.1 |
| | 8.3nm,0.7s,baz=167,slow=5.9,SNR=7.2 | | | | | | |
| PCRV | | | | LR | LR | 05 28 13.0 | |
| | comp=Z,1μm,18.5s,baz=198,slow=37 | | | | | | |
| RPN | Rapa Nui | 33.38 | 243 | LR | LR | 05 28 00.5 | |
| | comp=Z,653nm,20.7s,baz=82,slow=30 | | | | | | |
| OBIP | Obispado Ponce | 33.96 | 16 | *e*P | P | 05 18 12.1 | -0.2 |
| | 20nm,0.8s | | | | | | |
| MPR | Mayaguez | 33.98 | 15 | *e*P | P | 05 18 11.9 | -0.6 |
| | 16nm,0.9s | | | | | | |
| CELP | Cerrillos | 34.00 | 16 | *e*P | P | 05 18 12.6 | 0.0 |
| CPD | Cerro la Pandu | 34.15 | 17 | *e*P | P | 05 18 11.9 | -2.0 |
| | 28nm,0.8s | | | | | | |
| USHA | Ushuaia | 40.31 | 173 | P | P | 05 19 06.7 | +0.8 |
| | 11nm,0.8s,baz=248,slow=5.6,SNR=4.8 | | | | | | |
| USHA | | | | LR | LR | 05 33 52.7 | |
| | comp=Z,465nm,18.4s,baz=328,slow=33 | | | | | | |
| RCBR | Riachuelo | 40.33 | 81 | P | P | 05 19 07.5 | +0.9 |
| | 13nm,0.9s,baz=235,slow=6.7,SNR=3.8 | | | | | | |
| RCBR | | | | LR | LR | 05 36 42.3 | |
| | comp=Z,2μm,18.8s,baz=238,slow=38 | | | | | | |
| PMSA | Palmer Station | 50.52 | 173 | P | P | 05 20 27.4 | +0.9 |
| | 9.9nm,1.0s,baz=180,slow=4.0,SNR=3.4 | | | | | | |
| SWET | Sewanee | 50.70 | 349 | *e*P | P | 05 20 27.0 | -1.3 |
| | 2.9nm,0.9s | | | | | | |
| TX31 | Lajitas Ar. Si | 51.45 | 329 | *e*P | P | 05 20 34.0 | -0.2 |
| TXAR | Lajitas Array | 51.45 | 329 | P | P | 05 20 34.2 | +0.1 |
| | 1.3nm,0.7s,baz=148,slow=8.3,SNR=15 | | | | | | |
| TXAR | | | | LR | LR | 05 41 06.9 | |
| | comp=Z,464nm,18.2s,baz=0.0,slow=35 | | | | | | |
| MIAR | Mount Ida | 51.92 | 341 | *e*P | P | 05 20 37.0 | -0.4 |
| | 78nm,2.3s | | | | | | |
| ABTX | Abilene, Hawle | 52.38 | 335 | *e*P | P | 05 20 40.7 | -0.2 |
| | 8.0nm,0.6s | | | | | | |
| PBMO | Poplar Bluff | 53.15 | 345 | *e*P | P | 05 20 44.8 | -1.7 |
| | 9.5nm,0.9s | | | | | | |
| USIN | University of | 53.69 | 348 | *e*P | P | 05 20 48.9 | -1.5 |
| | 13nm,0.7s | | | | | | |
| WCI | Wyandotte Cave | 53.69 | 350 | *e*P | P | 05 20 49.4 | -1.1 |
| | 58nm,0.8s | | | | | | |
| TUL1 | Tulsa | 53.88 | 340 | *e*P | P | 05 20 51.7 | -0.2 |
| | 16nm,0.8s | | | | | | |
| OLIL | Olney | 54.52 | 348 | *e*P | P | 05 20 55.6 | -0.8 |
| | 19nm,0.8s | | | | | | |
| RKT | Rikitea | 56.12 | 252 | *e*S | S | 05 28 51.8 | -4.1 |
| | 388nm,32.5s | | | | | | |
| RKT | | | | *e*LR | LR | 05 37 36.4 | |
| | 728nm,27.5s | | | | | | |
| RKT | Rikitea | 56.12 | 252 | *e*T | T | 06 21 31.6 | |
| | 7.5nm,0.2s | | | | | | |
| 121A | Cookes Peak, D | 56.12 | 328 | *e*P | P | 05 21 09.4 | +1.1 |
| | 6.4nm,1.0s | | | | | | |
| ANMO | Albuquerque | 57.39 | 330 | *e*P | P | 05 21 16.3 | -1.0 |
| | 26nm,2.1s | | | | | | |
| SDCO | Great Sand Dun | 59.24 | 333 | *e*P | P | 05 21 30.3 | -0.1 |
| | 78nm,2.8s | | | | | | |
| FRNY | Flat Rock | 59.45 | 2 | *e*P | P | 05 21 32.0 | +0.7 |
| | 11nm,0.8s | | | | | | |
| WUAZ | Wupatki | 60.31 | 327 | *e*P | P | 05 21 39.4 | +1.8 |
| | 8.6nm,1.3s | | | | | | |
| ECSD | EROS Data Cent | 61.30 | 343 | *e*P | P | 05 21 43.2 | -0.7 |
| | 6.7nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SPMN | St. Paul | 61.73 | 347 | eP | P | 05 21 46.0 | -0.8 |
| | 10nm,0.7s | | | | | | |
| PFO | Pinyon Flat Ob | 61.77 | 322 | eP | P | 05 21 47.0 | -0.5 |
| FRD | Ford Ranch | 61.78 | 322 | eP | P | 05 21 47.6 | 0.0 |
| SNDA | J Saunders Pla | 61.82 | 322 | eP | P | 05 21 48.1 | +0.2 |
| DNR | Dunn Ranch,Anz | 61.84 | 322 | eP | P | 05 21 48.5 | +0.4 |
| SRU | San Rafael | 62.66 | 330 | eP | P | 05 21 52.6 | -0.8 |
| | 4.1nm,1.0s | | | | | | |
| CCUT | Cedar City | 62.89 | 327 | eP | P | 05 21 55.0 | -0.2 |
| | 27nm,2.2s | | | | | | |
| MSU | Marysvale | 63.01 | 329 | eP | P | 05 21 56.1 | +0.2 |
| | 2.6nm,0.7s | | | | | | |
| P17A | Butcher Ranch, | 63.05 | 330 | eP | P | 05 21 55.4 | -0.6 |
| | 8.2nm,1.2s | | | | | | |
| DUG | Dugway | 64.62 | 329 | eP | P | 05 22 06.8 | +0.5 |
| | 5.8nm,0.9s | | | | | | |
| FPU | Francis Peak | 64.79 | 331 | eP | P | 05 22 10.1 | +2.4 |
| HWUT | Hardware Ranch | 65.11 | 331 | eP | P | 05 22 09.8 | +0.2 |
| | 5.8nm,0.8s | | | | | | |
| AGMN | Agassiz Nation | 65.33 | 345 | eP | P | 05 22 10.3 | -0.2 |
| | 139nm,2.7s | | | | | | |
| HVU | Hansel Valley | 65.82 | 331 | eP | P | 05 22 11.9 | -2.2 |
| | 4.0nm,0.8s | | | | | | |
| DRLN | Deer Lake | 65.89 | 13 | eP | P | 05 22 13.4 | -0.7 |
| | 32nm,0.8s | | | | | | |
| NV01 | Mina Array Sit | 66.21 | 325 | eP | P | 05 22 17.4 | +0.6 |
| NVAR | Mina Array Bea | 66.21 | 325 | P | P | 05 22 17.7 | +0.9 |
| | 1.2nm,0.8s,baz=139,slow=6.0,SNR=7.1 | | | | | | |
| FLWY | Flagg Ranch | 66.69 | 333 | eP | P | 05 22 19.2 | -0.5 |
| | 6.6nm,0.8s | | | | | | |
| LKWY | Lake | 66.94 | 334 | eP | P | 05 22 21.5 | +0.1 |
| | 4.3nm,0.8s | | | | | | |
| ULM | Lac du Bonnet | 67.16 | 346 | P | P | 05 22 21.5 | -0.7 |
| | 5.4nm,0.7s,baz=190,slow=4.4,SNR=6.9 | | | | | | |
| ULM | Lac du Bonnet | 67.16 | 346 | eP | P | 05 22 21.6 | -0.7 |
| | 14nm,1.0s | | | | | | |
| HLID | Hailey | 67.96 | 331 | eP | P | 05 22 29.2 | +1.5 |
| | 35nm,2.3s | | | | | | |
| MCMT | McKenzie Canyo | 68.22 | 333 | eP | P | 05 22 30.7 | +1.3 |
| | 1.5nm,0.8s | | | | | | |
| VNA3 | Neumayer Olymp | 68.47 | 161 | P | P | 05 22 31.0 | +0.7 |
| VNA1 | Neumayer--Stat | 68.73 | 161 | P | P | 05 22 33.2 | +1.3 |
| VNA2 | Neumayer--Watz | 69.08 | 161 | P | P | 05 22 34.8 | +0.6 |
| | baz=298,slow=7.5 | | | | | | |
| TBI | Tubuai | 69.36 | 250 | eS | S | 05 31 45.5 | +3.4 |
| | 197nm,25.2s | | | | | | |
| TBI | Tubuai | 69.36 | 250 | eLR | LR | 05 43 43.1 | |
| | 616nm,27.0s | | | | | | |
| TBI | Tubuai | 69.36 | 250 | eT | T | 06 38 06.4 | |
| | 11nm,0.2s | | | | | | |
| SCHQ | Schefferville | 69.84 | 6 | P | P | 05 22 39.4 | +0.4 |
| | 9.1nm,0.8s,baz=235,slow=2.4,SNR=6.6 | | | | | | |
| SCHQ | | | | LR | LR | 05 52 23.8 | |
| | comp=Z,118nm,21.6s,baz=150,slow=35 | | | | | | |
| SCHQ | Schefferville | 69.84 | 6 | eP | P | 05 22 39.4 | +0.4 |
| | 229nm,2.5s | | | | | | |
| PPT2 | Papeete2 | 70.35 | 256 | eS | S | 05 31 55.0 | +1.0 |
| | 180nm,23.5s | | | | | | |
| PPT2 | Papeete2 | 70.35 | 256 | eLR | LR | 05 44 01.8 | |
| | 437nm,27.0s | | | | | | |
| PPT | Papeete | 70.35 | 256 | LR | LR | 05 47 28.9 | |
| | comp=Z,172nm,18.2s,baz=91,slow=31 | | | | | | |
| SNAA | Sanae | 70.69 | 161 | P | P | 05 22 44.5 | +0.4 |
| SNAA | Sanae | 70.69 | 161 | P | P | 05 22 44.6 | +0.5 |
| | 4.1nm,0.6s,baz=278,slow=6.9,SNR=59 | | | | | | |
| SNAA | Sanae | 70.69 | 161 | eP | P | 05 22 44.2 | +0.1 |
| | 3.8nm,0.8s | | | | | | |
| F10A | Beach Ranch, E | 71.09 | 331 | eP | P | 05 22 46.3 | -0.6 |
| | 92nm,2.8s | | | | | | |
| BSMT | Bassoo Peak | 71.41 | 334 | eP | P | 05 22 50.1 | +1.2 |
| G08A | Pilot Rock | 71.43 | 329 | eP | P | 05 22 47.4 | -1.6 |
| | 38nm,2.4s | | | | | | |
| DBIC | Dimbokro | 73.61 | 78 | P | P | 05 23 02.5 | +0.1 |
| | 9.9nm,0.8s,baz=219,slow=6.7,SNR=11 | | | | | | |
| EDM | Edmonton | 75.04 | 338 | eP | P | 05 23 09.4 | -0.6 |
| | 13nm,0.9s | | | | | | |
| QSPA | South Pole Qui | 75.29 | 180 | eP | P | 05 23 12.1 | +0.6 |
| | 6.4nm,0.7s | | | | | | |
| TOA0 | Torodi Ar. Sit | 81.71 | 74 | eP | P | 05 23 48.2 | +0.6 |
| TORD | Torodi Ar. Bea | 81.71 | 74 | P | P | 05 23 48.3 | +0.7 |
| | 33nm,0.7s,baz=258,slow=4.9,SNR=143 | | | | | | |
| TORD | | | | LR | LR | 05 58 03.9 | |
| | comp=Z,693nm,21.9s,baz=250,slow=34 | | | | | | |
| MORF | Marmelete | 81.72 | 48 | eP | P | 05 23 49.9 | +2.6 |
| | 84nm,1.7s | | | | | | |
| VNDA | Vanda | 82.15 | 191 | P | P | 05 23 50.8 | +2.0 |
| | 2.8nm,0.9s,baz=96,slow=1.5,SNR=16 | | | | | | |
| VNDA | | | | LR | LR | 05 55 21.3 | |
| | comp=Z,161nm,18.2s,baz=122,slow=32 | | | | | | |
| VNDA | Vanda | 82.15 | 191 | eP | P | 05 23 50.5 | +1.6 |
| PNCL | Nicolau / Gran | 82.16 | 47 | eP | P | 05 23 51.9 | +2.4 |
| | 59nm,1.9s | | | | | | |
| PBDV | Barranco-do-Ve | 82.21 | 48 | eP | P | 05 23 52.5 | +2.6 |
| | 97nm,1.9s | | | | | | |
| MESJ | Messejana | 82.26 | 48 | eP | P | 05 23 52.7 | +2.7 |
| | 52nm,1.5s | | | | | | |
| PCVE | Castro Verde | 82.30 | 48 | eP | P | 05 23 53.1 | +2.8 |
| | 77nm,2.1s | | | | | | |
| PVAQ | Vaqueiros | 82.44 | 48 | eP | P | 05 23 53.7 | +2.7 |
| | 46nm,1.6s | | | | | | |
| PBEJ | Beja | 82.59 | 48 | eP | P | 05 23 54.0 | +2.2 |
| | 62nm,1.8s | | | | | | |
| EVO | Evora | 82.70 | 47 | eP | P | 05 23 54.0 | +1.6 |
| | 50nm,1.6s | | | | | | |
| YKA | Yellowknife Ar | 82.83 | 343 | P | P | 05 23 52.5 | +0.1 |
| | 1.1nm,0.6s,baz=145,slow=5.7,SNR=8.6 | | | | | | |
| PTOM | Tomar | 82.89 | 46 | eP | P | 05 23 55.2 | +1.9 |
| | 137nm,1.9s | | | | | | |
| PBAR | Barrancos | 83.25 | 48 | eP | P | 05 23 57.3 | +2.1 |
| | 121nm,1.9s | | | | | | |
| SYO | Syowa Base | 84.97 | 161⇑ | eP | P | 05 24 02.5 | -0.9 |
| SYO | Syowa Base | 84.97 | 161⇓ | ePcP | PcP | 05 24 06.2 | -0.5 |
| ESDC | Sonseca Array | 86.05 | 47 | P | P | 05 24 09.5 | +0.1 |
| | 3.5nm,0.7s,baz=264,slow=5.3,SNR=17 | | | | | | |
| ESDC | | | | LR | LR | 06 00 20.5 | |
| | comp=Z,312nm,18.7s,baz=245,slow=34 | | | | | | |
| ES19 | SONSECA Array | 86.10 | 47 | eP | P | 05 24 09.4 | -0.2 |
| TAM | Tamanrasset | 88.03 | 66 | eP | P | 05 24 21.4 | +1.9 |
| | 4.1nm,0.6s | | | | | | |
| SUMG | Summit | 90.68 | 11 | iP | P | 05 24 38.3 | +7.2 |
| | 11nm,0.9s | | | | | | |
| SUMG | Summit | 90.68 | 11 | eP | P | 05 24 30.6 | -0.5 |
| | 2.8nm,0.6s | | | | | | |
| MAW | Mawson | 92.49 | 165 | P | P | 05 24 39.3 | +0.1 |
| | 4.5nm,0.7s,baz=180,slow=5.2,SNR=25 | | | | | | |
| MAW | | | | LR | LR | 06 05 41.7 | |
| | comp=Z,87nm,18.2s,baz=241,slow=35 | | | | | | |
| BOSA | Boshof | 92.50 | 120 | P | P | 05 24 40.3 | 0.0 |
| | 6.1nm,1.1s,baz=235,slow=3.3,SNR=3.2 | | | | | | |
| BOSA | | | | LR | LR | 06 03 51.2 | |
| | comp=Z,310nm,20.3s,baz=228,slow=34 | | | | | | |
| KEST | Kesra | 94.78 | 54 | P | P | 05 24 51.4 | +0.9 |
| | 2.7nm,0.8s,baz=256,slow=12,SNR=2.5 | | | | | | |
| KEST | | | | LR | LR | 06 07 48.8 | |
| | comp=Z,226nm,19.8s,baz=240,slow=36 | | | | | | |
| ILAR | Eielson Array | 95.45 | 336 | P | P | 05 24 52.2 | -0.6 |
| | 0.4nm,0.8s,baz=84,slow=3.2,SNR=4.3 | | | | | | |
| ILAR | | | | LR | LR | 06 11 58.1 | |
| | comp=Z,95nm,18.4s,baz=143,slow=38 | | | | | | |
| BPAW | Bear Paw Mtn. | 96.86 | 335 | eP | P | 05 24 58.4 | -0.8 |
| GERES | GERESS Array B | 100.79 | 42 | P | Pdif | 05 25 18.2 | +1.0 |
| | 1.0nm,0.6s,baz=238,slow=2.5,SNR=6.5 | | | | | | |
| DZM | Mont Dzumac | 108.70 | 240 | eLR | LR | 06 01 52.6 | |
| | 357nm,23.5s | | | | | | |
| BRTR | Keskin Array B | 114.33 | 53 | PKP | PKPdf | 05 30 09.0 | +0.4 |
| | 0.9nm,0.8s,baz=236,slow=1.0,SNR=3.3 | | | | | | |
| BRTR | Keskin Array B | 114.33 | 53 | PKP | PKPdf | 05 30 09.0 | +0.4 |
| H11N3 | WAKE ISLAND Hy | 120.08 | 284 | T | T | 07 41 37.7 | |
| | baz=97,slow=74,SNR=96 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 120.10 | 284 | T | T | 07 41 38.2 | |
| | baz=97,slow=74,SNR=109 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 120.10 | 284 | T | T | 07 41 39.1 | |
| | baz=97,slow=74,SNR=72 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 120.14 | 283 | T | T | 07 41 38.6 | |
| | baz=97,slow=75,SNR=50 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 120.15 | 283 | T | T | 07 41 38.9 | |
| | baz=97,slow=75,SNR=33 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 120.16 | 283 | T | T | 07 41 39.9 | |
| | baz=97,slow=75,SNR=40 | | | | | | |
| ABKAR | Akbulak array | 130.34 | 37 | ePKPdf | PKPdf | 05 30 40.1 | +1.3 |
| ASAR | Alice Springs | 131.87 | 218 | PKP | PKPdf | 05 30 42.8 | +0.2 |
| | 1.2nm,0.8s,baz=138,slow=2.0,SNR=11 | | | | | | |
| WRA | Warramunga Arr | 134.37 | 222 | PKP | PKPdf | 05 30 47.3 | -0.1 |
| | 2.4nm,0.7s,baz=136,slow=1.7,SNR=19 | | | | | | |
| ZALV | Zalesovo Beam | 138.18 | 17 | PKP | PKPdf | 05 30 53.8 | +0.4 |
| | 3.1nm,0.6s,baz=277,slow=1.6,SNR=9.8 | | | | | | |
| KURK | Kurchatov | 138.75 | 24 | ePKPdf | PKPdf | 05 30 56.1 | +1.6 |
| AAK | Ala-Archa | 142.43 | 37 | ePKPdf | PKPdf | 05 30 59.0 | -2.6 |
| MKAR | Makanchi Array | 143.33 | 25 | PKP | PKPdf | 05 31 03.6 | +0.6 |
| | 1.8nm,0.8s,baz=318,slow=1.6,SNR=9.8 | | | | | | |
| KSH | Kashi | 145.22 | 40 | PKPbc | PKPdf | 05 31 08.0 | +1.4 |
| KSH | | | | epPKP | pPKPdf | 05 31 18.9 | +2.7 |
| KSH | | | | ePP | PP | 05 34 33.5 | +8.1 |
| KSH | | | | PKS | PKSdf | 05 34 42.2 | 0.0 |
| KSH | | | | PPMZ | | | |
| | 95nm,4.5s | | | | | | |
| KSH | | | | LN | | | |
| | 110nm,5.6s | | | | | | |
| KSH | | | | LE | | | |
| | 73nm,4.7s | | | | | | |
| KSH | | | | LZ | | | |
| | 110nm,6.3s | | | | | | |
| CN2 | Changchun | 145.87 | 332 | ePKPbc | PKPdf | 05 31 05.5 | -1.9 |
| ULN | Ulaanbaatar | 147.00 | 356 | ePKPdf | PKPbc | 05 31 10.7 | -0.7 |
| ULN | | | | ePKPbc | PKPab | 05 31 11.9 | -1.0 |
| ULN | | | | ePKPab | PKiKP | 05 31 13.8 | -0.1 |
| SONM | Songino Array | 147.06 | 357 | PKPbc | PKPbc | 05 31 10.7 | -0.8 |
| | 4.6nm,0.7s,baz=334,slow=2.3,SNR=16 | | | | | | |
| WMQ | Urumqi | 147.93 | 23 | PKPbc | PKPdf | 05 31 12.0 | +1.0 |
| WMQ | | | | PP | PP | 05 34 46.0 | +5.4 |
| WMQ | | | | SKS | SKSdf | 05 38 15.0 | -2.6 |
| WMQ | | | | SKKS | SKKSac | 05 41 30.0 | -1.1 |
| WMQ | | | | SS | SS | 05 53 40.0 | -3.9 |
| WMQ | | | | PPMZ | | | |
| | 33nm,8.0s | | | | | | |
| WMQ | | | | LN | | | |
| | 99nm,26.0s | | | | | | |
| WMQ | | | | LE | | | |
| | 130nm,28.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | 130nm,27.0s | | | | | | |
| KSRS | Korea Array | 149.10 | 321 | PKPbc | PKPbc | 05 31 17.9 | +0.9 |
| | 1.2nm,0.5s,baz=343,slow=3.8,SNR=3.6 | | | | | | |
| KSAR | Wonju Array Be | 149.14 | 321 | PKPbc | PKPbc | 05 31 17.9 | +0.8 |
| NDI | New Delhi | 151.61 | 57 | eP | PKPbc | 05 31 23.0 | -0.4 |
| HHC | Hu-ho-hao-te | 153.29 | 347 | ePKPbc | PKPdf | 05 31 20.1 | +0.7 |
| HHC | | | | PP | PP | 05 35 17.6 | +6.3 |
| HHC | | | | SKKS | | 05 42 01.7 | |
| HHC | | | | SS | SS | 05 54 44.1 | +1.0 |
| HHC | | | | PPMZ | | | |
| | 70nm,8.7s | | | | | | |
| HHC | | | | LN | | | |
| | 210nm,17.4s | | | | | | |
| HHC | | | | LE | | | |
| | 170nm,19.9s | | | | | | |
| HHC | | | | LZ | | | |
| | 180nm,17.4s | | | | | | |
| NJ2 | Nanjing | 158.21 | 324 | ePKP | PKPdf | 05 31 25.5 | -0.6 |
| DMN | Daman | 158.28 | 51 | eP | PKPab | 05 31 59.4 | -1.4 |
| | 16nm,0.8s | | | | | | |
| KKN | Kakani | 158.32 | 51 | eP | PKPab | 05 32 01.0 | +0.1 |
| | 28nm,0.7s | | | | | | |
| PKI | Pulchoki | 158.53 | 51 | eP | PKPab | 05 32 01.7 | -0.3 |
| | 8.7nm,0.7s | | | | | | |
| GUN | Gumba | 158.69 | 49 | eP | PKPab | 05 32 03.6 | +0.9 |
| | 32nm,0.8s | | | | | | |
| LZH | Lanzhou | 158.86 | 1 | ePKP | PKPdf | 05 31 27.8 | +0.8 |
| LZH | | | | pPKP | pPKPdf | 05 31 37.2 | +0.6 |
| LZH | | | | sPKP | | 05 31 42.0 | |
| LZH | | | | LN | | | |
| | 110nm,18.0s | | | | | | |
| LZH | | | | LE | | | |
| | 110nm,17.9s | | | | | | |
| LZH | | | | LZ | | | |
| | 130nm,20.1s | | | | | | |
| RAMN | Ramite | 159.76 | 51 | eP | PKPab | 05 32 07.2 | 0.0 |
| | 12nm,0.7s | | | | | | |
| XAN | Xi'an | 160.41 | 348 | PKP | PKPdf | 05 31 28.9 | +0.2 |
| CD2 | Chengdu | 164.02 | 1 | PKP | PKPdf | 05 31 30.3 | -2.1 |
| GYA | Guiyang | 168.21 | 349 | ePKP | PKPdf | 05 31 32.8 | -3.1 |
| GYA | | | | sPKP | | 05 31 53.0 | |
| GYA | | | | PKPab | PKPab | 05 32 44.0 | +0.1 |
| GYA | | | | PKS | PKSdf | 05 35 04.5 | -4.2 |
| GYA | | | | PPMZ | | | |
| | 110nm,7.9s | | | | | | |
| KMI | Kunming | 169.71 | 7 | PKP | PKPdf | 05 31 35.1 | -2.0 |
| KMI | | | | PPMZ | | | |
| | 170nm,5.3s | | | | | | |
| CMAR | Chiang Mai Arr | 173.92 | 53 | PKP | PKPdf | 05 31 39.1 | +0.2 |
| | 0.5nm,0.3s,baz=249,slow=2.5,SNR=3.4 | | | | | | |

**DJA 04 05:45:54.3**±0.6, **8˚S**±4˚×**10˚6E**±˚, **h27**km±7km, **M3.6**/8, **MLv3.6**/8, **Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKJI | Sukabumi | 0.70 | 19 | P | Pb | 05 46 07.9 | 0.0 |
| SKJI | | | | S | Sn | 05 46 17.9 | -0.4 |
| CNJI | Cibinong | 0.87 | 66 | P | Pn | 05 46 09.9 | -0.9 |
| CGJI | Cibinong | 1.23 | 329 | P | Pb | 05 46 16.5 | -0.3 |
| CGJI | | | | S | Sn | 05 46 31.0 | -0.4 |
| LEM | Lembang | 1.53 | 57 | P | Pn | 05 46 21.1 | +1.0 |
| CMJI | Cimerak | 2.10 | 93 | P | Pn | 05 46 27.6 | -0.1 |
| CMJI | | | | S | Sn | 05 46 49.6 | -3.4 |

*PGC **04** 05:56:11.4±5.2, 49˚12N×129˚61W, h10km, ML3.7/26, Mw4.8, 236km southwest of Pt. Hardy, Bc Vancouver Island Region*

*IDC **04** 05:56:14.5±1.0, 49˚35N×129˚19W, h0km, mb4.0/6, mb1 4.2/14, mb1mx4.0/39, mbtmp4.0/14, ML3.6/7, MS3.8/21, Ms1 3.8/21, ms1mx3.7/33, Error ellipse: s-maj=19.6km s-min=10.1km az=65.0*

*ISCJB **04** 05:56:15.6±0.2, 49˚38N±0˚02×129˚08W±0˚03, h10km, mb4.5/27, MS4.0/30, Error ellipse: s-maj=2.9km s-min=2.5km az=151.2*

*BJI **04** 05:56:15.4, 49˚40N×129˚20W, h10km, mb5.0/7, Ms4.8/3, Ms7 4.5/3*

*NEIC **04** 05:56:16.9±0.4, 49˚45N×129˚09W, h10km, mb4.5/53, MW4.7(OTT), Error ellipse: s-maj=7.5km s-min=4.0km az=54.0*

**ISC 04 05:56:18.4**±0.9, **49˚37N**±0˚05×**129˚09W**±0˚04, **h19**km±3km, **n543**, σ**1§21**/522, **mb4.5**/27, **MS4.0**/30, **Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EDB | Eliza Dome | 1.38 | 68 | Pn | Pn | 05 56 39.9 | -2.6 |
| EDB | | | | Sn | Sb | 05 57 00.7 | +0.1 |
| EDB | Eliza Dome | 1.38 | 68 | ePn | Pn | 05 56 39.9 | -2.6 |
| EDB | | | | eSn | Sb | 05 57 00.7 | +0.1 |
| FHRB | Fair Harbour | 1.45 | 61 | Pn | Pn | 05 56 41.5 | -2.1 |
| FHRB | | | | Sn | Sb | 05 57 03.0 | +0.2 |
| ETB | Estevan Point | 1.67 | 89 | Pn | Pn | 05 56 43.8 | -2.7 |
| ETB | Estevan Point | 1.67 | 89 | ePn | Pn | 05 56 43.8 | -2.7 |
| PHC | Port Hardy | 1.71 | 38 | Pn | Pn | 05 56 45.2 | -1.9 |
| PHC | | | | Sn | Sn | 05 57 08.8 | +0.4 |
| PHC | Port Hardy | 1.71 | 38 | ePn | Pn | 05 56 45.2 | -1.9 |
| PHC | | | | eSn | Sn | 05 57 08.8 | +0.4 |
| WOSB | Woss | 1.81 | 63 | Pn | Pn | 05 56 47.2 | -1.5 |
| WOSB | | | | Sn | Sn | 05 57 12.0 | +0.9 |
| WOSB | Woss | 1.81 | 63 | ePn | Pn | 05 56 47.2 | -1.5 |
| WOSB | | | | eSn | Sn | 05 57 12.0 | +0.9 |
| TLCB | Telegraph Cove | 1.87 | 50 | Pn | Pn | 05 56 47.8 | -1.5 |
| TOFB | Tofino | 2.10 | 95 | Pn | Pn | 05 56 49.1 | -3.3 |
| TOFB | | | | Sn | Sn | 05 57 17.2 | -0.7 |
| NCRB | Newcastle Ridg | 2.22 | 61 | Pn | Pn | 05 56 53.3 | -0.9 |
| SPLB | Strathcona Par | 2.29 | 76 | Pn | Pn | 05 56 54.5 | -0.6 |
| BTB | Buttle Lake | 2.33 | 86 | Pn | Pn | 05 56 53.4 | -2.5 |
| OZB | Mount Ozzard | 2.40 | 99 | Pn | Pn | 05 56 53.2 | -3.4 |
| OZB | | | | Sn | Sn | 05 57 24.4 | -1.0 |
| CBB | Campbell River | 2.51 | 73 | Pn | Pn | 05 56 56.9 | -1.2 |
| B928 | Bamfield | 2.65 | 100 | Pn | Pn | 05 56 56.5 | -3.5 |
| B928 | | | | Sn | Sn | 05 57 30.5 | -1.1 |
| B927 | Port Alberni | 2.81 | 91 | Pn | Pn | 05 56 59.9 | -2.3 |
| B927 | | | | Sn | Sn | 05 57 35.5 | +0.1 |
| BBB | Bella Bella | 2.88 | 12 | Pn | Pn | 05 57 00.6 | -2.6 |
| | 11nm,0.3s,baz=216,slow=10,SNR=63 | | | | | | |
| BBB | | | | Sn | Sn | 05 57 35.1 | -2.2 |
| | 13nm,0.3s,baz=234,slow=18,SNR=3.7 | | | | | | |
| BBB | | | | LR | LR | 05 58 12.3 | |
| | comp=Z,2μm,19.4s,baz=234,slow=40 | | | | | | |
| BBB | Bella Bella | 2.88 | 12 | Pn | Pn | 05 57 00.6 | -2.6 |
| BBB | | | | Sn | Sn | 05 57 36.8 | -0.6 |
| MGB | Mount Grey | 2.91 | 96 | Pn | Pn | 05 57 01.2 | -2.6 |
| MGB | | | | Sn | Sn | 05 57 37.3 | -0.9 |
| TXB | Texada | 3.05 | 82 | Pn | Pn | 05 57 04.5 | -1.0 |
| YOUB | Youbou, Lake C | 3.21 | 97 | Pn | Pn | 05 57 05.1 | -2.6 |
| YOUB | | | | Sn | Sn | 05 57 45.0 | -0.4 |
| SHB | Sechelt | 3.41 | 84 | Pn | Pn | 05 57 09.7 | -0.9 |
| SHB | | | | Sn | Sn | 05 57 50.4 | -0.1 |
| LZB | Mount Lazard | 3.55 | 100 | Pn | Pn | 05 57 10.1 | -2.4 |
| OBC | Olympics--Boni | 3.58 | 110 | P | Pn | 05 57 11.7 | -1.2 |
| PGC | Sidney | 3.78 | 99 | Pn | Pn | 05 57 13.3 | -2.3 |
| PGC | Sidney | 3.78 | 99 | ePn | Pn | 05 57 13.3 | -2.3 |
| PGC | | | | eSn | Sn | 05 57 60.0 | +0.5 |
| OSR | Olympics--Salm | 3.89 | 117 | P | Pn | 05 57 15.5 | -1.7 |
| NLWA | Neilton Lookou | 4.00 | 118 | ePn | Pn | 05 57 15.7 | -3.0 |
| NLWA | | | | eSn | Sn | 05 58 03.1 | -2.0 |
| MOBC | Moresby Island | 4.19 | 336 | Pn | Pn | 05 57 15.9 | -5.4 |
| A04D | Lummi Island | 4.25 | 96 | P | Pn | 05 57 20.0 | -2.0 |
| | baz=4.6 | | | | | | |
| HDW | Hoodsport | 4.37 | 111 | P | Pn | 05 57 21.8 | -1.9 |
| VIB | Van Inlet | 4.45 | 332 | Pn | Pn | 05 57 21.0 | -3.9 |
| CMW | Cultus Mountai | 4.70 | 99 | P | Pn | 05 57 27.2 | -1.1 |
| UBRB | Upper Baezaeko | 4.73 | 40 | Pn | Pn | 05 57 29.7 | +1.0 |
| B05A | Bryant | 4.75 | 101 | P | Pn | 05 57 27.3 | -1.6 |
| | baz=5.0 | | | | | | |
| B05A | | | | S | Sn | 05 58 22.0 | -1.4 |
| | baz=5.0 | | | | | | |
| MBW | Mount Baker | 4.76 | 94 | P | Pn | 05 57 28.3 | -1.0 |
| LLLB | Lillooet | 4.81 | 72 | Pn | Pn | 05 57 29.9 | +0.1 |
| JCW | Jim Creek | 4.88 | 101 | P | Pn | 05 57 30.2 | -0.5 |
| RPW | Rockport | 5.08 | 98 | P | Pn | 05 57 32.1 | -1.4 |
| HTW | Haystack Looko | 5.11 | 105 | P | Pn | 05 57 33.2 | -0.7 |
| GPW | Glacier Peak | 5.41 | 100 | P | Pn | 05 57 37.7 | -0.5 |
| ERK | Elk Rock | 5.48 | 121 | P | Pn | 05 57 37.8 | -1.3 |
| LON | Longmire | 5.54 | 116 | ePn | Pn | 05 57 38.2 | -1.7 |
| LON | | | | eSn | Sn | 05 58 40.8 | -2.2 |
| FL2 | Flat Top 2 | 5.54 | 122 | P | Pn | 05 57 38.8 | -1.1 |
| LVP | Lakeview Peak | 5.59 | 124 | P | Pn | 05 57 39.3 | -1.2 |
| MTMW | Mount Mitchell | 5.72 | 123 | P | Pn | 05 57 41.5 | -0.9 |
| TBM | Table Mountain | 6.08 | 108 | P | Pn | 05 57 46.7 | -0.5 |
| PNT | Penticton | 6.19 | 87 | Pn | Pn | 05 57 47.7 | -1.0 |
| COR | Corvallis | 6.21 | 138 | ePn | Pn | 05 57 47.0 | -2.0 |
| B08A | Colville Reser | 6.52 | 95 | ePn | Pn | 05 57 52.5 | -0.8 |
| G05D | Wamic, OR | 6.71 | 125 | P | Pn | 05 57 55.0 | -0.8 |
| | baz=6.8,SNR=5.8 | | | | | | |
| BLBC | Blue River | 6.80 | 63 | Pn | Pn | 05 57 58.3 | +0.9 |
| I03D | Drain, OR | 6.92 | 143 | P | Pn | 05 57 57.5 | -1.2 |
| | baz=6.9 | | | | | | |
| HAWA | Hanford | 7.08 | 111 | ePn | Pn | 05 58 00.1 | -0.8 |
| | 7.2nm,0.6s | | | | | | |
| HAWA | | | | eSn | Sn | 05 59 24.6 | +3.7 |
| DOWB | Downie Slide | 7.09 | 68 | Pn | Pn | 05 58 01.0 | 0.0 |
| I04A | Tendick Farm, | 7.23 | 138 | P | Pn | 05 58 02.8 | -0.2 |
| | baz=7.3 | | | | | | |
| SLEB | Sale Mountain | 7.25 | 71 | Pn | Pn | 05 58 04.0 | +0.6 |
| I05D | Terrebonne, OR | 7.32 | 131 | P | Pn | 05 58 03.8 | -0.4 |
| | baz=7.4 | | | | | | |
| J04D | Umpqua Nationa | 7.80 | 139 | P | Pn | 05 58 10.5 | -0.6 |
| | baz=7.8 | | | | | | |
| NEW | Newport | 7.98 | 93 | Pn | Pn | 05 58 12.2 | -1.1 |
| | 1.4nm,0.3s,baz=284,slow=14,SNR=18 | | | | | | |
| NEW | | | | LR | LR | 06 01 24.1 | |
| | comp=Z,2μm,19.6s,baz=279,slow=38 | | | | | | |
| NEW | Newport | 7.98 | 93 | P | Pn | 05 58 12.5 | -0.8 |
| | baz=8.3 | | | | | | |
| NEW | Newport | 7.98 | 93 | ePn | Pn | 05 58 12.8 | -0.5 |
| NEW | | | | eSn | Sn | 05 59 46.8 | +3.9 |
| HUMO | Hull Mountain | 8.00 | 145 | ePn | Pn | 05 58 13.8 | +0.2 |
| G08A | Pilot Rock | 8.00 | 117 | ePn | Pn | 05 58 14.1 | +0.5 |
| J05D | Fort Rock, OR | 8.16 | 135 | P | Pn | 05 58 15.0 | -0.9 |
| | baz=8.2 | | | | | | |
| WAPA | Wapiti River | 8.38 | 42 | Pn | Pn | 05 58 20.7 | +2.0 |
| I07A | Izee | 8.44 | 125 | ePn | Pn | 05 58 22.0 | +2.3 |
| K05A | Summer Lake | 8.75 | 136 | ePn | Pn | 05 58 25.4 | +1.4 |
| YBH | Yreka Blue Hor | 8.85 | 147 | Pn | Pn | 05 58 25.9 | +0.6 |
| | 0.2nm,0.3s,baz=8.4,slow=7.0,SNR=16 | | | | | | |
| YBH | | | | LR | LR | 06 01 16.7 | |
| | comp=Z,414nm,18.6s,baz=332,slow=34 | | | | | | |
| YBH | Yreka Blue Hor | 8.85 | 147 | ePn | Pn | 05 58 25.1 | -0.2 |
| DLBC | Dease Lake | 9.10 | 357 | Pn | Pn | 05 58 28.8 | +0.1 |
| | 0.2nm,0.3s,baz=193,slow=10,SNR=7.5 | | | | | | |
| DLBC | Dease Lake | 9.10 | 357 | Pn | Pn | 05 58 28.1 | -0.5 |
| M02C | Callahan | 9.10 | 149 | P | Pn | 05 58 29.0 | +0.3 |
| | baz=9.1,SNR=7.3 | | | | | | |
| M04C | Macdoel | 9.13 | 143 | P | Pn | 05 58 29.2 | +0.1 |
| | baz=9.1,SNR=8.6 | | | | | | |
| KHMM | Horse Mountain | 9.30 | 154 | ePn | Pn | 05 58 29.8 | -1.7 |
| J08A | Circle Bar Ran | 9.48 | 125 | ePn | Pn | 05 58 34.7 | +0.7 |
| N02D | Trinity Center | 9.53 | 149 | P | Pn | 05 58 34.7 | +0.2 |
| | baz=9.5 | | | | | | |
| BSMT | Bassoo Peak | 9.60 | 94 | ePn | Pn | 05 58 35.3 | -0.3 |
| | 10.0nm,1.0s | | | | | | |
| BSMT | | | | eSn | Sn | 06 00 22.3 | -0.6 |
| MOD | Modoc | 9.67 | 137 | ePn | Pn | 05 58 36.4 | -0.2 |
| | 15nm,1.1s | | | | | | |
| BLMT | Blacktail Moun | 9.84 | 92 | ePn | Pn | 05 58 37.7 | -1.1 |
| WDC | Whiskeytown Da | 9.94 | 150 | ePn | Pn | 05 58 36.0 | -4.0 |
| WALA | Waterton Lakes | 9.94 | 86 | Pn | Pn | 05 58 40.9 | +0.7 |
| WALA | Waterton Lakes | 9.94 | 86 | ePn | Pn | 05 58 41.2 | +1.0 |
| | 15nm,1.0s | | | | | | |
| JTMT | Jette | 9.95 | 94 | ePn | Pn | 05 58 38.7 | -1.7 |
| WVOR | Wild Horse Val | 10.05 | 130 | ePn | Pn | 05 58 38.7 | -3.1 |
| | 10nm,1.0s | | | | | | |
| YBMT | Yellow Bay | 10.10 | 93 | ePn | Pn | 05 58 42.5 | +0.1 |
| | 9.1nm,0.8s | | | | | | |
| YBMT | | | | eSn | Sn | 06 00 37.8 | +2.6 |
| FNBB | Fort Nelson | 10.18 | 18 | Pn | Pn | 05 58 42.8 | -0.5 |
| SWMT | Swartz Lake | 10.20 | 95 | ePn | Pn | 05 58 42.3 | -1.5 |
| | 8.7nm,0.9s | | | | | | |
| SWMT | | | | eSn | Sn | 06 00 36.9 | -0.7 |
| O03D | Paynes Creek | 10.44 | 148 | P | Pn | 05 58 47.5 | +0.4 |
| | baz=10 | | | | | | |
| MSO | Missoula | 10.45 | 98 | P | Pn | 05 58 45.8 | -1.3 |
| | baz=11 | | | | | | |
| MSO | Missoula | 10.45 | 98 | ePn | Pn | 05 58 46.3 | -0.9 |
| EDM | Edmonton | 10.58 | 63 | ePn | Pn | 05 58 49.8 | +0.9 |
| EDM | | | | eSn | Sn | 06 00 51.6 | +4.9 |
| SLMT | Seeley Lake | 10.61 | 96 | ePn | Pn | 05 58 48.7 | -0.7 |
| | 18nm,0.8s | | | | | | |
| CHMT | Chamberlain Mo | 10.87 | 97 | ePn | Pn | 05 58 51.8 | -1.2 |
| | 6.2nm,0.9s | | | | | | |
| CHMT | | | | eSn | Sn | 06 00 57.5 | +3.5 |
| HLID | Hailey | 11.66 | 114 | P | Pn | 05 59 03.9 | +0.1 |
| | baz=12 | | | | | | |
| HLID | Hailey | 11.66 | 114 | ePn | Pn | 05 59 05.8 | +2.0 |
| LRM | Limekiln Ridge | 11.78 | 101 | ePn | Pn | 05 59 04.8 | -0.7 |
| | 79nm,1.1s | | | | | | |
| HRY | Holter Researc | 11.86 | 96 | ePn | Pn | 05 59 05.9 | -0.5 |
| | 6.3nm,0.7s | | | | | | |
| DLMT | Dillon | 11.88 | 103 | ePn | Pn | 05 59 05.2 | -1.6 |
| | 61nm,1.7s | | | | | | |
| MCMT | McKenzie Canyo | 11.96 | 106 | ePn | Pn | 05 59 07.7 | -0.3 |
| BOZ | Bozeman (W) | 12.38 | 101 | P | Pn | 05 59 12.7 | -0.8 |
| | baz=13 | | | | | | |
| BOZ | Bozeman (W) | 12.38 | 101 | ePn | Pn | 05 59 12.5 | -1.1 |
| BOZ | | | | eSn | Sn | 06 01 28.8 | -2.1 |
| EGMT | Eagleton | 12.85 | 89 | P | Pn | 05 59 19.4 | -0.4 |
| | baz=13 | | | | | | |
| EGMT | Eagleton | 12.85 | 89 | ePn | Pn | 05 59 19.5 | -0.4 |
| | 37nm,0.9s | | | | | | |
| EGMT | | | | eSn | Sn | 06 01 45.2 | +2.9 |
| QLMT | Earthquake Lak | 12.85 | 104 | ePn | Pn | 05 59 19.1 | -1.1 |
| | 3.9nm,1.1s | | | | | | |
| QLMT | | | | eSn | Sn | 06 01 45.4 | +2.7 |
| CMB | Columbia Colle | 12.95 | 148 | ePn | P | 05 59 27.3 | -4.6 |
| YMR | Madison River | 13.22 | 104 | ePn | Pn | 05 59 25.2 | +0.1 |
| | 107nm,1.3s | | | | | | |
| YMR | | | | eSn | Sn | 06 01 48.6 | -3.1 |
| YNR | Norris Junctio | 13.38 | 103 | ePn | Pn | 05 59 29.9 | +2.6 |
| NVAR | Mina Array Bea | 13.40 | 141 | Pn | Pn | 05 59 28.6 | +0.9 |
| | 0.1nm,0.3s,baz=11,slow=11,SNR=4.1 | | | | | | |
| YFT | Old Faithful | 13.40 | 105 | ePn | Pn | 05 59 32.0 | +4.3 |
| | 4.0nm,0.7s | | | | | | |
| GCMT | Greycliff | 13.59 | 98 | ePn | Pn | 05 59 31.0 | +1.0 |
| | 12nm,0.9s | | | | | | |
| H17A | Grant Village | 13.60 | 104 | P | Pn | 05 59 31.2 | +0.8 |
| | baz=14 | | | | | | |
| H17A | Grant Village | 13.60 | 104 | ePn | Pn | 05 59 31.5 | +1.2 |
| | 42nm,1.1s | | | | | | |
| IMW | Indian Meadow | 13.61 | 107 | ePn | Pn | 05 59 31.9 | +1.3 |
| LKWY | Lake | 13.63 | 104 | ePn | Pn | 05 59 28.1 | -2.7 |
| | 28nm,0.9s | | | | | | |
| FLWY | Flagg Ranch | 13.67 | 106 | ePn | Pn | 05 59 33.7 | +2.5 |
| | 81nm,1.2s | | | | | | |
| HVU | Hansel Valley | 13.70 | 117 | ePn | Pn | 05 59 30.3 | -1.4 |
| MOOW | Moose Ponds | 13.80 | 107 | ePn | Pn | 05 59 35.7 | +2.5 |
| | 49nm,1.0s | | | | | | |
| TPAW | Teton Pass | 13.81 | 108 | ePn | Pn | 05 59 34.1 | +0.8 |
| MLAC | Mammoth Lakes | 13.88 | 144 | P | Pn | 05 59 34.9 | +0.8 |

baz=14
REDW **Red Top Meadow** 13.94 109 *e*Pn Pn 05 59 37.7 +2.8
70nm,1.3s
SNOW **Snow King Moun** 13.95 108 *e*Pn Pn 05 59 33.1 -1.9
LOHW **Long Hollow** 13.96 107 *e*Pn Pn 05 59 37.5 +2.2
72nm,1.4s
RLMT **Red Lodge** 14.11 100 P Pn 05 59 36.8 -0.5
baz=14
RLMT **Red Lodge** 14.11 100 *e*Pn Pn 05 59 37.3 0.0
AHID **Auburn Hatcher** 14.11 111 *e*Pn Pn 05 59 33.8 -3.5
54nm,1.0s
BGU **Big Grassy Mou** 14.11 121 *e*Pn Pn 05 59 37.9 +0.6
16nm,1.1s
LRV **Little Rabbit** 14.21 153 *e*Pn Pn 05 59 41.6 +3.0
HWUT **Hardware Ranch** 14.52 116 *e*Pn Pn 05 59 43.6 +0.7
TIN **Tinemaha** 14.62 143 P Pn 05 59 46.1 +1.9
baz=15
R11A **Troy Canyon, C** 14.68 134 P Pn 05 59 46.9 +1.8
baz=15
R11A **Troy Canyon, C** 14.68 134 *e*Pn Pn 05 59 46.5 +1.4
DUG **Dugway** 14.73 122 P Pn 05 59 46.9 +1.2
baz=15
DUG **Dugway** 14.73 122 *e*Pn Pn 05 59 47.4 +1.7
RCTC **Rector, Farmer** 14.90 147 P Pn 05 59 50.1 +2.2
baz=15
BW06 **Boulder Array** 15.06 109 *e*Pn Pn 05 59 50.4 +0.2
26nm,1.3s
NLU **North Lily Min** 15.30 122 *e*Pn Pn 05 59 52.5 -0.9
18nm,1.0s
YKA **Yellowknife Ar** 15.40 26 Pn Pn 05 59 51.5 -2.8
0.3nm,0.3s,baz=213,slow=13,SNR=8.3
MPU **Maple Canyon** 15.51 121 *e*Pn P 05 59 59.1 -1.4
82nm,1.4s
LAO **LASA Array** 15.52 91 P Pn 05 59 55.5 -0.6
baz=16
LAO **LASA Array** 15.52 91 *e*Pn Pn 05 59 55.6 -0.5
46nm,1.1s
TPNV **Topopah Spring** 15.53 138 P Pn 05 59 55.8 -0.5
baz=16
DAC **Darwin (Calif)** 15.54 143 *e*Pn P 05 59 59.2 -1.6
9.3nm,1.0s
DAWY **Dawson** 15.74 343 *e*Pn Pn 05 59 58.6 -0.2
84nm,1.8s
ISA **Isabella** 15.75 146 P Pn 05 59 60.0 +0.8
baz=16
ISA **Isabella** 15.75 146 *e*Pn P 06 00 07.4 +4.4
20nm,1.3s
MPMC **Manual Prospec** 15.77 143 P Pn 06 00 00.6 +1.1
baz=16
ARVC **Arvin** 16.11 148 P P 06 00 05.8 -1.1
baz=16
TMUT **Trail Mountain** 16.24 122 *e*Pn Pn 06 00 06.1 +0.5
22nm,1.0s
MSU **Marysvale** 16.28 125 *e*Pn Pn 06 00 05.5 -0.6
20nm,1.2s
DGMT **Dagmar** 16.37 84 P Pn 06 00 06.7 -0.3
baz=17
DGMT **Dagmar** 16.37 84 *e*Pn Pn 06 00 06.0 -1.0
34nm,0.9s
SHPR **Sheep Range** 16.38 137 *e*Pn Pn 06 00 06.7 -0.5
P17A **Butcher Ranch,** 16.38 120 *e*Pn P 06 00 11.3 +1.2
22nm,1.0s
DOT **Dot Lake** 16.45 336 *e*P P 06 00 11.4 +0.9
204nm,2.0s
P18A **Preston Nutter** 16.56 119 *e*Pn P 06 00 13.4 +1.2
24nm,1.2s
EDW2 **Edwards Air Fo** 16.63 146 P P 06 00 11.6 -1.1
baz=17
GSC **Goldstone** 16.70 143 P P 06 00 13.3 -0.3
baz=17
GSC **Goldstone** 16.70 143 *e*Pn P 06 00 12.6 -0.9
14nm,1.2s
EGAK **Eagle** 16.73 342 *e*Pn Pn 06 00 08.4 -2.9
263nm,2.3s
SRU **San Rafael** 16.75 121 *e*Pn Pn 06 00 12.1 0.0
TUQ **Turquoise Moun** 16.95 140 P P 06 00 16.5 +0.2
baz=17
A25A **Svangstu Ranch** 16.98 82 P Pn 06 00 15.2 +0.6
baz=17
K22A **Casper** 17.02 105 P P 06 00 17.0 -0.1
baz=17
K22A **Casper** 17.02 105 *e*P P 06 00 16.3 -0.8
65nm,1.2s
B25A **Knox Farm, Ray** 17.09 84 P P 06 00 17.0 -0.7
baz=17
C25A **Freed Ranch, W** 17.16 86 P Pn 06 00 17.3 +0.3
baz=18
D25A **Fairfield** 17.28 88 P Pn 06 00 19.0 +0.6
baz=18
HEC **Hector,Ludlow** 17.30 142 P P 06 00 20.2 0.0
baz=17
BFSC **Mount Baldy Ra** 17.32 147 P P 06 00 21.7 +1.3
baz=17
O20A **White River Ci** 17.40 114 P P 06 00 21.6 +0.2
baz=18
O20A **White River Ci** 17.40 114 *e*P P 06 00 22.5 +1.1
46nm,1.3s
E25A **Miller Ranch,** 17.42 90 P P 06 00 22.7 +1.3
baz=18
FFC **Flin Flon** 17.45 62 *e*P Pn 06 00 20.6 +0.1
FMP **Fort Macarthur** 17.58 149 P P 06 00 24.7 +1.6
baz=18
F25A **Bowman** 17.58 92 P P 06 00 22.7 -0.5
baz=18
LDFC **Landfair** 17.60 139 *e*P P 06 00 23.6 +0.2
33nm,1.1s
GMRC **Granite Mounta** 17.62 141 P P 06 00 23.5 -0.3
baz=18
B26A **Jensen Ranch,** 17.67 83 P P 06 00 24.2 +0.1
baz=18
A26A **Wade Farm, Ken** 17.68 81 P P 06 00 24.0 -0.2
baz=18
G25A **Newell** 17.88 94 P P 06 00 26.8 +0.3
baz=18
C26A **Wahner Farm, P** 17.89 85 P Pn 06 00 25.8 -0.2
baz=18
D26A **Manning** 17.89 87 P P 06 00 26.9 +0.4
baz=18
RSSD **Black Hills** 17.92 98 *e*P P 06 00 27.2 +0.1
25nm,1.2s
H25A **Fruitdale** 17.99 96 P P 06 00 29.3 +1.6
baz=18
E26A **Carlson Angus** 18.05 89 P P 06 00 29.7 +1.3
baz=18
MURC **Murrieta** 18.06 146 P P 06 00 31.2 +2.6
baz=18
ILAR **Eielson Array** 18.10 335 P Pn 06 00 25.7 -2.8
baz=148,slow=10,SNR=18
F26A **Lodgepole** 18.12 91 P P 06 00 30.2 +1.1
baz=18
I25A **Rochford** 18.16 98 P P 06 00 31.2 +1.5
baz=18
BELC **Belle Mtn. Jos** 18.16 143 P P 06 00 30.9 +1.2
baz=18
PV04 **Paradox Valley** 18.16 120 *e*P Pn 06 00 29.5 -0.1
SCI **San Clemente I** 18.17 150 P P 06 00 32.1 +2.5
baz=18
A27A **Ledoux Ranch,** 18.18 81 P P 06 00 30.9 +1.2
baz=18
CCB **Clear Creek Bu** 18.27 334 *e*Pn Pn 06 00 30.2 -0.2
48nm,1.6s
PFO **Pinyon Flat Ob** 18.33 145 P P 06 00 33.7 +2.1
baz=18
PFO **Pinyon Flat Ob** 18.33 145 *e*P P 06 00 36.4 +4.8
6.0nm,1.0s
N23A **Red Feather La** 18.34 109 P P 06 00 33.0 +1.2
baz=18
IRM **Iron Mountain** 18.37 141 P P 06 00 33.4 +1.5
baz=18
G26A **Maurine** 18.37 93 P Pn 06 00 33.0 +1.0
baz=19
J25A **Sunshine Ranch** 18.40 99 P Pn 06 00 33.4 +1.1
baz=19
PHWY **Pilot Hill** 18.41 107 *e*P P 06 00 32.4 -0.3
35nm,1.1s
COLA **College** 18.45 334 *e*Pn Pn 06 00 33.1 +0.5
42nm,1.6s
D27A **Center** 18.46 87 P Pn 06 00 33.7 +0.7
baz=19
H26A **Fairpoint** 18.53 95 P Pn 06 00 34.7 +0.8
baz=19
PV01 **Paradox Valley** 18.53 120 *e*P P 06 00 33.8 -0.1
5µm,1.3s
PV01 *e*S Sn 06 04 00.9 +0.2
F27A **Lemmon** 18.54 91 P Pn 06 00 34.8 +0.9
baz=19
E27A **Carson** 18.65 89 P Pn 06 00 36.0 +0.7
baz=19
PDMCI **Parker Dam,Lak** 18.68 138 P Pn 06 00 37.3 +1.7
baz=19
I26A **New Underwood** 18.72 97 P Pn 06 00 36.9 +0.8
baz=19
109C **Camp Elliot, M** 18.74 147 P Pn 06 00 38.8 +2.4
baz=19
SMCO **Snowmass** 18.77 115 *e*P P 06 00 36.2 -0.4
12nm,1.1s
G27A **Dupree** 18.78 92 P Pn 06 00 37.3 +0.5
baz=19
A28A **Rude Farm, Bot** 18.82 80 P Pn 06 00 37.7 +0.4
baz=19
B28A **Dugan Ranch, T** 18.86 82 P Pn 06 00 38.0 +0.1
baz=19
BPAW **Bear Paw Mtn.** 18.87 330 *e*P P 06 00 36.8 -0.3
197nm,2.7s
L25A **Engebretsen Ra** 18.90 103 P Pn 06 00 39.4 +1.0
baz=19
J26A **Sides Ranch, S** 18.90 99 P Pn 06 00 39.1 +0.7
baz=19
H27A **Howes** 18.97 94 P Pn 06 00 39.8 +0.6
baz=19
WUAZ **Wupatki** 18.98 130 P Pn 06 00 39.8 +0.4
baz=19
WUAZ **Wupatki** 18.98 130 *e*P Pn 06 00 39.5 +0.1
Y12C **Blythe** 18.98 140 P Pn 06 00 42.0 +2.6
baz=19
MONP **Monument Peak** 18.99 145 P Pn 06 00 41.3 +1.7
baz=19
C28A **Hausauer Farms** 19.03 84 P Pn 06 00 40.5 +0.6
baz=19
D28A **Regan** 19.06 86 P Pn 06 00 40.6 +0.3
baz=19
INK **Inuvik** 19.12 355 P P 06 00 38.6 -1.2
0.1nm,0.3s,baz=172,slow=11,SNR=11
INK LR LR 06 07 33.1
comp=Z,531nm,20.2s,baz=136,slow=36
INK **Inuvik** 19.12 355 *e*P P 06 00 38.5 -1.3
31nm,1.2s
E28A **Huff** 19.17 88 P Pn 06 00 42.7 +1.1
baz=20
SWSC **Sam W. Stewart** 19.18 144 P Pn 06 00 43.0 +1.3
baz=19
ISCO **Idaho Springs** 19.20 111 P Pn 06 00 42.0 -0.2
baz=19
ISCO **Idaho Springs** 19.20 111 *e*P Pn 06 00 42.2 0.0
9.3nm,1.0s
M25A **Palm-Egli Farm** 19.22 105 P Pn 06 00 42.9 +0.5
baz=19
MVCO **Mesa Verde** 19.22 121 P Pn 06 00 42.2 -0.3
baz=19
MVCO **Mesa Verde** 19.22 121 *e*P P 06 00 41.3 -0.2
44nm,1.1s
I27A **Quinn** 19.23 96 P Pn 06 00 43.2 +0.9
baz=20
F28A **McLaughlin** 19.34 90 P Pn 06 00 44.0 +0.3
baz=20
GLA **Glamis** 19.46 142 P Pn 06 00 47.0 +1.9
baz=20
A29A **Manning Farm,** 19.48 80 P Pn 06 00 45.8 +0.6
baz=20
MDND **Maddock** 19.50 83 P Pn 06 00 46.4 +0.8
baz=20
MDND **Maddock** 19.50 83 *e*P Pn 06 00 46.3 +0.8
128nm,1.4s
B29A **Wagenman Farm,** 19.51 81 P Pn 06 00 46.5 +0.9
baz=20
G28A **Parade** 19.56 92 P Pn 06 00 47.1 +0.9
baz=20
J27A **Elkhorn Farm,** 19.62 98 P Pn 06 00 47.7 +0.6
baz=20
K27A **Flueckinger Fa** 19.73 100 P Pn 06 00 48.7 +0.3
baz=20
S22A **4UR Ranch, Cre** 19.80 118 P P 06 00 48.4 +0.6
baz=20
I28A **Midland** 19.83 95 P Pn 06 00 48.9 -0.6
baz=20
E29A **Napoleon** 19.86 87 P Pn 06 00 48.9 -0.9
baz=20
F29A **Eureka** 19.99 89 P Pn 06 00 50.5 -0.8
baz=20
J28A **Allard Ranch,** 20.04 97 P Pn 06 00 51.9 -0.2
baz=20
A30A **Hoffart Farm,** 20.08 79 P Pn 06 00 52.0 -0.3
baz=20
N26A **Koester Ranch,** 20.08 105 P Pn 06 00 53.5 +0.9
baz=20
W18A **Petrified Fore** 20.12 128 P Pn 06 00 53.0 -0.2
baz=20
W18A **Petrified Fore** 20.12 128 *e*P P 06 00 51.4 +0.2
50nm,1.3s
G29A **Hoven** 20.16 91 P Pn 06 00 52.4 -1.0
baz=20
B30A **Myrvik Farm, E** 20.18 81 P Pn 06 00 52.9 -0.6
baz=20
H29A **Onida** 20.19 93 P Pn 06 00 53.1 -0.7
baz=20
D30A **Buchanan** 20.27 85 P Pn 06 00 54.2 -0.4
baz=21
C30A **Mose, Pekin** 20.27 83 P Pn 06 00 54.6 -0.1
baz=21
K28A **Ten Mile Ranch** 20.29 99 P Pn 06 00 54.6 -0.4
baz=20
O26A **Horse Wrangler** 20.36 107 P Pn 06 00 55.9 +0.1
baz=21
E30A **Jud** 20.36 87 P Pn 06 00 55.8 +0.2
baz=21
I29A **Vivian Onida** 20.39 94 P Pn 06 00 56.2 +0.2
baz=21
F30A **Leola** 20.51 88 P Pn 06 00 57.4 -0.1
baz=21
N27A **Anderson Farm,** 20.53 105 P Pn 06 00 57.6 -0.2
baz=21
SDCO **Great Sand Dun** 20.58 116 P P 06 00 56.8 +0.5
baz=21
SDCO **Great Sand Dun** 20.58 116 *e*P P 06 00 56.6 +0.3
9.4nm,1.0s
SDCO LR LR
comp=Z,700nm,20.3s
B31A **Greenbush Farm** 20.62 81 P P 06 00 56.8 +0.5
baz=21
J29A **Okreek** 20.64 96 P P 06 00 57.0 +0.3
baz=21
G30A **Faulkton** 20.69 90 P P 06 00 57.6 +0.4
baz=21
C31A **Landman Farms,** 20.73 82 P P 06 00 57.7 +0.1
baz=21
P26A **Davis Ranch, A** 20.73 108 P P 06 00 57.8 0.0
baz=21
OGNE **Ogallala** 20.77 104 P P 06 00 57.9 -0.3
baz=21
OGNE **Ogallala** 20.77 104 PFAKE 06 01 10.0 +9.4
OGNE LR LR
comp=Z,400nm,18.9s
A31A **Linda, St. Vin** 20.79 79 P P 06 00 58.5 +0.3
baz=21
COLD **Coldfoot** 20.86 337 *e*P P 06 00 58.0 -0.8
comp=Z,39nm,1.5s
COLD LR LR
comp=Z,300nm,20.2s
O27A **Beecher Island** 20.91 106 P P 06 00 59.9 +0.2
baz=21
K29A **Lazy Trails An** 20.95 97 P P 06 01 00.1 +0.1
baz=21
D31A **Mcclaflin, Tow** 20.96 84 P P 06 01 00.2 +0.1
baz=21
E31A **Nome** 21.01 86 P P 06 01 00.8 +0.3
baz=21
F31A **Hecla** 21.01 88 P P 06 01 01.0 +0.4
baz=21
Q26A **Hugo** 21.02 110 P P 06 01 01.4 +0.5
baz=21
P27A **Ficken Ranch,** 21.21 108 P P 06 01 03.1 +0.1
baz=21
J30A **Dallas** 21.22 95 P P 06 01 02.9 -0.1
baz=22
N28A **Pribbeno Ranch** 21.22 104 P P 06 01 03.0 0.0
baz=21
G31A **Conde** 21.27 89 P P 06 01 03.2 -0.1
baz=22
B32A **Ashes, Strandq** 21.34 80 P P 06 01 03.9 -0.3
baz=22
ULM **Lac du Bonnet** 21.36 75 P P 06 01 04.7 +0.4
comp=Z,29nm,0.9s,baz=284,slow=11,SNR=18
ULM LR LR 06 09 38.0
comp=Z,841nm,20.1s,baz=283,slow=38
ULM **Lac du Bonnet** 21.36 75 *e*P P 06 01 05.5 +1.2
M29A **Burnside Ranch** 21.36 101 P P 06 01 04.8 +0.3
baz=22
K30A **Basset** 21.44 97 P P 06 01 05.4 +0.1
baz=22
R26A **Arlington** 21.45 111 P P 06 01 06.2 +0.7
baz=22
KSCO **Kaye Shedlock'** 21.51 109 P P 06 01 07.1 +0.9
baz=22
KSCO **Kaye Shedlock'** 21.51 109 *e*P P 06 01 06.6 +0.4
comp=Z,83nm,1.2s
T25A **Trinidad** 21.63 115 P P 06 01 08.1 +0.6
baz=22
FALS **False Pass** 21.63 298 PFAKE 06 01 20.0 +13
FALS LR LR
comp=Z,900nm,19.1s
P28A **Saint Francis** 21.72 106 P P 06 01 08.9 +0.5
baz=22
G32A **Webster** 21.72 89 P P 06 01 08.8 +0.6
baz=22
L30A **Spencer Herefo** 21.73 99 P P 06 01 09.0 +0.6
baz=22
N29A **Votaw Ranch, W** 21.73 102 P P 06 01 09.4 +0.9
baz=22
AGMN **Agassiz Nation** 21.80 80 P P 06 01 08.8 -0.3
baz=22
AGMN **Agassiz Nation** 21.80 80 *e*P P 06 01 08.6 -0.5
comp=Z,97nm,1.2s
AGMN LR LR
comp=Z,1µm,19.1s
R27A **Eads** 21.85 111 P P 06 01 10.3 +0.5
baz=22
TUC **Tucson** 21.86 134 *e*P P 06 01 09.8 -0.1
comp=Z,15nm,1.2s
S26A **Kim** 21.87 113 P P 06 01 10.0 0.0
baz=22
Q28A **Sharon Springs** 21.98 108 P P 06 01 11.5 +0.4
baz=22
ANMO **Albuquerque** 22.00 122 P P 06 01 10.4 -1.1
comp=Z,3.0nm,0.9s,baz=323,slow=10,SNR=16
ANMO LR LR 06 09 44.6
comp=Z,144nm,20.9s,baz=310,slow=37
ANMO **Albuquerque** 22.00 122 *e*P P 06 01 11.3 -0.2
O29A **4D Ranch, Culb** 22.01 104 P P 06 01 11.9 +0.5
baz=22
C33A **Trail** 22.01 81 P P 06 01 17.6 +6.3
baz=22
K31A **O'Neill** 22.03 96 P P 06 01 12.4 +0.8
baz=22
LAZ **Ladron** 22.04 125 *e*P P 06 01 12.8 +0.8
comp=Z,6.0nm,1.2s
H32A **Carlson Farm,** 22.06 91 P P 06 01 12.7 +0.8
baz=22
T26A **Comanche Natio** 22.09 114 P P 06 01 14.1 +1.7
baz=22
L31A **Butterfield Fa** 22.19 97 P P 06 01 14.4 +1.1
baz=22
P29A **Atwood** 22.22 105 P P 06 01 14.1 +0.3
baz=22
I32A **Karley and Nic** 22.24 92 P P 06 01 14.5 +0.7
baz=22
E33A **Westby DABS, E** 22.25 85 P P 06 01 14.5 +0.6
baz=22
J32A **Parkston** 22.27 94 P P 06 01 14.4 +0.3
baz=22
F33A **5 Mile Ranch,** 22.29 87 P P 06 01 14.5 +0.1
baz=23
LPM **Los Pinos Moun** 22.38 124 *e*P P 06 01 16.3 +0.7
comp=Z,14nm,1.3s
R28A **Tribune** 22.43 109 P P 06 01 16.6 +0.6
baz=23
H33A **Prehn Over Nor** 22.44 90 P P 06 01 16.0 0.0
baz=23
O30A **MW Ranch, Wils** 22.45 103 P P 06 01 17.3 +1.2
baz=23
M31A **Lambtecht Ranc** 22.52 99 P P 06 01 17.5 +0.7
baz=23
K32A **Verdigre** 22.52 95 P P 06 01 17.5 +0.6
baz=23
B34A **Aery, Baudette** 22.53 79 P P 06 01 17.3 +0.4
baz=23
D34A **Park Rapids** 22.59 83 P P 06 01 17.3 -0.2
baz=23
Q29A **Oakley** 22.61 107 P P 06 01 18.4 +0.5
baz=23
P30A **Selden** 22.69 105 P P 06 01 18.7 +0.1
baz=23
T27A **Campo** 22.69 113 P P 06 01 19.3 +0.6
baz=23
E34A **Wadena** 22.79 84 P P 06 01 19.7 +0.1
baz=23
S28A **Manter** 22.84 111 P P 06 01 20.3 -0.1
baz=23
J33A **Davis** 22.87 93 P P 06 01 20.4 -0.1
baz=23
ECSD **EROS Data Cent** 22.92 92 P P 06 01 20.1 -0.9
baz=23
ECSD **EROS Data Cent** 22.92 92 *e*P P 06 01 19.8 -1.2
comp=Z,18nm,1.0s
ECSD LR LR
comp=Z,600nm,20.0s
O31A **Woolen Ranch,** 22.93 102 P P 06 01 22.5 +1.3
baz=23
G34A **Benson** 22.94 88 P P 06 01 22.5 +1.3
baz=23
BGNE **Belgrade** 23.02 98 P P 06 01 22.3 +0.2
baz=23
T28A **Walsh** 23.02 112 P P 06 01 22.2 0.0
baz=23
Q30A **Quinter** 23.03 106 P P 06 01 21.9 -0.3
baz=23
U27A **Thompson Grove** 23.05 114 P P 06 01 21.9 -0.7
baz=23
H34A **Spellman Lake,** 23.08 89 P P 06 01 22.7 +0.1
baz=23
121A **Cookes Peak, D** 23.15 129 P P 06 01 23.3 -0.3
baz=23
121A **Cookes Peak, D** 23.15 129 *e*P P 06 01 22.0 -1.7
comp=Z,20nm,1.1s
P31A **Stockton** 23.25 104 P P 06 01 25.0 +0.6
baz=24
N32A **Stulken Farm,** 23.26 100 P P 06 01 25.1 +0.6
baz=24
E35A **Pequot Lakes** 23.27 84 P P 06 01 23.7 -0.9
baz=24
S29A **Ulysses** 23.30 110 P P 06 01 25.8 +0.7
baz=24
D35A **Remer** 23.33 82 P P 06 01 25.6 +0.4
baz=24
F35A **Swanville** 23.41 85 P P 06 01 27.2 +1.3
baz=24
R30A **Dighton** 23.41 107 P P 06 01 26.9 +0.7
baz=24
CBKS **Cedar Bluff** 23.43 106 P P 06 01 27.0 +0.7
baz=24
U28A **Mallet** 23.44 114 P P 06 01 27.0 +0.6
baz=24
T29A **Hugoton** 23.49 111 P P 06 01 27.1 +0.2
baz=24
Q31A **Ellis** 23.54 105 P P 06 01 27.7 +0.4
baz=24
O32A **Brockman Farm,** 23.54 101 P P 06 01 27.5 +0.2
baz=24
M33A **Taylor Creek F** 23.55 97 P P 06 01 27.4 0.0
baz=24
P32A **Huiting Farm,** 23.69 103 P P 06 01 29.1 +0.3
baz=24
S30A **Montezuma** 23.70 109 P P 06 01 29.7 +0.8
baz=24
G35A **Watkins** 23.70 87 P P 06 01 29.4 +0.5
baz=24
K34A **Le Mars** 23.73 94 P P 06 01 30.0 +0.9
baz=24
N33A **J Bar K, Exete** 23.82 99 P P 06 01 30.7 +0.7
baz=24
V28A **Channing** 23.86 115 P P 06 01 31.7 +1.2
baz=24
D36A **Goodland** 23.87 81 P P 06 01 31.1 +0.6
baz=24
R31A **Burdett** 23.88 106 P P 06 01 31.3 +0.7
baz=24
L34A **Svendsen Farm,** 23.89 96 P P 06 01 31.1 +0.5
baz=24
C36A **Pine Crest Far** 23.90 80 P P 06 01 31.7 +1.0
baz=24
I35A **Creekview Farm** 23.93 90 P P 06 01 32.8 +1.7
baz=24
M34A **Aspy Farms, Fr** 23.98 97 P P 06 01 34.6 +3.1
baz=24
J35A **Milford** 24.00 92 P P 06 01 33.9 +2.2

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | baz=24 | | | | | | |
| Q32A | Meitler Ranch, | 24.07 | 104 | P | P | 06 01 33.0 | +0.6 |
| | baz=24 | | | | | | |
| F36A | Milaca | 24.09 | 85 | P | P | 06 01 33.1 | +0.6 |
| | baz=24 | | | | | | |
| G36A | St. Michael | 24.18 | 86 | P | P | 06 01 34.3 | +1.0 |
| | baz=24 | | | | | | |
| W28A | Vega | 24.21 | 116 | P | P | 06 01 34.4 | +0.6 |
| | baz=24 | | | | | | |
| K35A | Storm Lake | 24.27 | 93 | P | P | 06 01 34.2 | 0.0 |
| | baz=24 | | | | | | |
| U30A | WK&E Inc. Balk | 24.29 | 111 | P | P | 06 01 34.8 | +0.3 |
| | baz=24 | | | | | | |
| R32A | Long Quarter, | 24.31 | 105 | P | P | 06 01 34.4 | -0.3 |
| | baz=24 | | | | | | |
| S31A | Mullinville | 24.32 | 108 | P | P | 06 01 35.2 | +0.5 |
| | baz=24 | | | | | | |
| C37A | Embarrass | 24.33 | 80 | P | P | 06 01 35.4 | +0.6 |
| | baz=25 | | | | | | |
| N34A | Lincoln | 24.38 | 98 | P | P | 06 01 35.1 | 0.0 |
| | baz=25 | | | | | | |
| T31A | Randall Ranch, | 24.52 | 109 | P | P | 06 01 37.1 | +0.6 |
| | baz=25 | | | | | | |
| Q33A | Connelly Farm, | 24.53 | 103 | P | P | 06 01 37.2 | +0.6 |
| | baz=25 | | | | | | |
| O34A | Beatrice | 24.60 | 100 | P | P | 06 01 38.0 | +0.7 |
| | baz=25 | | | | | | |
| EYMN | Ely | 24.71 | 79 | P | P | 06 01 38.9 | +0.8 |
| | baz=25 | | | | | | |
| EYMN | Ely | 24.71 | 79 | eP | P | 06 01 38.5 | +0.3 |
| | comp=Z,26nm,0.8s | | | | | | |
| EYMN | | | | LR | LR | | |
| | comp=Z,1µm,18.7s | | | | | | |
| X28A | Dimmitt | 24.73 | 117 | P | P | 06 01 38.6 | 0.0 |
| | baz=25 | | | | | | |
| V30A | Spur Ranch, Mi | 24.77 | 113 | P | P | 06 01 38.4 | -0.5 |
| | baz=25 | | | | | | |
| AMTX | Amarillo | 24.78 | 115 | P | P | 06 01 38.4 | -0.6 |
| | baz=25 | | | | | | |
| AMTX | Amarillo | 24.78 | 115 | eP | P | 06 01 38.5 | -0.4 |
| | comp=Z,10nm,0.8s | | | | | | |
| AMTX | | | | LR | LR | | |
| | comp=Z,700nm,18.9s | | | | | | |
| MSTX | Muleshoe | 24.79 | 119 | P | P | 06 01 40.0 | +1.0 |
| | baz=25 | | | | | | |
| MSTX | Muleshoe | 24.79 | 119 | eP | P | 06 01 38.8 | -0.3 |
| | comp=Z,23nm,1.2s | | | | | | |
| SPMN | St. Paul | 24.80 | 86 | P | P | 06 01 39.6 | +0.6 |
| | baz=25 | | | | | | |
| SPMN | St. Paul | 24.80 | 86 | eP | P | 06 01 40.1 | +1.2 |
| | comp=Z,18nm,1.0s | | | | | | |
| R33A | Olander Ranch, | 24.84 | 105 | P | P | 06 01 40.1 | +0.7 |
| | baz=25 | | | | | | |
| P34A | Walnut Farm, R | 24.86 | 101 | P | P | 06 01 40.3 | +0.7 |
| | baz=25 | | | | | | |
| U31A | Nine Bar Ranch | 24.88 | 110 | P | P | 06 01 41.4 | +1.6 |
| | baz=25 | | | | | | |
| N35A | Tabor | 24.92 | 97 | P | P | 06 01 41.3 | +1.2 |
| | baz=25 | | | | | | |
| C38A | Sawbill Land. | 24.92 | 79 | P | P | 06 01 40.6 | +0.5 |
| | baz=25 | | | | | | |
| T32A | Huddler Ranch, | 24.94 | 108 | P | P | 06 01 41.1 | +0.8 |
| | baz=25 | | | | | | |
| NIKH | Nikolski High | 24.96 | 294 | PFAKE | | 06 01 50.0 | +10 |
| NIKH | | | | LR | LR | | |
| | comp=Z,1µm,21.4s | | | | | | |
| MNTX | Cornudas Mount | 25.06 | 126 | P | P | 06 01 40.8 | -0.6 |
| | baz=25 | | | | | | |
| MNTX | Cornudas Mount | 25.06 | 126 | PFAKE | | 06 01 50.0 | +8.6 |
| MNTX | | | | LR | LR | | |
| | comp=Z,400nm,18.8s | | | | | | |
| X29A | Tulia | 25.07 | 116 | P | P | 06 01 41.7 | +0.1 |
| | baz=25 | | | | | | |
| Y28A | McKinney Farm, | 25.14 | 118 | P | P | 06 01 42.6 | +0.4 |
| | baz=25 | | | | | | |
| Q34A | Chapman | 25.14 | 102 | P | P | 06 01 41.0 | -1.1 |
| | baz=25 | | | | | | |
| KSU1 | Kansas State U | 25.25 | 102 | eP | P | 06 01 45.4 | +2.3 |
| | comp=Z,23nm,0.8s | | | | | | |
| V31A | Spring Creek L | 25.28 | 112 | P | P | 06 01 43.8 | +0.4 |
| | baz=26 | | | | | | |
| R34A | Isabella, Hill | 25.31 | 104 | P | P | 06 01 43.4 | -0.2 |
| | baz=26 | | | | | | |
| P35A | Duane Minner, | 25.39 | 100 | P | P | 06 01 45.0 | +0.7 |
| | baz=26 | | | | | | |
| CLNB | Carlsbad | 25.43 | 123 | eP | P | 06 01 44.2 | -0.7 |
| Y29A | Porterfield Fa | 25.51 | 117 | P | P | 06 01 45.9 | +0.4 |
| | baz=26 | | | | | | |
| Z28A | Tucker Farm, M | 25.51 | 119 | P | P | 06 01 46.8 | +1.3 |
| | baz=26 | | | | | | |
| W31A | Holland Ranch, | 25.61 | 113 | P | P | 06 01 47.2 | +0.8 |
| | baz=26 | | | | | | |
| O36A | Bolckow | 25.75 | 98 | P | P | 06 01 49.2 | +1.6 |
| | baz=26 | | | | | | |
| V32A | Arapaho | 25.80 | 111 | P | P | 06 01 48.8 | +0.6 |
| | baz=26 | | | | | | |
| U33A | Lingo Farm, Me | 25.91 | 108 | P | P | 06 01 48.8 | -0.3 |
| | baz=26 | | | | | | |
| Z29A | Hungry Hill Ra | 25.92 | 118 | P | P | 06 01 48.4 | -0.9 |
| | baz=26 | | | | | | |
| 128A | Castleberry Fa | 25.94 | 120 | P | P | 06 01 49.4 | -0.1 |
| | baz=26 | | | | | | |
| X31A | McDonald Ranch | 25.97 | 114 | P | P | 06 01 49.8 | +0.2 |
| | baz=26 | | | | | | |
| SCIA | State Center | 25.98 | 93 | PFAKE | | 06 02 00.0 | +10 |
| SCIA | | | | LR | LR | | |
| | comp=Z,700nm,18.3s | | | | | | |
| Q36A | Arnold C. Orve | 26.07 | 101 | P | P | 06 01 50.4 | -0.1 |
| | baz=26 | | | | | | |
| W32A | Sentinel | 26.07 | 112 | P | P | 06 01 50.8 | +0.2 |
| | baz=26 | | | | | | |
| T34A | McClaskey Farm | 26.12 | 106 | P | P | 06 01 51.7 | +0.7 |
| | baz=26 | | | | | | |
| V33A | Lossen Ranch, | 26.20 | 110 | P | P | 06 01 52.5 | +0.7 |
| | baz=26 | | | | | | |
| Z30A | Sanderson Ranc | 26.23 | 117 | P | P | 06 01 52.0 | -0.1 |
| | baz=26 | | | | | | |
| 228A | UT Block 9, Go | 26.26 | 121 | P | P | 06 01 52.3 | 0.0 |
| | baz=26 | | | | | | |
| Y31A | Rekieta Farm, | 26.26 | 115 | P | P | 06 01 51.8 | -0.5 |
| | baz=26 | | | | | | |
| S35A | Otter Creek Ra | 26.27 | 104 | P | P | 06 01 52.4 | +0.1 |
| | baz=26 | | | | | | |
| U34A | Anderson Ranch | 26.27 | 108 | P | P | 06 01 52.1 | -0.3 |
| | baz=26 | | | | | | |
| R36A | Gordon, Harris | 26.41 | 102 | P | P | 06 01 53.0 | -0.5 |
| | baz=27 | | | | | | |
| X32A | Elmer | 26.53 | 113 | P | P | 06 01 54.4 | -0.3 |
| | baz=27 | | | | | | |
| W33A | Caddo, Fort Co | 26.53 | 111 | P | P | 06 01 54.4 | -0.3 |
| | baz=27 | | | | | | |
| T35A | Sooner Cattle | 26.61 | 106 | P | P | 06 01 55.2 | -0.2 |
| | baz=27 | | | | | | |
| WMOK | Wichita Mounta | 26.62 | 112 | eP | P | 06 01 54.5 | -1.0 |
| | comp=Z,9.9nm,1.1s | | | | | | |
| WMOK | | | | LR | LR | | |
| | comp=Z,700nm,20.0s | | | | | | |
| V34A | Guthrie | 26.67 | 109 | P | P | 06 01 55.2 | -0.8 |
| | baz=27 | | | | | | |
| S36A | Lake Cedric, C | 26.70 | 103 | P | P | 06 01 55.5 | -0.8 |
| | baz=27 | | | | | | |
| Y32A | R-V Farms, Ver | 26.72 | 114 | P | P | 06 01 55.5 | -0.9 |
| | baz=27 | | | | | | |
| Z31A | Sharp Cattle R | 26.79 | 116 | P | P | 06 01 55.9 | -1.1 |
| | baz=27 | | | | | | |
| U35A | Pawnee | 26.81 | 107 | P | P | 06 01 56.4 | -0.8 |
| | baz=27 | | | | | | |
| 130A | Snyder | 26.83 | 118 | P | P | 06 01 56.7 | -0.7 |
| | baz=27 | | | | | | |
| COWI | Conover | 26.85 | 82 | eP | P | 06 01 59.3 | +1.8 |
| | comp=Z,12nm,1.0s | | | | | | |
| COWI | | | | LR | LR | | |
| | comp=Z,1µm,18.9s | | | | | | |
| W34A | Bridge Creek, | 26.90 | 110 | P | P | 06 01 57.2 | -0.9 |
| | baz=27 | | | | | | |
| X33A | Lawton | 26.92 | 112 | P | P | 06 01 57.9 | -0.3 |
| | baz=27 | | | | | | |
| T36A | Boggs Farm, Ca | 26.92 | 105 | P | P | 06 01 57.5 | -0.7 |
| | baz=27 | | | | | | |
| 329A | Wagon Wheel Ra | 27.07 | 121 | P | P | 06 01 59.5 | -0.1 |
| | baz=27 | | | | | | |
| V35A | Meyer Ranch, C | 27.14 | 108 | P | P | 06 01 59.9 | -0.3 |
| | baz=27 | | | | | | |
| S37A | Fort Scott | 27.17 | 102 | P | P | 06 01 59.7 | -0.8 |
| | baz=27 | | | | | | |
| Z32A | Haskell | 27.19 | 115 | P | P | 06 01 59.8 | -0.9 |
| | baz=27 | | | | | | |
| Y33A | Hilltop Ranch, | 27.21 | 113 | P | P | 06 02 00.5 | -0.3 |
| | baz=27 | | | | | | |
| X34A | Smith Ranch, M | 27.29 | 111 | P | P | 06 02 01.3 | -0.2 |
| | baz=28 | | | | | | |
| JFWS | Jewell Farm | 27.44 | 89 | eP | P | 06 02 04.0 | +1.1 |
| | comp=Z,39nm,1.0s | | | | | | |
| T37A | Cheneyville 18 | 27.50 | 103 | P | P | 06 02 03.0 | -0.4 |
| | baz=28 | | | | | | |
| 330A | Mertzon | 27.59 | 120 | P | P | 06 02 03.6 | -0.7 |
| | baz=28 | | | | | | |
| Z33A | Whitaker Ranch | 27.62 | 114 | P | P | 06 02 03.4 | -1.1 |
| | baz=28 | | | | | | |
| V36A | Jenks | 27.68 | 107 | P | P | 06 02 04.2 | -0.8 |
| | baz=28 | | | | | | |
| 231A | Bronte | 27.68 | 118 | P | P | 06 02 04.6 | -0.6 |
| | baz=28 | | | | | | |
| TUL1 | Tulsa | 27.69 | 106 | P | P | 06 02 04.6 | -0.6 |
| | baz=28 | | | | | | |
| Y34A | Reagan Ranch, | 27.77 | 112 | P | P | 06 02 05.1 | -0.7 |
| | baz=28 | | | | | | |
| 429A | Davenport Ranc | 27.77 | 122 | P | P | 06 02 05.3 | -0.7 |
| | baz=28 | | | | | | |
| U37A | Salina | 27.81 | 105 | P | P | 06 02 05.3 | -0.8 |
| | baz=28 | | | | | | |
| TXAR | Lajitas Array | 27.83 | 127 | P | P | 06 02 05.5 | -1.0 |
| | comp=Z,0.8nm,0.9s,baz=343,slow=3.9,SNR=7.9 | | | | | | |
| TXAR | | | | LR | LR | 06 13 53.6 | |
| | comp=Z,193nm,19.2s,baz=0.0,slow=38 | | | | | | |
| W36A | Wetumka | 27.92 | 108 | P | P | 06 02 06.0 | -1.1 |
| | baz=28 | | | | | | |
| X35A | Drake | 27.95 | 110 | P | P | 06 02 06.3 | -1.1 |
| | baz=28 | | | | | | |
| 529A | Stev Forest Ra | 27.98 | 123 | P | P | 06 02 07.1 | -0.7 |
| | baz=28 | | | | | | |
| 133A | Hamilton Ranch | 28.01 | 115 | P | P | 06 02 07.2 | -0.9 |
| | baz=28 | | | | | | |
| 430A | Baggett Ranch, | 28.02 | 121 | P | P | 06 02 07.3 | -0.9 |
| | baz=28 | | | | | | |
| 331A | San Angelo | 28.08 | 119 | P | P | 06 02 08.2 | -0.5 |
| | baz=28 | | | | | | |
| V37A | Hulbert | 28.12 | 106 | P | P | 06 02 07.9 | -1.1 |
| | baz=28 | | | | | | |
| U38A | Gravette | 28.25 | 104 | P | P | 06 02 09.9 | -0.3 |
| | baz=28 | | | | | | |
| 233A | Rising Star | 28.45 | 116 | P | P | 06 02 12.0 | 0.0 |
| | baz=29 | | | | | | |
| 530A | J-C Ranch, Com | 28.45 | 122 | P | P | 06 02 11.4 | -0.6 |
| | baz=29 | | | | | | |
| 431A | Sonora | 28.45 | 120 | P | P | 06 02 11.2 | -0.8 |
| | baz=29 | | | | | | |
| Z35A | Perchaven, San | 28.50 | 112 | P | P | 06 02 11.8 | -0.5 |
| | baz=29 | | | | | | |
| V38A | Canehill | 28.59 | 105 | P | P | 06 02 12.6 | -0.6 |
| | baz=29 | | | | | | |
| Y36A | Durant | 28.70 | 110 | P | P | 06 02 13.8 | -0.3 |
| | baz=29 | | | | | | |
| X37A | Clayton | 28.81 | 108 | P | P | 06 02 15.3 | +0.2 |
| | baz=29 | | | | | | |
| 531A | Rocksprings | 28.88 | 121 | P | P | 06 02 15.2 | -0.6 |
| | baz=29 | | | | | | |
| W38A | Poteau | 29.03 | 106 | P | P | 06 02 16.7 | -0.3 |
| | baz=29 | | | | | | |
| Z36A | Blue Ridge | 29.04 | 111 | P | P | 06 02 16.6 | -0.5 |
| | baz=29 | | | | | | |
| JCT | Junction City | 29.06 | 120 | P | P | 06 02 16.4 | -1.0 |
| | baz=29 | | | | | | |
| Y37A | Hugo | 29.06 | 109 | P | P | 06 02 17.3 | 0.0 |
| | baz=29 | | | | | | |
| X38A | Whitesboro | 29.09 | 107 | P | P | 06 02 16.2 | -1.4 |
| | baz=29 | | | | | | |
| LPIG | La Paz | 29.21 | 143 | LR | LR | 06 12 16.3 | |
| | comp=Z,126nm,19.1s,baz=29,slow=33 | | | | | | |
| HDIL | Hopedale | 29.21 | 92 | P | P | 06 02 17.9 | -0.8 |
| | baz=30 | | | | | | |
| HDIL | Hopedale | 29.21 | 92 | eP | P | 06 02 17.0 | -1.6 |
| | comp=Z,24nm,0.9s | | | | | | |
| 532A | Rocksprings | 29.27 | 120 | P | P | 06 02 18.1 | -1.1 |
| | baz=29 | | | | | | |
| 631A | Perdido Creek | 29.43 | 122 | P | P | 06 02 18.8 | -1.9 |
| | baz=30 | | | | | | |
| 632A | Uvalde | 29.80 | 121 | P | P | 06 02 23.9 | -0.1 |
| | baz=30 | | | | | | |
| MIAR | Mount Ida | 29.96 | 106 | P | P | 06 02 26.0 | +0.7 |
| | baz=30 | | | | | | |
| MIAR | Mount Ida | 29.96 | 106 | eP | P | 06 02 25.5 | +0.2 |
| | comp=Z,42nm,1.9s | | | | | | |
| 832A | Faith Ranch, C | 30.64 | 123 | P | P | 06 02 32.0 | +0.6 |
| | baz=31 | | | | | | |
| 833A | Chaparral WMA, | 30.93 | 122 | P | P | 06 02 34.1 | +0.2 |
| | baz=31 | | | | | | |
| OXF | Oxford | 32.62 | 102 | eP | P | 06 02 47.9 | -0.8 |
| | comp=Z,48nm,1.0s | | | | | | |
| GOGA | Godfrey | 37.14 | 98 | eP | P | 06 03 29.2 | +1.5 |
| | comp=Z,32nm,1.4s | | | | | | |
| KMSC | Kings Mountain | 37.46 | 94 | P | P | 06 03 32.2 | +1.8 |
| | baz=38 | | | | | | |
| SCHQ | Schefferville | 37.50 | 57 | LR | LR | 06 17 31.7 | |
| | comp=Z,202nm,19.3s,baz=114,slow=34 | | | | | | |
| SUMG | Summit | 43.99 | 26 | i P | P | 06 04 25.6 | +1.3 |
| | comp=Z,16nm,1.0s | | | | | | |
| SUMG | Summit | 43.99 | 26 | eP | P | 06 04 24.5 | +0.1 |
| | comp=Z,18nm,1.1s | | | | | | |
| PETK | Petropavlovsk- | 44.14 | 304 | P | P | 06 04 23.6 | -1.8 |
| | comp=Z,3.8nm,0.8s,baz=98,slow=11,SNR=4.0 | | | | | | |
| PETK | | | | LR | LR | 06 20 02.8 | |
| | comp=Z,85nm,21.5s,baz=57,slow=32 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 58.41 | 264 | T | T | 07 09 14.3 | |
| | baz=43,slow=75,SNR=86 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 58.41 | 264 | T | T | 07 09 07.7 | |
| | baz=43,slow=75,SNR=120 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 58.43 | 264 | T | T | 07 09 12.3 | |
| | baz=43,slow=75,SNR=60 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 59.43 | 263 | T | T | 07 10 26.2 | |
| | baz=62,slow=78,SNR=8.6 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 59.44 | 263 | T | T | 07 10 26.9 | |
| | baz=62,slow=78,SNR=11 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 59.44 | 263 | T | T | 07 10 29.3 | |
| | baz=62,slow=78,SNR=5.0 | | | | | | |
| ARCES | ARCESS Array B | 59.95 | 10 | LR | LR | 06 34 04.4 | |
| | comp=Z,56nm,18.8s,baz=290,slow=38 | | | | | | |
| ROSC | El Rosal | 63.93 | 115 | LR | LR | 06 40 02.7 | |
| | comp=Z,28nm,18.2s,baz=1.5,slow=41 | | | | | | |
| NOA | NORSAR Array B | 65.40 | 20 | LR | LR | 06 34 40.6 | |
| | comp=Z,43nm,18.5s,baz=340,slow=35 | | | | | | |
| PMOR | Pomariorio Ree | 66.22 | 200 | eT | T | 07 18 27.4 | |
| | comp=Z,7.0nm,0.2s | | | | | | |
| CN2 | Changchun | 66.69 | 311 | eP | P | 06 07 08.6 | +1.0 |
| FINES | FINESS Array B | 67.75 | 13 | LR | LR | 06 37 35.7 | |
| | comp=Z,140nm,18.5s,baz=342,slow=37 | | | | | | |
| PPT | Papeete | 69.08 | 201 | LR | LR | 06 31 58.1 | |
| | comp=Z,60nm,18.9s,baz=40,slow=31 | | | | | | |
| PPT2 | Papeete2 | 69.10 | 201 | eLR | LR | 06 27 57.8 | |
| | comp=Z,182nm,27.5s | | | | | | |
| PPT2 | Papeete2 | 69.10 | 201 | eT | T | 07 22 03.0 | |
| | comp=Z,1.9nm,0.3s | | | | | | |
| SONM | Songino Array | 71.96 | 324 | LR | LR | 06 40 26.0 | |
| | comp=Z,109nm,18.6s,baz=358,slow=37 | | | | | | |
| RKT | Rikitea | 72.35 | 186 | eLR | LR | 06 29 41.0 | |
| | comp=Z,222nm,23.5s | | | | | | |
| RKT | Rikitea | 72.35 | 186 | eT | T | 07 26 12.3 | |
| | comp=Z,2.6nm,0.3s | | | | | | |
| BJI | Beijing | 74.04 | 314 | P | P | 06 07 52.1 | -0.5 |
| BJI | | | | S | S | 06 17 23.0 | -1.1 |
| BJI | | | | LN | | | |
| | comp=Z,120nm,28.4s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,100nm,23.2s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,160nm,24.1s | | | | | | |
| TBI | Tubuai | 74.64 | 199 | eT | T | 07 28 58.3 | |
| | comp=Z,6.7nm,0.3s | | | | | | |
| HHC | Hu-ho-hao-te | 75.52 | 317 | eP | P | 06 08 01.0 | -0.4 |
| HHC | | | | PP | PP | 06 10 52.1 | +2.1 |
| HHC | | | | S | S | 06 17 40.0 | -0.8 |
| HHC | | | | PMZ | | | |
| | comp=Z,16nm,1.0s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,190nm,13.7s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,200nm,18.7s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,190nm,16.2s | | | | | | |
| GERES | GERESS Array B | 77.04 | 24 | LR | LR | 06 43 50.0 | |
| | comp=Z,96nm,18.2s,baz=338,slow=37 | | | | | | |
| NJ2 | Nanjing | 78.97 | 307 | eP | P | 06 08 21.7 | +1.0 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| ESDC | Sonseca Array | 78.99 | 40 | P | P | 06 08 21.5 | +0.7 |
| | comp=Z,0.5nm,0.3s,baz=317,slow=4.4,SNR=4.4 | | | | | | |
| MKAR | Makanchi Array | 80.42 | 339 | P | P | 06 08 26.7 | -1.7 |
| | comp=Z,1.0nm,0.9s,baz=38,slow=6.1,SNR=3.8 | | | | | | |
| ABKAR | Akbulak array | 81.45 | 354 | eP | P | 06 08 31.8 | -2.0 |
| | comp=Z,1.1nm,0.6s | | | | | | |
| WMQ | Urumqi | 81.77 | 334 | eP | P | 06 08 38.0 | +2.3 |
| XAN | Xi'an | 82.29 | 315 | P | P | 06 08 42.2 | +3.6 |
| XAN | | | | PMZ | | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| LZH | Lanzhou | 82.84 | 319 | eP | P | 06 08 42.6 | +1.1 |
| LZH | | | | pP | PcP | 06 08 47.5 | +1.1 |
| LZH | | | | sP | sP | 06 08 50.4 | +0.1 |
| LZH | | | | PMZ | | | |
| | comp=Z,18nm,1.1s | | | | | | |
| LPAZ | La Paz | 84.62 | 123 | LR | LR | 06 49 30.8 | |
| | comp=Z,29nm,21.7s,baz=337,slow=38 | | | | | | |
| KBZ | Khabaz | 87.02 | 6 | LR | LR | 06 51 21.1 | |
| | comp=Z,78nm,19.4s,baz=346,slow=38 | | | | | | |
| CD2 | Chengdu | 87.28 | 317 | eP | P | 06 09 03.5 | -0.2 |
| KSH | Kashi | 88.76 | 341 | eP | P | 06 09 14.7 | +3.9 |
| KSH | | | | epP | pP | 06 09 20.2 | +2.9 |
| KSH | | | | ePP | PP | 06 12 47.8 | +9.1 |
| KSH | | | | S | S | 06 20 01.0 | +4.1 |
| KSH | | | | LN | | | |
| | comp=Z,110nm,6.2s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,120nm,5.9s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,180nm,7.2s | | | | | | |
| QIZ | Qiongzhong | 94.23 | 306 | P | P | 06 09 39.2 | +2.9 |
| QIZ | | | | S | S | 06 20 34.0 | -13 |
| BDFB | Brasilia | 96.03 | 107 | LR | LR | 06 57 07.9 | |
| | comp=Z,27nm,18.7s,baz=286,slow=38 | | | | | | |
| CPUP | Villa Florida | 98.64 | 120 | LR | LR | 07 03 02.0 | |
| | comp=Z,22nm,18.6s,baz=356,slow=41 | | | | | | |
| VNA3 | Neumayer Olymp | 145.08 | 151 | P | PKPbc | 06 15 49.3 | -3.1 |
| VNA1 | Neumayer--Stat | 145.60 | 150 | P | PKPdf | 06 15 51.1 | -2.6 |
| VNA2 | Neumayer--Watz | 145.86 | 150 | P | PKPdf | 06 15 52.5 | -1.7 |
| | baz=310,slow=5.8 | | | | | | |
| SNAA | Sanae | 147.16 | 152 | P | PKPab | 06 16 00.2 | -0.3 |
| SNAA | Sanae | 147.16 | 152 | ePKPbc | PKPab | 06 15 59.8 | -0.7 |
| BOSA | Boshof | 151.48 | 53 | PKPbc | PKPbc | 06 16 10.7 | -0.2 |
| | comp=Z,6.1nm,1.1s,baz=337,slow=2.4,SNR=3.5 | | | | | | |

**DJA 04 06:01:30.5±0.3, 3°N±3°×9°8E±°, h10km, M3.6/9, MLv3.6/9, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time (h m s) | Res ISC |
|---|---|---|---|---|---|---|---|
| KCSI | Kotacane, Aceh | 0.40 | 317 | P | Pg | 06 01 37.8 | -0.5 |
| TSI | Tuntungan | 0.59 | 63 | P | Pg | 06 01 42.4 | +0.5 |
| SNSI | Sinabang, Aceh | 1.90 | 245 | P | Pn | 06 02 02.6 | -0.3 |
| GSI | Gunungsitoli | 1.97 | 194 | P | Pn | 06 02 03.9 | -0.1 |
| GSI | | | | S | Sn | 06 02 29.4 | +0.7 |
| LHMI | Lhok Sumawe | 2.27 | 331 | P | Pn | 06 02 08.5 | +0.5 |
| MNSI | Mandailing Nat | 2.87 | 148 | P | Pb | 06 02 22.4 | +0.6 |
| TPRI | Tanjung Pinang | 6.88 | 109 | P | Pn | 06 03 11.1 | -0.4 |

*CSEM 04 06:07:11.6±0.6, 44°.62N×14°.73E, h2km, ML3.5/10, Error ellipse: s-maj=11.2km s-min=6.2km az=27.0*
*ROM 04 06:07:16.2±0.4, 44°.80N×14°.87E, h6km, Md2.9/5, Ml2.7/7, Error ellipse: s-maj=9.8km s-min=1.7km az=30.0*
*VIE 04 06:07:16.3±0.8, 44°.89N×14°.88E, h10km, mb2.0/3, ml2.8/3, Error ellipse: s-maj=4.9km s-min=3.2km az=161.0*
**ISC 04 06:07:12.7±1.5, 44°.67N±0°.05×14°.79E±0°.03, h1km±10km, n46, σ1s.08/77, 16C-5D, Adriatic Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time (h m s) | Res ISC |
|---|---|---|---|---|---|---|---|
| GBRS | Gornja Briga | 0.86 | 1 | i Sg | Sg | 06 07 40.5 | +0.1 |
| BOJS | Bojanci | 0.90 | 21 | ⇓iPg | Pg | 06 07 28.9 | -0.9 |
| BOJS | | | | i Sg | Sg | 06 07 39.6 | -2.0 |
| | comp=Z,72nm,0.3s | | | | | | |
| BOJS | Bojanci | 0.90 | 21 | ⇓iPg | Pg | 06 07 29.0 | -0.9 |
| KNDS | Knezji Dol | 0.91 | 342 | i Pg | Pb | 06 07 30.2 | -1.1 |
| KNDS | | | | i Sg | Sb | 06 07 43.6 | -0.3 |
| | comp=Z,20nm,0.1s | | | | | | |
| KNDS | Knezji Dol | 0.91 | 342 | i Pg | Pb | 06 07 30.2 | -1.1 |
| KNDS | | | | i Sg | Sb | 06 07 43.6 | -0.3 |
| | comp=Z,20nm,0.1s | | | | | | |
| TRI | Trieste | 1.27 | 326 | Pg | Pg | 06 07 39.1 | +2.1 |
| TRI | | | | Sg | Sg | 06 07 55.4 | +2.0 |
| TRI | Trieste | 1.27 | 326 | Pg | Pg | 06 07 38.9 | +2.0 |
| TRI | | | | Sg | Sg | 06 07 54.8 | +1.5 |
| | comp=Z,53nm,0.4s | | | | | | |
| TRI | Trieste | 1.27 | 326 | Pg | Pg | 06 07 38.9 | +2.0 |
| TRI | | | | Sg | Sg | 06 07 55.3 | +2.0 |
| JAVS | Javornik | 1.33 | 338 | i Pg | Pb | 06 07 37.4 | -1.0 |
| JAVS | | | | i Sg | Sg | 06 07 57.4 | +2.1 |
| | comp=Z,50nm,0.3s | | | | | | |
| JAVS | Javornik | 1.33 | 338 | i Pg | Pb | 06 07 37.4 | -1.0 |
| JAVS | | | | i Sg | Sg | 06 07 57.4 | +2.1 |
| | comp=Z,50nm,0.3s | | | | | | |
| LJU | Ljubljana | 1.39 | 353 | i Pg | Pg | 06 07 39.3 | +0.1 |
| LJU | | | | i Sg | Sg | 06 07 57.8 | +0.5 |
| LJU | Ljubljana | 1.39 | 353 | i Pg | Pg | 06 07 39.3 | +0.1 |
| LJU | | | | i Sg | Sg | 06 07 57.8 | +0.5 |
| SABO | M.te Sabotino | 1.56 | 328 | ⇑ePg | Pg | 06 07 43.1 | +0.6 |
| SABO | | | | eSg | Sg | 06 08 03.9 | +1.2 |
| SABO | M.te Sabotino | 1.56 | 328 | Pg | Pg | 06 07 43.0 | +0.5 |
| SABO | | | | Sg | Sg | 06 08 03.6 | +1.0 |
| | comp=Z,209nm,0.6s | | | | | | |
| SABO | M.te Sabotino | 1.56 | 328 | ⇑ePg | Pg | 06 07 43.1 | +0.6 |
| SABO | | | | Sg | Sg | 06 08 03.6 | +1.0 |
| | comp=Z,209nm,0.6s | | | | | | |
| MOZS | Mozjanca | 1.64 | 352 | eSg | Sb | 06 08 04.9 | -0.1 |
| | comp=Z,23nm,0.3s | | | | | | |
| MOZS | Mozjanca | 1.64 | 352 | eSg | Sb | 06 08 04.9 | -0.1 |
| | comp=Z,23nm,0.3s | | | | | | |
| DRE | Drenchia | 1.71 | 332 | ⇑ePg | Pg | 06 07 45.2 | -0.2 |
| DRE | | | | eSg | Sg | 06 08 08.1 | +0.6 |
| DRE | Drenchia | 1.71 | 332 | ⇑ePg | Pg | 06 07 45.2 | -0.2 |
| DRE | | | | eSg | Sg | 06 08 08.1 | +0.6 |
| BLY | Banja Luka | 1.71 | 86 | Pg | Pg | 06 07 46.2 | +0.7 |
| BLY | | | | Sg | Sg | 06 08 08.3 | +0.6 |
| | comp=Z,46nm,0.5s | | | | | | |
| BLY | Banja Luka | 1.71 | 86 | Pg | Pg | 06 07 46.2 | +0.7 |
| BLY | | | | Sg | Sg | 06 08 08.3 | +0.6 |
| | comp=Z,46nm,0.5s | | | | | | |
| COLI | Coloredo | 1.77 | 326 | ⇑ePg | Pg | 06 07 46.3 | -0.3 |
| COLI | | | | eSg | Sg | 06 08 10.5 | +1.0 |
| COLI | Coloredo | 1.77 | 326 | ⇑ePg | Pg | 06 07 46.3 | -0.3 |
| COLI | | | | eSg | Sg | 06 08 10.5 | +1.0 |
| OBKA | Obir | 1.85 | 355 | ⇑ePg | Pg | 06 07 47.5 | -0.6 |
| | comp=Z,8.6nm,0.2s | | | | | | |
| OBKA | | | | ⇑Sg | Sb | 06 08 10.9 | -0.1 |
| | comp=Z,66nm,0.5s | | | | | | |
| OBKA | Obir | 1.85 | 355 | Pg | Pg | 06 07 47.5 | -0.6 |
| | comp=Z,8.6nm,0.2s | | | | | | |
| OBKA | | | | Sg | Sb | 06 08 10.9 | -0.1 |
| | comp=Z,66nm,0.5s | | | | | | |
| BAD | Bernadia | 1.91 | 326 | ⇓ePg | Pg | 06 07 48.0 | -1.2 |
| BAD | | | | eSg | Sb | 06 08 11.9 | -0.7 |
| BAD | Bernadia | 1.91 | 326 | ⇓ePg | Pg | 06 07 48.0 | -1.2 |
| BAD | | | | eSg | Sb | 06 08 11.9 | -0.7 |
| VINO | Villanova | 1.91 | 327 | ePg | Pg | 06 07 48.0 | -1.2 |
| VINO | Villanova | 1.91 | 327 | Pg | Pg | 06 07 49.0 | -0.2 |
| VINO | | | | Sg | Sb | 06 08 12.2 | -0.4 |
| | comp=Z,71nm,0.9s | | | | | | |
| VINO | Villanova | 1.91 | 327 | Pg | Pg | 06 07 49.0 | -0.2 |
| VINO | | | | Sg | Sb | 06 08 12.2 | -0.4 |
| | comp=Z,71nm,0.9s | | | | | | |
| PTCC | Patocco-Chiusa | 2.01 | 330 | Pg | Pg | 06 07 50.3 | -0.8 |
| | comp=Z,31nm,0.7s | | | | | | |
| PTCC | Patocco-Chiusa | 2.01 | 330 | Pg | Pg | 06 07 50.3 | -0.8 |
| | comp=Z,31nm,0.7s | | | | | | |
| SOKA | Soboth | 2.02 | 5 | ⇑ePg | Pb | 06 07 50.1 | -0.1 |
| | comp=Z,0.2nm,0.1s | | | | | | |
| SOKA | | | | ⇑Sg | Sb | 06 08 14.6 | -1.2 |
| SOKA | Soboth | 2.02 | 5 | Pg | Pb | 06 07 50.1 | -0.1 |
| | comp=Z,0.2nm,0.1s | | | | | | |
| SOKA | | | | Sg | Sb | 06 08 14.6 | -1.2 |
| ACOM | Acomizza, Ital | 2.08 | 335 | ePg | Pg | 06 07 52.1 | -0.4 |
| ACOM | Acomizza, Ital | 2.08 | 335 | Pg | Pg | 06 07 51.8 | -0.8 |
| ACOM | | | | Sg | Sb | 06 08 17.3 | -0.4 |
| | comp=Z,92nm,0.5s | | | | | | |
| ACOM | Acomizza, Ital | 2.08 | 335 | Pg | Pg | 06 07 51.8 | -0.8 |
| ACOM | | | | Sg | Sb | 06 08 17.3 | -0.4 |
| | comp=Z,92nm,0.5s | | | | | | |
| MYKA | Terra Mystica | 2.12 | 338 | ⇓iPg | Pg | 06 07 53.0 | -0.3 |
| | comp=Z,4.4nm,0.3s | | | | | | |
| MYKA | | | | ⇑eSg | Sg | 06 08 20.5 | -0.2 |
| | comp=Z,26nm,0.4s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| MYKA | Terra Mystica | 2.12 | 338 | Pg | Pg | 06 07 53.0 | -0.3 |
| | comp=Z,4.4nm,0.3s | | | | | | |
| MYKA | | | | Sg | Sg | 06 08 20.5 | -0.2 |
| | comp=Z,26nm,0.4s | | | | | | |
| ZOU | Zoufplan | 2.28 | 327 | ⇑ePg | Pb | 06 07 53.2 | -1.4 |
| CGRP | Cima Grappa | 2.43 | 301 | ⇑ePg | Pb | 06 07 55.8 | -1.5 |
| CGRP | Cima Grappa | 2.43 | 301 | ⇑ePg | Pb | 06 07 55.8 | -1.5 |
| RISI | Rein | 2.96 | 321 | Pg | Pb | 06 08 03.7 | -2.7 |
| RISI | Rein | 2.96 | 321 | Pg | Pb | 06 08 03.7 | -2.7 |
| MOA | Molln | 3.20 | 354 | ⇑Pn | Pb | 06 08 06.5 | -3.8 |
| | comp=Z,1.6nm,0.2s | | | | | | |
| MOA | | | | ⇑eSn | Sn | 06 08 43.0 | +0.1 |
| | comp=Z,9.5nm,0.4s | | | | | | |
| MOA | Molln | 3.20 | 354 | Pn | Pb | 06 08 06.5 | -3.8 |
| | comp=Z,1.6nm,0.2s | | | | | | |
| MOA | | | | Sn | Sn | 06 08 43.0 | +0.1 |
| | comp=Z,9.5nm,0.4s | | | | | | |

*ISCJB **04** 06:18:12.1±0.4, 30°07N±0°04×138°46E±0°08, h443km, mb3.6/18, Error ellipse: s-maj=9.1km s-min=5.7km az=0.9*
*JMA **04** 06:18:12.0±0.2, 30°14N×138°89E, h487km, M4.2*
*IDC **04** 06:18:14.7±1.1, 30°16N×138°49E, h464km±12km, mb3.4/18, mb1 3.6/24, mb1mx3.6/31, mbtmp4.3/24, Error ellipse: s-maj=13.7km s-min=10.6km az=94.0*
**ISC 04 06:18:12.8**±0.5**, 30°12N**±0°07×**138°54E**±0°09**, h443**km**, n43, σ1°47**/53**, mb3.7**/18**, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHJ | Hachijo jima 2 | 3.18 | 19 | P | P | 06 19 23.2 | +2.8 |
| | 39nm,0.3s,baz=223,slow=19,SNR=11 | | | | | | |
| JHJ | | | | S | S | 06 20 16.0 | +0.3 |
| | 77nm,0.3s,baz=234,slow=23,SNR=8.4 | | | | | | |
| JHJ2 | Mitsune | 3.18 | 20 | P | P | 06 19 23.2 | +2.7 |
| JHJ2 | | | | S | S | 06 20 17.2 | +1.5 |
| TK01 | Tokai 1 | 3.73 | 348 | P | P | 06 19 28.8 | +4.2 |
| TTO1 | TONANKAI O.B.S | 3.80 | 337 | P | P | 06 19 29.9 | +4.6 |
| JWZ | Kozaga | 4.17 | 326 | P | P | 06 19 32.7 | +3.9 |
| CBIJ | Chichi jima | 4.40 | 132 | P | P | 06 19 31.5 | +0.4 |
| CBIJ | | | | S | S | 06 20 33.9 | -0.9 |
| JIE | Ise | 4.54 | 340 | P | P | 06 19 36.0 | +3.8 |
| BSO1 | Boso 1 | 4.97 | 24 | P | P | 06 19 37.8 | +2.0 |
| BSO1 | | | | S | S | 06 20 43.8 | +0.1 |
| JOD2 | Odawara 2 | 5.15 | 5 | P | P | 06 19 39.3 | +1.1 |
| JOD2 | | | | S | S | 06 20 48.4 | +0.5 |
| JRY | Ryogami san | 5.89 | 3 | P | P | 06 19 46.9 | +1.3 |
| JRY | | | | S | S | 06 20 59.8 | -1.7 |
| MJAR | Matsushiro Arr | 6.42 | 358 | P | P | 06 19 51.7 | +0.7 |
| | 11nm,0.3s,baz=173,slow=11,SNR=59 | | | | | | |
| MJAR | | | | S | S | 06 21 10.7 | -0.7 |
| | baz=171,slow=16,SNR=3.3 | | | | | | |
| MAT | Matsushiro | 6.42 | 358 | P | P | 06 19 51.9 | +0.9 |
| MAT | | | | S | S | 06 21 10.7 | -0.8 |
| JHS | Saijyo | 6.68 | 318 | P | P | 06 19 57.0 | +3.1 |
| JNU | Nakatsue | 7.19 | 297 | P | P | 06 20 03.1 | +3.8 |
| | 1.2nm,0.3s,baz=122,slow=4.1,SNR=7.6 | | | | | | |
| JMK | Ichinoseki | 9.09 | 13 | P | P | 06 20 21.3 | +1.6 |
| JMK | | | | S | S | 06 22 01.1 | -3.2 |
| KSRS | Korea Array | 11.46 | 312 | P | P | 06 20 47.4 | +1.7 |
| | 1.6nm,0.3s,baz=127,slow=10,SNR=20 | | | | | | |
| JKB | Kayabe | 11.92 | 9 | P | P | 06 20 52.1 | +1.5 |
| JOSM | Okushiri--Mats | 11.97 | 3 | P | P | 06 20 52.8 | +1.7 |
| JOSM | | | | S | S | 06 22 56.9 | -4.9 |
| JCH | Churui | 13.06 | 16 | P | P | 06 21 05.1 | +2.1 |
| ASAJ | Asahikawa | 14.34 | 12 | P | P | 06 21 18.9 | +2.1 |
| | baz=237,slow=8.3 | | | | | | |
| JTKR | Abashiri--Toko | 14.47 | 16 | P | P | 06 21 18.8 | +0.6 |
| USRK | Ussuriysk Ar. | 14.99 | 342 | P | P | 06 21 25.0 | +1.3 |
| | 5.8nm,0.3s,baz=144,slow=10,SNR=80 | | | | | | |
| SONM | Songino Array | 30.32 | 315 | P | P | 06 23 46.6 | +0.2 |
| | 0.4nm,0.5s,baz=111,slow=7.9,SNR=3.0 | | | | | | |
| SONM | | | | PcP | PcP | 06 26 33.2 | -0.2 |
| | 0.3nm,0.3s,baz=116,slow=3.4,SNR=2.7 | | | | | | |
| CMAR | Chiang Mai Arr | 37.73 | 261 | P | P | 06 24 49.2 | -0.1 |
| | 1.2nm,0.4s,baz=56,slow=7.3,SNR=4.0 | | | | | | |
| ZALV | Zalesovo Beam | 45.11 | 318 | P | P | 06 25 47.9 | +0.2 |
| | 0.8nm,0.4s,baz=97,slow=7.4,SNR=3.1 | | | | | | |
| ZALV | | | | PcP | PcP | 06 27 17.9 | -1.3 |
| | 1.9nm,0.5s,baz=135,slow=3.0,SNR=5.2 | | | | | | |
| MKAR | Makanchi Array | 46.09 | 308 | P | P | 06 25 55.5 | +0.1 |
| | 0.5nm,0.4s,baz=96,slow=8.9,SNR=5.4 | | | | | | |
| MKAR | | | | PcP | PcP | 06 27 22.5 | -0.4 |
| | 1.0nm,0.5s,baz=97,slow=6.0,SNR=7.3 | | | | | | |
| WRA | Warramunga Arr | 49.93 | 185 | P | P | 06 26 24.6 | +0.1 |
| | 3.7nm,0.5s,baz=0.7,slow=7.8,SNR=66 | | | | | | |
| WRA | | | | PcP | PcP | 06 27 37.0 | -0.1 |
| | 0.6nm,0.4s,baz=358,slow=4.0,SNR=5.6 | | | | | | |
| ASAR | Alice Springs | 53.66 | 185 | P | P | 06 26 52.5 | +0.9 |
| | 0.3nm,0.4s,baz=20,slow=11,SNR=12 | | | | | | |
| ILAR | Eielson Array | 56.65 | 30 | P | P | 06 27 11.7 | -0.3 |
| | 0.7nm,0.5s,baz=260,slow=5.0,SNR=19 | | | | | | |
| ILAR | | | | PcP | PcP | 06 28 01.4 | -0.8 |
| | 0.6nm,0.6s,baz=261,slow=3.9,SNR=7.0 | | | | | | |
| INK | Inuvik | 61.64 | 25 | P | P | 06 27 45.8 | +0.2 |
| | 1.9nm,0.7s,baz=243,slow=2.3,SNR=6.9 | | | | | | |
| ARCES | ARCESS Array B | 69.63 | 340 | P | P | 06 28 36.1 | +0.2 |
| | 2.6nm,0.4s,baz=67,slow=8.6,SNR=30 | | | | | | |
| YKA | Yellowknife Ar | 71.00 | 28 | P | P | 06 28 44.1 | 0.0 |
| | 0.8nm,0.6s,baz=61,slow=7.2,SNR=9.1 | | | | | | |
| KBZ | Khabaz | 73.61 | 311 | P | P | 06 29 00.0 | +0.3 |
| | 0.8nm,0.5s,baz=107,slow=5.2,SNR=4.7 | | | | | | |
| FINES | FINESS Array B | 73.81 | 332 | P | P | 06 29 00.1 | -0.4 |
| | 3.4nm,0.4s,baz=76,slow=4.8,SNR=34 | | | | | | |
| AKASG | Malin Array Be | 78.28 | 322 | P | P | 06 29 24.7 | -0.8 |
| | 0.9nm,0.4s,baz=50,slow=5.9,SNR=8.4 | | | | | | |
| NB2 | NORSAR Subarra | 79.61 | 337 | P | P | 06 29 31.6 | -0.9 |
| | comp=Z,2.1nm,0.5s,baz=45,slow=5.3 | | | | | | |
| NOA | NORSAR Array B | 79.61 | 337 | P | P | 06 29 31.9 | -0.6 |
| | comp=Z,2.5nm,0.5s,baz=46,slow=5.2,SNR=7.6 | | | | | | |
| NVAR | Mina Array Bea | 81.14 | 51 | P | P | 06 29 42.8 | +1.6 |
| | comp=Z,0.4nm,0.5s,baz=304,slow=6.4,SNR=4.5 | | | | | | |
| BRTR | Keskin Array B | 81.61 | 311 | P | P | 06 29 43.2 | -0.3 |
| | comp=Z,2.1nm,0.6s,baz=104,slow=4.1,SNR=10 | | | | | | |
| GERES | GERESS Array B | 87.26 | 327 | P | P | 06 30 09.9 | -1.2 |
| | comp=Z,0.5nm,0.2s,baz=46,slow=3.9,SNR=5.1 | | | | | | |
| TXAR | Lajitas Array | 96.29 | 51 | P | P | 06 30 53.9 | +0.8 |
| | comp=Z,0.4nm,0.6s,baz=303,slow=3.5,SNR=7.0 | | | | | | |
| TORD | Torodi Ar. Bea | 120.19 | 310 | PKP | PKPdf | 06 36 12.1 | -1.0 |
| | comp=Z,0.5nm,0.4s,baz=58,slow=1.2,SNR=11 | | | | | | |
| LPAZ | La Paz | 151.98 | 67 | PKPbc | PKPbc | 06 37 18.1 | 0.0 |
| | comp=Z,1.1nm,0.7s,baz=296,slow=7.1,SNR=8.3 | | | | | | |

**IDC 04 06:40:32.5**±5.1**, 20°82N**×**122°47E, h0**km**, mb3.4**/3**, mb1 3.6**/3**, mb1mx3.4**/25**, mbtmp3.4**/3**, Error ellipse: s-maj=387.6km s-min=26.5km az=61.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H11N1 | WAKE ISLAND Hy | 41.58 | 83 | T | T | 07 33 25.0 | |
| | baz=279,slow=74,SNR=23 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.59 | 83 | T | T | 07 33 27.5 | |
| | baz=279,slow=74,SNR=25 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 41.60 | 83 | T | T | 07 33 33.3 | |
| | baz=279,slow=74,SNR=22 | | | | | | |
| MKAR | Makanchi Array | 41.60 | 318 | P | P | 06 48 22.1 | -0.2 |
| | 0.2nm,0.3s,baz=101,slow=7.8,SNR=2.8 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 41.61 | 85 | T | T | 07 33 24.0 | |
| | baz=281,slow=75,SNR=185 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 41.62 | 85 | T | T | 07 33 27.8 | |
| | baz=281,slow=75,SNR=193 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 41.62 | 85 | T | T | 07 33 25.4 | |
| | baz=281,slow=75,SNR=200 | | | | | | |
| WRA | Warramunga Arr | 42.14 | 163 | P | P | 06 48 26.0 | -0.8 |
| | 0.4nm,0.7s,baz=343,slow=8.9,SNR=2.7 | | | | | | |
| ASAR | Alice Springs | 45.59 | 165 | P | P | 06 48 55.2 | +0.7 |
| | 0.2nm,0.4s,baz=348,slow=7.5,SNR=4.2 | | | | | | |

*ISK **04** 06:45:06.8, 37°24N×28°18E, h5km, MD2.5*
*DDA **04** 06:45:07.8, 37°24N×28°26E, h7km, Md2.5*
*CSEM **04** 06:45:08.2±0.2, 37°23N×28°20E, h2km, MD2.5, Error ellipse: s-maj=7.6km s-min=4.0km az=54.0*
**ISC 04 06:45:07.9**±1.1**, 37°24N**±0°03×**28°19E**±0°03**, h7**km±13km**, n18, σ1°04**/30**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.13 | 143 | ePG | Pg | 06 45 10.2 | -0.5 |
| YER | Yerkesik | 0.13 | 143 | ePg | Pg | 06 45 10.2 | -0.5 |
| AYDN | Tasoluk | 0.49 | 330 | i P | Pb | 06 45 18.9 | +0.1 |
| AYDN | | | | i S | Sb | 06 45 25.9 | -0.4 |
| AYDN | Tasoluk | 0.49 | 330 | P | Pb | 06 45 18.9 | +0.1 |
| AYDN | | | | S | Sb | 06 45 25.9 | -0.4 |
| TURN | Turunc | 0.49 | 137 | i P | Pg | 06 45 16.7 | -0.7 |
| TURN | | | | i S | Sg | 06 45 23.3 | -0.6 |
| TURN | Turunc | 0.49 | 137 | P | Pg | 06 45 16.8 | -0.7 |
| TURN | | | | S | Sg | 06 45 23.3 | -0.6 |
| DALY | Dalyan (Mu˜la | 0.56 | 138 | ePG | Pg | 06 45 18.9 | +0.1 |
| DALY | | | | eSG | Sb | 06 45 27.7 | -0.6 |
| DALY | Dalyan (Mu˜la | 0.56 | 138 | ePg | Pg | 06 45 18.9 | +0.1 |
| DALY | | | | eSg | Sb | 06 45 27.7 | -0.6 |
| BODT | Bodrum | 0.72 | 256 | ePG | Pg | 06 45 21.6 | -0.1 |
| BODT | | | | eSG | Sb | 06 45 32.4 | -0.5 |
| BODT | Bodrum | 0.72 | 256 | ePg | Pg | 06 45 21.6 | -0.1 |
| BODT | | | | eSg | Sb | 06 45 32.4 | -0.5 |
| AYDB | Zeytinkoy-Aydi | 0.74 | 342 | ePG | Pg | 06 45 22.2 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 0.74 | 342 | ePg | Pg | 06 45 22.2 | 0.0 |
| FETY | Fethiye | 0.94 | 130 | ePG | Pg | 06 45 26.0 | +0.1 |
| FETY | Fethiye | 0.94 | 130 | ePg | Pg | 06 45 26.0 | +0.1 |
| MANT | Manisa | 1.28 | 13 | i P | Pg | 06 45 33.1 | +0.5 |
| MANT | | | | i S | Sb | 06 45 47.4 | -2.0 |
| MANT | Manisa | 1.28 | 13 | P | Pg | 06 45 33.1 | +0.5 |
| MANT | | | | S | Sb | 06 45 47.4 | -2.0 |
| AKAS | Kas | 1.52 | 131 | i P | Pg | 06 45 37.0 | 0.0 |
| AKAS | | | | i S | Sg | 06 45 59.5 | +2.8 |
| AKAS | Kas | 1.52 | 131 | P | Pg | 06 45 37.0 | 0.0 |
| AKAS | | | | S | Sg | 06 45 59.5 | +2.8 |

**IDC 04 06:52:12.6**±3.9**, 3°44S**×**147°78E, h0**km**, mb3.5**/3**, mb1 3.8**/3**, mb1mx3.5**/20**, mbtmp3.6**/3**, MS2.9**/1**, Ms1 2.9**/1**, ms1mx2.4**/23**, Error ellipse: s-maj=124.6km s-min=46.9km az=108.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | Guam | 17.16 | 350 | LR | LR | 07 02 12.5 | |
| | comp=Z,39nm,20.4s,baz=168,slow=35 | | | | | | |
| WRA | Warramunga Arr | 21.00 | 218 | P | P | 06 56 57.7 | -0.2 |
| | 1.5nm,0.9s,baz=42,slow=12,SNR=8.7 | | | | | | |
| ASAR | Alice Springs | 24.17 | 212 | P | P | 06 57 31.6 | +0.7 |
| | 0.8nm,0.8s,baz=52,slow=8.3,SNR=6.5 | | | | | | |
| FITZ | Fitzroy Crossi | 26.13 | 234 | P | P | 06 57 48.1 | -0.5 |
| | 3.8nm,1.2s,baz=72,slow=7.6,SNR=3.6 | | | | | | |
| TORD | Torodi Ar. Bea | 145.13 | 288 | PKPbc | PKPbc | 07 11 51.8 | -1.0 |
| | 0.7nm,1.0s,baz=66,slow=3.6,SNR=3.1 | | | | | | |

*IDC **04** 06:56:30.6±1.3, 4°89S×145°77E, h0km, mb3.6/4, mb1 4.0/6, mb1mx3.8/21, mbtmp3.8/6, ML3.3/2, Error ellipse: s-maj=41.0km s-min=22.4km az=108.0*
*ISCJB **04** 06:56:33.6±1.1, 5°19S±0°08×146°1E±0°1, h27km, mb3.6/4, Error ellipse: s-maj=19.4km s-min=10.1km az=160.1*
*AUST **04** 06:56:40.0, 5°30S×146°08E, h60km*
**ISC 04 06:56:34.4**±0.9**, 5°10S**±0°08×**146°2E**±0°2**, h27**km**, n16, σ1°54**/13**, mb3.7**/4**, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MANU | Manus Island | 3.25 | 21 | P | Pb | 06 57 31.3 | -0.1 |
| | baz=3.5,SNR=6.0 | | | | | | |
| PMG | Port Moresby | 4.38 | 168 | Pn | Pn | 06 57 42.2 | +3.0 |
| | 12nm,0.3s,baz=333,slow=6.7,SNR=20 | | | | | | |
| PMG | | | | Sn | Sn | 06 58 29.2 | -0.2 |
| | 12nm,0.3s,baz=313,slow=23,SNR=11 | | | | | | |
| PMG | Port Moresby | 4.38 | 168 | P | Pn | 06 57 42.2 | +3.0 |
| | baz=4.2,SNR=11 | | | | | | |
| COEN | Coen | 9.30 | 199 | P | Pn | 06 58 49.0 | +2.3 |
| | baz=9.1,SNR=12 | | | | | | |
| KDU | Kakadu | 15.52 | 240 | P | Pn | 07 00 11.1 | -0.5 |
| | baz=15,SNR=5.9 | | | | | | |
| PALU | Palau | 17.03 | 316 | P | P | 07 00 34.9 | +2.5 |
| | baz=17,SNR=7.9 | | | | | | |
| WRA | Warramunga Arr | 18.74 | 217 | P | P | 07 00 49.2 | -2.1 |
| | 0.4nm,0.3s,baz=35,slow=11,SNR=17 | | | | | | |
| ASAR | Alice Springs | 21.94 | 212 | P | P | 07 01 25.2 | -0.8 |
| | 0.6nm,0.5s,baz=47,slow=8.0,SNR=7.3 | | | | | | |
| FITZ | Fitzroy Crossi | 23.90 | 236 | P | P | 07 01 44.7 | -1.5 |
| | 2.5nm,0.4s,baz=47,slow=10,SNR=27 | | | | | | |
| FITZ | Fitzroy Crossi | 23.90 | 236 | P | P | 07 01 45.6 | -0.6 |
| | baz=24,SNR=16 | | | | | | |
| WRKA | Warakurna | 26.24 | 219 | P | P | 07 02 05.6 | -1.8 |
| | baz=26,SNR=6.7 | | | | | | |
| MEEK | Meekatharra | 33.95 | 228 | P | P | 07 03 15.7 | -0.1 |
| | baz=34,SNR=5.5 | | | | | | |
| LEM | Lembang | 38.42 | 265 | P | P | 07 04 00.2 | +5.9 |
| | baz=38,SNR=5.1 | | | | | | |
| MKAR | Makanchi Array | 76.31 | 321 | P | P | 07 08 19.7 | -1.2 |
| | 0.1nm,0.4s,baz=101,slow=6.0,SNR=2.6 | | | | | | |
| ILAR | Eielson Array | 84.97 | 23 | P | P | 07 09 07.1 | +0.2 |
| | 1.1nm,0.9s,baz=248,slow=5.6,SNR=8.1 | | | | | | |
| TORD | Torodi Ar. Bea | 144.10 | 285 | PKP | PKPbc | 07 16 06.4 | -0.4 |
| | 0.2nm,0.4s,baz=65,slow=3.3,SNR=3.6 | | | | | | |

**MEX 04 06:59:55.6**±0.4**, 14°22N**×**93°19W, h11**km±103km**, MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.48 | 359 | i P | Pn | 07 00 18.5 | -3.7 |
| CCIG | Comitan | 2.29 | 26 | eP | Pn | 07 00 33.0 | -0.6 |
| CCIG | | | | eS | Sn | 07 00 57.9 | -4.1 |

*DDA **04** 07:00:36.9, 35°38N×26°40E, h19km, Md3.0*
*ISCJB **04** 07:01:09.5±0.8, 36°63N±0°04×26°97E±0°04, h113km±10km, Error ellipse: s-maj=8.2km s-min=3.7km az=143.3*
*CSEM **04** 07:01:09.9±0.3, 36°63N×27°01E, h113km±4km, ML3.1, Error ellipse: s-maj=5.4km s-min=3.0km az=141.0*
*ATH **04** 07:01:10.0, 36°64N×26°93E, h106km±2km*
*ISK **04** 07:01:10.6, 36°74N×27°06E, h110km, ML3.1*
**ISC 04 07:01:09.3**±1.4**, 36°64N**±0°04×**27°01E**±0°03**, h120**km±10km**, n69, σ0°98**/93**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIS1 | Nisyros Isl. | 0.14 | 107 | ePG | Pn | 07 01 27.1 | +1.3 |
| NIS1 | Nisyros Isl. | 0.14 | 107 | eP | Pn | 07 01 25.1 | -0.7 |
| NIS1 | Nisyros Isl. | 0.14 | 107 | eP | Pn | 07 01 25.1 | -0.7 |
| NIS1 | Nisyros Isl. | 0.14 | 107 | ePg | Pn | 07 01 27.1 | +1.3 |
| BODT | Bodrum | 0.48 | 30 | ePG | Pn | 07 01 27.1 | 0.0 |
| BODT | Bodrum | 0.48 | 30 | ePg | Pn | 07 01 27.1 | 0.0 |
| ARG | Arkhangelos | 0.99 | 115 | eP | Pn | 07 01 32.0 | +0.8 |
| ARG | | | | eS | Sn | 07 01 48.7 | +0.9 |
| ARG | Arkhangelos | 0.99 | 115 | P | Pn | 07 01 31.9 | +0.8 |
| ARG | Arkhangelos | 0.99 | 115 | eP | Pn | 07 01 32.0 | +0.8 |
| ARG | | | | eS | Sn | 07 01 48.7 | +0.9 |
| GCAM | G?zelcaml? | 1.07 | 9 | i P | Pn | 07 01 32.6 | +0.6 |
| GCAM | G?zelcaml? | 1.07 | 9 | P | Pn | 07 01 32.6 | +0.6 |
| SMG | Samos | 1.07 | 353 | eP | Pn | 07 01 32.5 | +0.5 |
| SMG | Samos | 1.07 | 353 | eP | Pn | 07 01 32.5 | +0.5 |
| KARP | Karpathos | 1.10 | 174 | eP | Pn | 07 01 32.5 | +0.2 |
| KARP | | | | eS | Sn | 07 01 49.4 | -0.4 |
| KARP | Karpathos | 1.10 | 174 | P | Pn | 07 01 32.5 | +0.2 |
| KARP | Karpathos | 1.10 | 174 | eP | Pn | 07 01 32.5 | +0.2 |
| KARP | | | | eS | Sn | 07 01 49.4 | -0.4 |
| AYDN | Tasoluk | 1.23 | 34 | i P | Pn | 07 01 36.1 | +2.4 |
| AYDN | Tasoluk | 1.23 | 34 | P | Pn | 07 01 36.1 | +2.4 |
| APE | Apeiranthos | 1.26 | 290 | ePN | Pn | 07 01 35.5 | +1.5 |
| APE | Apeiranthos | 1.26 | 290 | eP | Pn | 07 01 34.7 | +0.7 |
| APE | Apeiranthos | 1.26 | 290 | eP | Pn | 07 01 34.7 | +0.7 |
| APE | Apeiranthos | 1.26 | 290 | ePn | Pn | 07 01 35.5 | +1.5 |
| TURN | Turunc | 1.30 | 79 | i P | Pn | 07 01 31.5 | -2.8 |
| TURN | Turunc | 1.30 | 79 | P | Pn | 07 01 31.5 | -2.8 |
| DALY | Dalyan (Mu˜la | 1.33 | 82 | ePN | Pn | 07 01 35.5 | +0.8 |
| DALY | | | | eSN | Sn | 07 01 54.0 | 0.0 |
| DALY | Dalyan (Mu˜la | 1.33 | 82 | ePn | Pn | 07 01 35.5 | +0.8 |
| DALY | | | | eSn | Sn | 07 01 54.0 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 1.48 | 28 | ePN | Pn | 07 01 36.8 | +0.2 |
| AYDB | Zeytinkoy-Aydi | 1.48 | 28 | ePn | Pn | 07 01 36.8 | +0.2 |
| ZKR | Zakros | 1.66 | 203 | eP | Pn | 07 01 39.3 | +0.8 |
| ZKR | | | | eS | Sn | 07 02 00.7 | -0.1 |
| ZKR | Zakros | 1.66 | 203 | P | Pn | 07 01 39.4 | +0.9 |
| ZKR | Zakros | 1.66 | 203 | eP | Pn | 07 01 39.3 | +0.8 |
| ZKR | | | | eS | Sn | 07 02 00.7 | -0.1 |
| FETY | Fethiye | 1.67 | 90 | ePN | Pn | 07 01 39.7 | +1.0 |
| FETY | Fethiye | 1.67 | 90 | ePn | Pn | 07 01 39.7 | +1.0 |
| IZM | Izmir | 1.76 | 6 | ePN | Pn | 07 01 40.2 | +0.3 |
| IZM | Izmir | 1.76 | 6 | ePn | Pn | 07 01 40.2 | +0.3 |
| NPS | Neapolis | 1.79 | 220 | eP | Pn | 07 01 40.2 | +0.1 |
| NPS | | | | eS | Sn | 07 02 02.9 | -0.7 |
| NPS | Neapolis | 1.79 | 220 | eP | Pn | 07 01 40.2 | +0.1 |
| NPS | | | | eS | Sn | 07 02 02.9 | -0.7 |
| CHOS | Chios island | 1.90 | 337 | ePN | Pn | 07 01 42.3 | +0.8 |
| CHOS | Chios island | 1.90 | 337 | eP | Pn | 07 01 42.4 | +0.9 |
| CHOS | Chios island | 1.90 | 337 | ePn | Pn | 07 01 42.3 | +0.8 |
| DNZL | Cakiroluk | 1.93 | 57 | i P | Pn | 07 01 42.4 | +0.3 |
| DNZL | | | | i S | Sn | 07 02 05.5 | -1.6 |
| DNZL | Cakiroluk | 1.93 | 57 | P | Pn | 07 01 42.4 | +0.3 |
| DNZL | | | | S | Sn | 07 02 05.5 | -1.6 |
| LAST | Lasithi | 1.93 | 221 | eP | Pn | 07 01 42.4 | +0.4 |
| LAST | | | | eS | Sn | 07 02 06.0 | -0.9 |
| LAST | Lasithi | 1.93 | 221 | P | Pn | 07 01 42.5 | +0.5 |
| LAST | Lasithi | 1.93 | 221 | eP | Pn | 07 01 42.4 | +0.4 |
| LAST | | | | eS | Sn | 07 02 06.0 | -0.9 |
| AKAS | Kas | 2.13 | 100 | i P | Pn | 07 01 44.4 | -0.1 |
| AKAS | Kas | 2.13 | 100 | P | Pn | 07 01 44.4 | -0.1 |
| IDI | Anoyia | 2.19 | 232 | eP | Pn | 07 01 45.0 | -0.2 |
| IDI | | | | eS | Sn | 07 02 10.8 | -1.8 |
| IDI | Anoyia | 2.19 | 232 | P | Pn | 07 01 44.9 | -0.2 |
| IDI | Anoyia | 2.19 | 232 | eP | Pn | 07 01 45.0 | -0.2 |
| IDI | | | | eS | Sn | 07 02 10.8 | -1.8 |
| MANT | Manisa | 2.22 | 33 | i P | Pn | 07 01 45.5 | -0.1 |
| MANT | Manisa | 2.22 | 33 | P | Pn | 07 01 45.5 | -0.1 |
| KULA | Kula-Manisa | 2.28 | 35 | ePN | Pn | 07 01 46.8 | +0.5 |
| KULA | Kula-Manisa | 2.28 | 35 | ePn | Pn | 07 01 46.8 | +0.5 |
| ELL | Elmali | 2.33 | 87 | ePN | Pn | 07 01 48.2 | +1.2 |
| ELL | Elmali | 2.33 | 87 | ePn | Pn | 07 01 48.2 | +1.2 |
| SIVA | Sivas | 2.42 | 228 | eP | Pn | 07 01 49.0 | +1.1 |
| SIVA | | | | eS | Sn | 07 02 16.8 | -0.8 |
| SIVA | Sivas | 2.42 | 228 | P | Pn | 07 01 49.2 | +1.3 |
| SIVA | Sivas | 2.42 | 228 | eP | Pn | 07 01 49.0 | +1.1 |
| SIVA | | | | eS | Sn | 07 02 16.8 | -0.8 |
| KHAL | Karahalli | 2.62 | 48 | i P | Pn | 07 01 50.9 | +0.2 |
| KHAL | Karahalli | 2.62 | 48 | P | Pn | 07 01 50.9 | +0.2 |
| IMMV | Iera Moni Meta | 2.73 | 245 | eP | Pn | 07 01 53.0 | +1.1 |
| IMMV | | | | eS | Sn | 07 02 23.4 | -1.4 |
| IMMV | Iera Moni Meta | 2.73 | 245 | eP | Pn | 07 01 53.0 | +1.1 |
| IMMV | | | | eS | Sn | 07 02 23.4 | -1.4 |
| GVD | Gavdhos | 2.98 | 234 | eP | Pn | 07 01 56.2 | +0.9 |
| GVD | | | | eS | Sn | 07 02 30.7 | -0.1 |
| GVD | Gavdhos | 2.98 | 234 | eP | Pn | 07 01 56.2 | +0.9 |
| GVD | | | | eS | Sn | 07 02 30.7 | -0.1 |
| ANKY | Antikythira Is | 3.10 | 257 | eP | Pn | 07 01 57.6 | +0.8 |
| ANKY | | | | eS | Sn | 07 02 32.6 | -0.9 |
| ANKY | Antikythira Is | 3.10 | 257 | eP | Pn | 07 01 57.6 | +0.8 |
| ANKY | | | | eS | Sn | 07 02 32.6 | -0.9 |
| KYTH | Kithira | 3.23 | 265 | eP | Pn | 07 01 59.3 | +0.8 |
| KYTH | Kithira | 3.23 | 265 | eP | Pn | 07 01 59.3 | +0.8 |

*ISCJB **04** 07:01:29.9±0.9, 24°46S±0°06×69°86W±0°09, h77km±10km, mb3.8/3, Error ellipse: s-maj=14.3km s-min=7.7km az=151.1*
*GUC **04** 07:01:30.7±0.7, 24°38S×69°61W, h95km±17km, ML4.4*
*IDC **04** 07:01:32.6±1.4, 24°40S×69°57W, h81km±6km, mb3.7/3, mb1 3.6/4, mb1mx3.5/14, mbtmp3.9/4, Error ellipse: s-maj=44.2km s-min=30.2km az=115.0*
**ISC 04 07:01:31.5**±1.0**, 24°41S**±0°07×**69°82W**±0°09**, h78**km±6km**, n19, σ1°01**/27**, mb4.0**/3**, 3C-2D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANCH | Antofagasta | 0.91 | 323 | ⇓iP | Pn | 07 01 45.0 | -4.3 |
| ANCH | | | | i S | Sn | 07 02 00.5 | -2.1 |
| PB06 | IPOC Station P | 1.71 | 8 | ⇑iP | Pn | 07 02 00.1 | +0.4 |
| PB06 | | | | i S | Sn | 07 02 21.3 | +0.2 |
| LVC | Limon Verde | 1.98 | 25 | eP | Pn | 07 02 03.0 | -0.3 |
| LVC | | | | eS | Sn | 07 02 25.1 | -2.4 |
| LVC | | | | AML | AML | 07 02 30.2 | |
| | comp=Z,5μm,0.5s | | | | | | |
| PB04 | IPOC Station P | 2.09 | 352 | ⇑iP | Pn | 07 02 05.3 | +0.6 |
| PB04 | | | | i S | Sn | 07 02 31.8 | +1.7 |
| PB04 | | | | AML | AML | 07 02 38.9 | |
| | comp=E,2μm,0.8s | | | | | | |
| PB07 | IPOC Station P | 2.67 | 359 | ⇑iP | Pn | 07 02 12.6 | 0.0 |
| PB07 | | | | i S | Sn | 07 02 45.5 | +1.4 |
| PB07 | | | | AML | AML | 07 02 53.1 | |
| | comp=E,1μm,0.3s | | | | | | |
| PB01 | IPOC Station P | 3.37 | 5 | ⇓iP | Pn | 07 02 21.4 | -0.5 |
| PB01 | | | | i S | Sn | 07 03 00.9 | +0.1 |
| PB01 | | | | AML | AML | 07 03 12.8 | |
| | comp=E,997nm,0.5s | | | | | | |
| FSA | Cafayete | 3.83 | 117 | eP | Pn | 07 02 29.0 | +0.7 |
| SLA | San Lorenzo | 3.94 | 95 | eP | Pn | 07 02 30.2 | +0.4 |
| HJA | Humahuaca | 4.21 | 74 | eP | Pn | 07 02 34.7 | +1.1 |
| AZAP | Zapla | 4.34 | 88 | eP | Pn | 07 02 34.7 | -0.6 |
| YJA | Yavi | 4.54 | 61 | eP | Pn | 07 02 38.6 | +0.5 |
| AHML | Horco Molle | 4.69 | 121 | eP | Pn | 07 02 39.7 | -0.1 |
| LPAZ | La Paz | 8.24 | 11 | P | Pn | 07 03 29.2 | +0.3 |
| | comp=E,0.2nm,0.3s,baz=180,slow=6.0,SNR=6.4 | | | | | | |
| BDFB | Brasilia | 22.24 | 71 | P | P | 07 06 21.7 | -0.5 |
| | comp=E,1.6nm,0.5s,baz=201,slow=8.6,SNR=3.4 | | | | | | |
| BDFB | | | | pP | pP | 07 06 39.0 | +0.8 |
| | comp=E,2.2nm,0.8s,baz=197,slow=14,SNR=1.9 | | | | | | |
| TXAR | Lajitas Array | 62.56 | 327 | pP | pP | 07 12 09.8 | +2.3 |
| | comp=E,0.2nm,0.7s,baz=150,slow=7.3,SNR=3.1 | | | | | | |
| TORD | Torodi Ar. Bea | 79.12 | 70 | P | P | 07 13 26.6 | -1.4 |
| | comp=E,1.2nm,0.5s,baz=260,slow=5.1,SNR=20 | | | | | | |
| TORD | | | | pP | pP | 07 13 48.5 | -0.4 |
| | comp=E,0.7nm,0.6s,baz=247,slow=5.9,SNR=3.7 | | | | | | |
| TORD | | | | sP | sP | 07 13 57.3 | -0.1 |
| | comp=E,0.8nm,0.5s,baz=257,slow=5.3,SNR=4.1 | | | | | | |
| MAW | Mawson | 81.79 | 163 | P | P | 07 13 42.2 | +0.8 |
| | comp=E,1.6nm,0.8s,baz=198,slow=6.7,SNR=9.9 | | | | | | |
| ZALV | Zalesovo Beam | 144.93 | 26 | PKP | PKPdf | 07 20 59.3 | +0.1 |
| | comp=E,1.5nm,0.5s,baz=302,slow=3.2,SNR=1.9 | | | | | | |
| MKAR | Makanchi Array | 148.46 | 38 | PKPbc | PKPbc | 07 21 09.4 | +0.3 |
| | comp=E,0.7nm,0.6s,baz=325,slow=2.3,SNR=6.2 | | | | | | |
| MKAR | | | | pPKPbc | pPKPbc | 07 21 32.3 | +1.2 |
| | comp=E,0.5nm,0.7s,baz=302,slow=3.2,SNR=2.8 | | | | | | |

*IDC **04** 07:20:58.4±2.0, 36°16N×70°12E, h131km±19km, mb3.8/13, mb1 3.9/18, mb1mx3.6/55, mbtmp4.3/18, MS2.8/1, Ms1 2.8/1, ms1mx2.1/40, Error ellipse: s-maj=15.6km s-min=10.6km az=51.0*
*ISCJB **04** 07:20:58.3±0.2, 36°28N±0°02×70°16E±0°03, h150km, mb4.0/16, Error ellipse: s-maj=3.9km s-min=2.6km az=160.2*
*MOS **04** 07:20:58.5±1.0, 36°26N×70°21E, h142km, mb4.1/10, Error ellipse: s-maj=11.5km s-min=5.1km az=84.2*
*NEIC **04** 07:20:59.8±1.6, 36°28N×70°23E, h143km±15km, mb4.5/9, Error ellipse: s-maj=15.0km s-min=8.5km az=209.0*
*BJI **04** 07:20:59.6, 36°55N×70°16E, h113km, mb4.5/8, mB4.7/5*
*NNC **04** 07:21:02.5±1.0, 36°58N×70°03E, h153km±7km, mb4.1, mpv4.8, Error ellipse: s-maj=9.0km s-min=5.3km az=177.0*
**ISC 04 07:21:00.1**±0.5**, 36°32N**±0°04×**70°17E**±0°05**, h150**km**, n136, σ1°68**/148**, mb4.0**/16**, 13C-15D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KBL | Kabul | 2.00 | 208 | PN | Pn | 07 21 33.6 | -1.9 |
| DZET | Dzherino | 2.70 | 337 | ⇑P | Pn | 07 21 42.9 | -1.0 |
| | 293nm,0.6s | | | | | | |
| DZET | | | | ⇓S | Sn | 07 22 14.4 | -3.2 |
| | 1μm,0.5s | | | | | | |
| DZET | Dzherino | 2.70 | 337 | PN | Pn | 07 21 42.8 | -1.0 |
| DZET | | | | pmax | pmax | | |
| | comp=Z,293nm,0.6s | | | | | | |
| CEP | Cherat | 2.87 | 150 | ⇑P | Pn | 07 21 45.7 | -0.3 |
| CEP | | | | S | Sn | 07 22 20.0 | -1.4 |
| CHCP | Chirah Chowk | 3.67 | 135 | ⇑P | Pn | 07 21 56.3 | +0.1 |
| THW | Thamme Wali | 3.75 | 159 | ⇑P | Pn | 07 21 56.1 | -1.1 |
| SFK | Sufi-Kurgan | 4.53 | 34 | ⇑P | Pn | 07 22 08.4 | +0.9 |
| | comp=Z,55nm,0.4s | | | | | | |
| SFK | | | | ⇓S | Sn | 07 23 00.2 | +0.3 |
| | comp=Z,362nm,0.3s | | | | | | |
| SFK | Sufi-Kurgan | 4.53 | 34 | PN | Pn | 07 22 08.3 | +0.9 |
| SFK | | | | S | Sn | 07 23 00.2 | +0.3 |
| SFK | | | | pmax | pmax | | |
| | comp=Z,55nm,0.4s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,363nm,0.3s | | | | | | |
| KSH | Kashi | 5.59 | 53 | eP | Pn | 07 22 17.7 | -3.7 |
| KSH | | | | S | Sn | 07 23 15.4 | -10 |
| KSH | | | | SMN | | | |
| | comp=N,920nm,0.9s | | | | | | |
| KSH | | | | SME | | | |
| | comp=N,340nm,0.4s | | | | | | |
| AML | Almayashu | 6.42 | 24 | P | Pn | 07 22 32.6 | -0.1 |
| | SNR=336 | | | | | | |
| MNAS | Manas | 6.42 | 16 | ⇓P | Pn | 07 22 32.6 | +0.1 |

comp=N,80nm,0.7s
MNAS ⇓S **Sn** **07 23 42.4 -2.3**
comp=N,172nm,0.6s
**MNAS Manas 6.42 16** PN **Pn** **07 22 32.6 +0.1**
MNAS pmax pmax
comp=Z,81nm,0.7s
**DHRM DHARAMSHALA 6.50 127** *e*P **Pn** **07 22 31.9 -1.8**
DHRM *e*S **Sn** **07 23 42.7 -4.1**
DHRM AML AML 07 23 46.2
comp=E,893nm,0.3s
DHRM AML AML 07 23 46.2
comp=N,1㎛,0.5s
**KK31 Karatay Array 6.78 2** ⇑P **Pn** **07 22 37.1 -0.1**
comp=N,26nm,0.4s,baz=197,slow=21,SNR=255
KK31 S **Sn** **07 23 50.1 -3.1**
comp=N,136nm,0.7s,baz=192,slow=23,SNR=14
**KK31 Karatay Array 6.78 2** PN **Pn** **07 22 37.0 -0.1**
KK31 pmax pmax
comp=Z,31nm,0.3s
**KKAR Karatay Array 6.78 2** *e*PN **Pn** **07 22 37.1 -0.1**
KKAR pmax pmax
comp=Z,13nm,0.4s
**KKAR Karatay Array 6.78 2** *e*Pn **Pn** **07 22 37.1 -0.1**
comp=Z,13nm,0.4s
KKAR *e*Sn **Sn** **07 23 50.2 -3.1**
**UCH Uchtor 6.79 28** P **Pn** **07 22 37.8 0.0**
SNR=164
**EKS2 Erkin-Say 6.92 23** *e*PN **Pn** **07 22 39.4 +0.2**
EKS2 pmax pmax
comp=Z,70nm,0.4s
**EKS2 Erkin-Say 6.92 23** P **Pn** **07 22 39.4 +0.2**
SNR=95
**EKS2 Erkin-Say 6.92 23** *e*Pn **Pn** **07 22 39.4 +0.2**
comp=Z,70nm,0.4s
EKS2 *e*Sn **Sn** **07 23 56.1 -0.7**
**KZA Kyzart 6.97 33** P **Pn** **07 22 39.8 -0.3**
SNR=78
**BHK Bhakra 7.13 131** *e*P **Pn** **07 22 39.8 -2.2**
**AAK Ala-Archa 7.14 27** ⇓P **Pn** **07 22 42.1 +0.1**
comp=Z,97nm,0.9s
AAK ⇑S **Sn** **07 24 00.2 -1.8**
comp=Z,192nm,0.9s
**AAK Ala-Archa 7.14 27** P **Pn** **07 22 42.3 +0.3**
comp=Z,22nm,0.3s,baz=189,slow=7.0,SNR=186
AAK S **Sn** **07 23 59.6 -2.4**
comp=Z,3.3nm,0.3s,baz=323,slow=20,SNR=9.2
**AAK Ala-Archa 7.14 27** *d i*PN **Pn** **07 22 42.2 +0.1**
AAK pmax pmax
comp=Z,97nm,0.9s
**AAK Ala-Archa 7.14 27** P **Pn** **07 22 42.0 -0.1**
SNR=111
**KBK Karagaybulak 7.33 29** P **Pn** **07 22 45.1 +0.5**
SNR=34
**FRU Bishkek 7.35 26** *i* PN **Pn** **07 22 45.0 +0.1**
FRU pmax pmax
comp=Z,135nm,2.0s
**CHMS Chumysh 7.55 26** P **Pn** **07 22 47.7 +0.3**
SNR=19
**ULHL Ulahol 7.56 37** P **Pn** **07 22 47.9 +0.1**
SNR=9.2
**USP Ospenovka 7.70 24** P **Pn** **07 22 49.8 +0.4**
SNR=79
**SMLA Simla 7.79 130** *i* P **Pn** **07 22 49.2 -1.5**
SMLA *i* S **Sn** **07 24 12.3 -5.3**
SMLA AML AML 07 24 18.5
comp=N,320nm,0.3s
SMLA AML AML 07 24 18.9
comp=E,423nm,0.5s
**TKM2 Tokmak 2 7.81 31** ⇑P **Pn** **07 22 51.0 -0.1**
comp=E,35nm,0.6s
**TKM2 Tokmak 2 7.81 31** PN **Pn** **07 22 51.0 -0.1**
TKM2 pmax pmax
comp=Z,35nm,0.6s
**TKM2 Tokmak 2 7.81 31** P **Pn** **07 22 51.1 -0.1**
SNR=70
**TKM2 Tokmak 2 7.81 31** *e*Pn **Pn** **07 22 50.9 -0.1**
comp=Z,45nm,0.5s
TKM2 *e*Sn **Sn** **07 24 18.0 -0.2**
**IMYA Miami 8.13 273** *e*P Pn 07 22 51.8 -3.6
**ISRO Mashad 8.64 273** *e*P **Pn** **07 23 00.0 -2.1**
**DDI Dehra Dun 8.90 130** *e*P **Pn** **07 23 04.8 -0.9**
DDI *e*S **Sn** **07 24 39.1 -5.4**
DDI AML AML 07 24 41.4
comp=N,325nm,0.7s
DDI AML AML 07 24 49.2
comp=E,334nm,0.2s
**IPAY Payeh 9.01 274** *e*P **Pn** **07 23 06.0 -1.2**
**IAKL Akhelmad 9.20 275** *e*P **Pn** **07 23 07.4 -2.4**
**IEMG Emamgholi 9.30 280** *e*P Pn 07 23 07.5 -3.5
**KHET Khetri 9.50 148** *e*S Sn 07 24 49.5 -9.5
KHET AML AML 07 24 52.3
comp=N,75nm,0.3s
KHET AML AML 07 24 52.4
comp=E,84nm,0.4s
**BHGR Bahadurgarh 9.51 141** *e*S Sn 07 24 50.5 -8.6
**NDI New Delhi 9.66 140** *e*P **Pn** **07 23 13.0 -2.6**
comp=E,6.0nm,0.6s
NDI *ex* x 07 24 52.5
**KUDL Kundal 9.75 145** *e*P **Pn** **07 23 13.7 -3.1**
KUDL *e*S Sn 07 24 53.5 -11
KUDL AML AML 07 24 59.9
comp=N,78nm,0.5s
KUDL AML AML 07 25 02.5
comp=E,104nm,0.9s
**GEYT Alibeck 9.76 283** P Pn 07 23 13.9 -3.0
comp=E,1.4nm,0.3s,baz=99,slow=9.8,SNR=5.2
GEYT S Sn 07 24 59.1 -6.0
comp=E,5.7nm,0.3s,baz=81,slow=20,SNR=9.0
**AYAN Aya Nagar 9.78 141** *ex* **Sn** **07 25 08.5 +3.0**
**ISFR Sfrayin 9.80 278** *e*P **Pn** **07 23 16.1 -1.7**
**SONA Sohna 9.94 142** *e*P **Pn** **07 23 17.6 -1.8**
SONA *e*S Sn 07 24 58.8 -11
SONA AML AML 07 25 04.0
comp=N,66nm,0.5s
SONA AML AML 07 25 05.9
comp=E,190nm,0.2s
**PDGK Podgornoye 10.01 43** ⇓P **Pn** **07 23 19.3 -0.8**
comp=E,21nm,0.9s
**PDGK Podgornoye 10.01 43** P **Pn** **07 23 19.3 -0.8**
PDGK pmax pmax
comp=Z,21nm,0.9s
**ISHV Shirvan 10.06 281** *e*P Pn 07 23 18.2 -2.8
**OTUK Ortayu 12.02 7** ⇓P **Pn** **07 23 45.7 -0.9**
comp=Z,15nm,0.6s
**OTUK Ortayu 12.02 7** P **Pn** **07 23 45.7 -0.9**
OTUK pmax pmax
comp=Z,15nm,0.6s
**MK31 Makanchi Array 13.83 37** P **Pn** **07 24 09.4 -0.4**
comp=Z,18nm,0.6s,baz=228,slow=16,SNR=111
**MK31 Makanchi Array 13.83 37** P **Pn** **07 24 09.4 -0.4**
MK31 pmax pmax
comp=Z,17nm,0.5s
**MKAR Makanchi Array 13.83 37** P **Pn** **07 24 09.5 -0.3**
comp=Z,0.6nm,0.3s,baz=230,slow=17,SNR=29
**MKAR Makanchi Array 13.83 37** P **Pn** **07 24 09.5 -0.3**
MKAR pmax pmax
comp=Z,1.0nm,0.3s
**DANN Dangsing 13.96 121** *e*P **Pn** **07 24 09.1 -2.7**
comp=Z,11nm,0.6s
**KOLN Koldanda 14.21 123** *e*P **Pn** **07 24 12.2 -2.8**
comp=Z,64nm,0.5s
**BHPL Bhopal 14.47 152** *e*P **P** **07 24 20.0 -0.5**
BHPL *ex* x 07 26 45.4
**GKN Gorkha 14.78 120** *e*P **Pn** **07 24 19.4 -2.6**
comp=Z,154nm,0.6s
**AB31 Akbulak array 14.93 333** ⇑P **Pn** **07 24 22.6 -0.9**
comp=Z,11nm,0.5s
AB31 ⇓S **Sn** **07 27 05.3 -3.9**
comp=Z,20nm,0.6s,baz=164,slow=20,SNR=21
**AB31 Akbulak array 14.93 333** P **Pn** **07 24 22.6 -0.9**
AB31 pmax pmax
comp=Z,8.0nm,0.3s
**ABKAR Akbulak array 14.93 333** *e*Pn **Pn** **07 24 22.5 -1.0**
comp=Z,13nm,0.4s
**DMN Daman 15.35 120** *e*P **Pn** **07 24 26.5 -2.7**
comp=Z,86nm,0.7s
**KKN Kakani 15.36 119** *e*P **Pn** **07 24 27.5 -1.8**
comp=Z,230nm,0.6s
**KURBB Kurchatov Arra 15.52 20** ⇑P **Pn** **07 24 29.6 -1.0**
comp=Z,32nm,0.8s
**KURBB Kurchatov Arra 15.52 20** P **Pn** **07 24 28.9 -1.8**
comp=Z,0.4nm,0.3s,baz=210,slow=10,SNR=38
**PKIN Phulchoki 15.57 120** *e*P **Pn** **07 24 29.9 -2.0**
comp=Z,82nm,0.5s
**PKI Pulchoki 15.59 120** *e*P **Pn** **07 24 30.0 -2.1**
comp=Z,201nm,0.9s
**KURK Kurchatov 15.62 20** ⇑P **Pn** **07 24 30.6 -1.4**
comp=Z,51nm,1.0s
**KURK Kurchatov 15.62 20** P **Pn** **07 24 28.9 -3.1**
**KURK Kurchatov 15.62 20** *e*Pn **Pn** **07 24 28.6 -3.5**
comp=Z,53nm,0.9s
KURK *e*Sn **S** **07 27 27.6 -0.1**
**GUN Gumba 15.72 118** *e*P **Pn** **07 24 31.8 -1.9**
comp=Z,163nm,0.8s
**AKTO Aktyubinsk 16.61 332** ⇓P **P** **07 24 44.3 +0.3**
comp=Z,16nm,0.8s
AKTO ⇓S **S** **07 27 45.1 -3.5**
comp=Z,20nm,0.8s
**AKTO Aktyubinsk 16.61 332** P **Pn** **07 24 44.6 +0.5**
comp=Z,1.1nm,0.3s,baz=141,slow=13,SNR=48
AKTO S S 07 27 36.9 -12
comp=Z,0.6nm,0.3s,baz=236,slow=22,SNR=10
**AKTO Aktyubinsk 16.61 332** P **Pn** **07 24 44.7 +0.5**
AKTO S S 07 27 36.9 -12
AKTO pmax pmax
comp=Z,1.0nm,0.3s
AKTO smax smax
comp=N,1.0nm,0.3s
**BVA0 Borovoye Array 16.70 0** ⇓P **P** **07 24 44.4 -0.6**
comp=N,17nm,1.1s
BVA0 S **S** **07 27 48.1 -2.6**
comp=N,0.3nm,0.7s,baz=189,slow=26,SNR=3.8
**BVA0 Borovoye Array 16.70 0** P **P** **07 24 44.3 -0.6**
BVA0 pmax pmax
comp=Z,17nm,1.1s
**BVAR Borovoye Array 16.70 0** P **P** **07 24 44.8 -0.2**
comp=Z,0.7nm,0.3s,baz=173,slow=13,SNR=24
BVAR S S 07 27 43.2 -7.5
comp=Z,0.5nm,0.3s,baz=210,slow=17,SNR=3.6
**BVAR Borovoye Array 16.70 0** P **P** **07 24 44.8 -0.2**
BVAR S S 07 27 43.2 -7.5
BVAR pmax pmax
comp=Z,1.0nm,0.3s
BVAR smax smax
comp=N,1.0nm,0.3s
**BRVK Borovoye 16.74 0** ⇑P **P** **07 24 44.6 -0.7**
comp=N,24nm,0.9s
**BRVK Borovoye 16.74 0** *d i*P **P** **07 24 44.9 -0.4**
BRVK pmax pmax
comp=Z,16nm,0.9s
**BRVK Borovoye 16.74 0** *e*P **P** **07 24 45.3 0.0**
comp=Z,15nm,0.9s
BRVK *e*S **S** **07 27 50.6 -0.9**
**RAMN Ramite 16.80 119** *e*P **P** **07 24 45.6 -0.9**
comp=Z,94nm,0.5s
**NGP Nagpur 16.99 150** *e*P **Pn** **07 24 51.6 +2.7**
NGP *ex* x 07 27 47.8
**TAPN Taplejung 17.36 116** *e*P **Pn** **07 24 53.2 -0.4**
comp=Z,178nm,0.7s
**ODAN Odare 17.42 118** *e*P **Pn** **07 24 53.6 -0.7**
comp=Z,62nm,0.6s
**LSA Lhasa 18.77 105** *e*P **P** **07 25 07.6 -0.7**
LSA pmax pmax
comp=Z,9.0nm,0.6s
**LSA Lhasa 18.77 105** *e*P **P** **07 25 07.6 -0.7**
comp=Z,8.7nm,0.6s
**HYBB Hyderabad (bro 20.24 156** *e*P **P** **07 25 24.5 +0.7**
**HYB Hyderabad 20.24 156** *i* P **P** **07 25 23.5 -0.2**
HYB *e*S **S** **07 29 02.0 -0.7**
**GNI Garni 20.32 289** P Pn 07 25 27.8 -0.5
comp=Z,9.3nm,0.5s,baz=9.8,slow=3.0,SNR=5.5
**GNI Garni 20.32 289** *d i*P Pn 07 25 27.6 -0.6
GNI pmax pmax
comp=Z,12nm,0.7s
**GNI Garni 20.32 289** *e*P Pn 07 25 27.6 -0.6
comp=Z,12nm,0.8s
**ZALV Zalesovo Beam 20.36 25** P **P** **07 25 26.0 +1.3**
comp=Z,55nm,0.5s,baz=221,slow=11,SNR=176
**ZALV Zalesovo Beam 20.36 25** P **P** **07 25 26.0 +1.3**
ZALV pmax pmax
comp=Z,55nm,0.5s
**NVS Novosibirsk 20.59 22** *i*P **P** **07 25 28.5 +1.4**
NVS pmax pmax
comp=Z,45nm,1.0s
NVS pmax pmax
comp=N,19nm,0.9s
**SHL Shillong 21.44 114** *ex* **P** **07 25 37.0 +0.3**
SHL AMB AMB 07 25 40.1
comp=Z,25nm,0.9s
**SVE Sverdlovsk 21.50 346** *e*P **P** **07 25 38.4 +1.6**
SVE *e*S S 07 29 33.8 +8.2
SVE pmax pmax
comp=Z,12nm,0.9s
**PVM Polavaram 21.54 149** *e*P **P** **07 25 38.4 +0.9**
**CHLP Challavanipeta 21.56 142** *e*P **P** **07 25 39.5 +1.7**
**ARU Arti 21.59 342** P **P** **07 25 39.0 +1.2**
comp=Z,2.0nm,0.2s,baz=105,slow=20,SNR=5.7
ARU S **S** **07 29 31.9 +4.6**
comp=Z,3.0nm,0.2s,baz=73,slow=19,SNR=2.3
ARU LR LR 07 34 05.3
comp=Z,25nm,19.2s,baz=208,slow=36
**ARU Arti 21.59 342** *c i*P **P** **07 25 39.5 +1.7**
ARU 07 26 07.3
ARU S **S** **07 29 29.6 +2.3**
ARU SS 07 30 10.1
ARU pmax pmax
comp=Z,38nm,1.2s
**ARU Arti 21.59 342** *e*P **P** **07 25 39.2 +1.4**
ARU *e*S **S** **07 29 30.6 +3.4**
**ADKI Addanki 22.18 154** *e*P **P** **07 25 46.4 +2.2**
**GTA Gaotai 23.56 73** *e*P P 07 26 02.9 +5.9
GTA PMZ
comp=Z,6.0nm,0.8s
**SKHT Srikalahasti 24.06 157** *e*P **P** **07 26 02.2 +0.7**
**SONM Songino Array 28.99 55** P **P** **07 26 47.4 +1.7**
comp=Z,0.4nm,0.5s,baz=263,slow=11,SNR=3.3
**EIL Elat 30.16 268** P **P** **07 26 57.5 +1.5**
comp=Z,2.8nm,0.6s,baz=56,slow=15,SNR=2.2
**CMAR Chiang Mai Arr 30.96 117** P **P** **07 27 04.8 +1.6**
comp=Z,1.7nm,0.4s,baz=297,slow=8.1,SNR=8.0
**CMAR Chiang Mai Arr 30.96 117** P **P** **07 27 04.8 +1.6**
CMAR pmax pmax
comp=Z,2.0nm,0.4s
**BOD Bodaibo 35.91 39** *e*P **P** **07 27 47.5 +1.9**
BOD pmax pmax
comp=Z,5.0nm,2.0s
**FINES FINESS Array B 37.26 326** P **P** **07 27 58.3 +1.3**
comp=Z,2.5nm,0.7s,baz=137,slow=12,SNR=5.8
**FINES FINESS Array B 37.26 326** P **P** **07 27 58.3 +1.3**
FINES pmax pmax
comp=Z,3.0nm,0.7s
**SUF Sumiainen 37.72 328** P **P** **07 28 02.6 +1.8**
**OUL Oulu 38.82 332** P **P** **07 28 11.6 +1.7**
**ARCES ARCESS Array B 41.06 338** P **P** **07 28 30.1 +1.8**
comp=Z,2.8nm,0.7s,baz=113,slow=9.3,SNR=11
**ARCES ARCESS Array B 41.06 338** P **P** **07 28 30.2 +1.8**
ARCES pmax pmax
comp=Z,3.0nm,0.7s
**PSI Prapat 42.62 135** P **P** **07 28 42.0 +0.1**
comp=Z,6.8nm,0.5s,baz=328,slow=22,SNR=14
**PSI Prapat 42.62 135** P **P** **07 28 42.0 +0.1**
PSI pmax pmax
comp=Z,7.0nm,0.5s
**NB2 NORSAR Subarra 44.12 323** P **P** **07 28 54.1 +0.8**
comp=Z,1.0nm,0.5s,baz=98,slow=7.9
**NOA NORSAR Array B 44.12 323** P **P** **07 28 53.3 0.0**
comp=Z,1.4nm,0.6s,baz=98,slow=8.0,SNR=4.7
**NOA NORSAR Array B 44.12 323** P **P** **07 28 53.3 0.0**
NOA pmax pmax
comp=Z,1.0nm,0.6s
**TORD Torodi Ar. Bea 65.04 268** P **P** **07 31 23.8 -0.9**
comp=Z,0.7nm,0.6s,baz=52,slow=5.8,SNR=7.5
**YKA Yellowknife Ar 81.45 2** P **P** **07 33 01.4 +1.3**
comp=Z,0.7nm,0.8s,baz=354,slow=4.6,SNR=3.3
**YKA Yellowknife Ar 81.45 2** P **P** **07 33 01.4 +1.3**
YKA pmax pmax
comp=Z,1.0nm,0.8s
**WRA Warramunga Arr 82.47 121** P **P** **07 33 05.2 -0.7**
comp=Z,0.9nm,0.5s,baz=325,slow=4.9,SNR=10
**WRA Warramunga Arr 82.47 121** P **P** **07 33 05.3 -0.7**
WRA pmax pmax
comp=Z,1.0nm,0.5s
**WRAB Tennant Creek 82.47 121** *e*P **P** **07 33 05.9 -0.1**
WRAB pmax pmax
comp=Z,1.0nm,0.5s
**WRAB Tennant Creek 82.47 121** *e*P **P** **07 33 05.9 -0.1**
comp=Z,1.2nm,0.5s
**ASAR Alice Springs 84.70 124** P **P** **07 33 16.4 -1.0**
comp=Z,0.9nm,0.6s,baz=310,slow=4.9,SNR=9.5
**ASAR Alice Springs 84.70 124** P **P** **07 33 16.4 -1.0**
ASAR pmax pmax
comp=Z,1.0nm,0.6s

**BJI 04 07:58:30.2, 33°.30N×96°.20E, h10km, mB3.5/1, ML3.4/4, Ms3.3/3, Ms7 3.0/2, Qinghai**

*AUST **04** 08:32:30.3±99.0, 4°.15S×134°.88E, h17km, Error ellipse: s-maj=1.7km s-min=1.2km az=255.0*
*IDC **04** 08:32:39.1±3.0, 4°.89S×133°.46E, h0km, mb3.3/1, mb1 3.6/4, mb1mx3.4/32, mbtmp3.4/4, ML3.5/3, Error ellipse: s-maj=130.0km s-min=29.1km az=81.0*
**ISC 04 08:32:43.1±1.8, 5°.1S±0°.1×133°.6E±0°.2, h28km, n9, σ2s17/8, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** baz=2.9,SNR=17 | **2.56** | **329** | P | | Pn | 08 33 17.3 | -5.5 |
| **KDU** | **Kakadu** baz=8.9,SNR=5.3 | **7.60** | **188** | P | | Pn | 08 34 40.0 | +8.0 |
| **MTN** | **Manton Dam** baz=9.4,SNR=3.0 | **8.04** | **197** | P | | Pn | 08 34 45.6 | +7.4 |
| **LUWI** | **Luwuk** baz=12,SNR=3.7 | **11.53** | **290** | P | | **Pn** | **08 35 26.0** | **-0.1** |
| **WRA** | **Warramunga Arr** 0.2nm,0.3s,baz=354,slow=13,SNR=3.8 | **14.75** | **177** | Pn | | **Pn** | **08 36 11.2** | **+1.2** |
| WRA | | | | Sn | | **Sn** | **08 38 49.9** | **-2.8** |
| | 0.1nm,0.3s,baz=3.9,slow=24,SNR=3.8 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** 0.1nm,0.3s,baz=32,slow=11,SNR=4.7 | **15.06** | **210** | Pn | | **Pn** | **08 36 15.8** | **+1.7** |
| FITZ | | | | Sn | | **Sn** | **08 38 58.1** | **-2.0** |
| | 0.2nm,0.3s,baz=198,slow=16,SNR=3.6 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** baz=17,SNR=3.2 | **15.06** | **210** | P | | **P** | **08 36 20.0** | **+0.9** |
| **ASAR** | **Alice Springs** 0.2nm,0.3s,baz=358,slow=13,SNR=10.0 | **18.44** | **179** | P | | **Pn** | **08 36 59.1** | **+2.3** |
| **MKAR** | **Makanchi Array** 0.1nm,0.3s,baz=139,slow=4.8,SNR=2.5 | **68.69** | **325** | P | | **P** | **08 43 42.9** | **-1.3** |

*THE **04** 08:43:12.5, 35°.06N×26°.48E, h0km±1km, ML3.6/1, Error ellipse: s-maj=4.7km s-min=0.9km az=162.0*
*ATH **04** 08:43:12.8, 35°.09N×26°.43E, h26km±1km, MD3.4/13*
*ISCJB **04** 08:43:13.4±1.0, 35°.1N±0°.1×26°.44E±0°.05, h21km±5km, Error ellipse: s-maj=17.6km s-min=3.9km az=163.0*
*CSEM **04** 08:43:13.7±0.5, 35°.08N×26°.38E, h10km, ML3.6, Error ellipse: s-maj=14.3km s-min=4.4km az=163.0*
**ISC 04 08:43:13.7±1.0, 35°.20N±0°.05×26°.41E±0°.03, h12km±7km, n53, σ1s01/67, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **0.18** | **243** | P | | **Pg** | **08 43 17.4** | **-0.3** |
| ZKR | | | | S | | **Sg** | **08 43 21.1** | **+0.5** |
| **NPS** | **Neapolis** | **0.66** | **276** | *e*PN | | **Pb** | **08 43 26.6** | **-0.5** |
| NPS | | | | *e*SN | | **Sb** | **08 43 36.0** | **-0.1** |
| **NPS** | **Neapolis** | **0.66** | **276** | *e*Pn | | **Pb** | **08 43 26.6** | **-0.5** |
| NPS | | | | *e*Sn | | **Sb** | **08 43 36.0** | **-0.1** |
| **KARP** | **Karpathos** | **0.70** | **60** | *e*PN | | **Pg** | **08 43 26.9** | **-0.5** |
| KARP | | | | *e*SN | | **Sb** | **08 43 38.8** | **+1.2** |
| **KARP** | **Karpathos** | **0.70** | **60** | P | | **Pg** | **08 43 26.7** | **-0.7** |
| KARP | | | | S | | **Sb** | **08 43 38.9** | **+1.3** |
| **KARP** | **Karpathos** | **0.70** | **60** | *e*Pn | | **Pg** | **08 43 26.9** | **-0.5** |
| KARP | | | | S | | **Sb** | **08 43 38.9** | **+1.3** |
| **LAST** | **Lasithi** | **0.77** | **268** | *e*PN | | **Pg** | **08 43 27.5** | **-1.0** |
| LAST | | | | *e*SN | | **Sb** | **08 43 40.1** | **+0.8** |
| **LAST** | **Lasithi** | **0.77** | **268** | P | | **Pg** | **08 43 27.6** | **-1.0** |
| LAST | | | | S | | **Sn** | **08 43 41.5** | **-0.3** |
| **LAST** | **Lasithi** | **0.77** | **268** | P | | **Pg** | **08 43 27.6** | **-0.9** |
| LAST | | | | *e*Sn | | **Sb** | **08 43 40.1** | **+0.8** |
| LAST | | | | S | | **Sn** | **08 43 41.5** | **-0.3** |
| **IDI** | **Anoyia** | **1.25** | **275** | *e*PN | | **Pg** | **08 43 36.5** | **-1.2** |
| **IDI** | **Anoyia** | **1.25** | **275** | P | | **Pg** | **08 43 36.7** | **-1.0** |
| IDI | | | | S | | **Sn** | **08 43 56.3** | **+2.6** |
| **IDI** | **Anoyia** | **1.25** | **275** | P | | **Pg** | **08 43 36.7** | **-1.0** |
| **SIVA** | **Sivas** | **1.32** | **263** | *e*PN | | **Pn** | **08 43 37.8** | **-0.1** |
| SIVA | | | | *e*SN | | **Sb** | **08 43 55.0** | **-0.3** |
| **SIVA** | **Sivas** | **1.32** | **263** | P | | **Pn** | **08 43 37.6** | **-0.3** |
| SIVA | | | | S | | **Sn** | **08 43 57.0** | **+1.5** |
| **SIVA** | **Sivas** | **1.32** | **263** | *e*Pn | | **Pn** | **08 43 37.8** | **-0.1** |
| SIVA | | | | *e*Sn | | **Sb** | **08 43 55.0** | **-0.3** |
| **THR6** | **Thira Island,** | **1.42** | **325** | P | | **Pg** | **08 43 40.5** | **-0.5** |
| **THR6** | **Thira Island,** | **1.42** | **325** | P | | **Pg** | **08 43 40.5** | **-0.5** |
| **THR5** | **Thira Island,** | **1.49** | **325** | P | | **Pb** | **08 43 41.0** | **-0.3** |
| **THR5** | **Thira Island,** | **1.49** | **325** | P | | **Pb** | **08 43 41.0** | **-0.3** |
| **NIS1** | **Nisyros Isl.** | **1.53** | **24** | *e*PN | | **Pb** | **08 43 42.1** | **+0.1** |
| **NIS1** | **Nisyros Isl.** | **1.53** | **24** | *e*Pn | | **Pb** | **08 43 42.1** | **+0.1** |
| **ARG** | **Arkhangelos** | **1.73** | **53** | *e*PN | | **Pn** | **08 43 44.3** | **+0.8** |
| **ARG** | **Arkhangelos** | **1.73** | **53** | *e*Pn | | **Pn** | **08 43 44.3** | **+0.8** |
| **VAM** | **Vamos** | **1.82** | **277** | *e*PN | | **Pn** | **08 43 46.1** | **+1.3** |
| **VAM** | **Vamos** | **1.82** | **277** | *e*Pn | | **Pn** | **08 43 46.1** | **+1.3** |
| **GVD** | **Gavdhos** | **1.94** | **260** | *e*PN | | **Pn** | **08 43 46.2** | **-0.2** |
| **GVD** | **Gavdhos** | **1.94** | **260** | *e*Pn | | **Pn** | **08 43 46.2** | **-0.2** |
| **APE** | **Apeiranthos** | **2.00** | **339** | *e*PN | | **Pn** | **08 43 48.0** | **+0.7** |
| **APE** | **Apeiranthos** | **2.00** | **339** | *e*Pn | | **Pn** | **08 43 48.0** | **+0.7** |
| **BDRM** | **Kayabasi** | **2.04** | **24** | *i* P | | **Pb** | **08 43 50.4** | **-0.3** |
| **BDRM** | **Kayabasi** | **2.04** | **24** | P | | **Pb** | **08 43 50.4** | **-0.3** |
| **MHLO** | **Agia Marina, M** | **2.21** | **313** | *e*PN | | **Pn** | **08 43 50.8** | **+0.7** |
| **MHLO** | **Agia Marina, M** | **2.21** | **313** | *e*Pn | | **Pn** | **08 43 50.8** | **+0.7** |
| **TURN** | **Turunc** | **2.44** | **46** | *i* P | | **Pn** | **08 43 51.0** | **-2.3** |
| TURN | | | | *i* S | | **Sn** | **08 44 21.8** | **-1.2** |
| **TURN** | **Turunc** | **2.44** | **46** | P | | **Pn** | **08 43 51.0** | **-2.3** |
| TURN | | | | S | | **Sn** | **08 44 21.8** | **-1.2** |
| **ANKY** | **Antikythira Is** | **2.62** | **286** | *e*PB | | **Pn** | **08 43 57.4** | **+1.6** |
| **ANKY** | **Antikythira Is** | **2.62** | **286** | P | | **Pn** | **08 43 57.0** | **+1.2** |
| **ANKY** | **Antikythira Is** | **2.62** | **286** | P | | **Pn** | **08 43 57.0** | **+1.2** |
| **ANKY** | **Antikythira Is** | **2.62** | **286** | *e*Pb | | **Pn** | **08 43 57.4** | **+1.6** |
| **AYDN** | **Tasoluk** | **2.73** | **25** | *i* P | | **Pb** | **08 44 01.3** | **-1.1** |
| **AYDN** | **Tasoluk** | **2.73** | **25** | P | | **Pb** | **08 44 01.3** | **-1.1** |
| **AKAS** | **Kas** | **2.80** | **67** | *i* P | | **Pn** | **08 43 59.2** | **+0.9** |
| **AKAS** | **Kas** | **2.80** | **67** | P | | **Pn** | **08 43 59.2** | **+0.9** |
| **KYTH** | **Kithira** | **2.95** | **292** | *e*PN | | **Pn** | **08 44 01.2** | **+0.9** |
| **KYTH** | **Kithira** | **2.95** | **292** | P | | **Pn** | **08 44 01.3** | **+0.9** |
| **KYTH** | **Kithira** | **2.95** | **292** | *e*Pn | | **Pn** | **08 44 01.2** | **+0.9** |
| **VLI** | **Veliai** | **3.20** | **299** | *e*PN | | **Pn** | **08 44 04.3** | **+0.6** |
| **VLI** | **Veliai** | **3.20** | **299** | P | | **Pn** | **08 44 04.4** | **+0.7** |
| **VLI** | **Veliai** | **3.20** | **299** | *e*Pn | | **Pn** | **08 44 04.3** | **+0.6** |
| **GOLH** | **Golhisar** | **3.26** | **50** | *i* P | | **Pn** | **08 44 05.9** | **+1.2** |
| **GOLH** | **Golhisar** | **3.26** | **50** | P | | **Pn** | **08 44 05.9** | **+1.2** |
| **MANT** | **Manisa** | **3.71** | **27** | *i* P | | Pn | 08 44 14.6 | +3.6 |
| **MANT** | **Manisa** | **3.71** | **27** | P | | Pn | 08 44 14.6 | +3.6 |

**WEL 04 08:43:51.3±0.3, 45°.04S×167°.00E, h5km, ML3.4/8, 1C-2D, Error ellipse: s-maj=3.2km s-min=1.8km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSZ** | **Milford Sound** | **0.75** | **61** | P* | | Pg | 08 44 04.7 | -1.0 |
| MSZ | | | | AML | | AML | 08 44 13.7 | |
| MSZ | | | | AML | | AML | 08 44 16.1 | |
| **MLZ** | **Mavora Lakes** | **0.88** | **111** | ⇑P* | | Pg | 08 44 07.6 | -0.6 |
| MLZ | | | | S* | | Sg | 08 44 19.2 | -0.6 |
| MLZ | | | | AML | | AML | 08 44 19.7 | |
| **WHZ** | **Wether Hill Ro** | **1.08** | **142** | ⇓P* | | Pg | 08 44 11.8 | -0.2 |
| WHZ | | | | S* | | Sb | 08 44 26.7 | -0.3 |
| WHZ | | | | AML | | AML | 08 44 27.8 | |
| **PYZ** | **Puysegur Point** | **1.15** | **191** | P* | | Pg | 08 44 12.4 | -0.9 |
| **WKZ** | **Wanaka** | **1.45** | **82** | PN | | Pn | 08 44 17.5 | -0.6 |
| WKZ | | | | SN | | Sb | 08 44 34.9 | -2.5 |
| WKZ | | | | AML | | AML | 08 44 36.3 | |
| **JCZ** | **Jackson Bay** | **1.58** | **53** | PN | | Pn | 08 44 19.6 | -0.5 |
| JCZ | | | | AML | | AML | 08 44 42.9 | |
| JCZ | | | | AML | | AML | 08 44 43.6 | |
| **EAZ** | **Earnscleugh** | **1.64** | **98** | PN | | Pn | 08 44 21.0 | +0.2 |
| EAZ | | | | AML | | AML | 08 44 43.7 | |
| EAZ | | | | AML | | AML | 08 44 44.5 | |
| **APZ** | **The Paps** | **1.92** | **159** | PN | | Pb | 08 44 26.1 | -0.8 |
| **TUZ** | **Tuapeka** | **2.06** | **117** | ⇓PN | | Pn | 08 44 26.8 | +0.2 |
| TUZ | | | | AML | | AML | 08 44 55.4 | |
| TUZ | | | | AML | | AML | 08 44 56.2 | |
| TUZ | | | | AML | | AML | 08 45 10.5 | |
| TUZ | | | | AML | | AML | 08 45 10.8 | |
| **SYZ** | **Scrubby Hill** | **2.12** | **136** | PN | | Pn | 08 44 27.7 | +0.4 |
| SYZ | | | | AML | | AML | 08 44 58.1 | |
| **LBZ** | **Lake Benmore** | **2.36** | **75** | PN | | Pn | 08 44 31.8 | +1.1 |
| **FOZ** | **Fox Glacier** | **2.43** | **53** | PN | | Pn | 08 44 31.3 | -0.2 |

*ATH **04** 08:58:27.6, 36°.05N×27°.69E, h49km±5km, MD3.1/9*

*ISK **04** 08:58:27.2, 36°.12N×27°.69E, h18km, MD2.9*
*CSEM **04** 08:58:28.8±0.1, 36°.05N×27°.69E, h40km, MD3.1, Error ellipse: s-maj=4.1km s-min=2.5km az=143.0*
**ISC 04 08:58:27.6**±1.1**, 36°.05N**±0°.03×**27°.68E**±0°.03**, h22**km±7km**, n53,** σ**0$^s$69**/77**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARG | Arkhangelos | 0.39 | 65 | eP | Pn | 08 58 38.6 | +0.6 |
| ARG | | | | eS | Sn | 08 58 45.6 | +0.8 |
| ARG | Arkhangelos | 0.39 | 65 | eP | Pn | 08 58 38.6 | +0.6 |
| ARG | | | | eS | Sn | 08 58 45.6 | +0.8 |
| KARP | Karpathos | 0.66 | 220 | eP | Pn | 08 58 41.9 | +0.2 |
| KARP | | | | eS | Sn | 08 58 51.4 | 0.0 |
| KARP | Karpathos | 0.66 | 220 | eP | Pn | 08 58 41.9 | +0.2 |
| KARP | | | | eS | Sn | 08 58 51.4 | 0.0 |
| NIS1 | Nisyros Isl. | 0.68 | 323 | eP | Pn | 08 58 42.2 | +0.2 |
| NIS1 | | | | eS | Sn | 08 58 52.8 | +0.8 |
| NIS1 | Nisyros Isl. | 0.68 | 323 | eP | Pn | 08 58 42.2 | +0.2 |
| NIS1 | | | | eS | Sn | 08 58 52.8 | +0.8 |
| BDRM | Kayabasi | 1.03 | 349 | i P | Pn | 08 58 46.5 | -0.3 |
| BDRM | Kayabasi | 1.03 | 349 | P | Pn | 08 58 46.5 | -0.3 |
| BODT | Bodrum | 1.05 | 343 | ePG | Pn | 08 58 46.9 | -0.1 |
| BODT | | | | eSG | Sb | 08 59 01.0 | +0.6 |
| BODT | Bodrum | 1.05 | 343 | ePg | Pn | 08 58 46.9 | -0.1 |
| BODT | | | | eSg | Sb | 08 59 01.0 | +0.6 |
| DALY | Dalyan (Mu˜la | 1.09 | 45 | ePG | Pn | 08 58 48.0 | +0.4 |
| DALY | | | | eSG | Sn | 08 59 02.9 | +0.9 |
| DALY | Dalyan (Mu˜la | 1.09 | 45 | ePg | Pn | 08 58 48.0 | +0.4 |
| DALY | | | | eSg | Sn | 08 59 02.9 | +0.9 |
| TURN | Turunc | 1.10 | 42 | S | Sb | 08 58 55.9 | -6.0 |
| YER | Yerkesik | 1.18 | 24 | ePN | Pn | 08 58 48.3 | -0.6 |
| YER | | | | eSN | Sb | 08 59 03.5 | -0.8 |
| YER | Yerkesik | 1.18 | 24 | ePn | Pn | 08 58 48.3 | -0.6 |
| YER | | | | eSn | Sb | 08 59 03.5 | -0.8 |
| FETY | Fethiye | 1.27 | 62 | ePN | Pn | 08 58 49.7 | -0.3 |
| FETY | Fethiye | 1.27 | 62 | ePn | Pn | 08 58 49.7 | -0.3 |
| AKAS | Kas | 1.56 | 83 | i S | Sn | 08 59 12.1 | -1.8 |
| AKAS | Kas | 1.56 | 83 | S | Sn | 08 59 12.1 | -1.8 |
| AYDN | Tasoluk | 1.61 | 6 | i P | Pb | 08 58 56.3 | -0.4 |
| AYDN | | | | i S | Sn | 08 59 15.4 | +0.4 |
| AYDN | Tasoluk | 1.61 | 6 | P | Pb | 08 58 56.3 | -0.4 |
| AYDN | | | | S | Sn | 08 59 15.4 | +0.4 |
| GCAM | G?zelcaml? | 1.68 | 348 | i P | Pn | 08 58 55.8 | +0.1 |
| GCAM | | | | i S | Sn | 08 59 16.3 | -0.3 |
| GCAM | G?zelcaml? | 1.68 | 348 | P | Pn | 08 58 55.8 | +0.1 |
| GCAM | | | | S | Sn | 08 59 16.3 | -0.3 |
| SMG | Samos | 1.79 | 338 | eP | Pn | 08 58 56.9 | -0.3 |
| SMG | | | | eS | Sn | 08 59 18.8 | -0.4 |
| SMG | Samos | 1.79 | 338 | eP | Pn | 08 58 56.9 | -0.3 |
| SMG | | | | eS | Sn | 08 59 18.8 | -0.4 |
| NPS | Neapolis | 1.86 | 246 | eP | Pn | 08 58 58.2 | 0.0 |
| NPS | Neapolis | 1.86 | 246 | eP | Pn | 08 58 58.2 | 0.0 |
| GOLH | Golhisar | 1.92 | 51 | i P | Pn | 08 58 59.3 | +0.3 |
| GOLH | | | | i S | Sb | 08 59 26.2 | +0.8 |
| GOLH | Golhisar | 1.92 | 51 | P | Pn | 08 58 59.3 | +0.3 |
| GOLH | | | | S | Sb | 08 59 26.2 | +0.8 |
| ELL | Elmali | 1.92 | 68 | ePN | Pn | 08 58 59.6 | +0.5 |
| ELL | Elmali | 1.92 | 68 | ePn | Pn | 08 58 59.7 | +0.5 |
| THR5 | Thira Island, | 1.92 | 282 | ePN | Pn | 08 58 59.6 | +0.6 |
| THR5 | Thira Island, | 1.92 | 282 | ePn | Pn | 08 58 59.6 | +0.6 |
| DNZL | Cakiroluk | 1.96 | 33 | i P | Pb | 08 59 02.3 | -0.5 |
| DNZL | Cakiroluk | 1.96 | 33 | P | Pb | 08 59 02.2 | -0.5 |
| DNZL | | | | S | Sb | 08 59 28.4 | +1.5 |
| LAST | Lasithi | 2.01 | 244 | eP | Pn | 08 59 00.3 | +0.1 |
| LAST | Lasithi | 2.01 | 244 | eP | Pn | 08 59 00.3 | +0.1 |
| APE | Apeiranthos | 2.01 | 301 | ePN | Pn | 08 59 01.3 | +1.1 |
| APE | Apeiranthos | 2.01 | 301 | eP | Pn | 08 59 00.2 | 0.0 |
| APE | Apeiranthos | 2.01 | 301 | eP | Pn | 08 59 00.2 | 0.0 |
| APE | Apeiranthos | 2.01 | 301 | ePn | Pn | 08 59 01.3 | +1.1 |
| IDI | Anoyia | 2.40 | 252 | eP | Pn | 08 59 05.5 | -0.1 |
| IDI | Anoyia | 2.40 | 252 | eP | Pn | 08 59 05.5 | -0.1 |
| MANT | Manisa | 2.53 | 16 | i P | Pn | 08 59 07.2 | -0.4 |
| MANT | | | | i S | Sn | 08 59 36.5 | -1.4 |
| MANT | Manisa | 2.53 | 16 | P | Pn | 08 59 07.2 | -0.4 |
| MANT | | | | S | Sn | 08 59 36.5 | -1.4 |
| SIVA | Sivas | 2.56 | 247 | eP | Pn | 08 59 07.8 | 0.0 |
| SIVA | Sivas | 2.56 | 247 | eP | Pn | 08 59 07.8 | 0.0 |
| KULA | Kula-Manisa | 2.58 | 17 | ePN | Pn | 08 59 07.5 | -0.6 |
| KULA | Kula-Manisa | 2.58 | 17 | ePn | Pn | 08 59 07.5 | -0.6 |
| KHAL | Karahalli | 2.73 | 31 | i P | Pn | 08 59 10.1 | -0.1 |
| KHAL | | | | i S | Sn | 08 59 44.2 | +1.7 |
| KHAL | Karahalli | 2.73 | 31 | P | Pn | 08 59 10.1 | -0.1 |
| KHAL | | | | S | Sn | 08 59 44.2 | +1.7 |
| AKS | Akhisar | 2.82 | 2 | ePN | Pn | 08 59 11.7 | +0.3 |
| AKS | Akhisar | 2.82 | 2 | ePn | Pn | 08 59 11.7 | +0.3 |

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*NNC **04** 09:00:54.0±1.7, 38°.40N×70°.47E, h137km±14km, mb2.5, mpv3.5, Error ellipse: s-maj=14.1km s-min=7.1km az=164.0*
*ISCJB **04** 09:00:55.8±1.4, 38°.58N±0°.10×70°.54E±0°.10, h23km, Error ellipse: s-maj=14.6km s-min=10.1km az=153.0*
**ISC 04 09:00:56.6**±2.0**, 38°.6N**±0°.1×**70°.44E**±0°.07**, h23**km**, n11,** σ**1$^s$25**/15**, 8C-3D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 1.29 | 282 | ⇑P | Pb | 09 01 20.9 | +0.8 |
| | 70nm,0.6s | | | | | | |
| DZET | | | | ⇑S | Sb | 09 01 41.8 | +5.5 |
| | 299nm,0.5s | | | | | | |
| SFK | Sufi-Kurgan | 2.79 | 58 | ⇑P | Pn | 09 01 38.6 | -1.4 |
| | 6.9nm,0.3s | | | | | | |
| SFK | | | | ⇑S | Sn | 09 02 14.6 | +1.5 |
| | 25nm,0.7s | | | | | | |
| MNAS | Manas | 4.23 | 21 | ⇓P | Pn | 09 01 59.7 | -0.1 |
| | 3.6nm,0.4s | | | | | | |
| MNAS | | | | ⇑S | Sn | 09 02 49.7 | +1.2 |
| | 3.6nm,0.3s | | | | | | |
| AML | Almayashu | 4.35 | 34 | P | Pn | 09 02 01.3 | -0.4 |
| | SNR=11 | | | | | | |
| KK31 | Karatay Array | 4.54 | 1 | P | Pn | 09 02 03.9 | -0.1 |
| | 1.5nm,0.4s,baz=186,slow=13,SNR=22 | | | | | | |
| KK31 | | | | ⇓S | Sn | 09 02 57.3 | +1.2 |
| | 5.8nm,0.6s,baz=185,slow=22 | | | | | | |
| UCH | Uchtor | 4.81 | 39 | P | Pn | 09 02 07.7 | -0.3 |
| | SNR=12 | | | | | | |
| AAK | Ala-Archa | 5.11 | 36 | ⇓P | Pn | 09 02 10.0 | -1.9 |
| | 4.3nm,0.7s | | | | | | |
| AAK | | | | ⇑S | Sn | 09 03 10.4 | +0.2 |
| | 7.3nm,0.8s | | | | | | |
| AAK | Ala-Archa | 5.11 | 36 | P | Pn | 09 02 12.5 | +0.6 |
| | SNR=6.6 | | | | | | |
| KBK | Karagaybulak | 5.34 | 39 | P | Pn | 09 02 15.8 | +0.8 |
| | SNR=7.8 | | | | | | |
| USP | Ospenovka | 5.62 | 32 | P | Pn | 09 02 18.1 | -0.7 |
| | SNR=6.2 | | | | | | |
| AB31 | Akbulak array | 13.09 | 328 | ⇑P | Pn | 09 03 56.2 | -4.7 |
| | 0.2nm,0.4s,baz=165,slow=10,SNR=3.8 | | | | | | |
| AB31 | | | | ⇑S | Sn | 09 06 23.3 | -2.4 |
| | 0.6nm,0.5s | | | | | | |

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**IDC 04 09:01:07.1**±31.0**, 18°.20S**×**177°.79W, h650**km±414km**, mb2.7**/5**, mb1 3.0**/5**, mb1mx2.8**/20**, mbtmp3.7**/5**, Error ellipse: s-maj=130.9km s-min=29.8km az=86.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 45.16 | 260 | P | P | 09 08 28.8 | 0.0 |
| | 0.4nm,0.4s,baz=96,slow=7.6,SNR=6.0 | | | | | | |
| ASAR | Alice Springs | 45.28 | 254 | P | P | 09 08 30.0 | +0.3 |
| | 0.4nm,0.4s,baz=91,slow=8.0,SNR=9.2 | | | | | | |
| QSPA | South Pole Qui | 71.86 | 180 | P | P | 09 11 26.3 | 0.0 |
| | 0.7nm,0.6s,baz=313,slow=1.9,SNR=10 | | | | | | |
| TXAR | Lajitas Array | 85.65 | 57 | P | P | 09 12 40.5 | +0.9 |
| | 0.4nm,0.7s,baz=218,slow=6.9,SNR=6.5 | | | | | | |
| ILAR | Eielson Array | 86.03 | 13 | P | P | 09 12 39.6 | -0.7 |
| | 0.2nm,0.4s,baz=214,slow=4.9,SNR=8.2 | | | | | | |

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*IDC **04** 09:19:20.1±2.4, 53°.51N×87°.80E, h0km, mb1 3.5/3, mb1mx3.3/40, mbtmp3.5/3, ML3.2/3, Error ellipse: s-maj=21.0km s-min=13.2km az=62.0*
*NNC **04** 09:19:23.6±1.5, 53°.53N×87°.21E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=10.6km s-min=6.3km az=49.0*
**ISC 04 09:19:22.8**±3.6**, 53°.6N**±0°.1×**87°.5E**±0°.2**, h10**km**, n13,** σ**0$^s$68**/16**, 6C-6D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZALV | Zalesovo Beam | 1.64 | 284 | Pn | Pn | 09 19 51.1 | -0.5 |
| | 4.7nm,0.3s,baz=108,slow=12,SNR=67 | | | | | | |
| ZALV | | | | Lg | Lg | 09 20 18.4 | |
| | 5.5nm,0.3s,baz=105,slow=24,SNR=16 | | | | | | |
| I46RU | ZALESOVO INFRA | 1.64 | 284 | i | | 09 33 50.0 | |
| | baz=98,slow=333,SNR=1.2 | | | | | | |
| KURK | Kurchatov | 6.18 | 246 | ⇓Pn | Pn | 09 20 53.1 | -0.9 |
| | 5.4nm,0.7s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 09 22 04.5 | -0.2 |
| | 6.2nm,0.7s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 09 22 33.7 | |
| | 51nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 6.28 | 245 | ⇓Pn | Pn | 09 20 55.5 | +0.1 |
| | 5.1nm,0.5s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 09 22 06.0 | -1.1 |
| | 12nm,0.6s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 09 22 36.7 | |
| | 30nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 6.28 | 245 | Pn | Pn | 09 20 56.0 | +0.6 |
| | 0.3nm,0.3s,baz=62,slow=14,SNR=30 | | | | | | |
| KURBB | | | | Sn | Sn | 09 22 08.0 | +0.9 |
| | 0.1nm,0.3s,baz=64,slow=24,SNR=4.7 | | | | | | |
| KURBB | | | | Lg | Lg | 09 22 43.9 | |
| | 0.2nm,0.3s,baz=64,slow=33,SNR=7.8 | | | | | | |
| MK31 | Makanchi Array | 7.58 | 208 | ⇑Pn | Pn | 09 21 13.4 | +0.1 |
| | 0.6nm,0.5s,baz=31,slow=11,SNR=8.7 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 09 22 39.8 | +0.5 |
| | 2.6nm,0.8s,baz=33,slow=17,SNR=4.6 | | | | | | |
| MK31 | | | | Lg | Lg | 09 23 20.4 | |
| | 7.6nm,0.9s,baz=34,slow=32,SNR=4.7 | | | | | | |
| MKAR | Makanchi Array | 7.58 | 208 | Pn | Pn | 09 21 13.1 | -0.2 |
| | 0.3nm,0.3s,baz=22,slow=11,SNR=8.6 | | | | | | |
| MKAR | | | | Sn | Sn | 09 22 38.7 | -0.5 |
| | 0.2nm,0.3s,baz=31,slow=20,SNR=6.5 | | | | | | |
| MKAR | | | | Lg | Lg | 09 23 21.4 | |
| | 0.2nm,0.3s,baz=35,slow=33,SNR=6.0 | | | | | | |
| VOSK | Vostochnaya | 9.97 | 272 | ⇓Sn | Sn | 09 23 37.4 | -0.4 |
| | 4.4nm,0.7s | | | | | | |
| CHKZ | Chkalovo | 10.04 | 277 | ⇑Sn | Sn | 09 23 39.3 | -0.1 |
| | 5.6nm,0.8s | | | | | | |
| BVA0 | Borovoye Array | 10.27 | 274 | Sn | Sn | 09 23 44.6 | -0.4 |
| | 7.0nm,1.0s,baz=78,slow=22,SNR=6.1 | | | | | | |
| BVAR | Borovoye Array | 10.27 | 274 | Pn | Pn | 09 21 51.4 | +1.4 |
| | 0.3nm,0.3s,baz=75,slow=17,SNR=3.8 | | | | | | |
| BVAR | | | | Sn | Sn | 09 23 42.4 | -2.7 |
| | 0.3nm,0.3s,baz=76,slow=24,SNR=7.6 | | | | | | |
| BVAR | | | | Lg | Lg | 09 24 54.3 | |
| | 0.1nm,0.3s,baz=78,slow=23,SNR=2.1 | | | | | | |
| BRVK | Borovoye | 10.32 | 274 | ⇑Sn | Sn | 09 23 46.2 | -0.3 |
| | 8.8nm,1.0s | | | | | | |
| ZRNK | Zerenda | 11.10 | 274 | ⇓Sn | Sn | 09 24 05.1 | -0.4 |
| | 4.8nm,0.9s | | | | | | |

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*AUST **04** 09:21:46.3±2.3, 43°.87S×173°.09E, h1km±17km, Error ellipse: s-maj=15.7km s-min=5.3km az=125.0*
*NEIC **04** 09:21:49.5±0.3, 43°.61S×172°.57E, h10km, mb5.1/18, ML5.0(WEL), Error ellipse: s-maj=6.8km s-min=2.8km az=138.0*
*NEIC Felt [IV] at Ashburton and Christchurch and [III] at Rangiora. Also felt at Kaiapoi, Leeston, Methven, Oxford, Pleasant Point, Rolleston, Taitapu and Timaru.*
*IDC **04** 09:21:49.7±0.7, 43°.37S×172°.40E, h0km, mb4.6/9, mb1 4.7/10, mb1mx4.5/27, mbtmp4.6/10, ML4.0/1, MS4.0/15, Ms1 4.1/15, ms1mx4.0/23, Error ellipse: s-maj=20.1km s-min=11.6km az=152.0*
*ISCJB **04** 09:21:49.1±0.4, 43°.51S±0°.02×172°.53E±0°.03, h11km±3km, mb4.9/23, MS4.0/14, Error ellipse: s-maj=4.7km s-min=2.7km az=138.9*
*BJI **04** 09:21:50.6, 43°.34S×172°.73E, h10km, mb5.5/13, mB5.6/10, Ms5.3/5, Ms7 4.9/5*
*WEL **04** 09:21:50.3±0.1, 43°.58S×172°.40E, h8km±1km, ML5.2/65, Error ellipse: s-maj=0.9km s-min=0.8km az=0.0, 7.*
*WEL Felt between West Coast, Otago and Canterbury, maximum reported intensity MM.*
**ISC 04 09:21:49.6**±0.6**, 43°.58S**±0°.02×**172°.46E**±0°.02**, h1**km±3km**, n285,** σ**1$^s$50**/243**, mb5.1**/24**, MS4.1**/14**, 13C-5D, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.12 | 90 | ⇓PG | Pg | 09 21 53.7 | +1.9 |
| CRLZ | | | | SG | Sg | 09 21 56.5 | +3.2 |
| CRLZ | | | | AML | AML | 09 21 56.9 | |
| CRLZ | | | | AML | AML | 09 21 56.9 | |
| CRLZ | | | | AML | AML | 09 21 57.0 | |
| CRLZ | Canterbury Las | 0.12 | 90 | Pg | Pg | 09 21 52.9 | +1.0 |
| CRLZ | | | | ⇑Pg | Pg | 09 21 53.8 | +2.0 |
| MQZ | McQueen's Vall | 0.19 | 133 | ⇓PG | Pg | 09 21 55.2 | +2.0 |
| MQZ | | | | SG | Sg | 09 21 59.1 | +3.3 |
| MQZ | | | | AML | AML | 09 21 59.6 | |
| MQZ | McQueen's Vall | 0.19 | 133 | ePg | Pg | 09 21 55.3 | +2.0 |
| OXZ | Oxford | 0.40 | 309 | ⇓PG | Pg | 09 21 57.1 | -0.1 |
| OXZ | | | | SG | Sg | 09 22 02.1 | -0.2 |
| OXZ | Oxford | 0.40 | 309 | ePg | Pg | 09 21 57.2 | -0.1 |
| LTZ | Lake Taylor | 0.81 | 350 | ⇑P* | Pg | 09 22 05.5 | +0.5 |
| LTZ | | | | S* | Sg | 09 22 16.3 | +0.9 |
| LTZ | | | | AML | AML | 09 22 16.8 | |
| LTZ | Lake Taylor | 0.81 | 350 | ⇑P* | Pg | 09 22 05.5 | +0.5 |
| LTZ | | | | S* | Sg | 09 22 16.3 | +0.9 |
| RPZ | Rata Peaks | 1.03 | 262 | ⇑P* | Pg | 09 22 09.4 | 0.0 |
| RPZ | | | | AML | AML | 09 22 28.5 | |
| RPZ | | | | AML | AML | 09 22 34.3 | |
| RPZ | Rata Peaks | 1.03 | 262 | Pg | Pg | 09 22 09.4 | 0.0 |
| | 3µm,0.3s,baz=100,slow=2.6,SNR=1950 | | | | | | |
| RPZ | | | | Lg | Lg | 09 22 23.3 | |
| | 3µm,0.3s,baz=217,slow=20,SNR=41 | | | | | | |
| RPZ | | | | LR | LR | 09 22 45.7 | |
| | comp=Z,8µm,18.8s,baz=246,slow=54 | | | | | | |
| WVZ | Waitaha Valley | 1.35 | 291 | P* | Pn | 09 22 14.9 | -0.8 |
| WVZ | | | | AML | AML | 09 22 37.0 | |
| WVZ | | | | AML | AML | 09 22 38.1 | |
| WVZ | Waitaha Valley | 1.35 | 291 | Pn | Pn | 09 22 14.8 | -0.8 |
| KHZ | Kahutara | 1.40 | 35 | PN | Pn | 09 22 14.6 | -1.6 |
| KHZ | | | | AML | AML | 09 22 43.6 | |
| KHZ | | | | AML | AML | 09 22 50.4 | |
| KHZ | Kahutara | 1.40 | 35 | ePn | Pn | 09 22 14.8 | -1.5 |
| LBZ | Lake Benmore | 1.83 | 243 | PN | Pn | 09 22 20.6 | -1.6 |
| LBZ | | | | AML | AML | 09 22 56.3 | |
| LBZ | | | | AML | AML | 09 23 00.8 | |
| LBZ | Lake Benmore | 1.83 | 243 | Pn | Pn | 09 22 20.8 | -1.4 |
| THZ | Tophouse | 1.84 | 10 | PN | Pn | 09 22 20.6 | -1.8 |
| THZ | | | | AML | AML | 09 22 55.1 | |
| THZ | | | | AML | AML | 09 22 58.5 | |
| THZ | Tophouse | 1.84 | 10 | ePn | Pn | 09 22 20.6 | -1.8 |
| THZ | | | | eSn | Sg | 09 22 54.7 | +6.0 |
| DSZ | Denniston Nort | 1.89 | 345 | PN | Pn | 09 22 21.3 | -1.8 |
| DSZ | | | | AML | AML | 09 22 52.8 | |
| DSZ | | | | AML | AML | 09 22 55.1 | |
| DSZ | Denniston Nort | 1.89 | 345 | Pn | Pn | 09 22 21.4 | -1.7 |
| ODZ | Otahua Downs | 1.96 | 221 | ⇑PN | Pn | 09 22 22.4 | -1.6 |
| ODZ | | | | AML | AML | 09 22 59.4 | |
| ODZ | | | | AML | AML | 09 23 04.3 | |
| ODZ | Otahua Downs | 1.96 | 221 | ⇑Pn | Pn | 09 22 22.4 | -1.6 |
| ODZ | | | | ePn | Pg | 09 22 27.6 | +0.3 |
| FOZ | Fox Glacier | 2.02 | 269 | ⇓PN | Pn | 09 22 23.1 | -1.6 |
| FOZ | | | | AML | AML | 09 22 32.7 | |
| FOZ | | | | AML | AML | 09 22 58.2 | |
| FOZ | Fox Glacier | 2.02 | 269 | Pn | Pn | 09 22 23.1 | -1.6 |
| BSWZ | Blackbirch Sta | 2.13 | 30 | PN | Pn | 09 22 25.2 | -1.1 |
| BSWZ | | | | AML | AML | 09 22 57.2 | |
| BSWZ | | | | AML | AML | 09 23 24.1 | |
| BSWZ | Blackbirch Sta | 2.13 | 30 | Pn | Pn | 09 22 25.2 | -1.1 |
| CMWZ | Cape Campbell | 2.24 | 36 | PN | Pn | 09 22 27.6 | -0.2 |
| CMWZ | | | | AML | AML | 09 23 22.5 | |
| CMWZ | | | | AML | AML | 09 23 34.8 | |
| CMWZ | Cape Campbell | 2.24 | 36 | Pn | Pn | 09 22 27.6 | -0.2 |
| TUWZ | Tuamarina | 2.41 | 28 | PN | Pn | 09 22 28.5 | -1.6 |
| TUWZ | | | | AML | AML | 09 23 14.6 | |
| TUWZ | | | | AML | AML | 09 23 21.6 | |
| TUWZ | Tuamarina | 2.41 | 28 | Pn | Pn | 09 22 28.5 | -1.6 |
| NNZ | Nelson | 2.45 | 16 | PN | Pn | 09 22 29.5 | -1.2 |
| NNZ | | | | AML | AML | 09 23 18.3 | |
| NNZ | | | | AML | AML | 09 23 23.1 | |
| NNZ | Nelson | 2.45 | 16 | Pn | Pn | 09 22 29.5 | -1.2 |
| HHSZ | Highcliff Hill | 2.66 | 209 | ⇑PN | Pn | 09 22 32.0 | -1.7 |
| HHSZ | Highcliff Hill | 2.66 | 209 | Pn | Pn | 09 22 32.0 | -1.7 |
| TCW | Tory Channel | 2.72 | 30 | PN | Pn | 09 22 32.5 | -1.9 |
| TCW | | | | AML | AML | 09 23 27.0 | |
| TCW | | | | AML | AML | 09 23 28.0 | |
| TCW | Tory Channel | 2.72 | 30 | Pn | Pn | 09 22 32.5 | -1.9 |
| JCZ | Jackson Bay | 2.73 | 258 | PN | Pn | 09 22 32.7 | -1.9 |
| JCZ | | | | AML | AML | 09 23 22.1 | |
| JCZ | | | | AML | AML | 09 23 26.8 | |
| JCZ | Jackson Bay | 2.73 | 258 | Pn | Pn | 09 22 32.7 | -1.9 |
| QRZ | Quartz Range | 2.75 | 1 | PN | Pn | 09 22 32.8 | -2.0 |
| QRZ | | | | AML | AML | 09 22 45.2 | |
| QRZ | | | | AML | AML | 09 22 45.2 | |
| QRZ | | | | AML | AML | 09 23 22.0 | |
| QRZ | | | | AML | AML | 09 23 22.0 | |
| QRZ | Quartz Range | 2.75 | 1 | Pn | Pn | 09 22 32.8 | -2.0 |
| WKZ | Wanaka | 2.77 | 242 | PN | Pn | 09 22 33.3 | -1.9 |
| WKZ | | | | AML | AML | 09 23 30.6 | |
| WKZ | | | | AML | AML | 09 23 30.6 | |
| WKZ | | | | AML | AML | 09 23 37.5 | |
| WKZ | | | | AML | AML | 09 23 37.5 | |
| WKZ | Wanaka | 2.77 | 242 | ePn | Pn | 09 22 33.6 | -1.6 |
| EAZ | Earnscleugh | 2.80 | 233 | PN | Pn | 09 22 33.8 | -1.7 |
| EAZ | | | | AML | AML | 09 23 21.6 | |
| EAZ | | | | AML | AML | 09 23 30.0 | |
| EAZ | Earnscleugh | 2.80 | 233 | Pn | Pn | 09 22 33.8 | -1.7 |
| BHW | Baring Head | 2.81 | 40 | PN | Pn | 09 22 33.4 | -2.1 |
| BHW | | | | AML | AML | 09 23 40.8 | |
| BHW | | | | AML | AML | 09 23 59.8 | |
| BHW | Baring Head | 2.81 | 40 | Pn | Pn | 09 22 33.4 | -2.1 |
| SNZO | South Karori | 2.81 | 37 | ePn | Pn | 09 22 33.5 | -2.1 |
| WEL | Wellington | 2.86 | 37 | PN | Pn | 09 22 34.5 | -1.7 |
| WEL | Wellington | 2.86 | 37 | Pn | Pn | 09 22 34.5 | -1.7 |
| PLWZ | Palliser | 2.88 | 47 | PN | Pn | 09 22 34.2 | -2.4 |
| DUWZ | D'Urville Isla | 2.98 | 22 | AML | AML | 09 23 36.7 | |
| DUWZ | | | | AML | AML | 09 23 43.1 | |
| MSWZ | Moikau Station | 2.99 | 45 | AML | AML | 09 23 14.8 | |
| MSWZ | | | | AML | AML | 09 23 18.4 | |
| TUZ | Tuapeka | 3.12 | 219 | PN | Pn | 09 22 38.0 | -1.8 |
| TUZ | | | | AML | AML | 09 23 41.1 | |
| TUZ | | | | AML | AML | 09 23 41.2 | |
| TUZ | | | | AML | AML | 09 23 43.7 | |
| TUZ | | | | AML | AML | 09 23 43.7 | |
| TUZ | Tuapeka | 3.12 | 219 | Pn | Pn | 09 22 38.0 | -1.8 |
| CAW | Cannon Point | 3.13 | 39 | PN | Pn | 09 22 37.7 | -2.4 |
| CAW | | | | AML | AML | 09 23 56.4 | |
| CAW | | | | AML | AML | 09 23 59.9 | |
| CAW | Cannon Point | 3.13 | 39 | Pn | Pn | 09 22 37.7 | -2.4 |
| TRWZ | Traveller | 3.23 | 49 | ⇑PN | Pn | 09 22 39.2 | -2.2 |
| TRWZ | | | | AML | AML | 09 24 18.4 | |
| TRWZ | | | | AML | AML | 09 24 40.0 | |
| TRWZ | Traveller | 3.23 | 49 | Pn | Pn | 09 22 39.2 | -2.2 |
| KIW | Kapiti Island | 3.27 | 35 | PN | Pn | 09 22 39.9 | -2.0 |
| KIW | | | | AML | AML | 09 23 49.0 | |
| KIW | | | | AML | AML | 09 24 00.4 | |
| KIW | Kapiti Island | 3.27 | 35 | Pn | Pn | 09 22 39.9 | -2.0 |
| MTW | Mount Morrison | 3.30 | 44 | PN | Pn | 09 22 39.9 | -2.5 |
| MTW | | | | AML | AML | 09 23 08.2 | |
| MTW | | | | AML | AML | 09 23 09.1 | |
| MTW | Mount Morrison | 3.30 | 44 | Pn | Pn | 09 22 39.9 | -2.5 |
| OGWZ | Otaki Gorge | 3.41 | 37 | PN | Pn | 09 22 41.9 | -2.1 |
| OGWZ | Otaki Gorge | 3.41 | 37 | Pn | Pn | 09 22 41.9 | -2.1 |
| MSZ | Milford Sound | 3.44 | 250 | PN | Pn | 09 22 42.4 | -1.9 |
| MSZ | | | | AML | AML | 09 23 42.4 | |
| MSZ | | | | AML | AML | 09 23 42.4 | |
| MSZ | | | | AML | AML | 09 23 42.5 | |
| MSZ | | | | AML | AML | 09 23 42.5 | |
| MSZ | Milford Sound | 3.44 | 250 | Pn | Pn | 09 22 42.4 | -1.9 |
| HOWZ | Holdsworth Sta | 3.51 | 41 | PN | Pn | 09 22 43.4 | -1.8 |
| HOWZ | Holdsworth Sta | 3.51 | 41 | Pn | Pn | 09 22 43.4 | -1.8 |
| TMWZ | Te Maipa | 3.54 | 47 | PN | Pn | 09 22 43.0 | -2.8 |
| TMWZ | Te Maipa | 3.54 | 47 | Pn | Pn | 09 22 43.0 | -2.8 |
| MLZ | Mavora Lakes | 3.54 | 239 | PN | Pn | 09 22 44.1 | -1.6 |
| MLZ | | | | AML | AML | 09 23 46.1 | |
| MLZ | | | | AML | AML | 09 23 53.4 | |
| MLZ | Mavora Lakes | 3.54 | 239 | Pn | Pn | 09 22 44.1 | -1.6 |
| MRZ | Mangatainoka R | 3.72 | 40 | PN | Pn | 09 22 45.5 | -2.7 |
| MRZ | | | | AML | AML | 09 24 03.5 | |
| MRZ | | | | AML | AML | 09 24 12.0 | |
| MRZ | Mangatainoka R | 3.72 | 40 | Pn | Pn | 09 22 45.5 | -2.7 |
| TIWZ | Tintock | 3.78 | 43 | PN | Pn | 09 22 46.3 | -2.7 |
| TIWZ | | | | AML | AML | 09 23 34.6 | |
| TIWZ | | | | AML | AML | 09 23 35.9 | |
| TIWZ | Tintock | 3.78 | 43 | Pn | Pn | 09 22 46.3 | -2.7 |
| SYZ | Scrubby Hill | 3.78 | 217 | PN | Pn | 09 22 47.5 | -1.5 |
| SYZ | | | | AML | AML | 09 24 05.4 | |
| SYZ | | | | AML | AML | 09 24 05.5 | |
| SYZ | | | | AML | AML | 09 24 10.4 | |
| SYZ | | | | AML | AML | 09 24 10.9 | |
| SYZ | Scrubby Hill | 3.78 | 217 | Pn | Pn | 09 22 47.5 | -1.5 |
| CPWZ | Castlepoint | 3.85 | 47 | PN | Pn | 09 22 49.1 | -0.8 |
| CPWZ | Castlepoint | 3.85 | 47 | Pn | Pn | 09 22 49.1 | -0.8 |
| WHZ | Wether Hill Ro | 3.96 | 233 | ⇑PN | Pn | 09 22 48.8 | -2.7 |
| WHZ | | | | AML | AML | 09 24 06.8 | |
| WHZ | | | | AML | AML | 09 24 10.1 | |
| WHZ | Wether Hill Ro | 3.96 | 233 | ePn | Pn | 09 22 49.0 | -2.5 |
| PRWZ | Pori Road | 3.99 | 42 | PN | Pn | 09 22 50.1 | -1.7 |
| PRWZ | Pori Road | 3.99 | 42 | Pn | Pn | 09 22 50.1 | -1.7 |
| POWZ | Post Office Ro | 4.02 | 39 | PN | Pn | 09 22 49.9 | -2.5 |
| POWZ | Post Office Ro | 4.02 | 39 | Pn | Pn | 09 22 49.9 | -2.5 |
| BFZ | Birch Farm | 4.04 | 45 | ⇑PN | Pn | 09 22 49.6 | -2.9 |
| BFZ | | | | AML | AML | 09 23 36.9 | |
| BFZ | | | | AML | AML | 09 24 26.4 | |
| BFZ | | | | AML | AML | 09 24 26.4 | |
| BFZ | | | | AML | AML | 09 24 26.8 | |
| BFZ | Birch Farm | 4.04 | 45 | ePn | Pn | 09 22 51.6 | -0.9 |
| WAZ | Wanganui | 4.26 | 27 | PN | Pn | 09 22 55.4 | -0.1 |
| WAZ | | | | AML | AML | 09 24 31.8 | |
| WAZ | | | | AML | AML | 09 24 59.8 | |
| WAZ | Wanganui | 4.26 | 27 | Pn | Pn | 09 22 55.5 | -0.1 |
| LREZ | Lake Rotokare | 4.36 | 20 | ⇑PN | Pn | 09 22 57.5 | +0.5 |
| TSZ | Takapari Road | 4.38 | 38 | PN | Pn | 09 22 54.5 | -2.7 |
| TSZ | | | | AML | AML | 09 24 27.3 | |
| TSZ | | | | AML | AML | 09 24 36.6 | |
| TSZ | Takapari Road | 4.38 | 38 | Pn | Pn | 09 22 54.5 | -2.7 |
| PREZ | Palmer Road | 4.42 | 17 | PN | Pn | 09 22 57.8 | 0.0 |
| PREZ | Palmer Road | 4.42 | 17 | Pn | Pn | 09 22 57.8 | 0.0 |
| NWEZ | Newall Road | 4.43 | 14 | PN | Pn | 09 22 57.9 | 0.0 |
| NWEZ | Newall Road | 4.43 | 14 | Pn | Pn | 09 22 57.9 | 0.0 |
| KHEZ | Kahui Hut | 4.43 | 16 | PN | Pn | 09 22 57.8 | -0.3 |
| KHEZ | Kahui Hut | 4.43 | 16 | Pn | Pn | 09 22 57.8 | -0.3 |
| NEZ | North Egmont | 4.47 | 16 | PN | Pn | 09 22 58.1 | -0.5 |
| NEZ | North Egmont | 4.47 | 16 | Pn | Pn | 09 22 58.1 | -0.5 |
| PKE | Pukeiti | 4.53 | 15 | PN | Pn | 09 22 59.0 | -0.2 |
| PKE | | | | AML | AML | 09 23 59.2 | |
| PKE | | | | AML | AML | 09 24 20.2 | |
| PKE | Pukeiti | 4.53 | 15 | Pn | Pn | 09 22 59.0 | -0.2 |
| APZ | The Paps | 4.54 | 223 | PN | Pn | 09 22 57.4 | -2.0 |
| APZ | | | | AML | AML | 09 24 24.4 | |
| APZ | | | | AML | AML | 09 24 28.6 | |
| APZ | The Paps | 4.54 | 223 | Pn | Pn | 09 22 57.4 | -2.0 |
| DREZ | Durham Road | 4.57 | 17 | PN | Pn | 09 22 59.4 | -0.5 |
| DREZ | Durham Road | 4.57 | 17 | Pn | Pn | 09 22 59.4 | -0.5 |
| MHEZ | Mangahewa | 4.71 | 18 | PN | Pn | 09 23 02.1 | +0.3 |
| MHEZ | Mangahewa | 4.71 | 18 | Pn | Pn | 09 23 02.1 | +0.3 |
| MTVZ | Mangateitei | 4.76 | 29 | AML | AML | 09 24 23.3 | |
| MTVZ | | | | AML | AML | 09 24 51.5 | |
| VRZ | Vera Road | 4.77 | 22 | PN | Pn | 09 23 02.0 | -0.6 |
| VRZ | | | | AML | AML | 09 24 03.1 | |
| VRZ | | | | AML | AML | 09 24 41.4 | |
| VRZ | Vera Road | 4.77 | 22 | Pn | Pn | 09 23 02.0 | -0.6 |
| PKVZ | Pokaka | 4.80 | 28 | PN | Pn | 09 23 03.0 | 0.0 |
| PKVZ | | | | AML | AML | 09 24 45.9 | |
| PKVZ | | | | AML | AML | 09 24 47.1 | |
| PKVZ | Pokaka | 4.80 | 28 | Pn | Pn | 09 23 03.0 | 0.0 |
| PXZ | Pawanui | 4.83 | 44 | PN | Pn | 09 23 00.8 | -2.6 |
| PXZ | | | | AML | AML | 09 24 52.7 | |
| PXZ | | | | AML | AML | 09 25 16.6 | |
| PXZ | Pawanui | 4.83 | 44 | Pn | Pn | 09 23 00.8 | -2.6 |
| WNVZ | Wahianoa | 4.85 | 30 | PN | Pn | 09 23 02.7 | -1.2 |
| WNVZ | Wahianoa | 4.85 | 30 | Pn | Pn | 09 23 02.7 | -1.2 |
| PYZ | Puysegur Point | 4.86 | 236 | PN | Pn | 09 23 01.5 | -2.2 |
| PYZ | Puysegur Point | 4.86 | 236 | Pn | Pn | 09 23 01.5 | -2.2 |
| DRZ | Dome Shelter | 4.89 | 30 | PN | Pn | 09 23 04.4 | -0.1 |
| DRZ | | | | AML | AML | 09 24 46.0 | |
| DRZ | | | | AML | AML | 09 24 47.1 | |
| DRZ | Dome Shelter | 4.89 | 30 | Pn | Pn | 09 23 04.4 | -0.1 |
| WHVZ | Whangaehu Hut | 4.89 | 30 | PN | Pn | 09 23 03.5 | -0.9 |
| FWVZ | Far West T-bar | 4.90 | 29 | PN | Pn | 09 23 03.2 | -1.4 |
| FWVZ | | | | AML | AML | 09 24 02.8 | |
| FWVZ | | | | AML | AML | 09 24 45.9 | |
| FWVZ | Far West T-bar | 4.90 | 29 | Pn | Pn | 09 23 04.0 | -0.6 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **TUVZ** | **Tukino** | **4.93** | **30** | PN | **Pn** | **09 23 04.0** | **-0.9** |
| TUVZ | | | | AML | AML | 09 24 05.7 | |
| TUVZ | | | | AML | AML | 09 24 08.5 | |
| **TUVZ** | **Tukino** | **4.93** | **30** | Pn | **Pn** | **09 23 04.0** | **-0.9** |
| **WPVZ** | **Whakapapa** | **4.95** | **29** | PN | **Pn** | **09 23 04.3** | **-0.8** |
| WPVZ | | | | AML | AML | 09 24 43.9 | |
| WPVZ | | | | AML | AML | 09 24 48.8 | |
| **WPVZ** | **Whakapapa** | **4.95** | **29** | Pn | **Pn** | **09 23 04.3** | **-0.8** |
| **COVZ** | **Chateau Observ** | **4.95** | **29** | PN | **Pn** | **09 23 04.6** | **-0.6** |
| **NGZ** | **Ngauruhoe** | **4.99** | **29** | PN | **Pn** | **09 23 04.9** | **-0.8** |
| NGZ | | | | AML | AML | 09 24 44.3 | |
| NGZ | | | | AML | AML | 09 25 05.6 | |
| **NGZ** | **Ngauruhoe** | **4.99** | **29** | Pn | **Pn** | **09 23 05.2** | **-0.5** |
| **KAHZ** | **Kahuranaki** | **5.02** | **43** | PN | Pn | 09 23 03.7 | -2.4 |
| **KAHZ** | **Kahuranaki** | **5.02** | **43** | Pn | Pn | 09 23 03.7 | -2.4 |
| **OTVZ** | **Oturere** | **5.02** | **30** | PN | **Pn** | **09 23 05.2** | **-1.0** |
| OTVZ | | | | AML | AML | 09 24 48.3 | |
| OTVZ | | | | AML | AML | 09 25 20.0 | |
| **OTVZ** | **Oturere** | **5.02** | **30** | Pn | **Pn** | **09 23 05.2** | **-1.0** |
| **TWVZ** | **Taurewa** | **5.03** | **27** | PN | **Pn** | **09 23 05.8** | **-0.4** |
| TWVZ | | | | AML | AML | 09 24 31.8 | |
| TWVZ | | | | AML | AML | 09 24 45.1 | |
| **TWVZ** | **Taurewa** | **5.03** | **27** | Pn | **Pn** | **09 23 05.8** | **-0.4** |
| **WTVZ** | **West Tongariro** | **5.04** | **29** | PN | **Pn** | **09 23 05.0** | **-1.3** |
| WTVZ | | | | AML | AML | 09 24 03.4 | |
| WTVZ | | | | AML | AML | 09 24 06.6 | |
| **WTVZ** | **West Tongariro** | **5.04** | **29** | Pn | **Pn** | **09 23 05.8** | **-0.5** |
| **KRVZ** | **Karewarewa** | **5.08** | **29** | PN | **Pn** | **09 23 06.3** | **-0.6** |
| KRVZ | | | | AML | AML | 09 24 06.1 | |
| KRVZ | | | | AML | AML | 09 24 08.7 | |
| **KRVZ** | **Karewarewa** | **5.08** | **29** | Pn | **Pn** | **09 23 06.3** | **-0.6** |
| **KWHZ** | **Kaweka Forest** | **5.11** | **37** | PN | **Pn** | **09 23 05.0** | **-2.3** |
| **MCHZ** | **McNeill Hill** | **5.21** | **39** | PN | Pn | 09 23 05.2 | -3.4 |
| **MCHZ** | **McNeill Hill** | **5.21** | **39** | Pn | Pn | 09 23 05.2 | -3.4 |
| **RATZ** | **Rangitukua** | **5.32** | **29** | AML | AML | 09 24 14.2 | |
| RATZ | | | | AML | AML | 09 24 14.6 | |
| **RATZ** | **Rangitukua** | **5.32** | **29** | Pn | **Pn** | **09 23 13.0** | **+2.8** |
| **BKZ** | **Black Stump Fm** | **5.35** | **36** | PN | Pn | 09 23 07.7 | -2.8 |
| BKZ | | | | AML | AML | 09 25 06.5 | |
| BKZ | | | | AML | AML | 09 25 10.1 | |
| **BKZ** | **Black Stump Fm** | **5.35** | **36** | *e*Pn | **Pn** | **09 23 10.5** | **-0.1** |
| **HIZ** | **Hauiti** | **5.37** | **20** | ⇓PN | **Pn** | **09 23 09.5** | **-1.3** |
| HIZ | | | | AML | AML | 09 24 52.3 | |
| HIZ | | | | AML | AML | 09 24 56.7 | |
| **HIZ** | **Hauiti** | **5.37** | **20** | *e*Pn | **Pn** | **09 23 09.8** | **-1.1** |
| **ARHZ** | **Aropaoanui** | **5.49** | **40** | PN | **Pn** | **09 23 10.9** | **-1.6** |
| **ARHZ** | **Aropaoanui** | **5.49** | **40** | Pn | **Pn** | **09 23 10.9** | **-1.6** |
| **NMHZ** | **Naumai** | **5.54** | **38** | PN | Pn | 09 23 10.7 | -2.5 |
| **NMHZ** | **Naumai** | **5.54** | **38** | Pn | Pn | 09 23 10.7 | -2.5 |
| **MRHZ** | **Matea Rd** | **5.60** | **34** | PN | Pn | 09 23 11.1 | -2.9 |
| **TLZ** | **Tolley Road** | **5.74** | **25** | PN | **Pn** | **09 23 14.7** | **-1.1** |
| **TLZ** | **Tolley Road** | **5.74** | **25** | Pn | **Pn** | **09 23 14.8** | **-1.1** |
| **RAHZ** | **Arahi** | **5.81** | **38** | PN | **Pn** | **09 23 15.2** | **-1.7** |
| **RAHZ** | **Arahi** | **5.81** | **38** | Pn | **Pn** | **09 23 15.2** | **-1.7** |
| **KNZ** | **Kokohu** | **6.01** | **43** | PN | **Pn** | **09 23 18.6** | **-1.0** |
| KNZ | | | | AML | AML | 09 24 29.0 | |
| KNZ | | | | AML | AML | 09 26 20.9 | |
| **MHGZ** | **Mahia Peninsul** | **6.02** | **45** | PN | **Pn** | **09 23 18.1** | **-1.7** |
| **MHGZ** | **Mahia Peninsul** | **6.02** | **45** | Pn | **Pn** | **09 23 18.1** | **-1.7** |
| **SNGZ** | **Shannon Statio** | **6.04** | **39** | PN | Pn | 09 23 17.4 | -2.7 |
| **SNGZ** | **Shannon Statio** | **6.04** | **39** | Pn | Pn | 09 23 17.4 | -2.7 |
| **PRGZ** | **Paritu Road** | **6.19** | **43** | PN | Pn | 09 23 18.5 | -3.6 |
| **PRGZ** | **Paritu Road** | **6.19** | **43** | Pn | Pn | 09 23 19.0 | -3.1 |
| **TOZ** | **Tahuroa Road** | **6.28** | **23** | PN | **Pn** | **09 23 21.3** | **-2.0** |
| TOZ | | | | AML | AML | 09 25 28.5 | |
| TOZ | | | | AML | AML | 09 25 42.7 | |
| **TOZ** | **Tahuroa Road** | **6.28** | **23** | Pn | **Pn** | **09 23 21.3** | **-2.0** |
| **RIGZ** | **Rimuhau** | **6.30** | **41** | PN | Pn | 09 23 19.3 | -4.3 |
| **URZ** | **Urewera** | **6.37** | **35** | PN | Pn | 09 23 21.0 | -3.6 |
| URZ | | | | AML | AML | 09 24 44.0 | |
| URZ | | | | AML | AML | 09 25 36.0 | |
| **URZ** | **Urewera** | **6.37** | **35** | Pn | Pn | 09 23 21.1 | -3.4 |
| | 3.9nm,0.3s,baz=256,slow=5.0,SNR=26 | | | | | | |
| URZ | | | | Sn | Sn | 09 24 31.1 | -6.8 |
| | 15nm,0.3s,baz=81,slow=14,SNR=9.4 | | | | | | |
| URZ | | | | LR | LR | 09 26 24.0 | |
| | comp=Z,3µm,19.4s,baz=262,slow=44 | | | | | | |
| **URZ** | **Urewera** | **6.37** | **35** | *e*Pn | **Pn** | **09 23 22.6** | **-2.0** |
| URZ | | | | Sn | Sn | 09 24 31.1 | -6.8 |
| **MWZ** | **Matawai** | **6.49** | **38** | ⇑PN | Pn | 09 23 22.3 | -3.9 |
| MWZ | | | | AML | AML | 09 24 37.9 | |
| MWZ | | | | AML | AML | 09 24 38.1 | |
| **MWZ** | **Matawai** | **6.49** | **38** | Pn | Pn | 09 23 22.3 | -3.9 |
| **TGRZ** | **Tauranga** | **6.51** | **28** | AML | AML | 09 24 48.4 | |
| **TKGZ** | **Te Karaka** | **6.55** | **40** | PN | Pn | 09 23 23.4 | -3.6 |
| **TKGZ** | **Te Karaka** | **6.55** | **40** | Pn | Pn | 09 23 23.4 | -3.6 |
| **MKAZ** | **Moumakai** | **6.78** | **19** | PN | **Pn** | **09 23 28.7** | **-1.5** |
| MKAZ | | | | AML | AML | 09 25 52.6 | |
| MKAZ | | | | AML | AML | 09 26 07.8 | |
| **MKAZ** | **Moumakai** | **6.78** | **19** | Pn | **Pn** | **09 23 28.7** | **-1.5** |
| **TWGZ** | **Tauwhareparae** | **6.82** | **40** | PN | Pn | 09 23 27.5 | -3.3 |
| **TWGZ** | **Tauwhareparae** | **6.82** | **40** | Pn | Pn | 09 23 27.5 | -3.3 |
| **ETAZ** | **East Tamaki Re** | **6.88** | **17** | PN | **Pn** | **09 23 30.3** | **-1.2** |
| **ETAZ** | **East Tamaki Re** | **6.88** | **17** | Pn | **Pn** | **09 23 30.3** | **-1.2** |
| **RVAZ** | **Riverhead Bore** | **6.99** | **14** | PN | **Pn** | **09 23 32.1** | **-0.9** |
| **RVAZ** | **Riverhead Bore** | **6.99** | **14** | Pn | **Pn** | **09 23 32.1** | **-0.9** |
| **PUZ** | **Puketiti** | **7.04** | **41** | PN | Pn | 09 23 29.8 | -4.0 |
| PUZ | | | | AML | AML | 09 25 46.6 | |
| PUZ | | | | AML | AML | 09 25 52.7 | |
| **PUZ** | **Puketiti** | **7.04** | **41** | Pn | Pn | 09 23 29.8 | -4.0 |
| **WIAZ** | **Waiheke Island** | **7.08** | **18** | PN | **Pn** | **09 23 33.1** | **-1.1** |
| **HAZ** | **Te Kaha** | **7.08** | **37** | PN | Pn | 09 23 30.7 | -3.6 |
| **KUZ** | **Kuaotunu** | **7.26** | **21** | PN | **Pn** | **09 23 35.1** | **-1.7** |
| KUZ | | | | AML | AML | 09 26 12.5 | |
| KUZ | | | | AML | AML | 09 26 23.1 | |
| **KUZ** | **Kuaotunu** | **7.26** | **21** | Pn | **Pn** | **09 23 35.1** | **-1.7** |
| **WMGZ** | **Waiomatatini S** | **7.32** | **40** | PN | Pn | 09 23 33.6 | -3.9 |
| **WMGZ** | **Waiomatatini S** | **7.32** | **40** | Pn | Pn | 09 23 33.6 | -3.9 |
| **MXZ** | **Matakaoa Point** | **7.47** | **38** | PN | **Pn** | **09 23 37.4** | **-2.3** |
| MXZ | | | | AML | AML | 09 25 38.5 | |
| MXZ | | | | AML | AML | 09 25 49.7 | |
| **MXZ** | **Matakaoa Point** | **7.47** | **38** | Pn | **Pn** | **09 23 37.4** | **-2.3** |
| **OUZ** | **Omahuta** | **8.39** | **6** | PN | **Pn** | **09 23 51.8** | **-0.4** |
| OUZ | | | | AML | AML | 09 24 15.6 | |
| OUZ | | | | AML | AML | 09 26 51.0 | |
| **OUZ** | **Omahuta** | **8.39** | **6** | *e*Pn | **Pn** | **09 23 52.5** | **+0.2** |
| **MILA** | **Mila** | **18.90** | **282** | P | **Pn** | **09 26 13.4** | **+1.3** |
| | baz=19,SNR=5.3 | | | | | | |
| **CNB** | **Canberra Magne** | **19.61** | **287** | P | **Pn** | **09 26 21.1** | **+0.5** |
| | baz=20,SNR=8.7 | | | | | | |
| **CAN** | **Canberra** | **19.86** | **287** | *e*P | **P** | **09 26 21.8** | **-0.3** |
| | 23nm,1.0s | | | | | | |
| **YNG** | **Young** | **20.83** | **288** | P | Pn | 09 26 34.1 | -0.9 |
| | baz=21,SNR=6.0 | | | | | | |
| **ARMA** | **Armidale** | **21.12** | **302** | P | **P** | **09 26 38.2** | **+2.3** |
| | baz=22,SNR=4.2 | | | | | | |
| **ARMA** | **Armidale** | **21.12** | **302** | *e*P | **P** | **09 26 37.7** | **+1.8** |
| | 186nm,2.1s | | | | | | |
| **TOO** | **Toolangi** | **21.30** | **277** | P | **P** | **09 26 40.0** | **+2.4** |
| | baz=22,SNR=6.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.02** | **345** | *e*LR | LR | 09 31 30.3 | |
| | 682nm,22.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **22.02** | **345** | P | **P** | **09 26 43.5** | **-2.0** |
| | 9.6nm,1.0s,baz=181,slow=16,SNR=2.0 | | | | | | |
| DZM | | | | LR | LR | 09 34 43.5 | |
| | comp=Z,971nm,18.6s,baz=152,slow=36 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **24.28** | **291** | P | **P** | **09 27 09.9** | **+1.5** |
| | baz=25,SNR=7.4 | | | | | | |
| **EIDS** | **Eidsvold** | **25.19** | **309** | P | **P** | **09 27 19.4** | **+2.8** |
| | baz=26,SNR=3.7 | | | | | | |
| **EIDS** | **Eidsvold** | **25.19** | **309** | *e*P | **P** | **09 27 17.8** | **+1.2** |
| | 34nm,1.4s | | | | | | |
| **MSVF** | **Nonsavu** | **26.19** | **12** | *e*P | **P** | **09 27 27.4** | **+1.6** |
| | 379nm,3.0s | | | | | | |
| **QLP** | **Quilpie** | **28.46** | **297** | P | **P** | **09 27 47.6** | **+1.5** |
| | baz=29,SNR=6.1 | | | | | | |
| **BBOO** | **Buckleboo** | **30.34** | **278** | P | **P** | **09 28 03.8** | **+1.0** |
| | baz=31,SNR=5.7 | | | | | | |
| **BBOO** | **Buckleboo** | **30.34** | **278** | *e*P | **P** | **09 28 04.0** | **+1.3** |
| | 27nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **34.33** | **184** | LR | LR | 09 40 46.5 | |
| | comp=Z,271nm,18.9s,baz=20,slow=33 | | | | | | |
| **FORT** | **Forrest** | **37.19** | **275** | *e*P | **P** | **09 29 03.2** | **+1.0** |
| | 48nm,1.3s | | | | | | |
| **TBI** | **Tubuai** | **37.20** | **70** | *e*T | T | 10 07 25.1 | |
| | 8.5nm,0.3s | | | | | | |
| **AS17** | **Alice Springs** | **37.26** | **290** | P | **P** | **09 29 02.8** | **-0.2** |
| | baz=38 | | | | | | |
| **AS01** | **Alice Springs** | **37.29** | **290** | *e*P | **P** | **09 29 02.6** | **-0.6** |
| **ASAR** | **Alice Springs** | **37.32** | **290** | P | **P** | **09 29 02.8** | **-0.7** |
| | 17nm,1.0s,baz=133,slow=8.1,SNR=68 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 31 22.8** | **-0.1** |
| | 1.9nm,0.9s,baz=138,slow=4.3,SNR=5.7 | | | | | | |
| ASAR | | | | LR | LR | 09 43 31.1 | |
| | comp=Z,259nm,19.9s,baz=152,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.58** | **294** | P | **P** | **09 29 21.6** | **-0.9** |
| | 9.9nm,0.8s,baz=136,slow=7.6,SNR=36 | | | | | | |
| WRA | | | | PcP | **PcP** | **09 31 30.2** | **+0.4** |
| | 2.5nm,0.8s,baz=132,slow=2.8,SNR=6.7 | | | | | | |
| WRA | | | | LR | LR | 09 45 46.3 | |
| | comp=Z,467nm,18.4s,baz=120,slow=36 | | | | | | |
| **WRAB** | **Tennant Creek** | **39.58** | **294** | P | **P** | **09 29 22.2** | **-0.2** |
| | 104nm,1.3s,SNR=6.0 | | | | | | |
| **WRAB** | **Tennant Creek** | **39.58** | **294** | *e*P | **P** | **09 29 20.9** | **-1.5** |
| | 48nm,1.4s | | | | | | |
| **PMG** | **Port Moresby** | **40.55** | **320** | LR | LR | 09 46 06.8 | |
| | comp=Z,395nm,18.5s,baz=240,slow=36 | | | | | | |
| **PAE** | **Paea** | **41.11** | **63** | *e*T | T | 10 12 07.0 | |
| | 6.4nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **41.16** | **63** | *e*LR | LR | 09 40 30.8 | |
| | 244nm,27.0s | | | | | | |
| **PPT2** | **Papeete2** | **41.16** | **63** | *e*T | T | 10 12 11.3 | |
| | 4.8nm,0.2s | | | | | | |
| **PMOR** | **Pomariorio Ree** | **44.15** | **62** | *e*T | T | 10 15 53.8 | |
| | 4.0nm,0.3s | | | | | | |
| **KNRA** | **Kununurra** | **46.32** | **293** | P | **P** | **09 30 17.7** | **+0.6** |
| | baz=47,SNR=8.1 | | | | | | |
| **MEEK** | **Meekatharra** | **46.37** | **273** | P | **P** | **09 30 16.9** | **-0.5** |
| | baz=47,SNR=19 | | | | | | |
| **QSPA** | **South Pole Qui** | **46.55** | **180** | P | **P** | **09 30 20.3** | **+1.8** |
| | 3.6nm,0.8s,baz=15,slow=1.2,SNR=16 | | | | | | |
| **QSPA** | **South Pole Qui** | **46.55** | **180** | *e*P | **P** | **09 30 20.7** | **+2.2** |
| | 12nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **46.76** | **288** | P | **P** | **09 30 19.5** | **-1.0** |
| | 16nm,1.1s,baz=152,slow=10,SNR=13 | | | | | | |
| FITZ | | | | PcP | **PcP** | **09 31 55.2** | **+1.2** |
| | 3.2nm,0.9s,baz=188,slow=5.5,SNR=3.6 | | | | | | |
| FITZ | | | | LR | LR | 09 49 37.0 | |
| | comp=Z,215nm,19.8s,baz=128,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **46.76** | **288** | P | **P** | **09 30 20.7** | **+0.2** |
| | baz=47,SNR=3.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **46.76** | **288** | *e*P | **P** | **09 30 19.7** | **-0.8** |
| | 26nm,1.2s | | | | | | |
| FITZ | | | | PcP | **PcP** | **09 31 55.2** | **+1.2** |
| **MTN** | **Manton Dam** | **46.84** | **298** | *e*P | **P** | **09 30 20.9** | **-0.3** |
| | 20nm,1.0s | | | | | | |
| **MORW** | **Morawa** | **46.85** | **269** | P | **P** | **09 30 21.2** | **0.0** |
| | baz=47,SNR=7.1 | | | | | | |
| **MBWA** | **Marble Bar** | **48.91** | **280** | *e*P | **P** | **09 30 37.4** | **+0.2** |
| | 46nm,1.3s | | | | | | |
| **BATI** | **Baumata** | **53.69** | **293** | LR | LR | 09 55 33.0 | |
| | comp=Z,292nm,18.5s,baz=164,slow=38 | | | | | | |
| **MAW** | **Mawson** | **57.24** | **205** | P | **P** | **09 31 40.5** | **+2.5** |
| | 1.7nm,0.8s,baz=114,slow=13,SNR=5.2 | | | | | | |
| MAW | | | | LR | LR | 09 55 36.5 | |
| | comp=Z,211nm,18.4s,baz=66,slow=35 | | | | | | |
| **TNTI** | **Ternate** | **59.75** | **305** | *e*P | **P** | **09 31 55.2** | **-1.0** |
| | 45nm,0.7s | | | | | | |
| **KAPI** | **Kappang** | **60.11** | **294** | P | **P** | **09 31 59.9** | **+1.2** |
| | 18nm,1.1s,baz=260,slow=3.1,SNR=4.7 | | | | | | |
| **KAPI** | **Kappang** | **60.11** | **294** | *e*P | **P** | **09 31 59.7** | **+1.0** |
| | 37nm,1.2s | | | | | | |
| **LUWI** | **Luwuk** | **61.15** | **299** | *e*P | **P** | **09 32 06.9** | **+1.1** |
| | 36nm,0.4s | | | | | | |
| **SYO** | **Syowa Base** | **62.45** | **197** | ⇑*e*P | **P** | **09 32 12.4** | **-1.3** |
| **SNAA** | **Sanae** | **65.01** | **182** | P | **P** | **09 32 31.8** | **+1.0** |
| **SNAA** | **Sanae** | **65.01** | **182** | *e*P | **P** | **09 32 31.8** | **+1.0** |
| | 1.7nm,0.9s | | | | | | |
| **SMRI** | **Semarang** | **65.03** | **285** | *e*P | **P** | **09 32 29.7** | **-1.9** |
| | 240nm,1.4s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **65.48** | **179** | P | P | 09 32 36.9 | +3.2 |
| **VNA2** | **Neumayer--Watz** | **65.81** | **180** | P | **P** | **09 32 36.3** | **+0.4** |
| | baz=168,slow=5.4 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **66.08** | **180** | P | **P** | **09 32 38.8** | **+1.2** |
| **LEM** | **Lembang** | **67.18** | **283** | LR | LR | 10 01 37.3 | |
| | comp=Z,164nm,20.3s,baz=210,slow=36 | | | | | | |
| **MYLDM** | **Lahad Datu** | **68.64** | **300** | *e*P | **P** | **09 32 55.6** | **+1.1** |
| | 39nm,1.5s | | | | | | |
| **SBUM** | **Sibu** | **70.66** | **293** | *e*P | **P** | **09 33 07.5** | **+0.5** |
| | 10nm,1.0s | | | | | | |
| **KSM** | **Kuching** | **71.23** | **291** | *e*P | **P** | **09 33 10.1** | **-0.4** |
| | 16nm,1.0s | | | | | | |
| **PSI** | **Prapat** | **80.07** | **283** | *e*P | **P** | **09 34 00.9** | **-0.5** |
| **QIZ** | **Qiongzhong** | **84.63** | **302** | P | P | 09 34 28.9 | +4.0 |
| QIZ | | | | S | **S** | **09 44 54.3** | **+1.1** |
| QIZ | | | | PMZ | | | |
| | 33nm,1.4s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **85.61** | **333** | LR | LR | 10 12 23.0 | |
| | comp=Z,14nm,18.4s,baz=175,slow=36 | | | | | | |
| **NJ2** | **Nanjing** | **89.81** | **317** | *e*P | **P** | **09 34 50.5** | **+0.9** |
| NJ2 | | | | PMZ | | | |
| | 70nm,1.0s | | | | | | |
| **KSRS** | **Korea Array** | **90.21** | **326** | P | **P** | **09 34 51.4** | **0.0** |
| | 3.6nm,1.0s,baz=150,slow=6.4,SNR=6.2 | | | | | | |
| KSRS | | | | LR | LR | 10 15 56.9 | |
| | comp=Z,27nm,18.1s,baz=166,slow=36 | | | | | | |
| **KSAR** | **Wonju Array Be** | **90.22** | **326** | P | **P** | **09 34 51.4** | **0.0** |
| **KS01** | **Wonju Array Si** | **90.24** | **326** | *e*P | **P** | **09 34 53.2** | **+1.7** |
| **CM01** | **Chiang Mai Arr** | **91.14** | **294** | *e*P | **P** | **09 34 57.6** | **+1.5** |
| **CMAR** | **Chiang Mai Arr** | **91.17** | **294** | P | **P** | **09 34 55.8** | **-0.6** |
| | 1.2nm,0.3s,baz=148,slow=3.3,SNR=7.0 | | | | | | |
| CMAR | | | | LR | LR | 10 17 23.0 | |
| | comp=Z,42nm,21.7s,baz=176,slow=37 | | | | | | |
| **GYA** | **Guiyang** | **92.14** | **305** | P | **P** | **09 35 03.2** | **+2.4** |
| GYA | | | | PP | PP | 09 38 45.8 | +4.6 |
| GYA | | | | S | **S** | **09 46 02.9** | **-1.4** |
| GYA | | | | SS | **SS** | **09 52 18.2** | **+3.8** |
| GYA | | | | PMZ | | | |
| | 20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | 130nm,5.8s | | | | | | |
| GYA | | | | LN | | | |
| | 480nm,20.8s | | | | | | |
| GYA | | | | LE | | | |
| | 370nm,19.4s | | | | | | |
| GYA | | | | LZ | | | |
| | 460nm,20.6s | | | | | | |
| **MRIV** | **Mauritius Mete** | **92.92** | **238** | *e*P | **P** | **09 35 04.7** | **+0.1** |
| **KMI** | **Kunming** | **93.54** | **302** | P | **P** | **09 35 07.7** | **+0.3** |
| KMI | | | | PMZ | | | |
| | 12nm,0.5s | | | | | | |
| KMI | | | | PMZ | | | |
| | 80nm,5.5s | | | | | | |
| **CN2** | **Changchun** | **96.60** | **328** | *e*P | **P** | **09 35 23.0** | **+2.3** |
| **CD2** | **Chengdu** | **97.14** | **306** | *e*P | Pdif | 09 35 24.0 | +0.4 |
| CD2 | | | | pP | pP | 09 35 27.3 | +3.4 |
| CD2 | | | | PP | **PP** | **09 39 20.6** | **+0.6** |
| CD2 | | | | SKS | **SKSac** | **09 46 01.2** | **-0.5** |
| CD2 | | | | S | **ScS** | **09 46 48.2** | **+0.1** |
| CD2 | | | | sS | sS | 09 46 53.9 | +5.6 |
| CD2 | | | | SS | **SS** | **09 53 28.0** | **+2.5** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.4s | | | | | | |
| **PETK** | **Petropavlovsk-** | **97.14** | **351** | LR | LR | 10 17 09.0 | |
| | comp=Z,40nm,18.6s,baz=142,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **98.70** | **122** | LR | LR | 10 12 32.8 | |
| | comp=Z,22nm,18.8s,baz=272,slow=31 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **100.33** | **318** | *e*P | **Pdif** | **09 35 38.7** | **+1.0** |
| HHC | | | | PP | **PP** | **09 39 46.8** | **+2.4** |
| HHC | | | | S | **Sdif** | **09 47 13.2** | **-1.2** |
| HHC | | | | SS | **SS** | **09 54 08.8** | **-1.4** |
| HHC | | | | PMZ | | | |
| | 26nm,1.2s | | | | | | |
| HHC | | | | LN | | | |
| | 140nm,16.2s | | | | | | |
| HHC | | | | LE | | | |
| | 180nm,17.4s | | | | | | |
| HHC | | | | LZ | | | |
| | 120nm,18.7s | | | | | | |
| **MOD** | **Modoc** | **104.31** | **45** | *e*PKiKP | **PKiKP** | **09 40 13.0** | **+1.0** |
| **WMQ** | **Urumqi** | **115.21** | **307** | *e*PKP | **PKPdf** | **09 40 33.0** | **+0.8** |
| **KSH** | **Kashi** | **119.92** | **298** | *e*PKP | **PKPdf** | **09 40 44.7** | **+3.2** |
| KSH | | | | *e*PP | PP | 09 42 14.5 | +8.3 |
| KSH | | | | SKS | **SKSdf** | **09 47 56.0** | **+1.4** |
| KSH | | | | SKKS | **SKKSac** | **09 49 07.5** | **+0.9** |
| KSH | | | | PPMZ | | | |
| | 46nm,6.9s | | | | | | |
| KSH | | | | LN | | | |
| | 110nm,6.1s | | | | | | |
| KSH | | | | LE | | | |
| | 100nm,5.2s | | | | | | |
| KSH | | | | LZ | | | |
| | 140nm,7.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **120.04** | **307** | PKP | **PKPdf** | **09 40 40.8** | **-0.6** |
| | 0.2nm,0.4s,baz=111,slow=2.5,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.65** | **197** | PKPbc | **PKPbc** | **09 41 37.9** | **-0.9** |
| | 3.7nm,0.6s,baz=163,slow=1.8,SNR=23 | | | | | | |
| **ARCES** | **ARCESS Array B** | **149.01** | **338** | PKPbc | **PKPbc** | **09 41 37.0** | **-1.1** |
| | 8.4nm,0.9s,baz=63,slow=1.9,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.22** | **277** | PKPbc | **PKPbc** | **09 41 39.8** | **0.0** |
| | 8.8nm,0.7s,baz=108,slow=2.4,SNR=14 | | | | | | |
| **FINES** | **FINESS Array B** | **153.28** | **324** | PKPbc | **PKPbc** | **09 41 46.9** | **-1.4** |
| | 1.8nm,0.6s,baz=56,slow=4.8,SNR=6.2 | | | | | | |
| FINES | | | | PKPab | **PKPab** | **09 41 58.9** | **-1.4** |
| | 2.3nm,0.6s,baz=87,slow=4.3,SNR=6.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **154.21** | **299** | PKPbc | **PKPbc** | **09 41 49.9** | **-0.7** |
| | 1.2nm,0.6s,baz=70,slow=2.3,SNR=4.0 | | | | | | |
| AKASG | | | | PKPab | **PKPab** | **09 42 03.1** | **-1.4** |
| | 4.0nm,0.8s,baz=70,slow=4.3,SNR=10 | | | | | | |
| **KOLS** | **Kolonicke sedl** | **158.78** | **295** | *e*PKP | **PKPab** | **09 42 26.7** | **+2.4** |
| **NOA** | **NORSAR Array B** | **159.22** | **334** | PKPab | **PKPab** | **09 42 25.2** | **-0.6** |
| | 2.4nm,0.9s,baz=42,slow=4.4,SNR=4.3 | | | | | | |
| **LANS** | **Liptovska Anna** | **160.60** | **296** | *e*PKP | **PKPab** | **09 42 36.4** | **+4.1** |
| **GERES** | **GERESS Array B** | **164.40** | **297** | PKPab | **PKPab** | **09 42 47.3** | **-1.6** |
| | 0.3nm,0.3s,baz=101,slow=5.6,SNR=5.8 | | | | | | |

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*NEIC **04** 09:29:27.0, 43°.55S×172°.41E, h5km, ML4.0(WEL), After WEL.*
*NEIC Felt in Canterbury.*
**WEL 04 09:29:26.9**±0.1**, 43°.57S×172°.40E, h5km, ML3.9**/17**, 1C-2D, Error ellipse: s-maj=1.0km s-min=0.8km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.16** | **94** | ⇓PG | Pg | 09 29 30.2 | 0.0 |
| CRLZ | | | | SG | Sg | 09 29 33.0 | +0.6 |
| CRLZ | | | | AML | AML | 09 29 33.0 | |
| CRLZ | | | | AML | AML | 09 29 33.2 | |
| CRLZ | | | | AML | AML | 09 29 33.2 | |
| **CRLZ** | **Canterbury Las** | **0.16** | **94** | ⇓Pg | Pg | 09 29 30.2 | 0.0 |
| CRLZ | | | | Sg | Sg | 09 29 33.0 | +0.6 |
| **MQZ** | **McQueen's Vall** | **0.23** | **128** | PG | Pg | 09 29 31.6 | +0.2 |
| MQZ | | | | SG | Sg | 09 29 35.2 | +0.6 |
| **MQZ** | **McQueen's Vall** | **0.23** | **128** | Pg | Pg | 09 29 31.6 | +0.2 |
| MQZ | | | | Sg | Sg | 09 29 35.2 | +0.6 |
| **OXZ** | **Oxford** | **0.35** | **312** | PG | Pg | 09 29 33.7 | -0.1 |
| OXZ | | | | SG | Sg | 09 29 38.7 | +0.2 |
| **OXZ** | **Oxford** | **0.35** | **312** | Pg | Pg | 09 29 33.7 | -0.1 |
| OXZ | | | | Sg | Sg | 09 29 38.7 | +0.2 |
| **LTZ** | **Lake Taylor** | **0.79** | **353** | P* | Pg | 09 29 41.9 | -0.2 |
| LTZ | | | | AML | AML | 09 29 53.8 | |
| LTZ | | | | AML | AML | 09 29 53.9 | |
| **LTZ** | **Lake Taylor** | **0.79** | **353** | P* | Pg | 09 29 41.9 | -0.2 |
| **RPZ** | **Rata Peaks** | **0.99** | **261** | P* | Pg | 09 29 45.7 | -0.2 |
| RPZ | | | | S* | Sb | 09 29 59.4 | -0.5 |
| RPZ | | | | AML | AML | 09 30 03.6 | |
| **RPZ** | **Rata Peaks** | **0.99** | **261** | P* | Pg | 09 29 45.7 | -0.2 |
| RPZ | | | | *e*Pg | Pb | 09 29 45.9 | -0.6 |
| RPZ | | | | *e*Sg | Sg | 09 29 59.3 | +0.6 |
| **WVZ** | **Waitaha Valley** | **1.31** | **291** | ⇑P* | Pn | 09 29 51.6 | -0.2 |
| WVZ | | | | AML | AML | 09 30 12.4 | |
| WVZ | | | | AML | AML | 09 30 14.3 | |
| **WVZ** | **Waitaha Valley** | **1.31** | **291** | P* | Pn | 09 29 51.6 | -0.2 |
| **KHZ** | **Kahutara** | **1.42** | **37** | *e*Pn | Pn | 09 29 51.1 | -2.3 |
| **LBZ** | **Lake Benmore** | **1.80** | **242** | AML | AML | 09 30 33.7 | |
| LBZ | | | | AML | AML | 09 30 33.9 | |
| **DSZ** | **Denniston Nort** | **1.87** | **346** | AML | AML | 09 30 30.5 | |
| DSZ | | | | AML | AML | 09 30 31.2 | |
| **ODZ** | **Otahua Downs** | **1.94** | **220** | *e*Pn | Pn | 09 29 59.9 | -0.6 |
| **FOZ** | **Fox Glacier** | **1.97** | **269** | AML | AML | 09 30 31.6 | |
| FOZ | | | | AML | AML | 09 30 36.4 | |
| **BSWZ** | **Blackbirch Sta** | **2.15** | **31** | PN | Pn | 09 30 02.0 | -1.3 |
| BSWZ | | | | AML | AML | 09 30 42.4 | |
| **TUWZ** | **Tuamarina** | **2.42** | **29** | PN | Pn | 09 30 07.2 | +0.1 |
| TUWZ | | | | AML | AML | 09 30 51.6 | |
| **NNZ** | **Nelson** | **2.46** | **18** | PN | Pn | 09 30 05.5 | -2.1 |
| NNZ | | | | AML | AML | 09 30 41.6 | |
| **QRZ** | **Quartz Range** | **2.74** | **2** | AML | AML | 09 30 21.4 | |
| QRZ | | | | AML | AML | 09 30 21.4 | |
| QRZ | | | | AML | AML | 09 30 55.5 | |
| QRZ | | | | AML | AML | 09 30 55.5 | |
| **WKZ** | **Wanaka** | **2.74** | **241** | AML | AML | 09 31 00.1 | |
| WKZ | | | | AML | AML | 09 31 13.9 | |
| **WKZ** | **Wanaka** | **2.74** | **241** | Pn | Pg | 09 30 19.0 | -0.4 |
| **EAZ** | **Earnscleugh** | **2.77** | **232** | AML | AML | 09 30 57.8 | |
| EAZ | | | | AML | AML | 09 31 00.3 | |
| **CAW** | **Cannon Point** | **3.15** | **40** | AML | AML | 09 30 55.9 | |
| CAW | | | | AML | AML | 09 31 33.7 | |
| **MRZ** | **Mangatainoka R** | **3.74** | **40** | PN | Pn | 09 30 22.1 | -3.2 |
| MRZ | | | | AML | AML | 09 31 47.4 | |
| **MRZ** | **Mangatainoka R** | **3.74** | **40** | Pn | Pn | 09 30 22.1 | -3.2 |
| **SYZ** | **Scrubby Hill** | **3.76** | **217** | PN | Pn | 09 30 24.6 | -0.9 |
| SYZ | | | | AML | AML | 09 31 36.3 | |
| SYZ | | | | AML | AML | 09 31 40.3 | |
| **SYZ** | **Scrubby Hill** | **3.76** | **217** | Pn | Pn | 09 30 24.6 | -0.9 |
| **WHZ** | **Wether Hill Ro** | **3.93** | **232** | AML | AML | 09 31 38.5 | |
| WHZ | | | | AML | AML | 09 31 39.0 | |
| **URZ** | **Urewera** | **6.39** | **36** | Pn | Pn | 09 31 02.8 | +1.2 |
| | 18nm,1.2s | | | | | | |

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*ISK **04** 09:41:14.9, 39°.85N×33°.04E, h7km, MD2.5*
*DDA **04** 09:41:16.0, 39°.86N×33°.10E, h7km, Md2.5*
*CSEM **04** 09:41:15.5±0.2, 39°.86N×33°.06E, h8km, MD2.5, Error ellipse: s-maj=4.5km s-min=3.7km az=81.0*
**ISC 04 09:41:15.7**±1.1**, 39°.86N**±0°.02×**33°.05E**±0°.02**, h5km**±9km**, n29, σ0s.95**/45**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LOD** | **Lodumlu** | **0.22** | **279** | *e*PG | **Pg** | **09 41 19.8** | **-0.3** |
| LOD | | | | *e*SG | **Sg** | **09 41 23.2** | **+0.2** |
| **LOD** | **Lodumlu** | **0.22** | **279** | *e*Pg | **Pg** | **09 41 19.8** | **-0.3** |
| LOD | | | | *e*Sg | **Sg** | **09 41 23.2** | **+0.2** |
| **BBAL** | **Bala** | **0.32** | **169** | *i* P | **Pg** | **09 41 22.1** | **+0.2** |
| BBAL | | | | *i* S | **Sb** | **09 41 28.4** | **-1.0** |
| **BBAL** | **Bala** | **0.32** | **169** | P | **Pg** | **09 41 22.1** | **+0.2** |
| BBAL | | | | S | **Sb** | **09 41 28.4** | **-1.0** |
| **AFSR** | **Af¯ar-Bala (A** | **0.41** | **178** | *e*PG | **Pg** | **09 41 24.0** | **+0.4** |
| AFSR | | | | *e*SG | **Sg** | **09 41 29.3** | **+0.4** |
| **AFSR** | **Af¯ar-Bala (A** | **0.41** | **178** | *e*Pg | **Pg** | **09 41 24.0** | **+0.4** |
| AFSR | | | | *e*Sg | **Sg** | **09 41 29.3** | **+0.4** |
| **KAMT** | **Kaman** | **0.71** | **133** | *e*PG | **Pg** | **09 41 28.8** | **-0.5** |
| KAMT | | | | *e*SG | **Sg** | **09 41 39.2** | **+0.7** |
| **KAMT** | **Kaman** | **0.71** | **133** | *e*Pg | **Pg** | **09 41 28.8** | **-0.5** |
| KAMT | | | | *e*Sg | **Sg** | **09 41 39.2** | **+0.7** |
| **CANT** | **Cankiri** | **0.87** | **30** | *e*PG | **Pg** | **09 41 32.2** | **-0.2** |
| **SERE** | **Sereflikochisa** | **0.99** | **156** | *e*PG | **Pg** | **09 41 34.3** | **-0.4** |
| **SERE** | **Sereflikochisa** | **0.99** | **156** | *e*Pg | **Pg** | **09 41 34.3** | **-0.4** |
| **CDAG** | **Cicekdag** | **1.05** | **102** | *i* P | **Pg** | **09 41 34.8** | **-1.0** |
| CDAG | | | | *i* S | **Sn** | **09 41 53.2** | **+1.1** |
| **CDAG** | **Cicekdag** | **1.05** | **102** | P | **Pg** | **09 41 34.8** | **-1.0** |
| CDAG | | | | S | **Sn** | **09 41 53.2** | **+1.1** |
| **BCAM** | **Yenicaga** | **1.22** | **322** | *i* P | **Pb** | **09 41 38.6** | **-0.7** |
| BCAM | | | | *i* S | **Sn** | **09 41 57.8** | **+1.4** |
| **BCAM** | **Yenicaga** | **1.22** | **322** | P | **Pb** | **09 41 38.6** | **-0.7** |
| BCAM | | | | S | **Sn** | **09 41 57.8** | **+1.4** |
| **SVRH** | **Sivrihisar-ESK** | **1.25** | **251** | *e*PN | **Pb** | **09 41 38.9** | **-0.8** |
| **SVRH** | **Sivrihisar-ESK** | **1.25** | **251** | *e*Pn | **Pb** | **09 41 38.9** | **-0.8** |
| **CHBY** | **Cihanbeyli** | **1.28** | **186** | *e*PN | **Pn** | **09 41 39.5** | **-0.7** |
| **CHBY** | **Cihanbeyli** | **1.28** | **186** | *e*Pn | **Pn** | **09 41 39.6** | **-0.7** |
| **ILGA** | **Ilgaz** | **1.30** | **23** | *i* P | **Pn** | **09 41 40.1** | **-0.6** |
| ILGA | | | | *i* S | **Sn** | **09 41 59.3** | **+0.7** |
| **ILGA** | **Ilgaz** | **1.30** | **23** | P | **Pn** | **09 41 40.1** | **-0.6** |
| ILGA | | | | S | **Sn** | **09 41 59.2** | **+0.7** |
| **TOS** | **Tosya** | **1.40** | **32** | *e*PN | **Pn** | **09 41 41.5** | **-0.4** |
| **TOS** | **Tosya** | **1.40** | **32** | *e*Pn | **Pn** | **09 41 41.5** | **-0.4** |
| **KDHN** | **Kadinhani** | **1.52** | **209** | *i* P | **Pg** | **09 41 44.8** | **0.0** |
| KDHN | | | | *i* S | **Sg** | **09 42 06.7** | **+2.3** |
| **KDHN** | **Kadinhani** | **1.52** | **209** | P | **Pg** | **09 41 44.8** | **0.0** |
| KDHN | | | | S | **Sg** | **09 42 06.7** | **+2.3** |
| **CTKT** | **Corum** | **1.54** | **60** | *i* P | Pn | 09 41 39.3 | -4.6 |
| CTKT | | | | *i* S | **Sg** | **09 42 07.2** | **+2.1** |
| **CTKT** | **Corum** | **1.54** | **60** | P | Pn | 09 41 39.3 | -4.6 |
| CTKT | | | | S | **Sg** | **09 42 07.2** | **+2.1** |
| **YOZ** | **Yozgat** | **1.77** | **96** | *e*PN | **Pn** | **09 41 46.8** | **-0.2** |
| **YOZ** | **Yozgat** | **1.77** | **96** | *e*Pn | **Pn** | **09 41 46.8** | **-0.2** |

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*ISCJB **04** 09:50:54.0±1.0, 44°.34N±0°.09×77°.73E±0°.07, h10km, Error ellipse: s-maj=13.9km s-min=6.6km az=167.3*
*NNC **04** 09:50:53.3±0.4, 44°.28N×77°.71E, h0km, mb3.2, mpv2.8, Error ellipse: s-maj=4.0km s-min=1.6km az=178.0*
**ISC 04 09:50:55.6**±1.0**, 44°.25N**±0°.09×**77°.77E**±0°.05**, h10km, n11,**

σ1$^s$09/15, 3C-5D, Eastern Kazakhstan

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDGK | Podgornoye | 1.55 | 126 | ⇓P | Pn | 09 51 22.0 | -1.2 |
| | 5.3nm,0.3s | | | | | | |
| PDGK | | | | ⇓S | Sn | 09 51 44.4 | +1.0 |
| | 8.0nm,0.5s | | | | | | |
| TKM2 | Tokmak 2 | 2.06 | 231 | ⇑Pn | Pn | 09 51 29.0 | -1.5 |
| | 7.4nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Sn | Sn | 09 51 56.4 | +0.1 |
| | 6.2nm,0.2s | | | | | | |
| TKM2 | Tokmak 2 | 2.06 | 231 | P | Pn | 09 51 28.2 | -2.3 |
| | SNR=12 | | | | | | |
| ULHL | Ulahol | 2.29 | 210 | P | Pn | 09 51 33.2 | -0.4 |
| | SNR=58 | | | | | | |
| USP | Ospenovka | 2.56 | 249 | P | Pn | 09 51 36.2 | -1.0 |
| | SNR=9.7 | | | | | | |
| KBK | Karagaybulak | 2.60 | 233 | P | Sn | 09 52 09.8 | +0.2 |
| | SNR=5.4 | | | | | | |
| KZA | Kyzart | 2.85 | 221 | P | Pn | 09 51 41.3 | -0.2 |
| | SNR=9.2 | | | | | | |
| AAK | Ala-Archa | 2.88 | 237 | ⇓Pn | Pn | 09 51 40.8 | -0.9 |
| | 1.4nm,0.4s | | | | | | |
| AAK | | | | ⇓Sn | Sn | 09 52 16.9 | +0.4 |
| | 8.6nm,0.5s | | | | | | |
| UCH | Uchtor | 3.12 | 231 | P | Pn | 09 51 46.4 | +1.1 |
| | SNR=5.5 | | | | | | |
| MK31 | Makanchi Array | 4.07 | 50 | Pn | Pn | 09 51 57.6 | -0.3 |
| | 0.4nm,0.3s,baz=234,slow=14,SNR=4.6 | | | | | | |
| MK31 | | | | ⇑Pg | Pb | 09 52 07.2 | -0.2 |
| | 0.5nm,0.3s,baz=234,slow=15,SNR=2.9 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 09 53 03.0 | |
| | 1.5nm,0.6s,baz=228,slow=30,SNR=4.3 | | | | | | |
| KK31 | Karatay Array | 5.38 | 260 | Pg | Pb | 09 52 30.6 | +0.9 |
| | 0.4nm,0.3s,baz=76,slow=18,SNR=7.4 | | | | | | |

*IDC **04** 09:53:19.2±1.6, 9°.52S×113°.10E, h0km, mb3.9/3, mb1 4.1/5, mb1mx3.7/31, mbtmp4.0/5, ML3.9/2, Error ellipse: s-maj=80.8km s-min=15.8km az=37.0*
*DJA **04** 09:53:24.2±0.4, 10°S±4°×11°2E±°, h67km±23km, M4.6/27, mb4.8/3, MLv4.5/27*
**ISC 04 09:53:19.6**±3.7, **10°.55S**±0°.08×**112°.10E**±0°.05, **h25**km±27km, **n29**, σ**1$^s$58**/34, **mb3.9**/3, **South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCJI | Pacitan | 2.51 | 339 | P | Pn | 09 53 57.9 | -1.0 |
| PCJI | | | | S | Sn | 09 54 28.3 | -0.4 |
| PWJI | Pagerwojo | 2.53 | 353 | P | Pn | 09 53 58.5 | -0.6 |
| PWJI | | | | S | Sn | 09 54 28.2 | -0.9 |
| GMJI | Gumukmas | 2.62 | 31 | P | Pn | 09 54 01.3 | +0.9 |
| GMJI | | | | S | Sn | 09 54 29.8 | -1.7 |
| JAGI | Jajag, Banyuwa | 2.89 | 45 | P | Pn | 09 54 05.3 | +1.1 |
| JAGI | | | | S | Sn | 09 54 36.7 | -1.5 |
| WOJI | Wonogiri, Jawa | 2.93 | 337 | P | Pn | 09 54 04.9 | +0.2 |
| WOJI | | | | S | Sn | 09 54 38.6 | -0.6 |
| UGM | Wanagama | 3.05 | 329 | P | Pn | 09 54 06.7 | +0.4 |
| UGM | | | | S | Sn | 09 54 41.4 | -0.6 |
| BLJI | Banyuglugur | 3.15 | 28 | P | Pn | 09 54 09.7 | +2.0 |
| BLJI | | | | S | Sn | 09 54 44.9 | +0.3 |
| NGJI | Ngawi | 3.22 | 349 | P | Pn | 09 54 11.8 | +3.1 |
| ABJI | Asem Bagus | 3.46 | 38 | P | Pn | 09 54 13.1 | +1.2 |
| IGBI | Denpasar | 3.46 | 60 | P | Pn | 09 54 14.6 | +2.6 |
| IGBI | | | | S | Sn | 09 54 50.4 | -1.8 |
| DNP | Denpasar | 3.59 | 59 | P | Pn | 09 54 16.6 | +2.9 |
| GRJI | Gresik | 3.63 | 6 | P | Pn | 09 54 15.2 | +0.9 |
| GRJI | | | | S | Sn | 09 54 55.6 | -0.8 |
| TBJI | Tambak Boyo | 3.72 | 356 | P | Pb | 09 54 31.9 | +7.3 |
| SMRI | Semarang | 3.84 | 335 | P | Pn | 09 54 19.3 | +2.0 |
| SRBI | Singaraja | 3.93 | 52 | P | Pn | 09 54 19.9 | +1.5 |
| KMMI | Kalianget | 3.94 | 28 | P | Pn | 09 54 19.4 | +0.9 |
| UWJI | Ujung Watu | 4.26 | 344 | P | Pn | 09 54 24.3 | +1.4 |
| CMJI | Cimerak | 4.53 | 307 | P | Pn | 09 54 26.2 | -0.5 |
| TWSI | Taliwang, Sumb | 5.05 | 70 | P | Pn | 09 54 34.8 | +1.0 |
| LEM | Lembang | 5.77 | 310 | Pn | Pn | 09 54 49.0 | +5.1 |
| | 4.1nm,0.3s,baz=315,slow=20,SNR=2.3 | | | | | | |
| LEM | | | | Sn | Sn | 09 55 52.4 | +2.9 |
| | 4.4nm,0.3s,baz=305,slow=19,SNR=2.3 | | | | | | |
| LEM | Lembang | 5.77 | 310 | P | Pn | 09 54 47.7 | +3.8 |
| | 397nm,1.0s,2.4nm | | | | | | |
| CNJI | Cibinong | 5.87 | 303 | P | Pn | 09 54 45.6 | +0.5 |
| | 82nm,1.4s,0.5nm | | | | | | |
| FITZ | Fitzroy Crossi | 15.11 | 121 | Pn | Pn | 09 56 48.8 | -2.8 |
| | 0.4nm,0.3s,baz=307,slow=11,SNR=8.7 | | | | | | |
| FITZ | | | | Sn | Sn | 09 59 23.9 | -14 |
| | 0.2nm,0.3s,baz=342,slow=20,SNR=4.6 | | | | | | |
| WRA | Warramunga Arr | 23.38 | 116 | P | P | 09 58 26.0 | -0.6 |
| | 3.5nm,0.8s,baz=297,slow=10,SNR=34 | | | | | | |
| WRA | | | | S | S | 10 02 38.6 | +0.2 |
| | 0.5nm,0.6s,baz=293,slow=22,SNR=3.4 | | | | | | |
| ASAR | Alice Springs | 24.54 | 125 | P | P | 09 58 38.9 | +1.3 |
| | 1.0nm,0.5s,baz=304,slow=9.2,SNR=22 | | | | | | |
| H08S2 | Diego Garcia H | 39.19 | 271 | T | T | 10 42 18.7 | |
| | baz=96,slow=76,SNR=23 | | | | | | |
| H08S3 | Diego Garcia H | 39.21 | 271 | T | T | 10 42 26.9 | |
| | baz=96,slow=76,SNR=14 | | | | | | |
| H08S1 | Diego Carcia H | 39.21 | 271 | T | T | 10 42 23.5 | |
| | baz=96,slow=76,SNR=14 | | | | | | |
| MKAR | Makanchi Array | 63.00 | 337 | P | P | 10 03 44.6 | +0.2 |
| | 0.9nm,0.5s,baz=146,slow=7.7,SNR=9.6 | | | | | | |

*TEH **04** 10:18:01.6, 29°.83N×51°.25E, h3km, ML3.5*
*ISCJB **04** 10:18:02.4±0.3, 29°.92N±0°.03×51°.45E±0°.04, h15km, mb3.8/14, Error ellipse: s-maj=4.5km s-min=3.7km az=3.3*
*THR **04** 10:18:02.8±0.7, 29°.93N×51°.73E, h15km, ML3.5*
*IDC **04** 10:18:02.1±1.3, 30°.16N×51°.54E, h0km, mb3.9/14, mb1 3.9/15, mb1mx3.8/44, mbtmp3.8/15, ML3.4/1, Error ellipse: s-maj=31.2km s-min=16.5km az=159.0*
*CSEM **04** 10:18:03.0±0.3, 29°.88N×51°.56E, h2km, ML3.5, Error ellipse: s-maj=8.2km s-min=5.7km az=88.0*
**ISC 04 10:18:03.4**±0.6, **29°.93N**±0°.04×**51°.48E**±0°.04, **h15**km, **n55**, σ**1$^s$46**/59, **mb3.8**/14, **Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IKAZ | Kazeroun | 0.34 | 115 | e | Sb | 10 18 18.4 | +1.6 |
| | comp=Z,84μm,0.3s | | | | | | |
| IKAZ | | | | ePg | Pg | 10 18 08.6 | -2.0 |
| AHBU | AHRAM | 1.07 | 189 | ePg | Pn | 10 18 24.1 | +0.2 |
| AHBU | | | | eSg | Sn | 10 18 40.2 | +1.7 |
| IPAR | Pars | 1.36 | 93 | ePg | Pn | 10 18 26.8 | -1.4 |
| IPAR | | | | eSg | Sg | 10 18 50.0 | +2.5 |
| IPAR | | | | e | | 10 18 56.5 | |
| | comp=Z,9μm,0.5s | | | | | | |
| IPAR | Pars | 1.36 | 93 | ePg | Pn | 10 18 26.8 | -1.4 |
| ISRV | Sarvestan | 1.52 | 110 | ePg | Pb | 10 18 31.4 | -0.1 |
| ISRV | | | | eSg | Sg | 10 18 54.9 | +2.4 |
| ISRV | | | | e | | 10 19 01.1 | |
| | comp=Z,9μm,0.3s | | | | | | |
| ISRV | Sarvestan | 1.52 | 110 | ePg | Pb | 10 18 31.4 | -0.1 |
| GHIR | Ghir-Karzin | 2.10 | 141 | ePg | Pn | 10 18 38.5 | +0.4 |
| GHIR | | | | AML | AML | 10 19 31.0 | |
| | comp=N,269nm,0.2s | | | | | | |
| GHIR | Ghir-Karzin | 2.10 | 141 | ePn | Pn | 10 18 38.6 | +0.4 |
| IGAR | Gharneh | 2.52 | 11 | ePn | Pn | 10 18 45.5 | +1.5 |
| IGAR | | | | e | | 10 19 26.3 | |
| | comp=Z,2μm,0.3s | | | | | | |
| ISAD | Sadrabad | 2.74 | 43 | ePn | Pn | 10 18 49.4 | +2.3 |
| ISAD | | | | e | | 10 19 41.2 | |
| | comp=Z,3μm,0.4s | | | | | | |
| ISAD | Sadrabad | 2.74 | 43 | ePn | Pn | 10 18 49.4 | +2.3 |
| IPIR | Pirpir | 2.80 | 350 | ePn | Pn | 10 18 47.7 | -0.2 |
| IPIR | | | | e | | 10 19 32.0 | |
| | comp=Z,1μm,0.2s | | | | | | |
| IPIR | Pirpir | 2.80 | 350 | ePn | Pn | 10 18 47.7 | -0.2 |
| IZEF | Zefreh | 3.05 | 14 | ePn | Pn | 10 18 52.5 | +1.1 |
| IZEF | | | | e | | 10 19 33.6 | |
| | comp=Z,667nm,0.1s | | | | | | |
| IZEF | Zefreh | 3.05 | 14 | ePn | Pn | 10 18 52.5 | +1.1 |
| IMEH | Mehriz | 3.07 | 61 | ePn | Pn | 10 18 54.0 | +2.4 |
| IMEH | | | | e | | 10 19 48.3 | |
| | comp=Z,780nm,0.2s | | | | | | |
| IMEH | Mehriz | 3.07 | 61 | ePn | Pn | 10 18 54.0 | +2.4 |
| NASN | Na'in | 3.08 | 21 | ePn | Pn | 10 18 52.3 | +0.4 |
| NASN | Na'in | 3.08 | 21 | ePn | Pn | 10 18 52.3 | +0.4 |
| SHGR | Shooshtar-Gavs | 3.17 | 314 | ePn | Pb | 10 18 56.2 | -3.2 |
| SHGR | Shooshtar-Gavs | 3.17 | 314 | ePn | Pb | 10 18 56.2 | -3.2 |
| IKLH | Kolahrood | 3.38 | 1 | ePn | Pn | 10 18 57.2 | +1.2 |
| IKLH | | | | e | | 10 19 41.6 | |
| | comp=N,1μm,0.1s | | | | | | |
| IKLH | Kolahrood | 3.38 | 1 | ePn | Pn | 10 18 57.2 | +1.2 |
| ICHK | Chekchek | 3.41 | 47 | ePn | Pn | 10 18 58.3 | +2.0 |
| ICHK | | | | e | | 10 19 33.1 | |
| | comp=Z,656nm,0.2s | | | | | | |
| ICHK | Chekchek | 3.41 | 47 | ePn | Pn | 10 18 58.3 | +2.0 |
| KHMZ | Khomeyn | 4.02 | 342 | ePn | Pn | 10 19 07.0 | +2.4 |
| KHMZ | Khomeyn | 4.02 | 342 | ePn | Pn | 10 19 07.1 | +2.4 |
| BOQSS | | 4.45 | 205 | S | Sn | 10 20 04.3 | +2.3 |
| BOQSS | | 4.45 | 205 | P | Pn | 10 19 11.0 | +0.6 |
| BOQSS | | 4.45 | 205 | P | Pn | 10 19 11.0 | +0.6 |
| BOQSS | | | | S | Sn | 10 20 04.0 | +2.0 |
| BNDS | Bandar-Abbas | 4.83 | 120 | ePn | Pn | 10 19 15.3 | -0.4 |
| BNDS | | | | AML | AML | 10 20 21.8 | |
| | comp=N,40nm,0.5s | | | | | | |
| BNDS | Bandar-Abbas | 4.83 | 120 | ePn | Pn | 10 19 15.3 | -0.4 |
| SLWS | | 5.16 | 189 | P | Pn | 10 19 21.3 | +1.1 |
| SLWS | | 5.16 | 189 | P | Pn | 10 19 21.0 | +0.8 |
| DAMV | Damavand | 5.70 | 4 | ePn | Pn | 10 19 28.8 | +0.9 |
| DAMV | Damavand | 5.70 | 4 | ePn | Pn | 10 19 28.8 | +0.9 |
| BTHS | | 5.88 | 186 | S | Sn | 10 20 37.5 | +0.3 |
| BTHS | | 5.88 | 186 | P | Pn | 10 19 30.3 | +0.2 |
| BTHS | | 5.88 | 186 | P | Pn | 10 19 30.0 | -0.1 |
| BTHS | | | | S | Sn | 10 20 38.0 | +0.7 |
| ASYS | | 6.72 | 251 | P | Pn | 10 19 40.0 | -1.6 |
| BRTR | Keskin Array B | 17.59 | 309 | P | P | 10 22 08.9 | -0.2 |
| | comp=N,0.1nm,0.3s,baz=123,slow=11,SNR=2.9 | | | | | | |
| AKTO | Aktyubinsk | 21.07 | 12 | P | P | 10 22 46.9 | 0.0 |
| | comp=N,0.9nm,0.4s,baz=172,slow=12,SNR=3.4 | | | | | | |
| MLR | Muntele Rosu | 25.34 | 315 | P | P | 10 23 30.3 | +0.5 |
| | comp=N,0.6nm,0.7s,baz=81,slow=13,SNR=2.2 | | | | | | |
| AKASG | Malin Array Be | 26.62 | 327 | P | P | 10 23 40.8 | -0.4 |
| | comp=N,1.2nm,0.4s,baz=132,slow=8.9,SNR=5.0 | | | | | | |
| BVAR | Borovoye Array | 26.92 | 26 | P | P | 10 23 43.9 | 0.0 |
| | comp=N,0.8nm,0.5s,baz=217,slow=37,SNR=4.4 | | | | | | |
| KURBB | Kurchatov Arra | 28.94 | 37 | P | P | 10 24 02.0 | +0.1 |
| | comp=N,1.2nm,0.7s,baz=237,slow=9.2,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 29.20 | 46 | P | P | 10 24 04.2 | -0.1 |
| | comp=N,0.3nm,0.5s,baz=248,slow=7.6,SNR=2.5 | | | | | | |
| ZALV | Zalesovo Beam | 34.00 | 36 | P | P | 10 24 45.9 | -0.5 |
| | comp=N,1.3nm,0.4s,baz=252,slow=8.5,SNR=6.4 | | | | | | |
| GERES | GERESS Array B | 34.32 | 314 | P | P | 10 24 47.3 | -2.1 |
| | comp=N,0.4nm,0.5s,baz=96,slow=9.2,SNR=3.3 | | | | | | |
| FINES | FINESS Array B | 35.70 | 339 | P | P | 10 24 58.9 | -2.1 |
| | comp=N,0.6nm,0.4s,baz=144,slow=9.8,SNR=5.9 | | | | | | |
| ARCES | ARCESS Array B | 42.34 | 347 | P | P | 10 25 55.2 | -1.3 |
| | comp=N,1.5nm,0.8s,baz=140,slow=6.4,SNR=4.3 | | | | | | |
| TORD | Torodi Ar. Bea | 48.84 | 261 | P | P | 10 26 50.8 | +2.2 |
| | comp=N,3.7nm,0.7s,baz=56,slow=8.2,SNR=26 | | | | | | |
| DBIC | Dimbokro | 57.64 | 258 | P | P | 10 27 55.8 | +2.4 |
| | comp=N,2.5nm,0.7s,baz=37,slow=5.1,SNR=3.1 | | | | | | |
| KSRS | Korea Array | 62.45 | 61 | P | P | 10 28 24.4 | -1.7 |
| | comp=N,1.3nm,0.5s,baz=284,slow=6.1,SNR=6.0 | | | | | | |
| ILAR | Eielson Array | 84.53 | 8 | P | P | 10 30 34.3 | -1.3 |
| | comp=N,0.2nm,0.6s,baz=326,slow=4.4,SNR=3.4 | | | | | | |

*IDC **04** 10:18:14.8±3.0, 4°.98S×133°.70E, h0km, mb3.3/1, mb1 3.9/5, mb1mx3.6/25, mbtmp3.7/5, ML3.7/4, MS2.7/1, Ms1 2.7/1, ms1mx2.3/16, Error ellipse: s-maj=119.6km s-min=25.5km az=79.0*
*ISCJB **04** 10:18:17.6±1.2, 5°.14S±0°.07×133°.2E±0°.2, h25km, mb3.3/1, Error ellipse: s-maj=28.1km s-min=10.2km az=1.6*
**ISC 04 10:18:17.3**±1.6, **5°.08S**±0°.08×**133°.3E**±0°.2, **h25**km, **n9**, σ**2$^s$82**/9, **Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.67 | 334 | Pn | Pn | 10 19 27.9 | +1.7 |
| | 1.4nm,0.3s,baz=12,slow=23,SNR=9.1 | | | | | | |
| SIJI | | | | Sn | Sn | 10 20 16.7 | -2.9 |
| | 1.6nm,0.3s,baz=288,slow=20,SNR=4.0 | | | | | | |
| SIJI | | | | LR | LR | 10 21 50.2 | |
| | comp=Z,92nm,21.8s,baz=297,slow=45 | | | | | | |
| MTN | Manton Dam | 8.02 | 196 | P | Sn | 10 21 43.8 | +1.5 |
| | baz=3.5,SNR=4.4 | | | | | | |
| KNRA | Kununurra | 11.46 | 203 | P | Pn | 10 21 05.6 | +6.2 |
| | baz=0.8,SNR=15 | | | | | | |
| WRA | Warramunga Arr | 14.81 | 176 | Pn | Pn | 10 21 46.1 | +0.9 |
| | 0.3nm,0.3s,baz=356,slow=13,SNR=10 | | | | | | |
| WRA | | | | Sn | Sn | 10 24 23.8 | -4.9 |
| | 0.2nm,0.3s,baz=354,slow=24,SNR=6.6 | | | | | | |
| FITZ | Fitzroy Crossi | 14.98 | 210 | Pn | P | 10 21 51.1 | -1.6 |
| | 0.5nm,0.3s,baz=36,slow=12,SNR=16 | | | | | | |
| FITZ | | | | Sn | Sn | 10 24 31.8 | -0.9 |
| | 0.8nm,0.3s,baz=208,slow=16,SNR=13 | | | | | | |
| FITZ | Fitzroy Crossi | 14.98 | 210 | P | P | 10 21 53.1 | +0.3 |
| | baz=4.2,SNR=3.8 | | | | | | |
| ASAR | Alice Springs | 18.49 | 178 | P | Pn | 10 22 34.0 | +2.1 |
| | 0.2nm,0.3s,baz=3.2,slow=11,SNR=14 | | | | | | |
| WRKA | Warakurna | 20.43 | 193 | P | Pn | 10 23 00.1 | +5.0 |
| | baz=9.1,SNR=5.1 | | | | | | |
| MKAR | Makanchi Array | 68.51 | 325 | P | P | 10 29 19.8 | +2.1 |
| | 0.2nm,0.6s,baz=111,slow=7.9,SNR=2.2 | | | | | | |

*ISCJB **04** 10:37:58.1±0.3, 39°.92N±0°.02×29°.15E±0°.03, h0km, Error ellipse: s-maj=4.4km s-min=2.9km az=39.7*
*DDA **04** 10:37:58.3, 39°.90N×29°.17E, h7km, Md2.6*
*CSEM **04** 10:37:58.2±0.1, 39°.92N×29°.15E, h1km, MD2.6, Error ellipse: s-maj=3.6km s-min=2.7km az=134.0, Mining explosion.*
*ISK **04** 10:37:58.1, 39°.91N×29°.16E, h6km, MD2.5*
**ISC 04 10:37:58.4**±0.9, **39°.90N**±0°.02×**29°.17E**±0°.02, **h0**km, **n49**, σ**0$^s$52**/61, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULDT | Uludag | 0.24 | 354 | i P | Pg | 10 38 03.6 | +0.5 |
| ULDT | Uludag | 0.24 | 354 | P | Pg | 10 38 03.6 | +0.5 |
| IGD | Bursa | 0.36 | 4 | P | Pg | 10 38 05.7 | +0.3 |
| IZI | Iznik | 0.49 | 28 | ePG | Pg | 10 38 08.3 | +0.4 |
| IZI | | | | eSG | Sg | 10 38 15.3 | +1.0 |
| IZI | Iznik | 0.49 | 28 | ePg | Pg | 10 38 08.3 | +0.4 |
| IZI | | | | eSg | Sg | 10 38 15.3 | +1.0 |
| DST | Dursunbey | 0.52 | 235 | ePG | Pg | 10 38 08.6 | +0.2 |
| DST | | | | eSG | Sg | 10 38 16.3 | +1.2 |
| DST | Dursunbey | 0.52 | 235 | ePg | Pg | 10 38 08.6 | +0.2 |
| DST | | | | eSg | Sg | 10 38 16.3 | +1.2 |
| CAVI | Cavuskoy | 0.60 | 60 | ePG | Pg | 10 38 09.9 | 0.0 |
| CAVI | | | | eSG | Sg | 10 38 18.9 | +1.3 |
| CAVI | Cavuskoy | 0.60 | 60 | ePg | Pg | 10 38 09.9 | 0.0 |
| CAVI | | | | eSg | Sg | 10 38 18.9 | +1.3 |
| DURS | Dursunbey | 0.61 | 241 | i P | Pg | 10 38 10.1 | -0.1 |
| DURS | Dursunbey | 0.61 | 241 | P | Pg | 10 38 10.1 | -0.1 |
| ADVT | Abdulvahap | 0.69 | 39 | ePG | Pg | 10 38 11.6 | 0.0 |
| ADVT | Abdulvahap | 0.69 | 39 | ePg | Pg | 10 38 11.6 | 0.0 |
| ARMT | Armutlu | 0.70 | 341 | ePG | Pg | 10 38 11.8 | -0.1 |
| ARMT | Armutlu | 0.70 | 341 | ePg | Pg | 10 38 11.9 | -0.1 |
| KCTX | Karacabey (Bur | 0.72 | 300 | ePG | Pg | 10 38 12.5 | +0.2 |
| KCTX | Karacabey (Bur | 0.72 | 300 | ePg | Pg | 10 38 12.5 | +0.2 |
| DEMI | Demirci | 0.93 | 202 | i P | Pg | 10 38 16.7 | +0.5 |
| DEMI | | | | i S | Sb | 10 38 29.7 | -0.7 |
| DEMI | Demirci | 0.93 | 202 | P | Pg | 10 38 16.7 | +0.5 |
| DEMI | | | | S | Sb | 10 38 29.7 | -0.7 |
| BORA | Eskisehir | 0.99 | 91 | i P | Pg | 10 38 16.7 | -0.7 |
| BORA | Eskisehir | 0.99 | 91 | P | Pg | 10 38 16.7 | -0.7 |
| HRT | Hereke | 0.99 | 22 | ePG | Pg | 10 38 17.4 | -0.1 |
| HRT | Hereke | 0.99 | 22 | ePg | Pg | 10 38 17.4 | -0.1 |
| BALB | Balikesir | 1.03 | 256 | ePG | Pg | 10 38 18.0 | -0.1 |
| BALB | Balikesir | 1.03 | 256 | ePg | Pg | 10 38 18.0 | -0.1 |
| EDC | Edincik | 1.09 | 294 | ePN | Pg | 10 38 19.2 | -0.2 |
| EDC | Edincik | 1.09 | 294 | ePn | Pg | 10 38 19.3 | -0.2 |
| GONE | Gonen-Balikesi | 1.15 | 278 | ePN | Pg | 10 38 19.7 | -0.8 |
| GONE | Gonen-Balikesi | 1.15 | 278 | ePn | Pg | 10 38 19.7 | -0.8 |
| GULT | Gulveren | 1.16 | 62 | ePN | Pg | 10 38 20.6 | -0.1 |
| GULT | Gulveren | 1.16 | 62 | ePn | Pg | 10 38 20.6 | -0.1 |
| ISK | Istanbul-Kandi | 1.17 | 356 | ePN | Pg | 10 38 20.5 | -0.3 |
| ISK | Istanbul-Kandi | 1.17 | 356 | ePn | Pg | 10 38 20.5 | -0.3 |
| ESKT | Eskisehir | 1.35 | 106 | P | Pg | 10 38 24.0 | -0.3 |
| ESKT | | | | S | Sn | 10 38 43.2 | -0.1 |
| SEYT | Eskypehyr | 1.35 | 106 | i P | Pg | 10 38 24.0 | -0.3 |
| SEYT | | | | i S | Sn | 10 38 43.3 | -0.1 |
| KLYT | Kilyos | 1.35 | 356 | ePN | Pg | 10 38 24.1 | -0.3 |
| KLYT | Kilyos | 1.35 | 356 | ePn | Pg | 10 38 24.1 | -0.3 |
| MRMT | Marmara Adasi | 1.39 | 301 | ePN | Pn | 10 38 24.8 | -0.4 |
| MRMT | Marmara Adasi | 1.39 | 301 | ePn | Pn | 10 38 24.8 | -0.4 |
| CTKS | Kestanelik-??a | 1.43 | 339 | ePN | Pn | 10 38 24.8 | -0.8 |
| CTKS | Kestanelik-??a | 1.43 | 339 | ePn | Pn | 10 38 24.8 | -0.8 |
| KULA | Kula-Manisa | 1.44 | 196 | ePN | Pn | 10 38 25.5 | -0.4 |
| KULA | Kula-Manisa | 1.44 | 196 | ePn | Pn | 10 38 25.5 | -0.4 |
| MANT | Manisa | 1.49 | 199 | i P | Pg | 10 38 27.2 | +0.2 |
| MANT | | | | i S | Sn | 10 38 46.9 | 0.0 |
| MANT | Manisa | 1.49 | 199 | P | Pg | 10 38 27.2 | +0.2 |
| MANT | | | | S | Sn | 10 38 46.9 | 0.0 |
| KHAL | Karahalli | 1.55 | 171 | i P | Pn | 10 38 27.1 | -0.3 |
| KHAL | Karahalli | 1.55 | 171 | P | Pn | 10 38 27.1 | -0.3 |
| SVRH | Sivrihisar-ESK | 1.87 | 103 | ePN | Pn | 10 38 31.7 | -0.2 |
| SVRH | Sivrihisar-ESK | 1.87 | 103 | ePn | Pn | 10 38 31.7 | -0.2 |

*IDC **04** 10:38:53.5±0.9, 19°.27N×122°.02E, h0km, mb3.8/8, mb1 3.9/9, mb1mx3.6/50, mbtmp3.8/9, ML3.7/1, MS3.3/8, Ms1 3.3/8, ms1mx3.1/26, Error ellipse: s-maj=34.7km s-min=17.9km az=66.0*
*ISCJB **04** 10:38:54.2±0.7, 19°.50N±0°.04×122°.1E±0°.1, h10km, mb3.7/8, MS3.2/6, Error ellipse: s-maj=18.3km s-min=6.1km az=4.2*
*MAN **04** 10:38:55, 19°.53N×121°.79E, h1km, mb5.1, ML4.0, MS4.1*
**ISC 04 10:38:55.6**±0.9, **19°.44N**±0°.06×**122°.2E**±0°.2, **h10**km, **n27**, σ**1$^s$40**/15, **mb3.9**/8, **MS3.1**/6, **1C**, **Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGCP | Mt. Cagua | 1.20 | 185 | eP | Pb | 10 39 19.6 | +1.2 |
| SGCP | | | | eS | Sb | 10 39 32.4 | -1.5 |
| PALP | Palanan | 2.38 | 174 | eP | Pb | 10 39 39.5 | +0.9 |
| BCPH | Baguio City Da | 3.39 | 206 | ⇑iP | Pn | 10 39 48.9 | +0.1 |
| BCPH | | | | i S | Sn | 10 40 31.2 | +2.0 |
| BOLP | Bolinao | 3.72 | 215 | eP | Pn | 10 39 54.3 | +1.1 |
| BALP | Baler | 3.72 | 189 | eP | Pn | 10 39 53.5 | +0.4 |
| JNU | Nakatsue | 15.70 | 28 | LR | LR | 10 49 07.9 | |
| | comp=Z,132nm,19.2s,baz=254,slow=39 | | | | | | |
| KSRS | Korea Array | 18.64 | 14 | P | Pn | 10 43 14.8 | +1.0 |
| | 0.2nm,0.3s,baz=188,slow=12,SNR=3.1 | | | | | | |
| KSRS | | | | LR | LR | 10 51 15.7 | |
| | comp=Z,141nm,18.8s,baz=207,slow=40 | | | | | | |
| JHJ | Hachijo jima 2 | 20.82 | 46 | LR | LR | 10 50 32.2 | |
| | comp=Z,71nm,19.5s,baz=266,slow=33 | | | | | | |
| CMAR | Chiang Mai Arr | 21.98 | 271 | P | P | 10 43 49.3 | -0.6 |
| | 0.7nm,0.3s,baz=62,slow=9.5,SNR=3.6 | | | | | | |
| GUMO | Guam | 22.53 | 102 | LR | LR | 10 52 38.6 | |
| | comp=Z,47nm,18.7s,baz=288,slow=36 | | | | | | |
| PSI | Prapat | 28.09 | 237 | LR | LR | 10 54 46.5 | |
| | comp=Z,103nm,20.8s,baz=137,slow=34 | | | | | | |
| TLY | Talaya | 35.31 | 340 | LR | LR | 11 00 30.8 | |
| | comp=Z,34nm,20.4s,baz=152,slow=37 | | | | | | |
| WRA | Warramunga Arr | 40.92 | 162 | P | P | 10 46 36.6 | -1.8 |
| | 0.6nm,0.8s,baz=342,slow=9.2,SNR=3.4 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.04 | 84 | T | T | 11 31 47.4 | |
| | baz=277,slow=75,SNR=649 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.05 | 84 | T | T | 11 31 48.4 | |
| | baz=277,slow=75,SNR=164 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.05 | 84 | T | T | 11 31 48.7 | |
| | baz=277,slow=75,SNR=198 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.06 | 82 | T | T | 11 31 47.7 | |
| | baz=277,slow=75,SNR=433 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.06 | 82 | T | T | 11 31 48.0 | |
| | baz=277,slow=75,SNR=230 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.07 | 82 | T | T | 11 31 49.1 | |
| | baz=277,slow=75,SNR=326 | | | | | | |
| MKAR | Makanchi Array | 42.44 | 319 | P | P | 10 46 50.5 | -0.1 |
| | 2.9nm,0.7s,baz=110,slow=10.0,SNR=18 | | | | | | |
| PETK | Petropavlovsk- | 43.38 | 31 | LR | LR | 11 03 30.8 | |
| | comp=Z,26nm,21.9s,baz=271,slow=34 | | | | | | |
| ASAR | Alice Springs | 44.35 | 165 | P | P | 10 47 04.1 | -2.1 |
| | 0.2nm,0.7s,baz=348,slow=7.3,SNR=3.3 | | | | | | |
| ZALV | Zalesovo Beam | 44.74 | 329 | P | P | 10 47 08.3 | -0.7 |
| | 1.0nm,0.5s,baz=108,slow=9.3,SNR=3.2 | | | | | | |
| KURBB | Kurchatov Arra | 46.36 | 323 | P | P | 10 47 20.6 | -1.2 |
| | 2.1nm,0.7s,baz=120,slow=7.5,SNR=14 | | | | | | |
| BVAR | Borovoye Array | 51.95 | 323 | P | P | 10 48 04.0 | -0.7 |
| | 0.6nm,0.6s,baz=81,slow=8.9,SNR=2.9 | | | | | | |
| BRTR | Keskin Array B | 76.74 | 308 | LR | LR | 11 28 11.6 | |
| | comp=Z,20nm,18.1s,baz=142,slow=39 | | | | | | |
| YKA | Yellowknife Ar | 86.97 | 23 | P | P | 10 51 42.6 | +1.8 |
| | 0.9nm,0.8s,baz=306,slow=4.0,SNR=2.9 | | | | | | |

*ISK **04** 10:39:40.2, 39°.90N×29°.19E, h5km, MD2.5*
*ISCJB **04** 10:39:41.2±0.3, 39°.91N±0°.02×29°.18E±0°.03, h0km, Error ellipse: s-maj=3.5km s-min=3.0km az=28.7*
*DDA **04** 10:39:41.0, 39°.91N×29°.18E, h7km, Md2.6*
*CSEM **04** 10:39:41.2±0.1, 39°.90N×29°.19E, h1km, MD2.6, Error ellipse: s-maj=3.2km s-min=2.7km az=140.0, Mining explosion.*
**ISC 04 10:39:41.5**±0.8, **39°.89N**±0°.02×**29°.19E**±0°.02, **h0**km, **n51**, σ**0$^s$56**/67, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULDT | Uludag | 0.25 | 351 | i P | Pg | 10 39 46.3 | -0.1 |
| ULDT | | | | i S | Sg | 10 39 50.0 | +0.3 |
| ULDT | Uludag | 0.25 | 351 | P | Pg | 10 39 46.3 | -0.1 |
| ULDT | | | | S | Sg | 10 39 50.0 | +0.3 |
| ORLT | Orhaneli | 0.27 | 305 | ePG | Pg | 10 39 46.8 | +0.1 |
| ORLT | Orhaneli | 0.27 | 305 | ePg | Pg | 10 39 46.8 | +0.1 |
| IGD | Bursa | 0.37 | 2 | P | Pg | 10 39 48.5 | -0.1 |
| IZI | Iznik | 0.49 | 26 | ePG | Pg | 10 39 50.9 | -0.1 |
| IZI | Iznik | 0.49 | 26 | ePg | Pg | 10 39 50.9 | -0.1 |
| DST | Dursunbey | 0.52 | 237 | ePG | Pg | 10 39 51.5 | 0.0 |
| DST | | | | eSG | Sg | 10 39 59.9 | +1.6 |
| DST | Dursunbey | 0.52 | 237 | ePg | Pg | 10 39 51.5 | 0.0 |
| DST | | | | eSg | Sg | 10 39 59.9 | +1.6 |
| CAVI | Cavuskoy | 0.59 | 58 | ePG | Pg | 10 39 52.6 | -0.2 |
| CAVI | | | | eSG | Sg | 10 40 01.7 | +1.2 |
| CAVI | Cavuskoy | 0.59 | 58 | ePg | Pg | 10 39 52.6 | -0.2 |
| CAVI | | | | eSg | Sg | 10 40 01.7 | +1.2 |
| ADVT | Abdulvahap | 0.69 | 38 | ePG | Pg | 10 39 54.4 | -0.2 |
| ADVT | Abdulvahap | 0.69 | 38 | ePg | Pg | 10 39 54.4 | -0.2 |
| ARMT | Armutlu | 0.72 | 340 | ePG | Pg | 10 39 55.0 | -0.2 |
| ARMT | Armutlu | 0.72 | 340 | ePg | Pg | 10 39 55.1 | -0.2 |
| KCTX | Karacabey (Bur | 0.74 | 301 | ePG | Pg | 10 39 55.7 | 0.0 |
| KCTX | | | | eSG | Sb | 10 40 07.1 | -0.8 |
| KCTX | Karacabey (Bur | 0.74 | 301 | ePg | Pg | 10 39 55.7 | 0.0 |
| KCTX | | | | eSg | Sb | 10 40 07.1 | -0.8 |
| DEMI | Demirci | 0.92 | 203 | i P | Pg | 10 39 58.1 | -1.1 |
| DEMI | | | | i S | Sg | 10 40 11.6 | +0.4 |
| DEMI | Demirci | 0.92 | 203 | P | Pg | 10 39 58.1 | -1.1 |
| DEMI | | | | S | Sg | 10 40 11.6 | +0.4 |
| BORA | Eskisehir | 0.97 | 90 | i P | Pg | 10 39 59.6 | -0.5 |
| BORA | Eskisehir | 0.97 | 90 | P | Pg | 10 39 59.6 | -0.5 |
| HRT | Hereke | 1.00 | 21 | ePG | Pg | 10 40 00.3 | -0.3 |
| HRT | Hereke | 1.00 | 21 | ePg | Pg | 10 40 00.3 | -0.3 |
| BALB | Balikesir | 1.04 | 256 | ePG | Pg | 10 40 01.3 | -0.1 |
| BALB | Balikesir | 1.04 | 256 | ePg | Pg | 10 40 01.3 | -0.1 |
| EDC | Edincik | 1.11 | 295 | ePN | Pg | 10 40 02.6 | -0.2 |
| EDC | Edincik | 1.11 | 295 | ePn | Pg | 10 40 02.6 | -0.2 |
| GULT | Gulveren | 1.15 | 62 | ePN | Pg | 10 40 03.3 | -0.3 |
| GULT | Gulveren | 1.15 | 62 | ePn | Pg | 10 40 03.3 | -0.3 |
| GONE | Gonen-Balikesi | 1.16 | 278 | ePN | Pg | 10 40 03.5 | -0.2 |
| GONE | Gonen-Balikesi | 1.16 | 278 | ePn | Pg | 10 40 03.6 | -0.2 |
| ISK | Istanbul-Kandi | 1.18 | 355 | ePN | Pg | 10 40 03.7 | -0.4 |
| ISK | Istanbul-Kandi | 1.18 | 355 | ePn | Pg | 10 40 03.7 | -0.4 |
| ESKT | Eskisehir | 1.33 | 106 | P | Pb | 10 40 07.5 | 0.0 |
| ESKT | | | | S | Sb | 10 40 25.4 | +0.2 |
| SEYT | Eskypehyr | 1.33 | 106 | i P | Pb | 10 40 07.5 | 0.0 |
| SEYT | | | | i S | Sb | 10 40 25.4 | +0.2 |
| MRMT | Marmara Adasi | 1.41 | 301 | ePN | Pn | 10 40 08.1 | -0.4 |
| MRMT | Marmara Adasi | 1.41 | 301 | ePn | Pn | 10 40 08.1 | -0.4 |
| KULA | Kula-Manisa | 1.44 | 197 | ePN | Pn | 10 40 08.4 | -0.4 |
| KULA | Kula-Manisa | 1.44 | 197 | ePn | Pn | 10 40 08.5 | -0.4 |
| CTKS | Kestanelik-??a | 1.44 | 339 | ePN | Pn | 10 40 08.3 | -0.5 |
| CTKS | Kestanelik-??a | 1.44 | 339 | ePn | Pn | 10 40 08.3 | -0.5 |
| MANT | Manisa | 1.48 | 199 | i P | Pb | 10 40 09.8 | -0.2 |
| MANT | | | | i S | Sn | 10 40 30.0 | +0.2 |
| MANT | Manisa | 1.48 | 199 | P | Pb | 10 40 09.8 | -0.2 |
| MANT | | | | S | Sn | 10 40 30.0 | +0.2 |
| KRBG | Karabiga-Canak | 1.53 | 290 | ePN | Pn | 10 40 09.8 | -0.3 |
| KRBG | Karabiga-Canak | 1.53 | 290 | ePn | Pn | 10 40 09.8 | -0.3 |
| KHAL | Karahalli | 1.54 | 171 | i P | Pn | 10 40 10.0 | -0.3 |
| KHAL | | | | i S | Sg | 10 40 32.3 | +1.4 |
| KHAL | Karahalli | 1.54 | 171 | P | Pn | 10 40 10.0 | -0.3 |
| KHAL | | | | S | Sg | 10 40 32.3 | +1.4 |
| LPK | Lapseki | 1.92 | 285 | ePN | Pn | 10 40 15.4 | -0.1 |
| LPK | Lapseki | 1.92 | 285 | ePn | Pn | 10 40 15.4 | -0.1 |
| GELI | Tayfur-Gelibol | 2.14 | 285 | ePN | Pn | 10 40 18.4 | 0.0 |
| GELI | Tayfur-Gelibol | 2.14 | 285 | ePn | Pn | 10 40 18.4 | 0.0 |

*ISCJB **04** 10:40:25.6±0.4, 63°.12N±0°.02×27°.75E±0°.07, h0km, Error ellipse: s-maj=4.5km s-min=2.7km az=23.4*
*CSEM **04** 10:40:26.9±0.1, 63°.10N×27°.76E, h2km, ML1.9, Error ellipse: s-maj=4.6km s-min=2.5km az=112.0, Mining*

*explosion.*
*NAO **04** 10:40:26.4±1.0, 63°.05N×28°.09E, ML2.3*
*HEL **04** 10:40:27.4±0.1, 63°.11N×27°.76E, h0km, ML1.9, Explosion*
*BER **04** 10:40:27.5±3.8, 63°.05N×27°.91E, h0km, ML2.3(NAO), Suspected explosion*
**ISC 04 10:40:26.2**±0.8**, 63°.11N**±0°.02×**27°.78E**±0°.03**, h0km, n40, σ1s.04/73, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SUF** | **Sumiainen** | **0.84** | **243** | *e*P | **Pg** | **10 40 42.3** | **0.0** |
| SUF | | | | *e*S | **Sg** | **10 40 53.0** | **-0.2** |
| **SUF** | **Sumiainen** | **0.84** | **243** | P | **Pg** | **10 40 42.3** | **0.0** |
| SUF | | | | S | **Sg** | **10 40 52.9** | **-0.2** |
| **KJN** | **Kajaani** | **0.98** | **358** | *e*P | **Pg** | **10 40 44.9** | **-0.1** |
| KJN | | | | *e*S | **Sg** | **10 40 56.7** | **-1.0** |
| **KJN** | **Kajaani** | **0.98** | **358** | P | **Pg** | **10 40 44.8** | **-0.1** |
| KJN | | | | S | **Sg** | **10 40 56.7** | **-1.0** |
| **KAF** | **Kangasniemi** | **1.21** | **215** | *e*P | **Pg** | **10 40 48.8** | **-0.5** |
| KAF | | | | *e*S | **Sg** | **10 41 04.2** | **-0.8** |
| **KAF** | **Kangasniemi** | **1.21** | **215** | P | **Pg** | **10 40 48.8** | **-0.5** |
| KAF | | | | S | **Sg** | **10 41 04.1** | **-0.8** |
| **JOF** | **Joensuu** | **1.62** | **95** | *e*P | **Pb** | **10 40 56.5** | **-0.5** |
| JOF | | | | *e*S | **Sn** | **10 41 17.1** | **-0.4** |
| JOF | | | | MSG | | 10 41 20.0 | |
| | comp=Z,8.3nm,0.1s | | | | | | |
| **JOF** | **Joensuu** | **1.62** | **95** | P | **Pb** | **10 40 56.4** | **-0.5** |
| JOF | | | | S | **Sn** | **10 41 17.1** | **-0.4** |
| **KEF** | **Keuruu** | **1.64** | **236** | *e*P | **Pn** | **10 40 56.7** | **+0.5** |
| KEF | | | | *e*S | **Sn** | **10 41 17.3** | **-0.7** |
| KEF | | | | MSG | | 10 41 20.9 | |
| | comp=Z,15nm,0.1s | | | | | | |
| **KEF** | **Keuruu** | **1.64** | **236** | P | **Pn** | **10 40 56.7** | **+0.5** |
| KEF | | | | S | **Sn** | **10 41 17.3** | **-0.7** |
| **FIA0** | **FINESS Array S** | **1.85** | **206** | Pg | **Pb** | **10 41 00.2** | **-0.6** |
| | baz=25,slow=16 | | | | | | |
| FIA0 | | | | Lg | Lg | 10 41 24.8 | |
| | baz=26,slow=28 | | | | | | |
| FIA0 | | | | Rg | Rg | 10 41 33.0 | |
| | baz=28,slow=37 | | | | | | |
| **FIA0** | **FINESS Array S** | **1.85** | **206** | Pg | **Pb** | **10 41 00.2** | **-0.6** |
| | baz=25,slow=16 | | | | | | |
| FIA0 | | | | Lg | Lg | 10 41 24.8 | |
| | baz=26,slow=28 | | | | | | |
| FIA0 | | | | Rg | Rg | 10 41 33.0 | |
| | baz=28,slow=37 | | | | | | |
| **FIA0** | **FINESS Array S** | **1.85** | **206** | *e*P | **Pn** | **10 40 60.0** | **+0.8** |
| FIA0 | | | | *e*S | **Sn** | **10 41 23.1** | **0.0** |
| FIA0 | | | | MSG | | 10 41 27.9 | |
| | comp=Z,8.2nm,0.1s | | | | | | |
| **FIA0** | **FINESS Array S** | **1.85** | **206** | P | **Pn** | **10 40 59.9** | **+0.8** |
| **FIA0** | **FINESS Array S** | **1.85** | **206** | Pg | **Pb** | **10 41 00.2** | **-0.6** |
| | baz=25,slow=16,SNR=90 | | | | | | |
| FIA0 | | | | S | **Sn** | **10 41 23.1** | **0.0** |
| FIA0 | | | | Lg | Lg | 10 41 24.8 | |
| | baz=26,slow=28 | | | | | | |
| **OUL** | **Oulu** | **2.15** | **338** | *e*P | **Pn** | **10 41 04.6** | **+1.4** |
| OUL | | | | *e*S | **Sn** | **10 41 31.5** | **+0.9** |
| **OUL** | **Oulu** | **2.15** | **338** | P | **Pn** | **10 41 04.6** | **+1.4** |
| OUL | | | | S | **Sn** | **10 41 31.5** | **+0.9** |
| **VAF** | **Ylistaro** | **2.33** | **271** | *e*P | **Pn** | **10 41 07.0** | **+1.4** |
| VAF | | | | *e*S | **Sn** | **10 41 35.8** | **+0.9** |
| **VAF** | **Ylistaro** | **2.33** | **271** | P | **Pn** | **10 41 07.0** | **+1.4** |
| VAF | | | | S | **Sn** | **10 41 35.8** | **+0.9** |
| **VJF** | **Virojoki** | **2.58** | **183** | *e*P | **Pn** | **10 41 10.6** | **+1.4** |
| VJF | | | | *e*S | **Sn** | **10 41 42.1** | **+1.0** |
| **VJF** | **Virojoki** | **2.58** | **183** | P | **Pn** | **10 41 10.5** | **+1.4** |
| VJF | | | | S | **Sn** | **10 41 42.1** | **+1.0** |
| **PVF** | **Pernaja** | **2.73** | **200** | *e*P | **Pn** | **10 41 12.9** | **+1.8** |
| PVF | | | | *e*S | **Sn** | **10 41 45.3** | **+0.6** |
| **PVF** | **Pernaja** | **2.73** | **200** | P | **Pn** | **10 41 12.9** | **+1.8** |
| PVF | | | | S | **Sn** | **10 41 45.3** | **+0.6** |
| **MSF** | **Maaselka** | **2.87** | **10** | *e*P | **Pn** | **10 41 13.6** | **+0.4** |
| MSF | | | | *e*S | **Sn** | **10 41 48.9** | **+0.6** |
| **MSF** | **Maaselka** | **2.87** | **10** | P | **Pn** | **10 41 13.5** | **+0.4** |
| MSF | | | | S | **Sn** | **10 41 48.8** | **+0.6** |
| **KU6** | **Riekki** | **3.07** | **16** | *e*P | **Pn** | **10 41 16.5** | **+0.6** |
| KU6 | | | | *e*S | **Sn** | **10 41 53.9** | **+0.6** |
| **KU6** | **Riekki** | **3.07** | **16** | P | **Pn** | **10 41 16.4** | **+0.6** |
| KU6 | | | | S | **Sn** | **10 41 53.8** | **+0.6** |
| **UMAU** | **Umeaa** | **3.28** | **287** | *e*P | **Pn** | **10 41 19.7** | **+1.0** |
| UMAU | | | | *e*S | **Sn** | **10 41 58.2** | **-0.1** |
| **UMAU** | **Umeaa** | **3.28** | **287** | P | **Pn** | **10 41 19.7** | **+1.0** |
| UMAU | | | | S | **Sn** | **10 41 58.2** | **-0.1** |
| **RNF** | **Rovaniemi** | **3.60** | **349** | *e*P | **Pn** | **10 41 24.3** | **+1.1** |
| RNF | | | | *e*S | **Sn** | **10 42 05.5** | **-0.8** |
| **RNF** | **Rovaniemi** | **3.60** | **349** | P | **Pn** | **10 41 24.2** | **+1.1** |
| RNF | | | | S | **Sn** | **10 42 05.4** | **-0.8** |
| **APA0** | **Apatity Array** | **5.02** | **23** | Pn | **Pn** | **10 41 44.1** | **+1.6** |
| | baz=214,slow=14 | | | | | | |
| APA0 | | | | Sn | **Sn** | **10 42 41.2** | **+0.1** |
| | baz=198,slow=28 | | | | | | |
| APA0 | | | | Lg | Lg | 10 42 58.9 | |
| | baz=210,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **5.02** | **23** | Pn | **Pn** | **10 41 44.1** | **+1.6** |
| | baz=214,slow=14 | | | | | | |
| APA0 | | | | Sn | **Sn** | **10 42 41.2** | **+0.1** |
| | baz=198,slow=28 | | | | | | |
| APA0 | | | | Lg | Lg | 10 42 58.9 | |
| | baz=210,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **5.02** | **23** | Pn | **Pn** | **10 41 44.2** | **+1.6** |
| | baz=214,slow=12,SNR=50 | | | | | | |
| APA0 | | | | Sn | **Sn** | **10 42 41.2** | **+0.1** |
| | baz=198,slow=26,SNR=50 | | | | | | |
| APA0 | | | | Lg | Lg | 10 42 58.8 | |
| | SNR=4.9 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.52** | **353** | Pn | **Pn** | **10 42 04.0** | **+0.8** |
| | baz=169,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **10 43 14.8** | **-3.4** |
| | baz=173,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.52** | **353** | Pn | **Pn** | **10 42 04.0** | **+0.8** |
| | baz=169,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **10 43 14.8** | **-3.4** |
| | baz=173,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.52** | **353** | Pn | **Pn** | **10 42 04.0** | **+0.8** |
| | baz=169,slow=14,SNR=50 | | | | | | |
| **HFS** | **Hagfors** | **7.34** | **252** | Pn | **Pn** | **10 42 15.3** | **+0.8** |
| | baz=72,slow=14 | | | | | | |
| **HFS** | **Hagfors** | **7.34** | **252** | Pn | **Pn** | **10 42 15.3** | **+0.8** |
| | baz=72,slow=14 | | | | | | |
| **HFS** | **Hagfors** | **7.34** | **252** | Pn | **Pn** | **10 42 15.3** | **+0.8** |
| | baz=72,slow=13,SNR=50 | | | | | | |

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*ISCJB **04** 10:45:31.7±1.0, 25°.50N±0°.03×105°.72E±0°.03, h15km±7km, mb4.4/43, MS3.0/1, Error ellipse: s-maj=5.4km s-min=4.5km az=155.1*
*BJI **04** 10:45:31.7, 25°.51N×105°.75E, h7km, mb4.5/30, mB4.8/18, ML4.4/19, Ms4.3/30, Ms7 4.0/24*
*IDC **04** 10:45:31.2±0.5, 25°.63N×105°.79E, h0km, mb4.3/24, mb1 4.4/25, mb1mx4.2/46, mbtmp4.3/25, ML4.3/1, MS3.1/1, Ms1 3.1/1, ms1mx2.7/26, Error ellipse: s-maj=15.7km s-min=12.7km az=51.0*
*NEIC **04** 10:45:34.6±0.7, 25°.54N×105°.77E, h20km±4km, mb4.6/12, Error ellipse: s-maj=5.6km s-min=4.8km az=98.0*
*MOS **04** 10:45:34.6±1.1, 25°.55N×105°.76E, h33km, mb4.5/24, Error ellipse: s-maj=8.9km s-min=7.0km az=103.7*
**ISC 04 10:45:33.8**±1.0**, 25°.53N**±0°.04×**105°.77E**±0°.04**, h15km**±6km**, n140, σ1s.66/163, mb4.5/43, 5C-5D, Southeastern China**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GYA** | **Guiyang** | **1.23** | **41** | ⇓*i*Pg | **Pn** | **10 45 54.7** | **-1.8** |
| GYA | | | | Sg | **Sb** | **10 46 10.6** | **-1.9** |
| GYA | | | | SME | | | |
| | 7µm,0.7s | | | | | | |
| **KMI** | **Kunming** | **2.77** | **262** | Pn | **Pn** | **10 46 18.8** | **+0.9** |
| KMI | | | | Sn | **Sn** | **10 46 53.0** | **+1.9** |
| KMI | | | | SMN | | | |
| | 1µm,0.9s | | | | | | |
| KMI | | | | SME | | | |
| | 860nm,0.8s | | | | | | |
| **KMI** | **Kunming** | **2.77** | **262** | P | **Pn** | **10 46 18.8** | **+0.9** |
| KMI | | | | | | 10 46 53.0 | |
| **KMI** | **Kunming** | **2.77** | **262** | Pn | **Pn** | **10 46 18.8** | **+0.9** |
| KMI | | | | Pb | **Pg** | **10 46 25.3** | **-1.7** |
| KMI | | | | Sn | **Sn** | **10 46 53.0** | **+1.9** |
| KMI | | | | Sb | **Sg** | **10 47 01.9** | **-1.0** |
| **SLVN** | **Son La** | **4.51** | **203** | *e*Pn | **Pn** | **10 46 41.9** | **+0.2** |
| **CD2** | **Chengdu** | **5.64** | **342** | Pn | **Pn** | **10 46 58.3** | **+1.1** |
| CD2 | | | | Sn | **Sn** | **10 48 00.9** | **-0.9** |
| CD2 | | | | Sg | **Sg** | **10 48 32.3** | **-2.8** |
| CD2 | | | | SMN | | | |
| | 620nm,1.1s | | | | | | |
| CD2 | | | | SME | | | |
| | 790nm,0.9s | | | | | | |
| CD2 | | | | LN | | | |
| | 2µm,5.1s | | | | | | |
| CD2 | | | | LE | | | |
| | 3µm,4.7s | | | | | | |
| CD2 | | | | LZ | | | |
| | 2µm,4.8s | | | | | | |
| **ENH** | **Enshi** | **5.76** | **34** | *e*Pn | **Pn** | **10 47 01.0** | **+2.3** |
| **GZH** | **Guangzhou** | **7.33** | **108** | Pn | **Pn** | **10 47 21.3** | **+1.0** |
| GZH | | | | Sn | **Sn** | **10 48 42.9** | **-0.3** |
| GZH | | | | SMN | | | |
| | 560nm,0.8s | | | | | | |
| GZH | | | | SME | | | |
| | 590nm,0.9s | | | | | | |
| **QIZ** | **Qiongzhong** | **7.49** | **149** | Pn | Pn | 10 47 18.4 | -4.1 |
| QIZ | | | | Sn | Sn | 10 48 54.4 | +7.2 |
| QIZ | | | | SMN | | | |
| | 99nm,2.6s | | | | | | |
| QIZ | | | | LZ | | | |
| | 2µm,9.2s | | | | | | |
| **QIZ** | **Qiongzhong** | **7.49** | **149** | *e*Pn | **Pn** | **10 47 21.4** | **-1.2** |
| **XAN** | **Xi'an** | **8.91** | **17** | P | **Pn** | **10 47 41.3** | **-0.8** |
| XAN | | | | PMZ | | | |
| | 47nm,0.8s | | | | | | |
| XAN | | | | LN | | | |
| | 330nm,4.1s | | | | | | |
| XAN | | | | LE | | | |
| | 510nm,4.0s | | | | | | |
| **WHN** | **Wuhan** | **9.08** | **55** | P | **Pn** | **10 47 46.7** | **+2.4** |
| WHN | | | | S | **Sn** | **10 49 24.9** | **-1.3** |
| WHN | | | | LN | | | |
| | 2µm,5.6s | | | | | | |
| WHN | | | | LE | | | |
| | 1µm,5.5s | | | | | | |
| WHN | | | | LZ | | | |
| | 2µm,5.7s | | | | | | |
| **CHTO** | **Chiang Mai** | **9.20** | **225** | *e*P | **Pn** | **10 47 47.3** | **+1.3** |
| **CHTO** | **Chiang Mai** | **9.20** | **225** | *e*Pn | **Pn** | **10 47 47.3** | **+1.3** |
| **CMAR** | **Chiang Mai Arr** | **9.46** | **223** | Pn | **Pn** | **10 47 50.5** | **+0.8** |
| | 0.8nm,0.3s,baz=33,slow=13,SNR=16 | | | | | | |
| CMAR | | | | Lg | Lg | 10 50 33.6 | |
| | 0.4nm,0.3s,baz=42,slow=28,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **9.46** | **223** | *i* P | **Pn** | **10 47 50.7** | **+1.0** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **9.48** | **223** | *e*Pn | **Pn** | **10 47 50.3** | **+0.4** |
| **LZH** | **Lanzhou** | **10.65** | **352** | *e*P | Pn | 10 48 11.5 | +5.5 |
| LZH | | | | pP | | 10 48 15.1 | |
| LZH | | | | sP | | 10 48 17.6 | |
| LZH | | | | *e*S | **Sn** | **10 50 10.7** | **+5.6** |
| LZH | | | | sS | | 10 50 14.0 | |
| LZH | | | | SS | **SnSn** | **10 50 26.1** | **+8.7** |
| LZH | | | | PMZ | | | |
| | comp=Z,32nm,1.2s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,120nm,4.0s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,530nm,8.8s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,1µm,7.8s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,980nm,9.7s | | | | | | |
| **NJ2** | **Nanjing** | **13.18** | **57** | *e*P | Pn | 10 48 44.7 | +4.2 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,60nm,0.8s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=Z,510nm,16.7s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=Z,770nm,16.0s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=Z,1µm,16.7s | | | | | | |
| **LSA** | **Lhasa** | **13.61** | **291** | P | **Pn** | **10 48 47.6** | **+0.8** |
| LSA | | | | PMZ | | | |
| | comp=Z,40nm,1.2s | | | | | | |
| **LSA** | **Lhasa** | **13.61** | **291** | *e*P | **Pn** | **10 48 47.5** | **+0.8** |
| **LSA** | **Lhasa** | **13.61** | **291** | *e*Pn | **Pn** | **10 48 47.5** | **+0.8** |
| **GTA** | **Gaotai** | **14.72** | **342** | *e*P | **P** | **10 49 06.1** | **-1.6** |
| GTA | | | | pP | Pn | 10 49 09.7 | +8.1 |
| GTA | | | | sP | | 10 49 12.3 | |
| GTA | | | | S | Sn | 10 51 51.2 | +6.8 |
| GTA | | | | sS | S | 10 51 56.4 | -6.8 |
| GTA | | | | SS | SnSn | 10 52 07.7 | +10 |
| GTA | | | | PMZ | | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,100nm,4.6s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,540nm,14.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,650nm,15.2s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,620nm,11.9s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **16.02** | **16** | *e*P | **P** | **10 49 21.3** | **-0.8** |
| HHC | | | | S | **Sn** | **10 52 19.3** | **+3.2** |
| HHC | | | | sS | **S** | **10 52 25.6** | **-4.2** |
| HHC | | | | PMZ | | | |
| | comp=Z,17nm,1.2s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,320nm,13.5s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,570nm,12.4s | | | | | | |
| **TAPN** | **Taplejung** | **16.28** | **280** | *e*P | **Pn** | **10 49 20.0** | **-2.2** |
| | comp=Z,55nm,1.1s | | | | | | |
| **ODAN** | **Odare** | **16.55** | **279** | *e*P | **Pn** | **10 49 23.6** | **-2.1** |
| | comp=Z,41nm,0.9s | | | | | | |
| **BJT** | **Baijiatuau** | **16.87** | **29** | *e*P | **P** | **10 49 32.8** | **+1.4** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| **BJT** | **Baijiatuau** | **16.87** | **29** | *e*Pn | **P** | **10 49 32.8** | **+1.4** |
| | comp=Z,20nm,1.1s | | | | | | |
| **RAMN** | **Ramite** | **17.26** | **279** | *e*P | **Pn** | **10 49 32.5** | **-2.1** |
| | comp=Z,22nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **17.93** | **282** | *e*P | **Pn** | **10 49 40.8** | **-2.2** |
| | comp=Z,97nm,0.9s | | | | | | |
| **PKI** | **Pulchoki** | **18.33** | **281** | *e*P | **Pn** | **10 49 45.6** | **-2.3** |
| | comp=Z,33nm,0.8s | | | | | | |
| **PKIN** | **Phulchoki** | **18.34** | **281** | *e*P | **Pn** | **10 49 45.6** | **-2.4** |
| | comp=Z,23nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **18.45** | **282** | *e*P | **P** | **10 49 46.9** | **-2.3** |
| | comp=Z,25nm,0.7s | | | | | | |
| **DMN** | **Daman** | **18.60** | **281** | *e*P | **P** | **10 49 48.5** | **-2.3** |
| | comp=Z,36nm,0.9s | | | | | | |
| **GKN** | **Gorkha** | **19.03** | **282** | *e*P | **P** | **10 49 53.2** | **-2.3** |
| | comp=Z,23nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **19.94** | **281** | *e*P | **P** | **10 50 03.9** | **-1.6** |
| | comp=Z,29nm,0.8s | | | | | | |
| **TJN** | **Taejon** | **21.40** | **54** | *c i*P | **P** | **10 50 21.1** | **+0.1** |
| **KSAR** | **Wonju Array Be** | **22.23** | **52** | P | **P** | **10 50 28.9** | **-1.0** |
| **KSAR** | **Wonju Array Be** | **22.23** | **52** | P | **P** | **10 50 28.9** | **-1.0** |
| **KSRS** | **Korea Array** | **22.26** | **52** | P | **P** | **10 50 28.9** | **-1.3** |
| | comp=Z,2.9nm,0.7s,baz=240,slow=9.5,SNR=8.2 | | | | | | |
| **KSRS** | **Korea Array** | **22.26** | **52** | P | **P** | **10 50 28.9** | **-1.3** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **22.27** | **1** | P | **P** | **10 50 29.9** | **-0.4** |
| | comp=Z,3.8nm,0.7s,baz=178,slow=11,SNR=27 | | | | | | |
| **SONM** | **Songino Array** | **22.27** | **1** | P | **P** | **10 50 29.9** | **-0.4** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **SONA1** | **Songino Array** | **22.28** | **1** | *e*P | **P** | **10 50 30.1** | **-0.5** |
| **ULN** | **Ulaanbaatar** | **22.32** | **2** | ⇑*e*P | **P** | **10 50 32.0** | **+1.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **22.32** | **2** | *e*P | **P** | **10 50 32.5** | **+1.6** |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **JNU** | **Nakatsue** | **23.13** | **65** | P | **P** | **10 50 39.1** | **-0.3** |
| | comp=Z,8.2nm,0.8s,baz=55,slow=12,SNR=3.9 | | | | | | |
| JNU | | | | LR | LR | 11 00 48.7 | |
| | comp=Z,53nm,20.6s,baz=285,slow=40 | | | | | | |
| **WMQ** | **Urumqi** | **23.44** | **326** | *e*P | **P** | **10 50 43.0** | **+0.4** |
| WMQ | | | | PP | **PnPn** | **10 51 14.0** | **+4.9** |
| WMQ | | | | S | **S** | **10 54 51.0** | **-4.5** |
| WMQ | | | | SS | **SnSn** | **10 55 37.0** | **+5.8** |
| WMQ | | | | PMZ | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,12nm,3.5s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,170nm,9.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,58nm,9.0s | | | | | | |
| **SBUM** | **Sibu** | **23.77** | **164** | *e*P | **P** | **10 50 46.6** | **+0.8** |
| | comp=Z,9.5nm,1.0s | | | | | | |
| **CN2** | **Changchun** | **24.27** | **36** | *e*P | **P** | **10 50 50.9** | **+0.5** |
| CN2 | | | | *e*pP | **pP** | **10 50 56.0** | **+0.9** |
| CN2 | | | | *e*S | S | 10 55 01.8 | -6.8 |
| CN2 | | | | PMZ | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,300nm,13.0s | | | | | | |
| **ZAK** | **Zakamensk** | **24.89** | **356** | *e*P | **P** | **10 50 56.2** | **+0.2** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **HYB** | **Hyderabad** | **26.54** | **258** | *i* P | **P** | **10 51 11.0** | **-0.2** |
| **MSHR** | **Mys Shultsa** | **26.90** | **44** | P | **P** | **10 51 13.0** | **-1.1** |
| **HVS** | **Khovu-Aksy** | **27.19** | **343** | ⇓*i*P | **P** | **10 51 17.4** | **+0.6** |
| HVS | | | | pmax | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **28.26** | **325** | P | **P** | **10 51 26.3** | **0.0** |
| | comp=Z,0.7nm,0.4s,baz=126,slow=9.9,SNR=7.1 | | | | | | |
| MKAR | | | | PcP | **PcP** | **10 54 39.6** | **+0.1** |
| | comp=Z,2.0nm,0.6s,baz=103,slow=5.4,SNR=9.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **28.26** | **325** | *c e*P | **P** | **10 51 26.8** | **+0.4** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **28.26** | **325** | *e*P | **P** | **10 51 27.0** | **+0.6** |
| MKAR | | | | PcP | **PcP** | **10 54 39.6** | **+0.1** |
| **USRK** | **Ussuriysk Ar.** | **28.27** | **42** | P | **P** | **10 51 24.9** | **-1.5** |
| | comp=Z,5.7nm,0.8s,baz=241,slow=8.2,SNR=9.5 | | | | | | |
| **MAKZ** | **Makanchi** | **28.43** | **324** | *e*P | **P** | **10 51 28.3** | **+0.4** |
| **KSH** | **Kashi** | **28.58** | **307** | P | P | 10 51 32.2 | +2.8 |
| KSH | | | | *e*pP | pP | 10 51 36.6 | +2.5 |
| KSH | | | | *e*PP | **PnPn** | **10 52 24.7** | **+5.4** |
| KSH | | | | S | **S** | **10 56 18.5** | **+1.2** |
| KSH | | | | PMZ | | | |
| | comp=Z,130nm,5.1s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,88nm,6.3s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,120nm,5.3s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,180nm,7.2s | | | | | | |
| **JHJ2** | **Mitsune** | **30.54** | **68** | *e*P | **P** | **10 51 48.1** | **+1.5** |
| | comp=Z,665nm,1.6s | | | | | | |
| **AAK** | **Ala-Archa** | **30.78** | **312** | P | **P** | **10 51 49.7** | **+0.7** |
| | comp=Z,2.1nm,0.4s,baz=152,slow=8.9,SNR=7.3 | | | | | | |
| **AAK** | **Ala-Archa** | **30.78** | **312** | ⇓*i*P | **P** | **10 51 50.1** | **+1.1** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **30.78** | **312** | *e*P | **P** | **10 51 50.2** | **+1.2** |
| | comp=Z,2.6nm,0.7s | | | | | | |
| **EKS2** | **Erkin-Say** | **31.28** | **311** | *e*P | **P** | **10 51 54.5** | **+1.2** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **EKS2** | **Erkin-Say** | **31.28** | **311** | *e*P | **P** | **10 51 54.5** | **+1.2** |
| | comp=Z,6.7nm,0.8s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **32.38** | **337** | *e*P | **P** | **10 52 01.9** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **32.38** | **337** | P | **P** | **10 52 02.4** | **-0.3** |
| | comp=Z,14nm,0.6s,baz=142,slow=8.5,SNR=44 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **32.38** | **337** | P | **P** | **10 52 02.4** | **-0.3** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **32.64** | **327** | P | **P** | **10 52 05.0** | **0.0** |
| | comp=Z,11nm,0.6s,baz=130,slow=9.9,SNR=138 | | | | | | |
| KURBB | | | | PcP | **PcP** | **10 54 49.9** | **-0.9** |
| | comp=Z,2.1nm,0.7s,baz=121,slow=2.7,SNR=13 | | | | | | |
| **KURK** | **Kurchatov** | **32.65** | **327** | P | **P** | **10 52 05.0** | **-0.1** |
| KURK | | | | | | 10 54 49.9 | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **32.65** | **327** | P | **P** | **10 52 05.0** | **-0.1** |
| KURK | | | | PcP | **PcP** | **10 54 49.9** | **-0.9** |
| **KAPI** | **Kappang** | **33.26** | **154** | P | **P** | **10 52 12.1** | **+1.4** |
| | comp=Z,8.6nm,0.8s,baz=214,slow=20,SNR=4.1 | | | | | | |
| **KKAR** | **Karatay Array** | **33.68** | **310** | *e*P | **P** | **10 52 14.2** | **0.0** |
| **KKAR** | **Karatay Array** | **33.68** | **310** | *e*P | **P** | **10 52 14.2** | **0.0** |
| **BVAR** | **Borovoye Array** | **38.13** | **326** | P | **P** | **10 52 51.1** | **-1.1** |
| | comp=Z,1.1nm,0.7s,baz=98,slow=11,SNR=5.7 | | | | | | |
| BVAR | | | | PcP | **PcP** | **10 55 05.7** | **-1.2** |
| | comp=Z,1.9nm,0.6s,baz=130,slow=2.3,SNR=7.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **38.13** | **326** | P | **P** | **10 52 51.1** | **-1.1** |
| BVAR | | | | | | 10 55 05.7 | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **38.21** | **325** | ⇓*e*P | **P** | **10 52 53.0** | **+0.2** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **GEYT** | **Alibeck** | **41.96** | **299** | P | **P** | **10 53 24.0** | **-0.2** |
| | comp=Z,4.9nm,0.4s,baz=115,slow=5.2,SNR=10 | | | | | | |
| **ABKAR** | **Akbulak array** | **42.58** | **316** | *e*P | **P** | **10 53 28.7** | **-0.3** |
| | comp=Z,1.2nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **44.11** | **317** | P | **P** | **10 53 41.5** | **+0.2** |
| | comp=Z,2.1nm,0.7s,baz=95,slow=11,SNR=9.3 | | | | | | |
| AKTO | | | | PcP | **PcP** | **10 55 26.2** | **-0.2** |
| | comp=Z,1.2nm,0.5s,baz=118,slow=3.1,SNR=4.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **44.11** | **317** | P | **P** | **10 53 41.6** | **+0.2** |
| AKTO | | | | | | 10 55 26.2 | |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **ARU** | **Arti** | **45.78** | **325** | *d i*P | **P** | **10 53 55.1** | **+0.5** |
| ARU | | | | | | 10 55 32.3 | |
| ARU | | | | S | **S** | **11 00 38.5** | **+1.0** |
| ARU | | | | SS | **SS** | **11 03 57.9** | **-3.8** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.7s | | | | | | |
| **MA2** | **Magadan** | **46.04** | **30** | *i* P | **P** | **10 53 57.2** | **+0.6** |
| **SEY** | **Seymchan** | **48.31** | **26** | ⇑*i*P | **P** | **10 54 14.0** | **-0.3** |
| **WRAB** | **Tennant Creek** | **53.05** | **146** | ⇑*e*P | **P** | **10 54 51.6** | **+1.1** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,15nm,1.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.05** | **146** | P | **P** | **10 54 50.5** | **0.0** |
| | comp=Z,4.6nm,0.9s,baz=333,slow=8.0,SNR=23 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.05** | **146** | P | **P** | **10 54 50.5** | **0.0** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **KIV** | **Kislovodsk** | **53.71** | **307** | *e*P | **P** | **10 54 55.4** | **+0.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **KIV** | **Kislovodsk** | **53.71** | **307** | *e*P | **P** | **10 54 55.4** | **+0.1** |
| | comp=Z,10nm,0.8s | | | | | | |
| **RAYN** | **Ar Rayn** | **54.45** | **282** | *e*P | **P** | **10 55 00.6** | **-0.4** |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **55.98** | **149** | P | **P** | **10 55 12.4** | **+0.6** |
| | comp=Z,1.9nm,0.9s,baz=326,slow=6.6,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **55.98** | **149** | P | **P** | **10 55 12.5** | **+0.6** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **AS01** | **Alice Springs** | **56.01** | **149** | *e*P | **P** | **10 55 12.0** | **0.0** |
| **BRTR** | **Keskin Array B** | **60.88** | **303** | P | **P** | **10 55 45.6** | **-0.5** |
| | comp=Z,0.7nm,0.5s,baz=126,slow=6.0,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **60.88** | **303** | P | **P** | **10 55 45.6** | **-0.5** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **AKASG** | **Malin Array Be** | **62.32** | **316** | P | **P** | **10 55 54.2** | **-1.2** |
| | comp=Z,4.1nm,0.8s,baz=73,slow=6.1,SNR=8.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **62.32** | **316** | P | **P** | **10 55 54.2** | **-1.2** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | **62.33** | **316** | P | **P** | **10 55 54.0** | **-1.5** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **62.94** | **337** | P | **P** | **10 55 57.5** | **-1.7** |
| | comp=Z,2.0nm,0.7s,baz=98,slow=6.2,SNR=5.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **62.94** | **337** | P | **P** | **10 55 57.5** | **-1.7** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **63.02** | **328** | P | **P** | **10 55 58.9** | **-1.0** |
| | comp=Z,2.4nm,0.5s,baz=104,slow=6.3,SNR=21 | | | | | | |
| **FINES** | **FINESS Array B** | **63.02** | **328** | P | **P** | **10 55 58.9** | **-1.0** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **SPA3** | **Spitsbergen Ar** | **65.08** | **347** | *e*P | **P** | **10 56 14.1** | **+0.9** |
| **SPB3** | **Spitsbergen Ar** | **65.08** | **347** | *e*P | **P** | **10 56 14.0** | **+0.8** |
| **BUR04** | **Bucovina Ar. S** | **65.42** | **313** | *e*P | **P** | **10 56 15.9** | **-0.1** |
| **IDI** | **Anoyia** | **68.67** | **300** | P | **P** | **10 56 35.8** | **-1.1** |
| | comp=Z,4.8nm,0.5s,baz=48,slow=14,SNR=4.2 | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.15** | **329** | P | **P** | **10 56 44.4** | **-1.1** |
| | comp=Z,1.6nm,0.6s,baz=73,slow=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.15** | **329** | P | **P** | **10 56 44.4** | **-1.1** |
| | comp=Z,1.9nm,0.6s,baz=74,slow=6.2,SNR=5.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.15** | **329** | P | **P** | **10 56 44.4** | **-1.1** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| KMBO | Kilima Mbogo | 71.19 | 259 | P | P | 10 56 53.0 | +0.1 |
| | comp=Z,1.0nm,0.4s,baz=40,slow=9.2,SNR=5.3 | | | | | | |
| KMBO | Kilima Mbogo | 71.19 | 259 | P | P | 10 56 53.0 | +0.1 |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| CLL | Collm | 72.16 | 319 | i P | P | 10 56 58.2 | +0.4 |
| CLL | Collm | 72.16 | 319 | i P | P | 10 56 58.2 | +0.4 |
| KHC | Kasperske Hory | 72.51 | 317 | eP | P | 10 57 01.6 | +1.6 |
| KHC | Kasperske Hory | 72.51 | 317 | eP | P | 10 57 01.6 | +1.6 |
| GEC2 | GERESS Array S | 72.53 | 316 | eP | P | 10 57 00.4 | +0.2 |
| GEC2 | GERESS Array S | 72.53 | 316 | eP | P | 10 57 00.4 | +0.2 |
| GERES | GERESS Array B | 72.53 | 316 | P | P | 10 56 59.9 | -0.3 |
| | comp=Z,0.9nm,0.5s,baz=74,slow=6.0,SNR=9.1 | | | | | | |
| GERES | GERESS Array B | 72.53 | 316 | P | P | 10 56 59.9 | -0.3 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| MLY | Manley | 72.62 | 26 | eP | P | 10 57 01.1 | +0.7 |
| | comp=Z,36nm,1.8s | | | | | | |
| BPAW | Bear Paw Mtn. | 72.89 | 27 | eP | P | 10 57 03.0 | +1.0 |
| | comp=Z,123nm,2.5s | | | | | | |
| COLA | College | 73.81 | 25 | P | P | 10 57 08.0 | +0.7 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| ILAR | Eielson Array | 74.23 | 25 | P | P | 10 57 08.4 | -1.4 |
| | comp=Z,0.5nm,0.6s,baz=318,slow=4.7,SNR=8.0 | | | | | | |
| ILAR | Eielson Array | 74.23 | 25 | P | P | 10 57 08.4 | -1.4 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| KDAK | Kodiak Island | 74.68 | 33 | i P | P | 10 57 14.3 | +1.8 |
| SML | Sawmill | 74.95 | 28 | eP | P | 10 57 14.6 | +0.5 |
| SML | Sawmill | 74.95 | 28 | eP | P | 10 57 14.6 | +0.5 |
| SUMG | Summit | 79.17 | 350 | eP | P | 10 57 38.4 | +0.3 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| SUMG | Summit | 79.17 | 350 | eP | P | 10 57 38.4 | +0.3 |
| | comp=Z,11nm,0.7s | | | | | | |
| LSZ | Lusaka | 85.68 | 251 | eP | P | 10 58 13.2 | +0.6 |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| LSZ | Lusaka | 85.68 | 251 | eP | P | 10 58 13.2 | +0.6 |
| | comp=Z,4.1nm,0.9s | | | | | | |
| YKA | Yellowknife Ar | 86.56 | 18 | P | P | 10 58 15.8 | -0.2 |
| | comp=Z,2.3nm,0.7s,baz=326,slow=5.5,SNR=8.3 | | | | | | |
| YKA | Yellowknife Ar | 86.56 | 18 | P | P | 10 58 15.8 | -0.2 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 118.56 | 29 | PKP | PKPdf | 11 04 21.5 | -0.2 |
| | comp=Z,0.3nm,0.4s,baz=278,slow=0.8,SNR=12 | | | | | | |
| JCT | Junction City | 119.16 | 25 | ePKIKP | PKPdf | 11 04 22.6 | -0.2 |
| JCT | Junction City | 119.16 | 25 | ePKPdf | PKPdf | 11 04 22.6 | -0.2 |
| SDV | Santo Domingo | 145.61 | 354 | ePKPdf | PKPdf | 11 05 11.8 | -0.9 |
| ROSC | El Rosal | 149.79 | 0 | ePKPdf | PKPdf | 11 05 19.4 | -0.4 |
| PTGA | Pitinga | 151.76 | 329 | epPKPdf | PKPbc | 11 05 28.6 | -0.2 |

*IDC **04** 11:20:39.4±1.5, 19.°41N×122.°67E, h0$^{km}$, mb3.5/5, mb1 3.7/5, mb1mx3.5/35, mbtmp3.5/5, MS2.8/3, Ms1 2.8/3, ms1mx2.6/28, Error ellipse: s-maj=59.8km s-min=20.8km az=59.0*

*ISCJB **04** 11:20:42.0±1.1, 19.°39N±0.°05×122.°1E±0.°1, h10$^{km}$, mb3.4/5, MS2.7/2, Error ellipse: s-maj=15.5km s-min=7.3km az=171.8*

*MAN **04** 11:20:43, 19.°36N×122.°06E, h21$^{km}$, mb5.0, ML3.9, MS4.1*

**ISC 04 11:20:42.9**±1.2, **19.°32N**±0.°07×**122.°1E**±0.°1, **h10**$^{km}$, **n24**, σ1$^s$**47**/18, **mb3.4**/5, **2C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGCP | Mt. Cagua | 1.07 | 183 | eP | Pb | 11 21 02.8 | -0.8 |
| SGCP | | | | eS | Sg | 11 21 18.3 | +0.6 |
| CVP | Callao Caves | 1.63 | 189 | eP | Pn | 11 21 11.4 | -0.3 |
| APYP | Conner | 1.66 | 209 | eP | Pn | 11 21 11.4 | -0.8 |
| APYP | | | | eS | Sg | 11 21 36.7 | +0.2 |
| PIP | Pasuquin | 1.72 | 235 | ⇑iP | Pn | 11 21 12.0 | -0.9 |
| ABRA | Dolores | 2.12 | 219 | eP | Pn | 11 21 19.1 | +0.6 |
| PALP | Palanan | 2.27 | 172 | eP | Pn | 11 21 21.6 | +1.2 |
| PALP | | | | eS | Sn | 11 21 49.9 | +1.4 |
| CAUP | Cauayan | 2.38 | 186 | eP | Pb | 11 21 24.7 | -1.2 |
| BCPH | Baguio City Da | 3.26 | 207 | ⇑iP | Pn | 11 21 33.9 | -0.5 |
| BCPH | | | | i S | Sn | 11 22 12.9 | -0.5 |
| BOLP | Bolinao | 3.59 | 216 | eP | Pn | 11 21 40.2 | +1.5 |
| BALP | Baler | 3.60 | 188 | eP | Pn | 11 21 40.1 | +1.3 |
| JNU | Nakatsue | 15.83 | 28 | LR | LR | 11 29 54.5 | |
| | comp=Z,33nm,21.7s,baz=191,slow=36 | | | | | | |
| CMAR | Chiang Mai Arr | 21.92 | 272 | P | P | 11 25 39.9 | +3.2 |
| | 0.5nm,0.3s,baz=67,slow=9.8,SNR=4.1 | | | | | | |
| GUMO | Guam | 22.56 | 101 | LR | LR | 11 32 13.4 | |
| | comp=Z,19nm,21.7s,baz=292,slow=32 | | | | | | |
| ASAJ | Asahikawa | 30.09 | 30 | LR | LR | 11 39 58.4 | |
| | comp=Z,25nm,18.6s,slow=39 | | | | | | |
| WRA | Warramunga Arr | 40.83 | 162 | P | P | 11 28 21.8 | -3.1 |
| | 0.6nm,1.0s,baz=346,slow=9.2,SNR=3.7 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.10 | 84 | T | T | 12 13 36.3 | |
| | baz=277,slow=75,SNR=41 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.11 | 84 | T | T | 12 13 33.4 | |
| | baz=277,slow=75,SNR=60 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.12 | 84 | T | T | 12 13 34.0 | |
| | baz=277,slow=75,SNR=41 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.13 | 82 | T | T | 12 13 33.8 | |
| | baz=277,slow=75,SNR=115 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.13 | 82 | T | T | 12 13 38.1 | |
| | baz=277,slow=75,SNR=54 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.14 | 82 | T | T | 12 13 34.9 | |
| | baz=277,slow=75,SNR=52 | | | | | | |
| MKAR | Makanchi Array | 42.49 | 319 | P | P | 11 28 40.0 | +1.6 |
| | 0.9nm,0.6s,baz=114,slow=8.5,SNR=7.9 | | | | | | |
| ASAR | Alice Springs | 44.25 | 164 | P | P | 11 28 50.6 | -2.2 |
| | 0.2nm,0.6s,baz=340,slow=6.5,SNR=6.4 | | | | | | |
| ZALV | Zalesovo Beam | 44.81 | 329 | P | P | 11 28 55.3 | -1.6 |
| | 0.6nm,0.4s,baz=126,slow=9.0,SNR=2.8 | | | | | | |

*NIED **04** 11:32:00, 36.°40N×141.°10E, h35$^{km}$, Mw4.1 Best double couple: $M_0$1.45000×$10^{15}$ NP1:$\phi_s$209.00000°, δ22.00000°, λ97.00000°. NP2:$\phi_s$21.00000°, δ68.00000°, λ87.00000°.*

*BJI **04** 11:32:17.8, 36.°16N×141.°63E, h49$^{km}$, mb4.7/22, mB4.8/15, Ms4.7/8, Ms7 4.4/5*

*ISCJB **04** 11:32:20.3±0.5, 36.°40N±0.°02×141.°14E±0.°05, h44$^{km}$±3$^{km}$, mb4.3/27, MS4.2/11, Error ellipse: s-maj=6.4km s-min=3.6km az=11.6*

*MOS **04** 11:32:20.3±0.9, 36.°43N×141.°08E, h43$^{km}$, mb4.5/20, Error ellipse: s-maj=10.6km s-min=8.1km az=116.6*

*JMA **04** 11:32:21.3±0.1, 36.°39N×141.°03E, h47$^{km}$±1$^{km}$, M4.2 Broadband fault plane solution: P waves. NP1: $\phi_s$28.00000°, δ77.00000°, λ90.00000°. NP2:$\phi_s$206.00000°, δ13.00000°, λ88.00000°. Principal axes: T Plg58.0000°, Azm299.0000°; N Plg0.0000°, Azm28.0000°; P Plg32.0000°, Azm118.0000°;*

*JMA Felt II J1.*

*NEIC **04** 11:32:22.6±0.9, 36.°38N×141.°13E, h49$^{km}$±8$^{km}$, mb4.8/9, MW4.1(NIED) Error ellipse: s-maj=10.3km s-min=8.1km az=103.0*

*NEIC Recorded [2 JMA] in Ibaraki and [1 JMA] in Chiba, Fukushima and Tochigi.*

*IDC **04** 11:32:24.3±2.0, 36.°30N×140.°91E, h65$^{km}$±18$^{km}$, mb3.8/13, mb1 4.0/18, mb1mx3.8/44, mbtmp4.1/18, MS3.1/5, Ms1 3.1/5, ms1mx2.9/30, Error ellipse: s-maj=17.8km s-min=9.3km az=68.0*

**ISC 04 11:32:22.2**±0.6, **36.°39N**±0.°03×**141.°17E**±0.°05, **h43**$^{km}$±4$^{km}$, **n116**, σ1$^s$**59**/129, **mb4.3**/27, **MS4.7**/11, **6C-13D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHO | Hitachi | 0.53 | 294 | ⇓P | Pn | 11 32 31.3 | -2.2 |
| JHO | | | | S | Sn | 11 32 38.3 | -3.2 |
| CHOJ | Chosi | 0.73 | 200 | ⇑P | Pn | 11 32 34.9 | -1.2 |
| CHOJ | | | | S | Sn | 11 32 44.2 | -2.0 |
| ONAJ | Iwakimizuishiy | 0.77 | 337 | ⇓P | Pn | 11 32 34.9 | -1.8 |
| ONAJ | | | | S | Sn | 11 32 44.2 | -2.9 |
| JYT | Yasato | 0.81 | 258 | ⇓P | Pn | 11 32 34.8 | -2.3 |
| JYT | | | | S | Sn | 11 32 43.9 | -4.1 |
| JFK | Kawauchi | 1.00 | 346 | ⇓P | Pn | 11 32 38.2 | -1.6 |
| JFK | | | | S | Sn | 11 32 50.1 | -2.7 |
| I30JP | ISUMI INFRASON | 1.29 | 213 | P | Pn | 11 32 44.0 | +0.3 |
| | baz=20,slow=18 | | | | | | |
| I30JP | | | | S | Sn | 11 33 00.0 | +0.3 |
| | baz=360,slow=24 | | | | | | |
| JFT | Otama | 1.31 | 329 | ⇓P | Pn | 11 32 43.5 | -0.5 |
| JFT | | | | S | Sn | 11 32 58.6 | -1.7 |
| JAG | Ashikaga | 1.39 | 272 | ⇓P | Pn | 11 32 43.0 | -2.1 |
| JMM | Marumori | 1.50 | 348 | ⇓P | Pn | 11 32 45.6 | -1.0 |
| JMM | | | | S | Sn | 11 33 03.3 | -1.7 |
| JFY | Yanaizu | 1.55 | 311 | ⇓P | Pn | 11 32 46.2 | -1.1 |
| JKT | Katashina | 1.59 | 284 | ⇓P | Pn | 11 32 46.6 | -1.4 |
| MJAR | Matsushiro Arr | 2.39 | 274 | P | Pn | 11 32 57.2 | -1.7 |
| | 113nm,0.3s,baz=112,slow=9.0,SNR=660 | | | | | | |
| MJAR | | | | S | Sn | 11 33 24.6 | -2.3 |
| | 36nm,0.3s,baz=110,slow=24,SNR=7.2 | | | | | | |
| MJAR | | | | LR | LR | 11 34 09.3 | |
| | comp=Z,303nm,21.4s,baz=95,slow=49 | | | | | | |
| MJAR | Matsushiro Arr | 2.39 | 274 | P | Pn | 11 32 57.2 | -1.7 |
| MJAR | | | | S | Sn | 11 33 24.7 | -2.3 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,113nm,0.3s | | | | | | |
| MJAR | | | | smax | smax | | |
| | comp=N,36nm,0.3s | | | | | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,303nm,21.4s | | | | | | |
| MAJO | Matsushiro | 2.40 | 274d | iP | Pn | 11 32 58.1 | -0.8 |
| MAJO | Matsushiro | 2.40 | 274 | ePn | Pn | 11 32 57.9 | -1.0 |
| MAT | Matsushiro | 2.40 | 274 | P | Pn | 11 32 57.8 | -1.1 |
| MAT | | | | S | Sn | 11 33 27.2 | +0.2 |
| JHJ2 | Mitsune | 3.46 | 199 | ePn | Pn | 11 33 14.4 | +0.9 |
| JHJ2 | | | | eSn | Sn | 11 33 53.1 | -0.1 |
| JHJ | Hachijo jima 2 | 3.46 | 200 | P | Pn | 11 33 12.1 | -1.5 |
| | comp=Z,52nm,0.3s,baz=341,slow=23,SNR=31 | | | | | | |
| JHJ | | | | S | Sn | 11 33 52.1 | -1.1 |
| | comp=Z,137nm,0.3s,baz=36,slow=22,SNR=13 | | | | | | |
| ERM | Erimo | 5.82 | 15 | ⇑eP | Pn | 11 33 45.2 | -0.7 |
| ERM | Erimo | 5.82 | 15 | ePn | Pn | 11 33 46.7 | +0.9 |
| ERM | | | | eSn | Sn | 11 34 52.2 | +0.8 |
| ASAJ | Asahikawa | 7.79 | 8 | P | Pn | 11 34 12.2 | -0.7 |
| | comp=Z,1.8nm,0.3s,baz=208,slow=13,SNR=18 | | | | | | |
| ASAJ | | | | S | Sn | 11 35 37.4 | -2.3 |
| | comp=Z,0.5nm,0.3s,baz=315,slow=19,SNR=2.7 | | | | | | |
| ASAJ | Asahikawa | 7.79 | 8 | P | Pn | 11 34 12.2 | -0.7 |
| ASAJ | | | | S | Sn | 11 35 37.4 | -2.3 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| ASAJ | Asahikawa | 7.79 | 8 | ePn | Pn | 11 34 12.9 | 0.0 |
| ASAJ | | | | S | Sn | 11 35 37.4 | -2.3 |
| JNU | Nakatsue | 9.08 | 252 | P | Pn | 11 34 28.6 | -2.1 |
| | comp=N,0.2nm,0.3s,baz=22,slow=5.4,SNR=2.1 | | | | | | |
| JNU | | | | LR | LR | 11 38 21.9 | |
| | comp=N,163nm,18.5s,baz=50,slow=40 | | | | | | |
| JNU | Nakatsue | 9.08 | 252 | ePn | Pn | 11 34 33.1 | +2.5 |
| CBIJ | Chichi jima | 9.31 | 174 | ePn | Pn | 11 34 31.5 | -2.3 |
| USRK | Ussuriysk Ar. | 10.48 | 321 | P | Pn | 11 34 52.2 | +2.5 |
| | comp=N,1.3nm,0.3s,baz=135,slow=13,SNR=15 | | | | | | |
| KSRS | Korea Array | 10.66 | 280 | P | Pn | 11 34 53.3 | +1.0 |
| | comp=N,0.6nm,0.3s,baz=92,slow=14,SNR=10 | | | | | | |
| KSRS | | | | LR | LR | 11 38 43.4 | |
| | comp=N,99nm,19.8s,baz=48,slow=36 | | | | | | |
| KSRS | Korea Array | 10.66 | 280 | P | Pn | 11 34 53.3 | +1.0 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,99nm,19.8s | | | | | | |
| KS01 | Wonju Array Si | 10.69 | 280 | ePn | Pn | 11 34 54.4 | +1.8 |
| KSAR | Wonju Array Be | 10.69 | 280 | P | Pn | 11 34 53.3 | +0.6 |
| KSAR | Wonju Array Be | 10.69 | 280 | P | Pn | 11 34 53.3 | +0.6 |
| CN2 | Changchun | 14.12 | 306 | eP | Pn | 11 35 41.8 | +2.4 |
| NJ2 | Nanjing | 18.95 | 263 | eP | P | 11 36 39.6 | 0.0 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,70nm,0.6s | | | | | | |
| YOJ | Yonaguni jima | 19.63 | 238 | eP | P | 11 36 45.6 | -1.5 |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,1μm,2.3s | | | | | | |
| YOJ | Yonaguni jima | 19.63 | 238 | eP | P | 11 36 45.6 | -1.5 |
| | comp=Z,1μm,2.3s | | | | | | |
| HHC | Hu-ho-hao-te | 23.50 | 290 | eP | P | 11 37 27.7 | -0.5 |
| HHC | | | | PP | PnPn | 11 38 00.4 | +4.4 |
| HHC | | | | S | S | 11 41 40.2 | +1.3 |
| HHC | | | | PMZ | | | |
| | comp=Z,16nm,1.2s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,79nm,3.7s | | | | | | |
| XAN | Xi'an | 26.39 | 274 | P | P | 11 37 53.8 | -0.8 |
| XAN | | | | PMZ | | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,97nm,4.8s | | | | | | |
| YAK | Yakutsk | 26.65 | 348 | eP | P | 11 37 54.9 | -1.6 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,6.0nm,1.1s | | | | | | |
| YAK | Yakutsk | 26.65 | 348 | eP | P | 11 37 54.9 | -1.6 |
| | comp=N,11nm,0.7s | | | | | | |
| SEY | Seymchan | 27.45 | 11 | P | P | 11 38 05.1 | +1.4 |
| | comp=N,2.2nm,0.8s,baz=200,slow=10,SNR=4.2 | | | | | | |
| SEY | Seymchan | 27.45 | 11 | P | P | 11 38 05.1 | +1.4 |
| SEY | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| ULN | Ulaanbaatar | 27.56 | 305 | ⇓iP | P | 11 38 04.3 | -0.8 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| ULN | Ulaanbaatar | 27.56 | 305 | eP | P | 11 38 03.4 | -1.7 |
| | comp=Z,7.6nm,1.5s | | | | | | |
| BOD | Bodaibo | 27.97 | 329 | eP | P | 11 38 06.7 | -1.7 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| SONA1 | Songino Array | 27.98 | 305 | eP | P | 11 38 07.4 | -1.5 |
| SONM | Songino Array | 27.99 | 305 | P | P | 11 38 07.7 | -1.2 |
| | comp=Z,2.1nm,0.6s,baz=103,slow=8.8,SNR=15 | | | | | | |
| SONM | | | | LR | LR | 11 49 31.1 | |
| | comp=Z,36nm,19.2s,baz=216,slow=37 | | | | | | |
| SONM | Songino Array | 27.99 | 305 | P | P | 11 38 07.7 | -1.2 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,36nm,19.2s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 27.99 | 119 | T | T | 12 07 58.8 | |
| | baz=312,slow=75,SNR=165 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.00 | 119 | T | T | 12 08 14.5 | |
| | baz=312,slow=75,SNR=157 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.01 | 119 | T | T | 12 08 16.4 | |
| | baz=312,slow=75,SNR=182 | | | | | | |
| SMY | Shemya | 28.26 | 44 | eP | P | 11 38 07.3 | -3.7 |
| SMY | | | | pmax | pmax | | |
| | comp=Z,166nm,1.3s | | | | | | |
| SMY | Shemya | 28.26 | 44 | eP | P | 11 38 07.3 | -3.7 |
| | comp=Z,166nm,1.3s | | | | | | |
| H11S1 | WAKE ISLAND Hy | 28.68 | 122 | T | T | 12 08 53.1 | |
| | baz=314,slow=76,SNR=488 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 28.68 | 122 | T | T | 12 09 08.9 | |
| | baz=314,slow=76,SNR=236 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 28.70 | 122 | T | T | 12 09 00.3 | |
| | baz=314,slow=76,SNR=197 | | | | | | |
| LZH | Lanzhou | 29.99 | 281 | eP | P | 11 38 27.0 | +0.2 |
| LZH | | | | pP | pP | 11 38 38.1 | -0.3 |
| LZH | | | | sP | sP | 11 38 44.6 | +1.1 |
| LZH | | | | PMZ | | | |
| | comp=Z,15nm,1.1s | | | | | | |
| TLY | Talaya | 30.61 | 312 | eP | P | 11 38 31.1 | -0.8 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,45nm,13.0s | | | | | | |
| CD2 | Chengdu | 31.49 | 271 | eP | P | 11 38 39.0 | -0.9 |
| CD2 | | | | pP | pP | 11 38 51.7 | +0.2 |
| CD2 | | | | sP | sP | 11 38 57.8 | +1.1 |
| CD2 | | | | S | S | 11 43 43.9 | -1.3 |
| CD2 | | | | sS | sS | 11 44 06.0 | +1.4 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| QIZ | Qiongzhong | 32.49 | 246 | P | P | 11 38 47.8 | -1.0 |
| QIZ | | | | S | S | 11 43 59.6 | -1.3 |
| QIZ | | | | PMZ | | | |
| | comp=Z,43nm,2.6s | | | | | | |
| KMI | Kunming | 34.68 | 262 | P | P | 11 39 10.0 | +2.0 |
| KMI | | | | PMZ | | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,220nm,4.0s | | | | | | |
| BILL | Bilibino | 34.70 | 16 | i P | P | 11 39 06.5 | -0.9 |
| BILL | | | | i | | 11 41 37.8 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| FAKI | Fak Fak | 39.99 | 194 | eP | P | 11 39 53.2 | +0.4 |
| | comp=Z,38nm,1.3s | | | | | | |
| WMQ | Urumqi | 40.96 | 297 | eP | P | 11 40 02.0 | +1.3 |
| WMQ | | | | PMZ | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| CMAR | Chiang Mai Arr | 41.15 | 256 | P | P | 11 39 58.7 | -3.7 |
| | comp=Z,0.3nm,0.3s,baz=58,slow=8.6,SNR=3.6 | | | | | | |
| CMAR | | | | LR | LR | 11 57 26.3 | |
| | comp=Z,20nm,18.0s,baz=205,slow=37 | | | | | | |
| ZAA0 | Zalesovo Array | 42.20 | 313 | eP | P | 11 40 09.5 | -1.1 |
| ZALV | Zalesovo Beam | 42.20 | 313 | P | P | 11 40 10.0 | -0.6 |
| | comp=Z,3.8nm,0.5s,baz=92,slow=7.2,SNR=14 | | | | | | |
| ZALV | Zalesovo Beam | 42.20 | 313 | i P | P | 11 40 10.0 | -0.6 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| NVS | Novosibirsk | 43.14 | 314 | i P | P | 11 40 17.2 | -1.0 |
| MKAR | Makanchi Array | 44.30 | 303 | P | P | 11 40 26.9 | -0.8 |
| | comp=Z,2.2nm,0.7s,baz=84,slow=11,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 44.30 | 303c | eP | P | 11 40 29.1 | +1.4 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 44.30 | 303 | eP | P | 11 40 28.8 | +1.2 |
| MAKZ | Makanchi | 44.51 | 303 | eP | P | 11 40 30.7 | +1.4 |
| KURK | Kurchatov | 46.18 | 309 | eP | P | 11 40 41.4 | -1.0 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| KURK | Kurchatov | 46.18 | 309 | eP | P | 11 40 41.4 | -1.0 |
| | comp=Z,23nm,0.8s | | | | | | |
| ODAN | Odare | 46.26 | 274 | eP | P | 11 40 44.5 | +0.8 |
| | comp=Z,12nm,0.4s | | | | | | |
| RAMN | Ramite | 46.86 | 275 | eP | P | 11 40 47.6 | -0.8 |
| | comp=Z,17nm,0.8s | | | | | | |
| GUN | Gumba | 47.03 | 276 | eP | P | 11 40 49.5 | -0.3 |
| | comp=Z,20nm,0.8s | | | | | | |
| GKN | Gorkha | 47.99 | 277 | eP | P | 11 40 56.2 | -0.9 |
| | comp=Z,24nm,0.9s | | | | | | |
| COLA | College | 49.72 | 32 | ⇓eP | P | 11 41 11.5 | +1.9 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,11nm,2.0s | | | | | | |
| TKM2 | Tokmak 2 | 49.77 | 299 | eP | P | 11 41 10.9 | +0.3 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| TKM2 | Tokmak 2 | 49.77 | 299 | eP | P | 11 41 10.9 | +0.3 |
| | comp=Z,9.9nm,1.4s | | | | | | |
| ILAR | Eielson Array | 50.14 | 32 | P | P | 11 41 13.8 | +1.0 |
| | comp=Z,1.5nm,0.7s,baz=268,slow=6.2,SNR=21 | | | | | | |
| ILAR | Eielson Array | 50.14 | 32 | P | P | 11 41 13.8 | +1.0 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| IL1 | Eielson Array | 50.14 | 32 | eP | P | 11 41 13.6 | +0.7 |
| KSH | Kashi | 50.49 | 294 | eP | P | 11 41 21.4 | +5.4 |
| KSH | | | | epP | pP | 11 41 34.0 | +5.8 |
| KSH | | | | ePcP | PcP | 11 42 38.0 | +4.4 |
| KSH | | | | S | S | 11 48 31.9 | +4.9 |
| KSH | | | | SS | SS | 11 52 04.6 | +3.6 |
| KSH | | | | PMZ | | | |
| | comp=Z,140nm,4.4s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,94nm,5.3s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,130nm,5.3s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,110nm,5.7s | | | | | | |
| AAK | Ala-Archa | 50.63 | 299 | ⇑eP | P | 11 41 16.6 | -0.4 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| BRVK | Borovoye | 50.92 | 313 | ⇓eP | P | 11 41 18.5 | -0.4 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| KKAR | Karatay Array | 53.28 | 300 | eP | P | 11 41 36.5 | -0.1 |
| KKAR | Karatay Array | 53.28 | 300 | eP | P | 11 41 36.5 | -0.1 |
| INK | Inuvik | 55.05 | 27 | P | P | 11 41 50.0 | +1.0 |
| | comp=Z,3.6nm,0.8s,baz=305,slow=4.8,SNR=4.9 | | | | | | |
| INK | Inuvik | 55.05 | 27 | P | P | 11 41 50.0 | +1.0 |
| INK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 56.40 | 188 | P | P | 11 41 58.6 | -0.7 |
| | comp=Z,1.4nm,0.5s,baz=6.1,slow=7.5,SNR=20 | | | | | | |
| WRA | Warramunga Arr | 56.40 | 188 | i P | P | 11 41 58.5 | -0.7 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ARU | Arti | 56.71 | 319c | iP | P | 11 42 00.3 | -0.8 |
| ARU | | | | | | 11 44 04.5 | |
| ARU | | | | PPP | PPP | 11 45 20.7 | |
| ARU | | | | S | S | 11 49 50.3 | -0.2 |
| ARU | | | | SS | SS | 11 53 35.3 | -2.8 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,14nm,1.7s | | | | | | |
| ARU | Arti | 56.71 | 319 | eP | P | 11 42 00.3 | -0.8 |
| | comp=Z,8.4nm,1.0s | | | | | | |
| ABKAR | Akbulak array | 58.20 | 310 | eP | P | 11 42 10.6 | -1.2 |
| | comp=Z,1.1nm,0.4s | | | | | | |
| ASAR | Alice Springs | 60.13 | 188 | P | P | 11 42 24.9 | -0.3 |
| | comp=Z,0.9nm,0.7s,baz=14,slow=6.4,SNR=7.4 | | | | | | |
| ASAR | Alice Springs | 60.13 | 188 | P | P | 11 42 25.0 | -0.3 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| FINES | FINESS Array B | 69.29 | 332 | P | P | 11 43 23.9 | -0.6 |
| | comp=Z,3.5nm,0.9s,baz=50,slow=7.4,SNR=3.2 | | | | | | |
| FINES | FINESS Array B | 69.29 | 332 | P | P | 11 43 23.9 | -0.6 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| AKASG | Malin Array Be | 74.69 | 322 | P | P | 11 43 55.9 | -1.1 |
| | comp=Z,0.8nm,0.5s,baz=49,slow=6.0,SNR=6.7 | | | | | | |
| AKASG | Malin Array Be | 74.69 | 322 | P | P | 11 43 55.9 | -1.1 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| KIEV | Kiev | 74.70 | 322 | ⇑eP | P | 11 43 56.9 | -0.2 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,11nm,3.2s | | | | | | |
| NB2 | NORSAR Subarra | 74.70 | 337 | P | P | 11 43 56.7 | -0.3 |
| | comp=Z,1.0nm,0.7s,baz=36,slow=6.5 | | | | | | |
| OKC | Ostrava-Krasne | 80.48 | 327 | AMS | AMS | 12 30 50.0 | |
| | comp=Z,200nm,20.5s | | | | | | |
| DPC | Dobruska-Polom | 80.90 | 328 | AMS | AMS | 12 29 30.0 | |
| | comp=Z,300nm,19.4s | | | | | | |
| UPC | Upice | 80.91 | 328 | AMS | AMS | 12 29 50.0 | |
| | comp=Z,300nm,17.9s | | | | | | |
| PVCC | Panska Ves | 81.51 | 329 | AMS | AMS | 12 27 40.0 | |
| | comp=Z,300nm,19.1s | | | | | | |
| GOPC | GO Pecny, Ondr | 81.88 | 328 | AMS | AMS | 12 29 00.0 | |
| | comp=Z,300nm,20.5s | | | | | | |
| PRU | Pruhonice | 81.93 | 328 | AMS | AMS | 12 29 00.0 | |
| | comp=Z,300nm,18.7s | | | | | | |
| TREC | Trest | 82.05 | 328 | AMS | AMS | 12 29 00.0 | |
| | comp=Z,300nm,20.1s | | | | | | |
| KHC | Kasperske Hory | 82.99 | 328 | AMS | AMS | 12 28 00.0 | |
| | comp=Z,400nm,17.9s | | | | | | |
| GERES | GERESS Array B | 83.15 | 328 | P | P | 11 44 42.5 | -1.1 |
| | comp=Z,0.5nm,0.2s,baz=40,slow=7.7,SNR=3.1 | | | | | | |
| GERES | GERESS Array B | 83.15 | 328 | P | P | 11 44 42.5 | -1.1 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| TXAR | Lajitas Array | 90.67 | 52 | P | P | 11 45 21.7 | +1.2 |
| | comp=Z,0.3nm,0.8s,baz=316,slow=7.0,SNR=3.9 | | | | | | |

**JMA 04 11:33:28.9, 42.°67N×140.°33E, h12**$^{km}$±1$^{km}$**, M0.3, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JSH | Shimam | 0.21 | 263 | P | Pg | 11 33 33.6 | +0.1 |
| JSH | | | | eS | Sg | 11 33 36.7 | +0.1 |

*AUST **04** 11:34:54.7±2.8, 1.°46S×126.°66E, h23$^{km}$, Error ellipse: s-maj=1.2km s-min=1.0km az=227.0*

*ISCJB **04** 11:35:09.4±0.6, 2.°93S±0.°05×127.°55E±0.°05, h10$^{km}$, Error ellipse: s-maj=9.0km s-min=6.4km az=44.0*

*DJA **04** 11:35:09.7±0.4, 3°S±7°×12°8E±°, h21$^{km}$±10$^{km}$, M3.4/7, MLv3.4/7*

**ISC 04 11:35:10.6**±0.9, **2.°84S**±0.°06×**127.°54E**±0.°06, **h10**$^{km}$, **n13**, σ1$^s$**57**/13, **Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NLAI | Namlea | 0.59 | 228 | P | Pg | 11 35 20.3 | -1.8 |
| AAI | Ambon | 1.07 | 142 | P | Pg | 11 35 25.3 | -5.8 |
| MSAI | Masohi | 1.48 | 110 | P | Pn | 11 35 36.0 | -1.3 |
| SANI | Sanana | 1.74 | 297 | P | Pn | 11 35 39.9 | -1.0 |
| SANI | | | | S | Sn | 11 36 03.1 | 0.0 |
| LBMI | Labuha | 2.19 | 359 | P | Pn | 11 35 47.1 | 0.0 |
| LBMI | | | | S | Sb | 11 36 17.9 | +0.4 |
| BNDI | Bandanaira | 2.89 | 125 | P | Pn | 11 35 56.2 | -0.6 |
| SWI | Sorong | 4.21 | 62 | P | Pn | 11 36 12.5 | -2.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 4.71 | 91 | P | Pn | 11 36 22.3 | +0.6 |
| | baz=5.8,SNR=5.8 | | | | | | |
| FAKI | Fak Fak | 4.71 | 91 | P | Pn | 11 36 19.7 | -2.0 |
| MTN | Manton Dam | 10.56 | 161 | P | Pn | 11 37 42.6 | +0.5 |
| | baz=12,SNR=4.1 | | | | | | |
| KNRA | Kununurra | 12.81 | 175 | P | Pn | 11 38 18.0 | +5.0 |
| | baz=14,SNR=3.1 | | | | | | |
| QIS | Mount Isa | 21.18 | 147 | P | P | 11 39 57.7 | +1.3 |
| | baz=23,SNR=3.8 | | | | | | |
| WRKA | Warakurna | 22.08 | 178 | P | P | 11 40 08.6 | +2.6 |
| | baz=24,SNR=4.3 | | | | | | |

*IDC **04** 11:48:30.1±0.4, 19°.76N×75°.48W, h0km, mb4.8/23, mb1 5.0/28, mb1mx4.9/30, mbtmp4.8/28, ML4.3/3, MS4.3/20, Ms1 4.3/20, ms1mx4.1/39, Error ellipse: s-maj=14.3km s-min=11.1km az=58.0*

*MOS **04** 11:48:31.1±0.9, 19°.89N×75°.42W, h10km, mb5.3/38, MS4.7/5, Error ellipse: s-maj=6.7km s-min=4.5km az=120.9*

*ISCJB **04** 11:48:33.9±0.1, 19°.80N±0°.02×75°.44W±0°.01, h33km, mb5.0/184, MS4.5/22, Error ellipse: s-maj=3.0km s-min=1.8km az=18.6*

*BJI **04** 11:48:33.0, 20°.16N×76°.03W, h26km, mB5.5/8, Ms5.4/4, Ms7 4.9/4*

*NEIC **04** 11:48:35.5±0.6, 19°.80N×75°.42W, h32km±4km, mb5.1/138, Error ellipse: s-maj=3.5km s-min=2.1km az=215.0*

*NEIC Felt [IV] at Guantanamo and Santiago de Cuba. Also felt at Baracoa, Camaguey and Contramaestre. Felt at Ocho Rios, Jamaica.*

*JSN **04** 11:48:35.8±0.8, 19°.74N×75°.61W, h30km±241km, MD5.2*

*GCMT **04** 11:48:35.7±0.2, 19°.76N×75°.39W, h33km, MW5.1/77, Moment Tensor Solution. s60,c91; s77,c124; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$5.40±.20; $M_{\theta\theta}$-4.53±.14; $M_{\phi\phi}$-0.86±.14; $M_{r\theta}$1.55±.12; $M_{\theta\phi}$2.07±.10; $M_{\phi r}$-0.69±.16; Best double couple: $M_0$5.69000×$10^{16}$ NP1:$\phi_s$114.00000°,δ54.00000°,λ90.00000°. NP2: $\phi_s$294.00000°,δ36.00000°,λ90.00000°. Principal axes: T 5.6590, Plg81.0000°, Azm24.0000°; N 0.0660, Plg0.0000°, Azm114.0000°; P -5.7210, Plg9.0000°, Azm204.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*SZGRF **04** 11:48:35.1, 19°.55N×75°.55W, h33km, mb5.3/14(BGR)*

**ISC 04 11:48:34.8**±0.6**, 19°.78N**±0°.04×**75°.50W**±0°.04**, h30km**±3km**, n936, σ1s.02**/950**, mb5.1**/184**, MS4.4**/22**, 20C-15D, Cuba region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GTBY | Guantanamo Bay | 0.40 | 68 | ePg | Pb | 11 48 42.1 | -1.5 |
| GTBY | | | | eSg | Sb | 11 48 48.5 | -1.2 |
| BNJ | Bonny Gate | 2.00 | 224 | i P | Pn | 11 49 05.5 | -1.1 |
| GWJ | Greenwich | 2.06 | 215 | i P | Pn | 11 49 06.2 | -1.3 |
| STH | Stony Hill | 2.10 | 216 | i P | Pn | 11 49 06.7 | -1.2 |
| STH | | | | i S | Sn | 11 49 30.3 | -2.8 |
| YHJ | Yallahs | 2.10 | 207 | i P | Pn | 11 49 07.4 | -0.6 |
| HOJ | Hope | 2.12 | 214 | i P | Pn | 11 49 06.7 | -1.6 |
| BBJ | Bamboo Saint A | 2.17 | 231 | i P | Pn | 11 49 07.8 | -1.2 |
| CVJ | Coleyville | 2.47 | 232 | i P | Pn | 11 49 11.8 | -1.3 |
| MTDJ | Mount Denham | 2.47 | 232 | ePn | Pn | 11 49 11.7 | -1.4 |
| MBJ | Montego Bay | 2.62 | 239 | i P | Pn | 11 49 14.4 | -0.8 |
| MBJ | | | | i S | Sn | 11 49 42.5 | -3.5 |
| MCJ | Malvern | 2.77 | 229 | i P | Pn | 11 49 16.8 | -0.5 |
| LGNH | LØogne | 3.01 | 114 | ePn | Pn | 11 49 19.7 | -0.8 |
| PAPH | Port-au-Prince | 3.27 | 112 | ePn | Pn | 11 49 23.9 | -0.3 |
| PAPH | | | | eSg | Sb | 11 50 13.7 | +1.9 |
| SDDR | Presa de Saban | 4.06 | 101 | ePn | Pn | 11 49 34.2 | -0.7 |
| SDDR | | | | eSn | Sn | 11 50 25.8 | +4.3 |
| GRTK | Grand Turk | 4.44 | 66 | ePn | Pn | 11 49 40.0 | -0.2 |
| GRTK | | | | eSn | Sn | 11 50 28.1 | -2.7 |
| BANI | BANI | 5.05 | 105 | ePn | Pn | 11 49 49.4 | +0.7 |
| SMN1 | Samana, DR | 5.91 | 95 | ePn | Pn | 11 49 59.5 | -0.8 |
| AGP | Aguadilla | 8.02 | 98 | ePn | Pn | 11 50 31.8 | +2.4 |
| AGPR | Aguadilla, PR | 8.04 | 98 | ePn | Pn | 11 50 29.5 | -0.1 |
| | 175nm,0.9s | | | | | | |
| MPR | Mayaguez | 8.06 | 100 | ePn | Pn | 11 50 31.4 | +1.5 |
| LSP | Las Mesas | 8.12 | 100 | ePn | Pn | 11 50 32.9 | +2.1 |
| LSP | | | | eSn | Sn | 11 52 04.3 | +2.7 |
| CRPR | Cabo Rojo, PR | 8.14 | 101 | ePn | Pn | 11 50 30.2 | -0.8 |
| CRPR | | | | eSn | Sn | 11 52 04.0 | +2.0 |
| LRS | Lares | 8.32 | 99 | ePn | Pn | 11 50 33.1 | -0.4 |
| AOPR | Arecibo Observ | 8.39 | 98 | ePn | Pn | 11 50 34.7 | +0.2 |
| OBIP | Obispado Ponce | 8.60 | 100 | ePn | Pn | 11 50 38.4 | +1.1 |
| CELP | Cerrillos | 8.61 | 100 | ePn | Pn | 11 50 37.1 | -0.4 |
| ICMP | Isla Caja de M | 8.71 | 101 | ePn | Pn | 11 50 38.9 | +0.1 |
| SJG | San Juan | 9.00 | 99 | Pn | Pn | 11 50 41.7 | -1.1 |
| | 5.3nm,0.3s,baz=284,slow=6.0,SNR=7.0 | | | | | | |
| SJG | | | | Sn | Sn | 11 52 16.5 | -6.7 |
| | 15nm,0.3s,baz=343,slow=20,SNR=6.5 | | | | | | |
| SJG | San Juan | 9.00 | 99 | eP | Pn | 11 50 42.1 | -0.8 |
| SJG | | | | | | 11 52 16.5 | |
| SJG | San Juan | 9.00 | 99 | ePn | Pn | 11 50 42.1 | -0.8 |
| SJG | | | | Sn | Sn | 11 52 16.5 | -6.7 |
| CPD | Cerro la Pandu | 9.24 | 99 | eP | Pn | 11 50 45.0 | -1.1 |
| CPD | Cerro la Pandu | 9.24 | 99 | ePn | Pn | 11 50 45.0 | -1.1 |
| HUMP | Col San Antoni | 9.28 | 99 | ePn | Pn | 11 50 43.6 | -3.0 |
| STVI | Saint Thomas | 10.07 | 96 | ePn | Pn | 11 50 54.1 | -3.4 |
| BCIP | Isla Barro Col | 11.35 | 202 | ePn | Pn | 11 51 15.2 | +0.1 |
| SDV | Santo Domingo | 11.81 | 156 | ePn | Pn | 11 51 22.9 | +1.4 |
| SMRT | St. Maarten | 11.89 | 96 | ePn | Pn | 11 51 17.7 | -4.6 |
| SMRT | | | | eSn | Sn | 11 53 24.6 | -9.5 |
| TGUH | Tegucigalpa,Un | 12.62 | 245 | ePn | Pn | 11 51 35.7 | +3.3 |
| TGUH | | | | eSn | Sn | 11 54 08.7 | +17 |
| JTS | JuntasAbangare | 13.12 | 225 | eP | Pn | 11 51 41.5 | +2.2 |
| JTS | JuntasAbangare | 13.12 | 225 | ePn | Pn | 11 51 41.5 | +2.2 |
| TIGA | Tifton | 13.71 | 329 | ePn | Pn | 11 51 45.2 | -1.9 |
| | 73nm,1.0s | | | | | | |
| NHSC | New Hope | 13.91 | 343 | eP | P | 11 51 59.3 | +1.6 |
| PCRV | Puerto La Cruz | 14.18 | 131 | Pn | Pn | 11 51 53.1 | -0.6 |
| | 11nm,0.3s,baz=51,slow=1.8,SNR=28 | | | | | | |
| PCRV | | | | Sn | Sn | 11 54 20.6 | -10 |
| | 1.1nm,0.3s,baz=75,slow=20,SNR=2.3 | | | | | | |
| PCRV | | | | LR | LR | 11 56 55.2 | |
| | comp=Z,836nm,21.9s,baz=323,slow=36 | | | | | | |
| ROSC | El Rosal | 14.88 | 175 | Pn | Pn | 11 52 03.6 | 0.0 |
| | 0.8nm,0.3s,baz=58,slow=8.5,SNR=13 | | | | | | |
| ROSC | | | | Sn | Sn | 11 54 55.7 | +8.1 |
| | 1.4nm,0.3s,baz=90,slow=20,SNR=2.1 | | | | | | |
| ROSC | | | | LR | LR | 11 58 19.4 | |
| | comp=Z,690nm,21.1s,baz=360,slow=40 | | | | | | |
| ROSC | El Rosal | 14.88 | 175 | ePn | P | 11 52 07.6 | -1.4 |
| ROSC | | | | Sn | Sn | 11 54 55.7 | +8.1 |
| BRAL | Brewton | 15.29 | 319 | ePn | Pn | 11 52 09.6 | +1.0 |
| | 90nm,0.8s | | | | | | |
| GOGA | Godfrey | 15.32 | 334 | eP | Pn | 11 52 06.7 | -2.3 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,76nm,1.3s | | | | | | |
| GOGA | Godfrey | 15.32 | 334 | ePn | Pn | 11 52 06.7 | -2.3 |
| | comp=Z,76nm,1.3s | | | | | | |
| JSC | Jenkinsville | 15.32 | 342 | eP | Pn | 11 52 05.8 | -3.2 |
| JSC | | | | pmax | pmax | | |
| | comp=Z,46nm,0.9s | | | | | | |
| JSC | Jenkinsville | 15.32 | 342 | ePn | Pn | 11 52 05.8 | -3.2 |
| | comp=Z,46nm,0.9s | | | | | | |
| CNNC | Cliffs of the | 15.54 | 353 | ePn | P | 11 52 14.2 | -1.6 |
| | comp=Z,123nm,1.0s | | | | | | |
| BBSR | BB Station | 15.84 | 36 | ePn | Pn | 11 52 12.7 | -3.0 |
| KMSC | Kings Mountain | 16.15 | 343 | P | Pn | 11 52 21.2 | +1.5 |
| | baz=16 | | | | | | |
| KMSC | Kings Mountain | 16.15 | 343 | ePn | Pn | 11 52 16.4 | -3.2 |
| | comp=Z,71nm,1.0s | | | | | | |
| BBGH | Gun Hill | 16.65 | 111 | ePn | Pn | 11 52 24.9 | -1.2 |
| TKL | Tuckaleechee C | 17.42 | 337 | P | Pn | 11 52 33.0 | -2.6 |
| | comp=Z,1.0nm,0.3s,baz=161,slow=16,SNR=11 | | | | | | |
| TKL | | | | S | Sn | 11 55 38.8 | -10 |
| | comp=Z,1.4nm,0.3s,baz=78,slow=19,SNR=4.3 | | | | | | |
| CPCT | Cooper Cave | 17.52 | 335 | ePn | Pn | 11 52 35.8 | -1.1 |
| VWCC | Virginia Weste | 17.84 | 348 | ePn | Pn | 11 52 39.2 | -1.6 |
| BLA | Blacksburg | 17.89 | 347 | eP | Pn | 11 52 40.7 | -0.8 |
| BLA | | | | pmax | pmax | | |
| | comp=Z,136nm,0.9s | | | | | | |
| BLA | Blacksburg | 17.89 | 347 | ePn | Pn | 11 52 40.7 | -0.8 |
| | comp=Z,136nm,0.9s | | | | | | |
| SWET | Sewanee | 17.93 | 331 | ePn | Pn | 11 52 41.5 | -0.4 |
| | comp=Z,42nm,1.5s | | | | | | |
| TZTN | Tazewell | 18.13 | 339 | ePn | P | 11 52 45.0 | +0.4 |
| | comp=Z,73nm,1.3s | | | | | | |
| VBMS | Vicksburg | 18.29 | 316 | P | Pn | 11 52 47.0 | +0.6 |
| | baz=18 | | | | | | |
| CBN | Corbin | 18.43 | 355 | eP | P | 11 52 46.9 | -0.9 |
| | comp=Z,184nm,1.3s | | | | | | |
| CMIG | Matias Romero | 18.58 | 265 | P | P | 11 52 49.5 | -0.2 |
| | comp=Z,0.6nm,0.3s,baz=58,slow=11,SNR=15 | | | | | | |
| OXF | Oxford | 19.16 | 323 | eP | P | 11 52 56.3 | +0.4 |
| OXF | | | | pmax | pmax | | |
| | comp=Z,137nm,1.0s | | | | | | |
| OXF | Oxford | 19.16 | 323 | eP | P | 11 52 56.2 | +0.4 |
| | comp=Z,137nm,1.0s | | | | | | |
| WVT | Waverly | 19.56 | 329 | eP | P | 11 53 00.2 | 0.0 |
| WVT | Waverly | 19.56 | 329 | eP | P | 11 53 00.2 | 0.0 |
| SDMD | Soldier's Deli | 19.60 | 357 | eP | Pn | 11 53 02.0 | -0.1 |
| OTAV | Otavalo | 19.64 | 189 | eP | Pn | 11 53 04.7 | +1.5 |
| OTAV | | | | ePn | P | 11 53 04.8 | +3.2 |
| 540A | Vidor | 19.68 | 305 | P | Pn | 11 53 02.5 | -0.6 |
| | baz=20 | | | | | | |
| MET | Memphis--Engin | 19.90 | 323 | eP | P | 11 53 04.9 | +0.9 |
| HALT | Halls | 20.16 | 326 | eP | Pn | 11 53 09.0 | +0.2 |
| MCWV | Mont Chateau | 20.16 | 350 | eP | Pn | 11 53 10.4 | +1.7 |
| | comp=Z,30nm,1.0s | | | | | | |
| MVL | Millersville | 20.17 | 358 | eP | Pn | 11 53 08.1 | -0.7 |
| | comp=Z,26nm,1.1s | | | | | | |
| 340A | Bronson | 20.20 | 309 | P | P | 11 53 07.7 | +0.5 |
| | baz=20 | | | | | | |
| 539A | Cross D Ranch, | 20.21 | 304 | P | P | 11 53 07.7 | +0.4 |
| | baz=20 | | | | | | |
| UTMT | University of | 20.24 | 327 | eP | Pn | 11 53 09.2 | -0.6 |
| GLAT | Glass | 20.41 | 326 | eP | Pn | 11 53 11.0 | -0.6 |
| 439A | Center Grove, | 20.55 | 306 | P | Pn | 11 53 12.6 | -0.7 |
| | baz=21 | | | | | | |
| GNAR | Gosnell | 20.57 | 325 | eP | Pn | 11 53 13.1 | -0.4 |
| HBAR | Harrisburg | 20.62 | 323 | eP | P | 11 53 12.9 | +1.1 |
| WCI | Wyandotte Cave | 20.64 | 335 | eP | P | 11 53 12.3 | +0.4 |
| WCI | | | | pmax | pmax | | |
| | comp=Z,351nm,1.0s | | | | | | |
| WCI | Wyandotte Cave | 20.64 | 335 | eP | P | 11 53 12.3 | +0.4 |
| | comp=Z,351nm,1.0s | | | | | | |
| LUPA | Lehigh Univers | 20.75 | 0 | eP | Pn | 11 53 14.9 | -0.7 |
| | comp=Z,131nm,1.3s | | | | | | |
| BRNJ | Basking Ridge | 20.85 | 2 | eP | P | 11 53 14.5 | +0.3 |
| | comp=Z,121nm,1.1s | | | | | | |
| SSPA | Standing Stone | 20.89 | 355 | eP | Pn | 11 53 16.1 | -1.1 |
| | comp=Z,46nm,1.1s | | | | | | |
| 239A | Gary | 20.93 | 309 | P | P | 11 53 16.4 | +1.2 |
| | baz=21 | | | | | | |
| NATX | Nacogdoches | 20.94 | 309 | P | Pn | 11 53 17.2 | -0.7 |
| | baz=21 | | | | | | |
| NATX | Nacogdoches | 20.94 | 309 | eP | P | 11 53 16.2 | +1.0 |
| | comp=Z,13nm,0.6s | | | | | | |
| USIN | University of | 20.98 | 332 | eP | P | 11 53 15.9 | +0.3 |
| | comp=Z,88nm,0.9s | | | | | | |
| HKT | Hockley | 21.01 | 303 | eP | P | 11 53 17.9 | +1.9 |
| HKT | | | | pmax | pmax | | |
| | comp=Z,123nm,1.5s | | | | | | |
| HKT | Hockley | 21.01 | 303 | eP | P | 11 53 17.9 | +1.9 |
| | comp=Z,123nm,1.5s | | | | | | |
| 737A | Port Lavaca | 21.05 | 299 | P | P | 11 53 18.7 | +2.2 |
| | baz=21 | | | | | | |
| 438A | Sam Houston St | 21.07 | 305 | P | P | 11 53 17.9 | +1.2 |
| | baz=21 | | | | | | |
| UALR | University of | 21.10 | 319 | eP | P | 11 53 18.8 | +1.9 |
| | comp=Z,35nm,1.0s | | | | | | |
| 637A | Eagle Lake | 21.21 | 301 | P | P | 11 53 19.9 | +1.7 |
| | baz=21 | | | | | | |
| 139A | Bunkhouse Ranc | 21.22 | 311 | P | P | 11 53 19.5 | +1.3 |
| | baz=21 | | | | | | |
| 338A | Crockett | 21.23 | 307 | P | P | 11 53 19.6 | +1.2 |
| | baz=21 | | | | | | |
| ODNJ | Ogdensburg | 21.25 | 2 | eP | P | 11 53 19.8 | +1.3 |
| | comp=Z,53nm,0.8s | | | | | | |
| 936A | North Padre Is | 21.36 | 295 | P | P | 11 53 21.0 | +1.2 |
| | baz=21 | | | | | | |
| ACSO | Alum Creek Sta | 21.37 | 344 | eP | P | 11 53 20.8 | +1.0 |
| | comp=Z,101nm,0.9s | | | | | | |
| Z39A | Irene McRaven, | 21.38 | 313 | P | P | 11 53 20.8 | +0.8 |
| | baz=21 | | | | | | |
| PBMO | Poplar Bluff | 21.39 | 325 | eP | P | 11 53 20.6 | +0.6 |
| 238A | Jacksonville | 21.40 | 309 | P | P | 11 53 21.3 | +1.1 |
| | baz=22 | | | | | | |
| 537A | Green Hill Far | 21.45 | 303 | P | P | 11 53 22.2 | +1.5 |
| | baz=22 | | | | | | |
| SIUC | Southern Illin | 21.50 | 329 | eP | P | 11 53 21.7 | +0.6 |
| BLO | Bloomington | 21.54 | 336 | eP | P | 11 53 22.4 | +0.8 |
| BLO | | | | pmax | pmax | | |
| | comp=Z,83nm,0.8s | | | | | | |
| BLO | Bloomington | 21.54 | 336 | eP | P | 11 53 22.4 | +0.8 |
| | comp=Z,83nm,0.8s | | | | | | |
| YLE | Yale | 21.58 | 5 | eP | P | 11 53 23.1 | +1.2 |
| 437A | Phantom Ranch, | 21.62 | 305 | P | P | 11 53 24.0 | +1.5 |
| | baz=22 | | | | | | |
| 736A | Circle Diamond | 21.64 | 299 | P | P | 11 53 24.3 | +1.6 |
| | baz=22 | | | | | | |
| 337A | Centerville | 21.64 | 306 | P | P | 11 53 24.2 | +1.4 |
| | baz=22 | | | | | | |
| 138A | Matatall Enter | 21.71 | 310 | P | P | 11 53 25.0 | +1.5 |
| | baz=22 | | | | | | |
| Y39A | Lockesburg | 21.72 | 314 | P | P | 11 53 24.4 | +0.8 |
| | baz=22 | | | | | | |
| MIAR | Mount Ida | 21.74 | 316 | eP | P | 11 53 24.4 | +0.6 |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,80nm,1.0s | | | | | | |
| MIAR | Mount Ida | 21.74 | 316 | P | P | 11 53 24.1 | +0.3 |
| | baz=22,SNR=45 | | | | | | |
| MIAR | Mount Ida | 21.74 | 316 | eP | P | 11 53 24.4 | +0.6 |
| | comp=Z,80nm,1.0s | | | | | | |
| 035Z | Hargill | 21.78 | 292 | P | P | 11 53 25.8 | +1.5 |
| | baz=22 | | | | | | |
| OLIL | Olney | 21.81 | 333 | eP | P | 11 53 25.1 | +0.6 |
| 636A | Smothers Creek | 21.81 | 300 | P | P | 11 53 26.6 | +1.9 |
| | baz=22 | | | | | | |
| 237A | Washetta, Mont | 21.91 | 308 | P | P | 11 53 27.1 | +1.5 |
| | baz=22 | | | | | | |
| 035A | Encino | 21.92 | 293 | P | P | 11 53 27.6 | +1.8 |
| | baz=22 | | | | | | |
| Z38A | Mt. Pleasant | 21.95 | 312 | P | P | 11 53 27.1 | +1.0 |
| | baz=22 | | | | | | |
| 536A | Bastrop | 22.04 | 302 | P | P | 11 53 28.4 | +1.3 |
| | baz=22 | | | | | | |
| 835A | Beeville | 22.05 | 297 | P | P | 11 53 28.5 | +1.3 |
| | baz=22 | | | | | | |
| 436A | Wall Ranch, Ga | 22.11 | 304 | P | P | 11 53 29.1 | +1.3 |
| | baz=22 | | | | | | |
| Y38A | Idabel | 22.15 | 313 | P | P | 11 53 28.8 | +0.6 |
| | baz=22 | | | | | | |
| ALLY | Alegheny Colle | 22.16 | 351 | eP | P | 11 53 29.0 | +0.8 |
| | comp=Z,119nm,1.2s | | | | | | |
| 137A | Heron Place, G | 22.16 | 309 | P | P | 11 53 29.6 | +1.2 |
| | baz=22 | | | | | | |
| 735A | Kenedy | 22.21 | 298 | P | P | 11 53 30.2 | +1.3 |
| | baz=22 | | | | | | |
| BINY | Binghamton | 22.36 | 359 | eP | P | 11 53 31.6 | +1.2 |
| | comp=Z,114nm,1.1s | | | | | | |
| 635A | Leesville | 22.36 | 300 | P | P | 11 53 31.2 | +0.6 |
| | baz=22 | | | | | | |
| Z37A | Pogue Cattle C | 22.37 | 311 | P | P | 11 53 31.3 | +0.7 |
| | baz=22 | | | | | | |
| 336A | Riesel | 22.41 | 305 | P | P | 11 53 31.4 | +0.4 |
| | baz=22 | | | | | | |
| 535A | Dale | 22.43 | 301 | P | P | 11 53 32.0 | +0.7 |
| | baz=22 | | | | | | |
| 934A | Benavides | 22.45 | 295 | P | P | 11 53 32.9 | +1.5 |
| | baz=22 | | | | | | |
| 236A | Katherine and | 22.45 | 307 | P | P | 11 53 32.0 | +0.5 |
| | baz=22 | | | | | | |
| 034A | Hebbronville | 22.45 | 293 | P | P | 11 53 33.4 | +1.8 |
| | baz=22 | | | | | | |
| 834A | Tilden | 22.62 | 296 | P | P | 11 53 34.4 | +1.1 |
| | baz=23 | | | | | | |
| X38A | Whitesboro | 22.64 | 315 | P | P | 11 53 34.4 | +0.9 |
| | baz=23 | | | | | | |
| 136A | Ennis | 22.67 | 308 | P | P | 11 53 34.3 | +0.5 |
| | baz=23 | | | | | | |
| W38A | Poteau | 22.68 | 316 | P | P | 11 53 34.4 | +0.6 |
| | baz=23 | | | | | | |
| SLM | Saint Louis | 22.71 | 329 | eP | P | 11 53 34.7 | +0.5 |
| SLM | | | | pmax | pmax | | |
| | comp=Z,135nm,1.3s | | | | | | |
| SLM | Saint Louis | 22.71 | 329 | eP | P | 11 53 34.7 | +0.5 |
| | comp=Z,135nm,1.3s | | | | | | |
| 435B | Jarrell | 22.73 | 303 | P | P | 11 53 35.1 | +0.6 |
| | baz=23 | | | | | | |
| Y37A | Hugo | 22.79 | 312 | P | P | 11 53 35.7 | +0.7 |
| | baz=23 | | | | | | |
| SFIN | Scholer Farm | 22.81 | 337 | P | P | 11 53 35.4 | +0.2 |
| | baz=23 | | | | | | |
| SFIN | Scholer Farm | 22.81 | 337 | eP | P | 11 53 35.3 | +0.2 |
| | comp=Z,183nm,1.1s | | | | | | |
| 335A | Moody | 22.82 | 304 | P | P | 11 53 36.1 | +0.8 |
| | baz=23 | | | | | | |
| 734A | La Parita Cree | 22.84 | 298 | P | P | 11 53 36.3 | +0.7 |
| | baz=23 | | | | | | |
| 634A | China Grove, S | 22.84 | 299 | P | P | 11 53 36.3 | +0.7 |
| | baz=23 | | | | | | |
| TRY | Troy | 22.93 | 3 | eP | P | 11 53 36.4 | 0.0 |
| X37A | Clayton | 22.96 | 314 | P | P | 11 53 37.3 | +0.5 |
| | baz=23 | | | | | | |
| MMNY | Mt. Morris Dam | 22.97 | 355 | eP | P | 11 53 37.9 | +1.0 |
| | comp=Z,76nm,1.1s | | | | | | |
| Z36A | Blue Ridge | 22.99 | 310 | P | P | 11 53 37.6 | +0.5 |
| | baz=23 | | | | | | |
| V38A | Canehill | 23.09 | 318 | P | P | 11 53 38.8 | +0.7 |
| | baz=23 | | | | | | |
| 933A | Laredo | 23.10 | 294 | P | P | 11 53 39.3 | +1.0 |
| | baz=23 | | | | | | |
| WHTX | Lake Whitney | 23.14 | 306 | P | P | 11 53 39.7 | +1.0 |
| | baz=23 | | | | | | |
| WHTX | Lake Whitney | 23.14 | 306 | eP | P | 11 53 39.2 | +0.5 |
| | comp=Z,176nm,1.4s | | | | | | |
| 534A | Blanco | 23.16 | 301 | P | P | 11 53 39.7 | +0.8 |
| | baz=23 | | | | | | |
| Y36A | Durant | 23.21 | 312 | P | P | 11 53 40.2 | +0.8 |
| | baz=23 | | | | | | |
| 434A | Burnet | 23.29 | 303 | P | P | 11 53 40.9 | +0.8 |
| | baz=23 | | | | | | |
| W37A | Quinton | 23.31 | 315 | P | P | 11 53 41.6 | +1.3 |
| | baz=23 | | | | | | |
| 135A | Vickery Place, | 23.36 | 307 | P | P | 11 53 41.9 | +1.0 |
| | baz=23 | | | | | | |
| 833A | Chaparral WMA, | 23.39 | 296 | P | P | 11 53 42.1 | +0.9 |
| | baz=23 | | | | | | |
| 733A | Divot King Ran | 23.41 | 297 | P | P | 11 53 42.2 | +0.8 |
| | baz=24 | | | | | | |
| U38A | Gravette | 23.44 | 319 | P | P | 11 53 42.3 | +0.7 |
| | baz=24 | | | | | | |
| 334A | Lometa | 23.47 | 304 | P | P | 11 53 42.9 | +0.9 |
| | baz=24 | | | | | | |
| 633A | Saathoff Ranch | 23.54 | 299 | P | P | 11 53 43.5 | +0.9 |
| | baz=24 | | | | | | |
| V37A | Hulbert | 23.57 | 317 | P | P | 11 53 43.5 | +0.6 |
| | baz=24 | | | | | | |
| ACCN | Adirondack Com | 23.59 | 3 | eP | P | 11 53 44.1 | +1.2 |
| | comp=Z,46nm,1.3s | | | | | | |
| ACCN | | | | eS | S | 11 57 59.0 | +3.7 |
| Z35A | Perchaven, San | 23.62 | 309 | P | P | 11 53 44.1 | +0.8 |
| | baz=24 | | | | | | |
| X36A | Centrahoma | 23.62 | 313 | P | P | 11 53 44.0 | +0.7 |
| | baz=24 | | | | | | |
| 533A | Kerrville | 23.63 | 300 | P | P | 11 53 44.1 | +0.5 |
| | baz=24 | | | | | | |
| 234A | Clairette | 23.67 | 305 | P | P | 11 53 44.7 | +0.8 |
| | baz=24 | | | | | | |
| Y35A | Marietta | 23.75 | 311 | P | P | 11 53 46.0 | +1.4 |
| | baz=24 | | | | | | |
| HDIL | Hopedale | 23.84 | 333 | P | P | 11 53 45.4 | +0.1 |
| | baz=24,SNR=9.4 | | | | | | |
| HDIL | Hopedale | 23.84 | 333 | eP | P | 11 53 45.8 | +0.4 |
| | comp=Z,60nm,0.8s | | | | | | |
| W36A | Wetumka | 23.85 | 314 | P | P | 11 53 45.9 | +0.3 |
| | baz=24 | | | | | | |
| 832A | Faith Ranch, C | 23.87 | 295 | P | P | 11 53 46.6 | +0.8 |
| | baz=24 | | | | | | |
| 134A | White-Moore Ra | 23.88 | 307 | P | P | 11 53 46.6 | +0.8 |
| | baz=24 | | | | | | |
| U37A | Salina | 23.88 | 318 | P | P | 11 53 46.4 | +0.6 |
| | baz=24 | | | | | | |
| 433A | Art | 23.92 | 302 | P | P | 11 53 47.1 | +0.8 |
| | baz=24 | | | | | | |
| X35A | Drake | 23.96 | 312 | P | P | 11 53 47.3 | +0.7 |
| | baz=24 | | | | | | |
| 732A | Laxson Ranch, | 23.99 | 297 | P | P | 11 53 47.6 | +0.7 |
| | baz=24 | | | | | | |
| TUL1 | Tulsa | 24.01 | 316 | P | P | 11 53 47.8 | +0.8 |
| | baz=24 | | | | | | |
| TUL1 | Tulsa | 24.01 | 316 | eP | P | 11 53 47.6 | +0.6 |
| | comp=Z,113nm,0.8s | | | | | | |
| V36A | Jenks | 24.03 | 316 | P | P | 11 53 48.1 | +0.8 |
| | baz=24 | | | | | | |
| 333A | Richland Sprin | 24.05 | 303 | P | P | 11 53 48.3 | +0.8 |
| | baz=24 | | | | | | |
| 632A | Uvalde | 24.06 | 298 | P | P | 11 53 48.7 | +1.0 |
| | baz=24 | | | | | | |
| Z34A | Collier Ranch, | 24.12 | 309 | P | P | 11 53 49.3 | +1.2 |
| | baz=24 | | | | | | |
| T37A | Cheneyville 18 | 24.21 | 320 | P | P | 11 53 49.8 | +0.9 |
| | baz=24 | | | | | | |
| U36A | Oologah | 24.26 | 317 | P | P | 11 53 50.0 | +0.7 |
| | baz=24 | | | | | | |
| 233A | Rising Star | 24.26 | 305 | P | P | 11 53 50.2 | +0.8 |
| | baz=24 | | | | | | |
| Y34A | Reagan Ranch, | 24.29 | 310 | P | P | 11 53 51.0 | +1.4 |
| | baz=24 | | | | | | |
| W35A | Tecumseh | 24.30 | 313 | P | P | 11 53 50.1 | +0.4 |
| | baz=24 | | | | | | |
| 532A | Rocksprings | 24.36 | 300 | P | P | 11 53 51.6 | +1.2 |
| | baz=24 | | | | | | |
| JCT | Junction City | 24.39 | 301 | eP | P | 11 53 51.6 | +1.0 |
| JCT | | | | pmax | pmax | | |
| | comp=Z,73nm,0.8s | | | | | | |
| JCT | Junction City | 24.39 | 301 | P | P | 11 53 51.7 | +1.0 |
| | baz=24,SNR=39 | | | | | | |
| JCT | Junction City | 24.39 | 301 | eP | P | 11 53 51.6 | +1.0 |
| | comp=Z,73nm,0.8s | | | | | | |
| 133A | Hamilton Ranch | 24.52 | 306 | P | P | 11 53 52.6 | +0.8 |
| | baz=25 | | | | | | |
| 432A | Menard | 24.53 | 302 | P | P | 11 53 52.6 | +0.7 |
| | baz=25 | | | | | | |
| S37A | Fort Scott | 24.57 | 321 | P | P | 11 53 52.9 | +0.7 |
| | baz=25 | | | | | | |
| V35A | Meyer Ranch, C | 24.61 | 315 | P | P | 11 53 53.1 | +0.5 |
| | baz=25 | | | | | | |
| 332A | Millersview | 24.67 | 303 | P | P | 11 53 54.1 | +0.9 |
| | baz=25 | | | | | | |
| X34A | Smith Ranch, M | 24.67 | 311 | P | P | 11 53 54.1 | +1.0 |
| | baz=25 | | | | | | |
| 631A | Perdido Creek | 24.69 | 298 | P | P | 11 53 53.7 | +0.4 |
| | baz=25 | | | | | | |
| Z33A | Whitaker Ranch | 24.71 | 308 | P | P | 11 53 54.6 | +1.1 |
| | baz=25 | | | | | | |
| T36A | Boggs Farm, Ca | 24.76 | 318 | P | P | 11 53 54.7 | +0.8 |
| | baz=25 | | | | | | |
| LONY | Lake Ozonia | 24.78 | 2 | eP | P | 11 53 54.8 | +0.8 |
| | comp=Z,40nm,1.0s | | | | | | |
| 232A | Coleman | 24.79 | 304 | P | P | 11 53 55.0 | +0.8 |
| | baz=25 | | | | | | |
| U35A | Pawnee | 24.89 | 316 | P | P | 11 53 55.9 | +0.8 |
| | baz=25 | | | | | | |
| 531A | Rocksprings | 24.90 | 299 | P | P | 11 53 56.0 | +0.7 |
| | baz=25 | | | | | | |
| R37A | Teagarden Farm | 24.94 | 322 | P | P | 11 53 56.2 | +0.7 |
| | baz=25 | | | | | | |
| Y33A | Hilltop Ranch, | 24.95 | 309 | P | P | 11 53 56.3 | +0.8 |
| | baz=25 | | | | | | |
| W34A | Bridge Creek, | 24.96 | 313 | P | P | 11 53 56.3 | +0.5 |
| | baz=25 | | | | | | |
| W34A | Bridge Creek, | 24.96 | 313 | eP | P | 11 53 56.5 | +0.7 |
| | comp=Z,67nm,0.9s | | | | | | |
| S36A | Lake Cedric, C | 25.01 | 320 | P | P | 11 53 56.7 | +0.6 |
| | baz=25 | | | | | | |
| FRNY | Flat Rock | 25.04 | 3 | eP | P | 11 53 55.3 | -1.0 |
| | comp=Z,43nm,1.4s | | | | | | |
| T35A | Sooner Cattle | 25.08 | 317 | P | P | 11 53 57.3 | +0.6 |
| | baz=25 | | | | | | |
| ABTX | Abilene, Hawle | 25.09 | 306 | P | P | 11 53 57.6 | +0.7 |
| | baz=25 | | | | | | |
| ABTX | Abilene, Hawle | 25.09 | 306 | eP | P | 11 53 57.5 | +0.5 |
| | comp=Z,44nm,1.0s | | | | | | |
| SADO | Sadowa | 25.10 | 354 | P | P | 11 53 56.5 | -0.4 |
| | comp=Z,53nm,1.0s,baz=192,slow=8.8,SNR=21 | | | | | | |
| SADO | Sadowa | 25.10 | 354 | eP | P | 11 53 56.7 | -0.2 |
| | comp=Z,76nm,1.1s | | | | | | |
| Q37A | Longview Farm, | 25.11 | 323 | P | P | 11 53 57.5 | +0.5 |
| | baz=25 | | | | | | |
| V34A | Guthrie | 25.11 | 314 | P | P | 11 53 57.7 | +0.6 |
| | baz=25 | | | | | | |
| V34A | Guthrie | 25.11 | 314 | eP | P | 11 53 57.6 | +0.6 |
| | comp=Z,129nm,0.9s | | | | | | |
| 431A | Sonora | 25.12 | 301 | P | P | 11 53 58.1 | +0.9 |
| | baz=25 | | | | | | |
| X33A | Lawton | 25.12 | 311 | P | P | 11 53 57.6 | +0.5 |
| | baz=25 | | | | | | |
| 331A | San Angelo | 25.19 | 302 | P | P | 11 53 58.7 | +0.8 |
| | baz=25 | | | | | | |
| Z32A | Haskell | 25.25 | 307 | P | P | 11 53 59.3 | +0.9 |
| | baz=25 | | | | | | |
| 231A | Bronte | 25.33 | 303 | P | P | 11 53 59.4 | +0.2 |
| | baz=25 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| R36A | Gordon, Harris | 25.34 | 321 | P | P | 11 54 | 00.0 +0.9 |
| | baz=25 | | | | | | |
| W33A | Caddo, Fort Co | 25.40 | 312 | P | P | 11 54 | 00.4 +0.6 |
| | baz=26 | | | | | | |
| WMOK | Wichita Mounta | 25.41 | 311 | eP | P | 11 53 | 59.9 0.0 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| WMOK | Wichita Mounta | 25.41 | 311 | eP | P | 11 53 | 59.9 0.0 |
| | comp=Z,28nm,0.9s | | | | | | |
| S35A | Otter Creek Ra | 25.43 | 319 | P | P | 11 54 | 00.6 +0.7 |
| | baz=26 | | | | | | |
| PTGA | Pitinga | 25.45 | 141 | P | P | 11 53 | 59.2 -1.0 |
| | comp=Z,52nm,0.8s,baz=338,slow=11,SNR=58 | | | | | | |
| PTGA | | | | LR | LR | 12 04 | 32.7 |
| | comp=Z,612nm,19.6s,baz=354,slow=38 | | | | | | |
| PTGA | Pitinga | 25.45 | 141 | eP | P | 11 54 | 01.2 +1.0 |
| | comp=Z,57nm,0.8s | | | | | | |
| U34A | Anderson Ranch | 25.46 | 315 | P | P | 11 54 | 01.1 +0.8 |
| | baz=26 | | | | | | |
| U34A | Anderson Ranch | 25.46 | 315 | eP | P | 11 54 | 00.8 +0.5 |
| | comp=Z,142nm,1.2s | | | | | | |
| Y32A | R-V Farms, Ver | 25.54 | 309 | P | P | 11 54 | 02.0 +1.0 |
| | baz=26 | | | | | | |
| 530A | J-C Ranch, Com | 25.54 | 299 | P | P | 11 54 | 02.0 +0.9 |
| | baz=26 | | | | | | |
| T34A | McClaskey Farm | 25.57 | 317 | P | P | 11 54 | 02.0 +0.7 |
| | baz=26 | | | | | | |
| X32A | Elmer | 25.62 | 310 | P | P | 11 54 | 02.2 +0.5 |
| | baz=26 | | | | | | |
| V33A | Lossen Ranch, | 25.63 | 313 | P | P | 11 54 | 02.3 +0.5 |
| | baz=26 | | | | | | |
| 430A | Baggett Ranch, | 25.66 | 300 | P | P | 11 54 | 02.6 +0.4 |
| | baz=26 | | | | | | |
| 131A | Roby | 25.68 | 305 | P | P | 11 54 | 02.7 +0.4 |
| | baz=26 | | | | | | |
| Q36A | Arnold C. Orve | 25.74 | 322 | P | P | 11 54 | 03.4 +0.6 |
| | baz=26 | | | | | | |
| R35A | Emporia Munici | 25.76 | 320 | P | P | 11 54 | 03.5 +0.6 |
| | baz=26 | | | | | | |
| Z31A | Sharp Cattle R | 25.76 | 307 | P | P | 11 54 | 03.7 +0.7 |
| | baz=26 | | | | | | |
| 330A | Mertzon | 25.82 | 302 | P | P | 11 54 | 03.9 +0.3 |
| | baz=26 | | | | | | |
| U33A | Lingo Farm, Me | 25.84 | 315 | P | P | 11 54 | 04.1 +0.4 |
| | baz=26 | | | | | | |
| S34A | Willow Spring | 25.93 | 318 | P | P | 11 54 | 04.9 +0.4 |
| | baz=26 | | | | | | |
| W32A | Sentinel | 25.94 | 311 | P | P | 11 54 | 05.0 +0.4 |
| | baz=26 | | | | | | |
| 230A | Sterling City | 25.94 | 303 | P | P | 11 54 | 05.0 +0.3 |
| | baz=26 | | | | | | |
| Q35A | Mercer Eighty, | 26.01 | 321 | P | P | 11 54 | 05.7 +0.5 |
| | baz=26 | | | | | | |
| P36A | Good Intent, A | 26.05 | 324 | P | P | 11 54 | 06.1 +0.6 |
| | baz=26 | | | | | | |
| 130A | Snyder | 26.09 | 304 | P | P | 11 54 | 06.5 +0.4 |
| | baz=26 | | | | | | |
| V32A | Arapaho | 26.10 | 312 | P | P | 11 54 | 06.4 +0.4 |
| | baz=26 | | | | | | |
| Y31A | Rekieta Farm, | 26.13 | 308 | P | P | 11 54 | 06.7 +0.3 |
| | baz=26 | | | | | | |
| 429A | Davenport Ranc | 26.15 | 300 | P | P | 11 54 | 06.7 +0.1 |
| | baz=26 | | | | | | |
| JFWS | Jewell Farm | 26.20 | 335 | eP | P | 11 54 | 07.4 +0.5 |
| JFWS | | | | pmax | pmax | | |
| | comp=Z,62nm,0.8s | | | | | | |
| JFWS | Jewell Farm | 26.20 | 335 | eP | P | 11 54 | 07.4 +0.5 |
| | comp=Z,62nm,0.8s | | | | | | |
| X31A | McDonald Ranch | 26.23 | 309 | P | P | 11 54 | 07.5 +0.2 |
| | baz=26 | | | | | | |
| 529A | Stev Forest Ra | 26.26 | 298 | P | P | 11 54 | 08.0 +0.3 |
| | baz=26 | | | | | | |
| O36A | Bolckow | 26.27 | 325 | P | P | 11 54 | 08.0 +0.5 |
| | baz=26 | | | | | | |
| T33A | Patterson Ranc | 26.30 | 316 | P | P | 11 54 | 08.2 +0.4 |
| | baz=26 | | | | | | |
| R34A | Isabella, Hill | 26.38 | 319 | P | P | 11 54 | 09.3 +0.7 |
| | baz=26 | | | | | | |
| U32A | Winter Ranch, | 26.41 | 314 | P | P | 11 54 | 09.7 +0.7 |
| | baz=26 | | | | | | |
| S33A | Kaszmaul Farm, | 26.43 | 317 | P | P | 11 54 | 09.8 +0.8 |
| | baz=26 | | | | | | |
| P35A | Duane Minner, | 26.44 | 323 | P | P | 11 54 | 09.6 +0.5 |
| | baz=26 | | | | | | |
| W31A | Holland Ranch, | 26.46 | 310 | P | P | 11 54 | 09.5 +0.1 |
| | baz=26 | | | | | | |
| 329A | Wagon Wheel Ra | 26.50 | 301 | P | P | 11 54 | 10.1 +0.3 |
| | baz=26 | | | | | | |
| Z30A | Sanderson Ranc | 26.50 | 306 | P | P | 11 54 | 10.1 +0.4 |
| | baz=26 | | | | | | |
| KSU1 | Kansas State U | 26.51 | 321 | P | P | 11 54 | 10.3 +0.6 |
| | baz=27,SNR=26 | | | | | | |
| KSU1 | Kansas State U | 26.51 | 321 | eP | P | 11 54 | 10.4 +0.6 |
| 229A | Bryant Ranch, | 26.53 | 302 | P | P | 11 54 | 10.3 +0.2 |
| | baz=27 | | | | | | |
| Y30A | Stafford Cattl | 26.57 | 307 | P | P | 11 54 | 10.8 +0.4 |
| | baz=27 | | | | | | |
| Q34A | Chapman | 26.59 | 320 | P | P | 11 54 | 11.1 +0.7 |
| | baz=27 | | | | | | |
| V31A | Spring Creek L | 26.68 | 312 | P | P | 11 54 | 12.3 +0.9 |
| | baz=27 | | | | | | |
| SCIA | State Center | 26.69 | 330 | eP | P | 11 54 | 12.2 +0.9 |
| | comp=Z,108nm,1.3s | | | | | | |
| X30A | Coker Ranch, T | 26.80 | 308 | P | P | 11 54 | 13.0 +0.5 |
| | baz=27 | | | | | | |
| T32A | Huddler Ranch, | 26.80 | 315 | P | P | 11 54 | 13.4 +1.0 |
| | baz=27 | | | | | | |
| 129A | Stewart Farms, | 26.81 | 304 | P | P | 11 54 | 13.1 +0.5 |
| | baz=27 | | | | | | |
| R33A | Olander Ranch, | 26.85 | 318 | P | P | 11 54 | 13.7 +0.9 |
| | baz=27 | | | | | | |
| O35A | Humboldt | 26.88 | 324 | P | P | 11 54 | 13.0 0.0 |
| | baz=27 | | | | | | |
| W30A | Crocket Farms | 26.92 | 310 | P | P | 11 54 | 13.8 +0.3 |
| | baz=27 | | | | | | |
| P34A | Walnut Farm, R | 26.92 | 322 | P | P | 11 54 | 14.3 +0.8 |
| | baz=27 | | | | | | |
| Z29A | Hungry Hill Ra | 26.93 | 305 | P | P | 11 54 | 14.1 +0.5 |
| | baz=27 | | | | | | |
| U31A | Nine Bar Ranch | 26.99 | 313 | P | P | 11 54 | 14.7 +0.6 |
| | baz=27 | | | | | | |
| S32A | Newby Ranch, P | 27.10 | 316 | P | P | 11 54 | 15.7 +0.6 |
| | baz=27 | | | | | | |
| Y29A | Porterfield Fa | 27.14 | 306 | P | P | 11 54 | 16.1 +0.5 |
| | baz=27 | | | | | | |
| N35A | Tabor | 27.15 | 325 | P | P | 11 54 | 15.7 +0.2 |
| | baz=27 | | | | | | |
| Q33A | Connelly Farm, | 27.18 | 320 | P | P | 11 54 | 16.8 +1.1 |
| | baz=27 | | | | | | |
| 228A | UT Block 9, Go | 27.20 | 302 | P | P | 11 54 | 16.6 +0.4 |
| | baz=27 | | | | | | |
| T31A | Randall Ranch, | 27.26 | 314 | P | P | 11 54 | 17.4 +0.9 |
| | baz=27 | | | | | | |
| TXAR | Lajitas Array | 27.27 | 296 | P | P | 11 54 | 17.2 +0.5 |
| | comp=Z,7.0nm,1.0s,baz=118,slow=8.5,SNR=48 | | | | | | |
| TXAR | | | | PcP | PcP | 11 57 | 36.8 +0.6 |
| | comp=Z,4.0nm,0.6s,baz=126,slow=4.4,SNR=17 | | | | | | |
| TXAR | | | | LR | LR | 12 07 | 56.3 |
| | comp=Z,199nm,19.5s,baz=0.0,slow=43 | | | | | | |
| O34A | Beatrice | 27.27 | 323 | P | P | 11 54 | 17.0 +0.5 |
| | baz=27 | | | | | | |
| TX31 | Lajitas Ar. Si | 27.27 | 296 | eP | P | 11 54 | 17.2 +0.4 |
| TX31 | | | | ePcP | PcP | 11 57 | 36.9 +0.7 |
| V30A | Spur Ranch, Mi | 27.28 | 311 | P | P | 11 54 | 17.5 +0.8 |
| | baz=27 | | | | | | |
| 128A | Castleberry Fa | 27.29 | 303 | P | P | 11 54 | 17.5 +0.6 |
| | baz=27 | | | | | | |
| P33A | Williams Farm, | 27.37 | 320 | P | P | 11 54 | 18.1 +0.7 |
| | baz=27 | | | | | | |
| R32A | Long Quarter, | 27.37 | 318 | P | P | 11 54 | 18.2 +0.6 |
| | baz=27 | | | | | | |
| X29A | Tulia | 27.41 | 308 | P | P | 11 54 | 18.6 +0.6 |
| | baz=28 | | | | | | |
| S31A | Mullinville | 27.41 | 315 | P | P | 11 54 | 19.2 +1.2 |
| | baz=28 | | | | | | |
| Z28A | Tucker Farm, M | 27.46 | 305 | P | P | 11 54 | 18.7 +0.2 |
| | baz=28 | | | | | | |
| AMTX | Amarillo | 27.59 | 308 | P | P | 11 54 | 20.3 +0.7 |
| | baz=28 | | | | | | |
| AMTX | Amarillo | 27.59 | 308 | eP | P | 11 54 | 19.9 +0.3 |
| N34A | Lincoln | 27.60 | 324 | P | P | 11 54 | 19.7 +0.2 |
| | baz=28 | | | | | | |
| Y28A | McKinney Farm, | 27.60 | 306 | P | P | 11 54 | 20.3 +0.6 |
| | baz=28 | | | | | | |
| M35A | Neola | 27.61 | 326 | P | P | 11 54 | 19.9 +0.4 |
| | baz=28 | | | | | | |
| Q32A | Meitler Ranch, | 27.62 | 319 | P | P | 11 54 | 20.6 +0.9 |
| | baz=28 | | | | | | |
| U30A | WK&E Inc. Balk | 27.63 | 312 | P | P | 11 54 | 20.7 +0.8 |
| | baz=28 | | | | | | |
| W29A | Amarillo | 27.67 | 309 | P | P | 11 54 | 20.8 +0.5 |
| | baz=28 | | | | | | |
| O33A | Hebron | 27.71 | 322 | P | P | 11 54 | 21.2 +0.7 |
| | baz=28 | | | | | | |
| T30A | Plains | 27.81 | 313 | P | P | 11 54 | 21.9 +0.4 |
| | baz=28 | | | | | | |
| X28A | Dimmitt | 27.82 | 307 | P | P | 11 54 | 21.8 +0.2 |
| | baz=28 | | | | | | |
| R31A | Burdett | 27.82 | 317 | P | P | 11 54 | 22.6 +1.1 |
| | baz=28 | | | | | | |
| V29A | Stinnett | 27.92 | 310 | P | P | 11 54 | 23.2 +0.6 |
| | baz=28 | | | | | | |
| L35A | Bielow Farm, R | 27.99 | 327 | P | P | 11 54 | 23.2 +0.2 |
| | baz=28 | | | | | | |
| U29A | Oasis Ranch, S | 28.02 | 312 | P | P | 11 54 | 23.9 +0.5 |
| | baz=28 | | | | | | |
| MSTX | Muleshoe | 28.03 | 306 | P | P | 11 54 | 23.8 +0.3 |
| | baz=28 | | | | | | |
| MSTX | Muleshoe | 28.03 | 306 | eP | P | 11 54 | 23.6 +0.1 |
| | comp=Z,21nm,0.9s | | | | | | |
| P32A | Huiting Farm, | 28.03 | 320 | P | P | 11 54 | 23.8 +0.4 |
| | baz=28 | | | | | | |
| N33A | J Bar K, Exete | 28.07 | 323 | P | P | 11 54 | 23.9 +0.2 |
| | baz=28 | | | | | | |
| S30A | Montezuma | 28.08 | 315 | P | P | 11 54 | 24.1 +0.2 |
| | baz=28 | | | | | | |
| M34A | Aspy Farms, Fr | 28.11 | 325 | P | P | 11 54 | 24.5 +0.5 |
| | baz=28 | | | | | | |
| W28A | Vega | 28.14 | 309 | P | P | 11 54 | 24.9 +0.3 |
| | baz=28 | | | | | | |
| Q31A | Ellis | 28.15 | 318 | P | P | 11 54 | 25.6 +1.1 |
| | baz=28 | | | | | | |
| O32A | Brockman Farm, | 28.24 | 321 | P | P | 11 54 | 25.8 +0.5 |
| | baz=28 | | | | | | |
| CBKS | Cedar Bluff | 28.25 | 317 | eP | P | 11 54 | 26.6 +1.2 |
| CBKS | Cedar Bluff | 28.25 | 317 | P | P | 11 54 | 26.3 +0.9 |
| | baz=28,SNR=15 | | | | | | |
| CBKS | Cedar Bluff | 28.25 | 317 | eP | P | 11 54 | 26.6 +1.2 |
| K35A | Storm Lake | 28.28 | 328 | P | P | 11 54 | 26.2 +0.6 |
| | baz=28 | | | | | | |
| R30A | Dighton | 28.30 | 316 | P | P | 11 54 | 26.8 +1.0 |
| | baz=28 | | | | | | |
| L34A | Svendsen Farm, | 28.32 | 326 | P | P | 11 54 | 26.4 +0.5 |
| | baz=28 | | | | | | |
| V28A | Channing | 28.37 | 310 | P | P | 11 54 | 27.1 +0.5 |
| | baz=28 | | | | | | |
| T29A | Hugoton | 28.39 | 313 | P | P | 11 54 | 27.6 +0.9 |
| | baz=28 | | | | | | |
| P31A | Stockton | 28.45 | 319 | P | P | 11 54 | 27.7 +0.6 |
| | baz=28 | | | | | | |
| M33A | Taylor Creek F | 28.49 | 324 | P | P | 11 54 | 28.0 +0.6 |
| | baz=28 | | | | | | |
| S29A | Ulysses | 28.51 | 314 | P | P | 11 54 | 28.4 +0.7 |
| | baz=29 | | | | | | |
| COWI | Conover | 28.55 | 340 | eP | P | 11 54 | 28.0 +0.1 |
| | comp=Z,35nm,1.4s | | | | | | |
| N32A | Stulken Farm, | 28.57 | 322 | P | P | 11 54 | 29.0 +0.8 |
| | baz=29 | | | | | | |
| Q30A | Quinter | 28.66 | 317 | P | P | 11 54 | 29.7 +0.7 |
| | baz=29 | | | | | | |
| U28A | Mallet | 28.66 | 311 | P | P | 11 54 | 29.6 +0.5 |
| | baz=29 | | | | | | |
| K34A | Le Mars | 28.69 | 327 | P | P | 11 54 | 29.4 +0.2 |
| | baz=29 | | | | | | |
| I36A | Fitzsimmons Fa | 28.70 | 332 | P | P | 11 54 | 29.9 +0.7 |
| | baz=29 | | | | | | |
| J35A | Milford | 28.75 | 329 | P | P | 11 54 | 29.6 -0.1 |
| | baz=29 | | | | | | |
| O31A | Woolen Ranch, | 28.80 | 320 | P | P | 11 54 | 30.7 +0.5 |
| | baz=29 | | | | | | |
| V27A | Dan Oppiter Fa | 28.82 | 309 | P | P | 11 54 | 30.8 +0.2 |
| | baz=29 | | | | | | |
| BGNE | Belgrade | 28.91 | 323 | P | P | 11 54 | 31.6 +0.4 |
| | baz=29 | | | | | | |
| BGNE | Belgrade | 28.91 | 323 | eP | P | 11 54 | 31.4 +0.2 |
| | comp=Z,91nm,1.0s | | | | | | |
| L33A | Hoskins | 28.94 | 325 | P | P | 11 54 | 31.9 +0.5 |
| | baz=29 | | | | | | |
| T28A | Walsh | 28.94 | 312 | P | P | 11 54 | 32.1 +0.5 |
| | baz=29 | | | | | | |
| R29A | Marienthal | 28.95 | 315 | P | P | 11 54 | 32.4 +0.8 |
| | baz=29 | | | | | | |
| N31A | Bailey Ranch, | 28.99 | 321 | P | P | 11 54 | 33.0 +1.0 |
| | baz=29 | | | | | | |
| P30A | Selden | 29.00 | 318 | P | P | 11 54 | 33.0 +1.0 |
| | baz=29 | | | | | | |
| I35A | Creekview Farm | 29.02 | 330 | P | P | 11 54 | 32.5 +0.4 |
| | baz=29 | | | | | | |
| S28A | Manter | 29.02 | 313 | P | P | 11 54 | 33.0 +0.6 |
| | baz=29 | | | | | | |
| J34A | George | 29.06 | 328 | P | P | 11 54 | 32.7 +0.2 |
| | baz=29 | | | | | | |
| Q29A | Oakley | 29.10 | 316 | P | P | 11 54 | 33.8 +0.8 |
| | baz=29 | | | | | | |
| K33A | Hardington | 29.10 | 326 | P | P | 11 54 | 33.2 +0.3 |
| | baz=29 | | | | | | |
| U27A | Thompson Grove | 29.11 | 310 | P | P | 11 54 | 33.5 +0.3 |
| | baz=29 | | | | | | |
| SPMN | St. Paul | 29.14 | 334 | P | P | 11 54 | 33.2 +0.1 |
| | baz=29 | | | | | | |
| SPMN | St. Paul | 29.14 | 334 | eP | P | 11 54 | 33.2 +0.1 |
| | comp=Z,10nm,0.2s | | | | | | |
| L32A | Elgin | 29.23 | 324 | P | P | 11 54 | 34.4 +0.4 |
| | baz=29 | | | | | | |
| O30A | MW Ranch, Wils | 29.26 | 319 | P | P | 11 54 | 34.8 +0.5 |
| | baz=29 | | | | | | |
| MNTX | Cornudas Mount | 29.32 | 300 | P | P | 11 54 | 35.5 +0.6 |
| | baz=29,SNR=39 | | | | | | |
| MNTX | Cornudas Mount | 29.32 | 300 | eP | P | 11 54 | 36.1 +1.2 |
| M31A | Lambtecht Ranc | 29.34 | 322 | P | P | 11 54 | 35.5 +0.5 |
| | baz=29 | | | | | | |
| T27A | Campo | 29.34 | 312 | P | P | 11 54 | 35.7 +0.6 |
| | baz=29 | | | | | | |
| R28A | Tribune | 29.35 | 315 | P | P | 11 54 | 36.3 +1.0 |
| | baz=29 | | | | | | |
| P29A | Atwood | 29.47 | 318 | P | P | 11 54 | 37.0 +0.8 |
| | baz=30 | | | | | | |
| G36A | St. Michael | 29.54 | 333 | P | P | 11 54 | 37.1 +0.4 |
| | baz=30 | | | | | | |
| I34A | Hadley | 29.57 | 329 | P | P | 11 54 | 37.2 +0.2 |
| | baz=30 | | | | | | |
| J33A | Davis | 29.59 | 327 | P | P | 11 54 | 36.9 -0.3 |
| | baz=30 | | | | | | |
| K32A | Verdigre | 29.65 | 325 | P | P | 11 54 | 37.3 -0.4 |
| | baz=30 | | | | | | |
| N30A | Hueftle Ranch, | 29.66 | 320 | P | P | 11 54 | 38.5 +0.6 |
| | baz=30 | | | | | | |
| O29A | 4D Ranch, Culb | 29.68 | 319 | P | P | 11 54 | 38.6 +0.5 |
| | baz=30 | | | | | | |
| ECSD | EROS Data Cent | 29.71 | 328 | P | P | 11 54 | 37.9 -0.4 |
| | baz=30,SNR=14 | | | | | | |
| ECSD | EROS Data Cent | 29.71 | 328 | eP | P | 11 54 | 37.9 -0.4 |
| | comp=Z,77nm,1.5s | | | | | | |
| Q28A | Sharon Springs | 29.75 | 316 | P | P | 11 54 | 39.4 +0.6 |
| | baz=30 | | | | | | |
| S27A | Las Animas | 29.76 | 313 | P | P | 11 54 | 39.4 +0.4 |
| | baz=30 | | | | | | |
| L31A | Butterfield Fa | 29.80 | 324 | P | P | 11 54 | 39.3 +0.2 |
| | baz=30 | | | | | | |
| G35A | Watkins | 29.85 | 332 | P | P | 11 54 | 39.5 0.0 |
| | baz=30 | | | | | | |
| F36A | Milaca | 29.96 | 334 | P | P | 11 54 | 40.7 +0.3 |
| | baz=30 | | | | | | |
| P28A | Saint Francis | 29.98 | 317 | P | P | 11 54 | 41.5 +0.8 |
| | baz=30 | | | | | | |
| M30A | Dale-Ortello V | 29.98 | 322 | P | P | 11 54 | 41.5 +0.7 |
| | baz=30 | | | | | | |
| N29A | Votaw Ranch, W | 29.99 | 320 | P | P | 11 54 | 41.6 +0.8 |
| | baz=30 | | | | | | |
| R27A | Eads | 29.99 | 314 | P | P | 11 54 | 41.8 +0.8 |
| | baz=30 | | | | | | |
| H34A | Spellman Lake, | 30.00 | 330 | P | P | 11 54 | 40.9 +0.1 |
| | baz=30 | | | | | | |
| T26A | Comanche Natio | 30.01 | 311 | P | P | 11 54 | 41.6 +0.5 |
| | baz=30 | | | | | | |
| K31A | O'Neill | 30.05 | 324 | P | P | 11 54 | 41.9 +0.6 |
| | baz=30 | | | | | | |
| J32A | Parkston | 30.08 | 326 | P | P | 11 54 | 41.4 -0.1 |
| | baz=30 | | | | | | |
| S26A | Kim | 30.13 | 312 | P | P | 11 54 | 42.7 +0.6 |
| | baz=30 | | | | | | |
| L30A | Spencer Herefo | 30.15 | 322 | P | P | 11 54 | 43.4 +1.1 |
| | baz=30 | | | | | | |
| KSCO | Kaye Shedlock' | 30.25 | 315 | P | P | 11 54 | 43.7 +0.5 |
| | baz=30 | | | | | | |
| KSCO | Kaye Shedlock' | 30.25 | 315 | eP | P | 11 54 | 43.8 +0.6 |
| | comp=Z,102nm,1.6s | | | | | | |
| O28A | Krutsinger Ran | 30.30 | 318 | P | P | 11 54 | 43.9 +0.3 |
| | baz=30 | | | | | | |
| I32A | Karley and Nic | 30.35 | 328 | P | P | 11 54 | 43.5 -0.4 |
| | baz=30 | | | | | | |
| G34A | Benson | 30.38 | 331 | P | P | 11 54 | 44.4 +0.3 |
| | baz=30 | | | | | | |
| F35A | Swanville | 30.39 | 333 | P | P | 11 54 | 44.2 0.0 |
| | baz=30 | | | | | | |
| M29A | Burnside Ranch | 30.40 | 321 | P | P | 11 54 | 45.4 +1.0 |
| | baz=30 | | | | | | |
| R26A | Arlington | 30.44 | 313 | P | P | 11 54 | 45.0 +0.1 |
| | baz=30 | | | | | | |
| H33A | Prehn Over Nor | 30.47 | 329 | P | P | 11 54 | 44.7 -0.3 |
| | baz=30 | | | | | | |
| N28A | Pribbeno Ranch | 30.47 | 319 | P | P | 11 54 | 45.3 +0.2 |
| | baz=30 | | | | | | |
| J31A | Geddes | 30.50 | 325 | P | P | 11 54 | 45.0 -0.2 |
| | baz=31 | | | | | | |
| P27A | Ficken Ranch, | 30.50 | 316 | P | P | 11 54 | 46.3 +0.9 |
| | baz=31 | | | | | | |
| K30A | Basset | 30.56 | 324 | P | P | 11 54 | 46.3 +0.5 |
| | baz=31 | | | | | | |
| T25A | Trinidad | 30.57 | 311 | P | P | 11 54 | 47.1 +0.9 |
| | baz=31 | | | | | | |
| D37A | Cotton | 30.60 | 337 | P | P | 11 54 | 46.6 +0.5 |
| | baz=31 | | | | | | |
| L29A | Maesberg Ranch | 30.66 | 322 | P | P | 11 54 | 47.1 +0.3 |
| | baz=31 | | | | | | |
| C38A | Sawbill Land. | 30.67 | 339 | P | P | 11 54 | 46.6 -0.1 |
| | baz=31 | | | | | | |
| H32A | Carlson Farm, | 30.68 | 328 | P | P | 11 54 | 46.5 -0.3 |
| | baz=31 | | | | | | |
| O27A | Beecher Island | 30.78 | 317 | P | P | 11 54 | 48.6 +0.7 |
| | baz=31 | | | | | | |
| M28A | Bar X Bar Ranc | 30.78 | 320 | P | P | 11 54 | 48.7 +0.8 |
| | baz=31 | | | | | | |
| Q26A | Hugo | 30.80 | 314 | P | P | 11 54 | 49.1 +1.0 |
| | baz=31 | | | | | | |
| E35A | Pequot Lakes | 30.88 | 334 | P | P | 11 54 | 49.0 +0.5 |
| | baz=31 | | | | | | |
| D36A | Goodland | 30.89 | 336 | P | P | 11 54 | 49.2 +0.5 |
| | baz=31 | | | | | | |
| I31A | Royce, Wessing | 30.90 | 327 | P | P | 11 54 | 48.4 -0.3 |
| | baz=31 | | | | | | |
| J30A | Dallas | 30.92 | 325 | P | P | 11 54 | 49.0 0.0 |
| | baz=31 | | | | | | |
| OGNE | Ogallala | 30.93 | 319 | P | P | 11 54 | 49.8 +0.7 |
| | baz=31 | | | | | | |
| OGNE | Ogallala | 30.93 | 319 | eP | P | 11 54 | 50.3 +1.1 |
| EYMN | Ely | 30.95 | 339 | P | P | 11 54 | 48.8 -0.3 |
| | baz=31,SNR=12 | | | | | | |
| EYMN | Ely | 30.95 | 339 | eP | P | 11 54 | 49.3 +0.2 |
| | comp=Z,53nm,1.0s | | | | | | |
| C37A | Embarrass | 31.00 | 338 | P | P | 11 54 | 50.0 +0.4 |
| | baz=31 | | | | | | |
| P26A | Davis Ranch, A | 31.01 | 316 | P | P | 11 54 | 50.7 +0.8 |
| | baz=31 | | | | | | |
| K29A | Lazy Trails An | 31.01 | 323 | P | P | 11 54 | 50.1 +0.2 |
| | baz=31 | | | | | | |
| SAML | Samuel | 31.02 | 156 | eP | P | 11 54 | 49.6 -0.4 |
| | comp=Z,34nm,1.0s | | | | | | |
| BNM | Barren Site | 31.07 | 304 | eP | P | 11 54 | 52.2 +1.6 |
| F33A | 5 Mile Ranch, | 31.13 | 331 | P | P | 11 54 | 50.6 -0.1 |
| | baz=31 | | | | | | |
| LPM | Los Pinos Moun | 31.13 | 304 | eP | P | 11 54 | 52.6 +1.5 |
| N27A | Anderson Farm, | 31.16 | 318 | P | P | 11 54 | 51.8 +0.6 |
| | baz=31 | | | | | | |
| D35A | Remer | 31.16 | 335 | P | P | 11 54 | 50.9 -0.1 |
| | baz=31 | | | | | | |
| E34A | Wadena | 31.16 | 333 | P | P | 11 54 | 51.3 +0.3 |
| | baz=31 | | | | | | |
| H31A | Wolsey | 31.18 | 327 | P | P | 11 54 | 50.9 -0.3 |
| | baz=31 | | | | | | |
| ANMO | Albuquerque | 31.21 | 305 | c iP | P | 11 54 | 52.9 +1.0 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,19nm,1.7s | | | | | | |
| ANMO | | | | MLR | MLR | | |
| | comp=Z,443nm,14.0s | | | | | | |
| ANMO | Albuquerque | 31.21 | 305 | eP | P | 11 54 | 53.6 +1.8 |
| | comp=Z,72nm,2.3s | | | | | | |
| L28A | Connealy Angus | 31.24 | 321 | P | P | 11 54 | 52.5 +0.7 |
| | baz=31 | | | | | | |
| G32A | Webster | 31.25 | 329 | P | P | 11 54 | 51.8 0.0 |
| | baz=31 | | | | | | |
| C36A | Pine Crest Far | 31.26 | 337 | P | P | 11 54 | 52.4 +0.5 |
| | baz=31 | | | | | | |
| Y22D | IRIS PASSCAL I | 31.28 | 304 | P | P | 11 54 | 53.8 +1.4 |
| | baz=31 | | | | | | |
| I30A | Oacoma | 31.28 | 326 | P | P | 11 54 | 52.1 -0.1 |
| | baz=31 | | | | | | |
| O26A | Horse Wrangler | 31.35 | 317 | P | P | 11 54 | 53.7 +0.8 |
| | baz=31 | | | | | | |
| SUSD | South Dakota S | 31.40 | 327 | P | P | 11 54 | 53.0 -0.2 |
| | baz=32 | | | | | | |
| J29A | Okreek | 31.43 | 324 | P | P | 11 54 | 53.4 -0.1 |
| | baz=32 | | | | | | |
| M27A | Reverse DX Ran | 31.48 | 319 | P | P | 11 54 | 55.3 +1.3 |
| | baz=32 | | | | | | |
| 121A | Cookes Peak, D | 31.51 | 300 | P | P | 11 54 | 56.5 +2.0 |
| | baz=32 | | | | | | |
| 121A | Cookes Peak, D | 31.51 | 300 | eP | P | 11 54 | 56.0 +1.5 |
| | comp=Z,18nm,1.0s | | | | | | |
| E33A | Westby DABS, E | 31.51 | 332 | P | P | 11 54 | 55.5 +1.4 |
| | baz=32 | | | | | | |
| LAZ | Ladron | 31.55 | 304 | eP | P | 11 54 | 56.4 +1.5 |
| G31A | Conde | 31.58 | 329 | P | P | 11 54 | 55.2 +0.5 |
| | baz=32 | | | | | | |
| K28A | Ten Mile Ranch | 31.58 | 322 | P | P | 11 54 | 55.3 +0.4 |
| | baz=32 | | | | | | |
| N26A | Koester Ranch, | 31.61 | 318 | P | P | 11 54 | 55.6 +0.5 |
| | baz=32 | | | | | | |
| SDCO | Great Sand Dun | 31.62 | 311 | P | P | 11 54 | 56.3 +0.8 |
| | baz=32,SNR=17 | | | | | | |
| SDCO | Great Sand Dun | 31.62 | 311 | eP | P | 11 54 | 56.6 +1.1 |
| | comp=Z,79nm,2.0s | | | | | | |
| D34A | Park Rapids | 31.63 | 334 | P | P | 11 54 | 55.9 +0.7 |
| | baz=32 | | | | | | |
| L27A | T5 Ranch, Ells | 31.76 | 320 | P | P | 11 54 | 56.9 +0.4 |
| | baz=32 | | | | | | |
| I29A | Vivian Onida | 31.83 | 325 | P | P | 11 54 | 56.7 -0.2 |
| | baz=32 | | | | | | |
| M26A | McRoberts Ranc | 31.91 | 319 | P | P | 11 54 | 58.5 +0.7 |
| | baz=32 | | | | | | |
| Q24A | Divide | 31.93 | 313 | P | P | 11 54 | 58.7 +0.4 |
| | baz=32 | | | | | | |
| D33A | AnnSam, Waubun | 31.94 | 333 | P | P | 11 54 | 58.1 +0.2 |
| | baz=32 | | | | | | |
| J28A | Allard Ranch, | 31.95 | 323 | P | P | 11 54 | 58.1 0.0 |
| | baz=32 | | | | | | |
| G30A | Faulkton | 31.98 | 328 | P | P | 11 54 | 57.8 -0.4 |
| | baz=32 | | | | | | |
| E32A | Braaten, Kindr | 32.05 | 331 | P | P | 11 54 | 58.6 -0.3 |
| | baz=32 | | | | | | |
| F31A | Hecla | 32.06 | 329 | P | P | 11 54 | 58.1 -0.8 |
| | baz=32 | | | | | | |
| K27A | Flueckinger Fa | 32.08 | 321 | P | P | 11 54 | 59.3 0.0 |
| | baz=32 | | | | | | |
| H29A | Onida | 32.18 | 326 | P | P | 11 55 | 00.1 0.0 |
| | baz=32 | | | | | | |
| SLBS | Sierra La Lagu | 32.18 | 283 | eP | P | 11 55 | 03.4 +3.1 |
| | comp=Z,38nm,1.0s | | | | | | |
| I28A | Midland | 32.28 | 324 | P | P | 11 55 | 01.2 +0.2 |
| | baz=32 | | | | | | |
| J27A | Elkhorn Farm, | 32.28 | 322 | P | P | 11 55 | 01.0 -0.1 |
| | baz=32 | | | | | | |
| E31A | Nome | 32.40 | 331 | P | P | 11 55 | 01.6 -0.3 |
| | baz=32 | | | | | | |
| F30A | Leola | 32.41 | 329 | P | P | 11 55 | 01.5 -0.6 |
| | baz=32 | | | | | | |
| G29A | Hoven | 32.42 | 327 | P | P | 11 55 | 01.5 -0.6 |
| | baz=32 | | | | | | |
| D32A | Dogwood Acres, | 32.44 | 332 | P | P | 11 55 | 02.1 -0.1 |
| | baz=32 | | | | | | |
| M25A | Palm-Egli Farm | 32.46 | 318 | P | P | 11 55 | 03.4 +0.6 |
| | baz=32 | | | | | | |
| B34A | Aery, Baudette | 32.54 | 336 | P | P | 11 55 | 03.5 +0.4 |
| | baz=33 | | | | | | |
| S22A | 4UR Ranch, Cre | 32.57 | 310 | P | P | 11 55 | 04.6 +0.8 |
| | baz=33 | | | | | | |
| ISCO | Idaho Springs | 32.64 | 314 | eP | P | 11 55 | 05.5 +1.0 |
| ISCO | Idaho Springs | 32.64 | 314 | P | P | 11 55 | 05.4 +1.0 |
| | baz=33,SNR=18 | | | | | | |
| ISCO | Idaho Springs | 32.64 | 314 | eP | P | 11 55 | 05.5 +1.0 |
| H28A | Mission Ridge | 32.64 | 325 | P | P | 11 55 | 04.2 +0.1 |
| | baz=33 | | | | | | |
| D31A | Mcclaflin, Tow | 32.69 | 331 | P | P | 11 55 | 04.5 +0.1 |
| | baz=33 | | | | | | |

L25A Engebretsen Ra 32.80 319 P P 11 55 06.2 +0.6
baz=33
F29A Eureka 32.81 328 P P 11 55 05.1 -0.5
baz=33
I27A Quinn 32.82 324 P P 11 55 05.9 +0.2
baz=33
E30A Jud 32.84 330 P P 11 55 05.4 -0.3
baz=33
G28A Parade 32.85 326 P P 11 55 06.1 +0.1
baz=33
AGMN Agassiz Nation 32.87 335 P P 11 55 06.4 +0.5
baz=33,SNR=12
AGMN Agassiz Nation 32.87 335 eP P 11 55 06.5 +0.5
comp=Z,48nm,1.2s
J26A Sides Ranch, S 32.94 322 P P 11 55 06.8 0.0
baz=33
H27A Howes 33.19 324 P P 11 55 09.4 +0.4
baz=33
D30A Buchanan 33.21 330 P P 11 55 08.8 -0.2
baz=33
B32A Ashes, Strandq 33.22 334 P P 11 55 09.5 +0.5
baz=33
E29A Napoleon 33.24 329 P P 11 55 09.0 -0.2
baz=33
I26A New Underwood 33.25 323 P P 11 55 09.8 +0.3
baz=33
C31A Landman Farms, 33.26 332 P P 11 55 09.6 +0.2
baz=33
SMCO Snowmass 33.29 312 eP P 11 55 11.1 +0.9
PHWY Pilot Hill 33.29 317 eP P 11 55 11.0 +0.9
comp=Z,24nm,1.3s
F28A McLaughlin 33.31 327 P P 11 55 10.1 +0.1
baz=33
N23A Red Feather La 33.40 316 P P 11 55 11.6 +0.6
baz=33
J25A Sunshine Ranch 33.41 321 P P 11 55 11.7 +0.7
baz=34
C30A Mose, Pekin 33.52 331 P P 11 55 11.8 0.0
baz=34
H26A Fairpoint 33.57 324 P P 11 55 12.5 +0.3
baz=34
D29A Pettibone, Tap 33.57 330 P P 11 55 12.2 0.0
baz=34
MVCO Mesa Verde 33.58 308 P P 11 55 13.3 +0.7
baz=34,SNR=12
MVCO Mesa Verde 33.58 308 eP P 11 55 13.8 +1.2
comp=Z,13nm,0.8s
G27A Dupree 33.59 325 P P 11 55 12.6 +0.2
baz=34
B31A Greenbush Farm 33.70 333 P P 11 55 13.7 +0.5
baz=34
I25A Rochford 33.74 322 P P 11 55 14.3 +0.4
baz=34
E28A Huff 33.76 328 P P 11 55 14.1 +0.2
baz=34
W18A Petrified Fore 33.81 304 P P 11 55 15.5 +0.9
baz=34
G26A Maurine 33.90 325 P P 11 55 15.2 +0.2
baz=34
A31A Linda, St. Vin 33.91 334 P P 11 55 15.2 +0.2
baz=34
TUC Tucson 33.91 299 eP P 11 55 17.2 +1.8
TUC pmax pmax
comp=Z,20nm,1.4s
TUC Tucson 33.91 299 eP P 11 55 17.2 +1.8
comp=Z,20nm,1.4s
F27A Lemmon 33.96 326 P P 11 55 16.4 +0.8
baz=34
RSSD Black Hills 33.98 322 eP P 11 55 16.6 +0.6
RSSD Black Hills 33.98 322 eP P 11 55 16.6 +0.6
PV01 Paradox Valley 33.98 310 eP P 11 55 17.6 +1.4
B30A Myrvik Farm, E 34.02 333 P P 11 55 16.4 +0.4
baz=34
H25A Fruitdale 34.03 323 P P 11 55 16.1 -0.1
baz=34
E27A Carson 34.10 327 P P 11 55 17.4 +0.6
baz=34
D28A Regan 34.13 329 P P 11 55 17.0 0.0
baz=34
MDND Maddock 34.14 331 P P 11 55 17.2 +0.1
baz=34
G25A Newell 34.28 324 P P 11 55 18.8 +0.4
baz=34
F26A Lodgepole 34.29 326 P P 11 55 18.5 0.0
baz=34
PV04 Paradox Valley 34.33 310 eP P 11 55 19.7 +0.6
PV05 Paradox Valley 34.35 309 eP P 11 55 20.1 +0.8
A30A Hoffart Farm, 34.38 333 P P 11 55 19.5 +0.4
baz=34
C28A Hausauer Farms 34.41 330 P P 11 55 19.7 +0.2
baz=34
PV10 Paradox Valley 34.42 310 eP P 11 55 21.1 +1.1
ULM Lac du Bonnet 34.45 337 P P 11 55 19.6 -0.1
comp=Z,40nm,1.0s,baz=142,slow=9.5,SNR=23
ULM PcP PcP 11 57 54.4 -0.2
comp=Z,5.7nm,0.8s,baz=124,slow=15,SNR=3.0
ULM LR LR 12 10 05.4
comp=Z,2µm,19.5s,baz=138,slow=38
B29A Wagenman Farm, 34.48 332 P P 11 55 20.7 +0.6
baz=34
PV09 Paradox Valley 34.53 310 eP P 11 55 22.5 +1.5
D27A Center 34.54 328 P P 11 55 21.4 +0.8
baz=35
O20A White River Ci 34.59 313 P P 11 55 22.6 +1.3
baz=35
O20A White River Ci 34.59 313 eP P 11 55 22.4 +1.1
comp=Z,34nm,1.1s
E26A Carlson Angus 34.59 326 P P 11 55 21.7 +0.7
baz=35
K22A Casper 34.67 318 P P 11 55 22.5 +0.6
baz=35
K22A Casper 34.67 318 eP P 11 55 21.7 -0.2
comp=Z,34nm,1.1s
F25A Bowman 34.76 325 P P 11 55 22.7 +0.1
baz=35
A29A Manning Farm, 34.77 332 P P 11 55 22.5 0.0
baz=35
B28A Dugan Ranch, T 34.93 331 P P 11 55 24.3 +0.4
baz=35
D26A Manning 34.95 327 P P 11 55 24.3 +0.2
baz=35
C27A Sayler Ranch, 34.95 329 P P 11 55 24.5 +0.5
baz=35
E25A Miller Ranch, 35.10 326 P P 11 55 25.9 +0.4
baz=35
WUAZ Wupatki 35.21 304 P P 11 55 27.6 +0.9
baz=35,SNR=46
WUAZ Wupatki 35.21 304 eP P 11 55 28.5 +1.8
comp=Z,38nm,0.9s
A28A Rude Farm, Bot 35.22 331 P P 11 55 26.6 +0.2
baz=35
B27A Peters Farms, 35.31 330 P P 11 55 27.4 +0.2
baz=35
C26A Wahner Farm, P 35.31 329 P P 11 55 27.7 +0.4
baz=35
D25A Fairfield 35.48 327 P P 11 55 29.1 +0.4
baz=36
SCHQ Schefferville 35.61 9 P P 11 55 30.0 +0.3
comp=Z,29nm,0.7s,baz=206,slow=7.6,SNR=18
SCHQ LR LR 12 08 45.2
comp=Z,630nm,21.8s,baz=254,slow=34
SCHQ Schefferville 35.61 9 eP P 11 55 30.4 +0.8
A27A Ledoux Ranch, 35.70 331 P P 11 55 31.0 +0.5
baz=36
B26A Jensen Ranch, 35.76 329 P P 11 55 31.8 +0.7
baz=36
SRU San Rafael 35.77 310 eP P 11 55 32.5 +1.0
SRU pmax pmax
comp=Z,9.0nm,0.9s
SRU San Rafael 35.77 310 eP P 11 55 32.5 +1.0
comp=Z,8.7nm,0.9s
C25A Freed Ranch, W 35.82 327 P P 11 55 32.1 +0.5
baz=36
A26A Wade Farm, Ken 36.03 330 P P 11 55 33.9 +0.6
baz=36
P17A Butcher Ranch, 36.07 311 eP P 11 55 35.2 +1.2
comp=Z,18nm,0.9s
B25A Knox Farm, Ray 36.14 328 P P 11 55 34.6 +0.3
baz=36
TMUT Trail Mountain 36.34 310 eP P 11 55 37.9 +1.4
LPAZ La Paz 36.57 168 P P 11 55 38.8 -0.1
comp=Z,7.8nm,0.6s,baz=356,slow=7.8,SNR=21
LPAZ LR LR 12 12 17.7
comp=Z,312nm,18.2s,baz=336,slow=39
LPAZ La Paz 36.57 168 eP P 11 55 39.0 +0.1
LPAZ pmax pmax
comp=Z,63nm,1.5s
LPAZ La Paz 36.57 168 eP P 11 55 39.0 +0.1
comp=Z,63nm,1.5s
A25A Svangstu Ranch 36.57 329 P P 11 55 38.2 +0.2
baz=37
BW06 Boulder Array 36.67 316 eP P 11 55 38.6 -0.6
BW06 eP P 11 55 39.2 0.0
LAO LASA Array 36.75 324 P P 11 55 39.6 0.0
baz=37,SNR=6.0
LAO LASA Array 36.75 324 eP P 11 55 39.6 0.0
comp=Z,42nm,1.3s
MSU Marysvale 36.76 308 eP P 11 55 41.5 +1.5
MSU Marysvale 36.76 308 eP P 11 55 41.5 +1.5
DGMT Dagmar 36.79 328 P P 11 55 40.3 +0.4
baz=37,SNR=5.8
DGMT Dagmar 36.79 328 eP P 11 55 40.5 +0.6
O16A Springville 36.89 311 eP P 11 55 37.4 -3.7
comp=Z,8.9nm,0.8s
MPU Maple Canyon 36.91 311 eP P 11 55 41.8 +0.6
comp=Z,50nm,0.9s
DCU Deer Creek Res 36.99 312 eP P 11 55 42.8 +0.9
PDMCI Parker Dam,Lak 37.09 301 P P 11 55 43.9 +1.3
baz=37
TCUT Toone Canyon 37.19 313 eP P 11 55 44.5 +0.8
NLU North Lily Min 37.20 311 eP P 11 55 44.8 +1.1
comp=Z,127nm,2.3s
NLU ePcP PcP 11 58 04.5 +1.2
CTU Camp Tracy 37.26 312 eP P 11 55 45.3 +1.2
comp=Z,15nm,0.9s
Y12C Blythe 37.29 300 P P 11 55 45.9 +1.6
baz=37
CCUT Cedar City 37.34 306 eP P 11 55 46.3 +1.4
comp=Z,8.8nm,0.9s
GLA Glamis 37.40 299 eP P 11 55 47.2 +1.9
GLA Glamis 37.40 299 P P 11 55 46.4 +1.1
baz=37
GLA Glamis 37.40 299 eP P 11 55 47.2 +1.9
HWUT Hardware Ranch 37.49 314 eP P 11 55 46.3 +0.1
comp=Z,18nm,0.8s
RLMT Red Lodge 37.64 320 P P 11 55 47.6 +0.2
baz=38,SNR=28
RLMT Red Lodge 37.64 320 eP P 11 55 47.7 +0.3
AHID Auburn Hatcher 37.68 315 eP P 11 55 48.4 +0.7
comp=Z,24nm,1.2s
HDU Hyde Park 37.71 314 eP P 11 55 48.5 +0.5
LOHW Long Hollow 37.74 317 eP P 11 55 48.6 +0.4
SNOW Snow King Moun 37.77 317 eP P 11 55 49.2 +0.7
REDW Red Top Meadow 37.78 316 eP P 11 55 49.2 +0.6
DUG Dugway 37.82 311 eP P 11 55 49.9 +1.0
DUG pmax pmax
comp=Z,29nm,0.9s
DUG Dugway 37.82 311 P P 11 55 49.6 +0.8
baz=38,SNR=39
DUG Dugway 37.82 311 eP P 11 55 49.9 +1.0
comp=Z,29nm,0.9s
IRM Iron Mountain 37.88 300 P P 11 55 50.6 +1.3
baz=38,SNR=18
MOOW Moose Ponds 37.89 317 eP P 11 55 50.0 +0.5
comp=Z,34nm,0.8s
TPAW Teton Pass 37.91 317 eP P 11 55 50.1 +0.4
comp=Z,21nm,0.8s
SPUT South Promonto 37.98 313 eP P 11 55 51.3 +1.1
comp=Z,30nm,1.1s
FLWY Flagg Ranch 38.02 318 eP P 11 55 51.4 +0.8
FXWY Fox Creek 38.02 317 eP P 11 55 51.0 +0.3
comp=Z,22nm,0.8s
LDFC Landfair 38.05 302 eP P 11 55 53.4 +2.6
comp=Z,19nm,0.9s
LKWY Lake 38.06 318 eP P 11 55 52.6 +1.6
LKWY pmax pmax
comp=Z,30nm,1.1s
LKWY Lake 38.06 318 eP P 11 55 52.6 +1.6
comp=Z,30nm,1.1s
IMW Indian Meadow 38.09 317 eP P 11 55 51.5 +0.3
comp=Z,27nm,0.8s
H17A Grant Village 38.09 318 P P 11 55 52.5 +1.2
baz=38
H17A Grant Village 38.09 318 eP P 11 55 51.8 +0.5
comp=Z,34nm,1.4s
SWSC Sam W. Stewart 38.18 298 P P 11 55 52.8 +1.0
baz=38
GCMT Greycliff 38.23 321 eP P 11 55 52.7 +0.4
BGU Big Grassy Mou 38.24 312 eP P 11 55 53.6 +1.2
SIV San Ignacio 38.27 157 LR LR 12 12 54.3
comp=Z,537nm,18.5s,baz=0.5,slow=38
YFT Old Faithful 38.28 318 eP P 11 55 54.7 +1.9
comp=Z,14nm,0.8s
YNR Norris Junctio 38.31 319 eP P 11 55 53.4 +0.3
comp=Z,15nm,0.9s
NPI North Pocatell 38.37 314 eP P 11 55 53.9 +0.4
IBP Imperial Bould 38.38 298 P P 11 55 55.1 +1.5
baz=38
HVU Hansel Valley 38.39 313 eP P 11 55 54.3 +0.6
HVU pmax pmax
comp=Z,14nm,0.8s
HVU Hansel Valley 38.39 313 eP P 11 55 54.3 +0.6
comp=Z,14nm,0.8s
GMRC Granite Mounta 38.42 301 P P 11 55 55.1 +1.1
baz=38,SNR=7.4
SHPR Sheep Range 38.43 304 eP P 11 55 56.0 +1.9
YMR Madison River 38.47 318 eP P 11 55 55.0 +0.7
comp=Z,17nm,0.8s
BELC Belle Mtn. Jos 38.54 300 P P 11 55 56.1 +1.0
baz=39
MONP Monument Peak 38.69 298 P P 11 55 57.8 +1.5
baz=39,SNR=12
TUQ Turquoise Moun 38.78 302 P P 11 55 58.2 +1.2
baz=39,SNR=8.3
QLMT Earthquake Lak 38.84 318 eP P 11 55 59.0 +1.6
PFO Pinyon Flat Ob 38.84 299 eP P 11 55 59.6 +2.1
PFO e 11 58 09.7
PFO pmax pmax
comp=Z,33nm,1.8s
PFO Pinyon Flat Ob 38.84 299 P P 11 55 58.9 +1.3
baz=39
PFO Pinyon Flat Ob 38.84 299 eP P 11 55 59.6 +2.1
comp=Z,33nm,1.8s
PFO ePcP PcP 11 58 09.7 +1.3
HEC Hector,Ludlow 38.97 301 P P 11 55 59.7 +1.2
baz=39
R11A Troy Canyon, C 39.25 307 P P 11 56 02.4 +1.4
baz=39
R11A Troy Canyon, C 39.25 307 eP P 11 56 02.1 +1.1
comp=Z,7.6nm,0.9s
109C Camp Elliot, M 39.26 298 P P 11 56 02.5 +1.6
baz=39
BBRC Big Bear Solar 39.34 300 P P 11 56 03.7 +1.9
baz=39
BOZ Bozeman (W) 39.35 319 eP P 11 56 02.2 +0.6
BOZ pmax pmax
comp=Z,98nm,1.9s
BOZ Bozeman (W) 39.35 319 P P 11 56 02.4 +0.7
baz=39,SNR=17
BOZ Bozeman (W) 39.35 319 eP P 11 56 02.2 +0.6
comp=Z,98nm,1.9s
TPNV Topopah Spring 39.39 305 eP P 11 56 04.3 +2.2
TPNV pmax pmax
comp=Z,17nm,1.0s
TPNV Topopah Spring 39.39 305 P P 11 56 03.9 +1.8
baz=39,SNR=22
TPNV Topopah Spring 39.39 305 eP P 11 56 04.3 +2.2
comp=Z,16nm,1.0s
GSC Goldstone 39.45 302 eP P 11 56 04.6 +2.0
GSC pmax pmax
comp=Z,17nm,1.2s
GSC Goldstone 39.45 302 P P 11 56 04.3 +1.7
baz=40,SNR=8.9
GSC Goldstone 39.45 302 eP P 11 56 04.6 +2.0
comp=Z,17nm,1.2s
MURC Murrieta 39.45 299 P P 11 56 03.9 +1.4
baz=40,SNR=7.6
EGMT Eagleton 39.48 324 P P 11 56 03.0 +0.4
baz=40,SNR=6.3
EGMT Eagleton 39.48 324 eP P 11 56 03.4 +0.8
comp=Z,34nm,1.2s
RRX Edison Barstow 39.52 301 P P 11 56 05.0 +1.9
baz=40
MCMT McKenzie Canyo 39.73 318 eP P 11 56 06.2 +1.3
ELK Elko 39.74 311 eP P 11 56 05.9 +0.8
ELK e 11 58 12.6
ELK pmax pmax
comp=Z,15nm,0.9s
ELK Elko 39.74 311 eP P 11 56 05.9 +0.8
comp=Z,15nm,0.9s
ELK ePcP PcP 11 58 12.6 +1.4
FURC Furnace Creek, 39.75 304 P P 11 56 06.4 +1.5
baz=40,SNR=8.3
DLMT Dillon 39.81 318 eP P 11 56 06.4 +0.9
comp=Z,124nm,1.9s
BFSC Mount Baldy Ra 39.94 300 P P 11 56 08.2 +1.5
baz=40,SNR=8.4
LRM Limekiln Ridge 39.94 319 eP P 11 56 07.7 +1.1
HRY Holter Researc 39.99 321 eP P 11 56 07.6 +0.7
MPMC Manual Prospec 40.16 303 P P 11 56 10.1 +1.6
baz=40,SNR=11
LRMC Laurel Mountai 40.19 302 P P 11 56 09.9 +1.1
baz=40
HLID Hailey 40.21 315 P P 11 56 10.0 +1.1
baz=40,SNR=31
HLID Hailey 40.21 315 eP P 11 56 09.6 +0.7
comp=Z,13nm,0.8s
FFC Flin Flon 40.27 336 eP P 11 56 09.0 0.0
FFC pmax pmax
comp=Z,46nm,1.3s
FFC Flin Flon 40.27 336 eP P 11 56 09.0 0.0
comp=Z,46nm,1.3s
GRAC Grapevine Rang 40.27 304 P P 11 56 11.0 +1.7
baz=40,SNR=6.3
DAC Darwin (Calif) 40.28 303 eP P 11 56 11.1 +1.5
DAC pmax pmax
comp=Z,10.0nm,1.0s
DAC Darwin (Calif) 40.28 303 eP P 11 56 11.1 +1.5
comp=Z,9.8nm,1.0s
EDW2 Edwards Air Fo 40.32 301 P P 11 56 11.3 +1.5
baz=40,SNR=11
FMP Fort Macarthur 40.37 299 P P 11 56 11.2 +1.1
baz=40
CWC Cottonwood Cre 40.70 303 P P 11 56 15.0 +2.0
baz=41,SNR=7.8
ISA Isabella 40.86 302 eP P 11 56 16.4 +2.2
ISA Isabella 40.86 302 eP P 11 56 16.4 +2.2
OSI Osito Adit 40.87 300 P P 11 56 15.4 +1.1
baz=41
CHMT Chamberlain Mo 40.94 320 eP P 11 56 15.5 +0.6
TIN Tinemaha 40.95 304 P P 11 56 16.7 +1.7
baz=41
ARVC Arvin 41.04 301 P P 11 56 17.3 +1.7
baz=41
MFID Camas Ranch 41.10 314 eP P 11 56 16.6 +0.4
comp=Z,125nm,2.3s
SLMT Seeley Lake 41.24 320 eP P 11 56 17.8 +0.5
MTUM Tungsten Hills 41.28 304 eP P 11 56 19.7 +1.9
MSO Missoula 41.32 320 P P 11 56 19.0 +1.1
baz=41,SNR=5.6
MSO Missoula 41.32 320 eP P 11 56 18.9 +1.0
comp=Z,69nm,1.8s
NVAR Mina Array Bea 41.33 306 P P 11 56 18.5 +0.3
comp=Z,9.7nm,0.8s,baz=106,slow=7.5,SNR=17
VES Vestal, Richgr 41.38 302 P P 11 56 20.7 +2.3
baz=41,SNR=16
BSC Santa Cruz Isl 41.52 299 P P 11 56 21.1 +1.5
baz=42
MLAC Mammoth Lakes 41.55 305 P P 11 56 21.7 +1.7
baz=42
RCTC Rector, Farmer 41.59 303 P P 11 56 21.8 +1.7
baz=42,SNR=6.2
SBC Santa Barbara 41.65 300 P P 11 56 21.8 +1.2
baz=42
SWMT Swartz Lake 41.67 321 eP P 11 56 21.7 +0.9
PKM Peak Mountain 41.80 301 P P 11 56 23.1 +1.0
baz=42
JTMT Jette 41.95 321 eP P 11 56 23.7 +0.6
SMMC Simmler 42.02 301 P P 11 56 25.0 +1.3
baz=42
BLMT Blacktail Moun 42.13 321 eP P 11 56 25.2 +0.6
BSMT Bassoo Peak 42.30 321 eP P 11 56 26.8 +0.7
WALA Waterton Lakes 42.37 323 eP P 11 56 26.8 +0.3
comp=Z,29nm,1.6s
LVC Limon Verde 42.62 171 LR LR 12 16 41.3
comp=Z,2µm,19.1s,baz=334,slow=40
LVC Limon Verde 42.62 171 eP P 11 56 28.1 -0.7
comp=Z,6.5nm,0.9s
WVOR Wild Horse Val 42.70 312 eP P 11 56 29.7 +0.4
WVOR pmax pmax
comp=Z,37nm,1.3s
WVOR Wild Horse Val 42.70 312 eP P 11 56 29.7 +0.4
comp=Z,37nm,1.3s
CMB Columbia Colle 42.84 305 eP P 11 56 31.7 +1.3
CMB pmax pmax
comp=Z,53nm,2.3s
CMB Columbia Colle 42.84 305 eP P 11 56 31.7 +1.3
comp=Z,52nm,2.3s
J08A Circle Bar Ran 42.89 313 eP P 11 56 30.8 0.0
comp=Z,28nm,1.0s
F10A Beach Ranch, E 43.01 317 eP P 11 56 31.4 -0.2
comp=Z,107nm,2.0s
LNOR Lincton Mounta 43.65 317 P P 11 56 37.4 +0.6
LNOR Lincton Mounta 43.65 317 P P 11 56 37.4 +0.6
MOD Modoc 43.73 310 eP P 11 56 37.8 +0.2
comp=Z,12nm,1.0s
MOD ePP PcP 11 58 25.7 +1.5
I07A Izee 43.83 314 eP P 11 56 38.4 0.0
comp=Z,6.7nm,0.9s
G08A Pilot Rock 43.88 316 eP P 11 56 39.0 +0.3
comp=Z,26nm,1.1s
NEW Newport 43.89 320 eP P 11 56 38.9 +0.2
NEW Newport 43.89 320 P P 11 56 39.0 +0.4
baz=44,SNR=8.8
NEW Newport 43.89 320 eP P 11 56 38.9 +0.2
OHCM Honcut 43.96 307 eP P 11 56 40.7 +1.5
EDM Edmonton 44.28 328 eP P 11 56 41.4 -0.3
EDM Edmonton 44.28 328 eP P 11 56 41.4 -0.3
BDFB Brasilia 44.38 141 P P 11 56 42.4 -0.6
comp=Z,35nm,0.8s,baz=305,slow=8.7,SNR=39
BDFB LR LR 12 15 58.0
comp=Z,496nm,19.9s,baz=313,slow=37
K05A Summer Lake 44.38 311 eP P 11 56 43.1 +0.3
comp=Z,11nm,0.9s
C09A Chrisman Ranch 44.40 319 eP P 11 56 43.1 +0.4
O03D Paynes Creek 44.41 308 P P 11 56 43.8 +0.8
baz=44
OD2 Odessa Site #2 44.51 318 P P 11 56 43.7 +0.1
D08A Wollman Farm, 44.51 318 eP P 11 56 43.9 +0.3
comp=Z,14nm,0.9s
JBO Jordan Butte 44.52 315 P P 11 56 44.3 +0.6
HAWA Hanford 44.65 317 eP P 11 56 45.0 +0.3
comp=Z,69nm,2.1s
J05D Fort Rock, OR 44.78 312 P P 11 56 46.0 0.0
baz=45,SNR=10.0
M04C Macdoel 44.80 310 P P 11 56 46.8 +0.6
baz=45,SNR=6.6
VTHM Trough 44.91 315 P P 11 56 47.6 +0.7
E07A Sunnyside 44.92 317 eP P 11 56 47.7 +0.8
comp=Z,9.9nm,0.8s
G06A Carlson Farm, 44.97 315 eP P 11 56 48.2 +0.9
I05D Terrebonne, OR 45.16 313 P P 11 56 50.3 +1.4
baz=45
N02D Trinity Center 45.24 309 P P 11 56 50.5 +0.9
baz=45
TRW Toppenish Ridg 45.27 316 P P 11 56 50.5 +0.8
B08A Colville Reser 45.27 319 eP P 11 56 49.6 -0.1
comp=Z,21nm,0.8s
J04D Umpqua Nationa 45.38 312 P P 11 56 52.3 +1.4
baz=45,SNR=11
YBH Yreka Blue Hor 45.42 310 eP P 11 56 50.6 -0.4
YBH pmax pmax
comp=Z,101nm,2.7s
YBH Yreka Blue Hor 45.42 310 eP P 11 56 50.6 -0.4
comp=Z,101nm,2.7s
G05D Wamic, OR 45.43 315 P P 11 56 52.2 +1.2
baz=45
M02C Callahan 45.44 309 P P 11 56 51.3 +0.1
baz=46
VBEM Beaver Butte 45.55 314 P P 11 56 53.8 +1.7
LTY Liberty 45.69 318 eP P 11 56 53.7 +0.7
comp=Z,35nm,1.2s
IRO Indian Ridge 45.70 313 eP P 11 56 53.8 +0.5
I04A Tendick Farm, 45.74 312 P P 11 56 53.8 +0.3
baz=46,SNR=10.0
HUMO Hull Mountain 45.81 311 eP P 11 56 53.7 -0.4
comp=Z,8.9nm,0.9s
H04A Detroit Lake 45.85 314 eP P 11 56 54.9 +0.6
comp=Z,25nm,1.0s
C06D Leavenworth 46.07 318 P P 11 56 56.6 +0.6
baz=46
L02D Cave Junction, 46.17 310 P P 11 56 57.2 +0.4
baz=46
RCM Mount Rainier- 46.23 317 P P 11 56 58.8 +1.2
LON Longmire 46.25 317 eP P 11 56 58.1 +0.7
LON pmax pmax
comp=Z,29nm,1.3s
LON Longmire 46.25 317 eP P 11 56 58.1 +0.7
comp=Z,29nm,1.3s
I03D Drain, OR 46.37 312 P P 11 56 59.1 +0.7
baz=46,SNR=8.6

**D05A Enumclaw 46.51 317** *e*P **P 11 56 59.9 +0.4**
comp=Z,23nm,1.0s
**RCBR Riachuelo 46.53 119** LR LR 12 18 28.8
comp=Z,253nm,18.0s,baz=298,slow=39
**G03D McMinnville, O 46.73 314** P **P 11 57 01.1 0.0**
baz=47
**KEBM Edson Butte 46.86 311** *e*P **P 11 57 04.0 +1.7**
**B05A Bryant 46.95 318** P **P 11 57 01.7 -1.1**
baz=47
**A04D Lummi Island 47.49 319** P **P 11 57 06.6 -0.3**
baz=48
**LCO Las Campanas 48.73 174** *e*P **P 11 57 17.2 +0.2**
comp=Z,15nm,0.9s
**CPUP Villa Florida 49.11 158** P **P 11 57 18.9 -0.8**
comp=Z,1.7nm,0.5s,baz=4.8,slow=6.0,SNR=6.8
CPUP LR LR 12 20 41.3
comp=Z,294nm,18.2s,baz=358,slow=39
**CPUP Villa Florida 49.11 158** *e*P **P 11 57 18.3 -1.4**
**CPUP Villa Florida 49.11 158** *e*P **P 11 57 18.2 -1.4**
**SFJD Kangerlussuaq 49.83 12** P **P 11 57 25.0 +0.3**
comp=Z,21nm,0.9s,baz=195,slow=9.3,SNR=6.8
SFJD LR LR 12 16 48.9
comp=Z,338nm,18.7s,baz=213,slow=34
**SFJD Kangerlussuaq 49.83 12** *i* P **P 11 57 25.1 +0.4**
SFJD pmax pmax
comp=Z,37nm,1.1s
**SFJD Kangerlussuaq 49.83 12** *i* P **P 11 57 25.1 +0.4**
comp=Z,37nm,1.1s
**SFJD Kangerlussuaq 49.83 12** *e*P **P 11 57 25.4 +0.7**
**YKA Yellowknife Ar 50.41 338** P **P 11 57 29.1 -0.1**
comp=Z,4.2nm,0.7s,baz=114,slow=8.1,SNR=35
**ILULI Ilulissat 51.66 11** *i* P **P 11 57 38.1 -0.3**
comp=Z,36nm,0.9s
**DLBC Dease Lake 55.00 328** *e*P **P 11 58 03.8 +0.5**
comp=Z,25nm,0.8s
**SUMG Summit 56.83 13** *e*P **P 11 58 16.4 -0.1**
**SUMG Summit 56.83 13** *e*P **P 11 58 16.4 -0.1**
**EGAK Eagle 61.95 334** *e*P **P 11 58 51.5 0.0**
EGAK *e*P **P 11 58 52.1 +0.6**
**DOT Dot Lake 62.96 332** *e*P **P 11 58 58.4 +0.1**
comp=Z,92nm,1.3s
**ALE Alert 63.01 2** P **P 11 58 58.2 -0.2**
comp=Z,130nm,1.4s,SNR=5.1
**DIV Divide 63.36 329** *e*P **P 11 59 01.9 +0.7**
comp=Z,26nm,0.8s
**ESDC Sonseca Array 63.64 55** P **P 11 59 03.6 +0.3**
comp=Z,4.1nm,0.9s,baz=278,slow=7.2,SNR=10.0
ESDC LR LR 12 20 57.9
comp=Z,342nm,21.6s,baz=280,slow=31
**ESK Eskdalemuir 63.91 37** *i* P **P 11 59 05.5 +0.7**
**ILAR Eielson Array 64.36 333** P **P 11 59 07.2 -0.3**
comp=Z,4.1nm,0.6s,baz=116,slow=3.7,SNR=63
**SML Sawmill 64.66 330** *e*P **P 11 59 10.0 +0.4**
SML pmax pmax
comp=Z,10.0nm,1.0s
**SML Sawmill 64.66 330** *e*P **P 11 59 10.0 +0.4**
comp=Z,10nm,1.0s
**COLA College 64.78 333**⇑ *i*P **P 11 59 10.0 -0.2**
COLA pmax pmax
comp=Z,13nm,1.0s
COLA MLR MLR
comp=Z,897nm,16.0s
**COLA College 64.78 333** *e*P **P 11 59 09.3 -0.9**
comp=Z,7.1nm,0.8s
**MCK McKinley 65.12 332** *e*P **P 11 59 12.5 0.0**
MCK pmax pmax
comp=Z,42nm,1.3s
**MCK McKinley 65.12 332** *e*P **P 11 59 12.5 0.0**
comp=Z,42nm,1.3s
**TRF Thorofare Moun 65.70 332** *e*P **P 11 59 16.6 +0.1**
comp=Z,62nm,1.3s
**COLD Coldfoot 66.01 336** *e*P **P 11 59 19.0 +0.8**
comp=Z,43nm,1.6s
**BPAW Bear Paw Mtn. 66.05 332** *e*P **P 11 59 18.2 -0.4**
comp=Z,4.9nm,0.8s
**KDAK Kodiak Island 66.62 325** *i* P **P 11 59 23.6 +1.4**
**DOU Dourbes 68.80 43** P **P 11 59 36.2 +0.1**
comp=Z,14nm,1.5s
**BCLA Clavier 69.22 42** P **P 11 59 39.2 +0.4**
comp=Z,11nm,1.2s
**TIC Toumodi 69.44 90** *e*P **P 11 59 40.2 -0.6**
**LIC Lamto 69.56 91** *e*P **P 11 59 41.1 -0.4**
comp=Z,78nm,1.3s
**DBIC Dimbokro 69.58 90** P **P 11 59 41.3 -0.3**
comp=Z,13nm,0.9s,baz=279,slow=6.1,SNR=11
**MEM Membach 69.64 42** P **P 11 59 41.6 +0.2**
**KIC Kosan Boka 69.79 90** *e*P **P 11 59 42.2 -0.7**
comp=Z,82nm,1.0s
**WLF Walferdange 69.85 43** P **P 11 59 43.8 +1.1**
**WLF Walferdange 69.85 43** *e*P **P 11 59 43.6 +0.9**
comp=Z,90nm,1.4s,baz=281,slow=5.9
**IBBN Ibbenburen 70.53 40** *e*P **P 11 59 47.8 +1.1**
comp=Z,57nm,1.1s,baz=281,slow=5.9
**ECH Echery 70.70 45** *e*P **P 11 59 46.0 -1.9**
ECH pmax pmax
comp=Z,26nm,1.2s
**ECH Echery 70.70 45** *e*P **P 11 59 46.0 -1.9**
comp=Z,26nm,1.2s
**TNS Taunus Mts 71.24 42** *e*P **P 11 59 51.9 +0.7**
comp=Z,33nm,1.6s,baz=281,slow=5.9
**NB2 NORSAR Subarra 71.33 31** P **P 11 59 52.4 +0.9**
comp=Z,51nm,1.4s,baz=279,slow=6.2
**NB2 NORSAR Subarra 71.33 31** P **P 11 59 52.4 +0.9**
baz=279,slow=6.2
**NOA NORSAR Array B 71.33 31** P **P 11 59 51.7 +0.2**
comp=Z,11nm,0.9s,baz=277,slow=5.9,SNR=8.4
NOA LR LR 12 29 05.2
comp=Z,158nm,18.7s,baz=70,slow=34
**BFO Black Forest 71.45 44** *i* P **P 11 59 53.4 +0.9**
**NRDL Niedersach Rie 71.92 40** *e*P **P 11 59 56.2 +1.1**
comp=Z,36nm,1.3s,baz=281,slow=5.9
**GTTG Gvttingen 71.99 41** *e*P **P 11 59 56.3 +0.7**
comp=Z,44nm,1.4s,baz=281,slow=5.9
**CLZ Clausthal 72.19 41** *e*P **P 11 59 57.8 +0.9**
comp=Z,58nm,1.5s,baz=281,slow=5.9
**TUE Stuetta 72.45 46** P **P 11 59 59.0 +0.2**
comp=Z,39nm,1.3s
**GRF Grafenberg Arr 73.10 43** *e*P **P 12 00 02.9 +0.7**
comp=Z,34nm,1.4s,baz=281,slow=5.9
**MOX Moxa 73.17 42** *e*P **P 12 00 03.6 +0.9**
comp=Z,28nm,1.4s,baz=281,slow=5.9
MOX *e*L L 12 26 31.7
comp=Z,150nm,21.8s
**RETA Reutte 73.21 45** *i* P **P 12 00 03.8 +0.7**
comp=Z,34nm,1.2s,SNR=7.1
**FETA Feichten 73.28 45**⇑ *i*P **P 12 00 04.5 +0.9**
comp=Z,27nm,1.2s,SNR=11
**MOTA Moosalm 73.47 45**⇑ *i*P **P 12 00 05.1 +0.4**
comp=Z,24nm,0.9s
**ROTZ Rotzenmuhle 73.71 42** *e*P **P 12 00 06.9 +1.0**
comp=Z,35nm,1.4s,baz=281,slow=5.9
**TANN Tannenbergstha 73.74 42** *e*P **P 12 00 06.8 +0.6**
comp=Z,43nm,1.5s,baz=281,slow=5.9
**TOA0 Torodi Ar. Sit 73.78 82** *e*PKP2 **P 12 00 05.2 -1.7**
**TORD Torodi Ar. Bea 73.78 82** P **P 12 00 06.4 -0.5**
comp=Z,8.5nm,0.9s,baz=285,slow=4.9,SNR=38
**CLL Collm 73.90 41**⇑ *i*P **P 12 00 07.3 +0.3**
CLL pmax pmax
comp=Z,25nm,1.5s
**CLL Collm 73.90 41** *e*P **P 12 00 07.3 +0.3**
comp=Z,24nm,1.5s,baz=281,slow=5.9
**CLL Collm 73.90 41**⇑ *i*P **P 12 00 07.3 +0.3**
comp=Z,25nm,1.5s
CLL LmV 12 28 00.0
comp=Z,300nm,18.6s
**WET Wettzell 74.27 43** *e*P **P 12 00 10.1 +0.9**
comp=Z,52nm,1.4s,baz=281,slow=5.9
**ABTA Abfaltersbach 74.53 45**⇑ *i*P **P 12 00 11.3 +0.4**
comp=Z,15nm,1.2s
**BRG Berggiesshubel 74.57 41** *e*P **P 12 00 11.1 +0.3**
comp=Z,25nm,1.3s
**BRG Berggiesshubel 74.57 41** *e*P **P 12 00 11.1 +0.3**
BRG pmax pmax
comp=Z,25nm,1.3s
**BRG Berggiesshubel 74.57 41** *e*P **P 12 00 11.2 +0.3**
comp=Z,25nm,1.3s,baz=281,slow=5.9
**TAM Tamanrasset 74.62 71** *e*P **P 12 00 11.8 -0.1**
TAM pmax pmax
comp=Z,1.0nm,0.6s
**TAM Tamanrasset 74.62 71** *e*P **P 12 00 11.8 -0.1**
comp=Z,1.5nm,0.6s
**KEST Kesra 74.67 57** P **P 12 00 12.3 +0.5**
comp=Z,11nm,0.8s,baz=229,slow=2.5,SNR=11
KEST LR LR 12 28 29.3
comp=Z,142nm,20.8s,baz=246,slow=32
**KHC Kasperske Hory 74.72 43** *i* P **P 12 00 12.4 +0.6**
KHC *e* 12 00 27.0

**KHC Kasperske Hory 74.72 43** *i* P **P 12 00 12.4 +0.6**
KHC *es*P **sP 12 00 27.0 +2.2**
**KHC Kasperske Hory 74.72 43** *e*P **P 12 00 11.9 +0.1**
comp=Z,3.4nm,0.8s
**GERES GERESS Array B 74.86 43** P **P 12 00 13.2 +0.5**
comp=Z,4.4nm,0.7s,baz=268,slow=4.0,SNR=28
GERES LR LR 12 29 30.2
comp=Z,308nm,19.3s,baz=253,slow=33
**PVCC Panska Ves 75.03 41** *e*P **P 12 00 14.2 +0.6**
**PVCC Panska Ves 75.03 41** *e*P **P 12 00 14.2 +0.6**
**PRU Pruhonice 75.14 42** *e*P **P 12 00 15.1 +0.9**
**PRU Pruhonice 75.14 42** *e*P **P 12 00 15.1 +0.9**
**GOPC GO Pecny, Ondr 75.31 42** *e*P **P 12 00 16.3 +1.1**
**GOPC GO Pecny, Ondr 75.31 42** *e*P **P 12 00 16.3 +1.1**
**ARCES ARCESS Array B 75.42 21** P **P 12 00 15.2 -0.3**
comp=Z,9.5nm,0.9s,baz=289,slow=3.7,SNR=13
**MOA Molln 75.45 44** *i* P **P 12 00 16.4 +0.4**
comp=Z,20nm,1.1s,SNR=7.6
**CADS Cadrg 75.47 46** *i* P **P 12 00 16.6 +0.4**
**UPC Upice 75.94 41** *e*P **P 12 00 19.8 +1.0**
**UPC Upice 75.94 41** *e*P **P 12 00 19.8 +1.0**
**OBKA Obir 75.95 45**⇑ *i*P **P 12 00 19.1 0.0**
comp=Z,28nm,1.3s
**KSP Ksiaz 76.03 41** *e*P **P 12 00 19.8 +0.5**
**KSP Ksiaz 76.03 41** *e*P **P 12 00 19.8 +0.5**
**CEY Cerknica 76.06 46** *i* P **P 12 00 20.1 +0.5**
**DPC Dobruska-Polom 76.17 41** *e*P **P 12 00 21.2 +1.1**
DPC *e* 12 00 26.2
DPC *e* 12 00 33.9
**DPC Dobruska-Polom 76.17 41** *e*P **P 12 00 21.2 +1.1**
DPC *ep*P **pP 12 00 26.2 -3.4**
DPC *es*P **sP 12 00 33.9 +0.8**
**SOKA Soboth 76.24 45** *i* P **P 12 00 20.6 -0.1**
comp=Z,31nm,1.2s,SNR=9.6
**ARSA Arzberg 76.42 44**⇑ *i*P **P 12 00 21.8 +0.2**
comp=Z,8.6nm,1.1s
**CONA Conrad Observa 76.47 44**⇓ *i*P **P 12 00 22.5 +0.5**
comp=Z,16nm,1.0s
**MORC Moravsky Berou 77.07 42** *e*P **P 12 00 25.3 0.0**
MORC pmax pmax
comp=Z,119nm,1.4s
**MORC Moravsky Berou 77.07 42** *e*P **P 12 00 25.3 0.0**
comp=Z,119nm,1.4s
**OKC Ostrava-Krasne 77.44 41** *e*P **P 12 00 28.6 +1.4**
**OKC Ostrava-Krasne 77.44 41** *e*P **P 12 00 28.6 +1.4**
**FINES FINESS Array B 78.22 29** P **P 12 00 31.8 +0.5**
comp=Z,7.6nm,0.5s,baz=266,slow=3.3,SNR=23
**VYHS Vyhne 78.24 43** *e*P **P 12 00 32.2 +0.4**
VYHS pmax pmax
comp=Z,14nm,1.3s
**VYHS Vyhne 78.24 43** *e*P **P 12 00 32.2 +0.4**
**OJC Ojcow 78.35 41** *e*P **P 12 00 33.3 +1.0**
**OJC Ojcow 78.35 41** *e*P **P 12 00 33.3 +1.0**
**NIE Niedzica 78.90 41** *e*P **P 12 00 37.0 +1.7**
**NIE Niedzica 78.90 41** *e*P **P 12 00 37.1 +1.7**
**PSZ Piszkesteto 79.09 43** *e*P **P 12 00 36.5 0.0**
PSZ pmax pmax
comp=Z,79nm,1.6s
**PSZ Piszkesteto 79.09 43** *e*P **P 12 00 36.5 0.0**
comp=Z,79nm,1.6s
**LVZ Lovozero 79.13 21** P **P 12 00 34.0 -2.3**
LVZ pmax pmax
comp=Z,45nm,1.7s
**VSU Vasula 79.56 31** P **P 12 00 39.0 +0.3**
VSU pmax pmax
comp=Z,66nm,0.8s
**KOLS Kolonicke sedl 80.28 42** *e*P **P 12 00 44.6 +1.7**
KOLS pmax pmax
comp=Z,15nm,1.3s
**KOLS Kolonicke sedl 80.28 42** *e*P **P 12 00 44.6 +1.7**
**DIVS Divibare 80.31 47**⇓ *i*P **P 12 00 43.2 0.0**
**KWP Kalwaria Pacla 80.32 41** *e*P **P 12 00 44.7 +1.7**
**KWP Kalwaria Pacla 80.32 41** *e*P **P 12 00 44.8 +1.7**
**UZH Uzhgorod 80.39 42**⇑ *i*P **P 12 00 44.7 +1.3**
UZH *e* 12 00 47.7
UZH *i* 12 00 51.9
**BZS Buzias 80.93 45**⇓ *i*P **P 12 00 47.7 +1.3**
**BZS Buzias 80.93 45**⇓ *i*P **P 12 00 47.7 +1.3**
**LVV L'vov 81.07 40** *e*P **P 12 00 47.1 0.0**
**BILL Bilibino 81.71 340** *c i*P **P 12 00 50.3 +0.2**
BILL *i* 12 00 58.5
BILL pmax pmax
comp=Z,41nm,1.2s
**BILL Bilibino 81.71 340** *e*P **P 12 00 50.4 +0.3**
comp=Z,81nm,1.6s
**TMCR Tamitsa 82.09 24** *e*P **P 12 00 52.9 +0.8**
TMCR pmax pmax
comp=Z,19nm,0.4s
**LOT Lotru 82.41 44**⇑ *i*P **P 12 00 54.9 +0.5**
**BURAR Bucovina Array 82.58 42**⇑ *i*P **P 12 00 56.8 +1.6**
**BURAR Bucovina Array 82.58 42**⇑ *i*P **P 12 00 56.8 +1.6**
**VTS Vitosha 83.02 47** P **P 12 00 57.7 0.0**
**MPEP Malo Peshtene 83.12 46** P **P 12 00 58.5 +0.5**
**VOIR 83.25 44**⇓ *i*P **P 12 00 59.9 +1.2**
**VOIR 83.25 44**⇓ *i*P **P 12 00 59.9 +1.2**
**DOPR Dopca 83.28 44**⇓ *i*P **P 12 01 00.0 +1.2**
**MMB Musomiste 83.73 48** *e*P **P 12 01 02.4 +1.2**
**MLR Muntele Rosu 83.82 44** LR LR 12 33 46.3
comp=Z,88nm,21.5s,baz=287,slow=32
**MLR Muntele Rosu 83.82 44**⇓ *i*P **P 12 01 03.6 +1.9**
**MLR Muntele Rosu 83.82 44**⇓ *i*P **P 12 01 03.6 +1.9**
**KIEV Kiev 83.83 38**⇑ *i*P **P 12 01 01.3 -0.1**
KIEV pmax pmax
comp=Z,12nm,1.2s
**AKASG Malin Array Be 83.83 38** P **P 12 01 00.9 -0.6**
comp=Z,2.0nm,0.6s,baz=280,slow=4.2,SNR=13
AKASG LR LR 12 34 20.0
comp=Z,259nm,21.2s,baz=235,slow=33
**AKASG Malin Array Be 83.83 38** *c* **eP 12 01 01.2 -0.3**
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**PLOR Plostina 84.14 43**⇓ *i*P **P 12 01 04.7 +1.5**
**PLOR Plostina 84.14 43**⇓ *i*P **P 12 01 04.7 +1.5**
**VRI Vrincioaia 84.19 43**⇓ *i*P **P 12 01 05.3 +1.9**
**VRI Vrincioaia 84.19 43**⇓ *i*P **P 12 01 05.3 +1.9**
**KLMR Klimovskoe 84.36 26** *c i*P **P 12 01 04.2 +0.3**
KLMR pmax pmax
comp=Z,113nm,1.6s
KLMR MLR MLR
comp=Z,270nm,16.0s
**KDZ Kurdzhali 84.89 48** *e*P **P 12 01 07.1 0.0**
**CFR Carcaliu 85.37 44**⇓ *i*P **P 12 01 09.2 -0.1**
**CFR Carcaliu 85.37 44**⇓ *i*P **P 12 01 09.2 -0.1**
**OBN Obninsk 85.87 32** *c i*P **P 12 01 11.6 0.0**
OBN *i* 12 01 16.5
OBN *i* S **S 12 11 42.2 -0.6**
OBN pmax pmax
comp=Z,94nm,1.4s
OBN MLR MLR
comp=Z,229nm,18.0s
**MOS Moscow 86.09 31** *e*P **P 12 01 12.0 -0.7**
MOS pmax pmax
comp=Z,69nm,1.0s
**LPSR Galich'ya Gora 88.34 34** *e*P **P 12 01 23.4 -0.2**
LPSR pmax pmax
comp=Z,50nm,1.1s
LPSR pmax pmax
comp=N,10.0nm,0.6s
LPSR pmax pmax
comp=E,30nm,1.4s
**VSR Storozhevoye 89.18 35** *e*P **P 12 01 27.2 -0.4**
VSR pmax pmax
comp=Z,20nm,1.2s
VSR pmax pmax
comp=N,10.0nm,1.0s
VSR pmax pmax
comp=E,20nm,1.0s
**VORD Divnogorie 89.38 35** *e*P **P 12 01 28.4 -0.1**
VORD pmax pmax
comp=Z,20nm,1.3s
VORD pmax pmax
comp=N,7.0nm,0.6s
VORD pmax pmax
comp=E,10.0nm,1.5s
**SEY Seymchan 89.42 340**⇑ *i*P **P 12 01 29.4 +0.9**
**VRH Novokhopyorsk 90.55 34** *e*P **P 12 01 34.1 +0.1**
VRH pmax pmax
comp=Z,30nm,0.7s
VRH pmax pmax
comp=N,40nm,1.1s
VRH pmax pmax
comp=E,20nm,0.9s
**BRTR Keskin Array B 91.38 47** P **P 12 01 38.5 +0.2**
comp=E,2.3nm,0.7s,baz=289,slow=3.8,SNR=10

**ANN Anapa 91.43 41** *e*P **P 12 01 35.6 -2.6**
ANN pmax pmax
comp=Z,55nm,1.6s
**ARU Arti 94.83 24** *c i*P **P 12 01 54.1 +0.5**
ARU 12 05 42.2
ARU S **SKSac 12 12 26.5 -0.5**
ARU pmax pmax
comp=Z,18nm,1.7s
ARU MLR MLR
comp=Z,571nm,16.0s
**KBZ Khabaz 95.33 40** P **P 12 01 56.6 +0.4**
comp=Z,3.0nm,0.7s,baz=28,slow=3.6,SNR=4.3
**YAK Yakutsk 96.03 348** *i* P **P 12 02 00.7 +1.7**
YAK pmax pmax
comp=Z,6.0nm,0.5s
**AKTO Aktyubinsk 98.98 28** LR LR 12 43 36.5
comp=Z,359nm,21.8s,baz=316,slow=33
**WMQ Urumqi 114.86 13** *e*PKP PKPdf 12 07 11.0 -1.9
**KSH Kashi 115.27 24** *e*PKP **PKPdf 12 07 14.7 +0.8**
KSH *es*PKP 12 07 28.7
KSH SKS **SKSdf 12 14 19.7 -4.5**
KSH PPMZ
comp=Z,89nm,4.5s
KSH LN
comp=Z,94nm,6.5s
KSH LE
comp=Z,210nm,10.4s
KSH LZ
comp=Z,220nm,12.1s
**VNDA Vanda 116.03 192** PKP **PKPdf 12 07 13.9 -0.1**
comp=Z,1.3nm,0.9s,baz=85,slow=0.1,SNR=6.7
**KSRS Korea Array 118.94 339** PKP **PKPdf 12 07 20.1 -0.7**
comp=Z,1.1nm,0.7s,baz=354,slow=1.3,SNR=4.5
**KSAR Wonju Array Be 118.97 339** PKIKP **PKPdf 12 07 20.1 -0.8**
**KSAR Wonju Array Be 118.97 339** PKP **PKPdf 12 07 20.1 -0.8**
**HHC Hu-ho-hao-te 119.33 354** *e*PKP **PKPdf 12 07 19.6 -2.0**
HHC PP **PP 12 08 44.3 +2.9**
HHC PPMZ
comp=Z,39nm,6.2s
HHC LN
comp=Z,250nm,16.2s
HHC LE
comp=Z,390nm,13.7s
HHC LZ
comp=Z,150nm,14.9s
**GTA Gaotai 120.96 4** *e*PKP **PKPdf 12 07 24.2 -0.7**
GTA sPKP 12 07 37.4
**LZH Lanzhou 124.44 1** *e*PKP **PKPdf 12 07 31.6 -0.1**
LZH sPKP 12 07 45.5
LZH LN
comp=Z,130nm,18.0s
LZH LE
comp=Z,130nm,17.9s
LZH LZ
comp=Z,170nm,20.1s
**MAW Mawson 125.48 162** PKP **PKPdf 12 07 32.4 +0.1**
comp=Z,2.4nm,0.8s,baz=252,slow=3.8,SNR=8.8
**XAN Xi'an 126.32 355** PKP **PKPdf 12 07 34.9 -0.3**
XAN PPMZ
comp=Z,83nm,3.9s
**CD2 Chengdu 129.60 1** PKP **PKPdf 12 07 39.6 -1.9**
CD2 sPKP 12 07 51.5
CD2 PP **PP 12 09 48.7 -1.5**
CD2 SKS **SKSdf 12 14 49.3 -2.1**
CD2 SKKS **SKKSac 12 16 42.5 -4.3**
CD2 SS **SS 12 27 09.4 -0.7**
CD2 PPMZ
comp=Z,140nm,5.6s
**CASY Casey 133.35 183** *e*PKPdf **PKPdf 12 07 47.7 +0.3**
**GYA Guiyang 133.99 357** *e*Pdif **Pdif 12 04 47.0 -2.0**
GYA PKP **PKPdf 12 07 49.4 -0.6**
GYA PP **PP 12 10 22.4 +3.8**
GYA PPMZ
comp=Z,120nm,7.9s
**CMAR Chiang Mai Arr 141.61 9** PKhKP PKPpre 12 07 59.8
comp=Z,1.5nm,0.9s,baz=327,slow=3.6,SNR=5.7
CMAR PKP **PKPdf 12 08 03.8 -0.3**
comp=Z,0.9nm,0.8s,baz=356,slow=2.9,SNR=4.5
**PALK Pallekele 144.34 43** *e*PKIKP PKPbc 12 08 07.2 -0.2
**PALK Pallekele 144.34 43** *e*PKPdf PKPbc 12 08 07.2 -0.1
**SIJI Sorong 147.76 302** PKPbc **PKPbc 12 08 17.6 0.0**
comp=Z,29nm,0.8s,baz=34,slow=5.2,SNR=8.0
**BBOO Buckleboo 149.00 239** *e*PKPdf **PKPdf 12 08 15.9 -0.4**
**WRAB Tennant Creek 151.94 265** *e*PKIKP **PKPdf 12 08 20.9 -0.3**
**WRAB Tennant Creek 151.94 265** *e*PKPdf **PKPdf 12 08 20.9 -0.3**
**WRA Warramunga Arr 151.95 265** PKP **PKPdf 12 08 20.9 -0.4**
comp=Z,24nm,0.9s,baz=78,slow=1.2,SNR=114
WRA PKPbc **PKPbc 12 08 26.9 -0.9**
comp=Z,23nm,0.6s,baz=85,slow=2.8,SNR=62
WRA PKPab **PKPab 12 08 37.2 +0.2**
comp=Z,4.3nm,0.8s,baz=86,slow=3.9,SNR=4.6
**ASAR Alice Springs 152.43 257** PKP **PKPdf 12 08 21.6 -0.3**
comp=Z,12nm,0.8s,baz=92,slow=1.4,SNR=115
ASAR PKPbc **PKPbc 12 08 27.6 -1.2**
comp=Z,32nm,0.8s,baz=89,slow=1.9,SNR=86
ASAR PKPab **PKPab 12 08 38.8 -0.3**
comp=Z,12nm,0.9s,baz=94,slow=3.1,SNR=11
**PSI Prapat 156.90 14** PKPab **PKPab 12 08 57.3 -0.8**
comp=Z,12nm,0.8s,baz=341,slow=12,SNR=3.5

*IDC **04** 12:03:50.3±10.0, 22°.84S×66°.00W, h212km±67km, mb3.7/1, mb1 3.3/4, mb1mx3.1/27, mbtmp3.9/4, Error ellipse: s-maj=113.1km s-min=30.5km az=22.0*
*SJA **04** 12:03:51.9±0.7, 22°.66S×66°.14W, h274km±9km, ML3.3*
*ISCJB **04** 12:03:53.6±0.6, 22°.69S±0°.05×66°.3W±0°.1, h251km, mb3.8/1, Error ellipse: s-maj=17.0km s-min=7.3km az=174.0*
**ISC 04 12:03:53.4**±1.1, **22°.64S**±0°.08×**66°.2W**±0°.2, **h251**km, **n15,**
σ1°.**14**/16, **Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YJA** | **Yavi** | **0.79** | **54** | *e*P | **Pn** | **12 04 29.5** | **+1.4** |
| **HJA** | **Humahuaca** | **0.92** | **128** | *e*P | **Pn** | **12 04 29.8** | **+1.2** |
| HJA | | | | *e*S | **S** | **12 04 57.7** | **+1.4** |
| **AZAP** | **Zapla** | **1.89** | **147** | *e*P | **Pn** | **12 04 35.3** | **0.0** |
| AZAP | | | | AML | AML | 12 05 09.8 | |
| | comp=Z,34nm,0.6s | | | | | | |
| **ASTB** | **Santa Barbara** | **2.05** | **130** | *e*P | **Pn** | **12 04 37.2** | **+0.6** |
| **SLA** | **San Lorenzo** | **2.17** | **163** | *e*P | **Pn** | **12 04 38.7** | **+1.0** |
| SLA | | | | AML | AML | 12 05 14.4 | |
| | comp=Z,23nm,0.7s | | | | | | |
| **FSA** | **Cafayete** | **3.44** | **177** | *e*P | **Pn** | **12 04 51.5** | **+0.5** |
| **VCA** | **Vinchina** | **6.33** | **196** | *e*P | **Pn** | **12 05 25.3** | **-0.6** |
| VCA | | | | AML | AML | 12 06 41.5 | |
| | comp=Z,14nm,0.7s | | | | | | |
| **LPAZ** | **La Paz** | **6.57** | **344** | P | **Pn** | **12 05 30.6** | **+1.1** |
| LPAZ | comp=Z,0.4nm,0.3s,baz=192,slow=3.9,SNR=8.6 | | | S | **S** | **12 06 45.7** | **-0.6** |
| | comp=Z,0.3nm,0.3s,baz=319,slow=13,SNR=9.2 | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **6.79** | **186** | *e*P | **Pn** | **12 05 30.6** | **-1.1** |
| **AGUA** | **GUANDACOL** | **7.12** | **196** | *e*P | **Pn** | **12 05 34.7** | **-1.1** |
| **AVFE** | **Valle Fertil** | **8.07** | **188** | AML | AML | 12 07 16.8 | |
| | comp=Z,8.9nm,0.5s | | | | | | |
| **SIV** | **San Ignacio** | **8.20** | **37** | P | **Pn** | **12 05 48.0** | **-1.3** |
| | comp=Z,0.6nm,0.3s,baz=226,slow=8.2,SNR=8.7 | | | | | | |
| **BDFB** | **Brasilia** | **18.53** | **71** | P | **P** | **12 07 50.5** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=224,slow=13,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.40** | **69** | P | **P** | **12 15 09.6** | **-0.5** |
| | comp=Z,1.4nm,0.6s,baz=252,slow=5.5,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.01** | **39** | PKPbc | **PKPab** | **12 23 02.3** | **+1.4** |
| | comp=Z,1.2nm,0.7s,baz=313,slow=3.6,SNR=8.4 | | | | | | |

*ISCJB **04** 12:04:03.9±0.5, 13°.8N±0°.1×44°.8W±0°.1, h15km, mb4.0/9, MS3.7/5, Error ellipse: s-maj=18.5km s-min=13.8km az=143.3*
*IDC **04** 12:04:03.3±0.8, 13°.78N×44°.84W, h0km, mb4.0/10, mb1 4.2/10, mb1mx3.9/38, mbtmp4.1/10, MS3.7/6, Ms1 3.8/6, ms1mx3.4/36, Error ellipse: s-maj=27.6km s-min=18.3km az=163.0*
**ISC 04 12:04:05.5**±0.7, **13°.7N**±0°.2×**44°.9W**±0°.1, **h15**km, **n25,**
σ0.**992**/14, **mb4.2**/9, **MS3.7**/5, **Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H05S1** | **Guadeloupe/Mar** SNR=11 | **15.53** | **275** | T | T | 12 23 38.5 | |
| **PCRV** | **Puerto La Cruz** | **19.67** | **262** | LR | LR | 12 14 26.5 | |
| | comp=Z,171nm,21.1s,baz=75,slow=32 | | | | | | |
| **PTGA** | **Pitinga** | **20.74** | **227** | P | Pn | 12 08 47.2 | -0.9 |
| | 9.6nm,0.9s,baz=53,slow=14,SNR=13 | | | | | | |
| PTGA | | | | LR | LR | 12 15 52.0 | |

comp=Z,170nm,20.8s,baz=30,slow=34
**ROSC El Rosal 30.36 256** LR LR 12 23 07.5
comp=Z,74nm,19.3s,baz=50,slow=38
**H10N3 ASCENSION HYDR 36.95 124** T T 12 50 10.9
baz=305,slow=75,SNR=64
**H10N2 ASCENSION HYDR 36.96 124** T T 12 50 11.2
baz=305,slow=75,SNR=58
**H10N1 ASCENSION HYDR 36.97 124** T T 12 50 12.4
baz=305,slow=75,SNR=60
**H10S3 ASCENSION HYDR 37.47 125** T T 12 50 46.9
baz=306,slow=75,SNR=90
**H10S1 ASCENSION HYDR 37.48 125** T T 12 50 47.5
baz=306,slow=75,SNR=91
**H10S2 ASCENSION HYDR 37.49 125** T T 12 50 51.5
baz=306,slow=75,SNR=80
**LPAZ La Paz 37.65 218** P **P 12 11 21.1 +0.2**
1.5nm,0.8s,baz=25,slow=4.8,SNR=5.7
LPAZ LR LR 12 26 37.9
comp=Z,142nm,19.7s,baz=16,slow=36
**DBIC Dimbokro 39.93 96** P **P 12 11 39.4 -0.1**
4.1nm,0.8s,baz=239,slow=7.6,SNR=4.1
**TORD Torodi Ar. Bea 45.22 85** P **P 12 12 22.4 -0.1**
3.3nm,0.8s,baz=285,slow=7.6,SNR=14
**KEST Kesra 53.17 56** P **P 12 13 24.7 +1.5**
4.8nm,0.9s,baz=352,slow=12,SNR=3.7
**TXAR Lajitas Array 56.35 296** P **P 12 13 46.6 +0.1**
0.4nm,0.8s,baz=116,slow=5.7,SNR=5.3
TXAR PcP **PcP 12 14 44.0 +0.3**
0.4nm,0.7s,baz=100,slow=4.1,SNR=4.3
TXAR LR LR 12 38 47.4
comp=Z,56nm,19.1s,baz=0.0,slow=37
**H09W1 TRISTAN DA CUN 59.07 150** T T 13 17 51.5
SNR=12
**YKA Yellowknife Ar 68.62 332** P **P 12 15 07.2 -0.6**
1.0nm,0.7s,baz=98,slow=6.6,SNR=3.6
**AKASG Malin Array Be 69.44 41** P **P 12 15 13.2 +0.2**
1.0nm,0.6s,baz=273,slow=4.9,SNR=5.7
**BRTR Keskin Array B 72.58 52** P **P 12 15 31.0 -1.5**
1.0nm,0.6s,baz=283,slow=5.0,SNR=4.7
**KMBO Kilima Mbogo 82.59 93** LR LR 12 51 55.0
comp=Z,184nm,19.6s,baz=302,slow=35
**ILAR Eielson Array 82.78 335** P **P 12 16 29.0 +0.2**
1.4nm,0.8s,baz=64,slow=4.9,SNR=15
**VNA1 Neumayer--Stat 87.81 169** P **P 12 16 54.6 +1.1**
**VNA3 Neumayer Olymp 88.03 169** P **P 12 16 54.9 +0.2**
**VNA2 Neumayer--Watz 88.20 168** P **P 12 16 55.5 0.0**
baz=331,slow=4.4
**SNAA Sanae 89.70 168** P **P 12 17 00.9 -1.7**

**IDC 04 12:04:22.1±7.0, 21.98°N×143.80°E, h227km±70km, mb3.2/11, mb1 3.4/11, mb1mx3.3/43, mbtmp3.8/11, Error ellipse: s-maj=28.1km s-min=12.1km az=79.0, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSRS** | **Korea Array** | **20.64** | **322** | P | P | 12 08 45.1 | +0.7 |
| | 1.0nm,0.7s,baz=146,slow=8.7,SNR=5.0 | | | | | | |
| **SONM** | **Songino Array** | **39.49** | **320** | P | P | 12 11 30.5 | -0.3 |
| | 0.6nm,0.5s,baz=138,slow=7.4,SNR=4.0 | | | | | | |
| **CTA** | **Charters Tower** | **41.88** | **177** | P | P | 12 11 50.4 | +0.1 |
| | 1.8nm,0.4s,baz=14,slow=9.5,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.67** | **193** | P | P | 12 11 56.5 | -0.2 |
| | 0.6nm,0.5s,baz=12,slow=8.8,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **46.38** | **193** | P | P | 12 12 25.5 | -0.5 |
| | 0.4nm,0.5s,baz=13,slow=7.1,SNR=4.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.35** | **321** | P | P | 12 13 24.6 | -0.7 |
| | 0.5nm,0.4s,baz=101,slow=6.1,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.93** | **312** | P | P | 12 13 30.6 | +1.0 |
| | 0.2nm,0.3s,baz=90,slow=7.2,SNR=3.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.71** | **317** | P | P | 12 13 48.1 | -0.9 |
| | 0.5nm,0.3s,baz=92,slow=7.0,SNR=4.8 | | | | | | |
| **ILAR** | **Eielson Array** | **61.53** | **27** | P | P | 12 14 12.9 | -1.9 |
| | 0.3nm,0.6s,baz=256,slow=5.5,SNR=4.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.94** | **28** | P | P | 12 15 44.4 | +0.7 |
| | 1.4nm,0.8s,baz=282,slow=8.7,SNR=3.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.52** | **52** | P | P | 12 16 21.2 | +1.2 |
| | 0.6nm,0.6s,baz=276,slow=6.7,SNR=5.1 | | | | | | |

*IDC **04** 12:08:16.8±0.7, 19.29°N×122.18°E, h0km, mb4.3/23, mb1 4.4/25, mb1mx4.3/45, mbtmp4.3/25, ML3.3/3, MS4.4/35, Ms1 4.4/35, ms1mx4.3/45, Error ellipse: s-maj=17.1km s-min=15.7km az=103.0*
*MAN **04** 12:08:17, 19.52°N×122.08°E, h9km, MS4.8*
*MAN INTENSITY I - CALAYAN ISLAND CAGAYAN.*
*ISCJB **04** 12:08:22.6±0.2, 19.34°N±0.02°×122.20°E±0.04°, h44km, mb4.6/66, MS4.5/42, Error ellipse: s-maj=5.6km s-min=3.0km az=5.2*
*GCMT **04** 12:08:23.8±0.2, 19.41°N×122.01E, h14km±1km, MW5.0/84, Moment Tensor Solution. s34,c46; s84,c135; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=0.47±.10; Mθθ=2.56±.09; Mϕϕ=-2.09±.10; Mrθ=0.07±.18; Mrϕ=-2.74±.08; Mθϕ=0.31±.19; Best double couple: M0=3.61100×10^16 NP1:ϕs=160.00000°,δ86.00000°,λ=-5.00000°. NP2: ϕs=250.00000°,δ85.00000°,λ=-176.00000°. Principal axes: T 3.8300, Plg1.0000°, Azm205.0000°; N -0.4370, Plg84.0000°, Azm304.0000°; P -3.3920, Plg6.0000°, Azm115.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC **04** 12:08:23.8±0.8, 19.43°N×122.25E, h38km±6km, mb4.8/24 Error ellipse: s-maj=10.2km s-min=6.2km az=117.0*
*NEIC Felt [I PIVS] on Calayan Island.*
*MOS **04** 12:08:23.2±1.5, 19.49°N×122.11E, h33km, mb5.1/27, MS4.6/9, Error ellipse: s-maj=10.2km s-min=6.4km az=109.6*
*BJI **04** 12:08:27.8, 19.65°N×121.70E, h36km, mb4.5/44, mB4.9/46, Ms5.0/61, Ms7 4.7/56*
*BKK **04** 12:08:35.7±0.5, 20.5°N×12.1°E±, h10km, M5.1/17, mB5.2/9, mb4.5/17, MLv5.8/1, Mw(mB)4.7/9*

**ISC 04 12:08:24.9±0.3, 19.42N±0.03×122.10E±0.05, h44km, h44km:pP-P, n205, σ1§99/198, mb4.7/66, MS4.5/42, 7C-6D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SGCP** | **Mt. Cagua** | **1.18** | **182** | *e*P | Pn | 12 08 39.3 | -5.6 |
| SGCP | | | | *e*S | **Sn** | **12 08 55.2** | **-4.6** |
| **CVP** | **Callao Caves** | **1.73** | **189** | *e*P | Pn | 12 08 47.9 | -4.6 |
| **APYP** | **Conner** | **1.75** | **208** | *e*P | Pn | 12 08 48.0 | -4.8 |
| APYP | | | | *e*S | Sn | 12 09 06.0 | -8.0 |
| **PIP** | **Pasuquin** | **1.78** | **232**↑ | *i*P | Pn | 12 08 48.3 | -4.9 |
| PIP | | | | *e*S | **Sn** | **12 09 12.8** | **-1.8** |
| **ABRA** | **Dolores** | **2.20** | **217** | *e*P | Pn | 12 08 55.1 | -3.9 |
| ABRA | | | | *e*S | Sn | 12 09 18.1 | -7.0 |
| **PALP** | **Palanan** | **2.37** | **172** | *e*P | **Pn** | **12 08 58.7** | **-2.6** |
| PALP | | | | *e*S | **Sn** | **12 09 26.8** | **-2.3** |
| **SZP** | **Santa** | **2.43** | **220** | *e*Pn | **Pn** | **12 09 00.8** | **-1.3** |
| **CAUP** | **Cauayan** | **2.48** | **186** | *e*P | **Pn** | **12 09 01.5** | **-1.3** |
| **BCPH** | **Baguio City Da** | **3.35** | **206**↑ | *i*P | **Pn** | **12 09 14.1** | **-0.9** |
| BCPH | | | | *i* S | Sn | 12 10 01.1 | +7.4 |
| **TWG** | **Pinlang** | **3.52** | **344** | *e*Pn | **Pn** | **12 09 15.2** | **-1.9** |
| **BOLP** | **Bolinao** | **3.67** | **215** | *e*P | **Pn** | **12 09 17.0** | **-2.2** |
| **BALP** | **Baler** | **3.69** | **188** | *e*P | **Pn** | **12 09 16.8** | **-2.8** |
| **PCPH** | **Palayan** | **3.96** | **194**↑ | *e*P | **Pn** | **12 09 21.4** | **-1.7** |
| **YULB** | **Yu-li** | **4.02** | **349** | *e*Pn | **Pn** | **12 09 21.0** | **-3.0** |
| **TPUB** | **Ta-pu** | **4.09** | **341** | *e*Pn | **Pn** | **12 09 25.2** | **+0.2** |
| **SSLB** | **Suanglung** | **4.47** | **346** | *e*Pn | **Pn** | **12 09 30.6** | **+0.4** |
| **NACB** | **Ninganchiao** | **4.75** | **354** | *e*Pn | **Pn** | **12 09 31.4** | **-2.7** |
| **YOJ** | **Yonaguni jima** | **5.09** | **9** | *e*P | **Pn** | **12 09 37.4** | **-1.3** |
| **YOJ** | **Yonaguni jima** | **5.09** | **9** | *e*Pn | **Pn** | **12 09 37.4** | **-1.3** |
| **YHNB** | **Yeheng** | **5.26** | **353** | *e*Pn | **Pn** | **12 09 40.0** | **-1.1** |
| **LQP** | **Lukban** | **5.31** | **186**‖ | *e*P | Pn | 12 09 36.4 | -5.5 |
| **GQP** | **Guinayangan** | **5.50** | **176**‖ | *e*P | **Pn** | **12 09 42.1** | **-2.2** |
| **TATO** | **Taipei** | **5.55** | **354** | *e*Pn | **Pn** | **12 09 45.3** | **+0.2** |
| **QZH** | **Quanzhou** | **6.38** | **330**↑ | *i*P | **Pn** | **12 09 54.3** | **-2.2** |
| QZH | | | | S | **Sn** | **12 11 04.9** | **-3.1** |
| QZH | | | | LN | | | |
| | 9μm,13.6s | | | | | | |
| QZH | | | | LE | | | |
| | 11μm,12.8s | | | | | | |
| QZH | | | | LZ | | | |
| | 12μm,17.2s | | | | | | |
| **PLP** | **Palo** | **8.67** | **161**‖ | *e*P | Pn | 12 10 23.5 | -4.3 |
| **GZH** | **Guangzhou** | **8.94** | **296** | P | **Pn** | **12 10 29.3** | **-2.3** |
| GZH | | | | S | Sn | 12 12 04.4 | -6.6 |
| GZH | | | | LN | | | |
| | 11μm,13.1s | | | | | | |
| GZH | | | | LE | | | |
| | 5μm,13.2s | | | | | | |
| **JOW** | **Kunigami** | **9.31** | **36** | Pn | **Pn** | **12 10 33.7** | **-2.9** |
| | 0.2nm,0.3s,baz=303,slow=29,SNR=6.7 | | | | | | |
| **QIZ** | **Qiongzhong** | **11.59** | **270** | P | **Pn** | **12 11 06.7** | **-1.1** |
| QIZ | | | | S | Sn | 12 13 05.9 | -10 |
| QIZ | | | | LN | | | |
| | 4μm,15.1s | | | | | | |
| QIZ | | | | LZ | | | |
| | 3μm,15.2s | | | | | | |
| **NJ2** | **Nanjing** | **12.91** | **348** | *e*P | **Pn** | **12 11 24.6** | **-1.2** |
| NJ2 | | | | S | **Sn** | **12 13 44.0** | **-4.1** |
| NJ2 | | | | PMZ | | | |
| | 30nm,0.5s | | | | | | |
| NJ2 | | | | LN | | | |
| | 6μm,16.6s | | | | | | |
| NJ2 | | | | LE | | | |
| | 4μm,12.0s | | | | | | |
| NJ2 | | | | LZ | | | |
| | 4μm,12.4s | | | | | | |
| **WHN** | **Wuhan** | **13.11** | **329** | P | **Pn** | **12 11 30.2** | **+1.7** |
| WHN | | | | LN | | | |
| | 12μm,14.5s | | | | | | |
| WHN | | | | LE | | | |
| | 17μm,18.8s | | | | | | |
| WHN | | | | LZ | | | |
| | 7μm,11.8s | | | | | | |
| **MYLDM** | **Lahad Datu** | **14.59** | **194** | *e*Pn | **Pn** | **12 11 50.0** | **+1.3** |
| **ENH** | **Enshi** | **15.72** | **316** | Pn | **Pn** | **12 12 04.4** | **+0.9** |
| **JNU** | **Nakatsue** | **15.74** | **28** | Pn | **Pn** | **12 12 01.9** | **-1.8** |
| | 0.1nm,0.3s,baz=138,slow=6.1,SNR=1.7 | | | | | | |
| JNU | | | | LR | LR | 12 18 33.8 | |
| | comp=Z,1μm,18.3s,baz=214,slow=39 | | | | | | |
| **JNU** | **Nakatsue** | **15.74** | **28** | *e*Pn | **Pn** | **12 12 04.8** | **+1.2** |
| | 40nm,0.9s | | | | | | |
| **GYA** | **Guiyang** | **15.84** | **299** | *e*P | **Pn** | **12 12 04.0** | **-1.1** |
| GYA | | | | pP | **P** | **12 12 11.4** | **+3.1** |
| GYA | | | | PP | **pP** | **12 12 18.0** | **-0.7** |
| GYA | | | | S | **Sn** | **12 14 54.2** | **-5.5** |
| GYA | | | | sS | **S** | **12 15 08.7** | **-3.8** |
| GYA | | | | SS | **SnSn** | **12 15 13.0** | **0.0** |
| GYA | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | 90nm,4.8s | | | | | | |
| GYA | | | | LN | | | |
| | 560nm,15.0s | | | | | | |
| GYA | | | | LE | | | |
| | 480nm,16.0s | | | | | | |
| GYA | | | | LZ | | | |
| | 520nm,15.0s | | | | | | |
| **TIA** | **Tai'an** | **17.29** | **346** | *e*P | P | 12 12 36.1 | +12 |
| TIA | | | | S | **S** | **12 15 45.5** | **+3.8** |
| TIA | | | | pmax | pmax | | |
| | comp=Z,20nm,1.6s | | | | | | |
| TIA | | | | pmax | pmax | | |
| | comp=Z,570nm,9.0s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=N,950nm,17.0s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=E,3μm,18.0s | | | | | | |
| TIA | | | | LR | LR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| **TJN** | **Taejon** | **17.51** | **14** | P | **P** | **12 12 28.0** | **+1.4** |
| **KHON** | **Khomkaen** | **18.60** | **264** | P | Pn | 12 12 46.2 | +6.9 |
| | comp=Z,12nm,1.0s,comp=Z,650nm | | | | | | |
| **KSAR** | **Wonju Array Be** | **18.65** | **15** | P | **P** | **12 12 38.0** | **-1.1** |
| **KSAR** | **Wonju Array Be** | **18.65** | **15** | P | **P** | **12 12 38.0** | **-1.1** |
| **KSRS** | **Korea Array** | **18.67** | **15** | P | **P** | **12 12 38.0** | **-1.3** |
| | comp=Z,0.2nm,0.3s,baz=195,slow=11,SNR=8.7 | | | | | | |
| KSRS | | | | LR | LR | 12 20 41.6 | |
| | comp=Z,2μm,18.1s,baz=208,slow=40 | | | | | | |
| **KS01** | **Wonju Array Si** | **18.69** | **15** | *e*P | **P** | **12 12 38.8** | **-0.7** |
| **GTOI** | **Gorontalo** | **18.69** | **177** | P | **P** | **12 12 39.6** | **-0.1** |
| | comp=Z,77nm,0.9s,comp=Z,1μm | | | | | | |
| **XAN** | **Xi'an** | **18.69** | **324** | P | **Pn** | **12 12 41.7** | **+1.3** |
| XAN | | | | pP | **pP** | **12 12 51.6** | **+1.4** |
| XAN | | | | PMZ | | | |
| | comp=Z,24nm,1.1s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,820nm,12.2s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,2μm,14.3s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,2μm,13.9s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,3μm,14.3s | | | | | | |
| **KMI** | **Kunming** | **18.79** | **291** | P | **Pn** | **12 12 44.8** | **+3.1** |
| KMI | | | | pP | **pP** | **12 12 51.6** | **+0.1** |
| KMI | | | | PMZ | | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,390nm,7.2s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,3μm,12.7s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,2μm,15.5s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,3μm,16.9s | | | | | | |
| **MPSI** | **Mapaga** | **19.09** | **187** | P | **Pn** | **12 12 47.3** | **+2.1** |
| | comp=Z,13nm,1.0s | | | | | | |
| **TNTI** | **Ternate** | **19.24** | **164** | *e*P | Pn | 12 12 55.5 | +8.5 |
| **SBUM** | **Sibu** | **19.44** | **211** | *e*P | **P** | **12 12 48.0** | **+0.1** |
| | comp=Z,35nm,1.1s | | | | | | |
| **LOEI** | **Loei** | **19.86** | **268** | P | **Pn** | **12 12 57.0** | **+2.7** |
| | comp=Z,38nm,0.7s,comp=Z,5μm | | | | | | |
| **CD2** | **Chengdu** | **20.13** | **308** | P | **P** | **12 12 54.0** | **-1.4** |
| CD2 | | | | pP | **pP** | **12 13 03.7** | **-2.3** |
| CD2 | | | | sP | **sP** | **12 13 09.0** | **-2.5** |
| CD2 | | | | S | **S** | **12 16 38.0** | **-1.1** |
| CD2 | | | | PMZ | | | |
| | comp=Z,40nm,1.0s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,700nm,6.8s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,6μm,12.7s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,5μm,12.5s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,3μm,15.2s | | | | | | |
| **PBKT** | **Sadao Pong** | **20.29** | **265** | P | Pn | 12 13 05.2 | +5.7 |
| | comp=Z,26nm,1.1s | | | | | | |
| **CRAI** | **Chiangrai** | **20.46** | **276** | P | Pn | 12 13 00.1 | -1.3 |
| | comp=Z,24nm,0.8s,comp=Z,722nm | | | | | | |
| **UTTA** | **Uttaradit** | **20.49** | **269** | P | Pn | 12 13 08.5 | +6.7 |
| | comp=Z,5.3nm,1.4s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **20.87** | **46** | LR | LR | 12 19 26.2 | |
| | comp=Z,868nm,20.6s,baz=282,slow=32 | | | | | | |
| **BJI** | **Beijing** | **21.17** | **347** | P | **P** | **12 13 08.1** | **+1.7** |
| BJI | | | | S | **S** | **12 17 00.0** | **+0.5** |
| BJI | | | | PMZ | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,150nm,4.7s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,2μm,12.6s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,1μm,15.4s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,680nm,25.6s | | | | | | |
| **KSM** | **Kuching** | **21.25** | **214** | *e*P | P | 12 13 13.0 | +5.5 |
| | comp=Z,39nm,1.1s | | | | | | |
| **SANI** | **Sanana** | **21.68** | **169** | P | P | 12 13 21.0 | +8.9 |
| **CHTO** | **Chiang Mai** | **21.89** | **272** | P | **P** | **12 13 15.8** | **+1.4** |
| | comp=Z,113nm,1.2s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.89** | **272** | *e*P | **P** | **12 13 15.0** | **+0.6** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.89** | **272** | *e*P | **P** | **12 13 15.0** | **+0.6** |
| | comp=Z,29nm,1.0s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.91** | **271** | *e*P | **P** | **12 13 15.1** | **+0.5** |
| **CMAR** | **Chiang Mai Arr** | **21.92** | **271** | P | **P** | **12 13 13.9** | **-0.8** |
| | comp=Z,4.4nm,1.0s,baz=70,slow=9.3,SNR=18 | | | | | | |
| CMAR | | | | ScP | **ScP** | **12 20 49.9** | **+3.3** |
| | comp=Z,0.4nm,0.4s,baz=197,slow=1.4,SNR=4.4 | | | | | | |
| CMAR | | | | LR | LR | 12 22 10.8 | |
| | comp=Z,254nm,18.6s,baz=80,slow=38 | | | | | | |
| **UTHA** | **Uthaitani** | **21.94** | **263** | P | P | 12 13 20.7 | +5.8 |
| | comp=Z,9.4nm,1.1s,comp=Z,86nm | | | | | | |
| **MAJO** | **Matsushiro** | **22.15** | **36**‖ | *e*P | P | 12 13 23.0 | +5.9 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,174nm,1.1s | | | | | | |
| **MAJO** | **Matsushiro** | **22.15** | **36** | *e*P | **P** | **12 13 20.8** | **+3.8** |
| | comp=Z,59nm,1.4s | | | | | | |
| **MAT** | **Matsushiro** | **22.15** | **36** | P | **P** | **12 13 20.1** | **+3.0** |
| MAT | | | | S | Sn | 12 17 29.4 | -2.3 |
| **MJAR** | **Matsushiro Arr** | **22.15** | **36** | P | **P** | **12 13 14.5** | **-2.6** |
| | comp=Z,1.1nm,0.8s,baz=230,slow=7.9,SNR=2.9 | | | | | | |
| MJAR | | | | ScP | **ScP** | **12 20 49.0** | **+2.1** |
| | comp=Z,0.5nm,0.4s,baz=222,slow=3.4,SNR=4.2 | | | | | | |
| **UMPA** | **Umpang Tak** | **22.35** | **265** | P | P | 12 13 27.0 | +7.6 |
| | comp=Z,12nm,1.4s,comp=Z,1μm | | | | | | |
| **GUMO** | **Guam** | **22.58** | **101** | LR | LR | 12 20 02.6 | |
| | comp=Z,796nm,21.2s,baz=286,slow=31 | | | | | | |
| **LZH** | **Lanzhou** | **23.10** | **320** | *e*P | **P** | **12 13 27.8** | **+0.6** |
| LZH | | | | pP | **pP** | **12 13 36.8** | **-1.3** |
| LZH | | | | sP | **sP** | **12 13 40.3** | **-3.3** |
| LZH | | | | PP | **PnPn** | **12 13 56.0** | **+2.4** |
| LZH | | | | *e*S | **S** | **12 17 29.2** | **-6.1** |
| LZH | | | | sS | Sn | 12 17 45.0 | -10 |
| LZH | | | | SS | **SnSn** | **12 18 10.2** | **-0.9** |
| LZH | | | | PMZ | | | |
| | comp=Z,47nm,1.3s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,190nm,4.2s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,1μm,10.2s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,3μm,11.3s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,3μm,12.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **23.18** | **339** | *e*P | **P** | **12 13 28.4** | **+0.5** |
| HHC | | | | sP | **sP** | **12 13 42.4** | **-1.9** |
| HHC | | | | S | **S** | **12 17 35.0** | **-1.5** |
| HHC | | | | sS | sS | 12 17 46.6 | -9.3 |
| HHC | | | | PMZ | | | |
| | comp=Z,31nm,1.5s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,160nm,3.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,2μm,14.7s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,4μm,15.7s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,2μm,14.9s | | | | | | |
| **BTO** | **Baotou** | **23.51** | **336** | *e*P | **P** | **12 13 29.4** | **-1.7** |
| **BBKI** | **Banjar Baru** | **23.84** | **198** | P | P | 12 13 43.4 | +9.2 |
| **KAPI** | **Kappang** | **24.39** | **186** | LR | LR | 12 25 26.2 | |
| | comp=Z,642nm,18.2s,baz=5.8,slow=42 | | | | | | |
| **CN2** | **Changchun** | **24.47** | **6** | *e*P | **P** | **12 13 43.3** | **+3.5** |
| CN2 | | | | *e*pP | **pP** | **12 13 53.0** | **+1.5** |
| CN2 | | | | *e*S | **S** | **12 17 58.0** | **+1.1** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,800nm,13.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,3μm,13.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,2μm,15.0s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **25.02** | **228** | *e*P | **P** | **12 13 48.8** | **+3.8** |
| | comp=Z,67nm,1.7s | | | | | | |
| **KULM** | **Kulim** | **25.18** | **239** | *e*P | **P** | **12 13 47.6** | **+1.2** |
| | comp=Z,44nm,1.2s | | | | | | |
| **IPM** | **Ipoh** | **25.36** | **237** | *e*P | **P** | **12 13 47.8** | **-0.4** |
| | comp=Z,27nm,1.0s | | | | | | |
| **MDJ** | **Mudanjiang** | **25.89** | **12** | P | **P** | **12 13 56.2** | **+3.6** |
| MDJ | | | | pP | **pP** | **12 14 04.8** | **+0.5** |
| MDJ | | | | sP | **sP** | **12 14 08.7** | **-0.9** |
| MDJ | | | | S | **S** | **12 18 22.1** | **+2.6** |
| MDJ | | | | sS | sS | 12 18 33.9 | -5.3 |
| MDJ | | | | PcS | **PcS** | **12 21 02.4** | **+1.0** |
| MDJ | | | | PMZ | | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,100nm,3.4s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,3μm,15.2s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,4μm,13.2s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,4μm,14.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **26.05** | **16** | P | **P** | **12 13 54.0** | **-0.1** |
| | comp=Z,4.7nm,0.8s,baz=213,slow=13,SNR=3.4 | | | | | | |
| USRK | | | | LR | LR | 12 24 14.6 | |
| | comp=Z,1μm,19.3s,baz=184,slow=37 | | | | | | |
| **GTA** | **Gaotai** | **27.68** | **321** | *e*P | **P** | **12 14 11.3** | **+2.3** |
| GTA | | | | pP | **pP** | **12 14 20.3** | **-0.4** |
| GTA | | | | sP | **sP** | **12 14 24.7** | **-1.3** |
| GTA | | | | PcP | **PcP** | **12 17 28.0** | **+2.7** |
| GTA | | | | S | **S** | **12 18 49.6** | **+1.4** |
| GTA | | | | sS | **sS** | **12 19 05.3** | **-2.6** |
| GTA | | | | SS | **SnSn** | **12 20 08.0** | **+5.1** |
| GTA | | | | ScP | **ScP** | **12 21 06.0** | **+3.5** |
| GTA | | | | PMZ | | | |
| | comp=Z,67nm,4.3s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,1μm,15.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,2μm,13.3s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,2μm,14.2s | | | | | | |
| **PSI** | **Prapat** | **28.04** | **237** | LR | LR | 12 25 00.9 | |
| | comp=Z,665nm,19.2s,baz=54,slow=36 | | | | | | |
| **LEM** | **Lembang** | **29.73** | **210** | LR | LR | 12 28 12.0 | |
| | comp=Z,592nm,19.0s,baz=34,slow=40 | | | | | | |
| **LSA** | **Lhasa** | **29.87** | **296** | *e*P | P | 12 14 32.3 | +3.3 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | **29.87** | **296** | *e*P | P | 12 14 32.3 | +3.3 |
| | comp=Z,15nm,1.1s | | | | | | |
| **ASAJ** | **Asahikawa** | **30.00** | **30** | LR | LR | 12 25 42.3 | |
| | comp=Z,950nm,21.2s,baz=222,slow=35 | | | | | | |
| **KLR** | **Kul'dur** | **30.73** | **12** | *e*P | P | 12 14 44.0 | +8.2 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,56nm,1.8s | | | | | | |
| KLR | | | | MLR | MLR | | |
| | comp=E,2μm,11.0s | | | | | | |
| KLR | | | | MLR | MLR | | |
| | comp=Z,6μm,11.0s | | | | | | |
| **HABR** | **Khabarovsk** | **30.82** | **17** | *e*P | **P** | **12 14 37.5** | **+1.0** |
| HABR | | | | *e**PP | **pP** | **12 14 46.9** | **-1.4** |
| HABR | | | | *e**SP | **sP** | **12 14 51.3** | **-2.3** |
| HABR | | | | *e* | | 12 15 37.3 | |
| HABR | | | | *e* | | 12 17 35.0 | |
| HABR | | | | *e*S | **S** | **12 19 37.7** | **+0.7** |
| HABR | | | | *e**SS | **sS** | **12 19 54.1** | **-2.6** |
| HABR | | | | *e* | | 12 21 18.8 | |
| HABR | | | | *e*SS | **ScS** | **12 25 11.4** | **+2.8** |
| HABR | | | | pmax | pmax | | |
| | comp=N,121nm,2.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,114nm,2.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,220nm,2.5s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,1μm,18.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **30.90** | **340** | *e*P | **P** | **12 14 37.5** | **0.0** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **30.90** | **340** | *e*P | **P** | **12 14 37.5** | **0.0** |
| | comp=Z,15nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **31.09** | **339** | P | **P** | **12 14 38.1** | **-1.0** |
| | comp=Z,4.1nm,1.1s,baz=153,slow=7.9,SNR=11 | | | | | | |
| SONM | | | | ScP | **ScP** | **12 21 15.1** | **+1.8** |
| | comp=Z,0.4nm,0.7s,baz=141,slow=5.0,SNR=3.7 | | | | | | |
| SONM | | | | LR | LR | 12 28 15.8 | |
| | comp=Z,1μm,19.1s,baz=149,slow=38 | | | | | | |
| **SONA1** | **Songino Array** | **31.09** | **339** | *e*P | **P** | **12 14 38.9** | **-0.3** |
| **ODAN** | **Odaran** | **32.69** | **290** | *e*P | **P** | **12 14 54.9** | **+1.3** |
| | comp=Z,72nm,1.3s | | | | | | |
| **RAMN** | **Ramite** | **33.40** | **290** | *e*P | **P** | **12 15 00.1** | **+0.3** |
| | comp=Z,78nm,1.3s | | | | | | |
| **KUR** | **Kuril'sk** | **33.44** | **34** | *c* *i*P | **P** | **12 15 02.3** | **+2.7** |
| KUR | | | | *i* | | 12 16 10.4 | |
| KUR | | | | *i* PPP | PPP | 12 16 22.0 | |
| KUR | | | | *i* SS | SS | 12 22 24.3 | -19 |
| KUR | | | | *i* SSS | SSS | 12 22 39.4 | |
| KUR | | | | pmax | pmax | | |
| | comp=N,28nm,1.8s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,54nm,1.8s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,134nm,1.8s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,1μm,18.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=E,841nm,18.0s | | | | | | |
| **GUN** | **Gumba** | **34.13** | **291** | *e*P | **P** | **12 15 08.4** | **+2.1** |
| | comp=E,79nm,1.1s | | | | | | |
| **ZAK** | **Zakamensk** | **34.33** | **339** | *e*P | **P** | **12 15 04.5** | **-2.9** |
| ZAK | | | | pmax | pmax | | |

comp=Z,4.0nm,1.1s
**PKI Pulchoki 34.51 291** *e*P **P** **12 15 10.7 +1.2**
comp=Z,42nm,1.2s
**DMN Daman 34.78 291** *e*P **P** **12 15 12.6 +0.8**
comp=Z,52nm,1.2s
**GKN Gorkha 35.24 291** *e*P **P** **12 15 16.4 +0.8**
comp=Z,41nm,1.1s
**TLY Talaya 35.31 340** P **P** **12 15 14.0 -1.7**
comp=Z,1.5nm,0.5s,baz=256,slow=7.7,SNR=3.1
TLY LR LR 12 30 52.5
comp=Z,647nm,18.2s,baz=142,slow=38
**TLY Talaya 35.31 340** *e*P **P** **12 15 16.1 +0.4**
TLY *e* 12 16 35.1
TLY *e*S S 12 20 53.2 +6.5
TLY *e*SS **SnSn** **12 23 08.8 +1.0**
TLY pmax pmax
comp=Z,2.0nm,0.8s
TLY MLR MLR
comp=Z,352nm,10.0s
**KOLN Koldanda 36.13 291** *e*P **P** **12 15 23.1 -0.2**
comp=Z,28nm,1.1s
**MOY Mondy 36.20 338** *e*P **P** **12 15 26.0 +2.5**
**WMQ Urumqi 37.66 318** *e*P **P** **12 15 37.0 +1.1**
WMQ S **S** **12 21 24.0 +1.2**
WMQ SS SnSn 12 23 52.0 -13
WMQ PMZ
comp=Z,12nm,0.8s
WMQ PMZ
comp=Z,24nm,3.5s
WMQ LN
comp=Z,880nm,14.0s
WMQ LE
comp=Z,540nm,16.0s
WMQ LZ
comp=Z,670nm,15.0s
**PMG Port Moresby 37.82 137** LR LR 12 30 34.3
comp=Z,324nm,19.3s,baz=232,slow=36
**BOD Bodaibo 38.81 353** *e*P P 12 15 38.3 -7.0
BOD pmax pmax
comp=Z,4.0nm,2.1s
**WRAB Tennant Creek 40.91 162** P P 12 16 12.0 +8.8
WRAB pmax pmax
comp=Z,23nm,1.1s
**WRA Warramunga Arr 40.92 162** P P 12 15 59.7 -3.5
comp=Z,5.5nm,1.1s,baz=346,slow=8.5,SNR=6.3
WRA ScP **ScP** **12 21 49.8 +0.4**
comp=Z,1.9nm,1.0s,baz=344,slow=4.3,SNR=4.3
WRA LR LR 12 33 42.9
comp=Z,238nm,20.1s,baz=5.0,slow=37
**H11S3 WAKE ISLAND Hy 42.09 84** T T 13 01 19.1
baz=276,slow=75,SNR=788
**H11S1 WAKE ISLAND Hy 42.10 84** T T 13 01 12.8
baz=276,slow=75,SNR=760
**H11S2 WAKE ISLAND Hy 42.11 84** T T 13 01 15.2
baz=276,slow=75,SNR=601
**H11N1 WAKE ISLAND Hy 42.11 82** T T 13 01 12.9
baz=278,slow=75,SNR=2486
**H11N2 WAKE ISLAND Hy 42.11 82** T T 13 01 13.0
baz=278,slow=75,SNR=1352
**H11N3 WAKE ISLAND Hy 42.13 82** T T 13 01 14.2
baz=278,slow=75,SNR=1101
**MK31 Makanchi Array 42.41 319** *i*P **P** **12 16 15.2 -0.1**
MK31 pmax pmax
comp=Z,32nm,0.9s
**MKAR Makanchi Array 42.41 319** P **P** **12 16 14.8 -0.5**
comp=Z,15nm,0.9s,baz=108,slow=7.9,SNR=43
MKAR LR LR 12 33 23.2
comp=Z,462nm,18.7s,baz=112,slow=35
**MKAR Makanchi Array 42.41 319** *i*P **P** **12 16 15.3 0.0**
MKAR pmax pmax
comp=Z,15nm,0.9s
**MKAR Makanchi Array 42.41 319** *e*P **P** **12 16 15.8 +0.6**
**MAKZ Makanchi 42.61 319** *e*P **P** **12 16 16.7 -0.2**
**PDGK Podgornoye 42.87 313** P **P** **12 16 20.5 +1.5**
PDGK pmax pmax
comp=Z,17nm,1.0s
**YAK Yakutsk 42.90 5** *e*P **P** **12 16 18.6 -0.3**
YAK *e**PP **pP** **12 16 26.9 -4.1**
YAK *e* 12 17 57.0
YAK *e* 12 18 10.9
YAK *e*PPP PPP 12 18 29.4
YAK *e*S **S** **12 22 39.8 -0.6**
YAK *e* 12 26 16.9
YAK *e*SSS SSS 12 26 38.4
YAK pmax pmax
comp=Z,5.0nm,1.0s
YAK pmax pmax
comp=Z,176nm,4.3s
YAK pmax pmax
comp=N,153nm,4.1s
YAK pmax pmax
comp=E,32nm,3.0s
YAK smax smax
comp=N,83nm,12.9s
YAK smax smax
comp=E,31nm,13.0s
YAK MLR MLR
comp=Z,1μm,15.0s
YAK MLR MLR
comp=N,720nm,14.0s
YAK MLR MLR
comp=E,435nm,14.0s
**PETK Petropavlovsk- 43.42 31** P **P** **12 16 23.0 -0.3**
comp=E,5.9nm,0.9s,baz=211,slow=2.7,SNR=6.5
PETK LR LR 12 33 08.3
comp=E,362nm,21.6s,baz=233,slow=34
**PETK Petropavlovsk- 43.42 31** P **P** **12 16 23.0 -0.3**
**KSH Kashi 44.32 307** P P 12 16 35.7 +4.8
KSH *e*pP pP 12 16 45.8 +2.8
KSH *e*sP sP 12 16 49.2 +1.0
KSH PcS PcS 12 22 15.6 +7.7
KSH S **S** **12 23 06.4 +4.3**
KSH PMZ
comp=E,17nm,1.2s
KSH PMZ
comp=E,150nm,5.4s
KSH LN
comp=E,790nm,12.8s
KSH LE
comp=E,920nm,14.6s
KSH LZ
comp=E,1μm,14.1s
**ASAR Alice Springs 44.35 164** P **P** **12 16 28.8 -2.3**
comp=E,2.6nm,0.9s,baz=351,slow=8.2,SNR=5.1
ASAR LR LR 12 37 06.7
comp=E,201nm,18.9s,baz=337,slow=39
**ZAA0 Zalesovo Array 44.72 329** *e*P **P** **12 16 32.6 -1.1**
**ZALV Zalesovo Beam 44.72 329** P **P** **12 16 32.5 -1.2**
comp=E,6.4nm,0.7s,baz=116,slow=6.7,SNR=14
ZALV LR LR 12 36 34.3
comp=E,614nm,18.3s,baz=82,slow=38
**TKM2 Tokmak 2 45.45 312** *e*P **P** **12 16 41.5 +1.5**
TKM2 pmax pmax
comp=Z,10.0nm,1.0s
**TKM2 Tokmak 2 45.45 312** *e*P **P** **12 16 41.5 +1.5**
comp=Z,9.9nm,1.0s
**CTA Charters Tower 45.85 148** LR LR 12 34 48.4
comp=Z,501nm,21.7s,baz=304,slow=35
**NVS Novosibirsk 46.00 330** *e*P **P** **12 16 44.9 +1.2**
**FRU Bishkek 46.12 311** *e*P P 12 16 51.0 +6.0
FRU *e* 12 17 00.0
FRU *e* 12 17 10.0
**AAK Ala-Archa 46.16 311** P **P** **12 16 45.0 -0.4**
comp=Z,1.2nm,0.3s,baz=117,slow=2.3,SNR=2.8
AAK LR LR 12 38 55.2
comp=Z,1μm,18.6s,baz=94,slow=40
**AAK Ala-Archa 46.16 311** *i*P **P** **12 16 47.9 +2.4**
AAK pmax pmax
comp=Z,12nm,1.0s
AAK MLR MLR
comp=Z,3μm,18.0s
**AAK Ala-Archa 46.16 311** *e*P **P** **12 16 48.1 +2.6**
comp=Z,7.2nm,0.9s
AAK *e*P **P** **12 16 48.4 +2.9**
**SFK Sufi-Kurgan 46.28 307** P **P** **12 16 48.4 +1.8**
SFK pmax pmax
comp=Z,14nm,1.1s
**KURK Kurchatov 46.33 323** *e*P **P** **12 16 46.7 +0.3**
KURK pmax pmax
comp=Z,50nm,1.1s
**KURK Kurchatov 46.33 323** *e*P **P** **12 16 46.7 +0.3**
comp=Z,50nm,1.1s
**KURBB Kurchatov Arra 46.34 323** P **P** **12 16 45.8 -0.7**
comp=Z,9.8nm,0.8s,baz=120,slow=7.6,SNR=29
**EKS2 Erkin-Say 46.68 311** *e*P **P** **12 16 50.5 +1.0**
EKS2 pmax pmax
comp=Z,5.0nm,0.8s
**EKS2 Erkin-Say 46.68 311** *e*P **P** **12 16 50.5 +1.0**
comp=Z,4.7nm,0.8s
**HNR Honiara 47.04 124** LR LR 12 36 22.2
comp=Z,601nm,18.2s,baz=298,slow=36
**MNAS Manas 47.55 310** P **P** **12 16 57.7 +1.4**
MNAS pmax pmax
comp=Z,13nm,1.1s
**SEY Seymchan 48.18 18** P **P** **12 16 59.1 -1.6**
comp=Z,1.8nm,0.7s,baz=198,slow=4.8,SNR=5.6
**SEY Seymchan 48.18 18** P P 12 17 04.0 +3.3
**KBL Kabul 49.09 299** *e*P **P** **12 17 09.6 +1.2**
KBL pmax pmax
comp=Z,13nm,0.9s
**KBL Kabul 49.09 299** *e*P **P** **12 17 09.6 +1.2**
comp=Z,13nm,0.9s
**KKAR Karatay Array 49.12 311** *e*P **P** **12 17 08.6 +0.4**
**KKAR Karatay Array 49.12 311** *e*P **P** **12 17 08.6 +0.4**
**OTUK Ortayu 49.20 318** P **P** **12 17 09.9 +1.1**
OTUK pmax pmax
comp=Z,22nm,1.0s
**BRVK Borovoye 52.00 323** *ce*P **P** **12 17 31.9 +2.1**
BRVK pmax pmax
comp=Z,20nm,1.2s
BRVK MLR MLR
comp=Z,526nm,17.0s
**BRVK Borovoye 52.00 323** *e*P **P** **12 17 32.4 +2.6**
comp=Z,15nm,1.0s
**CHKZ Chkalovo 52.02 324** P **P** **12 17 31.7 +1.8**
CHKZ pmax pmax
comp=Z,16nm,1.1s
**BILL Bilibino 55.88 18** P **P** **12 18 00.9 +3.0**
BILL pmax pmax
comp=Z,11nm,0.9s
**AB31 Akbulak array 57.42 317** *i*P **P** **12 18 09.5 +0.4**
AB31 pmax pmax
comp=Z,6.0nm,0.9s
**ABKAR Akbulak array 57.42 317** *e*P **P** **12 18 09.5 +0.4**
comp=Z,1.4nm,0.4s
**GEYT Alibeck 58.02 303** P **P** **12 18 12.6 -0.9**
comp=Z,1.0nm,0.4s,baz=77,slow=7.6,SNR=3.4
GEYT LR LR 12 46 42.8
comp=Z,434nm,18.4s,baz=85,slow=40
**SVE Sverdlovsk 58.40 325**[1] *e*P **P** **12 18 17.8 +2.0**
SVE pmax pmax
comp=Z,31nm,1.2s
SVE MLR MLR
comp=Z,470nm,14.0s
**ARU Arti 59.44 325** LR LR 12 44 45.6
comp=Z,369nm,19.1s,baz=126,slow=37
**ARU Arti 59.44 325** *d*P **P** **12 18 24.3 +1.3**
ARU S **S** **12 26 28.5 -0.4**
ARU pmax pmax
comp=Z,10.0nm,1.0s
ARU MLR MLR
comp=Z,577nm,16.0s
**ARU Arti 59.44 325** *e*P **P** **12 18 22.9 -0.1**
comp=Z,14nm,0.9s
**DZM Mont Dzumac 59.83 131** *e*LR LR 12 36 25.4
comp=Z,714nm,21.8s
**ZEI Tsey 68.54 309** *e*P **P** **12 19 23.5 +0.1**
ZEI pmax pmax
comp=Z,48nm,1.1s
**KBZ Khabaz 69.15 310** LR LR 12 53 55.8
comp=Z,354nm,18.6s,baz=65,slow=40
**KIV Kislovodsk 69.28 311** *e*P P 12 19 31.0 +3.2
KIV *i* 12 19 55.9
KIV *i*S S 12 28 53.8 +23
KIV pmax pmax
comp=Z,18nm,1.0s
KIV MLR MLR
comp=Z,350nm,18.0s
**KLMR Klimovskoe 69.64 329** *e*P P 12 19 33.7 +4.1
KLMR pmax pmax
comp=Z,27nm,1.3s
KLMR MLR MLR
comp=Z,1μm,15.0s
**RAYN Ar Rayn 70.61 289** *e*P **P** **12 19 36.5 +0.2**
comp=Z,13nm,1.0s
**CAST Castle Rocks 70.96 28** *e*P **P** **12 19 37.5 -0.2**
comp=Z,12nm,1.0s
**KDAK Kodiak Island 71.31 34** *i*P P 12 19 43.7 +3.9
**BPAW Bear Paw Mtn. 71.38 28** *e*P P 12 19 43.8 +3.6
comp=Z,58nm,2.0s
**OBN Obninsk 71.77 323** *e*P P 12 19 50.2 +7.6
OBN *i* 12 20 03.6
OBN *i*S **SKSac** **12 29 49.7 +7.0**
OBN MLR MLR
comp=Z,341nm,16.0s
**MCK McKinley 72.33 28** *e*P **P** **12 19 48.5 +2.6**
MCK pmax pmax
comp=Z,67nm,1.9s
**MCK McKinley 72.33 28** *e*P **P** **12 19 48.5 +2.6**
comp=Z,67nm,1.9s
**RND Reindeer 72.41 28** *e*P P 12 19 53.7 +7.3
RND pmax pmax
comp=Z,24nm,1.2s
**RND Reindeer 72.41 28** *e*P P 12 19 53.7 +7.3
comp=Z,24nm,1.2s
**ILAR Eielson Array 73.05 27** P **P** **12 19 49.0 -1.1**
comp=Z,0.5nm,0.6s,baz=269,slow=4.3,SNR=7.0
ILAR LR LR 12 54 13.5
comp=Z,122nm,18.2s,baz=310,slow=38
**ARCES ARCESS Array B 74.26 339** P **P** **12 19 56.3 -0.8**
comp=Z,2.4nm,0.8s,baz=96,slow=8.2,SNR=3.4
**EGAK Eagle 75.45 26** *e*P **P** **12 20 03.9 -0.2**
**FINES FINESS Array B 75.98 330** P **P** **12 20 06.5 -0.6**
comp=Z,4.4nm,0.8s,baz=44,slow=5.8,SNR=6.4
FINES LR LR 12 54 50.8
comp=Z,407nm,19.5s,baz=75,slow=37
**BRTR Keskin Array B 76.70 308** P **P** **12 20 11.7 -0.3**
comp=Z,0.7nm,0.8s,baz=46,slow=6.2,SNR=2.5
BRTR LR LR 12 59 46.5
comp=Z,97nm,19.6s,baz=349,slow=40
**AKASG Malin Array Be 77.00 319** P **P** **12 20 11.3 -1.8**
comp=Z,1.5nm,0.7s,baz=61,slow=5.6,SNR=4.1
AKASG LR LR 12 57 06.6
comp=Z,297nm,18.0s,baz=70,slow=38
**AKASG Malin Array Be 77.00 319** *i*P **P** **12 20 14.6 +1.5**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**INK Inuvik 77.31 22** P **P** **12 20 13.2 -1.2**
comp=Z,1.4nm,0.6s,baz=20,slow=15,SNR=2.8
**BR231 Keskin MP Arra 77.32 308** *e*P **P** **12 20 14.8 -0.5**
**BUR04 Bucovina Ar. S 80.39 317** *e*P **P** **12 20 30.4 -1.6**
**ABPO Ambohimpanom 82.76 247** *e*P **P** **12 20 46.8 +1.8**
ABPO pmax pmax
comp=Z,48nm,0.8s
**ABPO Ambohimpanom 82.76 247** *e*P **P** **12 20 46.8 +1.8**
comp=Z,48nm,0.8s
**NB2 NORSAR Subarra 82.82 333** P **P** **12 20 43.1 -1.4**
comp=Z,4.7nm,1.0s,baz=60,slow=4.6
**NB2 NORSAR Subarra 82.82 333** P **P** **12 20 43.1 -1.4**
baz=60,slow=4.6
**NOA NORSAR Array B 82.82 333** P **P** **12 20 42.1 -2.3**
comp=Z,1.0nm,0.7s,baz=65,slow=5.3,SNR=2.9
NOA LR LR 13 01 04.6
comp=Z,371nm,18.7s,baz=75,slow=38
**VYHS Vyhne 84.10 319** *e*P P 12 20 55.8 +4.5
**VYHS Vyhne 84.10 319** *e*P P 12 20 55.8 +4.5
**KMBO Kilima Mbogo 85.51 267** P **P** **12 20 58.6 -0.6**
comp=Z,0.9nm,0.3s,baz=8.1,slow=5.8,SNR=4.6
**KMBO Kilima Mbogo 85.51 267** P **P** **12 20 58.6 -0.6**
KMBO *e*P **PcP** **12 21 00.4 -1.8**
**YKA Yellowknife Ar 87.01 23** P **P** **12 21 04.8 -0.6**
comp=Z,2.6nm,0.6s,baz=306,slow=4.8,SNR=9.7
**GERES GERESS Array B 87.06 321** P **P** **12 21 04.6 -1.5**
comp=Z,0.4nm,0.2s,baz=61,slow=4.6,SNR=2.1
GERES LR LR 13 02 51.7
comp=Z,300nm,20.5s,baz=64,slow=38
**PPT Papeete 94.18 107** LR LR 12 54 29.2
comp=Z,112nm,20.8s,baz=282,slow=30
**PPT2 Papete2 94.18 107** *e*LR LR 12 51 59.4
comp=Z,325nm,25.5s
**KEST Kesra 96.02 311** LR LR 13 12 53.2
comp=Z,90nm,20.3s,baz=237,slow=40
**TBI Tubuai 96.12 112** *e*LR LR 12 52 36.4
comp=Z,226nm,27.8s
**MAW Mawson 96.91 199** LR LR 13 02 11.4
comp=Z,159nm,20.5s,baz=59,slow=33
**NVAR Mina Array Bea 99.29 44** LR LR 12 59 29.9
comp=Z,59nm,21.3s,baz=264,slow=31
**VNDA Vanda 99.48 172** LR LR 13 07 25.3
comp=Z,65nm,21.8s,baz=336,slow=36
**TXAR Lajitas Array 114.44 43** PKiKP **PKiKP** **12 27 00.1 -0.7**
comp=Z,0.3nm,0.7s,baz=298,slow=1.9,SNR=3.3

*IDC **04** 12:10:54.8±1.7,4°.93S×133°.20E,h0km,mb3.6/1, mb1 4.0/6,mb1mx3.7/34,mbtmp3.9/6,ML3.7/5,MS3.7/1, Ms1 3.7/1,ms1mx2.8/33,Error ellipse: s-maj=65.5km s-min=20.9km az=70.0*
*ISCJB **04** 12:10:58.4±0.8,4°.96S±0°.05×133°.2E±0°.1,h33km,mb3.6/1, MS3.6/1,Error ellipse: s-maj=16.9km s-min=6.3km az=168.2*
*AUST **04** 12:11:03.4±1.0,4°.92S×132°.93E,h67km,Error ellipse: s-maj=2.1km s-min=1.0km az=256.0*
**ISC 04 12:10:59.8±1.0,5°.04S±0°.07×133°.3E±0°.1,h35km,n15, σ2s07/13,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.33** | **335** | P | | **Pn** | **12 11 37.5** | **+1.7** |
| | baz=2.1,SNR=14 | | | | | | | |
| **SIJI** | **Sorong** | **4.59** | **334** | Pn | | **Pn** | **12 12 06.0** | **-0.8** |
| | 0.7nm,0.3s,baz=127,slow=20,SNR=3.7 | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **12 12 57.5** | **-1.6** |
| | 4.4nm,0.3s,baz=165,slow=22,SNR=9.0 | | | | | | | |
| **KDU** | **Kakadu** | **7.63** | **186** | P | | Pn | 12 12 53.8 | +5.1 |
| | baz=7.8,SNR=19 | | | | | | | |
| **MTN** | **Manton Dam** | **8.03** | **195** | P | | Pn | 12 12 59.7 | +5.7 |
| | baz=8.1,SNR=27 | | | | | | | |
| **TNTI** | **Ternate** | **8.24** | **314** | P | | **Pn** | **12 12 57.2** | **+0.3** |
| **KNRA** | **Kununurra** | **11.45** | **202** | P | | Pn | 12 13 45.8 | +4.8 |
| | baz=12,SNR=21 | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.85** | **176** | Pn | | **Pn** | **12 14 27.3** | **-0.1** |
| | 0.3nm,0.3s,baz=357,slow=13,SNR=11 | | | | | | | |
| WRA | | | | Sn | | **Sn** | **12 17 06.3** | **-4.5** |
| | 0.4nm,0.3s,baz=354,slow=24,SNR=3.3 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.96** | **209** | Pn | | **Pn** | **12 14 29.9** | **+1.0** |
| | 0.5nm,0.3s,baz=33,slow=11,SNR=15 | | | | | | | |
| FITZ | | | | Sn | | **Sn** | **12 17 13.8** | **+0.3** |
| | 1.0nm,0.3s,baz=212,slow=17,SNR=14 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.96** | **209** | P | | **P** | **12 14 33.6** | **-0.3** |
| | baz=15,SNR=13 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.53** | **178** | P | | **P** | **12 15 13.8** | **+0.3** |
| | 0.2nm,0.3s,baz=4.2,slow=12,SNR=17 | | | | | | | |
| ASAR | | | | S | | Sn | 12 18 33.9 | -6.1 |
| | 0.1nm,0.3s,baz=2.3,slow=28,SNR=3.7 | | | | | | | |
| **CTA** | **Charters Tower** | **19.59** | **141** | P | | **P** | **12 15 26.8** | **+1.7** |
| | 0.5nm,0.3s,baz=324,slow=14,SNR=3.2 | | | | | | | |
| **WRKA** | **Warakurna** | **20.44** | **193** | P | | Pn | 12 15 39.7 | +3.1 |
| | baz=21,SNR=8.2 | | | | | | | |
| **QLP** | **Quilpie** | **23.85** | **155** | P | | **P** | **12 16 13.3** | **+3.3** |
| | baz=24,SNR=3.4 | | | | | | | |
| **JNU** | **Nakatsue** | **38.02** | **357** | LR | | LR | 12 34 51.1 | |
| | comp=Z,99nm,19.5s,baz=144,slow=38 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.43** | **325** | P | | **P** | **12 21 57.0** | **-1.3** |
| | 0.2nm,0.3s,baz=120,slow=5.7,SNR=3.6 | | | | | | | |

**JMA 04 13:02:37.6±0.4,32°.00N×142°.84E,h0km,M3.6, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BSO1** | **Boso 1** | **3.07** | **330** | P | | Pn | 13 03 28.8 | +2.1 |
| BSO1 | | | | S | | Sb | 13 04 07.0 | -3.0 |
| **BSO3** | **Boso 3** | **3.41** | **326** | P | | Pn | 13 03 33.9 | +2.2 |
| BSO3 | | | | S | | Sn | 13 04 15.4 | +2.9 |
| **JYT** | **Yasato** | **4.75** | **333** | S | | Sn | 13 04 48.1 | +1.8 |
| **JHU** | **Hanno** | **4.85** | **323** | S | | Sn | 13 04 50.0 | +1.3 |
| **JHO** | **Hitachi** | **4.97** | **338** | P | | Pn | 13 03 54.9 | +1.4 |
| JHO | | | | S | | Sn | 13 04 53.3 | +1.6 |
| **JAG** | **Ashikaga** | **5.23** | **328** | S | | Sn | 13 05 00.5 | +2.4 |

*ISCJB **04** 13:09:20.6±0.7,20°.55N±0°.07×100°.84E±0°.04,h6km, mb3.5/4,Error ellipse: s-maj=10.1km s-min=5.4km az=166.4*
*IDC **04** 13:09:21.7±1.2,20°.66N×100°.78E,h0km,mb3.5/4, mb1 3.6/5,mb1mx3.3/39,mbtmp3.4/5,ML3.4/1,MS2.5/1, Ms1 2.7/1,ms1mx2.6/28,Error ellipse: s-maj=24.5km s-min=16.9km az=113.0*
*PLV **04** 13:09:25.6±2.0,20°.57N×100°.93E,h17km±20km,ML3.5*
**ISC 04 13:09:22.9±0.9,20°.62N±0°.08×100°.79E±0°.06,h6km,n9, σ1s04/12,mb3.5/4,Laos**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MLVB** | **Muong La stati** | **2.62** | **57** | *e*Pg | | Pg | 13 10 24.1 | +11 |
| MLVB | | | | *e*Sg | | Sg | 13 11 04.8 | +18 |
| **TGV** | **Tuan Giao** | **2.64** | **68** | *e*Pn | | **Pn** | **13 10 05.3** | **-0.7** |
| TGV | | | | *e*Pg | | **Pg** | **13 10 15.2** | **+1.7** |
| TGV | | | | *e*Sg | | **Sg** | **13 10 47.2** | **-0.5** |
| TGV | | | | AML | | AML | 13 10 51.9 | |
| | comp=E,198nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **2.77** | **219** | Pn | | **Pn** | **13 10 07.3** | **-0.6** |
| | comp=E,1.7nm,0.3s,baz=29,slow=12,SNR=15 | | | | | | | |
| CMAR | | | | Pg | | **Pb** | **13 10 13.8** | **+1.0** |
| | comp=E,10nm,0.3s,baz=22,slow=17,SNR=66 | | | | | | | |
| CMAR | | | | Lg | | Lg | 13 10 49.7 | |
| | comp=E,21nm,0.3s,baz=42,slow=28,SNR=16 | | | | | | | |
| CMAR | | | | LR | | LR | 13 11 25.6 | |
| | comp=E,83nm,18.2s,baz=322,slow=44 | | | | | | | |
| **MCVV** | **Moc Chau** | **3.62** | **86** | *e*Sg | | **Sg** | **13 11 19.4** | **+0.1** |
| **CCVB** | **Con Cuong** | **4.15** | **111** | *e*Pg | | **Pg** | **13 10 43.6** | **+1.0** |
| CCVB | | | | *e*Sg | | **Sg** | **13 11 35.0** | **-1.4** |
| **MKAR** | **Makanchi Array** | **30.15** | **334** | P | | **P** | **13 15 33.5** | **-0.2** |
| | comp=E,0.4nm,0.4s,baz=141,slow=10,SNR=4.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **34.71** | **335** | P | | **P** | **13 16 12.4** | **-1.1** |
| | comp=E,0.4nm,0.4s,baz=153,slow=8.2,SNR=3.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **51.99** | **139** | P | | **P** | **13 18 32.5** | **-0.8** |
| | comp=E,0.4nm,0.7s,baz=331,slow=7.9,SNR=3.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **54.58** | **142** | P | | **P** | **13 18 52.5** | **+0.2** |
| | comp=E,0.3nm,0.7s,baz=317,slow=6.2,SNR=6.0 | | | | | | | |

*IDC **04** 13:13:48.8±1.1,30°.62S×177°.42W,h0km,mb4.0/4, mb1 4.2/6,mb1mx3.9/22,mbtmp3.9/6,ML3.5/2,MS4.3/2, Ms1 4.3/2,ms1mx3.3/34,Error ellipse: s-maj=29.6km s-min=19.3km az=102.0*
*ISCJB **04** 13:13:53.1±0.7,30°.72S±0°.05×177°.6W±0°.1,h33km, mb4.0/5,MS5.0/1,Error ellipse: s-maj=17.8km s-min=6.9km az=7.9*
*NEIC **04** 13:13:55.4±3.5,30°.46S×177°.44W,h44km±26km,mb4.4/1, Error ellipse: s-maj=36.6km s-min=18.0km az=150.0*
**ISC 04 13:13:53.9±0.8,30°.61S±0°.06×177°.6W±0°.2,h33km,n19, σ1s17/19,mb4.1/5,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.38** | **347** | Pn | | **Pn** | **13 14 15.5** | **-1.3** |
| | 369nm,0.3s,baz=162,slow=20,SNR=4.0 | | | | | | | |
| RAO | | | | Sn | | **Sb** | **13 14 36.7** | **+0.2** |
| | 311nm,0.3s,baz=271,slow=21,SNR=4.1 | | | | | | | |
| **RAO** | **Raoul Island** | **1.38** | **347** | Pn | | **Pn** | **13 14 16.6** | **-0.3** |
| RAO | | | | Sn | | **Sb** | **13 14 36.7** | **+0.2** |
| **OUZ** | **Omahuta** | **8.74** | **236** | *e*Pn | | Pn | 13 16 06.8 | +8.9 |
| **URZ** | **Urewera** | **8.81** | **209** | Pn | | **Pn** | **13 15 57.4** | **-1.5** |
| | 0.5nm,0.3s,baz=108,slow=16,SNR=5.2 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **13 17 37.4** | **+0.4** |
| | 1.3nm,0.3s,baz=148,slow=14,SNR=7.6 | | | | | | | |
| **RPZ** | **Rata Peaks** | **15.90** | **211** | Pn | | **Pn** | **13 17 32.8** | **-2.4** |
| | 0.2nm,0.3s,baz=60,slow=16,SNR=2.0 | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.65** | **297** | LR | | LR | 13 22 56.1 | |
| | comp=Z,252nm,21.6s,baz=110,slow=33 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.48** | **267** | P | | **P** | **13 21 55.7** | **+1.5** |
| | 0.4nm,0.5s,baz=103,slow=7.4,SNR=9.2 | | | | | | | |
| **WRAB** | **Tennant Creek** | **44.48** | **272** | *e*P | | **P** | **13 22 04.0** | **+1.8** |
| | 5.8nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.48** | **272** | P | | **P** | **13 22 03.2** | **+0.9** |
| | 1.2nm,0.4s,baz=111,slow=8.1,SNR=27 | | | | | | | |
| **USHA** | **Ushuaia** | **75.54** | **146** | LR | | LR | 13 49 20.5 | |
| | comp=Z,904nm,21.8s,baz=274,slow=28 | | | | | | | |
| **SNAA** | **Sanae** | **77.94** | **178** | P | | **P** | **13 25 48.5** | **+0.3** |
| **VNA3** | **Neumayer Olymp** | **78.07** | **176** | P | | **P** | **13 25 49.8** | **+0.9** |
| **VNA2** | **Neumayer--Watz** | **78.51** | **177** | P | | **P** | **13 25 52.1** | **+0.8** |
| | baz=178,slow=4.8 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **78.74** | **176** | P | | **P** | **13 25 54.2** | **+1.7** |
| **NVAR** | **Mina Array Bea** | **88.13** | **42** | P | | **P** | **13 26 41.8** | **+0.3** |
| | 1.6nm,1.0s,baz=214,slow=8.2,SNR=8.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **98.04** | **13** | P | | **P** | **13 27 25.7** | **-0.5** |
| | 0.4nm,1.0s,baz=206,slow=7.9,SNR=2.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.47** | **340** | PKPbc | | **PKPdf** | **13 33 27.0** | **-0.7** |
| | 3.9nm,0.7s,baz=64,slow=3.2,SNR=5.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **151.69** | **323** | PKPbc | | **PKPbc** | **13 33 44.1** | **-0.4** |
| | 0.2nm,0.3s,baz=46,slow=2.4,SNR=5.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.61** | **178** | PKPab | | **PKPab** | **13 34 41.6** | **+0.6** |
| | 0.5nm,1.0s,baz=185,slow=4.0,SNR=3.1 | | | | | | | |

*NIED* ***04*** *13:28:00,24˚.10N×125˚.30E,h38km,Mw6.2 Best double couple: M₀2.59000×10¹⁸ NP1:φ₈100.00000°,δ69.00000°, λ13.00000°. NP2:φ₈6.00000°,δ78.00000°,λ159.00000°.*

*IDC* ***04*** *13:28:33.9±0.3,24˚.29N×125˚.25E,h0km,mb5.9/37, mb1 6.0/40,mb1mx6.0/41,mbtmp5.9/40,ML5.4/3,MS6.0/26, Ms1 6.0/26,ms1mx5.8/36,Error ellipse: s-maj=10.8km s-min=7.9km az=57.0*

*TAP* ***04*** *13:28:35.5,23˚.97N×125˚.51E,h35km±4km,ML6.6,D*

*BJI* ***04*** *13:28:35.1,24˚.13N×125˚.49E,h32km,mb6.0/78,mB6.2/68, ML5.7/3,Ms6.3/97,Ms7 6.1/89*

*SZGRF* ***04*** *13:28:36.3,23˚.84N×125˚.59E,h33km,mb6.3/19(BGR), Ms6.5/2(BGR)*

*MOS* ***04*** *13:28:36.3±1.0,24˚.33N×125˚.22E,h24km,mb6.4/112, MS6.1/91,Error ellipse: s-maj=6.0km s-min=3.6km az=110.1*

*ISCJB* ***04*** *13:28:38.7±0.2,24˚.21N±0˚.01×125˚.26E±0˚.01,h43km±1km, mb6.1/388,MS6.1/239,Error ellipse: s-maj=2.1km s-min=1.5km az=44.1*

*JMA* ***04*** *13:28:38.9±0.1,24˚.22N×125˚.34E,h53km±4km,M6.4*

*JMA Felt IV J1.*

*GCMT* ***04*** *13:28:38.9±0.1,24˚.09N×125˚.26E,h32km,MW6.3/132, Moment Tensor Solution. s132,c312; s128,c501; Duration: 3≈3 Moment tensor: Scale 10¹⁸Nm; Mrr1.91±.02; Mθθ-0.77±.02; Mφφ-1.14±.02; Mrθ1.23±.03; Mθφ2.39±.01; Mrφ0.77±.03; Best double couple: M₀3.24700×10¹⁸ NP1:φ₈104.00000°,δ60.00000°, λ42.00000°. NP2:φ₈350.00000°,δ55.00000°,λ142.00000°. Principal axes: T 3.1240, Plg50.0000°, Azm320.0000°; N 0.2420, Plg40.0000°, Azm134.0000°; P -3.3690, Plg3.0000°, Azm226.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*NEIC* ***04*** *13:28:39.0±0.0,24˚.27N×125˚.15E,h32km,Moment Tensor Solution. s13 Moment tensor: Scale 10¹⁸Nm; Mrr2.33; Mθθ-1.08; Mφφ-1.25; Mrθ0.39; Mθφ2.81; Mrφ1.47; Best double couple: M₀3.70000×10¹⁸ NP1:φ₈346.00000°, δ61.00000°,λ131.00000°. NP2:φ₈103.00000°,δ49.00000°, λ38.00000°. Principal axes: T 3.3900, Plg53.0000°, Azm308.0000°; N 0.6900, Plg36.0000°, Azm143.0000°; P -4.0800, Plg7.0000°, Azm48.0000°;*

**ISC 04 13:28:38.9±0.3,24˚.22N±0˚.02×125˚.25E±0˚.02,h33km±1km, h33km:pP-P,n2139,σ1s57/2205,mb6.2/401,MS6.1/242, 187C-65D,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JOGS** | **Gusukube** | **0.56** | **15** | ⇓P | | **Pn** | **13 28 50.9** | **+0.3** |
| JOGS | | | | eS | | **Sn** | **13 28 59.7** | **+0.9** |
| **JMJ** | **Miyako jima 2** | **0.60** | **4** | ⇓P | | **Pn** | **13 28 51.4** | **+0.3** |
| JMJ | | | | eS | | **Sn** | **13 29 00.7** | **+1.0** |
| **JMJ** | **Miyako jima 2** baz=346 | **0.60** | **4** | ⇓*i*P | | **Pn** | **13 28 51.6** | **+0.5** |
| JMJ | baz=346 | | | S | | **Sn** | **13 29 01.2** | **+1.5** |
| **JIRB** | **Irabujima** | **0.61** | **353** | P | | **Pb** | **13 28 51.6** | **+0.3** |
| JIRB | | | | eS | | **Sn** | **13 29 01.1** | **+1.0** |
| **JTJ** | **Tarama** | **0.65** | **310** | ⇑P | | **Pb** | **13 28 52.9** | **+0.9** |
| JTJ | | | | eS | | **Sn** | **13 29 12.7** | **+1.5** |
| **JKRS** | **Kuro-shima** | **1.13** | **271** | ⇑P | | **Pb** | **13 29 00.3** | **+0.3** |
| JKRS | | | | eS | | **Sb** | **13 29 16.3** | **+1.9** |
| **HATJ** | **Hateruma jima** | **1.33** | **263** | ⇓P | | **Pb** | **13 29 02.4** | **-0.9** |
| HATJ | | | | eS | | **Sb** | **13 29 19.4** | **-0.6** |
| **IRIF** | **Iriomote-Funau** | **1.39** | **275** | ⇑P | | **Pb** | **13 29 03.5** | **-0.9** |
| IRIF | | | | eS | | **Sb** | **13 29 21.6** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **2.06** | **277** | ⇑P | | **Pn** | **13 29 12.4** | **+1.2** |
| **YOJ** | **Yonaguni jima** baz=282 | **2.06** | **277** | P | | **Pn** | **13 29 12.4** | **+1.2** |
| **JYNG** | **Yonagunijimaku** | **2.12** | **277** | P | | **Pn** | **13 29 13.2** | **+1.2** |
| **JKE** | **Kume jima 2** | **2.52** | **33** | ⇓P | | **Pn** | **13 29 16.2** | **-1.4** |
| **JJT2** | **Tamagusuku 2** | **2.96** | **49** | ⇓P | | **Pn** | **13 29 22.3** | **-1.4** |
| **JAGN** | **Aguni-jima** | **2.97** | **37** | ⇓P | | **Pn** | **13 29 22.3** | **-1.5** |
| **TWB1** | **Santiao Chiao** baz=287 | **3.07** | **286** | P | | **Pn** | **13 29 26.7** | **+1.6** |
| **EGS** | baz=284 | **3.08** | **282** | ⇓P | | **Pn** | **13 29 27.4** | **+2.0** |
| **TWC** | **Suao** baz=280 | **3.12** | **278** | ⇓P | | **Pn** | **13 29 27.0** | **+1.1** |
| **ENA** | **Nanau** baz=277 | **3.21** | **274** | P | | **Pn** | **13 29 28.8** | **+1.7** |
| **PCYT** | **Pengchaiyu** baz=297 | **3.21** | **297** | P | | Pn | 13 29 30.3 | +3.3 |
| PCYT | baz=297 | | | eS | | **Sb** | **13 30 09.6** | **-4.4** |
| **ILA** | **Ilan** baz=282 | **3.24** | **280** | *e*P | | **Pn** | **13 29 29.8** | **+2.3** |
| **NWF** | **Wu-fen Shan** baz=287 | **3.27** | **286** | ⇓P | | **Pn** | **13 29 30.6** | **+2.6** |
| **TWE** | **Neicheng** baz=282 | **3.30** | **279** | ⇓*i*P | | **Pn** | **13 29 30.1** | **+1.8** |
| TWE | baz=282 | | | eS | | **Sn** | **13 30 07.6** | **+1.1** |
| **NACB** | **Ninganchiao** | **3.34** | **270** | *e*Pn | | **Pn** | **13 29 29.4** | **+0.5** |
| **HWA** | **Hwalien** baz=270 | **3.34** | **267** | P | | **Pn** | **13 29 29.4** | **+0.5** |
| **TWD** | **Chiawan** baz=271 | **3.34** | **268** | *e*P | | **Pn** | **13 29 29.3** | **+0.4** |
| **ENTT** | **Nioudou** baz=280 | **3.38** | **278** | P | | **Pn** | **13 29 31.7** | **+2.2** |
| **JNTH** | **Nagotoyohara** | **3.40** | **47** | P | | **Pn** | **13 29 28.1** | **-1.6** |
| **TWA** | **Mucha** baz=285 | **3.42** | **284** | ⇓*i*P | | **Pn** | **13 29 32.5** | **+2.5** |
| **TEGC** | **Jichi Village** baz=265 | **3.43** | **262** | *e*P | | **Pn** | **13 29 30.9** | **+0.8** |
| **ESF** | **Shoufeng Towns** baz=268 | **3.44** | **265** | *e*P | | **Pn** | **13 29 30.3** | **+0.1** |
| **TWY** | **Chenhua** baz=290 | **3.48** | **288** | *e*P | | **Pn** | **13 29 33.4** | **+2.6** |
| TWY | baz=290 | | | eS | | **Sn** | **13 30 15.4** | **+4.5** |
| **TAP1** | **Taipei** baz=286 | **3.49** | **284** | *e*P | | **Pn** | **13 29 33.3** | **+2.4** |
| **TAP** | **Taipei** baz=286 | **3.50** | **284** | *e*P | | **Pn** | **13 29 33.6** | **+2.5** |
| **TATO** | **Taipei** SNR=66 | **3.51** | **283** | P | | Pn | 13 29 34.6 | +3.4 |
| **TATO** | **Taipei** | **3.51** | **283** | *e*Pn | | **Pn** | **13 29 33.3** | **+2.1** |
| **ESL** | **Shilin** baz=267 | **3.51** | **264** | ⇑*i*P | | **Pn** | **13 29 30.9** | **-0.4** |
| ESL | baz=267 | | | eS | | **Sn** | **13 30 07.8** | **-3.9** |
| **NNS** | **Nan Shan** baz=277 | **3.54** | **274** | ⇓*e*P | | **Pn** | **13 29 33.3** | **+1.5** |
| **YHNB** | **Yeheng** | **3.56** | **278** | *e*Pn | | **Pn** | **13 29 34.3** | **+2.3** |
| **NSK** | **Sanguang** baz=280 | **3.58** | **278** | ⇓P | | **Pn** | **13 29 34.4** | **+2.2** |
| **TWS1** | **Kuangyinshan** baz=286 | **3.60** | **285** | *e*P | | Pn | 13 29 35.6 | +3.2 |
| **WHF** | **Hehuan Shan** baz=272 | **3.64** | **270** | ⇓*i*P | | **Pn** | **13 29 34.3** | **+0.9** |
| **EHY** | **Hungye** baz=263 | **3.67** | **260** | ⇑*i*P | | **Pn** | **13 29 33.2** | **-0.1** |
| EHY | baz=263 | | | eS | | **Sn** | **13 30 13.6** | **-1.9** |
| **YULB** | **Yu-li** | **3.71** | **258** | *e*Pn | | **Pn** | **13 29 33.5** | **-0.5** |
| YULB | | | | eSn | | Sn | 13 30 08.8 | -7.9 |
| **TWT** | **Tachien** baz=273 | **3.72** | **271** | ⇑P | | **Pn** | **13 29 36.0** | **+1.8** |
| **TWF1** | **Yuli** baz=260 | **3.72** | **257** | ⇑*i*P | | **Pn** | **13 29 33.7** | **-0.4** |
| TWF1 | baz=260 | | | eS | | **Sn** | **13 30 15.5** | **-1.4** |
| **JIH** | **Iheya** | **3.73** | **41** | ⇓P | | **Pn** | **13 29 32.4** | **-1.8** |
| **CHKT** | **Chengkung** baz=257 | **3.73** | **253** | ⇑*i*P | | **Pn** | **13 29 33.1** | **-1.1** |
| CHKT | baz=257 | | | eS | | **Sn** | **13 30 13.8** | **-3.3** |
| **NCU** | **National Centr** baz=284 | **3.77** | **282** | *e*P | | **Pn** | **13 29 37.1** | **+2.2** |
| **JOW** | **Kunigami** | **3.77** | **46** | ⇓P | | **Pn** | **13 29 33.1** | **-1.8** |
| **JOW** | **Kunigami** baz=358,slow=13 | **3.77** | **46** | Pn | | **Pn** | **13 29 33.4** | **-1.5** |
| JOW | 44nm,0.3s,baz=308,slow=19,SNR=2.7 | | | | Sn | **Sn** | **13 30 17.5** | **-0.7** |
| **JOW** | **Kunigami** baz=41 | **3.77** | **46** | ⇓*i*P | | **Pn** | **13 29 33.3** | **-1.5** |
| **WDT** | **Danda** baz=266 | **3.79** | **264** | ⇑*i*P | | **Pn** | **13 29 35.6** | **+0.2** |
| **HSN** | **Hsinchu** baz=281 | **3.94** | **279** | *e*P | | **Pn** | **13 29 40.0** | **+2.9** |
| **SSLB** | **Suanglung** | **3.95** | **265** | *e*Pn | | **Pn** | **13 29 37.6** | **+0.3** |
| **SMLT** | **Sun Moon Lake** baz=268 | **3.99** | **266** | ⇑*i*P | | **Pn** | **13 29 39.2** | **+1.3** |
| **YUS** | **Yu-Shan** baz=263 | **4.00** | **260** | ⇑*i*P | | **Pn** | **13 29 38.9** | **+0.5** |
| **ELDTW** | **Lidau** baz=259 | **4.01** | **256** | ⇑*i*P | | **Pn** | **13 29 37.6** | **-0.6** |
| **TYC** | **Yuchr** baz=269 | **4.03** | **266** | ⇑*i*P | | **Pn** | **13 29 39.6** | **+1.3** |
| **LAY** | **Lan-yu** baz=242 | **4.04** | **238** | ⇑*i*P | | **Pn** | **13 29 36.3** | **-2.2** |
| **TTN** | **Taitung** baz=253 | **4.04** | **250** | ⇑*i*P | | **Pn** | **13 29 37.7** | **-0.8** |
| TTN | baz=253 | | | eS | | **Sn** | **13 30 22.3** | **-2.4** |
| **TWG** | **Pinlang** baz=254 | **4.08** | **251** | P | | **Pn** | **13 29 38.0** | **-1.0** |
| **TWG** | **Pinlang** | **4.08** | **251** | *e*Pn | | **Pn** | **13 29 37.7** | **-1.3** |
| **TWQ1** | **Liyutan** baz=274 | **4.09** | **273** | ⇓P | | **Pn** | **13 29 41.6** | **+2.5** |
| TWQ1 | baz=274 | | | eS | | **Sn** | **13 30 28.3** | **+2.4** |
| **NSY** | **Sanyi** baz=275 | **4.10** | **274** | *e*P | | **Pn** | **13 29 42.0** | **+2.7** |
| NSY | baz=275 | | | eS | | **Sn** | **13 30 29.2** | **+3.0** |
| **TCU** | **Taichung** baz=272 | **4.18** | **270** | ⇓*i*P | | **Pn** | **13 29 42.9** | **+2.5** |
| **WNT** | **Mingjian** baz=268 | **4.19** | **266** | ⇑*i*P | | **Pn** | **13 29 43.1** | **+2.5** |
| **STYT** | **Tauyuan** baz=259 | **4.25** | **257** | ⇑*i*P | | **Pn** | **13 29 41.7** | **+0.3** |
| STYT | baz=259 | | | eS | | **Sn** | **13 30 28.8** | **-1.2** |
| **ECL** | **Taimali** baz=251 | **4.26** | **249** | ⇑*i*P | | **Pn** | **13 29 40.2** | **-1.4** |
| **WGK** | **Gukeng** baz=266 | **4.32** | **264** | *e*P | | **Pn** | **13 29 44.3** | **+1.9** |
| WGK | baz=266 | | | eS | | **Sn** | **13 30 35.8** | **+4.2** |
| **TPUB** | **Ta-pu** | **4.33** | **259** | *e*Pn | | **Pn** | **13 29 43.8** | **+1.2** |
| **JOKE** | **Okinoerabujima** | **4.33** | **43** | P | | **Pn** | **13 29 40.2** | **-2.3** |
| **WTP** | **Ta-pu** baz=260 | **4.36** | **258** | ⇑*i*P | | **Pn** | **13 29 44.4** | **+1.5** |
| **TAW** | **Tawu** baz=249 | **4.41** | **246** | ⇑P | | **Pn** | **13 29 42.5** | **-1.1** |
| TAW | baz=249 | | | eS | | **Sn** | **13 30 31.8** | **-2.0** |
| **CHN2** | **Minshiung** baz=264 | **4.42** | **262** | ⇑*e*P | | **Pn** | **13 29 45.8** | **+2.0** |
| **SGST** | **Jiashian** baz=258 | **4.43** | **256** | ⇑*i*P | | **Pn** | **13 29 45.5** | **+1.6** |
| SGST | baz=258 | | | S | | **Sn** | **13 30 36.8** | **+2.5** |
| **EAST** | **Anshuo** baz=249 | **4.44** | **247** | ⇑*i*P | | **Pn** | **13 29 42.9** | **-1.2** |
| **CHN1** | **Nanshi** baz=260 | **4.45** | **258** | ⇑*i*P | | **Pn** | **13 29 45.9** | **+1.8** |
| **TWK** | **Hsinying** baz=261 | **4.46** | **259** | *e*P | | **Pn** | **13 29 46.0** | **+1.6** |
| TWK | baz=261 | | | eS | | **Sn** | **13 30 36.1** | **+0.8** |
| **CHY** | **Chiayi** baz=264 | **4.48** | **262** | ⇓*e*P | | **Pn** | **13 29 45.8** | **+1.3** |
| CHY | baz=264 | | | eS | | **Sn** | **13 30 35.7** | **+0.3** |
| **SSD** | **Sandimen** baz=254 | **4.49** | **252** | ⇑P | | **Pn** | **13 29 44.4** | **-0.2** |
| **WTCT** | **Ta-ch'eng** baz=268 | **4.56** | **267** | ⇑P | | **Pn** | **13 29 47.7** | **+2.1** |
| WTCT | baz=268 | | | eS | | **Sn** | **13 30 39.1** | **+1.6** |
| **SGLT** | **Jiouru** baz=254 | **4.62** | **252** | *e*P | | **Pn** | **13 29 47.9** | **+1.5** |
| **CHN3** | **Shinhua** baz=259 | **4.62** | **257** | ⇓*i*P | | **Pn** | **13 29 49.7** | **+3.2** |
| **TSEB** | **Hengchuen, Pin** baz=244 | **4.62** | **241** | *e*P | | **Pn** | **13 29 45.7** | **-0.8** |
| TSEB | baz=244 | | | S | | **Sn** | **13 30 37.9** | **-1.1** |
| **SCZT** | **Fangliau** baz=250 | **4.64** | **248** | ⇓*e*P | | **Pn** | **13 29 46.8** | **+0.1** |
| **WSF** | **Szhu** baz=266 | **4.64** | **264** | ⇓P | | **Pn** | **13 29 48.9** | **+2.2** |
| WSF | baz=266 | | | eS | | **Sn** | **13 30 39.0** | **-0.4** |
| **TWM1** | **Shoushan** baz=256 | **4.64** | **254** | ⇑*i*P | | **Pn** | **13 29 49.5** | **+2.7** |
| **TWK1** | **Hengchun** baz=244 | **4.68** | **242** | ⇑*i*P | | **Pn** | **13 29 46.5** | **-0.8** |
| TWK1 | baz=244 | | | S | | **Sn** | **13 30 38.8** | **-1.6** |
| **CHN8** | **Yiju** baz=262 | **4.70** | **260** | ⇑P | | **Pn** | **13 29 48.9** | **+1.4** |
| **HEN** | **Hengchun** baz=245 | **4.70** | **243** | ⇑P | | **Pn** | **13 29 46.9** | **-0.7** |
| HEN | baz=245 | | | eS | | **Sn** | **13 30 37.2** | **-3.8** |
| **SCLT** | **Jiali** baz=260 | **4.75** | **258** | *e*P | | **Pn** | **13 29 49.9** | **+1.7** |
| **TAI1** | **Yung-k'ang** baz=259 | **4.75** | **257** | ⇑*i*P | | **Pn** | **13 29 50.4** | **+2.1** |
| **KAU** | **Kaohsiung** baz=253 | **4.83** | **251** | *e*P | | **Pn** | **13 29 50.8** | **+1.4** |
| **TWP** | **Hsiaoliuchiu** baz=251 | **4.86** | **248** | ⇓*e*P | | **Pn** | **13 29 52.8** | **+3.0** |
| **JTK** | **Tokunoshima** | **4.87** | **42** | ⇓P | | **Pn** | **13 29 47.3** | **-2.6** |
| **WDGT** | **Dungji** baz=262 | **5.21** | **261** | ⇑P | | **Pn** | **13 29 55.1** | **+0.5** |
| **PNG** | **Penghu** baz=265 | **5.25** | **264** | *e*P | | **Pn** | **13 29 56.1** | **+1.0** |
| **JAMN** | **Amaminishikomi** | **5.34** | **40** | P | | **Pn** | **13 29 53.5** | **-2.8** |
| **JMZ** | **Minamidaito 2** | **5.65** | **72** | ⇓P | | Pn | 13 29 56.4 | -4.2 |
| **JAM** | **Amami Oshima** | **5.72** | **42** | P | | **Pn** | **13 29 58.9** | **-2.7** |
| **JTAJ** | **Takarajima** | **6.05** | **35** | P | | **Pn** | **13 30 03.8** | **-2.4** |
| **QZH** | **Quanzhou** | **6.10** | **278** | ⇑*i*Pn | | **Pn** | **13 30 08.0** | **+1.1** |
| QZH | | | | | Sn | **Sn** | **13 31 13.1** | **-2.5** |
| QZH | 25μm,1.8s | | | | SMN | | | |
| QZH | 11μm,1.4s | | | | SME | | | |
| QZH | 250μm,11.0s | | | | LN | | | |
| QZH | 104μm,9.7s | | | | LE | | | |
| QZH | 295μm,19.4s | | | | LZ | | | |
| **KNM** | **Kinmen** baz=273 | **6.22** | **273** | *e*P | | **Pn** | **13 30 10.4** | **+1.9** |
| KNM | baz=273 | | | eS | | **Sn** | **13 31 18.6** | **+0.2** |
| **SGCP** | **Mt. Cagua** | **6.65** | **207** | *e*P | | **Pn** | **13 30 13.3** | **-1.2** |
| SGCP | | | | eS | | Px | 13 30 20.4 | |
| **CVP** | **Callao Caves** | **7.23** | **207** | *e*P | | **Pn** | **13 30 20.8** | **-1.6** |
| **PIP** | **Pasuquin** | **7.28** | **217** | ⇓*i*P | | **Pn** | **13 30 23.1** | **+0.1** |
| **APYP** | **Conner** | **7.35** | **211** | *e*P | | **Pn** | **13 30 22.7** | **-1.2** |
| APYP | | | | eS | | Px | 13 30 48.3 | |
| **PALP** | **Palanan** | **7.59** | **201** | *e*P | | **Pn** | **13 30 26.1** | **-1.3** |
| PALP | | | | eS | | Px | 13 30 51.7 | |
| **JYAK** | **Yakushimahirau** | **7.61** | **37** | P | | Pn | 13 30 23.6 | -3.9 |
| **SIPP** | **Brgy, Tapao** | **7.70** | **216** | ⇑*e*P | | **Pn** | **13 30 30.6** | **+1.9** |
| SIPP | | | | eS | | Px | 13 30 45.4 | |
| **SSE** | **Sheshan** | **7.74** | **333** | Pn | | **Pn** | **13 30 30.6** | **+1.3** |
| SSE | | | | Sn | | **Sn** | **13 31 54.5** | **-1.3** |
| SSE | 940nm,1.5s | | | | SMN | | | |
| SSE | 590nm,1.4s | | | | SME | | | |
| SSE | 56μm,19.8s | | | | LN | | | |
| SSE | 85μm,19.8s | | | | LE | | | |
| SSE | 88μm,18.0s | | | | LZ | | | |
| **ABRA** | **Dolores** | **7.79** | **214** | *e*P | | **Pn** | **13 30 29.1** | **-1.0** |
| **CAUP** | **Cauayan** | **7.92** | **205** | *e*P | | **Pn** | **13 30 32.4** | **+0.7** |
| **SZP** | **Santa** 35μm,1.6s | **8.00** | **215** | *e*Pn | | **Pn** | **13 30 32.8** | **-0.2** |
| **JSJ** | **Shimokoshiki** | **8.41** | **27** | P | | **Pn** | **13 30 37.1** | **-1.5** |
| **BCPH** | **Baguio City Da** | **8.94** | **210** | ⇑*i*P | | **Pn** | **13 30 45.4** | **-0.7** |
| **BALP** | **Baler** | **9.11** | **203** | *e*P | | **Pn** | **13 30 47.4** | **-0.8** |
| **JZO** | **Okuchi** | **9.19** | **30** | ⇓P | | **Pn** | **13 30 47.3** | **-2.0** |
| **JTZ** | **Takazaki** | **9.23** | **33** | P | | Pn | 13 30 46.2 | -3.5 |
| **KSJJU** | **Jeju** SNR=9.4 | **9.25** | **7** | P | | Pn | 13 30 53.5 | +3.4 |
| **KSJJU** | **Jeju** SNR=13 | **9.25** | **7** | P | | **Pn** | **13 30 52.3** | **+2.2** |
| **BOLP** | **Bolinao** | **9.26** | **214** | *e*P | | **Pn** | **13 30 50.3** | **0.0** |
| **PCPH** | **Palayan** | **9.46** | **205** | ⇑*e*P | | Px | 13 31 53.0 | |
| PCPH | | | | eS | | **Sn** | **13 32 32.1** | **-6.0** |
| **NJ2** | **Nanjing** | **9.63** | **326** | *e*P | | **Pn** | **13 30 56.8** | **+1.6** |
| NJ2 | | | | S | | **Sn** | **13 32 40.5** | **-1.8** |
| NJ2 | 1μm,0.8s | | | PMZ | | | | |
| NJ2 | 20μm,7.6s | | | PMZ | | | | |
| NJ2 | 158μm,15.5s | | | LN | | | | |
| NJ2 | 160μm,15.7s | | | LE | | | | |
| NJ2 | 322μm,15.8s | | | LZ | | | | |
| **JUR** | **Ureshino** | **9.76** | **24** | P | | **Pn** | **13 30 57.1** | **+0.1** |
| **JNU** | **Nakatsue** | **10.15** | **28** | P | | **Pn** | **13 31 00.6** | **-1.8** |
| **JNU** | **Nakatsue** 34nm,0.3s,baz=205,slow=4.8,SNR=185 | **10.15** | **28** | Pn | | **Pn** | **13 31 00.6** | **-1.8** |
| JNU | 3.3nm,0.3s,baz=172,slow=14,SNR=2.0 | | | | Sn | **Sn** | **13 32 59.5** | **+4.3** |
| **JNU** | **Nakatsue** 412nm,0.8s | **10.15** | **28** | *e*Pn | | **Pn** | **13 31 00.6** | **-1.8** |
| JNU | | | | | Sn | **Sn** | **13 32 59.5** | **+4.3** |
| **KSWAN** | **Wando** SNR=19 | **10.21** | **7** | P | | Pn | 13 31 07.0 | +3.7 |
| **KSJDO** | **Jindo** SNR=8.2 | **10.26** | **5** | P | | Pn | 13 31 07.6 | +3.7 |
| **KSJDO** | **Jindo** SNR=16 | **10.26** | **5** | P | | **Pn** | **13 31 06.2** | **+2.3** |
| **HKC** | **Hong Kong Obse** | **10.36** | **262** | *i* P | | Pn | 13 31 11.0 | +5.7 |
| **KSHUK** | **Heuksando** SNR=8.1 | **10.43** | **1** | P | | **Pn** | **13 31 09.2** | **+2.9** |
| **KSKOH** | **Goheung** SNR=36 | **10.50** | **9** | P | | **Pn** | **13 31 10.1** | **+2.9** |
| **KSKOH** | **Goheung** SNR=36 | **10.50** | **9** | P | | **Pn** | **13 31 10.1** | **+2.9** |
| **GQP** | **Guinayangan** | **10.59** | **195** | ⇓*e*P | | **Pn** | **13 31 09.3** | **+0.7** |
| **PVCP** | **Virac** | **10.62** | **186** | *e*P | | **Pn** | **13 31 06.2** | **-2.7** |
| **LQP** | **Lukban** | **10.64** | **200** | ⇑*e*P | | **Pn** | **13 31 07.5** | **-1.9** |
| **KSNAH** | **Namhae** SNR=42 | **10.82** | **12** | P | | **Pn** | **13 31 13.3** | **+1.8** |
| **KSNAH** | **Namhae** SNR=42 | **10.82** | **12** | P | | **Pn** | **13 31 13.3** | **+1.8** |
| **TGY** | **Tagaytay City** | **10.85** | **203** | ⇑*e*P | | **Pn** | **13 31 12.7** | **+0.6** |
| **KSTOY** | **TONGYEONG** SNR=29 | **10.95** | **14** | P | | **Pn** | **13 31 14.7** | **+1.4** |
| **KSTOY** | **TONGYEONG** SNR=29 | **10.95** | **14** | P | | **Pn** | **13 31 14.7** | **+1.4** |
| **GZH** | **Guangzhou** | **10.97** | **267** | P | | Pn | 13 31 09.9 | -3.8 |
| GZH | | | | S | | Sn | 13 33 05.5 | -10 |
| **KSKWJ** | **Gwangju** SNR=22 | **11.01** | **7** | P | | Pn | 13 31 17.5 | +3.4 |
| **KSKWJ** | **Gwangju** SNR=22 | **11.01** | **7** | P | | Pn | 13 31 17.5 | +3.4 |
| **KSGWJ** | **Gwangju-acc** SNR=14 | **11.01** | **7** | P | | Pn | 13 31 17.7 | +3.6 |
| **KSGWJ** | **Gwangju-acc** SNR=14 | **11.01** | **7** | P | | Pn | 13 31 17.7 | +3.6 |
| **AUQP** | **San Andres** | **11.11** | **193** | *e*P | | **Pn** | **13 31 16.3** | **+0.8** |
| **KSJIN** | **Jinju** SNR=18 | **11.17** | **12** | P | | **Pn** | **13 31 18.3** | **+2.0** |
| **KSJIN** | **Jinju** SNR=18 | **11.17** | **12** | P | | **Pn** | **13 31 18.3** | **+2.0** |
| **KSJEU** | **Jeongeup** SNR=36 | **11.33** | **7** | P | | Pn | 13 31 22.0 | +3.5 |
| **KSJEU** | **Jeongeup** SNR=23 | **11.33** | **7** | P | | **Pn** | **13 31 21.6** | **+3.0** |
| **LUBP** | **Lubang** | **11.45** | **205** | *e*P | | Pn | 13 31 24.8 | +4.6 |
| **KSBUS** | **Busan** SNR=7.5 | **11.49** | **16** | P | | **Pn** | **13 31 21.6** | **+0.9** |
| **KSBUS** | **Busan** SNR=7.5 | **11.49** | **16** | P | | **Pn** | **13 31 21.6** | **+0.9** |
| **WHN** | **Wuhan** | **11.55** | **305** | ⇓P | | **Pn** | **13 31 23.6** | **+2.0** |
| WHN | | | | pP | | | 13 31 31.9 | |
| WHN | | | | S | | Sn | 13 33 43.0 | +14 |
| WHN | 118μm,7.9s | | | LN | | | | |
| WHN | 90μm,10.2s | | | LE | | | | |
| WHN | 130μm,13.6s | | | LZ | | | | |
| **CNP** | **Catarman** | **11.66** | **183** | *e*P | | **Pn** | **13 31 24.0** | **+0.9** |
| **KSJEO** | **Jeonju** SNR=27 | **11.81** | **8** | P | | **Pn** | **13 31 28.0** | **+2.9** |
| **KSGUS** | **GUNSAN** SNR=32 | **11.85** | **6** | P | | **Pn** | **13 31 28.8** | **+3.1** |
| **KSGUS** | **GUNSAN** SNR=32 | **11.85** | **6** | P | | **Pn** | **13 31 28.8** | **+3.1** |
| **KSDAG** | **Daegu** SNR=17 | **11.94** | **14** | P | | **Pn** | **13 31 27.9** | **+1.1** |
| **KSYOC** | **YEONGCHEON** SNR=17 | **12.14** | **14** | P | | **Pn** | **13 31 31.1** | **+1.5** |
| **KSCPR** | **CHUPUNGNYEONG** SNR=25 | **12.19** | **10** | P | | **Pn** | **13 31 33.0** | **+2.7** |
| **KSTEJ** | **Daejeon** SNR=20 | **12.25** | **8** | P | | **Pn** | **13 31 33.6** | **+2.6** |
| **TJN** | **Taejon** | **12.26** | **8** | *ce*P | | **Pn** | **13 31 32.6** | **+1.4** |
| **KSKOJ** | **Gongju** SNR=79 | **12.32** | **7** | P | | **Pn** | **13 31 34.6** | **+2.5** |
| **KSSAJ** | **Sangju** SNR=15 | **12.41** | **11** | P | | **Pn** | **13 31 34.7** | **+1.5** |
| **KSBON** | **Boeun** SNR=37 | **12.44** | **10** | P | | **Pn** | **13 31 36.1** | **+2.4** |
| **KSEUS** | **ULSEONG** SNR=17 | **12.45** | **13** | P | | **Pn** | **13 31 35.9** | **+2.1** |
| **KSPHA** | **Pohang** SNR=14 | **12.45** | **16** | P | | **Pn** | **13 31 34.9** | **+1.0** |
| **KSCEJ** | **CHEONGJU** SNR=22 | **12.52** | **8** | P | | **Pn** | **13 31 36.9** | **+2.1** |
| **KSSES** | **Seosan** SNR=9.6 | **12.57** | **4** | P | | **Pn** | **13 31 38.0** | **+2.5** |
| **KSCEA** | **Cheonan** SNR=51 | **12.68** | **7** | P | | **Pn** | **13 31 39.1** | **+2.1** |
| **RCP** | **Rexas** | **12.81** | **191** | ⇑*e*P | | **Pn** | **13 31 39.4** | **+0.5** |
| **KSCHJ** | **Chungju** SNR=33 | **12.83** | **10** | P | | **Pn** | **13 31 41.8** | **+2.8** |
| **KSULJ** | **Uljin** SNR=11 | **12.95** | **15** | P | | **Pn** | **13 31 42.2** | **+1.6** |
| **PLP** | **Palo** | **12.98** | **181** | ⇓*e*P | | **Pn** | **13 31 41.5** | **+0.2** |
| **BUSP** | **Coron** | **13.06** | **202** | *e*P | | **Pn** | **13 31 41.1** | **-1.2** |
| **KSSWO** | **Suwon** SNR=25 | **13.09** | **6** | P | | **Pn** | **13 31 44.4** | **+1.8** |
| **KSICN** | **Icheon** SNR=21 | **13.16** | **8** | P | | **Pn** | **13 31 45.6** | **+2.0** |
| **KSYOW** | **Yeongwol** SNR=11 | **13.20** | **11** | P | | **Pn** | **13 31 46.7** | **+2.5** |
| **KSTBA** | **Taebaek** SNR=41 | **13.25** | **13** | P | | **Pn** | **13 31 46.0** | **+1.2** |
| **INCN** | **Inchon** 909nm,1.4s | **13.28** | **5** | *e*P | | **Pn** | **13 31 45.9** | **+0.8** |
| **KSSEO** | **Seoul** SNR=15 | **13.30** | **6** | P | | **Pn** | **13 31 47.5** | **+2.0** |
| **KSWJU** | **Wonju** SNR=24 | **13.36** | **10** | P | | **Pn** | **13 31 48.5** | **+2.2** |
| **KSAR** | **Wonju Array Be** | **13.37** | **9** | P | | **Pn** | **13 31 44.6** | **-1.9** |
| KSAR | | | | | | | 13 34 15.6 | |
| **KSAR** | **Wonju Array Be** | **13.37** | **9** | Pn | | **Pn** | **13 31 44.5** | **-1.9** |
| KSAR | | | | Sn | | **Sn** | **13 34 15.6** | **+1.6** |
| **KSRS** | **Korea Array** 3.4nm,0.3s,baz=188,slow=13,SNR=283 | **13.39** | **9** | Pn | | **Pn** | **13 31 44.5** | **-2.1** |
| KSRS | baz=182,slow=19,SNR=2.7 | | | | Sn | **Sn** | **13 34 15.6** | **+1.2** |
| KSRS | comp=Z,55μm,20.0s,baz=193,slow=38 | | | | LR | LR | 13 37 03.6 | |
| **KSRS** | **Korea Array** | **13.39** | **9** | P | | **Pn** | **13 31 44.6** | **-2.1** |
| KSRS | | | | | | | 13 34 15.6 | |
| KSRS | comp=Z,3.0nm,0.3s | | | pmax | | pmax | | |
| KSRS | comp=Z,55μm,20.0s | | | MLR | | MLR | | |
| **KSGAH** | **Ganghwa** SNR=7.9 | **13.49** | **4** | P | | **Pn** | **13 31 49.4** | **+1.4** |
| **KSJES** | **JEONGSEON** SNR=6.9 | **13.49** | **12** | P | | **Pn** | **13 31 49.4** | **+1.3** |
| **KSMUS** | **Musan** SNR=11 | **13.69** | **5** | P | | **Pn** | **13 31 53.1** | **+2.3** |
| **KSCHC** | **Chuncheon** SNR=23 | **13.69** | **9** | P | | **Pn** | **13 31 52.5** | **+1.7** |
| **KSBAR** | **Backryungdo** SNR=8.7 | **13.72** | **358** | P | | Pn | 13 31 55.2 | +4.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KSDDC | Dongducheon | 13.73 | 6 | P | Pn | 13 31 53.7 | +2.4 |
| | SNR=14 | | | | | | |
| KSDGY | Daegwallycong | 13.75 | 12 | P | Pn | 13 31 53.2 | +1.6 |
| | SNR=5.7 | | | | | | |
| GUIM | Jordan | 13.75 | 191 | eP | Pn | 13 31 54.2 | +2.5 |
| YNCB | YEONCHEON | 13.85 | 6 | P | Pn | 13 31 55.3 | +2.3 |
| | SNR=9.8 | | | | | | |
| TIA | Tai'an | 13.86 | 331 | ⇑P | Pn | 13 31 55.9 | +2.9 |
| TIA | | | | S | Sn | 13 34 31.6 | +5.9 |
| TIA | | | | PMZ | | | |
| | comp=Z,750nm,1.0s | | | | | | |
| TIA | | | | PMZ | | | |
| | comp=Z,21µm,8.6s | | | | | | |
| TIA | | | | LN | | | |
| | comp=Z,54µm,22.0s | | | | | | |
| TIA | | | | LE | | | |
| | comp=Z,34µm,21.0s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=Z,69µm,23.0s | | | | | | |
| CUYO | Cuyo Island | 13.89 | 198 | eP | Pn | 13 31 53.8 | +0.2 |
| KSIJA | INJE | 13.94 | 9 | P | Pn | 13 31 56.4 | +2.2 |
| | SNR=65 | | | | | | |
| KSJMJ | Jumunjin | 13.95 | 12 | P | Pn | 13 31 55.6 | +1.3 |
| | SNR=15 | | | | | | |
| KSCWO | Cheorwon | 13.96 | 7 | P | Pn | 13 31 56.5 | +2.0 |
| | SNR=14 | | | | | | |
| ENPP | El Nido | 14.07 | 204 | eP | Pn | 13 31 55.2 | -0.9 |
| SEHB | SEOHWA | 14.24 | 10 | P | Pn | 13 32 00.5 | +2.3 |
| | SNR=20 | | | | | | |
| KSSKC | Sokcho | 14.30 | 10 | P | Pn | 13 31 59.8 | +0.7 |
| | SNR=15 | | | | | | |
| SNPH | Sibulan | 14.92 | 188 | ⇓iP | P | 13 32 15.4 | +2.6 |
| DL2 | Dalian | 14.96 | 349 | P | Pn | 13 32 09.8 | +1.8 |
| DL2 | | | | S | Sn | 13 34 54.7 | +2.1 |
| DL2 | | | | PMZ | | | |
| | comp=Z,2µm,0.9s | | | | | | |
| DL2 | | | | PMZ | | | |
| | comp=Z,6µm,9.3s | | | | | | |
| JAO | Obara | 15.15 | 41 | P | P | 13 32 16.6 | +1.2 |
| BUTP | Butuan | 15.17 | 179 | eP | Pn | 13 32 12.7 | +1.9 |
| QIZ | Qiongzhong | 15.22 | 253 | P | Pn | 13 32 10.9 | -0.7 |
| QIZ | | | | S | Sn | 13 34 52.4 | -6.9 |
| QIZ | | | | LN | | | |
| | comp=Z,62µm,19.7s | | | | | | |
| QIZ | | | | LE | | | |
| | comp=Z,20µm,19.4s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,73µm,19.2s | | | | | | |
| QIZ | Qiongzhong | 15.22 | 253 | eP | P | 13 32 14.4 | -1.8 |
| | comp=Z,1µm,1.6s | | | | | | |
| ENH | Enshi | 15.26 | 297 | eP | P | 13 32 14.7 | -1.9 |
| | comp=Z,544nm,1.0s | | | | | | |
| JGF | Kuroka | 15.44 | 40 | P | P | 13 32 18.9 | +0.3 |
| JHHJ | Haha-jima-NKT | 15.48 | 78 | P | Pn | 13 32 16.1 | +1.1 |
| JHJ | Hachijo jima 2 | 15.52 | 52 | Pn | Pn | 13 32 14.7 | -0.8 |
| | comp=Z,137nm,0.3s,baz=230,slow=14,SNR=20 | | | | | | |
| JHJ | | | | Sn | Sn | 13 35 10.5 | +4.2 |
| | comp=Z,5.1nm,0.3s,baz=74,slow=20,SNR=1.7 | | | | | | |
| CBIJ | Chichi jima | 15.54 | 76 | P | Pn | 13 32 16.0 | +0.3 |
| CBIJ | Chichi jima | 15.54 | 76 | eP | Pn | 13 32 11.3 | -4.4 |
| | comp=Z,2µm,1.1s | | | | | | |
| JHJ2 | Mitsune | 15.54 | 52 | eP | Pn | 13 32 16.1 | +0.4 |
| | comp=Z,814nm,1.0s | | | | | | |
| PPR | Puerto Princes | 15.65 | 205 | ⇑eP | Pn | 13 32 16.6 | -0.6 |
| JKO | Kozu shima | 15.66 | 47 | P | Pn | 13 32 15.5 | -1.7 |
| CGP | Cagayan de Oro | 15.68 | 182 | eP | Pn | 13 32 16.3 | -1.3 |
| JIZS | Izushimoda | 15.80 | 45 | P | Pn | 13 32 18.6 | -0.5 |
| BIPH | Bislig | 15.98 | 176 | ⇑eP | Pn | 13 32 20.4 | -1.0 |
| JNT | Takato | 16.09 | 41 | P | P | 13 32 27.2 | +1.3 |
| JTT | Ttatey | 16.14 | 37 | P | P | 13 32 26.9 | +0.6 |
| BUKP | Musuan | 16.25 | 181 | eP | Pn | 13 32 25.3 | +0.5 |
| PAGZ | Pagadian | 16.38 | 187 | eP | P | 13 32 28.9 | -0.1 |
| JNG | Nsakai | 16.43 | 39 | P | P | 13 32 30.0 | +0.4 |
| IPIL | Ipil | 16.54 | 189 | eP | P | 13 32 31.2 | +0.4 |
| MAJO | Matsushiro | 16.59 | 39 | P | Pn | 13 32 26.0 | -3.1 |
| MAJO | Matsushiro | 16.59 | 39 | eP | Pn | 13 32 29.1 | 0.0 |
| | comp=Z,2µm,0.9s | | | | | | |
| MAT | Matsushiro | 16.59 | 39 | P | Pn | 13 32 24.3 | -4.8 |
| MAT | | | | S | Sn | 13 35 35.2 | +3.0 |
| MAT | Matsushiro | 16.59 | 39 | P | P | 13 32 31.4 | +0.1 |
| MJAR | Matsushiro Arr | 16.59 | 39 | Pn | Pn | 13 32 24.2 | -4.8 |
| | comp=Z,1.4nm,0.3s,baz=234,slow=14,SNR=31 | | | | | | |
| MJAR | | | | Sn | Sn | 13 35 34.1 | +1.8 |
| | baz=270,slow=26,SNR=1.9 | | | | | | |
| MJAR | | | | LR | LR | 13 39 29.3 | |
| | comp=Z,27µm,19.0s,baz=220,slow=40 | | | | | | |
| JRY | Ryogami san | 16.64 | 42 | P | P | 13 32 35.3 | +3.4 |
| JGK | Kuni | 16.85 | 40 | P | P | 13 32 35.4 | +1.1 |
| CTBH | Cotabato--PC H | 16.93 | 183 | ⇑iP | P | 13 32 37.2 | +2.1 |
| GYA | Guiyang | 16.95 | 281 | ⇓iP | P | 13 32 35.3 | -0.2 |
| GYA | | | | pP | pP | 13 32 41.0 | -3.1 |
| GYA | | | | PP | pwP | 13 32 47.4 | +3.3 |
| GYA | | | | S | Sn | 13 35 39.2 | -2.1 |
| GYA | | | | SS | SnSn | 13 35 59.7 | +5.1 |
| GYA | | | | PMZ | | | |
| | comp=Z,400nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,10µm,9.7s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,89µm,14.7s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,28µm,14.1s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,55µm,16.3s | | | | | | |
| JJN | Nakama | 16.96 | 38 | P | P | 13 32 36.0 | +0.7 |
| KCP | Kidapawan | 17.11 | 181 | eP | P | 13 32 37.6 | +0.3 |
| MATI | Mati | 17.20 | 177 | eP | Pn | 13 32 36.6 | -0.2 |
| XAN | Xi'an | 17.28 | 308 | P | Pn | 13 32 38.0 | +0.2 |
| XAN | | | | pP | pP | 13 32 46.0 | -1.6 |
| XAN | | | | S | Sn | 13 35 51.7 | +2.6 |
| XAN | | | | PMZ | | | |
| | comp=Z,640nm,0.9s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,15µm,7.5s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,27µm,9.8s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,57µm,18.3s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,52µm,16.0s | | | | | | |
| TIY | Taiyuan | 17.35 | 324 | ⇑iP | P | 13 32 41.0 | +1.3 |
| TIY | | | | PP | PnPn | 13 32 56.0 | +7.0 |
| TIY | | | | S | Sn | 13 35 51.9 | +1.2 |
| TIY | | | | PMZ | | | |
| | comp=Z,19µm,5.1s | | | | | | |
| TIY | | | | LN | | | |
| | comp=Z,47µm,12.3s | | | | | | |
| TIY | | | | LE | | | |
| | comp=Z,20µm,13.0s | | | | | | |
| TIY | | | | LZ | | | |
| | comp=Z,62µm,14.9s | | | | | | |
| JKT | Katashina | 17.35 | 41 | P | Pn | 13 32 39.0 | +0.3 |
| BJT | Baijiatuau | 17.51 | 336 | eP | P | 13 32 41.4 | -0.1 |
| BJT | | | | pmax | pmax | | |
| | comp=Z,268nm,0.6s | | | | | | |
| BJT | Baijiatuau | 17.51 | 336 | eP | P | 13 32 41.4 | -0.1 |
| | comp=Z,268nm,0.6s | | | | | | |
| BJI | Beijing | 17.53 | 336 | P | P | 13 32 41.8 | +0.2 |
| BJI | | | | S | Sn | 13 35 53.9 | -1.1 |
| BJI | | | | PMZ | | | |
| | comp=Z,410nm,2.0s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,20µm,4.1s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,45µm,22.6s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,77µm,23.2s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,66µm,25.2s | | | | | | |
| JHK | Hiroka | 17.55 | 39 | P | Pn | 13 32 41.0 | 0.0 |
| JIZZ | Izumozaki | 17.57 | 38 | P | P | 13 32 42.8 | +0.7 |
| SNY | Shenyang | 17.62 | 356 | ⇑P | P | 13 32 42.5 | -0.1 |
| SNY | | | | PP | PnPn | 13 32 57.7 | +5.0 |
| SNY | | | | S | Sn | 13 35 55.8 | -1.2 |
| SNY | | | | PMZ | | | |
| | comp=Z,430nm,1.1s | | | | | | |
| SNY | | | | PMZ | | | |
| | comp=Z,11µm,4.7s | | | | | | |
| SNY | | | | LE | | | |
| | comp=Z,115µm,22.1s | | | | | | |
| SNY | | | | LZ | | | |
| | comp=Z,69µm,19.2s | | | | | | |
| JSD | Sado | 17.69 | 36 | P | Pn | 13 32 42.7 | 0.0 |
| JSB | Shiboa | 17.89 | 41 | P | Pn | 13 32 44.5 | -0.8 |
| GSPH | General Santos | 18.03 | 181 | ⇑iP | P | 13 32 49.9 | +2.4 |
| JHO | Hitachi | 18.06 | 43 | P | Pn | 13 32 44.7 | -2.6 |
| JNS | Sasagawa | 18.11 | 38 | P | Pn | 13 32 46.6 | -1.4 |
| MSHR | Mys Shultsa | 18.96 | 14 | ceP | Pn | 13 32 57.9 | -0.2 |
| KDM | Kudat | 19.00 | 207 | ⇓P | Pn | 13 33 01.5 | +2.5 |
| CN2 | Changchun | 19.54 | 0 | eP | P | 13 33 02.6 | -1.0 |
| CN2 | | | | esP | sP | 13 33 16.9 | +0.4 |
| CN2 | | | | eS | S | 13 36 35.1 | -7.3 |
| CN2 | | | | PMZ | | | |
| | comp=Z,400nm,1.0s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,8µm,8.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,30µm,18.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,61µm,18.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,32µm,18.0s | | | | | | |
| VLA | Vladivostok | 19.63 | 15 | ⇑iP | P | 13 33 04.4 | -0.3 |
| VLA | | | | eS | S | 13 36 44.8 | +0.4 |
| VLA | | | | pmax | pmax | | |
| | comp=Z,51nm,0.9s | | | | | | |
| VLA | | | | MLR | MLR | | |
| | comp=E,554µm,12.0s | | | | | | |
| MYLDM | Lahad Datu | 20.01 | 200 | ⇓P | Pn | 13 33 13.3 | +2.4 |
| SDKM | Sandakan | 20.03 | 204 | ⇑P | Pn | 13 33 11.5 | +0.3 |
| KKM | Kota Kinabalu | 20.05 | 207 | ⇓P | Pn | 13 33 13.2 | +1.7 |
| KKM | Kota Kinabalu | 20.05 | 207 | PFAKE | | 13 33 20.0 | +8.5 |
| KKM | | | | LR | LR | | |
| | comp=Z,62µm,21.0s | | | | | | |
| HHC | Hu-ho-hao-te | 20.16 | 329 | ⇑iP | P | 13 33 11.3 | +0.7 |
| HHC | | | | PP | PnPn | 13 33 32.2 | +4.6 |
| HHC | | | | S | S | 13 36 56.8 | +1.5 |
| HHC | | | | sS | sS | 13 37 04.8 | -4.3 |
| HHC | | | | SS | SnSn | 13 37 24.1 | +11 |
| HHC | | | | PMZ | | | |
| | comp=Z,1µm,1.0s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,9µm,5.0s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,44µm,14.9s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,35µm,18.7s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,48µm,17.4s | | | | | | |
| CD2 | Chengdu | 20.17 | 294 | P | P | 13 33 10.7 | 0.0 |
| CD2 | | | | pP | pP | 13 33 19.9 | +0.4 |
| CD2 | | | | sP | sP | 13 33 24.7 | +1.1 |
| CD2 | | | | S | S | 13 36 55.8 | +0.3 |
| CD2 | | | | sS | sS | 13 37 11.2 | +1.8 |
| CD2 | | | | PMZ | | | |
| | comp=Z,2µm,0.8s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,15µm,5.5s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,107µm,10.8s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,98µm,11.7s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,92µm,16.6s | | | | | | |
| KMI | Kunming | 20.48 | 277 | P | Pn | 13 33 17.0 | +0.3 |
| KMI | | | | pP | pP | 13 33 25.7 | +2.7 |
| KMI | | | | sP | sP | 13 33 30.6 | +3.4 |
| KMI | | | | PP | PnPn | 13 33 35.2 | +3.1 |
| KMI | | | | S | Sn | 13 37 04.7 | -2.1 |
| KMI | | | | PMZ | | | |
| | comp=Z,610nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,7µm,3.7s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,34µm,13.0s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,79µm,16.1s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,82µm,15.6s | | | | | | |
| UBPT | Khong Chiam | 20.61 | 248 | P | Pn | 13 33 18.9 | +0.9 |
| | comp=Z,937nm,2.0s,comp=Z,31µm | | | | | | |
| MDJ | Mudanjiang | 20.66 | 9 | P | P | 13 33 15.9 | +0.1 |
| MDJ | | | | pP | pP | 13 33 23.8 | -0.8 |
| MDJ | | | | sP | sP | 13 33 28.0 | -0.7 |
| MDJ | | | | S | S | 13 37 02.4 | -2.4 |
| MDJ | | | | sS | sS | 13 37 17.1 | -1.7 |
| MDJ | | | | PMZ | | | |
| | comp=Z,1µm,5.2s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,44µm,17.1s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,50µm,16.8s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,54µm,17.7s | | | | | | |
| MDJ | Mudanjiang | 20.66 | 9 | eP | P | 13 33 14.8 | -1.1 |
| | comp=Z,98nm,0.9s | | | | | | |
| MDJ | | | | LR | LR | | |
| | comp=Z,56µm,19.0s | | | | | | |
| USRK | Ussuriysk Ar. | 20.68 | 14 | P | P | 13 33 14.2 | -1.9 |
| | comp=Z,34nm,0.6s,baz=194,slow=10,SNR=28 | | | | | | |
| USRK | | | | S | S | 13 37 02.3 | -3.0 |
| | comp=Z,5.0nm,0.9s,baz=177,slow=27,SNR=2.4 | | | | | | |
| BTO | Baotou | 20.74 | 326 | eP | P | 13 33 16.4 | -0.5 |
| TSM | Tawau | 21.05 | 201 | ⇑P | P | 13 33 21.5 | +1.2 |
| SKNT | Sakolnakorn | 21.16 | 254 | P | P | 13 33 24.9 | +3.4 |
| | comp=Z,918nm,1.9s,comp=Z,27µm | | | | | | |
| GUMO | Guam | 21.33 | 116 | P | P | 13 33 24.2 | +0.9 |
| | comp=Z,495nm,1.1s,baz=270,slow=11,SNR=16 | | | | | | |
| GUMO | | | | S | S | 13 37 21.4 | +2.8 |
| | comp=Z,72nm,1.0s,baz=180,slow=20,SNR=2.4 | | | | | | |
| GUMO | | | | LR | LR | 13 39 52.6 | |
| | comp=Z,29µm,20.9s,baz=302,slow=32 | | | | | | |
| GUMO | Guam | 21.33 | 116 | P | P | 13 33 24.2 | +0.9 |
| GUMO | | | | S | S | 13 37 21.4 | +2.8 |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,495nm,1.1s | | | | | | |
| GUMO | | | | smax | smax | | |
| | comp=N,72nm,1.0s | | | | | | |
| GUMO | | | | MLR | MLR | | |
| | comp=Z,29µm,20.9s | | | | | | |
| GUMO | Guam | 21.33 | 116 | eP | P | 13 33 25.2 | +1.9 |
| GUMO | | | | S | S | 13 37 21.4 | +2.8 |
| NONG | Nongkai | 21.49 | 258 | P | P | 13 33 28.6 | +3.5 |
| | comp=Z,498nm,1.7s,comp=Z,17µm | | | | | | |
| LZH | Lanzhou | 21.91 | 308 | eP | P | 13 33 30.0 | +0.4 |
| LZH | | | | pP | pP | 13 33 39.7 | +1.3 |
| LZH | | | | sP | sP | 13 33 43.1 | +0.5 |
| LZH | | | | PP | PnPn | 13 33 58.5 | +6.8 |
| LZH | | | | sS | sS | 13 37 44.0 | -0.1 |
| LZH | | | | SS | SnSn | 13 38 04.6 | +8.1 |
| LZH | | | | PMZ | | | |
| | comp=Z,740nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,5µm,4.0s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,39µm,14.0s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,16µm,14.2s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,82µm,16.1s | | | | | | |
| KHON | Khomkaen | 22.43 | 254 | P | P | 13 33 37.8 | +2.7 |
| | comp=Z,286nm,1.1s,comp=Z,3µm | | | | | | |
| ERM | Erimo | 23.16 | 36 | ceP | P | 13 33 40.0 | -2.5 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,1µm,0.9s | | | | | | |
| ERM | | | | MLR | MLR | | |
| | comp=Z,36µm,17.0s | | | | | | |
| ERM | Erimo | 23.16 | 36 | P | P | 13 33 40.2 | -2.3 |
| | comp=Z,8µm,0.9s,SNR=58 | | | | | | |
| ERM | Erimo | 23.16 | 36 | eP | P | 13 33 39.9 | -2.6 |
| | comp=Z,1µm,1.0s | | | | | | |
| ERM | | | | LR | LR | | |
| | comp=Z,40µm,19.0s | | | | | | |
| CRAI | Chiangrai | 23.36 | 265 | P | P | 13 33 41.1 | -3.6 |
| | comp=Z,473nm,2.1s,comp=Z,17µm | | | | | | |
| LOEI | Loei | 23.37 | 258 | P | P | 13 33 42.7 | -2.1 |
| | comp=Z,472nm,2.1s,comp=Z,21µm | | | | | | |
| TNTI | Ternate | 23.40 | 175 | eP | P | 13 33 46.0 | +1.0 |
| | comp=Z,6µm,1.3s | | | | | | |
| UTTA | Uttaradit | 23.92 | 259 | P | P | 13 33 51.1 | +1.0 |
| | comp=Z,38nm,1.0s,comp=Z,564nm | | | | | | |
| BTM | Bintulu | 23.97 | 211 | ⇑P | P | 13 33 51.0 | +0.5 |
| PBKT | Sadao Pong | 23.97 | 256 | P | P | 13 33 51.9 | +1.4 |
| | comp=Z,561nm,2.1s,comp=Z,29µm | | | | | | |
| MPSI | Mapaga | 24.30 | 193 | P | P | 13 33 53.8 | +0.3 |
| | comp=Z,535nm,1.9s,comp=Z,11µm | | | | | | |
| ASAJ | Asahikawa | 24.40 | 31 | P | P | 13 33 53.3 | -1.0 |
| | comp=Z,327nm,0.9s,baz=230,slow=11 | | | | | | |
| ASAJ | | | | S | S | 13 38 11.3 | -0.5 |
| | comp=Z,46nm,1.0s,baz=195,slow=20,SNR=5.2 | | | | | | |
| ASAJ | Asahikawa | 24.40 | 31 | P | P | 13 33 53.3 | -1.0 |
| ASAJ | | | | S | S | 13 38 11.3 | -0.5 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,327nm,0.9s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,47nm,1.0s | | | | | | |
| ASAJ | Asahikawa | 24.40 | 31 | eP | P | 13 33 53.3 | -1.0 |
| | comp=N,545nm,1.3s | | | | | | |
| ASAJ | | | | S | S | 13 38 11.3 | -0.5 |
| CMAI | Chiengmai2 | 24.64 | 265 | P | P | 13 33 58.2 | +1.3 |
| | comp=N,310nm,1.2s,comp=N,8µm | | | | | | |
| CHTO | Chiang Mai | 25.04 | 263 | P | P | 13 34 01.0 | +0.7 |
| | comp=N,1µm,1.4s,comp=N,32µm | | | | | | |
| CHTO | Chiang Mai | 25.04 | 263 | eP | P | 13 34 01.4 | +1.1 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,606nm,1.3s | | | | | | |
| CHTO | | | | MLR | MLR | | |
| | comp=Z,31µm,19.0s | | | | | | |
| CHTO | Chiang Mai | 25.04 | 263 | P | P | 13 34 01.7 | +1.4 |
| | SNR=125 | | | | | | |
| CHTO | Chiang Mai | 25.04 | 263 | eP | P | 13 34 01.4 | +1.1 |
| | comp=Z,606nm,1.3s | | | | | | |
| CHTO | | | | LR | LR | | |
| | comp=Z,31µm,19.0s | | | | | | |
| SBUM | Sibu | 25.04 | 212 | ⇑P | P | 13 34 02.0 | +1.7 |
| CMAR | Chiang Mai Arr | 25.14 | 262 | P | P | 13 34 01.2 | -0.1 |
| | comp=Z,89nm,1.0s,baz=61,slow=7.0,SNR=4.4 | | | | | | |
| CMAR | | | | PcP | PcP | 13 37 35.8 | +0.8 |
| | comp=Z,21nm,0.8s,baz=70,slow=0.9,SNR=8.6 | | | | | | |
| CMAR | | | | S | S | 13 38 25.8 | +1.6 |
| | comp=Z,3.4nm,0.8s,baz=58,slow=1.5,SNR=2.2 | | | | | | |
| CMAR | | | | LR | LR | 13 45 23.0 | |
| | comp=Z,41µm,19.1s,baz=78,slow=40 | | | | | | |
| LUWI | Luwuk | 25.22 | 186 | eP | P | 13 34 01.0 | -0.9 |
| | comp=Z,2µm,1.3s | | | | | | |
| HABR | Khabarovsk | 25.42 | 15 | ⇑eP | P | 13 34 00.9 | -2.5 |
| HABR | | | | e*SP | sP | 13 34 07.4 | -9.4 |
| HABR | | | | ePPP | PPP | 13 34 43.3 | |
| HABR | | | | e | | 13 37 33.3 | |
| HABR | | | | eS | S | 13 38 27.3 | -0.7 |
| HABR | | | | e*SS | sS | 13 38 35.1 | -8.5 |
| HABR | | | | eSS | SnSn | 13 39 19.8 | -2.0 |
| HABR | | | | e | | 13 45 00.6 | |
| HABR | | | | pmax | pmax | | |
| | comp=N,232nm,2.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,231nm,2.4s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,172nm,2.4s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,902nm,2.5s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=N,28µm,18.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,41µm,18.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=E,23µm,14.0s | | | | | | |
| KLR | Kul'dur | 25.48 | 10 | eP | P | 13 33 58.2 | -5.8 |
| KLR | | | | e | | 13 34 10.3 | |
| KLR | | | | eS | S | 13 38 19.0 | -10 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,250nm,1.8s | | | | | | |
| KLR | | | | MLR | MLR | | |
| | comp=E,24µm,11.0s | | | | | | |
| KLR | | | | MLR | MLR | | |
| | comp=Z,73µm,11.0s | | | | | | |
| PCI | Palu | 25.52 | 193 | P | P | 13 34 05.7 | +1.1 |
| | comp=Z,2µm,1.4s,comp=Z,28µmcomp=Z,48µm | | | | | | |
| SIJI | Sorong | 25.61 | 166 | P | P | 13 34 06.0 | +0.5 |
| | comp=Z,152nm,0.7s,baz=3.7,slow=11,SNR=46 | | | | | | |
| SIJI | | | | S | S | 13 38 42.8 | +11 |
| | comp=Z,6.0nm,0.8s,baz=300,slow=20,SNR=1.7 | | | | | | |
| SIJI | | | | LR | LR | 13 42 25.2 | |
| | comp=Z,34µm,20.8s,baz=356,slow=32 | | | | | | |
| PATY | Pattaya | 25.65 | 248 | P | P | 13 34 09.1 | +3.2 |
| | comp=Z,27nm,1.0s,comp=Z,3µm | | | | | | |
| UTHA | Uthaitani | 25.71 | 255 | P | P | 13 34 08.1 | +1.7 |
| | comp=Z,68nm,0.9s,comp=Z,682nm | | | | | | |
| UMPA | Umpang Tak | 25.98 | 257 | P | P | 13 34 11.7 | +2.8 |
| | comp=Z,66nm,1.1s,comp=Z,1µm | | | | | | |
| YUK | Yuzh-Kuril'sk | 25.98 | 35 | c iP | P | 13 34 07.6 | -1.0 |
| YUK | | | | i | | 13 34 43.1 | |
| YUK | | | | i S | S | 13 38 41.8 | +4.8 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,8µm,3.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,3µm,1.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,1µm,0.7s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,1µm,0.7s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=N,12µm,22.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=E,22µm,22.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,23µm,22.0s | | | | | | |
| GTA | Gaotai | 26.27 | 311 | ⇑P | P | 13 34 10.6 | -0.9 |
| GTA | | | | pP | pP | 13 34 19.9 | -1.0 |
| GTA | | | | sP | sP | 13 34 23.8 | -1.1 |
| GTA | | | | PP | PnPn | 13 34 56.1 | +4.9 |
| GTA | | | | PcP | PcP | 13 37 36.9 | -0.5 |
| GTA | | | | S | S | 13 38 41.9 | -0.1 |
| GTA | | | | sS | sS | 13 38 57.4 | -0.3 |
| GTA | | | | SS | SnSn | 13 39 54.2 | +11 |
| GTA | | | | PMZ | | | |
| | comp=Z,320nm,1.1s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,5µm,5.8s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,35µm,14.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,46µm,15.7s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,33µm,21.9s | | | | | | |
| BKB | Balikpapan | 26.59 | 199 | P | P | 13 34 17.5 | +3.2 |
| | comp=Z,2µm,1.8s,comp=Z,36µmcomp=Z,82µm | | | | | | |
| YSS | Yuzh-Sakhalins | 26.66 | 27 | b iP | P | 13 34 13.8 | -0.9 |
| YSS | | | | e*SP | sP | 13 34 25.0 | -3.2 |
| YSS | | | | e | | 13 34 52.0 | |
| YSS | | | | ePPP | PPP | 13 35 12.0 | |
| YSS | | | | i S | S | 13 38 44.0 | -3.7 |
| YSS | | | | eSS | SnSn | 13 39 52.0 | -0.3 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,160nm,1.0s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,3µm,8.0s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,13µm,16.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,44µm,18.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,37µm,18.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,30µm,16.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 26.66 | 27 | eP | P | 13 34 13.6 | -1.2 |
| | comp=E,542nm,0.8s | | | | | | |
| YSS | | | | LR | LR | | |
| | comp=Z,19µm,19.0s | | | | | | |
| PHET | Kaeng Krachan | 26.71 | 250 | P | P | 13 34 17.1 | +1.6 |
| | comp=Z,57nm,1.1s,comp=Z,707nm | | | | | | |
| KSM | Kuching | 26.84 | 215 | ⇑P | P | 13 34 19.6 | +3.0 |
| KSM | Kuching | 26.84 | 215 | eP | P | 13 34 17.4 | +0.8 |
| | comp=Z,2µm,1.5s | | | | | | |
| KSM | | | | LR | LR | | |
| | comp=Z,24µm,19.0s | | | | | | |
| ULN | Ulaanbaatar | 27.67 | 333 | c iP | P | 13 34 22.3 | -1.7 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,273nm,2.5s | | | | | | |
| ULN | | | | MLR | MLR | | |
| | comp=Z,44µm,19.0s | | | | | | |
| ULN | Ulaanbaatar | 27.67 | 333 | P | P | 13 34 22.6 | -1.4 |
| | SNR=86 | | | | | | |
| ULN | Ulaanbaatar | 27.67 | 333 | eP | P | 13 34 21.8 | -2.2 |
| | comp=Z,136nm,0.8s | | | | | | |
| ULN | | | | LR | LR | | |
| | comp=Z,44µm,19.0s | | | | | | |
| FAKI | Fak Fak | 27.82 | 165 | eP | P | 13 34 24.6 | -0.8 |
| | comp=Z,756nm,1.2s | | | | | | |
| KUR | Kuril'sk | 27.85 | 36 | c iP | P | 13 34 27.1 | +1.7 |
| KUR | | | | i | | 13 35 09.0 | |
| KUR | | | | i S | S | 13 38 59.1 | -7.3 |
| KUR | | | | i SS | SnSn | 13 40 21.2 | 0.0 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,4µm,2.8s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,843nm,2.6s | | | | | | |

KUR pmax pmax
comp=N,527nm,2.5s
KUR pmax pmax
comp=E,238nm,2.5s
KUR MLR MLR
comp=N,43µm,22.0s
KUR MLR MLR
comp=E,6µm,22.0s
KUR MLR MLR
comp=Z,17µm,22.0s
**SONM Songino Array 27.92 332** P **P** **13 34 24.8 -1.5**
comp=Z,117nm,0.7s,baz=150,slow=8.8,SNR=98
SONM PcP **PcP** **13 37 41.4 +0.3**
comp=Z,32nm,1.0s,baz=169,slow=1.5,SNR=4.5
SONM S **S** **13 39 10.7 +2.8**
comp=Z,5.5nm,1.0s,baz=120,slow=28,SNR=2.2
SONM LR LR 13 47 08.4
comp=Z,47µm,19.9s,baz=140,slow=40
SONM P3KPbc 14 06 46.8
comp=Z,0.1nm,0.3s,baz=316,slow=4.0,SNR=2.2
**KTGM Kuala Trenggan 28.37 232** ⇓P **P** **13 34 33.5 +3.1**
**KBKI Kotabaru 28.74 199** P **P** **13 34 34.0 +0.4**
comp=Z,301nm,1.9s,comp=Z,8µm
**SRIT Nakonsritamara 29.01 242** P **P** **13 34 37.7 +1.7**
comp=Z,108nm,2.1s,comp=Z,5µm
**CIT Chita 29.17 345** *e*P **P** **13 34 35.5 -1.6**
CIT *e* 13 34 48.5
CIT *e* 13 35 24.6
CIT *e* 13 39 23.2
CIT *e* 13 45 22.7
CIT pmax pmax
comp=Z,859nm,1.8s
**BBKI Banjar Baru 29.32 202** P **P** **13 34 40.0 +1.3**
comp=Z,1µm,1.6s,comp=Z,26µm
**TRTT Trang 29.39 241** P P 13 34 43.0 +3.6
comp=Z,114nm,2.4s,comp=Z,5µm
**KAPI Kappang 29.55 191** P **P** **13 34 41.2 +0.6**
comp=Z,46nm,0.9s,baz=10.0,slow=8.8,SNR=14
KAPI PcP **PcP** **13 37 45.6 +0.2**
comp=Z,29nm,0.7s,baz=285,slow=1.1,SNR=5.0
KAPI S **S** **13 39 37.5 +4.0**
comp=Z,3.0nm,0.4s,baz=18,slow=19,SNR=1.6
KAPI LR LR 13 46 09.9
comp=Z,15µm,21.1s,baz=8.8,slow=36
**KAPI Kappang 29.55 191** P **P** **13 34 40.9 +0.2**
comp=Z,372nm,1.1s,SNR=16
**KAPI Kappang 29.55 191** P **P** **13 34 42.5 +1.8**
SNR=21
**KAPI Kappang 29.55 191** *e*P **P** **13 34 40.4 -0.3**
comp=Z,766nm,1.8s
KAPI PcP **PcP** **13 37 45.6 +0.2**
KAPI S **S** **13 39 37.5 +4.0**
**PBKI Pangkalan Bun 29.84 208** P **P** **13 34 45.1 +1.7**
comp=Z,324nm,1.7s,comp=Z,7µm
**KULM Kulim 30.23 235** ⇑P **P** **13 34 48.8 +1.9**
**KULM Kulim 30.23 235** *e*P **P** **13 34 47.8 +1.0**
comp=Z,364nm,1.2s
KULM LR LR
comp=Z,21µm,19.0s
**SHL Shillong 30.25 280** *e*P **P** **13 34 47.4 +0.1**
SHL AMB AMB 13 34 50.8
comp=Z,616nm,0.0s
**MYKOM Kota Tinggi 30.42 226** ⇑P **P** **13 34 50.8 +2.3**
**PKDT Phuket 30.44 242** P P 13 34 52.0 +3.3
comp=Z,155nm,1.4s,comp=Z,6µm
**IPM Ipoh 30.48 234** *e*P **P** **13 34 49.1 0.0**
comp=Z,553nm,1.0s
**KGM Kluang 30.61 227** ⇓P **P** **13 34 52.2 +2.1**
**TPRI Tanjung Pinang 30.65 224** P **P** **13 34 52.6 +2.1**
comp=Z,385nm,1.6s,comp=Z,33µm
**LSA Lhasa 30.81 288** P **P** **13 34 53.9 +1.5**
LSA sP **sP** **13 35 08.7 +2.8**
LSA S **S** **13 39 51.4 -2.9**
LSA PMZ
comp=Z,130nm,1.1s
LSA LN
comp=Z,39µm,34.2s
LSA LE
comp=Z,22µm,18.2s
LSA LZ
comp=Z,35µm,18.2s
**LSA Lhasa 30.81 288** *e*P **P** **13 34 53.7 +1.3**
LSA pmax pmax
comp=Z,315nm,0.8s
LSA MLR MLR
comp=Z,37µm,19.0s
**LSA Lhasa 30.81 288** *e*P **P** **13 34 53.7 +1.3**
comp=Z,315nm,0.8s
LSA LR LR
comp=Z,37µm,19.0s
**FRIM Kepong 30.90 231** ⇑P **P** **13 34 55.3 +2.6**
**ZAK Zakamensk 31.19 332** *e*P **P** **13 34 52.2 -2.9**
ZAK pmax pmax
comp=Z,47nm,2.1s
**TPI Tanjungpandan 31.81 215** P **P** **13 35 02.2 +1.5**
comp=Z,561nm,1.5s,comp=Z,11µmcomp=Z,37µm
**TLY Talaya 32.04 334***c i*P **P** **13 35 00.9 -1.5**
TLY *e* 13 36 06.8
TLY *e*S **S** **13 40 11.1 -1.0**
TLY pmax pmax
comp=Z,92nm,0.9s
TLY MLR MLR
comp=Z,31µm,17.0s
**TLY Talaya 32.04 334** P **P** **13 35 01.8 -0.6**
comp=Z,602nm,0.9s,SNR=37
**TLY Talaya 32.04 334** P **P** **13 35 01.0 -1.5**
SNR=58
**TLY Talaya 32.04 334** *e*P **P** **13 35 00.8 -1.7**
comp=Z,84nm,0.8s
TLY LR LR
comp=Z,34µm,19.0s
**PPBI Pangkal Pinang 32.13 218** P **P** **13 35 06.3 +2.7**
comp=Z,359nm,1.8s,comp=Z,8µmcomp=Z,26µm
**IRK Irkutsk 32.23 336**⇑ *i*P **P** **13 35 01.8 -2.3**
IRK *e* 13 36 19.1
IRK *e* 13 45 33.3
**DGPR DIGLIPUR 32.44 256** *e*P **P** **13 35 04.6 -1.8**
DGPR AMB AMB 13 35 21.9
comp=Z,277nm,0.3s
**CLNS Chul'man 32.59 360** *e*P **P** **13 35 04.7 -2.5**
CLNS *e**PP **pP** **13 35 16.5 -0.2**
CLNS *e* 13 36 12.5
CLNS *e*PPP PPP 13 36 23.7
CLNS *e* 13 37 51.0
CLNS *e*S **S** **13 40 19.8 -0.8**
CLNS pmax pmax
comp=N,29nm,0.9s
CLNS pmax pmax
comp=E,15nm,0.9s
CLNS pmax pmax
comp=Z,36nm,1.2s
CLNS smax smax
comp=E,1µm,15.3s
CLNS MLR MLR
comp=Z,19µm,13.0s
CLNS MLR MLR
comp=E,11µm,13.0s
CLNS MLR MLR
comp=N,17µm,15.0s
**MMRI Maumere 32.78 186** *e*P **P** **13 35 09.2 0.0**
comp=N,625nm,0.9s
**TSI Tuntungan 32.96 235** P **P** **13 35 13.8 +2.9**
comp=N,564nm,1.1s,comp=N,16µm
**MOY Mondy 33.12 332** *e*P **P** **13 35 10.3 -1.7**
**LHMI Lhok Sumawe 33.12 240** P **P** **13 35 14.0 +1.7**
comp=N,224nm,0.9s
**JMBI JAMBI 33.18 222** P P 13 35 17.0 +4.3
comp=N,3µm,1.3s,comp=N,40µm
**PBA Port Blair 33.26 254** *e*P P 13 35 13.2 -0.3
PBA AMB AMB 13 35 19.1
comp=Z,144nm,0.6s
**BKNI Bangkinang 33.38 228** P **P** **13 35 15.9 +1.4**
comp=Z,2µm,1.1s,comp=Z,18µmcomp=Z,34µm
**BKNI Bangkinang 33.38 228** *e*P **P** **13 35 15.7 +1.2**
comp=Z,2µm,1.1s
**UWJI Ujung Watu 33.49 206** P **P** **13 35 17.2 +1.7**
comp=Z,978nm,1.6s,comp=Z,15µm
**TBJI Tambak Boyo 33.50 205** P P 13 35 18.8 +3.3
comp=Z,592nm,1.8s,comp=Z,15µmcomp=Z,20µm
**PMBI Palembang 33.54 219** P P 13 35 21.8 +6.0
comp=Z,883nm,1.6s,comp=Z,18µmcomp=Z,31µm
**KCSI Kotacane, Aceh 33.55 236** P **P** **13 35 19.0 +3.0**
comp=Z,279nm,2.0s,comp=Z,8µm
**SOEI Soe 33.78 182** *e*P **P** **13 35 15.3 -2.7**
comp=Z,272nm,0.8s
**TAPN Taplejung 33.86 283** *e*P **P** **13 35 20.5 +1.5**
comp=Z,701nm,0.6s

**SDSI Sungai Dareh 34.05 226** P **P** **13 35 22.5 +2.2**
comp=Z,417nm,1.6s,comp=Z,50µm
**MNSI Mandailing Nat 34.06 231** P **P** **13 35 20.9 +0.5**
comp=Z,2µm,1.0s,comp=Z,18µm
**MLSI Meulaboh, Aceh 34.14 239** P **P** **13 35 23.0 +1.9**
comp=Z,446nm,1.1s,comp=Z,8µm
**NGJI Ngawi 34.16 205** P P 13 35 24.4 +3.2
comp=Z,289nm,1.4s,comp=Z,10µm
**ODAN Odare 34.18 283** *e*P **P** **13 35 23.0 +1.3**
comp=Z,3µm,1.3s
**JAGI Jajag, Banyuwa 34.25 200** *e*P **P** **13 35 22.8 +0.8**
comp=Z,1µm,1.6s
**SMRI Semarang 34.27 207** P **P** **13 35 24.7 +2.5**
comp=Z,835nm,1.7s,comp=Z,22µm
**SMRI Semarang 34.27 207** *e*P **P** **13 35 23.9 +1.6**
comp=Z,2µm,1.4s
**BOD Bodaibo 34.53 349** *e*P **P** **13 35 21.6 -2.4**
**CMBY CAMPBELL BAY 34.55 245** *e*P **P** **13 35 23.0 -1.7**
**PWJI Pagerwojo 34.63 204** P **P** **13 35 26.5 +1.2**
comp=Z,328nm,1.4s,comp=Z,8µm
**PDSI Padang 34.68 227** P **P** **13 35 28.1 +2.3**
comp=Z,220nm,2.0s
**WOJI Wonogiri, Jawa 34.79 205** P **P** **13 35 28.1 +1.4**
comp=Z,774nm,1.6s,comp=Z,18µm
**RAMN Ramite 34.88 283** *e*P **P** **13 35 28.8 +1.1**
comp=Z,1µm,1.1s
**LHSI Lahat 34.99 220** P **P** **13 35 31.4 +3.0**
comp=Z,441nm,1.6s,comp=Z,17µm
**UGM Wanagama 35.02 206** P **P** **13 35 30.5 +1.8**
comp=Z,1µm,1.6s,comp=Z,23µm
**PCJI Pacitan 35.02 205** P P 13 35 32.5 +3.8
comp=Z,196nm,2.0s,comp=Z,7µm
**KLI Kotabumi 35.07 217** P **P** **13 35 31.7 +2.5**
comp=Z,948nm,1.3s,comp=Z,16µm
**MDSI Maura Dua 35.15 219** P **P** **13 35 31.6 +1.8**
comp=Z,457nm,1.6s,comp=Z,13µm
**GSI Gunungsitoli 35.16 234** P **P** **13 35 30.4 +0.5**
comp=Z,628nm,1.3s,comp=Z,18µm
**GSI Gunungsitoli 35.16 234** *e*P **P** **13 35 29.7 -0.2**
comp=Z,1µm,1.3s
**MASI Maura Aman, Be 35.22 223** P P 13 35 33.7 +3.2
comp=Z,2µm,1.0s,comp=Z,35µm
**LEM Lembang 35.33 211** P **P** **13 35 32.3 +0.8**
comp=Z,8µm,1.4s,comp=Z,242µm
**KSI Kapahiang 35.41 222** P **P** **13 35 34.5 +2.4**
comp=Z,1µm,1.9s,comp=Z,18µm
**SBJI Serang 35.45 214** P **P** **13 35 35.1 +2.7**
comp=Z,2µm,1.7s,comp=Z,30µm
**GUN Gumba 35.45 285** *e*P **P** **13 35 33.9 +1.1**
comp=Z,2µm,1.0s
**SKR Severo-Kuril's 35.58 34** *e*P P 13 35 28.5 -4.7
SKR *e* 13 35 41.5
SKR *i*S **S** **13 41 04.0 -2.8**
SKR *e*SSS SSS 13 43 58.0
SKR pmax pmax
comp=N,200nm,1.0s
SKR pmax pmax
comp=E,110nm,1.0s
SKR pmax pmax
comp=Z,340nm,1.0s
SKR pmax pmax
comp=N,1µm,3.0s
SKR pmax pmax
comp=E,2µm,3.0s
SKR pmax pmax
comp=Z,4µm,3.0s
SKR smax smax
comp=N,11µm,10.0s
SKR smax smax
comp=E,7µm,10.0s
SKR MLR MLR
comp=N,8µm,20.0s
SKR MLR MLR
comp=E,16µm,20.0s
SKR MLR MLR
comp=Z,16µm,20.0s
**LWLI Liwa 35.65 218** P **P** **13 35 36.3 +2.1**
comp=Z,557nm,1.0s,comp=Z,9µm
**MNAI Manna 35.75 220** *e*P **P** **13 35 36.0 +1.0**
comp=Z,3µm,1.5s
**CMJI Cimerak 35.78 209** P P 13 35 39.2 +4.0
comp=Z,398nm,1.6s,comp=Z,10µm
**KASI Kota Agung 35.82 217** P **P** **13 35 36.6 +1.0**
comp=Z,779nm,1.7s,comp=Z,14µm
**BOK Bokaro 35.88 278** *e*P **P** **13 35 36.5 +0.4**
BOK AMB AMB 13 35 41.3
comp=Z,627nm,1.1s
**PKI Pulchoki 35.89 284** *e*P **P** **13 35 37.2 +0.6**
comp=Z,1µm,1.0s
**PKIN Phulchoki 35.90 284** *e*P **P** **13 35 37.2 +0.6**
comp=Z,225nm,0.6s
**SISI Saibi 35.91 229** P **P** **13 35 36.3 -0.1**
comp=Z,1µm,1.4s,comp=Z,17µm
**CNJI Cibinong 35.98 212** P **P** **13 35 38.8 +1.9**
comp=Z,765nm,1.2s,comp=Z,11µm
**KKN Kakani 35.99 284** *e*P **P** **13 35 38.1 +0.8**
comp=Z,1µm,0.9s
**SKJI Sukabumi 35.99 213** P P 13 35 40.5 +3.4
comp=Z,861nm,1.4s,comp=Z,15µm
**CGJI Cibinong 36.10 214** P **P** **13 35 38.2 +0.3**
comp=Z,322nm,1.4s,comp=Z,7µm
**DMN Daman 36.16 284** *e*P **P** **13 35 39.5 +0.8**
comp=Z,2µm,1.1s
**HVS Khovu-Aksy 36.20 326***c i*P **P** **13 35 38.0 -0.6**
HVS pmax pmax
comp=Z,186nm,0.9s
HVS MLR MLR
comp=Z,57µm,16.0s
**PPSI Pulau Pagai 36.35 226** P P 13 35 43.8 +3.6
comp=Z,2µm,1.4s,comp=Z,27µm
**WMQ Urumqi 36.35 312**⇑ *i*P **P** **13 35 39.5 -0.5**
WMQ pP **pP** **13 35 49.5 -0.1**
WMQ sP **sP** **13 35 53.8 +0.2**
WMQ PP **PP** **13 37 05.6 +2.6**
WMQ PcP **PcP** **13 38 05.8 +1.7**
WMQ S **S** **13 41 14.5 -4.6**
WMQ sS **sS** **13 41 38.0 +3.1**
WMQ SS **SnSn** **13 43 45.0 -2.9**
WMQ PMZ
comp=Z,230nm,0.9s
WMQ PMZ
comp=Z,4µm,4.0s
WMQ LN
comp=Z,34µm,18.0s
WMQ LE
comp=Z,22µm,18.0s
WMQ LZ
comp=Z,16µm,18.0s
**GKN Gorkha 36.55 285** *e*P **P** **13 35 42.6 +0.6**
comp=Z,2µm,1.1s
**DANN Dangsing 37.30 286** *e*P **P** **13 35 49.6 +1.1**
comp=Z,251nm,1.0s
**KOLN Koldanda 37.48 285** *e*P **P** **13 35 50.9 +1.0**
comp=Z,1µm,0.9s
**PETK Petropavlovsk- 37.82 32** P **P** **13 35 51.7 -0.6**
comp=Z,192nm,0.7s,baz=182,slow=2.7,SNR=99
PETK LR LR 13 52 00.5
comp=Z,20µm,21.3s,baz=233,slow=37
**YAK Yakutsk 37.92 3** LR LR 13 53 00.3
comp=Z,36µm,18.3s,baz=192,slow=39
**YAK Yakutsk 37.92 3** *e*P **P** **13 35 51.2 -1.7**
YAK *e**PP **pP** **13 36 00.9 -1.6**
YAK *e* 13 37 18.7
YAK *e* 13 38 04.2
YAK *i*S **S** **13 41 40.6 -1.6**
YAK *e*SS **SnSn** **13 44 16.8 -8.3**
YAK *e*SSS SSS 13 44 45.9
YAK pmax pmax
comp=Z,101nm,0.9s
YAK pmax pmax
comp=N,47nm,1.1s
YAK pmax pmax
comp=Z,599nm,3.0s
YAK pmax pmax
comp=N,444nm,3.1s
YAK pmax pmax
comp=E,278nm,2.9s
YAK smax smax
comp=N,339nm,2.1s
YAK smax smax
comp=E,185nm,1.9s
YAK MLR MLR
comp=Z,36µm,18.0s
YAK MLR MLR
comp=N,24µm,16.0s
YAK MLR MLR
comp=E,14µm,14.0s

**YAK Yakutsk 37.92 3** P P 13 35 49.0 -3.9
comp=E,107nm,0.7s
**PET Petropavlovsk 38.23 33***d i*P **P** **13 35 54.7 -1.0**
PET *e**SP **sP** **13 36 09.2 -0.1**
PET *e*S **S** **13 41 45.3 -1.9**
PET pmax pmax
comp=Z,617nm,0.8s
PET pmax pmax
comp=Z,4µm,3.2s
PET pmax pmax
comp=Z,2µm,4.2s
PET MLR MLR
comp=Z,17µm,20.0s
PET MLR MLR
comp=Z,16µm,18.0s
**PET Petropavlovsk 38.23 33** *e*P **P** **13 35 55.1 -0.6**
comp=Z,1µm,1.0s
PET LR LR
comp=Z,17µm,19.0s
**WAKE Wake Island 38.67 89** PFAKE 13 36 10.0 +10
WAKE LR LR
comp=Z,5µm,19.0s
**CHLP Challavanipeta 38.68 270** *e*P **P** **13 36 00.4 +0.5**
CHLP IAmb IAmb 13 36 03.5
comp=Z,435nm,1.1s
CHLP *e*S **S** **13 41 53.2 -1.5**
CHLP IVMs_BB IVMs_BB 13 54 41.1
comp=Z,4µm,15.5s
**H11N1 WAKE ISLAND Hy 38.78 88** P **P** **13 35 58.2 -2.3**
baz=264,slow=12,SNR=21
H11N1 T T 14 17 27.0
baz=284,slow=74,SNR=240
**H11N2 WAKE ISLAND Hy 38.78 88** P **P** **13 36 00.5 +0.1**
baz=264,slow=12,SNR=18
H11N2 T T 14 17 27.0
baz=284,slow=74,SNR=144
**H11N3 WAKE ISLAND Hy 38.79 88** P **P** **13 35 59.4 -1.1**
baz=264,slow=12,SNR=14
H11N3 T T 14 17 27.0
baz=284,slow=74,SNR=194
**H11S3 WAKE ISLAND Hy 38.91 90** T T 14 17 37.5
baz=286,slow=75,SNR=210
**H11S1 WAKE ISLAND Hy 38.91 90** T T 14 17 35.8
baz=286,slow=75,SNR=176
**H11S2 WAKE ISLAND Hy 38.92 90** T T 14 17 36.3
baz=286,slow=75,SNR=166
**XMIS Christmas Isla 39.44 211** *e*P **P** **13 36 06.7 +0.4**
comp=Z,751nm,1.4s
**VIS Vishakhapatnam 39.56 269** *e*P **P** **13 36 08.0 +0.7**
VIS AMB AMB 13 36 11.3
comp=Z,296nm,5.3s
**KRAR Krasnoyarsk 39.60 332**⇓ *e*P **P** **13 36 05.9 -1.1**
KRAR pmax pmax
comp=Z,133nm,0.8s
KRAR MLR MLR
comp=Z,31µm,16.0s
**MA2 Magadan 39.60 20** *i*P **P** **13 36 06.8 -0.3**
**PMG Port Moresby 39.68 145***c i*P **P** **13 36 10.2 +2.0**
PMG pmax pmax
comp=Z,1µm,1.3s
PMG MLR MLR
comp=Z,40µm,19.0s
**PMG Port Moresby 39.68 145** *e*P **P** **13 36 09.6 +1.4**
comp=Z,832nm,1.4s
PMG LR LR
comp=Z,11µm,20.0s
**MK31 Makanchi Array 40.93 314** *e*P **P** **13 36 17.6 -0.7**
MK31 pmax pmax
comp=Z,637nm,1.1s
**MKAR Makanchi Array 40.93 314** P **P** **13 36 17.5 -0.9**
comp=Z,348nm,0.8s,baz=99,slow=8.5,SNR=746
MKAR LR LR 13 54 46.0
comp=Z,26µm,19.6s,baz=102,slow=38
MKAR PKPPKP P'P'df 14 08 19.7 -19
comp=Z,0.2nm,0.2s,baz=292,slow=4.5,SNR=3.7
MKAR P4KPbc 14 14 22.7
comp=Z,0.2nm,0.2s,baz=89,slow=5.9,SNR=2.6
**MKAR Makanchi Array 40.93 314** *i*P **P** **13 36 17.7 -0.6**
MKAR pmax pmax
comp=Z,349nm,0.8s
**PVM Polavaram 41.26 269** *e*P **P** **13 36 21.2 -0.1**
PVM IAmb IAmb 13 36 24.4
comp=Z,276nm,1.0s
PVM *e*S **S** **13 42 34.6 +1.3**
PVM IVMs_BB IVMs_BB 13 56 14.6
comp=Z,3µm,17.6s
**COEN Coen 41.79 153** *e*P **P** **13 36 25.3 -0.3**
comp=Z,1µm,1.4s
**FITZ Fitzroy Crossi 42.06 179** *e*P **P** **13 36 26.6 -1.1**
comp=Z,300nm,0.9s
**DDI Dehra Dun 42.15 289** *e*P **P** **13 36 28.0 -0.6**
DDI *e*P pP 13 36 29.2 -9.1
DDI AMB AMB 13 36 32.1
comp=Z,1µm,0.2s
**ZALV Zalesovo Beam 42.28 325** P **P** **13 36 27.7 -1.5**
comp=Z,175nm,0.5s,baz=114,slow=7.9,SNR=221
ZALV LR LR 13 55 43.5
comp=Z,34µm,18.6s,baz=130,slow=39
ZALV P4KPbc 14 14 29.1
comp=Z,0.9nm,0.5s,baz=142,slow=4.9,SNR=4.3
**ZALV Zalesovo Beam 42.28 325** *i*P **P** **13 36 27.3 -1.9**
ZALV pmax pmax
comp=Z,128nm,0.5s
**NGP Nagpur 42.59 275** *e*P **P** **13 36 31.9 -0.3**
NGP AMP 13 36 37.4
comp=Z,566nm,1.4s
NGP *ex* **S** **13 42 57.4 +4.4**
**SEY Seymchan 42.74 18**⇑ *e*P **P** **13 36 34.1 +1.3**
**SMLA Simla 42.87 290** *e*P **P** **13 36 34.8 +0.5**
SMLA AMB AMB 13 36 37.8
comp=Z,2µm,0.3s
SMLA *i*S **S** **13 42 55.0 -1.8**
**RPR Rampur 42.93 272** *e*P **P** **13 36 34.8 -0.2**
RPR IAmb IAmb 13 36 37.8
comp=Z,462nm,0.9s
RPR IVMs_BB IVMs_BB 13 56 24.4
comp=Z,3µm,21.2s
**NDI New Delhi 43.01 287** *e*P **P** **13 36 35.0 -0.5**
NDI *e*S **S** **13 42 57.0 -2.1**
**KWAJ Kwajalein Atol 43.22 103** P **P** **13 36 38.3 +1.0**
**KWAJ Kwajalein Atol 43.22 103** P **P** **13 36 38.3 +1.0**
**BHK Bhakra 43.50 291** *ex* **P** **13 36 39.0 -0.4**
**NVS Novosibirsk 43.52 326**⇑ *i*P **P** **13 36 37.3 -1.9**
NVS *i* 13 38 22.5
NVS *e*S S 13 42 58.5 -7.3
NVS pmax pmax
comp=Z,137nm,1.0s
NVS pmax pmax
comp=N,44nm,0.7s
NVS pmax pmax
comp=E,133nm,1.4s
NVS pmax pmax
comp=N,48nm,1.4s
NVS pmax pmax
comp=Z,99nm,1.4s
NVS pmax pmax
comp=E,52nm,0.8s
NVS smax smax
comp=N,107nm,2.1s
NVS smax smax
comp=E,63nm,1.8s
**DHRM DHARAMSHALA 43.56 292** *e*P **P** **13 36 40.2 +0.1**
DHRM AMB AMB 13 36 44.1
comp=Z,756nm,1.3s
**NJS Nagarjunasagar 43.58 269** *e*P **P** **13 36 40.8 +0.5**
NJS IAmb IAmb 13 36 43.1
comp=Z,209nm,0.9s
NJS *e*S **S** **13 43 06.5 -1.2**
NJS IVMs_BB IVMs_BB 13 55 46.2
comp=Z,5µm,21.9s
**BHPL Bhopal 43.62 279** *e*P **P** **13 36 39.6 -0.9**
BHPL AMB AMB 13 36 42.0
comp=Z,226nm,1.6s
**AAA Alma-Ata 43.76 308** *e*P **P** **13 36 42.4 +0.9**
AAA *e*S **S** **13 43 04.5 -5.3**
AAA pmax pmax
comp=Z,5µm,4.3s
AAA smax smax
comp=E,3µm,9.2s
AAA MLR MLR
comp=Z,30µm,16.0s
**MDRS Chennai 43.89 264** *e*P **P** **13 36 41.9 -0.8**
MDRS AMB AMB 13 36 48.1
comp=Z,188nm,1.4s
**KSH Kashi 44.01 302**⇑ *i*P P 13 36 47.4 +3.9
KSH *e*pP pP 13 36 57.0 +3.7

KSH PcS **PcS** **13 42 25.8 +3.8**
KSH S **S** **13 43 17.7 +4.1**
KSH sS sS 13 43 34.3 +4.6
KSH ScS **ScS** **13 46 42.6 +2.4**
KSH PMZ
comp=Z,480nm,1.1s
KSH PMZ
comp=Z,4µm,3.5s
KSH LN
comp=Z,36µm,18.7s
KSH LE
comp=Z,27µm,21.1s
KSH LZ
comp=Z,31µm,18.8s
**HYB Hyderabad** **44.01 270**⇑ *i*P **P** **13 36 44.0 +0.3**
comp=Z,400nm,1.0s
HYB *e*PP **PcP** **13 38 28.0 -1.1**
HYB *e*S **S** **13 43 12.0 -2.0**
HYB *e*ScS **ScS** **13 46 38.0 -2.6**
HYB LR LR 13 52 00.0
comp=Z,14nm,20.0s
**HYB Hyderabad** **44.01 270** *e*P **P** **13 36 43.5 -0.3**
**HYBB Hyderabad (bro** **44.01 270** *e*P **P** **13 36 43.5 -0.2**
HYBB IAmb IAmb 13 36 46.5
comp=Z,259nm,1.0s
HYBB *e*S **S** **13 43 13.9 0.0**
HYBB IVMs_BB IVMs_BB 13 57 26.3
comp=Z,3µm,15.3s
**ULHL Ulahol** **44.12 306** P **P** **13 36 45.4 +0.8**
SNR=83
**SKHT Srikalahasti** **44.13 265** *e*P **P** **13 36 45.1 +0.4**
SKHT IAmb IAmb 13 36 53.6
comp=Z,219nm,1.1s
SKHT *e*S **S** **13 43 14.3 -1.4**
SKHT IVMs_BB IVMs_BB 13 54 13.6
comp=Z,4µm,20.2s
**KURK Kurchatov** **44.48 319** *e*P **P** **13 36 46.1 -0.9**
KURK MLR MLR
comp=Z,27µm,22.0s
**KURK Kurchatov** **44.48 319** P **P** **13 36 46.4 -0.7**
SNR=248
**KURK Kurchatov** **44.48 319** P **P** **13 36 46.6 -0.4**
comp=Z,3µm,0.4s
**KURK Kurchatov** **44.48 319** *e*P **P** **13 36 46.1 -0.9**
comp=Z,4.3nm,1.8s
KURK LR LR
comp=Z,27µm,22.0s
**TKM2 Tokmak 2** **44.68 307** *e*P **P** **13 36 49.9 +0.8**
TKM2 pmax pmax
comp=Z,617nm,0.6s
TKM2 MLR MLR
comp=Z,23µm,20.0s
**TKM2 Tokmak 2** **44.68 307** P **P** **13 36 49.8 +0.7**
SNR=9.1
**TKM2 Tokmak 2** **44.68 307** *e*P **P** **13 36 49.9 +0.8**
comp=Z,616nm,0.6s
TKM2 LR LR
comp=Z,23µm,20.0s
**WRAB Tennant Creek** **44.77 168***c i*P **P** **13 36 49.5 -0.1**
WRAB pmax pmax
comp=Z,2µm,0.9s
WRAB MLR MLR
comp=Z,24µm,19.0s
**WRAB Tennant Creek** **44.77 168** P **P** **13 36 49.0 -0.6**
comp=Z,4µm,0.9s
**WRAB Tennant Creek** **44.77 168** *e*P **P** **13 36 49.3 -0.3**
comp=Z,596nm,0.9s
WRAB LR LR
comp=Z,11µm,19.0s
**WRA Warramunga Arr** **44.78 168** P **P** **13 36 49.5 -0.2**
comp=Z,499nm,0.8s,baz=348,slow=8.6,SNR=377
WRA PcP **PcP** **13 38 30.5 -0.9**
comp=Z,34nm,0.8s,baz=341,slow=3.6,SNR=2.2
WRA S **S** **13 43 22.0 -2.7**
comp=Z,3.3nm,0.9s,baz=349,slow=14,SNR=5.6
WRA LR LR 13 56 29.9
comp=Z,10µm,19.8s,baz=335,slow=37
WRA PKPPKP P'P'df 14 08 06.8 -17
comp=Z,1.4nm,1.0s,baz=117,slow=2.2,SNR=4.2
WRA P4KPbc 14 14 40.5
comp=Z,0.7nm,0.9s,baz=348,slow=4.6,SNR=4.4
**KZA Kyzart** **44.83 306** P **P** **13 36 51.9 +1.5**
SNR=32
**KBK Karagaybulak** **45.12 307** P **P** **13 36 53.5 +1.0**
SNR=606
**CHMS Chumysh** **45.31 307** P **P** **13 36 54.0 +0.2**
SNR=312
**FRU Bishkek** **45.39 307**⇑ *i*P **P** **13 36 55.0 +0.6**
FRU *e* 13 37 00.0
FRU *i* 13 37 09.0
FRU *e* 13 39 20.0
FRU pmax pmax
comp=Z,940nm,1.9s
FRU MLR MLR
comp=E,25µm,17.0s
**UCH Uchtor** **45.39 306** P **P** **13 36 56.4 +1.4**
SNR=1590
**MBWA Marble Bar** **45.42 187** P **P** **13 36 55.2 +0.5**
SNR=49
**MBWA Marble Bar** **45.42 187** *e*P **P** **13 36 53.3 -1.5**
MBWA comp=E,613nm,1.5s LR LR
comp=Z,8µm,22.0s
**AAK Ala-Archa** **45.45 307***c i*P **P** **13 36 55.6 +0.5**
AAK pmax pmax
comp=Z,623nm,0.9s
AAK MLR MLR
comp=Z,41µm,19.0s
**AAK Ala-Archa** **45.45 307** P **P** **13 36 55.6 +0.5**
comp=Z,1µm,0.8s
**AAK Ala-Archa** **45.45 307** P **P** **13 36 56.1 +1.0**
SNR=148
**AAK Ala-Archa** **45.45 307** P **P** **13 36 55.8 +0.8**
SNR=229
**AAK Ala-Archa** **45.45 307** *e*P **P** **13 36 55.7 +0.5**
comp=Z,231nm,0.9s
AAK LR LR
comp=Z,19µm,19.0s
**USP Ospenovka** **45.53 308** P **P** **13 36 56.0 +0.5**
SNR=121
**COCO West Island** **45.61 221** *e*P **P** **13 36 58.5 +2.2**
COCO pmax pmax
comp=Z,547nm,1.4s
COCO MLR MLR
comp=Z,8µm,20.0s
**COCO West Island** **45.61 221** P P 13 37 00.7 +4.4
SNR=5.4
**COCO West Island** **45.61 221** *e*P **P** **13 36 58.5 +2.2**
comp=Z,547nm,1.4s
COCO LR LR
comp=Z,8µm,20.0s
**PALK Pallekele** **45.83 256** *i* P **P** **13 37 00.1 +1.9**
**PALK Pallekele** **45.83 256** P **P** **13 36 59.2 +1.0**
comp=Z,869nm,1.2s,SNR=14
**PALK Pallekele** **45.83 256** P **P** **13 37 00.3 +2.0**
SNR=10
**PALK Pallekele** **45.83 256** *e*P **P** **13 36 59.4 +1.2**
comp=Z,702nm,1.6s
**URV Uravakonda** **45.96 268** *e*P **P** **13 36 59.5 +0.3**
URV IAmb IAmb 13 37 02.1
comp=Z,246nm,0.9s
URV *e*S **S** **13 43 42.2 0.0**
URV IVMs_BB IVMs_BB 13 57 11.1
comp=Z,4µm,22.6s
**EKS2 Erkin-Say** **45.98 307** *e*P **P** **13 36 59.7 +0.5**
EKS2 pmax pmax
comp=Z,242nm,0.9s
EKS2 MLR MLR
comp=Z,18µm,19.0s
**EKS2 Erkin-Say** **45.98 307** P **P** **13 36 59.5 +0.3**
SNR=284
**EKS2 Erkin-Say** **45.98 307** *e*P **P** **13 36 59.7 +0.5**
comp=Z,242nm,0.9s
EKS2 LR LR
comp=Z,18µm,19.0s
**AML Almayashu** **45.98 306** P **P** **13 37 00.5 +0.9**
SNR=349
**SMY Shemya** **46.43 39** P **P** **13 37 03.0 +0.6**
SMY pmax pmax
comp=Z,534nm,0.9s
**SMY Shemya** **46.43 39** P **P** **13 37 03.0 +0.6**
comp=Z,534nm,0.9s
**HNR Honiara** **47.60 130** *e*P **P** **13 37 12.7 +0.7**
HNR pmax pmax
comp=Z,412nm,1.0s
HNR MLR MLR
comp=Z,9µm,22.0s
HNR LR LR
comp=Z,9µm,22.0s
**POO Poona** **47.99 274** *e*P **P** **13 37 15.0 -0.1**
POO AMB AMB 13 37 16.9
comp=Z,327nm,1.9s
**ASAR Alice Springs** **48.33 169** P **P** **13 37 17.8 +0.2**
comp=Z,179nm,0.8s,baz=355,slow=6.4,SNR=512
ASAR PcP **PcP** **13 38 44.0 +0.1**
comp=Z,50nm,0.8s,baz=346,slow=3.8,SNR=5.7
ASAR S **S** **13 44 15.3 -0.3**
comp=Z,1.7nm,1.0s,baz=352,slow=25,SNR=2.4
ASAR LR LR 13 58 55.8
comp=Z,7µm,19.3s,baz=344,slow=38
ASAR PKPPKP P'P'df 14 08 01.2 -18
comp=Z,0.8nm,0.8s,baz=121,slow=3.8,SNR=4.7
ASAR P4KPbc 14 14 55.1
comp=Z,1.2nm,0.7s,baz=348,slow=4.2,SNR=15
**KK31 Karatay Array** **48.41 307** *i* P **P** **13 37 18.5 +0.5**
KK31 pmax pmax
comp=Z,102nm,0.5s
**KKAR Karatay Array** **48.41 307** *e*P **P** **13 37 18.2 +0.2**
KKAR pmax pmax
comp=Z,85nm,0.5s
**KKAR Karatay Array** **48.41 307** *e*P **P** **13 37 18.2 +0.2**
comp=Z,85nm,0.5s
**CTAO Charters Tower** **48.56 153** *e*P **P** **13 37 18.6 -0.7**
CTAO pmax pmax
comp=Z,606nm,1.5s
CTAO MLR MLR
comp=Z,18µm,20.0s
**CTAO Charters Tower** **48.56 153** *e*P **P** **13 37 18.6 -0.7**
comp=Z,606nm,1.5s
CTAO LR LR
comp=Z,18µm,20.0s
**TRD Trivandrum** **48.64 260** *e*P **P** **13 37 20.1 0.0**
**GOA Goa** **48.92 270** *e*P **P** **13 37 21.8 -0.4**
GOA AMB AMB 13 37 24.8
comp=Z,418nm,1.2s
**AMKA Amchitka** **49.17 42** *e*P **P** **13 37 23.3 -0.4**
comp=Z,747nm,0.9s
**BVA0 Borovoye Array** **50.02 320** P **P** **13 37 29.3 -0.8**
BVA0 pmax pmax
comp=Z,108nm,0.9s
**BVAR Borovoye Array** **50.02 320** P **P** **13 37 29.4 -0.8**
comp=Z,26nm,0.3s,baz=104,slow=8.9,SNR=53
BVAR PcP **PcP** **13 38 49.7 0.0**
comp=Z,66nm,0.9s,baz=97,slow=6.0,SNR=5.4
BVAR S **S** **13 44 33.4 -5.4**
comp=Z,2.9nm,0.9s,baz=146,slow=19,SNR=2.3
**BRVK Borovoye** **50.09 320** *e*P **P** **13 37 30.0 -0.7**
BRVK pmax pmax
comp=Z,129nm,0.6s
BRVK MLR MLR
comp=Z,15µm,20.0s
**BRVK Borovoye** **50.09 320** P **P** **13 37 30.2 -0.5**
comp=Z,1µm,0.5s,SNR=93
**BRVK Borovoye** **50.09 320** P **P** **13 37 30.5 -0.2**
SNR=167
**BRVK Borovoye** **50.09 320** *e*P **P** **13 37 30.0 -0.7**
comp=Z,129nm,0.6s
BRVK LR LR
comp=Z,15µm,20.0s
**BILL Bilibino** **50.43 19***c i*P **P** **13 37 32.2 -0.8**
BILL *i* 13 37 44.1
BILL *i* S **S** **13 44 41.5 -2.5**
BILL pmax pmax
comp=Z,279nm,2.5s
BILL MLR MLR
comp=Z,24µm,17.0s
**BILL Bilibino** **50.43 19** *e*P **P** **13 37 32.5 -0.5**
comp=Z,2µm,1.8s
BILL LR LR
comp=Z,25µm,19.0s
**BHJ Bhuj** **50.61 281** *e*P **P** **13 37 34.2 -0.8**
BHJ AMB AMB 13 37 37.3
comp=Z,229nm,1.6s
**MIDW Midway** **51.23 72** PFAKE 13 37 50.0 +10
MIDW LR LR
comp=Z,4µm,19.0s
**TARA Tarawa** **51.38 109** *e*P **P** **13 37 41.7 +0.8**
comp=Z,940nm,1.4s
TARA LR LR
comp=Z,5µm,20.0s
**GSTR Great Sitkin T** **52.14 42** *e*P **P** **13 37 47.3 +1.2**
comp=Z,70nm,0.6s
**FORT Forrest** **54.75 177** *e*P **P** **13 38 05.3 0.0**
comp=Z,992nm,1.2s
**EIDS Eidsvold** **55.27 151** *e*P **P** **13 38 08.7 -0.6**
comp=Z,192nm,0.9s
**AB31 Akbulak array** **56.08 314** *i* P **P** **13 38 15.0 +0.2**
AB31 pmax pmax
comp=Z,216nm,0.4s
**SVE Sverdlovsk** **56.23 323***d i*P **P** **13 38 15.5 -0.2**
SVE *e* 13 40 29.5
SVE *e*S **S** **13 46 04.4 +1.4**
SVE *e* 13 51 52.2
SVE pmax pmax
comp=Z,598nm,1.2s
SVE pmax pmax
comp=Z,2µm,10.4s
SVE MLR MLR
comp=Z,38µm,18.0s
SVE MLR MLR
comp=E,28µm,20.0s
**GAMB Gambell** **56.68 28** *e*P **P** **13 38 19.8 +1.0**
comp=E,297nm,1.3s
**IDAH Dahanechah** **57.31 294** *e*P **P** **13 38 24.7 +0.6**
**ARU Arti** **57.32 323** P **P** **13 38 22.8 -0.7**
comp=E,7.8nm,0.6s,baz=270,slow=20,SNR=46
ARU S **S** **13 46 13.0 -4.6**
comp=E,0.3nm,0.2s,baz=90,slow=20,SNR=2.3
**ARU Arti** **57.32 323***c i*P **P** **13 38 22.7 -0.9**
ARU 13 39 18.8
ARU 13 40 31.0
ARU PPP PPP 13 41 51.5
ARU S **S** **13 46 18.4 +0.8**
ARU SS **SS** **13 50 11.3 +4.4**
ARU SSS SSS 13 52 25.3
ARU pmax pmax
comp=Z,561nm,1.0s
ARU MLR MLR
comp=Z,24µm,23.0s
**ARU Arti** **57.32 323** P **P** **13 38 22.2 -1.3**
comp=Z,3µm,1.1s
**ARU Arti** **57.32 323** *e*P **P** **13 38 22.6 -0.9**
comp=Z,476nm,0.9s
ARU S **S** **13 46 13.0 -4.6**
ARU LR LR
comp=Z,21µm,21.0s
**NWAO Narrogin (SRO)** **57.34 188** *e*P **P** **13 38 24.0 +0.2**
NWAO pmax pmax
comp=Z,264nm,1.0s
NWAO MLR MLR
comp=Z,4µm,20.0s
**NWAO Narrogin (SRO)** **57.34 188** P **P** **13 38 24.8 +1.0**
SNR=22
**NWAO Narrogin (SRO)** **57.34 188** *e*P **P** **13 38 24.0 +0.2**
comp=Z,264nm,1.0s
NWAO LR LR
comp=Z,4µm,20.0s
**AKTO Aktyubinsk** **57.35 316** P **P** **13 38 23.7 -0.1**
comp=Z,155nm,0.8s,baz=91,slow=8.3,SNR=221
AKTO S **S** **13 46 15.4 -2.7**
comp=Z,1.2nm,0.5s,baz=54,slow=14,SNR=3.1
**IMON Monand** **57.40 295** *e*P **P** **13 38 25.5 +0.7**
**IEMG Emamgholi** **57.62 300** *e*P **P** **13 38 27.1 +0.8**
**BBOO Buckleboo** **57.64 169** *e*P **P** **13 38 25.7 -0.3**
comp=Z,482nm,0.9s
**IAKL Akhelmad** **57.64 299** *e*P **P** **13 38 27.6 +1.2**
**ABKT Ailbek** **57.98 301** P **P** **13 38 29.8 +1.3**
comp=Z,4µm,0.8s
**GEYT Alibeck** **57.98 301** P **P** **13 38 28.9 +0.4**
comp=Z,361nm,0.7s,baz=90,slow=2.6,SNR=158
GEYT S **S** **13 46 30.8 +4.0**
comp=Z,1.0nm,0.5s,baz=276,slow=2.8,SNR=1.7
GEYT LR LR 14 06 57.4
comp=Z,16µm,21.7s,baz=100,slow=40
**UNV Unalaska Valle** **58.06 40** *e*P **P** **13 38 29.5 +0.8**
comp=Z,91nm,0.8s
**IKOO Kooshah** **58.08 294** *e*P **P** **13 38 30.4 +0.8**
**ISFR Sfrayin** **58.18 300** *e*P **P** **13 38 31.5 +1.2**
**ITEG Tejag** **58.21 295** *e*P **P** **13 38 31.2 +0.8**
**ISHV Shirvan** **58.35 300** *e*P P 13 38 35.0 +3.6
**AKUT Akutan** **58.50 40** *e*P **P** **13 38 32.6 +0.8**
comp=Z,272nm,1.2s
**SOKR Solikamsk** **58.55 326***c i*P **P** **13 38 31.4 -0.6**
SOKR PPP PPP 13 42 05.6
SOKR S **S** **13 46 34.1 +0.7**
SOKR SS **SS** **13 50 31.0 +5.1**
SOKR pmax pmax
comp=Z,190nm,1.1s
SOKR MLR MLR
comp=Z,31µm,20.0s
**TNA Tin City** **58.64 27** *e*P **P** **13 38 33.7 +1.1**
comp=Z,284nm,1.2s
**FALS False Pass** **59.88 39** *e*P **P** **13 38 41.7 +0.4**
comp=Z,100nm,0.6s
**ARMA Armidale** **59.93 154** *e*P **P** **13 38 42.7 +0.6**
comp=Z,334nm,1.4s
**WBK Wadi Bani Khal** **60.31 283** P **P** **13 38 45.8 +0.9**
SNR=91
**DGAR Diego Garcia** **60.32 245** PFAKE 13 39 00.0 +15
DGAR LR LR
comp=Z,8µm,20.0s
**DZM Mont Dzumac** **60.99 136** *e*P **P** **13 38 49.7 +0.2**
comp=Z,672nm,1.6s
DZM *e*S **S** **13 47 10.4 +4.4**
comp=Z,8µm,33.6s
DZM *e*LR LR 13 57 03.0
comp=Z,41µm,25.4s
**DZM Mont Dzumac** **60.99 136** *e*P **P** **13 38 49.9 +0.4**
comp=Z,706nm,1.6s
**SMDO Samad** **61.01 284** P **P** **13 38 50.4 +0.7**
SNR=74
**JOHN Johnston Islan** **61.09 84** PFAKE 13 39 00.0 +10
JOHN LR LR
comp=Z,727nm,21.0s
**IBAF Bafgh** **61.11 294** *e*P **P** **13 38 50.2 -0.1**
**JMDO Jabal Madar** **61.15 283** P **P** **13 38 51.0 +0.4**
SNR=68
**HOQ Hoqain** **61.52 285** P **P** **13 38 53.6 +0.6**
SNR=171
**SDPT Sand Point** **61.56 39** *e*P **P** **13 38 53.3 +0.5**
comp=Z,106nm,0.6s
**IGLO Ghaloghah** **61.58 300** *e*P **P** **13 38 54.2 +0.6**
**BANOM Banah** **61.79 288** P **P** **13 38 56.4 +1.5**
SNR=19
**BANOM Banah** **61.79 288**⇓ P **P** **13 38 56.1 +1.2**
**ICHK Chekchek** **61.93 295** *e*P **P** **13 38 56.2 +0.2**
**IMEH Mehriz** **61.95 294** *e*P **P** **13 38 55.7 -0.4**
**UOSS Wadi Hilu** **62.13 286** P **P** **13 38 57.4 +0.2**
comp=Z,408nm,0.6s,SNR=16
**HATD Hatta, Dubai** **62.22 286**⇑ P **P** **13 38 58.2 +0.4**
**ARQ Araqi** **62.28 285** P **P** **13 38 58.9 +0.7**
SNR=46
**ASHO Ashiyiah** **62.33 286** P **P** **13 38 59.3 +0.7**
SNR=46
**ASHO Ashiyiah** **62.33 286**⇑ P **P** **13 38 59.1 +0.6**
**IALA Alasht** **62.46 299** *e*P **P** **13 39 00.3 +0.7**
**NAZ Nazwa, Dubai** **62.59 287**⇓ P **P** **13 39 00.7 +0.4**
**IFIR Firoozkooh** **62.59 299** *e*P **P** **13 39 01.3 +0.9**
**ISAD Sadrabad** **62.60 295** *e*P **P** **13 39 00.8 +0.2**
**CHGN Chignik** **62.69 38** *e*P **P** **13 38 58.7 -1.5**
**FAQ Al Faqa, Dubai** **62.72 286**⇑ P **P** **13 39 01.2 +0.1**
**IPRN Peran** **62.81 300** *e*P **P** **13 39 01.8 +0.1**
**ASUD Al Ashush, Dub** **62.98 286**⇓ P **P** **13 39 03.8 +1.0**
**IDMV Damavand** **63.18 299** *e*P **P** **13 39 04.9 +0.5**
**CAN Canberra** **63.34 158** *e*P **P** **13 39 05.0 +0.1**
CAN pmax pmax
comp=Z,1µm,1.9s
CAN MLR MLR
comp=Z,19µm,20.0s
**CAN Canberra** **63.34 158** *e*P **P** **13 39 05.0 +0.1**
comp=Z,1µm,1.9s
CAN LR LR
comp=Z,19µm,20.0s
**IZEF Zefreh** **63.51 296** *e*P **P** **13 39 06.7 +0.1**
**IPAR Pars** **63.61 293** *e*P **P** **13 39 06.8 -0.6**
**ISRV Sarvestan** **63.67 292** *e*P **P** **13 39 07.6 -0.2**
**IRAM Ramesheh** **63.71 295** *e*P P 13 39 15.9 +8.1
**IGAR Gharneh** **63.85 296** *e*P **P** **13 39 09.2 +0.4**
**IR3 Iran Long-Peri** **64.01 299** *e*P **P** **13 39 09.9 +0.3**
**IKLH Kolahrood** **64.03 297** *e*P **P** **13 39 10.8 +0.9**
**QAM Ghamsar** **64.04 297** *e*P **P** **13 39 10.1 +0.1**
**IMHD Mahdasht** **64.25 299** *e*P **P** **13 39 12.1 +0.9**
**IR5 Iran Long-Peri** **64.42 299** *e*P **P** **13 39 12.7 +0.4**
**IGZV Ghazvin** **64.45 300** *e*P **P** **13 39 13.7 +1.0**
**SHAO Shalim** **64.66 279** P **P** **13 39 14.8 +0.8**
SNR=20
**IPIR Pirpir** **64.73 296** *e*P **P** **13 39 14.2 -0.5**
**IRAZ Razeghan** **64.89 299** *e*P **P** **13 39 16.1 +0.5**
**MAK Makhachkala** **65.21 308** *e*P **P** **13 39 18.5 +1.3**
MAK *e* 13 39 45.7
MAK *e* 13 41 39.3
MAK *e*PPP PPP 13 43 10.6
MAK *e*S **S** **13 47 59.7 +1.5**
MAK pmax pmax
comp=N,228nm,1.5s
MAK pmax pmax
comp=E,165nm,1.1s
MAK pmax pmax
comp=Z,733nm,2.2s
MAK pmax pmax
comp=Z,4µm,3.0s
MAK smax smax
comp=E,2µm,3.4s
MAK smax smax
comp=N,1µm,2.8s
MAK MLR MLR
comp=Z,28µm,19.0s
MAK MLR MLR
comp=E,27µm,17.0s
MAK MLR MLR
comp=N,12µm,19.0s
**RSO Redoubt South** **65.33 33** *e*P **P** **13 39 18.0 +0.1**
comp=N,411nm,0.8s
**PPLA Purkeypile** **65.37 30** *e*P **P** **13 39 18.3 +0.3**
comp=N,220nm,1.1s
**OHAK Old Harbor** **65.42 36** *e*P **P** **13 39 18.0 -0.2**
comp=N,172nm,0.9s
**KDAK Kodiak Island** **65.73 36** S **S** **13 48 04.0 0.0**
comp=N,4.9nm,0.9s,baz=11,slow=5.2,SNR=1.9
**KDAK Kodiak Island** **65.73 36** *i* P **P** **13 39 20.6 +0.4**
**KDAK Kodiak Island** **65.73 36** P **P** **13 39 19.6 -0.6**
comp=N,887nm,1.4s,SNR=24
**KDAK Kodiak Island** **65.73 36** S **S** **13 48 04.0 0.0**
KDAK LR LR
comp=Z,6µm,20.0s
**BPAW Bear Paw Mtn.** **65.79 29** *e*P **P** **13 39 20.9 +0.2**
comp=Z,24nm,0.7s
**COLD Coldfoot** **65.83 25** *e*P **P** **13 39 21.4 +0.6**
comp=Z,182nm,1.0s
**RBK Rabkut** **66.11 279** P **P** **13 39 23.5 +0.1**
SNR=81
**ISRB Sarab** **66.14 302** *e*P **P** **13 39 24.0 +0.5**
**TRF Thorofare Moun** **66.17 29** *e*P **P** **13 39 23.9 +0.7**
comp=Z,87nm,0.8s
**MSVF Nonsavu** **66.26 124** *e*P **P** **13 39 25.2 +0.9**
MSVF pmax pmax
comp=Z,592nm,1.4s
MSVF MLR MLR
comp=Z,9µm,20.0s
**MSVF Nonsavu** **66.26 124** P **P** **13 39 25.3 +0.9**
comp=Z,940nm,1.0s,SNR=17
**MSVF Nonsavu** **66.26 124** *e*P **P** **13 39 25.2 +0.9**
comp=Z,592nm,1.4s
MSVF LR LR
comp=Z,9µm,20.0s
**IHRS Heris** **66.51 303** *e*P **P** **13 39 25.8 -0.1**
**RC01 Rabbit Creek A** **66.73 32** *e*P **P** **13 39 27.0 +0.4**
comp=Z,345nm,1.4s
**MCK McKinley** **66.74 29** *e*P **P** **13 39 26.3 -0.4**
MCK pmax pmax
comp=Z,577nm,1.3s
**MCK McKinley** **66.74 29** *e*P **P** **13 39 26.3 -0.4**
comp=Z,577nm,1.3s
**IBST Bostanabad** **66.76 302** *e*P **P** **13 39 26.3 -1.3**
**PMR Palmer** **66.95 31** *e*P **P** **13 39 27.1 -0.9**
PMR pmax pmax
comp=Z,320nm,1.2s
**PMR Palmer** **66.95 31** *e*P **P** **13 39 27.1 -0.9**
comp=Z,320nm,1.2s
**ABTO Aybut** **66.98 279** P **P** **13 39 29.0 0.0**
SNR=87
**SEW Seward** **67.01 33** *e*P **P** **13 39 27.7 -0.7**
comp=Z,177nm,1.0s
**COLA College** **67.05 28***c i*P **P** **13 39 29.6 +1.1**
COLA pmax pmax
comp=Z,71nm,0.8s
COLA MLR MLR

comp=Z,8μm,19.0s
**COLA College 67.05 28** *e*P **P 13 39 28.1 -0.4**
comp=Z,91nm,0.8s
COLA LR LR
comp=Z,8μm,19.0s
**KLMR Klimovskoe 67.11 328***c i*P **P 13 39 28.3 -0.7**
KLMR *e*S **S 13 48 16.0 -4.7**
KLMR SS **SS 13 52 41.9 +2.4**
KLMR MLR MLR
comp=Z,26μm,19.0s
**TMCR Tamitsa 67.29 332** *e*P **P 13 39 30.0 -0.1**
TMCR *e*S **S 13 48 24.0 +1.3**
TMCR pmax pmax
comp=Z,301nm,0.7s
**SML Sawmill 67.29 31** *e*P **P 13 39 30.3 +0.1**
SML pmax pmax
comp=Z,39nm,0.8s
**SML Sawmill 67.29 31** *e*P **P 13 39 30.3 +0.1**
comp=Z,39nm,0.8s
**IMRD Marand 67.44 304** *e*P **P 13 39 32.0 +0.3**
**TBLG Delisi 67.47 307** *e*P **P 13 39 31.8 +0.1**
**IAZR Azarshahr 67.47 302** *e*P **P 13 39 32.1 0.0**
**ILAR Eielson Array 67.47 28** P **P 13 39 30.8 -0.5**
comp=Z,27nm,0.6s,baz=256,slow=5.0,SNR=80
ILAR S **S 13 48 25.5 +0.5**
comp=Z,0.7nm,1.0s,baz=311,slow=3.5,SNR=3.2
ILAR PKP2bc P'P'bc 14 07 47.6 -14
comp=Z,2.8nm,0.9s,baz=119,slow=1.2,SNR=9.6
ILAR LR LR 14 11 54.5
comp=Z,6μm,18.5s,baz=298,slow=39
**VRH Novokhopyorsk 67.55 317** *e*P **P 13 39 31.5 -0.5**
VRH *e*S **S 13 48 22.2 -4.1**
VRH pmax pmax
comp=E,80nm,0.9s
VRH pmax pmax
comp=Z,550nm,0.9s
VRH pmax pmax
comp=N,110nm,1.1s
VRH smax smax
comp=N,2μm,6.3s
VRH smax smax
comp=Z,440nm,3.1s
VRH smax smax
comp=E,390nm,1.2s
VRH MLR MLR
comp=Z,7μm,19.0s
VRH MLR MLR
comp=N,5μm,13.0s
VRH MLR MLR
comp=E,6μm,16.0s
**ISHB Shabestar 67.61 303** *e*P **P 13 39 33.5 +0.6**
**GNI Garni 67.83 305***c i*P **P 13 39 35.1 +0.9**
GNI pmax pmax
comp=Z,334nm,1.3s
GNI MLR MLR
comp=Z,8μm,18.0s
**GNI Garni 67.83 305** P **P 13 39 35.7 +1.5**
SNR=43
**GNI Garni 67.83 305**⇑ *i*P **P 13 39 35.2 +1.0**
SNR=21
**GNI Garni 67.83 305** *e*P **P 13 39 35.0 +0.9**
comp=Z,152nm,0.8s
GNI LR LR
comp=Z,8μm,19.0s
**ZEI Tsey 67.84 308** *e*P **P 13 39 32.4 -1.9**
ZEI *e* 13 42 02.7
ZEI *e*S **S 13 48 30.6 0.0**
ZEI pmax pmax
comp=Z,899nm,0.9s
ZEI pmax pmax
comp=N,606nm,0.9s
ZEI pmax pmax
comp=E,863nm,0.8s
ZEI pmax pmax
comp=Z,210nm,2.5s
ZEI MLR MLR
comp=Z,95μm,19.0s
ZEI MLR MLR
comp=E,90μm,19.0s
**LVZ Lovozero 68.04 336***c i*P **P 13 39 34.2 -0.6**
LVZ pmax pmax
comp=Z,163nm,1.1s
LVZ MLR MLR
comp=Z,14μm,20.0s
**LVZ Lovozero 68.04 336** P **P 13 39 34.1 -0.8**
comp=Z,766nm,0.8s,SNR=10
**LVZ Lovozero 68.04 336** *e*P **P 13 39 34.1 -0.8**
comp=Z,161nm,1.0s
LVZ LR LR
comp=Z,14μm,20.0s
**KBZ Khabaz 68.34 309** P **P 13 39 36.9 -0.2**
comp=Z,250nm,0.9s,baz=91,slow=5.4,SNR=210
KBZ S **S 13 48 39.8 +3.8**
comp=Z,1.6nm,0.8s,baz=180,slow=20,SNR=3.7
KBZ PKP2bc **P'P'bc 14 07 54.3 -5.0**
comp=Z,0.5nm,0.3s,baz=270,slow=6.1,SNR=3.3
KBZ LR LR 14 14 40.7
comp=Z,12μm,18.2s,baz=74,slow=40
**PAX Paxson 68.40 29** *e*P **P 13 39 36.5 -0.8**
PAX pmax pmax
comp=Z,95nm,0.7s
**PAX Paxson 68.40 29** *e*P **P 13 39 36.5 -0.8**
comp=Z,95nm,0.7s
**KIV Kislovodsk 68.44 310** *e*P **P 13 39 39.0 +1.1**
**KIV Kislovodsk 68.44 310***c i*P **P 13 39 38.5 +0.7**
KIV *i* 13 39 51.5
KIV *i* 13 40 04.3
KIV *i* S **S 13 48 33.5 -3.9**
KIV pmax pmax
comp=Z,810nm,1.0s
KIV MLR MLR
comp=Z,12μm,20.0s
**KIV Kislovodsk 68.44 310** P **P 13 39 38.0 +0.1**
comp=Z,4μm,0.9s
**KIV Kislovodsk 68.44 310** P **P 13 39 38.9 +1.0**
SNR=101
**KIV Kislovodsk 68.44 310**⇑ *i*P **P 13 39 38.6 +0.7**
SNR=142
**KIV Kislovodsk 68.44 310** *e*P **P 13 39 38.3 +0.5**
comp=Z,1μm,1.3s
KIV LR LR
comp=Z,12μm,20.0s
**AKH Akhalkalaki 68.45 307** *e*P **P 13 39 39.8 +1.7**
**AKH Akhalkalaki 68.45 307**⇓ *i*P **P 13 39 39.4 +1.3**
**APA Apatity 68.57 336**⇓ *i*P **P 13 39 38.0 -0.1**
APA *i* 13 40 00.0
APA *i* S **S 13 48 35.0 -2.9**
APA *i* 13 49 22.0
APA pmax pmax
comp=Z,200nm,1.0s
APA MLR MLR
comp=Z,17μm,22.0s
**DIV Divide 68.62 31** *e*P **P 13 39 38.5 -0.1**
comp=Z,217nm,0.8s
**CLDR Caldiran 68.69 304** *e*P **P 13 39 40.5 +0.8**
**DOT Dot Lake 68.89 29** *e*P **P 13 39 39.6 -0.7**
comp=Z,276nm,0.8s
**KARS Kars 68.95 306** *e*P **P 13 39 42.6 +1.5**
**LPSR Galich'ya Gora 68.96 319** *e*P **P 13 39 40.6 -0.2**
LPSR *e*S **S 13 48 39.5 -3.6**
LPSR pmax pmax
comp=Z,420nm,0.9s
LPSR pmax pmax
comp=N,80nm,1.2s
LPSR pmax pmax
comp=E,320nm,1.3s
LPSR smax smax
comp=N,610nm,2.9s
LPSR smax smax
comp=Z,230nm,3.4s
LPSR smax smax
comp=E,420nm,2.5s
LPSR MLR MLR
comp=Z,8μm,16.0s
LPSR MLR MLR
comp=N,8μm,19.0s
LPSR MLR MLR
comp=E,9μm,20.0s
**HOPEN Hopen 69.00 346** *e*P **P 13 39 40.1 -0.5**
HOPEN *e*S **S 13 48 42.6 -0.2**
HOPEN IVMs_BB IVMs_BB 14 14 29.5
comp=Z,8μm,17.6s
**VORR Voronezh 69.00 318** *e*P **P 13 39 40.0 -1.0**
VORR pmax pmax
comp=Z,750nm,2.0s
**MOS Moscow 69.03 323***α i*P **P 13 39 41.0 -0.2**
MOS *e* 13 39 53.6
MOS *e* 13 40 06.4
MOS *e* 13 42 09.3
MOS *e*PPP PPP 13 43 56.9
MOS *e*S **S 13 48 41.4 -2.4**
MOS pmax pmax
comp=Z,449nm,1.1s
MOS pmax pmax
comp=Z,2μm,2.3s
MOS MLR MLR
comp=Z,15μm,20.0s
**VORD Divnogorie 69.10 318** *e*P **P 13 39 41.1 -0.6**
VORD *e*S **S 13 48 41.4 -3.4**
VORD pmax pmax
comp=Z,190nm,0.9s
VORD pmax pmax
comp=E,70nm,0.8s
VORD smax smax
comp=E,800nm,4.7s
VORD smax smax
comp=Z,290nm,5.1s
VORD smax smax
comp=N,710nm,2.7s
VORD MLR MLR
comp=Z,7μm,15.0s
VORD MLR MLR
comp=N,8μm,18.0s
VORD MLR MLR
comp=E,9μm,19.0s
**VSR Storozhevoye 69.12 318** *e*P **P 13 39 41.1 -0.7**
VSR *e*S **S 13 48 41.5 -3.6**
VSR pmax pmax
comp=Z,270nm,0.9s
VSR pmax pmax
comp=N,150nm,1.1s
VSR pmax pmax
comp=E,440nm,1.2s
VSR smax smax
comp=N,1μm,3.3s
VSR smax smax
comp=Z,330nm,7.2s
VSR smax smax
comp=E,1μm,5.0s
VSR MLR MLR
comp=Z,10μm,16.0s
VSR MLR MLR
comp=N,8μm,23.0s
VSR MLR MLR
comp=E,7μm,23.0s
**MENT Mentasta 69.19 29** *e*P **P 13 39 41.9 -0.2**
**BMRM Bremner River 69.21 31** *e*P **P 13 39 42.1 -0.1**
comp=E,92nm,0.6s
**HKR Hakkari 69.22 303** *e*P **P 13 39 43.4 +0.5**
**VANB Van 69.22 304** *e*P **P 13 39 43.4 +0.5**
**AGRB Hanur-Agry 69.27 305** *e*P **P 13 39 44.6 +1.3**
**CUKT Cukurca 69.41 302** *e*P **P 13 39 43.7 -0.3**
**OBN Obninsk 69.76 322** P **P 13 39 45.4 -0.3**
comp=E,202nm,0.5s,baz=80,slow=2.1,SNR=30
**OBN Obninsk 69.76 322***c i*P **P 13 39 44.9 -0.7**
OBN *i* 13 39 57.6
OBN *i* 13 40 11.3
OBN *e*S **S 13 48 53.2 +0.8**
OBN pmax pmax
comp=Z,139nm,0.9s
OBN MLR MLR
comp=Z,12μm,20.0s
**OBN Obninsk 69.76 322** P **P 13 39 45.0 -0.7**
comp=Z,2μm,0.5s,SNR=18
**OBN Obninsk 69.76 322** *e*P **P 13 39 43.5 -2.2**
comp=Z,227nm,0.6s
OBN LR LR
comp=Z,13μm,20.0s
**BCA Borcka 69.81 307** *e*P **P 13 39 46.8 +0.5**
**TAU Tasmania Unive 69.82 163** P **P 13 39 46.6 +0.5**
TAU pmax pmax
comp=Z,464nm,1.4s
TAU MLR MLR
comp=Z,10μm,22.0s
**TAU Tasmania Unive 69.82 163** P **P 13 39 46.6 +0.5**
comp=Z,464nm,1.4s
TAU LR LR
comp=Z,10μm,22.0s
**EGAK Eagle 69.88 27** *e*P **P 13 39 45.9 -0.3**
comp=Z,128nm,0.7s
EGAK LR LR
comp=Z,4μm,19.0s
**SPA0 Spitsbergen Ar 70.23 348**⇑ *i*P **P 13 39 47.1 -1.2**
SPA0 *e*S **S 13 48 54.4 -2.9**
SPA0 *e*S **S 13 48 57.0 -0.3**
**SIRT Sirnak 70.23 303** *e*P **P 13 39 49.8 +0.7**
**KEV Kevo 70.31 339** *e*P **P 13 39 48.3 -0.5**
KEV pmax pmax
comp=Z,110nm,0.8s
KEV MLR MLR
comp=Z,11μm,19.0s
**KEV Kevo 70.31 339** *e*P **P 13 39 48.3 -0.5**
comp=Z,110nm,0.8s
KEV LR LR
comp=Z,11μm,19.0s
**EZM Erzurum 70.40 306** *e*P **P 13 39 51.8 +1.5**
**SOC Sochi 70.62 310***c i*P **P 13 39 50.4 -0.8**
SOC *e* 13 42 27.8
SOC *e*PPP PPP 13 44 04.1
SOC *i* S **S 13 49 03.4 +0.6**
SOC *e* 13 49 48.0
SOC *e*SS **SS 13 53 29.4 -5.0**
SOC *e*SSS SSS 13 56 44.4
SOC pmax pmax
comp=Z,334nm,1.0s
SOC MLR MLR
comp=Z,13μm,19.0s
**KBS Kingsbay 70.71 349**⇑ *i*P **P 13 39 50.1 -1.0**
KBS *e*S **S 13 49 01.9 -0.9**
KBS IVMs_BB IVMs_BB 14 09 23.1
comp=Z,4μm,20.7s
**KBS Kingsbay 70.71 349** *e*P **P 13 39 50.5 -0.6**
KBS pmax pmax
comp=Z,41nm,0.6s
KBS MLR MLR
comp=Z,15μm,22.0s
**KBS Kingsbay 70.71 349** *e*P **P 13 39 50.5 -0.6**
comp=Z,41nm,0.6s
KBS LR LR
comp=Z,15μm,22.0s
**DAWY Dawson 70.80 28** *e*P **P 13 39 52.2 +0.2**
comp=Z,122nm,0.8s
**HSPB Hornsund (broa 70.88 347**⇑ *i*P **P 13 39 49.6 -2.6**
HSPB *e*S **S 13 49 01.8 -3.0**
HSPB IAMs_20 IAMs_20 14 14 10.3
comp=Z,18μm,20.7s
HSPB IVMs_BB IVMs_BB 14 16 31.1
comp=Z,6μm,14.4s
**ARCES ARCESS Array B 70.88 338** P **P 13 39 52.0 -0.4**
comp=Z,58nm,0.8s,baz=74,slow=6.7,SNR=74
ARCES LR LR 14 16 02.1
comp=Z,14μm,18.8s,baz=74,slow=40
**ARCES ARCESS Array B 70.88 338** P **P 13 39 52.0 -0.4**
**ARE0 ARCESS Array S 70.88 338** *e*P **P 13 39 51.3 -1.1**
ARE0 IVMs_BB IVMs_BB 14 15 38.6
comp=Z,6μm,19.7s
**SVAN Silvan-Diyarba 71.00 304** *e*P **P 13 39 53.9 +0.2**
**BJO Bjornoya 71.03 344** *e*P **P 13 39 51.8 -1.3**
BJO *e*S **S 13 49 04.2 -2.5**
BJO IVMs_BB IVMs_BB 14 16 56.6
comp=Z,7μm,18.2s
**HAMF Hammerfest 71.12 340**⇑ *i*P **P 13 39 52.4 -1.4**
HAMF IVMs_BB IVMs_BB 14 17 45.8
comp=Z,8μm,16.9s
**BNGB Bing¶¶ 71.16 305** *e*P **P 13 39 55.6 +0.9**
**BAYT Ayd¬ntepe-Bay 71.17 306** *e*P **P 13 39 55.8 +1.0**
**KTUT Trabzon 71.28 307** *e*P **P 13 39 55.4 +0.2**
**ERZN Erzincan 71.70 306** *e*P **P 13 39 58.1 +0.1**
**MAZI Mazidag 71.77 303** *e*P **P 13 39 58.9 +0.5**
**INK Inuvik 71.79 23** S **S 13 49 17.8 +2.3**
comp=Z,11nm,1.0s,baz=105,slow=20,SNR=15
**INK Inuvik 71.79 23** *e*P **P 13 39 57.7 0.0**
INK S **S 13 49 17.8 +2.3**
INK pmax pmax
comp=Z,187nm,1.1s
**INK Inuvik 71.79 23** *e*P **P 13 39 57.7 0.0**
comp=Z,187nm,1.1s
INK S **S 13 49 17.8 +2.3**
**MUKL Al Mukalla 71.81 278** *e*P **P 13 39 58.5 -0.3**
**KTK1 Kautokeino 71.82 338**⇑ *i*P **P 13 39 57.5 -0.4**
**KBSD Kabsdagh 71.83 303** *e*P **P 13 39 59.8 +1.1**
**DYBB Diyarbakir 71.86 304** *e*P **P 13 39 58.8 -0.1**
**ANN Anapa 71.87 312***c i*P **P 13 39 58.2 -0.5**
ANN *i* S **S 13 49 17.2 0.0**
ANN pmax pmax
comp=N,105nm,0.9s
ANN pmax pmax
comp=Z,434nm,0.9s
ANN pmax pmax
comp=E,66nm,0.9s
ANN pmax pmax
comp=Z,2μm,8.4s
**RAYN Ar Rayn 71.88 288** P **P 13 39 59.6 +0.4**
comp=Z,873nm,1.3s,SNR=78
**RAYN Ar Rayn 71.88 288** *e*P **P 13 39 59.1 -0.1**
comp=Z,365nm,1.4s
RAYN LR LR
comp=Z,7μm,21.0s
**MZRK Al-Mazaregh 72.09 302** *e*P **P 13 40 03.0 +2.7**
**PTK Pertek 72.15 305** *e*P **P 13 40 01.8 +1.0**
**AFI Afiamalu 72.22 115** P **P 13 40 02.3 +1.0**
AFI pmax pmax
comp=Z,790nm,1.5s
AFI MLR MLR
comp=Z,5μm,19.0s
**AFI Afiamalu 72.22 115** P **P 13 40 02.3 +1.0**
comp=Z,790nm,1.5s
AFI LR LR
comp=Z,5μm,19.0s
**SFNV Sufian 72.33 302** *e*P **P 13 40 04.0 +2.2**
**SVRC Sivrice-ELAZID 72.36 305** *e*P **P 13 40 02.9 +0.9**
**ILIC ilic-Erzincan 72.60 306** *e*P **P 13 40 05.4 +2.0**
**POHA Pohakuloa 72.67 76** PFAKE 13 40 20.0 +16
POHA LR LR
comp=Z,9μm,22.0s
**TRO Tromso 73.01 339**⇑ *i*P **P 13 40 03.0 -2.0**
TRO *e*S **S 13 49 27.9 -1.5**
TRO IVMs_BB IVMs_BB 14 17 27.9
comp=Z,3μm,20.9s
**URFA Urfa 73.01 304** *e*P **P 13 40 03.8 -2.0**
**MALT Malatya 73.04 305** *e*P **P 13 40 07.3 +1.3**
**MALT Malatya 73.04 305**⇓ *i*P **P 13 40 07.1 +1.1**
**FINES FINESS Array B 73.27 330** P **P 13 40 06.4 -0.3**
comp=Z,124nm,0.7s,baz=86,slow=5.9,SNR=186
FINES S **S 13 49 30.3 -2.5**
comp=Z,4.1nm,1.1s,baz=328,slow=4.9,SNR=2.4
FINES LR LR 14 15 52.8
comp=Z,31μm,18.7s,baz=70,slow=39
**ALE Alert 73.41 1** P **P 13 40 07.7 +0.4**
comp=Z,380nm,1.2s,SNR=8.9
**ALE Alert 73.41 1** P **P 13 40 07.7 +0.4**
comp=Z,380nm,1.2s,SNR=8.9
**SVSK Karacayir 73.67 307** *e*P **P 13 40 10.1 +1.0**
**DARE Darende-Malaty 73.67 305** *e*P **P 13 40 10.9 +1.3**
**TOKT Tokat 73.82 307** *e*P **P 13 40 10.9 +0.4**
**KVT Kavak 73.94 308** *e*P **P 13 40 12.0 +0.9**
**VSU Vasula 73.98 327***c i*P **P 13 40 10.9 0.0**
VSU pmax pmax
comp=Z,662nm,0.7s
VSU MLR MLR
comp=Z,60μm,17.0s
**SIM Simferopol' 74.08 312***c i*P **P 13 40 11.7 -0.1**
SIM *i* S **S 13 49 45.0 +2.6**
SIM pmax pmax
comp=Z,272nm,0.9s
**SNOP Sinop 74.25 309** *e*P **P 13 40 10.5 -2.3**
**DIKM Dikmen 74.33 309** *e*P **P 13 40 12.4 -0.9**
**KMRS Kahramanmaras 74.44 304** *e*P **P 13 40 14.8 +0.7**
**SARI SarD1z-Kayseri 74.51 305** *e*P **P 13 40 15.6 +0.9**
**BYBT Boyabat 74.73 309** *e*P **P 13 40 15.4 -0.2**
**MICGM Minsk 74.75 323**⇑ *e*P **P 13 40 16.0 +0.5**
**MICGM Minsk 74.75 323** *e*PP PP 13 43 00.0 -2.5
**MICGM Minsk 74.75 323** *e*PPP PPP 13 44 36.0
**MICGM Minsk 74.75 323** *e*S **S 13 49 48.0 -1.6**
**MICGM Minsk 74.75 323** *e*PS 13 50 12.0
**OUZ Omahuta 74.77 141** *e*P **P 13 40 17.1 +1.3**
comp=Z,290nm,1.5s
**MNK Minsk 74.78 323**⇑ *e*P **P 13 40 16.0 +0.3**
MNK *e* 13 43 00.0
MNK *e*S **S 13 49 48.0 -1.9**
MNK *e*PS PnS 13 50 12.0 -15
MNK pmax pmax
comp=Z,8μm,4.0s
MNK pmax pmax
comp=Z,1μm,1.0s
MNK pmax pmax
comp=E,1μm,2.0s
MNK pmax pmax
comp=N,540nm,1.2s
MNK MLR MLR
comp=E,19μm,18.0s
MNK MLR MLR
comp=Z,24μm,20.0s
**BNN Bunyan 74.80 306** *e*P **P 13 40 16.8 +0.5**
**STEI Steigen 74.95 338** *e*P **P 13 40 15.5 -0.9**
**BZK Bozkurt 75.11 310** *e*P P 13 40 21.5 +3.6
**BDHA Al Bayda' 75.13 279** *e*P **P 13 40 18.8 +0.1**
**IZAR Zarasai 75.19 325** *e*P **P 13 40 17.8 -0.2**
IZAR IAmb IAmb 13 40 22.8
comp=Z,67nm,0.8s
**NACGM Naroch 75.20 324** *e*P **P 13 40 18.0 -0.1**
**NACGM Naroch 75.20 324** *e*P **P 13 40 18.0 -0.1**
**NACGM Naroch 75.20 324** *e*PP PP 13 43 16.0 +10
**NACGM Naroch 75.20 324** *e*PPP PPP 13 44 52.0
**NACGM Naroch 75.20 324** *e*S **S 13 49 52.0 -2.6**
**NACGM Naroch 75.20 324** *e*PS 13 50 27.0
**ROOS tl_alroos 75.23 301** *e*P **P 13 40 18.9 +0.2**
**CORM Corum 75.25 308** *e*P sP 13 40 34.5 +1.6
**BTCH Batrach 75.25 303** *e*P **P 13 40 18.8 -0.1**
**KOZT Kozan 75.26 305** *e*P **P 13 40 19.3 +0.5**
**AKASG Malin Array Be 75.29 319** P **P 13 40 18.0 -0.7**
comp=Z,88nm,0.6s,baz=57,slow=6.6,SNR=227
AKASG S **S 13 49 49.8 -5.9**
comp=Z,0.2nm,0.3s,baz=66,slow=11,SNR=3.3
AKASG PKPPKP **P'P'df 14 07 42.5 -3.6**
comp=Z,0.4nm,0.4s,baz=250,slow=3.1,SNR=3.3
**AKASG Malin Array Be 75.29 319** *i* P **P 13 40 17.8 -0.9**
AKASG pmax pmax
comp=Z,88nm,0.6s
**KIEV Kiev 75.31 319** *e*P **P 13 40 17.9 -0.9**
KIEV pmax pmax
comp=Z,280nm,1.3s
**KIEV Kiev 75.31 319** *e*P **P 13 40 17.8 -1.0**
comp=Z,112nm,0.6s
KIEV LR LR
comp=Z,11μm,20.0s
**ISAL Salakas 75.31 325** *e*P **P 13 40 18.6 -0.1**
ISAL IAmb IAmb 13 40 23.6
comp=Z,56nm,0.9s
**IIGN Ignalina 75.34 324** *e*P **P 13 40 18.8 -0.1**
IIGN IAmb IAmb 13 40 23.7
comp=Z,55nm,0.8s
**TAHT Tahtakopru-Hat 75.35 303** *e*P **P 13 40 21.7 +2.3**
**TOS Tosya 75.40 309** *e*P **P 13 40 20.0 +0.3**
**LOF Lofoten 75.42 339** *e*P **P 13 40 18.7 -0.4**
**WRDH Warideh 75.46 303** *e*P **P 13 40 19.7 -0.4**
**ZALF Zalf 75.61 300** *e*P **P 13 40 21.9 +0.9**
**BIDA Albida 75.70 302** *e*P **P 13 40 22.0 +0.5**
**HAWK Haweek 75.80 302** *e*P **P 13 40 22.3 +0.2**
**KRTS Karatas 75.90 304** *e*P **P 13 40 22.6 +0.1**
**KARA Karaisali 75.91 305** *e*P **P 13 40 23.1 +0.5**
**NIG Nigde 75.96 306** *e*P **P 13 40 23.9 +0.8**
**DAMY Dhamar 75.97 280** *e*P **P 13 40 24.0 +0.5**
comp=Z,212nm,1.0s
**BRTR Keskin Array B 76.12 307** P **P 13 40 23.7 -0.2**
comp=Z,167nm,1.0s,baz=100,slow=5.1,SNR=274
BRTR S **S 13 50 04.0 -1.6**
comp=Z,0.3nm,0.3s,baz=45,slow=2.7,SNR=2.4
BRTR LR LR 14 19 11.6
comp=Z,5μm,19.8s,baz=86,slow=40
**GULA Gulagac 76.15 306** *e*P **P 13 40 24.7 +0.7**
**SALA Sala 76.15 300** *e*P **P 13 40 24.9 +0.7**
**TOTH TOTAH 76.17 300** *e*P **P 13 40 25.7 +1.6**
**KAMT Kaman 76.19 307** *e*P **P 13 40 24.0 -0.2**
**ASF Jabal al Asfar 76.21 299** P **P 13 40 24.9 +0.4**
comp=Z,154nm,0.9s,baz=50,slow=3.6,SNR=147
**RAO Raoul Island 76.22 131** PFAKE 13 40 40.0 +16
RAO LR LR
comp=Z,6μm,19.0s
**HWQ Hawqa 76.24 302** *e*P **P 13 40 24.5 -0.1**
**YAYX Yaylak 76.26 307** *e*P **P 13 40 24.4 -0.3**
**FLOS Flostrand 76.36 337** *e*P P 13 40 27.8 +3.3
**KONS Konsvik 76.36 338** *e*P **P 13 40 23.9 -0.6**
**SERE Serefikochisa 76.44 307** *e*P **P 13 40 24.2 -1.5**
**STOK Stokkvaagen 76.48 337** *e*P **P 13 40 25.1 0.0**

STOK eS S 13 50 08.4 +0.1
**BRBR Barbar** 76.53 301 eP P 13 40 27.0 +0.6
**RCY Rachaya** 76.59 301 eP P 13 40 26.8 +0.2
**BHL Bhannes** 76.59 301 eP P 13 40 25.3 -1.3
**AFSR Af˙ar-Bala (A** 76.63 307 eP P 13 40 26.9 +0.1
**CRAG Craig** 76.67 35 eP P 13 40 27.7 +1.2
comp=Z,118nm,1.0s
**ANTO Ankara** 76.68 308 eP P 13 40 26.9 -0.1
ANTO pmax pmax
comp=Z,411nm,0.7s
ANTO MLR MLR
comp=Z,3µm,20.0s
**ANTO Ankara** 76.68 308⇑ iP P 13 40 27.3 +0.3
**ANTO Ankara** 76.68 308 P P 13 40 27.4 +0.4
SNR=40
**ANTO Ankara** 76.68 308 eP P 13 40 26.9 -0.1
comp=Z,410nm,0.7s
ANTO LR LR
comp=Z,3µm,20.0s
**WRAK Wrangell Islan** 76.69 34 eP P 13 40 27.2 +0.6
comp=Z,189nm,1.0s
WRAK LR LR
comp=Z,4µm,20.0s
**LOD Lodumlu** 76.70 308 eP P 13 40 27.4 +0.4
**YESY Yesilyurt** 76.71 306 eP P 13 40 28.3 +1.1
**SULT Sultanhani-AKS** 76.74 306 eP P 13 40 27.6 +0.3
**SORM Soroca** 76.74 317⇑ iP P 13 40 25.9 -1.1
**KIS Kishinev** 76.86 316⇑ iP P 13 40 26.0 -1.7
comp=Z,800nm,2.0s
**KIS Kishinev** 76.86 316 *i* PcP PcP 13 40 44.0 +5.2
**KIS Kishinev** 76.86 316 ePP PP 13 43 20.0 -0.5
**KIS Kishinev** 76.86 316 ePPP PPP 13 44 20.0
**KIS Kishinev** 76.86 316 ePsP PsP 13 45 19.0
KIS eS S 13 50 12.0 -1.1
KIS eScS SKSac 13 50 25.0 -13
**KIS Kishinev** 76.86 316 ePS PnS 13 51 02.0 +7.7
KIS LRM MLR 14 17 10.0
comp=Z,2µm,15.0s
**KIS Kishinev** 76.86 316⇑ iP P 13 40 26.0 -1.7
KIS *i* 13 40 44.0
KIS *e* 13 43 20.0
KIS eS S 13 50 12.0 -1.1
KIS ePS PnS 13 51 02.0 +7.7
KIS pmax pmax
comp=Z,800nm,2.0s
KIS pmax pmax
comp=Z,3µm,8.0s
KIS MLR MLR
comp=Z,10µm,19.0s
KIS MLR MLR
comp=N,2µm,15.0s
KIS MLR MLR
comp=E,7µm,18.0s
KIS MLR MLR
comp=Z,12µm,20.0s
**MKAZ Moumakai** 77.00 141 ePN P 13 40 30.7 +2.2
**DLBC Dease Lake** 77.00 31 eP P 13 40 29.6 +1.2
comp=Z,183nm,1.1s
**CHBY Cihanbeyli** 77.06 307 eP P 13 40 29.4 +0.3
**MMAI Mount Meron Ar** 77.10 300 P P 13 40 30.0 +0.5
comp=Z,28nm,0.5s,baz=70,slow=9.9,SNR=37
**MMLI Mount Malkishu** 77.29 300 P P 13 40 31.5 +1.0
**SUW Suwalki** 77.49 324 eP P 13 40 30.7 -0.3
SUW eS S 13 50 17.2 -2.5
SUW LMZ LR 14 17 44.4
**SUW Suwalki** 77.49 324⇑ eP P 13 40 30.8 -0.3
SUW eS S 13 50 17.3 -2.5
SUW MLR MLR
comp=Z,19µm,21.3s
**TLCR** 77.52 314⇓ iP P 13 40 31.6 +0.1
**IAS Iasi** 77.58 316⇓ iP P 13 40 32.9 +1.1
**MDUB Mudurnu** 77.61 309 eP P 13 40 32.2 0.0
**TOZ Tahuroa Road** 77.63 141 PN P 13 40 34.3 +2.3
**KONT Konya--Tatoy** 77.68 306 eP P 13 40 30.5 -2.0
**KIZT Kizilcal** 77.69 307 eP P 13 40 32.5 -0.2
**SVRH Sivrihisar-ESK** 77.75 308 eP P 13 40 33.0 0.0
**LFK Lefkose** 77.75 303 eP P 13 40 31.3 -1.8
**NSS Namsos** 77.77 336 eP P 13 40 31.5 -1.0
NSS eS S 13 50 20.9 -1.5
NSS IVMs_BB IVMs_BB 14 19 31.1
comp=Z,10µm,16.9s
**HIZ Hauiti** 77.81 142 ePN P 13 40 33.8 +0.8
**GIUM Giurgiulesti** 77.81 314⇑ iP P 13 40 33.0 0.0
**HDMB Hadim** 77.94 305 eP P 13 40 33.6 -0.7
**CFR Carcaliu** 77.97 314⇑ iP P 13 40 33.7 -0.2
**RES Resolute Bay** 78.01 10 eP P 13 40 33.1 -0.5
RES pmax pmax
comp=Z,108nm,0.9s
**RES Resolute Bay** 78.01 10 eP P 13 40 33.1 -0.5
comp=Z,108nm,0.9s
**CSS Prodhromos** 78.02 303 P P 13 40 34.4 -0.1
**CSS Prodhromos** 78.02 303 eP P 13 40 34.9 +0.4
**CSS Prodhromos** 78.02 303 P P 13 40 34.0 -0.5
**CSS Prodhromos** 78.02 303 eP P 13 40 34.0 -0.5
comp=Z,59nm,0.9s
CSS LR LR
comp=Z,2µm,22.0s
**MAMC Mammari** 78.03 303 P P 13 40 34.7 +0.2
**TIRR Tirgusor** 78.06 313 eP P 13 40 34.1 -0.4
TIRR pmax pmax
comp=Z,141nm,0.9s
**TIRR Tirgusor** 78.06 313⇑ iP P 13 40 34.5 0.0
**TIRR Tirgusor** 78.06 313 eP P 13 40 34.1 -0.4
comp=Z,141nm,0.9s
**GULT Gulveren** 78.11 309 eP P 13 40 35.0 0.0
**ESKT Eskisehir** 78.21 308 eP P 13 40 35.0 -0.6
**TLB Topalu** 78.26 314⇓ iP P 13 40 35.7 +0.2
**HARR Harsova** 78.29 314⇑ iP P 13 40 36.2 +0.5
**LEF Lefka** 78.30 303 eP P 13 40 35.9 -0.1
**PETR Petresti** 78.35 315⇓ iP P 13 40 37.0 +0.9
**PRAR RASCA** 78.36 317⇑ iP P 13 40 35.8 -0.3
**TESR Tescani** 78.42 316⇑ iP P 13 40 36.4 -0.1
**SZAC Souni-Zanaja** 78.44 303 P P 13 40 36.6 -0.2
**HRFI Mount Harif** 78.45 298 P P 13 40 36.6 -0.3
**SILT Sile** 78.46 310 eP P 13 40 36.6 -0.2
**HRT Hereke** 78.57 310 eP P 13 40 37.2 -0.2
**MSAB Monastry St. A** 78.59 313⇑ iP P 13 40 37.9 +0.5
**VRI Vrincioaia** 78.62 315 eP P 13 40 37.1 -0.5
**VRI Vrincioaia** 78.62 315⇑ iP P 13 40 38.0 +0.4
**KZIT Kziot** 78.65 299 P P 13 40 38.5 +0.5
**GRER** 78.65 315⇓ iP P 13 40 38.2 +0.5
**EIL Elat** 78.65 297 P P 13 40 38.3 +0.3
**EIL Elat** 78.65 297 P P 13 40 38.3 +0.3
comp=Z,90nm,0.6s,baz=50,slow=4.9,SNR=46
**ADVT Abdulvahap** 78.66 309 eP P 13 40 37.7 -0.2
**CAVI Cavuskoy** 78.67 309 eP P 13 40 38.0 -0.1
**PLOR Plostina** 78.68 315⇑ iP P 13 40 38.2 +0.3
**LVV L'vov** 78.71 320 *i* P P 13 40 36.0 -2.0
LVV *e* 13 43 38.9
LVV *e* 13 45 24.5
LVV *i* S S 13 50 29.1 -4.0
LVV *e* 13 51 27.3
LVV MLR MLR
comp=N,2µm,20.0s
LVV MLR MLR
comp=E,7µm,20.0s
LVV MLR MLR
comp=Z,10µm,20.0s
**AMRR Amara** 78.71 314⇑ iP P 13 40 38.2 +0.1
**AKMC Akamas** 78.76 303 P P 13 40 38.1 -0.5
**SHUT Suhut-Afyon** 78.78 307 eP P 13 40 39.0 +0.2
**PGOR Pogoanele** 78.83 314⇑ iP P 13 40 39.9 +1.2
**KLYT Kilyos** 78.84 310 eP P 13 40 38.9 0.0
**SUTC Sutluce-Ispart** 78.85 306 eP P 13 40 38.4 -0.8
**BURAR Bucovina Array** 78.89 317⇑ iP P 13 40 39.4 +0.3
**IZI Iznik** 78.89 309 eP P 13 40 39.1 -0.1
**ISK Istanbul-Kandi** 78.90 310 eP P 13 40 38.1 -1.1
**URZ Urewera** 78.91 141 eP P 13 40 38.0 -1.0
comp=Z,484nm,1.8s
**HAZ Te Kaha** 78.96 140 ePN P 13 40 38.3 -1.1
**ISR Istrita** 79.03 315⇓ iP P 13 40 41.2 +1.3
**GEMT Gemlik** 79.05 309 eP P 13 40 40.0 -0.1
**BGKT Bogazkoy** 79.06 310 eP P 13 40 38.4 -1.6
**THZ Tophouse** 79.08 146 PN P 13 40 38.2 -1.8
**TBLU Trondheim** 79.09 335⇑ iP P 13 40 37.9 -1.9
TBLU IAmb IAmb 13 40 42.5
comp=Z,2µm,2.4s
TBLU IVMs_BB IVMs_BB 14 20 20.8
comp=Z,12µm,14.2s
**BCK Bucak** 79.16 306 eP P 13 40 38.8 -2.0
**BKZ Black Stump Fm** 79.18 142 PN P 13 40 40.6 0.0
**MWZ Matawai** 79.20 141 PN P 13 40 39.3 -1.5
**PRD Provadia** 79.22 312 *i* P P 13 40 41.2 +0.3

**CTKS Kestanelik-??a** 79.22 310 eP P 13 40 38.8 -2.1
**ARMT Armutlu** 79.23 310 eP P 13 40 40.6 -0.4
**MLR Muntele Rosu** 79.28 315 P P 13 40 41.2 -0.1
comp=Z,27nm,0.8s,baz=72,slow=6.4,SNR=99
**MLR Muntele Rosu** 79.28 315⇑ iP P 13 40 41.4 +0.1
**CTYL Yal??k??y-??at** 79.28 311 eP P 13 40 40.3 -0.9
**HFS Hagfors** 79.32 332 P P 13 40 40.9 -0.2
comp=Z,130nm,0.7s,baz=76,slow=6.3,SNR=64
**SECR** 79.38 315⇑ iP P 13 40 43.1 +1.4
**SULR** 79.40 314⇓ iP P 13 40 42.8 +1.0
**MRIV Mauritius Mete** 79.41 242 eP P 13 40 42.2 0.0
**DOPR Dopca** 79.44 316⇑ iP P 13 40 42.7 +0.6
**KWP Kalwaria Pacla** 79.57 320 eP P 13 40 43.1 +0.4
KWP eS S 13 50 40.0 -2.3
KWP LMZ LR 14 20 25.2
**KWP Kalwaria Pacla** 79.57 320⇑ eP P 13 40 43.1 +0.4
KWP eS S 13 50 40.0 -2.3
KWP MLR MLR
comp=Z,15µm,19.7s
**RPZ Rata Peaks** 79.60 148 eP P 13 40 42.2 -0.6
comp=Z,433nm,1.3s
**KHL Karahalli** 79.62 307 eP P 13 40 42.6 -0.7
**ARCR ARCALIA** 79.64 317⇑ iP P 13 40 44.0 +0.9
**SNZO South Karori** 79.70 144 PFAKE 13 41 00.0 +17
SNZO LR LR
comp=Z,7µm,22.0s
**KCTX Karacabey (Bur** 79.70 309 eP P 13 40 41.8 -1.8
**MRZ Mangatainoka R** 79.71 143 PN P 13 40 41.6 -1.8
**JMIC Jan Mayen** 79.72 346 eP P 13 40 45.1 +2.0
JMIC eS S 13 50 41.9 -1.2
**BEL Belsk** 79.72 322 eP P 13 40 43.8 +0.4
BEL eS S 13 50 41.8 -1.9
BEL LMZ LR 14 19 31.6
**BEL Belsk** 79.72 322⇑ eP P 13 40 43.9 +0.5
BEL eS S 13 50 41.9 -1.8
BEL MLR MLR
comp=Z,20µm,21.9s
**PHSR Pinarhisar** 79.75 311 eP P 13 40 44.1 +0.3
**WHZ Wether Hill Ro** 79.82 151 eP P 13 40 45.5 +1.6
comp=Z,252nm,1.6s
**VOIR** 79.87 315⇓ iP P 13 40 44.3 -0.2
**KHZ Kahutara** 79.88 146 PN P 13 40 41.9 -2.3
**KHZ Kahutara** 79.88 146 eP P 13 40 41.9 -2.3
comp=Z,156nm,1.2s
**NB2 NORSAR Subarra** 79.90 333 P P 13 40 43.8 -0.5
comp=Z,4µm,3.3s,baz=54,slow=6.2
**NB2 NORSAR Subarra** 79.90 333 P P 13 40 43.8 -0.5
baz=54,slow=6.2
**NOA NORSAR Array B** 79.90 333 P P 13 40 43.8 -0.5
comp=Z,49nm,0.8s,baz=56,slow=5.4,SNR=95
NOA LR LR 14 19 41.5
comp=Z,10µm,18.7s,baz=45,slow=38
**BMR Baia Mare** 79.92 318⇓ iP P 13 40 45.6 +1.0
**NC602 NORSAR Array S** 79.93 333 eP P 13 40 43.4 -1.0
NC602 eS S 13 50 43.6 -2.0
NC602 IVMs_BB IVMs_BB 14 20 39.6
comp=Z,8µm,15.5s
**ELL Elmali** 79.94 306 eP P 13 40 44.9 -0.2
**MTUR Matau** 79.95 315⇑ iP P 13 40 45.7 +0.7
**TKR Tekirdag** 79.99 310 eP P 13 40 45.2 +0.1
**MDB Medias** 80.01 316⇓ iP P 13 40 46.2 +1.0
**EDC Edinkik** 80.02 310 eP P 13 40 42.2 -3.1
**BFZ Birch Farm** 80.09 143 PN P 13 40 44.1 -1.3
**MRMT Marmara Adasi** 80.10 310 eP P 13 40 44.5 -1.4
**KOLS Kolonicke sedl** 80.13 319 eP P 13 40 45.8 +0.1
KOLS pmax pmax
comp=Z,576nm,2.9s
**KOLS Kolonicke sedl** 80.13 319 eP P 13 40 45.8 +0.1
**KOLS Kolonicke sedl** 80.13 319 eS S 13 50 46.6 -1.6
**KULA Kula-Manisa** 80.17 308 eP P 13 40 46.0 -0.3
**SZH Strazhica** 80.18 313 *i* P P 13 40 46.2 +0.1
**DENT Denizli** 80.19 307 eP P 13 40 46.4 0.0
**EDRB Edirne** 80.20 311 eP P 13 40 46.5 +0.3
**DOMB Dombas** 80.22 335 eP P 13 40 47.6 +1.6
**UZH Uzhgorod** 80.25 319 eP P 13 40 45.3 -1.0
UZH *e* 13 40 51.7
UZH *e* 13 40 55.5
UZH *e* 13 43 46.5
UZH eS S 13 50 45.7 -3.6
UZH *i* 13 51 02.9
UZH eSS SS 13 55 57.9 -2.0
**CJR Cluj-Napoca** 80.26 317⇓ iP P 13 40 47.7 +1.1
**BALB Balikesir** 80.28 309 eP P 13 40 46.5 -0.3
**HUMR Humele** 80.29 314⇓ iP P 13 40 46.7 0.0
**TRPA Tarpa** 80.31 318⇑ iP P 13 40 47.2 +0.5
**TRPA Tarpa** 80.31 318⇑ eP P 13 40 47.0 +0.3
**RKY Sarkoy-Tekirda** 80.36 310 eP P 13 40 45.6 -1.6
**KRBG Karabiga-Canak** 80.40 310 eP P 13 40 46.4 -0.9
**ODZ Otahua Downs** 80.40 149 eP P 13 40 48.0 +1.0
comp=Z,372nm,1.8s
**KSL Kastellorizon** 80.41 305 ePN P 13 40 46.0 -1.5
**KSL Kastellorizon** 80.41 305 ePN P 13 40 46.0 -1.5
**STHS Stebnicka Huta** 80.53 320 eP P 13 40 48.3 +0.4
STHS pmax pmax
comp=Z,23nm,1.0s
**STHS Stebnicka Huta** 80.53 320 eP P 13 40 48.3 +0.4
**FETY Fethiye** 80.59 306 eP P 13 40 46.4 -2.1
**LOT Lotru** 80.69 316⇑ iP P 13 40 49.3 +0.3
**OSL Oslo** 80.70 332 eP P 13 40 48.0 -0.5
**LPK Lapseki** 80.78 310 eP P 13 40 46.4 -3.0
**DRGR** 80.78 317⇑ iP P 13 40 49.8 +0.4
**ERIK Erikli-Kesan** 80.83 310 eP P 13 40 49.8 +0.2
**DALY Dalyan (Mu˙la** 80.84 306 eP P 13 40 43.4 -6.4
**AKN Aaknes** 80.94 335⇑ iP P 13 40 49.8 -0.1
**DIM Dimitrovgrad** 80.94 312 *i* P P 13 40 50.4 +0.2
**AYDB Zeytinkoy-Aydi** 80.95 307 eP P 13 40 50.7 +0.2
**GELI Tayfur-Gelibol** 80.97 310 eP P 13 40 50.4 0.0
**YERI Yerkesik** 80.98 307 eP P 13 40 50.8 +0.2
**GKP Gorka Klasztor** 80.99 325 eP P 13 40 50.3 +0.1
GKP eS S 13 50 56.4 -0.5
GKP LMZ LR 14 21 19.0
**GKP Gorka Klasztor** 80.99 325⇑ eP P 13 40 50.4 +0.2
GKP eS S 13 50 56.5 -0.5
GKP MLR MLR
comp=Z,31µm,21.0s
**OJC Ojcow** 81.00 321 eP P 13 40 50.6 +0.2
OJC eS S 13 50 54.7 -2.6
OJC LMZ LR 14 18 33.8
**OJC Ojcow** 81.00 321⇑ eP P 13 40 50.6 +0.2
OJC eS S 13 50 54.7 -2.6
OJC MLR MLR
comp=Z,12µm,22.5s
**DEV Deva** 81.05 316⇑ iP P 13 40 51.2 +0.5
**ENEZ Enez** 81.06 311 eP P 13 40 50.5 -0.3
**ALN Alexandroupoli** 81.06 311 eP P 13 40 50.2 -0.7
**ALN Alexandroupoli** 81.06 311 P P 13 40 50.2 -0.7
**ALN Alexandroupoli** 81.06 311 P P 13 40 50.2 -0.7
**ALN Alexandroupoli** 81.06 311 P P 13 40 50.2 -0.7
**NIE Niedzica** 81.08 320 eP P 13 40 51.4 +0.6
NIE eS S 13 50 59.4 +1.3
NIE LMZ LR 14 20 04.4
**NIE Niedzica** 81.08 320⇑ eP P 13 40 51.5 +0.6
NIE eS S 13 50 59.5 +1.3
NIE MLR MLR
comp=Z,6µm,23.1s
**KDZ Kurdzhali** 81.19 312 *i* P P 13 40 51.6 0.0
**DKL Dikili** 81.20 309 eP P 13 40 51.2 -0.4
**IZMI Izmir** 81.22 308 eP P 13 40 51.4 -0.4
**RER Riviere de l'E** 81.26 242 eP P 13 40 51.5 -0.8
comp=Z,443nm,1.3s
RER LR LR
comp=Z,6µm,19.0s
**BSD Bornholm Skovb** 81.28 327⇑ iP P 13 40 51.3 -0.4
BSD pmax pmax
comp=Z,160nm,0.7s
BSD MLR MLR
comp=Z,32µm,17.0s
**BSD Bornholm Skovb** 81.28 327⇑ iP P 13 40 51.3 -0.4
comp=Z,165nm,0.7s
comp=Z,32µm,17.0s
**EZN Ezine** 81.31 310 eP P 13 40 51.6 -0.5
**RDO Rodhopi** 81.31 311 ePN P 13 40 50.0 -2.2
**RDO Rodhopi** 81.31 311 ePN P 13 40 50.0 -2.2
**KONO Kongsberg** 81.33 332 eP P 13 40 51.1 -0.9
KONO IAmb IAmb 13 40 55.6
comp=Z,1µm,2.2s
KONO eS S 13 50 57.5 -2.8
KONO IVMs_BB IVMs_BB 14 20 45.1
comp=Z,9µm,19.5s
**KONO Kongsberg** 81.33 332 eP P 13 40 51.7 -0.2
KONO pmax pmax
comp=Z,600nm,1.9s
KONO MLR MLR
comp=Z,22µm,20.0s
**KONO Kongsberg** 81.33 332 eP P 13 40 51.7 -0.2
comp=Z,600nm,1.9s
KONO LR LR
comp=Z,22µm,20.0s
**SRE Strehaia** 81.39 315⇑ iP P 13 40 53.4 +0.9
**KULLO Kullorsuaq** 81.43 1⇑ iP P 13 40 52.4 +0.2
comp=Z,116nm,0.9s
**GADA Gvkgeada** 81.46 310 eP P 13 40 52.8 -0.2
**ARG Arkhangelos** 81.47 306 P P 13 40 52.8 -0.3
**ARG Arkhangelos** 81.47 306 ePN P 13 40 53.1 0.0
**ARG Arkhangelos** 81.47 306 ePN P 13 40 53.1 0.0
**ARG Arkhangelos** 81.47 306 P P 13 40 52.8 -0.3
**ARG Arkhangelos** 81.47 306 P P 13 40 52.8 -0.3
**YKA Yellowknife Ar** 81.47 24 P P 13 40 52.5 -0.1
comp=Z,72nm,0.8s,baz=304,slow=5.2,SNR=108
**YKA Yellowknife Ar** 81.47 24 P P 13 40 52.5 -0.1
YKA pmax pmax
comp=Z,72nm,0.8s
**PRK Paraskevi** 81.58 309 P P 13 40 53.3 -0.4
**PRK Paraskevi** 81.58 309 ePN P 13 40 53.1 -0.6
**PRK Paraskevi** 81.58 309 ePN P 13 40 53.1 -0.6
**PRK Paraskevi** 81.58 309 P P 13 40 53.3 -0.4
**PRK Paraskevi** 81.58 309 P P 13 40 53.3 -0.4
**SMTH Samothraki Isl** 81.60 311 ePN P 13 40 53.1 -0.7
**SMTH Samothraki Isl** 81.60 311 ePN P 13 40 53.1 -0.7
**SMTH Samothraki Isl** 81.60 311 P P 13 40 51.9 -1.9
**SMTH Samothraki Isl** 81.60 311 P P 13 40 51.9 -1.9
**RZN Rozhen** 81.65 312 *i* P P 13 40 54.4 +0.2
**PGB Panagyurishte** 81.65 313 *i* P P 13 40 54.3 +0.2
**LANS Liptovska Anna** 81.68 320 eP P 13 40 54.6 +0.5
**LANS Liptovska Anna** 81.68 320 eP P 13 40 54.6 +0.5
**BODT Bodrum** 81.73 307 eP P 13 40 53.9 -0.6
**SMG Samos** 81.81 308 ePN P 13 40 54.2 -0.7
**SMG Samos** 81.81 308 ePN P 13 40 54.2 -0.7
**SMG Samos** 81.81 308 P P 13 40 54.4 -0.5
**SMG Samos** 81.81 308 P P 13 40 54.4 -0.5
**HYA Hoyanger** 81.85 335 eP P 13 40 54.2 -0.4
HYA IAmb IAmb 13 40 57.7
comp=Z,109nm,0.6s
**SIGR SIGRI** 81.89 309 eP P 13 40 54.6 -0.6
**SIGR SIGRI** 81.89 309 ePN P 13 40 54.7 -0.6
**SIGR SIGRI** 81.89 309 ePN P 13 40 54.7 -0.6
**SIGR SIGRI** 81.89 309 P P 13 40 54.7 -0.6
**SIGR SIGRI** 81.89 309 P P 13 40 54.7 -0.6
**BZS Buzias** 81.98 316⇑ iP P 13 40 55.5 -0.1
**PSZ Piszkesteto** 82.00 319 eP P 13 40 55.6 -0.2
PSZ pmax pmax
comp=Z,584nm,1.9s
PSZ MLR MLR
comp=Z,10µm,20.0s
**PSZ Piszkesteto** 82.00 319⇓ iP P 13 40 56.2 +0.4
**PSZ Piszkesteto** 82.00 319⇑ eSKSdf P 13 40 55.9 +0.1
**PSZ Piszkesteto** 82.00 319 eP P 13 40 55.6 -0.2
comp=Z,584nm,1.9s
PSZ LR LR
comp=Z,10µm,20.0s
**NIS1 Nisyros Isl.** 82.01 306 ePN P 13 40 56.3 +0.3
**NIS1 Nisyros Isl.** 82.01 306 ePN P 13 40 56.3 +0.3
**NIS1 Nisyros Isl.** 82.01 306 P P 13 40 55.4 -0.6
**NIS1 Nisyros Isl.** 82.01 306 P P 13 40 55.4 -0.6
**FOO Floro** 82.03 335 eP P 13 40 55.4 -0.1
FOO IVMs_BB IVMs_BB 14 22 13.2
comp=Z,8µm,16.9s
**KAVA Kavala** 82.08 311 P P 13 40 55.9 -0.3
**KAVA Kavala** 82.08 311 P P 13 40 55.9 -0.3
**LIA Limnos Island** 82.08 310 ePN P 13 40 55.5 -0.7
**LIA Limnos Island** 82.08 310 ePN P 13 40 55.5 -0.7
**LIA Limnos Island** 82.08 310 P P 13 40 55.3 -0.9
**LIA Limnos Island** 82.08 310 P P 13 40 55.3 -0.9
**CHOS Chios island** 82.09 308 eP P 13 40 54.9 -1.6
**CHOS Chios island** 82.09 308 ePN P 13 40 55.8 -0.7
**CHOS Chios island** 82.09 308 ePN P 13 40 55.8 -0.7
**CHOS Chios island** 82.09 308 P P 13 40 55.5 -1.0
**CHOS Chios island** 82.09 308 P P 13 40 55.5 -1.0
**OKC Ostrava-Krasne** 82.12 321 eP P 13 40 56.4 +0.1
OKC *e* 13 51 06.1
OKC MLR MLR
comp=Z,8µm,19.7s
**OKC Ostrava-Krasne** 82.12 321⇑ eP P 13 40 56.4 +0.1
OKC eS S 13 51 06.1 -2.7
OKC AMS AMS 14 21 00.0
comp=Z,8µm,19.7s
**COP Copenhagen** 82.20 328 *i* P P 13 40 56.8 +0.2
COP pmax pmax
comp=Z,150nm,0.8s
COP MLR MLR
comp=Z,7µm,15.0s
**COP Copenhagen** 82.20 328 *i* P P 13 40 56.8 +0.2
comp=Z,150nm,0.8s
comp=Z,7µm,15.0s
**VTS Vitosha** 82.28 313 *i* P P 13 40 57.8 +0.3
**VYHS Vyhne** 82.36 320 eP P 13 40 57.6 0.0
VYHS pmax pmax
comp=Z,866nm,2.6s
**VYHS Vyhne** 82.36 320 eP P 13 40 57.6 0.0
**VYHS Vyhne** 82.36 320 eS S 13 51 10.7 -0.7
**MMB Musomiste** 82.36 312 *i* P P 13 40 57.1 -0.7
**NVR Nevrokopi** 82.37 312 ePN P 13 40 57.2 -0.6
**NVR Nevrokopi** 82.37 312 ePN P 13 40 57.2 -0.6
**NVR Nevrokopi** 82.37 312 P P 13 40 57.3 -0.6
**NVR Nevrokopi** 82.37 312 P P 13 40 57.3 -0.6
**ODD1 Odda** 82.42 334 eP P 13 40 58.0 +0.3
**KARP Karpathos** 82.45 305 ePN P 13 40 58.2 -0.2
**KARP Karpathos** 82.45 305 ePN P 13 40 58.2 -0.2
**KARP Karpathos** 82.45 305 P P 13 40 57.4 -1.0
**KARP Karpathos** 82.45 305 P P 13 40 57.4 -1.0
**SUE Sulen** 82.47 335 eP P 13 40 58.9 +1.1
SUE IVMs_BB IVMs_BB 14 21 41.8
comp=Z,10µm,10.5s
**MORC Moravsky Berou** 82.50 321 eP P 13 40 58.2 -0.1
MORC pmax pmax
comp=Z,865nm,1.5s
**MORC Moravsky Berou** 82.50 321 eP P 13 40 58.2 -0.1
comp=Z,865nm,1.5s
**HOMB Homborsund** 82.58 332 eP P 13 40 57.9 -0.6
HOMB IVMs_BB IVMs_BB 14 21 17.6
comp=Z,7µm,16.2s
**RUND Rundenannen** 82.62 334 eP P 13 41 00.3 +1.5
**ASK Askoy** 82.65 334 eP P 13 40 59.8 +1.0
**BER Bergen** 82.65 334 eP P 13 40 58.3 -0.5
BER eS S 13 51 12.8 -1.0
BER IVMs_BB IVMs_BB 14 21 43.0
comp=Z,14µm,18.1s
**SRS Serrai** 82.66 312 P P 13 40 58.5 -0.8
**SRS Serrai** 82.66 312 ePN P 13 40 58.3 -1.0
**SRS Serrai** 82.66 312 ePN P 13 40 58.3 -1.0
**SRS Serrai** 82.66 312 P P 13 40 58.5 -0.8
**SRS Serrai** 82.66 312 P P 13 40 58.5 -0.8
**KKB Krupnik** 82.67 313 *i* P P 13 40 59.2 -0.2
**KSP Ksiaz** 82.68 323 eP P 13 40 59.4 +0.2
KSP eS S 13 51 03.9 -11
KSP LMZ LR 14 21 10.9
**KSP Ksiaz** 82.68 323⇑ eP P 13 40 59.4 +0.2
KSP eS S 13 51 03.9 -11
KSP MLR MLR
comp=Z,19µm,20.2s
**BUD Budapest** 82.72 319⇑ eSKSdf P 13 40 59.4 -0.1
**OUR Ouranopolis** 82.73 311 eP P 13 40 57.2 -2.4
**OUR Ouranopolis** 82.73 311 P P 13 40 59.1 -0.5
**OUR Ouranopolis** 82.73 311 ePN P 13 40 59.2 -0.4
**OUR Ouranopolis** 82.73 311 ePN P 13 40 59.2 -0.4
**OUR Ouranopolis** 82.73 311 P P 13 40 59.1 -0.5
**OUR Ouranopolis** 82.73 311 P P 13 40 59.1 -0.5
**SCO Scoresbysund** 82.75 349 *i* P P 13 41 00.0 +0.9
SCO pmax pmax
comp=Z,260nm,1.2s
SCO MLR MLR
comp=Z,8µm,20.0s
**SCO Scoresbysund** 82.75 349 *i* P P 13 41 00.0 +0.9
comp=Z,264nm,1.2s
**BLS5 Blasjo** 82.78 333 eP P 13 40 58.8 -0.8
BLS5 IVMs_BB IVMs_BB 14 22 27.6
comp=Z,9µm,17.4s
**KRLC Kraliky** 82.78 322 eP P 13 41 00.4 +0.6
**KRLC Kraliky** 82.78 322⇑ eP P 13 41 00.4 +0.6
**SUMG Summit** 82.82 355 eP P 13 40 59.8 -0.2
SUMG pmax pmax
comp=Z,213nm,0.8s
**SUMG Summit** 82.82 355 eP P 13 40 59.8 -0.2
comp=Z,213nm,0.8s
**DPC Dobruska-Polom** 82.91 322⇑ iP P 13 41 00.9 +0.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DPC | | | | e | | 13 51 14.9 | |
| DPC | | | | MLR | MLR | | |
| | comp=Z,17µm,18.8s | | | | | | |
| DPC | Dobruska-Polom | 82.91 | 322 | ⇑iP | P | 13 41 00.9 | +0.4 |
| DPC | | | | eS | S | 13 51 14.9 | -2.0 |
| DPC | | | | AMS | AMS | 14 20 50.0 | |
| | comp=Z,17µm,18.8s | | | | | | |
| SOH | Sokhos | 82.95 | 312 | P | P | 13 40 59.9 | -1.0 |
| SOH | Sokhos | 82.95 | 312 | ePN | P | 13 40 59.6 | -1.3 |
| SOH | Sokhos | 82.95 | 312 | ePN | P | 13 40 59.6 | -1.3 |
| SOH | Sokhos | 82.95 | 312 | P | P | 13 40 59.9 | -1.0 |
| SOH | Sokhos | 82.95 | 312 | P | P | 13 40 59.9 | -1.0 |
| UPC | Upice | 83.00 | 323 | eP | P | 13 41 01.1 | +0.2 |
| UPC | | | | e | | 13 51 17.3 | |
| UPC | | | | MLR | MLR | | |
| | comp=Z,20µm,20.3s | | | | | | |
| UPC | Upice | 83.00 | 323 | ⇑eP | P | 13 41 01.1 | +0.2 |
| UPC | | | | esP | sP | 13 41 16.9 | +1.8 |
| UPC | | | | eS | S | 13 51 17.3 | -0.5 |
| UPC | | | | AMS | AMS | 14 21 00.0 | |
| | comp=Z,20µm,20.3s | | | | | | |
| APE | Apeiranthos | 83.02 | 307 | eP | P | 13 40 57.4 | -3.9 |
| APE | Apeiranthos | 83.02 | 307 | P | P | 13 41 00.0 | -1.3 |
| APE | | | | pmax | pmax | | |
| | comp=Z,159nm,1.9s | | | | | | |
| APE | Apeiranthos | 83.02 | 307 | ⇓iP | P | 13 41 01.0 | -0.3 |
| APE | Apeiranthos | 83.02 | 307 | ePN | P | 13 40 59.8 | -1.5 |
| APE | Apeiranthos | 83.02 | 307 | ePN | P | 13 40 59.8 | -1.5 |
| PLG | Polygyros | 83.08 | 311 | P | P | 13 41 00.7 | -0.8 |
| PLG | Polygyros | 83.08 | 311 | ePN | P | 13 41 00.3 | -1.2 |
| PLG | Polygyros | 83.08 | 311 | ePN | P | 13 41 00.3 | -1.2 |
| PLG | Polygyros | 83.08 | 311 | P | P | 13 41 00.7 | -0.8 |
| PLG | Polygyros | 83.08 | 311 | P | P | 13 41 00.7 | -0.8 |
| SNART | Snartemo | 83.10 | 332 | eP | P | 13 41 00.9 | -0.3 |
| SNART | | | | IAmb | IAmb | 13 41 02.8 | |
| | comp=Z,115nm,0.9s | | | | | | |
| SNART | | | | eSKSac | S | 13 51 19.4 | +0.9 |
| KNT | Kendrikon | 83.11 | 312 | eP | P | 13 41 01.0 | -0.7 |
| KNT | Kendrikon | 83.11 | 312 | P | P | 13 41 01.1 | -0.5 |
| KNT | Kendrikon | 83.11 | 312 | ePN | P | 13 41 00.5 | -1.1 |
| KNT | Kendrikon | 83.11 | 312 | ePN | P | 13 41 00.5 | -1.1 |
| KNT | Kendrikon | 83.11 | 312 | P | P | 13 41 01.1 | -0.5 |
| KNT | Kendrikon | 83.11 | 312 | P | P | 13 41 01.1 | -0.5 |
| PAIG | Paliouri | 83.11 | 311 | P | P | 13 41 00.9 | -0.7 |
| PAIG | Paliouri | 83.11 | 311 | ePN | P | 13 41 00.9 | -0.7 |
| PAIG | Paliouri | 83.11 | 311 | ePN | P | 13 41 00.9 | -0.7 |
| PAIG | Paliouri | 83.11 | 311 | P | P | 13 41 00.9 | -0.7 |
| PAIG | Paliouri | 83.11 | 311 | P | P | 13 41 00.9 | -0.7 |
| AAE | Adis Abeba | 83.17 | 277 | i P | P | 13 41 04.5 | +1.7 |
| RUE | Ruedersdorf | 83.20 | 325 | P | P | 13 41 01.3 | -0.5 |
| | comp=Z,264nm,0.9s | | | | | | |
| HORT | Hortiatis | 83.22 | 311 | eP | P | 13 41 01.2 | -1.1 |
| HORT | Hortiatis | 83.22 | 311 | ePN | P | 13 41 01.1 | -1.2 |
| HORT | Hortiatis | 83.22 | 311 | ePN | P | 13 41 01.1 | -1.2 |
| HORT | Hortiatis | 83.22 | 311 | P | P | 13 41 01.2 | -1.1 |
| HORT | Hortiatis | 83.22 | 311 | P | P | 13 41 01.2 | -1.1 |
| VAY | Valandovo | 83.26 | 312 | i P | P | 13 41 02.5 | +0.1 |
| VAY | Valandovo | 83.26 | 312 | P | P | 13 41 01.9 | -0.5 |
| VAY | Valandovo | 83.26 | 312 | P | P | 13 41 01.9 | -0.5 |
| VAY | Valandovo | 83.26 | 312 | P | P | 13 41 01.9 | -0.5 |
| VRAC | Vranov | 83.27 | 321 | P | P | 13 41 02.7 | +0.4 |
| | comp=Z,145nm,0.8s,baz=68,slow=5.2,SNR=49 | | | | | | |
| VRAC | Vranov | 83.27 | 321 | ⇓iP | P | 13 41 03.2 | +0.9 |
| THE | Thessaloniki | 83.30 | 312 | P | P | 13 41 01.3 | -1.3 |
| THE | Thessaloniki | 83.30 | 312 | ePN | P | 13 41 01.4 | -1.2 |
| THE | Thessaloniki | 83.30 | 312 | ePN | P | 13 41 01.4 | -1.2 |
| THE | Thessaloniki | 83.30 | 312 | P | P | 13 41 01.3 | -1.3 |
| THE | Thessaloniki | 83.30 | 312 | P | P | 13 41 01.3 | -1.3 |
| AOS | Alonnisos | 83.30 | 310 | eP | P | 13 40 56.6 | -6.0 |
| AOS | Alonnisos | 83.30 | 310 | ePN | P | 13 41 02.1 | -0.5 |
| AOS | Alonnisos | 83.30 | 310 | ePN | P | 13 41 02.1 | -0.5 |
| FURI | Furi | 83.30 | 277 | i P | P | 13 41 06.0 | +2.5 |
| FURI | | | | ePKP | PP | 13 44 20.8 | +5.4 |
| FURI | | | | eS | SKiKP | 13 50 31.7 | +38 |
| MUD | Monsted U'grnd | 83.31 | 330 | ⇑iP | P | 13 41 02.7 | +0.4 |
| MUD | | | | pmax | pmax | | |
| | comp=Z,370nm,0.9s | | | | | | |
| MUD | | | | MLR | MLR | | |
| | comp=Z,18µm,17.0s | | | | | | |
| MUD | Monsted U'grnd | 83.31 | 330 | ⇑iP | P | 13 41 02.7 | +0.4 |
| | comp=Z,370nm,0.9s | | | | | | |
| ZKR | Zakros | 83.33 | 305 | P | P | 13 41 02.5 | -0.4 |
| ZKR | Zakros | 83.33 | 305 | P | P | 13 41 02.5 | -0.4 |
| SANT | Santorini | 83.36 | 307 | ePN | P | 13 41 01.6 | -1.5 |
| SANT | Santorini | 83.36 | 307 | ePN | P | 13 41 01.6 | -1.5 |
| SANT | Santorini | 83.36 | 307 | eP | P | 13 41 01.0 | -2.1 |
| | comp=Z,296nm,1.1s | | | | | | |
| SANT | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| THR3 | Thira Island, | 83.39 | 307 | P | P | 13 41 01.8 | -1.4 |
| THR3 | Thira Island, | 83.39 | 307 | P | P | 13 41 01.8 | -1.4 |
| KARY | Karystos | 83.39 | 309 | P | P | 13 41 01.8 | -1.4 |
| KMY | Karmoy | 83.40 | 333 | eP | P | 13 41 03.5 | +0.8 |
| THR6 | Thira Island, | 83.42 | 307 | P | P | 13 41 01.6 | -1.7 |
| THR6 | Thira Island, | 83.42 | 307 | P | P | 13 41 01.6 | -1.7 |
| THR5 | Thira Island, | 83.43 | 307 | P | P | 13 41 03.8 | +0.4 |
| GRG | Griva | 83.53 | 312 | P | P | 13 41 03.1 | -0.8 |
| GRG | Griva | 83.53 | 312 | P | P | 13 41 03.0 | -0.8 |
| GRG | Griva | 83.53 | 312 | ePN | P | 13 41 03.1 | -0.8 |
| GRG | Griva | 83.53 | 312 | ePN | P | 13 41 03.1 | -0.8 |
| GRG | Griva | 83.53 | 312 | P | P | 13 41 03.0 | -0.8 |
| GRG | Griva | 83.53 | 312 | P | P | 13 41 03.0 | -0.8 |
| EREA | Eretria | 83.59 | 309 | ePN | P | 13 41 02.2 | -2.0 |
| EREA | Eretria | 83.59 | 309 | ePN | P | 13 41 02.2 | -2.0 |
| SKIA | Skiathos | 83.59 | 310 | ePN | P | 13 41 02.4 | -1.8 |
| SKIA | Skiathos | 83.59 | 310 | ePN | P | 13 41 02.4 | -1.8 |
| SKIA | Skiathos | 83.59 | 310 | P | P | 13 41 02.9 | -1.3 |
| XOR | Xorichti | 83.69 | 310 | ePN | P | 13 41 03.4 | -1.3 |
| XOR | Xorichti | 83.69 | 310 | ePN | P | 13 41 03.4 | -1.3 |
| XOR | Xorichti | 83.69 | 310 | P | P | 13 41 02.8 | -1.9 |
| XOR | Xorichti | 83.69 | 310 | P | P | 13 41 02.8 | -1.9 |
| DIVS | Divibare | 83.70 | 316 | ⇑iP | P | 13 41 04.7 | 0.0 |
| DIVS | Divibare | 83.70 | 316 | P | P | 13 41 04.4 | -0.3 |
| NEO | Neokhori | 83.70 | 310 | ePN | P | 13 41 03.4 | -1.3 |
| NEO | Neokhori | 83.70 | 310 | ePN | P | 13 41 03.4 | -1.3 |
| NEO | Neokhori | 83.70 | 310 | P | P | 13 41 03.1 | -1.6 |
| NEO | Neokhori | 83.70 | 310 | P | P | 13 41 03.1 | -1.6 |
| MRKA | Markates | 83.71 | 310 | ePN | P | 13 41 04.2 | -0.6 |
| MRKA | Markates | 83.71 | 310 | ePN | P | 13 41 04.2 | -0.6 |
| NPS | Neapolis | 83.72 | 306 | ePN | P | 13 41 03.8 | -1.1 |
| NPS | Neapolis | 83.72 | 306 | ePN | P | 13 41 03.8 | -1.1 |
| SKO | Skopje | 83.73 | 313 | i P | P | 13 41 05.5 | +0.7 |
| SKO | Skopje | 83.73 | 313 | P | P | 13 41 05.0 | +0.2 |
| SKO | Skopje | 83.73 | 313 | P | P | 13 41 05.0 | +0.2 |
| SKO | Skopje | 83.73 | 313 | P | P | 13 41 05.0 | +0.2 |
| SERI | Serifos | 83.73 | 308 | ePN | P | 13 41 03.0 | -2.0 |
| SERI | Serifos | 83.73 | 308 | ePN | P | 13 41 03.0 | -2.0 |
| PVCC | Panska Ves | 83.79 | 323 | eP | P | 13 41 05.9 | +1.0 |
| PVCC | | | | MLR | MLR | | |
| | comp=Z,15µm,18.8s | | | | | | |
| PVCC | Panska Ves | 83.79 | 323 | ⇑eP | P | 13 41 05.9 | +1.0 |
| PVCC | | | | AMS | AMS | 14 22 40.0 | |
| | comp=Z,15µm,18.8s | | | | | | |
| FYTO | Fytoko, Volos | 83.85 | 310 | P | P | 13 41 04.2 | -1.3 |
| FYTO | Fytoko, Volos | 83.85 | 310 | P | P | 13 41 04.2 | -1.3 |
| LIT | Litokhoron | 83.86 | 311 | P | P | 13 41 04.6 | -0.9 |
| LIT | Litokhoron | 83.86 | 311 | P | P | 13 41 04.6 | -0.9 |
| LIT | Litokhoron | 83.86 | 311 | P | P | 13 41 04.6 | -0.9 |
| LAST | Lasithi | 83.86 | 306 | P | P | 13 41 05.5 | -0.2 |
| LAST | Lasithi | 83.86 | 306 | P | P | 13 41 05.5 | -0.2 |
| SMIA | Simia | 83.90 | 310 | ePN | P | 13 41 04.7 | -1.1 |
| SMIA | Simia | 83.90 | 310 | ePN | P | 13 41 04.7 | -1.1 |
| TREC | Trest | 83.90 | 322 | ⇑AMS | AMS | 14 21 40.0 | |
| | comp=Z,14µm,20.7s | | | | | | |
| VLY | Voula,Athens | 83.93 | 309 | ePN | P | 13 41 03.8 | -2.1 |
| VLY | Voula,Athens | 83.93 | 309 | ePN | P | 13 41 03.8 | -2.1 |
| VLY | Voula,Athens | 83.93 | 309 | P | P | 13 41 04.0 | -1.9 |
| VLY | Voula,Athens | 83.93 | 309 | P | P | 13 41 04.0 | -1.9 |
| ATH | Athens Observa | 83.93 | 309 | ePN | P | 13 41 04.8 | -1.1 |
| ATH | Athens Observa | 83.93 | 309 | ePN | P | 13 41 04.8 | -1.1 |
| BRG | Berggiesshubel | 83.95 | 324 | i P | P | 13 41 05.8 | +0.1 |
| | comp=Z,54nm,0.9s | | | | | | |
| BRG | | | | PP | PP | 13 43 58.0 | -21 |
| BRG | | | | S | S | 13 50 44.0 | -43 |
| BRG | Berggiesshubel | 83.95 | 324 | i P | P | 13 41 05.8 | +0.1 |
| BRG | | | | i | | 13 41 19.7 | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,54nm,0.9s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=N,16µm,19.3s | | | | | | |
| BRG | | | | MLR | MLR | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,16µm,19.3s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=Z,24µm,18.9s | | | | | | |
| BRG | Berggiesshubel | 83.95 | 324 | eP | P | 13 41 05.7 | -0.1 |
| | comp=Z,177nm,1.4s,baz=57,slow=4.8 | | | | | | |
| GOPC | GO Pecny, Ondr | 83.98 | 322 | eP | P | 13 41 06.1 | +0.1 |
| GOPC | | | | e | | 13 41 20.8 | |
| GOPC | | | | e | | 13 51 27.0 | |
| GOPC | | | | MLR | MLR | | |
| | comp=Z,17µm,18.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 83.98 | 322 | ⇑eP | P | 13 41 06.1 | +0.1 |
| GOPC | | | | esP | sP | 13 41 20.8 | +0.6 |
| GOPC | | | | eS | SKSac | 13 51 27.0 | +0.2 |
| GOPC | | | | AMS | AMS | 14 21 30.0 | |
| | comp=Z,17µm,18.5s | | | | | | |
| MHLO | Agia Marina, M | 84.00 | 307 | ePN | P | 13 41 05.0 | -1.3 |
| MHLO | Agia Marina, M | 84.00 | 307 | ePN | P | 13 41 05.0 | -1.3 |
| MHLO | Agia Marina, M | 84.00 | 307 | P | P | 13 41 04.9 | -1.3 |
| PRU | Pruhonice | 84.08 | 323 | ⇑iP | P | 13 41 06.5 | +0.1 |
| PRU | | | | e | | 13 41 19.2 | |
| PRU | | | | e | | 13 51 26.1 | |
| PRU | | | | MLR | MLR | | |
| | comp=Z,17µm,20.7s | | | | | | |
| PRU | Pruhonice | 84.08 | 323 | ⇑iP | P | 13 41 06.5 | +0.1 |
| PRU | | | | esP | sP | 13 41 19.2 | -1.4 |
| PRU | | | | eS | SKSac | 13 51 26.1 | -1.2 |
| PRU | | | | AMS | AMS | 14 21 40.0 | |
| | comp=Z,17µm,20.7s | | | | | | |
| SOP | Sopron | 84.09 | 320 | ⇑eSKSdf | P | 13 41 06.6 | +0.1 |
| PRA | Prague | 84.10 | 323 | eP | P | 13 41 07.1 | +0.6 |
| PRA | | | | e | | 13 41 21.4 | |
| PRA | | | | e | | 13 51 27.8 | |
| PRA | | | | e | | 13 52 21.5 | |
| PRA | | | | MLR | MLR | | |
| | comp=Z,14µm,20.7s | | | | | | |
| PRA | Prague | 84.10 | 323 | ⇑eP | P | 13 41 07.1 | +0.6 |
| PRA | | | | esP | sP | 13 41 21.4 | +0.7 |
| PRA | | | | eS | SKSac | 13 51 27.8 | +0.4 |
| PRA | | | | eSP | SPn | 13 52 21.5 | +1.6 |
| PRA | | | | AMS | AMS | 14 21 40.0 | |
| | comp=Z,14µm,20.7s | | | | | | |
| ATAL | Atalanti | 84.11 | 310 | P | P | 13 41 05.1 | -1.7 |
| ATAL | Atalanti | 84.11 | 310 | P | P | 13 41 05.1 | -1.7 |
| VILL | Villia | 84.14 | 309 | P | P | 13 41 04.8 | -2.2 |
| LKR | Lokris | 84.14 | 310 | ePN | P | 13 41 05.0 | -1.9 |
| LKR | Lokris | 84.14 | 310 | ePN | P | 13 41 05.0 | -1.9 |
| LKR | Lokris | 84.14 | 310 | P | P | 13 41 05.1 | -1.9 |
| LKR | Lokris | 84.14 | 310 | P | P | 13 41 05.1 | -1.9 |
| VIL2 | Platees | 84.15 | 309 | ePN | P | 13 41 05.6 | -1.4 |
| VIL2 | Platees | 84.15 | 309 | ePN | P | 13 41 05.6 | -1.4 |
| BSEG | Bad Segeberg | 84.18 | 327 | eP | P | 13 41 07.4 | +0.6 |
| | comp=Z,294nm,1.1s,baz=57,slow=4.8 | | | | | | |
| NAIG | Nisos Aigina | 84.19 | 309 | ePN | P | 13 41 05.0 | -2.2 |
| NAIG | Nisos Aigina | 84.19 | 309 | ePN | P | 13 41 05.0 | -2.2 |
| CLL | Collm | 84.23 | 324 | eP | P | 13 41 07.0 | -0.1 |
| CLL | | | | e | | 13 41 21.0 | |
| CLL | | | | e | | 13 44 22.0 | |
| CLL | | | | eS | S | 13 51 30.0 | -0.1 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,271nm,1.3s | | | | | | |
| CLL | | | | MLR | MLR | | |
| | comp=Z,25µm,18.6s | | | | | | |
| CLL | Collm | 84.23 | 324 | eP | P | 13 41 07.0 | -0.1 |
| | comp=Z,167nm,1.1s,baz=57,slow=4.8 | | | | | | |
| CLL | Collm | 84.23 | 324 | eP | P | 13 41 07.0 | -0.1 |
| | comp=Z,271nm,1.3s | | | | | | |
| CLL | | | | esP | sP | 13 41 21.0 | -0.3 |
| CLL | | | | ePP | PP | 13 44 22.0 | +0.7 |
| CLL | | | | ePPP | PPP | 13 46 18.0 | |
| CLL | | | | e(PPPP) | | 13 48 00.0 | |
| CLL | | | | eS | S | 13 51 30.0 | -0.1 |
| CLL | | | | ePPS | PPS | 13 52 47.0 | |
| CLL | | | | eSS | SS | 13 57 00.0 | +1.1 |
| CLL | | | | eSSS | SSS | 14 00 36.0 | |
| CLL | | | | LmV | | 14 23 00.0 | |
| | comp=Z,25µm,18.6s | | | | | | |
| IDI | Anoyia | 84.25 | 306 | P | P | 13 41 06.7 | -1.0 |
| | comp=Z,96nm,1.0s,baz=50,slow=7.9,SNR=25 | | | | | | |
| IDI | Anoyia | 84.25 | 306 | P | P | 13 41 06.4 | -1.3 |
| IDI | Anoyia | 84.25 | 306 | eP | P | 13 41 05.9 | -1.7 |
| | comp=Z,114nm,0.8s | | | | | | |
| KZN | Kozani | 84.25 | 312 | P | P | 13 41 06.5 | -1.1 |
| KZN | Kozani | 84.25 | 312 | ePN | P | 13 41 06.3 | -1.3 |
| KZN | Kozani | 84.25 | 312 | ePN | P | 13 41 06.3 | -1.3 |
| KZN | Kozani | 84.25 | 312 | P | P | 13 41 06.5 | -1.1 |
| KZN | Kozani | 84.25 | 312 | P | P | 13 41 06.5 | -1.1 |
| FNA | Florina | 84.31 | 312 | P | P | 13 41 06.7 | -1.2 |
| FNA | Florina | 84.31 | 312 | P | P | 13 41 06.6 | -1.2 |
| FNA | Florina | 84.31 | 312 | ePN | P | 13 41 06.7 | -1.2 |
| FNA | Florina | 84.31 | 312 | ePN | P | 13 41 06.7 | -1.2 |
| FNA | Florina | 84.31 | 312 | P | P | 13 41 06.6 | -1.2 |
| FNA | Florina | 84.31 | 312 | P | P | 13 41 06.6 | -1.2 |
| AXAR | Agios Charalam | 84.33 | 310 | ePN | P | 13 41 06.9 | -1.1 |
| AXAR | Agios Charalam | 84.33 | 310 | ePN | P | 13 41 06.9 | -1.1 |
| AXAR | Agios Charalam | 84.33 | 310 | P | P | 13 41 06.1 | -1.9 |
| AXAR | Agios Charalam | 84.33 | 310 | P | P | 13 41 06.1 | -1.9 |
| IVA | Berane | 84.33 | 315 | ⇑iP | P | 13 41 07.9 | -0.1 |
| CONA | Conrad Observa | 84.37 | 320 | i PcP | P | 13 41 08.6 | +0.5 |
| | comp=Z,2µm,3.6s,SNR=40 | | | | | | |
| PVY | Plav | 84.42 | 314 | ⇑iP | P | 13 41 08.4 | -0.1 |
| THL | Klokotos Trika | 84.42 | 311 | ePN | P | 13 41 05.7 | -2.7 |
| THL | Klokotos Trika | 84.42 | 311 | ePN | P | 13 41 05.7 | -2.7 |
| THL | Klokotos Trika | 84.42 | 311 | P | P | 13 41 06.2 | -2.2 |
| PLE | Pljevlja | 84.44 | 315 | ⇑iP | P | 13 41 09.0 | +0.4 |
| LTK | Loutraki | 84.44 | 309 | ePN | P | 13 41 05.6 | -2.9 |
| LTK | Loutraki | 84.44 | 309 | ePN | P | 13 41 05.6 | -2.9 |
| LTK | Loutraki | 84.44 | 309 | P | P | 13 41 05.9 | -2.6 |
| LTK | Loutraki | 84.44 | 309 | P | P | 13 41 05.9 | -2.6 |
| AGG | Agios Georgios | 84.45 | 310 | eP | P | 13 41 06.6 | -1.9 |
| AGG | Agios Georgios | 84.45 | 310 | P | P | 13 41 06.7 | -1.9 |
| AGG | Agios Georgios | 84.45 | 310 | P | P | 13 41 06.7 | -1.9 |
| AGG | Agios Georgios | 84.45 | 310 | P | P | 13 41 06.7 | -1.9 |
| LOUT | Loutraki | 84.45 | 309 | ePN | P | 13 41 06.0 | -2.6 |
| LOUT | Loutraki | 84.45 | 309 | ePN | P | 13 41 06.0 | -2.6 |
| LOUT | Loutraki | 84.45 | 309 | P | P | 13 41 05.9 | -2.6 |
| DIDY | Didyma | 84.51 | 309 | ePN | P | 13 41 05.7 | -3.3 |
| DIDY | Didyma | 84.51 | 309 | ePN | P | 13 41 05.7 | -3.3 |
| DIDY | Didyma | 84.51 | 309 | P | P | 13 41 05.8 | -3.3 |
| OHR | Ohrid | 84.55 | 313 | i P | P | 13 41 08.1 | -0.9 |
| BEHE | Becsehely | 84.56 | 319 | ⇑eSKSdf | P | 13 41 08.9 | 0.0 |
| DSF | Desfina | 84.58 | 310 | ePN | P | 13 41 06.7 | -2.5 |
| DSF | Desfina | 84.58 | 310 | ePN | P | 13 41 06.7 | -2.5 |
| DSF | Desfina | 84.58 | 310 | P | P | 13 41 06.8 | -2.5 |
| DSF | Desfina | 84.58 | 310 | P | P | 13 41 06.8 | -2.5 |
| MAKR | Makrakomi, Fth | 84.59 | 310 | ePN | P | 13 41 07.7 | -1.6 |
| MAKR | Makrakomi, Fth | 84.59 | 310 | ePN | P | 13 41 07.7 | -1.6 |
| MAKR | Makrakomi, Fth | 84.59 | 310 | P | P | 13 41 07.6 | -1.7 |
| MAKR | Makrakomi, Fth | 84.59 | 310 | P | P | 13 41 07.6 | -1.7 |
| KRND | KRANIDI | 84.60 | 309 | ePN | P | 13 41 06.9 | -2.4 |
| KRND | KRANIDI | 84.60 | 309 | ePN | P | 13 41 06.9 | -2.4 |
| THAL | Thalero | 84.65 | 309 | ePN | P | 13 41 07.3 | -2.3 |
| THAL | Thalero | 84.65 | 309 | ePN | P | 13 41 07.3 | -2.3 |
| THAL | Thalero | 84.65 | 309 | P | P | 13 41 07.0 | -2.6 |
| NEST | Nestorio | 84.70 | 312 | ePN | P | 13 41 08.6 | -1.3 |
| NEST | Nestorio | 84.70 | 312 | ePN | P | 13 41 08.6 | -1.3 |
| NEST | Nestorio | 84.70 | 312 | P | P | 13 41 08.7 | -1.2 |
| VAM | Vamos | 84.70 | 306 | P | P | 13 41 09.6 | -0.3 |
| VAM | Vamos | 84.70 | 306 | ePN | P | 13 41 09.6 | -0.3 |
| VAM | Vamos | 84.70 | 306 | ePN | P | 13 41 09.6 | -0.3 |
| VAM | Vamos | 84.70 | 306 | P | P | 13 41 09.6 | -0.3 |
| VAM | Vamos | 84.70 | 306 | P | P | 13 41 09.6 | -0.3 |
| UPM | Unac-Piva | 84.81 | 315 | ⇑iP | P | 13 41 09.9 | -0.6 |
| IMMV | Iera Moni Meta | 84.84 | 306 | ePN | P | 13 41 10.1 | -0.5 |
| IMMV | Iera Moni Meta | 84.84 | 306 | ePN | P | 13 41 10.1 | -0.5 |
| EVR | Evrytania | 84.86 | 310 | ePN | P | 13 41 09.5 | -1.2 |
| EVR | Evrytania | 84.86 | 310 | ePN | P | 13 41 09.5 | -1.2 |
| EVR | Evrytania | 84.86 | 310 | P | P | 13 41 09.2 | -1.5 |
| EVR | Evrytania | 84.86 | 310 | P | P | 13 41 09.2 | -1.5 |
| KALE | Kalithea | 84.86 | 310 | ePN | P | 13 41 09.2 | -1.5 |
| KALE | Kalithea | 84.86 | 310 | ePN | P | 13 41 09.2 | -1.5 |
| KALE | Kalithea | 84.86 | 310 | P | P | 13 41 08.5 | -2.2 |
| KALE | Kalithea | 84.86 | 310 | P | P | 13 41 08.5 | -2.2 |
| SERG | Sergoula | 84.91 | 310 | ePN | P | 13 41 08.9 | -2.0 |
| SERG | Sergoula | 84.91 | 310 | ePN | P | 13 41 08.9 | -2.0 |
| SERG | Sergoula | 84.91 | 310 | P | P | 13 41 08.4 | -2.5 |
| ARSA | Arzberg | 84.91 | 320 | ⇑iP | P | 13 41 10.7 | -0.1 |
| | comp=Z,2µm,3.5s,SNR=26 | | | | | | |
| GUR | Goura | 84.92 | 309 | ePN | P | 13 41 08.7 | -2.4 |
| GUR | Goura | 84.92 | 309 | ePN | P | 13 41 08.7 | -2.4 |
| GUR | Goura | 84.92 | 309 | P | P | 13 41 08.4 | -2.7 |
| GUR | Goura | 84.92 | 309 | P | P | 13 41 08.4 | -2.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NKY | Niksic | 84.94 | 315 | ⇑iP | P | 13 41 10.2 | -0.9 |
| PDG | Podgorica | 84.95 | 314 | P | P | 13 41 10.7 | -0.3 |
| TTG | Podgorica | 84.95 | 314 | ⇑iP | P | 13 41 10.3 | -0.7 |
| TTG | Podgorica | 84.95 | 314 | P | P | 13 41 10.7 | -0.3 |
| TTG | Podgorica | 84.95 | 314 | P | P | 13 41 10.7 | -0.3 |
| TANN | Tannenbergstha | 84.99 | 324 | eP | P | 13 41 10.7 | -0.4 |
| | comp=Z,2µm,3.0s,baz=57,slow=4.8 | | | | | | |
| EFP | Efpalio | 85.01 | 310 | ePN | P | 13 41 09.8 | -1.6 |
| EFP | Efpalio | 85.01 | 310 | ePN | P | 13 41 09.8 | -1.6 |
| EFP | Efpalio | 85.01 | 310 | P | P | 13 41 09.8 | -1.6 |
| KLV | Kalavryta, Ach | 85.01 | 309 | ePN | P | 13 41 10.0 | -1.5 |
| KLV | Kalavryta, Ach | 85.01 | 309 | ePN | P | 13 41 10.0 | -1.5 |
| KLV | Kalavryta, Ach | 85.01 | 309 | P | P | 13 41 09.4 | -2.1 |
| KLV | Kalavryta, Ach | 85.01 | 309 | P | P | 13 41 09.4 | -2.1 |
| GVD | Gavdhos | 85.03 | 306 | ePN | P | 13 41 10.8 | -0.7 |
| GVD | Gavdhos | 85.03 | 306 | ePN | P | 13 41 10.8 | -0.7 |
| LAKA | Lakka | 85.04 | 310 | ePN | P | 13 41 10.3 | -1.3 |
| LAKA | Lakka | 85.04 | 310 | ePN | P | 13 41 10.3 | -1.3 |
| LAKA | Lakka | 85.04 | 310 | P | P | 13 41 10.1 | -1.5 |
| LAKA | Lakka | 85.04 | 310 | P | P | 13 41 10.1 | -1.5 |
| VLI | Veliai | 85.04 | 308 | ePN | P | 13 41 08.6 | -3.0 |
| VLI | Veliai | 85.04 | 308 | ePN | P | 13 41 08.6 | -3.0 |
| VLI | Veliai | 85.04 | 308 | P | P | 13 41 09.1 | -2.5 |
| VLI | Veliai | 85.04 | 308 | P | P | 13 41 09.1 | -2.5 |
| KHC | Kasperske Hory | 85.06 | 322 | ⇑iP | P | 13 41 11.5 | 0.0 |
| KHC | | | | e | | 13 41 14.5 | |
| KHC | | | | e | | 13 41 24.5 | |
| KHC | | | | e | | 13 51 34.9 | |
| KHC | | | | MLR | MLR | | |
| | comp=Z,16µm,18.1s | | | | | | |
| KHC | Kasperske Hory | 85.06 | 322 | ⇑iP | P | 13 41 11.5 | 0.0 |
| KHC | | | | ePCP | PcP | 13 41 14.5 | -0.2 |
| KHC | | | | esP | sP | 13 41 24.5 | -1.2 |
| KHC | | | | eS | SKSac | 13 51 34.9 | +1.1 |
| KHC | | | | ex | x | 13 52 09.4 | |
| KHC | | | | AMS | AMS | 14 25 50.0 | |
| | comp=Z,16µm,18.1s | | | | | | |
| KHC | Kasperske Hory | 85.06 | 322 | eP | P | 13 41 10.9 | -0.5 |
| | comp=Z,24nm,1.0s | | | | | | |
| TIR | Tirane | 85.06 | 313 | eP | P | 13 41 10.6 | -1.0 |
| TIR | | | | pmax | pmax | | |
| | comp=Z,471nm,0.8s | | | | | | |
| TIR | | | | MLR | MLR | | |
| | comp=Z,13µm,21.0s | | | | | | |
| TIR | Tirane | 85.06 | 313 | eP | P | 13 41 10.6 | -1.0 |
| | comp=Z,471nm,0.8s | | | | | | |
| TIR | | | | LR | LR | | |
| | comp=Z,13µm,21.0s | | | | | | |
| NRDL | Niedersach Rie | 85.09 | 326 | eP | P | 13 41 11.9 | +0.6 |
| | comp=Z,391nm,1.5s,baz=57,slow=4.8 | | | | | | |
| NRDL | | | | ePP | PP | 13 44 30.5 | +2.3 |
| PGC | Sidney | 85.10 | 38 | eP | P | 13 41 11.8 | +0.3 |
| | comp=Z,95nm,0.9s | | | | | | |
| GERES | GERESS Array B | 85.14 | 322 | P | P | 13 41 11.7 | -0.3 |
| | comp=Z,38nm,0.6s,baz=54,slow=5.0,SNR=59 | | | | | | |
| GERES | | | | LR | LR | 14 23 11.7 | |
| | comp=Z,13µm,20.9s,baz=52,slow=38 | | | | | | |
| VLX | Vlachokerasia | 85.15 | 309 | ePN | P | 13 41 11.1 | -1.1 |
| VLX | Vlachokerasia | 85.15 | 309 | ePN | P | 13 41 11.1 | -1.1 |
| VLX | Vlachokerasia | 85.15 | 309 | P | P | 13 41 10.3 | -1.9 |
| VLX | Vlachokerasia | 85.15 | 309 | P | P | 13 41 10.3 | -1.9 |
| ANKY | Antikythira Is | 85.16 | 307 | ePN | P | 13 41 07.4 | -4.7 |
| ANKY | Antikythira Is | 85.16 | 307 | ePN | P | 13 41 07.4 | -4.7 |
| ANKY | Antikythira Is | 85.16 | 307 | P | P | 13 41 10.8 | -1.3 |
| ANKY | Antikythira Is | 85.16 | 307 | P | P | 13 41 10.8 | -1.3 |
| KYTH | Kithira | 85.17 | 308 | ePN | P | 13 41 10.3 | -1.9 |
| KYTH | Kithira | 85.17 | 308 | ePN | P | 13 41 10.3 | -1.9 |
| KYTH | Kithira | 85.17 | 308 | P | P | 13 41 10.8 | -1.4 |
| KYTH | Kithira | 85.17 | 308 | P | P | 13 41 10.8 | -1.4 |
| JAN | Janina | 85.18 | 311 | P | P | 13 41 11.5 | -0.7 |
| JAN | Janina | 85.18 | 311 | ePN | P | 13 41 11.9 | -0.3 |
| JAN | Janina | 85.18 | 311 | ePN | P | 13 41 11.9 | -0.3 |
| JAN | Janina | 85.18 | 311 | P | P | 13 41 11.5 | -0.7 |
| JAN | Janina | 85.18 | 311 | P | P | 13 41 11.5 | -0.7 |
| ULC | Ulcinj | 85.18 | 314 | ⇑iP | P | 13 41 11.6 | -0.6 |
| BRY | Bratogost | 85.19 | 315 | ⇑iP | P | 13 41 11.7 | -0.7 |
| BUM | Brajici-Budva | 85.25 | 314 | ⇑iP | P | 13 41 12.4 | -0.2 |
| LRW | Lerwick | 85.31 | 336 | eP | P | 13 41 11.3 | -1.0 |
| LRW | | | | AMS | AMS | 14 23 51.1 | |
| | comp=Z,11µm,17.3s | | | | | | |
| CLZ | Clausthal | 85.32 | 326 | eP | P | 13 41 13.3 | +0.7 |
| | comp=Z,392nm,1.1s,baz=57,slow=4.8 | | | | | | |
| MOX | Moxa | 85.32 | 324 | eP | P | 13 41 12.9 | +0.2 |
| | comp=Z,160nm,1.0s,baz=57,slow=4.8 | | | | | | |
| MOX | | | | eS | S | 13 51 42.0 | +0.9 |
| | comp=Z,2µm,33.8s | | | | | | |
| MOX | | | | eL | L | 14 24 05.6 | |
| | comp=Z,18µm,18.7s | | | | | | |
| MOA | Molln | 85.34 | 321 | i PcP | P | 13 41 13.1 | +0.3 |
| | comp=Z,3µm,4.4s,SNR=32 | | | | | | |
| DRO | Drossia | 85.36 | 310 | ePN | P | 13 41 12.6 | -0.6 |
| DRO | Drossia | 85.36 | 310 | ePN | P | 13 41 12.6 | -0.6 |
| DRO | Drossia | 85.36 | 310 | P | P | 13 41 12.2 | -1.0 |
| PDO | Prodromos | 85.44 | 310 | ePN | P | 13 41 12.4 | -1.1 |
| PDO | Prodromos | 85.44 | 310 | ePN | P | 13 41 12.4 | -1.1 |
| PDO | Prodromos | 85.44 | 310 | P | P | 13 41 12.2 | -1.3 |
| HCY | Herceg Novi | 85.44 | 315 | ⇑iP | P | 13 41 13.0 | -0.5 |
| WET | Wettzell | 85.44 | 322 | eP | P | 13 41 13.6 | +0.2 |
| | comp=Z,689nm,2.2s,baz=57,slow=4.8 | | | | | | |
| BISS | Bistriski jare | 85.45 | 320 | i P | P | 13 41 13.1 | -0.4 |
| PERS | Pernice | 85.47 | 320 | eP | P | 13 41 13.2 | -0.3 |
| ROTZ | Rotzenmuhle | 85.48 | 323 | eP | P | 13 41 14.1 | +0.6 |
| | comp=Z,630nm,2.0s,baz=57,slow=4.8 | | | | | | |
| A04D | Lummi Island | 85.48 | 38 | P | P | 13 41 13.4 | 0.0 |
| | baz=85,SNR=9.7 | | | | | | |
| A04D | | | | S | S | 13 51 42.5 | -0.1 |
| | baz=85 | | | | | | |
| RLS | Riolos of Patr | 85.49 | 310 | ePN | P | 13 41 13.1 | -0.6 |
| RLS | Riolos of Patr | 85.49 | 310 | ePN | P | 13 41 13.1 | -0.6 |
| RLS | Riolos of Patr | 85.49 | 310 | P | P | 13 41 12.9 | -0.8 |
| RLS | Riolos of Patr | 85.49 | 310 | P | P | 13 41 12.9 | -0.8 |
| SOKA | Soboth | 85.49 | 320 | ⇑iPcP | P | 13 41 13.5 | -0.3 |
| | comp=Z,1µm,3.0s,SNR=25 | | | | | | |
| NLWA | Neilton Lookou | 85.52 | 40 | eP | P | 13 41 15.0 | +1.2 |
| | comp=Z,204nm,1.1s | | | | | | |
| NLWA | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| AMT | Artemida-Makis | 85.55 | 309 | ePN | P | 13 41 13.1 | -1.0 |
| AMT | Artemida-Makis | 85.55 | 309 | ePN | P | 13 41 13.1 | -1.0 |
| AMT | Artemida-Makis | 85.55 | 309 | P | P | 13 41 13.1 | -1.0 |
| ITM | Ithomi | 85.56 | 309 | ePN | P | 13 41 13.4 | -0.8 |
| ITM | Ithomi | 85.56 | 309 | ePN | P | 13 41 13.4 | -0.8 |
| ITM | Ithomi | 85.56 | 309 | P | P | 13 41 12.6 | -1.6 |
| ITM | Ithomi | 85.56 | 309 | P | P | 13 41 12.6 | -1.6 |
| IGT | Igoumenitsa | 85.59 | 311 | P | P | 13 41 13.1 | -1.2 |
| IGT | Igoumenitsa | 85.59 | 311 | P | P | 13 41 12.9 | -1.4 |
| IGT | Igoumenitsa | 85.59 | 311 | ePN | P | 13 41 12.8 | -1.5 |
| IGT | Igoumenitsa | 85.59 | 311 | ePN | P | 13 41 12.8 | -1.5 |
| IGT | Igoumenitsa | 85.59 | 311 | P | P | 13 41 12.9 | -1.4 |
| IGT | Igoumenitsa | 85.59 | 311 | P | P | 13 41 12.9 | -1.4 |
| SGD | Sagiada | 85.62 | 312 | ePN | P | 13 41 13.2 | -1.2 |
| SGD | Sagiada | 85.62 | 312 | ePN | P | 13 41 13.2 | -1.2 |
| SGD | Sagiada | 85.62 | 312 | P | P | 13 41 13.3 | -1.2 |
| GTTG | Gvttingen | 85.69 | 326 | eP | P | 13 41 14.5 | 0.0 |
| | comp=Z,244nm,1.0s,baz=57,slow=4.8 | | | | | | |
| VTN | Vitineika | 85.75 | 310 | ePN | P | 13 41 15.0 | 0.0 |
| VTN | Vitineika | 85.75 | 310 | ePN | P | 13 41 15.0 | 0.0 |
| PYL | PYLOS | 85.82 | 309 | ePN | P | 13 41 13.2 | -2.2 |
| PYL | PYLOS | 85.82 | 309 | ePN | P | 13 41 13.2 | -2.2 |
| PYL | PYLOS | 85.82 | 309 | P | P | 13 41 13.6 | -1.8 |
| PYL | PYLOS | 85.82 | 309 | P | P | 13 41 13.6 | -1.8 |
| PDKS | Podkum | 85.83 | 319 | i P | P | 13 41 15.0 | -0.4 |
| HDW | Hoodsport | 85.85 | 39 | P | P | 13 41 16.6 | +1.2 |
| OBKA | Obir | 85.87 | 320 | ⇑iP | P | 13 41 14.8 | -0.8 |
| | comp=Z,1µm,3.4s,SNR=18 | | | | | | |
| KEK | Kerkira | 85.87 | 312 | ePN | P | 13 41 14.7 | -0.9 |
| KEK | Kerkira | 85.87 | 312 | ePN | P | 13 41 14.7 | -0.9 |
| KEK | Kerkira | 85.87 | 312 | P | P | 13 41 14.5 | -1.1 |
| KEK | Kerkira | 85.87 | 312 | P | P | 13 41 14.5 | -1.1 |
| MBW | Mount Baker | 85.90 | 38 | P | P | 13 41 16.4 | +0.6 |
| KFL | Anninata | 85.94 | 310 | ePN | P | 13 41 14.7 | -1.3 |
| KFL | Anninata | 85.94 | 310 | ePN | P | 13 41 14.7 | -1.3 |
| KFL | Anninata | 85.94 | 310 | P | P | 13 41 15.1 | -0.9 |
| MOZS | Mozjanca | 86.04 | 319 | eP | P | 13 41 17.1 | +0.8 |
| VLS | Valsamata | 86.05 | 310 | P | P | 13 41 15.2 | -1.3 |
| VLS | Valsamata | 86.05 | 310 | ePN | P | 13 41 15.7 | -0.8 |
| VLS | Valsamata | 86.05 | 310 | ePN | P | 13 41 15.7 | -0.8 |
| VLS | Valsamata | 86.05 | 310 | P | P | 13 41 15.2 | -1.3 |
| VLS | Valsamata | 86.05 | 310 | P | P | 13 41 15.2 | -1.3 |
| GRF | Grafenberg Arr | 86.06 | 324 | eP | P | 13 41 16.9 | +0.6 |
| | comp=Z,686nm,1.7s,baz=57,slow=4.8 | | | | | | |
| GRF | | | | eS | S | 13 51 47.5 | -0.8 |

comp=Z,9µm,86.5s
GRF eL L 14 24 19.3
comp=Z,19µm,20.4s
**VISS Visnje 86.06 319** *i* P **P 13 41 16.1 -0.4**
VISS *e*SKSac S 13 52 05.6 +17
**GRFO Grafenberg 86.06 324** *e*P **P 13 41 16.7 +0.3**
GRFO pmax pmax
comp=Z,292nm,1.3s
**GRFO Grafenberg 86.06 324** *e*P **P 13 41 16.7 +0.3**
comp=Z,292nm,1.3s
**B05A Bryant 86.07 38** P **P 13 41 16.4 -0.1**
baz=86,SNR=35
**LJU Ljubljana 86.12 319** *e*P **P 13 41 16.0 -0.7**
**SFD Strofades 86.17 309** *e*PN **P 13 41 15.8 -1.3**
**SFD Strofades 86.17 309** *e*PN **P 13 41 15.8 -1.3**
**SFD Strofades 86.17 309** P **P 13 41 15.5 -1.6**
**JCW Jim Creek 86.20 38** P **P 13 41 18.0 +0.8**
**RJOB Jochberg 86.24 321** *e*P **P 13 41 17.3 -0.1**
comp=Z,145nm,1.1s,baz=57,slow=4.8
**KBA Koelnbreinsper 86.27 321** ⇑ *i*PcP **P 13 41 17.7 0.0**
comp=Z,1µm,3.6s,SNR=20
**CEY Cerknica 86.34 319** *e*P **P 13 41 17.4 -0.5**
CEY *e*SKSac S 13 52 09.2 +18
**IBBN Ibbenburen 86.38 327** *e*P **P 13 41 17.9 +0.1**
comp=Z,367nm,1.4s,baz=57,slow=4.8
IBBN *e*PP **PP 13 44 40.8 +2.1**
**JAVS Javornik 86.47 319** *e*P **P 13 41 17.7 -0.9**
**F04D Rainier, OR 86.70 40** P **P 13 41 19.4 -0.2**
baz=86
**ILULI Ilulissat 86.80 359** *i* P **P 13 41 20.0 +0.4**
**FUR Furstenfeldbru 86.87 322** *e*P **P 13 41 20.8 +0.4**
comp=Z,468nm,1.1s,baz=57,slow=4.8
**ABTA Abfaltersbach 86.93 321** ⇑ *i*P **P 13 41 19.5 -1.3**
comp=Z,435nm,2.6s,SNR=23
**C06D Leavenworth 86.93 38** P **P 13 41 20.8 +0.1**
baz=87,SNR=7.9
**G03D McMinnville, O 87.01 41** P **P 13 41 21.1 0.0**
baz=87,SNR=7.5
**TDL Tradedollar La 87.03 40** P **P 13 41 22.3 +1.0**
**RCM Mount Rainier- 87.05 39** P **P 13 41 22.7 +1.0**
**LON Longmire 87.05 39** *e*P **P 13 41 21.6 +0.3**
LON pmax pmax
comp=Z,82nm,1.0s
**LON Longmire 87.05 39** *e*P **P 13 41 21.6 +0.3**
comp=Z,82nm,1.0s
**WTSB Winterswijk 87.06 327** *i* P **P 13 41 21.5 +0.3**
comp=Z,321nm,1.8s
**LVP Lakeview Peak 87.07 40** P **P 13 41 22.4 +0.9**
**BUG Bochum--Univer 87.13 326** *e*P **P 13 41 21.4 -0.2**
comp=Z,696nm,2.2s,baz=57,slow=4.8
BUG *e*PP **PP 13 44 46.9 +2.2**
**WATA Walderalm 87.15 321** ⇓ *i*PcP **P 13 41 21.5 -0.5**
comp=Z,771nm,2.7s,SNR=19
**WTTA Wattenberg 87.16 321** ⇑ *i*PcP **P 13 41 21.5 -0.6**
comp=Z,742nm,2.6s,SNR=30
**MTMW Mount Mitchell 87.20 40** P **P 13 41 23.1 +0.9**
**TNS Taunus Mts 87.24 325** *e*P **P 13 41 21.9 -0.3**
comp=Z,130nm,1.4s,baz=57,slow=4.8
**ABPO Ambohimpanom 87.30 248** *e*P **P 13 41 22.7 -0.4**
ABPO pmax pmax
comp=Z,1µm,1.6s
ABPO MLR MLR
comp=Z,2µm,20.0s
**ABPO Ambohimpanom 87.30 248** *e*P **P 13 41 22.7 -0.4**
comp=Z,1µm,1.6s
ABPO LR LR
comp=Z,2µm,20.0s
**COR Corvallis 87.32 42** *e*P **P 13 41 24.1 +1.5**
COR pmax pmax
comp=Z,322nm,0.9s
**COR Corvallis 87.32 42** *e*P **P 13 41 24.1 +1.5**
comp=Z,322nm,0.9s
**RNO Roman Nose 87.40 42** P **P 13 41 24.8 +1.7**
**MOTA Moosalm 87.42 322** ⇑ *i*PcP **P 13 41 22.7 -0.5**
comp=Z,63nm,1.0s,SNR=31
**ETW Entiat 87.43 38** P **P 13 41 23.8 +0.6**
**RETA Reutte 87.53 322** ⇑ *i*PcP **P 13 41 23.4 -0.3**
comp=Z,2µm,4.3s,SNR=16
**KEBM Edson Butte 87.57 44** *e*P **P 13 41 25.4 +1.5**
comp=Z,438nm,1.0s
**WTV Waterville 87.59 38** P **P 13 41 24.4 +0.4**
**BORG Borgarnes 87.62 346** PFAKE 13 41 30.0 +6.4
BORG LR LR
comp=Z,7µm,22.0s
**STU Stuttgart 87.67 324** *e*P **P 13 41 23.5 -0.8**
STU pmax pmax
comp=Z,158nm,1.2s
**STU Stuttgart 87.67 324** *e*P **P 13 41 23.8 -0.5**
comp=Z,141nm,1.0s,baz=57,slow=4.8
**STU Stuttgart 87.67 324** *e*P **P 13 41 23.5 -0.8**
comp=Z,158nm,1.2s
**EDM Edmonton 87.71 31** *e*P **P 13 41 24.4 0.0**
EDM pmax pmax
comp=Z,703nm,1.4s
**EDM Edmonton 87.71 31** *e*P **P 13 41 24.4 0.0**
comp=Z,703nm,1.4s
**I03D Drain, OR 87.75 43** P **P 13 41 25.0 +0.3**
baz=88,SNR=35
**FETA Feichten 87.81 321** *i* PcP **P 13 41 24.6 -0.6**
comp=Z,1µm,3.9s,SNR=22
**SAW Saint Andrews 87.89 38** P **P 13 41 25.8 +0.4**
**MVH1 Achvaich 87.96 336** *e*P **P 13 41 24.1 -1.3**
**KBO Bosley Butte 87.98 44** *e*P **P 13 41 27.4 +1.4**
comp=Z,499nm,1.4s
**VFP Flag Point 88.03 40** P **P 13 41 27.0 +0.8**
**PAF Port-aux-Franc 88.08 212** PFAKE 13 41 40.0 +14
PAF LR LR
comp=Z,4µm,19.0s
**DAVA Damuels 88.14 322** ⇑ *i*PcP **P 13 41 26.4 -0.3**
comp=Z,2µm,5.2s,SNR=29
**G05D Wamic, OR 88.16 40** P **P 13 41 26.9 +0.2**
baz=88,SNR=20
**TIP Timpagrande 88.19 312** P **P 13 41 26.5 -0.5**
**TIP Timpagrande 88.19 312** P **P 13 41 26.5 -0.5**
TIP LR LR
comp=Z,6µm,22.0s
**HGN Heimansgroeve 88.21 326** *e*P **P 13 41 26.2 -0.5**
comp=Z,171nm,1.3s
**IRO Indian Ridge 88.26 42** P **P 13 41 28.0 +0.7**
**MEM Membach 88.27 326** P **P 13 41 27.1 +0.1**
**I04A Tendick Farm, 88.28 42** P **P 13 41 27.7 +0.4**
baz=88,SNR=42
**BEBN Eben Emael 88.32 326** P **P 13 41 27.5 +0.3**
**BFO Black Forest 88.40 323** *i* P **P 13 41 27.6 -0.1**
**BFO Black Forest 88.40 323** P **P 13 41 27.6 -0.1**
comp=Z,393nm,1.5s,SNR=6.2
**BFO Black Forest 88.40 323** *e*P **P 13 41 27.1 -0.6**
comp=Z,503nm,2.4s,baz=57,slow=4.8
**BFO Black Forest 88.40 323** *e*P **P 13 41 26.6 -1.2**
comp=Z,75nm,1.2s
BFO LR LR
comp=Z,13µm,20.0s
**L02D Cave Junction, 88.40 44** P **P 13 41 28.3 +0.4**
baz=88,SNR=14
**CUC Castrocucco 88.41 314** *e*P **P 13 41 26.0 -2.0**
comp=Z,16nm,0.6s
CUC LR LR
comp=Z,4µm,19.0s
**DAVOX Davos/Dischmat 88.42 322** P **P 13 41 28.1 +0.1**
comp=Z,126nm,0.8s,baz=62,slow=4.6,SNR=104
DAVOX PP **PP 13 44 52.4 -3.2**
comp=Z,11nm,0.7s,baz=69,slow=8.6,SNR=3.3
**DAVOX Davos/Dischmat 88.42 322** P **P 13 41 28.2 +0.1**
DAVOX 13 44 52.4
DAVOX pmax pmax
comp=Z,126nm,0.8s
DAVOX pmax pmax
comp=Z,11nm,0.7s
**OD2 Odessa Site #2 88.45 38** P **P 13 41 28.6 +0.5**
**EDU Dundee 88.48 334** *e*P **P 13 41 26.9 -1.0**
**WRD Warden 88.55 38** P **P 13 41 29.2 +0.8**
**HAWA Hanford 88.56 39** *e*P **P 13 41 29.0 +0.5**
comp=Z,119nm,1.1s
HAWA LR LR
comp=Z,3µm,21.0s
**HUMO Hull Mountain 88.57 43** *e*P **P 13 41 29.4 +0.7**
comp=Z,55nm,0.7s
**RRR Rubha Reidh 88.62 336** *e*P **P 13 41 27.6 -0.9**
**KMBO Kilima Mbogo 88.63 268** P **P 13 41 30.2 +0.5**
comp=Z,20nm,0.8s,baz=49,slow=7.4,SNR=39
KMBO LR LR 14 21 08.6
comp=Z,3µm,20.4s,baz=58,slow=36
**I05D Terrebonne, OR 88.64 41** P **P 13 41 29.3 +0.3**
baz=88,SNR=35
**KAC Achnashellach 88.69 336** *e*P **P 13 41 27.3 -1.6**
**BCLA Clavier 88.74 326** P **P 13 41 29.5 +0.2**

**ESY Stoneypath 88.76 334** *e*P **P 13 41 28.0 -1.2**
**J04D Umpqua Nationa 88.76 42** P **P 13 41 30.0 +0.2**
baz=89,SNR=56
**WLF Walferdange 88.76 325** P **P 13 41 29.7 +0.3**
WLF pmax pmax
comp=Z,63nm,0.9s
WLF MLR MLR
comp=Z,31µm,19.0s
**WLF Walferdange 88.76 325** P **P 13 41 29.7 +0.3**
comp=Z,64nm,0.9s
WLF LR LR
comp=Z,31µm,19.0s
**NEW Newport 88.82 36** *e*P **P 13 41 30.3 +0.6**
NEW pmax pmax
comp=Z,90nm,0.8s
NEW MLR MLR
comp=Z,5µm,21.0s
**NEW Newport 88.82 36** P **P 13 41 30.4 +0.7**
baz=89
**NEW Newport 88.82 36** *e*P **P 13 41 30.3 +0.6**
comp=Z,90nm,0.8s
NEW LR LR
comp=Z,5µm,21.0s
**RRH Rhenigidale 88.89 337** *e*P **P 13 41 28.7 -1.1**
**TUE Stuetta 88.90 322** *e*P **P 13 41 29.9 -0.5**
comp=Z,91nm,0.8s
TUE LR LR
comp=Z,13µm,21.0s
**KPL Plockton 88.94 336** *e*P **P 13 41 28.3 -1.7**
**KSB Sheil Bridge 88.94 336** *e*P **P 13 41 29.2 -0.9**
**KHMM Horse Mountain 88.99 45** *e*P **P 13 41 34.0 +3.1**
comp=Z,233nm,1.3s
**SFJD Kangerlussuaq 89.02 358** *e*P **P 13 41 29.0 -1.2**
SFJD pmax pmax
comp=Z,71nm,0.8s
SFJD MLR MLR
comp=Z,9µm,22.0s
**SFJD Kangerlussuaq 89.02 358** *i* P **P 13 41 30.5 +0.3**
comp=Z,68nm,0.8s
**SFJD Kangerlussuaq 89.02 358** *e*P **P 13 41 29.0 -1.2**
comp=Z,71nm,0.8s
SFJD LR LR
comp=Z,9µm,22.0s
**ECH Echery 89.10 324** *e*P **P 13 41 30.2 -0.9**
ECH pmax pmax
comp=Z,47nm,1.0s
ECH MLR MLR
comp=Z,14µm,20.0s
**ECH Echery 89.10 324** *e*P **P 13 41 30.2 -0.9**
comp=Z,47nm,1.0s
ECH LR LR
comp=Z,14µm,20.0s
**YBH Yreka Blue Hor 89.19 44** *e*P **P 13 41 32.5 +0.8**
YBH pmax pmax
comp=Z,214nm,1.5s
**YBH Yreka Blue Hor 89.19 44** *e*P **P 13 41 32.5 +0.8**
comp=Z,214nm,1.5s
**SNF Seneffe 89.20 327** P **P 13 41 31.3 -0.1**
**J05D Fort Rock, OR 89.28 42** P **P 13 41 32.4 +0.3**
baz=89,SNR=56
**M02C Callahan 89.28 44** P **P 13 41 32.6 +0.5**
baz=89,SNR=18
**DOU Dourbes 89.30 326** P **P 13 41 31.2 -0.6**
comp=Z,24nm,1.2s
**K04D Chiloquin, OR 89.31 43** P **P 13 41 32.5 +0.2**
baz=89,SNR=6.3
**EKA Eskdalemuir Ar 89.39 333** P **P 13 41 31.6 -0.6**
comp=Z,12nm,0.5s,baz=39,slow=5.3,SNR=21
EKA PP **PP 13 44 59.7 -3.0**
comp=Z,3.6nm,0.7s,baz=43,slow=7.7,SNR=3.4
**ESK Eskdalemuir 89.42 333** *e*P **P 13 41 31.2 -1.1**
ESK AMS AMS 14 25 08.5
comp=Z,14µm,19.3s
**ESK Eskdalemuir 89.42 333** *e*P **P 13 41 31.2 -1.1**
ESK pmax pmax
comp=Z,38nm,0.7s
ESK MLR MLR
comp=Z,19µm,21.0s
**ESK Eskdalemuir 89.42 333** P **P 13 41 33.6 +1.3**
comp=Z,322nm,0.7s,SNR=6.4
**ESK Eskdalemuir 89.42 333** *e*P **P 13 41 31.2 -1.1**
comp=Z,38nm,0.7s
ESK LR LR
comp=Z,19µm,21.0s
**LMK Market Rasen 89.47 331** *e*P **P 13 41 30.9 -1.7**
LMK AMB AMB 13 41 35.4
comp=Z,316nm,1.0s
LMK AMS AMS 14 26 15.2
comp=Z,15µm,18.7s
**ECK Cauldkaine Hil 89.48 333** *e*P **P 13 41 31.4 -1.2**
**BHH Howats Hill 89.58 333** *e*P **P 13 41 32.8 -0.3**
**N02D Trinity Center 89.60 45** P **P 13 41 34.0 +0.3**
baz=89,SNR=14
**VLC Villacollemand 89.61 319** *e*P **P 13 41 33.6 +0.1**
comp=Z,62nm,1.0s
VLC LR LR
comp=Z,10µm,20.0s
**HPK Haverah Park 89.70 332** *e*P **P 13 41 32.9 -0.7**
HPK AMB AMB 13 41 36.4
comp=Z,163nm,2.1s
HPK AMS AMS 14 28 19.4
comp=Z,10µm,16.5s
**BWH Wardlaw 89.70 333** *e*P **P 13 41 32.6 -1.1**
**KCPM Cahto Peak 89.71 46** *e*P **P 13 41 35.4 +1.2**
comp=Z,213nm,1.6s
**KIPM Iron Peak 89.71 46** P **P 13 41 35.0 +0.8**
comp=Z,317nm,1.5s
**M04C Macdoel 89.72 44** P **P 13 41 34.4 +0.1**
baz=90,SNR=50
**BBO1 Bothel 89.84 333** *e*P **P 13 41 33.3 -1.0**
**KESW Keswick, Cumbr 89.89 333** *e*P **P 13 41 33.8 -0.8**
KESW AMB AMB 13 41 36.1
comp=Z,162nm,2.5s
KESW AMS AMS 14 27 02.2
comp=Z,14µm,16.8s
**WDC Whiskeytown Da 89.92 45** *e*P **P 13 41 34.5 -0.5**
WDC pmax pmax
comp=Z,474nm,2.1s
**WDC Whiskeytown Da 89.92 45** *e*P **P 13 41 34.5 -0.5**
comp=Z,474nm,2.1s
**WALA Waterton Lakes 90.04 34** *e*P **P 13 41 36.7 +1.1**
comp=Z,278nm,1.1s
**LHO Holmfirth 90.08 332** *e*P **P 13 41 34.7 -0.8**
**BSMT Bassoo Peak 90.32 36** *e*P **P 13 41 38.0 +1.0**
comp=Z,282nm,1.5s
**ELSH Elham, Standar 90.33 329** *e*P **P 13 41 35.6 -1.0**
ELSH AMB AMB 13 41 40.7
comp=Z,107nm,0.8s
**CWF Charnwood Fore 90.39 331** *e*P **P 13 41 35.4 -1.5**
CWF AMS AMS 14 26 53.0
comp=Z,12µm,18.4s
**BLMT Blacktail Moun 90.45 35** *e*P **P 13 41 38.5 +0.9**
comp=Z,188nm,1.3s
**O03D Paynes Creek 90.55 45** P **P 13 41 37.9 -0.2**
baz=90,SNR=14
**STNC Stoke 90.55 331** *e*P **P 13 41 37.2 -0.4**
STNC AMB AMB 13 41 41.0
comp=Z,145nm,1.0s
STNC AMS AMS 14 26 49.1
comp=Z,13µm,18.5s
**MOD Modoc 90.61 43** *e*P **P 13 41 38.6 +0.2**
comp=Z,164nm,1.4s
**JTMT Jette 90.66 36** *e*P **P 13 41 39.3 +0.9**
comp=Z,277nm,1.6s
**YBMT Yellow Bay 90.73 35** *e*P **P 13 41 39.6 +0.9**
comp=Z,188nm,1.5s
**HMNX Herstmonceux 90.89 329** *e*P **P 13 41 39.0 -0.3**
HMNX AMB AMB 13 41 42.3
comp=Z,186nm,0.9s
HMNX AMS AMS 14 24 24.9
comp=Z,9µm,22.7s
**CASY Casey 90.91 186** *e*P **P 13 41 38.2 -0.5**
comp=Z,122nm,1.0s
CASY LR LR
comp=Z,2µm,20.0s
**SWMT Swartz Lake 90.95 36** *e*P **P 13 41 40.4 +0.5**
comp=Z,89nm,1.0s
**FOEL Foel Wylfa 91.12 332** *e*P **P 13 41 40.1 -0.2**
FOEL AMB AMB 13 41 43.3
comp=Z,157nm,1.0s
**HLM1 Long Mynd 91.24 331** *e*P **P 13 41 39.8 -1.1**
**BNI Bardonecchia 91.25 321** *e*P **P 13 41 40.7 -0.6**
BNI pmax pmax
comp=Z,241nm,0.9s
BNI MLR MLR
comp=Z,24µm,19.0s
**BNI Bardonecchia 91.25 321** *e*P **P 13 41 40.7 -0.6**
comp=Z,241nm,0.9s
BNI LR LR
comp=Z,24µm,19.0s
**WVOR Wild Horse Val 91.33 42** *e*P **P 13 41 42.6 +0.9**
WVOR pmax pmax
comp=Z,174nm,1.6s
WVOR MLR MLR
comp=Z,2µm,19.0s
**WVOR Wild Horse Val 91.33 42** *e*P **P 13 41 42.6 +0.9**
comp=Z,174nm,1.6s
WVOR LR LR
comp=Z,2µm,19.0s
**WLF1 Llynfaes 91.35 332** *e*P **P 13 41 40.8 -0.5**
WLF1 AMB AMB 13 41 44.1
comp=Z,158nm,1.7s
WLF1 AMS AMS 14 27 07.9
comp=Z,15µm,20.7s
**SLMT Seeley Lake 91.39 36** *e*P **P 13 41 42.1 +0.2**
comp=Z,185nm,0.9s
**CLTB Caltabellotta 91.40 313** *e*P **P 13 41 41.8 -0.2**
comp=Z,32nm,0.9s
CLTB LR LR
comp=Z,3µm,19.0s
**MSO Missoula 91.41 36** P **P 13 41 41.7 -0.3**
baz=91
**WDD Wield Dalam 91.41 311** PFAKE 13 41 50.0 +8.0
WDD LR LR
comp=Z,4µm,21.0s
**STRD Stroud 91.43 330** *e*P **P 13 41 41.0 -0.8**
STRD AMB AMB 13 41 44.4
comp=Z,203nm,1.7s
STRD AMS AMS 14 27 55.4
comp=Z,13µm,18.9s
**FFC Flin Flon 91.57 25** *e*P **P 13 41 42.5 +0.1**
FFC pmax pmax
comp=Z,693nm,1.5s
FFC MLR MLR
comp=Z,4µm,20.0s
**FFC Flin Flon 91.57 25** P **P 13 41 42.6 +0.1**
comp=Z,975nm,0.8s,SNR=42
**FFC Flin Flon 91.57 25** *e*P **P 13 41 42.5 +0.1**
comp=Z,694nm,1.5s
FFC LR LR
comp=Z,4µm,20.0s
**MCH1 Michaelchurch 91.65 331** *e*P **P 13 41 41.7 -1.1**
MCH1 AMB AMB 13 41 45.4
comp=Z,158nm,1.8s
MCH1 AMS AMS 14 27 23.0
comp=Z,14µm,18.6s
**MONM Monmouth 91.68 331** *e*P **P 13 41 41.9 -1.0**
MONM AMB AMB 13 41 45.3
comp=Z,197nm,2.3s
MONM AMS AMS 14 27 05.6
comp=Z,12µm,18.3s
**OLDB Oldbury-Upon-S 91.69 331** AMS AMS 14 29 10.1
comp=Z,12µm,17.1s
**CHMT Chanerlain Mo 91.72 36** *e*P **P 13 41 43.6 +0.1**
comp=Z,173nm,1.6s
**LPW Lampeter 92.04 331** *e*P **P 13 41 43.8 -0.8**
LPW AMB AMB 13 41 48.1
comp=Z,126nm,2.1s
**DODT Dodoma, Tanzan 92.05 264** *i* P **P 13 41 46.6 +1.1**
**DSB Dublin 92.20 333** *e*P **P 13 41 44.2 -1.1**
comp=Z,67nm,0.8s
**SSB Saint Sauveur 92.31 323** *e*P **P 13 41 45.3 -0.7**
SSB pmax pmax
comp=Z,99nm,1.3s
SSB MLR MLR
comp=Z,10µm,19.0s
**SSB Saint Sauveur 92.31 323** *e*P **P 13 41 45.3 -0.7**
comp=Z,99nm,1.3s
SSB LR LR
comp=Z,10µm,19.0s
**MFID Camas Ranch 92.43 40** *e*P **P 13 41 47.8 +1.0**
comp=Z,206nm,1.2s
**HRY Holter Researc 92.61 35** *e*P **P 13 41 48.1 +0.6**
comp=Z,207nm,0.7s
**CMB Columbia Colle 92.70 46** *e*P **P 13 41 48.0 0.0**
CMB pmax pmax
comp=Z,136nm,1.1s
**CMB Columbia Colle 92.70 46** *e*P **P 13 41 48.0 0.0**
comp=Z,136nm,1.1s
**PPT Papeete 92.81 108** LR LR 14 15 31.0
comp=Z,3µm,21.3s,baz=282,slow=30
**EGMT Eagleton 92.82 33** P **P 13 41 48.3 -0.1**
baz=93,SNR=30
**EGMT Eagleton 92.82 33** *e*P **P 13 41 48.6 +0.2**
comp=Z,170nm,1.2s
EGMT LR LR
comp=Z,5µm,21.0s
**PPT2 Papeete2 92.82 108** *e*SKSac **SKSac 13 52 18.9 -1.8**
comp=Z,3µm,23.8s
PPT2 *e*SS **SS 13 59 08.4 +1.7**
comp=Z,2µm,25.2s
PPT2 *e*LQ LQ 14 07 06.8
PPT2 comp=Z,13µm,37.2s *e*LR LR 14 11 31.6
comp=Z,18µm,32.2s,baz=293
**LRM Limekiln Ridge 92.84 36** *e*P **P 13 41 49.4 +0.6**
comp=Z,480nm,0.8s
**VSL Villasalto 92.86 316** PFAKE 13 42 00.0 +11
VSL LR LR
comp=Z,5µm,19.0s
**DLMT Dillon 93.05 37** *e*P **P 13 41 50.3 +0.6**
comp=Z,118nm,0.8s
**HLID Hailey 93.16 39** P **P 13 41 49.8 -0.4**
baz=93
**HLID Hailey 93.16 39** *e*P **P 13 41 51.5 +1.3**
comp=Z,86nm,0.7s
HLID LR LR
comp=Z,4µm,19.0s
**DYA Yadsworthy 93.17 330** AMS AMS 14 30 04.5
comp=Z,12µm,17.1s
**JSA Saint Aubin 93.22 329** AMS AMS 14 29 35.0
comp=Z,12µm,16.8s
**PMOR Pomariorio Ree 93.24 105** *e*P **P 13 41 50.6 -0.1**
comp=Z,206nm,1.2s
**PMOR Pomariorio Ree 93.24 105** *e*T T 15 24 45.6
comp=Z,3.9nm,0.2s
**MCMT McKenzie Canyo 93.25 37** *e*P **P 13 41 51.0 +0.3**
comp=Z,9.6nm,0.6s
**BOZ Bozeman (W) 93.40 36** *e*P **P 13 41 51.7 +0.5**
BOZ pmax pmax
comp=Z,26nm,0.7s
BOZ MLR MLR
comp=Z,5µm,22.0s
**BOZ Bozeman (W) 93.40 36** P **P 13 41 51.0 -0.2**
baz=93,SNR=30
**BOZ Bozeman (W) 93.40 36** *e*P **P 13 41 51.7 +0.5**
comp=Z,26nm,0.7s
BOZ LR LR
comp=Z,5µm,22.0s
**MIR Mirnyy 93.71 192** ⇑ *i*P P 13 42 00.0 +8.3
MIR pmax pmax
comp=Z,200nm,1.5s
**NVAR Mina Array Bea 93.83 45** P **P 13 41 54.1 +0.7**
comp=Z,35nm,0.9s,baz=283,slow=4.9,SNR=65
NVAR LR LR 14 17 21.4
comp=Z,5µm,21.9s,baz=308,slow=31
**CCA1 Carnmenellis 93.93 331** AMS AMS 14 29 01.8
comp=Z,10µm,18.1s
**MLAC Mammoth Lakes 93.94 46** P **P 13 41 53.5 -0.5**
baz=94
**QLMT Earthquake Lak 94.03 37** *e*P **P 13 41 54.7 +0.5**
comp=Z,20nm,1.4s
**GCMT Greycliff 94.34 35** *e*P **P 13 41 55.8 +0.3**
comp=Z,64nm,1.4s
**ELK Elko 94.39 42** *e*P **P 13 41 56.2 +0.2**
ELK pmax pmax
comp=Z,49nm,1.2s
**ELK Elko 94.39 42** *e*P **P 13 41 56.2 +0.2**
comp=Z,49nm,1.2s
**YMR Madison River 94.39 36** P **P 13 41 56.9 +1.0**
comp=Z,186nm,1.3s
**RCTC Rector, Farmer 94.42 47** P **P 13 41 56.1 +0.2**
baz=94
**SMMC Simmler 94.47 48** P **P 13 41 56.4 +0.2**
baz=94
**YNR Norris Junctio 94.51 36** *e*P **P 13 41 58.5 +2.0**
comp=Z,86nm,1.1s
**YFT Old Faithful 94.60 37** *e*P **P 13 41 58.9 +2.0**
comp=Z,129nm,1.1s
**TIN Tinemaha 94.67 46** P **P 13 41 57.2 0.0**
baz=94,SNR=7.0
**LKWY Lake 94.76 36** *e*P **P 13 41 58.3 +0.7**
LKWY pmax pmax
comp=Z,115nm,1.0s
LKWY MLR MLR

comp=Z,11µm,20.0s
**LKWY Lake** 94.76 36 eP P 13 41 58.3 +0.7
comp=Z,115nm,1.0s
LKWY LR LR
comp=Z,11µm,20.0s
**H17A Grant Village** 94.78 37 P P 13 41 56.2 -1.5
baz=94
**VES Vestal, Richgr** 94.79 47 P P 13 41 57.2 -0.4
baz=95
**PKM Peak Mountain** 94.82 48 P P 13 41 58.0 0.0
baz=95,SNR=23
**IMW Indian Meadow** 94.90 37 eP P 13 41 59.3 +0.9
comp=Z,59nm,1.0s
**FLWY Flagg Ranch** 94.91 37 eP P 13 41 60.0 +1.7
comp=Z,112nm,1.1s
**RLMT Red Lodge** 95.00 35 P P 13 41 57.7 -1.0
baz=95,SNR=34
**RLMT Red Lodge** 95.00 35 eP P 13 41 59.0 +0.3
comp=Z,128nm,1.4s
RLMT LR LR
comp=Z,4µm,21.0s
**KEST Kesra** 95.01 313 P P 13 41 58.7 -0.1
comp=Z,27nm,0.8s,baz=66,slow=4.4,SNR=28
KEST LR LR 14 31 40.5
comp=Z,3µm,19.3s,baz=338,slow=40
**MOOW Moose Ponds** 95.10 37 eP P 13 41 60.0 +0.8
comp=Z,87nm,1.6s
**CWC Cottonwood Cre** 95.12 46 P P 13 41 59.2 -0.2
baz=95,SNR=7.3
**SBC Santa Barbara** 95.14 49 P P 13 41 58.7 -0.6
baz=95
**TPAW Teton Pass** 95.16 37 eP P 13 41 59.6 +0.1
comp=Z,54nm,1.2s
**DGMT Dagmar** 95.20 31 P P 13 41 58.9 -0.4
baz=95
**DGMT Dagmar** 95.20 31 eP P 13 41 58.7 -0.5
comp=Z,133nm,1.2s
DGMT LR LR
comp=Z,5µm,20.0s
**HVU Hansel Valley** 95.21 40 eP P 13 42 00.2 +0.5
HVU pmax pmax
comp=Z,59nm,1.1s
**HVU Hansel Valley** 95.21 40 eP P 13 42 00.2 +0.5
comp=Z,59nm,1.1s
**GRAC Grapevine Rang** 95.26 46 P P 13 41 60.0 +0.1
baz=95,SNR=44
**TBI Tubuai** 95.27 113 eSKSac SKSac 13 52 31.9 -1.7
comp=Z,2µm,30.2s
TBI eSP SP 13 54 33.9 +3.1
comp=Z,2µm,29.0s
**TBI Tubuai** 95.27 113 eLQ LQ 14 08 56.5
comp=Z,6µm,33.2s
TBI eLR LR 14 13 12.7
comp=Z,7µm,28.2s,baz=302
**TBI Tubuai** 95.27 113 eT T 15 27 17.8
comp=Z,5.2nm,0.3s
**LOHW Long Hollow** 95.27 37 eP P 13 42 01.0 +1.1
comp=Z,70nm,1.7s
**SNOW Snow King Moun** 95.28 37 eP P 13 42 01.7 +1.6
comp=Z,42nm,1.1s
**REDW Red Top Meadow** 95.30 37 eP P 13 41 59.0 -1.1
comp=Z,107nm,1.5s
**ISA Isabella** 95.30 47 eP P 13 41 59.5 -0.6
ISA pmax pmax
comp=Z,39nm,1.1s
**ISA Isabella** 95.30 47 eP P 13 41 59.5 -0.6
comp=Z,39nm,1.1s
**A25A Svangstu Ranch** 95.35 30 P P 13 41 59.5 -0.5
baz=95
**ARVC Arvin** 95.36 48 P P 13 41 59.3 -1.0
baz=95
**BSC Santa Cruz Isl** 95.45 49 P P 13 42 00.4 -0.3
baz=95
**LAO LASA Array** 95.49 33 P P 13 42 00.7 0.0
baz=95
**LAO LASA Array** 95.49 33 eP P 13 42 00.6 -0.1
comp=Z,46nm,1.1s
LAO LR LR
comp=Z,6µm,20.0s
**DAC Darwin (Calif)** 95.53 46 eP P 13 41 59.6 -1.6
DAC pmax pmax
comp=Z,69nm,1.0s
**DAC Darwin (Calif)** 95.53 46 eP P 13 41 59.6 -1.6
comp=Z,69nm,1.0s
**AHID Auburn Hatcher** 95.54 38 eP P 13 42 02.4 +1.3
comp=Z,78nm,1.5s
AHID LR LR
comp=Z,4µm,20.0s
**BGU Big Grassy Mou** 95.60 40 eP P 13 42 02.5 +1.1
comp=Z,66nm,1.4s
**R11A Troy Canyon, C** 95.61 44 P P 13 42 01.4 -0.2
baz=95
**SPUT South Promonto** 95.70 40 P P 13 42 03.9 +2.0
comp=Z,105nm,1.7s
**OSI Osito Adit** 95.73 48 P P 13 42 02.1 +0.1
baz=96
**OSI Osito Adit** 95.73 48 eP P 13 42 02.4 +0.5
comp=Z,61nm,0.9s
**MPMC Manual Prospec** 95.73 46 P P 13 42 01.8 -0.3
baz=96,SNR=66
**BLG Laguna Peak** 95.78 49 P P 13 42 03.1 +0.9
baz=96
**B25A Knox Farm, Ray** 95.82 30 P P 13 42 01.6 -0.5
baz=96
**A26A Wade Farm, Ken** 95.87 29 P P 13 42 01.8 -0.5
baz=96
**FURC Furnace Creek,** 95.90 46 P P 13 42 03.0 +0.3
baz=96,SNR=30
**LRMC Laurel Mountai** 95.93 47 P P 13 42 02.5 -0.5
baz=96
**TPNV Topopah Spring** 96.02 45 P P 13 42 03.5 0.0
baz=96,SNR=48
**HWUT Hardware Ranch** 96.02 39 eP P 13 42 03.4 +0.1
comp=Z,188nm,1.5s
HWUT LR LR
comp=Z,3µm,19.0s
**EDW2 Edwards Air Fo** 96.07 48 P P 13 42 03.5 -0.1
baz=96,SNR=35
**B26A Jensen Ranch,** 96.16 30 P P 13 42 03.1 -0.5
baz=96
**A27A Ledoux Ranch,** 96.18 29 P P 13 42 02.7 -1.0
baz=96
**C25A Freed Ranch, W** 96.18 31 P P 13 42 03.1 -0.7
baz=96
**DUG Dugway** 96.18 41 eP P 13 42 04.8 +0.7
DUG pmax pmax
comp=Z,47nm,1.2s
DUG MLR MLR
comp=Z,3µm,22.0s
**DUG Dugway** 96.18 41 P P 13 42 03.9 -0.2
baz=96,SNR=12
**DUG Dugway** 96.18 41 eP P 13 42 04.8 +0.7
comp=Z,47nm,1.2s
DUG LR LR
comp=Z,3µm,22.0s
**DECC Green Verdugo** 96.20 48 P P 13 42 04.0 -0.2
baz=96
**PASC Pasadena Art C** 96.34 48 P P 13 42 04.2 -0.6
comp=Z,101nm,1.4s
**MWC Mount Wilson** 96.40 48 eP P 13 42 05.2 0.0
MWC pmax pmax
comp=Z,129nm,1.4s
**MWC Mount Wilson** 96.40 48 eP P 13 42 05.2 0.0
comp=Z,129nm,1.4s
**BW06 Boulder Array** 96.40 37 eP P 13 42 03.5 -1.6
comp=Z,25nm,1.3s
BW06 LR LR
comp=Z,6µm,21.0s
**TCUT Toone Canyon** 96.43 39 eP P 13 42 06.1 +0.8
comp=Z,286nm,1.8s
**CTU Camp Tracy** 96.50 40 eP P 13 42 06.7 +1.2
comp=Z,34nm,1.2s
**FMP Fort Macarthur** 96.53 49 P P 13 42 05.5 -0.1
baz=96
**D25A Fairfield** 96.56 31 P P 13 42 04.6 -1.0
baz=96
**B27A Peters Farms,** 96.58 29 P P 13 42 04.7 -0.8
baz=96
**GSC Goldstone** 96.62 47 eP P 13 42 06.3 +0.2
GSC pmax pmax
comp=Z,117nm,1.2s
**GSC Goldstone** 96.62 47 P P 13 42 05.7 -0.4
baz=96,SNR=28
**GSC Goldstone** 96.62 47 eP P 13 42 06.3 +0.2
comp=Z,117nm,1.2s
**C26A Wahner Farm, P** 96.63 30 P P 13 42 05.6 -0.2
baz=96
**A28A Rude Farm, Bot** 96.64 28 P P 13 42 05.4 -0.4
baz=96
**BFSC Mount Baldy Ra** 96.66 48 P P 13 42 06.3 0.0
baz=96
**RRX Edison Barstow** 96.74 47 P P 13 42 06.4 -0.1
baz=97
**SCI San Clemente I** 96.77 49 P P 13 42 06.4 -0.2
baz=97
**NLU North Lily Min** 96.78 41 eP P 13 42 07.5 +0.7
comp=Z,22nm,1.0s
**B28A Dugan Ranch, T** 96.94 29 P P 13 42 06.7 -0.4
baz=97
**C27A Sayler Ranch,** 96.98 30 P P 13 42 06.8 -0.6
baz=97
**SHPR Sheep Range** 96.99 45 eP P 13 42 08.2 +0.4
comp=Z,41nm,1.1s
**E25A Miller Ranch,** 96.99 31 P P 13 42 07.5 0.0
baz=97
**MPU Maple Canyon** 97.00 40 eP P 13 42 08.7 +0.9
comp=Z,183nm,1.4s
**D26A Manning** 97.06 31 P P 13 42 07.4 -0.3
baz=97
**A29A Manning Farm,** 97.07 28 P P 13 42 06.6 -1.2
baz=97
**TUQ Turquoise Moun** 97.12 46 P P 13 42 07.9 -0.5
baz=97,SNR=23
**BBRC Big Bear Solar** 97.15 48 P P 13 42 08.1 -0.6
baz=97
**HEC Hector,Ludlow** 97.21 47 P P 13 42 08.7 0.0
baz=97,SNR=9.0
**MURC Murrieta** 97.34 48 P P 13 42 08.9 -0.4
baz=97
**B29A Wagenman Farm,** 97.37 28 P P 13 42 08.8 -0.3
baz=97
**F25A Bowman** 97.38 32 P P 13 42 08.6 -0.6
baz=97
**ULM Lac du Bonnet** 97.40 25 P P 13 42 08.8 -0.3
comp=Z,26nm,0.8s,baz=328,slow=6.0,SNR=14
ULM LR LR 14 31 01.0
comp=Z,5µm,19.1s,baz=339,slow=38
**D27A Center** 97.42 30 P Pdif 13 42 09.7 +0.2
baz=97
**A30A Hoffart Farm,** 97.45 27 P P 13 42 09.1 -0.3
baz=97
**E26A Carlson Angus** 97.46 31 P P 13 42 09.0 -0.6
baz=97
**C28A Hausauer Farms** 97.48 29 P P 13 42 08.9 -0.7
baz=97
**MSU Marysvale** 97.62 42 eP Pdif 13 42 11.2 +0.4
MSU pmax pmax
comp=Z,68nm,1.3s
**MSU Marysvale** 97.62 42 eP Pdif 13 42 11.2 +0.4
comp=Z,68nm,1.3s
**GMRC Granite Mounta** 97.69 47 P Pdif 13 42 11.1 +0.1
baz=98,SNR=32
**TMUT Trail Mountain** 97.71 41 eP Pdif 13 42 13.9 +2.7
comp=Z,130nm,1.4s
**MDND Maddock** 97.73 29 P P 13 42 10.1 -0.6
baz=98
**D28A Regan** 97.80 30 P P 13 42 10.4 -0.6
baz=98
**F26A Lodgepole** 97.81 32 P P 13 42 10.4 -0.8
baz=98
**B30A Myrvik Farm, E** 97.81 28 P P 13 42 10.5 -0.6
baz=98
**109C Camp Elliot, M** 97.82 49 P P 13 42 10.9 -0.5
baz=98
**PFO Pinyon Flat Ob** 97.84 48 eP Pdif 13 42 11.9 +0.2
PFO pmax pmax
comp=Z,77nm,1.0s
PFO MLR MLR
comp=Z,7µm,21.0s
**PFO Pinyon Flat Ob** 97.84 48 P Pdif 13 42 12.2 +0.5
comp=Z,144nm,1.0s,SNR=7.7
**PFO Pinyon Flat Ob** 97.84 48 P P 13 42 11.5 -0.1
baz=98
**PFO Pinyon Flat Ob** 97.84 48 eP Pdif 13 42 11.9 +0.2
comp=Z,77nm,1.0s
PFO LR LR
comp=Z,7µm,21.0s
**LDFC Landfair** 97.87 46 eP Pdif 13 42 12.5 +0.6
comp=Z,144nm,1.4s
**E27A Carson** 97.91 31 P P 13 42 11.5 -0.1
baz=98
**A31A Linda, St. Vin** 97.92 27 P P 13 42 11.2 -0.3
baz=98
**BELC Belle Mtn. Jos** 97.92 47 P P 13 42 11.4 -0.6
baz=98,SNR=12
**G25A Newell** 97.93 32 P P 13 42 11.2 -0.5
baz=98
**F27A Lemmon** 98.11 31 P P 13 42 11.9 -0.6
baz=98
**B31A Greenbush Farm** 98.12 27 P P 13 42 11.6 -0.8
baz=98
**K22A Casper** 98.13 36 P P 13 42 12.2 -0.7
baz=98
**E28A Huff** 98.20 30 P P 13 42 12.3 -0.6
baz=98
**BAR Barrett** 98.23 49 eP P 13 42 13.3 0.0
comp=Z,54nm,1.3s
**SRU San Rafael** 98.24 41 eP Pdif 13 42 13.5 0.0
SRU pmax pmax
comp=Z,19nm,0.7s
**SRU San Rafael** 98.24 41 eP Pdif 13 42 13.5 0.0
comp=Z,19nm,0.7s
**H25A Fruitdale** 98.25 33 P P 13 42 12.9 -0.3
baz=98
**G26A Maurine** 98.25 32 P P 13 42 12.4 -0.8
baz=98
**MONP Monument Peak** 98.28 48 P P 13 42 13.3 -0.5
baz=98
**C30A Mose, Pekin** 98.33 28 P P 13 42 12.6 -0.9
baz=98
**D29A Pettibone, Tap** 98.33 29 P P 13 42 13.2 -0.2
baz=98
**RSSD Black Hills** 98.39 33 eP Pdif 13 42 16.5 +2.4
RSSD pmax pmax
comp=Z,63nm,1.5s
**RSSD Black Hills** 98.39 33 eP Pdif 13 42 16.4 +2.4
comp=Z,63nm,1.5s
**IRM Iron Mountain** 98.39 47 P P 13 42 13.3 -0.7
baz=98
**G27A Dupree** 98.51 32 P P 13 42 13.5 -0.8
baz=98
**C31A Landman Farms,** 98.58 28 P P 13 42 14.0 -0.5
baz=98
**B32A Ashes, Strandq** 98.61 27 P P 13 42 13.9 -0.7
baz=98
**I25A Rochford** 98.62 33 P P 13 42 14.2 -0.9
baz=98
**IBP Imperial Bould** 98.64 48 Pdiff P 13 42 14.5 -0.7
baz=98
**H26A Fairpoint** 98.66 32 Pdiff P 13 42 14.1 -0.9
baz=98
**D30A Buchanan** 98.66 29 P P 13 42 14.3 -0.6
baz=98
**SWSC Sam W. Stewart** 98.68 48 Pdiff P 13 42 14.8 -0.5
baz=98
**E29A Napoleon** 98.68 30 Pdiff P 13 42 13.7 -1.4
baz=98
**F28A McLaughlin** 98.70 31 Pdiff P 13 42 13.6 -1.5
baz=98
**O20A White River Ci** 98.89 39 Pdiff P 13 42 13.4 -2.9
baz=99
**AGMN Agassiz Nation** 98.96 26 Pdiff P 13 42 15.7 -0.5
baz=99
**AGMN Agassiz Nation** 98.96 26 PFAKE 13 42 30.0 +14
AGMN LR LR
comp=Z,6µm,20.0s
**PDMCI Parker Dam,Lak** 98.98 46 Pdiff P 13 42 15.7 -0.8
baz=99
**H27A Howes** 98.99 32 Pdiff P 13 42 15.5 -0.9
baz=99
**J25A Sunshine Ranch** 99.03 34 Pdiff Pdif 13 42 15.6 -1.2
baz=99
**I26A New Underwood** 99.04 33 Pdiff Pdif 13 42 15.6 -1.2
baz=99
**Y12C Blythe** 99.06 47 Pdiff Pdif 13 42 16.2 -0.7
baz=99
**E30A Jud** 99.06 29 Pdiff Pdif 13 42 15.8 -0.9
baz=99
**F29A Eureka** 99.16 30 Pdiff Pdif 13 42 16.8 -0.4
baz=99
**D31A Mcclaflin, Tow** 99.16 28 Pdiff Pdif 13 42 15.7 -1.5
baz=99
**G28A Parade** 99.22 31 Pdiff Pdif 13 42 16.8 -0.7
baz=99
**GLA Glamis** 99.27 48 eP Pdif 13 42 18.6 +0.6
GLA pmax pmax
comp=Z,41nm,1.1s
**GLA Glamis** 99.27 48 Pdiff Pdif 13 42 17.1 -0.9
baz=99
**GLA Glamis** 99.27 48 eP Pdif 13 42 18.6 +0.6
comp=Z,41nm,1.1s
**B34A Aery, Baudette** 99.29 26 Pdiff Pdif 13 42 17.1 -0.6
baz=99
**D32A Dogwood Acres,** 99.39 28 Pdiff Pdif 13 42 16.1 -2.1
baz=99
**I27A Quinn** 99.41 32 Pdiff Pdif 13 42 17.6 -0.9
baz=99
**C33A Trail** 99.42 27 Pdiff Pdif 13 42 19.2 +0.9
baz=99
**J26A Sides Ranch, S** 99.46 34 Pdiff Pdif 13 42 18.0 -0.6
baz=99
**H28A Mission Ridge** 99.47 32 Pdiff Pdif 13 42 17.6 -1.0
baz=99
**E31A Nome** 99.47 29 Pdiff Pdif 13 42 17.5 -1.0
baz=99
**F30A Leola** 99.52 30 Pdiff Pdif 13 42 17.4 -1.4
baz=99
**G29A Hoven** 99.59 31 Pdiff Pdif 13 42 17.7 -1.4
baz=99
**PHWY Pilot Hill** 99.64 36 eP Pdif 13 42 18.8 -1.0
comp=Z,19nm,1.4s
**N23A Red Feather La** 99.66 37 Pdiff Pdif 13 42 18.6 -1.3
baz=99
**PV04 Paradox Valley** 99.66 40 ePdif Pdif 13 42 18.6 -1.2
**E32A Braaten, Kindr** 99.80 28 Pdiff Pdif 13 42 19.7 -0.3
baz=100
**L25A Engebretsen Ra** 99.83 35 Pdiff Pdif 13 42 18.8 -1.6
baz=100
**F31A Hecla** 99.85 29 Pdiff Pdif 13 42 19.6 -0.7
baz=100
**D33A AnnSam, Waubun** 99.88 27 Pdiff Pdif 13 42 19.3 -1.1
baz=100
**H29A Onida** 99.89 31 Pdiff Pdif 13 42 19.5 -1.0
baz=100
**I28A Midland** 99.90 32 Pdiff Pdif 13 42 19.6 -1.0
baz=100
**G30A Faulkton** 100.00 30 Pdiff Pdif 13 42 19.9 -1.1
baz=100
**WUAZ Wupatki** 100.01 44 Pdiff Pdif 13 42 20.3 -1.1
baz=100
**WUAZ Wupatki** 100.01 44 ePdif Pdif 13 42 22.8 +1.4
comp=Z,49nm,1.3s
WUAZ LR LR
comp=Z,3µm,20.0s
**PV01 Paradox Valley** 100.03 40 ePdif Pdif 13 42 21.4 -0.1
comp=Z,2µm,1.1s
**J27A Elkhorn Farm,** 100.03 33 Pdiff Pdif 13 42 17.8 -3.5
baz=100
**D34A Park Rapids** 100.20 27 Pdiff Pdif 13 42 20.9 -0.8
baz=100
**J28A Allard Ranch,** 100.29 32 Pdiff Pdif 13 42 21.1 -1.3
baz=100
**M25A Palm-Egli Farm** 100.29 35 Pdiff Pdif 13 42 19.0 -3.6
baz=100
**I29A Vivian Onida** 100.30 32 Pdiff Pdif 13 42 21.5 -0.8
baz=100
**E33A Westby DABS, E** 100.32 28 Pdiff Pdif 13 42 20.2 -2.1
baz=100
**K27A Flueckinger Fa** 100.32 34 Pdiff Pdif 13 42 20.9 -1.6
baz=100
**G31A Conde** 100.36 30 Pdiff Pdif 13 42 24.0 +1.5
baz=100
**C36A Pine Crest Far** 100.59 25 Pdiff Pdif 13 42 23.2 -0.3
baz=100
**SCHQ Schefferville** 100.59 7 P Pdif 13 42 23.2 -0.2
comp=Z,11nm,0.9s,baz=287,slow=5.9,SNR=6.8
**ISCO Idaho Springs** 100.60 37 eP Pdif 13 42 26.7 +2.6
ISCO pmax pmax
comp=Z,18nm,1.4s
ISCO MLR MLR
comp=Z,3µm,20.0s
**ISCO Idaho Springs** 100.60 37 Pdiff Pdif 13 42 23.1 -1.0
baz=100
**ISCO Idaho Springs** 100.60 37 ePdif Pdif 13 42 26.7 +2.6
comp=Z,18nm,1.4s
ISCO LR LR
comp=Z,3µm,20.0s
**SUSD South Dakota S** 100.61 31 Pdiff Pdif 13 42 24.0 +0.3
baz=100
**G32A Webster** 100.65 29 Pdiff Pdif 13 42 22.9 -0.9
baz=100
**E34A Wadena** 100.66 27 Pdiff Pdif 13 42 24.2 +0.3
baz=100
**D35A Remer** 100.66 26 Pdiff Pdif 13 42 22.3 -1.5
baz=100
**MVCO Mesa Verde** 100.69 41 Pdiff Pdif 13 42 23.7 -0.8
baz=100
**MVCO Mesa Verde** 100.69 41 ePdif Pdif 13 42 25.4 +1.0
comp=Z,38nm,1.5s
MVCO LR LR
comp=Z,3µm,22.0s
**PBRG Braganca** 100.71 326 ePdif Pdif 13 42 30.8 +6.6
**PBRG Braganca** 100.71 326 ePP PP 13 46 32.9 +1.9
**F33A 5 Mile Ranch,** 100.72 28 Pdiff Pdif 13 42 25.0 +0.9
baz=100
**ESDC Sonseca Array** 100.72 323 P Pdif 13 42 23.9 -0.4
comp=Z,6.6nm,0.9s,baz=34,slow=4.3,SNR=12
ESDC PP PP 13 46 17.0 -14
comp=Z,3.3nm,0.8s,baz=46,slow=8.3,SNR=3.6
**J29A Okreek** 100.75 32 Pdiff Pdif 13 42 25.2 +0.9
baz=100
**K28A Ten Mile Ranch** 100.75 33 Pdiff Pdif 13 42 22.8 -1.6
baz=100
**M26A McRoberts Ranc** 100.75 35 Pdiff Pdif 13 42 22.8 -1.7
baz=100
**I30A Oacoma** 100.79 31 Pdiff Pdif 13 42 21.7 -2.8
baz=100
**H31A Wolsey** 100.81 30 Pdiff Pdif 13 42 23.0 -1.5
baz=100
**C37A Embarrass** 100.87 25 Pdiff Pdif 13 42 22.6 -2.1
baz=101
**D36A Goodland** 100.94 26 Pdiff Pdif 13 42 24.1 -0.9
baz=101
**E35A Pequot Lakes** 100.94 27 Pdiff Pdif 13 42 24.2 -0.9
baz=101
**EYMN Ely** 100.95 24 Pdiff Pdif 13 42 24.2 -0.8
baz=101
**EYMN Ely** 100.95 24 ePdif Pdif 13 42 24.5 -0.6
comp=Z,23nm,1.1s
EYMN LR LR
comp=Z,5µm,19.0s
**PAB San Pablo** 101.03 323 PFAKE 13 42 40.0 +14
PAB LR LR
comp=Z,13µm,19.0s
**M27A Reverse DX Ran** 101.10 34 Pdiff Pdif 13 42 26.2 +0.2
baz=101
**I31A Royce, Wessing** 101.12 31 Pdiff Pdif 13 42 22.6 -3.4
baz=101
**N26A Koester Ranch,** 101.17 35 Pdiff Pdif 13 42 25.9 -0.5
baz=101
**L28A Connealy Angus** 101.19 34 Pdiff Pdif 13 42 26.6 +0.2
baz=101
**J30A Dallas** 101.21 32 Pdiff Pdif 13 42 26.0 -0.4
baz=101
**C38A Sawbill Land.** 101.22 24 Pdiff Pdif 13 42 27.2 +0.9
baz=101
**K29A Lazy Trails An** 101.23 32 Pdiff Pdif 13 42 26.1 -0.4
baz=101
**D37A Cotton** 101.24 25 Pdiff Pdif 13 42 25.5 -0.9
baz=101
**H32A Carlson Farm,** 101.26 30 Pdiff Pdif 13 42 24.4 -2.2
baz=101
**MVO Moncorvo** 101.32 325 ePdif Pdif 13 42 30.0 +3.0
**MVO Moncorvo** 101.32 325 ePP PP 13 46 39.8 +4.2
**MVO Moncorvo** 101.32 325 eLQ LQ 14 14 11.6
MVO eLR LR 14 18 22.4
comp=Z,14µm,18.0s
**H33A Prehn Over Nor** 101.43 29 Pdiff Pdif 13 42 26.4 -1.0
baz=101
**Q24A Divide** 101.44 38 Pdiff Pdif 13 42 24.7 -3.2
baz=101
**F35A Swanville** 101.44 27 Pdiff Pdif 13 42 22.7 -4.6
baz=101
**G34A Benson** 101.48 28 Pdiff Pdif 13 42 27.2 -0.3
baz=101
**N27A Anderson Farm,** 101.54 35 Pdiff Pdif 13 42 28.2 +0.1
baz=101
**POLO Lamas de Olo** 101.56 326 ePdif Pdif 13 42 29.4 +1.3
**POLO Lamas de Olo** 101.56 326 ePP PP 13 46 40.9 +3.4
**J31A Geddes** 101.59 31 Pdiff Pdif 13 42 27.7 -0.3
baz=101
**I32A Karley and Nic** 101.62 30 Pdiff Pdif 13 42 27.8 -0.3
baz=101
**K30A Basset** 101.64 32 Pdiff Pdif 13 42 27.3 -1.0

baz=101
**L29A Maesberg Ranch** 101.67 33 Pdiff **Pdif** 13 42 28.1 -0.4
baz=101
**OGNE Ogallala** 101.71 35 Pdiff **Pdif** 13 42 26.9 -1.8
baz=102
**OGNE Ogallala** 101.71 35 PFAKE 13 42 40.0 +11
OGNE LR LR
comp=Z,4µm,21.0s
**M28A Bar X Bar Ranc** 101.72 34 Pdiff **Pdif** 13 42 28.9 +0.2
baz=102
**F36A Milaca** 101.87 27 Pdiff **Pdif** 13 42 28.9 -0.3
baz=102
**H34A Spellman Lake,** 101.87 29 Pdiff **Pdif** 13 42 28.9 -0.3
baz=102
**I33A Coleman** 101.90 30 Pdiff **Pdif** 13 42 28.5 -1.0
baz=102
**J32A Parkston** 101.95 31 Pdiff **Pdif** 13 42 29.9 +0.3
baz=102
**G35A Watkins** 101.98 28 Pdiff **Pdif** 13 42 28.8 -0.9
baz=102
**P26A Davis Ranch, A** 102.01 36 Pdiff **Pdif** 13 42 30.9 +0.7
baz=102
**O27A Beecher Island** 102.02 35 Pdiff **Pdif** 13 42 26.6 -3.5
baz=102
**M29A Burnside Ranch** 102.03 34 Pdiff **Pdif** 13 42 30.9 +0.8
baz=102
**SDCO Great Sand Dun** 102.08 39 Pdiff **Pdif** 13 42 29.1 -1.7
baz=102
**SDCO Great Sand Dun** 102.08 39 Pdif **Pdif** 13 42 32.0 +1.3
comp=Z,4.4nm,1.1s
SDCO LR LR
comp=Z,4µm,20.0s
**K31A O'Neill** 102.09 32 Pdiff **Pdif** 13 42 28.1 -2.2
baz=102
**L30A Spencer Herefo** 102.13 33 Pdiff **Pdif** 13 42 31.4 +0.8
baz=102
**MTE Manteigas** 102.14 325 *e*PP PP 13 46 47.2 +5.4
**MTE Manteigas** 102.14 325 *e*LQ LQ 14 13 40.9
MTE *e*LR LR 14 18 46.1
comp=Z,13µm,18.0s
**MTE Manteigas** 102.14 325 PFAKE 13 42 40.0 +9.4
MTE LR LR
comp=Z,13µm,20.0s
**N28A Pribbeno Ranch** 102.15 35 Pdiff **Pdif** 13 42 32.1 +1.4
baz=102
**ECSD EROS Data Cent** 102.23 30 Pdiff **Pdif** 13 42 29.8 -1.1
baz=102
**ECSD EROS Data Cent** 102.23 30 *e*P **Pdif** 13 42 28.7 -2.2
comp=Z,11nm,1.1s
ECSD LR LR
comp=Z,4µm,20.0s
**G36A St. Michael** 102.28 27 Pdiff **Pdif** 13 42 31.9 +0.9
baz=102
**I34A Hadley** 102.33 29 Pdiff **Pdif** 13 42 30.4 -1.0
baz=102
**Q26A Hugo** 102.37 37 Pdiff **Pdif** 13 42 32.5 +0.7
baz=102
**MAW Mawson** 102.39 200 P **Pdif** 13 42 30.4 -0.3
comp=Z,9.7nm,0.9s,baz=69,slow=4.6,SNR=16
MAW PP **PKiKP** 13 46 49.5 -2.6
comp=Z,4.0nm,1.2s,baz=61,slow=13,SNR=2.5
MAW PKKPbc **PKKPbc** 13 58 31.4 -3.2
comp=Z,4.7nm,0.9s,baz=261,slow=5.4,SNR=12
**L31A Butterfield Fa** 102.39 32 Pdiff **Pdif** 13 42 33.1 +1.4
baz=102
**J33A Davis** 102.40 30 Pdiff **Pdif** 13 42 33.1 +1.5
baz=102
**TUC Tucson** 102.41 46 *e*P **Pdif** 13 42 31.4 -0.6
TUC pmax pmax
comp=Z,8.0nm,1.2s
TUC MLR MLR
comp=Z,5µm,20.0s
**TUC Tucson** 102.41 46 *e*Pdif **Pdif** 13 42 31.4 -0.6
comp=Z,7.9nm,1.2s
TUC LR LR
comp=Z,5µm,20.0s
**LSZ Lusaka** 102.42 259 *e*P **Pdif** 13 42 30.9 -1.4
LSZ pmax pmax
comp=Z,35nm,1.4s
LSZ MLR MLR
comp=Z,6µm,21.0s
**LSZ Lusaka** 102.42 259 Pdiff **Pdif** 13 42 34.5 +2.2
SNR=7.9
**LSZ Lusaka** 102.42 259 *e*Pdif **Pdif** 13 42 30.9 -1.4
comp=Z,35nm,1.4s
LSZ LR LR
comp=Z,6µm,21.0s
**P27A Ficken Ranch,** 102.42 36 Pdiff **Pdif** 13 42 32.1 +0.1
baz=102
**K32A Verdigre** 102.44 31 Pdiff **Pdif** 13 42 32.1 +0.2
baz=102
**O28A Krutsinger Ran** 102.44 35 Pdiff **Pdif** 13 42 32.1 +0.1
baz=102
**N29A Votaw Ranch, W** 102.52 34 Pdiff **Pdif** 13 42 34.9 +2.6
baz=102
**SPMN St. Paul** 102.68 27 Pdiff **Pdif** 13 42 34.3 +1.5
baz=102
**PMRV Marv??o** 102.77 324 *e*PP PP 13 46 53.0 +6.5
**PMRV Marv??o** 102.77 324 *e*LR LR 14 19 10.0
comp=Z,6µm,18.0s
**KSCO Kaye Shedlock'** 102.79 36 Pdiff **Pdif** 13 42 34.3 +0.7
baz=102
**N30A Huettle Ranch,** 102.81 34 Pdiff **Pdif** 13 42 33.8 +0.2
baz=102
**R26A Arlington** 102.85 37 Pdiff **Pdif** 13 42 36.4 +2.5
baz=103
**P28A Saint Francis** 102.85 35 Pdiff **Pdif** 13 42 34.6 +0.7
baz=103
**I35A Creekview Farm** 102.86 29 Pdiff **Pdif** 13 42 35.1 +1.5
baz=103
**J34A George** 102.88 30 Pdiff **Pdif** 13 42 32.2 -1.6
baz=103
**PCAS Casmilo, Conde** 102.89 325 *e*Pdif **Pdif** 13 42 36.6 +2.7
**PCAS Casmilo, Conde** 102.89 325 *e*PP PP 13 46 53.1 +5.7
**L32A Elgin** 102.92 32 Pdiff **Pdif** 13 42 33.6 -0.4
baz=103
**K33A Hardington** 102.93 31 Pdiff **Pdif** 13 42 36.1 +2.0
baz=103
**O29A 4D Ranch, Culb** 102.95 34 Pdiff **Pdif** 13 42 36.8 +2.6
baz=103
**L33A Hoskins** 103.15 31 Pdiff **Pdif** 13 42 38.3 +3.3
baz=103
**I36A Fitzsimmons Fa** 103.15 28 Pdiff Pdif 13 42 47.2 +12
baz=103
**Q28A Sharon Springs** 103.18 36 Pdiff **Pdif** 13 42 38.5 +3.2
baz=103
**R27A Eads** 103.22 37 Pdiff **Pdif** 13 42 38.1 +2.5
baz=103
**P29A Atwood** 103.26 35 Pdiff **Pdif** 13 42 38.9 +3.2
baz=103
**O30A MW Ranch, Wils** 103.29 34 Pdiff **Pdif** 13 42 35.3 -0.4
baz=103
**K34A Le Mars** 103.29 30 Pdiff **Pdif** 13 42 35.8 +0.2
baz=103
**BGNE Belgrade** 103.31 32 Pdiff **Pdif** 13 42 39.0 +3.2
baz=103
**S26A Kim** 103.32 38 Pdiff **Pdif** 13 42 36.7 +0.7
baz=103
**COWI Conover** 103.37 24 PFAKE 13 42 50.0 +14
COWI LR LR
comp=Z,6µm,21.0s
**ANMO Albuquerque** 103.43 42 PFAKE 13 42 50.0 +13
ANMO LR LR
comp=Z,3µm,20.0s
**PBAR Barrancos** 103.48 323 *e*Pdif **Pdif** 13 42 40.2 +3.7
**PBAR Barrancos** 103.48 323 *e*PP PP 13 46 49.7 -2.1
**T26A Comanche Natio** 103.56 38 Pdiff **Pdif** 13 42 37.8 +0.6
baz=103
**S27A Las Animas** 103.59 37 Pdiff **Pdif** 13 42 39.7 +2.5
baz=103
**K35A Storm Lake** 103.65 29 Pdiff **Pdif** 13 42 38.0 +0.8
baz=103
**R28A Tribune** 103.71 36 Pdiff **Pdif** 13 42 38.4 +0.7
baz=104
**L34A Svendsen Farm,** 103.72 31 Pdiff **Pdif** 13 42 37.2 -0.4
baz=103
**Y22D IRIS PASSCAL I** 103.73 42 Pdiff **Pdif** 13 42 38.6 +0.7
baz=104
**N32A Stulken Farm,** 103.73 33 Pdiff **Pdif** 13 42 38.4 +0.8
baz=104
**Q29A Oakley** 103.76 35 Pdiff **Pdif** 13 42 38.6 +0.7
baz=104
**VNDA Vanda** 103.81 172 Pdiff **Pdif** 13 42 36.8 -0.2
comp=Z,0.4nm,0.3s,baz=316,slow=6.7,SNR=6.4
VNDA PP **PP** 13 46 51.9 -2.5
comp=Z,11nm,0.9s,baz=314,slow=8.3,SNR=10
VNDA PKKPbc **PKKPbc** 13 58 28.7 -1.8
comp=Z,4.5nm,0.9s,baz=104,slow=4.6,SNR=14

**M34A Aspy Farms, Fr** 103.99 31 Pdiff **Pdif** 13 42 37.7 -1.0
baz=104
**L35A Bielow Farm, R** 103.99 30 Pdiff **Pdif** 13 42 38.3 -0.4
baz=104
**R29A Marienthal** 104.02 36 Pdiff **Pdif** 13 42 39.2 +0.1
baz=104
**Q30A Quinter** 104.09 35 Pdiff **Pdif** 13 42 42.5 +3.2
baz=104
**O32A Brockman Farm,** 104.12 33 Pdiff **Pdif** 13 42 37.1 -2.3
baz=104
**P31A Stockton** 104.13 34 Pdiff **Pdif** 13 42 40.8 +1.4
baz=104
**T27A Campo** 104.13 38 Pdiff **Pdif** 13 42 40.3 +0.7
baz=104
**N33A J Bar K, Exete** 104.16 32 Pdiff **Pdif** 13 42 41.0 +1.4
baz=104
**121A Cookes Peak, D** 104.21 44 Pdiff **Pdif** 13 42 39.6 -0.6
baz=104
**S28A Manter** 104.21 37 Pdiff **Pdif** 13 42 41.9 +1.9
baz=104
**LIS Lisbon** 104.22 325 *e*PP **PKiKP** 13 46 56.5 -0.1
LIS AMS AMS 14 27 57.1
comp=E,12µm,20.8s
**PNCL Nicolau / Gran** 104.33 324 *e*Pdif **Pdif** 13 42 43.3 +3.0
**PNCL Nicolau / Gran** 104.33 324 *e*PP PP 13 46 59.5 +1.4
**MESJ Messejana** 104.37 324 *e*PP **PKiKP** 13 46 57.3 +0.4
MESJ *e*S **SKSac** 13 53 16.4 -2.0
MESJ AMS AMS 14 36 00.0
comp=Z,8µm,11.9s
**PVAQ Vaqueiros** 104.41 323 *e*P **Pdif** 13 42 41.2 +0.5
**PVAQ Vaqueiros** 104.41 323 *e*PP PP 13 47 03.7 +5.0
**PVAQ Vaqueiros** 104.41 323 *e*LQ LQ 14 15 22.4
PVAQ *e*LR LR 14 19 55.8
comp=Z,9µm,18.0s
**PCVE Castro Verde** 104.42 323 *e*PP PP 13 47 04.0 +5.2
**T28A Walsh** 104.43 37 Pdiff **Pdif** 13 42 39.2 -1.8
baz=104
**M35A Neola** 104.43 31 Pdiff **Pdif** 13 42 40.3 -0.4
baz=104
**P32A Huiting Farm,** 104.44 34 Pdiff **Pdif** 13 42 41.0 +0.2
baz=104
**CBKS Cedar Bluff** 104.47 35 Pdiff **Pdif** 13 42 39.4 -1.6
baz=104
**CBKS Cedar Bluff** 104.47 35 PFAKE 13 42 50.0 +9.0
CBKS LR LR
comp=Z,6µm,20.0s
**Q31A Ellis** 104.50 34 PKiKP **PKiKP** 13 47 01.6 +4.4
baz=104
**U27A Thompson Grove** 104.53 38 PKiKP **PKiKP** 13 46 59.9 +2.5
baz=104
**N34A Lincoln** 104.54 31 PKiKP **PKiKP** 13 47 01.7 +4.6
baz=104
**R30A Dighton** 104.58 35 PKiKP PKiKP 13 47 03.9 +6.5
baz=104
**O33A Hebron** 104.61 33 PKiKP PKiKP 13 47 03.9 +6.7
baz=104
**S29A Ulysses** 104.61 36 PKiKP **PKiKP** 13 47 02.1 +4.7
baz=104
**PBDV Barranco-do-Ve** 104.64 323 *e*Pdif **Pdif** 13 42 43.9 +2.1
**PBDV Barranco-do-Ve** 104.64 323 *e*PP PP 13 47 03.1 +2.6
**SBA Scott Base** 104.70 172 PFAKE 13 42 50.0 +9.1
SBA LR LR
comp=Z,2µm,20.0s
**T29A Hugoton** 104.86 37 PKiKP PKiKP 13 47 05.1 +7.2
baz=105
**U28A Mallet** 104.90 38 PKiKP **PKiKP** 13 46 59.6 +1.5
baz=105
**N35A Tabor** 104.93 31 PKiKP PKiKP 13 47 05.4 +7.5
baz=105
**Q32A Meitler Ranch,** 104.94 34 PKiKP PKiKP 13 47 05.5 +7.5
baz=105
**S30A Montezuma** 104.95 36 PKiKP **PKiKP** 13 47 01.7 +3.7
baz=105
**O34A Beatrice** 104.96 32 PKiKP **PKiKP** 13 46 59.7 +1.8
baz=105
**R31A Burdett** 104.97 35 PKiKP PKiKP 13 47 03.7 +5.7
baz=105
**MORF Marmelete** 104.99 324 *e*PP **PKiKP** 13 47 02.1 +4.0
MORF AMS AMS 14 37 47.3
comp=Z,8µm,23.2s
**MORF Marmelete** 104.99 324 *e*PP PP 13 47 04.6 +1.5
**V27A Dan Oppiter Fa** 105.00 39 PKiKP **PKiKP** 13 46 58.1 -0.1
baz=105
**P33A Williams Farm,** 105.04 33 PKiKP **PKiKP** 13 46 56.3 -1.8
baz=105
**TAM Tamanrasset** 105.11 304 PFAKE 13 47 10.0
TAM LR LR
comp=Z,4µm,21.0s
**SCIA State Center** 105.20 29 PFAKE 13 47 10.0
SCIA LR LR
comp=Z,6µm,22.0s
**PFVI Vila Bisbo** 105.21 323 *e*PP PP 13 47 05.2 +0.5
**O35A Humboldt** 105.27 31 PKiKP **PKiKP** 13 46 55.4 -3.1
baz=105
**R32A Long Quarter,** 105.29 34 PKiKP **PKiKP** 13 46 59.3 +0.7
baz=105
**Q33A Connelly Farm,** 105.31 33 PKiKP PKiKP 13 47 09.0 +10
baz=105
**T30A Plains** 105.35 36 PKiKP **PKiKP** 13 46 59.2 +0.4
baz=105
**V28A Channing** 105.35 38 PKiKP **PKiKP** 13 47 01.1 +2.2
baz=105
**U29A Oasis Ranch, S** 105.38 37 PKiKP **PKiKP** 13 46 57.3 -1.6
baz=105
**P34A Walnut Farm, R** 105.39 33 PKiKP **PKiKP** 13 46 55.4 -3.4
baz=105
**S31A Mullinville** 105.49 35 PKiKP **PKiKP** 13 46 55.6 -3.4
baz=105
**JFWS Jewell Farm** 105.62 26 PFAKE 13 47 10.0
JFWS LR LR
comp=Z,5µm,20.0s
**V29A Stinnett** 105.66 38 PKiKP **PKiKP** 13 46 55.9 -3.5
baz=105
**U30A WK&E Inc. Balk** 105.67 37 PKiKP **PKiKP** 13 46 55.9 -3.5
baz=105
**W28A Vega** 105.71 39 PKiKP **PKiKP** 13 46 56.0 -3.6
baz=106
**S32A Newby Ranch, P** 105.72 35 PKiKP **PKiKP** 13 47 03.7 +4.3
baz=106
**R33A Olander Ranch,** 105.75 34 PKiKP **PKiKP** 13 47 01.8 +2.4
baz=106
**T31A Randall Ranch,** 105.78 36 PKiKP **PKiKP** 13 47 03.8 +4.3
baz=106
**P35A Duane Minner,** 105.79 32 PKiKP **PKiKP** 13 47 01.9 +2.4
baz=106
**Q34A Chapman** 105.81 33 PKiKP PKiKP 13 47 07.7 +8.2
baz=106
**O36A Bockow** 105.82 31 PKiKP **PKiKP** 13 47 03.8 +4.3
baz=106
**MDT Midelt** 105.83 318 PP PKiKP 13 46 54.0 -5.8
comp=Z,9.7nm,0.9s,baz=35,slow=7.6,SNR=4.1
**KSU1 Kansas State U** 105.84 33 PKiKP **PKiKP** 13 47 03.9 +4.3
baz=106
**KSU1 Kansas State U** 105.84 33 PFAKE 13 47 10.0
KSU1 LR LR
comp=Z,5µm,21.0s
**P36A Good Intent, A** 106.11 31 PKiKP PKiKP 13 47 06.3 +6.3
baz=106
**T32A Huddler Ranch,** 106.11 35 PKiKP **PKiKP** 13 47 04.4 +4.2
baz=106
**W29A Amraillo** 106.13 39 PKiKP **PKiKP** 13 47 00.6 +0.3
baz=106
**R34A Isabella, Hill** 106.13 34 PKiKP PKiKP 13 47 06.3 +6.2
baz=106
**U31A Nine Bar Ranch** 106.22 37 PKiKP **PKiKP** 13 47 02.7 +2.3
baz=106
**AMTX Amarillo** 106.28 39 PKiKP PKiKP 13 47 08.6 +8.0
baz=106
**MNTX Cornudas Mount** 106.28 43 PKiKP **PKiKP** 13 47 02.9 +2.3
baz=106
**MNTX Cornudas Mount** 106.28 43 PFAKE 13 47 10.0
MNTX LR LR
comp=Z,4µm,19.0s
**S33A Kaszmaul Farm,** 106.29 35 PKiKP PKiKP 13 47 08.6 +8.1
baz=106
**MSTX Muleshoe** 106.30 40 PKiKP **PKiKP** 13 47 04.8 +4.1
baz=106
**Q35A Mercer Eighty,** 106.31 32 PKiKP PKiKP 13 47 14.3 +14
baz=106
**RTC Rabat Centre** 106.36 320 PFAKE 13 47 10.0
RTC LR LR
comp=Z,21µm,21.0s
**Q36A Arnold C. Orve** 106.51 32 PKiKP PKiKP 13 47 08.9 +8.2
baz=106
**T33A Patterson Ranc** 106.55 35 PKiKP **PKiKP** 13 47 05.2 +4.3
baz=106
**X29A Tulia** 106.58 39 PKiKP PKiKP 13 47 07.2 +6.0
baz=106
**R35A Emporia Munici** 106.64 33 PKiKP **PKiKP** 13 47 05.4 +4.3
baz=106
**Y28A McKinney Farm,** 106.65 40 PKiKP **PKiKP** 13 47 05.4 +4.1
baz=106
**S34A Willow Spring** 106.66 34 PKiKP PKiKP 13 47 07.3 +6.2
baz=106
**V31A Spring Creek L** 106.66 37 PKiKP PKiKP 13 46 53.9 -7.3
baz=106
**U32A Winter Ranch,** 106.67 36 PKiKP **PKiKP** 13 47 05.4 +4.2
baz=106
**W30A Crocket Farms** 106.69 38 PKiKP PKiKP 13 46 55.9 -5.4
baz=106
**Z28A Tucker Farm, M** 107.01 40 PKiKP PKiKP 13 47 09.9 +7.9
baz=107
**Y29A Porterfield Fa** 107.02 39 PKiKP PKiKP 13 47 11.9 +10
baz=107
**X30A Coker Ranch, T** 107.06 39 PKiKP **PKiKP** 13 47 02.3 +0.3
baz=107
**S35A Otter Creek Ra** 107.08 33 PKiKP PKiKP 13 47 11.9 +10
baz=107
**U33A Lingo Farm, Me** 107.10 35 PKiKP PKiKP 13 47 08.2 +6.2
baz=107
**V32A Arapaho** 107.14 36 PKiKP PKiKP 13 47 10.2 +8.1
baz=107
**T34A McClaskey Farm** 107.14 34 PKiKP PKiKP 13 47 10.1 +8.1
baz=107
**R37A Teagarden Farm** 107.32 32 PKiKP **PKiKP** 13 47 06.6 +4.3
baz=107
**128A Castleberry Fa** 107.42 41 PKiKP **PKiKP** 13 47 01.1 -1.7
baz=107
**X31A McDonald Ranch** 107.43 38 PKiKP **PKiKP** 13 47 06.9 +4.2
baz=107
**Z29A Hungry Hill Ra** 107.43 40 PKiKP **PKiKP** 13 47 01.1 -1.6
baz=107
**Y30A Stafford Cattl** 107.45 39 PKiKP **PKiKP** 13 47 03.1 +0.3
baz=107
**W32A Sentinel** 107.47 37 PKiKP **PKiKP** 13 47 06.9 +4.2
baz=107
**V33A Lossen Ranch,** 107.47 36 PKiKP PKiKP 13 47 08.8 +6.2
baz=107
**T35A Sooner Cattle** 107.57 34 PKiKP **PKiKP** 13 47 05.2 +2.3
baz=107
**RKT Rikitea** 107.58 108 *e*Pdif **Pdif** 13 42 56.0 +1.1
comp=Z,167nm,28.5s
**RKT Rikitea** 107.58 108 *e*PP PP 13 47 26.7 +3.2
comp=Z,241nm,27.5s
RKT *e*SKSac **SKSac** 13 53 30.1 -2.8
comp=Z,2µm,29.0s
RKT *e*SP **SP** 13 56 44.7 +2.8
comp=Z,2µm,27.5s
RKT *e*SS SS 14 02 44.4 +12
comp=Z,1µm,31.5s
**RKT Rikitea** 107.58 108 *e*LQ LQ 14 13 24.8
comp=Z,7µm,39.0s
RKT *e*LR LR 14 18 23.3
comp=Z,8µm,33.8s,baz=291
**228A UT Block 9, Go** 107.71 41 PKiKP **PKiKP** 13 47 03.6 +0.2
baz=108
**Z30A Sanderson Ranc** 107.75 40 PKiKP **PKiKP** 13 47 07.5 +4.1
baz=108
**Y31A Rekieta Farm,** 107.75 39 PKiKP PKiKP 13 47 09.4 +6.1
baz=108
**S37A Fort Scott** 107.76 32 PKiKP **PKiKP** 13 47 03.6 +0.5
baz=108
**129A Stewart Farms,** 107.78 40 PKiKP **PKiKP** 13 47 05.6 +2.2
baz=108
**T36A Boggs Farm, Ca** 107.78 34 PKiKP PKiKP 13 46 57.2 -6.0
baz=108
**V34A Guthrie** 107.87 35 PKiKP PKiKP 13 46 55.7 -7.7
baz=108
**U35A Pawnee** 107.88 35 PKiKP **PKiKP** 13 47 01.9 -1.5
baz=108
**W33A Caddo, Fort Co** 107.88 37 PKiKP **PKiKP** 13 47 07.7 +4.2
baz=108
**HDIL Hopedale** 107.99 27 PKiKP PKiKP 13 47 09.7 +6.3
baz=108
**HDIL Hopedale** 107.99 27 PFAKE 13 47 10.0
HDIL LR LR
comp=Z,6µm,20.0s
**WMOK Wichita Mounta** 108.01 37 *e*PKiKP **PKiKP** 13 47 02.4 -1.3
WMOK LR LR
comp=Z,4µm,20.0s
**W34A Bridge Creek,** 108.19 36 PKiKP **PKiKP** 13 47 08.2 +4.2
baz=108
**V35A Meyer Ranch, C** 108.28 35 PKiKP **PKiKP** 13 47 06.5 +2.3
baz=108
**Z31A Sharp Cattle R** 108.29 39 PKiKP **PKiKP** 13 47 01.6 -2.7
baz=108
**130A Snyder** 108.34 40 PKiKP PKiKP 13 47 10.5 +6.1
baz=108
**329A Wagon Wheel Ra** 108.52 41 PKiKP **PKiKP** 13 47 07.0 +2.2
baz=108
**AAM Ann Arbor** 108.63 22 PFAKE 13 47 20.0
AAM LR LR
comp=Z,8µm,19.0s
**TUL1 Tulsa** 108.71 34 PKiKP **PKiKP** 13 47 04.1 -0.9
baz=108
**230A Sterling City** 108.76 41 PKiKP **PKiKP** 13 47 07.4 +2.2
baz=108
**TXAR Lajitas Array** 108.97 44 Pdiff **Pdif** 13 43 01.2 -0.1
comp=Z,1.7nm,0.7s,baz=275,slow=2.4,SNR=15
TXAR PKiKP **PKiKP** 13 47 05.9 +0.1
comp=Z,2.4nm,0.7s,baz=312,slow=1.1,SNR=9.4
TXAR PKKPbc **PKKPbc** 13 58 11.6 -1.6
comp=Z,0.7nm,0.7s,baz=140,slow=4.8,SNR=5.9
TXAR PKKPab **PKKPdf** 13 58 24.4 -3.1
comp=Z,2.4nm,0.9s,baz=153,slow=9.8,SNR=8.8
**330A Mertzon** 109.06 41 PKiKP **PKiKP** 13 47 02.3 -3.6
baz=109
**V37A Hulbert** 109.07 34 PKiKP **PKiKP** 13 47 03.0 -2.6
baz=109
**ABTX Abilene, Hawle** 109.08 39 PKiKP **PKiKP** 13 47 04.2 -1.6
baz=109
**Z33A Whitaker Ranch** 109.10 38 PKiKP **PKiKP** 13 47 02.3 -3.5
baz=109
**LONY Lake Ozonia** 109.14 15 PFAKE 13 47 20.0
LONY LR LR
comp=Z,6µm,22.0s
**Y34A Reagan Ranch,** 109.16 37 PKiKP **PKiKP** 13 47 02.4 -3.5
baz=109
**429A Davenport Ranc** 109.18 42 PKiKP PKiKP 13 46 58.7 -7.4
baz=109
**231A Bronte** 109.19 40 PKiKP **PKiKP** 13 47 08.3 +2.2
baz=109
**529A Stev Forest Ra** 109.33 43 PKiKP **PKiKP** 13 47 10.5 +4.1
baz=109
**V38A Canehill** 109.45 33 PKiKP **PKiKP** 13 47 04.9 -1.5
baz=109
**BOSA Boshof** 109.49 247 PKiKP **PKiKP** 13 47 06.3 -0.3
comp=Z,5.3nm,0.7s,baz=40,slow=2.2,SNR=9.5
BOSA PKKPbc **PKKPbc** 13 58 12.1 +0.6
comp=Z,2.8nm,0.9s,baz=228,slow=12,SNR=2.8
**X37A Clayton** 109.95 35 PKiKP **PKiKP** 13 47 06.4 -0.9
baz=110
**ERPA Erie** 109.99 20 PFAKE 13 47 20.0
ERPA LR LR
comp=Z,10µm,20.0s
**X38A Whitesboro** 110.17 34 PKiKP **PKiKP** 13 47 10.3 +2.5
baz=110
**333A Richland Sprin** 110.41 40 PKiKP **PKiKP** 13 47 07.3 -1.0
baz=110
**JCT Junction City** 110.55 41 *e*PKiKP **PKiKP** 13 47 08.0 -0.7
JCT MLR MLR
comp=Z,4µm,22.0s
**JCT Junction City** 110.55 41 *e*PKiKP **PKiKP** 13 47 08.0 -0.7
JCT LR LR
comp=Z,4µm,22.0s
**ACSO Alum Creek Sta** 110.69 23 PFAKE 13 47 20.0
ACSO LR LR
comp=Z,6µm,22.0s
**532A Rocksprings** 110.74 41 PKiKP **PKiKP** 13 47 09.7 +0.6
baz=110
**MIAR Mount Ida** 110.91 34 PFAKE 13 47 20.0
MIAR LR LR
comp=Z,4µm,19.0s
**434A Burnet** 111.20 39 PKiKP PKiKP 13 47 15.7 +5.8
baz=111
**PMPST Porto Santo, M** 112.27 326 *e*PP PP 13 47 59.3 +3.3
**WVT Waverly** 112.33 29 *e*PKiKP **PKiKP** 13 47 10.7 -1.1
**PTCN Pitcairn Islan** 112.42 108 PFAKE 13 47 20.0
PTCN LR LR
comp=Z,4µm,20.0s
**NATX Nacogdoches** 112.51 36 Pdiff **Pdif** 13 43 15.7 -1.1
baz=112
**NATX Nacogdoches** 112.51 36 PFAKE 13 47 20.0
NATX LR LR
comp=Z,3µm,20.0s

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| PMOZ | Porto Moniz, M | 112.92 | 326 | ePP | PP | 13 48 06.1 | +5.3 |
| PMOZ | Porto Moniz, M | 112.92 | 326 | eLR | LR | 14 22 42.8 | |
| | comp=Z,6µm,20.0s | | | | | | |
| HKT | Hockley | 113.25 | 38 | PKIKP | PKiKP | 13 47 13.1 | -0.5 |
| HKT | Hockley | 113.25 | 38 | PKiKP | PKiKP | 13 47 13.1 | -0.5 |
| TOA0 | Torodi Ar. Sit | 113.54 | 298 | ePKP1 | PKiKP | 13 47 13.4 | -1.2 |
| TORD | Torodi Ar. Bea | 113.54 | 298 | Pdiff | Pdif | 13 43 20.3 | -1.3 |
| | comp=Z,0.5nm,0.8s,baz=104,slow=0.6,SNR=4.0 | | | | | | |
| TORD | | | | PKiKP | PKiKP | 13 47 13.7 | -1.0 |
| | comp=Z,4.3nm,0.6s,baz=68,slow=1.4,SNR=16 | | | | | | |
| TORD | | | | PP | PP | 13 47 56.0 | -10 |
| | comp=Z,22nm,0.9s,baz=48,slow=6.0,SNR=9.9 | | | | | | |
| TORD | | | | PKKPbc | PKKPbc | 13 57 57.6 | -0.1 |
| | comp=Z,2.5nm,0.8s,baz=257,slow=2.7,SNR=7.7 | | | | | | |
| KVTX | Kingsville | 113.82 | 42 | PFAKE | | 13 47 30.0 | |
| KVTX | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| SUR | Sutherland | 114.21 | 244 | PFAKE | | 13 47 30.0 | +14 |
| SUR | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| BLA | Blacksburg | 114.29 | 22 | PFAKE | | 13 47 30.0 | +14 |
| BLA | | | | LR | LR | | |
| | comp=Z,9µm,22.0s | | | | | | |
| VBMS | Vicksburg | 114.30 | 33 | Pdiff | Pdif | 13 43 23.1 | -1.6 |
| | baz=114 | | | | | | |
| CBN | Corbin | 114.38 | 19 | PFAKE | | 13 47 30.0 | +14 |
| CBN | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| GOGA | Godfrey | 116.50 | 27 | PFAKE | | 13 47 30.0 | +10 |
| GOGA | | | | LR | LR | | |
| | comp=Z,6µm,21.0s | | | | | | |
| CNNC | Cliffs of the | 116.93 | 21 | PFAKE | | 13 47 30.0 | +9.4 |
| CNNC | | | | LR | LR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| BRAL | Brewton | 116.96 | 31 | PFAKE | | 13 47 30.0 | +9.2 |
| BRAL | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| NHSC | New Hope | 118.06 | 24 | PFAKE | | 13 47 30.0 | +7.1 |
| NHSC | | | | LR | LR | | |
| | comp=Z,6µm,21.0s | | | | | | |
| NVL | N'lazarevskaya | 120.34 | 201 | ePKIKP | PKPdf | 13 47 26.0 | 0.0 |
| NVL | | | | e*PP | PKiKP | 13 47 38.5 | +12 |
| NVL | | | | e | | 13 51 29.1 | |
| DBIC | Dimbokro | 122.49 | 296 | PKP | PKPdf | 13 47 31.1 | -0.7 |
| | comp=Z,14nm,0.9s,baz=52,slow=2.3,SNR=14 | | | | | | |
| KIC | Kosan Boka | 122.57 | 295 | ePKP1 | PKiKP | 13 47 30.9 | -1.3 |
| | comp=Z,154nm,1.4s | | | | | | |
| TIC | Toumodi | 122.64 | 296 | ePKP1 | PKiKP | 13 47 31.0 | -1.4 |
| LIC | Lamto | 122.88 | 295 | ePKP1 | PKiKP | 13 47 31.5 | -1.3 |
| | comp=Z,75nm,1.2s | | | | | | |
| BBSR | BB Station | 122.93 | 10 | PFAKE | | 13 47 40.0 | +7.8 |
| BBSR | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| SNAA | Sanae | 124.41 | 198 | PKKPbc | PKKPbc | 13 57 16.0 | -3.3 |
| | comp=Z,2.4nm,0.8s,baz=297,slow=4.4,SNR=16 | | | | | | |
| SNAA | Sanae | 124.41 | 198 | ePKIKP | PKPdf | 13 47 32.5 | -1.4 |
| SNAA | Sanae | 124.41 | 198 | ePKPdf | PKPdf | 13 47 32.5 | -1.4 |
| SNAA | | | | PKKPbc | PKKPab | 13 57 16.0 | +0.7 |
| VNA1 | Neumayer--Stat | 126.45 | 197 | P | PKiKP | 13 47 37.8 | -0.3 |
| VNA3 | Neumayer Olymp | 126.48 | 197 | P | PKiKP | 13 47 37.5 | -0.8 |
| GRTK | Grand Turk | 131.83 | 21 | PFAKE | | 13 48 00.0 | +11 |
| GRTK | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| GTBY | Guantanamo Bay | 131.85 | 26 | PFAKE | | 13 48 00.0 | +10 |
| GTBY | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| MTDJ | Mount Denham | 132.32 | 30 | PFAKE | | 13 48 00.0 | +9.4 |
| MTDJ | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| SDDR | Presa de Saban | 134.13 | 22 | ePKPdf | PKPdf | 13 47 53.9 | -0.1 |
| SDDR | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| JTS | JuntasAbangare | 134.76 | 44 | PFAKE | | 13 48 10.0 | +15 |
| JTS | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| LRS | Lares | 136.13 | 17 | PKPdf | PKPdf | 13 47 58.4 | +0.7 |
| CELP | Cerrillos | 136.41 | 16 | ePKPdf | PKPdf | 13 47 58.6 | +0.4 |
| OBIP | Obispado Ponce | 136.43 | 16 | ePKPdf | PKPdf | 13 47 58.7 | +0.5 |
| SJG | San Juan | 136.48 | 16 | PFAKE | | 13 48 10.0 | +12 |
| SJG | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| ANWB | Willy Bob | 137.81 | 10 | PFAKE | | 13 48 10.0 | +9.3 |
| ANWB | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| PAYG | Puerto Ayora | 138.39 | 61 | PFAKE | | 13 48 10.0 | +8.0 |
| PAYG | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| BCIP | Isla Barro Col | 138.76 | 39 | PFAKE | | 13 48 10.0 | +7.4 |
| BCIP | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| PMSA | Palmer Station | 139.00 | 174 | PFAKE | | 13 48 10.0 | +8.6 |
| PMSA | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| FDF | Fort de France | 140.79 | 10 | ePKHKP | PKPpre | 13 47 59.5 | |
| FDF | | | | MLR | MLR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| FDF | Fort de France | 140.79 | 10 | ePKPpre | PKPpre | 13 47 59.5 | |
| FDF | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| BBGH | Gun Hill | 142.57 | 8 | PFAKE | | 13 48 20.0 | +11 |
| BBGH | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| GRGR | Grenville | 143.25 | 11 | ePKPpre | PKPpre | 13 48 05.9 | |
| GRGR | | | | LR | LR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| SDV | Santo Domingo | 143.63 | 27 | ePKPpre | PKPpre | 13 48 08.6 | |
| SDV | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| ROSC | El Rosal | 145.37 | 36 | PKPbc | PKPbc | 13 48 14.6 | -0.1 |
| | comp=Z,40nm,0.7s,baz=359,slow=2.3,SNR=22 | | | | | | |
| OTAV | Otavalo | 146.55 | 47 | ePKPbc | PKPbc | 13 48 17.8 | -0.6 |
| OTAV | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| HOPE | Hope Point | 147.02 | 200 | ePKPbc | PKPbc | 13 48 17.1 | -0.8 |
| HOPE | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| USHA | Ushuaia | 147.78 | 165 | PKPbc | PKPbc | 13 48 20.5 | +0.5 |
| | comp=Z,111nm,0.8s,baz=178,slow=2.8,SNR=27 | | | | | | |
| EFI | East Falkland | 152.47 | 176 | ePKPbc | PKPbc | 13 48 31.0 | -0.5 |
| EFI | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| RCBR | Riachuelo | 154.26 | 312 | PKP | PKPdf | 13 48 28.2 | -0.2 |
| | comp=Z,15nm,1.0s,baz=56,slow=3.6,SNR=3.5 | | | | | | |
| RCBR | | | | PKPab | PKPab | 13 48 48.5 | -2.1 |
| | comp=Z,30nm,0.8s,baz=67,slow=4.7,SNR=7.2 | | | | | | |
| RCBR | Riachuelo | 154.26 | 312 | ePKPdf | PKPdf | 13 48 28.2 | -0.2 |
| RCBR | | | | ePKPbc | PKPbc | 13 48 36.4 | -0.3 |
| RCBR | | | | PKPab | PKPab | 13 48 48.5 | -2.1 |
| RCBR | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| PTGA | Pitinga | 156.11 | 13 | PKP | PKPdf | 13 48 31.0 | 0.0 |
| | comp=Z,12nm,0.8s,baz=20,slow=1.2,SNR=19 | | | | | | |
| PTGA | | | | PKPab | PKPab | 13 48 56.7 | -1.5 |
| | comp=Z,64nm,0.9s,baz=1.3,slow=5.3,SNR=6.3 | | | | | | |
| PTGA | Pitinga | 156.11 | 13 | PKP | PKPdf | 13 48 31.0 | 0.0 |
| PTGA | | | | PKPab | PKPab | 13 48 56.7 | -1.5 |
| PTGA | | | | LR | LR | | |
| | comp=Z,32µm,20.0s | | | | | | |
| TRQA | Tornquist | 164.89 | 158 | ePKPdf | PKPdf | 13 48 39.4 | -0.4 |
| TRQA | | | | LR | LR | | |
| | comp=Z,4µm,22.0s | | | | | | |
| LCO | Las Campanas | 164.96 | 112 | PFAKE | | 13 48 50.0 | +10 |
| LCO | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| LPAZ | La Paz | 165.18 | 60 | PKP | PKPdf | 13 48 41.9 | +0.5 |
| | comp=Z,31nm,1.2s,baz=285,slow=0.8,SNR=22 | | | | | | |
| LPAZ | | | | PKPab | PKPab | 13 49 37.6 | -1.0 |
| | comp=Z,7.9nm,0.8s,baz=342,slow=3.0,SNR=2.8 | | | | | | |
| CFAA | Coronel Fontan | 166.00 | 125 | PKP | PKPdf | 13 48 41.0 | 0.0 |
| | comp=Z,1.1nm,0.9s,baz=322,slow=1.0,SNR=15 | | | | | | |
| CFAA | | | | PKPab | PKPab | 13 49 41.1 | -0.1 |
| | comp=Z,1.2nm,0.7s,baz=264,slow=5.9,SNR=5.6 | | | | | | |
| LVC | Limon Verde | 166.90 | 86 | PKP | PKPdf | 13 48 42.5 | +0.3 |
| | comp=Z,55nm,1.1s,baz=358,slow=1.5,SNR=16 | | | | | | |
| LVC | | | | PKPab | PKPab | 13 49 46.1 | +0.3 |
| | comp=Z,27nm,0.8s,baz=260,slow=6.1,SNR=2.3 | | | | | | |
| LVC | Limon Verde | 166.90 | 86 | PKP | PKPdf | 13 48 42.5 | +0.3 |
| LVC | | | | ePKPdf | PKPdf | 13 48 42.6 | +0.4 |
| LVC | | | | PKPab | PKPab | 13 49 46.1 | +0.3 |
| LVC | | | | LR | LR | | |
| | comp=Z,4µm,22.0s | | | | | | |
| BDFB | Brasilia | 169.38 | 322 | PKP | PKPdf | 13 48 43.8 | -0.1 |
| | comp=Z,5.8nm,0.8s,baz=41,slow=2.9,SNR=5.0 | | | | | | |
| BDFB | | | | PKPab | PKPab | 13 49 55.1 | -1.3 |
| | comp=Z,46nm,0.8s,baz=54,slow=3.5,SNR=23 | | | | | | |
| SIV | San Ignacio | 169.89 | 37 | PKP | PKPdf | 13 48 44.0 | -0.1 |
| | comp=Z,11nm,0.9s,baz=18,slow=0.3,SNR=14 | | | | | | |
| SIV | | | | PKPab | PKPab | 13 49 57.6 | -1.0 |
| | comp=Z,14nm,0.7s,baz=325,slow=4.0,SNR=8.9 | | | | | | |
| SIV | | | | PP | PP | 13 53 46.7 | -1.1 |
| | comp=Z,5.7nm,0.8s,baz=335,slow=4.1,SNR=3.7 | | | | | | |
| CPUP | Villa Florida | 176.86 | 133 | PKP | PKPdf | 13 48 46.5 | +0.1 |
| | comp=Z,13nm,0.9s,baz=19,slow=0.6,SNR=20 | | | | | | |
| CPUP | | | | PKPab | PKPab | 13 50 29.8 | +0.4 |
| | comp=Z,5.5nm,0.9s,baz=244,slow=6.3,SNR=3.9 | | | | | | |
| CPUP | | | | PP | PP | 13 54 23.0 | +0.9 |
| | comp=Z,7.1nm,1.2s,baz=135,slow=7.1,SNR=2.6 | | | | | | |

*CSEM 04 13:29:02.9, 40°.44N×28°.78E, h7km, MD2.6, After ISK*

**ISK 04 13:29:02.9, 40°.44N×28°.78E, h7km, MD2.6, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KCTX | Karacabey (Bur | 0.36 | 242 | ePG | Pg | 13 29 10.7 | +0.6 |
| KCTX | | | | eSG | Sb | 13 29 17.0 | -0.7 |
| KCTX | Karacabey (Bur | 0.36 | 242 | ePg | Pg | 13 29 10.7 | +0.6 |
| KCTX | | | | eSg | Sb | 13 29 17.0 | -0.7 |
| ORLT | Orhaneli | 0.40 | 167 | ePG | Pg | 13 29 11.2 | +0.3 |
| ORLT | | | | eSG | Sg | 13 29 17.3 | +1.2 |
| ORLT | Orhaneli | 0.40 | 167 | ePg | Pg | 13 29 11.2 | +0.4 |
| ORLT | | | | eSg | Sg | 13 29 17.3 | +1.1 |
| IZI | Iznik | 0.54 | 101 | ePG | Pg | 13 29 13.8 | +0.4 |
| IZI | | | | eSG | Sb | 13 29 21.9 | -1.0 |
| IZI | Iznik | 0.54 | 101 | ePg | Pg | 13 29 13.8 | +0.3 |
| IZI | | | | eSg | Sb | 13 29 21.9 | -1.0 |
| BNT | Bandirma | 0.66 | 263 | ePG | Pb | 13 29 16.2 | -0.6 |
| BNT | Bandirma | 0.66 | 263 | ePg | Pg | 13 29 16.2 | +0.5 |
| ISK | Istanbul-Kandi | 0.66 | 19 | ePG | Pg | 13 29 16.1 | +0.4 |
| ISK | | | | eSG | Sb | 13 29 25.8 | -0.5 |
| ISK | Istanbul-Kandi | 0.66 | 19 | ePg | Pg | 13 29 16.1 | +0.4 |
| ISK | | | | eSg | Sb | 13 29 25.8 | -0.4 |
| EDC | Edincik | 0.70 | 263 | ePG | Pb | 13 29 17.2 | -0.3 |
| EDC | Edincik | 0.70 | 263 | ePg | Pb | 13 29 17.2 | -0.3 |
| ADVT | Abdulvahap | 0.73 | 90 | ePG | Pb | 13 29 17.5 | -0.5 |
| ADVT | Abdulvahap | 0.73 | 90 | ePg | Pg | 13 29 17.5 | +0.5 |
| HRT | Hereke | 0.78 | 60 | ePG | Pg | 13 29 18.4 | +0.4 |
| HRT | Hereke | 0.78 | 60 | ePg | Pg | 13 29 18.4 | +0.4 |
| CTKS | Kestanelik-??a | 0.82 | 346 | ePG | Pg | 13 29 19.1 | +0.4 |
| CTKS | Kestanelik-??a | 0.82 | 346 | ePg | Pg | 13 29 19.1 | +0.4 |
| KLYT | Kilyos | 0.84 | 14 | ePG | Pb | 13 29 19.5 | -0.3 |
| KLYT | Kilyos | 0.84 | 14 | ePg | Pb | 13 29 19.5 | -0.3 |
| DST | Dursunbey | 0.84 | 188 | ePG | Pg | 13 29 19.3 | +0.2 |
| DST | Dursunbey | 0.84 | 188 | ePg | Pg | 13 29 19.3 | +0.1 |
| CAVI | Cavuskoy | 0.85 | 106 | ePG | Pg | 13 29 19.6 | +0.3 |
| CAVI | Cavuskoy | 0.85 | 106 | ePg | Pg | 13 29 19.6 | +0.3 |
| MRMT | Marmara Adasi | 0.92 | 281 | ePG | Pb | 13 29 21.1 | -0.2 |
| MRMT | Marmara Adasi | 0.92 | 281 | ePg | Pb | 13 29 21.1 | -0.1 |
| GONE | Gonen-Balikesi | 0.92 | 245 | ePG | Pg | 13 29 20.8 | +0.1 |
| GONE | Gonen-Balikesi | 0.92 | 245 | ePg | Pg | 13 29 20.8 | +0.2 |
| GULT | Gulveren | 1.33 | 90 | ePN | Pg | 13 29 28.5 | 0.0 |
| GULT | Gulveren | 1.33 | 90 | ePn | Pg | 13 29 28.5 | 0.0 |

**MEX 04 13:34:33.6±0.4, 15°.32N×93°.93W, h41km±66km, MD3.7, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.79 | 61 | eP | Pn | 13 34 46.7 | -1.6 |
| PCIG | | | | eS | Sn | 13 34 56.7 | -2.2 |
| CCIG | Comitan | 1.97 | 61 | i P | Pn | 13 35 03.2 | -1.6 |

*CSEM 04 13:38:57.9, 61°.58N×15°.62E, h0km, ML1.2, Mining explosion. After UPP*

**UPP 04 13:38:57.9, 61°.58N×15°.62E, h0km, ML1.2, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ROTU | Roteberg | 0.18 | 149 | P | Pg | 13 39 01.6 | +0.2 |
| ROTU | | | | S | Sg | 13 39 04.8 | +1.1 |
| HUDU | Hudiksvall | 0.73 | 77 | P | Pg | 13 39 11.7 | -0.2 |
| HASU | Hassela | 0.75 | 39 | P | Pg | 13 39 12.0 | -0.2 |
| ARNU | Arnoeviken | 0.85 | 81 | P | Pg | 13 39 13.9 | -0.2 |
| IGGU | Iggoen | 1.08 | 130 | P | Pg | 13 39 18.5 | -0.1 |
| FALU | Falun | 1.09 | 174 | P | Pg | 13 39 18.6 | -0.2 |
| OSTU | Oestervaala | 1.54 | 151 | P | Pn | 13 39 26.6 | 0.0 |
| HEMU | Hemsoen | 1.58 | 45 | P | Pn | 13 39 27.0 | -0.1 |
| FLYU | Flymyra | 1.83 | 142 | P | Pb | 13 39 31.5 | -0.7 |
| SOLU | Sollefteaa | 1.84 | 24 | P | Pn | 13 39 31.2 | +0.5 |

*CSEM 04 13:47:10.6, 40°.64N×20°.84E, h11km, ML1.8/3, After THE*

**THE 04 13:47:10.6, 40°.64N×20°.84E, h11km±1km, ML1.8/3, Error ellipse: s-maj=2.3km s-min=0.8km az=119.0, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NEST | Nestorio | 0.28 | 145 | P | Pg | 13 47 16.2 | -0.3 |
| NEST | | | | S | Sg | 13 47 20.8 | +0.4 |
| NEST | Nestorio | 0.28 | 145 | P | Pg | 13 47 16.2 | -0.3 |
| NEST | | | | S | Sg | 13 47 20.8 | +0.4 |
| FNA | Florina | 0.43 | 71 | P | Pg | 13 47 18.9 | -0.3 |
| FNA | | | | S | Sg | 13 47 25.8 | +0.7 |
| FNA | Florina | 0.43 | 71 | P | Pg | 13 47 18.9 | -0.3 |
| FNA | | | | S | Sg | 13 47 25.8 | +0.7 |
| KZN | Kozani | 0.79 | 115 | P | Pg | 13 47 25.3 | -0.7 |
| KZN | | | | S | Sb | 13 47 37.1 | -0.1 |
| KZN | Kozani | 0.79 | 115 | P | Pg | 13 47 25.3 | -0.7 |
| KZN | | | | S | Sb | 13 47 37.1 | -0.1 |
| GRG | Griva | 1.23 | 75 | P | Pn | 13 47 33.0 | -0.7 |
| GRG | Griva | 1.23 | 75 | P | Pn | 13 47 33.0 | -0.7 |

*ISCJB 04 14:17:13.6±0.6, 38°.86N±0°.03×141°.78E±0°.07, h79km±4km, mb3.7/5, Error ellipse: s-maj=10.0km s-min=4.8km az=17.6*
*IDC 04 14:17:14.3±2.0, 38°.89N×141°.92E, h73km±19km, mb3.4/5, mb1 3.7/10, mb1mx3.4/40, mbtmp3.9/10, MS4.3/1, Ms1 4.3/1, ms1mx3.4/40, Error ellipse: s-maj=26.0km s-min=12.7km az=102.0*
*JMA 04 14:17:15.8, 38°.85N×141°.62E, h73km±1km, M3.9 Broadband fault plane solution: P waves. NP1: φs351.00000°, δ84.00000°, λ-113.00000°. NP2: φs248.00000°, δ24.00000°, λ-15.00000°. Principal axes: T Plg35.0000°, Azm101.0000°; N Plg23.0000°, Azm354.0000°; P Plg46.0000°, Azm238.0000°;*
*JMA Felt II J1.*

**ISC 04 14:17:14.8±0.9, 38°.84N±0°.04×141°.76E±0°.07, h74km±6km, n31, σ1s25/40, mb3.8/5, 10C-3D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OFUJ | Ofunato | 0.25 | 344 | ⇓P | Pn | 14 17 26.9 | +0.8 |
| OFUJ | | | | eS | Sn | 14 17 35.0 | +0.6 |
| JMK | Ichinoseki | 0.43 | 285 | ⇑P | Pn | 14 17 27.4 | +0.1 |
| JMK | | | | eS | Sn | 14 17 35.8 | -0.8 |
| JIO | Ouri | 0.50 | 220 | ⇑P | Pn | 14 17 28.4 | +0.5 |
| JIO | | | | eS | Sn | 14 17 37.5 | -0.1 |
| JOM | Ohasama | 0.73 | 330 | ⇑P | Pn | 14 17 30.6 | +0.3 |
| JOM | | | | eS | Sn | 14 17 41.5 | -0.3 |
| JOU | Okura | 0.98 | 241 | ⇑P | Pn | 14 17 33.2 | 0.0 |
| JOU | | | | eS | Sn | 14 17 46.3 | -0.7 |
| JRG | Rokugo | 1.03 | 303 | ⇑P | Pn | 14 17 33.9 | 0.0 |
| JRG | | | | eS | Sn | 14 17 47.8 | -0.4 |
| JYK | Kaneyama | 1.09 | 275 | ⇑P | Pn | 14 17 34.4 | -0.2 |
| JYK | | | | eS | Sn | 14 17 48.9 | -0.6 |
| JMM | Marumori | 1.23 | 218 | ⇑P | Pn | 14 17 36.2 | -0.2 |
| JMM | | | | eS | Sn | 14 17 51.7 | -0.9 |
| JYS | Shirataka | 1.46 | 246 | ⇑P | Pn | 14 17 39.6 | +0.2 |
| JYS | | | | eS | Sn | 14 17 57.6 | -0.3 |
| JANG | Nango | 1.54 | 353 | ⇓P | Pn | 14 17 40.6 | +0.1 |
| JANG | | | | eS | Sn | 14 17 59.2 | -0.6 |
| JAH | Hinai | 1.60 | 328 | ⇑P | Pn | 14 17 41.8 | +0.6 |
| JYA | Atsumi | 1.62 | 262 | ⇑P | Pn | 14 17 41.4 | 0.0 |
| JYA | | | | eS | Sn | 14 18 00.1 | -1.4 |
| JFK | Kawauchi | 1.63 | 206 | ⇓P | Pn | 14 17 42.1 | +0.5 |
| JFK | | | | eS | Sn | 14 18 01.5 | -0.3 |
| MAT | Matsushiro | 3.63 | 232 | P | Pn | 14 18 10.4 | +1.7 |
| MAT | | | | eS | Sn | 14 18 53.3 | +3.0 |
| MJAR | Matsushiro Arr | 3.63 | 232 | P | Pn | 14 18 10.5 | +1.8 |
| | 7.3nm,0.3s,baz=41,slow=11,SNR=97 | | | | | | |
| ASAJ | Asahikawa | 5.31 | 7 | P | Pn | 14 18 31.1 | -0.4 |
| | 1.1nm,0.3s,baz=209,slow=10,SNR=22 | | | | | | |
| ASAJ | | | | S | Sn | 14 19 29.4 | -1.9 |
| | 1.1nm,0.3s,baz=120,slow=20,SNR=2.3 | | | | | | |
| JHJ | Hachijo jima 2 | 5.93 | 196 | P | Pn | 14 18 38.9 | -1.1 |
| | 11nm,0.3s,baz=346,slow=20,SNR=9.1 | | | | | | |
| JHJ | | | | S | Sn | 14 19 42.1 | -4.4 |
| | 22nm,0.3s,baz=74,slow=23,SNR=6.5 | | | | | | |
| USRK | Ussuriysk Ar. | 9.07 | 309 | P | Pn | 14 19 23.7 | +0.8 |
| | 0.6nm,0.3s,baz=115,slow=14,SNR=17 | | | | | | |
| KSRS | Korea Array | 10.98 | 267 | P | Pn | 14 19 51.8 | +2.8 |
| | 0.6nm,0.3s,baz=76,slow=13,SNR=6.7 | | | | | | |
| PETK | Petropavlovsk- | 18.00 | 32 | LR | LR | 14 27 29.8 | |
| | comp=Z,891nm,20.4s,baz=250,slow=34 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.89 | 124 | T | T | 14 53 40.6 | |
| | baz=318,slow=75,SNR=59 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.89 | 124 | T | T | 14 53 41.3 | |
| | baz=318,slow=75,SNR=206 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.90 | 124 | T | T | 14 53 43.0 | |
| | baz=318,slow=75,SNR=212 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 29.66 | 126 | T | T | 14 54 31.7 | |
| | baz=318,slow=76,SNR=118 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 29.66 | 126 | T | T | 14 54 29.6 | |
| | baz=318,slow=76,SNR=154 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 29.67 | 126 | T | T | 14 54 36.0 | |
| | baz=318,slow=76,SNR=110 | | | | | | |
| ZALV | Zalesovo Beam | 40.92 | 311 | P | P | 14 24 49.1 | -0.6 |
| | 0.8nm,0.5s,baz=89,slow=8.8,SNR=3.7 | | | | | | |
| MKAR | Makanchi Array | 43.41 | 301 | P | P | 14 25 10.1 | 0.0 |
| | 1.2nm,0.7s,baz=87,slow=9.4,SNR=12 | | | | | | |
| ILAR | Eielson Array | 47.83 | 33 | P | P | 14 25 43.6 | -1.0 |
| | 0.3nm,0.6s,baz=279,slow=7.2,SNR=3.9 | | | | | | |
| ILAR | | | | pP | pP | 14 26 02.4 | -0.5 |
| | 0.3nm,0.6s,baz=278,slow=6.3,SNR=4.0 | | | | | | |
| WRA | Warramunga Arr | 58.88 | 188 | P | P | 14 27 06.1 | 0.0 |
| | 1.2nm,0.6s,baz=6.5,slow=7.2,SNR=25 | | | | | | |
| ASAR | Alice Springs | 62.61 | 188 | P | P | 14 27 31.3 | 0.0 |
| | 0.6nm,0.7s,baz=1.4,slow=4.9,SNR=17 | | | | | | |

*NEIC 04 14:25:45.7, 37°.15N×117°.38W, h10km, ML3.7(REN), After REN.*

**ISC 04 14:25:45.0±1.0, 37°.18N±0°.02×117°.34W±0°.03, h11km±9km, n33, σ1s26/55, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRAC | Grapevine Rang | 0.18 | 188 | P | Pg | 14 25 49.0 | +0.1 |
| | baz=0.2 | | | | | | |
| GRAC | | | | S | Sg | 14 25 52.0 | +0.4 |
| | baz=0.2 | | | | | | |
| TIN | Tinemaha | 0.72 | 261 | P | Pb | 14 25 59.3 | -0.4 |
| | baz=0.7 | | | | | | |
| FURC | Furnace Creek, | 0.80 | 151 | P | Pb | 14 26 01.0 | 0.0 |
| | baz=0.8 | | | | | | |
| FURC | | | | S | Sb | 14 26 11.8 | -0.1 |
| | baz=0.8 | | | | | | |
| TPNV | Topopah Spring | 0.90 | 104 | P | Pg | 14 26 03.0 | +0.6 |
| | baz=0.9 | | | | | | |
| TPNV | | | | S | Sb | 14 26 15.6 | +0.7 |
| | baz=0.9 | | | | | | |
| DAC | Darwin (Calif) | 0.92 | 193 | ePg | Pg | 14 26 02.2 | -0.6 |
| DAC | | | | eSg | Sg | 14 26 14.2 | -0.6 |
| CWC | Cottonwood Cre | 0.95 | 219 | P | Pb | 14 26 03.1 | -0.4 |
| | baz=0.9 | | | | | | |
| CWC | | | | S | Sg | 14 26 15.2 | -0.4 |
| | baz=0.9 | | | | | | |
| MPMC | Manual Prospec | 1.12 | 186 | P | Pg | 14 26 06.0 | -0.6 |
| | baz=1.1 | | | | | | |
| MPMC | | | | S | Sg | 14 26 20.6 | -0.5 |
| | baz=1.1 | | | | | | |
| MLAC | Mammoth Lakes | 1.28 | 291 | Pb | Pb | 14 26 09.5 | +0.2 |
| | baz=1.3 | | | | | | |
| ISA | Isabella | 1.77 | 212 | P | Pn | 14 26 16.0 | +0.3 |
| | baz=1.7 | | | | | | |
| ISA | Isabella | 1.77 | 212 | ePn | Pn | 14 26 15.9 | +0.3 |
| R11A | Troy Canyon, C | 1.82 | 49 | Pb | Pb | 14 26 19.9 | +1.4 |
| | baz=1.9 | | | | | | |
| R11A | | | | Sb | Sg | 14 26 44.9 | +1.5 |
| | baz=1.9 | | | | | | |
| SHPR | Sheep Range | 1.87 | 110 | ePn | Pn | 14 26 18.9 | +1.8 |
| SHPR | | | | eSg | Sg | 14 26 45.1 | -0.1 |
| GSC | Goldstone | 1.92 | 167 | P | Pn | 14 26 18.4 | +0.5 |
| | baz=1.9 | | | | | | |
| GSC | Goldstone | 1.92 | 167 | ePn | Pn | 14 26 18.3 | +0.5 |
| GSC | | | | ePg | Pg | 14 26 21.6 | -0.3 |
| TUQ | Turquoise Moun | 2.08 | 146 | P | Pn | 14 26 20.6 | +0.6 |
| | baz=2.1 | | | | | | |
| CMB | Columbia Colle | 2.57 | 290 | ePn | Pn | 14 26 27.8 | +1.1 |
| CMB | | | | ePg | Pb | 14 26 31.9 | +0.7 |
| LDFC | Landfair | 2.76 | 139 | ePn | Pn | 14 26 29.4 | 0.0 |
| LDFC | | | | ePg | Pb | 14 26 35.6 | +1.1 |
| LDFC | | | | eSg | Sg | 14 27 13.0 | -0.8 |
| OSI | Osito Adit | 2.79 | 204 | ePg | Pg | 14 26 38.4 | -0.2 |
| MWC | Mount Wilson | 3.00 | 191 | Pn | Pn | 14 26 32.7 | -0.1 |
| MWC | | | | ePg | Pg | 14 26 41.7 | -0.9 |
| CCUT | Cedar City | 3.19 | 82 | ePn | Pn | 14 26 37.6 | +2.3 |
| CCUT | | | | eSg | Sg | 14 27 27.0 | -0.5 |
| PFO | Pinyon Flat Ob | 3.63 | 168 | ePn | Pn | 14 26 42.2 | +0.9 |
| ELK | Elko | 3.92 | 24 | ePn | Pn | 14 26 47.4 | +2.0 |
| ELK | | | | ePg | Pg | 14 26 59.3 | -0.8 |
| ELK | | | | eSg | Sg | 14 27 48.5 | -2.5 |
| MSU | Marysvale | 4.30 | 70 | ePn | Pn | 14 26 51.4 | +0.8 |
| MSU | | | | ePg | Pg | 14 27 06.3 | -1.0 |
| MSU | | | | eSg | Sg | 14 28 03.1 | 0.0 |
| GLA | Glamis | 4.60 | 153 | ePg | Pg | 14 27 12.8 | -0.4 |
| GLA | | | | eSg | Sg | 14 28 11.5 | -1.2 |
| DUG | Dugway | 4.65 | 48 | Pn | Pn | 14 26 56.1 | +0.7 |
| DUG | | | | ePg | Pg | 14 27 12.0 | -2.0 |
| DUG | | | | eSg | Sg | 14 28 13.8 | -0.5 |
| BGU | Big Grassy Mou | 5.03 | 41 | ePg | Pg | 14 27 23.3 | +2.1 |
| BGU | | | | eSg | Sg | 14 28 25.3 | -1.1 |
| WUAZ | Wupatki | 5.09 | 107 | ePg | Pb | 14 27 18.4 | +4.2 |
| | 11nm,0.8s | | | | | | |
| WUAZ | | | | eSg | Sg | 14 28 24.1 | -4.3 |
| TMUT | Trail Mountain | 5.27 | 64 | Pg | Pg | 14 27 23.2 | -2.8 |
| | 13nm,0.5s | | | | | | |
| SPUT | South Promonto | 5.61 | 41 | Pg | Pg | 14 27 30.9 | -1.5 |
| SRU | San Rafael | 5.71 | 68 | Pn | Pn | 14 27 10.7 | +0.8 |
| | 4.3nm,0.6s | | | | | | |
| HVU | Hansel Valley | 5.80 | 36 | ePg | Pg | 14 27 33.9 | -2.1 |
| | 2.5nm,0.6s | | | | | | |
| PV04 | Paradox Valley | 6.79 | 77 | ePg | Pg | 14 27 54.6 | -0.4 |
| YMR | Madison River | 8.90 | 31 | Pn | Pn | 14 27 53.0 | -0.8 |
| | 25nm,0.3s | | | | | | |

*NIED 04 14:35:00, 48°.10N×154°.30E, h41km, Mw5.3 Best double couple: M0 8.72000×10^16 NP1: φs219.00000°, δ38.00000°, λ-135.00000°. NP2: φs90.00000°, δ64.00000°, λ-61.00000°.*
*ISCJB 04 14:35:22.5±0.4, 47°.89N±0°.03×154°.06E±0°.03, h52km±4km, mb5.0/113, MS4.4/8, Error ellipse: s-maj=4.8km s-min=2.5km az=156.9*
*SKHL 04 14:35:22.6±0.4, 47°.75N×154°.41E, h62km±5km, mb6.2/3, mbh6.0/3, Ms4.6/7, msh5.7/3*
*MOS 04 14:35:23.7±1.1, 48°.01N×153°.98E, h63km, mb5.2/28, MS4.0/8, Error ellipse: s-maj=7.7km s-min=5.9km az=70.6*
*BJI 04 14:35:24.9, 48°.00N×154°.00E, h71km, mb4.7/43, mB5.2/30, Ms4.8/25, Ms7 4.6/25*
*IDC 04 14:35:26.6±1.9, 47°.98N×153°.93E, h75km±16km, mb4.1/21, mb1 4.3/26, mb1mx4.2/40, mbtmp4.5/26, MS4.4/11, Ms1 4.4/11, ms1mx4.1/50, Error ellipse: s-maj=16.0km s-min=9.9km az=139.0*
*GCMT 04 14:35:27.3±0.5, 47°.79N×154°.28E, h63km±4km, MW5.3/61, Moment Tensor Solution. s18,c20; s61,c87; Duration: 1s0 Moment tensor: Scale 10^17Nm; Mrr-0.58±.09; Mθθ0.78±.06; Mφφ-0.20±.06; Mrθ-0.47±.04; Mθφ0.31±.04; Mφr0.28±.03; Best double couple: M0 0.93900×10^17 NP1: φs102.00000°, δ66.00000°, λ-57.00000°. NP2: φs224.00000°, δ40.00000°, λ-141.00000°. Principal axes: T 0.9680, Plg15.0000°, Azm169.0000°; N -0.0570, Plg30.0000°, Azm267.0000°; P -0.9110, Plg56.0000°, Azm56.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC 04 14:35:27.3±0.7, 48°.05N×153°.93E, h77km±6km, mb5.1/74 Error ellipse: s-maj=7.5km s-min=3.4km az=155.0*

**ISC 04 14:35:26.4±0.4, 47°.92N±0°.05×154°.07E±0°.04, h72km±3km, h72km:pP-P, n727, σ1s05/751, mb5.0/113, 16C-13D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **3.07** | **25** | *e*PN | Pn | 14 36 05.7 | -6.8 |
| SKR | | | | *i* S | **Sn** | **14 36 43.0** | **-5.1** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,4μm,1.0s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=N,3μm,1.2s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=E,3μm,1.2s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=N,4μm,2.0s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=E,5μm,2.0s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,6μm,2.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,850nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,2μm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,8μm,6.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,14μm,8.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=E,11μm,14.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,10μm,14.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=N,10μm,10.0s | | | | | | |
| **SKR** | **Severo-Kuril's** | **3.07** | **25** | *e*P | **Pn** | **14 36 10.0** | **-2.5** |
| SKR | | | | AMB | AMB | 14 36 10.4 | |
| | comp=N,4μm,2.0s | | | | | | |
| SKR | | | | AMB | AMB | 14 36 10.4 | |
| | comp=N,6μm,2.0s | | | | | | |
| SKR | | | | AMB | AMB | 14 36 10.4 | |
| | comp=N,6μm,2.0s | | | | | | |
| SKR | | | | AMB | AMB | 14 36 14.9 | |
| | comp=N,580nm,0.5s | | | | | | |
| SKR | | | | AMB | AMB | 14 36 14.9 | |
| | comp=N,690nm,0.5s | | | | | | |
| SKR | | | | AMB | AMB | 14 36 14.9 | |
| | comp=N,1μm,0.5s | | | | | | |
| SKR | | | | *e*S | **Sn** | **14 36 44.4** | **-3.7** |
| SKR | | | | A | A | 14 36 54.0 | |
| | comp=N,8μm,7.0s | | | | | | |
| SKR | | | | A | A | 14 36 54.0 | |
| | comp=N,14μm,7.0s | | | | | | |
| SKR | | | | A | A | 14 37 16.3 | |
| | comp=N,2μm,0.5s | | | | | | |
| SKR | | | | A | A | 14 37 16.3 | |
| | comp=N,2μm,0.5s | | | | | | |
| SKR | | | | A | A | 14 37 16.3 | |
| | comp=N,1μm,0.5s | | | | | | |
| SKR | | | | AMS | AMS | 14 37 26.6 | |
| | comp=N,10μm,12.0s | | | | | | |
| SKR | | | | AMS | AMS | 14 37 26.6 | |
| | comp=N,11μm,12.0s | | | | | | |
| SKR | | | | AMS | AMS | 14 37 26.6 | |
| | comp=N,10μm,12.0s | | | | | | |
| **PAU** | **Pauzhetka** | **3.97** | **26** | *e*P | **Pn** | **14 36 23.2** | **-1.5** |
| PAU | | | | AMB | AMB | 14 36 27.0 | |
| | comp=N,600nm,0.2s | | | | | | |
| PAU | | | | *e*S | **Sn** | **14 37 08.2** | **-1.8** |
| PAU | | | | A | A | 14 37 29.4 | |
| | comp=N,4μm,0.9s | | | | | | |
| **KUR** | **Kuril'sk** | **5.05** | **240** | *c i*PN | **Pn** | **14 36 39.9** | **+0.4** |
| KUR | | | | *i* S | **Sn** | **14 37 38.0** | **+1.5** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,1μm,2.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,155nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,336nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,157nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,4μm,2.7s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,5μm,2.7s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,329nm,0.7s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,843nm,0.7s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,5μm,16.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=E,3μm,16.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,5μm,16.0s | | | | | | |
| **KUR** | **Kuril'sk** | **5.05** | **240** | *e*P | **Pn** | **14 36 39.9** | **+0.4** |
| KUR | | | | AMB | AMB | 14 36 43.2 | |
| | comp=Z,1μm,2.0s | | | | | | |
| KUR | | | | AMB | AMB | 14 36 48.4 | |
| | comp=Z,155nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 14 36 48.4 | |
| | comp=Z,157nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 14 36 48.4 | |
| | comp=Z,336nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **14 37 38.0** | **+1.5** |
| KUR | | | | A | A | 14 37 47.4 | |
| | comp=Z,5μm,2.0s | | | | | | |
| KUR | | | | A | A | 14 37 47.4 | |
| | comp=Z,4μm,2.0s | | | | | | |
| KUR | | | | A | A | 14 37 54.2 | |
| | comp=Z,330nm,0.7s | | | | | | |
| KUR | | | | A | A | 14 37 54.2 | |
| | comp=Z,840nm,0.7s | | | | | | |
| KUR | | | | AMS | AMS | 14 38 27.2 | |
| | comp=Z,5μm,16.0s | | | | | | |
| KUR | | | | AMS | AMS | 14 38 27.2 | |
| | comp=Z,3μm,16.0s | | | | | | |
| KUR | | | | AMS | AMS | 14 38 27.2 | |
| | comp=Z,5μm,16.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **5.69** | **23** | P | **Pn** | **14 36 47.3** | **-0.8** |
| | comp=Z,16nm,0.3s,baz=178,slow=12,SNR=122 | | | | | | |
| PETK | | | | S | **Sn** | **14 37 52.6** | **+0.6** |
| | baz=180,slow=14,SNR=2.5 | | | | | | |
| PETK | | | | LR | LR | 14 39 10.5 | |
| | comp=Z,3μm,21.3s,baz=197,slow=40 | | | | | | |
| **PET** | **Petropavlovsk** | **5.89** | **28** | *e*PN | **Pn** | **14 36 48.4** | **-2.5** |
| PET | | | | *e*S | **Sn** | **14 37 55.2** | **-1.6** |
| PET | | | | pmax | pmax | | |
| | comp=Z,400nm,3.5s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,1μm,2.4s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,734nm,1.6s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,3μm,19.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,3μm,19.0s | | | | | | |
| **PET** | **Petropavlovsk** | **5.89** | **28** | *e*P | **Pn** | **14 36 48.6** | **-2.3** |
| PET | | | | AMB | AMB | 14 36 56.4 | |
| | comp=Z,600nm,1.0s | | | | | | |
| PET | | | | AMB | AMB | 14 36 56.4 | |
| | comp=Z,2μm,2.0s | | | | | | |
| PET | | | | AMB | AMB | 14 36 56.4 | |
| | comp=Z,600nm,2.0s | | | | | | |
| PET | | | | AMB | AMB | 14 36 56.4 | |
| | comp=Z,1μm,2.0s | | | | | | |
| PET | | | | *e*S | **Sn** | **14 37 53.3** | **-3.5** |
| PET | | | | A | A | 14 38 13.4 | |
| | comp=Z,2μm,1.0s | | | | | | |
| PET | | | | AMS | AMS | 14 40 39.4 | |
| | comp=Z,2μm,18.0s | | | | | | |
| PET | | | | AMS | AMS | 14 40 39.4 | |
| | comp=Z,3μm,18.0s | | | | | | |
| PET | | | | AMS | AMS | 14 40 39.4 | |
| | comp=Z,2μm,18.0s | | | | | | |
| **PET** | **Petropavlovsk** | **5.89** | **28** | *e*P | **Pn** | **14 36 48.1** | **-2.7** |
| | comp=Z,1μm,1.4s | | | | | | |
| **SHO** | **Shikotan** | **6.47** | **234** | *e*P | **Pn** | **14 36 55.8** | **-3.2** |
| SHO | | | | AMB | AMB | 14 37 07.3 | |
| | comp=Z,190nm,0.6s | | | | | | |
| SHO | | | | *e*S | **Sn** | **14 38 06.0** | **-5.3** |
| SHO | | | | A | A | 14 38 34.6 | |
| | comp=Z,2μm,0.7s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.91** | **239** | *c i*PN | **Pn** | **14 37 04.1** | **-0.9** |
| YUK | | | | *i* S | **Sn** | **14 38 21.1** | **-1.0** |
| YUK | | | | pmax | pmax | | |
| | comp=N,89nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,63nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,198nm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,2μm,3.0s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,2μm,3.0s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,402nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,1μm,0.9s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=E,3μm,15.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,3μm,15.0s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.91** | **239** | *e*P | **Pn** | **14 37 04.1** | **-0.9** |
| YUK | | | | AMB | AMB | 14 37 21.5 | |
| | comp=Z,89nm,0.5s | | | | | | |
| YUK | | | | AMB | AMB | 14 37 21.5 | |
| | comp=Z,63nm,0.5s | | | | | | |
| YUK | | | | AMB | AMB | 14 37 21.5 | |
| | comp=Z,198nm,0.5s | | | | | | |
| YUK | | | | *e*S | **Sn** | **14 38 21.1** | **-1.0** |
| YUK | | | | A | A | 14 38 35.1 | |
| | comp=Z,2μm,3.0s | | | | | | |
| YUK | | | | A | A | 14 38 35.1 | |
| | comp=Z,2μm,3.0s | | | | | | |
| YUK | | | | A | A | 14 38 35.1 | |
| | comp=Z,3μm,3.0s | | | | | | |
| YUK | | | | A | A | 14 38 45.2 | |
| | comp=Z,400nm,0.7s | | | | | | |
| YUK | | | | A | A | 14 38 45.2 | |
| | comp=Z,1μm,0.7s | | | | | | |
| YUK | | | | AMS | AMS | 14 39 26.5 | |
| | comp=Z,3μm,15.0s | | | | | | |
| YUK | | | | AMS | AMS | 14 39 26.5 | |
| | comp=Z,3μm,15.0s | | | | | | |
| **JRA** | **Rausu** | **7.40** | **241** | P | **Pn** | **14 37 10.5** | **-1.1** |
| **NEM2** | **Nemuro 2** | **7.40** | **235** | P | Pn | 14 37 07.5 | -4.1 |
| NEM2 | | | | *e*S | Sn | 14 38 27.1 | -6.9 |
| **YSS** | **Yuzh-Sakhalins** | **7.74** | **267** | *i*PN | **Pn** | **14 37 16.0** | **-0.2** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,80nm,1.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.74** | **267** | *e*P | **Pn** | **14 37 16.0** | **-0.2** |
| YSS | | | | AMB | AMB | 14 37 17.8 | |
| | comp=Z,90nm,0.5s | | | | | | |
| YSS | | | | *e*S | **Sn** | **14 38 39.0** | **-3.1** |
| YSS | | | | A | A | 14 38 40.4 | |
| | comp=Z,150nm,0.8s | | | | | | |
| YSS | | | | A | A | 14 38 40.4 | |
| | comp=Z,196nm,0.8s | | | | | | |
| YSS | | | | AMS | AMS | 14 40 20.4 | |
| | comp=Z,900nm,19.0s | | | | | | |
| YSS | | | | AMS | AMS | 14 40 20.4 | |
| | comp=Z,1μm,19.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.74** | **267** | *e*P | **Pn** | **14 37 17.1** | **+1.0** |
| | comp=Z,161nm,0.8s | | | | | | |
| **JNK** | **Nakash** | **7.84** | **240** | P | **Pn** | **14 37 15.8** | **-1.9** |
| **TYV** | **Tymovskoe** | **8.01** | **296** | *e*P | **Pn** | **14 37 21.5** | **+1.6** |
| TYV | | | | AMB | AMB | 14 37 23.8 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **UGL** | **Uglegorsk** | **8.06** | **283** | *e*PN | **Pn** | **14 37 17.7** | **-2.9** |
| **UGL** | **Uglegorsk** | **8.06** | **283** | *e*P | **Pn** | **14 37 21.8** | **+1.2** |
| UGL | | | | AMB | AMB | 14 37 23.0 | |
| | comp=Z,70nm,0.7s | | | | | | |
| UGL | | | | AMB | AMB | 14 37 28.9 | |
| | comp=Z,1μm,4.0s | | | | | | |
| UGL | | | | *e*S | **Sn** | **14 38 51.1** | **+1.1** |
| UGL | | | | A | A | 14 38 53.2 | |
| | comp=Z,62nm,0.5s | | | | | | |
| UGL | | | | A | A | 14 38 53.2 | |
| | comp=Z,110nm,0.5s | | | | | | |
| UGL | | | | AMS | AMS | 14 40 38.4 | |
| | comp=Z,3μm,19.0s | | | | | | |
| UGL | | | | AMS | AMS | 14 40 38.4 | |
| | comp=Z,1μm,19.0s | | | | | | |
| **JTKR** | **Abashiri--Toko** | **8.11** | **245** | P | **Pn** | **14 37 20.8** | **-0.5** |
| **JAK** | **Akkeshi** | **8.22** | **237** | P | Pn | 14 37 19.2 | -3.6 |
| JAK | | | | *e*S | Sn | 14 38 47.3 | -6.8 |
| **JMP** | **Maruseppu** | **8.42** | **246** | P | **Pn** | **14 37 25.8** | **+0.2** |
| **JAR** | **Ashorobuto** | **8.57** | **241** | P | **Pn** | **14 37 25.9** | **-1.7** |
| **JKA** | **Kamikawa-asahi** | **8.84** | **249** | *e*P | **Pn** | **14 37 31.8** | **+0.5** |
| **ASAJ** | **Asahikawa** | **8.84** | **249** | P | **Pn** | **14 37 32.5** | **+1.2** |
| **ASAJ** | **Asahikawa** | **8.84** | **249** | P | **Pn** | **14 37 31.8** | **+0.5** |
| | baz=58,slow=11 | | | | | | |
| ASAJ | | | | LR | LR | 14 40 40.0 | |
| | comp=Z,2μm,19.7s,baz=52,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **8.84** | **249** | *e*P | **Pn** | **14 37 32.6** | **+1.2** |
| **JKK2** | **Kamakawa 2** | **8.87** | **247** | P | **Pn** | **14 37 31.7** | **0.0** |
| **OKH** | **Okha** | **9.03** | **313** | *e*P | **Pn** | **14 37 36.0** | **+2.2** |
| OKH | | | | *e*S | **Sn** | **14 39 13.7** | **0.0** |
| OKH | | | | A | A | 14 39 16.5 | |
| | comp=Z,300nm,0.5s | | | | | | |
| OKH | | | | A | A | 14 39 16.5 | |
| | comp=Z,400nm,0.5s | | | | | | |
| OKH | | | | AMS | AMS | 14 39 24.1 | |
| | comp=Z,3μm,18.0s | | | | | | |
| OKH | | | | AMS | AMS | 14 39 24.1 | |
| | comp=Z,4μm,18.0s | | | | | | |
| OKH | | | | AMS | AMS | 14 39 24.1 | |
| | comp=Z,2μm,18.0s | | | | | | |
| **JCH** | **Churui** | **9.22** | **239** | P | Pn | 14 37 33.1 | -3.4 |
| JCH | | | | *e*S | Sn | 14 39 12.5 | -6.1 |
| **JBT2** | **Biratori 2** | **9.71** | **242** | P | **Pn** | **14 37 40.9** | **-2.3** |
| **ERM** | **Erimo** | **9.72** | **237** | *e*PN | **Pn** | **14 37 41.0** | **-2.4** |
| **ERM** | **Erimo** | **9.72** | **237** | Pn | **Pn** | **14 37 42.8** | **-0.6** |
| | comp=Z,784nm,0.6s,SNR=6.9 | | | | | | |
| **ERM** | **Erimo** | **9.72** | **237** | *e*P | **Pn** | **14 37 41.0** | **-2.4** |
| **ERM** | **Erimo** | **9.72** | **237** | *e*P | **Pn** | **14 37 41.0** | **-2.4** |
| | comp=Z,82nm,0.6s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **9.79** | **239** | P | Pn | 14 37 40.3 | -3.9 |
| **NKL** | **Nikolayevsk** | **10.00** | **307** | *e*P | **Pn** | **14 37 47.0** | **0.0** |
| NKL | | | | AMB | AMB | 14 37 48.8 | |
| | comp=Z,70nm,1.0s | | | | | | |
| NKL | | | | AMB | AMB | 14 37 48.8 | |
| | comp=Z,100nm,1.0s | | | | | | |
| NKL | | | | AMB | AMB | 14 37 48.8 | |
| | comp=Z,160nm,1.0s | | | | | | |
| **JNB** | **Noboribetsu** | **10.69** | **244** | P | **Pn** | **14 37 54.5** | **-1.9** |
| **JYM2** | **Yakumo 2** | **11.29** | **244** | P | **Pn** | **14 38 01.6** | **-3.1** |
| **JTM** | **Tenmabayashi** | **11.72** | **237** | P | Pn | 14 38 04.2 | -6.3 |
| JTM | | | | *e*S | Sn | 14 40 06.9 | -13 |
| **JANG** | **Nango** | **11.75** | **235** | P | Pn | 14 38 03.8 | -7.2 |
| JANG | | | | *e*S | Sn | 14 40 07.1 | -13 |
| **MA2** | **Magadan** | **11.84** | **352** | *i* PN | **Pn** | **14 38 10.8** | **-1.3** |
| **MA2** | **Magadan** | **11.84** | **352** | *e*P | **Pn** | **14 38 10.7** | **-1.3** |
| **GRNR** | **Gornyy** | **11.86** | **290** | *e*P | **Pn** | **14 38 12.0** | **-0.4** |
| GRNR | | | | AMB | AMB | 14 38 14.8 | |
| | comp=Z,29nm,1.0s | | | | | | |
| **JTH** | **Tanohata** | **11.87** | **232** | P | Pn | 14 38 06.0 | -6.6 |
| JTH | | | | *e*S | Sn | 14 40 09.7 | -13 |
| **TEY** | **Ternei** | **12.38** | **263** | *e*P | **Pn** | **14 38 18.0** | **-1.5** |
| **OFUJ** | **Ofunato** | **12.60** | **230** | P | Pn | 14 38 15.6 | -7.0 |
| OFUJ | | | | *e*S | Sn | 14 40 28.1 | -13 |
| **HABR** | **Khabarovsk** | **12.70** | **280** | *e*PN | P | 14 38 38.4 | +6.0 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,154nm,2.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,321nm,2.8s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,85nm,2.8s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,1μm,16.0s | | | | | | |
| **JRG** | **Rokugo** | **12.92** | **234** | P | Pn | 14 38 20.7 | -6.2 |
| JRG | | | | *e*S | Sn | 14 40 36.5 | -12 |
| **JIO** | **Ouri** | **13.24** | **229** | P | Pn | 14 38 24.0 | -7.1 |
| JIO | | | | *e*S | Sn | 14 40 40.7 | -16 |
| **SMY** | **Shemya** | **13.66** | **62** | *e*P | Pn | 14 38 33.0 | -3.6 |
| SMY | | | | pmax | pmax | | |
| | comp=Z,156nm,0.6s | | | | | | |
| **SMY** | **Shemya** | **13.66** | **62** | *e*P | Pn | 14 38 33.0 | -3.6 |
| | comp=Z,156nm,0.6s | | | | | | |
| **JYA** | **Atsumi** | **13.99** | **233** | P | Pn | 14 38 35.0 | -6.1 |
| **EKMR** | **Ekimchan** | **14.38** | **299** | *e*P | **Pn** | **14 38 45.0** | **-1.0** |
| EKMR | | | | AMB | AMB | 14 39 08.0 | |
| | comp=Z,59nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **14.83** | **283** | *e*P | **Pn** | **14 38 51.6** | **-0.3** |
| KLR | | | | pmax | pmax | | |
| | comp=E,62nm,1.4s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,38nm,1.4s | | | | | | |
| **KLR** | **Kul'dur** | **14.83** | **283** | *e*P | **Pn** | **14 38 51.6** | **-0.3** |
| KLR | | | | AMB | AMB | 14 38 53.8 | |
| | comp=Z,62nm,1.0s | | | | | | |
| KLR | | | | AMB | AMB | 14 38 53.8 | |
| | comp=Z,38nm,1.0s | | | | | | |
| **JFY** | **Yanaizu** | **14.88** | **230** | P | Pn | 14 38 47.1 | -5.5 |
| **SEY** | **Seymchan** | **15.08** | **357** | P | **Pn** | **14 38 54.4** | **-0.6** |
| | comp=Z,0.7nm,0.3s,baz=174,slow=10,SNR=18 | | | | | | |
| **SEY** | **Seymchan** | **15.08** | **357** | *e*P | **Pn** | **14 38 55.8** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** | **15.76** | **265** | P | **Pn** | **14 39 03.6** | **-0.2** |
| | comp=Z,1.1nm,0.3s,baz=70,slow=12,SNR=18 | | | | | | |
| USRK | | | | LR | LR | 14 44 27.8 | |
| | comp=Z,1μm,21.9s,baz=349,slow=34 | | | | | | |
| **VLA** | **Vladivostok** | **16.25** | **261** | *e*P | **Pn** | **14 39 09.9** | **-0.1** |
| VLA | | | | *e*S | **Sn** | **14 42 07.8** | **-1.7** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **16.31** | **232** | *de*P | **Pn** | **14 39 06.7** | **-4.1** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,140nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **16.31** | **232** | *e*P | **Pn** | **14 39 06.4** | **-4.4** |
| MAJO | | | | AMB | AMB | 14 39 13.6 | |
| | comp=Z,50nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **16.31** | **232** | *e*P | **Pn** | **14 39 06.4** | **-4.4** |
| | comp=Z,31nm,0.8s | | | | | | |
| **MAT** | **Matsushiro** | **16.31** | **232** | P | **Pn** | **14 39 06.7** | **-4.1** |
| MAT | | | | *e*S | **Sn** | **14 42 09.2** | **-1.8** |
| **MJAR** | **Matsushiro Arr** | **16.31** | **232** | P | **Pn** | **14 39 06.6** | **-4.2** |
| | comp=Z,0.7nm,0.3s,baz=35,slow=12,SNR=20 | | | | | | |
| MJAR | | | | LR | LR | 14 45 36.4 | |
| | comp=Z,1μm,21.9s,baz=55,slow=38 | | | | | | |
| **BMKR** | **Bomnak** | **17.11** | **303** | *e*P | **Pn** | **14 39 20.0** | **-0.6** |
| BMKR | | | | AMB | AMB | 14 39 23.5 | |
| | comp=Z,16nm,1.0s | | | | | | |
| **MDJ** | **Mudanjiang** | **17.22** | **268** | P | **Pn** | **14 39 21.4** | **-0.6** |
| MDJ | | | | pP | **pP** | **14 39 36.6** | **-0.5** |
| MDJ | | | | sP | **sP** | **14 39 45.8** | **-0.5** |
| MDJ | | | | PMZ | | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,330nm,4.9s | | | | | | |
| **MDJ** | **Mudanjiang** | **17.22** | **268** | P | **P** | **14 39 23.7** | **+1.2** |
| | comp=Z,94nm,1.5s | | | | | | |
| **ZEA** | **Zeya** | **17.85** | **299** | *e*P | **Pn** | **14 39 30.1** | **+0.5** |
| ZEA | | | | AMB | AMB | 14 39 32.0 | |
| | comp=Z,25nm,1.0s | | | | | | |
| **KROS** | **Kirovskiy** | **18.12** | **301** | *e*P | **Pn** | **14 39 33.5** | **+0.6** |
| KROS | | | | AMB | AMB | 14 39 37.5 | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **18.30** | **221** | P | **P** | **14 39 32.8** | **-1.7** |
| | comp=Z,4.9nm,0.3s,baz=54,slow=14,SNR=2.0 | | | | | | |
| **YAK** | **Yakutsk** | **19.71** | **325** | P | **P** | **14 39 50.3** | **+0.7** |
| | comp=Z,0.0nm,0.3s,baz=105,slow=6.0,SNR=18 | | | | | | |
| **YAK** | **Yakutsk** | **19.71** | **325** | *e*P | **Pn** | **14 39 52.4** | **+0.7** |
| YAK | | | | *e*S | **S** | **14 43 27.9** | **+0.2** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,61nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,30nm,1.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,35nm,1.4s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,166nm,2.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,194nm,2.4s | | | | | | |
| **YAK** | **Yakutsk** | **19.71** | **325** | *e*P | **Pn** | **14 39 52.2** | **+0.5** |
| **YAK** | **Yakutsk** | **19.71** | **325** | *e*P | **P** | **14 39 49.9** | **+0.3** |
| | comp=E,194nm,1.0s | | | | | | |
| **CLNS** | **Chul'man** | **19.78** | **308** | *e*P | **Pn** | **14 39 52.5** | **-0.2** |
| CLNS | | | | *e*S | **S** | **14 43 26.9** | **-2.5** |
| CLNS | | | | pmax | pmax | | |
| | comp=Z,41nm,1.0s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=N,27nm,1.0s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=E,53nm,1.2s | | | | | | |
| CLNS | | | | smax | smax | | |
| | comp=E,666nm,13.0s | | | | | | |
| CLNS | | | | smax | smax | | |
| | comp=N,1μm,13.4s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=E,592nm,13.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=N,737nm,15.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=Z,806nm,13.0s | | | | | | |
| **CLNS** | **Chul'man** | **19.78** | **308** | *e*P | **Pn** | **14 39 52.5** | **-0.2** |
| **CN2** | **Changchun** | **20.30** | **269** | *e*P | **P** | **14 39 54.8** | **-1.4** |
| CN2 | | | | *e*pP | **pP** | **14 40 14.3** | **+3.3** |
| CN2 | | | | *e*S | S | 14 43 30.7 | -8.9 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **21.10** | **13** | *i* P | **P** | **14 40 01.6** | **-3.0** |
| BILL | | | | *i* | | 14 40 21.4 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,2μm,17.0s | | | | | | |
| **BILL** | **Bilibino** | **21.10** | **13** | *e*P | **P** | **14 40 04.0** | **-0.6** |
| **BILL** | **Bilibino** | **21.10** | **13** | P | **P** | **14 40 04.1** | **-0.6** |
| | comp=Z,14nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **21.78** | **251** | P | **P** | **14 40 11.9** | **-0.2** |
| | comp=Z,23nm,1.1s,baz=52,slow=11,SNR=21 | | | | | | |
| KSRS | | | | LR | LR | 14 48 17.8 | |
| | comp=Z,2μm,20.0s,baz=28,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **21.78** | **251** | P | **P** | **14 40 11.9** | **-0.2** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,2μm,20.0s | | | | | | |
| **KSAR** | **Wonju Array Be** | **21.81** | **251** | P | **P** | **14 40 11.9** | **-0.5** |
| **KSAR** | **Wonju Array Be** | **21.81** | **251** | *e*P | **P** | **14 40 11.9** | **-0.5** |
| **KSAR** | **Wonju Array Be** | **21.81** | **251** | P | **P** | **14 40 11.9** | **-0.5** |
| **TJN** | **Taejon** | **22.80** | **249** | P | **P** | **14 40 23.0** | **+0.1** |
| **JNU** | **Nakatsue** | **22.89** | **238** | P | **P** | **14 40 23.2** | **-0.7** |
| | comp=Z,6.5nm,0.8s,baz=41,slow=11,SNR=4.2 | | | | | | |
| **JNU** | **Nakatsue** | **22.89** | **238** | *e*P | **P** | **14 40 24.2** | **+0.3** |
| **BOD** | **Bodaibo** | **25.77** | **308** | *e*P | **P** | **14 40 48.2** | **-1.8** |
| **TNA** | **Tin City** | **26.70** | **35** | *e*P | **P** | **14 40 59.2** | **+0.9** |
| | comp=Z,144nm,1.2s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.99** | **155** | T | T | 15 13 34.3 | |
| | baz=342,slow=76,SNR=2966 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.00** | **155** | T | T | 15 13 38.2 | |
| | baz=342,slow=76,SNR=3825 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.00** | **155** | T | T | 15 13 36.2 | |
| | baz=342,slow=76,SNR=2282 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **30.87** | **273** | *e*P | **P** | **14 41 36.7** | **+0.9** |
| HHC | | | | pP | **pP** | **14 41 52.6** | **-0.4** |
| HHC | | | | sP | **sP** | **14 42 03.7** | **+2.3** |
| HHC | | | | S | S | 14 46 27.8 | -6.7 |
| HHC | | | | sS | **sS** | **14 47 03.1** | **-0.8** |
| HHC | | | | PMZ | | | |
| | comp=Z,12nm,0.5s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,240nm,6.3s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,1μm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,1μm,14.5s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,920nm,16.7s | | | | | | |
| **NJ2** | **Nanjing** | **30.97** | **252** | *e*P | **P** | **14 41 37.7** | **+1.1** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,50nm,0.6s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.10** | **156** | T | T | 15 14 39.3 | |
| | baz=344,slow=76,SNR=4470 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.11** | **156** | T | T | 15 14 23.6 | |
| | baz=344,slow=76,SNR=4291 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.11** | **156** | T | T | 15 14 23.9 | |
| | baz=344,slow=76,SNR=5336 | | | | | | |
| **ULN** | **Ulaanbaatar** | **31.14** | **288** | P | **P** | **14 41 37.0** | **-1.2** |
| **ULN** | **Ulaanbaatar** | **31.14** | **288** | *e*P | **P** | **14 41 37.3** | **-0.9** |
| **SONM** | **Songino Array** | **31.57** | **288** | P | **P** | **14 41 40.9** | **-1.0** |
| | comp=Z,1.3nm,1.0s,baz=66,slow=9.3,SNR=5.1 | | | | | | |
| SONM | | | | PcP | **PcP** | **14 44 30.9** | **-1.8** |
| | comp=Z,1.4nm,0.9s,baz=98,slow=4.4,SNR=3.5 | | | | | | |
| SONM | | | | ScP | **ScP** | **14 48 09.4** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=84,slow=3.9,SNR=4.9 | | | | | | |
| **TLY** | **Talaya** | **32.24** | **296** | *e*P | **P** | **14 41 47.4** | **-0.2** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **TLY** | **Talaya** | **32.24** | **296** | *e*P | **P** | **14 41 47.2** | **-0.4** |
| **TLY** | **Talaya** | **32.24** | **296** | *e*P | **P** | **14 41 46.5** | **-1.0** |
| **OHAK** | **Old Harbor** | **32.55** | **53** | *e*P | **P** | **14 41 49.5** | **-0.7** |
| | comp=Z,936nm,2.8s | | | | | | |
| **RSO** | **Redoubt South** | **32.59** | **47** | *e*P | **P** | **14 41 51.2** | **+0.4** |
| | comp=Z,62nm,1.0s | | | | | | |
| **PPLA** | **Purkeypile** | **32.86** | **43** | *e*P | **P** | **14 41 54.2** | **+1.2** |
| | comp=Z,176nm,1.5s | | | | | | |
| **KDAK** | **Kodiak Island** | **32.87** | **52** | *e*P | **P** | **14 41 51.3** | **-1.6** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,28nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **32.87** | **52** | *e*P | **P** | **14 41 51.3** | **-1.6** |
| **KDAK** | **Kodiak Island** | **32.87** | **52** | *e*P | **P** | **14 41 51.3** | **-1.6** |

comp=Z,28nm,1.1s
**BPAW Bear Paw Mtn. 33.44 41** *e*P **P 14 41 58.5 +0.6**
comp=Z,12nm,1.4s
**TRF Thorofare Moun 33.73 42** *e*P **P 14 42 01.0 +0.3**
comp=Z,13nm,1.0s
**COLD Coldfoot 34.00 35** *e*P **P 14 42 02.9 +0.2**
comp=Z,24nm,1.0s
**RC01 Rabbit Creek A 34.05 46** *e*P **P 14 42 03.0 -0.2**
**MCK McKinley 34.34 41** *e*P **P 14 42 05.0 -0.7**
MCK pmax pmax
comp=Z,59nm,1.3s
**MCK McKinley 34.34 41** *e*P **P 14 42 05.0 -0.7**
**MCK McKinley 34.34 41** *e*P **P 14 42 05.0 -0.7**
comp=Z,59nm,1.3s
**SML Sawmill 34.68 45** *e*P **P 14 42 08.7 0.0**
SML pmax pmax
comp=Z,38nm,1.2s
**SML Sawmill 34.68 45** *e*P **P 14 42 08.7 0.0**
**SML Sawmill 34.68 45** *e*P **P 14 42 08.7 0.0**
comp=Z,38nm,1.2s
**COLA College 34.82 39** *d i*P **P 14 42 10.3 +0.6**
COLA pmax pmax
comp=Z,106nm,1.3s
**COLA College 34.82 39** *e*P **P 14 42 10.3 +0.6**
**COLA College 34.82 39** *e*P **P 14 42 10.4 +0.6**
comp=Z,96nm,1.3s
**WHN Wuhan 34.86 255** P **P 14 42 12.1 +1.6**
**ILAR Eielson Array 35.23 40** P **P 14 42 13.1 -0.3**
comp=Z,24nm,1.1s,baz=258,slow=7.0,SNR=70
ILAR LR LR 14 55 48.1
comp=Z,750nm,21.6s,baz=314,slow=35
**XAN Xi'an 36.27 264** P **P 14 42 22.6 -0.1**
XAN PMZ
comp=Z,5.0nm,1.0s
XAN PMZ
comp=Z,740nm,11.0s
**BMRM Bremner River 36.54 46** *e*P **P 14 42 25.2 +0.5**
comp=Z,54nm,1.2s
**MENT Mentasta 36.73 43** *e*P **P 14 42 26.4 +0.1**
**EGAK Eagle 37.68 39** *e*P **P 14 42 33.5 -0.7**
comp=Z,67nm,1.3s
**HVS Khovu-Aksy 38.35 298** P **P 14 42 41.0 +0.9**
HVS pmax pmax
comp=Z,8.0nm,0.8s
**HVS Khovu-Aksy 38.35 298** *e*P **P 14 42 41.0 +0.9**
**LZH Lanzhou 38.51 271** *e*P **P 14 42 43.6 +1.9**
LZH pP **pP 14 43 01.7 +2.5**
LZH sP **sP 14 43 09.3 +1.7**
LZH PcP **PcP 14 44 55.1 +1.9**
LZH *e*S **S 14 48 30.4 -1.7**
LZH sS **sS 14 49 02.0 0.0**
LZH SS SS 14 51 13.3 -11
LZH PMZ
comp=Z,47nm,1.3s
LZH PMZ
comp=Z,130nm,4.5s
LZH LN
comp=Z,1μm,14.3s
LZH LE
comp=Z,470nm,14.9s
LZH LZ
comp=Z,1μm,15.4s
**GTA Gaotai 39.44 278** *e*P **P 14 42 49.4 0.0**
GTA pP **pP 14 43 07.7 +0.8**
GTA sP **sP 14 43 16.8 +1.5**
GTA PMZ
comp=Z,8.0nm,1.1s
**INK Inuvik 40.31 33** *e*P **P 14 42 56.6 +0.5**
INK pmax pmax
comp=Z,25nm,1.1s
**INK Inuvik 40.31 33** *e*P **P 14 42 56.6 +0.5**
**INK Inuvik 40.31 33** *e*P **P 14 42 56.6 +0.5**
comp=Z,25nm,1.1s
**CD2 Chengdu 41.63 265** *e*P **P 14 43 06.6 -0.8**
CD2 pP **pP 14 43 23.9 -1.2**
CD2 PP **PP 14 44 43.8 -1.0**
CD2 S **S 14 49 17.6 -1.0**
CD2 sS **sS 14 49 47.9 -0.8**
CD2 SS **SS 14 52 25.9 -0.1**
CD2 PMZ
comp=Z,40nm,0.5s
CD2 PMZ
comp=Z,160nm,5.6s
CD2 LN
comp=Z,1μm,14.7s
CD2 LZ
comp=Z,1μm,16.6s
**ZALV Zalesovo Beam 42.46 305** P **P 14 43 11.9 -2.0**
comp=Z,0.7nm,0.4s,baz=71,slow=6.3,SNR=4.6
ZALV PcP **PcP 14 45 05.2 -0.2**
comp=Z,3.6nm,0.9s,baz=79,slow=3.2,SNR=6.0
**GYA Guiyang 42.61 257** *e*P **P 14 43 17.0 +1.5**
GYA pP **pP 14 43 33.8 +0.6**
GYA sP **sP 14 43 43.0 +1.5**
GYA PP **PP 14 44 58.9 +3.5**
GYA S **S 14 49 32.3 -0.8**
GYA sS **sS 14 50 04.0 +0.6**
GYA SS SS 14 52 37.8 -7.6
GYA PMZ
comp=Z,10.0nm,1.0s
GYA PMZ
comp=Z,120nm,5.3s
GYA LN
comp=Z,540nm,18.2s
GYA LE
comp=Z,520nm,17.8s
GYA LZ
comp=Z,580nm,17.6s
**DLBC Dease Lake 44.31 47** *e*P **P 14 43 29.9 +1.1**
comp=Z,30nm,1.3s
**WMQ Urumqi 45.12 291** *e*P **P 14 43 36.0 +0.6**
WMQ PMZ
comp=Z,12nm,1.0s
**KMI Kunming 46.10 259** P **P 14 43 45.1 +1.6**
KMI PMZ
comp=Z,10.0nm,0.7s
KMI PMZ
comp=Z,210nm,8.3s
**MKAR Makanchi Array 46.99 297** P **P 14 43 48.5 -1.4**
comp=Z,6.6nm,0.8s,baz=72,slow=7.7,SNR=53
**KURK Kurchatov 47.26 303** *e*P **P 14 43 50.4 -1.6**
**YKA Yellowknife Ar 49.60 38** P **P 14 44 10.3 +0.6**
comp=Z,8.1nm,1.1s,baz=300,slow=8.0,SNR=9.2
**BRVK Borovoye 50.66 309** *e*P **P 14 44 17.2 -0.7**
BRVK pmax pmax
comp=Z,3.0nm,0.9s
**BRVK Borovoye 50.66 309** *e*P **P 14 44 17.2 -0.7**
**LSA Lhasa 50.86 273** *e*P **P 14 44 20.9 +0.6**
LSA pmax pmax
comp=Z,8.0nm,0.6s
**LSA Lhasa 50.86 273** *e*P **P 14 44 20.9 +0.6**
comp=Z,7.8nm,0.6s
**A04D Lummi Island 52.63 56** P **P 14 44 32.9 +0.3**
baz=52
**CHTO Chiang Mai 53.02 257** *e*P **P 14 44 36.3 +0.3**
CHTO pmax pmax
comp=Z,8.0nm,0.8s
**CHTO Chiang Mai 53.02 257** *e*P **P 14 44 36.3 +0.3**
**CHTO Chiang Mai 53.02 257** *e*P **P 14 44 36.3 +0.3**
comp=Z,7.8nm,0.8s
**MBW Mount Baker 53.04 55** P **P 14 44 36.4 +0.5**
**B05A Bryant 53.22 56** P **P 14 44 37.5 +0.5**
baz=53
**CMAR Chiang Mai Arr 53.28 256** P **P 14 44 37.9 +0.1**
comp=Z,5.0nm,0.8s,baz=30,slow=7.5,SNR=21
CMAR LR LR 15 08 54.6
comp=Z,741nm,18.8s,baz=14,slow=38
**AAK Ala-Archa 53.90 296** P **P 14 44 41.5 -0.8**
AAK pmax pmax
comp=Z,5.0nm,0.8s
**AAK Ala-Archa 53.90 296** *e*P **P 14 44 41.5 -0.8**
**AAK Ala-Archa 53.90 296** P **P 14 44 41.5 -0.8**
comp=Z,4.8nm,0.8s
**F04D Rainier, OR 53.91 59** P **P 14 44 42.9 +0.7**
baz=54
**C06D Leavenworth 54.08 56** P **P 14 44 44.0 +0.7**
baz=54
**G03D McMinnville, O 54.26 60** P **P 14 44 45.2 +0.6**
baz=54
**ETW Entiat 54.57 56** P **P 14 44 47.5 +0.5**
**TAPN Taplejung 54.69 273** *e*P **P 14 44 47.6 -0.8**
comp=Z,23nm,0.9s
**KSH Kashi 54.81 292** *e*P P 14 44 52.1 +3.2
KSH *ep*P pP 14 45 11.5 +4.2
KSH *es*P sP 14 45 20.6 +5.2
KSH PcS **PcS 14 49 54.8 +4.5**
KSH S **S 14 52 26.6 +2.2**
KSH SS **SS 14 56 13.6 +5.7**
KSH PMZ
comp=Z,93nm,4.5s
KSH LN
comp=Z,420nm,14.1s
KSH LE
comp=Z,570nm,13.7s
KSH LZ
comp=Z,550nm,17.5s
**EBG Ellensburg 54.83 57** P **P 14 44 50.0 +1.1**
**EDM Edmonton 55.04 47** *e*P **P 14 44 50.1 -0.1**
EDM pmax pmax
comp=Z,88nm,1.4s
**EDM Edmonton 55.04 47** *e*P **P 14 44 50.1 -0.1**
**EDM Edmonton 55.04 47** *e*P **P 14 44 50.0 -0.1**
comp=Z,88nm,1.4s
**I03D Drain, OR 55.08 61** P **P 14 44 52.1 +1.5**
baz=55,SNR=5.5
**ODAN Odare 55.22 273** *e*P **P 14 44 51.9 -0.2**
comp=Z,13nm,0.6s
**VFP Flag Point 55.24 59** P **P 14 44 53.0 +1.0**
**G05D Wamic, OR 55.37 59** P **P 14 44 53.8 +1.1**
baz=55,SNR=5.3
**IRO Indian Ridge 55.55 60** P **P 14 44 55.2 +1.0**
**GUN Gumba 55.55 275** *e*P **P 14 44 54.5 -0.1**
comp=Z,11nm,0.6s
**I04A Tendick Farm, 55.58 61** P **P 14 44 55.3 +1.0**
baz=55,SNR=17
**RAMN Ramite 55.69 273** *e*P **P 14 44 55.0 -0.5**
comp=Z,33nm,0.6s
**CROR Criterion Ridg 55.71 59** P **P 14 44 56.3 +1.0**
**L02D Cave Junction, 55.83 63** P **P 14 44 57.5 +1.4**
baz=56,SNR=6.0
**I05D Terrebonne, OR 55.88 60** P **P 14 44 57.6 +1.1**
baz=56
**NEW Newport 55.95 54** P **P 14 44 57.3 +0.4**
baz=56
**KKN Kakani 56.03 275** *e*P **P 14 44 57.7 -0.2**
comp=Z,15nm,0.5s
**J04D Umpqua Nationa 56.08 61** P **P 14 44 59.3 +1.2**
baz=56,SNR=8.8
**PKI Pulchoki 56.08 275** *e*P **P 14 44 58.3 -0.1**
comp=Z,8.2nm,0.5s
**PKIN Phulchoki 56.09 275** *e*P **P 14 44 58.1 -0.3**
comp=Z,6.7nm,0.5s
**KTRM Thompson Ridge 56.12 63** P **P 14 44 59.9 +1.6**
**DMN Daman 56.26 275** *e*P **P 14 44 59.6 0.0**
comp=Z,42nm,0.9s
**GKN Gorkha 56.32 276** *e*P **P 14 44 59.9 0.0**
comp=Z,30nm,0.8s
**J05D Fort Rock, OR 56.57 61** P **P 14 45 03.0 +1.5**
baz=56
**YBH Yreka Blue Hor 56.62 63** *e*P **P 14 45 02.8 +1.0**
YBH pmax pmax
comp=Z,36nm,1.3s
**YBH Yreka Blue Hor 56.62 63** *e*P **P 14 45 02.8 +1.0**
comp=Z,36nm,1.3s
**K04D Chiloquin, OR 56.66 62** P **P 14 45 03.3 +1.2**
baz=56
**M02C Callahan 56.74 63** P **P 14 45 04.6 +2.0**
baz=57,SNR=10
**LHEM Herd Peak 56.98 63** P **P 14 45 06.1 +1.6**
**N02D Trinity Center 57.08 64** P **P 14 45 06.3 +1.2**
baz=57,SNR=8.3
**M04C Macdoel 57.11 62** P **P 14 45 06.8 +1.5**
baz=57,SNR=10
**KOLN Koldanda 57.16 276** *e*P **P 14 45 05.8 -0.2**
comp=Z,8.8nm,0.5s
**WALA Waterton Lakes 57.20 51** *e*P **P 14 45 06.2 +0.5**
comp=Z,12nm,0.9s
**BSMT Bassoo Peak 57.46 53** *e*P **P 14 45 08.5 +0.7**
comp=Z,22nm,1.3s
**BLMT Blacktail Moun 57.59 53** *e*P **P 14 45 09.6 +0.9**
comp=Z,59nm,1.4s
**JTMT Jette 57.79 53** *e*P **P 14 45 10.5 +0.5**
comp=Z,4.4nm,1.0s
**YBMT Yellow Bay 57.87 53** *e*P **P 14 45 10.5 0.0**
comp=Z,23nm,1.5s
**MOD Modoc 57.95 61** *e*P **P 14 45 12.1 +0.8**
comp=Z,34nm,1.2s
**O03D Paynes Creek 58.04 64** P **P 14 45 12.4 +0.6**
baz=58,SNR=24
**SWMT Swartz Lake 58.09 53** *e*P **P 14 45 12.7 +0.6**
comp=Z,20nm,1.5s
**SLMT Seeley Lake 58.52 53** *e*P **P 14 45 15.1 0.0**
comp=Z,44nm,1.4s
**MSO Missoula 58.54 54** P **P 14 45 16.0 +0.8**
baz=58,SNR=10
**WVOR Wild Horse Val 58.60 60** *e*P **P 14 45 16.4 +0.7**
WVOR pmax pmax
comp=Z,26nm,1.1s
**WVOR Wild Horse Val 58.60 60** *e*P **P 14 45 16.4 +0.7**
comp=Z,26nm,1.1s
**CHMT Chamberlain Mo 58.86 53** *e*P **P 14 45 17.8 +0.2**
comp=Z,12nm,1.3s
**FFC Flin Flon 59.42 41** *e*P **P 14 45 22.2 +1.2**
**KLMR Klimovskoe 59.44 329** *e*P **P 14 45 18.5 -2.5**
KLMR pmax pmax
comp=Z,20nm,1.4s
**SUMG Summit 59.48 4** *e*P **P 14 45 21.2 -0.5**
SUMG pmax pmax
comp=Z,40nm,1.1s
**SUMG Summit 59.48 4** *i*P **P 14 45 21.4 -0.3**
comp=Z,48nm,1.2s
**SUMG Summit 59.48 4** *e*P **P 14 45 21.2 -0.5**
comp=Z,40nm,1.1s
**HRY Holter Researc 59.74 53** *e*P **P 14 45 24.6 +1.1**
comp=Z,18nm,1.1s
**LRM Limekiln Ridge 59.97 54** *e*P **P 14 45 26.2 +0.9**
comp=Z,285nm,1.2s
**EGMT Eagleton 60.01 50** P **P 14 45 25.9 +0.7**
baz=60,SNR=6.7
**HLID Hailey 60.32 57** P **P 14 45 28.8 +1.2**
baz=60,SNR=17
**HLID Hailey 60.32 57** *e*P **P 14 45 28.4 +0.8**
comp=Z,19nm,1.2s
**MCMT McKenzie Canyo 60.38 55** *e*P **P 14 45 28.5 +0.4**
comp=Z,7.1nm,1.2s
**BOZ Bozeman (W) 60.53 53** *e*P **P 14 45 30.1 +1.2**
BOZ pmax pmax
comp=Z,43nm,1.2s
**BOZ Bozeman (W) 60.53 53** P **P 14 45 30.4 +1.4**
baz=60,SNR=21
**BOZ Bozeman (W) 60.53 53** *e*P **P 14 45 30.1 +1.2**
comp=Z,43nm,1.2s
**QLMT Earthquake Lak 61.16 54** *e*P **P 14 45 34.4 +1.1**
comp=Z,6.3nm,1.3s
**NVAR Mina Array Bea 61.32 63** P **P 14 45 35.0 +0.5**
comp=Z,11nm,1.0s,baz=292,slow=6.5,SNR=40
**GCMT Greycliff 61.49 52** *e*P **P 14 45 36.8 +1.4**
comp=Z,24nm,1.2s
**MLAC Mammoth Lakes 61.51 64** P **P 14 45 37.6 +1.7**
baz=61
**YMR Madison River 61.52 54** *e*P **P 14 45 36.4 +0.6**
comp=Z,8.8nm,0.7s
**LKWY Lake 61.89 54** *e*P **P 14 45 41.0 +2.7**
LKWY pmax pmax
comp=Z,22nm,1.2s
**LKWY Lake 61.89 54** *e*P **P 14 45 41.0 +2.7**
comp=Z,22nm,1.2s
**H17A Grant Village 61.91 54** P **P 14 45 41.2 +2.8**
baz=62
**IMW Indian Meadow 62.03 55** *e*P **P 14 45 40.6 +1.3**
comp=Z,22nm,1.1s
**FLWY Flagg Ranch 62.04 54** *e*P **P 14 45 41.0 +1.7**
comp=Z,17nm,1.2s
**RCTC Rector, Farmer 62.12 66** P **P 14 45 40.4 +0.7**
baz=62
**RLMT Red Lodge 62.14 53** P **P 14 45 41.2 +1.3**
baz=62,SNR=5.5
**RLMT Red Lodge 62.14 53** *e*P **P 14 45 41.4 +1.5**
comp=Z,35nm,1.2s
**TIN Tinemaha 62.25 65** P **P 14 45 41.8 +1.1**
baz=62
**TPAW Teton Pass 62.29 55** *e*P **P 14 45 42.0 +1.0**
comp=Z,46nm,1.3s
**SMMC Simmler 62.30 67** P **P 14 45 41.9 +1.0**
baz=62
**LOHW Long Hollow 62.40 55** *e*P **P 14 45 43.1 +1.4**
comp=Z,32nm,1.3s
**SNOW Snow King Moun 62.42 55** *e*P **P 14 45 43.5 +1.7**
comp=Z,19nm,1.1s
**REDW Red Top Meadow 62.43 55** *e*P **P 14 45 43.3 +1.4**
comp=Z,60nm,1.4s
**VES Vestal, Richgr 62.52 66** P **P 14 45 42.5 +0.3**
baz=62
**DGMT Dagmar 62.53 47** P **P 14 45 42.9 +0.6**
baz=62,SNR=6.1
**PKM Peak Mountain 62.68 67** P **P 14 45 44.4 +0.7**
baz=62
**LAO LASA Array 62.70 50** P **P 14 45 44.6 +1.2**
baz=62,SNR=5.0
**CWC Cottonwood Cre 62.74 65** P **P 14 45 44.7 +0.7**
baz=63
**A25A Svangstu Ranch 62.75 46** P **P 14 45 44.3 +0.6**
baz=62
**GRAC Grapevine Rang 62.81 64** P **P 14 45 45.2 +0.9**
baz=63,SNR=6.1
**R11A Troy Canyon, C 63.00 62** P **P 14 45 46.3 +0.6**
baz=63
**ISA Isabella 63.01 66** P **P 14 45 45.9 +0.3**
baz=63,SNR=8.0
**ARVC Arvin 63.14 67** P **P 14 45 47.1 +0.6**
baz=63
**DAC Darwin (Calif) 63.15 65** *e*P **P 14 45 46.4 -0.3**
DAC pmax pmax
comp=Z,23nm,1.7s
**DAC Darwin (Calif) 63.15 65** *e*P **P 14 45 46.4 -0.3**
comp=Z,23nm,1.7s
**B25A Knox Farm, Ray 63.17 47** P **P 14 45 47.6 +1.1**
baz=63
**HWUT Hardware Ranch 63.19 57** *e*P **P 14 45 47.4 +0.5**
comp=Z,26nm,1.3s
**FINES FINESS Array B 63.26 335** P **P 14 45 45.0 -1.7**
comp=Z,3.3nm,0.8s,baz=34,slow=8.9,SNR=8.0
**FINES FINESS Array B 63.26 335** *i*P **P 14 45 48.2 +1.5**
FINES pmax pmax
comp=Z,1.0nm,0.3s
**FINES FINESS Array B 63.26 335** *e*P **P 14 45 48.2 +1.5**
**A26A Wade Farm, Ken 63.30 46** P **P 14 45 47.8 +0.5**
baz=63
**MPMC Manual Prospec 63.35 65** P **P 14 45 48.7 +0.6**
baz=63,SNR=13
**BSC Santa Cruz Isl 63.39 68** P **P 14 45 49.4 +1.3**
baz=63
**DUG Dugway 63.41 59** *e*P **P 14 45 49.1 +0.8**
DUG pmax pmax
comp=Z,40nm,1.2s
**DUG Dugway 63.41 59** *e*P **P 14 45 49.1 +0.8**
**DUG Dugway 63.41 59** P **P 14 45 49.3 +1.0**
baz=63,SNR=18
**DUG Dugway 63.41 59** *e*P **P 14 45 49.1 +0.8**
comp=Z,40nm,1.2s
**FURC Furnace Creek, 63.47 64** P **P 14 45 49.5 +1.0**
baz=63,SNR=7.4
**C25A Freed Ranch, W 63.51 47** P **P 14 45 49.5 +0.8**
baz=63
**TPNV Topopah Spring 63.52 64** P **P 14 45 49.8 +0.7**
baz=63,SNR=15
**BW06 Boulder Array 63.53 55** *e*P **P 14 45 49.5 +0.2**
comp=Z,29nm,1.1s
**OSI Osito Adit 63.55 67** P **P 14 45 50.2 +1.0**
baz=63
**B26A Jensen Ranch, 63.56 46** P **P 14 45 49.6 +0.6**
baz=63
**LRMC Laurel Mountai 63.62 66** P **P 14 45 50.1 +0.4**
baz=64
**A27A Ledoux Ranch, 63.64 45** P **P 14 45 50.3 +0.7**
baz=63
**BLG Laguna Peak 63.67 68** P **P 14 45 50.2 +0.2**
baz=64
**EDW2 Edwards Air Fo 63.82 66** P **P 14 45 51.4 +0.4**
baz=64,SNR=21
**SFJD Kangerlussuaq 63.88 11** *i*P **P 14 45 50.5 -0.3**
SFJD pmax pmax
comp=Z,18nm,1.0s
**SFJD Kangerlussuaq 63.88 11** *i*P **P 14 45 50.5 -0.3**
comp=Z,18nm,1.0s
**DECC Green Verdugo 64.03 67** P **P 14 45 53.0 +0.6**
baz=64
**A28A Rude Farm, Bot 64.13 45** P **P 14 45 53.3 +0.4**
baz=64
**E25A Miller Ranch, 64.26 48** P **P 14 45 54.1 +0.4**
baz=64
**GSC Goldstone 64.27 65** *e*P **P 14 45 54.4 +0.4**
GSC pmax pmax
comp=Z,19nm,1.3s
**GSC Goldstone 64.27 65** P **P 14 45 54.1 +0.1**
baz=64,SNR=5.1
**GSC Goldstone 64.27 65** *e*P **P 14 45 54.4 +0.4**
comp=Z,19nm,1.3s
**C27A Sayler Ranch, 64.37 47** P **P 14 45 55.1 +0.8**
baz=64
**D26A Manning 64.38 48** P **P 14 45 55.0 +0.5**
baz=64
**B28A Dugan Ranch, T 64.41 45** P **P 14 45 55.1 +0.5**
baz=64
**FMP Fort Macarthur 64.41 67** P **P 14 45 55.2 +0.5**
baz=64
**RRX Edison Barstow 64.43 66** P **P 14 45 55.9 +0.9**
baz=64
**BFSC Mount Baldy Ra 64.45 67** P **P 14 45 55.5 +0.2**
baz=64,SNR=5.4
**SHPR Sheep Range 64.47 63** *e*P **P 14 45 56.1 +0.8**
comp=Z,26nm,1.3s
**A29A Manning Farm, 64.61 44** P **P 14 45 56.4 +0.5**
baz=64
**F25A Bowman 64.63 49** P **P 14 45 56.8 +0.7**
baz=64
**OBN Obninsk 64.71 326** *e*P **P 14 45 59.5 +3.1**
OBN pmax pmax
comp=Z,7.0nm,1.0s
**TUQ Turquoise Moun 64.72 65** P **P 14 45 57.7 +0.8**
baz=64,SNR=19
**SCI San Clemente I 64.74 68** P **P 14 45 56.5 -0.5**
baz=65
**HEC Hector,Ludlow 64.88 65** P **P 14 45 58.7 +0.7**
baz=65,SNR=11
**B29A Wagenman Farm, 64.88 45** P **P 14 45 57.9 +0.2**
baz=65
**MSU Marysvale 64.89 60** *e*P **P 14 45 58.9 +0.7**
MSU pmax pmax
comp=Z,34nm,1.5s
**MSU Marysvale 64.89 60** *e*P **P 14 45 58.9 +0.7**
comp=Z,34nm,1.5s
**BBRC Big Bear Solar 64.89 66** P **P 14 45 58.9 +0.7**
baz=65
**C28A Hausauer Farms 64.91 46** P **P 14 45 58.7 +0.9**
baz=65
**TMUT Trail Mountain 64.92 59** *e*P **P 14 45 58.0 -0.4**
comp=Z,41nm,1.0s
**A30A Hoffart Farm, 65.04 44** P **P 14 45 59.2 +0.6**
baz=65
**F26A Lodgepole 65.08 49** P **P 14 45 59.7 +0.7**
baz=65
**G25A Newell 65.15 50** P **P 14 46 00.0 +0.4**
baz=65
**MURC Murrieta 65.16 67** P **P 14 46 00.1 +0.4**
baz=65
**D28A Regan 65.19 46** P **P 14 46 00.3 +0.6**
baz=65
**MDND Maddock 65.19 45** P **P 14 46 00.4 +0.7**
baz=65
**ULM Lac du Bonnet 65.21 42** P **P 14 45 60.0 +0.2**
comp=Z,6.0nm,0.9s,baz=281,slow=10,SNR=3.7
**ULM Lac du Bonnet 65.21 42** P **P 14 46 00.0 +0.2**
**ULM Lac du Bonnet 65.21 42** *e*P **P 14 46 00.0 +0.2**
**E27A Carson 65.23 48** P **P 14 46 00.3 +0.3**
baz=65
**K22A Casper 65.27 53** P **P 14 46 01.4 +0.9**
baz=65
**GMRC Granite Mounta 65.32 65** P **P 14 46 01.8 +0.9**
baz=65,SNR=9.8
**B30A Myrvik Farm, E 65.37 44** P **P 14 46 01.7 +0.8**
baz=65
**F27A Lemmon 65.39 48** P **P 14 46 01.1 0.0**
baz=65
**LDFC Landfair 65.45 64** *e*P **P 14 46 02.0 +0.3**
comp=Z,67nm,1.3s
**H25A Fruitdale 65.45 50** P **P 14 46 01.7 +0.2**
baz=65
**G26A Maurine 65.50 49** P **P 14 46 02.0 +0.2**
baz=65
**E28A Huff 65.56 47** P **P 14 46 02.1 0.0**
baz=65
**RSSD Black Hills 65.57 51** *e*P **P 14 46 02.6 +0.1**
RSSD pmax pmax
comp=Z,35nm,1.1s
**RSSD Black Hills 65.57 51** *e*P **P 14 46 02.6 +0.1**
comp=Z,34nm,1.1s
**PFO Pinyon Flat Ob 65.62 66** P **P 14 46 03.1 +0.3**
baz=66
**BELC Belle Mtn. Jos 65.64 66** P **P 14 46 03.1 +0.2**

baz=66
G27A **Dupree** 65.78 49 P P 14 46 03.7 +0.2
baz=66
I25A **Rochford** 65.80 51 P P 14 46 04.2 +0.3
baz=66
C30A **Mose, Pekin** 65.83 45 P P 14 46 03.7 -0.1
baz=66
F28A **McLaughlin** 66.02 48 P P 14 46 05.2 +0.2
baz=66
O20A **White River Ci** 66.04 56 P P 14 46 05.9 +0.4
baz=66
IRM **Iron Mountain** 66.05 65 P P 14 46 06.0 +0.6
baz=66,SNR=13
E29A **Napoleon** 66.08 46 P P 14 46 05.3 -0.1
baz=66
C31A **Landman Farms,** 66.12 44 P P 14 46 05.9 +0.2
baz=66
D30A **Buchanan** 66.12 46 P P 14 46 06.1 +0.4
baz=66
MONP **Monument Peak** 66.12 67 P P 14 46 06.8 +0.6
baz=66
J25A **Sunshine Ranch** 66.20 51 P P 14 46 06.7 +0.3
baz=66
H27A **Howes** 66.23 49 P P 14 46 06.8 +0.3
baz=66
B32A **Ashes, Strandq** 66.25 43 P P 14 46 06.4 0.0
baz=66
I26A **New Underwood** 66.25 50 P P 14 46 07.2 +0.6
baz=66
E30A **Jud** 66.48 46 P P 14 46 08.4 +0.4
baz=66
IBP **Imperial Bould** 66.48 67 P P 14 46 08.9 +0.6
baz=66
G28A **Parade** 66.50 48 P P 14 46 08.7 +0.6
baz=66
F29A **Eureka** 66.51 47 P P 14 46 08.6 +0.4
baz=66
GEYT **Alibeck** 66.56 301 P P 14 46 08.3 -0.4
comp=Z,1.3nm,0.5s,baz=299,slow=6.5,SNR=3.3
PDMCI **Parker Dam,Lak** 66.57 64 P P 14 46 09.1 +0.5
baz=66,SNR=7.2
AGMN **Agassiz Nation** 66.63 43 P P 14 46 09.3 +0.5
baz=66
I27A **Quinn** 66.64 50 P P 14 46 09.4 +0.3
baz=66
J26A **Sides Ranch, S** 66.64 51 P P 14 46 09.5 +0.3
baz=66
Y12C **Blythe** 66.71 65 P P 14 46 10.2 +0.6
baz=66
H28A **Mission Ridge** 66.73 49 P P 14 46 10.0 +0.3
baz=66
N23A **Red Feather La** 66.79 54 P P 14 46 10.8 +0.5
baz=66
G29A **Hoven** 66.92 48 P P 14 46 11.2 +0.4
baz=67
E31A **Nome** 66.93 45 P P 14 46 10.9 0.0
baz=67
GLA **Glamis** 67.00 66 P P 14 46 12.2 +0.7
baz=67
B34A **Aery, Baudette** 67.04 42 P P 14 46 11.2 -0.3
baz=67
I28A **Midland** 67.14 49 P P 14 46 12.3 +0.1
baz=67
H29A **Onida** 67.17 48 P P 14 46 12.4 0.0
baz=67
PV01 **Paradox Valley** 67.23 58 eP P 14 46 13.7 +0.6
comp=Z,1μm,1.2s
J27A **Elkhorn Farm,** 67.23 50 P P 14 46 13.7 +0.8
baz=67
F31A **Hecla** 67.26 46 P P 14 46 12.6 -0.3
baz=67
E32A **Braaten, Kindr** 67.30 45 P P 14 46 13.2 0.0
baz=67
NB2 **NORSAR Subarra** 67.33 341 P P 14 46 11.8 -1.3
comp=Z,3.1nm,0.8s,baz=27,slow=6.5
NOA **NORSAR Array B** 67.33 341 P P 14 46 12.2 -0.9
comp=Z,0.4nm,0.3s,baz=28,slow=6.6,SNR=5.3
NOA LR LR 15 20 09.9
comp=Z,148nm,18.1s,baz=20,slow=40
G30A **Faulkton** 67.35 47 P P 14 46 13.8 +0.3
baz=67
WUAZ **Wupatki** 67.39 62 P P 14 46 15.2 +1.0
baz=67,SNR=11
SMCO **Snowmass** 67.41 56 eP P 14 46 15.4 +0.9
comp=Z,17nm,0.5s
M25A **Palm-Egli Farm** 67.43 53 P P 14 46 15.1 +0.8
baz=67
D33A **AnnSam, Waubun** 67.48 44 P P 14 46 14.1 -0.2
baz=67
K27A **Flueckinger Fa** 67.50 51 P P 14 46 14.8 +0.2
baz=67
J28A **Allard Ranch,** 67.51 50 P P 14 46 14.8 +0.2
baz=67
I29A **Vivian Onida** 67.56 49 P P 14 46 15.1 +0.2
baz=67
ISCO **Idaho Springs** 67.73 55 eP P 14 46 17.3 +0.9
ISCO pmax pmax
comp=Z,27nm,1.2s
ISCO **Idaho Springs** 67.73 55 P P 14 46 17.5 +1.1
baz=68,SNR=16
ISCO **Idaho Springs** 67.73 55 eP P 14 46 17.3 +0.9
comp=Z,27nm,1.2s
D34A **Park Rapids** 67.82 44 P P 14 46 16.3 -0.2
baz=68
E33A **Westby DABS, E** 67.87 45 P P 14 46 16.8 0.0
baz=68
M26A **McRoberts Ranc** 67.90 52 P P 14 46 18.5 +1.3
baz=68
L27A **T5 Ranch, Ells** 67.90 51 P P 14 46 17.7 +0.6
baz=68
MVCO **Mesa Verde** 67.91 59 P P 14 46 18.1 +0.7
baz=68,SNR=7.1
MVCO **Mesa Verde** 67.91 59 eP P 14 46 17.7 +0.3
comp=Z,27nm,1.2s
SUSD **South Dakota S** 67.93 48 P P 14 46 17.3 +0.1
baz=68
K28A **Ten Mile Ranch** 67.95 50 P P 14 46 18.0 +0.6
baz=68
J29A **Okreek** 67.99 49 P P 14 46 18.4 +0.8
baz=68
I30A **Oacoma** 68.08 48 P P 14 46 18.4 +0.2
baz=68
F33A **5 Mile Ranch,** 68.22 45 P P 14 46 19.1 +0.2
baz=68
E34A **Wadena** 68.25 44 P P 14 46 19.4 +0.2
baz=68
N26A **Koester Ranch,** 68.31 53 P P 14 46 20.6 +0.9
baz=68
D35A **Remer** 68.35 43 P P 14 46 20.0 +0.2
baz=68
L28A **Connealy Angus** 68.37 51 P P 14 46 20.8 +0.7
baz=68
K29A **Lazy Trails An** 68.45 50 P P 14 46 21.1 +0.6
baz=68
J30A **Dallas** 68.47 49 P P 14 46 21.6 +1.0
baz=68
S22A **4UR Ranch, Cre** 68.48 57 P P 14 46 22.1 +0.9
baz=68
Q24A **Divide** 68.57 55 P P 14 46 22.4 +0.7
baz=68
W18A **Petrified Fore** 68.64 61 P P 14 46 22.8 +0.8
baz=68
O26A **Horse Wrangler** 68.67 53 P P 14 46 22.6 +0.5
baz=68
N27A **Anderson Farm,** 68.69 52 P P 14 46 22.6 +0.5
baz=68
C37A **Embarrass** 68.71 42 P P 14 46 21.9 -0.1
baz=68
EYMN **Ely** 68.86 41 P P 14 46 22.5 -0.4
baz=68
OGNE **Ogallala** 68.86 52 P P 14 46 23.5 +0.4
baz=69,SNR=11
OGNE **Ogallala** 68.86 52 eP P 14 46 23.8 +0.6
comp=Z,120nm,1.3s
J31A **Geddes** 68.87 48 P P 14 46 23.2 +0.1
baz=69
K30A **Basset** 68.88 49 P P 14 46 23.8 +0.6
baz=69
M28A **Bar X Bar Ranc** 68.88 51 P P 14 46 23.8 +0.5
baz=69
G34A **Benson** 68.97 45 P P 14 46 23.5 -0.1
baz=69
I32A **Karley and Nic** 68.97 47 P P 14 46 23.7 -0.1
baz=69
F35A **Swanville** 69.02 44 P P 14 46 23.9 0.0
baz=69
D37A **Cotton** 69.03 42 P P 14 46 23.8 -0.2
baz=69
C38A **Sawbill Land.** 69.13 41 P P 14 46 24.4 -0.2
baz=69
P26A **Davis Ranch, A** 69.14 54 P P 14 46 25.5 +0.5
baz=69
O27A **Beecher Island** 69.16 53 P P 14 46 25.4 +0.4
baz=69
M29A **Burnside Ranch** 69.21 51 P P 14 46 25.3 0.0
baz=69
SDCO **Great Sand Dun** 69.23 56 P P 14 46 26.4 +0.7
baz=69,SNR=14
N28A **Pribbeno Ranch** 69.30 52 P P 14 46 26.2 +0.3
baz=69
H34A **Spellman Lake,** 69.33 46 P P 14 46 26.2 +0.3
baz=69
L30A **Spencer Herefo** 69.34 50 P P 14 46 25.7 -0.4
baz=69
K31A **O'Neill** 69.35 49 P P 14 46 26.2 +0.1
baz=69
Q26A **Hugo** 69.50 54 P P 14 46 27.6 +0.4
baz=69
F36A **Milaca** 69.50 44 P P 14 46 27.0 +0.1
baz=69
G35A **Watkins** 69.53 45 P P 14 46 27.5 +0.4
baz=69
O28A **Krutsinger Ran** 69.58 52 P P 14 46 27.5 -0.1
baz=69
ECSD **EROS Data Cent** 69.61 47 P P 14 46 27.7 +0.1
baz=69,SNR=13
L31A **Butterfield Fa** 69.63 49 P P 14 46 27.7 -0.1
baz=69
N29A **Votaw Ranch, W** 69.69 51 P P 14 46 28.4 +0.1
baz=69
K32A **Verdigre** 69.72 48 P P 14 46 28.2 -0.1
baz=69
J33A **Davis** 69.74 47 P P 14 46 28.1 -0.3
baz=70
I34A **Hadley** 69.75 46 P P 14 46 28.5 0.0
baz=70
WRAB **Tennant Creek** 69.82 200 P P 14 46 28.0 -1.1
WRAB pmax pmax
comp=Z,21nm,1.3s
WRAB **Tennant Creek** 69.82 200 P P 14 46 27.9 -1.1
comp=Z,21nm,1.3s
WRA **Warramunga Arr** 69.83 200 P P 14 46 28.5 -0.6
comp=Z,1.8nm,0.6s,baz=17,slow=6.5,SNR=13
WRA LR LR 15 14 19.3
comp=Z,199nm,21.8s,baz=30,slow=33
G36A **St. Michael** 69.87 44 P P 14 46 29.3 +0.1
baz=70
KSCO **Kaye Shedlock'** 69.92 54 P P 14 46 30.2 +0.4
baz=70
R26A **Arlington** 69.98 55 P P 14 46 30.5 +0.3
baz=70
P28A **Saint Francis** 69.99 53 P P 14 46 30.3 +0.2
baz=70
O29A **4D Ranch, Culb** 70.10 52 P P 14 46 31.0 +0.2
baz=70
L32A **Elgin** 70.18 49 P P 14 46 31.6 +0.4
baz=70
T25A **Trinidad** 70.28 56 P P 14 46 32.3 +0.3
baz=70
Q28A **Sharon Springs** 70.31 53 P P 14 46 32.5 +0.3
baz=70
SPMN **St. Paul** 70.32 44 P P 14 46 32.0 +0.1
baz=70
R27A **Eads** 70.35 54 P P 14 46 32.3 0.0
baz=70
P29A **Atwood** 70.41 52 P P 14 46 32.5 -0.2
baz=70
O30A **MW Ranch, Wils** 70.45 51 P P 14 46 33.0 +0.1
baz=70
S26A **Kim** 70.45 55 P P 14 46 33.3 +0.2
baz=70
FITZ **Fitzroy Crossi** 70.48 209 eP P 14 46 33.3 +0.2
comp=Z,7.8nm,1.0s
KBZ **Khabaz** 70.51 314 P P 14 46 33.2 +0.1
comp=Z,4.5nm,0.9s,baz=112,slow=5.4,SNR=4.9
KBZ LR LR 15 21 05.2
comp=Z,457nm,19.2s,baz=18,slow=39
BGNE **Belgrade** 70.54 49 P P 14 46 33.2 -0.2
baz=70
N31A **Bailey Ranch,** 70.56 50 P P 14 46 33.4 -0.1
baz=70
J35A **Milford** 70.57 46 P P 14 46 33.2 -0.3
baz=70
K34A **Le Mars** 70.64 47 P P 14 46 33.9 0.0
baz=70
LAZ **Ladron** 70.66 60 eP P 14 46 35.5 +1.1
comp=Z,15nm,1.3s
ANMO **Albuquerque** 70.67 59⇓ eP P 14 46 35.3 +0.8
ANMO pmax pmax
comp=Z,15nm,1.3s
T26A **Comanche Natio** 70.70 56 P P 14 46 35.0 +0.3
baz=70
S27A **Las Animas** 70.72 55 P P 14 46 34.7 -0.1
baz=70
P30A **Selden** 70.81 52 P P 14 46 35.3 +0.2
baz=71
R28A **Tribune** 70.84 54 P P 14 46 35.8 +0.5
baz=71
Q29A **Oakley** 70.90 53 P P 14 46 36.0 +0.3
baz=71
M33A **Taylor Creek F** 70.91 49 P P 14 46 35.8 +0.1
baz=71
AKASG **Malin Array Be** 70.93 326 P P 14 46 33.6 -1.9
comp=Z,0.5nm,0.3s,baz=34,slow=6.2,SNR=4.3
AKASG **Malin Array Be** 70.93 326 i P P 14 46 36.0 +0.5
AKASG pmax pmax
comp=Z,1.0nm,0.3s
LPM **Los Pinos Moun** 71.02 60 eP P 14 46 36.7 +0.1
comp=Z,17nm,1.5s
L34A **Svendsen Farm,** 71.03 48 P P 14 46 35.7 -0.6
baz=71
K35A **Storm Lake** 71.03 47 P P 14 46 36.0 -0.3
baz=71
R29A **Marienthal** 71.15 53 P P 14 46 36.9 -0.3
baz=71
Q30A **Quinter** 71.24 52 P P 14 46 37.4 -0.3
baz=71
M34A **Aspy Farms, Fr** 71.27 48 P P 14 46 37.6 -0.2
baz=71
T27A **Campo** 71.27 55 P P 14 46 37.7 -0.3
baz=71
P31A **Stockton** 71.29 52 P P 14 46 37.3 -0.7
baz=71
O32A **Brockman Farm,** 71.32 50 P P 14 46 38.1 -0.1
baz=71
S28A **Manter** 71.34 54 P P 14 46 38.3 -0.1
baz=71
T28A **Walsh** 71.56 55 P P 14 46 39.7 0.0
baz=71
121A **Cookes Peak, D** 71.61 62 P P 14 46 41.0 +0.8
baz=71
CBKS **Cedar Bluff** 71.62 52 P P 14 46 39.6 -0.4
baz=71
P32A **Huiting Farm,** 71.62 51 P P 14 46 39.4 -0.5
baz=71
Q31A **Ellis** 71.66 52 P P 14 46 39.8 -0.4
baz=71
U27A **Thompson Grove** 71.67 56 P P 14 46 40.3 -0.1
baz=71
R30A **Dighton** 71.72 53 P P 14 46 39.9 -0.6
baz=72
M35A **Neola** 71.74 48 P P 14 46 40.1 -0.5
baz=72
S29A **Ulysses** 71.75 54 P P 14 46 40.3 -0.5
baz=72
O33A **Hebron** 71.82 50 P P 14 46 40.5 -0.6
baz=72
SCHQ **Schefferville** 71.98 23 P P 14 46 41.9 +0.1
comp=Z,13nm,1.1s,baz=354,slow=7.1,SNR=3.6
T29A **Hugoton** 71.99 54 P P 14 46 41.8 -0.5
baz=72
U28A **Mallet** 72.04 56 P P 14 46 42.3 -0.4
baz=72
S30A **Montezuma** 72.08 54 P P 14 46 42.4 -0.4
baz=72
Q32A **Meitler Ranch,** 72.11 51 P P 14 46 42.1 -0.8
baz=72
R31A **Burdett** 72.11 52 P P 14 46 42.1 -0.9
baz=72
O34A **Beatrice** 72.19 49 P P 14 46 42.4 -0.9
baz=72
N35A **Tabor** 72.22 48 P P 14 46 43.0 -0.5
baz=72
P33A **Williams Farm,** 72.23 51 P P 14 46 42.7 -0.9
baz=72
ANN **Anapa** 72.24 318 eP P 14 46 40.8 -2.7
ANN e*PP PcP 14 47 00.1 -1.2
ANN pmax pmax
comp=Z,70nm,1.9s
GNI **Garni** 72.27 311⇑ eP P 14 46 45.6 +1.6
GNI pmax pmax
comp=Z,14nm,1.2s
Q33A **Connelly Farm,** 72.48 51 P P 14 46 44.5 -0.6
baz=72
U29A **Oasis Ranch, S** 72.51 55 P P 14 46 44.6 -0.8
baz=72
P34A **Walnut Farm, R** 72.60 50 P P 14 46 44.5 -1.3
baz=72
S32A **Newby Ranch, P** 72.86 53 P P 14 46 46.8 -0.6
baz=73
W28A **Vega** 72.86 56 P P 14 46 47.0 -0.6
baz=73
T31A **Randall Ranch,** 72.91 53 P P 14 46 47.2 -0.4
baz=73
R33A **Olander Ranch,** 72.92 52 P P 14 46 46.9 -0.7
baz=73
Q34A **Chapman** 73.01 50 P P 14 46 47.5 -0.6
baz=73
P35A **Duane Minner,** 73.03 49 P P 14 46 47.9 -0.4
baz=73
KSU1 **Kansas State U** 73.04 50 P P 14 46 47.8 -0.6
baz=73
O36A **Bolckow** 73.11 48 P P 14 46 48.4 -0.3
baz=73
T32A **Huddler Ranch,** 73.25 53 P P 14 46 49.7 0.0
baz=73
W29A **Amarillo** 73.28 56 P P 14 46 50.0 +0.1
baz=73
R34A **Isabella, Hill** 73.31 51 P P 14 46 49.4 -0.6
baz=73
U31A **Nine Bar Ranch** 73.35 54 P P 14 46 50.1 -0.2
baz=73
P36A **Good Intent, A** 73.37 49 P P 14 46 49.6 -0.7
baz=73
X28A **Dimmitt** 73.41 57 P P 14 46 51.2 +0.5
baz=73
AMTX **Amarillo** 73.43 56 P P 14 46 51.1 +0.2
baz=73
AMTX **Amarillo** 73.43 56 eP P 14 46 51.5 +0.6
comp=Z,38nm,1.1s
S33A **Kaszmaul Farm,** 73.44 52 P P 14 46 50.4 -0.3
baz=73
IZEF **Zefreh** 73.45 301 eP P 14 46 50.9 -0.3
MSTX **Muleshoe** 73.48 58 P P 14 46 51.2 0.0
baz=73
Q35A **Mercer Eighty,** 73.52 50 P P 14 46 50.6 -0.7
baz=73
ASAR **Alice Springs** 73.53 199 P P 14 46 51.5 +0.3
comp=Z,2.1nm,0.9s,baz=14,slow=5.9,SNR=26
ASAR LR LR 15 18 06.6
comp=Z,110nm,21.3s,baz=340,slow=35
MNTX **Cornudas Mount** 73.62 61 P P 14 46 52.5 +0.6
baz=73,SNR=18
T33A **Patterson Ranc** 73.69 53 P P 14 46 52.0 -0.2
baz=73
X29A **Tulia** 73.74 57 P P 14 46 53.3 +0.6
baz=74
V31A **Spring Creek L** 73.79 54 P P 14 46 53.4 +0.4
baz=74
U32A **Winter Ranch,** 73.80 54 P P 14 46 53.4 +0.4
baz=74
Y28A **McKinney Farm,** 73.82 57 P P 14 46 53.7 +0.5
baz=74
R35A **Emporia Munici** 73.84 50 P P 14 46 52.6 -0.5
baz=74
W31A **Holland Ranch,** 74.17 55 P P 14 46 55.5 +0.4
baz=74
Y29A **Porterfield Fa** 74.19 57 P P 14 46 55.3 0.0
baz=74
R36A **Gordon, Harris** 74.20 50 P P 14 46 54.5 -0.6
baz=74
Z28A **Tucker Farm, M** 74.20 58 P P 14 46 55.4 0.0
baz=74
X30A **Coker Ranch, T** 74.20 56 P P 14 46 55.6 +0.3
baz=74
U33A **Lingo Farm, Me** 74.24 53 P P 14 46 55.2 -0.3
baz=74
S35A **Otter Creek Ra** 74.26 51 P P 14 46 54.9 -0.6
baz=74
V32A **Arapaho** 74.27 54 P P 14 46 55.8 +0.1
baz=74
T34A **McClaskey Farm** 74.30 52 P P 14 46 55.1 -0.7
baz=74
U34A **Anderson Ranch** 74.55 53 P P 14 46 57.2 -0.1
baz=74
R37A **Teagarden Farm** 74.55 50 P P 14 46 56.6 -0.6
baz=74
X31A **McDonald Ranch** 74.56 55 P P 14 46 57.5 +0.1
baz=74
W32A **Sentinel** 74.60 55 P P 14 46 57.8 +0.2
baz=74
S36A **Lake Cedric, C** 74.60 50 P P 14 46 57.2 -0.4
baz=74
V33A **Lossen Ranch,** 74.61 53 P P 14 46 57.6 0.0
baz=74
Z29A **Hungry Hill Ra** 74.61 57 P P 14 46 58.0 +0.3
baz=74
Y30A **Stafford Cattl** 74.61 56 P P 14 46 58.0 +0.3
baz=74
128A **Castleberry Fa** 74.63 58 P P 14 46 58.0 +0.1
baz=74
T35A **Sooner Cattle** 74.73 52 P P 14 46 57.5 -0.8
baz=74
STHS **Stebnicka Huta** 74.82 330 eP P 14 47 04.5 +5.9
STHS pmax pmax
comp=Z,4.0nm,1.0s
STHS **Stebnicka Huta** 74.82 330 e P 14 47 04.5 +5.9
KOLS **Kolonicke sedl** 74.89 329 eP P 14 46 56.3 -2.7
KOLS **Kolonicke sedl** 74.89 329 eP P 14 46 56.3 -2.7
Y31A **Rekieta Farm,** 74.90 56 P P 14 46 59.5 +0.2
baz=75
Z30A **Sanderson Ranc** 74.91 57 P P 14 46 59.7 +0.2
baz=75
228A **UT Block 9, Go** 74.94 59 P P 14 46 59.8 +0.1
baz=75
T36A **Boggs Farm, Ca** 74.96 51 P P 14 46 59.5 -0.1
baz=75
BURAR **Bucovina Array** 74.97 327 ⇓P P 14 46 59.0 -0.6
BURAR **Bucovina Array** 74.97 327 ⇓ i P P 14 46 59.0 -0.6
S37A **Fort Scott** 74.97 50 P P 14 46 59.2 -0.5
baz=75
129A **Stewart Farms,** 74.98 58 P P 14 47 00.1 +0.2
baz=75
W33A **Caddo, Fort Co** 75.00 54 P P 14 47 00.4 +0.5
baz=75
V34A **Guthrie** 75.01 53 P P 14 47 00.3 +0.3
baz=75
U35A **Pawnee** 75.03 52 P P 14 47 00.2 +0.2
baz=75
X32A **Elmer** 75.10 55 P P 14 47 00.9 +0.4
baz=75
UZH **Uzhgorod** 75.14 329 eP P 14 47 08.0 +7.6
UZH e 14 47 18.5
IPAR **Pars** 75.25 298 eP P 14 47 00.1 -1.7
W34A **Bridge Creek,** 75.32 54 P P 14 47 01.8 +0.1
baz=75
Y32A **R-V Farms, Ver** 75.33 55 P P 14 47 02.0 +0.2
baz=75
T37A **Cheneyville 18** 75.41 50 P P 14 47 02.1 -0.1
baz=75
V35A **Meyer Ranch, C** 75.43 53 P P 14 47 02.5 +0.2
baz=75
X33A **Lawton** 75.44 54 P P 14 47 02.6 +0.2
baz=75
Z31A **Sharp Cattle R** 75.44 56 P P 14 47 02.8 +0.3
baz=75
229A **Bryant Ranch,** 75.50 58 P P 14 47 03.6 +0.7
baz=75
130A **Snyder** 75.52 57 P P 14 47 03.0 +0.1
baz=75
U36A **Oologah** 75.54 51 P P 14 47 03.1 +0.2
baz=75
ISRV **Sarvestan** 75.54 298 eP P 14 47 02.6 -0.9
HDIL **Hopedale** 75.55 45 P P 14 47 02.9 0.0
baz=75
DPC **Dobruska-Polom** 75.57 334 eP P 14 47 02.8 -0.1
DPC e 14 47 22.0
DPC **Dobruska-Polom** 75.57 334 eP P 14 47 02.8 -0.1
DPC epP pP 14 47 22.0 -0.2
DPC ex x 14 47 40.3
CLL **Collm** 75.66 336 ⇓ i P P 14 47 02.3 -1.1
CLL pmax pmax
comp=Z,18nm,1.2s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CLL** | **Collm** | **75.66** | **336** | *e*P | **P** | **14 47 02.3** | **-1.1** |
| | comp=Z,18nm,1.2s,baz=25,slow=5.0 | | | | | | |
| **CLL** | **Collm** | **75.66** | **336** | *e*P | **P** | **14 47 02.3** | **-1.1** |
| **CLL** | **Collm** | **75.66** | **336** | ⇓*i*P | **P** | **14 47 02.3** | **-1.1** |
| | comp=Z,18nm,1.2s | | | | | | |
| CLL | | | | *e*pP | **pP** | **14 47 24.0** | **+1.3** |
| **KRLC** | **Kraliky** | **75.67** | **333** | *e*P | **P** | **14 47 03.1** | **-0.4** |
| **KRLC** | **Kraliky** | **75.67** | **333** | *e*P | **P** | **14 47 03.1** | **-0.4** |
| **329A** | **Wagon Wheel Ra** | **75.75** | **59** | P | **P** | **14 47 04.7** | **+0.4** |
| | baz=76 | | | | | | |
| **X34A** | **Smith Ranch, M** | **75.76** | **54** | P | **P** | **14 47 04.5** | **+0.3** |
| | baz=76 | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **75.77** | **55** | P | **P** | **14 47 04.0** | **-0.3** |
| | baz=76 | | | | | | |
| **131A** | **Roby** | **75.78** | **57** | P | **P** | **14 47 04.5** | **+0.1** |
| | baz=76 | | | | | | |
| **BRG** | **Berggiesshubel** | **75.79** | **335** | *e*P | **P** | **14 47 03.4** | **-0.7** |
| | comp=Z,7.7nm,1.1s | | | | | | |
| BRG | | | | *e* | | 14 47 22.1 | |
| | comp=Z,6.1nm,1.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **75.79** | **335** | *e*P | **P** | **14 47 03.4** | **-0.7** |
| BRG | | | | *e* | | 14 47 22.1 | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **Z32A** | **Haskell** | **75.82** | **56** | P | **P** | **14 47 04.7** | **+0.1** |
| | baz=76 | | | | | | |
| **U37A** | **Salina** | **75.85** | **51** | P | **P** | **14 47 04.8** | **+0.1** |
| | baz=76 | | | | | | |
| **VRI** | **Vrincioaia** | **75.86** | **325** | ⇑P | **P** | **14 47 03.4** | **-1.2** |
| **VRI** | **Vrincioaia** | **75.86** | **325** | ⇑*i*P | **P** | **14 47 03.4** | **-1.2** |
| **W35A** | **Tecumseh** | **75.87** | **53** | P | **P** | **14 47 04.8** | **0.0** |
| | baz=76 | | | | | | |
| **TUL1** | **Tulsa** | **75.87** | **52** | P | **P** | **14 47 04.8** | **0.0** |
| | baz=76 | | | | | | |
| **V36A** | **Jenks** | **75.89** | **52** | P | **P** | **14 47 05.0** | **+0.1** |
| | baz=76 | | | | | | |
| **230A** | **Sterling City** | **75.96** | **58** | P | **P** | **14 47 05.6** | **+0.1** |
| | baz=76 | | | | | | |
| **IKAZ** | **Kazeroun** | **76.01** | **299** | *e*P | **P** | **14 47 04.6** | **-1.6** |
| **U38A** | **Gravette** | **76.21** | **51** | P | **P** | **14 47 06.4** | **-0.4** |
| | baz=76 | | | | | | |
| **W36A** | **Wetumka** | **76.22** | **53** | P | **P** | **14 47 07.0** | **+0.1** |
| | baz=76 | | | | | | |
| **V37A** | **Hulbert** | **76.23** | **51** | P | **P** | **14 47 07.0** | **+0.1** |
| | baz=76 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **76.23** | **55** | P | **P** | **14 47 07.2** | **+0.2** |
| | baz=76 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **76.24** | **57** | P | **P** | **14 47 07.4** | **+0.3** |
| | baz=76 | | | | | | |
| **330A** | **Mertzon** | **76.28** | **58** | P | **P** | **14 47 07.5** | **+0.2** |
| | baz=76 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **76.29** | **54** | P | **P** | **14 47 07.7** | **+0.4** |
| | baz=76 | | | | | | |
| **TXAR** | **Lajitas Array** | **76.36** | **61** | P | **P** | **14 47 08.3** | **+0.5** |
| | comp=Z,12nm,0.9s,baz=297,slow=3.9,SNR=69 | | | | | | |
| **231A** | **Bronte** | **76.37** | **57** | P | **P** | **14 47 08.0** | **+0.2** |
| | baz=76 | | | | | | |
| **X35A** | **Drake** | **76.38** | **54** | P | **P** | **14 47 07.5** | **-0.2** |
| | baz=76 | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **76.41** | **334** | *e*P | **P** | **14 47 07.4** | **-0.3** |
| GOPC | | | | *e* | | 14 47 26.4 | |
| **GOPC** | **GO Pecny, Ondr** | **76.41** | **334** | *e*P | **P** | **14 47 07.4** | **-0.3** |
| GOPC | | | | *e*pP | **pP** | **14 47 26.4** | **-0.6** |
| **PRU** | **Pruhonice** | **76.41** | **334** | *e*P | **P** | **14 47 06.6** | **-1.1** |
| **PRU** | **Pruhonice** | **76.41** | **334** | *e*P | **P** | **14 47 06.6** | **-1.1** |
| **PRU** | **Pruhonice** | **76.41** | **334** | *e*P | **P** | **14 47 06.6** | **-1.1** |
| **VYHS** | **Vyhne** | **76.42** | **331** | *e*P | **P** | **14 47 06.3** | **-1.4** |
| **VYHS** | **Vyhne** | **76.42** | **331** | *e*P | **P** | **14 47 06.3** | **-1.4** |
| **429A** | **Davenport Ranc** | **76.44** | **59** | P | **P** | **14 47 08.3** | **0.0** |
| | baz=76 | | | | | | |
| **MLR** | **Muntele Rosu** | **76.47** | **325** | ⇓P | **P** | **14 47 06.4** | **-1.9** |
| **MLR** | **Muntele Rosu** | **76.47** | **325** | ⇓*i*P | **P** | **14 47 06.4** | **-1.9** |
| **X36A** | **Centrahoma** | **76.59** | **53** | P | **P** | **14 47 09.2** | **+0.3** |
| | baz=76 | | | | | | |
| **529A** | **Stev Forest Ra** | **76.62** | **60** | P | **P** | **14 47 09.6** | **+0.3** |
| | baz=76 | | | | | | |
| **V38A** | **Canehill** | **76.64** | **51** | P | **P** | **14 47 09.1** | **-0.1** |
| | baz=76 | | | | | | |
| **Z34A** | **Collier Ranch,** | **76.64** | **55** | P | **P** | **14 47 09.3** | **+0.1** |
| | baz=76 | | | | | | |
| **W37A** | **Quinton** | **76.65** | **52** | P | **P** | **14 47 09.4** | **+0.1** |
| | baz=76 | | | | | | |
| **133A** | **Hamilton Ranch** | **76.66** | **56** | P | **P** | **14 47 09.1** | **-0.3** |
| | baz=76 | | | | | | |
| **430A** | **Baggett Ranch,** | **76.70** | **59** | P | **P** | **14 47 09.8** | **+0.1** |
| | baz=76 | | | | | | |
| **Y35A** | **Marietta** | **76.72** | **54** | P | **P** | **14 47 09.6** | **-0.1** |
| | baz=76 | | | | | | |
| **SFIN** | **Scholer Farm** | **76.72** | **43** | P | **P** | **14 47 09.4** | **-0.2** |
| | baz=76 | | | | | | |
| **331A** | **San Angelo** | **76.78** | **58** | P | **P** | **14 47 10.2** | **+0.1** |
| | baz=77 | | | | | | |
| **232A** | **Coleman** | **76.79** | **57** | P | **P** | **14 47 10.4** | **+0.2** |
| | baz=77 | | | | | | |
| **VOIR** | | **76.86** | **326** | ⇑P | **P** | **14 47 10.3** | **-0.1** |
| **VOIR** | | **76.86** | **326** | ⇑*i*P | **P** | **14 47 10.3** | **-0.1** |
| **Z35A** | **Perchaven, San** | **77.03** | **54** | P | **P** | **14 47 11.1** | **-0.3** |
| | baz=77 | | | | | | |
| **X37A** | **Clayton** | **77.10** | **52** | P | **P** | **14 47 11.8** | **0.0** |
| | baz=77 | | | | | | |
| **233A** | **Rising Star** | **77.11** | **56** | P | **P** | **14 47 12.0** | **+0.1** |
| | baz=77 | | | | | | |
| **332A** | **Millersview** | **77.11** | **57** | P | **P** | **14 47 12.2** | **+0.3** |
| | baz=77 | | | | | | |
| **530A** | **J-C Ranch, Com** | **77.11** | **59** | P | **P** | **14 47 12.4** | **+0.4** |
| | baz=77 | | | | | | |
| **Y36A** | **Durant** | **77.13** | **53** | P | **P** | **14 47 11.9** | **-0.1** |
| | baz=77 | | | | | | |
| **431A** | **Sonora** | **77.14** | **58** | P | **P** | **14 47 12.4** | **+0.3** |
| | baz=77 | | | | | | |
| **134A** | **White-Moore Ra** | **77.15** | **56** | P | **P** | **14 47 12.1** | **0.0** |
| | baz=77 | | | | | | |
| **W38A** | **Poteau** | **77.18** | **52** | P | **P** | **14 47 12.3** | **+0.1** |
| | baz=77 | | | | | | |
| **X38A** | **Whitesboro** | **77.33** | **52** | P | **P** | **14 47 13.0** | **0.0** |
| | baz=77 | | | | | | |
| **432A** | **Menard** | **77.46** | **58** | P | **P** | **14 47 13.9** | **0.0** |
| | baz=77 | | | | | | |
| **KHC** | **Kasperske Hory** | **77.46** | **335** | *e*P | **P** | **14 47 13.5** | **-0.1** |
| KHC | | | | *e* | | 14 47 31.5 | |
| **KHC** | **Kasperske Hory** | **77.46** | **335** | *e*P | **P** | **14 47 13.5** | **-0.1** |
| KHC | | | | *e*pP | **pP** | **14 47 31.5** | **-1.5** |
| KHC | | | | *e*x | x | 14 47 52.9 | |
| **KHC** | **Kasperske Hory** | **77.46** | **335** | *e*P | **P** | **14 47 13.5** | **-0.1** |
| **KHC** | **Kasperske Hory** | **77.46** | **335** | *e*P | **P** | **14 47 13.5** | **-0.1** |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **Z36A** | **Blue Ridge** | **77.53** | **54** | P | **P** | **14 47 14.0** | **-0.2** |
| | baz=77 | | | | | | |
| **135A** | **Vickery Place,** | **77.53** | **55** | P | **P** | **14 47 14.5** | **+0.2** |
| | baz=77 | | | | | | |
| **234A** | **Clairette** | **77.55** | **56** | P | **P** | **14 47 14.3** | **0.0** |
| | baz=77 | | | | | | |
| **531A** | **Rocksprings** | **77.56** | **59** | P | **P** | **14 47 14.8** | **+0.3** |
| | baz=77 | | | | | | |
| **333A** | **Richland Sprin** | **77.58** | **57** | P | **P** | **14 47 15.0** | **+0.4** |
| | baz=77 | | | | | | |
| **GRF** | **Grafenberg Arr** | **77.61** | **336** | *e*P | **P** | **14 47 14.1** | **-0.3** |
| | comp=Z,42nm,1.4s,baz=25,slow=5.0 | | | | | | |
| **WET** | **Wettzell** | **77.65** | **335** | *e*P | **P** | **14 47 14.6** | **-0.1** |
| | comp=Z,20nm,1.3s,baz=25,slow=5.0 | | | | | | |
| **GERES** | **GERESS Array B** | **77.68** | **334** | P | **P** | **14 47 14.2** | **-0.7** |
| | comp=Z,1.3nm,0.6s,baz=42,slow=4.5,SNR=10.0 | | | | | | |
| **JCT** | **Junction City** | **77.75** | **58** | *e*P | **P** | **14 47 15.8** | **+0.2** |
| JCT | | | | pmax | pmax | | |
| | comp=Z,44nm,1.3s | | | | | | |
| **JCT** | **Junction City** | **77.75** | **58** | P | **P** | **14 47 15.7** | **+0.2** |
| | baz=78,SNR=10.0 | | | | | | |
| **JCT** | **Junction City** | **77.75** | **58** | *e*P | **P** | **14 47 15.8** | **+0.2** |
| | comp=Z,44nm,1.3s | | | | | | |
| **GRB3** | **Grafenberg Arr** | **77.77** | **336** | *e*P | **P** | **14 47 14.9** | **-0.4** |
| | baz=25,slow=5.0 | | | | | | |
| **WHTX** | **Lake Whitney** | **77.94** | **56** | P | **P** | **14 47 16.7** | **+0.2** |
| | baz=78 | | | | | | |
| **433A** | **Art** | **77.95** | **57** | P | **P** | **14 47 16.8** | **+0.1** |
| | baz=78 | | | | | | |
| **532A** | **Rocksprings** | **77.95** | **58** | P | **P** | **14 47 17.0** | **+0.3** |
| | baz=78 | | | | | | |
| **BZS** | **Buzias** | **77.97** | **328** | ⇓P | **P** | **14 47 15.9** | **-0.5** |
| **BZS** | **Buzias** | **77.97** | **328** | ⇓*i*P | **P** | **14 47 15.9** | **-0.5** |
| **BRTR** | **Keskin Array B** | **77.98** | **317** | P | **P** | **14 47 16.3** | **-0.5** |
| | comp=Z,1.8nm,0.9s,baz=55,slow=3.5,SNR=5.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **77.98** | **317** | *i* P | **P** | **14 47 17.2** | **+0.4** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **334A** | **Lometa** | **78.00** | **56** | P | **P** | **14 47 17.2** | **+0.4** |
| | baz=78 | | | | | | |
| **Z37A** | **Pogue Cattle C** | **78.02** | **53** | P | **P** | **14 47 16.9** | **-0.1** |
| | baz=78 | | | | | | |
| **MEM** | **Membach** | **78.08** | **340** | P | **P** | **14 47 16.7** | **-0.2** |
| | comp=Z,7.7nm,1.1s | | | | | | |
| **136A** | **Ennis** | **78.08** | **55** | P | **P** | **14 47 17.1** | **-0.2** |
| | baz=78 | | | | | | |
| **MIAR** | **Mount Ida** | **78.08** | **51** | P | **P** | **14 47 17.3** | **+0.1** |
| | baz=78,SNR=9.2 | | | | | | |
| **631A** | **Perdido Creek** | **78.10** | **59** | P | **P** | **14 47 17.5** | **0.0** |
| | baz=78 | | | | | | |
| **Y39A** | **Lockesburg** | **78.28** | **52** | P | **P** | **14 47 18.2** | **-0.1** |
| | baz=78 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **78.33** | **53** | P | **P** | **14 47 18.7** | **0.0** |
| | baz=78 | | | | | | |
| **434A** | **Burnet** | **78.37** | **57** | P | **P** | **14 47 19.0** | **0.0** |
| | baz=78 | | | | | | |
| **137A** | **Heron Place, G** | **78.41** | **54** | P | **P** | **14 47 19.4** | **+0.3** |
| | baz=78 | | | | | | |
| **BCLA** | **Clavier** | **78.41** | **340** | P | **P** | **14 47 18.6** | **-0.2** |
| **236A** | **Katherine and** | **78.44** | **55** | P | **P** | **14 47 19.4** | **+0.1** |
| | baz=78 | | | | | | |
| **632A** | **Uvalde** | **78.49** | **59** | P | **P** | **14 47 20.3** | **+0.7** |
| | baz=78 | | | | | | |
| **533A** | **Kerrville** | **78.49** | **58** | P | **P** | **14 47 20.2** | **+0.5** |
| | baz=78 | | | | | | |
| **138A** | **Matatall Enter** | **78.72** | **54** | P | **P** | **14 47 21.0** | **+0.2** |
| | baz=78 | | | | | | |
| **336A** | **Riesel** | **78.73** | **55** | P | **P** | **14 47 21.6** | **+0.8** |
| | baz=78 | | | | | | |
| **Z39A** | **Irene McRaven,** | **78.76** | **53** | P | **P** | **14 47 21.2** | **+0.2** |
| | baz=78 | | | | | | |
| **435B** | **Jarrell** | **78.78** | **56** | P | **P** | **14 47 21.4** | **+0.3** |
| | baz=79 | | | | | | |
| **WCI** | **Wyandotte Cave** | **78.81** | **44** | *e*P | **P** | **14 47 21.5** | **+0.3** |
| WCI | | | | pmax | pmax | | |
| | comp=Z,162nm,1.2s | | | | | | |
| **WCI** | **Wyandotte Cave** | **78.81** | **44** | *e*P | **P** | **14 47 21.5** | **+0.3** |
| | comp=Z,162nm,1.2s | | | | | | |
| **237A** | **Washetta, Mont** | **78.83** | **54** | P | **P** | **14 47 21.8** | **+0.3** |
| | baz=79 | | | | | | |
| **534A** | **Blanco** | **78.84** | **57** | P | **P** | **14 47 21.9** | **+0.3** |
| | baz=79 | | | | | | |
| **633A** | **Saathoff Ranch** | **78.87** | **58** | P | **P** | **14 47 22.3** | **+0.6** |
| | baz=79 | | | | | | |
| **732A** | **Laxson Ranch,** | **78.96** | **59** | P | **P** | **14 47 23.3** | **+1.1** |
| | baz=79 | | | | | | |
| **238A** | **Jacksonville** | **79.21** | **54** | P | **P** | **14 47 24.4** | **+0.9** |
| | baz=79 | | | | | | |
| **832A** | **Faith Ranch, C** | **79.30** | **60** | P | **P** | **14 47 24.7** | **+0.6** |
| | baz=79 | | | | | | |
| **733A** | **Divot King Ran** | **79.36** | **59** | P | **P** | **14 47 25.0** | **+0.6** |
| | baz=79 | | | | | | |
| **KBA** | **Koelnbreinsper** | **79.38** | **334** | ⇑*i*P | **P** | **14 47 24.8** | **+0.4** |
| | comp=Z,18nm,1.0s | | | | | | |
| **437A** | **Phantom Ranch,** | **79.55** | **55** | P | **P** | **14 47 26.0** | **+0.6** |
| | baz=79 | | | | | | |
| **239A** | **Gary** | **79.55** | **54** | P | **P** | **14 47 25.9** | **+0.6** |
| | baz=79 | | | | | | |
| **338A** | **Crockett** | **79.60** | **54** | P | **P** | **14 47 26.3** | **+0.7** |
| | baz=79 | | | | | | |
| **833A** | **Chaparral WMA,** | **79.60** | **59** | P | **P** | **14 47 26.6** | **+0.9** |
| | baz=79 | | | | | | |
| **BFO** | **Black Forest** | **79.62** | **338** | *i* P | **P** | **14 47 26.2** | **+0.7** |
| **NATX** | **Nacogdoches** | **79.64** | **54** | P | **P** | **14 47 26.3** | **+0.4** |
| | baz=79 | | | | | | |
| **734A** | **La Parita Cree** | **79.69** | **58** | P | **P** | **14 47 27.0** | **+0.9** |
| | baz=80 | | | | | | |
| **WTTA** | **Wattenberg** | **79.71** | **335** | ⇑*i*P | **P** | **14 47 26.0** | **-0.2** |
| | comp=Z,13nm,0.7s | | | | | | |
| **635A** | **Leesville** | **79.73** | **57** | P | **P** | **14 47 27.2** | **+0.8** |
| | baz=80 | | | | | | |
| **MOTA** | **Moosalm** | **79.78** | **335** | ⇑*i*P | **P** | **14 47 26.6** | **0.0** |
| | comp=Z,22nm,1.1s | | | | | | |
| **DIVS** | **Divibare** | **79.86** | **328** | ⇓*i*P | **P** | **14 47 25.4** | **-1.5** |
| **438A** | **Sam Houston St** | **79.97** | **55** | P | **P** | **14 47 28.6** | **+1.0** |
| | baz=80 | | | | | | |
| **537A** | **Green Hill Far** | **80.02** | **56** | P | **P** | **14 47 29.1** | **+1.2** |
| | baz=80 | | | | | | |
| **636A** | **Smothers Creek** | **80.06** | **57** | P | **P** | **14 47 29.1** | **+0.9** |
| | baz=80 | | | | | | |
| **735A** | **Kenedy** | **80.11** | **58** | P | **P** | **14 47 29.5** | **+1.1** |
| | baz=80 | | | | | | |
| **DAVA** | **Damuels** | **80.17** | **336** | ⇑*i*P | **P** | **14 47 28.8** | **+0.2** |
| | comp=Z,22nm,1.1s | | | | | | |
| **FETA** | **Feichten** | **80.18** | **336** | ⇑*i*P | **P** | **14 47 28.8** | **+0.1** |
| | comp=Z,10nm,1.0s | | | | | | |
| **933A** | **Laredo** | **80.21** | **60** | P | **P** | **14 47 30.2** | **+1.3** |
| | baz=80 | | | | | | |
| **834A** | **Tilden** | **80.24** | **59** | P | **P** | **14 47 30.5** | **+1.4** |
| | baz=80 | | | | | | |
| **OXF** | **Oxford** | **80.25** | **49** | *e*P | **P** | **14 47 28.8** | **-0.3** |
| OXF | | | | pmax | pmax | | |
| | comp=Z,83nm,1.2s | | | | | | |
| **OXF** | **Oxford** | **80.25** | **49** | *e*P | **P** | **14 47 28.8** | **-0.3** |
| | comp=Z,83nm,1.2s | | | | | | |
| **340A** | **Bronson** | **80.33** | **54** | P | **P** | **14 47 29.7** | **+0.2** |
| | baz=80 | | | | | | |
| **439A** | **Center Grove,** | **80.33** | **54** | P | **P** | **14 47 30.4** | **+0.9** |
| | baz=80 | | | | | | |
| **736A** | **Circle Diamond** | **80.45** | **57** | P | **P** | **14 47 31.6** | **+1.3** |
| | baz=80 | | | | | | |
| **835A** | **Beeville** | **80.53** | **58** | P | **P** | **14 47 31.8** | **+1.1** |
| | baz=80 | | | | | | |
| **934A** | **Benavides** | **80.65** | **59** | P | **P** | **14 47 32.5** | **+1.1** |
| | baz=80 | | | | | | |
| **034A** | **Hebbronville** | **80.96** | **60** | P | **P** | **14 47 34.2** | **+1.2** |
| | baz=81 | | | | | | |
| **TUE** | **Stuetta** | **81.07** | **336** | *e*P | **P** | **14 47 32.8** | **-0.7** |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **035A** | **Encino** | **81.40** | **59** | P | **P** | **14 47 36.5** | **+1.2** |
| | baz=81 | | | | | | |
| **VBMS** | **Vicksburg** | **81.49** | **51** | P | **P** | **14 47 36.5** | **+0.7** |
| | baz=81 | | | | | | |
| **KMSC** | **Kings Mountain** | **83.63** | **43** | P | **P** | **14 47 46.5** | **-0.3** |
| | baz=83 | | | | | | |
| **RAYN** | **Ar Rayn** | **84.43** | **299** | *e*P | **P** | **14 47 50.5** | **-0.6** |
| | comp=Z,14nm,1.1s | | | | | | |
| **TIGA** | **Tifton** | **85.61** | **46** | P | **P** | **14 47 57.0** | **+0.1** |
| | baz=85 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **114.41** | **330** | PKP | PKPdf | 14 53 57.0 | -1.2 |
| | comp=Z,0.6nm,0.8s,baz=353,slow=2.2,SNR=3.9 | | | | | | |
| **SYO** | **Syowa Base** | **142.25** | **212** | ⇑*e*pPdiff | pPdif | 14 52 32.6 | +2.6 |
| **CPUP** | **Villa Florida** | **147.32** | **60** | PKPbc | **PKPbc** | **14 55 01.2** | **-0.3** |
| | comp=Z,4.3nm,1.0s,baz=355,slow=1.2,SNR=5.3 | | | | | | |

*AUST* ***04*** *14:35:50.9, 3°.00N×128°.50E, h200km*
*ISCJB* ***04*** *14:35:52.3±0.5, 2°.75N±0°.05×128°.23E±0°.06, h200km, mb3.8/6, Error ellipse: s-maj=9.7km s-min=5.6km az=142.9*
*IDC* ***04*** *14:35:52.7±2.6, 2°.75N×128°.26E, h188km±26km, mb3.6/7, mb1 3.7/8, mb1mx3.4/40, mbtmp4.1/8, Error ellipse: s-maj=45.5km s-min=13.6km az=67.0*
*DJA* ***04*** *14:35:52.1±1.0, 3°N±9°×12°8E±°, h165km±10km, M4.3/13, mb4.2/9, mB4.7/1, MLv4.3/13, Mw(mB)3.9/1*
**ISC 04 14:35:54.0**±0.7**, 2°.73N**±0°.10×**128°.21E**±0°.09**, h200km, n43,** σ**0ˢ.82**/43**, mb3.9**/6**, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.12** | **204** | P | **Pn** | **14 36 32.0** | **-1.8** |
| **SGSI** | **Sangihe** | **2.84** | **290** | P | Pn | 14 36 38.0 | -3.8 |
| **LBMI** | **Labuha** | **3.42** | **192** | P | **Pn** | **14 36 47.4** | **-1.3** |
| **SWI** | **Sorong** | **4.69** | **140** | P | **Pn** | **14 37 03.6** | **-0.9** |
| | baz=4.7,SNR=4.3 | | | | | | |
| **SWI** | **Sorong** | **4.69** | **140** | P | **Pn** | **14 37 03.6** | **-0.9** |
| **SIJI** | **Sorong** | **4.70** | **139** | P | **Pn** | **14 37 03.4** | **-1.3** |
| | 3.1nm,0.3s,baz=335,slow=14,SNR=5.5 | | | | | | |
| **KMSI** | **Cibinong** | **4.74** | **243** | P | **Pn** | **14 37 04.3** | **-0.8** |
| **SANI** | **Sanana** | **5.25** | **205** | P | **Pn** | **14 37 09.9** | **-1.7** |
| | 25nm,0.8s,957nm0.1nm | | | | | | |
| **GTOI** | **Gorontalo** | **5.60** | **248** | P | **Pn** | **14 37 15.6** | **-0.5** |
| | 37nm,0.5s,0.3nm | | | | | | |
| **NLAI** | **Namlea** | **6.04** | **191** | P | **Pn** | **14 37 21.3** | **-0.4** |
| | 17nm,0.6s,0.1nm | | | | | | |
| **LUWI** | **Luwuk** | **6.61** | **236** | P | **Pn** | **14 37 29.3** | **+0.1** |
| | baz=7.0,SNR=7.2 | | | | | | |
| **LUWI** | **Luwuk** | **6.61** | **236** | P | **Pn** | **14 37 29.1** | **-0.1** |
| | 37nm,1.1s,0.4nm | | | | | | |
| **MRSI** | **Marisa** | **6.66** | **250** | P | **Pn** | **14 37 30.0** | **+0.2** |
| | 62nm,0.9s,0.2nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.91** | **144** | P | **Pn** | **14 37 33.9** | **+0.7** |
| | baz=7.0,SNR=8.1 | | | | | | |
| **APSI** | **Ampana** | **7.50** | **241** | P | **Pn** | **14 37 39.5** | **-1.2** |
| | 31nm,1.1s,0.2nm | | | | | | |
| **TTSI** | **Tana Toraja** | **10.17** | **236** | P | **Pn** | **14 38 15.6** | **+0.2** |
| | 12nm,1.6s | | | | | | |
| **JAY** | **Jayapura** | **13.53** | **113** | P | **P** | **14 39 01.5** | **+0.8** |
| | baz=13,SNR=7.3 | | | | | | |
| **MTN** | **Manton Dam** | **15.74** | **169** | P | **P** | **14 39 24.1** | **-1.1** |
| | baz=16,SNR=20 | | | | | | |
| **KDU** | **Kakadu** | **15.89** | **165** | P | **P** | **14 39 26.1** | **-0.7** |
| | baz=16,SNR=6.6 | | | | | | |
| **KSM** | **Kuching** | **17.94** | **266** | P | **Pn** | **14 39 51.7** | **+0.2** |
| | baz=18,SNR=4.0 | | | | | | |
| **KNRA** | **Kununurra** | **18.30** | **178** | P | **P** | **14 39 53.6** | **+0.5** |
| | baz=19,SNR=22 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.86** | **187** | P | **P** | **14 40 19.8** | **-0.8** |
| | 2.4nm,0.7s,baz=8.1,slow=7.8,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.86** | **187** | P | **P** | **14 40 22.7** | **+2.1** |
| | baz=21,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.32** | **165** | P | **P** | **14 40 44.1** | **-0.3** |
| | 10nm,0.6s,baz=344,slow=10,SNR=100 | | | | | | |
| **QIS** | **Mount Isa** | **25.70** | **155** | P | **P** | **14 41 06.0** | **0.0** |
| | baz=26,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **26.82** | **168** | P | **P** | **14 41 15.8** | **-0.1** |
| | 1.9nm,0.5s,baz=351,slow=7.5,SNR=60 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 44 33.6** | **+0.1** |
| | 0.7nm,0.4s,baz=357,slow=2.0,SNR=10 | | | | | | |
| **WRKA** | **Warakurna** | **27.60** | **180** | P | **P** | **14 41 23.2** | **+0.2** |
| | baz=28,SNR=19 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.65** | **301** | P | **P** | **14 42 08.0** | **+0.6** |
| | 1.4nm,0.8s,baz=122,slow=7.1,SNR=7.4 | | | | | | |
| **BBOO** | **Buckleboo** | **36.12** | **169** | P | **P** | **14 42 37.7** | **+0.7** |
| | baz=36,SNR=16 | | | | | | |
| **HTT** | **Hallett** | **37.36** | **165** | P | **P** | **14 42 46.5** | **-1.1** |
| | baz=38,SNR=3.8 | | | | | | |
| **ARPS** | **Mount Arapiles** | **41.30** | **163** | P | **P** | **14 43 21.2** | **+1.3** |
| | baz=42,SNR=7.8 | | | | | | |
| **ODAN** | **Odare** | **45.85** | **306** | *e*P | **P** | **14 43 56.5** | **-0.3** |
| | 12nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **46.53** | **305** | *e*P | **P** | **14 44 02.1** | **0.0** |
| | 16nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **47.51** | **306** | *e*P | **P** | **14 44 10.1** | **+0.4** |
| | 22nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **47.75** | **305** | *e*P | **P** | **14 44 11.2** | **-0.4** |
| | 4.9nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **47.76** | **305** | *e*P | **P** | **14 44 11.5** | **-0.1** |
| | 3.5nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **47.94** | **306** | *e*P | **P** | **14 44 12.9** | **0.0** |
| | 4.9nm,0.5s | | | | | | |
| **DMN** | **Daman** | **48.01** | **305** | *e*P | **P** | **14 44 13.6** | **+0.1** |
| | 11nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | **48.55** | **306** | *e*P | **P** | **14 44 17.2** | **-0.3** |
| | 11nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **48.72** | **341** | P | **P** | **14 44 17.7** | **-0.7** |
| | 0.9nm,0.5s,baz=158,slow=7.6,SNR=3.9 | | | | | | |
| **KOLN** | **Koldanda** | **49.31** | **305** | *e*P | **P** | **14 44 22.8** | **-0.5** |
| | 19nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.22** | **325** | P | **P** | **14 45 34.0** | **-0.3** |
| | 1.6nm,0.4s,baz=117,slow=8.2,SNR=9.8 | | | | | | |
| **VNDA** | **Vanda** | **82.26** | **173** | P | **P** | **14 47 53.0** | **+0.5** |
| | 0.9nm,0.8s,baz=306,slow=7.7,SNR=9.6 | | | | | | |

**MAN 04 14:41:04, 16°.77N×119°.71E, h33km, mb4.8, ML3.7, MS3.7, 1C, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BOLP** | **Bolinao** | **0.43** | **153** | *e*P | Pn | 14 41 14.8 | +0.9 |
| BOLP | | | | *e*S | Sn | 14 41 22.4 | +1.8 |
| **BCPH** | **Baguio City Da** | **0.92** | **115** | ⇑*i*P | Pn | 14 41 20.6 | -0.2 |
| BCPH | | | | *i* S | Sb | 14 41 33.5 | -0.3 |
| **SCZP** | **Santa Cruz** | **1.00** | **169** | *e*P | Pn | 14 41 21.6 | -0.1 |
| SCZP | | | | *e*S | Sn | 14 41 29.8 | -5.0 |
| **ABRA** | **Dolores** | **1.30** | **47** | *e*P | Pn | 14 41 25.6 | -0.3 |
| ABRA | | | | *e*S | Sn | 14 41 42.2 | +0.2 |
| **CAUP** | **Cauayan** | **2.03** | **85** | *e*P | Pb | 14 41 39.5 | -0.8 |
| **BALP** | **Baler** | **2.06** | **119** | *e*P | Pb | 14 41 39.2 | -1.6 |

*ISK* ***04*** *14:48:18.3, 37°.23N×28°.17E, h5km, MD2.5*
*ISCJB* ***04*** *14:48:19.5±0.5, 37°.20N±0°.05×28°.17E±0°.05, h3km±12km, Error ellipse: s-maj=9.2km s-min=4.7km az=39.9*
*DDA* ***04*** *14:48:19.7, 37°.20N×28°.23E, h12km, Md2.6*
*CSEM* ***04*** *14:48:19.2±0.3, 37°.17N×28°.12E, h10km, MD2.5, Error ellipse: s-maj=7.9km s-min=4.9km az=46.0*
**ISC 04 14:48:18.9**±1.0**, 37°.18N**±0°.03×**28°.11E**±0°.03**, h10**km±9km**, n20,** σ**0ˢ.56**/30**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.14** | **107** | *e*PG | **Pg** | **14 48 21.7** | **-0.5** |
| **YER** | **Yerkesik** | **0.14** | **107** | *e*Pg | **Pg** | **14 48 21.7** | **-0.5** |
| **TURN** | **Turunc** | **0.49** | **127** | *i* P | **Pg** | **14 48 27.6** | **-0.9** |
| TURN | | | | *i* S | **Sg** | **14 48 35.7** | **+0.7** |
| **TURN** | **Turunc** | **0.49** | **127** | P | **Pg** | **14 48 27.6** | **-0.9** |
| TURN | | | | S | **Sg** | **14 48 35.7** | **+0.7** |
| **AYDN** | **Tasoluk** | **0.52** | **339** | *i* P | **Pb** | **14 48 30.5** | **+0.3** |
| AYDN | | | | *i* S | **Sb** | **14 48 37.3** | **-0.5** |
| **AYDN** | **Tasoluk** | **0.52** | **339** | P | **Pb** | **14 48 30.5** | **+0.3** |
| AYDN | | | | S | **Sb** | **14 48 37.3** | **-0.5** |
| **BDRM** | **Kayabasi** | **0.55** | **259** | *i* P | **Pg** | **14 48 28.8** | **-0.7** |
| BDRM | | | | *i* S | **Sn** | **14 48 41.4** | **-0.6** |
| **BDRM** | **Kayabasi** | **0.55** | **259** | P | **Pg** | **14 48 28.8** | **-0.7** |
| BDRM | | | | S | **Sn** | **14 48 41.4** | **-0.6** |
| **DALY** | **Dalyan (Mu˜la** | **0.56** | **129** | *e*PG | **Pb** | **14 48 30.4** | **-0.4** |
| DALY | | | | *e*SG | **Sb** | **14 48 39.4** | **+0.6** |
| **DALY** | **Dalyan (Mu˜la** | **0.56** | **129** | *e*Pg | **Pb** | **14 48 30.4** | **-0.4** |
| DALY | | | | *e*Sg | **Sb** | **14 48 39.4** | **+0.6** |
| **BODT** | **Bodrum** | **0.65** | **260** | *e*PG | **Pb** | **14 48 33.1** | **+0.7** |
| **BODT** | **Bodrum** | **0.65** | **260** | *e*Pg | **Pb** | **14 48 33.1** | **+0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.79** | **347** | *e*PG | **Pg** | **14 48 33.7** | **-0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.79** | **347** | *e*Pg | **Pg** | **14 48 33.7** | **-0.5** |
| **FETY** | **Fethiye** | **0.95** | **124** | *e*PG | **Pb** | **14 48 37.7** | **+0.3** |
| **FETY** | **Fethiye** | **0.95** | **124** | *e*Pg | **Pb** | **14 48 37.7** | **+0.3** |
| **MANT** | **Manisa** | **1.36** | **15** | *i* P | **Pb** | **14 48 44.6** | **0.0** |
| MANT | | | | *i* S | **Sn** | **14 49 02.4** | **0.0** |
| **MANT** | **Manisa** | **1.36** | **15** | P | **Pb** | **14 48 44.6** | **0.0** |
| MANT | | | | S | **Sn** | **14 49 02.4** | **0.0** |
| **KULA** | **Kula-Manisa** | **1.41** | **18** | *e*PN | **Pn** | **14 48 45.0** | **+0.3** |
| **KULA** | **Kula-Manisa** | **1.41** | **18** | *e*Pn | **Pn** | **14 48 45.0** | **+0.3** |

*PGC* ***04*** *14:51:50.4±1.4, 49°.10N×129°.66W, h10km, ML4.0/33, Mw5.0, 240km southwest of Pt. Hardy, Bc Vancouver Island Region*
*IDC* ***04*** *14:51:50.7±0.7, 49°.15N×129°.71W, h0km, mb4.1/17, mb1 4.4/25, mb1mx4.2/56, mbtmp4.2/25, ML3.8/8, MS4.4/6, Ms1 4.4/6, ms1mx3.9/56, Error ellipse: s-maj=17.3km s-min=10.9km az=43.0*
*MOS* ***04*** *14:51:52.9±1.4, 49°.32N×129°.26W, h10km, mb5.0/10, Error ellipse: s-maj=11.6km s-min=5.6km az=119.5*
*BJI* ***04*** *14:51:53.5, 49°.30N×129°.20W, h10km, mb5.1/12, mB5.3/9, Ms5.0/5, Ms7 4.6/5*
*GCMT* ***04*** *14:51:54.5±0.5, 49°.08N×129°.48W, h16km±2km, MW5.3/72, Moment Tensor Solution. s25,c29; s72,c97; Duration: 1ˢ.1 Moment tensor: Scale 10^17Nm; Mrr-0.26±.07; Mθθ-0.69±.05; Mφφ0.95±.06; Mrθ0.18±.16; Mθφ0.16±.04; Mφr-0.82±.24; Best double couple: Mo1.14600×10^17 NP1:φs330.00000°, δ84.00000°, λ-131.00000°. NP2: φs233.00000°, δ42.00000°, λ-10.00000°. Principal axes: T 1.3700, Plg27.0000°, Azm92.0000°; N -0.4490, Plg41.0000°, Azm336.0000°; P -0.9210, Plg37.0000°, Azm204.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC* ***04*** *14:51:54.5±0.4, 49°.36N×129°.32W, h10km, mb4.8/42, MW5.0(OTT) Error ellipse: s-maj=7.6km s-min=3.3km az=48.0*
**ISC 04 14:51:55.3**±0.6**, 49°.31N**±0°.05×**129°.34W**±0°.04**, h19**km±2km**, n622,** σ**1ˢ.12**/628**, mb4.5**/36**, MS4.2**/3**, 4D, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.54** | **30** | Pn | **Pn** | **14 52 19.9** | **-1.9** |
| HOLB | | | | Sn | **Sn** | **14 52 41.3** | **0.0** |
| **HOLB** | **Holberg** | **1.54** | **30** | Pn | **Pn** | **14 52 19.9** | **-1.9** |
| HOLB | | | | Sn | **Sn** | **14 52 41.3** | **0.0** |
| **EDB** | **Eliza Dome** | **1.55** | **68** | Pn | **Pn** | **14 52 19.7** | **-2.2** |
| EDB | | | | Sn | **Sn** | **14 52 41.0** | **-0.4** |
| **EDB** | **Eliza Dome** | **1.55** | **68** | Pn | **Pn** | **14 52 19.7** | **-2.2** |
| EDB | | | | Sn | **Sn** | **14 52 41.0** | **-0.4** |
| **FHRB** | **Fair Harbour** | **1.62** | **62** | Pn | **Pn** | **14 52 21.2** | **-1.6** |
| FHRB | | | | Sn | **Sn** | **14 52 43.4** | **+0.2** |
| **ETB** | **Estevan Point** | **1.83** | **87** | Pn | **Pn** | **14 52 23.5** | **-2.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ETB | Estevan Point | 1.83 | 87 | Pn | Pn | 14 52 23.5 | -2.2 |
| PHC | Port Hardy | 1.86 | 41 | Pn | Pn | 14 52 24.8 | -1.3 |
| PHC | | | | Sn | Sb | 14 52 50.1 | -1.4 |
| PHC | Port Hardy | 1.86 | 41 | Pn | Pn | 14 52 24.8 | -1.3 |
| PHC | | | | Sn | Sb | 14 52 50.1 | -1.4 |
| WOSB | Woss | 1.98 | 64 | Pn | Pn | 14 52 27.0 | -1.0 |
| TLCB | Telegraph Cove | 2.03 | 52 | Pn | Pn | 14 52 27.5 | -1.1 |
| TOFB | Tofino | 2.25 | 93 | Pn | Pn | 14 52 28.7 | -2.8 |
| TOFB | | | | Sn | Sn | 14 52 56.4 | -2.4 |
| NCRB | Newcastle Ridg | 2.39 | 62 | Pn | Pn | 14 52 33.2 | -0.4 |
| BTB | Buttle Lake | 2.50 | 85 | Pn | Pn | 14 52 33.1 | -2.0 |
| BTB | | | | Sn | Sn | 14 53 04.5 | -0.7 |
| OZB | Mount Ozzard | 2.55 | 97 | Pn | Pn | 14 52 32.8 | -2.9 |
| CBB | Campbell River | 2.68 | 73 | Pn | Pn | 14 52 36.4 | -1.0 |
| CBB | | | | Sn | Sn | 14 53 09.9 | +0.6 |
| BMSB | Bamfield Mari | 2.80 | 98 | Pn | Pn | 14 52 36.4 | -2.7 |
| BMSB | | | | Sn | Sn | 14 53 10.1 | -2.3 |
| B928 | Bamfield | 2.81 | 98 | Pn | Pn | 14 52 36.2 | -2.9 |
| B928 | | | | Sn | Sn | 14 53 10.2 | -2.2 |
| B927 | Port Alberni | 2.97 | 90 | Pn | Pn | 14 52 40.1 | -1.2 |
| BBB | Bella Bella | 2.98 | 15 | Pn | Pn | 14 52 40.6 | -0.9 |
| | 16nm,0.3s,baz=214,slow=14,SNR=168 | | | | | | |
| BBB | | | | LR | LR | 14 53 52.2 | |
| | comp=Z,4µm,19.8s,baz=240,slow=38 | | | | | | |
| BBB | Bella Bella | 2.98 | 15 | Pn | Pn | 14 52 40.5 | -0.9 |
| BBB | | | | Sn | Sn | 14 53 16.4 | -0.3 |
| MGB | Mount Grey | 3.06 | 94 | Pn | Pn | 14 52 40.4 | -2.5 |
| MGB | | | | Sn | Sn | 14 53 17.7 | -1.4 |
| TXB | Texada | 3.22 | 81 | Pn | Pn | 14 52 44.2 | -0.6 |
| PFB | Port Renfrew | 3.31 | 101 | Pn | Pn | 14 52 43.5 | -2.6 |
| PFB | | | | Sn | Sn | 14 53 23.4 | -1.7 |
| GHNB | Nanoose | 3.34 | 88 | Pn | Pn | 14 52 44.4 | -2.0 |
| YOUB | Youbou, Lake C | 3.36 | 95 | Pn | Pn | 14 52 45.2 | -1.7 |
| YOUB | | | | Sn | Sn | 14 53 25.2 | -1.0 |
| NLLB | Nanaimo Lost L | 3.50 | 89 | Pn | Pn | 14 52 48.2 | -0.6 |
| SHB | Sechelt | 3.58 | 83 | Pn | Pn | 14 52 49.6 | -0.2 |
| SHB | | | | Sn | Sn | 14 53 32.5 | +0.9 |
| BNB | Barry Inlet | 3.60 | 336 | Pn | Pn | 14 52 47.2 | -3.0 |
| LZB | Mount Lazard | 3.70 | 99 | Pn | Pn | 14 52 49.3 | -2.2 |
| BPCB | Bare Point | 3.72 | 94 | Pn | Pn | 14 52 49.8 | -1.9 |
| PGC | Sidney | 3.93 | 98 | Pn | Pn | 14 52 53.6 | -1.1 |
| PGC | Sidney | 3.93 | 98 | ePn | Pn | 14 52 53.2 | -1.4 |
| VGZ | Gonzales | 4.07 | 101 | Pn | Pn | 14 52 54.0 | -2.6 |
| SNB | Saturna Island | 4.09 | 95 | Pn | Pn | 14 52 56.0 | -0.9 |
| NLWA | Neilton Lookou | 4.12 | 116 | ePn | Pn | 14 52 55.3 | -2.0 |
| MOBC | Moresby Island | 4.18 | 338 | Pn | Pn | 14 52 55.0 | -3.1 |
| WSLR | Whistler | 4.24 | 77 | Pn | Pn | 14 52 58.1 | -0.9 |
| DIB | Dawson Inlet, | 4.36 | 334 | Pn | Pn | 14 52 59.1 | -1.4 |
| A04D | Lummi Island | 4.40 | 95 | P | Pn | 14 53 01.4 | +0.3 |
| | baz=4.6 | | | | | | |
| VIB | Van Inlet | 4.43 | 334 | Pn | Pn | 14 52 58.2 | -3.3 |
| UBRB | Upper Baezaeko | 4.88 | 41 | Pn | Pn | 14 53 09.6 | +1.9 |
| B05A | Bryant | 4.90 | 100 | P | Pn | 14 53 07.9 | 0.0 |
| | baz=5.1 | | | | | | |
| LLLB | Lillooet | 4.98 | 72 | Pn | Pn | 14 53 09.4 | +0.2 |
| F04D | Rainier, OR | 5.36 | 125 | P | Pn | 14 53 15.7 | +1.5 |
| | baz=5.4 | | | | | | |
| ERK | Elk Rock | 5.59 | 120 | P | Pn | 14 53 16.5 | -1.1 |
| FL2 | Flat Top 2 | 5.65 | 121 | P | Pn | 14 53 17.9 | -0.5 |
| LON | Longmire | 5.66 | 114 | eP | Pn | 14 53 17.8 | -0.7 |
| LON | Longmire | 5.66 | 114 | ePn | Pn | 14 53 17.8 | -0.7 |
| RCM | Mount Rainier- | 5.67 | 113 | P | Pn | 14 53 18.3 | -0.5 |
| C06D | Leavenworth | 5.77 | 101 | P | Pn | 14 53 20.8 | +0.9 |
| | baz=5.9 | | | | | | |
| MTMW | Mount Mitchell | 5.83 | 122 | P | Pn | 14 53 21.0 | +0.2 |
| ASR | Mount Adams--S | 6.11 | 118 | P | Pn | 14 53 25.4 | +0.7 |
| COR | Corvallis | 6.28 | 137 | eP | Pn | 14 53 26.9 | 0.0 |
| COR | Corvallis | 6.28 | 137 | ePn | Pn | 14 53 26.9 | 0.0 |
| PNT | Penticton | 6.36 | 86 | Pn | Pn | 14 53 26.6 | -1.3 |
| G05D | Wamic, OR | 6.81 | 124 | P | Pn | 14 53 34.6 | +0.4 |
| | baz=6.9,SNR=8.8 | | | | | | |
| I03D | Drain, OR | 6.97 | 141 | P | Pn | 14 53 37.0 | +0.6 |
| | baz=6.9,SNR=7.5 | | | | | | |
| BLBC | Blue River | 6.97 | 63 | Pn | Pn | 14 53 37.0 | +0.4 |
| BPO | Bald Peter | 7.01 | 129 | P | Pn | 14 53 38.0 | +0.9 |
| HAWA | Hanford | 7.21 | 110 | eP | Pn | 14 53 35.3 | -4.4 |
| DOWB | Downie Slide | 7.26 | 68 | Pn | Pn | 14 53 38.6 | -1.7 |
| I04A | Tendick Farm, | 7.30 | 137 | P | Pn | 14 53 41.9 | +0.9 |
| | baz=7.3 | | | | | | |
| I05D | Terrebonne, OR | 7.40 | 129 | P | Pn | 14 53 42.6 | +0.2 |
| | baz=7.4 | | | | | | |
| SLEB | Sale Mountain | 7.42 | 71 | Pn | Pn | 14 53 43.4 | +0.6 |
| MNB | Mounoet Dainar | 7.52 | 63 | Pn | Pn | 14 53 44.2 | +0.1 |
| J04D | Umpqua Nationa | 7.87 | 138 | P | Pn | 14 53 50.0 | +1.1 |
| | baz=7.9,SNR=9.8 | | | | | | |
| HUMO | Hull Mountain | 8.04 | 144 | eP | Pn | 14 53 52.6 | +1.5 |
| NEW | Newport | 8.14 | 93 | Pn | Pn | 14 53 53.2 | +0.8 |
| | 2.5nm,0.3s,baz=266,slow=12,SNR=10 | | | | | | |
| NEW | | | | LR | LR | 14 57 04.2 | |
| | comp=Z,5µm,19.9s,baz=274,slow=37 | | | | | | |
| NEW | Newport | 8.14 | 93 | eP | Pn | 14 53 52.8 | +0.4 |
| NEW | Newport | 8.14 | 93 | P | Pn | 14 53 52.8 | +0.4 |
| | baz=8.3 | | | | | | |
| NEW | Newport | 8.14 | 93 | eP | Pn | 14 53 52.8 | +0.4 |
| L02D | Cave Junction, | 8.20 | 149 | P | Pn | 14 53 54.6 | +1.3 |
| | baz=8.1 | | | | | | |
| J05D | Fort Rock, OR | 8.23 | 134 | P | Pn | 14 53 55.1 | +1.3 |
| | baz=8.2,SNR=6.2 | | | | | | |
| K04D | Chiloquin, OR | 8.52 | 139 | P | Pn | 14 53 58.8 | +1.0 |
| | baz=8.5,SNR=6.3 | | | | | | |
| YBH | Yreka Blue Hor | 8.89 | 146 | Pn | Pn | 14 54 04.5 | +1.7 |
| | 0.3nm,0.3s,baz=340,slow=13,SNR=34 | | | | | | |
| YBH | Yreka Blue Hor | 8.89 | 146 | eP | Pn | 14 54 05.0 | +2.2 |
| YBH | Yreka Blue Hor | 8.89 | 146 | eP | Pn | 14 54 05.0 | +2.2 |
| M02C | Callahan | 9.14 | 148 | P | Pn | 14 54 07.8 | +1.6 |
| | baz=9.1,SNR=14 | | | | | | |
| DLBC | Dease Lake | 9.15 | 358 | Pn | Pn | 14 54 07.5 | +1.2 |
| | 0.5nm,0.3s,baz=185,slow=11,SNR=16 | | | | | | |
| DLBC | | | | LR | LR | 14 57 22.1 | |
| | comp=Z,2µm,21.4s,baz=170,slow=36 | | | | | | |
| DLBC | Dease Lake | 9.15 | 358 | Pn | Pn | 14 54 04.4 | -1.9 |
| DLBC | Dease Lake | 9.15 | 358 | eP | Pn | 14 54 08.6 | +2.3 |
| M04C | Macdoel | 9.18 | 142 | P | Pn | 14 54 08.2 | +1.3 |
| | baz=9.1,SNR=18 | | | | | | |
| KHMM | Horse Mountain | 9.32 | 153 | eP | Pn | 14 54 09.6 | +0.8 |
| N02D | Trinity Center | 9.56 | 148 | P | Pn | 14 54 14.1 | +2.1 |
| | baz=9.5,SNR=17 | | | | | | |
| MOD | Modoc | 9.74 | 136 | eP | Pn | 14 54 16.5 | +2.0 |
| BSMT | Bassoo Peak | 9.76 | 93 | eP | Pn | 14 54 13.8 | -1.0 |
| WDC | Whiskeytown Da | 9.97 | 149 | eP | Pn | 14 54 19.4 | +1.9 |
| WDC | Whiskeytown Da | 9.97 | 149 | eP | Pn | 14 54 19.4 | +1.9 |
| BLMT | Blacktail Moun | 10.00 | 92 | eP | Pn | 14 54 17.9 | -0.2 |
| WALA | Waterton Lakes | 10.11 | 86 | Pn | Pn | 14 54 19.6 | +0.1 |
| WALA | Waterton Lakes | 10.11 | 86 | eP | Pn | 14 54 20.7 | +1.2 |
| JTMT | Jette | 10.11 | 93 | eP | Pn | 14 54 18.7 | -0.9 |
| WVOR | Wild Horse Val | 10.14 | 129 | eP | Pn | 14 54 22.1 | +2.1 |
| WVOR | Wild Horse Val | 10.14 | 129 | eP | Pn | 14 54 22.1 | +2.1 |
| YBMT | Yellow Bay | 10.26 | 92 | eP | Pn | 14 54 21.5 | -0.1 |
| FNBB | Fort Nelson | 10.28 | 19 | Pn | Pn | 14 54 22.5 | +0.8 |
| SWMT | Swartz Lake | 10.36 | 94 | eP | Pn | 14 54 22.9 | 0.0 |
| O03D | Paynes Creek | 10.48 | 147 | P | Pn | 14 54 26.4 | +1.9 |
| | baz=10 | | | | | | |
| MSO | Missoula | 10.60 | 98 | P | Pn | 14 54 26.8 | +0.5 |
| | baz=11 | | | | | | |
| SLMT | Seeley Lake | 10.76 | 95 | eP | Pn | 14 54 28.3 | -0.2 |
| CHMT | Chamberlain Mo | 11.02 | 96 | eP | Pn | 14 54 31.6 | -0.5 |
| MFID | Camas Ranch | 11.04 | 117 | eP | Pn | 14 54 33.0 | +0.8 |
| HLID | Hailey | 11.79 | 114 | P | Pn | 14 54 43.0 | +0.5 |
| | baz=12 | | | | | | |
| WHY | Whitehorse | 11.80 | 347 | Pn | Pn | 14 54 45.3 | +2.7 |
| LRM | Limekiln Ridge | 11.93 | 101 | eP | Pn | 14 54 44.3 | -0.2 |
| DLMT | Dillon | 12.02 | 103 | eP | Pn | 14 54 45.7 | -0.1 |
| MCMT | McKenzie Canyo | 12.10 | 106 | eP | Pn | 14 54 46.7 | -0.1 |
| BOZ | Bozeman (W) | 12.53 | 100 | eP | Pn | 14 54 52.5 | -0.1 |
| BOZ | Bozeman (W) | 12.53 | 100 | P | Pn | 14 54 53.0 | +0.4 |
| | baz=13 | | | | | | |
| BOZ | Bozeman (W) | 12.53 | 100 | eP | Pn | 14 54 52.5 | -0.1 |
| QLMT | Earthquake Lak | 13.00 | 103 | eP | Pn | 14 55 00.4 | +1.3 |
| EGMT | Eagleton | 13.01 | 88 | P | Pn | 14 54 59.3 | +0.2 |
| | baz=13 | | | | | | |
| EGMT | Eagleton | 13.01 | 88 | eP | Pn | 14 54 58.1 | -1.0 |
| NVAR | Mina Array Bea | 13.46 | 140 | Pn | Pn | 14 55 07.3 | +1.8 |
| | 0.1nm,0.3s,baz=322,slow=9.9,SNR=16 | | | | | | |
| YNR | Norris Junctio | 13.53 | 103 | eP | Pn | 14 55 08.9 | +2.5 |
| YFT | Old Faithful | 13.55 | 104 | P | Pn | 14 55 07.9 | +1.3 |
| GCMT | Greycliff | 13.74 | 97 | eP | Pn | 14 55 09.3 | +0.1 |
| IMW | Indian Meadow | 13.75 | 106 | eP | Pn | 14 55 10.3 | +0.9 |
| LKWY | Lake | 13.77 | 103 | eP | Pn | 14 55 11.8 | +2.1 |
| LKWY | Lake | 13.77 | 103 | eP | Pn | 14 55 11.8 | +2.1 |
| FLWY | Flagg Ranch | 13.81 | 105 | eP | Pn | 14 55 11.3 | +1.1 |
| HVU | Hansel Valley | 13.82 | 117 | eP | Pn | 14 55 11.7 | +1.4 |
| HVU | Hansel Valley | 13.82 | 117 | eP | Pn | 14 55 11.7 | +1.4 |
| MLAC | Mammoth Lakes | 13.93 | 143 | P | Pn | 14 55 12.8 | +0.9 |
| | baz=14 | | | | | | |
| MOOW | Moose Ponds | 13.94 | 106 | eP | Pn | 14 55 15.1 | +3.0 |
| MOOW | | | | e | | 14 55 23.0 | |
| TPAW | Teton Pass | 13.95 | 108 | eP | Pn | 14 55 13.1 | +1.0 |
| TPAW | | | | e | | 14 55 23.7 | |
| LOHW | Long Hollow | 14.10 | 107 | ePn | Pn | 14 55 16.3 | +2.2 |
| LOHW | | | | e | | 14 55 24.5 | |
| BGU | Big Grassy Mou | 14.22 | 120 | eP | Pn | 14 55 15.7 | -0.1 |
| RLMT | Red Lodge | 14.26 | 99 | P | Pn | 14 55 16.8 | +0.4 |
| | baz=14 | | | | | | |
| RLMT | Red Lodge | 14.26 | 99 | ePn | Pn | 14 55 16.2 | -0.1 |
| RLMT | | | | e | | 14 55 26.4 | |
| HWUT | Hardware Ranch | 14.64 | 115 | eP | Pn | 14 55 23.9 | +2.4 |
| R11A | Troy Canyon, C | 14.76 | 133 | P | Pn | 14 55 23.8 | +0.7 |
| | baz=15 | | | | | | |
| DUG | Dugway | 14.84 | 122 | eP | Pn | 14 55 23.7 | -0.5 |
| DUG | Dugway | 14.84 | 122 | P | Pn | 14 55 24.8 | +0.6 |
| | baz=15 | | | | | | |
| DUG | Dugway | 14.84 | 122 | eP | Pn | 14 55 23.7 | -0.5 |
| TCUT | Toone Canyon | 15.03 | 116 | eP | Pn | 14 55 29.0 | +2.1 |
| | 52nm,1.3s | | | | | | |
| GRAC | Grapevine Rang | 15.07 | 140 | P | Pn | 14 55 29.0 | +1.9 |
| | baz=15 | | | | | | |
| CTU | Camp Tracy | 15.11 | 118 | eP | Pn | 14 55 27.1 | -0.7 |
| | 44nm,1.4s | | | | | | |
| BW06 | Boulder Array | 15.19 | 108 | eP | Pn | 14 55 30.4 | +1.4 |
| YKR1 | Yellowknife Ar | 15.42 | 26 | Pn | Pn | 14 55 30.6 | -1.0 |
| YKB3 | Yellowknife Ar | 15.48 | 26 | Pn | Pn | 14 55 31.3 | -1.1 |
| YKA | Yellowknife Ar | 15.52 | 26 | Pn | Pn | 14 55 30.9 | -1.9 |
| | 0.4nm,0.3s,baz=218,slow=12,SNR=17 | | | | | | |
| YKB6 | Yellowknife Ar | 15.54 | 26 | Pn | Pn | 14 55 32.0 | -1.1 |
| YKB7 | Yellowknife Ar | 15.55 | 26 | Pn | Pn | 14 55 32.3 | -1.0 |
| YKW3 | Yellowknife Ar | 15.57 | 26 | Pn | Pn | 14 55 32.0 | -1.5 |
| SMMC | Simmler | 15.59 | 150 | P | Pn | 14 55 35.1 | +1.1 |
| | baz=16 | | | | | | |
| YKB9 | Yellowknife Ar | 15.59 | 26 | Pn | Pn | 14 55 33.2 | -0.6 |
| TPNV | Topopah Spring | 15.59 | 138 | P | Pn | 14 55 35.3 | +1.2 |
| | baz=16 | | | | | | |
| YKB0 | Yellowknife Ar | 15.61 | 26 | Pn | Pn | 14 55 33.4 | -0.6 |
| MPU | Maple Canyon | 15.62 | 120 | eP | Pn | 14 55 34.5 | -0.1 |
| | 80nm,1.4s | | | | | | |
| LAO | LASA Array | 15.68 | 91 | P | Pn | 14 55 35.1 | 0.0 |
| | baz=16 | | | | | | |
| LAO | LASA Array | 15.68 | 91 | eP | Pn | 14 55 34.8 | -0.4 |
| | 105nm,1.3s | | | | | | |
| FURC | Furnace Creek, | 15.73 | 140 | P | Pn | 14 55 37.3 | +1.6 |
| | baz=16 | | | | | | |
| DAWY | Dawson | 15.75 | 344 | Pn | Pn | 14 55 34.6 | -1.4 |
| DAWY | Dawson | 15.75 | 344 | eP | Pn | 14 55 37.6 | +1.7 |
| | 186nm,1.7s | | | | | | |
| MENT | Mentasta | 15.77 | 335 | eP | P | 14 55 38.9 | -1.2 |
| ISA | Isabella | 15.80 | 146 | P | Pn | 14 55 38.1 | +1.4 |
| | baz=16 | | | | | | |
| MPMC | Manual Prospec | 15.82 | 142 | P | Pn | 14 55 38.4 | +1.2 |
| | baz=16 | | | | | | |
| PKM | Peak Mountain | 16.02 | 151 | P | Pn | 14 55 41.5 | +1.8 |
| | baz=16 | | | | | | |
| KDAK | Kodiak Island | 16.14 | 310 | Pn | Pn | 14 55 36.9 | -4.0 |
| | 0.2nm,0.3s,baz=130,slow=5.3,SNR=4.5 | | | | | | |
| KDAK | Kodiak Island | 16.14 | 310 | iP | P | 14 55 44.5 | +0.5 |
| ARVC | Arvin | 16.15 | 147 | P | Pn | 14 55 42.4 | +1.3 |
| | baz=16 | | | | | | |
| PAX | Paxson | 16.30 | 333 | eP | P | 14 55 46.4 | +0.5 |
| PAX | | | | pmax | pmax | | |
| | comp=Z,38nm,1.4s | | | | | | |
| PAX | Paxson | 16.30 | 333 | eP | P | 14 55 46.4 | +0.5 |
| | comp=Z,38nm,1.4s | | | | | | |
| TMUT | Trail Mountain | 16.35 | 121 | eP | Pn | 14 55 44.9 | +0.9 |
| | comp=Z,114nm,1.5s | | | | | | |
| MSU | Marysvale | 16.38 | 125 | eP | Pn | 14 55 44.3 | 0.0 |
| MSU | | | | pmax | pmax | | |
| | comp=Z,29nm,1.3s | | | | | | |
| MSU | Marysvale | 16.38 | 125 | eP | Pn | 14 55 44.2 | 0.0 |
| | comp=Z,29nm,1.3s | | | | | | |
| DOT | Dot Lake | 16.44 | 336 | eP | P | 14 55 47.4 | 0.0 |
| | comp=Z,263nm,1.7s | | | | | | |
| SHPR | Sheep Range | 16.45 | 136 | eP | Pn | 14 55 46.3 | +1.2 |
| | comp=Z,11nm,1.2s | | | | | | |
| CCUT | Cedar City | 16.48 | 130 | eP | Pn | 14 55 45.9 | +0.3 |
| | comp=Z,56nm,1.7s | | | | | | |
| DGMT | Dagmar | 16.54 | 83 | P | Pn | 14 55 46.3 | +0.3 |
| | baz=17 | | | | | | |
| DGMT | Dagmar | 16.54 | 83 | eP | Pn | 14 55 45.8 | -0.3 |
| | comp=Z,67nm,1.1s | | | | | | |
| EDW2 | Edwards Air Fo | 16.67 | 146 | P | P | 14 55 49.5 | -0.6 |
| | baz=17 | | | | | | |
| EGAK | Eagle | 16.73 | 342 | eP | P | 14 55 50.0 | -0.5 |
| | comp=Z,370nm,1.9s | | | | | | |
| GSC | Goldstone | 16.76 | 142 | P | Pn | 14 55 50.2 | +1.2 |
| | baz=17 | | | | | | |
| SRU | San Rafael | 16.86 | 120 | eP | Pn | 14 55 50.8 | +0.4 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,58nm,1.3s | | | | | | |
| SRU | San Rafael | 16.86 | 120 | eP | Pn | 14 55 50.8 | +0.4 |
| | comp=Z,58nm,1.3s | | | | | | |
| BLG | Laguna Peak | 16.99 | 150 | P | P | 14 55 53.5 | -0.2 |
| | baz=17 | | | | | | |
| TUQ | Turquoise Moun | 17.01 | 140 | P | Pn | 14 55 52.8 | +0.6 |
| | baz=17 | | | | | | |
| A25A | Svangstu Ranch | 17.14 | 81 | P | Pn | 14 55 54.5 | +0.8 |
| | baz=17 | | | | | | |
| K22A | Casper | 17.16 | 104 | P | P | 14 55 55.5 | -0.1 |
| | baz=17 | | | | | | |
| B25A | Knox Farm, Ray | 17.25 | 83 | P | Pn | 14 55 55.7 | +0.6 |
| | baz=17 | | | | | | |
| C25A | Freed Ranch, W | 17.33 | 85 | P | P | 14 55 56.8 | -0.6 |
| | baz=18 | | | | | | |
| BFSC | Mount Baldy Ra | 17.37 | 146 | P | Pn | 14 55 57.3 | +0.6 |
| | baz=17 | | | | | | |
| D25A | Fairfield | 17.44 | 87 | P | P | 14 55 58.3 | -0.3 |
| | baz=18 | | | | | | |
| O20A | White River Ci | 17.53 | 114 | P | P | 14 55 59.8 | 0.0 |
| | baz=18 | | | | | | |
| E25A | Miller Ranch, | 17.59 | 89 | P | P | 14 56 00.1 | -0.1 |
| | baz=18 | | | | | | |
| FFC | Flin Flon | 17.62 | 62 | eP | P | 14 56 01.6 | +1.1 |
| FFC | | | | pmax | pmax | | |
| | comp=Z,252nm,1.1s | | | | | | |
| FFC | Flin Flon | 17.62 | 62 | eP | P | 14 56 01.6 | +1.1 |
| | comp=Z,252nm,1.1s | | | | | | |
| LDFC | Landfair | 17.66 | 138 | eP | Pn | 14 56 00.6 | +0.3 |
| | comp=Z,40nm,1.1s | | | | | | |
| GMRC | Granite Mounta | 17.68 | 140 | P | Pn | 14 56 01.1 | +0.6 |
| | baz=18 | | | | | | |
| F25A | Bowman | 17.74 | 91 | P | Pn | 14 56 01.6 | +0.4 |
| | baz=18 | | | | | | |
| A26A | Wade Farm, Ken | 17.85 | 81 | P | P | 14 56 03.1 | 0.0 |
| | baz=18 | | | | | | |
| MCK | McKinley | 17.92 | 331 | eP | P | 14 56 05.1 | +1.3 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| MCK | McKinley | 17.92 | 331 | eP | P | 14 56 05.0 | +1.3 |
| | comp=Z,18nm,1.0s | | | | | | |
| G25A | Newell | 18.04 | 93 | P | P | 14 56 05.2 | 0.0 |
| | baz=18 | | | | | | |
| D26A | Manning | 18.05 | 87 | P | P | 14 56 05.8 | +0.4 |
| | baz=18 | | | | | | |
| C26A | Wahner Farm, P | 18.06 | 84 | P | P | 14 56 05.8 | +0.4 |
| | baz=18 | | | | | | |
| RSSD | Black Hills | 18.07 | 97 | eP | Pn | 14 56 04.0 | -1.4 |
| RSSD | Black Hills | 18.07 | 97 | eP | Pn | 14 56 04.0 | -1.4 |
| ILAR | Eielson Array | 18.09 | 335 | P | P | 14 56 05.4 | -0.1 |
| | comp=Z,0.1nm,0.3s,baz=145,slow=11,SNR=34 | | | | | | |
| ILAR | | | | PcP | PcP | 15 00 35.3 | -3.1 |
| | baz=207,slow=2.3,SNR=3.7 | | | | | | |
| MURC | Murrieta | 18.11 | 146 | P | P | 14 56 08.0 | +2.0 |
| | baz=18 | | | | | | |
| H25A | Fruitdale | 18.14 | 95 | P | P | 14 56 07.5 | +1.1 |
| | baz=18 | | | | | | |
| TRF | Thorofare Moun | 18.17 | 329 | eP | P | 14 56 07.3 | +0.7 |
| | comp=Z,58nm,1.4s | | | | | | |
| SCI | San Clemente I | 18.20 | 150 | P | P | 14 56 09.1 | +2.1 |
| | baz=18 | | | | | | |
| E26A | Carlson Angus | 18.21 | 89 | P | P | 14 56 08.1 | +1.0 |
| | baz=18 | | | | | | |
| BELC | Belle Mtn. Jos | 18.22 | 142 | P | P | 14 56 08.7 | +1.4 |
| | baz=18 | | | | | | |
| PV04 | Paradox Valley | 18.28 | 119 | eP | P | 14 56 09.0 | +0.9 |
| F26A | Lodgepole | 18.28 | 91 | P | P | 14 56 09.0 | +1.1 |
| | baz=18 | | | | | | |
| I25A | Rochford | 18.31 | 97 | P | Pn | 14 56 08.4 | +0.1 |
| | baz=18 | | | | | | |
| A27A | Ledoux Ranch, | 18.35 | 80 | P | P | 14 56 09.3 | +0.7 |
| | baz=18 | | | | | | |
| PFO | Pinyon Flat Ob | 18.38 | 144 | P | Pn | 14 56 10.3 | +1.1 |
| | baz=18 | | | | | | |
| IRM | Iron Mountain | 18.43 | 140 | P | Pn | 14 56 11.2 | +1.6 |
| | baz=18 | | | | | | |
| COLA | College | 18.43 | 335 | deP | Pn | 14 56 10.5 | +1.1 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,46nm,1.4s | | | | | | |
| COLA | College | 18.43 | 335 | eP | Pn | 14 56 10.7 | +1.3 |
| | comp=Z,106nm,1.7s | | | | | | |
| B27A | Peters Farms, | 18.46 | 82 | P | Pn | 14 56 10.8 | +0.9 |
| | baz=19 | | | | | | |
| C27A | Sayler Ranch, | 18.47 | 84 | P | Pn | 14 56 10.6 | +0.5 |
| | baz=19 | | | | | | |
| N23A | Red Feather La | 18.48 | 108 | P | Pn | 14 56 11.0 | +0.5 |
| | baz=19 | | | | | | |
| G26A | Maurine | 18.53 | 92 | P | Pn | 14 56 11.5 | +0.7 |
| | baz=19 | | | | | | |
| J25A | Sunshine Ranch | 18.55 | 99 | P | Pn | 14 56 11.4 | +0.3 |
| | baz=19 | | | | | | |
| PHWY | Pilot Hill | 18.55 | 107 | eP | Pn | 14 56 11.8 | +0.4 |
| | comp=Z,47nm,1.1s | | | | | | |
| D27A | Center | 18.63 | 86 | P | P | 14 56 11.8 | +0.1 |
| | baz=19 | | | | | | |
| PV01 | Paradox Valley | 18.65 | 119 | eP | Pn | 14 56 13.4 | +0.9 |
| H26A | Fairpoint | 18.68 | 94 | P | Pn | 14 56 13.2 | +0.5 |
| | baz=19 | | | | | | |
| F27A | Lemmon | 18.70 | 90 | P | Pn | 14 56 13.2 | +0.3 |
| | baz=19 | | | | | | |
| PDMCI | Parker Dam,Lak | 18.74 | 138 | P | Pn | 14 56 14.4 | +1.0 |
| | baz=19 | | | | | | |
| E27A | Carson | 18.81 | 88 | P | Pn | 14 56 14.4 | +0.2 |
| | baz=19 | | | | | | |
| BPAW | Bear Paw Mtn. | 18.84 | 330 | eP | Pn | 14 56 14.4 | 0.0 |
| | comp=Z,4.2nm,0.9s | | | | | | |
| I26A | New Underwood | 18.87 | 96 | P | Pn | 14 56 15.1 | 0.0 |
| | baz=19 | | | | | | |
| G27A | Dupree | 18.94 | 92 | P | Pn | 14 56 15.7 | -0.1 |
| | baz=19 | | | | | | |
| A28A | Rude Farm, Bot | 18.99 | 80 | P | Pn | 14 56 16.7 | +0.4 |
| | baz=19 | | | | | | |
| B28A | Dugan Ranch, T | 19.03 | 82 | P | Pn | 14 56 17.4 | +0.6 |
| | baz=19 | | | | | | |
| MONP | Monument Peak | 19.03 | 145 | P | Pn | 14 56 18.3 | +1.1 |
| | baz=19 | | | | | | |
| L25A | Engebretsen Ra | 19.04 | 102 | P | Pn | 14 56 17.9 | +0.7 |
| | baz=19 | | | | | | |
| J26A | Sides Ranch, S | 19.05 | 98 | P | Pn | 14 56 17.7 | +0.5 |
| | baz=19 | | | | | | |
| WUAZ | Wupatki | 19.06 | 130 | P | Pn | 14 56 18.2 | +0.7 |
| | baz=19 | | | | | | |
| WUAZ | Wupatki | 19.06 | 130 | eP | Pn | 14 56 18.0 | +0.5 |
| | comp=Z,21nm,1.1s | | | | | | |
| H27A | Howes | 19.13 | 94 | P | Pn | 14 56 18.1 | 0.0 |
| | baz=19 | | | | | | |
| INK | Inuvik | 19.16 | 355 | P | P | 14 56 17.7 | +0.4 |
| | comp=Z,0.1nm,0.3s,baz=170,slow=10,SNR=20 | | | | | | |
| INK | Inuvik | 19.16 | 355 | eP | Pn | 14 56 18.1 | -0.1 |
| INK | | | | pmax | pmax | | |
| | comp=Z,168nm,1.6s | | | | | | |
| INK | Inuvik | 19.16 | 355 | eP | Pn | 14 56 18.1 | -0.1 |
| | comp=Z,168nm,1.6s | | | | | | |
| C28A | Hausauer Farms | 19.20 | 84 | P | Pn | 14 56 19.1 | +0.3 |
| | baz=19 | | | | | | |
| D28A | Regan | 19.23 | 85 | P | Pn | 14 56 19.7 | +0.5 |
| | baz=19 | | | | | | |
| SWSC | Sam W. Stewart | 19.23 | 143 | P | Pn | 14 56 20.5 | +1.2 |
| | baz=19 | | | | | | |
| ISCO | Idaho Springs | 19.33 | 111 | P | Pn | 14 56 21.0 | +0.2 |
| | baz=19 | | | | | | |
| MVCO | Mesa Verde | 19.33 | 121 | P | Pn | 14 56 21.4 | +0.6 |
| | baz=19 | | | | | | |
| MVCO | Mesa Verde | 19.33 | 121 | eP | P | 14 56 20.0 | +0.4 |
| | comp=Z,92nm,1.2s | | | | | | |
| E28A | Huff | 19.33 | 87 | P | Pn | 14 56 20.3 | -0.2 |
| | baz=20 | | | | | | |
| M25A | Palm-Egli Farm | 19.36 | 104 | P | P | 14 56 20.6 | +0.6 |
| | baz=20 | | | | | | |
| I27A | Quinn | 19.38 | 95 | P | Pn | 14 56 21.0 | -0.2 |
| | baz=20 | | | | | | |
| F28A | McLaughlin | 19.51 | 89 | P | P | 14 56 21.9 | +0.6 |
| | baz=20 | | | | | | |
| GLA | Glamis | 19.52 | 141 | P | Pn | 14 56 22.6 | -0.2 |
| GLA | | | | pmax | pmax | | |
| | comp=Z,34nm,1.4s | | | | | | |
| GLA | Glamis | 19.52 | 141 | P | Pn | 14 56 22.6 | -0.2 |
| | comp=Z,34nm,1.4s | | | | | | |
| A29A | Manning Farm, | 19.65 | 80 | P | Pn | 14 56 24.2 | -0.1 |
| | baz=20 | | | | | | |
| MDND | Maddock | 19.67 | 83 | P | Pn | 14 56 24.4 | -0.1 |
| | baz=20 | | | | | | |
| B29A | Wagenman Farm, | 19.68 | 81 | P | Pn | 14 56 24.4 | -0.2 |
| | baz=20 | | | | | | |
| G28A | Parade | 19.72 | 92 | P | Pn | 14 56 25.1 | 0.0 |
| | baz=20 | | | | | | |
| J27A | Elkhorn Farm, | 19.77 | 97 | P | Pn | 14 56 25.7 | -0.2 |
| | baz=20 | | | | | | |
| H28A | Mission Ridge | 19.80 | 93 | P | Pn | 14 56 25.7 | -0.4 |
| | baz=20 | | | | | | |
| K27A | Flueckinger Fa | 19.88 | 99 | P | Pn | 14 56 26.6 | -0.5 |
| | baz=20 | | | | | | |
| D29A | Pettibone, Tap | 19.90 | 85 | P | Pn | 14 56 27.1 | -0.2 |
| | baz=20 | | | | | | |
| S22A | 4UR Ranch, Cre | 19.92 | 117 | P | Pn | 14 56 27.6 | -0.2 |
| | baz=20 | | | | | | |
| M26A | McRoberts Ranc | 19.93 | 103 | P | Pn | 14 56 27.6 | -0.2 |
| | baz=20 | | | | | | |
| I28A | Midland | 19.99 | 95 | P | Pn | 14 56 28.1 | -0.2 |
| | baz=20 | | | | | | |
| E29A | Napoleon | 20.02 | 87 | P | Pn | 14 56 28.3 | -0.5 |
| | baz=20 | | | | | | |
| Q24A | Divide | 20.12 | 112 | P | P | 14 56 29.5 | +1.1 |
| | baz=20 | | | | | | |
| F29A | Eureka | 20.15 | 89 | P | P | 14 56 29.3 | +1.0 |
| | baz=20 | | | | | | |
| J28A | Allard Ranch, | 20.20 | 96 | P | Pn | 14 56 30.1 | -0.7 |
| | baz=20 | | | | | | |
| W18A | Petrified Fore | 20.21 | 127 | P | Pn | 14 56 30.8 | -0.5 |
| | baz=20 | | | | | | |
| N26A | Koester Ranch, | 20.22 | 105 | P | Pn | 14 56 30.5 | -0.7 |
| | baz=20 | | | | | | |
| A30A | Hoffart Farm, | 20.25 | 79 | P | P | 14 56 30.2 | +0.9 |
| | baz=20 | | | | | | |
| G29A | Hoven | 20.32 | 90 | P | P | 14 56 30.9 | +0.8 |
| | baz=20 | | | | | | |
| B30A | Myrvik Farm, E | 20.34 | 81 | P | Pn | 14 56 31.6 | -0.9 |
| | baz=20 | | | | | | |
| H29A | Onida | 20.35 | 92 | P | Pn | 14 56 31.7 | -1.0 |
| | baz=20 | | | | | | |
| M27A | Reverse DX Ran | 20.38 | 102 | P | Pn | 14 56 32.1 | -1.0 |
| | baz=20 | | | | | | |
| D30A | Buchanan | 20.43 | 85 | P | Pn | 14 56 32.5 | -1.1 |
| | baz=21 | | | | | | |
| C30A | Mose, Pekin | 20.44 | 83 | P | P | 14 56 32.5 | +1.1 |
| | baz=21 | | | | | | |
| K28A | Ten Mile Ranch | 20.44 | 98 | P | P | 14 56 32.7 | +1.1 |
| | baz=21 | | | | | | |
| E30A | Jud | 20.52 | 86 | P | P | 14 56 33.4 | +1.1 |
| | baz=21 | | | | | | |
| I29A | Vivian Onida | 20.54 | 94 | P | Pn | 14 56 33.9 | -1.0 |
| | baz=21 | | | | | | |
| N27A | Anderson Farm, | 20.67 | 104 | P | Pn | 14 56 35.6 | -0.8 |
| | baz=21 | | | | | | |
| L28A | Connealy Angus | 20.69 | 100 | P | P | 14 56 35.5 | +1.3 |
| | baz=21 | | | | | | |
| SDCO | Great Sand Dun | 20.70 | 115 | P | P | 14 56 35.9 | +1.3 |
| | baz=21 | | | | | | |
| SDCO | Great Sand Dun | 20.70 | 115 | eP | P | 14 56 35.5 | +0.9 |
| | comp=Z,61nm,1.6s | | | | | | |
| B31A | Greenbush Farm | 20.79 | 80 | P | P | 14 56 36.0 | +0.9 |
| | baz=21 | | | | | | |
| J29A | Okreek | 20.80 | 95 | P | P | 14 56 36.3 | +0.9 |
| | baz=21 | | | | | | |
| COLD | Coldfoot | 20.85 | 337 | eP | Pn | 14 56 37.3 | -0.8 |
| | comp=Z,75nm,1.4s | | | | | | |
| G30A | Faulkton | 20.86 | 90 | P | P | 14 56 36.3 | +0.4 |
| | baz=21 | | | | | | |
| P26A | Davis Ranch, A | 20.87 | 108 | P | P | 14 56 36.9 | +0.6 |
| | baz=21 | | | | | | |
| C31A | Landman Farms, | 20.90 | 82 | P | P | 14 56 36.8 | +0.4 |
| | baz=21 | | | | | | |
| OGNE | Ogallala | 20.91 | 103 | P | P | 14 56 37.4 | +0.7 |
| | baz=21 | | | | | | |
| OGNE | Ogallala | 20.91 | 103 | eP | P | 14 56 38.1 | +1.4 |
| | comp=Z,239nm,1.5s | | | | | | |
| O27A | Beecher Island | 21.05 | 106 | P | P | 14 56 39.3 | +1.1 |
| | baz=21 | | | | | | |
| M28A | Bar X Bar Ranc | 21.10 | 101 | P | P | 14 56 39.6 | +0.9 |
| | baz=21 | | | | | | |
| K29A | Lazy Trails An | 21.10 | 97 | P | P | 14 56 40.0 | +1.4 |
| | baz=21 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| D31A | Mcclaflin, Tow | 21.12 | 84 | P | | P | 14 56 39.9 | +1.1 |
| | baz=21 | | | | | | | | |
| Q26A | Hugo | 21.15 | 110 | P | | P | 14 56 40.3 | +1.0 |
| | baz=21 | | | | | | | | |
| I30A | Oacoma | 21.16 | 93 | P | | P | 14 56 40.4 | +1.2 |
| | baz=21 | | | | | | | | |
| F31A | Hecla | 21.17 | 88 | P | | P | 14 56 40.1 | +0.8 |
| | baz=21 | | | | | | | | |
| E31A | Nome | 21.17 | 85 | P | | P | 14 56 40.2 | +0.9 |
| | baz=21 | | | | | | | | |
| SUSD | South Dakota S | 21.25 | 92 | P | | P | 14 56 41.2 | +1.0 |
| | baz=21 | | | | | | | | |
| L29A | Maesberg Ranch | 21.33 | 99 | P | | P | 14 56 42.3 | +1.2 |
| | baz=21 | | | | | | | | |
| P27A | Ficken Ranch, | 21.35 | 107 | P | | P | 14 56 42.4 | +1.0 |
| | baz=21 | | | | | | | | |
| N28A | Pribbeno Ranch | 21.37 | 103 | P | | P | 14 56 42.8 | +1.2 |
| | baz=22 | | | | | | | | |
| J30A | Dallas | 21.38 | 95 | P | | P | 14 56 42.4 | +0.8 |
| | baz=22 | | | | | | | | |
| G31A | Conde | 21.43 | 89 | P | | P | 14 56 42.9 | +0.8 |
| | baz=22 | | | | | | | | |
| M29A | Burnside Ranch | 21.51 | 101 | P | | P | 14 56 43.9 | +0.8 |
| | baz=22 | | | | | | | | |
| B32A | Ashes, Strandq | 21.51 | 80 | P | | P | 14 56 43.8 | +0.9 |
| | baz=22 | | | | | | | | |
| ULM | Lac du Bonnet | 21.53 | 75 | P | | P | 14 56 44.9 | +1.8 |
| | comp=Z,69nm,0.9s,baz=282,slow=12,SNR=28 | | | | | | | | |
| ULM | | | | LR | | LR | 15 05 18.1 | | |
| | comp=Z,3µm,19.0s,baz=328,slow=37 | | | | | | | | |
| O28A | Krutsinger Ran | 21.53 | 105 | P | | P | 14 56 44.3 | +1.0 |
| | baz=22 | | | | | | | | |
| D32A | Dogwood Acres, | 21.56 | 83 | P | | P | 14 56 43.3 | -0.1 |
| | baz=22 | | | | | | | | |
| R26A | Arlington | 21.58 | 111 | P | | P | 14 56 44.4 | +0.6 |
| | baz=22 | | | | | | | | |
| K30A | Basset | 21.60 | 97 | P | | P | 14 56 44.8 | +0.8 |
| | baz=22 | | | | | | | | |
| KSCO | Kaye Shedlock' | 21.65 | 108 | P | | P | 14 56 45.7 | +1.1 |
| | baz=22 | | | | | | | | |
| E32A | Braaten, Kindr | 21.69 | 85 | P | | P | 14 56 45.8 | +0.9 |
| | baz=22 | | | | | | | | |
| T25A | Trinidad | 21.75 | 115 | P | | P | 14 56 47.0 | +1.2 |
| | baz=22 | | | | | | | | |
| P28A | Saint Francis | 21.86 | 106 | P | | P | 14 56 47.7 | +0.9 |
| | baz=22 | | | | | | | | |
| N29A | Votaw Ranch, W | 21.88 | 102 | P | | P | 14 56 47.9 | +0.8 |
| | baz=22 | | | | | | | | |
| L30A | Spencer Herefo | 21.88 | 98 | P | | P | 14 56 47.9 | +0.9 |
| | baz=22 | | | | | | | | |
| G32A | Webster | 21.88 | 89 | P | | P | 14 56 47.4 | +0.4 |
| | baz=22 | | | | | | | | |
| J31A | Geddes | 21.88 | 94 | P | | P | 14 56 47.7 | +0.7 |
| | baz=22 | | | | | | | | |
| TUC | Tucson | 21.94 | 134 | eP | | P | 14 56 47.8 | 0.0 |
| TUC | | | | pmax | | pmax | | | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| TUC | Tucson | 21.94 | 134 | eP | | P | 14 56 47.8 | 0.0 |
| | comp=Z,26nm,1.4s | | | | | | | | |
| AGMN | Agassiz Nation | 21.97 | 80 | P | | P | 14 56 48.3 | +0.4 |
| | baz=22 | | | | | | | | |
| AGMN | Agassiz Nation | 21.97 | 80 | eP | | P | 14 56 48.5 | +0.5 |
| | comp=Z,117nm,1.1s | | | | | | | | |
| R27A | Eads | 21.99 | 110 | P | | P | 14 56 49.2 | +0.9 |
| | baz=22 | | | | | | | | |
| M30A | Dale-Ortello V | 21.99 | 100 | P | | P | 14 56 48.6 | +0.4 |
| | baz=22 | | | | | | | | |
| S26A | Kim | 22.00 | 112 | P | | P | 14 56 49.2 | +0.8 |
| | baz=22 | | | | | | | | |
| ANMO | Albuquerque | 22.11 | 122 | P | | P | 14 56 49.9 | +0.2 |
| | comp=Z,17nm,1.0s,baz=319,slow=10,SNR=23 | | | | | | | | |
| ANMO | Albuquerque | 22.11 | 122 | eP | | P | 14 56 50.6 | +0.9 |
| ANMO | | | | pmax | | pmax | | | |
| | comp=Z,28nm,1.2s | | | | | | | | |
| ANMO | Albuquerque | 22.11 | 122 | eP | | P | 14 56 48.1 | -1.6 |
| | comp=Z,24nm,1.1s | | | | | | | | |
| Q28A | Sharon Springs | 22.11 | 107 | P | | P | 14 56 50.5 | +0.9 |
| | baz=22 | | | | | | | | |
| LAZ | Ladron | 22.14 | 124 | eP | | P | 14 56 51.2 | +1.2 |
| | comp=Z,23nm,1.4s | | | | | | | | |
| O29A | 4D Ranch, Culb | 22.15 | 104 | P | | P | 14 56 50.8 | +0.9 |
| | baz=22 | | | | | | | | |
| C33A | Trail | 22.18 | 81 | P | | P | 14 56 56.9 | +6.8 |
| | baz=22 | | | | | | | | |
| K31A | O'Neill | 22.18 | 96 | P | | P | 14 56 51.2 | +1.0 |
| | baz=22 | | | | | | | | |
| T26A | Comanche Natio | 22.21 | 113 | P | | P | 14 56 51.8 | +1.0 |
| | baz=22 | | | | | | | | |
| H32A | Carlson Farm, | 22.22 | 90 | P | | P | 14 56 51.2 | +0.6 |
| | baz=22 | | | | | | | | |
| N30A | Hueftle Ranch, | 22.23 | 101 | P | | P | 14 56 52.0 | +1.2 |
| | baz=22 | | | | | | | | |
| S27A | Las Animas | 22.30 | 111 | P | | P | 14 56 52.7 | +1.0 |
| | baz=22 | | | | | | | | |
| D33A | AnnSam, Waubun | 22.32 | 83 | P | | P | 14 56 51.8 | +0.2 |
| | baz=22 | | | | | | | | |
| L31A | Butterfield Fa | 22.34 | 97 | P | | P | 14 56 53.0 | +1.0 |
| | baz=22 | | | | | | | | |
| P29A | Atwood | 22.36 | 105 | P | | P | 14 56 53.2 | +1.0 |
| | baz=22 | | | | | | | | |
| I32A | Karley and Nic | 22.40 | 91 | P | | P | 14 56 53.6 | +1.1 |
| | baz=22 | | | | | | | | |
| E33A | Westby DABS, E | 22.42 | 84 | P | | P | 14 56 53.4 | +0.7 |
| | baz=23 | | | | | | | | |
| J32A | Parkston | 22.43 | 93 | P | | P | 14 56 53.6 | +0.8 |
| | baz=23 | | | | | | | | |
| F33A | 5 Mile Ranch, | 22.46 | 86 | P | | P | 14 56 53.8 | +0.7 |
| | baz=23 | | | | | | | | |
| LPM | Los Pinos Moun | 22.48 | 123 | eP | | P | 14 56 54.4 | +0.7 |
| | comp=Z,19nm,1.2s | | | | | | | | |
| R28A | Tribune | 22.56 | 109 | P | | P | 14 56 55.4 | +1.0 |
| | baz=23 | | | | | | | | |
| O30A | MW Ranch, Wils | 22.59 | 103 | P | | P | 14 56 55.6 | +0.9 |
| | baz=23 | | | | | | | | |
| H33A | Prehn Over Nor | 22.60 | 89 | P | | P | 14 56 55.1 | +0.4 |
| | baz=23 | | | | | | | | |
| M31A | Lambtecht Ranc | 22.67 | 99 | P | | P | 14 56 56.2 | +0.8 |
| | baz=23 | | | | | | | | |
| B34A | Aery, Baudette | 22.70 | 79 | P | | P | 14 56 56.1 | +0.4 |
| | baz=23 | | | | | | | | |
| Q29A | Oakley | 22.75 | 107 | P | | P | 14 56 57.2 | +0.9 |
| | baz=23 | | | | | | | | |
| D34A | Park Rapids | 22.75 | 83 | P | | P | 14 56 56.6 | +0.3 |
| | baz=23 | | | | | | | | |
| T27A | Campo | 22.81 | 112 | P | | P | 14 56 57.8 | +0.7 |
| | baz=23 | | | | | | | | |
| I33A | Coleman | 22.82 | 91 | P | | P | 14 56 57.4 | +0.3 |
| | baz=23 | | | | | | | | |
| P30A | Selden | 22.83 | 104 | P | | P | 14 56 57.4 | +0.2 |
| | baz=23 | | | | | | | | |
| R29A | Marienthal | 22.93 | 108 | P | | P | 14 56 58.4 | +0.2 |
| | baz=23 | | | | | | | | |
| N31A | Bailey Ranch, | 22.95 | 100 | P | | P | 14 56 58.6 | +0.2 |
| | baz=23 | | | | | | | | |
| E34A | Wadena | 22.96 | 84 | P | | P | 14 56 58.4 | 0.0 |
| | baz=23 | | | | | | | | |
| L32A | Elgin | 22.96 | 97 | P | | P | 14 56 58.6 | 0.0 |
| | baz=23 | | | | | | | | |
| S28A | Manter | 22.98 | 110 | P | | P | 14 56 59.3 | +0.6 |
| | baz=23 | | | | | | | | |
| J33A | Davis | 23.03 | 93 | P | | P | 14 56 59.5 | +0.3 |
| | baz=23 | | | | | | | | |
| O31A | Woolen Ranch, | 23.07 | 102 | P | | P | 14 57 00.1 | +0.4 |
| | baz=23 | | | | | | | | |
| ECSD | EROS Data Cent | 23.08 | 92 | P | | P | 14 57 00.1 | +0.4 |
| | baz=23 | | | | | | | | |
| ECSD | EROS Data Cent | 23.08 | 92 | eP | | P | 14 56 59.2 | -0.5 |
| | comp=Z,60nm,1.4s | | | | | | | | |
| G34A | Benson | 23.11 | 87 | P | | P | 14 57 00.6 | +0.7 |
| | baz=23 | | | | | | | | |
| T28A | Walsh | 23.14 | 112 | P | | P | 14 57 01.0 | +0.5 |
| | baz=23 | | | | | | | | |
| BGNE | Belgrade | 23.17 | 98 | P | | P | 14 57 01.1 | +0.5 |
| | baz=23 | | | | | | | | |
| Q30A | Quinter | 23.17 | 105 | P | | P | 14 57 01.6 | +0.8 |
| | baz=23 | | | | | | | | |
| U27A | Thompson Grove | 23.18 | 114 | P | | P | 14 57 01.4 | +0.5 |
| | baz=23 | | | | | | | | |
| H34A | Spellman Lake, | 23.24 | 89 | P | | P | 14 57 01.4 | +0.1 |
| | baz=23 | | | | | | | | |
| 121A | Cookes Peak, D | 23.24 | 128 | P | | P | 14 57 02.6 | +1.0 |
| | baz=23 | | | | | | | | |
| K33A | Hardington | 23.33 | 94 | P | | P | 14 57 02.7 | +0.4 |
| | baz=24 | | | | | | | | |
| L33A | Hoskins | 23.36 | 96 | P | | P | 14 57 02.9 | +0.3 |
| | baz=24 | | | | | | | | |
| P31A | Stockton | 23.39 | 103 | P | | P | 14 57 03.5 | +0.6 |
| | baz=24 | | | | | | | | |
| N32A | Stulken Farm, | 23.41 | 100 | P | | P | 14 57 03.7 | +0.6 |
| | baz=24 | | | | | | | | |
| S29A | Ulysses | 23.44 | 109 | P | | P | 14 57 03.9 | +0.5 |
| | baz=24 | | | | | | | | |
| E35A | Pequot Lakes | 23.44 | 83 | P | | P | 14 57 03.9 | +0.7 |
| | baz=24 | | | | | | | | |
| I34A | Hadley | 23.44 | 90 | P | | P | 14 57 03.6 | +0.3 |
| | baz=24 | | | | | | | | |
| D35A | Remer | 23.50 | 82 | P | | P | 14 57 04.1 | +0.3 |
| | baz=24 | | | | | | | | |
| R30A | Dighton | 23.55 | 107 | P | | P | 14 57 05.2 | +0.7 |
| | baz=24 | | | | | | | | |
| U28A | Mallet | 23.56 | 113 | P | | P | 14 57 05.1 | +0.4 |
| | baz=24 | | | | | | | | |
| F35A | Swanville | 23.57 | 85 | P | | P | 14 57 05.5 | +0.9 |
| | baz=24 | | | | | | | | |
| CBKS | Cedar Bluff | 23.57 | 105 | P | | P | 14 57 05.2 | +0.5 |
| | baz=24 | | | | | | | | |
| V27A | Dan Oppiter Fa | 23.62 | 115 | P | | P | 14 57 05.9 | +0.7 |
| | baz=24 | | | | | | | | |
| T29A | Hugoton | 23.62 | 110 | P | | P | 14 57 05.9 | +0.7 |
| | baz=24 | | | | | | | | |
| Q31A | Ellis | 23.68 | 104 | P | | P | 14 57 06.5 | +0.8 |
| | baz=24 | | | | | | | | |
| O32A | Brockman Farm, | 23.69 | 101 | P | | P | 14 57 05.9 | +0.1 |
| | baz=24 | | | | | | | | |
| J34A | George | 23.70 | 92 | P | | P | 14 57 06.3 | +0.4 |
| | baz=24 | | | | | | | | |
| M33A | Taylor Creek F | 23.71 | 97 | P | | P | 14 57 06.2 | +0.3 |
| | baz=24 | | | | | | | | |
| S30A | Montezuma | 23.83 | 108 | P | | P | 14 57 07.7 | +0.5 |
| | baz=24 | | | | | | | | |
| P32A | Huiting Farm, | 23.83 | 102 | P | | P | 14 57 07.7 | +0.6 |
| | baz=24 | | | | | | | | |
| G35A | Watkins | 23.87 | 87 | P | | P | 14 57 07.8 | +0.4 |
| | baz=24 | | | | | | | | |
| K34A | Le Mars | 23.89 | 93 | P | | P | 14 57 08.2 | +0.6 |
| | baz=24 | | | | | | | | |
| N33A | J Bar K, Exete | 23.97 | 99 | P | | P | 14 57 08.6 | +0.2 |
| | baz=24 | | | | | | | | |
| V28A | Channing | 23.99 | 114 | P | | P | 14 57 09.3 | +0.6 |
| | baz=24 | | | | | | | | |
| R31A | Burdett | 24.02 | 106 | P | | P | 14 57 09.5 | +0.5 |
| | baz=24 | | | | | | | | |
| D36A | Goodland | 24.04 | 81 | P | | P | 14 57 09.7 | +0.7 |
| | baz=24 | | | | | | | | |
| L34A | Svendsen Farm, | 24.04 | 95 | P | | P | 14 57 09.5 | +0.4 |
| | baz=24 | | | | | | | | |
| C36A | Pine Crest Far | 24.07 | 80 | P | | P | 14 57 10.2 | +0.8 |
| | baz=24 | | | | | | | | |
| I35A | Creekview Farm | 24.09 | 90 | P | | P | 14 57 10.3 | +0.7 |
| | baz=24 | | | | | | | | |
| U29A | Oasis Ranch, S | 24.09 | 112 | P | | P | 14 57 09.8 | +0.1 |
| | baz=24 | | | | | | | | |
| M34A | Asy Farms, Fr | 24.14 | 96 | P | | P | 14 57 10.4 | +0.4 |
| | baz=24 | | | | | | | | |
| J35A | Milford | 24.16 | 91 | P | | P | 14 57 10.5 | +0.4 |
| | baz=24 | | | | | | | | |
| T30A | Plains | 24.16 | 110 | P | | P | 14 57 11.1 | +0.8 |
| | baz=24 | | | | | | | | |
| Q32A | Meitler Ranch, | 24.22 | 104 | P | | P | 14 57 11.6 | +0.9 |
| | baz=24 | | | | | | | | |
| O33A | Hebron | 24.23 | 100 | P | | P | 14 57 11.6 | +0.7 |
| | baz=24 | | | | | | | | |
| F36A | Milaca | 24.26 | 84 | P | | P | 14 57 12.2 | +1.2 |
| | baz=24 | | | | | | | | |
| V29A | Stinnett | 24.32 | 113 | P | | P | 14 57 12.8 | +0.9 |
| | baz=24 | | | | | | | | |
| W28A | Vega | 24.33 | 115 | P | | P | 14 57 13.3 | +1.3 |
| | baz=24 | | | | | | | | |
| G36A | St. Michael | 24.34 | 86 | P | | P | 14 57 13.0 | +1.2 |
| | baz=24 | | | | | | | | |
| U30A | W&E Inc. Balk | 24.42 | 111 | P | | P | 14 57 13.6 | +0.9 |
| | baz=24 | | | | | | | | |
| K35A | Storm Lake | 24.43 | 93 | P | | P | 14 57 14.0 | +1.4 |
| | baz=25 | | | | | | | | |
| S31A | Mullinville | 24.45 | 107 | P | | P | 14 57 13.9 | +1.0 |
| | baz=24 | | | | | | | | |
| R32A | Long Quarter, | 24.45 | 105 | P | | P | 14 57 13.9 | +1.0 |
| | baz=24 | | | | | | | | |
| C37A | Embarrass | 24.50 | 79 | P | | P | 14 57 14.4 | +1.2 |
| | baz=25 | | | | | | | | |
| L35A | Bielow Farm, R | 24.52 | 94 | P | | P | 14 57 13.6 | +0.1 |
| | baz=25 | | | | | | | | |
| P33A | Williams Farm, | 24.52 | 102 | P | | P | 14 57 14.3 | +0.8 |
| | baz=25 | | | | | | | | |
| D37A | Cotton | 24.52 | 81 | P | | P | 14 57 14.5 | +1.0 |
| | baz=25 | | | | | | | | |
| N34A | Lincoln | 24.53 | 98 | P | | P | 14 57 14.5 | +0.9 |
| | baz=25 | | | | | | | | |
| T31A | Randall Ranch, | 24.66 | 108 | P | | P | 14 57 15.8 | +1.1 |
| | baz=25 | | | | | | | | |
| Q33A | Connelly Farm, | 24.68 | 103 | P | | P | 14 57 15.9 | +1.0 |
| | baz=25 | | | | | | | | |
| M35A | Neola | 24.73 | 96 | P | | P | 14 57 16.4 | +1.0 |
| | baz=25 | | | | | | | | |
| W29A | Amraillo | 24.76 | 115 | P | | P | 14 57 16.8 | +1.0 |
| | baz=25 | | | | | | | | |
| X28A | Dimmitt | 24.85 | 116 | P | | P | 14 57 17.9 | +1.3 |
| | baz=25 | | | | | | | | |
| EYMN | Ely | 24.88 | 79 | P | | P | 14 57 17.0 | +0.3 |
| | baz=25 | | | | | | | | |
| EYMN | Ely | 24.88 | 79 | eP | | P | 14 57 17.9 | +1.2 |
| | comp=Z,44nm,0.9s | | | | | | | | |
| V30A | Spur Ranch, Mi | 24.90 | 112 | P | | P | 14 57 18.5 | +1.5 |
| | baz=25 | | | | | | | | |
| AMTX | Amarillo | 24.90 | 115 | P | | P | 14 57 17.7 | +0.6 |
| | baz=25 | | | | | | | | |
| AMTX | Amarillo | 24.90 | 115 | eP | | P | 14 57 17.6 | +0.5 |
| | comp=Z,26nm,0.8s | | | | | | | | |
| MSTX | Muleshoe | 24.91 | 118 | P | | P | 14 57 18.3 | +1.2 |
| | baz=25 | | | | | | | | |
| SPMN | St. Paul | 24.96 | 85 | P | | P | 14 57 18.4 | +1.0 |
| | baz=25 | | | | | | | | |
| R33A | Olander Ranch, | 24.98 | 104 | P | | P | 14 57 19.0 | +1.3 |
| | baz=25 | | | | | | | | |
| P34A | Walnut Farm, R | 25.01 | 101 | P | | P | 14 57 19.0 | +1.1 |
| | baz=25 | | | | | | | | |
| N35A | Tabor | 25.07 | 97 | P | | P | 14 57 19.7 | +1.2 |
| | baz=25 | | | | | | | | |
| T32A | Huddler Ranch, | 25.07 | 107 | P | | P | 14 57 19.6 | +1.1 |
| | baz=25 | | | | | | | | |
| C38A | Sawbill Land. | 25.09 | 79 | P | | P | 14 57 19.8 | +1.2 |
| | baz=25 | | | | | | | | |
| MNTX | Cornudas Mount | 25.16 | 125 | P | | P | 14 57 20.1 | +0.9 |
| | baz=25 | | | | | | | | |
| X29A | Tulia | 25.20 | 116 | P | | P | 14 57 20.9 | +1.2 |
| | baz=25 | | | | | | | | |
| O35A | Humboldt | 25.21 | 98 | P | | P | 14 57 20.8 | +1.1 |
| | baz=25 | | | | | | | | |
| Y28A | McKinney Farm, | 25.25 | 117 | P | | P | 14 57 21.3 | +1.1 |
| | baz=25 | | | | | | | | |
| KSU1 | Kansas State U | 25.40 | 101 | P | | P | 14 57 22.1 | +0.6 |
| | baz=26 | | | | | | | | |
| V31A | Spring Creek L | 25.41 | 111 | P | | P | 14 57 22.4 | +0.8 |
| | baz=26 | | | | | | | | |
| R34A | Ishabella, Hill | 25.45 | 103 | P | | P | 14 57 22.9 | +0.9 |
| | baz=26 | | | | | | | | |
| U32A | Winter Ranch, | 25.53 | 109 | P | | P | 14 57 24.2 | +1.5 |
| | baz=26 | | | | | | | | |
| P35A | Duane Minner, | 25.54 | 100 | P | | P | 14 57 23.6 | +0.9 |
| | baz=26 | | | | | | | | |
| T33A | Patterson Ranc | 25.56 | 107 | P | | P | 14 57 23.9 | +1.0 |
| | baz=26 | | | | | | | | |
| Z28A | Tucker Farm, M | 25.62 | 119 | P | | P | 14 57 24.9 | +1.4 |
| | baz=26 | | | | | | | | |
| Y29A | Porterfield Fa | 25.62 | 117 | P | | P | 14 57 24.4 | +0.8 |
| | baz=26 | | | | | | | | |
| X30A | Coker Ranch, T | 25.68 | 115 | P | | P | 14 57 24.8 | +0.7 |
| | baz=26 | | | | | | | | |
| W31A | Holland Ranch, | 25.74 | 112 | P | | P | 14 57 25.4 | +0.8 |
| | baz=26 | | | | | | | | |
| S34A | Willow Spring | 25.90 | 104 | P | | P | 14 57 26.4 | +0.4 |
| | baz=26 | | | | | | | | |
| Q35A | Mercer Eighty, | 25.91 | 101 | P | | P | 14 57 27.0 | +1.0 |
| | baz=26 | | | | | | | | |
| V32A | Arapaho | 25.93 | 110 | P | | P | 14 57 27.5 | +1.1 |
| | baz=26 | | | | | | | | |
| P36A | Good Intent, A | 26.02 | 99 | P | | P | 14 57 27.9 | +0.8 |
| | baz=26 | | | | | | | | |
| Z29A | Hungry Hill Ra | 26.03 | 118 | P | | P | 14 57 28.4 | +1.1 |
| | baz=26 | | | | | | | | |
| U33A | Lingo Farm, Me | 26.05 | 108 | P | | P | 14 57 28.1 | +0.7 |
| | baz=26 | | | | | | | | |
| 128A | Castleberry Fa | 26.05 | 120 | P | | P | 14 57 28.1 | +0.6 |
| | baz=26 | | | | | | | | |
| Y30A | Stafford Cattl | 26.07 | 116 | P | | P | 14 57 28.2 | +0.6 |
| | baz=26 | | | | | | | | |
| X31A | McDonald Ranch | 26.09 | 113 | P | | P | 14 57 28.4 | +0.6 |
| | baz=26 | | | | | | | | |
| R35A | Emporia Munici | 26.11 | 102 | P | | P | 14 57 28.4 | +0.5 |
| | baz=26 | | | | | | | | |
| SCIA | State Center | 26.14 | 93 | P | | P | 14 57 29.1 | +1.0 |
| | comp=Z,81nm,1.2s | | | | | | | | |
| W32A | Sentinel | 26.20 | 111 | P | | P | 14 57 29.6 | +0.8 |
| | baz=26 | | | | | | | | |
| Q36A | Arnold C. Orve | 26.22 | 100 | P | | P | 14 57 29.5 | +0.6 |
| | baz=26 | | | | | | | | |
| T34A | McClaskey Farm | 26.26 | 106 | P | | P | 14 57 29.6 | +0.3 |
| | baz=26 | | | | | | | | |
| V33A | Lossen Ranch, | 26.34 | 109 | P | | P | 14 57 30.4 | +0.5 |
| | baz=26 | | | | | | | | |
| Z30A | Sanderson Ranc | 26.35 | 117 | P | | P | 14 57 31.0 | +0.9 |
| | baz=26 | | | | | | | | |
| 228A | UT Block 9, Go | 26.37 | 121 | P | | P | 14 57 31.1 | +0.8 |
| | baz=26 | | | | | | | | |
| Y31A | Rekieta Farm, | 26.39 | 115 | P | | P | 14 57 31.5 | +1.1 |
| | baz=26 | | | | | | | | |
| U34A | Anderson Ranch | 26.41 | 107 | P | | P | 14 57 31.6 | +1.0 |
| | baz=26 | | | | | | | | |
| S35A | Otter Creek Ra | 26.41 | 104 | P | | P | 14 57 31.8 | +1.2 |
| | baz=26 | | | | | | | | |
| R36A | Gordon, Harris | 26.55 | 102 | P | | P | 14 57 32.8 | +0.9 |
| | baz=27 | | | | | | | | |
| X32A | Elmer | 26.65 | 113 | P | | P | 14 57 33.7 | +0.8 |
| | baz=27 | | | | | | | | |
| W33A | Caddo, Fort Co | 26.66 | 110 | P | | P | 14 57 34.2 | +1.3 |
| | baz=27 | | | | | | | | |
| WMOK | Wichita Mounta | 26.75 | 112 | eP | | P | 14 57 34.1 | +0.4 |
| WMOK | | | | pmax | | pmax | | | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| WMOK | Wichita Mounta | 26.75 | 112 | eP | | P | 14 57 34.1 | +0.4 |
| | comp=Z,21nm,1.1s | | | | | | | | |
| T35A | Sooner Cattle | 26.75 | 105 | P | | P | 14 57 35.0 | +1.3 |
| | baz=27 | | | | | | | | |
| V34A | Guthrie | 26.80 | 108 | P | | P | 14 57 34.5 | +0.4 |
| | baz=27 | | | | | | | | |
| Y32A | R-V Farms, Ver | 26.85 | 114 | P | | P | 14 57 35.3 | +0.7 |
| | baz=27 | | | | | | | | |
| S36A | Lake Cedric, C | 26.85 | 103 | P | | P | 14 57 35.1 | +0.5 |
| | baz=27 | | | | | | | | |
| Z31A | Sharp Cattle R | 26.91 | 116 | P | | P | 14 57 35.5 | +0.4 |
| | baz=27 | | | | | | | | |
| Q37A | Longview Farm, | 26.92 | 100 | P | | P | 14 57 35.5 | +0.4 |
| | baz=27 | | | | | | | | |
| 229A | Bryant Ranch, | 26.92 | 120 | P | | P | 14 57 35.9 | +0.5 |
| | baz=27 | | | | | | | | |
| 130A | Snyder | 26.94 | 118 | P | | P | 14 57 35.9 | +0.4 |
| | baz=27 | | | | | | | | |
| U35A | Pawnee | 26.95 | 106 | P | | P | 14 57 35.8 | +0.3 |
| | baz=27 | | | | | | | | |
| R37A | Teagarden Farm | 26.99 | 101 | P | | P | 14 57 36.4 | +0.5 |
| | baz=27 | | | | | | | | |
| W34A | Bridge Creek, | 27.03 | 109 | P | | P | 14 57 36.8 | +0.5 |
| | baz=27 | | | | | | | | |
| X33A | Lawton | 27.05 | 111 | P | | P | 14 57 36.8 | +0.4 |
| | baz=27 | | | | | | | | |
| T36A | Boggs Farm, Ca | 27.07 | 104 | P | | P | 14 57 37.2 | +0.7 |
| | baz=27 | | | | | | | | |
| 329A | Wagon Wheel Ra | 27.18 | 121 | P | | P | 14 57 38.4 | +0.7 |
| | baz=27 | | | | | | | | |
| 131A | Roby | 27.22 | 117 | P | | P | 14 57 38.5 | +0.5 |
| | baz=27 | | | | | | | | |
| V35A | Meyer Ranch, C | 27.27 | 108 | P | | P | 14 57 38.6 | +0.2 |
| | baz=27 | | | | | | | | |
| Z32A | Haskell | 27.31 | 115 | P | | P | 14 57 39.1 | +0.4 |
| | baz=27 | | | | | | | | |
| S37A | Fort Scott | 27.32 | 102 | P | | P | 14 57 39.3 | +0.5 |
| | baz=27 | | | | | | | | |
| Y33A | Hilltop Ranch, | 27.34 | 112 | P | | P | 14 57 39.3 | +0.3 |
| | baz=27 | | | | | | | | |
| 230A | Sterling City | 27.38 | 119 | P | | P | 14 57 39.7 | +0.3 |
| | baz=27 | | | | | | | | |
| X34A | Smith Ranch, M | 27.42 | 111 | P | | P | 14 57 40.1 | +0.4 |
| | baz=28 | | | | | | | | |
| T37A | Cheneyville 18 | 27.64 | 103 | P | | P | 14 57 42.1 | +0.4 |
| | baz=28 | | | | | | | | |
| W35A | Tecumseh | 27.64 | 109 | P | | P | 14 57 41.8 | +0.1 |
| | baz=28 | | | | | | | | |
| ABTX | Abilene, Hawle | 27.70 | 116 | P | | P | 14 57 42.5 | +0.3 |
| | baz=28 | | | | | | | | |
| 330A | Mertzon | 27.70 | 120 | P | | P | 14 57 42.6 | +0.3 |
| | baz=28 | | | | | | | | |
| Z33A | Whitaker Ranch | 27.75 | 114 | P | | P | 14 57 43.0 | +0.4 |
| | baz=28 | | | | | | | | |
| 231A | Bronte | 27.80 | 118 | P | | P | 14 57 43.5 | +0.3 |
| | baz=28 | | | | | | | | |
| V36A | Jenks | 27.82 | 106 | P | | P | 14 57 43.9 | +0.6 |
| | baz=28 | | | | | | | | |
| TUL1 | Tulsa | 27.83 | 106 | P | | P | 14 57 44.0 | +0.6 |
| | baz=28 | | | | | | | | |
| 429A | Davenport Ranc | 27.88 | 122 | P | | P | 14 57 44.6 | +0.6 |
| | baz=28 | | | | | | | | |
| Y34A | Reagan Ranch, | 27.90 | 112 | P | | P | 14 57 44.7 | +0.7 |
| | baz=28 | | | | | | | | |
| TXAR | Lajitas Array | 27.92 | 126 | P | | P | 14 57 43.9 | -0.5 |
| | comp=Z,2.6nm,1.0s,baz=325,slow=6.3,SNR=19 | | | | | | | | |
| U37A | Salina | 27.95 | 105 | P | | P | 14 57 44.9 | +0.4 |
| | baz=28 | | | | | | | | |
| W36A | Wetumka | 28.05 | 108 | P | | P | 14 57 45.9 | +0.5 |
| | baz=28 | | | | | | | | |
| X35A | Drake | 28.08 | 110 | P | | P | 14 57 46.0 | +0.4 |
| | baz=28 | | | | | | | | |
| 529A | Stev Forest Ra | 28.09 | 123 | P | | P | 14 57 46.0 | +0.3 |
| | baz=28 | | | | | | | | |
| 430A | Baggett Ranch, | 28.13 | 121 | P | | P | 14 57 46.2 | +0.1 |
| | baz=28 | | | | | | | | |
| 133A | Hamilton Ranch | 28.14 | 115 | P | | P | 14 57 46.0 | -0.1 |
| | baz=28 | | | | | | | | |
| 331A | San Angelo | 28.20 | 119 | P | | P | 14 57 47.3 | +0.6 |
| | baz=28 | | | | | | | | |
| Z34A | Collier Ranch, | 28.20 | 113 | P | | P | 14 57 46.8 | +0.1 |
| | baz=28 | | | | | | | | |
| 232A | Coleman | 28.22 | 117 | P | | P | 14 57 47.4 | +0.4 |
| | baz=28 | | | | | | | | |
| V37A | Hulbert | 28.26 | 105 | P | | P | 14 57 47.5 | +0.3 |
| | baz=28 | | | | | | | | |
| X36A | Centrahoma | 28.35 | 109 | P | | P | 14 57 48.7 | +0.7 |
| | baz=28 | | | | | | | | |
| U38A | Gravette | 28.39 | 104 | P | | P | 14 57 48.7 | +0.3 |
| | baz=28 | | | | | | | | |
| 332A | Millersview | 28.54 | 118 | P | | P | 14 57 50.2 | +0.4 |
| | baz=29 | | | | | | | | |
| 530A | J-C Ranch, Com | 28.55 | 122 | P | | P | 14 57 50.4 | +0.5 |
| | baz=29 | | | | | | | | |
| W37A | Quinton | 28.55 | 107 | P | | P | 14 57 50.1 | +0.2 |
| | baz=29 | | | | | | | | |
| 431A | Sonora | 28.56 | 120 | P | | P | 14 57 50.6 | +0.6 |
| | baz=29 | | | | | | | | |
| 233A | Rising Star | 28.57 | 116 | P | | P | 14 57 50.1 | +0.1 |
| | baz=29 | | | | | | | | |
| Z35A | Perchaven, San | 28.63 | 112 | P | | P | 14 57 51.2 | +0.7 |
| | baz=29 | | | | | | | | |
| 134A | White-Moore Ra | 28.66 | 114 | P | | P | 14 57 51.3 | +0.5 |
| | baz=29 | | | | | | | | |
| V38A | Canehill | 28.74 | 105 | P | | P | 14 57 51.9 | +0.4 |
| | baz=29 | | | | | | | | |
| Y36A | Durant | 28.84 | 110 | P | | P | 14 57 53.1 | +0.8 |
| | baz=29 | | | | | | | | |
| 432A | Menard | 28.88 | 119 | P | | P | 14 57 53.4 | +0.6 |
| | baz=29 | | | | | | | | |
| X37A | Clayton | 28.95 | 108 | P | | P | 14 57 54.3 | +1.0 |
| | baz=29 | | | | | | | | |
| 531A | Rocksprings | 28.99 | 121 | P | | P | 14 57 54.1 | +0.4 |
| | baz=29 | | | | | | | | |
| W38A | Poteau | 29.17 | 106 | P | | P | 14 57 56.1 | +0.9 |
| | baz=29 | | | | | | | | |
| JCT | Junction City | 29.17 | 119 | eP | | P | 14 57 55.0 | -0.4 |
| JCT | | | | pmax | | pmax | | | |
| | comp=Z,32nm,1.4s | | | | | | | | |
| JCT | Junction City | 29.17 | 119 | P | | P | 14 57 55.5 | +0.1 |
| | baz=29 | | | | | | | | |
| JCT | Junction City | 29.17 | 119 | eP | | P | 14 57 55.0 | -0.4 |
| | comp=Z,32nm,1.4s | | | | | | | | |
| Z36A | Blue Ridge | 29.17 | 111 | P | | P | 14 57 55.8 | +0.5 |
| | baz=29 | | | | | | | | |
| Y37A | Hugo | 29.19 | 109 | P | | P | 14 57 56.0 | +0.5 |
| | baz=29 | | | | | | | | |
| X38A | Whitesboro | 29.23 | 107 | P | | P | 14 57 56.6 | +0.7 |
| | baz=29 | | | | | | | | |
| HDIL | Hopedale | 29.37 | 92 | P | | P | 14 57 57.2 | +0.1 |
| | baz=30 | | | | | | | | |
| 532A | Rocksprings | 29.38 | 120 | P | | P | 14 57 57.2 | 0.0 |
| | baz=29 | | | | | | | | |
| WHTX | Lake Whitney | 29.44 | 114 | P | | P | 14 57 58.3 | +0.5 |
| | baz=30 | | | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| 334A | Lometa | 29.45 | 116 | P | P | 14 57 58.9 | +1.0 |
| | baz=30 | | | | | | |
| 631A | Perdido Creek | 29.54 | 122 | P | P | 14 57 59.1 | +0.4 |
| | baz=30 | | | | | | |
| 434A | Burnet | 29.81 | 117 | P | P | 14 58 01.7 | +0.7 |
| | baz=30 | | | | | | |
| 632A | Uvalde | 29.91 | 120 | P | P | 14 58 02.5 | +0.5 |
| | baz=30 | | | | | | |
| MIAR | Mount Ida | 30.10 | 106 | P | P | 14 58 03.7 | +0.2 |
| | baz=30 | | | | | | |
| 732A | Laxson Ranch, | 30.41 | 122 | P | P | 14 58 07.0 | +0.7 |
| | baz=30 | | | | | | |
| 138A | Matatall Enter | 30.41 | 110 | P | P | 14 58 07.2 | +0.9 |
| | baz=30 | | | | | | |
| 832A | Faith Ranch, C | 30.75 | 122 | P | P | 14 58 10.0 | +0.7 |
| | baz=31 | | | | | | |
| 733A | Divot King Ran | 30.79 | 121 | P | P | 14 58 10.3 | +0.6 |
| | baz=31 | | | | | | |
| 833A | Chaparral WMA, | 31.04 | 121 | P | P | 14 58 12.5 | +0.6 |
| | baz=31 | | | | | | |
| NATX | Nacogdoches | 31.29 | 111 | P | P | 14 58 14.8 | +0.7 |
| | baz=31 | | | | | | |
| 537A | Green Hill Far | 31.50 | 115 | P | P | 14 58 17.3 | +1.4 |
| | baz=32 | | | | | | |
| 636A | Smothers Creek | 31.50 | 117 | P | P | 14 58 16.9 | +1.0 |
| | baz=32 | | | | | | |
| 438A | Sam Houston St | 31.51 | 113 | P | P | 14 58 17.0 | +1.0 |
| | baz=32 | | | | | | |
| 933A | Laredo | 31.66 | 122 | P | P | 14 58 18.4 | +1.1 |
| | baz=32 | | | | | | |
| 834A | Tilden | 31.66 | 121 | P | P | 14 58 18.9 | +1.6 |
| | baz=32 | | | | | | |
| 736A | Circle Diamond | 31.89 | 118 | P | P | 14 58 20.9 | +1.6 |
| | baz=32 | | | | | | |
| 835A | Beeville | 31.95 | 119 | P | P | 14 58 21.0 | +1.2 |
| | baz=32 | | | | | | |
| 934A | Benavides | 32.09 | 121 | P | P | 14 58 22.5 | +1.5 |
| | baz=32 | | | | | | |
| 034A | Hebbronville | 32.41 | 122 | P | P | 14 58 25.4 | +1.5 |
| | baz=32 | | | | | | |
| OXF | Oxford | 32.77 | 102 | *e*P | P | 14 58 27.8 | +0.8 |
| OXF | | | | pmax | pmax | | |
| | comp=Z,112nm,1.1s | | | | | | |
| OXF | Oxford | 32.77 | 102 | *e*P | P | 14 58 27.8 | +0.8 |
| | comp=Z,112nm,1.1s | | | | | | |
| VBMS | Vicksburg | 33.55 | 106 | P | P | 14 58 34.8 | +1.0 |
| | baz=34 | | | | | | |
| GOGA | Godfrey | 37.29 | 98 | *e*P | P | 14 59 05.9 | -0.1 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,33nm,1.3s | | | | | | |
| GOGA | Godfrey | 37.29 | 98 | *e*P | P | 14 59 05.9 | -0.1 |
| | comp=Z,33nm,1.3s | | | | | | |
| KMSC | Kings Mountain | 37.62 | 94 | P | P | 14 59 09.4 | +0.6 |
| | baz=38 | | | | | | |
| SEY | Seymchan | 42.85 | 319 | P | P | 14 59 50.7 | -1.1 |
| | comp=Z,3.7nm,0.9s,baz=85,slow=15,SNR=4.3 | | | | | | |
| SEY | Seymchan | 42.85 | 319 | P | P | 14 59 55.0 | +3.3 |
| PETK | Petropavlovsk- | 44.04 | 304 | P | P | 14 59 59.5 | -2.1 |
| | comp=Z,4.3nm,0.8s,baz=82,slow=12,SNR=5.9 | | | | | | |
| PETK | | | | LR | LR | 15 15 21.1 | |
| | comp=Z,359nm,21.6s,baz=26,slow=32 | | | | | | |
| SUMG | Summit | 44.11 | 26 | *e*P | P | 15 00 03.0 | +0.7 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,31nm,1.0s | | | | | | |
| SUMG | Summit | 44.11 | 26 | *i* P | P | 15 00 03.4 | +1.1 |
| | comp=Z,30nm,1.0s | | | | | | |
| SUMG | Summit | 44.11 | 26 | *e*P | P | 15 00 03.0 | +0.7 |
| | comp=Z,31nm,1.0s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 58.25 | 264 | T | T | 16 04 35.4 | |
| | baz=43,slow=75,SNR=154 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 58.25 | 264 | T | T | 16 04 35.6 | |
| | baz=43,slow=75,SNR=157 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 58.26 | 264 | T | T | 16 04 36.7 | |
| | baz=43,slow=75,SNR=125 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 59.26 | 263 | T | T | 16 05 54.8 | |
| | baz=31,slow=76,SNR=11 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 59.27 | 263 | T | T | 16 05 54.5 | |
| | baz=31,slow=76,SNR=13 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 59.28 | 263 | T | T | 16 05 54.0 | |
| | baz=31,slow=76,SNR=5.8 | | | | | | |
| BOD | Bodaibo | 61.21 | 327 | *e*P | P | 15 02 06.0 | -2.4 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,4.0nm,2.1s | | | | | | |
| USRK | Ussuriysk Ar. | 62.98 | 307 | P | P | 15 02 18.1 | -2.4 |
| | comp=Z,1.9nm,0.8s,baz=48,slow=2.1,SNR=3.6 | | | | | | |
| NOA | NORSAR Array B | 65.51 | 20 | LR | LR | 15 30 40.2 | |
| | comp=Z,154nm,19.3s,baz=230,slow=35 | | | | | | |
| HFS | Hagfors | 66.86 | 19 | P | P | 15 02 45.6 | +0.1 |
| | comp=Z,5.1nm,0.8s,baz=156,slow=7.4,SNR=4.2 | | | | | | |
| FINES | FINESS Array B | 67.84 | 12 | P | P | 15 02 51.7 | 0.0 |
| | comp=Z,3.0nm,0.8s,baz=310,slow=6.5,SNR=3.1 | | | | | | |
| TLY | Talaya | 69.73 | 328 | *e*P | P | 15 03 05.8 | +2.1 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| KLMR | Klimovskoe | 69.82 | 6 | *e*P | P | 15 03 02.6 | -1.4 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,30nm,1.5s | | | | | | |
| SONM | Songino Array | 71.91 | 324 | P | P | 15 03 15.3 | -1.8 |
| | comp=Z,0.6nm,0.8s,baz=79,slow=4.5,SNR=3.5 | | | | | | |
| NVS | Novosibirsk | 72.68 | 341 | *i* P | P | 15 03 19.6 | -1.8 |
| ZALV | Zalesovo Beam | 73.16 | 340 | P | P | 15 03 22.8 | -1.4 |
| | comp=Z,1.1nm,0.7s,baz=35,slow=5.3,SNR=4.9 | | | | | | |
| ARU | Arti | 74.42 | 355 | *d i*P | P | 15 03 33.7 | +2.1 |
| ARU | | | | | | 15 06 27.1 | |
| ARU | | | | S | S | 15 13 10.2 | +5.3 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,16nm,2.5s | | | | | | |
| HHC | Hu-ho-hao-te | 75.45 | 317 | *e*P | P | 15 03 39.7 | +1.7 |
| HHC | | | | pP | pP | 15 03 44.4 | +0.3 |
| HHC | | | | sP | sP | 15 03 46.8 | +0.5 |
| HHC | | | | PP | PP | 15 06 34.4 | +7.9 |
| HHC | | | | S | S | 15 13 15.3 | -1.9 |
| HHC | | | | SKS | SKSac | 15 13 43.9 | -2.9 |
| HHC | | | | ScS | SKKSac | 15 13 48.6 | +1.5 |
| HHC | | | | PMZ | | | |
| | comp=Z,19nm,0.5s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,230nm,7.1s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,360nm,14.1s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,410nm,16.1s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,270nm,17.3s | | | | | | |
| BRVK | Borovoye | 76.66 | 348⇓ | *e*P | P | 15 03 46.6 | +2.1 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| BVAR | Borovoye Array | 76.67 | 348 | P | P | 15 03 44.1 | -0.5 |
| | comp=Z,0.7nm,0.7s,baz=46,slow=4.2,SNR=2.8 | | | | | | |
| KHC | Kasperske Hory | 76.87 | 24 | *e*P | P | 15 03 36.5 | -9.3 |
| KURK | Kurchatov | 77.52 | 342 | P | P | 15 03 48.3 | -1.0 |
| KURK | Kurchatov | 77.52 | 342 | P | P | 15 03 48.3 | -1.0 |
| KURBB | Kurchatov Arra | 77.62 | 342 | P | P | 15 03 48.3 | -1.6 |
| | comp=Z,1.7nm,0.9s,baz=20,slow=5.4,SNR=9.6 | | | | | | |
| AKASG | Malin Array Be | 78.69 | 14 | P | P | 15 03 55.5 | -0.4 |
| | comp=Z,0.3nm,0.3s,baz=354,slow=5.3,SNR=5.0 | | | | | | |
| AKASG | Malin Array Be | 78.69 | 14 | *i* P | P | 15 03 57.7 | +1.9 |
| ESDC | Sonseca Array | 79.14 | 40 | P | P | 15 03 58.9 | +0.3 |
| | comp=Z,1.0nm,0.6s,baz=322,slow=4.8,SNR=5.9 | | | | | | |
| MKAR | Makanchi Array | 80.41 | 339 | P | P | 15 04 03.9 | -1.5 |
| | comp=Z,1.1nm,0.8s,baz=33,slow=4.6,SNR=7.6 | | | | | | |
| MKAR | Makanchi Array | 80.41 | 339 | *i* P | P | 15 04 05.8 | +0.4 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ABKAR | Akbulak array | 81.49 | 354 | *e*P | P | 15 04 09.9 | -1.1 |
| | comp=Z,7.7nm,0.6s | | | | | | |
| WMQ | Urumqi | 81.75 | 334 | *e*P | P | 15 04 16.0 | +3.4 |
| XAN | Xi’an | 82.22 | 315 | P | P | 15 04 14.2 | -1.0 |
| XAN | | | | PMZ | | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,470nm,12.6s | | | | | | |
| LZH | Lanzhou | 82.78 | 319 | *e*P | P | 15 04 20.9 | +2.7 |
| LZH | | | | pP | pP | 15 04 24.7 | +0.3 |
| LZH | | | | sP | sP | 15 04 27.3 | +0.7 |
| LZH | | | | PMZ | | | |
| | comp=Z,30nm,1.4s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,160nm,5.0s | | | | | | |
| LPAZ | La Paz | 84.72 | 122 | P | P | 15 04 27.2 | -1.6 |
| | comp=Z,0.9nm,1.0s,baz=339,slow=8.6,SNR=3.2 | | | | | | |
| AAK | Ala-Archa | 86.07 | 343 | P | P | 15 04 33.6 | -1.3 |
| | comp=Z,0.4nm,0.3s,baz=343,slow=11,SNR=2.5 | | | | | | |
| AAK | Ala-Archa | 86.07 | 343 | P | P | 15 04 39.0 | +4.2 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| CD2 | Chengdu | 87.21 | 317 | *e*P | P | 15 04 41.8 | +1.4 |
| CD2 | | | | pP | pP | 15 04 45.1 | -1.5 |
| CD2 | | | | PP | PP | 15 08 04.6 | +1.0 |
| CD2 | | | | SKS | SKSac | 15 15 08.2 | +1.2 |
| CD2 | | | | S | S | 15 15 20.8 | +1.6 |
| CD2 | | | | SS | SS | 15 21 04.5 | +2.6 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| KSH | Kashi | 88.76 | 341 | P | P | 15 04 52.3 | +4.5 |
| KSH | | | | *e*sP | sP | 15 04 59.7 | +3.5 |
| KSH | | | | *e*PP | PP | 15 08 23.8 | +8.0 |
| KSH | | | | S | ScS | 15 15 38.1 | -1.3 |
| KSH | | | | SS | SS | 15 21 36.0 | +12 |
| KSH | | | | PMZ | | | |
| | comp=Z,150nm,7.9s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,71nm,6.3s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,100nm,6.5s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,170nm,6.2s | | | | | | |
| GYA | Guiyang | 89.60 | 312 | *e*P | P | 15 04 54.0 | +2.1 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| VNA1 | Neumayer--Stat | 145.64 | 150 | P | PKPab | 15 11 35.2 | +3.8 |
| VNA2 | Neumayer--Watz | 145.89 | 150 | P | PKPab | 15 11 35.6 | +3.1 |
| | baz=304,slow=4.9 | | | | | | |
| SNAA | Sanae | 147.19 | 152 | P | PKPab | 15 11 39.5 | +1.9 |
| SNAA | Sanae | 147.19 | 152 | *e*PKIKP | PKPdf | 15 11 33.7 | +0.2 |
| SNAA | Sanae | 147.19 | 152 | *e*PKPdf | PKPdf | 15 11 33.7 | +0.2 |
| BOSA | Boshof | 151.64 | 53 | PKPbc | PKPbc | 15 11 46.6 | -1.7 |
| | comp=Z,5.1nm,1.0s,baz=243,slow=2.3,SNR=3.9 | | | | | | |

*IDC **04** 14:58:57.2±0.7, 24°.30N×125°.26E, h0$^{km}$, mb4.1/19, mb1 4.2/20, mb1mx4.1/38, mbtmp4.1/20, ML3.2/2, Error ellipse: s-maj=18.8km s-min=15.4km az=86.0*
*NEIC **04** 14:59:02.6±0.7, 24°.24N×125°.28E, h38$^{km}$±6$^{km}$, mb4.7/4, Error ellipse: s-maj=9.7km s-min=5.9km az=143.0*
*NEIC Recorded [1 JMA] on Miyako-jima and Tarama-shima.*
*JMA **04** 14:59:02.0±0.1, 24°.25N×125°.34E, h58$^{km}$±4$^{km}$, M4.4*
*JMA Felt I J1.*
**ISC 04 14:58:59.9**±0.7**, 24°.16N**±0°.06×**125°.41E**±0°.05**, h23**$^{km}$±4$^{km}$**, n69,** σ1s**22**/78**, mb4.2**/24**, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOGS | Gusukube | 0.60 | 360 | P | Pn | 14 59 14.0 | +1.0 |
| JOGS | | | | S | Sn | 14 59 23.0 | +1.0 |
| JMJ | Miyako jima 2 | 0.66 | 351 | P | Pn | 14 59 14.5 | +0.6 |
| JMJ | | | | S | Sn | 14 59 24.1 | +0.6 |
| JIRB | Irabujima | 0.70 | 342 | P | Pb | 14 59 14.7 | +1.3 |
| JIRB | | | | S | Sn | 14 59 24.7 | +0.2 |
| JIKM | Ikemajima | 0.78 | 349 | P | Pb | 14 59 16.0 | +1.3 |
| JIKM | | | | S | Sn | 14 59 26.4 | 0.0 |
| JTJ | Tarama | 0.80 | 307 | P | Pn | 14 59 16.1 | +0.3 |
| JTJ | | | | S | Sb | 14 59 26.1 | +0.5 |
| JISG | Ishigakijimahi | 1.09 | 293 | P | Pn | 14 59 20.2 | +0.5 |
| JISG | | | | S | Sn | 14 59 33.3 | -0.8 |
| JIJ | Ishigaki jima | 1.17 | 280 | P | Pn | 14 59 21.6 | +0.7 |
| JIJ | | | | S | Sn | 14 59 35.3 | -0.9 |
| JKRS | Kuro-shima | 1.28 | 274 | P | Pb | 14 59 23.7 | +0.4 |
| JKRS | | | | S | Sn | 14 59 39.0 | +0.2 |
| HATJ | Hateruma jima | 1.47 | 266 | P | Pn | 14 59 25.9 | +0.9 |
| HATJ | | | | S | Sn | 14 59 43.0 | -0.5 |
| IRIF | Iriomote-Funau | 1.54 | 277 | P | Pn | 14 59 26.9 | +0.9 |
| IRIF | | | | S | Sn | 14 59 45.5 | +0.2 |
| YOJ | Yonaguni jima | 2.21 | 278 | P | Pn | 14 59 35.7 | +0.5 |
| YOJ | Yonaguni jima | 2.21 | 278 | *e*Pn | Pn | 14 59 35.6 | +0.5 |
| JYNG | Yonagunijimaku | 2.27 | 278 | P | Pn | 14 59 36.6 | +0.7 |
| JYNG | | | | S | Sn | 15 00 02.2 | -1.0 |
| JKE | Kume jima 2 | 2.49 | 30 | P | Pn | 14 59 39.5 | +0.5 |
| JJT2 | Tamagusuku 2 | 2.90 | 47 | P | Pn | 14 59 46.2 | +1.6 |
| JAGN | Aguni-jima | 2.93 | 34 | P | Pn | 14 59 46.1 | +1.0 |
| JNTH | Nagotoyohara | 3.33 | 45 | P | Pn | 14 59 51.6 | +1.0 |
| NACB | Ninganchiao | 3.48 | 271 | *e*Pn | Pn | 14 59 52.5 | -0.2 |
| TATO | Taipei | 3.66 | 284 | *e*Pn | Pn | 14 59 56.2 | +1.1 |
| JIH | Iheya | 3.68 | 38 | P | Pn | 14 59 56.1 | +0.7 |
| YHNB | Yeheng | 3.71 | 279 | *e*Pn | Pn | 14 59 57.3 | +1.4 |
| JOW | Kunigami | 3.71 | 44 | P | Pn | 14 59 56.8 | +0.9 |
| JOW | Kunigami | 3.71 | 44 | Pn | Pn | 14 59 56.5 | +0.6 |
| | 1.3nm,0.3s,baz=102,slow=23,SNR=70 | | | | | | |
| YULB | Yu-li | 3.84 | 259 | *e*Pn | Pn | 14 59 56.6 | -1.0 |
| SSLB | Suanglung | 4.09 | 266 | *e*Pn | Pn | 15 00 01.0 | -0.1 |
| TWG | Pinlang | 4.20 | 252 | *e*Pn | Pn | 15 00 01.2 | -1.4 |
| JOKE | Okinoerabujima | 4.28 | 41 | P | Pn | 15 00 04.1 | +0.5 |
| JOKE | | | | S | Sn | 15 00 51.6 | -1.2 |
| TPUB | Ta-pu | 4.46 | 260 | *e*Pn | Pn | 15 00 07.1 | +0.9 |
| JTK | Tokunoshima | 4.82 | 41 | P | Pn | 15 00 10.9 | -0.1 |
| JAMN | Amaminishikomi | 5.29 | 39 | P | Pn | 15 00 16.7 | -0.8 |
| JMZ | Minamidaito 2 | 5.53 | 71 | P | Pn | 15 00 19.6 | -1.2 |
| JMZ | | | | S | Sn | 15 01 16.6 | -7.0 |
| JAM | Amami Oshima | 5.67 | 41 | P | Pn | 15 00 22.2 | -0.5 |
| JAM | | | | S | Sn | 15 01 22.1 | -5.0 |
| JTAJ | Takarajima | 6.02 | 33 | P | Pn | 15 00 27.7 | +0.1 |
| JNU | Nakatsue | 10.14 | 27 | Pn | Pn | 15 01 24.2 | +0.1 |
| | 0.5nm,0.3s,baz=96,slow=2.1,SNR=5.4 | | | | | | |
| KSAR | Wonju Array Be | 13.41 | 9 | Pn | Pn | 15 02 10.7 | +1.9 |
| KSRS | Korea Array | 13.43 | 9 | Pn | Pn | 15 02 10.7 | +1.7 |
| | 0.2nm,0.3s,baz=190,slow=13,SNR=7.1 | | | | | | |
| MJAR | Matsushiro Arr | 16.54 | 39 | Pn | P | 15 02 54.0 | +1.2 |
| | 0.5nm,0.3s,baz=228,slow=9.3,SNR=8.8 | | | | | | |
| CN2 | Changchun | 19.59 | 0 | *e*P | Pn | 15 03 31.7 | +3.9 |
| ASAJ | Asahikawa | 24.38 | 31 | P | P | 15 04 16.6 | +0.4 |
| | 3.4nm,0.7s,baz=219,slow=13,SNR=5.5 | | | | | | |
| CMAR | Chiang Mai Arr | 25.28 | 262 | P | P | 15 04 24.8 | +0.1 |
| | 0.7nm,0.7s,baz=72,slow=6.7,SNR=5.8 | | | | | | |
| GTA | Gaotai | 26.42 | 311 | *e*P | P | 15 04 34.5 | -0.5 |
| GTA | | | | PcP | P | 15 04 34.6 | -0.5 |
| GTA | | | | pP | pwP | 15 04 39.1 | -2.7 |
| GTA | | | | sP | sP | 15 04 41.6 | -3.1 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| SONM | Songino Array | 28.04 | 332 | P | P | 15 04 48.0 | -1.5 |
| | comp=Z,1.5nm,0.4s,baz=156,slow=9.9,SNR=12 | | | | | | |
| TLY | Talaya | 32.15 | 334 | P | P | 15 05 24.7 | -1.0 |
| | comp=Z,1.0nm,0.5s,baz=191,slow=10,SNR=3.1 | | | | | | |
| PSI | Prapat | 33.24 | 234 | P | P | 15 05 36.9 | +1.1 |
| | comp=Z,12nm,0.9s,baz=59,slow=3.0,SNR=4.2 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 38.63 | 88 | T | T | 15 47 49.4 | |
| | baz=284,slow=75,SNR=3.3 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 38.63 | 88 | T | T | 15 47 49.4 | |
| | baz=284,slow=75,SNR=2.7 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 38.65 | 88 | T | T | 15 47 47.5 | |
| | baz=284,slow=75,SNR=3.5 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 38.76 | 90 | T | T | 15 47 56.4 | |
| | baz=278,SNR=3.2 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 38.77 | 90 | T | T | 15 47 56.4 | |
| | baz=278 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 38.78 | 90 | T | T | 15 47 56.4 | |
| | baz=278 | | | | | | |
| MKAR | Makanchi Array | 41.08 | 314 | P | P | 15 06 41.0 | -0.8 |
| | comp=Z,4.0nm,0.5s,baz=96,slow=9.0,SNR=36 | | | | | | |
| ZALV | Zalesovo Beam | 42.41 | 325 | P | P | 15 06 50.8 | -1.8 |
| | comp=Z,2.4nm,0.5s,baz=107,slow=8.8,SNR=11 | | | | | | |
| KURK | Kurchatov | 44.62 | 319 | P | P | 15 07 09.7 | -0.8 |
| KURBB | Kurchatov Arra | 44.65 | 319 | P | P | 15 07 09.7 | -1.0 |
| | comp=Z,3.5nm,0.7s,baz=110,slow=8.3,SNR=28 | | | | | | |
| WRAB | Tennant Creek | 44.68 | 168 | *e*P | P | 15 07 12.7 | +1.5 |
| | comp=Z,6.2nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 44.69 | 168 | P | P | 15 07 12.8 | +1.6 |
| | comp=Z,0.9nm,0.5s,baz=348,slow=8.8,SNR=12 | | | | | | |
| TKM2 | Tokmak 2 | 44.84 | 307 | *e*P | P | 15 07 13.4 | +0.9 |
| | comp=Z,10nm,0.6s | | | | | | |
| AAK | Ala-Archa | 45.60 | 307 | P | P | 15 07 18.0 | -0.6 |
| | comp=Z,1.4nm,0.5s,baz=97,slow=8.1,SNR=6.3 | | | | | | |
| ASAR | Alice Springs | 48.25 | 170 | P | P | 15 07 41.2 | +2.1 |
| | comp=Z,0.4nm,0.4s,baz=354,slow=7.0,SNR=22 | | | | | | |
| ABKAR | Akbulak array | 56.22 | 314 | *e*P | P | 15 08 37.9 | -0.3 |
| | comp=Z,8.1nm,0.6s | | | | | | |
| ARU | Arti | 57.46 | 323 | P | P | 15 08 45.6 | -1.2 |
| | comp=Z,3.4nm,0.8s | | | | | | |
| GEYT | Alibeck | 58.13 | 301 | P | P | 15 08 52.1 | +0.2 |
| | comp=Z,2.9nm,0.5s,baz=48,slow=2.2,SNR=7.0 | | | | | | |
| ILAR | Eielson Array | 67.46 | 28 | P | P | 15 09 54.0 | +0.4 |
| | comp=Z,0.3nm,0.5s,baz=288,slow=7.5,SNR=9.2 | | | | | | |
| KBZ | Khabaz | 68.49 | 309 | P | P | 15 10 01.2 | +0.9 |
| | comp=Z,0.6nm,0.3s,baz=180,slow=2.0,SNR=2.4 | | | | | | |
| FINES | FINESS Array B | 73.40 | 330 | P | P | 15 10 29.5 | -0.3 |
| | comp=Z,3.7nm,0.9s,baz=66,slow=2.3,SNR=8.9 | | | | | | |
| AKASG | Malin Array Be | 75.43 | 319 | P | P | 15 10 41.4 | -0.5 |
| | comp=Z,0.2nm,0.3s,baz=70,slow=5.0,SNR=3.6 | | | | | | |
| BRTR | Keskin Array B | 76.27 | 307 | P | P | 15 10 46.6 | -0.5 |
| | comp=Z,0.6nm,0.4s,baz=72,slow=4.7,SNR=2.7 | | | | | | |
| NOA | NORSAR Array B | 80.02 | 333 | P | P | 15 11 07.8 | +0.5 |
| | comp=Z,0.7nm,0.8s,baz=61,slow=5.6,SNR=2.8 | | | | | | |
| YKA | Yellowknife Ar | 81.46 | 24 | P | P | 15 11 15.9 | +1.0 |
| | comp=Z,0.6nm,0.5s,baz=303,slow=5.3,SNR=3.2 | | | | | | |

*AUST **04** 15:19:12.8, 5°.24S×149°.59E, h25$^{km}$*
*ISCJB **04** 15:19:15.8±0.5, 5°.62S±0°.05×149°.57E±0°.09, h50$^{km}$, mb4.2/15, Error ellipse: s-maj=13.2km s-min=6.9km az=2.2*
*NEIC **04** 15:19:19.1±2.2, 5°.64S×149°.60E, h71$^{km}$±20$^{km}$, mb4.8/6, Error ellipse: s-maj=16.2km s-min=12.4km az=84.0*
*IDC **04** 15:19:19.2±4.1, 5°.63S×149°.55E, h66$^{km}$±37$^{km}$, mb3.8/10, mb1 3.9/11, mb1mx3.8/29, mbtmp4.2/11, ML2.5/1, Error ellipse: s-maj=26.5km s-min=18.9km az=76.0*
*BJI **04** 15:19:21.6, 5°.66S×149°.09E, h83$^{km}$, mb4.6/23, mB5.1/18, Ms4.8/8, Ms7 4.5/8*
**ISC 04 15:19:17.5**±0.7**, 5°.58S**±0°.07×**149°.6E**±0°.1**, h50**$^{km}$**, n47,** σ1s**40**/50**, mb4.2**/15**, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | Rabaul | 2.92 | 62 | P | Pn | 15 19 54.9 | -6.6 |
| | baz=2.8,SNR=9.9 | | | | | | |
| PMG | Port Moresby | 4.49 | 212 | P | Pn | 15 20 24.3 | +1.2 |
| | 16nm,0.3s,baz=34,slow=13,SNR=29 | | | | | | |
| PMG | Port Moresby | 4.49 | 212 | P | Pn | 15 20 24.6 | +1.4 |
| | baz=4.8,SNR=21 | | | | | | |
| PMG | Port Moresby | 4.49 | 212 | *e*Pn | Pn | 15 20 24.5 | +1.4 |
| QIS | Mount Isa | 17.76 | 212 | P | P | 15 23 22.6 | +1.0 |
| | baz=18,SNR=4.2 | | | | | | |
| KDU | Kakadu | 18.30 | 246 | P | P | 15 23 27.0 | -0.5 |
| | baz=18,SNR=8.2 | | | | | | |
| MTN | Manton Dam | 19.58 | 247 | P | P | 15 23 41.4 | -0.2 |
| | baz=20,SNR=7.9 | | | | | | |
| EIDS | Eidsvold | 19.73 | 176 | *e*P | P | 15 23 41.5 | -1.6 |
| | 18nm,1.2s | | | | | | |
| WRAB | Tennant Creek | 20.57 | 225 | *e*P | P | 15 23 52.2 | -0.1 |
| | 95nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 20.58 | 225 | P | P | 15 23 52.1 | -0.3 |
| | 63nm,0.8s,baz=51,slow=11,SNR=86 | | | | | | |
| RMQ | Roma | 20.80 | 182 | P | P | 15 23 55.8 | +1.0 |
| | baz=21,SNR=6.9 | | | | | | |
| QLP | Quilpie | 21.50 | 193 | P | P | 15 24 04.6 | +2.3 |
| | baz=22,SNR=5.6 | | | | | | |
| KNRA | Kununurra | 22.76 | 242 | P | P | 15 24 14.5 | -1.3 |
| | baz=23,SNR=21 | | | | | | |
| DZM | Mont Dzumac | 23.12 | 137 | P | P | 15 24 20.4 | +0.8 |
| | 8.4nm,0.8s,baz=180,slow=9.6,SNR=6.6 | | | | | | |
| ASAR | Alice Springs | 23.48 | 218 | P | P | 15 24 22.9 | -0.1 |
| | 6.9nm,0.8s,baz=55,slow=8.6,SNR=75 | | | | | | |
| CMSA | Cobar Meteorol | 26.08 | 188 | P | P | 15 24 45.6 | -0.9 |
| | baz=27,SNR=7.1 | | | | | | |
| FITZ | Fitzroy Crossi | 26.48 | 240 | P | P | 15 24 49.9 | -0.5 |
| | 54nm,0.8s,baz=68,slow=7.6,SNR=62 | | | | | | |
| FITZ | Fitzroy Crossi | 26.48 | 240 | P | P | 15 24 50.0 | -0.4 |
| | baz=27,SNR=64 | | | | | | |
| FITZ | Fitzroy Crossi | 26.48 | 240 | *e*P | P | 15 24 49.6 | -0.8 |
| | 73nm,0.9s | | | | | | |
| WRKA | Warakurna | 28.12 | 224 | P | P | 15 25 04.2 | -0.8 |
| | baz=28,SNR=20 | | | | | | |
| FORT | Forrest | 32.21 | 216 | *e*P | P | 15 25 40.0 | -1.1 |
| | 21nm,0.8s | | | | | | |
| MBWA | Marble Bar | 32.81 | 239 | *e*P | P | 15 25 45.1 | -1.3 |
| | 12nm,1.1s | | | | | | |
| MEEK | Meekatharra | 36.20 | 231 | P | P | 15 26 15.6 | -0.1 |
| | baz=36,SNR=17 | | | | | | |
| WHN | Wuhan | 49.27 | 319 | P | P | 15 27 58.6 | -2.9 |
| GYA | Guiyang | 52.37 | 310 | *e*P | P | 15 28 27.2 | +2.1 |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| CN2 | Changchun | 53.77 | 338 | *e*P | P | 15 28 40.7 | +5.8 |
| KMI | Kunming | 54.81 | 306 | P | P | 15 28 43.9 | +0.8 |
| KMI | | | | PMZ | | | |
| | 8.0nm,0.5s | | | | | | |
| KMI | | | | PMZ | | | |
| | 120nm,3.6s | | | | | | |
| XAN | Xi’an | 55.03 | 319 | P | P | 15 28 44.7 | +0.4 |
| XAN | | | | PMZ | | | |
| | 8.0nm,1.4s | | | | | | |
| XAN | | | | PMZ | | | |
| | 190nm,5.4s | | | | | | |
| CMAR | Chiang Mai Arr | 55.34 | 297 | P | P | 15 28 47.4 | +0.7 |
| | 1.7nm,1.1s,baz=106,slow=6.9,SNR=4.8 | | | | | | |
| CD2 | Chengdu | 56.85 | 313 | *e*P | P | 15 28 57.0 | -0.5 |
| CD2 | | | | pP | pP | 15 29 17.7 | +6.4 |
| CD2 | | | | PP | PP | 15 31 04.6 | +0.2 |
| CD2 | | | | PcS | PcS | 15 33 51.9 | -1.8 |
| CD2 | | | | S | S | 15 36 46.3 | -1.4 |
| CD2 | | | | sS | sS | 15 37 22.3 | +12 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.4s | | | | | | |
| HHC | Hu-ho-hao-te | 57.87 | 327 | *e*P | P | 15 29 07.5 | +3.0 |
| HHC | | | | pP | pP | 15 29 26.8 | +8.5 |
| HHC | | | | sP | sP | 15 29 36.4 | +12 |
| HHC | | | | PP | PP | 15 31 18.9 | +5.6 |
| HHC | | | | S | S | 15 37 01.8 | +1.1 |
| HHC | | | | sS | sS | 15 37 34.3 | +10 |
| HHC | | | | ScS | ScS | 15 38 45.8 | -4.2 |
| HHC | | | | PMZ | | | |
| | 17nm,0.5s | | | | | | |
| HHC | | | | PMZ | | | |
| | 210nm,7.8s | | | | | | |
| HHC | | | | LN | | | |
| | 180nm,17.7s | | | | | | |
| HHC | | | | LE | | | |
| | 230nm,18.4s | | | | | | |
| HHC | | | | LZ | | | |
| | 190nm,17.7s | | | | | | |
| PETK | Petropavlovsk- | 58.87 | 6 | P | P | 15 29 11.1 | 0.0 |
| | 5.5nm,1.0s,baz=146,slow=6.6,SNR=3.7 | | | | | | |
| LZH | Lanzhou | 59.60 | 318 | *e*P | P | 15 29 19.8 | +3.1 |
| LZH | | | | pP | pP | 15 29 41.2 | +11 |
| LZH | | | | sP | sP | 15 29 50.7 | +14 |
| LZH | | | | PcP | PcP | 15 30 04.6 | +1.0 |
| LZH | | | | PMZ | | | |
| | 35nm,1.2s | | | | | | |
| LZH | | | | PMZ | | | |
| | 130nm,4.3s | | | | | | |
| GTA | Gaotai | 64.09 | 319 | *e*P | P | 15 29 48.2 | +1.4 |
| GTA | | | | pP | pP | 15 30 09.7 | +8.9 |
| GTA | | | | sP | sP | 15 30 17.3 | +11 |
| GTA | | | | sS | sS | 15 38 54.5 | +11 |
| GTA | | | | PMZ | | | |
| | 5.0nm,1.1s | | | | | | |
| GTA | | | | PMZ | | | |
| | 170nm,4.4s | | | | | | |
| GTA | | | | LN | | | |
| | 150nm,18.5s | | | | | | |
| GTA | | | | LE | | | |
| | 190nm,18.5s | | | | | | |
| GTA | | | | LZ | | | |
| | 220nm,19.5s | | | | | | |
| ULN | Ulaanbaatar | 65.01 | 330 | *e*P | P | 15 29 53.0 | +0.4 |
| | 3.1nm,1.0s | | | | | | |
| SONM | Songino Array | 65.32 | 330 | P | P | 15 29 55.3 | +0.7 |
| | 4.5nm,1.0s,baz=135,slow=5.4,SNR=22 | | | | | | |
| VNDA | Vanda | 72.19 | 177 | P | P | 15 30 36.2 | -0.5 |
| | 1.7nm,0.8s,baz=313,slow=5.4,SNR=10.0 | | | | | | |
| WMQ | Urumqi | 74.17 | 318 | *e*P | P | 15 30 50.0 | +0.9 |
| MKAR | Makanchi Array | 78.83 | 320 | P | P | 15 31 14.4 | -1.0 |
| | 0.9nm,0.9s,baz=107,slow=6.7,SNR=6.5 | | | | | | |
| ZALV | Zalesovo Beam | 80.04 | 327 | P | P | 15 31 20.8 | -0.9 |
| | 0.7nm,0.4s,baz=120,slow=5.8,SNR=4.9 | | | | | | |
| KSH | Kashi | 81.02 | 311 | *e*P | P | 15 31 29.8 | +2.3 |
| KSH | | | | *e*pP | pP | 15 31 50.1 | +8.1 |
| KSH | | | | *e*PP | PP | 15 34 40.6 | +7.6 |
| KSH | | | | S | S | 15 41 31.1 | -2.2 |
| KSH | | | | PMZ | | | |
| | 110nm,7.9s | | | | | | |
| KSH | | | | LN | | | |
| | 49nm,6.7s | | | | | | |
| KSH | | | | LE | | | |
| | 100nm,7.5s | | | | | | |
| KSH | | | | LZ | | | |
| | 260nm,12.8s | | | | | | |
| KURK | Kurchatov | 82.43 | 323 | P | P | 15 31 34.0 | -0.4 |
| KURBB | Kurchatov Arra | 82.45 | 323 | P | P | 15 31 34.0 | -0.5 |
| | 0.9nm,0.7s,baz=106,slow=5.0,SNR=8.8 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MAW | Mawson | 83.62 | 203 | P | P | 15 31 39.3 | -0.9 |
| | 0.8nm,0.9s,baz=69,slow=8.6,SNR=2.2 | | | | | | |
| ILAR | Eielson Array | 84.10 | 23 | P | P | 15 31 39.5 | -3.2 |
| | 0.8nm,0.8s,baz=248,slow=5.3,SNR=8.3 | | | | | | |
| KKAR | Karatay Array | 85.85 | 314 | eP | P | 15 31 50.7 | -1.4 |
| TORD | Torodi Ar. Bea | 147.47 | 286 | PKPbc | PKPbc | 15 38 57.7 | +0.6 |
| | 0.6nm,0.9s,baz=61,slow=4.1,SNR=2.5 | | | | | | |

*ISCJB **04** 15:19:58.5±0.5, 5°.56S±0°.05×149°.85E±0°.08, h35km, mb4.4/16, Error ellipse: s-maj=11.9km s-min=6.4km az=12.0*
*BJI **04** 15:20:02.2, 5°.95S×148°.76E, h40km, mb4.8/8, mB4.9/1*
*IDC **04** 15:20:03.3±2.4, 5°.65S×149°.90E, h67km±22km, mb4.0/13, mb1 4.1/15, mb1mx4.0/31, mbtmp4.3/15, MS3.4/1, Ms1 3.4/1, ms1mx3.0/24, Error ellipse: s-maj=17.8km s-min=11.0km az=109.0*
*NEIC **04** 15:20:04.4±1.8, 5°.68S×149°.80E, h76km±17km, mb4.7/3, Error ellipse: s-maj=13.7km s-min=9.4km az=75.0*
*AUST **04** 15:20:04.2, 5°.24S×149°.59E, h100km*
**ISC 04 15:20:00.4**±0.7**, 5°.55S**±0°.07×**149°.9E**±0°.1**, h35km, n41, σ1.43**/38**, mb4.3**/16**, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.71 | 215 | P | Pn | 15 21 10.9 | +1.9 |
| | 22nm,0.3s,baz=27,slow=6.9,SNR=8.7 | | | | | | |
| PMG | | | | S | Sn | 15 22 03.9 | +1.6 |
| | 29nm,0.3s,baz=68,slow=18,SNR=4.8 | | | | | | |
| PMG | | | | LR | LR | 15 22 48.0 | |
| | comp=Z,445nm,18.9s,baz=68,slow=36 | | | | | | |
| COEN | Coen | 10.67 | 218 | P | Pn | 15 22 32.6 | +1.7 |
| | baz=11,SNR=4.5 | | | | | | |
| QIS | Mount Isa | 17.97 | 213 | P | Pn | 15 24 08.0 | +0.4 |
| | baz=18,SNR=4.6 | | | | | | |
| KDU | Kakadu | 18.62 | 246 | P | P | 15 24 12.4 | -2.6 |
| | baz=18,SNR=7.4 | | | | | | |
| SIJI | Sorong | 19.19 | 283 | P | P | 15 24 22.4 | +1.0 |
| | 0.5nm,0.3s,baz=117,slow=12,SNR=5.0 | | | | | | |
| EIDS | Eidsvold | 19.74 | 177 | P | P | 15 24 29.0 | +1.7 |
| | baz=20,SNR=3.5 | | | | | | |
| EIDS | Eidsvold | 19.74 | 177 | eP | P | 15 24 28.5 | +1.2 |
| | 24nm,1.2s | | | | | | |
| MTN | Manton Dam | 19.90 | 247 | P | P | 15 24 27.4 | -1.7 |
| | baz=20,SNR=6.2 | | | | | | |
| PALU | Palau | 20.04 | 310 | P | Pn | 15 24 33.9 | +1.4 |
| | baz=20,SNR=4.7 | | | | | | |
| WRAB | Tennant Creek | 20.82 | 225 | eP | P | 15 24 37.9 | -1.3 |
| WRA | Warramunga Arr | 20.84 | 225 | P | P | 15 24 37.9 | -1.3 |
| | 86nm,0.8s,baz=49,slow=11,SNR=13 | | | | | | |
| WRA | | | | S | S | 15 28 28.4 | -1.6 |
| | 1.5nm,0.8s,baz=48,slow=23,SNR=2.9 | | | | | | |
| RMQ | Roma | 20.85 | 183 | P | P | 15 24 40.9 | +1.6 |
| | baz=21,SNR=7.1 | | | | | | |
| QLP | Quilpie | 21.61 | 194 | P | P | 15 24 52.7 | +5.2 |
| | baz=22,SNR=4.8 | | | | | | |
| DZM | Mont Dzumac | 22.92 | 137 | P | P | 15 25 01.4 | -0.2 |
| | 18nm,0.8s,baz=352,slow=7.6,SNR=7.1 | | | | | | |
| KNRA | Kununurra | 23.07 | 242 | P | P | 15 25 00.3 | -2.8 |
| | baz=23,SNR=5.7 | | | | | | |
| ASAR | Alice Springs | 23.71 | 219 | P | P | 15 25 08.1 | -1.2 |
| | 5.7nm,0.6s,baz=52,slow=9.1,SNR=9.4 | | | | | | |
| ASAR | | | | S | S | 15 29 25.2 | +2.9 |
| | 3.0nm,1.1s,baz=39,slow=20,SNR=4.1 | | | | | | |
| FITZ | Fitzroy Crossi | 26.79 | 240 | P | P | 15 25 36.1 | -1.3 |
| | 69nm,0.8s,baz=69,slow=7.7,SNR=15 | | | | | | |
| FITZ | Fitzroy Crossi | 26.79 | 240 | P | P | 15 25 36.3 | -1.1 |
| | baz=27,SNR=13 | | | | | | |
| FITZ | Fitzroy Crossi | 26.79 | 240 | eP | P | 15 25 35.9 | -1.5 |
| LUWI | Luwuk | 27.46 | 278 | P | P | 15 25 35.3 | -8.2 |
| | baz=27,SNR=4.1 | | | | | | |
| FORT | Forrest | 32.43 | 217 | eP | P | 15 26 25.8 | -1.5 |
| | 25nm,0.8s | | | | | | |
| MEEK | Meekatharra | 36.48 | 231 | P | P | 15 27 00.9 | -1.6 |
| | baz=36,SNR=8.0 | | | | | | |
| SMRI | Semarang | 39.26 | 266 | P | P | 15 27 16.9 | -9.2 |
| | baz=39,SNR=3.8 | | | | | | |
| RPZ | Rata Peaks | 42.32 | 157 | P | P | 15 27 49.9 | -1.0 |
| | 6.2nm,0.7s,baz=319,slow=7.0,SNR=3.3 | | | | | | |
| MJAR | Matsushiro Arr | 43.28 | 346 | P | P | 15 27 58.6 | -0.1 |
| | 1.7nm,0.9s,baz=172,slow=8.1,SNR=4.3 | | | | | | |
| KSRS | Korea Array | 47.45 | 336 | P | P | 15 28 32.6 | +0.9 |
| | 1.4nm,0.8s,baz=175,slow=6.1,SNR=3.9 | | | | | | |
| KSAR | Wonju Array Be | 47.45 | 336 | P | P | 15 28 32.6 | +0.8 |
| USRK | Ussuriysk Ar. | 52.09 | 344 | P | P | 15 29 06.9 | -0.1 |
| | 3.0nm,0.9s,baz=157,slow=4.7,SNR=3.7 | | | | | | |
| CN2 | Changchun | 53.86 | 338 | eP | P | 15 29 26.5 | +6.5 |
| CMAR | Chiang Mai Arr | 55.62 | 297 | P | P | 15 29 33.0 | -0.3 |
| | 1.2nm,0.9s,baz=122,slow=6.8,SNR=4.9 | | | | | | |
| PETK | Petropavlovsk- | 58.81 | 5 | P | P | 15 29 56.0 | +0.9 |
| | 5.4nm,0.8s,baz=171,slow=8.4,SNR=7.0 | | | | | | |
| GTA | Gaotai | 64.29 | 319 | eP | P | 15 30 33.6 | +1.0 |
| GTA | | | | PMZ | | | |
| | 7.0nm,1.2s | | | | | | |
| ULN | Ulaanbaatar | 65.15 | 330 | P | P | 15 30 39.0 | +0.9 |
| | 11nm,1.1s | | | | | | |
| SONM | Songino Array | 65.46 | 329 | P | P | 15 30 40.9 | +0.9 |
| | 9.5nm,1.0s,baz=136,slow=5.6,SNR=20 | | | | | | |
| VNDA | Vanda | 72.20 | 177 | P | P | 15 31 20.3 | -1.0 |
| | 2.8nm,0.7s,baz=329,slow=6.7,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 79.02 | 320 | P | P | 15 32 01.0 | +0.1 |
| | 2.0nm,0.9s,baz=101,slow=6.1,SNR=7.8 | | | | | | |
| ZALV | Zalesovo Beam | 80.20 | 327 | P | P | 15 32 05.1 | -2.1 |
| | 1.4nm,0.5s,baz=112,slow=5.8,SNR=6.4 | | | | | | |
| KURK | Kurchatov | 82.60 | 323 | P | P | 15 32 19.0 | -1.0 |
| KURBB | Kurchatov Arra | 82.63 | 323 | P | P | 15 32 19.0 | -1.1 |
| | baz=106,slow=4.7 | | | | | | |
| AAK | Ala-Archa | 83.11 | 314 | P | P | 15 32 22.0 | -1.0 |
| | 0.8nm,0.5s,baz=156,slow=6.7,SNR=3.9 | | | | | | |
| CLL | Collm | 122.08 | 330 | ePKPdf | PKPdf | 15 38 51.0 | -0.4 |

*DDA **04** 15:20:30.4, 36°.94N×35°.60E, h6km, Md2.7*
*ISK **04** 15:20:30.8, 37°.01N×35°.54E, h10km, MD2.6*
*ISCJB **04** 15:20:31.3±0.5, 36°.99N±0°.03×35°.58E±0°.03, h13km±4km, Error ellipse: s-maj=5.1km s-min=4.0km az=9.5*
*CSEM **04** 15:20:31.2±0.2, 36°.98N×35°.56E, h15km, MD2.7, Error ellipse: s-maj=4.1km s-min=3.5km az=33.0*
**ISC 04 15:20:30.9**±1.0**, 36°.99N**±0°.02×**35°.60E**±0°.02**, h16km**±9km**, n31, σ0.71**/46**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CEYT | Ceyhan | 0.12 | 82 | ePG | Pb | 15 20 35.2 | +0.3 |
| CEYT | Ceyhan | 0.12 | 82 | ePg | Pb | 15 20 35.2 | +0.3 |
| YURE | YUREGIR | 0.17 | 170 | i P | Pb | 15 20 36.0 | +0.2 |
| YURE | | | | i S | Sb | 15 20 40.0 | +1.1 |
| YURE | YUREGIR | 0.17 | 170 | P | Pb | 15 20 36.0 | +0.2 |
| YURE | | | | S | Sb | 15 20 40.0 | +1.1 |
| KRTS | Karatas | 0.46 | 203 | ePG | Pg | 15 20 40.2 | +0.2 |
| KRTS | Karatas | 0.46 | 203 | ePg | Pg | 15 20 40.2 | +0.2 |
| KARA | Karaisali | 0.51 | 302 | ePG | Pg | 15 20 40.3 | -0.8 |
| KARA | | | | eSG | Sg | 15 20 47.3 | -0.6 |
| KARA | Karaisali | 0.51 | 302 | ePg | Pg | 15 20 40.3 | -0.8 |
| KARA | | | | eSg | Sg | 15 20 47.3 | -0.6 |
| KOZT | Kozan | 0.52 | 21 | ePG | Pg | 15 20 41.3 | 0.0 |
| KOZT | Kozan | 0.52 | 21 | ePg | Pg | 15 20 41.3 | 0.0 |
| GULE | Gulek | 0.72 | 294 | i P | Pg | 15 20 45.6 | +0.6 |
| GULE | | | | i S | Sg | 15 20 55.8 | +1.3 |
| GULE | Gulek | 0.72 | 294 | P | Pg | 15 20 45.6 | +0.6 |
| GULE | | | | S | Sg | 15 20 55.8 | +1.3 |
| TAHT | Tahtakopru-Hat | 0.78 | 142 | ePG | Pn | 15 20 46.9 | -0.4 |
| TAHT | Tahtakopru-Hat | 0.78 | 142 | ePg | Pn | 15 20 46.9 | -0.4 |
| ANDN | Andirin | 0.84 | 45 | i P | Pg | 15 20 47.5 | +0.2 |
| ANDN | | | | i S | Sn | 15 21 00.1 | -0.2 |
| ANDN | Andirin | 0.84 | 45 | P | Pg | 15 20 47.5 | +0.2 |
| ANDN | | | | S | Sn | 15 21 00.1 | -0.2 |
| KAMA | Osmaniye | 0.88 | 77 | P | Pb | 15 20 47.6 | -0.2 |
| KAMA | | | | S | Sg | 15 20 59.9 | +0.4 |
| YAYL | Yayladag | 1.04 | 157 | i P | Pb | 15 20 49.6 | -1.1 |
| YAYL | | | | i S | Sb | 15 21 03.8 | -0.3 |
| YAYL | Yayladag | 1.04 | 157 | P | Pb | 15 20 49.6 | -1.1 |
| YAYL | | | | S | Sb | 15 21 03.8 | -0.3 |
| AYKD | Aykdinkavak | 1.05 | 66 | P | Pb | 15 20 50.1 | -0.7 |
| AYKD | | | | S | Sb | 15 21 04.2 | -0.3 |
| KMRS | Kahramanmaras | 1.16 | 63 | ePN | Pg | 15 20 54.0 | +0.6 |
| KMRS | Kahramanmaras | 1.16 | 63 | ePn | Pg | 15 20 54.0 | +0.6 |
| KUZU | Kuzuini | 1.21 | 100 | i P | Pg | 15 20 55.0 | +0.8 |
| KUZU | Kuzuini | 1.21 | 100 | P | Pg | 15 20 55.0 | +0.8 |
| KUZU | | | | S | Sb | 15 21 06.5 | -2.3 |
| KIZK | Mersin | 1.27 | 247 | i P | Pn | 15 20 53.9 | -0.3 |
| KIZK | | | | i S | Sb | 15 21 10.7 | -0.1 |
| KIZK | Mersin | 1.27 | 247 | P | Pn | 15 20 53.9 | -0.3 |
| KIZK | | | | S | Sb | 15 21 10.7 | -0.1 |
| NIG | Nigde | 1.36 | 325 | ePN | Pn | 15 20 55.8 | +0.2 |
| NIG | Nigde | 1.36 | 325 | ePn | Pn | 15 20 55.8 | +0.2 |
| SARI | SarD1z-Kayseri | 1.56 | 24 | ePN | Pb | 15 20 59.4 | -0.2 |
| GULA | Gulagac | 1.73 | 322 | ePN | Pn | 15 21 01.3 | +0.8 |
| GULA | Gulagac | 1.73 | 322 | ePn | Pn | 15 21 01.3 | +0.8 |

*ISCJB **04** 15:26:43.6±0.5, 39°.93N±0°.03×29°.13E±0°.03, h1km±5km, Error ellipse: s-maj=4.6km s-min=3.7km az=151.3*
*DDA **04** 15:26:43.8, 39°.90N×29°.17E, h7km, Md2.8*
*ISK **04** 15:26:43.6, 39°.95N×29°.16E, h8km, MD2.7*
*CSEM **04** 15:26:44.0±0.1, 39°.94N×29°.16E, h8km, MD2.7, Error ellipse: s-maj=2.3km s-min=1.9km az=156.0*
**ISC 04 15:26:44.2**±0.9**, 39°.93N**±0°.02×**29°.17E**±0°.02**, h11km**±8km**, n58, σ0.49**/71**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULDT | Uludag | 0.21 | 354 | i P | Pg | 15 26 48.7 | -0.3 |
| ULDT | | | | i S | Sg | 15 26 52.5 | +0.3 |
| ULDT | Uludag | 0.21 | 354 | P | Pg | 15 26 48.7 | -0.3 |
| ULDT | | | | S | Sg | 15 26 52.5 | +0.3 |
| ORLT | Orhaneli | 0.24 | 300 | ePG | Pg | 15 26 49.0 | -0.3 |
| ORLT | Orhaneli | 0.24 | 300 | ePg | Pg | 15 26 49.0 | -0.3 |
| IGD | Bursa | 0.34 | 5 | P | Pg | 15 26 50.9 | -0.1 |
| IZI | Iznik | 0.47 | 30 | ePG | Pg | 15 26 53.2 | -0.3 |
| IZI | Iznik | 0.47 | 30 | ePg | Pg | 15 26 53.2 | -0.3 |
| DST | Dursunbey | 0.53 | 233 | ePG | Pg | 15 26 54.2 | -0.4 |
| DST | Dursunbey | 0.53 | 233 | ePg | Pg | 15 26 54.2 | -0.4 |
| CAVI | Cavuskoy | 0.59 | 62 | ePG | Pg | 15 26 55.0 | -0.7 |
| CAVI | | | | eSG | Sg | 15 27 03.7 | +0.3 |
| CAVI | Cavuskoy | 0.59 | 62 | ePg | Pg | 15 26 55.0 | -0.7 |
| CAVI | | | | eSg | Sg | 15 27 03.7 | +0.3 |
| DURS | Dursunbey | 0.62 | 239 | i P | Pg | 15 26 55.4 | -1.0 |
| DURS | Dursunbey | 0.62 | 239 | P | Pg | 15 26 55.4 | -1.0 |
| ADVT | Abdulvahap | 0.67 | 41 | ePG | Pg | 15 26 56.8 | -0.4 |
| ADVT | Abdulvahap | 0.67 | 41 | ePg | Pg | 15 26 56.8 | -0.4 |
| ARMT | Armutlu | 0.68 | 340 | ePG | Pg | 15 26 56.7 | -0.7 |
| ARMT | Armutlu | 0.68 | 340 | ePg | Pg | 15 26 56.7 | -0.7 |
| KCTX | Karacabey (Bur | 0.71 | 299 | ePG | Pg | 15 26 57.5 | -0.4 |
| KCTX | Karacabey (Bur | 0.71 | 299 | ePg | Pg | 15 26 57.5 | -0.4 |
| DEMI | Demirci | 0.95 | 202 | i P | Pg | 15 27 02.2 | -0.3 |
| DEMI | | | | i S | Sg | 15 27 14.4 | -0.5 |
| DEMI | Demirci | 0.95 | 202 | P | Pg | 15 27 02.2 | -0.3 |
| DEMI | | | | S | Sg | 15 27 14.4 | -0.5 |
| HRT | Hereke | 0.97 | 23 | ePG | Pg | 15 27 02.3 | -0.7 |
| HRT | Hereke | 0.97 | 23 | ePg | Pg | 15 27 02.3 | -0.7 |
| BORA | Eskisehir | 0.99 | 92 | i P | Pg | 15 27 02.0 | -1.3 |
| BORA | | | | i S | Sn | 15 27 18.0 | -0.2 |
| BORA | Eskisehir | 0.99 | 92 | P | Pg | 15 27 02.0 | -1.3 |
| BORA | | | | S | Sn | 15 27 18.0 | -0.2 |
| BALB | Balikesir | 1.03 | 254 | ePG | Pg | 15 27 04.2 | +0.1 |
| BALB | Balikesir | 1.03 | 254 | ePg | Pg | 15 27 04.2 | +0.1 |
| EDC | Edincik | 1.08 | 293 | ePG | Pb | 15 27 04.6 | -0.3 |
| EDC | Edincik | 1.08 | 293 | ePg | Pb | 15 27 04.6 | -0.3 |
| ISK | Istanbul-Kandi | 1.14 | 356 | ePN | Pb | 15 27 05.5 | -0.4 |
| ISK | Istanbul-Kandi | 1.14 | 356 | ePn | Pb | 15 27 05.5 | -0.4 |
| GONE | Gonen-Balikesi | 1.14 | 276 | ePN | Pb | 15 27 05.9 | -0.1 |
| GONE | Gonen-Balikesi | 1.14 | 276 | ePn | Pb | 15 27 05.9 | -0.1 |
| GULT | Gulveren | 1.15 | 64 | ePN | Pg | 15 27 06.5 | +0.1 |
| GULT | Gulveren | 1.15 | 64 | ePn | Pg | 15 27 06.5 | +0.1 |
| KLYT | Kilyos | 1.33 | 356 | ePN | Pn | 15 27 08.4 | -0.2 |
| KLYT | Kilyos | 1.33 | 356 | ePn | Pn | 15 27 08.4 | -0.2 |
| ESKT | Eskisehir | 1.36 | 107 | P | Pb | 15 27 09.9 | +0.1 |
| ESKT | | | | S | Sg | 15 27 28.5 | +0.4 |
| SEYT | Eskypehyr | 1.36 | 107 | i P | Pb | 15 27 09.9 | +0.2 |
| SEYT | | | | i S | Sg | 15 27 28.5 | +0.4 |
| MRMT | Marmara Adasi | 1.38 | 300 | ePN | Pn | 15 27 09.6 | +0.2 |
| MRMT | Marmara Adasi | 1.38 | 300 | ePn | Pn | 15 27 09.6 | +0.2 |
| KULA | Kula-Manisa | 1.47 | 196 | ePN | Pb | 15 27 11.3 | -0.2 |
| KULA | Kula-Manisa | 1.47 | 196 | ePn | Pb | 15 27 11.3 | -0.2 |
| KRBG | Karabiga-Canak | 1.50 | 289 | ePN | Pn | 15 27 11.3 | +0.2 |
| KRBG | Karabiga-Canak | 1.50 | 289 | ePn | Pn | 15 27 11.3 | +0.2 |
| MANT | Manisa | 1.51 | 198 | i P | Pb | 15 27 12.4 | 0.0 |
| MANT | Manisa | 1.51 | 198 | P | Pb | 15 27 12.4 | 0.0 |
| KHAL | Karahalli | 1.58 | 171 | i P | Pn | 15 27 12.4 | +0.2 |
| KHAL | | | | i S | Sb | 15 27 33.8 | +0.4 |
| KHAL | Karahalli | 1.58 | 171 | P | Pn | 15 27 12.4 | +0.2 |
| KHAL | | | | S | Sb | 15 27 33.8 | +0.4 |
| RKY | Sarkoy-Tekirda | 1.70 | 297 | ePN | Pn | 15 27 14.0 | +0.2 |
| RKY | Sarkoy-Tekirda | 1.70 | 297 | ePn | Pn | 15 27 14.0 | +0.2 |
| AUMIH | MIHALICIK | 1.78 | 91 | P | Pb | 15 27 17.3 | +0.3 |
| AUMIH | | | | S | Sg | 15 27 42.5 | +0.9 |
| LPK | Lapseki | 1.90 | 284 | ePN | Pn | 15 27 17.0 | +0.5 |
| LPK | Lapseki | 1.90 | 284 | ePn | Pn | 15 27 17.0 | +0.5 |
| GELI | Tayfur-Gelibol | 2.12 | 284 | ePN | Pn | 15 27 20.2 | +0.7 |
| GELI | Tayfur-Gelibol | 2.12 | 284 | ePn | Pn | 15 27 20.2 | +0.7 |
| ERIK | Erikli-Kesan | 2.16 | 291 | ePN | Pn | 15 27 20.6 | +0.5 |
| ERIK | Erikli-Kesan | 2.16 | 291 | ePn | Pn | 15 27 20.6 | +0.5 |

*GUC **04** 15:50:48.1±0.5, 35°.82S×73°.52W, h38km±21km, ML4.7*
**ISC 04 15:50:48.4**±4.3**, 35°.9S**±0°.1×**73°.6W**±0°.2**, h35km, n21, σ1.13**/24**, 1C-4D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LNCH | Linares | 1.61 | 91 | eP | Pn | 15 51 13.7 | -0.7 |
| LNCH | | | | i S | Sn | 15 51 34.0 | +0.1 |
| TALC | Talca | 1.65 | 75⇓ | iP | Pn | 15 51 14.9 | 0.0 |
| TALC | | | | i S | Sn | 15 51 35.4 | +0.5 |
| RCDM | Rinconada Maip | 3.28 | 45 | eP | Pn | 15 51 36.9 | -0.4 |
| RCDM | | | | i S | Sn | 15 52 14.7 | -0.6 |
| CLCH | Cerro Calan | 3.51 | 47 | eP | Pn | 15 51 40.8 | +0.3 |
| CLCH | | | | AML | AML | 15 52 50.3 | |
| | comp=N,1µm,0.6s | | | | | | |
| PEL | Peldehue | 3.61 | 42⇑ | iP | Pn | 15 51 42.2 | +0.4 |
| PEL | | | | i S | Sn | 15 52 21.7 | -1.5 |
| PEL | | | | AML | AML | 15 52 50.6 | |
| | comp=E,950nm,0.2s | | | | | | |
| AAGR | Agrelo | 4.80 | 56 | eP | Pn | 15 52 00.5 | +2.2 |
| ARCO | CERRO ARCO | 4.88 | 53 | eP | Pn | 15 52 01.1 | +1.7 |
| ARCO | | | | AML | AML | 15 53 39.8 | |
| | comp=Z,39nm,0.7s | | | | | | |
| AUSP | Uspallata | 5.02 | 45 | eP | Pn | 15 52 03.2 | +1.7 |
| ASAL | Salagasta | 5.10 | 52 | eP | Pn | 15 52 04.4 | +2.0 |
| ASAL | | | | eS | Sn | 15 53 27.0 | +27 |
| RTLS | Leoncito | 5.39 | 43 | eP | Pn | 15 52 08.1 | +1.6 |
| RTCV | Cerro Valdivia | 5.78 | 48 | eP | Pn | 15 52 12.6 | +0.9 |
| CFAA | Coronel Fontan | 6.14 | 48 | eP | Pn | 15 52 17.0 | +0.3 |
| ACAN | Cantantal | 6.39 | 58 | eP | Pn | 15 52 21.0 | +0.9 |
| AMOG | MOGNA | 6.49 | 42 | eP | Pn | 15 52 21.5 | +0.1 |
| AVFE | Valle Fertil | 7.29 | 47⇓ | eP | Pn | 15 52 31.5 | -0.9 |
| AVFE | | | | AML | AML | 15 54 25.5 | |
| | comp=Z,18nm,0.8s | | | | | | |
| MRA | San Martin | 7.37 | 65 | eP | Pn | 15 52 34.6 | +1.1 |
| MRA | | | | AML | AML | 15 54 51.8 | |
| | comp=Z,12nm,0.7s | | | | | | |
| ACHE | Chepes | 7.43 | 53 | eP | Pn | 15 52 33.8 | -0.7 |
| AGUA | GUANDACOL | 7.66 | 36 | eP | Pn | 15 52 37.8 | +0.3 |
| VCA | Vinchina | 8.42 | 34⇓ | eP | Pn | 15 52 48.0 | -0.1 |
| VCA | | | | AML | AML | 15 55 38.2 | |
| | comp=Z,16nm,0.8s | | | | | | |
| TCA | Tanti | 8.74 | 62 | eP | Pn | 15 52 51.3 | -1.2 |
| CYA | Choya | 9.90 | 44⇓ | eP | Pn | 15 53 04.2 | -4.0 |

*ISCJB **04** 15:51:02.9±0.8, 5°.6S±0°.1×150°.1E±0°.2, h10km, mb3.8/8, Error ellipse: s-maj=30.1km s-min=9.0km az=25.4*
*IDC **04** 15:51:02.8±1.1, 5°.59S×150°.11E, h0km, mb3.8/8, mb1 4.0/9, mb1mx3.8/32, mbtmp3.9/9, ML2.6/1, Error ellipse: s-maj=40.5km s-min=18.5km az=101.0*
*NEIC **04** 15:51:08.3±0.8, 5°.61S×150°.03E, h35km, mb4.7/1, Error ellipse: s-maj=28.3km s-min=10.8km az=111.0*
**ISC 04 15:51:04.4**±1.0**, 5°.6S**±0°.1×**150°.2E**±0°.2**, h10km, n14, σ0.84**/16**, mb3.8**/8**, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.82 | 218 | Pn | Pn | 15 52 17.6 | +0.5 |
| | 17nm,0.3s,baz=40,slow=5.4,SNR=24 | | | | | | |
| PMG | | | | Sn | Sn | 15 53 13.5 | +0.4 |
| | 31nm,0.3s,baz=27,slow=19,SNR=7.5 | | | | | | |
| PMG | Port Moresby | 4.82 | 218 | ePn | Pn | 15 52 18.6 | +1.4 |
| PMG | | | | eSn | Sn | 15 53 13.2 | 0.0 |
| PMG | | | | Sn | Sn | 15 53 13.5 | +0.4 |
| COEN | Coen | 10.80 | 219 | ePn | Pn | 15 53 39.2 | 0.0 |
| WRAB | Tennant Creek | 20.97 | 226 | eP | P | 15 55 46.6 | -1.4 |
| | 36nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 20.98 | 226 | P | P | 15 55 46.8 | -1.3 |
| | 25nm,0.8s,baz=49,slow=11,SNR=84 | | | | | | |
| ASAR | Alice Springs | 23.84 | 219 | P | P | 15 56 16.9 | -1.2 |
| | 3.9nm,0.6s,baz=56,slow=8.7,SNR=45 | | | | | | |
| SONM | Songino Array | 65.60 | 329 | P | P | 16 01 49.9 | +1.2 |
| | 1.4nm,0.9s,baz=137,slow=5.9,SNR=8.3 | | | | | | |
| VNDA | Vanda | 72.17 | 177 | P | P | 16 02 29.8 | +0.8 |
| | 0.7nm,0.9s,baz=356,slow=6.0,SNR=4.1 | | | | | | |
| MKAR | Makanchi Array | 79.19 | 320 | P | P | 16 03 10.2 | +0.5 |
| | 0.6nm,0.8s,baz=101,slow=6.3,SNR=4.2 | | | | | | |
| ZALV | Zalesovo Beam | 80.34 | 327 | P | P | 16 03 14.9 | -0.8 |
| | 0.4nm,0.4s,baz=100,slow=5.1,SNR=3.0 | | | | | | |
| KURK | Kurchatov | 82.76 | 323 | P | P | 16 03 28.4 | -0.3 |
| KURBB | Kurchatov Arra | 82.79 | 322 | P | P | 16 03 28.4 | -0.4 |
| | 0.2nm,0.4s,baz=89,slow=5.0,SNR=3.6 | | | | | | |
| ILAR | Eielson Array | 83.88 | 23 | P | P | 16 03 33.5 | -0.6 |
| | 0.4nm,0.7s,baz=232,slow=5.3,SNR=3.0 | | | | | | |
| QSPA | South Pole Qui | 84.39 | 180 | P | P | 16 03 36.8 | -0.1 |
| | 1.7nm,1.0s,baz=0.0,slow=2.0,SNR=5.4 | | | | | | |

*ISCJB **04** 15:52:40.5±0.4, 59°.55S±0°.04×149°.3E±0°.2, h10km, mb4.9/21, MS4.4/9, Error ellipse: s-maj=13.4km s-min=5.9km az=1.9*
*IDC **04** 15:52:40.3±0.9, 59°.48S×149°.42E, h0km, mb4.7/11, mb1 4.8/12, mb1mx4.6/28, mbtmp4.7/12, ML3.8/1, MS4.4/10, Ms1 4.4/10, ms1mx4.2/24, Error ellipse: s-maj=39.4km s-min=15.1km az=82.0*
*GCMT **04** 15:52:41.8±0.3, 59°.37S×149°.22E, h12km, MW5.1/63, Moment Tensor Solution. s11,c11; s63,c89; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.21±.28; $M_{\theta\theta}$2.26±.23; $M_{\phi\phi}$-2.47±.28; $M_{r\theta}$-1.77±.72; $M_{\theta\phi}$-4.43±.16; $M_{\phi r}$-0.96±.68; Best double couple: $M_0$5.39500×$10^{16}$ NP1:$\phi_s$76.00000°, δ87.00000°, λ-159.00000°. NP2: $\phi_s$345.00000°, δ69.00000°, λ-3.00000°. Principal axes: T 5.1440, Plg12.0000°, Azm209.0000°; N 0.5070, Plg69.0000°, Azm84.0000°; P -5.6470, Plg17.0000°, Azm303.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC **04** 15:52:41.8±0.3, 59°.51S×149°.38E, h10km, mb4.9/13 Error ellipse: s-maj=10.3km s-min=6.1km az=94.0*
*AUST **04** 15:52:46.1±1.2, 59°.59S×149°.77E, h50km±18km, Error ellipse: s-maj=22.4km s-min=7.8km az=121.0*
**ISC 04 15:52:41.9**±0.4**, 59°.55S**±0°.06×**149°.49E**±0°.10**, h10km, n92, σ1.42**/83**, mb4.9**/21**, MS4.4**/9**, 4C-3D, West of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MCQ | Macquarie Isla | 7.23 | 50 | P | Pn | 15 54 26.9 | -0.6 |
| | baz=7.1,SNR=7.4 | | | | | | |
| MCQ | Macquarie Isla | 7.23 | 50 | eP | Pn | 15 54 26.2 | -1.4 |
| | 8µm,1.1s | | | | | | |
| TAU | Tasmania Unive | 16.72 | 354 | eP | Pn | 15 56 36.6 | +0.6 |
| | 173nm,1.0s | | | | | | |
| MOO | Moorlands | 17.19 | 354 | P | P | 15 56 44.8 | +1.2 |
| | baz=17,SNR=5.9 | | | | | | |
| WHZ | Wether Hill Ro | 17.57 | 47 | eP | P | 15 56 47.6 | -0.1 |
| | 180nm,1.5s | | | | | | |
| VNDA | Vanda | 18.52 | 172 | P | P | 15 56 56.7 | -1.3 |
| | 0.3nm,0.3s,baz=335,slow=12,SNR=60 | | | | | | |
| VNDA | | | | LR | LR | 16 03 32.0 | |
| | comp=Z,2µm,19.3s,baz=336,slow=35 | | | | | | |
| CASY | Casey | 18.69 | 233 | eP | Pn | 15 57 00.4 | +0.2 |
| | 30nm,0.9s | | | | | | |
| SBA | Scott Base | 19.25 | 169 | eP | Pn | 15 57 06.9 | 0.0 |
| | 29nm,1.0s | | | | | | |
| RPZ | Rata Peaks | 20.60 | 49 | LR | LR | 16 03 25.8 | |
| | comp=Z,1µm,19.4s,baz=198,slow=31 | | | | | | |
| TOO | Toolangi | 22.15 | 352 | P | P | 15 57 38.1 | +0.5 |
| | baz=22,SNR=6.5 | | | | | | |
| MILA | Mila | 22.52 | 359 | P | P | 15 57 41.5 | -0.1 |
| | baz=22,SNR=6.4 | | | | | | |
| ARPS | Mount Arapiles | 23.33 | 344 | P | P | 15 57 50.3 | +0.4 |
| | baz=23,SNR=9.6 | | | | | | |
| CAN | Canberra | 24.25 | 359 | eP | P | 15 57 58.4 | -0.4 |
| | 80nm,1.4s | | | | | | |
| CNB | Canberra Magne | 24.25 | 360 | P | P | 15 57 59.7 | +0.8 |
| | baz=24,SNR=5.5 | | | | | | |
| YNG | Young | 25.27 | 358 | P | P | 15 58 08.7 | +0.5 |
| | baz=25,SNR=32 | | | | | | |
| CMSA | Cobar Meteorol | 28.13 | 353 | P | P | 15 58 34.7 | +0.8 |
| | baz=28,SNR=18 | | | | | | |
| BBOO | Buckleboo | 28.20 | 336 | P | P | 15 58 34.8 | +0.3 |
| | baz=28,SNR=10.0 | | | | | | |
| BBOO | Buckleboo | 28.20 | 336 | eP | P | 15 58 33.7 | -0.9 |
| | 21nm,1.0s | | | | | | |
| QSPA | South Pole Qui | 30.54 | 180 | P | P | 15 58 56.4 | +1.2 |
| | 10nm,0.9s,baz=1.8,slow=4.8,SNR=23 | | | | | | |
| FORT | Forrest | 32.20 | 324 | P | P | 15 59 09.4 | -0.4 |
| | baz=32,SNR=9.5 | | | | | | |
| FORT | Forrest | 32.20 | 324 | eP | P | 15 59 08.6 | -1.3 |
| | 46nm,0.8s | | | | | | |
| RMQ | Roma | 33.05 | 359 | P | P | 15 59 18.1 | +0.7 |
| | baz=33,SNR=8.5 | | | | | | |
| QLP | Quilpie | 33.16 | 351 | P | P | 15 59 18.6 | +0.4 |
| | baz=33,SNR=7.3 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.73 | 301 | T | T | 16 34 53.6 | |
| | baz=147,slow=76,SNR=210 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.74 | 301 | T | T | 16 34 53.5 | |
| | baz=147,slow=76,SNR=252 | | | | | | |
| H01W3 | Cape Leeuwin H | 33.75 | 301 | T | T | 16 34 53.0 | |
| | baz=147,slow=76,SNR=195 | | | | | | |
| NWAO | Narrogin (SRO) | 34.12 | 307 | P | P | 15 59 25.9 | -0.7 |
| | 8.1nm,0.9s | | | | | | |
| EIDS | Eidsvold | 34.18 | 3 | P | P | 15 59 28.0 | +0.8 |
| | baz=34,SNR=6.9 | | | | | | |
| EIDS | Eidsvold | 34.18 | 3 | eP | P | 15 59 27.7 | +0.5 |
| | 22nm,1.1s | | | | | | |
| MAW | Mawson | 36.25 | 220 | P | P | 15 59 44.8 | +0.2 |
| | 7.0nm,1.1s,baz=121,slow=9.7,SNR=10 | | | | | | |
| MAW | | | | LR | LR | 16 14 23.6 | |
| | comp=Z,549nm,18.7s,baz=123,slow=36 | | | | | | |
| RAO | Raoul Island | 37.50 | 51 | LR | LR | 16 13 35.0 | |
| | comp=Z,732nm,20.0s,baz=136,slow=34 | | | | | | |
| ASAR | Alice Springs | 37.50 | 336 | P | P | 15 59 54.3 | -1.5 |
| | 18nm,0.8s,baz=166,slow=9.5,SNR=61 | | | | | | |
| ASAR | | | | PcP | PcP | 16 02 12.1 | -1.8 |
| | 1.3nm,0.8s,baz=158,slow=2.8,SNR=5.1 | | | | | | |
| DZM | Mont Dzumac | 39.34 | 25 | LR | LR | 16 14 58.8 | |
| | comp=Z,722nm,18.7s,baz=170,slow=34 | | | | | | |
| CTA | Charters Tower | 39.49 | 355 | P | P | 16 00 11.4 | -1.0 |
| | 17nm,0.9s,baz=169,slow=11 | | | | | | |
| CTAO | Charters Tower | 39.49 | 355 | eP | P | 16 00 12.5 | +0.1 |
| | 28nm,1.2s | | | | | | |
| QIS | Mount Isa | 39.59 | 345 | P | P | 16 00 12.9 | -0.4 |
| | baz=40,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 41.04 | 338 | P | P | 16 00 23.4 | -1.8 |
| | 28nm,1.0s,baz=166,slow=7.1,SNR=69 | | | | | | |
| WRA | | | | PcP | PcP | 16 02 24.4 | -0.6 |
| | 1.2nm,0.7s,baz=168,slow=2.8,SNR=4.6 | | | | | | |
| WRAB | Tennant Creek | 41.05 | 338 | eP | P | 16 00 23.5 | -1.8 |
| SYO | Syowa Base | 42.24 | 210⇓ | eP | P | 16 00 33.9 | -0.6 |
| MBWA | Marble Bar | 43.82 | 318 | eP | P | 16 00 46.5 | -1.3 |
| | 13nm,0.9s | | | | | | |
| KNRA | Kununurra | 46.37 | 332 | P | P | 16 01 07.6 | -0.6 |
| | baz=46,SNR=10 | | | | | | |
| SNAA | Sanae | 47.65 | 191 | P | P | 16 01 18.2 | +0.5 |
| SNAA | Sanae | 47.65 | 191 | LR | LR | 16 21 43.4 | |
| | comp=Z,390nm,18.5s,baz=182,slow=36 | | | | | | |
| SNAA | Sanae | 47.65 | 191 | eP | P | 16 01 18.0 | +0.3 |
| | 14nm,1.5s | | | | | | |
| KDU | Kakadu | 48.47 | 338 | P | P | 16 01 24.8 | +0.3 |
| | baz=49,SNR=8.5 | | | | | | |
| MTN | Manton Dam | 48.58 | 336 | P | P | 16 01 24.3 | -1.1 |
| | baz=49,SNR=8.5 | | | | | | |
| VNA2 | Neumayer--Watz | 48.79 | 190 | P | P | 16 01 27.1 | +0.7 |
| | baz=159,slow=5.3 | | | | | | |
| VNA1 | Neumayer--Stat | 49.14 | 190 | P | P | 16 01 29.7 | +0.7 |
| FAKI | Fak Fak | 58.04 | 340 | P | P | 16 02 35.3 | +0.4 |
| | baz=58,SNR=9.0 | | | | | | |
| KAPI | Kappang | 58.98 | 325 | P | P | 16 02 41.7 | +0.2 |
| | 6.2nm,0.6s,baz=189,slow=8.8,SNR=5.1 | | | | | | |
| KAPI | | | | LR | LR | 16 27 25.4 | |
| | comp=Z,603nm,21.1s,baz=144,slow=35 | | | | | | |
| PPT | Papeete | 60.38 | 74 | LR | LR | 16 24 59.6 | |
| | comp=Z,113nm,18.5s,baz=218,slow=32 | | | | | | |
| LEM | Lembang | 61.43 | 311 | P | P | 16 02 59.3 | +0.9 |
| | 20nm,0.8s,baz=139,slow=14,SNR=5.5 | | | | | | |
| MPSI | Mapaga | 64.03 | 327 | P | P | 16 03 16.7 | +1.1 |
| | 17nm,1.0s,455nm | | | | | | |
| LWLI | Liwa | 64.48 | 308 | P | P | 16 03 18.1 | -0.6 |
| | 414nm,0.9s,37µm | | | | | | |
| KSM | Kuching | 68.12 | 317 | P | P | 16 03 41.9 | 0.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=68,SNR=5.9 | | | | | | |
| **KSM** | **Kuching** | **68.12** | **317** | *e*P | **P** | **16 03 41.4** | **-0.4** |
| | 9.7nm,0.8s | | | | | | |
| **H08S2** | **Diego Garcia H** | **76.86** | **277** | T | T | 17 29 03.0 | |
| | baz=148,slow=76,SNR=67 | | | | | | |
| **H08S1** | **Diego Carcia H** | **76.87** | **277** | T | T | 17 29 00.4 | |
| | baz=148,slow=76,SNR=57 | | | | | | |
| **H08S3** | **Diego Garcia H** | **76.88** | **277** | T | T | 17 29 04.6 | |
| | baz=148,slow=76,SNR=60 | | | | | | |
| **H08N1** | **Diego Carcia H** | **78.72** | **277** | T | T | 17 31 26.7 | |
| | baz=126 | | | | | | |
| **H08N3** | **Diego Garcia H** | **78.73** | **277** | T | T | 17 31 21.2 | |
| | baz=126 | | | | | | |
| **H08N2** | **Diego Garcia H** | **78.74** | **277** | T | T | 17 31 24.3 | |
| | baz=126 | | | | | | |
| **BOSA** | **Boshof** | **80.90** | **227** | P | **P** | **16 04 54.5** | **-1.8** |
| | 3.1nm,0.8s,baz=117,slow=6.8,SNR=2.5 | | | | | | |
| BOSA | | | | LR | LR | 16 37 16.9 | |
| | comp=Z,204nm,18.8s,baz=174,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **87.91** | **313** | P | **P** | **16 05 31.7** | **+0.1** |
| | 1.8nm,0.9s,baz=190,slow=4.1,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 16 42 34.1 | |
| | comp=Z,156nm,19.9s,baz=187,slow=34 | | | | | | |
| **CHTO** | **Chiang Mai** | **88.24** | **313** | *e*P | **P** | **16 05 32.7** | **-0.3** |
| | 10nm,1.1s | | | | | | |
| **CPUP** | **Villa Florida** | **91.62** | **156** | P | **P** | **16 05 50.2** | **+1.3** |
| | 2.8nm,0.9s,baz=198,slow=7.1,SNR=3.7 | | | | | | |
| **GYA** | **Guiyang** | **92.67** | **322** | *e*P | **P** | **16 05 56.0** | **+2.3** |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **NJ2** | **Nanjing** | **94.72** | **334** | *e*P | **P** | **16 06 03.2** | **+0.4** |
| **CD2** | **Chengdu** | **97.72** | **322** | *e*P | Pdif | 16 06 17.3 | +0.7 |
| CD2 | | | | pP | pP | 16 06 20.7 | +0.8 |
| CD2 | | | | PP | **PP** | **16 10 15.8** | **+0.8** |
| CD2 | | | | SKS | **SKSac** | **16 16 54.9** | **+1.2** |
| CD2 | | | | S | **ScS** | **16 17 43.7** | **+1.7** |
| CD2 | | | | sS | sS | 16 17 49.5 | +2.2 |
| CD2 | | | | SS | **SS** | **16 24 26.8** | **+3.8** |
| **XAN** | **Xi'an** | **99.10** | **327** | P | **Pdif** | **16 06 23.4** | **+0.7** |
| XAN | | | | PMZ | | | |
| | 8.0nm,1.4s | | | | | | |
| **WMQ** | **Urumqi** | **114.81** | **315** | *e*PKP | PKPdf | 16 11 23.0 | +1.3 |
| **KSH** | **Kashi** | **115.70** | **305** | *e*PKP | **PKPdf** | **16 11 24.8** | **+1.1** |
| KSH | | | | *e*PP | **PP** | **16 12 25.9** | **-1.4** |
| KSH | | | | SKS | **SKSdf** | **16 18 32.9** | **-2.6** |
| KSH | | | | SKKS | **SKKSac** | **16 19 23.8** | **-3.8** |
| KSH | | | | PPMZ | | | |
| | 77nm,5.6s | | | | | | |
| KSH | | | | LN | | | |
| | 100nm,4.9s | | | | | | |
| KSH | | | | LE | | | |
| | 89nm,5.2s | | | | | | |
| KSH | | | | LZ | | | |
| | 150nm,6.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **119.32** | **313** | PKP | **PKPdf** | **16 11 30.5** | **+0.2** |
| | 0.3nm,0.6s,baz=158,slow=1.1,SNR=2.7 | | | | | | |
| **ILAR** | **Eielson Array** | **132.89** | **32** | PKP | **PKPdf** | **16 11 55.8** | **+0.2** |
| | 0.2nm,0.7s,baz=270,slow=0.9,SNR=3.0 | | | | | | |
| **VRI** | **Vrincioaia** | **143.92** | **274** | ⇑*i*P | PKPbc | 16 12 14.7 | +0.4 |
| **MLR** | **Muntele Rosu** | **144.06** | **273** | ⇑*i*P | PKPbc | 16 12 15.1 | +0.2 |
| **TESR** | **Tescani** | **144.40** | **275** | ⇓*i*P | **PKPdf** | **16 12 17.7** | **+0.5** |
| **DOPR** | **Dopca** | **144.67** | **273** | ⇓*i*P | **PKPdf** | **16 12 21.8** | **+4.1** |
| **OBN** | **Obninsk** | **144.92** | **293** | PKPdf | **PKPdf** | **16 12 17.5** | **-0.3** |
| **KEST** | **Kesra** | **144.93** | **245** | PKP | **PKPdf** | **16 12 19.1** | **+0.5** |
| | 10.0nm,1.1s,baz=63,slow=4.5,SNR=3.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.83** | **282** | PKPbc | **PKPdf** | **16 12 19.7** | **+0.3** |
| | 3.1nm,0.8s,baz=108,slow=2.8,SNR=7.5 | | | | | | |
| **BURAR** | **Bucovina Array** | **145.87** | **275** | ⇑*i*P | **PKPab** | **16 12 22.5** | **+1.5** |
| **BZS** | **Buzias** | **146.35** | **269** | ⇑*i*P | **PKPab** | **16 12 26.5** | **+3.8** |
| **VYHS** | **Vyhne** | **149.69** | **271** | *e*PKP | **PKPbc** | **16 12 30.6** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **152.13** | **272** | *e*PKPAB | **PKPab** | **16 12 43.8** | **-2.4** |
| DPC | | | | *e*pPKP | pPKP | 16 12 49.3 | |
| **GERES** | **GERESS Array B** | **152.52** | **267** | PKPbc | **PKPbc** | **16 12 38.3** | **+0.9** |
| | 1.6nm,0.7s,baz=126,slow=1.7,SNR=6.6 | | | | | | |
| **KHC** | **Kasperske Hory** | **152.77** | **267** | *e*PKPAB | **PKPab** | **16 12 49.3** | **+0.4** |
| KHC | | | | *e*x | x | 16 12 59.2 | |
| **FINES** | **FINESS Array B** | **152.81** | **299** | PKPbc | **PKPbc** | **16 12 36.8** | **-0.7** |
| | 4.0nm,0.7s,baz=140,slow=3.3,SNR=11 | | | | | | |
| **PRU** | **Pruhonice** | **152.81** | **270** | *e*pPKP | **PKPab** | **16 12 44.2** | **-4.8** |
| **BRG** | **Berggiesshubel** | **153.66** | **271** | *e*(P) | **PKPbc** | **16 12 41.3** | **+1.7** |
| | 2.5nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **154.01** | **232** | PKPab | **PKPab** | **16 12 52.6** | **-1.8** |
| | 0.2nm,0.3s,baz=145,slow=4.7,SNR=4.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **154.92** | **317** | PKPab | **PKPab** | **16 12 56.4** | **-1.0** |
| | 3.7nm,0.8s,baz=90,slow=5.4,SNR=7.6 | | | | | | |

*IDC **04** 16:01:54.6±1.3, 4°.73S×145°.24E, h0km, mb3.9/5, mb1 4.1/8, mb1mx3.8/28, mbtmp4.0/8, ML3.9/2, MS4.2/3, Ms1 4.2/3, ms1mx3.6/21, Error ellipse: s-maj=38.3km s-min=26.9km az=110.0*

**ISC 04 16:02:00.3**±1.2**, 5°.1S**±0°.1×**145°.4E**±0°.2**, h38km, n11, σ1s.57**/9**, mb3.9**/5**, MS4.3**/3**, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.65** | **159** | Pn | Pn | 16 03 11.9 | +3.9 |
| | 8.3nm,0.3s,baz=344,slow=7.4,SNR=24 | | | | | | |
| PMG | | | | Sn | **Sn** | **16 04 00.5** | **-0.3** |
| | 27nm,0.3s,baz=330,slow=20,SNR=17 | | | | | | |
| **CTA** | **Charters Tower** | **14.97** | **177** | Pn | **P** | **16 05 32.4** | **-1.8** |
| | 0.1nm,0.3s,baz=360,slow=19,SNR=2.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.32** | **215** | P | **Pn** | **16 06 12.2** | **+0.5** |
| | 0.8nm,0.3s,baz=38,slow=11,SNR=63 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 10 44.0** | **+1.7** |
| | 0.1nm,0.3s,baz=23,slow=1.7,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **21.59** | **210** | P | **P** | **16 06 48.4** | **+1.4** |
| | 1.8nm,0.5s,baz=37,slow=7.8,SNR=77 | | | | | | |
| **BATI** | **Baumata** | **22.17** | **255** | P | **P** | **16 06 51.5** | **-1.9** |
| | 3.9nm,0.3s,baz=82,slow=13,SNR=2.1 | | | | | | |
| **RAR** | **Rarotonga** | **55.43** | **112** | LR | LR | 16 34 56.1 | |
| | comp=Z,112nm,19.4s,baz=246,slow=36 | | | | | | |
| **VNDA** | **Vanda** | **72.95** | **176** | P | **P** | **16 13 26.6** | **+1.3** |
| | 0.6nm,0.7s,baz=341,slow=6.0,SNR=4.2 | | | | | | |
| **MAW** | **Mawson** | **82.52** | **203** | P | **P** | **16 14 19.2** | **+0.4** |
| | 0.5nm,0.4s,baz=90,slow=4.0,SNR=3.5 | | | | | | |
| **ILAR** | **Eielson Array** | **85.23** | **23** | P | **P** | **16 14 31.8** | **-0.9** |
| | 0.5nm,0.6s,baz=246,slow=4.8,SNR=5.7 | | | | | | |
| **GEYT** | **Alibeck** | **90.96** | **308** | LR | LR | 16 57 19.1 | |
| | comp=Z,169nm,21.4s,baz=215,slow=37 | | | | | | |
| **NVAR** | **Mina Array Bea** | **98.02** | **52** | LR | LR | 16 53 47.0 | |
| | comp=Z,106nm,20.1s,baz=228,slow=32 | | | | | | |

*ISCJB **04** 16:03:44.3±0.4, 40°.87N±0°.03×28°.12E±0°.04, h12km, Error ellipse: s-maj=4.7km s-min=3.5km az=141.0*
*CSEM **04** 16:03:44.6±0.1, 40°.84N×28°.14E, h15km, MD2.3, Error ellipse: s-maj=1.7km s-min=1.1km az=148.0*
*ISK **04** 16:03:44.2, 40°.85N×28°.15E, h16km, MD2.3*
*DDA **04** 16:03:47.5, 40°.73N×28°.26E, h6km, Md2.6*

**ISC 04 16:03:44.5**±0.8**, 40°.85N**±0°.03×**28°.15E**±0°.03**, h12km, n43, σ0s.37**/50**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTKS** | **Kestanelik-??a** | **0.48** | **35** | *e*PG | **Pb** | **16 03 54.3** | **-0.5** |
| CTKS | | | | *e*SG | **Sg** | **16 04 00.8** | **+0.7** |
| **CTKS** | **Kestanelik-??a** | **0.48** | **35** | *e*Pg | **Pb** | **16 03 54.3** | **-0.5** |
| CTKS | | | | *e*Sg | **Sg** | **16 04 00.9** | **+0.7** |
| **MRMT** | **Marmara Adasi** | **0.48** | **240** | *e*PG | **Pb** | **16 03 54.6** | **-0.3** |
| **MRMT** | **Marmara Adasi** | **0.48** | **240** | *e*Pg | **Pb** | **16 03 54.6** | **-0.3** |
| **EDC** | **Edincik** | **0.54** | **203** | *e*PG | **Pg** | **16 03 55.3** | **+0.2** |
| **EDC** | **Edincik** | **0.54** | **203** | *e*Pg | **Pg** | **16 03 55.3** | **+0.2** |
| **BGKT** | **Bogazkoy** | **0.58** | **55** | *e*PG | **Pg** | **16 03 56.2** | **+0.4** |
| BGKT | | | | *e*SG | **Sb** | **16 04 04.4** | **-0.4** |
| **BGKT** | **Bogazkoy** | **0.58** | **55** | *e*Pg | **Pg** | **16 03 56.2** | **+0.4** |
| BGKT | | | | *e*Sg | **Sb** | **16 04 04.4** | **-0.4** |
| **ARMT** | **Armutlu** | **0.61** | **117** | *e*PG | **Pg** | **16 03 56.8** | **+0.4** |
| **ARMT** | **Armutlu** | **0.61** | **117** | *e*Pg | **Pg** | **16 03 56.8** | **+0.4** |
| **CTYL** | **Yal??k??y-??at** | **0.64** | **10** | *e*PG | **Pb** | **16 03 57.1** | **-0.4** |
| **CTYL** | **Yal??k??y-??at** | **0.64** | **10** | *e*Pg | **Pb** | **16 03 57.1** | **-0.4** |
| **ISK** | **Istanbul-Kandi** | **0.73** | **72** | *e*PG | **Pg** | **16 03 58.6** | **0.0** |
| **ISK** | **Istanbul-Kandi** | **0.73** | **72** | *e*Pg | **Pg** | **16 03 58.6** | **0.0** |
| **RKY** | **Sarkoy-Tekirda** | **0.75** | **258** | *e*PG | **Pb** | **16 03 59.1** | **-0.4** |
| **RKY** | **Sarkoy-Tekirda** | **0.75** | **258** | *e*Pg | **Pb** | **16 03 59.1** | **-0.4** |
| **KRBG** | **Karabiga-Canak** | **0.79** | **235** | *e*PG | **Pb** | **16 03 59.9** | **-0.2** |
| **KRBG** | **Karabiga-Canak** | **0.79** | **235** | *e*Pg | **Pb** | **16 03 59.9** | **-0.2** |
| **KLYT** | **Kilyos** | **0.79** | **59** | *e*PG | **Pb** | **16 04 00.2** | **+0.1** |
| **KLYT** | **Kilyos** | **0.79** | **59** | *e*Pg | **Pb** | **16 04 00.2** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **0.87** | **204** | *e*PG | **Pb** | **16 04 01.5** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **0.87** | **204** | *e*Pg | **Pb** | **16 04 01.5** | **0.0** |
| **PHSR** | **Pinarhisar** | **0.91** | **329** | *e*PG | **Pb** | **16 04 02.2** | **-0.1** |
| **PHSR** | **Pinarhisar** | **0.91** | **329** | *e*Pg | **Pb** | **16 04 02.2** | **-0.1** |
| **IGD** | **Bursa** | **0.99** | **125** | P | **Pg** | **16 04 03.7** | **+0.1** |
| IGD | | | | S | **Sb** | **16 04 16.9** | **+0.3** |
| **IZI** | **Iznik** | **1.13** | **116** | *e*PN | **Pb** | **16 04 05.6** | **-0.4** |
| **IZI** | **Iznik** | **1.13** | **116** | *e*Pn | **Pb** | **16 04 05.6** | **-0.4** |
| **LPK** | **Lapseki** | **1.16** | **246** | *e*PN | **Pn** | **16 04 06.3** | **-0.1** |
| **LPK** | **Lapseki** | **1.16** | **246** | *e*Pn | **Pn** | **16 04 06.3** | **-0.1** |
| **HRT** | **Hereke** | **1.16** | **91** | *e*PN | **Pb** | **16 04 06.1** | **-0.3** |
| **HRT** | **Hereke** | **1.16** | **91** | *e*Pn | **Pb** | **16 04 06.1** | **-0.3** |
| **SILT** | **Sile** | **1.18** | **74** | *e*PN | **Pn** | **16 04 06.4** | **-0.3** |
| **SILT** | **Sile** | **1.18** | **74** | *e*Pn | **Pn** | **16 04 06.4** | **-0.3** |
| **ERIK** | **Erikli-Kesan** | **1.25** | **262** | *e*PN | **Pn** | **16 04 07.4** | **-0.4** |
| **ERIK** | **Erikli-Kesan** | **1.25** | **262** | *e*Pn | **Pn** | **16 04 07.4** | **-0.4** |
| **DURS** | **Dursunbey** | **1.27** | **168** | *i* P | **Pg** | **16 04 09.3** | **+0.4** |
| DURS | | | | *i* S | **Sn** | **16 04 25.2** | **+0.1** |
| **DURS** | **Dursunbey** | **1.27** | **168** | P | **Pg** | **16 04 09.3** | **+0.4** |
| DURS | | | | S | **Sn** | **16 04 25.2** | **+0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.35** | **251** | *e*PN | **Pn** | **16 04 08.4** | **-0.7** |
| **GELI** | **Tayfur-Gelibol** | **1.35** | **251** | *e*Pn | **Pn** | **16 04 08.4** | **-0.7** |
| **CAVI** | **Cavuskoy** | **1.45** | **116** | *e*PN | **Pn** | **16 04 10.1** | **-0.3** |
| **CAVI** | **Cavuskoy** | **1.45** | **116** | *e*Pn | **Pn** | **16 04 10.1** | **-0.3** |
| **EDRB** | **Edirne** | **1.45** | **314** | *e*PN | **Pn** | **16 04 10.7** | **+0.1** |
| **EDRB** | **Edirne** | **1.45** | **314** | *e*Pn | **Pn** | **16 04 10.7** | **+0.1** |

**IDC 04 16:08:13.4**±347.0**, 53°.92N**×**42°.23E, h0km, Error ellipse: s-maj=150.1km s-min=79.5km az=140.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **4.01** | **316** | *i* | | 16 31 50.0 | |
| | baz=131,slow=332,SNR=2.2 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **10.33** | **104** | *i* | | 17 10 10.0 | |
| | baz=295,slow=326,SNR=1.3 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **24.80** | **72** | *i* | | 18 42 25.0 | |
| | baz=284,slow=330,SNR=7.1 | | | | | | |

*ISCJB **04** 16:33:01.8±1.5, 10°.33N±0°.08×61°.87W±0°.03, h4km±10km, Error ellipse: s-maj=14.2km s-min=5.0km az=168.1*
*TRN **04** 16:33:01.2, 10°.33N×61°.90W, h6km, MD3.1*
*FUNV **04** 16:33:04.1, 10°.44N×61°.86W, h9km, MW2.4*

**ISC 04 16:33:02.8**±1.9**, 10°.4N**±0°.1×**61°.87W**±0°.04**, h12km**±13km**, n10, σ0s.82**/17**, Trinidad**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TCE** | **Chacachacare** | **0.34** | **19** | *e*P | **Pg** | **16 33 09.4** | **-0.3** |
| TCE | | | | *e*S | **Sg** | **16 33 14.2** | **-0.1** |
| **GUIV** | **Guiria** | **0.44** | **308** | *e*P | **Pg** | **16 33 11.6** | **0.0** |
| GUIV | | | | *e*S | **Sg** | **16 33 17.5** | **0.0** |
| **TRN** | **Trinidad (W)** | **0.53** | **59** | *e*P | **Pg** | **16 33 12.7** | **-0.5** |
| TRN | | | | *e*S | **Sg** | **16 33 20.9** | **+0.6** |
| **GUNV** | **Guanoco** | **1.08** | **259** | *e*P | **Pn** | **16 33 23.7** | **0.0** |
| GUNV | | | | *e*S | **Sn** | **16 33 39.5** | **+0.9** |
| **TPR** | **Prospect** | **1.34** | **53** | *e*P | **Pn** | **16 33 27.0** | **-0.4** |
| **CRUV** | **Carupano** | **1.38** | **283** | *e*P | **Pn** | **16 33 28.0** | **+0.2** |
| CRUV | | | | *e*S | **Sb** | **16 33 45.9** | **-0.2** |
| **TOSP** | **Speyside** | **1.60** | **55** | *e*P | **Pn** | **16 33 31.0** | **+0.1** |
| TOSP | | | | *e*S | **Sb** | **16 33 53.4** | **+1.0** |
| **CUPV** | **Cœpira** | **3.87** | **266** | *e*P | **Pn** | **16 34 03.2** | **+1.0** |
| CUPV | | | | *e*S | **Sn** | **16 34 45.7** | **-2.0** |
| **BIRV** | **Birongo** | **4.33** | **272** | *e*P | **Pn** | **16 34 09.5** | **+1.0** |
| **BAUV** | **El Baul** | **6.25** | **257** | *e*P | **Pn** | **16 34 34.5** | **-0.4** |

**NEIC 04 16:37:56.8, 51°.39N**×**175°.71W, h26km, ML3.6**(AEIC)**, After AEIC., Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ETKA** | **Kagalaska Isla** | **0.64** | **318** | P | Pb | 16 38 09.2 | -0.2 |
| **GSCK** | **Great Sitkin C** | **0.68** | **336** | P | Pb | 16 38 10.1 | -0.1 |
| **GSMY** | **Great Sitkin M** | **0.69** | **342** | P | Pb | 16 38 10.0 | -0.2 |
| **GSTD** | **Great Sitkin T** | **0.72** | **338** | P | Pb | 16 38 10.6 | -0.2 |
| GSTD | | | | S | Sb | 16 38 19.7 | -0.7 |
| **GSTR** | **Great Sitkin T** | **0.74** | **343** | *e*P | Pb | 16 38 11.0 | -0.1 |
| **ADAG** | **Mount Adagdak** | **0.81** | **317** | P | Pb | 16 38 12.4 | +0.1 |
| **KIRH** | **Kanaga Island** | **1.00** | **301** | P | Pn | 16 38 14.5 | -0.7 |
| **KIKV** | **Kanaga Island** | **1.03** | **299** | P | Pn | 16 38 14.8 | -0.8 |
| **KINC** | **Kanaga Island** | **1.04** | **302** | P | Pn | 16 38 15.0 | -0.6 |
| **KICM** | **Kanaga Island** | **1.07** | **300** | P | Pn | 16 38 15.4 | -0.7 |
| **ATKA** | **Atka Island** | **1.25** | **49** | P | Pn | 16 38 17.1 | -1.4 |
| ATKA | | | | S | Sb | 16 38 34.9 | -0.3 |
| **KOKL** | **Mount Kliuchef** | **1.32** | **44** | P | Pn | 16 38 19.7 | 0.0 |
| **KOWE** | **Korovin West** | **1.33** | **42** | P | Pn | 16 38 20.0 | +0.2 |
| **KOFP** | **Korovin Flat P** | **1.34** | **48** | P | Pn | 16 38 19.7 | -0.2 |
| **TAPA** | **Tanaga Point A** | **1.38** | **289** | P | Pn | 16 38 19.9 | -0.6 |
| **TAFL** | **Tanaga Flats** | **1.41** | **286** | P | Pn | 16 38 20.3 | -0.6 |
| **TAFP** | **Tanaga Falls P** | **1.50** | **291** | P | Pn | 16 38 21.9 | -0.3 |
| TAFP | | | | S | Sn | 16 38 40.0 | -1.0 |
| **TANO** | **Tanaga North** | **1.59** | **290** | P | Pn | 16 38 23.5 | +0.2 |
| **GAEA** | **Gareloi East** | **1.93** | **283** | P | Pn | 16 38 28.9 | +0.9 |
| **GALAA** | **Gareloi Lava P** | **1.94** | **282** | P | Pn | 16 38 28.3 | +0.1 |
| **GANE** | **Gareloi Northe** | **1.96** | **284** | P | Pn | 16 38 28.8 | +0.4 |
| **CERAA** | **Semis' Rag'd T** | **2.91** | **282** | P | Pn | 16 38 41.9 | +0.4 |
| **CESW** | **Semis' Southwe** | **2.99** | **282** | P | Pn | 16 38 42.9 | +0.4 |
| **AMKA** | **Amchitka** | **3.12** | **272** | P | Pn | 16 38 44.6 | +0.3 |
| AMKA | | | | S | Sn | 16 39 24.3 | +3.5 |
| **LSPA** | **Little Sitkin** | **3.60** | **281** | P | Pn | 16 38 51.0 | +0.1 |
| **LSNW** | **Little Sitkin** | **3.64** | **281** | P | Pn | 16 38 51.5 | +0.1 |
| **NIKH** | **Nikolski High** | **4.51** | **67** | P | Pn | 16 39 03.8 | +0.4 |
| **UNV** | **Unalaska Valle** | **6.12** | **63** | P | Pn | 16 39 27.1 | +1.6 |
| **SPIA** | **Saint Paul Isl** | **6.62** | **27** | P | Pn | 16 39 34.9 | +2.6 |

**IDC 04 16:39:37.0**±1.3**, 25°.57N**×**105°.98E, h0km, mb3.4**/4**, mb1 3.6**/5**, mb1mx3.3**/37**, mbtmp3.4**/5**, ML3.2**/1**, Error ellipse: s-maj=32.4km s-min=21.5km az=91.0, Southeastern China**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **9.62** | **224** | Pn | Pn | 16 41 56.7 | -0.1 |
| | 0.1nm,0.3s,baz=36,slow=12,SNR=4.4 | | | | | | |
| CMAR | | | | Pg | | 16 42 34.2 | |
| | 0.1nm,0.3s,baz=45,slow=17,SNR=8.0 | | | | | | |
| CMAR | | | | Lg | Lg | 16 44 38.8 | |
| | 0.1nm,0.3s,baz=46,slow=30,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **22.23** | **1** | P | P | 16 44 35.3 | 0.0 |
| | 0.3nm,0.5s,baz=186,slow=9.9,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **32.43** | **337** | P | P | 16 46 07.3 | -1.2 |
| | 1.8nm,0.7s,baz=134,slow=7.7,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.97** | **146** | P | P | 16 48 55.9 | +0.3 |
| | 0.4nm,0.8s,baz=334,slow=8.2,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **55.91** | **149** | P | P | 16 49 17.8 | +0.9 |
| | 0.3nm,0.9s,baz=325,slow=7.9,SNR=2.6 | | | | | | |

*IDC **04** 16:43:11.8±0.6, 36°.40S×73°.33W, h0km, mb4.5/13, mb1 4.6/17, mb1mx4.6/24, mbtmp4.5/17, ML4.2/4, MS4.2/11, Ms1 4.2/11, ms1mx4.1/17, Error ellipse: s-maj=24.5km s-min=13.4km az=98.0*
*ISCJB **04** 16:43:14.7±0.2, 36°.40S±0°.03×73°.41W±0°.04, h27km, mb4.8/26, MS4.4/9, Error ellipse: s-maj=4.8km s-min=4.4km az=37.5*
*GUC **04** 16:43:14.4±0.4, 36°.50S×73°.56W, h33km±4km, ML4.8*
*NEIC **04** 16:43:17.4±1.1, 36°.36S×73°.29W, h37km±9km, mb5.0/14, Error ellipse: s-maj=11.3km s-min=5.7km az=77.0*
*NEIC Felt [IV] at Concepcion, Talcahuano and Tome; [III] at Angol, Cauquenes, Chiguayante, La Laja, Penco, San Pedro and San Rosendo; [II] at Arauco and Florida. Also felt at Coronel.*

**ISC 04 16:43:16.1**±0.3**, 36°.42S**±0°.05×**73°.36W**±0°.06**, h27km, n187, σ1s.11**/199**, mb5.0**/26**, MS4.4**/9**, 3C, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCSP** | **San Pedro de C** | **0.47** | **154** | *e*P | **Pb** | **16 43 24.5** | **-1.3** |
| CCSP | | | | *i* S | **Sb** | **16 43 32.1** | **-0.3** |
| CCSP | | | | AML | AML | 16 43 33.6 | |
| | comp=N,130μm,0.5s | | | | | | |
| **COCH** | **Cobquecura** | **0.55** | **58** | ⇑*i*P | **Pn** | **16 43 28.0** | **-0.1** |
| COCH | | | | *i* S | **Sn** | **16 43 38.2** | **+1.9** |
| COCH | | | | AML | AML | 16 43 40.7 | |
| | comp=N,90μm,0.4s | | | | | | |
| **CCHI** | **Chillan** | **1.05** | **100** | *e*P | **Pb** | **16 43 35.6** | **0.0** |
| CCHI | | | | *e*S | **Sb** | **16 43 51.4** | **+2.5** |
| **TALC** | **Talca** | **1.73** | **54** | *e*P | **Pn** | **16 43 45.3** | **+0.8** |
| **NICH** | **Los Niches** | **2.24** | **51** | *e*P | **Pn** | **16 43 52.8** | **+1.4** |
| NICH | | | | *e*S | **Sb** | **16 44 23.9** | **+0.7** |
| **RCDM** | **Rinconada Maip** | **3.60** | **36** | *e*P | **Pn** | **16 44 10.5** | **+0.3** |
| **AAGR** | **Agrelo** | **5.00** | **50** | *e*P | **Pn** | **16 44 32.1** | **+2.7** |
| AAGR | | | | *e*S | Sn | 16 45 05.5 | -21 |
| **ARCO** | **CERRO ARCO** | **5.11** | **47** | *e*P | **Pn** | **16 44 33.5** | **+2.5** |
| ARCO | | | | *e*S | Sn | 16 45 06.3 | -23 |
| ARCO | | | | AML | AML | 16 45 19.0 | |
| | comp=Z,228nm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **5.32** | **39** | *e*P | **Pn** | **16 44 35.9** | **+1.8** |
| **ASAL** | **Salagasta** | **5.34** | **46** | *e*P | **Pn** | **16 44 36.4** | **+2.2** |
| **RTLS** | **Leoncito** | **5.71** | **37** | *e*P | **Pn** | **16 44 41.1** | **+1.7** |
| **RTCV** | **Cerro Valdivia** | **6.05** | **43** | *e*P | **Pn** | **16 44 45.2** | **+1.3** |
| **CFAA** | **Coronel Fontan** | **6.42** | **43** | Pn | **Pn** | **16 44 49.0** | **+0.1** |
| | comp=Z,1.7nm,0.3s,baz=218,slow=12,SNR=68 | | | | | | |
| CFAA | | | | Lg | Lg | 16 46 25.7 | |
| | comp=Z,0.9nm,0.3s,baz=288,slow=19,SNR=7.9 | | | | | | |
| CFAA | | | | LR | LR | 16 47 22.9 | |
| | comp=Z,264nm,19.1s,baz=224,slow=39 | | | | | | |
| **CFAA** | **Coronel Fontan** | **6.42** | **43** | *e*P | **Pn** | **16 44 49.6** | **+0.7** |
| **ACAN** | **Cantantal** | **6.57** | **53** | *e*P | **Pn** | **16 44 52.4** | **+1.4** |
| **AMOG** | **MOGNA** | **6.81** | **38** | *e*P | **Pn** | **16 44 54.5** | **+0.1** |
| **AVFE** | **Valle Fertil** | **7.57** | **42** | *e*P | **Pn** | **16 45 04.9** | **+0.1** |
| AVFE | | | | AML | AML | 16 46 57.1 | |
| | comp=Z,83nm,0.8s | | | | | | |
| **ACHE** | **Chepes** | **7.65** | **49** | *e*P | **Pn** | **16 45 05.9** | **0.0** |
| **LCO** | **Las Campanas** | **7.72** | **18** | *e*P | **Pn** | **16 45 05.7** | **-1.3** |
| | comp=Z,55nm,0.8s | | | | | | |
| **AGUA** | **GUANDACOL** | **8.04** | **32** | *e*P | **Pn** | **16 45 11.6** | **+0.4** |
| **VCA** | **Vinchina** | **8.81** | **31** | *e*P | **Pn** | **16 45 22.0** | **+0.2** |
| **TRQA** | **Tornquist** | **9.22** | **104** | *e*P | **Pn** | **16 45 29.0** | **+1.7** |
| | comp=Z,56nm,1.2s | | | | | | |
| **LVC** | **Limon Verde** | **14.29** | **17** | Pn | **Pn** | **16 46 35.8** | **-1.2** |
| | comp=Z,8.2nm,0.3s,baz=209,slow=10,SNR=2.8 | | | | | | |
| LVC | | | | Lg | Lg | 16 50 26.3 | |
| | comp=Z,12nm,0.3s,baz=212,slow=17,SNR=6.4 | | | | | | |
| **LVC** | **Limon Verde** | **14.29** | **17** | Pn | **Pn** | **16 46 35.8** | **-1.2** |
| | comp=Z,2.8nm,0.8s | | | | | | |
| LVC | | | | Lg | Lg | 16 50 26.3 | |
| **CPUP** | **Villa Florida** | **16.97** | **58** | Pn | **Pn** | **16 47 10.1** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=234,slow=11,SNR=6.9 | | | | | | |
| CPUP | | | | Lg | Lg | 16 51 57.6 | |
| | comp=Z,0.1nm,0.3s,baz=256,slow=20,SNR=2.9 | | | | | | |
| CPUP | | | | LR | LR | 16 53 44.9 | |
| | comp=Z,821nm,19.9s,baz=238,slow=37 | | | | | | |
| **USHA** | **Ushuaia** | **18.72** | **171** | P | **Pn** | **16 47 32.4** | **-0.5** |
| | comp=Z,0.2nm,0.3s,baz=337,slow=11,SNR=4.0 | | | | | | |
| **LPAZ** | **La Paz** | **20.59** | **14** | P | **P** | **16 47 53.9** | **+0.2** |
| | comp=Z,3.8nm,0.5s,baz=190,slow=6.8,SNR=21 | | | | | | |
| **SIV** | **San Ignacio** | **23.10** | **31** | P | **P** | **16 48 19.3** | **-0.6** |
| | comp=Z,6.8nm,0.8s,baz=231,slow=14,SNR=21 | | | | | | |
| **BDFB** | **Brasilia** | **30.61** | **54** | P | **P** | **16 49 28.1** | **-0.1** |
| | comp=Z,2.1nm,0.3s,baz=219,slow=7.7,SNR=5.1 | | | | | | |
| BDFB | | | | LR | LR | 17 02 56.1 | |
| | comp=Z,1μm,19.1s,baz=223,slow=39 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **47.89** | **156** | P | **P** | **16 51 52.6** | **+1.2** |
| **VNA2** | **Neumayer--Watz** | **48.22** | **156** | P | **P** | **16 51 54.4** | **+0.5** |
| | baz=280,slow=7.7 | | | | | | |
| **SNAA** | **Sanae** | **49.77** | **157** | P | **P** | **16 52 06.1** | **+0.2** |
| **SNAA** | **Sanae** | **49.77** | **157** | P | **P** | **16 52 06.3** | **+0.4** |
| | comp=Z,12nm,1.1s,baz=281,slow=6.5,SNR=64 | | | | | | |
| **SNAA** | **Sanae** | **49.77** | **157** | *e*P | **P** | **16 52 05.6** | **-0.3** |
| | comp=Z,26nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **53.82** | **180** | P | **P** | **16 52 36.6** | **+0.4** |
| | comp=Z,22nm,1.0s,baz=145,slow=4.1,SNR=39 | | | | | | |
| **RKT** | **Rikitea** | **54.28** | **266** | *e*T | T | 17 50 51.9 | |
| | comp=Z,2.4nm,0.2s | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **54.45** | **7** | *e*P | **P** | **16 52 40.0** | **-1.1** |
| **CELP** | **Cerrillos** | **54.58** | **8** | *e*P | **P** | **16 52 41.7** | **-0.3** |
| **LRS** | **Lares** | **54.77** | **8** | *e*P | **P** | **16 52 41.6** | **-1.8** |
| **VNDA** | **Vanda** | **61.52** | **192** | P | **P** | **16 53 30.9** | **+0.9** |
| | comp=Z,3.0nm,1.0s,baz=142,slow=5.0,SNR=11 | | | | | | |
| VNDA | | | | LR | LR | 17 16 48.4 | |
| | comp=Z,131nm,19.1s,baz=358,slow=33 | | | | | | |
| **SYO** | **Syowa Base** | **64.02** | **158** | ⇑*e*P | **P** | **16 53 45.2** | **-1.5** |
| **SYO** | **Syowa Base** | **64.02** | **158** | ⇑*e*pP | pP | 16 53 54.2 | -1.0 |
| **TBI** | **Tubuai** | **65.73** | **258** | *e*S | **S** | **17 02 46.4** | **+3.1** |
| | comp=Z,315nm,27.8s | | | | | | |
| **TBI** | **Tubuai** | **65.73** | **258** | *e*LR | LR | 17 13 55.2 | |
| | comp=Z,305nm,26.8s | | | | | | |
| **TBI** | **Tubuai** | **65.73** | **258** | *e*T | T | 18 05 10.2 | |
| | comp=Z,9.3nm,0.4s | | | | | | |
| **MEH** | **Mehetia** | **67.48** | **264** | *e*T | T | 18 07 27.2 | |
| | comp=Z,39nm,0.2s | | | | | | |
| **TIAR** | **Tiarei** | **68.68** | **264** | *e*T | T | 18 08 56.2 | |
| | comp=Z,7.4nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **68.85** | **263** | *e*S | **S** | **17 03 21.2** | **+0.1** |
| | comp=Z,375nm,26.5s | | | | | | |
| **PPT2** | **Papeete2** | **68.85** | **263** | *e*LR | LR | 17 15 16.2 | |
| | comp=Z,368nm,24.5s | | | | | | |
| **PPT** | **Papeete** | **68.86** | **263** | LR | LR | 17 18 20.1 | |
| | comp=Z,299nm,18.4s,baz=104,slow=31 | | | | | | |
| **732A** | **Laxson Ranch,** | **69.47** | **335** | P | **P** | **16 54 22.3** | **+0.4** |
| | baz=70 | | | | | | |
| **632A** | **Uvalde** | **70.13** | **336** | P | **P** | **16 54 26.8** | **+0.8** |
| | baz=70 | | | | | | |
| **532A** | **Rocksprings** | **70.74** | **336** | P | **P** | **16 54 30.2** | **+0.4** |
| | baz=71 | | | | | | |
| **434A** | **Burnet** | **70.85** | **337** | P | **P** | **16 54 30.7** | **+0.3** |
| | baz=71 | | | | | | |
| **531A** | **Rocksprings** | **70.99** | **335** | P | **P** | **16 54 31.8** | **+0.6** |
| | baz=71 | | | | | | |
| **JCT** | **Junction City** | **71.03** | **336** | P | **P** | **16 54 31.8** | **+0.3** |
| | baz=71 | | | | | | |
| **335A** | **Moody** | **71.03** | **338** | P | **P** | **16 54 31.8** | **+0.4** |
| | baz=71 | | | | | | |
| **433A** | **Art** | **71.05** | **337** | P | **P** | **16 54 31.6** | **-0.1** |
| | baz=71 | | | | | | |
| **MAW** | **Mawson** | **71.17** | **164** | P | **P** | **16 54 31.7** | **-0.1** |
| | comp=Z,8.5nm,1.1s,baz=220,slow=7.8,SNR=14 | | | | | | |
| MAW | | | | LR | LR | 17 25 40.0 | |
| | comp=Z,194nm,19.6s,baz=238,slow=36 | | | | | | |
| **530A** | **J-C Ranch, Com** | **71.24** | **335** | P | **P** | **16 54 33.6** | **+0.8** |
| | baz=72 | | | | | | |
| **334A** | **Lometa** | **71.32** | **338** | P | **P** | **16 54 33.0** | **-0.2** |
| | baz=72 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.34** | **332** | P | **P** | **16 54 33.6** | **+0.1** |
| | comp=Z,2.4nm,1.0s,baz=152,slow=8.3,SNR=15 | | | | | | |
| TXAR | | | | LR | LR | 17 21 23.6 | |
| | comp=Z,226nm,18.0s,baz=0.0,slow=32 | | | | | | |
| **333A** | **Richland Sprin** | **71.55** | **337** | P | **P** | **16 54 34.7** | **+0.1** |
| | baz=72 | | | | | | |
| **KMSC** | **Kings Mountain** | **71.59** | **353** | P | **P** | **16 54 34.5** | **-0.2** |
| | baz=72 | | | | | | |
| **WHTX** | **Lake Whitney** | **71.70** | **339** | P | **P** | **16 54 35.7** | **+0.2** |
| | baz=72 | | | | | | |
| **430A** | **Baggett Ranch,** | **71.79** | **335** | P | **P** | **16 54 36.2** | **0.0** |
| | baz=72 | | | | | | |
| **332A** | **Millersview** | **71.84** | **336** | P | **P** | **16 54 36.2** | **-0.1** |
| | baz=72 | | | | | | |
| **429A** | **Davenport Ranc** | **71.87** | **334** | P | **P** | **16 54 37.0** | **+0.3** |
| | baz=72 | | | | | | |
| **331A** | **San Angelo** | **72.00** | **336** | P | **P** | **16 54 36.9** | **-0.4** |
| | baz=72 | | | | | | |
| **233A** | **Rising Star** | **72.17** | **337** | P | **P** | **16 54 38.1** | **-0.2** |
| | baz=72 | | | | | | |
| **231A** | **Bronte** | **72.54** | **336** | P | **P** | **16 54 40.3** | **-0.3** |
| | baz=73 | | | | | | |
| **Z35A** | **Perchaven, San** | **72.90** | **339** | P | **P** | **16 54 42.7** | **+0.1** |
| | baz=73 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **72.96** | **337** | P | **P** | **16 54 43.0** | **0.0** |
| | baz=73 | | | | | | |
| **WVT** | **Waverly** | **73.43** | **348** | *e*P | **P** | **16 54 45.1** | **-0.6** |
| | comp=Z,11nm,0.8s | | | | | | |
| **X38A** | **Whitesboro** | **73.51** | **342** | P | **P** | **16 54 46.2** | **0.0** |
| | baz=74 | | | | | | |
| **Z32A** | **Haskell** | **73.54** | **337** | P | **P** | **16 54 46.6** | **+0.2** |
| | baz=74 | | | | | | |
| **X36A** | **Centrahoma** | **73.81** | **340** | P | **P** | **16 54 47.7** | **-0.3** |
| | baz=74 | | | | | | |
| **X35A** | **Drake** | **73.82** | **340** | P | **P** | **16 54 47.7** | **-0.3** |
| | baz=74 | | | | | | |
| **128A** | **Castleberry Fa** | **73.89** | **335** | P | **P** | **16 54 48.5** | **-0.1** |
| | baz=74 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **74.05** | **336** | P | **P** | **16 54 49.7** | **+0.2** |
| | baz=74 | | | | | | |
| **MNTX** | **Cornudas Mount** | **74.11** | **332** | P | **P** | **16 54 48.8** | **-1.0** |
| | baz=74 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **74.21** | **336** | P | **P** | **16 54 50.2** | **-0.2** |
| | baz=74 | | | | | | |
| **V38A** | **Canehill** | **74.54** | **342** | P | **P** | **16 54 51.9** | **-0.3** |
| | baz=75 | | | | | | |
| **V37A** | **Hulbert** | **74.74** | **342** | P | **P** | **16 54 53.7** | **+0.4** |
| | baz=75 | | | | | | |
| **V36A** | **Jenks** | **74.85** | **341** | P | **P** | **16 54 53.8** | **-0.2** |
| | baz=75 | | | | | | |
| **X31A** | **McDonald Ranch** | **74.92** | **338** | P | **P** | **16 54 54.4** | **0.0** |
| | baz=75 | | | | | | |
| **TUL1** | **Tulsa** | **74.93** | **341** | P | **P** | **16 54 54.2** | **-0.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=75 | | | | | | |
| V35A | Meyer Ranch, C | 75.07 | 340 | P | P | 16 54 54.8 | -0.4 |
| | baz=75 | | | | | | |
| W32A | Sentinel | 75.15 | 338 | P | P | 16 54 56.0 | +0.2 |
| | baz=76 | | | | | | |
| MSTX | Muleshoe | 75.22 | 335 | P | P | 16 54 56.3 | 0.0 |
| | baz=76 | | | | | | |
| U35A | Pawnee | 75.61 | 341 | P | P | 16 54 57.7 | -0.6 |
| | baz=76 | | | | | | |
| AMTX | Amarillo | 75.69 | 336 | P | P | 16 54 59.2 | +0.3 |
| | baz=76 | | | | | | |
| 121A | Cookes Peak, D | 75.78 | 330 | P | P | 16 55 00.8 | +1.1 |
| | baz=76 | | | | | | |
| T37A | Cheneyville 18 | 75.86 | 342 | P | P | 16 54 59.3 | -0.4 |
| | baz=76 | | | | | | |
| T35A | Sooner Cattle | 76.07 | 341 | P | P | 16 55 00.6 | -0.3 |
| | baz=76 | | | | | | |
| T34A | McClaskey Farm | 76.35 | 341 | P | P | 16 55 02.7 | +0.2 |
| | baz=77 | | | | | | |
| T33A | Patterson Ranc | 76.69 | 340 | P | P | 16 55 05.4 | +0.9 |
| | baz=77 | | | | | | |
| S35A | Otter Creek Ra | 76.74 | 341 | P | P | 16 55 05.1 | +0.4 |
| | baz=77 | | | | | | |
| ACSO | Alum Creek Sta | 76.79 | 352 | *e*P | P | 16 55 04.1 | -0.9 |
| | comp=Z,46nm,1.4s | | | | | | |
| DBIC | Dimbokro | 76.97 | 72 | P | P | 16 55 05.8 | -0.9 |
| | comp=Z,9.1nm,0.9s,baz=183,slow=5.0,SNR=6.3 | | | | | | |
| DBIC | | | | LR | LR | 17 28 01.1 | |
| | comp=Z,202nm,18.2s,baz=222,slow=35 | | | | | | |
| T28A | Walsh | 77.88 | 337 | P | P | 16 55 12.0 | +0.7 |
| | baz=78 | | | | | | |
| R32A | Long Quarter, | 78.07 | 340 | P | P | 16 55 12.4 | +0.2 |
| | baz=78 | | | | | | |
| T25A | Trinidad | 78.65 | 335 | P | P | 16 55 16.7 | +1.0 |
| | baz=79 | | | | | | |
| S26A | Kim | 78.78 | 336 | P | P | 16 55 16.8 | +0.5 |
| | baz=79 | | | | | | |
| R27A | Eads | 79.16 | 337 | P | P | 16 55 18.5 | +0.1 |
| | baz=80 | | | | | | |
| R26A | Arlington | 79.39 | 336 | P | P | 16 55 20.4 | +0.9 |
| | baz=80 | | | | | | |
| SDCO | Great Sand Dun | 79.57 | 335 | P | P | 16 55 21.7 | +0.9 |
| | baz=80 | | | | | | |
| WUAZ | Wupatki | 79.83 | 329 | P | P | 16 55 23.7 | +1.6 |
| | baz=80 | | | | | | |
| BOSA | Boshof | 79.90 | 118 | P | P | 16 55 22.0 | -0.8 |
| | comp=Z,9.2nm,1.0s,baz=296,slow=7.4,SNR=6.2 | | | | | | |
| BOSA | | | | LR | LR | 17 28 51.0 | |
| | comp=Z,118nm,18.9s,baz=184,slow=34 | | | | | | |
| S22A | 4UR Ranch, Cre | 80.04 | 334 | P | P | 16 55 24.4 | +1.0 |
| | baz=80 | | | | | | |
| MVCO | Mesa Verde | 80.18 | 332 | P | P | 16 55 25.5 | +1.5 |
| | baz=80 | | | | | | |
| TUQ | Turquoise Moun | 81.73 | 326 | P | P | 16 55 33.8 | +1.6 |
| | baz=82 | | | | | | |
| SHPR | Sheep Range | 82.28 | 327 | P | P | 16 55 35.5 | +0.3 |
| | comp=Z,16nm,1.6s | | | | | | |
| L27A | T5 Ranch, Ells | 82.50 | 339 | P | P | 16 55 37.3 | +1.2 |
| | baz=83 | | | | | | |
| ECSD | EROS Data Cent | 82.54 | 343 | P | P | 16 55 36.0 | -0.1 |
| | baz=83 | | | | | | |
| ECSD | EROS Data Cent | 82.54 | 343 | *e*P | P | 16 55 35.8 | -0.3 |
| | comp=Z,19nm,1.1s | | | | | | |
| N23A | Red Feather La | 82.55 | 336 | P | P | 16 55 37.1 | +0.6 |
| | baz=83 | | | | | | |
| TMUT | Trail Mountain | 83.03 | 331 | *e*P | P | 16 55 40.1 | +1.0 |
| | comp=Z,16nm,1.1s | | | | | | |
| PKM | Peak Mountain | 83.11 | 323 | P | P | 16 55 41.4 | +1.9 |
| | baz=83 | | | | | | |
| F36A | Milaca | 83.90 | 346 | P | P | 16 55 42.0 | -1.1 |
| | baz=84 | | | | | | |
| R11A | Troy Canyon, C | 84.01 | 328 | P | P | 16 55 45.6 | +1.6 |
| | baz=84 | | | | | | |
| K22A | Casper | 84.32 | 336 | P | P | 16 55 46.3 | +0.8 |
| | baz=85 | | | | | | |
| DUG | Dugway | 84.43 | 331 | P | P | 16 55 47.1 | +1.0 |
| | baz=85 | | | | | | |
| I25A | Rochford | 84.69 | 339 | P | P | 16 55 47.9 | +0.6 |
| | baz=85 | | | | | | |
| RSSD | Black Hills | 84.87 | 338 | *e*P | P | 16 55 47.4 | -0.9 |
| | comp=Z,16nm,1.5s | | | | | | |
| HWUT | Hardware Ranch | 85.17 | 332 | *e*P | P | 16 55 49.7 | -0.1 |
| | comp=Z,25nm,1.3s | | | | | | |
| NVAR | Mina Array Bea | 85.27 | 326 | P | P | 16 55 50.7 | +0.2 |
| | comp=Z,1.7nm,0.9s,baz=152,slow=6.4,SNR=8.7 | | | | | | |
| G25A | Newell | 85.67 | 339 | P | P | 16 55 52.1 | +0.1 |
| | baz=86 | | | | | | |
| F27A | Lemmon | 85.90 | 340 | P | P | 16 55 53.0 | -0.1 |
| | baz=86 | | | | | | |
| TORD | Torodi Ar. Bea | 86.04 | 71 | P | P | 16 55 54.3 | -0.3 |
| | comp=Z,3.7nm,0.9s,baz=231,slow=2.7,SNR=22 | | | | | | |
| TORD | | | | LR | LR | 17 33 00.2 | |
| | comp=Z,133nm,18.1s,baz=250,slow=35 | | | | | | |
| F25A | Bowman | 86.35 | 339 | P | P | 16 55 55.5 | +0.1 |
| | baz=87 | | | | | | |
| REDW | Red Top Meadow | 86.43 | 334 | *e*P | P | 16 55 56.0 | -0.1 |
| | comp=Z,20nm,1.5s | | | | | | |
| E26A | Carlson Angus | 86.57 | 340 | P | P | 16 55 56.6 | +0.1 |
| | baz=87 | | | | | | |
| TPAW | Teton Pass | 86.58 | 334 | *e*P | P | 16 55 57.0 | +0.1 |
| | comp=Z,11nm,1.1s | | | | | | |
| C30A | Mose, Pekin | 86.71 | 343 | P | P | 16 55 57.3 | +0.3 |
| | baz=87 | | | | | | |
| E25A | Miller Ranch, | 86.86 | 340 | P | P | 16 55 58.4 | +0.5 |
| | baz=87 | | | | | | |
| IMW | Indian Meadow | 86.93 | 334 | *e*P | P | 16 55 58.5 | -0.1 |
| | comp=Z,18nm,1.3s | | | | | | |
| B32A | Ashes, Strandq | 86.94 | 345 | P | P | 16 55 57.8 | -0.4 |
| | baz=87 | | | | | | |
| D26A | Manning | 87.08 | 341 | P | P | 16 55 59.2 | +0.3 |
| | baz=87 | | | | | | |
| MDND | Maddock | 87.11 | 343 | P | P | 16 55 59.4 | +0.4 |
| | baz=87 | | | | | | |
| A33A | Warroad | 87.22 | 346 | P | P | 16 55 59.6 | +0.2 |
| | baz=88 | | | | | | |
| B30A | Myrvik Farm, E | 87.38 | 344 | P | P | 16 56 00.3 | 0.0 |
| | baz=88 | | | | | | |
| D25A | Fairfield | 87.43 | 340 | P | P | 16 56 01.1 | +0.4 |
| | baz=88 | | | | | | |
| C27A | Sayler Ranch, | 87.46 | 341 | P | P | 16 56 01.1 | +0.4 |
| | baz=88 | | | | | | |
| YMR | Madison River | 87.61 | 334 | *e*P | P | 16 56 02.4 | +0.6 |
| | comp=Z,7.0nm,0.8s | | | | | | |
| LAO | LASA Array | 87.85 | 338 | P | P | 16 56 03.4 | +0.8 |
| | baz=88 | | | | | | |
| B28A | Dugan Ranch, T | 87.86 | 342 | P | P | 16 56 03.2 | +0.6 |
| | baz=88 | | | | | | |
| QLMT | Earthquake Lak | 87.91 | 334 | *e*P | P | 16 56 04.6 | +1.4 |
| | comp=Z,0.2nm,0.2s | | | | | | |
| HLID | Hailey | 87.93 | 331 | P | P | 16 56 04.0 | +0.7 |
| | baz=88 | | | | | | |
| A29A | Manning Farm, | 88.03 | 343 | P | P | 16 56 03.3 | -0.1 |
| | baz=88 | | | | | | |
| MCMT | McKenzie Canyo | 88.42 | 333 | *e*P | P | 16 56 06.3 | +0.6 |
| | comp=Z,6.3nm,1.2s | | | | | | |
| A27A | Ledoux Ranch, | 88.55 | 342 | P | P | 16 56 06.5 | +0.6 |
| | baz=89 | | | | | | |
| ULM | Lac du Bonnet | 88.56 | 346 | P | P | 16 56 04.4 | -1.4 |
| | comp=Z,9.2nm,1.0s,baz=166,slow=4.8,SNR=4.6 | | | | | | |
| LSZ | Lusaka | 90.06 | 109 | *e*P | P | 16 56 15.0 | +1.0 |
| | comp=Z,21nm,1.6s | | | | | | |
| ESDC | Sonseca Array | 99.03 | 47 | LR | LR | 17 41 46.8 | |
| | comp=Z,58nm,18.0s,baz=260,slow=36 | | | | | | |
| BRTR | Keskin Array B | 123.93 | 63 | PKP | PKPdf | 17 02 11.5 | -0.2 |
| | comp=Z,0.7nm,0.8s,baz=207,slow=4.1,SNR=4.1 | | | | | | |
| ABKAR | Akbulak array | 144.00 | 54 | *e*PKPpre | PKPpre | 17 02 46.3 | |
| KSM | Kuching | 145.06 | 186 | *e*PKP | PKPab | 17 02 50.7 | -0.2 |
| PSI | Prapat | 145.79 | 166 | PKPbc | PKPdf | 17 02 52.1 | -0.9 |
| | comp=Z,12nm,0.8s,baz=254,slow=5.0,SNR=5.8 | | | | | | |
| URV | Uravakonda | 146.19 | 122 | *e*PKPbc | PKPdf | 17 02 53.1 | -0.3 |
| ADKI | Addanki | 148.66 | 124 | *e*PKPbc | PKPbc | 17 03 00.6 | -0.6 |
| NJS | Nagarjunasagar | 148.71 | 122 | *e*PKPbc | PKPbc | 17 03 00.5 | -0.8 |
| HYB | Hyderabad | 148.78 | 120 | *i* PKP | PKPbc | 17 03 00.0 | -1.5 |
| HYBB | Hyderabad (bro | 148.78 | 120 | *e*PKPbc | PKPbc | 17 03 00.9 | -0.6 |
| BRVK | Borovoye | 149.70 | 45 | *e*PKPbc | PKPbc | 17 03 03.3 | +0.6 |
| BVAR | Borovoye Array | 149.77 | 45 | PKPbc | PKPbc | 17 03 02.1 | -0.8 |
| | comp=Z,1.3nm,0.5s,baz=282,slow=2.7,SNR=11 | | | | | | |
| YAK | Yakutsk | 150.60 | 338 | *e*PKPbc | PKPbc | 17 03 04.0 | -0.6 |
| KKAR | Karatay Array | 151.60 | 65 | *e*PKPbc | PKPbc | 17 03 07.0 | -0.6 |
| CHLP | Challavanipeta | 153.28 | 126 | *e*PKPbc | PKPbc | 17 03 10.9 | -1.1 |
| AAK | Ala-Archa | 154.54 | 66 | PKPbc | PKPbc | 17 03 13.5 | -0.8 |
| | comp=Z,1.7nm,0.8s,baz=191,slow=6.8,SNR=5.5 | | | | | | |
| AAK | | | | PKPab | PKPab | 17 03 29.0 | 0.0 |
| | comp=Z,2.5nm,0.4s,baz=245,slow=3.9,SNR=9.6 | | | | | | |
| AAK | Ala-Archa | 154.54 | 66 | *e*PKPbc | PKPbc | 17 03 14.5 | +0.2 |
| AAK | | | | PKPab | PKPab | 17 03 29.0 | 0.0 |
| KSH | Kashi | 155.69 | 73 | *e*PKP | PKPdf | 17 03 07.3 | -0.1 |
| KSH | | | | *e*pPKP | pPKPdf | 17 03 18.1 | +1.6 |
| KSH | | | | PKS | PKSdf | 17 06 39.8 | -1.7 |
| KSH | | | | *e*PP | PP | 17 07 09.4 | -2.0 |
| KSH | | | | SKKS | | 17 13 55.2 | |
| KSH | | | | PPMZ | | | |
| | comp=Z,120nm,4.2s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,90nm,4.7s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,140nm,5.3s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,130nm,5.8s | | | | | | |
| ZALV | Zalesovo Beam | 156.84 | 34 | PKP | PKPdf | 17 03 07.0 | -1.3 |
| | comp=Z,1.1nm,0.6s,baz=282,slow=2.9,SNR=8.6 | | | | | | |
| ZALV | | | | PKPab | PKPab | 17 03 38.5 | +0.3 |
| | comp=Z,1.2nm,0.4s,baz=297,slow=6.5,SNR=5.8 | | | | | | |
| KOLN | Koldanda | 158.70 | 107 | *e*P | PKPab | 17 03 46.9 | -0.4 |
| | comp=Z,28nm,1.1s | | | | | | |
| MKAR | Makanchi Array | 159.13 | 53 | PKP | PKPdf | 17 03 10.6 | -0.8 |
| | comp=Z,1.5nm,1.0s,baz=329,slow=2.1,SNR=9.1 | | | | | | |
| MKAR | | | | PKPab | PKPab | 17 03 47.2 | -1.2 |
| | comp=Z,0.4nm,0.5s,baz=298,slow=3.4,SNR=3.8 | | | | | | |
| GKN | Gorkha | 159.61 | 108 | *e*P | PKPab | 17 03 51.2 | 0.0 |
| | comp=Z,71nm,1.3s | | | | | | |
| DMN | Daman | 159.77 | 110 | *e*P | PKPab | 17 03 50.8 | -1.2 |
| | comp=Z,77nm,1.7s | | | | | | |
| PKI | Pulchoki | 159.98 | 110 | *e*P | PKPab | 17 03 52.7 | -0.3 |
| | comp=Z,39nm,1.4s | | | | | | |
| KKN | Kakani | 159.99 | 109 | *e*P | PKPab | 17 03 52.4 | -0.5 |
| | comp=Z,55nm,1.3s | | | | | | |
| WMQ | Urumqi | 163.75 | 57 | *e*PKP | PKPdf | 17 03 16.0 | -0.4 |
| KMI | Kunming | 168.25 | 162 | PKP | PKPdf | 17 03 18.5 | -2.3 |
| KMI | | | | PPMZ | | | |
| | comp=Z,82nm,4.0s | | | | | | |
| SONM | Songino Array | 168.59 | 1 | PKPab | PKPab | 17 04 29.3 | -0.6 |
| | comp=Z,1.3nm,1.0s,baz=348,slow=4.1,SNR=6.2 | | | | | | |
| NJ2 | Nanjing | 168.99 | 250 | *e*PKP | PKPdf | 17 03 22.9 | +2.2 |
| GYA | Guiyang | 170.07 | 180 | *e*PKP | PKPdf | 17 03 21.2 | -0.5 |
| GYA | | | | sPKP | | 17 03 37.6 | |
| GYA | | | | PKPab | PKPab | 17 04 39.4 | +2.5 |
| GYA | | | | PKS | PKSdf | 17 06 52.0 | -2.4 |
| GYA | | | | PP | PP | 17 08 29.9 | +4.0 |
| GYA | | | | PPMZ | | | |
| | comp=Z,120nm,8.5s | | | | | | |
| WHN | Wuhan | 171.29 | 230 | PKP | PKPdf | 17 03 24.4 | +2.3 |
| GTA | Gaotai | 173.84 | 59 | *e*PKP | PKPdf | 17 03 23.5 | +0.4 |
| GTA | | | | pPKP | pPKPdf | 17 03 34.2 | +2.1 |
| GTA | | | | sPKP | | 17 03 38.1 | |
| GTA | | | | PP | PP | 17 08 47.5 | +1.6 |
| GTA | | | | SKS | SKSdf | 17 10 21.6 | -2.8 |
| GTA | | | | SKKS | SKKSac | 17 15 29.1 | -1.3 |
| GTA | | | | SS | SS | 17 29 58.0 | -4.5 |
| GTA | | | | PPMZ | | | |
| | comp=Z,170nm,4.4s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,120nm,18.5s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,110nm,18.0s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,140nm,18.1s | | | | | | |
| HHC | Hu-ho-hao-te | 174.14 | 320 | *e*PKP | PKPdf | 17 03 23.8 | +0.7 |
| HHC | | | | pPKP | pPKPdf | 17 03 34.4 | +2.2 |
| HHC | | | | PP | PP | 17 08 50.8 | +4.0 |
| HHC | | | | SKKS | | 17 15 31.9 | |
| HHC | | | | SS | SS | 17 30 05.2 | +0.9 |
| HHC | | | | PPMZ | | | |
| | comp=Z,57nm,8.4s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,120nm,19.4s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,160nm,21.9s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,66nm,19.1s | | | | | | |

*MOS **04** 16:54:20.0±1.2, 53°.02N×154°.81E, h490km, mb4.2/1, Error ellipse: s-maj=47.4km s-min=21.5km az=146.5*

**KRSC 04 16:54:19.5**±2.0**, 52°.94N×154°.97E, h504**km±23km**, ML4.1, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| APC | Apacha | 1.32 | 90 | *e*P | P | 16 55 21.9 | -0.2 |
| APC | Apacha | 1.32 | 90 | PN | P | 16 55 21.9 | -0.2 |
| GNL | Ganaly | 1.94 | 66 | *e*P | P | 16 55 25.0 | +0.3 |
| GNL | | | | *e*S | S | 16 56 18.1 | +0.1 |
| GNL | Ganaly | 1.94 | 66 | PN | P | 16 55 25.0 | +0.3 |
| GNL | | | | S | S | 16 56 18.1 | +0.1 |
| RUS | Russkaya | 2.21 | 102 | *e*P | P | 16 55 26.8 | +0.8 |
| RUS | | | | *e*S | S | 16 56 18.7 | -1.5 |
| RUS | Russkaya | 2.21 | 102 | PN | P | 16 55 26.8 | +0.8 |
| RUS | | | | S | S | 16 56 18.7 | -1.5 |
| PET | Petropavlovsk | 2.23 | 86 | PN | P | 16 55 27.3 | +1.3 |
| KOK | Koryaka | 2.24 | 79 | *e*P | P | 16 55 28.3 | +2.1 |
| KOK | Koryaka | 2.24 | 79 | PN | P | 16 55 28.3 | +2.1 |
| AVH | Avacha | 2.29 | 80 | *e*P | P | 16 55 28.4 | +1.9 |
| AVH | Avacha | 2.29 | 80 | PN | P | 16 55 28.4 | +1.9 |
| SMAR | Somma | 2.33 | 80 | *e*P | P | 16 55 28.6 | +1.7 |
| SMAR | Somma | 2.33 | 80 | PN | P | 16 55 28.6 | +1.7 |
| UGLR | Uglovaya | 2.34 | 82 | *e*P | P | 16 55 29.6 | +2.8 |
| SDLR | Sedlovina | 2.38 | 80 | *e*P | P | 16 55 28.8 | +1.7 |
| SDLR | Sedlovina | 2.38 | 80 | PN | P | 16 55 28.8 | +1.7 |
| NLC | Nalytchevo | 2.65 | 83 | *e*P | P | 16 55 31.1 | +2.7 |
| NLC | | | | *e*S | S | 16 56 26.1 | +1.4 |
| NLC | Nalytchevo | 2.65 | 83 | PN | P | 16 55 31.1 | +2.7 |
| NLC | | | | S | S | 16 56 26.1 | +1.4 |
| SPN | Mys Shipunski | 3.06 | 85 | *e*P | P | 16 55 32.2 | +1.1 |
| SPN | | | | *e*S | S | 16 56 28.1 | -1.4 |
| SPN | Mys Shipunski | 3.06 | 85 | PN | P | 16 55 32.2 | +1.1 |
| SPN | | | | S | S | 16 56 28.1 | -1.4 |
| ESO | Esso | 3.70 | 35 | *e*P | P | 16 55 36.0 | +0.3 |
| ESO | Esso | 3.70 | 35 | PN | P | 16 55 36.0 | +0.3 |
| KZV | Kizimen | 3.82 | 53 | *e*P | P | 16 55 39.1 | +2.3 |
| TUMR | Tumrok | 3.84 | 50 | *e*P | P | 16 55 39.9 | +3.0 |
| TUMR | Tumrok | 3.84 | 50 | PN | P | 16 55 39.9 | +3.0 |
| MKZ | Mys Kozlova | 4.33 | 65 | *e*P | P | 16 55 42.5 | +1.8 |
| MKZ | | | | *e*S | S | 16 56 47.0 | -0.1 |
| MKZ | Mys Kozlova | 4.33 | 65 | PN | P | 16 55 42.5 | +1.8 |
| MKZ | | | | S | S | 16 56 47.0 | -0.1 |
| KBTR | Krutoberegovo | 5.62 | 51 | *e*P | P | 16 55 52.6 | +0.5 |
| KBTR | | | | *e*S | S | 16 57 06.1 | -2.0 |
| KBTR | Krutoberegovo | 5.62 | 51 | PN | P | 16 55 52.6 | +0.5 |
| KBTR | | | | S | S | 16 57 06.1 | -2.0 |

**MEX 04 17:02:09.3**±0.3**, 16°.47N×99°.07W, h16**km±6km**, MD3.8, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ACX | Acapulco | 0.85 | 298 | *e*P | Pb | 17 02 19.4 | -6.4 |
| ACX | | | | *e*S | Sb | 17 02 30.9 | -6.1 |
| PNIG | Pinotepa | 0.91 | 95 | *e*P | Pb | 17 02 23.8 | -3.0 |
| PNIG | | | | *e*S | Sb | 17 02 34.8 | -3.9 |
| TLIG | Tlapa | 1.19 | 24 | *i* P | Pn | 17 02 27.9 | -3.6 |
| TLIG | | | | *i* S | Sb | 17 02 42.0 | -5.0 |
| CAIG | El Cayaco | 1.28 | 297 | *e*P | Pn | 17 02 28.9 | -3.6 |
| CAIG | | | | *e*S | Sb | 17 02 44.0 | -5.3 |

**MAN 04 17:04:42, 17°.94N×122°.07E, h18**km**, mb4.6, ML3.5, MS3.5, 2C, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGCP | Mt. Cagua | 0.30 | 355 | *e*P | Pn | 17 04 52.2 | +0.7 |
| SGCP | | | | *e*S | Sn | 17 04 58.9 | +1.4 |
| CVP | Callao Caves | 0.34 | 225 | ⇑*i*P | Pg | 17 04 48.5 | -0.7 |
| CVP | | | | *i* S | Sg | 17 04 51.5 | -2.5 |
| APYP | Conner | 0.79 | 264 | *e*P | Pb | 17 04 57.0 | -0.3 |
| APYP | | | | *e*S | Sg | 17 05 08.1 | 0.0 |
| PALP | Palanan | 0.94 | 159 | *e*P | Pb | 17 04 59.4 | -0.3 |
| PALP | | | | *e*S | Sn | 17 05 14.4 | +1.2 |
| CAUP | Cauayan | 1.02 | 194 | *e*P | Pb | 17 05 01.2 | +0.1 |
| ABRA | Dolores | 1.33 | 258 | *e*P | Pn | 17 05 05.2 | -0.4 |
| BCPH | Baguio City Da | 2.11 | 223 | ⇑*i*P | Pn | 17 05 17.3 | +0.7 |
| BCPH | | | | *i* S | Sn | 17 05 42.6 | +0.1 |
| BOLP | Bolinao | 2.58 | 233 | *e*P | Pn | 17 05 24.6 | +1.7 |

*ISCJB **04** 17:23:20.2±1.7, 4°.79S±0°.10×134°.1E±0°.3, h10km, mb3.5/1, Error ellipse: s-maj=48.3km s-min=11.5km az=169.7*
*IDC **04** 17:23:22.3±4.2, 4°.88S×133°.72E, h0km, mb3.6/1, mb1 3.7/4, mb1mx3.4/30, mbtmp3.5/4, ML3.3/3, Error ellipse: s-maj=207.5km s-min=27.5km az=75.0*
*AUST **04** 17:23:50.6±99.0, 6°.67S×132°.91E, h0km±11km, Error ellipse: s-maj=14.7km s-min=1.4km az=266.0*

**ISC 04 17:23:21.4**±1.9**, 4°.7S**±0°.1×**134°.3E**±0°.3**, h10**km**, n8,** σ1**§58**/8**, 1C, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.88 | 322 | Pn | Pn | 17 24 34.9 | 0.0 |
| | 0.4nm,0.3s,baz=163,slow=19,SNR=4.1 | | | | | | |
| KDU | Kakadu | 8.11 | 193 | P | Pn | 17 25 20.9 | +1.6 |
| | baz=6.0,SNR=25 | | | | | | |
| MTN | Manton Dam | 8.65 | 201 | P | Pn | 17 25 27.3 | +0.7 |
| | baz=6.4,SNR=11 | | | | | | |
| KNRA | Kununurra | 12.16 | 206 | P | Pn | 17 26 13.6 | -1.3 |
| | baz=9.9,SNR=5.9 | | | | | | |
| WRA | Warramunga Arr | 15.12 | 180 | Pn | Pn | 17 26 54.2 | -1.2 |
| | 0.2nm,0.3s,baz=357,slow=13,SNR=3.8 | | | | | | |
| ASAR | Alice Springs | 18.83 | 181 | P | Pn | 17 27 43.0 | +0.8 |
| | 0.2nm,0.3s,baz=11,slow=14,SNR=19 | | | | | | |
| MKAR | Makanchi Array | 68.77 | 324 | P | P | 17 34 26.8 | +1.0 |
| | 0.2nm,0.3s,baz=117,slow=7.9,SNR=3.5 | | | | | | |
| SYO | Syowa Base | 87.31 | 201 | ⇑*e*P | P | 17 36 06.0 | -2.1 |

**IDC 04 17:24:09.2**±5.6**, 4°.99S×133°.55E, h0**km**, mb3.7**/1**, mb1 3.7**/4**, mb1mx3.4**/32**, mbtmp3.5**/4**, ML3.3**/3**, Error ellipse: s-maj=302.9km s-min=27.7km az=75.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.43 | 328 | P | Pn | 17 24 50.7 | +0.5 |
| | baz=3.8,SNR=5.9 | | | | | | |
| SIJI | Sorong | 4.68 | 331 | Pn | Pn | 17 25 20.3 | -0.9 |
| | 1.2nm,0.3s,baz=102,slow=20,SNR=6.4 | | | | | | |
| SIJI | | | | Sn | Sn | 17 26 11.9 | -4.4 |
| | 0.6nm,0.3s,baz=143,slow=20,SNR=2.6 | | | | | | |
| WRA | Warramunga Arr | 14.89 | 177 | Pn | Pn | 17 27 40.9 | -0.3 |
| | 0.2nm,0.3s,baz=357,slow=13,SNR=3.9 | | | | | | |
| ASAR | Alice Springs | 18.57 | 179 | P | P | 17 28 27.6 | -0.3 |
| | 0.1nm,0.3s,baz=7.5,slow=9.9,SNR=2.6 | | | | | | |
| MKAR | Makanchi Array | 68.55 | 325 | P | P | 17 35 14.2 | +0.4 |
| | 0.3nm,0.5s,baz=121,slow=6.6,SNR=4.3 | | | | | | |

**IDC 04 17:29:00.2**±999.0**, 56°.77N×35°.02E, h0**km**, Error ellipse: s-maj=890.0km s-min=29.8km az=91.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I43RU | DUBNA INFRASON | 1.22 | 91 | *i* | | 17 35 53.1 | |
| | baz=274,slow=313,SNR=3.6 | | | | | | |
| I31KZ | AKTYUBINSK INF | 15.04 | 105 | *i* | | 19 01 30.0 | |
| | baz=301,slow=331,SNR=0.4 | | | | | | |
| I46RU | ZALESOVO INFRA | 27.95 | 74 | *i* | | 20 21 00.0 | |
| | baz=292,slow=327,SNR=1.7 | | | | | | |

*NEIC **04** 17:29:21.6, 43°.62S×172°.16E, h5km, ML4.3(WEL), After WEL.*
*NEIC Felt [IV] at Christchurch, Darfield, Kaiapoi and Rangiora. Felt widely in Canterbury.*

**WEL 04 17:29:21.7**±0.1**, 43°.62S×172°.16E, h5**km**, ML4.3**/40**, 5C-9D, Error ellipse: s-maj=0.7km s-min=0.5km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OXZ | Oxford | 0.30 | 343 | ⇑PG | Pg | 17 29 27.8 | +0.2 |
| OXZ | | | | SG | Sg | 17 29 32.0 | +0.3 |
| OXZ | Oxford | 0.30 | 343 | Pg | Pg | 17 29 27.7 | +0.1 |
| OXZ | | | | Sg | Sg | 17 29 32.0 | +0.3 |
| OXZ | | | | Sg | Sb | 17 29 32.2 | -2.7 |
| CRLZ | Canterbury Las | 0.34 | 83 | ⇓PG | Pg | 17 29 28.5 | +0.3 |
| CRLZ | | | | SG | Sg | 17 29 33.6 | +0.9 |
| CRLZ | | | | AML | AML | 17 29 33.7 | |
| CRLZ | | | | AML | AML | 17 29 33.7 | |
| CRLZ | | | | AML | AML | 17 29 33.7 | |
| CRLZ | Canterbury Las | 0.34 | 83 | ⇓Pg | Pg | 17 29 28.6 | +0.3 |
| CRLZ | | | | Sg | Sg | 17 29 33.6 | +0.9 |
| MQZ | McQueen's Vall | 0.37 | 104 | ⇓PG | Pg | 17 29 29.0 | +0.1 |
| MQZ | | | | SG | Sg | 17 29 34.2 | +0.5 |
| MQZ | | | | AML | AML | 17 29 34.6 | |
| MQZ | McQueen's Vall | 0.37 | 104 | ⇓Pg | Pg | 17 29 29.0 | +0.1 |
| MQZ | | | | Sg | Sg | 17 29 34.0 | +0.3 |
| RPZ | Rata Peaks | 0.81 | 263 | ⇓P* | Pg | 17 29 37.5 | +0.3 |
| RPZ | | | | S* | Sb | 17 29 48.8 | -0.7 |
| RPZ | | | | AML | AML | 17 29 50.5 | |
| LTZ | Lake Taylor | 0.84 | 6 | ⇑P* | Pg | 17 29 37.7 | -0.1 |
| LTZ | | | | S* | Sg | 17 29 49.0 | +0.3 |
| LTZ | | | | AML | AML | 17 29 49.6 | |
| LTZ | Lake Taylor | 0.84 | 6 | ⇑P* | Pg | 17 29 37.7 | -0.1 |
| LTZ | | | | S* | Sg | 17 29 49.0 | +0.3 |
| WVZ | Waitaha Valley | 1.17 | 297 | ⇓P* | Pg | 17 29 43.1 | -1.0 |
| WVZ | | | | AML | AML | 17 30 03.2 | |
| WVZ | | | | AML | AML | 17 30 04.0 | |
| WVZ | Waitaha Valley | 1.17 | 297 | P* | Pg | 17 29 43.1 | -1.0 |
| KHZ | Kahutara | 1.57 | 41 | PN | Pn | 17 29 47.7 | -2.5 |
| KHZ | | | | AML | AML | 17 30 11.2 | |
| KHZ | | | | AML | AML | 17 30 13.9 | |
| KHZ | Kahutara | 1.57 | 41 | Pn | Pn | 17 29 47.7 | -2.5 |
| LBZ | Lake Benmore | 1.62 | 241 | PN | Pn | 17 29 49.4 | -1.5 |
| LBZ | | | | AML | AML | 17 30 14.5 | |
| LBZ | | | | AML | AML | 17 30 14.6 | |
| LBZ | Lake Benmore | 1.62 | 241 | Pn | Pn | 17 29 49.4 | -1.5 |
| FOZ | Fox Glacier | 1.79 | 271 | PN | Pn | 17 29 51.6 | -1.6 |
| FOZ | | | | AML | AML | 17 30 21.2 | |
| FOZ | | | | AML | AML | 17 30 22.7 | |
| FOZ | Fox Glacier | 1.79 | 271 | Pn | Pn | 17 29 51.6 | -1.6 |
| ODZ | Otahua Downs | 1.79 | 217 | PN | Pn | 17 29 51.3 | -2.0 |
| ODZ | | | | AML | AML | 17 30 25.7 | |
| ODZ | | | | AML | AML | 17 30 26.5 | |
| ODZ | Otahua Downs | 1.79 | 217 | Pn | Pn | 17 29 51.3 | -2.0 |
| DSZ | Denniston Nort | 1.89 | 352 | PN | Pn | 17 29 52.7 | -1.9 |
| DSZ | | | | AML | AML | 17 30 22.1 | |
| DSZ | | | | AML | AML | 17 30 27.1 | |
| DSZ | Denniston Nort | 1.89 | 352 | Pn | Pn | 17 29 52.7 | -1.9 |
| THZ | Tophouse | 1.93 | 17 | PN | Pn | 17 29 53.1 | -2.2 |
| THZ | | | | AML | AML | 17 30 24.3 | |
| THZ | | | | AML | AML | 17 30 29.4 | |
| THZ | Tophouse | 1.93 | 17 | Pn | Pn | 17 29 53.0 | -2.2 |
| BSWZ | Blackbirch Sta | 2.28 | 34 | AML | AML | 17 30 31.6 | |
| BSWZ | | | | AML | AML | 17 30 49.9 | |
| CMWZ | Cape Campbell | 2.40 | 40 | AML | AML | 17 30 33.3 | |
| CMWZ | | | | AML | AML | 17 30 34.5 | |
| JCZ | Jackson Bay | 2.50 | 258 | PN | Pn | 17 30 01.7 | -1.5 |
| JCZ | | | | AML | AML | 17 30 48.5 | |
| JCZ | | | | AML | AML | 17 30 51.2 | |
| JCZ | Jackson Bay | 2.50 | 258 | Pn | Pn | 17 30 01.7 | -1.5 |
| HHSZ | Highcliff Hill | 2.53 | 206 | PN | Pn | 17 30 01.1 | -2.3 |
| HHSZ | Highcliff Hill | 2.53 | 206 | Pn | Pn | 17 30 01.1 | -2.3 |
| TUWZ | Tuamarina | 2.55 | 32 | AML | AML | 17 30 38.3 | |
| TUWZ | | | | AML | AML | 17 30 43.5 | |
| NNZ | Nelson | 2.56 | 21 | PN | Pn | 17 30 01.9 | -1.9 |
| NNZ | | | | AML | AML | 17 30 13.8 | |
| NNZ | | | | AML | AML | 17 30 43.6 | |
| NNZ | Nelson | 2.56 | 21 | Pn | Pn | 17 30 01.9 | -1.9 |
| WKZ | Wanaka | 2.56 | 241 | PN | Pn | 17 30 02.1 | -1.8 |
| WKZ | | | | AML | AML | 17 30 51.8 | |
| WKZ | | | | AML | AML | 17 30 52.3 | |
| WKZ | Wanaka | 2.56 | 241 | Pn | Pn | 17 30 02.1 | -1.8 |
| EAZ | Earnscleugh | 2.60 | 231 | ⇑PN | Pn | 17 30 02.5 | -1.9 |
| EAZ | | | | AML | AML | 17 30 48.1 | |
| EAZ | | | | AML | AML | 17 30 51.6 | |
| EAZ | Earnscleugh | 2.60 | 231 | Pn | Pn | 17 30 02.5 | -1.9 |
| QRZ | Quartz Range | 2.80 | 6 | PN | Pn | 17 30 04.8 | -2.3 |
| QRZ | | | | AML | AML | 17 30 18.3 | |
| QRZ | | | | AML | AML | 17 30 54.6 | |
| QRZ | Quartz Range | 2.80 | 6 | Pn | Pn | 17 30 04.8 | -2.3 |
| TCW | Tory Channel | 2.87 | 34 | PN | Pn | 17 30 05.5 | -2.6 |
| TCW | | | | AML | AML | 17 30 18.9 | |
| TCW | | | | AML | AML | 17 30 49.4 | |
| TCW | Tory Channel | 2.87 | 34 | Pn | Pn | 17 30 05.5 | -2.6 |
| TUZ | Tuapeka | 2.95 | 217 | ⇑PN | Pn | 17 30 07.2 | -1.9 |
| TUZ | | | | AML | AML | 17 31 04.7 | |
| TUZ | | | | AML | AML | 17 31 05.3 | |
| TUZ | Tuapeka | 2.95 | 217 | Pn | Pn | 17 30 07.2 | -1.9 |
| BHW | Baring Head | 2.98 | 43 | AML | AML | 17 30 41.3 | |
| BHW | | | | AML | AML | 17 30 41.4 | |
| WEL | Wellington | 3.02 | 41 | Pn | Pn | 17 30 08.3 | -1.9 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **PLWZ** | **Palliser** | **3.07** | **49** | PN | Pn | 17 30 07.7 | -3.1 |
| **PLWZ** | **Palliser** | **3.07** | **49** | Pn | Pn | 17 30 07.7 | -3.1 |
| **DUWZ** | **D'Urville Isla** | **3.10** | **26** | AML | AML | 17 30 53.4 | |
| DUWZ | | | | AML | AML | 17 30 58.6 | |
| **DUWZ** | **D'Urville Isla** | **3.10** | **26** | Pn | Pn | 17 30 09.8 | -1.4 |
| **MSWZ** | **Moikau Station** | **3.17** | **47** | PN | Pn | 17 30 08.9 | -3.3 |
| MSWZ | | | | AML | AML | 17 30 45.5 | |
| MSWZ | | | | AML | AML | 17 30 46.9 | |
| **MSWZ** | **Moikau Station** | **3.17** | **47** | Pn | Pn | 17 30 08.9 | -3.3 |
| **MSZ** | **Milford Sound** | **3.22** | **249** | PN | Pn | 17 30 11.1 | -1.8 |
| MSZ | | | | AML | AML | 17 31 04.8 | |
| MSZ | | | | AML | AML | 17 31 08.6 | |
| **MSZ** | **Milford Sound** | **3.22** | **249** | Pn | Pn | 17 30 11.1 | -1.8 |
| **CAW** | **Cannon Point** | **3.31** | **42** | PN | Pn | 17 30 11.2 | -2.9 |
| CAW | | | | AML | AML | 17 30 49.0 | |
| CAW | | | | AML | AML | 17 30 50.1 | |
| **CAW** | **Cannon Point** | **3.31** | **42** | Pn | Pn | 17 30 11.2 | -2.9 |
| **MLZ** | **Mavora Lakes** | **3.34** | **237** | ⇓PN | Pn | 17 30 13.2 | -1.4 |
| MLZ | | | | AML | AML | 17 31 14.3 | |
| MLZ | | | | AML | AML | 17 31 17.7 | |
| **MLZ** | **Mavora Lakes** | **3.34** | **237** | Pn | Pn | 17 30 13.2 | -1.4 |
| **TRWZ** | **Traveller** | **3.42** | **51** | PN | Pn | 17 30 12.4 | -3.3 |
| TRWZ | | | | AML | AML | 17 30 54.2 | |
| TRWZ | | | | AML | AML | 17 30 57.8 | |
| **TRWZ** | **Traveller** | **3.42** | **51** | Pn | Pn | 17 30 12.4 | -3.3 |
| **KIW** | **Kapiti Island** | **3.43** | **38** | AML | AML | 17 30 57.0 | |
| KIW | | | | AML | AML | 17 31 00.9 | |
| **MTW** | **Mount Morrison** | **3.49** | **46** | AML | AML | 17 31 00.6 | |
| MTW | | | | AML | AML | 17 31 07.2 | |
| **OGWZ** | **Otaki Gorge** | **3.58** | **40** | PN | Pn | 17 30 15.1 | -2.7 |
| **OGWZ** | **Otaki Gorge** | **3.58** | **40** | Pn | Pn | 17 30 15.1 | -2.7 |
| **SYZ** | **Scrubby Hill** | **3.62** | **215** | ⇓PN | Pn | 17 30 16.7 | -1.7 |
| SYZ | | | | AML | AML | 17 31 25.9 | |
| SYZ | | | | AML | AML | 17 31 32.8 | |
| **SYZ** | **Scrubby Hill** | **3.62** | **215** | Pn | Pn | 17 30 16.7 | -1.7 |
| **TMWZ** | **Te Maipa** | **3.73** | **49** | Pn | Pn | 17 30 16.3 | -3.7 |
| **WHZ** | **Wether Hill Ro** | **3.77** | **231** | PN | Pn | 17 30 17.5 | -2.9 |
| WHZ | | | | AML | AML | 17 31 32.1 | |
| WHZ | | | | AML | AML | 17 31 32.5 | |
| **WHZ** | **Wether Hill Ro** | **3.77** | **231** | Pn | Pn | 17 30 17.5 | -2.9 |
| **MRZ** | **Mangatainoka R** | **3.90** | **42** | ⇓PN | Pn | 17 30 18.7 | -3.5 |
| MRZ | | | | AML | AML | 17 31 04.8 | |
| MRZ | | | | AML | AML | 17 31 12.4 | |
| **MRZ** | **Mangatainoka R** | **3.90** | **42** | Pn | Pn | 17 30 18.7 | -3.5 |
| **TIWZ** | **Tintock** | **3.96** | **46** | PN | Pn | 17 30 21.0 | -2.1 |
| TIWZ | | | | AML | AML | 17 31 05.5 | |
| TIWZ | | | | AML | AML | 17 31 10.6 | |
| **TIWZ** | **Tintock** | **3.96** | **46** | Pn | Pn | 17 30 21.1 | -2.1 |
| **BFZ** | **Birch Farm** | **4.22** | **47** | PN | Pn | 17 30 23.1 | -3.6 |
| **BFZ** | **Birch Farm** | **4.22** | **47** | Pn | Pn | 17 30 23.1 | -3.6 |
| **APZ** | **The Paps** | **4.36** | **221** | PN | Pn | 17 30 26.1 | -2.5 |
| APZ | | | | AML | AML | 17 31 46.7 | |
| APZ | | | | AML | AML | 17 31 53.6 | |
| **APZ** | **The Paps** | **4.36** | **221** | Pn | Pn | 17 30 26.1 | -2.5 |
| **NMEZ** | **Namu Road** | **4.39** | **18** | PN | Pn | 17 30 29.4 | +0.4 |
| **WAZ** | **Wanganui** | **4.40** | **30** | AML | AML | 17 31 21.2 | |
| **WAZ** | **Wanganui** | **4.40** | **30** | Pn | Pn | 17 30 29.9 | +0.8 |
| **NWEZ** | **Newall Road** | **4.52** | **17** | PN | Pn | 17 30 30.6 | -0.2 |
| **NWEZ** | **Newall Road** | **4.52** | **17** | Pn | Pn | 17 30 30.6 | -0.2 |
| **PREZ** | **Palmer Road** | **4.53** | **20** | PN | Pn | 17 30 30.2 | -0.7 |
| **PREZ** | **Palmer Road** | **4.53** | **20** | Pn | Pn | 17 30 30.2 | -0.7 |
| **TSZ** | **Takapari Road** | **4.55** | **40** | PN | Pn | 17 30 27.7 | -3.6 |
| **TSZ** | **Takapari Road** | **4.55** | **40** | Pn | Pn | 17 30 27.7 | -3.5 |
| **PKE** | **Pukeiti** | **4.63** | **18** | PN | Pn | 17 30 31.2 | -1.1 |
| PKE | | | | AML | AML | 17 31 25.4 | |
| **PKE** | **Pukeiti** | **4.63** | **18** | Pn | Pn | 17 30 31.2 | -1.1 |
| **DREZ** | **Durham Road** | **4.68** | **20** | Pn | Pn | 17 30 32.0 | -1.0 |
| **PRHZ** | **Porangahau** | **4.73** | **46** | Pn | Pn | 17 30 31.0 | -2.6 |
| **PNHZ** | **Pukenui** | **4.78** | **41** | Pn | Pn | 17 30 32.7 | -1.7 |
| **MHEZ** | **Mangahewa** | **4.82** | **20** | Pn | Pn | 17 30 34.7 | -0.2 |
| **VRZ** | **Vera Road** | **4.89** | **24** | AML | AML | 17 31 33.0 | |
| **PKVZ** | **Pokaka** | **4.94** | **30** | Pn | Pn | 17 30 35.2 | -1.4 |
| **WNVZ** | **Wahianoa** | **5.00** | **32** | PN | Pn | 17 30 35.2 | -2.4 |
| **WNVZ** | **Wahianoa** | **5.00** | **32** | Pn | Pn | 17 30 35.2 | -2.4 |
| **FWVZ** | **Far West T-bar** | **5.05** | **31** | AML | AML | 17 31 37.3 | |
| FWVZ | | | | AML | AML | 17 31 38.8 | |
| **TUVZ** | **Tukino** | **5.08** | **32** | Pn | Pn | 17 30 37.3 | -1.3 |
| **TWVZ** | **Taurewa** | **5.17** | **30** | Pn | Pn | 17 30 37.9 | -1.9 |
| **WTVZ** | **West Tongariro** | **5.18** | **31** | AML | AML | 17 31 54.6 | |
| WTVZ | | | | AML | AML | 17 31 58.7 | |
| **WTVZ** | **West Tongariro** | **5.18** | **31** | Pn | Pn | 17 30 39.2 | -0.8 |
| **MKAZ** | **Moumakai** | **6.89** | **20** | Pn | Pn | 17 31 02.2 | -1.1 |

*ISCJB **04** 17:35:02.7±1.3, 20°.1S±0°.2×178°.5W±0°.2, h550km, mb3.9/8, Error ellipse: s-maj=28.6km s-min=18.4km az=21.2*
*IDC **04** 17:35:04.2±2.6, 20°.28S×178°.26W, h571km±28km, mb3.4/8, mb1 3.6/9, mb1mx3.3/24, mbtmp4.4/9, Error ellipse: s-maj=27.4km s-min=18.1km az=139.0*
**ISC 04 17:35:04.1**±1.2, **20°.2S**±0°.2×**178°.4W**±0°.2, **h550**km, **n14**, σ**1s.37**/15, **mb3.7**/8, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.26** | **260** | P | **P** | **17 38 07.9** | **+1.9** |
| | 0.3nm,0.3s,baz=360,slow=18,SNR=5.6 | | | | | | |
| **URZ** | **Urewera** | **18.45** | **191** | P | **P** | **17 38 45.5** | **-0.3** |
| | 2.8nm,0.3s,baz=333,slow=18,SNR=15 | | | | | | |
| URZ | | | | S | S | 17 41 36.2 | -10 |
| | 0.5nm,0.3s,baz=342,slow=19,SNR=5.6 | | | | | | |
| **CTA** | **Charters Tower** | **33.14** | **264** | P | **P** | **17 40 55.1** | **-0.4** |
| | 2.5nm,0.4s,baz=92,slow=11,SNR=8.7 | | | | | | |
| **ASAR** | **Alice Springs** | **44.22** | **256** | P | **P** | **17 42 24.1** | **-1.0** |
| | 8.8nm,0.5s,baz=90,slow=8.5,SNR=289 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 43 55.9** | **-1.8** |
| | 0.5nm,0.7s,baz=115,slow=3.5,SNR=3.0 | | | | | | |
| ASAR | | | | S | **S** | **17 48 19.3** | **+0.3** |
| | 0.6nm,0.7s,baz=97,slow=15,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.26** | **262** | P | **P** | **17 42 24.1** | **-1.3** |
| | 4.8nm,0.6s,baz=97,slow=8.4,SNR=39 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.71** | **324** | P | **P** | **17 45 18.9** | **-0.1** |
| | 1.6nm,0.7s,baz=149,slow=5.6,SNR=5.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.85** | **345** | P | **P** | **17 45 53.2** | **-0.7** |
| | 2.5nm,0.8s,baz=134,slow=11,SNR=3.7 | | | | | | |
| **KSRS** | **Korea Array** | **76.38** | **319** | P | **P** | **17 45 57.2** | **+0.1** |
| | 0.9nm,0.6s,baz=131,slow=5.3,SNR=4.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **78.47** | **326** | P | **P** | **17 46 08.3** | **0.0** |
| | 2.3nm,0.7s,baz=84,slow=3.0,SNR=5.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.64** | **290** | P | **P** | **17 47 03.1** | **-0.9** |
| | 0.8nm,0.8s,baz=94,slow=3.2,SNR=5.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.53** | **331** | PKP | PKPdf | 17 53 29.7 | -4.7 |
| | 0.5nm,0.4s,baz=44,slow=4.1,SNR=7.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.32** | **312** | PKPbc | **PKPdf** | **17 53 41.5** | **-0.1** |
| | 1.5nm,1.2s,baz=49,slow=5.2,SNR=3.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.31** | **300** | PKPbc | **PKPdf** | **17 53 45.3** | **+2.0** |
| | 0.3nm,0.3s,baz=76,slow=6.1,SNR=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | **149.77** | **344** | PKPbc | **PKPdf** | **17 53 49.5** | **+2.8** |
| | 0.3nm,0.4s,baz=354,slow=5.3,SNR=2.8 | | | | | | |

**MAN 04 17:47:43, 10°.66N×124°.92E, h35km, mb4.0, ML2.7, MS2.4, 1D, Leyte**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OCLP** | **Ormoc** | **0.49** | **322** | eP | Pn | 17 47 55.8 | +2.3 |
| OCLP | | | | eS | Sn | 17 48 02.5 | +1.6 |
| **PLP** | **Palo** | **0.51** | **7⇓** | eP | Pn | 17 47 55.9 | +2.1 |
| PLP | | | | eS | Sn | 17 48 03.8 | +2.6 |
| **MSLP** | **Maasin** | **0.53** | **186** | eP | Pn | 17 47 57.1 | +3.0 |
| MSLP | | | | eS | Sn | 17 48 04.7 | +3.0 |

*ISCJB **04** 17:50:39.1±0.9, 18°.4S±0°.2×177°.8W±0°.2, h500km, mb3.4/6, Error ellipse: s-maj=31.9km s-min=19.5km az=43.5*
*IDC **04** 17:50:40.8±13.0, 18°.43S×177°.67W, h511km±165km, mb3.1/7, mb1 3.4/7, mb1mx3.1/23, mbtmp3.9/7, Error ellipse: s-maj=74.0km s-min=26.9km az=5.0*
**ISC 04 17:50:39.9**±1.0, **18°.3S**±0°.2×**177°.8W**±0°.2, **h500**km, **n8**, σ**1s.24**/8, **mb3.4**/6, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **20.34** | **192** | P | **P** | **17 54 40.5** | **-1.0** |
| | 5.6nm,0.6s,baz=45,slow=1.4,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.16** | **260** | P | **P** | **17 58 12.3** | **+0.7** |
| | 1.3nm,0.6s,baz=97,slow=7.6,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **45.27** | **255** | P | **P** | **17 58 13.4** | **+1.0** |
| | 2.6nm,0.6s,baz=90,slow=8.8,SNR=85 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.31** | **44** | P | **P** | **18 01 53.6** | **+0.1** |
| | 0.3nm,0.6s,baz=230,slow=5.3,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.71** | **57** | P | **P** | **18 02 27.6** | **+1.7** |
| | 0.4nm,0.5s,baz=211,slow=7.1,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **86.17** | **13** | P | **P** | **18 02 25.9** | **-1.3** |
| | 0.2nm,0.4s,baz=210,slow=5.8,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **94.28** | **319** | P | **P** | **18 03 04.9** | **-0.4** |
| | 0.2nm,0.5s,baz=102,slow=5.0,SNR=2.0 | | | | | | |
| **GERES** | **GERESS Array B** | **148.19** | **346** | PKPbc | **PKPbc** | **18 09 28.5** | **-0.7** |
| | 0.6nm,0.6s,baz=9.5,slow=4.1,SNR=3.5 | | | | | | |

*IDC **04** 17:50:38.8±2.6, 36°.74S×73°.80W, h0km, mb4.1/3, mb1 4.1/4, mb1mx3.9/20, mbtmp4.1/4, ML4.0/1, MS3.3/2, Ms1 3.3/2, ms1mx3.0/15, Error ellipse: s-maj=77.9km s-min=59.5km az=94.0*
*GUC **04** 17:50:44.2±0.5, 36°.49S×73°.53W, h22km±4km, ML4.3*
*NEIC **04** 17:50:45.6±1.0, 36°.50S×73°.58W, h35km, mb4.1/1, Error ellipse: s-maj=22.9km s-min=17.7km az=75.0*
**ISC 04 17:50:41.8**±2.1, **36°.42S**±0°.05×**73°.62W**±0°.09, **h8**km±11km, **n35**, σ**1s.52**/41, **mb4.1**/3, **1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCSP** | **San Pedro de C** | **0.59** | **136** | eP | **Pg** | **17 50 53.7** | **+0.6** |
| CCSP | | | | eS | **Sg** | **17 51 00.9** | **0.0** |
| CCSP | | | | AML | AML | 17 51 02.5 | |
| | comp=N,30µm,0.7s | | | | | | |
| **COCH** | **Cobquecura** | **0.73** | **67⇓** | eP | **Pb** | **17 50 57.1** | **+0.4** |
| COCH | | | | eS | **Sb** | **17 51 06.6** | **-0.3** |
| COCH | | | | AML | AML | 17 51 09.3 | |
| | comp=N,40µm,0.4s | | | | | | |
| **CCHI** | **Chillan** | **1.25** | **99** | eP | **Pn** | **17 51 04.7** | **-0.9** |
| CCHI | | | | eS | **Sb** | **17 51 20.3** | **-1.7** |
| CCHI | | | | AML | AML | 17 51 24.0 | |
| | comp=E,11µm,0.6s | | | | | | |
| **NICH** | **Los Niches** | **2.40** | **55** | eP | **Pn** | **17 51 22.8** | **+1.4** |
| NICH | | | | eS | **Sn** | **17 51 52.9** | **+1.8** |
| **CHPI** | **Pichilemu** | **2.41** | **34** | eP | **Pn** | **17 51 20.5** | **-1.1** |
| CHPI | | | | eS | **Sn** | **17 51 52.2** | **+0.9** |
| **CANA** | **Caviahue** | **2.51** | **126** | eP | **Pn** | **17 51 24.6** | **+1.4** |
| CANA | | | | eS | **Sb** | **17 51 58.6** | **+0.1** |
| CANA | | | | AML | AML | 17 52 08.3 | |
| | comp=N,1µm,0.7s | | | | | | |
| **PEL** | **Peldehue** | **4.06** | **37** | eP | **Pn** | **17 51 44.1** | **-0.2** |
| **AAGR** | **Agrelo** | **5.16** | **51** | eP | **Pn** | **17 52 01.4** | **+2.0** |
| **ARCO** | **CERRO ARCO** | **5.26** | **49** | eP | Pn | 17 51 57.0 | -3.9 |
| **AUSP** | **Uspallata** | **5.45** | **41** | eP | **Pn** | **17 52 05.3** | **+1.6** |
| AUSP | | | | eS | **Sb** | **17 53 28.7** | **+5.5** |
| **ASAL** | **Salagasta** | **5.49** | **47** | eP | **Pn** | **17 52 05.8** | **+1.8** |
| ASAL | | | | eS | **Sg** | **17 53 35.5** | **-2.6** |
| **RTLS** | **Leoncito** | **5.84** | **39** | eP | **Pn** | **17 52 10.4** | **+1.5** |
| **RTCV** | **Cerro Valdivia** | **6.19** | **44** | eP | **Pn** | **17 52 14.3** | **+0.7** |
| RTCV | | | | eS | Sb | 17 53 51.0 | +6.7 |
| **CFAA** | **Coronel Fontan** | **6.56** | **44** | eP | **Pn** | **17 52 18.7** | **+0.1** |
| CFAA | | | | eS | **Sb** | **17 53 51.5** | **-3.2** |
| **RTLL** | **Cerro Villicun** | **6.64** | **42** | eP | **Pn** | **17 52 19.6** | **-0.1** |
| **ACAN** | **Cantantal** | **6.73** | **54** | eP | **Pn** | **17 52 21.5** | **+0.5** |
| **AMOG** | **MOGNA** | **6.93** | **39** | eP | **Pn** | **17 52 23.7** | **-0.1** |
| **MRA** | **San Martin** | **7.65** | **61** | eP | **Pn** | **17 52 34.2** | **+0.6** |
| **AVFE** | **Valle Fertil** | **7.71** | **44** | eP | **Pn** | **17 52 33.9** | **-0.5** |
| **AGUA** | **GUANDACOL** | **8.14** | **33** | eP | **Pn** | **17 52 40.9** | **+0.4** |
| **VCA** | **Vinchina** | **8.91** | **32** | eP | **Pn** | **17 52 50.4** | **-0.7** |
| **ACLC** | **CERRO LA CRUZ** | **8.94** | **41** | eP | **Pn** | **17 52 49.4** | **-2.1** |
| **TCA** | **Tanti** | **9.05** | **59** | eP | **Pn** | **17 52 52.2** | **-0.7** |
| **TRQA** | **Tornquist** | **9.42** | **103** | eP | **Pn** | **17 52 58.3** | **+0.4** |
| | comp=N,12nm,0.9s | | | | | | |
| **CPUP** | **Villa Florida** | **17.14** | **59** | P | **Pn** | **17 54 42.2** | **+0.5** |
| | comp=N,0.1nm,0.3s,baz=246,slow=7.5,SNR=4.1 | | | | | | |
| CPUP | | | | LR | LR | 18 01 15.6 | |
| | comp=N,88nm,20.4s,baz=232,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **20.63** | **15** | P | Pn | 17 55 24.7 | 0.0 |
| | comp=N,1.3nm,0.5s,baz=200,slow=4.2,SNR=3.0 | | | | | | |
| **BDFB** | **Brasilia** | **30.77** | **54** | LR | LR | 18 09 57.6 | |
| | comp=N,67nm,20.2s,baz=235,slow=37 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **48.31** | **156** | P | **P** | **17 59 23.9** | **+0.7** |
| | baz=287,slow=8.4 | | | | | | |
| **SNAA** | **Sanae** | **49.85** | **157** | P | **P** | **17 59 35.3** | **+0.2** |
| **SNAA** | **Sanae** | **49.85** | **157** | eP | **P** | **17 59 35.1** | **0.0** |
| | comp=N,2.0nm,1.0s | | | | | | |
| **DBIC** | **Dimbokro** | **77.17** | **72** | P | **P** | **18 02 36.6** | **+0.1** |
| | comp=N,3.8nm,0.7s,baz=239,slow=5.9,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.24** | **71** | P | **P** | **18 03 23.9** | **-0.4** |
| | comp=N,1.3nm,0.9s,baz=228,slow=3.8,SNR=5.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **149.91** | **45** | PKPbc | **PKPbc** | **18 10 30.0** | **-2.1** |
| | comp=N,0.3nm,0.5s,baz=273,slow=2.8,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **156.95** | **34** | PKPab | **PKPab** | **18 11 06.8** | **-0.6** |
| | comp=N,0.4nm,0.4s,baz=309,slow=5.8,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **159.29** | **52** | PKPab | **PKPab** | **18 11 17.6** | **-0.3** |
| | comp=N,0.2nm,0.5s,baz=300,slow=2.8,SNR=4.1 | | | | | | |

**GUC 04 17:56:51.8**±0.5, **23°.89S**×**67°.38W**, **h251**km±17km, **ML4.0, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **2.34** | **300** | i P | Pn | 17 57 38.8 | +1.0 |
| PB06 | | | | i S | S | 17 58 14.4 | +0.3 |
| PB06 | | | | AML | AML | 17 58 17.0 | |
| | comp=E,203nm,0.1s | | | | | | |
| **PB09** | **IPOC Station P** | **2.71** | **320** | i P | Pn | 17 57 42.7 | +1.2 |
| PB09 | | | | i S | S | 17 58 21.7 | +0.9 |
| PB09 | | | | AML | AML | 17 58 23.8 | |
| | comp=N,257nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **2.99** | **301** | i P | Pn | 17 57 46.1 | +1.6 |
| PB04 | | | | i S | S | 17 58 27.1 | +1.0 |
| PB04 | | | | AML | AML | 17 58 30.9 | |
| | comp=E,120nm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **3.16** | **312** | i P | Pn | 17 57 47.6 | +1.1 |
| PB07 | | | | i S | S | 17 58 30.2 | +0.5 |
| PB07 | | | | AML | AML | 17 58 31.7 | |
| | comp=E,185nm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **3.44** | **325** | eP | Pn | 17 57 50.0 | +0.6 |
| PB01 | | | | eS | S | 17 58 35.8 | +0.7 |
| PB01 | | | | AML | AML | 17 58 40.9 | |
| | comp=N,70nm,0.2s | | | | | | |

*NEIC **04** 17:59:26.5, 18°.05N×68°.56W, h89km, MD4.0(RSPR), After RSPR.*
**RSPR 04 17:59:26.5, 18°.05N×68°.56W, h89**km±2km, **MD4.0**/17, **17C-14D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DR12** | **Loma Pena Alta** | **1.07** | **314⇑** | iP | Pn | 17 59 46.5 | -0.5 |
| **DR12** | **Loma Pena Alta** | **1.07** | **314** | i Pu | Pn | 17 59 46.5 | -0.5 |
| **IDE** | **Isla Desecheo** | **1.09** | **72⇓** | eP | Pn | 17 59 46.0 | -1.1 |
| **IDE** | **Isla Desecheo** | **1.09** | **72** | eS | Sn | 18 00 00.6 | -2.0 |
| **IDE** | **Isla Desecheo** | **1.09** | **72⇓** | eP | Pn | 17 59 46.0 | -1.1 |
| IDE | | | | eS | Sn | 18 00 00.6 | -2.0 |
| **SMN1** | **Samana, DR** | **1.32** | **329⇓** | eP | Pn | 17 59 49.5 | -0.4 |
| SMN1 | | | | eS | Sn | 18 00 07.1 | -0.6 |
| **MPR** | **Mayaguez** | **1.36** | **83** | eS | Sn | 18 00 07.5 | -1.0 |
| **CRPR** | **Cabo Rojo, PR** | **1.38** | **92⇓** | eP | Pn | 17 59 49.6 | -1.0 |
| **CRPR** | **Cabo Rojo, PR** | **1.38** | **92** | eS | Sn | 18 00 08.9 | 0.0 |
| **CRPR** | **Cabo Rojo, PR** | **1.38** | **92⇓** | eP | Pn | 17 59 49.6 | -1.0 |
| CRPR | | | | eS | Sn | 18 00 08.9 | 0.0 |
| **LSP** | **Las Mesas** | **1.41** | **85⇑** | eP | Pn | 17 59 50.6 | -0.5 |
| **LSP** | **Las Mesas** | **1.41** | **85** | ePn | Pn | 17 59 49.9 | -1.1 |
| **AGPR** | **Aguadilla, PR** | **1.44** | **73⇑** | eP | Pn | 17 59 51.2 | -0.2 |
| **AGPR** | **Aguadilla, PR** | **1.44** | **73** | eS | Sn | 18 00 09.8 | -0.4 |
| **AGPR** | **Aguadilla, PR** | **1.44** | **73⇑** | eP | Pn | 17 59 51.2 | -0.2 |
| AGPR | | | | eS | Sn | 18 00 09.8 | -0.4 |
| **GBPR** | **Guanica, Bosqu** | **1.60** | **92⇓** | eP | Pn | 17 59 52.9 | -0.6 |
| **GBPR** | **Guanica, Bosqu** | **1.60** | **92⇓** | eP | Pn | 17 59 52.9 | -0.6 |
| **LRS** | **Lares** | **1.65** | **81⇑** | eP | Pn | 17 59 53.5 | -0.6 |
| **LRS** | **Lares** | **1.65** | **81** | ePn | Pn | 17 59 52.9 | -1.2 |
| **AOPR** | **Arecibo Observ** | **1.75** | **80⇓** | eP | Pn | 17 59 55.0 | -0.3 |
| **AOPR** | **Arecibo Observ** | **1.75** | **80⇑** | eP | Pn | 17 59 55.3 | 0.0 |
| AOPR | | | | eS | Sn | 18 00 17.4 | +0.1 |
| **AOPR** | **Arecibo Observ** | **1.75** | **80** | eS | Sn | 18 00 16.4 | -0.8 |
| **AOPR** | **Arecibo Observ** | **1.75** | **80⇓** | eP | Pn | 17 59 55.0 | -0.3 |
| AOPR | | | | eS | Sn | 18 00 17.4 | +0.1 |
| **OBIP** | **Obispado Ponce** | **1.86** | **90⇑** | eP | Pn | 17 59 56.3 | -0.5 |
| **OBIP** | **Obispado Ponce** | **1.86** | **90** | eS | Sn | 18 00 19.8 | -0.1 |
| **OBIP** | **Obispado Ponce** | **1.86** | **90⇑** | eP | Pn | 17 59 56.3 | -0.5 |
| OBIP | | | | eS | Sn | 18 00 19.8 | -0.1 |
| **CELP** | **Cerrillos** | **1.89** | **89⇑** | eP | Pn | 17 59 56.8 | -0.4 |
| CELP | | | | eS | Sn | 18 00 20.0 | -0.6 |
| **CELP** | **Cerrillos** | **1.89** | **89⇑** | eP | Pn | 17 59 56.8 | -0.4 |
| CELP | | | | eS | Sn | 18 00 20.0 | -0.6 |
| **SJG** | **San Juan** | **2.30** | **88⇑** | eP | Pn | 18 00 01.8 | -0.7 |
| SJG | | | | eS | Sn | 18 00 30.5 | +0.4 |
| **SJG** | **San Juan** | **2.30** | **88⇓** | eP | Pn | 18 00 01.8 | -0.7 |
| SJG | | | | eS | Sn | 18 00 30.4 | +0.2 |
| **SJG** | **San Juan** | **2.30** | **88⇑** | eP | Pn | 18 00 01.8 | -0.7 |
| SJG | | | | eS | Sn | 18 00 30.5 | +0.4 |
| **CPD** | **Cerro la Pandu** | **2.52** | **90** | eS | Sn | 18 00 35.9 | +0.3 |
| **CPD** | **Cerro la Pandu** | **2.52** | **90⇑** | eP | Pn | 18 00 05.0 | -0.5 |
| **CPD** | **Cerro la Pandu** | **2.52** | **90⇑** | eP | Pn | 18 00 05.0 | -0.5 |
| CPD | | | | eS | Sn | 18 00 35.9 | +0.3 |
| **HUMP** | **Col San Antoni** | **2.58** | **88** | eS | Sn | 18 00 36.9 | -0.1 |
| **HUMP** | **Col San Antoni** | **2.58** | **88⇑** | eP | Pn | 18 00 06.1 | -0.2 |
| **HUMP** | **Col San Antoni** | **2.58** | **88⇑** | eP | Pn | 18 00 06.1 | -0.2 |
| HUMP | | | | eS | Sn | 18 00 37.4 | +0.4 |
| **HUMP** | **Col San Antoni** | **2.58** | **88⇑** | eP | Pn | 18 00 06.1 | -0.2 |
| HUMP | | | | eS | Sn | 18 00 36.9 | -0.1 |
| HUMP | | | | eS | Sn | 18 00 37.4 | +0.4 |
| **SDDR** | **Presa de Saban** | **2.75** | **290** | ePn | Pn | 18 00 13.2 | +4.6 |
| **STVI** | **Saint Thomas** | **3.44** | **84⇑** | eP | Pn | 18 00 17.9 | -0.1 |
| **STVI** | **Saint Thomas** | **3.44** | **84⇓** | eP | Pn | 18 00 18.5 | +0.5 |
| STVI | | | | eS | Sn | 18 00 58.0 | +0.2 |
| **STVI** | **Saint Thomas** | **3.44** | **84⇓** | eP | Pn | 18 00 18.5 | +0.5 |
| STVI | | | | eS | Sn | 18 00 58.0 | +0.2 |
| **TBVI** | **Tortola** | **3.77** | **84⇓** | iP | Pn | 18 00 22.2 | -0.1 |
| TBVI | | | | eS | Sn | 18 01 05.8 | +0.2 |
| **TBVI** | **Tortola** | **3.77** | **84⇓** | iP | Pn | 18 00 22.2 | -0.1 |
| TBVI | | | | eS | Sn | 18 01 05.8 | +0.2 |
| **GRTK** | **Grand Turk** | **4.21** | **325** | eP | Pn | 18 00 28.3 | 0.0 |
| **GTBY** | **Guantanamo Bay** | **6.47** | **288** | eP | Pn | 18 01 01.1 | +1.9 |

*ISCJB **04** 18:30:38.3±0.5, 4°.74S±0°.04×133°.81E±0°.05, h25km, mb3.6/1, MS3.8/5, Error ellipse: s-maj=7.2km s-min=5.2km az=151.1*
*IDC **04** 18:30:39.0±5.6, 5°.01S×133°.36E, h0km, mb3.7/1, mb1 4.3/3, mb1mx3.7/18, mbtmp4.0/3, ML4.1/2, MS3.7/5, Ms1 3.7/5, ms1mx3.2/19, Error ellipse: s-maj=332.7km s-min=30.6km az=77.0*
*DJA **04** 18:30:39.5±0.3, 5°S±4°×13°4E±°, h10km, M4.6/15, mb4.6/15, mB5.2/5, MLv4.6/10, Mw(mB)4.6/5*
*AUST **04** 18:30:42.3±0.0, 4°.80S×133°.67E, h49km, Error ellipse: s-maj=1.6km s-min=0.8km az=246.0*
**ISC 04 18:30:40.6**±0.8, **4°.69S**±0°.07×**133°.87E**±0°.07, **h25**km, **n34**, σ**1s.46**/31, **MS3.8**/5, **Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.39** | **317** | P | **Pn** | **18 31 18.5** | **+0.3** |
| | baz=2.4,SNR=119 | | | | | | |
| **FAKI** | **Fak Fak** | **2.39** | **317** | P | **Pn** | **18 31 18.2** | **0.0** |
| FAKI | | | | S | **Sn** | **18 31 44.5** | **-2.2** |
| **RKPI** | **Ransiki, Papua** | **3.18** | **6** | P | **Pn** | **18 31 28.6** | **-0.4** |
| **BNDI** | **Bandanaira** | **3.95** | **272** | P | **Pn** | **18 31 39.7** | **0.0** |
| BNDI | | | | S | **Sn** | **18 32 28.1** | **+2.8** |
| **SAUI** | **Saumlaki** | **4.15** | **218** | P | **Pn** | **18 31 43.8** | **+1.4** |
| **SWI** | **Sorong** | **4.61** | **326** | P | **Pn** | **18 31 49.7** | **+1.0** |
| | baz=4.6,SNR=43 | | | | | | |
| **SWI** | **Sorong** | **4.61** | **326** | P | **Pn** | **18 31 48.3** | **-0.5** |
| SWI | | | | S | **Sn** | **18 32 41.6** | **+0.1** |
| **MSAI** | **Masohi** | **5.11** | **285** | P | **Pn** | **18 31 55.3** | **-0.3** |
| | 23nm,0.8s,408nm0.2nm | | | | | | |
| **SMPI** | **Sarmi** | **5.53** | **61** | P | **Pn** | **18 32 01.8** | **+0.4** |
| | 9.5nm,1.4s,0.1nm | | | | | | |
| **AAI** | **Ambon** | **5.75** | **280** | P | **Pn** | **18 32 04.5** | **+0.1** |
| | 159nm,0.7s,4µm0.7nm | | | | | | |
| **GENI** | **Genyem** | **6.62** | **72** | P | **Pn** | **18 32 17.2** | **+0.7** |
| | 32nm,1.4s,0.2nm | | | | | | |
| **NLAI** | **Namlea** | **6.90** | **282** | P | **Pn** | **18 32 20.4** | **+0.1** |
| | 50nm,0.5s,2µm | | | | | | |
| **LBMI** | **Labuha** | **7.53** | **302** | P | **Pn** | **18 32 28.1** | **-0.8** |
| | 41nm,1.2s | | | | | | |
| **KDU** | **Kakadu** | **8.06** | **190** | P | **Pn** | **18 32 35.9** | **-0.3** |
| | baz=8.0,SNR=74 | | | | | | |
| **SANI** | **Sanana** | **8.29** | **288** | P | **Pn** | **18 32 38.2** | **-1.2** |
| | 28nm,0.8s | | | | | | |
| **TNTI** | **Ternate** | **8.46** | **310** | P | **Pn** | **18 32 41.3** | **-0.4** |
| | 26nm,1.4s | | | | | | |
| **MTN** | **Manton Dam** | **8.54** | **198** | P | **Pn** | **18 32 42.0** | **-0.7** |
| | baz=8.4,SNR=106 | | | | | | |
| **SOEI** | **Soe** | **10.77** | **242** | P | **Pn** | **18 33 11.7** | **-1.8** |
| | baz=11,SNR=4.2 | | | | | | |
| **SOEI** | **Soe** | **10.77** | **242** | P | **Pn** | **18 33 13.8** | **+0.3** |
| | 38nm,1.1s | | | | | | |
| **KDI** | **Kendari** | **11.24** | **273** | P | **Pn** | **18 33 19.7** | **-0.1** |
| | 21nm,1.1s | | | | | | |
| **BATI** | **Baumata** | **11.50** | **241** | P | **Pn** | **18 33 23.6** | **+0.2** |
| | 20nm,0.8s | | | | | | |
| **LUWI** | **Luwuk** | **11.66** | **288** | P | **Pn** | **18 33 24.8** | **-0.7** |
| | baz=12,SNR=4.8 | | | | | | |
| **LUWI** | **Luwuk** | **11.66** | **288** | P | **Pn** | **18 33 25.1** | **-0.4** |
| **KNRA** | **Kununurra** | **12.01** | **204** | P | **Pn** | **18 33 27.9** | **-2.4** |
| | baz=12,SNR=35 | | | | | | |
| **COEN** | **Coen** | **13.00** | **136** | P | **Pn** | **18 33 45.7** | **+1.9** |
| | baz=13,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.16** | **178** | Pn | **Pn** | **18 34 08.7** | **-4.6** |
| | 0.9nm,0.3s,baz=356,slow=13,SNR=22 | | | | | | |
| WRA | | | | Sn | Sn | 18 36 45.4 | -15 |
| | 0.4nm,0.3s,baz=356,slow=23,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **18.86** | **180** | P | **P** | **18 34 58.3** | **-0.8** |
| | 0.7nm,0.3s,baz=358,slow=12,SNR=29 | | | | | | |
| ASAR | | | | S | Sn | 18 38 14.6 | -16 |
| | 0.2nm,0.3s,baz=2.1,slow=27,SNR=4.2 | | | | | | |
| **WRKA** | **Warakurna** | **20.92** | **194** | P | Pn | 18 35 22.0 | -2.2 |
| | baz=21,SNR=16 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.22** | **5** | LR | LR | 18 53 49.4 | |
| | comp=Z,73nm,19.8s,baz=180,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.50** | **325** | P | **P** | **18 41 43.0** | **+2.1** |
| | 0.4nm,0.5s,baz=110,slow=8.0,SNR=8.8 | | | | | | |
| **MAW** | **Mawson** | **78.50** | **202** | LR | LR | 19 14 36.7 | |
| | comp=Z,50nm,19.5s,baz=62,slow=34 | | | | | | |
| **INK** | **Inuvik** | **95.30** | **22** | LR | LR | 19 25 56.9 | |
| | comp=Z,21nm,18.8s,baz=249,slow=35 | | | | | | |
| **DLBC** | **Dease Lake** | **97.17** | **32** | LR | LR | 19 29 44.3 | |
| | comp=Z,42nm,19.6s,baz=172,slow=36 | | | | | | |
| **BBB** | **Bella Bella** | **98.61** | **38** | LR | LR | 19 25 15.5 | |
| | comp=Z,31nm,19.6s,baz=244,slow=33 | | | | | | |

*GUC **04** 18:53:11.0±0.5, 34°.67S×71°.95W, h17km±7km, ML3.2*
**ISC 04 18:53:12.2**±1.2, **34°.59S**±0°.05×**71°.88W**±0°.06, **h13**km±12km, **n15**, σ**1s.15**/23, **1C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.22** | **333** | eP | **Pg** | **18 53 16.2** | **-0.8** |
| CHPI | | | | eS | **Sg** | **18 53 21.4** | **+1.1** |
| **NICH** | **Los Niches** | **0.68** | **128⇓** | iP | **Pg** | **18 53 24.7** | **-0.6** |
| NICH | | | | i S | **Sb** | **18 53 34.8** | **-0.4** |
| **RCDM** | **Rinconada Maip** | **1.41** | **39⇑** | iP | **Pb** | **18 53 38.5** | **0.0** |
| RCDM | | | | i S | **Sg** | **18 53 59.0** | **+1.3** |
| **ANTU** | **Antumapu** | **1.45** | **46** | eP | **Pn** | **18 53 38.8** | **+0.6** |
| ANTU | | | | eS | **Sg** | **18 54 00.5** | **+1.6** |
| ANTU | | | | AML | AML | 18 54 08.9 | |
| | comp=E,523nm,0.3s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.63** | **44** | eP | **Pb** | **18 53 41.9** | **-0.3** |
| CLCH | | | | i S | **Sg** | **18 54 06.1** | **+1.4** |
| CLCH | | | | AML | AML | 18 54 12.9 | |
| | comp=E,422nm,0.4s | | | | | | |
| **PEL** | **Peldehue** | **1.75** | **35⇓** | iP | **Pb** | **18 53 44.3** | **0.0** |
| PEL | | | | i S | **Sg** | **18 54 08.9** | **+0.3** |
| PEL | | | | AML | AML | 18 54 15.9 | |
| | comp=N,412nm,0.4s | | | | | | |
| **AAGR** | **Agrelo** | **2.95** | **60** | eP | **Pg** | **18 54 07.6** | **-1.2** |
| **AVIZ** | **Vizcacheras** | **3.01** | **69** | eP | **Pb** | **18 54 07.5** | **+1.8** |
| **ARCO** | **CERRO ARCO** | **3.01** | **55** | eP | **Pb** | **18 54 06.2** | **+0.4** |
| ARCO | | | | eS | **Sg** | **18 54 49.7** | **+0.7** |
| ARCO | | | | AML | AML | 18 54 56.1 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **AUSP** | **Uspallata** | **3.15** | **42** | eP | **Pb** | **18 54 05.9** | **-2.3** |
| AUSP | | | | eS | **Sg** | **18 54 52.7** | **-0.7** |
| **ASAL** | **Salagasta** | **3.23** | **53** | eP | **Pb** | **18 54 08.7** | **-0.8** |
| ASAL | | | | eS | **Sg** | **18 54 54.5** | **-1.4** |
| **CANA** | **Caviahue** | **3.36** | **169** | eP | **Pn** | **18 54 04.8** | **+0.2** |
| CANA | | | | AML | AML | 18 55 04.4 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **RTLS** | **Leoncito** | **3.52** | **39** | eP | Pn | 18 54 10.7 | +3.8 |
| RTLS | | | | eS | **Sg** | **18 55 05.1** | **-0.4** |
| **AVFE** | **Valle Fertil** | **5.41** | **45** | AML | AML | 18 56 08.6 | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **AGUA** | **GUANDACOL** | **5.84** | **30** | eP | **Pn** | **18 54 40.1** | **+1.4** |

*ISCJB **04** 19:06:56.5±1.0, 13°.73S±0°.09×49°.55W±0°.07, h10km, mb4.3/1, Error ellipse: s-maj=13.9km s-min=8.2km az=27.1*

*IDC* ***04*** *19:06:57.9±1.1, 13°.63S×49°.39W, h0km, mb4.2/1, mb1 4.3/5, mb1mx3.8/38, mbtmp4.2/5, ML4.6/4, MS2.8/1, Ms1 2.7/1, ms1mx2.3/27, Error ellipse: s-maj=29.5km s-min=22.3km az=153.0*

**ISC 04 19:06:57.9**±0.9**, 13°.63S**±0°.09×**49°.53W**±0°.09**, h10**km**, n9, σ2s.77**/10**, Brazil**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **2.48** | **144** | Pn | **Pn** | **19 07 38.4** | **-0.1** |
| | 351nm,0.3s,baz=312,slow=16,SNR=845 | | | | | | |
| BDFB | | | | Sn | **Sn** | **19 08 05.5** | **-3.4** |
| | 233nm,0.3s,baz=288,slow=19,SNR=34 | | | | | | |
| BDFB | | | | LR | LR | 19 08 37.7 | |
| | comp=Z,164nm,18.5s,baz=320,slow=42 | | | | | | |
| **SIV** | **San Ignacio** | **11.41** | **257** | Pn | Pn | 19 09 45.1 | +4.0 |
| | 0.8nm,0.3s,baz=87,slow=14,SNR=13 | | | | | | |
| SIV | | | | Sn | **Sn** | **19 11 48.7** | **0.0** |
| | 0.9nm,0.3s,baz=107,slow=17,SNR=2.7 | | | | | | |
| SIV | | | | Lg | Lg | 19 13 02.4 | |
| | 0.6nm,0.3s,baz=54,slow=1.8,SNR=1.9 | | | | | | |
| **CPUP** | **Villa Florida** | **14.60** | **209** | Pn | **Pn** | **19 10 24.8** | **+0.1** |
| | 0.2nm,0.3s,baz=59,slow=15,SNR=3.9 | | | | | | |
| CPUP | | | | Sn | Sn | 19 12 58.8 | -7.8 |
| | 0.6nm,0.3s,baz=242,slow=18,SNR=4.1 | | | | | | |
| CPUP | | | | Lg | Lg | 19 14 43.1 | |
| | 0.3nm,0.3s,baz=90,slow=20,SNR=1.7 | | | | | | |
| **RCBR** | **Riachuelo** | **15.50** | **61** | Lg | Lg | 19 14 50.3 | |
| | 1.0nm,0.3s,baz=304,slow=18,SNR=4.7 | | | | | | |
| **PTGA** | **Pitinga** | **16.47** | **320** | Pn | **Pn** | **19 10 50.5** | **+1.3** |
| | 1.5nm,0.3s,baz=149,slow=17,SNR=12 | | | | | | |
| PTGA | | | | Sn | **Sn** | **19 13 46.9** | **-5.3** |
| | 0.5nm,0.3s,baz=87,slow=19,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **57.30** | **64** | P | **P** | **19 16 46.5** | **0.0** |
| | 2.5nm,0.8s,baz=257,slow=7.6,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **142.78** | **185** | PKP | **PKPdf** | **19 26 35.7** | **+3.1** |
| | 0.2nm,0.8s,baz=157,slow=3.2,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **146.42** | **187** | PKPbc | **PKPab** | **19 26 41.2** | **+0.3** |
| | 0.8nm,0.6s,baz=177,slow=2.5,SNR=6.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.35** | **77** | PKPbc | **PKPbc** | **19 26 49.5** | **+1.4** |
| | 1.4nm,0.7s,baz=265,slow=4.5,SNR=9.2 | | | | | | |

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*IDC* ***04*** *19:10:53.3±0.9, 22°.78S×175°.28W, h0km, mb4.3/10, mb1 4.5/11, mb1mx4.2/34, mbtmp4.3/11, ML3.8/1, MS3.6/2, Ms1 3.6/2, ms1mx3.1/18, Error ellipse: s-maj=32.5km s-min=22.3km az=150.0*

*ISCJB* ***04*** *19:10:55.3±0.8, 23°.1S±0°.1×175°.1W±0°.1, h29km, mb4.4/13, MS3.7/2, Error ellipse: s-maj=20.7km s-min=14.0km az=136.4*

*NEIC* ***04*** *19:11:02.7±2.2, 23°.04S×175°.33W, h75km±17km, mb4.7/4, Error ellipse: s-maj=18.2km s-min=14.2km az=103.0*

*AUST* ***04*** *19:11:10.7, 23°.94S×177°.40W, h0km*

**ISC 04 19:10:56.8**±0.8**, 23°.3S**±0°.1×**175°.1W**±0°.1**, h29**km**, n30, σ1s.81**/30**, mb4.6**/13**, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **8.47** | **310** | *e*P | **Pn** | **19 12 59.1** | **+1.4** |
| | 50nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **16.31** | **202** | Pn | **P** | **19 14 48.3** | **+1.9** |
| | 0.4nm,0.3s,baz=73,slow=11,SNR=2.0 | | | | | | |
| URZ | | | | Sn | **Sn** | **19 17 39.5** | **-4.4** |
| | 0.6nm,0.3s,baz=11,slow=10,SNR=3.2 | | | | | | |
| **RMQ** | **Roma** | **32.85** | **257** | P | P | 19 17 31.8 | +3.6 |
| | baz=31,SNR=5.2 | | | | | | |
| **CTA** | **Charters Tower** | **35.96** | **268** | P | **P** | **19 17 55.4** | **+0.1** |
| | 6.0nm,0.8s,baz=109,slow=12,SNR=6.4 | | | | | | |
| **CTAO** | **Charters Tower** | **35.96** | **268** | *e*P | **P** | **19 17 54.2** | **-1.1** |
| | 8.6nm,0.9s | | | | | | |
| **QLP** | **Quilpie** | **36.89** | **256** | P | **P** | **19 18 04.5** | **+1.4** |
| | baz=35,SNR=6.4 | | | | | | |
| **HTT** | **Hallett** | **41.39** | **245** | P | **P** | **19 18 41.1** | **+0.4** |
| | baz=39,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **46.54** | **259** | P | **P** | **19 19 22.6** | **+0.4** |
| | 12nm,0.8s,baz=102,slow=6.6,SNR=119 | | | | | | |
| ASAR | | | | LR | LR | 19 38 49.8 | |
| | comp=Z,136nm,18.9s,baz=158,slow=36 | | | | | | |
| **WRAB** | **Tennant Creek** | **46.91** | **264** | *e*P | **P** | **19 19 24.0** | **-1.0** |
| | 6.8nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.92** | **264** | P | **P** | **19 19 24.5** | **-0.6** |
| | 4.8nm,0.7s,baz=100,slow=8.0,SNR=26 | | | | | | |
| **FORT** | **Forrest** | **50.70** | **249** | P | **P** | **19 19 56.0** | **+2.0** |
| | baz=48,SNR=10 | | | | | | |
| **WRKA** | **Warakurna** | **51.33** | **256** | P | **P** | **19 19 59.1** | **+0.2** |
| | baz=49,SNR=19 | | | | | | |
| **KNRA** | **Kununurra** | **53.18** | **267** | P | **P** | **19 20 13.2** | **+0.6** |
| | baz=51,SNR=17 | | | | | | |
| **MBWA** | **Marble Bar** | **59.88** | **258** | *e*P | **P** | **19 20 59.7** | **-0.6** |
| | 9.8nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **74.06** | **322** | P | **P** | **19 22 27.6** | **-2.5** |
| | 2.1nm,0.8s,baz=161,slow=6.0,SNR=5.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.69** | **344** | P | **P** | **19 22 59.7** | **-1.7** |
| | 5.5nm,0.8s,baz=140,slow=7.2,SNR=5.4 | | | | | | |
| PETK | | | | LR | LR | 19 54 27.6 | |
| | comp=Z,17nm,19.0s,baz=116,slow=33 | | | | | | |
| **KSRS** | **Korea Array** | **80.76** | **317** | P | **P** | **19 23 06.3** | **-1.3** |
| | 0.6nm,0.6s,baz=116,slow=6.7,SNR=2.9 | | | | | | |
| **KSAR** | **Wonju Array Be** | **80.78** | **317** | P | **P** | **19 23 06.3** | **-1.4** |
| **NVAR** | **Mina Array Bea** | **81.28** | **42** | P | **P** | **19 23 09.4** | **-1.2** |
| | 0.6nm,0.8s,baz=221,slow=9.5,SNR=3.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **82.79** | **325** | P | **P** | **19 23 17.9** | **-0.2** |
| | 6.4nm,0.8s,baz=130,slow=4.7,SNR=9.0 | | | | | | |
| **MDJ** | **Mudanjiang** | **84.36** | **324** | *e*P | **P** | **19 23 26.0** | **-0.1** |
| | 5.8nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.36** | **56** | P | **P** | **19 23 37.1** | **+0.4** |
| | 0.3nm,0.8s,baz=231,slow=4.3,SNR=3.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.56** | **288** | P | **P** | **19 24 11.3** | **+0.7** |
| | 3.6nm,0.9s,baz=132,slow=3.1,SNR=19 | | | | | | |
| **MKAR** | **Makanchi Array** | **115.06** | **312** | PKP | **PKPdf** | **19 29 33.8** | **-1.2** |
| | 0.2nm,0.6s,baz=76,slow=2.8,SNR=2.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **146.76** | **331** | PKPbc | **PKPdf** | **19 30 34.2** | **+0.2** |
| | 2.5nm,0.6s,baz=40,slow=4.0,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **150.70** | **311** | PKPbc | **PKPbc** | **19 30 46.1** | **-0.4** |
| | 1.3nm,0.8s,baz=134,slow=3.6,SNR=5.2 | | | | | | |
| **CLL** | **Collm** | **151.36** | **349** | *e*PKPab | **PKPab** | **19 30 54.0** | **-1.6** |
| CLL | | | | *i* | | 19 30 58.9 | |
| **BRG** | **Berggiesshubel** | **151.60** | **348** | *e*P | **PKPab** | **19 31 00.4** | **+3.7** |
| | 6.3nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **153.58** | **347** | PKPab | **PKPab** | **19 31 03.4** | **-1.8** |
| | 0.7nm,0.7s,baz=351,slow=1.8,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.44** | **163** | PKPab | **PKPab** | **19 32 19.3** | **+4.3** |
| | 0.3nm,0.6s,baz=210,slow=4.5,SNR=3.6 | | | | | | |

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**IDC 04 19:13:35.9**±999.0**, 56°.79N**×**34°.79E, h0**km**, Error ellipse: s-maj=832.7km s-min=32.4km az=92.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **1.34** | **92** | *i* | | 19 21 13.5 | |
| | baz=275,slow=315,SNR=3.4 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **15.16** | **105** | *i* | | 20 47 00.0 | |
| | baz=300,slow=336,SNR=0.5 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **28.06** | **74** | *i* | | 22 06 40.0 | |
| | baz=292,slow=329,SNR=1.6 | | | | | | |

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*ISCJB* ***04*** *19:17:30.6±0.6, 39°.48N±0°.03×27°.91E±0°.04, h4km±6km, Error ellipse: s-maj=6.3km s-min=4.6km az=140.8*

*ISK* ***04*** *19:17:30.4, 39°.48N×27°.93E, h6km, MD2.6*

*DDA* ***04*** *19:17:31.5, 39°.56N×27°.96E, h6km, Md2.5*

*CSEM* ***04*** *19:17:31.0±0.1, 39°.50N×27°.93E, h8km, MD2.6, Error ellipse: s-maj=2.7km s-min=2.1km az=48.0*

**ISC 04 19:17:31.1**±1.0**, 39°.48N**±0°.03×**27°.93E**±0°.03**, h8**km±10km**, n32, σ0s.41**/42**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BALB** | **Balikesir** | **0.16** | **346** | *e*PG | **Pg** | **19 17 34.0** | **-0.5** |
| BALB | | | | *e*SG | **Sg** | **19 17 37.0** | **+0.3** |
| **BALB** | **Balikesir** | **0.16** | **346** | *e*Pg | **Pg** | **19 17 34.0** | **-0.5** |
| BALB | | | | *e*Sg | **Sg** | **19 17 37.1** | **+0.3** |
| **DURS** | **Dursunbey** | **0.44** | **74** | *i* P | **Pg** | **19 17 39.1** | **-0.4** |
| DURS | | | | *i* S | **Sg** | **19 17 46.2** | **+0.9** |
| **DURS** | **Dursunbey** | **0.44** | **74** | P | **Pg** | **19 17 39.1** | **-0.4** |
| DURS | | | | S | **Sg** | **19 17 46.2** | **+0.9** |
| **DST** | **Dursunbey** | **0.55** | **77** | *e*PG | **Pg** | **19 17 41.3** | **-0.3** |
| **DST** | **Dursunbey** | **0.55** | **77** | *e*Pg | **Pg** | **19 17 41.3** | **-0.3** |
| **GONE** | **Gonen-Balikesi** | **0.59** | **341** | *e*PG | **Pg** | **19 17 42.5** | **-0.1** |
| **GONE** | **Gonen-Balikesi** | **0.59** | **341** | *e*Pg | **Pg** | **19 17 42.5** | **-0.1** |
| **DEMI** | **Demirci** | **0.75** | **126** | *i* P | **Pb** | **19 17 46.5** | **0.0** |
| DEMI | | | | *i* S | **Sg** | **19 17 55.9** | **+0.6** |
| **DEMI** | **Demirci** | **0.75** | **126** | P | **Pb** | **19 17 46.5** | **0.0** |
| DEMI | | | | S | **Sg** | **19 17 55.9** | **+0.6** |
| **KCTX** | **Karacabey (Bur** | **0.85** | **23** | *e*PG | **Pg** | **19 17 46.9** | **-0.5** |
| **KCTX** | **Karacabey (Bur** | **0.85** | **23** | *e*Pg | **Pg** | **19 17 46.9** | **-0.5** |
| **DKL** | **Dikili** | **0.90** | **243** | *e*PG | **Pg** | **19 17 47.8** | **-0.5** |
| **DKL** | **Dikili** | **0.90** | **243** | *e*Pg | **Pg** | **19 17 47.8** | **-0.5** |
| **KRBG** | **Karabiga-Canak** | **1.03** | **332** | *e*PG | **Pg** | **19 17 50.7** | **-0.2** |
| **KRBG** | **Karabiga-Canak** | **1.03** | **332** | *e*Pg | **Pg** | **19 17 50.7** | **-0.2** |
| **MANT** | **Manisa** | **1.10** | **154** | *i* P | **Pn** | **19 17 53.0** | **-0.1** |
| MANT | | | | *i* S | **Sg** | **19 18 06.8** | **+0.2** |
| **MANT** | **Manisa** | **1.10** | **154** | P | **Pn** | **19 17 53.0** | **-0.1** |
| MANT | | | | S | **Sg** | **19 18 06.8** | **+0.2** |
| **ULDT** | **Uludag** | **1.14** | **54** | *i* P | **Pg** | **19 17 52.1** | **-0.8** |
| ULDT | | | | *i* S | **Sg** | **19 18 08.1** | **+0.4** |
| **ULDT** | **Uludag** | **1.14** | **54** | P | **Pg** | **19 17 52.1** | **-0.8** |
| ULDT | | | | S | **Sg** | **19 18 08.1** | **+0.4** |
| **MRMT** | **Marmara Adasi** | **1.15** | **347** | *e*PN | **Pg** | **19 17 53.0** | **-0.2** |
| **MRMT** | **Marmara Adasi** | **1.15** | **347** | *e*Pn | **Pg** | **19 17 53.0** | **-0.2** |
| **ARMT** | **Armutlu** | **1.30** | **33** | *e*PN | **Pb** | **19 17 55.6** | **-0.1** |
| **ARMT** | **Armutlu** | **1.30** | **33** | *e*Pn | **Pb** | **19 17 55.6** | **-0.1** |
| **RKY** | **Sarkoy-Tekirda** | **1.34** | **335** | *e*PN | **Pn** | **19 17 56.2** | **0.0** |
| **RKY** | **Sarkoy-Tekirda** | **1.34** | **335** | *e*Pn | **Pn** | **19 17 56.2** | **0.0** |
| **GELI** | **Tayfur-Gelibol** | **1.45** | **310** | *e*PN | **Pn** | **19 17 57.7** | **+0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.45** | **310** | *e*Pn | **Pn** | **19 17 57.7** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.53** | **181** | *e*PN | **Pn** | **19 17 59.1** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.53** | **181** | *e*Pn | **Pn** | **19 17 59.1** | **+0.2** |
| **ERIK** | **Erikli-Kesan** | **1.61** | **318** | *e*PN | **Pn** | **19 17 59.7** | **-0.1** |
| **ERIK** | **Erikli-Kesan** | **1.61** | **318** | *e*Pn | **Pn** | **19 17 59.7** | **-0.1** |

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*ISCJB* ***04*** *19:18:50.5±0.3, 59°.77N±0°.03×152°.75W±0°.06, h103km±3km, mb3.6/3, Error ellipse: s-maj=5.4km s-min=3.2km az=38.6*

*IDC* ***04*** *19:18:51.0±2.1, 59°.74N×152°.86W, h88km±33km, mb3.3/3, mb1 3.5/6, mb1mx3.3/47, mbtmp3.7/6, Error ellipse: s-maj=35.5km s-min=17.0km az=118.0*

*NEIC* ***04*** *19:18:52.9, 59°.79N×152°.80W, h85km, MG2.9(AEIC), After AEIC.*

**ISC 04 19:18:51.5**±0.9**, 59°.77N**±0°.03×**152°.79W**±0°.04**, h93**km±6km**, n79, σ0s.64**/91**, mb3.7**/3**, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILS** | **Iliamna Low So** | **0.23** | **323** | P | **Pn** | **19 19 04.9** | **-0.2** |
| **OPT** | **Oil Point** | **0.26** | **242** | P | **Pn** | **19 19 05.3** | **+0.1** |
| **IVE** | **Iliamna Volcan** | **0.27** | **335** | P | **Pn** | **19 19 05.0** | **-0.3** |
| **ILW** | **Iliamna West** | **0.34** | **329** | P | **Pn** | **19 19 05.7** | **-0.1** |
| **AUE** | **Augustine Isla** | **0.51** | **216** | P | **Pn** | **19 19 07.0** | **+0.3** |
| **AUP** | **Augustine Pinn** | **0.52** | **218** | P | **Pn** | **19 19 07.3** | **+0.4** |
| **AUI** | **Augustine Isla** | **0.55** | **217** | P | **Pn** | **19 19 07.2** | **+0.2** |
| AUI | | | | S | **Sn** | **19 19 18.1** | **-0.4** |
| **HOM** | **Homer** | **0.59** | **101** | P | **Pn** | **19 19 08.1** | **+0.8** |
| **REF** | **Redoubt East F** | **0.72** | **3** | P | **Pn** | **19 19 08.6** | **-0.1** |
| REF | | | | S | **Sn** | **19 19 20.8** | **-0.7** |
| **RDN** | **Redoubt North** | **0.74** | **1** | P | **Pn** | **19 19 08.9** | **+0.1** |
| **NCT** | **North Crescent** | **0.79** | **355** | P | **Pn** | **19 19 09.1** | **-0.2** |
| **CNPM** | **China Poot** | **0.82** | **107** | P | **Pn** | **19 19 09.9** | **+0.3** |
| CNPM | | | | S | **Sn** | **19 19 23.8** | **+0.7** |
| **BRLK** | **Bradley Lake** | **0.96** | **90** | P | **Pn** | **19 19 11.1** | **+0.1** |
| BRLK | | | | S | **Sn** | **19 19 25.4** | **-0.3** |
| **MCNL** | **McNeil River** | **0.99** | **234** | P | **Pn** | **19 19 11.4** | **+0.1** |
| **BGRM** | **Barrier Glacie** | **1.00** | **10** | P | **Pn** | **19 19 11.5** | **-0.1** |
| **FOPK** | **Fourpeaked Vol** | **1.08** | **199** | P | **Pn** | **19 19 12.3** | **-0.1** |
| **FOSS** | **Fourpeaked Sta** | **1.08** | **206** | P | **Pn** | **19 19 12.6** | **+0.1** |
| **KAPH** | **Katmai Pasha** | **1.43** | **215** | P | **Pn** | **19 19 17.3** | **+0.7** |
| KAPH | | | | S | **Sn** | **19 19 35.6** | **+0.1** |
| **CKL** | **Chakachamna La** | **1.45** | **9** | P | **Pn** | **19 19 16.9** | **+0.1** |
| **SLKM** | **Skilak Lake** | **1.48** | **59** | P | **Pn** | **19 19 18.3** | **+1.1** |
| **CKN** | **Chakachatna No** | **1.49** | **11** | P | **Pn** | **19 19 17.6** | **+0.3** |
| **BGL** | **Barrier Glacie** | **1.51** | **7** | P | **Pn** | **19 19 17.9** | **+0.3** |
| **KAHG** | **Katmai Hook Gl** | **1.57** | **216** | P | **Pn** | **19 19 19.1** | **+0.7** |
| **KAHC** | **Katmai Hardscr** | **1.60** | **226** | P | **Pn** | **19 19 19.3** | **+0.4** |
| **VOGL** | **Vogel Lake** | **1.69** | **43** | P | **Pn** | **19 19 21.7** | **+1.9** |
| VOGL | | | | S | **Sn** | **19 19 43.2** | **+1.8** |
| **SEW** | **Seward** | **1.71** | **77** | P | **Pn** | **19 19 20.3** | **+0.2** |
| **STLK** | **Strandline Lak** | **1.79** | **15** | P | **Pn** | **19 19 21.4** | **+0.2** |
| **KAKN** | **Katmai Knife C** | **1.89** | **219** | P | **Pn** | **19 19 23.1** | **+0.6** |
| KAKN | | | | S | **Sn** | **19 19 45.5** | **-0.5** |
| **FIB** | **Fire Island** | **1.90** | **42** | P | **Pn** | **19 19 24.1** | **+1.5** |
| **SUA** | **Susitna One** | **1.97** | **30** | P | **Pn** | **19 19 24.2** | **+0.7** |
| SUA | | | | S | **Sn** | **19 19 48.0** | **+0.1** |
| **KABR** | **Katmai Barrier** | **2.00** | **215** | P | **Pn** | **19 19 24.5** | **+0.6** |
| **KDAK** | **Kodiak Island** | **2.00** | **177** | P | **Pn** | **19 19 23.7** | **-0.1** |
| | 8.4nm,0.3s,baz=10.0,slow=11,SNR=112 | | | | | | |
| KDAK | | | | S | **Sn** | **19 19 47.0** | **-1.3** |
| | 19nm,0.3s,baz=352,slow=14,SNR=38 | | | | | | |
| **RC01** | **Rabbit Creek A** | **2.01** | **48** | P | **Pn** | **19 19 24.0** | **+0.1** |
| RC01 | | | | S | **Sn** | **19 19 48.7** | **+0.1** |
| **KELA** | **Mount Kelaz** | **2.03** | **230** | P | **Pn** | **19 19 24.8** | **+0.5** |
| **PTE** | **Portage** | **2.17** | **58** | P | **Pn** | **19 19 26.5** | **+0.5** |
| **SKT** | **Skwentna** | **2.30** | **15** | P | **Pn** | **19 19 27.7** | **0.0** |
| **PWL** | **Port Wells** | **2.47** | **62** | P | **Pn** | **19 19 29.4** | **-0.6** |
| PWL | | | | S | **Sn** | **19 19 58.3** | **-1.2** |
| **PMR** | **Palmer** | **2.56** | **43** | P | **Pn** | **19 19 31.4** | **+0.2** |
| PMR | | | | S | **Sn** | **19 20 00.0** | **-1.6** |
| **OHAK** | **Old Harbor** | **2.57** | **186** | P | **Pn** | **19 19 31.2** | **-0.1** |
| **TRAP** | **Trapper Creek** | **2.85** | **25** | P | **Pn** | **19 19 36.0** | **+1.0** |
| **SML** | **Sawmill** | **2.99** | **45** | P | **Pn** | **19 19 36.5** | **-0.4** |
| **GLI** | **Glacier Island** | **3.04** | **66** | P | **Pn** | **19 19 38.6** | **+1.0** |
| **PPLA** | **Purkeypile** | **3.15** | **5** | P | **Pn** | **19 19 39.8** | **+0.6** |
| **HIN** | **Hinchinbrook I** | **3.21** | **76** | P | **Pn** | **19 19 39.4** | **-0.5** |
| **FID** | **Port Fidalgo** | **3.29** | **70** | P | **Pn** | **19 19 39.6** | **-1.4** |
| **SII** | **Sitkinak Islan** | **3.31** | **194** | P | **Pn** | **19 19 41.3** | **+0.1** |
| **JPK** | **Jack Peak** | **3.33** | **65** | P | **Pn** | **19 19 41.8** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **3.38** | **50** | P | **Pn** | **19 19 42.0** | **-0.3** |
| **VLZ** | **Valdez** | **3.48** | **64** | P | **Pn** | **19 19 43.0** | **-0.4** |
| **TT01** | **Tatalina** | **3.51** | **335** | P | **Pn** | **19 19 43.7** | **-0.2** |
| **TTA** | **Tatalina** | **3.53** | **335** | P | **Pn** | **19 19 43.9** | **-0.3** |
| **EYAK** | **Cordova Ski Ar** | **3.60** | **74** | P | **Pn** | **19 19 44.1** | **-1.0** |
| **CAST** | **Castle Rocks** | **3.67** | **5** | P | **Pn** | **19 19 46.5** | **+0.4** |
| **DIV** | **Divide** | **3.73** | **66** | P | **Pn** | **19 19 47.7** | **+0.8** |
| **KLU** | **Klutina** | **3.80** | **60** | P | **Pn** | **19 19 47.1** | **-0.7** |
| **TRF** | **Thorofare Moun** | **3.88** | **17** | P | **Pn** | **19 19 49.6** | **+0.5** |
| **RND** | **Reindeer** | **4.10** | **26** | P | **Pn** | **19 19 52.5** | **+0.5** |
| **DHY** | **Denali Highway** | **4.21** | **36** | P | **Pn** | **19 19 53.5** | **0.0** |
| **MCK** | **McKinley** | **4.37** | **23** | P | **Pn** | **19 19 56.3** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **4.42** | **10** | P | **Pn** | **19 19 56.5** | **+0.2** |
| **WASW** | **Wrangell South** | **4.73** | **59** | P | **Pn** | **19 20 00.4** | **-0.3** |
| **PAX** | **Paxson** | **4.76** | **45** | P | **Pn** | **19 20 00.9** | **0.0** |
| **VRDI** | **Verde Repeater** | **4.84** | **68** | P | **Pn** | **19 20 02.6** | **+0.6** |
| **WRH** | **Wood River Hil** | **5.20** | **23** | P | **Pn** | **19 20 06.5** | **-0.3** |
| **KIAG** | **Kiagna River** | **5.31** | **73** | P | **Pn** | **19 20 08.0** | **-0.4** |
| **BALM** | **Baldy** | **5.33** | **72** | P | **Pn** | **19 20 08.5** | **-0.2** |
| **MLY** | **Manley** | **5.36** | **9** | P | **Pn** | **19 20 08.8** | **-0.2** |
| **CCB** | **Clear Creek Bu** | **5.42** | **23** | P | **Pn** | **19 20 09.5** | **-0.2** |
| **BARN** | **Barnard Glacie** | **5.66** | **72** | P | **Pn** | **19 20 12.4** | **-0.8** |
| **ILAR** | **Eielson Array** | **5.72** | **26** | P | **Pn** | **19 20 13.2** | **-0.6** |
| | 1.9nm,0.3s,baz=214,slow=14,SNR=47 | | | | | | |
| ILAR | | | | S | Sn | 19 21 11.1 | -6.9 |
| | baz=206,slow=25,SNR=2.3 | | | | | | |
| **ILB** | **Eielson Array** | **5.72** | **26** | P | **Pn** | **19 20 13.2** | **-0.6** |
| **IL1** | **Eielson Array** | **5.72** | **26** | P | **Pn** | **19 20 13.2** | **-0.6** |
| **RKAV** | **Rock Avalanche** | **5.76** | **80** | P | **Pn** | **19 20 14.5** | **0.0** |
| **IM3** | **Indian Mountai** | **6.25** | **356** | P | **Pn** | **19 20 21.1** | **+0.1** |
| **DLBC** | **Dease Lake** | **11.76** | **87** | P | **Pn** | **19 21 36.4** | **+0.4** |
| | 0.3nm,0.3s,baz=312,slow=18,SNR=6.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **18.45** | **65** | P | **Pn** | **19 23 00.4** | **-0.1** |
| | 0.3nm,0.3s,baz=279,slow=9.8,SNR=5.0 | | | | | | |
| **SONM** | **Songino Array** | **55.01** | **306** | P | **P** | **19 28 13.9** | **+0.9** |
| | 0.4nm,0.5s,baz=46,slow=8.4,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.62** | **324** | P | **P** | **19 28 31.3** | **+0.1** |
| | 1.1nm,0.5s,baz=38,slow=6.7,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.68** | **321** | P | **P** | **19 29 18.2** | **-0.9** |
| | 0.1nm,0.4s,baz=35,slow=6.4,SNR=2.8 | | | | | | |

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*IDC* ***04*** *19:25:02.9±1.4, 17°.70S×173°.39W, h0km, mb4.4/8, mb1 4.5/9, mb1mx4.2/24, mbtmp4.4/9, ML3.5/1, MS3.3/5, Ms1 3.3/5, ms1mx3.1/24, Error ellipse: s-maj=47.8km s-min=21.0km az=109.0*

*NEIC* ***04*** *19:25:04.3±0.8, 17°.68S×173°.35W, h10km, mb4.5/2, Error ellipse: s-maj=27.4km s-min=11.8km az=116.0*

**ISC 04 19:25:06.0**±1.2**, 17°.8S**±0°.1×**173°.1W**±0°.3**, h28**km**, n22, σ1s.10**/17**, mb4.4**/10**, MS3.5**/3**, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.05** | **19** | Pn | **Pn** | **19 26 04.6** | **-1.7** |
| | 3.3nm,0.3s,baz=238,slow=15,SNR=3.3 | | | | | | |
| AFI | | | | Sn | Sn | 19 26 42.3 | -10 |
| | 12nm,0.3s,baz=230,slow=20,SNR=5.1 | | | | | | |
| AFI | | | | LR | LR | 19 27 16.3 | |
| | comp=Z,144nm,20.1s,baz=220,slow=33 | | | | | | |
| **MSVF** | **Nonsavu** | **8.43** | **269** | *e*P | Pn | 19 27 14.4 | +8.0 |
| **RAR** | **Rarotonga** | **13.03** | **107** | LR | LR | 19 32 02.2 | |
| | comp=Z,108nm,18.8s,baz=281,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.69** | **254** | *e*LR | LR | 19 30 16.9 | |
| | 234nm,32.2s | | | | | | |
| **URZ** | **Urewera** | **22.13** | **201** | P | **P** | **19 30 00.1** | **+0.7** |
| | 8.4nm,0.5s,baz=75,slow=1.0,SNR=6.1 | | | | | | |
| URZ | | | | S | **S** | **19 33 59.8** | **-2.0** |
| | 4.0nm,0.4s,baz=159,slow=17,SNR=6.1 | | | | | | |
| **PPT** | **Papeete** | **22.42** | **93** | LR | LR | 19 36 08.5 | |
| | comp=Z,117nm,21.6s,baz=208,slow=29 | | | | | | |
| **HNR** | **Honiara** | **27.44** | **284** | LR | LR | 19 39 58.8 | |
| | comp=Z,172nm,21.6s,baz=96,slow=33 | | | | | | |
| **RPZ** | **Rata Peaks** | **29.12** | **204** | P | **P** | **19 31 04.1** | **-0.3** |
| | 2.8nm,0.6s,baz=68,slow=19,SNR=2.4 | | | | | | |
| **CTAO** | **Charters Tower** | **38.45** | **260** | *e*P | P | 19 32 23.4 | -2.2 |
| | 6.8nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **49.61** | **259** | *e*P | P | 19 33 53.3 | -2.0 |
| | 5.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.62** | **259** | P | **P** | **19 33 53.6** | **-1.7** |
| | 4.0nm,0.8s,baz=94,slow=8.2,SNR=21 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 35 17.8** | **+1.1** |
| | 1.2nm,0.8s,baz=91,slow=3.8,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **49.68** | **254** | P | **P** | **19 33 54.8** | **-1.1** |
| | 13nm,0.8s,baz=89,slow=8.3,SNR=155 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 35 17.8** | **+0.9** |
| | 2.3nm,0.7s,baz=97,slow=4.3,SNR=8.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.93** | **320** | P | **P** | **19 36 20.6** | **-0.2** |
| | 1.9nm,0.8s,baz=174,slow=5.9,SNR=5.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.97** | **342** | P | **P** | **19 36 44.9** | **+0.6** |
| | 4.0nm,0.7s,baz=128,slow=9.6,SNR=5.9 | | | | | | |
| **KSRS** | **Korea Array** | **78.05** | **316** | P | **P** | **19 37 02.5** | **+0.3** |
| | 1.6nm,1.0s,baz=135,slow=6.5,SNR=6.0 | | | | | | |
| **KSAR** | **Wonju Array Be** | **78.06** | **316** | P | **P** | **19 37 02.5** | **+0.2** |
| **TXAR** | **Lajitas Array** | **81.70** | **56** | LR | LR | 20 05 55.2 | |
| | comp=Z,22nm,20.8s,baz=0.0,slow=30 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.62** | **288** | P | **P** | **19 38 21.4** | **+1.1** |
| | 1.3nm,0.9s,baz=98,slow=3.7,SNR=8.1 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **144.70** | **241** | PKP | **PKPdf** | **19 44 42.4** | **+1.0** |
| | 3.4nm,0.8s,baz=49,slow=4.8,SNR=8.8 | | | | | | |
| **CLL** | **Collm** | **146.19** | **353** | *i* PKPbc | **PKPab** | **19 44 44.6** | **+0.4** |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **148.15** | **319** | PKPbc | **PKPbc** | **19 44 50.5** | **+0.9** |
| | comp=Z,1.0nm,0.8s,baz=154,slow=1.3,SNR=5.3 | | | | | | |
| **GERES** | **GERESS Array B** | **148.52** | **351** | PKPbc | **PKPbc** | **19 44 50.5** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=1.9,slow=2.9,SNR=3.2 | | | | | | |

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*GUC* ***04*** *19:29:21.8±0.8, 35°.88S×71°.84W, h62km±7km, ML4.1*

*ISCJB* ***04*** *19:29:22.8±0.7, 35°.87S±0°.05×71°.88W±0°.09, h62km±7km, Error ellipse: s-maj=13.0km s-min=5.7km az=30.2*

**ISC 04 19:29:23.8**±1.4**, 35°.88S**±0°.06×**71°.88W**±0°.08**, h52**km±12km**, n19, σ1s.04**/23**, 2D, Central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LNCH** | **Linares** | **0.23** | **82** | ⇓*i*P | **Pn** | **19 29 32.0** | **-0.4** |
| LNCH | | | | *i* S | **Sn** | **19 29 39.6** | **+1.0** |
| **TALC** | **Talca** | **0.52** | **22** | ⇓*i*P | **Pn** | **19 29 34.4** | **-0.9** |
| TALC | | | | *i* S | **Sn** | **19 29 43.5** | **-0.2** |
| **CCHI** | **Chillan** | **0.74** | **193** | *i* P | **Pn** | **19 29 37.6** | **-0.6** |
| CCHI | | | | *i* S | **Sn** | **19 29 49.0** | **+0.4** |
| **COCH** | **Cobquecura** | **0.78** | **251** | *i* P | **Pn** | **19 29 38.3** | **-0.4** |
| COCH | | | | *i* S | **Sn** | **19 29 50.5** | **+1.1** |
| **NICH** | **Los Niches** | **1.02** | **31** | *e*P | **Pn** | **19 29 42.1** | **+0.2** |
| NICH | | | | *i* S | **Sn** | **19 29 55.9** | **+0.7** |
| **CANA** | **Caviahue** | **2.11** | **162** | *e*P | Pn | 19 29 58.0 | +1.2 |
| CANA | | | | *e*S | Sn | 19 30 31.6 | +9.5 |
| CANA | | | | AML | AML | 19 30 49.6 | |
| | comp=Z,50nm,0.6s | | | | | | |
| **CLCH** | **Cerro Calan** | **2.71** | **24** | *e*P | **Pn** | **19 30 04.8** | **-0.2** |
| CLCH | | | | *e*S | **Sn** | **19 30 37.4** | **+0.8** |
| CLCH | | | | AML | AML | 19 30 50.0 | |
| | comp=E,529nm,0.4s | | | | | | |
| **PEL** | **Peldehue** | **2.90** | **20** | *e*P | **Pn** | **19 30 07.8** | **+0.3** |
| PEL | | | | *e*S | **Sn** | **19 30 42.4** | **+1.2** |
| PEL | | | | AML | AML | 19 30 49.9 | |
| | comp=E,801nm,0.4s | | | | | | |
| **AAGR** | **Agrelo** | **3.75** | **43** | *e*P | Pn | 19 30 21.0 | +1.7 |
| **ARCO** | **CERRO ARCO** | **3.89** | **40** | *e*P | **Pn** | **19 30 21.9** | **+0.8** |
| ARCO | | | | AML | AML | 19 31 35.6 | |
| | comp=Z,16nm,0.6s | | | | | | |
| **ASAL** | **Salagasta** | **4.13** | **38** | *e*P | **Pn** | **19 30 25.0** | **+0.5** |
| ASAL | | | | *e*S | Sn | 19 31 19.1 | +7.4 |
| **AUSP** | **Uspallata** | **4.19** | **30** | *e*P | **Pn** | **19 30 25.0** | **-0.5** |
| AUSP | | | | *e*S | Sn | 19 31 18.3 | +5.0 |
| **RTLS** | **Leoncito** | **4.60** | **29** | *e*P | **Pn** | **19 30 30.8** | **-0.2** |
| RTLS | | | | *e*S | Sn | 19 31 29.4 | +6.1 |
| **CFAA** | **Coronel Fontan** | **5.23** | **36** | *e*P | **Pn** | **19 30 37.8** | **-1.7** |
| CFAA | | | | *e*S | Sn | 19 31 42.5 | +4.0 |
| **ACAN** | **Cantantal** | **5.30** | **49** | *e*P | **Pn** | **19 30 40.9** | **+0.4** |
| **AMOG** | **MOGNA** | **5.68** | **31** | *e*P | **Pn** | **19 30 43.8** | **-1.9** |
| **AVFE** | **Valle Fertil** | **6.39** | **37** | *e*P | **Pn** | **19 30 53.0** | **-2.3** |
| AVFE | | | | AML | AML | 19 32 20.3 | |
| | comp=Z,9.2nm,0.7s | | | | | | |
| **AGUA** | **GUANDACOL** | **6.98** | **25** | *e*P | **Pn** | **19 31 02.9** | **-0.7** |
| **VCA** | **Vinchina** | **7.77** | **25** | AML | AML | 19 32 59.7 | |
| | comp=Z,15nm,0.6s | | | | | | |

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**MAN 04 19:34:52, 17°.38N**×**120°.37E, h42**km**, mb4.5, ML3.4, MS3.3, Luzon**

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**IDC 04 19:43:37.3**±2.5**, 9°.25S**×**112°.06E, h0**km**, mb3.4**/4**, mb1 3.6**/4**, mb1mx3.4**/21**, mbtmp3.4**/4**, Error ellipse: s-maj=111.9km s-min=22.3km az=51.0, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.00** | **119** | P | P | 19 48 53.9 | -0.1 |
| | 0.8nm,0.7s,baz=292,slow=12,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **25.32** | **127** | P | P | 19 49 06.2 | +0.2 |
| | 0.8nm,0.7s,baz=303,slow=9.5,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **57.06** | **355** | P | P | 19 53 25.8 | +0.5 |
| | 0.3nm,0.6s,baz=168,slow=8.5,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.80** | **337** | P | P | 19 53 57.1 | -0.8 |
| | 0.2nm,0.3s,baz=151,slow=6.8,SNR=6.5 | | | | | | |

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*IDC* ***04*** *19:54:50.7±5.3, 5°.35S×132°.26E, h0km, mb3.3/1, mb1 3.5/3, mb1mx3.3/17, mbtmp3.3/3, ML3.5/2, Error ellipse: s-maj=346.6km s-min=33.3km az=75.0*

*AUST* ***04*** *19:55:01.6, 5°.97S×131°.03E, h100km*

**ISC 04 19:54:52.5**±1.1**, 5°.37S**±0°.09×**131°.6E**±0°.3**, h10**km**, n7, σ2s.13**/7**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SWI** | **Sorong** | **4.49** | **355** | P | **Pg** | **19 56 17.6** | **-1.0** |
| | baz=5.1,SNR=3.7 | | | | | | |
| **KDU** | **Kakadu** | **7.32** | **174** | P | **Pn** | **19 56 41.8** | **+2.3** |
| | baz=6.9,SNR=6.8 | | | | | | |
| **KNRA** | **Kununurra** | **10.62** | **195** | P | **Pn** | **19 57 23.9** | **-1.0** |
| | baz=10.0,SNR=7.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.72** | **170** | Pn | **Pn** | **19 58 18.5** | **-2.5** |
| | 0.2nm,0.3s,baz=352,slow=13,SNR=3.1 | | | | | | |
| WRA | | | | Sn | Sn | 20 00 48.6 | -16 |
| | 0.3nm,0.3s,baz=349,slow=21,SNR=5.2 | | | | | | |
| **QIS** | **Mount Isa** | **16.96** | **154** | P | **P** | **19 58 52.6** | **+0.6** |
| | baz=17,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **18.32** | **173** | P | **P** | **19 59 06.3** | **-0.8** |
| | 0.2nm,0.3s,baz=352,slow=12,SNR=24 | | | | | | |
| ASAR | | | | S | Sn | 20 02 15.0 | -17 |
| | 0.1nm,0.3s,baz=357,slow=28,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.78** | **326** | P | **P** | **20 05 52.6** | **+1.9** |
| | 0.2nm,0.6s,baz=125,slow=7.6,SNR=2.3 | | | | | | |

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**GUC 04 20:01:01.7**±0.3**, 23°.64S**×**67°.37W, h246**km±16km**, ML3.8, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **2.23** | **294** | *i* S | S | 20 02 21.8 | +0.6 |
| PB06 | | | | AML | AML | 20 02 23.5 | |
| | comp=E,160nm,0.1s | | | | | | |
| **PB04** | **IPOC Station P** | **2.87** | **296** | *i* P | Pn | 20 01 54.2 | +1.4 |
| PB04 | | | | *e*S | S | 20 02 33.9 | +0.7 |
| PB04 | | | | AML | AML | 20 02 40.4 | |
| | comp=N,89nm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **3.00** | **309** | *i* P | Pn | 20 01 55.5 | +1.2 |
| PB07 | | | | *i* S | S | 20 02 36.6 | +0.9 |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB07 | | | | AML | AML | 20 02 38.2 | |
| | comp=N,132nm,0.2s | | | | | | |
| PB01 | IPOC Station P | 3.24 | 322 | *i* P | Pn | 20 01 58.1 | +1.3 |
| PB01 | | | | *i* S | S | 20 02 41.4 | +1.1 |
| PB01 | | | | AML | AML | 20 02 43.2 | |
| | comp=E,61nm,0.2s | | | | | | |

*ISCJB **04** 20:02:40.6±1.1, 5.°33S±0.°07×134.°0E±0.°2, h10km, mb3.8/3, Error ellipse: s-maj=26.3km s-min=10.3km az=175.8*
*IDC **04** 20:02:40.7±4.8, 5.°18S×134.°38E, h0km, mb3.8/3, mb1 3.8/5, mb1mx3.6/17, mbtmp3.7/5, ML3.6/2, MS3.2/2, Ms1 3.2/2, ms1mx2.8/18, Error ellipse: s-maj=316.4km s-min=27.3km az=81.0*
*AUST **04** 20:02:43.6, 4.°96S×133.°53E, h35km*
**ISC 04 20:02:42.7**±1.3, **5.°2S**±0.°1×**134.°1E**±0.°3, **h10**km, **n10**, σ**1.s47**/9, **mb4.0**/3, **Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDU | Kakadu | 7.59 | 192 | P | Pn | 20 04 35.9 | +2.4 |
| | baz=7.8,SNR=8.4 | | | | | | |
| MTN | Manton Dam | 8.13 | 201 | P | Pn | 20 04 41.3 | +0.4 |
| | baz=8.2,SNR=26 | | | | | | |
| SOEI | Soe | 10.77 | 245 | P | Pn | 20 05 15.1 | -2.2 |
| | baz=10,SNR=5.0 | | | | | | |
| KNRA | Kununurra | 11.65 | 207 | P | Pn | 20 05 27.7 | -1.5 |
| | baz=12,SNR=39 | | | | | | |
| WRA | Warramunga Arr | 14.62 | 179 | Pn | Pn | 20 06 08.5 | -1.4 |
| | 0.2nm,0.3s,baz=360,slow=13,SNR=5.0 | | | | | | |
| WRA | | | | Sn | Sn | 20 08 44.5 | -7.6 |
| | 0.4nm,0.3s,baz=3.7,slow=23,SNR=7.1 | | | | | | |
| WRA | | | | LR | LR | 20 12 49.4 | |
| | comp=Z,58nm,20.0s,baz=265,slow=42 | | | | | | |
| ASAR | Alice Springs | 18.33 | 181 | P | P | 20 06 56.9 | -0.5 |
| | 0.3nm,0.3s,baz=8.2,slow=12,SNR=30 | | | | | | |
| ASAR | | | | S | Sn | 20 10 13.7 | -8.5 |
| | 0.1nm,0.3s,baz=1.6,slow=28,SNR=5.5 | | | | | | |
| ASAR | | | | LR | LR | 20 13 23.2 | |
| | comp=Z,117nm,20.1s,baz=311,slow=35 | | | | | | |
| SONM | Songino Array | 58.20 | 338 | P | P | 20 12 36.6 | -0.6 |
| | 0.3nm,0.6s,baz=149,slow=6.1,SNR=3.1 | | | | | | |
| MKAR | Makanchi Array | 69.09 | 325 | P | P | 20 13 49.4 | +0.3 |
| | 0.8nm,0.5s,baz=112,slow=8.5,SNR=14 | | | | | | |
| ZALV | Zalesovo Beam | 71.90 | 332 | P | P | 20 14 05.9 | -0.1 |
| | 0.9nm,0.6s,baz=110,slow=5.0,SNR=4.5 | | | | | | |
| TORD | Torodi Ar. Bea | 132.47 | 283 | PKP | PKPdf | 20 22 00.1 | +1.5 |
| | 0.5nm,0.8s,baz=115,slow=2.3,SNR=3.2 | | | | | | |

**IDC 04 20:17:21.9**±2.7, **5.°02S**×**134.°08E**, **h0**km, **mb3.6**/1, **mb1 3.5**/4, **mb1mx3.3**/22, **mbtmp3.4**/4, **ML3.3**/3, **MS4.4**/1, **Ms1 4.4**/1, **ms1mx2.7**/23, **Error ellipse: s-maj=108.6km s-min=27.5km az=74.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.98 | 326 | Pn | Pn | 20 18 37.8 | -0.3 |
| | 1.2nm,0.3s,baz=223,slow=23,SNR=12 | | | | | | |
| SIJI | | | | Sn | Sn | 20 19 30.5 | -6.0 |
| | 0.8nm,0.3s,baz=253,slow=19,SNR=3.3 | | | | | | |
| WRA | Warramunga Arr | 14.84 | 179 | Pn | Pn | 20 20 51.2 | -2.0 |
| | 0.1nm,0.3s,baz=358,slow=11,SNR=3.1 | | | | | | |
| WRA | | | | Sn | Sn | 20 23 24.2 | -14 |
| | 0.1nm,0.3s,baz=354,slow=24,SNR=2.6 | | | | | | |
| ASAR | Alice Springs | 18.54 | 180 | P | Pn | 20 21 41.0 | +0.6 |
| | 0.1nm,0.3s,baz=2.6,slow=12,SNR=8.9 | | | | | | |
| RAO | Raoul Island | 51.34 | 124 | LR | LR | 20 45 01.8 | |
| | comp=Z,461nm,21.8s,baz=144,slow=32 | | | | | | |
| MKAR | Makanchi Array | 68.88 | 325 | P | P | 20 28 28.6 | +0.1 |
| | 0.3nm,0.5s,baz=119,slow=7.5,SNR=6.2 | | | | | | |

*ISCJB **04** 20:41:53.5±0.7, 17.°9S±0.°2×177.°8W±0.°1, h400km, mb4.0/11, Error ellipse: s-maj=28.2km s-min=8.0km az=147.8*
*IDC **04** 20:41:56.8±6.1, 17.°87S×177.°81W, h421km±61km, mb3.7/11, mb1 3.9/11, mb1mx3.5/26, mbtmp4.4/11, Error ellipse: s-maj=44.5km s-min=20.0km az=145.0*
*AUST **04** 20:42:41.9±5.0, 18.°65S×178.°44E, h687km±1km, Error ellipse: s-maj=3.4km s-min=1.8km az=328.0*
**ISC 04 20:41:54.9**±0.6, **17.°8S**±0.°1×**177.°80W**±0.°09, **h400**km, **n33**, σ**1.s05**/35, **mb3.9**/11, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 6.94 | 57 | S | S | 20 45 00.3 | -2.0 |
| | 13nm,0.3s,baz=198,slow=19,SNR=9.5 | | | | | | |
| NIUE | Niue | 7.59 | 101 | P | S | 20 45 16.3 | +0.9 |
| | baz=11,SNR=3.3 | | | | | | |
| ARMA | Armidale | 30.52 | 240 | P | P | 20 47 34.1 | +0.7 |
| | baz=27,SNR=4.8 | | | | | | |
| CTA | Charters Tower | 34.04 | 260 | P | P | 20 48 03.5 | -0.1 |
| | 6.9nm,0.6s,baz=96,slow=10,SNR=11 | | | | | | |
| CMSA | Cobar Meteorol | 35.73 | 240 | P | P | 20 48 17.5 | -0.2 |
| | baz=32,SNR=8.8 | | | | | | |
| QLP | Quilpie | 36.13 | 249 | P | P | 20 48 21.1 | -0.1 |
| | baz=32,SNR=3.0 | | | | | | |
| COEN | Coen | 37.69 | 270 | P | P | 20 48 35.5 | +1.3 |
| | baz=34,SNR=9.2 | | | | | | |
| TOO | Toolangi | 37.71 | 231 | P | P | 20 48 34.2 | -0.1 |
| | baz=34,SNR=4.4 | | | | | | |
| HTT | Hallett | 41.72 | 239 | P | P | 20 49 04.7 | -2.2 |
| | baz=38,SNR=7.5 | | | | | | |
| BBOO | Buckleboo | 43.99 | 241 | P | P | 20 49 24.3 | -0.5 |
| | baz=40,SNR=26 | | | | | | |
| WRA | Warramunga Arr | 45.23 | 259 | P | P | 20 49 33.5 | -1.2 |
| | 3.9nm,0.5s,baz=95,slow=7.2,SNR=34 | | | | | | |
| WRA | | | | PcP | PcP | 20 51 05.9 | -1.1 |
| | 0.5nm,0.5s,baz=92,slow=3.5,SNR=4.0 | | | | | | |
| ASAR | Alice Springs | 45.39 | 254 | P | P | 20 49 35.6 | -0.3 |
| | 22nm,0.5s,baz=90,slow=8.3,SNR=469 | | | | | | |
| ASAR | | | | PcP | PcP | 20 51 06.3 | -1.2 |
| | 1.0nm,0.5s,baz=104,slow=3.9,SNR=4.5 | | | | | | |
| ASAR | | | | S | S | 20 55 40.8 | -5.8 |
| | 1.6nm,0.9s,baz=87,slow=15,SNR=8.4 | | | | | | |
| KDU | Kakadu | 48.14 | 269 | P | P | 20 49 57.4 | +0.4 |
| | baz=44,SNR=26 | | | | | | |
| MTN | Manton Dam | 49.38 | 268 | P | P | 20 50 06.3 | +0.1 |
| | baz=46,SNR=5.6 | | | | | | |
| WRKA | Warakurna | 50.44 | 252 | P | P | 20 50 13.7 | -0.4 |
| | baz=47,SNR=135 | | | | | | |
| KNRA | Kununurra | 51.08 | 264 | P | P | 20 50 18.8 | -0.1 |
| | baz=47,SNR=22 | | | | | | |
| SOEI | Soe | 56.65 | 270 | P | P | 20 51 00.8 | +2.0 |
| | baz=53,SNR=6.5 | | | | | | |
| BATI | Baumata | 57.11 | 269 | P | P | 20 51 03.8 | +1.8 |
| | 14nm,0.6s,baz=90,slow=3.0 | | | | | | |
| MEEK | Meekatharra | 59.03 | 249 | P | P | 20 51 13.7 | -1.2 |
| | baz=55,SNR=5.8 | | | | | | |
| KLBR | Kellerberrin | 59.41 | 243 | P | P | 20 51 16.1 | -1.3 |
| | baz=56,SNR=8.3 | | | | | | |
| MORW | Morawa | 61.07 | 246 | P | P | 20 51 27.4 | -1.2 |
| | baz=57,SNR=3.6 | | | | | | |
| MJAR | Matsushiro Arr | 68.14 | 323 | P | P | 20 52 14.0 | +0.6 |
| | 1.0nm,0.5s,baz=161,slow=6.2,SNR=4.0 | | | | | | |
| UGM | Wanagama | 70.23 | 268 | P | P | 20 52 26.6 | 0.0 |
| | baz=67,SNR=4.7 | | | | | | |
| KSM | Kuching | 73.24 | 277 | P | P | 20 52 45.6 | +1.3 |
| | baz=70,SNR=9.7 | | | | | | |
| LEM | Lembang | 73.30 | 268 | P | P | 20 52 45.1 | +0.3 |
| | 25nm,0.7s,baz=108,slow=20,SNR=5.9 | | | | | | |
| PETK | Petropavlovsk- | 73.68 | 345 | P | P | 20 52 46.3 | +0.4 |
| | 2.3nm,0.8s,baz=132,slow=6.4,SNR=3.2 | | | | | | |
| NVAR | Mina Array Bea | 78.91 | 44 | P | P | 20 53 16.1 | +0.4 |
| | 0.3nm,0.6s,baz=229,slow=6.8,SNR=3.3 | | | | | | |
| TXAR | Lajitas Array | 85.42 | 57 | P | P | 20 53 50.5 | +1.5 |
| | 0.3nm,0.7s,baz=226,slow=6.2,SNR=5.1 | | | | | | |
| ILAR | Eielson Array | 85.61 | 13 | P | P | 20 53 48.3 | -0.7 |
| | 0.8nm,0.4s,baz=230,slow=5.3,SNR=9.3 | | | | | | |
| CMAR | Chiang Mai Arr | 89.38 | 289 | P | P | 20 54 07.7 | -0.2 |
| | 1.2nm,1.1s,baz=155,slow=2.9,SNR=5.8 | | | | | | |
| BRTR | Keskin Array B | 145.09 | 315 | PKPbc | PKPdf | 21 00 45.2 | -0.7 |
| | 1.1nm,0.6s,baz=119,slow=3.9,SNR=6.4 | | | | | | |
| BRG | Berggiesshubel | 145.66 | 347 | *e*(P) | PKPdf | 21 00 46.7 | +0.5 |
| | 4.9nm,0.9s | | | | | | |
| GERES | GERESS Array B | 147.61 | 346 | PKPbc | PKPbc | 21 00 52.2 | -0.8 |
| | 1.4nm,0.5s,baz=23,slow=3.3,SNR=16 | | | | | | |

*IDC **04** 20:55:33.6±1.4, 11.°58S×119.°94E, h0km, mb3.6/3, mb1 3.6/6, mb1mx3.5/24, mbtmp3.5/6, ML2.9/3, Error ellipse: s-maj=44.4km s-min=28.9km az=51.0*
**ISC 04 20:55:37.8**±1.2, **11.°6S**±0.°1×**120.°3E**±0.°1, **h35**km, **n11**, σ**1.s61**/9, **mb3.7**/3, **South of Sumba**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BATI | Baumata | 3.57 | 68 | Pn | Pn | 20 56 35.5 | +4.8 |
| | 2.5nm,0.3s,baz=282,slow=12,SNR=3.2 | | | | | | |
| BATI | | | | Sn | Sn | 20 57 12.9 | +1.2 |
| | 22nm,0.3s,baz=14,slow=22,SNR=17 | | | | | | |
| KAPI | Kappang | 6.51 | 355 | Pn | Pn | 20 57 09.6 | -1.6 |
| | 0.5nm,0.3s,baz=172,slow=7.1,SNR=5.9 | | | | | | |
| KAPI | | | | Sn | Sn | 20 58 12.3 | -12 |
| | 0.8nm,0.3s,baz=274,slow=19,SNR=3.0 | | | | | | |
| WRA | Warramunga Arr | 15.88 | 123 | Pn | P | 20 59 23.3 | +1.1 |
| | 0.0nm,0.3s,baz=296,slow=13,SNR=3.5 | | | | | | |
| WRA | | | | Sn | Sn | 21 02 12.8 | -1.1 |
| | baz=290,slow=26,SNR=2.8 | | | | | | |
| ASAR | Alice Springs | 17.69 | 135 | P | P | 20 59 50.9 | +8.6 |
| | 0.0nm,0.3s,baz=312,slow=12,SNR=2.6 | | | | | | |
| ASAR | | | | S | S | 21 03 02.4 | -1.8 |
| | 0.1nm,0.3s,baz=308,slow=22,SNR=3.5 | | | | | | |
| H08S2 | Diego Garcia H | 47.25 | 270 | T | T | 21 54 41.0 | |
| | baz=96 | | | | | | |
| H08S3 | Diego Garcia H | 47.26 | 270 | T | T | 21 54 41.2 | |
| | baz=96 | | | | | | |
| H08S1 | Diego Carcia H | 47.27 | 270 | T | T | 21 54 41.4 | |
| | baz=96 | | | | | | |
| SONM | Songino Array | 60.40 | 349 | P | P | 21 05 42.7 | -1.0 |
| | 0.5nm,0.7s,baz=170,slow=6.2,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 67.29 | 333 | P | P | 21 06 30.4 | +1.4 |
| | 0.4nm,0.7s,baz=152,slow=6.5,SNR=3.4 | | | | | | |
| ZALV | Zalesovo Beam | 71.86 | 339 | P | P | 21 06 58.5 | +1.5 |
| | 0.3nm,0.3s,baz=151,slow=3.3,SNR=2.5 | | | | | | |
| LPAZ | La Paz | 151.12 | 163 | PKPbc | PKPbc | 21 15 29.6 | +0.5 |
| | 0.7nm,0.3s,baz=268,slow=5.5,SNR=7.3 | | | | | | |

**JMA 04 21:11:16.2**±0.1, **24.°37N**×**125.°39E**, **h49**km±3km, **M2.7**, **Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOGS | Gusukube | 0.39 | 2 | P | Pn | 21 11 26.1 | 0.0 |
| JOGS | | | | *e*S | Sn | 21 11 33.3 | +0.1 |
| JMJ | Miyako jima 2 | 0.45 | 349 | P | Pn | 21 11 26.9 | +0.1 |
| JMJ | | | | *e*S | Sn | 21 11 34.7 | +0.3 |
| JIRB | Irabujima | 0.50 | 337 | P | Pn | 21 11 27.2 | -0.2 |
| JIRB | | | | *e*S | Sn | 21 11 35.1 | -0.3 |
| JIKM | Ikemajima | 0.57 | 347 | P | Pn | 21 11 28.2 | 0.0 |
| JIKM | | | | *e*S | Sn | 21 11 36.8 | 0.0 |
| JTJ | Tarama | 0.68 | 293 | P | Pn | 21 11 29.9 | +0.2 |
| JTJ | | | | *e*S | Sn | 21 11 39.3 | -0.1 |
| JISG | Ishigakijimahi | 1.01 | 283 | P | Pn | 21 11 34.2 | +0.2 |
| JISG | | | | *e*S | Sn | 21 11 46.8 | -0.3 |
| JIJ | Ishigaki jima | 1.14 | 270 | P | Pn | 21 11 35.8 | 0.0 |
| JIJ | | | | *e*S | Sn | 21 11 50.3 | 0.0 |
| JKRS | Kuro-shima | 1.27 | 264 | P | Pn | 21 11 38.3 | +0.8 |
| HATJ | Hateruma jima | 1.48 | 258 | P | Pn | 21 11 40.7 | +0.3 |
| HATJ | | | | *e*S | Sn | 21 11 58.3 | -0.3 |
| IRIF | Iriomote-Funau | 1.51 | 269 | P | Pn | 21 11 41.1 | +0.2 |

**CASC 04 21:23:40.2**±1.2, **13.°44N**×**90.°09W**, **h57**km±11km, **MD3.5**, **ML4.0**, **2C-6D**, **Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SBLS | San Blas | 0.60 | 49 | ⇓*i*P | Pn | 21 23 53.5 | +0.1 |
| RTR | El Retiro | 0.63 | 44 | ⇓*i*P | Pn | 21 23 53.7 | 0.0 |
| SNJE | San Jose | 0.64 | 48 | ⇓*i*P | Pn | 21 23 53.8 | 0.0 |
| RBDL | Robledal | 0.78 | 30 | ⇓*i*P | Pn | 21 23 55.0 | -0.5 |
| IXG | Ixpaco | 0.81 | 334 | *e*P | Pn | 21 23 55.2 | -0.7 |
| BOQS | Boqueron | 0.84 | 70 | *e*P | Pn | 21 23 56.2 | -0.1 |
| SNET | Serv Nac Est T | 0.87 | 74 | *e*P | Pn | 21 23 56.8 | +0.2 |
| SNET | | | | *e*S | Sn | 21 24 08.8 | +0.1 |
| SNET | | | | AML | AML | 21 24 11.3 | |
| | comp=Z,5μm,0.3s | | | | | | |
| LFU | La Fuente | 1.00 | 72 | ⇓*e*P | Pn | 21 23 58.1 | -0.1 |
| LFRS | El Faro | 1.02 | 80 | *e*P | Pn | 21 23 58.6 | +0.1 |
| PCG | Pacaya | 1.07 | 332 | *e*P | Pn | 21 23 59.8 | +0.4 |
| PCG | | | | *e*S | Sn | 21 24 15.4 | +1.7 |
| NBG | Las Nubes | 1.17 | 348 | ⇓*e*P | Pn | 21 24 01.3 | +0.5 |
| NBG | | | | *e*S | Sn | 21 24 16.9 | +0.9 |
| SNVI | San Vicente | 1.23 | 82 | *e*P | Pn | 21 24 01.8 | +0.4 |
| SNVI | | | | *e*S | Sn | 21 24 18.1 | +0.8 |
| FUG | Fuego 3 | 1.24 | 324 | ⇑*e*P | Pn | 21 24 01.6 | +0.1 |
| MRL | Marmol | 1.66 | 13 | *e*P | Pn | 21 24 06.8 | -0.5 |
| MRL | | | | ⇑*e*P | Pn | 21 24 07.8 | +0.5 |
| MRL | | | | *e*S | Sn | 21 24 28.9 | +1.2 |
| JAT | Jato | 1.74 | 300 | *e*P | Pn | 21 24 08.8 | +0.8 |

**IDC 04 21:28:59.9**±2.7, **7.°83S**×**116.°95E**, **h0**km, **mb3.4**/4, **mb1 3.6**/4, **mb1mx3.4**/23, **mbtmp3.4**/4, **Error ellipse: s-maj=163.7km s-min=22.3km az=54.0, Bali Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 20.71 | 127 | P | P | 21 33 42.2 | +0.2 |
| | 0.5nm,0.4s,baz=301,slow=12,SNR=4.4 | | | | | | |
| ASAR | Alice Springs | 22.63 | 136 | P | P | 21 34 02.5 | -0.2 |
| | 0.5nm,0.3s,baz=313,slow=9.6,SNR=16 | | | | | | |
| SONM | Songino Array | 56.20 | 351 | P | P | 21 38 41.7 | -0.1 |
| | 0.6nm,0.5s,baz=170,slow=7.9,SNR=6.4 | | | | | | |
| MKAR | Makanchi Array | 62.51 | 334 | P | P | 21 39 25.4 | 0.0 |
| | 0.1nm,0.3s,baz=131,slow=6.5,SNR=2.8 | | | | | | |

**GUC 04 21:37:27.4**±0.6, **34.°26S**×**72.°46W**, **h12**km±3km, **ML3.6**, **1C-2D**, **Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHPI | Pichilemu | 0.40 | 109 | ⇑*i*P | Pg | 21 37 35.6 | +0.3 |
| CHPI | | | | *i* S | Sb | 21 37 41.9 | -0.6 |
| NICH | Los Niches | 1.25 | 127 | *e*P | Pg | 21 37 53.6 | +2.1 |
| NICH | | | | *i* S | Sg | 21 38 11.1 | +3.3 |
| TALC | Talca | 1.32 | 149 | *e*P | Pn | 21 37 50.4 | -1.3 |
| TALC | | | | *i* S | Sb | 21 38 08.1 | -1.0 |
| RCDM | Rinconada Maip | 1.57 | 61 | ⇓*i*P | Pn | 21 37 54.4 | -0.9 |
| ANTU | Antumapu | 1.67 | 66 | *e*P | Pn | 21 37 56.3 | -0.2 |
| ANTU | | | | AML | AML | 21 38 27.3 | |
| | comp=N,855nm,0.7s | | | | | | |
| CLCH | Cerro Calan | 1.81 | 62 | *e*P | Pn | 21 37 57.4 | -1.3 |
| CLCH | | | | *i* S | Sn | 21 38 20.5 | -1.2 |
| CLCH | | | | AML | AML | 21 38 35.4 | |
| | comp=E,724nm,0.4s | | | | | | |
| PEL | Peldehue | 1.85 | 53 | ⇓*i*P | Pn | 21 37 59.0 | -0.1 |
| PEL | | | | *i* S | Sn | 21 38 23.1 | +0.6 |
| PEL | | | | AML | AML | 21 38 35.4 | |
| | comp=E,1μm,0.6s | | | | | | |

**MEX 04 21:53:41.0**±0.3, **16.°17N**×**98.°82W**, **h17**km±258km, **MD3.6**, **1D**, **Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PNIG | Pinotepa | 0.70 | 71 | *e*P | Pg | 21 53 52.4 | -2.4 |
| PNIG | | | | *i* S | Sg | 21 54 01.3 | -2.9 |
| TLIG | Tlapa | 1.41 | 10 | ⇓*e*P | Pn | 21 54 02.6 | -3.5 |
| TLIG | | | | *e*S | Sn | 21 54 19.8 | -4.7 |
| OXX | Oaxaca | 2.21 | 65 | *e*P | Pn | 21 54 14.1 | -3.1 |

**IDC 04 21:54:20.8**±4.9, **56.°43S**×**23.°41W**, **h0**km, **mb3.5**/2, **mb1 3.7**/2, **mb1mx3.5**/14, **mbtmp3.5**/2, **Error ellipse: s-maj=381.3km s-min=37.0km az=102.0, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VNDA | Vanda | 46.28 | 182 | P | P | 22 02 47.2 | -0.1 |
| | 0.2nm,0.6s,baz=188,slow=6.7,SNR=3.6 | | | | | | |
| TORD | Torodi Ar. Bea | 72.41 | 26 | P | P | 22 05 48.7 | 0.0 |
| | 0.4nm,0.7s,baz=199,slow=6.5,SNR=5.5 | | | | | | |
| SONM | Songino Array | 148.65 | 84 | PKPbc | PKPbc | 22 14 08.4 | -0.6 |
| | 0.4nm,0.5s,baz=224,slow=3.7,SNR=4.4 | | | | | | |

*AUST **04** 21:58:32.9, 3.°97S×133.°52E, h60km*
**IDC 04 21:58:44.4**±2.5, **5.°17S**×**132.°81E**, **h0**km, **mb3.2**/1, **mb1 3.8**/4, **mb1mx3.5**/24, **mbtmp3.6**/4, **ML3.6**/3, **Error ellipse: s-maj=128.0km s-min=26.7km az=77.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.54 | 340 | Pn | Pn | 21 59 54.0 | -0.6 |
| | 0.5nm,0.3s,baz=161,slow=23,SNR=16 | | | | | | |
| SIJI | | | | Sn | Sn | 22 00 40.8 | -7.3 |
| | 0.7nm,0.3s,baz=6.3,slow=19,SNR=2.5 | | | | | | |
| KDU | Kakadu | 7.47 | 183 | P | Pn | 22 00 40.0 | +5.2 |
| | baz=8.8,SNR=21 | | | | | | |
| MTN | Manton Dam | 7.80 | 192 | P | Pn | 22 00 45.6 | +6.3 |
| | baz=9.2,SNR=55 | | | | | | |
| KNRA | Kununurra | 11.17 | 201 | P | Pn | 22 01 31.6 | +6.1 |
| | baz=13,SNR=13 | | | | | | |
| WRA | Warramunga Arr | 14.76 | 174 | Pn | Pn | 22 02 12.7 | -2.0 |
| | 0.4nm,0.3s,baz=353,slow=13,SNR=4.8 | | | | | | |
| WRA | | | | Sn | Sn | 22 04 51.3 | -7.7 |
| | 0.2nm,0.3s,baz=358,slow=25,SNR=4.6 | | | | | | |
| ASAR | Alice Springs | 18.42 | 177 | P | P | 22 03 01.9 | +0.5 |
| | 0.3nm,0.3s,baz=2.3,slow=12,SNR=19 | | | | | | |
| ASAR | | | | S | Sn | 22 06 18.6 | -9.3 |
| | 0.1nm,0.3s,baz=2.2,slow=27,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 68.28 | 325 | P | P | 22 09 47.5 | +0.2 |
| | 0.1nm,0.4s,baz=123,slow=7.1,SNR=3.5 | | | | | | |

**MEX 04 22:11:08.5**±0.6, **18.°19N**×**101.°54W**, **h18**km±935km, **MD3.5**, **Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZIIG | Zihuatanejo | 0.59 | 173 | *e*P | Pg | 22 11 18.3 | -1.9 |
| ZIIG | | | | *i* S | Sg | 22 11 25.5 | -2.6 |
| ARIG | Puente Sto Nin | 1.14 | 85 | *i* P | Pn | 22 11 26.4 | -3.2 |
| ARIG | | | | *i* S | Sb | 22 11 39.4 | -4.8 |
| MMIG | Aquila | 1.72 | 273 | *e*P | Pn | 22 11 33.9 | -3.7 |
| EZ5V | | 2.33 | 304 | *e*P | Pn | 22 11 41.0 | -5.4 |

*IDC **04** 22:31:31.5±1.2, 14.°87S×75.°97W, h0km, mb3.9/5, mb1 3.9/7, mb1mx3.8/20, mbtmp3.8/7, ML3.4/2, MS3.3/7, Ms1 3.3/7, ms1mx3.1/20, Error ellipse: s-maj=38.9km s-min=21.8km az=55.0*
*ISCJB **04** 22:31:33.4±0.9, 14.°88S±0.°09×76.°0W±0.°1, h29km, mb3.9/5, MS3.3/4, Error ellipse: s-maj=18.7km s-min=10.7km az=153.4*
*NEIC **04** 22:31:36.0±0.8, 14.°81S×76.°00W, h35km, mb4.0/1, Error ellipse: s-maj=15.3km s-min=11.2km az=56.0*
**ISC 04 22:31:35.7**±0.9, **14.°89S**±0.°10×**75.°9W**±0.°1, **h29**km, **n24**, σ**1.s21**/17, **mb4.0**/5, **MS3.4**/4, **Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARE | Arequipa | 4.51 | 111 | *e*P | Pn | 22 32 45.0 | +2.6 |
| ARE | | | | *e*S | Sb | 22 33 47.0 | -1.5 |
| LPAZ | La Paz | 7.60 | 102 | Pn | Pn | 22 33 29.8 | +4.6 |
| | 2.6nm,0.3s,baz=284,slow=8.2,SNR=40 | | | | | | |
| LPAZ | | | | Sn | Sb | 22 35 05.3 | -13 |
| | baz=271,slow=18,SNR=1.5 | | | | | | |
| LPAZ | | | | LR | LR | 22 36 12.4 | |
| | comp=Z,27nm,20.7s,baz=302,slow=36 | | | | | | |
| LVC | Limon Verde | 10.13 | 140 | Pn | Pn | 22 34 00.4 | +0.8 |
| | 58nm,0.3s,baz=312,slow=11,SNR=17 | | | | | | |
| LVC | | | | Sn | Sn | 22 35 51.1 | -1.3 |
| | 50nm,0.3s,baz=81,slow=19,SNR=7.4 | | | | | | |
| LVC | | | | Lg | Lg | 22 36 55.0 | |
| | 11nm,0.3s,baz=84,slow=22,SNR=6.7 | | | | | | |
| SAML | Samuel | 13.76 | 66 | *e*Pn | Pn | 22 34 48.4 | -0.5 |
| | 3.2nm,0.8s | | | | | | |
| SIV | San Ignacio | 14.32 | 96 | Pn | Pn | 22 34 56.3 | -0.4 |
| | 0.2nm,0.3s,baz=287,slow=16,SNR=3.4 | | | | | | |
| SIV | | | | LR | LR | 22 41 02.3 | |
| | comp=Z,166nm,18.6s,baz=226,slow=40 | | | | | | |
| CFAA | Coronel Fontan | 18.05 | 159 | P | P | 22 35 44.8 | +0.1 |
| | 0.1nm,0.3s,baz=331,slow=11,SNR=4.5 | | | | | | |
| ROSC | El Rosal | 19.67 | 5 | LR | LR | 22 45 03.8 | |
| | comp=Z,117nm,18.4s,baz=355,slow=41 | | | | | | |
| CPUP | Villa Florida | 20.74 | 126 | P | P | 22 36 14.7 | +0.6 |
| | 1.7nm,0.6s,baz=318,slow=12,SNR=3.9 | | | | | | |
| CPUP | | | | LR | LR | 22 45 36.4 | |
| | comp=Z,29nm,19.4s,baz=307,slow=41 | | | | | | |
| PTGA | Pitinga | 21.10 | 50 | P | P | 22 36 17.5 | -0.6 |
| | 1.8nm,0.4s,baz=222,slow=14,SNR=6.1 | | | | | | |
| PTGA | | | | LR | LR | 22 44 53.9 | |
| | comp=Z,139nm,19.8s,baz=232,slow=38 | | | | | | |
| SDV | Santo Domingo | 24.18 | 13 | *e*P | P | 22 36 48.9 | -1.1 |
| | 3.0nm,0.6s | | | | | | |
| TRQA | Tornquist | 26.16 | 155 | *e*P | P | 22 37 07.8 | +0.3 |
| TXAR | Lajitas Array | 51.50 | 329 | P | P | 22 40 37.6 | -1.4 |
| | 0.2nm,0.7s,baz=146,slow=9.1,SNR=4.0 | | | | | | |
| TXAR | | | | LR | LR | 23 01 04.6 | |
| | comp=Z,31nm,18.7s,baz=0.0,slow=34 | | | | | | |
| SCHQ | Schefferville | 69.87 | 6 | P | P | 22 42 45.5 | +2.0 |
| | 2.9nm,0.6s,baz=204,slow=19,SNR=4.5 | | | | | | |
| DBIC | Dimbokro | 73.58 | 78 | LR | LR | 23 14 21.4 | |
| | comp=Z,55nm,18.3s,baz=194,slow=35 | | | | | | |
| TORD | Torodi Ar. Bea | 81.67 | 74 | P | P | 22 43 52.5 | +0.6 |
| | 2.3nm,0.7s,baz=256,slow=3.3,SNR=18 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 120.13 | 284 | T | T | 01 01 36.0 | |
| | baz=97,slow=74,SNR=13 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 120.15 | 284 | T | T | 01 01 39.2 | |
| | baz=97,slow=74,SNR=16 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 120.15 | 284 | T | T | 01 01 41.7 | |
| | baz=97,slow=74,SNR=7.6 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 120.19 | 283 | T | T | 01 01 45.9 | |
| | baz=97,slow=74,SNR=21 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 120.20 | 283 | T | T | 01 01 40.6 | |
| | baz=97,slow=74,SNR=24 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 120.21 | 283 | T | T | 01 01 47.6 | |
| | baz=97,slow=74,SNR=20 | | | | | | |
| WRA | Warramunga Arr | 134.38 | 221 | PKP | PKPdf | 22 50 51.3 | -0.6 |
| | 0.2nm,0.4s,baz=146,slow=1.8,SNR=3.5 | | | | | | |
| ZALV | Zalesovo Beam | 138.19 | 17 | PKP | PKPdf | 22 50 57.7 | -0.1 |
| | 0.6nm,0.6s,baz=320,slow=3.8,SNR=3.4 | | | | | | |
| SONM | Songino Array | 147.09 | 357 | PKPbc | PKPbc | 22 51 15.6 | -0.5 |
| | 0.4nm,0.7s,baz=344,slow=4.5,SNR=2.8 | | | | | | |

**WEL 04 22:36:36.0**±0.1, **43.°56S**×**171.°91E**, **h5**km, **ML3.5**/14, **4C-2D**, **Error ellipse: s-maj=0.8km s-min=0.6km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OXZ | Oxford | 0.25 | 21 | PG | Pg | 22 36 40.7 | -0.2 |
| OXZ | | | | SG | Sg | 22 36 44.1 | -0.2 |
| CRLZ | Canterbury Las | 0.51 | 92 | PG | Pg | 22 36 46.5 | +0.6 |
| CRLZ | | | | SG | Sb | 22 36 53.9 | -1.3 |
| CRLZ | | | | AML | AML | 22 36 57.1 | |
| MQZ | McQueen's Vall | 0.56 | 106 | PG | Pg | 22 36 47.1 | +0.4 |
| MQZ | | | | SG | Sb | 22 36 55.3 | -1.1 |
| MQZ | | | | AML | AML | 22 36 57.9 | |
| RPZ | Rata Peaks | 0.64 | 256 | ⇑P* | Pg | 22 36 48.7 | +0.3 |
| RPZ | | | | SG | Sg | 22 36 57.7 | +0.9 |
| RPZ | | | | AML | AML | 22 37 02.9 | |
| LTZ | Lake Taylor | 0.82 | 19 | ⇑P* | Pg | 22 36 51.9 | +0.1 |
| LTZ | | | | AML | AML | 22 37 03.5 | |
| LTZ | | | | AML | AML | 22 37 05.2 | |
| WVZ | Waitaha Valley | 0.99 | 299 | ⇓P* | Pg | 22 36 54.8 | -0.1 |
| WVZ | | | | AML | AML | 22 37 11.8 | |
| WVZ | | | | AML | AML | 22 37 12.0 | |
| LBZ | Lake Benmore | 1.50 | 236 | PN | Pn | 22 37 02.6 | -0.9 |
| LBZ | | | | AML | AML | 22 37 30.2 | |
| LBZ | | | | AML | AML | 22 37 30.3 | |
| FOZ | Fox Glacier | 1.62 | 269 | ⇑PN | Pn | 22 37 04.1 | -1.0 |
| FOZ | | | | AML | AML | 22 37 30.4 | |
| FOZ | | | | AML | AML | 22 37 32.5 | |
| KHZ | Kahutara | 1.65 | 47 | PN | Pn | 22 37 03.6 | -2.0 |
| ODZ | Otahua Downs | 1.74 | 211 | ⇓PN | Pn | 22 37 05.4 | -1.4 |
| ODZ | | | | AML | AML | 22 37 36.2 | |
| ODZ | | | | AML | AML | 22 37 44.2 | |
| DSZ | Denniston Nort | 1.81 | 357 | PN | Pn | 22 37 06.7 | -1.3 |
| DSZ | | | | AML | AML | 22 37 34.1 | |
| DSZ | | | | AML | AML | 22 37 37.5 | |
| THZ | Tophouse | 1.94 | 22 | PN | Pn | 22 37 07.8 | -1.8 |
| THZ | | | | AML | AML | 22 37 36.6 | |
| THZ | | | | AML | AML | 22 37 41.4 | |
| JCZ | Jackson Bay | 2.34 | 256 | ⇑PN | Pn | 22 37 14.6 | -0.7 |
| JCZ | | | | AML | AML | 22 38 01.1 | |
| WKZ | Wanaka | 2.44 | 238 | AML | AML | 22 38 02.8 | |
| EAZ | Earnscleugh | 2.51 | 227 | AML | AML | 22 38 02.2 | |
| EAZ | | | | AML | AML | 22 38 07.1 | |
| NNZ | Nelson | 2.58 | 25 | PN | Pn | 22 37 17.1 | -1.3 |
| TUZ | Tuapeka | 2.89 | 213 | PN | Pn | 22 37 21.3 | -1.4 |
| TUZ | | | | AML | AML | 22 38 14.1 | |
| TUZ | | | | AML | AML | 22 38 15.4 | |

*DDA **04** 22:44:22.4, 37.°92N×30.°75E, h19km, Md2.5*
*ISK **04** 22:44:22.6, 37.°96N×30.°99E, h5km, MD2.6*
*CSEM **04** 22:44:23.2±0.3, 37.°95N×30.°94E, h15km, MD2.6, Error ellipse: s-maj=10.0km s-min=5.1km az=87.0*
**ISC 04 22:44:22.7**±1.0**, 37.°96N**±0.°03×**30.°95E**±0.°05**, h15**km±8km**, n15, σ0.s24**/20**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BAGO** | **Egridir - ISPA** | **0.13** | **284** | P | **Pg** | **22 44 25.9** | **-0.4** |
| BAGO | | | | S | **Sg** | **22 44 29.1** | **+0.3** |
| **SUTC** | **Sutluce-Ispart** | **0.48** | **175** | *e*PG | **Pg** | **22 44 32.2** | **-0.1** |
| SUTC | | | | *e*SG | **Sb** | **22 44 40.0** | **0.0** |
| **SUTC** | **Sutluce-Ispart** | **0.48** | **175** | *e*Pg | **Pg** | **22 44 32.2** | **-0.1** |
| SUTC | | | | *e*Sg | **Sb** | **22 44 40.0** | **0.0** |
| **BCK** | **Bucak** | **0.57** | **210** | *e*PG | **Pb** | **22 44 34.7** | **+0.2** |
| **BCK** | **Bucak** | **0.57** | **210** | *e*Pg | **Pb** | **22 44 34.7** | **+0.2** |
| **SHUT** | **Suhut-Afyon** | **0.67** | **332** | *e*PG | **Pb** | **22 44 36.5** | **+0.3** |
| **SHUT** | **Suhut-Afyon** | **0.67** | **332** | *e*Pg | **Pb** | **22 44 36.5** | **+0.3** |
| **BOLV** | **Bolvadin** | **0.76** | **0** | *i* P | **Pb** | **22 44 37.8** | **+0.1** |
| BOLV | | | | *i* S | **Sn** | **22 44 50.0** | **-0.3** |
| **BOLV** | **Bolvadin** | **0.76** | **0** | P | **Pb** | **22 44 37.8** | **+0.1** |
| BOLV | | | | S | **Sn** | **22 44 50.0** | **-0.3** |
| **KONT** | **Konya--Tatoy** | **1.12** | **90** | *e*PN | **Pn** | **22 44 43.9** | **0.0** |
| **KONT** | **Konya--Tatoy** | **1.12** | **90** | *e*Pn | **Pn** | **22 44 43.9** | **0.0** |
| **KIZT** | **Kizilcal** | **1.18** | **38** | *e*PN | **Pg** | **22 44 45.3** | **0.0** |
| **KIZT** | **Kizilcal** | **1.18** | **38** | *e*Pn | **Pg** | **22 44 45.3** | **0.0** |
| **HDMB** | **Hadim** | **1.58** | **129** | *e*PN | **Pb** | **22 44 51.9** | **+0.2** |
| **HDMB** | **Hadim** | **1.58** | **129** | *e*Pn | **Pb** | **22 44 51.9** | **+0.2** |

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**IDC 04 22:47:01.7**±2.1**, 5.°51S**×**147.°30E, h174**km±37km**, mb2.8**/2**, mb1 3.1**/4**, mb1mx2.9**/26**, mbtmp3.5**/4**, Error ellipse: s-maj=108.9km s-min=17.4km az=101.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.87** | **182** | P | Pn | 22 48 02.9 | +1.9 |
| | 2.7nm,0.3s,baz=0.0,slow=13,SNR=4.4 | | | | | | |
| PMG | | | | S | Sn | 22 48 46.8 | -0.6 |
| | 4.0nm,0.3s,baz=220,slow=23,SNR=6.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.10** | **220** | P | P | 22 51 11.7 | +0.3 |
| | 0.6nm,0.3s,baz=44,slow=12,SNR=7.3 | | | | | | |
| **ASAR** | **Alice Springs** | **22.19** | **214** | P | P | 22 51 44.5 | +0.4 |
| | 0.5nm,0.4s,baz=47,slow=8.2,SNR=8.9 | | | | | | |
| ASAR | | | | S | S | 22 55 36.6 | +0.8 |
| | 0.3nm,0.3s,baz=27,slow=17,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **77.31** | **320** | P | P | 22 58 36.8 | -0.3 |
| | 0.1nm,0.2s,baz=100,slow=4.2,SNR=2.7 | | | | | | |

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**IDC 04 22:59:53.6**±2.6**, 17.°93S**×**177.°30W, h0**km**, mb3.8**/3**, mb1 4.2**/3**, mb1mx3.7**/32**, mbtmp3.8**/3**, Error ellipse: s-maj=302.4km s-min=31.2km az=159.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.67** | **259** | P | P | 23 08 16.1 | -0.5 |
| | 0.7nm,0.3s,baz=96,slow=7.5,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **45.81** | **254** | P | P | 23 08 17.7 | +0.1 |
| | 3.2nm,0.6s,baz=88,slow=8.5,SNR=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.11** | **57** | P | P | 23 12 32.0 | 0.0 |
| | 0.1nm,0.6s,baz=246,slow=6.8,SNR=2.7 | | | | | | |

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*ISCJB **04** 23:05:20.0±0.6, 40.°47N±0.°03×141.°4E±0.°1, h93km±4km, mb3.5/5, Error ellipse: s-maj=13.3km s-min=5.3km az=179.4*
*IDC **04** 23:05:20.4±2.4, 40.°43N×141.°70E, h110km±21km, mb3.3/5, mb1 3.3/7, mb1mx3.1/36, mbtmp3.6/7, Error ellipse: s-maj=37.8km s-min=19.8km az=77.0*
*JMA **04** 23:05:20.7±0.1, 40.°48N×141.°42E, h87km±1km, M3.0*
*JMA Felt I J1.*
**ISC 04 23:05:20.3**±1.0**, 40.°46N**±0.°04×**141.°39E**±0.°09**, h89**km±7km**, n24, σ1.s22**/27**, mb3.6**/5**, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JANG** | **Nango** | **0.13** | **132** | P | **Pn** | **23 05 33.0** | **0.0** |
| JANG | | | | S | **Sn** | **23 05 41.9** | **-0.5** |
| **JTM** | **Tenmabayashi** | **0.41** | **323** | P | **Pn** | **23 05 34.3** | **0.0** |
| JTM | | | | S | **Sn** | **23 05 44.4** | **-0.3** |
| **JAH** | **Hinai** | **0.64** | **245** | P | **Pn** | **23 05 36.6** | **+0.5** |
| JAH | | | | S | **Sn** | **23 05 48.5** | **+0.6** |
| **JOT** | **Ohata** | **0.96** | **344** | P | **Pn** | **23 05 39.6** | **+0.1** |
| JOT | | | | S | **Sn** | **23 05 54.1** | **+0.3** |
| **JOM** | **Ohasama** | **0.99** | **184** | P | **Pn** | **23 05 40.7** | **+0.9** |
| JOM | | | | S | **Sn** | **23 05 55.3** | **+0.9** |
| **JIW** | **Iwasaki** | **1.06** | **278** | P | **Pn** | **23 05 41.3** | **+0.6** |
| **JRG** | **Rokugo** | **1.21** | **209** | P | **Pn** | **23 05 43.7** | **+1.3** |
| **JSR** | **Shiriuchi** | **1.30** | **326** | P | **Pn** | **23 05 43.8** | **+0.3** |
| JSR | | | | S | **Sn** | **23 06 01.8** | **+0.9** |
| **JKB** | **Kayabe** | **1.45** | **349** | P | **Pn** | **23 05 45.9** | **+0.5** |
| JKB | | | | S | **Sn** | **23 06 04.9** | **+0.6** |
| **JMK** | **Ichinoseki** | **1.51** | **185** | P | **Pn** | **23 05 46.9** | **+0.8** |
| JMK | | | | *e*S | **Sn** | **23 06 06.5** | **+0.8** |
| **ASAJ** | **Asahikawa** | **3.76** | **13** | P | **Pn** | **23 06 16.4** | **+0.3** |
| | baz=180,slow=1.0 | | | | | | |
| ASAJ | | | | S | **Sn** | **23 07 02.5** | **+3.3** |
| | baz=233,slow=20 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.64** | **214** | P | **Pn** | **23 06 30.6** | **+2.6** |
| | 0.4nm,0.3s,baz=28,slow=14,SNR=4.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.91** | **301** | P | **Pn** | **23 07 14.2** | **+1.9** |
| | 0.2nm,0.3s,baz=118,slow=14,SNR=7.6 | | | | | | |
| **SONM** | **Songino Array** | **26.00** | **298** | P | **P** | **23 10 45.0** | **+0.2** |
| | 0.3nm,0.5s,baz=74,slow=8.7,SNR=2.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.04** | **126** | T | T | 23 42 20.5 | |
| | baz=318,slow=75,SNR=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.05** | **126** | T | T | 23 42 19.6 | |
| | baz=318,slow=75,SNR=13 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.06** | **126** | T | T | 23 42 23.1 | |
| | baz=318,slow=75,SNR=12 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.85** | **128** | T | T | 23 43 24.8 | |
| | baz=320,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.85** | **128** | T | T | 23 43 23.8 | |
| | baz=320,slow=74 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.87** | **128** | T | T | 23 43 25.0 | |
| | baz=320 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.66** | **309** | P | **P** | **23 12 42.8** | **-0.4** |
| | 0.9nm,0.6s,baz=98,slow=7.4,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.37** | **299** | P | **P** | **23 13 05.3** | **-0.2** |
| | 0.3nm,0.4s,baz=85,slow=9.8,SNR=5.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.95** | **305** | P | **P** | **23 13 18.0** | **-0.2** |
| | 1.5nm,0.5s,baz=81,slow=8.6,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.45** | **188** | P | **P** | **23 15 18.2** | **-2.4** |
| | 0.4nm,0.8s,baz=6.3,slow=6.9,SNR=2.9 | | | | | | |

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*ISCJB **04** 23:32:24.4±0.8, 19.°83S±0.°04×69.°1W±0.°2, h113km±13km, mb3.4/1, Error ellipse: s-maj=30.8km s-min=5.9km az=6.5*
*GUC **04** 23:32:25.5±0.3, 19.°87S×69.°06W, h93km±4km, ML3.7*
*IDC **04** 23:32:32.7±7.7, 19.°21S×69.°12W, h176km±53km, mb3.2/1, mb1 3.3/2, mb1mx2.9/17, mbtmp3.6/2, Error ellipse: s-maj=85.4km s-min=62.0km az=7.0*
**ISC 04 23:32:25.6**±1.0**, 19.°85S**±0.°04×**69.°1W**±0.°2**, h97**km±14km**, n12, σ1.s40**/16**, 1C, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNMC** | **Minimini** | **0.87** | **324** | *i* P | **Pn** | **23 32 44.6** | **-0.1** |
| MNMC | | | | *i* S | **Sn** | **23 32 59.4** | **+0.4** |
| **PB01** | **IPOC Station P** | **1.26** | **199** | ⇑*i*P | **Pn** | **23 32 48.3** | **-0.5** |
| PB01 | | | | *i* S | **Sn** | **23 33 06.0** | **-0.3** |
| **PB09** | **IPOC Station P** | **1.95** | **185** | *e*P | **Pn** | **23 32 57.8** | **+0.3** |
| PB09 | | | | *i* S | **Sn** | **23 33 22.6** | **+0.7** |
| **PB07** | **IPOC Station P** | **2.03** | **202** | *e*P | **Pn** | **23 32 57.8** | **-0.7** |
| PB07 | | | | *e*S | **Sn** | **23 33 23.2** | **-0.5** |
| PB07 | | | | IAML | | 23 33 29.3 | |
| | comp=E,629nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **2.68** | **202** | *i* P | **Pn** | **23 33 07.9** | **+0.8** |
| PB04 | | | | *e*S | **Sn** | **23 33 40.1** | **+1.1** |
| PB04 | | | | IAML | | 23 33 49.0 | |
| | comp=N,274nm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **2.89** | **189** | *e*P | **Pn** | **23 33 10.8** | **+0.9** |
| PB06 | | | | *e*S | **Sn** | **23 33 45.3** | **+1.3** |
| PB06 | | | | IAML | | 23 33 48.4 | |
| | comp=N,195nm,1.0s | | | | | | |
| **LPAZ** | **La Paz** | **3.65** | **14** | P | **Pn** | **23 33 22.6** | **+2.0** |
| | comp=N,3.3nm,0.3s,baz=190,slow=7.6,SNR=88 | | | | | | |
| LPAZ | | | | S | **Sn** | **23 34 01.7** | **-1.2** |
| | baz=235,slow=16,SNR=1.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.94** | **71** | P | **P** | **23 44 05.5** | **-2.6** |
| | comp=N,0.3nm,0.4s,baz=256,slow=5.2,SNR=19 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **127.52** | **278** | T | T | 02 11 07.1 | |
| | baz=102 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **127.52** | **278** | T | T | 02 11 05.3 | |
| | baz=102 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **127.53** | **278** | T | T | 02 11 06.0 | |
| | baz=102 | | | | | | |
| **SONM** | **Songino Array** | **151.84** | **6** | PKPbc | **PKPdf** | **23 52 05.0** | **+2.2** |
| | comp=N,0.3nm,0.5s,baz=326,slow=1.5,SNR=3.0 | | | | | | |

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*IDC **04** 23:44:23.5±1.2, 10.°75S×120.°79E, h0km, mb3.7/3, mb1 3.7/4, mb1mx3.5/18, mbtmp3.6/4, Error ellipse: s-maj=99.7km s-min=32.1km az=62.0*
*DJA **04** 23:44:30.2±1.1, 11°S±9°×12°0E±°, h25km±10km, M4.2/7, mb5.0/1, MLv3.8/7*
**ISC 04 23:44:27.5**±1.0**, 11.°1S**±0.°1×**120.°5E**±0.°1**, h35**km**, n11, σ2.s02**/13**, mb3.9**/3**, South of Sumba**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BASI** | **Baing, Sumba** | **0.83** | **5** | P | **Pn** | **23 44 43.0** | **+0.3** |
| **WSI** | **Waingapu** | **1.38** | **352** | P | **Pn** | **23 44 51.0** | **+0.7** |
| **WBSI** | **Waikabubak, Su** | **1.77** | **322** | P | **Pn** | **23 44 55.3** | **-0.4** |
| WBSI | | | | S | **Sn** | **23 45 13.9** | **-3.2** |
| **BSSI** | **Bau Bau, Buton** | **4.87** | **360** | P | **Pn** | **23 45 38.6** | **+0.2** |
| **WRA** | **Warramunga Arr** | **15.99** | **125** | Pn | **Pn** | **23 48 10.9** | **+0.9** |
| | baz=299,slow=13,SNR=2.5 | | | | | | |
| WRA | | | | Sn | **Sn** | **23 51 02.8** | **-3.5** |
| | 0.2nm,0.3s,baz=303,slow=23,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **17.90** | **136** | P | P | 23 48 40.2 | +6.0 |
| | 0.1nm,0.3s,baz=311,slow=12,SNR=14 | | | | | | |
| ASAR | | | | S | **Sn** | **23 51 50.4** | **-2.2** |
| | 0.1nm,0.3s,baz=310,slow=23,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **59.95** | **349** | P | **P** | **23 54 29.8** | **-0.5** |
| | 0.6nm,0.6s,baz=168,slow=7.6,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.94** | **332** | P | **P** | **23 55 16.9** | **+0.5** |
| | 0.1nm,0.3s,baz=148,slow=6.8,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.47** | **339** | P | **P** | **23 55 44.9** | **+0.6** |
| | 0.6nm,0.4s,baz=131,slow=4.4,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.25** | **279** | PKP | **PKPdf** | **00 03 19.2** | **+3.3** |
| | 0.3nm,1.1s,baz=29,slow=3.3,SNR=3.2 | | | | | | |
| **LPAZ** | **La Paz** | **151.53** | **162** | PKPbc | **PKPbc** | **00 04 20.4** | **+0.6** |
| | 1.2nm,0.3s,baz=225,slow=1.2,SNR=6.9 | | | | | | |

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*SJA **04** 23:44:49.5±0.5, 24.°22S×67.°07W, h204km±7km, ML2.8*
*ISCJB **04** 23:44:50.8±0.5, 24.°18S±0.°05×67.°15W±0.°04, h181km, mb2.9/1, Error ellipse: s-maj=7.9km s-min=4.5km az=33.2*
*IDC **04** 23:44:50.4±1.6, 24.°28S×66.°90W, h174km±17km, mb3.0/1, mb1 3.1/4, mb1mx3.0/21, mbtmp3.6/4, Error ellipse: s-maj=30.2km s-min=20.8km az=117.0*
*GUC **04** 23:44:53.0±0.3, 24.°04S×67.°61W, h220km, ML4.2*
**ISC 04 23:44:50.2**±0.9**, 24.°21S**±0.°06×**67.°12W**±0.°05**, h181**km**, n21, σ1.s60**/32**, 5C-1D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.56** | **109** | *e*P | **Pn** | **23 45 24.6** | **+1.6** |
| SLA | | | | *e*S | **Sn** | **23 45 50.2** | **+1.9** |
| SLA | | | | AML | AML | 23 45 51.3 | |
| | comp=Z,24nm,0.7s | | | | | | |
| **HJA** | **Humahuaca** | **1.85** | **58** | *e*P | **Pn** | **23 45 27.8** | **+1.5** |
| **AZAP** | **Zapla** | **1.87** | **91** | *e*P | **Pn** | **23 45 27.4** | **+1.1** |
| AZAP | | | | AML | AML | 23 45 57.7 | |
| | comp=Z,32nm,0.6s | | | | | | |
| **FSA** | **Cafayete** | **2.12** | **152** | *e*P | **Pn** | **23 45 30.5** | **+1.5** |
| FSA | | | | AML | AML | 23 46 00.8 | |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **LVC** | **Limon Verde** | **2.29** | **314** | P | **Pn** | **23 45 32.9** | **+2.0** |
| | comp=Z,544nm,0.3s,baz=118,slow=8.2,SNR=138 | | | | | | |
| LVC | | | | S | **Sn** | **23 46 03.6** | **+1.2** |
| | comp=Z,1μm,0.3s,baz=189,slow=3.9,SNR=44 | | | | | | |
| **LVC** | **Limon Verde** | **2.29** | **314** | *e*P | **Pn** | **23 45 32.7** | **+1.8** |
| LVC | | | | AML | AML | 23 46 08.7 | |
| | comp=Z,921nm,0.1s | | | | | | |
| **ASTB** | **Santa Barbara** | **2.42** | **84** | *e*P | **Pn** | **23 45 33.5** | **+1.2** |
| **YJA** | **Yavi** | **2.50** | **36** | *e*P | **Pn** | **23 45 35.4** | **+1.8** |
| **PB06** | **IPOC Station P** | **2.71** | **303** | ⇑*i*P | **Pn** | **23 45 37.2** | **+1.6** |
| PB06 | | | | ⇑*i*P | **Pn** | **23 45 37.2** | **+1.6** |
| PB06 | | | | *i* S | **Sn** | **23 46 10.8** | **0.0** |
| PB06 | | | | AML | AML | 23 46 12.3 | |
| | comp=E,733nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **3.10** | **320** | ⇑*i*P | **Pn** | **23 45 42.2** | **+1.8** |
| PB09 | | | | *i* S | **Sn** | **23 46 19.8** | **+0.4** |
| PB09 | | | | AML | AML | 23 46 21.5 | |
| | comp=N,618nm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **3.36** | **303** | ⇓*i*P | **Pn** | **23 45 44.6** | **+1.1** |
| PB04 | | | | *i* S | **Sn** | **23 46 23.6** | **-1.4** |
| PB04 | | | | AML | AML | 23 46 26.4 | |
| | comp=E,267nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **3.55** | **314** | ⇑*i*P | **Pn** | **23 45 46.8** | **+0.8** |
| PB07 | | | | *i* S | **Sn** | **23 46 27.7** | **-1.8** |
| PB07 | | | | AML | AML | 23 46 29.6 | |
| | comp=E,301nm,0.7s | | | | | | |
| **PB01** | **IPOC Station P** | **3.84** | **325** | ⇑*i*P | **Pn** | **23 45 49.9** | **+0.4** |
| PB01 | | | | *i* S | **Sn** | **23 46 34.5** | **-1.3** |
| PB01 | | | | AML | AML | 23 46 37.2 | |
| | comp=E,120nm,0.2s | | | | | | |
| **CFAA** | **Coronel Fontan** | **7.43** | **187** | P | **Pn** | **23 46 36.0** | **-0.1** |
| | comp=E,0.0nm,0.3s,baz=6.3,slow=9.2,SNR=2.2 | | | | | | |
| CFAA | | | | S | **Sn** | **23 47 55.6** | **-4.3** |
| | comp=E,0.1nm,0.3s,baz=282,slow=19,SNR=6.9 | | | | | | |
| **LPAZ** | **La Paz** | **7.94** | **353** | P | **Pn** | **23 46 44.3** | **+0.9** |
| | comp=E,0.7nm,0.3s,baz=156,slow=7.0,SNR=18 | | | | | | |
| LPAZ | | | | S | **Sn** | **23 48 10.1** | **-2.8** |
| | comp=E,0.1nm,0.3s,baz=234,slow=18,SNR=2.5 | | | | | | |
| **SIV** | **San Ignacio** | **9.95** | **36** | P | **Pn** | **23 47 09.0** | **-0.3** |
| | comp=E,0.4nm,0.3s,baz=234,slow=13,SNR=6.2 | | | | | | |
| SIV | | | | S | **Sn** | **23 49 00.2** | **+0.1** |
| | comp=E,0.1nm,0.3s,baz=305,slow=18,SNR=2.4 | | | | | | |
| **BDFB** | **Brasilia** | **19.86** | **68** | P | **P** | **23 49 06.7** | **-1.0** |
| | comp=E,0.3nm,0.3s,baz=216,slow=9.3,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.74** | **69** | P | **P** | **23 56 21.6** | **-0.4** |
| | comp=E,0.3nm,0.9s,baz=256,slow=5.8,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **128.22** | **205** | PKP | **PKPdf** | **00 03 35.5** | **-0.3** |
| | comp=E,0.1nm,0.4s,baz=168,slow=2.1,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.39** | **207** | PKP | **PKPdf** | **00 03 43.3** | **+1.5** |
| | comp=E,0.5nm,0.9s,baz=166,slow=1.6,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.75** | **40** | PKPbc | **PKPab** | **00 04 11.8** | **-0.7** |
| | comp=E,0.1nm,0.4s,baz=310,slow=4.2,SNR=2.7 | | | | | | |

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*IDC **05** 00:22:18.4±0.7, 14.°84S×75.°96W, h0km, mb4.2/11, mb1 4.3/15, mb1mx4.2/34, mbtmp4.2/15, ML3.2/3, MS4.2/13, Ms1 4.1/13, ms1mx4.0/21, Error ellipse: s-maj=23.1km s-min=15.5km az=62.0*
*ISCJB **05** 00:22:20.5±0.3, 14.°80S±0.°05×75.°87W±0.°06, h28km, mb4.8/34, MS4.2/11, Error ellipse: s-maj=9.7km s-min=5.3km az=143.6*
*BJI **05** 00:22:20.1, 15.°78S×76.°42W, h31km, mB5.2/4, Ms5.3/3, Ms7 5.0/3*
*NEIC **05** 00:22:23.8±0.4, 14.°80S×76.°00W, h35km, mb4.9/20, ML4.6(ARE), Error ellipse: s-maj=11.4km s-min=7.2km az=52.0*
*NEIC Felt [II] at Ica.*
**ISC 05 00:22:22.4**±0.4**, 14.°84S**±0.°06×**75.°73W**±0.°06**, h28**km**, n168, σ1.s23**/158**, mb4.9**/33**, MS4.2**/11**, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARE** | **Arequipa** | **4.38** | **112** | *e*P | Pb | 00 23 34.0 | -4.9 |
| ARE | | | | *e*S | **Sb** | **00 24 32.0** | **+0.5** |
| **LPAZ** | **La Paz** | **7.46** | **102** | Pn | Pn | 00 24 16.9 | +6.9 |
| | 2.2nm,0.3s,baz=280,slow=6.6,SNR=41 | | | | | | |
| LPAZ | | | | Sn | **Sb** | **00 25 56.4** | **-3.8** |
| | baz=283,slow=19,SNR=1.6 | | | | | | |
| LPAZ | | | | LR | LR | 00 27 51.8 | |
| | comp=Z,847nm,19.2s,baz=278,slow=43 | | | | | | |
| **LPAZ** | **La Paz** | **7.46** | **102** | *e*Pn | Pn | 00 24 16.4 | +6.5 |
| LPAZ | | | | *e*Sn | **Sn** | **00 25 33.9** | **0.0** |
| LPAZ | | | | Sn | **Sb** | **00 25 56.4** | **-3.8** |
| **LVC** | **Limon Verde** | **10.07** | **141** | Pn | **Pn** | **00 24 46.9** | **+1.5** |
| | 83nm,0.3s,baz=322,slow=9.5,SNR=17 | | | | | | |
| LVC | | | | Sn | **Sn** | **00 26 37.9** | **+0.3** |
| | 73nm,0.3s,baz=107,slow=18,SNR=6.3 | | | | | | |
| LVC | | | | Lg | Lg | 00 27 38.3 | |
| | 40nm,0.3s,baz=131,slow=17,SNR=8.9 | | | | | | |
| **LVC** | **Limon Verde** | **10.07** | **141** | *e*Pn | **Pn** | **00 24 47.2** | **+1.8** |
| LVC | | | | *e*Sn | **Sn** | **00 26 34.9** | **-2.7** |
| LVC | | | | Lg | Lg | 00 27 38.3 | |
| **SAML** | **Samuel** | **13.60** | **66** | *e*Pn | **Pn** | **00 25 34.8** | **+1.3** |
| SAML | | | | *e*Sn | **Sn** | **00 28 00.7** | **-3.0** |
| **SIV** | **San Ignacio** | **14.18** | **97** | Pn | **Pn** | **00 25 41.7** | **+0.3** |
| | 0.3nm,0.3s,baz=272,slow=11,SNR=3.5 | | | | | | |
| **OTAV** | **Otavalo** | **15.22** | **350** | *e*Pn | **Pn** | **00 25 54.7** | **-1.3** |
| | 20nm,1.1s | | | | | | |
| **CFAA** | **Coronel Fontan** | **18.04** | **159** | P | **Pn** | **00 26 29.9** | **-1.2** |
| | 0.1nm,0.3s,baz=332,slow=10,SNR=17 | | | | | | |
| **ROSC** | **El Rosal** | **19.62** | **4** | P | **P** | **00 26 47.3** | **-1.9** |
| | 0.4nm,0.3s,baz=270,slow=20,SNR=1.8 | | | | | | |
| ROSC | | | | LR | LR | 00 35 53.0 | |
| | comp=Z,704nm,18.7s,baz=200,slow=42 | | | | | | |
| **CPUP** | **Villa Florida** | **20.64** | **127** | P | Pn | 00 27 02.5 | +0.3 |
| | 2.6nm,0.9s,baz=294,slow=13,SNR=5.2 | | | | | | |
| CPUP | | | | LR | LR | 00 36 28.1 | |
| | comp=Z,160nm,19.7s,baz=299,slow=41 | | | | | | |
| **CPUP** | **Villa Florida** | **20.64** | **127** | *e*P | Pn | 00 27 05.5 | +3.3 |
| **PTGA** | **Pitinga** | **20.95** | **49** | P | Pn | 00 27 05.2 | -0.8 |
| | 13nm,0.8s,baz=221,slow=11,SNR=25 | | | | | | |
| **PTGA** | **Pitinga** | **20.95** | **49** | *e*P | Pn | 00 27 05.2 | -0.8 |
| | 18nm,0.9s | | | | | | |
| **SDV** | **Santo Domingo** | **24.11** | **12** | *e*P | **P** | **00 27 37.6** | **+1.5** |
| | 24nm,1.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **24.20** | **350** | *e*P | **P** | **00 27 37.7** | **+1.0** |
| | 197nm,1.9s | | | | | | |
| **TRQA** | **Tornquist** | **26.13** | **155** | *e*P | **P** | **00 27 53.4** | **-0.7** |
| | 29nm,1.7s | | | | | | |
| **BDFB** | **Brasilia** | **26.74** | **95** | P | **P** | **00 28 02.3** | **+2.3** |
| | 1.9nm,0.5s,baz=268,slow=13,SNR=3.8 | | | | | | |
| BDFB | | | | LR | LR | 00 39 58.0 | |
| | comp=Z,643nm,20.4s,baz=264,slow=39 | | | | | | |
| **BDFB** | **Brasilia** | **26.74** | **95** | *e*P | **P** | **00 28 01.8** | **+1.8** |
| | 40nm,1.7s | | | | | | |
| **OBIP** | **Obispado Ponce** | **33.89** | **16** | *e*P | **P** | **00 29 00.9** | **-2.0** |
| | 208nm,2.5s | | | | | | |
| **MPR** | **Mayaguez** | **33.92** | **15** | *e*P | **P** | **00 29 03.0** | **-0.1** |
| | 35nm,1.4s | | | | | | |
| **CELP** | **Cerrillos** | **33.93** | **16** | *e*P | **P** | **00 29 02.5** | **-0.8** |
| **HUMP** | **Col San Antoni** | **34.19** | **17** | *e*P | **P** | **00 29 04.0** | **-1.6** |
| | 48nm,1.5s | | | | | | |
| **USHA** | **Ushuaia** | **40.31** | **173** | P | **P** | **00 29 57.2** | **+0.2** |
| | 4.3nm,0.8s,baz=0.0,slow=10,SNR=4.2 | | | | | | |
| **736A** | **Circle Diamond** | **48.18** | **335** | P | **P** | **00 31 01.0** | **+0.6** |
| | baz=48 | | | | | | |
| **636A** | **Smothers Creek** | **48.64** | **335** | P | **P** | **00 31 05.1** | **+1.2** |
| | baz=49 | | | | | | |
| **732A** | **Laxson Ranch,** | **49.26** | **332** | P | **P** | **00 31 09.2** | **+0.5** |
| | baz=49 | | | | | | |
| **632A** | **Uvalde** | **49.83** | **332** | P | **P** | **00 31 13.2** | **+0.1** |
| | baz=50 | | | | | | |
| **631A** | **Perdido Creek** | **50.11** | **331** | P | **P** | **00 31 15.1** | **-0.2** |
| | baz=50 | | | | | | |
| **532A** | **Rocksprings** | **50.42** | **333** | P | **P** | **00 31 17.0** | **-0.6** |
| | baz=50 | | | | | | |
| **138A** | **Matatall Enter** | **50.74** | **339** | P | **P** | **00 31 20.4** | **+0.6** |
| | baz=51 | | | | | | |
| **531A** | **Rocksprings** | **50.74** | **332** | P | **P** | **00 31 20.0** | **+0.1** |
| | baz=51 | | | | | | |
| **137A** | **Heron Place, G** | **50.92** | **338** | P | **P** | **00 31 22.2** | **+1.0** |
| | baz=51 | | | | | | |
| **333A** | **Richland Sprin** | **51.05** | **334** | P | **P** | **00 31 21.4** | **-0.9** |
| | baz=51 | | | | | | |
| **431A** | **Sonora** | **51.20** | **332** | P | **P** | **00 31 23.3** | **-0.1** |
| | baz=51 | | | | | | |
| **332A** | **Millersview** | **51.42** | **334** | P | **P** | **00 31 24.4** | **-0.7** |
| | baz=52 | | | | | | |
| **529A** | **Stev Forest Ra** | **51.48** | **330** | P | **P** | **00 31 24.3** | **-1.3** |
| | baz=52,SNR=5.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **51.54** | **329** | P | **P** | **00 31 25.6** | **-0.6** |
| | 0.8nm,0.7s,baz=153,slow=8.7,SNR=11 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **51.55** | **328** | *e*P | **P** | **00 31 25.2** | **-0.9** |
| **430A** | **Baggett Ranch,** | **51.58** | **332** | P | **P** | **00 31 25.7** | **-0.6** |
| | baz=52 | | | | | | |
| **233A** | **Rising Star** | **51.62** | **335** | P | **P** | **00 31 26.0** | **-0.5** |
| | baz=52 | | | | | | |
| **331A** | **San Angelo** | **51.66** | **333** | P | **P** | **00 31 26.3** | **-0.5** |
| | baz=52 | | | | | | |
| **429A** | **Davenport Ranc** | **51.75** | **331** | P | **P** | **00 31 28.2** | **+0.7** |
| | baz=52 | | | | | | |
| **134A** | **White-Moore Ra** | **51.77** | **336** | P | **P** | **00 31 27.8** | **+0.2** |
| | baz=52 | | | | | | |
| **232A** | **Coleman** | **51.82** | **334** | P | **P** | **00 31 27.5** | **-0.6** |
| | baz=52 | | | | | | |
| **PTCN** | **Pitcairn Islan** | **51.82** | **250** | *e*P | **P** | **00 31 25.4** | **-2.9** |
| | 304nm,0.7s | | | | | | |
| **MIAR** | **Mount Ida** | **51.96** | **341** | P | **P** | **00 31 28.9** | **-0.1** |
| | baz=52 | | | | | | |
| **MIAR** | **Mount Ida** | **51.96** | **341** | *e*P | **P** | **00 31 28.7** | **-0.3** |
| | 65nm,2.1s | | | | | | |
| **133A** | **Hamilton Ranch** | **52.14** | **335** | P | **P** | **00 31 30.9** | **+0.6** |
| | baz=52 | | | | | | |
| **Y36A** | **Durant** | **52.28** | **338** | P | **P** | **00 31 31.7** | **+0.4** |
| | baz=52 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **52.45** | **334** | P | **P** | **00 31 32.8** | **+0.1** |
| | baz=52 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **52.45** | **334** | *e*P | **P** | **00 31 31.5** | **-1.3** |
| | 5.3nm,0.7s | | | | | | |
| **X38A** | **Whitesboro** | **52.48** | **340** | P | **P** | **00 31 33.1** | **+0.2** |
| | baz=53 | | | | | | |
| **X37A** | **Clayton** | **52.59** | **340** | P | **P** | **00 31 33.5** | **-0.1** |
| | baz=53,SNR=9.6 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **52.67** | **336** | P | **P** | **00 31 34.5** | **+0.2** |
| | baz=53 | | | | | | |
| **W38A** | **Poteau** | **52.75** | **341** | P | **P** | **00 31 35.1** | **+0.3** |
| | baz=53 | | | | | | |
| **131A** | **Roby** | **52.81** | **334** | P | **P** | **00 31 35.4** | **0.0** |
| | baz=53 | | | | | | |
| **X35A** | **Drake** | **52.98** | **338** | P | **P** | **00 31 36.0** | **-0.6** |
| | baz=53 | | | | | | |
| **130A** | **Snyder** | **52.99** | **333** | P | **P** | **00 31 36.0** | **-0.7** |
| | baz=53 | | | | | | |
| **W37A** | **Quinton** | **53.11** | **340** | P | **P** | **00 31 36.6** | **-0.9** |
| | baz=53,SNR=5.6 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **53.26** | **334** | P | **P** | **00 31 37.8** | **-0.9** |
| | baz=53,SNR=5.7 | | | | | | |
| **W36A** | **Wetumka** | **53.38** | **339** | P | **P** | **00 31 38.5** | **-0.9** |
| | baz=54 | | | | | | |
| **V38A** | **Canehill** | **53.44** | **341** | P | **P** | **00 31 39.0** | **-0.9** |
| | baz=54,SNR=6.3 | | | | | | |
| **X34A** | **Smith Ranch, M** | **53.47** | **337** | P | **P** | **00 31 39.3** | **-1.0** |
| | baz=54,SNR=5.2 | | | | | | |
| **W35A** | **Tecumseh** | **53.62** | **338** | P | **P** | **00 31 40.4** | **-0.9** |
| | baz=54 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **53.65** | **334** | P | **P** | **00 31 40.5** | **-1.1** |
| | baz=54,SNR=9.4 | | | | | | |
| **128A** | **Castleberry Fa** | **53.69** | **332** | P | **P** | **00 31 40.9** | **-1.1** |
| | baz=54 | | | | | | |
| **V37A** | **Hulbert** | **53.69** | **340** | P | **P** | **00 31 41.2** | **-0.5** |
| | baz=54 | | | | | | |
| **WCI** | **Wyandotte Cave** | **53.71** | **350** | *e*P | **P** | **00 31 40.6** | **-1.3** |
| | 65nm,0.8s | | | | | | |
| **V36A** | **Jenks** | **53.87** | **340** | P | **P** | **00 31 42.6** | **-0.4** |
| | baz=54 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **53.87** | **335** | P | **P** | **00 31 42.5** | **-0.7** |
| | baz=54 | | | | | | |
| **TUL1** | **Tulsa** | **53.93** | **340** | P | **P** | **00 31 42.2** | **-1.3** |
| | baz=54,SNR=6.7 | | | | | | |
| **TUL1** | **Tulsa** | **53.93** | **340** | *e*P | **P** | **00 31 41.7** | **-1.8** |
| | 17nm,0.7s | | | | | | |
| **U38A** | **Gravette** | **53.96** | **341** | P | **P** | **00 31 43.0** | **-0.8** |
| | baz=54 | | | | | | |
| **Y30A** | **Stafford Cattl** | **54.06** | **334** | P | **P** | **00 31 43.8** | **-0.8** |
| | baz=54 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **54.15** | **339** | P | **P** | **00 31 44.3** | **-0.8** |
| | baz=54 | | | | | | |
| **U37A** | **Salina** | **54.16** | **341** | P | **P** | **00 31 44.8** | **-0.4** |
| | baz=54 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **54.20** | **337** | P | **P** | **00 31 45.7** | **+0.1** |
| | baz=54 | | | | | | |
| **X31A** | **McDonald Ranch** | **54.33** | **335** | P | **P** | **00 31 46.3** | **-0.2** |
| | baz=54 | | | | | | |
| **W32A** | **Sentinel** | **54.48** | **336** | P | **P** | **00 31 47.1** | **-0.5** |
| | baz=55 | | | | | | |
| **OLIL** | **Olney** | **54.54** | **348** | *e*P | **P** | **00 31 47.1** | **-0.8** |
| | 18nm,0.7s | | | | | | |
| **V33A** | **Lossen Ranch,** | **54.73** | **338** | P | **P** | **00 31 48.5** | **-0.8** |
| | baz=55 | | | | | | |
| **T37A** | **Cheneyville 18** | **54.76** | **341** | P | **P** | **00 31 48.9** | **-0.6** |
| | baz=55,SNR=5.3 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **55.01** | **340** | P | **P** | **00 31 51.4** | **+0.1** |
| | baz=55 | | | | | | |
| **T35A** | **Sooner Cattle** | **55.09** | **340** | P | **P** | **00 31 51.6** | **-0.3** |
| | baz=55 | | | | | | |
| **S37A** | **Fort Scott** | **55.32** | **342** | P | **P** | **00 31 53.2** | **-0.3** |
| | baz=56 | | | | | | |
| **T34A** | **McClaskey Farm** | **55.41** | **339** | P | **P** | **00 31 53.5** | **-0.7** |
| | baz=56 | | | | | | |
| **S36A** | **Lake Cedric, C** | **55.52** | **341** | P | **P** | **00 31 54.3** | **-0.7** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=56 | | | | | | |
| S35A | Otter Creek Ra | 55.72 | 340 | P | P | 00 31 55.8 | -0.6 |
| | baz=56 | | | | | | |
| R37A | Teagarden Farm | 55.83 | 342 | P | P | 00 31 56.6 | -0.6 |
| | baz=56 | | | | | | |
| R35A | Emporia Munici | 56.26 | 341 | P | P | 00 32 00.3 | 0.0 |
| | baz=56 | | | | | | |
| RKT | Rikitea | 56.32 | 252 | eLR | LR | 00 48 36.2 | |
| | 267nm,28.5s | | | | | | |
| RKT | Rikitea | 56.32 | 252 | eT | T | 01 32 20.6 | |
| | 6.1nm,0.2s | | | | | | |
| T31A | Randall Ranch, | 56.38 | 337 | P | P | 00 32 00.4 | -0.7 |
| | baz=56 | | | | | | |
| Q34A | Chapman | 57.05 | 340 | P | P | 00 32 05.6 | -0.3 |
| | baz=57 | | | | | | |
| P36A | Good Intent, A | 57.15 | 342 | P | P | 00 32 06.3 | -0.3 |
| | baz=57 | | | | | | |
| P35A | Duane Minner, | 57.31 | 341 | P | P | 00 32 07.2 | -0.6 |
| | baz=57 | | | | | | |
| P34A | Walnut Farm, R | 57.58 | 341 | P | P | 00 32 09.1 | -0.5 |
| | baz=58 | | | | | | |
| R26A | Arlington | 58.91 | 335 | P | P | 00 32 20.1 | +1.0 |
| | baz=59 | | | | | | |
| SDCO | Great Sand Dun | 59.32 | 333 | P | P | 00 32 22.0 | -0.2 |
| | baz=59 | | | | | | |
| SDCO | Great Sand Dun | 59.32 | 333 | eP | P | 00 32 21.2 | -0.9 |
| | 51nm,2.6s | | | | | | |
| S22A | 4UR Ranch, Cre | 59.92 | 332 | P | P | 00 32 26.1 | -0.3 |
| | baz=60 | | | | | | |
| P26A | Davis Ranch, A | 59.94 | 336 | P | P | 00 32 27.5 | +1.3 |
| | baz=60 | | | | | | |
| ECSD | EROS Data Cent | 61.34 | 343 | P | P | 00 32 34.9 | -0.7 |
| | baz=62 | | | | | | |
| ECSD | EROS Data Cent | 61.34 | 343 | eP | P | 00 32 34.5 | -1.0 |
| | 93nm,2.8s | | | | | | |
| PV10 | Paradox Valley | 61.46 | 331 | eP | P | 00 32 34.6 | -2.1 |
| SPMN | St. Paul | 61.76 | 346 | P | P | 00 32 38.0 | -0.2 |
| | baz=62 | | | | | | |
| F36A | Milaca | 62.53 | 346 | P | P | 00 32 43.5 | +0.1 |
| | baz=63 | | | | | | |
| K22A | Casper | 63.83 | 335 | P | P | 00 32 51.3 | -1.1 |
| | baz=64 | | | | | | |
| I25A | Rochford | 63.92 | 338 | P | P | 00 32 53.5 | +0.6 |
| | baz=64 | | | | | | |
| C36A | Pine Crest Far | 64.17 | 347 | P | P | 00 32 54.4 | +0.1 |
| | baz=64 | | | | | | |
| DUG | Dugway | 64.71 | 329 | P | P | 00 32 58.3 | +0.2 |
| | baz=65 | | | | | | |
| DUG | Dugway | 64.71 | 329 | eP | P | 00 32 58.4 | +0.2 |
| | 4.0nm,0.8s | | | | | | |
| TCUT | Toone Canyon | 64.74 | 331 | eP | P | 00 32 59.9 | +1.4 |
| | 5.5nm,0.7s | | | | | | |
| R11A | Troy Canyon, C | 64.76 | 326 | P | P | 00 32 59.0 | +0.4 |
| | baz=65 | | | | | | |
| F26A | Lodgepole | 65.14 | 340 | P | P | 00 33 00.7 | 0.0 |
| | baz=65 | | | | | | |
| HWUT | Hardware Ranch | 65.20 | 331 | eP | P | 00 33 01.3 | 0.0 |
| | 37nm,2.2s | | | | | | |
| B34A | Aery, Baudette | 65.26 | 346 | P | P | 00 33 01.2 | -0.1 |
| | baz=65 | | | | | | |
| AGMN | Agassiz Nation | 65.37 | 345 | P | P | 00 33 02.0 | -0.1 |
| | baz=66 | | | | | | |
| DRLN | Deer Lake | 65.82 | 13 | eP | P | 00 33 06.3 | +1.3 |
| | 380nm,2.6s | | | | | | |
| NVAR | Mina Array Bea | 66.31 | 325 | P | P | 00 33 08.9 | +0.2 |
| | 0.9nm,0.7s,baz=144,slow=5.9,SNR=5.7 | | | | | | |
| ULM | Lac du Bonnet | 67.19 | 346 | P | P | 00 33 12.8 | -0.9 |
| | 4.0nm,0.8s,baz=149,slow=4.9,SNR=4.2 | | | | | | |
| HLID | Hailey | 68.04 | 331 | P | P | 00 33 20.2 | +0.7 |
| | baz=68 | | | | | | |
| HLID | Hailey | 68.04 | 331 | eP | P | 00 33 20.2 | +0.7 |
| | 2.2nm,0.8s | | | | | | |
| MFID | Camas Ranch | 68.61 | 330 | eP | P | 00 33 23.8 | +0.8 |
| | 3.7nm,0.8s | | | | | | |
| VNA2 | Neumayer--Watz | 69.04 | 161 | P | P | 00 33 25.7 | +0.6 |
| | baz=290,slow=6.9 | | | | | | |
| TBI | Tubuai | 69.56 | 250 | eLR | LR | 00 54 24.5 | |
| | 172nm,24.5s | | | | | | |
| SCHQ | Schefferville | 69.81 | 5 | LR | LR | 01 06 31.9 | |
| | comp=Z,73nm,19.0s,baz=86,slow=38 | | | | | | |
| TIAR | Tiarei | 70.34 | 256 | eT | T | 01 49 54.1 | |
| | 3.7nm,0.2s | | | | | | |
| N02D | Trinity Center | 70.53 | 324 | P | P | 00 33 35.3 | +0.4 |
| | baz=70 | | | | | | |
| PPT2 | Papeete2 | 70.55 | 256 | eLR | LR | 00 54 52.1 | |
| | 98nm,24.0s | | | | | | |
| PPT | Papeete | 70.55 | 256 | LR | LR | 00 57 04.5 | |
| | comp=Z,78nm,18.5s,baz=282,slow=30 | | | | | | |
| SNAA | Sanae | 70.64 | 161 | P | P | 00 33 35.5 | +0.4 |
| F10A | Beach Ranch, E | 71.18 | 331 | eP | P | 00 33 39.7 | +1.1 |
| | 50nm,2.1s | | | | | | |
| I05D | Terrebonne, OR | 72.06 | 327 | P | P | 00 33 45.2 | +1.2 |
| | baz=72 | | | | | | |
| LIC | Lamto | 73.12 | 79 | eP | P | 00 33 53.5 | +2.6 |
| | 29nm,1.1s | | | | | | |
| TIC | Toumodi | 73.25 | 78 | eP | P | 00 33 54.1 | +2.4 |
| DBIC | Dimbokro | 73.41 | 78 | LR | LR | 01 04 31.8 | |
| | comp=Z,327nm,19.7s,baz=225,slow=34 | | | | | | |
| KIC | Kosan Boka | 73.43 | 79 | eP | P | 00 33 54.1 | +1.4 |
| | 149nm,2.1s | | | | | | |
| QSPA | South Pole Qui | 75.31 | 180 | eP | P | 00 34 03.7 | +0.8 |
| | 14nm,1.4s | | | | | | |
| RAR | Rarotonga | 79.33 | 251 | LR | LR | 01 00 29.2 | |
| | comp=Z,579nm,18.1s,baz=166,slow=29 | | | | | | |
| TOA0 | Torodi Ar. Sit | 81.51 | 74 | eP | P | 00 34 39.2 | +1.3 |
| TOA0 | Torodi Ar. Sit | 81.51 | 74 | eP | P | 00 34 39.8 | +1.9 |
| TORD | Torodi Ar. Bea | 81.51 | 74 | P | P | 00 34 39.7 | +1.8 |
| | 9.1nm,0.7s,baz=257,slow=4.9,SNR=51 | | | | | | |
| TORD | | | | LR | LR | 01 08 44.7 | |
| | comp=Z,223nm,21.9s,baz=15,slow=34 | | | | | | |
| VNDA | Vanda | 82.20 | 191 | P | P | 00 34 41.2 | +0.8 |
| | 1.2nm,0.8s,baz=104,slow=2.3,SNR=8.0 | | | | | | |
| VNDA | | | | LR | LR | 01 06 08.8 | |
| | comp=Z,91nm,19.6s,baz=112,slow=32 | | | | | | |
| DLBC | Dease Lake | 85.39 | 335 | P | P | 00 34 57.5 | +0.6 |
| | 2.8nm,0.7s,baz=169,slow=6.0 | | | | | | |
| ESDC | Sonseca Array | 85.89 | 47 | P | P | 00 35 02.1 | +2.2 |
| | 1.5nm,0.7s,baz=257,slow=5.3,SNR=11 | | | | | | |
| ESDC | | | | LR | LR | 01 11 03.9 | |
| | comp=Z,123nm,19.1s,baz=210,slow=34 | | | | | | |
| ES19 | SONSECA Array | 85.94 | 47 | eP | P | 00 35 02.1 | +2.0 |
| MAW | Mawson | 92.45 | 165 | LR | LR | 01 13 55.0 | |
| | comp=Z,105nm,21.9s,baz=240,slow=34 | | | | | | |
| KEST | Kesra | 94.61 | 54 | LR | LR | 01 18 42.5 | |
| | comp=Z,77nm,19.5s,baz=270,slow=36 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 120.28 | 284 | T | T | 02 52 26.5 | |
| | baz=97,slow=74,SNR=72 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 120.29 | 284 | T | T | 02 52 27.6 | |
| | baz=97,slow=74,SNR=57 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 120.29 | 284 | T | T | 02 52 25.6 | |
| | baz=97,slow=74,SNR=69 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 120.33 | 283 | T | T | 02 52 32.9 | |
| | baz=97,slow=75,SNR=35 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 120.34 | 283 | T | T | 02 52 34.6 | |
| | baz=97,slow=75,SNR=48 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 120.35 | 283 | T | T | 02 52 29.1 | |
| | baz=97,slow=75,SNR=43 | | | | | | |
| ASAR | Alice Springs | 132.00 | 218 | PKP | PKPdf | 00 41 33.0 | -1.1 |
| | 0.5nm,0.6s,baz=114,slow=2.3,SNR=2.8 | | | | | | |
| WRA | Warramunga Arr | 134.51 | 221 | PKP | PKPdf | 00 41 38.4 | -0.6 |
| | 0.8nm,0.6s,baz=134,slow=2.0,SNR=3.9 | | | | | | |
| ZAA0 | Zalesovo Array | 138.10 | 17 | ePKPdf | PKPdf | 00 41 45.0 | +0.5 |
| ZALV | Zalesovo Beam | 138.10 | 17 | PKP | PKPdf | 00 41 45.4 | +0.9 |
| | 2.1nm,0.8s,baz=293,slow=2.8,SNR=8.6 | | | | | | |
| MKAR | Makanchi Array | 143.23 | 25 | PKP | PKPdf | 00 41 55.2 | +1.1 |
| | 1.1nm,0.8s,baz=341,slow=1.8,SNR=8.3 | | | | | | |
| KSH | Kashi | 145.08 | 40 | PKPbc | PKPdf | 00 41 58.9 | +1.3 |
| KSH | | | | esPKP | | 00 42 13.5 | |
| KSH | | | | ePP | PP | 00 45 24.2 | +8.4 |
| KSH | | | | SKKS | | 00 52 10.5 | |
| KSH | | | | PPMZ | | | |
| | 69nm,4.8s | | | | | | |
| KSH | | | | LN | | | |
| | 120nm,5.5s | | | | | | |
| KSH | | | | LE | | | |
| | 72nm,5.4s | | | | | | |
| KSH | | | | LZ | | | |
| | 140nm,5.3s | | | | | | |
| SONA1 | Songino Array | 147.04 | 357 | ePKPdf | PKPbc | 00 42 03.0 | +0.3 |
| SONM | Songino Array | 147.06 | 357 | PKPbc | PKPbc | 00 42 03.4 | +0.6 |
| | 1.7nm,0.7s,baz=350,slow=1.1,SNR=8.8 | | | | | | |
| WMQ | Urumqi | 147.83 | 23 | ePKPbc | PKPdf | 00 42 01.0 | -1.1 |
| LZH | Lanzhou | 158.84 | 1 | ePKP | PKPdf | 00 42 17.3 | -0.9 |
| LZH | | | | pPKP | pPKPdf | 00 42 24.4 | -3.2 |
| LZH | | | | sPKP | | 00 42 29.2 | |
| LZH | | | | LN | | | |
| | 130nm,18.0s | | | | | | |
| LZH | | | | LE | | | |
| | 130nm,17.9s | | | | | | |
| LZH | | | | LZ | | | |
| | 170nm,20.1s | | | | | | |
| CD2 | Chengdu | 164.00 | 2 | PKP | PKPdf | 00 42 21.4 | -2.3 |
| CD2 | | | | pPKP | pPKPdf | 00 42 31.7 | -1.3 |
| CD2 | | | | sPKP | | 00 42 35.5 | |
| CD2 | | | | SKS | SKSdf | 00 49 23.6 | -2.9 |
| CD2 | | | | SKKS | SKKSac | 00 53 45.8 | -2.5 |
| CD2 | | | | PPMZ | | | |
| | 120nm,6.2s | | | | | | |
| GYA | Guiyang | 168.23 | 349 | ePKP | PKPdf | 00 42 25.9 | -1.3 |
| GYA | | | | sPKP | | 00 42 40.0 | |
| GYA | | | | PKPab | PKPab | 00 43 35.6 | +0.3 |
| GYA | | | | PKS | PKSdf | 00 45 56.8 | -3.2 |
| GYA | | | | PP | PP | 00 47 25.0 | +2.2 |
| GYA | | | | PPMZ | | | |
| | 120nm,8.2s | | | | | | |

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*ISCJB **05** 00:31:59.2±0.3, 6°.65S±0°.04×154°.89E±0°.05, h56km, mb4.8/35, MS3.7/7, Error ellipse: s-maj=7.0km s-min=5.6km az=18.3*

*BJI **05** 00:32:00.8, 7°.25S×154°.75E, h82km, mb4.9/20, mB5.0/15, Ms5.0/6, Ms7 4.6/5*

*IDC **05** 00:32:01.8±2.5, 6°.60S×154°.92E, h64km±21km, mb4.3/20, mb1 4.4/23, mb1mx4.2/44, mbtmp4.5/23, MS3.8/10, Ms1 3.8/10, ms1mx3.5/30, Error ellipse: s-maj=15.2km s-min=12.5km az=87.0*

*NEIC **05** 00:32:02.8±1.2, 6°.68S×154°.85E, h77km±10km, mb5.1/19, Error ellipse: s-maj=8.1km s-min=7.7km az=146.0*

*AUST **05** 00:32:12.5±2.2, 6°.63S×154°.55E, h170km, Error ellipse: s-maj=3.1km s-min=1.9km az=269.0*

**ISC 05 00:32:00.6**±0.4**, 6°.67S**±0°.06×**154°.98E**±0°.06**, h56km, n107, σ1.46**/117**, mb4.9**/35**, MS3.6**/7**, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | Rabaul | 3.74 | 311 | P | Pn | 00 33 05.6 | +10 |
| | baz=3.4,SNR=4.1 | | | | | | |
| HNR | Honiara | 5.63 | 119 | LR | LR | 00 35 34.2 | |
| | comp=Z,1μm,19.3s,baz=278,slow=37 | | | | | | |
| HNR | Honiara | 5.63 | 119 | P | Pn | 00 33 25.0 | +3.2 |
| HNR | Honiara | 5.63 | 119 | ePn | Pn | 00 33 26.1 | +4.3 |
| HNR | | | | eSn | Sn | 00 34 34.9 | +10 |
| PMG | Port Moresby | 8.21 | 250 | P | Pn | 00 33 57.7 | +0.5 |
| | 4.9nm,0.3s,baz=55,slow=6.9,SNR=10 | | | | | | |
| PMG | | | | S | Sn | 00 35 31.3 | +2.7 |
| | 12nm,0.3s,baz=74,slow=21,SNR=9.2 | | | | | | |
| PMG | | | | LR | LR | 00 37 07.1 | |
| | comp=Z,652nm,19.8s,baz=46,slow=37 | | | | | | |
| PMG | Port Moresby | 8.21 | 250 | P | Pn | 00 34 00.0 | +2.8 |
| | baz=7.8,SNR=6.4 | | | | | | |
| PMG | Port Moresby | 8.21 | 250 | ePn | Pn | 00 33 57.6 | +0.5 |
| PMG | | | | eSn | Sn | 00 35 26.4 | -2.2 |
| COEN | Coen | 13.68 | 237 | P | P | 00 35 20.8 | +1.8 |
| | baz=13,SNR=5.8 | | | | | | |
| COEN | Coen | 13.68 | 237 | eP | P | 00 35 20.9 | +1.9 |
| CTA | Charters Tower | 15.80 | 212 | P | Pn | 00 35 40.5 | +0.8 |
| | 0.3nm,0.3s,baz=34,slow=17,SNR=4.3 | | | | | | |
| CTAO | Charters Tower | 15.80 | 212 | ePn | Pn | 00 35 37.9 | -1.7 |
| | 24nm,1.4s | | | | | | |
| DZM | Mont Dzumac | 18.89 | 145 | P | Pn | 00 36 18.5 | +0.6 |
| | 0.3nm,0.3s,baz=354,slow=9.2,SNR=3.4 | | | | | | |
| DZM | | | | LR | LR | 00 42 50.9 | |
| | comp=Z,266nm,20.0s,baz=94,slow=34 | | | | | | |
| DZM | Mont Dzumac | 18.89 | 145 | eP | Pn | 00 36 18.5 | +0.6 |
| | 33nm,1.3s | | | | | | |
| EIDS | Eidsvold | 18.96 | 191 | eP | P | 00 36 17.7 | +0.3 |
| | 11nm,1.1s | | | | | | |
| QIS | Mount Isa | 20.32 | 226 | P | P | 00 36 32.6 | +0.3 |
| | baz=20,SNR=9.7 | | | | | | |
| RMQ | Roma | 20.58 | 196 | P | Pn | 00 36 36.6 | -1.1 |
| | baz=21,SNR=9.0 | | | | | | |
| QLP | Quilpie | 22.29 | 206 | P | P | 00 36 53.2 | -0.1 |
| | baz=22,SNR=3.3 | | | | | | |
| ARMA | Armidale | 23.83 | 187 | eP | P | 00 37 07.0 | -1.8 |
| | 102nm,1.8s | | | | | | |
| WRAB | Tennant Creek | 23.98 | 235 | P | P | 00 37 10.2 | 0.0 |
| | 102nm,1.6s,SNR=8.2 | | | | | | |
| WRA | Warramunga Arr | 23.99 | 235 | P | P | 00 37 10.0 | -0.3 |
| | 7.3nm,0.7s,baz=57,slow=10.0,SNR=22 | | | | | | |
| WRA | | | | PcP | PcP | 00 40 51.9 | +0.6 |
| | 4.1nm,0.7s,baz=63,slow=2.3,SNR=13 | | | | | | |
| SIJI | Sorong | 24.35 | 283 | P | P | 00 37 13.1 | -0.5 |
| | 31nm,0.7s,baz=98,slow=10,SNR=12 | | | | | | |
| CMSA | Cobar Meteorol | 26.22 | 198 | P | P | 00 37 31.4 | +1.1 |
| | baz=26,SNR=9.3 | | | | | | |
| AS01 | Alice Springs | 26.34 | 228 | eP | P | 00 37 30.8 | -0.8 |
| AS01 | | | | ePcP | PcP | 00 40 57.2 | +0.6 |
| AS12 | Alice Springs | 26.38 | 228 | eP | P | 00 37 31.5 | -0.5 |
| AS12 | | | | ePcP | PcP | 00 40 57.4 | +0.7 |
| AS12 | | | | eScP | ScP | 00 44 30.5 | -1.5 |
| ASAR | Alice Springs | 26.38 | 228 | P | P | 00 37 31.5 | -0.5 |
| | 1.6nm,0.4s,baz=58,slow=9.5,SNR=20 | | | | | | |
| ASAR | | | | PcP | PcP | 00 40 57.4 | +0.7 |
| | 1.8nm,0.8s,baz=64,slow=3.2,SNR=6.5 | | | | | | |
| ASAR | | | | ScP | ScP | 00 44 30.5 | -1.5 |
| | 0.3nm,0.5s,baz=75,slow=3.5,SNR=4.0 | | | | | | |
| ASAR | | | | LR | LR | 00 47 38.4 | |
| | comp=Z,159nm,19.6s,baz=108,slow=36 | | | | | | |
| WRKA | Warakurna | 31.39 | 231 | P | P | 00 38 15.6 | -1.0 |
| | baz=31,SNR=3.2 | | | | | | |
| BBOO | Buckleboo | 31.40 | 212 | P | P | 00 38 15.2 | -1.2 |
| | baz=31,SNR=7.6 | | | | | | |
| RAO | Raoul Island | 34.02 | 135 | LR | LR | 00 49 26.4 | |
| | comp=Z,782nm,19.9s,baz=164,slow=31 | | | | | | |
| KAPI | Kappang | 35.08 | 271 | P | P | 00 38 48.5 | -0.3 |
| | 3.4nm,0.4s,baz=128,slow=12,SNR=3.5 | | | | | | |
| MBWA | Marble Bar | 37.01 | 244 | eP | P | 00 39 03.5 | -1.7 |
| | 101nm,2.0s | | | | | | |
| URZ | Urewera | 37.29 | 151 | P | P | 00 39 08.4 | +1.1 |
| | 1.9nm,0.3s,baz=38,slow=7.5,SNR=2.9 | | | | | | |
| URZ | Urewera | 37.29 | 151 | eP | P | 00 39 08.4 | +1.1 |
| | 52nm,1.7s | | | | | | |
| MEEK | Meekatharra | 39.88 | 236 | P | P | 00 39 29.5 | +0.2 |
| | baz=40,SNR=4.2 | | | | | | |
| JNU | Nakatsue | 45.73 | 331 | P | P | 00 40 15.0 | -1.5 |
| | 10nm,0.9s,baz=33,slow=2.5,SNR=4.5 | | | | | | |
| JNU | Nakatsue | 45.73 | 331 | eP | P | 00 40 15.0 | -1.5 |
| | 139nm,2.1s | | | | | | |
| MJAR | Matsushiro Arr | 45.78 | 341 | LR | LR | 00 57 59.9 | |
| | comp=Z,17nm,21.8s,baz=190,slow=34 | | | | | | |
| KSRS | Korea Array | 50.65 | 332 | P | P | 00 40 53.2 | -1.1 |
| | 2.8nm,0.8s,baz=150,slow=8.4,SNR=7.1 | | | | | | |
| KS15 | Wonju Array Si | 50.66 | 332 | eP | P | 00 40 53.2 | -1.2 |
| NJ2 | Nanjing | 51.66 | 320 | eP | P | 00 41 02.5 | +0.5 |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,40nm,1.2s | | | | | | |
| NJ2 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| BKNI | Bangkinang | 54.27 | 275 | eP | P | 00 41 17.0 | -4.6 |
| | comp=Z,77nm,0.3s | | | | | | |
| YSS | Yuzh-Sakhalins | 54.48 | 350 | eP | P | 00 41 19.0 | -3.5 |
| | comp=Z,139nm,1.9s | | | | | | |
| KULM | Kulim | 55.52 | 281 | eP | P | 00 41 28.2 | -2.4 |
| | comp=Z,25nm,1.2s | | | | | | |
| PSI | Prapat | 56.75 | 278 | eP | P | 00 41 36.6 | -3.0 |
| | comp=Z,14nm,1.1s | | | | | | |
| GYA | Guiyang | 57.25 | 307 | P | P | 00 41 45.0 | +2.1 |
| GYA | | | | pP | pP | 00 42 05.8 | +7.8 |
| GYA | | | | sP | sP | 00 42 15.2 | +11 |
| GYA | | | | PP | PP | 00 43 55.5 | +4.9 |
| GYA | | | | S | S | 00 49 32.0 | -3.1 |
| GYA | | | | sS | sS | 00 50 08.9 | +8.4 |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,120nm,5.8s | | | | | | |
| BJI | Beijing | 58.65 | 326 | P | P | 00 41 58.8 | +6.6 |
| BJI | | | | PMZ | | | |
| | comp=Z,12nm,1.2s | | | | | | |
| PEA2 | Petropavlovsk- | 59.60 | 2 | eP | P | 00 41 59.1 | +0.6 |
| PETK | Petropavlovsk- | 59.60 | 2 | P | P | 00 41 59.1 | +0.6 |
| | comp=Z,5.6nm,0.7s,baz=168,slow=7.6,SNR=7.6 | | | | | | |
| PETK | | | | LR | LR | 01 03 53.5 | |
| | comp=Z,47nm,21.9s,baz=173,slow=32 | | | | | | |
| KMI | Kunming | 59.83 | 304 | P | P | 00 42 02.4 | +1.4 |
| KMI | | | | PMZ | | | |
| | comp=Z,22nm,1.2s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,180nm,4.1s | | | | | | |
| CM01 | Chiang Mai Arr | 60.61 | 295 | eP | P | 00 42 06.9 | +0.8 |
| CM31 | Chiang Mai Arr | 60.64 | 295 | eP | P | 00 42 07.5 | +1.1 |
| CMAR | Chiang Mai Arr | 60.64 | 295 | P | P | 00 42 07.5 | +1.1 |
| | comp=Z,13nm,0.8s,baz=120,slow=5.2,SNR=54 | | | | | | |
| CMAR | | | | LR | LR | 01 08 13.7 | |
| | comp=Z,18nm,19.7s,baz=290,slow=36 | | | | | | |
| CHTO | Chiang Mai | 60.75 | 296 | eP | P | 00 42 07.8 | +0.7 |
| | comp=Z,10nm,0.8s | | | | | | |
| CD2 | Chengdu | 61.60 | 310 | eP | P | 00 42 12.5 | -0.2 |
| CD2 | | | | pP | pP | 00 42 33.4 | +5.4 |
| CD2 | | | | PP | PP | 00 44 29.0 | 0.0 |
| CD2 | | | | PcS | PcS | 00 46 56.2 | -0.9 |
| CD2 | | | | S | S | 00 50 29.0 | -2.0 |
| CD2 | | | | sS | sS | 00 51 05.3 | +8.7 |
| CD2 | | | | SS | SS | 00 54 32.9 | -0.4 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.4s | | | | | | |
| HHC | Hu-ho-hao-te | 61.83 | 324 | eP | P | 00 42 17.0 | +2.9 |
| HHC | | | | PP | PP | 00 44 35.8 | +4.9 |
| HHC | | | | S | S | 00 50 31.0 | -2.6 |
| HHC | | | | PMZ | | | |
| | comp=Z,29nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,110nm,4.0s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,120nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,150nm,12.3s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,64nm,16.0s | | | | | | |
| LZH | Lanzhou | 64.08 | 315 | eP | P | 00 42 33.9 | +4.6 |
| LZH | | | | pP | PcP | 00 42 54.4 | -10 |
| LZH | | | | sP | sP | 00 43 04.0 | +13 |
| LZH | | | | PMZ | | | |
| | comp=Z,26nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,120nm,4.3s | | | | | | |
| CASY | Casey | 66.89 | 198 | eP | P | 00 42 45.2 | -1.4 |
| | comp=Z,37nm,2.1s | | | | | | |
| GTA | Gaotai | 68.50 | 317 | eP | P | 00 42 58.1 | +0.7 |
| GTA | | | | pP | PcP | 00 43 23.1 | +0.7 |
| GTA | | | | sP | sP | 00 43 32.8 | +14 |
| GTA | | | | PMZ | | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| SONA0 | Songino Array | 69.06 | 327 | eP | P | 00 43 00.6 | -0.2 |
| SONM | Songino Array | 69.06 | 327 | P | P | 00 43 00.6 | -0.2 |
| | comp=Z,3.4nm,0.8s,baz=128,slow=5.7,SNR=8.7 | | | | | | |
| SONA1 | Songino Array | 69.06 | 327 | eP | P | 00 43 00.5 | -0.3 |
| SEY | Seymchan | 69.43 | 359 | P | P | 00 43 02.3 | -0.2 |
| | comp=Z,1.6nm,0.3s,baz=180,slow=6.1,SNR=4.1 | | | | | | |
| VNDA | Vanda | 70.90 | 178 | P | P | 00 43 12.1 | +0.7 |
| | comp=Z,2.3nm,0.8s,baz=326,slow=6.1,SNR=18 | | | | | | |
| VNDA | Vanda | 70.90 | 178 | eP | P | 00 43 11.8 | +0.4 |
| | comp=Z,3.9nm,1.0s | | | | | | |
| KDAK | Kodiak Island | 76.88 | 26 | P | P | 00 43 46.9 | +0.3 |
| | comp=Z,7.4nm,0.8s,baz=119,slow=5.0,SNR=4.2 | | | | | | |
| KDAK | Kodiak Island | 76.88 | 26 | eP | P | 00 43 46.9 | +0.3 |
| | comp=Z,244nm,2.4s | | | | | | |
| CNPM | China Poot | 78.47 | 25 | eP | P | 00 43 56.1 | +0.7 |
| | comp=Z,36nm,1.0s | | | | | | |
| WMQ | Urumqi | 78.58 | 317 | eP | P | 00 43 58.0 | +1.5 |
| CAST | Castle Rocks | 80.43 | 21 | eP | P | 00 44 05.9 | -0.2 |
| | comp=Z,61nm,2.4s | | | | | | |
| MCK | McKinley | 81.76 | 22 | eP | P | 00 44 12.9 | -0.3 |
| | comp=Z,11nm,1.0s | | | | | | |
| ILAR | Eielson Array | 83.08 | 22 | P | P | 00 44 18.8 | -1.2 |
| | comp=Z,1.6nm,0.9s,baz=250,slow=4.7,SNR=9.9 | | | | | | |
| ILAR | | | | LR | LR | 01 15 47.0 | |
| | comp=Z,98nm,20.9s,baz=252,slow=32 | | | | | | |
| ILB | Eielson Array | 83.08 | 22 | eP | P | 00 44 18.8 | -1.2 |
| IL1 | Eielson Array | 83.08 | 22 | eP | P | 00 44 18.3 | -1.7 |
| MK32 | Makanchi Array | 83.16 | 319 | eP | P | 00 44 20.4 | -0.4 |
| MKAR | Makanchi Array | 83.16 | 319 | P | P | 00 44 20.4 | -0.4 |
| | comp=Z,4.0nm,0.8s,baz=107,slow=5.6,SNR=30 | | | | | | |
| MKAR | Makanchi Array | 83.16 | 319 | eP | P | 00 44 20.9 | +0.1 |
| QSPA | South Pole Qui | 83.30 | 180 | eP | P | 00 44 21.7 | +0.4 |
| | comp=Z,9.8nm,0.8s | | | | | | |
| MAKZ | Makanchi | 83.37 | 319 | eP | P | 00 44 21.9 | +0.1 |
| ZALV | Zalesovo Beam | 83.91 | 326 | P | P | 00 44 22.6 | -1.9 |
| | comp=Z,1.1nm,0.5s,baz=98,slow=4.5,SNR=5.5 | | | | | | |
| ZAA1 | Zalesovo Array | 83.91 | 326 | eP | P | 00 44 22.6 | -1.9 |
| MAW | Mawson | 84.69 | 203 | P | P | 00 44 28.7 | +0.6 |
| | comp=Z,3.7nm,0.7s,baz=106,slow=8.1,SNR=16 | | | | | | |
| MAW | Mawson | 84.69 | 203 | P | P | 00 44 28.5 | +0.4 |
| | baz=84,SNR=8.7 | | | | | | |
| MAW | Mawson | 84.69 | 203 | eP | P | 00 44 28.8 | +0.7 |
| | comp=Z,0.9nm,0.8s | | | | | | |
| KSH | Kashi | 85.80 | 310 | P | P | 00 44 36.9 | +2.5 |
| KSH | | | | epP | pP | 00 44 57.4 | +7.0 |
| KSH | | | | ePP | PP | 00 47 58.5 | +4.0 |
| KSH | | | | SKS | SKSac | 00 54 50.9 | -4.8 |
| KSH | | | | S | SKKSac | 00 55 03.0 | +0.1 |
| KSH | | | | PMZ | | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,98nm,3.9s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,110nm,7.6s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,64nm,6.8s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,130nm,4.8s | | | | | | |
| DLBC | Dease Lake | 87.87 | 31 | P | P | 00 44 45.1 | +1.1 |
| | comp=Z,6.6nm,1.0s,baz=264,slow=2.4,SNR=6.6 | | | | | | |
| DLBC | Dease Lake | 87.87 | 31 | eP | P | 00 44 45.1 | +1.1 |
| | comp=Z,166nm,2.6s | | | | | | |
| INK | Inuvik | 89.42 | 21 | LR | LR | 01 20 14.4 | |
| | comp=Z,103nm,19.9s,baz=178,slow=32 | | | | | | |
| NV01 | Mina Array Sit | 91.53 | 52 | eP | P | 00 45 02.6 | +0.8 |
| NVAR | Mina Array Bea | 91.53 | 52 | P | P | 00 45 02.9 | +1.1 |
| | comp=Z,2.5nm,0.8s,baz=258,slow=7.0,SNR=15 | | | | | | |
| PLM | Palomar | 92.08 | 57 | eP | P | 00 45 09.3 | +4.9 |
| BMN | Battle Mountai | 92.60 | 50 | eP | P | 00 45 07.1 | +0.4 |
| | comp=Z,5.2nm,0.7s | | | | | | |
| LTC | Little Chuckwa | 93.59 | 57 | eP | P | 00 45 10.7 | -0.5 |
| YKA | Yellowknife Ar | 96.06 | 28 | P | P | 00 45 20.8 | -1.0 |
| | comp=Z,3.6nm,0.8s,baz=270,slow=5.0,SNR=6.2 | | | | | | |
| YKB5 | Yellowknife Ar | 96.06 | 28 | eP | P | 00 45 20.8 | -1.0 |
| BR101 | Keskin Array S | 118.16 | 312 | ePKPdf | PKPdf | 00 50 40.3 | -1.8 |
| BRTR | Keskin Array B | 118.16 | 312 | PKP | PKPdf | 00 50 40.3 | -1.8 |
| | comp=Z,0.6nm,0.8s,baz=59,slow=1.6,SNR=3.2 | | | | | | |
| BOSA | Boshof | 120.21 | 231 | PKP | PKPdf | 00 50 46.5 | +0.2 |
| | comp=Z,3.2nm,0.8s,baz=69,slow=3.6,SNR=7.7 | | | | | | |
| LSZ | Lusaka | 122.95 | 247 | PKP | PKPdf | 00 50 52.2 | +0.3 |
| | comp=Z,1.7nm,0.8s,baz=54,slow=8.4,SNR=6.2 | | | | | | |
| GEC2 | GERESS Array S | 126.77 | 329 | ePKPdf | PKPdf | 00 50 58.4 | +0.2 |
| GERES | GERESS Array B | 126.77 | 329 | PKP | PKPdf | 00 50 58.4 | +0.2 |
| | comp=Z,1.1nm,0.7s,baz=99,slow=1.3,SNR=11 | | | | | | |
| CPUP | Villa Florida | 134.62 | 138 | PKP | PKPdf | 00 51 13.9 | +0.2 |
| | comp=Z,1.6nm,0.8s,baz=351,slow=3.6,SNR=3.9 | | | | | | |
| PTGA | Pitinga | 144.35 | 101 | ePKPdf | PKPab | 00 51 29.0 | -0.8 |
| TAM | Tamanrasset | 146.51 | 302 | ePKPdf | PKPab | 00 51 37.8 | 0.0 |
| BDFB | Brasilia | 148.21 | 134 | PKPbc | PKPbc | 00 51 40.6 | -0.9 |
| | comp=Z,9.0nm,0.7s,baz=227,slow=3.9,SNR=13 | | | | | | |
| BDFB | Brasilia | 148.21 | 134 | ePKPbc | PKPbc | 00 51 41.6 | 0.0 |
| TOA0 | Torodi Ar. Sit | 152.93 | 286 | ePKPdf | PKPdf | 00 51 45.2 | -0.3 |
| TOA0 | | | | ePKPbc | PKPbc | 00 51 52.0 | -0.7 |
| TOA0 | | | | ePKPab | PKPab | 00 52 03.6 | -0.4 |
| TORD | Torodi Ar. Bea | 152.93 | 286 | PKPbc | PKPbc | 00 51 52.0 | -0.7 |
| | comp=Z,8.6nm,0.7s,baz=66,slow=2.2,SNR=50 | | | | | | |
| TORD | | | | PKPab | PKPab | 00 52 03.6 | -0.4 |
| | comp=Z,2.7nm,0.6s,baz=106,slow=2.9,SNR=6.6 | | | | | | |
| DBIC | Dimbokro | 159.98 | 271 | PKPab | PKPab | 00 52 33.7 | -0.7 |
| | comp=Z,3.8nm,0.7s,baz=100,slow=2.2,SNR=4.6 | | | | | | |

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**WEL 05 00:46:08.4**±0.1**, 43°.56S**×**172°.20E, h5km, ML3.7**/17**, 4C-3D, Error ellipse: s-maj=0.7km s-min=0.7km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OXZ | Oxford | 0.26 | 333 | ⇓PG | Pg | 00 46 13.4 | -0.1 |
| OXZ | | | | SG | Sg | 00 46 17.3 | +0.4 |
| CRLZ | Canterbury Las | 0.31 | 94 | ⇓PG | Pg | 00 46 14.8 | +0.4 |
| CRLZ | | | | SG | Sg | 00 46 19.4 | +0.9 |
| CRLZ | | | | AML | AML | 00 46 19.8 | |
| MQZ | McQueen's Vall | 0.36 | 115 | ⇓PG | Pg | 00 46 15.6 | +0.2 |
| MQZ | | | | SG | Sg | 00 46 21.3 | +1.1 |
| MQZ | | | | AML | AML | 00 46 22.0 | |
| LTZ | Lake Taylor | 0.78 | 4 | ⇑P* | Pg | 00 46 23.5 | +0.1 |
| LTZ | | | | S* | Sg | 00 46 34.2 | +0.7 |
| LTZ | | | | AML | AML | 00 46 35.3 | |
| RPZ | Rata Peaks | 0.84 | 259 | ⇑P* | Pg | 00 46 24.7 | 0.0 |
| RPZ | | | | S* | Sb | 00 46 36.6 | -0.7 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RPZ | | | | AML | AML | 00 46 38.1 | |
| **WVZ** | **Waitaha Valley** | **1.17** | **294** | AML | AML | 00 46 48.1 | |
| WVZ | | | | AML | AML | 00 46 49.7 | |
| **KHZ** | **Kahutara** | **1.50** | **41** | ⇑PN | Pn | 00 46 34.0 | -2.0 |
| KHZ | | | | AML | AML | 00 46 54.2 | |
| KHZ | | | | AML | AML | 00 47 08.9 | |
| **LBZ** | **Lake Benmore** | **1.67** | **240** | AML | AML | 00 47 10.7 | |
| LBZ | | | | AML | AML | 00 47 11.9 | |
| **FOZ** | **Fox Glacier** | **1.82** | **269** | AML | AML | 00 47 07.2 | |
| FOZ | | | | AML | AML | 00 47 08.9 | |
| **DSZ** | **Denniston Nort** | **1.83** | **351** | AML | AML | 00 47 08.4 | |
| DSZ | | | | AML | AML | 00 47 09.0 | |
| **ODZ** | **Otahua Downs** | **1.86** | **216** | AML | AML | 00 47 09.6 | |
| ODZ | | | | AML | AML | 00 47 10.9 | |
| ODZ | | | | AML | AML | 00 47 14.0 | |
| ODZ | | | | AML | AML | 00 47 16.1 | |
| **THZ** | **Tophouse** | **1.87** | **16** | ⇑PN | Pn | 00 46 39.2 | -1.8 |
| THZ | | | | AML | AML | 00 47 21.3 | |
| THZ | | | | AML | AML | 00 47 21.9 | |
| **JCZ** | **Jackson Bay** | **2.54** | **257** | AML | AML | 00 47 32.0 | |
| JCZ | | | | AML | AML | 00 47 36.3 | |
| **WKZ** | **Wanaka** | **2.62** | **240** | AML | AML | 00 47 42.0 | |
| WKZ | | | | AML | AML | 00 47 44.8 | |
| **EAZ** | **Earnscleugh** | **2.66** | **230** | AML | AML | 00 47 37.6 | |
| EAZ | | | | AML | AML | 00 47 39.3 | |
| **TUZ** | **Tuapeka** | **3.02** | **216** | AML | AML | 00 47 52.7 | |
| TUZ | | | | AML | AML | 00 47 54.5 | |
| **CAW** | **Cannon Point** | **3.24** | **42** | AML | AML | 00 47 35.2 | |
| CAW | | | | AML | AML | 00 47 35.2 | |
| **SYZ** | **Scrubby Hill** | **3.69** | **215** | AML | AML | 00 48 19.1 | |

**MEX 05 01:12:59.2**±0.3**, 14.°18N×92.°72W, h14**km±244km**, MD4.1, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.59** | **342** | *e*P | Pn | 01 13 23.5 | -3.5 |
| PCIG | | | | *i* S | Sn | 01 13 42.6 | -4.9 |

**IDC 05 01:20:53.8**±3.6**, 13.°03N×145.°04E, h47**km±42km**, mb3.4**/3**, mb1 3.8**/3**, mb1mx3.3**/38**, mbtmp3.7**/3**, MS3.1**/1**, Ms1 3.1**/1**, ms1mx2.5**/19**, Error ellipse: s-maj=118.3km s-min=21.9km az=106.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.58** | **344** | P | Pn | 01 21 07.1 | +1.2 |
| | 572nm,0.3s,baz=351,slow=1.0,SNR=179 | | | | | | |
| GUMO | | | | S | Sn | 01 21 16.5 | +1.9 |
| | baz=24,slow=20 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **21.53** | **73** | T | T | 01 48 24.2 | |
| | baz=259,slow=75,SNR=7.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.54** | **73** | T | T | 01 48 48.6 | |
| | baz=259,slow=75,SNR=6.9 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.54** | **73** | T | T | 01 48 18.7 | |
| | baz=259,slow=75,SNR=6.6 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.99** | **70** | T | T | 01 49 17.1 | |
| | baz=256,slow=75,SNR=22 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.00** | **69** | T | T | 01 49 21.8 | |
| | baz=256,slow=75,SNR=16 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.00** | **70** | T | T | 01 48 53.1 | |
| | baz=256,slow=75,SNR=24 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.21** | **346** | LR | LR | 01 34 35.7 | |
| | comp=Z,42nm,19.6s,baz=110,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.41** | **198** | P | P | 01 27 36.4 | -0.5 |
| | 1.3nm,0.7s,baz=22,slow=9.1,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **38.06** | **197** | P | P | 01 28 08.0 | 0.0 |
| | 0.4nm,0.6s,baz=22,slow=10,SNR=8.7 | | | | | | |
| **ILAR** | **Eielson Array** | **69.00** | **25** | P | P | 01 31 54.1 | 0.0 |
| | 0.3nm,0.5s,baz=258,slow=5.7,SNR=8.4 | | | | | | |

*ISK **05** 01:28:50.0, 39.°33N×39.°27E, h5km, MD2.8*
*ISCJB **05** 01:28:51.1±0.5, 39.°34N±0.°02×39.°28E±0.°04, h4km±6km, Error ellipse: s-maj=5.3km s-min=4.0km az=13.5*
*CSEM **05** 01:28:51.2±0.2, 39.°34N×39.°26E, h5km, MD2.8, Error ellipse: s-maj=5.0km s-min=3.3km az=103.0*
*DDA **05** 01:28:51.2, 39.°34N×39.°28E, h7km, Md2.5*
**ISC 05 01:28:51.5**±1.1**, 39.°34N**±0.°02×**39.°26E**±0.°03**, h6**km±11km**, n31, σ0.s62**/41**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EZC** | **Erzincan** | **0.42** | **10** | *e*Pg | **Pg** | **01 28 59.4** | **-0.3** |
| **ERZN** | **Erzincan** | **0.43** | **55** | *e*PG | **Pg** | **01 28 59.4** | **-0.6** |
| **PTK** | **Pertek** | **0.46** | **167** | *e*PG | **Pg** | **01 28 60.0** | **-0.4** |
| PTK | | | | *e*SG | **Sg** | **01 29 07.4** | **+1.0** |
| **PTK** | **Pertek** | **0.46** | **167** | *e*Pg | **Pg** | **01 29 00.0** | **-0.4** |
| PTK | | | | *e*Sg | **Sg** | **01 29 07.4** | **+1.0** |
| **EUZM** | **Uzumlu** | **0.50** | **42** | *i* P | **Pg** | **01 29 00.7** | **-0.5** |
| EUZM | | | | *i* S | **Sg** | **01 29 08.4** | **+0.6** |
| **EUZM** | **Uzumlu** | **0.50** | **42** | P | **Pg** | **01 29 00.7** | **-0.5** |
| EUZM | | | | S | **Sg** | **01 29 08.4** | **+0.6** |
| **ILIC** | **ilic-Erzincan** | **0.55** | **282** | *e*PG | **Pg** | **01 29 01.6** | **-0.5** |
| **ILIC** | **ilic-Erzincan** | **0.55** | **282** | *e*Pg | **Pg** | **01 29 01.6** | **-0.5** |
| **KELT** | **Kelkit** | **0.81** | **360** | *i* P | **Pg** | **01 29 07.2** | **+0.1** |
| KELT | | | | *i* S | **Sg** | **01 29 17.7** | **+0.1** |
| **KELT** | **Kelkit** | **0.81** | **360** | P | **Pg** | **01 29 07.2** | **+0.1** |
| KELT | | | | S | **Sg** | **01 29 17.7** | **+0.1** |
| **ELZG** | **Elazig** | **0.87** | **195** | *i* P | **Pg** | **01 29 07.9** | **-0.3** |
| ELZG | | | | *i* S | **Sg** | **01 29 20.3** | **+0.9** |
| **ELZG** | **Elazig** | **0.87** | **195** | P | **Pg** | **01 29 07.9** | **-0.3** |
| ELZG | | | | S | **Sg** | **01 29 20.3** | **+0.9** |
| **SVRC** | **Sivrice-ELAZID** | **0.96** | **178** | *e*PG | **Pg** | **01 29 10.2** | **+0.3** |
| **SVRC** | **Sivrice-ELAZID** | **0.96** | **178** | *e*Pg | **Pg** | **01 29 10.2** | **+0.3** |
| **BINT** | **Bingol** | **1.06** | **115** | *e*Pn | **Pn** | **01 29 12.9** | **-0.2** |
| **GUMT** | **Gumushane** | **1.13** | **8** | *e*PN | **Pg** | **01 29 13.5** | **+0.2** |
| **GUMT** | **Gumushane** | **1.13** | **8** | *e*Pn | **Pg** | **01 29 13.5** | **+0.2** |
| **BNGB** | **Bingˆ¶l** | **1.16** | **107** | *e*PN | **Pg** | **01 29 12.9** | **-0.8** |
| **MALT** | **Malatya** | **1.21** | **213** | *e*PN | **Pg** | **01 29 13.5** | **-1.3** |
| **MALT** | **Malatya** | **1.21** | **213** | *e*Pn | **Pg** | **01 29 13.5** | **-1.3** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **1.25** | **32** | *e*PN | **Pn** | **01 29 15.3** | **-0.4** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **1.25** | **32** | *e*Pn | **Pn** | **01 29 15.3** | **-0.4** |
| **CUZAR** | **Zara_SIVAS** | **1.28** | **296** | P | **Pn** | **01 29 15.8** | **-0.2** |
| CUZAR | | | | S | **Sn** | **01 29 34.4** | **+0.9** |
| **CUKAN** | **kangal_SIVAS** | **1.39** | **270** | P | **Pn** | **01 29 16.9** | **-0.8** |
| CUKAN | | | | S | **Sb** | **01 29 35.6** | **-0.5** |
| **DARE** | **Darende-Malaty** | **1.58** | **242** | *e*PN | **Pb** | **01 29 21.1** | **-0.2** |
| **DARE** | **Darende-Malaty** | **1.58** | **242** | *e*Pn | **Pb** | **01 29 21.1** | **-0.2** |
| **VRTB** | **Varto-Mus** | **1.71** | **95** | *e*PN | **Pn** | **01 29 21.9** | **-0.1** |
| **VRTB** | **Varto-Mus** | **1.71** | **95** | *e*Pn | **Pn** | **01 29 21.9** | **-0.1** |
| **EZM** | **Erzurum** | **1.72** | **70** | *e*PN | **Pn** | **01 29 21.9** | **-0.3** |
| **SVSK** | **Karacayir** | **1.84** | **289** | *e*PN | **Pn** | **01 29 24.3** | **+0.7** |
| **SVSK** | **Karacayir** | **1.84** | **289** | *e*Pn | **Pn** | **01 29 24.3** | **+0.7** |

*IDC **05** 01:30:25.6±2.6, 36.°62N×69.°02E, h0km, mb3.6/2, mb1 3.6/5, mb1mx3.4/32, mbtmp3.6/5, ML3.7/2, MS2.6/1, Ms1 2.6/1, ms1mx2.4/30, Error ellipse: s-maj=56.9km s-min=21.0km az=147.0*
*ISCJB **05** 01:30:27.9±0.7, 36.°87N±0.°05×69.°15E±0.°06, h43km, mb3.6/1, Error ellipse: s-maj=7.8km s-min=5.9km az=135.7*
*NNC **05** 01:30:30.2±1.8, 36.°84N×69.°25E, h120km±19km, mb3.1, mpv3.8, Error ellipse: s-maj=16.5km s-min=11.3km az=168.0*
**ISC 05 01:30:30.3**±1.1**, 36.°83N**±0.°08×**69.°19E**±0.°07**, h43**km**, n14, σ1.s82**/19**, 6C-8D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **1.99** | **352** | ⇑P | **Pn** | **01 31 02.9** | **+1.3** |
| | 64nm,0.6s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **01 31 30.0** | **+4.7** |
| | 164nm,0.5s | | | | | | |
| **THW** | **Thamme Wali** | **4.54** | **152** | ⇑P | **Pn** | **01 31 36.0** | **-0.5** |
| **SFK** | **Sufi-Kurgan** | **4.64** | **46** | ⇓Pn | **Pn** | **01 31 38.5** | **+0.4** |
| | 13nm,0.7s | | | | | | |
| SFK | | | | ⇑Sn | **Sn** | **01 32 32.0** | **+1.2** |
| | 17nm,0.8s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 01 32 49.5 | |
| | 30nm,0.7s | | | | | | |
| **SARP** | **Sargodha** | **5.68** | **149** | P | **Pn** | **01 31 52.0** | **-0.1** |
| **MNAS** | **Manas** | **6.20** | **23** | ⇑Pn | **Pn** | **01 31 59.7** | **+0.3** |
| | 1.8nm,0.3s | | | | | | |
| MNAS | | | | ⇓Sn | **Sn** | **01 33 07.4** | **-1.5** |
| | 4.9nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **6.34** | **9** | ⇓P | **Pn** | **01 32 01.6** | **+0.4** |
| | 0.6nm,0.2s,baz=189,slow=13,SNR=4.3 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **01 33 12.3** | **-0.1** |
| | 4.5nm,0.6s,baz=189,slow=23 | | | | | | |
| **AAK** | **Ala-Archa** | **7.09** | **34** | ⇓P | **Pn** | **01 32 11.1** | **-0.5** |
| | 10nm,0.7s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **01 33 30.3** | **-0.6** |
| | 6.2nm,0.7s | | | | | | |
| **GEYT** | **Alibeck** | **8.88** | **280** | Pn | **Pn** | **01 32 34.8** | **-1.3** |
| | 1.5nm,0.3s,baz=106,slow=9.1,SNR=10 | | | | | | |
| GEYT | | | | Sn | **Sn** | **01 34 16.2** | **+1.4** |
| | 0.9nm,0.3s,baz=109,slow=16,SNR=3.9 | | | | | | |
| GEYT | | | | LR | LR | 01 37 21.5 | |
| | comp=Z,41nm,20.0s,baz=65,slow=47 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.93** | **40** | Pn | **Pn** | **01 33 47.6** | **+2.7** |
| | baz=237,slow=12,SNR=2.2 | | | | | | |
| **AB31** | **Akbulak array** | **14.12** | **334** | ⇑P | **Pn** | **01 33 45.2** | **-2.4** |
| | 0.4nm,0.2s,baz=154,slow=12,SNR=54 | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.79** | **333** | ⇓P | **Pn** | **01 34 08.5** | **-1.0** |
| | 4.9nm,1.0s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.21** | **3** | Pn | **Pn** | **01 34 12.2** | **-2.6** |
| | 0.2nm,0.3s,baz=182,slow=9.8,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.25** | **27** | P | Pn | 01 35 05.3 | +1.3 |
| | 1.4nm,0.4s,baz=210,slow=9.2,SNR=6.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **64.28** | **267** | P | **P** | **01 41 01.8** | **+0.4** |
| | 0.4nm,0.6s,baz=48,slow=5.8,SNR=9.4 | | | | | | |

*GUC **05** 01:44:28.1±0.6, 35.°14S×72.°30W, h36km±6km, ML3.8*
**ISC 05 01:44:25.6**±1.7**, 35.°16S**±0.°03×**72.°50W**±0.°07**, h0**km±13km**, n18, σ1.s66**/27**, 4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TALC** | **Talca** | **0.75** | **109** | ⇓*i*P | **Pg** | **01 44 40.2** | **+0.3** |
| TALC | | | | *i* S | **Sg** | **01 44 48.7** | **-0.9** |
| **CHPI** | **Pichilemu** | **0.87** | **28** | *i* P | **Pg** | **01 44 42.7** | **+0.4** |
| CHPI | | | | *i* S | **Sg** | **01 44 54.1** | **+0.6** |
| **COCH** | **Cobquecura** | **1.00** | **194** | *i* P | **Pn** | **01 44 47.3** | **+0.5** |
| COCH | | | | *i* S | **Sn** | **01 45 02.1** | **+0.5** |
| **LNCH** | **Linares** | **1.00** | **133** | ⇓*i*P | **Pg** | **01 44 45.1** | **+0.2** |
| LNCH | | | | *i* S | **Sb** | **01 44 57.7** | **-1.9** |
| **CCHI** | **Chillan** | **1.48** | **167** | *i* P | **Pg** | **01 44 54.6** | **+0.7** |
| CCHI | | | | *i* S | **Sg** | **01 45 13.9** | **+0.7** |
| **CLCH** | **Cerro Calan** | **2.39** | **43** | *i* P | **Pn** | **01 45 07.5** | **+1.4** |
| CLCH | | | | *i* S | **Sb** | **01 45 37.8** | **-1.9** |
| CLCH | | | | AML | AML | 01 45 49.1 | |
| | comp=E,729nm,0.4s | | | | | | |
| **PEL** | **Peldehue** | **2.51** | **37** | *i* P | **Pb** | **01 45 09.9** | **-1.6** |
| PEL | | | | *i* S | **Sb** | **01 45 41.5** | **-1.5** |
| PEL | | | | AML | AML | 01 45 56.1 | |
| | comp=N,536nm,0.4s | | | | | | |
| **AAGR** | **Agrelo** | **3.68** | **57** | *e*P | Pn | 01 45 26.7 | +2.9 |
| AAGR | | | | *e*S | **Sb** | **01 46 19.2** | **+2.4** |
| **ARCO** | **CERRO ARCO** | **3.76** | **53** | *e*P | Pb | 01 45 29.5 | -3.4 |
| ARCO | | | | *e*S | **Sb** | **01 46 21.3** | **+2.3** |
| ARCO | | | | AML | AML | 01 46 22.1 | |
| | comp=Z,28nm,0.8s | | | | | | |
| **AUSP** | **Uspallata** | **3.91** | **42** | *e*P | **Pn** | **01 45 28.5** | **+1.3** |
| AUSP | | | | ⇓*e*S | **Sb** | **01 46 25.7** | **+2.1** |
| **ASAL** | **Salagasta** | **3.98** | **51** | *e*P | **Pn** | **01 45 29.2** | **+1.2** |
| ASAL | | | | *e*S | **Sb** | **01 46 29.0** | **+3.6** |
| **RTLS** | **Leoncito** | **4.29** | **39** | *e*P | **Pn** | **01 45 33.2** | **+0.8** |
| RTLS | | | | *e*S | **Sb** | **01 46 30.8** | **-3.6** |
| **CFAA** | **Coronel Fontan** | **5.03** | **46** | *e*P | **Pn** | **01 45 41.9** | **-0.4** |
| **RTLL** | **Cerro Villicun** | **5.09** | **43** | *e*P | **Pn** | **01 45 43.4** | **+0.1** |
| **AMOG** | **MOGNA** | **5.39** | **40** | *e*P | **Pn** | **01 45 46.4** | **-0.9** |
| **AVFE** | **Valle Fertil** | **6.17** | **45** | *e*P | **Pn** | **01 45 57.5** | **-0.6** |
| AVFE | | | | AML | AML | 01 47 20.1 | |
| | comp=Z,11nm,0.6s | | | | | | |
| **AGUA** | **GUANDACOL** | **6.59** | **32** | ⇓*e*P | **Pn** | **01 46 03.4** | **-0.5** |
| **VCA** | **Vinchina** | **7.37** | **31** | *e*S | Pg | 01 46 43.6 | -3.2 |
| VCA | | | | AML | AML | 01 47 58.7 | |
| | comp=Z,9.4nm,0.7s | | | | | | |

*ISCJB **05** 02:02:33.9±0.6, 23.°78S±0.°06×69.°12W±0.°08, h113km±6km, mb3.8/5, Error ellipse: s-maj=13.7km s-min=5.7km az=142.3*
*GUC **05** 02:02:33.8±0.4, 23.°67S×69.°08W, h119km±3km, ML4.1*
*IDC **05** 02:02:36.3±6.2, 23.°75S×68.°84W, h113km±52km, mb3.6/5, mb1 3.7/6, mb1mx3.5/28, mbtmp3.9/6, Error ellipse: s-maj=40.2km s-min=28.3km az=65.0*
**ISC 05 02:02:34.9**±1.0**, 23.°77S**±0.°06×**69.°09W**±0.°08**, h106**km±9km**, n22, σ0.s82**/29**, mb4.0**/5**, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **1.15** | **337** | *e*P | **Pn** | **02 02 56.9** | **-0.7** |
| PB06 | | | | *e*S | **Sn** | **02 03 14.8** | **+0.1** |
| PB06 | | | | AML | AML | 02 03 17.2 | |
| | comp=E,8μm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **1.17** | **8** | *e*P | **Pn** | **02 02 57.6** | **-0.3** |
| LVC | | | | *e*S | **Sn** | **02 03 15.1** | **-0.1** |
| **LVC** | **Limon Verde** | **1.17** | **8** | *e*P | **Pn** | **02 02 57.8** | **-0.1** |
| LVC | | | | *e*S | **Sn** | **02 03 15.9** | **+0.7** |
| LVC | | | | AML | AML | 02 03 16.9 | |
| | comp=Z,19μm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **1.73** | **326** | *e*P | **Pn** | **02 03 04.0** | **-0.6** |
| PB04 | | | | *e*S | **Sn** | **02 03 27.0** | **-0.1** |
| PB04 | | | | AML | AML | 02 03 32.1 | |
| | comp=N,1μm,0.7s | | | | | | |
| **PB09** | **IPOC Station P** | **1.97** | **356** | *e*P | **Pn** | **02 03 06.8** | **-0.8** |
| PB09 | | | | *e*S | **Sn** | **02 03 31.7** | **-0.7** |
| PB09 | | | | AML | AML | 02 03 35.3 | |
| | comp=E,4μm,0.6s | | | | | | |
| **PB07** | **IPOC Station P** | **2.16** | **340** | *e*P | **Pn** | **02 03 09.2** | **-0.8** |
| PB07 | | | | *e*S | **Sn** | **02 03 36.3** | **-0.5** |
| PB07 | | | | AML | AML | 02 03 42.0 | |
| | comp=E,845nm,0.5s | | | | | | |
| **PB01** | **IPOC Station P** | **2.74** | **352** | *e*P | **Pn** | **02 03 16.5** | **-1.0** |
| PB01 | | | | AML | AML | 02 03 55.8 | |
| | comp=E,578nm,0.3s | | | | | | |
| **SLA** | **San Lorenzo** | **3.41** | **107** | *e*P | **Pn** | **02 03 26.3** | **-0.1** |
| SLA | | | | AML | AML | 02 04 26.9 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **HJA** | **Humahuaca** | **3.43** | **81** | *e*P | **Pn** | **02 03 28.4** | **+1.5** |
| **FSA** | **Cafayete** | **3.63** | **130** | *e*P | **Pn** | **02 03 30.4** | **+1.0** |
| FSA | | | | AML | AML | 02 04 08.4 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| FSA | | | | *e*S | **Sn** | **02 04 11.5** | **0.0** |
| **YJA** | **Yavi** | **3.66** | **65** | *e*P | **Pn** | **02 03 31.0** | **+0.9** |
| **AZAP** | **Zapla** | **3.71** | **98** | *e*P | **Pn** | **02 03 31.1** | **+0.5** |
| AZAP | | | | AML | AML | 02 04 14.1 | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **ASTB** | **Santa Barbara** | **4.22** | **93** | *e*P | **Pn** | **02 03 38.0** | **+0.6** |
| **AHML** | **Horco Molle** | **4.54** | **132** | *e*P | **Pn** | **02 03 41.8** | **+0.3** |
| **MNMC** | **Minimini** | **4.64** | **354** | *e*P | **Pn** | **02 03 43.2** | **0.0** |
| **VCA** | **Vinchina** | **5.01** | **171** | *e*P | **Pn** | **02 03 47.6** | **-0.4** |
| **CPUP** | **Villa Florida** | **10.96** | **106** | P | **Pn** | **02 05 07.2** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=284,slow=16,SNR=3.4 | | | | | | |
| **BDFB** | **Brasilia** | **21.41** | **72** | P | **P** | **02 07 13.1** | **-1.5** |
| | comp=Z,5.9nm,0.6s,baz=238,slow=12,SNR=13 | | | | | | |
| **PTGA** | **Pitinga** | **24.55** | **22** | P | **P** | **02 07 44.6** | **-0.3** |
| | comp=Z,1.2nm,0.4s,baz=342,slow=20 | | | | | | |
| **TXAR** | **Lajitas Array** | **62.40** | **326** | P | **P** | **02 12 48.3** | **+1.5** |
| | comp=Z,0.2nm,0.7s,baz=150,slow=7.4,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.28** | **70** | P | **P** | **02 14 23.2** | **-0.5** |
| | comp=Z,1.4nm,0.5s,baz=258,slow=5.4,SNR=39 | | | | | | |
| **MAW** | **Mawson** | **82.21** | **163** | P | **P** | **02 14 44.2** | **+0.3** |
| | comp=Z,1.3nm,0.6s,baz=234,slow=13,SNR=4.2 | | | | | | |

**KMA 05 02:08:01.5**±1.9**, 38.°57N×127.°66E, h0**km**, 3C-9D, Error ellipse: s-maj=12.7km s-min=9.9km az=161.0, North Korea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSCWO** | **Cheorwon** | **0.50** | **193** | ⇓P | Pb | 02 08 12.4 | -0.7 |
| | SNR=23 | | | | | | |
| **KSCWO** | **Cheorwon** | **0.50** | **193** | ⇓P | Pb | 02 08 12.4 | -0.7 |
| | SNR=23 | | | | | | |
| **KSIJA** | **INJE** | **0.68** | **148** | ⇓P | Pb | 02 08 15.8 | -0.4 |
| | SNR=10 | | | | | | |
| **KSIJA** | **INJE** | **0.68** | **148** | ⇓P | Pb | 02 08 15.8 | -0.4 |
| | SNR=10 | | | | | | |
| **KSSKC** | **Sokcho** | **0.73** | **112** | ⇓P | Pg | 02 08 14.4 | -1.1 |
| | SNR=14 | | | | | | |
| **KSSKC** | **Sokcho** | **0.73** | **112** | ⇓P | Pg | 02 08 14.4 | -1.1 |
| | SNR=14 | | | | | | |
| KSSKC | | | | ⇑S | Sg | 02 08 23.6 | -1.4 |
| **YNCB** | **YEONCHEON** | **0.78** | **228** | ⇓P | Pg | 02 08 14.8 | -1.7 |
| | SNR=10 | | | | | | |
| **YNCB** | **YEONCHEON** | **0.78** | **228** | ⇓P | Pg | 02 08 14.8 | -1.7 |
| | SNR=10 | | | | | | |
| **KSCHC** | **Chuncheon** | **0.80** | **171** | ⇑P | Pb | 02 08 18.5 | +0.2 |
| | SNR=16 | | | | | | |
| **KSCHC** | **Chuncheon** | **0.80** | **171** | ⇑P | Pb | 02 08 18.5 | +0.2 |
| | SNR=16 | | | | | | |
| KSCHC | | | | ⇓S | Sg | 02 08 27.3 | +0.1 |
| **KSDGY** | **Daegwallycong** | **1.19** | **137** | P | Pb | 02 08 25.2 | +0.2 |
| | SNR=9.0 | | | | | | |

**IDC 05 02:10:56.0**±25.0**, 19.°20S×178.°03W, h279**km±259km**, mb3.1**/4**, mb1 3.4**/4**, mb1mx3.1**/28**, mbtmp3.7**/4**, Error ellipse: s-maj=136.3km s-min=46.7km az=169.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.77** | **261** | P | P | 02 18 42.3 | -0.3 |
| | 0.6nm,0.5s,baz=97,slow=8.1,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **44.80** | **255** | P | P | 02 18 43.0 | +0.1 |
| | 0.8nm,0.5s,baz=94,slow=7.6,SNR=4.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.38** | **57** | P | P | 02 23 07.4 | 0.0 |
| | 0.2nm,0.6s,baz=211,slow=5.1,SNR=2.5 | | | | | | |
| **ILAR** | **Eielson Array** | **87.06** | **13** | P | P | 02 23 09.6 | -0.1 |
| | 0.4nm,0.5s,baz=217,slow=5.7,SNR=8.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.66** | **290** | P | P | 02 23 22.8 | -0.1 |
| | 2.1nm,0.3s,baz=125,slow=4.7,SNR=5.0 | | | | | | |

*AUST **05** 02:16:58.8, 2.°00N×127.°50E, h100km*
*ISCJB **05** 02:17:00.6±0.5, 1.°84N±0.°05×127.°51E±0.°06, h112km, mb4.2/8, Error ellipse: s-maj=8.8km s-min=5.9km az=145.2*
*DJA **05** 02:17:05.5±0.7, 2°N±3°×12°7E±°, h57km±10km, M4.7/12, mb4.9/7, mB5.2/5, MLv4.7/12, Mw(mB)4.6/5*
*IDC **05** 02:17:06.8±4.9, 1.°61N×127.°42E, h157km±42km, mb3.8/7, mb1 4.0/8, mb1mx3.6/35, mbtmp4.3/8, Error ellipse: s-maj=51.5km s-min=14.0km az=69.0*
**ISC 05 02:17:02.2**±0.7**, 1.°82N**±0.°06×**127.°37E**±0.°08**, h112**km**, n38, σ1.s77**/44**, mb4.3**/8**, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.04** | **180** | P | **Pn** | **02 17 25.4** | **+1.4** |
| TNTI | | | | S | **Sn** | **02 17 39.4** | **-1.1** |
| **LBMI** | **Labuha** | **2.45** | **177** | P | **Pn** | **02 17 43.8** | **+2.7** |
| LBMI | | | | S | **Sn** | **02 18 14.0** | **+3.1** |
| **SGSI** | **Sangihe** | **2.61** | **315** | P | **Pn** | **02 17 43.9** | **+0.8** |
| SGSI | | | | S | **Sn** | **02 18 14.3** | **-0.3** |
| **KMSI** | **Cibinong** | **3.61** | **250** | P | **Pn** | **02 17 57.7** | **+1.3** |
| **SANI** | **Sanana** | **4.09** | **200** | P | **Pn** | **02 18 04.1** | **+1.3** |
| **GTOI** | **Gorontalo** | **4.52** | **255** | P | **Pn** | **02 18 11.5** | **+3.0** |
| **LUWI** | **Luwuk** | **5.41** | **238** | P | **Pn** | **02 18 22.9** | **+2.3** |
| | baz=5.6,SNR=16 | | | | | | |
| **LUWI** | **Luwuk** | **5.41** | **238** | P | **Pn** | **02 18 22.7** | **+2.1** |
| | 127nm,0.5s,4μm2.7nm | | | | | | |
| **MRSI** | **Marisa** | **5.59** | **256** | P | **Pn** | **02 18 24.8** | **+1.7** |
| | 128nm,0.7s,3μm0.6nm | | | | | | |
| **APSI** | **Ampana** | **6.33** | **245** | P | **Pn** | **02 18 34.8** | **+1.7** |
| | 109nm,1.0s,2μm0.9nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.78** | **134** | P | **Pn** | **02 18 40.2** | **+1.0** |
| | baz=6.8,SNR=9.2 | | | | | | |
| **KDI** | **Kendari** | **7.45** | **220** | P | **Pn** | **02 18 51.2** | **+2.9** |
| | 21nm,0.6s,862nm0.1nm | | | | | | |
| **TTSI** | **Tana Toraja** | **8.97** | **237** | P | **Pn** | **02 19 10.2** | **+1.4** |
| | 60nm,0.6s | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.53** | **233** | P | **Pn** | **02 19 18.5** | **+2.1** |
| **KAPI** | **Kappang** | **10.20** | **228** | P | **Pn** | **02 19 28.4** | **+2.8** |
| | 8.7nm,0.3s,baz=8.1,slow=5.2,SNR=36 | | | | | | |
| KAPI | | | | S | **Sn** | **02 21 17.5** | **-0.6** |
| | 5.2nm,0.3s,baz=238,slow=22,SNR=12 | | | | | | |
| **MTN** | **Manton Dam** | **15.04** | **166** | P | **Pn** | **02 20 29.7** | **+0.7** |
| | baz=15,SNR=7.9 | | | | | | |
| **KDU** | **Kakadu** | **15.28** | **161** | P | **P** | **02 20 34.8** | **+0.5** |
| | baz=16,SNR=7.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.69** | **163** | P | **P** | **02 21 52.8** | **-1.7** |
| | 15nm,0.6s,baz=343,slow=10,SNR=69 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 25 41.4** | **-1.8** |
| | 0.4nm,0.3s,baz=335,slow=2.1,SNR=5.8 | | | | | | |
| **QIS** | **Mount Isa** | **25.27** | **152** | P | **P** | **02 22 19.8** | **+1.6** |
| | baz=26,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **26.12** | **166** | P | **P** | **02 22 24.4** | **-1.6** |
| | 5.6nm,0.5s,baz=346,slow=6.8,SNR=90 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 25 49.2** | **-1.5** |
| | 0.8nm,0.5s,baz=355,slow=2.0,SNR=6.7 | | | | | | |
| **WRKA** | **Warakurna** | **26.72** | **178** | P | **P** | **02 22 30.0** | **-1.2** |
| | baz=27,SNR=6.2 | | | | | | |
| **MEEK** | **Meekatharra** | **29.53** | **196** | P | **P** | **02 22 55.7** | **-0.6** |
| | baz=30,SNR=6.0 | | | | | | |
| **MORW** | **Morawa** | **32.58** | **199** | P | **P** | **02 23 22.7** | **-0.3** |
| | baz=33,SNR=3.3 | | | | | | |
| **KMBL** | **Kambalda** | **33.42** | **189** | P | **P** | **02 23 29.2** | **-1.1** |
| | baz=34,SNR=11 | | | | | | |
| **BLDU** | **Ballidu** | **33.82** | **197** | P | **P** | **02 23 32.9** | **-0.9** |
| | baz=34,SNR=9.3 | | | | | | |
| **KLBR** | **Kellerberrin** | **34.47** | **195** | P | **P** | **02 23 38.4** | **-0.9** |
| | baz=35,SNR=19 | | | | | | |
| **BBOO** | **Buckleboo** | **35.41** | **167** | P | **P** | **02 23 46.0** | **-1.4** |
| | baz=36,SNR=55 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **35.87** | **195** | P | **P** | **02 23 50.7** | **-0.6** |
| | baz=36,SNR=7.6 | | | | | | |
| **HTT** | **Hallett** | **36.72** | **164** | P | **P** | **02 23 55.7** | **-3.0** |
| | baz=37,SNR=6.1 | | | | | | |
| **ARPS** | **Mount Arapiles** | **40.69** | **162** | P | **P** | **02 24 31.3** | **-0.3** |
| | baz=41,SNR=5.2 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.40** | **342** | *e*P | **P** | **02 24 40.6** | **+3.0** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,87nm,4.0s | | | | | | |
| **SONM** | **Songino Array** | **49.30** | **341** | P | **P** | **02 25 42.3** | **+2.5** |
| | comp=Z,0.6nm,0.6s,baz=142,slow=9.7,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.48** | **326** | P | **P** | **02 26 53.8** | **+0.3** |
| | comp=Z,1.3nm,0.4s,baz=111,slow=7.6,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.57** | **333** | P | **P** | **02 27 15.8** | **+1.6** |
| | comp=Z,0.6nm,0.3s,baz=130,slow=8.4,SNR=3.1 | | | | | | |
| **VNDA** | **Vanda** | **81.47** | **173** | P | **P** | **02 29 05.2** | **-1.3** |
| | comp=Z,3.3nm,0.7s,baz=316,slow=6.4,SNR=26 | | | | | | |
| **MAW** | **Mawson** | **82.20** | **200** | P | **P** | **02 29 09.1** | **-1.3** |
| | comp=Z,1.6nm,0.7s,baz=68,slow=4.0,SNR=5.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **122.23** | **53** | PKP | **PKPdf** | **02 35 43.6** | **-1.2** |
| | comp=Z,0.2nm,0.6s,baz=336,slow=2.0,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.10** | **287** | PKP | **PKPdf** | **02 35 47.4** | **-1.2** |
| | comp=Z,0.5nm,0.3s,baz=87,slow=1.8,SNR=28 | | | | | | |

*IDC **05** 03:02:47.5±0.9, 4.°88S×133.°48E, h0km, mb4.0/5, mb1 4.3/10, mb1mx4.0/34, mbtmp4.2/10, ML4.2/5, MS3.2/1, Ms1 3.2/1, ms1mx2.6/34, Error ellipse: s-maj=35.1km s-min=19.0km az=62.0*
*DJA **05** 03:02:49.5±0.7, 5°S±4°×13°4E±°, h10km, M5.0/9, mb5.2/9, mB5.4/7, MLv5.0/8, Mw(mB)4.8/7*
*AUST **05** 03:02:52.2, 4.°96S×133.°53E, h35km*
**ISC 05 03:02:50.8**±0.6**, 4.°89S**±0.°06×**133.°52E**±0.°06**, h25**km**, n31, σ1.s78**/27**, mb4.0**/5**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.33** | **327** | P | **Pn** | **03 03 29.0** | **+1.5** |
| | baz=2.4,SNR=136 | | | | | | |
| **FAKI** | **Fak Fak** | **2.33** | **327** | P | **Pn** | **03 03 29.0** | **+1.5** |
| FAKI | | | | S | **Sn** | **03 03 56.9** | **+1.5** |
| **RKPI** | **Ransiki, Papua** | **3.42** | **11** | P | **Pn** | **03 03 42.5** | **0.0** |
| RKPI | | | | S | **Sn** | **03 04 21.2** | **-1.0** |
| **BNDI** | **Bandanaira** | **3.62** | **276** | P | Pn | 03 03 50.3 | +5.0 |
| BNDI | | | | S | **Sb** | **03 04 35.5** | **-2.2** |
| **SIJI** | **Sorong** | **4.58** | **330** | Pn | **Pn** | **03 03 57.0** | **-1.5** |
| | 9.6nm,0.3s,baz=85,slow=23,SNR=13 | | | | | | |
| SIJI | | | | Sn | **Sn** | **03 04 48.0** | **-3.0** |
| | 18nm,0.3s,baz=149,slow=23,SNR=7.7 | | | | | | |
| **SWI** | **Sorong** | **4.59** | **330** | P | Pn | 03 04 02.7 | +4.1 |
| | baz=4.7,SNR=4.2 | | | | | | |
| **AAI** | **Ambon** | **5.44** | **282** | P | Pn | 03 04 14.7 | +4.3 |
| | 310nm,0.7s,4μm1.2nm | | | | | | |
| **NLAI** | **Namlea** | **6.61** | **284** | P | Pn | 03 04 30.9 | +4.5 |
| | 91nm,0.5s,2μm0.5nm | | | | | | |
| **LBMI** | **Labuha** | **7.34** | **305** | P | Pn | 03 04 40.7 | +4.2 |
| | 77nm,1.0s,3μm0.3nm | | | | | | |
| **KDU** | **Kakadu** | **7.82** | **188** | P | **Pn** | **03 04 45.1** | **+2.1** |
| | baz=7.8,SNR=71 | | | | | | |
| **SANI** | **Sanana** | **8.03** | **290** | P | **Pn** | **03 04 48.6** | **+2.7** |
| | 58nm,0.6s | | | | | | |
| **MTN** | **Manton Dam** | **8.25** | **196** | P | **Pn** | **03 04 51.6** | **+2.6** |
| | baz=8.2,SNR=16 | | | | | | |
| **SOEI** | **Soe** | **10.37** | **242** | P | Pn | 03 05 22.0 | +3.8 |
| | 58nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **11.11** | **241** | Pn | **Pn** | **03 05 26.6** | **-1.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 3.9nm,0.3s,baz=67,slow=7.7,SNR=2.2 | | | | | | |
| BATI | | | | Sn | Sn | 03 07 31.4 | -0.3 |
| | 3.9nm,0.3s,baz=38,slow=12,SNR=2.3 | | | | | | |
| KNRA | Kununurra | 11.70 | 203 | P | Pn | 03 05 38.2 | +2.0 |
| | baz=12,SNR=12 | | | | | | |
| APSI | Ampana | 12.49 | 288 | P | Pn | 03 05 51.3 | +4.2 |
| COEN | Coen | 13.11 | 134 | P | Pn | 03 05 52.9 | -2.6 |
| | baz=13,SNR=6.9 | | | | | | |
| KAPI | Kappang | 13.72 | 269 | Pn | Pn | 03 06 03.6 | -0.3 |
| | 0.7nm,0.3s,baz=106,slow=15,SNR=2.5 | | | | | | |
| PMG | Port Moresby | 14.26 | 109 | LR | LR | 03 13 16.2 | |
| | comp=Z,109nm,20.6s,baz=218,slow=44 | | | | | | |
| WRA | Warramunga Arr | 14.99 | 177 | Pn | Pn | 03 06 17.9 | -3.2 |
| | 1.9nm,0.3s,baz=360,slow=13,SNR=35 | | | | | | |
| WRA | | | | Sn | Sn | 03 08 55.2 | -11 |
| | 1.2nm,0.3s,baz=0.4,slow=22,SNR=4.0 | | | | | | |
| QIS | Mount Isa | 16.66 | 160 | P | Pn | 03 06 40.8 | -2.0 |
| | baz=17,SNR=9.4 | | | | | | |
| ASAR | Alice Springs | 18.68 | 179 | P | P | 03 07 06.7 | -0.5 |
| | 1.2nm,0.3s,baz=354,slow=11,SNR=71 | | | | | | |
| ASAR | | | | S | Sn | 03 10 24.1 | -12 |
| | 0.3nm,0.3s,baz=0.4,slow=27,SNR=5.0 | | | | | | |
| CTA | Charters Tower | 19.54 | 142 | P | P | 03 07 17.7 | +1.0 |
| | 0.3nm,0.3s,baz=336,slow=10.0,SNR=9.9 | | | | | | |
| WRKA | Warakurna | 20.66 | 194 | P | Pn | 03 07 31.0 | -0.2 |
| | baz=21,SNR=25 | | | | | | |
| CMAR | Chiang Mai Arr | 41.23 | 305 | P | P | 03 10 34.1 | +0.1 |
| | 1.3nm,0.3s,baz=119,slow=7.3,SNR=3.6 | | | | | | |
| MKAR | Makanchi Array | 68.45 | 325 | P | P | 03 13 52.2 | +1.4 |
| | 1.3nm,0.5s,baz=115,slow=8.5,SNR=12 | | | | | | |
| ZALV | Zalesovo Beam | 71.31 | 332 | P | P | 03 14 07.8 | -0.3 |
| | 0.8nm,0.5s,baz=105,slow=3.4,SNR=2.6 | | | | | | |
| VNDA | Vanda | 74.14 | 174 | P | P | 03 14 26.0 | +1.4 |
| | 1.1nm,1.1s,baz=346,slow=4.2,SNR=2.5 | | | | | | |
| ILAR | Eielson Array | 89.96 | 25 | P | P | 03 15 48.3 | +0.6 |
| | 0.3nm,0.7s,baz=253,slow=6.3,SNR=2.9 | | | | | | |
| CPUP | Villa Florida | 147.24 | 162 | PKPbc | PKPbc | 03 22 32.9 | +0.1 |
| | 0.4nm,0.3s,baz=162,slow=19,SNR=2.2 | | | | | | |
| LPAZ | La Paz | 149.98 | 135 | PKPbc | PKPbc | 03 22 40.8 | -0.1 |
| | 0.3nm,0.5s,baz=225,slow=2.9,SNR=2.2 | | | | | | |

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*NIED **05** 03:05:00, 46.30N×148.80E, h300km, Mw4.2 Best double couple: M0 2.47000×10^15 NP1:φs239.00000°, δ18.00000°, λ96.00000°. NP2:φs52.00000°, δ72.00000°, λ88.00000°.*
*MOS **05** 03:05:41.9±1.3, 47.01N×148.25E, h276km, mb4.2/8, Error ellipse: s-maj=12.6km s-min=7.8km az=68.1*
*ISCJB **05** 03:05:41.9±0.4, 46.68N±0.04×148.47E±0.08, h300km, mb3.8/13, Error ellipse: s-maj=8.0km s-min=3.7km az=31.0*
*SKHL **05** 03:05:42.0, 46.77N×148.60E, h292km±3km, mb4.9/3, msh5.1/1*
*IDC **05** 03:05:44.5±1.5, 46.96N×148.22E, h291km±20km, mb3.5/10, mb1 3.7/17, mb1mx3.4/43, mbtmp4.3/17, Error ellipse: s-maj=28.4km s-min=11.2km az=147.0*
*JMA **05** 03:05:45.0±0.6, 46.28N×148.78E, h256km, M4.2*
**ISC 05 03:05:42.5**±0.6, **46.55N**±0.06×**148.58E**±0.07, **h300**km, **n105**, σ**1s56**/113, **mb4.0**/13, **5C-4D, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUR | Kuril'sk | 1.40 | 201 d | iPN | Pn | 03 06 25.8 | +0.7 |
| KUR | | | | eS | S | 03 06 59.7 | +0.7 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,107nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,33nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,23nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,54nm,0.8s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,44nm,0.8s | | | | | | |
| KUR | Kuril'sk | 1.40 | 201 | eP | Pn | 03 06 25.5 | +0.4 |
| KUR | | | | AMB | AMB | 03 06 25.9 | |
| | comp=E,33nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 03 06 25.9 | |
| | comp=E,22nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 03 06 25.9 | |
| | comp=E,91nm,0.3s | | | | | | |
| KUR | | | | eS | S | 03 06 58.2 | -0.8 |
| KUR | | | | A | A | 03 06 58.9 | |
| | comp=E,53nm,0.7s | | | | | | |
| KUR | | | | A | A | 03 06 58.9 | |
| | comp=E,33nm,0.7s | | | | | | |
| SHO | Shikotan | 2.95 | 205 | eP | Pn | 03 06 36.8 | -1.0 |
| SHO | | | | AMB | AMB | 03 06 37.9 | |
| | comp=E,22nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 03 06 44.3 | |
| | comp=E,400nm,2.0s | | | | | | |
| SHO | | | | eS | S | 03 07 18.0 | -3.9 |
| SHO | | | | A | A | 03 07 19.3 | |
| | comp=E,130nm,0.3s | | | | | | |
| SHO | | | | A | A | 03 07 19.8 | |
| | comp=E,900nm,3.0s | | | | | | |
| SHO | | | | A | A | 03 07 19.8 | |
| | comp=E,1μm,3.0s | | | | | | |
| YUK | Yuzh-Kuril'sk | 3.16 | 218 c | iPN | Pn | 03 06 41.1 | +1.2 |
| YUK | | | | iS | S | 03 07 26.0 | +0.3 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,141nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,30nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,47nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,148nm,0.8s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,263nm,0.8s | | | | | | |
| YUK | Yuzh-Kuril'sk | 3.16 | 218 | eP | Pn | 03 06 41.1 | +1.2 |
| YUK | | | | AMB | AMB | 03 06 43.0 | |
| | comp=E,30nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 03 06 43.0 | |
| | comp=E,47nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 03 06 43.0 | |
| | comp=E,141nm,0.3s | | | | | | |
| YUK | | | | eS | S | 03 07 26.0 | +0.3 |
| YUK | | | | A | A | 03 07 27.9 | |
| | comp=E,150nm,0.8s | | | | | | |
| YUK | | | | A | A | 03 07 27.9 | |
| | comp=E,260nm,0.8s | | | | | | |
| NEM2 | Nemuro 2 | 3.76 | 213 | P | Pn | 03 06 45.1 | -1.1 |
| NEM2 | | | | eS | S | 03 07 32.0 | -5.2 |
| YSS | Yuzh-Sakhalins | 4.03 | 278 | ePN | Pn | 03 06 46.9 | -2.0 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | |
| YSS | Yuzh-Sakhalins | 4.03 | 278 | eP | Pn | 03 06 46.9 | -2.0 |
| YSS | | | | AMB | AMB | 03 06 47.8 | |
| | comp=Z,30nm,0.9s | | | | | | |
| YSS | | | | AMB | AMB | 03 06 49.9 | |
| | comp=Z,390nm,3.0s | | | | | | |
| JNK | Nakash | 4.03 | 224 | P | Pn | 03 06 49.5 | +0.4 |
| JMP | Maruseppu | 4.47 | 237 | P | Pn | 03 06 55.1 | +1.0 |
| JSE | Soyaes | 4.49 | 251 | P | Pn | 03 06 55.2 | +1.1 |
| JAK | Akkeshi | 4.50 | 219 | P | Pn | 03 06 53.6 | -0.7 |
| JAK | | | | eS | S | 03 07 47.6 | -4.3 |
| JAR | Ashorobuto | 4.71 | 228 | P | Pn | 03 06 57.5 | +0.7 |
| JWK2 | Keihoku | 4.82 | 258 | P | Pn | 03 06 59.6 | +1.7 |
| JKA | Kamikawa-asahi | 4.87 | 242 | eP | Pn | 03 07 00.3 | +1.8 |
| ASAJ | Asahikawa | 4.87 | 242 | P | Pn | 03 07 00.2 | +1.7 |
| ASAJ | Asahikawa | 4.87 | 242 | P | Pn | 03 07 00.3 | +1.8 |
| | comp=Z,16nm,0.3s,baz=70,slow=13,SNR=120 | | | | | | |
| ASAJ | Asahikawa | 4.87 | 242 | PN | Pn | 03 07 00.3 | +1.8 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,16nm,0.3s | | | | | | |
| JKK2 | Kamakawa 2 | 4.91 | 239 | P | Pn | 03 07 00.3 | +1.3 |
| HRK | Horoka | 4.94 | 233 | eP | Pn | 03 07 00.9 | +1.5 |
| JOB | Onbets | 4.97 | 225 | P | Pn | 03 06 59.7 | 0.0 |
| JOB | | | | eS | S | 03 07 58.7 | -3.0 |
| UGL | Uglegorsk | 5.07 | 302 | ePN | Pn | 03 06 53.5 | -7.2 |
| UGL | | | | eS | S | 03 07 50.9 | -13 |
| UGL | Uglegorsk | 5.07 | 302 | eP | Pn | 03 07 00.2 | -0.5 |
| UGL | | | | AMB | AMB | 03 07 03.1 | |
| | comp=Z,35nm,0.4s | | | | | | |
| UGL | | | | AMB | AMB | 03 07 16.1 | |
| | comp=Z,460nm,3.0s | | | | | | |
| JSS | Shosan | 5.20 | 248 | P | Pn | 03 07 04.7 | +2.4 |
| JCH | Churui | 5.42 | 225 | P | Pn | 03 07 04.1 | -0.8 |
| JCH | | | | eS | S | 03 08 06.6 | -4.6 |
| JAB | Ashibetsu | 5.43 | 238 | P | Pn | 03 07 07.2 | +2.1 |
| JFR | Furan | 5.43 | 234 | P | Pn | 03 07 06.3 | +1.2 |
| MYR | Moyori | 5.70 | 224 | eP | Pn | 03 07 07.0 | -1.2 |
| JBT2 | Biratori 2 | 5.82 | 232 | P | Pn | 03 07 09.8 | +0.2 |
| TYV | Tymovskoe | 5.83 | 320 | eP | Pn | 03 07 07.5 | -2.2 |
| TYV | | | | AMB | AMB | 03 07 08.5 | |
| | comp=Z,18nm,0.8s | | | | | | |
| JNBK | Urakawa-nobuka | 5.97 | 226 | P | Pn | 03 07 10.0 | -1.4 |
| JNBK | | | | eS | S | 03 08 15.7 | -7.4 |
| JEM | Erimo | 5.97 | 223 | P | Pn | 03 07 10.9 | -0.6 |
| JEM | | | | eS | S | 03 08 15.3 | -7.9 |
| ERM | Erimo | 5.97 | 223⇓ | ePN | Pn | 03 07 11.5 | 0.0 |
| ERM | Erimo | 5.97 | 223 | eP | Pn | 03 07 11.5 | 0.0 |
| JEW | Eniwo | 6.29 | 236 | P | Pn | 03 07 16.4 | +1.1 |
| SKR | Severo-Kuril's | 6.49 | 48 | ePN | Pn | 03 07 12.5 | -5.0 |
| SKR | | | | eS | S | 03 08 26.9 | -7.3 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,120nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=N,60nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,50nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,80nm,0.5s | | | | | | |
| SKR | Severo-Kuril's | 6.49 | 48 | eP | Pn | 03 07 16.6 | -0.9 |
| SKR | | | | AMB | AMB | 03 07 17.2 | |
| | comp=E,60nm,0.5s | | | | | | |
| SKR | | | | AMB | AMB | 03 07 17.2 | |
| | comp=E,120nm,0.5s | | | | | | |
| SKR | | | | eS | S | 03 08 30.5 | -3.7 |
| SKR | | | | A | A | 03 08 31.7 | |
| | comp=E,50nm,0.5s | | | | | | |
| SKR | | | | A | A | 03 08 31.7 | |
| | comp=E,80nm,0.5s | | | | | | |
| JNB | Noboribetsu | 6.76 | 236 | P | Pn | 03 07 21.0 | +0.1 |
| JNB | | | | eS | S | 03 08 37.2 | -3.2 |
| JKB | Kayabe | 7.14 | 232 | P | Pn | 03 07 24.6 | -1.0 |
| JKB | | | | eS | S | 03 08 42.4 | -6.6 |
| JSH | Shimam | 7.23 | 240 | P | Pn | 03 07 27.7 | +1.0 |
| JYM2 | Yakumo 2 | 7.36 | 236 | P | Pn | 03 07 28.2 | -0.1 |
| JSR | Shiriuchi | 7.73 | 232 | P | Pn | 03 07 32.1 | -0.6 |
| JSR | | | | eS | S | 03 08 56.0 | -6.0 |
| JOSM | Okushiri--Mats | 7.91 | 239 | P | Pn | 03 07 34.7 | -0.2 |
| JTM | Tenmabayashi | 7.92 | 226 | P | Pn | 03 07 33.4 | -1.7 |
| JTM | | | | eS | S | 03 08 58.1 | -8.3 |
| JTH | Tanohata | 8.22 | 219 | P | Pn | 03 07 39.0 | +0.2 |
| JTH | | | | eS | S | 03 09 05.4 | -7.8 |
| NKL | Nikolayevsk | 8.35 | 325 | eP | Pn | 03 07 36.0 | -4.1 |
| NKL | | | | AMB | AMB | 03 07 37.0 | |
| | comp=E,30nm,1.0s | | | | | | |
| PETK | Petropavlovsk- | 8.82 | 39 | P | Pn | 03 07 44.3 | -1.7 |
| | comp=E,2.8nm,0.3s,baz=212,slow=13,SNR=13 | | | | | | |
| PETK | Petropavlovsk- | 8.82 | 39 | PN | Pn | 03 07 44.3 | -1.7 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| OFUJ | Ofunato | 9.02 | 217 | P | Pn | 03 07 48.6 | 0.0 |
| PET | Petropavlovsk | 9.19 | 41 | ePN | Pn | 03 07 49.6 | -0.8 |
| PET | | | | pmax | pmax | | |
| | comp=Z,32nm,1.3s | | | | | | |
| JRG | Rokugo | 9.21 | 222 | P | Pn | 03 07 51.0 | 0.0 |
| HABR | Khabarovsk | 9.36 | 287 | ePN | Pn | 03 07 47.5 | -5.1 |
| HABR | | | | eS | S | 03 09 29.7 | -8.9 |
| HABR | | | | pmax | pmax | | |
| | comp=E,109nm,2.6s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,54nm,2.6s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,21nm,1.3s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,332nm,17.0s | | | | | | |
| USRK | Ussuriysk Ar. | 11.90 | 265 | P | P | 03 08 24.5 | -0.8 |
| | comp=Z,1.9nm,0.3s,baz=70,slow=12,SNR=34 | | | | | | |
| EKMR | Ekimchan | 12.01 | 309 | eP | Pn | 03 08 23.1 | -1.9 |
| EKMR | | | | AMB | AMB | 03 08 27.5 | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| VLA | Vladivostok | 12.34 | 260⇑ | ePN | Pn | 03 08 28.1 | -0.9 |
| VLA | Vladivostok | 12.34 | 260 | eP | Pn | 03 08 28.1 | -0.9 |
| MJA0 | Matsu Arr-Jizo | 12.63 | 221 | ePN | P | 03 08 36.2 | +2.7 |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| MAJO | Matsushiro | 12.65 | 221 c | iPN | P | 03 08 36.1 | +2.5 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,77nm,0.6s | | | | | | |
| MAJO | Matsushiro | 12.65 | 221 | eP | P | 03 08 36.1 | +2.5 |
| MJAR | Matsushiro Arr | 12.65 | 221 | P | P | 03 08 36.2 | +2.6 |
| | comp=Z,2.9nm,0.3s,baz=21,slow=12,SNR=24 | | | | | | |
| MJAR | Matsushiro Arr | 12.65 | 221 | PN | P | 03 08 36.2 | +2.6 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| MJAR | Matsushiro Arr | 12.65 | 221 | eP | P | 03 08 36.1 | +2.5 |
| MAT | Matsushiro | 12.65 | 221 | P | P | 03 08 35.8 | +2.2 |
| MAT | | | | eS | S | 03 10 57.1 | +3.9 |
| BMKR | Bomnak | 14.91 | 310 | eP | Pn | 03 08 58.0 | -1.7 |
| KROS | Kirovskiy | 15.81 | 308 | eP | P | 03 09 07.1 | -1.1 |
| KROS | | | | AMB | AMB | 03 09 10.7 | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| SEY | Seymchan | 16.56 | 6 | P | P | 03 09 15.6 | -0.7 |
| | comp=Z,0.5nm,0.3s,baz=176,slow=9.2,SNR=13 | | | | | | |
| SEY | Seymchan | 16.56 | 6 | cP | P | 03 09 15.7 | -0.6 |
| SEY | Seymchan | 16.56 | 6 | eP | P | 03 09 15.7 | -0.6 |
| KSRS | Korea Array | 17.80 | 247 | P | Pn | 03 09 33.3 | -0.2 |
| | comp=Z,1.3nm,0.3s,baz=52,slow=10,SNR=17 | | | | | | |
| KSRS | Korea Array | 17.80 | 247 | eP | Pn | 03 09 33.6 | +0.1 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KSRS | Korea Array | 17.80 | 247 | eP | Pn | 03 09 33.6 | +0.1 |
| YAK | Yakutsk | 18.91 | 332 | eP | P | 03 09 41.0 | -0.5 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,7.0nm,1.0s | | | | | | |
| YAK | Yakutsk | 18.91 | 332 | eP | P | 03 09 40.4 | -1.1 |
| JNU | Nakatsue | 19.04 | 231 | P | P | 03 09 45.8 | +2.6 |
| | comp=N,0.5nm,0.3s,baz=9.5,slow=6.1,SNR=3.6 | | | | | | |
| GTA | Gaotai | 35.90 | 277 | eP | P | 03 12 15.3 | +0.5 |
| KDAK | Kodiak Island | 36.64 | 50 | P | P | 03 12 22.5 | +1.9 |
| | comp=N,4.5nm,0.9s,baz=291,slow=8.6,SNR=7.0 | | | | | | |
| KDAK | Kodiak Island | 36.64 | 50 | P | P | 03 12 22.5 | +1.9 |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| ILAR | Eielson Array | 38.65 | 38 | P | P | 03 12 39.3 | +2.0 |
| | comp=Z,0.9nm,0.6s,baz=255,slow=5.9,SNR=18 | | | | | | |
| ILAR | Eielson Array | 38.65 | 38 | eP | P | 03 12 40.0 | +2.8 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| ILAR | Eielson Array | 38.65 | 38 | eP | P | 03 12 40.0 | +2.8 |
| INK | Inuvik | 43.49 | 32 | P | P | 03 13 17.5 | +1.3 |
| | comp=Z,1.5nm,0.3s,baz=305,slow=7.4,SNR=23 | | | | | | |
| INK | Inuvik | 43.49 | 32 | P | P | 03 13 17.5 | +1.3 |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| KURK | Kurchatov | 44.85 | 302 | eP | P | 03 13 26.5 | -0.7 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| KURK | Kurchatov | 44.85 | 302 | eP | P | 03 13 26.5 | -0.7 |
| YKA | Yellowknife Ar | 52.92 | 35 | P | P | 03 14 29.0 | +1.1 |
| | comp=Z,1.3nm,0.7s,baz=305,slow=7.2,SNR=3.1 | | | | | | |
| YKA | Yellowknife Ar | 52.92 | 35 | P | P | 03 14 29.0 | +1.1 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| YKA | Yellowknife Ar | 52.92 | 35 | eP | P | 03 14 29.0 | +1.1 |
| ARU | Arti | 53.02 | 316 c | iP | P | 03 14 28.5 | -0.2 |
| ARU | | | | | | 03 16 28.4 | |
| ARU | | | | S | S | 03 21 35.6 | +1.2 |
| ARU | | | | SS | SKiKP | 03 25 11.7 | -0.7 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,14nm,2.5s | | | | | | |
| ARU | Arti | 53.02 | 316 | eP | P | 03 14 28.5 | -0.2 |
| ARCES | ARCESS Array B | 56.98 | 339 | P | P | 03 14 56.0 | -0.7 |
| | comp=Z,1.7nm,0.8s,baz=52,slow=6.2,SNR=3.1 | | | | | | |
| ARCES | ARCESS Array B | 56.98 | 339 | P | P | 03 14 56.0 | -0.7 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| FINES | FINESS Array B | 62.84 | 333 | P | P | 03 15 35.7 | -0.7 |
| | comp=Z,4.7nm,0.6s,baz=34,slow=7.6,SNR=13 | | | | | | |
| FINES | FINESS Array B | 62.84 | 333 | eP | P | 03 15 35.7 | -0.7 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| NB2 | NORSAR Subarra | 67.36 | 339 | P | P | 03 16 05.0 | -0.4 |
| | comp=Z,1.8nm,0.5s,baz=29,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 67.36 | 339 | P | P | 03 16 04.6 | -0.7 |
| | comp=Z,2.0nm,0.5s,baz=31,slow=6.6,SNR=12 | | | | | | |
| NOA | NORSAR Array B | 67.36 | 339 | eP | P | 03 16 04.9 | -0.4 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| KBZ | Khabaz | 68.70 | 311 | P | P | 03 16 15.2 | +1.4 |
| | comp=Z,4.3nm,1.1s,baz=53,slow=5.1,SNR=3.6 | | | | | | |
| KBZ | Khabaz | 68.70 | 311 | P | P | 03 16 15.2 | +1.4 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| AKASG | Malin Array Be | 69.92 | 324 | P | P | 03 16 20.6 | -0.5 |
| | comp=Z,1.3nm,0.4s,baz=38,slow=7.1,SNR=4.2 | | | | | | |
| AKASG | Malin Array Be | 69.92 | 324 | iP | P | 03 16 20.2 | -1.0 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| CLL | Collm | 75.29 | 333⇓ | iP | P | 03 16 52.9 | +0.3 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| CLL | Collm | 75.29 | 333 | eP | P | 03 16 52.9 | +0.3 |
| CLL | Collm | 75.29 | 333⇓ | iP | P | 03 16 52.9 | +0.3 |
| | comp=Z,5.0nm,0.6s | | | | | | |
| GERES | GERESS Array B | 77.20 | 331 | P | P | 03 17 03.9 | +0.4 |
| | comp=Z,0.7nm,0.6s,baz=34,slow=7.1,SNR=3.6 | | | | | | |
| GERES | GERESS Array B | 77.20 | 331 | P | P | 03 17 03.9 | +0.4 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |

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**DJA 05 03:17:53.1**±1.2, **1°N**±9°×**9°7E**±°, **h37**km±5km, **M3.7**/8, **MLv3.7**/8, **Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSI | Gunungsitoli | 0.45 | 39 | P | Pn | 03 18 04.3 | +1.4 |
| GSI | | | | S | Sn | 03 18 12.6 | +2.6 |
| SNSI | Sinabang, Aceh | 1.74 | 326 | P | Pn | 03 18 21.1 | +0.3 |
| SNSI | | | | S | Sn | 03 18 42.6 | +0.9 |
| MNSI | Mandailing Nat | 2.29 | 94 | P | Pn | 03 18 29.6 | +1.2 |
| MNSI | | | | S | Sn | 03 18 57.0 | +1.6 |
| KCSI | Kotacane, Aceh | 2.60 | 11 | P | Pn | 03 18 32.7 | +0.1 |
| TSI | Tuntungan | 2.84 | 27 | P | Pn | 03 18 36.4 | +0.6 |

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*ISCJB **05** 03:36:45.5±0.7, 20.79S±0.03×177.84W±0.03, h442km±7km, mb5.2/169, Error ellipse: s-maj=4.5km s-min=3.4km az=148.7*
*AUST **05** 03:36:46.7±0.7, 20.68S×177.73W, h446km±10km, Error ellipse: s-maj=8.8km s-min=6.4km az=129.0*
*GCMT **05** 03:36:47.8±0.2, 20.93S×177.63W, h485km±1km, MW5.4/86, Moment Tensor Solution. s86,c130; Duration: 1s2 Moment tensor: Scale 10^17Nm; Mrr-1.04±.03; Mθθ1.30±.05; Mφφ-0.25±.05; Mrθ0.40±.06; Mθφ0.04±.05; Mφr-0.53±.05; Best double couple: M0 1.36400×10^17 NP1:φs292.00000°, δ59.00000°, λ-61.00000°. NP2:φs65.00000°, δ41.00000°, λ-130.00000°. Principal axes: T 1.3680, Plg10.0000°, Azm2.0000°; N -0.0060, Plg25.0000°, Azm97.0000°; P -1.3610, Plg63.0000°, Azm252.0000°; nsta1 refers to body waves, cutoff=40s.*
*NEIC **05** 03:36:47.8±0.1, 20.86S×177.77W, mb5.2/125 Error ellipse: s-maj=5.6km s-min=3.5km az=139.0*
*BJI **05** 03:36:47.9, 20.66S×177.59W, h476km, mb5.2/51, mB5.2/32*
*IDC **05** 03:36:49.1±0.4, 20.80S×177.82W, h472km±3km, mb4.9/29, mb1 4.9/29, mb1mx4.8/36, mbtmp5.7/29, Error ellipse: s-maj=10.3km s-min=8.7km az=145.0*
*SZGRF **05** 03:36:49.8, 21.44S×178.91W, h489km*
*MOS **05** 03:36:49.0±0.9, 20.71S×177.89W, h479km, mb5.1/26, Error ellipse: s-maj=9.1km s-min=8.4km az=89.4*
**ISC 05 03:36:48.7**±0.2, **20.87S**±0.04×**177.75W**±0.04, **h477**km±2km, **h477**km**:pP-P, n962**, σ**1s24**/1215, **mb5.2**/169, **60C-44D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 5.04 | 307 | eP | P | 03 38 14.9 | -0.1 |
| MSVF | | | | eS | S | 03 39 24.5 | -0.7 |
| MSVF | Nonsavu | 5.04 | 307 | P | P | 03 38 15.3 | +0.3 |
| | 4μm,0.6s | | | | | | |
| MSVF | Nonsavu | 5.04 | 307 | eP | P | 03 38 14.9 | -0.1 |
| MSVF | | | | eS | S | 03 39 24.5 | -0.7 |
| NIUE | Niue | 7.57 | 78 | P | P | 03 38 38.4 | -1.7 |
| | baz=7.5,SNR=84 | | | | | | |
| RAO | Raoul Island | 8.35 | 181 | P | P | 03 38 46.3 | -1.9 |
| | 373nm,0.3s,baz=279,slow=22,SNR=6.2 | | | | | | |
| RAO | | | | S | S | 03 40 20.6 | -5.6 |
| | 88nm,0.3s,baz=253,slow=19,SNR=2.8 | | | | | | |
| RAO | Raoul Island | 8.35 | 181 | eP | P | 03 38 46.2 | -1.9 |
| RAO | | | | eS | S | 03 40 26.5 | +0.3 |
| RAO | Raoul Island | 8.35 | 181 | eP | P | 03 38 46.2 | -1.9 |
| RAO | | | | eS | S | 03 40 26.5 | +0.3 |
| AFI | Afiamalu | 8.97 | 40 | P | P | 03 38 50.2 | -4.8 |
| | 38nm,0.3s,baz=47,slow=1.6,SNR=42 | | | | | | |
| AFI | | | | S | S | 03 40 25.6 | -13 |
| | 183nm,0.3s,baz=38,slow=19,SNR=13 | | | | | | |
| AFI | Afiamalu | 8.97 | 40 | eP | P | 03 38 50.1 | -4.9 |
| AFI | | | | eS | S | 03 40 26.8 | -12 |
| DZM | Mont Dzumac | 14.76 | 262 | eP | P | 03 39 57.3 | +0.4 |
| | 670nm,0.9s | | | | | | |
| OUZ | Omahuta | 16.20 | 206 | eP | P | 03 40 12.6 | +0.8 |
| | 64nm,0.8s | | | | | | |
| KUZ | Kuaotunu | 16.82 | 198 | PN | P | 03 40 18.6 | +0.3 |
| MXZ | Matakaoa Point | 16.99 | 191 | PN | P | 03 40 18.6 | -1.4 |
| MXZ | | | | eSN | S | 03 43 12.1 | -1.7 |
| WMGZ | Waiomatatini S | 17.22 | 190 | ePN | P | 03 40 22.4 | 0.0 |
| HAZ | Te Kaha | 17.27 | 192 | ePN | P | 03 40 20.5 | -2.4 |
| HAZ | | | | SN | S | 03 43 17.1 | -1.6 |
| MKAZ | Moumakai | 17.32 | 199 | ePN | P | 03 40 23.9 | +0.5 |
| PUZ | Puketiti | 17.49 | 191 | ePN | P | 03 40 21.8 | -3.3 |
| PUZ | | | | SN | S | 03 43 20.8 | -1.9 |
| TWGZ | Tauwhareparae | 17.64 | 191 | ePN | P | 03 40 24.6 | -2.1 |
| MWZ | Matawai | 17.88 | 192 | ePN | P | 03 40 26.7 | -2.2 |
| URZ | Urewera | 17.89 | 193 | P | P | 03 40 26.3 | -2.7 |
| | 28nm,0.3s,baz=251,slow=3.0,SNR=35 | | | | | | |
| URZ | | | | S | S | 03 43 24.8 | -4.5 |
| | 3.1nm,0.3s,baz=114,slow=15,SNR=3.6 | | | | | | |
| URZ | Urewera | 17.89 | 193 | ePN | P | 03 40 25.5 | -3.5 |
| URZ | Urewera | 17.89 | 193 | eP | P | 03 40 27.2 | -1.8 |
| | 173nm,0.5s | | | | | | |
| URZ | | | | eS | S | 03 43 30.1 | +0.8 |
| TKGZ | Te Karaka | 17.92 | 191 | ePN | P | 03 40 27.0 | -2.3 |
| RAGZ | Rawiri | 18.06 | 192 | ePN | P | 03 40 28.7 | -2.0 |
| RIGZ | Rimuhau | 18.19 | 191 | PN | P | 03 40 32.2 | +0.2 |
| PRGZ | Paritu Road | 18.38 | 191 | ePN | P | 03 40 34.7 | +1.0 |
| KNZ | Kokohu | 18.52 | 191 | ePN | P | 03 40 35.4 | +0.6 |
| MHGZ | Mahia Peninsul | 18.60 | 191 | PN | P | 03 40 36.7 | +1.0 |
| WHHZ | Waihua | 18.65 | 192 | PN | P | 03 40 36.5 | +0.4 |
| HIZ | Hauiti | 18.71 | 198 | eP | P | 03 40 38.0 | +1.3 |
| | 184nm,1.0s | | | | | | |
| NMHZ | Naumai | 18.76 | 193 | PN | P | 03 40 36.8 | -0.4 |
| ARHZ | Aropaoanui | 18.88 | 193 | PN | P | 03 40 38.8 | +0.6 |
| BKZ | Black Stump Fm | 18.90 | 194 | PN | P | 03 40 36.8 | -1.6 |
| BKZ | Black Stump Fm | 18.90 | 194 | eP | P | 03 40 36.9 | -1.5 |
| | 46nm,0.8s | | | | | | |
| BKZ | | | | eS | S | 03 43 45.7 | -0.1 |
| KNTN | Kanton | 18.92 | 19 | eP | P | 03 40 35.8 | -3.1 |
| | 445nm,0.8s | | | | | | |
| MCHZ | McNeill Hill | 19.12 | 193 | PN | P | 03 40 39.6 | -0.8 |
| KWHZ | Kaweka Forest | 19.16 | 194 | PN | P | 03 40 39.7 | -1.2 |
| FWVZ | Far West T-bar | 19.21 | 196 | ePN | P | 03 40 40.2 | -1.3 |
| WNVZ | Wahianoa | 19.27 | 196 | ePN | P | 03 40 40.3 | -1.6 |
| BHHZ | Black Hill Sta | 19.30 | 195 | PN | P | 03 40 40.3 | -1.8 |
| KRHZ | Kereru | 19.38 | 194 | PN | P | 03 40 41.5 | -1.3 |
| KAHZ | Kahuranaki | 19.42 | 193 | PN | P | 03 40 43.2 | +0.1 |
| NEZ | North Egmont | 19.63 | 199 | PN | P | 03 40 49.0 | +3.8 |
| PXZ | Pawanui | 19.65 | 192 | PN | P | 03 40 44.7 | -0.5 |
| BFZ | Birch Farm | 20.40 | 193 | ePN | P | 03 40 50.9 | -1.2 |
| BFZ | Birch Farm | 20.40 | 193 | eP | P | 03 40 51.1 | -0.9 |
| | 71nm,0.5s | | | | | | |
| BFZ | | | | eS | S | 03 44 14.0 | +4.0 |
| MRZ | Mangatainoka R | 20.53 | 195 | PN | P | 03 40 51.8 | -1.5 |
| MRZ | | | | eSN | S | 03 44 07.2 | -5.0 |
| KIW | Kapiti Island | 20.89 | 196 | PN | P | 03 40 56.3 | -0.2 |
| SNZO | South Karori | 21.36 | 196 | eP | P | 03 41 00.2 | -0.5 |
| | 53nm,0.6s | | | | | | |
| SNZO | | | | eS | S | 03 44 26.5 | +1.3 |
| TCW | Tory Channel | 21.38 | 197 | PN | P | 03 41 00.4 | -0.5 |
| QRZ | Quartz Range | 21.55 | 200 | PN | P | 03 41 03.0 | +0.5 |
| NNZ | Nelson | 21.64 | 198 | ePN | P | 03 41 02.8 | -0.4 |
| THZ | Tophouse | 22.28 | 199 | PN | P | 03 41 09.1 | 0.0 |
| THZ | Tophouse | 22.28 | 199 | eP | P | 03 41 08.7 | -0.4 |
| | 49nm,0.6s | | | | | | |
| DSZ | Denniston Nort | 22.61 | 201 | PN | P | 03 41 12.3 | +0.2 |
| KHZ | Kahutara | 22.70 | 197 | PN | P | 03 41 12.6 | -0.2 |
| KHZ | Kahutara | 22.70 | 197 | eP | P | 03 41 12.0 | -0.8 |

62nm,0.7s
**TARA Tarawa** 23.90 336 *e*P P 03 41 21.3 -2.6
582nm,1.0s
**OXZ Oxford** 23.97 199 *e*P P 03 41 22.9 -1.3
98nm,0.6s
**RPZ Rata Peaks** 24.62 200 P P 03 41 27.7 -2.3
10nm,0.4s,baz=246,slow=3.5,SNR=2.2
RPZ S S 03 45 12.3 -4.4
4.7nm,0.5s,baz=157,slow=15,SNR=2.6
**RPZ Rata Peaks** 24.62 200 *e*P P 03 41 29.3 -0.7
203nm,1.7s
RPZ S S 03 45 12.3 -4.4
**ODZ Otahua Downs** 25.95 199 *e*P P 03 41 40.8 -0.9
184nm,2.2s
**TBI Tubuai** 26.31 101 *e*S S 03 45 28.7 -15
128nm,26.8s
**PAE Paea** 26.77 88 *e*pP pP 03 43 03.7 -7.0
27nm,1.3s
**PPT2 Papeete2** 26.79 88 *e*pP pP 03 43 04.1 -6.9
186nm,1.5s
PPT2 *e*S S 03 45 43.9 -7.6
121nm,26.5s
**PPT2 Papeete2** 26.79 88 *e*LR LR 03 59 06.2
148nm,29.5s
**TIAR Tiarei** 27.01 88 *e*pP pP 03 43 05.8 -7.1
28nm,0.8s
**TVO Taravao** 27.05 88 *e*pP pP 03 43 06.2 -7.2
81nm,1.4s
**WHZ Wether Hill Ro** 27.58 202 *e*P P 03 41 57.5 +1.4
80nm,0.8s
**EIDS Eidsvold** 28.97 255 P P 03 42 08.3 -0.3
baz=29,SNR=27
**EIDS Eidsvold** 28.97 255 *e*P P 03 42 08.8 +0.1
193nm,1.0s
**ARMA Armidale** 29.12 245 P P 03 42 11.0 +1.1
baz=29,SNR=72
**ARMA Armidale** 29.12 245 *e*P P 03 42 11.1 +1.2
146nm,0.8s
**MGCD Mangrove Creek** 30.22 239 P P 03 42 20.8 +1.4
baz=30,SNR=7.7
**XMAS Kiritimati** 30.24 44 *e*P P 03 42 19.0 -0.7
238nm,0.9s
**RMQ Roma** 31.12 253 P P 03 42 28.4 +1.2
baz=31,SNR=137
**CNB Canberra Magne** 32.21 236 P P 03 42 37.7 +1.1
baz=32,SNR=116
**CAN Canberra** 32.50 237 *e*P P 03 42 40.1 +1.1
CAN pmax pmax
comp=Z,290nm,0.9s
**CAN Canberra** 32.50 237 *e*P P 03 42 40.1 +1.1
comp=Z,290nm,0.9s
**YNG Young** 32.69 239 P P 03 42 41.2 +0.6
baz=33,SNR=24
**MILA Mila** 32.94 233 P P 03 42 43.6 +0.9
baz=33,SNR=12
**CTA Charters Tower** 33.68 265 P P 03 42 49.4 +0.2
comp=Z,277nm,0.6s,baz=92,slow=11,SNR=371
CTA PcP PcP 03 45 15.6 -0.2
comp=Z,20nm,0.8s,baz=87,slow=3.5,SNR=3.8
**CTAO Charters Tower** 33.68 265 *e*P P 03 42 49.0 -0.2
CTAO pmax pmax
comp=Z,321nm,0.7s
**CTAO Charters Tower** 33.68 265 *e*P P 03 42 49.0 -0.2
comp=Z,321nm,0.7s
**CMSA Cobar Meteorol** 34.33 244 P P 03 42 54.9 +0.4
baz=34,SNR=212
**QLP Quilpie** 35.17 253 P P 03 43 01.8 +0.2
baz=35,SNR=33
**PMG Port Moresby** 35.65 283 P P 03 43 05.6 -0.1
comp=Z,302nm,0.8s,baz=86,slow=5.8,SNR=42
**PMG Port Moresby** 35.65 283 P P 03 43 05.6 -0.1
baz=36,SNR=25
**PMG Port Moresby** 35.65 283 *e*P P 03 43 05.6 -0.1
comp=Z,328nm,0.8s
**TOO Toolangi** 35.87 234 P P 03 43 07.8 +0.5
baz=36,SNR=141
**COEN Coen** 37.84 274 P P 03 43 24.1 +0.3
baz=38,SNR=84
**ARPS Mount Arapiles** 38.48 237 P P 03 43 29.6 +0.8
baz=39,SNR=31
**QIS Mount Isa** 39.80 263 P P 03 43 39.2 -0.6
baz=40,SNR=55
**HTT Hallett** 40.26 243 P P 03 43 41.5 -1.9
baz=40,SNR=251
**BBOO Buckleboo** 42.59 244 P P 03 44 01.8 -0.1
baz=43,SNR=469
**BBOO Buckleboo** 42.59 244 *e*P P 03 44 02.0 +0.1
comp=Z,429nm,0.8s
**JAY Jayapura** 44.38 289 P P 03 44 16.1 0.0
baz=44,SNR=57
**AS01 Alice Springs** 44.62 257 *e*P P 03 44 17.8 -0.1
**ASAR Alice Springs** 44.66 257 P P 03 44 18.4 +0.1
comp=Z,660nm,0.8s,baz=99,slow=7.8,SNR=3627
ASAR PcP PcP 03 45 51.0 +0.1
comp=Z,35nm,0.6s,baz=100,slow=3.8,SNR=6.5
ASAR S S 03 50 17.4 -1.9
comp=Z,9.5nm,0.8s,baz=96,slow=16,SNR=12
**WRAB Tennant Creek** 44.77 262 *d i*P P 03 44 18.2 -0.9
**WRAB Tennant Creek** 44.77 262 P P 03 44 18.7 -0.4
comp=Z,3µm,1.0s
**WRA Warramunga Arr** 44.78 262 P P 03 44 18.6 -0.6
comp=Z,356nm,0.9s,baz=94,slow=7.4,SNR=344
WRA PcP PcP 03 45 51.6 +0.2
comp=Z,15nm,0.7s,baz=110,slow=2.7,SNR=4.7
WRA S S 03 50 18.1 -2.9
comp=Z,7.0nm,0.9s,baz=98,slow=14,SNR=8.4
**GENI Genyem** 44.82 288 P P 03 44 18.9 -0.6
**KDU Kakadu** 48.19 271 P P 03 44 44.6 -0.5
baz=48,SNR=82
**FORT Forrest** 49.36 247 P P 03 44 53.2 -0.4
baz=49,SNR=405
**FORT Forrest** 49.36 247 *e*P P 03 44 53.3 -0.4
comp=Z,741nm,0.7s
FORT *e*S S 03 51 22.9 -1.6
**MTN Manton Dam** 49.40 271 P P 03 44 53.2 -0.9
baz=49,SNR=76
**MTN Manton Dam** 49.40 271 *e*P P 03 44 53.3 -0.9
comp=Z,433nm,0.8s
**WRKA Warakurna** 49.59 254 P P 03 44 55.4 -0.1
baz=50,SNR=565
**GUMO Guam** 50.21 310 P P 03 45 00.1 0.0
comp=Z,99nm,0.8s,baz=40,slow=12,SNR=4.0
**KNRA Kununurra** 50.87 266 P P 03 45 04.8 -0.1
baz=51,SNR=93
**FAKI Fak Fak** 51.81 283 P P 03 45 11.5 -0.3
baz=52,SNR=13
**FAKI Fak Fak** 51.81 283 *e*P P 03 45 11.6 -0.3
comp=Z,293nm,1.3s
**SIJI Sorong** 53.55 285 P P 03 45 24.5 +0.1
comp=Z,678nm,0.7s,baz=78,slow=5.8,SNR=73
SIJI PP PP 03 47 29.4 -2.2
comp=Z,38nm,0.3s,baz=334,slow=0.7,SNR=5.1
**SWI Sorong** 53.56 285 P P 03 45 24.5 +0.1
baz=54,SNR=45
**KMBL Kambalda** 54.62 246 P P 03 45 31.3 -0.4
baz=55,SNR=28
**PALU Palau** 54.66 296 P P 03 45 33.3 +1.2
baz=55,SNR=15
**SOEI Soe** 56.74 272 P P 03 45 48.3 +1.4
baz=57,SNR=175
**SOEI Soe** 56.74 272 *e*P P 03 45 48.2 +1.4
comp=Z,1µm,0.8s
**BATI Baumata** 57.16 271 P P 03 45 50.8 +1.1
comp=Z,531nm,0.7s,baz=180,slow=1.1,SNR=52
**SBA Scott Base** 57.52 184 *e*P P 03 45 54.5 +3.5
SBA pmax pmax
comp=Z,84nm,0.9s
**SBA Scott Base** 57.52 184 *e*P P 03 45 54.5 +3.5
comp=Z,84nm,0.9s
**VNDA Vanda** 57.56 185 P P 03 45 53.9 +2.5
comp=Z,24nm,0.9s,baz=360,slow=7.6,SNR=107
**VNDA Vanda** 57.56 185 *e*P P 03 45 53.9 +2.5
VNDA pmax pmax
comp=Z,73nm,1.5s
**VNDA Vanda** 57.56 185 *e*P P 03 45 53.9 +2.5
comp=Z,73nm,1.5s
**TNTI Ternate** 57.78 285 *e*P P 03 45 53.8 0.0
comp=Z,723nm,0.9s
**MBWA Marble Bar** 58.00 258 *e*P P 03 45 55.0 -0.3
comp=Z,561nm,0.7s
**MEEK Meekatharra** 58.02 251 P P 03 45 54.7 -0.7
baz=58,SNR=68
**KLBR Kellerberrin** 58.11 245 P P 03 45 55.7 -0.2
baz=58,SNR=111
**NWAO Narrogin (SRO)** 58.41 243 P P 03 45 58.0 +0.1
comp=Z,128nm,1.1s,baz=272,slow=0.0,SNR=19
**NWAO Narrogin (SRO)** 58.41 243 *e*P P 03 45 58.3 +0.4
NWAO pmax pmax
comp=Z,110nm,1.0s
**NWAO Narrogin (SRO)** 58.41 243 P P 03 45 58.2 +0.4
baz=58,SNR=15
**NWAO Narrogin (SRO)** 58.41 243 *e*P P 03 45 58.3 +0.4
comp=Z,110nm,1.0s
**RKGY Rocky Gully** 58.47 242 P P 03 45 58.9 +0.7
baz=58,SNR=5.8
**MMRI Maumere** 59.00 272 *e*P P 03 46 01.7 -0.5
comp=Z,552nm,1.0s
**BLDU Ballidu** 59.12 246 P P 03 46 02.4 -0.2
baz=59,SNR=65
**MORW Morawa** 59.90 248 P P 03 46 07.9 -0.1
baz=60,SNR=41
**H01W1 Cape Leeuwin H** 60.76 241 P P 03 46 14.0 +0.7
**H01W2 Cape Leeuwin H** 60.77 241 P P 03 46 14.1 +0.7
**H01W3 Cape Leeuwin H** 60.77 241 P P 03 46 14.1 +0.7
**LUWI Luwuk** 61.23 281 *e*P P 03 46 17.3 +0.4
comp=Z,564nm,0.9s
**KAPI Kappang** 62.55 275 P P 03 46 25.6 0.0
comp=Z,46nm,0.7s,baz=158,slow=3.6,SNR=46
**KAPI Kappang** 62.55 275 P P 03 46 25.3 -0.3
comp=Z,453nm,0.7s,SNR=16
**KAPI Kappang** 62.55 275 *e*P P 03 46 25.3 -0.3
comp=Z,74nm,0.9s
**GIRL Giralia** 62.67 255 P P 03 46 27.4 +1.1
baz=63,SNR=34
**CASY Casey** 63.73 205 *e*P P 03 46 33.0 +0.6
comp=Z,110nm,1.0s
**SNPH Sibulan** 65.28 291 *d e*P P 03 46 47.0 +3.8
**JAGI Jajag, Banyuwa** 66.61 270 P P 03 46 50.4 -1.1
baz=67,SNR=12
**JAGI Jajag, Banyuwa** 66.61 270 *e*P P 03 46 50.0 -1.4
comp=Z,379nm,0.9s
**RCP Roxas** 66.76 293 *d e*P P 03 46 52.4 +0.1
**JHJ2 Mitsune** 67.25 322 *e*P P 03 46 54.9 0.0
comp=Z,373nm,1.0s
**JHJ Hachijo jima 2** 67.27 322 P P 03 46 55.0 0.0
comp=Z,140nm,0.4s,baz=60,slow=23,SNR=9.1
**MYLDM Lahad Datu** 67.65 285 *e*P P 03 46 59.9 +2.1
comp=Z,201nm,0.9s
**QSPA South Pole Qui** 69.20 180 pP pP 03 48 49.2 +2.1
comp=Z,16nm,1.1s,baz=79,slow=6.3,SNR=2.4
QSPA S S 03 55 36.3 +2.5
comp=Z,1.2nm,0.9s,baz=51,slow=18,SNR=8.1
**KKM Kota Kinabalu** 70.08 285 P P 03 47 13.1 +0.5
baz=70,SNR=34
**KKM Kota Kinabalu** 70.08 285 *e*P P 03 47 12.7 0.0
comp=Z,238nm,0.9s
**UGM Wanagama** 70.19 269 P P 03 47 13.1 -0.2
baz=70,SNR=11
**UGM Wanagama** 70.19 269 *e*P P 03 47 13.0 -0.2
comp=Z,247nm,0.8s
**SMRI Semarang** 70.55 270 *e*P P 03 47 15.6 +0.2
comp=Z,194nm,0.8s
**JOW Kunigami** 70.58 310 P P 03 47 16.1 +0.8
comp=Z,5.6nm,0.8s,baz=61,slow=15,SNR=10
**MJAR Maushiro Arr** 70.64 324 P P 03 47 15.2 -0.2
comp=Z,39nm,0.7s,baz=155,slow=6.1,SNR=96
MJAR pP pP 03 48 57.4 +0.9
comp=Z,1.0nm,0.6s,baz=198,slow=30,SNR=3.2
MJAR PKP2bc 04 15 07.4
comp=Z,0.4nm,0.3s,baz=180,slow=1.3,SNR=4.8
**MAJO Matsushiro** 70.64 324 *d i*P P 03 47 15.1 -0.3
MAJO pmax pmax
comp=Z,317nm,0.8s
**MAJO Matsushiro** 70.64 324 *e*P P 03 47 15.2 -0.3
comp=Z,49nm,0.7s
**MAT Matsushiro** 70.64 324 P P 03 47 15.2 -0.2
MAT S S 03 55 51.6 +0.7
**MIR Mirnyy** 70.76 205 *i*P P 03 47 26.0 +10
MIR pmax pmax
comp=Z,100nm,1.0s
**ERM Erimo** 72.26 330 P P 03 47 27.9 +3.2
ERM pmax pmax
comp=Z,148nm,1.9s
**SBUM Sibu** 72.29 280 *e*P P 03 47 26.4 +0.8
comp=Z,100nm,0.9s
**YUK Yuzh-Kuril'sk** 72.68 333 *de*P P 03 47 29.2 +2.1
YUK *i* PPP PPP 03 52 02.0
YUK *i* S SKiKP 03 56 08.1 -2.0
YUK pmax pmax
comp=Z,151nm,1.7s
YUK pmax pmax
comp=N,110nm,1.6s
YUK pmax pmax
comp=E,95nm,1.6s
YUK pmax pmax
comp=Z,305nm,4.0s
**JNU Nakatsue** 72.70 317 P P 03 47 27.7 +0.1
comp=Z,86nm,0.9s,baz=101,slow=5.3,SNR=30
**JNU Nakatsue** 72.70 317 *e*P P 03 47 27.1 -0.4
comp=Z,119nm,1.0s
**KUR Kuril'sk** 72.86 335 P P 03 47 16.7 -11
KUR *i* *PP pP 03 48 59.3 -11
KUR *i* 03 50 17.5
KUR *e*PPP PPP 03 52 00.2
KUR *i* S S 03 56 14.2 -1.0
KUR pmax pmax
comp=N,69nm,1.8s
KUR pmax pmax
comp=E,62nm,1.8s
KUR pmax pmax
comp=Z,104nm,1.8s
**YOJ Yonaguni jima** 73.14 305 *e*P P 03 47 29.6 -0.6
YOJ pmax pmax
comp=Z,228nm,0.8s
**YOJ Yonaguni jima** 73.14 305 *e*P P 03 47 29.6 -0.6
comp=Z,228nm,0.8s
**LEM Lembang** 73.26 269 P P 03 47 32.1 +0.7
comp=Z,430nm,0.9s,baz=64,slow=4.0,SNR=52
**KSM Kuching** 73.69 278 P P 03 47 34.5 +0.8
baz=74,SNR=57
**KSM Kuching** 73.69 278 *e*P P 03 47 34.3 +0.6
comp=Z,326nm,0.9s
**TWG Pinlang** 73.77 303 *e*P P 03 47 32.4 -1.5
comp=Z,614nm,0.5s
**YULB Yu-li** 73.89 303 *e*P P 03 47 33.1 -1.5
comp=Z,52nm,0.7s
**NACB Ninganchiao** 74.07 304 *e*P P 03 47 35.0 -0.6
comp=Z,193nm,1.0s
**ASAJ Asahikawa** 74.16 331 P P 03 47 37.2 +1.6
comp=Z,63nm,0.8s,baz=227,slow=4.2
**ASAJ Asahikawa** 74.16 331 *e*P P 03 47 37.3 +1.6
comp=Z,69nm,0.8s
**SSLB Suanglung** 74.37 303 *e*P P 03 47 36.5 -0.9
comp=Z,101nm,0.6s
**TPUB Ta-pu** 74.37 303 *e*P P 03 47 36.7 -0.6
comp=Z,305nm,0.7s
**YHNB Yeheng** 74.50 304 *e*P P 03 47 37.9 -0.2
comp=Z,132nm,0.9s
**TATO Taipei** 74.58 305 *e*P P 03 47 38.1 -0.4
comp=Z,212nm,0.8s
**SKR Severo-Kuril's** 74.88 343 *d e*P P 03 47 40.5 +1.0
**KSNAH Namhae** 75.67 316 P P 03 47 45.1 +0.8
SNR=6.0
**KSNAH Namhae** 75.67 316 P P 03 47 45.1 +0.8
SNR=6.0
**YSS Yuzh-Sakhalins** 76.33 333 *i*P P 03 47 47.9 +0.2
YSS pmax pmax
comp=Z,60nm,1.0s
**YSS Yuzh-Sakhalins** 76.33 333 *e*P P 03 47 48.5 +0.9
YSS *e*PcP PcP 03 47 49.1 -8.0
**PET Petropavlovsk** 76.38 346 *e*P P 03 47 47.4 -0.4
PET pmax pmax
comp=Z,12nm,0.6s
**KSTBA Taebaek** 76.47 319 P P 03 47 49.9 +1.1
SNR=5.3
**KSTBA Taebaek** 76.47 319 P P 03 47 49.9 +1.1
SNR=5.3
**KSCPR CHUPUNGNYEONG** 76.51 318 P P 03 47 49.6 +0.6
SNR=7.8
**KSCPR CHUPUNGNYEONG** 76.51 318 P P 03 47 49.6 +0.6
SNR=7.8
**PEA0 Petropavlovsk-** 76.68 345 *e*P P 03 47 49.6 +0.1
PEA0 *e*pP pP 03 49 34.0 +1.2
**PETK Petropavlovsk-** 76.68 345 P P 03 47 49.6 +0.1
comp=Z,30nm,0.7s,baz=142,slow=8.8,SNR=39
PETK pP pP 03 49 32.3 -0.5
comp=Z,9.8nm,0.9s,baz=150,slow=6.8,SNR=5.9
**KSJEU Jeongeup** 76.73 316 P P 03 47 50.9 +0.7
SNR=7.4
**KSJEU Jeongeup** 76.73 316 P P 03 47 50.9 +0.7
SNR=7.4
**KSBON Boeun** 76.80 318 P P 03 47 51.3 +0.7
SNR=6.8
**KSBON Boeun** 76.80 318 P P 03 47 51.3 +0.7
SNR=6.8
**QZH Quanzhou** 76.81 303 *i*P P 03 47 52.0 +1.2
QZH PMZ
comp=Z,370nm,1.0s
**KSCHJ Chungju** 76.92 318 P P 03 47 52.1 +0.9
SNR=7.9
**KSCHJ Chungju** 76.92 318 P P 03 47 52.1 +0.9
SNR=7.9
**TJN Taejon** 77.00 317 *i e*P P 03 47 52.5 +0.9
**KSDGY Daegwallycong** 77.00 319 P P 03 47 53.1 +1.4
SNR=11
**KSDGY Daegwallycong** 77.00 319 P P 03 47 53.1 +1.4
SNR=11
**KSJMJ Jumunjin** 77.07 319 P P 03 47 53.4 +1.4
SNR=9.2
**KSJMJ Jumunjin** 77.07 319 P P 03 47 53.4 +1.4
SNR=9.2
**KSRS Korea Array** 77.31 318 P P 03 47 54.4 +1.0
comp=Z,22nm,0.7s,baz=133,slow=6.0,SNR=48
KSRS pP pP 03 49 38.0 +1.3
comp=Z,1.0nm,0.6s,baz=142,slow=5.0,SNR=3.3
**KSAR Wonju Array Be** 77.33 318 P P 03 47 54.4 +0.9
KSAR *PP pP 03 49 38.0 +1.1
**KSAR Wonju Array Be** 77.33 318 P P 03 47 54.4 +0.9
KSAR pP pP 03 49 38.0 +1.1
**KS01 Wonju Array Si** 77.35 319 *e*P P 03 47 54.2 +0.7
KS01 *e*pP pP 03 49 38.9 +1.9
**KSSKC Sokcho** 77.47 319 P P 03 47 55.7 +1.6
SNR=11
**KSSKC Sokcho** 77.47 319 P P 03 47 55.7 +1.6
SNR=11
**KSICN Icheon** 77.53 318 P P 03 47 55.9 +1.4
SNR=7.9
**KSIJA INJE** 77.53 319 P P 03 47 56.1 +1.6
SNR=11
**KSIJA INJE** 77.53 319 P P 03 47 56.1 +1.6
SNR=11
**KSCHC Chuncheon** 77.58 319 P P 03 47 56.3 +1.5
SNR=12
**SEHB SEOHWA** 77.62 319 P P 03 47 56.7 +1.6
SNR=9.5
**SEHB SEOHWA** 77.62 319 P P 03 47 56.7 +1.6
SNR=9.5
**KSSWO Suwon** 77.79 318 P P 03 47 57.3 +1.4
SNR=7.3
**KSCWO Cheorwon** 77.96 319 P P 03 47 58.4 +1.6
SNR=39
**KSSEO Seoul** 77.96 318 P P 03 47 58.1 +1.3
SNR=8.2
**KSSEO Seoul** 77.96 318 P P 03 47 58.1 +1.3
SNR=8.2
**PKM Peak Mountain** 78.09 45 P P 03 47 60.0 +2.1
baz=78
**INCN Inchon** 78.14 318 *e*P P 03 47 58.2 +0.4
comp=Z,187nm,1.5s
**SMMC Simmler** 78.21 45 P P 03 48 00.3 +2.0
baz=78
**YNCB YEONCHEON** 78.30 318 P P 03 48 00.1 +1.4
SNR=8.0
**KSMUS Musan** 78.31 318 P P 03 48 00.0 +1.3
SNR=14
**KSGAH Ganghwa** 78.39 318 P P 03 48 00.2 +1.0
SNR=16
**CHGN Chignik** 78.59 11 *e*P P 03 47 59.3 -0.5
**VLA Vladivostok** 78.72 325 P P 03 48 02.7 +1.9
**MSHR Mys Shultsa** 78.75 324 *d i*P P 03 48 02.2 +1.2
**109C Camp Elliot, M** 78.80 48 P P 03 48 02.6 +1.1
baz=79
**ARVC Arvin** 78.88 46 P P 03 48 03.2 +1.3
baz=79
**KMRM Mail Ridge** 78.89 39 *e*P P 03 48 03.6 +1.7
comp=Z,72nm,0.9s
**VES Vestal, Richgr** 79.12 45 P P 03 48 04.3 +1.1
baz=79
**MURC Murrieta** 79.13 48 P P 03 48 04.4 +1.1
baz=79
**BFSC Mount Baldy Ra** 79.17 47 P P 03 48 04.5 +0.9
baz=79
**MONP Monument Peak** 79.28 49 P P 03 48 05.8 +1.4
baz=80
**EDW2 Edwards Air Fo** 79.31 46 P P 03 48 05.7 +1.5
baz=80
**USRK Ussuriysk Ar.** 79.40 326 P P 03 48 05.8 +1.4
comp=Z,51nm,0.8s,baz=130,slow=3.5,SNR=77
**ISA Isabella** 79.43 45 *e*P P 03 48 03.8 -1.1
ISA *e**PP pP 03 49 47.2 -1.8
ISA pmax pmax
comp=Z,12nm,0.9s
**ISA Isabella** 79.43 45 P P 03 48 06.5 +1.6
baz=80
**ISA Isabella** 79.43 45 *e*P P 03 48 03.8 -1.1
comp=Z,12nm,0.9s
ISA *e*pP pP 03 49 47.1 -1.8
**DLV T Lat** 79.45 287 *e*P P 03 48 06.6 +1.1
comp=Z,134nm,1.0s
**CMB Columbia Colle** 79.58 43 *e*P P 03 48 06.5 +0.9
CMB pmax pmax
comp=Z,15nm,1.0s
**CMB Columbia Colle** 79.58 43 *e*P P 03 48 06.5 +0.9
comp=Z,15nm,1.0s
**PFO Pinyon Flat Ob** 79.65 48 *e*P P 03 48 07.3 +1.1
PFO pmax pmax
comp=Z,16nm,1.4s
**PFO Pinyon Flat Ob** 79.65 48 *e*P P 03 48 07.2 +1.1
comp=Z,16nm,1.4s
**OHCM Honcut** 79.68 41 *e*P P 03 48 07.1 +1.1
OHCM *e*pP pP 03 49 49.6 -0.5
**BTDF Bukit Timah Da** 79.72 275 P P 03 48 08.0 +1.2
baz=80,SNR=5.1
**MYKOM Kota Tinggi** 79.80 276 *e*P P 03 48 08.1 +0.8
comp=Z,199nm,1.0s
**WDC Whiskeytown Da** 79.81 39 *e*P P 03 48 07.5 +0.8
WDC *e**PP pP 03 49 51.3 +0.4
WDC pmax pmax
comp=Z,19nm,1.0s
**WDC Whiskeytown Da** 79.81 39 *e*P P 03 48 07.5 +0.8
comp=Z,19nm,1.0s
WDC *e*pP pP 03 49 51.3 +0.4
**N02D Trinity Center** 79.96 39 P P 03 48 09.1 +1.5
baz=80
**O03D Paynes Creek** 80.08 40 P P 03 48 09.3 +1.1
baz=80
**CWC Cottonwood Cre** 80.13 45 P P 03 48 10.1 +1.4
baz=80
**M02C Callahan** 80.14 39 P P 03 48 09.5 +1.1
baz=80,SNR=5.8
**BELC Belle Mtn. Jos** 80.18 48 P P 03 48 10.4 +1.4
baz=80
**L02D Cave Junction,** 80.19 38 P P 03 48 10.6 +1.9
baz=80
**NJ2 Nanjing** 80.29 310 *e*P P 03 48 10.9 +1.5
NJ2 PMZ
comp=Z,60nm,0.9s
**MPMC Manual Prospec** 80.31 46 P P 03 48 11.1 +1.4
baz=80
**MLAC Mammoth Lakes** 80.33 44 P P 03 48 11.1 +1.3
baz=80
**MTUM Tungsten Hills** 80.34 44 *e*P P 03 48 11.1 +1.3
MTUM *e*pP pP 03 49 53.7 -0.5
**GSC Goldstone** 80.34 46 *e*P P 03 48 10.9 +1.1
GSC *e**PP pP 03 49 53.4 -0.7
GSC pmax pmax
comp=Z,9.0nm,1.0s
**GSC Goldstone** 80.34 46 P P 03 48 11.2 +1.4
baz=80
**GSC Goldstone** 80.34 46 *e*P P 03 48 10.8 +1.1
comp=Z,9.3nm,1.0s
GSC *e*pP pP 03 49 53.4 -0.7
**DAC Darwin (Calif)** 80.36 45 *e*P P 03 48 07.3 -2.6
DAC *e**PP pP 03 49 52.8 -1.5
**DAC Darwin (Calif)** 80.36 45 *e*P P 03 48 07.3 -2.6
DAC *e*pP pP 03 49 52.8 -1.5
**HEC Hector,Ludlow** 80.41 47 P P 03 48 11.3 +1.3
baz=81
**YBH Yreka Blue Hor** 80.43 38 P P 03 48 11.5 +1.4
comp=Z,22nm,0.8s,baz=209,slow=2.4,SNR=41
**YBH Yreka Blue Hor** 80.43 38 *e*P P 03 48 11.6 +1.6
YBH *e**PP pP 03 49 52.8 -1.6
YBH pmax pmax
comp=Z,16nm,0.8s
**YBH Yreka Blue Hor** 80.43 38 *e*P P 03 48 11.6 +1.6
comp=Z,16nm,0.8s
YBH *e*pP pP 03 49 52.8 -1.6
**GLA Glamis** 80.49 49 P P 03 48 12.2 +1.8
baz=81
**GMRC Granite Mounta** 80.84 47 P P 03 48 13.9 +1.5
baz=81

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IRM | Iron Mountain | 80.86 | 48 | P | P | 03 48 13.9 | +1.6 |
| | baz=81 | | | | | | |
| HABR | Khabarovsk | 80.88 | 330 | deP | P | 03 48 11.8 | -0.2 |
| HABR | | | | e*PP | pP | 03 49 54.6 | -2.0 |
| HABR | | | | e*SP | sP | 03 50 43.3 | -2.5 |
| HABR | | | | e | | 03 51 23.8 | |
| HABR | | | | ePPP | PPP | 03 53 17.1 | |
| HABR | | | | eS | S | 03 57 40.4 | -0.1 |
| HABR | | | | eSS | SS | 04 03 07.2 | -1.1 |
| HABR | | | | eSSS | SSS | 04 06 38.7 | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,28nm,1.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,25nm,1.0s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,16nm,1.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,66nm,21.0s | | | | | | |
| GRAC | Grapevine Rang | 80.92 | 45 | P | P | 03 48 14.9 | +2.3 |
| | baz=81 | | | | | | |
| MDJ | Mudanjiang | 80.95 | 325 | P | P | 03 48 14.1 | +1.6 |
| MDJ | | | | sP | sP | 03 50 41.4 | -4.9 |
| MDJ | | | | S | SKKSac | 03 57 47.6 | -1.1 |
| MDJ | | | | PMZ | | | |
| | comp=Z,72nm,0.8s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,140nm,5.6s | | | | | | |
| MDJ | Mudanjiang | 80.95 | 325 | eP | P | 03 48 14.1 | +1.6 |
| | comp=Z,70nm,0.9s | | | | | | |
| FURC | Furnace Creek, | 80.96 | 45 | P | P | 03 48 14.5 | +1.7 |
| | baz=81 | | | | | | |
| M04C | Macdoel | 80.97 | 39 | P | P | 03 48 14.4 | +1.5 |
| | baz=81 | | | | | | |
| TUQ | Turquoise Moun | 81.02 | 47 | P | P | 03 48 14.8 | +1.5 |
| | baz=81 | | | | | | |
| KDAK | Kodiak Island | 81.12 | 13 | P | P | 03 48 14.3 | +1.3 |
| | comp=Z,12nm,0.7s,baz=216,slow=5.1,SNR=9.1 | | | | | | |
| NVAR | Mina Array Bea | 81.13 | 43 | P | P | 03 48 15.2 | +1.3 |
| | comp=Z,9.0nm,0.9s,baz=226,slow=9.4,SNR=50 | | | | | | |
| NVAR | | | | pP | pP | 03 49 58.8 | +0.2 |
| | comp=Z,4.2nm,0.9s,baz=223,slow=8.3,SNR=5.7 | | | | | | |
| NVAR | | | | PKKPbc | PKKPbc | 04 06 48.2 | +0.6 |
| | comp=Z,1.4nm,0.7s,baz=85,slow=2.3,SNR=9.8 | | | | | | |
| NVAR | | | | PKPPKP | P'P'df | 04 14 50.9 | +1.0 |
| | comp=Z,0.6nm,0.8s,baz=64,slow=4.1,SNR=3.7 | | | | | | |
| NV01 | Mina Array Sit | 81.13 | 43 | eP | P | 03 48 14.7 | +0.7 |
| NV01 | | | | epP | pP | 03 49 59.1 | +0.6 |
| QIZ | Qiongzhong | 81.22 | 294 | P | P | 03 48 14.6 | +0.1 |
| QIZ | | | | pP | pP | 03 49 58.6 | -0.5 |
| QIZ | | | | PP | PP | 03 51 28.7 | +0.2 |
| QIZ | | | | S | S | 03 57 46.2 | +1.0 |
| QIZ | | | | PMZ | | | |
| | comp=Z,150nm,2.9s | | | | | | |
| MAW | Mawson | 81.30 | 200 | P | P | 03 48 14.9 | +0.9 |
| | comp=Z,43nm,0.9s,baz=130,slow=6.4,SNR=93 | | | | | | |
| MAW | Mawson | 81.30 | 200 | eP | P | 03 48 14.9 | +0.9 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| MAW | Mawson | 81.30 | 200 | P | P | 03 48 14.9 | +0.9 |
| | baz=81,SNR=41 | | | | | | |
| MAW | Mawson | 81.30 | 200 | eP | P | 03 48 14.9 | +0.9 |
| | comp=Z,11nm,1.0s | | | | | | |
| I03D | Drain, OR | 81.31 | 37 | P | P | 03 48 15.9 | +1.5 |
| | baz=82 | | | | | | |
| LDFC | Landfair | 81.38 | 47 | eP | P | 03 48 16.6 | +1.5 |
| | comp=Z,30nm,1.0s | | | | | | |
| LDFC | | | | epP | pP | 03 49 59.5 | -0.4 |
| COCO | West Island | 81.52 | 260 | eP | P | 03 48 17.1 | +0.9 |
| COCO | West Island | 81.52 | 260 | eP | P | 03 48 17.1 | +0.9 |
| | comp=Z,414nm,0.5s | | | | | | |
| K04D | Chiloquin, OR | 81.55 | 38 | P | P | 03 48 17.4 | +1.6 |
| | baz=82 | | | | | | |
| TPNV | Topopah Spring | 81.64 | 45 | eP | P | 03 48 16.9 | +0.4 |
| TPNV | | | | e*PP | pP | 03 50 01.2 | -0.1 |
| TPNV | Topopah Spring | 81.64 | 45 | P | P | 03 48 18.0 | +1.5 |
| | baz=82 | | | | | | |
| TPNV | Topopah Spring | 81.64 | 45 | eP | P | 03 48 16.9 | +0.4 |
| TPNV | | | | epP | pP | 03 50 01.2 | -0.1 |
| PDMCI | Parker Dam,Lak | 81.64 | 49 | P | P | 03 48 17.7 | +1.4 |
| | baz=82 | | | | | | |
| BKNI | Bangkinang | 81.90 | 273 | eP | P | 03 48 18.1 | 0.0 |
| | comp=Z,400nm,0.3s | | | | | | |
| I04A | Tendick Farm, | 81.90 | 37 | P | P | 03 48 18.9 | +1.4 |
| | baz=82 | | | | | | |
| MOD | Modoc | 81.95 | 39 | eP | P | 03 48 19.1 | +1.1 |
| | comp=Z,17nm,0.8s | | | | | | |
| K05A | Summer Lake | 82.11 | 39 | eP | P | 03 48 20.1 | +1.3 |
| | comp=Z,37nm,0.9s | | | | | | |
| SHPR | Sheep Range | 82.12 | 46 | eP | P | 03 48 20.1 | +1.2 |
| SHPR | | | | epP | pP | 03 50 00.9 | -3.0 |
| J05D | Fort Rock, OR | 82.25 | 38 | P | P | 03 48 21.1 | +1.6 |
| | baz=82,SNR=23 | | | | | | |
| H04A | Detroit Lake | 82.59 | 36 | eP | P | 03 48 21.8 | +0.8 |
| | comp=Z,52nm,1.4s | | | | | | |
| SNY | Shenyang | 82.64 | 320 | ⇓P | P | 03 48 21.1 | -0.1 |
| SNY | | | | PMZ | | | |
| | comp=Z,35nm,0.7s | | | | | | |
| CN2 | Changchun | 82.73 | 322 | eP | P | 03 48 22.1 | +0.4 |
| CN2 | | | | epP | pP | 03 50 08.4 | +1.6 |
| CN2 | | | | eS | S | 03 57 58.0 | -1.4 |
| CN2 | | | | PMZ | | | |
| | comp=Z,70nm,1.1s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,200nm,3.0s | | | | | | |
| I05D | Terrebonne, OR | 82.84 | 37 | P | P | 03 48 23.5 | +1.2 |
| | baz=83,SNR=8.0 | | | | | | |
| WHN | Wuhan | 82.85 | 306 | ⇑P | P | 03 48 23.9 | +1.3 |
| WHN | | | | pP | pP | 03 50 11.1 | +3.4 |
| WHN | | | | PMZ | | | |
| | comp=Z,210nm,1.2s | | | | | | |
| R11A | Troy Canyon, C | 82.85 | 44 | P | P | 03 48 24.0 | +1.3 |
| | baz=83 | | | | | | |
| KLR | Kul'dur | 82.96 | 329 | eP | P | 03 48 18.8 | -3.9 |
| KLR | | | | pmax | pmax | | |
| | comp=E,38nm,1.4s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,43nm,1.4s | | | | | | |
| BMN | Battle Mountai | 82.97 | 42 | eP | P | 03 48 24.1 | +0.9 |
| BMN | | | | e*PP | pP | 03 50 08.3 | -0.1 |
| BMN | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| BMN | Battle Mountai | 82.97 | 42 | eP | P | 03 48 24.1 | +0.9 |
| | comp=Z,14nm,1.0s | | | | | | |
| BMN | | | | epP | pP | 03 50 08.3 | -0.1 |
| TUC | Tucson | 83.03 | 52 | eP | P | 03 48 25.3 | +1.7 |
| TUC | | | | e*PP | pP | 03 50 07.4 | -1.4 |
| TUC | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| TUC | Tucson | 83.03 | 52 | eP | P | 03 48 25.3 | +1.7 |
| | comp=Z,9.6nm,0.9s | | | | | | |
| TUC | | | | epP | pP | 03 50 07.4 | -1.4 |
| F04A | Amboy | 83.25 | 35 | eP | P | 03 48 24.3 | +0.1 |
| | comp=Z,45nm,1.4s | | | | | | |
| WVOR | Wild Horse Val | 83.26 | 40 | eP | P | 03 48 25.1 | +0.5 |
| WVOR | | | | e*PP | pP | 03 50 11.3 | +1.4 |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| WVOR | Wild Horse Val | 83.26 | 40 | eP | P | 03 48 25.1 | +0.5 |
| | comp=Z,13nm,1.0s | | | | | | |
| WVOR | | | | epP | pP | 03 50 11.3 | +1.4 |
| BRLK | Bradley Lake | 83.29 | 13 | eP | P | 03 48 25.1 | +0.9 |
| | comp=Z,253nm,2.0s | | | | | | |
| IPM | Ipoh | 83.41 | 277 | eP | P | 03 48 26.6 | +0.8 |
| | comp=Z,286nm,1.5s | | | | | | |
| G05D | Wamic, OR | 83.42 | 36 | P | P | 03 48 26.5 | +1.4 |
| | baz=84 | | | | | | |
| UBPT | Khong Chiam | 83.47 | 289 | P | P | 03 48 27.4 | +1.4 |
| | comp=Z,157nm,0.9s | | | | | | |
| RSO | Redoubt South | 83.55 | 12 | eP | P | 03 48 24.8 | -0.9 |
| TIA | Tai'an | 83.69 | 312 | ⇓P | P | 03 48 27.2 | +0.5 |
| TIA | | | | PMZ | | | |
| | comp=Z,80nm,1.3s | | | | | | |
| I07A | Izee | 83.73 | 38 | eP | P | 03 48 27.9 | +1.0 |
| | comp=Z,14nm,0.9s | | | | | | |
| I07A | | | | epP | pP | 03 50 12.4 | +0.1 |
| G06A | Carlson Farm, | 83.79 | 37 | eP | P | 03 48 27.7 | +0.7 |
| | comp=Z,120nm,2.3s | | | | | | |
| CCUT | Cedar City | 83.89 | 46 | eP | P | 03 48 29.4 | +1.4 |
| | comp=Z,8.2nm,1.1s | | | | | | |
| CCUT | | | | epP | pP | 03 50 12.3 | -1.1 |
| J08A | Circle Bar Ran | 83.90 | 39 | eP | P | 03 48 29.1 | +1.3 |
| | comp=Z,13nm,1.1s | | | | | | |
| J08A | | | | epP | pP | 03 50 10.8 | -2.5 |
| KULM | Kulim | 84.05 | 278 | eP | P | 03 48 29.9 | +0.9 |
| | comp=Z,158nm,1.4s | | | | | | |
| WUAZ | Wupatki | 84.21 | 49 | P | P | 03 48 31.2 | +1.7 |
| | baz=84 | | | | | | |
| WUAZ | Wupatki | 84.21 | 49 | eP | P | 03 48 29.0 | -0.5 |
| WUAZ | | | | epP | pP | 03 50 13.7 | -1.4 |
| D05A | Enumclaw | 84.27 | 35 | eP | P | 03 48 30.6 | +1.3 |
| | comp=Z,76nm,1.6s | | | | | | |
| SPU | Mount Spurr | 84.35 | 12 | eP | P | 03 48 28.7 | -0.7 |
| ELK | Elko | 84.39 | 43 | eP | P | 03 48 30.0 | -0.4 |
| ELK | | | | e*PP | pP | 03 50 15.2 | -0.8 |
| ELK | Elko | 84.39 | 43 | eP | P | 03 48 30.0 | -0.4 |
| ELK | | | | epP | pP | 03 50 15.2 | -0.8 |
| PSI | Prapat | 84.75 | 275 | P | P | 03 48 32.1 | -0.5 |
| | comp=Z,37nm,0.8s,baz=146,slow=3.6,SNR=20 | | | | | | |
| PSI | Prapat | 84.75 | 275 | eP | P | 03 48 32.0 | -0.6 |
| PSI | | | | pmax | pmax | | |
| | comp=Z,78nm,1.1s | | | | | | |
| PSI | Prapat | 84.75 | 275 | P | P | 03 48 32.2 | -0.5 |
| | baz=85,SNR=10 | | | | | | |
| PSI | Prapat | 84.75 | 275 | eP | P | 03 48 32.0 | -0.6 |
| | comp=Z,78nm,1.1s | | | | | | |
| G08A | Pilot Rock | 84.77 | 37 | eP | P | 03 48 32.8 | +0.8 |
| | comp=Z,20nm,1.1s | | | | | | |
| A04D | Lummi Island | 84.87 | 33 | P | P | 03 48 33.7 | +1.6 |
| | baz=85 | | | | | | |
| SUA | Susitna One | 84.87 | 13 | eP | P | 03 48 31.6 | -0.5 |
| | comp=Z,28nm,0.7s | | | | | | |
| B05A | Bryant | 84.89 | 34 | P | P | 03 48 33.7 | +1.4 |
| | baz=85 | | | | | | |
| LTY | Liberty | 85.02 | 35 | eP | P | 03 48 33.5 | +0.4 |
| | comp=Z,11nm,1.0s | | | | | | |
| E07A | Sunnyside | 85.03 | 36 | eP | P | 03 48 33.8 | +0.7 |
| | comp=Z,13nm,0.9s | | | | | | |
| HAWA | Hanford | 85.11 | 36 | eP | P | 03 48 33.5 | +0.1 |
| | comp=Z,16nm,0.9s | | | | | | |
| HAWA | | | | epP | pP | 03 50 18.6 | -0.6 |
| MSU | Marysvale | 85.20 | 46 | eP | P | 03 48 33.7 | -0.7 |
| MSU | | | | e*PP | pP | 03 50 20.2 | 0.0 |
| MSU | Marysvale | 85.20 | 46 | eP | P | 03 48 33.7 | -0.7 |
| MSU | | | | epP | pP | 03 50 20.2 | 0.0 |
| TTA | Tatalina | 85.27 | 10 | eP | P | 03 48 33.4 | -0.5 |
| TTA | | | | pmax | pmax | | |
| | comp=Z,53nm,1.5s | | | | | | |
| TTA | Tatalina | 85.27 | 10 | eP | P | 03 48 33.4 | -0.5 |
| | comp=Z,53nm,1.5s | | | | | | |
| PMR | Palmer | 85.32 | 13 | eP | P | 03 48 33.8 | -0.2 |
| PMR | | | | pmax | pmax | | |
| | comp=Z,62nm,1.8s | | | | | | |
| PMR | Palmer | 85.32 | 13 | eP | P | 03 48 33.8 | -0.2 |
| | comp=Z,62nm,1.8s | | | | | | |
| 121A | Cookes Peak, D | 85.35 | 53 | P | P | 03 48 37.1 | +1.9 |
| | baz=86 | | | | | | |
| SKNT | Sakolnakorn | 85.45 | 290 | P | P | 03 48 36.9 | +1.1 |
| | comp=Z,219nm,1.0s | | | | | | |
| GSI | Gunungsitoli | 85.48 | 273 | eP | P | 03 48 36.8 | +0.8 |
| | comp=Z,518nm,1.4s | | | | | | |
| MFID | Camas Ranch | 85.52 | 40 | eP | P | 03 48 35.2 | -0.5 |
| MFID | | | | epP | pP | 03 50 19.8 | -1.8 |
| DUG | Dugway | 85.66 | 44 | epP | pP | 03 50 20.6 | -1.9 |
| DIV | Divide | 85.68 | 15 | eP | P | 03 48 36.3 | +0.3 |
| | comp=Z,22nm,0.8s | | | | | | |
| BMRM | Bremner River | 85.83 | 16 | eP | P | 03 48 37.0 | +0.4 |
| | comp=Z,66nm,1.4s | | | | | | |
| D08A | Wollman Farm, | 85.84 | 36 | eP | P | 03 48 38.1 | +1.1 |
| | comp=Z,16nm,1.0s | | | | | | |
| D08A | | | | epP | pP | 03 50 24.1 | +1.1 |
| SCM | Sheep Creek Mo | 85.93 | 14 | eP | P | 03 48 37.6 | +0.5 |
| SCM | | | | pmax | pmax | | |
| | comp=Z,37nm,0.7s | | | | | | |
| SCM | Sheep Creek Mo | 85.93 | 14 | eP | P | 03 48 37.6 | +0.5 |
| | comp=Z,37nm,0.7s | | | | | | |
| NLU | North Lily Min | 86.01 | 45 | eP | P | 03 48 37.7 | -0.5 |
| NLU | | | | epP | pP | 03 50 21.0 | -3.4 |
| F10A | Beach Ranch, E | 86.15 | 37 | eP | P | 03 48 39.3 | +0.7 |
| | comp=Z,28nm,0.9s | | | | | | |
| SRIT | Nakonsritamara | 86.23 | 281 | P | P | 03 48 41.9 | +2.4 |
| | comp=Z,95nm,1.3s | | | | | | |
| KHON | Khomkaen | 86.23 | 289 | P | P | 03 48 41.2 | +1.7 |
| | comp=Z,49nm,1.0s,comp=Z,1μm | | | | | | |
| TMUT | Trail Mountain | 86.25 | 46 | eP | P | 03 48 40.6 | +1.1 |
| TMUT | | | | epP | pP | 03 50 24.2 | -1.5 |
| BJT | Baijiatuau | 86.31 | 315 | eP | P | 03 48 40.0 | +0.7 |
| BJT | | | | e*PP | pP | 03 50 27.6 | +2.0 |
| BJT | | | | pmax | pmax | | |
| | comp=Z,36nm,0.8s | | | | | | |
| BJT | Baijiatuau | 86.31 | 315 | eP | P | 03 48 40.0 | +0.7 |
| | comp=Z,36nm,0.8s | | | | | | |
| BJT | | | | epP | pP | 03 50 27.6 | +2.0 |
| CAST | Castle Rocks | 86.39 | 11 | eP | P | 03 48 38.2 | -1.0 |
| | comp=Z,18nm,0.7s | | | | | | |
| CAST | | | | epP | pP | 03 50 23.1 | -2.4 |
| B08A | Colville Reser | 86.40 | 35 | eP | P | 03 48 39.6 | 0.0 |
| | comp=Z,12nm,1.0s | | | | | | |
| B08A | | | | epP | pP | 03 50 25.5 | -0.4 |
| ENH | Enshi | 86.44 | 304 | eP | P | 03 48 41.1 | +0.8 |
| | comp=Z,49nm,0.9s | | | | | | |
| HLID | Hailey | 86.45 | 41 | P | P | 03 48 41.6 | +1.4 |
| | baz=87 | | | | | | |
| HLID | Hailey | 86.45 | 41 | eP | P | 03 48 41.7 | +1.5 |
| HLID | | | | epP | pP | 03 50 25.3 | -1.2 |
| HVU | Hansel Valley | 86.52 | 43 | eP | P | 03 48 41.7 | +1.2 |
| HVU | | | | e*PP | pP | 03 50 24.6 | -2.2 |
| HVU | Hansel Valley | 86.52 | 43 | eP | P | 03 48 41.6 | +1.2 |
| HVU | | | | epP | pP | 03 50 24.6 | -2.2 |
| O16A | Springville | 86.52 | 45 | eP | P | 03 48 38.6 | -2.0 |
| O16A | | | | epP | pP | 03 50 24.1 | -2.7 |
| EPU | East Promontor | 86.55 | 43 | eP | P | 03 48 41.1 | +0.5 |
| CTU | Camp Tracy | 86.61 | 44 | eP | P | 03 48 41.0 | 0.0 |
| CTU | | | | epP | pP | 03 50 24.9 | -2.4 |
| SRU | San Rafael | 86.61 | 46 | eP | P | 03 48 41.1 | 0.0 |
| SRU | | | | e*PP | pP | 03 50 25.8 | -1.6 |
| SRU | San Rafael | 86.61 | 46 | eP | P | 03 48 41.1 | 0.0 |
| SRU | | | | epP | pP | 03 50 25.8 | -1.6 |
| NONG | Nongkai | 86.61 | 291 | P | P | 03 48 42.8 | +1.5 |
| | comp=Z,81nm,1.1s | | | | | | |
| C09A | Chrisman Ranch | 86.64 | 36 | eP | P | 03 48 41.5 | +0.7 |
| | comp=Z,9.7nm,0.8s | | | | | | |
| P17A | Butcher Ranch, | 86.65 | 46 | eP | P | 03 48 40.2 | -1.0 |
| | comp=Z,15nm,1.1s | | | | | | |
| PATY | Pattaya | 86.68 | 285 | P | P | 03 48 44.3 | +2.7 |
| | comp=Z,27nm,0.9s,comp=Z,957nm | | | | | | |
| LAZ | Ladron | 86.70 | 51 | eP | P | 03 48 41.0 | -0.6 |
| LAZ | | | | epP | pP | 03 50 28.1 | +0.1 |
| TRF | Thorofare Moun | 86.76 | 12 | eP | P | 03 48 40.8 | -0.4 |
| | comp=Z,31nm,0.8s | | | | | | |
| TRF | | | | epP | pP | 03 50 26.4 | -1.2 |
| MNTX | Cornudas Mount | 86.78 | 54 | P | P | 03 48 43.2 | +1.4 |
| | baz=87 | | | | | | |
| MNTX | Cornudas Mount | 86.78 | 54 | eP | P | 03 48 42.5 | +0.7 |
| MNTX | | | | epP | pP | 03 50 28.0 | -0.1 |
| SEY | Seymchan | 86.78 | 347 | P | P | 03 48 41.0 | -0.1 |
| | comp=Z,25nm,0.8s,baz=146,slow=5.2,SNR=46 | | | | | | |
| SEY | | | | pP | pP | 03 50 26.4 | -1.0 |
| | comp=Z,12nm,1.0s,baz=117,slow=5.0,SNR=4.8 | | | | | | |
| SEY | Seymchan | 86.78 | 347 | ⇓eP | P | 03 48 40.0 | -1.0 |
| BNM | Barren Site | 86.96 | 52 | ePcP | PcP | 03 48 50.7 | +6.2 |
| RND | Reindeer | 87.00 | 13 | eP | P | 03 48 42.4 | +0.2 |
| RND | | | | e*PP | pP | 03 50 27.3 | -1.4 |
| RND | | | | pmax | pmax | | |
| | comp=Z,48nm,0.8s | | | | | | |
| RND | Reindeer | 87.00 | 13 | eP | P | 03 48 42.4 | +0.2 |
| | comp=Z,48nm,0.8s | | | | | | |
| RND | | | | epP | pP | 03 50 27.3 | -1.4 |
| GYA | Guiyang | 87.03 | 300 | ⇓iP | P | 03 48 43.6 | +0.4 |
| GYA | | | | pP | pP | 03 50 30.8 | +1.1 |
| GYA | | | | sP | sP | 03 51 19.2 | +0.7 |
| GYA | | | | PP | PP | 03 52 18.0 | +2.7 |
| GYA | | | | SKS | SKSac | 03 58 23.2 | -1.7 |
| GYA | | | | S | S | 03 58 41.4 | -0.7 |
| GYA | | | | PMZ | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| LPM | Los Pinos Moun | 87.03 | 52 | eP | P | 03 48 43.9 | +0.7 |
| TCUT | Toone Canyon | 87.05 | 44 | eP | P | 03 48 42.7 | -0.4 |
| TCUT | | | | epP | pP | 03 50 28.0 | -1.6 |
| TX31 | Lajitas Ar. Si | 87.06 | 57 | eP | P | 03 48 43.5 | +0.2 |
| TX31 | | | | epP | pP | 03 50 29.1 | -0.6 |
| TXAR | Lajitas Array | 87.06 | 57 | P | P | 03 48 44.7 | +1.4 |
| | comp=Z,5.5nm,1.0s,baz=220,slow=4.8,SNR=29 | | | | | | |
| TXAR | | | | pP | pP | 03 50 29.7 | -0.1 |
| | comp=Z,6.1nm,1.1s,baz=225,slow=5.0,SNR=6.6 | | | | | | |
| TXAR | | | | PKKPbc | PKKPbc | 04 06 33.0 | -0.1 |
| | comp=Z,1.6nm,0.8s,baz=113,slow=2.9,SNR=15 | | | | | | |
| PV05 | Paradox Valley | 87.07 | 47 | eP | P | 03 48 43.2 | -0.1 |
| PV05 | | | | epP | pP | 03 50 28.8 | -1.0 |
| BPAW | Bear Paw Mtn. | 87.22 | 11 | eP | P | 03 48 41.1 | -2.0 |
| | comp=Z,62nm,2.0s | | | | | | |
| PV09 | Paradox Valley | 87.25 | 47 | eP | P | 03 48 44.6 | +0.4 |
| PV09 | | | | epP | pP | 03 50 30.3 | -0.4 |
| PV10 | Paradox Valley | 87.26 | 47 | eP | P | 03 48 44.0 | -0.2 |
| MCK | McKinley | 87.28 | 12 | eP | P | 03 48 42.3 | -1.1 |
| MCK | | | | e*PP | pP | 03 50 29.1 | -0.9 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| MCK | McKinley | 87.28 | 12 | eP | P | 03 48 42.3 | -1.1 |
| | comp=Z,23nm,0.8s | | | | | | |
| MCK | | | | epP | pP | 03 50 29.1 | -0.9 |
| ANMO | Albuquerque | 87.45 | 51 | ⇑iP | P | 03 48 46.4 | +1.2 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| ANMO | Albuquerque | 87.45 | 51 | eP | P | 03 48 45.5 | +0.4 |
| ANMO | | | | epP | pP | 03 50 30.6 | -1.2 |
| NEW | Newport | 87.54 | 36 | eP | P | 03 48 44.3 | -0.7 |
| NEW | | | | pmax | pmax | | |
| | comp=Z,65nm,2.5s | | | | | | |
| NEW | Newport | 87.54 | 36 | P | P | 03 48 45.7 | +0.7 |
| | baz=88 | | | | | | |
| NEW | Newport | 87.54 | 36 | eP | P | 03 48 44.3 | -0.7 |
| | comp=Z,65nm,2.5s | | | | | | |
| BWN | Browne | 87.57 | 12 | eP | P | 03 48 43.9 | -0.8 |
| | comp=Z,89nm,0.8s | | | | | | |
| SNAA | Sanae | 87.64 | 178 | P | P | 03 48 45.2 | 0.0 |
| SNAA | Sanae | 87.64 | 178 | S | SKSac | 03 58 27.8 | +0.7 |
| | comp=Z,0.8nm,0.9s,baz=180,slow=20,SNR=7.0 | | | | | | |
| VNA3 | Neumayer Olymp | 87.76 | 176 | P | P | 03 48 46.6 | +0.8 |
| PHET | Kaeng Krachan | 87.79 | 285 | P | P | 03 48 49.4 | +2.5 |
| | comp=Z,35nm,1.0s,comp=Z,330nm | | | | | | |
| PBKT | Sadao Pong | 87.96 | 288 | P | P | 03 48 49.3 | +1.7 |
| | comp=Z,69nm,1.3s | | | | | | |
| LOEI | Loei | 88.05 | 289 | P | P | 03 48 47.8 | -0.3 |
| | comp=Z,35nm,1.7s | | | | | | |
| MCMT | McKenzie Canyo | 88.08 | 40 | eP | P | 03 48 48.8 | +0.9 |
| MCMT | | | | epP | pP | 03 50 33.3 | -1.4 |
| MLY | Manley | 88.11 | 11 | eP | P | 03 48 46.7 | -0.6 |
| | comp=Z,15nm,0.6s | | | | | | |
| MLY | | | | epP | pP | 03 50 31.1 | -3.0 |
| WRH | Wood River Hil | 88.11 | 12 | eP | P | 03 48 47.2 | -0.1 |
| | comp=Z,27nm,0.7s | | | | | | |
| WRH | | | | epP | pP | 03 50 30.5 | -3.6 |
| VNA2 | Neumayer--Watz | 88.20 | 177 | P | P | 03 48 48.6 | +0.7 |
| | baz=179,slow=3.3 | | | | | | |
| DOT | Dot Lake | 88.26 | 14 | eP | P | 03 48 47.2 | -0.8 |
| DOT | | | | epP | pP | 03 50 33.0 | -1.8 |
| HDA | Harding Lake | 88.28 | 13 | eP | P | 03 48 48.0 | 0.0 |
| | comp=Z,31nm,0.6s | | | | | | |
| HDA | | | | epP | pP | 03 50 33.6 | -1.3 |
| DLBC | Dease Lake | 88.30 | 23 | PKPPKP | P'P'df | 04 14 35.2 | -0.2 |
| | comp=Z,2.2nm,0.8s,baz=315,slow=1.4,SNR=3.1 | | | | | | |
| CCB | Clear Creek Bu | 88.32 | 12 | eP | P | 03 48 47.8 | -0.4 |
| | comp=Z,31nm,0.6s | | | | | | |
| CCB | | | | epP | pP | 03 50 32.7 | -2.4 |
| NVL | N'lazarevskaya | 88.36 | 183 | i P | P | 03 48 49.2 | +0.7 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,46nm,0.6s | | | | | | |
| VNA1 | Neumayer--Stat | 88.43 | 177 | P | P | 03 48 49.6 | +0.8 |
| S22A | 4UR Ranch, Cre | 88.49 | 49 | P | P | 03 48 51.3 | +1.2 |
| | baz=89 | | | | | | |
| MSO | Missoula | 88.52 | 38 | P | P | 03 48 50.7 | +1.0 |
| | baz=89 | | | | | | |
| MSO | Missoula | 88.52 | 38 | eP | P | 03 48 49.2 | -0.6 |
| | comp=Z,32nm,1.8s | | | | | | |
| COLA | College | 88.52 | 12c | iP | P | 03 48 48.4 | -0.7 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,27nm,0.6s | | | | | | |
| COLA | College | 88.52 | 12 | eP | P | 03 48 49.0 | -0.1 |
| | comp=Z,41nm,0.6s | | | | | | |
| COLA | | | | epP | pP | 03 50 35.0 | -1.0 |
| MDM | Murphy Dome | 88.52 | 12 | eP | P | 03 48 48.9 | -0.3 |
| | comp=Z,15nm,0.8s | | | | | | |
| DLMT | Dillon | 88.52 | 40 | eP | P | 03 48 49.4 | -0.4 |
| DLMT | | | | epP | pP | 03 50 35.0 | -1.7 |
| 529A | Stev Forest Ra | 88.53 | 57 | P | P | 03 48 51.3 | +1.1 |
| | baz=89 | | | | | | |
| XAN | Xi'an | 88.54 | 307 | P | P | 03 48 50.9 | +0.9 |
| XAN | | | | PMZ | | | |
| | comp=Z,98nm,1.0s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,130nm,3.3s | | | | | | |
| REDW | Red Top Meadow | 88.55 | 42 | eP | P | 03 48 47.5 | -2.6 |
| | comp=Z,9.6nm,0.9s | | | | | | |
| REDW | | | | epP | pP | 03 50 35.5 | -1.5 |
| TPAW | Teton Pass | 88.55 | 42 | eP | P | 03 48 49.0 | -1.2 |
| | comp=Z,9.8nm,1.1s | | | | | | |
| FXWY | Fox Creek | 88.58 | 42 | eP | P | 03 48 49.7 | -0.6 |
| FXWY | | | | epP | pP | 03 50 36.2 | -0.9 |
| IL1 | Eielson Array | 88.62 | 13 | eP | P | 03 48 48.7 | -0.9 |
| IL1 | | | | epP | pP | 03 50 33.5 | -3.0 |
| ILAR | Eielson Array | 88.62 | 13 | P | P | 03 48 49.0 | -0.7 |
| | comp=Z,9.3nm,0.7s,baz=219,slow=5.8,SNR=109 | | | | | | |
| ILAR | | | | pP | pP | 03 50 35.2 | -1.3 |
| | comp=Z,7.0nm,1.0s,baz=228,slow=5.6,SNR=9.7 | | | | | | |
| ILAR | | | | PKiKP | PKiKP | 03 53 45.0 | -1.5 |
| | comp=Z,0.7nm,0.9s,baz=240,slow=5.0,SNR=4.4 | | | | | | |
| ILAR | | | | S | SKSac | 03 58 32.0 | -0.4 |
| | comp=Z,0.3nm,0.8s,baz=220,slow=5.4,SNR=2.9 | | | | | | |
| ILAR | | | | PKKP | PKKPdf | 04 06 26.2 | +0.6 |
| | comp=Z,0.5nm,0.6s,baz=350,slow=2.0,SNR=8.0 | | | | | | |
| ILAR | | | | PKPPKP | P'P'df | 04 14 31.2 | -3.2 |
| | comp=Z,0.6nm,0.9s,baz=325,slow=2.5,SNR=4.6 | | | | | | |
| O20A | White River Ci | 88.65 | 46 | P | P | 03 48 51.9 | +1.3 |
| | baz=89 | | | | | | |
| SNOW | Snow King Moun | 88.66 | 42 | eP | P | 03 48 51.4 | +0.7 |
| | comp=Z,7.7nm,0.8s | | | | | | |
| SNOW | | | | epP | pP | 03 50 36.0 | -1.6 |
| UTTA | Uttaradit | 88.77 | 289 | P | P | 03 48 53.1 | +1.7 |
| | comp=Z,17nm,1.1s,comp=Z,137nm | | | | | | |
| IMW | Indian Meadow | 88.77 | 42 | eP | P | 03 48 51.6 | +0.4 |
| | comp=Z,17nm,1.3s | | | | | | |
| IMW | | | | epP | pP | 03 50 36.5 | -1.7 |
| MOOW | Moose Ponds | 88.81 | 42 | eP | P | 03 48 51.9 | +0.5 |
| | comp=Z,66nm,2.9s | | | | | | |
| LOHW | Long Hollow | 88.83 | 42 | eP | P | 03 48 50.8 | -0.6 |
| | comp=Z,13nm,1.5s | | | | | | |
| PLCA | Paso Flores | 88.85 | 133 | eP | P | 03 48 53.1 | +1.5 |
| PLCA | Paso Flores | 88.85 | 133 | eP | P | 03 48 53.1 | +1.5 |
| UTHA | Uthaitani | 88.94 | 287 | P | P | 03 48 54.1 | +1.9 |
| | comp=Z,19nm,1.0s,comp=Z,142nm | | | | | | |
| QLMT | Earthquake Lak | 88.95 | 41 | eP | P | 03 48 54.1 | +2.2 |
| QLMT | | | | epP | pP | 03 50 36.6 | -2.2 |
| 429A | Davenport Ranc | 89.00 | 57 | P | P | 03 48 53.6 | +1.3 |
| | baz=89 | | | | | | |
| FLWY | Flagg Ranch | 89.01 | 42 | eP | P | 03 48 53.9 | +1.6 |
| | comp=Z,9.3nm,0.9s | | | | | | |
| SMCO | Snowmass | 89.06 | 47 | eP | P | 03 48 53.5 | +0.7 |
| SMCO | | | | epP | pP | 03 50 37.5 | -2.3 |
| BW06 | Boulder Array | 89.07 | 43 | eP | P | 03 48 52.8 | +0.2 |
| | comp=Z,5.6nm,0.9s | | | | | | |
| 228A | UT Block 9, Go | 89.09 | 55 | P | P | 03 48 54.1 | +1.4 |
| | baz=89 | | | | | | |
| YMC | Maple Creek | 89.17 | 41 | eP | P | 03 48 54.8 | +1.9 |
| 530A | J-C Ranch, Com | 89.24 | 57 | P | P | 03 48 55.1 | +1.7 |
| | baz=89 | | | | | | |
| BOZ | Bozeman (W) | 89.25 | 40 | eP | P | 03 48 52.9 | -0.3 |
| BOZ | | | | e*PP | pP | 03 50 38.4 | -1.9 |
| BOZ | Bozeman (W) | 89.25 | 40 | P | P | 03 48 55.0 | +1.8 |
| | baz=89 | | | | | | |
| BOZ | Bozeman (W) | 89.25 | 40 | eP | P | 03 48 52.9 | -0.3 |
| BOZ | | | | epP | pP | 03 50 38.4 | -1.9 |
| H17A | Grant Village | 89.25 | 41 | P | P | 03 48 55.7 | +2.3 |
| | baz=89 | | | | | | |
| 329A | Wagon Wheel Ra | 89.30 | 56 | P | P | 03 48 54.6 | +0.9 |
| | baz=89 | | | | | | |
| 128A | Castleberry Fa | 89.39 | 55 | P | P | 03 48 55.3 | +1.2 |
| | baz=90 | | | | | | |
| SDCO | Great Sand Dun | 89.42 | 49 | P | P | 03 48 55.7 | +1.3 |
| | baz=90 | | | | | | |
| SDCO | Great Sand Dun | 89.42 | 49 | eP | P | 03 48 55.3 | +0.9 |
| | comp=Z,46nm,2.7s | | | | | | |
| BILL | Bilibino | 89.42 | 354 | eP | P | 03 48 51.1 | -2.2 |
| BILL | | | | i *PP | pP | 03 50 41.2 | +0.8 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| 631A | Perdido Creek | 89.54 | 58 | P | P | 03 48 55.8 | +1.0 |
| | baz=90 | | | | | | |
| 832A | Faith Ranch, C | 89.56 | 60 | P | P | 03 48 55.9 | +1.0 |
| | baz=90 | | | | | | |
| 430A | Baggett Ranch, | 89.58 | 57 | P | P | 03 48 56.0 | +1.0 |
| | baz=90 | | | | | | |
| HRY | Holter Researc | 89.68 | 39 | eP | P | 03 48 55.8 | +0.6 |
| HRY | | | | epP | pP | 03 50 38.8 | -3.4 |
| UMPA | Umpang Tak | 89.70 | 287 | P | P | 03 48 57.9 | +2.1 |
| | comp=Z,13nm,1.1s,comp=Z,878nm | | | | | | |

KMI Kunming 89.72 297 P P 03 48 57.4 +1.4
KMI PMZ
comp=Z,65nm,1.1s
KMI PMZ
comp=Z,390nm,4.2s
732A Laxson Ranch, 89.74 59 P P 03 48 57.3 +1.5
baz=90
WALA Waterton Lakes 89.74 36 *e*P P 03 48 56.2 +0.8
WALA *e*pP pP 03 50 43.1 +0.7
MSTX Muleshoe 89.75 53 P P 03 48 56.9 +1.2
baz=90
DAWY Dawson 89.75 16 *e*pP pP 03 50 38.7 -3.4
HHC Hu-ho-hao-te 89.77 314 *e*P P 03 48 57.0 +1.3
HHC pP pP 03 50 44.3 +1.5
HHC S S 03 59 08.2 +1.5
HHC SS SS 04 05 21.9 +3.6
HHC PMZ
comp=Z,42nm,0.9s
HHC PMZ
comp=Z,140nm,3.8s
933A Laredo 89.86 60 P P 03 48 57.5 +1.3
baz=90
CRAI Chiangrai 89.86 292 P P 03 48 53.1 -3.4
comp=Z,24nm,1.2s,comp=Z,829nm
129A Stewart Farms, 89.86 55 P P 03 48 57.4 +1.1
baz=90
531A Rocksprings 89.87 58 P P 03 48 57.7 +1.4
baz=90
330A Mertzon 89.89 56 P P 03 48 57.1 +0.7
baz=90
EGAK Eagle 89.90 15 *e*P P 03 48 56.0 +0.5
comp=Z,22nm,0.8s
EGAK *e*pP pP 03 50 42.4 -0.3
T25A Trinidad 89.92 50 P P 03 48 58.0 +1.4
baz=90
Y28A McKinney Farm, 90.11 54 P P 03 48 58.1 +0.7
baz=90
034A Hebbronville 90.12 61 P P 03 48 58.6 +1.1
baz=90
COLD Coldfoot 90.20 10 *e*P P 03 48 57.4 +0.5
comp=Z,13nm,0.8s
COLD *e*pP pP 03 50 43.8 -0.3
632A Uvalde 90.21 58 P P 03 48 59.4 +1.5
baz=90
Z29A Hungry Hill Ra 90.25 54 P P 03 48 59.1 +1.1
baz=90
532A Rocksprings 90.36 58 P P 03 48 59.7 +1.1
baz=90
X28A Dimmitt 90.41 53 P P 03 48 59.9 +1.1
baz=91
CM01 Chiang Mai Arr 90.43 289 *e*P P 03 49 00.2 +1.1
CMAR Chiang Mai Arr 90.45 289 P P 03 48 59.8 +0.6
comp=Z,50nm,1.0s,baz=120,slow=3.2,SNR=94
CMAR PP PP 03 52 43.2 +0.9
comp=Z,1.7nm,0.3s,baz=120,slow=5.3,SNR=4.8
CMAR PKKPbc PKKPbc 04 06 23.9 -0.3
comp=Z,2.7nm,0.6s,baz=282,slow=5.2,SNR=5.7
CMAR Chiang Mai Arr 90.45 289 *i* P P 03 49 01.0 +1.8
CMAR pmax pmax
comp=Z,50nm,1.0s
Y29A Porterfield Fa 90.53 54 P P 03 49 00.4 +1.1
baz=91
N23A Red Feather La 90.55 46 P P 03 49 00.8 +1.3
baz=91
CHTO Chiang Mai 90.58 290 P P 03 49 01.1 +1.3
comp=Z,341nm,0.8s,comp=Z,4µm
CHTO Chiang Mai 90.58 290 *e*P P 03 49 00.9 +1.1
CHTO pmax pmax
comp=Z,51nm,0.8s
CHTO Chiang Mai 90.58 290 *e*P P 03 49 00.9 +1.1
comp=Z,50nm,0.8s
834A Tilden 90.65 60 P P 03 49 01.0 +1.1
baz=91
633A Saathoff Ranch 90.67 59 P P 03 49 01.2 +1.2
baz=91
Z30A Sanderson Ranc 90.70 55 P P 03 49 01.2 +1.1
baz=91
432A Menard 90.75 57 P P 03 49 01.4 +1.0
baz=91
X29A Tulia 90.75 53 P P 03 49 01.3 +0.9
baz=91
U27A Thompson Grove 90.76 51 P P 03 49 01.2 +0.8
baz=91
231A Bronte 90.77 56 P P 03 49 01.3 +0.8
baz=91
S26A Kim 90.81 50 P P 03 49 01.7 +1.1
baz=91
CMAI Chiengmai2 90.91 291 P P 03 49 03.4 +1.9
comp=Z,62nm,1.1s
K22A Casper 90.98 44 P P 03 49 02.4 +1.1
baz=91
332A Millersview 91.00 57 P P 03 49 02.2 +0.7
baz=91
131A Roby 91.02 55 P P 03 49 02.3 +0.7
baz=91
533A Kerrville 91.03 58 P P 03 49 02.7 +1.0
baz=91
R26A Arlington 91.12 49 P P 03 49 03.0 +1.0
baz=91
CD2 Chengdu 91.18 303 *e*P P 03 49 01.6 -0.8
CD2 pP pP 03 50 48.8 -0.8
CD2 sP sP 03 51 37.7 -0.4
CD2 SKS SKSac 03 58 46.9 -1.8
CD2 S S 03 59 18.6 -1.0
CD2 sS sS 04 02 31.4 0.0
CD2 SS SS 04 05 38.8 +0.2
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.6s
433A Art 91.26 58 P P 03 49 03.6 +0.9
baz=91
232A Coleman 91.27 56 P P 03 49 04.1 +1.3
baz=91
Q26A Hugo 91.34 49 P P 03 49 04.1 +1.0
baz=92
936A North Padre Is 91.39 61 P P 03 49 03.9 +0.6
baz=92
534A Blanco 91.46 58 P P 03 49 04.4 +0.8
baz=92
Z31A Sharp Cattle R 91.47 55 P P 03 49 04.3 +0.7
baz=92
333A Richland Sprin 91.57 57 P P 03 49 04.8 +0.7
baz=92
ABTX Abilene, Hawle 91.57 56 P P 03 49 05.1 +0.9
baz=92
T28A Walsh 91.57 51 P P 03 49 04.8 +0.7
baz=92
R27A Eads 91.58 49 P P 03 49 05.0 +0.9
baz=92
Y31A Rekieta Farm, 91.64 54 P P 03 49 05.3 +0.9
baz=92
P26A Davis Ranch, A 91.74 48 P P 03 49 05.8 +0.9
baz=92
635A Leesville 91.77 59 P P 03 49 05.7 +0.7
baz=92
233A Rising Star 91.91 57 P P 03 49 06.6 +0.9
baz=92
434A Burnet 91.93 58 P P 03 49 06.3 +0.5
baz=92
Z32A Haskell 91.97 55 P P 03 49 07.2 +1.2
baz=92
334A Lometa 92.16 57 P P 03 49 07.5 +0.7
baz=92
P27A Ficken Ranch, 92.27 48 P P 03 49 08.6 +1.3
baz=92
EDM Edmonton 92.29 33 *e*P P 03 49 06.9 -0.1
EDM *e**PP pP 03 50 56.4 +2.1
EDM Edmonton 92.29 33 *e*P P 03 49 06.9 -0.1
EDM *e*pP pP 03 50 56.4 +2.1
R28A Tribune 92.30 50 P P 03 49 08.7 +1.3
baz=92
W31A Holland Ranch, 92.37 53 P P 03 49 08.8 +1.0
baz=92
234A Clairette 92.50 57 P P 03 49 09.4 +1.0
baz=93
S29A Ulysses 92.50 51 P P 03 49 09.3 +1.0
baz=93
YAK Yakutsk 92.54 338 *e*P P 03 49 05.2 -2.6
YAK *e* 03 52 52.8
YAK *e*S SKSac 03 58 56.7 +2.1
YAK pmax pmax
comp=Z,12nm,0.9s
YAK pmax pmax
comp=N,3.0nm,0.9s
YAK pmax pmax
comp=E,3.0nm,0.8s
YAK pmax pmax
comp=Z,32nm,19.4s
YAK pmax pmax
comp=N,20nm,20.3s
YAK pmax pmax
comp=E,20nm,21.1s
YAK smax smax
comp=E,100nm,2.0s
YAK smax smax
comp=N,66nm,2.7s
X32A Elmer 92.56 54 P P 03 49 09.6 +1.0
baz=93
Q28A Sharon Springs 92.59 49 P P 03 49 09.9 +1.1
baz=93
O27A Beecher Island 92.61 48 P P 03 49 10.0 +1.2
baz=93
W32A Sentinel 92.87 54 P P 03 49 11.0 +1.0
baz=93
LAO LASA Array 93.03 41 P P 03 49 11.9 +1.4
baz=93
LZH Lanzhou 93.17 307 *e*P P 03 49 13.1 +1.5
LZH pP pP 03 51 02.8 +3.9
LZH sP sP 03 51 49.4 +2.0
LZH SKS SKSac 03 58 58.4 -1.3
LZH *e*S ScS 03 59 38.7 +0.5
LZH sS sS 04 02 50.7 +0.8
LZH PMZ
comp=N,28nm,1.0s
LZH PMZ
comp=N,100nm,6.0s
I25A Rochford 93.41 44 P P 03 49 13.3 +0.8
baz=94
P29A Atwood 93.45 49 P P 03 49 13.9 +1.3
baz=94
W33A Caddo, Fort Co 93.47 54 P P 03 49 14.1 +1.3
baz=94
Q30A Quinter 93.70 50 P P 03 49 14.7 +0.9
baz=94
P30A Selden 93.91 49 P P 03 49 16.2 +1.5
baz=94
J27A Elkhorn Farm, 94.22 45 P P 03 49 17.4 +1.3
baz=94
338A Crockett 94.48 58 P P 03 49 17.8 +0.4
baz=95
INK Inuvik 94.57 15 P P 03 49 17.4 +0.5
comp=N,5.9nm,0.8s,baz=207,slow=4.5,SNR=9.0
F26A Lodgepole 94.88 43 P P 03 49 20.1 +1.2
baz=95
U35A Pawnee 95.24 53 P P 03 49 22.1 +1.3
baz=95
E26A Carlson Angus 95.27 42 P P 03 49 21.8 +1.0
baz=95
ULN Ulaanbaatar 95.79 319 *ce*P P 03 49 23.6 +0.4
ULN pmax pmax
comp=Z,17nm,1.7s
ULN Ulaanbaatar 95.79 319 *e*P P 03 49 21.9 -1.2
comp=Z,6.6nm,0.8s
T36A Boggs Farm, Ca 96.13 53 P P 03 49 25.6 +0.8
baz=96
SONA1 Songino Array 96.18 319 *e*P P 03 49 24.0 -0.9
SONM Songino Array 96.18 319 P P 03 49 24.7 -0.2
comp=Z,2.1nm,0.7s,baz=127,slow=4.6,SNR=12
SONM pP pP 03 51 12.8 +0.3
comp=Z,0.3nm,0.4s,baz=130,slow=2.3,SNR=3.1
SONM PKiKP PKiKP 03 54 00.5 +0.4
comp=Z,1.0nm,0.9s,baz=103,slow=3.1,SNR=2.7
SONM S SKSac 03 59 16.1 +1.2
comp=Z,1.1nm,1.0s,baz=156,slow=5.4,SNR=4.6
SONM PKKPbc PKKPbc 04 06 10.3 -0.5
comp=Z,1.4nm,0.8s,baz=202,slow=3.2,SNR=5.6
I30A Oacoma 96.20 45 P P 03 49 25.9 +1.0
baz=96
C27A Sayler Ranch, 96.38 41 P P 03 49 28.1 +2.4
baz=97
GTA Gaotai 97.38 309 *e*P Pdif 03 49 30.6 +0.1
GTA pP pP 03 51 20.1 +1.9
GTA sP sP 03 52 05.8 -0.8
GTA SKS SKSac 03 59 21.2 -0.3
GTA S S 04 00 11.4 -1.6
GTA sS sS 04 03 23.7 -3.2
GTA SS SS 04 07 08.6 +2.7
GTA PMZ
comp=Z,8.0nm,1.5s
GTA PMZ
comp=Z,47nm,4.2s
D30A Buchanan 97.86 43 Pdiff P 03 49 33.3 +1.0
baz=98
H33A Prehn Over Nor 98.28 45 Pdiff P 03 49 34.9 +0.6
baz=98
AGMN Agassiz Nation 100.11 42 Pdiff Pdif 03 49 43.1 +0.9
baz=100
SPMN St. Paul 101.09 46 Pdiff Pdif 03 49 47.6 +0.9
baz=101
LPAZ La Paz 101.71 113 P Pdif 03 49 53.6 +2.7
comp=Z,2.2nm,0.8s,baz=242,slow=1.7,SNR=11
LPAZ PKKPbc PKKPbc 04 05 54.0 -1.0
comp=Z,1.2nm,0.8s,baz=93,slow=7.6,SNR=5.5
D37A Cotton 101.94 44 Pdiff Pdif 03 49 51.7 +1.3
baz=102
EYMN Ely 102.78 43 Pdiff Pdif 03 49 55.6 +1.5
baz=103
C38A Sawbill Land. 102.85 44 Pdiff Pdif 03 49 55.9 +1.4
baz=103
TIGA Tifton 104.00 61 Pdiff Pdif 03 50 00.3 +0.4
baz=104
ROSC El Rosal 104.25 90 PKKPbc PKKPbc 04 05 47.2 +0.1
comp=Z,2.1nm,0.4s,baz=270,slow=20,SNR=3.2
CPUP Villa Florida 105.59 127 PKKPbc PKKPbc 04 05 41.9 -1.2
comp=Z,1.5nm,0.8s,baz=253,slow=19,SNR=2.9
ZAA0 Zalesovo Array 110.92 321 *e*PKiKP PKiKP 03 54 25.0 -1.7
ZALV Zalesovo Beam 110.92 321 PKiKP PKiKP 03 54 25.6 -1.1
comp=Z,5.9nm,0.5s,baz=194,slow=0.9,SNR=21
MK31 Makanchi Array 111.62 313 *i* PKIKP PKiKP 03 54 27.1 -1.2
MK31 pmax pmax
comp=Z,4.0nm,0.5s
MKAR Makanchi Array 111.62 313 Pdiff Pdif 03 50 34.0 +0.5
comp=Z,1.1nm,0.7s,baz=104,slow=6.1,SNR=3.8
MKAR PKiKP PKiKP 03 54 26.8 -1.6
comp=Z,5.4nm,0.6s,baz=75,slow=1.1,SNR=38
MKAR PKKPbc PKKPbc 04 05 24.0 -0.7
comp=Z,1.7nm,0.7s,baz=270,slow=3.8,SNR=11
MKAR Makanchi Array 111.62 313 Pdif Pdif 03 50 34.0 +0.5
MKAR *e*PKiKP PKiKP 03 54 26.9 -1.4
MKAR *e*PKKPbc PKKPbc 04 05 24.7 +0.1
MAKZ Makanchi 111.83 313 *e*PKiKP PKiKP 03 54 26.8 -1.9
NVS Novosibirsk 111.94 322⇓*i*PKIKP PKiKP 03 54 26.7 -1.9
NVS *i* 03 55 17.1
NVS *e* 04 00 26.3
NVS *e* 04 04 06.7
NVS pmax pmax
comp=N,3.0nm,1.0s
NVS pmax pmax
comp=Z,12nm,1.0s
NVS pmax pmax
comp=E,2.0nm,0.5s
KURK Kurchatov 114.42 317 *e*PKIKP PKPdf 03 54 32.3 -1.2
KURK Kurchatov 114.42 317 *e*PKiKP PKPdf 03 54 32.3 -1.2
KURK PP PP 03 55 34.1 -4.6
KURBB Kurchatov Arra 114.47 317 PKP PKPdf 03 54 32.3 -1.3
comp=E,8.2nm,0.7s,baz=89,slow=1.9,SNR=62
KURBB PP PP 03 55 34.1 -5.0
comp=E,0.4nm,0.2s,baz=97,slow=7.0,SNR=5.1
KSH Kashi 115.29 305 *e*PKP PKPdf 03 54 36.5 +0.8
KSH *e*PP PP 03 55 54.6 +9.3
KSH *e*sPKP 03 57 16.0
KSH SKS SKSdf 04 01 02.5 +0.2
KSH SKKS SKKSac 04 01 55.5 -0.9
KSH SS SS 04 11 10.7 +4.1
KSH PPMZ
comp=E,90nm,5.1s
TKM2 Tokmak 2 115.92 309 *e*PKIKP PKPdf 03 54 35.0 -2.0
TKM2 Tokmak 2 115.92 309 *e*PKPdf PKPdf 03 54 35.0 -2.0
AAK Ala-Archa 116.70 308 PKP PKPdf 03 54 37.8 -0.6
comp=E,3.9nm,0.7s,baz=162,slow=3.1,SNR=9.7
AAK PP PP 03 55 53.5 -1.6
comp=E,0.6nm,0.3s,baz=102,slow=11,SNR=3.9
AAK Ala-Archa 116.70 308*d i*PKIKP PKPdf 03 54 37.7 -0.7
AAK Ala-Archa 116.70 308 *e*PKPdf PKPdf 03 54 36.6 -1.8
AAK *e*PKPdf PKiKP 03 54 36.9 -1.5
AAK PP PP 03 55 53.5 -1.6
SFK Sufi-Kurgan 117.23 305 PKIKP PKPdf 03 54 39.1 -0.5
SFK pmax pmax
comp=Z,18nm,1.0s
MNAS Manas 118.16 308 PKIKP PKPdf 03 54 40.4 -0.8
MNAS pmax pmax
comp=Z,12nm,0.7s
OTUK Ortayu 118.44 314 PKIKP PKPdf 03 54 40.6 -0.8
OTUK pmax pmax
comp=Z,13nm,0.6s
BDFB Brasilia 118.76 122 PKP PKPdf 03 54 42.5 -0.5
comp=Z,1.8nm,0.4s,baz=27,slow=2.4,SNR=5.3
BDFB PKKPbc PKKPbc 04 04 59.8 -0.2
comp=Z,4.6nm,0.7s,baz=16,slow=1.1,SNR=9.2
BDFB PKKPab PKKPab 04 05 04.3 -0.7
comp=Z,7.7nm,1.0s,baz=99,slow=2.0,SNR=6.0
BVA0 Borovoye Array 119.51 320 *i* PKIKP PKPdf 03 54 42.3 -1.0
BVA0 pmax pmax
comp=Z,21nm,0.6s
BVAR Borovoye Array 119.51 320 PKP PKPdf 03 54 42.5 -0.8
comp=Z,15nm,0.4s,baz=95,slow=1.6,SNR=83
BVAR pPKP pPKPdf 03 56 38.2 +1.2
comp=Z,3.6nm,0.9s,baz=114,slow=1.8,SNR=4.2
BVAR PKKPbc PKKPbc 04 04 57.3 -0.4
comp=Z,1.2nm,0.7s,baz=304,slow=3.2,SNR=4.3
BVAR PKKPab PKKPab 04 04 59.8 +1.3
comp=Z,1.0nm,0.6s,baz=304,slow=3.3,SNR=4.4
BRVK Borovoye 119.57 320*d i*PKIKP PKPdf 03 54 42.5 -0.9
BRVK Borovoye 119.57 320 *e*PKPdf PKPdf 03 54 42.0 -1.3
KK31 Karatay Array 119.65 308 *i* PKIKP PKPdf 03 54 43.0 -0.9
KK31 pmax pmax
comp=Z,4.0nm,0.5s
KKAR Karatay Array 119.65 308 *e*PKIKP PKPdf 03 54 42.6 -1.3
KKAR Karatay Array 119.65 308 *e*PKPdf PKPdf 03 54 42.6 -1.3
KBL Kabul 120.27 299 *e*PKIKP PKPdf 03 54 45.0 -0.6
KBL Kabul 120.27 299 *e*PKPdf PKPdf 03 54 45.0 -0.6
DZET Dzherino 120.76 303 PKIKP PKPdf 03 54 45.5 -0.8
DZET pmax pmax
comp=Z,19nm,0.6s
OPO Ambohidratompo 121.05 231 PKP PKPdf 03 54 48.2 +0.7
comp=Z,12nm,0.8s,baz=90,slow=2.5,SNR=13
ILULI Ilulissat 122.01 20 *i* P PKPdf 03 54 46.7 -0.9
comp=Z,25nm,0.7s
SPA0 Spitsbergen Ar 122.24 357 *e*PKPdf PKPdf 03 54 47.7 -0.2
SFJD Kangerlussuaq 123.20 22 *i* PKIKP PKPdf 03 54 49.2 -0.7
SFJD pmax pmax
comp=Z,11nm,0.6s
SFJD Kangerlussuaq 123.20 22 *i* P PKPdf 03 54 49.2 -0.7
comp=Z,11nm,0.6s
SUMG Summit 123.45 14 *e*PKIKP PKPdf 03 54 50.9 +0.1
SUMG Summit 123.45 14 *e*PKPdf PKPdf 03 54 50.9 +0.1
SUR Sutherland 124.15 199 *e*PKPdf PKPdf 03 54 53.8 +0.6
SVE Sverdlovsk 124.42 325 *e*PKIKP PKPdf 03 54 52.0 -0.6
SVE pmax pmax
comp=Z,41nm,1.2s
SOKR Solikamsk 125.51 329*c i*PKIKP PKPdf 03 54 54.3 -0.2
SOKR pmax pmax
comp=Z,70nm,1.4s
ARU Arti 125.63 325 PKP PKPdf 03 54 54.3 -0.6
comp=Z,2.0nm,0.2s,baz=235,slow=23,SNR=5.4
ARU Arti 125.63 325 *i* PKIKP PKPdf 03 54 54.7 -0.2
ARU 03 56 47.1
ARU 04 01 11.8
ARU Arti 125.63 325 *e*PKPdf PKPdf 03 54 55.2 +0.3
BOSA Boshof 126.02 205 PKP PKPdf 03 54 57.1 +0.3
comp=Z,12nm,0.8s,baz=134,slow=2.7,SNR=14
BOSA PKKP PKKPdf 04 05 14.9 +0.9
comp=Z,4.1nm,0.9s,baz=222,slow=5.2,SNR=3.6
BOSA Boshof 126.02 205 *e*PKIKP PKPdf 03 54 57.5 +0.7
BOSA Boshof 126.02 205 *e*PKPdf PKPdf 03 54 57.5 +0.7
BOSA PKKP PKKPdf 04 05 14.9 +0.9
AB31 Akbulak array 126.51 316 PKIKP PKPdf 03 54 56.1 -0.7
AB31 pmax pmax
comp=Z,7.0nm,0.7s
AKTO Aktyubinsk 127.49 318 PKP PKPdf 03 54 58.0 -0.6
comp=Z,13nm,0.7s,baz=84,slow=2.8,SNR=46
AKTO pPKP pPKPdf 03 56 51.6 -0.8
comp=Z,4.1nm,0.9s,baz=35,slow=5.1,SNR=3.1
LBTB Lobatse 129.06 208 *e*PKIKP PKPdf 03 55 03.2 +0.6
LBTB Lobatse 129.06 208 *e*PKPdf PKPdf 03 55 03.2 +0.6
GEYT Alibeck 129.18 302 PKP PKPdf 03 55 01.4 -0.9
comp=Z,11nm,0.7s,baz=211,slow=0.9,SNR=12
GEYT pPKP pPKPdf 03 56 54.9 -1.2
comp=Z,2.2nm,0.5s,baz=98,slow=20,SNR=1.7
GEYT PP PP 03 57 15.5 -2.6
comp=Z,1.5nm,0.3s,baz=96,slow=1.4,SNR=4.2
GEYT SKPbc SKPbc 03 57 40.2 +1.5
comp=Z,6.8nm,0.9s,baz=122,slow=1.9,SNR=3.9
ARA0 ARCESS Array S 129.32 350 *e*PKPdf PKPdf 03 55 00.9 -0.7
ARCES ARCESS Array B 129.32 350 PKP PKPdf 03 55 01.2 -0.4
comp=Z,5.3nm,0.5s,baz=16,slow=1.3,SNR=32
ARCES SKPbc SKPbc 03 57 38.5 +0.3
comp=Z,6.8nm,0.8s,baz=39,slow=5.8,SNR=7.6
UOSS Wadi Hilu 130.39 285 *e*PKPdf PKPdf 03 55 03.4 -1.6
HATD Hatta, Dubai 130.44 285⇑*i*PKPdf PKPdf 03 55 04.6 -0.4
SNR=6.5
ASHO Ashiyiah 130.49 285⇑*i*PKPdf PKPdf 03 55 05.2 0.0
SNR=6.7
ASUD Al Ashush, Dub 131.15 285 ⇑PKiKP PKiKP 03 55 06.9 -0.4
MATP Matopo 131.59 214 PKP PKPdf 03 55 07.3 -0.2
comp=Z,12nm,0.6s,baz=152,slow=2.3,SNR=24
LSZ Lusaka 135.96 217 PKP PKPdf 03 55 15.9 +0.1
comp=Z,13nm,0.8s,baz=46,slow=4.2,SNR=20
LSZ SKPbc SKPbc 03 58 04.0 +1.5
comp=Z,6.7nm,0.9s,baz=73,slow=7.6,SNR=6.5
FINES FINESS Array B 136.19 344 PKhKP PKPpre 03 55 00.9
comp=Z,1.3nm,0.5s,baz=94,slow=4.2,SNR=7.1
FINES PKP PKPdf 03 55 14.5 -0.1
comp=Z,12nm,0.8s,baz=111,slow=4.3,SNR=14
FINES SKPbc SKPbc 03 58 02.6 +1.1
comp=Z,18nm,0.9s,baz=85,slow=4.6,SNR=17
VRH Novokhopyorsk 136.84 324 *e*PKIKP PKPdf 03 55 15.8 -0.4
VRH pmax pmax
comp=Z,10.0nm,0.6s
VRH pmax pmax
comp=N,5.0nm,0.4s
VRH pmax pmax
comp=E,8.0nm,0.6s
OBN Obninsk 137.19 332 *i* PKIKP PKPdf 03 55 16.4 -0.3
OBN *i* 03 57 10.1
OBN *i* 03 58 05.8
OBN *i* 04 01 44.7
OBN *i* SS SS 04 15 32.8 -2.2
OBN pmax pmax
comp=Z,20nm,0.9s
LPSR Galich'ya Gora 137.57 327 *e*PKIKP PKPdf 03 55 17.6 +0.1
LPSR pmax pmax
comp=Z,20nm,1.1s
LPSR pmax pmax
comp=N,2.0nm,0.5s
LPSR pmax pmax
comp=E,6.0nm,1.2s
VSR Storozhevoye 138.21 325 *e*PKIKP PKPdf 03 55 18.0 -0.7
VSR pmax pmax
comp=E,6.0nm,0.6s
VSR pmax pmax
comp=Z,9.0nm,0.6s
VSR pmax pmax
comp=N,10.0nm,1.2s
VORD Divnogorie 138.27 325 *e*PKIKP PKPdf 03 55 17.0 -1.8
VORD pmax pmax
comp=N,110nm,0.4s
VORD pmax pmax
comp=E,50nm,0.4s
VORD pmax pmax
comp=Z,20nm,0.4s
VSU Vasula 138.47 341⇑*e*PKIKP PKPdf 03 55 19.8 +0.9
ZEI Tsey 138.94 312 *i* PKIKP PKPdf 03 55 19.6 -1.0
ZEI pmax pmax
comp=Z,30nm,0.8s
GNI Garni 139.11 308 PKIKP PKPdf 03 55 21.2 +0.2
KBZ Khabaz 139.31 314 PKhKP PKPpre 03 55 12.8
comp=Z,2.8nm,0.8s,baz=148,slow=3.7,SNR=4.0
KBZ PP PP 03 58 22.2 +1.1
comp=Z,4.1nm,0.8s,baz=63,slow=1.7,SNR=6.3
KMBO Kilima Mbogo 139.37 242 PKhKP PKPpre 03 55 13.5
comp=Z,3.6nm,0.6s,baz=64,slow=7.3,SNR=11
KMBO PKP PKPdf 03 55 22.8 +0.5
comp=Z,12nm,0.9s,baz=58,slow=4.8,SNR=14
KMBO SKPbc SKiKP 03 58 14.2 -1.1
comp=Z,5.2nm,0.9s,baz=74,slow=4.8,SNR=6.9
NB2 NORSAR Subarra 139.37 353 PKP PKPpre 03 55 11.3
comp=Z,2.0nm,0.7s,baz=16,slow=3.2
NOA NORSAR Array B 139.37 353 PKhKP PKPpre 03 55 11.6
comp=Z,3.8nm,0.8s,baz=11,slow=2.3,SNR=9.6
NOA PKP PKPdf 03 55 20.7 +0.1
comp=Z,1.7nm,0.8s,baz=14,slow=4.1,SNR=7.0
NOA SKPbc SKiKP 03 58 12.6 -0.9
comp=Z,11nm,0.8s,baz=14,slow=4.4,SNR=16
KIV Kislovodsk 139.38 314 *i* PKIKP PKPdf 03 55 23.4 +2.2
KIV *i* 03 58 20.2
KIV pmax pmax
comp=Z,18nm,1.1s

NBO02 NORSAR Array S 139.40 354 ePKPdf PKPdf 03 55 20.1 -0.6
DAMY Dhamar 139.46 268 ePKPdf PKPdf 03 55 25.8 +3.3
RAYN Ar Rayn 139.97 282 ePKPpre PKPpre 03 55 15.8
RAYN ePKPdf PKPdf 03 55 21.2 -1.7
NACGM Naroch 141.30 337 e PKPdf 03 55 19.0 -5.2
SOC Sochi 141.50 315 ePKHKP PKPpre 03 55 20.0
SOC eSS SS 04 16 19.3 -7.0
SOC pmax pmax
comp=Z,31nm,1.0s
BAYT Ayd˜–ntepe-Bay 142.40 310 eP PKPdf 03 55 24.1 -2.7
BNGB Bingˆ¶l 142.45 307 eP PKPdf 03 55 24.0 -2.9
ANN Anapa 142.45 318 i PKIKP PKPdf 03 55 35.6 +9.1
ANN pmax pmax
comp=Z,36nm,0.9s
SHEL Horse Pasture 142.57 167 ePKIKP PKPdf 03 55 26.6 -1.1
SHEL Horse Pasture 142.57 167 ePKPdf PKPdf 03 55 26.6 -1.1
GUMT Gumushane 142.85 310 eP PKPdf 03 55 24.9 -2.6
FURI Furi 142.93 257 ePKPdf PKPdf 03 55 27.7 -1.0
MAZI Mazidag 143.06 305 eP PKPbc 03 55 25.8 -0.1
SUW Suwalki 143.26 339 ePKP PKPab 03 55 25.2 -0.2
SUW Suwalki 143.26 339 ePKIKP PKPab 03 55 25.3 -0.1
PTK Pertek 143.43 308 eP PKPbc 03 55 27.9 +0.8
AKASG Malin Array Be 143.45 331 PKhKP PKPpre 03 55 25.6
comp=Z,48nm,0.7s,baz=42,slow=4.5,SNR=167
AKASG SKPbc SKiKP 03 58 22.8 +0.6
comp=Z,3.0nm,0.7s,baz=44,slow=2.2,SNR=5.0
KIEV Kiev 143.46 331 d iPKHKP PKPpre 03 55 25.1
KIEV Kiev 143.46 331 ePKPpre PKPpre 03 55 25.4
AK11 Malin Array Si 143.49 331 ePKPdf PKPab 03 55 25.3 -1.1
SVRC Sivrice-ELAZID 143.66 307 eP PKPbc 03 55 28.1 +0.3
ILIC ilic-Erzincan 143.85 309 eP PKPbc 03 55 28.4 +0.1
MUD Monsted U'grnd 144.09 353 i PKIKP PKPbc 03 55 27.6 -0.7
MUD pmax pmax
comp=Z,100nm,1.1s
MUD Monsted U'grnd 144.09 353 i P PKPbc 03 55 27.6 -0.7
comp=Z,100nm,1.1s
EDU Dundee 144.16 5 eP PKPbc 03 55 28.0 -0.5
MALT Malatya 144.34 307 eP PKPdf 03 55 30.5 +0.3
MALT Malatya 144.34 307 ⇓PKIKP PKPdf 03 55 30.7 +0.5
MALT Malatya 144.34 307 ⇓iP PKPdf 03 55 30.7 +0.5
SIM Simferopol' 144.42 320 dePKIKP PKPdf 03 55 30.0 0.0
SIM e 03 57 22.0
SIM pmax pmax
comp=Z,113nm,0.8s
BSD Bornholm Skovb 144.50 347 i PKIKP PKPbc 03 55 29.0 -0.6
BSD pmax pmax
comp=Z,92nm,1.0s
BSD Bornholm Skovb 144.50 347 i P PKPbc 03 55 29.0 -0.6
comp=Z,92nm,1.0s
ESY Stoneypath 144.81 5 eP PKPdf 03 55 30.0 -0.3
SVSK Karacayir 144.81 310 eP PKPab 03 55 32.4 +0.7
MBAR Mbarara 144.90 236 PKP PKPdf 03 55 31.8 -0.3
comp=Z,80nm,0.7s,baz=135,slow=3.2,SNR=67
MBAR Mbarara 144.90 236 ePKIKP PKPdf 03 55 31.5 -0.5
MBAR Mbarara 144.90 236 ePKPdf PKPdf 03 55 31.5 -0.5
KVT Kavak 145.01 313 eP PKPab 03 55 32.5 0.0
DIKM Dikmen 145.30 314 eP PKPab 03 55 34.1 +0.5
ESK Eskdalemuir 145.36 5 eP PKPdf 03 55 31.6 +0.3
SORM Soroca 145.64 329 ⇑PKIKP PKPdf 03 55 32.6 +0.6
SORM Soroca 145.64 329 ⇑iP PKPdf 03 55 32.6 +0.6
GKP Gorka Klasztor 145.66 344 ePKP PKPbc 03 55 33.1 -0.1
GKP Gorka Klasztor 145.66 344 ePKP2 PKPbc 03 55 33.2 0.0
BYBT Boyabat 145.71 314 eP PKPdf 03 55 32.1 -0.2
KMRS Kahramanmaras 145.74 307 eP PKPbc 03 55 34.1 +0.1
SARI SarD1z-Kayseri 145.79 308 eP PKPbc 03 55 33.7 -0.6
BEL Belsk 145.88 339 ePKP PKPbc 03 55 34.1 +0.2
BEL Belsk 145.88 339 ePKP2 PKPbc 03 55 34.2 +0.3
BZK Bozkurt 145.99 315 eP PKPab 03 55 36.1 -0.1
H10S3 ASCENSION HYDR 146.02 149 PKPbc PKPbc 03 55 35.8 +0.7
baz=255,slow=5.2,SNR=6.2
H10S2 ASCENSION HYDR 146.03 149 PKPbc PKPab 03 55 36.0 -0.8
baz=255,slow=5.2,SNR=23
H10S1 ASCENSION HYDR 146.04 149 PKPbc PKPbc 03 55 35.9 +0.8
baz=255,slow=5.2,SNR=20
BNN Bunyan 146.04 309 eP PKPbc 03 55 35.1 +0.1
KESW Keswick, Cumbr 146.09 6 eP PKPbc 03 55 34.3 -0.1
LVV L'vov 146.34 334 ePKIKP PKPbc 03 55 34.3 -1.0
TOS Tosya 146.41 314 eP PKPbc 03 55 35.7 -0.2
KOZT Kozan 146.55 307 eP PKPdf 03 55 34.9 +1.0
TAHT Tahtakopru-Hat 146.64 305 eP PKPdf 03 55 35.3 +1.2
CEYT Ceyhan 146.77 306 eP PKPdf 03 55 35.3 +1.1
HPK Haverah Park 146.83 4 eP PKPbc 03 55 36.2 -0.2
KWP Kalwaria Pacla 147.01 335 ePKP PKPbc 03 55 36.9 -0.2
KWP Kalwaria Pacla 147.01 335 ePKP2 PKPbc 03 55 36.9 -0.2
H10N3 ASCENSION HYDR 147.06 148 PKPbc PKPbc 03 55 39.2 +1.3
baz=208,slow=2.9,SNR=9.0
H10N1 ASCENSION HYDR 147.07 148 PKPbc PKPbc 03 55 39.3 +1.3
baz=208,slow=2.9,SNR=15
H10N2 ASCENSION HYDR 147.08 148 PKPbc PKPbc 03 55 39.3 +1.4
baz=208,slow=2.9,SNR=10
WME Myndd Eilian 147.14 7 eP PKPbc 03 55 37.1 -0.2
RUE Ruedersdorf 147.20 347 ePKPdf PKPdf 03 55 35.7 +1.3
KARA Karaisali 147.21 307 eP PKPdf 03 55 34.9 -0.1
NIG Nigde 147.22 309 eP PKPbc 03 55 38.1 -0.3
LHO Holmfirth 147.23 5 eP PKPbc 03 55 37.1 -0.5
WLF1 Llynfaes 147.23 7 eP PKPbc 03 55 36.4 -1.1
BRTR Keskin Array B 147.26 312 PKP PKPdf 03 55 34.2 -1.0
comp=Z,25nm,0.8s,baz=130,slow=2.4,SNR=53
BRTR PKPbc PKPbc 03 55 38.2 -0.1
comp=Z,24nm,0.8s,baz=107,slow=1.5,SNR=76
BRTR pPKPbc pPKPbc 03 57 29.8 -0.8
comp=Z,3.3nm,0.9s,baz=163,slow=1.4,SNR=3.0
BRTR PP PP 03 59 01.2 -7.3
comp=Z,9.1nm,1.0s,baz=72,slow=4.7,SNR=6.3
WPM1 Penmaenmawr 147.32 7 eP PKPbc 03 55 37.4 -0.5
TLCR 147.34 324 ⇑PKP2 PKPbc 03 55 38.2 +0.1
TLCR 147.34 324 ⇑iP PKPbc 03 55 38.2 +0.1
KAMT Kaman 147.36 311 eP PKPbc 03 55 37.3 -1.2
GULA Gulagac 147.40 309 eP PKPbc 03 55 39.3 +0.6
LMK Market Rasen 147.41 3 eP PKPbc 03 55 37.5 -0.5
YAYX Yaylak 147.47 311 eP PKPdf 03 55 36.9 +1.4
GIUM Giurgiulesti 147.48 325 ⇑iP PKPbc 03 55 39.2 +0.8
BUR04 Bucovina Ar. S 147.49 331 ePKPdf PKPdf 03 55 35.7 +0.4
BUR04 ePKPbc PKPbc 03 55 38.7 +0.1
BURAR Bucovina Array 147.49 331 ⇑PKIKP PKPdf 03 55 36.3 +1.0
BURAR Bucovina Array 147.49 331 ⇑iP PKPdf 03 55 36.3 +1.0
OJC Ojcow 147.59 339 ePKP PKPbc 03 55 38.4 -0.2
OJC Ojcow 147.59 339 ePKIKP PKPdf 03 55 34.5 -0.7
OJC Ojcow 147.59 339 ePKPdf PKPdf 03 55 34.5 -0.7
OJC ePKPbc PKPbc 03 55 37.3 -1.3
TESR Tescani 147.60 328 ⇑iP PKPbc 03 55 39.0 +0.2
STNC Stoke 147.65 5 eP PKPbc 03 55 38.3 -0.3
CFR Carcaliu 147.72 325 ⇓PKP2 PKPbc 03 55 39.0 -0.1
CFR Carcaliu 147.72 325 ⇓iP PKPbc 03 55 39.0 -0.1
KOLS Kolonicke sedl 147.74 335 ePKIKP PKPdf 03 55 35.7 +0.2
KOLS Kolonicke sedl 147.74 335 ePKP PKPdf 03 55 35.7 +0.2
KOLS e 03 55 39.4
STHS Stebnicka Huta 147.74 337 ePKIKP PKPdf 03 55 36.1 +0.6
STHS Stebnicka Huta 147.74 337 ePKP PKPdf 03 55 36.1 +0.6
STHS e 03 55 39.1
FOEL Foel Wylfa 147.76 6 eP PKPbc 03 55 38.6 -0.4
AFSR Af¯ar-Bala (A 147.77 312 eP PKPbc 03 55 38.9 -0.7
ANTO Ankara 147.78 313 ⇑PKIKP PKPdf 03 55 36.1 +0.2
ANTO Ankara 147.78 313 ⇑iP PKPdf 03 55 36.1 +0.2
ANTO Ankara 147.78 313 ePKPdf PKPdf 03 55 35.8 -0.2
ANTO ePKPbc PKPbc 03 55 39.3 -0.2
BR231 Keskin MP Arra 147.80 313 ePKPdf PKPdf 03 55 35.3 -0.7
BR231 ePKPbc PKPbc 03 55 38.6 -1.0
UZH Uzhgorod 147.97 335 ⇓iPKP2 PKPbc 03 55 40.2 +0.6
YESY Yesilyurt 147.98 309 eP PKPbc 03 55 39.5 -0.7
TIRR Tirgusor 148.02 323 ⇑PKP2 PKPbc 03 55 39.7 -0.2
TIRR Tirgusor 148.02 323 ⇑iP PKPbc 03 55 39.7 -0.2
PLOR Plostina 148.05 327 ⇑PKP2 PKPbc 03 55 39.9 -0.1
PLOR Plostina 148.05 327 ⇑iP PKPbc 03 55 39.9 -0.1
CWF Charnwood Fore 148.07 4 eP PKPbc 03 55 39.2 -0.5
CWF Charnwood Fore 148.07 4 ePKPdf PKPdf 03 55 37.2 +1.3
CWF ePKPbc PKPbc 03 55 39.5 -0.2
NIE Niedzica 148.09 337 ePKP PKPbc 03 55 40.4 +0.5
NIE Niedzica 148.09 337 ePKP2 PKPbc 03 55 40.5 +0.5
KSP Ksiaz 148.11 343 ePKP PKPbc 03 55 40.3 +0.4
KSP Ksiaz 148.11 343 ePKP2 PKPbc 03 55 40.4 +0.5
TLB Topalu 148.15 324 ⇑PKP2 PKPbc 03 55 40.7 +0.5
TLB Topalu 148.15 324 ⇑iP PKPbc 03 55 40.7 +0.5
HLM1 Long Mynd 148.16 6 eP PKPbc 03 55 39.0 -0.9
TRPA Tarpa 148.27 334 ⇑iP PKPbc 03 55 40.7 +0.3
CHBY Cihanbeyli 148.27 311 eP PKPbc 03 55 40.3 -0.5
MANR Mangalia 148.32 322 ⇓iP PKPbc 03 55 41.2 +0.6
LPW Lampeter 148.43 7 eP PKPbc 03 55 39.7 -1.0
OKC Ostrava-Krasne 148.46 340 ePKP2 PKPbc 03 55 41.1 +0.3
OKC Ostrava-Krasne 148.46 340 ⇑ePKP PKPbc 03 55 41.1 +0.3
OKC ePKPAB PKPab 03 55 45.8 -0.1
OKC epPKP pPKPdf 03 57 32.1 +1.4
CLL Collm 148.47 347 ⇓ePKHKP PKPdf 03 55 37.0 +0.4
CLL pmax pmax
comp=Z,17nm,1.3s
CLL Collm 148.47 347 ePKPdf PKPdf 03 55 36.3 -0.2
baz=15,slow=1.5
CLL ePKPbc PKPbc 03 55 40.8 0.0
baz=20,slow=2.4
CLL Collm 148.47 347 ePKPdf PKPdf 03 55 37.0 +0.4
comp=Z,17nm,1.3s
CLL ⇓iPKPbc PKPbc 03 55 41.0 +0.2
comp=Z,91nm,0.9s
CLL epPKPab pPKPab 03 57 34.0 -1.2
CLL i 03 57 39.9
CLL Collm 148.47 347 ePKPdf PKPdf 03 55 36.9 +0.4
CLL ePKPbc PKPbc 03 55 41.0 +0.2
UPC Upice 148.49 343 ePKPDF PKPdf 03 55 36.8 +0.1
UPC ⇑ePKP PKPbc 03 55 41.3 +0.4
UPC ePKPAB PKPab 03 55 44.8 -1.2
UPC epPKP pPKPdf 03 57 33.4 +2.6
DPC Dobruska-Polom 148.54 343 ePKPDF PKPdf 03 55 37.3 +0.5
DPC ⇑ePKP PKPbc 03 55 41.6 +0.5
DPC ePKPAB PKPab 03 55 45.7 -0.6
DPC epPKP pPKPdf 03 57 33.0 +2.1
DPC ex x 03 57 37.8
WIMM Wimmelburg 148.56 349 ePKPdf PKPdf 03 55 36.5 -0.1
baz=15,slow=1.5
WIMM ePKPbc PKPbc 03 55 41.1 +0.1
baz=20,slow=2.4
MDUB Mudurnu 148.57 315 eP PKPbc 03 55 41.3 -0.3
MSAB Monastry St. A 148.58 323 ⇑iP PKPbc 03 55 41.9 +0.6
DOPR Dopca 148.60 328 ⇓iP PKPbc 03 55 42.0 +0.7
ISR Istrita 148.60 326 ⇓PKP2 PKPbc 03 55 41.8 +0.4
ISR Istrita 148.60 326 ⇓iP PKPbc 03 55 41.8 +0.4
LANS Liptovska Anna 148.61 338 ePKHKP PKPbc 03 55 40.7 -0.6
LANS e 03 59 14.7
LANS Liptovska Anna 148.61 338 ePKP PKPbc 03 55 40.7 -0.6
LANS ePP PP 03 59 14.7 -0.7
MLR Muntele Rosu 148.66 327 ⇓PKHKP PKPbc 03 55 41.3 -0.3
KRLC Kraliky 148.66 342 ePKP2 PKPbc 03 55 41.7 +0.3
KRLC Kraliky 148.66 342 ⇑ePKP PKPbc 03 55 41.7 +0.3
KRLC ePKPAB PKPab 03 55 46.3 -0.5
KRLC epPKP pPKPdf 03 57 33.7 +2.6
MCH1 Michaelchurch 148.66 6 eP PKPbc 03 55 39.5 -1.7
BRG Berggiesshubel 148.67 346 i PKP PKPdf 03 55 37.1 +0.2
comp=Z,26nm,1.4s
BRG Berggiesshubel 148.67 346 ⇑i PKPbc 03 55 41.4 +0.1
comp=Z,42nm,0.7s
BRG epPKP pPKPdf 03 57 33.5 +2.4
comp=Z,20nm,1.0s
BRG e 03 58 18.8
comp=Z,15nm,1.6s
BRG Berggiesshubel 148.67 346 ⇑iPKHKP PKPdf 03 55 37.1 +0.2
BRG pmax pmax
comp=Z,26nm,1.4s
BRG Berggiesshubel 148.67 346 ePKPdf PKPdf 03 55 36.9 0.0
baz=15,slow=1.5
BRG ePKPbc PKPbc 03 55 41.4 +0.1
baz=20,slow=2.4
MORC Moravsky Berou 148.70 341 ⇑PKHKP PKPbc 03 55 41.5 0.0
MORC Moravsky Berou 148.70 341 ⇑iP PKPbc 03 55 41.5 0.0
MORC Moravsky Berou 148.70 341 ePKPdf PKPdf 03 55 36.9 -0.2
MORC ePKPbc PKPbc 03 55 41.9 +0.4
WTSB Winterswijk 148.76 355 ePKPdf PKPdf 03 55 37.2 +0.2
comp=Z,12nm,0.2s
WTSB ePKPbc PKPbc 03 55 40.6 -0.8
WTSB ePKPab PKPab 03 55 47.8 +0.8
FBE Freiberg 148.76 346 ePKPdf PKPdf 03 55 37.6 +0.6
baz=15,slow=1.5
FBE ePKPbc PKiKP 03 55 42.1 -0.5
baz=20,slow=2.4
FBE epPKPbc pPKPbc 03 57 36.9 +2.6
SSW Stow on the Wo 148.80 5 eP PKPbc 03 55 41.2 -0.4
NEUB Neuenburg 148.81 348 ePKPdf PKPdf 03 55 37.1 0.0
baz=15,slow=1.5
NEUB ePKPbc PKPbc 03 55 41.8 +0.2
baz=20,slow=2.4
MONM Monmouth 148.84 6 eP PKPbc 03 55 41.0 -0.7
SVRH Sivrihisar-ESK 148.84 313 eP PKPbc 03 55 41.3 -1.0
PVCC Panska Ves 148.84 345 ePKPDF PKPdf 03 55 37.8 +0.6
PVCC ⇑ePKP PKPbc 03 55 42.1 +0.4
PVCC epPKP pPKPdf 03 57 34.2 +2.9
CJR Cluj-Napoca 148.90 331 ⇑PKP2 PKPbc 03 55 42.6 +0.5
CJR Cluj-Napoca 148.90 331 ⇑iP PKPbc 03 55 42.6 +0.5
SECR 148.91 326 ⇑iP PKPbc 03 55 42.4 +0.3
KONT Konya--Tatoy 148.92 310 eP PKPbc 03 55 41.9 -0.5
STRD Stroud 148.96 5 eP PKPbc 03 55 41.0 -1.0
GULT Gulveren 149.04 315 eP PKPbc 03 55 42.7 0.0
LFK Lefkose 149.04 304 eP PKPbc 03 55 42.9 +0.1
TAUT Tautenburg 149.04 348 ePKPdf PKPdf 03 55 37.3 -0.2
baz=15,slow=1.5
TAUT ePKPbc PKPbc 03 55 42.4 +0.2
baz=20,slow=2.4
TAUT epPKPbc pPKPbc 03 57 37.9 +2.8
HKWD Heukewalde 149.07 348 ePKPdf PKPdf 03 55 37.1 -0.5
baz=15,slow=1.5
HKWD ePKPbc PKPbc 03 55 42.4 +0.1
baz=20,slow=2.4
HKWD epPKPbc pPKPbc 03 57 38.1 +3.0
VOIR 149.15 328 ⇑iP PKPbc 03 55 42.9 +0.1
SCHF Schoenfels 149.19 347 ePKPdf PKPdf 03 55 38.0 +0.2
baz=15,slow=1.5
SCHF ePKPbc PKPbc 03 55 42.9 +0.3
baz=20,slow=2.4
HDMB Hadim 149.22 308 eP PKPbc 03 55 42.5 -0.9
DRGR 149.24 332 ⇓PKHKP PKPbc 03 55 42.9 0.0
DRGR 149.24 332 ⇓iP PKPbc 03 55 42.9 0.0
SWN1 Swindon 149.25 5 eP PKPbc 03 55 41.9 -0.8
BATH Bath 149.28 6 eP PKPbc 03 55 42.1 -0.6
CSS Prodhromos 149.30 304 eP PKPbc 03 55 44.5 +1.1
CSS Prodhromos 149.30 304 ePKPbc PKPbc 03 55 43.1 -0.3
PRA Prague 149.30 345 ePKHKP PKPdf 03 55 38.6 +0.7
PRA e 03 55 46.5
PRA Prague 149.30 345 ePKPDF PKPdf 03 55 38.6 +0.7
PRA ⇑ePKP PKPbc 03 55 43.1 +0.2
PRA ePKPAB PKiKP 03 55 46.5 +2.8
PRA epPKP pPKPdf 03 57 36.2 +4.1
MAMC Mammari 149.32 304 P PKPbc 03 55 43.5 +0.1
PRU Pruhonice 149.35 344 ePKHKP PKPdf 03 55 38.1 +0.1
PRU e 03 55 48.3
PRU Pruhonice 149.35 344 ePKPDF PKPdf 03 55 38.1 +0.1
PRU ⇑ePKP PKPbc 03 55 43.2 +0.2
PRU ePKPAB PKPab 03 55 48.3 -1.3
PRU epPKP pPKPdf 03 57 34.5 +2.3
PRU ex x 03 57 38.8
GOPC GO Pecny, Ondr 149.35 344 ePKPDF PKPdf 03 55 38.9 +0.8
GOPC ⇑ePKP PKPbc 03 55 43.3 +0.3
GOPC ePKPAB PKPab 03 55 49.2 -0.4
GOPC epPKP pPKPdf 03 57 35.6 +3.4
MOX Moxa 149.38 348 ePKPdf PKPdf 03 55 38.0 0.0
baz=15,slow=1.5
MOX ePKPbc PKPbc 03 55 43.1 +0.1
baz=20,slow=2.4
PRD Provadia 149.38 322 P PKPbc 03 55 43.8 +0.5
VYHS Vyhne 149.38 338 ePKIKP PKPdf 03 55 37.9 -0.3
VYHS Vyhne 149.38 338 ePKP PKPdf 03 55 37.9 -0.3
VYHS e 03 55 42.3
VRAC Vranov 149.40 341 ⇓PKP2 PKPbc 03 55 45.7 +2.5
VRAC Vranov 149.40 341 ⇓iP PKPbc 03 55 45.7 +2.5
PLN Plauen 149.42 348 ePKPdf PKPdf 03 55 37.8 -0.3
baz=15,slow=1.5
PLN ePKPbc PKPbc 03 55 43.4 +0.2
baz=20,slow=2.4
TANN Tannenbergstha 149.43 347 ePKPdf PKPdf 03 55 38.1 -0.1
baz=15,slow=1.5
TANN ePKPbc PKPbc 03 55 43.4 +0.2
baz=20,slow=2.4
TANN epPKPbc pPKPbc 03 57 38.8 +2.7
WERD Werda 149.43 347 ePKPdf PKPdf 03 55 38.1 -0.1
baz=15,slow=1.5
WERD ePKPbc PKPbc 03 55 43.5 +0.3
baz=20,slow=2.4
PSZ Piszkesteto 149.49 336 ⇑PKHKP PKPbc 03 55 44.1 +0.6
PSZ Piszkesteto 149.49 336 ⇑iP PKPbc 03 55 44.1 +0.6
PSZ Piszkesteto 149.49 336 ePKPdf PKPdf 03 55 38.4 -0.1
PSZ ePKPbc PKPbc 03 55 43.6 +0.1
WOL Wolverton 149.49 4 eP PKPbc 03 55 42.0 -1.2
TRIB Obertriebel 149.56 347 ePKPbc PKPbc 03 55 43.6 +0.1
baz=20,slow=2.4
SCHD Schmiedefeld 149.56 349 ePKPdf PKPdf 03 55 38.3 -0.1
baz=15,slow=1.5
SCHD ePKPbc PKPbc 03 55 43.8 +0.2
baz=20,slow=2.4
WERN Wernitzgruen 149.57 347 ePKPdf PKPdf 03 55 38.6 +0.2
baz=15,slow=1.5
WERN ePKPbc PKiKP 03 55 44.0 -0.4
baz=20,slow=2.4
WERN epPKPbc pPKPbc 03 57 39.1 +2.6
LEF Lefka 149.59 304 eP PKPbc 03 55 43.9 -0.1
ROHR Rohrbach 149.63 347 ePKPdf PKPdf 03 55 38.7 +0.2
baz=15,slow=1.5
ROHR ePKPbc PKPbc 03 55 44.0 +0.3
baz=20,slow=2.4
ROHR epPKPbc pPKPbc 03 57 39.1 +2.4
SZAC Souni-Zanaja 149.71 304 P PKPbc 03 55 44.6 +0.2
LOT Lotru 149.76 329 ⇑iP PKPbc 03 55 43.8 -0.5
IZI Iznik 149.77 316 eP PKPbc 03 55 42.1 -2.4
ALFC Alevga 149.80 305 P PKPbc 03 55 44.2 -0.4
SMOL Smolenice 149.84 340 ePKHKP PKPdf 03 55 39.4 +0.5
SMOL Smolenice 149.84 340 ePKP PKPdf 03 55 39.4 +0.5
SMOL e 03 55 44.7
DEV Deva 149.84 331 ⇑PKHKP PKPbc 03 55 43.1 -1.3
DEV Deva 149.84 331 ⇑iP PKPbc 03 55 43.0 -1.3
CTKS Kestanelik-??a 149.89 318 eP PKPbc 03 55 43.3 -1.3
SHUT Suhut-Afyon 149.93 312 eP PKPbc 03 55 44.9 -0.1
BEBN Eben Emael 150.01 356 PKPbc PKPbc 03 55 44.4 -0.1
HGN Heimansgroeve 150.02 355 ePKPdf PKPdf 03 55 39.1 +0.1
comp=Z,12nm,1.0s
HGN ePKPbc PKPbc 03 55 44.0 -0.6
comp=Z,37nm,0.9s
HGN ePKPab PKPab 03 55 50.4 -1.9
HMNX Herstmonceux 150.02 2 eP PKPbc 03 55 44.7 +0.2
ARMT Armutlu 150.04 317 eP PKPbc 03 55 44.7 -0.3
AKMC Akamas 150.05 305 P PKPbc 03 55 44.3 -0.9
UCC Uccle 150.08 357 PKPbc PKPbc 03 55 45.4 +0.7
SUTC Sutluce-Ispart 150.09 310 eP PKPbc 03 55 44.2 -1.2
ROTZ Rotzenmuhle 150.09 347 ePKPbc PKPbc 03 55 45.0 +0.2
baz=20,slow=2.4
MEM Membach 150.17 355 PKP PKPdf 03 55 39.6 +0.3
MEM PKPbc PKPbc 03 55 45.1 +0.1
MEM Membach 150.17 355 ePKIKP PKPdf 03 55 39.2 -0.1
MEM Membach 150.17 355 ePKPdf PKPdf 03 55 39.2 -0.1
MEM ePKPbc PKPbc 03 55 45.0 +0.1
BUD Budapest 150.17 337 ⇓e PKPbc 03 55 44.9 -0.1
GZR Gura Zlata 150.27 330 ⇓PKIKP PKPbc 03 55 45.4 0.0
GZR Gura Zlata 150.27 330 ⇓iP PKPbc 03 55 45.4 0.0
GRF Grafenberg Arr 150.37 348 ePKPdf PKPdf 03 55 39.5 -0.2
baz=15,slow=1.5
GRF ePKPbc PKiKP 03 55 45.7 -0.3
baz=20,slow=2.4
GRF epPKPbc pPKPbc 03 57 40.9 +2.5
GRFO Grafenberg 150.37 348 ePKIKP PKPdf 03 55 37.6 -2.0
GRFO Grafenberg 150.37 348 ePKPdf PKPdf 03 55 37.6 -2.0
GRFO ePKPbc PKPbc 03 55 45.6 +0.1
SNF Seneffe 150.38 357 PKPbc PKPbc 03 55 45.8 +0.5
KHC Kasperske Hory 150.38 345 ePKIKP PKPdf 03 55 39.8 +0.1
KHC e 03 55 54.2
KHC Kasperske Hory 150.38 345 ePKPDF PKPdf 03 55 39.8 +0.1
KHC ⇑ePKP PKPbc 03 55 45.7 +0.2
KHC ex x 03 55 50.0
KHC ePKPAB PKPab 03 55 54.2 +0.3
KHC epPKP pPKPdf 03 57 37.6 +3.7
KHC ex x 03 57 42.7
KHC Kasperske Hory 150.38 345 ePKPdf PKPdf 03 55 39.2 -0.5
KHC ePKPbc PKiKP 03 55 46.0 -0.1
BCLA Clavier 150.41 356 PKPbc PKPbc 03 55 45.4 -0.1
WET Wettzell 150.53 346 ePKPdf PKPdf 03 55 39.5 -0.5
baz=15,slow=1.5
WET ePKPbc PKPbc 03 55 45.8 -0.1
baz=20,slow=2.4
EDRB Edirne 150.60 321 eP PKPbc 03 55 44.5 -1.7
SRE Strehaia 150.61 329 ⇑PKIKP PKPbc 03 55 46.8 +0.7
SRE Strehaia 150.61 329 ⇑iP PKPbc 03 55 46.8 +0.7
GEC2 GERESS Array S 150.62 344 ePKIKP PKPdf 03 55 40.2 0.0
GEC2 GERESS Array S 150.62 344 ePKPdf PKPdf 03 55 39.8 -0.4
baz=15,slow=1.5
GEC2 ePKPbc PKPbc 03 55 46.0 -0.1
baz=20,slow=2.4
GEC2 GERESS Array S 150.62 344 ePKPdf PKPdf 03 55 40.1 0.0
GEC2 ePKPbc PKPbc 03 55 46.0 -0.1
GEC2 ePKPbc PKiKP 03 55 46.3 -0.4
GERES GERESS Array B 150.62 344 PKP PKPdf 03 55 40.0 -0.2
comp=Z,2.7nm,0.9s,baz=48,slow=2.0,SNR=18
GERES PKPbc PKPbc 03 55 46.1 -0.1
comp=Z,17nm,0.7s,baz=34,slow=2.3,SNR=68
GERES PKPab PKPab 03 55 54.8 -0.3
comp=Z,1.6nm,0.6s,baz=79,slow=2.9,SNR=6.4
GERES pPKPbc pPKPbc 03 57 37.5 -1.7
comp=Z,0.5nm,0.6s,baz=126,slow=35,SNR=3.4
BZS Buzias 150.63 332 ⇓PKIKP PKPbc 03 55 46.2 +0.1
BZS Buzias 150.63 332 ⇓iP PKPbc 03 55 46.2 +0.1
DOU Dourbes 150.77 357 PKPbc PKPbc 03 55 46.5 +0.2
EDC Edincik 150.79 317 eP PKPbc 03 55 46.0 -0.7
MRMT Marmara Adasi 150.82 318 eP PKPbc 03 55 45.2 -1.6
CONA Conrad Observa 150.85 341 ⇑iPKPdf PKPdf 03 55 40.8 +0.2
comp=Z,6.0nm,1.0s
CONA ⇓iPKiKP PKiKP 03 55 47.1 0.0
comp=Z,40nm,0.7s
BANR Banloc 151.03 332 ⇓iP PKPbc 03 55 46.9 -0.1
GONE Gonen-Balikesi 151.07 317 eP PKPbc 03 55 46.5 -0.9
WLF Walferdange 151.10 355 PKPbc PKPbc 03 55 47.7 +0.6
WLF Walferdange 151.10 355 ePKIKP PKPbc 03 55 47.7 +0.6
WLF Walferdange 151.10 355 ePKPbc PKPbc 03 55 47.6 +0.6
DIM Dimitrovgrad 151.18 322 P PKPbc 03 55 47.4 -0.1
ELL Elmali 151.19 309 eP PKPbc 03 55 47.2 -0.7
KULA Kula-Manisa 151.24 313 eP PKPbc 03 55 47.2 -0.7
MPEP Malo Peshtene 151.28 326 P PKPbc 03 55 47.7 0.0
ERIK Erikli-Kesan 151.45 319 eP PKPbc 03 55 46.9 -1.3
KDZ Kurdzhali 151.50 322 P PKPbc 03 55 48.7 +0.4
PGB Panagyurishte 151.61 325 P PKPbc 03 55 48.9 +0.3
STU Stuttgart 151.61 350 ePKIKP PKPdf 03 55 40.9 -0.6
STU Stuttgart 151.61 350 ePKPdf PKPdf 03 55 40.9 -0.6
STU ePKPbc PKPbc 03 55 48.2 0.0
ENEZ Enez 151.63 320 eP PKPbc 03 55 48.0 -0.5
GELI Tayfur-Gelibol 151.63 319 eP PKPbc 03 55 47.6 -0.9
FETY Fethiye 151.84 310 eP PKPbc 03 55 48.5 -0.7
RZN Rozhen 151.87 323 P PKPbc 03 55 48.5 -0.9
KOGS Kog 152.04 339 i PKPbc PKPbc 03 55 48.5 -0.8
AYDB Zeytinkoy-Aydi 152.05 313 eP PKPbc 03 55 49.6 -0.2
DALY Dalyan (Mu˜la 152.06 310 eP PKPbc 03 55 48.4 -1.2
VTS Vitosha 152.09 326 P PKPbc 03 55 49.5 -0.3
BFO Black Forest 152.17 351 ePKIKP PKPdf 03 55 40.3 -2.1
BFO e 03 55 48.5
BFO Black Forest 152.17 351 ePKPdf PKPdf 03 55 40.3 -2.1
BFO ePKPbc PKPbc 03 55 48.5 -1.1
YER Yerkesik 152.18 311 eP PKPbc 03 55 48.8 -1.2
SOKA Soboth 152.22 341 ⇑iPKPdf PKPdf 03 55 39.7 -3.0
comp=Z,4.3nm,0.7s
SOKA ⇓iPKPbc PKPbc 03 55 49.2 -0.7
comp=Z,18nm,0.9s
PERS Pernice 152.23 341 i PKPbc PKPbc 03 55 49.1 -0.7
KBA Koelnbreinsper 152.34 344 ⇑iPKPdf PKPdf 03 55 41.9 -1.0
comp=Z,11nm,1.3s
KBA ⇑iPKPbc PKPbc 03 55 49.6 -0.6
comp=Z,24nm,0.9s
MMB Musomiste 152.50 324 P PKPbc 03 55 50.2 -0.3
DIVS Divibare 152.54 332 ⇑iP PKPdf 03 55 42.8 -0.4
SIGR SIGRI 152.71 317 eP PKPbc 03 55 49.0 -2.0
PDKS Podkum 152.78 340 i PKPbc PKPbc 03 55 50.5 -0.5
ABTA Abfaltersbach 152.86 344 ⇑iPKPdf PKPdf 03 55 42.9 -0.7
comp=Z,20nm,0.9s
ABTA ⇑iPKPbc PKPbc 03 55 50.7 -0.5
comp=Z,30nm,0.6s
FETA Feichten 153.01 347 ⇓iPKPdf PKPdf 03 55 43.4 -0.5
comp=Z,14nm,0.8s
BOJS Bojanci 153.20 339 ePKPdf PKPdf 03 55 45.0 +1.0
BOJS i PKPbc PKiKP 03 55 51.9 0.0
BOJS epPKPbc pPKPbc 03 57 44.4 -0.8
FUORN Ofenpass-Fuorn 153.49 348 ePKPdf PKPdf 03 55 44.1 -0.6
FUORN ePKPbc PKiKP 03 55 52.9 0.0
TUE Stuetta 153.81 349 ePKPdf PKPdf 03 55 44.9 -0.2
AGG Agios Georgios 154.99 321 ePKIKP PKPdf 03 55 46.7 0.0
AGG e 03 56 13.3
AGG Agios Georgios 154.99 321 ePKPdf PKPdf 03 55 46.7 0.0
AGG ePKPab PKPab 03 56 13.3 -0.6
BNI Bardonecchia 155.60 352 ePKIKP PKPdf 03 55 47.3 -0.2
BNI e 03 56 15.4
BNI Bardonecchia 155.60 352 ePKPdf PKPdf 03 55 47.3 -0.2
BNI ePKPab PKPab 03 56 15.4 -0.9
PBRG Braganca 157.79 18 ePKPab PKPab 03 56 27.5 +1.7
MVO Moncorvo 158.29 19 ePKPdf PKPdf 03 55 51.5 +0.6
PVIS Viseu 158.41 21 ePKPdf PKPdf 03 55 50.0 -1.0
PCBR Castelo Branco 159.34 22 ePKPdf PKPdf 03 55 53.2 +1.1
PMRV Marv??o 159.74 22 ePKPdf PKPdf 03 55 53.2 +0.6
PNCL Nicolau / Gran 160.45 26 ePKPdf PKPdf 03 55 54.6 +1.3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ES19 | SONSECA Array | 160.50 | 14 | ePKPdf | PKPdf | 03 55 53.3 | -0.1 |
| ES19 | | | | ePKPab | PKPab | 03 56 36.7 | -1.0 |
| ESDC | Sonseca Array | 160.51 | 14 | PKP | PKPdf | 03 55 53.5 | 0.0 |
| | comp=Z,1.2nm,0.8s,baz=5.3,slow=3.3,SNR=6.2 | | | | | | |
| ESDC | | | | PKPab | PKPab | 03 56 38.4 | +0.6 |
| | comp=Z,1.3nm,0.7s,baz=341,slow=5.1,SNR=6.0 | | | | | | |
| ESDC | | | | pPKPab | pPKPab | 03 58 24.6 | -1.4 |
| | comp=Z,0.2nm,0.5s,baz=358,slow=37,SNR=1.9 | | | | | | |
| PBEJ | Beja | 160.79 | 25 | ePKPdf | PKPdf | 03 55 55.0 | +1.3 |
| MESJ | Messejana | 160.81 | 26 | ePKPdf | PKPdf | 03 55 54.9 | +1.2 |
| PTEO | Sao Teotonio | 160.85 | 27 | ePKPdf | PKPdf | 03 55 55.2 | +1.4 |
| PBAR | Barrancos | 160.97 | 23 | ePKPdf | PKPdf | 03 55 54.9 | +1.0 |
| PCVE | Castro Verde | 161.06 | 26 | ePKPdf | PKPdf | 03 55 53.8 | -0.2 |
| MORF | Marmelete | 161.08 | 28 | ePKPdf | PKPdf | 03 55 54.9 | +0.8 |
| PBDV | Barranco-do-Ve | 161.44 | 26 | ePKPdf | PKPdf | 03 55 55.5 | +1.0 |
| LIC | Lamto | 163.82 | 153 | ePKP2 | PKPab | 03 56 53.7 | +0.9 |
| | comp=Z,78nm,1.6s | | | | | | |
| KEST | Kesra | 163.94 | 339 | PKP | PKPdf | 03 55 56.6 | -0.4 |
| | comp=Z,4.1nm,0.9s,baz=7.0,slow=2.6,SNR=3.8 | | | | | | |
| KEST | | | | PKPab | PKPab | 03 56 53.1 | +0.1 |
| | comp=Z,4.0nm,0.9s,baz=18,slow=10,SNR=4.1 | | | | | | |
| KIC | Kosan Boka | 164.07 | 154 | ePKP2 | PKPab | 03 56 54.7 | +0.8 |
| | comp=Z,67nm,0.9s | | | | | | |
| TIC | Toumodi | 164.21 | 153 | ePKP2 | PKPab | 03 56 55.2 | +0.7 |
| DBIC | Dimbokro | 164.30 | 153 | PKP | PKPdf | 03 55 57.4 | -0.4 |
| | comp=Z,14nm,0.8s,baz=173,slow=2.4,SNR=11 | | | | | | |
| DBIC | | | | PKPab | PKPab | 03 56 56.2 | +1.3 |
| | comp=Z,13nm,0.8s,baz=193,slow=7.5,SNR=9.2 | | | | | | |
| DBIC | Dimbokro | 164.30 | 153 | ePKIKP | PKPdf | 03 55 57.5 | -0.3 |
| DBIC | | | | e | | 03 56 56.3 | |
| DBIC | Dimbokro | 164.30 | 153 | ePKPdf | PKPdf | 03 55 57.5 | -0.3 |
| DBIC | | | | ePKPab | PKPab | 03 56 56.3 | +1.4 |
| TOA0 | Torodi Ar. Sit | 172.30 | 176 | ePKPdf | PKPdf | 03 56 02.3 | -0.7 |
| TOA0 | | | | ePKPab | PKPab | 03 57 30.1 | -0.1 |
| TORD | Torodi Ar. Bea | 172.30 | 176 | PKP | PKPdf | 03 56 02.1 | -1.0 |
| | comp=Z,16nm,0.8s,baz=314,slow=0.5,SNR=93 | | | | | | |
| TORD | | | | PKPab | PKPab | 03 57 30.9 | +0.8 |
| | comp=Z,11nm,0.8s,baz=173,slow=4.1,SNR=21 | | | | | | |
| TORD | | | | pPKP | pPKPdf | 03 57 59.2 | +1.2 |
| | comp=Z,5.1nm,1.2s,baz=203,slow=2.5,SNR=1.8 | | | | | | |
| TORD | | | | PP | PP | 04 01 21.4 | +0.7 |
| | comp=Z,7.9nm,1.0s,baz=179,slow=5.3,SNR=11 | | | | | | |
| TOA1 | Torodi Ar. Sit | 172.31 | 176 | ePKP2 | PKPab | 03 57 30.1 | -0.1 |
| TAM | Tamanrasset | 176.40 | 303 | ePKIKP | PKPdf | 03 56 04.3 | 0.0 |
| TAM | | | | e | | 03 57 49.4 | |
| TAM | Tamanrasset | 176.40 | 303 | ePKPdf | PKPdf | 03 56 04.3 | 0.0 |
| TAM | | | | ePKPab | PKPab | 03 57 49.4 | +0.6 |

*NEIC **05** 03:37:42.9, 43°.57S×172°.38E, h5km, ML3.8(WEL), After WEL.*
*NEIC Felt in Canterbury.*
**WEL 05 03:37:42.9**±0.1**, 43°.56S×172°.39E, h5**km**, ML3.8**/17**, 3C-6D, Error ellipse: s-maj=1.0km s-min=1.0km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.17 | 96 | PG | Pg | 03 37 46.3 | 0.0 |
| CRLZ | | | | SG | Sg | 03 37 49.1 | +0.6 |
| CRLZ | | | | AML | AML | 03 37 49.6 | |
| CRLZ | Canterbury Las | 0.17 | 96 | Pg | Pg | 03 37 46.1 | -0.2 |
| CRLZ | | | | Sg | Sg | 03 37 49.1 | +0.6 |
| MQZ | McQueen's Vall | 0.24 | 127 | ⇓PG | Pg | 03 37 47.7 | +0.1 |
| MQZ | | | | SG | Sg | 03 37 51.4 | +0.6 |
| MQZ | | | | AML | AML | 03 37 51.7 | |
| MQZ | McQueen's Vall | 0.24 | 127 | ⇓Pg | Pg | 03 37 47.8 | +0.1 |
| MQZ | | | | Sg | Sg | 03 37 51.5 | +0.7 |
| OXZ | Oxford | 0.35 | 313 | ⇓PG | Pg | 03 37 49.6 | -0.1 |
| OXZ | | | | SG | Sg | 03 37 54.6 | +0.4 |
| OXZ | Oxford | 0.35 | 313 | ⇓Pg | Pg | 03 37 49.6 | -0.1 |
| OXZ | | | | Sg | Sg | 03 37 54.6 | +0.4 |
| LTZ | Lake Taylor | 0.78 | 354 | ⇑P* | Pg | 03 37 58.1 | +0.1 |
| LTZ | | | | S* | Sg | 03 38 09.1 | +0.8 |
| LTZ | | | | AML | AML | 03 38 10.5 | |
| LTZ | Lake Taylor | 0.78 | 354 | ⇑P* | Pg | 03 37 58.1 | +0.1 |
| RPZ | Rata Peaks | 0.98 | 260 | ⇓P* | Pg | 03 38 01.8 | +0.1 |
| RPZ | | | | S* | Sb | 03 38 15.6 | -0.1 |
| RPZ | | | | AML | AML | 03 38 21.3 | |
| RPZ | Rata Peaks | 0.98 | 260 | ⇓P* | Pg | 03 38 01.9 | +0.1 |
| WVZ | Waitaha Valley | 1.30 | 291 | P* | Pb | 03 38 07.8 | 0.0 |
| WVZ | | | | AML | AML | 03 38 32.2 | |
| WVZ | | | | AML | AML | 03 38 33.5 | |
| WVZ | Waitaha Valley | 1.30 | 291 | P* | Pb | 03 38 07.8 | 0.0 |
| KHZ | Kahutara | 1.42 | 37 | PN | Pn | 03 38 07.4 | -2.0 |
| KHZ | | | | AML | AML | 03 38 43.1 | |
| KHZ | Kahutara | 1.42 | 37 | ePn | Pn | 03 38 07.5 | -1.8 |
| LBZ | Lake Benmore | 1.79 | 242 | AML | AML | 03 38 41.3 | |
| LBZ | | | | AML | AML | 03 38 51.2 | |
| LBZ | Lake Benmore | 1.79 | 242 | Pn | Pn | 03 38 13.5 | -1.0 |
| THZ | Tophouse | 1.84 | 12 | ⇑PN | Pn | 03 38 13.5 | -1.7 |
| THZ | | | | AML | AML | 03 38 48.3 | |
| THZ | | | | AML | AML | 03 38 48.3 | |
| THZ | Tophouse | 1.84 | 12 | Pn | Pn | 03 38 13.4 | -1.7 |
| DSZ | Denniston Nort | 1.86 | 346 | AML | AML | 03 38 44.1 | |
| DSZ | | | | AML | AML | 03 38 45.4 | |
| DSZ | | | | AML | AML | 03 38 45.7 | |
| DSZ | | | | AML | AML | 03 38 48.0 | |
| DSZ | Denniston Nort | 1.86 | 346 | Pn | Pn | 03 38 14.6 | -0.9 |
| ODZ | Otahua Downs | 1.94 | 220 | AML | AML | 03 38 47.0 | |
| ODZ | | | | AML | AML | 03 38 48.4 | |
| ODZ | | | | AML | AML | 03 38 54.2 | |
| ODZ | | | | AML | AML | 03 39 00.3 | |
| ODZ | Otahua Downs | 1.94 | 220 | ePn | Pn | 03 38 16.2 | -0.3 |
| ODZ | | | | eS | Sg | 03 38 45.5 | +0.2 |
| FOZ | Fox Glacier | 1.96 | 269 | AML | AML | 03 38 40.2 | |
| FOZ | | | | AML | AML | 03 38 46.7 | |
| FOZ | Fox Glacier | 1.96 | 269 | Pn | Pn | 03 38 15.9 | -0.9 |
| JCZ | Jackson Bay | 2.68 | 258 | AML | AML | 03 39 14.8 | |
| JCZ | | | | AML | AML | 03 39 18.3 | |
| JCZ | Jackson Bay | 2.68 | 258 | Pn | Pn | 03 38 25.7 | -1.1 |
| QRZ | Quartz Range | 2.73 | 2 | AML | AML | 03 38 35.8 | |
| QRZ | | | | AML | AML | 03 39 17.9 | |
| QRZ | Quartz Range | 2.73 | 2 | Pn | Pn | 03 38 26.4 | -1.0 |
| WKZ | Wanaka | 2.73 | 241 | AML | AML | 03 39 17.8 | |
| WKZ | | | | AML | AML | 03 39 20.8 | |
| WKZ | Wanaka | 2.73 | 241 | Pn | Pg | 03 38 35.0 | -0.4 |
| EAZ | Earnscleugh | 2.77 | 232 | AML | AML | 03 39 17.1 | |
| EAZ | | | | AML | AML | 03 39 25.2 | |
| EAZ | Earnscleugh | 2.77 | 232 | Pn | Pn | 03 38 26.5 | -1.4 |
| SNZO | South Karori | 2.83 | 38 | Pn | Pn | 03 38 22.1 | -6.6 |
| SNZO | | | | eS | Sn | 03 38 59.5 | -3.6 |
| TUZ | Tuapeka | 3.10 | 218 | AML | AML | 03 39 32.8 | |
| TUZ | | | | AML | AML | 03 39 34.1 | |
| TUZ | Tuapeka | 3.10 | 218 | Pn | Pn | 03 38 31.2 | -1.2 |
| CAW | Cannon Point | 3.15 | 40 | Pn | Pn | 03 38 30.4 | -2.8 |
| MLZ | Mavora Lakes | 3.51 | 238 | Pn | Pn | 03 38 37.4 | -0.7 |
| MRZ | Mangatainoka R | 3.75 | 40 | Pn | Pn | 03 38 38.5 | -2.9 |
| WHZ | Wether Hill Ro | 3.93 | 232 | ePn | Pn | 03 38 42.0 | -1.9 |
| WHZ | | | | ePg | Pg | 03 38 56.5 | -1.7 |
| WHZ | | | | eS | Sb | 03 39 39.4 | -1.2 |

**IDC 05 03:43:12.8**±2.5**, 4°.10N×94°.60E, h0**km**, mb3.8**/5**, mb1 4.1**/7**, mb1mx3.6**/58**, mbtmp3.9**/7**, ML4.1**/2**, Error ellipse: s-maj=80.5km s-min=22.5km az=58.0, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PSI | Prapat | 4.51 | 106 | Pn | Pn | 03 44 23.8 | +1.3 |
| | 3.5nm,0.3s,baz=316,slow=15,SNR=12 | | | | | | |
| PSI | | | | Sn | Sn | 03 45 07.5 | -8.4 |
| | 2.3nm,0.3s,baz=17,slow=20,SNR=3.0 | | | | | | |
| CMAR | Chiang Mai Arr | 14.89 | 16 | Pn | Pn | 03 46 46.3 | +1.5 |
| | 0.5nm,0.3s,baz=203,slow=11,SNR=4.5 | | | | | | |
| H08S2 | Diego Garcia H | 24.95 | 242 | T | T | 04 14 34.4 | |
| | baz=59 | | | | | | |
| H08S3 | Diego Garcia H | 24.95 | 242 | T | T | 04 14 34.3 | |
| | baz=59 | | | | | | |
| H08S1 | Diego Carcia H | 24.97 | 242 | T | T | 04 14 31.6 | |
| | baz=59 | | | | | | |
| MKAR | Makanchi Array | 43.85 | 348 | P | P | 03 51 21.7 | +0.8 |
| | 0.5nm,0.6s,baz=163,slow=6.9,SNR=2.6 | | | | | | |
| SONM | Songino Array | 44.74 | 11 | P | P | 03 51 26.4 | -1.7 |
| | 0.4nm,0.5s,baz=203,slow=8.0,SNR=2.6 | | | | | | |
| WRA | Warramunga Arr | 45.78 | 123 | P | P | 03 51 36.2 | -0.4 |
| | 1.0nm,0.8s,baz=305,slow=9.2,SNR=2.7 | | | | | | |
| ASAR | Alice Springs | 47.21 | 128 | P | P | 03 51 47.9 | 0.0 |
| | 1.2nm,0.4s,baz=304,slow=7.8,SNR=5.2 | | | | | | |
| ZALV | Zalesovo Beam | 50.33 | 353 | P | P | 03 52 11.4 | 0.0 |
| | 0.6nm,0.3s,baz=169,slow=7.4,SNR=2.7 | | | | | | |

*IDC **05** 03:44:31.5±3.8, 35°.88S×178°.55E, h88km±29km, mb4.3/12, mb1 4.4/13, mb1mx4.1/36, mbtmp4.6/13, MS3.3/2, Ms1 3.3/2, ms1mx2.9/17, Error ellipse: s-maj=37.9km s-min=15.3km az=68.0*
*NEIC **05** 03:44:33.4, 36°.11S×178°.65E, h147km, mb4.3/2, After WEL.*
*WEL **05** 03:44:34.5±0.6, 36°.18S×178°.60E, h145km±4km, ML4.7/20, Error ellipse: s-maj=3.9km s-min=3.8km az=0.0*
*ISCJB **05** 03:44:38.6±0.6, 36°.84S±0°.05×178°.44E±0°.08, h186km±3km, mb4.3/14, Error ellipse: s-maj=11.0km s-min=8.5km az=17.6*
**ISC 05 03:44:39.7**±0.9**, 36°.69S**±0°.07×**178°.38E**±0°.07**, h173**km±6km**, n221, σ1.65**/211**, mb4.3**/14**, 8C-11D, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 0.88 | 184 | PN | Pn | 03 45 01.3 | -4.3 |
| MXZ | | | | AML | AML | 03 45 30.1 | |
| MXZ | | | | AML | AML | 03 45 30.1 | |
| MXZ | | | | AML | AML | 03 45 33.0 | |
| MXZ | | | | AML | AML | 03 45 33.0 | |
| MXZ | Matakaoa Point | 0.88 | 184 | Pn | Pn | 03 45 01.6 | -4.1 |
| MXZ | | | | Sn | Sn | 03 45 23.4 | -2.6 |
| WMGZ | Waiomatatini S | 1.13 | 178 | ⇑PN | Pn | 03 45 05.6 | -2.0 |
| WMGZ | | | | eSN | Sn | 03 45 28.2 | -1.1 |
| WMGZ | Waiomatatini S | 1.13 | 178 | Pn | Pn | 03 45 05.6 | -2.0 |
| HAZ | Te Kaha | 1.17 | 204 | ⇓PN | Pn | 03 45 05.0 | -2.9 |
| HAZ | | | | SN | Sn | 03 45 30.4 | +0.5 |
| WIZ | White Island | 1.27 | 228 | PN | Pn | 03 45 06.0 | -2.8 |
| PUZ | Puketiti | 1.39 | 184 | ⇑PN | Pn | 03 45 08.0 | -2.0 |
| PUZ | | | | SN | Sn | 03 45 33.1 | -0.4 |
| PUZ | | | | AML | AML | 03 45 46.5 | |
| PUZ | Puketiti | 1.39 | 184 | Pn | Pn | 03 45 08.0 | -2.0 |
| TWGZ | Tauwhareparae | 1.52 | 192 | PN | Pn | 03 45 10.2 | -1.0 |
| TWGZ | Tauwhareparae | 1.52 | 192 | Pn | Pn | 03 45 10.2 | -1.0 |
| TWGZ | | | | Sn | Sn | 03 45 39.8 | +4.0 |
| MWZ | Matawai | 1.78 | 202 | PN | Pn | 03 45 13.2 | -0.6 |
| MWZ | | | | SN | Sn | 03 45 42.9 | +2.5 |
| MWZ | | | | AML | AML | 03 45 54.2 | |
| MWZ | | | | AML | AML | 03 45 57.5 | |
| MWZ | | | | AML | AML | 03 45 57.5 | |
| MWZ | Matawai | 1.78 | 202 | Pn | Pn | 03 45 13.3 | -0.5 |
| TKGZ | Te Karaka | 1.80 | 193 | ⇓PN | Pn | 03 45 13.3 | -0.7 |
| TKGZ | Te Karaka | 1.80 | 193 | Pn | Pn | 03 45 13.3 | -0.7 |
| CNGZ | Carnagh Statio | 1.80 | 184 | ⇓PN | Pn | 03 45 13.3 | -0.7 |
| CNGZ | Carnagh Statio | 1.80 | 184 | Pn | Pn | 03 45 13.3 | -0.7 |
| MYRZ | Mayor Island | 1.81 | 250 | ePN | Pn | 03 45 11.5 | -2.7 |
| OPRZ | Ohinepanea | 1.86 | 231 | PN | Pn | 03 45 13.6 | -1.0 |
| OPRZ | Ohinepanea | 1.86 | 231 | Pn | Pn | 03 45 13.3 | -1.3 |
| URZ | Urewera | 1.86 | 212 | ⇓PN | Pn | 03 45 13.6 | -1.1 |
| URZ | | | | AML | AML | 03 45 48.5 | |
| URZ | | | | AML | AML | 03 45 48.7 | |
| URZ | Urewera | 1.86 | 212 | P | Pn | 03 45 13.5 | -1.2 |
| | 118nm,0.3s,baz=234,slow=1.4,SNR=152 | | | | | | |
| URZ | | | | S | Sn | 03 45 43.1 | +1.2 |
| | 166nm,0.3s,baz=102,slow=21,SNR=12 | | | | | | |
| MARZ | Manawahe | 1.88 | 226 | PN | Pn | 03 45 14.2 | -0.7 |
| MARZ | Manawahe | 1.88 | 226 | Pn | Pn | 03 45 14.2 | -0.7 |
| EDRZ | Edgecumbe | 1.93 | 222 | PN | Pn | 03 45 14.9 | -0.6 |
| EDRZ | Edgecumbe | 1.93 | 222 | Pn | Pn | 03 45 14.9 | -0.6 |
| RAGZ | Rawiri | 1.96 | 203 | PN | Pn | 03 45 15.7 | -0.2 |
| RAGZ | Rawiri | 1.96 | 203 | Pn | Pn | 03 45 15.9 | 0.0 |
| TGRZ | Tauranga | 1.98 | 238 | ⇓PN | Pn | 03 45 15.0 | -1.0 |
| TGRZ | Tauranga | 1.98 | 238 | Pn | Pn | 03 45 15.0 | -1.0 |
| RIGZ | Rimuhau | 2.07 | 193 | PN | Pn | 03 45 16.4 | -0.7 |
| KUZ | Kuaotunu | 2.14 | 268 | ⇓PN | Pn | 03 45 13.5 | -4.2 |
| KUZ | Kuaotunu | 2.14 | 268 | Pn | Pn | 03 45 13.5 | -4.2 |
| TARZ | Mount Tarawera | 2.15 | 223 | PN | Pn | 03 45 18.1 | +0.2 |
| TARZ | Mount Tarawera | 2.15 | 223 | Pn | Pn | 03 45 18.2 | +0.3 |
| RRRZ | Republican Roa | 2.22 | 221 | PN | Pn | 03 45 18.4 | -0.3 |
| RRRZ | Republican Roa | 2.22 | 221 | Pn | Pn | 03 45 18.5 | -0.1 |
| SNGZ | Shannon Statio | 2.25 | 201 | PN | Pn | 03 45 19.0 | 0.0 |
| SNGZ | Shannon Statio | 2.25 | 201 | Pn | Pn | 03 45 19.0 | 0.0 |
| PRGZ | Paritu Road | 2.27 | 190 | PN | Pn | 03 45 18.4 | -0.8 |
| PRGZ | Paritu Road | 2.27 | 190 | Pn | Pn | 03 45 18.6 | -0.6 |
| HRRZ | Handcock Road | 2.38 | 224 | ePN | Pn | 03 45 21.1 | +0.6 |
| HRRZ | Handcock Road | 2.38 | 224 | Pn | Pn | 03 45 20.5 | 0.0 |
| KNZ | Kokohu | 2.40 | 193 | PN | Pn | 03 45 19.8 | -0.9 |
| KNZ | | | | AML | AML | 03 45 57.0 | |
| KNZ | | | | AML | AML | 03 46 35.6 | |
| KNZ | Kokohu | 2.40 | 193 | Pn | Pn | 03 45 19.8 | -0.9 |
| PRRZ | Plateau Road | 2.40 | 220 | PN | Pn | 03 45 20.6 | -0.1 |
| PRRZ | Plateau Road | 2.40 | 220 | Pn | Pn | 03 45 20.7 | 0.0 |
| RAHZ | Arahi | 2.45 | 204 | ⇑PN | Pn | 03 45 21.3 | 0.0 |
| RAHZ | Arahi | 2.45 | 204 | Pn | Pn | 03 45 21.3 | 0.0 |
| ALRZ | Allen Road | 2.47 | 220 | ⇑PN | Pn | 03 45 21.7 | +0.1 |
| ALRZ | Allen Road | 2.47 | 220 | Pn | Pn | 03 45 21.7 | +0.1 |
| MHGZ | Mahia Peninsul | 2.49 | 188 | ⇓PN | Pn | 03 45 21.3 | -0.5 |
| MHGZ | Mahia Peninsul | 2.49 | 188 | Pn | Pn | 03 45 21.3 | -0.5 |
| TOZ | Tahuroa Road | 2.52 | 245 | PN | Pn | 03 45 21.4 | -0.8 |
| TOZ | Tahuroa Road | 2.52 | 245 | Pn | Pn | 03 45 21.1 | -1.1 |
| WHHZ | Waihua | 2.55 | 200 | PN | Pn | 03 45 22.5 | 0.0 |
| MKAZ | Moumakai | 2.61 | 260 | PN | Pn | 03 45 21.1 | -2.1 |
| MKAZ | Moumakai | 2.61 | 260 | Pn | Pn | 03 45 20.8 | -2.4 |
| MRHZ | Matea Rd | 2.65 | 215 | PN | Pn | 03 45 23.3 | -0.4 |
| NMHZ | Naumai | 2.71 | 207 | PN | Pn | 03 45 24.6 | +0.2 |
| NMHZ | Naumai | 2.71 | 207 | Pn | Pn | 03 45 24.6 | +0.2 |
| ARHZ | Aropaoanui | 2.79 | 203 | PN | Pn | 03 45 25.2 | -0.2 |
| ARHZ | Aropaoanui | 2.79 | 203 | Pn | Pn | 03 45 25.2 | -0.2 |
| BKZ | Black Stump Fm | 2.89 | 210 | ⇓PN | Pn | 03 45 26.3 | -0.4 |
| BKZ | | | | AML | AML | 03 46 22.6 | |
| BKZ | | | | AML | AML | 03 46 27.5 | |
| BKZ | Black Stump Fm | 2.89 | 210 | Pn | Pn | 03 45 26.3 | -0.4 |
| RATZ | Rangitukua | 3.00 | 223 | PN | Pn | 03 45 28.5 | +0.6 |
| RATZ | Rangitukua | 3.00 | 223 | Pn | Pn | 03 45 28.6 | +0.6 |
| RITZ | Rihia Road | 3.03 | 220 | Pn | Pn | 03 45 28.8 | +0.4 |
| MCHZ | McNeill Hill | 3.05 | 205 | PN | Pn | 03 45 28.3 | -0.3 |
| MCHZ | McNeill Hill | 3.05 | 205 | Pn | Pn | 03 45 28.3 | -0.3 |
| KATZ | Kakaramea | 3.12 | 222 | PN | Pn | 03 45 30.3 | +0.8 |
| KATZ | Kakaramea | 3.12 | 222 | Pn | Pn | 03 45 30.3 | +0.8 |
| KWHZ | Kaweka Forest | 3.14 | 209 | PN | Pn | 03 45 29.0 | -0.7 |
| CKHZ | Cape Kidnapper | 3.14 | 199 | PN | Pn | 03 45 28.8 | -0.8 |
| CKHZ | Cape Kidnapper | 3.14 | 199 | Pn | Pn | 03 45 29.1 | -0.6 |
| KRVZ | Karewarewa | 3.23 | 221 | PN | Pn | 03 45 31.4 | +0.5 |
| KRVZ | Karewarewa | 3.23 | 221 | Pn | Pn | 03 45 31.4 | +0.5 |
| OTVZ | Oturere | 3.27 | 220 | PN | Pn | 03 45 31.4 | -0.1 |
| OTVZ | Oturere | 3.27 | 220 | Pn | Pn | 03 45 31.3 | -0.1 |
| WTVZ | West Tongariro | 3.28 | 221 | PN | Pn | 03 45 31.7 | +0.2 |
| WTVZ | West Tongariro | 3.28 | 221 | Pn | Pn | 03 45 31.7 | +0.2 |
| NGZ | Ngauruhoe | 3.31 | 221 | PN | Pn | 03 45 32.4 | +0.4 |
| NGZ | Ngauruhoe | 3.31 | 221 | Pn | Pn | 03 45 32.4 | +0.4 |
| KAHZ | Kahuranaki | 3.32 | 200 | PN | Pn | 03 45 31.3 | -0.7 |
| KAHZ | Kahuranaki | 3.32 | 200 | Pn | Pn | 03 45 31.5 | -0.5 |
| TWVZ | Taurewa | 3.33 | 223 | PN | Pn | 03 45 33.5 | +1.4 |
| TWVZ | Taurewa | 3.33 | 223 | Pn | Pn | 03 45 32.5 | +0.4 |
| HIZ | Hauiti | 3.34 | 236 | ⇓PN | Pn | 03 45 33.6 | +1.5 |
| HIZ | Hauiti | 3.34 | 236 | Pn | Pn | 03 45 33.6 | +1.5 |
| BHHZ | Black Hill Sta | 3.34 | 212 | PN | Pn | 03 45 31.7 | -0.5 |
| BHHZ | Black Hill Sta | 3.34 | 212 | Pn | Pn | 03 45 31.7 | -0.5 |
| KRHZ | Kereru | 3.35 | 208 | ⇓PN | Pn | 03 45 31.2 | -1.1 |
| TUVZ | Tukino | 3.36 | 219 | PN | Pn | 03 45 32.7 | +0.3 |
| TUVZ | Tukino | 3.36 | 219 | Pn | Pn | 03 45 32.8 | +0.3 |
| FWVZ | Far West T-bar | 3.40 | 220 | ⇑PN | Pn | 03 45 33.2 | +0.1 |
| FWVZ | Far West T-bar | 3.40 | 220 | Pn | Pn | 03 45 33.2 | +0.1 |
| WHVZ | Whangaehu Hut | 3.40 | 220 | PN | Pn | 03 45 33.0 | -0.1 |
| WHVZ | Whangaehu Hut | 3.40 | 220 | Pn | Pn | 03 45 33.0 | -0.1 |
| WNVZ | Wahianoa | 3.43 | 219 | PN | Pn | 03 45 32.9 | -0.5 |
| WNVZ | Wahianoa | 3.43 | 219 | Pn | Pn | 03 45 32.9 | -0.5 |
| PKVZ | Pokaka | 3.53 | 222 | PN | Pn | 03 45 35.0 | +0.4 |
| PKVZ | Pokaka | 3.53 | 222 | Pn | Pn | 03 45 35.0 | +0.4 |
| MTVZ | Mangateitei | 3.54 | 220 | PN | Pn | 03 45 34.5 | -0.2 |
| MTVZ | Mangateitei | 3.54 | 220 | Pn | Pn | 03 45 34.6 | -0.2 |
| PXZ | Pawanui | 3.54 | 199 | ⇑PN | Pn | 03 45 33.3 | -1.3 |
| PXZ | | | | AML | AML | 03 46 22.1 | |
| PXZ | | | | AML | AML | 03 46 22.1 | |
| PXZ | | | | AML | AML | 03 46 22.3 | |
| PXZ | | | | AML | AML | 03 46 24.7 | |
| PXZ | Pawanui | 3.54 | 199 | Pn | Pn | 03 45 33.4 | -1.3 |
| PNHZ | Pukenui | 3.65 | 207 | PN | Pn | 03 45 34.7 | -1.4 |
| PNHZ | Pukenui | 3.65 | 207 | Pn | Pn | 03 45 34.7 | -1.4 |
| WPHZ | Waipukurau | 3.70 | 204 | PN | Pn | 03 45 35.7 | -1.0 |
| WPHZ | Waipukurau | 3.70 | 204 | Pn | Pn | 03 45 35.8 | -0.9 |
| PRHZ | Porangahau | 3.83 | 200 | PN | Pn | 03 45 36.9 | -1.4 |
| PRHZ | Porangahau | 3.83 | 200 | Pn | Pn | 03 45 37.0 | -1.3 |
| TSZ | Takapari Road | 3.87 | 209 | PN | Pn | 03 45 37.3 | -1.5 |
| TSZ | | | | AML | AML | 03 46 48.8 | |
| TSZ | | | | AML | AML | 03 46 53.1 | |
| TSZ | Takapari Road | 3.87 | 209 | Pn | Pn | 03 45 37.3 | -1.5 |
| DVHZ | Dannevirke | 4.00 | 205 | PN | Pn | 03 45 38.7 | -1.8 |
| DVHZ | Dannevirke | 4.00 | 205 | Pn | Pn | 03 45 38.7 | -1.8 |
| ANWZ | Angora Road | 4.05 | 201 | PN | Pn | 03 45 39.8 | -1.3 |
| WAZ | Wanganui | 4.06 | 220 | PN | Pn | 03 45 41.5 | +0.1 |
| WAZ | Wanganui | 4.06 | 220 | Pn | Pn | 03 45 41.3 | 0.0 |
| OUZ | Omahuta | 4.15 | 289 | ePn | Pn | 03 45 37.0 | -5.4 |
| POWZ | Post Office Ro | 4.23 | 208 | PN | Pn | 03 45 42.4 | -1.0 |
| POWZ | Post Office Ro | 4.23 | 208 | Pn | Pn | 03 45 42.4 | -1.0 |
| NEZ | North Egmont | 4.25 | 231 | ePN | Pn | 03 45 45.6 | +1.8 |
| NEZ | North Egmont | 4.25 | 231 | Pn | Pn | 03 45 45.6 | +1.8 |
| PRWZ | Pori Road | 4.30 | 205 | PN | Pn | 03 45 43.5 | -0.8 |
| PRWZ | Pori Road | 4.30 | 205 | Pn | Pn | 03 45 43.5 | -0.8 |
| KHEZ | Kahui Hut | 4.32 | 232 | PN | Pn | 03 45 47.3 | +2.6 |
| KHEZ | Kahui Hut | 4.32 | 232 | Pn | Pn | 03 45 46.4 | +1.7 |
| BFZ | Birch Farm | 4.32 | 202 | PN | Pn | 03 45 43.2 | -1.4 |
| BFZ | | | | AML | AML | 03 46 40.8 | |
| BFZ | | | | AML | AML | 03 46 40.8 | |
| BFZ | | | | AML | AML | 03 46 40.9 | |
| BFZ | | | | AML | AML | 03 46 40.9 | |
| BFZ | Birch Farm | 4.32 | 202 | Pn | Pn | 03 45 43.2 | -1.4 |
| TIWZ | Tintock | 4.52 | 205 | ePN | Pn | 03 45 45.6 | -1.7 |
| TIWZ | | | | AML | AML | 03 46 46.0 | |
| TIWZ | | | | AML | AML | 03 46 48.3 | |
| TIWZ | Tintock | 4.52 | 205 | Pn | Pn | 03 45 46.1 | -1.2 |
| MRZ | Mangatainoka R | 4.53 | 208 | ⇑PN | Pn | 03 45 45.3 | -2.1 |
| MRZ | | | | AML | AML | 03 46 43.6 | |
| MRZ | | | | AML | AML | 03 46 43.6 | |
| MRZ | Mangatainoka R | 4.53 | 208 | Pn | Pn | 03 45 45.3 | -2.1 |
| CPWZ | Castlepoint | 4.54 | 201 | PN | Pn | 03 45 46.4 | -1.1 |
| CPWZ | Castlepoint | 4.54 | 201 | Pn | Pn | 03 45 46.4 | -1.1 |
| HOWZ | Holdsworth Sta | 4.76 | 207 | PN | Pn | 03 45 47.9 | -2.4 |
| HOWZ | Holdsworth Sta | 4.76 | 207 | Pn | Pn | 03 45 47.9 | -2.4 |
| TMWZ | Te Maipa | 4.82 | 203 | PN | Pn | 03 45 48.8 | -2.3 |
| TMWZ | Te Maipa | 4.82 | 203 | Pn | Pn | 03 45 48.8 | -2.3 |
| OGWZ | Otaki Gorge | 4.83 | 210 | PN | Pn | 03 45 49.1 | -2.0 |
| OGWZ | Otaki Gorge | 4.83 | 210 | Pn | Pn | 03 45 49.1 | -2.0 |
| KIW | Kapiti Island | 4.97 | 212 | PN | Pn | 03 45 50.8 | -2.2 |
| KIW | | | | AML | AML | 03 46 54.8 | |
| KIW | | | | AML | AML | 03 46 57.1 | |
| KIW | Kapiti Island | 4.97 | 212 | Pn | Pn | 03 45 51.1 | -1.9 |
| MTW | Mount Morrison | 5.00 | 206 | PN | Pn | 03 45 50.6 | -2.7 |
| MTW | | | | AML | AML | 03 46 54.2 | |
| MTW | | | | AML | AML | 03 46 57.6 | |
| MTW | Mount Morrison | 5.00 | 206 | Pn | Pn | 03 45 50.8 | -2.6 |
| CAW | Cannon Point | 5.11 | 209 | PN | Pn | 03 45 52.3 | -2.6 |
| CAW | | | | AML | AML | 03 46 57.6 | |
| CAW | | | | AML | AML | 03 47 00.6 | |
| CAW | Cannon Point | 5.11 | 209 | Pn | Pn | 03 45 52.4 | -2.6 |
| TRWZ | Traveller | 5.15 | 203 | PN | Pn | 03 45 53.1 | -2.2 |
| TRWZ | | | | AML | AML | 03 46 57.7 | |
| TRWZ | | | | AML | AML | 03 46 58.4 | |
| TRWZ | Traveller | 5.15 | 203 | Pn | Pn | 03 45 53.2 | -2.2 |
| PAWZ | Paruwai Farm | 5.22 | 205 | PN | Pn | 03 45 53.6 | -2.7 |
| PAWZ | | | | AML | AML | 03 46 59.7 | |
| PAWZ | | | | AML | AML | 03 47 01.5 | |
| PAWZ | Paruwai Farm | 5.22 | 205 | Pn | Pn | 03 45 53.5 | -2.7 |
| MSWZ | Moikau Station | 5.31 | 206 | PN | Pn | 03 45 54.7 | -2.8 |
| MSWZ | | | | AML | AML | 03 47 04.5 | |
| MSWZ | | | | AML | AML | 03 47 04.6 | |
| MSWZ | Moikau Station | 5.31 | 206 | Pn | Pn | 03 45 54.7 | -2.8 |
| WEL | Wellington | 5.38 | 210 | PN | Pn | 03 45 56.3 | -2.1 |
| DUWZ | D'Urville Isla | 5.39 | 219 | PN | Pn | 03 45 56.6 | -1.9 |
| DUWZ | D'Urville Isla | 5.39 | 219 | Pn | Pn | 03 45 56.6 | -1.9 |
| SNZO | South Karori | 5.43 | 211 | ePn | Pn | 03 45 56.7 | -2.3 |
| SNZO | | | | eS | Sn | 03 47 02.5 | +1.2 |
| BHW | Baring Head | 5.45 | 209 | ePN | Pn | 03 45 56.7 | -2.5 |
| BHW | | | | AML | AML | 03 47 04.8 | |
| BHW | | | | AML | AML | 03 47 06.4 | |
| BHW | Baring Head | 5.45 | 209 | Pn | Pn | 03 45 56.0 | -3.2 |
| PLWZ | Palliser | 5.45 | 206 | PN | Pn | 03 45 56.3 | -3.0 |
| PLWZ | Palliser | 5.45 | 206 | Pn | Pn | 03 45 56.4 | -2.9 |
| TCW | Tory Channel | 5.53 | 214 | PN | Pn | 03 45 58.1 | -2.3 |
| TCW | | | | AML | AML | 03 47 08.2 | |
| TCW | | | | AML | AML | 03 47 08.9 | |
| TCW | Tory Channel | 5.53 | 214 | Pn | Pn | 03 45 58.0 | -2.4 |
| TUWZ | Tuamarina | 5.86 | 215 | PN | Pn | 03 46 01.9 | -2.8 |
| TUWZ | | | | AML | AML | 03 47 15.5 | |
| TUWZ | | | | AML | AML | 03 47 15.9 | |
| TUWZ | Tuamarina | 5.86 | 215 | Pn | Pn | 03 46 01.9 | -2.8 |
| NNZ | Nelson | 5.97 | 219 | PN | Pn | 03 46 04.0 | -2.1 |
| NNZ | Nelson | 5.97 | 219 | Pn | Pn | 03 46 03.9 | -2.1 |
| BSWZ | Blackbirch Sta | 6.12 | 213 | PN | Pn | 03 46 05.2 | -2.9 |
| BSWZ | Blackbirch Sta | 6.12 | 213 | Pn | Pn | 03 46 05.7 | -2.4 |
| QRZ | Quartz Range | 6.16 | 226 | PN | Pn | 03 46 06.0 | -2.6 |
| QRZ | Quartz Range | 6.16 | 226 | Pn | Pn | 03 46 06.2 | -2.4 |
| THZ | Tophouse | 6.61 | 218 | PN | Pn | 03 46 12.1 | -2.5 |
| THZ | Tophouse | 6.61 | 218 | Pn | Pn | 03 46 12.1 | -2.5 |
| KHZ | Kahutara | 6.83 | 212 | PN | Pn | 03 46 14.8 | -2.7 |
| KHZ | Kahutara | 6.83 | 212 | Pn | Pn | 03 46 14.8 | -2.7 |
| LTZ | Lake Taylor | 7.69 | 216 | PN | Pn | 03 46 25.9 | -3.0 |
| LTZ | Lake Taylor | 7.69 | 216 | Pn | Pn | 03 46 25.7 | -3.1 |
| CTZ | Chatham Island | 8.01 | 153 | ⇓PN | Pn | 03 46 33.5 | +0.5 |
| CTZ | Chatham Island | 8.01 | 153 | Pn | Pn | 03 46 33.5 | +0.5 |
| OXZ | Oxford | 8.22 | 214 | PN | Pn | 03 46 31.1 | -4.7 |
| MQZ | McQueen's Vall | 8.27 | 210 | PN | Pn | 03 46 32.3 | -4.0 |
| RPZ | Rata Peaks | 8.98 | 216 | PN | Pn | 03 46 43.3 | -2.5 |
| RPZ | Rata Peaks | 8.98 | 216 | P | Pn | 03 46 42.8 | -3.0 |
| | 3.4nm,0.3s,baz=252,slow=2.9,SNR=14 | | | | | | |
| RPZ | | | | S | Sn | 03 48 23.0 | -2.9 |
| | 2.9nm,0.3s,baz=345,slow=21,SNR=8.8 | | | | | | |
| RPZ | Rata Peaks | 8.98 | 216 | Pn | Pn | 03 46 43.3 | -2.5 |
| RPZ | | | | S | Sn | 03 48 23.0 | -2.9 |
| FOZ | Fox Glacier | 9.56 | 221 | Pn | Pn | 03 46 50.1 | -3.3 |
| LBZ | Lake Benmore | 9.89 | 216 | Pn | Pn | 03 46 55.3 | -2.5 |
| ODZ | Otahua Downs | 10.19 | 213 | Pn | Pn | 03 46 58.9 | -2.8 |
| JCZ | Jackson Bay | 10.40 | 222 | Pn | Pn | 03 47 00.5 | -4.0 |
| TUZ | Tuapeka | 11.35 | 213 | Pn | Pn | 03 47 15.5 | -1.2 |
| DZM | Mont Dzumac | 17.87 | 321 | LR | LR | 03 53 54.6 | |
| | comp=Z,93nm,18.4s,slow=32 | | | | | | |
| HNR | Honiara | 31.87 | 324 | LR | LR | 04 00 19.5 | |
| | comp=Z,51nm,21.1s,baz=164,slow=30 | | | | | | |
| ASAR | Alice Springs | 40.24 | 276 | P | P | 03 52 00.7 | +1.0 |
| | 14nm,0.7s,baz=119,slow=7.6,SNR=20 | | | | | | |
| VNDA | Vanda | 41.56 | 185 | P | P | 03 52 17.6 | +7.8 |
| | 2.1nm,0.8s,baz=341,slow=6.2,SNR=2.5 | | | | | | |
| WRAB | Tennant Creek | 41.81 | 281 | P | P | 03 52 12.8 | +0.3 |
| | 6.2nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 41.81 | 281 | P | P | 03 52 13.0 | +0.4 |
| | 4.3nm,0.5s,baz=121,slow=7.7,SNR=9.3 | | | | | | |
| CASY | Casey | 48.19 | 210 | P | P | 03 53 01.7 | -0.5 |
| | 4.4nm,0.7s | | | | | | |
| QSPA | South Pole Qui | 53.44 | 180 | P | P | 03 53 49.7 | +8.1 |
| | 13nm,0.8s,baz=43,slow=2.7,SNR=16 | | | | | | |
| QSPA | South Pole Qui | 53.44 | 180 | eP | P | 03 53 49.5 | +8.0 |
| MAW | Mawson | 65.36 | 202 | P | P | 03 55 09.0 | +6.0 |
| | 8.5nm,1.0s,baz=115,slow=8.8,SNR=9.5 | | | | | | |
| SYO | Syowa Base | 70.30 | 195 | ⇑eX | P | 03 55 37.4 | +3.6 |
| SNAA | Sanae | 71.94 | 180 | P | P | 03 55 49.2 | +5.5 |
| SNAA | Sanae | 71.94 | 180 | P | P | 03 55 49.6 | +5.9 |
| | 2.7nm,1.1s,baz=169,slow=5.7,SNR=8.0 | | | | | | |
| VNA2 | Neumayer--Watz | 72.61 | 178 | P | P | 03 55 53.8 | +6.2 |
| | baz=173,slow=5.8 | | | | | | |
| VNA1 | Neumayer--Stat | 72.86 | 178 | P | P | 03 55 55.2 | +6.1 |
| MJAR | Matsushiro Arr | 81.84 | 328 | P | P | 03 56 37.4 | -1.9 |
| | 1.7nm,0.7s,baz=167,slow=4.5,SNR=3.6 | | | | | | |
| JNU | Nakatsue | 82.40 | 321 | P | P | 03 56 40.6 | -1.8 |
| | 6.1nm,0.9s,baz=113,slow=2.1,SNR=4.3 | | | | | | |
| KSRS | Korea Array | 87.30 | 322 | P | P | 03 57 06.9 | +0.3 |
| | 5.6nm,0.7s,baz=138,slow=5.6,SNR=18 | | | | | | |
| KSAR | Wonju Array Be | 87.31 | 322 | P | P | 03 57 06.9 | +0.2 |
| USRK | Ussuriysk Ar. | 90.83 | 329 | P | P | 03 57 23.1 | 0.0 |
| | 0.8nm,0.5s,baz=112,slow=10,SNR=3.5 | | | | | | |
| PETK | Petropavlovsk- | 91.22 | 348 | P | P | 03 57 23.3 | -1.3 |
| | 3.3nm,0.6s,baz=147,slow=8.3,SNR=3.6 | | | | | | |
| CMAR | Chiang Mai Arr | 92.71 | 291 | P | P | 03 57 33.5 | +1.1 |
| | 1.3nm,0.3s,baz=143,slow=3.3,SNR=4.4 | | | | | | |
| MKAR | Makanchi Array | 119.39 | 308 | PKP | PKPdf | 04 03 07.3 | -0.8 |
| | 0.6nm,0.7s,baz=110,slow=1.2,SNR=2.6 | | | | | | |
| BVAR | Borovoye Array | 128.61 | 313 | PKP | PKPdf | 04 03 26.0 | +0.5 |
| | 0.8nm,0.6s,baz=29,slow=3.3,SNR=4.4 | | | | | | |
| AKTO | Aktyubinsk | 135.82 | 308 | PKP | PKPdf | 04 03 38.5 | -0.7 |
| | 1.4nm,0.7s,baz=105,slow=2.7,SNR=4.9 | | | | | | |
| ARCES | ARCESS Array B | 143.95 | 344 | PKP | PKPab | 04 03 51.2 | +0.1 |
| | 2.6nm,0.8s,baz=57,slow=3.3,SNR=4.5 | | | | | | |
| FINES | FINESS Array B | 149.73 | 334 | PKPbc | PKPbc | 04 04 07.5 | -0.6 |
| | 3.6nm,0.6s,baz=93,slow=3.8,SNR=11 | | | | | | |
| DBIC | Dimbokro | 149.98 | 174 | PKPbc | PKPab | 04 04 13.5 | -2.8 |
| | 2.8nm,0.6s,baz=148,slow=4.1,SNR=6.6 | | | | | | |
| BRTR | Keskin Array B | 152.23 | 287 | PKPbc | PKPbc | 04 04 14.8 | 0.0 |
| | 1.7nm,0.8s,baz=149,slow=4.1,SNR=7.1 | | | | | | |
| AKASG | Malin Array Be | 153.89 | 312 | PKPbc | PKPbc | 04 04 17.6 | -0.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 0.8nm,0.7s,baz=58,slow=2.1,SNR=4.5 | | | | | | |
| TORD | Torodi Ar. Bea | 156.37 | 188 | PKP | PKPdf | 04 04 17.1 | +2.8 |
| | 1.7nm,0.8s,baz=192,slow=2.5,SNR=4.8 | | | | | | |
| TORD | | | | PKPab | PKPab | 04 04 47.5 | +4.2 |
| | 3.6nm,0.8s,baz=169,slow=3.8,SNR=14 | | | | | | |
| TORD | | | | PP | PP | 04 08 25.0 | +4.7 |
| | 1.6nm,1.1s,baz=186,slow=0.6,SNR=3.8 | | | | | | |
| GERES | GERESS Array B | 163.48 | 322 | PKPab | PKPab | 04 05 12.3 | -1.3 |
| | 1.4nm,0.8s,baz=28,slow=3.6,SNR=7.9 | | | | | | |

*JMA **05** 04:03:05.6±0.1, 24°.09N×121°.71E, h0km, M3.1*
*ISCJB **05** 04:03:07.0±0.5, 24°.10N±0°.03×121°.73E±0°.04, h9km±4km, Error ellipse: s-maj=6.5km s-min=3.6km az=37.8*
*TAP **05** 04:03:07.1, 24°.13N×121°.67E, h11km, ML3.4, C*
**ISC 05 04:03:07.2**±0.9, **24°.11N**±0°.03×**121°.70E**±0°.03, **h13**km±6km, **n39**, σ**0.41**/42, **5C-3D, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWD | Chiawan | 0.10 | 255 | ⇓iP | Pg | 04 03 09.8 | -0.3 |
| | baz=230 | | | | | | |
| TWD | | | | iS | Sg | 04 03 11.7 | -0.5 |
| | baz=230 | | | | | | |
| HWA | Hwalien | 0.15 | 213 | eP | Pg | 04 03 11.2 | +0.4 |
| | baz=198 | | | | | | |
| EHP | Heping Village | 0.21 | 11 | eP | Pg | 04 03 12.0 | +0.2 |
| | baz=22 | | | | | | |
| EHP | | | | eS | Sg | 04 03 15.6 | +0.6 |
| | baz=22 | | | | | | |
| ESF | Shoufeng Towns | 0.29 | 217 | P | Pb | 04 03 14.0 | -0.3 |
| | baz=210 | | | | | | |
| ENA | Nanau | 0.32 | 7 | ⇑iP | Pg | 04 03 13.6 | -0.3 |
| | baz=14 | | | | | | |
| ESL | Shilin | 0.38 | 220 | ⇓iP | Pg | 04 03 14.6 | -0.1 |
| | baz=221 | | | | | | |
| WHF | Hehuan Shan | 0.40 | 276 | ⇑iP | Pg | 04 03 15.0 | -0.3 |
| | baz=273 | | | | | | |
| NNS | Nan Shan | 0.45 | 319 | ⇑iP | Pg | 04 03 15.9 | -0.2 |
| | baz=319 | | | | | | |
| TWT | Tachien | 0.50 | 287 | P | Pb | 04 03 17.3 | -0.6 |
| | baz=285 | | | | | | |
| TWC | Suao | 0.52 | 15 | P | Pg | 04 03 17.2 | -0.3 |
| | baz=11 | | | | | | |
| ENTT | Nioudou | 0.55 | 347 | ⇑iP | Pg | 04 03 17.8 | -0.1 |
| | baz=350 | | | | | | |
| TWE | Neicheng | 0.61 | 358 | ⇑iP | Pb | 04 03 19.1 | -0.6 |
| | baz=1.0 | | | | | | |
| WDT | Danda | 0.62 | 236 | P | Pg | 04 03 19.4 | 0.0 |
| | baz=242 | | | | | | |
| NSK | Sanguang | 0.65 | 332 | ⇓iP | Pb | 04 03 19.8 | -0.5 |
| | baz=333 | | | | | | |
| ILA | Ilan | 0.66 | 4 | eP | Pb | 04 03 20.1 | -0.4 |
| | baz=7.0 | | | | | | |
| EHY | Hungye | 0.69 | 210 | eP | Pg | 04 03 20.1 | -0.4 |
| | baz=207 | | | | | | |
| SMLT | Sun Moon Lake | 0.76 | 253 | eP | Pg | 04 03 21.7 | -0.2 |
| | baz=251 | | | | | | |
| EGS | | 0.77 | 16 | eP | Pg | 04 03 21.9 | -0.1 |
| | baz=27 | | | | | | |
| TYC | Yuchr | 0.79 | 256 | eP | Pb | 04 03 22.6 | -0.2 |
| | baz=254 | | | | | | |
| NSTT | Nanjuang | 0.82 | 310 | eP | Pb | 04 03 23.1 | -0.2 |
| | baz=310 | | | | | | |
| TWF1 | Yuli | 0.83 | 206 | eP | Pg | 04 03 22.9 | -0.4 |
| | baz=215 | | | | | | |
| TWA | Mucha | 0.88 | 353 | eP | Pb | 04 03 24.2 | -0.1 |
| | baz=355 | | | | | | |
| TWQ1 | Liyutan | 0.88 | 286 | eP | Pn | 04 03 25.7 | +0.5 |
| | baz=285 | | | | | | |
| YUS | Yu-Shan | 0.92 | 228 | eP | Pg | 04 03 25.2 | +0.2 |
| | baz=238 | | | | | | |
| TCU | Taichung | 0.93 | 273 | eP | Pn | 04 03 26.4 | +0.4 |
| | baz=271 | | | | | | |
| TWB1 | Santiao Chiao | 0.94 | 16 | eP | Pg | 04 03 24.6 | -0.7 |
| | baz=12 | | | | | | |
| NWF | Wu-fen Shan | 0.96 | 5 | eP | Pb | 04 03 25.9 | +0.1 |
| | baz=6.0 | | | | | | |
| CHKT | Chengkung | 1.05 | 197 | eP | Pb | 04 03 26.5 | -0.7 |
| | baz=179 | | | | | | |
| CHN5 | Tsauling | 1.06 | 242 | eP | Pn | 04 03 28.4 | +0.6 |
| | baz=241 | | | | | | |
| YOJ | Yonaguni jima | 1.25 | 73 | P | Pn | 04 03 30.2 | -0.1 |
| CHN4 | Tsaushan | 1.26 | 234 | eP | Pg | 04 03 31.9 | +0.5 |
| | baz=233 | | | | | | |
| STYT | Tauyuan | 1.27 | 223 | eP | Pn | 04 03 30.6 | -0.1 |
| | baz=222 | | | | | | |
| TWG | Pinlang | 1.40 | 204 | eP | Pn | 04 03 32.6 | +0.2 |
| | baz=203 | | | | | | |
| CHN1 | Nanshi | 1.41 | 230 | eP | Pg | 04 03 34.4 | +0.1 |
| | baz=230 | | | | | | |
| SSD | Sandimen | 1.67 | 216 | eP | Pb | 04 03 37.4 | -0.4 |
| | baz=216 | | | | | | |
| IRIF | Iriomote-Funau | 1.87 | 83 | P | Pn | 04 03 39.7 | +0.8 |
| JKRS | Kuro-shima | 2.12 | 86 | P | Pn | 04 03 42.6 | +0.4 |
| JIJ | Ishigaki jima | 2.25 | 83 | P | Pn | 04 03 44.5 | +0.4 |
| JISG | Ishigakijimahi | 2.43 | 78 | P | Pn | 04 03 46.7 | +0.1 |
| JISG | | | | eS | Sn | 04 04 16.6 | +0.4 |

**TAP 05 04:03:12.9, 24°.13N×121°.67E, h9km, ML3.7, 1C, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWD | Chiawan | 0.08 | 230 | P | Pg | 04 03 15.3 | +0.1 |
| | baz=225 | | | | | | |
| TWD | | | | S | Sg | 04 03 17.1 | +0.3 |
| | baz=225 | | | | | | |
| HWA | Hwalien | 0.17 | 199 | eP | Pg | 04 03 18.1 | +1.7 |
| | baz=195 | | | | | | |
| HWA | | | | eS | Sg | 04 03 20.1 | +1.3 |
| | baz=195 | | | | | | |
| EHP | Heping Village | 0.19 | 21 | eP | Pg | 04 03 17.7 | +0.8 |
| | baz=31 | | | | | | |
| EHP | | | | eS | Sg | 04 03 21.0 | +1.3 |
| | baz=31 | | | | | | |
| ESF | Shoufeng Towns | 0.30 | 209 | eP | Pg | 04 03 19.5 | +0.6 |
| | baz=209 | | | | | | |
| ENA | Nanau | 0.30 | 13 | eP | Pg | 04 03 19.0 | 0.0 |
| | baz=15 | | | | | | |
| ENA | | | | eS | Sg | 04 03 23.2 | +0.2 |
| | baz=15 | | | | | | |
| ENA | Nanau | 0.30 | 13 | S | Pg | 04 03 17.8 | -1.2 |
| | baz=14 | | | | | | |
| WHF | Hehuan Shan | 0.37 | 272 | eP | Pg | 04 03 20.4 | -0.3 |
| | baz=271 | | | | | | |
| WHF | | | | eS | Sg | 04 03 25.7 | -0.3 |
| | baz=271 | | | | | | |
| WHF | Hehuan Shan | 0.37 | 272 | iS | Pg | 04 03 20.0 | -0.7 |
| | baz=273 | | | | | | |
| ESL | Shilin | 0.38 | 214 | eP | Pg | 04 03 19.9 | -0.5 |
| | baz=213 | | | | | | |
| ESL | Shilin | 0.38 | 214 | eS | Pg | 04 03 20.2 | -0.3 |
| | baz=221 | | | | | | |
| NNS | Nan Shan | 0.41 | 319 | P | Pg | 04 03 21.2 | +0.2 |
| | baz=320 | | | | | | |
| NNS | | | | S | Sg | 04 03 27.1 | +0.5 |
| | baz=320 | | | | | | |
| NNS | Nan Shan | 0.41 | 319 | S | Pg | 04 03 21.4 | +0.3 |
| | baz=319 | | | | | | |
| TWT | Tachien | 0.46 | 285 | eP | Pg | 04 03 22.7 | +0.5 |
| | baz=284 | | | | | | |
| TWT | | | | S | Sb | 04 03 29.7 | -0.8 |
| | baz=284 | | | | | | |
| TWT | Tachien | 0.46 | 285 | eS | Pb | 04 03 23.9 | +0.4 |
| | baz=285 | | | | | | |
| TWC | Suao | 0.50 | 19 | ⇑eP | Pb | 04 03 23.4 | -0.5 |
| | baz=12 | | | | | | |
| TWC | | | | eS | Sg | 04 03 29.6 | +0.2 |
| | baz=12 | | | | | | |
| TWC | Suao | 0.50 | 19 | eS | Pb | 04 03 23.5 | -0.4 |
| | baz=11 | | | | | | |
| ENTT | Nioudou | 0.51 | 350 | eP | Pg | 04 03 23.2 | +0.2 |
| | baz=350 | | | | | | |
| TWE | Neicheng | 0.59 | 0 | eP | Pg | 04 03 24.5 | +0.3 |
| | baz=2.0 | | | | | | |
| TWE | | | | eS | Sb | 04 03 33.0 | -0.7 |
| | baz=2.0 | | | | | | |
| TWE | Neicheng | 0.59 | 0 | eS | Pn | 04 03 27.5 | +0.2 |
| | baz=1.0 | | | | | | |
| NSK | Sanguang | 0.61 | 333 | eP | Pg | 04 03 25.1 | +0.2 |
| | baz=333 | | | | | | |
| NSK | | | | eS | Sg | 04 03 33.2 | +0.3 |
| | baz=333 | | | | | | |
| WDT | Danda | 0.61 | 232 | eP | Pg | 04 03 25.1 | -0.1 |
| | baz=242 | | | | | | |
| ILA | Ilan | 0.63 | 7 | eP | Pg | 04 03 25.4 | +0.3 |
| | baz=7.0 | | | | | | |
| SMLT | Sun Moon Lake | 0.74 | 251 | eP | Pg | 04 03 27.5 | +0.1 |
| | baz=250 | | | | | | |
| EGS | | 0.75 | 19 | eP | Pb | 04 03 28.0 | -0.1 |
| | baz=28 | | | | | | |
| TYC | Yuchr | 0.77 | 253 | eP | Pg | 04 03 28.0 | +0.2 |
| | baz=253 | | | | | | |
| NSTT | Nanjuang | 0.78 | 309 | eP | Pb | 04 03 28.8 | +0.2 |
| | baz=309 | | | | | | |
| TWQ1 | Liyutan | 0.84 | 285 | eP | Pn | 04 03 31.3 | +0.4 |
| | baz=285 | | | | | | |
| NSY | Sanyi | 0.87 | 289 | eP | Pn | 04 03 31.4 | 0.0 |
| | baz=289 | | | | | | |
| TCU | Taichung | 0.90 | 271 | eP | Pn | 04 03 31.4 | -0.3 |
| | baz=264 | | | | | | |
| YUS | Yu-Shan | 0.92 | 226 | eP | Pg | 04 03 31.0 | -0.1 |
| | baz=237 | | | | | | |
| HSN | Hsinchu | 0.92 | 317 | eP | Pn | 04 03 32.4 | +0.5 |
| | baz=319 | | | | | | |
| TWB1 | Santiao Chiao | 0.92 | 19 | eP | Pg | 04 03 30.6 | -0.1 |
| | baz=10.0 | | | | | | |
| WNT | Mingjian | 0.93 | 254 | eP | Pn | 04 03 32.0 | -0.1 |
| | baz=247 | | | | | | |
| NWF | Wu-fen Shan | 0.94 | 6 | eP | Pn | 04 03 32.6 | +0.3 |
| | baz=6.0 | | | | | | |
| CHN5 | Tsauling | 1.05 | 240 | eP | Pn | 04 03 34.1 | +0.3 |
| | baz=240 | | | | | | |
| CHKT | Chengkung | 1.06 | 195 | eP | Pg | 04 03 32.9 | -0.5 |
| | baz=195 | | | | | | |
| CHN4 | Tsaushan | 1.25 | 232 | eP | Pg | 04 03 38.6 | +1.6 |
| | baz=233 | | | | | | |
| YOJ | Yonaguni jima | 1.27 | 75 | eP | Pb | 04 03 37.0 | 0.0 |
| | baz=84 | | | | | | |
| STYT | Tauyuan | 1.27 | 221 | eP | Pg | 04 03 37.7 | +0.2 |
| | baz=221 | | | | | | |
| CHN1 | Nanshi | 1.41 | 228 | eP | Pg | 04 03 40.2 | +0.3 |
| | baz=229 | | | | | | |
| SSD | Sandimen | 1.68 | 215 | eP | Pg | 04 03 44.5 | -0.5 |
| | baz=206 | | | | | | |

*ISCJB **05** 04:15:49.5±0.3, 61°.96N±0°.03×124°.24W±0°.05, h7km, mb3.2/3, Error ellipse: s-maj=4.5km s-min=3.0km az=168.8*
*IDC **05** 04:15:51.8±0.7, 62°.00N×124°.19W, h0km, mb3.3/3, mb1 4.0/10, mb1mx3.7/38, mbtmp3.8/10, ML3.6/7, Error ellipse: s-maj=11.5km s-min=7.5km az=169.0*
*PGC **05** 04:15:52.8±0.0, 62°.03N×124°.07W, h1km, ML4.4/21, Mw3.9, 150km west of Fort Simpson, Nt Northwest Territories, Canada*
**ISC 05 04:15:50.8**±0.6, **62°.04N**±0°.05×**124°.41W**±0°.03, **h7**km, **n74**, σ**1.73**/83, **mb3.4**/3, **Northwest Territories**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNBB | Fort Nelson | 3.24 | 167 | Pn | Pn | 04 16 43.1 | +1.1 |
| FNBB | | | | Sn | Sn | 04 17 21.7 | +0.9 |
| YKR1 | Yellowknife Ar | 4.45 | 80 | Pn | Pn | 04 16 58.3 | -0.3 |
| YKR2 | Yellowknife Ar | 4.47 | 80 | Pn | Pn | 04 16 58.5 | -0.3 |
| YKR3 | Yellowknife Ar | 4.49 | 80 | Pn | Pn | 04 16 58.8 | -0.3 |
| YKR4 | Yellowknife Ar | 4.51 | 80 | Sg | Sb | 04 18 07.5 | +2.8 |
| YKR5 | Yellowknife Ar | 4.54 | 80 | Pn | Pn | 04 16 59.4 | -0.4 |
| DLBC | Dease Lake | 4.57 | 220 | Pn | Pn | 04 17 03.5 | +3.1 |
| | 5.9nm,0.3s,baz=43,slow=7.1,SNR=56 | | | | | | |
| DLBC | | | | Sn | Sn | 04 17 53.4 | -0.4 |
| | 5.6nm,0.3s,baz=186,slow=19,SNR=3.8 | | | | | | |
| DLBC | | | | Lg | Lg | 04 18 12.8 | |
| | 7.1nm,0.3s,baz=256,slow=7.7,SNR=4.3 | | | | | | |
| DLBC | Dease Lake | 4.57 | 220 | Pn | Pn | 04 17 03.2 | +2.9 |
| DLBC | | | | Sg | Sg | 04 18 17.8 | +0.3 |
| YKR7 | Yellowknife Ar | 4.58 | 80 | Pn | Pn | 04 16 59.8 | -0.6 |
| YKR7 | | | | Sg | Sb | 04 18 10.5 | +3.8 |
| YKW3 | Yellowknife Ar | 4.60 | 79 | Pn | Pn | 04 17 00.2 | -0.5 |
| YKW3 | | | | Sg | Sb | 04 18 10.0 | +2.7 |
| YKB1 | Yellowknife Ar | 4.60 | 81 | Pn | Pn | 04 17 00.7 | 0.0 |
| YKB2 | Yellowknife Ar | 4.60 | 81 | Pn | Pn | 04 17 00.6 | -0.1 |
| YKA | Yellowknife Ar | 4.60 | 80 | Pn | Pn | 04 16 59.5 | -1.2 |
| | 4.0nm,0.3s,baz=269,slow=13,SNR=43 | | | | | | |
| YKA | | | | Pg | Pb | 04 17 13.6 | +1.8 |
| | 25nm,0.3s,baz=266,slow=16,SNR=50 | | | | | | |
| YKA | | | | Sn | Sn | 04 17 53.8 | -0.6 |
| | 6.8nm,0.3s,baz=266,slow=23,SNR=5.1 | | | | | | |
| YKA | | | | Lg | Lg | 04 18 11.5 | |
| | 37nm,0.3s,baz=268,slow=30,SNR=11 | | | | | | |
| YKB3 | Yellowknife Ar | 4.60 | 81 | Pn | Pn | 04 17 00.6 | -0.1 |
| YKB4 | Yellowknife Ar | 4.60 | 80 | Pn | Pn | 04 17 00.9 | +0.2 |
| YKB6 | Yellowknife Ar | 4.60 | 80 | Pn | Pn | 04 17 00.1 | -0.6 |
| YKR8 | Yellowknife Ar | 4.60 | 80 | Pn | Pn | 04 17 00.4 | -0.3 |
| YKB7 | Yellowknife Ar | 4.61 | 79 | Pn | Pn | 04 17 00.2 | -0.5 |
| YKB8 | Yellowknife Ar | 4.61 | 79 | Pn | Pn | 04 17 00.2 | -0.5 |
| YKB9 | Yellowknife Ar | 4.61 | 79 | Pn | Pn | 04 17 00.2 | -0.6 |
| YKB9 | | | | Sg | Sb | 04 18 10.4 | +3.0 |
| YKB0 | Yellowknife Ar | 4.61 | 79 | Pn | Pn | 04 16 59.9 | -0.9 |
| YKR9 | Yellowknife Ar | 4.63 | 80 | Pn | Pn | 04 17 00.6 | -0.5 |
| CLVN | Colville Lake | 5.07 | 353 | Pn | Pn | 04 17 08.8 | +1.7 |
| WHY | Whitehorse | 5.23 | 259 | Pn | Pn | 04 17 12.9 | +3.5 |
| WHY | | | | Sg | Sg | 04 18 38.6 | +0.1 |
| MANA | Manning | 6.24 | 143 | Pn | Pn | 04 17 23.4 | +0.1 |
| MANA | | | | Sn | Sn | 04 18 30.1 | -4.6 |
| MANA | | | | Sg | Sg | 04 19 03.0 | -8.0 |
| HYT | Haines Junctio | 6.40 | 265 | Pn | Pn | 04 17 28.9 | +3.4 |
| HYT | | | | Sn | Sn | 04 18 41.3 | +2.5 |
| HYT | | | | Sg | Sg | 04 19 16.4 | +0.3 |
| PLBC | Pleasant Camp | 6.41 | 251 | Pn | Pn | 04 17 29.2 | +3.7 |
| PLBC | | | | Sn | Sn | 04 18 41.8 | +3.0 |
| PLBC | | | | Sg | Sg | 04 19 14.5 | -1.8 |
| YUK7 | Dusty Glacier | 6.79 | 263 | Pn | Pn | 04 17 34.5 | +3.6 |
| YUK7 | | | | Sg | Sg | 04 19 27.6 | -0.9 |
| KUKN | Kugluktuk,NWT | 7.02 | 30 | Pn | Pn | 04 17 34.5 | +0.7 |
| DAWY | Dawson | 7.10 | 293 | Pn | Pn | 04 17 38.1 | +3.0 |
| INK | Inuvik | 7.36 | 333 | Pn | Pn | 04 17 40.3 | +1.9 |
| | 2.9nm,0.3s,baz=139,slow=14,SNR=56 | | | | | | |
| INK | | | | Sn | Sn | 04 18 57.8 | -4.3 |
| | 1.2nm,0.3s,baz=18,slow=20,SNR=2.2 | | | | | | |
| INK | | | | Lg | Lg | 04 19 45.5 | |
| | 1.1nm,0.3s,baz=129,slow=6.5,SNR=2.2 | | | | | | |
| INK | Inuvik | 7.36 | 333 | Pn | Pn | 04 17 39.7 | +1.3 |
| INK | | | | Sn | Sn | 04 19 00.6 | -1.5 |
| WAPA | Wapiti River | 7.38 | 156 | Pn | Pn | 04 17 38.3 | -0.6 |
| YUK3 | Moose Creek | 7.58 | 275 | Pn | Pn | 04 17 45.3 | +3.5 |
| YUK3 | | | | Sg | Sg | 04 19 53.8 | -0.2 |
| BVCY | Beaver Creek | 7.70 | 280 | Pn | Pn | 04 17 46.1 | +3.0 |
| BVCY | | | | Sg | Sg | 04 19 56.8 | -0.7 |
| YUK2 | White River | 7.76 | 275 | Pn | Pn | 04 17 47.3 | +3.1 |
| YUK2 | | | | Sg | Sg | 04 19 57.4 | -2.3 |
| SNLN | Sandy Lake, NW | 7.83 | 77 | Pn | Pn | 04 17 43.6 | -1.3 |
| UBRB | Upper Baezaeko | 9.18 | 179 | Pn | Pn | 04 18 03.2 | -0.4 |
| BBB | Bella Bella | 10.09 | 193 | Pn | Pn | 04 18 15.6 | -0.3 |
| | 0.1nm,0.3s,baz=22,slow=16,SNR=1.9 | | | | | | |
| MNB | Mounoet Dainar | 10.39 | 159 | Pn | Pn | 04 18 19.6 | -0.7 |
| BLBC | Blue River | 10.41 | 162 | Pn | Pn | 04 18 20.2 | -0.3 |
| ILAR | Eielson Array | 10.42 | 295 | Pn | Pn | 04 18 22.1 | +1.7 |
| | 0.2nm,0.3s,baz=100,slow=11,SNR=22 | | | | | | |
| ILAR | | | | Lg | Lg | 04 21 21.8 | |
| | 0.2nm,0.3s,baz=95,slow=30,SNR=5.7 | | | | | | |
| EDM | Edmonton | 10.63 | 141 | Pn | Pn | 04 18 22.3 | -1.1 |
| PRDA | Priddis | 12.50 | 149 | P | Pn | 04 18 46.6 | -2.4 |
| WALA | Waterton Lakes | 14.28 | 151 | P | Pn | 04 19 09.0 | -4.3 |
| NEW | Newport | 14.41 | 160 | Pn | Pn | 04 19 12.2 | -2.8 |
| | 0.1nm,0.3s,baz=61,slow=19,SNR=2.0 | | | | | | |
| NEW | | | | Lg | Lg | 04 23 07.0 | |
| | 0.1nm,0.3s,baz=49,slow=19,SNR=2.5 | | | | | | |
| EGMT | Eagleton | 16.30 | 143 | P | Pn | 04 19 36.9 | -3.2 |
| | baz=16 | | | | | | |
| MSO | Missoula | 16.38 | 154 | P | Pn | 04 19 38.1 | -2.9 |
| | baz=16 | | | | | | |
| RES | Resolute Bay | 16.41 | 28 | Pn | Pn | 04 19 40.5 | -0.6 |
| | 1.0nm,0.3s,baz=218,slow=13,SNR=3.9 | | | | | | |
| RES | | | | Sn | Sn | 04 22 30.4 | -13 |
| | 1.0nm,0.3s,baz=90,slow=7.1,SNR=3.8 | | | | | | |
| RES | | | | Lg | Lg | 04 24 24.2 | |
| | baz=156,slow=7.6,SNR=2.1 | | | | | | |
| A25A | Svangstu Ranch | 17.71 | 128 | P | Pn | 04 19 54.6 | -3.1 |
| | baz=18 | | | | | | |
| BOZ | Bozeman (W) | 18.01 | 150 | P | P | 04 20 03.9 | +1.8 |
| | baz=18 | | | | | | |
| A26A | Wade Farm, Ken | 18.15 | 126 | P | Pn | 04 19 59.7 | -3.4 |
| | baz=18 | | | | | | |
| A27A | Ledoux Ranch, | 18.41 | 125 | P | Pn | 04 20 04.5 | -1.7 |
| | baz=18 | | | | | | |
| LAO | LASA Array | 18.57 | 138 | P | P | 04 20 06.1 | -2.0 |
| | baz=18 | | | | | | |
| D26A | Manning | 19.56 | 130 | P | P | 04 20 18.6 | -0.3 |
| | baz=19 | | | | | | |
| ULM | Lac du Bonnet | 19.60 | 114 | Pn | P | 04 20 16.9 | -2.4 |
| | 0.9nm,0.3s,baz=321,slow=11,SNR=9.1 | | | | | | |
| F26A | Lodgepole | 20.49 | 132 | P | Pn | 04 20 30.8 | -0.4 |
| | baz=20 | | | | | | |
| B32A | Ashes, Strandq | 20.74 | 118 | P | P | 04 20 31.0 | -0.7 |
| | baz=20 | | | | | | |
| G26A | Maurine | 21.00 | 133 | P | P | 04 20 35.8 | +1.2 |
| | baz=21 | | | | | | |
| AGMN | Agassiz Nation | 21.10 | 118 | P | P | 04 20 37.5 | +2.0 |
| | baz=21 | | | | | | |
| G27A | Dupree | 21.16 | 132 | P | P | 04 20 37.3 | +1.0 |
| | baz=21 | | | | | | |
| F28A | McLaughlin | 21.16 | 129 | P | P | 04 20 38.7 | +2.5 |
| | baz=21 | | | | | | |
| H25A | Fruitdale | 21.25 | 136 | P | P | 04 20 38.7 | +1.3 |
| | baz=21 | | | | | | |
| B34A | Aery, Baudette | 21.46 | 116 | P | P | 04 20 40.6 | +1.1 |
| | baz=21 | | | | | | |
| H26A | Fairpoint | 21.53 | 134 | P | P | 04 20 41.1 | +0.8 |
| | baz=21 | | | | | | |
| I25A | Rochford | 21.74 | 137 | P | P | 04 20 44.3 | +1.6 |
| | baz=22 | | | | | | |
| H27A | Howes | 21.75 | 133 | P | P | 04 20 43.2 | +0.5 |
| | baz=22 | | | | | | |
| G28A | Parade | 21.78 | 130 | P | P | 04 20 45.2 | +2.3 |
| | baz=22 | | | | | | |
| K22A | Casper | 22.14 | 143 | P | P | 04 20 47.8 | +0.9 |
| | baz=22 | | | | | | |
| D35A | Remer | 22.81 | 117 | P | P | 04 20 53.1 | -0.8 |
| | baz=23 | | | | | | |
| DUG | Dugway | 22.98 | 157 | P | P | 04 20 57.6 | +1.7 |
| | baz=23 | | | | | | |
| NVAR | Mina Array Bea | 23.94 | 168 | P | P | 04 21 05.1 | -0.4 |
| | 1.2nm,0.9s,baz=1.1,slow=9.1,SNR=2.1 | | | | | | |
| ANMO | Albuquerque | 29.40 | 149 | P | P | 04 21 55.5 | +0.8 |
| | 0.2nm,0.3s,baz=333,slow=11,SNR=2.2 | | | | | | |
| TXAR | Lajitas Array | 35.44 | 148 | P | P | 04 22 46.9 | -0.6 |
| | 0.1nm,0.4s,baz=342,slow=8.6,SNR=2.1 | | | | | | |

**JMA 05 04:27:48.4, 37°.27N×140°.02E, h7km±1km, M2.6, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JFY | Yanaizu | 0.29 | 299 | P | Pg | 04 27 54.2 | +0.1 |
| JFY | | | | S | Sg | 04 27 58.2 | +0.2 |
| JSB | Shiboa | 0.31 | 195 | P | Pg | 04 27 55.1 | +0.5 |
| JSB | | | | eS | Sg | 04 27 59.3 | +0.6 |
| JFT | Otama | 0.35 | 45 | P | Pg | 04 27 55.5 | +0.1 |
| JFT | | | | S | Sg | 04 28 00.3 | +0.2 |
| JFK | Kawauchi | 0.69 | 82 | P | Pg | 04 28 01.4 | -0.3 |
| JFK | | | | S | Sg | 04 28 10.5 | -0.2 |
| MAT | Matsushiro | 1.62 | 244 | P | Pb | 04 28 18.2 | -0.5 |
| MAT | | | | S | Sg | 04 28 43.1 | +2.4 |

*IDC **05** 04:35:42.8±1.8, 0°.92N×126°.24E, h0km, mb3.8/3, mb1 4.1/4, mb1mx3.6/30, mbtmp3.9/4, ML3.7/1, Error ellipse: s-maj=55.5km s-min=26.9km az=66.0*
*ISCJB **05** 04:35:51.2±0.8, 0°.5N±0°.1×126°.08E±0°.05, h44km, mb3.8/3, Error ellipse: s-maj=15.4km s-min=6.4km az=174.9*
*DJA **05** 04:35:51.1±1.3, 1°N±5°×12°6E±°, h27km±18km, M4.2/9, mb4.8/2, MLv3.9/9*
**ISC 05 04:35:51.9**±1.3, **0°.7N**±0°.1×**126°.07E**±0°.06, **h44**km, **n14**, σ**1.73**/15, **mb3.8**/3, **Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | Ternate | 1.30 | 85 | P | Pn | 04 36 12.5 | -1.1 |
| TNTI | | | | S | Sn | 04 36 31.2 | +1.4 |
| LBMI | Labuha | 1.92 | 132 | P | Pn | 04 36 21.6 | -0.5 |
| LBMI | | | | S | Sn | 04 36 47.7 | +2.6 |
| KMSI | Cibinong | 2.09 | 268 | P | Pn | 04 36 22.8 | -1.7 |
| SANI | Sanana | 2.69 | 182 | P | Pn | 04 36 31.5 | -1.2 |
| GTOI | Gorontalo | 3.06 | 270 | P | Pn | 04 36 39.0 | +1.2 |
| LUWI | Luwuk | 3.70 | 243 | P | Pn | 04 36 48.7 | +2.1 |
| APSI | Ampana | 4.69 | 251 | P | Pn | 04 37 01.1 | +1.0 |
| TTSI | Tana Toraja | 7.25 | 240 | P | Pn | 04 37 37.3 | +2.0 |
| | 16nm,0.7s,0.1nm | | | | | | |
| KAPI | Kappang | 8.46 | 228 | Pn | Pn | 04 37 51.3 | -0.6 |
| | 0.9nm,0.3s,baz=56,slow=15,SNR=3.8 | | | | | | |
| BKB | Balikpapan | 9.37 | 258 | P | Pn | 04 38 06.4 | +2.0 |
| BLJI | Banyuglugur | 14.98 | 236 | P | P | 04 39 24.8 | -0.8 |
| WRA | Warramunga Arr | 22.02 | 159 | P | P | 04 40 40.4 | -2.3 |
| | 3.6nm,0.6s,baz=337,slow=12,SNR=9.1 | | | | | | |
| ASAR | Alice Springs | 25.34 | 163 | P | P | 04 41 13.9 | -1.0 |
| | 1.2nm,0.4s,baz=345,slow=11,SNR=20 | | | | | | |
| MKAR | Makanchi Array | 59.72 | 327 | P | P | 04 45 48.4 | -3.8 |
| | 0.3nm,0.5s,baz=125,slow=7.4,SNR=3.8 | | | | | | |

**KRSC 05 04:55:50.6**±0.5, **60°.49N×166°.37E, h21**km±6km, **ML3.9, Eastern Siberia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TILK | Tilichiki | 0.12 | 247 | iP | Pb | 04 55 55.3 | -1.5 |
| TILK | | | | iS | Sb | 04 55 58.8 | -2.4 |
| OSSR | Ossora | 2.09 | 235 | iP | Pb | 04 56 26.2 | -1.4 |
| OSSR | | | | eS | Sb | 04 56 52.2 | -0.8 |
| KBTR | Krutoberegovo | 4.69 | 205 | eP | Pn | 04 57 04.1 | +4.1 |
| MKZ | Mys Kozlova | 6.46 | 205 | eP | Pn | 04 57 29.8 | +5.5 |

*BJI **05** 05:02:11.8, 23°.97N×106°.16E, h9km, ML3.3/5, Ms2.9/1, Ms7 2.7/1*
*PLV **05** 05:02:13.6±2.1, 23°.70N×106°.09E, h17km±14km, ML3.4*
**ISC 05 05:02:08.7**±1.4, **23°.95N**±0°.03×**106°.27E**±0°.04, **h1**km±12km, **n16**, σ**1.83**/29, **Southeastern China**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CBVB | Cao Bang | 1.30 | 183 | ePg | Pg | 05 02 35.3 | +1.8 |
| CBVB | | | | AML | AML | 05 02 53.8 | |
| | comp=E,645nm,0.8s | | | | | | |
| HGVB | Ha Giang | 1.61 | 227 | ePn | Pn | 05 02 36.8 | -1.6 |
| HGVB | | | | eSg | Sn | 05 02 56.5 | -3.3 |
| HGVB | | | | AML | AML | 05 03 01.0 | |
| | comp=N,317nm,0.2s | | | | | | |
| BCVB | Bac Can | 2.11 | 193 | ePg | Pg | 05 02 49.2 | +0.1 |
| BCVB | | | | AML | AML | 05 03 19.1 | |
| | comp=N,510nm,0.3s | | | | | | |
| VTVB | Vinh Tuy | 2.11 | 217 | ePg | Pg | 05 02 49.0 | -0.1 |
| VTVB | | | | eSg | Sb | 05 03 13.7 | -0.8 |
| VTVB | | | | AML | AML | 05 03 16.6 | |
| | comp=N,292nm,1.0s | | | | | | |
| MTZV | Met | 2.40 | 178 | ePg | Pg | 05 02 55.6 | +1.0 |
| MTZV | | | | eSg | Sg | 05 03 25.3 | -0.4 |
| MTZV | | | | AML | AML | 05 03 28.7 | |
| | comp=E,222nm,0.3s | | | | | | |
| GYA | Guiyang | 2.52 | 8 | Pn | Pb | 05 02 54.9 | 0.0 |
| GYA | | | | Sn | Sn | 05 03 21.2 | -1.2 |
| GYA | | | | Sg | Sb | 05 03 26.6 | +0.1 |
| GYA | | | | SMN | | | |
| | comp=E,190nm,0.5s | | | | | | |
| GYA | | | | SME | | | |
| | comp=E,180nm,0.6s | | | | | | |
| BGV | Bac-Giang | 2.65 | 181 | ePg | Pg | 05 02 59.9 | +0.5 |
| BGV | | | | eSg | Sb | 05 03 31.0 | +1.1 |
| BGV | | | | AML | AML | 05 03 40.9 | |
| | comp=N,292nm,0.5s | | | | | | |
| SPV | Sa-pa | 2.75 | 235 | ePn | Pn | 05 02 53.2 | -0.9 |
| TIYB | Tien Yen | 2.81 | 158 | ePg | Pg | 05 03 03.6 | +1.1 |
| TIYB | | | | eSg | Sg | 05 03 39.1 | +0.3 |
| TTVN | Tram Tau | 3.03 | 216 | ePg | Pg | 05 03 06.0 | -0.9 |
| TTVN | | | | eSg | Sb | 05 03 41.5 | +0.5 |
| TTVN | | | | AML | AML | 05 03 51.2 | |
| | comp=E,164nm,0.4s | | | | | | |
| PLV | Phu-Lien | 3.15 | 174 | ePg | Pg | 05 03 09.5 | +0.4 |
| PLV | | | | eSg | Sg | 05 03 47.7 | -2.3 |
| KMI | Kunming | 3.42 | 291 | Pg | Pb | 05 03 11.3 | +1.1 |
| KMI | | | | S* | Sn | 05 03 48.4 | +3.8 |
| KMI | | | | Sg | Sb | 05 03 55.7 | +3.4 |
| KMI | | | | smax | smax | | |
| | comp=N,70nm,0.9s | | | | | | |
| KMI | | | | smax | smax | | |
| | comp=E,28nm,1.0s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,84nm,3.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,27nm,3.8s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,74nm,6.3s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **KMI** | **Kunming** | **3.42** | **291** | Pn | Pn | 05 03 00.7 | -2.6 |
| KMI | | | | Sn | **Sn** | **05 03 41.6** | **-3.0** |
| KMI | | | | Sg | **Sg** | **05 03 57.5** | **-1.0** |
| KMI | | | | SMN | | | |
| | comp=Z,70nm,0.9s | | | | | | |
| KMI | | | | SME | | | |
| | comp=Z,28nm,1.0s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,84nm,3.8s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,27nm,3.8s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,74nm,6.3s | | | | | | |
| **MLVB** | **Muong La stati** | **3.44** | **237** | *e*Sg | **Sn** | **05 03 47.6** | **+2.7** |
| **MCVV** | **Moc Chau** | **3.48** | **206** | *e*Sg | **Sb** | **05 03 54.9** | **+1.0** |
| **TGV** | **Tuan Giao** | **3.53** | **229** | *e*Pg | **Pg** | **05 03 15.4** | **-0.9** |
| TGV | | | | *e*Sg | **Sb** | **05 03 58.1** | **+2.8** |
| TGV | | | | AML | AML | 05 04 12.4 | |
| | comp=E,98nm,0.6s | | | | | | |

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*ISCJB **05** 05:10:31.9±0.8, 3.°99S±0.°08×100.°43E±0.°07, h27km, mb3.9/8, Error ellipse: s-maj=12.9km s-min=7.3km az=36.6*

*IDC **05** 05:10:31.0±2.2, 4.°01S×100.°68E, h0km, mb3.9/8, mb1 4.0/8, mb1mx3.7/41, mbtmp3.9/8, Error ellipse: s-maj=81.4km s-min=19.5km az=56.0*

*DJA **05** 05:10:31.8±0.7, 4°S±5°×10°0E±°, h10km, M4.1/11, MLv4.1/11*

**ISC 05 05:10:34.8**±1.1**, 3.°87S**±0.°09×**100.°52E**±0.°08**, h27**km**, n26, σ1.§45**/20**, mb3.9**/8**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MASI** | **Maura Aman, Be** | **1.86** | **67** | S | **Sb** | **05 11 29.1** | **-2.0** |
| **KRJI** | **Kerinci** | **2.00** | **28** | P | **Pn** | **05 11 06.4** | **-0.6** |
| **KSI** | **Kapahiang** | **2.08** | **84** | P | **Pn** | **05 11 07.7** | **-0.3** |
| **MNAI** | **Manna** | **2.48** | **101** | P | **Pn** | **05 11 12.8** | **-0.6** |
| **SISI** | **Saibi** | **2.90** | **330** | P | **Pn** | **05 11 16.7** | **-2.6** |
| **PDSI** | **Padang** | **2.94** | **359** | P | **Pn** | **05 11 18.8** | **-1.0** |
| **LHSI** | **Lahat** | **2.99** | **89** | P | **Pn** | **05 11 19.9** | **-0.7** |
| **SDSI** | **Sungai Dareh** | **3.05** | **17** | P | **Pn** | **05 11 20.1** | **-1.3** |
| **MDSI** | **Maura Dua** | **3.70** | **100** | P | **Pn** | **05 11 29.7** | **-0.5** |
| **LWLI** | **Liwa** | **3.71** | **108** | P | **Pn** | **05 11 30.4** | **-0.1** |
| **KASI** | **Kota Agung** | **4.29** | **113** | P | **Pn** | **05 11 37.0** | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **22.24** | **356** | P | **P** | **05 15 31.8** | **+2.0** |
| | 1.3nm,0.3s,baz=191,slow=9.2,SNR=6.0 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.13** | **261** | T | T | 05 45 52.3 | |
| | baz=86,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.14** | **261** | T | T | 05 45 52.8 | |
| | baz=86,slow=75 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.15** | **261** | T | T | 05 45 52.2 | |
| | baz=86,slow=75 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.34** | **159** | T | T | 05 52 07.1 | |
| | baz=332 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.36** | **159** | T | T | 05 52 07.1 | |
| | baz=332 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.36** | **159** | T | T | 05 52 06.6 | |
| | baz=332 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.62** | **119** | P | **P** | **05 17 37.2** | **-2.0** |
| | 0.4nm,0.4s,baz=307,slow=8.8,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **37.75** | **125** | P | **P** | **05 17 47.0** | **-1.9** |
| | 0.5nm,0.7s,baz=299,slow=8.3,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **51.74** | **5** | P | **P** | **05 19 41.4** | **+1.3** |
| | 0.7nm,0.5s,baz=188,slow=8.7,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.96** | **344** | P | **P** | **05 19 50.2** | **+1.2** |
| | 1.1nm,0.7s,baz=150,slow=7.4,SNR=8.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.56** | **27** | P | **P** | **05 20 08.1** | **+0.2** |
| | 3.1nm,0.7s,baz=229,slow=6.4,SNR=8.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.48** | **344** | P | **P** | **05 20 22.5** | **+1.1** |
| | 0.5nm,0.3s,baz=155,slow=6.8,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.09** | **349** | P | **P** | **05 20 33.5** | **+0.8** |
| | 2.3nm,0.8s,baz=163,slow=5.6,SNR=6.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.83** | **40** | PKPbc | **PKPab** | **05 30 14.3** | **+1.4** |
| | 1.7nm,0.7s,baz=278,slow=1.1,SNR=24 | | | | | | |

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**GUC 05 05:14:37.3**±0.4**, 37.°31S**×**73.°22W, h43**km±2km**, ML3.7, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCSP** | **San Pedro de C** | **0.47** | **11** | *e*P | Pn | 05 14 48.0 | +0.2 |
| CCSP | | | | *e*S | Sn | 05 14 56.5 | +1.4 |
| CCSP | | | | AML | AML | 05 14 57.5 | |
| | comp=N,12μm,0.5s | | | | | | |
| **CCHI** | **Chillan** | **1.15** | **53** | *e*P | Pn | 05 14 58.5 | +1.5 |
| CCHI | | | | *e*S | Sn | 05 15 14.2 | +2.7 |
| **COCH** | **Cobquecura** | **1.22** | **17** | *e*P | Pn | 05 14 59.5 | +1.6 |
| COCH | | | | *e*S | Sn | 05 15 15.9 | +2.7 |
| COCH | | | | AML | AML | 05 15 22.1 | |
| | comp=E,2μm,0.3s | | | | | | |
| **TALC** | **Talca** | **2.29** | **34** | *e*P | Pn | 05 15 14.9 | +2.3 |
| TALC | | | | *e*S | Sn | 05 15 43.3 | +3.7 |
| **VLCH** | **Valdivia** | **2.50** | **180** | *e*P | Pn | 05 15 17.5 | +2.1 |

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*NIED **05** 05:16:00, 24.°20N×125.°30E, h35km, Mw4.3 Best double couple: M₀2.68000×10¹⁵ NP1:φs106.00000°, δ81.00000°, λ-7.00000°. NP2:φs197.00000°, δ83.00000°, λ-171.00000°.*

*BJI **05** 05:16:30.2, 22.°99N×126.°10E, h4km, mb4.4/7, mB4.6/2, Ms3.9/1*

*IDC **05** 05:16:45.0±0.9, 24.°30N×125.°23E, h0km, mb3.9/13, mb1 4.1/16, mb1mx3.9/37, mbtmp4.0/16, ML2.9/3, MS3.2/2, Ms1 3.2/2, ms1mx2.8/32, Error ellipse: s-maj=24.0km s-min=18.0km az=71.0*

*NEIC **05** 05:16:49.9±0.6, 24.°32N×125.°30E, h35km, mb4.3/1, Error ellipse: s-maj=13.3km s-min=6.6km az=148.0*

*JMA **05** 05:16:49.7±0.1, 24.°24N×125.°33E, h53km±4km, M4.2*

**ISC 05 05:16:47.2**±1.0**, 24.°19N**±0.°06×**125.°37E**±0.°05**, h18**km±3km**, n57, σ1.§25**/65**, mb4.0**/13**, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOGS** | **Gusukube** | **0.57** | **4** | P | **Pn** | **05 17 01.5** | **+1.1** |
| JOGS | | | | *e*S | **Sn** | **05 17 10.3** | **+0.9** |
| **JMJ** | **Miyako jima 2** | **0.63** | **354** | P | **Pn** | **05 17 02.1** | **+0.9** |
| JMJ | | | | *e*S | **Sn** | **05 17 11.3** | **+0.5** |
| **JIRB** | **Irabujima** | **0.66** | **345** | P | **Pn** | **05 17 02.2** | **+0.5** |
| JIRB | | | | *e*S | **Sn** | **05 17 11.6** | **0.0** |
| **JIKM** | **Ikemajima** | **0.74** | **352** | P | **Pn** | **05 17 03.6** | **+0.8** |
| JIKM | | | | *e*S | **Sn** | **05 17 13.8** | **+0.2** |
| **JTJ** | **Tarama** | **0.76** | **307** | P | **Pn** | **05 17 03.6** | **+0.7** |
| JTJ | | | | *e*S | **Sn** | **05 17 13.5** | **-0.4** |
| **JISG** | **Ishigakijimahi** | **1.04** | **293** | P | **Pg** | **05 17 07.7** | **+0.3** |
| JISG | | | | *e*S | **Sn** | **05 17 20.8** | **-0.2** |
| **JIJ** | **Ishigaki jima** | **1.13** | **279** | P | **Pg** | **05 17 09.1** | **0.0** |
| JIJ | | | | *e*S | **Sb** | **05 17 22.5** | **0.0** |
| **JKRS** | **Kuro-shima** | **1.24** | **273** | P | **Pg** | **05 17 11.2** | **0.0** |
| JKRS | | | | *e*S | **Sn** | **05 17 26.4** | **+0.5** |
| **HATJ** | **Hateruma jima** | **1.43** | **265** | P | **Pb** | **05 17 13.3** | **0.0** |
| HATJ | | | | *e*S | **Sn** | **05 17 30.3** | **-0.3** |
| **IRIF** | **Iriomote-Funau** | **1.50** | **276** | P | **Pb** | **05 17 14.4** | **-0.1** |
| **YOJ** | **Yonaguni jima** | **2.17** | **278** | P | **Pn** | **05 17 23.0** | **+0.7** |
| YOJ | | | | *e*S | **Sn** | **05 17 48.7** | **0.0** |
| **YOJ** | **Yonaguni jima** | **2.17** | **278** | *e*Pn | **Pn** | **05 17 23.0** | **+0.7** |
| **JYNG** | **Yonagunijimaku** | **2.22** | **277** | P | **Pn** | **05 17 24.2** | **+1.1** |
| JYNG | | | | *e*S | **Sn** | **05 17 50.0** | **-0.2** |
| **JKE** | **Kume jima 2** | **2.49** | **31** | P | **Pn** | **05 17 27.0** | **+0.2** |
| **JAGN** | **Aguni-jima** | **2.93** | **35** | P | **Pn** | **05 17 33.6** | **+0.7** |
| **JNTH** | **Nagotoyohara** | **3.34** | **45** | P | **Pn** | **05 17 39.1** | **+0.6** |
| **NACB** | **Ninganchiao** | **3.44** | **271** | *e*Pn | **Pn** | **05 17 40.1** | **+0.2** |
| **YHNB** | **Yeheng** | **3.67** | **278** | *e*Pn | **Pn** | **05 17 44.6** | **+1.5** |
| **JIH** | **Iheya** | **3.68** | **39** | P | **Pn** | **05 17 43.8** | **+0.6** |
| **JOW** | **Kunigami** | **3.72** | **44** | P | **Pn** | **05 17 44.2** | **+0.5** |
| **JOW** | **Kunigami** | **3.72** | **44** | Pn | **Pn** | **05 17 44.2** | **+0.5** |
| | 0.4nm,0.3s,baz=209,slow=16,SNR=53 | | | | | | |
| **YULB** | **Yu-li** | **3.81** | **259** | *e*Pn | **Pn** | **05 17 44.4** | **-0.6** |
| **SSLB** | **Suanglung** | **4.05** | **265** | *e*Pn | **Pn** | **05 17 48.5** | **+0.1** |
| **TWG** | **Pinlang** | **4.17** | **252** | *e*Pn | **Pn** | **05 17 49.0** | **-1.0** |
| **JOKE** | **Okinoerabujima** | **4.28** | **42** | P | **Pn** | **05 17 51.2** | **-0.3** |
| **TPUB** | **Ta-pu** | **4.43** | **259** | *e*Pn | **Pn** | **05 17 54.5** | **+1.0** |
| **JTK** | **Tokunoshima** | **4.82** | **41** | P | **Pn** | **05 17 58.3** | **-0.6** |
| **JAMN** | **Amaminishikomi** | **5.29** | **39** | P | **Pn** | **05 18 04.2** | **-1.1** |
| **JAM** | **Amami Oshima** | **5.67** | **41** | P | **Pn** | **05 18 09.6** | **-0.9** |
| **QZH** | **Quanzhou** | **6.21** | **278** | Pn | **Pn** | **05 18 18.9** | **+0.9** |
| **JNU** | **Nakatsue** | **10.13** | **27** | Pn | **Pn** | **05 19 09.8** | **-2.0** |
| | 0.2nm,0.3s,baz=175,slow=6.1,SNR=2.0 | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.39** | **9** | Pn | **Pn** | **05 19 54.3** | **-1.9** |
| **KSRS** | **Korea Array** | **13.40** | **9** | Pn | **Pn** | **05 19 54.3** | **-2.2** |
| | 0.1nm,0.3s,baz=181,slow=13,SNR=3.8 | | | | | | |
| **MAJO** | **Matsushiro** | **16.55** | **39** | P | **Pn** | **05 20 37.4** | **-0.9** |
| | 61nm,2.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **16.55** | **39** | Pn | **P** | **05 20 40.3** | **-0.5** |
| | 0.6nm,0.3s,baz=229,slow=11,SNR=10.0 | | | | | | |
| MJAR | | | | LR | LR | 05 27 35.0 | |
| | comp=Z,37nm,19.0s,baz=280,slow=39 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **20.24** | **328** | *e*P | **P** | **05 21 22.5** | **+1.0** |
| HHC | | | | PP | **PnPn** | **05 21 45.2** | **+6.9** |
| HHC | | | | PMZ | | | |
| | 31nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | 91nm,3.8s | | | | | | |
| HHC | | | | LN | | | |
| | 98nm,9.9s | | | | | | |
| HHC | | | | LE | | | |
| | 120nm,9.0s | | | | | | |
| **GTA** | **Gaotai** | **26.37** | **311** | *e*P | **P** | **05 22 21.8** | **-0.8** |
| GTA | | | | pP | **pP** | **05 22 27.5** | **-0.6** |
| GTA | | | | sP | **sP** | **05 22 30.6** | **+0.3** |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **28.00** | **332** | P | **P** | **05 22 35.7** | **-1.4** |
| | 1.2nm,0.8s,baz=149,slow=9.5,SNR=5.3 | | | | | | |
| SONM | | | | LR | LR | 05 35 27.0 | |
| | comp=Z,106nm,19.2s,baz=121,slow=40 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **38.67** | **88** | T | T | 06 05 30.7 | |
| | baz=288 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **38.67** | **88** | T | T | 06 05 32.9 | |
| | baz=288 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **38.69** | **88** | T | T | 06 05 34.1 | |
| | baz=288 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.80** | **90** | T | T | 06 05 59.9 | |
| | baz=284 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.81** | **90** | T | T | 06 06 01.8 | |
| | baz=284 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.82** | **90** | T | T | 06 06 02.0 | |
| | baz=284 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.03** | **314** | P | **P** | **05 24 28.0** | **-1.4** |
| | 3.5nm,0.7s,baz=99,slow=11,SNR=19 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.37** | **325** | P | **P** | **05 24 38.5** | **-1.7** |
| | 0.9nm,0.4s,baz=115,slow=8.8,SNR=3.9 | | | | | | |
| **KURK** | **Kurchatov** | **44.58** | **319** | P | **P** | **05 24 57.4** | **-0.6** |
| **KURBB** | **Kurchatov Arra** | **44.60** | **319** | P | **P** | **05 24 57.4** | **-0.8** |
| | 2.9nm,0.7s,baz=110,slow=8.3,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.73** | **168** | P | **P** | **05 25 00.5** | **+1.0** |
| | 0.8nm,0.6s,baz=349,slow=8.8,SNR=8.0 | | | | | | |
| **AAK** | **Ala-Archa** | **45.55** | **307** | P | **P** | **05 25 07.0** | **+0.8** |
| | 0.8nm,0.4s,baz=104,slow=3.8,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **48.28** | **169** | P | **P** | **05 25 29.1** | **+1.7** |
| | 0.3nm,0.4s,baz=355,slow=12,SNR=5.4 | | | | | | |
| **GEYT** | **Alibeck** | **58.08** | **301** | P | **P** | **05 26 38.8** | **-0.8** |
| | 1.8nm,0.5s,baz=133,slow=6.1,SNR=3.2 | | | | | | |
| **ILAR** | **Eielson Array** | **67.45** | **28** | P | **P** | **05 27 42.6** | **+1.1** |
| | 0.2nm,0.7s,baz=260,slow=5.4,SNR=4.1 | | | | | | |
| **KBZ** | **Khabaz** | **68.44** | **309** | P | **P** | **05 27 49.0** | **+0.9** |
| | 1.8nm,0.8s,baz=158,slow=5.4,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **73.35** | **330** | P | **P** | **05 28 17.1** | **-0.5** |
| | 1.7nm,0.7s,baz=46,slow=12,SNR=3.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **75.39** | **319** | P | **P** | **05 28 28.8** | **-0.8** |
| | 0.3nm,0.5s,baz=58,slow=6.6,SNR=2.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.22** | **307** | P | **P** | **05 28 35.4** | **+0.5** |
| | 1.1nm,0.8s,baz=50,slow=8.3,SNR=5.1 | | | | | | |

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*BJI **05** 05:45:42.9, 25.°33N×141.°47E, h10km, mb4.7/35, mB5.1/24, Ms4.6/16, Ms7 4.3/13*

*ISCJB **05** 05:45:45.9±0.3, 25.°49N±0.°05×141.°12E±0.°04, h10km, mb4.7/50, MS3.7/2, Error ellipse: s-maj=6.9km s-min=5.1km az=161.1*

*NEIC **05** 05:45:47.5±4.9, 25.°49N×141.°10E, h14km±29km, mb5.1/32, Error ellipse: s-maj=11.6km s-min=9.1km az=140.0*

*MOS **05** 05:45:48.3±1.2, 25.°53N×141.°10E, h33km, mb5.0/14, Error ellipse: s-maj=14.3km s-min=7.8km az=100.2*

*IDC **05** 05:45:56.0±3.3, 25.°58N×141.°07E, h88km±28km, mb4.0/17, mb1 4.2/20, mb1mx4.1/36, mbtmp4.3/20, MS2.7/2, Ms1 2.7/2, ms1mx2.5/28, Error ellipse: s-maj=18.0km s-min=14.1km az=101.0*

**ISC 05 05:45:47.5**±0.5**, 25.°56N**±0.°07×**141.°17E**±0.°06**, h10**km**, n137, σ1.§40**/141**, mb4.9**/52**, 3C-5D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **1.78** | **31** | *e*Pn | **Pn** | **05 46 16.6** | **-1.7** |
| **MJAR** | **Matsushiro Arr** | **11.23** | **348** | P | Pn | 05 48 31.4 | +3.3 |
| | 0.5nm,0.3s,baz=163,slow=8.8,SNR=5.0 | | | | | | |
| MJAR | | | | LR | LR | 05 52 38.5 | |
| | comp=Z,105nm,18.8s,baz=150,slow=36 | | | | | | |
| **MAJO** | **Matsushiro** | **11.23** | **348** | P | **Pn** | **05 48 28.0** | **-0.1** |
| **MAJO** | **Matsushiro** | **11.23** | **348** | Pn | **Pn** | **05 48 28.0** | **-0.1** |
| **JNU** | **Nakatsue** | **11.71** | **312** | P | Pn | 05 48 40.4 | +5.6 |
| | 0.3nm,0.3s,baz=35,slow=17,SNR=2.5 | | | | | | |
| **GUMO** | **Guam** | **12.41** | **163** | LR | LR | 05 52 04.2 | |
| | comp=Z,12nm,21.6s,baz=68,slow=30 | | | | | | |
| **TJN** | **Taejon** | **15.99** | **316** | ⇓*e*P | **Pn** | **05 49 33.3** | **+0.8** |
| **KSRS** | **Korea Array** | **16.35** | **320** | P | **P** | **05 49 41.4** | **+1.3** |
| | 0.6nm,0.3s,baz=131,slow=15,SNR=37 | | | | | | |
| **KSRS** | **Korea Array** | **16.35** | **320** | P | **P** | **05 49 41.4** | **+1.3** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KSAR** | **Wonju Array Be** | **16.37** | **320** | P | **P** | **05 49 41.4** | **+1.2** |
| **KSAR** | **Wonju Array Be** | **16.37** | **320** | P | **P** | **05 49 41.4** | **+1.2** |
| **ERM** | **Erimo** | **16.49** | **5** | *e*P | **Pn** | **05 49 39.1** | **+0.2** |
| **YUK** | **Yuzh-Kuril'sk** | **18.82** | **11** | *c i*P | P | 05 49 54.5 | -13 |
| YUK | | | | *i* S | **Sn** | **05 53 37.7** | **-0.6** |
| YUK | | | | pmax | pmax | | |
| | comp=N,108nm,1.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,129nm,1.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,48nm,0.7s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,237nm,2.8s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,258nm,22.0s | | | | | | |
| **KUR** | **Kuril'sk** | **20.36** | **14** | *d i*P | **P** | **05 50 22.3** | **-1.7** |
| KUR | | | | *i* | | 05 50 38.0 | |
| KUR | | | | *i* S | **S** | **05 54 09.4** | **-2.6** |
| KUR | | | | pmax | pmax | | |
| | comp=N,81nm,1.8s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,85nm,1.8s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,54nm,16.0s | | | | | | |
| **NJ2** | **Nanjing** | **20.58** | **293** | *e*P | **P** | **05 50 26.0** | **-0.6** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **WHN** | **Wuhan** | **24.16** | **288** | ⇑P | **P** | **05 51 07.4** | **+3.5** |
| **HHC** | **Hu-ho-hao-te** | **28.91** | **309** | *e*P | **P** | **05 51 47.2** | **+0.4** |
| HHC | | | | S | **S** | **05 56 32.6** | **-4.8** |
| HHC | | | | PMZ | | | |
| | comp=Z,15nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,100nm,3.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,120nm,11.3s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,190nm,12.3s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,97nm,11.3s | | | | | | |
| **XAN** | **Xi'an** | **29.14** | **294** | P | **P** | **05 51 47.4** | **-1.4** |
| XAN | | | | PMZ | | | |
| | comp=Z,7.0nm,1.6s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,96nm,5.7s | | | | | | |
| **QIZ** | **Qiongzhong** | **29.66** | **264** | P | **P** | **05 51 52.4** | **-1.1** |
| QIZ | | | | S | **S** | **05 56 47.8** | **-1.5** |
| QIZ | | | | PMZ | | | |
| | comp=Z,88nm,2.4s | | | | | | |
| QIZ | | | | PMZ | | | |
| | comp=Z,700nm,3.6s | | | | | | |
| **GYA** | **Guiyang** | **30.97** | **279** | P | **P** | **05 52 05.8** | **+0.6** |
| GYA | | | | PP | **PnPn** | **05 53 06.3** | **+0.4** |
| GYA | | | | S | **S** | **05 57 08.4** | **-1.6** |
| GYA | | | | SS | **SnSn** | **05 58 51.2** | **+1.2** |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,580nm,18.0s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,510nm,17.9s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,540nm,17.8s | | | | | | |
| **LUWI** | **Luwuk** | **31.88** | **217** | *e*P | **P** | **05 52 12.1** | **-1.0** |
| | comp=Z,34nm,0.5s | | | | | | |
| **CD2** | **Chengdu** | **33.28** | **288** | *e*P | **P** | **05 52 24.1** | **-1.3** |
| CD2 | | | | PP | **PP** | **05 53 39.3** | **-1.3** |
| CD2 | | | | S | **S** | **05 57 45.0** | **-0.8** |
| CD2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,140nm,5.2s | | | | | | |
| **LZH** | **Lanzhou** | **33.55** | **297** | *e*P | **P** | **05 52 28.9** | **+1.1** |
| LZH | | | | pP | **pP** | **05 52 32.5** | **+1.7** |
| LZH | | | | sP | **sP** | **05 52 35.4** | **+3.3** |
| LZH | | | | PMZ | | | |
| | comp=Z,32nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,130nm,4.5s | | | | | | |
| **KMI** | **Kunming** | **34.65** | **278** | P | **P** | **05 52 38.2** | **+0.6** |
| KMI | | | | PMZ | | | |
| | comp=Z,14nm,0.5s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,96nm,3.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **34.83** | **319** | ⇓*i*P | **P** | **05 52 39.2** | **+0.4** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **34.83** | **319** | *e*P | **P** | **05 52 39.3** | **+0.4** |
| | comp=Z,12nm,0.9s | | | | | | |
| **SONA1** | **Songino Array** | **35.22** | **318** | *e*P | **P** | **05 52 42.6** | **+0.5** |
| **SONM** | **Songino Array** | **35.22** | **318** | P | **P** | **05 52 42.1** | **+0.1** |
| | comp=Z,3.7nm,0.7s,baz=133,slow=9.7,SNR=19 | | | | | | |
| **GTA** | **Gaotai** | **37.19** | **302** | *e*P | **P** | **05 52 59.9** | **+0.8** |
| GTA | | | | pP | **pP** | **05 53 06.9** | **+4.7** |
| GTA | | | | sP | sP | 05 53 09.9 | +6.5 |
| GTA | | | | PMZ | | | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| **ZAK** | **Zakamensk** | **38.18** | **321** | *e*P | **P** | **05 53 06.5** | **-0.8** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.65** | **268** | P | **P** | **05 53 19.4** | **-0.5** |
| | comp=Z,0.9nm,0.4s,baz=64,slow=7.7,SNR=4.4 | | | | | | |
| **BILL** | **Bilibino** | **45.15** | **13** | *e*P | **P** | **05 54 05.1** | **+1.2** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.71** | **189** | *e*P | **P** | **05 54 07.3** | **-1.6** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.71** | **189** | P | **P** | **05 54 07.2** | **-1.6** |
| | comp=Z,198nm,0.8s,SNR=22 | | | | | | |
| **WRAB** | **Tennant Creek** | **45.71** | **189** | *e*P | **P** | **05 54 07.3** | **-1.6** |
| | comp=Z,24nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.72** | **189** | P | **P** | **05 54 07.6** | **-1.4** |
| | comp=Z,25nm,0.8s,baz=9.0,slow=8.4,SNR=46 | | | | | | |
| **WMQ** | **Urumqi** | **46.75** | **307** | P | **P** | **05 54 18.0** | **+1.0** |
| WMQ | | | | PMZ | | | |
| | comp=Z,15nm,1.0s | | | | | | |
| **TAPN** | **Taplejung** | **47.59** | **285** | *e*P | **P** | **05 54 25.4** | **+1.3** |
| | comp=Z,22nm,0.9s | | | | | | |
| **ODAN** | **Odare** | **47.96** | **284** | *e*P | **P** | **05 54 27.8** | **+0.9** |
| | comp=Z,59nm,1.2s | | | | | | |
| **RAMN** | **Ramite** | **48.63** | **284** | *e*P | **P** | **05 54 33.5** | **+1.4** |
| | comp=Z,34nm,1.0s | | | | | | |
| **GUN** | **Gumba** | **49.08** | **286** | *e*P | **P** | **05 54 37.1** | **+1.5** |
| | comp=Z,42nm,0.9s | | | | | | |
| **AS01** | **Alice Springs** | **49.43** | **189** | *e*P | **P** | **05 54 36.3** | **-1.5** |
| **ASAR** | **Alice Springs** | **49.44** | **189** | P | **P** | **05 54 36.4** | **-1.5** |
| | comp=Z,2.3nm,0.8s,baz=11,slow=11,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 55 59.5** | **-0.6** |
| | comp=Z,0.6nm,0.8s,baz=15,slow=4.2,SNR=3.3 | | | | | | |
| **DMN** | **Daman** | **49.81** | **285** | *e*P | **P** | **05 54 42.4** | **+1.3** |
| | comp=Z,31nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.06** | **320** | P | **P** | **05 54 40.8** | **-1.4** |
| | comp=Z,0.5nm,0.3s,baz=116,slow=6.6,SNR=2.3 | | | | | | |
| **GKN** | **Gorkha** | **50.14** | **286** | *e*P | **P** | **05 54 44.7** | **+1.2** |
| | comp=Z,32nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.76** | **311** | P | **P** | **05 54 47.4** | **-0.4** |
| | comp=Z,3.4nm,0.8s,baz=95,slow=9.0,SNR=22 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.76** | **311** | P | **P** | **05 54 47.4** | **-0.4** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **50.76** | **311** | *e*P | **P** | **05 54 48.4** | **+0.6** |
| **DANN** | **Dangsing** | **50.84** | **287** | *e*P | **P** | **05 54 50.7** | **+1.8** |
| | comp=Z,7.7nm,0.7s | | | | | | |
| **MAKZ** | **Makanchi** | **50.98** | **311** | *e*P | **P** | **05 54 49.6** | **+0.2** |
| **KOLN** | **Koldanda** | **51.09** | **286** | *e*P | **P** | **05 54 52.0** | **+1.3** |
| | comp=Z,23nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **53.42** | **315** | *e*P | **P** | **05 55 07.5** | **+0.1** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,21nm,1.2s | | | | | | |
| **KURK** | **Kurchatov** | **53.42** | **315** | *e*P | **P** | **05 55 07.5** | **+0.1** |
| | comp=Z,21nm,1.2s | | | | | | |
| **KSH** | **Kashi** | **55.59** | **302** | P | P | 05 55 27.1 | +3.5 |
| KSH | | | | *e*ScP | **ScP** | **06 00 21.9** | **-0.5** |
| KSH | | | | PcS | **PcS** | **06 00 27.5** | **+3.9** |
| KSH | | | | S | **S** | **06 03 12.2** | **+2.6** |
| KSH | | | | ScS | **ScS** | **06 05 09.9** | **-3.4** |
| KSH | | | | PMZ | | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,170nm,6.0s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,150nm,6.4s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,120nm,6.4s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,120nm,7.9s | | | | | | |
| **KDAK** | **Kodiak Island** | **56.13** | **36** | P | **P** | **05 55 25.6** | **-1.4** |
| | comp=Z,14nm,1.0s,baz=250,slow=3.6,SNR=7.3 | | | | | | |
| **KDAK** | **Kodiak Island** | **56.13** | **36** | *i* P | **P** | **05 55 27.1** | **+0.2** |
| **CAST** | **Castle Rocks** | **57.06** | **30** | *e*P | **P** | **05 55 34.2** | **+0.7** |
| | comp=Z,40nm,2.1s | | | | | | |
| **MLY** | **Manley** | **57.88** | **28** | *e*P | **P** | **05 55 40.5** | **+1.2** |
| | comp=Z,56nm,2.4s | | | | | | |
| **BRVK** | **Borovoye** | **58.62** | **318** | ⇓*i*P | **P** | **05 55 44.7** | **+0.1** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **58.62** | **318** | *e*P | **P** | **05 55 44.6** | **0.0** |
| | comp=Z,5.5nm,0.8s | | | | | | |
| **COLA** | **College** | **59.09** | **28** | ⇑*e*P | **P** | **05 55 48.3** | **+0.7** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **KKAR** | **Karatay Array** | **59.25** | **306** | *e*P | **P** | **05 55 48.7** | **-0.5** |
| **KKAR** | **Karatay Array** | **59.25** | **306** | *e*P | **P** | **05 55 48.7** | **-0.5** |
| **IL1** | **Eielson Array** | **59.49** | **28** | *e*P | **P** | **05 55 48.9** | **-1.5** |
| **ILAR** | **Eielson Array** | **59.49** | **28** | P | **P** | **05 55 49.2** | **-1.2** |
| | comp=Z,2.7nm,0.8s,baz=264,slow=5.7,SNR=23 | | | | | | |
| **DOT** | **Dot Lake** | **60.66** | **30** | *e*P | **P** | **05 55 58.5** | **-0.1** |
| | comp=Z,17nm,0.9s | | | | | | |
| **KBL** | **Kabul** | **61.90** | **297** | *e*P | **P** | **05 56 08.0** | **+0.3** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **KBL** | **Kabul** | **61.90** | **297** | *e*P | **P** | **05 56 08.0** | **+0.3** |
| | comp=Z,11nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **64.80** | **24** | P | **P** | **05 56 25.1** | **-0.9** |
| | comp=Z,4.4nm,0.8s,baz=315,slow=6.0,SNR=9.0 | | | | | | |
| **ABKAR** | **Akbulak array** | **65.51** | **315** | *e*P | **P** | **05 56 28.7** | **-2.3** |
| | comp=Z,1.2nm,0.7s | | | | | | |
| **APA** | **Apatity** | **73.11** | **338** | *e*P | P | 05 57 23.0 | +5.3 |
| APA | | | | MLR | MLR | | |
| | comp=Z,300nm,25.0s | | | | | | |
| **YKA** | **Yellowknife Ar** | **73.92** | **28** | P | **P** | **05 57 21.5** | **-1.0** |
| | comp=Z,3.7nm,0.7s,baz=297,slow=6.1,SNR=4.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **74.68** | **341** | P | **P** | **05 57 24.9** | **-2.0** |
| | comp=Z,1.7nm,0.6s,baz=72,slow=7.8,SNR=6.7 | | | | | | |
| **B08A** | **Colville Reser** | **77.27** | **42** | *e*P | **P** | **05 57 42.4** | **+0.3** |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **78.38** | **313** | P | **P** | **05 57 46.3** | **-2.0** |
| | comp=Z,2.5nm,0.8s,baz=90,slow=3.0,SNR=2.4 | | | | | | |
| **NEW** | **Newport** | **78.65** | **42** | *e*P | **P** | **05 57 50.1** | **+0.3** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,32nm,1.5s | | | | | | |
| **NEW** | **Newport** | **78.65** | **42** | P | **P** | **05 57 49.5** | **-0.3** |
| | baz=79 | | | | | | |
| **NEW** | **Newport** | **78.65** | **42** | *e*P | **P** | **05 57 50.1** | **+0.3** |
| | comp=Z,32nm,1.5s | | | | | | |
| **FINES** | **FINESS Array B** | **78.91** | **334** | P | **P** | **05 57 48.2** | **-2.6** |
| | comp=Z,4.4nm,0.5s,baz=82,slow=5.4,SNR=32 | | | | | | |
| **J08A** | **Circle Bar Ran** | **79.91** | **47** | *e*P | **P** | **05 57 58.2** | **+1.3** |
| | comp=Z,101nm,3.0s | | | | | | |
| **WALA** | **Waterton Lakes** | **80.20** | **40** | *e*P | **P** | **05 57 59.0** | **+0.7** |
| | comp=Z,219nm,2.8s | | | | | | |
| **CMB** | **Columbia Colle** | **80.88** | **52** | *e*P | **P** | **05 58 02.3** | **+0.2** |
| CMB | | | | pmax | pmax | | |
| | comp=Z,44nm,2.3s | | | | | | |
| **CMB** | **Columbia Colle** | **80.88** | **52** | *e*P | **P** | **05 58 02.3** | **+0.2** |
| | comp=Z,44nm,2.3s | | | | | | |
| **MFID** | **Camas Ranch** | **81.62** | **46** | *e*P | **P** | **05 58 06.5** | **+0.5** |
| | comp=Z,82nm,2.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NV01** | **Mina Array Sit** | **82.18** | **51** | *e*P | **P** | **05 58 09.4** | **+0.2** |
| **NVAR** | **Mina Array Bea** | **82.18** | **51** | P | **P** | **05 58 09.1** | **-0.1** |
| | comp=Z,1.3nm,0.6s,baz=293,slow=6.3,SNR=12 | | | | | | |
| **HLID** | **Hailey** | **82.46** | **45** | P | **P** | **05 58 10.4** | **-0.1** |
| | baz=82 | | | | | | |
| **HRY** | **Holter Researc** | **82.55** | **42** | *e*P | **P** | **05 58 11.2** | **+0.4** |
| **LRM** | **Limekiln Ridge** | **82.61** | **43** | *e*P | **P** | **05 58 11.2** | **-0.1** |
| **BOZ** | **Bozeman (W)** | **83.19** | **42** | *e*P | P | 05 58 11.6 | -2.7 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,89nm,2.9s | | | | | | |
| **BOZ** | **Bozeman (W)** | **83.19** | **42** | P | **P** | **05 58 13.8** | **-0.5** |
| | baz=83 | | | | | | |
| **BOZ** | **Bozeman (W)** | **83.19** | **42** | *e*P | P | 05 58 11.6 | -2.7 |
| | comp=Z,89nm,2.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **83.31** | **324** | P | P | 05 58 11.3 | -3.1 |
| | comp=Z,0.7nm,0.5s,baz=52,slow=4.7,SNR=5.3 | | | | | | |
| **YMR** | **Madison River** | **84.09** | **43** | *e*P | **P** | **05 58 19.3** | **+0.4** |
| | comp=Z,10nm,1.0s | | | | | | |
| **R11A** | **Troy Canyon, C** | **84.12** | **50** | P | **P** | **05 58 19.0** | **-0.2** |
| | baz=84 | | | | | | |
| **TPNV** | **Topopah Spring** | **84.31** | **52** | P | **P** | **05 58 19.8** | **-0.3** |
| | baz=84 | | | | | | |
| **HVU** | **Hansel Valley** | **84.38** | **46** | *e*P | P | 05 58 23.5 | +3.1 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,29nm,1.9s | | | | | | |
| **HVU** | **Hansel Valley** | **84.38** | **46** | *e*P | P | 05 58 23.5 | +3.1 |
| | comp=Z,29nm,1.9s | | | | | | |
| **H17A** | **Grant Village** | **84.47** | **43** | P | **P** | **05 58 23.0** | **+2.0** |
| | baz=84 | | | | | | |
| **H17A** | **Grant Village** | **84.47** | **43** | P | **P** | **05 58 22.2** | **+1.2** |
| | comp=Z,25nm,1.4s | | | | | | |
| **LKWY** | **Lake** | **84.49** | **43** | *e*P | **P** | **05 58 23.5** | **+2.5** |
| LKWY | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **LKWY** | **Lake** | **84.49** | **43** | *e*P | **P** | **05 58 23.5** | **+2.5** |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **IMW** | **Indian Meadow** | **84.50** | **44** | *e*P | **P** | **05 58 21.3** | **+0.2** |
| | comp=Z,7.7nm,0.9s | | | | | | |
| **FLWY** | **Flagg Ranch** | **84.55** | **43** | *e*P | **P** | **05 58 22.8** | **+1.4** |
| | comp=Z,9.9nm,0.9s | | | | | | |
| **FXWY** | **Fox Creek** | **84.57** | **44** | *e*P | **P** | **05 58 22.3** | **+0.8** |
| | comp=Z,54nm,2.5s | | | | | | |
| **NB2** | **NORSAR Subarra** | **84.69** | **338** | P | P | 05 58 17.9 | -3.5 |
| | comp=Z,2.0nm,0.8s,baz=43,slow=5.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **84.69** | **338** | P | P | 05 58 17.9 | -3.5 |
| | comp=Z,1.1nm,0.5s,baz=45,slow=4.9,SNR=3.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **84.69** | **338** | P | P | 05 58 18.0 | -3.5 |
| **MOOW** | **Moose Ponds** | **84.69** | **44** | *e*P | **P** | **05 58 22.8** | **+0.7** |
| | comp=Z,8.5nm,1.4s | | | | | | |
| **TPAW** | **Teton Pass** | **84.69** | **44** | *e*P | **P** | **05 58 23.0** | **+0.9** |
| | comp=Z,43nm,2.5s | | | | | | |
| **EPU** | **East Promontor** | **84.80** | **46** | *e*P | **P** | **05 58 21.9** | **-0.7** |
| **LOHW** | **Long Hollow** | **84.85** | **44** | *e*P | **P** | **05 58 23.4** | **+0.6** |
| | comp=Z,106nm,3.0s | | | | | | |
| **RLMT** | **Red Lodge** | **84.90** | **42** | P | **P** | **05 58 23.6** | **+0.6** |
| | baz=85 | | | | | | |
| **RLMT** | **Red Lodge** | **84.90** | **42** | *e*P | **P** | **05 58 23.9** | **+0.9** |
| | comp=Z,47nm,1.8s | | | | | | |
| **RAYN** | **Ar Rayn** | **84.92** | **294** | *e*P | **P** | **05 58 24.8** | **+1.4** |
| | comp=Z,5.5nm,1.2s | | | | | | |
| **AHID** | **Auburn Hatcher** | **84.96** | **45** | *e*P | **P** | **05 58 25.4** | **+2.0** |
| | comp=Z,15nm,1.5s | | | | | | |
| **DUG** | **Dugway** | **85.12** | **48** | *e*P | **P** | **05 58 24.3** | **+0.1** |
| DUG | | | | pmax | pmax | | |
| | comp=Z,12nm,1.5s | | | | | | |
| **DUG** | **Dugway** | **85.12** | **48** | P | **P** | **05 58 23.8** | **-0.4** |
| | baz=85 | | | | | | |
| **DUG** | **Dugway** | **85.12** | **48** | *e*P | **P** | **05 58 24.3** | **+0.1** |
| | comp=Z,12nm,1.5s | | | | | | |
| **TUQ** | **Turquoise Moun** | **85.24** | **53** | P | **P** | **05 58 24.8** | **-0.1** |
| | baz=85 | | | | | | |
| **HWUT** | **Hardware Ranch** | **85.25** | **46** | *e*P | **P** | **05 58 25.2** | **+0.3** |
| | comp=Z,5.3nm,0.9s | | | | | | |
| **GMRC** | **Granite Mounta** | **85.74** | **53** | P | **P** | **05 58 27.1** | **-0.2** |
| | baz=86 | | | | | | |
| **BW06** | **Boulder Array** | **85.94** | **44** | *e*P | **P** | **05 58 27.8** | **-0.5** |
| BW06 | | | | *e*P | **PcP** | **05 58 28.3** | **-2.8** |
| **HAY** | **Hayfield** | **86.23** | **54** | *e*P | **P** | **05 58 30.8** | **+1.2** |
| **HAY** | **Hayfield** | **86.23** | **54** | *e*P | **P** | **05 58 30.8** | **+1.2** |
| **F27A** | **Lemmon** | **88.72** | **39** | P | **P** | **05 58 41.0** | **-0.5** |
| | baz=89 | | | | | | |
| **H26A** | **Fairpoint** | **89.02** | **40** | P | **P** | **05 58 42.6** | **-0.3** |
| | baz=89 | | | | | | |
| **G27A** | **Dupree** | **89.06** | **39** | P | **P** | **05 58 42.1** | **-0.9** |
| | baz=89 | | | | | | |
| **ISCO** | **Idaho Springs** | **90.04** | **45** | P | **P** | **05 58 47.8** | **-0.3** |
| | baz=90 | | | | | | |
| **SDCO** | **Great Sand Dun** | **91.26** | **47** | P | **P** | **05 58 53.2** | **-0.5** |
| | baz=91 | | | | | | |
| **TXAR** | **Lajitas Array** | **97.25** | **53** | P | **P** | **05 59 21.1** | **-0.1** |
| | comp=Z,0.2nm,0.6s,baz=329,slow=3.4,SNR=3.8 | | | | | | |
| **SYO** | **Syowa Base** | **117.75** | **204** | ⇓*e*X | **Pdif** | **06 00 48.6** | **-2.5** |
| **TORD** | **Torodi Ar. Bea** | **124.88** | **310** | PKP | **PKPdf** | **06 04 45.9** | **-2.7** |
| | comp=Z,0.6nm,0.7s,baz=11,slow=1.7,SNR=5.1 | | | | | | |
| **PTGA** | **Pitinga** | **147.98** | **43** | PKPbc | **PKPdf** | **06 05 32.1** | **+1.1** |
| | comp=Z,5.6nm,0.7s,baz=302,slow=4.0,SNR=12 | | | | | | |
| **LPAZ** | **La Paz** | **151.17** | **77** | PKPbc | **PKPbc** | **06 05 42.0** | **-0.6** |
| | comp=Z,2.3nm,0.6s,baz=315,slow=4.3,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **151.17** | **77** | PKIKP | **PKPbc** | **06 05 42.0** | **-0.6** |

**PGC 05 05:53:10.4**±1.9**, 48°.87N**×**129°.21W, h10**km**, ML2.9**/28**, Mw3.5**/28**, 240km southwest of Pt. Hardy, Bc Vancouver Island Region, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BPBC** | **Brooks Peninsu** | **1.59** | **35** | Pn | Pn | 05 53 36.4 | -2.3 |
| BPBC | | | | Sn | Sn | 05 53 55.3 | -4.1 |
| **EDB** | **Eliza Dome** | **1.69** | **53** | Pn | Pn | 05 53 37.9 | -2.1 |
| EDB | | | | Sn | Sn | 05 53 58.1 | -3.7 |
| **ETB** | **Estevan Point** | **1.82** | **73** | Pn | Pn | 05 53 40.0 | -1.8 |
| **HOLB** | **Holberg** | **1.90** | **21** | Pn | Pn | 05 53 40.8 | -2.2 |
| HOLB | | | | Sn | Sn | 05 54 03.2 | -3.9 |
| **MAYB** | **Maynard** | **2.02** | **40** | Pn | Pn | 05 53 43.0 | -1.8 |
| MAYB | | | | Sn | Sn | 05 54 06.5 | -3.8 |
| **PHC** | **Port Hardy** | **2.17** | **31** | Pn | Pn | 05 53 45.2 | -1.3 |
| PHC | | | | Sn | Sn | 05 54 09.8 | -3.7 |
| **GDR** | **Gold River** | **2.27** | **65** | Pn | Pn | 05 53 46.4 | -1.6 |
| **OZB** | **Mount Ozzard** | **2.45** | **87** | Pn | Pn | 05 53 48.7 | -1.8 |
| OZB | | | | Sn | Sn | 05 54 16.8 | -3.8 |
| **BTB** | **Buttle Lake** | **2.49** | **75** | Pn | Pn | 05 53 50.1 | -1.1 |
| **NCRB** | **Newcastle Ridg** | **2.56** | **52** | Pn | Pn | 05 53 51.4 | -0.7 |
| NCRB | | | | Sn | Sn | 05 54 20.5 | -3.0 |
| **BMSB** | **Bamfield Mari** | **2.69** | **89** | Pn | Pn | 05 53 52.1 | -1.6 |
| BMSB | | | | Sn | Sn | 05 54 22.5 | -3.8 |
| **B928** | **Bamfield** | **2.69** | **89** | Pn | Pn | 05 53 51.9 | -1.7 |
| B928 | | | | Sn | Sn | 05 54 22.8 | -3.4 |
| **CBB** | **Campbell River** | **2.76** | **64** | Pn | Pn | 05 53 54.0 | -0.7 |
| **ALB** | **Alberni** | **2.91** | **80** | Pn | Pn | 05 53 55.8 | -0.9 |
| **MGB** | **Mount Grey** | **2.98** | **86** | Pn | Pn | 05 53 56.4 | -1.6 |
| MGB | | | | Sn | Sn | 05 54 30.2 | -3.6 |
| **PFB** | **Port Renfrew** | **3.17** | **94** | Pn | Pn | 05 53 59.0 | -1.4 |
| PFB | | | | Sn | Sn | 05 54 34.2 | -4.1 |
| **TXB** | **Texada** | **3.23** | **73** | Pn | Pn | 05 54 00.4 | -0.8 |
| **YOUB** | **Youbou, Lake C** | **3.26** | **88** | Pn | Pn | 05 54 00.4 | -1.3 |
| YOUB | | | | Sn | Sn | 05 54 37.4 | -3.3 |
| **GHNB** | **Nanoose** | **3.29** | **81** | Pn | Pn | 05 54 01.2 | -0.8 |
| **BBB** | **Bella Bella** | **3.39** | **11** | Pn | Pn | 05 54 02.4 | -1.0 |
| BBB | | | | Sn | Sn | 05 54 39.5 | -4.1 |
| **NLLB** | **Nanaimo Lost L** | **3.45** | **82** | Pn | Pn | 05 54 03.8 | -0.4 |
| NLLB | | | | Sn | Sn | 05 54 42.3 | -2.8 |
| **SHB** | **Sechelt** | **3.57** | **76** | Pn | Pn | 05 54 05.4 | -0.6 |
| **LZB** | **Mount Lazard** | **3.57** | **92** | Pn | Pn | 05 54 04.6 | -1.3 |
| LZB | | | | Sn | Sn | 05 54 45.4 | -2.9 |
| **PGC** | **Sidney** | **3.81** | **91** | Pn | Pn | 05 54 08.3 | -0.8 |
| PGC | | | | Sn | Sn | 05 54 51.8 | -2.2 |
| **BIB** | **Bowen Island** | **3.91** | **80** | Pn | Pn | 05 54 10.4 | 0.0 |
| **VGZ** | **Gonzales** | **3.93** | **94** | Sn | Sn | 05 54 53.7 | -3.1 |
| **SNB** | **Saturna Island** | **3.99** | **89** | Pn | Pn | 05 54 11.5 | -0.1 |
| **WPB** | **Watts Point** | **4.00** | **76** | Pn | Pn | 05 54 11.8 | 0.0 |
| **VDB** | **Vedder Mountai** | **4.68** | **85** | Pn | Pn | 05 54 20.5 | -0.7 |
| **MBW** | **Mount Baker** | **4.83** | **88** | Pn | Pn | 05 54 23.2 | -0.1 |
| **LLLB** | **Lillooet** | **5.06** | **67** | Pn | Pn | 05 54 26.7 | +0.4 |

*IDC **05** 06:01:19.1±1.3, 15°.05S×76°.24W, h0km, mb3.8/3, mb1 3.9/8, mb1mx3.8/27, mbtmp3.8/8, ML3.4/4, MS3.5/2, Ms1 3.5/2, ms1mx2.9/21, Error ellipse: s-maj=34.7km s-min=22.5km az=48.0*
*ISCJB **05** 06:01:20.9±1.0, 15°.1S±0°.1×76°.3W±0°.1, h29km, mb3.8/3, MS3.5/2, Error ellipse: s-maj=21.8km s-min=10.9km az=146.8*
**ISC 05 06:01:23.1**±1.0**, 15°.1S**±0°.1×**76°.2W**±0°.1**, h29**km**, n17, σ1.16**/11**, mb4.0**/3**, Off coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **7.85** | **100** | Pn | **Pn** | **06 03 16.5** | **+0.5** |
| | 0.7nm,0.3s,baz=286,slow=7.7,SNR=28 | | | | | | |
| **ATAH** | **Atahualpa** | **8.21** | **345** | Pn | **Pn** | **06 03 19.8** | **-1.0** |
| | 0.4nm,0.3s,baz=359,slow=7.7,SNR=2.4 | | | | | | |
| ATAH | | | | Lg | Lg | 06 05 18.2 | |
| | 1.6nm,0.3s,baz=328,slow=16,SNR=5.2 | | | | | | |
| **LVC** | **Limon Verde** | **10.16** | **138** | Pn | **Pn** | **06 03 48.1** | **+0.8** |
| | 36nm,0.3s,baz=318,slow=10,SNR=9.1 | | | | | | |
| LVC | | | | Sn | **Sn** | **06 05 37.8** | **-2.5** |
| | 5.3nm,0.3s,baz=317,slow=19,SNR=1.6 | | | | | | |
| LVC | | | | Lg | Lg | 06 06 41.6 | |
| | baz=136,slow=21,SNR=3.1 | | | | | | |
| **SIV** | **San Ignacio** | **14.60** | **95** | Pn | **Pn** | **06 04 48.6** | **+0.7** |
| | 0.1nm,0.3s,baz=279,slow=12,SNR=3.6 | | | | | | |
| **CFAA** | **Coronel Fontan** | **17.96** | **157** | P | **P** | **06 05 31.4** | **+0.3** |
| | 0.0nm,0.3s,baz=339,slow=11,SNR=7.3 | | | | | | |
| **PTGA** | **Pitinga** | **21.47** | **50** | P | **P** | **06 06 10.3** | **+0.8** |
| | 6.1nm,0.9s,baz=233,slow=12,SNR=5.2 | | | | | | |
| PTGA | | | | LR | LR | 06 15 20.7 | |
| | comp=Z,84nm,19.6s,baz=258,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **51.54** | **329** | P | **P** | **06 10 26.5** | **-0.2** |
| | 0.3nm,0.6s,baz=150,slow=8.6,SNR=7.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.02** | **74** | P | **P** | **06 13 40.7** | **-0.4** |
| | 2.1nm,0.8s,baz=265,slow=4.9,SNR=7.4 | | | | | | |
| **BOSA** | **Boshof** | **92.59** | **120** | LR | LR | 06 52 11.1 | |
| | comp=Z,38nm,19.7s,baz=47,slow=33 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **119.90** | **284** | T | T | 08 31 24.4 | |
| | baz=97,slow=74,SNR=19 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **119.92** | **284** | T | T | 08 31 24.4 | |
| | baz=97,slow=74,SNR=34 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **119.92** | **284** | T | T | 08 31 24.4 | |
| | baz=97,slow=74,SNR=19 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **119.95** | **283** | T | T | 08 31 29.2 | |
| | baz=98,slow=75,SNR=11 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **119.96** | **283** | T | T | 08 31 28.7 | |
| | baz=98,slow=75,SNR=9.3 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **119.97** | **283** | T | T | 08 31 30.3 | |
| | baz=98,slow=75,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **131.51** | **218** | PKP | **PKPdf** | **06 20 34.6** | **+0.7** |
| | 0.3nm,0.8s,baz=124,slow=1.7,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **134.01** | **222** | PKP | **PKPdf** | **06 20 39.4** | **+0.7** |
| | 0.6nm,0.6s,baz=130,slow=1.9,SNR=7.7 | | | | | | |

*IDC **05** 06:18:59.7±0.9, 24°.14N×142°.53E, h0km, mb3.8/6, mb1 4.1/6, mb1mx3.8/34, mbtmp3.8/6, MS3.4/2, Ms1 3.4/2, ms1mx2.7/35, Error ellipse: s-maj=41.7km s-min=21.2km az=105.0*
*ISCJB **05** 06:19:02.8±0.8, 24°.1N±0°.1×142°.5E±0°.3, h33km, mb3.8/6, MS3.4/2, Error ellipse: s-maj=38.6km s-min=19.5km az=14.0*
**ISC 05 06:19:05.0**±1.0**, 24°.1N**±0°.2×**142°.5E**±0°.3**, h35**km**, n9, σ0.82**/7**, mb3.8**/6**, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **40.85** | **271** | LR | LR | 06 44 02.1 | |
| | comp=Z,20nm,19.9s,baz=180,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.51** | **191** | P | **P** | **06 27 12.2** | **-1.1** |
| | 0.7nm,0.4s,baz=12,slow=8.1,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **48.23** | **191** | P | **P** | **06 27 43.5** | **+1.0** |
| | 0.2nm,0.3s,baz=15,slow=12,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.61** | **311** | P | **P** | **06 28 15.4** | **0.0** |
| | 0.2nm,0.4s,baz=98,slow=8.9,SNR=2.7 | | | | | | |
| **ILAR** | **Eielson Array** | **60.19** | **28** | P | **P** | **06 29 08.4** | **-0.6** |
| | 1.4nm,0.8s,baz=259,slow=5.6,SNR=14 | | | | | | |
| **INK** | **Inuvik** | **65.61** | **24** | P | **P** | **06 29 45.4** | **+0.3** |
| | 2.0nm,0.9s,baz=294,slow=7.1,SNR=3.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.14** | **52** | P | **P** | **06 31 22.8** | **+0.2** |
| | 0.8nm,0.8s,baz=266,slow=5.2,SNR=4.3 | | | | | | |
| **IDI** | **Anoyia** | **96.47** | **313** | LR | LR | 07 20 00.7 | |
| | comp=Z,35nm,18.8s,baz=288,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **150.27** | **81** | PKPbc | **PKPbc** | **06 38 54.0** | **+0.1** |
| | 1.9nm,0.8s,baz=280,slow=2.7,SNR=6.2 | | | | | | |

*KRSC **05** 06:45:28.8±2.5, 50°.19N×157°.27E, h46km±24km, ML4.2*
*MOS **05** 06:45:31.3±1.8, 50°.22N×156°.97E, h35km, mb4.5/2, Error ellipse: s-maj=20.1km s-min=5.9km az=76.8*
**ISC 05 06:45:25.7**±1.4**, 50°.0N**±0°.1×**156°.83E**±0°.10**, h67**km±18km**, n41, σ1.90**/48**, 3C-2D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **0.86** | **328** | *e*P | **Pn** | **06 45 44.4** | **+2.1** |
| SKR | | | | *e*S | **Sn** | **06 45 54.2** | **-0.4** |
| **SKR** | **Severo-Kuril's** | **0.86** | **328** | ⇑*i*PN | **Pn** | **06 45 41.5** | **-0.8** |
| SKR | | | | *e*S | **Sn** | **06 45 51.5** | **-3.1** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,440nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=N,180nm,0.3s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=E,180nm,0.3s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,236nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,3µm,0.2s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,3µm,2.0s | | | | | | |
| **PAU** | **Pauzhetka** | **1.52** | **360** | *e*P | **Pn** | **06 45 52.2** | **+1.4** |
| PAU | | | | *e*S | **Sn** | **06 46 07.7** | **-2.0** |
| **PAU** | **Pauzhetka** | **1.52** | **360** | PN | **Pn** | **06 45 52.2** | **+1.4** |
| PAU | | | | S | **Sn** | **06 46 07.7** | **-2.0** |
| **ASAK** | **Asacha** | **2.53** | **15** | *e*P | **Pn** | **06 46 06.7** | **+2.2** |
| **MTVR** | **Mutnovka** | **2.68** | **18** | *e*P | **Pn** | **06 46 08.6** | **+2.1** |
| MTVR | | | | *e*S | **Sn** | **06 46 36.3** | **-1.6** |
| **RUS** | **Russkaya** | **2.70** | **22** | *e*P | **Pn** | **06 46 07.6** | **+0.8** |
| RUS | | | | *e*S | **Sn** | **06 46 34.7** | **-3.6** |
| **RUS** | **Russkaya** | **2.70** | **22** | PN | **Pn** | **06 46 07.6** | **+0.8** |
| RUS | | | | S | **Sn** | **06 46 34.7** | **-3.6** |
| **APC** | **Apacha** | **2.99** | **4** | P | **Pn** | **06 46 13.1** | **+2.5** |
| **APC** | **Apacha** | **2.99** | **4** | PN | **Pn** | **06 46 13.1** | **+2.5** |
| **PET** | **Petropavlovsk** | **3.28** | **20** | *e*P | **Pn** | **06 46 17.1** | **+2.5** |
| PET | | | | *e*S | **Sn** | **06 46 50.6** | **-1.9** |
| **PET** | **Petropavlovsk** | **3.28** | **20** | *e*PN | **Pn** | **06 46 16.2** | **+1.6** |
| PET | | | | S | **Sn** | **06 46 50.6** | **-1.9** |
| **UGLR** | **Uglovaya** | **3.49** | **20** | *e*P | **Pn** | **06 46 20.8** | **+3.2** |
| UGLR | | | | *e*S | **Sn** | **06 46 57.9** | **+0.1** |
| **AVH** | **Avacha** | **3.53** | **19** | *e*P | Pn | 06 46 21.3 | +3.2 |
| AVH | | | | *e*S | **Sn** | **06 46 59.2** | **+0.6** |
| **AVH** | **Avacha** | **3.53** | **19** | PN | Pn | 06 46 21.3 | +3.2 |
| AVH | | | | S | **Sn** | **06 46 59.2** | **+0.6** |
| **KOK** | **Koryaka** | **3.53** | **18** | *e*P | Pn | 06 46 21.7 | +3.5 |
| KOK | | | | *e*S | **Sn** | **06 46 59.7** | **+1.0** |
| **KOK** | **Koryaka** | **3.53** | **18** | PN | Pn | 06 46 21.7 | +3.5 |
| KOK | | | | S | **Sn** | **06 46 59.7** | **+1.0** |
| **SMAR** | **Somma** | **3.54** | **20** | *e*P | Pn | 06 46 21.9 | +3.5 |
| SMAR | | | | *e*S | **Sn** | **06 46 59.3** | **+0.2** |
| **SMAR** | **Somma** | **3.54** | **20** | PN | Pn | 06 46 21.9 | +3.5 |
| SMAR | | | | S | **Sn** | **06 46 59.3** | **+0.2** |
| **SDLR** | **Sedlovina** | **3.57** | **20** | *e*P | **Pn** | **06 46 20.8** | **+2.1** |
| SDLR | | | | *e*S | **Sn** | **06 46 57.9** | **-1.8** |
| **SDLR** | **Sedlovina** | **3.57** | **20** | PN | **Pn** | **06 46 20.8** | **+2.1** |
| SDLR | | | | S | **Sn** | **06 46 57.9** | **-1.8** |
| **NLC** | **Nalytchevo** | **3.59** | **25** | P | **Pn** | **06 46 19.1** | **+0.3** |
| **NLC** | **Nalytchevo** | **3.59** | **25** | PN | **Pn** | **06 46 19.1** | **+0.3** |
| **KRX** | **Arik** | **3.60** | **18** | *e*P | Pn | 06 46 22.3 | +3.2 |
| KRX | | | | *e*S | **Sn** | **06 47 01.5** | **+1.1** |
| **SPN** | **Mys Shipunski** | **3.73** | **31** | *e*P | **Pn** | **06 46 22.4** | **+1.6** |
| SPN | | | | S | **Sn** | **06 47 02.9** | **-0.5** |
| **SPN** | **Mys Shipunski** | **3.73** | **31** | PN | **Pn** | **06 46 22.4** | **+1.6** |
| SPN | | | | S | **Sn** | **06 47 02.9** | **-0.5** |
| **GNL** | **Ganaly** | **3.81** | **10** | *e*P | Pn | 06 46 25.9 | +3.9 |
| **GNL** | **Ganaly** | **3.81** | **10** | PN | Pn | 06 46 25.9 | +3.9 |
| **MKZ** | **Mys Kozlova** | **5.51** | **31** | *e*P | **Pn** | **06 46 46.7** | **+1.7** |
| MKZ | | | | *e*S | **Sn** | **06 47 43.4** | **-3.5** |
| **MKZ** | **Mys Kozlova** | **5.51** | **31** | PN | **Pn** | **06 46 46.7** | **+1.7** |
| **TUMR** | **Tumrok** | **5.71** | **19** | *e*P | Pn | 06 46 52.2 | +4.3 |
| **TUMR** | **Tumrok** | **5.71** | **19** | PN | Pn | 06 46 52.2 | +4.3 |
| **KBTR** | **Krutoberegovo** | **7.23** | **28** | *e*P | **Pn** | **06 47 10.6** | **+2.0** |
| **KBTR** | **Krutoberegovo** | **7.23** | **28** | PN | **Pn** | **06 47 10.6** | **+2.0** |
| **KUR** | **Kuril'sk** | **7.68** | **235** | *i* PN | **Pn** | **06 47 15.0** | **+0.3** |
| **YUK** | **Yuzh-Kuril'sk** | **9.54** | **236** | *i* PN | **Pn** | **06 47 39.9** | **-0.3** |
| **ERM** | **Erimo** | **12.37** | **235** | ⇓*i*PN | Pn | 06 48 15.8 | -3.0 |
| **TLY** | **Talaya** | **33.03** | **294** | *i* P | P | 06 51 49.6 | -4.8 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **HVS** | **Khovu-Aksy** | **39.03** | **297** | ⇑P | P | 06 52 41.1 | -4.6 |
| **AAK** | **Ala-Archa** | **54.64** | **296** | ⇓P | P | 06 54 44.6 | -3.0 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.5s | | | | | | |
| **LVZ** | **Lovozero** | **54.80** | **337** | ⇑P | **P** | **06 54 46.5** | **-1.7** |

*IDC **05** 06:50:53.4±2.5, 6°.48S×130°.70E, h0km, mb3.5/1, mb1 3.8/3, mb1mx3.5/21, mbtmp3.6/3, ML3.7/2, Error ellipse: s-maj=136.0km s-min=33.0km az=71.0*
*AUST **05** 06:50:58.9, 6°.48S×130°.03E, h60km*
**ISC 05 06:50:55.4**±1.0**, 6°.47S**±0°.08×**130°.9E**±0°.2**, h10**km**, n10, σ1.74**/8**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **3.77** | **21** | P | **Pb** | **06 52 04.2** | **+2.1** |
| | baz=4.2,SNR=8.0 | | | | | | |
| **MTN** | **Manton Dam** | **6.34** | **178** | P | Pn | 06 52 33.9 | +4.9 |
| | baz=6.5,SNR=6.9 | | | | | | |
| **KDU** | **Kakadu** | **6.37** | **166** | P | Pn | 06 52 33.5 | +4.2 |
| | baz=6.7,SNR=32 | | | | | | |
| **KNRA** | **Kununurra** | **9.39** | **193** | P | **Pn** | **06 53 11.5** | **+0.6** |
| | baz=9.3,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.80** | **166** | Pn | **Pn** | **06 54 10.3** | **-1.1** |
| | 0.4nm,0.3s,baz=349,slow=13,SNR=18 | | | | | | |
| WRA | | | | Sn | Sn | 06 56 33.1 | -12 |
| | 1.0nm,0.3s,baz=339,slow=22,SNR=12 | | | | | | |
| **PALU** | **Palau** | **14.17** | **15** | P | **P** | **06 54 21.9** | **-2.1** |
| | baz=14,SNR=4.9 | | | | | | |
| **COEN** | **Coen** | **14.17** | **123** | P | **P** | **06 54 24.8** | **+0.9** |
| | baz=15,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **17.34** | **171** | P | **P** | **06 54 58.0** | **-1.2** |
| | 0.4nm,0.3s,baz=346,slow=10,SNR=18 | | | | | | |
| ASAR | | | | S | Sn | 06 57 58.0 | -13 |
| | 0.2nm,0.3s,baz=356,slow=27,SNR=6.6 | | | | | | |
| **WRKA** | **Warakurna** | **18.64** | **187** | P | **Pn** | **06 55 15.1** | **+1.4** |
| | baz=19,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.28** | **326** | P | **P** | **07 01 55.7** | **-1.0** |
| | 0.2nm,0.3s,baz=114,slow=7.8,SNR=3.3 | | | | | | |

*GUC **05** 07:05:02.1±0.4, 36°.96S×73°.44W, h21km±3km, ML3.7*
**ISC 05 07:05:02.1**±3.0**, 36°.9S**±0°.1×**73°.5W**±0°.1**, h14**km**, n16, σ1.13**/19**, 1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCSP** | **San Pedro de C** | **0.31** | **72** | *e*P | **Pb** | **07 05 09.2** | **-0.2** |
| CCSP | | | | *e*S | **Sb** | **07 05 14.3** | **+0.1** |
| CCSP | | | | AML | AML | 07 05 15.3 | |
| | comp=N,15µm,0.2s | | | | | | |
| **COCH** | **Cobquecura** | **0.98** | **35** | ⇓*e*P | **Pb** | **07 05 20.3** | **-0.4** |
| COCH | | | | *e*S | **Sg** | **07 05 34.2** | **+0.5** |
| COCH | | | | AML | AML | 07 05 36.0 | |
| | comp=E,5µm,0.5s | | | | | | |
| **CCHI** | **Chillan** | **1.17** | **74** | *e*P | **Pb** | **07 05 23.2** | **-0.9** |
| CCHI | | | | *e*S | **Sg** | **07 05 39.0** | **-0.9** |
| **TALC** | **Talca** | **2.14** | **45** | *e*P | **Pn** | **07 05 38.5** | **+1.2** |
| TALC | | | | *e*S | **Sb** | **07 06 06.8** | **-0.2** |
| **CLCH** | **Cerro Calan** | **4.28** | **35** | *e*P | **Pn** | **07 06 06.2** | **-0.6** |
| CLCH | | | | *e*S | **Sn** | **07 06 56.7** | **+0.2** |
| **AAGR** | **Agrelo** | **5.41** | **46** | *e*P | **Pn** | **07 06 25.1** | **+2.6** |
| **ARCO** | **CERRO ARCO** | **5.54** | **44** | *e*P | **Pn** | **07 06 26.3** | **+2.1** |
| ARCO | | | | AML | AML | 07 07 59.7 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **ASAL** | **Salagasta** | **5.78** | **43** | *e*P | **Pn** | **07 06 28.7** | **+1.2** |
| **AUSP** | **Uspallata** | **5.79** | **37** | *e*P | **Pn** | **07 06 28.8** | **+1.0** |
| AUSP | | | | *e*S | Sn | 07 07 42.7 | +8.6 |
| **RTLS** | **Leoncito** | **6.18** | **35** | *e*P | **Pn** | **07 06 33.9** | **+0.7** |
| **CFAA** | **Coronel Fontan** | **6.86** | **41** | *e*P | **Pn** | **07 06 42.0** | **-0.3** |
| **RTLL** | **Cerro Villicun** | **6.96** | **38** | *e*P | **Pn** | **07 06 42.8** | **-0.9** |
| **AMOG** | **MOGNA** | **7.28** | **36** | *e*P | **Pn** | **07 06 47.1** | **-0.9** |
| **AVFE** | **Valle Fertil** | **8.02** | **40** | AML | AML | 07 08 51.5 | |
| | comp=Z,4.3nm,0.9s | | | | | | |
| **AGUA** | **GUANDACOL** | **8.52** | **31** | *e*P | **Pn** | **07 07 04.9** | **-0.3** |
| **VCA** | **Vinchina** | **9.30** | **30** | AML | AML | 07 09 34.3 | |
| | comp=Z,6.9nm,0.6s | | | | | | |

**IDC 05 07:16:30.0**±2.5**, 54°.14N**×**86°.44E, h0**km**, mb1 3.4**/2**, mb1mx3.1**/40**, mbtmp3.4**/2**, ML3.1**/2**, Error ellipse: s-maj=20.0km s-min=12.3km az=58.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.98** | **259** | *i* | | 07 23 20.0 | |
| | baz=80,slow=331,SNR=0.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.98** | **259** | Pg | Pg | 07 16 47.2 | -1.4 |
| | 2.8nm,0.3s,baz=75,slow=16,SNR=12 | | | | | | |
| ZALV | | | | Lg | Lg | 07 17 02.4 | |
| | 6.3nm,0.3s,baz=76,slow=28,SNR=19 | | | | | | |
| ZALV | | | | Rg | Rg | 07 17 06.8 | |
| | 5.2nm,0.4s,baz=91,slow=29,SNR=5.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.99** | **237** | Pn | Pn | 07 18 01.0 | +1.2 |
| | 0.4nm,0.3s,baz=54,slow=13,SNR=32 | | | | | | |
| KURBB | | | | Lg | Lg | 07 19 41.5 | |
| | 0.1nm,0.3s,baz=4.5,slow=14,SNR=6.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.82** | **201** | Pn | Pn | 07 18 25.8 | +0.8 |
| | 0.4nm,0.3s,baz=24,slow=13,SNR=9.0 | | | | | | |
| MKAR | | | | Sn | Sn | 07 19 53.5 | -0.7 |
| | 0.2nm,0.3s,baz=27,slow=26,SNR=4.2 | | | | | | |
| MKAR | | | | Lg | Lg | 07 20 36.5 | |
| | 0.0nm,0.3s,baz=20,slow=25,SNR=3.6 | | | | | | |

**IDC 05 07:24:39.3**±6.1**, 5°.32S**×**133°.72E, h0**km**, mb3.9**/1**, mb1 3.7**/3**, mb1mx3.5**/25**, mbtmp3.6**/3**, ML3.2**/2**, Error ellipse: s-maj=351.3km s-min=31.4km az=78.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.55** | **178** | Pn | Pn | 07 28 06.4 | -0.3 |
| | 0.1nm,0.3s,baz=355,slow=13,SNR=5.1 | | | | | | |
| WRA | | | | Sn | Sn | 07 30 46.2 | -2.7 |
| | 0.1nm,0.3s,baz=1.1,slow=22,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **18.25** | **179** | P | Pn | 07 28 54.1 | -0.1 |
| | 0.1nm,0.3s,baz=5.2,slow=11,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.92** | **325** | P | P | 07 35 46.2 | 0.0 |
| | 0.7nm,0.6s,baz=117,slow=8.1,SNR=8.7 | | | | | | |

*CSEM **05** 07:35:45.9±0.2, 39°.12N×21°.65E, h16km±1km, ML2.1, Error ellipse: s-maj=4.2km s-min=3.3km az=132.0*
*THE **05** 07:35:46.6, 39°.11N×21°.68E, h16km±1km, ML2.1/7, Error ellipse: s-maj=1.4km s-min=0.8km az=357.0*
*ATH **05** 07:35:46.1, 39°.12N×21°.69E, h28km±1km, MD2.8/12*
**ISC 05 07:35:46.4**±1.0**, 39°.11N**±0°.03×**21°.68E**±0°.03**, h16**km±7km**, n35, σ0.50**/62**, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EVR** | **Evrytania** | **0.22** | **152** | P | **Pg** | **07 35 51.0** | **-0.5** |
| EVR | | | | S | **Sg** | **07 35 55.3** | **+0.3** |
| **EVR** | **Evrytania** | **0.22** | **152** | P | **Pg** | **07 35 51.0** | **-0.5** |
| EVR | | | | S | **Sg** | **07 35 55.3** | **+0.3** |
| **MAKR** | **Makrakomi, Fth** | **0.37** | **106** | *e*PB | **Pg** | **07 35 54.1** | **+0.1** |
| MAKR | | | | *e*SB | **Sb** | **07 36 00.6** | **+0.4** |
| **MAKR** | **Makrakomi, Fth** | **0.37** | **106** | P | **Pg** | **07 35 54.1** | **+0.1** |
| MAKR | | | | S | **Sb** | **07 36 00.4** | **+0.2** |
| **MAKR** | **Makrakomi, Fth** | **0.37** | **106** | P | **Pg** | **07 35 54.1** | **+0.1** |
| MAKR | | | | S | **Sb** | **07 36 00.4** | **+0.2** |
| **PVO** | **Paravola** | **0.51** | **193** | *e*PN | **Pg** | **07 35 56.2** | **-0.3** |
| PVO | | | | *e*SN | **Sb** | **07 36 04.2** | **0.0** |
| **PVO** | **Paravola** | **0.51** | **193** | P | **Pg** | **07 35 56.1** | **-0.4** |
| PVO | | | | S | **Sb** | **07 36 04.1** | **-0.1** |
| **PVO** | **Paravola** | **0.51** | **193** | P | **Pg** | **07 35 56.1** | **-0.4** |
| PVO | | | | S | **Sb** | **07 36 04.1** | **-0.1** |
| **AGG** | **Agios Georgios** | **0.52** | **100** | *e*PN | **Pg** | **07 35 56.8** | **+0.1** |
| AGG | | | | *e*SN | **Sb** | **07 36 04.8** | **+0.3** |
| **AGG** | **Agios Georgios** | **0.52** | **100** | P | **Pg** | **07 35 56.6** | **-0.1** |
| AGG | | | | S | **Sb** | **07 36 04.7** | **+0.3** |
| **AGG** | **Agios Georgios** | **0.52** | **100** | P | **Pg** | **07 35 56.6** | **-0.1** |
| AGG | | | | S | **Sb** | **07 36 04.7** | **+0.3** |
| **THL** | **Klokotos Trika** | **0.52** | **30** | *e*PN | **Pg** | **07 35 56.6** | **-0.2** |
| THL | | | | *e*SN | **Sb** | **07 36 04.9** | **+0.3** |
| **THL** | **Klokotos Trika** | **0.52** | **30** | P | **Pg** | **07 35 56.5** | **-0.2** |
| **THL** | **Klokotos Trika** | **0.52** | **30** | *e*Pn | **Pg** | **07 35 56.6** | **-0.2** |
| THL | | | | *e*Sn | **Sb** | **07 36 04.9** | **+0.3** |
| **PDO** | **Prodromos** | **0.64** | **217** | *e*PN | **Pb** | **07 35 59.4** | **+0.1** |
| PDO | | | | *e*SN | **Sb** | **07 36 08.8** | **+0.8** |
| **PDO** | **Prodromos** | **0.64** | **217** | P | **Pb** | **07 35 59.3** | **0.0** |
| PDO | | | | S | **Sn** | **07 36 09.6** | **-1.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PDO** | **Prodromos** | **0.64** | **217** | *e*Pn | **Pb** | **07 35 59.4** | **+0.1** |
| PDO | | | | *e*Sn | **Sb** | **07 36 08.8** | **+0.8** |
| **EFP** | **Efpalio** | **0.71** | **165** | *e*PN | **Pb** | **07 35 59.7** | **-0.7** |
| EFP | | | | *e*SN | **Sb** | **07 36 10.5** | **+0.6** |
| **EFP** | **Efpalio** | **0.71** | **165** | P | **Pb** | **07 35 59.9** | **-0.5** |
| EFP | | | | S | **Sb** | **07 36 10.3** | **+0.4** |
| **EFP** | **Efpalio** | **0.71** | **165** | P | **Pb** | **07 35 59.9** | **-0.5** |
| EFP | | | | S | **Sb** | **07 36 10.3** | **+0.4** |
| **SERG** | **Sergoula** | **0.76** | **157** | *e*PN | **Pb** | **07 36 00.7** | **-0.6** |
| SERG | | | | *e*SN | **Sg** | **07 36 12.1** | **+0.9** |
| **SERG** | **Sergoula** | **0.76** | **157** | P | **Pb** | **07 36 00.6** | **-0.7** |
| SERG | | | | S | **Sg** | **07 36 11.8** | **+0.6** |
| **SERG** | **Sergoula** | **0.76** | **157** | P | **Pb** | **07 36 00.6** | **-0.7** |
| SERG | | | | S | **Sg** | **07 36 11.8** | **+0.6** |
| SERG | | | | *e*Sn | **Sg** | **07 36 12.1** | **+0.9** |
| **KALE** | **Kalithea** | **0.81** | **153** | *e*PB | **Pb** | **07 36 01.3** | **-0.9** |
| **KALE** | **Kalithea** | **0.81** | **153** | P | **Pb** | **07 36 01.2** | **-0.9** |
| KALE | | | | S | **Sg** | **07 36 13.8** | **+1.0** |
| **KALE** | **Kalithea** | **0.81** | **153** | *e*Pb | **Pb** | **07 36 01.3** | **-0.9** |
| KALE | | | | S | **Sg** | **07 36 13.8** | **+1.0** |
| **LKD2** | **Lefkada island** | **0.86** | **248** | *e*PN | **Pg** | **07 36 03.1** | **0.0** |
| **LKD2** | **Lefkada island** | **0.86** | **248** | *e*Pn | **Pg** | **07 36 03.1** | **0.0** |
| **LAKA** | **Lakka** | **0.90** | **165** | *e*PN | **Pg** | **07 36 04.0** | **+0.1** |
| **LAKA** | **Lakka** | **0.90** | **165** | *e*Pn | **Pg** | **07 36 04.0** | **+0.1** |
| **DSF** | **Desfina** | **0.97** | **136** | *e*PN | **Pg** | **07 36 05.2** | **+0.1** |
| **DSF** | **Desfina** | **0.97** | **136** | P | **Pg** | **07 36 05.3** | **+0.1** |
| DSF | | | | S | **Sg** | **07 36 18.0** | **+0.2** |
| **DSF** | **Desfina** | **0.97** | **136** | *e*Pn | **Pg** | **07 36 05.2** | **+0.1** |
| DSF | | | | S | **Sg** | **07 36 18.0** | **+0.2** |
| **KLV** | **Kalavryta, Ach** | **1.13** | **161** | *e*PN | **Pb** | **07 36 07.7** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **1.13** | **161** | *e*Pn | **Pb** | **07 36 07.7** | **+0.1** |

*GUC **05** 07:48:16.7±0.5, 34.°42S×72.°80W, h11km±2km, ML3.5*

**ISC 05 07:48:16.7**±2.7**, 34.°43S**±0.°05×**72.°8W**±0.°1**, h2**km±18km**, n16, σ1.°58**/21**, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.65** | **87** | *e*P | **Pg** | **07 48 30.2** | **+1.1** |
| CHPI | | | | *e*S | **Sb** | **07 48 40.0** | **-0.2** |
| **TALC** | **Talca** | **1.36** | **136** | *e*P | **Pn** | **07 48 42.2** | **-0.4** |
| TALC | | | | *e*S | **Sg** | **07 49 01.4** | **+1.1** |
| **COCH** | **Cobquecura** | **1.70** | **180** | *e*P | **Pn** | **07 48 47.5** | **+0.2** |
| COCH | | | | *e*S | **Sb** | **07 49 10.3** | **-0.2** |
| COCH | | | | AML | AML | 07 49 22.4 | |
| | comp=E,780nm,0.4s | | | | | | |
| **CLCH** | **Cerro Calan** | **2.13** | **62** | *e*P | **Pn** | **07 48 54.4** | **+1.0** |
| CLCH | | | | AML | AML | 07 49 31.6 | |
| | comp=N,386nm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **2.17** | **54** | *e*P | **Pb** | **07 48 54.9** | **-1.7** |
| PEL | | | | *e*S | **Sb** | **07 49 24.2** | **+0.2** |
| PEL | | | | AML | AML | 07 49 31.5 | |
| | comp=N,547nm,0.4s | | | | | | |
| **CCHI** | **Chillan** | **2.25** | **165** | *e*P | **Pn** | **07 48 56.0** | **+1.2** |
| CCHI | | | | *e*S | **Sb** | **07 49 26.0** | **-0.2** |
| **AAGR** | **Agrelo** | **3.56** | **69** | *e*P | **Pb** | **07 49 20.1** | **-0.3** |
| AAGR | | | | *e*S | **Sg** | **07 50 13.2** | **+2.2** |
| **ARCO** | **CERRO ARCO** | **3.58** | **65** | *e*P | **Pb** | **07 49 19.3** | **-1.5** |
| ARCO | | | | *e*S | **Sg** | **07 50 09.5** | **-2.3** |
| ARCO | | | | AML | AML | 07 50 22.3 | |
| | comp=Z,21nm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **3.59** | **53** | *e*P | Pb | 07 49 17.7 | -3.4 |
| AUSP | | | | *e*S | **Sg** | **07 50 10.4** | **-1.7** |
| **ASAL** | **Salagasta** | **3.77** | **62** | *e*P | **Pb** | **07 49 21.2** | **-2.9** |
| ASAL | | | | *e*S | **Sg** | **07 50 17.3** | **-0.6** |
| **RTLS** | **Leoncito** | **3.93** | **49** | *e*P | Pb | 07 49 22.2 | -4.6 |
| RTLS | | | | *e*S | **Sg** | **07 50 22.1** | **-0.8** |
| **RTCV** | **Cerro Valdivia** | **4.38** | **56** | *e*P | Pn | 07 49 27.7 | +3.4 |
| **CFAA** | **Coronel Fontan** | **4.75** | **55** | *e*P | **Pn** | **07 49 31.4** | **+2.1** |
| **AMOG** | **MOGNA** | **5.02** | **47** | *e*P | Pn | 07 49 35.6 | +2.5 |
| **AVFE** | **Valle Fertil** | **5.86** | **52** | *e*P | Pn | 07 49 48.1 | +3.4 |
| AVFE | | | | AML | AML | 07 51 13.8 | |
| | comp=Z,9.2nm,0.8s | | | | | | |
| **VCA** | **Vinchina** | **6.89** | **36** | *e*P | **Pn** | **07 50 01.0** | **+2.2** |
| VCA | | | | AML | AML | 07 51 40.7 | |
| | comp=Z,8.5nm,0.7s | | | | | | |

*CSEM **05** 07:58:41.8, 60.°97N×28.°89E, h0km, ML1.8, Mining explosion. After HEL*

**HEL 05 07:58:41.8**±0.1**, 60.°97N×28.°89E, h0**km**, ML1.8, Explosion, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VJF** | **Virojoki** | **0.78** | **238** | *e*P | Pg | 07 58 55.7 | -1.1 |
| VJF | | | | *e*S | Sg | 07 59 06.1 | -0.8 |
| **VJF** | **Virojoki** | **0.78** | **238** | P | Pg | 07 58 55.7 | -1.1 |
| VJF | | | | S | Sg | 07 59 06.1 | -0.8 |
| **FIA0** | **FINESS Array S** | **1.45** | **291** | *e*P | Pn | 07 59 07.5 | -1.7 |
| FIA0 | | | | *e*SN | Sb | 07 59 28.6 | +0.1 |
| **FIA0** | **FINESS Array S** | **1.45** | **291** | P | Pn | 07 59 07.5 | -1.7 |
| FIA0 | | | | Sn | Sb | 07 59 28.6 | +0.1 |
| **PVF** | **Pernaja** | **1.55** | **256** | *e*P | Pn | 07 59 09.2 | -1.3 |
| PVF | | | | MSG | | 07 59 25.1 | |
| | comp=Z,9.5nm,0.2s | | | | | | |
| **PVF** | **Pernaja** | **1.55** | **256** | P | Pn | 07 59 09.2 | -1.4 |
| **KAF** | **Kangasniemi** | **1.69** | **314** | *e*PN | Pn | 07 59 12.8 | +0.2 |
| KAF | | | | MSG | | 07 59 32.8 | |
| | comp=Z,4.4nm,0.2s | | | | | | |
| KAF | | | | *e*SN | Sn | 07 59 34.8 | -0.2 |
| **KAF** | **Kangasniemi** | **1.69** | **314** | Pn | Pn | 07 59 12.7 | +0.1 |
| KAF | | | | Sn | Sn | 07 59 34.7 | -0.2 |
| **SUF** | **Sumiainen** | **2.19** | **325** | *e*PG | Pb | 07 59 20.8 | -1.4 |
| SUF | | | | MSG | | 07 59 48.1 | |
| | comp=Z,5.8nm,0.2s | | | | | | |
| SUF | | | | *e*SG | Sb | 07 59 49.5 | -0.4 |
| **SUF** | **Sumiainen** | **2.19** | **325** | Pg | Pn | 07 59 20.8 | +1.4 |
| SUF | | | | Sg | Sb | 07 59 49.5 | -0.4 |
| **JOF** | **Joensuu** | **2.27** | **29** | *e*P | Pn | 07 59 20.4 | -0.1 |
| JOF | | | | *e*S | Sn | 07 59 48.6 | -0.5 |
| **JOF** | **Joensuu** | **2.27** | **29** | P | Pn | 07 59 20.4 | -0.1 |
| JOF | | | | S | Sn | 07 59 48.6 | -0.6 |
| **KEF** | **Keuruu** | **2.27** | **304** | *e*PB | Pn | 07 59 21.7 | +1.2 |
| KEF | | | | MSG | | 07 59 48.9 | |
| | comp=Z,3.4nm,0.2s | | | | | | |
| KEF | | | | *e*SG | Sb | 07 59 51.5 | -0.7 |
| **KEF** | **Keuruu** | **2.27** | **304** | Pb | Pn | 07 59 21.7 | +1.2 |
| KEF | | | | Sg | Sb | 07 59 51.5 | -0.8 |
| **MEF** | **Metsahovi** | **2.34** | **253** | *e*P | Pn | 07 59 21.6 | +0.1 |
| **MEF** | **Metsahovi** | **2.34** | **253** | P | Pn | 07 59 21.6 | +0.1 |

*CSEM **05** 08:00:11.4, 61.°11N×21.°85E, h0km, ML1.4, Mining explosion. After HEL*

**HEL 05 08:00:11.4**±0.1**, 61.°11N×21.°85E, h0**km**, ML1.4, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAF** | **Rauma** | **0.10** | **206** | *e* | Pg | 08 00 12.9 | -0.4 |
| **RAF** | **Rauma** | **0.10** | **206** | *e*P | Pg | 08 00 13.0 | -0.3 |
| RAF | | | | *e*S | Sg | 08 00 14.7 | +0.1 |
| **RAF** | **Rauma** | **0.10** | **206** | P | Pg | 08 00 12.9 | -0.4 |
| RAF | | | | S | Sg | 08 00 14.6 | +0.1 |
| **AAL** | **Aland** | **1.31** | **225** | *e*P | Pg | 08 00 35.8 | -0.7 |
| AAL | | | | *e*S | Sg | 08 00 51.7 | -1.8 |
| **AAL** | **Aland** | **1.31** | **225** | P | Pg | 08 00 35.8 | -0.7 |
| AAL | | | | S | Sg | 08 00 51.6 | -1.8 |
| **MEF** | **Metsahovi** | **1.54** | **125** | *e*SN | Sg | 08 01 00.9 | +0.1 |
| **MEF** | **Metsahovi** | **1.54** | **125** | Sn | Sg | 08 01 00.9 | +0.1 |
| **KEF** | **Keuruu** | **1.79** | **52** | *e*P | Pn | 08 00 43.0 | -0.5 |
| KEF | | | | *e*S | Sn | 08 01 05.7 | -1.2 |
| **KEF** | **Keuruu** | **1.79** | **52** | P | Pn | 08 00 43.0 | -0.5 |
| KEF | | | | S | Sn | 08 01 05.6 | -1.3 |
| **VAF** | **Ylistaro** | **1.98** | **11** | MSG | | 08 01 08.8 | |
| | comp=Z,1.1nm,0.2s | | | | | | |
| VAF | | | | *e*SG | Sn | 08 01 12.2 | +0.7 |
| **PVF** | **Pernaja** | **2.04** | **104** | MSG | | 08 01 13.7 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| PVF | | | | *e*SG | Sb | 08 01 15.8 | +0.5 |
| **FIA0** | **FINESS Array S** | **2.07** | **79** | *e*PG | Pn | 08 00 48.3 | +1.0 |
| FIA0 | | | | *e*SG | Sb | 08 01 16.1 | +0.2 |
| **FIA0** | **FINESS Array S** | **2.07** | **79** | Pg | Pn | 08 00 48.3 | +1.0 |
| FIA0 | | | | Sg | Sb | 08 01 16.1 | +0.2 |
| **KAF** | **Kangasniemi** | **2.35** | **63** | MSG | | 08 01 21.7 | |
| | comp=Z,0.9nm,0.2s | | | | | | |
| KAF | | | | *e*SG | Sb | 08 01 23.8 | -0.4 |
| **MTSE** | **Matsula** | **2.60** | **157** | *e*SG | Sb | 08 01 31.2 | 0.0 |
| **MTSE** | **Matsula** | **2.60** | **157** | Sg | Sb | 08 01 31.2 | 0.0 |

**IDC 05 08:12:55.8**±2.5**, 2.°30N×128.°43E, h266**km±22km**, mb3.5**/6**, mb1 3.7**/6**, mb1mx3.1**/42**, mbtmp4.1**/6**, Error ellipse: s-maj=59.3km s-min=11.0km az=66.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.85** | **166** | P | P | 08 17 36.2 | -0.2 |
| | 1.8nm,0.4s,baz=344,slow=10,SNR=67 | | | | | | |
| WRA | | | | S | S | 08 21 24.7 | -1.0 |
| | 0.5nm,0.9s,baz=342,slow=16,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **26.35** | **169** | P | P | 08 18 08.1 | +0.1 |
| | 1.8nm,0.5s,baz=354,slow=7.8,SNR=53 | | | | | | |
| ASAR | | | | PcP | PcP | 08 21 27.3 | +0.8 |
| | 0.8nm,0.4s,baz=354,slow=2.3,SNR=15 | | | | | | |
| ASAR | | | | S | S | 08 22 21.2 | 0.0 |
| | 0.3nm,0.8s,baz=356,slow=18,SNR=4.9 | | | | | | |
| ASAR | | | | ScP | ScP | 08 24 43.1 | +2.3 |
| | 0.3nm,0.6s,baz=347,slow=3.5,SNR=4.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **33.06** | **301** | P | P | 08 19 07.9 | +0.9 |
| | 0.8nm,0.3s,baz=121,slow=8.4,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.69** | **325** | P | P | 08 22 31.7 | -0.9 |
| | 0.9nm,0.5s,baz=128,slow=7.1,SNR=6.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.85** | **327** | P | P | 08 22 58.8 | -1.3 |
| | 1.2nm,0.5s,baz=128,slow=5.9,SNR=9.1 | | | | | | |
| **VNDA** | **Vanda** | **81.81** | **173** | P | P | 08 24 45.9 | +1.2 |
| | 1.5nm,0.7s,baz=320,slow=6.8,SNR=13 | | | | | | |

*NNC **05** 08:19:12.6±1.3, 36.°75N×69.°28E, h190km±10km, mb3.1, mpv4.3, Error ellipse: s-maj=13.0km s-min=9.2km az=159.0*

**ISC 05 08:19:10.9**±3.2**, 36.°6N**±0.°2×**69.°1E**±0.°1**, h100**km**, n19, σ1.°19**/23**, 7C-7D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.19** | **354** | ⇓P | Pn | 08 19 51.3 | +5.4 |
| | 27nm,0.4s | | | | | | |
| DZET | | | | ⇓S | Sn | 08 20 21.9 | +9.2 |
| | 310nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.81** | **44** | ⇑P | **Pn** | **08 20 21.6** | **+0.3** |
| | 12nm,0.3s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **08 21 18.2** | **+2.3** |
| | 38nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **6.40** | **23** | ⇓P | **Pn** | **08 20 43.7** | **+1.0** |
| | 26nm,0.5s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **08 21 55.1** | **+0.8** |
| | 9.7nm,0.5s | | | | | | |
| **AML** | **Almayashu** | **6.53** | **31** | P | **Pn** | **08 20 44.5** | **-0.1** |
| | SNR=23 | | | | | | |
| **KK31** | **Karatay Array** | **6.55** | **9** | P | **Pn** | **08 20 46.2** | **+1.6** |
| | 3.0nm,0.3s,baz=197,slow=14,SNR=52 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **08 21 58.7** | **+0.9** |
| | 59nm,0.8s | | | | | | |
| **UCH** | **Uchtor** | **6.97** | **35** | P | **Pn** | **08 20 50.4** | **-0.2** |
| | SNR=63 | | | | | | |
| **EKS2** | **Erkin-Say** | **7.00** | **29** | P | **Pn** | **08 20 51.3** | **+0.4** |
| | SNR=22 | | | | | | |
| **KZA** | **Kyzart** | **7.21** | **39** | P | **Pn** | **08 20 53.0** | **-0.9** |
| | SNR=6.8 | | | | | | |
| **AAK** | **Ala-Archa** | **7.28** | **33** | ⇑P | **Pn** | **08 20 54.6** | **-0.1** |
| | 20nm,0.4s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **08 22 14.8** | **-1.0** |
| | 12nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **7.28** | **33** | P | **Pn** | **08 20 54.8** | **+0.1** |
| | SNR=27 | | | | | | |
| **KBK** | **Karagaybulak** | **7.50** | **35** | P | **Pn** | **08 20 57.7** | **0.0** |
| | SNR=22 | | | | | | |
| **CHMS** | **Chumysh** | **7.69** | **32** | P | **Pn** | **08 20 59.7** | **-0.3** |
| | SNR=21 | | | | | | |
| **USP** | **Ospenovka** | **7.80** | **30** | P | **Pn** | **08 21 01.0** | **-0.7** |
| | SNR=36 | | | | | | |
| **ULHL** | **Ulahol** | **7.85** | **42** | P | **Pn** | **08 21 00.9** | **-1.6** |
| | SNR=13 | | | | | | |
| **TKM2** | **Tokmak 2** | **8.01** | **36** | ⇓P | **Pn** | **08 21 03.4** | **-1.2** |
| | 22nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **8.01** | **36** | P | **Pn** | **08 21 03.8** | **-0.9** |
| | SNR=39 | | | | | | |
| **AB31** | **Akbulak array** | **14.29** | **335** | ⇓P | **Pn** | **08 22 29.4** | **+1.1** |
| | 0.2nm,0.3s,baz=150,slow=14,SNR=3.6 | | | | | | |
| AB31 | | | | ⇑S | **Sn** | **08 25 02.7** | **-2.9** |
| | 1.6nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.53** | **23** | ⇑Pn | **Pn** | **08 22 43.2** | **-0.9** |
| | 1.8nm,0.5s,baz=209,slow=10 | | | | | | |
| **KURK** | **Kurchatov** | **15.64** | **23** | ⇑Pn | **Pn** | **08 22 45.1** | **-0.4** |
| | 2.6nm,0.5s | | | | | | |

**MEX 05 08:24:45.8**±0.4**, 25.°40N×101.°34W, h5**km**, MD3.7, Northern Mexico**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LNIG** | **Linares** | **1.77** | **106** | *e*P | Pn | 08 25 13.4 | -3.7 |
| LNIG | | | | *e*S | Sn | 08 25 35.6 | -4.5 |
| **ZAIG** | **Zacatecas** | **2.85** | **203** | *e*P | Pn | 08 25 29.4 | -2.9 |
| ZAIG | | | | *i* S | Sn | 08 26 03.0 | -4.3 |
| **HPIG** | | **4.17** | **292** | *e*P | Pn | 08 25 49.1 | -1.4 |

*BJI **05** 08:26:22.7, 6.°30N×123.°96E, h599km, mb4.8/44, mB4.8/31*
*KLM **05** 08:26:25.8, 6.°74N×124.°04E, h599km, mb5.1, MS6.1*
*MAN **05** 08:26:26, 6.°76N×123.°76E, h602km, MS5.0*
*MOS **05** 08:26:27.8±0.9, 6.°77N×123.°68E, h617km, mb4.8/47, Error ellipse: s-maj=10.2km s-min=5.3km az=118.1*
*DJA **05** 08:26:27.2±0.6, 7°N±7°×12°4E±°, h565km±5km, M4.8/30, mb5.1/30, mB5.3/25, MLv5.4/9, Mw(mB)4.7/25*
*ISCJB **05** 08:26:27.1±0.1, 6.°77N±0.°02×123.°72E±0.°02, h604km±2km, mb4.8/144, Error ellipse: s-maj=3.9km s-min=2.5km az=159.6*
*NEIC **05** 08:26:28.1±0.3, 6.°76N×123.°69E, h602km±4km, mb5.0/90, Error ellipse: s-maj=4.3km s-min=2.9km az=66.0*
*GCMT **05** 08:26:28.1±0.7, 6.°91N×123.°68E, h606km±7km, MW5.2/41, Moment Tensor Solution. s41,c51; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.41±.46; $M_{\theta\theta}$5.77±.66; $M_{\phi\phi}$-4.37±.83; $M_{r\theta}$1.00±.68; $M_{\theta\phi}$2.99±.49; $M_{\phi r}$-4.11±.81; Best double couple: $M_0$7.25900×$10^{16}$ NP1:$\phi_s$35.00000°, δ68.00000°, λ-155.00000°. NP2:$\phi_s$295.00000°, δ67.00000°, λ-24.00000°. Principal axes: T 6.5880, Plg1.0000°, Azm164.0000°; N 1.3310, Plg57.0000°, Azm73.0000°; P -7.9290, Plg33.0000°, Azm255.0000°; nsta1 refers to body waves, cutoff=40s.*
*AUST **05** 08:26:28.5±0.4, 6.°62N×123.°70E, h607km±5km Error ellipse: s-maj=5.7km s-min=3.1km az=34.0*
*IDC **05** 08:26:29.2±0.8, 6.°74N×123.°73E, h619km±10km, mb3.9/36, mb1 3.9/37, mb1mx3.9/48, mbtmp4.9/37, Error ellipse: s-maj=10.4km s-min=5.9km az=69.0*

**ISC 05 08:26:28.0**±0.3**, 6.°76N**±0.°03×**123.°75E**±0.°04**, h602**km±3km**, h603**km**:pP-P, n521, σ1.°16**/592**, mb4.8**/152**, 21C-24D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PAGZ** | **Pagadian** | **1.14** | **341** | *e*P | **P** | **08 27 39.1** | **-0.7** |
| **GSPH** | **General Santos** | **1.36** | **119** | *e*P | **P** | **08 27 40.5** | **0.0** |
| **BUKP** | **Musuan** | **1.71** | **49** | *e*P | **P** | **08 27 41.1** | **-0.3** |
| **DCPH** | **Dipolog City** | **1.86** | **348** | ⇑*e*P | **P** | **08 27 41.1** | **-0.8** |
| DCPH | | | | *e*S | **S** | **08 28 40.2** | **-1.9** |
| **CGP** | **Cagayan de Oro** | **1.93** | **29** | *e*P | **P** | **08 27 41.3** | **-0.9** |
| **MATI** | **Mati** | **2.49** | **86** | *e*P | **P** | **08 27 43.4** | **-1.3** |
| **SNPH** | **Sibulan** | **2.62** | **349** | ⇑*e*P | **P** | **08 27 44.8** | **-0.5** |
| SNPH | | | | *i* S | **S** | **08 28 44.7** | **-3.7** |
| **BUTP** | **Butuan** | **2.87** | **40** | *e*P | **P** | **08 27 46.6** | **0.0** |
| **BIPH** | **Bislig** | **2.95** | **61** | ⇓*e*P | **P** | **08 27 46.0** | **-1.1** |
| BIPH | | | | *i* S | **S** | **08 28 47.9** | **-3.4** |
| **SCPH** | **Surigao** | **3.46** | **30** | ⇑*i*P | **P** | **08 27 50.0** | **-0.1** |
| **SGSI** | **Sangihe** | **3.53** | **150** | P | **P** | **08 27 49.3** | **-1.3** |
| SGSI | | | | S | **S** | **08 28 54.6** | **-3.1** |
| **MSLP** | **Maasin** | **3.53** | **18** | *e*P | **P** | **08 27 50.0** | **-0.5** |
| **GUIM** | **Jordan** | **4.01** | **343** | *e*P | **P** | **08 27 51.6** | **-2.1** |
| **PLP** | **Palo** | **4.54** | **15** | ⇓*e*P | **P** | **08 27 57.2** | **-0.4** |
| **RCP** | **Roxas** | **4.88** | **348** | ⇑*e*P | **P** | **08 27 58.5** | **-1.5** |
| **CUYO** | **Cuyo Island** | **4.88** | **327** | *e*P | **P** | **08 27 59.4** | **-0.7** |
| **MYLDM** | **Lahad Datu** | **5.46** | **254** | *e*P | **P** | **08 28 06.2** | **+1.4** |
| MYLDM | | | | *e*S | **S** | **08 29 26.7** | **+3.1** |
| **PPR** | **Puerto Princes** | **5.81** | **301** | ⇓*e*P | **P** | **08 28 08.0** | **+0.4** |
| **OTRP** | **Odiongan** | **5.83** | **343** | *e*P | **P** | **08 28 07.3** | **-0.5** |
| **GTOI** | **Gorontalo** | **6.13** | **187** | P | **P** | **08 28 08.1** | **-2.3** |
| | 832nm,0.7s,18µm2.5nm | | | | | | |
| GTOI | | | | S | **S** | **08 29 32.1** | **-1.9** |
| | 832nm,0.7s,18µm2.5nm | | | | | | |
| **KMSI** | **Cibinong** | **6.15** | **178** | P | **P** | **08 28 10.5** | **-0.1** |
| | 1µm,0.9s,3.3nm | | | | | | |
| **ENPP** | **El Nido** | **6.15** | **316** | *e*P | **P** | **08 28 10.3** | **-0.2** |
| **SJMP** | **San Jose** | **6.23** | **336** | *e*P | **P** | **08 28 11.4** | **+0.2** |
| **BUSP** | **Coron** | **6.28** | **326** | *e*P | **P** | **08 28 11.3** | **-0.4** |
| **MRSI** | **Marisa** | **6.50** | **196** | P | **P** | **08 28 12.9** | **-0.8** |
| | 185nm,0.8s,0.6nm | | | | | | |
| **KDM** | **Kudat** | **6.87** | **272** | ⇓P | **P** | **08 28 16.5** | **-0.5** |
| **TNTI** | **Ternate** | **6.95** | **149** | P | **P** | **08 28 16.8** | **-0.9** |
| | 407nm,1.5s,5µm5.8nm | | | | | | |
| **TNTI** | **Ternate** | **6.95** | **149** | *e*Pn | **P** | **08 28 16.8** | **-0.9** |
| TNTI | | | | *e*Sn | **S** | **08 29 50.1** | **+2.6** |
| **MPSI** | **Mapaga** | **7.45** | **211** | P | **P** | **08 28 21.4** | **-0.9** |
| | 47nm,0.6s,4µm0.4nm | | | | | | |
| **KKM** | **Kota Kinabalu** | **7.53** | **265** | P | **P** | **08 28 22.5** | **-0.6** |
| | baz=7.5 | | | | | | |
| **KKM** | **Kota Kinabalu** | **7.53** | **265** | ⇑P | **P** | **08 28 22.7** | **-0.4** |
| **KKM** | **Kota Kinabalu** | **7.53** | **265** | *e*Pn | **P** | **08 28 22.1** | **-1.0** |
| KKM | | | | *e*Sn | **S** | **08 29 54.0** | **-3.3** |
| **LUBP** | **Lubang** | **7.74** | **334** | *e*P | **P** | **08 28 24.5** | **-0.5** |
| **TGY** | **Tagaytay City** | **7.81** | **339** | ⇑*i*P | **P** | **08 28 25.3** | **-0.4** |
| **LUWI** | **Luwuk** | **7.81** | **187** | P | **P** | **08 28 24.6** | **-1.1** |
| | baz=7.7 | | | | | | |
| **LUWI** | **Luwuk** | **7.81** | **187** | P | **P** | **08 28 26.3** | **+0.6** |
| | 580nm,0.9s,16µm | | | | | | |
| **LUWI** | **Luwuk** | **7.81** | **187** | *e*Pn | **P** | **08 28 24.2** | **-1.5** |
| LUWI | | | | *e*Sn | **S** | **08 30 01.6** | **-0.4** |
| **APSI** | **Ampana** | **7.90** | **195** | P | **P** | **08 28 26.2** | **-0.4** |
| | 350nm,0.6s,4µm | | | | | | |
| **LBMI** | **Labuha** | **8.24** | **153** | P | **P** | **08 28 29.1** | **-0.7** |
| | 810nm,1.0s,7µm | | | | | | |
| **PCI** | **Palu** | **8.56** | **207** | P | **P** | **08 28 31.2** | **-1.6** |
| | 130nm,0.7s,2µm | | | | | | |
| **SANI** | **Sanana** | **9.03** | **166** | P | **P** | **08 28 35.6** | **-1.8** |
| | 1µm,0.8s,15µm | | | | | | |
| **PALP** | **Palanan** | **10.32** | **353** | *e*P | **P** | **08 28 49.9** | **-0.1** |
| **NLAI** | **Namlea** | **10.48** | **161** | P | **P** | **08 28 52.7** | **+1.1** |
| | 912nm,0.7s,7µm | | | | | | |
| **TTSI** | **Tana Toraja** | **10.50** | **202** | P | **P** | **08 28 53.0** | **+1.1** |
| | 120nm,0.7s,2µm | | | | | | |
| **BKB** | **Balikpapan** | **10.50** | **221** | P | **P** | **08 28 50.8** | **-1.1** |
| | 128nm,1.2s | | | | | | |
| **SWI** | **Sorong** | **10.65** | **135** | P | **P** | **08 28 54.3** | **+0.9** |
| | baz=11,SNR=19 | | | | | | |
| **SWI** | **Sorong** | **10.65** | **135** | P | **P** | **08 28 54.5** | **+1.2** |
| | 264nm,0.9s,4µm | | | | | | |
| **PALU** | **Palau** | **10.66** | **86** | P | **P** | **08 28 54.4** | **+1.0** |
| | baz=11 | | | | | | |
| **KDI** | **Kendari** | **10.70** | **186** | P | **P** | **08 28 54.6** | **+0.7** |
| | 131nm,1.0s,1µm | | | | | | |
| **SZP** | **Santa** | **11.20** | **344** | *e*Pn | **P** | **08 28 57.7** | **-1.0** |
| SZP | | | | *e*Sn | **S** | **08 31 02.1** | **-0.4** |
| **BTM** | **Bintulu** | **11.20** | **252** | ⇑P | **P** | **08 28 59.0** | **+0.1** |
| **ABRA** | **Dolores** | **11.22** | **345** | *e*P | **P** | **08 28 56.7** | **-2.3** |
| **AAI** | **Ambon** | **11.28** | **157** | P | **P** | **08 29 00.4** | **+0.7** |
| | 737nm,0.6s,6µm | | | | | | |
| **MSAI** | **Masohi** | **11.29** | **153** | P | **P** | **08 29 01.2** | **+1.5** |
| | 362nm,0.7s,3µm | | | | | | |
| **APYP** | **Conner** | **11.31** | **348** | *e*P | **P** | **08 28 58.3** | **-1.4** |
| **SPSI** | **Sidrap Palu** | **11.37** | **201** | P | **P** | **08 29 00.7** | **+0.2** |
| | 69nm,0.7s,498nm | | | | | | |
| **PIP** | **Pasuquin** | **11.90** | **345** | ⇓*e*P | **P** | **08 29 03.5** | **-2.2** |
| **SBUM** | **Sibu** | **12.27** | **250** | ⇓P | **P** | **08 29 10.0** | **+0.4** |
| **SBUM** | **Sibu** | **12.27** | **250** | *e*P | **P** | **08 29 09.9** | **+0.4** |
| SBUM | | | | *e*S | **S** | **08 31 24.7** | **+2.5** |
| **KAPI** | **Kappang** | **12.36** | **199** | P | **P** | **08 29 10.7** | **+0.3** |
| | 2.7nm,0.3s,baz=29,slow=3.7,SNR=7.5 | | | | | | |
| **KAPI** | **Kappang** | **12.36** | **199** | *e*Pn | **P** | **08 29 09.7** | **-0.7** |
| **BKSI** | **Bulukumba** | **12.54** | **197** | P | **P** | **08 29 13.9** | **+1.7** |
| | 17nm,0.8s,465nm | | | | | | |
| **BNDI** | **Bandanaira** | **12.78** | **151** | P | **P** | **08 29 15.5** | **+0.9** |
| | 971nm,1.0s,9µm | | | | | | |
| **FAKI** | **Fak Fak** | **12.82** | **138** | P | **P** | **08 29 15.7** | **+0.6** |
| | baz=13,SNR=118 | | | | | | |
| **FAKI** | **Fak Fak** | **12.82** | **138** | P | **P** | **08 29 15.5** | **+0.5** |
| | 912nm,0.8s,7µm | | | | | | |
| **FAKI** | **Fak Fak** | **12.82** | **138** | *e*Pn | **P** | **08 29 15.6** | **+0.5** |
| **BBKI** | **Banjar Baru** | **13.50** | **221** | P | **P** | **08 29 23.5** | **+1.5** |
| | 61nm,0.6s | | | | | | |
| **KSM** | **Kuching** | **14.40** | **249** | P | **P** | **08 29 30.5** | **-0.3** |
| | baz=14 | | | | | | |
| **KSM** | **Kuching** | **14.40** | **249** | ⇓P | **P** | **08 29 30.7** | **0.0** |
| **KSM** | **Kuching** | **14.40** | **249** | *e*Pn | **P** | **08 29 30.5** | **-0.3** |
| KSM | | | | *e*Sn | **S** | **08 32 02.1** | **+2.2** |
| **PBKI** | **Pangkalan Bun** | **15.29** | **232** | P | **P** | **08 29 39.7** | **+0.8** |
| | 705nm,0.9s,7µm | | | | | | |
| **MMRI** | **Maumere** | **15.37** | **186** | P | **P** | **08 29 41.7** | **+2.1** |
| **MMRI** | **Maumere** | **15.37** | **186** | *e*P | **P** | **08 29 41.0** | **+1.5** |
| | 140nm,0.7s | | | | | | |
| MMRI | | | | *e*S | **S** | **08 32 20.0** | **+4.2** |
| **DLV** | **T Lat** | **15.92** | **290** | *e*P | **P** | **08 29 45.2** | **+0.4** |
| | 44nm,0.7s | | | | | | |
| **TWG** | **Pinlang** | **16.18** | **351** | *e*P | **P** | **08 29 45.8** | **-1.2** |
| | 620nm,0.5s | | | | | | |
| TWG | | | | *e*S | **S** | **08 32 28.8** | **-0.2** |
| **SOEI** | **Soe** | **16.41** | **178** | P | **P** | **08 29 49.3** | **0.0** |
| | baz=16,SNR=19 | | | | | | |
| **SOEI** | **Soe** | **16.41** | **178** | *e*P | **P** | **08 29 48.9** | **-0.4** |
| | 112nm,0.8s | | | | | | |
| SOEI | | | | *e*S | **S** | **08 32 34.3** | **+1.1** |
| **SAUI** | **Saumlaki** | **16.46** | **153** | *e*P | **P** | **08 29 49.7** | **0.0** |
| | 196nm,0.6s | | | | | | |
| **YULB** | **Yu-li** | **16.71** | **352** | *e*P | **P** | **08 29 50.1** | **-1.7** |
| | 95nm,0.9s | | | | | | |
| **TPUB** | **Ta-pu** | **16.72** | **350** | *e*P | **P** | **08 29 51.8** | **-0.1** |
| | 838nm,0.6s | | | | | | |
| TPUB | | | | *e*S | **S** | **08 32 41.9** | **+4.1** |
| **SSLB** | **Suanglung** | **17.14** | **351** | *e*P | **P** | **08 29 55.2** | **-0.6** |
| | 199nm,0.6s | | | | | | |
| SSLB | | | | *e*S | **S** | **08 32 44.0** | **-0.8** |
| **NACB** | **Ninganchiao** | **17.44** | **353** | *e*P | **P** | **08 29 58.0** | **-0.4** |
| | 40nm,0.8s | | | | | | |
| **YOJ** | **Yonaguni jima** | **17.62** | **358** | *e*P | **P** | **08 30 01.2** | **+1.2** |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,223nm,0.7s | | | | | | |
| **YOJ** | **Yonaguni jima** | **17.62** | **358** | *e*P | **P** | **08 30 01.2** | **+1.2** |
| | comp=Z,224nm,0.7s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **17.90** | **212** | P | **P** | **08 30 04.0** | **+1.2** |
| | baz=18 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **17.90** | **212** | *e*P | **P** | **08 30 03.3** | **+0.5** |
| | comp=Z,60nm,0.7s | | | | | | |
| **YHNB** | **Yeheng** | **17.96** | **353** | *e*P | **P** | **08 30 03.0** | **-0.2** |
| | comp=Z,142nm,0.6s | | | | | | |
| **QIZ** | **Qiongzhong** | **18.22** | **313** | P | **P** | **08 30 06.6** | **+1.0** |
| QIZ | | | | sP | **sP** | **08 32 31.8** | **-1.8** |
| QIZ | | | | S | **S** | **08 33 03.8** | **+1.6** |
| QIZ | | | | PMZ | | | |
| | comp=Z,54nm,1.7s | | | | | | |
| **TATO** | **Taipei** | **18.25** | **353** | *e*P | **P** | **08 30 04.5** | **-1.2** |
| | comp=Z,94nm,0.9s | | | | | | |
| **QZH** | **Quanzhou** | **18.75** | **345** | ⇓*i*P | **P** | **08 30 11.7** | **+1.4** |
| **JAY** | **Jayapura** | **19.27** | **118** | P | **P** | **08 30 16.2** | **+0.9** |
| | baz=19,SNR=5.2 | | | | | | |
| **JOW** | **Kunigami** | **20.42** | **12** | P | **P** | **08 30 25.6** | **+0.1** |
| | comp=Z,2.3nm,0.4s,baz=0.0,slow=20 | | | | | | |
| **MYKOM** | **Kota Tinggi** | **20.45** | **257** | ⇑P | **P** | **08 30 26.1** | **+0.3** |
| **MYKOM** | **Kota Tinggi** | **20.45** | **257** | *e*P | **P** | **08 30 25.7** | **-0.2** |
| | comp=Z,98nm,0.7s | | | | | | |
| **KTGM** | **Kuala Trenggan** | **20.55** | **267** | ⇑P | **P** | **08 30 27.3** | **+0.5** |
| **BTDF** | **Bukit Timah Da** | **20.63** | **256** | P | **P** | **08 30 27.0** | **-0.6** |
| | baz=21 | | | | | | |
| **MTN** | **Manton Dam** | **20.81** | **159** | P | **P** | **08 30 28.7** | **-0.4** |
| | baz=21,SNR=14 | | | | | | |
| **MTN** | **Manton Dam** | **20.81** | **159** | *e*P | **P** | **08 30 28.8** | **-0.3** |
| | comp=Z,67nm,0.3s | | | | | | |
| **KGM** | **Kluang** | **20.91** | **258** | ⇑P | **P** | **08 30 30.3** | **+0.3** |
| **KDU** | **Kakadu** | **21.17** | **156** | P | **P** | **08 30 31.8** | **-0.5** |
| | baz=21,SNR=28 | | | | | | |
| **SKNT** | **Sakolnakorn** | **21.83** | **299** | P | **P** | **08 30 39.2** | **+1.0** |
| | comp=Z,188nm,1.3s | | | | | | |
| **FRIM** | **Kepong** | **22.32** | **262** | ⇓P | **P** | **08 30 42.6** | **0.0** |
| **KHON** | **Khomkaen** | **22.59** | **297** | P | **P** | **08 30 45.4** | **+0.5** |
| | comp=Z,42nm,0.5s,comp=Z,1µm | | | | | | |
| **IPM** | **Ipoh** | **22.73** | **265** | ⇓P | **P** | **08 30 46.1** | **-0.2** |
| **IPM** | **Ipoh** | **22.73** | **265** | *e*P | **P** | **08 30 45.5** | **-0.8** |
| | comp=Z,26nm,0.7s | | | | | | |
| **KNRA** | **Kununurra** | **22.84** | **167** | P | **P** | **08 30 47.1** | **0.0** |
| | baz=23,SNR=12 | | | | | | |
| **KULM** | **Kulim** | **23.02** | **268** | ⇓P | **P** | **08 30 48.8** | **0.0** |
| **KULM** | **Kulim** | **23.02** | **268** | *e*P | **P** | **08 30 48.7** | **-0.2** |
| | comp=Z,50nm,1.1s | | | | | | |
| **MNAI** | **Manna** | **23.52** | **243** | *e*P | **P** | **08 30 51.6** | **-1.6** |
| | comp=Z,636nm,1.4s | | | | | | |
| **BKNI** | **Bangkinang** | **23.54** | **255** | *e*P | **P** | **08 30 53.0** | **-0.5** |
| | comp=Z,75nm,0.6s | | | | | | |
| **TRTT** | **Trang** | **23.89** | **274** | P | **P** | **08 30 56.8** | **+0.2** |

comp=Z,44nm,1.1s,comp=Z,767nm
**SRIT Nakonsritamara 24.00 276** P **P** **08 30 57.9 +0.4**
comp=Z,81nm,0.9s
**PBKT Sadao Pong 24.32 296** P **P** **08 31 00.9 +0.6**
comp=Z,69nm,0.8s
**PPI Padang Panjang 24.38 254** P **P** **08 31 00.2 -0.7**
baz=24,SNR=9.4
**LOEI Loei 24.41 298** P **P** **08 30 58.6 -2.5**
comp=Z,79nm,0.7s
**PHET Kaeng Krachan 24.53 286** P **P** **08 31 02.8 +0.6**
comp=Z,56nm,0.7s,comp=Z,477nm
**PSI Prapat 25.05 262** *eP* **P** **08 31 07.2 +0.3**
PSI pmax pmax
comp=Z,85nm,0.9s
**PSI Prapat 25.05 262** P **P** **08 31 06.7 -0.3**
baz=25
**PSI Prapat 25.05 262** *eP* **P** **08 31 07.2 +0.3**
comp=Z,85nm,0.9s
**UTTA Uttaradit 25.13 298** P **P** **08 31 07.8 +0.4**
comp=Z,12nm,0.7s,comp=Z,137nm
**WHN Wuhan 25.26 341** ⇑P **P** **08 31 10.0 +1.7**
**GYA Guiyang 25.47 322** P **P** **08 31 11.8 +1.3**
GYA sP **sP** **08 33 52.6 -0.7**
GYA S **S** **08 34 58.4 +1.6**
GYA ScP **ScP** **08 37 06.0 +1.5**
GYA PcS **PcS** **08 38 02.2 -0.5**
GYA ScS **ScS** **08 40 55.5 +0.6**
GYA PMZ
comp=Z,20nm,0.7s
GYA PMZ
comp=Z,130nm,4.8s
**NJ2 Nanjing 25.58 350** *eP* **P** **08 31 12.1 +1.0**
NJ2 PMZ
comp=Z,40nm,1.2s
**UMPA Umpang Tak 26.11 293** P **P** **08 31 16.6 +0.5**
comp=Z,21nm,1.0s,comp=Z,419nm
**CRAI Chiangrai 26.33 303** P **P** **08 31 13.6 -4.4**
comp=Z,19nm,0.8s,comp=Z,20µm
**GSI Gunungsitoli 26.66 259** P **P** **08 31 19.7 -1.3**
baz=27
**GSI Gunungsitoli 26.66 259** *eP* **P** **08 31 19.6 -1.3**
comp=Z,284nm,0.6s
**LHMI Lhok Sumawe 26.70 268** *eP* **P** **08 31 21.7 +0.4**
comp=Z,152nm,1.0s
**CM01 Chiang Mai Arr 26.79 298** P **P** **08 31 23.1 +1.1**
baz=27
**CM01 Chiang Mai Arr 26.79 298** *eP* **P** **08 31 22.7 +0.7**
**CMAR Chiang Mai Arr 26.82 298** P **P** **08 31 22.3 0.0**
comp=Z,23nm,0.7s,baz=114,slow=7.2,SNR=64
CMAR PcP **PcP** **08 34 23.8 -0.7**
comp=Z,2.1nm,0.4s,baz=146,slow=0.9,SNR=7.7
CMAR S **S** **08 35 16.2 -1.6**
comp=Z,0.6nm,0.3s,baz=102,slow=13,SNR=4.6
CMAR ScP **ScP** **08 37 07.2 -1.3**
comp=Z,2.6nm,0.8s,baz=132,slow=1.5,SNR=13
**CMAR Chiang Mai Arr 26.82 298** *ceP* **P** **08 31 23.2 +0.9**
CMAR pmax pmax
comp=Z,23nm,0.7s
**CM13 Chiang Mai Arr 26.83 298** P **P** **08 31 23.5 +1.1**
baz=27
**CHTO Chiang Mai 26.95 299** P **P** **08 31 23.9 +0.5**
comp=Z,321nm,1.1s,comp=Z,4µm
**CHTO Chiang Mai 26.95 299** *eP* **P** **08 31 24.3 +0.8**
CHTO pmax pmax
comp=Z,45nm,0.5s
**CHTO Chiang Mai 26.95 299** *eP* **P** **08 31 24.3 +0.8**
comp=Z,45nm,0.5s
**JNU Nakatsue 27.05 13** P **P** **08 31 23.6 -0.6**
comp=Z,5.9nm,0.5s,baz=341,slow=2.1,SNR=8.6
**JNU Nakatsue 27.05 13** *eP* **P** **08 31 23.9 -0.2**
comp=Z,187nm,2.6s
**KMI Kunming 27.16 315** P **P** **08 31 26.7 +1.3**
KMI S **S** **08 35 30.2 +6.8**
KMI PMZ
comp=Z,15nm,0.5s
KMI PMZ
comp=Z,110nm,4.2s
**CMAI Chiengmai2 27.32 301** P **P** **08 31 27.3 +0.5**
comp=Z,25nm,0.8s
**COEN Coen 28.20 137** P **P** **08 31 33.8 -0.6**
baz=28,SNR=246
**COEN Coen 28.20 137** *eP* **P** **08 31 33.7 -0.6**
comp=Z,137nm,0.4s
**PMG Port Moresby 28.32 124** P **P** **08 31 34.8 -0.5**
comp=Z,37nm,0.7s,baz=355,slow=6.1,SNR=8.5
**PMG Port Moresby 28.32 124** *c iP* **P** **08 31 35.2 -0.1**
PMG pmax pmax
comp=Z,194nm,1.7s
**PMG Port Moresby 28.32 124** P **P** **08 31 35.3 0.0**
baz=28
**PMG Port Moresby 28.32 124** *eP* **P** **08 31 35.0 -0.3**
comp=Z,80nm,1.0s
**WB7 Warramunga Arr 28.43 159** P **P** **08 31 35.9 -0.4**
baz=28
**WRAB Tennant Creek 28.50 159** *eP* **P** **08 31 36.5 -0.4**
**WRAB Tennant Creek 28.50 159** P **P** **08 31 36.7 -0.2**
comp=Z,2µm,0.4s
**WRAB Tennant Creek 28.50 159** *eP* **P** **08 31 36.5 -0.4**
comp=Z,177nm,0.5s
**WRA Warramunga Arr 28.50 159** P **P** **08 31 36.3 -0.6**
comp=Z,163nm,0.5s,baz=331,slow=11,SNR=565
WRA S **S** **08 35 39.5 -4.4**
comp=Z,18nm,0.7s,baz=334,slow=16,SNR=12
WRA ScP **ScP** **08 37 12.9 -0.8**
comp=Z,17nm,0.5s,baz=343,slow=3.2,SNR=18
**TJN Taejon 29.66 6**⇓ *eP* **P** **08 31 46.6 -0.1**
**XAN Xi'an 30.42 335** P **P** **08 31 53.8 +0.6**
XAN PMZ
comp=Z,27nm,0.7s
XAN PMZ
comp=Z,48nm,5.9s
**CD2 Chengdu 30.47 325** *eP* **P** **08 31 53.3 -0.4**
CD2 sP **sP** **08 34 38.9 -1.0**
CD2 S **S** **08 36 14.5 +0.5**
CD2 SS **SS** **08 39 24.5 +1.4**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,140nm,5.4s
**KSAR Wonju Array Be 30.77 6** P **P** **08 31 57.2 +1.1**
**KSAR Wonju Array Be 30.77 6** P **P** **08 31 57.2 +1.1**
**KSRS Korea Array 30.79 6** P **P** **08 31 57.2 +0.9**
comp=Z,5.0nm,0.4s,baz=180,slow=9.7,SNR=19
**QIS Mount Isa 31.30 150** P **P** **08 32 01.2 +0.3**
baz=31,SNR=214
**AS14 Alice Springs 31.81 162** P **P** **08 32 05.8 +0.6**
baz=32
**ASAR Alice Springs 31.82 162** P **P** **08 32 05.8 +0.5**
comp=Z,110nm,0.3s,baz=340,slow=7.1,SNR=2585
ASAR PcP **PcP** **08 34 36.5 -0.9**
comp=Z,5.5nm,0.5s,baz=339,slow=2.7,SNR=5.0
ASAR S **S** **08 36 33.8 -1.0**
comp=Z,46nm,0.7s,baz=350,slow=23,SNR=43
ASAR ScP **ScP** **08 37 22.1 -2.5**
comp=Z,8.5nm,0.5s,baz=339,slow=2.9,SNR=9.4
**AS01 Alice Springs 31.84 162** *eP* **P** **08 32 05.7 +0.3**
**AS03 Alice Springs 31.84 162** P **P** **08 32 06.1 +0.6**
baz=32
**WRKA Warakurna 31.91 172** P **P** **08 32 06.4 +0.4**
baz=32,SNR=233
**MAJO Matsushiro 32.46 22**⇓ *iP* **P** **08 32 10.1 -0.4**
MAJO pmax pmax
comp=Z,80nm,1.1s
**MAJO Matsushiro 32.46 22** *eP* **P** **08 32 09.9 -0.6**
comp=Z,7.8nm,0.5s
**MAT Matsushiro 32.46 22** P **P** **08 32 09.6 -0.9**
**MJAR Matsushiro Ar 32.46 22** P **P** **08 32 09.9 -0.6**
comp=Z,11nm,0.7s,baz=195,slow=9.6,SNR=29
MJAR PcP **PcP** **08 34 39.0 +0.1**
comp=Z,0.7nm,0.5s,baz=188,slow=2.6,SNR=4.0
MJAR ScP **ScP** **08 37 25.3 -1.3**
comp=Z,1.4nm,0.8s,baz=169,slow=2.5,SNR=4.0
**MEEK Meekatharra 33.57 188** P **P** **08 32 19.8 -0.2**
baz=34,SNR=9.1
**BJT Baijiatuau 33.81 350** *eP* **P** **08 32 22.2 +0.4**
BJT pmax pmax
comp=Z,20nm,0.8s
**BJT Baijiatuau 33.81 350** *eP* **P** **08 32 22.2 +0.4**
comp=Z,20nm,0.8s
**BJI Beijing 33.83 350** P **P** **08 32 22.1 +0.2**
BJI S **S** **08 37 06.6 +2.0**
BJI PMZ
comp=Z,26nm,1.0s
BJI PMZ
comp=Z,41nm,3.0s
**LZH Lanzhou 34.42 331** *eP* **P** **08 32 29.6 +2.5**
LZH pP **PP** **08 34 09.9 -0.8**
LZH PcP **PcP** **08 34 45.7 +0.8**
LZH sP **sP** **08 35 17.6 +2.6**
LZH *e*S **S** **08 37 17.0 +3.0**
LZH PcS **PcS** **08 38 33.0 +0.5**
LZH sS **sS** **08 40 18.5 +1.6**
LZH ScS **ScS** **08 41 39.2 +0.5**
LZH PMZ
comp=Z,30nm,1.2s
LZH PMZ
comp=Z,130nm,4.2s
**CTA Charters Tower 34.66 141** P **P** **08 32 30.4 +1.2**
comp=Z,45nm,0.6s,baz=312,slow=9.2,SNR=64
**CTA Charters Tower 34.66 141** P **P** **08 32 30.4 +1.2**
baz=35
**CTAO Charters Tower 34.66 141** *eP* **P** **08 32 29.9 +0.7**
CTAO pmax pmax
comp=Z,51nm,0.6s
**CTAO Charters Tower 34.66 141** *eP* **P** **08 32 29.9 +0.7**
comp=Z,51nm,0.6s
**HHC Hu-ho-hao-te 35.65 344** *eP* **P** **08 32 37.4 +0.2**
HHC pP **pP** **08 34 19.0 +2.5**
HHC S **S** **08 37 30.5 -1.6**
HHC sS **sS** **08 40 35.5 -0.5**
HHC SS **SS** **08 40 40.7 -8.5**
HHC PMZ
comp=Z,17nm,0.7s
HHC PMZ
comp=Z,110nm,3.6s
**MSHR Mys Shultsa 36.27 9**⇓ *eP* **P** **08 32 42.4 +0.3**
**MORW Morawa 36.38 191** P **P** **08 32 43.2 0.0**
baz=36,SNR=4.7
**FORT Forrest 37.55 174** P **P** **08 32 53.1 +0.5**
baz=38,SNR=141
**FORT Forrest 37.55 174** *eP* **P** **08 32 53.2 +0.5**
comp=Z,172nm,0.6s
**BLDU Ballidu 37.77 190** P **P** **08 32 54.0 -0.4**
baz=38
**KMBL Kambalda 37.95 183** P **P** **08 32 56.1 +0.1**
baz=38,SNR=52
**USRK Ussuriysk Ar. 37.99 10** P **P** **08 32 57.1 +1.1**
comp=Z,5.4nm,0.5s,baz=198,slow=7.5,SNR=18
USRK PcP **PcP** **08 34 55.2 -0.2**
comp=Z,1.7nm,0.5s,baz=223,slow=3.3,SNR=4.4
**LSA Lhasa 38.23 311** *eP* **P** **08 33 00.3 +1.5**
LSA pmax pmax
comp=Z,19nm,0.6s
**LSA Lhasa 38.23 311** *eP* **P** **08 33 00.3 +1.5**
comp=Z,19nm,0.6s
**KLBR Kellerberrin 38.56 188** P **P** **08 33 00.7 -0.1**
baz=39,SNR=12
**QLP Quilpie 38.64 150** P **P** **08 33 02.0 +0.4**
baz=39,SNR=49
**GTA Gaotai 39.00 330** *eP* **P** **08 33 05.6 +1.1**
GTA pP **pP** **08 34 48.0 +1.8**
GTA PcP **PcP** **08 34 59.9 +0.9**
GTA sP **sP** **08 35 55.9 +1.3**
GTA S **S** **08 38 24.2 +2.6**
GTA sS **sS** **08 41 27.3 -1.3**
GTA SS **SS** **08 41 39.3 -5.1**
GTA ScS **ScS** **08 42 03.0 -1.8**
GTA PMZ
comp=Z,13nm,1.0s
GTA PMZ
comp=Z,93nm,4.7s
**HNR Honiara 39.49 114** P **P** **08 33 10.0 +1.5**
comp=Z,72nm,0.4s,baz=227,slow=4.5,SNR=5.0
**HNR Honiara 39.49 114** *eP* **P** **08 33 09.1 +0.5**
HNR pmax pmax
comp=Z,98nm,0.5s
**HNR Honiara 39.49 114** *eP* **P** **08 33 09.1 +0.5**
comp=Z,98nm,0.5s
**TAPN Taplejung 39.85 305** *eP* **P** **08 33 12.2 +0.5**
comp=Z,65nm,0.5s
**ODAN Odare 39.92 304** *eP* **P** **08 33 12.6 +0.5**
comp=Z,105nm,0.6s
**NWAO Narrogin (SRO) 39.95 189** P **P** **08 33 12.4 +0.5**
comp=Z,9.0nm,0.4s,baz=61,slow=0.1,SNR=8.4
**NWAO Narrogin (SRO) 39.95 189** P **P** **08 33 12.2 +0.3**
baz=40
**CHLP Challavanipeta 40.36 291** *eP* **P** **08 33 16.0 +0.6**
CHLP IAmb IAmb 08 33 17.1
comp=Z,37nm,1.0s
**RAMN Ramite 40.60 304** *eP* **P** **08 33 18.2 +0.6**
comp=Z,73nm,0.6s
**ASAJ Asahikawa 40.70 21** P **P** **08 33 18.8 +1.0**
comp=Z,7.4nm,0.6s,baz=235,slow=11,SNR=11
**ASAJ Asahikawa 40.70 21** *eP* **P** **08 33 18.2 +0.4**
comp=Z,3.4nm,0.6s
**BBOO Buckleboo 41.05 164** P **P** **08 33 21.2 +0.5**
baz=41,SNR=233
**BBOO Buckleboo 41.05 164** *eP* **P** **08 33 21.2 +0.5**
comp=Z,94nm,0.7s
**EIDS Eidsvold 41.55 141** P **P** **08 33 25.1 +0.4**
baz=42,SNR=16
**EIDS Eidsvold 41.55 141** *eP* **P** **08 33 25.1 +0.4**
comp=Z,48nm,0.8s
**GUN Gumba 41.56 305** *eP* **P** **08 33 25.6 +0.3**
comp=Z,101nm,0.5s
**RKGY Rocky Gully 41.64 188** P **P** **08 33 26.4 +1.1**
baz=42,SNR=5.4
**PKI Pulchoki 41.82 304** *eP* **P** **08 33 27.1 -0.1**
comp=Z,32nm,0.5s
**PKIN Phulchoki 41.83 304** *eP* **P** **08 33 27.2 -0.1**
comp=Z,13nm,0.5s
**KKN Kakani 42.01 305** *eP* **P** **08 33 28.6 0.0**
comp=Z,35nm,0.4s
**DMN Daman 42.08 304** *eP* **P** **08 33 29.2 0.0**
comp=Z,55nm,0.9s
**PVM Polavaram 42.41 288** *eP* **P** **08 33 31.8 +0.2**
PVM IAmb IAmb 08 33 32.6
comp=Z,30nm,0.7s
**HTT Hallett 42.48 161** P **P** **08 33 30.9 -1.1**
baz=43,SNR=48
**GKN Gorkha 42.61 305** *eP* **P** **08 33 33.2 -0.1**
comp=Z,29nm,0.4s
**HABR Khabarovsk 42.66 11** *eP* **P** **08 33 31.7 -1.3**
HABR *e* 08 35 09.0
HABR *e**PP **pP** **08 35 15.9 -1.6**
HABR *e* 08 35 24.5
HABR *e**SP **sP** **08 36 23.4 -1.7**
HABR *e*S **S** **08 39 13.5 -0.2**
HABR *e* 08 42 24.9
HABR *e*SS **SS** **08 42 44.4 +1.2**
HABR pmax pmax
comp=Z,18nm,2.0s
HABR MLR MLR
comp=Z,30nm,19.0s
**PALK Pallekele 42.72 273** P **P** **08 33 34.6 +0.4**
comp=Z,10nm,0.5s,baz=116,slow=6.0,SNR=8.3
**PALK Pallekele 42.72 273** *eP* **P** **08 33 34.2 0.0**
PALK pmax pmax
comp=Z,190nm,1.8s
**PALK Pallekele 42.72 273** *eP* **P** **08 33 34.2 0.0**
comp=Z,190nm,1.8s
**ULN Ulaanbaatar 43.37 344**⇑ *iP* **P** **08 33 39.5 +0.7**
ULN pmax pmax
comp=Z,3.0nm,0.5s
**ULN Ulaanbaatar 43.37 344** *eP* **P** **08 33 39.0 +0.2**
comp=Z,5.2nm,0.5s
**KOLN Koldanda 43.38 304** *eP* **P** **08 33 39.7 +0.4**
comp=Z,117nm,0.5s
**DANN Dangsing 43.46 305** *eP* **P** **08 33 40.3 +0.3**
**CMSA Cobar Meteorol 43.47 152** P **P** **08 33 41.0 +1.4**
baz=44,SNR=117
**SONM Songino Array 43.53 343** P **P** **08 33 40.5 +0.5**
comp=Z,3.1nm,0.6s,baz=160,slow=8.0,SNR=17
SONM PcP **PcP** **08 35 13.8 -0.2**
comp=Z,3.7nm,0.7s,baz=165,slow=4.7,SNR=9.3
SONM ScP **ScP** **08 38 06.5 -2.4**
comp=Z,1.3nm,0.6s,baz=155,slow=4.2,SNR=4.1
**SONA1 Songino Array 43.54 343** *eP* **P** **08 33 40.4 +0.3**
**ADKI Addanki 43.80 286** *eP* **P** **08 33 42.4 0.0**
ADKI IAmb IAmb 08 33 43.4
comp=Z,27nm,0.7s
**SKHT Srikalahasti 43.84 283** *eP* **P** **08 33 42.8 +0.1**
SKHT IAmb IAmb 08 33 43.6
comp=Z,40nm,0.6s
**NJS Nagarjunasagar 44.51 287** *eP* **P** **08 33 47.8 -0.1**
NJS IAmb IAmb 08 33 48.7
comp=Z,44nm,0.7s
**RPR Rampur 44.86 290** *eP* **P** **08 33 50.8 +0.3**
RPR IAmb IAmb 08 33 51.5
comp=Z,75nm,0.6s
**HYB Hyderabad 45.34 288**⇓ *iP* **P** **08 33 53.0 -1.2**
comp=Z,71nm,0.8s
**HYBB Hyderabad (bro 45.34 288** *eP* **P** **08 33 53.9 -0.4**
HYBB IAmb IAmb 08 33 54.5
comp=Z,44nm,0.6s
**ARMA Armidale 45.62 146** P **P** **08 33 58.2 +2.0**
baz=46,SNR=28
**ARMA Armidale 45.62 146** *eP* **P** **08 33 57.8 +1.6**
comp=Z,54nm,0.8s
**URV Uravakonda 46.30 284** *eP* **P** **08 34 00.8 -0.7**
URV IAmb IAmb 08 34 02.0
comp=Z,25nm,0.8s
**YNG Young 47.02 152** P **P** **08 34 08.0 +1.4**
baz=47,SNR=5.5
**MGCD Mangrove Creek 47.49 148** P **P** **08 34 10.7 +0.7**
baz=48,SNR=9.5
**TLY Talaya 47.77 343** *eP* **P** **08 34 11.8 -0.1**
TLY pmax pmax
comp=Z,6.0nm,0.7s
**TLY Talaya 47.77 343** *eP* **P** **08 34 12.4 +0.5**
comp=Z,7.5nm,0.8s
**CAN Canberra 48.14 152** *eP* **P** **08 34 16.6 +1.6**
CAN pmax pmax
comp=Z,43nm,0.8s
**CAN Canberra 48.14 152** *eP* **P** **08 34 16.6 +1.6**
comp=Z,43nm,0.8s
**CNB Canberra Magne 48.31 152** P **P** **08 34 17.4 +1.2**
baz=48,SNR=31
**TOO Toolangi 48.55 157** P **P** **08 34 19.4 +1.5**
baz=49,SNR=44
**WMQ Urumqi 48.56 325** P **P** **08 34 18.5 +0.5**
WMQ PMZ
comp=Z,25nm,0.8s
**MILA Mila 49.64 153** P **P** **08 34 27.2 +1.2**
baz=50,SNR=8.7
**HVS Khovu-Aksy 50.77 336**⇑ *eP* **P** **08 34 34.1 +0.1**
HVS pmax pmax
comp=Z,18nm,1.0s
**LHI Lord Howe Isla 50.85 140** *eP* **P** **08 34 36.6 +1.8**
comp=Z,206nm,1.3s
**DGAR Diego Garcia 53.07 256**⇓ *iP* **P** **08 34 49.7 -1.3**
**PDGK Podgornoye 53.21 321** P **P** **08 34 52.0 +0.6**
PDGK pmax pmax
comp=Z,22nm,0.7s
**MK31 Makanchi Array 53.40 325** *eP* **P** **08 34 53.4 +0.6**
MK31 pmax pmax
comp=Z,19nm,0.5s
**MKAR Makanchi Array 53.40 325** P **P** **08 34 53.4 +0.6**
comp=Z,33nm,0.5s,baz=121,slow=8.3,SNR=449
MKAR PcP **PcP** **08 35 49.5 -0.6**
comp=Z,7.5nm,0.5s,baz=120,slow=4.4,SNR=11
MKAR ScP **ScP** **08 38 48.4 -2.6**
comp=Z,2.5nm,0.7s,baz=113,slow=5.7,SNR=4.7
MKAR S **S** **08 41 41.5 +0.6**
comp=Z,0.8nm,0.6s,baz=137,slow=14,SNR=5.0
**MAKZ Makanchi 53.58 325** *eP* **P** **08 34 54.7 +0.6**
**KSH Kashi 53.82 315** P **P** **08 34 57.7 +1.7**
KSH *e*pP **pP** **08 36 50.6 +2.2**
KSH *e*sP **sP** **08 37 54.3 +0.9**
KSH PcS **PcS** **08 39 50.8 -1.6**
KSH S **S** **08 41 47.0 +0.1**
KSH sS **sS** **08 45 07.1 -1.8**
KSH SS **SS** **08 45 44.9 +4.6**
KSH PMZ
comp=Z,93nm,7.0s
**PETK Petropavlovsk- 53.84 25** P **P** **08 34 56.5 +0.8**
comp=Z,1.3nm,0.6s,baz=180,slow=4.3,SNR=4.5
**ULHL Ulahol 54.80 318** P **P** **08 35 04.0 +1.1**
SNR=5.7
**YAK Yakutsk 55.33 3** *eP* **P** **08 35 06.4 +0.5**
**KZA Kyzart 55.39 317** P **P** **08 35 08.8 +1.5**
SNR=9.8
**TKM2 Tokmak 2 55.53 318** *i* P **P** **08 35 08.4 +0.4**
TKM2 pmax pmax
comp=Z,16nm,0.5s
**TKM2 Tokmak 2 55.53 318** P **P** **08 35 08.7 +0.8**
SNR=32
**TKM2 Tokmak 2 55.53 318** *eP* **P** **08 35 08.5 +0.6**
comp=Z,23nm,0.5s
**SFK Sufi-Kurgan 55.77 314** P **P** **08 35 10.4 +0.7**
SFK pmax pmax
comp=Z,23nm,0.5s
**UCH Uchtor 55.95 317** P **P** **08 35 12.4 +1.2**
SNR=38
**AAK Ala-Archa 56.14 318** P **P** **08 35 12.5 +0.4**
comp=Z,5.5nm,0.5s,baz=120,slow=5.3,SNR=22
AAK PcP **PcP** **08 36 00.2 -0.8**
comp=Z,5.1nm,0.4s,baz=90,slow=4.8,SNR=7.1
**AAK Ala-Archa 56.14 318** *d iP* **P** **08 35 12.8 +0.7**
AAK pmax pmax
comp=Z,13nm,0.9s
**AAK Ala-Archa 56.14 318** P **P** **08 35 12.9 +0.8**
comp=Z,71nm,0.5s,SNR=6.8
**AAK Ala-Archa 56.14 318** P **P** **08 35 13.0 +0.8**
SNR=9.5
**AAK Ala-Archa 56.14 318** *eP* **P** **08 35 12.9 +0.8**
comp=Z,7.1nm,0.7s
AAK PcP **PcP** **08 36 00.2 -0.8**
**USP Ospenovka 56.40 318** P **P** **08 35 14.3 +0.5**
SNR=8.1
**AML Almayashu 56.47 317** P **P** **08 35 15.8 +1.1**
SNR=7.2
**ZAA0 Zalesovo Array 56.57 334** P **P** **08 35 14.2 -0.4**
baz=57,SNR=3.3
**ZAA0 Zalesovo Array 56.57 334** *eP* **P** **08 35 13.9 -0.7**
**ZALV Zalesovo Beam 56.57 334** P **P** **08 35 14.0 -0.6**
comp=Z,4.5nm,0.4s,baz=122,slow=6.4,SNR=12
ZALV S **S** **08 42 20.0 -1.6**
comp=Z,0.6nm,0.4s,baz=108,slow=14,SNR=3.0
**EKS2 Erkin-Say 56.63 317** *eP* **P** **08 35 16.4 +1.0**
EKS2 pmax pmax
comp=Z,25nm,0.7s
**EKS2 Erkin-Say 56.63 317** P **P** **08 35 16.4 +1.0**
SNR=30
**EKS2 Erkin-Say 56.63 317** *eP* **P** **08 35 16.4 +1.0**
comp=Z,25nm,0.7s
**KBL Kabul 57.34 307** *eP* **P** **08 35 20.6 0.0**
KBL pmax pmax
comp=Z,39nm,0.7s
**KBL Kabul 57.34 307** *eP* **P** **08 35 20.6 0.0**
comp=Z,39nm,0.7s
**MNAS Manas 57.42 317** P **P** **08 35 21.6 +0.8**
MNAS pmax pmax
comp=Z,17nm,0.6s
**KURBB Kurchatov Arra 57.61 328** P **P** **08 35 21.9 +0.2**
comp=Z,38nm,0.6s,baz=130,slow=6.3,SNR=474
KURBB pP **pP** **08 37 15.8 -0.7**
comp=Z,1.6nm,0.8s,baz=131,slow=7.0,SNR=4.3
**KURK Kurchatov 57.61 328** *eP* **P** **08 35 22.3 +0.5**
KURK *PP **pP** **08 37 15.8 -0.7**
KURK pmax pmax
comp=Z,148nm,0.5s
**KURK Kurchatov 57.61 328** P **P** **08 35 22.8 +1.0**
comp=Z,805nm,0.5s,SNR=30
**KURK Kurchatov 57.61 328** *eP* **P** **08 35 22.2 +0.5**
comp=Z,148nm,0.5s
KURK pP **pP** **08 37 15.8 -0.7**
**NVS Novosibirsk 57.85 334** *i* P **P** **08 35 22.7 -0.6**
**DZET Dzherino 58.74 312** P **P** **08 35 29.8 0.0**
DZET pmax pmax
comp=Z,40nm,0.5s
**MSVF Nonsavu 58.87 115** *eP* **P** **08 35 32.6 +1.7**
MSVF pmax pmax
comp=Z,132nm,1.9s
**MSVF Nonsavu 58.87 115** *eP* **P** **08 35 32.6 +1.7**
comp=Z,132nm,1.9s
**KK31 Karatay Array 59.01 317** *i* P **P** **08 35 31.3 -0.1**
KK31 pmax pmax
comp=Z,8.0nm,0.4s
**KKAR Karatay Array 59.01 317** *eP* **P** **08 35 31.4 0.0**
KKAR pmax pmax
comp=Z,19nm,0.7s
**KKAR Karatay Array 59.01 317** *eP* **P** **08 35 31.4 0.0**
comp=Z,19nm,0.7s
**OTUK Ortayu 59.94 323** P **P** **08 35 37.6 +0.2**
OTUK pmax pmax
comp=Z,15nm,0.6s
**VOSK Vostochnaya 62.73 327** *ceP* **P** **08 35 54.8 -0.7**
VOSK pmax pmax
comp=Z,16nm,0.5s
**BVA0 Borovoye Array 63.18 327** *i* P **P** **08 35 58.1 -0.3**
BVA0 pmax pmax
comp=Z,33nm,0.8s
**BVAR Borovoye Array 63.18 327** P **P** **08 35 58.3 0.0**
comp=Z,8.2nm,0.5s,baz=134,slow=8.5,SNR=53
BVAR PcP **PcP** **08 36 27.2 -1.9**
comp=Z,3.6nm,0.6s,baz=139,slow=4.1,SNR=5.3
**BRVK Borovoye 63.26 327** *d iP* **P** **08 35 58.9 +0.1**
BRVK pmax pmax

comp=Z,36nm,1.2s
**BRVK Borovoye 63.26 327 P P 08 35 58.1 -0.7**
comp=Z,205nm,1.0s,SNR=9.9
**BRVK Borovoye 63.26 327** *e*P **P 08 35 59.0 +0.2**
comp=Z,25nm,0.9s
**CHKZ Chkalovo 63.36 328** *i* P **P 08 35 59.0 -0.4**
CHKZ pmax pmax
comp=Z,8.0nm,0.6s
**ZRNK Zerenda 63.90 327** *i* P **P 08 36 02.8 -0.1**
ZRNK pmax pmax
comp=Z,19nm,0.4s
**HIZ Hauiti 65.37 138** *e*P **P 08 36 14.4 +2.0**
**WHZ Wether Hill Ro 65.57 148** *e*P **P 08 36 13.5 +0.1**
comp=Z,401nm,2.8s
**THZ Tophouse 65.89 142** *e*P **P 08 36 15.8 +0.1**
**RPZ Rata Peaks 65.93 144** *e*P **P 08 36 16.2 +0.4**
comp=Z,28nm,1.0s
**IAKL Akhelmad 65.97 307** *e*P **P 08 36 16.4 -0.2**
**OXZ Oxford 66.28 143** *e*P **P 08 36 18.4 +0.5**
**ODZ Otahua Downs 66.50 146** *e*P **P 08 36 20.7 +1.5**
comp=Z,21nm,1.3s
**KHZ Kahutara 66.66 142** *e*P **P 08 36 20.4 +0.2**
comp=Z,15nm,0.6s
**GEYT Alibeck 66.70 308** P **P 08 36 21.4 +0.7**
comp=Z,12nm,0.7s,baz=143,slow=5.2,SNR=8.6
**URZ Urewera 66.76 137** *e*P **P 08 36 21.2 +0.2**
comp=Z,34nm,1.3s
**SNZO South Karori 66.77 140** *e*P **P 08 36 20.6 -0.4**
comp=Z,76nm,1.1s
**BKZ Black Stump Fm 66.80 138** *e*P **P 08 36 22.1 +0.8**
comp=Z,68nm,0.6s
**UOSS Wadi Hilu 66.84 294** *e*P **P 08 36 20.7 -1.1**
comp=Z,20nm,1.2s
**MQZ McQueen's Vall 66.86 144** *e*P **P 08 36 22.5 +1.1**
comp=Z,700nm,2.8s
**BFZ Birch Farm 67.42 139** *e*P **P 08 36 25.5 +0.5**
comp=Z,18nm,0.7s
**BILL Bilibino 67.44 16** *e*P P 08 36 32.9 +8.3
BILL *i* 08 36 45.2
BILL pmax pmax
comp=Z,9.0nm,1.1s
**ATKA Atka Island 67.75 36** *e*P **P 08 36 27.8 +1.0**
comp=Z,158nm,1.3s
**IBAF Bafgh 67.92 301** *e*P **P 08 36 27.8 -0.7**
**AB31 Akbulak array 67.94 321** *i* P **P 08 36 27.8 -0.2**
AB31 pmax pmax
comp=Z,6.0nm,0.3s
**ABKAR Akbulak array 67.94 321** *e*P **P 08 36 27.9 -0.1**
comp=Z,12nm,0.5s
**AKTO Aktyubinsk 69.46 321** P **P 08 36 37.0 -0.1**
comp=Z,16nm,0.5s,baz=99,slow=8.1,SNR=72
**AKTO Aktyubinsk 69.46 321** P **P 08 36 36.9 -0.2**
AKTO pmax pmax
comp=Z,15nm,0.5s
**SVE Sverdlovsk 69.85 329** *e*P **P 08 36 39.2 -0.1**
SVE pmax pmax
comp=Z,25nm,0.6s
**ISRV Sarvestan 69.86 299** *e*P **P 08 36 39.4 -1.0**
**IPAR Pars 69.94 299** *e*P **P 08 36 39.9 -0.9**
**ARU Arti 70.81 328** P **P 08 36 44.4 -0.5**
comp=Z,2.5nm,0.2s,baz=272,slow=22,SNR=5.1
**ARU Arti 70.81 328***d i*P **P 08 36 44.1 -0.9**
ARU 08 39 28.6
ARU PPP PPP 08 41 20.2
ARU S **S 08 45 13.1 +0.3**
ARU pmax pmax
comp=Z,18nm,0.6s
**ARU Arti 70.81 328** *e*P **P 08 36 44.3 -0.7**
comp=Z,32nm,0.4s
**IKAZ Kazeroun 70.98 299** *e*P **P 08 36 45.6 -1.3**
**IPIR Pirpir 71.96 302** *e*P **P 08 36 50.9 -1.7**
**RAYN Ar Rayn 76.58 293** P **P 08 37 17.6 -0.8**
comp=Z,324nm,0.6s,SNR=17
**RAYN Ar Rayn 76.58 293** *e*P **P 08 37 17.9 -0.4**
comp=Z,30nm,0.8s
**DGRG David-gareji 76.85 311** P **P 08 37 20.4 +0.9**
**DGRG David-gareji 76.85 311** P **P 08 37 20.4 +0.9**
**KBZ Khabaz 78.76 313** P **P 08 37 28.7 -0.8**
comp=Z,4.3nm,0.7s,baz=196,slow=3.0,SNR=8.0
**ABPO Ambohimpanom 79.57 249** *e*P **P 08 37 32.8 -1.7**
ABPO pmax pmax
comp=Z,58nm,0.9s
**ABPO Ambohimpanom 79.57 249** *e*P **P 08 37 32.8 -1.7**
comp=Z,58nm,0.9s
**TTA Tatalina 79.57 27** *e*P **P 08 37 34.6 +1.0**
TTA pmax pmax
comp=Z,36nm,2.1s
**TTA Tatalina 79.57 27** *e*P **P 08 37 34.6 +1.0**
comp=Z,36nm,2.1s
**VRH Novokhopyorsk 79.78 321** *e*P **P 08 37 33.6 -1.1**
VRH pmax pmax
comp=E,10.0nm,0.6s
VRH pmax pmax
comp=Z,20nm,0.6s
VRH pmax pmax
comp=N,10.0nm,0.7s
**OHAK Old Harbor 80.54 33** *e*P **P 08 37 39.6 +1.0**
comp=N,56nm,1.5s
**KDAK Kodiak Island 80.94 33** P **P 08 37 40.0 -0.6**
comp=N,12nm,0.7s,baz=285,slow=0.2,SNR=9.6
**KDAK Kodiak Island 80.94 33***ce*P **P 08 37 41.5 +0.9**
**KDAK Kodiak Island 80.94 33** *e*P **P 08 37 41.6 +0.9**
comp=N,212nm,1.9s
**RSO Redoubt South 80.95 30** *e*P **P 08 37 41.6 +0.7**
**VORD Divnogorie 81.31 320** *e*P **P 08 37 41.3 -1.3**
VORD pmax pmax
comp=Z,50nm,1.5s
VORD pmax pmax
comp=N,10.0nm,0.5s
VORD pmax pmax
comp=E,30nm,1.1s
**PPLA Purkeypile 81.32 27** *e*P **P 08 37 43.5 +0.8**
comp=E,40nm,1.6s
**KLMR Klimovskoe 81.33 330***d i*P **P 08 37 41.9 -0.6**
KLMR pmax pmax
comp=Z,24nm,0.5s
**CAST Castle Rocks 81.38 27** *e*P **P 08 37 44.0 +1.2**
comp=Z,6.0nm,0.5s
**VSR Storozhevoye 81.39 321** *e*P **P 08 37 41.4 -1.7**
VSR pmax pmax
comp=N,4.0nm,0.4s
VSR pmax pmax
comp=Z,10.0nm,0.4s
VSR pmax pmax
comp=E,8.0nm,0.5s
**LPSR Galich'ya Gora 81.53 322** *e*P **P 08 37 43.7 -0.1**
LPSR pmax pmax
comp=Z,10.0nm,0.5s
LPSR pmax pmax
comp=N,3.0nm,0.4s
LPSR pmax pmax
comp=E,9.0nm,0.4s
**CNPM China Poot 81.69 31** *e*P **P 08 37 44.8 +0.3**
comp=E,454nm,2.6s
**BRLK Bradley Lake 81.87 31** *e*P **P 08 37 45.9 +0.5**
comp=E,417nm,2.5s
**BPAW Bear Paw Mtn. 81.89 26** *e*P **P 08 37 46.7 +1.3**
comp=E,9.4nm,0.7s
**SUA Susitna One 81.96 29** *e*P **P 08 37 48.1 +2.2**
comp=E,48nm,1.0s
**MLY Manley 82.02 25** *e*P **P 08 37 47.5 +1.4**
comp=E,8.1nm,0.6s
**TMCR Tamitsa 82.09 334** *e*P **P 08 37 46.2 -0.1**
TMCR pmax pmax
comp=Z,22nm,0.5s
**TRF Thorofare Moun 82.19 27** *e*P **P 08 37 47.2 +0.1**
comp=Z,7.8nm,0.9s
**COLD Coldfoot 82.28 23** *e*P **P 08 37 49.0 +1.7**
comp=Z,5.9nm,0.8s
**RC01 Rabbit Creek A 82.44 29** *e*P **P 08 37 48.7 +0.5**
comp=Z,187nm,2.4s
**SEW Seward 82.59 30** *e*P **P 08 37 49.7 +0.8**
comp=Z,225nm,2.0s
**ANN Anapa 82.68 314** *e*P **P 08 37 48.6 -1.1**
ANN pmax pmax
comp=Z,52nm,0.9s
**PMR Palmer 82.73 29** *e*P **P 08 37 49.3 -0.3**
PMR pmax pmax
comp=Z,63nm,2.0s
**PMR Palmer 82.73 29** *e*P **P 08 37 49.3 -0.3**
comp=Z,63nm,2.0s
**MCK McKinley 82.80 27** *e*P **P 08 37 50.9 +0.9**
MCK pmax pmax
comp=Z,17nm,0.8s
**MCK McKinley 82.80 27** *e*P **P 08 37 50.9 +0.9**
comp=Z,17nm,0.8s
**RND Reindeer 82.84 27** *e*P **P 08 37 50.7 +0.5**
RND pmax pmax
comp=Z,7.0nm,0.7s
**RND Reindeer 82.84 27** *e*P **P 08 37 50.7 +0.5**
comp=Z,6.9nm,0.7s
**OBN Obninsk 82.89 325** P **P 08 37 50.0 -0.6**
comp=Z,44nm,0.4s,baz=44,slow=1.8,SNR=7.6
**OBN Obninsk 82.89 325** *i* P **P 08 37 49.9 -0.6**
OBN pmax pmax
comp=Z,27nm,0.8s
**OBN Obninsk 82.89 325** *e*P **P 08 37 50.0 -0.6**
comp=Z,48nm,0.5s
**SML Sawmill 83.11 29** *e*P **P 08 37 51.8 +0.2**
SML pmax pmax
comp=Z,9.0nm,1.5s
**SML Sawmill 83.11 29** *e*P **P 08 37 51.8 +0.2**
comp=Z,9.2nm,1.5s
**WRH Wood River Hil 83.15 26** *e*P **P 08 37 51.6 -0.1**
comp=Z,78nm,2.5s
**CCB Clear Creek Bu 83.27 26** *e*P **P 08 37 52.1 -0.2**
comp=Z,88nm,2.9s
**LVZ Lovozero 83.45 338** *i*P **P 08 37 52.6 -0.6**
LVZ pmax pmax
comp=Z,17nm,1.0s
**LVZ Lovozero 83.45 338** *e*P **P 08 37 53.6 +0.5**
comp=Z,24nm,1.1s
**HDA Harding Lake 83.65 26** *e*P **P 08 37 53.4 -0.8**
comp=Z,120nm,2.8s
**IL1 Eielson Array 83.66 26** *e*P **P 08 37 53.1 -1.2**
**ILAR Eielson Array 83.66 26** P **P 08 37 52.8 -1.4**
comp=Z,0.7nm,0.5s,baz=240,slow=5.1,SNR=24
**ASF Jabal al Asfar 83.79 302** P **P 08 37 55.5 -0.2**
comp=Z,9.4nm,0.5s,baz=62,slow=3.0,SNR=18
**KLU Klutina 84.27 29** *e*P **P 08 37 57.9 +0.5**
comp=Z,234nm,2.8s
**RIDG Independ'e Rid 84.61 27** *e*P **P 08 37 59.5 +0.5**
comp=Z,64nm,2.0s
**BMRM Bremner River 84.94 29** *e*P **P 08 38 00.3 -0.3**
comp=Z,30nm,1.4s
**DOT Dot Lake 84.97 27** *e*P **P 08 38 00.8 +0.1**
comp=Z,24nm,0.7s
**MENT Mentasta 85.19 27** *e*P **P 08 38 01.5 -0.2**
**MAW Mawson 85.57 200** P **P 08 38 01.3 -2.0**
comp=Z,2.8nm,0.5s,baz=60,slow=4.9,SNR=22
**MAW Mawson 85.57 200** *e*P **P 08 38 02.9 -0.4**
**MAW Mawson 85.57 200** P **P 08 38 03.0 -0.4**
baz=86,SNR=8.9
**MAW Mawson 85.57 200** *e*P **P 08 38 02.9 -0.4**
**EIL Elat 85.66 299** P **P 08 38 04.2 -0.4**
comp=Z,8.4nm,0.7s,baz=356,slow=20,SNR=5.2
**BR131 Keskin Array S 85.82 309** P **P 08 38 04.3 -1.1**
baz=86,SNR=5.2
**BRTR Keskin Array B 85.82 309** P **P 08 38 04.1 -1.4**
comp=Z,5.8nm,0.6s,baz=124,slow=4.5,SNR=27
**BRTR Keskin Array B 85.82 309***ce*P **P 08 38 04.0 -1.4**
BRTR pmax pmax
comp=Z,6.0nm,0.6s
**EGAK Eagle 86.11 25** *e*P **P 08 38 06.1 +0.1**
**BR231 Keskin MP Arra 86.47 310** *e*P P 08 38 04.2 -4.3
**ARA0 ARCESS Array S 86.60 340** *e*P **P 08 38 07.3 -1.0**
**ARCES ARCESS Array B 86.60 340** P **P 08 38 07.2 -1.1**
comp=Z,5.4nm,0.7s,baz=76,slow=6.1,SNR=16
**KMBO Kilima Mbogo 86.66 268** P **P 08 38 09.3 -0.7**
comp=Z,6.9nm,0.7s,baz=46,slow=7.1,SNR=18
**VNDA Vanda 86.79 172** P **P 08 38 08.2 -0.7**
comp=Z,2.1nm,0.6s,baz=316,slow=6.6,SNR=27
**VNDA Vanda 86.79 172** *e*P **P 08 38 09.4 +0.4**
VNDA pmax pmax
comp=Z,43nm,2.5s
**VNDA Vanda 86.79 172** *e*P **P 08 38 09.4 +0.4**
comp=Z,43nm,2.5s
**SPB1 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.6 -0.2**
**SPA1 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.6 -0.2**
**SPB2 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.2 -0.6**
**SPB5 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.5 -0.3**
**SPA0 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.4 -0.4**
**SPA2 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.3 -0.5**
**SPITS Spitsbergen Ar 86.95 349** P **P 08 38 08.9 -0.9**
comp=Z,10nm,0.6s,baz=82,slow=7.7,SNR=15
**SPA3 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.8 0.0**
**SPB3 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.5 -0.3**
**SPB4 Spitsbergen Ar 86.95 349** *e*P **P 08 38 09.5 -0.3**
**AKASG Main Array Be 87.69 321** P **P 08 38 12.2 -1.5**
comp=Z,3.1nm,0.5s,baz=68,slow=4.8,SNR=11
**KIEV Kiev 87.70 321** *e*P **P 08 38 12.1 -1.7**
KIEV pmax pmax
comp=Z,5.0nm,0.7s
**KIEV Kiev 87.70 321** *e*P **P 08 38 11.9 -1.9**
comp=Z,4.7nm,0.7s
**AK11 Malin Array Si 87.73 321** *e*P **P 08 38 12.7 -1.2**
**FINES FINESS Array B 87.78 332** P **P 08 38 12.3 -1.6**
comp=Z,5.8nm,0.5s,baz=71,slow=4.4,SNR=34
**FINES FINESS Array B 87.78 332***ce*P **P 08 38 12.8 -1.1**
FINES pmax pmax
comp=Z,6.0nm,0.5s
**INK Inuvik 88.44 21** P **P 08 38 16.3 -0.6**
comp=Z,3.4nm,0.9s,baz=223,slow=1.8,SNR=4.4
**MLR Muntele Rosu 90.68 316** *i*P **P 08 38 27.4 -0.5**
**BURAR Bucovina Array 90.78 318** *i*P **P 08 38 27.7 -0.6**
**BUR04 Bucovina Ar. S 90.79 318** *e*P **P 08 38 28.0 -0.3**
**LOT Lotru 92.19 316** *i*P **P 08 38 34.3 -0.5**
**SYO Syowa Base 94.17 201** *e*P **P 08 38 42.6 -0.5**
**NB2 NORSAR Subarra 94.77 333** P **P 08 38 43.9 -2.3**
comp=Z,1.8nm,0.6s,baz=66,slow=4.8
**NOA NORSAR Array B 94.77 333** P **P 08 38 44.5 -1.6**
comp=Z,2.6nm,0.7s,baz=69,slow=4.7,SNR=7.1
**BRG Berggiesshubel 97.06 323** *e*(P) Pdif 08 38 56.2 -0.3
comp=Z,6.1nm,1.1s
**BRG Berggiesshubel 97.06 323** *e*P Pdif 08 38 56.2 -0.4
BRG pmax pmax
comp=Z,6.0nm,1.1s
**LSZ Lusaka 97.10 255** *e*P **P 08 38 55.8 -1.9**
LSZ pmax pmax
comp=Z,5.0nm,0.6s
**LSZ Lusaka 97.10 255** *e*P **P 08 38 55.8 -1.9**
comp=Z,4.9nm,0.6s
**NVAR Mina Array Bea 107.05 47** PKKPbc PKKPbc 08 55 05.5 -1.6
comp=Z,0.6nm,0.6s,baz=145,slow=3.1,SNR=3.9
**O20A White River Ci 113.19 41** P **PKiKP 08 43 59.6 +0.8**
baz=113
**F26A Lodgepole 113.26 33** P **PKiKP 08 43 58.9 +0.3**
baz=113
**G27A Dupree 113.96 33** P **PKiKP 08 43 60.0 +0.1**
baz=114
**H26A Fairpoint 113.96 35** P **PKiKP 08 44 00.0 0.0**
baz=114
**H27A Howes 114.34 34** P PKPdf 08 44 00.5 -0.2
baz=114
**C31A Landman Farms, 114.54 29** P PKPdf 08 44 00.6 -0.3
baz=114
**B32A Ashes, Strandq 114.69 28** P PKPdf 08 44 00.5 -0.7
baz=114
**G28A Parade 114.71 33** P PKPdf 08 44 01.4 +0.1
baz=115
**I27A Quinn 114.71 35** P PKPdf 08 44 01.2 -0.2
baz=115
**A33A Warroad 114.83 27** P PKPdf 08 44 01.2 -0.3
baz=115
**B34A Aery, Baudette 115.50 27** P **PKPdf 08 44 02.5 -0.2**
baz=115
**C33A Trail 115.50 28** P **PKPdf 08 44 02.5 -0.3**
baz=115
**J28A Allard Ranch, 115.57 35** P **PKPdf 08 44 01.9 -1.2**
baz=115
**D34A Park Rapids 116.26 29** P **PKPdf 08 44 03.8 -0.4**
baz=116
**SDCO Great Sand Dun 116.27 42** *e*PKPdf **PKPdf 08 44 05.9 +1.0**
**E34A Wadena 116.68 29** P **PKPdf 08 44 04.5 -0.5**
baz=116
**Q28A Sharon Springs 117.89 39** P **PKPdf 08 44 07.7 -0.1**
baz=118
**ECSD EROS Data Cent 117.90 32** P **PKPdf 08 44 07.3 -0.2**
baz=118
**F36A Milaca 117.94 29** P **PKPdf 08 44 07.3 -0.2**
baz=118
**SCHQ Schefferville 118.00 7** PKP **PKPdf 08 44 06.8 -0.6**
comp=Z,2.0nm,0.3s,baz=13,slow=3.6,SNR=9.1
**H35A Sunnyside Ranc 118.15 30** P **PKPdf 08 44 08.0 +0.1**
baz=118
**R28A Tribune 118.33 40** P **PKPdf 08 44 08.9 +0.3**
baz=118
**BGNE Belgrade 118.62 35** P **PKPdf 08 44 08.7 -0.3**
baz=118
**H36A Jessenland, He 118.68 30** P **PKPdf 08 44 09.3 +0.3**
baz=118
**SPMN St. Paul 118.76 29** P **PKPdf 08 44 09.3 +0.3**
baz=119
**U27A Thompson Grove 118.78 42** P **PKPdf 08 44 10.0 +0.5**
baz=119
**P31A Stockton 119.11 37** P **PKPdf 08 44 10.0 0.0**
baz=119
**TOA0 Torodi Ar. Sit 119.15 289** *e*PKPdf **PKPdf 08 44 09.7 -1.0**
**TORD Torodi Ar. Bea 119.15 289** PKP **PKPdf 08 44 09.8 -0.9**
comp=Z,4.4nm,0.6s,baz=61,slow=2.0,SNR=36
TORD PP PP 08 45 31.3 -10
comp=Z,0.9nm,0.8s,baz=54,slow=7.5,SNR=4.2
**TOA1 Torodi Ar. Sit 119.15 289** *e*PKP2 **PKPdf 08 44 09.4 -1.2**
**O32A Brockman Farm, 119.29 36** P **PKPdf 08 44 09.8 -0.5**
baz=119
**P32A Huiting Farm, 119.51 37** P **PKPdf 08 44 10.3 -0.4**
baz=119
**O33A Hebron 119.82 36** P **PKPdf 08 44 10.7 -0.6**
baz=120
**R32A Long Quarter, 120.21 38** P **PKPdf 08 44 12.2 0.0**
baz=120
**S32A Newby Ranch, P 120.52 39** P **PKPdf 08 44 12.5 -0.3**
baz=120
**P34A Walnut Farm, R 120.60 36** P **PKPdf 08 44 12.6 -0.2**
baz=120
**Q34A Chapman 120.95 36** P **PKPdf 08 44 13.5 0.0**
baz=121
**KSU1 Kansas State U 121.02 36** P **PKPdf 08 44 13.5 -0.1**
baz=121
**W31A Holland Ranch, 121.41 42** P **PKPdf 08 44 14.9 +0.4**
baz=121
**Q35A Mercer Eighty, 121.52 36** P **PKPdf 08 44 14.5 -0.1**
baz=121
**129A Stewart Farms, 121.56 45** P **PKPdf 08 44 15.1 +0.2**
baz=122
**Z30A Sanderson Ranc 121.71 44** P **PKPdf 08 44 15.6 +0.4**
baz=122
**X31A McDonald Ranch 121.71 42** P **PKPdf 08 44 15.7 +0.6**
baz=122
**U33A Lingo Farm, Me 121.83 39** P **PKPdf 08 44 15.5 +0.2**
baz=122
**TXAR Lajitas Array 121.99 49** PKP **PKPdf 08 44 15.8 -0.1**
comp=Z,0.4nm,0.6s,baz=337,slow=0.8,SNR=6.9
TXAR PKKPbc **PKKPbc 08 54 16.6 +0.1**
comp=Z,0.5nm,0.8s,baz=110,slow=5.2,SNR=7.2
**S35A Otter Creek Ra 122.13 37** P **PKPdf 08 44 15.7 -0.1**
baz=122
**R36A Gordon, Harris 122.19 36** P **PKPdf 08 44 15.7 -0.2**
baz=122
**Y32A R-V Farms, Ver 122.44 42** P **PKPdf 08 44 16.8 +0.3**
baz=122
**S36A Lake Cedric, C 122.53 37** P **PKPdf 08 44 16.3 -0.2**
baz=122
**V34A Guthrie 122.58 39** P **PKPdf 08 44 16.9 +0.2**
baz=122
**429A Davenport Ranc 122.63 47** P **PKPdf 08 44 17.2 +0.1**
baz=123
**529A Stev Forest Ra 122.66 48** P **PKPdf 08 44 17.2 +0.1**
baz=123
**U35A Pawnee 122.73 39** P **PKPdf 08 44 17.4 +0.4**
baz=123
**X33A Lawton 122.74 41** P **PKPdf 08 44 17.0 -0.1**
baz=123
**T36A Boggs Farm, Ca 122.80 37** P **PKPdf 08 44 17.0 -0.1**
baz=123
**Z32A Haskell 122.83 43** P **PKPdf 08 44 17.7 +0.4**
baz=123
**S37A Fort Scott 122.96 36** P **PKPdf 08 44 17.1 -0.3**
baz=123
**V35A Meyer Ranch, C 123.05 39** P **PKPdf 08 44 17.4 -0.2**
baz=123
**331A San Angelo 123.31 46** P **PKPdf 08 44 18.5 +0.2**
baz=123
**T37A Cheneyville 18 123.33 37** P **PKPdf 08 44 18.0 -0.2**
baz=123
**W35A Tecumseh 123.41 40** P **PKPdf 08 44 18.6 +0.2**
baz=123
**431A Sonora 123.53 46** P **PKPdf 08 44 19.0 +0.2**
baz=123
**Y34A Reagan Ranch, 123.58 41** P **PKPdf 08 44 19.1 +0.4**
baz=124
**V36A Jenks 123.59 39** P **PKPdf 08 44 19.0 +0.3**
baz=124
**TUL1 Tulsa 123.60 38** P **PKPdf 08 44 18.9 +0.2**
baz=124
**V37A Hulbert 124.02 38** P **PKPdf 08 44 19.6 +0.2**
baz=124
**U38A Gravette 124.11 37** P **PKPdf 08 44 19.7 +0.1**
baz=124
**X36A Centrahoma 124.11 40** P **PKPdf 08 44 20.2 +0.5**
baz=124
**JCT Junction City 124.22 46** *e*PKIKP **PKPdf 08 44 20.1 0.0**
**JCT Junction City 124.22 46** P **PKPdf 08 44 20.3 +0.2**
baz=124
**JCT Junction City 124.22 46** *e*PKPdf **PKPdf 08 44 20.1 0.0**
**333A Richland Sprin 124.32 45** P **PKPdf 08 44 20.6 +0.4**
baz=124
**W37A Quinton 124.33 39** P **PKPdf 08 44 20.6 +0.5**
baz=124
**V38A Canehill 124.48 38** P **PKPdf 08 44 20.3 0.0**
baz=124
**234A Clairette 124.50 44** P **PKPdf 08 44 21.2 +0.7**
baz=124
**433A Art 124.57 45** P **PKPdf 08 44 20.6 -0.1**
baz=124
**Y36A Durant 124.58 41** P **PKPdf 08 44 21.0 +0.5**
baz=124
**X38A Whitesboro 125.01 39** P **PKPdf 08 44 21.3 -0.1**
baz=125
**MIAR Mount Ida 125.87 38** P **PKPdf 08 44 23.6 +0.6**
baz=126
**Y39A Lockesburg 125.95 39** P **PKPdf 08 44 23.7 +0.5**
baz=126
**KIC Kosan Boka 126.98 283** *e*PKIKP **PKPdf 08 44 25.2 -0.5**
comp=Z,12nm,0.6s
**DBIC Dimbokro 127.02 284** PKP **PKPdf 08 44 25.8 0.0**
comp=Z,3.2nm,0.5s,baz=334,slow=3.0,SNR=7.5
**TIC Toumodi 127.19 284** *e*PKIKP **PKPdf 08 44 25.5 -0.6**
**LIC Lamto 127.29 283** *e*PKIKP **PKPdf 08 44 26.1 -0.2**
comp=Z,57nm,1.5s
**WVT Waverly 128.05 33** *e*PKIKP **PKPdf 08 44 27.3 +0.1**
**WVT Waverly 128.05 33** *e*PKPdf **PKPdf 08 44 27.3 +0.1**
**PLCA Paso Flores 143.83 161** *e*PKIKP **PKPdf 08 44 56.1 -0.1**
**PLCA Paso Flores 143.83 161** *e*PKPbc **PKPdf 08 44 56.1 -0.1**
**TRQA Tornquist 148.41 171** *e*PKPbc **PKPbc 08 45 08.2 0.0**
**STVI Saint Thomas 153.61 19** *e*PKPbc **PKPbc 08 45 20.4 -0.1**
**CPUP Villa Florida 160.51 177** PKP **PKPdf 08 45 20.5 0.0**
comp=Z,1.1nm,0.7s,baz=58,slow=4.3,SNR=5.3
**LPAZ La Paz 165.00 130** PKP **PKPdf 08 45 26.2 +0.3**
comp=Z,2.3nm,0.9s,baz=41,slow=6.9,SNR=9.5
**LPAZ La Paz 165.00 130** *e*PKIKP **PKPdf 08 45 26.7 +0.8**
**LPAZ La Paz 165.00 130** *e*PKPdf **PKPdf 08 45 26.7 +0.8**

**PGC 05 08:39:13.5±0.1, 65°.69N×137°.44W, h1km, ML2.6/2, 203km northeast of Dawson, Yt Northern Yukon Territory, Canada, Northern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAWY** | **Dawson** | **1.83** | **208** | Pn | Pn | 08 39 45.6 | -0.5 |
| DAWY | | | | Sn | Sn | 08 40 10.3 | +0.4 |
| **INK** | **Inuvik** | **3.05** | **29** | Pn | Pn | 08 40 02.0 | -0.7 |
| INK | | | | Sn | Sn | 08 40 38.3 | -1.5 |
| **YUK3** | **Moose Creek** | **4.15** | **200** | Pn | Pn | 08 40 17.4 | -0.8 |
| YUK3 | | | | Sg | Sb | 08 41 21.0 | +2.6 |
| **YUK2** | **White River** | **4.20** | **203** | Pn | Pn | 08 40 18.1 | -0.6 |
| YUK2 | | | | Sg | Sb | 08 41 22.7 | +3.2 |
| **YUK5** | **Granite Creek** | **4.58** | **183** | Sg | Sg | 08 41 36.1 | -4.7 |
| **HYT** | **Haines Junctio** | **4.88** | **180** | Sg | Sb | 08 41 43.8 | +4.6 |

**TRN 05 08:45:42.4, 16°.67N×61°.81W, h103km, MD3.5, M3.6(FDF), 2C-1D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLYT** | **Lee's Yard** | **0.37** | **278** | *e*P | Pn | 08 45 59.5 | +1.9 |
| MLYT | | | | *e*S | Sn | 08 46 11.0 | +1.9 |
| **BPA** | **Boggy Peak** | **0.38** | **352** | *e*P | Pn | 08 45 59.8 | +2.0 |
| BPA | | | | *e*S | Sn | 08 46 10.8 | +1.5 |
| **SSG** | **Sans Toucher** | **0.59** | **168** | *e*P | Pn | 08 46 00.9 | +1.6 |
| **MLG** | **Mont-d'or** | **0.61** | **171** | *e*P | Pn | 08 46 01.3 | +1.9 |
| **DEG** | **La Desirade** | **0.80** | **116** | *e*P | Pn | 08 46 02.3 | +1.3 |
| DEG | | | | *e*S | Sn | 08 46 16.8 | +1.8 |
| **MGG** | **Marie-Galante** | **0.88** | **148** | *i*P | Pn | 08 46 03.4 | +1.6 |
| MGG | | | | *e*S | Sn | 08 46 17.4 | +1.0 |
| **ANWB** | **Willy Bob** | **0.99** | **1** | *e*P | Pn | 08 46 04.2 | +1.3 |
| ANWB | | | | *e*S | Sn | 08 46 19.5 | +1.1 |
| **SKI** | **Saint Kitts** | **1.11** | **307** | *i*P | Pn | 08 46 05.0 | +0.8 |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKI | | | | eS | Sn | 08 46 21.6 | +0.8 |
| BBL | Barber's Block | 1.18 | 164 | eP | Pn | 08 46 06.2 | +1.1 |
| BBL | | | | eS | Sn | 08 46 24.5 | +2.3 |
| SEUS | St. Eustatius | 1.39 | 306 | eS | Sn | 08 46 29.0 | +2.5 |
| PCM | Pelee Case Pet | 1.93 | 163 | eP | Pn | 08 46 15.9 | +1.6 |
| CXM | Morne La Croix | 1.95 | 162 | eP | Pn | 08 46 15.5 | +0.9 |
| CXM | | | | eS | Sn | 08 46 40.2 | +1.0 |
| BAMF | Morne Balai | 1.95 | 161 | ⇓eP | Pn | 08 46 15.9 | +1.4 |
| GBMF | Grand Be | 1.96 | 162 | eP | Pn | 08 46 16.2 | +1.4 |
| FDF | Fort de France | 2.03 | 162 | eP | Pn | 08 46 16.4 | +0.9 |
| FDF | | | | eS | Sn | 08 46 42.1 | +1.3 |
| BVM | Bellevue | 2.05 | 160 | eP | Pn | 08 46 17.0 | +1.2 |
| ZAM | Aeronautique | 2.22 | 160 | eP | Pn | 08 46 19.2 | +1.3 |
| LPMF | Morne Lapointe | 2.24 | 159 | eP | Pn | 08 46 19.1 | +0.9 |
| TRMF | Trois Ilets | 2.24 | 161 | eP | Pn | 08 46 18.9 | +0.7 |

**WEL 05 08:58:19.6**±0.2**, 37°.92S**×**178°.04E, h72**km±1km**, ML3.9**/15**, 21C-13D, Error ellipse: s-maj=1.4km s-min=1.0km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PUZ | Puketiti | 0.23 | 132 | ⇑PN | Pn | 08 58 30.1 | -0.5 |
| PUZ | | | | SN | Sn | 08 58 37.7 | -0.9 |
| PUZ | | | | AML | AML | 08 58 37.7 | |
| TWGZ | Tauwhareparae | 0.26 | 191 | ⇑PN | Pn | 08 58 30.6 | -0.1 |
| TWGZ | | | | SN | Sn | 08 58 39.1 | +0.1 |
| HAZ | Te Kaha | 0.27 | 309 | ⇓PN | Pn | 08 58 30.6 | -0.1 |
| HAZ | | | | SN | Sn | 08 58 38.2 | -0.6 |
| WMGZ | Waiomatatini S | 0.31 | 71 | ⇑PN | Pn | 08 58 31.1 | +0.1 |
| WMGZ | | | | SN | Sn | 08 58 39.7 | +0.4 |
| MXZ | Matakaoa Point | 0.41 | 30 | ⇑PN | Pn | 08 58 32.1 | +0.3 |
| MXZ | | | | SN | Sn | 08 58 41.2 | +0.5 |
| MXZ | | | | AML | AML | 08 58 41.9 | |
| MXZ | | | | AML | AML | 08 58 42.4 | |
| MXZ | | | | AML | AML | 08 58 42.6 | |
| TKGZ | Te Karaka | 0.54 | 197 | ⇓PN | Pn | 08 58 32.8 | -0.1 |
| TKGZ | | | | SN | Sn | 08 58 42.8 | +0.1 |
| MWZ | Matawai | 0.58 | 225 | ⇓PN | Pn | 08 58 33.2 | -0.2 |
| MWZ | | | | SN | Sn | 08 58 42.8 | -0.7 |
| MWZ | | | | AML | AML | 08 58 43.1 | |
| MWZ | | | | AML | AML | 08 58 43.3 | |
| MWZ | | | | AML | AML | 08 58 43.7 | |
| RAGZ | Rawiri | 0.76 | 221 | ⇓PN | Pn | 08 58 35.4 | 0.0 |
| WIZ | White Island | 0.78 | 300 | ePN | Pn | 08 58 35.2 | -0.4 |
| URZ | Urewera | 0.81 | 245 | ⇑PN | Pn | 08 58 35.7 | -0.2 |
| URZ | | | | AML | AML | 08 58 48.4 | |
| URZ | | | | AML | AML | 08 58 49.5 | |
| RIGZ | Rimuhau | 0.81 | 196 | ⇓PN | Pn | 08 58 35.8 | -0.1 |
| PRGZ | Paritu Road | 1.01 | 187 | ⇓PN | Pn | 08 58 37.8 | -0.5 |
| SNGZ | Shannon Statio | 1.02 | 213 | PN | Pn | 08 58 38.5 | 0.0 |
| EDRZ | Edgecumbe | 1.05 | 259 | ⇑PN | Pn | 08 58 38.6 | -0.2 |
| KNZ | Kokohu | 1.13 | 195 | ⇓PN | Pn | 08 58 39.2 | -0.6 |
| KNZ | | | | AML | AML | 08 58 55.8 | |
| KNZ | | | | AML | AML | 08 58 57.2 | |
| OPRZ | Ohinepanea | 1.18 | 273 | ⇑PN | Pn | 08 58 39.8 | -0.6 |
| MHGZ | Mahia Peninsul | 1.23 | 185 | ⇓PN | Pn | 08 58 40.8 | -0.4 |
| RAHZ | Arahi | 1.25 | 217 | PN | Pn | 08 58 41.6 | +0.2 |
| TARZ | Mount Tarawera | 1.25 | 255 | ⇑PN | Pn | 08 58 41.4 | -0.1 |
| RRRZ | Republican Roa | 1.28 | 250 | ⇑PN | Pn | 08 58 41.3 | -0.4 |
| LIRZ | Lichensteins R | 1.31 | 266 | ⇑PN | Pn | 08 58 42.0 | -0.2 |
| WHHZ | Waihua | 1.31 | 209 | ⇑PN | Pn | 08 58 42.3 | +0.2 |
| HLRZ | Highlands Stat | 1.38 | 256 | ePN | Pn | 08 58 42.8 | -0.2 |
| PRRZ | Plateau Road | 1.42 | 246 | ⇑PN | Pn | 08 58 43.3 | -0.3 |
| KARZ | Kaharoa | 1.43 | 266 | ⇑PN | Pn | 08 58 43.3 | -0.4 |
| HRRZ | Handcock Road | 1.46 | 251 | PN | Pn | 08 58 43.9 | -0.2 |
| ALRZ | Allen Road | 1.48 | 244 | ⇑PN | Pn | 08 58 44.1 | -0.3 |
| NMHZ | Naumai | 1.52 | 219 | ⇓PN | Pn | 08 58 45.3 | +0.3 |
| MRHZ | Matea Rd | 1.57 | 234 | PN | Pn | 08 58 45.4 | -0.1 |
| ARHZ | Aropaoanui | 1.57 | 211 | ⇓PN | Pn | 08 58 45.6 | +0.1 |
| BKZ | Black Stump Fm | 1.74 | 224 | ⇓PN | Pn | 08 58 47.7 | -0.2 |
| BKZ | | | | AML | AML | 08 59 09.6 | |
| BKZ | | | | AML | AML | 08 59 09.8 | |
| CKHZ | Cape Kidnapper | 1.89 | 203 | ⇑PN | Pn | 08 58 48.9 | -0.9 |
| KWHZ | Kaweka Forest | 1.96 | 220 | ⇓PN | Pn | 08 58 50.2 | -0.6 |
| RITZ | Rihia Road | 2.01 | 238 | PN | Pn | 08 58 51.7 | +0.2 |
| TLZ | Tolley Road | 2.02 | 258 | PN | Pn | 08 58 51.2 | -0.3 |
| TOZ | Tahuroa Road | 2.02 | 275 | ⇑PN | Pn | 08 58 51.2 | -0.3 |
| KAHZ | Kahuranaki | 2.08 | 206 | ⇑PN | Pn | 08 58 51.5 | -0.9 |
| KRHZ | Kereru | 2.16 | 217 | ⇑PN | Pn | 08 58 52.4 | -1.1 |
| KUZ | Kuaotunu | 2.19 | 302 | PN | Pn | 08 58 53.3 | -0.5 |
| BHHZ | Black Hill Sta | 2.20 | 224 | ⇑PN | Pn | 08 58 53.7 | -0.3 |
| KRVZ | Karewarewa | 2.22 | 237 | ⇓PN | Pn | 08 58 54.3 | -0.1 |
| OTVZ | Oturere | 2.24 | 236 | PN | Pn | 08 58 54.4 | -0.3 |
| WTVZ | West Tongariro | 2.26 | 237 | PN | Pn | 08 58 54.9 | -0.1 |
| NGZ | Ngauruhoe | 2.29 | 236 | PN | Pn | 08 58 55.1 | -0.2 |
| PXZ | Pawanui | 2.30 | 203 | PN | Pn | 08 58 53.4 | -1.9 |
| PXZ | | | | AML | AML | 08 59 21.6 | |
| PXZ | | | | AML | AML | 08 59 21.7 | |
| PXZ | | | | AML | AML | 08 59 22.3 | |
| PXZ | | | | AML | AML | 08 59 22.3 | |
| TUVZ | Tukino | 2.31 | 234 | PN | Pn | 08 58 55.3 | -0.3 |
| COVZ | Chateau Observ | 2.34 | 236 | PN | Pn | 08 58 55.9 | -0.1 |
| WPVZ | Whakapapa | 2.34 | 236 | PN | Pn | 08 58 55.9 | -0.1 |
| WHVZ | Whangaehu Hut | 2.35 | 234 | PN | Pn | 08 58 55.9 | -0.5 |
| DRZ | Dome Shelter | 2.37 | 234 | PN | Pn | 08 58 56.9 | +0.3 |
| WNVZ | Wahianoa | 2.37 | 233 | ⇑PN | Pn | 08 58 56.0 | -0.5 |
| MKAZ | Moumakai | 2.43 | 289 | PN | Pn | 08 58 57.0 | 0.0 |
| PNHZ | Pukenui | 2.45 | 215 | PN | Pn | 08 58 55.8 | -1.6 |
| MTVZ | Mangateitei | 2.49 | 233 | PN | Pn | 08 58 57.7 | -0.2 |
| PKVZ | Pokaka | 2.52 | 236 | PN | Pn | 08 58 58.2 | -0.1 |
| WIAZ | Waiheke Island | 2.58 | 295 | PN | Pn | 08 58 59.5 | +0.5 |
| HIZ | Hauiti | 2.58 | 256 | PN | Pn | 08 58 59.8 | +0.8 |
| PRHZ | Porangahau | 2.58 | 205 | PN | Pn | 08 58 57.1 | -2.0 |
| GRZ | Great Barrier | 2.66 | 308 | PN | Pn | 08 59 00.3 | +0.1 |
| TSZ | Takapari Road | 2.68 | 217 | ⇑PN | Pn | 08 58 58.6 | -1.9 |
| DVHZ | Dannevirke | 2.79 | 211 | PN | Pn | 08 58 59.5 | -2.4 |
| VRZ | Vera Road | 2.84 | 244 | PN | Pn | 08 59 03.4 | +0.8 |
| WAZ | Wanganui | 3.01 | 232 | PN | Pn | 08 59 05.0 | +0.1 |
| BFZ | Birch Farm | 3.09 | 206 | PN | Pn | 08 59 03.5 | -2.5 |
| BFZ | | | | AML | AML | 08 59 41.6 | |
| TIWZ | Tintock | 3.31 | 210 | AML | AML | 08 59 47.2 | |
| TIWZ | | | | AML | AML | 08 59 49.1 | |
| MRZ | Mangatainoka R | 3.34 | 214 | PN | Pn | 08 59 06.4 | -3.0 |
| MRZ | | | | AML | AML | 08 59 44.4 | |
| MRZ | | | | AML | AML | 08 59 45.6 | |
| HOWZ | Holdsworth Sta | 3.56 | 213 | PN | Pn | 08 59 09.3 | -3.1 |
| TMWZ | Te Maipa | 3.59 | 207 | PN | Pn | 08 59 09.8 | -3.1 |
| OGWZ | Otaki Gorge | 3.65 | 217 | PN | Pn | 08 59 10.5 | -3.1 |
| MTW | Mount Morrison | 3.78 | 211 | PN | Pn | 08 59 12.3 | -3.1 |
| MTW | | | | AML | AML | 08 59 54.6 | |
| MTW | | | | AML | AML | 08 59 54.8 | |
| KIW | Kapiti Island | 3.81 | 219 | PN | Pn | 08 59 12.9 | -3.0 |
| TRWZ | Traveller | 3.92 | 207 | PN | Pn | 08 59 14.1 | -3.2 |
| CAW | Cannon Point | 3.93 | 215 | PN | Pn | 08 59 13.8 | -3.7 |
| CAW | | | | AML | AML | 09 00 02.1 | |
| PAWZ | Paruwai Farm | 4.00 | 210 | PN | Pn | 08 59 15.5 | -3.0 |
| PAWZ | | | | AML | AML | 09 00 00.3 | |
| PAWZ | | | | AML | AML | 09 00 01.0 | |
| TCW | Tory Channel | 4.39 | 220 | PN | Pn | 08 59 20.1 | -3.6 |
| TCW | | | | AML | AML | 09 00 11.4 | |
| TCW | | | | AML | AML | 09 00 12.6 | |
| TUWZ | Tuamarina | 4.72 | 221 | PN | Pn | 08 59 24.9 | -3.3 |
| TUWZ | | | | AML | AML | 09 00 19.0 | |
| QRZ | Quartz Range | 5.16 | 234 | PN | Pn | 08 59 31.1 | -3.2 |
| THZ | Tophouse | 5.51 | 224 | PN | Pn | 08 59 35.4 | -3.7 |
| KHZ | Kahutara | 5.66 | 216 | PN | Pn | 08 59 38.6 | -2.4 |

*ISCJB **05** 09:17:06.0±1.1, 4°.5S±0°.2×151°.8E±0°.3, h153km, mb3.4/6, Error ellipse: s-maj=46.6km s-min=10.7km az=35.4*

*IDC **05** 09:17:07.8±4.1, 4°.60S×151°.88E, h163km±36km, mb3.2/6, mb1 3.5/7, mb1mx3.2/31, mbtmp3.7/7, Error ellipse: s-maj=42.5km s-min=24.1km az=119.0*

**ISC 05 09:17:07.1**±1.2**, 4°.5S**±0°.2×**151°.9E**±0°.3**, h153**km**, n8, σ1s.07**/9**, mb3.5**/6**, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 6.74 | 224 | P | Pn | 09 18 44.5 | +0.7 |
| | 1.1nm,0.3s,baz=190,slow=9.2,SNR=3.3 | | | | | | |
| PMG | | | | S | Sn | 09 19 59.4 | -0.1 |
| | 1.7nm,0.3s,baz=330,slow=18,SNR=7.0 | | | | | | |
| WRA | Warramunga Arr | 22.95 | 227 | P | P | 09 21 57.0 | -1.3 |
| | 1.6nm,0.7s,baz=49,slow=9.9,SNR=28 | | | | | | |
| ASAR | Alice Springs | 25.74 | 221 | P | P | 09 22 23.3 | -0.4 |
| | 0.2nm,0.3s,baz=52,slow=8.4,SNR=10 | | | | | | |
| SONM | Songino Array | 65.58 | 328 | P | P | 09 27 35.4 | +0.7 |
| | 0.5nm,0.6s,baz=137,slow=7.2,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 79.49 | 319 | P | P | 09 28 56.9 | 0.0 |
| | 0.2nm,0.4s,baz=111,slow=8.0,SNR=2.7 | | | | | | |
| ILAR | Eielson Array | 82.25 | 22 | P | P | 09 29 09.7 | -1.4 |
| | 0.6nm,0.6s,baz=249,slow=5.3,SNR=11 | | | | | | |
| NVAR | Mina Array Bea | 92.64 | 52 | P | P | 09 30 03.4 | +1.2 |
| | 0.2nm,0.6s,baz=231,slow=5.7,SNR=2.8 | | | | | | |
| TORD | Torodi Ar. Bea | 149.32 | 288 | PKPbc | PKPbc | 09 36 38.3 | -0.7 |
| | 2.1nm,0.8s,baz=79,slow=2.4,SNR=12 | | | | | | |

*DDA **05** 09:18:01.6, 37°.22N×28°.17E, h7km, Md2.5*

*ISK **05** 09:18:01.1, 37°.25N×28°.18E, h5km, MD2.8*

*ISCJB **05** 09:18:02.2±0.7, 37°.16N±0°.05×28°.13E±0°.05, h0km, Error ellipse: s-maj=8.1km s-min=4.1km az=33.5*

*CSEM **05** 09:18:02.1±0.4, 37°.22N×28°.20E, h1km, MD2.5, Error ellipse: s-maj=12.6km s-min=7.2km az=37.0, Mining explosion.*

**ISC 05 09:18:01.5**±0.9**, 37°.29N**±0°.04×**28°.26E**±0°.03**, h0**km**, n16, σ0s.74**/24**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.16 | 172 | ePG | Pg | 09 18 04.5 | 0.0 |
| YER | | | | eSG | Sg | 09 18 07.4 | +0.9 |
| YER | Yerkesik | 0.16 | 172 | ePg | Pg | 09 18 04.5 | 0.0 |
| YER | | | | eSg | Sg | 09 18 07.4 | +0.9 |
| AYDN | Tasoluk | 0.47 | 321 | iP | Pb | 09 18 13.4 | +0.6 |
| AYDN | | | | iS | Sb | 09 18 20.6 | +0.2 |
| AYDN | Tasoluk | 0.47 | 321 | P | Pb | 09 18 13.4 | +0.6 |
| AYDN | | | | S | Sb | 09 18 20.6 | +0.2 |
| TURN | Turunc | 0.50 | 146 | iP | Pg | 09 18 10.6 | -0.5 |
| TURN | | | | iS | Sg | 09 18 17.5 | -0.1 |
| TURN | Turunc | 0.50 | 146 | P | Pg | 09 18 10.6 | -0.5 |
| TURN | | | | S | Sg | 09 18 17.5 | -0.1 |
| DALY | Dalyan (Mu˜la | 0.57 | 146 | ePG | Pb | 09 18 13.7 | -0.6 |
| DALY | Dalyan (Mu˜la | 0.57 | 146 | ePg | Pb | 09 18 13.7 | -0.6 |
| BDRM | Kayabasi | 0.69 | 251 | iP | Pg | 09 18 13.3 | -1.3 |
| BDRM | Kayabasi | 0.69 | 251 | P | Pg | 09 18 13.3 | -1.3 |
| AYDB | Zeytinkoy-Aydi | 0.71 | 336 | ePG | Pb | 09 18 16.4 | -0.5 |
| AYDB | Zeytinkoy-Aydi | 0.71 | 336 | ePg | Pb | 09 18 16.4 | -0.5 |
| BODT | Bodrum | 0.79 | 253 | ePG | Pg | 09 18 16.1 | -0.5 |
| BODT | Bodrum | 0.79 | 253 | ePg | Pg | 09 18 16.1 | -0.5 |
| GOLH | Golhisar | 1.04 | 93 | iP | Pg | 09 18 20.7 | -0.8 |
| GOLH | | | | iS | Sn | 09 18 39.8 | +1.0 |
| GOLH | Golhisar | 1.04 | 93 | P | Pg | 09 18 20.6 | -0.8 |
| GOLH | | | | S | Sn | 09 18 39.8 | +1.0 |

*SZGRF **05** 09:44:21.9, 19°.13S×176°.39W, h33km*

*ISCJB **05** 09:44:46.5±1.0, 18°.94S±0°.05×176°.13W±0°.04, h241km±9km, mb4.7/82, Error ellipse: s-maj=9.4km s-min=5.2km az=145.8*

*IDC **05** 09:44:46.5±1.6, 18°.91S×175°.94W, h234km±14km, mb4.3/16, mb1 4.5/18, mb1mx4.4/24, mbtmp4.8/18, Error ellipse: s-maj=14.2km s-min=9.0km az=118.0*

*BJI **05** 09:44:47.8, 18°.90S×176°.10W, h261km, mb4.7/29, mB5.0/22*

*AUST **05** 09:44:49.1±1.6, 18°.88S×175°.94W, h262km, Error ellipse: s-maj=2.1km s-min=1.4km az=309.0*

*NEIC **05** 09:44:51.0±1.0, 18°.96S×176°.06W, h274km±9km, mb4.8/68, Error ellipse: s-maj=9.9km s-min=5.7km az=140.0*

*MOS **05** 09:44:53.9±1.9, 18°.81S×176°.27W, h297km, mb4.9/20, Error ellipse: s-maj=11.1km s-min=10.3km az=121.4*

**ISC 05 09:44:51.0**±0.7**, 19°.05S**±0°.07×**176°.04W**±0°.07**, h278**km±6km**, n280, σ1s.16**/304**, mb4.8**/86**, 39C-15D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 5.77 | 282 | eP | Pn | 09 46 21.0 | +4.0 |
| MSVF | Nonsavu | 5.77 | 282 | ePn | Pn | 09 46 21.0 | +4.0 |
| NIUE | Niue | 5.78 | 91 | P | Pn | 09 46 14.2 | -2.8 |
| | baz=5.7,SNR=23 | | | | | | |
| AFI | Afiamalu | 6.54 | 39 | P | Pn | 09 46 20.7 | -5.8 |
| | 11nm,0.3s,baz=166,slow=2.1,SNR=23 | | | | | | |
| AFI | | | | S | S | 09 47 29.0 | -14 |
| | 42nm,0.3s,baz=284,slow=23,SNR=13 | | | | | | |
| AFI | Afiamalu | 6.54 | 39 | eP | Pn | 09 46 21.0 | -5.5 |
| AFI | Afiamalu | 6.54 | 39 | ePn | Pn | 09 46 21.0 | -5.5 |
| AFI | | | | S | S | 09 47 29.0 | -14 |
| DZM | Mont Dzumac | 16.68 | 257 | P | P | 09 48 27.1 | -0.7 |
| | 0.1nm,0.3s,baz=181,slow=6.6,SNR=2.6 | | | | | | |
| URZ | Urewera | 20.05 | 196 | P | P | 09 49 03.6 | -0.1 |
| | 36nm,0.4s,baz=11,slow=1.9,SNR=71 | | | | | | |
| URZ | Urewera | 20.05 | 196 | eP | P | 09 49 03.2 | -0.5 |
| | 40nm,0.4s | | | | | | |
| BKZ | Black Stump Fm | 21.07 | 196 | eP | P | 09 49 13.0 | -1.1 |
| | 26nm,1.2s | | | | | | |
| OXZ | Oxford | 26.21 | 200 | eP | P | 09 50 03.6 | +3.0 |
| | 366nm,2.7s | | | | | | |
| OXZ | | | | ePcP | PcP | 09 53 19.9 | +0.4 |
| RPZ | Rata Peaks | 26.88 | 201 | P | P | 09 50 08.7 | +2.1 |
| | 5.2nm,0.6s,baz=31,slow=12,SNR=4.5 | | | | | | |
| EIDS | Eidsvold | 31.03 | 252 | P | P | 09 50 43.9 | +0.4 |
| | baz=31,SNR=4.8 | | | | | | |
| EIDS | Eidsvold | 31.03 | 252 | eP | P | 09 50 43.5 | 0.0 |
| | 12nm,0.8s | | | | | | |
| ARMA | Armidale | 31.37 | 243 | P | P | 09 50 47.6 | +1.1 |
| | baz=32,SNR=15 | | | | | | |
| ARMA | Armidale | 31.37 | 243 | eP | P | 09 50 47.6 | +1.1 |
| | 301nm,2.7s | | | | | | |
| RMQ | Roma | 33.22 | 251 | P | P | 09 51 03.8 | +1.3 |
| | baz=33,SNR=10 | | | | | | |
| CNB | Canberra Magne | 34.57 | 235 | P | P | 09 51 14.4 | +0.4 |
| | baz=35,SNR=11 | | | | | | |
| CTA | Charters Tower | 35.50 | 262 | P | P | 09 51 22.8 | +0.7 |
| | 39nm,0.7s,baz=94,slow=11,SNR=16 | | | | | | |
| CTAO | Charters Tower | 35.50 | 262 | eP | P | 09 51 21.4 | -0.6 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,44nm,0.8s | | | | | | |
| CTAO | Charters Tower | 35.50 | 262 | eP | P | 09 51 21.4 | -0.6 |
| | comp=Z,44nm,0.8s | | | | | | |
| CMSA | Cobar Meteorol | 36.59 | 243 | P | P | 09 51 31.3 | +0.3 |
| | baz=37,SNR=20 | | | | | | |
| PMG | Port Moresby | 36.87 | 280 | ⇓iP | P | 09 51 33.8 | +0.2 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,240nm,1.3s | | | | | | |
| PMG | Port Moresby | 36.87 | 280 | P | P | 09 51 34.1 | +0.5 |
| | baz=37,SNR=3.8 | | | | | | |
| PMG | Port Moresby | 36.87 | 280 | eP | P | 09 51 34.1 | +0.5 |
| | comp=Z,75nm,1.3s | | | | | | |
| QLP | Quilpie | 37.27 | 251 | P | P | 09 51 36.9 | +0.1 |
| | baz=37,SNR=45 | | | | | | |
| TOO | Toolangi | 38.24 | 233 | P | P | 09 51 45.0 | +0.2 |
| | baz=38,SNR=5.2 | | | | | | |
| COEN | Coen | 39.37 | 271 | P | P | 09 51 54.7 | +0.3 |
| | baz=39,SNR=8.1 | | | | | | |
| QIS | Mount Isa | 41.67 | 260 | P | P | 09 52 12.6 | -0.5 |
| | baz=42,SNR=5.7 | | | | | | |
| HTT | Hallett | 42.54 | 241 | P | P | 09 52 18.0 | -2.0 |
| | baz=43,SNR=7.7 | | | | | | |
| BBOO | Buckleboo | 44.85 | 242 | P | P | 09 52 38.1 | -0.2 |
| | baz=45,SNR=17 | | | | | | |
| BBOO | Buckleboo | 44.85 | 242 | eP | P | 09 52 38.0 | -0.2 |
| | comp=Z,30nm,1.1s | | | | | | |
| AS01 | Alice Springs | 46.62 | 255 | eP | P | 09 52 51.9 | -0.3 |
| WRAB | Tennant Creek | 46.64 | 260 | ⇓iP | P | 09 52 51.8 | -0.6 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,60nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 46.64 | 260 | eP | P | 09 52 51.6 | -0.8 |
| | comp=Z,17nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 46.65 | 260 | P | P | 09 52 51.4 | -1.1 |
| | comp=Z,21nm,0.5s,baz=97,slow=5.6,SNR=305 | | | | | | |
| WRA | | | | S | S | 09 59 15.4 | -5.0 |
| | comp=Z,2.5nm,1.1s,baz=97,slow=14,SNR=8.4 | | | | | | |
| ASAR | Alice Springs | 46.66 | 255 | P | P | 09 52 52.4 | -0.1 |
| | comp=Z,36nm,0.8s,baz=87,slow=8.4,SNR=256 | | | | | | |
| ASAR | | | | PcP | PcP | 09 54 20.8 | -0.6 |
| | comp=Z,3.2nm,0.7s,baz=90,slow=5.0,SNR=4.7 | | | | | | |
| ASAR | | | | S | S | 09 59 16.1 | -4.4 |
| | comp=Z,3.6nm,0.9s,baz=93,slow=15,SNR=15 | | | | | | |
| KDU | Kakadu | 49.79 | 269 | P | P | 09 53 15.9 | -0.5 |
| | baz=50,SNR=14 | | | | | | |
| MTN | Manton Dam | 51.02 | 269 | P | P | 09 53 24.8 | -0.8 |
| | baz=51,SNR=25 | | | | | | |
| MTN | Manton Dam | 51.02 | 269 | eP | P | 09 53 24.7 | -0.8 |
| | comp=Z,72nm,0.8s | | | | | | |
| FORT | Forrest | 51.57 | 245 | P | P | 09 53 28.8 | -0.6 |
| | baz=52,SNR=14 | | | | | | |
| FORT | Forrest | 51.57 | 245 | eP | P | 09 53 28.8 | -0.6 |
| | comp=Z,36nm,0.7s | | | | | | |
| WRKA | Warakurna | 51.65 | 253 | P | P | 09 53 29.8 | -0.4 |
| | baz=52,SNR=66 | | | | | | |
| KNRA | Kununurra | 52.62 | 265 | P | P | 09 53 36.7 | -0.5 |
| | baz=53,SNR=35 | | | | | | |
| SOEI | Soe | 58.33 | 270 | eP | P | 09 54 19.2 | +1.2 |
| | comp=Z,77nm,0.6s | | | | | | |
| SBA | Scott Base | 59.44 | 184 | eP | P | 09 54 27.5 | +3.2 |
| SBA | | | | pmax | pmax | | |
| | comp=Z,151nm,2.6s | | | | | | |
| SBA | Scott Base | 59.44 | 184 | eP | P | 09 54 27.5 | +3.2 |
| | comp=Z,150nm,2.6s | | | | | | |
| VNDA | Vanda | 59.52 | 185 | P | P | 09 54 26.5 | +1.6 |
| | comp=Z,4.2nm,0.9s,baz=1.0,slow=6.9,SNR=17 | | | | | | |
| VNDA | Vanda | 59.52 | 185 | eP | P | 09 54 27.2 | +2.3 |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| VNDA | Vanda | 59.52 | 185 | eP | P | 09 54 27.1 | +2.3 |
| | comp=Z,6.0nm,1.1s | | | | | | |
| MBWA | Marble Bar | 59.98 | 256 | eP | P | 09 54 28.4 | -0.7 |
| | comp=Z,23nm,0.9s | | | | | | |
| MEEK | Meekatharra | 60.15 | 250 | P | P | 09 54 29.0 | -1.1 |
| | baz=60,SNR=6.4 | | | | | | |
| KLBR | Kellerberrin | 60.35 | 244 | P | P | 09 54 30.8 | -0.5 |
| | baz=60,SNR=9.5 | | | | | | |
| BLDU | Ballidu | 61.34 | 245 | P | P | 09 54 37.5 | -0.5 |
| | baz=61,SNR=10 | | | | | | |
| SPSI | Sidrap Palu | 64.34 | 275 | P | P | 09 54 57.2 | -0.7 |
| | comp=Z,19nm,0.8s,comp=Z,2µm | | | | | | |
| TWSI | Taliwang, Sumb | 65.60 | 269 | P | P | 09 55 06.3 | +0.3 |
| | comp=Z,29nm,1.3s | | | | | | |
| CASY | Casey | 66.06 | 205 | eP | P | 09 55 11.0 | +3.1 |
| CASY | | | | ePcP | PcP | 09 55 43.1 | +7.0 |
| MYLDM | Lahad Datu | 68.77 | 284 | eP | P | 09 55 28.4 | +2.6 |
| | comp=Z,12nm,1.0s | | | | | | |
| BBKI | Banjar Baru | 69.15 | 274 | P | P | 09 55 34.4 | +6.2 |
| MJAR | Matsushiro Arr | 70.17 | 322 | P | P | 09 55 33.6 | -0.3 |
| | comp=Z,23nm,0.8s,baz=159,slow=6.1,SNR=66 | | | | | | |
| MAJO | Matsushiro | 70.17 | 322 | d iP | P | 09 55 33.9 | 0.0 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,185nm,0.9s | | | | | | |
| MAJO | Matsushiro | 70.17 | 322 | eP | P | 09 55 33.7 | -0.2 |
| | comp=Z,32nm,0.8s | | | | | | |
| MAT | Matsushiro | 70.17 | 322 | P | P | 09 55 33.6 | -0.3 |
| MAT | | | | S | S | 10 04 21.4 | -0.9 |
| QSPA | South Pole Qui | 71.01 | 180 | eP | P | 09 55 39.5 | +0.8 |
| | comp=Z,14nm,0.9s | | | | | | |
| KKM | Kota Kinabalu | 71.20 | 284 | P | P | 09 55 40.9 | +0.2 |
| | baz=71,SNR=3.7 | | | | | | |
| ERM | Erimo | 71.50 | 329 | ⇓eP | P | 09 55 42.1 | +0.4 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| KUR | Kuril'sk | 71.91 | 334 | eP | P | 09 55 44.2 | +0.2 |
| SBUM | Sibu | 73.60 | 278 | eP | P | 09 55 54.2 | -0.5 |
| | comp=Z,7.3nm,0.8s | | | | | | |
| KSM | Kuching | 75.06 | 277 | P | P | 09 56 03.9 | +0.8 |
| | baz=75,SNR=6.6 | | | | | | |
| KSM | Kuching | 75.06 | 277 | eP | P | 09 56 03.7 | +0.6 |
| | comp=Z,21nm,0.9s | | | | | | |
| PEA0 | Petropavlovsk- | 75.37 | 344 | eP | P | 09 56 03.7 | -0.2 |
| PETK | Petropavlovsk- | 75.37 | 344 | P | P | 09 56 03.8 | -0.2 |
| | comp=Z,15nm,0.9s,baz=120,slow=8.8,SNR=14 | | | | | | |
| YSS | Yuzh-Sakhalins | 75.45 | 332 | iP | P | 09 56 05.6 | +1.1 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| KSRS | Korea Array | 77.05 | 317 | P | P | 09 56 15.1 | +1.4 |
| | comp=Z,7.7nm,1.1s,baz=141,slow=6.2,SNR=13 | | | | | | |
| KSAR | Wonju Array Be | 77.07 | 317 | P | P | 09 56 15.1 | +1.3 |
| KSAR | Wonju Array Be | 77.07 | 317 | P | P | 09 56 15.1 | +1.3 |
| KS01 | Wonju Array Si | 77.08 | 317 | eP | P | 09 56 14.7 | +0.8 |
| VLA | Vladivostok | 78.19 | 324 | ⇑iP | P | 09 56 20.7 | +0.9 |
| VLA | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| MSHR | Mys Shultsa | 78.25 | 323 | ⇓iP | P | 09 56 21.3 | +1.1 |
| NV01 | Mina Array Sit | 78.71 | 43 | eP | P | 09 56 23.3 | +0.2 |
| NV01 | | | | ePP | PP | 09 59 27.9 | +2.1 |
| NVAR | Mina Array Bea | 78.71 | 43 | P | P | 09 56 23.8 | +0.7 |
| | comp=Z,5.6nm,0.7s,baz=225,slow=8.9,SNR=46 | | | | | | |
| USRK | Ussuriysk Ar. | 78.83 | 325 | P | P | 09 56 24.9 | +1.6 |
| | comp=Z,7.3nm,0.8s,baz=133,slow=3.6,SNR=19 | | | | | | |
| KDAK | Kodiak Island | 78.99 | 13 | ceP | P | 09 56 24.0 | +0.2 |
| TPNV | Topopah Spring | 79.21 | 45 | eP | P | 09 56 26.4 | +0.6 |
| TPNV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| TPNV | Topopah Spring | 79.21 | 45 | eP | P | 09 56 26.4 | +0.6 |
| | comp=Z,5.2nm,0.8s | | | | | | |
| MOD | Modoc | 79.53 | 39 | eP | P | 09 56 27.8 | +0.4 |
| | comp=Z,6.9nm,0.9s | | | | | | |
| HABR | Khabarovsk | 80.12 | 329 | eP | P | 09 56 29.2 | -0.9 |
| HABR | | | | e | | 09 56 35.2 | |
| HABR | | | | e*PP | pP | 09 57 39.0 | +3.7 |
| HABR | | | | e*SP | sP | 09 58 11.1 | +6.5 |
| HABR | | | | e | | 09 59 36.0 | |
| HABR | | | | ePPP | PPP | 10 01 27.5 | |
| HABR | | | | eS | S | 10 06 08.9 | -2.0 |
| HABR | | | | e | | 10 06 26.1 | |
| HABR | | | | eSS | SS | 10 11 28.0 | -0.8 |
| HABR | | | | eSSS | SSS | 10 14 57.0 | |
| HABR | | | | pmax | pmax | | |
| | comp=N,12nm,1.1s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,34nm,1.1s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,13nm,0.8s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,58nm,18.0s | | | | | | |
| NJ2 | Nanjing | 80.40 | 309 | eP | P | 09 56 32.5 | +0.5 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,40nm,1.2s | | | | | | |
| MDJ | Mudanjiang | 80.42 | 324 | P | P | 09 56 33.6 | +1.8 |
| MDJ | | | | PMZ | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,88nm,5.2s | | | | | | |
| BMN | Battle Mountai | 80.54 | 41 | eP | P | 09 56 33.3 | +0.5 |
| BMN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| BMN | Battle Mountai | 80.54 | 41 | eP | P | 09 56 33.3 | +0.5 |
| | comp=Z,4.6nm,0.8s | | | | | | |
| WVOR | Wild Horse Val | 80.84 | 39 | eP | P | 09 56 34.7 | +0.4 |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| WVOR | Wild Horse Val | 80.84 | 39 | eP | P | 09 56 34.7 | +0.4 |
| | comp=Z,8.2nm,1.0s | | | | | | |
| I07A | Izee | 81.31 | 37 | eP | P | 09 56 37.3 | +0.6 |
| | comp=Z,167nm,3.0s | | | | | | |
| J08A | Circle Bar Ran | 81.48 | 38 | eP | P | 09 56 38.2 | +0.6 |
| | comp=Z,8.1nm,1.1s | | | | | | |
| WUAZ | Wupatki | 81.80 | 48 | eP | P | 09 56 41.2 | +1.7 |
| | comp=Z,8.6nm,1.1s | | | | | | |
| KLR | Kul'dur | 82.24 | 328 | eP | P | 09 56 38.2 | -3.1 |
| CN2 | Changchun | 82.30 | 321 | ⇑P | P | 09 56 42.3 | +0.6 |
| CN2 | | | | PMZ | | | |
| | comp=Z,30nm,0.9s | | | | | | |
| G08A | Pilot Rock | 82.35 | 37 | eP | P | 09 56 42.7 | +0.7 |
| | comp=Z,15nm,1.0s | | | | | | |
| E07A | Sunnyside | 82.62 | 35 | eP | P | 09 56 44.0 | +0.7 |
| | comp=Z,14nm,0.9s | | | | | | |
| HAWA | Hanford | 82.69 | 36 | eP | P | 09 56 44.3 | +0.7 |
| | comp=Z,17nm,1.0s | | | | | | |
| MSU | Marysvale | 82.77 | 45 | eP | P | 09 56 46.0 | +1.4 |
| MSU | Marysvale | 82.77 | 45 | eP | P | 09 56 46.0 | +1.4 |
| MFID | Camas Ranch | 83.09 | 40 | eP | P | 09 56 46.5 | +0.6 |
| | comp=Z,10nm,1.0s | | | | | | |
| TTA | Tatalina | 83.22 | 9 | eP | P | 09 56 46.6 | +0.6 |
| TTA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| TTA | Tatalina | 83.22 | 9 | eP | P | 09 56 46.6 | +0.6 |
| | comp=Z,15nm,1.1s | | | | | | |
| DUG | Dugway | 83.23 | 44 | eP | P | 09 56 47.3 | +0.6 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| DUG | Dugway | 83.23 | 44 | eP | P | 09 56 47.3 | +0.6 |
| | comp=Z,3.4nm,0.9s | | | | | | |
| D08A | Wollman Farm, | 83.43 | 35 | eP | P | 09 56 48.2 | +0.9 |
| | comp=Z,9.5nm,0.9s | | | | | | |
| MAW | Mawson | 83.54 | 199 | P | P | 09 56 48.2 | +0.5 |
| | comp=Z,4.3nm,0.8s,baz=108,slow=6.1,SNR=14 | | | | | | |
| MAW | Mawson | 83.54 | 199 | eP | P | 09 56 48.3 | +0.6 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| MAW | Mawson | 83.54 | 199 | P | P | 09 56 48.3 | +0.6 |
| | baz=84,SNR=8.7 | | | | | | |
| MAW | Mawson | 83.54 | 199 | eP | P | 09 56 48.3 | +0.6 |
| | comp=Z,1.1nm,0.8s | | | | | | |
| F10A | Beach Ranch, E | 83.73 | 37 | eP | P | 09 56 49.1 | +0.1 |
| | comp=Z,17nm,0.8s | | | | | | |
| B08A | Colville Reser | 83.99 | 34 | eP | P | 09 56 49.9 | -0.3 |
| | comp=Z,6.5nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HLID | Hailey | 84.03 | 40 | eP | P | 09 56 51.8 | +1.1 |
| | comp=Z,9.2nm,0.8s | | | | | | |
| HVU | Hansel Valley | 84.09 | 42 | eP | P | 09 56 51.5 | +0.4 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| HVU | Hansel Valley | 84.09 | 42 | eP | P | 09 56 51.5 | +0.4 |
| | comp=Z,7.0nm,0.8s | | | | | | |
| O16A | Springville | 84.09 | 44 | eP | P | 09 56 50.6 | -0.6 |
| | comp=Z,5.5nm,1.0s | | | | | | |
| CTU | Camp Tracy | 84.18 | 44 | eP | P | 09 56 52.0 | +0.4 |
| | comp=Z,7.1nm,1.1s | | | | | | |
| SRU | San Rafael | 84.19 | 45 | eP | P | 09 56 52.3 | +0.6 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| SRU | San Rafael | 84.19 | 45 | eP | P | 09 56 52.2 | +0.6 |
| | comp=Z,12nm,0.8s | | | | | | |
| P17A | Butcher Ranch, | 84.23 | 45 | eP | P | 09 56 53.5 | +1.7 |
| | comp=Z,8.9nm,1.1s | | | | | | |
| CAST | Castle Rocks | 84.31 | 11 | eP | P | 09 56 49.4 | -2.0 |
| | comp=Z,8.8nm,1.0s | | | | | | |
| TCUT | Toone Canyon | 84.62 | 43 | eP | P | 09 56 55.2 | +1.3 |
| | comp=Z,15nm,0.8s | | | | | | |
| P18A | Preston Nutter | 84.64 | 45 | eP | P | 09 56 54.8 | +0.8 |
| | comp=Z,99nm,3.0s | | | | | | |
| TRF | Thorofare Moun | 84.66 | 11 | eP | P | 09 56 52.7 | -0.7 |
| | comp=Z,18nm,0.8s | | | | | | |
| TX31 | Lajitas Ar. Si | 84.72 | 57 | eP | P | 09 56 55.3 | +0.9 |
| TXAR | Lajitas Array | 84.72 | 57 | P | P | 09 56 55.6 | +1.2 |
| | comp=Z,3.3nm,0.8s,baz=216,slow=8.4,SNR=36 | | | | | | |
| HWUT | Hardware Ranch | 84.77 | 43 | eP | P | 09 56 54.7 | +0.2 |
| | comp=Z,3.2nm,0.8s | | | | | | |
| IPM | Ipoh | 84.79 | 277 | eP | P | 09 56 55.8 | +0.7 |
| | comp=Z,20nm,0.8s | | | | | | |
| PV09 | Paradox Valley | 84.83 | 46 | eP | P | 09 56 55.9 | +0.9 |
| PV10 | Paradox Valley | 84.84 | 47 | eP | P | 09 56 55.8 | +0.8 |
| RND | Reindeer | 84.89 | 12 | eP | P | 09 56 54.6 | +0.2 |
| RND | | | | pmax | pmax | | |
| | comp=Z,30nm,0.9s | | | | | | |
| RND | Reindeer | 84.89 | 12 | eP | P | 09 56 54.6 | +0.2 |
| | comp=Z,30nm,0.9s | | | | | | |
| ANMO | Albuquerque | 85.06 | 51 | ⇑iP | P | 09 56 55.9 | -0.2 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| ANMO | Albuquerque | 85.06 | 51 | eP | P | 09 56 57.1 | +1.0 |
| | comp=Z,4.5nm,0.8s | | | | | | |
| MCK | McKinley | 85.17 | 12 | eP | P | 09 56 55.6 | -0.2 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| MCK | McKinley | 85.17 | 12 | eP | P | 09 56 55.5 | -0.2 |
| | comp=Z,23nm,0.8s | | | | | | |
| SEY | Seymchan | 85.40 | 346 | ⇓iP | P | 09 56 56.7 | -0.1 |
| BWN | Browne | 85.47 | 11 | eP | P | 09 56 57.4 | +0.3 |
| | comp=Z,28nm,1.1s | | | | | | |
| MCMT | McKenzie Canyo | 85.66 | 40 | eP | P | 09 56 59.6 | +0.7 |
| WRH | Wood River Hil | 86.00 | 12 | eP | P | 09 56 59.6 | -0.2 |
| | comp=Z,22nm,1.0s | | | | | | |
| MLY | Manley | 86.03 | 10 | eP | P | 09 56 59.4 | -0.6 |
| | comp=Z,138nm,3.0s | | | | | | |
| DOT | Dot Lake | 86.11 | 14 | eP | P | 09 57 00.2 | -0.2 |
| | comp=Z,30nm,0.8s | | | | | | |
| BSMT | Bassoo Peak | 86.18 | 36 | eP | P | 09 57 01.2 | 0.0 |
| BJI | Beijing | 86.18 | 315 | P | P | 09 57 01.5 | +0.3 |
| BJI | | | | PMZ | | | |
| | comp=Z,15nm,1.2s | | | | | | |
| CCB | Clear Creek Bu | 86.21 | 12 | eP | P | 09 56 60.0 | -0.8 |
| | comp=Z,221nm,2.8s | | | | | | |
| COLA | College | 86.41 | 12c | iP | P | 09 57 01.5 | -0.2 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| COLA | College | 86.41 | 12 | eP | P | 09 57 01.2 | -0.5 |
| | comp=Z,19nm,0.8s | | | | | | |
| IL1 | Eielson Array | 86.50 | 12 | eP | P | 09 57 01.2 | -1.0 |
| ILAR | Eielson Array | 86.50 | 12 | P | P | 09 57 01.3 | -0.9 |
| | comp=Z,2.8nm,0.7s,baz=221,slow=5.5,SNR=23 | | | | | | |
| SMCO | Snowmass | 86.64 | 47 | eP | P | 09 57 04.4 | +0.5 |
| | comp=Z,89nm,2.9s | | | | | | |
| BW06 | Boulder Array | 86.64 | 43 | eP | P | 09 57 03.1 | -0.6 |
| BOZ | Bozeman (W) | 86.82 | 39 | eP | P | 09 57 04.6 | +0.2 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,90nm,3.0s | | | | | | |
| BOZ | Bozeman (W) | 86.82 | 39 | eP | P | 09 57 04.6 | +0.2 |
| | comp=Z,90nm,3.0s | | | | | | |
| HRY | Holter Researc | 87.26 | 38 | eP | P | 09 57 07.0 | +0.6 |
| GYA | Guiyang | 87.56 | 299 | eP | P | 09 57 08.9 | +0.6 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| DAWY | Dawson | 87.57 | 15 | eP | P | 09 57 07.9 | +0.6 |
| | comp=Z,9.3nm,0.9s | | | | | | |
| EGAK | Eagle | 87.74 | 14 | eP | P | 09 57 08.4 | +0.3 |
| | comp=Z,127nm,2.7s | | | | | | |
| SYO | Syowa Base | 88.53 | 192 | ⇓eX | P | 09 57 10.4 | -1.5 |
| XAN | Xi'an | 88.74 | 307 | P | P | 09 57 14.9 | +1.3 |
| XAN | | | | pP | pP | 09 58 16.7 | -3.4 |
| XAN | | | | PMZ | | | |
| | comp=Z,15nm,1.2s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,71nm,7.4s | | | | | | |
| ABTX | Abilene, Hawle | 89.21 | 55 | eP | P | 09 57 16.6 | +0.8 |
| | comp=Z,3.0nm,0.6s | | | | | | |
| SNAA | Sanae | 89.39 | 178 | P | P | 09 57 15.7 | -0.3 |
| SNAA | Sanae | 89.39 | 178 | eP | P | 09 57 15.4 | -0.6 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| SNAA | Sanae | 89.39 | 178 | eP | P | 09 57 15.4 | -0.6 |
| | comp=Z,2.4nm,0.9s | | | | | | |
| VNA3 | Neumayer Olymp | 89.45 | 176 | P | P | 09 57 16.5 | +0.2 |
| HHC | Hu-ho-hao-te | 89.68 | 314 | eP | P | 09 57 19.4 | +1.5 |
| HHC | | | | PP | PP | 10 00 57.2 | +2.7 |
| HHC | | | | S | S | 10 07 45.4 | +0.2 |
| HHC | | | | SS | SS | 10 13 53.3 | +3.9 |
| HHC | | | | PMZ | | | |
| | comp=Z,24nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,89nm,4.2s | | | | | | |
| VNA2 | Neumayer--Watz | 89.92 | 176 | P | P | 09 57 18.9 | +0.5 |
| | baz=193,slow=3.8 | | | | | | |
| VNA1 | Neumayer--Stat | 90.13 | 176 | P | P | 09 57 19.9 | +0.6 |
| KMI | Kunming | 90.35 | 296 | P | P | 09 57 22.5 | +1.0 |
| KMI | | | | PMZ | | | |
| | comp=Z,12nm,0.8s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,130nm,4.4s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,380nm,12.2s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,170nm,4.3s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,280nm,14.6s | | | | | | |
| LAO | LASA Array | 90.61 | 40 | eP | P | 09 57 23.4 | +1.4 |
| | comp=Z,15nm,0.9s | | | | | | |
| RSSD | Black Hills | 90.83 | 43 | eP | P | 09 57 23.5 | +0.2 |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,133nm,2.8s | | | | | | |
| RSSD | Black Hills | 90.83 | 43 | eP | P | 09 57 23.5 | +0.2 |
| | comp=Z,133nm,2.8s | | | | | | |
| CM01 | Chiang Mai Arr | 91.36 | 289 | eP | P | 09 57 27.1 | +1.1 |
| CMAR | Chiang Mai Arr | 91.39 | 289 | P | P | 09 57 27.1 | +1.0 |
| | comp=Z,6.4nm,0.9s,baz=116,slow=2.9,SNR=25 | | | | | | |
| CHTO | Chiang Mai | 91.50 | 289 | P | P | 09 57 28.5 | +1.8 |
| | comp=Z,53nm,0.9s | | | | | | |
| CHTO | Chiang Mai | 91.50 | 289 | eP | P | 09 57 28.0 | +1.3 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 91.50 | 289 | eP | P | 09 57 28.0 | +1.3 |
| | comp=Z,6.8nm,0.8s | | | | | | |
| CD2 | Chengdu | 91.58 | 302 | eP | P | 09 57 27.4 | +0.6 |
| CD2 | | | | pP | pP | 09 58 31.0 | -2.5 |
| CD2 | | | | PP | PP | 10 01 09.3 | -0.3 |
| CD2 | | | | SKS | SKSac | 10 07 33.6 | +0.9 |
| CD2 | | | | S | S | 10 08 04.0 | +1.3 |
| CD2 | | | | SS | SS | 10 14 18.6 | +1.6 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| DGMT | Dagmar | 92.63 | 39 | eP | P | 09 57 32.3 | +1.1 |
| | comp=Z,17nm,0.8s | | | | | | |
| LZH | Lanzhou | 93.37 | 307 | eP | P | 09 57 36.4 | +1.3 |
| LZH | | | | pP | pP | 09 58 39.4 | -2.5 |
| LZH | | | | PMZ | | | |
| | comp=Z,20nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,85nm,4.3s | | | | | | |
| ULN | Ulaanbaatar | 95.49 | 319 | ⇓iP | P | 09 57 43.8 | -0.7 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| ULN | Ulaanbaatar | 95.49 | 319 | eP | P | 09 57 45.5 | +1.0 |
| | comp=Z,7.2nm,1.1s | | | | | | |
| SONA1 | Songino Array | 95.88 | 319 | eP | P | 09 57 46.0 | -0.4 |
| SONM | Songino Array | 95.89 | 319 | P | P | 09 57 45.3 | -1.0 |
| | comp=Z,2.0nm,0.9s,baz=108,slow=4.8,SNR=6.3 | | | | | | |
| TLY | Talaya | 98.91 | 322 | ePP | PP | 10 02 05.4 | -0.2 |
| MKAR | Makanchi Array | 111.54 | 314 | PKiKP | PKiKP | 10 02 50.5 | -1.8 |
| | comp=Z,0.4nm,0.3s,baz=74,slow=4.3,SNR=5.2 | | | | | | |
| KURK | Kurchatov | 114.18 | 318 | PKIKP | PKPdf | 10 02 56.2 | -1.0 |
| KURK | Kurchatov | 114.18 | 318 | PKP | PKPdf | 10 02 56.1 | -1.0 |
| KURBB | Kurchatov Arra | 114.23 | 318 | PKP | PKPdf | 10 02 56.1 | -1.2 |
| | comp=Z,0.7nm,0.2s,baz=91,slow=1.8,SNR=14 | | | | | | |
| KSH | Kashi | 115.57 | 305 | ePKP | PKPdf | 10 02 58.6 | -1.8 |
| KSH | | | | ePP | PP | 10 04 09.6 | +2.3 |
| KSH | | | | PKS | PKSdf | 10 06 33.5 | -3.7 |
| KSH | | | | SKS | SKSdf | 10 09 43.1 | -2.8 |
| KSH | | | | SKKS | SKKSac | 10 10 34.8 | -4.6 |
| KSH | | | | SS | SS | 10 19 46.4 | +1.4 |
| KSH | | | | PPMZ | | | |
| | comp=Z,82nm,6.5s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,190nm,7.1s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,150nm,5.5s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,170nm,5.8s | | | | | | |
| BVAR | Borovoye Array | 119.15 | 321 | PKP | PKPdf | 10 03 05.8 | -1.0 |
| | comp=Z,1.3nm,0.5s,baz=116,slow=3.4,SNR=8.5 | | | | | | |
| ARU | Arti | 125.04 | 326 | PKP | PKPdf | 10 03 17.4 | -0.5 |
| | comp=Z,1.6nm,0.2s,baz=97,slow=23,SNR=1.3 | | | | | | |
| ARU | Arti | 125.04 | 326 | i PKIKP | PKPdf | 10 03 17.0 | -0.9 |
| ARU | | | | | | 10 05 08.5 | |
| ARU | | | | | | 10 09 50.5 | |
| AKTO | Aktyubinsk | 127.19 | 319 | PKP | PKPdf | 10 03 21.1 | -1.2 |
| | comp=Z,0.8nm,0.6s,baz=319,slow=1.3,SNR=4.3 | | | | | | |
| ARCES | ARCESS Array B | 127.81 | 351 | PKP | PKPdf | 10 03 21.6 | -1.3 |
| | comp=Z,3.9nm,0.8s,baz=107,slow=0.4,SNR=12 | | | | | | |
| BOSA | Boshof | 128.34 | 204 | PKP | PKPdf | 10 03 25.5 | +0.1 |
| | comp=Z,2.3nm,0.7s,baz=223,slow=2.0,SNR=4.1 | | | | | | |
| FINES | FINESS Array B | 134.88 | 345 | PKP | PKPdf | 10 03 36.4 | 0.0 |
| | comp=Z,2.0nm,0.6s,baz=280,slow=1.2,SNR=4.1 | | | | | | |
| AKASG | Malin Array Be | 142.59 | 333 | PKhKP | PKPpre | 10 03 43.1 | |
| | comp=Z,0.8nm,0.4s,baz=39,slow=4.5,SNR=5.4 | | | | | | |
| AKASG | | | | PKP | PKiKP | 10 03 52.9 | -1.2 |
| | comp=Z,0.9nm,0.5s,baz=47,slow=2.9,SNR=5.4 | | | | | | |
| SHEL | Horse Pasture | 143.93 | 164 | i PKIKP | PKPdf | 10 03 55.2 | +0.9 |
| MALT | Malatya | 144.47 | 310 | ⇓PKIKP | PKPdf | 10 03 54.8 | +0.1 |
| MALT | Malatya | 144.47 | 310 | ⇓iP | PKPdf | 10 03 54.8 | +0.1 |
| LVV | L'vov | 145.35 | 337 | ePKIKP | PKPdf | 10 03 55.1 | -0.6 |
| OJC | Ojcow | 146.43 | 342 | ePKP | PKPbc | 10 03 59.3 | 0.0 |
| OJC | Ojcow | 146.43 | 342 | ePKP2 | PKPbc | 10 03 59.4 | +0.1 |
| BURAR | Bucovina Array | 146.65 | 334 | ⇑PKP2 | PKPab | 10 04 01.1 | -0.8 |
| BURAR | Bucovina Array | 146.65 | 334 | ⇑iP | PKPab | 10 04 01.1 | -0.8 |
| KSP | Ksiaz | 146.80 | 346 | ePKP | PKPbc | 10 04 00.8 | +0.5 |
| KSP | Ksiaz | 146.80 | 346 | ePKP2 | PKPbc | 10 04 00.9 | +0.6 |
| TESR | Tescani | 146.86 | 331 | ⇑iP | PKPbc | 10 04 00.5 | -0.2 |
| UZH | Uzhgorod | 146.97 | 337 | i PKHKP | PKPpre | 10 03 47.7 | |
| UZH | | | | e | | 10 04 00.5 | |
| NIE | Niedzica | 146.98 | 340 | ePKP | PKPbc | 10 04 01.6 | +0.7 |
| NIE | Niedzica | 146.98 | 340 | ePKP2 | PKPbc | 10 04 01.6 | +0.7 |
| CLL | Collm | 147.03 | 350 | ⇓iPKIKP | PKPbc | 10 04 00.7 | -0.2 |
| CLL | | | | i | | 10 04 02.7 | |
| CLL | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | |
| CLL | Collm | 147.03 | 350 | ePKPbc | PKPbc | 10 04 00.9 | -0.1 |
| | baz=13,slow=2.6 | | | | | | |
| CLL | Collm | 147.03 | 350 | ⇓iPKPbc | PKPbc | 10 04 00.7 | -0.2 |
| | comp=Z,27nm,0.8s | | | | | | |
| CLL | | | | ⇑iPKPab | PKPab | 10 04 02.7 | -0.4 |
| | comp=Z,23nm,0.9s | | | | | | |
| WIMM | Wimmelburg | 147.05 | 351 | ePKPbc | PKPbc | 10 04 00.9 | 0.0 |
| | baz=13,slow=2.6 | | | | | | |
| BRTR | Keskin Array B | 147.18 | 315 | PKP | PKPdf | 10 03 58.5 | -0.8 |
| | comp=Z,6.4nm,0.8s,baz=29,slow=3.3,SNR=17 | | | | | | |
| BRTR | | | | PKPbc | PKPbc | 10 04 02.0 | +0.1 |
| | comp=Z,9.3nm,0.9s,baz=132,slow=3.5,SNR=24 | | | | | | |
| UPC | Upice | 147.18 | 346 | ePKP2 | PKPbc | 10 04 01.6 | +0.2 |
| UPC | Upice | 147.18 | 346 | ⇑ePKP | PKPbc | 10 04 01.6 | +0.2 |
| UPC | | | | ePKPAB | PKiKP | 10 04 03.3 | -0.2 |
| OKC | Ostrava-Krasne | 147.25 | 343 | ePKP2 | PKPbc | 10 04 01.9 | +0.3 |
| OKC | Ostrava-Krasne | 147.25 | 343 | ⇑ePKP | PKPbc | 10 04 01.9 | +0.3 |
| OKC | | | | ePKPAB | PKPab | 10 04 04.7 | +0.6 |
| DPC | Dobruska-Polom | 147.25 | 345 | ePKP2 | PKPbc | 10 04 01.8 | +0.1 |
| DPC | Dobruska-Polom | 147.25 | 345 | ⇑ePKP | PKPbc | 10 04 01.8 | +0.1 |
| DPC | | | | ePKPAB | PKiKP | 10 04 03.9 | +0.2 |
| DPC | | | | ex | x | 10 04 04.7 | |
| BRG | Berggiesshubel | 147.27 | 348 | i PKP | PKPbc | 10 04 01.7 | +0.1 |
| | comp=Z,12nm,0.8s | | | | | | |
| BRG | Berggiesshubel | 147.27 | 348 | i PKP2 | PKPbc | 10 04 01.7 | +0.1 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| BRG | Berggiesshubel | 147.27 | 348 | ePKPbc | PKPbc | 10 04 01.8 | +0.1 |
| | baz=13,slow=2.6 | | | | | | |
| TRPA | Tarpa | 147.30 | 337 | ⇑iP | PKPbc | 10 04 02.3 | +0.5 |
| VRI | Vrincioaia | 147.30 | 330 | ⇑PKP2 | PKPbc | 10 04 03.0 | +1.1 |
| VRI | Vrincioaia | 147.30 | 330 | ⇑iP | PKPbc | 10 04 03.0 | +1.1 |
| FBE | Freiberg | 147.34 | 349 | ePKPbc | PKPbc | 10 04 02.2 | +0.4 |
| | baz=13,slow=2.6 | | | | | | |
| PLOR | Plostina | 147.35 | 330 | ⇑PKIKP | PKPbc | 10 04 00.8 | -1.3 |
| PLOR | Plostina | 147.35 | 330 | ⇑iP | PKPbc | 10 04 00.8 | -1.3 |
| KRLC | Kraliky | 147.39 | 345 | ePKP2 | PKPbc | 10 04 01.9 | -0.1 |
| KRLC | Kraliky | 147.39 | 345 | ⇑ePKP | PKPbc | 10 04 01.9 | -0.1 |
| KRLC | | | | ePKPAB | PKPab | 10 04 05.0 | +0.3 |
| MORC | Moravsky Berou | 147.47 | 344 | ⇑PKIKP | PKPdf | 10 03 59.8 | +0.5 |
| MORC | Moravsky Berou | 147.47 | 344 | ⇑iP | PKPdf | 10 03 59.8 | +0.5 |
| PVCC | Panska Ves | 147.47 | 347 | ePKP2 | PKPbc | 10 04 02.5 | +0.3 |
| PVCC | Panska Ves | 147.47 | 347 | ⇑ePKP | PKPbc | 10 04 02.5 | +0.3 |
| PVCC | | | | ePKPAB | PKPab | 10 04 05.6 | +0.7 |
| PRA | Prague | 147.94 | 347 | ePKIKP | PKPbc | 10 04 02.4 | -1.0 |
| PRA | Prague | 147.94 | 347 | ⇑ePKP | PKPbc | 10 04 02.4 | -1.0 |
| MLR | Muntele Rosu | 147.95 | 330 | ⇑PKIKP | PKPbc | 10 04 02.7 | -1.1 |
| MLR | Muntele Rosu | 147.95 | 330 | ⇑iP | PKPbc | 10 04 02.7 | -1.1 |
| WERD | Werda | 147.97 | 350 | ePKPbc | PKPbc | 10 04 03.7 | +0.2 |
| | baz=13,slow=2.6 | | | | | | |
| PRU | Pruhonice | 147.99 | 347 | ePKP2 | PKPbc | 10 04 03.7 | +0.1 |
| PRU | Pruhonice | 147.99 | 347 | ⇑ePKP | PKPbc | 10 04 03.7 | +0.1 |
| PRU | | | | ePKPAB | PKPab | 10 04 07.1 | +0.1 |
| GOPC | GO Pecny, Ondr | 148.01 | 347 | ePKIKP | PKPbc | 10 04 03.0 | -0.6 |
| GOPC | GO Pecny, Ondr | 148.01 | 347 | ⇑ePKP | PKPbc | 10 04 03.0 | -0.6 |
| DRGR | | 148.34 | 335 | ⇑PKIKP | PKPbc | 10 04 04.2 | -0.5 |
| DRGR | | 148.34 | 335 | ⇑iP | PKPbc | 10 04 04.2 | -0.5 |
| VOIR | | 148.41 | 331 | ⇑PKP2 | PKPbc | 10 04 05.7 | +0.8 |
| VOIR | | 148.41 | 331 | ⇑iP | PKPbc | 10 04 05.7 | +0.8 |
| MEM | Membach | 148.47 | 358 | PKPbc | PKPbc | 10 04 05.0 | +0.2 |
| ROTZ | Rotzenmuhle | 148.65 | 350 | ePKPbc | PKPbc | 10 04 05.7 | +0.4 |
| | baz=13,slow=2.6 | | | | | | |
| MMAI | Mount Meron Ar | 148.65 | 303 | PKPbc | PKPbc | 10 04 05.0 | -0.9 |
| | comp=Z,14nm,0.6s,baz=66,slow=6.5,SNR=12 | | | | | | |
| BCLA | Clavier | 148.68 | 358 | PKPbc | PKPbc | 10 04 06.4 | +1.1 |
| GRF | Grafenberg Arr | 148.88 | 351 | ePKPbc | PKPbc | 10 04 05.8 | 0.0 |
| | baz=13,slow=2.6 | | | | | | |
| GRF | | | | ePKPab | PKPab | 10 04 10.8 | +0.1 |
| | baz=20,slow=4.2 | | | | | | |
| GRA2 | Grafenberg Arr | 148.89 | 351 | ePKPab | PKPab | 10 04 10.9 | +0.1 |
| | baz=20,slow=4.2 | | | | | | |
| KHC | Kasperske Hory | 149.00 | 348 | ePKHKP | PKPbc | 10 04 06.2 | 0.0 |
| KHC | | | | e | | 10 04 11.5 | |
| KHC | Kasperske Hory | 149.00 | 348 | ⇑ePKP | PKPbc | 10 04 06.2 | 0.0 |
| KHC | | | | ePKPAB | PKPab | 10 04 11.5 | +0.3 |
| DOU | Dourbes | 149.02 | 359 | PKPbc | PKPbc | 10 04 06.5 | +0.4 |
| GRB3 | Grafenberg Arr | 149.12 | 350 | ePKPab | PKPab | 10 04 11.6 | -0.1 |
| | baz=20,slow=4.2 | | | | | | |
| GRB2 | Grafenberg Arr | 149.22 | 350 | ePKPab | PKPab | 10 04 12.0 | 0.0 |
| | baz=20,slow=4.2 | | | | | | |
| GEC2 | GERESS Array S | 149.25 | 347 | ePKPbc | PKPbc | 10 04 06.9 | -0.1 |
| | baz=13,slow=2.6 | | | | | | |
| GERES | GERESS Array B | 149.25 | 347 | PKPbc | PKPbc | 10 04 05.8 | -1.1 |
| | comp=Z,3.6nm,0.7s,baz=29,slow=3.0,SNR=16 | | | | | | |
| WLF | Walferdange | 149.40 | 357 | PKPbc | PKPbc | 10 04 08.1 | +1.0 |
| GZR | Gura Zlata | 149.44 | 333 | ⇑iP | PKPbc | 10 04 05.9 | -1.5 |
| CONA | Conrad Observa | 149.61 | 344 | ⇑iPKiKP | PKiKP | 10 04 08.4 | -0.3 |
| | comp=Z,12nm,1.0s | | | | | | |
| BZS | Buzias | 149.74 | 335 | ⇑iP | PKPbc | 10 04 08.3 | +0.3 |
| SOKA | Soboth | 150.98 | 344 | ⇑iPKPbc | PKPbc | 10 04 10.6 | -0.5 |
| | comp=Z,16nm,1.3s | | | | | | |
| KBA | Koelnbreinsper | 151.00 | 347 | ⇓iPKPbc | PKPbc | 10 04 10.9 | -0.3 |
| | comp=Z,9.0nm,0.7s | | | | | | |
| WTTA | Wattenberg | 151.16 | 349 | ⇑iPKiKP | PKPbc | 10 04 11.6 | 0.0 |
| | comp=Z,16nm,0.7s | | | | | | |
| MOTA | Moosalm | 151.18 | 350 | ⇓iPKPbc | PKPbc | 10 04 11.1 | -0.5 |
| | comp=Z,12nm,1.0s | | | | | | |
| DAVA | Damuels | 151.42 | 352 | ⇑iPKiKP | PKiKP | 10 04 12.6 | +0.1 |
| | comp=Z,14nm,1.0s | | | | | | |
| ABTA | Abfaltersbach | 151.49 | 348 | ⇓iPKPbc | PKPbc | 10 04 11.7 | -0.6 |
| | comp=Z,14nm,0.7s | | | | | | |
| FETA | Feichten | 151.55 | 350 | ⇑iPKiKP | PKPbc | 10 04 12.4 | -0.1 |
| | comp=Z,9.1nm,0.8s | | | | | | |
| DIVS | Divibare | 151.64 | 335 | ⇑iP | PKPbc | 10 04 12.9 | +0.2 |
| ESDC | Sonseca Array | 158.33 | 17 | PKPab | PKPab | 10 04 50.2 | -0.9 |
| | comp=Z,1.4nm,0.6s,baz=328,slow=3.6,SNR=9.1 | | | | | | |
| TORD | Torodi Ar. Bea | 173.74 | 159 | PKP | PKPdf | 10 04 26.0 | -2.0 |
| | comp=Z,2.5nm,1.1s,baz=317,slow=2.3,SNR=9.1 | | | | | | |
| TORD | | | | PKPab | PKPab | 10 05 58.9 | -0.6 |
| | comp=Z,1.6nm,0.8s,baz=193,slow=4.7,SNR=8.5 | | | | | | |

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**WEL 05 09:51:22.3±0.1,39°.22S×175°.19E,h127km±1km,ML3.5/12, 25C-11D,Error ellipse: s-maj=0.9km s-min=0.8km az=0.0,North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PKVZ | Pokaka | 0.14 | 121 | ⇑PN | Pn | 09 51 39.4 | -0.3 |
| PKVZ | | | | SN | Sn | 09 51 52.4 | -0.5 |
| TWVZ | Taurewa | 0.24 | 53 | ⇑PN | Pn | 09 51 39.7 | -0.4 |
| TWVZ | | | | SN | Sn | 09 51 52.5 | -0.9 |
| MTVZ | Mangateitei | 0.28 | 127 | PN | Pn | 09 51 39.9 | -0.2 |
| MTVZ | | | | SN | Sn | 09 51 52.9 | -0.6 |
| COVZ | Chateau Observ | 0.28 | 86 | PN | Pn | 09 51 39.9 | -0.3 |
| COVZ | | | | SN | Sn | 09 51 52.7 | -0.9 |
| WPVZ | Whakapapa | 0.28 | 87 | PN | Pn | 09 51 40.0 | -0.2 |
| WPVZ | | | | SN | Sn | 09 51 53.1 | -0.5 |
| FWVZ | Far West T-bar | 0.28 | 98 | ⇑PN | Pn | 09 51 40.1 | -0.3 |
| FWVZ | | | | SN | Sn | 09 51 52.9 | -1.0 |
| TRVZ | Turoa | 0.29 | 106 | ⇑PN | Pn | 09 51 40.1 | -0.2 |
| TRVZ | | | | SN | Sn | 09 51 53.2 | -0.8 |
| NGZ | Ngauruhoe | 0.32 | 83 | ⇓PN | Pn | 09 51 40.2 | -0.2 |
| WTVZ | West Tongariro | 0.33 | 72 | PN | Pn | 09 51 40.1 | -0.3 |
| WTVZ | | | | SN | Sn | 09 51 53.2 | -0.7 |
| WNVZ | Wahianoa | 0.34 | 109 | PN | Pn | 09 51 40.2 | -0.2 |
| WNVZ | | | | SN | Sn | 09 51 53.3 | -0.8 |
| VRZ | Vera Road | 0.35 | 285 | ⇑PN | Pn | 09 51 40.0 | -0.3 |
| TUVZ | Tukino | 0.36 | 98 | PN | Pn | 09 51 40.5 | -0.1 |
| KRVZ | Karewarewa | 0.37 | 71 | ⇓PN | Pn | 09 51 40.3 | -0.2 |
| KRVZ | | | | SN | Sn | 09 51 53.6 | -0.6 |
| OTVZ | Oturere | 0.37 | 82 | PN | Pn | 09 51 40.7 | +0.1 |
| KATZ | Kakaramea | 0.46 | 59 | ⇑PN | Pn | 09 51 40.7 | -0.4 |
| WAZ | Wanganui | 0.56 | 196 | ⇑PN | Pn | 09 51 41.6 | +0.2 |
| LREZ | Lake Rotokare | 0.66 | 248 | ⇑PN | Pn | 09 51 42.2 | +0.1 |
| WATZ | Wairara | 0.66 | 40 | ⇓PN | Pn | 09 51 42.1 | -0.1 |
| MHEZ | Mangahewa | 0.69 | 282 | ⇑PN | Pn | 09 51 42.3 | +0.1 |
| BHHZ | Black Hill Sta | 0.73 | 112 | ⇓PN | Pn | 09 51 42.2 | -0.5 |
| HIZ | Hauiti | 0.75 | 340 | ⇑PN | Pn | 09 51 42.3 | -0.5 |
| DREZ | Durham Road | 0.77 | 272 | ⇑PN | Pn | 09 51 42.9 | 0.0 |
| PREZ | Palmer Road | 0.81 | 261 | ⇑PN | Pn | 09 51 43.5 | +0.2 |
| NEZ | North Egmont | 0.85 | 266 | ⇑PN | Pn | 09 51 43.8 | +0.1 |
| KHEZ | Kahui Hut | 0.92 | 265 | ⇑PN | Pn | 09 51 44.3 | 0.0 |
| TLZ | Tolley Road | 0.93 | 17 | PN | Pn | 09 51 43.8 | -0.6 |
| PKE | Pukeiti | 0.93 | 271 | PN | Pn | 09 51 44.2 | -0.2 |
| KWHZ | Kaweka Forest | 0.98 | 102 | ⇓PN | Pn | 09 51 44.9 | +0.1 |
| KRHZ | Kereru | 1.01 | 115 | PN | Pn | 09 51 45.1 | +0.1 |
| BKZ | Black Stump Fm | 1.01 | 88 | ⇓PN | Pn | 09 51 44.6 | -0.6 |
| BKZ | | | | AML | AML | 09 52 01.0 | |
| BKZ | | | | AML | AML | 09 52 03.4 | |
| NWEZ | Newall Road | 1.03 | 266 | PN | Pn | 09 51 45.0 | -0.2 |
| TSZ | Takapari Road | 1.03 | 145 | PN | Pn | 09 51 45.3 | 0.0 |
| TSZ | | | | AML | AML | 09 52 03.0 | |
| TSZ | | | | AML | AML | 09 52 03.5 | |
| MRHZ | Matea Rd | 1.03 | 68 | ⇓PN | Pn | 09 51 44.4 | -0.9 |
| NMEZ | Namu Road | 1.03 | 259 | ⇑PN | Pn | 09 51 45.1 | -0.1 |
| PNHZ | Pukenui | 1.05 | 132 | PN | Pn | 09 51 45.5 | 0.0 |
| POWZ | Post Office Ro | 1.25 | 159 | PN | Pn | 09 51 47.3 | -0.2 |
| NMHZ | Naumai | 1.26 | 85 | PN | Pn | 09 51 48.4 | +0.7 |
| WPHZ | Waipukurau | 1.28 | 132 | ⇓PN | Pn | 09 51 48.0 | +0.1 |
| DVHZ | Dannevirke | 1.32 | 145 | PN | Pn | 09 51 48.0 | -0.2 |
| ARHZ | Aropaoanui | 1.40 | 92 | PN | Pn | 09 51 49.5 | +0.3 |
| KAHZ | Kahuranaki | 1.43 | 114 | PN | Pn | 09 51 49.6 | +0.2 |
| PRWZ | Pori Road | 1.47 | 156 | ⇑PN | Pn | 09 51 49.8 | 0.0 |
| MRZ | Mangatainoka R | 1.47 | 168 | ⇑PN | Pn | 09 51 49.4 | -0.5 |
| MRZ | | | | AML | AML | 09 52 09.1 | |
| MRZ | | | | AML | AML | 09 52 10.4 | |
| TOZ | Tahuroa Road | 1.51 | 10 | PN | Pn | 09 51 49.7 | -0.6 |
| RAHZ | Arahi | 1.51 | 79 | PN | Pn | 09 51 50.4 | +0.1 |
| PXZ | Pawanui | 1.53 | 123 | PN | Pn | 09 51 50.3 | -0.1 |
| PXZ | | | | AML | AML | 09 52 11.6 | |
| PXZ | | | | AML | AML | 09 52 11.6 | |
| PXZ | | | | AML | AML | 09 52 14.4 | |
| CKHZ | Cape Kidnapper | 1.53 | 107 | ⇓PN | Pn | 09 51 50.8 | +0.3 |
| PRHZ | Porangahau | 1.53 | 134 | PN | Pn | 09 51 50.4 | -0.1 |
| WHHZ | Waihua | 1.60 | 86 | PN | Pn | 09 51 51.6 | +0.2 |
| OGWZ | Otaki Gorge | 1.60 | 180 | ⇑PN | Pn | 09 51 51.0 | -0.3 |
| TIWZ | Tintock | 1.65 | 161 | PN | Pn | 09 51 51.4 | -0.5 |
| TIWZ | | | | AML | AML | 09 52 15.1 | |
| TIWZ | | | | AML | AML | 09 52 15.8 | |
| KIW | Kapiti Island | 1.66 | 187 | PN | Pn | 09 51 51.2 | -0.8 |
| BFZ | Birch Farm | 1.67 | 151 | PN | Pn | 09 51 51.8 | -0.4 |
| BFZ | | | | AML | AML | 09 52 14.1 | |
| BFZ | | | | AML | AML | 09 52 14.1 | |
| BFZ | | | | AML | AML | 09 52 14.1 | |
| BFZ | | | | AML | AML | 09 52 14.7 | |
| HOWZ | Holdsworth Sta | 1.70 | 172 | ⇑PN | Pn | 09 51 51.8 | -0.7 |
| URZ | Urewera | 1.78 | 58 | PN | Pn | 09 51 52.3 | -1.2 |
| DUWZ | D'Urville Isla | 1.86 | 211 | ⇓PN | Pn | 09 51 53.7 | -0.8 |
| RAGZ | Rawiri | 1.88 | 68 | PN | Pn | 09 51 54.0 | -0.8 |
| CAW | Cannon Point | 1.89 | 183 | PN | Pn | 09 51 54.0 | -0.8 |
| CAW | | | | AML | AML | 09 52 19.4 | |
| KNZ | Kokohu | 1.94 | 85 | PN | Pn | 09 51 54.7 | -0.6 |
| MTW | Mount Morrison | 1.95 | 173 | PN | Pn | 09 51 54.5 | -1.0 |
| TMWZ | Te Maipa | 1.96 | 164 | PN | Pn | 09 51 54.9 | -0.8 |
| MWZ | Matawai | 2.03 | 65 | PN | Pn | 09 51 55.5 | -1.1 |
| RIGZ | Rimuhau | 2.07 | 76 | PN | Pn | 09 51 56.5 | -0.6 |
| WEL | Wellington | 2.09 | 189 | PN | Pn | 09 51 56.2 | -1.0 |
| TCW | Tory Channel | 2.11 | 199 | PN | Pn | 09 51 56.4 | -1.0 |
| TCW | | | | AML | AML | 09 52 23.7 | |
| TCW | | | | AML | AML | 09 52 24.2 | |
| MHGZ | Mahia Peninsul | 2.11 | 89 | PN | Pn | 09 51 57.2 | -0.3 |
| PRGZ | Paritu Road | 2.12 | 83 | PN | Pn | 09 51 57.0 | -0.6 |
| PAWZ | Paruwai Farm | 2.17 | 175 | PN | Pn | 09 51 57.0 | -1.2 |
| MSWZ | Moikau Station | 2.19 | 179 | ⇑PN | Pn | 09 51 57.4 | -1.2 |
| MSWZ | | | | AML | AML | 09 52 23.9 | |
| BHW | Baring Head | 2.20 | 186 | ⇑PN | Pn | 09 51 57.3 | -1.2 |
| TRWZ | Traveller | 2.21 | 170 | PN | Pn | 09 51 57.5 | -1.2 |
| TRWZ | | | | AML | AML | 09 52 26.2 | |
| TKGZ | Te Karaka | 2.22 | 70 | PN | Pn | 09 51 58.2 | -0.6 |
| PLWZ | Palliser | 2.35 | 179 | PN | Pn | 09 51 58.9 | -1.6 |
| TUWZ | Tuamarina | 2.41 | 203 | ⇓PN | Pn | 09 51 59.6 | -1.5 |
| TUWZ | | | | AML | AML | 09 52 30.2 | |
| TUWZ | | | | AML | AML | 09 52 30.7 | |
| TWGZ | Tauwhareparae | 2.42 | 65 | ⇑PN | Pn | 09 52 00.7 | -0.7 |
| NNZ | Nelson | 2.43 | 214 | ⇑PN | Pn | 09 52 00.1 | -1.4 |
| HAZ | Te Kaha | 2.50 | 55 | PN | Pn | 09 52 00.7 | -1.8 |
| QRZ | Quartz Range | 2.60 | 231 | PN | Pn | 09 52 01.9 | -1.7 |
| PUZ | Puketiti | 2.66 | 66 | ⇑PN | Pn | 09 52 03.0 | -1.4 |
| PUZ | | | | AML | AML | 09 52 35.9 | |
| MXZ | Matakaoa Point | 2.96 | 57 | PN | Pn | 09 52 07.4 | -0.9 |
| THZ | Tophouse | 3.08 | 214 | PN | Pn | 09 52 08.0 | -2.0 |
| KHZ | Kahutara | 3.43 | 201 | ⇑PN | Pn | 09 52 12.6 | -1.9 |
| DSZ | Denniston Nort | 3.61 | 225 | PN | Pn | 09 52 14.6 | -2.3 |
| OXZ | Oxford | 4.74 | 209 | PN | Pn | 09 52 28.1 | -3.8 |

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*NEIC **05** 10:10:55.8, 43°.63S×172°.44E, h12km, ML4.2(WEL), After WEL.*

*NEIC Felt [IV] at Burwood, Christchurch, Kaiapoi, Parklands, Rangiora and Rolleston. Felt widely in Canterbury.*

**WEL 05 10:10:55.8±0.1,43°.64S×172°.41E,h12km,ML4.1/34, 7C-4D,Error ellipse: s-maj=0.7km s-min=0.6km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.16 | 67 | ⇑PG | Pg | 10 10 59.6 | +0.2 |
| CRLZ | | | | SG | Sg | 10 11 02.4 | +0.4 |
| CRLZ | | | | AML | AML | 10 11 02.4 | |
| CRLZ | | | | AML | AML | 10 11 02.5 | |
| CRLZ | | | | AML | AML | 10 11 02.5 | |
| CRLZ | Canterbury Las | 0.16 | 67 | ⇑Pg | Pg | 10 10 59.6 | +0.2 |
| CRLZ | | | | Sg | Sg | 10 11 02.2 | +0.2 |
| MQZ | McQueen's Vall | 0.19 | 112 | ⇓PG | Pg | 10 11 00.1 | +0.3 |
| MQZ | | | | SG | Sg | 10 11 02.9 | +0.3 |
| MQZ | | | | AML | AML | 10 11 03.2 | |
| MQZ | McQueen's Vall | 0.19 | 112 | ⇓P* | Pg | 10 11 00.1 | +0.3 |
| MQZ | | | | Sg | Sg | 10 11 02.9 | +0.3 |
| OXZ | Oxford | 0.42 | 319 | ⇓P* | Pg | 10 11 03.7 | -0.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OXZ | Oxford | 0.42 | 319 | ⇓P* | Pg | 10 11 03.7 | -0.3 |
| LTZ | Lake Taylor | 0.86 | 353 | ⇑P* | Pg | 10 11 11.7 | -0.8 |
| LTZ | | | | S* | Sg | 10 11 23.2 | -0.6 |
| LTZ | | | | AML | AML | 10 11 24.0 | |
| LTZ | Lake Taylor | 0.86 | 353 | ⇑P* | Pg | 10 11 11.7 | -0.8 |
| LTZ | | | | S* | Sg | 10 11 23.2 | -0.6 |
| RPZ | Rata Peaks | 0.99 | 265 | P* | Pg | 10 11 14.2 | -0.7 |
| RPZ | | | | AML | AML | 10 11 28.9 | |
| RPZ | | | | AML | AML | 10 11 35.8 | |
| RPZ | Rata Peaks | 0.99 | 265 | P* | Pg | 10 11 14.2 | -0.7 |
| WVZ | Waitaha Valley | 1.35 | 294 | PN | Pn | 10 11 19.5 | -0.9 |
| WVZ | | | | AML | AML | 10 11 43.7 | |
| WVZ | | | | AML | AML | 10 11 49.7 | |
| WVZ | Waitaha Valley | 1.35 | 294 | Pn | Pn | 10 11 20.4 | +0.1 |
| KHZ | Kahutara | 1.47 | 34 | ⇑PN | Pn | 10 11 20.0 | -2.1 |
| KHZ | | | | AML | AML | 10 11 27.2 | |
| KHZ | | | | AML | AML | 10 11 54.2 | |
| KHZ | Kahutara | 1.47 | 34 | ⇑Pn | Pn | 10 11 20.1 | -2.1 |
| KHZ | | | | Sn | Sn | 10 11 38.8 | -2.5 |
| LBZ | Lake Benmore | 1.77 | 244 | AML | AML | 10 11 54.8 | |
| LBZ | | | | AML | AML | 10 11 56.5 | |
| LBZ | | | | AML | AML | 10 11 56.7 | |
| LBZ | | | | AML | AML | 10 12 01.6 | |
| LBZ | Lake Benmore | 1.77 | 244 | Pn | Pn | 10 11 25.7 | -0.7 |
| ODZ | Otahua Downs | 1.89 | 221 | AML | AML | 10 12 00.1 | |
| ODZ | | | | AML | AML | 10 12 03.9 | |
| ODZ | | | | AML | AML | 10 12 03.9 | |
| ODZ | | | | AML | AML | 10 12 06.3 | |
| ODZ | Otahua Downs | 1.89 | 221 | Pn | Pn | 10 11 27.0 | -1.0 |
| THZ | Tophouse | 1.91 | 11 | PN | Pn | 10 11 26.2 | -2.0 |
| THZ | | | | AML | AML | 10 11 56.4 | |
| THZ | | | | AML | AML | 10 12 10.6 | |
| THZ | Tophouse | 1.91 | 11 | Pn | Pn | 10 11 26.2 | -2.0 |
| DSZ | Denniston Nort | 1.94 | 346 | ⇑PN | Pn | 10 11 27.2 | -1.5 |
| DSZ | | | | AML | AML | 10 11 55.6 | |
| DSZ | | | | AML | AML | 10 11 55.6 | |
| DSZ | | | | AML | AML | 10 11 55.8 | |
| DSZ | | | | AML | AML | 10 11 56.3 | |
| DSZ | Denniston Nort | 1.94 | 346 | Pn | Pn | 10 11 27.2 | -1.5 |
| FOZ | Fox Glacier | 1.98 | 271 | AML | AML | 10 11 57.6 | |
| FOZ | | | | AML | AML | 10 12 00.6 | |
| FOZ | | | | AML | AML | 10 12 04.1 | |
| FOZ | | | | AML | AML | 10 12 08.7 | |
| FOZ | Fox Glacier | 1.98 | 271 | Pn | Pn | 10 11 28.4 | -0.7 |
| BSWZ | Blackbirch Sta | 2.21 | 30 | AML | AML | 10 12 12.2 | |
| BSWZ | | | | AML | AML | 10 12 21.7 | |
| TUWZ | Tuamarina | 2.48 | 28 | AML | AML | 10 12 17.8 | |
| TUWZ | | | | AML | AML | 10 12 27.6 | |
| TUWZ | Tuamarina | 2.48 | 28 | Pn | Pn | 10 11 34.6 | -1.3 |
| NNZ | Nelson | 2.52 | 17 | AML | AML | 10 12 12.9 | |
| NNZ | | | | AML | AML | 10 12 25.8 | |
| NNZ | | | | AML | AML | 10 12 28.4 | |
| NNZ | | | | AML | AML | 10 12 28.5 | |
| NNZ | Nelson | 2.52 | 17 | Pn | Pn | 10 11 35.1 | -1.4 |
| HHSZ | Highcliff Hill | 2.59 | 209 | Pn | Pn | 10 11 36.5 | -1.1 |
| JCZ | Jackson Bay | 2.68 | 259 | AML | AML | 10 12 28.5 | |
| JCZ | | | | AML | AML | 10 12 32.7 | |
| JCZ | Jackson Bay | 2.68 | 259 | Pn | Pn | 10 11 37.9 | -0.9 |
| WKZ | Wanaka | 2.71 | 243 | AML | AML | 10 12 27.7 | |
| WKZ | | | | AML | AML | 10 12 36.5 | |
| WKZ | Wanaka | 2.71 | 243 | Pn | Pn | 10 11 38.5 | -0.8 |
| EAZ | Earnscleugh | 2.74 | 233 | AML | AML | 10 12 26.6 | |
| EAZ | | | | AML | AML | 10 12 32.4 | |
| EAZ | Earnscleugh | 2.74 | 233 | Pn | Pn | 10 11 38.5 | -1.0 |
| TCW | Tory Channel | 2.79 | 30 | AML | AML | 10 12 13.6 | |
| TCW | | | | AML | AML | 10 12 13.8 | |
| TCW | Tory Channel | 2.79 | 30 | Pn | Pn | 10 11 37.8 | -2.4 |
| QRZ | Quartz Range | 2.81 | 2 | AML | AML | 10 12 27.9 | |
| QRZ | | | | AML | AML | 10 12 32.2 | |
| QRZ | Quartz Range | 2.81 | 2 | Pn | Pn | 10 11 38.6 | -2.0 |
| WEL | Wellington | 2.93 | 37 | AML | AML | 10 12 14.3 | |
| WEL | | | | AML | AML | 10 12 14.3 | |
| PLWZ | Palliser | 2.94 | 46 | Pn | Pn | 10 11 39.6 | -2.8 |
| DUWZ | D'Urville Isla | 3.05 | 22 | AML | AML | 10 12 25.8 | |
| TUZ | Tuapeka | 3.05 | 220 | AML | AML | 10 12 35.4 | |
| TUZ | | | | AML | AML | 10 12 38.8 | |
| TUZ | | | | AML | AML | 10 12 40.1 | |
| TUZ | | | | AML | AML | 10 12 41.0 | |
| TUZ | Tuapeka | 3.05 | 220 | Pn | Pn | 10 11 42.8 | -1.0 |
| MSWZ | Moikau Station | 3.05 | 44 | AML | AML | 10 12 16.6 | |
| MSWZ | | | | AML | AML | 10 12 19.0 | |
| MSWZ | Moikau Station | 3.05 | 44 | Pn | Pn | 10 11 40.8 | -3.1 |
| PAWZ | Paruwai Farm | 3.17 | 46 | AML | AML | 10 12 23.0 | |
| PAWZ | Paruwai Farm | 3.17 | 46 | Pn | Pn | 10 11 42.3 | -3.2 |
| CAW | Cannon Point | 3.20 | 39 | AML | AML | 10 12 21.1 | |
| CAW | | | | AML | AML | 10 12 25.4 | |
| TRWZ | Traveller | 3.30 | 48 | AML | AML | 10 12 23.6 | |
| TRWZ | | | | AML | AML | 10 12 25.1 | |
| TRWZ | Traveller | 3.30 | 48 | Pn | Pn | 10 11 44.3 | -3.0 |
| KIW | Kapiti Island | 3.34 | 35 | Pn | Pn | 10 11 45.5 | -2.3 |
| MTW | Mount Morrison | 3.37 | 44 | AML | AML | 10 12 23.8 | |
| MTW | | | | AML | AML | 10 12 32.3 | |
| MTW | Mount Morrison | 3.37 | 44 | Pn | Pn | 10 11 45.5 | -2.8 |
| MSZ | Milford Sound | 3.39 | 251 | AML | AML | 10 12 46.3 | |
| MSZ | | | | AML | AML | 10 12 53.1 | |
| MSZ | Milford Sound | 3.39 | 251 | Pn | Pn | 10 11 48.0 | -0.5 |
| MLZ | Mavora Lakes | 3.48 | 239 | AML | AML | 10 12 55.6 | |
| MLZ | | | | AML | AML | 10 12 56.5 | |
| MLZ | Mavora Lakes | 3.48 | 239 | Pn | Pn | 10 11 49.5 | -0.3 |
| OGWZ | Otaki Gorge | 3.48 | 37 | Pn | Pn | 10 11 47.0 | -2.7 |
| HOWZ | Holdsworth Sta | 3.58 | 41 | Pn | Pn | 10 11 48.1 | -3.0 |
| SYZ | Scrubby Hill | 3.71 | 218 | AML | AML | 10 12 59.6 | |
| SYZ | | | | AML | AML | 10 13 02.5 | |
| SYZ | Scrubby Hill | 3.71 | 218 | Pn | Pn | 10 11 52.8 | -0.1 |
| MRZ | Mangatainoka R | 3.79 | 39 | AML | AML | 10 12 37.6 | |
| MRZ | | | | AML | AML | 10 12 37.8 | |
| MRZ | Mangatainoka R | 3.79 | 39 | Pn | Pn | 10 11 50.7 | -3.4 |
| TIWZ | Tintock | 3.85 | 43 | AML | AML | 10 12 38.2 | |
| TIWZ | | | | AML | AML | 10 12 39.2 | |
| TIWZ | Tintock | 3.85 | 43 | Pn | Pn | 10 11 52.3 | -2.6 |
| WHZ | Wether Hill Ro | 3.90 | 233 | AML | AML | 10 13 09.4 | |
| WHZ | | | | AML | AML | 10 13 14.3 | |
| WHZ | Wether Hill Ro | 3.90 | 233 | Pn | Pn | 10 11 50.5 | -5.0 |
| PRWZ | Pori Road | 4.06 | 42 | Pn | Pn | 10 11 55.5 | -2.3 |
| POWZ | Post Office Ro | 4.09 | 39 | Pn | Pn | 10 11 55.5 | -2.7 |
| BFZ | Birch Farm | 4.10 | 45 | Pn | Pn | 10 11 54.9 | -3.5 |
| WAZ | Wanganui | 4.33 | 27 | Pn | Pn | 10 12 01.7 | +0.2 |
| NMEZ | Namu Road | 4.36 | 15 | Pn | Pn | 10 12 01.3 | -0.6 |
| APZ | The Paps | 4.47 | 223 | Pn | Pn | 10 12 02.6 | -0.7 |
| PREZ | Palmer Road | 4.49 | 18 | Pn | Pn | 10 12 03.4 | -0.3 |
| KHEZ | Kahui Hut | 4.50 | 16 | Pn | Pn | 10 12 03.2 | -0.7 |
| NEZ | North Egmont | 4.54 | 17 | Pn | Pn | 10 12 03.5 | -1.0 |
| PKE | Pukeiti | 4.59 | 15 | Pn | Pn | 10 12 04.3 | -0.8 |
| PRHZ | Porangahau | 4.61 | 44 | Pn | Pn | 10 12 02.4 | -2.9 |
| DREZ | Durham Road | 4.64 | 17 | Pn | Pn | 10 12 04.9 | -0.8 |
| PNHZ | Pukenui | 4.67 | 39 | Pn | Pn | 10 12 02.7 | -3.6 |
| VRZ | Vera Road | 4.84 | 22 | Pn | Pn | 10 12 07.5 | -1.0 |
| PKVZ | Pokaka | 4.87 | 28 | Pn | Pn | 10 12 08.1 | -0.8 |
| PXZ | Pawanui | 4.90 | 44 | Pn | Pn | 10 12 05.8 | -3.5 |
| WNVZ | Wahianoa | 4.93 | 30 | Pn | Pn | 10 12 08.7 | -1.1 |
| WHVZ | Whangaehu Hut | 4.96 | 30 | Pn | Pn | 10 12 08.9 | -1.5 |
| BHHZ | Black Hill Sta | 4.97 | 35 | Pn | Pn | 10 12 07.8 | -2.5 |
| FWVZ | Far West T-bar | 4.97 | 29 | AML | AML | 10 13 09.5 | |
| FWVZ | | | | AML | AML | 10 13 28.4 | |
| FWVZ | Far West T-bar | 4.97 | 29 | Pn | Pn | 10 12 09.2 | -1.4 |
| TUVZ | Tukino | 5.00 | 30 | Pn | Pn | 10 12 09.6 | -1.2 |
| WPVZ | Whakapapa | 5.02 | 29 | Pn | Pn | 10 12 09.8 | -1.3 |
| KAHZ | Kahuranaki | 5.09 | 43 | Pn | Pn | 10 12 08.5 | -3.4 |
| TWVZ | Taurewa | 5.10 | 28 | Pn | Pn | 10 12 10.9 | -1.2 |
| WTVZ | West Tongariro | 5.11 | 29 | Pn | Pn | 10 12 11.0 | -1.3 |
| NMHZ | Naumai | 5.61 | 38 | Pn | Pn | 10 12 16.4 | -2.7 |
| TLZ | Tolley Road | 5.81 | 25 | Pn | Pn | 10 12 20.1 | -1.7 |
| MHGZ | Mahia Peninsul | 6.09 | 45 | Pn | Pn | 10 12 22.6 | -3.1 |
| RAGZ | Rawiri | 6.38 | 38 | Pn | Pn | 10 12 25.7 | -4.0 |
| URZ | Urewera | 6.44 | 35 | Pn | Pn | 10 12 26.7 | -3.7 |
| TKGZ | Te Karaka | 6.62 | 40 | Pn | Pn | 10 12 28.5 | -4.4 |
| MKAZ | Moumakai | 6.85 | 19 | Pn | Pn | 10 12 33.8 | -2.2 |

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*ISCJB **05** 10:11:49.9±0.4, 58°.41N±0°.04×156°.10W±0°.09, h186$^{km}$±4$^{km}$, mb2.9/1, Error ellipse: s-maj=8.6km s-min=4.6km az=35.7*

*IDC **05** 10:11:50.8±4.4, 58°.78N×156°.06W, h155$^{km}$±20$^{km}$, mb2.9/2, mb1 3.4/5, mb1mx3.0/39, mbtmp3.6/5, Error ellipse: s-maj=53.0km s-min=17.5km az=79.0*

*NEIC **05** 10:11:51.4, 58°.42N×156°.19W, h184$^{km}$, MG3.1(AEIC), After AEIC.*

**ISC 05 10:11:51.2**±1.1, **58°.45N**±0°.05×**156°.12W**±0°.07, **h180**$^{km}$±7$^{km}$, **n68**, σ1.01/78, **Alaska Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KELA | Mount Kelaz | 0.20 | 92 | P | Pn | 10 12 14.9 | -0.3 |
| CNTC | Contact Creek | 0.22 | 146 | P | Pn | 10 12 15.0 | -0.3 |
| ANCK | Angle Creek | 0.41 | 127 | P | Pn | 10 12 15.9 | +0.2 |
| ANCK | | | | S | Sn | 10 12 34.6 | +0.1 |
| PLWL | Peulik Whale M | 0.42 | 197 | P | Pn | 10 12 15.3 | -0.3 |
| KVTA | Katmai Vly 10 | 0.44 | 98 | P | Pn | 10 12 15.7 | 0.0 |
| ACHA | Angle Creek He | 0.48 | 119 | P | Pn | 10 12 16.3 | +0.3 |
| KJL | Kejulik | 0.49 | 144 | P | Pn | 10 12 16.3 | +0.3 |
| KBM | Katmai Bkd Mtn | 0.51 | 109 | P | Pn | 10 12 16.2 | +0.2 |
| KCE | Katmai Mt Cerb | 0.53 | 112 | P | Pn | 10 12 16.6 | +0.4 |
| KCE | | | | S | Sn | 10 12 35.2 | -0.1 |
| KCG | Knife Ck. Glac | 0.55 | 104 | P | Pn | 10 12 16.3 | +0.1 |
| KAKN | Katmai Knife C | 0.58 | 105 | P | Pn | 10 12 16.5 | +0.1 |
| KAKN | | | | S | Sn | 10 12 35.7 | -0.1 |
| MGLS | Mageik Landsli | 0.59 | 121 | P | Pn | 10 12 16.7 | +0.4 |
| KAHC | Katmai Hardscr | 0.62 | 70 | P | Pn | 10 12 16.6 | 0.0 |
| KABR | Katmai Barrier | 0.68 | 117 | P | Pn | 10 12 16.8 | -0.1 |
| KABR | | | | S | Sn | 10 12 36.9 | +0.2 |
| PLK1 | Peulik 1 | 0.70 | 202 | P | Pn | 10 12 16.8 | -0.1 |
| KAHG | Katmai Hook Gl | 0.83 | 86 | P | Pn | 10 12 18.1 | +0.4 |
| KAPH | Katmai Pasha | 0.94 | 80 | P | Pn | 10 12 18.9 | +0.4 |
| KAPH | | | | S | Sn | 10 12 40.3 | +0.7 |
| MCNL | McNeil River | 1.19 | 51 | P | Pn | 10 12 20.4 | +0.1 |
| ANNE | Aniakchak Nort | 1.86 | 215 | P | Pn | 10 12 26.0 | -0.8 |
| ANNW | Aniakchak Nort | 1.86 | 218 | P | Pn | 10 12 26.8 | 0.0 |
| OHAK | Old Harbor | 1.95 | 128 | P | Pn | 10 12 27.4 | -0.2 |
| OHAK | | | | S | Sn | 10 12 54.3 | -1.5 |
| KDAK | Kodiak Island | 1.99 | 108 | P | Pn | 10 12 27.9 | -0.1 |
| | 43nm,0.3s,baz=319,slow=11,SNR=1070 | | | | | | |
| KDAK | | | | S | Sn | 10 12 55.5 | -1.1 |
| | 29nm,0.3s,baz=133,slow=22,SNR=37 | | | | | | |
| KDAK | Kodiak Island | 1.99 | 108 | *e*Pn | Pn | 10 12 28.0 | -0.1 |
| KDAK | | | | *e*Sn | Sn | 10 12 49.2 | -7.4 |
| SII | Sitkinak Islan | 2.16 | 150 | P | Pn | 10 12 29.8 | -0.2 |
| SII | | | | S | Sn | 10 12 58.8 | -1.3 |
| CHGN | Chignik | 2.48 | 211 | P | Pn | 10 12 32.5 | -1.1 |
| CHGN | | | | S | Sn | 10 13 05.0 | -1.6 |
| CHIR | Chirikof Islan | 2.65 | 174 | P | Pn | 10 12 34.5 | -1.0 |
| CHIR | | | | S | Sn | 10 13 07.4 | -2.6 |
| CNPM | China Poot | 2.75 | 65 | P | Pn | 10 12 37.6 | +0.9 |
| VNHG | Veniaminof 1 | 2.78 | 218 | P | Pn | 10 12 36.9 | -0.3 |
| BRLK | Bradley Lake | 3.00 | 62 | P | Pn | 10 12 40.5 | +0.7 |
| CKL | Chakachamna La | 3.35 | 33 | P | Pn | 10 12 44.7 | +0.6 |
| BGL | Barrier Glacie | 3.39 | 32 | P | Pn | 10 12 45.4 | +0.8 |
| SPBG | Spurr Blockage | 3.40 | 32 | P | Pn | 10 12 45.5 | +0.9 |
| SLKM | Skilak Lake | 3.65 | 53 | P | Pn | 10 12 48.1 | +0.4 |
| STLK | Strandline Lak | 3.74 | 33 | P | Pn | 10 12 49.6 | +0.6 |
| SEW | Seward | 3.80 | 61 | P | Pn | 10 12 49.9 | +0.3 |
| SUA | Susitna One | 4.06 | 39 | P | Pn | 10 12 52.9 | -0.1 |
| RC01 | Rabbit Creek A | 4.17 | 48 | P | Pn | 10 12 53.7 | -0.7 |
| SKT | Skwentna | 4.22 | 31 | P | Pn | 10 12 55.3 | +0.4 |
| SKT | | | | S | Sn | 10 13 44.3 | -0.7 |
| TT01 | Tatalina | 4.47 | 1 | P | Pn | 10 12 58.4 | +0.2 |
| PWL | Port Wells | 4.63 | 55 | P | Pn | 10 12 59.5 | -0.7 |
| DTNA | Dutton South F | 4.72 | 228 | P | Pn | 10 13 00.5 | -0.9 |
| DT1 | Dutton Round H | 4.76 | 228 | P | Pn | 10 13 01.1 | -0.8 |
| CUT | Chulitna | 4.91 | 34 | P | Pn | 10 13 03.0 | -0.8 |
| SML | Sawmill | 5.15 | 46 | *e*Pn | Pn | 10 13 03.1 | -3.9 |
| SML | | | | *e*Sn | Sn | 10 14 01.3 | -5.2 |
| GLI | Glacier Island | 5.18 | 58 | P | Pn | 10 13 06.3 | -1.1 |
| FID | Port Fidalgo | 5.41 | 61 | P | Pn | 10 13 09.3 | -1.1 |
| JPK | Jack Peak | 5.48 | 57 | P | Pn | 10 13 10.7 | -0.5 |
| SCM | Sheep Creek Mo | 5.55 | 49 | P | Pn | 10 13 11.5 | -0.7 |
| VLZ | Valdez | 5.63 | 57 | P | Pn | 10 13 13.0 | -0.1 |
| DIV | Divide | 5.87 | 58 | P | Pn | 10 13 16.2 | -0.2 |
| KLU | Klutina | 5.96 | 55 | P | Pn | 10 13 16.8 | -0.7 |
| HARP | HAARP | 6.72 | 49 | P | Pn | 10 13 27.1 | -0.4 |
| GLB | Gilahina Butte | 6.87 | 59 | P | Pn | 10 13 29.5 | 0.0 |
| PAX | Paxson | 6.92 | 45 | P | Pn | 10 13 29.4 | -0.7 |
| VRDI | Verde Repeater | 6.96 | 61 | P | Pn | 10 13 30.9 | 0.0 |
| CRQM | Cirque | 6.98 | 65 | P | Pn | 10 13 31.3 | +0.3 |
| MCARA | McCarthy VSAT | 7.21 | 60 | P | Pn | 10 13 34.3 | +0.5 |
| KIAG | Kiagna River | 7.39 | 65 | P | Pn | 10 13 37.1 | +0.6 |
| HDA | Harding Lake | 7.41 | 32 | P | Pn | 10 13 33.7 | -2.8 |
| BALM | Baldy | 7.42 | 64 | P | Pn | 10 13 37.4 | +0.6 |
| MENT | Mentasta | 7.56 | 48 | *e*Pn | Pn | 10 13 37.7 | -0.8 |
| MENT | | | | *e*Sn | Sn | 10 15 04.3 | +0.8 |
| IM3 | Indian Mountai | 7.64 | 7 | P | Pn | 10 13 39.4 | -0.2 |
| ILAR | Eielson Array | 7.71 | 31 | P | Pn | 10 13 37.0 | -3.4 |
| | 0.8nm,0.3s,baz=222,slow=13,SNR=34 | | | | | | |
| ILAR | | | | S | Sn | 10 14 58.0 | -9.0 |
| | 0.5nm,0.3s,baz=205,slow=15,SNR=9.5 | | | | | | |
| BCA3 | Beaver Creek A | 8.40 | 51 | P | Pn | 10 13 48.9 | -0.6 |
| EGAK | Eagle | 9.52 | 42 | *e*Pn | Pn | 10 14 02.4 | -1.8 |
| INK | Inuvik | 14.05 | 36 | P | Pn | 10 14 58.2 | -3.8 |
| | 0.3nm,0.3s,baz=241,slow=17,SNR=12 | | | | | | |
| YKA | Yellowknife Ar | 20.58 | 61 | P | P | 10 16 16.2 | +0.5 |
| | 2.3nm,0.5s,baz=277,slow=9.9,SNR=9.3 | | | | | | |
| TXAR | Lajitas Array | 46.02 | 106 | P | P | 10 19 58.5 | +1.9 |
| | 0.2nm,0.7s,baz=328,slow=4.3,SNR=3.0 | | | | | | |

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*IDC **05** 10:12:08.4±1.4, 4°.11S×101°.09E, h0$^{km}$, mb4.4/11, mb1 4.6/11, mb1mx4.2/31, mbtmp4.4/11, MS3.7/4, Ms1 3.7/4, ms1mx3.3/29, Error ellipse: s-maj=43.4km s-min=17.9km az=54.0*

*ISCJB **05** 10:12:11.5±0.7, 4°.23S±0°.09×100°.93E±0°.06, h33$^{km}$, mb4.5/18, MS3.7/4, Error ellipse: s-maj=14.6km s-min=5.3km az=29.9*

*NEIC **05** 10:12:15.5±2.4, 4°.06S×101°.17E, h50$^{km}$±19$^{km}$, mb4.6/5, Error ellipse: s-maj=25.3km s-min=10.6km az=53.0*

*DJA **05** 10:12:16.3±1.3, 4°S±5°×10°1E±°, h31$^{km}$±12$^{km}$, M4.5/9, mb4.4/9, mB5.7/3, MLv4.5/5, Mw(mB)5.2/3*

**ISC 05 10:12:13.7**±0.7, **4°.02S**±0°.09×**101°.08E**±0°.07, **h29**$^{km}$, **n56**, σ**1.34**/45, **mb4.5**/18, **MS3.8**/4, **Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MASI | Maura Aman, Be | 1.45 | 53 | P | Pb | 10 12 40.3 | +0.2 |
| PPSI | Pulau Pagai | 1.64 | 319 | P | Pb | 10 12 44.9 | +1.5 |
| MNAI | Manna | 1.90 | 100 | *e*Pn | Pn | 10 12 45.2 | +0.9 |
| MNAI | | | | *e*Sn | Sn | 10 13 07.4 | +0.2 |
| LHSI | Lahat | 2.45 | 86 | P | Pn | 10 12 54.0 | +2.3 |
| SDSI | Sungai Dareh | 3.09 | 6 | P | Pn | 10 13 02.3 | +1.8 |
| MDSI | Maura Dua | 3.12 | 99 | P | Pn | 10 13 01.6 | +0.5 |
| LWLI | Liwa | 3.13 | 109 | P | Pn | 10 13 04.4 | +3.1 |
| KASI | Kota Agung | 3.72 | 114 | P | Pn | 10 13 11.0 | +1.8 |
| CGJI | Cibinong | 5.27 | 119 | P | Pn | 10 13 28.3 | -2.2 |
| CBJI | Citeko | 6.22 | 113 | P | Pn | 10 13 53.2 | +10 |
| LEM | Lembang | 7.08 | 113 | P | Pn | 10 13 58.6 | +3.0 |
| BBKI | Banjar Baru | 13.74 | 88 | P | P | 10 15 42.5 | +7.4 |
| KKM | Kota Kinabalu | 18.12 | 57 | *e*Pn | Pn | 10 16 22.0 | -1.6 |
| SPSI | Sidrap Palu | 18.64 | 90 | P | P | 10 16 30.1 | +0.7 |
| | 30nm,1.0s,819nm | | | | | | |
| TTSI | Tana Toraja | 18.73 | 88 | P | Pn | 10 16 38.9 | +8.0 |
| BKSI | Bulukumba | 19.02 | 95 | P | Pn | 10 16 42.6 | +8.1 |
| MPSI | Mapaga | 19.30 | 77 | P | Pn | 10 16 39.3 | +1.6 |
| | 28nm,1.5s,916nm | | | | | | |
| MRSI | Marisa | 21.32 | 78 | P | P | 10 17 00.2 | +1.7 |
| | 30nm,1.2s | | | | | | |
| GTOI | Gorontalo | 22.40 | 79 | P | P | 10 17 10.2 | +0.1 |
| | 357nm,1.7s,33μm | | | | | | |
| CMAR | Chiang Mai Arr | 22.43 | 355 | P | P | 10 17 09.3 | -1.1 |
| | 9.3nm,0.8s,baz=184,slow=8.5,SNR=40 | | | | | | |
| CMAR | | | | LR | LR | 10 27 35.8 | |
| | comp=Z,292nm,18.0s,baz=182,slow=41 | | | | | | |
| LBMI | Labuha | 26.61 | 83 | P | P | 10 18 00.5 | +11 |
| H08S2 | Diego Garcia H | 28.66 | 261 | T | T | 10 47 43.6 | |
| | baz=84,slow=76,SNR=621 | | | | | | |
| H08S3 | Diego Garcia H | 28.67 | 261 | T | T | 10 47 44.2 | |
| | baz=84,slow=76,SNR=597 | | | | | | |
| H08S1 | Diego Carcia H | 28.68 | 261 | T | T | 10 47 46.6 | |
| | baz=84,slow=76,SNR=562 | | | | | | |
| H01W3 | Cape Leeuwin H | 33.01 | 160 | T | T | 10 53 16.2 | |
| | baz=336,slow=76,SNR=66 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.02 | 160 | T | T | 10 53 17.2 | |
| | baz=336,slow=76,SNR=62 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.03 | 160 | T | T | 10 53 17.3 | |
| | baz=336,slow=76,SNR=57 | | | | | | |
| ODAN | Odare | 33.43 | 337 | *e*P | P | 10 18 51.4 | +0.9 |
| | 33nm,0.9s | | | | | | |
| TAPN | Taplejung | 33.75 | 338 | *e*P | P | 10 18 54.7 | +1.4 |
| | 53nm,0.9s | | | | | | |
| RAMN | Ramite | 33.82 | 336 | *e*P | P | 10 18 55.2 | +1.3 |
| | 21nm,1.0s | | | | | | |
| GUN | Gumba | 34.96 | 336 | *e*P | P | 10 19 05.0 | +1.1 |
| | 56nm,1.3s | | | | | | |
| DMN | Daman | 35.02 | 335 | *e*P | P | 10 19 05.8 | +1.5 |
| | 3.9nm,0.3s | | | | | | |
| KKN | Kakani | 35.10 | 335 | *e*P | P | 10 19 06.3 | +1.4 |
| | 6.9nm,0.3s | | | | | | |
| GKN | Gorkha | 35.56 | 335 | *e*P | P | 10 19 09.6 | +0.8 |
| | 21nm,0.9s | | | | | | |
| KOLN | Koldanda | 35.82 | 333 | *e*P | P | 10 19 11.7 | +0.6 |
| | 12nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 36.06 | 119 | P | P | 10 19 10.8 | -2.3 |
| | 2.5nm,0.8s,baz=296,slow=8.6,SNR=15 | | | | | | |
| WRAB | Tennant Creek | 36.07 | 119 | *e*P | P | 10 19 11.1 | -2.1 |
| | 6.8nm,0.7s | | | | | | |
| ASAR | Alice Springs | 37.21 | 125 | P | P | 10 19 21.6 | -1.3 |
| | 2.6nm,0.8s,baz=296,slow=7.6,SNR=29 | | | | | | |
| ASAR | | | | LR | LR | 10 36 45.5 | |
| | comp=Z,70nm,19.8s,baz=301,slow=40 | | | | | | |
| KSAR | Wonju Array Be | 48.20 | 29 | P | P | 10 20 51.4 | -0.3 |
| KSRS | Korea Array | 48.23 | 29 | P | P | 10 20 51.4 | -0.5 |
| | 5.0nm,1.0s,baz=212,slow=7.7,SNR=9.3 | | | | | | |
| SONM | Songino Array | 51.85 | 5 | P | P | 10 21 20.3 | +0.9 |
| | 9.0nm,0.8s,baz=185,slow=8.8,SNR=37 | | | | | | |
| ULN | Ulaanbaatar | 51.93 | 5 | *e*P | P | 10 21 21.0 | +0.9 |
| | 4.3nm,0.8s | | | | | | |
| TKM2 | Tokmak 2 | 52.10 | 336 | *e*P | P | 10 21 21.6 | 0.0 |
| | 5.0nm,0.9s | | | | | | |
| EKS2 | Erkin-Say | 52.64 | 335 | *e*P | P | 10 21 25.7 | +0.3 |
| | 5.0nm,0.8s | | | | | | |
| MJAR | Matsushiro Arr | 53.19 | 37 | P | P | 10 21 27.9 | -1.5 |
| | 3.2nm,0.9s,baz=215,slow=7.2,SNR=7.3 | | | | | | |
| MKAR | Makanchi Array | 53.25 | 344 | P | P | 10 21 29.9 | +0.2 |
| | 8.7nm,0.8s,baz=148,slow=8.4,SNR=64 | | | | | | |
| USRK | Ussuriysk Ar. | 55.44 | 27 | P | P | 10 21 44.8 | -0.9 |
| | 6.4nm,0.9s,baz=225,slow=6.1,SNR=9.6 | | | | | | |
| ZALV | Zalesovo Beam | 59.34 | 349 | P | P | 10 22 12.8 | -0.2 |
| | 10nm,0.8s,baz=172,slow=4.5,SNR=32 | | | | | | |
| ABKAR | Akbulak array | 63.92 | 331 | *e*P | P | 10 22 43.0 | -1.0 |
| | 1.6nm,0.6s | | | | | | |
| MAW | Mawson | 68.61 | 195 | LR | LR | 10 46 36.9 | |
| | comp=Z,50nm,18.7s,baz=61,slow=30 | | | | | | |
| KBZ | Khabaz | 70.53 | 319 | P | P | 10 23 24.8 | -1.2 |
| | 2.3nm,0.9s,baz=23,slow=7.8,SNR=3.7 | | | | | | |
| BOSA | Boshof | 75.64 | 242 | LR | LR | 10 50 20.3 | |
| | comp=Z,57nm,19.2s,baz=69,slow=30 | | | | | | |
| ARCES | ARCESS Array B | 88.73 | 340 | P | P | 10 25 03.0 | -1.2 |
| | 3.8nm,0.9s,baz=60,slow=9.9,SNR=4.3 | | | | | | |
| WCI | Wyandotte Cave | 145.29 | 10 | *e*PKPbc | PKPbc | 10 31 48.0 | -1.0 |
| TXAR | Lajitas Array | 145.59 | 40 | PKPbc | PKPdf | 10 31 50.6 | +0.5 |
| | 5.1nm,1.0s,baz=278,slow=2.0,SNR=30 | | | | | | |
| JCT | Junction City | 147.12 | 35 | *e*PKPdf | PKPdf | 10 31 52.1 | -0.5 |
| JCT | | | | *e*PKPbc | PKPbc | 10 31 54.7 | -0.1 |
| JCT | | | | *e*PKPab | PKPab | 10 31 56.4 | +0.1 |

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*GUC **05** 10:13:04.2±0.5, 33°.89S×72°.31W, h37$^{km}$±4$^{km}$, ML3.2*

**ISC 05 10:13:04.1**±2.4, **33°.90S**±0°.06×**72°.4W**±0°.1, **h6**$^{km}$±14$^{km}$, **n17**, σ**1.53**/21, **Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHPI | Pichilemu | 0.59 | 147 | *e*P | Pg | 10 13 15.8 | +0.4 |
| CHPI | | | | *e*S | Sb | 10 13 25.1 | -0.2 |
| PEL | Peldehue | 1.61 | 63 | *e*P | Pn | 10 13 33.3 | +0.2 |
| PEL | | | | *e*S | Sn | 10 13 54.1 | 0.0 |
| PEL | | | | AML | AML | 10 13 59.7 | |
| | comp=E,554nm,0.4s | | | | | | |
| TALC | Talca | 1.62 | 158 | *e*P | Pn | 10 13 32.6 | -0.7 |
| TALC | | | | *e*S | Sn | 10 13 53.8 | -0.6 |
| CLCH | Cerro Calan | 1.62 | 73 | *e*P | Pn | 10 13 32.1 | -1.2 |
| CLCH | | | | *e*S | Sn | 10 13 52.9 | -1.6 |
| CLCH | | | | AML | AML | 10 14 02.6 | |
| | comp=N,360nm,0.6s | | | | | | |
| COCH | Cobquecura | 2.25 | 188 | *e*P | Pn | 10 13 42.0 | +0.1 |
| COCH | | | | *e*S | Sn | 10 14 10.6 | +0.6 |
| COCH | | | | AML | AML | 10 14 28.2 | |
| | comp=E,200nm,0.6s | | | | | | |
| AUSP | Uspallata | 3.02 | 57 | *e*P | Pb | 10 13 59.0 | +0.5 |
| AUSP | | | | *e*S | Sb | 10 14 34.5 | -1.2 |
| ARCO | CERRO ARCO | 3.08 | 71 | *e*P | Pb | 10 13 59.9 | +0.6 |
| ARCO | | | | AML | AML | 10 14 47.1 | |
| | comp=Z,23nm,0.8s | | | | | | |
| AAGR | Agrelo | 3.08 | 76 | *e*P | Pb | 10 14 00.6 | +1.1 |
| ASAL | Salagasta | 3.25 | 67 | *e*P | Pb | 10 14 01.3 | -0.9 |
| ASAL | | | | *e*S | Sb | 10 14 45.4 | +3.3 |
| RTLS | Leoncito | 3.34 | 52 | *e*P | Pb | 10 14 03.4 | -0.4 |
| RTLS | | | | *e*S | Sb | 10 14 45.4 | +0.6 |
| RTCV | Cerro Valdivia | 3.82 | 59 | *e*P | Pb | 10 14 08.1 | -3.9 |
| CFAA | Coronel Fontan | 4.18 | 58 | *e*P | Pb | 10 14 16.0 | -2.0 |
| CFAA | | | | *e*S | Sb | 10 15 06.9 | -1.9 |
| AMOG | MOGNA | 4.42 | 49 | *e*P | Pn | 10 14 15.9 | +4.1 |
| ACAN | Cantantal | 4.65 | 71 | *e*P | Pb | 10 14 21.8 | -4.4 |
| AVFE | Valle Fertil | 5.28 | 54 | *e*P | Pn | 10 14 27.1 | +3.5 |
| AVFE | | | | *e*S | Sn | 10 15 28.0 | +3.2 |
| AVFE | | | | AML | AML | 10 15 38.5 | |
| | comp=Z,8.9nm,0.8s | | | | | | |
| MRA | San Martin | 5.78 | 77 | AML | AML | 10 15 46.6 | |
| | comp=Z,4.5nm,0.8s | | | | | | |
| VCA | Vinchina | 6.26 | 36 | AML | AML | 10 16 21.7 | |
| | comp=Z,8.3nm,0.6s | | | | | | |

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*ISCJB **05** 10:16:13.8±0.5, 39°.69N±0°.03×29°.48E±0°.03, h0$^{km}$, Error ellipse: s-maj=4.9km s-min=3.7km az=172.4*

*DDA **05** 10:16:14.2, 39°.70N×29°.47E, h7$^{km}$, Md2.6*

*CSEM **05** 10:16:14.4±0.2, 39°.69N×29°.47E, h2$^{km}$, MD2.6, Error ellipse: s-maj=3.4km s-min=2.8km az=171.0, Mining explosion.*

*ISK **05** 10:16:15.3, 39°.78N×29°.48E, h12$^{km}$, MD2.6*

**ISC 05 10:16:14.2**±0.9, **39°.68N**±0°.03×**29°.46E**±0°.02, **h0**$^{km}$, **n26**, σ**0.50**/38, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ULDT | Uludag | 0.53 | 332 | *i* P | Pg | 10 16 24.3 | 0.0 |
| ULDT | | | | *i* S | Sg | 10 16 32.4 | +1.2 |
| ULDT | Uludag | 0.53 | 332 | P | Pg | 10 16 24.3 | 0.0 |
| ULDT | | | | S | Sg | 10 16 32.5 | +1.2 |
| CAVI | Cavuskoy | 0.60 | 29 | *e*PG | Pg | 10 16 25.3 | -0.4 |
| CAVI | | | | *e*SG | Sg | 10 16 33.1 | -0.4 |
| CAVI | Cavuskoy | 0.60 | 29 | *e*Pg | Pg | 10 16 25.3 | -0.4 |
| CAVI | | | | *e*Sg | Sg | 10 16 33.1 | -0.4 |
| IZI | Iznik | 0.66 | 1 | *e*PG | Pg | 10 16 26.7 | -0.2 |
| IZI | Iznik | 0.66 | 1 | *e*Pg | Pg | 10 16 26.7 | -0.2 |
| DURS | Dursunbey | 0.77 | 265 | *i* P | Pg | 10 16 28.3 | -0.5 |
| DURS | | | | *i* S | Sg | 10 16 37.9 | -0.9 |
| DURS | Dursunbey | 0.77 | 265 | P | Pg | 10 16 28.3 | -0.5 |
| DURS | | | | S | Sg | 10 16 37.9 | -0.9 |
| BORA | Eskisehir | 0.79 | 75 | *i* P | Pg | 10 16 28.8 | -0.5 |
| BORA | | | | *i* S | Sg | 10 16 39.0 | -0.6 |
| BORA | Eskisehir | 0.79 | 75 | P | Pg | 10 16 28.8 | -0.5 |
| BORA | | | | S | Sg | 10 16 39.0 | -0.6 |
| DEMI | Demirci | 0.86 | 223 | *i* P | Pb | 10 16 31.8 | -0.1 |
| DEMI | Demirci | 0.86 | 223 | P | Pb | 10 16 31.8 | -0.1 |
| ARMT | Armutlu | 1.00 | 333 | *e*PG | Pg | 10 16 33.5 | +0.1 |
| ARMT | | | | *e*SG | Sg | 10 16 46.6 | +0.2 |
| ARMT | Armutlu | 1.00 | 333 | *e*Pg | Pg | 10 16 33.5 | +0.1 |
| ARMT | | | | *e*Sg | Sg | 10 16 46.6 | +0.2 |
| KCTX | Karacabey (Bur | 1.03 | 305 | *e*PG | Pb | 10 16 34.9 | -0.1 |
| KCTX | Karacabey (Bur | 1.03 | 305 | *e*Pg | Pb | 10 16 34.9 | -0.1 |
| ESKT | Eskisehir | 1.08 | 98 | P | Pg | 10 16 35.3 | +0.4 |
| SEYT | Eskypehyr | 1.08 | 98 | *i* P | Pg | 10 16 35.3 | +0.4 |
| GULT | Gulveren | 1.11 | 47 | *e*PG | Pb | 10 16 36.0 | -0.2 |
| GULT | Gulveren | 1.11 | 47 | *e*Pg | Pb | 10 16 36.0 | -0.2 |
| KHAL | Karahalli | 1.30 | 179 | *i* P | Pg | 10 16 39.5 | +0.4 |
| KHAL | Karahalli | 1.30 | 179 | P | Pg | 10 16 39.5 | +0.4 |
| BALY | Balya | 1.42 | 273 | *i* P | Pn | 10 16 41.0 | -0.3 |
| BALY | | | | *i* S | Sn | 10 17 01.3 | +0.5 |
| BALY | Balya | 1.42 | 273 | P | Pn | 10 16 41.0 | -0.3 |
| BALY | | | | S | Sn | 10 17 01.3 | +0.5 |
| SVRH | Sivrihisar-ESK | 1.61 | 97 | *e*PN | Pn | 10 16 44.3 | +0.4 |
| SVRH | Sivrihisar-ESK | 1.61 | 97 | *e*Pn | Pn | 10 16 44.3 | +0.4 |

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*ISK **05** 10:23:37.3, 38°.14N×26°.60E, h5$^{km}$, MD2.8*

*DDA **05** 10:23:38.0, 38°.19N×26°.60E, h10$^{km}$, Md3.1*

*CSEM **05** 10:23:38.7±0.2, 38°.18N×26°.58E, h8$^{km}$, MD3.1, Error ellipse: s-maj=5.2km s-min=3.1km az=59.0*

*THE **05** 10:23:38.8, 38°.18N×26°.61E, h9$^{km}$±1$^{km}$, ML2.7/4, Error ellipse: s-maj=1.4km s-min=0.4km az=232.0*

*ISCJB **05** 10:23:38.6±0.4, 38°.17N±0°.02×26°.57E±0°.03, h7$^{km}$±3$^{km}$, Error ellipse: s-maj=4.3km s-min=2.6km az=147.3*

*ATH **05** 10:23:38.4, 38°.15N×26°.56E, h29$^{km}$±1$^{km}$, MD2.7/4*

**ISC 05 10:23:38.4**±0.9, **38°.19N**±0°.02×**26°.60E**±0°.02, **h9**$^{km}$±6$^{km}$,

**n61, σ0ˢ54/98, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZEY | ˜zmir | 0.09 | 304 | P | Pg | 10 23 40.5 | -0.3 |
| ZEY | | | | S | Sg | 10 23 42.6 | +0.2 |
| URLA | Izmir | 0.17 | 359 | i P | Pg | 10 23 41.6 | -0.5 |
| URLA | | | | i S | Sg | 10 23 45.7 | +1.1 |
| URLA | Izmir | 0.17 | 359 | P | Pg | 10 23 41.6 | -0.5 |
| URLA | | | | S | Sg | 10 23 45.7 | +1.1 |
| CHOS | Chios island | 0.47 | 295 | ePG | Pg | 10 23 48.0 | +0.3 |
| CHOS | | | | eSG | Sb | 10 23 55.8 | -0.2 |
| CHOS | Chios island | 0.47 | 295 | ePB | Pg | 10 23 48.1 | +0.5 |
| CHOS | | | | eSB | Sb | 10 23 56.0 | -0.1 |
| CHOS | Chios island | 0.47 | 295 | P | Pg | 10 23 47.9 | +0.3 |
| CHOS | | | | S | Sb | 10 23 55.7 | -0.4 |
| CHOS | Chios island | 0.47 | 295 | P | Pg | 10 23 47.9 | +0.3 |
| CHOS | | | | eSg | Sb | 10 23 55.8 | -0.2 |
| CHOS | | | | eSb | Sb | 10 23 56.0 | -0.1 |
| SMG | Samos | 0.51 | 159 | ePN | Pg | 10 23 48.6 | +0.2 |
| SMG | | | | eSN | Sb | 10 23 57.0 | -0.1 |
| SMG | Samos | 0.51 | 159 | P | Pg | 10 23 48.5 | +0.2 |
| SMG | | | | S | Sb | 10 23 56.7 | -0.4 |
| SMG | Samos | 0.51 | 159 | ePb | Pg | 10 23 48.6 | +0.2 |
| SMG | | | | S | Sb | 10 23 56.7 | -0.4 |
| SMG | | | | eSb | Sb | 10 23 57.0 | -0.1 |
| IZM | Izmir | 0.56 | 68 | ePG | Pg | 10 23 49.2 | -0.1 |
| IZM | Izmir | 0.56 | 68 | ePg | Pg | 10 23 49.2 | -0.1 |
| GCAM | G?zelcaml? | 0.70 | 134 | i P | Pg | 10 23 51.8 | -0.1 |
| GCAM | | | | i S | Sb | 10 24 02.1 | -0.3 |
| GCAM | G?zelcaml? | 0.70 | 134 | P | Pg | 10 23 51.8 | -0.1 |
| GCAM | | | | S | Sb | 10 24 02.1 | -0.3 |
| DKL | Dikili | 0.91 | 15 | ePG | Pn | 10 23 57.0 | -0.4 |
| DKL | | | | eSG | Sn | 10 24 11.2 | +0.5 |
| DKL | Dikili | 0.91 | 15 | ePg | Pn | 10 23 57.0 | -0.4 |
| DKL | | | | eSg | Sn | 10 24 11.2 | +0.5 |
| AYDB | Zeytinkoy-Aydi | 1.05 | 103 | ePG | Pg | 10 23 58.2 | -0.3 |
| AYDB | | | | eSG | Sn | 10 24 13.8 | -0.3 |
| AYDB | Zeytinkoy-Aydi | 1.05 | 103 | ePg | Pg | 10 23 58.2 | -0.3 |
| AYDB | | | | eSg | Sn | 10 24 13.8 | -0.3 |
| PRK | Paraskevi | 1.09 | 346 | ePN | Pn | 10 23 59.6 | -0.2 |
| PRK | | | | eSN | Sn | 10 24 15.1 | +0.1 |
| PRK | Paraskevi | 1.09 | 346 | P | Pb | 10 23 58.8 | -0.6 |
| PRK | | | | S | Sn | 10 24 14.8 | -0.2 |
| PRK | Paraskevi | 1.09 | 346 | P | Pb | 10 23 58.8 | -0.6 |
| PRK | Paraskevi | 1.09 | 346 | ePn | Pn | 10 23 59.6 | -0.2 |
| PRK | | | | S | Sn | 10 24 14.8 | -0.2 |
| PRK | | | | eSn | Sn | 10 24 15.1 | +0.1 |
| AYVA | Ayvalik | 1.12 | 4 | i P | Pb | 10 23 59.5 | -0.4 |
| AYVA | | | | i S | Sn | 10 24 16.0 | +0.2 |
| AYVA | Ayvalik | 1.12 | 4 | P | Pb | 10 23 59.5 | -0.4 |
| AYVA | | | | S | Sn | 10 24 16.0 | +0.2 |
| AYDN | Tasoluk | 1.14 | 117 | i P | Pn | 10 24 01.7 | +1.1 |
| AYDN | | | | i S | Sn | 10 24 17.2 | +0.9 |
| AYDN | Tasoluk | 1.14 | 117 | P | Pn | 10 24 01.7 | +1.1 |
| AYDN | | | | S | Sn | 10 24 17.2 | +0.9 |
| AKHS | Akhisar | 1.18 | 54 | i P | Pb | 10 23 59.8 | -1.1 |
| AKHS | | | | i S | Sn | 10 24 16.7 | -0.5 |
| AKHS | Akhisar | 1.18 | 54 | P | Pb | 10 23 59.8 | -1.1 |
| AKHS | | | | S | Sn | 10 24 16.7 | -0.5 |
| AKS | Akhisar | 1.18 | 54 | ePN | Pn | 10 24 00.9 | -0.1 |
| AKS | Akhisar | 1.18 | 54 | ePn | Pn | 10 24 00.9 | -0.1 |
| SIGR | SIGRI | 1.18 | 331 | ePN | Pg | 10 24 02.1 | +1.1 |
| SIGR | SIGRI | 1.18 | 331 | ePN | Pb | 10 24 00.4 | -0.5 |
| SIGR | | | | eSN | Sn | 10 24 17.4 | +0.2 |
| SIGR | SIGRI | 1.18 | 331 | P | Pb | 10 24 00.2 | -0.7 |
| SIGR | | | | S | Sn | 10 24 16.9 | -0.3 |
| SIGR | SIGRI | 1.18 | 331 | ePn | Pb | 10 24 00.4 | -0.5 |
| SIGR | | | | S | Sn | 10 24 16.9 | -0.3 |
| SIGR | | | | eSn | Sn | 10 24 17.4 | +0.2 |
| BODT | Bodrum | 1.26 | 153 | ePN | Pn | 10 24 01.9 | -0.2 |
| BODT | Bodrum | 1.26 | 153 | ePn | Pn | 10 24 01.9 | -0.2 |
| BDRM | Kayabasi | 1.31 | 149 | i P | Pg | 10 24 03.3 | -0.1 |
| BDRM | | | | i S | Sg | 10 24 21.2 | +0.8 |
| BDRM | Kayabasi | 1.31 | 149 | P | Pg | 10 24 03.3 | -0.1 |
| BDRM | | | | S | Sg | 10 24 21.2 | +0.8 |
| APE | Apeiranthos | 1.40 | 218 | ePN | Pn | 10 24 03.5 | -0.7 |
| APE | Apeiranthos | 1.40 | 218 | P | Pn | 10 24 03.3 | -0.9 |
| APE | Apeiranthos | 1.40 | 218 | ePn | Pn | 10 24 03.5 | -0.7 |
| MANT | Manisa | 1.57 | 78 | i P | Pb | 10 24 07.7 | 0.0 |
| MANT | Manisa | 1.57 | 78 | P | Pb | 10 24 07.7 | 0.0 |
| EZN | Ezine | 1.65 | 353 | ePN | Pb | 10 24 09.5 | +0.5 |
| EZN | Ezine | 1.65 | 353 | ePn | Pb | 10 24 09.5 | +0.5 |
| KULA | Kula-Manisa | 1.65 | 78 | ePN | Pb | 10 24 08.7 | -0.4 |
| KULA | Kula-Manisa | 1.65 | 78 | ePn | Pb | 10 24 08.7 | -0.4 |
| YER | Yerkesik | 1.70 | 128 | ePN | Pn | 10 24 08.7 | +0.4 |
| YER | Yerkesik | 1.70 | 128 | ePn | Pn | 10 24 08.7 | +0.4 |
| BOZC | Bozcaada | 1.71 | 346 | P | Pn | 10 24 07.9 | -0.4 |
| BOZC | | | | P | Pn | 10 24 07.9 | -0.4 |
| BALY | Balya | 1.74 | 27 | i P | Pn | 10 24 08.7 | -0.2 |
| BALY | | | | i S | Sn | 10 24 31.4 | +0.2 |
| BALY | Balya | 1.74 | 27 | P | Pn | 10 24 08.7 | -0.2 |
| BALY | | | | S | Sn | 10 24 31.4 | +0.2 |
| BALB | Balikesir | 1.76 | 34 | ePN | Pb | 10 24 11.3 | +0.5 |
| BALB | Balikesir | 1.76 | 34 | ePn | Pb | 10 24 11.3 | +0.5 |
| DENT | Denizli | 1.97 | 102 | ePN | Pb | 10 24 13.5 | -0.9 |
| DENT | Denizli | 1.97 | 102 | ePn | Pb | 10 24 13.5 | -0.9 |
| GONE | Gonen-Balikesi | 2.04 | 24 | ePN | Pb | 10 24 15.0 | -0.6 |
| GONE | Gonen-Balikesi | 2.04 | 24 | ePn | Pb | 10 24 15.0 | -0.6 |
| DST | Dursunbey | 2.12 | 47 | ePN | Pb | 10 24 15.9 | -1.1 |
| DST | Dursunbey | 2.12 | 47 | ePn | Pb | 10 24 15.9 | -1.1 |
| KHAL | Karahalli | 2.28 | 85 | P | Pb | 10 24 20.6 | +0.7 |

*NIED **05** 10:27:00, 38.°70N×142.°20E, h35km, Mw3.8 Best double couple: M₀5.04000×10¹⁴ NP1:φₛ102.00000°, δ39.00000°, λ73.00000°. NP2:φₛ303.00000°, δ53.00000°, λ103.00000°.*

**JMA 05 10:27:42.5**±0.1**, 38.°72N×142.°25E, h30**km±2km**, M3.5, 4C-1D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OFUJ | Ofunato | 0.58 | 309 | ⇑P | Pb | 10 27 54.1 | -0.1 |
| OFUJ | | | | eS | Sb | 10 28 01.9 | -0.3 |
| JIO | Ouri | 0.75 | 250 | ⇓P | Pn | 10 27 56.5 | -0.6 |
| JIO | | | | S | Sb | 10 28 05.8 | -1.3 |
| JMK | Ichinoseki | 0.84 | 286 | ⇑P | Pn | 10 27 58.2 | 0.0 |
| JMK | | | | eS | Sb | 10 28 08.8 | -0.6 |
| JOM | Ohasama | 1.06 | 316 | ⇑P | Pn | 10 28 01.5 | +0.2 |
| JOM | | | | eS | Sn | 10 28 15.0 | -0.1 |
| JTH | Tanohata | 1.25 | 346 | P | Pn | 10 28 03.5 | -0.5 |
| JOU | Okura | 1.29 | 255 | P | Pn | 10 28 04.7 | +0.1 |
| JOU | | | | eS | Sn | 10 28 21.4 | +0.5 |
| JRG | Rokugo | 1.43 | 299 | P | Pn | 10 28 07.4 | +1.0 |
| JRG | | | | eS | Sb | 10 28 25.5 | -0.8 |
| JMM | Marumori | 1.43 | 234 | ⇑P | Pn | 10 28 06.4 | 0.0 |
| JMM | | | | eS | Sn | 10 28 24.1 | 0.0 |
| JYK | Kaneyama | 1.49 | 278 | P | Pn | 10 28 08.1 | +0.9 |
| JYK | | | | eS | Sn | 10 28 26.6 | +0.9 |

*CSEM **05** 10:29:28.2±0.1, 36.°63N×13.°01W, h10km, mb4.3, Error ellipse: s-maj=4.3km s-min=2.8km az=118.0*
*MDD **05** 10:29:32.6±1.7, 36.°62N×12.°89W, h60km±80km, mb4.3/34, Error ellipse: s-maj=16.1km s-min=8.7km az=81.0, PRXIMO*
*IGIL **05** 10:29:33.6, 36.°76N×12.°62W, h2km, ML2.6*
*INMG **05** 10:29:34.4±1.1, 36.°57N×12.°97W, h10km, ML3.0, Error ellipse: s-maj=4.2km s-min=1.9km az=132.0*
*CNRM **05** 10:29:37.9, 36.°37N×12.°57W, h31km, MD3.5*
*LDG **05** 10:29:48.9±0.6, 37.°23N×11.°54W, h20km, Ml3.2/3, Error ellipse: s-maj=10.5km s-min=8.5km az=42.0*

**ISC 05 10:29:30.8**±2.6**, 36.°75N**±0.°07×**12.°6W**±0.°1**, h10**km**, n169, σ1ˢ71/256, 8C, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PFVI | Vila Bisbo | 3.07 | 82 | ⇑iPn | Pn | 10 30 21.2 | +1.8 |
| PFVI | | | | eSn | Sn | 10 30 56.2 | 0.0 |
| PFVI | | | | A | A | 10 30 57.8 | |
| | 39nm,0.3s | | | | | | |
| PFVI | Vila Bisbo | 3.07 | 82 | ⇑P | Pn | 10 30 21.2 | +1.8 |
| | 12nm,0.2s,SNR=18 | | | | | | |
| PFVI | | | | S | Sn | 10 30 55.9 | -0.3 |
| | 62nm,0.1s,SNR=7.9 | | | | | | |
| PFVI | Vila Bisbo | 3.07 | 82 | P | Pn | 10 30 21.2 | +1.8 |
| | 12nm,0.2s,SNR=18 | | | | | | |
| PFVI | | | | S | Sn | 10 30 55.9 | -0.3 |
| | 62nm,0.1s,SNR=7.9 | | | | | | |
| PFVI | | | | eSn | Sn | 10 30 56.2 | 0.0 |
| | 39nm,0.3s | | | | | | |
| PTEO | Sao Teotonio | 3.22 | 74 | ⇑ePn | Pn | 10 30 23.4 | +2.0 |
| PTEO | | | | eSn | Sn | 10 30 59.9 | +0.1 |
| PTEO | | | | A | A | 10 31 02.4 | |
| | 47nm,0.8s | | | | | | |
| PTEO | Sao Teotonio | 3.22 | 74 | P | Pn | 10 30 23.4 | +2.0 |
| PTEO | Sao Teotonio | 3.22 | 74 | P | Pn | 10 30 23.4 | +2.0 |
| PTEO | | | | eSn | Sn | 10 30 59.9 | +0.1 |
| | 47nm,0.8s | | | | | | |
| MORF | Marmelete | 3.23 | 79 | eP | Pn | 10 30 23.5 | +1.8 |
| MORF | | | | eS | Sn | 10 30 59.7 | -0.5 |
| MORF | | | | AML | AML | 10 31 00.7 | |
| | comp=E,28nm,0.2s | | | | | | |
| MORF | Marmelete | 3.23 | 79 | ePn | Pn | 10 30 23.4 | +1.8 |
| MORF | | | | eSn | Sn | 10 31 00.4 | +0.2 |
| MORF | | | | A | A | 10 31 03.8 | |
| | comp=E,38nm,0.2s | | | | | | |
| MORF | Marmelete | 3.23 | 79 | P | Pn | 10 30 23.5 | +1.8 |
| MORF | Marmelete | 3.23 | 79 | ePn | Pn | 10 30 23.4 | +1.8 |
| MORF | | | | eSn | Sn | 10 31 00.4 | +0.2 |
| | comp=E,38nm,0.2s | | | | | | |
| PMST | Lisbon--Monsan | 3.38 | 53 | ePn | Pn | 10 30 25.6 | +2.0 |
| PMST | | | | eSn | Sn | 10 31 04.3 | +0.6 |
| PMST | | | | A | A | 10 31 05.4 | |
| | comp=E,32nm,0.2s | | | | | | |
| PMST | Lisbon--Monsan | 3.38 | 53 | ePn | Pn | 10 30 25.6 | +2.0 |
| PMST | | | | eSn | Sn | 10 31 04.3 | +0.6 |
| | comp=E,32nm,0.2s | | | | | | |
| PMAFR | Mafra | 3.45 | 49 | ePn | Pn | 10 30 26.7 | +2.1 |
| PMAFR | | | | eSn | Sn | 10 31 05.8 | +0.3 |
| PMAFR | | | | A | A | 10 31 08.2 | |
| | comp=E,44nm,0.2s | | | | | | |
| PMAFR | Mafra | 3.45 | 49 | ⇑P | Pn | 10 30 26.6 | +2.1 |
| | comp=E,20nm,0.3s,SNR=18 | | | | | | |
| PMAFR | | | | S | Sn | 10 31 06.1 | +0.6 |
| | comp=E,33nm,0.1s,SNR=7.9 | | | | | | |
| PMAFR | Mafra | 3.45 | 49 | P | Pn | 10 30 26.6 | +2.0 |
| | comp=E,20nm,0.3s,SNR=18 | | | | | | |
| PMAFR | | | | eSn | Sn | 10 31 05.8 | +0.3 |
| | comp=E,44nm,0.2s | | | | | | |
| PMAFR | | | | S | Sn | 10 31 06.1 | +0.6 |
| | comp=E,33nm,0.1s,SNR=7.9 | | | | | | |
| PNCL | Nicolau / Gran | 3.54 | 66 | ePn | Pn | 10 30 27.7 | +1.9 |
| PNCL | | | | eSn | Sn | 10 31 07.6 | -0.1 |
| PNCL | | | | A | A | 10 31 08.4 | |
| | comp=E,19nm,0.1s | | | | | | |
| PNCL | Nicolau / Gran | 3.54 | 66 | ePn | Pn | 10 30 27.7 | +1.9 |
| PNCL | | | | eSn | Sn | 10 31 07.6 | -0.1 |
| | comp=E,19nm,0.1s | | | | | | |
| PACT | Alcochete | 3.62 | 55 | ⇑ePn | Pn | 10 30 25.0 | -2.0 |
| PACT | | | | eSn | Sn | 10 31 06.4 | -3.3 |
| PACT | | | | A | A | 10 31 07.9 | |
| | comp=E,25nm,0.1s | | | | | | |
| PACT | Alcochete | 3.62 | 55 | ⇑ePn | Pn | 10 30 25.0 | -2.0 |
| PACT | | | | eSn | Sn | 10 31 06.4 | -3.3 |
| | comp=E,25nm,0.1s | | | | | | |
| MESJ | Messejana | 3.68 | 71 | eP | Pn | 10 30 29.6 | +1.8 |
| MESJ | | | | eS | Sn | 10 31 10.4 | -0.8 |
| MESJ | | | | AML | AML | 10 31 11.4 | |
| | comp=N,13nm,0.2s | | | | | | |
| MESJ | Messejana | 3.68 | 71 | ePn | Pn | 10 30 29.8 | +2.0 |
| MESJ | | | | eSn | Sn | 10 31 11.1 | -0.1 |
| MESJ | | | | A | A | 10 31 15.7 | |
| | comp=N,15nm,0.2s | | | | | | |
| MESJ | Messejana | 3.68 | 71 | P | Pn | 10 30 29.6 | +1.8 |
| MESJ | Messejana | 3.68 | 71 | P | Pn | 10 30 29.6 | +1.8 |
| MESJ | | | | eSn | Sn | 10 31 11.1 | -0.1 |
| | comp=N,15nm,0.2s | | | | | | |
| PCVE | Castro Verde | 3.77 | 75 | ePn | Pn | 10 30 31.0 | +2.0 |
| PCVE | | | | eSn | Sn | 10 31 12.6 | -0.8 |
| PCVE | | | | A | A | 10 31 15.4 | |
| | comp=N,20nm,0.5s | | | | | | |
| PCVE | Castro Verde | 3.77 | 75 | P | Pn | 10 30 31.0 | +2.0 |
| PCVE | Castro Verde | 3.77 | 75 | P | Pn | 10 30 31.0 | +2.0 |
| PCVE | | | | eSn | Sn | 10 31 12.6 | -0.8 |
| | comp=N,20nm,0.5s | | | | | | |
| PBDV | Barranco-do-Ve | 3.79 | 81 | ePn | Pn | 10 30 31.5 | +2.1 |
| PBDV | | | | eSn | Sn | 10 31 14.1 | +0.1 |
| PBDV | | | | A | A | 10 31 20.4 | |
| | comp=N,18nm,0.6s | | | | | | |
| PBDV | Barranco-do-Ve | 3.79 | 81 | P | Pn | 10 30 31.5 | +2.1 |
| PBDV | | | | S | Sn | 10 31 14.1 | +0.1 |
| | comp=N,18nm,0.6s | | | | | | |
| PBDV | Barranco-do-Ve | 3.79 | 81 | P | Pn | 10 30 31.5 | +2.1 |
| PBDV | | | | S | Sn | 10 31 14.1 | +0.1 |
| | comp=N,18nm,0.6s | | | | | | |
| PVAQ | Vaqueiros | 3.98 | 79 | ePn | Pn | 10 30 34.1 | +2.2 |
| PVAQ | | | | eSn | Sn | 10 31 18.2 | -0.4 |
| PVAQ | | | | A | A | 10 31 22.7 | |
| | comp=N,20nm,0.2s | | | | | | |
| PVAQ | Vaqueiros | 3.98 | 79 | P | Pn | 10 30 34.1 | +2.2 |
| PVAQ | Vaqueiros | 3.98 | 79 | P | Pn | 10 30 34.1 | +2.2 |
| PVAQ | | | | eSn | Sn | 10 31 18.2 | -0.4 |
| | comp=N,20nm,0.2s | | | | | | |
| EVOP | Sao Brissos | 3.99 | 62 | ePn | Pn | 10 30 33.2 | +1.1 |
| EVOP | | | | eSn | Sn | 10 31 07.1 | -12 |
| | comp=N,8.6nm,0.1s | | | | | | |
| EVOP | | | | eS | Sn | 10 31 16.8 | -2.1 |
| PBEJ | Beja | 4.00 | 70 | ePn | Pn | 10 30 34.5 | +2.3 |
| PBEJ | | | | eSn | Sn | 10 31 18.3 | -0.9 |
| PBEJ | | | | A | A | 10 31 22.4 | |
| | comp=N,14nm,0.3s | | | | | | |
| PBEJ | Beja | 4.00 | 70 | P | Pn | 10 30 34.5 | +2.3 |
| PBEJ | | | | S | Sn | 10 31 18.3 | -0.9 |
| | comp=N,7.2nm,0.3s | | | | | | |
| PBEJ | Beja | 4.00 | 70 | P | Pn | 10 30 34.5 | +2.3 |
| PBEJ | | | | S | Sn | 10 31 18.3 | -0.9 |
| | comp=N,7.2nm,0.3s | | | | | | |
| EVO | Evora | 4.07 | 63 | ePn | Pn | 10 30 33.2 | 0.0 |
| EVO | | | | eSn | Sn | 10 31 07.1 | -14 |
| | comp=N,17nm,0.1s | | | | | | |
| EVO | | | | eS | Sn | 10 31 16.8 | -4.1 |
| EGRO | El Granado | 4.18 | 78 | P | Pn | 10 30 36.6 | +1.9 |
| | comp=N,4.1nm,0.3s,SNR=36 | | | | | | |
| EGRO | | | | S | Sn | 10 31 23.1 | -0.5 |
| | comp=N,7.8nm,0.2s,SNR=6.6 | | | | | | |
| EGRO | El Granado | 4.18 | 78 | P | Pn | 10 30 36.6 | +1.9 |
| | comp=N,4.1nm,0.3s,SNR=36 | | | | | | |
| EGRO | | | | S | Sn | 10 31 23.1 | -0.5 |
| | comp=N,7.8nm,0.2s,SNR=6.6 | | | | | | |
| PTOM | Tomar | 4.39 | 48 | ePn | Pn | 10 30 39.7 | +2.2 |
| PTOM | | | | eSn | Sn | 10 31 29.3 | +0.6 |
| PTOM | | | | A | A | 10 31 32.3 | |
| | comp=N,19nm,0.1s | | | | | | |
| PTOM | Tomar | 4.39 | 48 | P | Pn | 10 30 39.7 | +2.2 |
| PTOM | | | | S | Sn | 10 31 29.3 | +0.6 |
| | comp=N,9.4nm,0.1s | | | | | | |
| PTOM | Tomar | 4.39 | 48 | P | Pn | 10 30 39.7 | +2.2 |
| PTOM | | | | S | Sn | 10 31 29.3 | +0.6 |
| | comp=N,9.4nm,0.1s | | | | | | |
| PCAS | Casmilo, Conde | 4.63 | 43 | ePn | Pn | 10 30 42.8 | +2.0 |
| PCAS | | | | eSn | Sn | 10 31 33.8 | -0.8 |
| PCAS | | | | A | A | 10 31 38.0 | |
| | comp=N,6.4nm,0.1s | | | | | | |
| PCAS | Casmilo, Conde | 4.63 | 43 | ePn | Pn | 10 30 42.8 | +2.0 |
| PCAS | | | | eSn | Sn | 10 31 33.8 | -0.8 |
| | comp=N,6.4nm,0.1s | | | | | | |
| PBAR | Barrancos | 4.67 | 71 | ePn | Pn | 10 30 43.4 | +2.0 |
| PBAR | | | | eSn | Sn | 10 31 34.2 | -1.4 |
| PBAR | | | | A | A | 10 31 42.9 | |
| | comp=N,14nm,0.1s | | | | | | |
| PBAR | Barrancos | 4.67 | 71 | P | Pn | 10 30 43.4 | +2.0 |
| PBAR | | | | S | Sn | 10 31 34.2 | -1.4 |
| | comp=N,14nm,0.1s | | | | | | |
| PBAR | Barrancos | 4.67 | 71 | P | Pn | 10 30 43.4 | +2.0 |
| PBAR | | | | S | Sn | 10 31 34.2 | -1.4 |
| | comp=N,14nm,0.1s | | | | | | |
| PMPST | Porto Santo, M | 4.76 | 221 | ePn | Pn | 10 30 35.8 | -6.8 |
| PMPST | | | | eSn | Sn | 10 31 20.6 | -17 |
| PMPST | | | | A | A | 10 31 36.3 | |
| | comp=N,38nm,0.4s | | | | | | |
| PMPST | Porto Santo, M | 4.76 | 221 | ePn | Pn | 10 30 35.8 | -6.8 |
| PMPST | | | | eSn | Sn | 10 31 20.6 | -17 |
| | comp=N,38nm,0.4s | | | | | | |
| PMPS | Porto Santo | 4.78 | 221 | ePn | Pn | 10 30 35.8 | -7.0 |
| PMPS | | | | eSn | Sn | 10 31 20.7 | -18 |
| PMPS | | | | A | A | 10 31 30.4 | |
| | comp=N,21nm,0.8s | | | | | | |
| EMIN | Mina Concepcio | 4.86 | 76 | ⇑P | Pn | 10 30 45.7 | +1.7 |
| | comp=N,2.2nm,0.3s,SNR=18 | | | | | | |
| EMIN | | | | S | Sn | 10 31 38.9 | -1.4 |
| | comp=N,6.4nm,0.2s,SNR=36 | | | | | | |
| EMIN | Mina Concepcio | 4.86 | 76 | P | Pn | 10 30 45.7 | +1.7 |
| | comp=N,2.2nm,0.3s,SNR=18 | | | | | | |
| EMIN | | | | S | Sn | 10 31 38.9 | -1.4 |
| | comp=N,6.4nm,0.2s,SNR=36 | | | | | | |
| EBAD | Badajoz | 4.88 | 64 | P | Pn | 10 30 46.5 | +2.2 |
| | comp=N,1.6nm,0.1s,SNR=5.5 | | | | | | |
| EBAD | | | | S | Sn | 10 31 39.6 | -1.2 |
| | comp=N,10nm,0.1s,SNR=7.9 | | | | | | |
| EBAD | Badajoz | 4.88 | 64 | P | Pn | 10 30 46.5 | +2.2 |
| | comp=N,1.6nm,0.1s,SNR=5.5 | | | | | | |
| EBAD | | | | S | Sn | 10 31 39.6 | -1.2 |
| | comp=N,10nm,0.1s,SNR=7.9 | | | | | | |
| PMRV | Marv??o | 4.92 | 55 | ePn | Pn | 10 30 46.4 | +1.5 |
| PMRV | | | | eSn | Sn | 10 31 40.2 | -1.7 |
| PMRV | | | | A | A | 10 31 43.4 | |
| | comp=N,8.1nm,0.2s | | | | | | |
| PMRV | Marv??o | 4.92 | 55 | P | Pn | 10 30 46.4 | +1.5 |
| PMRV | | | | S | Sn | 10 31 40.2 | -1.7 |
| | comp=N,8.1nm,0.2s | | | | | | |
| PMRV | Marv??o | 4.92 | 55 | P | Pn | 10 30 46.4 | +1.5 |
| PMRV | | | | S | Sn | 10 31 40.2 | -1.7 |
| | comp=N,8.1nm,0.2s | | | | | | |
| PCBR | Castelo Branco | 5.09 | 51 | ePn | Pn | 10 30 49.2 | +2.0 |
| PCBR | | | | eSn | Sn | 10 31 45.8 | -0.3 |
| PCBR | | | | A | A | 10 31 47.0 | |
| | comp=N,5.1nm,0.3s | | | | | | |
| PCBR | Castelo Branco | 5.09 | 51 | P | Pn | 10 30 49.2 | +2.0 |
| PCBR | | | | S | Sn | 10 31 45.8 | -0.3 |
| | comp=N,2.6nm,0.3s | | | | | | |
| PCBR | Castelo Branco | 5.09 | 51 | P | Pn | 10 30 49.2 | +2.0 |
| PCBR | | | | S | Sn | 10 31 45.8 | -0.3 |
| | comp=N,2.6nm,0.3s | | | | | | |
| PMAR | Madeira | 5.34 | 223 | ePn | Pn | 10 30 43.6 | -7.2 |
| PMAR | | | | eSn | Sn | 10 31 36.4 | -16 |
| PMAR | | | | A | A | 10 31 40.8 | |
| | comp=N,30nm,0.2s | | | | | | |
| PMAR | Madeira | 5.34 | 223 | ePn | Pn | 10 30 43.6 | -7.2 |
| PMAR | | | | eSn | Sn | 10 31 36.4 | -16 |
| | comp=N,30nm,0.2s | | | | | | |
| PTO | Porto | 5.39 | 34 | eSn | Sn | 10 31 52.3 | -1.1 |
| PTO | | | | A | A | 10 31 52.4 | |
| | comp=N,78nm,0.1s | | | | | | |
| PTO | Porto | 5.39 | 34 | S | Sn | 10 31 52.3 | -1.1 |
| | comp=N,39nm,0.1s | | | | | | |
| PTO | Porto | 5.39 | 34 | S | Sn | 10 31 52.3 | -1.1 |
| | comp=N,39nm,0.1s | | | | | | |
| MTE | Manteigas | 5.40 | 46 | ePn | Pn | 10 30 53.3 | +1.8 |
| MTE | | | | eSn | Sn | 10 31 52.6 | -1.2 |
| MTE | | | | A | A | 10 31 56.1 | |
| | comp=N,8.7nm,0.3s | | | | | | |
| MTE | Manteigas | 5.40 | 46 | P | Pn | 10 30 53.3 | +1.8 |
| MTE | | | | S | Sn | 10 31 52.6 | -1.2 |
| | comp=N,4.3nm,0.3s | | | | | | |
| MTE | Manteigas | 5.40 | 46 | P | Pn | 10 30 53.3 | +1.8 |
| MTE | | | | S | Sn | 10 31 52.6 | -1.2 |
| | comp=N,4.3nm,0.3s | | | | | | |
| PVIS | Viseu | 5.42 | 42 | ePn | Pn | 10 30 53.4 | +1.6 |
| PVIS | | | | eSn | Sn | 10 31 52.2 | -2.1 |
| PVIS | | | | A | A | 10 31 56.0 | |
| | comp=N,17nm,0.3s | | | | | | |
| PVIS | Viseu | 5.42 | 42 | P | Pn | 10 30 53.4 | +1.6 |
| PVIS | | | | S | Sn | 10 31 52.2 | -2.1 |
| | comp=N,8.6nm,0.3s | | | | | | |
| PVIS | Viseu | 5.42 | 42 | P | Pn | 10 30 53.4 | +1.6 |
| PVIS | | | | S | Sn | 10 31 52.2 | -2.1 |
| | comp=N,8.6nm,0.3s | | | | | | |
| PMOZ | Porto Moniz, M | 5.43 | 225 | ePn | Pn | 10 30 44.8 | -7.1 |
| PMOZ | | | | eSn | Sn | 10 31 37.6 | -17 |
| PMOZ | | | | A | A | 10 31 48.2 | |
| | comp=N,37nm,0.4s | | | | | | |
| PMOZ | Porto Moniz, M | 5.43 | 225 | ePn | Pn | 10 30 44.8 | -7.1 |
| PMOZ | | | | eSn | Sn | 10 31 37.6 | -17 |
| | comp=N,37nm,0.4s | | | | | | |
| ESPR | Espera | 5.43 | 87 | P | Pn | 10 30 53.5 | +1.6 |
| | comp=N,5.2nm,0.2s,SNR=7.9 | | | | | | |
| ESPR | | | | S | Sn | 10 31 53.8 | -0.7 |
| | comp=N,15nm,0.4s,SNR=7.9 | | | | | | |
| ESPR | Espera | 5.43 | 87 | P | Pn | 10 30 53.5 | +1.6 |
| | comp=N,5.2nm,0.2s,SNR=7.9 | | | | | | |
| ESPR | | | | S | Sn | 10 31 53.8 | -0.7 |
| | comp=N,15nm,0.4s,SNR=7.9 | | | | | | |
| ECAB | El Cabril | 5.89 | 75 | ⇑P | Pn | 10 30 59.8 | +1.6 |
| | comp=N,4.0nm,0.3s,SNR=18 | | | | | | |
| ECAB | | | | S | Sn | 10 32 05.3 | -0.4 |
| | comp=N,1.9nm,0.1s,SNR=7.9 | | | | | | |
| ECAB | El Cabril | 5.89 | 75 | P | Pn | 10 30 59.8 | +1.6 |
| | comp=N,4.0nm,0.3s,SNR=18 | | | | | | |
| ECAB | | | | S | Sn | 10 32 05.3 | -0.4 |
| | comp=N,1.9nm,0.1s,SNR=7.9 | | | | | | |
| PVRL | Vila Real | 5.92 | 39 | ePn | Pn | 10 31 00.7 | +2.1 |
| PVRL | | | | eSn | Sn | 10 32 05.0 | -1.6 |
| PVRL | | | | A | A | 10 32 08.7 | |
| | comp=N,12nm,0.1s | | | | | | |
| PVRL | Vila Real | 5.92 | 39 | P | Pn | 10 31 00.7 | +2.1 |
| PVRL | | | | S | Sn | 10 32 05.0 | -1.6 |
| | comp=N,6.2nm,0.1s | | | | | | |
| PVRL | Vila Real | 5.92 | 39 | P | Pn | 10 31 00.7 | +2.1 |
| PVRL | | | | S | Sn | 10 32 05.0 | -1.6 |
| | comp=N,6.2nm,0.1s | | | | | | |
| POLO | Lamas de Olo | 5.96 | 38 | ePn | Pn | 10 31 00.1 | +0.9 |
| POLO | | | | eSn | Sn | 10 32 03.8 | -3.7 |
| POLO | | | | A | A | 10 32 09.7 | |
| | comp=N,3.1nm,0.3s | | | | | | |
| POLO | Lamas de Olo | 5.96 | 38 | ePn | Pn | 10 31 00.1 | +0.9 |
| POLO | | | | eSn | Sn | 10 32 03.8 | -3.7 |
| | comp=N,3.1nm,0.3s | | | | | | |
| PCAB | Cabril | 6.11 | 34 | ePn | Pn | 10 31 02.7 | +1.5 |
| PCAB | | | | eSn | Sn | 10 32 08.7 | -2.5 |
| PCAB | | | | A | A | 10 32 15.2 | |
| | comp=N,11nm,0.2s | | | | | | |
| PCAB | Cabril | 6.11 | 34 | P | Pn | 10 31 02.7 | +1.5 |
| PCAB | | | | S | Sn | 10 32 08.7 | -2.5 |
| | comp=N,5.6nm,0.2s | | | | | | |
| PCAB | Cabril | 6.11 | 34 | P | Pn | 10 31 02.7 | +1.5 |
| PCAB | | | | S | Sn | 10 32 08.7 | -2.5 |
| | comp=N,5.6nm,0.2s | | | | | | |
| EPLA | Plasencia | 6.12 | 55 | P | Pn | 10 31 03.1 | +1.8 |
| | comp=N,7.0nm,0.3s,SNR=11 | | | | | | |
| EPLA | | | | S | Sn | 10 32 10.1 | -1.2 |
| | comp=N,4.6nm,0.2s,SNR=7.9 | | | | | | |
| EPLA | Plasencia | 6.12 | 55 | P | Pn | 10 31 03.1 | +1.8 |
| | comp=N,7.0nm,0.3s,SNR=11 | | | | | | |
| EPLA | | | | S | Sn | 10 32 10.1 | -1.2 |
| | comp=N,4.6nm,0.2s,SNR=7.9 | | | | | | |
| MVO | Moncorvo | 6.21 | 43 | ePn | Pn | 10 31 04.3 | +1.8 |
| MVO | | | | eSn | Sn | 10 32 12.3 | -1.2 |
| MVO | | | | A | A | 10 32 13.2 | |
| | comp=N,7.6nm,0.3s | | | | | | |
| MVO | Moncorvo | 6.21 | 43 | P | Pn | 10 31 04.3 | +1.8 |
| | comp=N,4.4nm,0.3s,SNR=9.7 | | | | | | |
| MVO | | | | S | Sn | 10 32 11.9 | -1.6 |
| | comp=N,18nm,0.6s,SNR=7.9 | | | | | | |
| MVO | Moncorvo | 6.21 | 43 | P | Pn | 10 31 04.3 | +1.8 |
| | comp=N,4.4nm,0.3s,SNR=9.7 | | | | | | |
| MVO | | | | S | Sn | 10 32 11.9 | -1.6 |
| | comp=N,18nm,0.6s,SNR=7.9 | | | | | | |
| MVO | | | | eSn | Sn | 10 32 12.3 | -1.2 |
| | comp=N,7.6nm,0.3s | | | | | | |
| PGAV | Gavieira, Arco | 6.21 | 32 | ePn | Pn | 10 31 04.4 | +1.8 |
| PGAV | | | | eSn | Sn | 10 32 10.3 | -3.4 |
| PGAV | | | | A | A | 10 32 13.2 | |
| | comp=N,10nm,0.1s | | | | | | |
| PGAV | Gavieira, Arco | 6.21 | 32 | ePn | Pn | 10 31 04.4 | +1.8 |
| PGAV | | | | eSn | Sn | 10 32 10.3 | -3.4 |
| | comp=N,10nm,0.1s | | | | | | |
| ELOB | Lobios | 6.22 | 33 | P | Pn | 10 31 04.6 | +1.9 |
| | comp=N,4.4nm,0.4s,SNR=17 | | | | | | |
| ELOB | | | | S | Sn | 10 32 11.9 | -2.1 |
| | comp=N,5.0nm,0.1s,SNR=7.9 | | | | | | |
| ELOB | Lobios | 6.22 | 33 | P | Pn | 10 31 04.6 | +1.9 |
| | comp=N,4.4nm,0.4s,SNR=17 | | | | | | |
| ELOB | | | | S | Sn | 10 32 11.9 | -2.1 |
| | comp=N,5.0nm,0.1s,SNR=7.9 | | | | | | |
| EMIJ | Mijas | 6.32 | 89 | P | Pn | 10 31 05.3 | +1.2 |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | Sn | 10 32 14.8 | -1.5 |
| | comp=N,4.5nm,0.3s,SNR=4.0 | | | | | | |
| EMIJ | Mijas | 6.32 | 89 | P | Pn | 10 31 05.3 | +1.2 |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | Sn | 10 32 14.8 | -1.5 |
| | comp=N,4.5nm,0.3s,SNR=4.0 | | | | | | |
| EADA | Adamuz | 6.56 | 75 | P | Pn | 10 31 08.8 | +1.4 |
| | comp=N,2.4nm,0.3s,SNR=11 | | | | | | |
| EADA | | | | S | Sn | 10 32 20.9 | -1.4 |
| | comp=N,3.4nm,0.1s,SNR=7.9 | | | | | | |
| EADA | Adamuz | 6.56 | 75 | P | Pn | 10 31 08.8 | +1.4 |
| | comp=N,2.4nm,0.3s,SNR=11 | | | | | | |
| EADA | | | | S | Sn | 10 32 20.9 | -1.4 |
| | comp=N,3.4nm,0.1s,SNR=7.9 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OUK** | **Oukaimeden** | **6.79** | **143** | P | **Pn** | **10 31 10.0** | **-0.8** |
| OUK | | | | S | Sn | 10 32 20.0 | -8.4 |
| **OUK** | **Oukaimeden** | **6.79** | **143** | *i* P | **Pn** | **10 31 10.0** | **-0.8** |
| OUK | | | | *i* S | Sn | 10 32 20.0 | -8.4 |
| **EMAZ** | **Mazaricos** | **6.80** | **23** | P | **Pn** | **10 31 11.3** | **+0.6** |
| | comp=N,5.2nm,0.1s,SNR=7.9 | | | | | | |
| EMAZ | | | | S | Sn | 10 32 24.7 | -3.5 |
| | comp=N,12nm,0.1s,SNR=7.9 | | | | | | |
| **EMAZ** | **Mazaricos** | **6.80** | **23** | P | **Pn** | **10 31 11.3** | **+0.6** |
| | comp=N,5.2nm,0.1s,SNR=7.9 | | | | | | |
| EMAZ | | | | S | Sn | 10 32 24.7 | -3.5 |
| | comp=N,12nm,0.1s,SNR=7.9 | | | | | | |
| **PBRG** | **Braganca** | **6.81** | **40** | *e*Pn | **Pn** | **10 31 12.1** | **+1.3** |
| PBRG | | | | *e*Sn | **Sn** | **10 32 25.2** | **-3.2** |
| PBRG | | | | A | A | 10 32 32.1 | |
| | comp=N,3.9nm,0.2s | | | | | | |
| **PBRG** | **Braganca** | **6.81** | **40** | P | **Pn** | **10 31 12.1** | **+1.3** |
| PBRG | | | | S | **Sn** | **10 32 25.2** | **-3.2** |
| | comp=N,1.9nm,0.2s | | | | | | |
| **PBRG** | **Braganca** | **6.81** | **40** | P | **Pn** | **10 31 12.1** | **+1.3** |
| PBRG | | | | S | **Sn** | **10 32 25.2** | **-3.2** |
| | comp=N,1.9nm,0.2s | | | | | | |
| **TZC** | **Tazercounte** | **6.83** | **130** | P | **Pn** | **10 31 12.0** | **+0.7** |
| TZC | | | | S | Sn | 10 32 22.0 | -7.3 |
| **TZC** | **Tazercounte** | **6.83** | **130** | *e*P | **Pn** | **10 31 12.0** | **+0.7** |
| TZC | | | | *i* S | Sn | 10 32 22.0 | -7.3 |
| **KIB** | **El Ksiba** | **6.84** | **126** | *e*P | **Pn** | **10 31 13.0** | **+1.7** |
| KIB | | | | *i* S | Sn | 10 32 22.0 | -7.2 |
| **ECAL** | **Calabor** | **6.91** | **40** | P | **Pn** | **10 31 13.8** | **+1.6** |
| | comp=N,4.5nm,0.3s,SNR=15 | | | | | | |
| ECAL | | | | S | **Sn** | **10 32 28.3** | **-2.6** |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | |
| **ECAL** | **Calabor** | **6.91** | **40** | P | **Pn** | **10 31 13.8** | **+1.6** |
| | comp=N,4.5nm,0.3s,SNR=15 | | | | | | |
| ECAL | | | | S | **Sn** | **10 32 28.3** | **-2.6** |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.99** | **29** | P | **Pn** | **10 31 14.2** | **+1.0** |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | |
| EAGO | | | | S | **Sn** | **10 32 30.5** | **-2.2** |
| | comp=N,5.1nm,0.1s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.99** | **29** | P | **Pn** | **10 31 14.2** | **+1.0** |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | |
| EAGO | | | | S | **Sn** | **10 32 30.5** | **-2.2** |
| | comp=N,5.1nm,0.1s,SNR=7.9 | | | | | | |
| **CZD** | **Col de Zad** | **7.25** | **119** | S | Sn | 10 32 33.0 | -6.6 |
| **CZD** | **Col de Zad** | **7.25** | **119** | *i* P | **Pn** | **10 31 19.0** | **+1.9** |
| CZD | | | | *i* S | Sn | 10 32 33.0 | -6.6 |
| **ESDC** | **Sonseca Array** | **7.42** | **64** | P | **Pn** | **10 31 20.5** | **+1.3** |
| | comp=N,9.4nm,0.1s,baz=253,slow=13,SNR=7.9 | | | | | | |
| ESDC | | | | S | **Sn** | **10 32 40.9** | **-2.6** |
| | comp=N,18nm,5.3s,SNR=7.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **7.42** | **64** | P | **Pn** | **10 31 20.5** | **+1.3** |
| | comp=N,9.4nm,0.1s,SNR=7.9 | | | | | | |
| ESDC | | | | S | **Sn** | **10 32 40.9** | **-2.6** |
| | comp=N,18nm,5.3s,SNR=7.9 | | | | | | |
| **GUD** | **Guadarrama** | **7.68** | **57** | P | **Pn** | **10 31 24.4** | **+1.5** |
| | comp=N,1.4nm,0.3s,SNR=6.6 | | | | | | |
| GUD | | | | S | **Sn** | **10 32 47.4** | **-2.7** |
| | comp=N,1.1nm,0.2s,SNR=7.9 | | | | | | |
| **GUD** | **Guadarrama** | **7.68** | **57** | P | **Pn** | **10 31 24.4** | **+1.5** |
| | comp=N,1.4nm,0.3s,SNR=6.6 | | | | | | |
| GUD | | | | S | **Sn** | **10 32 47.4** | **-2.7** |
| | comp=N,1.1nm,0.2s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **7.69** | **79** | S | **Sn** | **10 32 47.3** | **-3.0** |
| | comp=N,28nm,3.6s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **7.69** | **79** | S | **Sn** | **10 32 47.3** | **-3.0** |
| | comp=N,28nm,3.6s,SNR=7.9 | | | | | | |
| **EPON** | **Pontenova** | **7.80** | **31** | P | **Pn** | **10 31 25.8** | **+1.4** |
| | comp=N,1.7nm,0.1s,SNR=6.2 | | | | | | |
| EPON | | | | S | Sn | 10 32 48.5 | -4.2 |
| | comp=N,1.9nm,0.2s,SNR=7.9 | | | | | | |
| **EPON** | **Pontenova** | **7.80** | **31** | P | **Pn** | **10 31 25.8** | **+1.4** |
| | comp=N,1.7nm,0.1s,SNR=6.2 | | | | | | |
| EPON | | | | S | Sn | 10 32 48.5 | -4.2 |
| | comp=N,1.9nm,0.2s,SNR=7.9 | | | | | | |
| **EMEL** | **Melilla** | **7.97** | **98** | P | **Pn** | **10 31 27.2** | **+0.5** |
| | comp=N,22nm,0.1s,SNR=7.9 | | | | | | |
| EMEL | | | | S | **Sn** | **10 32 53.3** | **-3.6** |
| | comp=N,53nm,1.1s,SNR=7.9 | | | | | | |
| **EMLI** | **Melilla** | **7.97** | **98** | P | **Pn** | **10 31 27.2** | **+0.5** |
| | comp=N,22nm,0.1s,SNR=7.9 | | | | | | |
| EMLI | | | | S | **Sn** | **10 32 53.3** | **-3.7** |
| | comp=N,53nm,1.1s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **8.14** | **77** | P | **Pn** | **10 31 30.3** | **+1.1** |
| | comp=N,3.5nm,0.6s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **10 32 58.3** | **-3.0** |
| | comp=N,1.9nm,0.2s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **8.14** | **77** | P | **Pn** | **10 31 30.3** | **+1.1** |
| | comp=N,3.5nm,0.6s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **10 32 58.3** | **-3.0** |
| | comp=N,1.9nm,0.2s,SNR=7.9 | | | | | | |
| **EVIA** | **Vianos** | **8.25** | **74** | P | **Pn** | **10 31 32.0** | **+1.4** |
| | comp=N,1.4nm,0.3s,SNR=7.9 | | | | | | |
| EVIA | | | | S | **Sn** | **10 33 01.1** | **-2.8** |
| | comp=N,3.2nm,0.4s,SNR=7.9 | | | | | | |
| **EVIA** | **Vianos** | **8.25** | **74** | P | **Pn** | **10 31 32.0** | **+1.4** |
| | comp=N,1.4nm,0.3s,SNR=7.9 | | | | | | |
| EVIA | | | | S | **Sn** | **10 33 01.1** | **-2.8** |
| | comp=N,3.2nm,0.4s,SNR=7.9 | | | | | | |
| **ZFT** | **Errachidia** | **8.30** | **122** | S | Sn | 10 32 58.0 | -7.3 |
| **ZFT** | **Errachidia** | **8.30** | **122** | *e*P | **Pn** | **10 31 33.0** | **+1.6** |
| ZFT | | | | *i* S | Sn | 10 32 58.0 | -7.3 |
| **EARI** | **Arriondas** | **8.67** | **39** | P | **Pn** | **10 31 38.1** | **+1.7** |
| | comp=N,0.2nm,0.2s,SNR=7.9 | | | | | | |
| EARI | | | | S | Sn | 10 33 09.7 | -4.5 |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | |
| **EARI** | **Arriondas** | **8.67** | **39** | P | **Pn** | **10 31 38.1** | **+1.7** |
| | comp=N,0.2nm,0.2s,SNR=7.9 | | | | | | |
| EARI | | | | S | Sn | 10 33 09.7 | -4.5 |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **8.99** | **74** | P | **Pn** | **10 31 42.0** | **+1.3** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **8.99** | **74** | P | **Pn** | **10 31 42.0** | **+1.3** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| **ETOR** | **Torete** | **9.20** | **61** | P | **Pn** | **10 31 45.4** | **+1.7** |
| | comp=N,24nm,0.2s,SNR=30 | | | | | | |
| ETOR | | | | S | Sn | 10 33 23.5 | -3.8 |
| | comp=N,9.1nm,0.3s,SNR=7.9 | | | | | | |
| **ETOR** | **Torete** | **9.20** | **61** | P | **Pn** | **10 31 45.4** | **+1.7** |
| | comp=N,24nm,0.2s,SNR=30 | | | | | | |
| ETOR | | | | S | Sn | 10 33 23.5 | -3.8 |
| | comp=N,9.1nm,0.3s,SNR=7.9 | | | | | | |
| **EMOS** | **Mosqueruela** | **10.18** | **66** | P | **Pn** | **10 31 58.7** | **+1.5** |
| | comp=N,2.4nm,0.6s,SNR=7.9 | | | | | | |
| EMOS | | | | S | Sn | 10 33 46.8 | -4.7 |
| | comp=N,33nm,1.7s,SNR=7.9 | | | | | | |
| **EMOS** | **Mosqueruela** | **10.18** | **66** | P | **Pn** | **10 31 58.7** | **+1.5** |
| | comp=N,2.4nm,0.6s,SNR=7.9 | | | | | | |
| EMOS | | | | S | Sn | 10 33 46.8 | -4.7 |
| | comp=N,33nm,1.7s,SNR=7.9 | | | | | | |
| **ELIZ** | **Elizondo** | **10.66** | **50** | P | **Pn** | **10 32 05.2** | **+1.7** |
| | comp=N,3.8nm,0.2s,SNR=7.9 | | | | | | |
| **ELIZ** | **Elizondo** | **10.66** | **50** | P | **Pn** | **10 32 05.2** | **+1.7** |
| | comp=N,3.8nm,0.2s,SNR=7.9 | | | | | | |
| **ESAC** | **San Caprasio** | **10.66** | **58** | P | **Pn** | **10 32 05.7** | **+2.1** |
| | comp=N,1.7nm,0.1s,SNR=7.9 | | | | | | |
| ESAC | | | | S | Sn | 10 33 58.3 | -4.7 |
| | comp=N,4.8nm,0.7s,SNR=7.9 | | | | | | |
| **ESAC** | **San Caprasio** | **10.66** | **58** | P | **Pn** | **10 32 05.7** | **+2.1** |
| | comp=N,1.7nm,0.1s,SNR=7.9 | | | | | | |
| ESAC | | | | S | Sn | 10 33 58.3 | -4.7 |
| | comp=N,4.8nm,0.7s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **10.67** | **52** | P | **Pn** | **10 32 05.4** | **+1.7** |
| | comp=N,1.5nm,0.2s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **10.67** | **52** | P | **Pn** | **10 32 05.4** | **+1.7** |
| | comp=N,1.5nm,0.2s,SNR=7.9 | | | | | | |
| **EALK** | **Alkurruntz** | **10.70** | **49** | P | **Pn** | **10 32 05.8** | **+1.8** |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | |
| **EALK** | **Alkurruntz** | **10.70** | **49** | P | **Pn** | **10 32 05.8** | **+1.8** |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | |
| **SJPF** | **Ste Jean** | **10.82** | **50** | *e*Pn | **Pn** | **10 32 07.4** | **+1.7** |
| SJPF | | | | *e*Sn | Sn | 10 33 49.8 | -17 |
| | comp=N,0.5nm,0.3s | | | | | | |
| **SJPF** | **Ste Jean** | **10.82** | **50** | P | **Pn** | **10 32 07.4** | **+1.7** |
| **SJPF** | **Ste Jean** | **10.82** | **50** | *e*Pn | **Pn** | **10 32 07.4** | **+1.7** |
| SJPF | | | | *e*Sn | Sn | 10 33 49.8 | -17 |
| | comp=N,0.2nm,0.3s | | | | | | |
| **ETSF** | **Etsaut** | **11.13** | **53** | *e*Pn | **Pn** | **10 32 11.8** | **+1.8** |
| ETSF | | | | *e*Sn | Sn | 10 33 57.5 | -17 |
| | comp=N,0.8nm,0.4s | | | | | | |
| **ETSF** | **Etsaut** | **11.13** | **53** | P | **Pn** | **10 32 11.8** | **+1.8** |
| **ETSF** | **Etsaut** | **11.13** | **53** | *e*Pn | **Pn** | **10 32 11.8** | **+1.8** |
| ETSF | | | | *e*Sn | Sn | 10 33 57.5 | -17 |
| | comp=N,0.4nm,0.4s | | | | | | |
| **ATE** | **Arette** | **11.13** | **52** | P | **Pn** | **10 32 11.8** | **+1.8** |
| | comp=N,1.5nm,0.2s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **11.13** | **52** | P | **Pn** | **10 32 11.8** | **+1.8** |
| | comp=N,1.5nm,0.2s,SNR=7.9 | | | | | | |
| **EPOB** | **Poblet** | **11.61** | **62** | P | **Pn** | **10 32 17.7** | **+1.1** |
| | comp=N,0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EPOB** | **Poblet** | **11.61** | **62** | P | **Pn** | **10 32 17.7** | **+1.1** |
| | comp=N,0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EPF** | **Esparros** | **11.77** | **54** | *e*Pn | **Pn** | **10 32 20.8** | **+2.0** |
| EPF | | | | *e*Sn | Sn | 10 34 12.4 | -18 |
| **EPF** | **Esparros** | **11.77** | **54** | P | **Pn** | **10 32 20.8** | **+2.0** |
| **EPF** | **Esparros** | **11.77** | **54** | *e*Pn | **Pn** | **10 32 20.8** | **+2.0** |
| EPF | | | | *e*Sn | Sn | 10 34 12.4 | -18 |
| **CSOR** | **Sort** | **12.01** | **58** | P | **Pn** | **10 32 23.4** | **+1.3** |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | |
| **CSOR** | **Sort** | **12.01** | **58** | P | **Pn** | **10 32 23.4** | **+1.3** |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | |
| **ETOS** | **Mallorca** | **12.51** | **71** | P | **Pn** | **10 32 29.9** | **+1.0** |
| | comp=N,4.1nm,0.4s,SNR=7.9 | | | | | | |
| **ETOS** | **Mallorca** | **12.51** | **71** | P | **Pn** | **10 32 29.9** | **+1.0** |
| | comp=N,4.1nm,0.4s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **12.63** | **59** | P | **Pn** | **10 32 32.2** | **+1.6** |
| | comp=N,1.9nm,0.4s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **12.63** | **59** | P | **Pn** | **10 32 32.2** | **+1.6** |
| | comp=N,1.9nm,0.4s,SNR=7.9 | | | | | | |
| **CFON** | **Fontmartina** | **12.70** | **62** | P | **Pn** | **10 32 33.2** | **+1.6** |
| | comp=N,0.5nm,0.3s,SNR=7.9 | | | | | | |
| **CFON** | **Fontmartina** | **12.70** | **62** | P | **Pn** | **10 32 33.2** | **+1.6** |
| | comp=N,0.5nm,0.3s,SNR=7.9 | | | | | | |
| **EJON** | **La Jonquera** | **13.25** | **60** | P | **Pn** | **10 32 40.2** | **+1.3** |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | |
| **EJON** | **La Jonquera** | **13.25** | **60** | P | **Pn** | **10 32 40.2** | **+1.3** |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | |

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*NNC* ***05*** *10:43:02.7±1.0, 51°.45N×75°.63E, h0km, mb3.3, mpv2.9, Error ellipse: s-maj=43.3km s-min=6.7km az=23.0*
*ISCJB* ***05*** *10:43:03.9±0.7, 51°.5N±0°.2×75°.6E±0°.1, h10km, Error ellipse: s-maj=24.1km s-min=5.1km az=24.5*
*IDC* ***05*** *10:43:04.3±1.1, 51°.51N×75°.68E, h0km, mb1 2.8/3, mb1mx2.8/41, mbtmp2.8/3, ML2.5/3, Error ellipse: s-maj=27.6km s-min=9.6km az=28.0*
**ISC 05 10:43:04.0**±1.0**, 51°.4N**±0°.1×**75°.67E**±0°.06**, h10km, n8, σ1°.54**/13**, 3C-6D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **1.97** | **113** | ⇓Pn | **Pb** | **10 43 38.4** | **-1.6** |
| | 16nm,0.5s,baz=294,slow=16 | | | | | | |
| KURBB | | | | ⇓Sn | **Sb** | **10 44 04.6** | **0.0** |
| | 35nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **1.99** | **109** | ⇓Pn | **Pb** | **10 43 38.2** | **-2.0** |
| | 12nm,0.7s | | | | | | |
| KURK | | | | ⇑Sn | **Sb** | **10 44 04.4** | **-0.6** |
| | 23nm,0.4s | | | | | | |
| **VOSK** | **Vostochnaya** | **3.18** | **296** | ⇑Pn | **Pn** | **10 43 54.1** | **0.0** |
| | 4.5nm,1.6s | | | | | | |
| VOSK | | | | ⇑Pg | **Pb** | **10 43 58.5** | **-2.1** |
| | 1.0nm,0.3s | | | | | | |
| VOSK | | | | ⇓Lg | Lg | 10 44 39.7 | |
| | 4.7nm,0.6s | | | | | | |
| **BVA0** | **Borovoye Array** | **3.63** | **298** | Pn | **Pn** | **10 44 01.5** | **+1.3** |
| | 0.9nm,0.6s,baz=109,slow=14,SNR=8.7 | | | | | | |
| BVA0 | | | | ⇓Pg | **Pb** | **10 44 06.5** | **-1.7** |
| | 1.0nm,0.4s,baz=130,slow=18,SNR=7.3 | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 10 44 44.9 | |
| | 4.8nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **3.63** | **298** | Pn | **Pn** | **10 44 00.9** | **+0.7** |
| | 0.4nm,0.3s,baz=116,slow=15,SNR=6.5 | | | | | | |
| BVAR | | | | Pg | **Pb** | **10 44 07.3** | **-0.9** |
| | 0.7nm,0.3s,baz=127,slow=17,SNR=6.8 | | | | | | |
| BVAR | | | | Sn | **Sn** | **10 44 43.9** | **+0.8** |
| | 0.7nm,0.3s,baz=110,slow=25,SNR=3.5 | | | | | | |
| BVAR | | | | Lg | Lg | 10 44 55.4 | |
| | 1.3nm,0.3s,baz=127,slow=30,SNR=5.9 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.12** | **62** | *i* | | 11 18 50.0 | |
| | baz=247,slow=320,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.12** | **62** | Pn | **Pn** | **10 44 36.0** | **+1.6** |
| | 0.4nm,0.3s,baz=256,slow=16,SNR=3.2 | | | | | | |
| ZALV | | | | Lg | Lg | 10 46 16.2 | |
| | 0.3nm,0.3s,baz=257,slow=25,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **6.34** | **134** | Pn | **Pn** | **10 44 39.4** | **+1.8** |
| | 0.1nm,0.3s,baz=344,slow=15,SNR=2.7 | | | | | | |
| MKAR | | | | Lg | Lg | 10 46 21.1 | |
| | 0.4nm,0.3s,baz=317,slow=25,SNR=7.9 | | | | | | |

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*IDC* ***05*** *10:43:59.5±2.1, 59°.68N×24°.61E, h0km, mb1 3.3/3, mb1mx3.1/32, mbtmp3.3/3, ML2.8/3, Error ellipse: s-maj=23.0km s-min=7.5km az=144.0*
*ISCJB* ***05*** *10:44:00.1±0.4, 59°.95N±0°.03×24°.27E±0°.04, h0km, Error ellipse: s-maj=3.8km s-min=3.0km az=150.9*
*CSEM* ***05*** *10:44:01.3±0.2, 59°.95N×24°.30E, h2km, ML2.2, Error ellipse: s-maj=4.7km s-min=3.5km az=154.0, Mining explosion.*
*UPP* ***05*** *10:44:02.5, 59°.89N×24°.14E, h0km, ML2.0, Suspected Mining explosion.*
*HEL* ***05*** *10:44:02.1±0.1, 59°.95N×24°.19E, h0km, ML2.2, ML2.0(UPP), Explosion*
*NAO* ***05*** *10:44:02.7±1.0, 59°.90N×24°.29E, ML2.0*
*BER* ***05*** *10:44:03.2±4.0, 59°.92N×24°.24E, h0km, ML2.0(NAO), Suspected explosion*
**ISC 05 10:44:01.4**±0.8**, 59°.94N**±0°.02×**24°.19E**±0°.02**, h0km, n70, σ1°.03**/91**, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MEF** | **Metsahovi** | **0.29** | **21** | *e*P | **Pg** | **10 44 07.0** | **0.0** |
| MEF | | | | *e*S | **Sg** | **10 44 11.0** | **+0.1** |
| **PVF** | **Pernaja** | **1.03** | **53** | *e*P | **Pg** | **10 44 20.4** | **-0.8** |
| PVF | | | | *e*S | **Sg** | **10 44 33.0** | **-1.5** |
| **PVF** | **Pernaja** | **1.03** | **53** | P | **Pg** | **10 44 20.4** | **-0.8** |
| PVF | | | | S | **Sg** | **10 44 33.0** | **-1.5** |
| **MTSE** | **Matsula** | **1.25** | **189** | *e*P | **Pg** | **10 44 24.4** | **-0.9** |
| MTSE | | | | *e*SB | **Sg** | **10 44 41.5** | **+0.1** |
| **MTSE** | **Matsula** | **1.25** | **189** | P | **Pg** | **10 44 24.4** | **-0.9** |
| MTSE | | | | Sb | **Sg** | **10 44 41.5** | **+0.1** |
| **RAF** | **Rauma** | **1.61** | **313** | *e*P | **Pn** | **10 44 30.9** | **-0.2** |
| RAF | | | | MSG | | 10 44 49.9 | |
| | comp=Z,31nm,0.2s | | | | | | |
| RAF | | | | *e*S | **Sn** | **10 44 51.9** | **-0.8** |
| **RAF** | **Rauma** | **1.61** | **313** | P | **Pn** | **10 44 30.9** | **-0.2** |
| RAF | | | | S | **Sn** | **10 44 51.8** | **-0.8** |
| **FIA0** | **FINESS Array S** | **1.77** | **31** | Pg | **Pn** | **10 44 33.7** | **+0.4** |
| | baz=201,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 10 44 59.0 | |
| | baz=195,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **1.77** | **31** | Pg | **Pn** | **10 44 33.7** | **+0.4** |
| | baz=201,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 10 44 59.0 | |
| | baz=195,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **1.77** | **31** | *e*P | **Pn** | **10 44 33.4** | **+0.1** |
| **FIA0** | **FINESS Array S** | **1.77** | **31** | P | **Pn** | **10 44 33.4** | **+0.1** |
| **FIA0** | **FINESS Array S** | **1.77** | **31** | Pg | **Pn** | **10 44 33.7** | **+0.4** |
| | baz=201,slow=18,SNR=90 | | | | | | |
| FIA0 | | | | Lg | Lg | 10 44 59.0 | |
| | baz=195,slow=26,SNR=50 | | | | | | |
| **FINES** | **FINESS Array B** | **1.77** | **31** | Pn | **Pn** | **10 44 33.6** | **+0.4** |
| | comp=Z,1.4nm,0.3s,baz=203,slow=17,SNR=61 | | | | | | |
| FINES | | | | Lg | Lg | 10 44 59.6 | |
| | comp=Z,8.1nm,0.3s,baz=200,slow=25,SNR=26 | | | | | | |
| **VJF** | **Virojoki** | **1.78** | **69** | *e*P | **Pn** | **10 44 33.4** | **-0.1** |
| VJF | | | | MSG | | 10 44 55.3 | |
| | comp=Z,27nm,0.2s | | | | | | |
| VJF | | | | *e*S | **Sn** | **10 44 57.0** | **+0.2** |
| **VJF** | **Virojoki** | **1.78** | **69** | P | **Pn** | **10 44 33.3** | **-0.1** |
| VJF | | | | S | **Sn** | **10 44 57.0** | **+0.2** |
| **VSU** | **Vasula** | **1.98** | **137** | Pg | **Pn** | **10 44 37.1** | **+0.9** |
| VSU | | | | Lg | Lg | 10 45 04.1 | |
| **VSU** | **Vasula** | **1.98** | **137** | Pg | **Pn** | **10 44 37.1** | **+0.9** |
| VSU | | | | Lg | Lg | 10 45 04.1 | |
| **VSU** | **Vasula** | **1.98** | **137** | *e*PG | **Pn** | **10 44 37.3** | **+1.2** |
| VSU | | | | *e*SG | **Sb** | **10 45 03.5** | **-0.1** |
| **VSU** | **Vasula** | **1.98** | **137** | Pg | **Pn** | **10 44 37.3** | **+1.2** |
| VSU | | | | Sg | **Sb** | **10 45 03.4** | **-0.1** |
| VSU | | | | Lg | Lg | 10 45 04.1 | |
| **AAL** | **Aland** | **2.12** | **278** | *e*P | **Pn** | **10 44 38.8** | **+0.8** |
| AAL | | | | *e*SB | **Sn** | **10 45 06.5** | **+1.6** |
| **AAL** | **Aland** | **2.12** | **278** | P | **Pn** | **10 44 38.7** | **+0.8** |
| AAL | | | | Sb | **Sn** | **10 45 06.5** | **+1.6** |
| AAL | | | | S | **Sb** | **10 45 06.9** | **-0.4** |
| **KEF** | **Keuruu** | **2.26** | **8** | *e*PB | **Pn** | **10 44 41.7** | **+1.8** |
| KEF | | | | MSG | | 10 45 08.5 | |
| | comp=Z,12nm,0.2s | | | | | | |
| KEF | | | | *e*SG | **Sb** | **10 45 11.8** | **+0.4** |
| **KEF** | **Keuruu** | **2.26** | **8** | Pb | **Pn** | **10 44 41.7** | **+1.8** |
| KEF | | | | Sg | **Sb** | **10 45 11.8** | **+0.4** |
| **KAF** | **Kangasniemi** | **2.41** | **24** | *e*PB | **Pn** | **10 44 44.2** | **+2.2** |
| KAF | | | | MSG | | 10 45 12.9 | |
| | comp=Z,12nm,0.2s | | | | | | |
| KAF | | | | *e*SG | **Sb** | **10 45 16.5** | **+0.7** |
| **KAF** | **Kangasniemi** | **2.41** | **24** | Pb | **Pn** | **10 44 44.2** | **+2.2** |
| **NRTU** | **Norrtaelje** | **2.82** | **267** | *e*P | **Pn** | **10 44 48.4** | **+0.8** |
| **NRTU** | **Norrtaelje** | **2.82** | **267** | P | **Pn** | **10 44 48.4** | **+0.8** |
| **GRAU** | **Graesoe** | **2.85** | **280** | *e*P | **Pn** | **10 44 48.2** | **+0.1** |
| **GRAU** | **Graesoe** | **2.85** | **280** | P | **Pn** | **10 44 48.2** | **+0.1** |
| **SUF** | **Sumiainen** | **2.94** | **18** | *e*PB | **Pn** | **10 44 51.8** | **+2.5** |
| SUF | | | | MSG | | 10 45 28.2 | |
| | comp=Z,3.3nm,0.2s | | | | | | |
| **SUF** | **Sumiainen** | **2.94** | **18** | Pb | **Pn** | **10 44 51.8** | **+2.5** |
| **FORU** | **Forsmark** | **3.03** | **281** | *e*P | **Pn** | **10 44 51.8** | **+1.1** |
| **FORU** | **Forsmark** | **3.03** | **281** | P | **Pn** | **10 44 51.7** | **+1.1** |
| **FLYU** | **Flymyra** | **3.17** | **276** | *e*P | **Pn** | **10 44 54.1** | **+1.6** |
| **FLYU** | **Flymyra** | **3.17** | **276** | P | **Pn** | **10 44 54.0** | **+1.6** |
| **VAF** | **Ylistaro** | **3.19** | **348** | *e*PB | Pn | 10 44 56.6 | +3.7 |
| VAF | | | | MSG | | 10 45 35.4 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| **VAF** | **Ylistaro** | **3.19** | **348** | Pb | Pn | 10 44 56.5 | +3.7 |
| **IGGU** | **Iggoen** | **3.53** | **288** | *e*P | **Pn** | **10 44 58.3** | **+0.9** |
| **IGGU** | **Iggoen** | **3.53** | **288** | P | **Pn** | **10 44 58.3** | **+0.9** |
| **OSTU** | **Oestervaala** | **3.54** | **278** | *e*P | **Pn** | **10 44 58.8** | **+1.2** |
| **OSTU** | **Oestervaala** | **3.54** | **278** | P | **Pn** | **10 44 58.8** | **+1.2** |
| **BACU** | **Backbrunna** | **3.57** | **272** | *e*P | **Pn** | **10 44 58.6** | **+0.7** |
| **BACU** | **Backbrunna** | **3.57** | **272** | P | **Pn** | **10 44 58.6** | **+0.7** |
| **ARNU** | **Arnoeviken** | **3.77** | **301** | *e*P | **Pn** | **10 45 01.7** | **+1.0** |
| **ARNU** | **Arnoeviken** | **3.77** | **301** | P | **Pn** | **10 45 01.6** | **+1.0** |
| **FALU** | **Falun** | **4.20** | **281** | *e*P | **Pn** | **10 45 07.1** | **+0.4** |
| **FALU** | **Falun** | **4.20** | **281** | P | **Pn** | **10 45 07.1** | **+0.4** |
| **UMAU** | **Umeaa** | **4.29** | **339** | *e*P | **Pn** | **10 45 08.3** | **+0.5** |
| UMAU | | | | *e*SG | **Sg** | **10 46 17.5** | **-1.5** |
| **UMAU** | **Umeaa** | **4.29** | **339** | P | **Pn** | **10 45 08.3** | **+0.5** |
| **HASU** | **Hassela** | **4.30** | **304** | *e*P | **Pn** | **10 45 08.9** | **+1.0** |
| **HASU** | **Hassela** | **4.30** | **304** | P | **Pn** | **10 45 08.9** | **+1.0** |
| **ROTU** | **Roteberg** | **4.37** | **293** | *e*P | **Pn** | **10 45 09.5** | **+0.5** |
| **ROTU** | **Roteberg** | **4.37** | **293** | P | **Pn** | **10 45 09.5** | **+0.5** |
| **JOF** | **Joensuu** | **4.54** | **46** | *e*P | **Pn** | **10 45 12.1** | **+0.8** |
| **JOF** | **Joensuu** | **4.54** | **46** | P | **Pn** | **10 45 12.1** | **+0.8** |
| **HFS** | **Hagfors** | **5.26** | **277** | Pn | **Pn** | **10 45 22.8** | **+1.6** |
| | baz=92,slow=11 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 46 23.3** | **+0.7** |
| | baz=80,slow=37 | | | | | | |
| HFS | | | | Lg | Lg | 10 46 43.8 | |
| | baz=98,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **5.26** | **277** | Pn | **Pn** | **10 45 22.8** | **+1.6** |
| | baz=92,slow=11 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 46 23.3** | **+0.7** |
| | baz=80,slow=37 | | | | | | |
| HFS | | | | Lg | Lg | 10 46 43.8 | |
| | baz=98,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **5.26** | **277** | Pn | **Pn** | **10 45 21.6** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=100,slow=15,SNR=5.7 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 46 22.7** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=96,slow=23,SNR=4.1 | | | | | | |
| HFS | | | | Lg | Lg | 10 46 44.5 | |
| | comp=Z,0.4nm,0.3s,baz=95,slow=31,SNR=5.0 | | | | | | |
| **HFS** | **Hagfors** | **5.26** | **277** | Pn | **Pn** | **10 45 22.8** | **+1.6** |
| | baz=92,slow=11,SNR=50 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 46 23.3** | **+0.7** |
| | baz=80,slow=28,SNR=50 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.50** | **285** | Pn | **Pn** | **10 45 37.6** | **-0.7** |
| | baz=91,slow=14 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.50** | **285** | Pn | **Pn** | **10 45 37.6** | **-0.7** |
| | baz=91,slow=14 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.50** | **285** | Pn | **Pn** | **10 45 37.6** | **-0.7** |
| | baz=91,slow=14,SNR=50 | | | | | | |
| **NOA** | **NORSAR Array B** | **6.50** | **285** | Pn | **Pn** | **10 45 37.9** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=93,slow=10,SNR=4.5 | | | | | | |
| NOA | | | | Sn | **Sn** | **10 46 50.3** | **-2.8** |
| | comp=Z,0.3nm,0.3s,baz=122,slow=22,SNR=3.5 | | | | | | |
| **APA0** | **Apatity Array** | **8.61** | **23** | Pn | **Pn** | **10 46 07.9** | **+0.8** |
| | baz=204,slow=14 | | | | | | |
| **APA0** | **Apatity Array** | **8.61** | **23** | Pn | **Pn** | **10 46 07.9** | **+0.8** |
| | baz=204,slow=14 | | | | | | |
| **APA0** | **Apatity Array** | **8.61** | **23** | Pn | **Pn** | **10 46 07.9** | **+0.8** |
| | baz=204,slow=12,SNR=50 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.65** | **3** | Pn | **Pn** | **10 46 21.4** | **+0.1** |
| | baz=184,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.65** | **3** | Pn | **Pn** | **10 46 21.4** | **+0.1** |
| | baz=184,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.65** | **3** | Pn | **Pn** | **10 46 21.4** | **+0.1** |
| | baz=184,slow=12,SNR=50 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.65** | **3** | Pn | **Pn** | **10 46 21.4** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=180,slow=13,SNR=9.3 | | | | | | |

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*ISCJB* ***05*** *10:52:09.4±0.5, 63°.94N±0°.02×28°.2E±0°.1, h0km, Error ellipse: s-maj=6.4km s-min=3.2km az=5.7*
*CSEM* ***05*** *10:52:10.4±0.4, 63°.92N×28°.23E, h2km, ML1.7, Error ellipse: s-maj=9.4km s-min=5.3km az=99.0, Mining explosion.*
*IDC* ***05*** *10:52:10.9±2.2, 63°.84N×28°.77E, h0km, mb1 3.1/3, mb1mx2.9/39, mbtmp2.9/3, ML1.9/2, Error ellipse: s-maj=34.5km s-min=8.4km az=102.0*
*HEL* ***05*** *10:52:11.9, 63°.97N×28°.11E, h0km, ML1.7, Explosion*
*UPP* ***05*** *10:52:15.5, 63°.95N×27°.40E, h0km, ML1.7, Suspected Mining explosion.*
**ISC 05 10:52:11.5**±1.0**, 63°.95N**±0°.03×**28°.01E**±0°.05**, h0km, n47, σ1°.34**/65**, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OUL** | **Oulu** | **1.46** | **322** | *e*PG | **Pn** | **10 52 38.4** | **-0.8** |
| | baz=135 | | | | | | |
| **OUL** | **Oulu** | **1.46** | **322** | Pg | **Pn** | **10 52 38.3** | **-0.8** |
| **SUF** | **Sumiainen** | **1.49** | **215** | *e*PG | **Pn** | **10 52 39.4** | **-0.1** |
| SUF | | | | MSG | | 10 52 58.0 | |
| | comp=Z,3.9nm,0.2s | | | | | | |
| SUF | | | | *e*SN | **Sn** | **10 53 00.7** | **+1.1** |
| **SUF** | **Sumiainen** | **1.49** | **215** | Pg | **Pn** | **10 52 39.3** | **-0.1** |
| SUF | | | | Sn | **Sn** | **10 53 00.7** | **+1.1** |
| **JOF** | **Joensuu** | **1.81** | **123** | *e*PG | **Pn** | **10 52 44.2** | **+0.3** |
| **JOF** | **Joensuu** | **1.81** | **123** | Pg | **Pn** | **10 52 44.1** | **+0.3** |
| **KAF** | **Kangasniemi** | **2.00** | **204** | *e*PG | **Pn** | **10 52 48.1** | **+1.6** |
| | baz=21 | | | | | | |
| KAF | | | | MSG | | 10 53 12.5 | |
| | comp=Z,7.5nm,0.2s | | | | | | |
| KAF | | | | *e*SG | **Sb** | **10 53 15.2** | **+1.2** |
| **KAF** | **Kangasniemi** | **2.00** | **204** | Pg | **Pn** | **10 52 48.0** | **+1.6** |
| KAF | | | | Sg | **Sb** | **10 53 15.2** | **+1.2** |
| **MSF** | **Maaselka** | **2.02** | **12** | *e*PG | **Pn** | **10 52 47.8** | **+0.9** |
| **MSF** | **Maaselka** | **2.02** | **12** | Pg | **Pn** | **10 52 47.7** | **+0.9** |
| **KU6** | **Riekki** | **2.23** | **20** | *e*PB | **Pn** | **10 52 50.4** | **+0.6** |
| KU6 | | | | MSG | | 10 53 16.9 | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| KU6 | | | | *e*SG | **Sn** | **10 53 19.3** | **+1.3** |
| **KU6** | **Riekki** | **2.23** | **20** | Pb | **Pn** | **10 52 50.3** | **+0.6** |
| KU6 | | | | Sg | **Sn** | **10 53 19.3** | **+1.3** |
| **KEF** | **Keuruu** | **2.29** | **220** | *e*PB | **Pb** | **10 52 53.0** | **-0.6** |
| KEF | | | | MSG | | 10 53 21.1 | |
| | comp=Z,4.8nm,0.2s | | | | | | |
| KEF | | | | *e*SG | **Sb** | **10 53 23.0** | **+0.7** |
| **KEF** | **Keuruu** | **2.29** | **220** | Pb | **Pb** | **10 52 52.9** | **-0.6** |
| KEF | | | | Sg | **Sb** | **10 53 23.0** | **+0.7** |
| **VAF** | **Ylistaro** | **2.56** | **252** | *e*PB | **Pb** | **10 52 57.4** | **-0.9** |
| VAF | | | | MSG | | 10 53 28.9 | |
| | comp=Z,3.2nm,0.2s | | | | | | |
| VAF | | | | *e*SB | **Sb** | **10 53 30.8** | **+0.6** |
| **VAF** | **Ylistaro** | **2.56** | **252** | Pb | **Pb** | **10 52 57.3** | **-0.9** |
| VAF | | | | Sb | **Sb** | **10 53 30.7** | **+0.6** |
| **FIA0** | **FINESS Array S** | **2.67** | **200** | *e*PB | **Pb** | **10 52 58.4** | **-1.6** |
| | baz=18 | | | | | | |
| FIA0 | | | | *e*SB | **Sb** | **10 53 33.4** | **+0.2** |
| **FIA0** | **FINESS Array S** | **2.67** | **200** | Pb | **Pb** | **10 52 58.4** | **-1.6** |
| FIA0 | | | | Sb | **Sb** | **10 53 33.4** | **+0.2** |
| **FINES** | **FINESS Array B** | **2.67** | **200** | Pn | **Pn** | **10 52 58.0** | **+2.4** |
| | comp=Z,0.3nm,0.3s,baz=28,slow=14,SNR=5.4 | | | | | | |
| FINES | | | | Lg | Lg | 10 53 34.5 | |
| | comp=Z,0.6nm,0.3s,baz=24,slow=23,SNR=9.1 | | | | | | |
| **RNF** | **Rovaniemi** | **2.80** | **344** | *e*PB | **Pn** | **10 53 00.1** | **+2.6** |
| RNF | | | | *e*SB | **Sb** | **10 53 36.1** | **-1.0** |
| **RNF** | **Rovaniemi** | **2.80** | **344** | Pb | **Pn** | **10 53 00.1** | **+2.6** |
| RNF | | | | Sb | **Sb** | **10 53 36.1** | **-1.0** |
| **BURU** | **Burvik** | **2.96** | **285** | *e*P | **Pn** | **10 53 00.7** | **+1.0** |
| **BURU** | **Burvik** | **2.96** | **285** | P | **Pn** | **10 53 00.7** | **+1.0** |
| **SJUU** | **Sjulsmark** | **3.16** | **303** | *e*P | **Pn** | **10 53 03.5** | **+1.1** |
| SJUU | | | | *e*S | **Sn** | **10 53 39.5** | **-1.2** |
| **SJUU** | **Sjulsmark** | **3.16** | **303** | P | **Pn** | **10 53 03.5** | **+1.1** |
| SJUU | | | | S | **Sn** | **10 53 39.5** | **-1.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **UMAU** | **Umeaa** | **3.24** | **272** | eP | **Pn** | **10 53 04.2** | **+0.7** |
| **UMAU** | **Umeaa** | **3.24** | **272** | P | **Pn** | **10 53 04.1** | **+0.7** |
| **VJF** | **Virojoki** | **3.43** | **184** | eSB | **Sb** | **10 53 52.0** | **-3.1** |
| **VJF** | **Virojoki** | **3.43** | **184** | Sb | **Sb** | **10 53 52.0** | **-3.1** |
| **SGF** | **Sodankyl** | **3.56** | **351** | eP | **Pn** | **10 53 09.8** | **+1.8** |
| **SGF** | **Sodankyl** | **3.56** | **351** | P | **Pn** | **10 53 09.7** | **+1.8** |
| **ERTU** | **Ertsjaerv** | **3.58** | **320** | eP | **Pn** | **10 53 09.2** | **+1.0** |
| **ERTU** | **Ertsjaerv** | **3.58** | **320** | P | **Pn** | **10 53 09.2** | **+1.0** |
| ERTU | | | | S | **Sn** | **10 53 51.7** | **+0.5** |
| **HARU** | **Harads** | **3.72** | **310** | eP | **Pn** | **10 53 10.7** | **+0.7** |
| **HARU** | **Harads** | **3.72** | **310** | P | **Pn** | **10 53 10.7** | **+0.7** |
| **SVAU** | **Svanoeiden** | **3.72** | **282** | eP | **Pn** | **10 53 10.1** | **0.0** |
| **SVAU** | **Svanoeiden** | **3.72** | **282** | P | **Pn** | **10 53 10.1** | **0.0** |
| **LILU** | **Lilltraesk** | **3.76** | **295** | eP | **Pn** | **10 53 11.1** | **+0.4** |
| **LILU** | **Lilltraesk** | **3.76** | **295** | P | **Pn** | **10 53 11.1** | **+0.4** |
| **LANU** | **Lannavaara** | **4.79** | **332** | eP | **Pn** | **10 53 26.6** | **+1.7** |
| **LANU** | **Lannavaara** | **4.79** | **332** | P | **Pn** | **10 53 26.5** | **+1.7** |
| **KUA** | **Kurravaara** | **5.10** | **325** | eP | **Pn** | **10 53 31.4** | **+2.4** |
| **KUA** | **Kurravaara** | **5.10** | **325** | P | **Pn** | **10 53 31.5** | **+2.4** |
| **NIKU** | **Nikkaluokta** | **5.38** | **321** | eP | **Pn** | **10 53 33.7** | **+0.8** |
| **NIKU** | **Nikkaluokta** | **5.38** | **321** | P | **Pn** | **10 53 33.6** | **+0.8** |
| **ARCES** | **ARCESS Array B** | **5.70** | **351** | Pn | **Pn** | **10 53 37.4** | **+0.2** |
| | comp=Z,0.1nm,0.3s,baz=172,slow=13,SNR=5.6 | | | | | | |
| ARCES | | | | Sn | **Sn** | **10 54 41.4** | **-1.9** |
| | comp=Z,0.2nm,0.3s,baz=166,slow=24,SNR=3.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **8.29** | **257** | Pn | **Pn** | **10 54 14.3** | **+1.4** |
| | baz=80,slow=18,SNR=2.7 | | | | | | |

*GUC **05** 10:54:15.8±0.4, 33°.67S×72°.03W, h42km±1km, ML3.6*

**ISC 05 10:54:16.1**±2.0**, 33°.67S**±0°.07×**72°.1W**±0°.1**, h33**km±3km**, n22, σ1s.38**/25**, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.73** | **173** | eP | **Pb** | **10 54 29.9** | **-0.6** |
| CHPI | | | | eS | **Sn** | **10 54 40.4** | **+0.3** |
| **TACH** | **Talagante** | **0.98** | **90** | eP | **Pn** | **10 54 32.6** | **-0.9** |
| **SAN** | **Santiago** | **1.23** | **80** | eP | **Pn** | **10 54 36.5** | **-0.5** |
| SAN | | | | eS | **Sn** | **10 54 52.5** | **+0.1** |
| **ANTU** | **Antumapu** | **1.23** | **86** | eS | **Sn** | **10 54 52.7** | **0.0** |
| ANTU | | | | AML | AML | 10 54 54.3 | |
| | comp=N,2μm,0.3s | | | | | | |
| **STL** | **Santa Lucia** | **1.25** | **80** | eP | **Pn** | **10 54 36.8** | **-0.5** |
| STL | | | | eS | **Sn** | **10 54 52.9** | **-0.1** |
| **PEL** | **Peldehue** | **1.30** | **67** | eP | **Pn** | **10 54 37.5** | **-0.4** |
| PEL | | | | eS | **Sn** | **10 54 54.5** | **+0.2** |
| PEL | | | | AML | AML | 10 54 58.6 | |
| | comp=E,3μm,0.4s | | | | | | |
| **PCH** | **Pirque** | **1.33** | **89** | eP | **Pn** | **10 54 38.4** | **-0.1** |
| **CLCH** | **Cerro Calan** | **1.34** | **79** | eP | **Pn** | **10 54 38.4** | **-0.2** |
| CLCH | | | | eS | **Sn** | **10 54 55.1** | **-0.2** |
| CLCH | | | | AML | AML | 10 55 01.8 | |
| | comp=E,2μm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **2.70** | **59** | eP | **Pb** | **10 55 03.0** | **-1.0** |
| AUSP | | | | eS | **Sb** | **10 55 37.6** | **+0.7** |
| **ARCO** | **CERRO ARCO** | **2.79** | **74** | eP | **Pb** | **10 55 04.3** | **-1.0** |
| ARCO | | | | eS | **Sb** | **10 55 41.4** | **+2.3** |
| ARCO | | | | AML | AML | 10 55 46.5 | |
| | comp=Z,183nm,0.5s | | | | | | |
| **AAGR** | **Agrelo** | **2.81** | **79** | eP | **Pb** | **10 55 04.9** | **-0.7** |
| **ASAL** | **Salagasta** | **2.95** | **70** | eP | **Pb** | **10 55 07.0** | **-1.1** |
| ASAL | | | | eS | **Sb** | **10 55 46.7** | **+3.0** |
| **RTLS** | **Leoncito** | **3.01** | **53** | eP | **Pb** | **10 55 07.7** | **-1.6** |
| RTLS | | | | eS | **Sb** | **10 55 48.1** | **+2.3** |
| **RTCV** | **Cerro Valdivia** | **3.50** | **60** | eP | Pb | 10 55 14.2 | -3.2 |
| RTCV | | | | eS | **Sb** | **10 56 00.6** | **+1.0** |
| **RTLL** | **Cerro Villicun** | **3.85** | **54** | eS | **Sb** | **10 56 06.9** | **-2.8** |
| **CFAA** | **Coronel Fontan** | **3.86** | **59** | eP | Pn | 10 55 17.3 | +4.1 |
| **AMOG** | **MOGNA** | **4.09** | **49** | eP | Pn | 10 55 18.7 | +2.3 |
| **ACAN** | **Cantantal** | **4.36** | **73** | eP | Pn | 10 55 24.7 | +4.6 |
| **AVFE** | **Valle Fertil** | **4.96** | **54** | eP | Pn | 10 55 33.4 | +5.1 |
| AVFE | | | | AML | AML | 10 56 39.8 | |
| | comp=Z,32nm,0.5s | | | | | | |
| **AGUA** | **GUANDACOL** | **5.18** | **37** | eP | **Pn** | **10 55 33.1** | **+1.7** |
| **VCA** | **Vinchina** | **5.94** | **35** | AML | AML | 10 57 17.1 | |
| | comp=Z,44nm,0.4s | | | | | | |
| **TCA** | **Tanti** | **6.76** | **72** | eP | Pn | 10 55 56.0 | +2.9 |

*ISCJB **05** 11:21:19.3±0.4, 24°.13N±0°.02×121°.74E±0°.02, h5km±3km, Error ellipse: s-maj=3.7km s-min=2.1km az=33.0*
*JMA **05** 11:21:19.5±0.1, 24°.14N×121°.73E, h4km±2km*
*TAP **05** 11:21:19.5, 24°.14N×121°.69E, h11km, ML3.1, C*

**ISC 05 11:21:19.6**±0.9**, 24°.13N**±0°.02×**121°.73E**±0°.03**, h12**km±6km**, n45, σ0s.58**/74**, 10C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWD** | **Chiawan** | **0.13** | **248** | ⇑iP | **Pg** | **11 21 22.6** | **-0.3** |
| | baz=232 | | | | | | |
| TWD | | | | i S | **Sg** | **11 21 24.6** | **-0.6** |
| | baz=232 | | | | | | |
| **EHP** | **Heping Village** | **0.18** | **3** | eP | **Pg** | **11 21 23.9** | **+0.3** |
| | baz=16 | | | | | | |
| EHP | | | | eS | **Sg** | **11 21 27.2** | **+0.8** |
| | baz=16 | | | | | | |
| **HWA** | **Hwalien** | **0.19** | **217** | eP | **Pg** | **11 21 24.4** | **+0.6** |
| | baz=207 | | | | | | |
| **ENA** | **Nanau** | **0.30** | **2** | P | **Pg** | **11 21 25.6** | **-0.1** |
| | baz=9.0 | | | | | | |
| ENA | | | | S | **Sg** | **11 21 29.6** | **-0.1** |
| | baz=9.0 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.33** | **218** | eP | **Pg** | **11 21 26.7** | **+0.5** |
| | baz=215 | | | | | | |
| **ESL** | **Shilin** | **0.42** | **221** | ⇑P | **Pg** | **11 21 27.4** | **-0.4** |
| | baz=223 | | | | | | |
| ESL | | | | S | **Sg** | **11 21 33.0** | **-0.4** |
| | baz=223 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.42** | **272** | ⇑iP | **Pg** | **11 21 27.6** | **-0.5** |
| | baz=270 | | | | | | |
| WHF | | | | eS | **Sg** | **11 21 32.6** | **-1.3** |
| | baz=270 | | | | | | |
| **NNS** | **Nan Shan** | **0.45** | **313** | ⇑iP | **Pg** | **11 21 28.1** | **-0.3** |
| | baz=315 | | | | | | |
| NNS | | | | S | **Sg** | **11 21 33.6** | **-0.9** |
| | baz=315 | | | | | | |
| **TWC** | **Suao** | **0.49** | **13** | P | **Pg** | **11 21 29.3** | **+0.1** |
| | baz=10.0 | | | | | | |
| TWC | | | | S | **Sg** | **11 21 35.6** | **-0.1** |
| | baz=10.0 | | | | | | |
| **TWT** | **Tachien** | **0.52** | **284** | ⇑iP | **Pg** | **11 21 29.9** | **+0.1** |
| | baz=282 | | | | | | |
| TWT | | | | i S | **Sg** | **11 21 36.8** | **+0.1** |
| | baz=282 | | | | | | |
| **ENTT** | **Nioudou** | **0.53** | **344** | ⇑iP | **Pg** | **11 21 29.9** | **0.0** |
| | baz=346 | | | | | | |
| ENTT | | | | i S | **Sg** | **11 21 36.9** | **-0.1** |
| | baz=346 | | | | | | |
| **TWE** | **Neicheng** | **0.59** | **354** | ⇑iP | **Pg** | **11 21 31.2** | **+0.1** |
| | baz=358 | | | | | | |
| TWE | | | | i S | **Sg** | **11 21 38.8** | **-0.1** |
| | baz=358 | | | | | | |
| **ILA** | **Ilan** | **0.63** | **2** | eP | **Pb** | **11 21 32.2** | **-0.3** |
| | baz=3.0 | | | | | | |
| **NSK** | **Sanguang** | **0.64** | **328** | P | **Pg** | **11 21 31.9** | **-0.1** |
| | baz=330 | | | | | | |
| NSK | | | | S | **Sg** | **11 21 40.3** | **-0.2** |
| | baz=330 | | | | | | |
| **WDT** | **Danda** | **0.66** | **236** | ⇑P | **Pg** | **11 21 32.2** | **-0.3** |
| | baz=234 | | | | | | |
| WDT | | | | S | **Sg** | **11 21 41.3** | **0.0** |
| | baz=234 | | | | | | |
| **EHY** | **Hungye** | **0.72** | **211** | eP | **Pg** | **11 21 33.2** | **-0.4** |
| | baz=211 | | | | | | |
| **EGS** | | **0.73** | **15** | eP | **Pb** | **11 21 34.7** | **+0.4** |
| | baz=24 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.80** | **252** | P | **Pg** | **11 21 34.8** | **-0.2** |
| | baz=251 | | | | | | |
| SMLT | | | | eS | **Sg** | **11 21 44.8** | **-0.8** |
| | baz=251 | | | | | | |
| **TYC** | **Yuchr** | **0.83** | **254** | P | **Pg** | **11 21 34.8** | **-0.8** |
| | baz=245 | | | | | | |
| TYC | | | | S | **Sg** | **11 21 45.4** | **-1.1** |
| | baz=245 | | | | | | |
| **NSTT** | **Nanjuang** | **0.83** | **307** | eP | **Pg** | **11 21 35.4** | **-0.2** |
| | baz=307 | | | | | | |
| NSTT | | | | S | **Sg** | **11 21 45.9** | **-0.6** |
| | baz=307 | | | | | | |
| **TWA** | **Mucha** | **0.86** | **351** | ⇑eP | **Pg** | **11 21 35.6** | **-0.5** |
| | baz=352 | | | | | | |
| TWA | | | | S | **Sg** | **11 21 46.6** | **-0.7** |
| | baz=352 | | | | | | |
| **TWF1** | **Yuli** | **0.87** | **207** | eP | **Pg** | **11 21 36.0** | **-0.4** |
| | baz=217 | | | | | | |
| **TWQ1** | **Liyutan** | **0.90** | **284** | eP | **Pn** | **11 21 37.9** | **-0.1** |
| | baz=294 | | | | | | |
| TWQ1 | | | | eS | **Sb** | **11 21 49.5** | **+0.4** |
| | baz=294 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.91** | **15** | eP | **Pb** | **11 21 37.2** | **0.0** |
| | baz=9.0 | | | | | | |
| TWB1 | | | | eS | **Sg** | **11 21 47.6** | **-1.3** |
| | baz=9.0 | | | | | | |
| **NSY** | **Sanyi** | **0.93** | **288** | eP | **Pn** | **11 21 39.1** | **+0.6** |
| | baz=288 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.94** | **3** | eP | **Pb** | **11 21 37.9** | **+0.1** |
| | baz=355 | | | | | | |
| NWF | | | | eS | **Sg** | **11 21 49.7** | **-0.2** |
| | baz=355 | | | | | | |
| **YUS** | **Yu-Shan** | **0.96** | **228** | eP | **Pg** | **11 21 37.8** | **-0.3** |
| | baz=217 | | | | | | |
| YUS | | | | S | **Sb** | **11 21 51.3** | **+0.2** |
| | baz=217 | | | | | | |
| **TCU** | **Taichung** | **0.96** | **271** | eP | **Pn** | **11 21 39.4** | **+0.6** |
| | baz=271 | | | | | | |
| **WNT** | **Mingjian** | **0.99** | **255** | eP | **Pn** | **11 21 39.3** | **+0.1** |
| | baz=249 | | | | | | |
| WNT | | | | eS | **Sn** | **11 21 54.2** | **+1.1** |
| | baz=249 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.01** | **344** | eP | **Pn** | **11 21 39.9** | **+0.4** |
| | baz=344 | | | | | | |
| TWS1 | | | | eS | **Sn** | **11 21 53.5** | **0.0** |
| | baz=344 | | | | | | |
| **ALS** | **Alishan** | **1.05** | **234** | eP | **Pg** | **11 21 39.2** | **-0.6** |
| | baz=233 | | | | | | |
| **CHKT** | **Chengkung** | **1.08** | **198** | eP | **Pb** | **11 21 39.3** | **-0.9** |
| | baz=183 | | | | | | |
| **CHN5** | **Tsauling** | **1.10** | **241** | ⇑iP | **Pn** | **11 21 41.1** | **+0.2** |
| | baz=241 | | | | | | |
| CHN5 | | | | i S | **Sn** | **11 21 56.8** | **+0.8** |
| | baz=241 | | | | | | |
| **ELDTW** | **Lidau** | **1.14** | **215** | eP | **Pb** | **11 21 39.9** | **-1.4** |
| | baz=216 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.22** | **74** | P | **Pn** | **11 21 42.6** | **+0.3** |
| YOJ | | | | eS | **Sb** | **11 21 58.4** | **+0.3** |
| **CHN4** | **Tsaushan** | **1.30** | **234** | eP | **Pg** | **11 21 44.5** | **0.0** |
| | baz=222 | | | | | | |
| CHN4 | | | | eS | **Sg** | **11 22 02.7** | **+1.2** |
| | baz=222 | | | | | | |
| **STYT** | **Tauyuan** | **1.31** | **223** | eP | **Pn** | **11 21 43.0** | **-0.8** |
| | baz=223 | | | | | | |
| STYT | | | | eS | **Sg** | **11 22 02.2** | **+0.3** |
| | baz=223 | | | | | | |
| **WTP** | **Ta-pu** | **1.35** | **229** | eP | **Pb** | **11 21 45.0** | **+0.2** |
| | baz=219 | | | | | | |
| **TWG** | **Pinlang** | **1.44** | **205** | eP | **Pn** | **11 21 46.1** | **+0.7** |
| | baz=215 | | | | | | |
| **CHN1** | **Nanshi** | **1.45** | **230** | eP | **Pb** | **11 21 46.5** | **0.0** |
| | baz=224 | | | | | | |
| CHN1 | | | | eS | **Sg** | **11 22 07.3** | **+1.1** |
| | baz=224 | | | | | | |
| **SGST** | **Jiashian** | **1.48** | **225** | eP | **Pb** | **11 21 47.0** | **0.0** |
| | baz=226 | | | | | | |
| **SSD** | **Sandimen** | **1.71** | **216** | eP | **Pn** | **11 21 50.0** | **+0.9** |
| | baz=229 | | | | | | |
| **EAST** | **Anshuo** | **1.92** | **205** | eP | **Pn** | **11 21 52.5** | **+0.4** |
| | baz=194 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.21** | **84** | P | **Pn** | **11 21 56.0** | **-0.1** |
| JIJ | | | | eS | **Sn** | **11 22 23.9** | **+0.5** |
| **JISG** | **Ishigakijimahi** | **2.40** | **79** | P | **Pn** | **11 21 58.5** | **-0.1** |
| JISG | | | | eS | **Sb** | **11 22 31.1** | **-1.1** |

**IDC 05 11:21:28.1**±4.8**, 2°.25S**×**139°.21E, h0**km**, mb3.2**/2**, mb1 3.4**/3**, mb1mx3.2**/31**, mbtmp3.3**/3**, ML3.4**/1**, Error ellipse: s-maj=191.5km s-min=30.5km az=87.0, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **18.21** | **195** | P | P | 11 25 43.4 | +0.5 |
| | 0.1nm,0.3s,baz=17,slow=12,SNR=6.9 | | | | | | |
| **ASAR** | **Alice Springs** | **21.90** | **193** | P | P | 11 26 22.3 | -0.7 |
| | 0.2nm,0.4s,baz=12,slow=9.8,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.74** | **322** | P | P | 11 32 40.2 | +0.2 |
| | 0.4nm,0.5s,baz=112,slow=7.7,SNR=3.6 | | | | | | |

*ISCJB **05** 11:35:40.2±0.5, 6°.53N±0°.06×123°.9E±0°.1, h600km, mb3.6/12, Error ellipse: s-maj=14.4km s-min=7.6km az=165.4*
*IDC **05** 11:35:40.3±1.7, 6°.42N×123°.89E, h583km±19km, mb3.0/12, mb1 3.1/12, mb1mx2.9/42, mbtmp4.0/12, Error ellipse: s-maj=30.4km s-min=8.7km az=66.0*
*DJA **05** 11:35:40.0±2.3, 7°N±20'×12°4E±1°9, h558km±15km, M4.7/6, mb4.3/6, mB5.3/3, MLv4.8/3, Mw(mB)4.7/3*
*AUST **05** 11:35:49.0±2.5, 4°.59N×123°.48E, h439km, Error ellipse: s-maj=3.6km s-min=1.3km az=32.0*

**ISC 05 11:35:41.4**±0.6**, 6°.48N**±0°.08×**123°.9E**±0°.1**, h600**km**, n26, σ1s.21**/33**, mb3.7**/12**, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GTOI** | **Gorontalo** | **5.88** | **189** | P | **P** | **11 37 19.0** | **-2.6** |
| | 227nm,0.8s,52μm1.0nm | | | | | | |
| **MRSI** | **Marisa** | **6.28** | **198** | P | **P** | **11 37 23.2** | **-1.9** |
| **MPSI** | **Mapaga** | **7.30** | **213** | P | **P** | **11 37 32.8** | **-1.5** |
| **KKM** | **Kota Kinabalu** | **7.66** | **267** | P | **P** | **11 37 35.7** | **-2.0** |
| | baz=7.4,SNR=16 | | | | | | |
| **SANI** | **Sanana** | **8.73** | **166** | P | **P** | **11 37 47.4** | **-0.4** |
| **TTSI** | **Tana Toraja** | **10.31** | **203** | P | **P** | **11 38 04.2** | **+0.9** |
| **SPSI** | **Sidrap Palu** | **11.17** | **202** | P | **P** | **11 38 11.5** | **-0.4** |
| **FAKI** | **Fak Fak** | **12.52** | **138** | P | **P** | **11 38 25.1** | **-0.3** |
| | baz=12,SNR=3.8 | | | | | | |
| **KSM** | **Kuching** | **14.45** | **250** | P | **P** | **11 38 44.3** | **-0.4** |
| | baz=14,SNR=7.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.08** | **298** | P | **P** | **11 40 37.3** | **-0.8** |
| | 1.4nm,0.5s,baz=119,slow=7.4,SNR=10.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.20** | **159** | P | **P** | **11 40 47.6** | **-0.2** |
| | 0.2nm,0.2s,baz=336,slow=9.6,SNR=5.1 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 43 42.5** | **+1.2** |
| | 0.5nm,0.4s,baz=332,slow=2.5,SNR=8.4 | | | | | | |
| WRA | | | | S | **S** | **11 44 50.4** | **-2.3** |
| | 0.3nm,0.5s,baz=335,slow=14,SNR=4.6 | | | | | | |
| WRA | | | | ScP | **ScP** | **11 46 28.9** | **+2.4** |
| | 0.6nm,0.6s,baz=344,slow=3.2,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **31.52** | **162** | P | **P** | **11 41 16.6** | **+0.4** |
| | 0.7nm,0.3s,baz=336,slow=7.0,SNR=8.1 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 43 51.3** | **+1.1** |
| | 0.7nm,0.4s,baz=340,slow=2.6,SNR=8.4 | | | | | | |
| ASAR | | | | S | **S** | **11 45 42.8** | **-0.9** |
| | 1.4nm,0.9s,baz=350,slow=22,SNR=9.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **11 46 39.1** | **+1.8** |
| | 0.3nm,0.4s,baz=342,slow=3.3,SNR=6.0 | | | | | | |
| **WRKA** | **Warakurna** | **31.62** | **172** | P | **P** | **11 41 18.6** | **+1.5** |
| | baz=30,SNR=5.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **32.65** | **22** | P | **P** | **11 41 24.8** | **-0.9** |
| | 1.1nm,0.4s,baz=196,slow=11,SNR=4.6 | | | | | | |
| **MEEK** | **Meekatharra** | **33.32** | **189** | P | **P** | **11 41 31.8** | **+0.4** |
| | baz=32,SNR=3.4 | | | | | | |
| **MORW** | **Morawa** | **36.15** | **192** | P | **P** | **11 41 55.6** | **+0.8** |
| | baz=34,SNR=5.3 | | | | | | |
| **KLBR** | **Kellerberrin** | **38.31** | **188** | P | **P** | **11 42 13.2** | **+0.8** |
| | baz=37,SNR=6.4 | | | | | | |
| **SONM** | **Songino Array** | **43.83** | **343** | P | **P** | **11 42 56.4** | **+0.6** |
| | 0.3nm,0.3s,baz=133,slow=6.3,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.71** | **326** | P | **P** | **11 44 09.3** | **+0.8** |
| | 4.0nm,0.4s,baz=122,slow=8.3,SNR=41 | | | | | | |
| MKAR | | | | PcP | **PcP** | **11 45 04.4** | **-0.5** |
| | 0.7nm,0.5s,baz=113,slow=4.3,SNR=4.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.88** | **334** | P | **P** | **11 44 30.7** | **+0.5** |
| | 0.5nm,0.3s,baz=137,slow=3.4,SNR=2.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **63.49** | **327** | P | **P** | **11 45 13.6** | **-0.3** |
| | 0.9nm,0.4s,baz=120,slow=8.7,SNR=6.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **69.77** | **322** | P | **P** | **11 45 53.0** | **+0.5** |
| | 1.7nm,0.5s,baz=112,slow=11,SNR=6.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **86.11** | **309** | P | **P** | **11 47 19.7** | **-0.7** |
| | 0.8nm,0.8s,baz=73,slow=4.1,SNR=3.9 | | | | | | |
| **VNDA** | **Vanda** | **86.50** | **172** | P | **P** | **11 47 21.8** | **+0.6** |
| | 0.6nm,0.5s,baz=317,slow=7.0,SNR=5.3 | | | | | | |
| **FINES** | **FINESS Array B** | **88.09** | **332** | P | **P** | **11 47 28.4** | **-0.5** |
| | 2.3nm,1.0s,baz=225,slow=1.9,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.38** | **289** | PKP | **PKPdf** | **11 53 24.6** | **-0.1** |
| | 0.2nm,0.3s,baz=82,slow=1.3,SNR=5.7 | | | | | | |

*IDC **05** 11:37:12.8±0.9, 33°.83S×72°.14W, h0km, mb4.0/5, mb1 4.1/7, mb1mx3.9/23, mbtmp3.9/7, ML3.6/2, MS2.9/3, Ms1 2.9/3, ms1mx2.8/23, Error ellipse: s-maj=31.4km s-min=29.5km az=70.0*
*NEIC **05** 11:37:14.0, 33°.67S×72°.18W, h45km, MG4.3(GUC), After GUC.*
*GUC **05** 11:37:14.8±0.5, 33°.67S×72°.18W, h45km±3km, ML4.3*
*ISCJB **05** 11:37:16.0±0.8, 33°.67S±0°.03×72°.24W±0°.05, h28km±6km, mb4.0/5, MS3.2/1, Error ellipse: s-maj=7.8km s-min=5.0km az=19.4*

**ISC 05 11:37:14.7**±1.7**, 33°.74S**±0°.04×**72°.16W**±0°.06**, h10**km±10km**, n43, σ1s.23**/45**, mb4.1**/5**, 4D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.67** | **169** | eP | **Pn** | **11 37 29.6** | **-0.6** |
| CHPI | | | | eS | **Sn** | **11 37 40.5** | **-0.1** |
| **IHA** | **Instituto Hidr** | **0.83** | **32** | ⇓iP | **Pb** | **11 37 31.3** | **+0.1** |
| IHA | | | | i S | **Sb** | **11 37 42.3** | **-0.2** |
| **SAN** | **Santiago** | **1.28** | **78** | eP | **Pn** | **11 37 38.1** | **-0.6** |
| SAN | | | | eS | **Sn** | **11 37 55.3** | **-0.7** |
| **ANTU** | **Antumapu** | **1.28** | **83** | eP | **Pn** | **11 37 38.1** | **-0.7** |
| ANTU | | | | eS | **Sn** | **11 37 55.7** | **-0.3** |
| **PEL** | **Peldehue** | **1.37** | **65** | eP | Pn | 11 37 38.9 | -1.0 |
| PEL | | | | eS | **Sn** | **11 37 57.5** | **-0.6** |
| PEL | | | | AML | AML | 11 38 00.1 | |
| | comp=N,13μm,0.4s | | | | | | |
| **PCH** | **Pirque** | **1.38** | **86** | eP | **Pn** | **11 37 40.0** | **-0.1** |
| **CLCH** | **Cerro Calan** | **1.40** | **76** | eP | **Pn** | **11 37 40.1** | **-0.2** |
| CLCH | | | | eS | **Sn** | **11 37 58.9** | **+0.1** |
| CLCH | | | | AML | AML | 11 38 05.3 | |
| | comp=N,6μm,0.7s | | | | | | |
| **NICH** | **Los Niches** | **1.48** | **149** | eP | Pg | 11 37 52.1 | +9.0 |
| NICH | | | | eS | Sg | 11 38 12.9 | +11 |
| **TALC** | **Talca** | **1.71** | **165** | eP | **Pn** | **11 37 45.0** | **+0.4** |
| TALC | | | | eS | **Sb** | **11 38 08.2** | **+0.3** |
| **LNCH** | **Linares** | **2.15** | **168** | eP | **Pb** | **11 37 54.7** | **+0.9** |
| **COCH** | **Cobquecura** | **2.44** | **192** | eP | **Pn** | **11 37 55.5** | **+0.8** |
| **AUSP** | **Uspallata** | **2.78** | **58** | eP | **Pb** | **11 38 05.2** | **+0.6** |
| AUSP | | | | ⇓eS | **Sb** | **11 38 40.9** | **+2.1** |
| **ARCO** | **CERRO ARCO** | **2.85** | **73** | eP | **Pb** | **11 38 06.2** | **+0.5** |
| ARCO | | | | eS | **Sn** | **11 38 38.1** | **+3.3** |
| ARCO | | | | AML | AML | 11 38 48.8 | |
| | comp=Z,463nm,0.5s | | | | | | |
| **CCHI** | **Chillan** | **2.86** | **179** | eP | **Pg** | **11 38 10.0** | **+0.4** |
| **AAGR** | **Agrelo** | **2.86** | **78** | eP | **Pb** | **11 38 05.5** | **-0.4** |
| **ASAL** | **Salagasta** | **3.01** | **69** | eP | **Pb** | **11 38 09.7** | **+1.1** |
| ASAL | | | | ⇓eS | **Sb** | **11 38 47.9** | **+2.5** |
| **RTLS** | **Leoncito** | **3.09** | **52** | eP | **Pb** | **11 38 09.3** | **-0.7** |
| RTLS | | | | eS | **Sb** | **11 38 51.0** | **+3.3** |
| **RTCV** | **Cerro Valdivia** | **3.58** | **59** | eP | **Pb** | **11 38 16.5** | **-1.6** |
| RTCV | | | | ⇓eS | **Sg** | **11 39 07.5** | **-2.1** |
| **RTLL** | **Cerro Villicun** | **3.93** | **53** | eP | Pn | 11 38 20.2 | +5.1 |
| **CFAA** | **Coronel Fontan** | **3.93** | **58** | Pn | **Pn** | **11 38 16.6** | **+1.4** |
| | comp=Z,2.2nm,0.3s,baz=226,slow=12,SNR=48 | | | | | | |
| CFAA | | | | Sn | **Sb** | **11 39 10.4** | **-1.4** |
| | comp=Z,0.6nm,0.3s,baz=72,slow=20,SNR=3.1 | | | | | | |
| CFAA | | | | LR | LR | 11 40 03.8 | |
| | comp=Z,31nm,18.1s,baz=236,slow=43 | | | | | | |
| **CFAA** | **Coronel Fontan** | **3.93** | **58** | eP | Pn | 11 38 19.2 | +4.1 |
| CFAA | | | | eS | **Sb** | **11 39 14.1** | **+2.3** |
| **AMOG** | **MOGNA** | **4.17** | **49** | eP | Pn | 11 38 23.4 | +4.9 |
| **CANA** | **Caviahue** | **4.24** | **168** | AML | AML | 11 39 40.6 | |
| | comp=N,73nm,0.7s | | | | | | |
| **ACAN** | **Cantantal** | **4.42** | **72** | eP | Pn | 11 38 26.2 | +4.3 |
| **LCO** | **Las Campanas** | **4.87** | **15** | ePn | Pn | 11 38 26.8 | -1.5 |
| LCO | | | | eSn | **Sn** | **11 39 25.0** | **0.0** |
| **AGUA** | **GUANDACOL** | **5.27** | **37** | eP | **Pn** | **11 38 35.2** | **+1.6** |
| **ACHE** | **Chepes** | **5.31** | **63** | eP | Pn | 11 38 38.4 | +4.3 |
| **MRA** | **San Martin** | **5.56** | **78** | eP | Pn | 11 38 40.8 | +3.1 |
| **VCA** | **Vinchina** | **6.03** | **35** | AML | AML | 11 40 38.7 | |
| | comp=Z,95nm,0.6s | | | | | | |
| **FSA** | **Cafayete** | **9.30** | **37** | eP | Pn | 11 39 36.4 | +7.4 |
| **TRQA** | **Tornquist** | **9.31** | **120** | ePn | **Pn** | **11 39 28.5** | **-0.5** |
| TRQA | | | | eSn | **Sn** | **11 41 13.5** | **-0.4** |
| **CPUP** | **Villa Florida** | **14.80** | **64** | LR | LR | 11 46 53.1 | |
| | comp=Z,102nm,19.5s,baz=200,slow=39 | | | | | | |
| **LPAZ** | **La Paz** | **17.75** | **13** | P | **Pn** | **11 41 22.5** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=168,slow=5.0,SNR=5.7 | | | | | | |
| **BDFB** | **Brasilia** | **28.27** | **56** | LR | LR | 11 55 47.8 | |
| | comp=Z,56nm,19.0s,baz=212,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.46** | **331** | P | **P** | **11 48 24.1** | **+0.8** |
| | comp=Z,0.6nm,0.6s,baz=155,slow=8.4,SNR=11 | | | | | | |
| **MAW** | **Mawson** | **73.46** | **164** | P | **P** | **11 48 46.8** | **0.0** |
| | comp=Z,1.0nm,0.5s,baz=216,slow=8.3,SNR=4.2 | | | | | | |
| **DBIC** | **Dimbokro** | **75.19** | **71** | P | **P** | **11 48 57.4** | **-0.4** |
| | comp=Z,2.4nm,0.7s,baz=229,slow=8.3,SNR=2.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.61** | **325** | P | **P** | **11 49 43.2** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=174,slow=4.5,SNR=3.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.22** | **70** | P | **P** | **11 49 45.6** | **-1.1** |
| | comp=Z,1.2nm,0.7s,baz=267,slow=4.2,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **120.94** | **209** | PKP | **PKPdf** | **11 56 06.9** | **-1.0** |
| | comp=Z,0.3nm,0.5s,baz=158,slow=1.9,SNR=6.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **147.16** | **43** | PKPbc | **PKPbc** | **11 56 57.5** | **0.0** |
| | comp=Z,0.9nm,0.4s,baz=337,slow=3.4,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **154.06** | **32** | PKPbc | **PKPbc** | **11 57 13.2** | **-0.8** |
| | comp=Z,1.1nm,0.4s,baz=248,slow=1.6,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **156.67** | **48** | PKPab | **PKPab** | **11 57 38.8** | **-0.2** |
| | comp=Z,0.4nm,0.6s,baz=295,slow=3.6,SNR=3.9 | | | | | | |

*AWI **05** 12:01:25.2, 56°.74S×24°.89W*
*ISCJB **05** 12:01:32.0±0.6, 57°.66S±0°.08×25°.6W±0°.2, h43km, mb4.1/10, Error ellipse: s-maj=18.2km s-min=9.0km az=150.0*
*IDC **05** 12:01:35.8±0.7, 57°.73S×25°.66W, h62km±5km, mb3.8/8, mb1 3.8/9, mb1mx3.7/18, mbtmp4.0/9, Error ellipse: s-maj=26.2km s-min=15.5km az=88.0*
*NEIC **05** 12:01:37.9±1.3, 57°.73S×25°.82W, h86km±12km, mb4.4/2, Error ellipse: s-maj=15.1km s-min=8.1km az=56.0*

**ISC 05 12:01:34.1**±0.5**, 57°.68S**±0°.10×**25°.5W**±0°.1**, h43**km**, n28, σ1s.77**/26**, mb4.1**/10**, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **7.02** | **294** | ePn | **Pn** | **12 03 16.2** | **+1.9** |
| **VNA1** | **Neumayer--Stat** | **14.94** | **157** | P | **Pn** | **12 05 02.6** | **+0.7** |
| **VNA3** | **Neumayer Olymp** | **15.14** | **160** | P | **Pn** | **12 05 04.6** | **-0.2** |
| **VNA2** | **Neumayer--Watz** | **15.33** | **157** | P | **Pn** | **12 05 06.9** | **-0.3** |
| | baz=318,slow=13 | | | | | | |
| **SNAA** | **Sanae** | **16.88** | **155** | P | **P** | **12 05 28.2** | **-0.3** |
| **SNAA** | **Sanae** | **16.88** | **155** | P | **Pn** | **12 05 26.8** | **0.0** |
| | 0.2nm,0.3s,baz=328,slow=15,SNR=7.7 | | | | | | |
| **SNAA** | **Sanae** | **16.88** | **155** | eP | **P** | **12 05 28.7** | **+0.3** |
| **QSPA** | **South Pole Qui** | **32.56** | **180** | P | **P** | **12 08 00.3** | **-0.6** |
| | 1.5nm,0.5s,baz=120,slow=1.9,SNR=27 | | | | | | |
| **MAW** | **Mawson** | **38.30** | **142** | P | **P** | **12 08 49.6** | **-0.2** |
| | 0.9nm,0.6s,baz=230,slow=8.5,SNR=4.0 | | | | | | |
| **VNDA** | **Vanda** | **44.98** | **182** | P | **P** | **12 09 44.1** | **-0.2** |
| | 1.4nm,0.6s,baz=185,slow=6.9,SNR=15 | | | | | | |
| VNDA | | | | pP | **pP** | **12 10 00.3** | **+4.0** |
| | 0.9nm,0.5s,baz=184,slow=6.3,SNR=3.7 | | | | | | |
| **BOSA** | **Boshof** | **45.54** | **73** | P | **P** | **12 09 50.2** | **+0.7** |
| | 1.0nm,0.7s,baz=215,slow=16,SNR=2.5 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **49.34** | **14** | T | T | 13 05 00.6 | |
| | baz=188,slow=75,SNR=35 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **49.34** | **14** | T | T | 13 05 00.9 | |
| | baz=188,slow=75,SNR=24 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **49.35** | **14** | T | T | 13 05 01.9 | |
| | baz=188,slow=75,SNR=29 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **50.45** | **14** | T | T | 13 06 21.6 | |
| | baz=191,slow=72,SNR=6.3 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **50.45** | **14** | T | T | 13 06 24.7 | |
| | baz=191,slow=72,SNR=32 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **50.47** | **14** | T | T | 13 06 22.8 | |
| | baz=191,slow=72,SNR=16 | | | | | | |
| **LPAZ** | **La Paz** | **52.06** | **304** | P | **P** | **12 10 40.0** | **-0.1** |
| | 1.3nm,0.6s,baz=204,slow=3.2,SNR=5.7 | | | | | | |
| **SAML** | **Samuel** | **56.59** | **314** | eP | **P** | **12 11 10.6** | **-1.8** |
| | 0.8nm,0.4s | | | | | | |
| **DBIC** | **Dimbokro** | **66.30** | **23** | P | **P** | **12 12 17.8** | **-0.1** |
| | 1.3nm,0.5s,baz=180,slow=9.1,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.06** | **28** | P | **P** | **12 13 05.6** | **+0.3** |
| | 1.7nm,0.5s,baz=199,slow=6.6,SNR=22 | | | | | | |
| TORD | | | | pP | **PcP** | **12 13 23.0** | **+2.7** |
| | 2.0nm,0.6s,baz=200,slow=6.7,SNR=7.5 | | | | | | |
| **JTS** | **JuntasAbangare** | **83.15** | **301** | eP | **P** | **12 13 52.7** | **-2.7** |
| | 2.9nm,0.3s | | | | | | |
| **ASAR** | **Alice Springs** | **97.15** | **161** | P | **P** | **12 14 59.8** | **-2.1** |
| | 0.4nm,0.6s,baz=185,slow=3.4,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **136.54** | **72** | PKP | **PKPdf** | **12 20 48.6** | **-1.7** |
| | 0.1nm,0.3s,baz=191,slow=2.9,SNR=3.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **137.99** | **316** | PKP | **PKPdf** | **12 20 51.2** | **-1.3** |
| | 0.8nm,0.6s,baz=137,slow=2.2,SNR=4.9 | | | | | | |
| **INK** | **Inuvik** | **147.64** | **319** | PKPbc | **PKPdf** | **12 21 10.6** | **+1.3** |
| | 1.9nm,0.5s,baz=85,slow=1.5,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **149.90** | **88** | PKPbc | **PKPbc** | **12 21 17.5** | **-1.2** |
| | 1.1nm,0.4s,baz=218,slow=3.5,SNR=8.0 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| SONM | | | | pPKPbc | pPKPbc | 12 21 35.0 | +2.9 |
| | 0.9nm,0.7s,baz=245,slow=4.3,SNR=4.2 | | | | | | |
| ILAR | Eielson Array | 151.87 | 309 | PKPbc | PKPbc | 12 21 21.2 | -1.3 |
| | 1.8nm,0.5s,baz=140,slow=3.6,SNR=29 | | | | | | |
| ILAR | | | | pPKPbc | pPKPbc | 12 21 39.1 | +3.2 |
| | 0.7nm,0.8s,baz=134,slow=3.9,SNR=2.7 | | | | | | |

*ISCJB **05** 12:22:24.1±1.0, 51.°42N±0.°04×16.°15E±0.°05, h0km, Error ellipse: s-maj=6.6km s-min=3.5km az=22.2*
*CSEM **05** 12:22:24.9±0.6, 51.°45N×16.°15E, h2km, ML3.1/6, Error ellipse: s-maj=8.0km s-min=4.3km az=3.0*
*PRU **05** 12:22:26.1, 51.°42N×16.°17E, h0km*
**ISC 05 12:22:25.8**±1.5**, 51.°42N**±0.°07×**16.°15E**±0.°03**, h0km, n24, σ0.s51**/47**, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.59 | 171 | ePg | Pg | 12 22 37.8 | +0.8 |
| KSP | | | | eSg | Sg | 12 22 45.6 | +1.1 |
| KSP | Ksiaz | 0.59 | 171 | ePg | Pg | 12 22 37.8 | +0.8 |
| KSP | | | | eSg | Sg | 12 22 45.6 | +1.1 |
| UPC | Upice | 0.92 | 186 | ePG | Pg | 12 22 43.5 | +0.1 |
| UPC | | | | eSG | Sg | 12 22 54.8 | -0.5 |
| | comp=Z,36nm,0.3s | | | | | | |
| UPC | Upice | 0.92 | 186 | Pg | Pg | 12 22 43.5 | +0.1 |
| UPC | | | | Sg | Sg | 12 22 54.8 | -0.5 |
| | 36nm,0.3s | | | | | | |
| DPC | Dobruska-Polom | 1.08 | 174 | ePG | Pg | 12 22 46.5 | +0.1 |
| DPC | | | | eSG | Sg | 12 23 00.0 | -0.3 |
| | comp=Z,16nm,0.3s | | | | | | |
| DPC | Dobruska-Polom | 1.08 | 174 | Pg | Pg | 12 22 46.5 | +0.1 |
| DPC | | | | Sg | Sg | 12 23 00.0 | -0.3 |
| | 16nm,0.3s | | | | | | |
| PVCC | Panska Ves | 1.34 | 229 | ePG | Pb | 12 22 51.7 | -0.1 |
| PVCC | | | | eSG | Sb | 12 23 09.5 | 0.0 |
| | comp=Z,38nm,0.2s | | | | | | |
| PVCC | Panska Ves | 1.34 | 229 | Pg | Pb | 12 22 51.7 | -0.1 |
| PVCC | | | | Sg | Sb | 12 23 09.5 | 0.0 |
| | 38nm,0.2s | | | | | | |
| KRLC | Kraliky | 1.41 | 163 | ePG | Pn | 12 22 52.3 | -0.4 |
| KRLC | | | | eSG | Sg | 12 23 10.2 | -0.7 |
| KRLC | Kraliky | 1.41 | 163 | Pg | Pn | 12 22 52.3 | -0.4 |
| KRLC | | | | Sg | Sg | 12 23 10.2 | -0.7 |
| BRG | Berggiesshubel | 1.50 | 249 | PG | Pn | 12 22 54.0 | +0.2 |
| BRG | | | | SG | Sn | 12 23 14.0 | 0.0 |
| | 26nm,0.4s | | | | | | |
| PRA | Prague | 1.74 | 220 | eSG | Sg | 12 23 21.6 | +0.1 |
| PRA | Prague | 1.74 | 220 | Sg | Sg | 12 23 21.6 | +0.1 |
| GOPC | GO Pecny, Ondr | 1.74 | 210 | ePG | Pb | 12 22 58.5 | -0.1 |
| GOPC | | | | eSG | Sg | 12 23 21.4 | -0.2 |
| GOPC | GO Pecny, Ondr | 1.74 | 210 | Pg | Pb | 12 22 58.5 | -0.1 |
| GOPC | | | | Sg | Sg | 12 23 21.4 | -0.2 |
| PRU | Pruhonice | 1.76 | 216 | ePG | Pb | 12 22 58.9 | 0.0 |
| PRU | | | | eSG | Sg | 12 23 22.3 | 0.0 |
| | comp=Z,16nm,0.3s | | | | | | |
| PRU | Pruhonice | 1.76 | 216 | Pg | Pb | 12 22 58.9 | 0.0 |
| PRU | | | | Sg | Sg | 12 23 22.3 | 0.0 |
| | 16nm,0.3s | | | | | | |
| MORC | Moravsky Berou | 1.87 | 151 | ePn | Pn | 12 22 58.5 | -0.5 |
| MORC | | | | eSg | Sb | 12 23 24.5 | -0.2 |
| CLL | Collm | 1.98 | 268 | ePg | Pb | 12 23 02.0 | -0.6 |
| CLL | | | | eSg | Sg | 12 23 30.0 | +0.8 |
| OKC | Ostrava-Krasne | 2.03 | 141 | ePG | Pb | 12 23 03.9 | +0.4 |
| OKC | | | | eSG | Sg | 12 23 30.6 | -0.4 |
| | comp=Z,5.8nm,0.4s | | | | | | |
| OKC | Ostrava-Krasne | 2.03 | 141 | Pg | Pb | 12 23 03.9 | +0.4 |
| OKC | | | | Sg | Sg | 12 23 30.6 | -0.4 |
| | 5.8nm,0.4s | | | | | | |
| VRAC | Vranov | 2.13 | 172 | eSg | Sg | 12 23 35.4 | +1.1 |
| KHC | Kasperske Hory | 2.83 | 217 | ePG | Pb | 12 23 18.0 | +0.9 |
| KHC | | | | eSN | Sn | 12 23 46.4 | -0.5 |
| KHC | | | | eSG | Sg | 12 23 56.0 | -0.5 |
| | comp=Z,4.8nm,0.3s | | | | | | |
| KHC | Kasperske Hory | 2.83 | 217 | Pg | Pb | 12 23 18.0 | +0.9 |
| KHC | | | | Sn | Sn | 12 23 46.4 | -0.5 |
| KHC | | | | Sg | Sg | 12 23 56.0 | -0.5 |
| | 4.8nm,0.3s | | | | | | |

*BJI **05** 12:27:32.3, 5.°25S×101.°94E, h10km, mb4.7/6, mB5.0/3, Ms4.5/2, Ms7 4.2/2*
*IDC **05** 12:27:36.8±0.9, 4.°58S×102.°00E, h0km, mb4.4/14, mb1 4.5/14, mb1mx4.2/31, mbtmp4.4/14, Error ellipse: s-maj=34.8km s-min=16.0km az=50.0*
*ISCJB **05** 12:27:40.6±0.5, 4.°79S±0.°06×101.°92E±0.°04, h37km, mb4.4/17, Error ellipse: s-maj=9.5km s-min=3.8km az=29.3*
*NEIC **05** 12:27:43.8±2.4, 4.°59S×102.°07E, h52km±18km, mb4.7/3, Error ellipse: s-maj=30.5km s-min=9.7km az=50.0*
*NEIC Felt [II] at Bengkulu.*
*DJA **05** 12:27:44.3±0.7, 5.°S±3.°×10.°2E±.°, h37km±8km, M4.7/25, mb4.8/12, mB5.1/1, MLv4.7/25, Mw(mB)4.4/1*
**ISC 05 12:27:42.2**±0.7**, 4.°70S**±0.°08×**102.°00E**±0.°07**, h37km, n57, σ1.s29**/59**, mb4.6**/17**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MNAI | Manna | 1.01 | 71 | P | Pn | 12 28 00.9 | +1.1 |
| MNAI | Manna | 1.01 | 71 | ePg | Pn | 12 28 00.6 | +0.8 |
| MNAI | | | | eSg | Sn | 12 28 11.0 | -1.7 |
| MASI | Maura Aman, Be | 1.56 | 9 | P | Pn | 12 28 09.1 | +1.6 |
| LHSI | Lahat | 1.74 | 60 | P | Pn | 12 28 10.9 | +1.0 |
| LWLI | Liwa | 2.07 | 99 | P | Pn | 12 28 16.0 | +1.4 |
| LWLI | | | | S | Sn | 12 28 40.5 | +1.3 |
| MDSI | Maura Dua | 2.18 | 85 | P | Pn | 12 28 17.2 | +1.3 |
| MDSI | | | | S | Sn | 12 28 43.4 | +1.8 |
| KASI | Kota Agung | 2.62 | 108 | P | Pn | 12 28 23.8 | +1.9 |
| KASI | | | | S | Sn | 12 28 53.3 | +0.9 |
| KRJI | Kerinci | 2.64 | 348 | P | Pn | 12 28 24.2 | +1.8 |
| PPSI | Pulau Pagai | 2.77 | 314 | P | Pn | 12 28 26.0 | +2.0 |
| KLI | Kotabumi | 2.85 | 93 | P | Pn | 12 28 26.4 | +1.3 |
| PMBI | Palembang | 3.27 | 58 | P | Pn | 12 28 31.5 | +0.5 |
| SDSI | Sungai Dareh | 3.78 | 351 | P | Pn | 12 28 39.7 | +1.7 |
| PDSI | Padang | 4.06 | 338 | P | Pn | 12 28 43.6 | +1.7 |
| CGJI | Cibinong | 4.14 | 118 | P | Pn | 12 28 44.4 | +1.6 |
| CGJI | | | | S | Sn | 12 29 26.6 | -3.4 |
| SISI | Saibi | 4.43 | 319 | P | Pn | 12 28 49.2 | +2.3 |
| PPBI | Pangkal Pinang | 4.83 | 59 | P | Pn | 12 28 53.6 | +1.2 |
| SKJI | Sukabumi | 5.08 | 117 | P | Pn | 12 28 57.1 | +1.3 |
| | 196nm,1.0s,1.1nm | | | | | | |
| CNJI | Cibinong | 5.72 | 117 | P | Pn | 12 29 06.2 | +1.6 |
| | 118nm,1.4s,0.5nm | | | | | | |
| MNSI | Mandailing Nat | 5.97 | 336 | P | Pn | 12 29 10.7 | +2.7 |
| | 51nm,0.4s,1µm0.3nm | | | | | | |
| LEM | Lembang | 5.97 | 111 | P | Pn | 12 29 09.6 | +1.3 |
| | 591nm,1.1s,2.2nm | | | | | | |
| CMJI | Cimerak | 7.10 | 116 | P | Pn | 12 29 25.0 | +1.4 |
| | 136nm,1.3s,0.5nm | | | | | | |
| GSI | Gunungsitoli | 7.42 | 323 | P | Pn | 12 29 30.5 | +2.5 |
| | 66nm,3.9s,0.4nm | | | | | | |
| UGM | Wanagama | 9.05 | 111 | P | Pn | 12 29 51.9 | +1.5 |
| | 199nm,1.7s | | | | | | |
| CMAR | Chiang Mai Arr | 23.20 | 353 | P | P | 12 32 44.5 | -1.5 |
| | 1.6nm,0.5s,baz=181,slow=9.0,SNR=13 | | | | | | |
| H08S2 | Diego Garcia H | 29.48 | 263 | T | T | 13 04 10.3 | |
| | baz=86,slow=75,SNR=11 | | | | | | |
| H08S3 | Diego Garcia H | 29.49 | 263 | T | T | 13 04 19.2 | |
| | baz=86,slow=75,SNR=11 | | | | | | |
| H08S1 | Diego Carcia H | 29.50 | 263 | T | T | 13 04 24.4 | |
| | baz=86,slow=75,SNR=9.6 | | | | | | |
| H01W3 | Cape Leeuwin H | 32.07 | 161 | T | T | 13 08 00.7 | |
| | baz=338,slow=76,SNR=24 | | | | | | |
| H01W2 | Cape Leeuwin H | 32.09 | 161 | T | T | 13 08 01.9 | |
| | baz=338,slow=76,SNR=29 | | | | | | |
| H01W1 | Cape Leeuwin H | 32.09 | 161 | T | T | 13 08 01.9 | |
| | baz=338,slow=76,SNR=28 | | | | | | |
| ODAN | Odare | 34.41 | 336 | eP | P | 12 34 26.9 | +0.5 |
| | 24nm,0.7s | | | | | | |
| TAPN | Taplejung | 34.72 | 337 | eP | P | 12 34 29.8 | +0.6 |
| | 26nm,0.6s | | | | | | |
| RAMN | Ramite | 34.81 | 335 | eP | P | 12 34 30.8 | +0.9 |
| | 6.9nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 34.93 | 119 | P | P | 12 34 30.5 | -0.3 |
| | 1.7nm,0.8s,baz=299,slow=9.1,SNR=15 | | | | | | |
| WRA | | | | PcP | PcP | 12 37 03.5 | +0.4 |
| | 0.7nm,0.6s,baz=308,slow=2.0,SNR=4.2 | | | | | | |
| WRAB | Tennant Creek | 34.94 | 118 | eP | P | 12 34 31.2 | +0.3 |
| | 1.8nm,0.3s | | | | | | |
| GUN | Gumba | 35.95 | 335 | eP | P | 12 34 40.4 | +0.5 |
| | 34nm,0.6s | | | | | | |
| ASAR | Alice Springs | 36.07 | 125 | P | P | 12 34 41.2 | +0.6 |
| | 2.1nm,0.7s,baz=298,slow=8.1,SNR=29 | | | | | | |
| ASAR | | | | PcP | PcP | 12 37 07.2 | +0.7 |
| | 1.0nm,0.8s,baz=309,slow=2.7,SNR=5.2 | | | | | | |
| GKN | Gorkha | 36.57 | 334 | eP | P | 12 34 45.1 | +0.2 |
| | 8.1nm,0.4s | | | | | | |
| KOLN | Koldanda | 36.84 | 332 | eP | P | 12 34 47.9 | +0.6 |
| | 10nm,0.5s | | | | | | |
| HHC | Hu-ho-hao-te | 46.16 | 10 | eP | P | 12 36 07.8 | +4.4 |
| HHC | | | | S | S | 12 42 55.9 | +8.8 |
| HHC | | | | PMZ | | | |
| | 22nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | 84nm,3.6s | | | | | | |
| HHC | | | | LN | | | |
| | 160nm,14.8s | | | | | | |
| HHC | | | | LE | | | |
| | 120nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | 94nm,13.6s | | | | | | |
| KSAR | Wonju Array Be | 48.36 | 28 | P | P | 12 36 19.8 | -0.6 |
| KSRS | Korea Array | 48.38 | 28 | P | P | 12 36 19.8 | -0.8 |
| | 1.6nm,0.6s,baz=226,slow=7.2,SNR=6.9 | | | | | | |
| SONM | Songino Array | 52.45 | 4 | P | P | 12 36 51.2 | -0.1 |
| | 6.2nm,0.7s,baz=184,slow=9.5,SNR=45 | | | | | | |
| SONM | | | | PcP | PcP | 12 38 01.3 | -0.4 |
| | 1.8nm,0.5s,baz=185,slow=3.8,SNR=6.2 | | | | | | |
| EKS2 | Erkin-Say | 53.64 | 334 | eP | P | 12 37 00.6 | +0.4 |
| | 5.8nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 54.16 | 343 | P | P | 12 37 03.2 | -0.6 |
| | 7.3nm,0.6s,baz=146,slow=8.1,SNR=70 | | | | | | |
| USRK | Ussuriysk Ar. | 55.64 | 26 | P | P | 12 37 13.0 | -1.4 |
| | 3.9nm,0.6s,baz=226,slow=7.3,SNR=7.7 | | | | | | |
| ZALV | Zalesovo Beam | 60.18 | 348 | P | P | 12 37 45.2 | -1.0 |
| | 8.1nm,0.4s,baz=171,slow=4.8,SNR=29 | | | | | | |
| BVAR | Borovoye Array | 63.39 | 339 | P | P | 12 38 06.8 | -1.0 |
| | 4.2nm,0.5s,baz=146,slow=8.4,SNR=22 | | | | | | |
| ABKAR | Akbulak array | 64.95 | 331 | eP | P | 12 38 17.6 | -0.5 |
| | 6.4nm,0.6s | | | | | | |
| KBZ | Khabaz | 71.64 | 319 | P | P | 12 39 00.6 | +0.5 |
| | 2.4nm,0.7s,baz=120,slow=7.1,SNR=5.3 | | | | | | |
| BRTR | Keskin Array B | 76.61 | 313 | P | P | 12 39 29.4 | +0.1 |
| | 2.8nm,0.6s,baz=134,slow=6.9,SNR=13 | | | | | | |
| AKASG | Malin Array Be | 82.83 | 322 | P | P | 12 40 01.7 | -1.0 |
| | 0.2nm,0.3s,baz=88,slow=4.7,SNR=3.6 | | | | | | |
| FINES | FINESS Array B | 87.41 | 332 | P | P | 12 40 25.4 | 0.0 |
| | 3.5nm,1.0s,baz=102,slow=4.8,SNR=5.1 | | | | | | |
| ARCES | ARCESS Array B | 89.67 | 340 | P | P | 12 40 36.3 | +0.3 |
| | 3.3nm,0.9s,baz=92,slow=6.3,SNR=4.1 | | | | | | |
| WMOK | Wichita Mounta | 144.44 | 30 | ePKPdf | PKPab | 12 47 12.7 | -0.7 |
| TXAR | Lajitas Array | 145.49 | 42 | PKPbc | PKPdf | 12 47 17.5 | +0.2 |
| | 6.6nm,0.8s,baz=297,slow=1.2,SNR=71 | | | | | | |
| JCT | Junction City | 147.13 | 36 | ePKPbc | PKPbc | 12 47 22.0 | -0.1 |
| JCT | | | | ePKPab | PKPab | 12 47 23.9 | +0.2 |

*ISCJB **05** 12:49:14.3±0.5, 50.°38N±0.°04×18.°78E±0.°03, h0km, Error ellipse: s-maj=6.1km s-min=2.2km az=13.1*
*CSEM **05** 12:49:15.4±0.3, 50.°37N×18.°79E, h2km, ML3.0/8, Error ellipse: s-maj=7.6km s-min=2.9km az=12.0*
*PRU **05** 12:49:16.2, 50.°35N×18.°82E, h0km*
*VIE **05** 12:49:19.5±1.2, 50.°36N×18.°36E, h0km, mb2.3/3, ml2.5/3, Error ellipse: s-maj=7.9km s-min=6.1km az=148.0, Suspected Mining induced.*
**ISC 05 12:49:15.7**±0.8**, 50.°35N**±0.°04×**18.°81E**±0.°02**, h0km, n35, σ0.s82**/70**, 1D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHZP | Chorzow | 0.13 | 115 | i Pg | Pg | 12 49 18.1 | -0.1 |
| CHZP | | | | eSg | Sg | 12 49 19.8 | -0.1 |
| OJC | Ojcow | 0.65 | 101 | ePg | Pg | 12 49 27.2 | -0.9 |
| OJC | | | | eSg | Sg | 12 49 35.5 | -1.0 |
| OJC | Ojcow | 0.65 | 101 | ePg | Pg | 12 49 27.2 | -0.9 |
| OJC | | | | eSg | Sg | 12 49 35.5 | -1.0 |
| OKC | Ostrava-Krasne | 0.66 | 220 | ePG | Pg | 12 49 28.5 | +0.1 |
| OKC | | | | eSG | Sg | 12 49 37.7 | +0.7 |
| | comp=Z,33nm,0.4s | | | | | | |
| OKC | Ostrava-Krasne | 0.66 | 220 | Pg | Pg | 12 49 28.5 | +0.1 |
| OKC | | | | Sg | Sg | 12 49 37.7 | +0.7 |
| | 33nm,0.4s | | | | | | |
| MORC | Moravsky Berou | 0.99 | 235 | ePg | Pb | 12 49 35.7 | -0.1 |
| MORC | | | | eSg | Sn | 12 49 50.7 | -1.0 |
| LANS | Liptovska Anna | 1.27 | 160 | ePN | Pg | 12 49 40.2 | +0.2 |
| LANS | | | | eSN | Sb | 12 49 57.5 | 0.0 |
| LANS | Liptovska Anna | 1.27 | 160 | ePn | Pg | 12 49 40.3 | +0.2 |
| LANS | | | | eSn | Sb | 12 49 57.5 | 0.0 |
| KRLC | Kraliky | 1.33 | 259 | ePG | Pg | 12 49 40.6 | -0.6 |
| KRLC | | | | eSG | Sb | 12 49 59.4 | +0.3 |
| KRLC | Kraliky | 1.33 | 259 | Pg | Pg | 12 49 40.6 | -0.6 |
| KRLC | | | | Sg | Sb | 12 49 59.4 | +0.3 |
| NIE | Niedzica | 1.34 | 133 | ePg | Pg | 12 49 41.6 | +0.2 |
| NIE | | | | eSg | Sn | 12 50 00.4 | +0.1 |
| NIE | Niedzica | 1.34 | 133 | ePg | Pg | 12 49 41.6 | +0.2 |
| NIE | | | | eSg | Sn | 12 50 00.4 | +0.1 |
| DPC | Dobruska-Polom | 1.59 | 271 | ePG | Pn | 12 49 45.3 | +0.1 |
| DPC | | | | eSG | Sg | 12 50 07.9 | +1.1 |
| | comp=Z,14nm,0.2s | | | | | | |
| DPC | Dobruska-Polom | 1.59 | 271 | Pg | Pn | 12 49 45.3 | +0.1 |
| DPC | | | | Sg | Sg | 12 50 07.9 | +1.1 |
| | 14nm,0.2s | | | | | | |
| KSP | Ksiaz | 1.68 | 288 | ePg | Pb | 12 49 47.6 | +0.2 |
| KSP | | | | eSg | Sg | 12 50 11.2 | +1.6 |
| KSP | Ksiaz | 1.68 | 288 | ePg | Pb | 12 49 47.6 | +0.2 |
| KSP | | | | eSg | Sg | 12 50 11.2 | +1.6 |
| VRAC | Vranov | 1.77 | 235 | ePn | Pb | 12 49 48.4 | -0.7 |
| VRAC | | | | eSg | Sg | 12 50 13.3 | +0.7 |
| UPC | Upice | 1.79 | 276 | ePG | Pb | 12 49 49.2 | -0.3 |
| UPC | | | | eSG | Sg | 12 50 14.3 | +1.0 |
| | comp=Z,11nm,0.5s | | | | | | |
| UPC | Upice | 1.79 | 276 | Pg | Pb | 12 49 49.2 | -0.3 |
| UPC | | | | Sg | Sg | 12 50 14.3 | +1.0 |
| | 11nm,0.5s | | | | | | |
| STHS | Stebnicka Huta | 1.83 | 120 | ePN | Pn | 12 49 49.5 | +1.1 |
| STHS | | | | eSN | Sn | 12 50 11.6 | -0.7 |
| STHS | Stebnicka Huta | 1.83 | 120 | ePn | Pn | 12 49 49.6 | +1.1 |
| STHS | | | | eSn | Sn | 12 50 11.6 | -0.7 |
| VYHS | Vyhne | 1.85 | 179 | ePN | Pn | 12 49 48.9 | +0.1 |
| VYHS | | | | eSN | Sn | 12 50 11.7 | -1.2 |
| VYHS | Vyhne | 1.85 | 179 | ePn | Pn | 12 49 48.9 | +0.1 |
| VYHS | | | | eSn | Sn | 12 50 11.7 | -1.2 |
| GOPC | GO Pecny, Ondr | 2.62 | 262 | ePN | Pn | 12 49 59.0 | -0.3 |
| GOPC | | | | ePG | Pb | 12 50 03.8 | +0.2 |
| GOPC | | | | eSN | Sn | 12 50 31.0 | -0.9 |
| GOPC | | | | eSG | Sg | 12 50 39.4 | -0.5 |
| | comp=Z,4.7nm,0.2s | | | | | | |
| GOPC | GO Pecny, Ondr | 2.62 | 262 | Pn | Pn | 12 49 59.0 | -0.3 |
| KOLS | Kolonicke sedl | 2.66 | 121 | ePN | Pn | 12 50 00.6 | +0.8 |
| KOLS | | | | eSN | Sn | 12 50 33.0 | +0.2 |
| KOLS | Kolonicke sedl | 2.66 | 121 | ePn | Pn | 12 50 00.6 | +0.8 |
| KOLS | | | | eSn | Sn | 12 50 33.0 | +0.2 |
| PVCC | Panska Ves | 2.71 | 275 | eSG | Sg | 12 50 43.0 | +0.1 |
| | comp=Z,13nm,0.2s | | | | | | |
| PVCC | Panska Ves | 2.71 | 275 | Sg | Sg | 12 50 43.0 | +0.1 |
| | 13nm,0.2s | | | | | | |
| PRU | Pruhonice | 2.77 | 264 | ePG | Pb | 12 50 07.3 | +1.3 |
| PRU | | | | eSN | Sn | 12 50 34.5 | -0.8 |
| PRU | | | | eSG | Sg | 12 50 43.5 | -1.0 |
| | comp=Z,4.0nm,0.3s | | | | | | |
| PRU | Pruhonice | 2.77 | 264 | Pg | Pb | 12 50 07.3 | +1.3 |
| PRU | | | | Sn | Sn | 12 50 34.5 | -0.8 |
| PRU | | | | Sg | Sg | 12 50 43.5 | -1.0 |
| | 4.0nm,0.3s | | | | | | |
| KHC | Kasperske Hory | 3.60 | 252 | ePN | Pn | 12 50 12.6 | -0.2 |
| KHC | | | | ex | x | 12 50 21.5 | |
| KHC | | | | ePG | Pb | 12 50 22.5 | +2.2 |
| KHC | | | | eSN | Sn | 12 50 54.2 | -1.9 |
| KHC | | | | eSG | Sg | 12 51 09.9 | -1.5 |
| | comp=Z,6.5nm,0.5s | | | | | | |
| KHC | Kasperske Hory | 3.60 | 252 | Pn | Pn | 12 50 12.6 | -0.2 |
| MOA | Molln | 3.89 | 232 | ⇓iSg | Sg | 12 51 20.4 | -0.3 |
| | 4.4nm,0.4s | | | | | | |
| MOA | Molln | 3.89 | 232 | Sg | Sg | 12 51 20.4 | -0.3 |
| | 4.4nm,0.4s | | | | | | |

*NIED **05** 13:03:00, 24.°30N×125.°30E, h32km, Mw4.3 Best double couple: $M_0$2.91000×10^15 NP1:$\phi_s$99.00000°, δ81.00000°, λ4.00000°. NP2:$\phi_s$9.00000°, δ87.00000°, λ171.00000°.*
*IDC **05** 13:03:46.6±0.9, 24.°22N×125.°11E, h0km, mb4.0/16, mb1 4.1/19, mb1mx4.0/41, mbtmp4.0/19, ML3.0/4, MS3.3/4, Ms1 3.3/4, ms1mx2.9/36, Error ellipse: s-maj=19.9km s-min=19.2km az=122.0*
*MOS **05** 13:03:49.8±1.0, 24.°11N×125.°16E, h33km, mb4.7/20, Error ellipse: s-maj=11.9km s-min=8.0km az=128.6*
*ISCJB **05** 13:03:49.3±0.6, 24.°11N±0.°04×125.°42E±0.°03, h39km±4km, mb4.3/33, MS3.3/3, Error ellipse: s-maj=7.7km s-min=3.5km az=156.4*
*JMA **05** 13:03:51.4±0.1, 24.°26N×125.°32E, h59km±4km, M4.4*
*JMA Felt I J1.*
*NEIC **05** 13:03:51.5±0.7, 24.°25N×125.°28E, h35km, mb4.8/3, MW4.2(NIED), Error ellipse: s-maj=13.9km s-min=7.3km az=148.0*
*NEIC Recorded [1 JMA] on Miyako-jima.*
**ISC 05 13:03:50.3**±1.4**, 24.°19N**±0.°06×**125.°34E**±0.°05**, h27km**±9km**, n94, σ1.s07**/108**, mb4.3**/33**, MS3.2**/3**, 5C-1D, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOGS | Gusukube | 0.57 | 6 | P | Pn | 13 04 03.4 | +0.8 |
| JOGS | | | | eS | Sn | 13 04 12.4 | +1.3 |
| JMJ | Miyako jima 2 | 0.62 | 356 | P | Pn | 13 04 03.8 | +0.5 |
| JMJ | | | | eS | Sn | 13 04 12.7 | +0.3 |
| JIRB | Irabujima | 0.65 | 347 | P | Pn | 13 04 04.0 | +0.3 |
| JIRB | | | | eS | Sn | 13 04 13.7 | +0.6 |
| JIKM | Ikemajima | 0.73 | 354 | P | Pn | 13 04 05.3 | +0.5 |
| JIKM | | | | eS | Sn | 13 04 15.9 | +0.8 |
| JTJ | Tarama | 0.73 | 308 | P | Pn | 13 04 05.3 | +0.5 |
| JTJ | | | | eS | Sn | 13 04 15.5 | +0.4 |
| JISG | Ishigakijimahi | 1.02 | 293 | P | Pb | 13 04 09.2 | -0.1 |
| JISG | | | | eS | Sn | 13 04 22.7 | +0.6 |
| JIJ | Ishigaki jima | 1.10 | 279 | P | Pb | 13 04 10.8 | 0.0 |
| JIJ | | | | eS | Sb | 13 04 24.7 | -0.1 |
| JKRS | Kuro-shima | 1.21 | 272 | P | Pb | 13 04 12.8 | +0.2 |
| JKRS | | | | eS | Sb | 13 04 28.1 | +0.2 |
| HATJ | Hateruma jima | 1.41 | 265 | P | Pb | 13 04 15.0 | -0.9 |
| HATJ | | | | eS | Sn | 13 04 32.2 | +0.4 |
| IRIF | Iriomote-Funau | 1.48 | 276 | P | Pb | 13 04 16.1 | -0.9 |
| IRIF | | | | eS | Sn | 13 04 34.7 | +1.3 |
| YOJ | Yonaguni jima | 2.14 | 278 | P | Pn | 13 04 25.1 | +0.9 |
| YOJ | | | | eS | Sn | 13 04 51.0 | +1.1 |
| YOJ | Yonaguni jima | 2.14 | 278 | eP | Pn | 13 04 23.9 | -0.3 |
| YOJ | Yonaguni jima | 2.14 | 278 | ePn | Pn | 13 04 23.9 | -0.3 |
| JYNG | Yonagunijimaku | 2.20 | 277 | P | Pn | 13 04 24.8 | -0.2 |
| JYNG | | | | eS | Sn | 13 04 51.0 | -0.3 |
| JKE | Kume jima 2 | 2.50 | 31 | P | Pn | 13 04 28.9 | -0.2 |
| JJT2 | Tamagusuku 2 | 2.92 | 48 | P | Pn | 13 04 35.6 | +0.7 |
| JAGN | Aguni-jima | 2.94 | 35 | P | Pn | 13 04 34.7 | -0.5 |
| JNTH | Nagotoyohara | 3.35 | 46 | P | Pn | 13 04 40.8 | -0.1 |
| NACB | Ninganchiao | 3.42 | 270 | ePn | Pn | 13 04 41.9 | +0.1 |
| YHNB | Yeheng | 3.64 | 278 | ePn | Pn | 13 04 46.9 | +2.0 |
| JIH | Iheya | 3.69 | 39 | P | Pn | 13 04 45.4 | -0.2 |
| JIH | | | | eS | Sn | 13 05 26.9 | -1.3 |
| JOW | Kunigami | 3.73 | 45 | P | Pn | 13 04 46.1 | 0.0 |
| JOW | Kunigami | 3.73 | 45 | Pn | Pn | 13 04 46.6 | +0.5 |
| | 0.3nm,0.3s,baz=104,slow=24,SNR=25 | | | | | | |
| YULB | Yu-li | 3.79 | 259 | ePn | Pn | 13 04 45.8 | -1.1 |
| SSLB | Suanglung | 4.03 | 265 | ePn | Pn | 13 04 49.8 | -0.4 |
| TWG | Pinlang | 4.15 | 252 | ePn | Pn | 13 04 50.3 | -1.5 |
| JOKE | Okinoerabujima | 4.29 | 42 | P | Pn | 13 04 53.2 | -0.7 |
| TPUB | Ta-pu | 4.41 | 259 | ePn | Pn | 13 04 56.4 | +1.0 |
| JTK | Tokunoshima | 4.83 | 41 | P | Pn | 13 05 00.2 | -1.1 |
| JAMN | Amaminishikomi | 5.30 | 40 | P | Pn | 13 05 06.0 | -1.7 |
| JMZ | Minamidaito 2 | 5.58 | 72 | P | Pn | 13 05 08.9 | -2.6 |
| JMZ | | | | eS | Sn | 13 06 07.1 | -7.6 |
| JAM | Amami Oshima | 5.68 | 41 | P | Pn | 13 05 11.6 | -1.3 |
| JNU | Nakatsue | 10.14 | 27 | Pn | Pn | 13 06 12.4 | -1.7 |
| | 0.2nm,0.3s,baz=214,slow=15,SNR=3.7 | | | | | | |
| KSAR | Wonju Array Be | 13.39 | 9 | P | Pn | 13 06 56.4 | -2.1 |
| KSAR | Wonju Array Be | 13.39 | 9 | Pn | Pn | 13 06 56.4 | -2.1 |
| KSRS | Korea Array | 13.40 | 9 | Pn | Pn | 13 06 56.4 | -2.3 |
| | 0.2nm,0.3s,baz=189,slow=12,SNR=3.1 | | | | | | |
| MAJO | Matsushiro | 16.56 | 39 | ⇑iP | P | 13 07 44.8 | +1.9 |
| MAT | Matsushiro | 16.56 | 39 | P | P | 13 07 43.9 | +1.0 |
| MAT | | | | S | Sn | 13 10 44.4 | +0.8 |
| MJAR | Matsushiro Arr | 16.56 | 39 | Pn | P | 13 07 41.8 | -1.1 |
| | 0.4nm,0.3s,baz=228,slow=11,SNR=19 | | | | | | |
| MJAR | | | | LR | LR | 13 13 08.8 | |
| | comp=Z,46nm,19.5s,baz=240,slow=34 | | | | | | |
| MJA0 | Matsu Arr-Jizo | 16.58 | 39 | eP | P | 13 07 44.7 | +1.5 |
| CMAR | Chiang Mai Arr | 25.22 | 262 | P | P | 13 09 11.7 | -2.3 |
| | 0.6nm,0.5s,baz=63,slow=8.2,SNR=2.8 | | | | | | |
| CMAR | | | | LR | LR | 13 20 34.6 | |
| | comp=Z,50nm,18.0s,baz=130,slow=40 | | | | | | |
| ULN | Ulaanbaatar | 27.73 | 333 | ⇓iP | P | 13 09 37.1 | +0.5 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,2.5s | | | | | | |
| ULN | Ulaanbaatar | 27.73 | 333 | eP | P | 13 09 37.0 | +0.5 |
| SONM | Songino Array | 27.98 | 332 | P | P | 13 09 36.6 | -2.2 |
| | comp=Z,1.1nm,0.6s,baz=149,slow=10,SNR=10 | | | | | | |
| SONM | | | | LR | LR | 13 21 57.4 | |
| | comp=Z,58nm,18.0s,baz=154,slow=39 | | | | | | |
| SONM | Songino Array | 27.98 | 332 | eP | P | 13 09 38.5 | -0.3 |
| TAPN | Taplejung | 33.95 | 283 | eP | P | 13 10 33.1 | +1.3 |
| | comp=Z,12nm,0.7s | | | | | | |
| ODAN | Odare | 34.27 | 283 | eP | P | 13 10 35.3 | +0.8 |
| | comp=Z,19nm,0.9s | | | | | | |
| RAMN | Ramite | 34.96 | 283 | eP | P | 13 10 41.3 | +0.8 |
| | comp=Z,38nm,1.5s | | | | | | |
| GUN | Gumba | 35.54 | 285 | eP | P | 13 10 46.6 | +1.0 |
| | comp=Z,27nm,0.9s | | | | | | |
| PKI | Pulchoki | 35.98 | 284 | eP | P | 13 10 49.7 | +0.4 |
| | comp=Z,3.4nm,0.3s | | | | | | |
| PKIN | Phulchoki | 35.99 | 284 | eP | P | 13 10 49.6 | +0.2 |
| | comp=Z,5.1nm,0.5s | | | | | | |
| KKN | Kakani | 36.08 | 284 | eP | P | 13 10 50.6 | +0.5 |
| | comp=Z,24nm,0.9s | | | | | | |
| DMN | Daman | 36.24 | 284 | eP | P | 13 10 52.4 | +0.9 |
| | comp=Z,6.9nm,0.5s | | | | | | |
| GKN | Gorkha | 36.63 | 285 | eP | P | 13 10 55.2 | +0.5 |
| | comp=Z,12nm,0.6s | | | | | | |
| KOLN | Koldanda | 37.56 | 285 | eP | P | 13 11 03.2 | +0.5 |
| | comp=Z,11nm,0.8s | | | | | | |
| PETK | Petropavlovsk- | 37.80 | 32 | P | P | 13 11 06.0 | +1.9 |
| | comp=Z,1.9nm,0.8s,baz=205,slow=5.7,SNR=4.2 | | | | | | |
| MK31 | Makanchi Array | 41.01 | 314 | i P | P | 13 11 30.8 | -0.2 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 41.01 | 314 | P | P | 13 11 30.0 | -1.1 |
| | comp=Z,4.0nm,0.7s,baz=99,slow=10,SNR=43 | | | | | | |
| MKAR | Makanchi Array | 41.01 | 314 | ceP | P | 13 11 30.7 | -0.3 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| PDGK | Podgornoye | 42.03 | 309 | P | P | 13 11 39.5 | +0.1 |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 42.35 | 325 | P | P | 13 11 40.6 | -1.2 |
| | comp=Z,2.2nm,0.5s,baz=112,slow=9.0,SNR=7.6 | | | | | | |
| ZALV | | | | LR | LR | 13 31 24.1 | |
| | comp=Z,66nm,19.1s,baz=68,slow=39 | | | | | | |
| ZALV | Zalesovo Beam | 42.35 | 325 | eP | P | 13 11 41.8 | 0.0 |
| KURK | Kurchatov | 44.55 | 319 | P | P | 13 11 59.4 | -0.3 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| KURK | Kurchatov | 44.55 | 319 | P | P | 13 11 58.0 | -1.7 |
| KURBB | Kurchatov Arra | 44.58 | 319 | P | P | 13 11 58.0 | -1.9 |
| | comp=Z,3.8nm,0.7s,baz=111,slow=8.3,SNR=21 | | | | | | |
| WRA | Warramunga Arr | 44.74 | 168 | P | P | 13 12 01.9 | +0.4 |
| | comp=Z,0.6nm,0.6s,baz=348,slow=8.7,SNR=3.1 | | | | | | |
| WRA | Warramunga Arr | 44.74 | 168 | i P | P | 13 12 11.0 | +10 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| TKM2 | Tokmak 2 | 44.76 | 307 | i P | P | 13 12 02.2 | +0.5 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 44.76 | 307 | eP | P | 13 12 02.3 | +0.6 |
| | comp=Z,14nm,0.6s | | | | | | |
| AAK | Ala-Archa | 45.53 | 307 | P | P | 13 12 06.8 | -1.0 |
| | comp=Z,2.6nm,0.8s,baz=106,slow=7.8,SNR=7.9 | | | | | | |
| AAK | Ala-Archa | 45.53 | 307 | ⇑eP | P | 13 12 08.3 | +0.5 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| AAK | Ala-Archa | 45.53 | 307 | eP | P | 13 12 08.9 | +1.1 |
| EKS2 | Erkin-Say | 46.06 | 307 | eP | P | 13 12 12.9 | +1.0 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| EKS2 | Erkin-Say | 46.06 | 307 | eP | P | 13 12 12.9 | +1.0 |
| | comp=Z,2.8nm,0.8s | | | | | | |
| MNAS | Manas | 46.98 | 306 | P | P | 13 12 19.6 | +0.5 |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| ASAR | Alice Springs | 48.30 | 169 | P | P | 13 12 29.7 | +0.4 |
| | comp=Z,0.3nm,0.3s,baz=357,slow=9.3,SNR=2.9 | | | | | | |
| KK31 | Karatay Array | 48.49 | 307 | i P | P | 13 12 31.3 | +0.6 |
| KK31 | | | | pmax | pmax | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,1.0nm,0.4s | | | | | | |
| DZET | Dzherino | 49.61 | 301 | P | P | 13 12 40.2 | +0.8 |
| DZET | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| BVAR | Borovoye Array | 50.09 | 320 | P | P | 13 12 42.7 | 0.0 |
| | comp=Z,1.0nm,0.5s,baz=107,slow=9.8,SNR=6.6 | | | | | | |
| BRVK | Borovoye | 50.16 | 320 | ceP | P | 13 12 44.7 | +1.4 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.2s | | | | | | |
| ZRNK | Zerenda | 50.89 | 320 | *i* P | P | 13 12 48.6 | -0.2 |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| AB31 | Akbulak array | 56.15 | 314 | *i* P | P | 13 13 27.7 | +0.3 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| ABKAR | Akbulak array | 56.15 | 314 | *e*P | P | 13 13 27.6 | +0.1 |
| | comp=Z,7.8nm,0.6s | | | | | | |
| SVE | Sverdlovsk | 56.29 | 323 | *e*P | P | 13 13 28.7 | +0.4 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| ARU | Arti | 57.39 | 323 | c *i*P | P | 13 13 35.5 | -0.6 |
| ARU | | | | | | 13 14 27.0 | |
| ARU | | | | S | S | 13 21 27.5 | -3.5 |
| ARU | | | | | | 13 23 23.4 | |
| ARU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| AKTO | Aktyubinsk | 57.42 | 316 | P | P | 13 13 37.2 | +0.8 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| GEYT | Alibeck | 58.06 | 301 | P | P | 13 13 41.4 | +0.2 |
| | comp=Z,3.7nm,0.6s,baz=72,slow=1.9,SNR=7.4 | | | | | | |
| ILAR | Eielson Array | 67.46 | 28 | P | P | 13 14 45.3 | +2.0 |
| | comp=Z,0.2nm,0.6s,baz=282,slow=5.3,SNR=6.2 | | | | | | |
| ZEI | Tsey | 67.92 | 308 | *e*P | P | 13 14 45.3 | -1.6 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.4s | | | | | | |
| KBZ | Khabaz | 68.42 | 309 | P | P | 13 14 50.3 | +0.6 |
| | comp=Z,2.8nm,0.9s,baz=27,slow=9.0,SNR=4.2 | | | | | | |
| FINES | FINESS Array B | 73.33 | 330 | P | P | 13 15 19.3 | +0.1 |
| | comp=Z,3.0nm,0.8s,baz=111,slow=7.9,SNR=4.9 | | | | | | |
| AKASG | Malin Array Be | 75.36 | 319 | P | P | 13 15 30.7 | -0.6 |
| | comp=Z,0.5nm,0.4s,baz=61,slow=6.8,SNR=2.9 | | | | | | |
| BRTR | Keskin Array B | 76.20 | 307 | P | P | 13 15 35.9 | -0.5 |
| | comp=Z,0.9nm,0.7s,baz=125,slow=6.2,SNR=6.5 | | | | | | |
| BRTR | Keskin Array B | 76.20 | 307 | *i* P | P | 13 15 37.0 | +0.5 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |

*ISCJB **05** 13:19:44.4±0.9, 37.°11N±0.°06×28.°07E±0.°06, h0km, Error ellipse: s-maj=9.3km s-min=5.5km az=34.6*
*DDA **05** 13:19:45.0, 37.°16N×28.°03E, h7km, Md2.3*
*ISK **05** 13:19:44.8, 37.°25N×28.°26E, h4km, MD2.7*
*CSEM **05** 13:19:45.4±0.6, 37.°17N×28.°13E, h1km, MD2.7, Error ellipse: s-maj=18.0km s-min=11.4km az=30.0, Mining explosion.*
**ISC 05 13:19:44.3**±1.0, **37.°16N**±0.°05×**28.°06E**±0.°04, **h0**km, **n13**, σ**0.s42**/17, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.18 | 99 | *e*PG | Pg | 13 19 47.8 | +0.1 |
| YER | | | | *e*SG | Sg | 13 19 50.2 | +0.2 |
| YER | Yerkesik | 0.18 | 99 | *e*Pg | Pg | 13 19 47.8 | +0.1 |
| YER | | | | *e*Sg | Sg | 13 19 50.2 | +0.2 |
| BDRM | Kayabasi | 0.51 | 259 | *i* P | Pg | 13 19 54.1 | +0.1 |
| BDRM | Kayabasi | 0.51 | 259 | P | Pg | 13 19 54.1 | +0.1 |
| AYDN | Tasoluk | 0.52 | 344 | *i* P | Pb | 13 19 56.4 | +0.1 |
| AYDN | | | | *i* S | Sb | 13 20 03.6 | -0.8 |
| AYDN | Tasoluk | 0.52 | 344 | P | Pb | 13 19 56.4 | +0.1 |
| AYDN | | | | S | Sb | 13 20 03.6 | -0.8 |
| TURN | Turunc | 0.52 | 124 | P | Pg | 13 19 53.7 | -0.6 |
| DALY | Dalyan (Mu˜la | 0.58 | 126 | *e*PG | Pg | 13 19 55.9 | +0.4 |
| DALY | Dalyan (Mu˜la | 0.58 | 126 | *e*Pg | Pg | 13 19 55.9 | +0.4 |
| BODT | Bodrum | 0.61 | 261 | *e*PG | Pn | 13 20 00.4 | +0.1 |
| BODT | Bodrum | 0.61 | 261 | *e*Pg | Pn | 13 20 00.4 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 0.79 | 350 | *e*PG | Pg | 13 19 59.9 | +0.4 |
| AYDB | Zeytinkoy-Aydi | 0.79 | 350 | *e*Pg | Pg | 13 19 59.9 | +0.4 |

*ISCJB **05** 13:23:27.9±0.8, 12.°1N±0.°2×43.°8W±0.°2, h14km, mb3.7/5, MS3.2/5, Error ellipse: s-maj=32.5km s-min=17.6km az=146.8*
*IDC **05** 13:23:27.5±1.1, 12.°17N×43.°81W, h0km, mb3.7/6, mb1 4.0/6, mb1mx3.7/30, mbtmp3.8/6, MS3.3/5, Ms1 3.3/5, ms1mx3.0/30, Error ellipse: s-maj=39.6km s-min=23.0km az=148.0*
**ISC 05 13:23:29.7**±1.0, **12.°1N**±0.°2×**43.°8W**±0.°2, **h14**km, **n14**, σ**0.s27**/6, **mb3.9**/5, **MS3.2**/5, **Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PTGA | Pitinga | 20.52 | 233 | P | P | 13 28 07.6 | -0.1 |
| | 2.7nm,0.8s,baz=50,slow=18,SNR=5.0 | | | | | | |
| PTGA | | | | LR | LR | 13 35 08.9 | |
| | comp=Z,62nm,20.5s,baz=70,slow=34 | | | | | | |
| SJG | San Juan | 22.36 | 288 | LR | LR | 13 35 29.9 | |
| | comp=Z,63nm,20.8s,baz=94,slow=32 | | | | | | |
| H10N3 | ASCENSION HYDR | 35.25 | 123 | T | T | 14 07 30.5 | |
| | baz=304,slow=75,SNR=22 | | | | | | |
| H10N2 | ASCENSION HYDR | 35.26 | 123 | T | T | 14 07 30.8 | |
| | baz=304,slow=75,SNR=24 | | | | | | |
| H10N1 | ASCENSION HYDR | 35.27 | 123 | T | T | 14 07 32.0 | |
| | baz=304,slow=75,SNR=28 | | | | | | |
| H10S3 | ASCENSION HYDR | 35.75 | 125 | T | T | 14 08 07.5 | |
| | baz=305,slow=74 | | | | | | |
| H10S1 | ASCENSION HYDR | 35.75 | 125 | T | T | 14 08 08.2 | |
| | baz=305 | | | | | | |
| H10S2 | ASCENSION HYDR | 35.77 | 125 | T | T | 14 08 08.8 | |
| | baz=305,slow=74 | | | | | | |
| LPAZ | La Paz | 37.10 | 221 | P | P | 13 30 40.9 | +0.2 |
| | 2.3nm,1.0s,baz=27,slow=6.8,SNR=5.5 | | | | | | |
| LPAZ | | | | LR | LR | 13 46 38.0 | |
| | comp=Z,37nm,18.3s,baz=57,slow=38 | | | | | | |
| DBIC | Dimbokro | 38.78 | 94 | LR | LR | 13 44 19.5 | |
| | comp=Z,45nm,19.1s,baz=314,slow=32 | | | | | | |
| TORD | Torodi Ar. Bea | 44.36 | 84 | P | P | 13 31 40.0 | -0.1 |
| | 2.0nm,1.1s,baz=278,slow=9.5,SNR=6.9 | | | | | | |
| TORD | | | | LR | LR | 13 48 06.2 | |
| | comp=Z,66nm,20.4s,baz=15,slow=33 | | | | | | |
| TXAR | Lajitas Array | 57.96 | 297 | P | P | 13 33 21.9 | -0.3 |
| | 0.3nm,0.6s,baz=117,slow=9.2,SNR=4.3 | | | | | | |
| AKASG | Malin Array Be | 69.95 | 40 | P | P | 13 34 40.6 | -0.1 |
| | 0.3nm,0.3s,baz=270,slow=6.2,SNR=4.3 | | | | | | |
| ILAR | Eielson Array | 84.61 | 335 | P | P | 13 36 02.9 | +0.3 |
| | 0.8nm,1.0s,baz=66,slow=5.2,SNR=5.2 | | | | | | |

*ISCJB **05** 13:29:01.4±0.9, 13.°7N±0.°1×144.°9E±0.°2, h135km±6km, mb3.4/7, Error ellipse: s-maj=39.1km s-min=23.8km az=3.3*
*IDC **05** 13:29:02.7±0.5, 13.°73N×144.°86E, h125km±4km, mb3.3/7, mb1 3.6/7, mb1mx3.2/41, mbtmp3.7/7, Error ellipse: s-maj=25.7km s-min=19.9km az=101.0*
**ISC 05 13:29:02.9**±0.9, **13.°7N**±0.°2×**144.°9E**±0.°2, **h131**km±7km, **n12**, σ**1.s23**/10, **mb3.5**/7, **Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | Guam | 0.10 | 226 | P | Pn | 13 29 21.1 | +0.4 |
| | 653nm,0.3s,baz=46,slow=1.5,SNR=461 | | | | | | |
| GUMO | | | | S | Sn | 13 29 33.7 | -0.5 |
| | 1µm,0.3s,baz=345,slow=20,SNR=104 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 21.86 | 71 | T | T | 13 56 54.1 | |
| | baz=257,slow=75,SNR=8.0 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 21.86 | 71 | T | T | 13 56 56.6 | |
| | baz=257,slow=75,SNR=5.3 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 21.87 | 71 | T | T | 13 56 57.2 | |
| | baz=257,slow=75,SNR=6.6 | | | | | | |
| WRA | Warramunga Arr | 34.98 | 198 | P | P | 13 35 42.6 | -0.2 |
| | 0.6nm,0.5s,baz=19,slow=9.4,SNR=2.7 | | | | | | |
| ASAR | Alice Springs | 38.64 | 196 | P | P | 13 36 13.4 | -0.2 |
| | 0.4nm,0.6s,baz=20,slow=13,SNR=7.2 | | | | | | |
| CMAR | Chiang Mai Arr | 44.38 | 282 | P | P | 13 37 01.4 | +0.8 |
| | 0.5nm,0.5s,baz=91,slow=7.2,SNR=3.7 | | | | | | |
| MKAR | Makanchi Array | 61.49 | 316 | P | P | 13 39 05.8 | 0.0 |
| | 0.1nm,0.4s,baz=89,slow=8.9,SNR=3.6 | | | | | | |
| KURBB | Kurchatov Arra | 64.62 | 320 | P | P | 13 39 24.8 | -1.5 |
| | 1.2nm,0.4s,baz=99,slow=6.2,SNR=7.9 | | | | | | |
| ILAR | Eielson Array | 68.47 | 25 | P | P | 13 39 49.7 | -0.9 |
| | 0.5nm,0.4s,baz=253,slow=5.7,SNR=14 | | | | | | |
| NVAR | Mina Array Bea | 86.82 | 51 | P | P | 13 41 35.0 | +1.9 |
| | 0.2nm,0.6s,baz=261,slow=4.5,SNR=2.6 | | | | | | |
| LPAZ | La Paz | 147.96 | 99 | PKPbc | PKPab | 13 48 36.3 | -1.2 |
| | 1.7nm,0.6s,baz=274,slow=4.3,SNR=7.8 | | | | | | |

*ISK **05** 13:29:08.7, 38.°85N×27.°85E, h5km, MD2.5*
*ISCJB **05** 13:29:09.6±0.5, 38.°87N±0.°03×27.°83E±0.°05, h11km, Error ellipse: s-maj=5.7km s-min=4.2km az=143.5*
*DDA **05** 13:29:09.2, 38.°90N×27.°86E, h5km, Md2.4*
*CSEM **05** 13:29:09.6±0.2, 38.°87N×27.°84E, h2km, MD2.5, Error ellipse: s-maj=4.8km s-min=3.9km az=82.0*
**ISC 05 13:29:09.2**±0.8, **38.°87N**±0.°02×**27.°82E**±0.°03, **h11**km, **n32**, σ**1.s26**/44, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKHS | Akhisar | 0.01 | 305 | *i* P | Pg | 13 29 09.3 | -1.9 |
| AKHS | | | | *i* S | Sg | 13 29 09.9 | -2.7 |
| AKHS | Akhisar | 0.01 | 305 | P | Pg | 13 29 09.3 | -1.9 |
| AKHS | | | | S | Sg | 13 29 09.8 | -2.7 |
| AKS | Akhisar | 0.01 | 304 | PG | Pg | 13 29 09.4 | -1.8 |
| AKS | Akhisar | 0.01 | 304 | *i* Pg | Pg | 13 29 09.4 | -1.8 |
| IZM | Izmir | 0.65 | 223 | *e*PG | Pb | 13 29 22.4 | -0.1 |
| IZM | Izmir | 0.65 | 223 | *e*Pg | Pb | 13 29 22.4 | -0.1 |
| MANT | Manisa | 0.69 | 123 | *i* P | Pb | 13 29 22.0 | -1.4 |
| MANT | Manisa | 0.69 | 123 | P | Pb | 13 29 21.9 | -1.4 |
| DEMI | Demirci | 0.72 | 76 | *i* P | Pb | 13 29 22.8 | -0.9 |
| DEMI | Demirci | 0.72 | 76 | P | Pb | 13 29 22.8 | -0.9 |
| KULA | Kula-Manisa | 0.75 | 118 | *e*PG | Pb | 13 29 23.6 | -0.6 |
| KULA | | | | *e*SG | Sb | 13 29 34.1 | -0.4 |
| KULA | Kula-Manisa | 0.75 | 118 | *e*Pg | Pb | 13 29 23.6 | -0.6 |
| KULA | | | | *e*Sg | Sb | 13 29 34.1 | -0.4 |
| BALB | Balikesir | 0.77 | 3 | *e*PG | Pn | 13 29 25.5 | -0.5 |
| BALB | Balikesir | 0.77 | 3 | *e*Pg | Pn | 13 29 25.5 | -0.5 |
| BALY | Balya | 0.88 | 350 | *i* P | Pg | 13 29 26.3 | +0.1 |
| BALY | | | | *i* S | Sb | 13 29 39.6 | +1.3 |
| BALY | Balya | 0.88 | 350 | P | Pg | 13 29 26.3 | +0.1 |
| BALY | | | | S | Sb | 13 29 39.6 | +1.3 |
| DURS | Dursunbey | 0.89 | 35 | *i* P | Pb | 13 29 26.4 | -0.2 |
| DURS | | | | *i* S | Sn | 13 29 42.0 | +1.4 |
| DURS | Dursunbey | 0.89 | 35 | P | Pb | 13 29 26.4 | -0.2 |
| DURS | | | | S | Sn | 13 29 42.0 | +1.4 |
| AYDB | Zeytinkoy-Aydi | 0.93 | 177 | *e*PG | Pn | 13 29 27.5 | -0.7 |
| AYDB | Zeytinkoy-Aydi | 0.93 | 177 | *e*Pg | Pn | 13 29 27.5 | -0.7 |
| DST | Dursunbey | 0.96 | 40 | *e*PG | Pn | 13 29 29.1 | +0.5 |
| DST | Dursunbey | 0.96 | 40 | *e*Pg | Pn | 13 29 29.1 | +0.5 |
| GONE | Gonen-Balikesi | 1.18 | 355 | *e*PN | Pg | 13 29 32.6 | +0.8 |
| GONE | Gonen-Balikesi | 1.18 | 355 | *e*Pn | Pg | 13 29 32.6 | +0.8 |
| AYDN | Tasoluk | 1.21 | 178 | *i* P | Pg | 13 29 33.6 | +1.1 |
| AYDN | | | | *i* S | Sn | 13 29 51.4 | +2.9 |
| AYDN | Tasoluk | 1.21 | 178 | P | Pg | 13 29 33.6 | +1.1 |
| AYDN | | | | S | Sn | 13 29 51.4 | +2.9 |
| KHAL | Karahalli | 1.40 | 111 | *i* P | Pg | 13 29 35.9 | -0.2 |
| KHAL | | | | *i* S | Sg | 13 29 54.5 | +0.3 |
| KHAL | Karahalli | 1.40 | 111 | P | Pg | 13 29 35.9 | -0.2 |
| KHAL | | | | S | Sg | 13 29 54.5 | +0.3 |
| CHOS | Chios island | 1.47 | 251 | *e*PN | Pg | 13 29 37.5 | +0.1 |
| CHOS | Chios island | 1.47 | 251 | *e*Pn | Pg | 13 29 37.5 | +0.1 |
| SIGR | SIGRI | 1.57 | 283 | *e*PN | Pg | 13 29 38.8 | -0.5 |
| SIGR | SIGRI | 1.57 | 283 | *e*Pn | Pg | 13 29 38.8 | -0.5 |

*ISCJB **05** 13:31:26.8±0.6, 39.°75N±0.°04×30.°79E±0.°04, h0km±8km, Error ellipse: s-maj=7.1km s-min=3.9km az=41.0*
*DDA **05** 13:31:26.4, 39.°75N×30.°77E, h7km, Md2.6*
*CSEM **05** 13:31:26.8±0.2, 39.°71N×30.°78E, h5km, MD2.6, Error ellipse: s-maj=6.5km s-min=3.3km az=49.0*
*ISK **05** 13:31:26.3, 39.°71N×30.°80E, h3km, MD2.6*
**ISC 05 13:31:26.8**±1.0, **39.°73N**±0.°03×**30.°80E**±0.°03, **h8**km±9km, **n27**, σ**0.s53**/38, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ESKT | Eskisehir | 0.22 | 170 | *e*PG | Pg | 13 31 31.0 | -0.2 |
| ESKT | Eskisehir | 0.22 | 170 | *e*Pg | Pg | 13 31 31.0 | -0.2 |
| ESKT | Eskisehir | 0.22 | 170 | P | Pg | 13 31 30.7 | -0.5 |
| ESKT | | | | S | Sg | 13 31 35.2 | +1.0 |
| SEYT | Eskypehyr | 0.22 | 170 | *i* P | Pg | 13 31 30.7 | -0.5 |
| SEYT | | | | *i* S | Sg | 13 31 35.2 | +1.0 |
| BORA | Eskisehir | 0.31 | 299 | *i* P | Pg | 13 31 31.8 | -1.1 |
| BORA | | | | *i* S | Sg | 13 31 37.0 | 0.0 |
| BORA | Eskisehir | 0.31 | 299 | P | Pg | 13 31 31.8 | -1.1 |
| BORA | | | | S | Sg | 13 31 37.0 | 0.0 |
| AUMIH | MIHALICIK | 0.54 | 75 | P | Pg | 13 31 36.7 | -0.6 |
| AUMIH | | | | S | Sb | 13 31 46.4 | -0.2 |
| SVRH | Sivrihisar-ESK | 0.63 | 117 | *e*PG | Pg | 13 31 38.8 | -0.1 |
| SVRH | | | | *e*SG | Sb | 13 31 48.4 | -0.5 |
| SVRH | Sivrihisar-ESK | 0.63 | 117 | *e*Pg | Pg | 13 31 38.8 | -0.1 |
| SVRH | | | | *e*Sg | Sb | 13 31 48.4 | -0.5 |
| GPA | Golpazari | 0.67 | 326 | *e*PG | Pg | 13 31 39.8 | +0.1 |
| GPA | Golpazari | 0.67 | 326 | *e*Pg | Pg | 13 31 39.8 | +0.1 |
| GULT | Gulveren | 0.73 | 343 | *e*PG | Pb | 13 31 42.0 | +0.2 |
| GULT | Gulveren | 0.73 | 343 | *e*Pg | Pb | 13 31 42.0 | +0.2 |
| MDUB | Mudurnu | 0.80 | 22 | *e*PG | Pb | 13 31 42.9 | 0.0 |
| MDUB | Mudurnu | 0.80 | 22 | *e*Pg | Pb | 13 31 42.9 | 0.0 |
| CAVI | Cavuskoy | 0.87 | 303 | *e*PG | Pb | 13 31 44.1 | -0.1 |
| CAVI | Cavuskoy | 0.87 | 303 | *e*Pg | Pb | 13 31 44.1 | -0.1 |
| BOLV | Bolvadin | 1.02 | 174 | *i* P | Pn | 13 31 47.1 | -0.4 |
| BOLV | | | | *i* S | Sn | 13 32 02.2 | +0.2 |
| BOLV | Bolvadin | 1.02 | 174 | P | Pn | 13 31 47.1 | -0.4 |
| BOLV | | | | S | Sn | 13 32 02.2 | +0.2 |
| ADVT | Abdulvahap | 1.07 | 311 | *e*PN | Pb | 13 31 47.8 | +0.2 |
| ADVT | Abdulvahap | 1.07 | 311 | *e*Pn | Pb | 13 31 47.8 | +0.2 |
| IZI | Iznik | 1.19 | 301 | *e*PN | Pn | 13 31 50.3 | +0.6 |
| IZI | Iznik | 1.19 | 301 | *e*Pn | Pn | 13 31 50.3 | +0.6 |
| KIZT | Kizilcal | 1.19 | 135 | *e*PN | Pn | 13 31 49.6 | -0.2 |
| KIZT | Kizilcal | 1.19 | 135 | *e*Pn | Pn | 13 31 49.6 | -0.2 |
| ULDT | Uludag | 1.34 | 288 | *i* P | Pn | 13 31 51.8 | -0.2 |
| ULDT | | | | *i* S | Sg | 13 32 11.1 | +1.0 |
| ULDT | Uludag | 1.34 | 288 | P | Pn | 13 31 51.8 | -0.2 |
| ULDT | | | | S | Sg | 13 32 11.1 | +1.0 |

*IDC **05** 13:32:57.6±1.5, 39.°24S×177.°02E, h0km, mb3.9/3, mb1 4.1/4, mb1mx3.8/29, mbtmp3.9/4, ML3.4/1, Error ellipse: s-maj=37.1km s-min=11.0km az=102.0*
*ISCJB **05** 13:33:00.4±0.4, 39.°21S±0.°03×177.°42E±0.°04, h40km±5km, mb3.9/3, Error ellipse: s-maj=5.7km s-min=3.5km az=34.8*
*WEL **05** 13:33:01.5±0.1, 39.°16S×177.°40E, h32km, ML4.0/45, Error ellipse: s-maj=0.9km s-min=0.6km az=90.0*
*WEL Felt from Gisborne to Hawke''s Bay, maximum reported intensity MM 4.*
*NEIC **05** 13:33:01.6, 39.°15S×177.°37E, h29km, ML4.1(WEL), After WEL.*
*NEIC Felt in the Wairoa area.*
**ISC 05 13:33:01.0**±0.9, **39.°18S**±0.°03×**177.°38E**±0.°03, **h32**km±7km, **n166**, σ**0.s69**/153, **mb3.9**/3, **14C-25D**, **Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WHHZ | Waihua | 0.15 | 310 | ⇑P* | Pn | 13 33 06.6 | -0.5 |
| WHHZ | | | | S* | Sb | 13 33 11.4 | +0.4 |
| KNZ | Kokohu | 0.27 | 56 | ⇓P* | Pn | 13 33 08.6 | -0.2 |
| KNZ | | | | *e*S* | Sn | 13 33 13.6 | -0.2 |
| KNZ | | | | AML | AML | 13 33 16.4 | |
| KNZ | Kokohu | 0.27 | 56 | P* | Pn | 13 33 08.6 | -0.2 |
| ARHZ | Aropaoanui | 0.31 | 254 | ⇑P* | Pn | 13 33 09.1 | -0.3 |
| ARHZ | Aropaoanui | 0.31 | 254 | P* | Pn | 13 33 09.1 | -0.3 |
| RAHZ | Arahi | 0.35 | 318 | ⇑P* | Pb | 13 33 08.8 | -0.5 |
| RAHZ | | | | S* | Sn | 13 33 15.1 | -0.7 |
| RAHZ | Arahi | 0.35 | 318 | P* | Pb | 13 33 08.8 | -0.5 |
| SNGZ | Shannon Statio | 0.40 | 355 | ⇑P* | Pb | 13 33 09.7 | -0.2 |
| SNGZ | Shannon Statio | 0.40 | 355 | P* | Pb | 13 33 09.7 | -0.2 |
| MHGZ | Mahia Peninsul | 0.41 | 87 | ⇑P* | Pn | 13 33 11.1 | +0.4 |
| MHGZ | Mahia Peninsul | 0.41 | 87 | P* | Pn | 13 33 11.1 | +0.4 |
| NMHZ | Naumai | 0.46 | 280 | ⇑P* | Pb | 13 33 10.9 | 0.0 |
| NMHZ | Naumai | 0.46 | 280 | P* | Pb | 13 33 10.9 | 0.0 |
| PRGZ | Paritu Road | 0.46 | 57 | ⇑P* | Pb | 13 33 11.6 | +0.7 |
| PRGZ | Paritu Road | 0.46 | 57 | P* | Pb | 13 33 11.6 | +0.7 |
| CKHZ | Cape Kidnapper | 0.54 | 206 | ⇓PN | Pb | 13 33 13.1 | +1.0 |
| CKHZ | Cape Kidnapper | 0.54 | 206 | P* | Pb | 13 33 13.1 | +1.0 |
| RIGZ | Rimuhau | 0.56 | 32 | ⇓PN | Pn | 13 33 12.7 | 0.0 |
| MCHZ | McNeill Hill | 0.60 | 243 | ⇓PN | Pb | 13 33 13.8 | +0.7 |
| MCHZ | McNeill Hill | 0.60 | 243 | P* | Pb | 13 33 13.8 | +0.7 |
| RAGZ | Rawiri | 0.68 | 2 | ⇓PN | Pn | 13 33 14.0 | -0.5 |
| RAGZ | Rawiri | 0.68 | 2 | P* | Pn | 13 33 14.0 | -0.5 |
| BKZ | Black Stump Fm | 0.69 | 270 | ⇑PN | Pn | 13 33 14.5 | -0.2 |
| BKZ | | | | AML | AML | 13 33 25.3 | |
| BKZ | | | | AML | AML | 13 33 26.7 | |
| BKZ | Black Stump Fm | 0.69 | 270 | ⇑Pn | Pn | 13 33 14.5 | -0.2 |
| KAHZ | Kahuranaki | 0.73 | 212 | PN | Pn | 13 33 15.6 | +0.4 |
| KAHZ | Kahuranaki | 0.73 | 212 | Pn | Pn | 13 33 15.6 | +0.4 |
| KWHZ | Kaweka Forest | 0.79 | 251 | ⇓PN | Pn | 13 33 16.0 | +0.1 |
| TKGZ | Te Karaka | 0.82 | 26 | ⇓PN | Pn | 13 33 16.0 | -0.3 |
| TKGZ | Te Karaka | 0.82 | 26 | Pn | Pn | 13 33 16.0 | -0.3 |
| MRHZ | Matea Rd | 0.83 | 294 | ⇑PN | Pn | 13 33 16.3 | -0.2 |
| MWZ | Matawai | 0.85 | 8 | PN | Pn | 13 33 16.1 | -0.6 |
| MWZ | | | | AML | AML | 13 33 29.9 | |
| MWZ | | | | AML | AML | 13 33 31.6 | |
| MWZ | | | | AML | AML | 13 33 34.1 | |
| MWZ | | | | AML | AML | 13 33 40.6 | |
| MWZ | Matawai | 0.85 | 8 | Pn | Pn | 13 33 16.1 | -0.6 |
| MWZ | | | | Sn | Sn | 13 33 28.9 | +0.8 |
| KRHZ | Kereru | 0.91 | 239 | ⇓PN | Pn | 13 33 17.6 | -0.1 |
| URZ | Urewera | 0.94 | 347 | ⇓PN | Pn | 13 33 17.7 | -0.3 |
| URZ | | | | AML | AML | 13 33 31.0 | |
| URZ | | | | AML | AML | 13 33 31.1 | |
| URZ | Urewera | 0.94 | 347 | Pg | Pn | 13 33 17.7 | -0.3 |
| | 209nm,0.3s,baz=105,slow=12,SNR=1261 | | | | | | |
| URZ | | | | Lg | Lg | 13 33 29.8 | |
| | 400nm,0.3s,baz=340,slow=18,SNR=54 | | | | | | |
| PXZ | Pawanui | 0.95 | 205 | ⇑PN | Pn | 13 33 17.5 | -0.5 |
| PXZ | | | | AML | AML | 13 33 32.3 | |
| PXZ | | | | AML | AML | 13 33 32.3 | |
| PXZ | | | | AML | AML | 13 33 32.6 | |
| PXZ | | | | AML | AML | 13 33 32.7 | |
| PXZ | Pawanui | 0.95 | 205 | Pn | Pn | 13 33 17.6 | -0.5 |
| ALRZ | Allen Road | 1.02 | 307 | ⇑PN | Pn | 13 33 19.1 | 0.0 |
| ALRZ | Allen Road | 1.02 | 307 | Pn | Pn | 13 33 19.1 | 0.0 |
| PRRZ | Plateau Road | 1.03 | 311 | PN | Pn | 13 33 18.9 | -0.3 |
| PRRZ | Plateau Road | 1.03 | 311 | Pn | Pn | 13 33 19.0 | -0.2 |
| HATZ | Hinemaiaia | 1.04 | 285 | PN | Pn | 13 33 20.0 | +0.5 |
| HATZ | | | | AML | AML | 13 33 34.9 | |
| HATZ | | | | AML | AML | 13 33 35.7 | |
| HATZ | Hinemaiaia | 1.04 | 285 | Pn | Pn | 13 33 20.0 | +0.5 |
| BHHZ | Black Hill Sta | 1.07 | 253 | ⇓PN | Pn | 13 33 19.9 | 0.0 |
| BHHZ | Black Hill Sta | 1.07 | 253 | Pn | Pn | 13 33 19.9 | 0.0 |
| RRRZ | Republican Roa | 1.08 | 321 | ⇑PN | Pn | 13 33 19.7 | -0.2 |
| RRRZ | Republican Roa | 1.08 | 321 | Pn | Pn | 13 33 19.9 | 0.0 |
| TWGZ | Tauwhareparae | 1.10 | 25 | PN | Pn | 13 33 19.9 | -0.3 |
| TWGZ | Tauwhareparae | 1.10 | 25 | Pn | Pn | 13 33 19.9 | -0.3 |
| WPHZ | Waipukurau | 1.15 | 219 | ⇓PN | Pn | 13 33 20.7 | -0.2 |
| WPHZ | Waipukurau | 1.15 | 219 | Pn | Pn | 13 33 20.7 | -0.2 |
| WPRZ | Whakapapatarin | 1.16 | 304 | PN | Pn | 13 33 20.9 | -0.1 |
| WPRZ | Whakapapatarin | 1.16 | 304 | Pn | Pn | 13 33 20.9 | -0.1 |
| HRRZ | Handcock Road | 1.16 | 312 | PN | Pn | 13 33 20.9 | -0.2 |
| HRRZ | Handcock Road | 1.16 | 312 | Pn | Pn | 13 33 21.0 | -0.1 |
| TARZ | Mount Tarawera | 1.16 | 324 | PN | Pn | 13 33 21.1 | -0.1 |
| TARZ | Mount Tarawera | 1.16 | 324 | Pn | Pn | 13 33 21.1 | -0.1 |
| PNHZ | Pukenui | 1.18 | 231 | ⇓PN | Pn | 13 33 20.9 | -0.4 |
| PNHZ | Pukenui | 1.18 | 231 | Pn | Pn | 13 33 20.9 | -0.4 |
| EDRZ | Edgecumbe | 1.18 | 334 | PN | Pn | 13 33 21.2 | -0.2 |
| EDRZ | | | | AML | AML | 13 33 49.1 | |
| EDRZ | | | | AML | AML | 13 33 53.1 | |
| EDRZ | Edgecumbe | 1.18 | 334 | Pn | Pn | 13 33 21.0 | -0.3 |
| RITZ | Rihia Road | 1.20 | 279 | PN | Pn | 13 33 22.1 | +0.5 |
| RITZ | | | | AML | AML | 13 33 49.9 | |
| RITZ | | | | AML | AML | 13 33 50.7 | |
| RITZ | Rihia Road | 1.20 | 279 | Pn | Pn | 13 33 22.1 | +0.5 |
| WHTZ | Whakaora | 1.22 | 294 | PN | Pn | 13 33 22.3 | +0.4 |
| WHTZ | Whakaora | 1.22 | 294 | Pn | Pn | 13 33 22.4 | +0.5 |
| PRHZ | Porangahau | 1.23 | 208 | PN | Pn | 13 33 21.3 | -0.8 |
| PRHZ | Porangahau | 1.23 | 208 | Pn | Pn | 13 33 21.4 | -0.6 |
| HSRZ | Hossack Road | 1.24 | 314 | PN | Pn | 13 33 21.9 | -0.2 |
| MOVZ | Moawhango | 1.29 | 259 | AML | AML | 13 33 41.7 | |
| MOVZ | | | | AML | AML | 13 33 43.0 | |
| GRRZ | Galatos Road | 1.29 | 309 | ⇑PN | Pn | 13 33 23.0 | +0.1 |
| RATZ | Rangitukua | 1.29 | 283 | PN | Pn | 13 33 23.1 | +0.2 |
| RATZ | | | | AML | AML | 13 33 50.1 | |
| RATZ | | | | AML | AML | 13 33 51.5 | |
| PUZ | Puketiti | 1.30 | 32 | ⇓PN | Pn | 13 33 22.0 | -0.9 |
| PUZ | | | | AML | AML | 13 33 58.9 | |
| PUZ | | | | AML | AML | 13 34 04.5 | |
| PUZ | Puketiti | 1.30 | 32 | Pn | Pn | 13 33 22.0 | -0.9 |
| MARZ | Manawahe | 1.31 | 335 | Pn | Pn | 13 33 23.3 | +0.2 |
| KATZ | Kakaramea | 1.33 | 278 | ⇓PN | Pn | 13 33 23.7 | +0.2 |
| KATZ | Kakaramea | 1.33 | 278 | Pn | Pn | 13 33 23.7 | +0.2 |
| OTVZ | Oturere | 1.34 | 270 | ⇓PN | Pn | 13 33 23.9 | +0.4 |
| OTVZ | | | | AML | AML | 13 33 45.7 | |
| OTVZ | | | | AML | AML | 13 33 47.5 | |
| OTVZ | Oturere | 1.34 | 270 | Pn | Pn | 13 33 23.9 | +0.4 |
| TUVZ | Tukino | 1.35 | 265 | PN | Pn | 13 33 24.1 | +0.4 |
| TUVZ | | | | AML | AML | 13 33 46.6 | |
| TUVZ | | | | AML | AML | 13 33 56.4 | |
| TUVZ | Tukino | 1.35 | 265 | Pn | Pn | 13 33 24.1 | +0.4 |
| KRVZ | Karewarewa | 1.36 | 273 | PN | Pn | 13 33 23.9 | +0.1 |
| KRVZ | | | | AML | AML | 13 33 45.4 | |
| KRVZ | | | | AML | AML | 13 33 45.7 | |
| KRVZ | Karewarewa | 1.36 | 273 | Pn | Pn | 13 33 24.1 | +0.2 |
| UTU | Utuhina | 1.36 | 317 | PN | Pn | 13 33 23.8 | -0.1 |
| UTU | | | | AML | AML | 13 33 38.5 | |
| UTU | | | | AML | AML | 13 33 55.1 | |
| UTU | Utuhina | 1.36 | 317 | Pn | Pn | 13 33 24.2 | +0.3 |
| WATZ | Wairara | 1.37 | 289 | PN | Pn | 13 33 23.9 | -0.1 |
| WATZ | | | | AML | AML | 13 33 52.8 | |
| WATZ | | | | AML | AML | 13 33 54.8 | |
| WATZ | Wairara | 1.37 | 289 | Pn | Pn | 13 33 23.9 | -0.1 |
| NGZ | Ngauruhoe | 1.39 | 269 | ⇓PN | Pn | 13 33 24.6 | +0.3 |
| NGZ | | | | AML | AML | 13 33 49.6 | |
| NGZ | | | | AML | AML | 13 33 51.3 | |
| NGZ | Ngauruhoe | 1.39 | 269 | Pn | Pn | 13 33 24.6 | +0.3 |
| WNVZ | Wahianoa | 1.40 | 263 | ⇓PN | Pn | 13 33 24.7 | +0.3 |
| WNVZ | Wahianoa | 1.40 | 263 | Pn | Pn | 13 33 24.7 | +0.3 |
| WTVZ | West Tongariro | 1.40 | 272 | ⇓PN | Pn | 13 33 24.7 | +0.3 |
| WTVZ | | | | AML | AML | 13 33 51.8 | |
| WTVZ | | | | AML | AML | 13 33 53.2 | |
| WTVZ | West Tongariro | 1.40 | 272 | Pn | Pn | 13 33 24.7 | +0.3 |
| WHVZ | Whangaehu Hut | 1.40 | 265 | ⇓PN | Pn | 13 33 24.7 | +0.2 |
| WHVZ | Whangaehu Hut | 1.40 | 265 | Pn | Pn | 13 33 24.7 | +0.2 |
| KUTZ | Kaahu Road | 1.40 | 299 | ⇓PN | Pn | 13 33 24.2 | -0.1 |
| KUTZ | Kaahu Road | 1.40 | 299 | Pn | Pn | 13 33 24.2 | -0.1 |
| TSZ | Takapari Road | 1.41 | 231 | ⇓PN | Pn | 13 33 23.8 | -0.7 |
| TSZ | | | | AML | AML | 13 33 42.8 | |
| TSZ | | | | AML | AML | 13 33 43.1 | |
| TSZ | Takapari Road | 1.41 | 231 | ⇓Pn | Pn | 13 33 23.8 | -0.7 |
| DRZ | Dome Shelter | 1.42 | 265 | *e*PN | Pn | 13 33 24.9 | +0.1 |
| DRZ | | | | AML | AML | 13 33 48.0 | |
| DRZ | | | | AML | AML | 13 33 51.2 | |
| DRZ | Dome Shelter | 1.42 | 265 | Pn | Pn | 13 33 25.1 | +0.3 |
| FWVZ | Far West T-bar | 1.43 | 266 | ⇓PN | Pn | 13 33 25.0 | +0.1 |
| FWVZ | | | | AML | AML | 13 33 47.5 | |
| FWVZ | | | | AML | AML | 13 33 50.7 | |
| FWVZ | Far West T-bar | 1.43 | 266 | Pn | Pn | 13 33 25.0 | +0.1 |
| WPVZ | Whakapapa | 1.43 | 268 | ⇓PN | Pn | 13 33 25.1 | +0.3 |
| WPVZ | | | | AML | AML | 13 33 49.6 | |
| WPVZ | | | | AML | AML | 13 33 51.6 | |
| WPVZ | Whakapapa | 1.43 | 268 | Pn | Pn | 13 33 25.1 | +0.3 |
| COVZ | Chateau Observ | 1.43 | 268 | ⇓PN | Pn | 13 33 25.0 | +0.2 |
| COVZ | Chateau Observ | 1.43 | 268 | Pn | Pn | 13 33 25.0 | +0.2 |
| TRVZ | Turoa | 1.43 | 264 | PN | Pn | 13 33 25.1 | +0.2 |
| TRVZ | | | | AML | AML | 13 33 46.4 | |
| TRVZ | | | | AML | AML | 13 33 48.0 | |
| TRVZ | Turoa | 1.43 | 264 | Pn | Pn | 13 33 25.1 | +0.2 |
| HAZ | Te Kaha | 1.45 | 13 | PN | Pn | 13 33 24.6 | -0.4 |
| OPRZ | Ohinepanea | 1.48 | 334 | PN | Pn | 13 33 24.5 | -0.9 |
| OPRZ | Ohinepanea | 1.48 | 334 | Pn | Pn | 13 33 24.5 | -0.9 |
| MTVZ | Mangateitei | 1.50 | 261 | *e*PN | Pn | 13 33 25.6 | -0.2 |
| MTVZ | | | | AML | AML | 13 33 58.4 | |
| MTVZ | | | | AML | AML | 13 33 59.1 | |
| MTVZ | Mangateitei | 1.50 | 261 | Pn | Pn | 13 33 25.8 | 0.0 |
| TWVZ | Taurewa | 1.52 | 273 | PN | Pn | 13 33 25.8 | -0.2 |
| TWVZ | | | | AML | AML | 13 33 50.3 | |
| TWVZ | | | | AML | AML | 13 33 52.5 | |
| TWVZ | Taurewa | 1.52 | 273 | Pn | Pn | 13 33 25.8 | -0.2 |
| WMGZ | Waiomatatini S | 1.58 | 31 | PN | Pn | 13 33 25.8 | -0.9 |
| WMGZ | Waiomatatini S | 1.58 | 31 | Pn | Pn | 13 33 26.0 | -0.7 |
| WMGZ | | | | Sn | Sn | 13 33 46.6 | +0.6 |
| PKVZ | Pokaka | 1.59 | 265 | PN | Pn | 13 33 27.3 | +0.3 |
| PKVZ | | | | AML | AML | 13 33 58.2 | |
| PKVZ | | | | AML | AML | 13 33 58.6 | |
| PKVZ | Pokaka | 1.59 | 265 | Pn | Pn | 13 33 27.3 | +0.3 |
| TLZ | Tolley Road | 1.67 | 300 | PN | Pn | 13 33 27.6 | -0.5 |
| TLZ | Tolley Road | 1.67 | 300 | Pn | Pn | 13 33 27.6 | -0.5 |
| TGRZ | Tauranga | 1.69 | 328 | AML | AML | 13 33 59.6 | |
| TGRZ | | | | AML | AML | 13 34 01.1 | |
| BFZ | Birch Farm | 1.74 | 210 | PN | Pn | 13 33 27.7 | -1.3 |
| BFZ | | | | AML | AML | 13 33 50.2 | |
| BFZ | | | | AML | AML | 13 33 57.6 | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BFZ | | | | AML | AML | 13 33 57.6 | |
| BFZ | | | | AML | AML | 13 33 57.7 | |
| BFZ | Birch Farm | 1.74 | 210 | Pn | Pn | 13 33 27.7 | -1.3 |
| POWZ | Post Office Ro | 1.74 | 225 | PN | Pn | 13 33 28.4 | -0.6 |
| POWZ | Post Office Ro | 1.74 | 225 | Pn | Pn | 13 33 28.4 | -0.6 |
| MXZ | Matakaoa Point | 1.77 | 25 | PN | Pn | 13 33 29.5 | +0.2 |
| MXZ | | | | AML | AML | 13 33 53.0 | |
| MXZ | | | | AML | AML | 13 34 03.4 | |
| MXZ | | | | AML | AML | 13 34 15.8 | |
| MXZ | Matakaoa Point | 1.77 | 25 | Pn | Pn | 13 33 29.5 | +0.2 |
| WAZ | Wanganui | 1.94 | 252 | PN | Pn | 13 33 32.6 | +0.8 |
| WAZ | | | | AML | AML | 13 34 13.0 | |
| WAZ | | | | AML | AML | 13 34 15.4 | |
| WAZ | Wanganui | 1.94 | 252 | Pn | Pn | 13 33 32.8 | +1.0 |
| TIWZ | Tintock | 1.97 | 215 | PN | Pn | 13 33 31.5 | -0.7 |
| TIWZ | | | | AML | AML | 13 34 00.0 | |
| TIWZ | | | | AML | AML | 13 34 00.6 | |
| TIWZ | Tintock | 1.97 | 215 | Pn | Pn | 13 33 31.2 | -1.0 |
| MRZ | Mangatainoka R | 2.03 | 222 | PN | Pn | 13 33 31.5 | -1.5 |
| MRZ | | | | AML | AML | 13 33 57.7 | |
| MRZ | | | | AML | AML | 13 33 57.9 | |
| MRZ | Mangatainoka R | 2.03 | 222 | Pn | Pn | 13 33 31.6 | -1.4 |
| VRZ | Vera Road | 2.04 | 271 | PN | Pn | 13 33 33.5 | +0.4 |
| VRZ | | | | AML | AML | 13 34 11.2 | |
| VRZ | | | | AML | AML | 13 34 14.3 | |
| VRZ | Vera Road | 2.04 | 271 | Pn | Pn | 13 33 33.5 | +0.4 |
| HIZ | Hauiti | 2.08 | 288 | PN | Pn | 13 33 33.7 | 0.0 |
| HIZ | | | | AML | AML | 13 34 07.7 | |
| HIZ | | | | AML | AML | 13 34 18.6 | |
| HIZ | Hauiti | 2.08 | 288 | Pn | Pn | 13 33 33.7 | 0.0 |
| TMWZ | Te Maipa | 2.24 | 210 | Pn | Pn | 13 33 34.5 | -1.4 |
| MTW | Mount Morrison | 2.45 | 215 | AML | AML | 13 34 07.0 | |
| MTW | | | | AML | AML | 13 34 07.1 | |
| KIW | Kapiti Island | 2.54 | 228 | AML | AML | 13 34 10.7 | |
| KIW | | | | AML | AML | 13 34 12.9 | |
| NEZ | North Egmont | 2.56 | 267 | Pn | Pn | 13 33 41.8 | +1.5 |
| TRWZ | Traveller | 2.57 | 210 | AML | AML | 13 34 11.7 | |
| TRWZ | Traveller | 2.57 | 210 | Pn | Pn | 13 33 37.9 | -2.5 |
| CAW | Cannon Point | 2.62 | 222 | AML | AML | 13 34 11.3 | |
| CAW | | | | AML | AML | 13 34 17.2 | |
| PKE | Pukeiti | 2.64 | 269 | Pn | Pn | 13 33 42.5 | +1.1 |
| PAWZ | Paruwai Farm | 2.67 | 214 | AML | AML | 13 34 12.4 | |
| PAWZ | | | | AML | AML | 13 34 15.2 | |
| PAWZ | Paruwai Farm | 2.67 | 214 | Pn | Pn | 13 33 39.5 | -2.2 |
| KUZ | Kuaotunu | 2.76 | 331 | Pn | Pn | 13 33 42.6 | -0.3 |
| MSWZ | Moikau Station | 2.77 | 215 | AML | AML | 13 34 15.5 | |
| MSWZ | | | | AML | AML | 13 34 15.7 | |
| WEL | Wellington | 2.91 | 223 | AML | AML | 13 34 20.0 | |
| WEL | | | | AML | AML | 13 34 21.4 | |
| WEL | Wellington | 2.91 | 223 | Pn | Pn | 13 33 42.8 | -2.3 |
| TCW | Tory Channel | 3.13 | 228 | AML | AML | 13 34 24.2 | |
| TCW | | | | AML | AML | 13 34 24.3 | |
| TCW | Tory Channel | 3.13 | 228 | Pn | Pn | 13 33 46.0 | -2.1 |
| TUWZ | Tuamarina | 3.46 | 228 | AML | AML | 13 34 32.2 | |
| TUWZ | | | | AML | AML | 13 34 32.2 | |
| NNZ | Nelson | 3.68 | 235 | Pn | Pn | 13 33 53.4 | -2.3 |
| THZ | Tophouse | 4.28 | 231 | AML | AML | 13 34 55.2 | |
| THZ | | | | AML | AML | 13 34 57.7 | |
| THZ | Tophouse | 4.28 | 231 | Pn | Pn | 13 34 01.0 | -3.1 |
| MQZ | McQueen's Vall | 5.76 | 217 | AML | AML | 13 35 23.2 | |
| MQZ | McQueen's Vall | 5.76 | 217 | Pn | Pn | 13 34 20.1 | -4.0 |
| RPZ | Rata Peaks | 6.57 | 224 | Pn | Pn | 13 34 32.0 | -3.4 |
| | 0.9nm,0.3s,baz=50,slow=9.1,SNR=5.0 | | | | | | |
| RPZ | | | | Sn | Sn | 13 35 41.8 | -7.4 |
| | 4.0nm,0.3s,baz=134,slow=22,SNR=22 | | | | | | |
| TUZ | Tuapeka | 8.86 | 218 | Pn | Pn | 13 35 02.6 | -4.2 |
| ASAR | Alice Springs | 39.80 | 280 | P | P | 13 40 30.4 | -0.8 |
| | 2.5nm,0.8s,baz=126,slow=8.0,SNR=23 | | | | | | |
| WRA | Warramunga Arr | 41.61 | 285 | P | P | 13 40 45.1 | -1.1 |
| | 1.7nm,0.6s,baz=127,slow=7.2,SNR=14 | | | | | | |
| QSPA | South Pole Qui | 50.95 | 180 | P | P | 13 42 00.9 | +1.8 |
| | 0.7nm,0.7s,baz=70,slow=1.1,SNR=3.8 | | | | | | |
| ARCES | ARCESS Array B | 146.10 | 343 | PKPbc | PKPdf | 13 52 35.4 | -0.3 |
| | 3.0nm,0.8s,baz=60,slow=4.3,SNR=4.9 | | | | | | |

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*ISCJB **05** 13:33:37.8±0.4, 19°.88N±0°.03×121°.31E±0°.08, h40km, mb3.9/12, MS3.2/3, Error ellipse: s-maj=10.2km s-min=4.0km az=178.5*
*IDC **05** 13:33:38.3±0.9, 19°.83N×121°.55E, h35km±6km, mb3.8/11, mb1 3.9/12, mb1mx3.7/46, mbtmp4.0/12, ML4.0/1, MS3.3/3, Ms1 3.4/3, ms1mx2.9/37, Error ellipse: s-maj=22.7km s-min=15.7km az=71.0*
*NEIC **05** 13:33:38.5±0.4, 19°.82N×121°.43E, mb4.2/1, Error ellipse: s-maj=11.0km s-min=6.4km az=95.0*
**ISC 05 13:33:39.1**±0.6, **19°.89N**±0°.04×**121°.30E**±0°.08, **h40**km, **n36**, σ**1s.56**/35, **mb4.0**/12, **MS3.4**/3, **1C-1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PIP | Pasuquin | 1.69 | 202 | ⇑iP | Pn | 13 34 06.6 | +0.5 |
| PIP | | | | eS | Sn | 13 34 24.7 | -1.8 |
| SGCP | Mt. Cagua | 1.79 | 157 | eP | Pn | 13 34 08.1 | +0.6 |
| SGCP | | | | eS | Sn | 13 34 27.1 | -1.9 |
| APYP | Conner | 2.02 | 181 | eP | Pn | 13 34 10.6 | 0.0 |
| APYP | | | | eS | Sn | 13 34 32.8 | -1.9 |
| CVP | Callao Caves | 2.23 | 167 | ⇓eP | Pn | 13 34 15.2 | +1.6 |
| CVP | | | | eS | Sn | 13 34 44.4 | +4.4 |
| ABRA | Dolores | 2.30 | 194 | eP | Pn | 13 34 15.5 | +1.0 |
| SZP | Santa | 2.46 | 199 | Pn | Pn | 13 34 16.9 | +0.1 |
| TWG | Pinlang | 2.92 | 356 | ePn | Pn | 13 34 23.5 | +0.4 |
| CAUP | Cauayan | 2.98 | 170 | eP | Pn | 13 34 32.6 | +8.8 |
| PALP | Palanan | 3.01 | 159 | eP | Pn | 13 34 26.6 | +2.3 |
| TPUB | Ta-pu | 3.45 | 350 | ePn | Pn | 13 34 30.8 | +0.4 |
| YULB | Yu-li | 3.48 | 360 | ePn | Pn | 13 34 31.2 | +0.4 |
| SSLB | Suanglung | 3.89 | 355 | ePn | Pn | 13 34 37.6 | +1.2 |
| YHNB | Yeheng | 4.75 | 1 | ePn | Pn | 13 34 49.0 | +0.6 |
| QIZ | Qiongzhong | 10.84 | 267 | ePn | Pn | 13 36 11.5 | -0.3 |
| KSAR | Wonju Array Be | 18.41 | 17 | P | Pn | 13 37 51.5 | +0.4 |
| KSRS | Korea Array | 18.43 | 17 | P | Pn | 13 37 51.5 | +0.1 |
| | 0.4nm,0.3s,baz=198,slow=11,SNR=10.0 | | | | | | |
| CMAR | Chiang Mai Arr | 21.16 | 270 | P | P | 13 38 22.3 | +1.2 |
| | 0.8nm,0.7s,baz=81,slow=9.2,SNR=5.2 | | | | | | |
| CMAR | | | | LR | LR | 13 46 59.8 | |
| | comp=Z,28nm,18.1s,baz=225,slow=38 | | | | | | |
| ASAJ | Asahikawa | 29.99 | 32 | P | P | 13 39 41.9 | -1.9 |
| | 4.9nm,0.9s,baz=117,slow=9.0,SNR=2.6 | | | | | | |
| SONM | Songino Array | 30.38 | 340 | P | P | 13 39 47.1 | -0.3 |
| | 1.0nm,0.8s,baz=160,slow=9.8,SNR=4.6 | | | | | | |
| SONM | | | | LR | LR | 13 52 44.1 | |
| | comp=Z,78nm,18.4s,baz=176,slow=38 | | | | | | |
| TLY | Talaya | 34.61 | 341 | LR | LR | 13 57 22.4 | |
| | comp=Z,73nm,18.0s,baz=178,slow=41 | | | | | | |
| MKAR | Makanchi Array | 41.57 | 319 | P | P | 13 41 24.3 | +1.4 |
| | 0.6nm,0.6s,baz=112,slow=10,SNR=9.2 | | | | | | |
| MKAR | | | | pP | pP | 13 41 35.7 | +1.5 |
| | 0.7nm,0.6s,baz=116,slow=9.3,SNR=5.6 | | | | | | |
| WRAB | Tennant Creek | 41.59 | 161 | eP | P | 13 41 21.3 | -2.0 |
| | 2.6nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 41.60 | 161 | P | P | 13 41 21.7 | -1.7 |
| | 3.5nm,0.6s,baz=342,slow=9.0,SNR=23 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.79 | 84 | T | T | 14 27 16.3 | |
| | baz=280,slow=74,SNR=14 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.80 | 82 | T | T | 14 27 15.8 | |
| | baz=278,slow=75,SNR=8.5 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.80 | 82 | T | T | 14 27 15.8 | |
| | baz=278,slow=75,SNR=3.7 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.80 | 84 | T | T | 14 27 14.6 | |
| | baz=280,slow=74,SNR=11 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.81 | 84 | T | T | 14 27 16.0 | |
| | baz=280,slow=74,SNR=8.9 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.81 | 82 | T | T | 14 27 16.7 | |
| | baz=278,slow=75,SNR=5.5 | | | | | | |
| PETK | Petropavlovsk- | 43.41 | 31 | P | P | 13 41 38.4 | +0.7 |
| | 0.4nm,0.5s,baz=199,slow=3.5,SNR=4.2 | | | | | | |
| ZALV | Zalesovo Beam | 43.94 | 330 | P | P | 13 41 42.3 | +0.4 |
| | 1.2nm,0.7s,baz=128,slow=7.7,SNR=5.9 | | | | | | |
| ZALV | | | | pP | pP | 13 41 53.9 | +0.6 |
| | 3.5nm,0.7s,baz=116,slow=7.3,SNR=6.9 | | | | | | |
| ASAR | Alice Springs | 45.01 | 164 | P | P | 13 41 49.8 | -1.1 |
| | 1.6nm,0.3s,baz=341,slow=6.9,SNR=34 | | | | | | |
| KURK | Kurchatov | 45.50 | 323 | P | P | 13 41 55.3 | +0.9 |
| KURBB | Kurchatov Arra | 45.51 | 323 | P | P | 13 41 55.3 | +0.8 |
| | 2.4nm,0.2s,baz=119,slow=7.3,SNR=6.7 | | | | | | |
| ILAR | Eielson Array | 72.97 | 27 | P | P | 13 45 03.5 | -0.7 |
| | 0.2nm,0.6s,baz=276,slow=5.4,SNR=4.5 | | | | | | |
| ILAR | | | | pP | pP | 13 45 13.1 | -3.2 |
| | 0.3nm,0.5s,baz=273,slow=4.9,SNR=3.8 | | | | | | |
| FINES | FINESS Array B | 75.20 | 330 | P | P | 13 45 19.4 | +2.2 |
| | 3.9nm,0.9s,baz=97,slow=11,SNR=2.8 | | | | | | |

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*IDC **05** 13:44:04.2±3.1, 37°.31N×72°.30E, h145km±26km, mb3.7/5, mb1 3.8/12, mb1mx3.4/48, mbtmp4.2/12, Error ellipse: s-maj=26.8km s-min=16.9km az=159.0*
*NNC **05** 13:44:11.8±1.3, 37°.88N×72°.04E, h180km±12km, mb3.2, mpv4.1, Error ellipse: s-maj=12.5km s-min=6.5km az=153.0*
**ISC 05 13:44:11.4**±0.9, **37°.82N**±0°.07×**72°.01E**±0°.07, **h200**km, **n49**, σ**1s.53**/44, **mb4.0**/5, **4C-10D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 2.48 | 28 | ⇓P | Pn | 13 44 53.9 | -1.4 |
| | 24nm,0.3s | | | | | | |
| DZET | Dzherino | 2.69 | 292 | ⇓P | Pn | 13 44 57.0 | -0.5 |
| | 26nm,0.2s | | | | | | |
| DZET | | | | ⇑S | Sn | 13 45 31.9 | -1.5 |
| | 537nm,0.6s | | | | | | |
| AML | Almayashu | 4.50 | 16 | P | Pn | 13 45 19.1 | -0.6 |
| | SNR=15 | | | | | | |
| MNAS | Manas | 4.68 | 5 | ⇓P | Pn | 13 45 21.8 | 0.0 |
| | 36nm,0.5s | | | | | | |
| MNAS | | | | ⇓S | Sn | 13 46 15.8 | -1.4 |
| | 128nm,0.6s | | | | | | |
| UCH | Uchtor | 4.80 | 23 | P | Pn | 13 45 22.8 | -0.9 |
| | SNR=39 | | | | | | |
| KZA | Kyzart | 4.93 | 29 | P | Pn | 13 45 23.5 | -1.7 |
| | SNR=6.0 | | | | | | |
| EKS2 | Erkin-Say | 5.02 | 15 | P | Pn | 13 45 25.9 | -0.2 |
| | SNR=23 | | | | | | |
| AAK | Ala-Archa | 5.17 | 21 | ⇑P | Pn | 13 45 27.6 | -0.4 |
| | 20nm,0.5s | | | | | | |
| AAK | | | | ⇓S | Sn | 13 46 27.2 | -1.4 |
| | 76nm,0.7s | | | | | | |
| AAK | Ala-Archa | 5.17 | 21 | P | Pn | 13 45 27.0 | -1.0 |
| | 11nm,0.3s,baz=208,slow=6.6,SNR=89 | | | | | | |
| AAK | | | | S | Sn | 13 46 27.5 | -1.1 |
| | 7.1nm,0.3s,baz=319,slow=22,SNR=27 | | | | | | |
| AAK | Ala-Archa | 5.17 | 21 | P | Pn | 13 45 27.8 | -0.2 |
| | SNR=45 | | | | | | |
| KBK | Karagaybulak | 5.33 | 24 | P | Pn | 13 45 30.1 | 0.0 |
| | SNR=12 | | | | | | |
| KK31 | Karatay Array | 5.40 | 348 | P | Pn | 13 45 31.4 | +0.5 |
| | 9.1nm,0.3s,baz=163,slow=13,SNR=206 | | | | | | |
| KK31 | | | | ⇑S | Sn | 13 46 32.2 | -1.5 |
| | 121nm,0.4s,baz=163,slow=23 | | | | | | |
| CHMS | Chumysh | 5.58 | 21 | P | Pn | 13 45 33.0 | -0.2 |
| | SNR=6.0 | | | | | | |
| USP | Ospenovka | 5.76 | 18 | P | Pn | 13 45 35.7 | +0.2 |
| | SNR=5.2 | | | | | | |
| TKM2 | Tokmak 2 | 5.79 | 27 | ⇑P | Pn | 13 45 34.9 | -1.0 |
| | 4.5nm,0.5s | | | | | | |
| TKM2 | Tokmak 2 | 5.79 | 27 | P | Pn | 13 45 35.0 | -1.0 |
| | SNR=12 | | | | | | |
| DHRM | DHARAMSHALA | 6.58 | 146 | eP | Pn | 13 45 38.6 | -7.8 |
| DHRM | | | | eS | Sn | 13 46 45.8 | -16 |
| DHRM | | | | AML | AML | 13 46 49.4 | |
| | comp=N,163nm,0.6s | | | | | | |
| DHRM | | | | AML | AML | 13 46 49.4 | |
| | comp=E,223nm,0.4s | | | | | | |
| SMLA | Simla | 7.92 | 146 | eP | Pn | 13 45 54.9 | -8.6 |
| SMLA | | | | eS | Sn | 13 47 16.7 | -16 |
| SMLA | | | | AML | AML | 13 47 17.9 | |
| | comp=N,117nm,0.5s | | | | | | |
| SMLA | | | | AML | AML | 13 47 18.3 | |
| | comp=E,164nm,0.4s | | | | | | |
| KHET | Khetri | 10.23 | 161 | eP | Pn | 13 46 24.3 | -9.3 |
| KHET | | | | eS | Sn | 13 48 07.0 | -21 |
| KHET | | | | AML | AML | 13 48 10.3 | |
| | comp=N,7.0nm,0.9s | | | | | | |
| KHET | | | | AML | AML | 13 48 29.6 | |
| | comp=E,51nm,0.6s | | | | | | |
| JASL | Jaisalmer | 10.90 | 185 | eP | Pn | 13 46 34.0 | -8.3 |
| GEYT | Alibeck | 10.98 | 275 | P | Pn | 13 46 41.8 | -1.4 |
| | comp=E,0.6nm,0.3s,baz=98,slow=19,SNR=2.9 | | | | | | |
| GEYT | | | | S | Sn | 13 48 43.2 | -2.5 |
| | comp=E,0.6nm,0.3s,baz=86,slow=20,SNR=3.8 | | | | | | |
| MK31 | Makanchi Array | 11.75 | 37 | P | Pn | 13 46 51.6 | -1.4 |
| | comp=E,0.4nm,0.4s,baz=225,slow=14,SNR=8.6 | | | | | | |
| MKAR | Makanchi Array | 11.75 | 37 | P | Pn | 13 46 51.5 | -1.5 |
| | comp=E,0.1nm,0.3s,baz=225,slow=14,SNR=11 | | | | | | |
| KURBB | Kurchatov Arra | 13.62 | 18 | P | P | 13 47 17.8 | -0.9 |
| | comp=E,0.1nm,0.3s,baz=207,slow=11,SNR=19 | | | | | | |
| KOLN | Koldanda | 13.97 | 132 | eP | Pn | 13 47 13.4 | -7.7 |
| | comp=E,13nm,0.4s | | | | | | |
| AB31 | Akbulak array | 14.37 | 327 | P | Pn | 13 47 26.0 | +0.3 |
| | comp=E,6.0nm,0.6s,baz=141,slow=11,SNR=66 | | | | | | |
| AB31 | | | | S | S | 13 50 00.0 | -5.4 |
| | comp=E,4.4nm,0.5s,baz=133,slow=24,SNR=11 | | | | | | |
| GKN | Gorkha | 14.42 | 129 | eP | Pn | 13 47 19.5 | -7.1 |
| | comp=E,25nm,0.4s | | | | | | |
| VOSK | Vostochnaya | 14.92 | 358 | ⇓P | Pn | 13 47 32.2 | -0.2 |
| | comp=E,3.5nm,1.1s | | | | | | |
| KKN | Kakani | 14.97 | 128 | eP | Pn | 13 47 26.4 | -7.0 |
| | comp=E,40nm,0.6s | | | | | | |
| PKIN | Phulchoki | 15.19 | 128 | eP | Pn | 13 47 29.5 | -6.7 |
| | comp=E,27nm,0.6s | | | | | | |
| PKI | Pulchoki | 15.21 | 128 | eP | Pn | 13 47 29.6 | -6.8 |
| | comp=E,31nm,0.7s | | | | | | |
| BVA0 | Borovoye Array | 15.25 | 356 | P | P | 13 47 36.4 | -0.4 |
| | comp=E,7.1nm,0.8s,baz=234,slow=42,SNR=33 | | | | | | |
| BVAR | Borovoye Array | 15.25 | 356 | P | P | 13 47 36.8 | +0.1 |
| | comp=E,0.6nm,0.3s,baz=164,slow=12,SNR=32 | | | | | | |
| BVAR | | | | S | Sn | 13 50 28.2 | +1.1 |
| | comp=E,0.2nm,0.3s,baz=163,slow=22,SNR=4.1 | | | | | | |
| BHPL | Bhopal | 15.26 | 161 | eP | Pn | 13 47 34.8 | -2.0 |
| BHPL | | | | AMB | AMB | 13 47 43.4 | |
| | comp=Z,6.5nm,1.9s | | | | | | |
| GUN | Gumba | 15.26 | 126 | eP | Pn | 13 47 30.2 | -7.0 |
| | comp=Z,39nm,0.7s | | | | | | |
| ZRNK | Zerenda | 15.28 | 353 | ⇓P | P | 13 47 37.5 | +0.4 |
| | comp=Z,5.4nm,0.6s | | | | | | |
| BRVK | Borovoye | 15.29 | 356 | ⇓P | P | 13 47 37.3 | +0.2 |
| | comp=Z,13nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 16.09 | 326 | ⇓P | Pn | 13 47 48.6 | +2.0 |
| | comp=Z,7.0nm,0.6s | | | | | | |
| AKTO | | | | ⇓S | S | 13 50 43.4 | -0.9 |
| | comp=Z,3.4nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 16.09 | 326 | P | Pn | 13 47 48.8 | +2.2 |
| | comp=Z,1.6nm,0.3s,baz=127,slow=12,SNR=23 | | | | | | |
| AKTO | | | | S | S | 13 50 45.0 | +0.6 |
| | comp=Z,0.5nm,0.3s,baz=165,slow=22,SNR=7.0 | | | | | | |
| RAMN | Ramite | 16.39 | 127 | eP | P | 13 47 43.6 | -6.3 |
| | comp=Z,27nm,0.5s | | | | | | |
| TAPN | Taplejung | 16.83 | 124 | eP | P | 13 47 48.8 | -6.0 |
| | comp=Z,7.0nm,0.3s | | | | | | |
| ODAN | Odare | 16.96 | 126 | eP | P | 13 47 49.7 | -6.4 |
| | comp=Z,27nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 18.38 | 25 | P | P | 13 48 11.9 | +0.9 |
| | comp=Z,1.3nm,0.3s,baz=221,slow=10.0,SNR=20 | | | | | | |
| ARU | Arti | 20.67 | 339 | P | Pn | 13 48 38.4 | -2.8 |
| | comp=Z,0.2nm,0.3s,baz=149,slow=5.9,SNR=2.6 | | | | | | |
| ARCES | ARCESS Array B | 40.24 | 337 | P | P | 13 51 30.9 | +2.7 |
| | comp=Z,5.5nm,1.1s,baz=108,slow=6.0,SNR=3.9 | | | | | | |
| NOA | NORSAR Array B | 43.82 | 322 | P | P | 13 51 59.9 | +2.6 |
| | comp=Z,1.5nm,0.9s,baz=93,slow=8.0,SNR=3.0 | | | | | | |
| TORD | Torodi Ar. Bea | 66.55 | 269 | P | P | 13 54 40.2 | 0.0 |
| | comp=Z,1.5nm,0.5s,baz=48,slow=5.7,SNR=21 | | | | | | |
| INK | Inuvik | 72.47 | 10 | P | P | 13 55 17.1 | +1.7 |
| | comp=Z,7.9nm,1.2s,baz=331,slow=10,SNR=3.4 | | | | | | |
| WRA | Warramunga Arr | 82.01 | 123 | P | P | 13 56 05.2 | -4.0 |
| | comp=Z,0.3nm,0.3s,baz=323,slow=4.8,SNR=5.0 | | | | | | |

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*IDC **05** 13:50:43.2±9.0, 22°.83S×179°.99E, h650km±81km, mb3.1/6, mb1 3.2/7, mb1mx3.0/23, mbtmp4.1/7, Error ellipse: s-maj=99.3km s-min=23.1km az=50.0*
**ISC 05 13:50:42.5**±2.2, **22°.7S**±0°.2×**179°.9W**±0°.3, **h650**km, **n7**, σ**1s.24**/9, **mb3.8**/6, **South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 15.74 | 189 | P | P | 13 53 54.5 | -0.9 |
| | 0.4nm,0.3s,baz=283,slow=3.9,SNR=6.1 | | | | | | |
| URZ | | | | S | S | 13 56 33.4 | +1.3 |
| | 0.4nm,0.3s,baz=221,slow=22,SNR=8.1 | | | | | | |
| CTA | Charters Tower | 31.56 | 268 | P | P | 13 56 14.7 | -0.4 |
| | 1.7nm,0.4s,baz=90,slow=11,SNR=5.7 | | | | | | |
| ASAR | Alice Springs | 42.32 | 259 | P | P | 13 57 43.1 | +0.8 |
| | 2.9nm,0.6s,baz=92,slow=9.1,SNR=87 | | | | | | |
| ASAR | | | | PcP | PcP | 13 59 20.4 | +0.4 |
| | 0.5nm,0.6s,baz=111,slow=3.7,SNR=5.0 | | | | | | |
| WRA | Warramunga Arr | 42.58 | 265 | P | P | 13 57 44.1 | -0.2 |
| | 2.1nm,0.5s,baz=101,slow=8.9,SNR=6.6 | | | | | | |
| QSPA | South Pole Qui | 67.40 | 180 | P | P | 14 00 36.4 | +1.2 |
| | 1.0nm,0.8s,baz=181,slow=3.8,SNR=6.9 | | | | | | |
| MAW | Mawson | 78.92 | 200 | P | P | 14 01 38.2 | -2.0 |
| | 1.3nm,0.5s,baz=117,slow=6.8,SNR=6.2 | | | | | | |
| CMAR | Chiang Mai Arr | 89.17 | 290 | P | P | 14 02 32.1 | +0.8 |
| | 0.7nm,0.8s,baz=149,slow=3.7,SNR=5.0 | | | | | | |

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*ISCJB **05** 13:57:01.1±0.9, 31°.50S±0°.04×69°.26W±0°.06, h123km±10km, Error ellipse: s-maj=8.1km s-min=6.0km az=156.9*
*SJA **05** 13:57:01.7±0.9, 31°.53S×69°.17W, h112km±5km, ML3.4*
*GUC **05** 13:57:01.5±0.7, 31°.49S×69°.34W, h123km±33km, ML3.4*
**ISC 05 13:57:02.0**±1.6, **31°.51S**±0°.04×**69°.25W**±0°.06, **h115**km±12km, **n19**, σ**0s.57**/24, **1D, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RTLS | Leoncito | 0.30 | 188 | eP | Pn | 13 57 18.4 | -0.2 |
| RTLS | | | | eS | Sn | 13 57 32.0 | +0.8 |
| SJA | San Juan | 0.59 | 92 | eP | Pn | 13 57 19.9 | -0.1 |
| RTLL | Cerro Villicun | 0.68 | 75 | eP | Pn | 13 57 20.1 | -0.7 |
| RTCV | Cerro Valdivia | 0.70 | 121 | eP | Pn | 13 57 20.7 | -0.2 |
| AUSP | Uspallata | 0.73 | 190 | eP | Pn | 13 57 21.5 | +0.1 |
| AMOG | MOGNA | 0.86 | 49 | eP | Pn | 13 57 22.0 | -0.3 |
| CFAA | Coronel Fontan | 0.87 | 97 | eP | Pn | 13 57 21.8 | -0.5 |
| ASAL | Salagasta | 1.14 | 162 | eP | Pn | 13 57 25.4 | +0.3 |
| ARCO | CERRO ARCO | 1.36 | 169 | eP | Pn | 13 57 28.0 | +0.4 |
| ARCO | | | | AML | AML | 13 57 49.0 | |
| | comp=Z,553nm,0.2s | | | | | | |
| AAGR | Agrelo | 1.61 | 167 | eP | Pn | 13 57 30.8 | +0.2 |
| TLL | Tololo Astrono | 1.89 | 314 | eP | Pn | 13 57 34.4 | +0.3 |
| TLL | | | | eS | Sn | 13 57 58.8 | +0.3 |
| TLL | | | | AML | AML | 13 58 01.2 | |
| | comp=N,451nm,0.3s | | | | | | |
| ACAN | Cantantal | 1.91 | 114 | eP | Pn | 13 57 33.9 | -0.2 |
| PEL | Peldehue | 2.04 | 216 | eP | Pn | 13 57 35.2 | -0.5 |
| PEL | | | | i S | Sn | 13 58 01.7 | +0.2 |
| PEL | | | | AML | AML | 13 58 05.8 | |
| | comp=E,190nm,0.3s | | | | | | |
| AGUA | GUANDACOL | 2.11 | 18 | eP | Pn | 13 57 37.9 | +1.1 |
| CLCH | Cerro Calan | 2.18 | 210 | i S | Sn | 13 58 05.1 | +0.4 |
| CLCH | | | | AML | AML | 13 58 15.8 | |
| | comp=E,136nm,0.7s | | | | | | |
| LSCH | La Serena | 2.34 | 312 | i P | Pn | 13 57 39.2 | -0.4 |
| LSCH | | | | i S | Sn | 13 58 07.2 | -1.2 |
| LSCH | | | | AML | AML | 13 58 07.6 | |
| | comp=N,211nm,0.3s | | | | | | |
| LCO | Las Campanas | 2.79 | 333 | ⇓iP | Pn | 13 57 45.7 | +0.1 |
| LCO | | | | i S | Sn | 13 58 18.5 | -0.6 |
| LCO | | | | AML | AML | 13 58 19.4 | |
| | comp=E,268nm,0.4s | | | | | | |
| VCA | Vinchina | 2.90 | 18 | eP | Pn | 13 57 47.7 | +0.7 |
| VCA | | | | AML | AML | 13 58 28.1 | |
| | comp=Z,117nm,0.3s | | | | | | |
| MRA | San Martin | 3.13 | 108 | eP | Pn | 13 57 49.4 | -0.6 |
| MRA | | | | AML | AML | 13 58 53.7 | |
| | comp=Z,53nm,0.7s | | | | | | |

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*IDC **05** 14:12:07.6±2.8, 13°.86N×90°.15W, h0km, mb3.7/2, mb1 4.0/4, mb1mx3.7/33, mbtmp3.6/4, ML3.9/2, MS3.4/1, Ms1 3.4/1, ms1mx2.6/32, Error ellipse: s-maj=140.9km s-min=46.3km az=38.0*
*ISCJB **05** 14:12:10.5±1.0, 13°.30N±0°.09×90°.88W±0°.05, h38km, mb3.7/2, MS3.3/1, Error ellipse: s-maj=13.1km s-min=4.7km az=20.9*
*CASC **05** 14:12:11.7±1.5, 13°.39N×90°.74W, h19km±7km, MD3.8, ML3.5*
*MEX **05** 14:12:12.3±0.5, 13°.17N×91°.43W, h9km±122km, MD4.0*
**ISC 05 14:12:11.9**±1.1, **13°.3N**±0°.1×**90°.89W**±0°.05, **h38**km, **n28**, σ**1s.49**/34, **1C-4D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IXG | Ixpaco | 0.93 | 27 | eP | Pn | 14 12 27.0 | -1.6 |
| PCG | Pacaya | 1.09 | 14 | eP | Pn | 14 12 30.4 | -0.4 |
| FUG | Fuego 3 | 1.11 | 2 | eP | Pn | 14 12 30.5 | -0.5 |
| JAT | Jato | 1.22 | 323 | eP | Pn | 14 12 32.6 | +0.2 |
| SBLS | San Blas | 1.33 | 68 | ⇓eP | Pn | 14 12 32.4 | -1.6 |
| RTR | El Retiro | 1.33 | 65 | eP | Pn | 14 12 32.7 | -1.3 |
| NBG | Las Nubes | 1.35 | 23 | eP | Pn | 14 12 35.2 | +0.8 |
| SNJE | San Jose | 1.35 | 67 | eP | Pn | 14 12 33.1 | -1.3 |
| RBDL | Robledal | 1.40 | 56 | ⇓eP | Pn | 14 12 33.9 | -1.1 |
| BOQS | Boqueron | 1.61 | 76 | eP | Pn | 14 12 37.5 | -0.5 |
| SNET | Serv Nac Est T | 1.65 | 78 | eP | Pn | 14 12 37.2 | -1.2 |
| SNET | | | | eS | Sn | 14 12 57.5 | -0.8 |
| SNET | | | | AML | AML | 14 13 00.2 | |
| | comp=Z,657nm,0.3s | | | | | | |
| LFU | La Fuente | 1.77 | 76 | eP | Pn | 14 12 39.2 | -0.8 |
| LFU | | | | eS | Sn | 14 12 59.3 | -2.1 |
| LFRS | El Faro | 1.80 | 81 | eP | Pn | 14 12 39.9 | -0.6 |
| LFRS | | | | eS | Sn | 14 13 01.6 | -0.5 |
| MTO2 | Montecristo 2 | 1.82 | 54 | ⇓eP | Pn | 14 12 40.4 | -0.4 |
| LBRS | Las Brisas | 1.84 | 77 | eP | Pn | 14 12 41.0 | +0.1 |
| SNVI | San Vicente | 2.01 | 82 | eP | Pn | 14 12 43.3 | -0.1 |
| MRL | Marmol | 2.07 | 34 | ⇑eP | Pn | 14 12 44.8 | +0.6 |
| CAHU | Cacacuatique | 2.64 | 80 | eP | Pn | 14 12 52.1 | 0.0 |
| CNCH | Conchagua | 2.97 | 91 | eP | Pn | 14 12 56.2 | -0.4 |
| CCIG | Comitan | 3.17 | 338 | i P | Pn | 14 13 01.5 | +2.2 |
| CCIG | | | | i S | Sn | 14 13 36.1 | +0.1 |
| PCIG | | 3.26 | 316 | eP | Pn | 14 12 58.3 | -2.1 |
| PCIG | | | | eS | Sn | 14 13 33.8 | -4.3 |
| COPN | Copaltepe | 4.34 | 105 | ⇓eP | Pn | 14 13 15.4 | +0.1 |
| CMIG | Matias Romero | 5.37 | 315 | Pn | Pn | 14 13 29.7 | +0.3 |
| | comp=Z,1.3nm,0.3s,baz=119,slow=10,SNR=7.0 | | | | | | |
| CMIG | | | | Sn | Sn | 14 14 26.7 | -3.3 |
| | comp=Z,2.1nm,0.3s,baz=121,slow=18,SNR=5.9 | | | | | | |
| TXAR | Lajitas Array | 19.85 | 325 | P | Pn | 14 16 41.7 | +0.1 |
| | comp=Z,0.1nm,0.3s,baz=148,slow=11,SNR=9.0 | | | | | | |
| SADO | Sadowa | 32.89 | 15 | LR | LR | 14 31 43.3 | |
| | comp=Z,58nm,19.3s,baz=78,slow=36 | | | | | | |
| NVAR | Mina Array Bea | 34.87 | 321 | P | P | 14 19 02.2 | +2.4 |
| | comp=Z,1.7nm,0.8s,baz=134,slow=9.1,SNR=9.9 | | | | | | |
| NVAR | | | | PcP | PcP | 14 21 34.3 | +2.0 |
| | comp=Z,0.4nm,0.8s,baz=146,slow=3.9,SNR=3.5 | | | | | | |
| ILAR | Eielson Array | 63.87 | 337 | P | P | 14 22 39.6 | -0.8 |
| | comp=Z,0.4nm,1.0s,baz=124,slow=5.8,SNR=6.1 | | | | | | |
| CMAR | Chiang Mai Arr | 146.96 | 343 | PKPbc | PKPbc | 14 31 51.2 | 0.0 |
| | comp=Z,1.0nm,0.6s,baz=339,slow=3.8,SNR=8.5 | | | | | | |

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*IDC **05** 14:13:19.6±1.0, 7°.70S×158°.59E, h0km, mb3.7/5, mb1 3.9/7, mb1mx3.7/33, mbtmp3.8/7, ML3.7/2, MS2.8/2, Ms1 2.8/2, ms1mx2.6/22, Error ellipse: s-maj=28.2km s-min=25.0km az=62.0*
*ISCJB **05** 14:13:26.3±0.9, 7°.8S±0°.1×158°.5E±0°.1, h61km, mb3.6/5, Error ellipse: s-maj=22.4km s-min=10.9km az=45.0*
**ISC 05 14:13:27.1**±0.9, **7°.9S**±0°.2×**158°.6E**±0°.2, **h61**km, **n16**, σ**1s.91**/10, **mb3.6**/5, **Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HNR | Honiara | 2.06 | 140 | Pn | Pn | 14 13 57.0 | -2.4 |
| | 56nm,0.3s,baz=337,slow=13,SNR=28 | | | | | | |
| HNR | | | | Sn | Sn | 14 14 25.0 | +0.9 |
| | 170nm,0.3s,baz=40,slow=22,SNR=6.7 | | | | | | |
| HNR | | | | LR | LR | 14 14 59.4 | |
| | comp=Z,178nm,19.6s,baz=306,slow=46 | | | | | | |
| HNR | Honiara | 2.06 | 140 | eP | Pn | 14 13 55.0 | -4.4 |
| HNR | | | | i S | Sn | 14 14 28.0 | +4.0 |
| PMG | Port Moresby | 11.41 | 261 | LR | LR | 14 20 15.0 | |
| | comp=Z,67nm,21.6s,baz=252,slow=36 | | | | | | |
| DZM | Mont Dzumac | 16.03 | 153 | Pn | P | 14 17 10.0 | -1.3 |
| | 0.1nm,0.3s,baz=357,slow=19,SNR=1.8 | | | | | | |
| WRA | Warramunga Arr | 26.39 | 240 | P | P | 14 18 58.9 | +0.8 |
| | 0.5nm,0.4s,baz=66,slow=9.3,SNR=9.4 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 27.37 | 17 | T | T | 14 47 39.0 | |
| | baz=198,slow=76,SNR=90 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 27.38 | 17 | T | T | 14 47 36.2 | |
| | baz=198,slow=76,SNR=202 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 27.39 | 17 | T | T | 14 47 40.3 | |
| | baz=198,slow=76,SNR=72 | | | | | | |
| ASAR | Alice Springs | 28.41 | 234 | P | P | 14 19 16.4 | +0.2 |
| | 0.1nm,0.4s,baz=61,slow=9.3,SNR=7.2 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.59 | 17 | T | T | 14 49 13.7 | |
| | baz=196,slow=76,SNR=75 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.60 | 17 | T | T | 14 49 15.0 | |
| | baz=196,slow=76,SNR=78 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.61 | 17 | T | T | 14 49 15.0 | |
| | baz=196,slow=76,SNR=94 | | | | | | |
| SONM | Songino Array | 72.02 | 326 | P | P | 14 24 45.4 | +0.7 |
| | 1.6nm,0.8s,baz=124,slow=4.9,SNR=8.1 | | | | | | |
| MKAR | Makanchi Array | 86.42 | 318 | P | P | 14 26 03.2 | +0.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | 0.5nm,0.6s,baz=95,slow=5.8,SNR=6.3 | | | | | | |
| NVAR | Mina Array Bea | 89.46 | 51 | P | P | 14 26 18.3 | +0.2 |
| | 0.2nm,0.5s,baz=250,slow=5.3,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 156.70 | 285 | PKPab | PKPab | 14 33 45.6 | -0.4 |
| | 0.4nm,0.8s,baz=94,slow=2.4,SNR=3.2 | | | | | | |

*ISCJB **05** 14:14:26.6±0.9, 24°.6N±0°.2×94°.8E±0°.3, h112km, mb3.7/6, Error ellipse: s-maj=45.0km s-min=12.7km az=152.4*

*IDC **05** 14:14:28.4±3.6, 24°.67N×94°.89E, h110km±35km, mb3.4/6, mb1 3.5/7, mb1mx3.2/48, mbtmp3.7/7, Error ellipse: s-maj=48.9km s-min=14.5km az=60.0*

**ISC 05 14:14:28.3**±1.1**, 24°.7N**±0°.2×**94°.9E**±0°.3**, h112km, n7, σ0s.89**/8**, mb3.7**/6**, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 7.22 | 148 | P | Pn | 14 16 11.5 | +0.3 |
| | 0.2nm,0.3s,baz=326,slow=13,SNR=12 | | | | | | |
| CMAR | | | | S | Sn | 14 17 44.5 | +13 |
| | baz=322,slow=28,SNR=2.5 | | | | | | |
| MKAR | Makanchi Array | 24.29 | 339 | P | P | 14 19 35.9 | +0.8 |
| | 1.5nm,0.6s,baz=150,slow=9.3,SNR=19 | | | | | | |
| SONM | Songino Array | 24.87 | 19 | P | P | 14 19 40.2 | -0.3 |
| | 0.8nm,0.7s,baz=200,slow=12,SNR=5.6 | | | | | | |
| KURBB | Kurchatov Arra | 28.86 | 338 | P | P | 14 20 16.4 | +0.4 |
| | 0.9nm,0.6s,baz=147,slow=9.4,SNR=8.9 | | | | | | |
| AKASG | Malin Array Be | 56.05 | 316 | P | P | 14 23 55.0 | -0.4 |
| | 0.6nm,0.4s,baz=84,slow=7.4,SNR=3.2 | | | | | | |
| WRA | Warramunga Arr | 58.63 | 136 | P | P | 14 24 14.3 | +0.4 |
| | 0.8nm,0.5s,baz=322,slow=7.4,SNR=9.0 | | | | | | |
| ASAR | Alice Springs | 61.13 | 139 | P | P | 14 24 31.6 | +0.6 |
| | 0.6nm,0.7s,baz=316,slow=6.6,SNR=14 | | | | | | |
| ASAR | | | | pP | pP | 14 24 56.8 | -1.5 |
| | 0.3nm,0.6s,baz=320,slow=6.8,SNR=2.4 | | | | | | |

**IDC 05 14:33:52.7**±3.0**, 19°.54S**×**175°.91W, h176km**±32km, **mb3.6**/3**, mb1 3.8**/5**, mb1mx3.4**/29**, mbtmp4.2**/5**, Error ellipse: s-maj=38.9km s-min=20.1km az=134.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 6.86 | 36 | P | Pn | 14 35 31.1 | -0.1 |
| | 2.7nm,0.3s,baz=257,slow=9.8,SNR=8.3 | | | | | | |
| AFI | | | | S | Sn | 14 36 40.8 | -8.0 |
| | 4.4nm,0.3s,baz=207,slow=17,SNR=7.1 | | | | | | |
| DZM | Mont Dzumac | 16.69 | 258 | P | Pn | 14 37 41.4 | +4.7 |
| | 0.8nm,0.3s,baz=177,slow=2.1,SNR=9.2 | | | | | | |
| URZ | Urewera | 19.61 | 197 | P | P | 14 38 07.4 | -0.1 |
| | 2.4nm,0.3s,baz=2.2,slow=2.8,SNR=15 | | | | | | |
| URZ | | | | S | S | 14 41 31.2 | -8.1 |
| | 0.2nm,0.3s,baz=0.0,slow=15,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 46.65 | 256 | P | P | 14 42 04.1 | +0.2 |
| | 4.6nm,0.6s,baz=96,slow=8.5,SNR=127 | | | | | | |
| ASAR | | | | PcP | PcP | 14 43 34.1 | -0.8 |
| | 0.2nm,0.7s,baz=93,slow=4.4,SNR=2.7 | | | | | | |
| WRA | Warramunga Arr | 46.69 | 261 | P | P | 14 42 03.9 | -0.3 |
| | 1.2nm,0.6s,baz=95,slow=7.9,SNR=52 | | | | | | |
| NVAR | Mina Array Bea | 78.99 | 43 | P | P | 14 45 37.5 | +0.1 |
| | 0.5nm,0.7s,baz=215,slow=7.6,SNR=4.0 | | | | | | |

*IDC **05** 14:34:46.3±0.8, 43°.64N×39°.91E, h0km, mb3.8/5, mb1 3.9/10, mb1mx3.6/37, mbtmp3.8/10, ML4.0/5, Error ellipse: s-maj=14.7km s-min=9.4km az=7.0*

*ISCJB **05** 14:34:47.3±0.8, 43°.71N±0°.02×39°.81E±0°.03, h5km±5km, mb3.8/9, Error ellipse: s-maj=4.2km s-min=3.4km az=168.8*

*MOS **05** 14:34:47.3±1.4, 43°.57N×39°.78E, h18km, mb4.3/6, Error ellipse: s-maj=0.1km s-min=0.0km az=22.7*

*MOS Felt (III) at Sochi.*

*NEIC **05** 14:34:48.5±0.7, 43°.77N×39°.81E, h10km, mb3.5/1, Error ellipse: s-maj=13.5km s-min=8.0km az=173.0*

*NEIC Felt [III] at Sochi.*

*CSEM **05** 14:34:48.0±0.2, 43°.72N×39°.83E, h2km, mb4.1/6, Error ellipse: s-maj=5.1km s-min=4.6km az=10.0*

**ISC 05 14:34:47.8**±1.2**, 43°.68N**±0°.03×**39°.89E**±0°.02**, h3km**±9km**, n93, σ1s.50**/117**, mb3.9**/9**, 1C-6D, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOC | Sochi | 0.16 | 231 | d iPG | Pg | 14 34 51.3 | +0.4 |
| SOC | | | | e | | 14 34 57.7 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,3μm,0.4s | | | | | | |
| SOC | | | | smax | smax | | |
| | comp=N,4.0nm,0.6s | | | | | | |
| SOC | | | | smax | smax | | |
| | comp=E,5μm,0.6s | | | | | | |
| SOC | Sochi | 0.16 | 231 | i Pg | Pg | 14 34 51.3 | +0.4 |
| | comp=E,3μm,0.4s | | | | | | |
| DOMR | Dombai | 1.32 | 107 | ePG | Pn | 14 35 13.0 | -0.4 |
| DOMR | | | | eS | Sg | 14 35 31.5 | +1.2 |
| DOMR | Dombai | 1.32 | 107 | ePg | Pn | 14 35 13.0 | -0.4 |
| DOMR | | | | eSg | Sg | 14 35 31.5 | +1.2 |
| KIV | Kislovodsk | 2.04 | 81 | ePN | Pn | 14 35 23.5 | +0.3 |
| KIV | Kislovodsk | 2.04 | 81 | ePn | Pn | 14 35 23.6 | +0.4 |
| KIV | | | | eSn | Sn | 14 35 48.5 | -0.8 |
| KIV | Kislovodsk | 2.04 | 81 | ePn | Pn | 14 35 23.5 | +0.3 |
| ERBR | Yeremizino-Bor | 2.08 | 12 | ePN | Pn | 14 35 23.2 | -0.4 |
| ERBR | | | | eS | Sb | 14 35 51.2 | -1.2 |
| ERBR | Yeremizino-Bor | 2.08 | 12 | ePn | Pn | 14 35 23.2 | -0.4 |
| ERBR | | | | eSn | Sb | 14 35 51.2 | -1.2 |
| ANN | Anapa | 2.09 | 303 | ePN | Pb | 14 35 25.0 | -1.3 |
| ANN | Anapa | 2.09 | 303 | ePn | Pb | 14 35 25.0 | -1.3 |
| BEYR | Belyy Ugol+ | 2.15 | 80 | ⇑iPN | Pn | 14 35 25.5 | +0.9 |
| BEYR | | | | i S | Sn | 14 35 52.3 | +0.6 |
| BEYR | Belyy Ugol+ | 2.15 | 80 | i Pn | Pn | 14 35 25.5 | +0.9 |
| BEYR | | | | i Sn | Sn | 14 35 52.3 | +0.6 |
| KBZ | Khabaz | 2.18 | 88 | Pn | Pn | 14 35 26.1 | +1.1 |
| | comp=E,7.6nm,0.3s,baz=269,slow=10,SNR=54 | | | | | | |
| KBZ | | | | Sn | Sb | 14 35 54.5 | -0.9 |
| | comp=E,9.3nm,0.3s,baz=196,slow=20,SNR=6.9 | | | | | | |
| KBZ | Khabaz | 2.18 | 88 | PN | Pn | 14 35 26.1 | +1.1 |
| KBZ | | | | | | 14 35 54.5 | |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.3s | | | | | | |
| KBZ | | | | smax | smax | | |
| | comp=N,9.0nm,0.3s | | | | | | |
| PYA1 | Pyatigorsk | 2.35 | 80 | ePN | Pn | 14 35 27.1 | -0.3 |
| PYA1 | | | | eS | Sn | 14 35 57.8 | +1.0 |
| PYA1 | Pyatigorsk | 2.35 | 80 | ePn | Pn | 14 35 27.1 | -0.3 |
| PYA1 | | | | eSn | Sn | 14 35 57.8 | +1.0 |
| KBTC | Kuba-Taba | 2.56 | 86 | i PN | Pn | 14 35 30.6 | +0.4 |
| KBTC | | | | eS | Sn | 14 36 02.0 | +0.2 |
| KBTC | Kuba-Taba | 2.56 | 86 | i Pn | Pn | 14 35 30.6 | +0.4 |
| KBTC | | | | eSn | Sn | 14 36 02.0 | +0.2 |
| DBOC | Borcka | 2.68 | 150 | i P | Pb | 14 35 35.7 | -0.7 |
| DBOC | | | | i S | Sn | 14 36 01.9 | -3.0 |
| DBOC | Borcka | 2.68 | 150 | P | Pb | 14 35 35.7 | -0.7 |
| DBOC | | | | S | Sn | 14 36 01.9 | -3.0 |
| ONI | Oni | 2.83 | 111 | P | Pn | 14 35 34.8 | +0.8 |
| ONI | Oni | 2.83 | 111 | PN | Pn | 14 35 34.7 | +0.8 |
| ONI | Oni | 2.83 | 111 | P | Pn | 14 35 34.8 | +0.8 |
| GRSN | GIRESUNGRSN | 3.01 | 204 | i P | Pn | 14 35 35.0 | -1.4 |
| GRSN | | | | i S | Sn | 14 36 13.0 | +0.1 |
| GRSN | GIRESUNGRSN | 3.01 | 204 | P | Pn | 14 35 35.0 | -1.4 |
| GRSN | | | | S | Sn | 14 36 13.0 | +0.1 |
| ZEI | Tsey | 3.07 | 106 | ePN | Pn | 14 35 37.9 | +0.5 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,98nm,0.6s | | | | | | |
| ZEI | Tsey | 3.07 | 106 | ePn | Pn | 14 35 37.9 | +0.5 |
| | comp=Z,98nm,0.6s | | | | | | |
| DDEM | Demirkent | 3.11 | 153 | i P | Pn | 14 35 40.3 | +2.4 |
| DDEM | | | | i S | Sn | 14 36 14.2 | -1.4 |
| DDEM | Demirkent | 3.11 | 153 | P | Pn | 14 35 40.3 | +2.4 |
| DDEM | | | | S | Sn | 14 36 14.2 | -1.4 |
| LACR | Lac | 3.33 | 103 | PN | Pn | 14 35 36.7 | -4.3 |
| BTKR | Batakoyurt | 3.40 | 94 | ePN | Pn | 14 35 39.6 | -2.2 |
| AKH | Akhalkalaki | 3.50 | 129 | P | Pn | 14 35 40.7 | -2.7 |
| AKH | Akhalkalaki | 3.50 | 129 | PN | Pn | 14 35 40.6 | -2.7 |
| AKH | Akhalkalaki | 3.50 | 129 | P | Pn | 14 35 40.7 | -2.7 |
| KELT | Kelkit | 3.56 | 188 | i P | Pn | 14 35 45.5 | +1.3 |
| KELT | | | | i S | Sn | 14 36 28.1 | +1.2 |
| KELT | Kelkit | 3.56 | 188 | P | Pn | 14 35 45.5 | +1.3 |
| KELT | | | | S | Sn | 14 36 28.1 | +1.2 |
| SUSE | Susehri | 3.69 | 200 | i P | Pn | 14 35 46.4 | +0.5 |
| SUSE | | | | i S | Sn | 14 36 32.4 | +2.4 |
| SUSE | Susehri | 3.69 | 200 | P | Pn | 14 35 46.4 | +0.5 |
| SUSE | | | | S | Sn | 14 36 32.4 | +2.4 |
| SUDU | Sudak | 3.71 | 291 | ⇓ePN | Pn | 14 35 44.6 | -1.4 |
| SUDU | | | | eS | Sn | 14 36 29.9 | -0.3 |
| SUDU | Sudak | 3.71 | 291 | ePn | Pn | 14 35 44.6 | -1.4 |
| SUDU | | | | eSn | Sn | 14 36 29.9 | -0.3 |
| KEMA | Kemaliye | 4.53 | 194 | i P | Pn | 14 35 58.8 | +1.4 |
| KEMA | Kemaliye | 4.53 | 194 | P | Pn | 14 35 58.8 | +1.4 |
| KEMA | | | | S | Sb | 14 37 00.2 | -2.9 |
| SEV | Sevastopol’ | 4.56 | 283 | ePN | Pn | 14 35 57.4 | -0.3 |
| SEV | | | | eS | Sn | 14 36 50.4 | -0.8 |
| SEV | Sevastopol’ | 4.56 | 283 | ePn | Pn | 14 35 57.4 | -0.3 |
| SEV | | | | eSn | Sn | 14 36 50.4 | -0.8 |
| DGRG | David-gareji | 4.62 | 117 | P | Pn | 14 36 01.9 | +3.2 |
| DGRG | David-gareji | 4.62 | 117 | PN | Pn | 14 36 01.8 | +3.2 |
| DGRG | David-gareji | 4.62 | 117 | Pn | Pn | 14 36 01.8 | +3.2 |
| BRTR | Keskin Array B | 6.12 | 232 | Pn | Pn | 14 36 19.7 | +0.4 |
| | comp=Z,0.9nm,0.3s,baz=40,slow=10,SNR=11 | | | | | | |
| BRTR | | | | Sn | Sn | 14 37 32.6 | +2.7 |
| | comp=Z,0.7nm,0.3s,baz=65,slow=21,SNR=5.9 | | | | | | |
| BRTR | Keskin Array B | 6.12 | 232 | P | Pn | 14 36 19.7 | +0.4 |
| BRTR | | | | | | 14 37 32.6 | |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| BRTR | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| VORD | Divnogorie | 7.30 | 357 | eP | Pn | 14 36 39.8 | +4.5 |
| VORD | | | | pmax | pmax | | |
| | comp=N,40nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,100nm,0.7s | | | | | | |
| VSR | Storozhevoye | 7.55 | 357 | eP | Pn | 14 36 38.9 | +0.1 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,20nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.0s | | | | | | |
| VSR | Storozhevoye | 7.55 | 357 | eP | Pn | 14 36 38.9 | +0.1 |
| | comp=E,20nm,0.8s | | | | | | |
| VRH | Novokhopyorsk | 7.63 | 9 | eP | Pn | 14 36 41.7 | +2.0 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,30nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.6s | | | | | | |
| VRH | Novokhopyorsk | 7.63 | 9 | eP | Pn | 14 36 41.7 | +2.0 |
| | comp=E,10.0nm,0.5s | | | | | | |
| TIRR | Tirgusor | 8.30 | 279 | eP | Pn | 14 36 47.3 | -1.7 |
| TIRR | Tirgusor | 8.30 | 279 | ePn | Pn | 14 36 46.6 | -2.4 |
| TIRR | | | | eSn | Sn | 14 38 15.2 | -8.1 |
| TIRR | Tirgusor | 8.30 | 279 | eP | Pn | 14 36 47.3 | -1.7 |
| LPSR | Galich’ya Gora | 8.95 | 356 | eP | Pn | 14 36 58.0 | +0.1 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,3.0nm,0.4s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.4s | | | | | | |
| LPSR | Galich’ya Gora | 8.95 | 356 | eP | Pn | 14 36 58.0 | +0.1 |
| | comp=E,10.0nm,0.7s | | | | | | |
| AKASG | Malin Array Be | 10.09 | 318 | Pn | Pn | 14 37 11.5 | -2.1 |
| | comp=E,2.1nm,0.3s,baz=132,slow=13,SNR=4.6 | | | | | | |
| AKASG | | | | Sn | Sn | 14 39 00.7 | -6.5 |
| | comp=E,1.7nm,0.3s,baz=125,slow=23,SNR=4.3 | | | | | | |
| AKASG | Malin Array Be | 10.09 | 318 | eP | Pn | 14 37 15.0 | +1.5 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| AKASG | Malin Array Be | 10.09 | 318 | eP | Pn | 14 37 15.0 | +1.5 |
| | comp=Z,2.0nm,0.3s | | | | | | |
| AKTO | Aktyubinsk | 14.06 | 55 | Pn | Pn | 14 38 05.3 | -2.5 |
| | comp=Z,0.3nm,0.3s,baz=254,slow=10,SNR=6.9 | | | | | | |
| AKTO | | | | Sn | Sn | 14 40 34.2 | -10 |
| | comp=Z,0.1nm,0.3s,baz=165,slow=20,SNR=2.9 | | | | | | |
| KLMR | Klimovskoe | 17.20 | 359 | eP | P | 14 38 50.6 | +0.1 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,33nm,1.5s | | | | | | |
| KLMR | Klimovskoe | 17.20 | 359 | eP | P | 14 38 50.6 | +0.1 |
| | comp=Z,33nm,1.5s | | | | | | |
| ARU | Arti | 17.43 | 36 | d iP | P | 14 38 54.4 | +1.3 |
| ARU | | | | S | S | 14 42 14.8 | +0.1 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.7s | | | | | | |
| ARU | Arti | 17.43 | 36 | P | Pn | 14 38 52.0 | +0.2 |
| | comp=Z,2.7nm,0.6s | | | | | | |
| ARU | Arti | 17.43 | 36 | i P | P | 14 38 54.4 | +1.3 |
| | comp=Z,7.0nm,1.7s | | | | | | |
| ARU | | | | S | S | 14 42 14.8 | +0.1 |
| SVE | Sverdlovsk | 18.58 | 38 | eP | Pn | 14 39 09.3 | +3.3 |
| GERES | GERESS Array B | 18.78 | 295 | P | P | 14 39 07.4 | -0.8 |
| | comp=Z,0.9nm,0.3s,baz=98,slow=9.6,SNR=7.4 | | | | | | |
| GERES | GERESS Array B | 18.78 | 295 | eP | P | 14 39 07.1 | -1.1 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| GERES | GERESS Array B | 18.78 | 295 | eP | P | 14 39 07.1 | -1.1 |
| | comp=Z,1.0nm,0.3s | | | | | | |
| FINES | FINESS Array B | 19.59 | 340 | P | P | 14 39 15.3 | -1.5 |
| | comp=Z,0.9nm,0.3s,baz=157,slow=13,SNR=24 | | | | | | |
| FINES | FINESS Array B | 19.59 | 340 | P | P | 14 39 15.3 | -1.5 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| DAVOX | Davos/Dischmat | 21.30 | 289 | P | P | 14 39 34.3 | -1.4 |
| | comp=Z,5.7nm,0.8s,baz=135,slow=13,SNR=6.1 | | | | | | |
| DAVOX | Davos/Dischmat | 21.30 | 289 | P | P | 14 39 34.3 | -1.4 |
| DAVOX | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| BRVK | Borovoye | 22.11 | 54 | ⇓eP | P | 14 39 46.3 | +2.1 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| BRVK | Borovoye | 22.11 | 54 | eP | P | 14 39 46.3 | +2.1 |
| | comp=Z,4.0nm,0.7s | | | | | | |
| BVA0 | Borovoye Array | 22.17 | 54 | i P | P | 14 39 48.8 | +4.0 |
| BVAR | Borovoye Array | 22.17 | 54 | P | P | 14 39 49.0 | +4.2 |
| | comp=Z,1.5nm,0.8s,baz=251,slow=9.0,SNR=7.2 | | | | | | |
| DZET | Dzherino | 22.24 | 93 | P | P | 14 39 42.9 | -2.9 |
| DZET | | | | | | 14 40 14.1 | |
| HFS | Hagfors | 22.83 | 325 | P | P | 14 39 50.1 | -1.6 |
| | comp=Z,3.7nm,0.5s,baz=129,slow=12,SNR=13 | | | | | | |
| HFS | Hagfors | 22.83 | 325 | P | P | 14 39 50.1 | -1.6 |
| HFS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| NB2 | NORSAR Subarra | 24.35 | 326 | P | P | 14 40 11.4 | +4.6 |
| | comp=Z,4.2nm,1.0s,baz=123,slow=9.3 | | | | | | |
| NOA | NORSAR Array B | 24.35 | 326 | P | P | 14 40 05.3 | -1.5 |
| | comp=Z,0.6nm,0.6s,baz=134,slow=12,SNR=3.4 | | | | | | |
| LVZ | Lovozero | 24.43 | 355 | ⇓P | P | 14 40 08.7 | +1.3 |
| LVZ | | | | pmax | pmax | | |
| | comp=Z,21nm,1.2s | | | | | | |
| LVZ | Lovozero | 24.43 | 355 | P | P | 14 40 08.7 | +1.3 |
| | comp=Z,21nm,1.2s | | | | | | |
| ARCES | ARCESS Array B | 26.95 | 349 | P | P | 14 40 31.3 | +1.2 |
| | comp=Z,2.5nm,0.9s,baz=157,slow=6.6,SNR=5.5 | | | | | | |
| ARCES | ARCESS Array B | 26.95 | 349 | P | P | 14 40 31.3 | +1.2 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| TORD | Torodi Ar. Bea | 44.68 | 239 | P | P | 14 43 01.5 | -0.6 |
| | comp=Z,0.6nm,0.6s,baz=41,slow=8.0,SNR=5.5 | | | | | | |
| ULN | Ulaanbaatar | 45.70 | 60 | ⇓eP | P | 14 43 09.8 | -0.3 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ULN | Ulaanbaatar | 45.70 | 60 | eP | P | 14 43 09.8 | -0.3 |
| | comp=Z,1.0nm,0.8s | | | | | | |

*IDC **05** 14:38:58.5±0.8, 36°.28N×68°.83E, h0km, mb3.9/14, mb1 4.1/19, mb1mx3.9/46, mbtmp4.0/19, ML3.8/4, MS3.4/4, Ms1 3.4/4, ms1mx2.9/47, Error ellipse: s-maj=17.0km s-min=14.9km az=9.0*

*ISCJB **05** 14:38:59.9±0.4, 36°.41N±0°.03×68°.69E±0°.05, h24km, mb3.8/12, MS3.4/3, Error ellipse: s-maj=6.0km s-min=4.4km az=158.8*

*NNC **05** 14:39:02.4±2.3, 36°.37N×68°.60E, h131km±23km, mb3.6, mpv4.3, Error ellipse: s-maj=24.0km s-min=16.3km az=167.0*

**ISC 05 14:39:02.0**±0.6**, 36°.45N**±0°.05×**68°.60E**±0°.06**, h24km, n62, σ2s.02**/61**, mb3.9**/12**, MS3.5**/3**, 13C-11D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.36 | 4 | ⇓Pn | Pn | 14 39 40.8 | +1.5 |
| | 192nm,0.7s | | | | | | |
| DZET | | | | ⇓Sn | Sb | 14 40 13.3 | +0.6 |
| | 671nm,0.5s | | | | | | |
| CEP | Cherat | 3.77 | 133 | P | Pn | 14 40 02.8 | +4.1 |
| CEP | | | | S | Sb | 14 40 59.0 | +5.9 |
| THW | Thamme Wali | 4.47 | 144 | P | Pn | 14 40 11.4 | +3.1 |
| CHCP | Chirah Chowk | 4.73 | 125 | P | Pn | 14 40 15.2 | +3.4 |
| SFK | Sufi-Kurgan | 5.25 | 46 | ⇑Pn | Pn | 14 40 20.8 | +1.6 |
| | 34nm,0.7s | | | | | | |
| SFK | | | | ⇓Sn | Sn | 14 41 20.5 | +1.5 |
| | 112nm,1.0s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 14 41 47.4 | |
| | 196nm,1.0s | | | | | | |
| SARP | Sargodha | 5.63 | 142 | P | Pn | 14 40 26.2 | +2.0 |
| KSH | Kashi | 6.58 | 60 | ePn | Pn | 14 40 33.8 | -3.5 |
| KSH | | | | Sn | Sn | 14 41 43.7 | -7.9 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,56nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=N,91nm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,110nm,0.9s | | | | | | |
| MNAS | Manas | 6.75 | 25 | ⇑Pn | Pn | 14 40 40.5 | +0.9 |
| | comp=E,11nm,0.4s | | | | | | |
| MNAS | | | | ⇑Sn | Sn | 14 41 54.9 | -0.8 |
| | comp=E,46nm,1.0s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 14 42 27.0 | |
| | comp=E,75nm,1.1s | | | | | | |
| KK31 | Karatay Array | 6.81 | 12 | ⇓Pn | Pn | 14 40 41.7 | +1.3 |
| | comp=E,4.5nm,0.5s,baz=198,slow=19,SNR=25 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 14 41 53.1 | -4.0 |
| | comp=E,40nm,0.9s | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 14 42 34.5 | |
| | comp=E,70nm,0.8s,baz=192,slow=28,SNR=7.7 | | | | | | |
| AML | Almayashu | 6.91 | 33 | P | Pn | 14 40 42.9 | +0.8 |
| | SNR=14 | | | | | | |
| UCH | Uchtor | 7.37 | 37 | P | Pn | 14 40 49.3 | +0.9 |
| | SNR=68 | | | | | | |
| EKS2 | Erkin-Say | 7.38 | 31 | P | Pn | 14 40 49.5 | +1.2 |
| | SNR=7.2 | | | | | | |
| KZA | Kyzart | 7.63 | 40 | P | Pn | 14 40 53.0 | +1.1 |
| | SNR=10 | | | | | | |
| AAK | Ala-Archa | 7.67 | 35 | ⇓Pn | Pn | 14 40 53.2 | +0.9 |
| | comp=E,18nm,0.5s | | | | | | |
| AAK | | | | ⇓Sn | Sn | 14 42 21.7 | +3.2 |
| | comp=E,27nm,0.8s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 14 43 00.1 | |
| | comp=E,79nm,1.3s | | | | | | |
| AAK | Ala-Archa | 7.67 | 35 | Pn | Pn | 14 40 53.4 | +1.1 |
| | comp=E,4.5nm,0.3s,baz=207,slow=6.8,SNR=71 | | | | | | |
| AAK | | | | Sn | Sn | 14 42 20.2 | +1.7 |
| | comp=E,0.6nm,0.3s,baz=195,slow=20,SNR=2.6 | | | | | | |
| AAK | | | | Lg | Lg | 14 43 07.3 | |
| | comp=E,0.2nm,0.3s,baz=65,slow=20,SNR=5.5 | | | | | | |
| AAK | Ala-Archa | 7.67 | 35 | P | Pn | 14 40 53.4 | +1.1 |
| | SNR=28 | | | | | | |
| KBK | Karagaybulak | 7.90 | 36 | P | Pn | 14 40 56.8 | +1.3 |
| | SNR=15 | | | | | | |
| CHMS | Chumysh | 8.08 | 34 | P | Pn | 14 40 58.5 | +0.7 |
| | SNR=22 | | | | | | |
| USP | Ospenovka | 8.18 | 32 | P | Pn | 14 40 59.5 | +0.3 |
| | SNR=7.6 | | | | | | |
| ULHL | Ulahol | 8.28 | 43 | P | Pn | 14 41 02.1 | +1.4 |
| | SNR=8.1 | | | | | | |
| TKM2 | Tokmak 2 | 8.42 | 38 | ⇓Pn | Pn | 14 41 02.8 | +0.2 |
| | comp=E,12nm,0.9s | | | | | | |
| TKM2 | Tokmak 2 | 8.42 | 38 | P | Pn | 14 41 03.0 | +0.4 |
| | SNR=15 | | | | | | |
| GEYT | Alibeck | 8.50 | 283 | Pn | Pn | 14 41 02.6 | -1.0 |
| | comp=E,1.4nm,0.3s,baz=102,slow=12,SNR=7.5 | | | | | | |
| GEYT | | | | Sn | Sn | 14 42 31.4 | -7.3 |
| | comp=E,2.9nm,0.3s,baz=120,slow=35,SNR=6.1 | | | | | | |
| GEYT | | | | LR | LR | 14 45 28.8 | |
| | comp=E,116nm,19.4s,baz=105,slow=45 | | | | | | |
| SMLA | Simla | 8.88 | 124 | i S | Sn | 14 42 50.5 | +2.4 |
| SMLA | | | | AML | AML | 14 42 56.0 | |
| | comp=N,575nm,0.4s | | | | | | |
| SMLA | | | | AML | AML | 14 42 57.3 | |
| | comp=E,624nm,0.3s | | | | | | |
| PDGK | Podgornoye | 10.82 | 47 | ⇓Pn | Pn | 14 41 33.9 | -1.4 |
| | comp=E,13nm,0.9s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 14 44 58.7 | |
| | comp=E,28nm,1.5s | | | | | | |
| AB31 | Akbulak array | 14.28 | 336 | P | Pn | 14 42 20.3 | -2.1 |
| | comp=E,2.5nm,0.6s,baz=150,slow=13,SNR=39 | | | | | | |
| AB31 | | | | ⇓S | Sn | 14 44 50.6 | -9.3 |
| | comp=E,10nm,0.9s | | | | | | |
| MK31 | Makanchi Array | 14.53 | 40 | ⇑P | Pn | 14 42 23.6 | -2.3 |
| | comp=E,7.6nm,0.9s,baz=227,slow=12,SNR=31 | | | | | | |
| MKAR | Makanchi Array | 14.53 | 40 | Pn | Pn | 14 42 24.2 | -1.8 |
| | comp=E,0.2nm,0.3s,baz=228,slow=13,SNR=32 | | | | | | |
| MKAR | | | | Lg | Lg | 14 46 46.4 | |
| | comp=E,0.1nm,0.3s,baz=239,slow=25,SNR=2.3 | | | | | | |
| KOLN | Koldanda | 15.36 | 120 | eP | Pn | 14 42 34.4 | -3.0 |
| | comp=E,16nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 15.87 | 24 | ⇑Pn | Pn | 14 42 39.5 | -4.2 |
| | comp=E,7.0nm,0.6s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 14 47 22.5 | |
| | comp=E,18nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 15.87 | 24 | Pn | Pn | 14 42 40.0 | -3.6 |
| | comp=E,0.0nm,0.3s,baz=215,slow=13,SNR=6.6 | | | | | | |
| KURBB | | | | Lg | Lg | 14 47 29.1 | |
| | comp=E,0.0nm,0.3s,baz=209,slow=29,SNR=4.9 | | | | | | |
| AKTO | Aktyubinsk | 15.93 | 335 | Pn | Pn | 14 42 44.7 | +0.3 |
| | comp=E,0.3nm,0.3s,baz=142,slow=15,SNR=6.7 | | | | | | |
| AKTO | | | | Sn | Sn | 14 45 34.8 | -5.4 |
| | comp=E,0.2nm,0.3s,baz=177,slow=19,SNR=3.7 | | | | | | |
| AKTO | | | | Lg | Lg | 14 47 39.9 | |
| | comp=E,0.1nm,0.3s,baz=216,slow=19,SNR=1.9 | | | | | | |
| GKN | Gorkha | 15.96 | 117 | eP | Pn | 14 42 42.1 | -2.9 |
| | comp=E,98nm,0.8s | | | | | | |
| ZRNK | Zerenda | 16.50 | 1 | ⇓P | Pn | 14 42 51.0 | -0.7 |
| | comp=E,4.7nm,0.8s | | | | | | |
| DMN | Daman | 16.52 | 118 | eP | Pn | 14 42 49.9 | -2.5 |
| | comp=E,35nm,0.6s | | | | | | |
| KKN | Kakani | 16.54 | 117 | eP | Pn | 14 42 50.1 | -2.5 |
| | comp=E,58nm,0.7s | | | | | | |
| BVA0 | Borovoye Array | 16.62 | 4 | ⇓Pn | Pn | 14 42 46.9 | -6.3 |
| | comp=E,3.5nm,0.6s,baz=176,slow=13,SNR=9.6 | | | | | | |
| BVAR | Borovoye Array | 16.62 | 4 | Pn | Pn | 14 42 51.3 | -2.0 |
| | comp=E,0.3nm,0.3s,baz=183,slow=7.4,SNR=4.8 | | | | | | |
| BVAR | | | | Sn | Sn | 14 45 39.9 | -17 |
| | baz=184,slow=20,SNR=2.1 | | | | | | |
| BVAR | | | | Lg | Lg | 14 47 52.4 | |
| | comp=E,0.4nm,0.3s,baz=191,slow=13,SNR=3.1 | | | | | | |
| PKIN | Phulchoki | 16.75 | 117 | eP | Pn | 14 42 52.8 | -2.4 |
| | comp=E,38nm,0.6s | | | | | | |
| PKI | Pulchoki | 16.76 | 117 | eP | Pn | 14 42 53.0 | -2.5 |
| | comp=E,71nm,0.8s | | | | | | |
| GUN | Gumba | 16.91 | 115 | eP | Pn | 14 42 55.2 | -2.1 |
| | comp=E,33nm,0.5s | | | | | | |
| CHKZ | Chkalovo | 17.29 | 4 | ⇑P | Pn | 14 42 59.0 | -2.5 |
| | comp=E,6.0nm,1.3s | | | | | | |
| RAMN | Ramite | 17.98 | 117 | eP | Pn | 14 43 08.7 | -1.9 |
| | comp=E,34nm,0.7s | | | | | | |
| TAPN | Taplejung | 18.56 | 114 | eP | P | 14 43 16.2 | -1.2 |
| | comp=E,40nm,0.8s | | | | | | |
| ODAN | Odare | 18.61 | 116 | eP | P | 14 43 16.7 | -1.1 |
| | comp=E,23nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 20.81 | 28 | P | P | 14 43 40.8 | -0.6 |
| | comp=E,7.9nm,0.6s,baz=224,slow=10,SNR=23 | | | | | | |
| KBZ | Khabaz | 20.91 | 298 | P | Pn | 14 43 46.6 | +1.4 |
| | comp=E,2.6nm,0.8s,baz=141,slow=8.2,SNR=5.3 | | | | | | |
| ARU | Arti | 21.11 | 344 | P | P | 14 43 47.2 | +2.7 |
| | comp=E,0.4nm,0.2s,baz=107,slow=19,SNR=2.2 | | | | | | |
| BRTR | Keskin Array B | 27.61 | 288 | P | P | 14 44 50.0 | +2.5 |
| | comp=E,1.6nm,0.8s,baz=98,slow=8.2,SNR=4.5 | | | | | | |
| OBN | Obninsk | 28.73 | 321 | LR | LR | 14 57 30.9 | |
| | comp=E,62nm,21.5s,baz=92,slow=38 | | | | | | |
| SONM | Songino Array | 29.96 | 56 | P | P | 14 45 09.3 | +0.9 |
| | comp=E,2.1nm,0.9s,baz=255,slow=9.6,SNR=11 | | | | | | |
| AKASG | Malin Array Be | 31.48 | 309 | P | P | 14 45 23.2 | +1.6 |
| | comp=E,0.2nm,0.3s,baz=87,slow=7.7,SNR=4.0 | | | | | | |
| CMAR | Chiang Mai Arr | 32.15 | 116 | P | P | 14 45 27.4 | -0.4 |
| | comp=E,2.8nm,1.1s,baz=300,slow=7.9,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 14 59 54.0 | |
| | comp=E,87nm,18.5s,baz=191,slow=39 | | | | | | |
| HFS | Hagfors | 41.92 | 322 | P | P | 14 46 52.5 | +2.2 |
| | comp=E,4.8nm,0.8s,baz=91,slow=9.3,SNR=4.5 | | | | | | |
| NB2 | NORSAR Subarra | 43.26 | 323 | P | P | 14 47 02.5 | +1.3 |
| | comp=Z,1.2nm,0.6s,baz=99,slow=8.6 | | | | | | |
| NOA | NORSAR Array B | 43.26 | 323 | P | P | 14 47 02.8 | +1.5 |
| | comp=Z,2.9nm,0.9s,baz=98,slow=8.1,SNR=6.0 | | | | | | |
| TORD | Torodi Ar. Bea | 63.78 | 267 | P | P | 14 49 33.3 | +1.0 |
| | comp=Z,0.9nm,0.7s,baz=41,slow=5.9,SNR=6.8 | | | | | | |
| SFJD | Kangerlussuaq | 67.10 | 338 | LR | LR | 15 17 53.0 | |
| | comp=Z,41nm,20.9s,baz=116,slow=35 | | | | | | |
| INK | Inuvik | 74.25 | 8 | P | P | 14 50 38.2 | +1.7 |
| | comp=Z,3.0nm,0.8s,baz=344,slow=7.4,SNR=3.2 | | | | | | |
| ILAR | Eielson Array | 75.34 | 15 | P | P | 14 50 43.9 | +1.0 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.9nm,0.9s,baz=322,slow=4.2,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **83.62** | **120** | P | **P** | **14 51 26.4** | **-2.2** |
| | comp=Z,0.7nm,0.8s,baz=317,slow=5.4,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **85.83** | **123** | P | **P** | **14 51 38.2** | **-1.4** |
| | comp=Z,0.6nm,0.8s,baz=306,slow=4.8,SNR=9.3 | | | | | | |

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*NIED **05** 15:10:00, 43°.60N×147°.50E, h41$^{km}$, Mw3.5 Best double couple: $M_0$2.21000×$10^{14}$ NP1:$\phi_s$173.00000°, $\delta$41.00000°, $\lambda$23.00000°. NP2:$\phi_s$66.00000°, $\delta$75.00000°, $\lambda$128.00000°.*
*JMA **05** 15:10:09.0±0.3, 43°.55N×147°.45E, h4$^{km}$±3$^{km}$, M3.9*
*SKHL **05** 15:10:09.3±1.0, 43°.64N×147°.74E, h45$^{km}$±5$^{km}$, mb4.7/3*
**ISC 05 15:10:08.7**±2.7**, 43°.71N**±0°.10×**147°.7E**±0°.1**, h24**$^{km}$±19$^{km}$**, n15,** $\sigma$**1$^s$29**/23**, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.66** | **284** | *e*P | **Pb** | **15 10 21.3** | **-0.3** |
| SHO | | | | AMB | AMB | 15 10 22.5 | |
| | 700nm,0.3s | | | | | | |
| SHO | | | | *e*S | **Sn** | **15 10 31.2** | **-1.1** |
| SHO | | | | A | A | 15 10 32.9 | |
| | 2μm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.38** | **284** | *e*P | **Pn** | **15 10 32.0** | **-0.5** |
| YUK | | | | AMB | AMB | 15 10 33.3 | |
| | 73nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 15 10 33.3 | |
| | 102nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 15 10 33.3 | |
| | 286nm,0.2s | | | | | | |
| YUK | | | | *e*S | **Sn** | **15 10 49.0** | **-1.0** |
| YUK | | | | A | A | 15 10 49.5 | |
| | 420nm,0.4s | | | | | | |
| YUK | | | | A | A | 15 10 49.5 | |
| | 1μm,0.4s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.48** | **257** | P | **Pn** | **15 10 32.8** | **-1.0** |
| NEM2 | | | | *e*S | **Sn** | **15 10 49.3** | **-3.1** |
| **KUR** | **Kuril'sk** | **1.52** | **4** | *e*P | **Pn** | **15 10 34.2** | **-0.2** |
| KUR | | | | AMB | AMB | 15 10 36.1 | |
| | 19nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 15 10 36.1 | |
| | 10.0nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 15 10 36.1 | |
| | 43nm,0.2s | | | | | | |
| KUR | | | | *e*S | **Sn** | **15 10 52.9** | **-0.6** |
| KUR | | | | A | A | 15 10 54.4 | |
| | 150nm,0.3s | | | | | | |
| KUR | | | | A | A | 15 10 54.4 | |
| | 151nm,0.3s | | | | | | |
| **JRA** | **Rausu** | **1.89** | **278** | P | **Pn** | **15 10 39.7** | **+0.2** |
| **JNK** | **Nakash** | **2.18** | **268** | P | **Pn** | **15 10 43.7** | **+0.2** |
| **JAK** | **Akkeshi** | **2.32** | **253** | P | **Pn** | **15 10 45.0** | **-0.4** |
| **JTKR** | **Abashiri--Toko** | **2.77** | **277** | P | **Pn** | **15 10 52.7** | **+1.1** |
| JTKR | | | | *e*S | **Sn** | **15 11 25.1** | **+0.9** |
| **JAR** | **Ashorobuto** | **2.90** | **263** | P | **Pn** | **15 10 54.1** | **+0.7** |
| JAR | | | | *e*S | **Sn** | **15 11 28.1** | **+0.5** |
| **JOB** | **Onbets** | **2.95** | **255** | P | **Pn** | **15 10 54.5** | **+0.5** |
| JOB | | | | *e*S | **Sn** | **15 11 28.0** | **-0.6** |
| **JCH** | **Churui** | **3.37** | **252** | P | **Pn** | **15 11 00.4** | **+0.6** |
| JCH | | | | *e*S | **Sn** | **15 11 39.1** | **0.0** |
| **JEM** | **Erimo** | **3.76** | **245** | P | **Pn** | **15 11 07.3** | **+2.2** |
| **JFR** | **Furan** | **3.77** | **263** | P | **Pn** | **15 11 07.7** | **+2.3** |
| **JNBK** | **Urakawa-nobuka** | **3.92** | **250** | P | **Pn** | **15 11 08.2** | **+0.9** |
| **YSS** | **Yuzh-Sakhalins** | **4.77** | **315** | *e*P | **Pn** | **15 11 20.9** | **+1.9** |

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**DJA 05 15:13:33.3**±0.3**, 0°N**±3°×**12°2E**±°**, h77**$^{km}$±5$^{km}$**, M4.0**/18**, mb4.2**/7**, mB5.0**/3**, MLv3.9**/18**, Mw(mB)4.3**/3**, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **0.55** | **31** | P | Pn | 15 13 49.1 | +1.9 |
| MRSI | | | | S | Sn | 15 14 01.1 | +3.6 |
| **APSI** | **Ampana** | **0.91** | **181** | P | Pn | 15 13 49.7 | -1.4 |
| APSI | | | | S | Sn | 15 14 04.7 | +0.4 |
| **GTOI** | **Gorontalo** | **1.49** | **65** | P | Pn | 15 13 57.8 | -0.6 |
| **LUWI** | **Luwuk** | **1.52** | **133** | P | Pn | 15 13 59.3 | +0.5 |
| LUWI | | | | S | Sn | 15 14 20.1 | +2.1 |
| **MPSI** | **Mapaga** | **1.79** | **281** | P | Pn | 15 14 03.3 | +0.9 |
| MPSI | | | | S | Sn | 15 14 26.4 | +1.9 |
| **KMSI** | **Cibinong** | **2.39** | **76** | P | Pn | 15 14 10.0 | -0.4 |
| **TTSI** | **Tana Toraja** | **3.54** | **211** | P | Pn | 15 14 26.5 | +0.5 |
| **SPSI** | **Sidrap Palu** | **4.37** | **206** | P | Pn | 15 14 37.7 | +0.4 |
| **SANI** | **Sanana** | **4.78** | **115** | P | Pn | 15 14 42.4 | -0.5 |
| **BKB** | **Balikpapan** | **4.92** | **255** | P | Pn | 15 14 44.2 | -0.7 |
| **SGSI** | **Sangihe** | **5.33** | **47** | P | Pn | 15 14 50.1 | -0.2 |
| | 168nm,0.6s,0.6nm | | | | | | |
| **BKSI** | **Bulukumba** | **5.50** | **196** | P | Pn | 15 14 52.3 | -0.5 |
| | 13nm,1.7s,339nm0.0nm | | | | | | |
| **LBMI** | **Labuha** | **5.88** | **96** | P | Pn | 15 14 57.7 | -0.2 |
| | 15nm,2.0s,3μm0.4nm | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **6.21** | **191** | P | Pn | 15 15 03.0 | +0.5 |
| | 50nm,1.6s,0.2nm | | | | | | |
| **NLAI** | **Namlea** | **6.32** | **121** | P | Pn | 15 15 03.6 | -0.3 |
| | 16nm,0.9s,0.1nm | | | | | | |

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*IDC **05** 15:15:25.9±1.1, 41°.02N×124°.62W, h0$^{km}$, mb4.0/6, mb1 4.4/10, mb1mx4.0/40, mbtmp4.1/10, ML3.8/4, MS3.4/7, Ms1 3.4/7, ms1mx3.2/31, Error ellipse: s-maj=14.4km s-min=11.2km az=154.0*
*ISCJB **05** 15:15:27.5±0.5, 40°.99N±0°.02×124°.71W±0°.05, h34$^{km}$±3$^{km}$, mb4.2/8, MS3.5/6, Error ellipse: s-maj=6.4km s-min=3.0km az=171.2*
*NEIC **05** 15:15:27.6, 40°.95N×124°.80W, h24$^{km}$, mb4.4/9, MW4.4(BRK), After NCEDC.*
*NEIC Felt [III] at Ferndale and Scotia; [II] at Arcata, Crescent City, Eureka, Fortuna, Hoopa, Loleta, McKinleyville, Rio Dell and Trinidad. Felt in Del Norte, Humboldt and Siskiyou Counties. Also felt at Merlin, Oregon.*
**ISC 05 15:15:29.5**±0.9**, 40°.96N**±0°.05×**124°.68W**±0°.08**, h35**$^{km}$±8$^{km}$**, n296,** $\sigma$**1$^s$23**/286**, mb4.2**/8**, MS3.4**/6**, 6C-1D, Near coast of northern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHMM** | **Horse Mountain** | **0.72** | **97** | *e*Pg | **Pn** | **15 15 41.8** | **-1.6** |
| **KSXB** | **Camp Six Broad** | **1.06** | **34** | ⇓P | **Pn** | **15 15 45.7** | **-2.2** |
| **KBO** | **Bosley Butte** | **1.29** | **15** | *e*Pn | **Pn** | **15 15 48.5** | **-2.7** |
| **KTRM** | **Thompson Ridge** | **1.36** | **46** | P | **Pn** | **15 15 50.5** | **-1.6** |
| **L02D** | **Cave Junction,** | **1.44** | **34** | P | **Pn** | **15 15 51.0** | **-2.2** |
| | baz=1.5 | | | | | | |
| L02D | | | | S | **Sn** | **15 16 09.1** | **-1.8** |
| | baz=1.5 | | | | | | |
| **M02C** | **Callahan** | **1.44** | **72** | P | **Pn** | **15 15 51.8** | **-1.4** |
| | baz=1.5,SNR=938 | | | | | | |
| M02C | | | | S | **Sn** | **15 16 10.2** | **-0.8** |
| | baz=1.5 | | | | | | |
| **KIPM** | **Iron Peak** | **1.47** | **141** | *e*Pn | **Pn** | **15 15 52.1** | **-1.5** |
| **N02D** | **Trinity Center** | **1.49** | **89** | P | **Pn** | **15 15 52.6** | **-1.4** |
| | baz=1.6,SNR=383 | | | | | | |
| N02D | | | | S | **Sn** | **15 16 12.3** | **0.0** |
| | baz=1.6 | | | | | | |
| **KCPM** | **Cahto Peak** | **1.52** | **146** | *e*Pn | **Pn** | **15 15 52.6** | **-1.7** |
| KCPM | | | | *e*Sn | **Sn** | **15 16 11.1** | **-2.0** |
| **WDC** | **Whiskeytown Da** | **1.67** | **103** | *e*Pn | **Pn** | **15 15 55.4** | **-0.9** |
| **YBH** | **Yreka Blue Hor** | **1.67** | **62** | Pg | **Pn** | **15 15 55.4** | **-0.9** |
| | 42nm,0.3s,baz=261,slow=12,SNR=476 | | | | | | |
| YBH | | | | Lg | Lg | 15 16 16.1 | |
| | 339nm,0.3s,baz=152,slow=11,SNR=40 | | | | | | |
| **KEBM** | **Edson Butte** | **1.93** | **8** | *e*Pn | **Pn** | **15 15 57.4** | **-2.5** |
| **LHEM** | **Herd Peak** | **1.97** | **69** | ⇑P | **Pn** | **15 16 00.2** | **-0.4** |
| **BUOR** | **Burton Butte** | **2.25** | **53** | P | **Pn** | **15 16 05.1** | **+0.7** |
| **O03D** | **Paynes Creek** | **2.29** | **106** | P | **Pn** | **15 16 03.6** | **-1.2** |
| | baz=2.4 | | | | | | |
| O03D | | | | S | **Sn** | **15 16 32.2** | **+0.3** |
| | baz=2.4 | | | | | | |
| **M04C** | **Macdoel** | **2.29** | **68** | P | **Pn** | **15 16 04.9** | **0.0** |
| | baz=2.4,SNR=47 | | | | | | |
| M04C | | | | Sb | **Sn** | **15 16 34.5** | **+2.6** |
| | baz=2.4 | | | | | | |
| **LTIM** | **Timbered Crate** | **2.42** | **84** | ⇑P | **Pn** | **15 16 06.1** | **-0.6** |
| **LASM** | **Arnica Sink** | **2.42** | **74** | ⇑P | **Pn** | **15 16 06.3** | **-0.5** |
| **VSP** | **Spence Mountai** | **2.47** | **55** | ⇑P | **Pn** | **15 16 07.4** | **+0.1** |
| **LBCM** | **Butte Creek Ri** | **2.52** | **92** | ⇑P | **Pn** | **15 16 07.6** | **-0.6** |
| **HOG** | **Hogback Mounta** | **2.57** | **59** | ⇑P | **Pn** | **15 16 08.7** | **-0.2** |
| **K04D** | **Chiloquin, OR** | **2.75** | **52** | P | **Pn** | **15 16 10.0** | **-1.2** |
| | baz=2.8,SNR=8.1 | | | | | | |
| K04D | | | | S | **Sn** | **15 16 43.0** | **-0.2** |
| | baz=2.8 | | | | | | |
| **I03D** | **Drain, OR** | **2.91** | **19** | P | **Pn** | **15 16 11.9** | **-1.4** |
| | baz=2.9,SNR=52 | | | | | | |
| I03D | | | | S | **Sn** | **15 16 45.4** | **-1.6** |
| | baz=2.9 | | | | | | |
| **J04D** | **Umpqua Nationa** | **2.97** | **39** | P | **Pn** | **15 16 13.7** | **-0.6** |
| | baz=3.0,SNR=38 | | | | | | |
| **I04A** | **Tendick Farm,** | **3.29** | **30** | P | **Pn** | **15 16 17.9** | **-0.7** |
| | baz=3.3 | | | | | | |
| I04A | | | | S | **Sn** | **15 16 55.9** | **-0.7** |
| | baz=3.3 | | | | | | |
| **MOD** | **Modoc** | **3.42** | **73** | *e*Pn | **Pn** | **15 16 19.6** | **-0.9** |
| **J05D** | **Fort Rock, OR** | **3.46** | **47** | P | **Pn** | **15 16 20.8** | **-0.2** |
| | baz=3.5,SNR=30 | | | | | | |
| J05D | | | | S | **Sn** | **15 16 59.6** | **-1.2** |
| | baz=3.5 | | | | | | |
| **COR** | **Corvallis** | **3.76** | **15** | *e*Pn | **Pn** | **15 16 24.2** | **-0.8** |
| **SAC** | **San Andreas** | **3.80** | **152** | *e*Pn | **Pn** | **15 16 23.9** | **-1.7** |
| **I05D** | **Terrebonne, OR** | **4.18** | **35** | P | **Pn** | **15 16 31.5** | **+0.7** |
| | baz=4.2 | | | | | | |
| **G03D** | **McMinnville, O** | **4.37** | **13** | P | **Pn** | **15 16 32.9** | **-0.5** |
| | baz=4.4,SNR=12 | | | | | | |
| G03D | | | | S | **Sn** | **15 17 22.2** | **-0.8** |
| | baz=4.4 | | | | | | |
| **CMB** | **Columbia Colle** | **4.42** | **130** | *e*Pn | **Pn** | **15 16 34.0** | **-0.1** |
| **WVOR** | **Wild Horse Val** | **4.76** | **70** | *e*P | **Pn** | **15 16 37.4** | **-1.4** |
| **G05D** | **Wamic, OR** | **4.94** | **29** | P | **Pn** | **15 16 42.1** | **+0.9** |
| | baz=5.0,SNR=7.7 | | | | | | |
| **VLL** | **Laurance Lake** | **5.00** | **25** | P | **Pn** | **15 16 43.4** | **+1.2** |
| **J08A** | **Circle Bar Ran** | **5.20** | **61** | P | **Pn** | **15 16 44.4** | **-0.4** |
| **NVAR** | **Mina Array Bea** | **5.53** | **115** | Pn | **Pn** | **15 16 49.7** | **+0.2** |
| | 20nm,0.3s,baz=289,slow=14,SNR=156 | | | | | | |
| NVAR | | | | Lg | Lg | 15 18 08.3 | |
| | baz=281,slow=34,SNR=1.9 | | | | | | |
| **BMN** | **Battle Mountai** | **5.69** | **93** | *e*Pn | **Pn** | **15 16 51.8** | **+0.1** |
| | 26nm,1.0s | | | | | | |
| **LON** | **Longmire** | **6.15** | **19** | *e*Pn | **Pn** | **15 16 57.5** | **-0.3** |
| | 13nm,0.6s | | | | | | |
| **NLWA** | **Neilton Lookou** | **6.46** | **5** | *e*Pn | **Pn** | **15 17 02.4** | **+0.3** |
| | 29nm,0.8s | | | | | | |
| **HAWA** | **Hanford** | **6.59** | **33** | *e*Pn | **Pn** | **15 17 04.0** | **+0.2** |
| | 15nm,0.5s | | | | | | |
| **SMMC** | **Simmler** | **6.74** | **145** | P | **Pn** | **15 17 05.2** | **-0.8** |
| | baz=6.8 | | | | | | |
| **VES** | **Vestal, Richgr** | **6.74** | **138** | P | **Pn** | **15 17 06.1** | **+0.2** |
| | baz=6.8 | | | | | | |
| **MFID** | **Camas Ranch** | **7.01** | **67** | *e*Pn | **Pn** | **15 17 09.6** | **-0.2** |
| | 17nm,0.8s | | | | | | |
| **ELK** | **Elko** | **7.16** | **89** | *e*Pn | **Pn** | **15 17 13.6** | **+1.7** |
| | 10nm,0.7s | | | | | | |
| **PKM** | **Peak Mountain** | **7.17** | **146** | P | **Pn** | **15 17 11.6** | **-0.4** |
| | baz=7.2 | | | | | | |
| **ISA** | **Isabella** | **7.19** | **135** | P | **Pn** | **15 17 13.5** | **+1.2** |
| | baz=7.3 | | | | | | |
| **ISA** | **Isabella** | **7.19** | **135** | *e*Pn | **Pn** | **15 17 13.4** | **+1.2** |
| | 43nm,0.5s | | | | | | |
| **DAC** | **Darwin (Calif)** | **7.25** | **128** | Pn | **Pn** | **15 17 15.3** | **+2.2** |
| | 5.1nm,0.6s | | | | | | |
| **ARVC** | **Arvin** | **7.43** | **140** | P | **Pn** | **15 17 16.1** | **+0.6** |
| | baz=7.5 | | | | | | |
| **R11A** | **Troy Canyon, C** | **7.48** | **107** | P | **Pn** | **15 17 16.6** | **+0.3** |
| | baz=7.6 | | | | | | |
| **B05A** | **Bryant** | **7.53** | **13** | P | **Pn** | **15 17 16.1** | **-0.6** |
| | baz=7.6,SNR=8.1 | | | | | | |
| **TPNV** | **Topopah Spring** | **7.69** | **119** | P | **Pn** | **15 17 20.2** | **+1.0** |
| | baz=7.8 | | | | | | |
| **PGC** | **Sidney** | **7.74** | **6** | *e*Pn | **Pn** | **15 17 19.9** | **+0.3** |
| | 32nm,0.8s | | | | | | |
| **OSI** | **Osito Adit** | **7.89** | **141** | P | **Pn** | **15 17 22.8** | **+1.0** |
| | baz=7.9 | | | | | | |
| **OSI** | **Osito Adit** | **7.89** | **141** | *e*Pn | **Pn** | **15 17 22.6** | **+0.8** |
| | 63nm,0.5s | | | | | | |
| **HLID** | **Hailey** | **8.04** | **68** | *e*Pn | **Pn** | **15 17 25.6** | **+1.7** |
| | 15nm,0.8s | | | | | | |
| **EDW2** | **Edwards Air Fo** | **8.05** | **137** | P | **Pn** | **15 17 24.8** | **+0.8** |
| | baz=8.1 | | | | | | |
| **GSC** | **Goldstone** | **8.39** | **130** | *e*Pn | **Pn** | **15 17 27.1** | **-1.5** |
| | 11nm,0.5s | | | | | | |
| **MWC** | **Mount Wilson** | **8.53** | **140** | *e*Pn | **Pn** | **15 17 31.4** | **+0.7** |
| | 12nm,0.5s | | | | | | |
| **SHPR** | **Sheep Range** | **8.66** | **118** | *e*Pn | **Pn** | **15 17 33.6** | **+1.0** |
| | 8.0nm,0.6s | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **8.72** | **138** | P | **Pn** | **15 17 34.0** | **+0.7** |
| | baz=8.8 | | | | | | |
| **BGU** | **Big Grassy Mou** | **8.82** | **86** | *e*Pn | **Pn** | **15 17 36.6** | **+2.0** |
| | 12nm,0.6s | | | | | | |
| **HVU** | **Hansel Valley** | **8.99** | **81** | *e*Pn | **Pn** | **15 17 39.5** | **+2.6** |
| | 7.5nm,0.7s | | | | | | |
| **HEC** | **Hector,Ludlow** | **9.00** | **130** | P | Pn | 15 17 40.3 | +3.3 |
| | baz=9.1 | | | | | | |
| **DUG** | **Dugway** | **9.06** | **91** | P | **Pn** | **15 17 38.5** | **+0.6** |
| | baz=9.1 | | | | | | |
| **DUG** | **Dugway** | **9.06** | **91** | *e*Pn | **Pn** | **15 17 38.4** | **+0.5** |
| | 36nm,1.2s | | | | | | |
| **NEW** | **Newport** | **9.07** | **34** | Pn | Pn | 15 17 41.7 | +3.8 |
| | 0.1nm,0.3s,baz=213,slow=18,SNR=2.6 | | | | | | |
| NEW | | | | Lg | Lg | 15 19 58.7 | |
| | 0.6nm,0.3s,baz=143,slow=20,SNR=2.9 | | | | | | |
| NEW | | | | LR | LR | 15 20 52.0 | |
| | comp=Z,44nm,20.6s,baz=220,slow=36 | | | | | | |
| **CCUT** | **Cedar City** | **9.41** | **108** | *e*Pn | **Pn** | **15 17 44.0** | **+1.2** |
| | 3.6nm,0.6s | | | | | | |
| **GMRC** | **Granite Mounta** | **9.43** | **128** | P | **Pn** | **15 17 45.3** | **+2.4** |
| | baz=9.5 | | | | | | |
| **MURC** | **Murrieta** | **9.46** | **139** | P | **Pn** | **15 17 44.2** | **+0.9** |
| | baz=9.5 | | | | | | |
| **MCMT** | **McKenzie Canyo** | **9.50** | **62** | *e*Pn | **Pn** | **15 17 45.1** | **+1.1** |
| | 4.9nm,0.9s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **9.79** | **132** | P | **Pn** | **15 17 48.5** | **+0.6** |
| | baz=9.8 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **9.83** | **136** | *e*Pn | **Pn** | **15 17 49.0** | **+0.5** |
| | 5.7nm,0.4s | | | | | | |
| **BSMT** | **Bassoo Peak** | **9.87** | **42** | *e*Pn | **Pn** | **15 17 50.4** | **+1.4** |
| | 10nm,0.8s | | | | | | |
| **HWUT** | **Hardware Ranch** | **9.89** | **82** | *e*Pn | **Pn** | **15 17 52.0** | **+2.7** |
| | 6.9nm,0.8s | | | | | | |
| **MSU** | **Marysvale** | **9.94** | **100** | *e*Pn | **Pn** | **15 17 52.1** | **+2.2** |
| | 58nm,0.6s | | | | | | |
| **TCUT** | **Toone Canyon** | **10.03** | **85** | *e*Pn | **Pn** | **15 17 53.6** | **+2.4** |
| | 10.0nm,0.7s | | | | | | |
| **JTMT** | **Jette** | **10.06** | **44** | *e*Pn | **Pn** | **15 17 52.0** | **+0.4** |
| | 3.4nm,0.8s | | | | | | |
| **SWMT** | **Swartz Lake** | **10.07** | **46** | *e*Pn | **Pn** | **15 17 52.9** | **+1.2** |
| | 1.3nm,0.5s | | | | | | |
| **LRM** | **Limekiln Ridge** | **10.14** | **57** | *e*Pn | **Pn** | **15 17 53.6** | **+0.9** |
| | 76nm,1.2s | | | | | | |
| **IRM** | **Iron Mountain** | **10.16** | **129** | P | **Pn** | **15 17 54.1** | **+1.3** |
| | baz=10 | | | | | | |
| **CHMT** | **Chamberlain Mo** | **10.16** | **50** | *e*P | **Pn** | **15 17 53.8** | **+0.8** |
| | 5.1nm,0.9s | | | | | | |
| **SLMT** | **Seeley Lake** | **10.20** | **48** | *e*Pn | **Pn** | **15 17 54.9** | **+1.5** |
| | 15nm,1.0s | | | | | | |
| **MONP** | **Monument Peak** | **10.41** | **138** | P | **Pn** | **15 17 56.7** | **+0.1** |
| | baz=10 | | | | | | |
| **TMUT** | **Trail Mountain** | **10.45** | **95** | *e*Pn | Pn | 15 18 00.4 | +3.3 |
| | 70nm,1.0s | | | | | | |
| **BAR** | **Barrett** | **10.46** | **140** | *e*Pn | **Pn** | **15 17 58.3** | **+1.3** |
| **QLMT** | **Earthquake Lak** | **10.46** | **64** | Pn | **Pn** | **15 17 55.6** | **-1.5** |
| **TPAW** | **Teton Pass** | **10.49** | **72** | *e*Pn | **Pn** | **15 18 00.7** | **+3.1** |
| | 20nm,1.2s | | | | | | |
| **REDW** | **Red Top Meadow** | **10.54** | **72** | Pn | **Pn** | **15 17 58.5** | **+0.3** |
| | 18nm,1.3s | | | | | | |
| **IMW** | **Indian Meadow** | **10.57** | **69** | *e*Pn | **Pn** | **15 17 60.0** | **+1.2** |
| | 18nm,1.0s | | | | | | |
| **BOZ** | **Bozeman (W)** | **10.60** | **59** | P | **Pn** | **15 18 00.1** | **+1.2** |
| | baz=11 | | | | | | |
| **MOOW** | **Moose Ponds** | **10.68** | **70** | *e*Pn | **Pn** | **15 18 01.0** | **+0.8** |
| | 6.4nm,1.0s | | | | | | |
| **SRU** | **San Rafael** | **11.01** | **95** | *e*Pn | Pn | 15 18 08.5 | +3.8 |
| | 22nm,0.7s | | | | | | |
| **GLA** | **Glamis** | **11.14** | **132** | P | **Pn** | **15 18 07.6** | **+1.2** |
| | baz=11 | | | | | | |
| **GLA** | **Glamis** | **11.14** | **132** | *e*Pn | **Pn** | **15 18 07.4** | **+1.0** |
| | 9.8nm,0.4s | | | | | | |
| **BW06** | **Boulder Array** | **11.42** | **76** | *e*Pn | **Pn** | **15 18 11.9** | **+1.6** |
| | 7.0nm,1.0s | | | | | | |
| **BBB** | **Bella Bella** | **11.47** | **349** | Pn | **Pn** | **15 18 13.3** | **+2.6** |
| | 0.3nm,0.3s,baz=172,slow=7.1,SNR=5.7 | | | | | | |
| **WUAZ** | **Wupatki** | **11.78** | **113** | *e*Pn | **Pn** | **15 18 18.1** | **+2.9** |
| | 6.0nm,0.7s | | | | | | |
| **PV04** | **Paradox Valley** | **12.42** | **97** | *e*Pn | **Pn** | **15 18 26.6** | **+2.6** |
| **PV01** | **Paradox Valley** | **12.75** | **98** | *e*Pn | **Pn** | **15 18 31.0** | **+2.5** |
| | 2μm,0.9s | | | | | | |
| **MVCO** | **Mesa Verde** | **13.11** | **101** | *e*Pn | **Pn** | **15 18 35.6** | **+2.2** |
| | 16nm,0.8s | | | | | | |
| **K22A** | **Casper** | **13.65** | **77** | P | **Pn** | **15 18 40.7** | **0.0** |
| | baz=14 | | | | | | |
| **N23A** | **Red Feather La** | **14.17** | **84** | P | **Pn** | **15 18 48.2** | **+0.3** |
| | baz=14 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **14.18** | **97** | P | Pn | 15 18 51.4 | +3.4 |
| | baz=14 | | | | | | |
| **PHWY** | **Pilot Hill** | **14.49** | **82** | *e*Pn | **Pn** | **15 18 51.8** | **-0.5** |
| | 22nm,1.3s | | | | | | |
| **ISCO** | **Idaho Springs** | **14.58** | **88** | P | **Pn** | **15 18 54.3** | **+0.8** |
| | baz=15 | | | | | | |
| **ISCO** | **Idaho Springs** | **14.58** | **88** | *e*Pn | **Pn** | **15 18 54.4** | **+0.9** |
| | 9.0nm,0.7s | | | | | | |
| **SDCO** | **Great Sand Dun** | **15.18** | **96** | P | **Pn** | **15 19 03.4** | **+2.0** |
| | baz=15 | | | | | | |
| **SDCO** | **Great Sand Dun** | **15.18** | **96** | *e*Pn | **Pn** | **15 19 03.3** | **+1.8** |
| | 18nm,0.8s | | | | | | |
| **LAZ** | **Ladron** | **15.34** | **110** | Pn | **Pn** | **15 19 05.0** | **+1.4** |
| | 4.3nm,0.6s | | | | | | |
| **M25A** | **Palm-Egli Farm** | **15.53** | **81** | P | **Pn** | **15 19 05.8** | **-0.2** |
| | baz=16 | | | | | | |
| **RSSD** | **Black Hills** | **15.54** | **71** | Pn | **Pn** | **15 19 04.0** | **-2.0** |
| | 3.7nm,0.5s | | | | | | |
| **L25A** | **Engebretsen Ra** | **15.55** | **79** | P | **Pn** | **15 19 06.1** | **-0.1** |
| | baz=16 | | | | | | |
| **ANMO** | **Albuquerque** | **15.57** | **107** | Pn | **Pn** | **15 19 07.4** | **+0.9** |
| | 0.1nm,0.3s,baz=305,slow=12,SNR=10 | | | | | | |
| **ANMO** | **Albuquerque** | **15.57** | **107** | *e*P | **Pn** | **15 19 08.4** | **+1.9** |
| **J25A** | **Sunshine Ranch** | **15.66** | **74** | P | **Pn** | **15 19 06.0** | **-1.6** |
| | baz=16 | | | | | | |
| **121A** | **Cookes Peak, D** | **15.92** | **117** | P | **P** | **15 19 13.4** | **-1.0** |
| | baz=16 | | | | | | |
| **G25A** | **Newell** | **16.09** | **68** | P | **Pn** | **15 19 12.1** | **-0.9** |
| | baz=16 | | | | | | |
| **F25A** | **Bowman** | **16.18** | **65** | P | **Pn** | **15 19 12.1** | **-2.0** |
| | baz=16 | | | | | | |
| **J26A** | **Sides Ranch, S** | **16.19** | **75** | P | **Pn** | **15 19 12.7** | **-1.6** |
| | baz=16 | | | | | | |
| **T25A** | **Trinidad** | **16.20** | **97** | P | **Pn** | **15 19 15.5** | **+1.0** |
| | baz=16 | | | | | | |
| **M26A** | **McRoberts Ranc** | **16.21** | **81** | P | **Pn** | **15 19 14.1** | **-0.6** |
| | baz=16 | | | | | | |
| **N26A** | **Koester Ranch,** | **16.23** | **83** | P | **Pn** | **15 19 15.0** | **+0.2** |
| | baz=16 | | | | | | |
| **O26A** | **Horse Wrangler** | **16.24** | **86** | P | **Pn** | **15 19 15.2** | **+0.2** |
| | baz=16 | | | | | | |
| **P26A** | **Davis Ranch, A** | **16.34** | **88** | P | **Pn** | **15 19 16.7** | **+0.4** |
| | baz=16 | | | | | | |
| **Q26A** | **Hugo** | **16.35** | **90** | P | **Pn** | **15 19 17.1** | **+0.6** |
| | baz=16 | | | | | | |
| **I26A** | **New Underwood** | **16.38** | **72** | P | **Pn** | **15 19 16.3** | **-0.4** |
| | baz=16 | | | | | | |
| **D25A** | **Fairfield** | **16.53** | **61** | P | **Pn** | **15 19 16.8** | **-1.7** |
| | baz=17 | | | | | | |
| **R26A** | **Arlington** | **16.57** | **92** | P | **Pn** | **15 19 19.1** | **0.0** |
| | baz=17 | | | | | | |
| **F26A** | **Lodgepole** | **16.71** | **66** | P | **Pn** | **15 19 19.6** | **-1.2** |
| | baz=17 | | | | | | |
| **N27A** | **Anderson Farm,** | **16.74** | **83** | P | **Pn** | **15 19 20.5** | **-0.9** |
| | baz=17 | | | | | | |
| **S26A** | **Kim** | **16.75** | **95** | P | **Pn** | **15 19 21.4** | **0.0** |
| | baz=17 | | | | | | |
| **M27A** | **Reverse DX Ran** | **16.77** | **81** | P | **Pn** | **15 19 19.5** | **-2.2** |
| | baz=17 | | | | | | |
| **T26A** | **Comanche Natio** | **16.80** | **96** | P | **Pn** | **15 19 22.4** | **+0.2** |
| | baz=17 | | | | | | |
| **O27A** | **Beecher Island** | **16.88** | **85** | P | **Pn** | **15 19 22.2** | **-0.8** |
| | baz=17 | | | | | | |
| **P27A** | **Ficken Ranch,** | **16.93** | **88** | P | **Pn** | **15 19 23.7** | **+0.1** |
| | baz=17 | | | | | | |
| **I27A** | **Quinn** | **16.96** | **72** | P | **Pn** | **15 19 23.4** | **-0.6** |
| | baz=17 | | | | | | |
| **J27A** | **Elkhorn Farm,** | **16.97** | **75** | P | **Pn** | **15 19 23.2** | **-1.0** |
| | baz=17 | | | | | | |
| **H27A** | **Howes** | **16.98** | **70** | P | **Pn** | **15 19 22.4** | **-1.8** |
| | baz=17 | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **17.01** | **89** | P | **Pn** | **15 19 23.9** | **-0.8** |
| | baz=17 | | | | | | |
| **R27A** | **Eads** | **17.06** | **92** | P | **Pn** | **15 19 24.6** | **-0.8** |
| | baz=17 | | | | | | |
| **D26A** | **Manning** | **17.09** | **62** | P | **Pn** | **15 19 23.6** | **-2.0** |
| | baz=17 | | | | | | |
| **OGNE** | **Ogallala** | **17.10** | **83** | P | **Pn** | **15 19 25.3** | **-0.5** |
| | baz=17 | | | | | | |
| **OGNE** | **Ogallala** | **17.10** | **83** | *e*P | **Pn** | **15 19 24.8** | **-1.0** |
| | 37nm,0.6s | | | | | | |
| **G27A** | **Dupree** | **17.15** | **68** | P | **Pn** | **15 19 24.6** | **-1.8** |
| | baz=17 | | | | | | |
| **F27A** | **Lemmon** | **17.16** | **66** | P | **Pn** | **15 19 24.6** | **-1.8** |
| | baz=17 | | | | | | |
| **S27A** | **Las Animas** | **17.16** | **94** | P | **Pn** | **15 19 26.6** | **0.0** |
| | baz=17 | | | | | | |
| **O28A** | **Krutsinger Ran** | **17.42** | **85** | P | **Pn** | **15 19 28.9** | **-0.9** |
| | baz=18 | | | | | | |
| **T27A** | **Campo** | **17.49** | **96** | P | **Pn** | **15 19 30.8** | **+0.1** |
| | baz=18 | | | | | | |
| **N28A** | **Pribbeno Ranch** | **17.51** | **83** | P | **Pn** | **15 19 30.1** | **-0.8** |
| | baz=18 | | | | | | |
| **J28A** | **Allard Ranch,** | **17.53** | **74** | P | **Pn** | **15 19 29.8** | **-1.4** |
| | baz=18 | | | | | | |
| **I28A** | **Midland** | **17.59** | **72** | P | **Pn** | **15 19 29.7** | **-2.1** |
| | baz=18 | | | | | | |
| **Q28A** | **Sharon Springs** | **17.60** | **89** | P | **Pn** | **15 19 31.5** | **-0.5** |
| | baz=18 | | | | | | |
| **U27A** | **Thompson Grove** | **17.64** | **98** | P | **Pn** | **15 19 33.0** | **+0.5** |
| | baz=18 | | | | | | |
| **H28A** | **Mission Ridge** | **17.73** | **70** | P | **Pn** | **15 19 32.7** | **-0.8** |
| | baz=18 | | | | | | |
| **R28A** | **Tribune** | **17.80** | **91** | P | **Pn** | **15 19 34.1** | **-0.3** |
| | baz=18 | | | | | | |
| **DLBC** | **Dease Lake** | **17.82** | **351** | P | **P** | **15 19 35.6** | **+0.5** |
| | 0.2nm,0.3s,baz=171,slow=17,SNR=4.3 | | | | | | |
| **V27A** | **Dan Oppiter Fa** | **17.89** | **100** | P | **Pn** | **15 19 35.7** | **+0.1** |
| | baz=18 | | | | | | |
| **MNTX** | **Cornudas Mount** | **18.06** | **115** | P | **P** | **15 19 39.0** | **+1.3** |
| | baz=18 | | | | | | |
| **O29A** | **4D Ranch, Culb** | **18.16** | **85** | P | **Pn** | **15 19 37.1** | **-1.8** |
| | baz=18 | | | | | | |
| **P29A** | **Atwood** | **18.16** | **87** | P | **Pn** | **15 19 37.2** | **-1.7** |
| | baz=18 | | | | | | |
| **K29A** | **Lazy Trails An** | **18.22** | **76** | P | **P** | **15 19 37.7** | **-1.9** |
| | baz=18 | | | | | | |
| **R29A** | **Marienthal** | **18.28** | **90** | P | **P** | **15 19 39.4** | **-0.9** |
| | baz=18 | | | | | | |
| **Q29A** | **Oakley** | **18.29** | **89** | P | **P** | **15 19 39.5** | **-0.8** |
| | baz=18 | | | | | | |
| **H29A** | **Onida** | **18.30** | **70** | P | **P** | **15 19 38.9** | **-1.5** |
| | baz=18 | | | | | | |
| **V28A** | **Channing** | **18.34** | **99** | P | **Pn** | **15 19 41.8** | **+0.6** |
| | baz=18 | | | | | | |
| **T29A** | **Hugoton** | **18.54** | **94** | P | **P** | **15 19 42.2** | **-1.0** |
| | baz=19 | | | | | | |
| **Q30A** | **Quinter** | **18.84** | **88** | P | **P** | **15 19 46.2** | **-0.2** |
| | baz=19 | | | | | | |
| **S30A** | **Montezuma** | **19.02** | **92** | P | **Pn** | **15 19 49.2** | **-0.1** |
| | baz=19 | | | | | | |
| **AMTX** | **Amarillo** | **19.11** | **101** | *e*P | **Pn** | **15 19 51.0** | **+0.6** |
| **T30A** | **Plains** | **19.15** | **94** | P | **P** | **15 19 49.9** | **+0.1** |
| | baz=19 | | | | | | |
| **U30A** | **WK&E Inc. Balk** | **19.24** | **95** | P | **P** | **15 19 49.7** | **-1.0** |
| | baz=19 | | | | | | |
| **CBKS** | **Cedar Bluff** | **19.24** | **88** | P | **P** | **15 19 49.9** | **-0.9** |
| | baz=19 | | | | | | |
| **CBKS** | **Cedar Bluff** | **19.24** | **88** | *e*P | **P** | **15 19 50.0** | **-0.9** |
| | 126nm,1.1s | | | | | | |
| **X29A** | **Tulia** | **19.28** | **102** | P | **Pn** | **15 19 52.2** | **-0.3** |
| | baz=19 | | | | | | |
| **P31A** | **Stockton** | **19.35** | **86** | P | **P** | **15 19 51.4** | **-0.6** |
| | baz=19 | | | | | | |
| **J31A** | **Geddes** | **19.36** | **74** | P | **P** | **15 19 51.6** | **-0.4** |
| | baz=19 | | | | | | |
| **Q31A** | **Ellis** | **19.46** | **87** | P | **P** | **15 19 53.4** | **+0.2** |
| | baz=20 | | | | | | |
| **V30A** | **Spur Ranch, Mi** | **19.49** | **98** | P | **Pn** | **15 19 54.6** | **-0.4** |
| | baz=20 | | | | | | |
| **R31A** | **Burdett** | **19.54** | **90** | P | **Pn** | **15 19 54.9** | **-0.6** |
| | baz=20 | | | | | | |
| **D30A** | **Buchanan** | **19.57** | **63** | P | **P** | **15 19 53.1** | **-1.2** |
| | baz=20 | | | | | | |
| **128A** | **Castleberry Fa** | **19.59** | **108** | P | **P** | **15 19 54.6** | **-0.1** |
| | baz=20 | | | | | | |
| **A29A** | **Manning Farm,** | **19.63** | **58** | P | **P** | **15 19 55.0** | **+0.1** |
| | baz=20 | | | | | | |
| **228A** | **UT Block 9, Go** | **19.78** | **109** | P | **P** | **15 19 56.8** | **0.0** |
| | baz=20 | | | | | | |
| **T31A** | **Randall Ranch,** | **19.78** | **93** | P | **Pn** | **15 19 58.4** | **0.0** |
| | baz=20 | | | | | | |
| **C30A** | **Mose, Pekin** | **19.86** | **61** | P | **P** | **15 19 57.8** | **+0.3** |
| | baz=20 | | | | | | |
| **X30A** | **Coker Ranch, T** | **19.89** | **101** | P | **P** | **15 19 58.6** | **+0.6** |
| | baz=20 | | | | | | |
| **U31A** | **Nine Bar Ranch** | **19.90** | **95** | P | **Pn** | **15 19 59.3** | **-0.5** |
| | baz=20 | | | | | | |
| **K32A** | **Verdigre** | **19.95** | **76** | P | **P** | **15 19 58.2** | **-0.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=20 | | | | | | |
| J32A | Parkston | 20.00 | 74 | P | **P** | **15 19 58.8** | **-0.3** |
| | baz=20 | | | | | | |
| O32A | Brockman Farm, | 20.04 | 83 | P | **P** | **15 19 59.4** | **0.0** |
| | baz=20 | | | | | | |
| Q32A | Meitler Ranch, | 20.09 | 87 | P | Pn | 15 20 01.2 | -0.8 |
| | baz=20 | | | | | | |
| R32A | Long Quarter, | 20.12 | 89 | P | **P** | **15 20 01.4** | **+1.1** |
| | baz=20 | | | | | | |
| V31A | Spring Creek L | 20.12 | 97 | P | Pn | 15 20 03.3 | +0.9 |
| | baz=20 | | | | | | |
| S32A | Newby Ranch, P | 20.15 | 91 | P | Pn | 15 20 01.9 | -0.8 |
| | baz=20 | | | | | | |
| H32A | Carlson Farm, | 20.28 | 71 | P | **P** | **15 20 01.8** | **-0.3** |
| | baz=20 | | | | | | |
| Q33A | Connelly Farm, | 20.64 | 87 | P | **P** | **15 20 05.9** | **0.0** |
| | baz=21 | | | | | | |
| TXAR | Lajitas Array | 20.67 | 118 | P | Pn | 15 20 08.0 | -1.0 |
| | 4.7nm,0.8s,baz=296,slow=8.5,SNR=31 | | | | | | |
| TXAR | | | | LR | LR | 15 28 59.8 | |
| | comp=Z,78nm,19.5s,baz=0.0,slow=39 | | | | | | |
| V32A | Arapaho | 20.74 | 96 | P | **P** | **15 20 07.7** | **+0.6** |
| | baz=21 | | | | | | |
| H33A | Prehn Over Nor | 20.78 | 70 | P | **P** | **15 20 07.0** | **-0.5** |
| | baz=21 | | | | | | |
| W32A | Sentinel | 20.82 | 98 | P | **P** | **15 20 07.8** | **-0.2** |
| | baz=21 | | | | | | |
| T33A | Patterson Ranc | 20.87 | 92 | P | **P** | **15 20 08.4** | **0.0** |
| | baz=21 | | | | | | |
| ECSD | EROS Data Cent | 20.89 | 73 | P | **P** | **15 20 07.4** | **-1.2** |
| | baz=21 | | | | | | |
| ECSD | EROS Data Cent | 20.89 | 73 | *e*P | **P** | **15 20 06.1** | **-2.5** |
| | 8.3nm,0.7s | | | | | | |
| S33A | Kaszmaul Farm, | 20.89 | 91 | P | **P** | **15 20 09.0** | **+0.3** |
| | baz=21 | | | | | | |
| 429A | Davenport Ranc | 21.11 | 112 | P | **P** | **15 20 11.7** | **+0.6** |
| | baz=21 | | | | | | |
| F33A | 5 Mile Ranch, | 21.14 | 67 | P | **P** | **15 20 10.2** | **-1.1** |
| | baz=21 | | | | | | |
| 529A | Stev Forest Ra | 21.17 | 114 | P | **P** | **15 20 12.8** | **+0.9** |
| | baz=21 | | | | | | |
| 330A | Mertzon | 21.18 | 109 | P | **P** | **15 20 11.7** | **-0.1** |
| | baz=21 | | | | | | |
| U33A | Lingo Farm, Me | 21.19 | 94 | P | **P** | **15 20 13.6** | **+1.7** |
| | baz=21 | | | | | | |
| R34A | Isabella, Hill | 21.26 | 88 | P | **P** | **15 20 14.3** | **+1.6** |
| | baz=21 | | | | | | |
| P34A | Walnut Farm, R | 21.27 | 85 | P | **P** | **15 20 12.4** | **-0.4** |
| | baz=21 | | | | | | |
| V33A | Lossen Ranch, | 21.28 | 95 | P | **P** | **15 20 15.8** | **+2.9** |
| | baz=21 | | | | | | |
| WMOK | Wichita Mounta | 21.33 | 99 | *e*P | **P** | **15 20 12.3** | **-1.2** |
| Q34A | Chapman | 21.33 | 86 | P | **P** | **15 20 14.6** | **+1.2** |
| | baz=21 | | | | | | |
| 430A | Baggett Ranch, | 21.48 | 111 | P | **P** | **15 20 15.7** | **+0.6** |
| | baz=22 | | | | | | |
| KSU1 | Kansas State U | 21.54 | 86 | P | **P** | **15 20 17.8** | **+2.1** |
| | baz=22 | | | | | | |
| KSU1 | Kansas State U | 21.54 | 86 | *e*P | **P** | **15 20 17.7** | **+2.1** |
| | 60nm,0.6s | | | | | | |
| U34A | Anderson Ranch | 21.62 | 93 | P | **P** | **15 20 16.1** | **-0.4** |
| | baz=22 | | | | | | |
| T34A | McClaskey Farm | 21.69 | 91 | P | **P** | **15 20 16.3** | **-0.9** |
| | baz=22 | | | | | | |
| AGMN | Agassiz Nation | 21.69 | 61 | P | **P** | **15 20 16.3** | **-0.8** |
| | baz=22 | | | | | | |
| AGMN | Agassiz Nation | 21.69 | 61 | *e*P | **P** | **15 20 16.6** | **-0.6** |
| | 8.4nm,0.6s | | | | | | |
| Y33A | Hilltop Ranch, | 21.76 | 100 | P | **P** | **15 20 16.9** | **-1.1** |
| | baz=22 | | | | | | |
| 331A | San Angelo | 21.77 | 109 | P | **P** | **15 20 18.3** | **+0.2** |
| | baz=22 | | | | | | |
| M35A | Neola | 21.77 | 79 | P | **P** | **15 20 16.0** | **-2.0** |
| | baz=22 | | | | | | |
| 530A | J-C Ranch, Com | 21.77 | 112 | P | **P** | **15 20 19.0** | **+0.7** |
| | baz=22 | | | | | | |
| L35A | Bielow Farm, R | 21.80 | 77 | P | **P** | **15 20 16.3** | **-2.1** |
| | baz=22 | | | | | | |
| V34A | Guthrie | 21.85 | 95 | P | **P** | **15 20 21.3** | **+2.4** |
| | baz=22 | | | | | | |
| P35A | Duane Minner, | 21.89 | 84 | P | **P** | **15 20 18.1** | **-1.2** |
| | baz=22 | | | | | | |
| N35A | Tabor | 21.90 | 81 | P | **P** | **15 20 18.7** | **-0.8** |
| | baz=22 | | | | | | |
| 431A | Sonora | 21.98 | 110 | P | **P** | **15 20 20.1** | **-0.4** |
| | baz=22 | | | | | | |
| 232A | Coleman | 22.02 | 106 | P | **P** | **15 20 19.8** | **-1.1** |
| | baz=22 | | | | | | |
| Q35A | Mercer Eighty, | 22.03 | 86 | P | **P** | **15 20 20.7** | **-0.2** |
| | baz=22 | | | | | | |
| R35A | Emporia Munici | 22.05 | 88 | P | **P** | **15 20 19.4** | **-1.7** |
| | baz=22 | | | | | | |
| ULM | Lac du Bonnet | 22.07 | 55 | P | **P** | **15 20 19.8** | **-1.4** |
| | 4.9nm,0.5s,baz=285,slow=9.2,SNR=5.0 | | | | | | |
| ULM | | | | LR | LR | 15 29 30.6 | |
| | comp=Z,126nm,18.8s,baz=49,slow=38 | | | | | | |
| S35A | Otter Creek Ra | 22.14 | 89 | P | **P** | **15 20 21.3** | **-0.8** |
| | baz=22 | | | | | | |
| 133A | Hamilton Ranch | 22.20 | 104 | P | **P** | **15 20 21.9** | **-0.9** |
| | baz=22 | | | | | | |
| 332A | Millersview | 22.22 | 108 | P | **P** | **15 20 21.7** | **-1.3** |
| | baz=22 | | | | | | |
| T35A | Sooner Cattle | 22.23 | 91 | P | **P** | **15 20 22.3** | **-0.8** |
| | baz=22 | | | | | | |
| U35A | Pawnee | 22.25 | 93 | P | **P** | **15 20 23.1** | **-0.2** |
| | baz=22 | | | | | | |
| 531A | Rocksprings | 22.32 | 111 | P | **P** | **15 20 24.5** | **+0.4** |
| | baz=22 | | | | | | |
| YKA | Yellowknife Ar | 22.39 | 12 | P | **P** | **15 20 24.4** | **-0.1** |
| | 3.6nm,0.8s,baz=193,slow=10,SNR=3.9 | | | | | | |
| Y34A | Reagan Ranch, | 22.43 | 99 | P | **P** | **15 20 24.4** | **-0.9** |
| | baz=22 | | | | | | |
| 432A | Menard | 22.46 | 109 | P | **P** | **15 20 24.9** | **-0.7** |
| | baz=22 | | | | | | |
| P36A | Good Intent, A | 22.48 | 84 | P | **P** | **15 20 24.4** | **-1.3** |
| | baz=22 | | | | | | |
| B34A | Aery, Baudette | 22.52 | 60 | P | **P** | **15 20 24.4** | **-1.6** |
| | baz=22 | | | | | | |
| T36A | Boggs Farm, Ca | 22.67 | 90 | P | **P** | **15 20 29.2** | **+1.5** |
| | baz=23 | | | | | | |
| JCT | Junction City | 22.67 | 110 | P | **P** | **15 20 28.0** | **+0.2** |
| | baz=23 | | | | | | |
| JCT | Junction City | 22.67 | 110 | *e*P | **P** | **15 20 30.5** | **+2.7** |
| | 11nm,0.9s | | | | | | |
| 631A | Perdido Creek | 22.74 | 113 | P | **P** | **15 20 28.7** | **+0.1** |
| | baz=23 | | | | | | |
| 532A | Rocksprings | 22.80 | 110 | P | **P** | **15 20 29.0** | **-0.2** |
| | baz=23 | | | | | | |
| 333A | Richland Sprin | 22.80 | 107 | P | **P** | **15 20 28.3** | **-0.9** |
| | baz=23 | | | | | | |
| U36A | Oologah | 23.00 | 92 | P | **P** | **15 20 34.8** | **+3.6** |
| | baz=23 | | | | | | |
| 433A | Art | 23.03 | 108 | P | **P** | **15 20 31.5** | **-0.1** |
| | baz=23 | | | | | | |
| V36A | Jenks | 23.06 | 94 | P | **P** | **15 20 30.7** | **-1.1** |
| | baz=23 | | | | | | |
| F36A | Milaca | 23.07 | 67 | P | **P** | **15 20 30.1** | **-1.8** |
| | baz=23 | | | | | | |
| TUL1 | Tulsa | 23.13 | 93 | P | P | 15 20 37.1 | +4.7 |
| | baz=23 | | | | | | |
| 632A | Uvalde | 23.24 | 112 | P | **P** | **15 20 34.0** | **+0.4** |
| | baz=23 | | | | | | |
| 334A | Lometa | 23.34 | 106 | P | **P** | **15 20 36.5** | **+1.9** |
| | baz=23 | | | | | | |
| D36A | Goodland | 23.37 | 64 | P | **P** | **15 20 34.5** | **-0.3** |
| | baz=23 | | | | | | |
| 533A | Kerrville | 23.45 | 109 | P | **P** | **15 20 36.9** | **+1.2** |
| | baz=24 | | | | | | |
| U37A | Salina | 23.46 | 92 | P | **P** | **15 20 35.3** | **-0.5** |
| | baz=24 | | | | | | |
| SPMN | St. Paul | 23.58 | 69 | P | **P** | **15 20 36.3** | **-0.5** |
| | baz=24 | | | | | | |
| 732A | Laxson Ranch, | 23.58 | 113 | P | **P** | **15 20 37.7** | **+0.7** |
| | baz=24 | | | | | | |
| 434A | Burnet | 23.59 | 107 | P | **P** | **15 20 37.1** | **0.0** |
| | baz=24 | | | | | | |
| C36A | Pine Crest Far | 23.64 | 63 | P | **P** | **15 20 37.0** | **-0.4** |
| | baz=24 | | | | | | |
| 633A | Saathoff Ranch | 23.70 | 111 | P | **P** | **15 20 38.0** | **-0.1** |
| | baz=24 | | | | | | |
| Z36A | Blue Ridge | 23.72 | 100 | P | **P** | **15 20 38.0** | **-0.3** |
| | baz=24 | | | | | | |
| 832A | Faith Ranch, C | 23.85 | 114 | P | **P** | **15 20 41.1** | **+1.6** |
| | baz=24 | | | | | | |
| 534A | Blanco | 23.87 | 109 | P | **P** | **15 20 40.4** | **+0.7** |
| | baz=24 | | | | | | |
| D37A | Cotton | 23.88 | 64 | P | **P** | **15 20 38.9** | **-0.7** |
| | baz=24 | | | | | | |
| 733A | Divot King Ran | 24.06 | 113 | P | **P** | **15 20 42.6** | **+1.1** |
| | baz=24 | | | | | | |
| C37A | Embarrass | 24.08 | 63 | P | **P** | **15 20 41.5** | **0.0** |
| | baz=24 | | | | | | |
| 833A | Chaparral WMA, | 24.23 | 113 | P | **P** | **15 20 44.8** | **+1.8** |
| | baz=24 | | | | | | |
| X38A | Whitesboro | 24.33 | 95 | P | **P** | **15 20 45.3** | **+1.3** |
| | baz=24 | | | | | | |
| W38A | Poteau | 24.41 | 94 | P | **P** | **15 20 44.9** | **+0.3** |
| | baz=24 | | | | | | |
| EYMN | Ely | 24.56 | 62 | P | **P** | **15 20 45.1** | **-0.8** |
| | baz=25 | | | | | | |
| C38A | Sawbill Land. | 24.69 | 63 | P | **P** | **15 20 47.2** | **+0.1** |
| | baz=25 | | | | | | |
| 933A | Laredo | 24.75 | 115 | P | **P** | **15 20 50.5** | **+2.7** |
| | baz=25 | | | | | | |
| MIAR | Mount Ida | 25.33 | 95 | P | **P** | **15 20 54.9** | **+1.9** |
| | baz=25 | | | | | | |
| ILAR | Eielson Array | 27.06 | 339 | P | **P** | **15 21 08.6** | **+0.3** |
| | 0.6nm,0.8s,baz=157,slow=9.3,SNR=5.8 | | | | | | |
| INK | Inuvik | 27.82 | 353 | LR | LR | 15 32 22.7 | |
| | comp=Z,71nm,21.0s,baz=156,slow=37 | | | | | | |
| KMSC | Kings Mountain | 34.35 | 85 | P | **P** | **15 22 13.6** | **+0.7** |
| | baz=34 | | | | | | |
| ROSC | El Rosal | 57.56 | 115 | LR | LR | 15 54 23.7 | |
| | comp=Z,36nm,18.3s,baz=14,slow=41 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 61.22 | 272 | T | T | 16 32 12.8 | |
| | baz=53,slow=75,SNR=79 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 61.22 | 272 | T | T | 16 32 14.8 | |
| | baz=53,slow=75,SNR=96 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 61.23 | 272 | T | T | 16 32 15.6 | |
| | baz=53,slow=75,SNR=89 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 62.09 | 271 | T | T | 16 33 21.6 | |
| | baz=54,slow=74,SNR=32 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 62.10 | 271 | T | T | 16 33 21.1 | |
| | baz=54,slow=74,SNR=36 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 62.11 | 271 | T | T | 16 33 22.2 | |
| | baz=54,slow=74,SNR=30 | | | | | | |
| LPAZ | La Paz | 77.36 | 125 | P | P | 15 27 25.2 | +3.7 |
| | 1.8nm,0.7s,baz=343,slow=4.9,SNR=7.9 | | | | | | |
| BVAR | Borovoye Array | 85.49 | 351 | P | **P** | **15 28 04.1** | **+0.6** |
| | 1.3nm,0.7s,baz=90,slow=1.5,SNR=5.2 | | | | | | |
| MKAR | Makanchi Array | 89.39 | 342 | LR | LR | 16 12 54.3 | |
| | comp=Z,48nm,19.3s,baz=200,slow=39 | | | | | | |
| BDFB | Brasilia | 90.38 | 110 | LR | LR | 16 12 58.7 | |
| | comp=Z,41nm,18.8s,baz=41,slow=38 | | | | | | |
| KMI | Kunming | 100.88 | 317 | P | **Pdif** | **15 29 13.7** | **-1.7** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| KMI | | | | pmax | pmax | | |
| | comp=Z,240nm,4.5s | | | | | | |

*NEIC **05** 15:36:19.0, 39.°07S×174.°83E, h216km, MG4.0(WEL), After WEL.*

**WEL 05 15:36:18.6**±0.3**, 39.°09S×174.°81E, h219**km±2km**, ML4.0**/20**, 26C-33D, Error ellipse: s-maj=1.7km s-min=1.6km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VRZ | Vera Road | 0.06 | 222 | PN | Pn | 15 36 46.1 | -0.9 |
| VRZ | | | | SN | S | 15 37 07.7 | -1.6 |
| VRZ | Vera Road | 0.06 | 222 | Pn | Pn | 15 36 46.2 | -0.8 |
| PKVZ | Pokaka | 0.47 | 116 | ⇓PN | Pn | 15 36 47.5 | -0.3 |
| PKVZ | | | | SN | S | 15 37 08.9 | -1.8 |
| PKVZ | Pokaka | 0.47 | 116 | Pn | Pn | 15 36 47.5 | -0.3 |
| PKVZ | | | | Sn | S | 15 37 08.7 | -2.1 |
| DREZ | Durham Road | 0.48 | 257 | PN | Pn | 15 36 47.6 | -0.3 |
| DREZ | | | | SN | S | 15 37 09.5 | -1.1 |
| DREZ | Durham Road | 0.48 | 257 | Pn | Pn | 15 36 47.7 | -0.2 |
| DREZ | | | | Sn | S | 15 37 09.5 | -1.1 |
| LREZ | Lake Rotokare | 0.49 | 220 | ⇑PN | Pn | 15 36 47.7 | -0.1 |
| LREZ | | | | SN | S | 15 37 09.8 | -0.9 |
| TWVZ | Taurewa | 0.49 | 89 | ⇓PN | Pn | 15 36 47.4 | -0.6 |
| TWVZ | Taurewa | 0.49 | 89 | Pn | Pn | 15 36 47.5 | -0.6 |
| TWVZ | | | | Sn | S | 15 37 08.6 | -2.3 |
| PREZ | Palmer Road | 0.56 | 243 | PN | Pn | 15 36 48.1 | -0.1 |
| PREZ | | | | SN | S | 15 37 10.4 | -0.9 |
| PREZ | Palmer Road | 0.56 | 243 | Pn | Pn | 15 36 48.1 | -0.1 |
| PREZ | | | | Sn | S | 15 37 10.4 | -0.9 |
| NEZ | North Egmont | 0.58 | 251 | ⇑PN | Pn | 15 36 48.2 | -0.1 |
| NEZ | | | | SN | S | 15 37 10.5 | -1.0 |
| NEZ | North Egmont | 0.58 | 251 | Pn | Pn | 15 36 48.2 | -0.1 |
| NEZ | | | | Sn | S | 15 37 10.5 | -1.0 |
| COVZ | Chateau Observ | 0.58 | 102 | ⇓PN | Pn | 15 36 48.0 | -0.3 |
| COVZ | Chateau Observ | 0.58 | 102 | Pn | Pn | 15 36 48.0 | -0.3 |
| WPVZ | Whakapapa | 0.59 | 102 | ⇓PN | Pn | 15 36 48.1 | -0.3 |
| WPVZ | Whakapapa | 0.59 | 102 | Pn | Pn | 15 36 48.1 | -0.3 |
| MTVZ | Mangateitei | 0.60 | 121 | PN | Pn | 15 36 48.2 | -0.2 |
| MTVZ | Mangateitei | 0.60 | 121 | Pn | Pn | 15 36 48.2 | -0.2 |
| FWVZ | Far West T-bar | 0.60 | 107 | PN | Pn | 15 36 48.2 | -0.3 |
| FWVZ | Far West T-bar | 0.60 | 107 | Pn | Pn | 15 36 48.2 | -0.3 |
| WTVZ | West Tongariro | 0.61 | 93 | PN | Pn | 15 36 48.1 | -0.3 |
| WTVZ | West Tongariro | 0.61 | 93 | Pn | Pn | 15 36 48.1 | -0.3 |
| TRVZ | Turoa | 0.61 | 111 | ⇓PN | Pn | 15 36 48.4 | -0.2 |
| TRVZ | Turoa | 0.61 | 111 | Pn | Pn | 15 36 48.4 | -0.2 |
| DRZ | Dome Shelter | 0.62 | 108 | *e*PN | Pn | 15 36 48.4 | -0.3 |
| DRZ | Dome Shelter | 0.62 | 108 | Pn | Pn | 15 36 48.3 | -0.5 |
| NGZ | Ngauruhoe | 0.62 | 99 | ⇓PN | Pn | 15 36 48.3 | -0.2 |
| NGZ | Ngauruhoe | 0.62 | 99 | Pn | Pn | 15 36 48.3 | -0.2 |
| WHVZ | Whangaehu Hut | 0.64 | 108 | ⇓PN | Pn | 15 36 48.5 | -0.2 |
| WHVZ | Whangaehu Hut | 0.64 | 108 | Pn | Pn | 15 36 48.5 | -0.2 |
| PKE | Pukeiti | 0.65 | 260 | ⇑PN | Pn | 15 36 48.2 | -0.3 |
| PKE | Pukeiti | 0.65 | 260 | Pn | Pn | 15 36 48.2 | -0.3 |
| KHEZ | Kahui Hut | 0.65 | 251 | PN | Pn | 15 36 48.4 | -0.1 |
| KHEZ | Kahui Hut | 0.65 | 251 | Pn | Pn | 15 36 48.4 | -0.1 |
| KRVZ | Karewarewa | 0.65 | 91 | ⇓PN | Pn | 15 36 48.3 | -0.3 |
| KRVZ | Karewarewa | 0.65 | 91 | Pn | Pn | 15 36 48.3 | -0.3 |
| KRVZ | | | | Sn | S | 15 37 09.8 | -2.2 |
| WNVZ | Wahianoa | 0.66 | 112 | PN | Pn | 15 36 48.5 | -0.2 |
| WNVZ | Wahianoa | 0.66 | 112 | Pn | Pn | 15 36 48.5 | -0.2 |
| OTVZ | Oturere | 0.67 | 97 | PN | Pn | 15 36 48.5 | -0.2 |
| OTVZ | Oturere | 0.67 | 97 | Pn | Pn | 15 36 48.5 | -0.2 |
| OTVZ | | | | Sn | S | 15 37 10.6 | -1.7 |
| TUVZ | Tukino | 0.68 | 106 | ⇓PN | Pn | 15 36 48.8 | 0.0 |
| TUVZ | Tukino | 0.68 | 106 | Pn | Pn | 15 36 48.8 | 0.0 |
| WAZ | Wanganui | 0.69 | 168 | PN | Pn | 15 36 48.7 | +0.1 |
| WAZ | Wanganui | 0.69 | 168 | Pn | Pn | 15 36 48.9 | +0.2 |
| KATZ | Kakaramea | 0.70 | 81 | PN | Pn | 15 36 48.5 | -0.4 |
| NWEZ | Newall Road | 0.76 | 255 | PN | Pn | 15 36 48.9 | -0.1 |
| NMEZ | Namu Road | 0.79 | 245 | PN | Pn | 15 36 49.1 | 0.0 |
| RITZ | Rihia Road | 0.83 | 83 | ⇑PN | Pn | 15 36 49.2 | -0.1 |
| RITZ | Rihia Road | 0.83 | 83 | Pn | Pn | 15 36 49.2 | -0.1 |
| TLZ | Tolley Road | 0.95 | 37 | PN | Pn | 15 36 49.4 | -0.8 |
| TLZ | Tolley Road | 0.95 | 37 | Pn | Pn | 15 36 49.3 | -0.9 |
| BHHZ | Black Hill Sta | 1.06 | 113 | ⇓PN | Pn | 15 36 50.3 | -0.5 |
| BHHZ | Black Hill Sta | 1.06 | 113 | Pn | Pn | 15 36 50.3 | -0.5 |
| MRHZ | Matea Rd | 1.28 | 79 | ⇓PN | Pn | 15 36 51.4 | -1.0 |
| KWHZ | Kaweka Forest | 1.30 | 106 | PN | Pn | 15 36 52.6 | +0.1 |
| BKZ | Black Stump Fm | 1.31 | 94 | ⇓PN | Pn | 15 36 52.0 | -0.6 |
| BKZ | | | | AML | AML | 15 37 16.1 | |
| BKZ | | | | AML | AML | 15 37 17.6 | |
| BKZ | Black Stump Fm | 1.31 | 94 | Pn | Pn | 15 36 52.0 | -0.6 |
| TSZ | Takapari Road | 1.32 | 138 | ⇑PN | Pn | 15 36 52.6 | 0.0 |
| TSZ | | | | AML | AML | 15 37 17.8 | |
| TSZ | | | | AML | AML | 15 37 19.8 | |
| TSZ | Takapari Road | 1.32 | 138 | Pn | Pn | 15 36 52.6 | 0.0 |
| KRHZ | Kereru | 1.33 | 115 | ⇓PN | Pn | 15 36 52.6 | -0.1 |
| PNHZ | Pukenui | 1.36 | 128 | PN | Pn | 15 36 53.0 | +0.1 |
| PNHZ | Pukenui | 1.36 | 128 | Pn | Pn | 15 36 53.0 | +0.1 |
| POWZ | Post Office Ro | 1.50 | 151 | ⇑PN | Pn | 15 36 53.7 | -0.2 |
| POWZ | Post Office Ro | 1.50 | 151 | Pn | Pn | 15 36 53.8 | -0.2 |
| MCHZ | McNeill Hill | 1.51 | 104 | ⇓PN | Pn | 15 36 54.6 | +0.6 |
| MCHZ | McNeill Hill | 1.51 | 104 | Pn | Pn | 15 36 54.6 | +0.6 |
| RRRZ | Republican Roa | 1.53 | 61 | ⇓PN | Pn | 15 36 53.5 | -0.9 |
| RRRZ | Republican Roa | 1.53 | 61 | Pn | Pn | 15 36 53.6 | -0.7 |
| NMHZ | Naumai | 1.56 | 91 | ⇓PN | Pn | 15 36 55.0 | +0.4 |
| NMHZ | Naumai | 1.56 | 91 | Pn | Pn | 15 36 55.0 | +0.4 |
| WPHZ | Waipukurau | 1.60 | 128 | ⇓PN | Pn | 15 36 55.0 | +0.2 |
| WPHZ | Waipukurau | 1.60 | 128 | Pn | Pn | 15 36 55.0 | +0.2 |
| DVHZ | Dannevirke | 1.60 | 140 | PN | Pn | 15 36 54.7 | -0.2 |
| DVHZ | Dannevirke | 1.60 | 140 | Pn | Pn | 15 36 54.7 | -0.2 |
| MRZ | Mangatainoka R | 1.68 | 160 | PN | Pn | 15 36 55.1 | -0.5 |
| MRZ | | | | AML | AML | 15 37 22.0 | |
| MRZ | | | | AML | AML | 15 37 22.0 | |
| MRZ | Mangatainoka R | 1.68 | 160 | Pn | Pn | 15 36 55.1 | -0.5 |
| ARHZ | Aropaoanui | 1.71 | 97 | ⇓PN | Pn | 15 36 56.0 | +0.2 |
| ARHZ | Aropaoanui | 1.71 | 97 | Pn | Pn | 15 36 56.0 | +0.2 |
| PRWZ | Pori Road | 1.72 | 149 | ⇑PN | Pn | 15 36 55.9 | 0.0 |
| PRWZ | Pori Road | 1.72 | 149 | Pn | Pn | 15 36 55.9 | 0.0 |
| KAHZ | Kahuranaki | 1.75 | 115 | ⇓PN | Pn | 15 36 56.6 | +0.4 |
| KAHZ | Kahuranaki | 1.75 | 115 | Pn | Pn | 15 36 56.6 | +0.4 |
| OGWZ | Otaki Gorge | 1.75 | 171 | ⇑PN | Pn | 15 36 56.1 | -0.1 |
| OGWZ | Otaki Gorge | 1.75 | 171 | Pn | Pn | 15 36 56.1 | -0.1 |
| KIW | Kapiti Island | 1.78 | 177 | ⇑PN | Pn | 15 36 55.9 | -0.5 |
| KIW | | | | AML | AML | 15 37 23.4 | |
| KIW | | | | AML | AML | 15 37 24.7 | |
| KIW | Kapiti Island | 1.78 | 177 | Pn | Pn | 15 36 55.9 | -0.5 |
| RAHZ | Arahi | 1.78 | 85 | ⇓PN | Pn | 15 36 56.4 | -0.2 |
| RAHZ | Arahi | 1.78 | 85 | Pn | Pn | 15 36 56.4 | -0.2 |
| PRHZ | Porangahau | 1.84 | 131 | PN | Pn | 15 36 57.2 | +0.2 |
| PRHZ | Porangahau | 1.84 | 131 | Pn | Pn | 15 36 57.2 | +0.2 |
| DUWZ | D'Urville Isla | 1.85 | 201 | ⇑PN | Pn | 15 36 56.5 | -0.6 |
| DUWZ | D'Urville Isla | 1.85 | 201 | Pn | Pn | 15 36 56.5 | -0.6 |
| PXZ | Pawanui | 1.85 | 121 | ⇓PN | Pn | 15 36 57.1 | +0.1 |
| PXZ | | | | AML | AML | 15 37 25.5 | |
| PXZ | | | | AML | AML | 15 37 25.6 | |
| PXZ | | | | AML | AML | 15 37 27.9 | |
| PXZ | | | | AML | AML | 15 37 27.9 | |
| PXZ | Pawanui | 1.85 | 121 | Pn | Pn | 15 36 57.1 | +0.1 |
| CKHZ | Cape Kidnapper | 1.85 | 109 | ⇓PN | Pn | 15 36 57.5 | +0.4 |
| CKHZ | Cape Kidnapper | 1.85 | 109 | Pn | Pn | 15 36 57.5 | +0.4 |
| ANWZ | Angora Road | 1.88 | 137 | PN | Pn | 15 36 57.5 | +0.1 |
| TIWZ | Tintock | 1.88 | 154 | ⇑PN | Pn | 15 36 57.0 | -0.4 |
| TIWZ | | | | AML | AML | 15 37 27.6 | |
| TIWZ | | | | AML | AML | 15 37 27.8 | |
| TIWZ | Tintock | 1.88 | 154 | Pn | Pn | 15 36 57.0 | -0.4 |
| WHHZ | Waihua | 1.89 | 91 | ⇓PN | Pn | 15 36 57.4 | -0.1 |
| HOWZ | Holdsworth Sta | 1.89 | 164 | ⇑PN | Pn | 15 36 56.9 | -0.6 |
| HOWZ | Holdsworth Sta | 1.89 | 164 | Pn | Pn | 15 36 56.9 | -0.6 |
| BFZ | Birch Farm | 1.94 | 146 | ⇑PN | Pn | 15 36 57.5 | -0.4 |
| BFZ | | | | AML | AML | 15 37 26.6 | |
| BFZ | | | | AML | AML | 15 37 27.6 | |
| BFZ | | | | AML | AML | 15 37 28.6 | |
| BFZ | | | | AML | AML | 15 37 28.9 | |
| BFZ | Birch Farm | 1.94 | 146 | Pn | Pn | 15 36 57.5 | -0.4 |
| URZ | Urewera | 1.98 | 66 | ⇓PN | Pn | 15 36 56.9 | -1.5 |
| URZ | | | | AML | AML | 15 37 28.7 | |
| URZ | | | | AML | AML | 15 37 28.8 | |
| URZ | Urewera | 1.98 | 66 | Pn | Pn | 15 36 56.9 | -1.5 |
| SNGZ | Shannon Statio | 2.00 | 82 | ⇓PN | Pn | 15 36 58.2 | -0.4 |
| SNGZ | Shannon Statio | 2.00 | 82 | Pn | Pn | 15 36 58.2 | -0.4 |
| CAW | Cannon Point | 2.03 | 174 | ⇑PN | Pn | 15 36 58.3 | -0.5 |
| CAW | | | | AML | AML | 15 37 28.6 | |
| CAW | | | | AML | AML | 15 37 29.7 | |
| CAW | Cannon Point | 2.03 | 174 | Pn | Pn | 15 36 58.3 | -0.5 |
| CPWZ | Castlepoint | 2.12 | 150 | ⇑PN | Pn | 15 36 59.7 | +0.1 |
| CPWZ | Castlepoint | 2.12 | 150 | Pn | Pn | 15 36 59.7 | +0.1 |
| RAGZ | Rawiri | 2.12 | 75 | ⇓PN | Pn | 15 36 59.0 | -0.8 |
| RAGZ | Rawiri | 2.12 | 75 | Pn | Pn | 15 36 59.0 | -0.8 |
| MTW | Mount Morrison | 2.14 | 166 | ⇑PN | Pn | 15 36 59.1 | -0.8 |
| MTW | | | | AML | AML | 15 37 30.4 | |
| MTW | | | | AML | AML | 15 37 31.2 | |
| MTW | Mount Morrison | 2.14 | 166 | Pn | Pn | 15 36 59.1 | -0.8 |
| TCW | Tory Channel | 2.17 | 191 | ⇑PN | Pn | 15 36 59.7 | -0.4 |
| TCW | | | | AML | AML | 15 37 31.7 | |
| TCW | | | | AML | AML | 15 37 32.0 | |
| TCW | Tory Channel | 2.17 | 191 | Pn | Pn | 15 36 59.7 | -0.4 |
| TMWZ | Te Maipa | 2.19 | 158 | ⇑PN | Pn | 15 36 59.8 | -0.6 |
| TMWZ | Te Maipa | 2.19 | 158 | Pn | Pn | 15 36 59.8 | -0.6 |
| WEL | Wellington | 2.20 | 181 | PN | Pn | 15 36 59.7 | -0.7 |
| WEL | | | | AML | AML | 15 37 31.7 | |
| WEL | | | | AML | AML | 15 37 32.2 | |
| WEL | Wellington | 2.20 | 181 | Pn | Pn | 15 36 59.7 | -0.7 |
| KNZ | Kokohu | 2.23 | 89 | ⇓PN | Pn | 15 37 00.4 | -0.5 |
| KNZ | Kokohu | 2.23 | 89 | Pn | Pn | 15 37 00.4 | -0.4 |
| MWZ | Matawai | 2.26 | 71 | ⇓PN | Pn | 15 37 00.0 | -1.2 |
| MWZ | | | | AML | AML | 15 37 00.8 | |
| MWZ | | | | AML | AML | 15 37 00.9 | |
| MWZ | | | | AML | AML | 15 37 32.9 | |
| MWZ | | | | AML | AML | 15 37 33.2 | |
| MWZ | Matawai | 2.26 | 71 | Pn | Pn | 15 37 00.0 | -1.2 |
| BHW | Baring Head | 2.32 | 179 | PN | Pn | 15 37 00.8 | -0.9 |
| BHW | | | | AML | AML | 15 37 31.9 | |
| BHW | | | | AML | AML | 15 37 32.0 | |
| BHW | Baring Head | 2.32 | 179 | Pn | Pn | 15 37 00.8 | -0.9 |
| RIGZ | Rimuhau | 2.34 | 82 | ⇓PN | Pn | 15 37 01.4 | -0.6 |
| PAWZ | Paruwai Farm | 2.34 | 169 | ⇑PN | Pn | 15 37 01.2 | -0.8 |
| PAWZ | | | | AML | AML | 15 37 34.3 | |
| PAWZ | | | | AML | AML | 15 37 34.7 | |
| PAWZ | Paruwai Farm | 2.34 | 169 | Pn | Pn | 15 37 01.2 | -0.8 |
| MSWZ | Moikau Station | 2.35 | 172 | ⇑PN | Pn | 15 37 01.2 | -0.9 |
| MSWZ | | | | AML | AML | 15 37 34.2 | |
| MSWZ | | | | AML | AML | 15 37 34.3 | |
| MSWZ | Moikau Station | 2.35 | 172 | Pn | Pn | 15 37 01.2 | -0.9 |
| NNZ | Nelson | 2.40 | 207 | ⇑PN | Pn | 15 37 01.5 | -1.0 |
| NNZ | Nelson | 2.40 | 207 | Pn | Pn | 15 37 01.5 | -1.0 |
| PRGZ | Paritu Road | 2.40 | 87 | PN | Pn | 15 37 02.3 | -0.4 |
| PRGZ | Paritu Road | 2.40 | 87 | Pn | Pn | 15 37 02.3 | -0.4 |
| TRWZ | Traveller | 2.41 | 164 | ⇑PN | Pn | 15 37 01.9 | -0.7 |
| TRWZ | | | | AML | AML | 15 37 35.9 | |
| TRWZ | | | | AML | AML | 15 37 36.0 | |
| TRWZ | Traveller | 2.41 | 164 | Pn | Pn | 15 37 01.9 | -0.7 |
| MHGZ | Mahia Peninsul | 2.41 | 93 | ⇓PN | Pn | 15 37 02.6 | -0.1 |
| MHGZ | Mahia Peninsul | 2.41 | 93 | Pn | Pn | 15 37 02.6 | -0.1 |
| TUWZ | Tuamarina | 2.44 | 195 | PN | Pn | 15 37 02.1 | -0.8 |
| TUWZ | | | | AML | AML | 15 37 36.3 | |
| TUWZ | | | | AML | AML | 15 37 36.4 | |
| TUWZ | Tuamarina | 2.44 | 195 | Pn | Pn | 15 37 02.2 | -0.7 |
| TKGZ | Te Karaka | 2.46 | 76 | ⇓PN | Pn | 15 37 02.7 | -0.6 |
| TKGZ | Te Karaka | 2.46 | 76 | Pn | Pn | 15 37 02.7 | -0.6 |
| QRZ | Quartz Range | 2.47 | 224 | ⇑PN | Pn | 15 37 01.7 | -1.6 |
| QRZ | Quartz Range | 2.47 | 224 | Pn | Pn | 15 37 01.7 | -1.6 |
| PLWZ | Palliser | 2.51 | 172 | PN | Pn | 15 37 02.7 | -1.1 |
| PLWZ | Palliser | 2.51 | 172 | Pn | Pn | 15 37 02.7 | -1.1 |
| TWGZ | Tauwhareparae | 2.65 | 71 | *e*PN | Pn | 15 37 04.5 | -0.8 |
| TWGZ | Tauwhareparae | 2.65 | 71 | *e*Pn | Pn | 15 37 04.5 | -0.8 |
| HAZ | Te Kaha | 2.69 | 61 | ⇓PN | Pn | 15 37 03.7 | -2.0 |
| BSWZ | Blackbirch Sta | 2.72 | 195 | PN | Pn | 15 37 05.7 | -0.4 |
| BSWZ | Blackbirch Sta | 2.72 | 195 | Pn | Pn | 15 37 05.7 | -0.4 |
| CNGZ | Carnagh Statio | 2.72 | 78 | PN | Pn | 15 37 05.7 | -0.4 |
| CNGZ | Carnagh Statio | 2.72 | 78 | Pn | Pn | 15 37 05.7 | -0.4 |
| PUZ | Puketiti | 2.89 | 71 | ⇓PN | Pn | 15 37 06.5 | -1.5 |
| PUZ | | | | AML | AML | 15 37 42.3 | |
| PUZ | | | | AML | AML | 15 37 42.6 | |
| PUZ | Puketiti | 2.89 | 71 | Pn | Pn | 15 37 06.5 | -1.5 |
| THZ | Tophouse | 3.04 | 208 | ⇑PN | Pn | 15 37 08.3 | -1.5 |
| THZ | Tophouse | 3.04 | 208 | Pn | Pn | 15 37 08.3 | -1.5 |
| WMGZ | Waiomatatini S | 3.10 | 67 | PN | Pn | 15 37 08.9 | -1.5 |
| WMGZ | Waiomatatini S | 3.10 | 67 | Pn | Pn | 15 37 08.9 | -1.5 |
| MXZ | Matakaoa Point | 3.14 | 62 | PN | Pn | 15 37 09.9 | -1.0 |
| MXZ | Matakaoa Point | 3.14 | 62 | Pn | Pn | 15 37 09.9 | -1.0 |
| KHZ | Kahutara | 3.47 | 196 | PN | Pn | 15 37 13.5 | -1.1 |
| KHZ | | | | AML | AML | 15 37 55.8 | |
| KHZ | | | | AML | AML | 15 37 56.9 | |
| KHZ | Kahutara | 3.47 | 196 | Pn | Pn | 15 37 13.5 | -1.1 |
| DSZ | Denniston Nort | 3.51 | 220 | ⇑PN | Pn | 15 37 13.2 | -2.0 |
| DSZ | Denniston Nort | 3.51 | 220 | Pn | Pn | 15 37 13.2 | -2.0 |
| LTZ | Lake Taylor | 4.16 | 207 | ⇑PN | Pn | 15 37 21.5 | -1.6 |
| LTZ | Lake Taylor | 4.16 | 207 | Pn | Pn | 15 37 21.5 | -1.6 |
| OXZ | Oxford | 4.72 | 205 | PN | Pn | 15 37 27.7 | -2.3 |
| OXZ | Oxford | 4.72 | 205 | Pn | Pn | 15 37 27.5 | -2.5 |
| CRLZ | Canterbury Las | 4.78 | 199 | PN | Pn | 15 37 28.0 | -2.6 |
| CRLZ | Canterbury Las | 4.78 | 199 | Pn | Pn | 15 37 28.2 | -2.4 |
| MQZ | McQueen's Vall | 4.89 | 199 | PN | Pn | 15 37 29.4 | -2.7 |
| MQZ | McQueen's Vall | 4.89 | 199 | Pn | Pn | 15 37 29.4 | -2.6 |
| WVZ | Waitaha Valley | 5.04 | 216 | Pn | Pn | 15 37 32.1 | -1.8 |
| RPZ | Rata Peaks | 5.42 | 210 | Pn | Pn | 15 37 36.2 | -2.5 |
| FOZ | Fox Glacier | 5.91 | 219 | Pn | Pn | 15 37 41.2 | -3.6 |
| LBZ | Lake Benmore | 6.33 | 212 | Pn | Pn | 15 37 47.5 | -2.7 |
| ODZ | Otahua Downs | 6.71 | 206 | Pn | Pn | 15 37 53.3 | -1.9 |

*NNC **05** 15:37:55.0±2.9, 36.°90N×70.°72E, h108km±57km, mb2.7, mpv3.5, Error ellipse: s-maj=25.7km s-min=14.5km az=160.0*

**ISC 05 15:37:55.3**±3.9**, 36.°9N**±0.°2×**70.°73E**±0.°08**, h100**km**, n12,** σ**0.s96**/16**, 1C-7D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.42 | 322 | ⇓P | **Pn** | **15 38 33.6** | **0.0** |
| | 8.4nm,0.5s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **15 39 03.5** | **+0.7** |
| | 29nm,0.3s | | | | | | |
| SFK | Sufi-Kurgan | 3.79 | 34 | ⇓P | **Pn** | **15 38 52.1** | **+0.2** |
| | 2.3nm,0.3s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **15 39 36.4** | **+0.7** |
| | 11nm,0.4s | | | | | | |
| AML | Almayashu | 5.70 | 23 | P | **Pn** | **15 39 17.1** | **-0.8** |
| | SNR=6.2 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MNAS** | **Manas** | **5.74** | **13** | ⇑P | **Pn** | **15 39 17.5** | **-0.7** |
| | 1.1nm,0.2s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **15 40 24.4** | **+1.6** |
| | 1.2nm,0.3s | | | | | | |
| **UCH** | **Uchtor** | **6.07** | **28** | P | **Pn** | **15 39 22.2** | **-0.7** |
| | SNR=5.5 | | | | | | |
| **KK31** | **Karatay Array** | **6.20** | **359** | P | **Pn** | **15 39 24.3** | **+0.1** |
| | 1.6nm,0.2s,baz=171,slow=12,SNR=82 | | | | | | |
| KK31 | | | | S | **Sn** | **15 40 31.8** | **-1.9** |
| | 6.3nm,0.5s,baz=166,slow=28,SNR=11 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.21** | **21** | P | **Pn** | **15 39 24.4** | **-0.2** |
| | SNR=22 | | | | | | |
| **AAK** | **Ala-Archa** | **6.42** | **26** | ⇓P | **Pn** | **15 39 26.6** | **-0.8** |
| | 3.4nm,0.4s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **15 40 40.4** | **+1.2** |
| | 5.3nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **6.42** | **26** | P | **Pn** | **15 39 27.2** | **-0.1** |
| | SNR=10 | | | | | | |
| **CHMS** | **Chumysh** | **6.83** | **26** | P | **Pn** | **15 39 32.4** | **-0.5** |
| | SNR=6.8 | | | | | | |
| **USP** | **Ospenovka** | **6.98** | **23** | P | **Pn** | **15 39 34.0** | **-1.0** |
| | SNR=7.3 | | | | | | |
| **SMLA** | **Simla** | **7.86** | **135** | *i* P | Pn | 15 39 40.5 | -6.3 |
| SMLA | | | | *i* S | Sn | 15 40 59.3 | -15 |
| SMLA | | | | AML | AML | 15 41 00.2 | |
| | comp=N,72nm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 15 41 00.3 | |
| | comp=E,51nm,0.2s | | | | | | |

*IDC **05** 16:17:57.9±5.8, 6°.29S×130°.43E, h105km±53km, mb3.5/5, mb1 3.8/7, mb1mx3.5/21, mbtmp4.0/7, Error ellipse: s-maj=42.7km s-min=19.4km az=78.0*

*ISCJB **05** 16:18:00.6±0.5, 6°.37S±0°.04×130°.20E±0°.06, h146km, mb3.6/5, Error ellipse: s-maj=9.1km s-min=5.5km az=168.1*

*DJA **05** 16:18:02.9±0.4, 6°S±3°×13°0E±°, h120km±10km, M4.7/18, mb4.6/11, mB5.4/7, MLv4.6/18, Mw(mB)4.8/7*

**ISC 05 16:18:01.4**±0.7**, 6°.37S**±0°.06×**130°.21E**±0°.08**, h146km, n22, σ2s.04**/25**, mb3.7**/5**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDI** | **Bandanaira** | **1.86** | **351** | P | **Pn** | **16 18 34.7** | **0.0** |
| BNDI | | | | S | Sn | 16 19 07.6 | +7.4 |
| **SAUI** | **Saumlaki** | **1.94** | **146** | P | **Pn** | **16 18 37.3** | **+1.7** |
| **MSAI** | **Masohi** | **3.26** | **337** | P | **Pn** | **16 18 52.1** | **+0.1** |
| MSAI | | | | S | **Sn** | **16 19 26.1** | **-5.1** |
| **AAI** | **Ambon** | **3.33** | **323** | P | **Pn** | **16 18 53.0** | **+0.1** |
| AAI | | | | S | **Sn** | **16 19 30.9** | **-1.9** |
| **FAKI** | **Fak Fak** | **3.99** | **31** | P | **Pn** | **16 19 01.3** | **-0.1** |
| **NLAI** | **Namlea** | **4.39** | **315** | P | **Pn** | **16 19 06.8** | **+0.1** |
| **SWI** | **Sorong** | **5.57** | **11** | P | **Pn** | **16 19 21.4** | **-1.0** |
| | 42nm,0.6s,7µm1.3nm | | | | | | |
| **SANI** | **Sanana** | **6.01** | **315** | P | **Pn** | **16 19 28.5** | **+0.3** |
| | 22nm,0.7s,0.1nm | | | | | | |
| **RKPI** | **Ransiki, Papua** | **6.24** | **40** | P | **Pn** | **16 19 32.6** | **+1.2** |
| | 215nm,0.8s,6µm2.0nm | | | | | | |
| **LBMI** | **Labuha** | **6.30** | **335** | P | **Pn** | **16 19 32.7** | **+0.6** |
| | 99nm,0.5s,2µm0.4nm | | | | | | |
| **SOEI** | **Soe** | **6.77** | **240** | P | **Pn** | **16 19 38.7** | **+0.1** |
| | 87nm,0.8s,0.5nm | | | | | | |
| **BATI** | **Baumata** | **7.51** | **239** | P | **Pn** | **16 19 48.1** | **-0.3** |
| | 62nm,0.7s,0.2nm | | | | | | |
| **TNTI** | **Ternate** | **7.64** | **338** | P | **Pn** | **16 19 50.3** | **+0.3** |
| | 45nm,0.8s,1µm0.1nm | | | | | | |
| **MMRI** | **Maumere** | **8.21** | **254** | P | **Pn** | **16 19 58.8** | **+1.0** |
| **WRA** | **Warramunga Arr** | **14.08** | **164** | P | **Pn** | **16 21 12.2** | **-2.4** |
| | 2.0nm,0.3s,baz=347,slow=13,SNR=63 | | | | | | |
| WRA | | | | S | Sn | 16 23 39.1 | -12 |
| | 2.8nm,0.3s,baz=330,slow=23,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **17.56** | **169** | P | **Pn** | **16 21 57.2** | **-0.2** |
| | 0.9nm,0.3s,baz=340,slow=9.9,SNR=78 | | | | | | |
| ASAR | | | | S | **S** | **16 25 05.5** | **-6.1** |
| | 0.7nm,0.3s,baz=357,slow=28,SNR=5.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.49** | **309** | P | **P** | **16 25 19.0** | **+1.1** |
| | 0.6nm,0.8s,baz=138,slow=7.2,SNR=5.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **63.66** | **18** | P | **P** | **16 28 16.8** | **-0.2** |
| | 1.7nm,0.8s,baz=195,slow=4.3,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.81** | **327** | P | **P** | **16 28 45.5** | **+1.8** |
| | 0.6nm,0.5s,baz=121,slow=7.8,SNR=8.9 | | | | | | |
| **VNDA** | **Vanda** | **73.05** | **173** | P | **P** | **16 29 16.2** | **+1.3** |
| | 0.9nm,0.8s,baz=322,slow=7.2,SNR=4.0 | | | | | | |
| **MAW** | **Mawson** | **75.61** | **201** | P | **P** | **16 29 31.7** | **+1.9** |
| | 0.8nm,0.5s,baz=76,slow=8.2,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.88** | **282** | PKP | **PKPdf** | **16 36 54.3** | **+1.5** |
| | 0.2nm,0.3s,baz=87,slow=2.7,SNR=3.9 | | | | | | |

**MEX 05 16:26:00.8**±0.3**, 19°.26N**×**103°.68W, h32km**±3km**, MD3.8, Jalisco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EZ5V** | | **0.23** | **17** | *e*P | Pb | 16 26 06.5 | -1.6 |
| EZ5V | | | | *i* S | Sb | 16 26 11.2 | -1.8 |
| **R15V** | | **0.30** | **254** | *e*P | Pb | 16 26 07.1 | -1.5 |
| R15V | | | | *i* S | Sb | 16 26 12.2 | -1.8 |
| **CJM** | **Chamela** | **1.31** | **281** | *e*P | Pn | 16 26 21.1 | -1.7 |
| CJM | | | | *e*S | Sn | 16 26 36.5 | -2.8 |
| **ANIG** | **Ahuacatlan** | **1.96** | **336** | *e*P | Pn | 16 26 29.9 | -2.0 |
| ANIG | | | | *e*S | Sn | 16 26 52.7 | -2.8 |

*ISCJB **05** 16:28:15.8±0.5, 30°.95N±0°.06×130°.4E±0°.1, h156km±4km, mb3.3/5, Error ellipse: s-maj=15.9km s-min=8.2km az=21.2*

*JMA **05** 16:28:18.1±0.1, 30°.97N×130°.33E, h140km±2km, M3.3*

*IDC **05** 16:28:20.4±7.8, 31°.07N×130°.32E, h186km±87km, mb3.0/5, mb1 3.1/6, mb1mx3.0/32, mbtmp3.5/6, Error ellipse: s-maj=80.3km s-min=18.8km az=69.0*

**ISC 05 16:28:16.6**±0.8**, 30°.95N**±0°.07×**130°.28E**±0°.10**, h150km**±7km**, n17, σ0s.97**/24**, mb3.4**/5**, Kyushu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKC** | **Kuchinoerabu** | **0.50** | **188** | P | **Pn** | **16 28 38.5** | **+0.6** |
| **JSU** | **Suzuyama** | **0.57** | **15** | P | **Pn** | **16 28 38.8** | **+0.5** |
| **JTSR** | **Tashiro 2** | **0.59** | **69** | P | **Pn** | **16 28 38.5** | **+0.1** |
| JTSR | | | | *e*S | **Sn** | **16 28 53.9** | **-1.1** |
| **JTN** | **Tanegashima 3** | **0.67** | **116** | P | **Pn** | **16 28 39.4** | **+0.5** |
| JTN | | | | *e*S | **Sn** | **16 28 55.7** | **-0.1** |
| **JYAK** | **Yakushimahirau** | **0.74** | **164** | P | **Pn** | **16 28 39.9** | **+0.6** |
| JYAK | | | | S | **Sn** | **16 28 56.4** | **-0.2** |
| **JSJ** | **Shimokoshiki** | **0.87** | **326** | P | **Pn** | **16 28 40.5** | **+0.3** |
| **JNAR** | **Kushima--Naru** | **1.02** | **56** | P | **Pn** | **16 28 42.2** | **+0.7** |
| JNAR | | | | *e*S | **Sn** | **16 29 00.1** | **-0.4** |
| **JNN** | **Nakanoshima** | **1.16** | **198** | P | **Pn** | **16 28 43.7** | **+0.9** |
| **JTZ** | **Takazaki** | **1.17** | **36** | P | **Pn** | **16 28 43.4** | **+0.6** |
| JTZ | | | | *e*S | **Sn** | **16 29 02.2** | **-0.7** |
| **JZO** | **Okuchi** | **1.21** | **13** | P | **Pn** | **16 28 44.1** | **+0.8** |
| **JIU2** | **Izumi 2** | **1.65** | **16** | P | **Pn** | **16 28 49.0** | **+1.3** |
| JIU2 | | | | *e*S | **Sn** | **16 29 11.6** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **8.64** | **48** | P | **Pn** | **16 30 20.9** | **+2.4** |
| | 0.4nm,0.3s,baz=240,slow=14,SNR=4.6 | | | | | | |
| MJAR | | | | S | **Sn** | **16 31 52.4** | **-2.1** |
| | 0.2nm,0.3s,baz=233,slow=25,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.92** | **307** | P | **P** | **16 35 35.7** | **-0.2** |
| | 0.2nm,0.3s,baz=99,slow=7.6,SNR=2.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.76** | **175** | P | **P** | **16 37 01.9** | **+0.5** |
| | 0.2nm,0.6s,baz=355,slow=7.9,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **54.42** | **176** | P | **P** | **16 37 29.2** | **+0.9** |
| | 0.3nm,0.8s,baz=358,slow=6.6,SNR=9.0 | | | | | | |
| **FINES** | **FINESS Array B** | **69.66** | **330** | P | **P** | **16 39 08.7** | **-0.8** |
| | 1.1nm,0.5s,baz=77,slow=2.5,SNR=4.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **75.57** | **308** | P | **P** | **16 39 44.7** | **-0.3** |
| | 0.7nm,0.9s,baz=64,slow=9.8,SNR=3.4 | | | | | | |

**IDC 05 16:43:59.5**±9.0**, 19°.44S**×**177°.92W, h585km**±97km**, mb2.8**/4**, mb1 3.0**/4**, mb1mx2.7**/24**, mbtmp3.8**/4**, Error ellipse: s-maj=142.2km s-min=45.1km az=156.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **33.68** | **263** | P | P | 16 49 53.7 | +0.2 |
| | 2.0nm,0.7s,baz=105,slow=12,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.83** | **261** | P | P | 16 51 22.4 | -0.4 |
| | 0.2nm,0.3s,baz=98,slow=7.6,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **44.84** | **256** | P | P | 16 51 22.9 | 0.0 |
| | 1.0nm,0.6s,baz=86,slow=8.2,SNR=30 | | | | | | |
| ASAR | | | | PcP | PcP | 16 52 51.3 | -0.6 |
| | 0.3nm,0.7s,baz=90,slow=4.6,SNR=5.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.42** | **57** | P | P | 16 55 41.0 | -0.2 |
| | 0.1nm,0.3s,baz=194,slow=3.3,SNR=2.7 | | | | | | |
| **GERES** | **GERESS Array B** | **149.21** | **345** | PKPbc | PKPbc | 17 02 42.7 | -0.1 |
| | 0.3nm,0.5s,baz=20,slow=3.1,SNR=3.8 | | | | | | |

*DJA **05** 16:54:10.6±2.1, 5°S±8°×14°6E±1°2, h35km±13km, M5.1/34, mb5.2/34, mB5.4/17, MLv6.1/2, Mw(mB)4.8/17*

*IDC **05** 16:54:33.6±0.7, 5°.10S×144°.19E, h88km±5km, mb4.1/15, mb1 4.2/18, mb1mx4.0/33, mbtmp4.4/18, MS3.5/4, Ms1 3.6/4, ms1mx3.1/23, Error ellipse: s-maj=19.4km s-min=12.0km az=73.0*

*BJI **05** 16:54:33.0, 5°.48S×144°.14E, h106km, mb4.8/26, mB5.0/21*

*NEIC **05** 16:54:33.8±0.3, 5°.11S×144°.12E, mb4.8/11, Error ellipse: s-maj=8.5km s-min=6.3km az=75.0*

*ISCJB **05** 16:54:33.8±0.7, 5°.20S±0°.04×144°.15E±0°.04, h101km±6km, mb4.6/31, Error ellipse: s-maj=7.3km s-min=5.4km az=140.3*

*AUST **05** 16:54:35.8±0.3, 5°.16S×144°.10E, h114km, Error ellipse: s-maj=0.7km s-min=0.7km az=231.0*

**ISC 05 16:54:34.4**±0.5**, 5°.17S**±0°.05×**144°.20E**±0°.06**, h92km**±4km**, h92km:pP-P, n102, σ1s.53**/111**, mb4.7**/30**, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **4.37** | **307** | P | **Pn** | **16 55 38.9** | **+0.3** |
| | baz=4.3,SNR=11 | | | | | | |
| **MANU** | **Manus Island** | **4.43** | **46** | P | **Pn** | **16 55 41.0** | **+1.6** |
| | baz=4.5,SNR=13 | | | | | | |
| **GENI** | **Genyem** | **4.77** | **302** | P | **Pn** | **16 55 43.5** | **-0.4** |
| | 651nm,0.6s,11µm7.6nm | | | | | | |
| **MMPI** | **Merauke** | **5.00** | **229** | P | **Pn** | **16 55 45.0** | **-2.1** |
| | 305nm,0.7s,8µm6.6nm | | | | | | |
| **PMG** | **Port Moresby** | **5.13** | **145** | P | **Pn** | **16 55 49.9** | **+1.1** |
| | 12nm,0.3s,baz=22,slow=6.0,SNR=64 | | | | | | |
| PMG | | | | S | **Sn** | **16 56 45.1** | **-1.7** |
| | 22nm,0.3s,baz=315,slow=16,SNR=9.2 | | | | | | |
| PMG | | | | LR | LR | 16 57 59.1 | |
| | comp=Z,307nm,20.9s,baz=318,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **5.13** | **145** | P | **Pn** | **16 55 50.0** | **+1.1** |
| | baz=5.2,SNR=32 | | | | | | |
| **SMPI** | **Sarmi** | **6.32** | **300** | P | **Pn** | **16 56 05.4** | **+0.3** |
| | 131nm,0.8s | | | | | | |
| **RABL** | **Rabaul** | **8.00** | **83** | P | Pn | 16 56 33.1 | +5.1 |
| | baz=8.1,SNR=12 | | | | | | |
| **COEN** | **Coen** | **8.79** | **187** | P | **Pn** | **16 56 41.3** | **+2.6** |
| | baz=8.8,SNR=22 | | | | | | |
| **COEN** | **Coen** | **8.79** | **187** | *e*Pn | **Pn** | **16 56 41.2** | **+2.5** |
| **RKPI** | **Ransiki, Papua** | **10.64** | **290** | P | **Pn** | **16 57 06.1** | **+2.1** |
| | 140nm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **12.13** | **280** | P | **Pn** | **16 57 22.3** | **-1.7** |
| | baz=12,SNR=6.8 | | | | | | |
| **FAKI** | **Fak Fak** | **12.13** | **280** | P | **Pn** | **16 57 27.1** | **+3.1** |
| | 39nm,1.0s | | | | | | |
| **SWI** | **Sorong** | **13.61** | **288** | P | **Pn** | **16 57 43.9** | **+0.3** |
| | baz=14,SNR=8.7 | | | | | | |
| **SWI** | **Sorong** | **13.61** | **288** | P | **Pn** | **16 57 43.7** | **+0.1** |
| | 89nm,0.8s,725nm | | | | | | |
| **KDU** | **Kakadu** | **13.77** | **236** | P | **Pn** | **16 57 44.0** | **-1.8** |
| | baz=14,SNR=13 | | | | | | |
| **BNDI** | **Bandanaira** | **14.26** | **272** | P | **P** | **16 57 56.7** | **+0.1** |
| | 163nm,1.0s | | | | | | |
| **CTA** | **Charters Tower** | **14.96** | **172** | P | **Pn** | **16 58 01.9** | **+0.8** |
| | 0.2nm,0.3s,baz=342,slow=16,SNR=3.8 | | | | | | |
| **MTN** | **Manton Dam** | **14.98** | **239** | P | **Pn** | **16 57 59.4** | **-1.9** |
| | baz=15,SNR=10 | | | | | | |
| **MTN** | **Manton Dam** | **14.98** | **239** | *e*Pn | **Pn** | **16 57 58.6** | **-2.7** |
| **MSAI** | **Masohi** | **15.33** | **276** | P | **P** | **16 58 09.0** | **+0.4** |
| | 35nm,0.6s,315nm | | | | | | |
| **PALU** | **Palau** | **15.77** | **322** | P | **P** | **16 58 13.7** | **+0.3** |
| | baz=16,SNR=6.4 | | | | | | |
| **QIS** | **Mount Isa** | **15.93** | **196** | P | **P** | **16 58 15.6** | **+0.4** |
| | baz=16,SNR=5.9 | | | | | | |
| **AAI** | **Ambon** | **16.02** | **275** | P | **P** | **16 58 16.6** | **+0.4** |
| | 191nm,0.6s,2µm | | | | | | |
| **HNR** | **Honiara** | **16.18** | **106** | P | **P** | **16 58 18.0** | **0.0** |
| **NLAI** | **Namlea** | **17.16** | **276** | P | **P** | **16 58 29.3** | **+0.5** |
| | 110nm,0.8s,1µm | | | | | | |
| **LBMI** | **Labuha** | **17.27** | **285** | P | **P** | **16 58 31.2** | **+1.2** |
| | 130nm,1.2s,1µm | | | | | | |
| **WRAB** | **Tennant Creek** | **17.52** | **212** | *e*P | **P** | **16 58 31.1** | **-1.7** |
| | 20nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.54** | **212** | P | **P** | **16 58 31.4** | **-1.5** |
| | 1.0nm,0.3s,baz=29,slow=11,SNR=42 | | | | | | |
| WRA | | | | LR | LR | 17 05 58.4 | |
| | comp=Z,161nm,18.8s,baz=25,slow=39 | | | | | | |
| **TNTI** | **Ternate** | **17.82** | **289** | P | **P** | **16 58 35.8** | **-0.2** |
| | 56nm,1.2s,753nm | | | | | | |
| **TNTI** | **Ternate** | **17.82** | **289** | *e*P | **P** | **16 58 35.8** | **-0.2** |
| | 67nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **18.41** | **234** | P | **P** | **16 58 40.5** | **-1.9** |
| | baz=18,SNR=41 | | | | | | |
| **SANI** | **Sanana** | **18.43** | **279** | P | **P** | **16 58 42.7** | **-0.1** |
| | 78nm,1.0s,742nm | | | | | | |
| **PATS** | **Pohnpei** | **18.46** | **50** | P | **P** | **16 58 40.1** | **-3.0** |
| | baz=19,SNR=3.5 | | | | | | |
| **SOEI** | **Soe** | **20.27** | **256** | P | **P** | **16 59 03.1** | **+0.1** |
| | 137nm,0.9s,2µm | | | | | | |
| **SOEI** | **Soe** | **20.27** | **256** | *e*P | **P** | **16 59 02.2** | **-0.7** |
| | 331nm,1.4s | | | | | | |
| **AS01** | **Alice Springs** | **20.87** | **207** | *e*P | **P** | **16 59 08.4** | **-0.8** |
| **ASAR** | **Alice Springs** | **20.89** | **207** | P | **P** | **16 59 08.6** | **-0.9** |
| | 35nm,1.1s,baz=27,slow=12,SNR=48 | | | | | | |
| **BATI** | **Baumata** | **20.95** | **255** | P | **P** | **16 59 11.2** | **+1.1** |
| | 74nm,0.8s | | | | | | |
| **KMSI** | **Cibinong** | **20.98** | **285** | P | **P** | **16 59 09.4** | **-1.1** |
| | 514nm,0.8s,4µm | | | | | | |
| **EIDS** | **Eidsvold** | **21.14** | **163** | *e*P | **P** | **16 59 13.8** | **+1.7** |
| | 9.9nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **21.29** | **180** | P | **P** | **16 59 15.4** | **+1.8** |
| | baz=21,SNR=6.7 | | | | | | |
| **RMQ** | **Roma** | **21.64** | **169** | P | **P** | **16 59 19.0** | **+1.6** |
| | baz=22,SNR=17 | | | | | | |
| **LUWI** | **Luwuk** | **21.78** | **280** | P | **P** | **16 59 19.5** | **+0.5** |
| | baz=22,SNR=6.5 | | | | | | |
| **LUWI** | **Luwuk** | **21.78** | **280** | P | **P** | **16 59 19.0** | **0.0** |
| | 97nm,0.9s,916nm | | | | | | |
| **LUWI** | **Luwuk** | **21.78** | **280** | *e*P | **P** | **16 59 17.6** | **-1.3** |
| | 69nm,0.8s | | | | | | |
| **MMRI** | **Maumere** | **22.07** | **260** | P | **P** | **16 59 19.7** | **-2.3** |
| | 50nm,1.1s | | | | | | |
| **MMRI** | **Maumere** | **22.07** | **260** | *e*P | **P** | **16 59 19.8** | **-2.3** |
| | 66nm,1.1s | | | | | | |
| **EDFI** | **Ende, Flores** | **22.62** | **260** | P | **P** | **16 59 23.5** | **-4.5** |
| | 49nm,0.9s | | | | | | |
| **APSI** | **Ampana** | **22.91** | **280** | P | **P** | **16 59 30.7** | **-0.1** |
| | 117nm,1.0s,1µm | | | | | | |
| **MRSI** | **Marisa** | **22.93** | **284** | P | **P** | **16 59 30.4** | **-0.6** |
| | 85nm,0.9s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **23.61** | **267** | P | **P** | **16 59 36.5** | **-0.9** |
| | 66nm,0.8s | | | | | | |
| **BKSI** | **Bulukumba** | **23.97** | **269** | P | **P** | **16 59 39.5** | **-1.1** |
| | 39nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **24.35** | **269** | P | **P** | **16 59 43.2** | **-0.7** |
| | 16nm,0.6s,baz=113,slow=11,SNR=9.7 | | | | | | |
| KAPI | | | | LR | LR | 17 11 47.6 | |
| | comp=Z,104nm,18.6s,baz=311,slow=42 | | | | | | |
| **KAPI** | **Kappang** | **24.35** | **269** | *e*P | **P** | **16 59 43.1** | **-0.9** |
| | 19nm,0.6s | | | | | | |
| **TTSI** | **Tana Toraja** | **24.41** | **274** | P | **P** | **16 59 44.6** | **+0.1** |
| | 47nm,1.0s | | | | | | |
| **MPSI** | **Mapaga** | **24.88** | **282** | P | **P** | **16 59 47.0** | **-1.8** |
| **WRKA** | **Warakurna** | **24.96** | **216** | P | **P** | **16 59 48.6** | **-0.9** |
| | baz=25,SNR=5.8 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.27** | **177** | P | **P** | **17 00 02.4** | **+1.3** |
| | baz=26,SNR=7.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **27.31** | **130** | P | **P** | **17 00 10.4** | **-0.4** |
| | 5.3nm,0.8s,baz=241,slow=19,SNR=4.9 | | | | | | |
| **MYLDM** | **Lahad Datu** | **27.65** | **291** | *e*P | **P** | **17 00 15.0** | **+1.3** |
| **KSM** | **Kuching** | **34.49** | **280** | P | P | 17 01 06.7 | -7.3 |
| | baz=34,SNR=3.7 | | | | | | |
| **KSM** | **Kuching** | **34.49** | **280** | *e*P | **P** | **17 01 13.2** | **-0.8** |
| **MJAR** | **Matsushiro Arr** | **41.87** | **353** | P | **P** | **17 02 15.0** | **-0.7** |
| | 0.2nm,0.3s,baz=186,slow=8.2,SNR=2.7 | | | | | | |
| **NJ2** | **Nanjing** | **44.19** | **329** | *e*P | **P** | **17 02 34.5** | **+0.2** |
| NJ2 | | | | PMZ | | | |
| | 30nm,1.1s | | | | | | |
| **KSRS** | **Korea Array** | **45.04** | **342** | P | **P** | **17 02 40.3** | **-0.7** |
| | 3.2nm,0.9s,baz=159,slow=10,SNR=8.1 | | | | | | |
| KSRS | | | | pP | **pP** | **17 03 01.3** | **-1.6** |
| | 6.0nm,1.0s,baz=162,slow=9.6,SNR=5.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.04** | **342** | P | **P** | **17 02 40.3** | **-0.7** |
| KSAR | | | | pP | **pP** | **17 03 01.3** | **-1.6** |
| **RPZ** | **Rata Peaks** | **45.09** | **152** | P | **P** | **17 02 41.8** | **+0.3** |
| | 9.1nm,0.7s,baz=347,slow=3.4,SNR=5.3 | | | | | | |
| **LOEI** | **Loei** | **48.00** | **299** | P | **P** | **17 03 02.4** | **-2.2** |
| | 52nm,1.9s | | | | | | |
| **GYA** | **Guiyang** | **48.06** | **313** | P | **P** | **17 03 07.2** | **+2.2** |
| GYA | | | | pP | **pP** | **17 03 30.8** | **+3.7** |
| GYA | | | | PP | **PP** | **17 05 00.2** | **+2.2** |
| GYA | | | | S | **S** | **17 09 57.0** | **+0.1** |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | 90nm,5.2s | | | | | | |
| **UTTA** | **Uttaradit** | **48.72** | **299** | P | **P** | **17 03 11.1** | **+1.1** |
| | 3.5nm,1.0s | | | | | | |
| **NANT** | **Nan** | **49.02** | **300** | P | **P** | **17 03 12.9** | **+0.5** |
| | 6.4nm,1.0s | | | | | | |
| **CRAI** | **Chiangrai** | **49.91** | **302** | P | P | 17 03 14.7 | -4.4 |
| | 43nm,0.8s | | | | | | |
| **KMI** | **Kunming** | **50.30** | **309** | P | **P** | **17 03 23.9** | **+1.7** |
| KMI | | | | PMZ | | | |
| | 9.0nm,0.6s | | | | | | |
| KMI | | | | PMZ | | | |
| | 88nm,4.0s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **50.41** | **299** | P | **P** | **17 03 23.5** | **+0.6** |
| | baz=50,SNR=5.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **50.41** | **299** | P | **P** | **17 03 23.1** | **+0.3** |
| | 5.9nm,0.7s,baz=122,slow=6.0,SNR=31 | | | | | | |
| CMAR | | | | LR | LR | 17 25 05.5 | |
| | comp=Z,99nm,19.6s,baz=184,slow=36 | | | | | | |
| **CHTO** | **Chiang Mai** | **50.55** | **299** | P | **P** | **17 03 24.9** | **+1.0** |
| | 41nm,1.3s | | | | | | |
| **CHTO** | **Chiang Mai** | **50.55** | **299** | *e*P | **P** | **17 03 23.5** | **-0.5** |
| | 11nm,1.1s | | | | | | |
| **CMAI** | **Chiengmai2** | **50.91** | **301** | P | **P** | **17 03 27.8** | **+0.9** |
| **XAN** | **Xi'an** | **51.30** | **322** | P | **P** | **17 03 28.6** | **-0.8** |
| XAN | | | | PMZ | | | |
| | 11nm,1.0s | | | | | | |
| XAN | | | | PMZ | | | |
| | 91nm,4.3s | | | | | | |
| **CD2** | **Chengdu** | **52.72** | **316** | *e*P | **P** | **17 03 40.6** | **+0.6** |
| CD2 | | | | S | **S** | **17 11 02.1** | **+0.9** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **54.69** | **330** | *e*P | **P** | **17 03 56.3** | **+2.0** |
| HHC | | | | PP | **PP** | **17 06 01.7** | **+3.8** |
| HHC | | | | PMZ | | | |
| | 33nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | 120nm,3.8s | | | | | | |
| HHC | | | | LN | | | |
| | 150nm,14.8s | | | | | | |
| HHC | | | | LE | | | |
| | 150nm,14.8s | | | | | | |
| HHC | | | | LZ | | | |
| | 98nm,14.8s | | | | | | |
| **LZH** | **Lanzhou** | **55.79** | **321** | *e*P | **P** | **17 04 03.2** | **+0.9** |
| LZH | | | | PMZ | | | |
| | 36nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | 170nm,4.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.17** | **9** | P | **P** | **17 04 24.9** | **-0.6** |
| | 4.8nm,0.7s,baz=167,slow=8.4,SNR=14 | | | | | | |
| **GTA** | **Gaotai** | **60.34** | **321** | *e*P | **P** | **17 04 34.1** | **+0.1** |
| GTA | | | | PMZ | | | |
| | 3.0nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **62.07** | **333** | *e*P | **P** | **17 04 44.7** | **-0.8** |
| | 2.5nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **62.35** | **332** | P | **P** | **17 04 45.1** | **-2.3** |
| | 1.3nm,0.6s,baz=158,slow=9.3,SNR=3.0 | | | | | | |
| **WMQ** | **Urumqi** | **70.36** | **320** | *e*P | **P** | **17 05 40.0** | **+1.5** |
| **VNDA** | **Vanda** | **72.91** | **176** | P | **P** | **17 05 53.6** | **+0.4** |
| | 0.9nm,0.7s,baz=351,slow=6.4,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.10** | **321** | P | **P** | **17 06 06.0** | **-0.5** |
| | 1.2nm,0.4s,baz=96,slow=8.4,SNR=20 | | | | | | |
| **KSH** | **Kashi** | **76.76** | **312** | *e*P | **P** | **17 06 18.6** | **+2.4** |
| KSH | | | | *e*pP | **pP** | **17 06 44.1** | **+4.0** |
| KSH | | | | *e*PP | **PP** | **17 09 08.6** | **-1.5** |
| KSH | | | | S | **S** | **17 15 55.9** | **-0.4** |
| KSH | | | | ScS | **SKKSac** | **17 16 22.0** | **+1.1** |
| KSH | | | | PMZ | | | |
| | 84nm,5.1s | | | | | | |
| KSH | | | | LN | | | |
| | 95nm,6.8s | | | | | | |
| KSH | | | | LE | | | |
| | 130nm,8.2s | | | | | | |
| KSH | | | | LZ | | | |
| | 130nm,7.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **76.84** | **329** | P | **P** | **17 06 14.6** | **-1.6** |
| | 1.7nm,0.4s,baz=126,slow=6.1,SNR=12 | | | | | | |
| ZALV | | | | pP | **pP** | **17 06 38.3** | **-1.7** |
| | 2.1nm,0.7s,baz=120,slow=4.6,SNR=2.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **84.47** | **324** | P | **P** | **17 06 56.7** | **-0.3** |
| | 1.9nm,0.4s,baz=114,slow=7.4,SNR=12 | | | | | | |
| BVAR | | | | sP | **sP** | **17 07 29.5** | **-1.5** |
| | 5.2nm,0.7s,baz=114,slow=6.6,SNR=5.3 | | | | | | |
| **MCK** | **McKinley** | **84.61** | **24** | *e*P | **P** | **17 06 56.2** | **-1.2** |
| | 10nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **85.83** | **24** | P | **P** | **17 07 01.7** | **-1.8** |
| | 6.7nm,0.7s,baz=255,slow=5.2,SNR=59 | | | | | | |
| ILAR | | | | pP | **pP** | **17 07 25.9** | **-1.9** |
| | 2.0nm,0.7s,baz=254,slow=5.1,SNR=3.9 | | | | | | |
| **DOT** | **Dot Lake** | **86.61** | **25** | *e*P | **P** | **17 07 06.9** | **-0.5** |
| | 21nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **99.06** | **52** | P | **Pdif** | **17 08 05.3** | **-0.4** |
| | 0.8nm,0.8s,baz=255,slow=3.5,SNR=3.0 | | | | | | |
| **GERES** | **GERESS Array B** | **119.64** | **325** | PKP | **PKPdf** | **17 13 13.1** | **-0.8** |
| | 0.4nm,0.5s,baz=132,slow=2.0,SNR=4.6 | | | | | | |
| **LPAZ** | **La Paz** | **141.56** | **124** | PKhKP | PKPpre | 17 13 52.0 | |
| | 3.4nm,0.7s,baz=199,slow=18,SNR=15 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **142.18** | **285** | PKhKP | PKPpre | 17 13 51.4 | |
| | 0.7nm,0.8s,baz=72,slow=3.8,SNR=4.3 | | | | | | |
| **CPUP** | **Villa Florida** | **142.37** | **147** | PKhKP | PKPpre | 17 13 53.6 | |
| | 1.2nm,0.6s,baz=270,slow=20,SNR=2.7 | | | | | | |
| **DBIC** | **Dimbokro** | **149.19** | **274** | PKPbc | **PKPbc** | **17 14 13.2** | **-0.2** |
| | 2.0nm,0.5s,baz=34,slow=2.8,SNR=4.8 | | | | | | |

*IDC **05** 17:00:31.1±1.0, 27°.14N×88°.11E, h0km, mb3.8/7, mb1 4.0/7, mb1mx3.6/38, mbtmp3.8/7, Error ellipse: s-maj=50.5km s-min=18.6km az=55.0*

*ISCJB **05** 17:00:34.3±1.1, 27°.2N±0°.2×88°.1E±0°.3, h36km, mb3.9/6, Error ellipse: s-maj=38.3km s-min=18.5km az=148.2*

**ISC 05 17:00:36.6**±1.3**, 27°.2N**±0°.2×**88°.1E**±0°.3**, h36km, n7, σ0s.31**/7**, mb3.9**/6**, Sikkim**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **20.12** | **348** | P | **P** | **17 05 07.7** | **+0.4** |
| | 0.6nm,0.3s,baz=172,slow=11,SNR=8.2 | | | | | | |
| **SONM** | **Songino Array** | **25.08** | **30** | P | **P** | **17 05 57.7** | **-0.1** |
| | 1.0nm,0.4s,baz=228,slow=11,SNR=2.7 | | | | | | |
| **FINES** | **FINESS Array B** | **53.20** | **328** | P | **P** | **17 09 50.6** | **-0.3** |
| | 1.0nm,0.7s,baz=125,slow=8.7,SNR=5.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **55.30** | **338** | P | **P** | **17 10 05.9** | **-0.2** |
| | 0.8nm,0.7s,baz=99,slow=7.9,SNR=5.1 | | | | | | |
| **GERES** | **GERESS Array B** | **60.07** | **313** | P | **P** | **17 10 40.2** | **+0.1** |
| | 0.8nm,0.6s,baz=89,slow=6.8,SNR=8.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.78** | **131** | P | **P** | **17 11 11.8** | **-0.1** |
| | 0.9nm,0.6s,baz=325,slow=6.6,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **67.14** | **135** | P | **P** | **17 11 27.1** | **+0.2** |
| | 0.5nm,0.5s,baz=316,slow=6.2,SNR=16 | | | | | | |

**IDC 05 17:04:20.1**±5.6**, 18°.34N**×**146°.63E, h224km**±31km**, mb3.0**/3**, mb1 3.4**/4**, mb1mx2.9**/37**, mbtmp3.7**/4**, Error ellipse: s-maj=219.0km s-min=26.0km az=121.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.02** | **200** | P | Pn | 17 05 35.0 | -0.4 |
| | 1.3nm,0.3s,baz=12,slow=20,SNR=2.1 | | | | | | |
| GUMO | | | | S | S | 17 06 35.9 | +0.9 |
| | 2.2nm,0.3s,baz=171,slow=19,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.91** | **198** | P | P | 17 11 32.7 | +0.1 |
| | 0.8nm,0.5s,baz=22,slow=8.9,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **43.56** | **197** | P | P | 17 12 01.6 | -0.5 |
| | 0.1nm,0.4s,baz=10,slow=7.4,SNR=6.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.66** | **52** | P | P | 17 16 19.1 | +0.1 |
| | 0.4nm,0.7s,baz=272,slow=6.2,SNR=3.0 | | | | | | |

**MEX 05 17:14:08.0**±0.3**, 14°.95N**×**93°.42W, h48km**±115km**, MD3.9, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.77** | **14** | *e*P | Pn | 17 14 21.2 | -1.4 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| PCIG | | | | eS | Sn | 17 14 31.1 | -2.2 |

*IDC **05** 17:23:29.4±1.5, 24.07N×125.02E, h0km, mb3.3/3, mb1 3.6/4, mb1mx3.4/24, mbtmp3.4/4, ML3.2/1, MS3.6/1, Ms1 3.6/1, ms1mx2.8/13, Error ellipse: s-maj=56.9km s-min=28.4km az=72.0*

*JMA **05** 17:23:33.7±0.1, 24.15N×125.31E, h40km±4km, M3.1*

**ISC 05 17:23:31.2**±1.5**, 24.08N**±0.06×**125.38E**±0.04**, h18**km±5km**, n25,** σ1.03/37**, mb3.5**/3**, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOGS** | **Gusukube** | **0.68** | **2** | P | **Pn** | **17 23 45.9** | **0.0** |
| JOGS | | | | eS | **Sb** | **17 23 54.6** | **+1.1** |
| **JMJ** | **Miyako jima 2** | **0.74** | **354** | P | **Pb** | **17 23 46.6** | **+1.1** |
| JMJ | | | | eS | **Sb** | **17 23 55.9** | **+0.7** |
| **JIRB** | **Irabujima** | **0.77** | **346** | P | **Pb** | **17 23 46.8** | **+0.8** |
| JIRB | | | | S | **Sg** | **17 23 56.4** | **-0.1** |
| **JTJ** | **Tarama** | **0.83** | **312** | P | **Pg** | **17 23 47.6** | **+0.1** |
| JTJ | | | | eS | **Sg** | **17 23 57.6** | **-0.9** |
| **JIKM** | **Ikemajima** | **0.85** | **352** | P | **Pb** | **17 23 48.1** | **+0.7** |
| JIKM | | | | eS | **Sg** | **17 23 58.7** | **-0.3** |
| **JISG** | **Ishigakijimahi** | **1.10** | **298** | P | **Pb** | **17 23 51.7** | **+0.1** |
| JISG | | | | eS | **Sb** | **17 24 04.8** | **-0.8** |
| **JIJ** | **Ishigaki jima** | **1.16** | **284** | P | **Pn** | **17 23 52.7** | **+0.2** |
| JIJ | | | | eS | **Sb** | **17 24 07.4** | **-0.1** |
| **JKRS** | **Kuro-shima** | **1.26** | **277** | P | **Pn** | **17 23 54.7** | **+0.8** |
| JKRS | | | | eS | **Sb** | **17 24 10.4** | **+0.1** |
| **HATJ** | **Hateruma jima** | **1.44** | **269** | P | **Pn** | **17 23 56.7** | **+0.4** |
| HATJ | | | | eS | **Sn** | **17 24 13.5** | **-1.2** |
| **IRIF** | **Iriomote-Funau** | **1.52** | **280** | P | **Pn** | **17 23 58.0** | **+0.5** |
| IRIF | | | | eS | **Sn** | **17 24 16.3** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **2.19** | **280** | P | **Pn** | **17 24 06.9** | **+0.2** |
| YOJ | | | | eS | **Sn** | **17 24 31.5** | **-1.9** |
| **JYNG** | **Yonagunijimaku** | **2.25** | **280** | P | **Pn** | **17 24 07.7** | **+0.2** |
| JYNG | | | | eS | **Sn** | **17 24 32.3** | **-2.5** |
| **JKE** | **Kume jima 2** | **2.58** | **29** | P | **Pn** | **17 24 11.5** | **-0.5** |
| **JAGN** | **Aguni-jima** | **3.02** | **34** | P | **Pn** | **17 24 19.2** | **+1.1** |
| **JNTH** | **Nagotoyohara** | **3.41** | **44** | P | **Pn** | **17 24 23.5** | **0.0** |
| **JOW** | **Kunigami** | **3.79** | **43** | P | **Pn** | **17 24 28.9** | **+0.2** |
| **JOKE** | **Okinoerabujima** | **4.36** | **41** | P | **Pn** | **17 24 35.9** | **-0.6** |
| **JTK** | **Tokunoshima** | **4.90** | **40** | P | **Pn** | **17 24 43.0** | **-0.9** |
| **JAMN** | **Amaminishikomi** | **5.37** | **39** | P | **Pn** | **17 24 48.9** | **-1.5** |
| **JMZ** | **Minamidaito 2** | **5.58** | **71** | P | **Pn** | **17 24 51.3** | **-2.0** |
| JMZ | | | | eS | Sn | 17 25 50.4 | -6.6 |
| **JAM** | **Amami Oshima** | **5.75** | **40** | P | **Pn** | **17 24 54.2** | **-1.4** |
| **MJAR** | **Matsushiro Arr** | **16.62** | **39** | Pn | **P** | **17 27 26.6** | **+0.9** |
| | 0.1nm,0.3s,baz=227,slow=11,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.11** | **314** | P | **P** | **17 31 13.2** | **-0.9** |
| | 0.1nm,0.3s,baz=103,slow=8.9,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.62** | **168** | P | **P** | **17 31 43.8** | **+1.1** |
| | 0.5nm,0.8s,baz=348,slow=8.9,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **48.18** | **169** | P | **P** | **17 32 12.2** | **+1.6** |
| | 0.3nm,0.7s,baz=354,slow=7.5,SNR=6.3 | | | | | | |
| ASAR | | | | LR | LR | 17 53 50.8 | |
| | comp=Z,62nm,20.2s,baz=292,slow=38 | | | | | | |

*ISCJB **05** 17:32:20.1±0.5, 32.19N±0.02×115.15W±0.04, h24km±4km, Error ellipse: s-maj=6.3km s-min=4.2km az=177.3*

*NEIC **05** 17:32:22.0, 32.16N×115.23W, h8km, ML3.0(PAS), ML3.2(ECX), After ECX.*

*ECX **05** 17:32:22.0±0.6, 32.15N×115.22W, h8km, MD3.1, ML3.3*

*MEX **05** 17:32:22.4±0.6, 32.20N×115.12W, h11km±376km, MD3.8*

**ISC 05 17:32:20.1**±1.0**, 32.15N**±0.02×**115.20W**±0.04**, h18**km±8km**, n24,** σ0.72/38**, 5C-3D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.26** | **1** | eP | **Pb** | **17 32 26.8** | **+0.5** |
| MBIG | | | | i S | **Sg** | **17 32 29.3** | **-0.7** |
| **MBIG** | **Mexicali** | **0.26** | **1** | ⇓eP | **Pb** | **17 32 27.1** | **+0.8** |
| **CPBX** | **Cerro Prieto** | **0.28** | **342** | ⇑eP | **Pb** | **17 32 27.2** | **+0.5** |
| CPBX | | | | eS | **Sg** | **17 32 31.0** | **+0.3** |
| CPBX | | | | IAML | | 17 32 32.4 | |
| | comp=N,20μm,0.3s | | | | | | |
| CPBX | | | | ⇓e | | 17 32 32.4 | |
| **CPBX** | **Cerro Prieto** | **0.28** | **342** | eP | **Pb** | **17 32 26.8** | **+0.1** |
| **RDX** | **Rancho Dawling** | **0.67** | **251** | ⇑eP | **Pn** | **17 32 34.0** | **-0.8** |
| RDX | | | | eS | **Sb** | **17 32 42.7** | **+0.4** |
| RDX | | | | IAML | | 17 32 43.3 | |
| | comp=N,674nm,0.5s | | | | | | |
| RDX | | | | ⇑e | | 17 32 43.3 | |
| **ECBX** | **El Chinero** | **0.68** | **169** | ⇑eP | **Pg** | **17 32 33.5** | **-0.1** |
| ECBX | | | | eS | **Sb** | **17 32 43.2** | **+0.6** |
| **RMX** | **La Rumorosa** | **0.87** | **302** | eP | **Pg** | **17 32 37.0** | **-0.1** |
| RMX | | | | eS | **Sb** | **17 32 47.8** | **-0.4** |
| **IBP** | **Imperial Bould** | **0.91** | **305** | eP | **Pg** | **17 32 37.8** | **-0.1** |
| **GLA** | **Glamis** | **0.96** | **19** | ePg | **Pb** | **17 32 37.0** | **-1.3** |
| GLA | | | | eSg | **Sb** | **17 32 48.8** | **-1.9** |
| **SPIG** | **San Pedro Mart** | **1.12** | **192** | eP | **Pn** | **17 32 41.2** | **0.0** |
| SPIG | | | | eS | **Sg** | **17 32 56.6** | **+0.1** |
| **SPIG** | **San Pedro Mart** | **1.12** | **192** | ⇑eP | **Pn** | **17 32 41.2** | **0.0** |
| **SPIG** | **San Pedro Mart** | **1.12** | **192** | eP | **Pn** | **17 32 41.2** | **0.0** |
| SPIG | | | | eS | **Sg** | **17 32 56.6** | **+0.1** |
| **SPX** | **San Pedro Mart** | **1.12** | **192** | eP | **Pn** | **17 32 41.3** | **+0.1** |
| **SPX** | **San Pedro Mart** | **1.12** | **192** | eP | **Pn** | **17 32 41.1** | **-0.1** |
| SPX | | | | eS | **Sg** | **17 32 56.7** | **+0.1** |
| **CBX** | **Cerro Bola** | **1.25** | **278** | eP | **Pb** | **17 32 43.3** | **0.0** |
| CBX | | | | eS | **Sn** | **17 32 59.2** | **-0.2** |
| **CBX** | **Cerro Bola** | **1.25** | **278** | eP | **Pb** | **17 32 43.3** | **0.0** |
| CBX | | | | IAML | | 17 33 01.1 | |
| | comp=N,656nm,0.4s | | | | | | |
| CBX | | | | ⇓e | | 17 33 01.1 | |
| **CBX** | **Cerro Bola** | **1.25** | **278** | eP | **Pb** | **17 32 43.3** | **0.0** |
| CBX | | | | eS | **Sn** | **17 32 59.2** | **-0.2** |
| **BAR** | **Barrett** | **1.35** | **294** | eP | **Pb** | **17 32 45.0** | **0.0** |
| **BAR** | **Barrett** | **1.35** | **294** | ePn | **Pn** | **17 32 44.1** | **-0.1** |
| BAR | | | | eSn | **Sb** | **17 33 02.1** | **+0.1** |
| **PFO** | **Pinyon Flat Ob** | **1.80** | **325** | ePn | **Pn** | **17 32 49.4** | **-1.1** |
| **LDFC** | **Landfair** | **2.93** | **1** | ePn | **Pn** | **17 33 06.7** | **+0.8** |
| LDFC | | | | ePg | **Pg** | **17 33 17.9** | **+1.6** |
| **GSC** | **Goldstone** | **3.42** | **337** | ePg | **Pg** | **17 33 26.9** | **+1.3** |
| **R11A** | **Troy Canyon, C** | **6.20** | **357** | Pn | **Pn** | **17 33 52.3** | **+1.4** |
| R11A | | | | ePg | **Pg** | **17 34 17.7** | **-1.1** |
| **121A** | **Cookes Peak, D** | **6.29** | **85** | ePn | **Pn** | **17 33 52.1** | **-0.1** |

**MAN 05 17:43:45, 19.40N×121.90E, h1km, mb4.3, ML3.2, MS3.0, 1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGCP** | **Mt. Cagua** | **1.16** | **173** | eP | Pb | 17 44 07.9 | -0.1 |
| SGCP | | | | eS | Sn | 17 44 25.8 | +0.8 |
| **PIP** | **Pasuquin** | **1.62** | **229** | ⇑iP | Pn | 17 44 15.0 | +0.3 |
| **APYP** | **Conner** | **1.66** | **202** | eP | Pn | 17 44 14.9 | -0.3 |
| APYP | | | | eS | Sn | 17 44 32.1 | -5.0 |
| **ABRA** | **Dolores** | **2.08** | **213** | eP | Pn | 17 44 21.9 | +0.9 |
| ABRA | | | | eS | Sn | 17 44 48.5 | +1.0 |
| **CAUP** | **Cauayan** | **2.45** | **182** | eP | Pb | 17 44 30.4 | +0.6 |

**KRSC 05 18:25:59.9**±1.0**, 52.51N×159.96E, h44**km±12km**, ML3.6, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **0.59** | **4** | i P | Pn | 18 26 13.1 | +1.2 |
| SPN | | | | eS | Sn | 18 26 21.6 | +1.1 |
| **NLC** | **Nalytchevo** | **0.76** | **331** | eP | Pn | 18 26 15.3 | +1.1 |
| NLC | | | | eS | Sn | 18 26 25.5 | +1.0 |
| **RUS** | **Russkaya** | **0.89** | **265** | i P | Pn | 18 26 16.8 | +0.8 |
| RUS | | | | eS | Sn | 18 26 28.2 | +0.5 |
| **PET** | **Petropavlovsk** | **0.94** | **303** | i P | Pn | 18 26 17.3 | +0.6 |
| PET | | | | eS | Sn | 18 26 29.1 | +0.1 |
| **UGLR** | **Uglovaya** | **0.98** | **316** | i P | Pn | 18 26 18.4 | +1.0 |
| **SDLR** | **Sedlovina** | **1.01** | **320** | eP | Pn | 18 26 18.6 | +0.8 |
| **SMAR** | **Somma** | **1.03** | **317** | i P | Pn | 18 26 19.2 | +1.0 |
| **AVH** | **Avacha** | **1.06** | **316** | i P | Pn | 18 26 19.6 | +1.2 |
| **MTVR** | **Mutnovka** | **1.09** | **269** | eP | Pn | 18 26 20.0 | +1.1 |
| MTVR | | | | eS | Sn | 18 26 33.5 | +0.6 |
| **KOK** | **Koryaka** | **1.12** | **315** | eP | Pn | 18 26 20.6 | +1.3 |
| **KRX** | **Arik** | **1.16** | **317** | eP | Pn | 18 26 20.8 | +0.9 |
| **ASAK** | **Asacha** | **1.27** | **265** | i P | Pn | 18 26 23.1 | +1.8 |
| ASAK | | | | eS | Sn | 18 26 39.6 | +2.4 |
| **KII** | **Karymskiy** | **1.56** | **349** | eP | Pn | 18 26 27.4 | +2.2 |
| KII | | | | eS | Sn | 18 26 46.6 | +2.3 |
| **GNL** | **Ganaly** | **1.70** | **315** | eP | Pn | 18 26 29.4 | +2.2 |
| GNL | | | | eS | Sn | 18 26 49.8 | +2.0 |
| **APC** | **Apacha** | **1.75** | **285** | eP | Pn | 18 26 30.2 | +2.4 |
| APC | | | | eS | Sn | 18 26 53.2 | +4.3 |
| **PAU** | **Pauzhetka** | **2.21** | **243** | eP | Pn | 18 26 37.7 | +3.6 |
| PAU | | | | eS | Sn | 18 27 03.9 | +3.8 |
| **MKZ** | **Mys Kozlova** | **2.30** | **27** | eP | Pn | 18 26 38.0 | +2.7 |
| MKZ | | | | eS | Sn | 18 27 04.9 | +2.5 |
| **KZV** | **Kizimen** | **2.61** | **4** | i P | Pn | 18 26 42.9 | +3.1 |
| **TUMR** | **Tumrok** | **2.78** | **2** | i P | Pn | 18 26 45.8 | +3.8 |
| **SKR** | **Severo-Kuril's** | **3.02** | **234** | eP | Pn | 18 26 48.2 | +3.1 |
| SKR | | | | eS | Sn | 18 27 22.3 | +2.3 |
| **ESO** | **Esso** | **3.50** | **348** | eP | Pn | 18 26 54.7 | +2.9 |
| **KBTR** | **Krutoberegovo** | **4.06** | **23** | eP | Pn | 18 27 03.1 | +3.6 |

**MAN 05 18:26:40, 8.19N×127.01E, h1km, mb4.8, ML3.7, MS3.7, 1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BIPH** | **Bislig** | **0.64** | **269** | ⇑iP | Pb | 18 26 54.6 | +0.6 |
| BIPH | | | | i S | Sg | 18 27 00.8 | +0.1 |
| **MATI** | **Mati** | **1.44** | **211** | eP | Pn | 18 27 07.2 | -0.1 |
| MATI | | | | eS | Sn | 18 27 27.8 | +0.8 |
| **BUTP** | **Butuan** | **1.57** | **300** | eP | Pn | 18 27 09.1 | 0.0 |
| **BUKP** | **Musuan** | **1.95** | **261** | eP | Pg | 18 27 17.3 | -0.2 |
| BUKP | | | | eS | Sg | 18 27 44.4 | +1.5 |
| **CGP** | **Cagayan de Oro** | **2.31** | **277** | eP | Pb | 18 27 21.1 | -1.3 |

**WEL 05 18:35:37.1**±0.5**, 36.25S×177.86E, h33**km**, ML3.5**/3**, Error ellipse: s-maj=6.6km s-min=3.4km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.36** | **165** | P* | Pn | 18 35 59.0 | -0.7 |
| MXZ | | | | S* | Sn | 18 36 15.4 | -1.3 |
| **HAZ** | **Te Kaha** | **1.51** | **182** | eP* | Pn | 18 36 00.9 | -0.8 |
| **WMGZ** | **Waiomatatini S** | **1.63** | **164** | PN | Pn | 18 36 03.1 | -0.3 |
| WMGZ | | | | eSN | Sn | 18 36 22.4 | -1.0 |
| **PUZ** | **Puketiti** | **1.85** | **170** | PN | Pn | 18 36 05.4 | -1.1 |
| PUZ | | | | AML | AML | 18 36 35.0 | |
| **MWZ** | **Matawai** | **2.10** | **187** | P* | Pn | 18 36 10.0 | 0.0 |
| MWZ | | | | S* | Sn | 18 36 34.3 | -0.8 |
| **TKGZ** | **Te Karaka** | **2.19** | **180** | PN | Pn | 18 36 10.7 | -0.4 |
| TKGZ | | | | SN | Sn | 18 36 36.3 | -0.8 |
| **CNGZ** | **Carnagh Statio** | **2.25** | **173** | PN | Pn | 18 36 11.7 | -0.3 |
| **RIGZ** | **Rimuhau** | **2.46** | **182** | ePN | Pn | 18 36 14.1 | -0.8 |
| **KNZ** | **Kokohu** | **2.77** | **183** | ePN | Pn | 18 36 17.6 | -1.6 |

**WEL 05 18:47:37.7**±0.1**, 43.58S×171.86E, h5**km**, ML3.6**/13**, 2C-4D, Error ellipse: s-maj=0.7km s-min=0.7km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OXZ** | **Oxford** | **0.28** | **27** | ⇓PG | Pg | 18 47 43.3 | 0.0 |
| OXZ | | | | SG | Sg | 18 47 47.3 | +0.2 |
| **CRLZ** | **Canterbury Las** | **0.55** | **90** | ⇑PG | Pg | 18 47 49.0 | +0.7 |
| CRLZ | | | | SG | Sb | 18 47 56.9 | -1.2 |
| CRLZ | | | | AML | AML | 18 48 01.3 | |
| **MQZ** | **McQueen's Vall** | **0.59** | **103** | ⇓P* | Pg | 18 47 49.5 | +0.5 |
| MQZ | | | | AML | AML | 18 47 59.9 | |
| MQZ | | | | AML | AML | 18 48 00.4 | |
| **RPZ** | **Rata Peaks** | **0.60** | **257** | ⇑P* | Pg | 18 47 49.7 | +0.3 |
| RPZ | | | | SG | Sg | 18 47 58.0 | +0.8 |
| RPZ | | | | AML | AML | 18 48 00.6 | |
| **LTZ** | **Lake Taylor** | **0.85** | **21** | ⇓P* | Pg | 18 47 54.2 | +0.1 |
| LTZ | | | | S* | Sg | 18 48 05.6 | +0.4 |
| LTZ | | | | AML | AML | 18 48 06.8 | |
| **WVZ** | **Waitaha Valley** | **0.96** | **301** | ⇓P* | Pg | 18 47 56.2 | 0.0 |
| WVZ | | | | AML | AML | 18 48 11.4 | |
| WVZ | | | | AML | AML | 18 48 11.5 | |
| **LBZ** | **Lake Benmore** | **1.46** | **236** | AML | AML | 18 48 26.0 | |
| LBZ | | | | AML | AML | 18 48 27.2 | |
| **FOZ** | **Fox Glacier** | **1.58** | **270** | AML | AML | 18 48 27.4 | |
| FOZ | | | | AML | AML | 18 48 30.4 | |
| **KHZ** | **Kahutara** | **1.69** | **47** | PN | Pn | 18 48 06.1 | -1.8 |
| **ODZ** | **Otahua Downs** | **1.71** | **210** | AML | AML | 18 48 14.5 | |
| ODZ | | | | AML | AML | 18 48 40.2 | |
| **THZ** | **Tophouse** | **1.97** | **23** | PN | Pn | 18 48 10.2 | -1.6 |
| THZ | | | | AML | AML | 18 48 36.7 | |
| THZ | | | | AML | AML | 18 48 38.1 | |
| **JCZ** | **Jackson Bay** | **2.30** | **257** | AML | AML | 18 48 58.5 | |
| JCZ | | | | AML | AML | 18 48 58.8 | |
| **WKZ** | **Wanaka** | **2.40** | **238** | AML | AML | 18 49 00.3 | |
| **EAZ** | **Earnscleugh** | **2.46** | **227** | AML | AML | 18 48 57.7 | |
| EAZ | | | | AML | AML | 18 48 59.0 | |
| **TUZ** | **Tuapeka** | **2.86** | **213** | AML | AML | 18 49 16.0 | |
| TUZ | | | | AML | AML | 18 49 17.5 | |

*DJA **05** 19:21:42.4±0.9, 6°S±4°×15°4E±°, h174km±11km, M4.9/32, mb4.8/32, mB5.5/19, Mw(mB)4.9/19*

*IDC **05** 19:21:59.2±0.5, 3.36S×151.13E, h0km, mb4.2/15, mb1 4.4/17, mb1mx4.4/24, mbtmp4.3/17, ML3.1/2, MS4.5/17, Ms1 4.5/17, ms1mx4.4/21, Error ellipse: s-maj=22.8km s-min=13.5km az=79.0*

*AUST **05** 19:22:00.7±4.1, 3.49S×151.13E, h10km±29km, Error ellipse: s-maj=9.9km s-min=7.6km az=28.0*

*BJI **05** 19:22:01.0, 3.57S×151.34E, h35km, mb4.7/44, mB5.2/41, Ms5.0/37, Ms7 4.7/37*

*ISCJB **05** 19:22:02.7±0.2, 3.41S±0.03×151.01E±0.04, h33km, mb4.8/63, MS4.5/17, Error ellipse: s-maj=6.2km s-min=4.0km az=179.0*

*GCMT **05** 19:22:04.4±0.1, 3.41S×151.06E, h15km, MW5.3/109, Moment Tensor Solution. s70,c115; s109,c205; Duration: 1s1 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.18±.02; $M_{\theta\theta}$1.25±.02; $M_{\phi\phi}$-1.07±.02; $M_{r\theta}$-0.03±.03; $M_{\theta\phi}$0.44±.01; $M_{\phi r}$-0.14±.03; Best double couple: $M_0$1.25200×$10^{17}$ NP1:$\phi_s$35.00000°, δ86.00000°, λ-173.00000°. NP2:$\phi_s$304.00000°, δ83.00000°, λ-4.00000°. Principal axes: T 1.3340, Plg2.0000°, Azm169.0000°; N -0.1640, Plg82.0000°, Azm63.0000°; P -1.1700, Plg8.0000°, Azm260.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*MOS **05** 19:22:04.0±1.2, 3.37S×151.02E, h44km, mb4.9/16 Error ellipse: s-maj=14.2km s-min=8.0km az=89.3*

*NEIC **05** 19:22:04.4±0.3, 3.42S×150.98E, h35km, mb5.1/29, Error ellipse: s-maj=10.3km s-min=6.8km az=95.0*

**ISC 05 19:22:04.6**±0.3**, 3.36S**±0.04×**151.06E**±0.06**, h35**km**, n172,** σ1.87/178**, mb4.9**/63**, MS4.5**/17**, 10C, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **1.37** | **127** | P | Pn | 19 22 22.4 | -4.9 |
| | baz=1.2,SNR=183 | | | | | | |
| **MANU** | **Manus Island** | **3.92** | **289** | P | **Pn** | **19 23 01.1** | **-1.3** |
| | baz=4.0 | | | | | | |
| **PMG** | **Port Moresby** | **7.15** | **213** | Pn | **Pn** | **19 23 47.6** | **+0.9** |
| | 2.9nm,0.3s,baz=91,slow=3.4,SNR=15 | | | | | | |
| PMG | | | | Sn | **Sn** | **19 25 08.0** | **+1.2** |
| | baz=270,slow=17,SNR=1.5 | | | | | | |
| PMG | | | | LR | LR | 19 26 47.4 | |
| | comp=Z,3μm,19.8s,baz=26,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **7.15** | **213** | ceP | **Pn** | **19 23 48.9** | **+2.2** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,219nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **7.15** | **213** | eP | **Pn** | **19 23 47.6** | **+0.9** |
| | comp=Z,86nm,0.9s | | | | | | |
| PMG | | | | Sn | **Sn** | **19 25 08.0** | **+1.2** |
| **JAY** | **Jayapura** | **10.38** | **274** | P | **Pn** | **19 24 32.7** | **+1.6** |
| | baz=10 | | | | | | |
| **HNR** | **Honiara** | **10.69** | **125** | LR | LR | 19 28 39.4 | |
| | comp=Z,6μm,21.1s,baz=296,slow=38 | | | | | | |
| **PATS** | **Pohnpei** | **12.45** | **36** | P | **Pn** | **19 24 59.6** | **+0.2** |
| | baz=13 | | | | | | |
| **RKPI** | **Ransiki, Papua** | **16.97** | **276** | P | **P** | **19 26 04.4** | **+3.3** |
| | comp=Z,169nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** | **17.27** | **195** | P | **Pn** | **19 26 03.0** | **-0.2** |
| | comp=Z,0.3nm,0.3s,baz=12,slow=12,SNR=11 | | | | | | |
| **CTAO** | **Charters Tower** | **17.27** | **195** | eP | **Pn** | **19 26 02.7** | **-0.5** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,240nm,1.8s | | | | | | |
| **CTAO** | **Charters Tower** | **17.27** | **195** | eP | **Pn** | **19 26 02.7** | **-0.5** |
| | comp=Z,240nm,1.8s | | | | | | |
| **FAKI** | **Fak Fak** | **18.79** | **271** | P | **P** | **19 26 20.3** | **-0.9** |
| | baz=19,SNR=7.3 | | | | | | |
| **FAKI** | **Fak Fak** | **18.79** | **271** | P | **P** | **19 26 19.5** | **-1.7** |
| | comp=Z,114nm,1.2s,comp=Z,2μm | | | | | | |
| **FAKI** | **Fak Fak** | **18.79** | **271** | eP | **P** | **19 26 20.0** | **-1.2** |
| | comp=Z,117nm,1.1s | | | | | | |
| **SWI** | **Sorong** | **19.94** | **277** | P | **P** | **19 26 34.6** | **+0.9** |
| | baz=20,SNR=7.5 | | | | | | |
| **SWI** | **Sorong** | **19.94** | **277** | P | **P** | **19 26 34.1** | **+0.3** |
| | comp=Z,75nm,1.1s,comp=Z,2μm | | | | | | |
| **QIS** | **Mount Isa** | **20.42** | **212** | P | **P** | **19 26 37.7** | **-1.1** |
| | baz=20,SNR=5.6 | | | | | | |
| **KDU** | **Kakadu** | **20.59** | **242** | P | **P** | **19 26 39.0** | **-1.8** |
| | baz=21,SNR=14 | | | | | | |
| **BNDI** | **Bandanaira** | **21.14** | **266** | P | P | 19 26 40.9 | -5.9 |
| | comp=Z,321nm,1.1s,comp=Z,4μm | | | | | | |
| **EIDS** | **Eidsvold** | **21.88** | **180** | P | **P** | **19 26 54.1** | **-0.4** |
| | baz=22,SNR=6.0 | | | | | | |
| **EIDS** | **Eidsvold** | **21.88** | **180** | eP | **P** | **19 26 53.6** | **-1.0** |
| | comp=Z,106nm,1.4s | | | | | | |
| **MSAI** | **Masohi** | **22.10** | **269** | P | P | 19 26 51.2 | -5.8 |
| | comp=Z,14nm,1.1s,comp=Z,3μm | | | | | | |
| **AAI** | **Ambon** | **22.83** | **268** | P | P | 19 26 57.7 | -7.1 |
| | comp=Z,41nm,0.9s,comp=Z,1μm | | | | | | |
| **RMQ** | **Roma** | **23.10** | **185** | P | **P** | **19 27 06.7** | **-0.8** |
| | baz=23,SNR=56 | | | | | | |
| **WRAB** | **Tennant Creek** | **23.18** | **223** | ceP | **P** | **19 27 07.2** | **-1.2** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,65nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.18** | **223** | eP | **P** | **19 27 05.5** | **-2.8** |
| | comp=Z,78nm,1.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.19** | **223** | P | **P** | **19 27 05.5** | **-3.0** |
| | comp=Z,16nm,1.1s,baz=49,slow=10,SNR=27 | | | | | | |
| WRA | | | | S | **S** | **19 31 15.7** | **-2.4** |
| | comp=Z,1.3nm,1.2s,baz=45,slow=13,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.19** | **223** | ceP | **P** | **19 27 06.0** | **-2.5** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| **LBMI** | **Labuha** | **23.70** | **276** | P | P | 19 27 07.2 | -6.3 |
| | comp=Z,65nm,1.6s,comp=Z,2μm | | | | | | |
| **DZM** | **Mont Dzumac** | **23.85** | **143** | eP | **P** | **19 27 15.0** | **+0.1** |
| | comp=Z,313nm,1.2s | | | | | | |
| DZM | | | | eS | **S** | **19 31 25.4** | **-3.4** |
| | comp=Z,689nm,23.8s | | | | | | |
| DZM | | | | eLQ | LQ | 19 32 04.4 | |
| | comp=Z,3μm,25.9s | | | | | | |
| DZM | | | | eLR | LR | 19 33 12.5 | |
| | comp=Z,5μm,24.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **23.85** | **143** | P | **P** | **19 27 14.1** | **-0.8** |
| | comp=Z,131nm,1.2s,baz=180,slow=19,SNR=17 | | | | | | |
| **DZM** | **Mont Dzumac** | **23.85** | **143** | eP | **P** | **19 27 14.1** | **-0.8** |
| | comp=Z,267nm,1.4s | | | | | | |
| **NLAI** | **Namlea** | **23.93** | **270** | P | P | 19 27 07.6 | -8.0 |
| | comp=Z,30nm,1.0s,comp=Z,876nm | | | | | | |
| **QLP** | **Quilpie** | **24.00** | **195** | P | **P** | **19 27 15.5** | **-0.6** |
| | baz=24,SNR=65 | | | | | | |
| **TNTI** | **Ternate** | **24.04** | **279** | P | **P** | **19 27 12.1** | **-4.6** |
| | comp=Z,62nm,1.6s,comp=Z,1μm | | | | | | |
| **TNTI** | **Ternate** | **24.04** | **279** | eP | **P** | **19 27 16.5** | **-0.2** |
| | comp=Z,107nm,1.3s | | | | | | |
| **SANI** | **Sanana** | **25.08** | **272** | P | P | 19 27 19.0 | -7.2 |
| | comp=Z,77nm,1.2s,comp=Z,2μm | | | | | | |
| **KNRA** | **Kununurra** | **25.13** | **239** | P | **P** | **19 27 25.0** | **-1.6** |
| | baz=25,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **26.13** | **218** | P | **P** | **19 27 33.9** | **-1.7** |
| | comp=Z,6.1nm,0.6s,baz=53,slow=8.2,SNR=50 | | | | | | |
| ASAR | | | | LR | LR | 19 39 03.3 | |
| | comp=Z,1μm,19.1s,baz=44,slow=39 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.62** | **35** | T | T | 19 55 06.5 | |
| | baz=217,slow=75,SNR=244 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.62** | **35** | T | T | 19 55 06.9 | |
| | baz=217,slow=75,SNR=72 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.64** | **35** | T | T | 19 55 07.7 | |
| | baz=217,slow=75,SNR=72 | | | | | | |
| **ARMA** | **Armidale** | **26.92** | **179** | P | **P** | **19 27 42.5** | **-0.2** |
| | baz=27,SNR=4.1 | | | | | | |
| **KMSI** | **Cibinong** | **27.35** | **278** | P | **P** | **19 27 41.9** | **-4.8** |
| | comp=Z,103nm,1.0s,comp=Z,3μm | | | | | | |
| **SOEI** | **Soe** | **27.35** | **255** | P | **P** | **19 27 45.8** | **-1.0** |
| | baz=27,SNR=4.2 | | | | | | |
| **SOEI** | **Soe** | **27.35** | **255** | P | **P** | **19 27 44.3** | **-2.6** |
| | comp=Z,71nm,1.0s | | | | | | |
| **DAV** | **Davao City (W)** | **27.47** | **292** | LR | LR | 19 38 22.2 | |
| | comp=Z,960nm,18.4s,baz=92,slow=36 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.71** | **34** | T | T | 19 56 28.2 | |
| | baz=218,slow=76,SNR=59 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.72** | **34** | T | T | 19 56 30.2 | |
| | baz=218,slow=76,SNR=80 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.73** | **34** | T | T | 19 56 28.8 | |
| | baz=218,slow=76,SNR=191 | | | | | | |
| **GTOI** | **Gorontalo** | **28.32** | **278** | P | P | 19 27 47.7 | -7.7 |
| | comp=Z,32nm,0.9s | | | | | | |
| **LUWI** | **Luwuk** | **28.36** | **274** | P | **P** | **19 27 57.3** | **+1.5** |
| | baz=28 | | | | | | |
| **LUWI** | **Luwuk** | **28.36** | **274** | P | P | 19 27 47.4 | -8.3 |
| | comp=Z,58nm,1.3s,comp=Z,2μm | | | | | | |
| **LUWI** | **Luwuk** | **28.36** | **274** | eP | **P** | **19 27 52.8** | **-3.0** |
| | comp=Z,96nm,1.3s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **28.48** | **190** | P | **P** | **19 27 55.2** | **-1.4** |
| | baz=28,SNR=7.3 | | | | | | |
| **APSI** | **Ampana** | **29.49** | **274** | P | P | 19 27 58.0 | -7.8 |
| | comp=Z,50nm,1.0s,comp=Z,662nm | | | | | | |
| **WRKA** | **Warakurna** | **30.74** | **223** | P | **P** | **19 28 14.4** | **-2.3** |
| | baz=31,SNR=6.2 | | | | | | |
| **YNG** | **Young** | **30.88** | **184** | P | **P** | **19 28 18.1** | **+0.3** |
| | baz=31 | | | | | | |
| **MPSI** | **Mapaga** | **31.37** | **276** | P | P | 19 28 15.1 | -7.2 |
| **CNB** | **Canberra Magne** | **31.83** | **183** | P | **P** | **19 28 26.2** | **0.0** |
| | baz=32,SNR=6.0 | | | | | | |
| **CAN** | **Canberra** | **31.86** | **183** | P | **P** | **19 28 25.6** | **-0.8** |
| | baz=32 | | | | | | |
| **ARPS** | **Mount Arapiles** | **34.31** | **193** | P | **P** | **19 28 47.4** | **-0.4** |
| | baz=34,SNR=12 | | | | | | |
| **TOO** | **Toolangi** | **34.43** | **188** | P | **P** | **19 28 49.1** | **+0.2** |
| | baz=34,SNR=5.8 | | | | | | |
| **MBWA** | **Marble Bar** | **35.23** | **237** | eP | **P** | **19 28 53.3** | **-2.7** |
| | comp=Z,22nm,1.1s | | | | | | |
| **KKM** | **Kota Kinabalu** | **36.03** | **285** | P | **P** | **19 29 02.4** | **-0.6** |
| | baz=36,SNR=5.1 | | | | | | |
| **KKM** | **Kota Kinabalu** | **36.03** | **285** | eP | **P** | **19 29 01.9** | **-1.2** |
| **MEEK** | **Meekatharra** | **38.74** | **230** | P | **P** | **19 29 23.7** | **-2.1** |
| | baz=39,SNR=3.4 | | | | | | |
| **NACB** | **Ninganchiao** | **39.64** | **315** | eP | **P** | **19 29 33.9** | **+0.6** |
| **YHNB** | **Yeheng** | **40.11** | **316** | eP | **P** | **19 29 37.5** | **+0.3** |
| | comp=Z,85nm,1.4s | | | | | | |
| **JNU** | **Nakatsue** | **41.01** | **334** | eP | **P** | **19 29 44.9** | **+0.4** |
| | comp=Z,11nm,0.9s | | | | | | |
| **KSM** | **Kuching** | **41.02** | **276** | eP | **P** | **19 29 44.6** | **-0.3** |
| | comp=Z,18nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.47** | **344** | P | **P** | **19 29 46.0** | **-2.2** |
| | comp=Z,3.4nm,0.9s,baz=169,slow=9.1,SNR=5.3 | | | | | | |
| MJAR | | | | LR | LR | 19 45 49.6 | |
| | comp=Z,615nm,20.4s,baz=170,slow=34 | | | | | | |
| **MAJO** | **Matsushiro** | **41.47** | **344** | eP | **P** | **19 29 45.8** | **-2.5** |
| **MAJO** | **Matsushiro** | **41.47** | **344** | eP | **P** | **19 29 45.8** | **-2.5** |
| **MAT** | **Matsushiro** | **41.47** | **344** | P | **P** | **19 29 46.3** | **-1.9** |
| MAT | | | | S | **S** | **19 35 58.8** | **-2.6** |
| **URZ** | **Urewera** | **42.10** | **149** | P | **P** | **19 29 51.6** | **-1.7** |
| | comp=Z,3.9nm,0.5s,baz=40,slow=7.9,SNR=3.1 | | | | | | |
| **SSE** | **Sheshan** | **44.55** | **322** | P | **P** | **19 30 14.4** | **+1.2** |
| SSE | | | | S | **S** | **19 36 46.7** | **+0.1** |
| SSE | | | | PMZ | | | |
| | comp=Z,36nm,0.7s | | | | | | |
| SSE | | | | PMZ | | | |
| | comp=Z,190nm,4.9s | | | | | | |
| SSE | | | | LN | | | |
| | comp=Z,590nm,19.2s | | | | | | |
| SSE | | | | LZ | | | |
| | comp=Z,940nm,19.1s | | | | | | |
| **DLV** | **T Lat** | **44.97** | **290** | eP | **P** | **19 30 17.5** | **+0.4** |
| | comp=Z,36nm,1.2s | | | | | | |
| **TJN** | **Taejon** | **45.31** | **333** | ⇑P | **P** | **19 30 19.9** | **+0.8** |
| **KSRS** | **Korea Array** | **45.95** | **334** | P | **P** | **19 30 24.2** | **0.0** |
| | comp=Z,0.8nm,0.6s,baz=143,slow=7.8,SNR=4.8 | | | | | | |
| KSRS | | | | LR | LR | 19 48 03.2 | |
| | comp=Z,519nm,21.6s,baz=158,slow=34 | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.96** | **334** | P | **P** | **19 30 24.3** | **0.0** |
| **KSAR** | **Wonju Array Be** | **45.96** | **334** | P | **P** | **19 30 24.2** | **0.0** |
| **QIZ** | **Qiongzhong** | **46.25** | **300** | P | **P** | **19 30 26.9** | **0.0** |
| QIZ | | | | S | **S** | **19 37 07.4** | **-4.2** |
| QIZ | | | | PMZ | | | |
| | comp=Z,95nm,2.9s | | | | | | |
| **NJ2** | **Nanjing** | **46.65** | **322** | eP | **P** | **19 30 31.0** | **+1.2** |
| NJ2 | | | | S | **S** | **19 37 15.0** | **-1.8** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| NJ2 | | | | PMZ | | | |

comp=Z,430nm,6.3s
NJ2 LN
comp=Z,930nm,21.7s
NJ2 LE
comp=Z,2μm,20.2s
NJ2 LZ
comp=Z,1μm,19.8s
**YUK Yuzh-Kuril'sk 47.41 355** *c iP* **P** 19 30 41.5 +6.0
YUK *eS* **S** **19 37 31.9 +4.5**
YUK pmax pmax
comp=Z,244nm,3.8s
**KUR Kuril'sk 48.46 357** *c iP* **P** **19 30 43.7 +0.1**
KUR *i* 19 32 41.8
KUR *i* S **S** **19 37 37.5 -4.7**
KUR *i* SSS SSS 19 42 30.3
KUR pmax pmax
comp=Z,413nm,4.3s
**DL2 Dalian 50.06 330** P P 19 31 03.7 +7.7
DL2 S S 19 38 11.5 +6.6
DL2 pmax pmax
comp=Z,36nm,1.1s
DL2 pmax pmax
comp=Z,160nm,3.3s
DL2 smax smax
comp=N,330nm,19.0s
DL2 smax smax
comp=E,240nm,19.6s
DL2 SMZ
comp=E,420nm,21.3s
**USRK Ussuriysk Ar. 50.35 342** P **P** **19 30 58.4 +0.3**
comp=E,2.9nm,0.7s,baz=165,slow=7.1,SNR=8.2
USRK LR LR 19 51 52.5
comp=E,358nm,18.3s,baz=154,slow=36
**TIA Tai'an 50.54 324** *eP* **P** **19 30 59.4 -0.3**
**YSS Yuzh-Sakhalins 50.63 353** *eP* **P** **19 31 03.0 +2.8**
YSS *e**PP pP 19 31 24.0 +13
YSS *eS* **S** **19 38 11.0 -1.6**
YSS *eP*S S 19 38 20.0 +7.4
YSS *e* 19 40 42.0
YSS *e* 19 41 45.0
**KULM Kulim 51.09 279** P **P** **19 31 03.5 -0.7**
comp=E,24nm,1.0s
**MDJ Mudanjiang 51.49 340** P **P** **19 31 06.7 +0.1**
MDJ PP **PP** **19 33 04.3 +0.1**
MDJ S S 19 38 31.3 +6.8
MDJ ScS **ScS** **19 40 47.2 -7.1**
MDJ PMZ
comp=E,6.0nm,0.9s
MDJ PMZ
comp=E,130nm,6.5s
MDJ LN
comp=E,620nm,28.6s
MDJ LE
comp=E,400nm,28.6s
MDJ LZ
comp=E,700nm,25.9s
**MDJ Mudanjiang 51.49 340** P **P** **19 31 04.4 -2.3**
**ENH Enshi 51.91 313** P **P** **19 31 09.2 -1.0**
**GYA Guiyang 52.15 307** *eP* **P** **19 31 13.0 +0.9**
GYA PP **PP** **19 33 13.0 +2.3**
GYA S **S** **19 38 30.2 -4.3**
GYA PMZ
comp=E,20nm,1.0s
GYA PMZ
comp=E,120nm,5.6s
GYA LN
comp=E,520nm,19.2s
GYA LE
comp=E,490nm,18.5s
GYA LZ
comp=E,470nm,19.0s
**LOEI Loei 53.31 295** P P 19 31 24.6 +3.9
comp=E,161nm,1.1s,comp=E,7μm
**PHET Kaeng Krachan 53.57 289** P P 19 31 30.2 +7.6
comp=E,5.9nm,1.0s
**BJI Beijing 53.75 327** P **P** **19 31 25.7 +2.2**
BJI S **S** **19 38 58.1 +2.6**
BJI SS **SS** **19 42 40.5 +3.6**
BJI PMZ
comp=E,240nm,4.1s
BJI LN
comp=E,590nm,20.8s
BJI LE
comp=E,360nm,21.8s
BJI LZ
comp=E,1μm,33.3s
**UTTA Uttaradit 54.03 295** P **P** **19 31 27.4 +1.5**
comp=E,5.4nm,1.0s
**NANT Nan 54.23 296** P **P** **19 31 28.5 +1.2**
comp=E,6.3nm,0.9s
**XAN Xi'an 54.39 317** P **P** **19 31 27.0 -1.4**
XAN PMZ
comp=E,8.0nm,1.1s
XAN PMZ
comp=E,180nm,5.5s
**KMI Kunming 54.75 304** P **P** **19 31 32.6 +1.2**
KMI PP **PP** **19 33 38.2 +3.8**
KMI S **S** **19 39 11.2 +1.1**
KMI PMZ
comp=E,7.0nm,0.7s
KMI PMZ
comp=E,260nm,4.1s
KMI LN
comp=E,350nm,16.6s
KMI LE
comp=E,360nm,23.1s
KMI LZ
comp=E,510nm,21.5s
**CRAI Chiangrai 54.98 297** P **P** **19 31 34.5 +1.7**
comp=E,47nm,1.0s
**KLR Kul'dur 55.00 345** *eP* **P** **19 31 33.7 +1.3**
KLR pmax pmax
comp=E,100nm,2.6s
KLR pmax pmax
comp=Z,170nm,2.6s
**CMAR Chiang Mai Arr 55.70 295** P **P** **19 31 38.5 +0.4**
comp=Z,5.1nm,0.8s,baz=112,slow=5.3,SNR=36
CMAR LR LR 19 55 24.7
comp=Z,263nm,19.5s,baz=96,slow=36
**CMAR Chiang Mai Arr 55.70 295** *ceP* **P** **19 31 39.5 +1.4**
CMAR pmax pmax
comp=Z,5.0nm,0.8s
**CHTO Chiang Mai 55.81 295** P P 19 31 44.6 +5.8
comp=Z,56nm,1.2s
**CHTO Chiang Mai 55.81 295** *eP* **P** **19 31 39.5 +0.7**
CHTO pmax pmax
comp=Z,16nm,1.2s
**CHTO Chiang Mai 55.81 295** *eP* **P** **19 31 39.5 +0.7**
comp=Z,16nm,1.2s
**CD2 Chengdu 56.49 311** P **P** **19 31 43.8 +0.3**
CD2 PcS **PcS** **19 36 40.1 -0.8**
CD2 S **S** **19 39 29.3 -3.5**
CD2 SS **SS** **19 43 19.2 -1.4**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,120nm,5.4s
CD2 LN
comp=Z,750nm,15.7s
CD2 LE
comp=Z,1μm,16.6s
CD2 LZ
comp=Z,1μm,15.6s
**PETK Petropavlovsk- 56.54 5** P **P** **19 31 43.7 +0.3**
comp=Z,5.8nm,0.8s,baz=171,slow=7.9,SNR=14
PETK LR LR 19 51 22.4
comp=Z,469nm,21.5s,baz=188,slow=31
**PET Petropavlovsk 56.54 5** *eP* P 19 31 49.3 +6.0
PET *eS* **S** **19 39 34.8 +2.4**
PET *e*SS **SS** **19 43 20.1 -0.3**
PET pmax pmax
comp=Z,23nm,1.0s
PET pmax pmax
comp=Z,100nm,15.5s
PET MLR MLR
comp=Z,400nm,21.0s
PET MLR MLR
comp=Z,400nm,19.0s
**HHC Hu-ho-hao-te 56.88 325** *eP* **P** **19 31 48.3 +2.1**
HHC S **S** **19 39 32.2 -5.5**
HHC PMZ
comp=Z,30nm,0.8s
HHC PMZ
comp=Z,220nm,3.6s
HHC LN
comp=Z,530nm,17.1s
HHC LE
comp=Z,480nm,19.2s
HHC LZ
comp=Z,680nm,19.6s
**LZH Lanzhou 59.00 316** *eP* **P** **19 32 04.2 +3.0**
LZH pP **pP** **19 32 13.8 +1.9**
LZH sP **sP** **19 32 18.1 +2.1**
LZH PcP **PcP** **19 32 50.0 0.0**
LZH PP PP 19 34 19.5 +7.5
LZH *e*S **S** **19 40 08.1 +2.4**
LZH sS **sS** **19 40 24.3 +1.1**
LZH SS **SS** **19 43 58.1 -2.0**
LZH PMZ
comp=Z,18nm,1.0s
LZH PMZ
comp=Z,69nm,4.7s
LZH LN
comp=Z,1μm,14.8s
LZH LE
comp=Z,1μm,12.9s
LZH LZ
comp=Z,2μm,14.9s
**PPT Papeete 59.81 108** LR LR 19 54 46.7
comp=Z,133nm,18.9s,baz=297,slow=33
**PPT2 Papeete2 59.81 108** *eS* **S** **19 40 15.2 -1.4**
comp=Z,604nm,26.0s
PPT2 *e*LQ LQ 19 47 08.3
comp=Z,2μm,32.0s
PPT2 *e*LR LR 19 49 43.9
comp=Z,797nm,32.0s
**TBI Tubuai 60.73 115** *eS* **S** **19 40 30.3 +2.3**
comp=Z,376nm,29.0s
TBI *e*LQ LQ 19 49 23.6
comp=Z,2μm,30.2s
TBI *e*LR LR 19 50 18.0
comp=Z,676nm,31.2s
**GTA Gaotai 63.43 318** *eP* **P** **19 32 33.1 +1.9**
GTA S **S** **19 41 02.4 +0.5**
GTA PMZ
comp=Z,3.0nm,1.0s
GTA PMZ
comp=Z,110nm,4.7s
GTA LN
comp=Z,240nm,16.2s
GTA LE
comp=Z,380nm,19.0s
GTA LZ
comp=Z,600nm,21.4s
**DRV Dumont d'Urvil 63.66 185** S S 19 40 57.0 -6.5
DRV SS **SS** **19 45 15.0 +3.5**
DRV L L 19 48 00.0
DRV R 19 52 00.0
**ULN Ulaanbaatar 63.87 329** *ceP* **P** **19 32 35.5 +1.6**
ULN pmax pmax
comp=Z,6.0nm,1.2s
**ULN Ulaanbaatar 63.87 329** *eP* **P** **19 32 33.9 0.0**
comp=Z,11nm,1.2s
**SONM Songino Array 64.20 328** P **P** **19 32 36.8 +0.8**
comp=Z,1.4nm,0.6s,baz=146,slow=6.3,SNR=3.7
SONM LR LR 19 58 55.2
comp=Z,744nm,21.5s,baz=128,slow=34
**YAK Yakutsk 67.24 349** *eP* **P** **19 32 56.8 +1.7**
YAK *eS* S 19 41 55.4 +8.1
YAK pmax pmax
comp=E,6.0nm,1.1s
YAK pmax pmax
comp=N,3.0nm,1.0s
YAK pmax pmax
comp=Z,22nm,1.3s
YAK pmax pmax
comp=Z,68nm,3.2s
YAK pmax pmax
comp=N,12nm,1.5s
YAK pmax pmax
comp=E,50nm,3.0s
YAK smax smax
comp=E,120nm,17.0s
YAK smax smax
comp=N,109nm,17.9s
**YAK Yakutsk 67.24 349** *eP* **P** **19 32 56.1 +1.0**
comp=N,32nm,1.2s
**ZAK Zakamensk 67.38 329** *eP* **P** **19 32 55.2 -1.2**
ZAK pmax pmax
comp=Z,9.0nm,1.2s
**BOD Bodaibo 67.84 340** *eP* **P** **19 32 58.0 -1.1**
BOD pmax pmax
comp=Z,5.0nm,1.5s
**TLY Talaya 67.98 330** *eP* P 19 33 06.9 +6.8
TLY *eS* S 19 42 13.8 +17
TLY pmax pmax
comp=Z,7.0nm,1.7s
TLY MLR MLR
comp=Z,312nm,18.0s
**TLY Talaya 67.98 330** P **P** **19 33 00.5 +0.4**
**CASY Casey 68.89 196** *eP* **P** **19 33 04.5 -0.9**
comp=Z,22nm,1.4s
**BILL Bilibino 72.04 6** P **P** **19 33 23.9 -0.8**
**BILL Bilibino 72.04 6** P **P** **19 33 23.9 -0.8**
**WMQ Urumqi 73.52 318** P **P** **19 33 35.0 +1.0**
WMQ PP **PP** **19 36 18.0 -0.3**
WMQ S **S** **19 42 58.0 -3.6**
WMQ SS **SS** **19 47 50.0 +5.0**
WMQ PMZ
comp=Z,12nm,1.0s
WMQ LN
comp=Z,440nm,24.0s
WMQ LE
comp=Z,400nm,22.0s
WMQ LZ
comp=Z,410nm,22.0s
**VNDA Vanda 74.33 178** P **P** **19 33 38.9 +0.9**
comp=Z,1.5nm,0.8s,baz=11,slow=4.1,SNR=5.8
VNDA LR LR 20 02 10.5
comp=Z,229nm,20.2s,baz=0.0,slow=32
**MKAR Makanchi Array 78.11 319** P **P** **19 34 00.2 +0.1**
comp=Z,2.5nm,0.9s,baz=106,slow=7.7,SNR=11
MKAR LR LR 20 07 27.1
comp=Z,332nm,21.6s,baz=99,slow=35
**MKAR Makanchi Array 78.11 319** *i* P **P** **19 34 00.6 +0.4**
MKAR pmax pmax
comp=Z,2.0nm,0.9s
**ZALV Zalesovo Beam 79.00 327** P **P** **19 34 04.4 -0.5**
comp=Z,1.0nm,0.5s,baz=108,slow=4.8,SNR=6.1
ZALV LR LR 20 08 46.9
comp=Z,394nm,20.7s,baz=72,slow=36
**ZALV Zalesovo Beam 79.00 327** *i* P **P** **19 34 05.0 +0.1**
ZALV pmax pmax
comp=Z,1.0nm,0.5s
**TRF Thorofare Moun 79.55 23** *eP* **P** **19 34 07.7 -0.2**
comp=Z,28nm,1.3s
**MCK McKinley 80.22 23** *eP* **P** **19 34 11.0 -0.3**
MCK pmax pmax
comp=Z,40nm,1.2s
**MCK McKinley 80.22 23** *eP* **P** **19 34 11.0 -0.3**
comp=Z,40nm,1.2s
**KSH Kashi 80.69 311** *eP* P 19 34 18.6 +4.1
KSH S **S** **19 44 20.2 +0.3**
KSH SS SS 19 49 43.2 +10
KSH PMZ
comp=Z,140nm,4.0s
KSH LN
comp=Z,96nm,8.4s
KSH LE
comp=Z,130nm,6.7s
KSH LZ
comp=Z,280nm,10.7s
**COLA College 81.17 22** P **P** **19 34 16.9 +0.6**
**COLA College 81.17 22** P **P** **19 34 16.9 +0.6**
**COLD Coldfoot 81.49 20** *eP* **P** **19 34 21.0 +3.0**
comp=Z,11nm,1.2s
**ILAR Eielson Array 81.49 23** P **P** **19 34 17.7 -0.4**
comp=Z,1.4nm,0.7s,baz=253,slow=5.2,SNR=13
ILAR LR LR 20 08 28.8
comp=Z,187nm,18.9s,baz=260,slow=34
**KURK Kurchatov 81.58 322** *eP* **P** **19 34 18.7 -0.1**
KURK pmax pmax
comp=Z,18nm,1.1s
**KURK Kurchatov 81.58 322** *eP* **P** **19 34 18.7 -0.1**
comp=Z,18nm,1.1s
**TKM2 Tokmak 2 81.69 314** P **P** **19 34 19.9 0.0**
**TKM2 Tokmak 2 81.69 314** P **P** **19 34 19.9 0.0**
**DOT Dot Lake 82.12 24** *eP* **P** **19 34 22.3 +0.9**
comp=Z,74nm,1.3s
**AAK Ala-Archa 82.43 314** *eP* **P** **19 34 24.3 +0.6**
AAK pmax pmax
comp=Z,11nm,1.5s
**AAK Ala-Archa 82.43 314** *eP* **P** **19 34 24.3 +0.6**
comp=Z,11nm,1.5s
**EKS2 Erkin-Say 82.95 314** *eP* **P** **19 34 28.3 +1.9**
EKS2 pmax pmax
comp=Z,7.0nm,1.2s
**EKS2 Erkin-Say 82.95 314** *eP* **P** **19 34 28.3 +1.9**
comp=Z,7.4nm,1.2s
**KKAR Karatay Array 85.39 314** *eP* **P** **19 34 38.8 +0.2**
KKAR pmax pmax
comp=Z,9.0nm,1.0s
**KKAR Karatay Array 85.39 314** *eP* **P** **19 34 38.8 +0.2**
comp=Z,8.5nm,1.0s
**MAW Mawson 86.22 203** P **P** **19 34 43.6 +1.5**
comp=Z,1.9nm,0.9s,baz=66,slow=6.0,SNR=4.6
**QSPA South Pole Qui 86.59 180** *eP* **P** **19 34 43.1 -1.1**
comp=Z,20nm,1.2s
**BBB Bella Bella 87.01 37** LR LR 20 03 44.0
comp=Z,98nm,21.5s,baz=224,slow=29
**BRVK Borovoye 87.13 323** *ceP* **P** **19 34 47.8 +0.9**
BRVK pmax pmax
comp=Z,3.0nm,1.0s
**BRVK Borovoye 87.13 323** *eP* **P** **19 34 45.9 -1.0**
comp=Z,4.5nm,0.8s
**NVAR Mina Array Bea 92.56 52** P **P** **19 35 14.3 +1.3**
comp=Z,0.6nm,0.6s,baz=272,slow=7.1,SNR=2.9
NVAR LR LR 20 09 36.4
comp=Z,286nm,21.0s,baz=268,slow=31
**ABKAR Akbulak array 93.26 319** *eP* **P** **19 35 14.1 -1.5**
comp=Z,5.9nm,0.6s
**GEYT Alibeck 94.37 308** P **P** **19 35 22.6 +1.5**
comp=Z,0.4nm,0.4s,baz=35,slow=5.3,SNR=2.9
**SYO Syowa Base 94.44 200** *eP* **P** **19 35 21.6 +0.9**
**UZH Uzhgorod 117.28 324** *e*PKIKP PKPdf 19 40 55.9 +9.5
**UPC Upice 119.73 329** AMS AMS 20 32 00.0
**GERES GERESS Array B 121.93 328** PKP **PKPdf** **19 40 55.4 -0.1**
comp=Z,0.7nm,0.7s,baz=50,slow=2.1,SNR=5.2
**TORD Torodi Ar. Bea 148.21 290** PKPbc **PKPbc** **19 41 47.5 -0.5**
comp=Z,6.3nm,0.7s,baz=74,slow=2.2,SNR=35
**BDFB Brasilia 153.30 136** PKPbc **PKPbc** **19 41 59.8 -0.4**
comp=Z,1.4nm,0.4s,baz=225,slow=2.9,SNR=2.8
BDFB PKPab **PKPab** **19 42 11.7 -0.4**
comp=Z,5.0nm,0.9s,baz=158,slow=5.4,SNR=3.4
**DBIC Dimbokro 155.79 279** PKPab **PKPab** **19 42 24.4 +1.6**
comp=Z,3.5nm,0.8s,baz=170,slow=6.1,SNR=3.4

**FUNV 05 19:32:12.3, 6.84N×73.10W, h168km, MW3.7, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAPV** | **Capacho** | **1.28** | **37** | *e*P | Pn | 19 32 40.4 | -1.1 |
| CAPV | | | | *e*S | Sn | 19 33 01.8 | -2.2 |
| **VIGV** | **El Vigia** | **2.63** | **41** | *e*P | Pn | 19 32 55.0 | -1.0 |
| VIGV | | | | *e*S | Sn | 19 33 26.3 | -3.6 |
| **SOCV** | **Socops** | **2.65** | **57** | *e*P | Pn | 19 32 55.3 | -0.9 |
| SOCV | | | | *e*S | Sn | 19 33 26.8 | -3.4 |
| **VIRV** | **Villa del Rosa** | **3.70** | **11** | *e*P | Pn | 19 33 07.4 | -1.9 |
| VIRV | | | | *e*S | Sn | 19 33 49.6 | -4.2 |
| **CURV** | **Curarigua** | **4.42** | **44** | *e*P | Pn | 19 33 17.2 | -1.4 |
| CURV | | | | *e*S | Sn | 19 34 05.2 | -5.4 |
| **DABV** | **Dabajuro** | **4.73** | **31** | *e*P | Pn | 19 33 21.3 | -1.2 |
| DABV | | | | *e*S | Sn | 19 34 11.2 | -6.4 |
| **BAUV** | **El Baul** | **5.43** | **67** | *e*P | Pn | 19 33 29.5 | -2.2 |
| BAUV | | | | *e*S | Sn | 19 34 27.3 | -6.6 |
| **MONV** | **Montecano** | **5.95** | **31** | *e*P | Pn | 19 33 36.6 | -1.9 |
| **TURV** | **Turiamo** | **6.32** | **55** | *e*P | Pn | 19 33 41.7 | -1.7 |

*ISCJB **05** 19:34:21.0±0.2, 8.60S±0.03×118.44E±0.02, h152km, mb4.2/21, Error ellipse: s-maj=4.2km s-min=2.9km az=14.0*
*NEIC **05** 19:34:22.7±0.9, 8.49S×118.50E, h157km±8km, mb4.4/11, Error ellipse: s-maj=10.0km s-min=6.7km az=67.0*
*DJA **05** 19:34:23.4±0.3, 9°S±3°×11°8E±°, h117km±5km, M4.6/31, mb4.7/15, mB5.1/5, MLv4.7/31, Mw(mB)4.5/5*
*BJI **05** 19:34:23.3, 8.50S×118.50E, h156km, mb4.6/15, mB4.8/8*
*IDC **05** 19:34:23.4±1.6, 8.41S×118.46E, h159km±14km, mb4.0/14, mb1 4.0/16, mb1mx3.9/30, mbtmp4.4/16, MS4.0/2, Ms1 4.0/2, ms1mx3.2/29, Error ellipse: s-maj=18.9km s-min=10.7km az=71.0*

**ISC 05 19:34:22.4±0.4, 8.60S±0.04×118.45E±0.04, h152km, n91, s138/105, mb4.4/21, 2C, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WBSI** | **Waikabubak, Su** | **1.39** | **138** | P | **Pn** | **19 34 49.2** | **-1.8** |
| WBSI | | | | S | **Sn** | **19 35 11.2** | **-1.7** |
| **TWSI** | **Taliwang, Sumb** | **1.56** | **265** | P | **Pn** | **19 34 51.1** | **-1.6** |
| TWSI | | | | S | **Sn** | **19 35 13.9** | **-2.0** |
| **BASI** | **Baing, Sumba** | **2.64** | **128** | P | **Pn** | **19 35 04.8** | **-0.5** |
| BASI | | | | S | **Sn** | **19 35 38.8** | **+0.3** |
| **BSSI** | **Bau Bau, Buton** | **3.17** | **40** | P | **Pn** | **19 35 12.1** | **+0.1** |
| BSSI | | | | S | **Sn** | **19 35 50.9** | **+0.4** |
| **EDFI** | **Ende, Flores** | **3.21** | **93** | P | **Pn** | **19 35 12.3** | **-0.2** |
| EDFI | | | | S | **Sn** | **19 35 50.0** | **-1.3** |
| **DNP** | **Denpasar** | **3.21** | **268** | P | **Pn** | **19 35 12.0** | **-0.4** |
| **SRBI** | **Singaraja** | **3.25** | **279** | P | **Pn** | **19 35 12.4** | **-0.5** |
| **IGBI** | **Denpasar** | **3.27** | **266** | P | **Pn** | **19 35 12.9** | **-0.4** |
| IGBI | | | | S | **Sn** | **19 35 51.0** | **-1.8** |
| **BKSI** | **Bulukumba** | **3.66** | **27** | P | **Pn** | **19 35 18.3** | **0.0** |
| **MMRI** | **Maumere** | **3.74** | **91** | P | **Pn** | **19 35 19.3** | **-0.1** |
| **MMRI** | **Maumere** | **3.74** | **91** | *e*Pn | **Pn** | **19 35 19.2** | **-0.1** |
| MMRI | | | | *e*Sn | **Sn** | **19 36 06.7** | **+3.0** |
| **KAPI** | **Kappang** | **3.79** | **20** | P | **Pn** | **19 35 20.4** | **+0.4** |
| | 10nm,0.3s,baz=199,slow=7.1,SNR=46 | | | | | | |
| KAPI | | | | S | **Sn** | **19 36 04.6** | **-0.3** |
| | 3.5nm,0.3s,baz=309,slow=23,SNR=13 | | | | | | |
| **ABJI** | **Asem Bagus** | **4.25** | **281** | P | **Pn** | **19 35 25.4** | **-0.6** |
| **KMMI** | **Kalianget** | **4.70** | **289** | P | **Pn** | **19 35 33.5** | **+1.6** |
| **SPSI** | **Sidrap Palu** | **4.79** | **16** | P | **Pn** | **19 35 33.7** | **+0.6** |
| **BLJI** | **Banyuglugur** | **4.88** | **280** | P | **Pn** | **19 35 34.3** | **0.0** |
| **GMJI** | **Gumukmas** | **4.96** | **273** | P | **Pn** | **19 35 35.2** | **-0.2** |
| **BATI** | **Baumata** | **5.38** | **108** | P | **Pn** | **19 35 40.8** | **-0.2** |
| | 202nm,0.5s,4μm0.8nm | | | | | | |
| **TTSI** | **Tana Toraja** | **5.69** | **14** | P | **Pn** | **19 35 45.8** | **+0.8** |
| | 55nm,0.7s,832nm0.2nm | | | | | | |
| **KBKI** | **Kotabaru** | **5.74** | **337** | P | **Pn** | **19 35 45.8** | **+0.1** |
| | 56nm,1.3s,0.2nm | | | | | | |
| **SOEI** | **Soe** | **5.86** | **102** | P | **Pn** | **19 35 47.2** | **-0.1** |
| | 274nm,0.8s,3μm1.1nm | | | | | | |
| SOEI | | | | S | **Sn** | **19 36 53.1** | **-0.6** |
| | 274nm,0.8s,3μm1.1nm | | | | | | |
| **SOEI** | **Soe** | **5.86** | **102** | *e*Pn | **Pn** | **19 35 47.1** | **-0.2** |
| SOEI | | | | *e*Sn | Sn | 19 36 46.2 | -7.5 |
| **GRJI** | **Gresik** | **6.15** | **285** | P | **Pn** | **19 35 51.2** | **+0.1** |
| | 135nm,0.8s,0.4nm | | | | | | |
| **BBKI** | **Banjar Baru** | **6.24** | **325** | P | **Pn** | **19 35 52.9** | **+0.5** |
| | 150nm,1.0s,0.5nm | | | | | | |
| **PWJI** | **Pagerwojo** | **6.60** | **275** | P | **Pn** | **19 35 57.2** | **0.0** |
| | 58nm,2.3s,0.6nm | | | | | | |
| **TBJI** | **Tambak Boyo** | **6.78** | **285** | P | **Pn** | **19 36 00.0** | **+0.5** |
| | 92nm,1.5s,0.5nm | | | | | | |
| **PCJI** | **Pacitan** | **7.21** | **273** | P | **Pn** | **19 36 05.5** | **+0.3** |
| | 83nm,1.5s,0.7nm | | | | | | |
| **UGM** | **Wanagama** | **7.88** | **274** | P | **Pn** | **19 36 14.7** | **+0.5** |
| | 180nm,1.9s,1.2nm | | | | | | |
| **SMRI** | **Semarang** | **8.09** | **280** | P | **Pn** | **19 36 17.6** | **+0.6** |
| | 75nm,0.8s | | | | | | |
| **LUWI** | **Luwuk** | **8.66** | **30** | P | **Pn** | **19 36 26.1** | **+1.5** |
| **MBWA** | **Marble Bar** | **12.54** | **174** | *e*Pn | **Pn** | **19 37 15.7** | **0.0** |
| MBWA | | | | *e*Sn | Sn | 19 39 24.9 | -10 |
| **SAUI** | **Saumlaki** | **12.73** | **88** | *e*Pn | **Pn** | **19 37 18.0** | **-0.1** |
| **TNTI** | **Ternate** | **12.87** | **44** | *e*Pn | **Pn** | **19 37 21.1** | **+1.1** |
| **MTN** | **Manton Dam** | **13.15** | **110** | *e*Pn | **Pn** | **19 37 21.7** | **-1.8** |
| **MYLDM** | **Lahad Datu** | **13.69** | **0** | *e*P | **P** | **19 37 34.6** | **+0.6** |
| **KKM** | **Kota Kinabalu** | **14.72** | **351** | *e*P | **P** | **19 37 45.7** | **+0.1** |
| **FAKI** | **Fak Fak** | **14.84** | **68** | *e*Sn | **Sn** | **19 40 26.1** | **-3.7** |
| **WRA** | **Warramunga Arr** | **19.06** | **128** | P | **P** | **19 38 33.5** | **+0.3** |
| | 4.0nm,0.3s,baz=302,slow=12,SNR=218 | | | | | | |
| WRA | | | | S | **S** | **19 41 57.5** | **-4.1** |
| | 0.4nm,0.3s,baz=304,slow=22,SNR=3.0 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 46 12.3** | **-1.0** |
| | 0.0nm,0.3s,baz=309,slow=1.9,SNR=6.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **19.06** | **128** | *e*P | **P** | **19 38 33.4** | **+0.2** |
| | 38nm,0.9s | | | | | | |
| WRAB | | | | *e*S | **S** | **19 41 59.5** | **-2.0** |
| **ASAR** | **Alice Springs** | **21.05** | **137** | P | **P** | **19 38 55.6** | **+1.1** |
| | 14nm,0.5s,baz=315,slow=9.5,SNR=396 | | | | | | |
| ASAR | | | | S | **S** | **19 42 38.9** | **-1.6** |
| | 3.1nm,0.9s,baz=327,slow=24,SNR=8.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 46 17.4** | **-0.6** |
| | 3.1nm,0.7s,baz=337,slow=2.1,SNR=11 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AS01 | Alice Springs | 21.08 | 137 | eP | P | 19 38 54.7 | -0.2 |
| NWAO | Narrogin (SRO) | 24.23 | 182 | P | P | 19 39 27.1 | +1.9 |
| | 3.7nm,0.5s,baz=38,slow=0.0,SNR=3.7 | | | | | | |
| NWAO | | | | LR | LR | 19 49 13.0 | |
| | comp=Z,4.9nm,18.4s,baz=184,slow=36 | | | | | | |
| NWAO | Narrogin (SRO) | 24.23 | 182 | eP | P | 19 39 26.9 | +1.7 |
| | 25nm,1.1s | | | | | | |
| CTA | Charters Tower | 29.20 | 116 | P | P | 19 40 11.6 | +1.7 |
| | 2.7nm,0.6s,baz=294,slow=12,SNR=3.7 | | | | | | |
| CTAO | Charters Tower | 29.20 | 116 | P | P | 19 40 11.1 | +1.2 |
| | 14nm,1.1s | | | | | | |
| CM01 | Chiang Mai Arr | 33.03 | 324 | eP | P | 19 40 43.4 | -0.1 |
| CMAR | Chiang Mai Arr | 33.07 | 324 | P | P | 19 40 44.0 | +0.2 |
| | 1.2nm,0.7s,baz=153,slow=6.5,SNR=9.6 | | | | | | |
| CMAR | | | | pP | pP | 19 41 18.6 | +2.4 |
| | 0.3nm,0.6s,baz=124,slow=45,SNR=2.3 | | | | | | |
| CMAR | | | | PcP | PcP | 19 43 24.6 | +0.7 |
| | 0.8nm,0.8s,baz=168,slow=4.6,SNR=4.8 | | | | | | |
| CMAR | | | | ScP | ScP | 19 46 53.4 | -0.7 |
| | 1.3nm,0.8s,baz=176,slow=3.3,SNR=10.0 | | | | | | |
| CHTO | Chiang Mai | 33.35 | 325 | eP | P | 19 40 46.4 | +0.1 |
| | 3.5nm,1.0s | | | | | | |
| KMI | Kunming | 36.85 | 336 | P | P | 19 41 17.9 | +1.5 |
| KMI | | | | PMZ | | | |
| | 6.0nm,0.7s | | | | | | |
| KMI | | | | PMZ | | | |
| | 170nm,4.4s | | | | | | |
| CD2 | Chengdu | 41.74 | 341 | eP | P | 19 41 57.0 | +0.3 |
| KSAR | Wonju Array Be | 46.65 | 10 | P | P | 19 42 35.4 | -0.2 |
| KSRS | Korea Array | 46.67 | 10 | P | P | 19 42 35.4 | -0.3 |
| | 2.7nm,0.8s,baz=189,slow=9.5,SNR=12 | | | | | | |
| KS01 | Wonju Array Si | 46.68 | 10 | eP | P | 19 42 36.1 | +0.3 |
| BJI | Beijing | 48.44 | 358 | P | P | 19 42 49.7 | +0.4 |
| BJI | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| MAJO | Matsushiro | 48.59 | 21 | P | P | 19 42 49.0 | -1.5 |
| MAT | Matsushiro | 48.59 | 21 | P | P | 19 42 47.5 | -3.1 |
| MJAR | Matsushiro Arr | 48.59 | 21 | P | P | 19 42 48.3 | -2.2 |
| | 3.4nm,0.8s,baz=193,slow=9.0,SNR=10 | | | | | | |
| HHC | Hu-ho-hao-te | 49.62 | 353 | eP | P | 19 43 01.0 | +2.6 |
| HHC | | | | PMZ | | | |
| | 21nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | 93nm,4.4s | | | | | | |
| GTA | Gaotai | 50.81 | 341 | eP | P | 19 43 07.7 | +0.3 |
| GTA | | | | pP | pP | 19 43 40.6 | -1.5 |
| GTA | | | | PMZ | | | |
| | 10.0nm,0.9s | | | | | | |
| MDJ | Mudanjiang | 53.92 | 10 | eP | P | 19 43 29.5 | -0.6 |
| | 11nm,0.8s | | | | | | |
| USRK | Ussuriysk Ar. | 53.97 | 12 | P | P | 19 43 29.5 | -0.9 |
| | 5.5nm,0.5s,baz=200,slow=5.8,SNR=28 | | | | | | |
| ULN | Ulaanbaatar | 57.12 | 351 | eP | P | 19 43 52.3 | -0.8 |
| | 3.6nm,0.7s | | | | | | |
| SONM | Songino Array | 57.20 | 350 | P | P | 19 43 52.9 | -0.7 |
| | 4.2nm,0.6s,baz=166,slow=8.9,SNR=12 | | | | | | |
| SONA1 | Songino Array | 57.21 | 350 | eP | P | 19 43 52.8 | -0.9 |
| WMQ | Urumqi | 59.17 | 334 | eP | P | 19 44 09.0 | +1.7 |
| KBL | Kabul | 63.43 | 316 | eP | P | 19 44 33.6 | -2.8 |
| | 4.4nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 63.86 | 333 | P | P | 19 44 37.4 | -1.3 |
| | 4.2nm,0.8s,baz=142,slow=7.7,SNR=31 | | | | | | |
| MKAR | | | | pP | pP | 19 45 16.4 | +1.6 |
| | 0.8nm,0.6s,baz=128,slow=7.9,SNR=2.3 | | | | | | |
| AAK | Ala-Archa | 64.85 | 326 | P | P | 19 44 44.5 | -0.9 |
| EKS2 | Erkin-Say | 65.27 | 325 | eP | P | 19 44 46.0 | -2.1 |
| | 1.5nm,0.9s | | | | | | |
| KURK | Kurchatov | 68.41 | 334 | eP | P | 19 45 05.7 | -1.8 |
| | 3.3nm,0.8s | | | | | | |
| ZAA0 | Zalesovo Array | 68.48 | 339 | eP | P | 19 45 05.6 | -2.3 |
| ZALV | Zalesovo Beam | 68.48 | 339 | P | P | 19 45 05.5 | -2.4 |
| | 4.1nm,0.6s,baz=148,slow=5.4,SNR=22 | | | | | | |
| MAW | Mawson | 69.42 | 200 | P | P | 19 45 15.9 | +2.3 |
| | 1.1nm,0.5s,baz=48,slow=8.3,SNR=5.8 | | | | | | |
| PEA0 | Petropavlovsk- | 69.93 | 24 | eP | P | 19 45 16.9 | 0.0 |
| PETK | Petropavlovsk- | 69.93 | 24 | P | P | 19 45 16.6 | -0.3 |
| | 9.9nm,0.8s,baz=200,slow=7.9,SNR=12 | | | | | | |
| YAK | Yakutsk | 70.96 | 6 | P | P | 19 45 21.5 | -1.4 |
| GEYT | Alibeck | 72.78 | 314 | P | P | 19 45 32.9 | -1.5 |
| | 1.5nm,0.8s,baz=101,slow=4.6,SNR=3.3 | | | | | | |
| SBA | Scott Base | 73.47 | 171 | P | P | 19 45 41.8 | +4.2 |
| ABKAR | Akbulak array | 76.93 | 325 | eP | P | 19 45 56.1 | -1.8 |
| | 2.3nm,0.8s | | | | | | |
| SYO | Syowa Base | 78.02 | 201 | ⇑ePcP | PcP | 19 46 15.5 | +2.7 |
| SYO | Syowa Base | 78.02 | 201 | ⇑epP | pP | 19 46 46.0 | +4.8 |
| QSPA | South Pole Qui | 81.39 | 180 | P | P | 19 46 24.0 | +1.9 |
| KBZ | Khabaz | 85.61 | 315 | LR | LR | 20 31 02.5 | |
| | comp=Z,98nm,20.1s,baz=66,slow=40 | | | | | | |
| LSZ | Lusaka | 88.02 | 255 | P | P | 19 46 57.2 | +0.9 |
| | 0.8nm,0.5s,baz=105,slow=4.9,SNR=4.5 | | | | | | |
| LSZ | Lusaka | 88.02 | 255 | P | P | 19 46 48.5 | -7.8 |
| | 7.6nm,1.5s | | | | | | |
| BRTR | Keskin Array B | 91.47 | 310 | LR | LR | 20 33 06.4 | |
| | comp=Z,65nm,21.2s,baz=58,slow=39 | | | | | | |
| TOA0 | Torodi Ar. Sit | 117.86 | 280 | ePKPdf | PKPdf | 19 52 51.0 | -0.9 |
| TORD | Torodi Ar. Bea | 117.86 | 280 | PKP | PKPdf | 19 52 51.3 | -0.5 |
| | 0.9nm,0.3s,baz=50,slow=2.3,SNR=32 | | | | | | |
| NVAR | Mina Array Bea | 121.18 | 50 | PKP | PKPdf | 19 52 58.8 | +0.9 |
| | 1.0nm,0.8s,baz=270,slow=0.9,SNR=4.0 | | | | | | |
| TXAR | Lajitas Array | 135.47 | 57 | SKPbc | SKPbc | 19 56 41.3 | -1.1 |
| | 1.1nm,0.8s,baz=316,slow=2.5,SNR=5.6 | | | | | | |
| CPUP | Villa Florida | 145.03 | 187 | PKPbc | PKPdf | 19 53 43.5 | +1.1 |
| | 3.3nm,1.0s,baz=141,slow=4.9,SNR=5.4 | | | | | | |

*NEIC **05** 19:43:55.2, 43°.55S×172°.39E, h5km, ML4.0(WEL), After WEL.*
*NEIC Felt widely in Canterbury.*
**WEL 05 19:43:55.2**±0.1**, 43°.56S×172°.37E, h5km, ML4.0**/22**, 3C-5D, Error ellipse: s-maj=0.5km s-min=0.5km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.18 | 96 | PG | Pg | 19 43 58.9 | +0.1 |
| CRLZ | | | | SG | Sg | 19 44 01.2 | 0.0 |
| CRLZ | | | | AML | AML | 19 44 01.6 | |
| CRLZ | | | | AML | AML | 19 44 01.7 | |
| CRLZ | | | | AML | AML | 19 44 01.7 | |
| CRLZ | Canterbury Las | 0.18 | 96 | Sg | Sg | 19 44 01.2 | 0.0 |
| CRLZ | Canterbury Las | 0.18 | 96 | Pg | Pg | 19 43 58.5 | -0.4 |
| CRLZ | | | | ⇑Pg | Pg | 19 43 58.9 | +0.1 |
| CRLZ | | | | Sg | Sg | 19 44 01.2 | 0.0 |
| MQZ | McQueen's Vall | 0.25 | 127 | ⇓PG | Pg | 19 44 00.4 | +0.2 |
| MQZ | | | | SG | Sg | 19 44 04.2 | +0.7 |
| MQZ | | | | AML | AML | 19 44 04.3 | |
| MQZ | McQueen's Vall | 0.25 | 127 | Sg | Sg | 19 44 04.2 | +0.7 |
| MQZ | McQueen's Vall | 0.25 | 127 | ⇓Pg | Pg | 19 44 00.4 | +0.2 |
| MQZ | | | | Sg | Sg | 19 44 04.2 | +0.7 |
| OXZ | Oxford | 0.34 | 313 | ⇓PG | Pg | 19 44 02.0 | +0.2 |
| OXZ | | | | SG | Sg | 19 44 07.0 | +0.8 |
| OXZ | Oxford | 0.34 | 313 | ⇓Pg | Pg | 19 44 02.0 | +0.2 |
| OXZ | | | | Sg | Sg | 19 44 07.0 | +0.8 |
| LTZ | Lake Taylor | 0.78 | 354 | ⇓P* | Pg | 19 44 10.4 | +0.1 |
| LTZ | | | | S* | Sg | 19 44 20.9 | +0.5 |
| LTZ | | | | AML | AML | 19 44 22.0 | |
| LTZ | Lake Taylor | 0.78 | 354 | P* | Pg | 19 44 10.4 | +0.1 |
| LTZ | | | | S* | Sg | 19 44 21.0 | +0.6 |
| RPZ | Rata Peaks | 0.97 | 260 | P* | Pg | 19 44 14.2 | +0.2 |
| RPZ | | | | S* | Sb | 19 44 27.5 | -0.3 |
| RPZ | | | | AML | AML | 19 44 37.7 | |
| RPZ | Rata Peaks | 0.97 | 260 | P* | Pg | 19 44 14.0 | +0.1 |
| RPZ | | | | eSg | Sg | 19 44 25.6 | -1.0 |
| WVZ | Waitaha Valley | 1.29 | 291 | P* | Pn | 19 44 18.9 | -1.0 |
| WVZ | | | | AML | AML | 19 44 37.8 | |
| WVZ | | | | AML | AML | 19 44 39.7 | |
| WVZ | Waitaha Valley | 1.29 | 291 | P* | Pn | 19 44 19.0 | -0.9 |
| KHZ | Kahutara | 1.42 | 37 | ⇑PN | Pn | 19 44 19.6 | -2.2 |
| KHZ | | | | AML | AML | 19 44 40.0 | |
| KHZ | | | | AML | AML | 19 44 51.4 | |
| KHZ | Kahutara | 1.42 | 37 | ePn | Pn | 19 44 19.3 | -2.5 |
| LBZ | Lake Benmore | 1.79 | 242 | AML | AML | 19 45 01.5 | |
| LBZ | | | | AML | AML | 19 45 03.6 | |
| LBZ | Lake Benmore | 1.79 | 242 | Pn | Pn | 19 44 25.9 | -0.9 |
| THZ | Tophouse | 1.83 | 12 | ⇑PN | Pn | 19 44 25.5 | -1.9 |
| THZ | | | | AML | AML | 19 44 59.3 | |
| THZ | | | | AML | AML | 19 44 59.8 | |
| THZ | Tophouse | 1.83 | 12 | Pn | Pn | 19 44 25.5 | -2.0 |
| DSZ | Denniston Nort | 1.86 | 347 | AML | AML | 19 44 57.3 | |
| DSZ | | | | AML | AML | 19 44 58.6 | |
| DSZ | Denniston Nort | 1.86 | 347 | Pn | Pn | 19 44 26.4 | -1.4 |
| ODZ | Otahua Downs | 1.94 | 219 | AML | AML | 19 45 07.6 | |
| ODZ | | | | AML | AML | 19 45 09.6 | |
| ODZ | Otahua Downs | 1.94 | 219 | ePn | Pn | 19 44 27.3 | -1.6 |
| ODZ | | | | ePg | Pg | 19 44 31.9 | -0.5 |
| ODZ | | | | eSg | Sg | 19 44 58.1 | +0.5 |
| FOZ | Fox Glacier | 1.95 | 269 | AML | AML | 19 44 52.5 | |
| FOZ | | | | AML | AML | 19 45 02.9 | |
| FOZ | Fox Glacier | 1.95 | 269 | Pn | Pn | 19 44 28.6 | -0.4 |
| BSWZ | Blackbirch Sta | 2.15 | 32 | AML | AML | 19 45 04.9 | |
| BSWZ | | | | AML | AML | 19 45 20.0 | |
| BSWZ | Blackbirch Sta | 2.15 | 32 | Pn | Pn | 19 44 29.9 | -1.8 |
| TUWZ | Tuamarina | 2.42 | 29 | AML | AML | 19 45 20.9 | |
| TUWZ | | | | AML | AML | 19 45 24.3 | |
| TUWZ | Tuamarina | 2.42 | 29 | Pn | Pn | 19 44 35.0 | -0.5 |
| NNZ | Nelson | 2.45 | 18 | Pn | Pn | 19 44 34.6 | -1.3 |
| NNZ | | | | Sn | Sn | 19 45 04.9 | -1.3 |
| HHSZ | Highcliff Hill | 2.65 | 208 | Pn | Pn | 19 44 36.8 | -1.8 |
| JCZ | Jackson Bay | 2.67 | 258 | AML | AML | 19 45 28.5 | |
| JCZ | | | | AML | AML | 19 45 32.7 | |
| JCZ | Jackson Bay | 2.67 | 258 | Pn | Pn | 19 44 37.8 | -1.2 |
| WKZ | Wanaka | 2.73 | 241 | AML | AML | 19 45 28.7 | |
| WKZ | | | | AML | AML | 19 45 34.2 | |
| WKZ | Wanaka | 2.73 | 241 | Pn | Pn | 19 44 39.1 | -0.7 |
| QRZ | Quartz Range | 2.73 | 2 | AML | AML | 19 45 24.2 | |
| QRZ | | | | AML | AML | 19 45 28.3 | |
| QRZ | Quartz Range | 2.73 | 2 | Pn | Pn | 19 44 38.6 | -1.1 |
| TCW | Tory Channel | 2.73 | 32 | AML | AML | 19 45 14.5 | |
| EAZ | Earnscleugh | 2.76 | 232 | AML | AML | 19 45 26.1 | |
| EAZ | | | | AML | AML | 19 45 26.9 | |
| EAZ | Earnscleugh | 2.76 | 232 | Pn | Pn | 19 44 38.8 | -1.4 |
| TUZ | Tuapeka | 3.09 | 218 | AML | AML | 19 45 41.7 | |
| TUZ | | | | AML | AML | 19 45 46.0 | |
| TUZ | Tuapeka | 3.09 | 218 | Pn | Pn | 19 44 43.2 | -1.5 |
| CAW | Cannon Point | 3.16 | 40 | AML | AML | 19 45 19.2 | |
| CAW | | | | AML | AML | 19 45 19.5 | |
| CAW | Cannon Point | 3.16 | 40 | Pn | Pn | 19 44 42.8 | -2.9 |
| KIW | Kapiti Island | 3.29 | 36 | Pn | Pn | 19 44 45.2 | -2.1 |
| MSZ | Milford Sound | 3.39 | 249 | AML | AML | 19 45 51.0 | |
| MSZ | | | | AML | AML | 19 45 55.3 | |
| MSZ | Milford Sound | 3.39 | 249 | Pn | Pn | 19 44 48.0 | -0.8 |
| MLZ | Mavora Lakes | 3.50 | 238 | AML | AML | 19 45 57.3 | |
| MLZ | | | | AML | AML | 19 46 02.6 | |
| MLZ | Mavora Lakes | 3.50 | 238 | Pn | Pn | 19 44 49.4 | -1.0 |
| SYZ | Scrubby Hill | 3.76 | 216 | Pn | Pn | 19 44 52.6 | -1.3 |
| WHZ | Wether Hill Ro | 3.93 | 232 | Pn | Pn | 19 44 53.7 | -2.5 |
| PREZ | Palmer Road | 4.42 | 18 | Pn | Pn | 19 45 04.2 | +1.1 |
| KHEZ | Kahui Hut | 4.43 | 17 | Pn | Pn | 19 45 03.6 | +0.3 |
| APZ | The Paps | 4.51 | 222 | Pn | Pn | 19 45 02.2 | -2.0 |
| PKE | Pukeiti | 4.52 | 16 | Pn | Pn | 19 45 04.0 | -0.4 |
| URZ | Urewera | 6.39 | 36 | ePn | Pn | 19 45 25.8 | -4.2 |
| URZ | | | | eSn | Sn | 19 46 34.8 | -8.5 |

**IDC 05 19:49:03.9**±2.4**, 6°.77S×154°.23E, h0km, mb3.3**/3**, mb1 3.7**/3**, mb1mx3.3**/31**, mbtmp3.3**/3**, MS3.6**/1**, Ms1 3.6**/1**, ms1mx3.1**/10**, Error ellipse: s-maj=135.5km s-min=28.1km az=130.0, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 23.32 | 234 | P | P | 19 54 13.7 | -0.2 |
| | 0.5nm,0.8s,baz=58,slow=9.7,SNR=4.4 | | | | | | |
| ASAR | Alice Springs | 25.76 | 227 | P | P | 19 54 36.0 | -0.5 |
| | 0.5nm,0.9s,baz=59,slow=8.9,SNR=3.7 | | | | | | |
| ASAR | | | | LR | LR | 20 04 20.0 | |
| | comp=Z,137nm,19.4s,baz=325,slow=36 | | | | | | |
| ILAR | Eielson Array | 83.45 | 22 | P | P | 20 01 32.7 | -0.3 |
| | 0.2nm,0.3s,baz=246,slow=5.3,SNR=4.1 | | | | | | |
| TORD | Torodi Ar. Bea | 152.23 | 285 | PKPbc | PKPbc | 20 09 03.0 | +0.3 |
| | 0.2nm,0.6s,baz=94,slow=2.9,SNR=3.0 | | | | | | |
| TORD | | | | PKPab | PKPab | 20 09 12.3 | -0.1 |
| | 0.4nm,0.6s,baz=98,slow=2.5,SNR=4.0 | | | | | | |

*IDC **05** 20:14:43.7±1.1, 24°.08S×66°.60W, h194km±11km, mb3.3/3, mb1 3.3/7, mb1mx3.2/31, mbtmp3.7/7, Error ellipse: s-maj=22.1km s-min=15.3km az=42.0*
*SJA **05** 20:14:44.1±0.6, 24°.09S×66°.72W, h216km±8km, ML3.2*
*ISCJB **05** 20:14:45.2±0.4, 24°.01S±0°.06×66°.75W±0°.06, h195km, mb3.5/3, Error ellipse: s-maj=9.9km s-min=4.2km az=39.7*
*GUC **05** 20:14:46.1±0.5, 23°.87S×67°.08W, h243km±20km, ML4.5*
**ISC 05 20:14:44.5**±0.8**, 24°.01S**±0°.07×**66°.70W**±0°.06**, h195km, n26, σ1$^s$52**/33**, mb3.4**/3**, Salta Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SLA | San Lorenzo | 1.30 | 123 | eP | Pn | 20 15 18.3 | +2.1 |
| SLA | | | | eS | Sn | 20 15 43.2 | +2.4 |
| SLA | | | | AML | AML | 20 15 46.5 | |
| | comp=Z,102nm,0.7s | | | | | | |
| HJA | Humahuaca | 1.42 | 56 | eP | Pn | 20 15 20.4 | +2.9 |
| AZAP | Zapla | 1.51 | 99 | eP | Pn | 20 15 20.0 | +1.9 |
| AZAP | | | | AML | AML | 20 15 48.1 | |
| | comp=Z,44nm,0.7s | | | | | | |
| ASTB | Santa Barbara | 2.02 | 89 | eP | Pn | 20 15 25.3 | +2.2 |
| FSA | Cafayete | 2.17 | 163 | eP | Pn | 20 15 25.4 | +0.8 |
| FSA | | | | AML | AML | 20 15 56.3 | |
| | comp=Z,72nm,0.6s | | | | | | |
| LVC | Limon Verde | 2.46 | 304 | P | Pn | 20 15 29.9 | +1.9 |
| | comp=Z,2μm,0.3s,baz=144,slow=6.3,SNR=1024 | | | | | | |
| LVC | | | | S | Sn | 20 16 03.1 | +1.4 |
| | comp=Z,2μm,0.3s,baz=253,slow=21,SNR=22 | | | | | | |
| LVC | Limon Verde | 2.46 | 304 | eP | Pn | 20 15 29.9 | +1.9 |
| LVC | | | | AML | AML | 20 16 05.8 | |
| | comp=Z,1μm,0.5s | | | | | | |
| PB06 | IPOC Station P | 2.94 | 296 | i P | Pn | 20 15 34.7 | +1.3 |
| PB06 | | | | i S | Sn | 20 16 11.9 | +0.4 |
| PB06 | | | | AML | AML | 20 16 13.4 | |
| | comp=E,854nm,0.1s | | | | | | |
| AHML | Horco Molle | 3.03 | 156 | eP | Pn | 20 15 35.0 | +0.8 |
| AHML | | | | AML | AML | 20 16 16.1 | |
| | comp=Z,14nm,0.6s | | | | | | |
| PB09 | IPOC Station P | 3.22 | 313 | i P | Pn | 20 15 38.6 | +1.9 |
| PB09 | | | | i S | Sn | 20 16 18.0 | +0.6 |
| PB09 | | | | AML | AML | 20 16 22.6 | |
| | comp=N,543nm,0.2s | | | | | | |
| MACH | Maria Elena | 3.34 | 302 | i P | Pn | 20 15 39.9 | +1.6 |
| MACH | | | | eS | Sn | 20 16 20.2 | 0.0 |
| PB04 | IPOC Station P | 3.59 | 297 | i P | Pn | 20 15 42.4 | +1.2 |
| PB04 | | | | i S | Sn | 20 16 24.9 | -0.6 |
| PB04 | | | | AML | AML | 20 16 28.4 | |
| | comp=N,465nm,0.1s | | | | | | |
| PB07 | IPOC Station P | 3.71 | 307 | i P | Pn | 20 15 43.6 | +0.8 |
| PB07 | | | | eS | Sn | 20 16 27.2 | -1.2 |
| PB07 | | | | AML | AML | 20 16 29.9 | |
| | comp=N,328nm,0.3s | | | | | | |
| PB01 | IPOC Station P | 3.92 | 318 | i P | Pn | 20 15 46.2 | +1.0 |
| PB01 | | | | i S | Sn | 20 16 32.2 | -0.6 |
| PB01 | | | | AML | AML | 20 16 35.5 | |
| | comp=E,202nm,0.2s | | | | | | |
| CYA | Choya | 4.49 | 170 | eP | Pn | 20 15 52.3 | 0.0 |
| CYA | | | | AML | AML | 20 16 45.2 | |
| | comp=N,11nm,0.5s | | | | | | |
| VCA | Vinchina | 4.90 | 196 | AML | AML | 20 17 00.5 | |
| | comp=Z,17nm,0.5s | | | | | | |
| CFAA | Coronel Fontan | 7.69 | 190 | P | Pn | 20 16 31.3 | -2.4 |
| | comp=Z,0.1nm,0.3s,baz=38,slow=16,SNR=15 | | | | | | |
| CFAA | | | | S | Sn | 20 17 51.7 | -8.9 |
| | comp=Z,1.3nm,0.3s,baz=231,slow=15,SNR=30 | | | | | | |
| LPAZ | La Paz | 7.80 | 350 | P | Pn | 20 16 37.2 | +1.4 |
| | comp=Z,0.8nm,0.3s,baz=152,slow=6.1,SNR=12 | | | | | | |
| LPAZ | | | | S | Sn | 20 18 02.1 | -1.9 |
| | baz=24,slow=20,SNR=1.9 | | | | | | |
| CPUP | Villa Florida | 8.80 | 107 | P | Pn | 20 16 46.9 | -1.2 |
| | comp=Z,0.1nm,0.3s,baz=279,slow=17,SNR=4.3 | | | | | | |
| BDFB | Brasilia | 19.43 | 68 | P | P | 20 18 55.0 | -1.3 |
| | comp=Z,0.3nm,0.3s,baz=225,slow=10.0,SNR=3.2 | | | | | | |
| PTGA | Pitinga | 24.04 | 17 | P | P | 20 19 40.8 | -1.1 |
| | comp=Z,2.3nm,0.5s,baz=227,slow=16,SNR=4.7 | | | | | | |
| TXAR | Lajitas Array | 63.84 | 324 | P | P | 20 24 56.6 | +0.3 |
| | comp=Z,0.2nm,0.4s,baz=120,slow=5.4,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 76.31 | 69 | P | P | 20 26 11.1 | -1.2 |
| | comp=Z,0.4nm,0.6s,baz=255,slow=5.6,SNR=15 | | | | | | |
| WRA | Warramunga Arr | 131.75 | 207 | PKP | PKPdf | 20 33 34.9 | -0.1 |
| | comp=Z,0.1nm,0.5s,baz=159,slow=1.5,SNR=3.1 | | | | | | |
| ZALV | Zalesovo Beam | 143.27 | 28 | PKP | PKPbc | 20 33 52.5 | -0.2 |
| | comp=Z,0.8nm,0.5s,baz=276,slow=3.9,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 146.35 | 40 | PKPbc | PKPdf | 20 34 01.0 | +0.3 |
| | comp=Z,1.3nm,0.6s,baz=311,slow=2.5,SNR=12 | | | | | | |

*IDC **05** 20:20:16.9±0.8, 6°.74S×150°.58E, h0km, mb4.1/15, mb1 4.3/16, mb1mx4.2/37, mbtmp4.1/16, ML2.2/1, Error ellipse: s-maj=29.0km s-min=17.0km az=103.0*
*ISCJB **05** 20:20:20.3±0.7, 6°.75S±0°.09×150°.5E±0°.1, h33km, mb4.3/21, Error ellipse: s-maj=19.7km s-min=7.6km az=34.6*
*NEIC **05** 20:20:23.9±2.0, 6°.75S×150°.42E, h50km±17km, mb4.7/8, Error ellipse: s-maj=16.5km s-min=10.2km az=97.0*
**ISC 05 20:20:22.0**±0.8**, 6°.7S**±0°.1×**150°.5E**±0°.1**, h33km, n31, σ0$^s$83**/34**, mb4.2**/21**, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.26 | 231 | Pn | Pn | 20 21 25.4 | +0.9 |
| | 10nm,0.3s,baz=36,slow=8.2,SNR=37 | | | | | | |
| PMG | | | | Sn | Sn | 20 22 13.4 | +0.2 |
| | 22nm,0.3s,baz=38,slow=19,SNR=16 | | | | | | |
| PMG | Port Moresby | 4.26 | 231 | Pn | Pn | 20 21 25.4 | +0.9 |
| PMG | | | | eSn | Sn | 20 22 12.6 | -0.6 |
| WRAB | Tennant Creek | 20.46 | 229 | eP | P | 20 24 55.7 | -1.3 |
| | 36nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 20.48 | 229 | P | P | 20 24 56.5 | -0.7 |
| | 20nm,0.8s,baz=52,slow=11,SNR=119 | | | | | | |
| ASAR | Alice Springs | 23.21 | 222 | P | P | 20 25 25.5 | -0.8 |
| | 4.0nm,0.7s,baz=53,slow=9.5,SNR=48 | | | | | | |
| JNU | Nakatsue | 43.82 | 336 | P | P | 20 28 24.9 | -0.1 |
| | 8.7nm,0.9s,baz=343,slow=2.4,SNR=4.9 | | | | | | |
| MJAR | Matsushiro Arr | 44.58 | 346 | P | P | 20 28 30.5 | -0.5 |
| | 2.0nm,0.8s,baz=165,slow=10,SNR=4.7 | | | | | | |
| KSRS | Korea Array | 48.77 | 336 | P | P | 20 29 04.5 | +0.8 |
| | 2.9nm,0.8s,baz=153,slow=8.8,SNR=10 | | | | | | |
| KSAR | Wonju Array Be | 48.78 | 336 | P | P | 20 29 04.5 | +0.7 |
| USRK | Ussuriysk Ar. | 53.40 | 343 | P | P | 20 29 40.2 | +1.8 |
| | 1.6nm,0.7s,baz=167,slow=7.0,SNR=5.0 | | | | | | |
| CMAR | Chiang Mai Arr | 56.70 | 297 | P | P | 20 30 03.7 | +0.9 |
| | 0.6nm,0.8s,baz=117,slow=5.3,SNR=4.4 | | | | | | |
| ULN | Ulaanbaatar | 66.48 | 330 | eP | P | 20 31 08.4 | -0.1 |
| | 3.8nm,1.2s | | | | | | |
| SONM | Songino Array | 66.79 | 329 | P | P | 20 31 09.9 | -0.5 |
| | 1.0nm,0.5s,baz=152,slow=6.5,SNR=4.3 | | | | | | |
| VNDA | Vanda | 71.00 | 177 | P | P | 20 31 35.9 | -0.1 |
| | 0.8nm,0.6s,baz=322,slow=8.0,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 80.31 | 320 | P | P | 20 32 29.1 | -0.7 |
| | 0.4nm,0.6s,baz=166,slow=2.5,SNR=4.4 | | | | | | |
| ZALV | Zalesovo Beam | 81.52 | 327 | P | P | 20 32 34.6 | -1.5 |
| | 0.8nm,0.6s,baz=131,slow=6.1,SNR=5.0 | | | | | | |
| MCK | McKinley | 83.51 | 23 | P | P | 20 32 46.4 | +0.1 |
| | 13nm,0.8s | | | | | | |
| KURK | Kurchatov | 83.91 | 323 | eP | P | 20 32 47.6 | -0.9 |
| | 6.4nm,1.0s | | | | | | |
| KURBB | Kurchatov Arra | 83.94 | 322 | P | P | 20 32 48.4 | -0.3 |
| | 1.1nm,0.9s,baz=109,slow=4.2,SNR=12 | | | | | | |
| COLA | College | 84.48 | 22 | eP | P | 20 32 50.7 | -0.4 |
| | 7.1nm,0.8s | | | | | | |
| ILAR | Eielson Array | 84.80 | 22 | P | P | 20 32 52.5 | -0.2 |
| | 4.6nm,0.8s,baz=252,slow=5.2,SNR=40 | | | | | | |
| EKS2 | Erkin-Say | 84.88 | 314 | P | P | 20 32 53.9 | +0.1 |
| | 2.0nm,0.8s | | | | | | |
| EGAK | Eagle | 87.02 | 23 | P | P | 20 33 04.8 | +1.0 |
| | 7.5nm,0.9s | | | | | | |
| KKAR | Karatay Array | 87.32 | 314 | eP | P | 20 33 04.9 | -0.8 |
| | 1.2nm,0.3s | | | | | | |
| BVAR | Borovoye Array | 89.44 | 323 | P | P | 20 33 14.3 | -1.2 |
| | 1.1nm,0.9s,baz=83,slow=3.7,SNR=5.7 | | | | | | |
| BRVK | Borovoye | 89.51 | 323 | P | P | 20 33 14.4 | -1.4 |
| NVAR | Mina Array Bea | 95.05 | 52 | P | P | 20 33 42.1 | 0.0 |
| | 0.8nm,0.8s,baz=279,slow=2.9,SNR=3.9 | | | | | | |
| GERES | GERESS Array B | 124.47 | 327 | PKP | PKPdf | 20 39 18.7 | +0.7 |
| | 0.7nm,0.6s,baz=90,slow=2.7,SNR=6.1 | | | | | | |
| TORD | Torodi Ar. Bea | 148.67 | 284 | PKP | PKPdf | 20 40 02.2 | -0.9 |
| | 1.1nm,0.9s,baz=5.7,slow=1.4,SNR=2.8 | | | | | | |
| TORD | | | | PKPbc | PKPbc | 20 40 07.3 | +0.5 |
| | 3.8nm,0.5s,baz=79,slow=2.5,SNR=56 | | | | | | |
| BDFB | Brasilia | 151.16 | 141 | PKPbc | PKPbc | 20 40 13.8 | +0.8 |
| | 0.7nm,0.3s,baz=211,slow=18,SNR=4.3 | | | | | | |
| DBIC | Dimbokro | 155.55 | 271 | PKPab | PKPab | 20 40 39.9 | +0.5 |
| | 4.0nm,0.7s,baz=90,slow=3.2,SNR=5.4 | | | | | | |

*IDC **05** 20:23:59.3±0.9, 6°.76S×150°.67E, h0km, mb4.1/14, mb1 4.2/15, mb1mx4.1/40, mbtmp4.1/15, ML2.1/1, Error ellipse: s-maj=34.5km s-min=16.4km az=101.0*
*ISCJB **05** 20:24:02.7±0.8, 6°.74S±0°.09×150°.6E±0°.1, h33km, mb4.1/15, Error ellipse: s-maj=21.4km s-min=7.9km az=31.0*
*NEIC **05** 20:24:04.7±0.7, 6°.73S×150°.54E, h35km, mb4.8/2, Error ellipse: s-maj=22.5km s-min=9.7km az=112.0*
**ISC 05 20:24:04.5**±0.9**, 6°.8S**±0°.1×**150°.6E**±0°.2**, h33km, n24, σ0$^s$95**/28**, mb4.1**/15**, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.31 | 232 | Pn | Pn | 20 25 08.7 | +0.9 |
| | 8.1nm,0.3s,baz=40,slow=8.9,SNR=9.6 | | | | | | |
| PMG | | | | Sn | Sn | 20 25 57.0 | +0.1 |
| | 26nm,0.3s,baz=151,slow=19,SNR=11 | | | | | | |
| PMG | Port Moresby | 4.31 | 232 | ePn | Pn | 20 25 08.4 | +0.6 |
| PMG | | | | Sn | Sn | 20 25 57.0 | +0.1 |
| WRAB | Tennant Creek | 20.51 | 229 | eP | P | 20 28 39.6 | -0.4 |
| WRA | Warramunga Arr | 20.52 | 229 | P | P | 20 28 39.6 | -0.6 |
| | 16nm,0.7s,baz=52,slow=11,SNR=23 | | | | | | |
| ASAR | Alice Springs | 23.25 | 222 | P | P | 20 29 08.3 | -0.8 |
| | 3.1nm,0.6s,baz=54,slow=8.8,SNR=21 | | | | | | |
| ASAR | | | | S | S | 20 33 18.6 | -0.6 |
| | 1.3nm,1.0s,baz=44,slow=21,SNR=5.5 | | | | | | |
| JNU | Nakatsue | 43.86 | 336 | P | P | 20 32 07.2 | -0.6 |
| | 4.0nm,0.6s,baz=126,slow=19,SNR=5.3 | | | | | | |
| MJAR | Matsushiro Arr | 44.61 | 346 | P | P | 20 32 14.0 | +0.2 |
| | 0.4nm,0.3s,baz=168,slow=6.2,SNR=4.2 | | | | | | |
| KSRS | Korea Array | 48.81 | 336 | P | P | 20 32 46.6 | 0.0 |
| | 2.1nm,0.9s,baz=152,slow=9.3,SNR=5.8 | | | | | | |
| KSAR | Wonju Array Be | 48.82 | 336 | P | P | 20 32 46.6 | -0.1 |
| USRK | Ussuriysk Ar. | 53.43 | 343 | P | P | 20 33 22.4 | +1.3 |
| | 2.1nm,0.9s,baz=90,slow=13,SNR=4.0 | | | | | | |
| CMAR | Chiang Mai Arr | 56.77 | 297 | P | P | 20 33 46.9 | +1.1 |
| | 0.7nm,0.8s,baz=113,slow=6.8,SNR=4.6 | | | | | | |
| SONM | Songino Array | 66.84 | 329 | P | P | 20 34 52.8 | -0.4 |
| | 1.7nm,0.7s,baz=145,slow=5.3,SNR=3.4 | | | | | | |
| VNDA | Vanda | 70.98 | 177 | P | P | 20 35 19.1 | +0.8 |
| | 0.9nm,0.7s,baz=332,slow=7.0,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 80.37 | 320 | P | P | 20 36 12.6 | -0.1 |
| | 0.3nm,0.6s,baz=90,slow=4.3,SNR=3.1 | | | | | | |
| ZALV | Zalesovo Beam | 81.57 | 327 | P | P | 20 36 17.9 | -0.9 |
| | 0.3nm,0.4s,baz=103,slow=6.7,SNR=4.2 | | | | | | |
| MAW | Mawson | 82.94 | 203 | P | P | 20 36 24.5 | -1.2 |
| | 2.0nm,1.0s,baz=50,slow=7.9,SNR=2.7 | | | | | | |
| MCK | McKinley | 83.50 | 23 | eP | P | 20 36 29.2 | +0.5 |
| | 9.7nm,0.8s | | | | | | |
| TKM2 | Tokmak 2 | 83.71 | 314 | P | P | 20 36 27.5 | -3.1 |
| KURK | Kurchatov | 83.97 | 323 | P | P | 20 36 29.7 | -1.7 |
| | 5.9nm,1.1s | | | | | | |
| KURBB | Kurchatov Arra | 83.99 | 322 | P | P | 20 36 31.2 | -0.3 |
| | 1.1nm,0.8s,baz=101,slow=4.3,SNR=8.6 | | | | | | |
| ILAR | Eielson Array | 84.78 | 22 | P | P | 20 36 35.1 | -0.1 |
| | 3.5nm,0.7s,baz=251,slow=5.3,SNR=29 | | | | | | |
| GERES | GERESS Array B | 124.52 | 327 | PKP | PKPdf | 20 43 01.4 | +0.7 |
| | 0.5nm,0.6s,baz=90,slow=1.7,SNR=6.0 | | | | | | |
| TORD | Torodi Ar. Bea | 148.75 | 284 | PKP | PKPdf | 20 43 46.1 | +0.4 |
| | 1.7nm,0.9s,baz=106,slow=3.7,SNR=3.1 | | | | | | |
| TORD | | | | PKPbc | PKPbc | 20 43 50.0 | +0.4 |
| | 2.9nm,0.4s,baz=93,slow=2.7,SNR=73 | | | | | | |
| DBIC | Dimbokro | 155.63 | 271 | PKPab | PKPab | 20 44 22.5 | +0.3 |
| | 4.0nm,0.7s,baz=104,slow=4.2,SNR=4.6 | | | | | | |

*ISCJB **05** 20:29:45.7±0.9, 4°.75S±0°.03×153°.47E±0°.04, h43km±7km, mb5.1/92, MS4.0/19, Error ellipse: s-maj=7.2km s-min=4.7km az=165.0*
*BJI **05** 20:29:47.2, 4°.82S×153°.88E, h75km, mb4.8/55, mB5.0/44, Ms5.0/35, Ms7 4.6/35*
*IDC **05** 20:29:47.6±0.6, 4°.74S×153°.40E, h43km±4km, mb4.6/27, mb1 4.6/29, mb1mx4.6/41, mbtmp4.8/29, ML3.7/2, MS4.0/19, Ms1 4.1/19, ms1mx4.0/22, Error ellipse: s-maj=17.0km s-min=9.9km az=79.0*
*MOS **05** 20:29:47.3±1.2, 4°.69S×153°.24E, h48km, mb5.4/29, Error ellipse: s-maj=9.8km s-min=6.8km az=99.6*
*GCMT **05** 20:29:47.2±0.2, 4°.92S×153°.29E, h48km±1km, MW5.1/66, Moment Tensor Solution. s56,c70; s66,c112; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.51±.17; $M_{\theta\theta}$1.39±.12; $M_{\phi\phi}$-4.90±.12; $M_{r\theta}$-1.74±.11; $M_{\theta\phi}$0.09±.13; $M_{\phi r}$-1.20±.12; Best double couple: $M_0$4.84200×$10^{16}$ NP1:$\phi_s$204.00000°, δ59.00000°, λ123.00000°. NP2: $\phi_s$333.00000°, δ44.00000°, λ48.00000°. Principal axes: T 4.6130, Plg61.0000°, Azm166.0000°; N 0.4590, Plg28.0000°, Azm6.0000°; P -5.0720, Plg8.0000°,*

*Azm271.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC* ***05*** *20:29:47.2±0.2, 4.73S×153.39E, mb5.3/46 Error ellipse: s-maj=6.8km s-min=4.3km az=81.0*

*DJA* ***05*** *20:29:48.8±1.4, 5°S±3°×15°3E±°, h34km±11km, M5.1/44, mb5.2/44, mB5.6/14, Mw(mB)5.1/14*

*AUST* ***05*** *20:29:51.5±0.9, 4.86S×153.26E, h77km±7km, Error ellipse: s-maj=11.3km s-min=6.1km az=58.0*

**ISC 05 20:29:47.8**±0.4, **4.77S**±0.04×**153.41E**±0.05, **h47**km±2km, **h46**km**:pP-P, n333,** σ**1.26**/368, **mb5.1**/98, **MS4.0**/20, **27C-15D, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | Rabaul | 1.37 | 295 | P | Pn | 20 30 12.1 | +1.6 |
| | baz=1.3,SNR=1000 | | | | | | |
| MANU | Manus Island | 6.61 | 294 | P | Pn | 20 31 26.2 | +3.7 |
| | baz=6.5,SNR=20 | | | | | | |
| PMG | Port Moresby | 7.72 | 233 | P | Pn | 20 31 38.9 | +1.2 |
| | 14nm,0.3s,baz=40,slow=6.2,SNR=30 | | | | | | |
| PMG | | | | S | Sn | 20 33 01.7 | -2.1 |
| | 74nm,0.3s,baz=166,slow=18,SNR=18 | | | | | | |
| PMG | Port Moresby | 7.72 | 233 | eP | Pn | 20 31 38.2 | +0.5 |
| PMG | | | | S | Sn | 20 33 01.7 | -2.1 |
| PMG | Port Moresby | 7.72 | 233 | P | Pn | 20 31 39.2 | +1.5 |
| | baz=7.6,SNR=28 | | | | | | |
| PMG | Port Moresby | 7.72 | 233 | ePn | Pn | 20 31 38.2 | +0.5 |
| PMG | | | | eSn | Sn | 20 32 48.7 | -15 |
| PMG | | | | S | Sn | 20 33 01.7 | -2.1 |
| HNR | Honiara | 7.97 | 126 | LR | LR | 20 34 55.7 | |
| | comp=Z,3µm,21.5s,baz=299,slow=38 | | | | | | |
| HNR | Honiara | 7.97 | 126 | eP | Pn | 20 31 45.4 | +4.3 |
| HNR | Honiara | 7.97 | 126 | eP | Pn | 20 31 45.0 | +3.9 |
| HNR | Honiara | 7.97 | 126 | ePn | Pn | 20 31 45.4 | +4.3 |
| GENI | Genyem | 13.39 | 279 | P | Pn | 20 32 54.9 | -0.4 |
| | 153nm,1.2s,3µm | | | | | | |
| COEN | Coen | 13.60 | 227 | P | Pn | 20 33 00.9 | +2.7 |
| | baz=14,SNR=8.8 | | | | | | |
| COEN | Coen | 13.60 | 227 | ePn | Pn | 20 33 01.4 | +3.2 |
| SMPI | Sarmi | 14.93 | 280 | P | Pn | 20 33 16.2 | +0.3 |
| | 59nm,1.3s | | | | | | |
| CTA | Charters Tower | 16.74 | 204 | P | P | 20 33 40.4 | -0.5 |
| | 1.0nm,0.3s,baz=24,slow=14,SNR=22 | | | | | | |
| CTA | | | | LR | LR | 20 39 20.9 | |
| | comp=Z,924nm,21.1s,baz=27,slow=34 | | | | | | |
| CTA | Charters Tower | 16.74 | 204 | P | P | 20 33 40.8 | 0.0 |
| | baz=17 | | | | | | |
| CTAO | Charters Tower | 16.74 | 204 | eP | Pn | 20 33 39.6 | +0.5 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,53nm,1.0s | | | | | | |
| CTAO | Charters Tower | 16.74 | 204 | ePn | Pn | 20 33 39.6 | +0.5 |
| | comp=Z,53nm,1.0s | | | | | | |
| GUMO | Guam | 20.12 | 335 | P | P | 20 34 17.9 | 0.0 |
| | comp=Z,88nm,1.0s,baz=159,slow=8.6,SNR=2.2 | | | | | | |
| GUMO | | | | LR | LR | 20 42 43.3 | |
| | comp=Z,286nm,18.1s,baz=151,slow=39 | | | | | | |
| GUMO | Guam | 20.12 | 335 | eP | P | 20 34 17.0 | -0.9 |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,328nm,1.1s | | | | | | |
| GUMO | Guam | 20.12 | 335 | eP | P | 20 34 17.0 | -0.9 |
| | comp=Z,328nm,1.1s | | | | | | |
| EIDS | Eidsvold | 20.60 | 186 | P | P | 20 34 24.4 | +1.3 |
| | baz=21,SNR=38 | | | | | | |
| EIDS | Eidsvold | 20.60 | 186 | eP | P | 20 34 24.0 | +1.0 |
| | comp=Z,104nm,0.8s | | | | | | |
| QIS | Mount Isa | 20.65 | 219 | P | P | 20 34 23.7 | 0.0 |
| | baz=21,SNR=52 | | | | | | |
| FAKI | Fak Fak | 21.19 | 274 | P | P | 20 34 29.4 | -0.2 |
| | baz=21,SNR=9.3 | | | | | | |
| FAKI | Fak Fak | 21.19 | 274 | P | P | 20 34 30.9 | +1.3 |
| | comp=Z,90nm,1.4s,comp=Z,1µm | | | | | | |
| FAKI | Fak Fak | 21.19 | 274 | eP | P | 20 34 31.1 | +1.5 |
| | comp=Z,96nm,1.1s | | | | | | |
| DZM | Mont Dzumac | 21.34 | 145 | eP | P | 20 34 32.6 | +1.5 |
| | comp=Z,385nm,1.0s | | | | | | |
| DZM | | | | eLR | LR | 20 39 48.2 | |
| | comp=Z,2µm,26.3s | | | | | | |
| DZM | Mont Dzumac | 21.34 | 145 | P | P | 20 34 32.3 | +1.2 |
| | comp=Z,80nm,0.7s,baz=1.4,slow=2.5,SNR=43 | | | | | | |
| DZM | | | | LR | LR | 20 42 11.7 | |
| | comp=Z,928nm,20.7s,baz=22,slow=35 | | | | | | |
| DZM | Mont Dzumac | 21.34 | 145 | eP | P | 20 34 31.9 | +0.8 |
| | comp=Z,157nm,0.9s | | | | | | |
| RMQ | Roma | 22.04 | 191 | P | P | 20 34 39.8 | +1.2 |
| | baz=22,SNR=19 | | | | | | |
| KDU | Kakadu | 22.12 | 248 | P | P | 20 34 38.6 | -0.9 |
| | baz=22,SNR=82 | | | | | | |
| PALU | Palau | 22.40 | 302 | P | P | 20 34 44.2 | +1.7 |
| | baz=22,SNR=5.4 | | | | | | |
| SWI | Sorong | 22.45 | 279 | P | P | 20 34 44.7 | +1.6 |
| | comp=Z,120nm,0.9s,comp=Z,1µm | | | | | | |
| QLP | Quilpie | 23.39 | 201 | P | P | 20 34 52.5 | 0.0 |
| | baz=23,SNR=64 | | | | | | |
| MTN | Manton Dam | 23.41 | 249 | P | P | 20 34 51.5 | -1.4 |
| | baz=23,SNR=46 | | | | | | |
| MTN | Manton Dam | 23.41 | 249 | eP | P | 20 34 51.4 | -1.4 |
| | comp=Z,109nm,1.0s | | | | | | |
| BNDI | Bandanaira | 23.43 | 270 | P | P | 20 34 54.6 | +1.6 |
| | comp=Z,114nm,1.6s,comp=Z,2µm | | | | | | |
| WRAB | Tennant Creek | 23.90 | 229c | eP | P | 20 34 56.9 | -0.6 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,353nm,1.7s | | | | | | |
| WRAB | Tennant Creek | 23.90 | 229 | P | P | 20 34 57.9 | +0.4 |
| | comp=Z,374nm,1.0s,SNR=30 | | | | | | |
| WRAB | Tennant Creek | 23.90 | 229 | eP | P | 20 34 56.7 | -0.8 |
| | comp=Z,123nm,1.1s | | | | | | |
| WRAB | | | | eS | S | 20 39 10.0 | -0.8 |
| WRA | Warramunga Arr | 23.92 | 229 | P | P | 20 34 57.1 | -0.5 |
| | comp=Z,34nm,0.7s,baz=54,slow=9.9,SNR=119 | | | | | | |
| WRA | | | | PcP | PcP | 20 38 39.5 | 0.0 |
| | comp=Z,9.5nm,1.1s,baz=53,slow=3.3,SNR=5.5 | | | | | | |
| WRA | | | | S | S | 20 39 10.5 | -0.5 |
| | comp=Z,9.7nm,1.0s,baz=48,slow=17,SNR=4.5 | | | | | | |
| WRA | | | | ScP | ScP | 20 42 15.5 | +1.3 |
| | comp=Z,2.2nm,0.8s,baz=43,slow=2.3,SNR=4.5 | | | | | | |
| WRA | | | | LR | LR | 20 44 02.7 | |
| | comp=Z,661nm,21.6s,baz=55,slow=36 | | | | | | |
| WRA | Warramunga Arr | 23.92 | 229c | eP | P | 20 34 57.0 | -0.6 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,34nm,0.7s | | | | | | |
| AAI | Ambon | 25.17 | 271 | P | P | 20 35 09.5 | +0.5 |
| | comp=Z,44nm,0.9s | | | | | | |
| ARMA | Armidale | 25.56 | 184 | P | P | 20 35 14.1 | +1.6 |
| | baz=26,SNR=28 | | | | | | |
| ARMA | Armidale | 25.56 | 184 | eP | P | 20 35 13.8 | +1.2 |
| | comp=Z,72nm,0.8s | | | | | | |
| LBMI | Labuha | 26.20 | 278 | P | P | 20 35 20.9 | +2.5 |
| | comp=Z,139nm,1.1s,comp=Z,1µm | | | | | | |
| NLAI | Namlea | 26.29 | 272 | P | P | 20 35 21.2 | +2.0 |
| | comp=Z,30nm,0.9s | | | | | | |
| AS01 | Alice Springs | 26.55 | 223 | eP | P | 20 35 20.7 | -0.8 |
| H11S3 | WAKE ISLAND Hy | 26.57 | 29 | T | T | 21 03 57.9 | |
| | baz=208,slow=74,SNR=146 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 26.57 | 29 | T | T | 21 03 55.4 | |
| | baz=208,slow=74,SNR=201 | | | | | | |
| ASAR | Alice Springs | 26.58 | 223 | P | P | 20 35 21.1 | -0.7 |
| | comp=Z,10nm,0.8s,baz=58,slow=8.7,SNR=66 | | | | | | |
| ASAR | | | | PcP | PcP | 20 38 46.1 | +0.7 |
| | comp=Z,3.2nm,0.6s,baz=49,slow=2.6,SNR=5.2 | | | | | | |
| ASAR | | | | S | S | 20 39 58.1 | +4.7 |
| | comp=Z,1.2nm,0.9s,baz=41,slow=17,SNR=3.9 | | | | | | |
| ASAR | | | | ScP | ScP | 20 42 22.0 | +0.2 |
| | comp=Z,0.6nm,0.6s,baz=35,slow=3.4,SNR=3.3 | | | | | | |
| ASAR | | | | LR | LR | 20 45 55.4 | |
| | comp=Z,494nm,19.6s,baz=44,slow=36 | | | | | | |
| ASPA | Alice Springs | 26.58 | 223 | P | P | 20 35 21.4 | -0.4 |
| | baz=26 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 26.59 | 29 | T | T | 21 03 53.6 | |
| | baz=208,slow=74,SNR=9.3 | | | | | | |
| TNTI | Ternate | 26.59 | 281 | P | P | 20 35 24.4 | +2.5 |
| | comp=Z,68nm,1.0s,comp=Z,1µm | | | | | | |
| TNTI | Ternate | 26.59 | 281 | eP | P | 20 35 20.6 | -1.3 |
| | comp=Z,53nm,0.9s | | | | | | |
| SANI | Sanana | 27.50 | 275 | P | P | 20 35 32.1 | +2.0 |
| | comp=Z,79nm,0.9s,comp=Z,591nm | | | | | | |
| CMSA | Cobar Meteorol | 27.59 | 194 | P | P | 20 35 30.6 | -0.1 |
| | baz=28,SNR=32 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 27.71 | 28 | T | T | 21 05 29.5 | |
| | baz=198,slow=77 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 27.73 | 28 | T | T | 21 05 02.7 | |
| | baz=198,slow=77 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 27.73 | 28 | T | T | 21 05 23.3 | |
| | baz=198,slow=77 | | | | | | |
| MGCD | Mangrove Creek | 28.37 | 184 | P | P | 20 35 39.2 | +1.6 |
| | baz=28,SNR=11 | | | | | | |
| KMSI | Cibinong | 29.87 | 279 | P | P | 20 35 53.3 | +2.1 |
| | comp=Z,158nm,0.9s | | | | | | |
| CNB | Canberra Magne | 30.62 | 187 | P | P | 20 35 59.0 | +1.3 |
| | baz=31,SNR=7.7 | | | | | | |
| CAN | Canberra | 30.67 | 187 | eP | P | 20 35 58.5 | +0.4 |
| CAN | | | | pmax | pmax | | |
| | comp=Z,51nm,1.3s | | | | | | |
| CAN | Canberra | 30.67 | 187 | P | P | 20 35 59.3 | +1.2 |
| | baz=31 | | | | | | |
| CAN | Canberra | 30.67 | 187 | eP | P | 20 35 58.5 | +0.4 |
| | comp=Z,51nm,1.3s | | | | | | |
| LUWI | Luwuk | 30.81 | 276 | P | P | 20 36 00.5 | +1.0 |
| | comp=Z,48nm,1.1s,comp=Z,768nm | | | | | | |
| LUWI | Luwuk | 30.81 | 276 | eP | P | 20 35 58.8 | -0.7 |
| | comp=Z,45nm,1.1s | | | | | | |
| GTOI | Gorontalo | 30.84 | 279 | P | P | 20 36 03.7 | +4.0 |
| | comp=Z,60nm,0.8s,comp=Z,66µm | | | | | | |
| WRKA | Warakurna | 31.42 | 228 | P | P | 20 36 03.3 | -1.5 |
| | baz=31,SNR=34 | | | | | | |
| EDFI | Ende, Flores | 31.73 | 261 | P | P | 20 36 09.5 | +1.7 |
| | comp=Z,32nm,0.9s | | | | | | |
| BBOO | Buckleboo | 32.26 | 208 | P | P | 20 36 11.5 | -0.6 |
| | baz=32,SNR=8.7 | | | | | | |
| BBOO | Buckleboo | 32.26 | 208 | eP | P | 20 36 10.6 | -1.4 |
| | comp=Z,43nm,1.0s | | | | | | |
| SPSI | Sidrap Palu | 33.55 | 270 | P | P | 20 36 22.9 | -0.6 |
| | comp=Z,23nm,1.0s | | | | | | |
| TTSI | Tana Toraja | 33.55 | 272 | P | P | 20 36 25.7 | +2.1 |
| | comp=Z,14nm,1.3s | | | | | | |
| ARPS | Mount Arapiles | 33.57 | 197 | P | P | 20 36 23.8 | +0.5 |
| | baz=34,SNR=8.0 | | | | | | |
| MPSI | Mapaga | 33.85 | 278 | P | P | 20 36 27.4 | +1.2 |
| | comp=Z,23nm,0.8s | | | | | | |
| FORT | Forrest | 35.19 | 220 | P | P | 20 36 37.4 | -0.2 |
| | baz=35,SNR=13 | | | | | | |
| FORT | Forrest | 35.19 | 220 | eP | P | 20 36 36.9 | -0.7 |
| | comp=Z,115nm,0.7s | | | | | | |
| MYLDM | Lahad Datu | 36.24 | 285 | eP | P | 20 36 47.7 | +1.0 |
| | comp=Z,46nm,1.1s | | | | | | |
| TWSI | Taliwang, Sumb | 36.47 | 262 | P | P | 20 36 48.2 | -0.5 |
| | comp=Z,19nm,1.2s | | | | | | |
| MBWA | Marble Bar | 36.51 | 240 | eP | P | 20 36 47.8 | -1.2 |
| | comp=Z,34nm,0.9s | | | | | | |
| MOO | Moorlands | 37.91 | 187 | P | P | 20 37 02.7 | +2.1 |
| | baz=38,SNR=4.7 | | | | | | |
| TAU | Tasmania Unive | 38.36 | 187 | eP | P | 20 37 05.5 | +1.2 |
| TAU | | | | pmax | pmax | | |
| | comp=Z,56nm,1.1s | | | | | | |
| TAU | Tasmania Unive | 38.36 | 187 | eP | P | 20 37 05.5 | +1.2 |
| | comp=Z,56nm,1.1s | | | | | | |
| HIZ | Hauiti | 38.84 | 153 | eP | P | 20 37 10.1 | +1.7 |
| | comp=Z,83nm,1.1s | | | | | | |
| KMBL | Kambalda | 39.69 | 224 | P | P | 20 37 15.4 | -0.3 |
| | baz=40,SNR=6.1 | | | | | | |
| MEEK | Meekatharra | 39.70 | 233 | P | P | 20 37 15.5 | -0.4 |
| | baz=40,SNR=24 | | | | | | |
| URZ | Urewera | 39.71 | 150 | P | P | 20 37 17.2 | +1.5 |
| | comp=Z,5.3nm,0.4s,baz=251,slow=4.1,SNR=6.2 | | | | | | |
| URZ | Urewera | 39.71 | 150 | eP | P | 20 37 16.9 | +1.2 |
| | comp=Z,39nm,1.0s | | | | | | |
| JHJ | Hachijo jima 2 | 39.84 | 342 | LR | LR | 20 54 39.0 | |
| | comp=Z,98nm,18.1s,baz=342,slow=38 | | | | | | |
| BKZ | Black Stump Fm | 40.12 | 152 | eP | P | 20 37 19.6 | +0.4 |
| | comp=Z,356nm,2.9s | | | | | | |
| THZ | Tophouse | 40.74 | 158 | eP | P | 20 37 24.6 | +0.3 |
| | comp=Z,102nm,0.8s | | | | | | |
| KHZ | Kahutara | 41.55 | 157 | eP | P | 20 37 30.0 | -0.7 |
| | comp=Z,112nm,1.1s | | | | | | |
| PBKI | Pangkalan Bun | 41.69 | 271 | P | P | 20 37 35.8 | +3.4 |
| | comp=Z,121nm,1.0s | | | | | | |
| OXZ | Oxford | 41.78 | 160 | eP | P | 20 37 33.1 | +0.4 |
| | comp=Z,64nm,0.9s | | | | | | |
| RPZ | Rata Peaks | 41.80 | 161 | P | P | 20 37 33.2 | +0.4 |
| | comp=Z,104nm,0.8s,baz=17,slow=3.1,SNR=34 | | | | | | |
| RPZ | Rata Peaks | 41.80 | 161 | eP | P | 20 37 32.8 | 0.0 |
| | comp=Z,130nm,0.9s | | | | | | |
| MQZ | McQueen's Vall | 42.33 | 159 | eP | P | 20 37 37.4 | +0.3 |
| | comp=Z,190nm,1.5s | | | | | | |
| KLBR | Kellerberrin | 42.77 | 227 | P | P | 20 37 40.0 | -0.9 |
| | baz=43,SNR=5.0 | | | | | | |
| MORW | Morawa | 42.83 | 231 | P | P | 20 37 40.5 | -1.0 |
| | baz=43,SNR=5.8 | | | | | | |
| ODZ | Otahua Downs | 42.86 | 162 | eP | P | 20 37 42.0 | +0.6 |
| | comp=Z,147nm,1.6s | | | | | | |
| JNU | Nakatsue | 43.32 | 332 | P | P | 20 37 45.8 | +0.4 |
| | comp=Z,24nm,0.9s,baz=166,slow=3.1,SNR=10 | | | | | | |
| JNU | | | | LR | LR | 20 52 51.1 | |
| | comp=Z,99nm,21.6s,baz=137,slow=32 | | | | | | |
| JNU | Nakatsue | 43.32 | 332 | eP | P | 20 37 45.8 | +0.4 |
| | comp=Z,51nm,1.0s | | | | | | |
| MJAR | Matsushiro Arr | 43.49 | 342 | P | P | 20 37 44.8 | -1.9 |
| | comp=Z,2.9nm,1.0s,baz=173,slow=8.4,SNR=6.0 | | | | | | |
| MJAR | | | | LR | LR | 20 53 41.3 | |
| | comp=Z,212nm,21.9s,baz=175,slow=33 | | | | | | |
| MAJO | Matsushiro | 43.49 | 342 | P | P | 20 37 45.7 | -0.9 |
| MAJO | Matsushiro | 43.49 | 342 | P | P | 20 37 45.7 | -0.9 |
| MAT | Matsushiro | 43.49 | 342 | P | P | 20 37 45.3 | -1.3 |
| MAT | | | | S | S | 20 44 13.8 | +1.6 |
| KSM | Kuching | 43.50 | 277 | eP | P | 20 37 48.9 | +1.8 |
| | comp=Z,20nm,0.9s | | | | | | |
| NWAO | Narrogin (SRO) | 43.84 | 226 | P | P | 20 37 48.6 | -0.9 |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,44nm,1.3s | | | | | | |
| NWAO | Narrogin (SRO) | 43.84 | 226 | P | P | 20 37 48.6 | -0.9 |
| | comp=Z,44nm,1.3s | | | | | | |
| TJN | Taejon | 47.64 | 331d | iP | P | 20 38 20.9 | +1.5 |
| DLV | T Lat | 47.66 | 291 | eP | P | 20 38 20.1 | 0.0 |
| | comp=Z,94nm,1.8s | | | | | | |
| KSRS | Korea Array | 48.25 | 333 | P | P | 20 38 24.2 | +0.1 |
| | comp=Z,9.3nm,1.0s,baz=149,slow=9.4,SNR=21 | | | | | | |
| KSRS | | | | pP | pP | 20 38 35.4 | -1.6 |
| | comp=Z,6.6nm,0.8s,baz=152,slow=8.9,SNR=10 | | | | | | |
| KSRS | | | | LR | LR | 20 58 10.9 | |
| | comp=Z,71nm,18.0s,baz=163,slow=35 | | | | | | |
| KSAR | Wonju Array Be | 48.26 | 333 | P | P | 20 38 24.3 | +0.1 |
| KSAR | | | | *PP | pP | 20 38 35.4 | -1.7 |
| KSAR | Wonju Array Be | 48.26 | 333 | P | P | 20 38 24.2 | +0.1 |
| KSAR | | | | pP | pP | 20 38 35.4 | -1.7 |
| KS01 | Wonju Array Si | 48.28 | 333 | eP | P | 20 38 24.2 | -0.2 |
| INCN | Inchon | 48.88 | 332 | eP | P | 20 38 29.3 | +0.3 |
| | comp=Z,76nm,1.3s | | | | | | |
| QIZ | Qiongzhong | 48.98 | 300 | P | P | 20 38 31.3 | +1.2 |
| QIZ | | | | S | S | 20 45 31.8 | +0.4 |
| QIZ | | | | PMZ | | | |
| | comp=Z,65nm,3.6s | | | | | | |
| YUK | Yuzh-Kuril'sk | 49.06 | 353c | iP | P | 20 38 23.1 | -7.1 |
| YUK | | | | i *PP | pP | 20 38 36.0 | -7.1 |
| YUK | | | | i | | 20 39 48.7 | |
| YUK | | | | e | | 20 40 17.3 | |
| YUK | | | | eS | S | 20 45 22.2 | -9.4 |
| YUK | | | | SS | SS | 20 48 51.8 | -12 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,175nm,2.8s | | | | | | |
| MDSI | Maura Dua | 49.06 | 268 | P | P | 20 38 41.1 | +10 |
| NJ2 | Nanjing | 49.21 | 320 | eP | P | 20 38 33.5 | +1.9 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.6s | | | | | | |
| ASAJ | Asahikawa | 49.63 | 350 | LR | LR | 20 57 19.8 | |
| | comp=Z,251nm,19.5s,baz=134,slow=33 | | | | | | |
| ASAJ | Asahikawa | 49.63 | 350 | eP | P | 20 38 35.7 | +1.1 |
| | comp=Z,9.6nm,1.1s | | | | | | |
| USRK | Ussuriysk Ar. | 52.42 | 341 | P | P | 20 38 55.9 | +0.3 |
| | comp=Z,6.1nm,0.8s,baz=173,slow=8.9,SNR=14 | | | | | | |
| USRK | | | | LR | LR | 20 57 24.4 | |
| | comp=Z,120nm,21.7s,baz=167,slow=32 | | | | | | |
| TIA | Tai'an | 53.05 | 323 | eP | P | 20 39 00.9 | +0.5 |
| TIA | | | | PMZ | | | |
| | comp=Z,20nm,1.4s | | | | | | |
| MDJ | Mudanjiang | 53.61 | 339 | P | P | 20 39 04.5 | +0.2 |
| MDJ | | | | PMZ | | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,60nm,6.6s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,63nm,25.2s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,130nm,28.0s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,180nm,30.8s | | | | | | |
| MDJ | Mudanjiang | 53.61 | 339 | eP | P | 20 39 04.3 | 0.0 |
| KULM | Kulim | 53.63 | 280 | P | P | 20 39 03.0 | -2.0 |
| | comp=Z,10nm,1.1s | | | | | | |
| CN2 | Changchun | 54.52 | 335 | eP | P | 20 39 11.1 | +0.1 |
| GYA | Guiyang | 54.86 | 307 | P | P | 20 39 16.2 | +2.3 |
| GYA | | | | PP | PP | 20 41 22.6 | +5.3 |
| GYA | | | | S | S | 20 46 51.9 | -0.3 |
| GYA | | | | SS | SS | 20 50 36.3 | 0.0 |
| GYA | | | | PMZ | | | |
| | comp=Z,30nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,140nm,5.8s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,580nm,19.2s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,520nm,18.5s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,610nm,19.0s | | | | | | |
| HABR | Khabarovsk | 55.41 | 345 | P | P | 20 39 16.0 | -1.2 |
| HABR | | | | e*PP | pP | 20 39 32.1 | +1.8 |
| HABR | | | | e*SP | sP | 20 39 38.9 | +3.2 |
| HABR | | | | e | | 20 40 15.3 | |
| HABR | | | | e | | 20 41 20.6 | |
| HABR | | | | eS | S | 20 46 57.2 | -1.3 |
| HABR | | | | e | | 20 48 59.8 | |
| HABR | | | | eSS | SS | 20 50 44.5 | +0.6 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,9.0nm,0.6s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,31nm,1.1s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,64nm,17.0s | | | | | | |
| BJI | Beijing | 56.21 | 326 | P | P | 20 39 23.8 | +0.6 |
| BJI | | | | PMZ | | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,210nm,26.6s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,280nm,25.4s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,290nm,37.8s | | | | | | |
| UTTA | Uttaradit | 56.74 | 295 | P | P | 20 39 35.7 | +8.4 |
| | comp=Z,5.0nm,0.9s | | | | | | |
| KLR | Kul'dur | 56.99 | 343 | eP | P | 20 39 25.8 | -2.8 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,45nm,1.6s | | | | | | |
| XAN | Xi'an | 57.02 | 316 | P | P | 20 39 29.7 | +0.5 |
| XAN | | | | PMZ | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,130nm,4.7s | | | | | | |
| PPT | Papeete | 57.16 | 108 | LR | LR | 20 59 32.2 | |
| | comp=Z,76nm,21.6s,baz=288,slow=31 | | | | | | |
| PPT2 | Papeete2 | 57.16 | 108 | eS | S | 20 47 32.4 | +9.4 |
| | comp=Z,115nm,24.2s | | | | | | |
| PPT2 | | | | eLR | LR | 20 56 25.5 | |
| | comp=Z,231nm,24.5s | | | | | | |
| KMI | Kunming | 57.47 | 304 | P | P | 20 39 35.2 | +2.5 |
| KMI | | | | PMZ | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,170nm,4.0s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,260nm,4.4s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,230nm,4.0s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| PETK | Petropavlovsk- | 57.78 | 3 | P | P | 20 39 35.2 | +1.2 |
| | comp=Z,4.6nm,0.8s,baz=144,slow=5.5,SNR=4.1 | | | | | | |
| PETK | | | | pP | pP | 20 39 47.0 | -0.2 |
| | comp=Z,5.6nm,0.7s,baz=166,slow=6.9,SNR=4.6 | | | | | | |
| PETK | | | | LR | LR | 21 00 10.2 | |
| | comp=Z,119nm,21.9s,baz=188,slow=32 | | | | | | |
| TBI | Tubuai | 58.02 | 114 | eLQ | LQ | 20 54 29.7 | |
| | comp=Z,779nm,31.2s | | | | | | |
| TBI | | | | eLR | LR | 20 56 57.3 | |
| | comp=Z,484nm,24.2s | | | | | | |
| CMAR | Chiang Mai Arr | 58.41 | 295 | P | P | 20 39 40.5 | +1.3 |
| | comp=Z,4.0nm,0.8s,baz=117,slow=5.1,SNR=32 | | | | | | |
| CMAR | | | | pP | pP | 20 39 51.6 | -0.7 |
| | comp=Z,6.9nm,0.8s,baz=122,slow=5.6,SNR=14 | | | | | | |
| CMAR | | | | LR | LR | 21 05 22.2 | |
| | comp=Z,127nm,18.6s,baz=142,slow=37 | | | | | | |
| CHTO | Chiang Mai | 58.52 | 295 | eP | P | 20 39 39.5 | -0.4 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,19nm,1.5s | | | | | | |
| CHTO | Chiang Mai | 58.52 | 295 | eP | P | 20 39 39.5 | -0.4 |
| | comp=Z,19nm,1.5s | | | | | | |
| CD2 | Chengdu | 59.18 | 310 | eP | P | 20 39 44.5 | +0.2 |
| CD2 | | | | PP | PP | 20 41 55.9 | +0.3 |
| CD2 | | | | S | S | 20 47 48.7 | -0.2 |
| CD2 | | | | SS | SS | 20 51 45.3 | +1.2 |
| CD2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,160nm,5.4s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,610nm,18.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,430nm,15.7s | | | | | | |
| HHC | Hu-ho-hao-te | 59.38 | 324 | eP | P | 20 39 48.4 | +2.8 |
| HHC | | | | PP | PP | 20 42 05.4 | +8.2 |
| HHC | | | | S | S | 20 47 52.0 | +0.7 |
| HHC | | | | PMZ | | | |
| | comp=Z,30nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,110nm,4.8s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,160nm,14.8s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,200nm,17.3s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,240nm,16.3s | | | | | | |
| LZH | Lanzhou | 61.63 | 316 | eP | P | 20 40 02.8 | +1.7 |
| LZH | | | | PcP | PcP | 20 40 41.6 | -0.8 |
| LZH | | | | PP | PP | 20 42 24.3 | +7.0 |
| LZH | | | | eS | S | 20 48 15.0 | -5.4 |
| LZH | | | | SS | SS | 20 52 21.0 | -1.6 |
| LZH | | | | PMZ | | | |
| | comp=Z,24nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,1µm,14.6s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,1µm,14.5s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,1µm,15.8s | | | | | | |
| GTA | Gaotai | 66.05 | 317 | eP | P | 20 40 31.6 | +1.5 |
| GTA | | | | S | S | 20 49 15.7 | +0.7 |
| GTA | | | | SS | SS | 20 53 32.7 | +1.3 |
| GTA | | | | PMZ | | | |
| | comp=Z,20nm,1.4s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,78nm,4.3s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,130nm,16.6s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,140nm,21.9s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,220nm,20.9s | | | | | | |
| ULN | Ulaanbaatar | 66.29 | 328d | iP | P | 20 40 32.9 | +1.4 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| ULN | Ulaanbaatar | 66.29 | 328 | eP | P | 20 40 30.4 | -1.1 |
| | comp=Z,8.6nm,0.9s | | | | | | |
| SONM | Songino Array | 66.63 | 328 | P | P | 20 40 34.1 | +0.5 |
| | comp=Z,5.3nm,0.9s,baz=128,slow=4.9,SNR=15 | | | | | | |
| SONA1 | Songino Array | 66.63 | 328 | eP | P | 20 40 33.8 | +0.2 |
| SEY | Seymchan | 67.52 | 359 | P | P | 20 40 39.2 | +0.4 |
| | comp=Z,2.1nm,0.4s,baz=117,slow=14,SNR=8.8 | | | | | | |
| SEY | Seymchan | 67.52 | 359⇑ | eP | P | 20 40 39.3 | +0.5 |
| CASY | Casey | 68.22 | 197 | eP | P | 20 40 43.2 | 0.0 |
| LSA | Lhasa | 68.72 | 304 | eP | P | 20 40 48.0 | +0.4 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| LSA | Lhasa | 68.72 | 304 | eP | P | 20 40 48.0 | +0.4 |
| | comp=Z,7.7nm,0.9s | | | | | | |
| YAK | Yakutsk | 69.07 | 348 | P | P | 20 40 48.8 | +0.3 |
| | comp=Z,6.7nm,0.3s,baz=150,slow=0.4,SNR=3.1 | | | | | | |
| YAK | Yakutsk | 69.07 | 348 | eP | P | 20 40 47.8 | -0.7 |
| YAK | | | | e | | 20 41 14.8 | |
| YAK | | | | ePPP | PPP | 20 44 57.3 | |
| YAK | | | | eS | S | 20 49 50.3 | +0.3 |
| YAK | | | | eSS | SS | 20 54 18.2 | +1.3 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,1.0nm,0.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,4.0nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,132nm,5.3s | | | | | | |

YAK pmax pmax
comp=E,16nm,1.9s
YAK pmax pmax
comp=N,80nm,5.6s
YAK smax smax
comp=N,42nm,3.3s
YAK smax smax
comp=E,13nm,1.8s
**YAK Yakutsk 69.07 348** P **P** **20 40 48.4 -0.1**
**ZAK Zakamensk 69.79 328** *eP* **P** **20 40 53.5 +0.2**
ZAK *e* 20 41 16.9
ZAK pmax pmax
comp=Z,12nm,1.1s
ZAK pmax pmax
comp=Z,10.0nm,1.1s
**BOD Bodaibo 69.98 339** *eP* **P** **20 40 53.7 -0.5**
BOD pmax pmax
comp=Z,7.0nm,1.2s
**TLY Talaya 70.36 330** P **P** **20 40 57.2 +0.5**
comp=Z,1.1nm,0.5s,baz=110,slow=7.3,SNR=5.1
**TLY Talaya 70.36 330** *eP* **P** **20 40 58.3 +1.6**
TLY pmax pmax
comp=Z,7.0nm,1.0s
TLY MLR MLR
comp=Z,112nm,19.0s
**TLY Talaya 70.36 330** *eP* **P** **20 40 57.3 +0.6**
comp=Z,5.6nm,1.1s
**TAPN Taplejung 70.91 301** *eP* **P** **20 41 00.6 -0.3**
comp=Z,43nm,1.1s
**ODAN Odare 71.05 300** *eP* **P** **20 41 01.6 -0.1**
comp=Z,22nm,0.6s
**RKT Rikitea 71.24 113** *e*LR LR 21 03 06.8
comp=Z,395nm,29.0s
**RAMN Ramite 71.75 300** *eP* **P** **20 41 06.4 +0.4**
comp=Z,22nm,1.0s
**CHLP Challavanipeta 72.10 291** *eP* **P** **20 41 08.3 +0.5**
CHLP IAmb IAmb 20 41 10.2
comp=Z,37nm,0.9s
CHLP *ep*P **pP** **20 41 19.8 -1.6**
CHLP *e*PcP **PcP** **20 41 25.8 -0.3**
**GUN Gumba 72.62 301** *eP* **P** **20 41 11.9 +0.6**
comp=Z,49nm,1.0s
**VNDA Vanda 72.84 178** P **P** **20 41 11.9 +0.8**
comp=Z,41nm,1.1s,baz=335,slow=6.4,SNR=91
VNDA LR LR 21 07 12.8
comp=Z,89nm,21.1s,baz=354,slow=31
**PKI Pulchoki 72.94 301** *eP* **P** **20 41 13.6 +0.5**
comp=Z,12nm,0.6s
**PKIN Phulchoki 72.95 301** *eP* **P** **20 41 13.5 +0.4**
comp=Z,8.8nm,0.6s
**KKN Kakani 73.11 301** *eP* **P** **20 41 14.6 +0.6**
comp=Z,16nm,0.8s
**BILL Bilibino 73.21 5**⇑ *i*P **P** **20 41 13.9 +0.4**
BILL *i* 20 41 23.1
BILL *i* 20 41 37.6
BILL pmax pmax
comp=Z,9.0nm,0.8s
**DMN Daman 73.21 301** *eP* **P** **20 41 15.5 +0.9**
comp=Z,40nm,1.0s
**SBA Scott Base 73.37 177** *eP* **P** **20 41 15.8 +1.5**
**SBA Scott Base 73.37 177** *eP* **P** **20 41 15.8 +1.5**
**GKN Gorkha 73.71 301** *eP* **P** **20 41 17.9 +0.4**
comp=Z,24nm,0.8s
**PVM Polavaram 74.14 289** *eP* **P** **20 41 19.8 -0.1**
PVM IAmb IAmb 20 41 21.0
comp=Z,17nm,0.8s
PVM *e*PcP **pP** **20 41 33.3 -0.1**
PVM *es*P **sP** **20 41 37.5 -1.2**
**MIR Mirnyy 74.17 201**⇑ *eP* P 20 41 29.0 +10
MIR pmax pmax
comp=Z,60nm,1.0s
**KOLN Koldanda 74.54 300** *eP* **P** **20 41 22.7 +0.3**
comp=Z,15nm,0.8s
**SKHT Srikalahasti 75.38 285** *eP* **P** **20 41 27.5 +0.3**
SKHT IAmb IAmb 20 41 28.2
comp=Z,18nm,1.0s
SKHT *e*PcP **PcP** **20 41 39.1 -1.2**
**ADKI Addanki 75.46 288** *eP* **P** **20 41 27.6 -0.1**
ADKI IAML 20 41 28.7
comp=Z,17nm,0.8s
ADKI *es*P **sP** **20 41 45.3 -1.2**
**WMQ Urumqi 76.13 317** P **P** **20 41 32.0 +1.0**
WMQ PP **PP** **20 44 26.0 +3.5**
WMQ S **S** **20 51 09.0 -2.6**
WMQ SS **SS** **20 56 06.0 +0.2**
WMQ PMZ
comp=Z,29nm,1.2s
WMQ PMZ
comp=Z,46nm,8.0s
WMQ LN
comp=Z,210nm,22.0s
WMQ LE
comp=Z,110nm,22.0s
WMQ LZ
comp=Z,150nm,24.0s
**NJS Nagarjunasagar 76.21 288** *eP* **P** **20 41 31.8 -0.1**
NJS IAmb IAmb 20 41 32.5
comp=Z,27nm,1.1s
**RPR Rampur 76.60 291** *eP* **P** **20 41 34.2 +0.2**
RPR IAmb IAmb 20 41 34.8
comp=Z,18nm,0.9s
RPR *e*PcP **PcP** **20 41 44.0 -1.4**
**HYB Hyderabad 77.06 289** *i*P **P** **20 41 36.0 -0.7**
HYB *e*PcP **PcP** **20 41 46.5 -1.0**
HYB *es*P **sP** **20 41 54.0 -1.6**
**HYBB Hyderabad (bro 77.06 289** *eP* **P** **20 41 36.4 -0.3**
HYBB IAmb IAmb 20 41 37.1
comp=Z,20nm,0.9s
HYBB *e*PcP **PcP** **20 41 46.2 -1.3**
HYBB *es*P **sP** **20 41 54.0 -1.6**
**URV Uravakonda 77.91 286** *eP* **P** **20 41 41.1 -0.4**
URV IAmb IAmb 20 41 42.4
comp=Z,22nm,0.9s
URV *ep*P **PcP** **20 41 51.7 +0.5**
URV *es*P **sP** **20 41 57.7 -2.7**
**DGAR Diego Garcia 80.45 263** *eP* **P** **20 41 54.3 -1.1**
**DGAR Diego Garcia 80.45 263** *eP* **P** **20 41 54.3 -1.1**
comp=Z,314nm,1.3s
**MCK McKinley 80.61 22** *eP* **P** **20 41 54.2 -1.0**
MCK pmax pmax
comp=Z,13nm,1.0s
**MCK McKinley 80.61 22** *eP* **P** **20 41 54.2 -1.0**
comp=Z,13nm,1.0s
**MKAR Makanchi Array 80.70 319** P **P** **20 41 56.4 +0.3**
comp=Z,9.6nm,0.5s,baz=99,slow=7.1,SNR=103
**ZALV Zalesovo Beam 81.47 326** P **P** **20 41 59.2 -0.7**
comp=Z,11nm,0.6s,baz=110,slow=5.8,SNR=49
ZALV pP **pP** **20 42 13.3 -0.4**
comp=Z,9.0nm,0.8s,baz=118,slow=5.0,SNR=7.4
**COLA College 81.60 22**⇑ *i*P **P** **20 41 59.8 -0.6**
COLA pmax pmax
comp=Z,8.0nm,1.0s
**COLA College 81.60 22** *eP* **P** **20 41 58.8 -1.6**
**ILAR Eielson Array 81.91 22** P **P** **20 42 01.1 -1.0**
comp=Z,3.2nm,1.0s,baz=257,slow=5.0,SNR=13
ILAR PKKPbc **PKKPbc** **21 00 32.5 -3.1**
comp=Z,0.4nm,0.7s,baz=37,slow=1.1,SNR=5.3
ILAR LR LR 21 16 21.1
comp=Z,95nm,18.8s,baz=226,slow=34
**NVS Novosibirsk 82.64 327** *eP* **P** **20 42 05.6 -0.5**
NVS *eS* **S** **20 52 18.6 -1.3**
NVS pmax pmax
comp=N,14nm,1.6s
NVS pmax pmax
comp=E,27nm,1.6s
NVS pmax pmax
comp=Z,48nm,1.6s
NVS smax smax
comp=E,65nm,3.9s
**KSH Kashi 83.38 311** P **P** **20 42 13.2 +2.8**
KSH PP **PP** **20 45 27.6 +4.7**
KSH S **S** **20 52 28.1 -0.3**
KSH SS **SS** **20 57 58.9 +4.3**
KSH PMZ
comp=E,12nm,0.9s
KSH PMZ
comp=E,130nm,3.5s
KSH LN
comp=E,130nm,4.5s
KSH LE
comp=E,130nm,6.1s
KSH LZ
comp=E,170nm,9.0s
**ULHL Ulahol 83.74 313** P **P** **20 42 13.9 +1.6**
SNR=5.5
**KURK Kurchatov 84.12 322** *eP* **P** **20 42 13.5 -0.3**
KURK pmax pmax
comp=Z,101nm,1.1s
**KURK Kurchatov 84.12 322** P **P** **20 42 13.2 -0.6**
comp=Z,214nm,1.3s,SNR=29
**KURK Kurchatov 84.12 322** *eP* **P** **20 42 13.5 -0.3**
comp=Z,101nm,1.1s
**KURBB Kurchatov Arra 84.15 322** P **P** **20 42 13.9 -0.1**
comp=Z,17nm,1.0s,baz=106,slow=4.3,SNR=72
**TKM2 Tokmak 2 84.35 314** *i*P **P** **20 42 16.5 +1.1**
TKM2 pmax pmax
comp=Z,23nm,0.7s
**TKM2 Tokmak 2 84.35 314** P **P** **20 42 16.2 +0.8**
SNR=18
**TKM2 Tokmak 2 84.35 314** *eP* **P** **20 42 15.5 +0.1**
comp=Z,23nm,0.7s
TKM2 *e* 20 42 27.2
TKM2 *e* 20 42 33.5
**KZA Kyzart 84.43 313** P **P** **20 42 18.5 +2.4**
SNR=14
**KBK Karagaybulak 84.76 313** P **P** **20 42 19.1 +1.6**
SNR=13
**CHMS Chumysh 84.97 314** P **P** **20 42 19.0 +0.7**
SNR=20
**UCH Uchtor 85.00 313** P **P** **20 42 21.1 +2.1**
SNR=34
**FRU Bishkek 85.04 314** *i*P **P** **20 42 19.0 +0.3**
FRU pmax pmax
comp=Z,100nm,1.9s
**AAK Ala-Archa 85.09 313** P **P** **20 42 20.0 +0.9**
comp=Z,12nm,0.7s,baz=108,slow=4.8,SNR=38
**AAK Ala-Archa 85.09 313***c i*P **P** **20 42 20.5 +1.4**
AAK pmax pmax
comp=Z,28nm,0.7s
**AAK Ala-Archa 85.09 313** P **P** **20 42 20.2 +1.1**
comp=Z,133nm,1.0s,SNR=12
**AAK Ala-Archa 85.09 313** P **P** **20 42 20.0 +0.9**
SNR=20
**AAK Ala-Archa 85.09 313** *eP* **P** **20 42 19.4 +0.2**
comp=Z,32nm,0.8s
AAK *e* 20 42 31.2
AAK *e* 20 42 38.2
**QSPA South Pole Qui 85.19 180** *eP* **P** **20 42 19.0 -0.1**
comp=Z,110nm,0.9s
**USP Ospenovka 85.20 314** P **P** **20 42 20.5 +1.0**
SNR=26
**AML Almayashu 85.58 313** P **P** **20 42 23.4 +1.6**
SNR=31
**EKS2 Erkin-Say 85.61 313** *eP* **P** **20 42 22.2 +0.5**
EKS2 *e* 20 42 33.8
EKS2 *e* 20 42 40.6
**EKS2 Erkin-Say 85.61 313** P **P** **20 42 22.9 +1.2**
SNR=28
**EKS2 Erkin-Say 85.61 313** *eP* **P** **20 42 22.2 +0.5**
EKS2 *e* 20 42 33.8
EKS2 *e* 20 42 40.6
**MAW Mawson 85.83 203** P **P** **20 42 22.1 0.0**
comp=Z,11nm,0.7s,baz=85,slow=5.1,SNR=24
MAW LR LR 21 17 49.9
comp=Z,62nm,20.4s,baz=61,slow=34
**MAW Mawson 85.83 203** P **P** **20 42 22.2 +0.1**
baz=86,SNR=14
**KKAR Karatay Array 88.05 313** *eP* **P** **20 42 33.4 0.0**
KKAR *e* 20 42 44.9
KKAR *e* 20 42 51.2
KKAR pmax pmax
comp=Z,8.0nm,0.8s
**KKAR Karatay Array 88.05 313** *eP* **P** **20 42 33.4 0.0**
comp=Z,8.1nm,0.8s
KKAR *e* 20 42 44.9
KKAR *e* 20 42 51.2
**VOSK Vostochnaya 89.18 323***ceP* **P** **20 42 37.5 -1.0**
VOSK pmax pmax
comp=Z,26nm,1.1s
**CHKZ Chkalovo 89.54 324** *i*P **P** **20 42 38.8 -1.3**
CHKZ pmax pmax
comp=Z,32nm,1.1s
**BVAR Borovoye Array 89.58 323** P **P** **20 42 39.7 -0.6**
comp=Z,20nm,0.8s,baz=101,slow=6.2,SNR=120
**BRVK Borovoye 89.65 323***c i*P **P** **20 42 39.9 -0.7**
BRVK pmax pmax
comp=Z,57nm,1.7s
**BRVK Borovoye 89.65 323** P **P** **20 42 40.4 -0.2**
comp=Z,182nm,1.0s,SNR=18
**BRVK Borovoye 89.65 323** *eP* **P** **20 42 39.4 -1.3**
BRVK *e* 20 42 51.0
BRVK *e* 20 42 57.6
**ZRNK Zerenda 90.40 323** *i*P **P** **20 42 43.3 -0.9**
ZRNK pmax pmax
comp=Z,35nm,1.2s
**NVAR Mina Array Bea 91.59 52** P **P** **20 42 50.9 +0.5**
comp=Z,0.2nm,0.3s,baz=240,slow=7.1,SNR=3.5
NVAR sP **sP** **20 43 08.4 -1.0**
comp=Z,1.1nm,0.8s,baz=261,slow=6.2,SNR=5.5
NVAR LR LR 21 16 55.8
comp=Z,354nm,21.0s,baz=302,slow=31
**DAC Darwin (Calif) 91.98 54** *eP* **P** **20 42 50.5 -1.7**
DAC pmax pmax
comp=Z,5.0nm,1.1s
**DAC Darwin (Calif) 91.98 54** *eP* **P** **20 42 50.5 -1.7**
comp=Z,4.6nm,1.1s
**SYO Syowa Base 93.89 199**⇓ *eP* **P** **20 42 58.0 -2.0**
**SYO Syowa Base 93.89 199**⇑ *e*X pP 20 43 15.5 +1.6
**SVE Sverdlovsk 95.48 327** *eP* **P** **20 43 05.7 -1.8**
SVE pmax pmax
comp=Z,13nm,1.4s
**ABKAR Akbulak array 95.85 319** *eP* **P** **20 43 08.0 -1.4**
comp=Z,4.4nm,0.9s
**ARU Arti 96.63 326** P **P** **20 43 11.4 -1.3**
comp=Z,0.3nm,0.4s,baz=90,slow=20,SNR=2.3
**ARU Arti 96.63 326** P **P** **20 43 11.2 -1.5**
ARU *PP **pP** **20 42 27.2 +0.5**
ARU 20 47 06.4
ARU S **SKSac** **20 53 42.4 -3.3**
**ARU Arti 96.63 326** *eP* **P** **20 43 11.2 -1.5**
comp=Z,3.7nm,0.8s
ARU *e* 20 43 21.7
ARU *e* 20 43 27.9
**GEYT Alibeck 97.08 307** P Pdif 20 43 15.5 +0.2
comp=Z,0.8nm,0.3s,baz=80,slow=8.1,SNR=3.5
**TXAR Lajitas Array 103.59 61** PKiKP **PKiKP** **20 48 02.5 -0.6**
comp=Z,0.2nm,1.0s,baz=306,slow=2.1,SNR=3.2
**ARCES ARCESS Array B 107.02 343** PKiKP **PKiKP** **20 48 08.0 -0.1**
comp=Z,1.5nm,0.9s,baz=47,slow=1.7,SNR=2.6
ARCES PKKPbc **PKKPbc** **20 59 25.6 -2.8**
comp=Z,1.5nm,0.9s,baz=295,slow=3.7,SNR=3.6
**FINES FINESS Array B 111.28 336** Pdiff **Pdif** **20 44 16.8 -1.0**
comp=Z,2.4nm,1.0s,baz=62,slow=3.9,SNR=2.8
FINES PKiKP **PKiKP** **20 48 15.6 -0.6**
comp=Z,2.7nm,0.9s,baz=83,slow=4.8,SNR=3.4
**AKASG Malin Array Be 114.83 325** PKP PKPdf 20 48 22.6 -0.8
comp=Z,2.4nm,0.6s,baz=58,slow=2.2,SNR=9.9
**AKASG Malin Array Be 114.83 325***c i*PKiKP PKPdf 20 48 22.8 -0.5
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**ASF Jabal al Asfar 114.90 303** sPKP sPKiKP 20 48 42.0 -1.7
comp=Z,1.6nm,0.8s,baz=23,slow=6.2,SNR=3.6
**BRTR Keskin Array B 115.73 312** PKP **PKPdf** **20 48 25.1 -0.6**
comp=Z,1.8nm,0.9s,baz=49,slow=2.3,SNR=7.1
**BRTR Keskin Array B 115.73 312***c i*PKiKP **PKPdf** **20 48 24.6 -1.1**
BRTR pmax pmax
comp=Z,2.0nm,0.9s
**KMBO Kilima Mbogo 115.95 266** PKP **PKPdf** **20 48 25.5 -1.4**
comp=Z,2.0nm,1.1s,baz=150,slow=5.3,SNR=3.3
**MMAI Mount Meron Ar 115.97 304** sPKP sPKiKP 20 48 44.5 -1.2
comp=Z,2.2nm,0.7s,baz=68,slow=11,SNR=4.5
**EIL Elat 117.00 301** PKP **PKPdf** **20 48 28.1 -0.1**
comp=Z,1.4nm,0.4s,baz=18,slow=9.6,SNR=3.6
**NOA NORSAR Array B 117.09 340** PKP **PKPdf** **20 48 25.9 -1.6**
comp=Z,1.3nm,0.7s,baz=44,slow=1.6,SNR=3.2
**TLB Topalu 118.03 319**⇓ PKiKP **PKPdf** **20 48 29.9 +0.2**
**TLB Topalu 118.03 319**⇓ *i*P **PKPdf** **20 48 29.9 +0.2**
**BURAR Bucovina Array 118.54 323**⇓ PKiKP **PKPdf** **20 48 32.0 +1.2**
**BURAR Bucovina Array 118.54 323**⇓ *i*P **PKPdf** **20 48 32.0 +1.2**
**MLR Muntele Rosu 119.02 320**⇓ PKiKP **PKPdf** **20 48 31.7 -0.1**
**MLR Muntele Rosu 119.02 320**⇓ *i*P **PKPdf** **20 48 31.7 -0.1**
**VOIR 119.61 321**⇓ PKiKP PKPdf 20 48 38.4 +5.5
**VOIR 119.61 321**⇓ *i*P PKPdf 20 48 38.4 +5.5
**KOLS Kolonicke sedl 119.63 325** *e*PKiKP **PKPdf** **20 48 33.7 +1.0**
**KOLS Kolonicke sedl 119.63 325** *e*PKP **PKPdf** **20 48 33.7 +1.0**
**UZH Uzhgorod 119.77 325**⇑ *i*PKiKP PKPdf 20 48 45.1 +12
UZH *e* 20 48 55.5
**TRPA Tarpa 119.88 324**⇓ *i*P **PKPdf** **20 48 33.7 +0.6**
**STHS Stebnicka Huta 119.97 326** *e*PKiKP **PKPdf** **20 48 33.6 +0.2**
**STHS Stebnicka Huta 119.97 326** *e*PKP **PKPdf** **20 48 33.5 +0.2**
**HUMR Humele 120.05 320**⇓ *i*P **PKPdf** **20 48 33.3 -0.3**
**BOSA Boshof 120.12 233** PKP **PKPdf** **20 48 34.5 +0.1**
comp=Z,1.9nm,0.6s,baz=209,slow=6.2,SNR=4.2
**LANS Liptovska Anna 121.09 326** *e*PKiKP **PKPdf** **20 48 37.0 +1.5**
**LANS Liptovska Anna 121.09 326** *e*PKP **PKPdf** **20 48 37.0 +1.5**
**OKC Ostrava-Krasne 121.42 328** *e*PKiKP **PKPdf** **20 48 35.9 -0.2**
OKC *e* 20 48 47.0
**OKC Ostrava-Krasne 121.42 328** *e*PKPdf **PKPdf** **20 48 35.9 -0.2**
OKC *ex* x 20 48 43.0
OKC *ep*PKP **pPKPdf** **20 48 47.0 -3.4**
**PSZ Piszkesteto 121.52 325**⇓ PKiKP **PKPdf** **20 48 36.9 +0.5**
**PSZ Piszkesteto 121.52 325**⇓ *i*P **PKPdf** **20 48 36.9 +0.5**
**BZS Buzias 121.67 322**⇑ PKiKP **PKPdf** **20 48 37.4 +0.7**
**BZS Buzias 121.67 322**⇑ *i*P **PKPdf** **20 48 37.4 +0.7**
**MORC Moravsky Berou 121.78 328**⇑ PKiKP **PKPdf** **20 48 37.3 +0.5**
**MORC Moravsky Berou 121.78 328**⇑ *i*P **PKPdf** **20 48 37.3 +0.5**
**VYHS Vyhne 121.80 326** *e*PKiKP **PKPdf** **20 48 37.1 +0.2**
**VYHS Vyhne 121.80 326** *e*PKP **PKPdf** **20 48 37.1 +0.2**
**KRLC Kraliky 122.00 329** *e*PKiKP **PKPdf** **20 48 37.9 +0.6**
KRLC *e* 20 48 48.7
KRLC *e* 20 48 54.1
**KRLC Kraliky 122.00 329** *e*PKPdf **PKPdf** **20 48 37.9 +0.6**
KRLC *ex* x 20 48 48.7
KRLC *ep*PKP **pPKPdf** **20 48 54.1 +2.5**
**DPC Dobruska-Polom 122.08 329** *e*PKiKP **PKPdf** **20 48 37.4 0.0**
DPC *e* 20 48 48.8
DPC *e* 20 48 53.8
**DPC Dobruska-Polom 122.08 329** *e*PKPdf **PKPdf** **20 48 37.4 0.0**
DPC *ex* x 20 48 48.8
DPC *ep*PKP **pPKPdf** **20 48 53.8 +2.0**
DPC *es*PKP 20 48 58.6
**VRAC Vranov 122.55 328**⇑ PKP **PKPdf** **20 48 38.6 +0.3**
comp=Z,1.0nm,0.4s,baz=146,slow=3.6,SNR=4.0
**VRAC Vranov 122.55 328**⇑ *i*P **PKPdf** **20 48 38.7 +0.3**
**PVCC Panska Ves 122.85 330** *e*PKiKP **PKPdf** **20 48 38.8 0.0**
PVCC *e* 20 48 51.2
**PVCC Panska Ves 122.85 330** *e*PKPdf **PKPdf** **20 48 38.8 0.0**
PVCC *ex* x 20 48 40.0
PVCC *ep*PKP **pPKPdf** **20 48 51.2 -2.0**
**BRG Berggiesshubel 122.94 331** *e*PKP **PKPdf** **20 48 39.8 +0.8**
comp=Z,8.8nm,1.0s
**BRG Berggiesshubel 122.94 331** *e*PKiKP **PKPdf** **20 48 39.8 +0.8**
BRG pmax pmax
comp=Z,9.0nm,1.0s
**CLL Collm 123.12 331** *i*PKiKP **PKPdf** **20 48 40.1 +0.8**
CLL *e* 20 48 58.0
CLL pmax pmax
comp=Z,7.0nm,0.8s
**CLL Collm 123.12 331** *i*PKPdf **PKPdf** **20 48 40.1 +0.8**
comp=Z,7.0nm,0.8s
CLL *e* 20 48 58.0
CLL L L 21 33 00.0
comp=Z,200nm,20.0s
**GOPC GO Pecny, Ondr 123.12 329** *e*PKiKP **PKPdf** **20 48 40.4 +1.0**
GOPC *e* 20 48 54.7
**GOPC GO Pecny, Ondr 123.12 329** *e*PKPdf **PKPdf** **20 48 40.4 +1.0**
GOPC *ex* x 20 48 49.7
GOPC *ep*PKP **pPKPdf** **20 48 54.7 +0.9**
**PRU Pruhonice 123.20 330** *e*PKiKP **PKPdf** **20 48 39.9 +0.4**
PRU *e* 20 48 48.5
PRU *e* 20 48 56.6
**PRU Pruhonice 123.20 330** *e*PKPdf **PKPdf** **20 48 39.9 +0.4**
PRU *ep*PKP **pPKPdf** **20 48 56.6 +2.7**
**DIVS Divibare 123.42 321**⇑ *i*P **PKPdf** **20 48 40.9 +0.7**
**CONA Conrad Observa 123.76 327**⇑ *i*PKiKP **PKiKP** **20 48 41.7 +0.7**
comp=Z,5.4nm,0.8s
**NKC Novy Kostel 124.09 331** *e*PKiKP **PKPdf** **20 48 40.8 -0.4**
NKC *e* 20 48 50.0
**NKC Novy Kostel 124.09 331** *e*PKPdf **PKPdf** **20 48 40.8 -0.4**
NKC *ex* x 20 48 50.0
**KHC Kasperske Hory 124.23 329** *e*PKiKP **PKPdf** **20 48 42.4 +0.8**
KHC *e* 20 48 53.0
KHC *e* 20 48 58.3
**KHC Kasperske Hory 124.23 329** *e*PKPdf **PKPdf** **20 48 42.4 +0.8**
KHC *ex* x 20 48 45.8
KHC *ex* x 20 48 53.0
KHC *ep*PKP **pPKPdf** **20 48 58.3 +2.4**
KHC *ex* x 20 49 04.6
**GERES GERESS Array B 124.35 329** PKP **PKPdf** **20 48 41.8 -0.1**
comp=Z,3.5nm,0.7s,baz=69,slow=1.8,SNR=33
**GRA4 Grafenberg Arr 125.02 331** *e*PKPdf **PKPdf** **20 48 42.7 -0.4**
baz=48,slow=1.2
**GRF Grafenberg Arr 125.04 331** *e*PKPdf **PKPdf** **20 48 42.6 -0.5**
baz=48,slow=1.2
**GRB2 Grafenberg Arr 125.10 330** *e*PKPdf **PKPdf** **20 48 44.1 +0.8**
baz=48,slow=1.2
**GRB5 Grafenberg Arr 125.20 330** *e*PKPdf **PKPdf** **20 48 44.4 +1.0**
baz=48,slow=1.2
**KBA Koelnbreinsper 125.63 327**⇑ *i*PKiKP **PKPdf** **20 48 44.4 -0.1**
comp=Z,9.5nm,1.1s
**EKA Eskdalemuir Ar 126.18 344** PKP **PKPdf** **20 48 45.1 0.0**
comp=Z,4.0nm,1.0s,baz=336,slow=2.6,SNR=3.6
**ABTA Abfaltersbach 126.28 327**⇑ *i*PKiKP **PKPdf** **20 48 45.0 -0.6**
comp=Z,8.0nm,0.8s
**WTTA Wattenberg 126.42 328**⇑ *i*PKiKP **PKiKP** **20 48 46.9 +0.4**
comp=Z,19nm,1.1s
**MOTA Moosalm 126.64 329**⇑ *i*PKiKP **PKiKP** **20 48 47.0 +0.2**
comp=Z,9.5nm,0.9s
**FETA Feichten 127.05 329**⇑ *i*PKiKP **PKiKP** **20 48 48.0 +0.3**
comp=Z,11nm,1.0s
**DAVA Damuels 127.31 329**⇑ *i*PKiKP **PKiKP** **20 48 48.4 +0.2**
comp=Z,9.7nm,0.9s
**DAVOX Davos/Dischmat 127.65 329** PKP **PKPdf** **20 48 49.0 +0.6**
comp=Z,5.7nm,0.7s,baz=240,slow=5.4,SNR=7.3
**LPAZ La Paz 133.90 118** PKP **PKPdf** **20 49 01.8 +0.2**
comp=Z,0.9nm,0.6s,baz=71,slow=6.9,SNR=3.6
**KEST Kesra 134.79 318** PKP **PKPdf** **20 49 03.5 +1.4**
comp=Z,5.7nm,0.8s,baz=261,slow=3.0,SNR=6.9
**CPUP Villa Florida 137.08 138** PKP **PKPdf** **20 49 07.5 +1.0**
comp=Z,2.2nm,1.0s,baz=183,slow=7.6,SNR=3.9
**ESDC Sonseca Array 139.68 333** PKP **PKPdf** **20 49 12.5 +1.5**
comp=Z,0.3nm,0.4s,baz=360,slow=2.4,SNR=3.9
**TAM Tamanrasset 144.17 303** *e*PKiKP PKPbc 20 49 18.0 +0.2
**TAM Tamanrasset 144.17 303** *e*PKPdf PKPbc 20 49 18.0 +0.2
**BDFB Brasilia 150.65 134** PKPbc **PKPbc** **20 49 34.7 -1.3**
comp=Z,6.2nm,0.5s,baz=164,slow=2.4,SNR=9.6
**TORD Torodi Ar. Bea 150.87 288** PKP **PKPdf** **20 49 29.8 -0.8**
comp=Z,3.1nm,1.1s,baz=14,slow=0.8,SNR=12
TORD PKPbc **PKPbc** **20 49 35.8 -0.6**
comp=Z,40nm,0.8s,baz=94,slow=3.7,SNR=272
**DBIC Dimbokro 158.29 276** PKPab **PKPab** **20 50 14.5 -0.8**
comp=Z,3.8nm,0.8s,baz=136,slow=5.6,SNR=3.0

**KRSC 05 20:31:37.4**±1.9**, 52°.63N×160°.74E, h17**km±24km**, ML3.7,**
**Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | | h m s | ISC |
| **SPN** | **Mys Shipunski** | **0.64** | **318** | *i* P | Pn | 20 31 50.9 | -0.7 |
| SPN | | | | *i* S | Sg | 20 31 58.2 | -0.3 |
| **NLC** | **Nalytchevo** | **1.00** | **303** | *e*P | Pb | 20 31 56.1 | -0.1 |
| NLC | | | | *e*S | Sb | 20 32 07.7 | -1.4 |
| **SDLR** | **Sedlovina** | **1.29** | **301** | *i* P | Pn | 20 32 00.9 | 0.0 |
| **UGLR** | **Uglovaya** | **1.29** | **297** | *i* P | Pn | 20 32 01.0 | +0.2 |
| **PET** | **Petropavlovsk** | **1.32** | **288** | *e*P | Pn | 20 32 01.4 | +0.3 |
| PET | | | | *e*S | Sn | 20 32 16.7 | -1.6 |
| **SMAR** | **Somma** | **1.33** | **299** | *i* P | Pn | 20 32 01.2 | -0.3 |
| **AVH** | **Avacha** | **1.36** | **298** | *e*P | Pb | 20 32 02.2 | -0.4 |
| **RUS** | **Russkaya** | **1.37** | **263** | *i* P | Pb | 20 32 02.4 | -0.2 |
| RUS | | | | *i* S | Sn | 20 32 18.7 | -0.8 |
| **KOK** | **Koryaka** | **1.43** | **298** | *e*P | Pb | 20 32 03.4 | -0.4 |
| **KRX** | **Arik** | **1.46** | **301** | *e*P | Pn | 20 32 03.3 | +0.2 |
| **MTVR** | **Mutnovka** | **1.56** | **266** | *e*P | Pb | 20 32 05.6 | -0.5 |
| MTVR | | | | *e*S | Sn | 20 32 24.4 | -0.2 |
| **KII** | **Karymskiy** | **1.60** | **332** | *e*P | Pb | 20 32 06.7 | 0.0 |
| KII | | | | *e*S | Sb | 20 32 27.8 | +1.1 |
| **ASAK** | **Asacha** | **1.75** | **263** | *e*P | Pb | 20 32 08.7 | -0.5 |
| ASAK | | | | *e*S | Sb | 20 32 30.7 | -0.2 |
| **GNL** | **Ganaly** | **1.99** | **303** | *e*P | Pb | 20 32 12.2 | -1.1 |
| GNL | | | | *e*S | Sn | 20 32 36.2 | +1.1 |
| **MKZ** | **Mys Kozlova** | **2.02** | **17** | *e*P | Pb | 20 32 12.8 | -0.8 |
| MKZ | | | | *e*S | Sb | 20 32 37.9 | -0.4 |
| **APC** | **Apacha** | **2.19** | **279** | *e*P | Pb | 20 32 15.5 | -1.1 |
| APC | | | | *e*S | Sb | 20 32 42.4 | -1.0 |
| **KZV** | **Kizimen** | **2.50** | **354** | *e*P | Pb | 20 32 20.8 | -1.2 |
| KZV | | | | *e*S | Sb | 20 32 50.2 | -2.5 |
| **TUMR** | **Tumrok** | **2.68** | **353** | *i* P | Pb | 20 32 23.2 | -1.8 |
| **PAU** | **Pauzhetka** | **2.69** | **246** | P | Pb | 20 32 23.4 | -1.6 |
| **KMNR** | **Kamenistaya** | **3.14** | **355** | *e*P | Pb | 20 32 30.9 | -2.0 |
| **KBTR** | **Krutoberegovo** | **3.79** | **18** | *e*P | Pn | 20 32 38.4 | +3.5 |
| **BKI** | **Bering** | **4.03** | **48** | *e*S | Sn | 20 33 24.5 | -0.4 |

**IDC 05 20:32:37.7±1.4, 40°.77N×66°.23E, h0km, mb3.3/1, mb1 3.5/5, mb1mx3.3/48, mbtmp3.5/5, ML3.4/4, Error ellipse: s-maj=20.9km s-min=12.9km az=158.0, Southeastern Uzbekistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAK | Ala-Archa | 6.46 | 71 | Pn | Pn | 20 34 14.7 | +0.4 |
| | 1.0nm,0.3s,baz=248,slow=12,SNR=11 | | | | | | |
| AAK | | | | Sn | Sn | 20 35 28.5 | -0.5 |
| | 0.4nm,0.3s,baz=131,slow=19,SNR=2.7 | | | | | | |
| AAK | | | | Lg | Lg | 20 36 04.6 | |
| | 0.6nm,0.3s,baz=198,slow=20,SNR=2.4 | | | | | | |
| GEYT | Alibeck | 6.89 | 248 | Pn | Pn | 20 34 19.2 | -0.9 |
| | 1.5nm,0.3s,baz=70,slow=12,SNR=12 | | | | | | |
| GEYT | | | | Sn | Sn | 20 35 29.6 | -10 |
| | 1.3nm,0.3s,baz=84,slow=15,SNR=3.6 | | | | | | |
| GEYT | | | | Lg | Lg | 20 36 21.4 | |
| | baz=56,slow=38,SNR=2.7 | | | | | | |
| AKTO | Aktyubinsk | 11.24 | 332 | Sn | Sn | 20 37 13.8 | -12 |
| | 0.2nm,0.3s,baz=13,slow=18,SNR=2.0 | | | | | | |
| AKTO | | | | Lg | Lg | 20 38 23.7 | |
| | 0.1nm,0.3s,baz=180,slow=20,SNR=2.3 | | | | | | |
| BVAR | Borovoye Array | 12.58 | 12 | Pn | Pn | 20 35 34.3 | -3.6 |
| | 0.7nm,0.3s,baz=188,slow=12,SNR=16 | | | | | | |
| BVAR | | | | Sn | Sn | 20 37 47.7 | -11 |
| | 0.2nm,0.3s,baz=195,slow=20,SNR=3.1 | | | | | | |
| BVAR | | | | Lg | Lg | 20 39 18.1 | |
| | 0.2nm,0.3s,baz=183,slow=27,SNR=2.8 | | | | | | |
| KURBB | Kurchatov Arra | 13.06 | 37 | Lg | Lg | 20 39 31.4 | |
| | 0.0nm,0.3s,baz=222,slow=29,SNR=4.0 | | | | | | |
| MKAR | Makanchi Array | 13.07 | 57 | Pn | Pn | 20 35 47.4 | +2.8 |
| | 0.1nm,0.3s,baz=240,slow=12,SNR=3.5 | | | | | | |
| ZALV | Zalesovo Beam | 18.16 | 37 | P | Pn | 20 36 49.6 | -1.4 |
| | 0.1nm,0.3s,baz=240,slow=13,SNR=2.7 | | | | | | |
| TORD | Torodi Ar. Bea | 62.28 | 263 | P | P | 20 43 02.1 | +0.4 |
| | 0.3nm,0.8s,baz=50,slow=7.6,SNR=2.7 | | | | | | |

*CSEM 05 20:38:02.3, 46°.07N×14°.91E, h0km, ML0.5, After LJU*
**LJU 05 20:38:02.3, 46°.07N×14°.91E, h6km, ML0.5, 3C-2D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDKS | Podkum | 0.06 | 102 | ⇑iPg | Pg | 20 38 04.2 | +0.1 |
| PDKS | | | | i Sg | Sg | 20 38 05.4 | +0.1 |
| | comp=Z,15nm,0.1s | | | | | | |
| PDKS | Podkum | 0.06 | 102 | ⇑iPg | Pg | 20 38 04.2 | +0.2 |
| PDKS | | | | i Sg | Sg | 20 38 05.4 | +0.1 |
| | comp=Z,15nm,0.1s | | | | | | |
| VNDS | Vrh nad Dolski | 0.15 | 281 | ⇑iPg | Pg | 20 38 05.7 | +0.3 |
| VNDS | | | | i Sg | Sg | 20 38 07.7 | +0.2 |
| | comp=Z,8.0nm,0.1s | | | | | | |
| LJU | Ljubljana | 0.27 | 264 | i Sg | Sg | 20 38 11.5 | +0.3 |
| LJU | Ljubljana | 0.27 | 264 | i Sg | Sg | 20 38 11.5 | +0.3 |
| VISS | Visnje | 0.28 | 190 | ⇓iPg | Pg | 20 38 08.0 | +0.2 |
| VISS | | | | i Sg | Sg | 20 38 11.7 | +0.3 |
| | comp=Z,2.0nm,0.1s | | | | | | |
| VISS | Visnje | 0.28 | 190 | ⇓iPg | Pg | 20 38 08.0 | +0.3 |
| VISS | | | | i Sg | Sg | 20 38 11.7 | +0.3 |
| | comp=Z,2.0nm,0.1s | | | | | | |
| LEGS | Legarje | 0.31 | 114 | i Pg | Pg | 20 38 08.7 | +0.3 |
| LEGS | | | | i Sg | Sg | 20 38 13.0 | +0.4 |
| LEGS | Legarje | 0.31 | 114 | i Pg | Pg | 20 38 08.7 | +0.3 |
| LEGS | | | | i Sg | Sg | 20 38 13.0 | +0.4 |
| MOZS | Mozjanca | 0.39 | 304 | i Pg | Pg | 20 38 10.3 | +0.3 |
| MOZS | | | | i Sg | Sg | 20 38 15.7 | +0.5 |
| | comp=Z,1.0nm,0.1s | | | | | | |
| MOZS | Mozjanca | 0.39 | 304 | i Pg | Pg | 20 38 10.3 | +0.3 |
| MOZS | | | | i Sg | Sg | 20 38 15.7 | +0.5 |
| | comp=Z,1.0nm,0.1s | | | | | | |
| CRNS | Crni Vrh | 0.45 | 271 | i Pg | Pg | 20 38 11.3 | +0.2 |
| CRNS | | | | i Sg | Sg | 20 38 17.6 | +0.5 |
| CRES | Cresnjev | 0.46 | 123 | i Sg | Sg | 20 38 17.3 | +0.1 |
| CRES | Cresnjev | 0.46 | 123 | i Sg | Sg | 20 38 17.3 | +0.2 |

*ISCJB 05 20:38:56.2±0.3, 62°.63N±0°.04×125°.26W±0°.05, h10km, mb3.6/7, Error ellipse: s-maj=5.2km s-min=3.1km az=174.5*
*IDC 05 20:38:57.9±0.6, 62°.68N×125°.17W, h0km, mb3.6/7, mb1 3.9/12, mb1mx3.6/55, mbtmp3.7/12, ML3.8/5, Error ellipse: s-maj=12.6km s-min=10.2km az=180.0*
*NEIC 05 20:38:58.5, 62°.62N×125°.18W, h1km, mb3.9/2, ML4.1(OTT), After OTT.*
*PGC 05 20:38:58.5±0.0, 62°.62N×125°.18W, h1km, ML4.1/21, 224km Wnw of Fort Simpson, Nt Northwest Territories, Canada*
**ISC 05 20:38:57.8±0.6, 62°.64N±0°.04×125°.17W±0°.03, h10km, n69, σ2ˢ.06/91, mb3.7/7, Northwest Territories**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNBB | Fort Nelson | 3.90 | 163 | Pn | Pn | 20 39 58.6 | +0.8 |
| FNBB | | | | Sn | Sn | 20 40 43.1 | -0.5 |
| FNBB | | | | Sg | Sg | 20 40 59.4 | -3.6 |
| FNBB | Fort Nelson | 3.90 | 163 | Pn | Pn | 20 39 58.6 | +0.8 |
| FNBB | | | | Sn | Sn | 20 40 43.1 | -0.5 |
| FNBB | | | | Sg | Sg | 20 40 59.4 | -3.6 |
| CLVN | Colville Lake | 4.44 | 355 | Pn | Pn | 20 40 06.4 | +1.3 |
| CLVN | Colville Lake | 4.44 | 355 | Pn | Pn | 20 40 06.4 | +1.3 |
| YKR1 | Yellowknife Ar | 4.73 | 87 | Pn | Pn | 20 40 09.9 | +0.8 |
| YKR1 | Yellowknife Ar | 4.73 | 87 | Pn | Pn | 20 40 09.9 | +0.8 |
| YKR2 | Yellowknife Ar | 4.76 | 87 | Pn | Pn | 20 40 10.3 | +0.9 |
| YKR2 | Yellowknife Ar | 4.76 | 87 | Pn | Pn | 20 40 10.3 | +0.9 |
| YKR3 | Yellowknife Ar | 4.78 | 87 | Pn | Pn | 20 40 10.3 | +0.6 |
| YKR3 | Yellowknife Ar | 4.78 | 87 | Pn | Pn | 20 40 10.3 | +0.6 |
| YKR4 | Yellowknife Ar | 4.80 | 87 | Pn | Pn | 20 40 10.8 | +0.8 |
| YKR4 | Yellowknife Ar | 4.80 | 87 | Pn | Pn | 20 40 10.8 | +0.8 |
| YKR5 | Yellowknife Ar | 4.82 | 87 | Pn | Pn | 20 40 11.3 | +1.0 |
| YKR5 | Yellowknife Ar | 4.82 | 87 | Pn | Pn | 20 40 11.3 | +1.0 |
| DLBC | Dease Lake | 4.84 | 212 | Pn | Pn | 20 40 12.0 | +1.2 |
| | 3.2nm,0.3s,baz=30,slow=12,SNR=17 | | | | | | |
| DLBC | | | | Sn | Sn | 20 41 08.3 | +1.4 |
| | 3.5nm,0.3s,baz=342,slow=27,SNR=4.3 | | | | | | |
| DLBC | | | | Lg | Lg | 20 41 25.9 | |
| | 2.8nm,0.3s,baz=232,slow=19,SNR=3.6 | | | | | | |
| DLBC | Dease Lake | 4.84 | 212 | Pn | Pn | 20 40 11.2 | +0.4 |
| DLBC | | | | Sg | Sg | 20 41 27.8 | -5.4 |
| DLBC | Dease Lake | 4.84 | 212 | ePn | Pn | 20 40 10.6 | -0.2 |
| DLBC | | | | eSn | Sn | 20 41 08.0 | +1.1 |
| DLBC | | | | Lg | Lg | 20 41 25.9 | |
| YKR7 | Yellowknife Ar | 4.87 | 87 | Pn | Pn | 20 40 11.8 | +0.8 |
| YKR7 | Yellowknife Ar | 4.87 | 87 | Pn | Pn | 20 40 11.8 | +0.8 |
| YKW3 | Yellowknife Ar | 4.88 | 86 | Pn | Pn | 20 40 11.9 | +0.8 |
| YKW3 | | | | Sn | Sn | 20 41 04.9 | -2.7 |
| YKW3 | | | | Sg | Sg | 20 41 30.3 | -4.0 |
| YKB0 | Yellowknife Ar | 4.88 | 86 | Pn | Pn | 20 40 12.2 | +1.0 |
| YKB0 | | | | Sg | Sg | 20 41 30.0 | -4.3 |
| YKB0 | Yellowknife Ar | 4.88 | 86 | Pn | Pn | 20 40 12.2 | +1.0 |
| YKB0 | | | | Sg | Sg | 20 41 30.0 | -4.3 |
| YKB9 | Yellowknife Ar | 4.88 | 86 | Pn | Pn | 20 40 12.1 | +0.9 |
| YKB8 | Yellowknife Ar | 4.88 | 86 | Pn | Pn | 20 40 11.9 | +0.7 |
| YKB8 | | | | Sg | Sg | 20 41 29.8 | -4.7 |
| YKB7 | Yellowknife Ar | 4.89 | 86 | Pn | Pn | 20 40 11.7 | +0.5 |
| YKB7 | | | | Sg | Sg | 20 41 30.2 | -4.3 |
| YKB6 | Yellowknife Ar | 4.89 | 87 | Pn | Pn | 20 40 11.9 | +0.6 |
| YKA | Yellowknife Ar | 4.89 | 87 | Pn | Pn | 20 40 12.0 | +0.7 |
| | 2.6nm,0.3s,baz=270,slow=13,SNR=49 | | | | | | |
| YKA | | | | Pg | Pb | 20 40 24.2 | +0.8 |
| | 3.5nm,0.3s,baz=271,slow=13,SNR=12 | | | | | | |
| YKA | | | | Sn | Sn | 20 41 06.2 | -1.7 |
| | 5.2nm,0.3s,baz=273,slow=23,SNR=4.9 | | | | | | |
| YKA | | | | Lg | Lg | 20 41 27.5 | |
| | 11nm,0.3s,baz=276,slow=31,SNR=6.7 | | | | | | |
| YKR8 | Yellowknife Ar | 4.89 | 87 | Pn | Pn | 20 40 12.0 | +0.7 |
| YKB4 | Yellowknife Ar | 4.89 | 87 | Pn | Pn | 20 40 12.3 | +1.0 |
| YKB3 | Yellowknife Ar | 4.90 | 87 | Pn | Pn | 20 40 12.7 | +1.3 |
| YKB3 | | | | Sg | Sg | 20 41 30.4 | -4.4 |
| YKB2 | Yellowknife Ar | 4.90 | 88 | Pn | Pn | 20 40 13.0 | +1.6 |
| YKB1 | Yellowknife Ar | 4.90 | 88 | Pn | Pn | 20 40 12.7 | +1.3 |
| YKB1 | | | | Sg | Sg | 20 41 30.4 | -4.6 |
| YKR9 | Yellowknife Ar | 4.91 | 87 | Pn | Pn | 20 40 12.1 | +0.5 |
| WHY | Whitehorse | 5.04 | 251 | Pn | Pn | 20 40 13.8 | +0.4 |
| WHY | | | | Sn | Sn | 20 41 10.5 | -1.1 |
| WHY | | | | Sg | Sg | 20 41 34.6 | -4.7 |
| WHY | Whitehorse | 5.04 | 251 | Pn | Pn | 20 40 13.8 | +0.4 |
| WHY | | | | Sn | Sn | 20 41 10.5 | -1.1 |
| WHY | | | | Sg | Sg | 20 41 34.6 | -4.7 |
| HYT | Haines Junctio | 6.13 | 258 | Pn | Pn | 20 40 29.3 | +0.8 |
| HYT | | | | Sg | Sg | 20 42 08.0 | -6.5 |
| HYT | Haines Junctio | 6.13 | 258 | Pn | Pn | 20 40 29.3 | +0.8 |
| HYT | | | | Sg | Sg | 20 42 08.0 | -6.5 |
| PLBC | Pleasant Camp | 6.30 | 245 | Pn | Pn | 20 40 31.5 | +0.8 |
| PLBC | | | | Sn | Sn | 20 41 39.5 | -3.1 |
| PLBC | | | | Sg | Sg | 20 42 11.8 | -8.0 |
| PLBC | Pleasant Camp | 6.30 | 245 | Pn | Pn | 20 40 31.5 | +0.8 |
| PLBC | | | | Sn | Sn | 20 41 39.5 | -3.1 |
| PLBC | | | | Sg | Sg | 20 42 11.8 | -8.0 |
| YUK4 | Talbot Arm | 6.48 | 264 | Pn | Pn | 20 40 32.7 | -0.6 |
| YUK7 | Dusty Glacier | 6.54 | 257 | Pn | Pn | 20 40 35.4 | +1.2 |
| DAWY | Dawson | 6.56 | 289 | Pn | Pn | 20 40 34.6 | +0.4 |
| DAWY | Dawson | 6.56 | 289 | Pn | Pn | 20 40 34.6 | +0.4 |
| INK | Inuvik | 6.67 | 332 | Pn | Pn | 20 40 35.6 | 0.0 |
| | 2.7nm,0.3s,baz=150,slow=9.0,SNR=19 | | | | | | |
| INK | | | | Sn | Sn | 20 41 48.2 | -3.3 |
| | 3.1nm,0.3s,baz=125,slow=29,SNR=6.2 | | | | | | |
| INK | | | | Lg | Lg | 20 42 28.0 | |
| | 2.1nm,0.3s,baz=218,slow=19,SNR=3.5 | | | | | | |
| INK | Inuvik | 6.67 | 332 | Pn | Pn | 20 40 35.6 | 0.0 |
| INK | | | | Sn | Sn | 20 41 47.5 | -4.0 |
| KUKN | Kugluktuk,NWT | 6.71 | 35 | Pn | Pn | 20 40 37.2 | +1.0 |
| YUK1 | Sand Pete Hill | 7.15 | 273 | Pn | Pn | 20 40 42.4 | -0.1 |
| YUK3 | Moose Creek | 7.20 | 270 | Pn | Pn | 20 40 43.1 | -0.1 |
| BVCY | Beaver Creek | 7.26 | 275 | Pn | Pn | 20 40 43.9 | 0.0 |
| YUK2 | White River | 7.38 | 270 | Pn | Pn | 20 40 45.3 | -0.2 |
| EGAK | Eagle | 7.42 | 294 | ePn | Pn | 20 40 45.9 | 0.0 |
| EGAK | | | | eSg | Sb | 20 42 42.3 | +7.6 |
| SNLN | Sandy Lake, NW | 8.06 | 81 | Pn | Pn | 20 40 56.0 | +1.3 |
| SNLN | Sandy Lake, NW | 8.06 | 81 | Pn | Pn | 20 40 56.0 | +1.3 |
| ILAR | Eielson Array | 9.86 | 292 | Pn | Pn | 20 41 19.8 | +0.5 |
| | 0.1nm,0.3s,baz=99,slow=11,SNR=8.4 | | | | | | |
| ILAR | | | | Lg | Lg | 20 44 04.4 | |
| | 0.1nm,0.3s,baz=88,slow=26,SNR=2.6 | | | | | | |
| SML | Sawmill | 10.82 | 276 | P | Pn | 20 41 34.4 | +1.8 |
| EDM | Edmonton | 11.31 | 141 | eP | Pn | 20 41 35.8 | -3.6 |
| FFC | Flin Flon | 14.36 | 113 | Pn | Pn | 20 42 17.1 | -3.8 |
| WALA | Waterton Lakes | 14.97 | 150 | P | Pn | 20 42 28.2 | -1.1 |
| RES | Resolute Bay | 16.05 | 29 | Pn | Pn | 20 42 42.4 | -0.8 |
| | 1.3nm,0.3s,baz=214,slow=11,SNR=3.8 | | | | | | |
| EGMT | Eagleton | 16.99 | 142 | eP | Pn | 20 42 54.5 | -0.9 |
| | 7.3nm,0.8s | | | | | | |
| LOHW | Long Hollow | 20.87 | 149 | eP | Pn | 20 43 43.7 | +1.2 |
| | 3.8nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 24.60 | 167 | P | P | 20 44 21.8 | +3.6 |
| | 0.6nm,0.5s,baz=348,slow=8.4,SNR=3.9 | | | | | | |
| TXAR | Lajitas Array | 36.13 | 147 | P | P | 20 46 02.8 | +2.9 |
| | 0.2nm,0.6s,baz=21,slow=5.8,SNR=2.4 | | | | | | |
| HFS | Hagfors | 53.59 | 24 | P | P | 20 48 20.6 | +2.2 |
| | 5.8nm,1.0s,baz=3.4,slow=7.2,SNR=2.7 | | | | | | |
| ZALV | Zalesovo Beam | 61.40 | 340 | P | P | 20 49 13.4 | 0.0 |
| | 0.5nm,0.5s,baz=0.0,slow=4.9,SNR=2.6 | | | | | | |
| KURK | Kurchatov | 65.43 | 344 | P | P | 20 49 42.1 | +2.0 |
| KURBB | Kurchatov Arra | 65.54 | 344 | P | P | 20 49 42.1 | +1.3 |
| | 0.5nm,0.7s,baz=12,slow=6.1,SNR=4.6 | | | | | | |
| ESDC | Sonseca Array | 67.72 | 46 | P | P | 20 49 56.5 | +1.5 |
| | 0.3nm,0.5s,baz=337,slow=7.0,SNR=2.6 | | | | | | |
| MKAR | Makanchi Array | 68.74 | 340 | P | P | 20 50 02.0 | +0.7 |
| | 0.2nm,0.5s,baz=13,slow=4.4,SNR=3.4 | | | | | | |

*CSEM 05 20:42:41.0±0.1, 40°.79N×22°.22E, h0km, MD3.1, Error ellipse: s-maj=3.3km s-min=2.3km az=152.0*
*THE 05 20:42:41.5, 40°.78N×22°.22E, h2km±2km, ML2.5/4, Error ellipse: s-maj=2.2km s-min=0.5km az=201.0*
*ATH 05 20:42:41.2, 40°.79N×22°.21E, h14km±1km, MD3.1/20*
**ISC 05 20:42:41.5±0.9, 40°.80N±0°.02×22°.21E±0°.02, h8km±9km, n81, σ0ˢ.72/110, 1C, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRG | Griva | 0.22 | 42 | ePG | Pg | 20 42 45.8 | -0.2 |
| GRG | | | | eSG | Sg | 20 42 49.9 | +0.9 |
| GRG | Griva | 0.22 | 42 | P | Pg | 20 42 45.7 | -0.2 |
| GRG | | | | S | Sg | 20 42 49.7 | +0.7 |
| GRG | Griva | 0.22 | 42 | P | Pg | 20 42 45.7 | -0.2 |
| GRG | | | | S | Sg | 20 42 49.7 | +0.7 |
| KZN | Kozani | 0.59 | 214 | ePB | Pg | 20 42 52.0 | -0.9 |
| KZN | Kozani | 0.59 | 214 | P | Pg | 20 42 52.1 | -0.9 |
| KZN | Kozani | 0.59 | 214 | P | Pg | 20 42 52.1 | -0.9 |
| THE | Thessaloniki | 0.60 | 106 | ePB | Pg | 20 42 52.7 | -0.4 |
| THE | Thessaloniki | 0.60 | 106 | P | Pg | 20 42 52.7 | -0.4 |
| THE | Thessaloniki | 0.60 | 106 | P | Pg | 20 42 52.7 | -0.4 |
| FNA | Florina | 0.63 | 269 | ePG | Pg | 20 42 53.1 | -0.6 |
| FNA | | | | eSB | Sg | 20 43 02.1 | +0.1 |
| FNA | Florina | 0.63 | 269 | P | Pg | 20 42 53.1 | -0.6 |
| FNA | | | | S | Sb | 20 43 03.1 | -0.8 |
| FNA | Florina | 0.63 | 269 | P | Pg | 20 42 53.1 | -0.6 |
| FNA | | | | eSb | Sg | 20 43 02.1 | +0.1 |
| FNA | | | | S | Sb | 20 43 03.1 | -0.8 |
| KNT | Kendrikon | 0.64 | 55 | P | Pg | 20 42 53.5 | -0.3 |
| KNT | | | | S | Sg | 20 43 02.6 | +0.4 |
| KNT | Kendrikon | 0.64 | 55 | P | Pg | 20 42 53.5 | -0.3 |
| KNT | | | | S | Sg | 20 43 02.6 | +0.4 |
| HORT | Hortiatis | 0.71 | 106 | ePB | Pg | 20 42 55.1 | -0.1 |
| HORT | | | | eSB | Sg | 20 43 04.7 | +0.3 |
| HORT | Hortiatis | 0.71 | 106 | P | Pg | 20 42 55.0 | -0.1 |
| HORT | Hortiatis | 0.71 | 106 | P | Pg | 20 42 55.0 | -0.1 |
| HORT | | | | eSb | Sg | 20 43 04.7 | +0.3 |
| LIT | Litokhoron | 0.73 | 163 | ePB | Pg | 20 42 54.9 | -0.6 |
| LIT | Litokhoron | 0.73 | 163 | ePb | Pg | 20 42 54.9 | -0.6 |
| SOH | Sokhos | 0.87 | 88 | ePG | Pg | 20 42 57.3 | -1.0 |
| SOH | | | | eSB | Sg | 20 43 09.7 | +0.1 |
| SOH | Sokhos | 0.87 | 88 | P | Pg | 20 42 57.5 | -0.8 |
| SOH | | | | S | Sg | 20 43 10.0 | +0.4 |
| SOH | Sokhos | 0.87 | 88 | P | Pg | 20 42 57.5 | -0.8 |
| SOH | | | | eSb | Sg | 20 43 09.7 | +0.1 |
| SOH | | | | S | Sg | 20 43 10.0 | +0.4 |
| NEST | Nestorio | 0.96 | 247 | ePN | Pg | 20 42 59.8 | -0.2 |
| NEST | Nestorio | 0.96 | 247 | P | Pg | 20 42 59.2 | -0.8 |
| NEST | Nestorio | 0.96 | 247 | P | Pg | 20 42 59.2 | -0.8 |
| NEST | Nestorio | 0.96 | 247 | ePn | Pg | 20 42 59.8 | -0.2 |
| PLG | Polygyros | 1.03 | 114 | ePG | Pg | 20 43 00.5 | -0.8 |
| PLG | | | | eSB | Sg | 20 43 14.3 | -0.5 |
| PLG | Polygyros | 1.03 | 114 | P | Pg | 20 43 00.9 | -0.5 |
| PLG | Polygyros | 1.03 | 114 | ePg | Pg | 20 43 00.5 | -0.8 |
| PLG | Polygyros | 1.03 | 114 | P | Pg | 20 43 00.9 | -0.5 |
| PLG | | | | eSb | Sg | 20 43 14.3 | -0.5 |
| SRS | Serrai | 1.10 | 73 | ePG | Pg | 20 43 01.4 | -1.2 |
| SRS | Serrai | 1.10 | 73 | P | Pg | 20 43 01.4 | -1.2 |
| SRS | | | | S | Sb | 20 43 17.2 | 0.0 |
| SRS | Serrai | 1.10 | 73 | P | Pg | 20 43 01.4 | -1.2 |
| SRS | | | | S | Sb | 20 43 17.2 | 0.0 |
| THL | Klokotos Trika | 1.24 | 187 | ePB | Pg | 20 43 04.8 | -0.5 |
| THL | | | | eSB | Sg | 20 43 21.0 | -0.3 |
| THL | Klokotos Trika | 1.24 | 187 | P | Pg | 20 43 04.2 | -1.1 |
| THL | | | | S | Sb | 20 43 22.0 | +0.8 |
| THL | Klokotos Trika | 1.24 | 187 | P | Pg | 20 43 04.2 | -1.1 |
| THL | Klokotos Trika | 1.24 | 187 | ePb | Pg | 20 43 04.8 | -0.5 |
| THL | | | | eSb | Sg | 20 43 21.0 | -0.3 |
| THL | | | | S | Sb | 20 43 22.0 | +0.8 |
| NVR | Nevrokopi | 1.37 | 66 | ePB | Pn | 20 43 06.8 | -0.1 |
| NVR | Nevrokopi | 1.37 | 66 | P | Pn | 20 43 06.8 | -0.1 |
| NVR | Nevrokopi | 1.37 | 66 | P | Pn | 20 43 06.8 | -0.1 |
| PAIG | Paliouri | 1.42 | 127 | ePG | Pn | 20 43 07.2 | -0.4 |
| PAIG | | | | eSB | Sb | 20 43 26.8 | +0.3 |
| PAIG | Paliouri | 1.42 | 127 | P | Pn | 20 43 06.8 | -0.8 |
| PAIG | Paliouri | 1.42 | 127 | P | Pn | 20 43 06.8 | -0.8 |
| PAIG | Paliouri | 1.42 | 127 | ePg | Pn | 20 43 07.2 | -0.4 |
| PAIG | | | | eSb | Sb | 20 43 26.8 | +0.3 |
| OUR | Ouranopolis | 1.43 | 108 | ePG | Pn | 20 43 07.5 | -0.2 |
| OUR | | | | eSB | Sn | 20 43 27.4 | +0.8 |
| OUR | Ouranopolis | 1.43 | 108 | P | Pn | 20 43 07.2 | -0.5 |
| OUR | Ouranopolis | 1.43 | 108 | P | Pn | 20 43 07.2 | -0.5 |
| OUR | Ouranopolis | 1.43 | 108 | ePg | Pn | 20 43 07.5 | -0.2 |
| OUR | | | | eSb | Sn | 20 43 27.4 | +0.8 |
| XOR | Xorichti | 1.61 | 152 | ePB | Pb | 20 43 11.3 | -0.3 |
| XOR | Xorichti | 1.61 | 152 | ePb | Pb | 20 43 11.3 | -0.3 |
| KAVA | Kavala | 1.76 | 83 | P | Pn | 20 43 12.6 | +0.3 |
| KAVA | Kavala | 1.76 | 83 | P | Pn | 20 43 12.6 | +0.3 |
| AGG | Agios Georgios | 1.77 | 177 | ePN | Pn | 20 43 13.5 | +1.0 |
| AGG | Agios Georgios | 1.77 | 177 | ePn | Pn | 20 43 13.5 | +1.0 |
| MAKR | Makrakomi, Fth | 1.78 | 182 | ePN | Pn | 20 43 13.4 | +0.8 |
| MAKR | Makrakomi, Fth | 1.78 | 182 | ePn | Pn | 20 43 13.4 | +0.8 |
| DSL | Palaion Diasel | 1.87 | 208 | ePN | Pn | 20 43 14.9 | +1.1 |
| DSL | | | | eSN | Sb | 20 43 39.5 | +0.1 |
| DSL | Palaion Diasel | 1.87 | 208 | ePn | Pn | 20 43 14.9 | +1.1 |
| DSL | | | | eSn | Sb | 20 43 39.5 | +0.1 |
| EVR | Evrytania | 1.90 | 189 | ePN | Pn | 20 43 14.7 | +0.4 |
| EVR | Evrytania | 1.90 | 189 | ePn | Pn | 20 43 14.7 | +0.4 |
| IGT | Igoumenitsa | 1.91 | 229 | ePG | Pb | 20 43 16.1 | -0.5 |
| IGT | Igoumenitsa | 1.91 | 229 | ePg | Pb | 20 43 16.1 | -0.5 |
| SGD | Sagiada | 1.92 | 233 | ePN | Pb | 20 43 16.1 | -0.6 |
| SGD | Sagiada | 1.92 | 233 | ePn | Pb | 20 43 16.1 | -0.6 |
| BARS | Barje | 2.04 | 352 | ePn | Pn | 20 43 16.5 | +0.3 |
| AOS | Alonnisos | 2.07 | 141 | ePB | Pn | 20 43 16.4 | -0.2 |
| PDO | Prodromos | 2.33 | 200 | ePN | Pn | 20 43 21.1 | +0.9 |
| PDO | Prodromos | 2.33 | 200 | ePn | Pn | 20 43 21.1 | +0.9 |
| LKD2 | Lefkada island | 2.33 | 211 | ePN | Pn | 20 43 21.5 | +1.3 |
| LKD2 | Lefkada island | 2.33 | 211 | ePn | Pn | 20 43 21.5 | +1.3 |
| EFP | Efpalio | 2.38 | 186 | ePN | Pn | 20 43 22.1 | +1.3 |
| EFP | Efpalio | 2.38 | 186 | ePn | Pn | 20 43 22.1 | +1.3 |
| SERG | Sergoula | 2.38 | 183 | ePN | Pn | 20 43 22.0 | +1.1 |
| SERG | Sergoula | 2.38 | 183 | ePn | Pn | 20 43 22.0 | +1.1 |
| KALE | Kalithea | 2.40 | 181 | ePN | Pn | 20 43 22.9 | +1.7 |
| KALE | Kalithea | 2.40 | 181 | ePn | Pn | 20 43 22.9 | +1.7 |
| DRO | Drossia | 2.87 | 188 | ePN | Pn | 20 43 28.4 | +0.9 |
| DRO | Drossia | 2.87 | 188 | ePn | Pn | 20 43 28.4 | +0.9 |
| DID | Didima | 3.38 | 166 | ePN | Pn | 20 43 35.3 | +0.7 |
| DID | Didima | 3.38 | 166 | ePn | Pn | 20 43 35.3 | +0.7 |
| BZS | Buzias | 4.84 | 355 | ⇑iP | Pn | 20 43 54.8 | +0.2 |

**JMA 05 20:48:38.4±0.2, 39°.83N×143°.86E, h46km, M3.7, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JTH | Tanohata | 1.54 | 275 | P | Pn | 20 49 04.0 | +0.6 |
| JTH | | | | eS | Sn | 20 49 23.0 | +0.8 |
| MIYJ | Miyakonagasawa | 1.59 | 262 | P | Pn | 20 49 05.1 | +1.0 |
| MIYJ | | | | eS | Sn | 20 49 24.6 | +1.0 |
| JANG | Nango | 1.88 | 288 | P | Pn | 20 49 09.0 | +0.9 |
| JOM | Ohasama | 2.01 | 261 | P | Pn | 20 49 11.3 | +1.4 |
| JOM | | | | S | Sn | 20 49 35.5 | +1.6 |
| JMK | Ichinoseki | 2.23 | 248 | P | Pn | 20 49 13.3 | +0.5 |
| JMK | | | | eS | Sn | 20 49 39.2 | +0.1 |
| JNBK | Urakawa-nobuka | 2.59 | 341 | P | Pn | 20 49 19.7 | +2.0 |
| JNBK | | | | eS | Sn | 20 49 50.1 | +2.2 |
| JOT | Ohata | 2.64 | 307 | P | Pn | 20 49 20.5 | +2.0 |
| JOT | | | | eS | Sn | 20 49 51.3 | +2.0 |
| JCH | Churui | 2.81 | 352 | P | Pn | 20 49 21.9 | +1.1 |
| JCH | | | | eS | Sn | 20 49 54.3 | +0.9 |
| JYK | Kaneyama | 2.86 | 253 | P | Pn | 20 49 22.7 | +1.2 |
| JYK | | | | eS | Sn | 20 49 56.1 | +1.3 |
| JKB | Kayabe | 2.97 | 315 | P | Pn | 20 49 25.0 | +2.0 |
| JKB | | | | eS | Sn | 20 49 58.7 | +1.4 |
| JAK | Akkeshi | 3.23 | 11 | P | Pn | 20 49 26.7 | +0.2 |
| JAK | | | | eS | Sn | 20 50 03.0 | -0.6 |
| JAR | Ashorobuto | 3.46 | 359 | P | Pn | 20 49 30.1 | +0.3 |
| JAR | | | | S | Sn | 20 50 09.0 | -0.6 |
| NEM2 | Nemuro 2 | 3.80 | 21 | P | Pn | 20 49 33.4 | -1.0 |
| NEM2 | | | | eS | Sn | 20 50 14.9 | -3.0 |
| JTKR | Abashiri--Toko | 4.14 | 0 | P | Pn | 20 49 39.9 | +0.9 |
| JTKR | | | | S | Sn | 20 50 25.7 | -0.4 |
| JHR | Hokuryu | 4.22 | 338 | P | Pn | 20 49 43.5 | +3.3 |
| JHR | | | | eS | Sn | 20 50 31.6 | +3.4 |

**IDC 05 20:54:31.1±1.9, 8°.77S×127°.33E, h0km, mb3.4/1, mb1 3.4/3, mb1mx3.2/35, mbtmp3.3/3, ML3.3/2, MS3.1/1, Ms1 3.1/1, ms1mx2.7/13, Error ellipse: s-maj=200.2km s-min=32.1km az=62.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 13.02 | 149 | Pn | Pn | 20 57 37.5 | 0.0 |
| | 0.1nm,0.3s,baz=324,slow=14,SNR=7.3 | | | | | | |
| WRA | | | | Sn | Sn | 20 59 57.8 | -5.5 |
| | 0.2nm,0.3s,baz=320,slow=26,SNR=5.4 | | | | | | |
| ASAR | Alice Springs | 16.10 | 158 | Pn | Pn | 20 58 18.9 | -0.1 |
| | 0.1nm,0.3s,baz=331,slow=12,SNR=4.7 | | | | | | |
| ASAR | | | | Sn | Sn | 21 01 08.4 | -10 |
| | 0.1nm,0.3s,baz=314,slow=20,SNR=3.4 | | | | | | |
| MJAR | Matsushiro Arr | 46.21 | 12 | LR | LR | 21 21 20.0 | |
| | comp=Z,24nm,21.3s,baz=260,slow=35 | | | | | | |
| MKAR | Makanchi Array | 68.29 | 328 | P | P | 21 05 34.1 | 0.0 |
| | 0.3nm,0.7s,baz=140,slow=7.6,SNR=3.2 | | | | | | |

**IDC 05 21:04:26.7±1.9, 7°.18S×151°.19E, h0km, mb3.5/3, mb1 3.8/4, mb1mx3.5/23, mbtmp3.6/4, ML1.4/1, Error ellipse: s-maj=105.5km s-min=25.9km az=131.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.56 | 241 | Pn | Pn | 21 05 38.1 | +1.1 |
| | 1.1nm,0.3s,baz=53,slow=11,SNR=3.1 | | | | | | |
| PMG | | | | Sn | Sn | 21 06 24.7 | -6.1 |
| | 3.0nm,0.3s,baz=90,slow=18,SNR=4.8 | | | | | | |
| WRA | Warramunga Arr | 20.69 | 231 | P | P | 21 09 07.6 | -1.0 |
| | 2.2nm,0.7s,baz=56,slow=12,SNR=26 | | | | | | |
| ASAR | Alice Springs | 23.33 | 223 | P | P | 21 09 36.5 | -0.2 |
| | 0.5nm,0.6s,baz=54,slow=9.0,SNR=8.7 | | | | | | |
| ILAR | Eielson Array | 84.95 | 22 | P | P | 21 17 03.5 | 0.0 |
| | 0.4nm,0.7s,baz=256,slow=5.7,SNR=3.8 | | | | | | |
| TORD | Torodi Ar. Bea | 149.42 | 284 | PKPbc | PKPbc | 21 24 18.8 | -0.1 |
| | 0.5nm,0.7s,baz=58,slow=3.1,SNR=6.7 | | | | | | |

*ISCJB 05 21:04:24.7±1.1, 28°.9S±0°.3×61°.7E±0°.2, h11km, mb3.6/7, Error ellipse: s-maj=44.2km s-min=20.6km az=11.5*
*IDC 05 21:04:24.8±1.2, 28°.82S×61°.65E, h0km, mb3.6/7, mb1 3.8/7, mb1mx3.5/38, mbtmp3.6/7, Error ellipse: s-maj=49.4km s-min=22.9km az=16.0*
**ISC 05 21:04:26.7±1.4, 28°.9S±0°.4×61°.6E±0°.2, h11km, n10, σ0ˢ.93/7, mb3.7/7, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LSZ | Lusaka | 33.69 | 286 | P | P | 21 11 08.7 | +0.5 |
| | 0.8nm,0.6s,baz=104,slow=11,SNR=4.1 | | | | | | |
| H01W2 | Cape Leeuwin H | 44.56 | 112 | T | T | 22 00 18.2 | |
| | baz=263,slow=74,SNR=3.7 | | | | | | |
| H01W3 | Cape Leeuwin H | 44.57 | 112 | T | T | 22 00 18.7 | |
| | baz=263,slow=74,SNR=4.1 | | | | | | |
| H01W1 | Cape Leeuwin H | 44.58 | 112 | T | T | 22 00 19.0 | |
| | baz=263,slow=74,SNR=3.9 | | | | | | |
| CMAR | Chiang Mai Arr | 59.25 | 42 | P | P | 21 14 29.4 | +1.0 |
| | 0.5nm,0.8s,baz=230,slow=8.0,SNR=4.5 | | | | | | |
| ASAR | Alice Springs | 64.11 | 104 | P | P | 21 15 01.4 | +0.1 |
| | 0.6nm,0.9s,baz=244,slow=6.1,SNR=3.5 | | | | | | |
| WRA | Warramunga Arr | 65.91 | 100 | P | P | 21 15 12.8 | -0.2 |
| | 0.2nm,0.7s,baz=248,slow=5.8,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 71.37 | 297 | P | P | 21 15 46.8 | -0.3 |
| | 0.5nm,0.8s,baz=110,slow=6.5,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 77.57 | 14 | P | P | 21 16 22.2 | -0.3 |
| | 0.2nm,0.4s,baz=207,slow=5.7,SNR=3.6 | | | | | | |
| ZALV | Zalesovo Beam | 84.87 | 14 | P | P | 21 16 59.6 | -1.4 |
| | 1.1nm,0.6s,baz=197,slow=5.1,SNR=6.4 | | | | | | |

*GEN 05 21:04:27.8, 44°.61N×10°.46E, h23km, ML2.4*
*ISCJB 05 21:04:29.0±0.2, 44°.56N±0°.02×10°.34E±0°.03, h27km±2km, Error ellipse: s-maj=3.8km s-min=2.7km az=145.6*
*ROM 05 21:04:28.6±0.2, 44°.56N×10°.38E, h26km±2km, Ml2.6/5, Error ellipse: s-maj=3.3km s-min=2.4km az=51.0*
*CSEM 05 21:04:28.3±0.1, 44°.62N×10°.40E, h15km, ML2.6/18, Error ellipse: s-maj=3.3km s-min=2.7km az=116.0*
*LDG 05 21:04:29.5±0.1, 44°.61N×10°.34E, h2km, Ml2.6/19, Error ellipse: s-maj=2.1km s-min=1.6km az=44.0*
**ISC 05 21:04:28.7±0.8, 44°.55N±0°.02×10°.42E±0°.02, h27km±5km, n87, σ1ˢ.10/147, 2C-7D, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ERBM | Eremo | 0.13 | 184 | Pg | Pb | 21 04 33.7 | -0.2 |
| ERBM | | | | Sg | Sb | 21 04 38.1 | +0.6 |
| | 416nm,0.2s | | | | | | |
| ERBM | Eremo | 0.13 | 184 | Pg | Pb | 21 04 33.7 | -0.2 |
| ERBM | | | | Sg | Sb | 21 04 38.1 | +0.6 |
| | 416nm,0.2s | | | | | | |
| GSCL | Gusciola | 0.23 | 149 | Pg | Pb | 21 04 34.8 | -0.2 |
| GSCL | | | | Sg | Sb | 21 04 39.7 | +0.5 |
| | 125nm,0.6s | | | | | | |
| GSCL | Gusciola | 0.23 | 149 | Pg | Pb | 21 04 34.8 | -0.2 |
| GSCL | | | | Sg | Sb | 21 04 39.7 | +0.5 |
| | 125nm,0.6s | | | | | | |
| PRMA | PARMA | 0.23 | 340 | Pg | Pb | 21 04 34.3 | -0.7 |
| PRMA | | | | Sg | Sb | 21 04 40.0 | +0.8 |
| | 564nm,0.6s | | | | | | |
| PRMA | PARMA | 0.23 | 340 | Pg | Pb | 21 04 34.3 | -0.7 |
| VALM | Valbona | 0.23 | 213 | P | Pb | 21 04 34.6 | -0.5 |
| VALM | | | | S | Sb | 21 04 39.5 | +0.1 |
| GRAM | Graiana | 0.26 | 258 | P | Pb | 21 04 34.8 | -0.7 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRAM | | | | S | Sb | 21 04 39.7 | -0.3 |
| NOVE | Novellara | 0.33 | 40 | Pg | Pb | 21 04 35.9 | -0.4 |
| NOVE | | | | Sg | Sn | 21 04 43.0 | -0.6 |
| | 542nm,0.4s | | | | | | |
| NOVE | Novellara | 0.33 | 40 | Pg | Pb | 21 04 35.9 | -0.4 |
| BACM | Baccana | 0.37 | 223 | P | Pb | 21 04 36.4 | -0.5 |
| BACM | | | | S | Sb | 21 04 42.5 | 0.0 |
| CODM | Codolo | 0.44 | 249 | P | Pb | 21 04 37.6 | -0.5 |
| CODM | | | | S | Sb | 21 04 44.3 | -0.1 |
| ZCCA | Zocca | 0.44 | 116 | Pg | Pn | 21 04 39.3 | -0.1 |
| ZCCA | Zocca | 0.44 | 116 | Pg | Pn | 21 04 39.3 | -0.1 |
| VINC | Vinca | 0.45 | 206 | P | Pb | 21 04 38.2 | 0.0 |
| VINC | | | | S | Sb | 21 04 45.1 | +0.4 |
| POPM | Popiglio | 0.56 | 154 | P | Pb | 21 04 39.4 | -0.6 |
| POPM | | | | S | Sb | 21 04 47.4 | -0.2 |
| FNVD | Fontana Vidola | 0.63 | 127 | Pg | Pn | 21 04 42.1 | +0.1 |
| FNVD | | | | Sg | Sn | 21 04 51.6 | +0.4 |
| FNVD | Fontana Vidola | 0.63 | 127 | Pg | Pn | 21 04 42.1 | +0.1 |
| FNVD | | | | Sg | Sn | 21 04 51.6 | +0.4 |
| MAIM | Mastiano | 0.63 | 176 | P | Pb | 21 04 41.2 | 0.0 |
| MAIM | | | | S | Sb | 21 04 50.1 | +0.4 |
| SC2M | Scurtabo | 0.65 | 258 | Pg | Pn | 21 04 41.6 | -0.7 |
| SC2M | | | | Sg | Sb | 21 04 50.0 | -0.3 |
| SC2M | Scurtabo | 0.65 | 258 | P | Pb | 21 04 41.0 | -0.6 |
| SC2M | Scurtabo | 0.65 | 258 | Pg | Pn | 21 04 41.6 | -0.7 |
| SC2M | | | | Sg | Sb | 21 04 50.0 | -0.3 |
| PII | Pisa | 0.83 | 175 | Pg | Pn | 21 04 45.1 | +0.5 |
| | 34nm,0.2s | | | | | | |
| PII | Pisa | 0.83 | 175 | Pg | Pn | 21 04 45.1 | +0.5 |
| | 34nm,0.2s | | | | | | |
| BALD | Monte Baldo | 1.17 | 14⇓ | ePg | Pb | 21 04 50.3 | -0.1 |
| BALD | | | | eSg | Sb | 21 05 06.5 | +1.3 |
| BALD | Monte Baldo | 1.17 | 14⇓ | ePg | Pb | 21 04 50.3 | -0.1 |
| BALD | | | | eSg | Sb | 21 05 06.6 | +1.3 |
| ROVR | Rover˜¤ Verone | 1.19 | 22 | Pg | Pb | 21 04 50.6 | -0.2 |
| ROVR | Rover˜¤ Verone | 1.19 | 22 | Pg | Pb | 21 04 50.6 | -0.2 |
| TEOL | Teolo | 1.20 | 47⇓ | ePg | Pn | 21 04 50.1 | +0.3 |
| TEOL | | | | eSg | Sb | 21 05 06.6 | +0.6 |
| TEOL | Teolo | 1.20 | 47 | Pg | Pn | 21 04 50.1 | +0.3 |
| | 160nm,0.4s | | | | | | |
| TEOL | Teolo | 1.20 | 47 | Pg | Pn | 21 04 50.1 | +0.3 |
| | 160nm,0.4s | | | | | | |
| TEOL | | | | eSg | Sb | 21 05 06.6 | +0.6 |
| MARN | Marana (Italy) | 1.23 | 27 | ePg | Pn | 21 04 50.6 | +0.5 |
| MARN | | | | eSg | Sb | 21 05 07.5 | +0.8 |
| MARN | Marana (Italy) | 1.23 | 27 | ePg | Pn | 21 04 50.7 | +0.5 |
| MARN | | | | eSg | Sb | 21 05 07.5 | +0.8 |
| MAGA | Magasa | 1.24 | 7 | Pg | Pb | 21 04 51.1 | -0.4 |
| | 106nm,0.3s | | | | | | |
| MAGA | Magasa | 1.24 | 7 | Pg | Pb | 21 04 51.1 | -0.4 |
| | 106nm,0.3s | | | | | | |
| DDS | Dosso del Somm | 1.44 | 22⇓ | ePg | Pn | 21 04 53.8 | +0.6 |
| DDS | | | | eSg | Sb | 21 05 13.2 | +0.2 |
| DDS | Dosso del Somm | 1.44 | 22⇓ | ePg | Pn | 21 04 53.8 | +0.6 |
| DDS | | | | eSg | Sb | 21 05 13.2 | +0.2 |
| RNI | Roncone | 1.44 | 6⇑ | ePg | Pn | 21 04 54.0 | +0.8 |
| RNI | | | | eSg | Sb | 21 05 13.6 | +0.5 |
| RNI | Roncone | 1.44 | 6⇑ | ePg | Pn | 21 04 54.0 | +0.8 |
| RNI | | | | eSg | Sb | 21 05 13.6 | +0.5 |
| PANI | Panarotta | 1.63 | 22 | ePg | Pn | 21 04 56.6 | +0.8 |
| PANI | Panarotta | 1.63 | 22 | ePg | Pn | 21 04 56.6 | +0.8 |
| CGRP | Cima Grappa | 1.65 | 36 | ePg | Pn | 21 04 56.9 | +0.8 |
| CGRP | Cima Grappa | 1.65 | 36 | ePg | Pn | 21 04 56.9 | +0.8 |
| PGF | Pioggiola | 2.25 | 208 | ePn | Pn | 21 05 06.1 | +1.8 |
| PGF | | | | eSn | Sb | 21 05 33.6 | -2.6 |
| | 6.8nm,0.4s | | | | | | |
| PGF | Pioggiola | 2.25 | 208 | ePn | Pn | 21 05 06.1 | +1.8 |
| PGF | | | | eSn | Sb | 21 05 33.6 | -2.6 |
| | 3.4nm,0.4s | | | | | | |
| SBF | Sospel | 2.25 | 253 | ePn | Pn | 21 05 05.5 | +1.2 |
| SBF | | | | eSn | Sn | 21 05 32.1 | +0.8 |
| | 31nm,0.4s | | | | | | |
| SBF | Sospel | 2.25 | 253 | ePn | Pn | 21 05 05.5 | +1.2 |
| SBF | | | | eSn | Sn | 21 05 32.1 | +0.8 |
| | 16nm,0.4s | | | | | | |
| ABSI | Aberstueckl | 2.27 | 16⇓ | ePn | Pn | 21 05 06.6 | +1.9 |
| MBDF | Montbardon | 2.61 | 275 | ePn | Pn | 21 05 11.2 | +1.9 |
| MBDF | | | | eSn | Sn | 21 05 40.3 | 0.0 |
| | 3.8nm,0.4s | | | | | | |
| MBDF | Montbardon | 2.61 | 275 | ePn | Pn | 21 05 11.2 | +1.9 |
| MBDF | | | | eSn | Sn | 21 05 40.3 | 0.0 |
| | 1.9nm,0.4s | | | | | | |
| LPG | La Plagne | 2.77 | 291 | ePn | Pn | 21 05 12.6 | +1.0 |
| LPG | La Plagne | 2.77 | 291 | ePg | Pb | 21 05 19.3 | +1.6 |
| LPG | | | | eSn | Sn | 21 05 43.7 | -0.7 |
| | 3.0nm,0.5s | | | | | | |
| LPG | La Plagne | 2.77 | 291 | ePn | Pn | 21 05 12.6 | +1.0 |
| LPG | La Plagne | 2.77 | 291 | ePg | Pb | 21 05 19.3 | +1.6 |
| LPG | | | | eSn | Sn | 21 05 43.7 | -0.7 |
| | 1.5nm,0.5s | | | | | | |
| LPL | La Plagne | 2.79 | 292 | ePn | Pn | 21 05 12.2 | +0.4 |
| LPL | La Plagne | 2.79 | 292 | ePg | Pb | 21 05 19.5 | +1.5 |
| LPL | | | | eSn | Sn | 21 05 44.3 | -0.4 |
| | 5.6nm,0.6s | | | | | | |
| LPL | La Plagne | 2.79 | 292 | ePn | Pn | 21 05 12.2 | +0.4 |
| LPL | La Plagne | 2.79 | 292 | ePg | Pb | 21 05 19.5 | +1.5 |
| LPL | | | | eSn | Sn | 21 05 44.3 | -0.4 |
| | 2.8nm,0.6s | | | | | | |
| WTTA | Wattenberg | 2.85 | 17⇓ | iPn | Pn | 21 05 14.4 | +1.8 |
| WTTA | Wattenberg | 2.85 | 17 | Pn | Pn | 21 05 14.4 | +1.8 |
| FRF | La Foret Royal | 2.90 | 251 | ePn | Pn | 21 05 14.5 | +1.4 |
| FRF | | | | eSn | Sn | 21 05 47.3 | +0.3 |
| | 17nm,0.3s | | | | | | |
| FRF | La Foret Royal | 2.90 | 251 | ePn | Pn | 21 05 14.5 | +1.4 |
| FRF | | | | eSn | Sn | 21 05 47.3 | +0.3 |
| | 8.4nm,0.3s | | | | | | |
| JAVS | Javornik | 2.90 | 61 | i Pn | Pn | 21 05 13.4 | +0.1 |
| JAVS | | | | i Sn | Sn | 21 05 45.6 | -1.7 |
| JAVS | Javornik | 2.90 | 61 | i Pn | Pn | 21 05 13.4 | +0.1 |
| JAVS | | | | i Sn | Sn | 21 05 45.6 | -1.7 |
| LMR | La Mourre | 3.08 | 248 | ePn | Pn | 21 05 16.7 | +1.2 |
| LMR | | | | eSn | Sn | 21 05 51.9 | +0.5 |
| | 12nm,0.4s | | | | | | |
| LMR | La Mourre | 3.08 | 248 | ePn | Pn | 21 05 16.7 | +1.2 |
| LMR | | | | eSn | Sn | 21 05 51.9 | +0.5 |
| | 6.2nm,0.4s | | | | | | |
| ORIF | Oris-en-Rattie | 3.26 | 278 | eP | Pn | 21 05 21.3 | +3.1 |
| ORIF | | | | eSn | Sn | 21 05 55.4 | -0.7 |
| | 8.8nm,0.5s | | | | | | |
| ORIF | Oris-en-Rattie | 3.26 | 278 | eP | Pn | 21 05 21.3 | +3.1 |
| ORIF | | | | eSn | Sn | 21 05 55.4 | -0.7 |
| | 4.4nm,0.5s | | | | | | |
| SMRF | Simiane la Rot | 3.53 | 262 | ePn | Pn | 21 05 24.1 | +2.3 |
| SMRF | | | | eSn | Sn | 21 06 02.1 | -0.6 |
| | 2.9nm,0.7s | | | | | | |
| SMRF | Simiane la Rot | 3.53 | 262 | ePn | Pn | 21 05 24.1 | +2.3 |
| SMRF | | | | eSn | Sn | 21 06 02.1 | -0.6 |
| | 1.5nm,0.7s | | | | | | |
| CABF | La Chapelle | 3.68 | 306 | ePn | Pn | 21 05 25.7 | +1.8 |
| CABF | | | | eSn | Sn | 21 06 05.1 | -1.3 |
| | 0.8nm,0.3s | | | | | | |
| CABF | La Chapelle | 3.68 | 306 | ePn | Pn | 21 05 25.7 | +1.8 |
| CABF | | | | eSn | Sn | 21 06 05.1 | -1.3 |
| | 0.4nm,0.3s | | | | | | |
| HINF | Hinteralfeld | 4.11 | 324 | ePn | Pn | 21 05 30.5 | +0.8 |
| HINF | | | | eSn | Sn | 21 06 15.1 | -1.8 |
| | 4.1nm,0.4s | | | | | | |
| HINF | Hinteralfeld | 4.11 | 324 | ePn | Pn | 21 05 30.5 | +0.8 |
| HINF | | | | eSn | Sn | 21 06 15.1 | -1.8 |
| | 2.0nm,0.4s | | | | | | |
| VIVF | Saint-Julien-l | 4.11 | 276 | ePn | Pn | 21 05 30.4 | +0.6 |
| VIVF | | | | eSn | Sn | 21 06 15.7 | -1.3 |
| | 1.8nm,0.5s | | | | | | |
| VIVF | Saint-Julien-l | 4.11 | 276 | ePn | Pn | 21 05 30.4 | +0.6 |
| VIVF | | | | eSn | Sn | 21 06 15.7 | -1.3 |
| | 0.9nm,0.5s | | | | | | |
| CDF | Champ du Feu | 4.44 | 332 | ePn | Pn | 21 05 34.9 | +0.6 |
| CDF | | | | eSn | Sn | 21 06 23.1 | -2.0 |
| | 1.4nm,0.2s | | | | | | |
| CDF | Champ du Feu | 4.44 | 332 | ePn | Pn | 21 05 34.9 | +0.6 |
| CDF | | | | eSn | Sn | 21 06 23.1 | -2.0 |
| | 0.7nm,0.2s | | | | | | |
| HAU | Haudompre | 4.47 | 322 | ePn | Pn | 21 05 35.3 | +0.6 |
| HAU | | | | eSn | Sn | 21 06 23.7 | -2.1 |
| | 5.9nm,0.3s | | | | | | |
| HAU | Haudompre | 4.47 | 322 | ePn | Pn | 21 05 35.3 | +0.6 |
| HAU | | | | eSn | Sn | 21 06 23.7 | -2.1 |
| | 3.0nm,0.3s | | | | | | |
| KHC | Kasperske Hory | 5.07 | 24 | eSN | Sn | 21 06 39.9 | -0.8 |
| SMF | Signal de Mont | 5.07 | 297 | ePn | Pn | 21 05 43.4 | +0.4 |
| SMF | | | | eSn | Sn | 21 06 38.2 | -2.5 |
| | 1.2nm,0.2s | | | | | | |
| SMF | Signal de Mont | 5.07 | 297 | ePn | Pn | 21 05 43.4 | +0.4 |
| SMF | | | | eSn | Sn | 21 06 38.2 | -2.5 |
| | 0.6nm,0.2s | | | | | | |
| LOR | Lormes | 5.33 | 303 | ePn | Pn | 21 05 46.5 | 0.0 |
| | baz=125 | | | | | | |
| LOR | | | | eSn | Sn | 21 06 44.3 | -2.7 |
| | 5.2nm,0.5s | | | | | | |
| LOR | Lormes | 5.33 | 303 | ePn | Pn | 21 05 46.5 | 0.0 |
| LOR | | | | eSn | Sn | 21 06 44.3 | -2.7 |
| | 2.6nm,0.5s | | | | | | |
| SSF | Saint Saulge | 5.45 | 300 | ePn | Pn | 21 05 48.5 | +0.3 |
| SSF | | | | eSn | Sn | 21 06 47.3 | -2.7 |
| | 1.9nm,0.4s | | | | | | |
| SSF | Saint Saulge | 5.45 | 300 | ePn | Pn | 21 05 48.5 | +0.3 |

*NEIC **05** 21:05:32.1, 52.°40N×166.°82W, h26km, ML2.9(AEIC), After AEIC.*
*IDC **05** 21:05:32.0±2.1, 53.°06N×166.°76W, h0km, mb3.6/5, mb1 3.8/5, mb1mx3.5/31, mbtmp3.7/5, MS3.9/1, Ms1 3.8/1, ms1mx2.9/36, Error ellipse: s-maj=63.9km s-min=28.0km az=17.0*
**ISC 05 21:05:30.6**±2.2**, 52.°50N**±0.°09×**166.°88W**±0.°07**, h3**km±12km**,**
**n21,** σ**1.°02**/23**, mb3.6**/5**, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKFG | Magazine Ridge | 1.10 | 326 | P | Pn | 21 05 52.6 | -0.3 |
| OKFG | | | | S | Sn | 21 06 09.5 | +0.8 |
| OKTU | Okmok Mt. Tuli | 1.13 | 322 | P | Pn | 21 05 53.9 | +0.6 |
| OKSO | Okmok South | 1.15 | 318 | P | Pb | 21 05 53.2 | +0.1 |
| OKSO | | | | S | Sn | 21 06 10.4 | +0.4 |
| OKCE | Okmok Cone E | 1.21 | 321 | P | Pn | 21 05 54.6 | +0.1 |
| OKCE | | | | S | Sn | 21 06 12.1 | +0.7 |
| NIKH | Nikolski High | 1.29 | 292 | P | Pg | 21 05 54.9 | -0.4 |
| NIKH | | | | S | Sn | 21 06 13.1 | -0.1 |
| MGOD | Makushin Gods | 1.29 | 0 | P | Pg | 21 05 55.4 | +0.1 |
| MSOM | Makushin Julie | 1.32 | 358 | P | Pb | 21 05 55.9 | 0.0 |
| MSOM | | | | S | Sn | 21 06 14.0 | +0.1 |
| UNV | Unalaska Valle | 1.36 | 10 | P | Pg | 21 05 56.6 | -0.1 |
| UNV | | | | S | Sn | 21 06 15.5 | +0.4 |
| MSW | Makushin Switc | 1.42 | 2 | P | Pg | 21 05 57.6 | 0.0 |
| MSW | | | | S | Sn | 21 06 16.9 | +0.5 |
| MTBL | Makushin Table | 1.47 | 5 | P | Pb | 21 05 58.4 | -0.3 |
| MTBL | | | | S | Sn | 21 06 18.4 | +0.4 |
| PETK | Petropavlovsk- | 21.29 | 286 | P | P | 21 10 20.8 | +2.8 |
| | 1.0nm,0.4s,baz=87,slow=11,SNR=4.3 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 38.54 | 222 | T | T | 21 54 25.0 | |
| | baz=25,slow=76,SNR=5.2 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 38.55 | 222 | T | T | 21 54 21.0 | |
| | baz=25,slow=76,SNR=3.7 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 38.56 | 222 | T | T | 21 54 29.2 | |
| | baz=25,slow=76,SNR=3.6 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.72 | 221 | T | T | 21 56 10.3 | |
| | baz=24,slow=74 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 39.73 | 221 | T | T | 21 56 02.8 | |
| | baz=24,slow=74 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.74 | 221 | T | T | 21 56 04.9 | |
| | baz=24 | | | | | | |
| TXAR | Lajitas Array | 51.23 | 91 | P | P | 21 14 36.8 | +1.4 |
| | 0.3nm,0.8s,baz=291,slow=7.7,SNR=2.5 | | | | | | |
| TXAR | | | | LR | LR | 21 34 13.9 | |
| | comp=Z,100nm,18.2s,baz=0.0,slow=34 | | | | | | |
| ARCES | ARCESS Array B | 57.94 | 355 | P | P | 21 15 21.7 | -1.8 |
| | 1.5nm,0.9s,baz=12,slow=6.5,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 64.80 | 315 | P | P | 21 16 08.7 | -1.7 |
| | 0.3nm,0.7s,baz=45,slow=7.1,SNR=3.2 | | | | | | |
| FINES | FINESS Array B | 65.93 | 353 | P | P | 21 16 16.1 | -1.3 |
| | 1.7nm,0.5s,baz=9.9,slow=7.1,SNR=9.6 | | | | | | |

**DJA 05 21:20:19.8**±0.7**, 8°S**±4°×**10°7E**±°**, h26**km±8km**, M3.9**/12**,**
**MLv3.9**/12**, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNJI | Cibinong | 0.86 | 348 | P | Pb | 21 20 35.9 | -0.3 |
| CNJI | | | | S | Sb | 21 20 47.2 | -0.2 |
| CMJI | Cimerak | 1.19 | 72 | P | Pn | 21 20 39.8 | -0.9 |
| LEM | Lembang | 1.36 | 13 | P | Pn | 21 20 43.2 | -0.1 |
| SKJI | Sukabumi | 1.37 | 327 | P | Pn | 21 20 43.4 | +0.1 |
| SKJI | | | | S | Sn | 21 21 00.5 | -0.1 |
| KPJI | Karang Pucung | 1.80 | 63 | P | Pn | 21 20 49.3 | +0.1 |
| CGJI | Cibinong | 2.22 | 314 | P | Pn | 21 20 54.6 | -0.4 |
| UGM | Wanagama | 3.19 | 86 | P | Pn | 21 21 08.4 | 0.0 |
| SMRI | Semarang | 3.29 | 71 | P | Pn | 21 21 09.8 | 0.0 |
| PCJI | Pacitan | 3.83 | 91 | P | Pn | 21 21 17.2 | +0.1 |
| KASI | Kota Agung | 3.83 | 313 | P | Pn | 21 21 17.3 | +0.2 |
| PWJI | Pagerwojo | 4.45 | 89 | P | Pn | 21 21 25.7 | 0.0 |

*DDA **05** 21:20:46.8, 39.°05N×26.°67E, h5km, Md3.0*
*ISK **05** 21:20:47.6, 39.°06N×26.°67E, h7km, MD3.0*
*ATH **05** 21:20:47.5, 39.°05N×26.°58E, h21km±1km, MD2.9/6*
*ISCJB **05** 21:20:47.8±0.4, 39.°06N±0.°02×26.°60E±0.°02, h6km±3km, Error ellipse: s-maj=3.2km s-min=2.6km az=159.7*
*CSEM **05** 21:20:47.9±0.1, 39.°05N×26.°62E, h8km, MD3.0, Error ellipse: s-maj=2.7km s-min=2.5km az=50.0*
*THE **05** 21:20:48.0, 39.°06N×26.°62E, h8km±2km, ML2.1/5, Error ellipse: s-maj=3.8km s-min=1.1km az=251.0*
**ISC 05 21:20:47.7**±0.9**, 39.°06N**±0.°02×**26.°63E**±0.°02**, h9**km±8km**,**
**n83,** σ**0.°66**/123**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DKL | Dikili | 0.22 | 86 | ePG | Pg | 21 20 52.2 | +0.1 |
| DKL | Dikili | 0.22 | 86 | ePg | Pg | 21 20 52.2 | +0.1 |
| AYVA | Ayvalik | 0.25 | 11 | i P | Pg | 21 20 52.6 | -0.2 |
| AYVA | | | | i S | Sb | 21 20 57.6 | -1.5 |
| AYVA | Ayvalik | 0.25 | 11 | P | Pg | 21 20 52.6 | -0.2 |
| AYVA | | | | S | Sb | 21 20 57.5 | -1.5 |
| PRK | Paraskevi | 0.34 | 304 | ePB | Pg | 21 20 54.4 | +0.1 |
| PRK | | | | eSB | Sg | 21 20 59.8 | +1.0 |
| PRK | Paraskevi | 0.34 | 304 | P | Pg | 21 20 54.1 | -0.2 |
| PRK | | | | S | Sg | 21 20 59.6 | +0.8 |
| PRK | Paraskevi | 0.34 | 304 | P | Pg | 21 20 54.1 | -0.2 |
| PRK | Paraskevi | 0.34 | 304 | ePb | Pg | 21 20 54.4 | +0.1 |
| PRK | | | | S | Sg | 21 20 59.6 | +0.8 |
| SIGR | SIGRI | 0.62 | 284 | ePG | Pb | 21 21 00.5 | -0.3 |
| SIGR | SIGRI | 0.62 | 284 | ePN | Pg | 21 20 59.3 | -0.5 |
| SIGR | | | | eSN | Sg | 21 21 07.6 | -0.2 |
| SIGR | SIGRI | 0.62 | 284 | P | Pg | 21 20 59.2 | -0.5 |
| SIGR | | | | S | Sb | 21 21 10.0 | +0.4 |
| SIGR | SIGRI | 0.62 | 284 | P | Pg | 21 20 59.2 | -0.5 |
| SIGR | SIGRI | 0.62 | 284 | ePg | Pb | 21 21 00.5 | -0.3 |
| SIGR | | | | eSn | Sg | 21 21 07.6 | -0.2 |
| SIGR | | | | S | Sb | 21 21 10.0 | +0.4 |
| URLA | Izmir | 0.70 | 182 | i P | Pg | 21 21 00.0 | -1.2 |
| URLA | | | | i S | Sb | 21 21 11.8 | -0.1 |
| URLA | Izmir | 0.70 | 182 | P | Pg | 21 20 60.0 | -1.2 |
| URLA | | | | S | Sb | 21 21 11.8 | -0.1 |
| EZN | Ezine | 0.80 | 343 | ePG | Pb | 21 21 04.1 | +0.2 |
| EZN | Ezine | 0.80 | 343 | ePg | Pb | 21 21 04.1 | +0.2 |
| CHOS | Chios island | 0.81 | 214 | ePG | Pb | 21 21 03.9 | -0.1 |
| CHOS | | | | eSG | Sb | 21 21 16.2 | +1.2 |
| CHOS | Chios island | 0.81 | 214 | ePN | Pg | 21 21 02.8 | -0.5 |
| CHOS | | | | eSN | Sg | 21 21 13.3 | -0.5 |
| CHOS | Chios island | 0.81 | 214 | P | Pg | 21 21 02.9 | -0.3 |
| CHOS | | | | S | Sb | 21 21 15.4 | +0.4 |
| CHOS | Chios island | 0.81 | 214 | P | Pg | 21 21 02.9 | -0.3 |
| CHOS | Chios island | 0.81 | 214 | ePg | Pb | 21 21 03.9 | -0.1 |
| CHOS | | | | eSn | Sg | 21 21 13.3 | -0.5 |
| CHOS | | | | S | Sb | 21 21 15.4 | +0.4 |
| ZEY | ˜zmir | 0.82 | 187 | P | Pg | 21 21 03.1 | -0.5 |
| ZEY | | | | S | Sb | 21 21 16.2 | +0.7 |
| BOZC | Bozcaada | 0.90 | 331 | P | Pg | 21 21 04.9 | -0.2 |
| BOZC | | | | S | Sn | 21 21 19.2 | -0.6 |
| AKHS | Akhisar | 0.94 | 101 | i P | Pb | 21 21 06.1 | -0.2 |
| AKHS | | | | i S | Sn | 21 21 20.3 | -0.5 |
| AKHS | Akhisar | 0.94 | 101 | P | Pb | 21 21 06.1 | -0.2 |
| AKHS | | | | S | Sn | 21 21 20.3 | -0.5 |
| AKS | Akhisar | 0.94 | 101 | ePG | Pg | 21 21 04.7 | -1.1 |
| AKS | Akhisar | 0.94 | 101 | ePg | Pg | 21 21 04.7 | -1.1 |
| BALY | Balya | 1.03 | 48 | i P | Pg | 21 21 07.1 | -0.3 |
| BALY | | | | i S | Sn | 21 21 23.5 | +0.5 |
| BALY | Balya | 1.03 | 48 | P | Pg | 21 21 07.1 | -0.3 |
| BALY | | | | S | Sn | 21 21 23.5 | +0.5 |
| BALB | Balikesir | 1.13 | 59 | ePN | Pg | 21 21 08.9 | -0.5 |
| BALB | Balikesir | 1.13 | 59 | ePn | Pg | 21 21 09.0 | -0.5 |
| GADA | Gvkgeada | 1.26 | 334 | ePN | Pg | 21 21 12.3 | +0.3 |
| GADA | Gvkgeada | 1.26 | 334 | ePn | Pg | 21 21 12.3 | +0.3 |
| GONE | Gonen-Balikesi | 1.28 | 39 | ePN | Pn | 21 21 11.9 | +0.1 |
| GONE | Gonen-Balikesi | 1.28 | 39 | ePn | Pn | 21 21 12.0 | +0.1 |
| LPK | Lapseki | 1.32 | 4 | ePN | Pb | 21 21 12.7 | 0.0 |
| LPK | Lapseki | 1.32 | 4 | ePn | Pb | 21 21 12.7 | 0.0 |
| GELI | Tayfur-Gelibol | 1.34 | 355 | ePN | Pg | 21 21 13.3 | -0.2 |
| GELI | Tayfur-Gelibol | 1.34 | 355 | ePn | Pg | 21 21 13.3 | -0.2 |
| SMG | Samos | 1.36 | 173 | ePN | Pn | 21 21 12.7 | -0.2 |
| SMG | | | | eSN | Sn | 21 21 32.5 | +1.4 |
| SMG | Samos | 1.36 | 173 | P | Pn | 21 21 12.1 | -0.8 |
| SMG | | | | S | Sg | 21 21 31.2 | -0.2 |
| SMG | Samos | 1.36 | 173 | P | Pn | 21 21 12.1 | -0.8 |
| SMG | Samos | 1.36 | 173 | ePn | Pn | 21 21 12.7 | -0.2 |
| SMG | | | | S | Sg | 21 21 31.2 | -0.2 |
| SMG | | | | eSn | Sn | 21 21 32.5 | +1.4 |
| LIA | Limnos Island | 1.40 | 307 | ePN | Pn | 21 21 13.6 | +0.2 |
| LIA | | | | eSN | Sg | 21 21 32.7 | 0.0 |
| LIA | Limnos Island | 1.40 | 307 | P | Pn | 21 21 13.3 | -0.1 |
| LIA | | | | S | Sb | 21 21 30.7 | -1.3 |
| LIA | Limnos Island | 1.40 | 307 | P | Pn | 21 21 13.3 | -0.1 |
| LIA | Limnos Island | 1.40 | 307 | ePn | Pn | 21 21 13.6 | +0.2 |
| LIA | | | | S | Sb | 21 21 30.7 | -1.3 |
| LIA | | | | eSn | Sg | 21 21 32.7 | 0.0 |
| KRBG | Karabiga-Canak | 1.43 | 21 | ePN | Pb | 21 21 14.3 | -0.3 |
| KRBG | Karabiga-Canak | 1.43 | 21 | ePn | Pb | 21 21 14.3 | -0.3 |
| AYDB | Zeytinkoy-Aydi | 1.49 | 138 | ePN | Pn | 21 21 15.0 | +0.2 |
| AYDB | Zeytinkoy-Aydi | 1.49 | 138 | ePn | Pn | 21 21 15.0 | +0.2 |
| DURS | Dursunbey | 1.53 | 69 | i P | Pn | 21 21 14.9 | -0.5 |
| DURS | | | | i S | Sg | 21 21 36.8 | -0.1 |
| DURS | Dursunbey | 1.53 | 69 | P | Pn | 21 21 14.9 | -0.5 |
| DURS | | | | S | Sg | 21 21 36.8 | -0.1 |
| EDC | Edincik | 1.60 | 36 | ePN | Pn | 21 21 16.6 | +0.3 |
| EDC | Edincik | 1.60 | 36 | ePn | Pn | 21 21 16.6 | +0.3 |
| MANT | Manisa | 1.61 | 110 | i P | Pg | 21 21 19.3 | +0.7 |
| MANT | | | | i S | Sg | 21 21 39.1 | -0.4 |
| MANT | Manisa | 1.61 | 110 | P | Pg | 21 21 19.3 | +0.7 |
| MANT | | | | S | Sg | 21 21 39.1 | -0.4 |
| ERIK | Erikli-Kesan | 1.61 | 357 | ePN | Pb | 21 21 17.1 | -0.6 |
| ERIK | Erikli-Kesan | 1.61 | 357 | ePn | Pb | 21 21 17.1 | -0.6 |
| SMTH | Samothraki Isl | 1.65 | 329 | ePN | Pn | 21 21 16.9 | 0.0 |
| SMTH | | | | eSN | Sn | 21 21 38.3 | +0.1 |
| SMTH | Samothraki Isl | 1.65 | 329 | P | Pn | 21 21 16.9 | 0.0 |
| SMTH | | | | S | Sn | 21 21 37.7 | -0.5 |
| SMTH | Samothraki Isl | 1.65 | 329 | P | Pn | 21 21 16.9 | 0.0 |
| SMTH | | | | S | Sn | 21 21 37.7 | -0.5 |
| SMTH | | | | eSn | Sn | 21 21 38.3 | +0.1 |
| KULA | Kula-Manisa | 1.68 | 108 | ePN | Pn | 21 21 17.7 | +0.3 |
| KULA | Kula-Manisa | 1.68 | 108 | ePn | Pn | 21 21 17.7 | +0.3 |
| RKY | Sarkoy-Tekirda | 1.68 | 14 | ePN | Pb | 21 21 18.2 | -0.7 |
| RKY | Sarkoy-Tekirda | 1.68 | 14 | ePn | Pb | 21 21 18.2 | -0.7 |
| AYDN | Tasoluk | 1.71 | 144 | i P | Pn | 21 21 18.0 | +0.3 |
| AYDN | | | | i S | Sg | 21 21 43.6 | +1.0 |
| AYDN | Tasoluk | 1.71 | 144 | P | Pn | 21 21 18.0 | +0.3 |
| AYDN | | | | S | Sg | 21 21 43.6 | +1.0 |
| MRMT | Marmara Adasi | 1.71 | 25 | ePN | Pn | 21 21 18.2 | +0.3 |
| MRMT | Marmara Adasi | 1.71 | 25 | ePn | Pn | 21 21 18.2 | +0.3 |
| ENEZ | Enez | 1.71 | 348 | ePN | Pn | 21 21 18.4 | +0.6 |
| ENEZ | Enez | 1.71 | 348 | ePn | Pn | 21 21 18.4 | +0.6 |
| KCTX | Karacabey (Bur | 1.80 | 47 | ePN | Pn | 21 21 19.8 | +0.8 |
| KCTX | Karacabey (Bur | 1.80 | 47 | ePn | Pn | 21 21 19.8 | +0.8 |
| ARMT | Armutlu | 2.29 | 48 | ePN | Pn | 21 21 26.9 | +1.2 |
| ARMT | Armutlu | 2.29 | 48 | ePn | Pn | 21 21 26.9 | +1.2 |
| CTKS | Kestanelik-??a | 2.61 | 33 | ePN | Pn | 21 21 31.5 | +1.4 |
| CTKS | Kestanelik-??a | 2.61 | 33 | ePn | Pn | 21 21 31.5 | +1.4 |
| BGKT | Bogazkoy | 2.68 | 37 | ePN | Pn | 21 21 32.2 | +1.1 |
| BGKT | Bogazkoy | 2.68 | 37 | ePn | Pn | 21 21 32.2 | +1.1 |
| EDRB | Edirne | 2.79 | 2 | ePN | Pn | 21 21 34.0 | +1.5 |
| EDRB | Edirne | 2.79 | 2 | ePn | Pn | 21 21 34.0 | +1.5 |

*NEIC **05** 21:22:46.5, 37.°15N×117.°38W, h9km, MW4.0, ML4.1(REN) Best double couple: NP1:φs240.00000°, δ79.00000°, λ-22.00000°. NP2:φs335.00000°, δ68.00000°, λ-168.00000°. Principal axes: T 1.1800, Plg7.0000°, Azm289.0000°; N 0.2200, Plg65.0000°, Azm34.0000°; P -1.4100, Plg23.0000°, Azm196.0000°; After REN.*
*NEIC Felt at Beatty. Also felt at Death Valley, California.*
**ISC 05 21:22:45.6**±0.8**, 37.°16N**±0.°02×**117.°38W**±0.°02**, h7**km±6km**,**
**n111,** σ**1.°14**/114**, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRAC | Grapevine Rang | 0.16 | 178 | P | Pg | 21 22 50.0 | +1.0 |
| | baz=0.2 | | | | | | |
| GRAC | | | | S | Sg | 21 22 52.7 | +1.3 |
| | baz=0.2 | | | | | | |
| TIN | Tinemaha | 0.69 | 261 | P | Pb | 21 22 59.9 | -0.1 |
| | baz=0.7 | | | | | | |
| TIN | | | | S | Sb | 21 23 09.4 | -0.3 |
| | baz=0.7 | | | | | | |
| TIN | Tinemaha | 0.69 | 261 | ePg | Pb | 21 22 59.8 | -0.2 |
| FURC | Furnace Creek, | 0.81 | 149 | P | Pb | 21 23 01.8 | -0.1 |
| | baz=0.8 | | | | | | |
| FURC | | | | S | Sb | 21 23 13.4 | +0.4 |
| | baz=0.8 | | | | | | |
| DAC | Darwin (Calif) | 0.90 | 191 | ePg | Pb | 21 23 03.5 | -0.2 |
| DAC | | | | eSg | Sg | 21 23 15.2 | +0.5 |
| CWC | Cottonwood Cre | 0.92 | 218 | P | Pg | 21 23 03.5 | +0.3 |
| | baz=0.9 | | | | | | |
| CWC | | | | S | Sb | 21 23 16.0 | -0.4 |
| | baz=0.9 | | | | | | |
| CWC | Cottonwood Cre | 0.92 | 218 | ePg | Pb | 21 23 03.9 | 0.0 |
| TPNV | Topopah Spring | 0.93 | 103 | P | Pg | 21 23 04.0 | +0.5 |
| | baz=0.9 | | | | | | |
| TPNV | Topopah Spring | 0.93 | 103 | ePg | Pg | 21 23 04.1 | +0.6 |
| MTUM | Tungsten Hills | 0.97 | 282 | ePg | Pg | 21 23 04.9 | +0.7 |
| MPMC | Manual Prospec | 1.10 | 185 | P | Pg | 21 23 06.8 | 0.0 |
| | baz=1.1 | | | | | | |
| RVCM | Rose Valley Ce | 1.22 | 200 | ePg | Pg | 21 23 09.4 | +0.2 |
| RCWM | Renegade Canyo | 1.23 | 190 | ePg | Pg | 21 23 09.4 | +0.2 |
| MLAC | Mammoth Lakes | 1.25 | 292 | P | Pg | 21 23 10.2 | +0.5 |
| | baz=1.3 | | | | | | |
| MLAC | Mammoth Lakes | 1.25 | 292 | ePg | Pg | 21 23 10.0 | +0.3 |
| WLHM | Little Horse | 1.26 | 217 | ePn | Pg | 21 23 10.1 | +0.3 |
| WCHM | Chimney Peak | 1.40 | 204 | ePg | Pg | 21 23 11.8 | -0.6 |
| NV01 | Mina Array Sit | 1.46 | 330 | ePn | Pn | 21 23 12.1 | -0.6 |
| WWPM | Walker Pass | 1.54 | 202 | ePn | Pn | 21 23 13.8 | +0.3 |
| WHFM | Hanning Flat | 1.66 | 208 | ePn | Pn | 21 23 15.6 | +0.4 |
| LRMC | Laurel Mountai | 1.70 | 189 | P | Pn | 21 23 16.0 | +0.2 |
| | baz=1.7 | | | | | | |
| LRMC | | | | Sb | Sg | 21 23 40.1 | -0.2 |
| | baz=1.7 | | | | | | |
| WASM | Alta Sierra Ca | 1.71 | 214 | ePn | Pn | 21 23 16.3 | +0.3 |
| RCTC | Rector, Farmer | 1.72 | 241 | Sb | Sb | 21 23 40.3 | +1.0 |
| | baz=1.7 | | | | | | |
| WBSM | Bird Springs | 1.73 | 201 | ePn | Pn | 21 23 16.5 | +0.1 |
| ISA | Isabella | 1.74 | 211 | P | Pn | 21 23 16.8 | +0.5 |
| | baz=1.7 | | | | | | |
| ISA | Isabella | 1.74 | 211 | ePn | Pn | 21 23 16.8 | +0.5 |
| ISA | | | | eSn | Sg | 21 23 41.3 | -0.3 |
| R11A | Troy Canyon, C | 1.85 | 50 | Pb | Pb | 21 23 20.4 | +0.6 |
| | baz=1.9 | | | | | | |
| R11A | | | | Sb | Sg | 21 23 45.4 | +0.3 |
| | baz=1.9 | | | | | | |
| SHPR | Sheep Range | 1.90 | 110 | ePn | Pn | 21 23 20.1 | +1.6 |
| VES | Vestal, Richgr | 1.91 | 227 | Sb | Sg | 21 23 46.7 | -0.2 |
| | baz=1.9 | | | | | | |
| GSC | Goldstone | 1.91 | 166 | P | Pn | 21 23 19.1 | +0.4 |
| | baz=1.9 | | | | | | |
| GSC | | | | Sb | Sg | 21 23 46.6 | -0.5 |
| | baz=1.9 | | | | | | |
| CCAC | Calif City Air | 2.07 | 195 | ePn | Pn | 21 23 21.4 | +0.6 |
| BLKC | Black Mountain | 2.07 | 176 | ePn | Pn | 21 23 21.5 | +0.6 |
| TUQ | Turquoise Moun | 2.08 | 145 | P | Pn | 21 23 21.4 | +0.3 |
| | baz=2.1 | | | | | | |
| TUQ | | | | S | Sn | 21 23 48.0 | +0.6 |
| | baz=2.1 | | | | | | |
| TUQ | Turquoise Moun | 2.08 | 145 | ePn | Pn | 21 23 21.8 | +0.7 |
| FLSC | Flash Two Peak | 2.21 | 173 | ePn | Pn | 21 23 23.4 | +0.7 |
| EDW2 | Edwards Air Fo | 2.33 | 192 | P | Pn | 21 23 24.3 | -0.1 |
| | baz=2.3 | | | | | | |
| EDW2 | Edwards Air Fo | 2.33 | 192 | ePn | Pn | 21 23 25.1 | +0.7 |
| HEC | Hector,Ludlow | 2.48 | 160 | P | Pn | 21 23 26.9 | +0.4 |
| | baz=2.5 | | | | | | |
| HEC | | | | Sb | Sg | 21 24 03.9 | -1.4 |
| | baz=2.5 | | | | | | |
| HEC | Hector,Ludlow | 2.48 | 160 | ePn | Pn | 21 23 27.3 | +0.9 |
| FOXC | Fox Airport | 2.51 | 196 | ePn | Pn | 21 23 27.7 | +0.8 |
| CMB | Columbia Colle | 2.54 | 291 | ePn | Pn | 21 23 28.8 | +1.4 |
| MARC | Maricopa | 2.68 | 217 | ePn | Pn | 21 23 30.0 | +0.9 |
| CARC | Carrizo Plain | 2.72 | 228 | ePn | Pn | 21 23 30.6 | +0.8 |
| HOLC | Holcomb Ridge | 2.73 | 188 | ePn | Pn | 21 23 30.7 | +0.8 |
| PTRM | Twissleman Ran | 2.74 | 237 | ePn | Pb | 21 23 34.7 | -0.2 |
| ABL | Mount Abel | 2.75 | 213 | ePn | Pn | 21 23 31.1 | +0.7 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GMRC | Granite Mounta | 2.76 | 149 | Pb | Pb | 21 23 35.7 | +0.4 |
| | baz=2.7 | | | | | | |
| GMRC | | | | Sb | Sg | 21 24 12.4 | -1.8 |
| | baz=2.7 | | | | | | |
| GMRC | Granite Mounta | 2.76 | 149 | ePn | Pn | 21 23 31.2 | +0.9 |
| GMRC | | | | ePg | Pb | 21 23 36.4 | +1.1 |
| OSI | Osito Adit | 2.77 | 204 | ePn | Pb | 21 23 36.7 | +1.3 |
| LDFC | Landfair | 2.77 | 138 | ePn | Pb | 21 23 36.6 | +1.0 |
| SMMC | Simmler | 2.81 | 230 | P | Pn | 21 23 30.2 | -0.8 |
| | baz=2.8 | | | | | | |
| SMMC | | | | Sb | Sb | 21 24 12.7 | +1.9 |
| | baz=2.8 | | | | | | |
| HDB | Hidalgo Marine | 2.90 | 162 | ePn | Pn | 21 23 33.2 | +1.0 |
| BBRC | Big Bear Solar | 2.92 | 173 | Sb | Sg | 21 24 18.6 | -0.8 |
| | baz=2.9 | | | | | | |
| BFSC | Mount Baldy Ra | 2.93 | 185 | P | Pn | 21 23 33.6 | +1.0 |
| | baz=2.9 | | | | | | |
| PKM | Peak Mountain | 3.00 | 222 | Pb | Pb | 21 23 39.9 | +0.3 |
| | baz=3.0 | | | | | | |
| LRV | Little Rabbit | 3.01 | 257 | ePn | Pb | 21 23 39.8 | +0.1 |
| LRV | | | | eSn | Sg | 21 24 21.8 | -0.7 |
| PASC | Pasadena Art C | 3.06 | 193 | ePn | Pn | 21 23 36.4 | +2.1 |
| CCUT | Cedar City | 3.22 | 82 | ePn | Pn | 21 23 38.4 | +1.6 |
| TPC | Twentynine Pal | 3.24 | 160 | ePn | Pn | 21 23 38.1 | +1.2 |
| BMN | Battle Mountai | 3.27 | 2 | ePn | Pn | 21 23 39.2 | +1.8 |
| SAO | San Andreas Ge | 3.28 | 264 | ePn | Pb | 21 23 42.7 | -1.5 |
| BELC | Belle Mtn. Jos | 3.35 | 160 | P | Pn | 21 23 39.1 | +0.7 |
| | baz=3.3 | | | | | | |
| BELC | Belle Mtn. Jos | 3.35 | 160 | ePn | Pn | 21 23 39.7 | +1.2 |
| BACC | Bachelor Mtn. | 3.55 | 175 | ePn | Pn | 21 23 42.5 | +1.3 |
| PFO | Pinyon Flat Ob | 3.62 | 168 | ePn | Pn | 21 23 43.2 | +0.9 |
| DNR | Dunn Ranch,Anz | 3.64 | 170 | ePn | Pn | 21 23 43.7 | +1.3 |
| DNR | | | | eSn | Sn | 21 24 23.4 | -2.4 |
| CTW | Cottonwood Mou | 3.69 | 160 | ePn | Pn | 21 23 44.5 | +1.4 |
| CTW | | | | ePg | Pb | 21 23 51.6 | +0.4 |
| HAY | Hayfield | 3.71 | 158 | ePn | Pn | 21 23 45.0 | +1.6 |
| OHCM | Honcut | 3.89 | 305 | ePg | Pb | 21 23 55.6 | +1.0 |
| OHCM | | | | e | | 21 23 55.8 | |
| ELK | Elko | 3.95 | 24 | ePn | Pn | 21 23 48.2 | +1.5 |
| ELK | | | | ePg | Pg | 21 24 00.8 | -0.5 |
| BORC | Borrego Spring | 3.96 | 168 | ePg | Pg | 21 24 00.1 | -1.5 |
| SAC | San Andreas | 4.04 | 277 | ePn | Pn | 21 23 50.4 | +2.6 |
| SAC | | | | ePg | Pg | 21 24 01.7 | -1.2 |
| BLYC | Blythe | 4.12 | 145 | eSn | Sn | 21 24 33.5 | -3.9 |
| MSU | Marysvale | 4.33 | 70 | ePn | Pn | 21 23 53.8 | +1.7 |
| NSHM | Saint Helena R | 4.36 | 290 | ePg | Pb | 21 24 03.8 | +1.3 |
| BTCC | Brunts Corner | 4.50 | 156 | ePg | Pg | 21 24 12.8 | +0.9 |
| BAR | Barrett | 4.51 | 172 | ePn | Pn | 21 23 56.0 | +1.7 |
| GLA | Glamis | 4.60 | 152 | ePg | Pg | 21 24 11.5 | -2.3 |
| DUG | Dugway | 4.68 | 48 | ePg | Pg | 21 24 14.1 | -1.2 |
| NLU | North Lily Min | 5.00 | 55 | ePg | Pg | 21 24 21.0 | -0.5 |
| BGU | Big Grassy Mou | 5.06 | 41 | ePn | Pn | 21 24 02.8 | +0.8 |
| BGU | | | | ePg | Pb | 21 24 19.1 | +4.6 |
| WUAZ | Wupatki | 5.12 | 107 | Pn | Pn | 21 24 04.1 | +1.3 |
| MOD | Modoc | 5.25 | 335 | ePn | Pn | 21 24 05.7 | +1.1 |
| WDC | Whiskeytown Da | 5.28 | 312 | ePg | Pg | 21 24 23.6 | -3.2 |
| TMUT | Trail Mountain | 5.30 | 64 | ePn | Pn | 21 24 09.0 | +3.5 |
| WVOR | Wild Horse Val | 5.35 | 350 | ePg | Pg | 21 24 27.3 | -0.9 |
| CTU | Camp Tracy | 5.63 | 49 | ePg | Pg | 21 24 33.4 | 0.0 |
| SPUT | South Promonto | 5.64 | 41 | ePg | Pg | 21 24 32.0 | -1.6 |
| P17A | Butcher Ranch, | 5.71 | 64 | ePn | Pn | 21 24 18.9 | +8.0 |
| P17A | | | | ePg | Pg | 21 24 31.9 | -3.0 |
| SRU | San Rafael | 5.74 | 68 | ePn | Pn | 21 24 14.7 | +3.3 |
| HVU | Hansel Valley | 5.83 | 36 | ePn | Pn | 21 24 17.2 | +4.7 |
| TCUT | Toone Canyon | 6.09 | 48 | ePn | Pn | 21 24 23.6 | +7.3 |
| P18A | Preston Nutter | 6.12 | 64 | ePn | Pn | 21 24 22.9 | +6.2 |
| YBH | Yreka Blue Hor | 6.15 | 320 | ePg | Pg | 21 24 41.3 | -2.2 |
| K05A | Summer Lake | 6.18 | 335 | ePn | Pn | 21 24 22.9 | +5.5 |
| J08A | Circle Bar Ran | 6.25 | 353 | ePn | Pn | 21 24 26.1 | +7.9 |
| HWUT | Hardware Ranch | 6.32 | 44 | ePn | Pn | 21 24 23.6 | +4.2 |
| MFID | Camas Ranch | 6.36 | 10 | ePn | Pb | 21 24 29.6 | -7.0 |
| PV05 | Paradox Valley | 6.63 | 80 | ePn | Pn | 21 24 31.8 | +8.1 |
| PV09 | Paradox Valley | 6.66 | 76 | ePg | Pg | 21 24 54.6 | +1.4 |
| HLID | Hailey | 6.78 | 19 | ePn | Pn | 21 24 34.7 | +9.0 |
| PV01 | Paradox Valley | 7.05 | 79 | ePn | Pn | 21 24 30.6 | +1.1 |
| PV01 | | | | ePg | Pg | 21 24 57.3 | -3.5 |
| MVCO | Mesa Verde | 7.09 | 87 | ePn | Pn | 21 24 33.4 | +3.4 |
| I07A | Izee | 7.10 | 348 | ePn | Pn | 21 24 38.5 | +8.6 |
| TUC | Tucson | 7.27 | 130 | ePn | Pn | 21 24 35.4 | +3.1 |
| TUC | | | | eSg | Sg | 21 26 38.1 | -1.0 |
| MOOW | Moose Ponds | 8.29 | 35 | Pn | Pn | 21 24 52.1 | +5.6 |
| FLWY | Flagg Ranch | 8.57 | 34 | eSn | Sn | 21 26 25.1 | -2.2 |
| DLMT | Dillon | 8.95 | 22 | ePn | Pn | 21 25 05.1 | +10 |
| TX31 | Lajitas Ar. Si | 13.87 | 120 | ePn | P | 21 26 11.7 | +0.6 |
| HHC | Hu-ho-hao-te | 90.35 | 325 | eP | P | 21 35 47.3 | -0.3 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,49nm,4.8s | | | | | | |
| WMQ | Urumqi | 96.24 | 342 | eP | P | 21 36 15.0 | +0.4 |

**IDC 05 21:34:16.4±1.7, 1.25N×126.50E, h0km, mb3.7/4, mb1 3.9/4, mb1mx3.4/43, mbtmp3.7/4, Error ellipse: s-maj=169.6km s-min=21.1km az=66.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 22.42 | 160 | P | P | 21 39 16.8 | -0.1 |
| | 1.2nm,0.5s,baz=339,slow=10,SNR=20 | | | | | | |
| ASAR | Alice Springs | 25.79 | 164 | P | P | 21 39 49.2 | -0.1 |
| | 0.6nm,0.6s,baz=351,slow=15,SNR=9.3 | | | | | | |
| MKAR | Makanchi Array | 59.47 | 326 | P | P | 21 44 21.5 | +0.2 |
| | 0.5nm,0.4s,baz=122,slow=8.4,SNR=11 | | | | | | |
| KURBB | Kurchatov Arra | 63.70 | 328 | P | P | 21 44 49.6 | -0.2 |
| | 0.7nm,0.6s,baz=126,slow=6.0,SNR=5.1 | | | | | | |

**IDC 05 21:51:49.2±3.5, 20.61S×70.19W, h0km, mb3.7/1, mb1 3.5/2, mb1mx3.4/16, mbtmp3.5/2, ML3.3/1, Error ellipse: s-maj=127.8km s-min=44.9km az=104.0, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 4.72 | 25 | Pn | Pn | 21 53 01.3 | -1.3 |
| | 0.8nm,0.3s,baz=209,slow=7.2,SNR=14 | | | | | | |
| LPAZ | | | | Sn | Sn | 21 54 01.3 | +2.7 |
| | 0.2nm,0.3s,baz=234,slow=19,SNR=1.4 | | | | | | |
| TORD | Torodi Ar. Bea | 78.19 | 71 | P | P | 22 03 51.1 | 0.0 |
| | 0.5nm,0.7s,baz=251,slow=4.6,SNR=7.8 | | | | | | |
| MKAR | Makanchi Array | 145.59 | 34 | PKPbc | PKPdf | 22 11 29.1 | -0.5 |
| | 0.3nm,0.4s,baz=314,slow=2.8,SNR=6.7 | | | | | | |

**PGC 05 22:01:14.0±0.0, 59.60N×122.39W, h1km, ML3.6/19, 88km Nne of Fort Nelson, Bc British Columbia, British Columbia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNBB | Fort Nelson | 0.78 | 204 | P | Pg | 22 01 28.1 | -0.8 |
| FNBB | | | | S | Sg | 22 01 37.3 | -1.8 |
| DLBC | Dease Lake | 4.11 | 257 | Pn | Pn | 22 02 17.1 | -0.9 |
| DLBC | | | | Pg | Pb | 22 02 28.5 | +1.2 |
| DLBC | | | | Sg | Sb | 22 03 21.5 | +3.9 |
| YKR1 | Yellowknife Ar | 4.64 | 48 | Pn | Pn | 22 02 24.1 | -1.0 |
| YKR1 | | | | Sn | Sn | 22 03 15.6 | -3.9 |
| YKR2 | Yellowknife Ar | 4.66 | 48 | Pn | Pn | 22 02 24.4 | -1.0 |
| YKR3 | Yellowknife Ar | 4.68 | 48 | Pn | Pn | 22 02 25.1 | -0.6 |
| YKR4 | Yellowknife Ar | 4.70 | 49 | Pn | Pn | 22 02 24.8 | -1.1 |
| YKR5 | Yellowknife Ar | 4.71 | 49 | Pn | Pn | 22 02 24.5 | -1.7 |
| YKR5 | | | | Sn | Sn | 22 03 17.8 | -3.6 |
| YKB1 | Yellowknife Ar | 4.72 | 50 | Pn | Pn | 22 02 24.8 | -1.4 |
| YKB2 | Yellowknife Ar | 4.73 | 50 | Pn | Pn | 22 02 24.8 | -1.6 |
| YKB2 | | | | Sn | Sn | 22 03 18.3 | -3.6 |
| YKB3 | Yellowknife Ar | 4.75 | 50 | Pn | Pn | 22 02 25.5 | -1.1 |
| YKR7 | Yellowknife Ar | 4.75 | 49 | Pn | Pn | 22 02 25.6 | -1.1 |
| YKB4 | Yellowknife Ar | 4.76 | 49 | Pn | Pn | 22 02 25.5 | -1.3 |
| YKR8 | Yellowknife Ar | 4.77 | 49 | Pn | Pn | 22 02 25.7 | -1.2 |
| YKR8 | | | | Sn | Sn | 22 03 19.7 | -3.1 |
| YKB6 | Yellowknife Ar | 4.78 | 49 | Pn | Pn | 22 02 25.9 | -1.2 |
| YKR9 | Yellowknife Ar | 4.79 | 49 | Pn | Pn | 22 02 26.1 | -1.1 |
| YKB7 | Yellowknife Ar | 4.80 | 49 | Pn | Pn | 22 02 26.0 | -1.3 |
| YKB7 | | | | Sn | Sn | 22 03 20.3 | -3.1 |
| YKW3 | Yellowknife Ar | 4.80 | 48 | Pn | Pn | 22 02 26.1 | -1.3 |
| YKW3 | | | | Sn | Sn | 22 03 20.4 | -3.2 |
| YKB8 | Yellowknife Ar | 4.81 | 48 | Pn | Pn | 22 02 26.3 | -1.2 |
| YKB8 | | | | Sn | Sn | 22 03 20.4 | -3.3 |
| YKB9 | Yellowknife Ar | 4.82 | 48 | Pn | Pn | 22 02 26.2 | -1.4 |
| WHY | Whitehorse | 6.33 | 285 | Sg | Sg | 22 04 30.0 | -7.5 |
| UBRB | Upper Baezaeko | 6.79 | 189 | Sg | Sb | 22 04 42.4 | +7.9 |
| HYT | Haines Junctio | 7.63 | 286 | Sg | Sg | 22 05 10.6 | -8.5 |
| CLVN | Colville Lake | 7.65 | 349 | Pn | Pn | 22 03 07.5 | +1.1 |
| MNB | Mounoet Dainar | 7.75 | 161 | Pn | Pn | 22 03 07.0 | -1.2 |
| MNB | | | | Sn | Sn | 22 04 30.0 | -6.8 |
| SLEB | Sale Mountain | 8.79 | 162 | Pn | Pn | 22 03 21.6 | -0.8 |
| KUKN | Kugluktuk,NWT | 8.86 | 18 | Sn | Sn | 22 04 56.3 | -7.1 |
| YUK1 | Sand Pete Hill | 9.20 | 294 | Sg | Sn | 22 05 59.9 | +48 |
| YUK2 | White River | 9.30 | 292 | Sg | Sn | 22 06 01.6 | +47 |
| INK | Inuvik | 9.99 | 336 | Pn | Pn | 22 03 36.0 | -2.4 |

*NSSC **05** 22:04:18.6±1.2, 34.09N×35.63E, h21km±4km, ML2.0*
*ISCJB **05** 22:04:19.0±0.7, 34.09N±0.02×35.64E±0.06, h27km±4km, Error ellipse: s-maj=8.2km s-min=3.6km az=4.6*
*CSEM **05** 22:04:19.2±0.2, 34.08N×35.65E, h22km±1km, ML2.9, Error ellipse: s-maj=4.3km s-min=1.9km az=94.0*
*GRAL **05** 22:04:21.3±0.3, 34.03N×35.77E, h20km±5km, MD2.9*
**ISC 05 22:04:19.2±1.0, 34.09N±0.02×35.63E±0.05, h29km±7km, n34, σ0.80/64, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BHL | Bhannes | 0.18 | 175 | eP | Pb | 22 04 25.5 | +0.2 |
| BHL | Bhannes | 0.18 | 175 | eP | Pb | 22 04 25.5 | +0.2 |
| HWQ | Hawqa | 0.32 | 53 | eP | Pb | 22 04 27.4 | +0.4 |
| HWQ | | | | eS | Sb | 22 04 31.8 | -0.5 |
| HWQ | Hawqa | 0.32 | 53 | eP | Pb | 22 04 27.4 | +0.4 |
| HWQ | | | | eS | Sb | 22 04 31.8 | -0.5 |
| DQRL | Deir Qamar | 0.38 | 188 | eP | Pb | 22 04 28.2 | +0.4 |
| DQRL | Deir Qamar | 0.38 | 188 | eP | Pb | 22 04 28.2 | +0.4 |
| RCY | Rachaya | 0.61 | 164 | eP | Pb | 22 04 31.1 | -0.5 |
| RCY | | | | eS | Sb | 22 04 38.3 | -1.6 |
| RCY | Rachaya | 0.61 | 164 | eP | Pb | 22 04 31.0 | -0.5 |
| RCY | | | | eS | Sb | 22 04 38.3 | -1.6 |
| BRBR | Barbar | 0.72 | 158 | eP | Pb | 22 04 32.9 | -0.5 |
| BRBR | | | | eS | Sb | 22 04 42.1 | -1.0 |
| BRBR | | | | AML | AML | 22 04 43.3 | |
| | comp=E,88nm,0.2s | | | | | | |
| BRBR | | | | AML | AML | 22 04 43.8 | |
| | comp=N,58nm,0.6s | | | | | | |
| BRBR | Barbar | 0.72 | 158 | eP | Pb | 22 04 32.9 | -0.5 |
| BRBR | | | | eS | Sb | 22 04 42.1 | -1.0 |
| QASN | Qassioun | 0.77 | 136 | eP | Pn | 22 04 34.1 | 0.0 |
| QASN | | | | eS | Sb | 22 04 42.9 | -1.3 |
| QASN | | | | AML | AML | 22 04 46.3 | |
| | comp=E,39nm,0.2s | | | | | | |
| QASN | | | | AML | AML | 22 04 47.3 | |
| | comp=N,148nm,0.4s | | | | | | |
| QASN | Qassioun | 0.77 | 136 | eP | Pn | 22 04 34.2 | 0.0 |
| QASN | | | | eS | Sb | 22 04 42.9 | -1.3 |
| HAWK | Haweek | 0.77 | 56 | eP | Pb | 22 04 33.7 | -0.5 |
| HAWK | | | | eS | Sb | 22 04 43.4 | -1.0 |
| HAWK | | | | AML | AML | 22 04 45.1 | |
| | comp=N,86nm,0.7s | | | | | | |
| HAWK | | | | AML | AML | 22 04 45.6 | |
| | comp=E,55nm,0.4s | | | | | | |
| HAWK | Haweek | 0.77 | 56 | eP | Pb | 22 04 33.7 | -0.5 |
| HAWK | | | | eS | Sb | 22 04 43.4 | -1.0 |
| TOTH | TOTAH | 0.98 | 137 | eP | Pn | 22 04 36.8 | -0.2 |
| TOTH | | | | eS | Sb | 22 04 48.8 | -1.4 |
| TOTH | | | | AML | AML | 22 04 50.0 | |
| | comp=E,16nm,0.3s | | | | | | |
| TOTH | | | | AML | AML | 22 04 51.0 | |
| | comp=N,20nm,0.2s | | | | | | |
| TOTH | TOTAH | 0.98 | 137 | eP | Pn | 22 04 36.8 | -0.2 |
| TOTH | | | | eS | Sb | 22 04 48.8 | -1.4 |
| BIDA | Albida | 1.09 | 31 | eP | Pn | 22 04 38.8 | +0.3 |
| BIDA | | | | eS | Sb | 22 04 52.7 | -0.6 |
| BIDA | | | | AML | AML | 22 04 55.8 | |
| | comp=N,88nm,0.2s | | | | | | |
| BIDA | | | | AML | AML | 22 04 56.3 | |
| | comp=E,54nm,0.2s | | | | | | |
| BIDA | Albida | 1.09 | 31 | eP | Pn | 22 04 38.8 | +0.3 |
| BIDA | | | | eS | Sb | 22 04 52.7 | -0.6 |
| RABH | Abou Rabah | 1.35 | 75 | eP | Pn | 22 04 42.8 | +0.7 |
| RABH | | | | eS | Sb | 22 05 00.3 | -0.4 |
| RABH | | | | AML | AML | 22 05 01.3 | |
| | comp=N,55nm,0.5s | | | | | | |
| RABH | | | | AML | AML | 22 05 01.9 | |
| | comp=E,38nm,0.4s | | | | | | |
| RABH | Abou Rabah | 1.35 | 75 | eP | Pn | 22 04 42.8 | +0.7 |
| RABH | | | | eS | Sb | 22 05 00.3 | -0.4 |
| ROOS | tl_alroos | 1.38 | 86 | eP | Pn | 22 04 43.1 | +0.6 |
| ROOS | | | | eS | Sn | 22 05 00.4 | +0.7 |
| ROOS | tl_alroos | 1.38 | 86 | eP | Pn | 22 04 43.1 | +0.6 |
| ROOS | | | | eS | Sn | 22 05 00.4 | +0.7 |
| TCHB | Talchebab | 1.44 | 169 | eP | Pn | 22 04 44.3 | +1.0 |
| TCHB | | | | eS | Sn | 22 05 02.1 | +0.8 |
| TCHB | | | | AML | AML | 22 05 03.7 | |
| | comp=N,24nm,0.2s | | | | | | |
| TCHB | | | | AML | AML | 22 05 07.6 | |
| | comp=E,28nm,0.6s | | | | | | |
| TCHB | Talchebab | 1.44 | 169 | eP | Pn | 22 04 44.3 | +1.0 |
| TCHB | | | | eS | Sn | 22 05 02.1 | +0.8 |
| KFRA | Kufra | 1.48 | 40 | eP | Pn | 22 04 44.8 | +0.9 |
| KFRA | | | | eS | Sn | 22 05 02.6 | +0.3 |
| KFRA | | | | AML | AML | 22 05 06.1 | |
| | comp=E,188nm,0.3s | | | | | | |
| KFRA | | | | AML | AML | 22 05 11.4 | |
| | comp=N,47nm,0.5s | | | | | | |
| KFRA | Kufra | 1.48 | 40 | eP | Pn | 22 04 44.8 | +0.9 |
| KFRA | | | | eS | Sn | 22 05 02.6 | +0.3 |
| SALA | Sala | 1.65 | 146 | eP | Pn | 22 04 46.9 | +0.5 |
| SALA | | | | eS | Sn | 22 05 07.8 | +1.1 |
| SALA | | | | AML | AML | 22 05 09.2 | |
| | comp=N,22nm,0.3s | | | | | | |
| SALA | | | | AML | AML | 22 05 09.3 | |
| | comp=E,3.8nm,0.3s | | | | | | |
| SALA | Sala | 1.65 | 146 | eP | Pn | 22 04 46.9 | +0.5 |
| SALA | | | | eS | Sn | 22 05 07.8 | +1.1 |
| ARNB | Al Arnab | 1.79 | 9 | eP | Pn | 22 04 48.6 | +0.4 |
| ARNB | | | | eS | Sn | 22 05 09.2 | -0.9 |
| ARNB | | | | AML | AML | 22 05 16.1 | |
| | comp=N,16nm,0.2s | | | | | | |
| ARNB | | | | AML | AML | 22 05 20.5 | |
| | comp=E,25nm,0.4s | | | | | | |
| ARNB | Al Arnab | 1.79 | 9 | eP | Pn | 22 04 48.6 | +0.4 |
| ARNB | | | | eS | Sn | 22 05 09.2 | -0.9 |
| ZALF | Zalf | 1.83 | 129 | eP | Pn | 22 04 49.1 | +0.4 |
| ZALF | | | | eS | Sn | 22 05 12.4 | +1.4 |
| ZALF | | | | AML | AML | 22 05 13.9 | |
| | comp=E,20nm,0.4s | | | | | | |
| ZALF | | | | AML | AML | 22 05 13.9 | |
| | comp=N,23nm,0.4s | | | | | | |
| ZALF | Zalf | 1.83 | 129 | eP | Pn | 22 04 49.1 | +0.4 |
| ZALF | | | | eS | Sn | 22 05 12.4 | +1.4 |
| BTCH | Batrach | 2.06 | 19 | eP | Pn | 22 04 52.7 | +0.8 |
| BTCH | | | | eS | Sn | 22 05 16.4 | -0.3 |
| BTCH | | | | AML | AML | 22 05 32.0 | |
| | comp=N,17nm,0.8s | | | | | | |
| BTCH | | | | AML | AML | 22 05 34.5 | |
| | comp=E,15nm,0.8s | | | | | | |
| BTCH | Batrach | 2.06 | 19 | eP | Pn | 22 04 52.7 | +0.8 |
| BTCH | | | | eS | Sn | 22 05 16.4 | -0.3 |

*KRNET **05** 22:17:14.2±0.1, 41.78N×77.64E, h9km, mb2.5*
*NNC **05** 22:17:16.4±2.2, 41.81N×77.80E, h0km, mb3.4, mpv3.1, Error ellipse: s-maj=17.4km s-min=9.4km az=173.0*
**ISC 05 22:17:14.9±1.9, 41.78N±0.07×77.63E±0.05, h5km±12km, n18, σ1.37/34, 24C-12D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANVS | Anan'yevo | 1.00 | 1 | ⇓iP | Pb | 22 17 33.9 | -1.0 |
| | baz=1.0 | | | | | | |
| ANVS | | | | ⇓iS | Sb | 22 17 48.0 | -0.4 |
| | baz=1.0 | | | | | | |
| ULHL | Ulahol | 1.14 | 295 | ⇑iP | Pg | 22 17 36.5 | -0.1 |
| | baz=293 | | | | | | |
| ULHL | | | | ⇑iS | Sn | 22 17 52.3 | -1.5 |
| | baz=293 | | | | | | |
| NRN | Naryn | 1.27 | 255 | ⇑iP | Pb | 22 17 39.0 | -0.5 |
| | baz=254 | | | | | | |
| NRN | | | | ⇑iS | Sn | 22 17 58.1 | +0.8 |
| | baz=254 | | | | | | |
| BOOM | Boomskoye usch | 1.44 | 300 | ⇑iP | Pg | 22 17 42.3 | -0.3 |
| | baz=300 | | | | | | |
| BOOM | | | | ⇑iS | Sg | 22 18 03.7 | +2.4 |
| | baz=300 | | | | | | |
| KNDC | Almaty | 1.52 | 341 | ⇓P | Pg | 22 17 43.7 | -0.3 |
| | 24nm,0.3s | | | | | | |
| KNDC | | | | ⇑S | Sg | 22 18 05.7 | +2.1 |
| | 42nm,0.3s | | | | | | |
| KZA | Kyzart | 1.80 | 280 | ⇑iP | Pg | 22 17 49.7 | +0.3 |
| | baz=280 | | | | | | |
| KZA | | | | ⇑iS | Sg | 22 18 14.7 | +1.9 |
| | baz=280 | | | | | | |
| TKM2 | Tokmak 2 | 1.89 | 308 | ⇑P | Pg | 22 17 50.2 | -0.9 |
| | 3.6nm,0.3s | | | | | | |
| TKM2 | | | | ⇑S | Sg | 22 18 17.1 | +1.5 |
| | 13nm,0.2s | | | | | | |
| TKM2 | Tokmak 2 | 1.89 | 308 | ⇓iP | Pg | 22 17 50.1 | -1.0 |
| | baz=308 | | | | | | |
| TKM2 | | | | ⇓iS | Sg | 22 18 16.5 | +0.9 |
| | baz=308 | | | | | | |
| PDGK | Podgornoye | 2.06 | 41 | ⇑P | Pb | 22 17 51.4 | -1.4 |
| | 16nm,0.5s | | | | | | |
| PDGK | | | | ⇓S | Sb | 22 18 17.7 | -1.1 |
| | 63nm,0.6s | | | | | | |
| KBK | Karagaybulak | 2.18 | 295 | ⇑iP | Pb | 22 17 55.1 | +0.2 |
| | baz=294 | | | | | | |
| KBK | | | | ⇑iS | Sg | 22 18 25.4 | +0.6 |
| | baz=294 | | | | | | |
| UCH | Uchtor | 2.37 | 282 | ⇑iP | Pb | 22 17 58.9 | +0.6 |
| | baz=282 | | | | | | |
| UCH | | | | ⇑iS | Sg | 22 18 30.2 | -0.7 |
| | baz=282 | | | | | | |
| ARLS | Aral | 2.48 | 273 | ⇓eP | Pb | 22 17 57.8 | -2.1 |
| | baz=273 | | | | | | |
| ARLS | | | | ⇓iS | Sb | 22 18 29.0 | -1.8 |
| | baz=273 | | | | | | |
| AAK | Ala-Archa | 2.48 | 291 | ⇓Pn | Pg | 22 18 00.9 | -1.5 |
| | 1.6nm,0.3s | | | | | | |
| AAK | | | | ⇓Sn | Sg | 22 18 34.5 | -0.1 |
| | 13nm,0.6s | | | | | | |
| AAK | Ala-Archa | 2.48 | 291 | ⇑iP | Pb | 22 18 00.0 | -0.1 |
| | baz=291 | | | | | | |
| AAK | | | | ⇑iS | Sg | 22 18 33.3 | -1.3 |
| | baz=291 | | | | | | |
| USP | Ospenovka | 2.75 | 304 | ⇑iP | Pb | 22 18 03.2 | -1.4 |
| | baz=304 | | | | | | |
| USP | | | | ⇑iS | Sb | 22 18 39.1 | +0.5 |
| | baz=304 | | | | | | |
| EKS | Erkin-Say | 2.99 | 289 | ⇑eP | Pn | 22 18 04.6 | +1.5 |
| | baz=289 | | | | | | |
| EKS | | | | ⇑iS | Sb | 22 18 42.8 | -2.8 |
| | baz=289 | | | | | | |
| SFK | Sufi-Kurgan | 3.59 | 242 | ⇓eP | Pn | 22 18 14.1 | +2.6 |
| | baz=242 | | | | | | |
| SFK | | | | ⇓iS | Sn | 22 18 56.0 | +1.6 |
| | baz=242 | | | | | | |
| MK31 | Makanchi Array | 6.02 | 32 | ⇑Pn | Pn | 22 18 46.2 | +1.6 |
| | 0.2nm,0.5s,baz=210,slow=14 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 22 20 17.2 | |
| | 0.8nm,0.5s,baz=210,slow=28 | | | | | | |

*CSEM **05** 22:23:17.5±0.7, 38.90N×27.38E, h10km, MD2.6, Error ellipse: s-maj=15.7km s-min=8.0km az=90.0*
*ISK **05** 22:23:17.5, 38.94N×28.20E, h19km, MD2.2*
*DDA **05** 22:23:22.1, 38.82N×27.95E, h7km, Md2.6*
**ISC 05 22:23:20.7±1.0, 38.79N±0.06×27.92E±0.10, h16km±10km, n12, σ0.88/16, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKHS | Akhisar | 0.12 | 316 | i P | Pg | 22 23 24.7 | +0.3 |
| AKHS | | | | i S | Sg | 22 23 27.0 | +0.2 |
| AKHS | Akhisar | 0.12 | 316 | P | Pg | 22 23 24.7 | +0.3 |
| AKHS | | | | S | Sg | 22 23 26.9 | +0.2 |
| AKS | Akhisar | 0.12 | 315 | ePG | Pg | 22 23 24.6 | +0.2 |
| AKS | Akhisar | 0.12 | 315 | ePg | Pg | 22 23 24.6 | +0.2 |
| MANT | Manisa | 0.58 | 121 | P | Pn | 22 23 33.4 | -1.2 |
| MANT | | | | S | Sb | 22 23 40.3 | -0.5 |
| KULA | Kula-Manisa | 0.64 | 115 | ePG | Pb | 22 23 29.0 | -4.6 |
| AYDB | Zeytinkoy-Aydi | 0.84 | 182 | ePG | Pn | 22 23 37.2 | -0.9 |
| AYDB | | | | eSG | Sn | 22 23 51.6 | +1.3 |
| AYDB | Zeytinkoy-Aydi | 0.84 | 182 | ePg | Pn | 22 23 37.2 | -0.9 |
| AYDB | | | | eSg | Sn | 22 23 51.6 | +1.3 |
| DURS | Dursunbey | 0.92 | 28 | i P | Pg | 22 23 39.5 | +1.0 |
| DURS | | | | i S | Sn | 22 23 52.0 | 0.0 |
| DURS | Dursunbey | 0.92 | 28 | P | Pg | 22 23 39.5 | +1.0 |
| DURS | | | | S | Sn | 22 23 52.0 | 0.0 |
| GONE | Gonen-Balikesi | 1.27 | 352 | ePN | Pn | 22 23 39.5 | -4.3 |
| GONE | Gonen-Balikesi | 1.27 | 352 | ePn | Pn | 22 23 39.5 | -4.3 |

*AZER **05** 22:28:34.0±0.6, 43.05N×45.00E, h4km, Error ellipse: s-maj=20.1km s-min=12.2km az=262.0*
*TIF **05** 22:28:36.8, 43.03N×45.23E, h8km±1km*
*MOS **05** 22:28:37.7±0.6, 43.01N×45.16E, h9km, mb3.9/3, Error ellipse: s-maj=6.6km s-min=4.5km az=28.2*
*CSEM **05** 22:28:38.0±0.2, 43.07N×45.21E, h2km, mb3.9, Error ellipse: s-maj=4.8km s-min=2.6km az=13.0*
**ISC 05 22:28:38.5±0.8, 43.02N±0.02×45.18E±0.01, h13km±6km, n128, σ1.34/204, mb3.7/3, 23C-16D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KMGR | Komgaron | 0.23 | 279 | ⇑iPG | Pg | 22 28 42.7 | -1.0 |
| KMGR | | | | i S | Sg | 22 28 48.5 | +1.4 |
| KMGR | Komgaron | 0.23 | 279 | i Pg | Pg | 22 28 42.7 | -1.0 |
| KMGR | | | | i Sg | Sg | 22 28 48.5 | +1.4 |
| VLKR | Vladikavkaz | 0.37 | 274 | ⇑iPG | Pg | 22 28 45.2 | -0.9 |
| VLKR | | | | eS | Sb | 22 28 52.5 | -0.2 |
| VLKR | Vladikavkaz | 0.37 | 274 | i Pg | Pg | 22 28 45.2 | -0.9 |
| VLKR | | | | eSg | Sb | 22 28 52.5 | -0.2 |
| GROC | Groznyy | 0.48 | 68 | ePG | Pg | 22 28 47.4 | -0.7 |
| GROC | | | | eS | Sg | 22 28 54.3 | -0.3 |
| GROC | Groznyy | 0.48 | 68 | ePg | Pg | 22 28 47.4 | -0.7 |
| GROC | | | | eSg | Sg | 22 28 54.3 | -0.3 |
| BTKR | Batakoyurt | 0.58 | 307 | ⇑iPG | Pg | 22 28 50.3 | +0.3 |
| BTKR | | | | eS | Sn | 22 29 00.9 | -1.1 |
| BTKR | Batakoyurt | 0.58 | 307 | i Pg | Pg | 22 28 50.3 | +0.3 |
| BTKR | | | | eSg | Sn | 22 29 00.9 | -1.1 |
| ARNR | Ardon | 0.68 | 284 | ePG | Pg | 22 28 51.7 | 0.0 |
| ARNR | | | | eS | Sn | 22 29 04.3 | 0.0 |
| ARNR | Ardon | 0.68 | 284 | ePg | Pg | 22 28 51.7 | 0.0 |
| ARNR | | | | eSg | Sn | 22 29 04.3 | 0.0 |
| LACR | Lac | 0.68 | 254 | cePG | Pg | 22 28 50.7 | -1.1 |
| LACR | Lac | 0.68 | 254 | ePg | Pg | 22 28 50.7 | -1.1 |
| TRKR | Terskaya | 0.77 | 335 | ePG | Pb | 22 28 54.1 | +0.2 |
| TRKR | | | | eS | Sn | 22 29 07.4 | +0.8 |
| TRKR | Terskaya | 0.77 | 335 | ePg | Pb | 22 28 54.1 | +0.2 |
| TRKR | | | | eSg | Sn | 22 29 07.4 | +0.8 |
| KORR | Kora | 0.82 | 275 | ePG | Pg | 22 28 53.2 | -1.2 |
| KORR | | | | eS | Sb | 22 29 06.3 | +0.7 |
| KORR | Kora | 0.82 | 275 | ePg | Pg | 22 28 53.2 | -1.2 |
| KORR | | | | eSg | Sb | 22 29 06.3 | +0.7 |
| BTLR | Botlikh | 0.84 | 115 | ePG | Pg | 22 28 52.9 | -2.0 |
| BTLR | | | | eS | Sg | 22 29 05.0 | -1.0 |
| BTLR | | | | pmax | pmax | | |
| | comp=Z,32nm,0.8s | | | | | | |
| BTLR | Botlikh | 0.84 | 115 | ePg | Pg | 22 28 52.9 | -2.0 |
| | comp=Z,32nm,0.8s | | | | | | |
| BTLR | | | | eSg | Sg | 22 29 05.0 | -1.0 |
| STDR | Stavd-Durt | 0.89 | 293 | ⇑iPG | Pb | 22 28 56.0 | +0.2 |
| STDR | | | | eS | Sn | 22 29 10.5 | +1.0 |
| STDR | Stavd-Durt | 0.89 | 293 | i Pg | Pb | 22 28 56.0 | +0.2 |
| STDR | | | | eSg | Sn | 22 29 10.5 | +1.0 |
| ZEI | Tsey | 0.97 | 256 | ⇑iPG | Pg | 22 28 56.7 | -0.6 |
| ZEI | | | | eS | Sb | 22 29 11.1 | +1.0 |
| PRTR | Priterechnaya | 0.98 | 318 | cePG | Pn | 22 28 58.6 | +0.6 |
| PRTR | Priterechnaya | 0.98 | 318 | ePg | Pn | 22 28 58.6 | +0.6 |
| DUS | Dusheti | 1.00 | 201 | P | Pg | 22 28 56.8 | -1.0 |
| DUS | | | | S | Sn | 22 29 12.4 | +0.1 |
| DUS | Dusheti | 1.00 | 201 | PG | Pg | 22 28 56.8 | -1.0 |
| DUS | | | | S | Sn | 22 29 12.3 | +0.1 |
| DUS | Dusheti | 1.00 | 201 | P | Pg | 22 28 56.8 | -1.0 |
| DUS | | | | Sg | Sn | 22 29 12.3 | +0.1 |
| LSNR | Lesken | 1.03 | 285 | ⇑iPG | Pb | 22 28 57.9 | -0.3 |
| LSNR | | | | eS | Sn | 22 29 14.2 | +1.3 |
| LSNR | Lesken | 1.03 | 285 | i Pg | Pb | 22 28 57.9 | -0.3 |
| LSNR | | | | eSg | Sn | 22 29 14.2 | +1.3 |
| DLMR | Dylym | 1.06 | 87 | ePG | Pb | 22 28 58.0 | -0.8 |
| DLMR | | | | eS | Sn | 22 29 15.5 | +1.8 |
| DLMR | | | | pmax | pmax | | |
| | comp=Z,173nm,0.2s | | | | | | |
| DLMR | Dylym | 1.06 | 87 | ePg | Pb | 22 28 58.0 | -0.8 |
| | comp=Z,173nm,0.2s | | | | | | |
| DLMR | | | | eSg | Sn | 22 29 15.5 | +1.8 |
| DIGR | Digorskoe uzhe | 1.18 | 265 | ePG | Pn | 22 29 00.1 | -0.9 |
| DIGR | | | | eS | Sn | 22 29 17.4 | +0.4 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| DIGR | Digorskoe uzhe | 1.18 | 265 | *e*Pg | Pn | 22 29 00.1 | -0.9 |
| DIGR | | | | *e*Sg | Sn | 22 29 17.4 | +0.4 |
| DBC | Dubki | 1.21 | 90 | ⇑*i*PG | Pn | 22 29 00.2 | -1.0 |
| DBC | | | | *i* S | Sn | 22 29 18.6 | +1.2 |
| DBC | Dubki | 1.21 | 90 | *i* Pg | Pn | 22 29 00.2 | -1.0 |
| DBC | | | | *i* Sg | Sn | 22 29 18.6 | +1.2 |
| XNZR | Khunzakh | 1.22 | 113 | *e*PG | Pn | 22 29 00.0 | -1.4 |
| XNZR | | | | *e*S | Sn | 22 29 19.0 | +1.2 |
| XNZR | | | | pmax | pmax | | |
| | comp=Z,203nm,0.3s | | | | | | |
| XNZR | Khunzakh | 1.22 | 113 | *e*Pg | Pn | 22 29 00.0 | -1.4 |
| | comp=Z,203nm,0.3s | | | | | | |
| XNZR | | | | *e*Sg | Sn | 22 29 19.0 | +1.2 |
| UNCR | Uncukul | 1.22 | 104 | *e*PG | Pn | 22 28 59.8 | -1.6 |
| UNCR | | | | *e*S | Sn | 22 29 19.0 | +1.2 |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,322nm,0.3s | | | | | | |
| UNCR | Uncukul | 1.22 | 104 | *e*Pg | Pn | 22 28 59.8 | -1.6 |
| | comp=Z,322nm,0.3s | | | | | | |
| UNCR | | | | *e*Sg | Sn | 22 29 19.0 | +1.2 |
| NCK | Nalchik | 1.25 | 293 | ⇓*e*PG | Pn | 22 29 01.9 | +0.1 |
| NCK | | | | *e*S | Sg | 22 29 21.7 | +2.7 |
| NCK | Nalchik | 1.25 | 293 | *e*Pg | Pn | 22 29 01.9 | +0.1 |
| NCK | | | | *e*Sg | Sg | 22 29 21.7 | +2.7 |
| KRNR | Karanay | 1.28 | 98 | *e*PG | Pn | 22 29 01.8 | -0.4 |
| KRNR | | | | *i* S | Sg | 22 29 21.0 | +1.1 |
| KRNR | | | | pmax | pmax | | |
| | comp=Z,158nm,0.3s | | | | | | |
| KRNR | Karanay | 1.28 | 98 | *e*Pg | Pn | 22 29 01.8 | -0.4 |
| | comp=Z,158nm,0.3s | | | | | | |
| KRNR | | | | *i* Sg | Sg | 22 29 21.0 | +1.1 |
| TBLG | Delisi | 1.33 | 194 | P | Pn | 22 29 02.3 | -0.5 |
| TBLG | | | | S | Sg | 22 29 21.8 | +0.3 |
| TBLG | Delisi | 1.33 | 194 | PG | Pn | 22 29 02.3 | -0.5 |
| TBLG | | | | S | Sg | 22 29 21.7 | +0.3 |
| TBLG | Delisi | 1.33 | 194 | P | Pn | 22 29 02.3 | -0.5 |
| TBLG | | | | S | Sg | 22 29 21.8 | +0.3 |
| ONI | Oni | 1.34 | 252 | P | Pn | 22 29 02.6 | -0.5 |
| ONI | | | | S | Sg | 22 29 22.8 | +0.9 |
| ONI | Oni | 1.34 | 252 | PG | Pn | 22 29 02.5 | -0.5 |
| ONI | | | | S | Sg | 22 29 22.8 | +0.9 |
| ONI | Oni | 1.34 | 252 | P | Pn | 22 29 02.6 | -0.5 |
| ONI | | | | S | Sg | 22 29 22.8 | +0.9 |
| ARKR | Arakani | 1.40 | 107 | *i* PG | Pn | 22 29 04.0 | +0.2 |
| ARKR | | | | *i* S | Sg | 22 29 23.5 | -0.1 |
| ARKR | | | | pmax | pmax | | |
| | comp=Z,119nm,0.3s | | | | | | |
| ARKR | Arakani | 1.40 | 107 | *i* Pg | Pn | 22 29 04.0 | +0.2 |
| | comp=Z,119nm,0.3s | | | | | | |
| ARKR | | | | *i* Sg | Sg | 22 29 23.5 | -0.1 |
| BUJR | Buynaksk | 1.43 | 97 | *e*PG | Pb | 22 29 05.0 | 0.0 |
| BUJR | | | | *e*S | Sg | 22 29 26.0 | +1.5 |
| BUJR | | | | pmax | pmax | | |
| | comp=Z,135nm,0.3s | | | | | | |
| BUJR | Buynaksk | 1.43 | 97 | *e*Pg | Pb | 22 29 05.0 | 0.0 |
| | comp=Z,135nm,0.3s | | | | | | |
| BUJR | | | | *e*Sg | Sg | 22 29 26.0 | +1.5 |
| GNBR | Gunib | 1.46 | 115 | ⇓*i*PG | Pn | 22 29 04.4 | -0.2 |
| GNBR | | | | *i* S | Sb | 22 29 24.6 | +0.6 |
| GNBR | Gunib | 1.46 | 115 | *i* Pg | Pn | 22 29 04.4 | -0.2 |
| GNBR | | | | *i* Sg | Sb | 22 29 24.6 | +0.6 |
| KBTC | Kuba-Taba | 1.52 | 302 | ⇑*e*PG | Pn | 22 29 05.6 | +0.2 |
| KBTC | | | | *e*S | Sg | 22 29 27.8 | +0.4 |
| KBTC | Kuba-Taba | 1.52 | 302 | *e*Pg | Pn | 22 29 05.6 | +0.2 |
| KBTC | | | | *e*Sg | Sg | 22 29 27.8 | +0.4 |
| DGRG | David-gareji | 1.58 | 175 | P | Pb | 22 29 07.7 | +0.1 |
| DGRG | | | | S | Sg | 22 29 31.3 | +1.9 |
| DGRG | David-gareji | 1.58 | 175 | PG | Pb | 22 29 07.6 | +0.1 |
| DGRG | | | | S | Sg | 22 29 31.2 | +1.9 |
| DGRG | David-gareji | 1.58 | 175 | P | Pb | 22 29 07.7 | +0.1 |
| DGRG | | | | Sg | Sg | 22 29 31.2 | +1.9 |
| KMKR | Kumukh | 1.67 | 122 | *e*PN | Pn | 22 29 07.5 | -0.2 |
| KMKR | | | | *e*S | Sg | 22 29 34.0 | +1.6 |
| KMKR | Kumukh | 1.67 | 122 | *e*Pn | Pn | 22 29 07.5 | -0.2 |
| KMKR | | | | *e*Sg | Sg | 22 29 34.0 | +1.6 |
| MAK | Makhachkala | 1.71 | 91 | *e*PN | Pg | 22 29 10.6 | -0.7 |
| MAK | | | | *e* | | 22 29 35.3 | |
| MAK | | | | pmax | pmax | | |
| | comp=Z,54nm,0.3s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=E,381nm,0.8s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,587nm,0.6s | | | | | | |
| MAK | Makhachkala | 1.71 | 91 | *e*Pn | Pg | 22 29 10.6 | -0.7 |
| | comp=N,54nm,0.3s | | | | | | |
| MAK | | | | *e*Sg | Sg | 22 29 35.3 | +1.9 |
| | comp=N,587nm,0.6s | | | | | | |
| KZR | Kazreti | 1.74 | 199 | P | Pn | 22 29 09.2 | +0.8 |
| KZR | | | | S | Sg | 22 29 34.2 | -0.2 |
| KZR | Kazreti | 1.74 | 199 | P | Pn | 22 29 09.2 | +0.8 |
| KZR | | | | S | Sg | 22 29 34.2 | -0.2 |
| ZKTA | Zakatala | 1.75 | 142 | ⇓Pn | Pn | 22 29 09.4 | +0.9 |
| | SNR=16 | | | | | | |
| ZKTA | | | | ⇑Sn | Sg | 22 29 35.4 | +0.6 |
| PYA1 | Pyatigorsk | 1.84 | 305 | ⇑*e*PN | Pn | 22 29 09.2 | -0.6 |
| PYA1 | Pyatigorsk | 1.84 | 305 | *e*Pn | Pn | 22 29 09.2 | -0.6 |
| QZX | Qazax, Azerbai | 1.97 | 176 | ⇓Pn | Pn | 22 29 12.3 | +0.7 |
| | SNR=26 | | | | | | |
| QZX | | | | ⇑Sn | Sg | 22 29 40.7 | -1.1 |
| QZX | Qazax, Azerbai | 1.97 | 176 | Pn | Pn | 22 29 12.3 | +0.7 |
| | SNR=26 | | | | | | |
| QZX | | | | Sn | Sg | 22 29 40.7 | -1.1 |
| BEYR | Belyy Ugol+ | 1.98 | 301 | *ce*PN | Pn | 22 29 11.2 | -0.6 |
| BEYR | Belyy Ugol+ | 1.98 | 301 | *e*Pn | Pn | 22 29 11.2 | -0.6 |
| URKR | Urkarakh | 2.00 | 114 | *i* PN | Pb | 22 29 14.0 | -0.8 |
| URKR | Urkarakh | 2.00 | 114 | *i* Pn | Pb | 22 29 14.0 | -0.8 |
| AKH | Akhalkalaki | 2.04 | 219 | P | Pn | 22 29 13.9 | +1.2 |
| AKH | | | | S | Sb | 22 29 42.6 | +1.6 |
| AKH | Akhalkalaki | 2.04 | 219 | PN | Pn | 22 29 13.9 | +1.2 |
| AKH | | | | S | Sb | 22 29 42.5 | +1.6 |
| AKH | Akhalkalaki | 2.04 | 219 | P | Pn | 22 29 13.9 | +1.2 |
| AKH | | | | S | Sb | 22 29 42.6 | +1.6 |
| KIV | Kislovodsk | 2.04 | 298 | ⇓*i*PN | Pn | 22 29 12.5 | -0.2 |
| KIV | | | | *e*S | Sb | 22 29 41.4 | +0.5 |
| KIV | Kislovodsk | 2.04 | 298 | *i* Pn | Pn | 22 29 12.5 | -0.2 |
| KIV | | | | *e*Sg | Sb | 22 29 41.4 | +0.5 |
| CHVG | Ch'k'valeri | 2.30 | 263 | P | Pg | 22 29 21.4 | -1.2 |
| CHVG | | | | S | Sg | 22 29 52.0 | -0.4 |
| CHVG | Ch'k'valeri | 2.30 | 263 | P | Pg | 22 29 21.4 | -1.2 |
| CHVG | | | | S | Sg | 22 29 52.0 | -0.4 |
| SEKA | Sheki | 2.35 | 140 | ⇑Pn | Pn | 22 29 18.5 | +1.6 |
| | SNR=28 | | | | | | |
| SEKA | | | | ⇓Sn | Sb | 22 29 50.9 | +1.2 |
| SEKA | Sheki | 2.35 | 140 | Pn | Pn | 22 29 18.5 | +1.6 |
| | SNR=28 | | | | | | |
| SEKA | | | | Sn | Sb | 22 29 50.9 | +1.2 |
| EPOS | Posof | 2.37 | 231 | *i* P | Pb | 22 29 20.1 | -1.1 |
| EPOS | Posof | 2.37 | 231 | P | Pb | 22 29 20.1 | -1.1 |
| EPOS | | | | S | Sn | 22 29 40.0 | -6.2 |
| GANJ | Ganja | 2.52 | 160 | ⇓Pn | Pn | 22 29 20.6 | +1.4 |
| | SNR=13 | | | | | | |
| GANJ | | | | ⇑Sn | Sb | 22 29 55.4 | +0.8 |
| GANJ | Ganja | 2.52 | 160 | Pn | Pn | 22 29 20.6 | +1.4 |
| | SNR=13 | | | | | | |
| GANJ | | | | Sn | Sb | 22 29 55.4 | +0.8 |
| KSMR | Kasumkent | 2.60 | 122 | *i* PN | Pb | 22 29 26.0 | +0.9 |
| KSMR | Kasumkent | 2.60 | 122 | *i* Pn | Pb | 22 29 26.0 | +0.9 |
| EAK | Akyaka | 2.61 | 207 | *i* P | Pb | 22 29 23.9 | -1.4 |
| EAK | Akyaka | 2.61 | 207 | P | Pb | 22 29 23.9 | -1.4 |
| MNGR | Mingechevir, A | 2.66 | 147 | ⇓Pn | Pb | 22 29 24.6 | -1.4 |
| MNGR | | | | ⇑Sn | Sb | 22 30 00.7 | +2.3 |
| MNGR | Mingechevir, A | 2.66 | 147 | Pn | Pb | 22 29 24.6 | -1.4 |
| MNGR | | | | Sn | Sb | 22 30 00.7 | +2.3 |
| GNI | Garni | 2.89 | 187 | *d i*PN | Pn | 22 29 27.5 | +3.1 |
| GNI | | | | pmax | pmax | | |
| | comp=Z,71nm,1.7s | | | | | | |
| GNI | Garni | 2.89 | 187 | *i* Pn | Pn | 22 29 27.5 | +3.1 |
| | comp=Z,71nm,1.7s | | | | | | |
| DIGO | Kars | 2.94 | 208 | *i* P | Pb | 22 29 30.0 | -0.9 |
| DIGO | Kars | 2.94 | 208 | P | Pb | 22 29 30.0 | -0.9 |
| QUBA | Quba, Azerbaij | 2.97 | 123 | ⇑Pn | Pn | 22 29 26.2 | +0.8 |
| QUBA | | | | ⇓Sn | Sb | 22 30 09.8 | +2.3 |
| QUBA | Quba, Azerbaij | 2.97 | 123 | Pn | Pn | 22 29 26.2 | +0.8 |
| QUBA | | | | Sn | Sb | 22 30 09.8 | +2.3 |
| DBOC | Borcka | 3.10 | 239 | *i* P | Pn | 22 29 29.3 | +2.1 |
| DBOC | Borcka | 3.10 | 239 | P | Pn | 22 29 29.3 | +2.1 |
| DBOC | | | | S | Sn | 22 29 48.0 | -16 |
| BRDA | Brd | 3.14 | 151 | ⇓Pn | Pn | 22 29 29.1 | +1.5 |
| BRDA | | | | ⇓Sn | Sb | 22 30 12.8 | +0.6 |
| BRDA | Brd | 3.14 | 151 | Pn | Pn | 22 29 29.1 | +1.5 |
| BRDA | | | | Sn | Sb | 22 30 12.8 | +0.6 |
| IML | Ismayilli | 3.16 | 134 | ⇓Pn | Pn | 22 29 29.2 | +1.3 |
| IML | Ismayilli | 3.16 | 134 | Pn | Pn | 22 29 29.2 | +1.3 |
| DDEM | Demirkent | 3.33 | 231 | *i* P | Pb | 22 29 34.4 | -3.1 |
| DDEM | Demirkent | 3.33 | 231 | P | Pb | 22 29 34.4 | -3.1 |
| SIZA | Siyzn | 3.38 | 124 | ⇑Pn | Pn | 22 29 33.8 | +2.7 |
| SIZA | Siyzn | 3.38 | 124 | Pn | Pn | 22 29 33.8 | +2.7 |
| PQL | Pirkuli | 3.38 | 130 | ⇑Pn | Pn | 22 29 33.7 | +2.5 |
| PQL | Pirkuli | 3.38 | 130 | Pn | Pn | 22 29 33.7 | +2.5 |
| ATGJ | Altiaghaj | 3.54 | 126 | ⇑P | Pn | 22 29 35.7 | +2.5 |
| ATGJ | Altiaghaj | 3.54 | 126 | P | Pn | 22 29 35.7 | +2.5 |
| EATA | Eleskirt | 3.75 | 214 | *i* P | Pb | 22 29 41.2 | -3.6 |
| EATA | Eleskirt | 3.75 | 214 | P | Pb | 22 29 41.2 | -3.6 |
| TUTA | Tutak | 4.03 | 207 | P | Pb | 22 29 48.1 | -1.4 |
| LRK | Lerik | 4.99 | 150 | ⇑P | Pn | 22 29 55.5 | +2.3 |
| LRK | Lerik | 4.99 | 150 | P | Pn | 22 29 55.5 | +2.3 |
| ANN | Anapa | 5.87 | 290 | *i* P | Pn | 22 30 05.0 | -0.2 |
| ANN | Anapa | 5.87 | 290 | *i* P | Pn | 22 30 05.0 | -0.2 |
| AB31 | Akbulak array | 11.98 | 54 | P | Pn | 22 31 27.9 | -0.9 |
| | comp=Z,0.5nm,0.5s,baz=235,slow=12,SNR=10 | | | | | | |
| AB31 | | | | ⇓S | Sn | 22 33 37.7 | -4.5 |
| | comp=Z,0.5nm,0.3s,baz=234,slow=22,SNR=4.3 | | | | | | |
| AB31 | Akbulak array | 11.98 | 54 | P | Pn | 22 31 27.9 | -0.9 |
| | comp=Z,0.5nm,0.5s,SNR=10 | | | | | | |
| AB31 | | | | S | Sn | 22 33 37.7 | -4.5 |
| | comp=Z,0.5nm,0.3s,SNR=4.3 | | | | | | |
| ARU | Arti | 15.92 | 28 | *d i*P | P | 22 32 25.4 | -0.3 |
| ARU | | | | S | Sn | 22 35 24.6 | +6.3 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.5s | | | | | | |
| ARU | Arti | 15.92 | 28 | *i* P | P | 22 32 25.4 | -0.3 |
| | comp=Z,4.0nm,1.5s | | | | | | |
| AAK | Ala-Archa | 21.46 | 81 | ⇓P | P | 22 33 32.4 | +5.7 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.8s | | | | | | |
| KURK | Kurchatov | 23.96 | 60 | *e*P | P | 22 33 58.2 | +5.9 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | |
| ULN | Ulaanbaatar | 42.66 | 61 | ⇑*e*P | P | 22 36 39.4 | +4.6 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| KSCWO | Cheorwon | 60.34 | 64 | P | P | 22 38 46.7 | -0.4 |
| | SNR=6.7 | | | | | | |

*NIED* ***05*** *22:35:00, 41.50N×142.00E, h53km, Mw4.3 Best double couple: Mo3.55000×10$^{15}$ NP1:φs194.00000°, δ20.00000°, λ86.00000°. NP2:φs18.00000°, δ70.00000°, λ91.00000°.*

*BJI* ***05*** *22:35:52.9, 41.34N×142.44E, h61km, mb4.8/48, mB5.0/32, Ms4.4/18, Ms7 4.3/16*

*ISCJB* ***05*** *22:35:57.4±0.3, 41.50N±0.02×142.02E±0.03, h68km±2km, mb4.6/78, Error ellipse: s-maj=4.5km s-min=2.7km az=42.7*

*MOS* ***05*** *22:35:57.5±1.0, 41.67N×141.89E, h59km, mb4.8/24, Error ellipse: s-maj=7.9km s-min=5.7km az=104.0*

*JMA* ***05*** *22:35:58.0±0.1, 41.49N×142.01E, h63km±2km, M4.1 Broadband fault plane solution: P waves. NP1: φs17.00000°, δ82.00000°, λ97.00000°. NP2:φs152.00000°, δ11.00000°, λ46.00000°. Principal axes: T Plg52.0000°, Azm295.0000°; N Plg7.0000°, Azm196.0000°; P Plg37.0000°, Azm100.0000°;*

*JMA Felt II J1.*

*IDC* ***05*** *22:35:59.2±0.7, 41.48N×141.94E, h71km±6km, mb4.2/24, mb1 4.3/29, mb1mx4.3/35, mbtmp4.5/29, MS3.4/13, Ms1 3.5/13, ms1mx3.3/37 Error ellipse: s-maj=13.2km s-min=11.5km az=126.0*

*NEIC* ***05*** *22:35:59.3±0.6, 41.48N×142.04E, h74km±5km, mb4.9/30, MW4.3(NIED), Error ellipse: s-maj=7.8km s-min=5.3km az=137.0*

*NEIC Recorded [2 JMA] in southwestern Hokkaido. Also recorded [2 JMA] in Aomori, Honshu.*

**ISC 05 22:35:58.1**±0.4**, 41.48N**±0.03×**142.07E**±0.03**, h63**km±2km**, h62**km**:pP-P, n268,** σ**1.48**/319**, mb4.7**/78**, 23C-26D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOT | Ohata | 0.78 | 263 | ⇓P | Pn | 22 36 12.8 | -0.6 |
| JOT | | | | *e*S | Sn | 22 36 23.8 | -0.9 |
| JKB | Kayabe | 0.88 | 298 | ⇓P | Pn | 22 36 13.8 | -0.9 |
| JKB | | | | *e*S | Sn | 22 36 25.8 | -1.2 |
| JNBK | Urakawa-nobuka | 0.95 | 32 | P | Pn | 22 36 15.4 | -0.2 |
| JNBK | | | | *e*S | Sn | 22 36 28.6 | +0.1 |
| ERM | Erimo | 0.97 | 56 | *ce*P | Pn | 22 36 16.4 | +0.5 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,2µm,1.0s | | | | | | |
| ERM | Erimo | 0.97 | 56 | *e*Pn | Pn | 22 36 16.4 | +0.5 |
| ERM | | | | *e*Sn | Sn | 22 36 30.1 | +1.1 |
| JEM | Erimo | 0.97 | 56 | ⇑P | Pn | 22 36 16.3 | +0.4 |
| JEM | | | | *e*S | Sn | 22 36 29.9 | +0.8 |
| JTM | Tenmabayashi | 1.03 | 228 | ⇓P | Pn | 22 36 16.6 | 0.0 |
| JTM | | | | *e*S | Sn | 22 36 30.1 | -0.2 |
| JANG | Nango | 1.18 | 201 | ⇓P | Pn | 22 36 18.3 | -0.4 |
| JANG | | | | *e*S | Sn | 22 36 33.4 | -0.5 |
| JSR | Shiriuchi | 1.24 | 273 | ⇓P | Pn | 22 36 19.0 | -0.4 |
| JSR | | | | *e*S | Sn | 22 36 34.8 | -0.6 |
| JNB | Noboribetsu | 1.25 | 322 | ⇓P | Pn | 22 36 18.6 | -1.0 |
| JNB | | | | *e*S | Sn | 22 36 34.1 | -1.5 |
| JBT2 | Biratori 2 | 1.32 | 9 | ⇓P | Pn | 22 36 20.8 | +0.4 |
| JBT2 | | | | *e*S | Sn | 22 36 37.7 | +0.6 |
| JYM2 | Yakumo 2 | 1.42 | 297 | ⇓P | Pn | 22 36 21.8 | 0.0 |
| JYM2 | | | | *e*S | Sn | 22 36 39.8 | +0.1 |
| JEW | Eniwo | 1.44 | 341 | ⇓P | Pn | 22 36 22.1 | +0.1 |
| JEW | | | | *e*S | Sn | 22 36 39.9 | -0.1 |
| JCH | Churui | 1.49 | 40 | ⇓P | Pn | 22 36 23.6 | +0.9 |
| JCH | | | | *e*S | Sn | 22 36 43.0 | +1.8 |
| JAH | Hinai | 1.69 | 221 | ⇓P | Pn | 22 36 25.7 | +0.3 |
| JAH | | | | *e*S | Sn | 22 36 46.5 | +0.5 |
| JFR | Furan | 1.73 | 13 | P | Pn | 22 36 26.3 | +0.3 |
| JFR | | | | *e*S | Sn | 22 36 47.5 | +0.5 |
| JOSM | Okushiri--Mats | 2.03 | 288 | ⇓P | Pn | 22 36 29.1 | -1.0 |
| JOSM | | | | *e*S | Sn | 22 36 52.8 | -1.6 |
| ASAJ | Asahikawa | 2.67 | 8 | P | Pn | 22 36 39.5 | +0.8 |
| | comp=Z,33nm,0.3s,baz=217,slow=9.8,SNR=118 | | | | | | |
| ASAJ | | | | S | Sn | 22 37 10.7 | +0.9 |
| | comp=Z,23nm,0.3s,baz=239,slow=16,SNR=6.0 | | | | | | |
| ASAJ | | | | LR | LR | 22 38 02.7 | |
| | comp=Z,434nm,21.6s,baz=264,slow=46 | | | | | | |
| ASAJ | Asahikawa | 2.67 | 8 | P | Pn | 22 36 39.5 | +0.8 |
| ASAJ | | | | S | Sn | 22 37 10.7 | +0.9 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,33nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,23nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,434nm,21.6s | | | | | | |
| ASAJ | Asahikawa | 2.67 | 8 | *e*Pn | Pn | 22 36 39.7 | +1.1 |
| ASAJ | | | | *e*Sn | Sn | 22 37 06.8 | -2.9 |
| YUK | Yuzh-Kuril'sk | 3.78 | 46 | *d i*P | Pn | 22 36 53.9 | 0.0 |
| YUK | | | | *i* S | Sn | 22 37 35.1 | -2.0 |
| YUK | | | | pmax | pmax | | |
| | comp=N,163nm,0.8s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,151nm,0.8s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,217nm,0.8s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,411nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,795nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,786nm,2.0s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,746nm,2.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 5.50 | 5 | *e*P | Pn | 22 37 17.0 | -0.3 |
| YSS | | | | *e*S | Sn | 22 38 17.5 | -1.6 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| KUR | Kuril'sk | 5.65 | 46 | *d i*P | Pn | 22 37 20.8 | +1.4 |
| KUR | | | | *e*S | Sn | 22 38 23.6 | +0.7 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,38nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,11nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,25nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,19nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,37nm,0.4s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,512nm,5.0s | | | | | | |
| MAJO | Matsushiro | 5.77 | 213 | ⇓*e*P | Pn | 22 37 23.1 | +1.9 |
| MAJO | Matsushiro | 5.77 | 213 | *e*Pn | Pn | 22 37 23.7 | +2.4 |
| MAT | Matsushiro | 5.78 | 213 | P | Pn | 22 37 23.1 | +1.9 |
| MAT | | | | S | Sn | 22 38 27.3 | +1.2 |
| MJAR | Matsushiro Arr | 5.78 | 213 | P | Pn | 22 37 23.2 | +2.0 |
| | comp=Z,3.1nm,0.3s,baz=20,slow=15,SNR=24 | | | | | | |
| MJAR | | | | S | Sn | 22 38 28.6 | +2.5 |
| | baz=24,slow=31,SNR=2.2 | | | | | | |
| MJAR | | | | LR | LR | 22 40 00.2 | |
| | comp=Z,128nm,21.5s,baz=50,slow=42 | | | | | | |
| UGL | Uglegorsk | 7.60 | 360 | *e*P | Pn | 22 37 44.2 | -1.9 |
| UGL | | | | *e*S | Sn | 22 39 09.1 | -1.6 |
| VLA | Vladivostok | 7.73 | 286 | ⇓P | Pn | 22 37 43.4 | -4.5 |
| VLA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| USRK | Ussuriysk Ar. | 7.89 | 294 | P | Pn | 22 37 50.3 | +0.1 |
| | comp=Z,2.2nm,0.3s,baz=104,slow=14,SNR=43 | | | | | | |
| USRK | | | | LR | LR | 22 40 45.0 | |
| | comp=Z,208nm,21.9s,baz=115,slow=37 | | | | | | |
| MSHR | Mys Shultsa | 8.20 | 281 | *d*P | Pn | 22 37 54.5 | +0.1 |
| JHJ | Hachijo jima 2 | 8.54 | 193 | P | Pn | 22 37 58.7 | -0.3 |
| | comp=Z,4.6nm,0.3s,baz=21,slow=17,SNR=7.6 | | | | | | |
| JHJ | | | | S | Sn | 22 39 28.4 | -5.6 |
| | comp=Z,4.2nm,0.3s,baz=264,slow=18,SNR=3.1 | | | | | | |
| JHJ2 | Mitsune | 8.54 | 193 | *e*Pn | Pn | 22 37 50.7 | -8.4 |
| HABR | Khabarovsk | 8.58 | 327 | *e*P | Pn | 22 37 57.0 | -2.5 |
| HABR | | | | *e*S | Sn | 22 39 32.1 | -2.6 |
| HABR | | | | pmax | pmax | | |
| | comp=E,11nm,0.7s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,9.0nm,0.4s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,186nm,15.0s | | | | | | |
| MDJ | Mudanjiang | 9.66 | 293 | P | Pn | 22 38 17.3 | +3.0 |
| MDJ | | | | PMZ | | | |
| | comp=Z,36nm,0.8s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,63nm,6.0s | | | | | | |
| MDJ | Mudanjiang | 9.66 | 293 | *e*Pn | Pn | 22 38 17.4 | +3.1 |
| KSULJ | Uljin | 10.93 | 248 | P | Pn | 22 38 36.8 | +5.1 |
| | SNR=7.7 | | | | | | |
| KSDGY | Daegwallycong | 11.01 | 254 | P | Pn | 22 38 37.5 | +4.6 |
| | SNR=7.6 | | | | | | |
| KSTBA | Taebaek | 11.06 | 251 | P | Pn | 22 38 38.9 | +5.4 |
| | SNR=21 | | | | | | |
| SEHB | SEOHWA | 11.09 | 258 | P | Pn | 22 38 39.7 | +5.7 |
| | SNR=8.6 | | | | | | |
| KSJES | JEONGSEON | 11.12 | 253 | P | Pn | 22 38 39.5 | +5.1 |
| | SNR=12 | | | | | | |
| KSIJA | INJE | 11.30 | 257 | P | Pn | 22 38 42.0 | +5.2 |
| | SNR=15 | | | | | | |
| KSCHC | Chuncheon | 11.60 | 256 | P | Pn | 22 38 45.0 | +4.2 |
| | SNR=6.1 | | | | | | |
| KSEUS | ULSEONG | 11.61 | 248 | P | Pn | 22 38 46.5 | +5.5 |
| | SNR=10 | | | | | | |
| KSRS | Korea Array | 11.65 | 254 | P | Pn | 22 38 44.1 | +2.6 |
| | comp=Z,2.4nm,0.3s,baz=64,slow=14,SNR=38 | | | | | | |
| KSRS | | | | S | Sn | 22 40 56.5 | +6.6 |
| | comp=Z,1.4nm,0.3s,baz=68,slow=24,SNR=13 | | | | | | |
| KSRS | | | | LR | LR | 22 42 45.1 | |
| | comp=Z,92nm,21.5s,baz=70,slow=35 | | | | | | |
| KSRS | Korea Array | 11.65 | 254 | P | Pn | 22 38 44.1 | +2.6 |
| KSRS | | | | S | Sn | 22 40 56.5 | +6.6 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| KSRS | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,92nm,21.5s | | | | | | |
| KS01 | Wonju Array Si | 11.66 | 255 | *e*Pn | Pn | 22 38 40.6 | -1.1 |
| KS01 | | | | *e*Sn | Sn | 22 40 56.0 | +5.8 |
| KSAR | Wonju Array Be | 11.68 | 254 | P | Pn | 22 38 44.1 | +2.1 |
| KSAR | | | | S | Sn | 22 40 56.5 | +5.8 |
| KSAR | Wonju Array Be | 11.68 | 254 | P | Pn | 22 38 44.1 | +2.1 |
| KSAR | | | | S | Sn | 22 40 56.5 | +5.8 |
| KSCHJ | Chungju | 11.87 | 252 | P | Pn | 22 38 50.3 | +5.8 |
| | SNR=7.3 | | | | | | |
| KSBON | Boeun | 12.16 | 251 | P | P | 22 38 54.2 | -4.8 |
| | SNR=13 | | | | | | |
| KSCPR | CHUPUNGNYEONG | 12.18 | 249 | P | P | 22 38 54.8 | -4.4 |
| | SNR=9.5 | | | | | | |
| JNU | Nakatsue | 12.20 | 230 | P | Pn | 22 38 49.8 | +0.7 |
| | comp=Z,0.4nm,0.3s,baz=0.0,slow=9.1,SNR=3.3 | | | | | | |
| JNU | | | | LR | LR | 22 43 44.7 | |
| | comp=Z,75nm,21.3s,baz=21,slow=38 | | | | | | |
| CLNS | Chul'man | 18.95 | 330 | *e*P | P | 22 40 14.3 | +0.3 |
| CLNS | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.9s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.9s | | | | | | |
| BJI | Beijing | 19.65 | 274 | P | P | 22 40 21.0 | -0.7 |
| BJI | | | | S | S | 22 44 01.7 | +1.7 |
| BJI | | | | PMZ | | | |
| | comp=E,27nm,0.8s | | | | | | |
| BJI | | | | LN | | | |
| | comp=E,120nm,14.4s | | | | | | |
| BJI | | | | LE | | | |
| | comp=E,150nm,14.4s | | | | | | |
| BJT | Baijiatuau | 19.66 | 274 | *e*P | P | 22 40 20.2 | -1.7 |
| BJT | Baijiatuau | 19.66 | 274 | *e*P | P | 22 40 20.1 | -1.7 |
| BJT | | | | *e*Pn | Pn | 22 40 21.1 | -2.6 |
| TIA | Tai'an | 20.10 | 263 | ⇓P | P | 22 40 25.2 | -1.5 |
| TIA | | | | PMZ | | | |
| | comp=E,20nm,0.8s | | | | | | |
| NJ2 | Nanjing | 20.79 | 251 | *e*P | P | 22 40 34.0 | -0.1 |
| NJ2 | | | | PMZ | | | |
| | comp=E,40nm,1.2s | | | | | | |
| YAK | Yakutsk | 21.89 | 344 | LR | LR | 22 50 04.3 | |
| | comp=E,58nm,18.3s,baz=56,slow=39 | | | | | | |
| YAK | Yakutsk | 21.89 | 344 | *e*P | P | 22 40 41.1 | -4.5 |
| YAK | | | | *e*S | S | 22 44 35.3 | -8.4 |
| YAK | | | | *e**SS | Sn | 22 44 45.9 | -11 |
| YAK | | | | *e*SS | SnSn | 22 44 57.4 | -16 |
| YAK | | | | *e*SSS | SSS | 22 45 17.5 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,26nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,9.0nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,1.0nm,0.7s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,2.0nm,0.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,39nm,1.9s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,43nm,1.8s | | | | | | |
| SEY | Seymchan | 22.34 | 12 | P | P | 22 40 48.4 | -2.1 |
| | comp=E,2.5nm,0.4s,baz=208,slow=7.9,SNR=7.0 | | | | | | |
| HHC | Hu-ho-hao-te | 22.92 | 279 | *e*P | P | 22 40 55.7 | -1.3 |
| HHC | | | | sP | sP | 22 41 20.6 | +2.2 |
| HHC | | | | S | S | 22 44 51.5 | -11 |
| HHC | | | | SS | SnSn | 22 45 43.3 | +4.4 |
| HHC | | | | PMZ | | | |
| | comp=E,22nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=E,92nm,4.1s | | | | | | |
| HHC | | | | LN | | | |
| | comp=E,110nm,10.2s | | | | | | |
| HHC | | | | LE | | | |
| | comp=E,120nm,10.2s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=E,120nm,12.0s | | | | | | |
| BOD | Bodaibo | 24.18 | 322 | *e*P | P | 22 41 06.3 | -2.1 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| WHN | Wuhan | 24.84 | 253 | ⇓P | P | 22 41 14.6 | 0.0 |
| WHN | | | | pP | pP | 22 41 31.4 | +1.7 |
| ULN | Ulaanbaatar | 25.55 | 296 | ⇑*i*P | P | 22 41 20.9 | -0.2 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| ULN | Ulaanbaatar | 25.55 | 296 | *e*P | P | 22 41 20.2 | -0.9 |
| | comp=Z,8.5nm,0.9s | | | | | | |
| SONA1 | Songino Array | 25.99 | 296 | *e*P | P | 22 41 23.9 | -1.2 |
| SONM | Songino Array | 26.00 | 296 | P | P | 22 41 23.9 | -1.2 |
| | comp=Z,7.1nm,0.6s,baz=87,slow=8.0,SNR=42 | | | | | | |
| SONM | | | | LR | LR | 22 50 57.5 | |
| | comp=Z,107nm,21.5s,baz=130,slow=35 | | | | | | |
| XAN | Xi'an | 27.12 | 265 | P | P | 22 41 33.4 | -1.9 |

| Sta | Name | Dist | Az | Phase | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| XAN | | | | pP | **pP** | 22 41 48.9 | -1.5 |
| XAN | | | | PMZ | | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,85nm,3.6s | | | | | | |
| **TLY** | **Talaya** | 28.01 | 305 | P | **P** | 22 41 41.2 | -1.8 |
| | comp=Z,3.7nm,0.6s,baz=181,slow=2.1,SNR=3.7 | | | | | | |
| **TLY** | **Talaya** | 28.01 | 305 | *e*P | **P** | 22 41 43.5 | +0.5 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ZAK** | **Zakamensk** | 28.14 | 302 | *e*P | **P** | 22 41 43.6 | -0.6 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **LZH** | **Lanzhou** | 30.11 | 272 | *e*P | **P** | 22 42 01.7 | -0.3 |
| LZH | | | | pP | **pP** | 22 42 17.0 | -0.2 |
| LZH | | | | *e*S | **S** | 22 46 57.2 | +0.9 |
| LZH | | | | PMZ | | | |
| | comp=Z,20nm,1.3s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,37nm,4.0s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | 30.25 | 128 | T | T | 23 14 31.2 | |
| | baz=321,slow=76,SNR=284 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | 30.26 | 128 | T | T | 23 14 32.0 | |
| | baz=321,slow=76,SNR=304 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | 30.26 | 128 | T | T | 23 14 32.6 | |
| | baz=321,slow=76,SNR=275 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | 31.09 | 130 | T | T | 23 15 40.1 | |
| | baz=323,slow=76,SNR=174 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | 31.09 | 130 | T | T | 23 15 37.9 | |
| | baz=323,slow=76,SNR=107 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | 31.11 | 130 | T | T | 23 15 42.2 | |
| | baz=323,slow=76,SNR=92 | | | | | | |
| **GTA** | **Gaotai** | 32.00 | 281 | *e*P | **P** | 22 42 18.2 | -0.3 |
| GTA | | | | pP | **pP** | 22 42 32.9 | -0.9 |
| GTA | | | | PcP | **PcP** | 22 45 07.8 | +0.7 |
| GTA | | | | S | **S** | 22 47 24.3 | -1.4 |
| GTA | | | | SS | **SnSn** | 22 49 19.6 | -0.4 |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,74nm,6.3s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,150nm,14.1s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,140nm,14.5s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,140nm,14.7s | | | | | | |
| **CD2** | **Chengdu** | 32.44 | 263 | *e*P | **P** | 22 42 21.0 | -1.3 |
| CD2 | | | | pP | **pP** | 22 42 36.0 | -1.6 |
| CD2 | | | | PP | **PP** | 22 43 35.0 | -1.5 |
| CD2 | | | | S | **S** | 22 47 31.4 | -1.1 |
| CD2 | | | | sS | **sS** | 22 47 57.6 | -1.0 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| **GYA** | **Guiyang** | 32.71 | 254 | *e*P | **P** | 22 42 26.0 | +1.2 |
| GYA | | | | pP | **pP** | 22 42 41.2 | +1.0 |
| GYA | | | | sP | **sP** | 22 42 49.4 | +1.9 |
| GYA | | | | PP | **PnPn** | 22 43 36.5 | +1.7 |
| GYA | | | | S | **S** | 22 47 36.0 | -1.0 |
| GYA | | | | sS | **sS** | 22 48 02.1 | -1.0 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,110nm,4.9s | | | | | | |
| **QIZ** | **Qiongzhong** | 35.40 | 241 | P | **P** | 22 42 47.4 | -0.6 |
| QIZ | | | | pP | **pP** | 22 43 02.9 | -0.6 |
| QIZ | | | | sP | **sP** | 22 43 09.9 | -0.9 |
| QIZ | | | | S | **S** | 22 48 17.8 | -0.5 |
| QIZ | | | | PMZ | | | |
| | comp=Z,410nm,3.6s | | | | | | |
| **KMI** | **Kunming** | 36.35 | 256 | P | **P** | 22 42 57.3 | +0.9 |
| KMI | | | | PMZ | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,170nm,4.0s | | | | | | |
| **ZAA0** | **Zalesovo Array** | 39.42 | 308 | *e*P | **P** | 22 43 21.1 | -0.5 |
| ZAA0 | | | | *e*PcP | **PcP** | 22 45 28.8 | +0.2 |
| **ZALV** | **Zalesovo Beam** | 39.42 | 308 | P | **P** | 22 43 21.5 | -0.2 |
| | comp=Z,17nm,0.7s,baz=89,slow=7.8,SNR=71 | | | | | | |
| ZALV | | | | pP | **pP** | 22 43 37.7 | +0.4 |
| | comp=Z,5.4nm,0.7s,baz=79,slow=7.7,SNR=3.4 | | | | | | |
| ZALV | | | | PcP | **PcP** | 22 45 28.5 | 0.0 |
| | comp=Z,3.6nm,0.6s,baz=99,slow=2.8,SNR=7.7 | | | | | | |
| ZALV | | | | LR | LR | 22 59 51.0 | |
| | comp=Z,58nm,19.0s,baz=76,slow=36 | | | | | | |
| **WMQ** | **Urumqi** | 39.46 | 292 | P | **P** | 22 43 22.8 | +0.6 |
| WMQ | | | | pP | **pP** | 22 43 39.0 | +1.1 |
| WMQ | | | | PP | **PnPn** | 22 44 59.0 | +1.9 |
| WMQ | | | | S | **S** | 22 49 22.5 | +2.8 |
| WMQ | | | | PMZ | | | |
| | comp=Z,36nm,0.7s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,59nm,16.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,79nm,18.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,71nm,16.0s | | | | | | |
| **NVS** | **Novosibirsk** | 40.26 | 310 | *e*P | **P** | 22 43 27.2 | -1.4 |
| NVS | | | | pmax | pmax | | |
| | comp=N,2.0nm,0.9s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.9s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **CRAI** | **Chiangrai** | 41.09 | 252 | P | P | 22 43 32.0 | -3.9 |
| | comp=Z,137nm,1.0s | | | | | | |
| **KHON** | **Khomkaen** | 42.00 | 245 | P | **P** | 22 43 44.0 | +0.7 |
| | comp=Z,14nm,0.7s | | | | | | |
| **CMAI** | **Chiengmai2** | 42.23 | 253 | P | P | 22 43 49.3 | +3.9 |
| | comp=Z,144nm,1.1s,comp=Z,6µm | | | | | | |
| **LOEI** | **Loei** | 42.27 | 248 | P | P | 22 43 49.2 | +3.7 |
| | comp=Z,80nm,1.3s | | | | | | |
| **MKAR** | **Makanchi Array** | 42.33 | 298 | P | **P** | 22 43 45.5 | -0.2 |
| | comp=Z,9.5nm,0.7s,baz=83,slow=12,SNR=86 | | | | | | |
| MKAR | | | | PcP | **PcP** | 22 45 38.2 | 0.0 |
| | comp=Z,1.4nm,0.6s,baz=69,slow=5.0,SNR=4.3 | | | | | | |
| **LSA** | **Lhasa** | 42.49 | 271 | *e*P | **P** | 22 43 49.1 | +1.3 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | 42.49 | 271 | *e*P | **P** | 22 43 49.0 | +1.3 |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **MAKZ** | **Makanchi** | 42.53 | 298 | *e*P | **P** | 22 43 47.2 | -0.2 |
| **UTTA** | **Uttaradit** | 42.60 | 249 | P | P | 22 43 55.1 | +6.9 |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **CHTO** | **Chiang Mai** | 43.03 | 252 | P | P | 22 43 55.8 | +4.1 |
| | comp=Z,66nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | 43.03 | 252 | *e*P | **P** | 22 43 52.3 | +0.6 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | 43.03 | 252 | *e*P | **P** | 22 43 52.3 | +0.6 |
| | comp=Z,8.6nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | 43.27 | 251 | P | **P** | 22 43 54.5 | +0.9 |
| | comp=Z,1.3nm,0.4s,baz=41,slow=7.9,SNR=8.2 | | | | | | |
| CMAR | | | | LR | LR | 23 01 57.1 | |
| | comp=Z,118nm,19.0s,baz=216,slow=36 | | | | | | |
| **PPLA** | **Purkeypile** | 43.28 | 38 | *e*P | **P** | 22 43 54.6 | +1.2 |
| | comp=Z,61nm,1.9s | | | | | | |
| **KURK** | **Kurchatov** | 43.71 | 305 | P | **P** | 22 43 57.1 | +0.3 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,23nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | 43.71 | 305 | *e*P | **P** | 22 43 55.8 | -1.0 |
| | comp=Z,38nm,0.6s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | 43.78 | 36 | *e*P | **P** | 22 43 55.0 | -2.2 |
| | comp=Z,36nm,1.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | 43.79 | 305 | P | **P** | 22 43 57.1 | -0.3 |
| | comp=Z,23nm,0.6s,baz=78,slow=8.7,SNR=50 | | | | | | |
| **COLD** | **Coldfoot** | 44.06 | 31 | *e*P | **P** | 22 43 59.6 | +0.2 |
| | comp=Z,66nm,2.5s | | | | | | |
| **TRF** | **Thorofare Moun** | 44.12 | 37 | *e*P | **P** | 22 44 01.3 | +1.2 |
| | comp=Z,78nm,2.0s | | | | | | |
| **WRH** | **Wood River Hil** | 45.02 | 35 | *e*P | **P** | 22 44 09.0 | +2.0 |
| | comp=Z,107nm,2.6s | | | | | | |
| **FAKI** | **Fak Fak** | 45.09 | 194 | *e*P | **P** | 22 44 07.0 | -1.0 |
| | comp=Z,49nm,1.5s | | | | | | |
| **COLA** | **College** | 45.09 | 35*c* | *i*P | **P** | 22 44 09.3 | +1.7 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,41nm,2.5s | | | | | | |
| **IL1** | **Eielson Array** | 45.51 | 35 | *e*P | **P** | 22 44 11.3 | +0.4 |
| **ILAR** | **Eielson Array** | 45.51 | 35 | P | **P** | 22 44 11.9 | +1.0 |
| | comp=Z,5.1nm,1.0s,baz=272,slow=6.9,SNR=40 | | | | | | |
| ILAR | | | | pP | **pP** | 22 44 29.4 | +2.5 |
| | comp=Z,3.6nm,1.0s,baz=284,slow=9.6,SNR=5.0 | | | | | | |
| **TAPN** | **Taplejung** | 46.29 | 270 | *e*P | **P** | 22 44 18.5 | +0.5 |
| | comp=Z,32nm,0.8s | | | | | | |
| **ODAN** | **Odare** | 46.80 | 270 | *e*P | **P** | 22 44 22.3 | +0.5 |
| | comp=Z,34nm,0.8s | | | | | | |
| **RAMN** | **Ramite** | 47.34 | 270 | *e*P | **P** | 22 44 25.6 | -0.5 |
| | comp=Z,66nm,0.8s | | | | | | |
| **GUN** | **Gumba** | 47.37 | 272 | *e*P | **P** | 22 44 26.6 | +0.2 |
| | comp=Z,119nm,0.6s | | | | | | |
| **KKN** | **Kakani** | 47.89 | 272 | *e*P | **P** | 22 44 29.9 | -0.4 |
| | comp=Z,52nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | 47.91 | 272 | *e*P | **P** | 22 44 30.5 | 0.0 |
| | comp=Z,15nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | 47.91 | 272 | *e*P | **P** | 22 44 30.5 | 0.0 |
| | comp=Z,16nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | 48.09 | 295 | *e*P | **P** | 22 44 32.0 | +0.4 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | 48.09 | 295 | P | **P** | 22 44 32.1 | +0.4 |
| | SNR=32 | | | | | | |
| **TKM2** | **Tokmak 2** | 48.09 | 295 | *e*P | **P** | 22 44 32.0 | +0.4 |
| | comp=Z,20nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | 48.10 | 310*c* | *i*P | **P** | 22 44 31.6 | +0.3 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **BRVK** | **Borovoye** | 48.10 | 310 | *e*P | **P** | 22 44 30.8 | -0.5 |
| | comp=Z,8.4nm,0.6s | | | | | | |
| **DMN** | **Daman** | 48.11 | 272 | *e*P | **P** | 22 44 31.5 | -0.6 |
| | comp=Z,26nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | 48.26 | 273 | *e*P | **P** | 22 44 33.0 | 0.0 |
| | comp=Z,30nm,0.6s | | | | | | |
| **KBK** | **Karagaybulak** | 48.63 | 295 | P | **P** | 22 44 36.2 | +0.4 |
| | SNR=28 | | | | | | |
| **USP** | **Ospenovka** | 48.70 | 296 | P | **P** | 22 44 36.1 | 0.0 |
| | SNR=11 | | | | | | |
| **DANN** | **Dangsing** | 48.73 | 274 | *e*P | **P** | 22 44 37.4 | +0.5 |
| | comp=Z,22nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | 48.95 | 295 | P | **P** | 22 44 37.9 | -0.3 |
| | comp=Z,3.7nm,0.3s,baz=116,slow=5.3,SNR=5.7 | | | | | | |
| **AAK** | **Ala-Archa** | 48.95 | 295*c* | *i*P | **P** | 22 44 38.1 | -0.1 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | 48.95 | 295 | P | **P** | 22 44 38.2 | 0.0 |
| | SNR=8.0 | | | | | | |
| **AAK** | **Ala-Archa** | 48.95 | 295 | *e*P | **P** | 22 44 38.0 | -0.3 |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KOLN** | **Koldanda** | 49.16 | 273 | *e*P | **P** | 22 44 40.2 | +0.2 |
| | comp=Z,27nm,0.6s | | | | | | |
| **KSH** | **Kashi** | 49.18 | 291 | P | P | 22 44 43.8 | +3.8 |
| KSH | | | | *e*pP | pP | 22 44 59.3 | +3.2 |
| KSH | | | | PP | **PP** | 22 46 37.8 | +3.8 |
| KSH | | | | S | **S** | 22 51 43.6 | +2.6 |
| KSH | | | | ScS | **ScS** | 22 54 27.7 | +1.5 |
| KSH | | | | SS | **SS** | 22 55 15.2 | +2.7 |
| KSH | | | | PMZ | | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,110nm,6.6s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,160nm,7.8s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,95nm,5.7s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,190nm,7.1s | | | | | | |
| **EKS2** | **Erkin-Say** | 49.42 | 296 | *e*P | **P** | 22 44 41.7 | -0.1 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **EKS2** | **Erkin-Say** | 49.42 | 296 | P | **P** | 22 44 41.5 | -0.3 |
| | SNR=14 | | | | | | |
| **EKS2** | **Erkin-Say** | 49.42 | 296 | *e*P | **P** | 22 44 41.7 | -0.1 |
| | comp=Z,6.1nm,0.6s | | | | | | |
| **AML** | **Almayashu** | 49.69 | 295 | P | **P** | 22 44 44.6 | +0.5 |
| | SNR=8.2 | | | | | | |
| **INK** | **Inuvik** | 50.23 | 29 | P | **P** | 22 44 48.2 | +0.9 |
| | comp=Z,8.4nm,0.5s,baz=290,slow=6.1,SNR=29 | | | | | | |
| **KAPI** | **Kappang** | 50.57 | 209 | *e*P | **P** | 22 44 48.9 | -1.6 |
| | comp=Z,23nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | 51.44 | 297 | *e*P | **P** | 22 44 56.5 | -0.4 |
| **KKAR** | **Karatay Array** | 51.44 | 297 | *e*P | **P** | 22 44 56.5 | -0.4 |
| **KULM** | **Kulim** | 51.57 | 237 | *e*P | **P** | 22 44 56.9 | -1.2 |
| | comp=Z,24nm,1.3s | | | | | | |
| **IPM** | **Ipoh** | 51.96 | 236 | *e*P | **P** | 22 44 59.5 | -1.5 |
| | comp=Z,26nm,1.3s | | | | | | |
| **SVE** | **Sverdlovsk** | 52.22 | 317⇑ | *i*P | **P** | 22 45 03.0 | +0.6 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **ARU** | **Arti** | 53.43 | 317*d* | *i*P | **P** | 22 45 10.4 | -0.9 |
| ARU | | | | | | 22 46 17.0 | |
| ARU | | | | | | 22 47 13.3 | |
| ARU | | | | S | **S** | 22 52 39.2 | +0.5 |
| ARU | | | | SS | **SKiKP** | 22 56 22.1 | +1.2 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **ARU** | **Arti** | 53.43 | 317 | *e*P | **P** | 22 45 11.1 | -0.2 |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | 55.54 | 308 | *e*P | **P** | 22 45 26.6 | -0.1 |
| **KBL** | **Kabul** | 56.40 | 289 | *e*P | **P** | 22 45 32.6 | -0.7 |
| KBL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **KBL** | **Kabul** | 56.40 | 289 | *e*P | **P** | 22 45 32.6 | -0.7 |
| | comp=Z,6.5nm,0.6s | | | | | | |
| **KEV** | **Kevo** | 59.48 | 339 | *e*P | **P** | 22 45 53.4 | -0.7 |
| KEV | | | | pmax | pmax | | |
| | comp=Z,69nm,1.9s | | | | | | |
| **KEV** | **Kevo** | 59.48 | 339 | *e*P | **P** | 22 45 53.4 | -0.7 |
| | comp=Z,69nm,1.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | 59.73 | 32 | P | **P** | 22 45 56.3 | +0.4 |
| | comp=Z,1.1nm,0.7s,baz=303,slow=6.8,SNR=3.4 | | | | | | |
| **ARA0** | **ARCESS Array S** | 60.03 | 339 | *e*P | **P** | 22 45 57.8 | -0.2 |
| **ARCES** | **ARCESS Array B** | 60.03 | 339 | P | **P** | 22 45 57.1 | -0.8 |
| | comp=Z,1.3nm,0.7s,baz=60,slow=7.2,SNR=7.1 | | | | | | |
| ARCES | | | | LR | LR | 23 14 24.4 | |
| | comp=Z,105nm,18.3s,baz=246,slow=38 | | | | | | |
| **KLMR** | **Klimovskoe** | 60.30 | 327 | *e*P | P | 22 45 55.6 | -4.2 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | 61.53 | 188 | P | **P** | 22 46 07.8 | -0.8 |
| | comp=Z,2.0nm,0.6s,baz=6.3,slow=7.0,SNR=35 | | | | | | |
| **IMYA** | **Miami** | 61.70 | 295 | *e*P | **P** | 22 46 10.8 | +0.8 |
| **GEYT** | **Alibeck** | 62.20 | 297 | P | **P** | 22 46 12.8 | -0.3 |
| | comp=Z,10nm,0.7s,baz=31,slow=3.5,SNR=16 | | | | | | |
| **IMOG** | **Moghan** | 62.35 | 295 | *e*P | **P** | 22 46 14.4 | -0.1 |
| **IAKL** | **Akhelmad** | 62.48 | 296 | *e*P | **P** | 22 46 15.5 | +0.2 |
| **IKRD** | **Kardeh** | 62.55 | 296 | *e*P | P | 22 46 12.2 | -3.6 |
| **OBN** | **Obninsk** | 64.87 | 322 | *i* P | **P** | 22 46 29.4 | -0.9 |
| OBN | | | | *i* | | 22 47 04.6 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **FINES** | **FINESS Array B** | 65.14 | 332 | P | **P** | 22 46 31.6 | -0.4 |
| | comp=Z,10nm,0.7s,baz=57,slow=6.7,SNR=54 | | | | | | |
| FINES | | | | LR | LR | 23 17 40.0 | |
| | comp=Z,119nm,18.3s,baz=295,slow=38 | | | | | | |
| **AS01** | **Alice Springs** | 65.25 | 188 | *e*P | **P** | 22 46 32.8 | -0.4 |
| **ASAR** | **Alice Springs** | 65.25 | 188 | P | **P** | 22 46 33.0 | -0.2 |
| | comp=Z,1.8nm,0.9s,baz=9.3,slow=5.5,SNR=12 | | | | | | |
| **SUMG** | **Summit** | 66.25 | 0 | *e*P | **P** | 22 46 39.4 | -0.1 |
| **SUMG** | **Summit** | 66.25 | 0 | *i* P | pP | 22 47 00.7 | +4.4 |
| | comp=Z,7.3nm,0.8s | | | | | | |
| **SUMG** | **Summit** | 66.25 | 0 | *e*P | **P** | 22 46 39.4 | -0.1 |
| | comp=Z,264nm,2.8s | | | | | | |
| **IBAF** | **Bafgh** | 67.48 | 293 | *e*P | **P** | 22 46 47.6 | -0.1 |
| **KIV** | **Kislovodsk** | 68.42 | 310 | *i* P | **P** | 22 46 54.3 | +1.0 |
| KIV | | | | *i* | | 22 47 13.1 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,24nm,1.0s | | | | | | |
| **KIV** | **Kislovodsk** | 68.42 | 310 | *e*P | **P** | 22 46 54.7 | +1.4 |
| | comp=Z,26nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | 68.43 | 310 | P | **P** | 22 46 53.6 | +0.4 |
| | comp=Z,5.6nm,0.7s,baz=20,slow=8.1,SNR=12 | | | | | | |
| **ISAD** | **Sadrabad** | 68.58 | 294 | *e*P | **P** | 22 46 54.5 | -0.3 |
| **IZEF** | **Zefreh** | 68.93 | 296 | *e*P | **P** | 22 46 57.2 | +0.3 |
| **IKLH** | **Kolahrood** | 69.19 | 296 | *e*P | **P** | 22 46 58.6 | +0.2 |
| **IRAM** | **Ramesheh** | 69.54 | 295 | *e*P | **P** | 22 47 00.2 | -0.5 |
| **AFI** | **Afiamalu** | 69.64 | 132 | LR | LR | 23 12 22.3 | |
| | comp=Z,31nm,21.4s,baz=12,slow=31 | | | | | | |
| **IPIR** | **Pirpir** | 70.03 | 296 | *e*P | **P** | 22 47 02.7 | -1.0 |
| **IPAR** | **Pars** | 70.26 | 293 | *e*P | **P** | 22 47 05.2 | +0.1 |
| **NB2** | **NORSAR Subarra** | 70.30 | 337 | P | **P** | 22 47 04.0 | -0.5 |
| | comp=Z,2.3nm,0.6s,baz=35,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | 70.30 | 337 | P | **P** | 22 47 03.7 | -0.8 |
| | comp=Z,5.3nm,0.8s,baz=38,slow=6.2,SNR=12 | | | | | | |
| NOA | | | | LR | LR | 23 20 53.9 | |
| | comp=Z,56nm,19.7s,baz=275,slow=38 | | | | | | |
| **ISRV** | **Sarvestan** | 70.49 | 292 | *e*P | **P** | 22 47 06.0 | -0.6 |
| **UOSS** | **Wadi Hilu** | 70.98 | 287 | *e*P | **P** | 22 47 09.4 | +0.1 |
| | comp=Z,9.3nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | 71.11 | 322 | P | **P** | 22 47 09.2 | -0.4 |
| | comp=Z,5.2nm,0.4s,baz=44,slow=6.1,SNR=46 | | | | | | |
| **AKASG** | **Malin Array Be** | 71.11 | 322 | *i* P | **P** | 22 47 09.1 | -0.5 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.4s | | | | | | |
| **KIEV** | **Kiev** | 71.12 | 322⇓ | *i*P | **P** | 22 47 09.4 | -0.3 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | 71.12 | 322 | *e*P | **P** | 22 47 09.1 | -0.6 |
| | comp=Z,9.1nm,0.8s | | | | | | |
| **IKAZ** | **Kazeroun** | 71.13 | 293 | *e*P | **P** | 22 47 10.0 | -0.5 |
| **AK11** | **Malin Array Si** | 71.16 | 322 | *e*P | **P** | 22 47 09.9 | +0.1 |
| **IVIS** | **Veis** | 71.59 | 300 | *e*P | **P** | 22 47 10.4 | -2.6 |
| **NVAR** | **Mina Array Bea** | 71.95 | 55 | P | **P** | 22 47 16.3 | +1.1 |
| | comp=Z,0.5nm,0.6s,baz=302,slow=5.2,SNR=3.5 | | | | | | |
| **RCWM** | **Renegade Canyo** | 73.93 | 56 | *e*P | **P** | 22 47 24.0 | -2.7 |
| **MALT** | **Malatya** | 74.46 | 307*c* | *e*P | **P** | 22 47 31.4 | +1.6 |
| **MALT** | **Malatya** | 74.46 | 307⇑ | *i*P | **P** | 22 47 31.1 | +1.3 |
| **BUR04** | **Bucovina Ar. S** | 75.15 | 321 | *e*P | **P** | 22 47 33.7 | +0.1 |
| **BURAR** | **Bucovina Array** | 75.15 | 321⇑ | *i*P | **P** | 22 47 34.1 | +0.5 |
| **CFR** | **Carcaliu** | 75.47 | 318⇑ | *i*P | **P** | 22 47 35.5 | +0.2 |
| **KOLS** | **Kolonicke sedl** | 75.53 | 324 | *e*P | **P** | 22 47 35.9 | +0.2 |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| **KOLS** | **Kolonicke sedl** | 75.53 | 324 | *e*P | **P** | 22 47 35.9 | +0.2 |
| **STHS** | **Stebnicka Huta** | 75.63 | 325 | *e*P | **P** | 22 47 37.1 | +0.9 |
| STHS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **STHS** | **Stebnicka Huta** | 75.63 | 325 | *e*P | **P** | 22 47 37.1 | +0.9 |
| **OJC** | **Ojcow** | 75.64 | 326 | *e*P | **P** | 22 47 36.7 | +0.4 |
| **OJC** | **Ojcow** | 75.64 | 326 | *e*P | **P** | 22 47 36.7 | +0.4 |
| **OJC** | **Ojcow** | 75.64 | 326 | *e*P | **P** | 22 47 36.8 | +0.5 |
| | comp=Z,15nm,1.0s | | | | | | |
| **VRI** | **Vrincioaia** | 75.68 | 319⇑ | *i*P | **P** | 22 47 37.7 | +1.1 |
| **PLOR** | **Plostina** | 75.73 | 319⇑ | *i*P | **P** | 22 47 38.4 | +1.5 |
| **TRPA** | **Tarpa** | 76.01 | 323⇑ | *i*P | **P** | 22 47 39.2 | +0.8 |
| **BRTR** | **Keskin Array B** | 76.30 | 311 | P | **P** | 22 47 40.7 | +0.3 |
| | comp=Z,2.7nm,0.6s,baz=78,slow=3.8,SNR=17 | | | | | | |
| **MLR** | **Muntele Rosu** | 76.33 | 319⇑ | *i*P | **P** | 22 47 41.3 | +0.8 |
| **MSAB** | **Monastry St. A** | 76.40 | 317⇓ | *i*P | **P** | 22 47 41.6 | +1.0 |
| **LANS** | **Liptovska Anna** | 76.59 | 325 | *e*P | **P** | 22 47 40.0 | -1.8 |
| **LANS** | **Liptovska Anna** | 76.59 | 325 | *e*P | **P** | 22 47 40.0 | -1.8 |
| **KSP** | **Ksiaz** | 76.60 | 328 | *e*P | **P** | 22 47 42.3 | +0.6 |
| **KSP** | **Ksiaz** | 76.60 | 328 | *e*P | **P** | 22 47 42.3 | +0.6 |
| **OKC** | **Ostrava-Krasne** | 76.63 | 326 | *e*P | **P** | 22 47 42.2 | +0.4 |
| OKC | | | | *e* | | 22 48 00.5 | |
| OKC | | | | *e* | | 22 48 07.2 | |
| **OKC** | **Ostrava-Krasne** | 76.63 | 326 | *e*P | **P** | 22 47 42.2 | +0.4 |
| OKC | | | | *e*pP | **pP** | 22 48 00.5 | +1.5 |
| OKC | | | | *e*sP | **sP** | 22 48 07.2 | +1.3 |
| **ANTO** | **Ankara** | 76.68 | 312 | *e*P | **P** | 22 47 43.6 | +1.1 |
| ANTO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **ANTO** | **Ankara** | 76.68 | 312⇑ | *i*P | **P** | 22 47 43.5 | +1.1 |
| **ANTO** | **Ankara** | 76.68 | 312 | *e*P | **P** | 22 47 43.6 | +1.1 |
| | comp=Z,10nm,0.8s | | | | | | |
| **BR231** | **Keskin MP Arra** | 76.71 | 312 | *e*P | **P** | 22 47 41.3 | -1.4 |
| **VOIR** | | 76.81 | 320⇑ | *i*P | **P** | 22 47 43.8 | +0.7 |
| **MORC** | **Moravsky Berou** | 76.92 | 327⇑ | *i*P | **P** | 22 47 44.1 | +0.5 |
| **DPC** | **Dobruska-Polom** | 76.97 | 328 | *e*P | **P** | 22 47 44.6 | +0.7 |
| DPC | | | | *e* | | 22 47 51.2 | |
| DPC | | | | *e* | | 22 48 04.0 | |
| **DPC** | **Dobruska-Polom** | 76.97 | 328 | *e*P | **P** | 22 47 44.6 | +0.7 |
| DPC | | | | *e*PCP | **PcP** | 22 47 51.2 | -3.5 |
| DPC | | | | *e*sP | **sP** | 22 48 04.0 | -3.9 |
| **UPC** | **Upice** | 76.97 | 328 | *e*P | **P** | 22 47 44.7 | +0.9 |
| UPC | | | | *e* | | 22 48 03.8 | |
| **UPC** | **Upice** | 76.97 | 328 | *e*P | **P** | 22 47 44.7 | +0.9 |
| UPC | | | | *e*sP | **sP** | 22 48 03.8 | -4.1 |
| **KRLC** | **Kraliky** | 77.00 | 327 | *e*P | **P** | 22 47 44.7 | +0.7 |
| KRLC | | | | *e* | | 22 48 03.8 | |
| **KRLC** | **Kraliky** | 77.00 | 327 | *e*P | **P** | 22 47 44.7 | +0.7 |
| KRLC | | | | *e*sP | **sP** | 22 48 03.8 | -4.3 |
| **VYHS** | **Vyhne** | 77.37 | 325 | *e*P | **P** | 22 47 45.1 | -1.0 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **VYHS** | **Vyhne** | 77.37 | 325 | *e*P | **P** | 22 47 45.1 | -1.0 |
| **CLL** | **Collm** | 77.50 | 330 | *e*P | **P** | 22 47 47.0 | +0.3 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **CLL** | **Collm** | 77.50 | 330 | *e*P | **P** | 22 47 47.0 | +0.3 |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **PVCC** | **Panska Ves** | 77.53 | 329 | *e*P | **P** | 22 47 45.8 | -1.1 |
| PVCC | | | | *e* | | 22 48 04.7 | |
| **PVCC** | **Panska Ves** | 77.53 | 329 | *e*P | **P** | 22 47 45.8 | -1.1 |
| PVCC | | | | *e*x | x | 22 47 51.2 | |
| PVCC | | | | *e*pP | **pP** | 22 48 04.7 | +0.6 |
| **VRAC** | **Vranov** | 77.68 | 327⇑ | *i*P | **P** | 22 47 48.4 | +0.6 |
| **GOPC** | **GO Pecny, Ondr** | 77.93 | 328 | *e*P | **P** | 22 47 47.9 | -1.3 |
| GOPC | | | | *e* | | 22 47 54.7 | |
| GOPC | | | | *e* | | 22 48 07.5 | |
| **GOPC** | **GO Pecny, Ondr** | 77.93 | 328 | *e*P | **P** | 22 47 47.9 | -1.3 |
| GOPC | | | | *e*PCP | **PcP** | 22 47 54.7 | -4.1 |
| GOPC | | | | *e*pP | **pP** | 22 48 07.5 | +1.1 |
| **SMOL** | **Smolenice** | 77.95 | 326 | *e*P | **P** | 22 47 48.0 | -1.3 |
| **SMOL** | **Smolenice** | 77.95 | 326 | *e*P | **P** | 22 47 48.0 | -1.3 |
| **PRU** | **Pruhonice** | 77.97 | 328 | *e*P | **P** | 22 47 50.0 | +0.7 |
| PRU | | | | *e* | | 22 47 54.6 | |
| PRU | | | | *e* | | 22 48 09.4 | |
| **PRU** | **Pruhonice** | 77.97 | 328 | *e*P | **P** | 22 47 50.0 | +0.7 |
| PRU | | | | *e*x | x | 22 47 54.6 | |
| PRU | | | | *e*sP | **sP** | 22 48 09.4 | -4.0 |
| **SMCO** | **Snowmass** | 78.09 | 48 | *e*P | **P** | 22 47 52.8 | +2.0 |
| | comp=Z,20nm,0.6s | | | | | | |
| **NKC** | **Novy Kostel** | 78.58 | 330 | *e*P | **P** | 22 47 51.3 | -1.5 |
| NKC | | | | *e* | | 22 47 55.9 | |
| **NKC** | **Novy Kostel** | 78.58 | 330 | *e*P | **P** | 22 47 51.3 | -1.5 |
| NKC | | | | *e*x | x | 22 47 55.9 | |
| **KHC** | **Kasperske Hory** | 79.03 | 328 | *e*P | **P** | 22 47 55.7 | +0.4 |
| KHC | | | | *e* | | 22 47 59.9 | |
| KHC | | | | *e* | | 22 48 15.0 | |
| KHC | | | | *e* | | 22 48 22.2 | |
| **KHC** | **Kasperske Hory** | 79.03 | 328 | *e*P | **P** | 22 47 55.7 | +0.4 |
| KHC | | | | *e*PCP | **PcP** | 22 47 59.9 | -3.7 |
| KHC | | | | *e*sP | **sP** | 22 48 15.0 | -4.4 |
| **KHC** | **Kasperske Hory** | 79.03 | 328 | *e*P | **P** | 22 47 55.2 | -0.1 |
| | comp=Z,1.9nm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | 79.21 | 328 | P | **P** | 22 47 56.0 | -0.3 |
| | comp=Z,1.0nm,0.5s,baz=39,slow=6.0,SNR=13 | | | | | | |
| GERES | | | | pP | **pP** | 22 48 15.2 | +1.7 |
| | comp=Z,0.5nm,0.5s,baz=34,slow=5.7,SNR=2.5 | | | | | | |
| **RAYN** | **Ar Rayn** | 79.46 | 292 | *e*P | **P** | 22 47 58.0 | -0.1 |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **SOKA** | **Soboth** | 80.39 | 326⇑ | *i*P | **P** | 22 48 03.2 | +0.4 |
| | comp=Z,7.7nm,1.0s | | | | | | |
| **OBKA** | **Obir** | 80.73 | 326⇓ | *i*P | **P** | 22 48 04.8 | +0.2 |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **KBA** | **Koelnbreinsper** | 80.77 | 327⇓ | *i*P | **P** | 22 48 05.9 | +1.0 |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **ANMO** | **Albuquerque** | 81.36 | 51 | ⇑P | **P** | 22 48 08.1 | -0.1 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,9.0nm,2.5s | | | | | | |
| **MOTA** | **Moosalm** | 81.45 | 329⇑ | *i*P | **P** | 22 48 08.8 | +0.3 |
| | comp=Z,5.2nm,0.7s | | | | | | |
| **RETA** | **Reutte** | 81.46 | 329⇓ | *i*P | **P** | 22 48 09.0 | +0.6 |
| | comp=Z,6.6nm,0.8s | | | | | | |
| **FETA** | **Feichten** | 81.86 | 329⇓ | *i*P | **P** | 22 48 10.7 | +0.1 |
| | comp=Z,6.3nm,0.9s | | | | | | |
| **DAVA** | **Damuels** | 81.97 | 329⇑ | *i*P | **P** | 22 48 10.7 | -0.5 |
| | comp=Z,9.6nm,1.1s | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | 82.37 | 329 | *e*P | **P** | 22 48 14.3 | +0.9 |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | 87.02 | 53 | P | **P** | 22 48 38.2 | +1.2 |
| | comp=Z,0.4nm,0.8s,baz=316,slow=5.0,SNR=2.6 | | | | | | |
| TXAR | | | | pP | **pP** | 22 48 57.1 | +2.7 |
| | comp=Z,0.5nm,0.7s,baz=300,slow=2.9,SNR=3.3 | | | | | | |
| **KEST** | **Kesra** | 91.79 | 323 | P | **P** | 22 48 59.1 | -0.1 |
| | comp=Z,2.0nm,0.7s,baz=0.0,slow=8.1,SNR=3.6 | | | | | | |
| **ESDC** | **Sonseca Array** | 93.52 | 334 | P | **P** | 22 49 06.5 | -0.6 |
| | comp=Z,1.1nm,0.7s,baz=23,slow=4.2,SNR=7.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | 114.50 | 317 | PKP | PKPdf | 22 54 30.1 | -1.3 |
| | comp=Z,0.3nm,0.6s,baz=10,slow=1.9,SNR=5.2 | | | | | | |
| **SNAA** | **Sanae** | 145.13 | 199 | *e*PKP2 | **PKPbc** | 22 55 26.8 | -0.1 |
| **SNAA** | **Sanae** | 145.13 | 199 | *e*PKPbc | **PKPbc** | 22 55 26.8 | -0.1 |

*IDC **05** 22:49:28.8±0.8, 41.°47N×77.°81E, h0km, mb3.8/9, mb1 3.8/16, mb1mx3.7/37, mbtmp3.7/16, ML3.1/7, Error ellipse: s-maj=15.6km s-min=12.9km az=142.0*

*KRNET **05** 22:49:30.7±0.1, 41.°77N×77.°67E, h14km, mb4.2*

*BJI **05** 22:49:31.2, 41.°73N×77.°81E, h6km, mb3.7/4, mB4.4/2*

*NNC **05** 22:49:33.0±1.1, 41.°80N×77.°77E, h0km, mb4.5, mpv4.3, Error ellipse: s-maj=8.9km s-min=5.6km az=166.0*

*MOS **05** 22:49:34.2±1.9, 41.°86N×78.°01E, h33km, mb4.1/6, Error*

*ellipse: s-maj=12.2km s-min=6.7km az=112.4*

**ISC 05 22:49:30.9**±1.3**, 41°.73N**±0°.04×**77°.72E**±0°.03**, h6**km±8km**, n99,** σ1.40/112**, mb3.7**/11**, 39C-29D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANVS** | **Anan'yevo** | **1.06** | **358** | ⇓iP | **Pg** | **22 49 50.7** | **-0.5** |
| | baz=360 | | | | | | |
| ANVS | | | | ⇓iS | **Sb** | **22 50 05.2** | **-0.8** |
| | baz=360 | | | | | | |
| **ULHL** | **Ulahol** | **1.22** | **296** | ⇓iP | **Pg** | **22 49 53.5** | **-0.8** |
| | baz=294 | | | | | | |
| ULHL | | | | ⇓iS | **Sg** | **22 50 10.0** | **0.0** |
| | baz=294 | | | | | | |
| **ULHL** | **Ulahol** | **1.22** | **296** | P | **Pg** | **22 49 53.5** | **-0.8** |
| | SNR=808 | | | | | | |
| **NRN** | **Naryn** | **1.32** | **258** | ⇑iP | **Pn** | **22 49 55.9** | **-0.3** |
| | baz=255 | | | | | | |
| NRN | | | | ⇑iS | **Sn** | **22 50 15.3** | **+1.0** |
| | baz=255 | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.53** | **301** | ⇓iP | **Pb** | **22 49 59.0** | **-0.7** |
| | baz=300 | | | | | | |
| BOOM | | | | ⇓iS | **Sg** | **22 50 20.3** | **+0.3** |
| | baz=300 | | | | | | |
| **KNDC** | **Almaty** | **1.59** | **340** | ⇑P | **Pb** | **22 50 00.3** | **-0.4** |
| | 685nm,0.3s | | | | | | |
| KNDC | | | | ⇑S | **Sg** | **22 50 22.3** | **+0.2** |
| | 1μm,0.5s | | | | | | |
| **AAA** | **Alma-Ata** | **1.65** | **340** | i PN | **Pb** | **22 50 00.9** | **-0.8** |
| AAA | | | | i S | **Sb** | **22 50 22.5** | **-0.3** |
| AAA | | | | pmax | pmax | | |
| | comp=Z,5μm,0.4s | | | | | | |
| AAA | | | | smax | smax | | |
| | comp=E,4μm,0.4s | | | | | | |
| **KZA** | **Kyzart** | **1.87** | **282** | ⇑iP | **Pb** | **22 50 05.7** | **-0.1** |
| | baz=280 | | | | | | |
| KZA | | | | ⇑iS | **Sg** | **22 50 30.9** | **-0.3** |
| | baz=280 | | | | | | |
| **KZA** | **Kyzart** | **1.87** | **282** | P | **Pb** | **22 50 05.9** | **+0.1** |
| | SNR=36 | | | | | | |
| **TKM2** | **Tokmak 2** | **1.97** | **308** | ⇓P | **Pb** | **22 50 07.0** | **-0.3** |
| | comp=E,115nm,0.3s | | | | | | |
| TKM2 | | | | ⇓S | **Sg** | **22 50 33.8** | **-0.6** |
| | comp=E,1μm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **1.97** | **308** | i PN | **Pb** | **22 50 07.2** | **-0.2** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,91nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **1.97** | **308** | ⇑iP | **Pb** | **22 50 07.1** | **-0.3** |
| | baz=308 | | | | | | |
| TKM2 | | | | ⇑iS | **Sg** | **22 50 33.8** | **-0.6** |
| | baz=308 | | | | | | |
| **TKM2** | **Tokmak 2** | **1.97** | **308** | P | **Pb** | **22 50 07.1** | **-0.3** |
| | SNR=258 | | | | | | |
| **PDGK** | **Podgornoye** | **2.07** | **39** | ⇓P | **Pb** | **22 50 07.9** | **-0.9** |
| | comp=Z,490nm,0.6s | | | | | | |
| PDGK | | | | ⇑S | **Sb** | **22 50 35.1** | **+0.4** |
| | comp=Z,2μm,0.8s | | | | | | |
| **PDGK** | **Podgornoye** | **2.07** | **39** | i PN | **Pb** | **22 50 08.4** | **-0.4** |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,490nm,0.5s | | | | | | |
| **KBK** | **Karagaybulak** | **2.26** | **295** | ⇑iP | **Pb** | **22 50 12.4** | **+0.2** |
| | baz=295 | | | | | | |
| KBK | | | | ⇑iS | **Sb** | **22 50 40.9** | **+0.5** |
| | baz=295 | | | | | | |
| **KBK** | **Karagaybulak** | **2.26** | **295** | P | **Pb** | **22 50 12.4** | **+0.2** |
| | SNR=55 | | | | | | |
| **UCH** | **Uchtor** | **2.44** | **283** | ⇑iP | **Pb** | **22 50 15.6** | **+0.1** |
| | baz=282 | | | | | | |
| UCH | | | | ⇑iS | **Sb** | **22 50 46.0** | **0.0** |
| | baz=282 | | | | | | |
| **UCH** | **Uchtor** | **2.44** | **283** | P | **Pb** | **22 50 15.7** | **+0.2** |
| | SNR=72 | | | | | | |
| **CHMS** | **Chumysh** | **2.54** | **301** | ⇑iP | **Pb** | **22 50 16.0** | **-0.9** |
| | baz=301 | | | | | | |
| CHMS | | | | ⇑iS | **Sb** | **22 50 48.7** | **+0.3** |
| | baz=301 | | | | | | |
| **CHMS** | **Chumysh** | **2.54** | **301** | P | **Pb** | **22 50 16.1** | **-0.8** |
| | SNR=78 | | | | | | |
| **ARLS** | **Aral** | **2.54** | **274** | ⇑iP | **Pb** | **22 50 15.4** | **-1.6** |
| | baz=273 | | | | | | |
| ARLS | | | | ⇑iS | **Sb** | **22 50 49.9** | **+1.3** |
| | baz=273 | | | | | | |
| **FRU** | **Bishkek** | **2.55** | **297** | ⇓iPN | **Pb** | **22 50 17.0** | **-0.1** |
| FRU | | | | i S | **Sg** | **22 50 52.5** | **-0.4** |
| FRU | | | | pmax | pmax | | |
| | comp=Z,340nm,1.5s | | | | | | |
| FRU | | | | smax | smax | | |
| | comp=N,1μm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **2.56** | **292** | ⇓Pn | **Pb** | **22 50 17.5** | **+0.1** |
| | comp=N,86nm,0.6s | | | | | | |
| AAK | | | | ⇓Sn | **Sg** | **22 50 51.3** | **-1.8** |
| | comp=N,666nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **2.56** | **292** | Pn | **Pb** | **22 50 17.5** | **+0.1** |
| | comp=N,25nm,0.3s,baz=112,slow=11,SNR=184 | | | | | | |
| AAK | | | | Sn | **Sg** | **22 50 51.7** | **-1.5** |
| | comp=N,78nm,0.3s,baz=260,slow=22,SNR=30 | | | | | | |
| **AAK** | **Ala-Archa** | **2.56** | **292** | d iPN | **Pb** | **22 50 17.4** | **+0.1** |
| AAK | | | | eS | **Sb** | **22 50 49.2** | **0.0** |
| **AAK** | **Ala-Archa** | **2.56** | **292** | ⇓eP | **Pb** | **22 50 17.4** | **+0.1** |
| | baz=291 | | | | | | |
| AAK | | | | ⇓iS | **Sb** | **22 50 49.7** | **+0.5** |
| | baz=291 | | | | | | |
| **AAK** | **Ala-Archa** | **2.56** | **292** | P | **Pb** | **22 50 17.5** | **+0.1** |
| | SNR=111 | | | | | | |
| **KSH** | **Kashi** | **2.57** | **212** | Pn | Pg | 22 50 24.0 | +3.8 |
| KSH | | | | Sn | Sg | 22 51 07.4 | +13 |
| KSH | | | | pmax | pmax | | |
| | comp=Z,110nm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=N,310nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,300nm,0.6s | | | | | | |
| **USP** | **Ospenovka** | **2.83** | **304** | ⇑iP | **Pb** | **22 50 19.7** | **-2.2** |
| | baz=304 | | | | | | |
| USP | | | | ⇑iS | **Sb** | **22 50 56.6** | **-0.3** |
| | baz=304 | | | | | | |
| **USP** | **Ospenovka** | **2.83** | **304** | P | **Pb** | **22 50 21.2** | **-0.8** |
| | SNR=102 | | | | | | |
| **AML** | **Almayashu** | **3.03** | **279** | ⇑iP | **Pb** | **22 50 23.5** | **-2.0** |
| | baz=278 | | | | | | |
| AML | | | | ⇑iS | **Sb** | **22 51 00.3** | **-2.5** |
| | baz=278 | | | | | | |
| **AML** | **Almayashu** | **3.03** | **279** | P | **Pb** | **22 50 26.9** | **+1.5** |
| | SNR=46 | | | | | | |
| **EKS** | **Erkin-Say** | **3.07** | **289** | ⇑iP | **Pb** | **22 50 24.7** | **-1.3** |
| | baz=289 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.07** | **289** | P | **Pb** | **22 50 25.9** | **-0.2** |
| | SNR=12 | | | | | | |
| **ARSB** | **Arslanbob** | **3.58** | **265** | ⇑iP | Pn | 22 50 30.0 | +2.9 |
| | baz=264 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.62** | **243** | ⇑Pn | **Pn** | **22 50 30.1** | **+2.3** |
| | comp=E,43nm,1.1s | | | | | | |
| SFK | | | | ⇑Pg | Pg | 22 50 45.0 | +4.6 |
| | comp=E,32nm,0.6s | | | | | | |
| SFK | | | | ⇓Lg | Lg | 22 51 24.1 | |
| | comp=E,160nm,0.8s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.62** | **243** | i PN | **Pb** | **22 50 36.3** | **+0.8** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,43nm,1.1s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.62** | **243** | ⇓iP | Pn | 22 50 30.9 | +3.1 |
| | baz=242 | | | | | | |
| **MNAS** | **Manas** | **3.95** | **283** | ⇑Pn | Pb | 22 50 36.5 | -4.5 |
| | comp=Z,26nm,0.7s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 22 51 33.8 | |
| | comp=Z,69nm,0.6s | | | | | | |
| **MNAS** | **Manas** | **3.95** | **283** | i PN | Pb | 22 50 37.0 | -4.1 |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **3.95** | **283** | ⇑eP | Pn | 22 50 35.2 | +3.0 |
| | baz=282 | | | | | | |
| **ARK** | **Arkit** | **4.30** | **273** | ⇓eP | **Pn** | **22 50 39.4** | **+2.4** |
| | baz=272 | | | | | | |
| **KK31** | **Karatay Array** | **5.51** | **287** | Pn | Pg | 22 51 12.4 | -4.0 |
| | comp=Z,18nm,0.6s,baz=95,slow=15,SNR=104 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 22 52 23.0 | |
| | comp=Z,31nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **6.04** | **31** | Pn | **Pn** | **22 51 02.8** | **+2.0** |
| | comp=Z,6.9nm,0.7s,baz=211,slow=12,SNR=85 | | | | | | |
| MK31 | | | | ⇓Pg | Pb | 22 51 19.9 | +3.4 |
| | comp=Z,6.1nm,0.5s,baz=208,slow=16,SNR=8.1 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 22 52 33.9 | |
| | comp=Z,29nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **6.04** | **31** | Pn | **Pn** | **22 51 02.9** | **+2.1** |
| | comp=Z,1.5nm,0.3s,baz=213,slow=12,SNR=70 | | | | | | |
| MKAR | | | | Sn | **Sn** | **22 52 13.9** | **+3.7** |
| | comp=Z,3.5nm,0.3s,baz=227,slow=21,SNR=4.6 | | | | | | |
| MKAR | | | | Lg | Lg | 22 52 32.3 | |
| | comp=Z,4.0nm,0.3s,baz=219,slow=25,SNR=5.4 | | | | | | |
| **DZET** | **Dzherino** | **7.39** | **250** | ⇑Pn | **Pn** | **22 51 21.7** | **+2.2** |
| | comp=Z,11nm,0.7s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 22 53 20.2 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **OTUK** | **Ortayu** | **7.55** | **332** | ⇓Pn | **Pn** | **22 51 23.0** | **+1.5** |
| | comp=Z,7.6nm,0.6s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 22 53 24.4 | |
| | comp=Z,242nm,1.8s | | | | | | |
| **OTUK** | **Ortayu** | **7.55** | **332** | i P | **Pn** | **22 51 23.0** | **+1.5** |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **7.63** | **71** | Pn | **Pn** | **22 51 21.5** | **-1.2** |
| WMQ | | | | Sn | **Sn** | **22 52 49.7** | **+0.1** |
| WMQ | | | | smax | smax | | |
| | comp=N,28nm,1.0s | | | | | | |
| WMQ | | | | smax | smax | | |
| | comp=E,33nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.92** | **3** | ⇓Pn | Pn | 22 51 44.8 | +4.6 |
| | comp=E,7.3nm,0.6s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 22 54 09.7 | |
| | comp=E,128nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.92** | **3** | Pn | Pn | 22 51 43.4 | +3.2 |
| | comp=E,0.2nm,0.3s,baz=191,slow=12,SNR=5.0 | | | | | | |
| KURBB | | | | Sn | **Sn** | **22 53 23.1** | **+2.1** |
| | comp=E,0.3nm,0.3s,baz=189,slow=27,SNR=4.6 | | | | | | |
| KURBB | | | | Lg | Lg | 22 54 08.9 | |
| | comp=E,0.6nm,0.3s,baz=191,slow=30,SNR=4.8 | | | | | | |
| **KURK** | **Kurchatov** | **9.02** | **4** | ⇓Pn | Pn | 22 51 44.3 | +2.8 |
| | comp=E,9.8nm,0.6s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 22 54 07.8 | |
| | comp=E,190nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **9.02** | **4** | P | **Pn** | **22 51 43.4** | **+1.9** |
| KURK | | | | | | 22 53 23.1 | |
| **VOSK** | **Vostochnaya** | **11.91** | **340** | ⇑Pn | **Pn** | **22 52 23.2** | **+2.0** |
| | comp=E,5.6nm,0.8s | | | | | | |
| VOSK | | | | ⇓Lg | Lg | 22 55 34.0 | |
| | comp=E,94nm,1.9s | | | | | | |
| **VOSK** | **Vostochnaya** | **11.91** | **340** | i P | **Pn** | **22 52 23.2** | **+2.0** |
| VOSK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **BVA0** | **Borovoye Array** | **12.34** | **339** | Pn | Pn | 22 52 34.4 | +7.4 |
| | comp=Z,7.8nm,0.8s,baz=147,slow=13,SNR=10 | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 22 55 48.9 | |
| | comp=Z,53nm,1.1s | | | | | | |
| **BVAR** | **Borovoye Array** | **12.34** | **339** | Pn | **Pn** | **22 52 26.7** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=145,slow=15,SNR=4.4 | | | | | | |
| BVAR | | | | Sn | **Sn** | **22 54 40.9** | **-3.9** |
| | comp=Z,0.3nm,0.3s,baz=144,slow=20,SNR=2.7 | | | | | | |
| BVAR | | | | Lg | Lg | 22 55 57.1 | |
| | comp=Z,1.1nm,0.3s,baz=143,slow=27,SNR=9.5 | | | | | | |
| **BRVK** | **Borovoye** | **12.40** | **339** | ⇑eP | Pn | 22 52 30.8 | +3.0 |
| **ZRNK** | **Zerenda** | **12.68** | **335** | ⇓Pn | **Pn** | **22 52 31.2** | **-0.5** |
| | comp=Z,3.6nm,0.8s | | | | | | |
| ZRNK | | | | ⇓Sn | Sn | 22 55 03.8 | +11 |
| | comp=Z,14nm,1.6s | | | | | | |
| ZRNK | | | | ⇑Lg | Lg | 22 55 58.4 | |
| | comp=Z,42nm,1.4s | | | | | | |
| **ZRNK** | **Zerenda** | **12.68** | **335** | i P | **Pn** | **22 52 31.1** | **-0.5** |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **CHKZ** | **Chkalovo** | **12.87** | **341** | ⇑Pn | Pn | 22 52 38.5 | +4.3 |
| | comp=Z,5.1nm,0.8s | | | | | | |
| CHKZ | | | | ⇑Lg | Lg | 22 55 44.3 | |
| | comp=Z,35nm,1.1s | | | | | | |
| **CHKZ** | **Chkalovo** | **12.87** | **341** | i P | Pn | 22 52 38.5 | +4.3 |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **13.12** | **19** | Pn | **Pn** | **22 52 39.5** | **+1.8** |
| | comp=Z,0.2nm,0.3s,baz=215,slow=15,SNR=4.0 | | | | | | |
| ZALV | | | | Sn | **Sn** | **22 55 07.3** | **+3.5** |
| | comp=Z,0.3nm,0.3s,baz=221,slow=17,SNR=3.0 | | | | | | |
| ZALV | | | | Lg | Lg | 22 56 22.6 | |
| | comp=Z,0.2nm,0.3s,baz=199,slow=27,SNR=3.6 | | | | | | |
| **KOLN** | **Koldanda** | **14.73** | **159** | eP | **Pn** | **22 53 01.4** | **+1.4** |
| | comp=Z,5.6nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **14.81** | **155** | eP | **P** | **22 53 05.1** | **-2.0** |
| | comp=Z,9.2nm,0.5s | | | | | | |
| **KKN** | **Kakani** | **15.22** | **154** | eP | **P** | **22 53 09.4** | **-2.3** |
| | comp=Z,8.8nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **15.31** | **152** | eP | **P** | **22 53 12.0** | **-0.9** |
| | comp=Z,28nm,1.0s | | | | | | |
| **DMN** | **Daman** | **15.33** | **154** | eP | **Pn** | **22 53 10.4** | **+2.3** |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **15.46** | **154** | eP | **Pn** | **22 53 11.5** | **+1.6** |
| | comp=Z,8.2nm,0.6s | | | | | | |
| **GEYT** | **Alibeck** | **15.52** | **262** | Pn | **Pn** | **22 53 09.4** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=91,slow=12,SNR=2.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.17** | **309** | Pn | **P** | **22 53 20.1** | **-1.8** |
| | comp=Z,0.2nm,0.3s,baz=118,slow=15,SNR=2.6 | | | | | | |
| AKTO | | | | Sn | Sn | 22 56 01.0 | -17 |
| | comp=Z,0.0nm,0.3s,baz=209,slow=19,SNR=2.0 | | | | | | |
| AKTO | | | | Lg | Lg | 22 58 05.3 | |
| | comp=Z,0.3nm,0.3s,baz=16,slow=19,SNR=2.3 | | | | | | |
| **RAMN** | **Ramite** | **16.45** | **151** | eP | **Pn** | **22 53 23.5** | **+0.9** |
| | comp=Z,23nm,0.8s | | | | | | |
| **ODAN** | **Odare** | **16.83** | **149** | eP | **Pn** | **22 53 27.5** | **+0.1** |
| | comp=Z,15nm,0.9s | | | | | | |
| **GTA** | **Gaotai** | **16.95** | **91** | eP | **P** | **22 53 31.9** | **+1.2** |
| GTA | | | | PMZ | | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **ARU** | **Arti** | **19.24** | **326** | P | **Pn** | **22 53 57.1** | **+0.5** |
| | comp=Z,0.0nm,0.3s,baz=108,slow=19,SNR=2.8 | | | | | | |
| ARU | | | | Lg | Lg | 22 59 40.8 | |
| | comp=Z,0.0nm,0.3s,baz=128,slow=20,SNR=2.9 | | | | | | |
| **ARU** | **Arti** | **19.24** | **326** | d iP | **Pn** | **22 53 58.6** | **+2.0** |
| ARU | | | | S | **S** | **22 57 34.4** | **+0.7** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **21.18** | **63** | P | **P** | **22 54 17.0** | **0.0** |
| | comp=Z,2.4nm,0.8s,baz=264,slow=11,SNR=14 | | | | | | |
| **SONM** | **Songino Array** | **21.18** | **63** | P | **P** | **22 54 17.0** | **0.0** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **21.62** | **64** | ⇓P | **P** | **22 54 24.4** | **+2.6** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **CD2** | **Chengdu** | **23.51** | **109** | eP | **P** | **22 54 40.5** | **-1.2** |
| **GNI** | **Garni** | **24.88** | **277** | P | P | 22 54 59.0 | +4.5 |
| GNI | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **25.36** | **81** | eP | **P** | **22 55 00.5** | **+1.7** |
| HHC | | | | S | **S** | **22 59 21.0** | **-4.5** |
| **BRTR** | **Keskin Array B** | **33.19** | **281** | P | **P** | **22 56 08.8** | **+0.3** |
| | comp=Z,0.4nm,0.6s,baz=141,slow=4.7,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **36.42** | **321** | P | **P** | **22 56 36.6** | **+0.7** |
| | comp=Z,5.8nm,1.1s,baz=115,slow=11,SNR=3.2 | | | | | | |
| **FINES** | **FINESS Array B** | **36.42** | **321** | P | **P** | **22 56 36.6** | **+0.7** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **38.88** | **300** | eP | **P** | **22 56 58.3** | **+1.4** |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,17nm,2.0s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **38.88** | **300** | eP | **P** | **22 56 58.3** | **+1.4** |
| **LANS** | **Liptovska Anna** | **40.65** | **301** | eP | **P** | **22 57 12.8** | **+1.2** |
| **LANS** | **Liptovska Anna** | **40.65** | **301** | eP | **P** | **22 57 12.8** | **+1.2** |
| **NOA** | **NORSAR Array B** | **43.57** | **320** | P | **P** | **22 57 35.7** | **+0.3** |
| | comp=Z,0.6nm,0.7s,baz=92,slow=5.2,SNR=2.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.57** | **320** | P | **P** | **22 57 35.7** | **+0.3** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **67.82** | **12** | P | **P** | **23 00 28.6** | **-0.5** |
| | comp=Z,1.7nm,0.7s,baz=0.0,slow=5.1,SNR=3.3 | | | | | | |
| **INK** | **Inuvik** | **67.82** | **12** | P | **P** | **23 00 28.7** | **-0.5** |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **68.24** | **19** | P | **P** | **23 00 31.2** | **-0.7** |
| | comp=Z,0.3nm,0.7s,baz=297,slow=6.0,SNR=4.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **70.97** | **271** | P | **P** | **23 00 48.3** | **-1.2** |
| | comp=Z,1.4nm,0.8s,baz=40,slow=5.6,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.64** | **127** | P | **P** | **23 01 42.9** | **-1.7** |
| | comp=Z,0.4nm,0.5s,baz=305,slow=3.3,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **83.27** | **130** | P | **P** | **23 01 57.0** | **-1.4** |
| | comp=Z,0.5nm,0.7s,baz=339,slow=5.2,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **83.27** | **130** | P | **P** | **23 01 57.0** | **-1.4** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |

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*ISCJB **05** 23:09:36.7±1.9, 17°.0S±0°.8×179°.0W±0°.5, h539km, mb3.3/5, Error ellipse: s-maj=118.7km s-min=21.7km az=153.1*
*IDC **05** 23:09:45.8±11.0, 17°.29S×179°.00W, h650km±157km, mb2.8/5, mb1 3.2/6, mb1mx2.9/22, mbtmp3.8/6, Error ellipse: s-maj=120.4km s-min=47.5km az=161.0*
**ISC 05 23:09:37.6**±2.0**, 16°.9S**±0°.7×**179°.0W**±0°.4**, h539**km**, n6,** σ0.35/5**, mb3.1**/5**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.69** | **247** | P | P | 23 12 48.8 | +4.6 |
| | 0.2nm,0.3s,baz=0.0,slow=10,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.31** | **259** | P | **P** | **23 17 00.0** | **-0.1** |
| | 0.8nm,0.5s,baz=96,slow=7.2,SNR=40 | | | | | | |
| **ASAR** | **Alice Springs** | **44.57** | **253** | P | **P** | **23 17 02.1** | **+0.1** |
| | 4.3nm,0.5s,baz=88,slow=8.7,SNR=52 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.09** | **44** | P | **P** | **23 20 47.0** | **+0.4** |
| | 0.2nm,0.5s,baz=230,slow=6.9,SNR=1.6 | | | | | | |
| **ILAR** | **Eielson Array** | **85.06** | **13** | P | **P** | **23 21 15.9** | **-0.1** |
| | 0.2nm,0.4s,baz=229,slow=4.5,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.91** | **58** | P | **P** | **23 21 20.8** | **-0.3** |
| | 0.3nm,0.7s,baz=213,slow=7.6,SNR=5.0 | | | | | | |

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**WEL 05 23:13:22.5**±0.1**, 43°.47S**×**172°.16E, h7**km**, ML3.7**/18**, 3C-3D, Error ellipse: s-maj=0.7km s-min=0.6km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OXZ** | **Oxford** | **0.17** | **328** | ⇓PG | Pg | 23 13 25.8 | -0.2 |
| OXZ | | | | SG | Sg | 23 13 28.3 | -0.1 |
| **CRLZ** | **Canterbury Las** | **0.35** | **107** | PG | Pg | 23 13 29.5 | +0.2 |
| CRLZ | | | | SG | Sg | 23 13 34.7 | +0.8 |
| CRLZ | | | | AML | AML | 23 13 34.9 | |
| **MQZ** | **McQueen's Vall** | **0.43** | **124** | ⇓PG | Pg | 23 13 30.9 | +0.1 |
| MQZ | | | | SG | Sg | 23 13 37.0 | +0.7 |
| MQZ | | | | AML | AML | 23 13 39.0 | |
| **LTZ** | **Lake Taylor** | **0.69** | **7** | ⇑P* | Pg | 23 13 36.1 | +0.1 |
| LTZ | | | | S* | Sg | 23 13 45.7 | +0.7 |
| LTZ | | | | AML | AML | 23 13 47.7 | |
| **RPZ** | **Rata Peaks** | **0.84** | **253** | ⇓P* | Pg | 23 13 38.6 | -0.1 |
| RPZ | | | | S* | Sg | 23 13 50.1 | +0.5 |
| RPZ | | | | AML | AML | 23 13 51.6 | |
| **WVZ** | **Waitaha Valley** | **1.11** | **290** | ⇑P* | Pg | 23 13 43.3 | -0.6 |
| WVZ | | | | AML | AML | 23 14 00.3 | |
| WVZ | | | | AML | AML | 23 14 07.0 | |
| **KHZ** | **Kahutara** | **1.46** | **44** | PN | Pn | 23 13 47.5 | -1.8 |
| KHZ | | | | AML | AML | 23 14 15.1 | |
| KHZ | | | | AML | AML | 23 14 25.1 | |
| **LBZ** | **Lake Benmore** | **1.70** | **237** | AML | AML | 23 14 17.4 | |
| LBZ | | | | AML | AML | 23 14 19.0 | |
| **DSZ** | **Denniston Nort** | **1.75** | **351** | AML | AML | 23 14 19.3 | |
| DSZ | | | | AML | AML | 23 14 22.1 | |
| **THZ** | **Tophouse** | **1.79** | **18** | ⇑PN | Pn | 23 13 52.3 | -1.7 |
| THZ | | | | AML | AML | 23 14 25.6 | |
| THZ | | | | AML | AML | 23 14 31.2 | |
| **FOZ** | **Fox Glacier** | **1.80** | **266** | AML | AML | 23 14 21.8 | |
| FOZ | | | | AML | AML | 23 14 22.2 | |
| **ODZ** | **Otahua Downs** | **1.91** | **214** | AML | AML | 23 14 25.5 | |
| ODZ | | | | AML | AML | 23 14 25.6 | |
| **BSWZ** | **Blackbirch Sta** | **2.17** | **36** | AML | AML | 23 14 44.0 | |
| **JCZ** | **Jackson Bay** | **2.54** | **255** | AML | AML | 23 14 52.0 | |
| JCZ | | | | AML | AML | 23 14 54.8 | |
| **WKZ** | **Wanaka** | **2.64** | **238** | AML | AML | 23 14 52.1 | |
| WKZ | | | | AML | AML | 23 14 54.3 | |
| **QRZ** | **Quartz Range** | **2.66** | **6** | AML | AML | 23 14 14.7 | |
| QRZ | | | | AML | AML | 23 14 48.7 | |
| **EAZ** | **Earnscleugh** | **2.70** | **228** | AML | AML | 23 14 49.2 | |
| EAZ | | | | AML | AML | 23 14 52.7 | |
| **TUZ** | **Tuapeka** | **3.07** | **215** | AML | AML | 23 15 06.6 | |
| TUZ | | | | AML | AML | 23 15 07.9 | |
| **SYZ** | **Scrubby Hill** | **3.74** | **214** | AML | AML | 23 15 25.3 | |
| SYZ | | | | AML | AML | 23 15 32.1 | |

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*DDA **05** 23:27:16.6, 39°.93N×39°.53E, h15km, Md2.6*
*ISCJB **05** 23:27:17.2±0.5, 39°.93N±0°.03×39°.59E±0°.05, h12km, Error ellipse: s-maj=5.1km s-min=4.5km az=177.2*
*CSEM **05** 23:27:17.4±0.2, 39°.96N×39°.55E, h2km, MD2.6, Error ellipse: s-maj=5.6km s-min=4.2km az=117.0*
**ISC 05 23:27:17.0**±0.8**, 39°.94N**±0°.03×**39°.52E**±0°.03**, h12**km**, n23,** σ0.62/31**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EZC** | **Erzincan** | **0.22** | **215** | ePg | **Pb** | **23 27 24.4** | **+1.3** |
| **EUZM** | **Uzumlu** | **0.27** | **149** | i P | **Pg** | **23 27 22.2** | **-0.4** |
| EUZM | | | | i S | **Sg** | **23 27 25.8** | **-0.6** |
| **EUZM** | **Uzumlu** | **0.27** | **149** | P | **Pg** | **23 27 22.2** | **-0.4** |
| EUZM | | | | S | **Sg** | **23 27 25.8** | **-0.6** |
| **ERZN** | **Erzincan** | **0.38** | **156** | ePG | **Pg** | **23 27 24.4** | **-0.3** |
| **GUMT** | **Gumushane** | **0.52** | **357** | ePG | **Pg** | **23 27 27.6** | **+0.2** |
| **GUMT** | **Gumushane** | **0.52** | **357** | ePg | **Pg** | **23 27 27.6** | **+0.2** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **0.66** | **46** | ePG | **Pg** | **23 27 29.6** | **-0.3** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **0.66** | **46** | ePg | **Pg** | **23 27 29.6** | **-0.3** |
| **KOPT** | **Kop Dagi** | **0.76** | **83** | i P | **Pb** | **23 27 32.3** | **0.0** |
| **KOPT** | **Kop Dagi** | **0.76** | **83** | P | **Pb** | **23 27 32.3** | **0.0** |
| KOPT | | | | S | **Sn** | **23 27 47.6** | **+2.3** |
| **ILIC** | **ilic-Erzincan** | **0.88** | **237** | ePG | **Pn** | **23 27 34.8** | **-0.5** |
| **ILIC** | **ilic-Erzincan** | **0.88** | **237** | ePg | **Pn** | **23 27 34.8** | **-0.5** |
| **MACK** | **Trabzon** | **1.02** | **11** | i P | **Pb** | **23 27 36.4** | **-0.3** |
| MACK | | | | i S | **Sb** | **23 27 50.1** | **0.0** |
| **MACK** | **Trabzon** | **1.02** | **11** | P | **Pb** | **23 27 36.4** | **-0.3** |
| MACK | | | | S | **Sb** | **23 27 50.1** | **0.0** |
| **PTK** | **Pertek** | **1.05** | **185** | ePG | **Pn** | **23 27 37.6** | **0.0** |
| **PTK** | **Pertek** | **1.05** | **185** | ePg | **Pn** | **23 27 37.7** | **0.0** |
| **SUSE** | **Susehri** | **1.05** | **286** | i P | **Pb** | **23 27 37.3** | **+0.1** |
| SUSE | | | | i S | **Sn** | **23 27 51.9** | **-0.4** |
| **SUSE** | **Susehri** | **1.05** | **286** | P | **Pb** | **23 27 37.2** | **+0.1** |
| SUSE | | | | S | **Sn** | **23 27 51.9** | **-0.4** |
| **KTUT** | **Trabzon** | **1.07** | **10** | ePG | **Pb** | **23 27 37.4** | **0.0** |
| **KTUT** | **Trabzon** | **1.07** | **10** | ePg | **Pb** | **23 27 37.4** | **0.0** |
| **CUZAR** | **Zara_SIVAS** | **1.35** | **269** | P | **Pn** | **23 27 42.0** | **+0.2** |
| CUZAR | | | | S | **Sg** | **23 28 01.4** | **+1.0** |
| **SVSK** | **Karacayir** | **1.94** | **270** | ePN | **Pb** | **23 27 51.8** | **-0.5** |
| **SVSK** | **Karacayir** | **1.94** | **270** | ePn | **Pb** | **23 27 51.8** | **-0.5** |

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*ISCJB **05** 23:30:07.7±0.5, 31°.24N±0°.04×115°.66W±0°.03, h3km±6km, Error ellipse: s-maj=6.7km s-min=4.0km az=33.8*
*ECX **05** 23:30:08.7±0.4, 31°.23N×115°.61W, h5km, MD3.2, ML3.4, Fault plane solution: NP1:$\phi_s$344.90000°, δ75.52000°, λ-26.57000°.*
*MEX **05** 23:30:09.0±0.2, 31°.19N×115°.66W, h5km, MD3.5*
**ISC 05 23:30:07.8**±1.0**, 31°.24N**±0°.04×**115°.66W**±0°.03**, h9**km±12km**, n17,** σ0.73/30**, 4C-6D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPIG** | **San Pedro Mart** | **0.25** | **140** | eP | **Pg** | **23 30 13.1** | **+0.2** |
| SPIG | | | | i S | **Sg** | **23 30 16.4** | **0.0** |
| **SPIG** | **San Pedro Mart** | **0.25** | **140** | ⇓iP | **Pg** | **23 30 13.1** | **+0.2** |
| SPIG | | | | eS | **Sg** | **23 30 16.5** | **+0.1** |
| **SPX** | **San Pedro Mart** | **0.25** | **139** | ⇓iP | **Pg** | **23 30 13.1** | **+0.1** |
| SPX | | | | eS | **Sg** | **23 30 16.5** | **0.0** |
| SPX | | | | IAML | | 23 30 17.2 | |
| | comp=E,5μm,0.3s | | | | | | |
| SPX | | | | ⇓e | | 23 30 17.2 | |
| **ECBX** | **El Chinero** | **0.57** | **65** | ⇑eP | **Pg** | **23 30 18.3** | **-0.5** |
| ECBX | | | | eS | **Sg** | **23 30 25.6** | **-0.6** |
| **ZAX** | **El Zacaton** | **0.60** | **298** | ⇑eP | **Pg** | **23 30 19.5** | **+0.1** |
| ZAX | | | | eS | **Sb** | **23 30 28.7** | **-0.4** |
| ZAX | | | | ⇑e | | 23 30 30.4 | |
| ZAX | | | | IAML | | 23 30 30.4 | |
| | comp=N,2μm,0.3s | | | | | | |
| **RDX** | **Rancho Dawling** | **0.73** | **340** | ⇓eP | **Pg** | **23 30 22.3** | **+0.4** |
| RDX | | | | eS | **Sb** | **23 30 32.4** | **-0.7** |
| **ECNX** | **Esteban Cantu** | **0.91** | **298** | eP | **Pg** | **23 30 25.2** | **-0.1** |
| ECNX | | | | eS | **Sg** | **23 30 38.0** | **+0.9** |
| **PBX** | **Punta Banda** | **1.04** | **299** | ⇓eP | **Pg** | **23 30 27.5** | **-0.4** |
| PBX | | | | eS | **Sg** | **23 30 42.0** | **+0.6** |
| **CBX** | **Cerro Bola** | **1.37** | **322** | eP | **Pn** | **23 30 31.9** | **-1.4** |
| CBX | | | | eS | **Sb** | **23 30 49.3** | **-2.2** |
| **CBX** | **Cerro Bola** | **1.37** | **322** | ⇓eP | **Pn** | **23 30 33.0** | **-0.3** |
| CBX | | | | IAML | | 23 30 53.9 | |
| | comp=E,534nm,0.6s | | | | | | |
| CBX | | | | e | | 23 30 53.9 | |
| **RMX** | **La Rumorosa** | **1.41** | **345** | eP | **Pn** | **23 30 34.0** | **+0.2** |
| RMX | | | | eS | **Sb** | **23 30 52.0** | **-0.5** |
| RMX | | | | ⇑e | | 23 30 55.0 | |
| RMX | | | | IAML | | 23 30 55.0 | |
| | comp=N,681nm,0.3s | | | | | | |
| **IBP** | **Imperial Bould** | **1.47** | **345** | P | **Pn** | **23 30 35.1** | **+0.5** |
| | baz=1.3 | | | | | | |
| IBP | | | | S | **Sb** | **23 30 53.7** | **-0.5** |
| | baz=1.3 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **1.70** | **356** | P | **Pb** | **23 30 39.3** | **0.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=1.6 | | | | | | |
| SWSC | | | | S | **Sg** | **23 31 02.1** | **-0.5** |
| | baz=1.6 | | | | | | |
| **MONP** | **Monument Peak** | **1.77** | **339** | P | **Pn** | **23 30 39.4** | **+0.5** |
| | baz=1.6 | | | | | | |
| MONP | | | | S | **Sn** | **23 31 02.7** | **+1.0** |
| | baz=1.6 | | | | | | |
| **GLA** | **Glamis** | **1.94** | **21** | S | **Sb** | **23 31 08.7** | **+1.0** |
| | baz=1.9 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **2.46** | **344** | Sb | **Sb** | **23 31 23.7** | **+0.9** |
| | baz=2.3 | | | | | | |
| **MURC** | **Murrieta** | **2.69** | **331** | Sb | **Sb** | **23 31 29.3** | **-0.2** |
| | baz=2.5 | | | | | | |

*CSEM **05** 23:41:29.1±0.1, 67°.84N×20°.21E, h1km, ML1.0, Error ellipse: s-maj=3.1km s-min=2.7km az=170.0, Mining explosion.*

*HEL **05** 23:41:30.1±0.2, 67°.86N×20°.14E, h0km, ML1.5, ML1.0(UPP), Explosion*

**UPP 05 23:41:29.4, 67°.83N×20°.19E, h0km, ML1.0, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUA** | **Kurravaara** | **0.13** | **24** | *i* P | Pg | 23 41 32.3 | +0.3 |
| KUA | | | | *i* S | Sg | 23 41 34.2 | +0.4 |
| **KUA** | **Kurravaara** | **0.13** | **24** | P | Pg | 23 41 32.3 | +0.3 |
| KUA | | | | S | Sg | 23 41 34.2 | +0.4 |
| **NIKU** | **Nikkaluokta** | **0.44** | **275** | *i* P | Pg | 23 41 37.9 | +0.1 |
| **NIKU** | **Nikkaluokta** | **0.44** | **275** | P | Pg | 23 41 37.9 | +0.1 |
| **LANU** | **Lannavaara** | **0.71** | **71** | *e*P | Pg | 23 41 42.7 | -0.4 |
| LANU | | | | *e*S | Sg | 23 41 51.8 | -0.6 |
| **LANU** | **Lannavaara** | **0.71** | **71** | P | Pg | 23 41 42.8 | -0.3 |
| LANU | | | | S | Sg | 23 41 51.7 | -0.7 |
| **MASU** | **Masugnsbyn** | **0.79** | **118** | *i* P | Pg | 23 41 44.4 | -0.2 |
| **MASU** | **Masugnsbyn** | **0.79** | **118** | P | Pg | 23 41 44.3 | -0.2 |
| **SALU** | **Saltoluokta** | **0.79** | **236** | *i* P | Pg | 23 41 44.3 | -0.3 |
| **SALU** | **Saltoluokta** | **0.79** | **236** | P | Pg | 23 41 44.3 | -0.3 |
| **KIF** | **Kilpisjarvi** | **1.20** | **11** | *e*PB | Pg | 23 41 52.4 | +0.1 |
| KIF | | | | *e*S | Sg | 23 42 05.4 | -2.4 |
| **KIF** | **Kilpisjarvi** | **1.20** | **11** | Pb | Pg | 23 41 52.4 | +0.1 |
| KIF | | | | S | Sg | 23 42 05.4 | -2.4 |
| **HEF** | **Hetta** | **1.42** | **64** | *e*P | Pn | 23 41 55.4 | -1.0 |
| HEF | | | | MSG | | 23 42 14.6 | |
| | comp=Z,3.7nm,0.2s | | | | | | |
| HEF | | | | *e*SN | Sn | 23 42 18.1 | +2.3 |
| **HEF** | **Hetta** | **1.42** | **64** | Sn | Sn | 23 42 18.1 | +2.2 |
| **HEF** | **Hetta** | **1.42** | **64** | P | Pn | 23 41 55.4 | -1.1 |
| **ERTU** | **Ertsjaerv** | **1.50** | **148** | *e*P | Pn | 23 41 56.7 | -0.8 |
| ERTU | | | | *e*SN | Sn | 23 42 21.0 | +3.2 |
| **ERTU** | **Ertsjaerv** | **1.50** | **148** | Sn | Sn | 23 42 21.0 | +3.2 |
| **ERTU** | **Ertsjaerv** | **1.50** | **148** | P | Pn | 23 41 56.7 | -0.9 |
| **HARU** | **Harads** | **1.71** | **169** | *e*P | Pn | 23 42 00.4 | 0.0 |
| **HARU** | **Harads** | **1.71** | **169** | P | Pn | 23 42 00.3 | 0.0 |
| **KALU** | **Kalix** | **2.34** | **146** | *e*SG | Sg | 23 42 45.4 | +0.8 |
| **KALU** | **Kalix** | **2.34** | **146** | Sg | Sg | 23 42 45.4 | +0.8 |
| **SGF** | **Sodankyl** | **2.46** | **96** | *e*PB | Pb | 23 42 13.8 | -0.6 |
| SGF | | | | *e*SG | Sg | 23 42 48.3 | +0.1 |
| **SGF** | **Sodankyl** | **2.46** | **96** | Pb | Pb | 23 42 13.7 | -0.6 |
| SGF | | | | Sg | Sg | 23 42 48.2 | 0.0 |
| **RNF** | **Rovaniemi** | **2.58** | **116** | *e*PB | Pb | 23 42 14.7 | -1.8 |
| RNF | | | | *e*SG | Sg | 23 42 51.4 | -0.7 |
| **RNF** | **Rovaniemi** | **2.58** | **116** | Pb | Pb | 23 42 14.6 | -1.8 |
| **KEV** | **Kevo** | **3.14** | **49** | *e*SB | Sb | 23 43 03.1 | -1.7 |
| **KEV** | **Kevo** | **3.14** | **49** | Sb | Sb | 23 43 03.1 | -1.7 |

*CSEM **05** 23:41:31.8±1.0, 67°.77N×20°.40E, h1km, ML1.0, Error ellipse: s-maj=36.3km s-min=19.3km az=168.0, Mining explosion.*

**UPP 05 23:41:33.3, 67°.85N×20°.15E, h0km, ML1.0, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKU** | **Nikkaluokta** | **0.42** | **273** | P | Pg | 23 41 41.5 | 0.0 |
| **LANU** | **Lannavaara** | **0.72** | **73** | P | Pg | 23 41 47.0 | -0.2 |
| **SALU** | **Saltoluokta** | **0.79** | **234** | P | Pg | 23 41 48.0 | -0.5 |

*ISCJB **05** 23:42:32.6±0.3, 57°.30S±0°.05×24°.55W±0°.09, h10km, mb5.0/30, MS4.3/17, Error ellipse: s-maj=8.8km s-min=5.9km az=42.9*

*IDC **05** 23:42:37.0±0.8, 57°.32S×24°.45W, h29km±5km, mb4.8/18, mb1 4.8/19, mb1mx4.7/24, mbtmp4.9/19, ML5.0/1, MS4.2/14, Ms1 4.2/14, ms1mx4.1/18, Error ellipse: s-maj=14.7km s-min=12.1km az=66.0*

*GCMT **05** 23:42:37.0±0.3, 57°.56S×24°.18W, h28km±1km, MW5.1/71, Moment Tensor Solution. s29,c41; s71,c96; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.44±.23; $M_{\theta\theta}$-4.59±.17; $M_{\phi\phi}$1.15±.16; $M_{r\theta}$-0.04±.30; $M_{\theta\phi}$1.36±.11; $M_{\phi r}$2.87±.32; Best double couple: $M_0$5.19900×$10^{16}$ NP1:$\phi_s$313.00000°, δ59.00000°, λ131.00000°. NP2: $\phi_s$73.00000°, δ50.00000°, λ42.00000°. Principal axes: T 5.4390, Plg55.0000°, Azm277.0000°; N -0.4800, Plg35.0000°, Azm109.0000°; P -4.9590, Plg5.0000°, Azm15.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **05** 23:42:37.0±2.0, 57°.32S×24°.39W, h27km±13km, mb5.2/18 Error ellipse: s-maj=7.2km s-min=5.4km az=219.0*

*MOS **05** 23:42:38.0±1.1, 57°.37S×24°.47W, h49km, mb5.1/17, Error ellipse: s-maj=27.0km s-min=11.8km az=99.3*

*AWI **05** 23:42:40.0, 57°.27S×24°.51W*

**ISC 05 23:42:33.6**±0.3**, 57°.29S**±0°.08×**24°.42W**±0°.07**, h10**km**, n233,** σ**1**ˢ**.27**/233**, mb5.0**/29**, MS4.2**/17**, 3C-2D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **7.44** | **289** | Pn | Pn | 23 44 25.7 | +3.6 |
| | 754nm,0.7s,SNR=12 | | | | | | |
| **HOPE** | **Hope Point** | **7.44** | **289** | *e*Pn | Pn | 23 44 26.0 | +3.9 |
| HOPE | | | | *e*Sn | **Sn** | **23 45 46.0** | **-0.4** |
| **VNA1** | **Neumayer--Stat** | **15.08** | **159** | P | **Pn** | **23 46 07.0** | **+0.6** |
| **VNA3** | **Neumayer Olymp** | **15.32** | **162** | P | **Pn** | **23 46 09.3** | **-0.3** |
| **VNA2** | **Neumayer--Watz** | **15.47** | **159** | P | **Pn** | **23 46 11.5** | **-0.1** |
| | baz=322,slow=15 | | | | | | |
| **SNAA** | **Sanae** | **16.99** | **157** | P | **Pn** | **23 46 31.7** | **+0.7** |
| **SNAA** | **Sanae** | **16.99** | **157** | Pn | **Pn** | **23 46 31.6** | **+0.6** |
| | 5.6nm,0.3s,baz=331,slow=14,SNR=85 | | | | | | |
| SNAA | | | | Sn | Sn | 23 49 22.0 | -18 |
| | 0.3nm,0.3s,baz=337,slow=16,SNR=2.6 | | | | | | |
| **SNAA** | **Sanae** | **16.99** | **157** | *e*P | **Pn** | **23 46 31.4** | **+0.3** |
| SNAA | | | | *e* | | 23 49 28.2 | |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,62nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **16.99** | **157** | *e*Pn | **Pn** | **23 46 31.4** | **+0.3** |
| | comp=Z,62nm,1.0s | | | | | | |
| SNAA | | | | Sn | Sn | 23 49 22.0 | -18 |
| SNAA | | | | *e*Sn | Sn | 23 49 28.2 | -12 |
| **EFI** | **East Falkland** | **20.19** | **272** | ⇑*i*P | **P** | **23 47 09.0** | **+0.9** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,328nm,0.8s | | | | | | |
| **EFI** | **East Falkland** | **20.19** | **272** | P | **P** | **23 47 09.0** | **+0.9** |
| | comp=Z,3µm,0.7s | | | | | | |
| **EFI** | **East Falkland** | **20.19** | **272** | *e*P | **P** | **23 47 08.9** | **+0.9** |
| | comp=Z,396nm,0.7s | | | | | | |
| **PMSA** | **Palmer Station** | **20.29** | **232** | P | Pn | 23 47 10.5 | -0.6 |
| | comp=Z,208nm,0.8s,baz=76,slow=6.9,SNR=32 | | | | | | |
| **PMSA** | **Palmer Station** | **20.29** | **232** | *e*P | Pn | 23 47 10.9 | -0.2 |
| | comp=Z,201nm,0.8s | | | | | | |
| **NVL** | **N'lazarevskaya** | **20.38** | **146** | *e*P | P | 23 47 05.0 | -5.0 |
| NVL | | | | MLR | MLR | | |
| | comp=Z,252nm,11.0s | | | | | | |
| **USHA** | **Ushuaia** | **24.38** | **257** | P | **P** | **23 47 51.0** | **-0.6** |
| | comp=Z,90nm,0.9s,baz=95,slow=14,SNR=32 | | | | | | |
| **SYO** | **Syowa Base** | **29.65** | **139** | ⇓*e*X | P | 23 48 44.0 | +5.3 |
| **TRQA** | **Tornquist** | **31.21** | **292** | *e*P | **P** | **23 48 51.8** | **-1.1** |
| | comp=Z,20nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **32.96** | **180** | P | **P** | **23 49 09.2** | **+1.0** |
| | comp=Z,10nm,0.5s,baz=214,slow=1.9,SNR=102 | | | | | | |
| **QSPA** | **South Pole Qui** | **32.96** | **180** | *e*P | **P** | **23 49 09.2** | **+1.0** |
| | comp=Z,40nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **38.24** | **142** | P | **P** | **23 49 53.3** | **+0.2** |
| | comp=Z,14nm,1.3s,baz=252,slow=7.7,SNR=7.9 | | | | | | |
| MAW | | | | PcP | **PcP** | **23 52 06.8** | **-0.3** |
| | comp=Z,4.1nm,0.7s,baz=231,slow=4.7,SNR=3.9 | | | | | | |
| MAW | | | | LR | LR | 00 03 16.3 | |
| | comp=Z,344nm,21.3s,baz=242,slow=32 | | | | | | |
| **MAW** | **Mawson** | **38.24** | **142** | P | **P** | **23 49 53.3** | **+0.2** |
| MAW | | | | | | 23 52 06.8 | |
| MAW | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | |
| MAW | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **38.24** | **142** | *e*P | **P** | **23 49 53.8** | **+0.6** |
| | comp=Z,2.2nm,0.8s | | | | | | |
| MAW | | | | PcP | **PcP** | **23 52 06.8** | **-0.3** |
| **CPUP** | **Villa Florida** | **38.78** | **309** | P | **P** | **23 49 58.8** | **+0.6** |
| | comp=Z,79nm,0.9s,baz=151,slow=8.4,SNR=146 | | | | | | |
| CPUP | | | | LR | LR | 00 05 33.1 | |
| | comp=Z,343nm,20.9s,baz=161,slow=36 | | | | | | |
| **SUR** | **Sutherland** | **39.54** | **71** | *e*P | **P** | **23 50 06.5** | **+1.7** |
| | comp=Z,279nm,2.5s | | | | | | |
| **LCO** | **Las Campanas** | **42.79** | **291** | *e*P | **P** | **23 50 30.3** | **-1.2** |
| | comp=Z,26nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **44.84** | **72** | P | **P** | **23 50 48.0** | **+0.1** |
| | comp=Z,6.4nm,1.0s,baz=197,slow=9.3,SNR=4.6 | | | | | | |
| BOSA | | | | LR | LR | 00 05 22.4 | |
| | comp=Z,481nm,21.8s,baz=175,slow=30 | | | | | | |
| **SBA** | **Scott Base** | **44.94** | **183** | *e*P | **P** | **23 50 50.0** | **+2.1** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,23nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **44.94** | **183** | *e*P | **P** | **23 50 50.0** | **+2.1** |
| | comp=Z,23nm,1.0s | | | | | | |
| **BDFB** | **Brasilia** | **45.22** | **327** | P | **P** | **23 50 51.8** | **+0.8** |
| | comp=Z,6.7nm,0.6s,baz=133,slow=6.0,SNR=11 | | | | | | |
| BDFB | | | | LR | LR | 00 07 40.2 | |
| | comp=Z,293nm,20.1s,baz=158,slow=33 | | | | | | |
| **VNDA** | **Vanda** | **45.40** | **182** | P | **P** | **23 50 52.6** | **+1.0** |
| | comp=Z,14nm,0.7s,baz=188,slow=6.6,SNR=73 | | | | | | |
| VNDA | | | | pP | pP | 23 51 00.5 | +5.8 |
| | comp=Z,16nm,0.7s,baz=184,slow=6.9,SNR=20 | | | | | | |
| VNDA | | | | PcP | **PcP** | **23 52 32.3** | **+1.8** |
| | comp=Z,5.0nm,0.9s,baz=117,slow=2.3,SNR=3.1 | | | | | | |
| VNDA | | | | LR | LR | 00 09 13.6 | |
| | comp=Z,271nm,20.2s,baz=165,slow=35 | | | | | | |
| **LVC** | **Limon Verde** | **47.24** | **298** | *e*P | **P** | **23 51 07.2** | **+0.2** |
| | comp=Z,37nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **47.96** | **69** | P | **P** | **23 51 12.6** | **+0.3** |
| | comp=Z,12nm,1.0s,baz=182,slow=11,SNR=3.9 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **48.81** | **13** | T | T | 00 44 20.6 | |
| | baz=187,slow=75,SNR=158 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **48.81** | **13** | T | T | 00 44 20.9 | |
| | baz=187,slow=75,SNR=135 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **48.82** | **13** | T | T | 00 44 21.8 | |
| | baz=187,slow=75,SNR=149 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **49.92** | **13** | T | T | 00 45 43.7 | |
| | baz=196 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **49.93** | **13** | T | T | 00 45 45.2 | |
| | baz=196 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **49.94** | **13** | T | T | 00 45 45.9 | |
| | baz=196 | | | | | | |
| **CASY** | **Casey** | **52.21** | **159** | *e*P | **P** | **23 51 45.0** | **+1.0** |
| | comp=Z,8.8nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **52.34** | **303** | P | **P** | **23 51 46.9** | **+0.6** |
| | comp=Z,36nm,0.5s,baz=143,slow=5.6,SNR=130 | | | | | | |
| LPAZ | | | | LR | LR | 00 13 08.3 | |
| | comp=Z,197nm,21.4s,baz=148,slow=35 | | | | | | |
| **SAML** | **Samuel** | **56.77** | **312** | *e*P | **P** | **23 52 18.4** | **+0.7** |
| | comp=Z,63nm,0.7s | | | | | | |
| **LSZ** | **Lusaka** | **57.44** | **65** | *e*P | **P** | **23 52 23.8** | **+1.2** |
| LSZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **LSZ** | **Lusaka** | **57.44** | **65** | *e*P | **P** | **23 52 23.8** | **+1.2** |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **PTGA** | **Pitinga** | **63.10** | **319** | *e*P | **P** | **23 53 01.6** | **+0.4** |
| | comp=Z,19nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **65.71** | **21** | P | **P** | **23 53 18.3** | **+0.1** |
| | comp=Z,4.1nm,0.8s,baz=178,slow=7.6,SNR=4.4 | | | | | | |
| DBIC | | | | LR | LR | 00 15 02.6 | |
| | comp=Z,110nm,20.2s,baz=160,slow=30 | | | | | | |
| **OTAV** | **Otavalo** | **71.61** | **301** | *e*P | **P** | **23 53 55.4** | **-0.3** |
| | comp=Z,46nm,1.5s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.43** | **27** | P | **P** | **23 54 06.8** | **+1.0** |
| | comp=Z,11nm,0.7s,baz=201,slow=6.0,SNR=58 | | | | | | |
| TORD | | | | LR | LR | 00 19 55.8 | |
| | comp=Z,124nm,21.6s,baz=190,slow=30 | | | | | | |
| **ROSC** | **El Rosal** | **73.87** | **307** | P | **P** | **23 54 09.3** | **+0.3** |
| | comp=Z,18nm,0.7s,baz=118,slow=3.8,SNR=14 | | | | | | |
| ROSC | | | | LR | LR | 00 27 30.1 | |
| | comp=Z,60nm,21.2s,baz=170,slow=36 | | | | | | |
| **ROSC** | **El Rosal** | **73.87** | **307** | *e*P | **P** | **23 54 10.2** | **+1.2** |
| **KMBO** | **Kilima Mbogo** | **74.09** | **66** | LR | LR | 00 23 04.2 | |
| | comp=Z,208nm,21.9s,baz=178,slow=33 | | | | | | |
| **RPZ** | **Rata Peaks** | **78.53** | **191** | P | **P** | **23 54 34.0** | **-0.7** |
| | comp=Z,15nm,0.7s,baz=201,slow=0.7,SNR=7.1 | | | | | | |
| RPZ | | | | LR | LR | 00 26 55.9 | |
| | comp=Z,120nm,18.6s,baz=178,slow=34 | | | | | | |
| **RPZ** | **Rata Peaks** | **78.53** | **191** | *e*P | **P** | **23 54 35.8** | **+1.1** |
| | comp=Z,58nm,1.2s | | | | | | |
| **THZ** | **Tophouse** | **80.25** | **193** | *e*P | **P** | **23 54 45.4** | **+1.2** |
| | comp=Z,25nm,0.8s | | | | | | |
| **RKT** | **Rikitea** | **81.24** | **241** | *e*LR | LR | 00 20 20.8 | |
| | comp=Z,299nm,31.0s | | | | | | |
| **BKZ** | **Black Stump Fm** | **82.31** | **196** | *e*P | **P** | **23 54 56.3** | **+1.1** |
| | comp=Z,11nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **83.10** | **197** | P | **P** | **23 54 58.8** | **-0.4** |
| | comp=Z,5.7nm,0.6s,baz=150,slow=3.4,SNR=4.8 | | | | | | |
| **JTS** | **JuntasAbangare** | **83.46** | **300** | ⇓P | **P** | **23 55 01.4** | **+0.1** |
| JTS | | | | pmax | pmax | | |
| | comp=Z,26nm,1.3s | | | | | | |
| **TAM** | **Tamanrasset** | **83.64** | **28** | *e*P | **P** | **23 55 05.0** | **+2.9** |
| TAM | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **TAM** | **Tamanrasset** | **83.64** | **28** | *e*P | **P** | **23 55 05.0** | **+2.9** |
| | comp=Z,9.9nm,1.3s | | | | | | |
| **MDT** | **Midelt** | **91.30** | **17** | P | **P** | **23 55 41.0** | **+2.0** |
| | comp=Z,1.7nm,0.8s,baz=201,slow=6.6,SNR=4.1 | | | | | | |
| **PPT2** | **Papeete2** | **92.64** | **231** | *e*LR | LR | 00 25 32.5 | |
| | comp=Z,495nm,23.0s | | | | | | |
| **PPT** | **Papeete** | **92.66** | **231** | LR | LR | 00 28 34.8 | |
| | comp=Z,225nm,20.6s,baz=172,slow=30 | | | | | | |
| **H07N1** | **FLORES T-PHASE** | **96.78** | **355** | T | T | 01 43 51.7 | |
| **KEST** | **Kesra** | **96.95** | **27** | LR | LR | 00 36 46.9 | |
| | comp=Z,128nm,18.3s,baz=242,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **97.32** | **160** | P | **P** | **23 56 06.3** | **-0.7** |
| | comp=Z,3.6nm,1.0s,baz=186,slow=3.6,SNR=19 | | | | | | |
| **ESDC** | **Sonseca Array** | **98.12** | **16** | P | Pdif | 23 56 11.7 | +1.7 |
| | comp=Z,0.7nm,0.8s,baz=183,slow=5.4,SNR=3.9 | | | | | | |
| ESDC | | | | LR | LR | 00 38 00.6 | |
| | comp=Z,81nm,18.2s,baz=5.0,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **101.03** | **160** | P | **Pdif** | **23 56 22.9** | **-0.6** |
| | comp=Z,0.9nm,0.9s,baz=193,slow=4.2,SNR=4.8 | | | | | | |
| WRA | | | | pP | pP | 23 56 32.9 | +5.9 |
| | comp=Z,0.7nm,0.7s,baz=195,slow=4.4,SNR=3.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **108.24** | **44** | PKKPbc | PKKPbc | 00 12 09.9 | -1.5 |
| | comp=Z,1.0nm,1.1s,baz=352,slow=3.2,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **108.71** | **295** | PKiKP | **PKiKP** | **00 01 02.5** | **+0.1** |
| | comp=Z,0.1nm,0.5s,baz=114,slow=2.2,SNR=3.6 | | | | | | |
| **VYHS** | **Vyhne** | **111.34** | **29** | *e*P | **Pdif** | **23 57 07.9** | **-0.6** |
| **VYHS** | **Vyhne** | **111.34** | **29** | PDIF | **Pdif** | **23 57 07.8** | **-0.7** |
| **KIEV** | **Kiev** | **116.31** | **35** | *i* PKIKP | **PKPdf** | **00 01 16.0** | **0.0** |
| **AKASG** | **Malin Array Be** | **116.32** | **35** | PKP | **PKPdf** | **00 01 15.6** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=242,slow=1.8,SNR=2.2 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **117.07** | **298** | P | **PKPdf** | **00 01 18.7** | **+0.4** |
| | baz=117 | | | | | | |
| **IRM** | **Iron Mountain** | **118.37** | **290** | P | **PKPdf** | **00 01 21.3** | **+0.7** |
| | baz=119 | | | | | | |
| **PV10** | **Paradox Valley** | **118.63** | **297** | *e*PKPdf | **PKPdf** | **00 01 21.8** | **+0.5** |
| **BELC** | **Belle Mtn. Jos** | **118.68** | **289** | P | **PKPdf** | **00 01 22.6** | **+1.2** |
| | baz=119 | | | | | | |
| **N23A** | **Red Feather La** | **119.14** | **301** | P | **PKPdf** | **00 01 22.9** | **+0.6** |
| | baz=119 | | | | | | |
| **TUQ** | **Turquoise Moun** | **119.76** | **290** | P | **PKPdf** | **00 01 23.4** | **0.0** |
| | baz=120 | | | | | | |
| **SRU** | **San Rafael** | **119.93** | **296** | *e*PKPdf | **PKPdf** | **00 01 24.0** | **+0.3** |
| **GSC** | **Goldstone** | **120.11** | **289** | *e*PKPdf | **PKPdf** | **00 01 24.6** | **+0.5** |
| **P18A** | **Preston Nutter** | **120.19** | **297** | *e*PKPdf | **PKPdf** | **00 01 25.2** | **+0.8** |
| **MSU** | **Marysvale** | **120.27** | **295** | *e*PKPdf | **PKPdf** | **00 01 25.6** | **+1.1** |
| **H27A** | **Howes** | **120.34** | **306** | P | **PKPdf** | **00 01 24.6** | **+0.5** |
| | baz=121 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **120.39** | **288** | P | **PKPdf** | **00 01 25.3** | **+0.8** |
| | baz=121 | | | | | | |
| **TMUT** | **Trail Mountain** | **120.40** | **296** | *e*PKPdf | **PKPdf** | **00 01 25.6** | **+0.8** |
| **LRMC** | **Laurel Mountai** | **120.70** | **289** | P | **PKPdf** | **00 01 26.3** | **+1.1** |
| | baz=121 | | | | | | |
| **RSSD** | **Black Hills** | **120.80** | **304** | *e*PKPdf | **PKPdf** | **00 01 24.9** | **-0.3** |
| **HFS** | **Hagfors** | **120.87** | **21** | PKKPbc | PKKPbc | 00 11 27.7 | -0.3 |
| | comp=Z,1.4nm,0.5s,baz=5.2,slow=1.6,SNR=6.5 | | | | | | |
| **A33A** | **Warroad** | **120.97** | **313** | P | **PKPdf** | **00 01 25.2** | **+0.1** |
| | baz=121 | | | | | | |
| **H25A** | **Fruitdale** | **121.00** | **305** | P | **PKPdf** | **00 01 25.2** | **-0.2** |
| | baz=121 | | | | | | |
| **RCWM** | **Renegade Canyo** | **121.04** | **289** | *e*PKPdf | **PKPdf** | **00 01 27.3** | **+1.5** |
| **MPMC** | **Manual Prospec** | **121.04** | **289** | P | **PKPdf** | **00 01 26.9** | **+0.9** |
| | baz=121 | | | | | | |
| **TPNV** | **Topopah Spring** | **121.10** | **291** | *e*PKPdf | **PKPdf** | **00 01 27.3** | **+1.3** |
| **ISA** | **Isabella** | **121.24** | **288** | P | **PKPdf** | **00 01 27.6** | **+1.4** |
| | baz=122 | | | | | | |
| **NOA** | **NORSAR Array B** | **121.25** | **19** | PKP | **PKPdf** | **00 01 25.4** | **+0.1** |
| | comp=Z,1.1nm,0.7s,baz=199,slow=2.0,SNR=2.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **121.25** | **19** | PKIKP | **PKPdf** | **00 01 25.4** | **+0.1** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **NLU** | **North Lily Min** | **121.34** | **296** | *e*PKPdf | **PKPdf** | **00 01 27.5** | **+1.1** |
| **R11A** | **Troy Canyon, C** | **121.84** | **292** | P | **PKPdf** | **00 01 28.3** | **+0.9** |
| | baz=122 | | | | | | |
| **DUG** | **Dugway** | **121.88** | **296** | *e*PKPdf | **PKPdf** | **00 01 28.1** | **+0.7** |
| **TCUT** | **Toone Canyon** | **121.91** | **297** | *e*PKPdf | **PKPdf** | **00 01 28.7** | **+1.2** |
| **ULM** | **Lac du Bonnet** | **122.21** | **314** | PKP | **PKPdf** | **00 01 26.8** | **-0.6** |
| | comp=Z,1.0nm,0.4s,baz=85,slow=2.1,SNR=3.0 | | | | | | |
| **ULM** | **Lac du Bonnet** | **122.21** | **314** | PKIKP | **PKPdf** | **00 01 26.8** | **-0.6** |
| ULM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **HWUT** | **Hardware Ranch** | **122.36** | **298** | *e*PKPdf | **PKPdf** | **00 01 28.6** | **+0.4** |
| **OBN** | **Obninsk** | **122.41** | **37** | PKIKP | **PKPdf** | **00 01 27.0** | **-0.6** |
| OBN | | | | *e* | | 00 01 41.4 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **BGU** | **Big Grassy Mou** | **122.55** | **296** | *e*PKPdf | **PKPdf** | **00 01 29.5** | **+0.9** |
| **KOLN** | **Koldanda** | **122.55** | **89** | *e*P | **PKPdf** | **00 01 28.4** | **-0.7** |
| | comp=Z,16nm,0.8s | | | | | | |
| **SPUT** | **South Promonto** | **122.56** | **297** | *e*PKPdf | **PKPdf** | **00 01 29.6** | **+0.9** |
| SPUT | | | | *e*PP | **PP** | **00 03 03.2** | **-3.2** |
| **HVU** | **Hansel Valley** | **123.08** | **297** | *e*PKPdf | **PKPdf** | **00 01 30.4** | **+0.7** |
| **CMAR** | **Chiang Mai Arr** | **123.21** | **109** | PKP | **PKPdf** | **00 01 30.3** | **-0.1** |
| | comp=Z,5.6nm,0.8s,baz=233,slow=3.7,SNR=27 | | | | | | |
| CMAR | | | | PKKPab | **PKKPab** | **00 11 22.0** | **+1.2** |
| | comp=Z,0.7nm,0.3s,baz=20,slow=2.9,SNR=5.3 | | | | | | |
| **DMN** | **Daman** | **123.24** | **90** | *e*P | **PKPdf** | **00 01 29.7** | **-0.8** |
| | comp=Z,9.4nm,0.3s | | | | | | |
| **NV01** | **Mina Array Sit** | **123.28** | **290** | *e*PKPdf | **PKPdf** | **00 01 31.2** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **123.28** | **290** | PKP | **PKPdf** | **00 01 31.0** | **+0.8** |
| | comp=Z,2.1nm,0.7s,baz=142,slow=2.9,SNR=8.1 | | | | | | |
| **GKN** | **Gorkha** | **123.30** | **89** | *e*P | **PKPdf** | **00 01 29.1** | **-1.4** |
| | comp=Z,35nm,1.2s | | | | | | |
| **PKIN** | **Phulchoki** | **123.37** | **90** | *e*P | **PKPdf** | **00 01 29.8** | **-1.0** |
| | comp=Z,12nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | **123.38** | **90** | *e*P | **PKPdf** | **00 01 29.9** | **-1.0** |
| | comp=Z,24nm,1.0s | | | | | | |
| **LOHW** | **Long Hollow** | **123.43** | **300** | *e*PKPdf | **PKPdf** | **00 01 31.0** | **+0.7** |
| **KKN** | **Kakani** | **123.48** | **90** | *e*P | **PKPdf** | **00 01 29.6** | **-1.3** |
| | comp=Z,15nm,0.9s | | | | | | |
| **ELK** | **Elko** | **123.50** | **294** | *e*PKPdf | **PKPdf** | **00 01 31.9** | **+1.3** |
| **TPAW** | **Teton Pass** | **123.50** | **299** | *e*PKPdf | **PKPdf** | **00 01 31.5** | **+1.0** |
| **RAMN** | **Ramite** | **123.53** | **92** | *e*P | **PKPdf** | **00 01 30.8** | **-0.3** |
| | comp=Z,27nm,1.0s | | | | | | |
| **MOOW** | **Moose Ponds** | **123.60** | **300** | *e*PKPdf | **PKPdf** | **00 01 30.9** | **+0.3** |
| **FXWY** | **Fox Creek** | **123.65** | **299** | *e*PKPdf | **PKPdf** | **00 01 31.7** | **+1.0** |
| **IMW** | **Indian Meadow** | **123.81** | **300** | *e*PKPdf | **PKPdf** | **00 01 32.1** | **+1.0** |
| **FLWY** | **Flagg Ranch** | **123.83** | **300** | *e*PKPdf | **PKPdf** | **00 01 32.1** | **+1.0** |
| **JIRN** | **Jiri** | **123.87** | **91** | *e*P | **PKPdf** | **00 01 29.9** | **-2.0** |
| | comp=Z,815nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **123.89** | **92** | *e*P | **PKPdf** | **00 01 31.2** | **-0.6** |
| | comp=Z,21nm,0.9s | | | | | | |
| **GUN** | **Gumba** | **123.90** | **90** | *e*P | **PKPdf** | **00 01 30.3** | **-1.6** |
| | comp=Z,17nm,0.7s | | | | | | |
| **BMN** | **Battle Mountai** | **124.25** | **293** | *e*PKPdf | **PKPdf** | **00 01 33.1** | **+1.1** |
| **TAPN** | **Taplejung** | **124.45** | **92** | *e*P | **PKPdf** | **00 01 31.3** | **-1.6** |
| | comp=Z,22nm,1.2s | | | | | | |
| **FINES** | **FINESS Array B** | **124.78** | **27** | PKP | **PKPdf** | **00 01 31.5** | **-0.5** |
| | comp=Z,7.2nm,0.7s,baz=190,slow=3.3,SNR=18 | | | | | | |
| **FINES** | **FINESS Array B** | **124.78** | **27** | PKIKP | **PKPdf** | **00 01 31.5** | **-0.5** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **HLID** | **Hailey** | **125.21** | **297** | *e*PKPdf | **PKPdf** | **00 01 35.1** | **+1.4** |
| **DLMT** | **Dillon** | **125.69** | **300** | *e*PKPdf | **PKPdf** | **00 01 36.2** | **+1.7** |
| **LRM** | **Limekiln Ridge** | **125.96** | **300** | *e*PKPdf | **PKPdf** | **00 01 37.0** | **+1.8** |
| **HRY** | **Holter Researc** | **126.33** | **301** | *e*PKPdf | **PKPdf** | **00 01 37.0** | **+1.3** |
| **EGMT** | **Eagleton** | **126.35** | **304** | *e*PKPdf | **PKPdf** | **00 01 36.9** | **+1.3** |
| **WVOR** | **Wild Horse Val** | **126.45** | **293** | *e*PKPdf | **PKPdf** | **00 01 37.8** | **+1.7** |
| **O03D** | **Paynes Creek** | **126.46** | **289** | P | **PKPdf** | **00 01 36.7** | **+0.7** |
| | baz=127 | | | | | | |
| **ABKAR** | **Akbulak array** | **126.83** | **55** | *e*PKPdf | **PKPdf** | **00 01 36.4** | **+0.1** |
| **MOD** | **Modoc** | **126.89** | **292** | *e*PKPdf | **PKPdf** | **00 01 38.5** | **+1.6** |
| **J08A** | **Circle Bar Ran** | **127.05** | **294** | *e*PKPdf | **PKPdf** | **00 01 38.6** | **+1.5** |
| **CHMT** | **Chamberlain Mo** | **127.14** | **301** | *e*PKPdf | **PKPdf** | **00 01 38.2** | **+0.9** |
| **KKAR** | **Karatay Array** | **127.30** | **67** | *e*PKPdf | **PKPdf** | **00 01 37.4** | **-0.1** |
| **MSO** | **Missoula** | **127.40** | **300** | *e*PKPdf | **PKPdf** | **00 01 38.5** | **+0.9** |
| **N02D** | **Trinity Center** | **127.43** | **289** | P | **PKPdf** | **00 01 39.3** | **+1.5** |
| | baz=128 | | | | | | |
| **KSH** | **Kashi** | **127.44** | **73** | PKP | **PKPdf** | **00 01 38.0** | **0.0** |
| KSH | | | | *e*sPKP | | 00 01 53.3 | |
| KSH | | | | PP | PP | 00 03 29.9 | -9.1 |
| KSH | | | | PKS | **PKSdf** | **00 05 15.5** | **+0.9** |
| KSH | | | | SKS | **SKSdf** | **00 08 46.3** | **-3.2** |
| KSH | | | | SKKS | SKKSac | 00 10 22.3 | -14 |
| KSH | | | | AMB | AMB | | |
| | comp=Z,160nm,4.6s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=N,140nm,9.2s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=E,100nm,7.1s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,150nm,6.9s | | | | | | |
| **KSH** | **Kashi** | **127.44** | **73** | PKP | **PKPdf** | **00 01 38.0** | **0.0** |
| KSH | | | | PKS | **PKSdf** | **00 05 15.5** | **+0.9** |
| KSH | | | | SKS | **SKSdf** | **00 08 46.3** | **-3.2** |
| KSH | | | | SKKS | SKKSac | 00 10 22.3 | -14 |
| KSH | | | | PPMZ | | | |
| | comp=Z,160nm,4.6s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,140nm,9.2s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,100nm,7.1s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,150nm,6.9s | | | | | | |
| **SLMT** | **Seeley Lake** | **127.49** | **301** | *e*PKPdf | **PKPdf** | **00 01 37.1** | **-0.8** |
| **K05A** | **Summer Lake** | **127.79** | **292** | *e*PKPdf | **PKPdf** | **00 01 39.8** | **+1.2** |
| **M02C** | **Callahan** | **127.81** | **290** | P | **PKPdf** | **00 01 39.6** | **+1.0** |
| | baz=128 | | | | | | |
| **KLMR** | **Klimovskoe** | **127.98** | **34** | *e*PKIKP | **PKPdf** | **00 01 36.7** | **-1.4** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,28nm,1.4s | | | | | | |
| **I07A** | **Izee** | **128.09** | **294** | *e*PKPdf | **PKPdf** | **00 01 40.6** | **+1.5** |
| **F10A** | **Beach Ranch, E** | **128.34** | **297** | *e*PKPdf | **PKPdf** | **00 01 40.0** | **+0.5** |
| **J05D** | **Fort Rock, OR** | **128.37** | **292** | P | **PKPdf** | **00 01 40.3** | **+0.6** |
| | baz=129 | | | | | | |
| **EKS2** | **Erkin-Say** | **128.61** | **69** | *e*PKPdf | **PKPdf** | **00 01 39.6** | **-0.6** |
| **G08A** | **Pilot Rock** | **128.69** | **296** | *e*PKPdf | **PKPdf** | **00 01 41.6** | **+1.4** |
| **AAK** | **Ala-Archa** | **128.96** | **70***c* | *i*PKIKP | **PKPdf** | **00 01 41.3** | **+0.4** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | |
| **AAK** | **Ala-Archa** | **128.96** | **70** | *e*PKPdf | **PKPdf** | **00 01 41.3** | **+0.4** |
| **I05D** | **Terrebonne, OR** | **129.19** | **293** | P | **PKPdf** | **00 01 42.6** | **+1.5** |
| | baz=129 | | | | | | |
| **I04A** | **Tendick Farm,** | **129.33** | **292** | P | **PKPdf** | **00 01 41.8** | **+0.4** |
| | baz=130 | | | | | | |
| **KMI** | **Kunming** | **130.68** | **108** | P | **PKPdf** | **00 01 45.8** | **+1.0** |
| KMI | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| **KMI** | **Kunming** | **130.68** | **108** | PKP | **PKPdf** | **00 01 45.8** | **+1.0** |
| **B08A** | **Colville Reser** | **131.05** | **298** | *e*PKPdf | **PKPdf** | **00 01 45.6** | **+1.2** |
| **LON** | **Longmire** | **131.13** | **295** | *e*PKPdf | **PKPdf** | **00 01 45.4** | **+0.7** |
| **ARU** | **Arti** | **131.40** | **47** | PKP | **PKPdf** | **00 01 44.9** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=37,slow=20,SNR=2.2 | | | | | | |
| **ARU** | **Arti** | **131.40** | **47** | *i* PKIKP | **PKPdf** | **00 01 44.6** | **-0.2** |
| **ARU** | **Arti** | **131.40** | **47** | *e*PKPdf | **PKPdf** | **00 01 45.4** | **+0.6** |
| **ARCES** | **ARCESS Array B** | **131.54** | **21** | PKP | **PKPdf** | **00 01 44.3** | **-0.4** |
| | comp=Z,1.3nm,0.6s,baz=186,slow=1.2,SNR=10 | | | | | | |
| **ARCES** | **ARCESS Array B** | **131.54** | **21** | PKIKP | **PKPdf** | **00 01 44.3** | **-0.4** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **EDM** | **Edmonton** | **131.67** | **306** | *e*PKPdf | **PKPdf** | **00 01 46.1** | **+0.6** |
| **SVE** | **Sverdlovsk** | **132.51** | **48** | *e*PKIKP | **PKPdf** | **00 01 46.7** | **-0.2** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **BRVK** | **Borovoye** | **134.14** | **57***c* | *i*PKIKP | **PKPdf** | **00 01 51.0** | **+0.9** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **134.14** | **57** | *e*PKPdf | **PKPdf** | **00 01 50.6** | **+0.6** |
| **MKAR** | **Makanchi Array** | **135.84** | **71** | PKhKP | PKPpre | 00 01 41.2 | |
| | comp=Z,0.4nm,0.7s,baz=264,slow=3.7,SNR=3.6 | | | | | | |
| MKAR | | | | PKP | **PKPdf** | **00 01 52.5** | **-1.1** |
| | comp=Z,2.3nm,0.9s,baz=242,slow=2.6,SNR=11 | | | | | | |
| MKAR | | | | SKPbc | **SKPbc** | **00 05 21.8** | **-3.1** |
| | comp=Z,1.2nm,1.0s,baz=239,slow=0.8,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **135.84** | **71** | *i* PKHKP | PKPpre | 00 01 41.3 | |
| MKAR | | | | | | 00 01 52.5 | |
| MKAR | | | | pmax | pmax | | |

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,2.0nm,0.9s | | | | | | |
| MKAR | | | | pmax | pmax | | |
| | comp=N,1.0nm,1.0s | | | | | | |
| CD2 | Chengdu | 135.86 | 104 | PKP | PKPdf | 00 01 54.5 | +0.4 |
| CD2 | | | | pPKP | pPKPdf | 00 02 11.5 | +14 |
| CD2 | | | | sPKP | | 00 02 17.9 | |
| CD2 | | | | PP | PP | 00 04 34.7 | +1.6 |
| CD2 | | | | SKS | SKSdf | 00 09 00.3 | -4.6 |
| CD2 | | | | SKKS | SKKSac | 00 11 23.2 | -4.6 |
| CD2 | Chengdu | 135.86 | 104 | SS | SS | 00 22 31.2 | -0.6 |
| CD2 | | | | AMB | AMB | | |
| | comp=Z,120nm,5.2s | | | | | | |
| CD2 | Chengdu | 135.86 | 104 | PKP | PKPdf | 00 01 54.5 | +0.4 |
| CD2 | | | | sPKP | | 00 02 17.9 | |
| CD2 | | | | PP | PP | 00 04 34.7 | +1.6 |
| CD2 | | | | SKS | SKSdf | 00 09 00.3 | -4.6 |
| CD2 | | | | SKKS | SKKSac | 00 11 23.2 | -4.6 |
| CD2 | | | | SS | SS | 00 22 31.2 | -0.6 |
| CD2 | | | | PPMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| KURK | Kurchatov | 136.56 | 64 | ePKIKP | PKPdf | 00 01 57.5 | +2.9 |
| KURK | Kurchatov | 136.56 | 64 | ePKPdf | PKPdf | 00 01 54.6 | 0.0 |
| YKA | Yellowknife Ar | 138.12 | 316 | PKhKP | PKPpre | 00 01 49.2 | |
| | comp=Z,1.1nm,0.7s,baz=120,slow=2.3,SNR=3.6 | | | | | | |
| YKA | | | | PKP | PKPdf | 00 01 57.1 | 0.0 |
| | comp=Z,10nm,0.9s,baz=120,slow=2.4,SNR=14 | | | | | | |
| YKA | | | | PP | PP | 00 04 45.4 | -1.5 |
| | comp=Z,1.6nm,0.7s,baz=123,slow=6.8,SNR=4.2 | | | | | | |
| YKA | Yellowknife Ar | 138.12 | 316 | i PKHKP | PKPpre | 00 01 49.2 | |
| YKA | | | | | | 00 01 57.1 | |
| YKA | | | | | | 00 04 45.4 | |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| YKA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| YKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| LZH | Lanzhou | 139.89 | 99 | ePKP | PKPdf | 00 02 13.5 | +12 |
| LZH | | | | sPKP | | 00 02 25.5 | |
| LZH | | | | LR | LR | | |
| | comp=N,130nm,18.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,130nm,17.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,170nm,20.1s | | | | | | |
| ZALV | Zalesovo Beam | 141.54 | 64 | PKhKP | PKPpre | 00 01 53.3 | |
| | comp=Z,0.6nm,0.5s,baz=252,slow=2.9,SNR=3.3 | | | | | | |
| ZALV | | | | PKP | PKPdf | 00 02 02.8 | -0.9 |
| | comp=Z,1.3nm,0.5s,baz=253,slow=2.3,SNR=5.9 | | | | | | |
| ZALV | | | | pPKP | pPKPdf | 00 02 12.8 | +5.7 |
| | comp=Z,2.7nm,0.7s,baz=249,slow=3.4,SNR=6.6 | | | | | | |
| ZALV | Zalesovo Beam | 141.54 | 64 | i PKHKP | PKPpre | 00 01 53.3 | |
| ZALV | | | | | | 00 02 02.8 | |
| ZALV | | | | | | 00 02 12.8 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| HHC | Hu-ho-hao-te | 147.50 | 101 | ePKPbc | PKPbc | 00 02 17.0 | -0.2 |
| HHC | | | | PP | PP | 00 05 50.4 | +6.5 |
| HHC | | | | AMB | AMB | | |
| | comp=Z,49nm,7.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,85nm,13.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,120nm,13.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,110nm,18.0s | | | | | | |
| HHC | Hu-ho-hao-te | 147.50 | 101 | ePKPbc | PKPbc | 00 02 17.0 | -0.2 |
| HHC | | | | PP | PP | 00 05 50.4 | +6.5 |
| HHC | | | | PPMZ | | | |
| | comp=Z,49nm,7.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,85nm,13.6s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,120nm,13.6s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,110nm,18.0s | | | | | | |
| PCA | Pinnacle | 147.70 | 302 | ePKPbc | PKPab | 00 02 18.4 | -1.1 |
| DAWY | Dawson | 148.76 | 310 | ePKPbc | PKPbc | 00 02 19.4 | -0.4 |
| ZAK | Zakamensk | 149.06 | 80 | ePKIKP | PKPdf | 00 02 15.8 | -1.0 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.2s | | | | | | |
| SONM | Songino Array | 149.28 | 86 | PKP | PKPdf | 00 02 16.9 | -0.4 |
| | comp=Z,15nm,0.9s,baz=228,slow=1.7,SNR=21 | | | | | | |
| SONM | | | | PKPbc | PKPbc | 00 02 21.3 | -0.3 |
| | comp=Z,12nm,0.7s,baz=223,slow=2.6,SNR=72 | | | | | | |
| SONA1 | Songino Array | 149.29 | 86 | ePKPdf | PKPdf | 00 02 17.0 | -0.3 |
| BJI | Beijing | 149.34 | 107 | PKPbc | PKPdf | 00 02 09.5 | -7.9 |
| ULN | Ulaanbaatar | 149.65 | 87 | ePKPbc | PKPbc | 00 02 21.8 | -0.8 |
| TLY | Talaya | 149.94 | 78 | PKPbc | PKPbc | 00 02 23.4 | +0.4 |
| | comp=Z,2.9nm,0.5s,baz=197,slow=6.2,SNR=11 | | | | | | |
| TLY | | | | PKPab | PKPab | 00 02 29.0 | +0.2 |
| | comp=Z,3.6nm,0.6s,baz=245,slow=5.5,SNR=4.7 | | | | | | |
| TLY | Talaya | 149.94 | 78 | ePKP2 | PKPbc | 00 02 23.1 | +0.1 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,18nm,1.3s | | | | | | |
| BMRM | Bremner River | 150.02 | 302 | ePKPbc | PKPbc | 00 02 24.3 | +1.4 |
| EYAK | Cordova Ski Ar | 150.41 | 301 | ePKPbc | PKPbc | 00 02 25.3 | +1.6 |
| JNU | Nakatsue | 150.54 | 135 | PKPbc | PKPbc | 00 02 25.0 | 0.0 |
| | comp=Z,14nm,0.8s,baz=158,slow=3.0,SNR=8.3 | | | | | | |
| JNU | | | | PKPab | PKPab | 00 02 31.6 | -0.2 |
| | comp=Z,15nm,0.8s,baz=127,slow=2.9,SNR=5.2 | | | | | | |
| DIV | Divide | 150.61 | 302 | ePKPbc | PKPbc | 00 02 25.7 | +1.4 |
| DOT | Dot Lake | 150.61 | 308 | ePKPbc | PKPbc | 00 02 25.3 | +1.1 |
| KLU | Klutina | 150.80 | 303 | ePKPbc | PKPbc | 00 02 26.1 | +1.3 |
| PAX | Paxson | 151.04 | 306 | ePKPbc | PKPbc | 00 02 25.7 | +0.4 |
| FYU | Fort Yukon | 151.75 | 313 | ePKPbc | PKPbc | 00 02 28.1 | +1.4 |
| SML | Sawmill | 151.99 | 303 | ePKPbc | PKPbc | 00 02 28.5 | +1.0 |
| SEW | Seward | 152.00 | 299 | ePKPbc | PKPbc | 00 02 28.1 | +0.7 |
| HDA | Harding Lake | 152.03 | 309 | ePKPdf | PKPdf | 00 02 19.9 | -1.0 |
| ILAR | Eielson Array | 152.08 | 309 | PKP | PKPdf | 00 02 18.4 | -2.5 |
| | comp=Z,0.9nm,0.7s,baz=272,slow=1.4,SNR=8.3 | | | | | | |
| ILAR | | | | PKPbc | PKPbc | 00 02 27.6 | +0.1 |
| | comp=Z,26nm,0.9s,baz=132,slow=1.5,SNR=100 | | | | | | |
| ILAR | | | | PKPab | PKPab | 00 02 36.9 | -0.4 |
| | comp=Z,14nm,0.9s,baz=137,slow=3.2,SNR=12 | | | | | | |
| ILAR | Eielson Array | 152.08 | 309 | PKIKP | PKPdf | 00 02 18.4 | -2.5 |
| ILAR | | | | | | 00 02 27.7 | |
| ILAR | | | | | | 00 02 36.9 | |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| RC01 | Rabbit Creek A | 152.43 | 301 | ePKPab | PKPab | 00 02 39.5 | +0.6 |
| CCB | Clear Creek Bu | 152.44 | 309 | ePKPbc | PKPbc | 00 02 27.9 | -0.5 |
| COLA | College | 152.51 | 309 | ePKPab | PKPab | 00 02 40.4 | +1.4 |
| WRH | Wood River Hil | 152.53 | 309 | ePKPbc | PKPbc | 00 02 29.2 | +0.6 |
| RND | Reindeer | 152.63 | 306 | ePKPbc | PKPbc | 00 02 30.1 | +1.1 |
| KDAK | Kodiak Island | 152.73 | 293 | i PKIKP | PKPbc | 00 02 29.8 | +0.7 |
| MCK | McKinley | 152.74 | 307 | ePKPbc | PKPbc | 00 02 30.1 | +1.0 |
| KSAR | Wonju Array Be | 153.00 | 125 | PKPbc | PKPbc | 00 02 30.4 | 0.0 |
| KSAR | | | | PKPab | PKPab | 00 02 41.9 | +0.1 |
| KSRS | Korea Array | 153.03 | 125 | PKPbc | PKPbc | 00 02 30.4 | 0.0 |
| | comp=Z,3.2nm,0.7s,baz=197,slow=2.2,SNR=13 | | | | | | |
| KSRS | | | | PKPab | PKPab | 00 02 41.9 | 0.0 |
| | comp=Z,2.3nm,0.8s,baz=224,slow=1.6,SNR=5.2 | | | | | | |
| KSRS | Korea Array | 153.03 | 125 | PKIKP | PKPbc | 00 02 30.5 | 0.0 |
| KSRS | | | | | | 00 02 41.9 | |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| BWN | Browne | 153.06 | 308 | ePKPbc | PKPbc | 00 02 30.6 | +0.9 |
| TRF | Thorofare Moun | 153.27 | 306 | ePKPbc | PKPbc | 00 02 31.2 | +0.8 |
| RSO | Redoubt South | 153.67 | 299 | ePKPab | PKPab | 00 02 45.0 | +0.7 |
| BPAW | Bear Paw Mtn. | 153.70 | 307 | ePKPbc | PKPbc | 00 02 31.7 | +0.5 |
| COLD | Coldfoot | 153.78 | 314 | ePKPbc | PKPbc | 00 02 32.6 | +1.4 |
| MJAR | Matsushiro Arr | 156.23 | 143 | PKPab | PKPab | 00 02 55.9 | +0.2 |
| | comp=Z,1.5nm,0.6s,baz=182,slow=5.0,SNR=4.7 | | | | | | |
| MJAR | Matsushiro Arr | 156.23 | 143 | PKP2 | PKPab | 00 02 55.9 | +0.2 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| BOD | Bodaibo | 157.93 | 71 | ePKIKP | PKPdf | 00 02 26.4 | -2.7 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| USRK | Ussuriysk Ar. | 160.27 | 121 | PKPab | PKPab | 00 03 12.3 | -0.6 |
| | comp=Z,3.5nm,0.7s,baz=228,slow=4.5,SNR=9.9 | | | | | | |
| KLR | Kul'dur | 163.69 | 109 | ePKP2 | PKPab | 00 03 22.8 | -5.0 |
| PETK | Petropavlovsk- | 175.64 | 197 | PKP | PKPdf | 00 02 42.0 | -0.6 |
| | comp=Z,1.9nm,0.8s,baz=153,slow=4.7,SNR=2.9 | | | | | | |
| PETK | | | | PKPab | PKPab | 00 04 19.8 | -0.7 |
| | comp=Z,6.1nm,0.8s,baz=159,slow=4.5,SNR=6.2 | | | | | | |
| PETK | Petropavlovsk- | 175.64 | 197 | PKIKP | PKPdf | 00 02 42.0 | -0.6 |
| PETK | | | | | | 00 04 19.8 | |
| PETK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| PETK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |

*ATH* ***05*** *23:43:11.5, 38.03N×27.99E, h5km±1km, MD3.8/34*
*IDC* ***05*** *23:43:12.9±0.9, 37.93N×28.10E, h0km, mb3.7/7, mb1 3.8/14, mb1mx3.6/48, mbtmp3.7/14, ML3.5/7, Error ellipse: s-maj=18.4km s-min=15.3km az=5.0*
*ISCJB* ***05*** *23:43:13.6±0.3, 38.00N±0.01×27.95E±0.02, h9km±2km, mb3.6/7, Error ellipse: s-maj=2.4km s-min=2.0km az=154.2*
*DDA* ***05*** *23:43:13.6, 38.00N×27.95E, h17km, Ml4.1*
*ISK* ***05*** *23:43:13.4, 38.04N×27.94E, h6km, ML3.9*
*CSEM* ***05*** *23:43:14.0±0.1, 37.98N×27.96E, h5km, ML3.9, Error ellipse: s-maj=2.0km s-min=1.8km az=151.0*
*THE* ***05*** *23:43:14.2, 37.96N×27.97E, h3km±1km, ML3.8/8, Error ellipse: s-maj=1.9km s-min=0.8km az=52.0*
**ISC 05 23:43:14.1**±0.8**, 37.99N**±0.01×**27.95E**±0.01**, h11**km±5km**, n350,** σ1.00/401**, mb3.6**/7**, 13C-9D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AYDB | Zeytinkoy-Aydi | 0.07 | 225 | PG | Pg | 23 43 16.5 | 0.0 |
| AYDB | | | | eSG | Sg | 23 43 18.4 | 0.0 |
| AYDN | Tasoluk | 0.34 | 190 | i P | Pb | 23 43 22.2 | 0.0 |
| AYDN | | | | i S | Sb | 23 43 27.6 | 0.0 |
| AYDN | Tasoluk | 0.34 | 190 | P | Pb | 23 43 22.2 | 0.0 |
| AYDN | | | | S | Sb | 23 43 27.6 | 0.0 |
| GCAM | G?zelcaml? | 0.64 | 243 | i P | Pg | 23 43 26.1 | -0.4 |
| GCAM | | | | i S | Sg | 23 43 34.8 | -0.1 |
| GCAM | G?zelcaml? | 0.64 | 243 | P | Pg | 23 43 26.1 | -0.4 |
| GCAM | | | | S | Sg | 23 43 34.8 | -0.1 |
| IZM | Izmir | 0.68 | 307 | ePG | Pg | 23 43 26.3 | -1.0 |
| KULA | Kula-Manisa | 0.76 | 47 | ePG | Pg | 23 43 28.4 | -0.5 |
| KULA | | | | eSG | Sg | 23 43 38.8 | -0.1 |
| KULA | Kula-Manisa | 0.76 | 47 | ePg | Pg | 23 43 28.4 | -0.5 |
| KULA | | | | eSg | Sg | 23 43 38.8 | -0.1 |
| DENT | Denizli | 0.89 | 105 | ePG | Pg | 23 43 31.1 | -0.1 |
| DENT | Denizli | 0.89 | 105 | ePg | Pg | 23 43 31.1 | -0.1 |
| AKHS | Akhisar | 0.89 | 353 | i P | Pg | 23 43 31.2 | -0.1 |
| AKHS | | | | i S | Sn | 23 43 45.6 | 0.0 |
| AKHS | Akhisar | 0.89 | 353 | P | Pg | 23 43 31.2 | -0.1 |
| AKHS | | | | S | Sn | 23 43 45.6 | 0.0 |
| AKS | Akhisar | 0.89 | 353 | ePG | Pg | 23 43 29.4 | -1.9 |
| YER | Yerkesik | 0.90 | 163 | ePG | Pg | 23 43 31.3 | -0.1 |
| YER | Yerkesik | 0.90 | 163 | ePg | Pg | 23 43 31.3 | -0.1 |
| DNZL | Cakiroluk | 0.92 | 109 | i P | Pg | 23 43 31.8 | 0.0 |
| DNZL | | | | i S | Sb | 23 43 45.3 | +0.8 |
| DNZL | Cakiroluk | 0.92 | 109 | P | Pg | 23 43 31.8 | 0.0 |
| DNZL | | | | S | Sb | 23 43 45.3 | +0.8 |
| SMG | Samos | 0.93 | 252 | ePN | Pg | 23 43 31.9 | -0.1 |
| SMG | | | | eSB | Sg | 23 43 44.1 | 0.0 |
| SMG | Samos | 0.93 | 252 | P | Pg | 23 43 31.4 | -0.6 |
| SMG | | | | S | Sb | 23 43 45.2 | +0.6 |
| SMG | Samos | 0.93 | 252 | P | Pg | 23 43 31.4 | -0.6 |
| SMG | Samos | 0.93 | 252 | ePn | Pg | 23 43 31.9 | -0.1 |
| SMG | | | | eSb | Sg | 23 43 44.1 | 0.0 |
| SMG | | | | S | Sb | 23 43 45.2 | +0.6 |
| BDRM | Kayabasi | 1.01 | 204 | i P | Pg | 23 43 32.9 | -0.7 |
| BDRM | | | | i S | Sg | 23 43 46.6 | -0.2 |
| BDRM | Kayabasi | 1.01 | 204 | P | Pg | 23 43 32.9 | -0.7 |
| BDRM | | | | S | Sg | 23 43 46.6 | -0.2 |
| BODT | Bodrum | 1.06 | 209 | ePN | Pg | 23 43 34.0 | -0.5 |
| BODT | Bodrum | 1.06 | 209 | ePn | Pg | 23 43 34.0 | -0.5 |
| URLA | Izmir | 1.13 | 289 | i P | Pg | 23 43 35.3 | -0.5 |
| URLA | | | | i S | Sb | 23 43 51.4 | +1.0 |
| URLA | Izmir | 1.13 | 289 | P | Pg | 23 43 35.4 | -0.5 |
| URLA | | | | S | Sb | 23 43 51.4 | +1.0 |
| ZEY | ˜zmir | 1.17 | 283 | P | Pg | 23 43 35.7 | -0.8 |
| ZEY | | | | S | Sb | 23 43 52.8 | +1.3 |
| KHAL | Karahalli | 1.27 | 72 | i P | Pg | 23 43 37.5 | -1.0 |
| KHAL | | | | i S | Sn | 23 43 55.1 | 0.0 |
| KHAL | Karahalli | 1.27 | 72 | P | Pg | 23 43 37.5 | -1.0 |
| KHAL | | | | S | Sn | 23 43 55.1 | 0.0 |
| KHL | Karahalli | 1.28 | 75 | ePN | Pn | 23 43 38.2 | +0.1 |
| KHL | Karahalli | 1.28 | 75 | ePn | Pn | 23 43 38.2 | +0.1 |
| DALY | Dalyan (Mu˜la | 1.30 | 154 | ePN | Pg | 23 43 39.1 | 0.0 |
| DALY | Dalyan (Mu˜la | 1.30 | 154 | ePn | Pg | 23 43 39.1 | 0.0 |
| DKL | Dikili | 1.35 | 323 | ePN | Pn | 23 43 39.0 | +0.1 |
| DKL | Dikili | 1.35 | 323 | ePn | Pn | 23 43 39.0 | +0.1 |
| GOLH | Golhisar | 1.48 | 120 | i P | Pb | 23 43 41.9 | +0.1 |
| GOLH | | | | i S | Sg | 23 44 03.2 | +1.3 |
| GOLH | Golhisar | 1.48 | 120 | P | Pb | 23 43 41.9 | +0.1 |
| GOLH | | | | S | Sg | 23 44 03.2 | +1.3 |
| NIS1 | Nisyros Isl. | 1.52 | 204 | ePN | Pb | 23 43 42.4 | +0.1 |
| NIS1 | Nisyros Isl. | 1.52 | 204 | ePG | Pn | 23 43 40.2 | -1.1 |
| NIS1 | | | | eSB | Sn | 23 44 02.2 | +1.1 |
| NIS1 | Nisyros Isl. | 1.52 | 204 | P | Pn | 23 43 40.1 | -1.2 |
| NIS1 | | | | S | Sn | 23 44 00.8 | -0.3 |
| NIS1 | Nisyros Isl. | 1.52 | 204 | P | Pn | 23 43 40.1 | -1.2 |
| NIS1 | Nisyros Isl. | 1.52 | 204 | ePn | Pb | 23 43 42.4 | +0.1 |
| NIS1 | | | | S | Sn | 23 44 00.8 | -0.3 |
| NIS1 | | | | eSb | Sn | 23 44 02.2 | +1.1 |
| NISR | Nisiros | 1.53 | 206 | ePB | Pn | 23 43 41.5 | +0.1 |
| NISR | Nisiros | 1.53 | 206 | ePb | Pn | 23 43 41.5 | +0.1 |
| CHOS | Chios island | 1.54 | 285 | ePN | Pn | 23 43 41.9 | +0.2 |
| CHOS | Chios island | 1.54 | 285 | ePB | Pn | 23 43 41.9 | +0.2 |
| CHOS | | | | eSB | Sn | 23 44 02.4 | +0.6 |
| CHOS | Chios island | 1.54 | 285 | P | Pn | 23 43 41.8 | +0.1 |
| CHOS | | | | S | Sn | 23 44 02.5 | +0.6 |
| CHOS | Chios island | 1.54 | 285 | P | Pn | 23 43 41.8 | +0.1 |
| CHOS | | | | eSb | Sn | 23 44 02.4 | +0.6 |
| FETY | Fethiye | 1.63 | 146 | ePN | Pn | 23 43 43.5 | +0.7 |
| FETY | Fethiye | 1.63 | 146 | ePn | Pn | 23 43 43.5 | +0.7 |
| AYVA | Ayvalik | 1.64 | 323 | i P | Pn | 23 43 42.9 | -0.1 |
| AYVA | | | | i S | Sg | 23 44 07.3 | +0.4 |
| AYVA | Ayvalik | 1.64 | 323 | P | Pn | 23 43 42.9 | -0.1 |
| AYVA | | | | S | Sg | 23 44 07.3 | +0.4 |
| BALB | Balikesir | 1.64 | 358 | ePN | Pn | 23 43 42.8 | -0.2 |
| BALB | Balikesir | 1.64 | 358 | ePn | Pn | 23 43 42.8 | -0.2 |
| DURS | Dursunbey | 1.66 | 14 | i P | Pn | 23 43 42.9 | -0.4 |
| DURS | | | | i S | Sg | 23 44 06.4 | -1.0 |
| DURS | Dursunbey | 1.66 | 14 | P | Pn | 23 43 42.9 | -0.4 |
| DURS | | | | S | Sg | 23 44 06.4 | -1.0 |
| DST | Dursunbey | 1.69 | 18 | ePN | Pn | 23 43 43.5 | -0.1 |
| DST | Dursunbey | 1.69 | 18 | ePn | Pn | 23 43 43.6 | -0.1 |
| BALY | Balya | 1.76 | 352 | i P | Pn | 23 43 44.7 | 0.0 |
| BALY | | | | i S | Sn | 23 44 08.1 | +0.9 |
| BALY | Balya | 1.76 | 352 | P | Pn | 23 43 44.7 | 0.0 |
| BALY | | | | S | Sn | 23 44 08.1 | +0.9 |
| ARG | Arkhangelos | 1.78 | 175 | ePG | Pn | 23 43 44.7 | -0.1 |
| ARG | | | | eSN | Sg | 23 44 11.2 | -0.1 |
| ARG | Arkhangelos | 1.78 | 175 | P | Pn | 23 43 44.5 | -0.3 |
| ARG | | | | S | Sn | 23 44 07.5 | 0.0 |
| ARG | Arkhangelos | 1.78 | 175 | P | Pn | 23 43 44.5 | -0.3 |
| ARG | | | | S | Sn | 23 44 07.5 | 0.0 |
| ARG | | | | eSn | Sg | 23 44 11.2 | -0.1 |
| PRK | Paraskevi | 1.81 | 314 | ePN | Pn | 23 43 45.5 | +0.2 |
| PRK | | | | eSN | Sb | 23 44 10.9 | +0.8 |
| PRK | Paraskevi | 1.81 | 314 | P | Pn | 23 43 45.4 | +0.2 |
| PRK | | | | S | Sb | 23 44 10.1 | 0.0 |
| PRK | Paraskevi | 1.81 | 314 | ePn | Pn | 23 43 45.5 | +0.2 |
| PRK | | | | S | Sb | 23 44 10.1 | 0.0 |
| PRK | | | | eSn | Sb | 23 44 10.9 | +0.8 |
| ELL | Elmali | 1.99 | 128 | ePN | Pn | 23 43 49.3 | +1.4 |
| ELL | Elmali | 1.99 | 128 | ePn | Pn | 23 43 49.3 | +1.4 |
| ISP | Isparta | 2.04 | 94 | ePN | Pn | 23 43 49.5 | +1.0 |
| ISP | Isparta | 2.04 | 94 | ePN | Pn | 23 43 48.4 | -0.1 |
| ISP | Isparta | 2.04 | 94 | P | Pn | 23 43 47.6 | -0.9 |
| ISP | | | | S | Sn | 23 44 13.0 | -1.1 |
| ISP | Isparta | 2.04 | 94 | P | Pn | 23 43 47.6 | -0.9 |
| ISP | Isparta | 2.04 | 94 | ePn | Pn | 23 43 48.4 | -0.1 |
| ISP | | | | S | Sn | 23 44 13.0 | -1.1 |
| SIGR | SIGRI | 2.04 | 307 | ePN | Pn | 23 43 48.8 | +0.3 |
| SIGR | SIGRI | 2.04 | 307 | ePN | Pn | 23 43 48.6 | +0.1 |
| SIGR | | | | eSN | Sn | 23 44 16.0 | +2.0 |
| SIGR | SIGRI | 2.04 | 307 | P | Pn | 23 43 48.4 | -0.1 |
| SIGR | | | | S | Sn | 23 44 15.9 | +2.0 |
| SIGR | SIGRI | 2.04 | 307 | P | Pn | 23 43 48.4 | -0.1 |
| SIGR | SIGRI | 2.04 | 307 | ePn | Pn | 23 43 48.8 | +0.3 |
| SIGR | | | | S | Sn | 23 44 15.9 | +2.0 |
| GONE | Gonen-Balikesi | 2.06 | 354 | ePN | Pn | 23 43 49.2 | +0.5 |
| GONE | Gonen-Balikesi | 2.06 | 354 | ePn | Pn | 23 43 49.2 | +0.5 |
| SHUT | Suhut-Afyon | 2.12 | 74 | ePN | Pn | 23 43 50.0 | +0.4 |
| SHUT | Suhut-Afyon | 2.12 | 74 | ePn | Pn | 23 43 50.0 | +0.4 |
| APE | Apeiranthos | 2.13 | 245 | ePN | Pn | 23 43 51.2 | +1.4 |
| APE | Apeiranthos | 2.13 | 245 | ePG | Pb | 23 43 53.1 | +0.2 |
| APE | | | | eSN | Sb | 23 44 19.5 | +0.1 |
| APE | Apeiranthos | 2.13 | 245 | P | Pn | 23 43 50.0 | +0.2 |
| APE | | | | S | Sn | 23 44 17.2 | +0.9 |
| APE | Apeiranthos | 2.13 | 245 | P | Pn | 23 43 50.0 | +0.2 |
| APE | Apeiranthos | 2.13 | 245 | ePn | Pn | 23 43 51.2 | +1.4 |
| APE | Apeiranthos | 2.13 | 245 | ePg | Pb | 23 43 53.1 | +0.2 |
| APE | | | | S | Sn | 23 44 17.2 | +0.9 |
| APE | | | | eSn | Sb | 23 44 19.5 | +0.1 |
| BCK | Bucak | 2.16 | 103 | ePN | Pb | 23 43 51.9 | -1.4 |
| BCK | Bucak | 2.16 | 103 | ePn | Pb | 23 43 51.9 | -1.4 |
| ORLT | Orhaneli | 2.18 | 19 | ePN | Pn | 23 43 50.4 | 0.0 |
| ORLT | Orhaneli | 2.18 | 19 | ePn | Pn | 23 43 50.4 | 0.0 |
| EZN | Ezine | 2.23 | 326 | ePN | Pn | 23 43 51.1 | +0.2 |
| EZN | Ezine | 2.23 | 326 | ePn | Pn | 23 43 51.1 | +0.2 |
| BAGO | Egridir - ISPA | 2.24 | 89 | P | Pn | 23 43 51.9 | +0.6 |
| BAGO | | | | S | Sg | 23 44 30.9 | +4.7 |
| KCTX | Karacabey (Bur | 2.29 | 8 | ePN | Pn | 23 43 52.9 | +1.0 |
| KCTX | Karacabey (Bur | 2.29 | 8 | ePn | Pn | 23 43 52.9 | +1.0 |
| ULDT | Uludag | 2.33 | 23 | i P | Pg | 23 43 57.7 | -1.2 |
| ULDT | Uludag | 2.33 | 23 | P | Pg | 23 43 57.7 | -1.2 |
| EDC | Edincik | 2.35 | 358 | ePN | Pn | 23 43 52.7 | 0.0 |
| EDC | Edincik | 2.35 | 358 | ePn | Pn | 23 43 52.7 | 0.0 |
| BNT | Bandirma | 2.36 | 359 | ePN | Pn | 23 43 53.0 | +0.2 |
| BNT | Bandirma | 2.36 | 359 | ePn | Pn | 23 43 53.0 | +0.2 |
| BOZC | Bozcaada | 2.37 | 322 | P | Pn | 23 43 53.0 | +0.1 |
| BOZC | | | | P | Pn | 23 43 53.0 | +0.1 |
| ANTB | Antalya | 2.41 | 116 | ePN | Pn | 23 43 55.5 | +2.0 |
| ANTB | Antalya | 2.41 | 116 | ePn | Pn | 23 43 55.5 | +2.0 |
| KRBG | Karabiga-Canak | 2.45 | 348 | ePN | Pn | 23 43 54.0 | 0.0 |
| KRBG | Karabiga-Canak | 2.45 | 348 | ePn | Pn | 23 43 54.0 | 0.0 |
| BOLV | Bolvadin | 2.46 | 72 | P | Pg | 23 44 01.8 | +0.4 |
| IGD | Bursa | 2.47 | 23 | P | Pb | 23 43 59.3 | +0.8 |
| SUTC | Sutluce-Ispart | 2.47 | 101 | ePN | Pn | 23 43 56.1 | +1.6 |
| SUTC | Sutluce-Ispart | 2.47 | 101 | ePn | Pn | 23 43 56.1 | +1.6 |
| MDNY | Mudanya-Bursa | 2.48 | 17 | ePN | Pn | 23 43 55.1 | +0.6 |
| MDNY | Mudanya-Bursa | 2.48 | 17 | ePn | Pn | 23 43 55.1 | +0.6 |
| KARP | Karpathos | 2.52 | 195 | ePB | Pn | 23 43 54.6 | -0.5 |
| KARP | Karpathos | 2.52 | 195 | P | Pn | 23 43 54.6 | -0.5 |
| KARP | | | | S | Sn | 23 44 25.0 | -0.9 |
| KARP | Karpathos | 2.52 | 195 | P | Pn | 23 43 54.6 | -0.5 |
| KARP | | | | S | Sn | 23 44 25.0 | -0.9 |
| LPK | Lapseki | 2.55 | 339 | ePN | Pn | 23 43 55.8 | +0.4 |
| LPK | Lapseki | 2.55 | 339 | ePn | Pn | 23 43 55.8 | +0.4 |
| SANT | Santorini | 2.57 | 232 | ePN | Pn | 23 43 54.2 | -1.5 |
| SANT | Santorini | 2.57 | 232 | ePn | Pn | 23 43 54.2 | -1.5 |
| THR5 | Thira Island, | 2.61 | 234 | ePN | Pn | 23 43 56.8 | +0.6 |
| THR5 | Thira Island, | 2.61 | 234 | ePn | Pn | 23 43 56.8 | +0.6 |
| GEMT | Gemlik | 2.62 | 21 | ePN | Pn | 23 43 57.3 | +0.9 |
| GEMT | Gemlik | 2.62 | 21 | ePn | Pn | 23 43 57.3 | +0.9 |
| MRMT | Marmara Adasi | 2.62 | 354 | ePN | Pn | 23 43 56.7 | +0.2 |
| MRMT | Marmara Adasi | 2.62 | 354 | ePn | Pn | 23 43 56.7 | +0.2 |
| IZI | Iznik | 2.62 | 26 | ePN | Pn | 23 43 57.1 | +0.6 |
| IZI | Iznik | 2.62 | 26 | ePn | Pn | 23 43 57.1 | +0.6 |
| CAVI | Cavuskoy | 2.65 | 33 | ePN | Pn | 23 43 57.5 | +0.7 |
| CAVI | Cavuskoy | 2.65 | 33 | ePn | Pn | 23 43 57.5 | +0.7 |
| GELI | Tayfur-Gelibol | 2.66 | 335 | ePN | Pn | 23 43 57.7 | +0.8 |
| GELI | Tayfur-Gelibol | 2.66 | 335 | ePn | Pn | 23 43 57.7 | +0.8 |
| ARMT | Armutlu | 2.66 | 15 | ePN | Pn | 23 43 57.4 | +0.4 |
| ARMT | Armutlu | 2.66 | 15 | ePn | Pn | 23 43 57.4 | +0.4 |
| BORA | Eskisehir | 2.71 | 45 | P | Pg | 23 44 05.3 | -0.8 |
| GADA | Gvkgeada | 2.71 | 325 | ePN | Pn | 23 43 58.2 | +0.5 |
| GADA | Gvkgeada | 2.71 | 325 | ePn | Pn | 23 43 58.2 | +0.5 |
| ESKT | Eskisehir | 2.73 | 55 | ePN | Pn | 23 43 58.6 | +0.5 |
| ESKT | Eskisehir | 2.73 | 55 | ePn | Pn | 23 43 58.6 | +0.5 |
| RKY | Sarkoy-Tekirda | 2.76 | 348 | ePN | Pn | 23 43 58.9 | +0.6 |
| RKY | Sarkoy-Tekirda | 2.76 | 348 | ePn | Pn | 23 43 58.9 | +0.6 |
| ADVT | Abdulvahap | 2.80 | 29 | ePN | Pn | 23 43 58.9 | 0.0 |
| ADVT | Abdulvahap | 2.80 | 29 | ePn | Pn | 23 43 58.9 | 0.0 |
| LIA | Limnos Island | 2.88 | 312 | ePN | Pn | 23 44 00.6 | +0.7 |
| LIA | Limnos Island | 2.88 | 312 | P | Pn | 23 44 00.0 | +0.1 |
| LIA | | | | S | Sn | 23 44 35.2 | +0.7 |
| LIA | Limnos Island | 2.88 | 312 | P | Pn | 23 44 00.0 | +0.1 |
| LIA | Limnos Island | 2.88 | 312 | ePn | Pn | 23 44 00.6 | +0.7 |
| LIA | | | | S | Sn | 23 44 35.2 | +0.7 |
| SERI | Serifos | 2.88 | 254 | ePB | Pn | 23 44 00.0 | 0.0 |
| SERI | Serifos | 2.88 | 254 | ePb | Pn | 23 44 00.0 | 0.0 |
| ERIK | Erikli-Kesan | 2.90 | 338 | ePN | Pn | 23 44 00.8 | +0.6 |
| ERIK | Erikli-Kesan | 2.90 | 338 | ePn | Pn | 23 44 00.8 | +0.6 |
| GPA | Golpazari | 2.93 | 38 | ePN | Pn | 23 44 01.4 | +0.6 |
| GPA | Golpazari | 2.93 | 38 | ePn | Pn | 23 44 01.4 | +0.6 |
| BUY | Buyukada | 2.99 | 17 | P | Pg | 23 44 11.2 | -0.2 |
| TKR | Tekirdag | 3.01 | 354 | ePN | Pn | 23 44 01.9 | +0.2 |
| TKR | Tekirdag | 3.01 | 354 | ePn | Pn | 23 44 01.9 | +0.2 |
| ENEZ | Enez | 3.07 | 334 | ePN | Pn | 23 44 03.3 | +0.7 |
| ENEZ | Enez | 3.07 | 334 | ePn | Pn | 23 44 03.3 | +0.7 |
| SMTH | Samothraki Isl | 3.11 | 324 | ePN | Pn | 23 44 03.4 | +0.3 |
| SMTH | Samothraki Isl | 3.11 | 324 | P | Pn | 23 44 03.2 | +0.1 |
| SMTH | Samothraki Isl | 3.11 | 324 | ePn | Pn | 23 44 03.4 | +0.3 |
| MHLO | Agia Marina, M | 3.11 | 246 | ePB | Pn | 23 44 06.1 | +2.9 |
| MHLO | Agia Marina, M | 3.11 | 246 | ePb | Pn | 23 44 06.1 | +2.9 |
| HRT | Hereke | 3.12 | 25 | ePN | Pn | 23 44 04.0 | +0.7 |
| HRT | Hereke | 3.12 | 25 | ePn | Pn | 23 44 04.0 | +0.7 |
| CRLT | Corlu | 3.13 | 357 | ePN | Pn | 23 44 04.3 | +0.8 |
| CRLT | Corlu | 3.13 | 357 | ePn | Pn | 23 44 04.3 | +0.8 |
| GULT | Gulveren | 3.15 | 38 | ePN | Pn | 23 44 05.5 | +1.8 |
| GULT | Gulveren | 3.15 | 38 | ePn | Pn | 23 44 05.5 | +1.8 |
| SVRH | Sivrihisar-ESK | 3.15 | 61 | ePN | Pn | 23 44 04.4 | +0.7 |
| SVRH | Sivrihisar-ESK | 3.15 | 61 | ePn | Pn | 23 44 04.4 | +0.7 |
| ISK | Istanbul-Kandi | 3.19 | 15 | ePN | Pn | 23 44 04.8 | +0.6 |
| ISK | Istanbul-Kandi | 3.19 | 15 | ePn | Pn | 23 44 04.8 | +0.6 |
| EREA | Eretria | 3.19 | 279 | ePN | Pn | 23 44 04.8 | +0.5 |
| EREA | Eretria | 3.19 | 279 | ePn | Pn | 23 44 04.8 | +0.5 |
| ZKR | Zakros | 3.19 | 206 | ePB | Pn | 23 44 06.4 | +2.1 |
| ZKR | Zakros | 3.19 | 206 | ePb | Pn | 23 44 06.4 | +2.1 |
| BGKT | Bogazkoy | 3.25 | 11 | ePN | Pn | 23 44 05.8 | +0.8 |
| BGKT | Bogazkoy | 3.25 | 11 | ePn | Pn | 23 44 05.8 | +0.8 |
| SPNC | Sapanca-Adapaz | 3.25 | 33 | ePN | Pn | 23 44 06.0 | +0.9 |
| SPNC | Sapanca-Adapaz | 3.25 | 33 | ePn | Pn | 23 44 06.0 | +0.9 |
| ALN | Alexandroupoli | 3.25 | 334 | P | Pn | 23 44 05.2 | +0.1 |
| ALN | Alexandroupoli | 3.25 | 334 | P | Pn | 23 44 05.2 | +0.1 |
| CTKS | Kestanelik-??a | 3.27 | 7 | ePN | Pn | 23 44 05.2 | -0.1 |
| CTKS | Kestanelik-??a | 3.27 | 7 | ePn | Pn | 23 44 05.2 | -0.1 |
| VLY | Voula,Athens | 3.29 | 269 | ePN | Pn | 23 44 05.8 | +0.2 |
| VLY | Voula,Athens | 3.29 | 269 | ePn | Pn | 23 44 05.8 | +0.2 |
| NPS | Neapolis | 3.31 | 215 | ePN | Pn | 23 44 07.2 | +1.3 |
| NPS | Neapolis | 3.31 | 215 | ePn | Pn | 23 44 07.2 | +1.3 |
| AUMIH | MIHALICIK | 3.33 | 55 | P | Pg | 23 44 17.3 | -0.6 |
| ATH | Athens Observa | 3.35 | 271 | ePN | Pn | 23 44 06.2 | -0.2 |
| ATH | Athens Observa | 3.35 | 271 | ePn | Pn | 23 44 06.2 | -0.2 |
| KLYT | Kilyos | 3.36 | 14 | ePN | Pn | 23 44 06.9 | +0.3 |
| KLYT | Kilyos | 3.36 | 14 | ePn | Pn | 23 44 06.9 | +0.3 |
| AOS | Alonnisos | 3.40 | 291 | ePN | Pn | 23 44 08.1 | +1.0 |
| AOS | Alonnisos | 3.40 | 291 | ePN | Pn | 23 44 08.1 | +1.0 |
| AOS | Alonnisos | 3.40 | 291 | ePn | Pn | 23 44 08.1 | +1.0 |
| SILT | Sile | 3.42 | 22 | ePN | Pn | 23 44 08.5 | +1.2 |
| SILT | Sile | 3.42 | 22 | ePn | Pn | 23 44 08.5 | +1.2 |
| LAST | Lasithi | 3.46 | 216 | ePB | Pn | 23 44 10.3 | +2.3 |
| LAST | Lasithi | 3.46 | 216 | ePb | Pn | 23 44 10.3 | +2.3 |
| KONT | Konya--Tatoy | 3.48 | 89 | ePN | Pn | 23 44 10.2 | +1.9 |
| KONT | Konya--Tatoy | 3.48 | 89 | ePn | Pn | 23 44 10.2 | +1.9 |
| CTYL | Yal??k??y-??at | 3.49 | 4 | ePN | Pn | 23 44 08.7 | +0.4 |
| CTYL | Yal??k??y-??at | 3.49 | 4 | ePn | Pn | 23 44 08.7 | +0.4 |
| BTAS | Taskesti | 3.50 | 42 | P | Pg | 23 44 20.4 | -0.7 |
| MDUB | Mudurnu | 3.53 | 45 | ePN | Pn | 23 44 10.6 | +1.6 |
| MDUB | Mudurnu | 3.53 | 45 | ePn | Pn | 23 44 10.6 | +1.6 |
| IDI | Anoyia | 3.66 | 223 | Pn | Pn | 23 44 11.1 | +0.4 |
| | 0.9nm,0.3s,baz=53,slow=16,SNR=13 | | | | | | |
| IDI | | | | Sn | Sn | 23 44 52.8 | -1.1 |
| | 4.3nm,0.3s,baz=276,slow=19,SNR=2.1 | | | | | | |
| IDI | | | | Lg | Lg | 23 45 10.9 | |
| | 3.0nm,0.3s,baz=162,slow=20,SNR=1.6 | | | | | | |
| IDI | Anoyia | 3.66 | 223 | ePN | Pn | 23 44 11.0 | +0.3 |
| IDI | Anoyia | 3.66 | 223 | ePn | Pn | 23 44 11.0 | +0.3 |
| VILL | Villia | 3.67 | 274 | ePn | Pn | 23 44 11.1 | +0.3 |
| VIL2 | Platees | 3.70 | 275 | ePN | Pn | 23 44 11.1 | -0.2 |
| SKIA | Skiathos | 3.71 | 290 | ePN | Pn | 23 44 12.0 | +0.7 |
| SKIA | Skiathos | 3.71 | 290 | ePn | Pn | 23 44 12.0 | +0.7 |
| DID | Didima | 3.77 | 264 | ePN | Pn | 23 44 12.1 | -0.1 |
| DID | Didima | 3.77 | 264 | ePn | Pn | 23 44 12.1 | -0.1 |
| DIDY | Didyma | 3.79 | 264 | ePN | Pn | 23 44 12.7 | +0.1 |
| DIDY | Didyma | 3.79 | 264 | ePn | Pn | 23 44 12.7 | +0.1 |
| SMIA | Simia | 3.83 | 285 | ePN | Pn | 23 44 13.1 | +0.1 |
| SMIA | Simia | 3.83 | 285 | ePn | Pn | 23 44 13.1 | +0.1 |
| PAIG | Paliouri | 3.85 | 301 | ePN | Pn | 23 44 14.1 | +0.8 |
| PAIG | Paliouri | 3.85 | 301 | ePn | Pn | 23 44 14.1 | +0.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KRND | KRANIDI | 3.86 | 262 | ePN | Pn | 23 44 13.6 | +0.2 |
| KRND | KRANIDI | 3.86 | 262 | ePn | Pn | 23 44 13.6 | +0.2 |
| OUR | Ouranopolis | 3.87 | 308 | ePN | Pn | 23 44 14.3 | +0.7 |
| OUR | Ouranopolis | 3.87 | 308 | ePn | Pn | 23 44 14.3 | +0.7 |
| SIVA | Sivas | 3.90 | 221 | ePB | Pn | 23 44 17.3 | +3.3 |
| SIVA | Sivas | 3.90 | 221 | ePb | Pn | 23 44 17.3 | +3.3 |
| NEO | Neokhori | 3.93 | 291 | ePN | Pn | 23 44 15.0 | +0.6 |
| NEO | Neokhori | 3.93 | 291 | ePn | Pn | 23 44 15.0 | +0.6 |
| LTK | Loutraki | 3.94 | 272 | ePN | Pn | 23 44 15.3 | +0.8 |
| LTK | Loutraki | 3.94 | 272 | ePn | Pn | 23 44 15.3 | +0.8 |
| LKR | Lokris | 3.95 | 281 | ePN | Pn | 23 44 15.3 | +0.6 |
| LKR | Lokris | 3.95 | 281 | ePn | Pn | 23 44 15.3 | +0.6 |
| XOR | Xorichti | 3.97 | 292 | ePN | Pn | 23 44 15.1 | +0.1 |
| XOR | Xorichti | 3.97 | 292 | ePn | Pn | 23 44 15.1 | +0.1 |
| VAM | Vamos | 3.97 | 231 | ePB | Pn | 23 44 18.2 | +3.2 |
| VAM | Vamos | 3.97 | 231 | ePb | Pn | 23 44 18.2 | +3.2 |
| IMMV | Iera Moni Meta | 4.07 | 233 | ePN | Pn | 23 44 17.2 | +0.9 |
| IMMV | Iera Moni Meta | 4.07 | 233 | ePn | Pn | 23 44 17.2 | +0.9 |
| VLI | Veliai | 4.19 | 254 | ePN | Pn | 23 44 18.5 | +0.5 |
| VLI | Veliai | 4.19 | 254 | ePn | Pn | 23 44 18.5 | +0.5 |
| AXAR | Agios Charalam | 4.23 | 282 | ePN | Pn | 23 44 19.9 | +1.4 |
| AXAR | Agios Charalam | 4.23 | 282 | ePn | Pn | 23 44 19.9 | +1.4 |
| PLG | Polygyros | 4.23 | 306 | ePN | Pn | 23 44 19.1 | +0.5 |
| PLG | Polygyros | 4.23 | 306 | ePn | Pn | 23 44 19.1 | +0.5 |
| BCAM | Yenicaga | 4.25 | 47 | iP | Pn | 23 44 20.0 | +1.1 |
| BCAM | Yenicaga | 4.25 | 47 | P | Pn | 23 44 20.0 | +1.1 |
| DESF | Desfina | 4.29 | 277 | ePN | Pn | 23 44 19.6 | +0.2 |
| DESF | Desfina | 4.29 | 277 | ePn | Pn | 23 44 19.6 | +0.2 |
| DSF | Desfina | 4.29 | 277 | ePN | Pn | 23 44 20.4 | +0.9 |
| DSF | Desfina | 4.29 | 277 | ePn | Pn | 23 44 20.4 | +0.9 |
| GUR | Goura | 4.43 | 271 | ePN | Pn | 23 44 22.5 | +1.1 |
| GUR | Goura | 4.43 | 271 | ePn | Pn | 23 44 22.5 | +1.1 |
| VLX | Vlachokerasia | 4.46 | 264 | ePN | Pn | 23 44 22.1 | +0.3 |
| VLX | Vlachokerasia | 4.46 | 264 | ePn | Pn | 23 44 22.1 | +0.3 |
| AGG | Agios Georgios | 4.53 | 285 | ePN | Pn | 23 44 23.8 | +1.1 |
| AGG | Agios Georgios | 4.53 | 285 | ePn | Pn | 23 44 23.8 | +1.1 |
| SOH | Sokhos | 4.54 | 310 | ePN | Pn | 23 44 24.1 | +1.2 |
| SOH | Sokhos | 4.54 | 310 | ePn | Pn | 23 44 24.1 | +1.2 |
| HORT | Hortiatis | 4.58 | 306 | ePN | Pn | 23 44 24.5 | +1.2 |
| HORT | Hortiatis | 4.58 | 306 | ePn | Pn | 23 44 24.5 | +1.2 |
| KLV | Kalavryta, Ach | 4.58 | 272 | ePN | Pn | 23 44 24.6 | +1.2 |
| KLV | Kalavryta, Ach | 4.58 | 272 | ePn | Pn | 23 44 24.6 | +1.2 |
| SRS | Serrai | 4.59 | 314 | ePN | Pn | 23 44 24.4 | +0.9 |
| SRS | Serrai | 4.59 | 314 | ePn | Pn | 23 44 24.4 | +0.9 |
| KALE | Kalithea | 4.60 | 277 | ePN | Pn | 23 44 24.6 | +1.0 |
| KALE | Kalithea | 4.60 | 277 | ePn | Pn | 23 44 24.6 | +1.0 |
| NVR | Nevrokopi | 4.60 | 318 | ePN | Pn | 23 44 24.7 | +1.0 |
| NVR | Nevrokopi | 4.60 | 318 | ePn | Pn | 23 44 24.7 | +1.0 |
| SERG | Sergoula | 4.66 | 277 | ePN | Pn | 23 44 26.1 | +1.6 |
| SERG | Sergoula | 4.66 | 277 | ePn | Pn | 23 44 26.1 | +1.6 |
| MAKR | Makrakomi, Fth | 4.68 | 284 | ePN | Pn | 23 44 26.3 | +1.6 |
| MAKR | Makrakomi, Fth | 4.68 | 284 | ePn | Pn | 23 44 26.3 | +1.6 |
| THE | Thessaloniki | 4.68 | 306 | ePN | Pn | 23 44 26.2 | +1.5 |
| THE | Thessaloniki | 4.68 | 306 | ePn | Pn | 23 44 26.2 | +1.5 |
| LAKA | Lakka | 4.72 | 275 | ePN | Pn | 23 44 26.5 | +1.2 |
| LAKA | Lakka | 4.72 | 275 | ePn | Pn | 23 44 26.5 | +1.2 |
| BRTR | Keskin Array B | 4.76 | 67 | Pn | Pn | 23 44 27.1 | +1.1 |
| | 1.1nm,0.3s,baz=247,slow=15,SNR=33 | | | | | | |
| BRTR | | | | Sn | Sn | 23 45 22.0 | +0.7 |
| | 0.4nm,0.3s,baz=270,slow=17,SNR=1.5 | | | | | | |
| EFP | Efpalio | 4.78 | 277 | ePN | Pn | 23 44 27.8 | +1.7 |
| EFP | Efpalio | 4.78 | 277 | ePn | Pn | 23 44 27.8 | +1.7 |
| ITM | Ithomi | 4.85 | 262 | ePN | Pn | 23 44 28.5 | +1.4 |
| ITM | Ithomi | 4.85 | 262 | ePn | Pn | 23 44 28.5 | +1.4 |
| THL | Klokotos Trika | 4.90 | 291 | ePN | Pn | 23 44 29.0 | +1.3 |
| THL | Klokotos Trika | 4.90 | 291 | ePn | Pn | 23 44 29.0 | +1.3 |
| EVR | Evrytania | 4.91 | 283 | ePN | Pn | 23 44 29.8 | +1.8 |
| EVR | Evrytania | 4.91 | 283 | ePn | Pn | 23 44 29.8 | +1.8 |
| DRO | Drossia | 4.93 | 271 | ePN | Pn | 23 44 29.7 | +1.5 |
| DRO | Drossia | 4.93 | 271 | ePn | Pn | 23 44 29.7 | +1.5 |
| AMT | Artemida-Makis | 4.97 | 267 | ePN | Pn | 23 44 31.1 | +2.4 |
| AMT | Artemida-Makis | 4.97 | 267 | ePn | Pn | 23 44 31.1 | +2.4 |
| RLS | Riolos of Patr | 5.12 | 273 | ePN | Pn | 23 44 34.0 | +3.2 |
| RLS | Riolos of Patr | 5.12 | 273 | ePn | Pn | 23 44 34.0 | +3.2 |
| GRG | Griva | 5.21 | 306 | ePN | Pn | 23 44 34.1 | +2.0 |
| GRG | Griva | 5.21 | 306 | ePn | Pn | 23 44 34.1 | +2.0 |
| CSS | Prodhromos | 5.29 | 123 | ePN | Pn | 23 44 33.3 | +0.2 |
| CSS | Prodhromos | 5.29 | 123 | ePn | Pn | 23 44 33.3 | +0.2 |
| PDO | Prodromos | 5.36 | 279 | ePN | Pn | 23 44 37.3 | +3.3 |
| PDO | Prodromos | 5.36 | 279 | ePn | Pn | 23 44 37.3 | +3.3 |
| DSL | Palaion Diasel | 5.49 | 284 | ePN | Pn | 23 44 39.1 | +3.2 |
| LKD2 | Lefkada island | 5.79 | 280 | ePN | Pn | 23 44 44.1 | +4.2 |
| JAN | Janina | 5.79 | 289 | ePN | Pn | 23 44 41.2 | +1.2 |
| JAN | Janina | 5.79 | 289 | ePn | Pn | 23 44 41.2 | +1.2 |
| FNA | Florina | 5.80 | 301 | ePN | Pn | 23 44 42.2 | +2.0 |
| FNA | Florina | 5.80 | 301 | ePn | Pn | 23 44 42.2 | +2.0 |
| NEST | Nestorio | 5.88 | 296 | ePN | Pn | 23 44 44.1 | +2.8 |
| NEST | Nestorio | 5.88 | 296 | ePn | Pn | 23 44 44.1 | +2.8 |
| MSAB | Monastry St. A | 6.09 | 359⇑ | iP | Pn | 23 44 44.8 | +0.7 |
| MSAB | Monastry St. A | 6.09 | 359⇑ | iP | Pn | 23 44 44.8 | +0.7 |
| IGT | Igoumenitsa | 6.15 | 287 | ePN | Pn | 23 44 48.8 | +3.9 |
| SGD | Sagiada | 6.24 | 287 | ePN | Pn | 23 44 50.2 | +4.1 |
| TIRR | Tirgusor | 6.47 | 3⇓ | iP | Pn | 23 44 49.5 | +0.3 |
| TIRR | Tirgusor | 6.47 | 3⇓ | iP | Pn | 23 44 49.5 | +0.3 |
| TLB | Topalu | 6.59 | 1⇑ | iP | Pn | 23 44 50.4 | -0.5 |
| TLB | Topalu | 6.59 | 1⇑ | iP | Pn | 23 44 50.4 | -0.5 |
| BARS | Barje | 6.72 | 318⇑ | iPn | Pn | 23 44 54.2 | +1.5 |
| CFR | Carcaliu | 7.18 | 1⇑ | iP | Pn | 23 44 58.9 | -0.1 |
| CFR | Carcaliu | 7.18 | 1⇑ | iP | Pn | 23 44 58.9 | -0.1 |
| MLR | Muntele Rosu | 7.64 | 349⇑ | iP | Pn | 23 45 06.9 | +1.4 |
| MLR | Muntele Rosu | 7.64 | 349⇑ | iP | Pn | 23 45 06.9 | +1.4 |
| MMAI | Mount Meron Ar | 7.85 | 127 | Pn | Pn | 23 45 07.0 | -1.3 |
| | 3.0nm,0.3s,baz=311,slow=12,SNR=21 | | | | | | |
| MMAI | | | | Sn | Sn | 23 46 31.5 | -5.6 |
| | 1.9nm,0.3s,baz=309,slow=28,SNR=1.9 | | | | | | |
| PLOR | Plostina | 7.91 | 353⇑ | iP | Pn | 23 45 11.3 | +2.2 |
| PLOR | Plostina | 7.91 | 353⇑ | iP | Pn | 23 45 11.3 | +2.2 |
| VRI | Vrincioaia | 7.92 | 354⇓ | iP | Pn | 23 45 11.2 | +2.0 |
| VRI | Vrincioaia | 7.92 | 354⇓ | iP | Pn | 23 45 11.2 | +2.0 |
| KUBS | Kucevo | 7.97 | 326 | ePn | Pn | 23 45 09.1 | -0.7 |
| GRUS | Gruza | 8.04 | 319⇓ | iPn | Pn | 23 45 12.1 | +1.3 |
| IVAS | Ivanjica | 8.13 | 316 | iPn | Pn | 23 45 13.6 | +1.5 |
| DIVS | Divibare | 8.56 | 318⇓ | iP | Pn | 23 45 19.5 | +1.4 |
| DIVS | Divibare | 8.56 | 318⇓ | iP | Pn | 23 45 19.5 | +1.4 |
| BZS | Buzias | 8.96 | 330⇓ | iP | Pn | 23 45 24.0 | +0.5 |
| BZS | Buzias | 8.96 | 330⇓ | iP | Pn | 23 45 24.0 | +0.5 |
| TEKS | Tekeris | 9.11 | 319 | ePn | Pn | 23 45 26.5 | +0.9 |
| ASF | Jabal al Asfar | 9.35 | 126 | Pn | Pn | 23 45 27.7 | -1.2 |
| | 0.1nm,0.3s,baz=104,slow=19,SNR=1.4 | | | | | | |
| ASF | | | | Sn | Sn | 23 47 13.8 | -0.3 |
| | 0.2nm,0.3s,baz=61,slow=13,SNR=1.4 | | | | | | |
| BURAR | Bucovina Array | 9.82 | 349⇑ | iP | Pn | 23 45 36.9 | +1.6 |
| BURAR | Bucovina Array | 9.82 | 349⇑ | iP | Pn | 23 45 36.9 | +1.6 |
| EIL | Elat | 10.14 | 143 | Pn | Pn | 23 45 38.2 | -1.4 |
| | 1.2nm,0.3s,baz=8.3,slow=4.6,SNR=9.0 | | | | | | |
| EIL | | | | Sn | Sn | 23 47 26.0 | -7.3 |
| | 0.9nm,0.3s,baz=105,slow=16,SNR=2.1 | | | | | | |
| GERES | GERESS Array B | 14.97 | 321 | Pn | P | 23 46 50.7 | -0.5 |
| | 0.1nm,0.3s,baz=134,slow=11,SNR=6.2 | | | | | | |
| KEST | Kesra | 15.07 | 267 | Pn | P | 23 46 50.5 | -1.9 |
| | 0.7nm,0.3s,baz=42,slow=2.7,SNR=4.4 | | | | | | |
| BRG | Berggiesshubel | 16.27 | 327 | eP | P | 23 47 10.9 | +5.4 |
| | 6.0nm,1.1s | | | | | | |
| FINES | FINESS Array B | 23.50 | 358 | P | P | 23 48 24.3 | +0.6 |
| | 3.6nm,0.9s,baz=168,slow=17,SNR=2.3 | | | | | | |
| AKTO | Aktyubinsk | 24.69 | 50 | P | P | 23 48 35.9 | +0.8 |
| | 2.2nm,0.9s,baz=256,slow=8.2,SNR=3.7 | | | | | | |
| ESDC | Sonseca Array | 24.85 | 284 | P | P | 23 48 37.5 | +0.9 |
| | 0.5nm,0.7s,baz=80,slow=10.0,SNR=2.3 | | | | | | |
| EKA | Eskdalemuir Ar | 27.18 | 320 | P | P | 23 48 58.2 | +0.8 |
| | 0.4nm,0.4s,baz=115,slow=10,SNR=1.7 | | | | | | |
| ARCES | ARCESS Array B | 31.63 | 358 | P | P | 23 49 37.6 | +0.8 |
| | 2.4nm,0.9s,baz=171,slow=9.0,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 34.03 | 230 | P | P | 23 49 58.8 | +0.5 |
| | 0.3nm,0.4s,baz=34,slow=9.0,SNR=3.5 | | | | | | |
| ZALV | Zalesovo Beam | 41.43 | 48 | P | P | 23 50 59.5 | -1.0 |
| | 0.4nm,0.3s,baz=260,slow=8.2,SNR=2.5 | | | | | | |

*ISCJB **05** 23:56:16.9±1.2, 37°.57N±0°.04×28°.9E±0°.1, h9km, Error ellipse: s-maj=13.0km s-min=6.2km az=4.1*
*CSEM **05** 23:56:17.6±0.8, 37°.56N×28°.84E, h5km, MD2.8, Error ellipse: s-maj=26.5km s-min=12.7km az=81.0*
*DDA **05** 23:56:23.9, 38°.02N×27°.98E, h7km, Md2.1*
*ISK **05** 23:56:26.8, 36°.98N×28°.70E, h4km, MD2.8*
**ISC 05 23:56:17.2**±1.1**, 37°.56N**±0°.03×**28°.83E**±0°.05**, h9**km**, n12,** σ**2s.71**/18**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.60 | 226 | ePG | Pn | 23 56 34.8 | +2.8 |
| YER | | | | eSG | Sb | 23 56 40.6 | +2.0 |
| YER | Yerkesik | 0.60 | 226 | ePg | Pn | 23 56 34.8 | +2.8 |
| YER | | | | eSg | Sb | 23 56 40.6 | +2.0 |
| DALY | Dalyan (Mu˜la | 0.75 | 191 | ePG | Pg | 23 56 31.0 | -0.6 |
| DALY | Dalyan (Mu˜la | 0.75 | 191 | ePg | Pg | 23 56 31.0 | -0.6 |
| AYDN | Tasoluk | 0.76 | 278 | iP | Pg | 23 56 31.9 | +0.1 |
| AYDN | | | | iS | Sg | 23 56 36.7 | -5.1 |
| AYDN | Tasoluk | 0.76 | 278 | P | Pg | 23 56 31.9 | +0.1 |
| AYDN | | | | S | Sg | 23 56 36.7 | -5.1 |
| FETY | Fethiye | 0.94 | 167 | ePG | Pb | 23 56 36.4 | +0.7 |
| FETY | | | | eSG | Sg | 23 56 43.5 | -4.0 |
| FETY | Fethiye | 0.94 | 167 | ePg | Pb | 23 56 36.4 | +0.7 |
| FETY | | | | eSg | Sg | 23 56 43.5 | -4.0 |
| MANT | Manisa | 0.96 | 347 | iP | Pn | 23 56 37.0 | 0.0 |
| MANT | | | | iS | Sg | 23 56 47.4 | -0.7 |
| MANT | Manisa | 0.96 | 347 | P | Pn | 23 56 37.0 | 0.0 |
| MANT | | | | S | Sg | 23 56 47.4 | -0.7 |
| ELL | Elmali | 1.18 | 133 | ePG | Pn | 23 56 46.7 | +6.7 |
| ELL | Elmali | 1.18 | 133 | ePg | Pn | 23 56 46.7 | +6.7 |

*NIED **06** 00:02:00, 36°.30N×141°.80E, h20km, Mw3.7 Best double couple: M0 3.95000×10^14 NP1:φs224.00000°, δ22.00000°, λ119.00000°. NP2:φs13.00000°, δ71.00000°, λ79.00000°.*
*ISCJB **06** 00:02:16.1±1.8, 36°.32N±0°.04×142°.00E±0°.08, h10km±14km, mb3.6/5, MS4.0/3, Error ellipse: s-maj=10.8km s-min=6.8km az=169.4*
*IDC **06** 00:02:18.4±2.4, 36°.43N×141°.66E, h0km, mb3.7/5, mb1 3.8/8, mb1mx3.5/55, mbtmp3.7/8, ML3.7/3, MS4.0/3, Ms1 3.9/3, ms1mx3.0/33, Error ellipse: s-maj=50.9km s-min=25.5km az=69.0*
*JMA **06** 00:02:19.0±0.2, 36°.33N×141°.77E, h77km±4km, M3.6*
**ISC 06 00:02:17.1**±3.9**, 36°.31N**±0°.05×**141°.94E**±0°.10**, h9**km±25km**, n28,** σ**1s.38**/24**, mb3.7**/5**, MS4.0**/3**, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHOJ | Chosi | 1.07 | 236 | P | Pb | 00 02 37.8 | 0.0 |
| CHOJ | | | | S | Sb | 00 02 52.2 | +0.3 |
| JHO | Hitachi | 1.15 | 286 | P | Pn | 00 02 37.7 | -1.7 |
| JHO | | | | S | Sb | 00 02 53.1 | -1.0 |
| ONAJ | Iwakimizuishiy | 1.21 | 311 | P | Pn | 00 02 39.0 | -1.4 |
| ONAJ | | | | S | Sb | 00 02 54.7 | -1.4 |
| JFK | Kawauchi | 1.36 | 321 | P | Pn | 00 02 41.5 | -0.9 |
| JFT | Otama | 1.76 | 314 | P | Pn | 00 02 48.0 | +0.1 |
| JMM | Marumori | 1.80 | 330 | P | Pn | 00 02 48.4 | 0.0 |
| BSO1 | Boso 1 | 1.83 | 206 | P | Pn | 00 02 48.5 | +0.2 |
| BSO1 | | | | S | Sn | 00 03 11.5 | +0.1 |
| BSO3 | Boso 3 | 1.91 | 218 | P | Pn | 00 02 49.8 | +0.2 |
| JAG | Ashikaga | 2.01 | 274 | P | Pn | 00 02 50.2 | -1.1 |
| MJAR | Matsushiro Arr | 3.02 | 275 | Pn | Pn | 00 03 05.5 | +0.3 |
| | 9.5nm,0.3s,baz=121,slow=8.8,SNR=37 | | | | | | |
| MJAR | | | | Sn | Sn | 00 03 44.1 | +2.6 |
| | 4.9nm,0.3s,baz=85,slow=26,SNR=6.3 | | | | | | |
| MJAR | | | | LR | LR | 00 04 19.0 | |
| | comp=Z,79nm,21.3s,baz=115,slow=44 | | | | | | |
| MAT | Matsushiro | 3.02 | 275 | P | Pn | 00 03 05.8 | +0.6 |
| MAT | | | | S | Sn | 00 03 42.5 | +1.0 |
| JHJ | Hachijo jima 2 | 3.65 | 210 | Pn | Pn | 00 03 13.8 | 0.0 |
| | 58nm,0.3s,baz=39,slow=19,SNR=16 | | | | | | |
| JHJ | | | | Sn | Sn | 00 03 52.8 | -4.1 |
| | 91nm,0.3s,baz=66,slow=23,SNR=8.9 | | | | | | |
| USRK | Ussuriysk Ar. | 10.94 | 319 | Pn | Pn | 00 04 58.2 | +4.3 |
| | 0.1nm,0.3s,baz=134,slow=4.2,SNR=2.4 | | | | | | |
| KSRS | Korea Array | 11.29 | 280 | Pn | Pn | 00 04 59.4 | +0.8 |
| | 0.2nm,0.3s,baz=87,slow=14,SNR=2.9 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 27.42 | 120 | T | T | 00 36 54.4 | |
| | baz=311 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 27.42 | 120 | T | T | 00 36 51.9 | |
| | baz=311 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 27.43 | 120 | T | T | 00 36 55.4 | |
| | baz=311 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 28.11 | 122 | T | T | 00 37 59.7 | |
| | baz=312,slow=75 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 28.11 | 123 | T | T | 00 37 52.5 | |
| | baz=312,slow=75 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 28.13 | 123 | T | T | 00 37 53.7 | |
| | baz=312,slow=75 | | | | | | |
| SONM | Songino Array | 28.54 | 305 | P | P | 00 08 14.4 | +1.2 |
| | 0.7nm,0.5s,baz=111,slow=8.4,SNR=4.3 | | | | | | |
| CMAR | Chiang Mai Arr | 41.73 | 257 | P | P | 00 10 06.6 | -0.1 |
| | 0.4nm,0.5s,baz=32,slow=8.6,SNR=3.9 | | | | | | |
| ZALV | Zalesovo Beam | 42.72 | 313 | P | P | 00 10 13.6 | -0.8 |
| | 0.4nm,0.4s,baz=101,slow=7.5,SNR=3.0 | | | | | | |
| MKAR | Makanchi Array | 44.86 | 303 | P | P | 00 10 32.0 | +0.2 |
| | 0.7nm,0.7s,baz=86,slow=8.6,SNR=5.8 | | | | | | |
| WRA | Warramunga Arr | 56.41 | 189 | P | P | 00 12 03.5 | +4.4 |
| | 0.5nm,0.5s,baz=0.9,slow=7.6,SNR=5.1 | | | | | | |
| ASAR | Alice Springs | 60.13 | 188 | LR | LR | 00 37 17.0 | |
| | comp=Z,158nm,20.9s,baz=240,slow=35 | | | | | | |
| KBZ | Khabaz | 71.69 | 311 | LR | LR | 00 47 07.8 | |
| | comp=Z,80nm,19.1s,baz=214,slow=38 | | | | | | |
| AKASG | Malin Array Be | 75.13 | 323 | LR | LR | 00 48 39.3 | |
| | comp=Z,58nm,18.2s,baz=290,slow=37 | | | | | | |

*IDC **06** 00:06:16.2±1.5, 6°.32S×128°.80E, h0km, mb3.7/2, mb1 4.0/5, mb1mx3.6/36, mbtmp3.9/5, ML3.8/3, Error ellipse: s-maj=56.4km s-min=26.8km az=77.0*
*AUST **06** 00:06:24.9, 5°.98S×129°.53E, h100km*
**ISC 06 00:06:18.2**±1.0**, 6°.29S**±0°.10×**129°.2E**±0°.2**, h10**km**, n11,** σ**2s.50**/7**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 4.55 | 43 | P | Pn | 00 07 27.2 | 0.0 |
| | baz=4.1,SNR=26 | | | | | | |
| SIJI | Sorong | 5.78 | 21 | Pn | Pn | 00 07 47.2 | +3.1 |
| | 6.9nm,0.3s,baz=37,slow=4.5,SNR=54 | | | | | | |
| SIJI | | | | Sn | Sn | 00 08 45.8 | -4.8 |
| | 8.8nm,0.3s,baz=250,slow=23,SNR=15 | | | | | | |
| SWI | Sorong | 5.78 | 21 | P | Pn | 00 07 48.0 | +3.9 |
| | baz=5.4,SNR=7.6 | | | | | | |
| MTN | Manton Dam | 6.80 | 164 | P | Pn | 00 08 06.4 | +8.3 |
| | baz=7.0,SNR=29 | | | | | | |
| KDU | Kakadu | 7.15 | 153 | P | Pn | 00 08 08.0 | +5.0 |
| | baz=7.3,SNR=12 | | | | | | |
| LUWI | Luwuk | 8.23 | 309 | P | Pn | 00 08 21.7 | +3.8 |
| | baz=8.4,SNR=4.7 | | | | | | |
| WRA | Warramunga Arr | 14.48 | 160 | Pn | Pn | 00 09 42.9 | -0.5 |
| | 0.2nm,0.3s,baz=339,slow=13,SNR=12 | | | | | | |
| WRA | | | | Sn | Sn | 00 12 11.2 | -13 |
| | 1.0nm,0.3s,baz=331,slow=24,SNR=17 | | | | | | |
| ASAR | Alice Springs | 17.87 | 166 | P | P | 00 10 28.0 | +0.2 |
| | 1.1nm,0.3s,baz=348,slow=9.6,SNR=30 | | | | | | |
| ASAR | | | | S | Sn | 00 13 38.2 | -8.4 |
| | 0.2nm,0.3s,baz=352,slow=25,SNR=4.2 | | | | | | |
| WRKA | Warakurna | 18.66 | 182 | P | Pn | 00 10 40.0 | +3.2 |
| | baz=19,SNR=19 | | | | | | |
| SONM | Songino Array | 57.51 | 342 | P | P | 00 16 05.8 | -2.0 |
| | 0.1nm,0.3s,baz=142,slow=5.4,SNR=2.1 | | | | | | |
| MKAR | Makanchi Array | 67.18 | 327 | P | P | 00 17 11.4 | -1.1 |
| | 0.9nm,0.4s,baz=119,slow=8.0,SNR=17 | | | | | | |

*NSSC **06** 00:13:40.8±1.3, 35°.65N×44°.86E, h227km±52km, ML3.4*
*ISK **06** 00:13:41.0, 35°.43N×45°.29E, h5km, ML4.1*
*ISN **06** 00:13:45.2±4.3, 35°.59N×44°.71E, h0km±15km, ML3.7*
*IDC **06** 00:13:46.5±3.7, 35°.67N×44°.50E, h0km, mb3.6/5, mb1 3.6/9, mb1mx3.4/40, mbtmp3.6/9, ML3.3/4, MS2.9/1, Ms1 2.9/1, ms1mx2.4/26, Error ellipse: s-maj=66.5km s-min=26.3km az=6.0*
*CSEM **06** 00:13:47.4±0.3, 35°.41N×44°.84E, h2km, ML3.6, Error ellipse: s-maj=8.0km s-min=6.1km az=50.0*
*TEH **06** 00:13:51.1, 35°.56N×44°.63E, h18km, ML3.6*
**ISC 06 00:13:47.1**±1.5**, 35°.42N**±0°.03×**44°.70E**±0°.03**, h7**km±10km**, n77,** σ**1s.79**/77**, mb3.6**/5**, Iraq**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IKRK | Kirkuk | 0.29 | 267 | ePg | x | 00 13 49.7 | |
| IKRK | | | | eSG | x | 00 13 57.8 | |
| IDHR | Dehrash | 1.56 | 117 | ePn | Pg | 00 14 19.5 | +2.5 |
| IDHR | | | | eSg | Sg | 00 14 43.9 | +6.7 |
| IDHR | | | | e | | 00 14 45.5 | |
| | comp=Z,9µm,0.1s | | | | | | |
| IDHR | Dehrash | 1.56 | 117 | ePn | Pg | 00 14 19.5 | +2.5 |
| MSL | Mosul | 1.62 | 308 | ePn | x | 00 14 14.0 | |
| MSL | | | | iSn | x | 00 14 34.4 | |
| IGHG | Ghaleghazi | 1.88 | 125 | ePn | Pg | 00 14 24.4 | +1.3 |
| IGHG | | | | eSg | Sg | 00 14 53.8 | +6.2 |
| IGHG | | | | e | | 00 15 13.5 | |
| | comp=Z,4µm,0.3s | | | | | | |
| ILIN | Lien | 1.92 | 104 | ePn | Pn | 00 14 17.9 | -2.5 |
| ILIN | | | | e | | 00 14 55.0 | |
| | comp=Z,3µm,0.3s | | | | | | |
| ILIN | Lien | 1.92 | 104 | ePn | Pn | 00 14 17.9 | -2.5 |
| IVIS | Veis | 1.98 | 116 | ePn | Pn | 00 14 19.8 | -1.3 |
| IVIS | | | | e | | 00 14 57.6 | |
| | comp=Z,2µm,0.3s | | | | | | |
| IVIS | Veis | 1.98 | 116 | ePn | Pn | 00 14 19.8 | -1.3 |
| CUKT | Cukurca | 2.03 | 335 | ePN | Pn | 00 14 20.1 | -1.7 |
| CUKT | | | | eSN | Sn | 00 14 50.0 | +2.5 |
| CUKT | Cukurca | 2.03 | 335 | ePn | Pn | 00 14 20.1 | -1.7 |
| CUKT | | | | eSn | Sn | 00 14 50.0 | +2.5 |
| BHD | Baghdad | 2.16 | 187 | ePN | x | 00 14 25.7 | |
| BHD | | | | iSn | x | 00 14 55.3 | |
| BHD | Baghdad | 2.16 | 187 | ePn | Pn | 00 14 25.7 | +2.3 |
| | SNR=39 | | | | | | |
| BHD | | | | iSn | Sb | 00 14 55.3 | +1.9 |
| | SNR=3.0 | | | | | | |
| HKR | Hakkari | 2.29 | 341 | ePN | Pn | 00 14 23.9 | -1.6 |
| HKR | | | | eSN | Sn | 00 14 55.4 | +1.4 |
| HKR | Hakkari | 2.29 | 341 | ePn | Pn | 00 14 23.9 | -1.6 |
| HKR | | | | eSn | Sn | 00 14 55.4 | +1.4 |
| IAZR | Azarshahr | 2.48 | 24 | ePn | Pn | 00 14 29.6 | +1.4 |
| IAZR | | | | e | | 00 15 18.9 | |
| | comp=Z,8µm,0.3s | | | | | | |
| IAZR | Azarshahr | 2.48 | 24 | ePn | Pn | 00 14 29.6 | +1.4 |
| IBDR | Badra | 2.52 | 156 | ePn | x | 00 14 28.6 | |
| IBDR | | | | iSn | x | 00 15 01.1 | |
| IKOM | Komasi | 2.62 | 117 | ePn | Pn | 00 14 28.9 | -1.1 |
| IKOM | | | | e | | 00 15 21.6 | |
| | comp=Z,2µm,0.3s | | | | | | |
| IKOM | Komasi | 2.62 | 117 | ePn | Pn | 00 14 28.9 | -1.1 |
| SIRT | Sirnak | 2.77 | 319 | ePN | Pn | 00 14 32.6 | +0.7 |
| SIRT | | | | eSN | Sb | 00 15 10.2 | -0.8 |
| SIRT | Sirnak | 2.77 | 319 | ePn | Pn | 00 14 32.6 | +0.7 |
| SIRT | | | | eSn | Sb | 00 15 10.2 | -0.8 |
| IBST | Bostanabad | 2.88 | 37 | ePn | Pn | 00 14 34.9 | +1.3 |
| IBST | | | | e | | 00 15 33.9 | |
| | comp=Z,1µm,0.3s | | | | | | |
| IBST | Bostanabad | 2.88 | 37 | ePn | Pn | 00 14 34.9 | +1.3 |
| ISHB | Shabestar | 2.95 | 14 | ePn | Pn | 00 14 35.1 | +0.5 |
| ISHB | | | | e | | 00 15 30.8 | |
| | comp=Z,2µm,0.3s | | | | | | |
| ITBZ | Tabriz | 3.04 | 22 | ePn | Pn | 00 14 36.4 | +0.6 |
| ITBZ | | | | e | | 00 14 44.3 | |
| | comp=Z,975nm,0.2s | | | | | | |
| ITBZ | | | | eSg | Sg | 00 15 22.4 | -2.4 |
| ITBZ | Tabriz | 3.04 | 22 | ePn | Pn | 00 14 36.4 | +0.6 |
| ITBZ | | | | eSg | Sg | 00 15 22.4 | -2.4 |
| MZRK | Al-Mazaregh | 3.32 | 278 | eP | Pn | 00 14 39.2 | -0.3 |
| MZRK | | | | eS | Sn | 00 15 19.4 | +0.2 |
| MZRK | | | | AML | AML | 00 15 41.8 | |
| | comp=Z,177nm,0.5s | | | | | | |
| MZRK | Al-Mazaregh | 3.32 | 278 | eP | Pn | 00 14 39.2 | -0.3 |
| MZRK | | | | eS | Sn | 00 15 19.4 | +0.2 |
| | comp=Z,177nm,0.5s | | | | | | |
| IMRD | Marand | 3.39 | 13 | ePn | Pn | 00 14 41.5 | +1.0 |
| IMRD | | | | e | | 00 14 54.2 | |
| | comp=Z,1µm,0.2s | | | | | | |
| IMRD | Marand | 3.39 | 13 | ePn | Pn | 00 14 41.5 | +1.0 |
| ISRB | Sarab | 3.39 | 44 | ePn | Pn | 00 14 42.3 | +1.8 |
| ISRB | | | | e | | 00 14 53.6 | |
| | comp=Z,2µm,0.4s | | | | | | |
| ISRB | Sarab | 3.39 | 44 | ePn | Pn | 00 14 42.3 | +1.8 |
| IHRS | Heris | 3.45 | 32 | ePn | Pn | 00 14 42.8 | +1.4 |
| IHRS | | | | e | | 00 15 58.8 | |
| | comp=Z,937nm,0.4s | | | | | | |
| IHRS | Heris | 3.45 | 32 | ePn | Pn | 00 14 42.8 | +1.4 |
| KBSD | Kabsdagh | 3.71 | 296 | eP | Pn | 00 14 41.7 | -3.2 |
| KBSD | | | | eS | Sn | 00 15 26.4 | -2.5 |
| KBSD | | | | AML | AML | 00 15 44.0 | |
| | comp=Z,74nm,0.5s | | | | | | |
| KBSD | Kabsdagh | 3.71 | 296 | eP | Pn | 00 14 41.7 | -3.2 |
| KBSD | | | | eS | Sn | 00 15 26.4 | -2.5 |
| | comp=Z,74nm,0.5s | | | | | | |
| CLDR | Caldiran | 3.77 | 351 | ePN | Pn | 00 14 43.8 | -2.1 |
| CLDR | Caldiran | 3.77 | 351 | ePn | Pn | 00 14 43.8 | -2.1 |
| SFNV | Sufian | 3.86 | 286 | eP | Pn | 00 14 44.4 | -2.5 |
| SFNV | | | | eS | Sn | 00 15 31.8 | -0.7 |
| SFNV | | | | AML | AML | 00 15 59.2 | |
| | comp=Z,197nm,0.5s | | | | | | |
| SFNV | Sufian | 3.86 | 286 | eP | Pn | 00 14 44.4 | -2.5 |
| SFNV | | | | eS | Sn | 00 15 31.8 | -0.7 |
| | comp=Z,197nm,0.5s | | | | | | |
| SVAN | Silvan-Diyarba | 3.92 | 315 | ePN | Pn | 00 14 49.2 | +1.6 |
| SVAN | Silvan-Diyarba | 3.92 | 315 | ePn | Pn | 00 14 49.3 | +1.6 |
| MAZI | Mazidag | 3.99 | 302 | ePN | Pn | 00 14 51.1 | +2.3 |
| MAZI | Mazidag | 3.99 | 302 | ePn | Pn | 00 14 51.1 | +2.3 |
| RTB | Rutbah | 4.35 | 238 | ePN | x | 00 14 57.2 | |
| RTB | | | | eSN | x | 00 15 44.1 | |
| RTB | Rutbah | 4.35 | 238 | ePn | Pn | 00 14 57.2 | +3.6 |
| | SNR=39 | | | | | | |
| DIY | Diyarbakir | 4.37 | 306 | ePn | Pn | 00 14 57.6 | +3.7 |
| AGRB | Hanur-Agry | 4.37 | 342 | ePN | Pn | 00 14 53.8 | -0.2 |
| AGRB | Hanur-Agry | 4.37 | 342 | ePn | Pn | 00 14 53.8 | -0.2 |
| MNKR | ALMNKUR | 4.45 | 278 | eP | Pn | 00 14 52.6 | -2.4 |
| MNKR | | | | eS | Sn | 00 15 44.3 | -2.8 |
| MNKR | | | | AML | AML | 00 16 18.1 | |
| | comp=Z,331nm,0.5s | | | | | | |
| MNKR | ALMNKUR | 4.45 | 278 | eP | Pn | 00 14 52.6 | -2.4 |
| MNKR | | | | eS | Sn | 00 15 44.3 | -2.8 |
| | comp=Z,331nm,0.5s | | | | | | |
| DYBB | Diyarbakir | 4.45 | 306 | ePN | Pn | 00 14 57.6 | +2.5 |
| VRTB | Varto-Mus | 4.54 | 326 | ePN | Pn | 00 14 57.2 | +0.8 |
| VRTB | Varto-Mus | 4.54 | 326 | ePn | Pn | 00 14 57.2 | +0.8 |
| NSR | Nassriya | 4.56 | 164 | ePn | x | 00 14 56.1 | |
| NSR | | | | iSn | x | 00 15 50.4 | |
| NSR | Nassriya | 4.56 | 164 | ePn | Pn | 00 14 56.1 | -0.3 |
| | SNR=39 | | | | | | |
| NSR | | | | iSn | Sn | 00 15 50.4 | +0.7 |
| | SNR=3.0 | | | | | | |
| KSRV | Kasrt alli | 4.66 | 277 | eP | Pn | 00 14 55.5 | -2.4 |
| KSRV | | | | eS | Sn | 00 15 49.7 | -2.6 |
| KSRV | | | | AML | AML | 00 16 18.4 | |
| | comp=Z,67nm,0.5s | | | | | | |
| KSRV | Kasrt alli | 4.66 | 277 | eP | Pn | 00 14 55.5 | -2.4 |
| KSRV | | | | eS | Sn | 00 15 49.7 | -2.6 |
| | comp=Z,67nm,0.5s | | | | | | |
| BNGB | Bing˘¶l | 4.80 | 319 | ePN | Pn | 00 15 01.5 | +1.6 |
| BINT | Bingol | 4.82 | 317 | ePn | Pn | 00 15 01.5 | +1.3 |
| URFA | Urfa | 5.15 | 295 | ePN | Pn | 00 15 08.8 | +4.1 |
| URFA | Urfa | 5.15 | 295 | ePn | Pn | 00 15 08.8 | +4.1 |
| SVRC | Sivrice-ELAZID | 5.24 | 306 | ePN | Pn | 00 15 09.2 | +3.2 |
| SVRC | Sivrice-ELAZID | 5.24 | 306 | ePn | Pn | 00 15 09.2 | +3.2 |
| PTK | Pertek | 5.48 | 311 | ePN | Pn | 00 15 11.8 | +2.6 |
| PTK | Pertek | 5.48 | 311 | ePn | Pn | 00 15 11.9 | +2.6 |
| QAM | Ghamsar | 5.80 | 105 | ePn | Pn | 00 15 16.4 | +2.7 |
| QAM | | | | e | | 00 15 17.5 | |
| | comp=Z,222nm,0.2s | | | | | | |
| GEYT | Alibeck | 11.06 | 73 | Pn | Pn | 00 16 28.0 | +2.3 |
| | comp=Z,0.1nm,0.3s,baz=280,slow=17,SNR=4.1 | | | | | | |
| IDI | Anoyia | 16.17 | 275 | Pn | Pn | 00 17 33.8 | -1.1 |
| | comp=Z,0.1nm,0.3s,baz=28,slow=15,SNR=2.3 | | | | | | |
| IDI | | | | LR | LR | 00 24 37.9 | |
| | comp=Z,45nm,20.8s,baz=290,slow=41 | | | | | | |
| AKTO | Aktyubinsk | 17.86 | 29 | P | P | 00 17 56.4 | -0.2 |
| | comp=Z,0.1nm,0.3s,baz=180,slow=10,SNR=4.0 | | | | | | |
| AKASG | Malin Array Be | 18.95 | 328 | P | P | 00 18 05.2 | -3.3 |
| | comp=Z,0.2nm,0.3s,baz=132,slow=12,SNR=3.6 | | | | | | |
| ARU | Arti | 23.04 | 20 | P | P | 00 18 51.6 | -1.0 |
| | comp=Z,0.2nm,0.4s,baz=53,slow=20,SNR=2.6 | | | | | | |
| BVAR | Borovoye Array | 25.26 | 38 | P | P | 00 19 11.6 | -2.0 |
| | comp=Z,0.4nm,0.6s,baz=226,slow=7.2,SNR=3.5 | | | | | | |
| FINES | FINESS Array B | 28.61 | 341 | P | P | 00 19 41.2 | -2.5 |
| | comp=Z,3.3nm,1.0s,baz=149,slow=9.1,SNR=5.2 | | | | | | |
| MKAR | Makanchi Array | 30.25 | 56 | P | P | 00 19 59.0 | +0.5 |
| | comp=Z,0.9nm,0.8s,baz=255,slow=8.3,SNR=8.5 | | | | | | |
| ARCES | ARCESS Array B | 35.77 | 349 | P | P | 00 20 44.7 | -1.6 |
| | comp=Z,0.6nm,0.6s,baz=168,slow=10,SNR=2.7 | | | | | | |

*MOS **06** 00:22:49.8±1.0, 53°.61N×158°.14E, h200km, mb4.1/1, Error ellipse: s-maj=25.2km s-min=9.9km az=78.9*
*KRSC **06** 00:22:49.9±0.9, 53°.65N×158°.27E, h198km±8km, ML4.0*
*ISCJB **06** 00:22:50.4±0.5, 53°.61N±0°.05×158°.3E±0°.1, h200km±4km, mb3.0/4, Error ellipse: s-maj=12.8km s-min=5.9km az=28.2*
*IDC **06** 00:22:51.5±0.9, 53°.60N×157°.96E, h193km±6km, mb2.9/4, mb1 3.2/4, mb1mx2.9/34, mbtmp3.4/4, Error ellipse: s-maj=34.9km s-min=24.0km az=7.0*

**ISC 06 00:22:51.0±0.8, 53°.59N±0°.05×158°.37E±0°.06, h199km±5km, n51, σ1s.06/80, mb3.1/4, 1D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GNL** | **Ganaly** | **0.28** | **293** | *i* P | **Pn** | **00 23 17.0** | **-0.4** |
| GNL | | | | *e*S | **Sn** | **00 23 37.0** | **-0.9** |
| **GNL** | **Ganaly** | **0.28** | **293** | PN | **Pn** | **00 23 17.0** | **-0.4** |
| GNL | | | | S | **Sn** | **00 23 37.0** | **-0.9** |
| **KRX** | **Arik** | **0.28** | **144** | *e*P | **Pn** | **00 23 17.7** | **+0.2** |
| KRX | | | | *e*S | **Sn** | **00 23 38.6** | **+0.6** |
| **KOK** | **Koryaka** | **0.34** | **151** | *i* P | **Pn** | **00 23 18.0** | **+0.4** |
| KOK | | | | *e*S | **Sn** | **00 23 38.7** | **+0.6** |
| **KOK** | **Koryaka** | **0.34** | **151** | PN | **Pn** | **00 23 18.0** | **+0.4** |
| KOK | | | | S | **Sn** | **00 23 38.7** | **+0.6** |
| **AVH** | **Avacha** | **0.39** | **145** | *i* P | **Pn** | **00 23 18.0** | **+0.3** |
| AVH | | | | *e*S | **Sn** | **00 23 38.9** | **+0.6** |
| **AVH** | **Avacha** | **0.39** | **145** | PN | **Pn** | **00 23 18.0** | **+0.3** |
| AVH | | | | S | **Sn** | **00 23 38.9** | **+0.6** |
| **SMAR** | **Somma** | **0.41** | **141** | *e*P | **Pn** | **00 23 18.2** | **+0.2** |
| **SMAR** | **Somma** | **0.41** | **141** | PN | **Pn** | **00 23 18.2** | **+0.2** |
| **SDLR** | **Sedlovina** | **0.44** | **135** | *i* P | **Pn** | **00 23 17.8** | **-0.1** |
| SDLR | | | | *i* S | **Sn** | **00 23 39.0** | **+0.4** |
| **SDLR** | **Sedlovina** | **0.44** | **135** | PN | **Pn** | **00 23 17.8** | **-0.1** |
| SDLR | | | | S | **Sn** | **00 23 39.0** | **+0.4** |
| **UGLR** | **Uglovaya** | **0.47** | **144** | *e*P | **Pn** | **00 23 18.2** | **+0.2** |
| **PET** | **Petropavlovsk** | **0.59** | **163** | *i* P | **Pn** | **00 23 18.4** | **+0.1** |
| PET | | | | *i* S | **Sn** | **00 23 39.3** | **-0.1** |
| **PET** | **Petropavlovsk** | **0.59** | **163**⇓ | *i*PN | **Pn** | **00 23 18.5** | **+0.1** |
| PET | | | | *e*S | **Sn** | **00 23 39.1** | **-0.3** |
| PET | | | | pmax | pmax | | |
| | comp=Z,27nm,0.5s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,600nm,2.0s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,397nm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,147nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **0.62** | **220** | P | **Pn** | **00 23 18.2** | **-0.3** |
| | comp=E,10.0nm,0.3s,baz=70,slow=6.4,SNR=46 | | | | | | |
| PETK | | | | LR | LR | 00 23 30.3 | |
| | comp=E,31nm,19.9s,baz=237,slow=75 | | | | | | |
| PETK | | | | S | **Sn** | **00 23 39.2** | **-0.6** |
| | comp=E,2.7nm,0.3s,baz=74,slow=11,SNR=3.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **0.62** | **220** | PN | **Pn** | **00 23 18.2** | **-0.3** |
| PETK | | | | S | **Sn** | **00 23 39.2** | **-0.6** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.3s | | | | | | |
| PETK | | | | smax | smax | | |
| | comp=N,3.0nm,0.3s | | | | | | |
| **NLC** | **Nalytchevo** | **0.72** | **125** | *i* P | **Pn** | **00 23 19.0** | **+0.1** |
| NLC | | | | *i* S | **Sn** | **00 23 40.4** | **0.0** |
| **NLC** | **Nalytchevo** | **0.72** | **125** | PN | **Pn** | **00 23 19.0** | **+0.1** |
| NLC | | | | S | **Sn** | **00 23 40.4** | **0.0** |
| **KII** | **Karymskiy** | **0.78** | **54** | *e*P | **Pn** | **00 23 19.3** | **-0.1** |
| **KII** | **Karymskiy** | **0.78** | **54** | PN | **Pn** | **00 23 19.3** | **-0.1** |
| **APC** | **Apacha** | **0.98** | **228** | *i* P | **Pn** | **00 23 20.6** | **+0.1** |
| APC | | | | *e*S | **Sn** | **00 23 42.8** | **-0.5** |
| **APC** | **Apacha** | **0.98** | **228** | PN | **Pn** | **00 23 20.6** | **+0.1** |
| APC | | | | S | **Sn** | **00 23 42.8** | **-0.5** |
| **SPN** | **Mys Shipunski** | **1.11** | **116** | *i* P | **Pn** | **00 23 20.7** | **-0.7** |
| SPN | | | | *e*S | **Sn** | **00 23 43.4** | **-1.4** |
| **SPN** | **Mys Shipunski** | **1.11** | **116** | PN | **Pn** | **00 23 20.7** | **-0.7** |
| SPN | | | | S | **Sn** | **00 23 43.4** | **-1.4** |
| **MTVR** | **Mutnovka** | **1.11** | **186** | *i* P | **Pn** | **00 23 22.3** | **+0.7** |
| MTVR | | | | *e*S | **Sn** | **00 23 46.4** | **+1.1** |
| **RUS** | **Russkaya** | **1.16** | **176** | *i* P | **Pn** | **00 23 21.3** | **-0.5** |
| RUS | | | | *i* S | **Sn** | **00 23 44.5** | **-1.0** |
| **RUS** | **Russkaya** | **1.16** | **176** | PN | **Pn** | **00 23 21.3** | **-0.5** |
| RUS | | | | S | **Sn** | **00 23 44.5** | **-1.0** |
| **ASAK** | **Asacha** | **1.24** | **193** | *i* P | **Pn** | **00 23 22.9** | **+0.4** |
| **MIPR** | **Malaya Ipel'ka** | **1.64** | **217** | *e*P | **Pn** | **00 23 25.6** | **-0.3** |
| **KZV** | **Kizimen** | **1.90** | **36** | *e*P | **Pn** | **00 23 28.6** | **+0.1** |
| KZV | | | | *e*S | **Sn** | **00 23 57.3** | **-0.5** |
| **TUMR** | **Tumrok** | **1.99** | **31** | *i* P | **Pn** | **00 23 29.8** | **+0.4** |
| TUMR | | | | *i* S | **Sn** | **00 23 59.7** | **+0.3** |
| **TUMR** | **Tumrok** | **1.99** | **31** | PN | **Pn** | **00 23 29.8** | **+0.4** |
| TUMR | | | | S | **Sn** | **00 23 59.7** | **+0.3** |
| **MKZ** | **Mys Kozlova** | **2.21** | **63** | *i* P | **Pn** | **00 23 30.8** | **-0.7** |
| MKZ | | | | *e*S | **Sn** | **00 23 59.7** | **-3.4** |
| **MKZ** | **Mys Kozlova** | **2.21** | **63** | PN | **Pn** | **00 23 30.8** | **-0.7** |
| MKZ | | | | S | **Sn** | **00 23 59.7** | **-3.4** |
| **PAU** | **Pauzhetka** | **2.33** | **205** | *i* P | **Pn** | **00 23 33.6** | **+0.7** |
| **PAU** | **Pauzhetka** | **2.33** | **205** | PN | **Pn** | **00 23 33.6** | **+0.7** |
| **ESO** | **Esso** | **2.35** | **5** | *e*P | **Pn** | **00 23 32.6** | **-0.5** |
| **ESO** | **Esso** | **2.35** | **5** | PN | **Pn** | **00 23 32.6** | **-0.5** |
| **KMNR** | **Kamenistaya** | **2.43** | **26** | *e*P | **Pn** | **00 23 34.8** | **+0.8** |
| **KMNR** | **Kamenistaya** | **2.43** | **26** | PN | **Pn** | **00 23 34.8** | **+0.8** |
| **KOZ** | **Kozyrevsk** | **2.62** | **19** | *e*P | **Pn** | **00 23 34.6** | **-1.5** |
| **KOZ** | **Kozyrevsk** | **2.62** | **19** | PN | **Pn** | **00 23 34.6** | **-1.5** |
| **SRDR** | **Sredinnyy** | **2.84** | **15** | *e*P | **Pn** | **00 23 38.8** | **+0.1** |
| **SRDR** | **Sredinnyy** | **2.84** | **15** | PN | **Pn** | **00 23 38.8** | **+0.1** |
| **SKR** | **Severo-Kuril's** | **3.22** | **206** | *e*P | **Pn** | **00 23 44.0** | **+0.8** |
| SKR | | | | *e*S | **Sn** | **00 24 25.0** | **+1.0** |
| **SKR** | **Severo-Kuril's** | **3.22** | **206** | *e*PN | **Pn** | **00 23 40.4** | **-2.8** |
| SKR | | | | *e*S | **Sn** | **00 24 20.0** | **-4.0** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,70nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,150nm,0.3s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,150nm,0.3s | | | | | | |
| **KBG** | **Krutoberegovo** | **3.66** | **41** | *i* P | **Pn** | **00 23 50.0** | **+1.6** |
| **SONM** | **Songino Array** | **32.78** | **281** | P | **P** | **00 29 04.7** | **-0.5** |
| | comp=E,0.3nm,0.5s,baz=51,slow=11,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.01** | **294** | P | **P** | **00 31 00.5** | **-1.5** |
| | comp=E,0.4nm,0.5s,baz=54,slow=6.7,SNR=5.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.39** | **66** | P | **P** | **00 33 52.0** | **+2.6** |
| | comp=E,0.2nm,0.4s,baz=310,slow=4.7,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **76.11** | **203** | P | **P** | **00 34 17.3** | **+0.7** |
| | comp=E,0.2nm,0.7s,baz=25,slow=6.5,SNR=2.4 | | | | | | |

*CSEM **06** 00:26:41.7, 15°.18N×44°.20E, h3km, ML3.8, After DHMR*

**DHMR 06 00:26:41.7±1.1, 15°.18N×44°.20E, h3km±11km, ML3.8, 1C-3D, Western Arabian Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANA** | **San'a** | **0.20** | **2**⇑ | *i*P | Pg | 00 26 45.6 | -0.4 |
| SANA | | | | *i* S | Sg | 00 26 48.8 | -0.2 |
| SANA | | | | AML | AML | 00 26 53.1 | |
| | comp=E,28μm,0.5s | | | | | | |
| **DHBB** | **Dhamar BB** | **0.64** | **163** | *i* P | Pg | 00 26 53.8 | -0.6 |
| DHBB | | | | *i* S | Sg | 00 27 03.1 | +0.2 |
| **DHBB** | **Dhamar BB** | **0.64** | **163** | *i* P | Pg | 00 26 53.8 | -0.5 |
| DHBB | | | | *i* S | Sg | 00 27 03.1 | +0.2 |
| **UDYN** | **Al 'Udayn** | **1.23** | **191** | *i* P | Pg | 00 27 03.7 | -1.9 |
| UDYN | | | | *i* S | Sb | 00 27 22.0 | -0.2 |
| **UDYN** | **Al 'Udayn** | **1.23** | **191** | *i* P | Pg | 00 27 03.7 | -1.8 |
| UDYN | | | | *i* S | Sb | 00 27 22.0 | -0.2 |
| **LBOS** | | **1.65** | **142**⇓ | *i*P | Pb | 00 27 12.7 | -0.6 |
| LBOS | | | | *i* S | Sg | 00 27 36.0 | +0.5 |
| **BDHA** | **Al Bayda'** | **1.79** | **132**⇓ | *i*P | Pn | 00 27 14.6 | +0.8 |
| BDHA | | | | *i* S | Sb | 00 27 39.1 | +0.6 |
| BDHA | | | | AML | AML | 00 27 43.5 | |
| | comp=N,529nm,0.5s | | | | | | |
| **BDHA** | **Al Bayda'** | **1.79** | **132**⇓ | *i*P | Pn | 00 27 14.6 | +0.8 |
| BDHA | | | | *i* S | Sb | 00 27 39.1 | +0.6 |
| | comp=N,265nm,0.5s | | | | | | |

*ISCJB **06** 00:49:12.3±0.4, 52°.83S±0°.06×10°.5E±0°.2, h10km, mb4.5/18, MS4.4/15, Error ellipse: s-maj=15.6km s-min=8.3km az=11.9*

*IDC **06** 00:49:12.4±0.5, 52°.81S×10°.48E, h0km, mb4.4/15, mb1 4.5/16, mb1mx4.4/24, mbtmp4.4/16, ML4.0/1, MS4.4/16, Ms1 4.4/16, ms1mx4.3/19, Error ellipse: s-maj=21.6km s-min=14.9km az=93.0*

*NEIC **06** 00:49:13.8±0.3, 52°.82S×10°.52E, h10km, mb4.8/4, Error ellipse: s-maj=13.4km s-min=8.5km az=106.0*

*GCMT **06** 00:49:13.8±0.2, 52°.84S×10°.88E, h12km, MW5.0/82, Moment Tensor Solution. s22,c25; s82,c124; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.38±.12; $M_{\theta\theta}$4.60±.09; $M_{\phi\phi}$-1.22±.11; $M_{r\theta}$1.31±.29; $M_{\theta\phi}$-1.38±.09; $M_{\phi r}$-0.83±.39; Best double couple: $M_0$4.45600×$10^{16}$ NP1:$\phi_s$295.00000°,δ56.00000°,λ-74.00000°. NP2: $\phi_s$88.00000°,δ37.00000°,λ-112.00000°. Principal axes: T 5.1620, Plg10.0000°, Azm13.0000°; N -1.4110, Plg13.0000°, Azm106.0000°; P -3.7510, Plg74.0000°, Azm247.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*AWI **06** 00:49:25.3, 53°.79S×11°.08E*

**ISC 06 00:49:13.8±0.5, 52°.82S±0°.08×10°.6E±0°.1, h10km, n48, σ0s.83/31, mb4.7/18, MS4.4/15, 1D, Southwest of Africa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **19.82** | **199** | P | **Pn** | **00 53 45.5** | **-0.1** |
| **SNAA** | **Sanae** | **19.83** | **192** | P | **P** | **00 53 44.9** | **+0.6** |
| **SNAA** | **Sanae** | **19.83** | **192** | P | **P** | **00 53 45.1** | **+0.8** |
| | 0.4nm,0.3s,baz=27,slow=13,SNR=41 | | | | | | |
| SNAA | | | | S | S | 00 57 13.5 | -14 |
| | 0.1nm,0.3s,baz=323,slow=20,SNR=3.0 | | | | | | |
| SNAA | | | | LR | LR | 00 59 38.3 | |
| | comp=Z,677nm,21.2s,baz=14,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **19.83** | **192** | *e*P | **P** | **00 53 44.8** | **+0.5** |
| | 29nm,0.9s | | | | | | |
| SNAA | | | | S | S | 00 57 13.5 | -14 |
| **VNA2** | **Neumayer--Watz** | **19.88** | **197** | P | **Pn** | **00 53 46.8** | **+0.3** |
| | baz=22,slow=13 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **20.57** | **199** | P | **P** | **00 53 53.3** | **+1.0** |
| **SYO** | **Syowa Base** | **21.16** | **151**⇓ | *e*P | **P** | **00 53 57.3** | **-1.3** |
| **SUR** | **Sutherland** | **21.73** | **24** | *e*P | **P** | **00 54 05.2** | **0.0** |
| | 204nm,1.9s | | | | | | |
| **BOSA** | **Boshof** | **26.51** | **30** | P | **P** | **00 54 51.7** | **+0.2** |
| | 3.9nm,1.1s,baz=200,slow=12,SNR=3.3 | | | | | | |
| BOSA | | | | LR | LR | 01 03 25.9 | |
| | comp=Z,1μm,20.5s,baz=202,slow=32 | | | | | | |
| **MAW** | **Mawson** | **28.80** | **141** | LR | LR | 01 04 14.0 | |
| | comp=Z,514nm,21.1s,baz=278,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **30.00** | **28** | P | **P** | **00 55 24.1** | **+1.5** |
| | 2.0nm,0.7s,baz=202,slow=10.0,SNR=3.8 | | | | | | |
| LBTB | | | | LR | LR | 01 05 59.3 | |
| | comp=Z,1μm,18.7s,baz=208,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **37.42** | **180** | P | **P** | **00 56 26.8** | **+0.1** |
| | 9.1nm,1.0s,baz=224,slow=6.9,SNR=19 | | | | | | |
| **QSPA** | **South Pole Qui** | **37.42** | **180** | *e*P | **P** | **00 56 26.4** | **-0.3** |
| | 36nm,1.5s | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **48.28** | **326** | T | T | 01 49 44.5 | |
| | baz=160,slow=75,SNR=11 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **48.30** | **326** | T | T | 01 49 46.9 | |
| | baz=160,slow=75,SNR=12 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **48.30** | **326** | T | T | 01 49 48.7 | |
| | baz=160,slow=75,SNR=8.9 | | | | | | |
| **VNDA** | **Vanda** | **48.71** | **172** | P | **P** | **00 57 58.3** | **+0.7** |
| | 6.2nm,0.9s,baz=226,slow=7.4,SNR=24 | | | | | | |
| VNDA | | | | LR | LR | 01 17 33.6 | |
| | comp=Z,1μm,20.0s,baz=195,slow=35 | | | | | | |
| **TRQA** | **Tornquist** | **50.84** | **256** | *e*P | **P** | **00 58 15.2** | **+0.8** |
| | 24nm,1.4s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **56.10** | **33** | LR | LR | 01 22 54.5 | |
| | comp=Z,549nm,18.2s,baz=168,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | **56.25** | **270** | P | **P** | **00 58 54.1** | **-0.1** |
| | 8.5nm,1.1s,baz=112,slow=6.1,SNR=8.3 | | | | | | |
| CPUP | | | | LR | LR | 01 19 07.0 | |
| | comp=Z,157nm,21.2s,baz=156,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **58.82** | **286** | P | **P** | **00 59 11.8** | **-0.7** |
| | 10nm,1.1s,baz=143,slow=10.0,SNR=9.3 | | | | | | |
| BDFB | | | | LR | LR | 01 19 31.5 | |
| | comp=Z,245nm,19.7s,baz=138,slow=31 | | | | | | |
| **DBIC** | **Dimbokro** | **60.69** | **342** | P | **P** | **00 59 24.3** | **-0.9** |
| | 3.8nm,0.7s,baz=142,slow=7.8,SNR=6.0 | | | | | | |
| DBIC | | | | LR | LR | 01 19 49.2 | |
| | comp=Z,418nm,21.4s,baz=136,slow=30 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.14** | **351** | P | **P** | **01 00 00.9** | **-0.2** |
| | 0.8nm,0.6s,baz=174,slow=6.2,SNR=18 | | | | | | |
| TORD | | | | LR | LR | 01 23 12.2 | |
| | comp=Z,126nm,20.6s,baz=170,slow=31 | | | | | | |
| **H08N3** | **Diego Garcia H** | **67.35** | **69** | T | T | 02 13 32.2 | |
| | baz=216,slow=76,SNR=15 | | | | | | |
| **H08N1** | **Diego Carcia H** | **67.37** | **70** | T | T | 02 13 29.7 | |
| | baz=216,slow=76,SNR=11 | | | | | | |
| **H08N2** | **Diego Garcia H** | **67.38** | **69** | T | T | 02 13 32.6 | |
| | baz=216,slow=76,SNR=13 | | | | | | |
| **LPAZ** | **La Paz** | **70.38** | **269** | P | **P** | **01 00 28.9** | **+0.2** |
| | 6.2nm,1.0s,baz=127,slow=5.3,SNR=19 | | | | | | |
| LPAZ | | | | LR | LR | 01 29 15.6 | |
| | comp=Z,117nm,19.7s,baz=112,slow=34 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **70.39** | **122** | T | T | 02 17 57.2 | |
| | baz=219,slow=75,SNR=100 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **70.40** | **122** | T | T | 02 17 58.2 | |
| | baz=219,slow=75,SNR=103 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **70.40** | **122** | T | T | 02 17 55.3 | |
| | baz=219,slow=75,SNR=90 | | | | | | |
| **RAYN** | **Ar Rayn** | **81.88** | **32** | *e*P | **P** | **01 01 33.5** | **+0.3** |
| | 9.5nm,1.4s | | | | | | |
| **MDT** | **Midelt** | **86.30** | **347** | P | **P** | **01 01 55.9** | **+0.4** |
| | 1.9nm,1.1s,baz=253,slow=4.4,SNR=2.3 | | | | | | |
| **KEST** | **Kesra** | **88.19** | **359** | P | **P** | **01 02 04.9** | **+0.4** |
| | 3.6nm,0.9s,baz=180,slow=10,SNR=2.3 | | | | | | |
| KEST | | | | LR | LR | 01 40 38.3 | |
| | comp=Z,137nm,18.2s,baz=204,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **89.35** | **130** | P | **P** | **01 02 10.6** | **+0.1** |
| | 6.3nm,1.1s,baz=212,slow=4.5,SNR=26 | | | | | | |
| **ROSC** | **El Rosal** | **90.75** | **277** | LR | LR | 01 39 41.2 | |
| | comp=Z,195nm,20.2s,baz=171,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **92.75** | **128** | P | **P** | **01 02 25.6** | **-0.7** |
| | 0.8nm,1.0s,baz=211,slow=4.4,SNR=5.4 | | | | | | |
| **ESDC** | **Sonseca Array** | **92.98** | **349** | P | **P** | **01 02 27.7** | **+1.0** |
| | 1.7nm,0.7s,baz=175,slow=4.4,SNR=8.3 | | | | | | |
| ESDC | | | | LR | LR | 01 43 15.0 | |
| | comp=Z,156nm,18.1s,baz=5.0,slow=35 | | | | | | |
| **BRTR** | **Keskin Array B** | **94.32** | **18** | P | **P** | **01 02 33.2** | **+0.2** |
| | 0.3nm,0.6s,baz=192,slow=13,SNR=2.7 | | | | | | |
| BRTR | | | | LR | LR | 01 47 16.5 | |
| | comp=Z,111nm,19.1s,baz=192,slow=37 | | | | | | |
| **GEYT** | **Alibeck** | **99.35** | **36** | LR | LR | 01 51 32.7 | |
| | comp=Z,172nm,18.3s,baz=35,slow=38 | | | | | | |
| **TBI** | **Tubuai** | **102.19** | **199** | *e*SS | SS | 01 21 54.6 | -0.5 |
| | 283nm,37.2s | | | | | | |
| **TBI** | **Tubuai** | **102.19** | **199** | *e*LR | LR | 01 36 27.7 | |
| | 250nm,23.0s | | | | | | |
| **PPT2** | **Papeete2** | **107.81** | **200** | *e*SS | SS | 01 23 12.9 | +0.5 |
| | 123nm,26.0s | | | | | | |
| **PPT2** | **Papeete2** | **107.81** | **200** | *e*LR | LR | 01 38 55.3 | |
| | 251nm,22.2s | | | | | | |
| **TXAR** | **Lajitas Array** | **127.22** | **271** | PKP | **PKPdf** | **01 08 18.1** | **-0.1** |
| | 0.9nm,0.9s,baz=184,slow=2.4,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **128.96** | **60** | PKP | **PKPdf** | **01 08 20.7** | **-0.3** |
| | 0.2nm,0.3s,baz=224,slow=4.7,SNR=2.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **142.29** | **268** | PKP | **PKPdf** | **01 08 43.4** | **-2.7** |
| | 0.6nm,0.6s,baz=108,slow=5.8,SNR=5.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **150.02** | **311** | PKPbc | **PKPbc** | **01 09 03.1** | **0.0** |
| | 5.5nm,0.9s,baz=92,slow=2.0,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **163.40** | **325** | PKPab | **PKPab** | **01 10 05.7** | **-0.6** |
| | 0.5nm,0.7s,baz=34,slow=4.9,SNR=4.5 | | | | | | |

**CASC 06 01:15:25.2±1.7, 13°.38N×91°.12W, h15km, MD3.6, 2D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IXG** | **Ixpaco** | **1.01** | **39** | *e*P | Pb | 01 15 43.1 | -1.7 |
| **JAT** | **Jato** | **1.06** | **331**⇓ | *e*P | Pb | 01 15 45.2 | 0.0 |
| **FUG** | **Fuego 3** | **1.09** | **14**⇓ | *e*P | Pb | 01 15 45.1 | -1.0 |
| **PCG** | **Pacaya** | **1.12** | **26** | *e*P | Pb | 01 15 45.5 | -1.1 |
| **NBG** | **Las Nubes** | **1.41** | **32** | *e*P | Pn | 01 15 50.6 | -0.1 |
| **RTR** | **El Retiro** | **1.52** | **70** | *e*P | Pn | 01 15 51.2 | -0.9 |
| **SBLS** | **San Blas** | **1.52** | **72** | *e*P | Pn | 01 15 51.1 | -1.1 |
| **RBDL** | **Robledal** | **1.57** | **62** | *e*P | Pn | 01 15 51.9 | -0.8 |
| **BOQS** | **Boqueron** | **1.82** | **79** | *e*P | Pn | 01 15 55.8 | -0.5 |
| **LFU** | **La Fuente** | **1.98** | **79** | *e*P | Pn | 01 15 58.7 | +0.4 |
| **MTO2** | **Montecristo 2** | **1.98** | **59** | *e*P | Pn | 01 15 58.2 | -0.3 |
| **LFRS** | **El Faro** | **2.01** | **83** | *e*P | Pn | 01 15 59.0 | +0.2 |
| LFRS | | | | *e*S | Sb | 01 16 26.1 | -0.6 |
| **LBRS** | **Las Brisas** | **2.04** | **80** | *e*P | Pn | 01 15 59.4 | +0.2 |
| **MRL** | **Marmol** | **2.17** | **39** | *e*P | Pn | 01 16 01.1 | +0.1 |
| MRL | | | | *e*P | Pb | 01 16 02.0 | -2.4 |
| **SNVI** | **San Vicente** | **2.23** | **84** | *e*S | Sb | 01 16 31.1 | -1.8 |

**MEX 06 01:59:45.9±0.4, 16°.24N×98°.39W, h10km, MD4.0, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.30** | **59** | *e*P | Pg | 01 59 51.3 | -0.7 |
| PNIG | | | | *i* S | Sg | 01 59 56.1 | +0.1 |
| **TLIG** | **Tlapa** | **1.33** | **353** | *e*P | Pn | 02 00 06.8 | -3.9 |
| TLIG | | | | *i* S | Sb | 02 00 23.2 | -5.2 |
| **CAIG** | **El Cayaco** | **1.97** | **294** | *e*P | Pn | 02 00 16.1 | -3.2 |
| CAIG | | | | *e*S | Sn | 02 00 39.6 | -4.6 |
| **ZIIG** | **Zihuatanejo** | **3.24** | **295** | *i* P | Pn | 02 00 34.1 | -2.8 |
| ZIIG | | | | *e*S | Sn | 02 01 11.2 | -4.3 |

*ISCJB **06** 02:18:46.3±0.4, 31°.20S±0°.04×68°.66W±0°.06, h111km, Error ellipse: s-maj=8.7km s-min=4.7km az=148.1*

*SJA **06** 02:18:46.4±0.5, 31°.25S×68°.65W, h104km±3km, ML3.1*

*GUC **06** 02:18:47.2±0.5, 31°.12S×69°.02W, h170km±18km, ML3.3*

**ISC 06 02:18:46.3±1.3, 31°.24S±0°.05×68°.64W±0°.06, h111km, n19, σ0s.80/24, San Juan Province**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLL** | **Cerro Villicun** | **0.17** | **122** | *e*P | **Pn** | **02 19 01.5** | **-0.4** |
| RTLL | | | | *e*S | **Sn** | **02 19 12.7** | **-0.8** |
| **SJA** | **San Juan** | **0.29** | **166** | *e*P | **Pn** | **02 19 02.5** | **+0.2** |
| **AMOG** | **MOGNA** | **0.33** | **23** | *e*P | **Pn** | **02 19 02.4** | **0.0** |
| **CFAA** | **Coronel Fontan** | **0.50** | **136** | *e*P | **Pn** | **02 19 03.2** | **-0.2** |
| **RTCV** | **Cerro Valdivia** | **0.62** | **172** | *e*P | **Pn** | **02 19 04.2** | **-0.1** |
| **RTLS** | **Leoncito** | **0.79** | **225** | *e*P | **Pn** | **02 19 06.5** | **+0.6** |
| **AUSP** | **Uspallata** | **1.17** | **213** | *e*P | **Pn** | **02 19 10.3** | **+0.6** |
| **AVFE** | **Valle Fertil** | **1.17** | **61** | *e*P | **Pn** | **02 19 09.9** | **+0.4** |
| **ASAL** | **Salagasta** | **1.36** | **187** | *e*P | **Pn** | **02 19 12.1** | **+0.5** |
| **ACAN** | **Cantantal** | **1.61** | **130** | *e*P | **Pn** | **02 19 15.4** | **+0.9** |
| **ARCO** | **CERRO ARCO** | **1.61** | **189** | *e*P | **Pn** | **02 19 15.3** | **+0.6** |
| ARCO | | | | AML | AML | 02 19 39.7 | |
| | comp=Z,173nm,0.4s | | | | | | |
| **AGUA** | **GUANDACOL** | **1.75** | **4** | *e*P | **Pn** | **02 19 17.3** | **+0.9** |
| **AAGR** | **Agrelo** | **1.85** | **185** | *e*P | **Pn** | **02 19 18.0** | **+0.4** |
| **TLL** | **Tololo Astrono** | **2.15** | **299** | *e*P | **Pn** | **02 19 22.3** | **+0.9** |
| TLL | | | | *e*S | **Sn** | **02 19 49.3** | **+0.9** |
| TLL | | | | AML | AML | 02 19 51.8 | |
| | comp=N,141nm,1.6s | | | | | | |
| **VCA** | **Vinchina** | **2.52** | **9** | *e*P | **Pn** | **02 19 27.5** | **+1.2** |
| VCA | | | | AML | AML | 02 20 01.5 | |
| | comp=Z,61nm,0.2s | | | | | | |
| **LSCH** | **La Serena** | **2.61** | **300** | *e*P | **Pn** | **02 19 26.9** | **-0.3** |
| LSCH | | | | *e*S | **Sn** | **02 19 57.3** | **-1.3** |
| **LCO** | **Las Campanas** | **2.85** | **321** | *e*P | **Pn** | **02 19 31.2** | **+0.6** |
| LCO | | | | *e*S | **Sn** | **02 20 04.9** | **+0.2** |
| LCO | | | | AML | AML | 02 20 08.2 | |
| | comp=E,107nm,0.2s | | | | | | |
| **VACH** | **Vallenar** | **3.23** | **325** | *e*S | **Sn** | **02 20 11.9** | **-1.4** |
| **CPCH** | **Copiapo** | **4.15** | **338** | *e*P | **Pn** | **02 19 48.1** | **+0.4** |
| CPCH | | | | *e*S | **Sn** | **02 20 33.9** | **-1.5** |

*ISCJB **06** 02:19:34.0±0.8, 5°.05S±0°.07×131°.3E±0°.2, h10km, mb3.6/1, Error ellipse: s-maj=22.2km s-min=9.4km az=0.0*

*IDC **06** 02:19:34.4±2.6, 5°.01S×131°.45E, h0km, mb3.6/1, mb1 3.8/4, mb1mx3.5/36, mbtmp3.6/4, ML3.8/2, Error ellipse: s-maj=123.9km s-min=27.9km az=78.0*

*AUST **06** 02:19:38.2±0.0, 4°.80S×131°.29E, h112km, Error ellipse: s-maj=2.2km s-min=1.2km az=281.0*

**ISC 06 02:19:35.5±1.0, 5°.11S±0°.08×131°.4E±0°.2, h10km, n10, σ2s.76/9, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.34** | **21** | P | **Pn** | **02 20 12.6** | **-1.5** |
| | baz=2.1,SNR=22 | | | | | | |
| **SWI** | **Sorong** | **4.22** | **358** | P | **Pn** | **02 20 39.2** | **-0.8** |
| | baz=3.9,SNR=4.5 | | | | | | |
| **KDU** | **Kakadu** | **7.60** | **172** | P | Pn | 02 21 31.2 | +4.9 |
| | baz=8.0,SNR=21 | | | | | | |
| **MTN** | **Manton Dam** | **7.69** | **182** | P | Pn | 02 21 34.1 | +6.5 |
| | baz=8.0,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.09** | **203** | Pn | **Pn** | **02 22 55.4** | **+0.1** |
| | baz=22,slow=13 | | | | | | |
| FITZ | | | | Sn | Sn | 02 25 25.6 | -6.2 |
| | 0.3nm,0.3s,baz=126,slow=19,SNR=3.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.09** | **203** | P | **Pn** | **02 22 56.4** | **+1.2** |
| | baz=14,SNR=9.8 | | | | | | |
| **COEN** | **Coen** | **14.55** | **128** | P | **Pn** | **02 23 03.6** | **+2.0** |
| | baz=15,SNR=7.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.01** | **169** | Pn | **Pn** | **02 23 07.2** | **-0.8** |
| | 0.4nm,0.3s,baz=356,slow=13,SNR=23 | | | | | | |
| WRA | | | | Sn | **Sn** | **02 25 48.9** | **-5.5** |
| | 0.5nm,0.3s,baz=354,slow=24,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **18.60** | **173** | P | **Pn** | **02 23 56.0** | **+2.6** |
| | 0.3nm,0.3s,baz=354,slow=10,SNR=16 | | | | | | |
| ASAR | | | | S | Sn | 02 27 12.1 | -10 |
| | 0.1nm,0.3s,baz=1.5,slow=27,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.44** | **326** | P | **P** | **02 30 31.6** | **+0.1** |
| | 0.2nm,0.3s,baz=113,slow=6.9,SNR=2.6 | | | | | | |

*ISCJB **06** 02:20:09.1±0.4, 40°.73S±0°.08×78°.1E±0°.1, h10km, mb4.3/21, MS4.2/9, Error ellipse: s-maj=13.1km s-min=11.3km az=35.1*

*IDC **06** 02:20:09.0±0.6, 40°.73S×78°.06E, h0km, mb4.1/15, mb1 4.2/15, mb1mx4.1/41, mbtmp4.1/15, MS4.1/9, Ms1 4.1/9, ms1mx3.8/30, Error ellipse: s-maj=19.4km s-min=18.0km az=11.0*

*NEIC **06** 02:20:10.4±0.3, 40°.76S×78°.09E, h10km, mb4.6/9, Error ellipse: s-maj=10.5km s-min=9.4km az=163.0*

**ISC 06 02:20:10.6±0.5, 40°.7S±0°.1×78°.1E±0°.1, h10km, n41, σ0s.76/33, mb4.3/21, MS4.2/9, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAW** | **Mawson** | **28.20** | **192** | LR | LR | 02 35 07.2 | |
| | comp=Z,483nm,18.9s,baz=60,slow=32 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **28.92** | **90** | T | T | 02 56 18.5 | |
| | baz=248,slow=74,SNR=510 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **28.93** | **90** | T | T | 02 56 19.4 | |
| | baz=248,slow=74,SNR=467 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **28.93** | **90** | T | T | 02 56 19.8 | |
| | baz=248,slow=74,SNR=564 | | | | | | |
| **H08S2** | **Diego Garcia H** | **33.32** | **350** | T | T | 03 01 54.1 | |
| | baz=173,slow=76,SNR=8.1 | | | | | | |
| **H08S1** | **Diego Carcia H** | **33.32** | **350** | T | T | 03 01 49.5 | |
| | baz=173,slow=76,SNR=8.7 | | | | | | |
| **H08S3** | **Diego Garcia H** | **33.34** | **350** | T | T | 03 01 52.7 | |
| | baz=173,slow=76,SNR=8.7 | | | | | | |
| **BOSA** | **Boshof** | **44.50** | **269** | P | **P** | **02 28 22.5** | **+0.1** |
| | 7.1nm,1.1s,baz=135,slow=7.1,SNR=1.8 | | | | | | |
| BOSA | | | | LR | LR | 02 44 35.2 | |
| | comp=Z,310nm,18.2s,baz=168,slow=33 | | | | | | |
| **LBTB** | **Lobatse** | **46.13** | **273** | P | **P** | **02 28 34.4** | **-0.9** |
| | 3.0nm,0.9s,baz=88,slow=16,SNR=3.0 | | | | | | |
| **MATP** | **Matopo** | **46.57** | **280** | P | **P** | **02 28 38.7** | **-0.2** |
| | 4.6nm,1.1s,baz=125,slow=14,SNR=3.6 | | | | | | |
| **SNAA** | **Sanae** | **49.12** | **204** | P | **P** | **02 29 00.3** | **+2.4** |
| **SNAA** | **Sanae** | **49.12** | **204** | P | **P** | **02 28 58.1** | **+0.1** |
| | 0.6nm,1.2s,baz=91,slow=11,SNR=3.9 | | | | | | |
| **SNAA** | **Sanae** | **49.12** | **204** | *e*P | **P** | **02 28 58.0** | **+0.1** |
| | 2.8nm,1.3s | | | | | | |
| **VNDA** | **Vanda** | **49.28** | **163** | P | **P** | **02 28 59.3** | **+0.3** |
| | 1.5nm,0.8s,baz=273,slow=6.4,SNR=6.6 | | | | | | |
| VNDA | | | | LR | LR | 02 48 16.5 | |
| | comp=Z,174nm,19.0s,baz=280,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **49.38** | **88** | P | **P** | **02 29 00.9** | **+0.4** |
| | 1.3nm,0.9s,baz=226,slow=8.6,SNR=6.5 | | | | | | |
| ASAR | | | | LR | LR | 02 47 32.1 | |
| | comp=Z,401nm,19.0s,baz=253,slow=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **49.43** | **180** | P | **P** | **02 29 00.7** | **+0.2** |
| | 5.2nm,1.0s,baz=286,slow=3.1,SNR=7.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **49.43** | **180** | *e*P | **P** | **02 29 00.3** | **-0.3** |
| | 80nm,2.2s | | | | | | |
| **LSZ** | **Lusaka** | **50.02** | **286** | *e*P | **P** | **02 29 05.8** | **+0.2** |
| | 8.2nm,1.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **50.69** | **205** | P | **P** | **02 29 10.2** | **+0.3** |
| | baz=90,slow=8.0 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **51.03** | **205** | P | **P** | **02 29 13.4** | **+1.1** |
| **WRA** | **Warramunga Arr** | **51.85** | **84** | P | **P** | **02 29 18.9** | **-0.4** |
| | 2.1nm,0.9s,baz=229,slow=6.7,SNR=5.7 | | | | | | |
| WRA | | | | LR | LR | 02 48 46.9 | |
| | comp=Z,228nm,19.4s,baz=260,slow=33 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **54.02** | **306** | P | **P** | **02 29 35.5** | **0.0** |
| | 2.7nm,1.1s,baz=244,slow=1.8,SNR=3.9 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **54.02** | **306** | *e*P | **P** | **02 29 35.8** | **+0.3** |
| | 5.8nm,1.4s | | | | | | |
| **KKM** | **Kota Kinabalu** | **58.22** | **46** | *e*P | **P** | **02 30 05.2** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **61.99** | **22** | P | **P** | **02 30 31.6** | **+0.6** |
| | 0.8nm,0.3s,baz=214,slow=5.7,SNR=6.4 | | | | | | |
| **GEYT** | **Alibeck** | **80.39** | **344** | P | **P** | **02 32 22.7** | **+0.7** |
| | 2.5nm,0.9s,baz=52,slow=9.6,SNR=9.1 | | | | | | |
| **AAK** | **Ala-Archa** | **83.04** | **357** | *e*P | **P** | **02 32 36.9** | **+0.9** |
| **EKS2** | **Erkin-Say** | **83.10** | **357** | *e*P | **P** | **02 32 36.3** | **+0.1** |
| | 3.1nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **83.30** | **358** | *e*P | **P** | **02 32 37.2** | **-0.2** |
| | 3.0nm,1.0s | | | | | | |
| **KKAR** | **Karatay Array** | **83.73** | **354** | *e*P | **P** | **02 32 40.3** | **+0.9** |
| | 5.4nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **87.22** | **3** | P | **P** | **02 32 56.6** | **-0.1** |
| | 1.7nm,0.9s,baz=165,slow=5.0,SNR=12 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MKAR | | | | LR | LR | 03 09 38.9 | |
| | comp=Z,68nm,20.0s,baz=168,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **88.44** | **289** | P | **P** | **02 33 02.9** | **-0.4** |
| | 0.5nm,0.8s,baz=141,slow=7.1,SNR=3.5 | | | | | | |
| TORD | | | | LR | LR | 03 09 49.6 | |
| | comp=Z,112nm,20.8s,baz=30,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **88.99** | **280** | LR | LR | 03 08 53.7 | |
| | comp=Z,138nm,18.1s,baz=137,slow=33 | | | | | | |
| **BRTR** | **Keskin Array B** | **89.74** | **327** | P | **P** | **02 33 08.7** | **-0.3** |
| | 0.6nm,0.8s,baz=90,slow=7.2,SNR=3.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **90.17** | **37** | P | **P** | **02 33 11.0** | **+0.1** |
| **KSRS** | **Korea Array** | **90.19** | **37** | P | **P** | **02 33 11.0** | **0.0** |
| | 0.5nm,0.3s,baz=207,slow=4.9,SNR=4.8 | | | | | | |
| **KURK** | **Kurchatov** | **91.07** | **0** | *e*P | **P** | **02 33 14.3** | **-0.3** |
| | 7.5nm,1.4s | | | | | | |
| **BRVK** | **Borovoye** | **93.66** | **355** | *e*P | **P** | **02 33 26.5** | **-0.1** |
| | 2.4nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **94.61** | **44** | LR | LR | 03 11 31.9 | |
| | comp=Z,28nm,21.8s,baz=240,slow=33 | | | | | | |
| **ILAR** | **Eielson Array** | **144.85** | **32** | PKP | **PKPab** | **02 39 44.5** | **-1.3** |
| | 1.7nm,1.0s,baz=290,slow=2.5,SNR=8.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **168.54** | **172** | PKP | **PKPdf** | **02 40 16.0** | **-1.8** |
| | 0.4nm,0.8s,baz=185,slow=4.1,SNR=4.0 | | | | | | |
| TXAR | | | | PKPab | **PKPab** | **02 41 26.2** | **-1.0** |
| | 0.8nm,1.0s,baz=190,slow=4.5,SNR=3.5 | | | | | | |

*IDC **06** 02:27:28.6±1.3, 22°.84S×171°.11E, h0km, mb4.0/6, mb1 4.3/7, mb1mx3.9/28, mbtmp4.1/7, ML4.3/1, MS3.5/1, Ms1 3.5/1, ms1mx2.9/22, Error ellipse: s-maj=65.1km s-min=24.6km az=167.0*

*NEIC **06** 02:27:34.8±0.6, 22°.64S×170°.95E, h35km, mb4.1/1, Error ellipse: s-maj=28.8km s-min=13.2km az=173.0*

*ISCJB **06** 02:27:35.5±0.7, 22°.7S±0°.1×170°.70E±0°.07, h42km, mb4.0/7, Error ellipse: s-maj=20.8km s-min=9.0km az=0.5*

**ISC 06 02:27:35.4**±0.7**, 22°.5S**±0°.2×**170°.87E**±0°.10**, h42km, n34, σ1s40**/38**, mb4.1**/7**, 1D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **4.12** | **276** | Pn | **Pn** | **02 28 35.5** | **-0.5** |
| | 17nm,0.3s,baz=180,slow=5.6,SNR=139 | | | | | | |
| DZM | | | | Sn | **Sn** | **02 29 21.7** | **-1.3** |
| | 19nm,0.3s,baz=360,slow=20,SNR=12 | | | | | | |
| **MSVF** | **Nonsavu** | **8.27** | **56** | *e*Pn | Pn | 02 29 39.2 | +6.2 |
| | 46nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **16.56** | **163** | LR | LR | 02 36 12.7 | |
| | comp=Z,160nm,18.7s,baz=328,slow=32 | | | | | | |
| **CTA** | **Charters Tower** | **23.05** | **271** | P | **P** | **02 32 39.1** | **+1.8** |
| | 3.0nm,0.7s,baz=83,slow=8.1,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **33.96** | **261** | P | **P** | **02 34 15.7** | **+0.6** |
| | 2.6nm,0.7s,baz=86,slow=9.2,SNR=24 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.09** | **267** | P | **P** | **02 34 15.7** | **-0.6** |
| | 0.5nm,0.7s,baz=96,slow=8.5,SNR=8.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.24** | **294** | P | **P** | **02 39 49.9** | **+2.4** |
| | 1.2nm,0.5s,baz=143,slow=4.7,SNR=5.8 | | | | | | |
| **SNAA** | **Sanae** | **85.94** | **182** | P | **P** | **02 40 10.6** | **-0.2** |
| **SNAA** | **Sanae** | **85.94** | **182** | *e*P | **P** | **02 40 10.4** | **-0.4** |
| | 1.3nm,1.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **86.78** | **181** | P | **P** | **02 40 15.0** | **+0.1** |
| | baz=161,slow=4.3 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.06** | **180** | P | **P** | **02 40 17.3** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **89.86** | **48** | P | **P** | **02 40 29.4** | **-0.8** |
| | 0.2nm,0.4s,baz=260,slow=9.1,SNR=2.8 | | | | | | |
| **SONM** | **Songino Array** | **90.76** | **323** | P | **P** | **02 40 34.7** | **+0.7** |
| | 1.7nm,0.9s,baz=133,slow=4.6,SNR=5.7 | | | | | | |
| **ABKAR** | **Akbulak array** | **120.28** | **315** | *e*PKPdf | **PKPdf** | **02 46 22.3** | **+0.5** |
| **ARCES** | **ARCESS Array B** | **128.63** | **345** | PKP | **PKPdf** | **02 46 36.2** | **-1.1** |
| | 0.6nm,0.5s,baz=65,slow=2.4,SNR=4.2 | | | | | | |
| **MORC** | **Moravsky Berou** | **145.66** | **329** | *e*PKPbc | **PKPab** | **02 47 10.2** | **+0.3** |
| **PSZ** | **Piszkesteto** | **145.67** | **325** | *e*PKPbc | **PKPab** | **02 47 10.4** | **+0.5** |
| **KRLC** | **Kraliky** | **145.82** | **330** | *e*PKP | **PKPab** | **02 47 11.1** | **+0.7** |
| KRLC | | | | *e*x | x | 02 47 14.0 | |
| **DPC** | **Dobruska-Polom** | **145.84** | **331** | *e*PKP | **PKPab** | **02 47 11.0** | **+0.5** |
| DPC | | | | *e*x | x | 02 47 14.2 | |
| DPC | | | | *e*pPKP | **pPKPdf** | **02 47 19.5** | **-3.2** |
| DPC | | | | *e*x | x | 02 47 33.0 | |
| **UPC** | **Upice** | **145.86** | **331** | *e*PKP | **PKPab** | **02 47 11.9** | **+1.4** |
| UPC | | | | *e*x | x | 02 47 17.1 | |
| **VYHS** | **Vyhne** | **145.87** | **326** | *e*PKP | **PKPab** | **02 47 11.5** | **+0.9** |
| **PVCC** | **Panska Ves** | **146.48** | **332** | *e*PKP | **PKPab** | **02 47 13.1** | **+0.2** |
| PVCC | | | | *e*pPKP | **pPKPdf** | **02 47 20.6** | **-3.1** |
| **BRG** | **Berggiesshubel** | **146.49** | **333** | *e*PKP | **PKPab** | **02 47 12.8** | **-0.1** |
| | 8.9nm,1.3s | | | | | | |
| **CLL** | **Collm** | **146.54** | **335** | *i* PKPbc | **PKPab** | **02 47 13.2** | **+0.1** |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **PRA** | **Prague** | **146.88** | **332** | *e*PKP | **PKPab** | **02 47 14.2** | **-0.2** |
| **PRU** | **Pruhonice** | **146.89** | **332** | *e*PKP | **PKPab** | **02 47 14.2** | **-0.3** |
| PRU | | | | *e*pPKP | **pPKPdf** | **02 47 22.3** | **-2.1** |
| **NKC** | **Novy Kostel** | **147.59** | **334** | *e*PKP | **PKPab** | **02 47 18.3** | **+1.0** |
| NKC | | | | *e*x | x | 02 47 21.3 | |
| **KHC** | **Kasperske Hory** | **147.95** | **331** | *e*PKP | **PKPbc** | **02 47 16.8** | **+0.7** |
| KHC | | | | *e*pPKP | **pPKPdf** | **02 47 23.4** | **-2.8** |
| **KHC** | **Kasperske Hory** | **147.95** | **331** | *e*PKPbc | **PKPbc** | **02 47 16.3** | **+0.2** |
| **GERES** | **GERESS Array B** | **148.10** | **331** | PKPbc | **PKPbc** | **02 47 17.4** | **+0.8** |
| | comp=Z,2.4nm,0.7s,baz=35,slow=3.3,SNR=18 | | | | | | |
| **STU** | **Stuttgart** | **150.04** | **335** | *e*PKPbc | **PKPbc** | **02 47 22.1** | **+0.8** |
| **WLF** | **Walferdange** | **150.37** | **340** | *e*PKPbc | **PKPbc** | **02 47 23.3** | **+1.2** |
| **FETA** | **Feichten** | **150.79** | **332** | ⇓*i*pPKPdf | **PKPab** | **02 47 27.5** | **-3.1** |
| | comp=Z,7.4nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **166.10** | **230** | PKP | **PKPdf** | **02 47 37.6** | **+0.8** |
| | comp=Z,0.7nm,1.0s,baz=254,slow=0.7,SNR=3.3 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **02 48 35.7** | **-1.6** |
| | comp=Z,0.6nm,0.9s,baz=84,slow=0.9,SNR=3.6 | | | | | | |

*IDC **06** 02:54:48.4±0.8, 32°.86N×76°.17E, h0km, mb3.7/14, mb1 3.8/18, mb1mx3.7/44, mbtmp3.7/18, ML3.5/4, Error ellipse: s-maj=19.6km s-min=16.7km az=40.0*

*ISCJB **06** 02:54:52.0±0.3, 33°.12N±0°.03×76°.16E±0°.07, h28km, mb3.6/13, Error ellipse: s-maj=8.2km s-min=3.9km az=171.3*

*NNC **06** 02:55:05.5±2.9, 33°.63N×75°.98E, h105km±19km, mb3.5, mpv4.3, Error ellipse: s-maj=23.9km s-min=20.6km az=37.0*

*NDI **06** 02:55:11.4±2.3, 31°.67N×76°.38E, h10km, ML3.3*

**ISC 06 02:54:53.5**±0.5**, 33°.07N**±0°.05×**76°.12E**±0°.07**, h28km, n42, σ1s77**/52**, mb3.7**/13**, 12C-8D, Kashmir-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BHK** | **Bhakra** | **1.66** | **171** | *e*P | **Pn** | **02 55 20.0** | **-0.8** |
| BHK | | | | *e*S | **Sn** | **02 55 42.0** | **+0.8** |
| **SMLA** | **Simla** | **2.13** | **155** | *i* P | **Pn** | **02 55 28.1** | **+1.0** |
| SMLA | | | | *e*x | **Sn** | **02 55 54.1** | **+1.6** |
| SMLA | | | | AML | AML | 02 55 59.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| SMLA | | | | AML | AML | 02 55 60.0 | |
| | comp=E,2μm,0.5s | | | | | | |
| **CHCP** | **Chirah Chowk** | **2.46** | **285** | ⇑P | **Pb** | **02 55 35.9** | **-1.2** |
| **SARP** | **Sargodha** | **3.13** | **250** | P | **Pn** | **02 55 43.1** | **+2.1** |
| **CEP** | **Cherat** | **3.60** | **283** | P | **Pn** | **02 55 49.9** | **+2.3** |
| **BHGR** | **Bahadurgarh** | **4.42** | **171** | *e*P | **Pn** | **02 55 58.7** | **0.0** |
| BHGR | | | | *e*S | Sn | 02 56 35.4 | -14 |
| **NDI** | **New Delhi** | **4.47** | **168** | *e*P | **Pn** | **02 56 00.5** | **+1.1** |
| NDI | | | | *e*x | **Sb** | **02 57 04.5** | **-0.2** |
| **KHET** | **Khetri** | **4.98** | **183** | *e*P | **Pn** | **02 56 05.9** | **-0.6** |
| KHET | | | | *e*S | Sn | 02 56 49.7 | -14 |
| KHET | | | | AML | AML | 02 57 25.2 | |
| | comp=N,53nm,0.4s | | | | | | |
| KHET | | | | AML | AML | 02 57 26.7 | |
| | comp=E,59nm,0.5s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **7.25** | **344** | ⇓P | Pn | 02 56 41.5 | +3.8 |
| | comp=E,9.9nm,0.4s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **02 57 58.8** | **-0.4** |
| | comp=E,21nm,0.3s | | | | | | |
| **DZET** | **Dzherino** | **8.23** | **316** | ⇓P | **Pn** | **02 56 52.7** | **+1.6** |
| | comp=E,4.3nm,0.3s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **02 58 22.7** | **-0.5** |
| | comp=E,16nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **9.64** | **353** | ⇑P | Pn | 02 57 14.4 | +4.0 |
| | comp=E,3.4nm,0.7s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **02 58 59.3** | **+1.5** |
| | comp=E,6.9nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **9.64** | **353** | Pn | **Pn** | **02 57 13.4** | **+3.0** |
| | comp=E,0.7nm,0.3s,baz=164,slow=7.3,SNR=11 | | | | | | |
| AAK | | | | Sn | **Sn** | **02 59 01.4** | **+3.6** |
| | comp=E,0.3nm,0.3s,baz=127,slow=20,SNR=3.9 | | | | | | |
| **MNAS** | **Manas** | **9.83** | **344** | ⇓P | **Pn** | **02 57 14.4** | **+1.4** |
| | comp=E,2.9nm,0.7s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **02 59 00.2** | **-2.3** |
| | comp=E,6.1nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **9.85** | **358** | ⇓P | **Pn** | **02 57 15.7** | **+2.4** |
| | comp=E,5.6nm,1.4s | | | | | | |
| TKM2 | | | | ⇑S | Sn | 02 58 55.4 | -7.6 |
| | comp=E,2.5nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **10.58** | **13** | P | **Pn** | **02 57 25.6** | **+2.5** |
| PDGK | | | | S | **Sn** | **02 59 18.7** | **-1.9** |
| **KK31** | **Karatay Array** | **10.95** | **338** | ⇑P | **Pn** | **02 57 29.6** | **+1.4** |
| | comp=E,1.0nm,0.3s,baz=145,slow=12 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **02 59 25.2** | **-4.6** |
| | comp=E,5.2nm,0.5s,baz=151,slow=23,SNR=5.1 | | | | | | |
| **MK31** | **Makanchi Array** | **14.49** | **17** | ⇑P | **Pn** | **02 58 19.5** | **+2.9** |
| | comp=E,0.2nm,0.3s,baz=0.0,slow=0.1,SNR=5.5 | | | | | | |
| MK31 | | | | ⇑S | **Sn** | **03 00 51.5** | **-4.9** |
| | comp=E,4.9nm,1.1s,baz=196,slow=24,SNR=8.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **14.49** | **17** | Pn | **Pn** | **02 58 17.9** | **+1.2** |
| | comp=E,0.3nm,0.3s,baz=197,slow=13,SNR=6.6 | | | | | | |
| MKAR | | | | Sn | **Sn** | **03 00 52.9** | **-3.5** |
| | comp=E,0.5nm,0.3s,baz=196,slow=21,SNR=11 | | | | | | |
| **GEYT** | **Alibeck** | **15.44** | **293** | Pn | **Pn** | **02 58 27.8** | **-1.6** |
| | comp=E,0.3nm,0.3s,baz=101,slow=15,SNR=3.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.63** | **5** | P | **Pn** | **02 58 55.9** | **-1.0** |
| | comp=E,0.1nm,0.3s,baz=190,slow=11,SNR=4.1 | | | | | | |
| **KURK** | **Kurchatov** | **17.73** | **5** | ⇓P | **Pn** | **02 58 58.0** | **-0.2** |
| | comp=E,2.5nm,0.5s | | | | | | |
| **VOSK** | **Vostochnaya** | **19.99** | **351** | P | **P** | **02 59 24.3** | **+0.6** |
| **AB31** | **Akbulak array** | **20.18** | **328** | ⇑P | **P** | **02 59 26.4** | **+0.8** |
| | comp=E,1.4nm,0.5s,baz=134,slow=11,SNR=45 | | | | | | |
| AB31 | | | | S | S | 03 03 00.7 | -10 |
| **BVA0** | **Borovoye Array** | **20.37** | **350** | ⇑P | **P** | **02 59 27.5** | **-0.2** |
| | comp=E,2.1nm,0.6s,baz=158,slow=11,SNR=7.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **20.37** | **350** | P | **P** | **02 59 28.6** | **+0.9** |
| | comp=E,1.7nm,0.5s,baz=156,slow=10,SNR=9.3 | | | | | | |
| **BRVK** | **Borovoye** | **20.42** | **350** | ⇑P | **P** | **02 59 28.3** | **+0.1** |
| | comp=E,5.0nm,0.5s | | | | | | |
| **ZRNK** | **Zerenda** | **20.52** | **348** | P | **P** | **02 59 29.6** | **+0.3** |
| **CHKZ** | **Chkalovo** | **20.97** | **351** | P | **P** | **02 59 34.8** | **+0.6** |
| **ZALV** | **Zalesovo Beam** | **21.77** | **14** | P | **P** | **02 59 42.4** | **-0.4** |
| | comp=E,1.1nm,0.4s,baz=190,slow=12,SNR=3.1 | | | | | | |
| **AKTO** | **Aktyubinsk** | **21.89** | **328** | ⇑P | **P** | **02 59 44.6** | **+0.4** |
| | comp=E,7.3nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **21.89** | **328** | P | **P** | **02 59 45.6** | **+1.5** |
| | comp=E,2.7nm,0.4s,baz=123,slow=11,SNR=18 | | | | | | |
| **SONM** | **Songino Array** | **27.14** | **48** | P | **P** | **03 00 35.2** | **+0.9** |
| | comp=E,0.3nm,0.4s,baz=226,slow=9.7,SNR=2.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **34.59** | **293** | P | **P** | **03 01 40.8** | **+0.8** |
| | comp=E,0.5nm,0.6s,baz=57,slow=5.3,SNR=3.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **38.38** | **312** | P | **P** | **03 02 12.0** | **0.0** |
| | comp=E,0.7nm,0.5s,baz=102,slow=7.9,SNR=3.7 | | | | | | |
| **IDI** | **Anoyia** | **42.06** | **288** | P | **P** | **03 02 42.9** | **0.0** |
| | comp=E,5.5nm,0.9s,baz=357,slow=17,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **42.66** | **327** | P | **P** | **03 02 48.5** | **+1.2** |
| | comp=E,1.2nm,0.5s,baz=118,slow=9.9,SNR=9.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **45.91** | **338** | P | **P** | **03 03 14.2** | **+1.0** |
| | comp=E,0.8nm,0.6s,baz=116,slow=9.0,SNR=5.5 | | | | | | |
| **ESDC** | **Sonseca Array** | **62.81** | **301** | P | **P** | **03 05 17.5** | **+0.8** |
| | comp=E,0.4nm,0.6s,baz=65,slow=7.8,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.98** | **273** | P | **P** | **03 06 01.7** | **-1.2** |
| | comp=E,0.5nm,0.6s,baz=55,slow=5.4,SNR=8.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **76.59** | **125** | P | **P** | **03 06 40.5** | **-1.0** |
| | comp=E,0.1nm,0.3s,baz=326,slow=5.6,SNR=5.3 | | | | | | |
| **ILAR** | **Eielson Array** | **76.85** | **17** | P | **P** | **03 06 42.6** | **+0.1** |
| | comp=E,0.2nm,0.6s,baz=298,slow=4.8,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **78.83** | **128** | P | **P** | **03 06 52.2** | **-1.8** |
| | comp=E,0.3nm,0.6s,baz=328,slow=4.7,SNR=2.9 | | | | | | |

*ISCJB **06** 03:08:47.7±0.3, 51°.18N±0°.01×12°.30E±0°.02, h11km±2km, Error ellipse: s-maj=2.4km s-min=2.1km az=13.2*

*CSEM **06** 03:08:48.8±0.1, 51°.14N×12°.29E, h15km, ML3.7/8, Error ellipse: s-maj=3.0km s-min=2.3km az=9.0*

*BGR **06** 03:08:49.3±0.2, 51°.16N×12°.25E, h10km, ML3.1/24, Error ellipse: s-maj=2.2km s-min=2.2km az=47.0*

*LDG **06** 03:08:49.1±0.1, 51°.16N×12°.21E, h10km, Ml3.1/15, Error ellipse: s-maj=2.1km s-min=1.5km az=178.0*

*BNS **06** 03:08:50.2±0.5, 51°.15N×12°.30E, h4km, ML2.8*

*PRU **06** 03:08:50.8, 51°.07N×12°.35E, h21km, Ne Of Gera*

*CLL **06** 03:08:50.3±0.9, 51°.15N×12°.25E, h11km±2km, ML2.9/15*

*WBNET **06** 03:09:00.0, 51°.14N×12°.24E, h49km, Ml3.2*

**ISC 06 03:08:47.8**±0.6**, 51°.13N**±0°.01×**12°.25E**±0°.01**, h13**km±5km**, n183, σ1s48**/298**, 44C-21D, Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MODW** | **Modelwitz** | **0.23** | **143** | ⇓*i*Pg | **Pb** | **03 08 55.1** | **+1.3** |
| MODW | | | | *e*Sg | **Sb** | **03 08 58.7** | **+0.9** |
| **MODW** | **Modelwitz** | **0.23** | **143** | ⇓*i*Pg | **Pb** | **03 08 55.1** | **+1.3** |
| MODW | | | | *e*Sg | **Sb** | **03 08 58.7** | **+0.9** |
| MODW | | | | AML | AML | 03 08 59.0 | |
| | comp=N,1μm,0.5s | | | | | | |
| **MODW** | **Modelwitz** | **0.23** | **143** | Pg | **Pb** | **03 08 55.1** | **+1.3** |
| MODW | | | | Sg | **Sb** | **03 08 58.7** | **+0.9** |
| **HKWD** | **Heukewalde** | **0.30** | **178** | ⇑*i*Pg | **Pb** | **03 08 56.2** | **+1.2** |
| HKWD | | | | *i* Sg | **Sb** | **03 09 01.0** | **+1.2** |
| **HKWD** | **Heukewalde** | **0.30** | **178** | ⇑*i*Pg | **Pb** | **03 08 56.2** | **+1.2** |
| HKWD | | | | *i* Sg | **Sb** | **03 09 01.0** | **+1.2** |
| HKWD | | | | AML | AML | 03 09 01.9 | |
| | comp=N,3μm,0.2s | | | | | | |
| **HKWD** | **Heukewalde** | **0.30** | **178** | Pg | **Pb** | **03 08 56.2** | **+1.2** |
| HKWD | | | | Sg | **Sb** | **03 09 01.0** | **+1.2** |
| **NEUB** | **Neuenburg** | **0.31** | **285** | ⇓*i*Pg | **Pb** | **03 08 56.3** | **+1.1** |
| NEUB | | | | *e*Sg | **Sg** | **03 09 00.7** | **+2.2** |
| **NEUB** | **Neuenburg** | **0.31** | **285** | ⇓*i*Pg | **Pb** | **03 08 56.3** | **+1.1** |
| NEUB | | | | *e*Sg | **Sg** | **03 09 00.7** | **+2.2** |
| NEUB | | | | AML | AML | 03 09 01.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| **NEUB** | **Neuenburg** | **0.31** | **285** | Pg | **Pb** | **03 08 56.3** | **+1.1** |
| NEUB | | | | Sg | **Sg** | **03 09 00.7** | **+2.2** |
| **MLFH** | **Mildenfurth** | **0.35** | **198** | ⇑*i*Pg | **Pb** | **03 08 57.1** | **+1.2** |
| MLFH | | | | *e*Sg | **Sg** | **03 09 02.2** | **+2.5** |
| **MLFH** | **Mildenfurth** | **0.35** | **198** | Pg | **Pb** | **03 08 57.2** | **+1.2** |
| MLFH | | | | Sg | **Sg** | **03 09 02.0** | **+2.3** |
| **TAUT** | **Tautenburg** | **0.37** | **247** | ⇑*i*Pg | **Pg** | **03 08 57.2** | **+1.9** |
| TAUT | | | | *i* Sg | **Sg** | **03 09 02.4** | **+2.2** |
| **TAUT** | **Tautenburg** | **0.37** | **247** | ⇑*i*Pg | **Pg** | **03 08 57.2** | **+1.9** |
| TAUT | | | | *i* Sg | **Sg** | **03 09 02.5** | **+2.2** |
| TAUT | | | | AML | AML | 03 09 02.8 | |
| | comp=N,670nm,0.2s | | | | | | |
| **TAUT** | **Tautenburg** | **0.37** | **247** | Pg | **Pg** | **03 08 57.2** | **+1.9** |
| TAUT | | | | Sg | **Sg** | **03 09 02.4** | **+2.2** |
| **SCHF** | **Schoenfels** | **0.46** | **168** | ⇓*e*Pg | **Pb** | **03 08 59.1** | **+1.3** |
| SCHF | | | | *i* Sg | **Sb** | **03 09 05.5** | **+1.0** |
| **SCHF** | **Schoenfels** | **0.46** | **168** | ⇓*e*Pg | **Pb** | **03 08 59.1** | **+1.3** |
| SCHF | | | | *i* Sg | **Sb** | **03 09 05.5** | **+1.0** |
| SCHF | | | | AML | AML | 03 09 06.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| **SCHF** | **Schoenfels** | **0.46** | **168** | Pg | **Pb** | **03 08 59.1** | **+1.3** |
| SCHF | | | | Sg | **Sb** | **03 09 05.5** | **+1.0** |
| **CLL** | **Collm** | **0.51** | **69** | ⇑*i*Pg | **Pb** | **03 08 59.4** | **+0.8** |
| CLL | | | | *i* Sg | **Sb** | **03 09 06.1** | **+0.3** |
| **CLL** | **Collm** | **0.51** | **69** | *i* Pg | **Pb** | **03 08 59.3** | **+0.8** |
| CLL | | | | *i* Sg | **Sb** | **03 09 05.7** | **-0.1** |
| | comp=Z,425nm,0.5s | | | | | | |
| **CLL** | **Collm** | **0.51** | **69** | ⇑*i*Pg | **Pb** | **03 08 59.4** | **+0.8** |
| CLL | | | | *i* Sg | **Sb** | **03 09 06.1** | **+0.3** |
| CLL | | | | AML | AML | 03 09 06.5 | |
| | comp=N,1μm,0.2s | | | | | | |
| **CLL** | **Collm** | **0.51** | **69** | Pg | **Pb** | **03 08 59.4** | **+0.8** |
| CLL | | | | Sg | **Sb** | **03 09 06.1** | **+0.3** |
| **WIMM** | **Wimmelburg** | **0.61** | **310** | ⇓*i*Pg | **Pg** | **03 09 01.0** | **+1.2** |
| **WIMM** | **Wimmelburg** | **0.61** | **310** | ⇓*i*Pg | **Pg** | **03 09 01.0** | **+1.2** |
| **WIMM** | **Wimmelburg** | **0.61** | **310** | Pg | **Pg** | **03 09 01.0** | **+1.2** |
| **MOX** | **Moxa** | **0.63** | **220** | ⇑*i*Pg | **Pb** | **03 09 02.0** | **+1.3** |
| MOX | | | | *e*Sg | **Sb** | **03 09 11.0** | **+1.6** |
| **MOX** | **Moxa** | **0.63** | **220** | ⇑*i*Pg | **Pb** | **03 09 02.0** | **+1.3** |
| MOX | | | | *e*Sg | **Sb** | **03 09 11.0** | **+1.6** |
| **MOX** | **Moxa** | **0.63** | **220** | Pg | **Pb** | **03 09 02.0** | **+1.3** |
| MOX | | | | Sg | **Sb** | **03 09 11.0** | **+1.6** |
| **PLN** | **Plauen** | **0.65** | **185** | ⇑*i*Pg | **Pb** | **03 09 02.2** | **+1.3** |
| PLN | | | | *e*Sg | **Sb** | **03 09 11.5** | **+1.6** |
| **PLN** | **Plauen** | **0.65** | **185** | ⇑*i*Pg | **Pb** | **03 09 02.2** | **+1.3** |
| PLN | | | | *e*Sg | **Sb** | **03 09 11.5** | **+1.6** |
| PLN | | | | AML | AML | 03 09 13.5 | |
| | comp=E,505nm,0.4s | | | | | | |
| **PLN** | **Plauen** | **0.65** | **185** | Pg | **Pb** | **03 09 02.2** | **+1.3** |
| PLN | | | | Sg | **Sb** | **03 09 11.5** | **+1.6** |
| **WERD** | **Werda** | **0.68** | **177** | ⇑*i*Pg | **Pb** | **03 09 03.1** | **+1.5** |
| WERD | | | | *e*Sg | **Sb** | **03 09 12.8** | **+1.9** |
| **WERD** | **Werda** | **0.68** | **177** | ⇑*i*Pg | **Pb** | **03 09 03.1** | **+1.5** |
| WERD | | | | *e*Sg | **Sb** | **03 09 12.8** | **+1.9** |
| **WERD** | **Werda** | **0.68** | **177** | Pg | **Pb** | **03 09 03.1** | **+1.5** |
| WERD | | | | Sg | **Sb** | **03 09 12.8** | **+1.9** |
| **MULD** | **Muldenberg** | **0.72** | **172** | *e*Pg | **Pb** | **03 09 03.9** | **+1.6** |
| MULD | | | | *i* Sg | **Sb** | **03 09 13.2** | **+1.1** |
| **MULD** | **Muldenberg** | **0.72** | **172** | *e*Pg | **Pb** | **03 09 04.0** | **+1.7** |
| MULD | | | | *i* Sg | **Sb** | **03 09 13.3** | **+1.1** |
| MULD | | | | AML | AML | 03 09 14.2 | |
| | comp=E,501nm,0.1s | | | | | | |
| **MULD** | **Muldenberg** | **0.72** | **172** | Pg | **Pb** | **03 09 03.9** | **+1.6** |
| MULD | | | | Sg | **Sb** | **03 09 13.2** | **+1.1** |
| **TANN** | **Tannenbergstha** | **0.72** | **169** | ⇑*i*Pg | **Pn** | **03 09 04.2** | **+0.4** |
| TANN | | | | *i* Sg | **Sb** | **03 09 14.3** | **+2.1** |
| **TANN** | **Tannenbergstha** | **0.72** | **169** | ⇑*i*Pg | **Pn** | **03 09 04.2** | **+0.4** |
| TANN | | | | *i* Sg | **Sb** | **03 09 13.9** | **+1.7** |
| TANN | | | | AML | AML | 03 09 14.6 | |
| | comp=E,877nm,0.2s | | | | | | |
| **TANN** | **Tannenbergstha** | **0.72** | **169** | Pg | **Pn** | **03 09 04.2** | **+0.4** |
| TANN | | | | Sg | **Sb** | **03 09 14.3** | **+2.1** |
| **FBE** | **Freiberg** | **0.73** | **106** | ⇓*i*Pg | **Pn** | **03 09 03.6** | **-0.1** |
| FBE | | | | *e*Sg | **Sb** | **03 09 13.2** | **+1.0** |
| **FBE** | **Freiberg** | **0.73** | **106** | ⇓*i*Pg | **Pn** | **03 09 03.6** | **-0.1** |
| FBE | | | | *e*Sg | **Sb** | **03 09 13.2** | **+1.0** |
| **FBE** | **Freiberg** | **0.73** | **106** | Pg | **Pn** | **03 09 03.7** | **-0.1** |
| FBE | | | | Sg | **Sb** | **03 09 13.2** | **+1.0** |
| **HWTS** | **Hohenwarte Tal** | **0.73** | **223** | ⇓*e*Pg | **Pg** | **03 09 03.6** | **+1.6** |
| HWTS | | | | *e*Sg | **Sg** | **03 09 13.4** | **+1.9** |
| **HWTS** | **Hohenwarte Tal** | **0.73** | **223** | Pg | **Pg** | **03 09 03.6** | **+1.6** |
| HWTS | | | | Sg | **Sg** | **03 09 13.4** | **+1.9** |
| **GUNZ** | **Gunzen** | **0.77** | **176** | ⇑*i*Pg | **Pb** | **03 09 04.7** | **+1.7** |
| GUNZ | | | | *i* Sg | **Sb** | **03 09 15.1** | **+1.7** |
| **GUNZ** | **Gunzen** | **0.77** | **176** | ⇑*i*Pg | **Pb** | **03 09 04.7** | **+1.7** |
| GUNZ | | | | *i* Sg | **Sb** | **03 09 15.1** | **+1.7** |
| GUNZ | | | | AML | AML | 03 09 16.6 | |
| | comp=E,514nm,0.2s | | | | | | |
| **GUNZ** | **Gunzen** | **0.77** | **176** | Pg | **Pb** | **03 09 04.7** | **+1.7** |
| GUNZ | | | | Sg | **Sb** | **03 09 15.1** | **+1.7** |
| **TRIB** | **Obertriebel** | **0.78** | **185** | *i* Pg | **Pb** | **03 09 04.8** | **+1.6** |
| TRIB | | | | *e*Sg | **Sb** | **03 09 15.7** | **+2.0** |
| **TRIB** | **Obertriebel** | **0.78** | **185** | *i* Pg | **Pb** | **03 09 04.8** | **+1.6** |
| TRIB | | | | *e*Sg | **Sb** | **03 09 15.7** | **+2.0** |
| TRIB | | | | AML | AML | 03 09 17.1 | |
| | comp=N,308nm,0.4s | | | | | | |
| **TRIB** | **Obertriebel** | **0.78** | **185** | Pg | **Pb** | **03 09 04.8** | **+1.6** |
| TRIB | | | | Sg | **Sb** | **03 09 15.7** | **+2.0** |
| **KRCW** | **Kraslice** | **0.82** | **167** | ⇑P | **Pn** | **03 09 05.7** | **+0.6** |
| **POCW** | **Po˜¨¡tky** | **0.82** | **172** | ⇑P | **Pn** | **03 09 05.7** | **+0.6** |
| POCW | | | | S | **Sb** | **03 09 16.9** | **+2.1** |
| **WERN** | **Wernitzgruen** | **0.84** | **175** | ⇑*i*Pg | **Pn** | **03 09 06.1** | **+0.7** |
| WERN | | | | *i* Sg | **Sg** | **03 09 17.6** | **+2.4** |
| **WERN** | **Wernitzgruen** | **0.84** | **175** | ⇑*i*Pg | **Pn** | **03 09 06.1** | **+0.7** |
| WERN | | | | *i* Sg | **Sg** | **03 09 17.6** | **+2.4** |
| WERN | | | | AML | AML | 03 09 18.9 | |
| | comp=N,557nm,0.1s | | | | | | |
| **WERN** | **Wernitzgruen** | **0.84** | **175** | Pg | **Pn** | **03 09 06.1** | **+0.7** |
| WERN | | | | Sg | **Sg** | **03 09 17.6** | **+2.4** |
| **LBCW** | **Luby** | **0.87** | **173** | ⇑P | **Pn** | **03 09 06.5** | **+0.7** |
| LBCW | | | | S | **Sg** | **03 09 18.4** | **+2.5** |
| **STCW** | **Studenec** | **0.89** | **169** | ⇑P | **Pn** | **03 09 06.7** | **+0.7** |
| STCW | | | | S | **Sg** | **03 09 18.7** | **+2.2** |
| **SCHD** | **Schmiedefeld** | **0.89** | **228** | ⇑*i*Pg | **Pb** | **03 09 06.5** | **+1.4** |
| SCHD | | | | *e*Sg | **Sg** | **03 09 18.8** | **+2.3** |
| **SCHD** | **Schmiedefeld** | **0.89** | **228** | ⇑*i*Pg | **Pb** | **03 09 06.5** | **+1.4** |
| SCHD | | | | *e*Sg | **Sg** | **03 09 18.8** | **+2.3** |
| **SCHD** | **Schmiedefeld** | **0.89** | **228** | Pg | **Pb** | **03 09 06.5** | **+1.4** |
| SCHD | | | | Sg | **Sg** | **03 09 18.8** | **+2.3** |
| **ROHR** | **Rohrbach** | **0.90** | **177** | ⇑*i*Pg | **Pg** | **03 09 06.8** | **+1.7** |
| ROHR | | | | *e*Sg | **Sg** | **03 09 18.7** | **+1.9** |
| **ROHR** | **Rohrbach** | **0.90** | **177** | ⇑*i*Pg | **Pg** | **03 09 06.8** | **+1.7** |
| ROHR | | | | *e*Sg | **Sg** | **03 09 18.7** | **+1.9** |
| ROHR | | | | AML | AML | 03 09 20.0 | |
| | comp=N,579nm,0.1s | | | | | | |
| **ROHR** | **Rohrbach** | **0.90** | **177** | Pg | **Pg** | **03 09 06.8** | **+1.7** |
| ROHR | | | | Sg | **Sg** | **03 09 18.7** | **+1.9** |
| **VAC** | **Vackov** | **0.90** | **175** | ⇑P | **Pn** | **03 09 06.9** | **+0.8** |
| VAC | | | | S | **Sg** | **03 09 18.9** | **+2.1** |
| **NKC** | **Novy Kostel** | **0.90** | **172** | ⇑*i*Pg | **Pn** | **03 09 07.0** | **+0.7** |
| NKC | | | | *e*Sg | **Sg** | **03 09 19.2** | **+2.1** |
| **NKC** | **Novy Kostel** | **0.90** | **172** | ⇑*e*PG | **Pb** | **03 09 06.5** | **+1.2** |
| NKC | | | | *e*SG | **Sg** | **03 09 18.8** | **+1.7** |
| | comp=N,558nm,0.3s | | | | | | |
| **NKC** | **Novy Kostel** | **0.90** | **172** | ⇑*i*Pg | **Pn** | **03 09 07.0** | **+0.7** |
| NKC | | | | *e*Sg | **Sg** | **03 09 19.2** | **+2.1** |
| **NKC** | **Novy Kostel** | **0.90** | **172** | Pg | **Pn** | **03 09 07.0** | **+0.7** |
| NKC | | | | Sg | **Sg** | **03 09 18.8** | **+1.7** |
| | comp=N,558nm,0.3s | | | | | | |
| **VIEL** | **Selb-Vielitz** | **0.95** | **186** | ⇑*i*Pg | **Pg** | **03 09 07.6** | **+1.5** |
| VIEL | | | | *e*Pn | **Pn** | **03 09 08.1** | **+1.3** |
| VIEL | | | | *e*Sg | **Sg** | **03 09 20.7** | **+2.2** |
| **VIEL** | **Selb-Vielitz** | **0.95** | **186** | ⇑*i*Pg | **Pg** | **03 09 07.6** | **+1.5** |
| VIEL | | | | *e*Sg | **Sg** | **03 09 20.7** | **+2.2** |
| **VIEL** | **Selb-Vielitz** | **0.95** | **186** | Pg | **Pg** | **03 09 07.6** | **+1.5** |
| **SKC** | **Skalna** | **0.96** | **176** | ⇑P | **Pg** | **03 09 07.9** | **+1.5** |
| SKC | | | | S | **Sn** | **03 09 21.1** | **+0.5** |
| **ZHC** | **Zelena Hora** | **1.06** | **178** | P | **Pn** | **03 09 09.4** | **+1.1** |
| ZHC | | | | S | **Sn** | **03 09 24.0** | **+1.0** |
| **BRG** | **Berggiesshubel** | **1.10** | **103** | PG | **Pg** | **03 09 09.8** | **+0.8** |
| BRG | | | | SG | **Sn** | **03 09 24.2** | **+0.3** |
| | comp=N,191nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.10** | **103** | ⇓*i*Pg | **Pg** | **03 09 09.7** | **+0.8** |
| BRG | | | | *i* Sg | **Sn** | **03 09 24.7** | **+0.8** |
| **BRG** | **Berggiesshubel** | **1.10** | **103** | ⇓*i*Pg | **Pg** | **03 09 09.7** | **+0.8** |
| BRG | | | | *i* Sg | **Sn** | **03 09 24.7** | **+0.8** |
| BRG | | | | AML | AML | 03 09 25.1 | |
| | comp=N,431nm,0.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.10** | **103** | Pg | **Pg** | **03 09 09.7** | **+0.8** |
| BRG | | | | Sg | **Sn** | **03 09 24.7** | **+0.8** |
| **MANZ** | **Manzenberg** | **1.15** | **185** | ⇓*i*Pn | **Pn** | **03 09 10.5** | **+0.9** |
| MANZ | | | | *e*Pg | **Pg** | **03 09 11.2** | **+1.3** |
| MANZ | | | | *i* Sg | **Sg** | **03 09 27.1** | **+2.3** |
| **MANZ** | **Manzenberg** | **1.15** | **185** | ⇓*i*Pn | **Pn** | **03 09 10.5** | **+0.9** |
| **MANZ** | **Manzenberg** | **1.15** | **185** | Pn | **Pn** | **03 09 10.5** | **+0.9** |
| **ROTZ** | **Rotzenmuhle** | **1.36** | **181** | ⇑*i*Pn | **Pn** | **03 09 13.7** | **+1.2** |
| ROTZ | | | | *i* Pg | **Pg** | **03 09 15.4** | **+1.5** |
| ROTZ | | | | *i* Sg | **Sg** | **03 09 32.9** | **+1.3** |
| **ROTZ** | **Rotzenmuhle** | **1.36** | **181** | ⇑*i*Pn | **Pn** | **03 09 13.7** | **+1.2** |
| **ROTZ** | **Rotzenmuhle** | **1.36** | **181** | Pn | **Pn** | **03 09 13.7** | **+1.2** |
| **CLZ** | **Clausthal** | **1.38** | **302** | ⇓*e*Pn | **Pb** | **03 09 14.2** | **+0.8** |
| CLZ | | | | *i* Pg | **Pg** | **03 09 15.3** | **+1.1** |
| CLZ | | | | *i* Sg | **Sb** | **03 09 32.6** | **+1.7** |
| **CLZ** | **Clausthal** | **1.38** | **302** | *i* Pg | **Pg** | **03 09 15.3** | **+1.1** |
| CLZ | | | | *i* Sg | **Sb** | **03 09 32.6** | **+1.7** |
| CLZ | | | | AML | AML | 03 09 34.4 | |
| | comp=N,117nm,0.1s | | | | | | |
| **CLZ** | **Clausthal** | **1.38** | **302** | ⇓*e*Pn | **Pb** | **03 09 14.2** | **+0.8** |
| **CLZ** | **Clausthal** | **1.38** | **302** | Pn | **Pb** | **03 09 14.2** | **+0.8** |
| **VITZ** | **Vitzeroda** | **1.39** | **261** | *e*Pg | **Pb** | **03 09 14.9** | **+1.4** |
| VITZ | | | | *e*Sg | **Sb** | **03 09 33.4** | **+2.3** |
| **VITZ** | **Vitzeroda** | **1.39** | **261** | Pg | **Pb** | **03 09 14.9** | **+1.4** |
| VITZ | | | | Sg | **Sb** | **03 09 33.4** | **+2.3** |
| **ASSE** | **Asse, Remlinge** | **1.41** | **316** | ⇑*i*Pg | **Pb** | **03 09 14.8** | **+0.9** |
| ASSE | | | | *i* Sg | **Sg** | **03 09 33.3** | **+0.2** |
| **ASSE** | **Asse, Remlinge** | **1.41** | **316** | Pg | **Pb** | **03 09 14.8** | **+0.9** |
| ASSE | | | | Sg | **Sg** | **03 09 33.3** | **+0.2** |
| **GRA1** | **Grafenberg Arr** | **1.58** | **205** | Pn | **Pn** | **03 09 16.4** | **+0.9** |
| **GRA1** | **Grafenberg Arr** | **1.58** | **205** | Pg | **Pg** | **03 09 19.6** | **+1.5** |
| GRA1 | | | | Sg | **Sg** | **03 09 40.5** | **+1.9** |
| **GRF** | **Grafenberg Arr** | **1.58** | **205** | ⇑*i*Pn | **Pn** | **03 09 16.4** | **+0.9** |
| GRF | | | | *i* Pg | **Pg** | **03 09 19.6** | **+1.5** |
| GRF | | | | *e*Sg | **Sg** | **03 09 40.5** | **+1.9** |
| **PVCC** | **Panska Ves** | **1.59** | **111** | *e*Pn | **Pn** | **03 09 16.7** | **+1.1** |
| PVCC | | | | *e*Pg | **Pg** | **03 09 18.4** | **+0.2** |
| PVCC | | | | *e*Sg | **Sg** | **03 09 40.2** | **+1.3** |
| **PVCC** | **Panska Ves** | **1.59** | **111** | ⇑*e*PN | **Pn** | **03 09 16.5** | **+0.9** |
| PVCC | | | | *e*PG | **Pb** | **03 09 17.8** | **+0.8** |
| PVCC | | | | *e*SG | **Sg** | **03 09 39.1** | **+0.2** |
| | comp=N,294nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.59** | **111** | *e*Pn | **Pn** | **03 09 16.7** | **+1.1** |
| **PVCC** | **Panska Ves** | **1.59** | **111** | Pn | **Pn** | **03 09 16.7** | **+1.1** |
| **PVCC** | **Panska Ves** | **1.59** | **111** | Pg | **Pg** | **03 09 18.4** | **+0.2** |
| PVCC | | | | Sg | **Sg** | **03 09 39.1** | **+0.2** |
| | comp=N,294nm,0.2s | | | | | | |
| **RUE** | **Ruedersdorf** | **1.65** | **34** | *e*Pg | **Pg** | **03 09 20.1** | **+0.6** |
| RUE | | | | *e*Sg | **Sg** | **03 09 41.3** | **+0.3** |
| **RUE** | **Ruedersdorf** | **1.65** | **34** | Pg | **Pg** | **03 09 20.1** | **+0.6** |
| RUE | | | | Sg | **Sg** | **03 09 41.3** | **+0.3** |
| **PRA** | **Prague** | **1.75** | **126** | ⇑*e*PG | **Pg** | **03 09 21.5** | **+0.2** |
| PRA | | | | *e*SG | **Sg** | **03 09 44.5** | **+0.5** |
| | comp=N,32nm,0.4s | | | | | | |
| **PRA** | **Prague** | **1.75** | **126** | Pg | **Pg** | **03 09 21.5** | **+0.2** |
| PRA | | | | Sg | **Sg** | **03 09 44.5** | **+0.5** |
| | comp=N,32nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.85** | **127** | ⇓*i*Pn | **Pn** | **03 09 20.2** | **+1.0** |
| PRU | | | | *e*Pg | **Pg** | **03 09 23.9** | **+0.5** |
| PRU | | | | *e*Sg | **Sg** | **03 09 48.6** | **+1.2** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRU** | **Pruhonice** | **1.85** | **127**⇑ | ex | x | 03 09 17.7 | |
| PRU | | | | ePG | **Pg** | **03 09 23.7** | **+0.4** |
| PRU | | | | ex | x | 03 09 41.4 | |
| PRU | | | | eSG | **Sg** | **03 09 47.5** | **+0.1** |
| | comp=N,23nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.85** | **127**⇓ | iPn | **Pn** | **03 09 20.2** | **+1.0** |
| **PRU** | **Pruhonice** | **1.85** | **127** | Pn | **Pn** | **03 09 20.2** | **+1.0** |
| **GOPC** | **GO Pecny, Ondr** | **2.02** | **126** | ePN | **Pn** | **03 09 22.7** | **+1.1** |
| GOPC | | | | ePG | **Pg** | **03 09 26.9** | **+0.3** |
| GOPC | | | | eSG | **Sg** | **03 09 52.7** | **-0.1** |
| | comp=N,30nm,0.3s | | | | | | |
| GOPC | | | | ex | x | 03 09 54.4 | |
| **GOPC** | **GO Pecny, Ondr** | **2.02** | **126** | Pn | **Pn** | **03 09 22.7** | **+1.1** |
| GOPC | | | | Sg | **Sg** | **03 09 52.7** | **-0.1** |
| | comp=N,30nm,0.3s | | | | | | |
| **WET** | **Wettzell** | **2.03** | **168** | ePn | **Pn** | **03 09 22.8** | **+1.1** |
| WET | | | | eSg | **Sg** | **03 09 53.7** | **+0.8** |
| **WET** | **Wettzell** | **2.03** | **168** | ePn | **Pn** | **03 09 22.8** | **+1.1** |
| **WET** | **Wettzell** | **2.03** | **168** | Pn | **Pn** | **03 09 22.8** | **+1.1** |
| WET | | | | Sg | **Sg** | **03 09 53.7** | **+0.8** |
| **KHC** | **Kasperske Hory** | **2.17** | **156** | ePn | **Pb** | **03 09 26.4** | **-0.6** |
| KHC | | | | ePg | **Pg** | **03 09 29.9** | **+0.4** |
| KHC | | | | eSg | **Sg** | **03 09 57.1** | **-0.5** |
| **KHC** | **Kasperske Hory** | **2.17** | **156** | ePN | **Pn** | **03 09 25.0** | **+1.3** |
| KHC | | | | ePG | **Pb** | **03 09 28.8** | **+1.8** |
| KHC | | | | ex | x | 03 09 31.3 | |
| KHC | | | | eSN | **Sn** | **03 09 48.8** | **-1.7** |
| KHC | | | | eSG | **Sb** | **03 09 56.9** | **+3.1** |
| | comp=N,63nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.17** | **156** | Pn | **Pn** | **03 09 25.0** | **+1.3** |
| **UPC** | **Upice** | **2.46** | **103**⇓ | ePG | **Pg** | **03 09 34.5** | **-0.5** |
| UPC | | | | eSN | **Sn** | **03 09 56.1** | **-1.5** |
| UPC | | | | ex | x | 03 09 59.0 | |
| UPC | | | | eSG | **Sg** | **03 10 05.9** | **-1.0** |
| | comp=N,73nm,0.5s | | | | | | |
| **GEC2** | **GERESS Array S** | **2.47** | **157** | eSg | **Sg** | **03 10 06.7** | **-0.4** |
| **GEC2** | **GERESS Array S** | **2.47** | **157** | Sg | **Sg** | **03 10 06.7** | **-0.4** |
| **KSP** | **Ksiaz** | **2.57** | **95** | ePg | **Pg** | **03 09 37.3** | **+0.3** |
| KSP | | | | eSg | **Sg** | **03 10 11.0** | **+0.7** |
| **TNS** | **Taunus Mts** | **2.58** | **251** | eSg | **Sg** | **03 10 11.2** | **+0.4** |
| **TNS** | **Taunus Mts** | **2.58** | **251** | Sg | **Sg** | **03 10 11.2** | **+0.4** |
| **DPC** | **Dobruska-Polom** | **2.70** | **105** | ePN | **Pn** | **03 09 33.0** | **+2.0** |
| DPC | | | | ePG | **Pg** | **03 09 38.9** | **-0.6** |
| DPC | | | | eSG | **Sg** | **03 10 13.2** | **-1.3** |
| | comp=N,28nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **2.70** | **105** | Pn | **Pn** | **03 09 33.0** | **+2.0** |
| DPC | | | | Sg | **Sg** | **03 10 13.2** | **-1.3** |
| | comp=N,28nm,0.3s | | | | | | |
| **KOE** | **Koeppel** | **2.95** | **258** | ePn | **Pn** | **03 09 36.8** | **+2.4** |
| **KOE** | **Koeppel** | **2.95** | **258** | Pn | **Pn** | **03 09 36.8** | **+2.4** |
| **KRLC** | **Kraliky** | **3.07** | **108** | ePG | **Pg** | **03 09 46.6** | **0.0** |
| KRLC | | | | eSG | **Sg** | **03 10 26.1** | **-0.3** |
| **KRLC** | **Kraliky** | **3.07** | **108** | Pg | **Pg** | **03 09 46.6** | **0.0** |
| KRLC | | | | Sg | **Sg** | **03 10 26.1** | **-0.3** |
| **BUG** | **Bochum--Univer** | **3.14** | **278** | eSg | **Sb** | **03 10 26.2** | **+4.5** |
| **BGG** | **Burgeitz** | **3.26** | **255** | ePn | **Pn** | **03 09 41.1** | **+2.5** |
| **BGG** | **Burgeitz** | **3.26** | **255** | Pn | **Pn** | **03 09 41.1** | **+2.5** |
| **VRAC** | **Vranov** | **3.33** | **121** | ePn | **Pn** | **03 09 41.0** | **+1.4** |
| VRAC | | | | eSg | **Sg** | **03 10 34.4** | **-0.3** |
| **STB** | **Steinbach** | **3.47** | **263** | ePn | **Pn** | **03 09 44.3** | **+2.8** |
| STB | | | | eSn | **Sn** | **03 10 24.6** | **+2.2** |
| | comp=N,13nm,0.7s | | | | | | |
| **STB** | **Steinbach** | **3.47** | **263** | Pn | **Pn** | **03 09 44.3** | **+2.8** |
| STB | | | | Sn | **Sn** | **03 10 24.6** | **+2.2** |
| | comp=N,13nm,0.7s | | | | | | |
| **MOA** | **Molln** | **3.53** | **157**⇓ | iPn | **Pn** | **03 09 42.5** | **+0.1** |
| **MOA** | **Molln** | **3.53** | **157** | Pn | **Pn** | **03 09 42.5** | **+0.1** |
| **MORC** | **Moravsky Berou** | **3.64** | **110** | ePn | **Pn** | **03 09 45.0** | **+1.1** |
| MORC | | | | eSg | **Sg** | **03 10 43.6** | **-1.1** |
| **BFO** | **Black Forest** | **3.78** | **224** | ePn | **Pn** | **03 09 45.2** | **-0.6** |
| BFO | | | | ePg | **Pg** | **03 10 00.5** | **+0.3** |
| BFO | | | | eSg | **Sg** | **03 10 49.7** | **+0.5** |
| **BFO** | **Black Forest** | **3.78** | **224** | Pn | **Pn** | **03 09 45.2** | **-0.6** |
| **MOTA** | **Moosalm** | **3.86** | **192**⇑ | iPn | **Pn** | **03 09 46.8** | **-0.2** |
| **MOTA** | **Moosalm** | **3.86** | **192** | Pn | **Pn** | **03 09 46.8** | **-0.2** |
| **OKC** | **Ostrava-Krasne** | **3.98** | **107**⇑ | ePN | **Pn** | **03 09 50.1** | **+1.6** |
| OKC | | | | ePG | **Pg** | **03 10 03.0** | **-1.0** |
| OKC | | | | eSG | **Sg** | **03 10 54.0** | **-1.5** |
| | comp=N,21nm,0.6s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **3.98** | **107** | Pn | **Pn** | **03 09 50.1** | **+1.6** |
| **DAVA** | **Damuels** | **4.15** | **203**⇑ | iPn | **Pn** | **03 09 49.8** | **-1.1** |
| **DAVA** | **Damuels** | **4.15** | **203** | Pn | **Pn** | **03 09 49.8** | **-1.1** |
| **WLF** | **Walferdange** | **4.17** | **252** | eSg | **Sg** | **03 11 00.5** | **-1.1** |
| **CDF** | **Champ du Feu** | **4.22** | **232** | ePn | **Pn** | **03 09 51.7** | **-0.1** |
| **CDF** | **Champ du Feu** | **4.22** | **232** | eP | Pn | 03 09 55.2 | +3.4 |
| **CDF** | **Champ du Feu** | **4.22** | **232** | ePg | **Pg** | **03 10 06.9** | **-1.6** |
| CDF | | | | eSn | **Sn** | **03 10 38.5** | **-2.5** |
| CDF | | | | eSg | **Sg** | **03 11 01.0** | **-2.1** |
| | comp=N,14nm,0.4s | | | | | | |
| **CDF** | **Champ du Feu** | **4.22** | **232** | ePn | **Pn** | **03 09 51.7** | **-0.1** |
| **CDF** | **Champ du Feu** | **4.22** | **232** | eP | Pn | 03 09 55.2 | +3.4 |
| **CDF** | **Champ du Feu** | **4.22** | **232** | ePg | **Pg** | **03 10 06.9** | **-1.6** |
| CDF | | | | eSn | **Sn** | **03 10 38.5** | **-2.5** |
| CDF | | | | eSg | **Sg** | **03 11 01.0** | **-2.1** |
| | comp=N,6.8nm,0.4s | | | | | | |
| **HINF** | **Hinteralfeld** | **4.83** | **229** | ePn | **Pn** | **03 10 00.0** | **-0.3** |
| **HINF** | **Hinteralfeld** | **4.83** | **229** | eP | Pn | 03 10 04.3 | +4.0 |
| **HINF** | **Hinteralfeld** | **4.83** | **229** | ePg | Pg | 03 10 18.4 | -1.9 |
| HINF | | | | eSg | **Sg** | **03 11 20.4** | **-2.5** |
| | comp=N,7.6nm,0.3s | | | | | | |
| **HINF** | **Hinteralfeld** | **4.83** | **229** | ePn | **Pn** | **03 10 00.0** | **-0.3** |
| **HINF** | **Hinteralfeld** | **4.83** | **229** | eP | Pn | 03 10 04.3 | +4.0 |
| **HINF** | **Hinteralfeld** | **4.83** | **229** | ePg | Pg | 03 10 18.4 | -1.9 |
| HINF | | | | eSg | **Sg** | **03 11 20.4** | **-2.5** |
| | comp=N,3.8nm,0.3s | | | | | | |
| **GIVF** | **Givet** | **4.84** | **261** | eSg | **Sg** | **03 11 19.1** | **-4.0** |
| | comp=N,32nm,0.8s | | | | | | |
| **PAGF** | **Fort de Pagny** | **4.95** | **241** | ePn | **Pn** | **03 10 01.4** | **-0.4** |
| | baz=58 | | | | | | |
| **PAGF** | **Fort de Pagny** | **4.95** | **241** | ePg | Pb | 03 10 19.4 | +5.2 |
| | baz=55 | | | | | | |
| PAGF | | | | eSg | **Sg** | **03 11 22.4** | **-4.1** |
| | comp=N,0.8nm,0.3s | | | | | | |
| **PAGF** | **Fort de Pagny** | **4.95** | **241** | ePn | **Pn** | **03 10 01.4** | **-0.4** |
| **PAGF** | **Fort de Pagny** | **4.95** | **241** | ePg | Pb | 03 10 19.4 | +5.2 |
| | baz=55 | | | | | | |
| **HAU** | **Haudompre** | **4.95** | **233** | ePn | **Pn** | **03 10 01.2** | **-0.7** |
| **HAU** | **Haudompre** | **4.95** | **233** | eP | Pn | 03 10 05.6 | +3.7 |
| **HAU** | **Haudompre** | **4.95** | **233** | ePg | **Pg** | **03 10 21.1** | **-1.5** |
| HAU | | | | eSg | **Sg** | **03 11 23.4** | **-3.3** |
| | comp=N,7.9nm,0.3s | | | | | | |
| **HAU** | **Haudompre** | **4.95** | **233** | ePn | **Pn** | **03 10 01.2** | **-0.7** |
| **HAU** | **Haudompre** | **4.95** | **233** | eP | Pn | 03 10 05.6 | +3.7 |
| **HAU** | **Haudompre** | **4.95** | **233** | ePg | **Pg** | **03 10 21.1** | **-1.5** |
| **BAIF** | **Baives** | **5.23** | **261** | eP | Pn | 03 10 09.2 | +3.5 |
| BAIF | | | | eSg | Sg | 03 11 31.1 | -4.6 |
| | comp=N,31nm,1.1s | | | | | | |
| **BAIF** | **Baives** | **5.23** | **261** | eP | Pn | 03 10 09.2 | +3.5 |
| **MEZF** | **Maizieres J'vi** | **5.35** | **243** | eSg | Sg | 03 11 35.2 | -4.2 |
| | comp=N,2.1nm,0.2s | | | | | | |
| **SFTF** | **Sexfontaines** | **5.52** | **241** | ePn | **Pn** | **03 10 09.3** | **-0.4** |
| **SFTF** | **Sexfontaines** | **5.52** | **241** | ePg | Pg | 03 10 31.0 | -2.5 |
| SFTF | | | | eSg | Sg | 03 11 40.5 | -4.4 |
| | comp=N,3.8nm,0.5s | | | | | | |
| **SFTF** | **Sexfontaines** | **5.52** | **241** | ePn | **Pn** | **03 10 09.3** | **-0.4** |
| **CABF** | **La Chapelle** | **6.08** | **224** | ePg | Pg | 03 10 40.7 | -3.4 |
| CABF | | | | eSg | Sg | 03 11 58.6 | -4.2 |
| | comp=N,0.9nm,0.3s | | | | | | |
| **LOR** | **Lormes** | **6.72** | **238** | ePn | **Pn** | **03 10 25.5** | **-0.6** |
| | baz=65 | | | | | | |
| **LOR** | **Lormes** | **6.72** | **238** | ePg | Pg | 03 10 52.3 | -4.1 |
| | baz=64 | | | | | | |
| LOR | | | | eSg | Sg | 03 12 18.9 | -4.4 |
| | comp=N,4.3nm,0.6s | | | | | | |
| **LOR** | **Lormes** | **6.72** | **238** | ePn | **Pn** | **03 10 25.5** | **-0.6** |
| **LPG** | **La Plagne** | **6.72** | **215** | ePn | **Pn** | **03 10 25.8** | **-0.6** |
| **LPG** | **La Plagne** | **6.72** | **215** | ePg | Pg | 03 10 52.8 | -3.6 |
| LPG | | | | eSg | **Sg** | **03 12 19.3** | **-4.1** |
| | comp=N,1.0nm,0.2s | | | | | | |
| **LPG** | **La Plagne** | **6.72** | **215** | ePn | **Pn** | **03 10 25.8** | **-0.6** |
| **SMF** | **Signal de Mont** | **7.13** | **234** | eSg | Sg | 03 12 31.1 | -5.4 |
| | comp=N,5.2nm,0.4s | | | | | | |
| **AVF** | **Avril sur Loir** | **7.29** | **237** | eSg | Sg | 03 12 35.7 | -5.8 |
| | comp=N,1.4nm,0.4s | | | | | | |

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*BJI **06** 03:26:04.8, 32°.70N×85°.29E, h9km, mb4.5/6, mB4.6/5, Ms4.3/6, Ms7 4.0/5*
*ISCJB **06** 03:26:09.8±0.3, 32°.80N±0°.03×85°.64E±0°.05, h10km, mb3.8/16, MS3.5/10, Error ellipse: s-maj=6.3km s-min=4.7km az=170.3*
*IDC **06** 03:26:09.1±0.8, 32°.55N×85°.32E, h0km, mb3.9/15, mb1 4.1/19, mb1mx3.8/47, mbtmp3.9/19, ML3.8/3, MS3.6/13, Ms1 3.6/13, ms1mx3.4/37, Error ellipse: s-maj=24.9km s-min=15.2km az=48.0*
*NEIC **06** 03:26:11.1±0.6, 32°.62N×85°.28E, h10km, mb4.2/1, Error ellipse: s-maj=18.8km s-min=8.5km az=50.0*
*DMN **06** 03:26:12.4±7.3, 32°.60N×85°.72E, h10km, Mb5.0/6, Error ellipse: s-maj=173.3km s-min=19.9km az=2.0*
**ISC 06 03:26:10.9**±0.6**, 32°.77N**±0°.07×**85°.57E**±0°.05**, h10km, n45, σ2s09**/43**, mb3.9**/16**, MS3.5**/10**, Xizang**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DANN** | **Dangsing** | **4.67** | **200** | eP | Pn | 03 27 23.9 | +2.1 |
| **GKN** | **Gorkha** | **4.82** | **190** | eP | **Pn** | **03 27 25.3** | **+1.6** |
| | 48nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **4.85** | **177** | eP | **Pn** | **03 27 25.9** | **+1.7** |
| **DMN** | **Daman** | **5.16** | **185** | eP | **Pn** | **03 27 29.7** | **+1.3** |
| | 18nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **5.17** | **182** | eP | **Pn** | **03 27 30.3** | **+1.6** |
| | 42nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **5.18** | **182** | eP | **Pn** | **03 27 30.1** | **+1.3** |
| | 32nm,0.5s | | | | | | |
| **KOLN** | **Koldanda** | **5.26** | **199** | eP | **Pn** | **03 27 31.3** | **+1.4** |
| | 25nm,0.4s | | | | | | |
| **LSA** | **Lhasa** | **5.67** | **121** | ePn | Pn | 03 27 40.1 | +4.5 |
| | 11nm,0.7s | | | | | | |
| **TAPN** | **Taplejung** | **5.71** | **161** | eP | **Pn** | **03 27 37.7** | **+1.7** |
| | 18nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **5.86** | **171** | eP | **Pn** | **03 27 38.5** | **+0.4** |
| | 57nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **6.09** | **165** | eP | **Pn** | **03 27 41.7** | **+0.4** |
| | 24nm,0.5s | | | | | | |
| **KSH** | **Kashi** | **10.27** | **314** | eP | **Pn** | **03 28 35.9** | **-2.6** |
| KSH | | | | esP | | 03 28 42.2 | |
| KSH | | | | S | **Sn** | **03 30 31.2** | **-2.6** |
| KSH | | | | sS | | 03 30 36.9 | |
| KSH | | | | SS | **SnSn** | **03 30 44.7** | **-0.9** |
| KSH | | | | PMZ | | | |
| | 120nm,5.8s | | | | | | |
| KSH | | | | LN | | | |
| | 540nm,7.7s | | | | | | |
| KSH | | | | LE | | | |
| | 570nm,7.5s | | | | | | |
| KSH | | | | LZ | | | |
| | 540nm,7.5s | | | | | | |
| **AAK** | **Ala-Archa** | **13.18** | **322** | Pn | **Pn** | **03 29 17.6** | **-0.6** |
| | baz=174,slow=10,SNR=2.3 | | | | | | |
| AAK | | | | LR | LR | 03 34 38.0 | |
| | comp=Z,151nm,19.1s,baz=122,slow=38 | | | | | | |
| **GTA** | **Gaotai** | **13.28** | **56** | eP | **Pn** | **03 29 20.4** | **+0.8** |
| GTA | | | | pP | P | 03 29 23.7 | -5.8 |
| GTA | | | | sP | | 03 29 27.1 | |
| GTA | | | | S | **Sn** | **03 31 52.0** | **+4.6** |
| GTA | | | | sS | S | 03 31 58.3 | -14 |
| GTA | | | | SS | **SnSn** | **03 32 08.0** | **+8.3** |
| GTA | | | | PMZ | | | |
| | 3.0nm,0.8s | | | | | | |
| GTA | | | | PMZ | | | |
| | 63nm,5.0s | | | | | | |
| GTA | | | | LN | | | |
| | 670nm,14.3s | | | | | | |
| GTA | | | | LE | | | |
| | 340nm,10.0s | | | | | | |
| **EKS2** | **Erkin-Say** | **13.58** | **320** | ePn | Pn | 03 29 27.6 | +3.9 |
| | 4.1nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **14.23** | **351** | Pn | **Pn** | **03 29 33.8** | **+1.3** |
| | 0.1nm,0.3s,baz=169,slow=14,SNR=11 | | | | | | |
| MKAR | | | | LR | LR | 03 35 57.0 | |
| | comp=Z,136nm,18.7s,baz=164,slow=41 | | | | | | |
| **LZH** | **Lanzhou** | **15.44** | **73** | eP | Pn | 03 29 43.9 | -5.0 |
| LZH | | | | PP | pP | 03 29 57.0 | +0.7 |
| LZH | | | | eS | **Sn** | **03 32 37.1** | **-3.0** |
| LZH | | | | eSS | **SnSn** | **03 32 55.0** | **+2.3** |
| LZH | | | | PMZ | | | |
| | 27nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | 140nm,4.1s | | | | | | |
| LZH | | | | LN | | | |
| | 720nm,10.0s | | | | | | |
| LZH | | | | LE | | | |
| | 220nm,11.2s | | | | | | |
| LZH | | | | LZ | | | |
| | 950nm,12.1s | | | | | | |
| **CD2** | **Chengdu** | **15.57** | **92** | eP | Pn | 03 29 46.8 | -3.8 |
| CD2 | | | | pP | **P** | **03 29 55.9** | **+1.0** |
| CD2 | | | | sP | sP | 03 29 57.3 | -1.7 |
| CD2 | | | | S | **Sn** | **03 32 42.9** | **-0.2** |
| CD2 | | | | PMZ | | | |
| | 20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 160nm,5.0s | | | | | | |
| CD2 | | | | LN | | | |
| | 1μm,10.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | 510nm,10.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **18.59** | **346** | P | **Pn** | **03 30 29.0** | **+0.8** |
| | 0.1nm,0.3s,baz=163,slow=11,SNR=9.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.64** | **137** | P | **P** | **03 30 28.4** | **-0.4** |
| | 1.0nm,0.3s,baz=318,slow=11,SNR=13 | | | | | | |
| CMAR | | | | LR | LR | 03 37 56.2 | |
| | comp=Z,100nm,18.9s,baz=207,slow=38 | | | | | | |
| **KURK** | **Kurchatov** | **18.66** | **346** | P | **P** | **03 30 29.0** | **+0.2** |
| **GYA** | **Guiyang** | **19.37** | **103** | P | **P** | **03 30 37.2** | **+0.2** |
| GYA | | | | PMZ | | | |
| | 20nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **21.18** | **359** | P | **P** | **03 30 58.5** | **+2.2** |
| | 1.5nm,0.6s,baz=184,slow=12,SNR=6.1 | | | | | | |
| ZALV | | | | LR | LR | 03 40 38.1 | |
| | comp=Z,121nm,19.4s,baz=250,slow=41 | | | | | | |
| **SONM** | **Songino Array** | **21.78** | **40** | P | **P** | **03 31 04.9** | **+1.9** |
| | 1.5nm,0.9s,baz=230,slow=11,SNR=5.0 | | | | | | |
| SONM | | | | LR | LR | 03 40 24.5 | |
| | comp=Z,197nm,21.9s,baz=204,slow=39 | | | | | | |
| **GEYT** | **Alibeck** | **22.94** | **291** | P | **P** | **03 31 13.1** | **-2.2** |
| | 1.0nm,0.3s,baz=190,slow=5.7,SNR=2.1 | | | | | | |
| GEYT | | | | LR | LR | 03 41 46.4 | |
| | comp=Z,239nm,19.6s,baz=70,slow=41 | | | | | | |
| **BVAR** | **Borovoye Array** | **23.01** | **336** | P | **P** | **03 31 17.5** | **+1.7** |
| | 0.6nm,0.4s,baz=141,slow=9.6,SNR=4.9 | | | | | | |
| **TLY** | **Talaya** | **23.05** | **30** | LR | LR | 03 40 54.4 | |
| | comp=Z,130nm,20.4s,baz=207,slow=38 | | | | | | |
| **ABKAR** | **Akbulak array** | **25.23** | **318** | eP | **P** | **03 31 37.0** | **+0.2** |
| | 4.2nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **25.77** | **191** | LR | LR | 03 41 19.8 | |
| | comp=Z,170nm,21.6s,baz=116,slow=36 | | | | | | |
| **AKTO** | **Aktyubinsk** | **26.90** | **319** | P | **P** | **03 31 53.4** | **+1.4** |
| | 0.8nm,0.5s,baz=117,slow=11,SNR=2.2 | | | | | | |
| AKTO | | | | LR | LR | 03 43 17.5 | |
| | comp=Z,132nm,18.1s,baz=115,slow=38 | | | | | | |
| **CN2** | **Changchun** | **32.89** | **59** | eP | **P** | **03 32 45.7** | **+0.6** |
| CN2 | | | | PMZ | | | |
| | 10.0nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **34.74** | **70** | LR | LR | 03 48 09.7 | |
| | comp=Z,73nm,18.9s,baz=255,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **44.55** | **311** | LR | LR | 03 56 01.0 | |
| | comp=Z,77nm,20.2s,baz=315,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **47.32** | **326** | P | **P** | **03 34 44.9** | **+0.4** |
| | 5.3nm,0.8s,baz=108,slow=9.1,SNR=9.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **49.30** | **336** | P | **P** | **03 34 59.3** | **-0.4** |
| | 4.9nm,0.8s,baz=106,slow=8.9,SNR=9.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **54.15** | **45** | LR | LR | 04 00 17.1 | |
| | comp=Z,44nm,18.2s,baz=282,slow=38 | | | | | | |
| **NB2** | **NORSAR Subarra** | **54.47** | **325** | P | **P** | **03 35 38.4** | **0.0** |
| | comp=Z,2.1nm,0.8s,baz=85,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **54.47** | **325** | P | **P** | **03 35 38.3** | **-0.1** |
| | comp=Z,3.9nm,0.8s,baz=85,slow=7.2,SNR=6.3 | | | | | | |
| **GERES** | **GERESS Array B** | **54.72** | **310** | P | **P** | **03 35 39.2** | **-1.2** |
| | comp=Z,0.1nm,0.5s,baz=68,slow=6.5,SNR=2.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **70.13** | **131** | P | **P** | **03 37 22.5** | **-1.3** |
| | comp=Z,0.6nm,0.4s,baz=326,slow=6.5,SNR=6.7 | | | | | | |
| **ASAR** | **Alice Springs** | **72.63** | **134** | P | **P** | **03 37 40.2** | **+1.4** |
| | comp=Z,0.5nm,0.9s,baz=317,slow=6.1,SNR=4.9 | | | | | | |
| **ILAR** | **Eielson Array** | **74.53** | **21** | P | **P** | **03 37 51.6** | **+2.1** |
| | comp=Z,0.5nm,0.9s,baz=316,slow=4.3,SNR=5.2 | | | | | | |
| **INK** | **Inuvik** | **75.11** | **14** | P | **P** | **03 37 54.9** | **+2.2** |
| | comp=Z,4.9nm,1.0s,baz=355,slow=7.0,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.92** | **278** | P | **P** | **03 38 08.4** | **-1.1** |
| | comp=Z,0.9nm,0.8s,baz=53,slow=5.3,SNR=8.1 | | | | | | |
| TORD | | | | LR | LR | 04 17 03.9 | |
| | comp=Z,64nm,18.4s,baz=110,slow=39 | | | | | | |
| **YKA** | **Yellowknife Ar** | **83.69** | **9** | P | **P** | **03 38 39.8** | **+0.2** |
| | comp=Z,1.6nm,0.8s,baz=332,slow=4.9,SNR=3.9 | | | | | | |

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**IDC 06 03:31:49.1**±3.2**, 6°.12S**×**147°.55E, h0km, mb2.8**/1**, mb1 3.3**/3**, mb1mx3.2**/40**, mbtmp3.1**/3**, ML2.5**/2**, Error ellipse: s-maj=81.6km s-min=34.8km az=94.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.29** | **187** | Pn | Pn | 03 32 42.9 | +1.0 |
| | 4.3nm,0.3s,baz=7.5,slow=8.8,SNR=6.7 | | | | | | |
| PMG | | | | Sn | Sn | 03 33 22.8 | +1.1 |
| | 3.6nm,0.3s,baz=218,slow=19,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.81** | **222** | P | P | 03 36 10.0 | -0.4 |
| | 0.1nm,0.3s,baz=48,slow=11,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **21.84** | **216** | P | P | 03 36 43.0 | -0.4 |
| | 0.2nm,0.4s,baz=50,slow=8.7,SNR=5.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.65** | **284** | PKPbc | PKPdf | 03 51 30.0 | -0.6 |
| | 0.3nm,0.8s,baz=95,slow=4.2,SNR=4.6 | | | | | | |

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*IDC **06** 03:49:19.5±5.1, 12°.30S×166°.62E, h166km±48km, mb3.5/7, mb1 3.6/8, mb1mx3.4/33, mbtmp4.0/8, Error ellipse: s-maj=29.8km s-min=26.4km az=45.0*
*ISCJB **06** 03:49:21.3±0.9, 12°.40S±0°.08×166°.6E±0°.2, h200km, mb3.6/7, Error ellipse: s-maj=28.9km s-min=10.1km az=173.4*
**ISC 06 03:49:22.8**±0.9**, 12°.46S**±0°.09×**166°.6E**±0°.2**, h200km, n11, σ0s85**/13**, mb3.6**/7**, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **9.56** | **181** | P | **Pn** | **03 51 36.6** | **+0.2** |
| | 2.2nm,0.3s,baz=356,slow=12,SNR=11 | | | | | | |
| DZM | | | | S | **Sn** | **03 53 22.0** | **-1.5** |
| | 0.5nm,0.3s,baz=180,slow=19,SNR=3.9 | | | | | | |
| **RPZ** | **Rata Peaks** | **31.38** | **174** | P | **P** | **03 55 26.3** | **+1.5** |
| | 7.8nm,0.7s,baz=344,slow=7.4,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.84** | **252** | P | **P** | **03 55 29.1** | **0.0** |
| | 0.3nm,0.7s,baz=85,slow=9.1,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **32.96** | **246** | P | **P** | **03 55 38.8** | **-0.1** |
| | 0.6nm,0.8s,baz=68,slow=10,SNR=5.4 | | | | | | |
| **KSRS** | **Korea Array** | **61.52** | **326** | P | **P** | **03 59 18.6** | **+0.1** |
| | 0.6nm,0.4s,baz=120,slow=7.4,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **80.30** | **324** | P | **P** | **04 01 11.3** | **-0.2** |
| | 0.4nm,0.3s,baz=137,slow=6.2,SNR=5.2 | | | | | | |
| **ILAR** | **Eielson Array** | **84.57** | **18** | P | **P** | **04 01 31.8** | **-1.4** |
| | 0.4nm,0.6s,baz=238,slow=5.2,SNR=6.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **95.13** | **317** | P | **P** | **04 02 23.2** | **-0.1** |
| | 1.2nm,0.6s,baz=98,slow=5.6,SNR=7.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **117.91** | **346** | PKP | **PKPdf** | **04 07 44.9** | **0.0** |
| | 3.4nm,1.0s,baz=78,slow=2.6,SNR=9.7 | | | | | | |
| **KEST** | **Kesra** | **149.05** | **322** | PKPbc | **PKPbc** | **04 08 48.0** | **+0.2** |
| | 2.7nm,0.9s,baz=37,slow=5.1,SNR=3.4 | | | | | | |
| **ESDC** | **Sonseca Array** | **151.64** | **345** | PKPbc | **PKPbc** | **04 08 54.3** | **+0.5** |
| | 0.3nm,0.5s,baz=37,slow=2.1,SNR=3.6 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | **04 09 03.6** | **+0.6** |
| | 0.4nm,0.5s,baz=13,slow=3.4,SNR=4.2 | | | | | | |

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*MOS **06** 03:55:16.6±0.5, 52°.80N×163°.46E, h53km, mb4.2/1, Error ellipse: s-maj=15.0km s-min=9.3km az=41.3*
*KRSC **06** 03:55:22.7±1.3, 53°.16N×162°.57E, h60km±21km, ML4.0*
*ISCJB **06** 03:55:23.7±0.8, 53°.16N±0°.04×162°.57E±0°.07, h27km, mb3.4/3, Error ellipse: s-maj=7.2km s-min=4.6km az=136.0*
*IDC **06** 03:55:40.3±3.0, 52°.76N×160°.59E, h118km±25km, mb3.1/3, mb1 3.4/3, mb1mx2.9/35, mbtmp3.5/3, Error ellipse: s-maj=40.6km s-min=28.3km az=137.0*
**ISC 06 03:55:23.5**±1.4**, 53°.11N**±0°.06×**162°.72E**±0°.09**, h27km, n43, σ1s06**/63**, mb3.4**/3**, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **1.56** | **338** | eP | **Pn** | **03 55 48.9** | **-0.6** |
| MKZ | | | | eS | **Sn** | **03 56 07.1** | **-1.7** |
| **MKZ** | **Mys Kozlova** | **1.56** | **338** | PN | **Pn** | **03 55 48.9** | **-0.6** |
| **SPN** | **Mys Shipunski** | **1.63** | **271** | i P | **Pn** | **03 55 49.7** | **-0.7** |
| SPN | | | | i S | **Sn** | **03 56 08.4** | **-2.0** |
| **SPN** | **Mys Shipunski** | **1.63** | **271** | PN | **Pn** | **03 55 49.7** | **-0.7** |
| **NLC** | **Nalytchevo** | **2.04** | **273** | eP | **Pn** | **03 55 55.6** | **-0.4** |
| NLC | | | | eS | **Sn** | **03 56 18.8** | **-1.6** |
| **NLC** | **Nalytchevo** | **2.04** | **273** | PN | **Pn** | **03 55 55.6** | **-0.4** |
| **KII** | **Karymskiy** | **2.16** | **297** | eS | **Sn** | **03 56 22.0** | **-1.7** |
| **SDLR** | **Sedlovina** | **2.31** | **276** | i P | **Pn** | **03 55 59.9** | **0.0** |
| SDLR | | | | eS | **Sn** | **03 56 27.0** | **-0.6** |
| **SDLR** | **Sedlovina** | **2.31** | **276** | PN | **Pn** | **03 55 59.9** | **0.0** |
| **UGLR** | **Uglovaya** | **2.35** | **274** | i P | **Pn** | **03 56 00.7** | **+0.3** |
| UGLR | | | | eS | **Sn** | **03 56 27.6** | **-0.8** |
| **SMAR** | **Somma** | **2.36** | **275** | eP | **Pn** | **03 56 00.7** | **0.0** |
| SMAR | | | | eS | **Sn** | **03 56 27.6** | **-1.3** |
| **SMAR** | **Somma** | **2.36** | **275** | PN | **Pn** | **03 56 00.7** | **0.0** |
| **AVH** | **Avacha** | **2.40** | **275** | eP | **Pn** | **03 56 01.5** | **+0.4** |
| AVH | | | | eS | **Sn** | **03 56 28.4** | **-1.3** |
| **AVH** | **Avacha** | **2.40** | **275** | PN | **Pn** | **03 56 01.5** | **+0.4** |
| **PET** | **Petropavlovsk** | **2.46** | **270** | eP | **Pn** | **03 56 02.8** | **+1.0** |
| PET | | | | eS | **Sn** | **03 56 30.2** | **-0.6** |
| **PET** | **Petropavlovsk** | **2.46** | **270** | ePN | **Pn** | **03 56 02.7** | **+1.0** |
| PET | | | | pmax | pmax | | |
| | comp=Z,30nm,0.3s | | | | | | |
| **KRX** | **Arik** | **2.46** | **277** | eP | **Pn** | **03 56 01.9** | **-0.1** |
| KRX | | | | eS | **Sn** | **03 56 29.1** | **-2.1** |
| **KZV** | **Kizimen** | **2.46** | **325** | eP | **Pn** | **03 56 01.8** | **-0.2** |
| KZV | | | | eS | **Sn** | **03 56 29.7** | **-1.5** |
| **KOK** | **Koryaka** | **2.46** | **276** | eP | **Pn** | **03 56 02.0** | **0.0** |
| KOK | | | | eS | **Sn** | **03 56 30.5** | **-0.7** |
| **KOK** | **Koryaka** | **2.46** | **276** | PN | **Pn** | **03 56 02.0** | **0.0** |
| **RUS** | **Russkaya** | **2.65** | **257** | i P | **Pn** | **03 56 04.3** | **-0.1** |
| RUS | | | | eS | **Sn** | **03 56 34.0** | **-1.5** |
| **RUS** | **Russkaya** | **2.65** | **257** | PN | **Pn** | **03 56 04.3** | **-0.1** |
| RUS | | | | S | **Sn** | **03 56 34.0** | **-1.5** |
| **TUMR** | **Tumrok** | **2.65** | **326** | i P | **Pn** | **03 56 04.8** | **+0.3** |
| **TUMR** | **Tumrok** | **2.65** | **326** | PN | **Pn** | **03 56 04.8** | **+0.3** |
| **MTVR** | **Mutnovka** | **2.83** | **259** | eP | **Pn** | **03 56 07.3** | **+0.3** |
| MTVR | | | | eS | **Sn** | **03 56 38.4** | **-1.8** |
| **GNL** | **Ganaly** | **2.92** | **283** | eP | **Pn** | **03 56 09.0** | **+0.7** |
| GNL | | | | eS | **Sn** | **03 56 41.0** | **-1.5** |
| **GNL** | **Ganaly** | **2.92** | **283** | PN | **Pn** | **03 56 09.0** | **+0.7** |
| **ASAK** | **Asacha** | **3.02** | **258** | eP | **Pn** | **03 56 10.2** | **+0.6** |
| ASAK | | | | eS | **Sn** | **03 56 44.4** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **3.03** | **272** | P | **Pn** | **03 56 10.8** | **+1.2** |
| | comp=Z,5.6nm,0.3s,baz=96,slow=17,SNR=50 | | | | | | |
| PETK | | | | S | **Sn** | **03 56 44.2** | **-0.7** |
| | comp=Z,9.4nm,0.3s,baz=111,slow=16,SNR=9.6 | | | | | | |
| **KBTR** | **Krutoberegovo** | **3.10** | **1** | eP | **Pn** | **03 56 10.0** | **-0.6** |
| **KBTR** | **Krutoberegovo** | **3.10** | **1** | PN | **Pn** | **03 56 10.0** | **-0.6** |
| **APC** | **Apacha** | **3.37** | **269** | eP | **Pn** | **03 56 16.3** | **+2.1** |
| APC | | | | eS | **Sn** | **03 56 53.5** | **+0.2** |
| **APC** | **Apacha** | **3.37** | **269** | PN | **Pn** | **03 56 16.3** | **+2.1** |
| **SRDR** | **Sredinnyy** | **3.65** | **333** | P | **Pn** | **03 56 19.2** | **+0.9** |
| **SRDR** | **Sredinnyy** | **3.65** | **333** | PN | **Pn** | **03 56 19.2** | **+0.9** |
| **ESO** | **Esso** | **3.67** | **322** | eP | **Pn** | **03 56 19.1** | **+0.7** |
| ESO | | | | eS | **Sn** | **03 57 00.5** | **-0.2** |
| **ESO** | **Esso** | **3.67** | **322** | PN | **Pn** | **03 56 19.1** | **+0.7** |
| **SKR** | **Severo-Kuril's** | **4.76** | **242** | eP | **Pn** | **03 56 33.6** | **+0.2** |
| SKR | | | | eP | **Pn** | **03 56 33.6** | **+0.2** |
| SKR | | | | eS | **Sn** | **03 57 26.1** | **-1.5** |
| **SKR** | **Severo-Kuril's** | **4.76** | **242** | ePN | **Pn** | **03 56 30.5** | **-2.9** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,50nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **27.68** | **45** | P | P | 04 01 27.0 | +18 |
| | comp=Z,0.3nm,0.6s,baz=261,slow=8.2,SNR=4.4 | | | | | | |
| **KURK** | **Kurchatov** | **49.06** | **303** | P | **P** | **04 04 08.8** | **+1.0** |
| **KURBB** | **Kurchatov Arra** | **49.16** | **303** | P | **P** | **04 04 08.8** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=56,slow=7.7,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **76.80** | **207** | P | **P** | **04 07 13.6** | **+1.1** |
| | comp=Z,0.7nm,1.0s,baz=23,slow=6.2,SNR=4.9 | | | | | | |

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**NEIC 06 04:13:55.3, 51°.58N**×**175°.16W, h15km, ML3.6**(AEIC)**, After AEIC., Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.73** | **310** | P | Pg | 04 14 09.6 | 0.0 |
| **GSCK** | **Great Sitkin C** | **0.76** | **305** | P | Pg | 04 14 10.0 | -0.2 |
| **GSTR** | **Great Sitkin T** | **0.76** | **313** | ePg | Pb | 04 14 10.4 | +0.1 |
| **GSTD** | **Great Sitkin T** | **0.78** | **308** | P | Pg | 04 14 10.3 | -0.3 |
| GSTD | | | | S | Sg | 04 14 20.7 | -0.2 |
| **ETKA** | **Kagalaska Isla** | **0.83** | **291** | P | Pg | 04 14 10.8 | -0.5 |
| **ATKA** | **Atka Island** | **0.86** | **43** | P | Pb | 04 14 10.9 | -1.1 |
| ATKA | | | | S | Sb | 04 14 22.4 | -1.0 |
| **KOKL** | **Mount Kliuchef** | **0.95** | **38** | P | Pb | 04 14 13.4 | -0.2 |
| **KOFP** | **Korovin Flat P** | **0.96** | **43** | P | Pb | 04 14 13.5 | -0.2 |
| **KOWE** | **Korovin West** | **0.97** | **35** | P | Pb | 04 14 13.8 | 0.0 |
| **ADAG** | **Mount Adagdak** | **0.98** | **295** | P | Pb | 04 14 13.9 | -0.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KOKV | Korovin Volcan | 1.00 | 38 | P | Pb | 04 14 13.4 | -0.9 |
| KOKV | | | | S | Sg | 04 14 28.1 | +0.4 |
| KOSE | Korovin Southe | 1.03 | 41 | P | Pb | 04 14 14.4 | -0.5 |
| KOSE | | | | S | Sb | 04 14 27.8 | -0.5 |
| KIRH | Kanaga Island | 1.25 | 286 | P | Pn | 04 14 17.2 | -1.0 |
| KIKV | Kanaga Island | 1.29 | 284 | P | Pn | 04 14 18.2 | -0.6 |
| KICM | Kanaga Island | 1.31 | 286 | P | Pn | 04 14 18.7 | -0.3 |
| TAPA | Tanaga Point A | 1.67 | 279 | P | Pn | 04 14 23.1 | -1.0 |
| TAFL | Tanaga Flats | 1.72 | 277 | P | Pn | 04 14 24.2 | -0.4 |
| TAFP | Tanaga Falls P | 1.79 | 282 | P | Pn | 04 14 25.2 | -0.4 |
| TAFP | | | | S | Sb | 04 14 49.1 | -0.9 |
| TASE | Tanaga Southea | 1.81 | 279 | P | Pn | 04 14 25.3 | -0.7 |
| GAEA | Gareloi East | 2.25 | 277 | P | Pn | 04 14 31.7 | -0.2 |
| GANE | Gareloi Northe | 2.27 | 278 | P | Pn | 04 14 32.2 | 0.0 |
| CERAA | Semis' Rag'd T | 3.22 | 278 | P | Pn | 04 14 46.3 | +0.9 |
| CESW | Semis' Southwe | 3.30 | 278 | P | Pn | 04 14 47.2 | +0.9 |
| AMKA | Amchitka | 3.47 | 269 | ePn | Pn | 04 14 48.7 | -0.1 |
| AMKA | | | | eS | Sn | 04 15 32.8 | +3.3 |
| LSPA | Little Sitkin | 3.91 | 278 | P | Pn | 04 14 55.0 | +0.2 |
| LSPA | | | | S | Sn | 04 15 42.6 | +2.1 |
| LSNW | Little Sitkin | 3.95 | 278 | P | Pn | 04 14 55.7 | +0.3 |
| LSSA | Little Sitkin | 3.95 | 278 | P | Pn | 04 14 55.6 | +0.3 |

**MEX 06 04:27:41.4±0.3, 14°.56N×92°.71W, h52$^{km}$±76$^{km}$, MD3.9, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.24 | 337 | eP | Pn | 04 28 00.9 | -1.5 |
| PCIG | | | | i S | Sn | 04 28 16.1 | -2.0 |

*IDC **06** 04:31:05.2±1.1, 54°.25N×169°.09E, h0$^{km}$, mb3.6/8, mb1 3.8/8, mb1mx3.6/42, mbtmp3.6/8, MS2.2/1, Ms1 2.2/1, ms1mx2.2/36, Error ellipse: s-maj=35.3km s-min=21.6km az=178.0*

*ISCJB **06** 04:31:06.7±1.0, 54°.3N±0°.2×169°.0E±0°.2, h20$^{km}$, mb3.6/8, Error ellipse: s-maj=32.1km s-min=18.4km az=173.8*

**ISC 06 04:31:08.5±1.2, 54°.3N±0°.3×169°.1E±0°.2, h20$^{km}$, n15, σ0$^s$.71/8, mb3.7/8, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PETK | Petropavlovsk- | 6.86 | 265 | LR | LR | 04 35 28.2 | |
| | comp=Z,20nm,18.8s,baz=62,slow=38 | | | | | | |
| ILAR | Eielson Array | 24.15 | 47 | P | P | 04 36 21.9 | -0.8 |
| | 0.3nm,0.6s,baz=251,slow=6.8,SNR=8.5 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.52 | 184 | T | T | 05 14 17.9 | |
| | baz=2.3,slow=76,SNR=201 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.53 | 184 | T | T | 05 14 18.8 | |
| | baz=2.3,slow=76,SNR=201 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.53 | 184 | T | T | 05 14 19.3 | |
| | baz=2.3,slow=76,SNR=231 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.74 | 184 | T | T | 05 15 48.6 | |
| | baz=2.4,slow=76,SNR=74 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.75 | 184 | T | T | 05 15 50.6 | |
| | baz=2.4,slow=76,SNR=45 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.76 | 184 | T | T | 05 15 47.8 | |
| | baz=2.4,slow=76,SNR=96 | | | | | | |
| SONM | Songino Array | 38.76 | 287 | P | P | 04 38 31.2 | -0.1 |
| | 0.4nm,0.5s,baz=57,slow=9.0,SNR=3.1 | | | | | | |
| KURBB | Kurchatov Arra | 51.63 | 306 | P | P | 04 40 12.9 | -0.2 |
| | 0.3nm,0.3s,baz=50,slow=7.9,SNR=7.6 | | | | | | |
| MKAR | Makanchi Array | 52.34 | 300 | P | P | 04 40 17.9 | -0.6 |
| | 0.2nm,0.3s,baz=61,slow=10,SNR=3.0 | | | | | | |
| BVAR | Borovoye Array | 53.71 | 312 | P | P | 04 40 28.8 | +0.2 |
| | 0.8nm,0.5s,baz=44,slow=8.8,SNR=5.1 | | | | | | |
| TXAR | Lajitas Array | 65.21 | 74 | P | P | 04 41 48.6 | +0.3 |
| | 0.4nm,0.5s,baz=297,slow=4.7,SNR=9.1 | | | | | | |
| BRTR | Keskin Array B | 78.86 | 327 | P | P | 04 43 11.2 | +1.1 |
| | 1.4nm,1.0s,baz=35,slow=3.5,SNR=3.7 | | | | | | |
| WRA | Warramunga Arr | 79.70 | 213 | P | P | 04 43 14.4 | -0.1 |
| | 1.0nm,1.1s,baz=25,slow=6.0,SNR=3.3 | | | | | | |

**FUNV 06 04:36:15.0, 10°.47N×69°.75W, h1$^{km}$, MW3.8, 2C-6D, Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIQV | Siquisique | 0.19 | 343 | ⇓iP | Pg | 04 36 18.6 | -0.1 |
| SIQV | | | | eS | Sg | 04 36 21.6 | +0.3 |
| CURV | Curarigua | 0.50 | 205 | ⇑iP | Pg | 04 36 23.9 | -0.8 |
| CURV | | | | eS | Sg | 04 36 31.8 | +0.6 |
| TEPV | Terepaima | 0.74 | 132 | ⇓eP | Pg | 04 36 29.4 | 0.0 |
| TEPV | | | | eS | Sg | 04 36 39.9 | +0.8 |
| QARV | Quebrada Arrib | 0.80 | 251 | ⇑iP | Pg | 04 36 30.4 | -0.2 |
| QARV | | | | eS | Sg | 04 36 42.0 | +1.0 |
| DABV | Dabajuro | 0.98 | 298 | ⇓eP | Pg | 04 36 34.3 | +0.4 |
| DABV | | | | eS | Sb | 04 36 47.6 | -0.7 |
| SANV | Sanarito | 0.98 | 168 | ⇓iP | Pg | 04 36 33.6 | -0.5 |
| SANV | | | | eS | Sg | 04 36 47.8 | +0.8 |
| JACV | Jacura | 1.09 | 56 | eP | Pg | 04 36 35.8 | -0.2 |
| JACV | | | | eS | Sb | 04 36 51.3 | -0.3 |
| MONV | Montecano | 1.49 | 352 | ⇓eP | Pn | 04 36 42.0 | -1.0 |
| MONV | | | | eS | Sb | 04 37 02.6 | -0.5 |
| TURV | Turiamo | 1.88 | 90 | eP | Pn | 04 36 47.2 | -1.1 |
| TURV | | | | eS | Sn | 04 37 11.7 | -0.9 |
| BAUV | El Baul | 2.27 | 132 | eP | Pn | 04 36 53.8 | +0.2 |
| BAUV | | | | eS | Sn | 04 37 20.9 | -1.3 |
| VIGV | El Vigia | 2.27 | 225 | eP | Pn | 04 36 53.6 | 0.0 |
| VIGV | | | | eS | Sn | 04 37 21.5 | -0.9 |
| SOCV | Socops | 2.43 | 207 | eP | Pn | 04 36 56.0 | +0.1 |
| SOCV | | | | eS | Sn | 04 37 24.5 | -1.8 |
| VIRV | Villa del Rosa | 2.61 | 271 | ⇓iP | Pn | 04 36 57.3 | -1.1 |
| BIRV | Birongo | 3.42 | 90 | eP | Pn | 04 37 08.8 | -0.8 |
| ELOV | Elorza | 3.45 | 176 | eP | Pn | 04 37 09.0 | -1.0 |
| CAPV | Capacho | 3.62 | 225 | eP | Pn | 04 37 11.4 | -1.1 |
| CAPV | | | | eS | Sn | 04 37 52.3 | -3.8 |
| CUPV | Cœpira | 3.92 | 96 | eP | Pn | 04 37 15.7 | -0.8 |
| PCRV | Puerto La Cruz | 5.04 | 93 | eP | Pn | 04 37 30.7 | -1.2 |

*DDA **06** 04:47:51.3, 35°.43N×31°.42E, h22$^{km}$, Md3.0*

*ISK **06** 04:47:51.4, 34°.97N×31°.49E, h46$^{km}$, MD3.3*

*ISCJB **06** 04:47:53.6±1.1, 35°.20N±0°.06×31°.59E±0°.07, h31$^{km}$±8$^{km}$, Error ellipse: s-maj=11.3km s-min=7.0km az=40.0*

*NIC **06** 04:47:53.5, 35°.38N×31°.58E, h21$^{km}$, ML3.1*

*CSEM **06** 04:47:53.6±0.5, 35°.10N×31°.58E, h30$^{km}$, ML3.1, Error ellipse: s-maj=13.4km s-min=7.1km az=37.0*

**ISC 06 04:47:50.6±1.4, 35°.24N±0°.04×31°.44E±0°.04, h24$^{km}$±14$^{km}$, n40, σ1$^s$.32/52, 2C, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKMC | Akamas | 0.76 | 106 | ⇑P | Pb | 04 48 04.9 | -0.3 |
| | baz=299 | | | | | | |
| AKMC | Akamas | 0.76 | 106 | ⇑P | Pb | 04 48 04.9 | -0.3 |
| PPCY | Paphos | 0.82 | 115 | P | Pn | 04 48 07.8 | +1.1 |
| | baz=308 | | | | | | |
| PPCY | Paphos | 0.82 | 115 | P | Pn | 04 48 07.8 | +1.1 |
| ALFC | Alevga | 0.95 | 95 | P | Pb | 04 48 08.9 | +0.4 |
| | baz=284 | | | | | | |
| ALFC | | | | S | Sb | 04 48 21.2 | +0.5 |
| ALFC | Alevga | 0.95 | 95 | P | Pb | 04 48 08.9 | +0.4 |
| ALFC | | | | S | Sb | 04 48 21.2 | +0.5 |
| LEF | Lefka | 1.20 | 95 | ePN | Pn | 04 48 10.8 | -1.0 |
| LEF | | | | eSN | Sn | 04 48 26.3 | -1.0 |
| LEF | Lefka | 1.20 | 95 | ePn | Pn | 04 48 10.8 | -1.0 |
| LEF | | | | eSn | Sn | 04 48 26.3 | -1.0 |
| GAZI | Gazipasa | 1.22 | 36 | i P | Pn | 04 48 11.5 | -0.7 |
| GAZI | | | | i S | Sn | 04 48 27.6 | -0.5 |
| GAZI | Gazipasa | 1.22 | 36 | P | Pn | 04 48 11.5 | -0.7 |
| GAZI | | | | S | Sn | 04 48 27.6 | -0.5 |
| AKDN | Akdeniz- K˜–br | 1.25 | 87 | ePN | Pb | 04 48 13.3 | -0.2 |
| AKDN | Akdeniz- K˜–br | 1.25 | 87 | ePn | Pb | 04 48 13.3 | -0.2 |
| SZAC | Souni-Zanaja | 1.28 | 112 | P | Pb | 04 48 14.8 | +0.8 |
| | baz=300 | | | | | | |
| SZAC | | | | S | Sb | 04 48 30.4 | +0.3 |
| SZAC | Souni-Zanaja | 1.28 | 112 | P | Pb | 04 48 14.8 | +0.8 |
| CSS | Prodhromos | 1.58 | 100 | ePN | Pn | 04 48 17.1 | 0.0 |
| CSS | Prodhromos | 1.58 | 100 | ePn | Pn | 04 48 17.1 | 0.0 |
| LFK | Lefkose | 1.71 | 88 | ePN | Pn | 04 48 19.7 | +0.7 |
| LFK | Lefkose | 1.71 | 88 | ePn | Pn | 04 48 19.7 | +0.7 |
| ERMK | Ermenek | 1.84 | 40 | i P | Pb | 04 48 23.1 | -0.6 |
| ERMK | | | | i S | Sb | 04 48 45.9 | -0.5 |
| ERMK | Ermenek | 1.84 | 40 | P | Pb | 04 48 23.1 | -0.6 |
| ERMK | | | | S | Sb | 04 48 45.9 | -0.5 |
| HDMB | Hadim | 1.92 | 26 | ePN | Pb | 04 48 25.7 | +0.7 |
| HDMB | Hadim | 1.92 | 26 | ePn | Pb | 04 48 25.7 | +0.7 |
| SUTC | Sutluce-Ispart | 2.26 | 351 | ePN | Pb | 04 48 31.3 | +0.5 |
| SUTC | Sutluce-Ispart | 2.26 | 351 | ePn | Pb | 04 48 31.3 | +0.5 |
| FETY | Fethiye | 2.36 | 307 | ePN | Pb | 04 48 32.4 | -0.1 |
| FETY | Fethiye | 2.36 | 307 | ePn | Pb | 04 48 32.4 | -0.1 |
| KIZK | Mersin | 2.52 | 60 | i P | Pn | 04 48 32.7 | +2.6 |
| KIZK | | | | i S | Sn | 04 49 01.0 | +0.9 |
| KIZK | Mersin | 2.52 | 60 | P | Pn | 04 48 32.7 | +2.6 |
| KIZK | | | | S | Sn | 04 49 01.0 | +0.9 |
| KONT | Konya--Tatoy | 2.80 | 15 | ePN | Pb | 04 48 38.7 | -1.2 |
| KONT | Konya--Tatoy | 2.80 | 15 | ePn | Pb | 04 48 38.7 | -1.2 |
| YESY | Yesilyurt | 3.14 | 36 | ePN | Pb | 04 48 43.0 | -2.9 |
| YESY | Yesilyurt | 3.14 | 36 | ePn | Pb | 04 48 43.0 | -2.9 |
| GULE | Gulek | 3.38 | 52 | eP | Pn | 04 48 44.6 | +2.5 |
| GULE | Gulek | 3.38 | 52 | P | Pn | 04 48 44.6 | +2.5 |
| GULE | | | | S | Sb | 04 49 30.5 | -0.2 |
| TAHT | Tahtakopru-Hat | 4.02 | 72 | ePN | Pn | 04 48 53.5 | +2.8 |
| TAHT | Tahtakopru-Hat | 4.02 | 72 | ePn | Pn | 04 48 53.5 | +2.8 |
| THL | Klokotos Trika | 8.65 | 303 | eP | Pn | 04 49 54.9 | +0.7 |
| THL | Klokotos Trika | 8.65 | 303 | eP | Pn | 04 49 54.9 | +0.7 |
| LKD2 | Lefkada island | 9.32 | 295 | eP | Pn | 04 50 01.7 | -1.8 |
| LKD2 | Lefkada island | 9.32 | 295 | eP | Pn | 04 50 01.7 | -1.8 |

*IDC **06** 04:50:57.4±0.6, 28°.39N×105°.03E, h0$^{km}$, mb4.2/20, mb1 4.3/22, mb1mx4.1/49, mbtmp4.2/22, ML4.1/2, MS3.6/8, Ms1 3.6/8, ms1mx3.3/35, Error ellipse: s-maj=21.8km s-min=14.5km az=52.0*

*ISCJB **06** 04:50:59.2±0.4, 28°.43N±0°.04×104°.92E±0°.05, h19$^{km}$, mb4.2/23, MS3.4/6, Error ellipse: s-maj=6.5km s-min=5.8km az=32.3*

*BJI **06** 04:51:01.0, 28°.36N×104°.91E, h17$^{km}$, mb4.3/15, mB4.5/6, ML4.2/22, Ms4.1/15, Ms7 3.8/15*

*NEIC **06** 04:51:04.8±1.4, 28°.36N×104°.94E, h54$^{km}$±12$^{km}$, mb4.4/3, Error ellipse: s-maj=11.9km s-min=7.3km az=219.0*

**ISC 06 04:51:01.1±0.4, 28°.44N±0°.03×105°.02E±0°.04, h19$^{km}$, n45, σ1$^s$.50/53, mb4.2/23, MS3.4/6, 1C, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GYA | Guiyang | 2.46 | 143 | Pn | Pn | 04 51 40.2 | -0.1 |
| GYA | | | | Pg | Pg | 04 51 48.8 | +0.5 |
| GYA | | | | Sn | Sn | 04 52 10.5 | +0.6 |
| GYA | | | | Sg | Sg | 04 52 20.8 | +0.6 |
| GYA | | | | SMN | | | |
| | 1μm,0.9s | | | | | | |
| GYA | | | | SME | | | |
| | 990nm,0.7s | | | | | | |
| CD2 | Chengdu | 2.69 | 336 | Pn | Pn | 04 51 44.2 | +0.7 |
| CD2 | | | | Pg | Pb | 04 51 50.7 | +1.9 |
| CD2 | | | | Sn | Sn | 04 52 14.7 | -1.0 |
| CD2 | | | | Sg | Sg | 04 52 25.9 | -1.9 |
| CD2 | | | | SMN | | | |
| | 3μm,0.8s | | | | | | |
| CD2 | | | | SME | | | |
| | 4μm,0.8s | | | | | | |
| KMI | Kunming | 3.88 | 212 | Pn | Pn | 04 52 01.5 | +1.4 |
| KMI | | | | Pg | Pb | 04 52 10.2 | +1.0 |
| KMI | | | | Sn | Sn | 04 52 45.4 | +0.1 |
| KMI | | | | Sg | Sg | 04 53 06.2 | +0.2 |
| KMI | | | | SMN | | | |
| | 100nm,1.2s | | | | | | |
| KMI | | | | SME | | | |
| | 120nm,1.1s | | | | | | |
| KMI | | | | LN | | | |
| | 1μm,3.8s | | | | | | |
| KMI | | | | LE | | | |
| | 2μm,3.8s | | | | | | |
| KMI | | | | LZ | | | |
| | 1μm,11.0s | | | | | | |
| ENH | Enshi | 4.30 | 64 | ePn | Pn | 04 52 09.3 | +3.7 |
| ENH | | | | eS | Sn | 04 52 58.0 | +2.7 |
| XAN | Xi'an | 6.50 | 30 | Pn | Pn | 04 52 37.5 | +1.7 |
| XAN | | | | Pg | Pg | 04 53 01.5 | -4.1 |
| XAN | | | | Sn | Sn | 04 53 47.3 | -2.2 |
| XAN | | | | Sg | Sg | 04 54 26.4 | -3.4 |
| XAN | | | | SMN | | | |
| | 590nm,1.2s | | | | | | |
| XAN | | | | SME | | | |
| | 380nm,1.0s | | | | | | |
| SLVN | Son La | 7.15 | 188 | ePn | Pb | 04 53 10.9 | +6.2 |
| SLVN | | | | eS | Sg | 04 54 47.4 | -3.2 |
| LZH | Lanzhou | 7.69 | 353 | ePn | Pn | 04 53 01.7 | +9.5 |
| LZH | | | | Pg | Pb | 04 53 24.6 | +11 |
| LZH | | | | Sn | Sn | 04 54 26.9 | +8.0 |
| LZH | | | | Sg | Sb | 04 55 05.8 | +20 |
| LZH | | | | smax | smax | | |
| | comp=N,250nm,1.2s | | | | | | |
| LZH | | | | smax | smax | | |
| | comp=E,250nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,850nm,6.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,2μm,6.7s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,2μm,7.0s | | | | | | |
| WHN | Wuhan | 8.39 | 73 | ⇑iP | Pn | 04 53 04.0 | +2.2 |
| WHN | | | | S | Sn | 04 54 33.6 | -2.4 |
| WHN | | | | LN | | | |
| | comp=Z,1μm,10.1s | | | | | | |
| WHN | | | | LE | | | |
| | comp=Z,2μm,9.0s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,2μm,11.6s | | | | | | |
| CMAR | Chiang Mai Arr | 11.39 | 211 | Pn | Pn | 04 53 42.8 | -0.2 |
| | comp=Z,0.4nm,0.3s,baz=19,slow=12,SNR=18 | | | | | | |
| CMAR | | | | LR | LR | 04 58 38.7 | |
| | comp=Z,359nm,18.7s,baz=354,slow=41 | | | | | | |
| GTA | Gaotai | 11.76 | 340 | eP | Pn | 04 53 53.1 | +5.1 |
| GTA | | | | pP | | 04 53 56.5 | |
| GTA | | | | sP | | 04 53 59.5 | |
| GTA | | | | S | Sn | 04 56 10.0 | +11 |
| GTA | | | | sS | | 04 56 15.2 | |
| GTA | | | | PMZ | | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,100nm,4.5s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,500nm,13.8s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,610nm,13.3s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,400nm,14.3s | | | | | | |
| SONM | Songino Array | 19.39 | 3 | P | Pn | 04 55 27.1 | -0.1 |
| | comp=Z,0.4nm,0.3s,baz=183,slow=10,SNR=12 | | | | | | |
| SONM | | | | LR | LR | 05 03 41.8 | |
| | comp=Z,237nm,18.3s,baz=139,slow=39 | | | | | | |
| KSRS | Korea Array | 21.17 | 59 | LR | LR | 05 03 57.8 | |
| | comp=Z,107nm,18.6s,baz=261,slow=37 | | | | | | |
| CN2 | Changchun | 22.43 | 41 | eP | P | 04 56 00.9 | +2.1 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,200nm,13.0s | | | | | | |
| JNU | Nakatsue | 22.67 | 72 | LR | LR | 05 05 59.5 | |
| | comp=Z,158nm,18.2s,baz=295,slow=40 | | | | | | |
| TLY | Talaya | 23.23 | 358 | LR | LR | 05 06 11.3 | |
| | comp=Z,182nm,20.0s,baz=140,slow=39 | | | | | | |
| MKAR | Makanchi Array | 25.54 | 322 | P | P | 04 56 28.3 | -0.3 |
| | comp=Z,4.3nm,0.8s,baz=123,slow=10,SNR=23 | | | | | | |
| KSH | Kashi | 26.39 | 302 | eP | P | 04 56 39.8 | +3.3 |
| KSH | | | | esP | sP | 04 56 46.6 | +1.9 |
| KSH | | | | ePP | PnPn | 04 57 24.5 | +8.3 |
| KSH | | | | S | S | 05 01 12.9 | +3.8 |
| KSH | | | | sS | sS | 05 01 20.6 | +2.0 |
| KSH | | | | LN | | | |
| | comp=Z,120nm,5.1s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,140nm,4.7s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,140nm,6.1s | | | | | | |
| USRK | Ussuriysk Ar. | 26.66 | 47 | P | P | 04 56 38.8 | +0.1 |
| | comp=Z,3.7nm,0.7s,baz=250,slow=8.2,SNR=8.1 | | | | | | |
| MJAR | Matsushiro Arr | 29.02 | 65 | LR | LR | 05 09 54.5 | |
| | comp=Z,84nm,18.6s,baz=215,slow=39 | | | | | | |
| ZALV | Zalesovo Beam | 29.46 | 335 | P | P | 04 57 03.8 | +0.2 |
| | comp=Z,3.1nm,0.7s,baz=145,slow=7.0,SNR=6.8 | | | | | | |
| ZALV | | | | LR | LR | 05 09 10.6 | |
| | comp=Z,74nm,18.5s,baz=126,slow=37 | | | | | | |
| KURBB | Kurchatov Arra | 29.86 | 325 | P | P | 04 57 06.8 | -0.3 |
| | comp=Z,1.6nm,0.6s,baz=131,slow=9.9,SNR=18 | | | | | | |
| KURK | Kurchatov | 29.87 | 325 | eP | P | 04 57 06.5 | -0.8 |
| | comp=Z,7.4nm,0.9s | | | | | | |
| BVAR | Borovoye Array | 35.38 | 324 | P | P | 04 57 55.6 | +0.1 |
| | comp=Z,0.6nm,0.5s,baz=138,slow=12,SNR=4.0 | | | | | | |
| GEYT | Alibeck | 40.02 | 296 | P | P | 04 58 35.6 | +0.6 |
| | comp=Z,9.0nm,0.8s,baz=100,slow=8.1,SNR=9.8 | | | | | | |
| ABKAR | Akbulak array | 40.06 | 314 | eP | P | 04 58 35.5 | +0.4 |
| | comp=Z,2.5nm,0.6s | | | | | | |
| PETK | Petropavlovsk- | 45.58 | 42 | LR | LR | 05 20 34.4 | |
| | comp=Z,37nm,18.5s,baz=243,slow=39 | | | | | | |
| RAYN | Ar Rayn | 53.27 | 279 | eP | P | 05 00 18.1 | -0.9 |
| | comp=Z,7.0nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 55.83 | 146 | P | P | 05 00 36.1 | -1.3 |
| | comp=Z,5.0nm,0.7s,baz=337,slow=8.2,SNR=29 | | | | | | |
| BRTR | Keskin Array B | 58.77 | 301 | P | P | 05 00 57.5 | -0.8 |
| | comp=Z,1.0nm,0.6s,baz=92,slow=5.9,SNR=5.5 | | | | | | |
| ASAR | Alice Springs | 58.81 | 149 | P | P | 05 00 57.4 | -1.0 |
| | comp=Z,3.2nm,0.7s,baz=328,slow=7.0,SNR=24 | | | | | | |
| AKASG | Malin Array Be | 59.80 | 314 | P | P | 05 01 04.2 | -0.7 |
| | comp=Z,0.6nm,0.5s,baz=68,slow=6.9,SNR=8.5 | | | | | | |
| ARCES | ARCESS Array B | 60.01 | 336 | P | P | 05 01 05.7 | -0.4 |
| | comp=Z,2.1nm,0.8s,baz=78,slow=8.8,SNR=4.6 | | | | | | |
| FINES | FINESS Array B | 60.22 | 327 | P | P | 05 01 07.0 | -0.7 |
| | comp=Z,3.0nm,0.7s,baz=91,slow=7.6,SNR=8.2 | | | | | | |
| HFS | Hagfors | 66.42 | 327 | P | P | 05 01 48.0 | -0.8 |
| | comp=Z,1.5nm,0.5s,baz=91,slow=10,SNR=8.5 | | | | | | |
| NB2 | NORSAR Subarra | 67.33 | 328 | P | P | 05 01 53.3 | -1.3 |
| | comp=Z,1.1nm,0.6s,baz=73,slow=6.9 | | | | | | |
| NOA | NORSAR Array B | 67.33 | 328 | P | P | 05 01 53.6 | -1.1 |
| | comp=Z,1.2nm,0.6s,baz=74,slow=6.9,SNR=4.5 | | | | | | |
| GERES | GERESS Array B | 69.98 | 315 | P | P | 05 02 11.0 | -0.5 |
| | comp=Z,1.8nm,0.8s,baz=71,slow=5.8,SNR=9.0 | | | | | | |
| PPLA | Purkeypile | 70.62 | 28 | eP | P | 05 02 15.6 | +0.5 |
| ILAR | Eielson Array | 71.89 | 25 | P | P | 05 02 21.6 | -1.0 |
| | comp=Z,0.4nm,0.4s,baz=286,slow=4.4,SNR=6.3 | | | | | | |
| KDAK | Kodiak Island | 72.61 | 33 | P | P | 05 02 26.9 | -0.1 |
| | comp=Z,5.6nm,0.7s,baz=302,slow=3.5,SNR=5.0 | | | | | | |
| EKA | Eskdalemuir Ar | 76.59 | 326 | P | P | 05 02 49.1 | -1.2 |
| | comp=Z,1.9nm,0.9s,baz=59,slow=5.9,SNR=3.4 | | | | | | |
| YKA | Yellowknife Ar | 83.99 | 17 | P | P | 05 03 29.6 | -0.2 |
| | comp=Z,0.8nm,0.5s,baz=327,slow=4.6,SNR=3.8 | | | | | | |
| TORD | Torodi Ar. Bea | 95.20 | 288 | P | P | 05 04 23.2 | -0.8 |
| | comp=Z,0.5nm,0.9s,baz=48,slow=4.9,SNR=3.2 | | | | | | |
| TXAR | Lajitas Array | 116.33 | 28 | PKP | PKPdf | 05 09 42.8 | -1.3 |
| | comp=Z,0.2nm,0.6s,baz=331,slow=1.1,SNR=2.9 | | | | | | |
| ROSC | El Rosal | 146.89 | 359 | PKPbc | PKPbc | 05 10 43.6 | +0.1 |
| | comp=Z,6.7nm,0.6s,baz=82,slow=0.8,SNR=8.1 | | | | | | |

*NIED **06** 04:51:00, 33°.50N×133°.70E, h8$^{km}$, Mw4.2 Best double couple: $M_0$2.51000×10$^{15}$ NP1:$\phi_s$318.00000°, δ46.00000°, λ40.00000°. NP2:$\phi_s$198.00000°, δ62.00000°, λ128.00000°.*

*IDC **06** 04:51:45.5±0.6, 33°.51N×133°.74E, h0$^{km}$, ML3.8/4, Error ellipse: s-maj=14.9km s-min=10.4km az=164.0*

*ISCJB **06** 04:51:47.4±0.4, 33°.54N±0°.03×133°.75E±0°.03, h23$^{km}$±3$^{km}$, mb4.3/29, Error ellipse: s-maj=5.8km s-min=3.5km az=169.0*

*JMA **06** 04:51:47.7, 33°.53N×133°.73E, h7$^{km}$±1$^{km}$, M4.5 Broadband fault plane solution: P waves. NP1: $\phi_s$161.00000°, δ67.00000°, λ87.00000°. NP2: $\phi_s$348.00000°, δ23.00000°, λ97.00000°. Principal axes: T Plg68.0000°, Azm65.0000°; N Plg3.0000°, Azm162.0000°; P Plg22.0000°, Azm253.0000°;*

*JMA Felt IV J1.*

*NEIC **06** 04:51:51.1±0.8, 33°.52N×133°.75E, h37$^{km}$±6$^{km}$, mb4.6/5, MW4.2(NIED) Error ellipse: s-maj=8.9km s-min=5.7km az=168.0*

*NEIC Recorded [4 JMA] in Kochi and [2 JMA] in Ehime, Kagawa and Tokushima. Also recorded [2 JMA] in Hiroshima and [1 JMA] in Hyogo, Okayama, Wakayama and Yamaguchi, Honshu. Recorded [1 JMA] in Oita, Kyushu.*

*KMA **06** 04:52:16.9, 34°.75N×131°.41E, h0$^{km}$*

**ISC 06 04:51:47.4±1.0, 33°.51N±0°.04×133°.73E±0°.02, h12$^{km}$±6$^{km}$, n60, σ0$^s$.80/69, mb4.4/28, 1C-6D, Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JMN | Monobe | 0.25 | 29 | ⇓P | Pg | 04 51 52.7 | +0.1 |
| JMN | | | | S | Sg | 04 51 56.6 | +0.4 |
| MRT2 | Murotomisaki 2 | 0.36 | 110 | ⇓P | Pg | 04 51 55.1 | +0.4 |
| MRT2 | | | | S | Sg | 04 52 00.2 | +0.7 |
| JKU | Kubokawa | 0.59 | 251 | ⇓P | Pg | 04 51 59.3 | +0.3 |
| JKU | | | | S | Sb | 04 52 08.0 | -0.1 |
| JET | Tanbara | 0.63 | 295 | ⇓P | Pg | 04 51 59.6 | -0.1 |
| JET | | | | S | Sg | 04 52 08.3 | +0.3 |
| JAI | Aioi | 0.66 | 65 | ⇓P | Pg | 04 52 00.1 | -0.1 |
| JAI | | | | S | Sg | 04 52 08.2 | -0.7 |
| JJS | Sakaide | 0.88 | 11 | ⇑P | Pg | 04 52 04.0 | -0.3 |
| JJS | | | | S | Sg | 04 52 15.5 | -0.3 |
| UWA2 | Uwa jima 2 | 0.97 | 253 | ⇓P | Pg | 04 52 06.1 | -0.1 |
| UWA2 | | | | S | Sg | 04 52 18.7 | -0.2 |
| JNU | Nakatsue | 2.42 | 262 | Pn | Pn | 04 52 26.4 | -0.4 |
| | 32nm,0.3s,baz=58,slow=3.9,SNR=138 | | | | | | |
| JNU | | | | Pg | Pb | 04 52 29.7 | -1.2 |
| | 51nm,0.3s,baz=80,slow=8.6,SNR=143 | | | | | | |
| JNU | | | | Lg | Lg | 04 53 03.2 | |
| | 160nm,0.3s,baz=330,slow=8.1,SNR=6.5 | | | | | | |
| JNU | Nakatsue | 2.42 | 262 | ePn | Pb | 04 52 29.3 | -1.6 |
| JNU | | | | Lg | Lg | 04 53 03.2 | |
| JNU | | | | eS | Sg | 04 53 04.8 | -0.5 |
| MAJO | Matsushiro | 4.76 | 49 | ePn | Pn | 04 52 59.8 | +0.8 |
| MAJO | | | | eS | Sn | 04 53 54.6 | +0.6 |
| MAT | Matsushiro | 4.76 | 49 | P | Pn | 04 52 59.7 | +0.8 |
| MAT | | | | S | Sn | 04 53 53.8 | -0.2 |
| MJAR | Matsushiro Arr | 4.76 | 49 | Pn | Pn | 04 53 00.2 | +1.3 |
| | 2.9nm,0.3s,baz=241,slow=14,SNR=25 | | | | | | |
| MJAR | | | | Sn | Sn | 04 53 50.8 | -3.2 |
| | 3.5nm,0.3s,baz=223,slow=17,SNR=5.0 | | | | | | |
| MJAR | | | | Lg | Lg | 04 54 15.5 | |
| | 2.0nm,0.3s,baz=220,slow=25,SNR=4.6 | | | | | | |
| KSULJ | Uljin | 4.77 | 313 | P | Pn | 04 52 59.1 | +0.1 |
| | SNR=6.2 | | | | | | |
| JHJ | Hachijo jima 2 | 5.08 | 93 | Pn | Pn | 04 53 03.2 | -0.1 |
| | 18nm,0.3s,baz=246,slow=19,SNR=4.9 | | | | | | |
| JHJ | | | | Sn | Sn | 04 53 59.2 | -2.7 |
| | 16nm,0.3s,baz=74,slow=20,SNR=2.5 | | | | | | |
| KSTBA | Taebaek | 5.32 | 314 | P | Pn | 04 53 07.1 | +0.4 |
| | SNR=20 | | | | | | |
| KSJES | JEONGSEON | 5.69 | 315 | P | Pn | 04 53 12.7 | +1.0 |
| | SNR=5.8 | | | | | | |
| KSKWJ | Gwangju | 5.82 | 288 | P | Pn | 04 53 14.3 | +0.9 |
| | SNR=7.0 | | | | | | |
| KSDGY | Daegwallycong | 5.86 | 317 | P | Pn | 04 53 14.7 | +0.5 |
| | SNR=8.5 | | | | | | |
| KSJEU | Jeongeup | 5.96 | 291 | P | Pn | 04 53 15.8 | +0.4 |
| | SNR=7.1 | | | | | | |
| KSRS | Korea Array | 6.16 | 311 | Pn | Pn | 04 53 19.3 | +1.1 |
| | 2.1nm,0.3s,baz=124,slow=15,SNR=23 | | | | | | |
| KSRS | | | | Sn | Sn | 04 54 28.6 | +0.1 |
| | 3.1nm,0.3s,baz=133,slow=25,SNR=5.1 | | | | | | |
| KSAR | Wonju Array Be | 6.18 | 311 | Pn | Pn | 04 53 19.3 | +0.9 |
| KSAR | | | | Sn | Sn | 04 54 28.6 | -0.4 |
| USRK | Ussuriysk Ar. | 10.76 | 353 | Pn | Pn | 04 54 21.6 | +0.4 |
| | 0.2nm,0.3s,baz=181,slow=13,SNR=2.2 | | | | | | |
| ULN | Ulaanbaatar | 24.64 | 314 | eP | P | 04 57 07.8 | -0.1 |
| | 18nm,1.0s | | | | | | |
| SONM | Songino Array | 25.03 | 313 | P | P | 04 57 11.8 | +0.4 |
| | 6.3nm,0.7s,baz=130,slow=9.5,SNR=17 | | | | | | |
| PETK | Petropavlovsk- | 26.01 | 34 | P | P | 04 57 19.3 | -0.8 |
| | 3.5nm,0.4s,baz=224,slow=4.0,SNR=3.1 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 32.51 | 107 | T | T | 05 32 11.3 | |
| | baz=302,slow=75,SNR=15 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 32.52 | 107 | T | T | 05 32 11.2 | |
| | baz=302,slow=75,SNR=13 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 32.53 | 107 | T | T | 05 32 12.2 | |
| | baz=302,slow=75,SNR=15 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 33.01 | 109 | T | T | 05 32 51.1 | |
| | baz=315,slow=74,SNR=18 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 33.01 | 109 | T | T | 05 32 50.1 | |
| | baz=315 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 33.03 | 109 | T | T | 05 32 51.8 | |
| | baz=315,slow=74,SNR=13 | | | | | | |
| CMAR | Chiang Mai Arr | 34.49 | 253 | P | P | 04 58 35.2 | -0.3 |
| | 0.8nm,0.3s,baz=55,slow=7.8,SNR=2.2 | | | | | | |
| ZALV | Zalesovo Beam | 39.84 | 316 | P | P | 04 59 20.7 | +0.2 |
| | 1.6nm,0.6s,baz=96,slow=8.9,SNR=3.6 | | | | | | |
| ZALV | | | | PcP | PcP | 05 01 26.2 | 0.0 |
| | 0.9nm,0.3s,baz=107,slow=2.0,SNR=3.1 | | | | | | |
| MKAR | Makanchi Array | 40.80 | 305 | P | P | 04 59 28.6 | +0.1 |
| | 1.5nm,0.7s,baz=96,slow=9.9,SNR=5.1 | | | | | | |
| KURK | Kurchatov | 43.28 | 310 | P | P | 04 59 49.5 | +0.8 |
| KURBB | Kurchatov Arra | 43.34 | 310 | P | P | 04 59 49.5 | +0.3 |
| | 1.9nm,0.4s,baz=92,slow=9.0,SNR=21 | | | | | | |
| TKM2 | Tokmak 2 | 45.83 | 300 | eP | P | 05 00 10.2 | +0.8 |
| | 4.2nm,0.8s | | | | | | |
| AAK | Ala-Archa | 46.67 | 299 | P | P | 05 00 16.9 | +0.8 |
| | 3.1nm,0.3s,baz=167,slow=6.0,SNR=5.3 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BVAR** | **Borovoye Array** | **48.37** | **314** | P | P | 05 00 24.6 | -4.3 |
| | 1.3nm,0.6s,baz=74,slow=5.1,SNR=6.7 | | | | | | |
| BVAR | | | | PcP | **PcP** | **05 01 55.3** | **0.0** |
| | 0.9nm,0.5s,baz=90,slow=4.3,SNR=3.3 | | | | | | |
| **BRVK** | **Borovoye** | **48.43** | **314** | P | **P** | **05 00 29.9** | **+0.6** |
| | 3.9nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **49.47** | **301** | *e*P | **P** | **05 00 37.8** | **+0.2** |
| | 6.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **53.16** | **179** | P | **P** | **05 01 04.9** | **-0.3** |
| | 5.2nm,0.7s,baz=352,slow=7.7,SNR=17 | | | | | | |
| **ABKAR** | **Akbulak array** | **55.39** | **310** | *e*P | **P** | **05 01 21.9** | **+0.6** |
| | 7.4nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **55.77** | **31** | P | **P** | **05 01 24.1** | **+0.2** |
| | 1.2nm,0.8s,baz=259,slow=6.4,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **56.86** | **180** | P | **P** | **05 01 32.0** | **0.0** |
| | 2.0nm,0.6s,baz=12,slow=12,SNR=17 | | | | | | |
| **GEYT** | **Alibeck** | **59.97** | **298** | P | **P** | **05 01 54.4** | **+0.6** |
| | 2.9nm,0.6s,baz=219,slow=3.7,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **65.01** | **338** | P | **P** | **05 02 25.5** | **-1.4** |
| | 1.7nm,0.6s,baz=65,slow=9.0,SNR=3.0 | | | | | | |
| **KBZ** | **Khabaz** | **68.31** | **309** | P | **P** | **05 02 48.8** | **+0.5** |
| | 6.0nm,0.8s,baz=80,slow=3.3,SNR=9.4 | | | | | | |
| **FINES** | **FINESS Array B** | **68.89** | **331** | P | **P** | **05 02 51.3** | **-0.3** |
| | 2.5nm,0.5s,baz=81,slow=5.7,SNR=10 | | | | | | |
| **YKA** | **Yellowknife Ar** | **69.91** | **27** | P | **P** | **05 02 59.0** | **+1.0** |
| | 1.8nm,0.8s,baz=300,slow=6.6,SNR=3.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.08** | **320** | P | **P** | **05 03 17.1** | **-0.2** |
| | 0.2nm,0.3s,baz=52,slow=6.7,SNR=5.0 | | | | | | |
| **HFS** | **Hagfors** | **74.55** | **333** | P | **P** | **05 03 25.3** | **-0.5** |
| | 4.3nm,0.7s,baz=75,slow=7.8,SNR=4.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **74.84** | **335** | P | **P** | **05 03 26.9** | **-0.6** |
| | 1.4nm,0.7s,baz=47,slow=5.7,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.30** | **309** | P | **P** | **05 03 36.6** | **+0.2** |
| | 4.8nm,0.8s,baz=92,slow=6.4,SNR=16 | | | | | | |
| **NEW** | **Newport** | **76.95** | **40** | P | **P** | **05 03 40.8** | **+1.0** |
| | 1.6nm,0.9s,baz=346,slow=4.1,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.08** | **49** | P | **P** | **05 04 08.4** | **+0.2** |
| | 1.8nm,0.9s,baz=291,slow=5.3,SNR=8.9 | | | | | | |
| **GERES** | **GERESS Array B** | **82.17** | **325** | P | **P** | **05 04 08.4** | **+0.2** |
| | 1.0nm,0.7s,baz=21,slow=5.7,SNR=5.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **97.19** | **48** | P | Pdif | 05 05 21.2 | +0.8 |
| | 0.4nm,0.7s,baz=278,slow=4.3,SNR=6.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **114.89** | **307** | PKP | PKPdf | 05 10 27.7 | -1.0 |
| | 0.3nm,0.6s,baz=31,slow=0.9,SNR=8.9 | | | | | | |
| **SAML** | **Samuel** | **151.00** | **36** | *e*PKPdf | **PKPdf** | **05 11 34.9** | **-0.2** |
| SAML | | | | *e*PKPbc | **PKiKP** | **05 11 41.4** | **0.0** |

*ISK **06** 04:53:10.8, 37°.96N×28°.03E, h6$^{km}$, MD2.6*
*ISCJB **06** 04:53:11.6±0.4, 38°.01N±0°.03×27°.96E±0°.04, h6$^{km}$±5$^{km}$, Error ellipse: s-maj=6.5km s-min=3.7km az=33.3*
*DDA **06** 04:53:11.9, 38°.02N×27°.98E, h7$^{km}$, Md2.7*
*CSEM **06** 04:53:11.8±0.2, 37°.99N×27°.98E, h5$^{km}$, MD2.6, Error ellipse: s-maj=5.0km s-min=3.5km az=111.0*
**ISC 06 04:53:11.5**±0.9**, 37°.96N**±0°.02×**28°.00E**±0°.03**, h9**$^{km}$±6$^{km}$**, n30, σ0$^s$.47**/41**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AYDB** | **Zeytinkoy-Aydi** | **0.09** | **259** | *e*PG | **Pg** | **04 53 13.7** | **-0.2** |
| AYDB | | | | *e*SG | **Sg** | **04 53 15.7** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.09** | **259** | *e*Pg | **Pg** | **04 53 13.7** | **-0.2** |
| AYDB | | | | *e*Sg | **Sg** | **04 53 15.7** | **+0.1** |
| **AYDN** | **Tasoluk** | **0.32** | **198** | *i* P | **Pb** | **04 53 19.7** | **+0.3** |
| AYDN | | | | *i* S | **Sb** | **04 53 24.8** | **+0.1** |
| **AYDN** | **Tasoluk** | **0.32** | **198** | P | **Pb** | **04 53 19.8** | **+0.3** |
| AYDN | | | | S | **Sb** | **04 53 24.8** | **+0.1** |
| **GCAM** | **G?zelcaml?** | **0.66** | **247** | *i* S | **Sg** | **04 53 32.6** | **-0.4** |
| **GCAM** | **G?zelcaml?** | **0.66** | **247** | S | **Sg** | **04 53 32.6** | **-0.4** |
| **MANT** | **Manisa** | **0.68** | **39** | *i* S | **Sg** | **04 53 34.5** | **+0.8** |
| **MANT** | **Manisa** | **0.68** | **39** | P | **Pg** | **04 53 25.0** | **+0.3** |
| MANT | | | | S | **Sg** | **04 53 34.5** | **+0.8** |
| **IZM** | **Izmir** | **0.73** | **307** | *e*PG | **Pg** | **04 53 25.5** | **0.0** |
| **IZM** | **Izmir** | **0.73** | **307** | *e*Pg | **Pg** | **04 53 25.5** | **0.0** |
| **KULA** | **Kula-Manisa** | **0.76** | **43** | *e*PG | **Pg** | **04 53 25.5** | **-0.6** |
| KULA | | | | *e*SG | **Sg** | **04 53 36.2** | **+0.3** |
| **KULA** | **Kula-Manisa** | **0.76** | **43** | *e*Pg | **Pg** | **04 53 25.5** | **-0.6** |
| KULA | | | | *e*Sg | **Sg** | **04 53 36.2** | **+0.3** |
| **YER** | **Yerkesik** | **0.86** | **165** | *e*PG | **Pg** | **04 53 27.5** | **-0.5** |
| **YER** | **Yerkesik** | **0.86** | **165** | *e*Pg | **Pg** | **04 53 27.5** | **-0.5** |
| **DNZL** | **Cakiroluk** | **0.87** | **108** | *i* P | **Pn** | **04 53 29.8** | **-0.3** |
| **DNZL** | **Cakiroluk** | **0.87** | **108** | P | **Pn** | **04 53 29.8** | **-0.3** |
| **AKHS** | **Akhisar** | **0.93** | **351** | *i* P | **Pg** | **04 53 28.6** | **-0.7** |
| AKHS | | | | *i* S | **Sg** | **04 53 40.2** | **-1.2** |
| **AKHS** | **Akhisar** | **0.93** | **351** | P | **Pg** | **04 53 28.6** | **-0.7** |
| AKHS | | | | S | **Sg** | **04 53 40.2** | **-1.2** |
| **AKS** | **Akhisar** | **0.93** | **351** | *e*PG | **Pg** | **04 53 29.1** | **-0.2** |
| **AKS** | **Akhisar** | **0.93** | **351** | *e*Pg | **Pg** | **04 53 29.1** | **-0.2** |
| **BDRM** | **Kayabasi** | **1.00** | **207** | *i* S | **Sb** | **04 53 44.9** | **+0.5** |
| **BDRM** | **Kayabasi** | **1.00** | **207** | P | **Pg** | **04 53 30.4** | **-0.3** |
| BDRM | | | | S | **Sb** | **04 53 44.9** | **+0.5** |
| **BODT** | **Bodrum** | **1.05** | **212** | *e*PG | **Pg** | **04 53 31.5** | **-0.2** |
| **BODT** | **Bodrum** | **1.05** | **212** | *e*Pg | **Pg** | **04 53 31.5** | **-0.2** |
| **KHAL** | **Karahalli** | **1.24** | **70** | *i* S | **Sn** | **04 53 52.1** | **-0.1** |
| **KHAL** | **Karahalli** | **1.24** | **70** | P | **Pb** | **04 53 35.4** | **+0.1** |
| KHAL | | | | S | **Sn** | **04 53 52.1** | **-0.1** |
| **DURS** | **Dursunbey** | **1.68** | **13** | *i* P | **Pb** | **04 53 42.8** | **+0.2** |
| **DURS** | **Dursunbey** | **1.68** | **13** | P | **Pb** | **04 53 42.8** | **+0.2** |
| **BALY** | **Balya** | **1.80** | **351** | *i* P | **Pn** | **04 53 43.2** | **+0.4** |
| **BALY** | **Balya** | **1.80** | **351** | P | **Pn** | **04 53 43.2** | **+0.4** |

*JMA **06** 04:57:43.3±0.1, 24°.18N×121°.82E, h28$^{km}$±1$^{km}$*
*TAP **06** 04:57:43.9, 24°.24N×121°.83E, h15$^{km}$, ML3.2, D*
*ISCJB **06** 04:57:44.2±0.4, 24°.23N±0°.02×121°.89E±0°.03, h19$^{km}$±4$^{km}$, Error ellipse: s-maj=4.4km s-min=2.3km az=27.1*
**ISC 06 04:57:43.8**±1.0**, 24°.22N**±0°.02×**121°.85E**±0°.03**, h18**$^{km}$±5$^{km}$**, n40, σ0$^s$.52**/74**, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ENA** | **Nanau** | **0.23** | **334** | *i* P | **Pb** | **04 57 49.1** | **-0.2** |
| | baz=337 | | | | | | |
| ENA | | | | S | **Sb** | **04 57 53.2** | **+0.1** |
| | baz=337 | | | | | | |
| **TWD** | **Chiawan** | **0.27** | **239** | *i* P | **Pb** | **04 57 50.1** | **-0.1** |
| | baz=231 | | | | | | |
| TWD | | | | S | **Sb** | **04 57 55.0** | **+0.5** |
| | baz=231 | | | | | | |
| **HWA** | **Hwalien** | **0.33** | **223** | *e*P | **Pb** | **04 57 51.6** | **+0.4** |
| | baz=216 | | | | | | |
| HWA | | | | *e*S | **Sb** | **04 57 57.5** | **+1.2** |
| | baz=216 | | | | | | |
| **TWC** | **Suao** | **0.39** | **360** | P | **Pg** | **04 57 51.8** | **+0.1** |
| | baz=3.0 | | | | | | |
| TWC | | | | *e*S | **Sb** | **04 57 57.5** | **-0.2** |
| | baz=3.0 | | | | | | |
| **NNS** | **Nan Shan** | **0.49** | **296** | *i* P | **Pb** | **04 57 53.8** | **-0.2** |
| | baz=295 | | | | | | |
| NNS | | | | S | **Sb** | **04 58 00.8** | **0.0** |
| | baz=295 | | | | | | |
| **ENTT** | **Nioudou** | **0.49** | **328** | *i* P | **Pb** | **04 57 53.9** | **0.0** |
| | baz=328 | | | | | | |
| ENTT | | | | S | **Sb** | **04 58 00.6** | **-0.2** |
| | baz=328 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.54** | **262** | P | **Pb** | **04 57 54.8** | **-0.2** |
| | baz=258 | | | | | | |
| WHF | | | | S | **Sb** | **04 58 02.3** | **-0.3** |
| | baz=258 | | | | | | |
| **ILA** | **Ilan** | **0.55** | **350** | *e*P | **Pg** | **04 57 54.6** | **-0.1** |
| | baz=352 | | | | | | |
| ILA | | | | *e*S | **Sb** | **04 58 03.4** | **+1.0** |
| | baz=352 | | | | | | |
| **ESL** | **Shilin** | **0.56** | **223** | *e*P | **Pb** | **04 57 54.9** | **-0.2** |
| | baz=219 | | | | | | |
| ESL | | | | *e*S | **Sb** | **04 58 03.9** | **+1.2** |
| | baz=219 | | | | | | |
| **TWT** | **Tachien** | **0.62** | **273** | *e*P | **Pb** | **04 57 56.6** | **+0.5** |
| | baz=270 | | | | | | |
| TWT | | | | S | **Sb** | **04 58 05.6** | **+1.0** |
| | baz=270 | | | | | | |
| **EGS** | | **0.62** | **7** | *e*P | **Pb** | **04 57 56.8** | **+0.7** |
| | baz=9.0 | | | | | | |
| EGS | | | | *e*S | **Sb** | **04 58 05.5** | **+0.9** |
| | baz=9.0 | | | | | | |
| **NSK** | **Sanguang** | **0.64** | **315** | *i* P | **Pg** | **04 57 56.1** | **-0.3** |
| | baz=315 | | | | | | |
| NSK | | | | S | **Sb** | **04 58 05.1** | **0.0** |
| | baz=315 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.79** | **9** | P | **Pg** | **04 57 59.3** | **0.0** |
| | baz=11 | | | | | | |
| TWB1 | | | | S | **Sb** | **04 58 09.6** | **+0.1** |
| | baz=11 | | | | | | |
| **TWA** | **Mucha** | **0.79** | **342** | *e*P | **Pg** | **04 57 59.4** | **+0.1** |
| | baz=343 | | | | | | |
| TWA | | | | *e*S | **Sg** | **04 58 09.9** | **+0.1** |
| | baz=343 | | | | | | |
| **WDT** | **Danda** | **0.81** | **235** | *i* P | **Pn** | **04 57 59.9** | **-0.6** |
| | baz=232 | | | | | | |
| WDT | | | | *e*S | **Sn** | **04 58 11.2** | **-1.1** |
| | baz=232 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.85** | **356** | *i* P | **Pn** | **04 58 00.6** | **-0.3** |
| | baz=356 | | | | | | |
| NWF | | | | S | **Sg** | **04 58 11.7** | **+0.1** |
| | baz=356 | | | | | | |
| **EHY** | **Hungye** | **0.86** | **214** | *e*P | **Pg** | **04 58 00.4** | **-0.2** |
| | baz=212 | | | | | | |
| EHY | | | | *e*S | **Sn** | **04 58 13.7** | **+0.5** |
| | baz=212 | | | | | | |
| **TAP1** | **Taipei** | **0.87** | **340** | *e*P | **Pn** | **04 58 01.1** | **0.0** |
| | baz=339 | | | | | | |
| TAP1 | | | | *e*S | **Sn** | **04 58 12.6** | **-0.6** |
| | baz=339 | | | | | | |
| **NSTT** | **Nanjuang** | **0.88** | **298** | *e*P | **Pn** | **04 58 01.0** | **-0.3** |
| | baz=297 | | | | | | |
| NSTT | | | | *e*S | **Sg** | **04 58 12.7** | **+0.2** |
| | baz=297 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.93** | **249** | *e*P | **Pn** | **04 58 02.0** | **-0.1** |
| | baz=246 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **04 58 14.9** | **-0.3** |
| | baz=246 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.96** | **336** | *e*P | **Pg** | **04 58 02.3** | **-0.2** |
| | baz=336 | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **04 58 15.2** | **-0.4** |
| | baz=336 | | | | | | |
| **TYC** | **Yuchr** | **0.96** | **251** | *e*P | **Pn** | **04 58 02.5** | **+0.1** |
| | baz=248 | | | | | | |
| TYC | | | | *e*S | **Sn** | **04 58 15.1** | **-0.6** |
| | baz=248 | | | | | | |
| **TWQ1** | **Liyutan** | **0.99** | **277** | *e*P | **Pg** | **04 58 03.5** | **+0.4** |
| | baz=276 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **04 58 15.9** | **-0.5** |
| | baz=276 | | | | | | |
| **TWF1** | **Yuli** | **1.00** | **211** | *e*P | **Pb** | **04 58 01.8** | **-0.9** |
| | baz=208 | | | | | | |
| TWF1 | | | | *e*S | **Sn** | **04 58 17.5** | **+0.8** |
| | baz=208 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.02** | **77** | P | **Pb** | **04 58 02.2** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **1.08** | **77** | P | **Pb** | **04 58 03.8** | **-0.2** |
| **YUS** | **Yu-Shan** | **1.10** | **229** | *e*P | **Pb** | **04 58 04.4** | **-0.2** |
| | baz=226 | | | | | | |
| YUS | | | | *e*S | **Sg** | **04 58 20.5** | **+0.8** |
| | baz=226 | | | | | | |
| **ALS** | **Alishan** | **1.19** | **234** | *e*P | **Pb** | **04 58 06.2** | **+0.2** |
| | baz=231 | | | | | | |
| ALS | | | | *e*S | **Sg** | **04 58 22.4** | **-0.2** |
| | baz=231 | | | | | | |
| **CHKT** | **Chengkung** | **1.20** | **202** | *e*P | **Pg** | **04 58 07.2** | **+0.2** |
| | baz=200 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **04 58 21.8** | **+0.2** |
| | baz=200 | | | | | | |
| **CHN5** | **Tsauling** | **1.24** | **240** | *e*P | **Pb** | **04 58 06.8** | **+0.1** |
| | baz=238 | | | | | | |
| CHN5 | | | | *e*S | **Sg** | **04 58 24.1** | **0.0** |
| | baz=238 | | | | | | |
| **ELDTW** | **Lidau** | **1.28** | **217** | *e*P | **Pn** | **04 58 06.5** | **-0.5** |
| | baz=215 | | | | | | |
| ELDTW | | | | *e*S | **Sg** | **04 58 24.5** | **-0.9** |
| | baz=215 | | | | | | |
| **PCYT** | **Pengchaiyu** | **1.42** | **8** | P | **Pn** | **04 58 09.1** | **+0.4** |
| | baz=9.0 | | | | | | |
| **CHN4** | **Tsaushan** | **1.44** | **233** | *e*P | **Pg** | **04 58 10.8** | **-0.8** |
| | baz=231 | | | | | | |
| CHN4 | | | | *e*S | **Sb** | **04 58 28.9** | **+0.7** |
| | baz=231 | | | | | | |
| **WTP** | **Ta-pu** | **1.49** | **230** | *e*P | **Pb** | **04 58 11.2** | **+0.2** |
| | baz=228 | | | | | | |
| WTP | | | | *e*S | **Sb** | **04 58 29.6** | **-0.2** |
| | baz=228 | | | | | | |
| **TWK** | **Hsinying** | **1.57** | **233** | *e*S | **Sg** | **04 58 35.7** | **+1.1** |
| | baz=231 | | | | | | |
| **CHN1** | **Nanshi** | **1.59** | **230** | *e*P | **Pb** | **04 58 12.0** | **-0.8** |
| | baz=228 | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **04 58 32.5** | **0.0** |
| | baz=228 | | | | | | |
| **SGST** | **Jiashian** | **1.63** | **226** | *e*P | **Pb** | **04 58 13.4** | **+0.1** |
| | baz=224 | | | | | | |
| SGST | | | | *e*S | **Sb** | **04 58 33.0** | **-0.4** |
| | baz=224 | | | | | | |
| **SSD** | **Sandimen** | **1.85** | **218** | *e*P | **Pn** | **04 58 15.4** | **+0.8** |
| | baz=216 | | | | | | |
| SSD | | | | *e*S | **Sb** | **04 58 39.3** | **-0.5** |
| | baz=216 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.97** | **89** | P | **Pn** | **04 58 16.5** | **+0.2** |
| **JIJ** | **Ishigaki jima** | **2.10** | **86** | *e*S | **Sn** | **04 58 43.3** | **-0.3** |

*ISCJB **06** 05:13:16.9±0.5, 39°.10N±0°.03×27°.80E±0°.05, h7$^{km}$±6$^{km}$, Error ellipse: s-maj=6.3km s-min=4.3km az=154.0*
*ISK **06** 05:13:16.4, 39°.10N×27°.83E, h20$^{km}$, MD2.7*
*CSEM **06** 05:13:17.1±0.2, 39°.10N×27°.82E, h10$^{km}$, MD2.7, Error ellipse: s-maj=6.6km s-min=4.3km az=88.0*
*DDA **06** 05:13:17.2, 39°.10N×27°.81E, h7$^{km}$, Md2.7*
**ISC 06 05:13:17.3**±1.0**, 39°.10N**±0°.02×**27°.82E**±0°.03**, h16**$^{km}$±9$^{km}$**, n27, σ0$^s$.61**/38**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKS** | **Akhisar** | **0.22** | **182** | *e*PG | **Pg** | **05 13 22.2** | **-0.1** |
| **AKS** | **Akhisar** | **0.22** | **182** | *e*Pg | **Pg** | **05 13 22.2** | **-0.1** |
| **BALB** | **Balikesir** | **0.54** | **5** | *e*PG | **Pg** | **05 13 27.7** | **-0.4** |
| **BALB** | **Balikesir** | **0.54** | **5** | *e*Pg | **Pg** | **05 13 27.7** | **-0.4** |
| **BALY** | **Balya** | **0.66** | **346** | *i* P | **Pg** | **05 13 30.3** | **0.0** |
| BALY | | | | *i* S | **Sb** | **05 13 39.5** | **0.0** |
| **BALY** | **Balya** | **0.66** | **346** | P | **Pg** | **05 13 30.3** | **0.0** |
| BALY | | | | S | **Sb** | **05 13 39.5** | **0.0** |
| **DKL** | **Dikili** | **0.71** | **268** | *e*PG | **Pg** | **05 13 30.8** | **-0.4** |
| **DKL** | **Dikili** | **0.71** | **268** | *e*Pg | **Pg** | **05 13 30.8** | **-0.4** |
| **DURS** | **Dursunbey** | **0.71** | **45** | *i* P | **Pb** | **05 13 31.8** | **+0.4** |
| DURS | | | | *i* S | **Sb** | **05 13 42.3** | **+1.2** |
| **DURS** | **Dursunbey** | **0.71** | **45** | P | **Pb** | **05 13 31.8** | **+0.4** |
| DURS | | | | S | **Sb** | **05 13 42.3** | **+1.2** |
| **DST** | **Dursunbey** | **0.80** | **50** | *e*PG | **Pg** | **05 13 32.4** | **-0.5** |
| **DST** | **Dursunbey** | **0.80** | **50** | *e*Pg | **Pg** | **05 13 32.4** | **-0.5** |
| **IZM** | **Izmir** | **0.82** | **212** | *e*PG | **Pg** | **05 13 32.8** | **-0.5** |
| **IZM** | **Izmir** | **0.82** | **212** | *e*Pg | **Pg** | **05 13 32.8** | **-0.5** |
| **MANT** | **Manisa** | **0.83** | **136** | *i* P | **Pg** | **05 13 33.1** | **-0.5** |
| MANT | | | | *i* S | **Sb** | **05 13 45.1** | **+0.5** |
| **MANT** | **Manisa** | **0.83** | **136** | P | **Pg** | **05 13 33.1** | **-0.5** |
| MANT | | | | S | **Sb** | **05 13 45.1** | **+0.5** |
| **KULA** | **Kula-Manisa** | **0.88** | **131** | *e*PG | **Pg** | **05 13 33.6** | **-0.7** |
| KULA | | | | *e*SG | **Sg** | **05 13 46.2** | **+0.3** |
| **KULA** | **Kula-Manisa** | **0.88** | **131** | *e*Pg | **Pg** | **05 13 33.6** | **-0.7** |
| KULA | | | | *e*Sg | **Sg** | **05 13 46.2** | **+0.3** |
| **GONE** | **Gonen-Balikesi** | **0.95** | **354** | *e*PG | **Pg** | **05 13 34.9** | **-0.9** |
| **GONE** | **Gonen-Balikesi** | **0.95** | **354** | *e*Pg | **Pg** | **05 13 34.9** | **-0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.15** | **177** | *e*PN | **Pb** | **05 13 38.0** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.15** | **177** | *e*Pn | **Pb** | **05 13 38.1** | **-0.8** |
| **KCTX** | **Karacabey (Bur** | **1.24** | **19** | *e*PN | **Pn** | **05 13 39.1** | **-0.9** |
| **KCTX** | **Karacabey (Bur** | **1.24** | **19** | *e*Pn | **Pn** | **05 13 39.1** | **-0.9** |
| **AYDN** | **Tasoluk** | **1.44** | **178** | *i* P | **Pg** | **05 13 45.2** | **+0.3** |
| AYDN | | | | *i* S | **Sg** | **05 14 04.0** | **+0.4** |
| **AYDN** | **Tasoluk** | **1.44** | **178** | P | **Pg** | **05 13 45.2** | **+0.3** |
| AYDN | | | | S | **Sg** | **05 14 04.0** | **+0.4** |
| **BOZC** | **Bozcaada** | **1.56** | **299** | P | **Pn** | **05 13 44.8** | **+0.4** |
| BOZC | | | | S | **Sn** | **05 14 05.0** | **+0.7** |

**MEX 06 05:14:00.8**±0.5**, 18°.89N**×**97°.86W, h88**$^{km}$±22$^{km}$**, MD3.9, Central Mexico**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TPIG** | **Tehuac#an** | **0.67** | **135** | *i* P | Pn | 05 14 15.9 | -1.2 |
| TPIG | | | | *i* S | Sn | 05 14 27.4 | -1.8 |
| **TLIG** | **Tlapa** | **1.48** | **207** | *e*P | Pn | 05 14 24.8 | -1.6 |
| TLIG | | | | *e*S | Sn | 05 14 44.5 | -1.3 |
| **CMIG** | **Matias Romero** | **3.35** | **122** | *i* P | Pn | 05 14 42.9 | -8.3 |

*ISCJB **06** 05:24:37.2±0.5, 0°.80S±0°.07×100°.49E±0°.09, h128$^{km}$±6$^{km}$, mb3.9/10, Error ellipse: s-maj=16.7km s-min=9.5km az=150.5*
*IDC **06** 05:24:38.1±3.4, 0°.91S×100°.43E, h125$^{km}$±28$^{km}$, mb3.5/10, mb1 3.6/11, mb1mx3.4/30, mbtmp3.9/11, Error ellipse: s-maj=39.8km s-min=18.6km az=51.0*
*DJA **06** 05:24:39.5±0.7, 1°S±4°×10°0E±°, h101$^{km}$±10$^{km}$, M4.0/10, mb4.4/1, MLv3.7/10*
**ISC 06 05:24:37.8**±1.1**, 0°.81S**±0°.06×**100°.48E**±0°.08**, h117**$^{km}$±9$^{km}$**, n20, σ0$^s$.71**/20**, mb3.9**/10**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDSI** | **Padang** | **0.10** | **189** | P | **Pn** | **05 24 53.7** | **-0.3** |
| **BKNI** | **Bangkinang** | **1.26** | **27** | P | **Pn** | **05 25 03.0** | **+0.6** |
| **SISI** | **Saibi** | **1.48** | **250** | P | **Pn** | **05 25 05.9** | **+1.1** |
| **MNSI** | **Mandailing Nat** | **1.83** | **331** | P | **Pn** | **05 25 09.8** | **+0.7** |
| **PPSI** | **Pulau Pagai** | **2.00** | **194** | P | **Pn** | **05 25 11.3** | **+0.1** |
| **GSI** | **Gunungsitoli** | **3.58** | **306** | P | **Pn** | **05 25 32.4** | **+0.6** |
| **PSI** | **Prapat** | **3.91** | **337** | P | **Pn** | **05 25 36.6** | **+0.4** |
| | 2.2nm,0.3s,baz=144,slow=16,SNR=5.8 | | | | | | |
| **MNAI** | **Manna** | **4.31** | **145** | P | **Pn** | **05 25 42.1** | **+0.6** |
| **MDSI** | **Maura Dua** | **5.20** | **135** | P | **Pn** | **05 25 54.9** | **+1.5** |
| **WRA** | **Warramunga Arr** | **38.20** | **122** | P | **P** | **05 31 45.4** | **-1.1** |
| | 0.3nm,0.3s,baz=305,slow=8.9,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **39.58** | **128** | P | **P** | **05 31 57.6** | **-0.4** |
| | 0.3nm,0.3s,baz=300,slow=8.6,SNR=4.0 | | | | | | |
| **KSRS** | **Korea Array** | **45.76** | **31** | P | **P** | **05 32 47.8** | **+0.3** |
| | 1.2nm,0.6s,baz=224,slow=8.8,SNR=5.3 | | | | | | |
| **SONM** | **Songino Array** | **48.72** | **5** | P | **P** | **05 33 10.5** | **0.0** |
| | 1.1nm,0.3s,baz=191,slow=10,SNR=5.8 | | | | | | |
| SONM | | | | PcP | **PcP** | **05 34 34.3** | **+0.4** |
| | 0.7nm,0.5s,baz=194,slow=3.0,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.02** | **344** | P | **P** | **05 33 20.2** | **-0.2** |
| | 0.9nm,0.4s,baz=154,slow=8.3,SNR=7.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.89** | **28** | P | **P** | **05 33 42.2** | **+0.6** |
| | 2.7nm,0.8s,baz=239,slow=7.2,SNR=4.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.10** | **349** | P | **P** | **05 34 03.8** | **-0.9** |
| | 1.4nm,0.5s,baz=168,slow=7.6,SNR=4.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **72.88** | **312** | P | **P** | **05 35 54.1** | **-0.3** |
| | 0.3nm,0.5s,baz=109,slow=7.8,SNR=2.3 | | | | | | |
| **FINES** | **FINESS Array B** | **83.29** | **332** | P | **P** | **05 36 51.3** | **0.0** |
| | 1.1nm,0.5s,baz=120,slow=6.9,SNR=8.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.52** | **340** | P | **P** | **05 37 02.6** | **+0.3** |
| | 1.1nm,0.8s,baz=99,slow=3.1,SNR=4.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.47** | **37** | PKP | PKPbc | 05 43 57.1 | +0.1 |
| | 0.3nm,0.6s,baz=324,slow=1.6,SNR=7.0 | | | | | | |

**CASC 06 05:56:47.4**±2.1**, 11°.99N**×**87°.21W, h52**$^{km}$±47$^{km}$**, MD4.0, ML3.7, 1C-1D, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **COPN** | **Copaltepe** | **0.63** | **73** | *e*P | Pn | 05 57 01.0 | +0.7 |
| COPN | | | | ⇑*i*P | Pn | 05 57 01.1 | +0.7 |
| **CNGN** | **Cerro Negro** | **0.71** | **44** | *e*S | Sn | 05 57 11.8 | +0.2 |
| **MOMN** | **Momotombo** | **0.77** | **58** | *e*P | Pn | 05 57 02.2 | -0.1 |
| **APYN** | **Apoyeque** | **0.87** | **74** | *e*P | Pn | 05 57 04.1 | +0.6 |
| **XAVN** | **Gruta Xavier** | **0.88** | **80** | *e*P | Pn | 05 57 04.2 | +0.7 |
| **CRUN** | **El Crucero** | **0.89** | **90** | *e*P | Pn | 05 57 04.2 | +0.4 |
| **TISN** | **Laguna Tiscapa** | **0.93** | **81** | *e*P | Pn | 05 57 04.8 | +0.5 |
| **MGAN** | **Managua** | **0.95** | **81** | *e*P | Pn | 05 57 04.7 | +0.2 |
| MGAN | | | | *e*S | Sn | 05 57 18.2 | +1.0 |
| MGAN | | | | AML | AML | 05 57 20.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| **MASN** | **Masaya** | **1.03** | **90** | *e*P | Pn | 05 57 06.0 | +0.4 |
| MASN | | | | *e*S | Sn | 05 57 20.0 | +0.8 |
| **CNCH** | **Conchagua** | **1.42** | **334** | *e*P | Pn | 05 57 11.1 | +0.1 |
| CNCH | | | | *e*P | Pn | 05 57 11.2 | +0.3 |
| CNCH | | | | *e*S | Sn | 05 57 28.0 | -0.6 |
| CNCH | | | | *e*S | Sn | 05 57 29.2 | +0.5 |
| CNCH | | | | AML | AML | 05 57 30.5 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **2.05** | **358** | ⇓*i*P | Pn | 05 57 20.5 | +1.0 |
| **NY14** | **Universidad de** | **2.12** | **129** | *i* P | Pn | 05 57 21.5 | +1.1 |
| NY14 | | | | *i* S | Sn | 05 57 47.8 | +2.3 |
| **LAPC** | **Finca la Perla** | **2.12** | **125** | *i* P | Pn | 05 57 20.3 | -0.2 |
| **BUEV** | **Buena Vista** | **2.13** | **124** | *i* P | Pn | 05 57 20.8 | +0.1 |
| **GPS2** | **Hotel Rincˆ‡n** | **2.20** | **124** | *i* P | Pn | 05 57 21.9 | +0.4 |
| **SNVI** | **San Vicente** | **2.27** | **316** | *e*S | Sn | 05 57 50.5 | +1.0 |
| **MESS** | **Mesas** | **2.33** | **122** | *i* P | Pn | 05 57 23.5 | +0.1 |
| **CUI** | **Cuipilapa** | **2.40** | **123** | *i* P | Pn | 05 57 25.2 | +0.9 |
| **LFRS** | **El Faro** | **2.43** | **312** | *e*P | Pn | 05 57 24.8 | 0.0 |
| **LBRS** | **Las Brisas** | **2.49** | **314** | *e*P | Pn | 05 57 26.4 | +0.7 |
| LBRS | | | | *e*S | Sn | 05 57 55.3 | +0.3 |
| **PTEN** | **Parque Tenorio** | **2.52** | **120** | *i* P | Pn | 05 57 25.3 | -0.7 |
| **LFU** | **La Fuente** | **2.55** | **313** | *e*P | Pn | 05 57 26.7 | +0.3 |
| **JCR** | **Jicaral** | **2.96** | **136** | *e*P | Pn | 05 57 33.2 | +1.1 |
| JCR | | | | *e*S | Sn | 05 58 05.6 | -0.8 |
| **CGA2** | **Cerro Gallo 2** | **3.33** | **126** | *e*P | Pn | 05 57 37.8 | +0.6 |
| CGA2 | | | | *e*S | Sn | 05 58 16.0 | +0.3 |
| **BUS** | **Buena Vista** | **4.17** | **125** | *e*P | Pn | 05 57 50.7 | +1.7 |
| BUS | | | | *e*S | Sn | 05 58 37.0 | +0.1 |

**TAP 06 06:05:30.1, 23°.88N**×**120°.94E, h29**$^{km}$**, ML2.5, 1C, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMLT** | **Sun Moon Lake** | **0.03** | **268** | P | Pb | 06 05 34.5 | -0.6 |
| | baz=264 | | | | | | |
| SMLT | | | | S | Sb | 06 05 38.0 | -0.5 |
| | baz=264 | | | | | | |
| **TYC** | **Yuchr** | **0.08** | **285** | P | Pb | 06 05 34.7 | -0.4 |
| | baz=288 | | | | | | |
| TYC | | | | S | Sb | 06 05 38.4 | -0.2 |
| | baz=288 | | | | | | |
| **WDT** | **Danda** | **0.22** | **125** | ⇑*i*P | Pb | 06 05 36.3 | -0.5 |
| | baz=124 | | | | | | |
| WDT | | | | S | Sb | 06 05 41.0 | -0.4 |
| | baz=124 | | | | | | |
| **CHN5** | **Tsauling** | **0.37** | **220** | P | Pb | 06 05 38.1 | -0.5 |
| | baz=219 | | | | | | |
| CHN5 | | | | S | Sb | 06 05 44.3 | -0.1 |
| | baz=219 | | | | | | |
| **ALS** | **Alishan** | **0.39** | **198** | P | Pb | 06 05 38.6 | -0.6 |
| | baz=196 | | | | | | |
| ALS | | | | S | Sb | 06 05 44.9 | -0.4 |
| | baz=196 | | | | | | |
| **YUS** | **Yu-Shan** | **0.39** | **178** | *e*P | Pb | 06 05 38.8 | -0.7 |
| | baz=177 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.40** | **49** | P | Pb | 06 05 38.9 | -0.5 |
| | baz=49 | | | | | | |
| WHF | | | | S | Sb | 06 05 45.2 | -0.6 |
| | baz=49 | | | | | | |
| **TWT** | **Tachien** | **0.43** | **31** | *e*S | Sb | 06 05 45.1 | -0.9 |
| | baz=29 | | | | | | |
| **EHY** | **Hungye** | **0.52** | **137** | *e*S | Sb | 06 05 47.4 | -0.6 |
| | baz=136 | | | | | | |
| **TWF1** | **Yuli** | **0.62** | **148** | *e*P | Pb | 06 05 42.2 | -0.3 |
| | baz=147 | | | | | | |
| TWF1 | | | | S | Sb | 06 05 50.7 | -0.3 |
| | baz=147 | | | | | | |
| **ELDTW** | **Lidau** | **0.70** | **174** | *e*P | Pb | 06 05 42.9 | -0.9 |
| | baz=173 | | | | | | |
| ELDTW | | | | *e*S | Sb | 06 05 52.0 | -1.2 |
| | baz=173 | | | | | | |
| **CHN1** | **Nanshi** | **0.79** | **208** | *e*P | Pn | 06 05 45.1 | -0.2 |
| | baz=208 | | | | | | |
| CHN1 | | | | S | Sn | 06 05 56.0 | -0.2 |
| | baz=208 | | | | | | |

**IDC 06 06:06:04.7**±2.6**, 54°.19N**×**86°.36E, h0**$^{km}$**, mb1 3.1**/2**, mb1mx2.9**/55**, mbtmp3.1**/2**, ML2.9**/2**, Error ellipse: s-maj=20.3km s-min=12.9km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.94** | **256** | *i* | | 06 12 30.0 | |
| | baz=74,slow=330,SNR=1.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.94** | **256** | Pg | Pg | 06 06 21.3 | -1.5 |
| | 3.3nm,0.3s,baz=72,slow=19,SNR=22 | | | | | | |
| ZALV | | | | Lg | Lg | 06 06 36.5 | |
| | 6.8nm,0.3s,baz=78,slow=30,SNR=25 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.98** | **236** | Pn | Pn | 06 07 35.0 | +0.6 |
| | 0.2nm,0.3s,baz=52,slow=13,SNR=5.0 | | | | | | |
| KURBB | | | | Lg | Lg | 06 09 15.7 | |
| | 0.1nm,0.3s,baz=49,slow=31,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.85** | **201** | Pn | Pn | 06 08 01.6 | +1.5 |
| | 0.2nm,0.3s,baz=22,slow=12,SNR=5.0 | | | | | | |

*ISCJB **06** 06:17:41.1±0.6, 29°.0S±0°.1×61°.7E±0°.1, h11$^{km}$, mb4.1/12, MS3.5/4, Error ellipse: s-maj=18.5km s-min=13.6km az=137.3*
*IDC **06** 06:17:41.2±0.6, 28°.96S×61°.63E, h0$^{km}$, mb4.1/12, mb1 4.2/13, mb1mx4.0/43, mbtmp4.1/13, ML3.7/1, MS3.5/4, Ms1 3.5/4, ms1mx3.1/29, Error ellipse: s-maj=21.7km s-min=17.4km az=67.0*

**ISC 06 06:17:42.8**±0.7**, 29°.0S**±0°.1×**61°.6E**±0°.1**, h11**km**, n20,** σ**0.38**/13**, mb4.1**/12**, MS3.5**/4**, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPO** | **Ambohidratompo** | **16.73** | **305** | Pn | **P** | **06 21 39.0** | **-0.7** |
| | 0.3nm,0.3s,baz=82,slow=19,SNR=2.8 | | | | | | |
| **H08S1** | **Diego Carcia H** | **23.56** | **28** | T | T | 06 47 06.6 | |
| | baz=204,slow=76,SNR=6.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **23.57** | **28** | T | T | 06 47 05.2 | |
| | baz=204,slow=76,SNR=3.2 | | | | | | |
| **H08S3** | **Diego Garcia H** | **23.58** | **28** | T | T | 06 47 04.9 | |
| | baz=204,slow=76,SNR=4.6 | | | | | | |
| **BOSA** | **Boshof** | **31.76** | **262** | LR | LR | 06 35 19.6 | |
| | comp=Z,61nm,18.7s,baz=78,slow=33 | | | | | | |
| **LSZ** | **Lusaka** | **33.66** | **287** | P | **P** | **06 24 24.2** | **+0.1** |
| | 3.7nm,0.7s,baz=88,slow=8.9,SNR=9.1 | | | | | | |
| **MAW** | **Mawson** | **38.68** | **179** | P | **P** | **06 25 05.9** | **-0.3** |
| | 2.4nm,0.8s,baz=337,slow=9.3,SNR=6.2 | | | | | | |
| MAW | | | | LR | LR | 06 40 18.4 | |
| | comp=Z,56nm,18.1s,baz=62,slow=35 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **44.58** | **112** | T | T | 07 13 34.2 | |
| | baz=262,slow=75,SNR=8.1 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **44.58** | **112** | T | T | 07 13 35.4 | |
| | baz=262,slow=75,SNR=9.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **44.60** | **112** | T | T | 07 13 33.0 | |
| | baz=262,slow=75,SNR=10.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **59.37** | **42** | P | **P** | **06 27 45.5** | **+0.2** |
| | 1.7nm,0.3s,baz=231,slow=8.0,SNR=6.7 | | | | | | |
| **QSPA** | **South Pole Qui** | **61.20** | **180** | P | **P** | **06 27 58.0** | **+0.5** |
| | 1.1nm,0.6s,baz=262,slow=2.3,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **64.14** | **104** | P | **P** | **06 28 17.3** | **-0.4** |
| | 1.1nm,0.8s,baz=238,slow=7.9,SNR=7.4 | | | | | | |
| **VNDA** | **Vanda** | **64.14** | **166** | P | **P** | **06 28 16.8** | **+0.1** |
| | 1.4nm,0.8s,baz=279,slow=6.6,SNR=8.2 | | | | | | |
| VNDA | | | | LR | LR | 06 52 56.2 | |
| | comp=Z,48nm,20.0s,baz=308,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **65.94** | **100** | P | **P** | **06 28 29.0** | **-0.4** |
| | 0.8nm,0.6s,baz=251,slow=5.6,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.37** | **297** | P | **P** | **06 29 03.2** | **0.0** |
| | 1.1nm,0.8s,baz=116,slow=5.4,SNR=8.6 | | | | | | |
| TORD | | | | LR | LR | 06 59 20.5 | |
| | comp=Z,42nm,18.8s,baz=335,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **77.69** | **14** | P | **P** | **06 29 39.4** | **+0.1** |
| | 1.6nm,0.8s,baz=190,slow=4.9,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **84.32** | **340** | P | **P** | **06 30 14.9** | **+0.4** |
| | 0.5nm,0.4s,baz=155,slow=4.3,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.98** | **14** | P | **P** | **06 30 17.8** | **+0.1** |
| | 6.3nm,0.7s,baz=211,slow=4.2,SNR=19 | | | | | | |
| **SONM** | **Songino Array** | **86.39** | **28** | P | **P** | **06 30 25.1** | **-0.1** |
| | 0.4nm,0.5s,baz=212,slow=4.6,SNR=4.2 | | | | | | |

**IDC 06 06:21:06.5**±2.9**, 4°.27S**×**136°.04E, h0**km**, mb3.4**/1**, mb1 3.9**/3**, mb1mx3.5**/20**, mbtmp3.7**/3**, ML3.8**/2**, Error ellipse: s-maj=121.1km s-min=30.8km az=80.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **15.67** | **186** | Pn | Pn | 06 24 48.7 | -0.1 |
| | 0.4nm,0.3s,baz=7.7,slow=13,SNR=3.2 | | | | | | |
| WRA | | | | Sn | Sn | 06 27 26.9 | -16 |
| | 0.2nm,0.3s,baz=4.5,slow=23,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **19.39** | **186** | P | P | 06 25 34.3 | 0.0 |
| | 0.3nm,0.3s,baz=5.7,slow=10,SNR=17 | | | | | | |
| ASAR | | | | S | Sn | 06 28 54.6 | -19 |
| | 0.1nm,0.3s,baz=4.3,slow=26,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.42** | **324** | P | P | 06 32 16.5 | 0.0 |
| | 0.3nm,0.7s,baz=120,slow=5.7,SNR=2.9 | | | | | | |

*TIR **06** 06:57:58.2, 39°.68N×20°.45E, h17km*
*IDC **06** 06:58:08.0±1.0, 39°.72N×20°.69E, h0km, mb3.9/7, mb1 3.8/11, mb1mx3.7/35, mbtmp3.8/11, ML3.9/4, MS2.9/1, Ms1 3.0/1, ms1mx2.4/38, Error ellipse: s-maj=19.6km s-min=18.2km az=99.0*
*ISCJB **06** 06:58:09.8±0.4, 39°.72N±0°.01×20°.40E±0°.02, h9km±3km, mb3.9/6, MS2.8/1, Error ellipse: s-maj=2.8km s-min=2.0km az=145.9*
*ATH **06** 06:58:09.7, 39°.72N×20°.43E, h16km±1km, MD3.7/43, ML3.8*
*THE **06** 06:58:10.0, 39°.69N×20°.45E, h0km±1km, ML3.6/9, Error ellipse: s-maj=1.8km s-min=0.5km az=359.0*
*PDG **06** 06:58:10.7±0.5, 39°.80N×20°.43E, h11km±1km, ML3.5/10, Error ellipse: s-maj=0.6km s-min=0.8km az=0.0*
*CSEM **06** 06:58:10.2±0.1, 39°.71N×20°.40E, h5km, ML3.6, Error ellipse: s-maj=2.7km s-min=1.7km az=55.0*
**ISC 06 06:58:10.1**±0.8**, 39°.69N**±0°.02×**20°.43E**±0°.02**, h13**km±5km**, n251,** σ**1.28**/308**, mb4.0**/6**, 17C-13D, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IGT** | **Igoumenitsa** | **0.17** | **206** | ePB | **Pg** | **06 58 14.0** | **-0.2** |
| IGT | | | | eSB | **Sb** | **06 58 18.7** | **+0.2** |
| **IGT** | **Igoumenitsa** | **0.17** | **206** | P | **Pg** | **06 58 13.9** | **-0.2** |
| IGT | | | | S | **Sg** | **06 58 16.6** | **-0.3** |
| **IGT** | **Igoumenitsa** | **0.17** | **206** | ePb | **Pg** | **06 58 14.0** | **-0.2** |
| IGT | | | | eSb | **Sb** | **06 58 18.7** | **+0.2** |
| **JAN** | **Janina** | **0.33** | **95** | ePB | **Pg** | **06 58 16.3** | **-0.5** |
| JAN | | | | eSB | **Sg** | **06 58 21.5** | **+0.2** |
| **JAN** | **Janina** | **0.33** | **95** | P | **Pg** | **06 58 16.1** | **-0.7** |
| JAN | | | | S | **Sg** | **06 58 21.0** | **-0.3** |
| **JAN** | **Janina** | **0.33** | **95** | ePb | **Pg** | **06 58 16.3** | **-0.5** |
| JAN | | | | eSb | **Sg** | **06 58 21.5** | **+0.2** |
| **SRN** | **Sarande** | **0.38** | **300** | i PG | **Pg** | **06 58 17.2** | **-0.6** |
| SRN | | | | i SG | **Sb** | **06 58 24.5** | **-0.1** |
| **SRN** | **Sarande** | **0.38** | **300** | P | **Pg** | **06 58 17.5** | **-0.3** |
| SRN | | | | S | **Sb** | **06 58 24.1** | **-0.5** |
| **SRN** | **Sarande** | **0.38** | **300** | i Pg | **Pg** | **06 58 17.2** | **-0.6** |
| **SRN** | **Sarande** | **0.38** | **300** | P | **Pg** | **06 58 17.5** | **-0.3** |
| SRN | | | | S | **Sb** | **06 58 24.1** | **-0.5** |
| SRN | | | | i Sg | **Sb** | **06 58 24.5** | **-0.1** |
| **KEK** | **Kerkira** | **0.49** | **273** | ePB | **Pg** | **06 58 19.8** | **0.0** |
| KEK | | | | eSB | **Sg** | **06 58 26.4** | **+0.1** |
| **KEK** | **Kerkira** | **0.49** | **273** | P | **Pg** | **06 58 19.7** | **0.0** |
| KEK | | | | S | **Sb** | **06 58 27.4** | **-0.2** |
| **KEK** | **Kerkira** | **0.49** | **273** | P | **Pg** | **06 58 19.7** | **0.0** |
| KEK | | | | eSb | **Sg** | **06 58 26.4** | **+0.1** |
| KEK | | | | S | **Sb** | **06 58 27.4** | **-0.2** |
| **DSL** | **Palaion Diasel** | **0.76** | **137** | ePN | **Pg** | **06 58 24.2** | **-0.6** |
| DSL | | | | eSN | **Sb** | **06 58 36.5** | **+1.2** |
| **DSL** | **Palaion Diasel** | **0.76** | **137** | P | **Pg** | **06 58 23.9** | **-0.9** |
| **DSL** | **Palaion Diasel** | **0.76** | **137** | ePn | **Pg** | **06 58 24.2** | **-0.6** |
| DSL | | | | eSn | **Sb** | **06 58 36.5** | **+1.2** |
| **NEST** | **Nestorio** | **0.87** | **33** | ePN | **Pg** | **06 58 26.0** | **-1.0** |
| **NEST** | **Nestorio** | **0.87** | **33** | P | **Pg** | **06 58 25.9** | **-1.0** |
| NEST | | | | S | **Sb** | **06 58 39.4** | **+0.7** |
| **NEST** | **Nestorio** | **0.87** | **33** | ePn | **Pg** | **06 58 26.0** | **-1.0** |
| NEST | | | | S | **Sb** | **06 58 39.4** | **+0.7** |
| **LKD2** | **Lefkada island** | **0.91** | **169** | ePB | **Pb** | **06 58 26.9** | **-0.9** |
| LKD2 | | | | eSN | **Sn** | **06 58 41.7** | **0.0** |
| **LKD2** | **Lefkada island** | **0.91** | **169** | P | **Pb** | **06 58 26.8** | **-1.0** |
| LKD2 | | | | S | **Sg** | **06 58 41.1** | **+1.4** |
| **LKD2** | **Lefkada island** | **0.91** | **169** | ePb | **Pb** | **06 58 26.9** | **-0.9** |
| LKD2 | | | | S | **Sg** | **06 58 41.1** | **+1.4** |
| LKD2 | | | | eSn | **Sn** | **06 58 41.7** | **0.0** |
| **KBN** | **Korca** | **0.97** | **16** | i PG | **Pb** | **06 58 28.4** | **-0.5** |
| **KBN** | **Korca** | **0.97** | **16** | i Pg | **Pb** | **06 58 28.4** | **-0.5** |
| **KZN** | **Kozani** | **1.20** | **59** | ePN | **Pn** | **06 58 32.0** | **-0.7** |
| **KZN** | **Kozani** | **1.20** | **59** | P | **Pn** | **06 58 31.9** | **-0.7** |
| KZN | | | | S | **Sg** | **06 58 49.8** | **+0.9** |
| **KZN** | **Kozani** | **1.20** | **59** | P | **Pn** | **06 58 31.9** | **-0.7** |
| KZN | | | | S | **Sg** | **06 58 49.8** | **+0.9** |
| **THL** | **Klokotos Trika** | **1.23** | **95** | ePB | **Pn** | **06 58 32.2** | **-0.7** |
| **THL** | **Klokotos Trika** | **1.23** | **95** | P | **Pn** | **06 58 32.3** | **-0.7** |
| THL | | | | S | **Sg** | **06 58 51.5** | **+1.7** |
| **THL** | **Klokotos Trika** | **1.23** | **95** | P | **Pn** | **06 58 32.3** | **-0.7** |
| THL | | | | S | **Sg** | **06 58 51.5** | **+1.7** |
| **PDO** | **Prodromos** | **1.23** | **151** | P | **Pn** | **06 58 32.7** | **-0.3** |
| **PDO** | **Prodromos** | **1.23** | **151** | P | **Pn** | **06 58 32.7** | **-0.3** |
| **FNA** | **Florina** | **1.31** | **33** | ePN | **Pn** | **06 58 33.6** | **-0.6** |
| **FNA** | **Florina** | **1.31** | **33** | P | **Pn** | **06 58 34.1** | **-0.1** |
| FNA | | | | S | **Sg** | **06 58 53.1** | **+0.6** |
| **FNA** | **Florina** | **1.31** | **33** | ePn | **Pn** | **06 58 33.6** | **-0.6** |
| **FNA** | **Florina** | **1.31** | **33** | P | **Pn** | **06 58 34.1** | **-0.1** |
| FNA | | | | S | **Sg** | **06 58 53.1** | **+0.6** |
| **EVR** | **Evrytania** | **1.32** | **125** | ePN | **Pb** | **06 58 35.0** | **+0.3** |
| **EVR** | **Evrytania** | **1.32** | **125** | P | **Pn** | **06 58 34.4** | **+0.1** |
| **EVR** | **Evrytania** | **1.32** | **125** | P | **Pn** | **06 58 34.4** | **+0.1** |
| **EVR** | **Evrytania** | **1.32** | **125** | ePn | **Pb** | **06 58 35.0** | **+0.3** |
| **OHR** | **Ohrid** | **1.45** | **11** | ePn | **Pg** | **06 58 38.5** | **+0.4** |
| OHR | | | | eSn | **Sg** | **06 58 60.0** | **+3.1** |
| **OHR** | **Ohrid** | **1.45** | **11** | ePn | **Pg** | **06 58 38.4** | **+0.4** |
| **MAKR** | **Makrakomi, Fth** | **1.48** | **116** | ePN | **Pb** | **06 58 37.5** | **+0.1** |
| **MAKR** | **Makrakomi, Fth** | **1.48** | **116** | P | **Pb** | **06 58 37.6** | **+0.1** |
| **MAKR** | **Makrakomi, Fth** | **1.48** | **116** | P | **Pb** | **06 58 37.6** | **+0.1** |
| **VLS** | **Valsamata** | **1.51** | **175** | ePB | **Pn** | **06 58 37.5** | **+0.6** |
| **VLS** | **Valsamata** | **1.51** | **175** | P | **Pn** | **06 58 36.9** | **0.0** |
| VLS | | | | S | **Sg** | **06 58 59.5** | **+0.7** |
| **VLS** | **Valsamata** | **1.51** | **175** | P | **Pn** | **06 58 36.9** | **0.0** |
| **VLS** | **Valsamata** | **1.51** | **175** | ePb | **Pn** | **06 58 37.5** | **+0.6** |
| VLS | | | | S | **Sg** | **06 58 59.5** | **+0.7** |
| **KFL** | **Anninata** | **1.60** | **170** | ePN | **Pn** | **06 58 39.0** | **+0.9** |
| **KFL** | **Anninata** | **1.60** | **170** | ePn | **Pn** | **06 58 39.0** | **+0.9** |
| **AGG** | **Agios Georgios** | **1.61** | **114** | ePN | **Pb** | **06 58 39.7** | **-0.1** |
| **AGG** | **Agios Georgios** | **1.61** | **114** | P | **Pn** | **06 58 39.3** | **+1.0** |
| **AGG** | **Agios Georgios** | **1.61** | **114** | P | **Pn** | **06 58 39.3** | **+1.0** |
| **AGG** | **Agios Georgios** | **1.61** | **114** | ePn | **Pb** | **06 58 39.7** | **-0.1** |
| **EFP** | **Efpalio** | **1.70** | **137** | ePN | **Pb** | **06 58 41.7** | **+0.4** |
| **EFP** | **Efpalio** | **1.70** | **137** | P | **Pb** | **06 58 41.9** | **+0.6** |
| **EFP** | **Efpalio** | **1.70** | **137** | ePn | **Pb** | **06 58 41.7** | **+0.4** |
| **TIR** | **Tirane** | **1.71** | **346** | i PG | **Pb** | **06 58 41.8** | **+0.3** |
| **TIR** | **Tirane** | **1.71** | **346** | i Pg | **Pb** | **06 58 41.8** | **+0.3** |
| **SERG** | **Sergoula** | **1.79** | **135** | P | **Pn** | **06 58 41.7** | **+0.9** |
| **SERG** | **Sergoula** | **1.79** | **135** | P | **Pn** | **06 58 41.7** | **+0.9** |
| **RLS** | **Riolos of Patr** | **1.82** | **153** | ePN | **Pb** | **06 58 43.6** | **+0.4** |
| **RLS** | **Riolos of Patr** | **1.82** | **153** | ePn | **Pb** | **06 58 43.6** | **+0.4** |
| **KALE** | **Kalithea** | **1.86** | **134** | ePN | **Pb** | **06 58 44.2** | **+0.3** |
| **KALE** | **Kalithea** | **1.86** | **134** | P | **Pb** | **06 58 43.6** | **-0.3** |
| **KALE** | **Kalithea** | **1.86** | **134** | P | **Pb** | **06 58 43.6** | **-0.3** |
| **KALE** | **Kalithea** | **1.86** | **134** | ePn | **Pb** | **06 58 44.2** | **+0.3** |
| **LAKA** | **Lakka** | **1.88** | **140** | ePN | **Pb** | **06 58 44.2** | **-0.1** |
| **LAKA** | **Lakka** | **1.88** | **140** | P | **Pb** | **06 58 44.0** | **-0.3** |
| **LAKA** | **Lakka** | **1.88** | **140** | P | **Pb** | **06 58 44.0** | **-0.3** |
| **AXAR** | **Agios Charalam** | **1.96** | **117** | ePN | **Pb** | **06 58 45.3** | **-0.3** |
| **AXAR** | **Agios Charalam** | **1.96** | **117** | ePn | **Pb** | **06 58 45.3** | **-0.3** |
| **FYTO** | **Fytoko, Volos** | **1.96** | **97** | P | **Pn** | **06 58 43.9** | **+0.9** |
| **FYTO** | **Fytoko, Volos** | **1.96** | **97** | P | **Pn** | **06 58 43.9** | **+0.9** |
| **GRG** | **Griva** | **1.97** | **49** | ePN | **Pn** | **06 58 44.5** | **+1.3** |
| **GRG** | **Griva** | **1.97** | **49** | P | **Pn** | **06 58 44.2** | **+1.0** |
| **GRG** | **Griva** | **1.97** | **49** | P | **Pn** | **06 58 44.2** | **+1.0** |
| **GRG** | **Griva** | **1.97** | **49** | ePn | **Pn** | **06 58 44.5** | **+1.3** |
| **PHP** | **Peshkopia** | **2.00** | **0** | i PG | **Pb** | **06 58 46.2** | **-0.1** |
| **PHP** | **Peshkopia** | **2.00** | **0** | i Pg | **Pb** | **06 58 46.2** | **-0.1** |
| **DSF** | **Desfina** | **2.07** | **127** | ePN | **Pb** | **06 58 46.8** | **-0.8** |
| **DSF** | **Desfina** | **2.07** | **127** | P | **Pn** | **06 58 46.3** | **+1.7** |
| **DSF** | **Desfina** | **2.07** | **127** | P | **Pn** | **06 58 46.3** | **+1.7** |
| **DSF** | **Desfina** | **2.07** | **127** | ePn | **Pb** | **06 58 46.8** | **-0.8** |
| **DESF** | **Desfina** | **2.07** | **127** | ePN | **Pb** | **06 58 46.6** | **-1.0** |
| **DESF** | **Desfina** | **2.07** | **127** | ePn | **Pb** | **06 58 46.6** | **-1.0** |
| **KLV** | **Kalavryta, Ach** | **2.12** | **140** | ePN | **Pb** | **06 58 47.6** | **-0.8** |
| **KLV** | **Kalavryta, Ach** | **2.12** | **140** | ePn | **Pb** | **06 58 47.6** | **-0.8** |
| **THE** | **Thessaloniki** | **2.16** | **63** | ePN | **Pn** | **06 58 47.4** | **+1.7** |
| **THE** | **Thessaloniki** | **2.16** | **63** | ePn | **Pn** | **06 58 47.4** | **+1.7** |
| **XOR** | **Xorichti** | **2.16** | **98** | ePN | **Pn** | **06 58 47.2** | **+1.4** |
| **XOR** | **Xorichti** | **2.16** | **98** | P | **Pn** | **06 58 46.5** | **+0.7** |
| **XOR** | **Xorichti** | **2.16** | **98** | P | **Pn** | **06 58 46.5** | **+0.7** |
| **XOR** | **Xorichti** | **2.16** | **98** | ePn | **Pn** | **06 58 47.2** | **+1.4** |
| **NEO** | **Neokhori** | **2.19** | **99** | ePN | **Pb** | **06 58 48.2** | **-1.4** |
| **NEO** | **Neokhori** | **2.19** | **99** | P | **Pn** | **06 58 47.3** | **+1.0** |
| **NEO** | **Neokhori** | **2.19** | **99** | P | **Pn** | **06 58 47.3** | **+1.0** |
| **NEO** | **Neokhori** | **2.19** | **99** | ePn | **Pb** | **06 58 48.2** | **-1.4** |
| **HORT** | **Hortiatis** | **2.24** | **65** | ePN | **Pn** | **06 58 48.1** | **+1.2** |
| **HORT** | **Hortiatis** | **2.24** | **65** | ePn | **Pn** | **06 58 48.1** | **+1.2** |
| **LKR** | **Lokris** | **2.25** | **117** | ePN | **Pb** | **06 58 49.7** | **-0.9** |
| **LKR** | **Lokris** | **2.25** | **117** | ePn | **Pb** | **06 58 49.7** | **-0.9** |
| **GUR** | **Goura** | **2.30** | **139** | ePN | **Pb** | **06 58 50.2** | **-1.3** |
| **GUR** | **Goura** | **2.30** | **139** | P | **Pn** | **06 58 49.5** | **+1.7** |
| **GUR** | **Goura** | **2.30** | **139** | P | **Pn** | **06 58 49.5** | **+1.7** |
| **GUR** | **Goura** | **2.30** | **139** | ePn | **Pb** | **06 58 50.2** | **-1.3** |
| **SMIA** | **Simia** | **2.30** | **110** | ePN | **Pb** | **06 58 50.1** | **-1.4** |
| **SMIA** | **Simia** | **2.30** | **110** | ePn | **Pb** | **06 58 50.1** | **-1.4** |
| **VAY** | **Valandovo** | **2.31** | **44** | ePn | **Pb** | **06 58 49.7** | **-1.9** |
| VAY | | | | eSn | **Sn** | **06 59 15.7** | **-0.3** |
| **VAY** | **Valandovo** | **2.31** | **44** | ePn | **Pb** | **06 58 49.7** | **-1.9** |
| VAY | | | | eSn | **Sn** | **06 59 15.7** | **-0.3** |
| **AMT** | **Artemida-Makis** | **2.37** | **155** | ePN | **Pn** | **06 58 51.0** | **+2.3** |
| **AMT** | **Artemida-Makis** | **2.37** | **155** | ePn | **Pn** | **06 58 51.0** | **+2.3** |
| **PUK** | **Puka** | **2.39** | **350** | i PG | **Pb** | **06 58 51.9** | **-1.1** |
| **PUK** | **Puka** | **2.39** | **350** | i Pg | **Pb** | **06 58 51.9** | **-1.1** |
| **KNT** | **Kendrikon** | **2.39** | **51** | ePB | **Pn** | **06 58 50.1** | **+1.1** |
| **KNT** | **Kendrikon** | **2.39** | **51** | ePb | **Pn** | **06 58 50.1** | **+1.1** |
| **THAL** | **Thalero** | **2.40** | **133** | ePN | **Pb** | **06 58 52.0** | **-1.1** |
| **THAL** | **Thalero** | **2.40** | **133** | ePn | **Pb** | **06 58 52.0** | **-1.1** |
| **SKIA** | **Skiathos** | **2.41** | **102** | ePB | **Pn** | **06 58 50.3** | **+1.1** |
| **SKIA** | **Skiathos** | **2.41** | **102** | ePb | **Pn** | **06 58 50.3** | **+1.1** |
| **PLG** | **Polygyros** | **2.41** | **73** | ePN | **Pn** | **06 58 50.0** | **+0.7** |
| **PLG** | **Polygyros** | **2.41** | **73** | ePn | **Pn** | **06 58 50.0** | **+0.7** |
| **ULC** | **Ulcinj** | **2.45** | **339** | ⇑iPn | **Pn** | **06 58 50.2** | **+0.5** |
| ULC | | | | eSn | **Sn** | **06 59 20.6** | **+1.1** |
| **ULC** | **Ulcinj** | **2.45** | **339** | ⇑iPn | **Pn** | **06 58 50.2** | **+0.5** |
| ULC | | | | eSn | **Sn** | **06 59 20.6** | **+1.1** |
| **SOH** | **Sokhos** | **2.51** | **62** | ePB | **Pn** | **06 58 52.5** | **+1.9** |
| **SOH** | **Sokhos** | **2.51** | **62** | ePb | **Pn** | **06 58 52.5** | **+1.9** |
| **PAIG** | **Paliouri** | **2.51** | **83** | ePN | **Pn** | **06 58 51.4** | **+0.8** |
| **PAIG** | **Paliouri** | **2.51** | **83** | P | **Pn** | **06 58 51.2** | **+0.6** |
| **PAIG** | **Paliouri** | **2.51** | **83** | ePn | **Pn** | **06 58 51.4** | **+0.8** |
| **TAR1** | **Taranto** | **2.56** | **290** | ePn | **Pn** | **06 58 51.8** | **+0.6** |
| **PE1** | **Pezze di Greco** | **2.56** | **297** | ePn | **Pb** | **06 58 54.8** | **-1.0** |
| **LTK** | **Loutraki** | **2.58** | **129** | ePN | **Pn** | **06 58 53.4** | **+1.8** |
| **LTK** | **Loutraki** | **2.58** | **129** | P | **Pn** | **06 58 52.1** | **+0.5** |
| **LTK** | **Loutraki** | **2.58** | **129** | P | **Pn** | **06 58 52.1** | **+0.5** |
| **LTK** | **Loutraki** | **2.58** | **129** | ePn | **Pn** | **06 58 53.4** | **+1.8** |
| **LOUT** | **Loutraki** | **2.61** | **130** | ePN | **Pn** | **06 58 54.1** | **+2.1** |
| **LOUT** | **Loutraki** | **2.61** | **130** | ePn | **Pn** | **06 58 54.1** | **+2.1** |
| **MRKA** | **Markates** | **2.64** | **111** | ePB | **Pn** | **06 58 54.9** | **+2.5** |
| **MRKA** | **Markates** | **2.64** | **111** | ePb | **Pn** | **06 58 54.9** | **+2.5** |
| **VIL2** | **Platees** | **2.66** | **123** | ePN | **Pb** | **06 58 55.5** | **-2.0** |
| **VILL** | **Villia** | **2.71** | **123** | ePn | **Pn** | **06 58 55.5** | **+2.1** |
| **AOS** | **Alonnisos** | **2.72** | **100** | ePN | **Pn** | **06 58 55.3** | **+1.8** |
| **AOS** | **Alonnisos** | **2.72** | **100** | P | **Pn** | **06 58 54.6** | **+1.1** |
| **AOS** | **Alonnisos** | **2.72** | **100** | P | **Pn** | **06 58 54.6** | **+1.1** |
| **AOS** | **Alonnisos** | **2.72** | **100** | ePn | **Pn** | **06 58 55.3** | **+1.8** |
| **VLX** | **Vlachokerasia** | **2.77** | **146** | ePN | **Pn** | **06 58 56.7** | **+2.4** |
| **VLX** | **Vlachokerasia** | **2.77** | **146** | ePn | **Pn** | **06 58 56.7** | **+2.4** |
| **OUR** | **Ouranopolis** | **2.80** | **76** | ePN | **Pn** | **06 58 56.3** | **+1.7** |
| **OUR** | **Ouranopolis** | **2.80** | **76** | P | **Pn** | **06 58 55.6** | **+1.0** |
| **OUR** | **Ouranopolis** | **2.80** | **76** | P | **Pn** | **06 58 55.6** | **+1.0** |
| **OUR** | **Ouranopolis** | **2.80** | **76** | ePn | **Pn** | **06 58 56.3** | **+1.7** |
| **SRS** | **Serrai** | **2.81** | **58** | ePN | **Pn** | **06 58 56.2** | **+1.5** |
| **SRS** | **Serrai** | **2.81** | **58** | ePn | **Pn** | **06 58 56.2** | **+1.5** |
| **BUM** | **Brajici-Budva** | **2.86** | **336** | ⇓iPn | **Pn** | **06 58 55.6** | **+0.2** |
| BUM | | | | eSn | **Sn** | **06 59 30.9** | **+1.2** |
| **BUM** | **Brajici-Budva** | **2.86** | **336** | ⇓iPn | **Pn** | **06 58 55.6** | **+0.2** |
| BUM | | | | eSn | **Sn** | **06 59 30.9** | **+1.2** |
| **PDG** | **Podgorica** | **2.88** | **342** | ⇑iPn | **Pn** | **06 58 56.4** | **+0.7** |
| PDG | | | | eSn | **Sn** | **06 59 31.4** | **+1.2** |
| **TTG** | **Podgorica** | **2.88** | **342** | ⇑iPn | **Pn** | **06 58 56.4** | **+0.7** |
| TTG | | | | eSn | **Sn** | **06 59 31.4** | **+1.2** |
| **TIP** | **Timpagrande** | **2.89** | **261** | P | **Pn** | **06 58 56.4** | **+0.5** |
| **TIP** | **Timpagrande** | **2.89** | **261** | P | **Pn** | **06 58 56.4** | **+0.5** |
| **PVY** | **Plav** | **2.93** | **353** | ePn | **Pn** | **06 58 57.2** | **+0.8** |
| PVY | | | | eSn | **Sn** | **06 59 32.0** | **+0.5** |
| **PVY** | **Plav** | **2.93** | **353** | ePn | **Pn** | **06 58 57.2** | **+0.8** |
| PVY | | | | eSn | **Sn** | **06 59 32.0** | **+0.5** |
| **KKB** | **Krupnik** | **2.97** | **42** | P | **Pb** | **06 58 59.9** | **-2.9** |
| **KKB** | **Krupnik** | **2.97** | **42** | P | **Pb** | **06 58 59.9** | **-2.9** |
| **PYL** | **PYLOS** | **2.97** | **159** | ePN | **Pn** | **06 58 58.2** | **+1.3** |
| **PYL** | **PYLOS** | **2.97** | **159** | P | **Pn** | **06 58 58.0** | **+1.1** |
| **PYL** | **PYLOS** | **2.97** | **159** | ePn | **Pn** | **06 58 58.2** | **+1.3** |
| **BAI** | **Bari** | **3.06** | **299** | ePn | **Pn** | **06 58 59.1** | **+1.0** |
| **ATH** | **Athens Observa** | **3.08** | **123** | ePN | **Pn** | **06 59 00.7** | **+2.2** |
| **ATH** | **Athens Observa** | **3.08** | **123** | ePn | **Pn** | **06 59 00.7** | **+2.2** |
| **SG1** | **Sgolgore (BA)** | **3.09** | **293** | ePn | **Pn** | **06 58 59.3** | **+0.7** |
| **DIDY** | **Didyma** | **3.10** | **134** | ePN | **Pn** | **06 59 00.3** | **+1.5** |
| **DIDY** | **Didyma** | **3.10** | **134** | ePn | **Pn** | **06 59 00.3** | **+1.5** |
| **HCY** | **Herceg Novi** | **3.12** | **333** | ⇓iPn | **Pn** | **06 58 59.3** | **+0.3** |
| HCY | | | | eSn | **Sn** | **06 59 37.0** | **+0.9** |
| **HCY** | **Herceg Novi** | **3.12** | **333** | ⇓iPn | **Pn** | **06 58 59.3** | **+0.3** |
| HCY | | | | eSn | **Sn** | **06 59 37.0** | **+0.9** |
| **KRND** | **KRANIDI** | **3.14** | **136** | ePN | **Pn** | **06 59 01.0** | **+1.8** |
| **KRND** | **KRANIDI** | **3.14** | **136** | ePn | **Pn** | **06 59 01.0** | **+1.8** |
| **MMB** | **Musomiste** | **3.15** | **52** | P | **Pn** | **06 59 01.8** | **+2.4** |
| **MMB** | **Musomiste** | **3.15** | **52** | P | **Pn** | **06 59 01.8** | **+2.4** |
| **BEY** | **Berane** | **3.21** | **353** | ⇑iPn | **Pn** | **06 59 01.1** | **+0.8** |
| BEY | | | | eSn | **Sn** | **06 59 39.1** | **+0.7** |
| **IVA** | **Berane** | **3.21** | **353** | ⇑iPn | **Pn** | **06 59 01.1** | **+0.8** |
| IVA | | | | eSn | **Sn** | **06 59 39.1** | **+0.7** |
| **NKME** | **Niksic** | **3.27** | **341** | ⇓iPn | **Pn** | **06 59 01.4** | **+0.3** |
| NKME | | | | eSn | **Sn** | **06 59 40.5** | **+0.6** |
| **NKME** | **Niksic** | **3.27** | **341** | ⇓iPn | **Pn** | **06 59 01.4** | **+0.3** |
| NKME | | | | eSn | **Sn** | **06 59 40.5** | **+0.6** |
| **NKY** | **Niksic** | **3.31** | **341** | ⇓iPn | **Pn** | **06 59 02.0** | **+0.4** |
| NKY | | | | eSn | **Sn** | **06 59 41.7** | **+0.9** |
| **NKY** | **Niksic** | **3.31** | **341** | ⇓iPn | **Pn** | **06 59 02.0** | **+0.4** |
| NKY | | | | eSn | **Sn** | **06 59 41.7** | **+0.9** |
| **CDT** | **Castel del Mon** | **3.47** | **295** | ePn | **Pn** | **06 59 05.0** | **+1.2** |
| **BRY** | **Bratogost** | **3.51** | **337** | ⇓iPn | **Pn** | **06 59 04.6** | **+0.1** |
| BRY | | | | eSn | **Sn** | **06 59 46.7** | **+0.7** |
| **BRY** | **Bratogost** | **3.51** | **337** | ⇓iPn | **Pn** | **06 59 04.6** | **+0.1** |
| BRY | | | | eSn | **Sn** | **06 59 46.7** | **+0.7** |
| **VLI** | **Veliai** | **3.56** | **146** | ePN | **Pn** | **06 59 06.6** | **+1.6** |
| **VLI** | **Veliai** | **3.56** | **146** | P | **Pn** | **06 59 06.3** | **+1.3** |
| **VLI** | **Veliai** | **3.56** | **146** | P | **Pn** | **06 59 06.3** | **+1.3** |
| **VLI** | **Veliai** | **3.56** | **146** | ePn | **Pn** | **06 59 06.6** | **+1.6** |
| **VTS** | **Vitosha** | **3.58** | **35** | P | **Pn** | **06 59 07.9** | **+2.5** |
| **VTS** | **Vitosha** | **3.58** | **35** | P | **Pn** | **06 59 07.9** | **+2.5** |
| **SJES** | **Sjenica** | **3.59** | **355** | ⇓iPn | **Pn** | **06 59 07.4** | **+1.9** |
| **LIA** | **Limnos Island** | **3.67** | **85** | ePN | **Pn** | **06 59 08.5** | **+2.0** |
| **LIA** | **Limnos Island** | **3.67** | **85** | ePn | **Pn** | **06 59 08.5** | **+2.0** |
| **UPM** | **Unac-Piva** | **3.70** | **342** | ⇑iPn | **Pn** | **06 59 07.5** | **+0.4** |
| UPM | | | | eSn | **Sn** | **06 59 50.6** | **+0.1** |
| **UPM** | **Unac-Piva** | **3.70** | **342** | ⇑iPn | **Pn** | **06 59 07.5** | **+0.4** |
| UPM | | | | eSn | **Sn** | **06 59 50.6** | **+0.1** |
| **PLE** | **Pljevlja** | **3.72** | **348** | ⇑iPn | **Pn** | **06 59 07.5** | **+0.1** |
| PLE | | | | eSn | **Sn** | **06 59 51.6** | **+0.5** |
| **PLE** | **Pljevlja** | **3.72** | **348** | ⇑iPn | **Pn** | **06 59 07.5** | **+0.1** |
| PLE | | | | eSn | **Sn** | **06 59 51.6** | **+0.5** |
| **IVAS** | **Ivanjica** | **3.89** | **357** | ePn | **Pn** | **06 59 11.6** | **+2.0** |
| **MS1** | **Monte Sant'Ang** | **3.96** | **302** | ePn | **Pn** | **06 59 11.4** | **+0.8** |
| **PGB** | **Panagyurishte** | **4.02** | **43** | P | **Pn** | **06 59 12.8** | **+1.4** |
| **PGB** | **Panagyurishte** | **4.02** | **43** | P | **Pn** | **06 59 12.8** | **+1.4** |
| **GRUS** | **Gruza** | **4.20** | **3** | ePn | **Pn** | **06 59 14.8** | **+0.9** |
| **SIGR** | **SIGRI** | **4.23** | **95** | ePN | **Pn** | **06 59 17.0** | **+2.8** |
| **SIGR** | **SIGRI** | **4.23** | **95** | ePn | **Pn** | **06 59 17.0** | **+2.8** |
| **BBLS** | **Lazići** | **4.25** | **350** | ePn | **Pn** | **06 59 16.4** | **+1.9** |
| **KDZ** | **Kurdzhali** | **4.27** | **61** | P | Pb | 06 59 20.0 | -5.0 |
| **KDZ** | **Kurdzhali** | **4.27** | **61** | P | Pb | 06 59 20.0 | -5.0 |
| **DIVS** | **Divibare** | **4.42** | **356** | ⇓iP | **Pn** | **06 59 17.6** | **+0.7** |
| **DIVS** | **Divibare** | **4.42** | **356** | ⇓iP | **Pn** | **06 59 17.6** | **+0.7** |
| **MPEP** | **Malo Peshtene** | **4.43** | **33** | P | **Pn** | **06 59 19.1** | **+2.1** |
| **MPEP** | **Malo Peshtene** | **4.43** | **33** | P | **Pn** | **06 59 19.1** | **+2.1** |
| **ANKY** | **Antikythira Is** | **4.44** | **148** | ePN | **Pn** | **06 59 18.7** | **+1.6** |
| **ANKY** | **Antikythira Is** | **4.44** | **148** | P | **Pn** | **06 59 18.2** | **+1.1** |
| **ANKY** | **Antikythira Is** | **4.44** | **148** | P | **Pn** | **06 59 18.2** | **+1.1** |
| **ANKY** | **Antikythira Is** | **4.44** | **148** | ePn | **Pn** | **06 59 18.7** | **+1.6** |
| **TRUS** | **Trudelj** | **4.53** | **360** | ePn | **Pn** | **06 59 18.2** | **-0.2** |
| **CHOS** | **Chios island** | **4.57** | **105** | ePN | **Pn** | **06 59 21.5** | **+2.6** |
| **CHOS** | **Chios island** | **4.57** | **105** | ePn | **Pn** | **06 59 21.5** | **+2.6** |
| **APE** | **Apeiranthos** | **4.78** | **122** | ⇑iP | **Pn** | **06 59 22.8** | **+0.9** |
| **APE** | **Apeiranthos** | **4.78** | **122** | ⇑iP | **Pn** | **06 59 22.8** | **+0.9** |
| **TEKS** | **Tekeris** | **4.91** | **352** | ePn | **Pn** | **06 59 23.8** | **+0.3** |
| **IDI** | **Anoyia** | **5.64** | **140** | Pn | **Pn** | **06 59 32.2** | **-1.5** |
| | 1.0nm,0.3s,baz=331,slow=15,SNR=7.1 | | | | | | |
| IDI | | | | Sn | **Sn** | **07 00 33.9** | **-4.5** |
| | 3.1nm,0.3s,baz=291,slow=21,SNR=7.2 | | | | | | |
| **BZS** | **Buzias** | **5.99** | **8** | ⇑iP | Pn | 06 59 34.0 | -4.4 |
| **VOIR** | | **6.68** | **29** | ⇑iP | Pn | 06 59 43.7 | -4.3 |
| **BOJS** | **Bojanci** | **6.96** | **328** | i Pn | **Pn** | **06 59 51.6** | **0.0** |
| BOJS | | | | eSn | **Sn** | **07 01 09.2** | **-1.4** |
| **BOJS** | **Bojanci** | **6.96** | **328** | i Pn | **Pn** | **06 59 51.7** | **0.0** |
| BOJS | | | | eSn | **Sn** | **07 01 09.2** | **-1.4** |
| **MLR** | **Muntele Rosu** | **7.08** | **33** | ⇑iP | **Pn** | **06 59 56.1** | **+2.6** |
| **MLR** | **Muntele Rosu** | **7.08** | **33** | ⇑iP | **Pn** | **06 59 56.1** | **+2.6** |
| **VISS** | **Visnje** | **7.37** | **328** | i Pn | **Pn** | **06 59 58.5** | **+1.2** |
| VISS | | | | eSn | **Sn** | **07 01 18.0** | **-2.7** |
| **VISS** | **Visnje** | **7.37** | **328** | i Pn | **Pn** | **06 59 58.5** | **+1.2** |
| VISS | | | | eSn | **Sn** | **07 01 18.0** | **-2.7** |
| **PLOR** | **Plostina** | **7.67** | **35** | ⇑iP | Pn | 07 00 05.8 | +4.3 |
| **JAVS** | **Javornik** | **7.77** | **325** | i Pn | **Pn** | **07 00 03.2** | **+0.3** |
| JAVS | | | | eSn | **Sn** | **07 01 26.3** | **-4.4** |
| **JAVS** | **Javornik** | **7.77** | **325** | i Pn | **Pn** | **07 00 03.2** | **+0.3** |
| **PERS** | **Pernice** | **7.96** | **333** | i Pn | **Pn** | **07 00 05.3** | **-0.1** |
| PERS | | | | i Sn | **Sn** | **07 01 31.0** | **-4.2** |
| **PERS** | **Pernice** | **7.96** | **333** | i Pn | **Pn** | **07 00 05.3** | **-0.1** |
| **KEST** | **Kesra** | **9.63** | **249** | Pn | **Pn** | **07 00 31.4** | **+2.9** |
| | 0.2nm,0.3s,baz=22,slow=5.4,SNR=3.7 | | | | | | |
| **GERES** | **GERESS Array B** | **10.35** | **334** | Pn | **Pn** | **07 00 39.5** | **+1.3** |
| | 0.2nm,0.3s,baz=149,slow=12,SNR=4.7 | | | | | | |
| **ESDC** | **Sonseca Array** | **18.77** | **278** | P | **Pn** | **07 02 30.7** | **+1.3** |
| | 0.5nm,0.3s,baz=76,slow=12,SNR=4.6 | | | | | | |
| **HFS** | **Hagfors** | **20.90** | **351** | P | **P** | **07 02 51.6** | **-0.3** |
| | 1.6nm,0.5s,baz=177,slow=10,SNR=5.6 | | | | | | |
| **FINES** | **FINESS Array B** | **22.06** | **7** | P | **P** | **07 03 03.2** | **-1.1** |
| | 4.9nm,0.9s,baz=186,slow=13,SNR=4.0 | | | | | | |
| **NB2** | **NORSAR Subarra** | **22.13** | **348** | P | **P** | **07 03 05.9** | **+0.8** |
| | comp=Z,1.1nm,0.6s,baz=157,slow=10 | | | | | | |
| **NB2** | **NORSAR Subarra** | **22.13** | **348** | P | **P** | **07 03 05.9** | **+0.8** |
| | comp=Z,1.1nm,0.6s,SNR=3.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **22.13** | **348** | P | **P** | **07 03 05.2** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=159,slow=9.5,SNR=3.6 | | | | | | |
| NOA | | | | LR | LR | 07 13 52.1 | |
| | comp=Z,32nm,19.2s,baz=355,slow=43 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.17** | **217** | P | **P** | **07 04 29.7** | **+0.9** |
| | comp=Z,3.2nm,0.7s,baz=33,slow=8.7,SNR=23 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.59** | **60** | P | **P** | **07 06 20.2** | **-1.6** |
| | comp=Z,2.0nm,0.7s,baz=280,slow=7.0,SNR=18 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.75** | **49** | P | **P** | **07 06 21.6** | **-1.3** |
| | comp=Z,1.5nm,0.5s,baz=266,slow=8.2,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **59.56** | **51** | P | **P** | **07 08 11.9** | **-1.4** |
| | comp=Z,0.7nm,0.9s,baz=294,slow=7.7,SNR=3.5 | | | | | | |

*ISK **06** 07:18:42.5, 40°.24N×40°.14E, h4km, MD2.6*
*CSEM **06** 07:18:43.5±0.5, 40°.24N×40°.15E, h8km, MD2.6, Error ellipse: s-maj=13.7km s-min=11.8km az=80.0*
**ISC 06 07:18:43.0**±1.0**, 40°.25N**±0°.04×**40°.19E**±0°.05**, h11**km±9km**, n15,** σ**0.70**/19**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BAYT** | **Ayd˜–ntepe-Bay** | **0.15** | **347** | PG | **Pg** | **07 18 46.4** | **-0.2** |
| BAYT | | | | eSG | **Sg** | **07 18 49.5** | **+0.2** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **0.15** | **347** | i Pg | **Pg** | **07 18 46.4** | **-0.2** |
| BAYT | | | | eSg | **Sg** | **07 18 49.5** | **+0.2** |
| **KELT** | **Kelkit** | **0.72** | **262** | i P | **Pn** | **07 18 58.7** | **-0.5** |
| **KELT** | **Kelkit** | **0.72** | **262** | P | **Pn** | **07 18 58.7** | **-0.5** |
| KELT | | | | S | **Sb** | **07 19 08.5** | **+1.0** |
| **ERZN** | **Erzincan** | **0.75** | **209** | ePG | **Pg** | **07 18 57.0** | **-0.5** |
| **MACK** | **Trabzon** | **0.77** | **336** | i P | **Pg** | **07 18 57.3** | **-0.5** |
| **MACK** | **Trabzon** | **0.77** | **336** | P | **Pg** | **07 18 57.3** | **-0.5** |
| **EZC** | **Erzincan** | **0.81** | **233** | ePg | **Pg** | **07 18 57.0** | **-1.6** |
| **EZM** | **Erzurum** | **0.96** | **110** | ePG | **Pn** | **07 19 02.0** | **-0.6** |
| **BNGB** | **Bingˆ¶l** | **1.31** | **163** | ePN | **Pg** | **07 19 08.3** | **+0.2** |
| **BINT** | **Bingol** | **1.39** | **170** | ePn | **Pn** | **07 19 08.3** | **-0.1** |
| **PTK** | **Pertek** | **1.48** | **205** | ePN | **Pb** | **07 19 10.9** | **+0.2** |
| **PTK** | **Pertek** | **1.48** | **205** | ePn | **Pb** | **07 19 10.9** | **+0.2** |
| **SUSE** | **Susehri** | **1.52** | **269** | i P | **Pg** | **07 19 11.9** | **-0.3** |
| **SUSE** | **Susehri** | **1.52** | **269** | P | **Pg** | **07 19 11.8** | **-0.3** |
| SUSE | | | | S | **Sg** | **07 19 33.1** | **+1.2** |

*IGQ **06** 07:18:42±0.5, 2°.69S×76°.59W, h21km±5km, Mb4.2, Error ellipse: s-maj=8.5km s-min=4.5km az=112.8*
*ISCJB **06** 07:18:46.9±0.5, 2°.41S±0°.04×76°.90W±0°.06, h150km, mb3.8/6, Error ellipse: s-maj=8.6km s-min=4.8km az=150.6*
*IDC **06** 07:18:46.9±1.9, 2°.35S×76°.86W, h145km±20km, mb3.5/6, mb1 3.7/10, mb1mx3.4/35, mbtmp4.1/10, MS3.3/1, Ms1 3.3/1, ms1mx2.4/22, Error ellipse: s-maj=22.3km s-min=14.5km az=74.0*
**ISC 06 07:18:47.6**±0.7**, 2°.39S**±0°.06×**76°.96W**±0°.08**, h150**km**, n49,** σ**0.96**/48**, mb4.0**/6**, 1C-17D, Peru-Ecuador border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BPAT** | **Tungurahua Vol** | **1.71** | **301** | ⇓P | **Pn** | **07 19 19.7** | **-0.3** |
| **BPAT** | **Tungurahua Vol** | **1.71** | **301** | ⇓S | **Sn** | **07 19 45.9** | **+1.2** |
| **PAT1** | **Patacocha** | **1.71** | **301** | ⇓P | **Pn** | **07 19 19.6** | **-0.3** |
| **BULB** | **Ulba Tungurahu** | **1.73** | **303** | ⇓P | **Pn** | **07 19 19.5** | **-0.5** |
| **ARRY** | **Arrayan** | **1.73** | **300** | ⇓P | **Pn** | **07 19 19.6** | **-0.5** |
| **BRUN** | **Tungurahua Vol** | **1.73** | **303** | ⇓P | **Pn** | **07 19 19.9** | **-0.2** |
| **BRUN** | **Tungurahua Vol** | **1.73** | **303** | ⇓S | **Sn** | **07 19 45.2** | **+0.2** |
| **RETU** | **Refugio** | **1.75** | **302** | P | **Pn** | **07 19 19.8** | **-0.6** |
| **RUN5** | **Runtun** | **1.75** | **303** | S | **Sn** | **07 19 45.1** | **-0.1** |
| **RUN5** | **Runtun** | **1.75** | **303** | P | **Pn** | **07 19 19.9** | **-0.4** |
| **BMAS** | **Trigal station** | **1.75** | **300** | ⇓P | **Pn** | **07 19 19.9** | **-0.3** |
| **JUI6** | **Juive** | **1.78** | **302** | P | **Pn** | **07 19 19.7** | **-0.9** |
| **RIOE** | **Riobamba** | **1.78** | **291** | P | **Pn** | **07 19 20.6** | **0.0** |
| **RIOE** | **Riobamba** | **1.78** | **291** | S | **Sn** | **07 19 45.1** | **-0.7** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BBIL** | **Ulba Tungurahu** | **1.78** | **301** | ⇓P | **Pn** | **07 19 19.4** | **-1.2** |
| **BIL2** | **Estacion Bilba** | **1.79** | **301** | P | **Pn** | **07 19 20.6** | **0.0** |
| **IGUA** | **Igualata** | **1.90** | **298** | P | **Pn** | **07 19 21.4** | **-0.8** |
| **TAMB** | **Tambo** | **2.19** | **320** | P | **Pn** | **07 19 25.1** | **-0.4** |
| **COV1** | **Cotopaxi Volc** | **2.20** | **321** | P | **Pn** | **07 19 27.6** | **+1.9** |
| **BMOR** | **Cotopaxi Volca** | **2.22** | **318** | ⇓P | **Pn** | **07 19 26.8** | **+0.9** |
| **BTAM** | **Cotopaxi Volca** | **2.22** | **320** | ⇓P | **Pn** | **07 19 26.9** | **+0.9** |
| **MOV1** | **Cotopaxi Vol s** | **2.22** | **318** | P | **Pn** | **07 19 26.8** | **+0.8** |
| **BVC2** | **Cotopaxi Volca** | **2.25** | **320** | ⇓P | **Pn** | **07 19 26.2** | **0.0** |
| **VC1** | **Cotopaxi 1** | **2.25** | **320** | ⇓P | **Pn** | **07 19 26.3** | **+0.1** |
| **BREF** | **Cotopaxi Volca** | **2.25** | **319** | ⇓P | **Pn** | **07 19 26.5** | **+0.1** |
| **ANTI** | **Antisana** | **2.27** | **328** | ⇓P | **Pn** | **07 19 26.5** | **0.0** |
| **BNAS** | **Cotopaxi Volca** | **2.28** | **318** | ⇓P | **Pn** | **07 19 27.9** | **+1.3** |
| **NAS2** | **Nasa** | **2.29** | **319** | P | **Pn** | **07 19 27.4** | **+0.7** |
| **PITA** | **Cotopaxi Volc** | **2.33** | **321** | P | **Pn** | **07 19 27.4** | **+0.2** |
| **CAYA** | **Cayambe** | **2.65** | **337** | ⇓P | **Pn** | **07 19 31.8** | **+0.7** |
| **GGP** | **Refugio Guagua** | **2.73** | **323** | P | **Pn** | **07 19 32.1** | **-0.1** |
| **TERV** | **Terraza Guagua** | **2.74** | **323** | P | **Pn** | **07 19 32.4** | **+0.1** |
| **PINO** | **Pino** | **2.76** | **323** | P | **Pn** | **07 19 32.5** | **-0.1** |
| **OTAV** | **Otavalo** | **3.00** | **330** | ⇑P | **Pn** | **07 19 34.2** | **-1.3** |
| **COTA** | **Cotacachi** | **3.03** | **333** | P | **Pn** | **07 19 37.8** | **+1.9** |
| **URCU** | **Urcuqui** | **3.09** | **335** | P | **Pn** | **07 19 37.8** | **+1.2** |
| **ATAH** | **Atahualpa** | **4.93** | **197** | P | **Pn** | **07 20 00.1** | **-0.4** |
| | 11nm,0.3s,baz=25,slow=7.7,SNR=63 | | | | | | |
| ATAH | | | | S | **Sn** | **07 20 57.5** | **+0.2** |
| | 5.7nm,0.3s,baz=207,slow=6.1,SNR=7.5 | | | | | | |
| **ROSC** | **El Rosal** | **7.66** | **20** | P | **Pn** | **07 20 36.5** | **-0.4** |
| | 0.6nm,0.3s,baz=236,slow=17,SNR=5.3 | | | | | | |
| **NNA** | **Nana** | **9.54** | **179** | P | **Pn** | **07 21 02.0** | **+0.4** |
| | 7.9nm,0.3s,baz=333,slow=9.0,SNR=21 | | | | | | |
| NNA | | | | S | Sn | 07 22 37.9 | -10 |
| | 5.3nm,0.3s,baz=240,slow=18,SNR=4.5 | | | | | | |
| **LPAZ** | **La Paz** | **16.32** | **148** | P | **P** | **07 22 29.0** | **-0.2** |
| | 0.3nm,0.3s,baz=324,slow=5.9,SNR=12 | | | | | | |
| **SIV** | **San Ignacio** | **20.68** | **132** | P | **P** | **07 23 15.9** | **-0.1** |
| | 4.8nm,0.5s,baz=325,slow=12,SNR=28 | | | | | | |
| **LVC** | **Limon Verde** | **21.57** | **159** | P | **P** | **07 23 29.1** | **+3.3** |
| | 13nm,0.6s,baz=340,slow=9.0,SNR=3.8 | | | | | | |
| **BDFB** | **Brasilia** | **31.42** | **117** | P | **P** | **07 24 53.7** | **-1.3** |
| | 1.4nm,0.4s,baz=282,slow=12,SNR=5.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **40.60** | **323** | P | **P** | **07 26 14.0** | **+1.1** |
| | 0.2nm,0.5s,baz=148,slow=8.8,SNR=8.5 | | | | | | |
| **LPIG** | **La Paz** | **41.76** | **311** | LR | LR | 07 42 40.9 | |
| | comp=Z,37nm,18.9s,baz=263,slow=34 | | | | | | |
| **ULM** | **Lac du Bonnet** | **54.89** | **345** | P | **P** | **07 28 00.9** | **-1.6** |
| | 3.4nm,0.5s,baz=184,slow=4.8,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.51** | **76** | P | **P** | **07 30 36.9** | **-1.5** |
| | 0.1nm,0.3s,baz=273,slow=5.3,SNR=5.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **87.69** | **180** | P | **P** | **07 31 20.2** | **+1.1** |
| | 1.3nm,0.8s,baz=208,slow=2.7,SNR=4.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **142.10** | **233** | PKhKP | PKPpre | 07 37 59.9 | |
| | 0.5nm,1.0s,baz=120,slow=2.8,SNR=3.4 | | | | | | |

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**BJI 06 07:19:22.3, 33°.32N×96°.19E, h10km, ML3.1/6, Qinghai**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LSA** | **Lhasa** | **5.62** | **231** | Pn | Pn | 07 20 49.9 | +3.4 |

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*ISCJB **06** 07:19:49.0±1.0, 33°.1N±0°.1×96°.4E±0°.1, h10km, mb3.5/3, MS3.6/1, Error ellipse: s-maj=19.3km s-min=9.3km az=40.8*

*IDC **06** 07:19:49.4±1.4, 33°.11N×96°.16E, h0km, mb3.5/3, mb1 3.8/5, mb1mx3.5/35, mbtmp3.6/5, ML3.5/2, MS3.7/1, Ms1 3.7/1, ms1mx2.8/30, Error ellipse: s-maj=76.1km s-min=23.5km az=60.0*

**ISC 06 07:19:50.8±1.5, 33°.1N±0°.1×96°.4E±0°.1, h10km, n8, σ1s.58/8, mb3.6/3, Qinghai**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CD2** | **Chengdu** | **6.67** | **107** | Pn | **Pn** | **07 21 29.8** | **+0.8** |
| CD2 | | | | Pg | Pg | 07 21 54.7 | -3.9 |
| CD2 | | | | Sn | **Sn** | **07 22 42.8** | **-2.3** |
| CD2 | | | | Sg | Sg | 07 23 22.0 | -3.0 |
| CD2 | | | | smax | smax | | |
| | comp=N,20nm,1.4s | | | | | | |
| CD2 | | | | smax | smax | | |
| | comp=E,20nm,1.0s | | | | | | |
| **GTA** | **Gaotai** | **6.86** | **23** | *e*P | **Pn** | **07 21 32.1** | **+0.5** |
| **SONM** | **Songino Array** | **16.53** | **24** | Pn | **Pn** | **07 23 43.6** | **+0.8** |
| | comp=E,0.3nm,0.3s,baz=207,slow=15,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **17.35** | **326** | P | **P** | **07 23 52.4** | **-2.0** |
| | comp=E,0.1nm,0.3s,baz=138,slow=14,SNR=7.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **21.84** | **328** | P | **P** | **07 24 42.5** | **-0.9** |
| | comp=E,1.3nm,0.7s,baz=136,slow=11,SNR=11 | | | | | | |
| **BVAR** | **Borovoye Array** | **27.22** | **325** | LR | LR | 07 38 06.5 | |
| | comp=E,161nm,20.4s,baz=64,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.05** | **140** | P | **P** | **07 30 25.8** | **+0.8** |
| | comp=E,0.4nm,0.9s,baz=320,slow=9.0,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **66.88** | **143** | P | **P** | **07 30 43.8** | **+0.5** |
| | comp=E,0.7nm,0.8s,baz=325,slow=6.8,SNR=6.0 | | | | | | |

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*IDC **06** 07:26:06.2±0.7, 55°.47S×27°.83W, h0km, mb3.9/8, mb1 4.0/9, mb1mx3.9/32, mbtmp4.0/9, ML3.9/1, MS2.9/2, Ms1 2.9/2, ms1mx2.6/18, Error ellipse: s-maj=25.8km s-min=16.6km az=61.0*

*ISCJB **06** 07:26:08.3±0.7, 55°.47S±0°.10×27°.8W±0°.2, h26km, mb3.9/8, MS3.3/1, Error ellipse: s-maj=21.9km s-min=10.4km az=150.9*

*AWI **06** 07:26:33.3, 58°.19S×30°.70W*

**ISC 06 07:26:10.0±0.7, 55°.5S±0°.1×27°.8W±0°.2, h26km, n23, σ0s.71/16, mb4.0/8, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **17.47** | **158** | P | **P** | **07 30 12.5** | **+0.2** |
| **VNA3** | **Neumayer Olymp** | **17.66** | **161** | P | **Pn** | **07 30 14.0** | **+0.3** |
| **VNA2** | **Neumayer--Watz** | **17.86** | **158** | P | **Pn** | **07 30 16.3** | **0.0** |
| | baz=314,slow=14 | | | | | | |
| **SNAA** | **Sanae** | **19.42** | **156** | P | **P** | **07 30 32.7** | **-1.2** |
| **SNAA** | **Sanae** | **19.42** | **156** | P | **P** | **07 30 33.0** | **-0.9** |
| | 0.4nm,0.3s,baz=304,slow=10,SNR=110 | | | | | | |
| SNAA | | | | LR | LR | 07 37 01.5 | |
| | comp=Z,11nm,20.6s,baz=76,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.78** | **180** | P | **P** | **07 32 57.5** | **-0.5** |
| | 2.2nm,0.6s,baz=200,slow=2.7,SNR=20 | | | | | | |
| **CPUP** | **Villa Florida** | **36.16** | **312** | P | **P** | **07 33 09.9** | **0.0** |
| | 1.5nm,0.8s,baz=85,slow=8.0,SNR=3.6 | | | | | | |
| **CFAA** | **Coronel Fontan** | **37.00** | **293** | P | **P** | **07 33 16.3** | **-0.8** |
| | 0.2nm,0.5s,baz=159,slow=7.0,SNR=6.2 | | | | | | |
| **MAW** | **Mawson** | **40.83** | **144** | P | **P** | **07 33 49.5** | **+0.7** |
| | 0.5nm,0.3s,baz=253,slow=11,SNR=4.0 | | | | | | |
| **BDFB** | **Brasilia** | **42.68** | **331** | LR | LR | 07 49 55.8 | |
| | comp=Z,41nm,19.8s,baz=228,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **46.19** | **77** | P | **P** | **07 34 32.0** | **-0.5** |
| | 1.2nm,0.7s,baz=30,slow=4.1,SNR=3.6 | | | | | | |
| **VNDA** | **Vanda** | **47.13** | **183** | P | **P** | **07 34 40.0** | **+0.8** |
| | 0.9nm,0.6s,baz=189,slow=6.3,SNR=14 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **47.56** | **18** | T | T | 08 26 36.3 | |
| | baz=190,slow=75,SNR=33 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **47.56** | **18** | T | T | 08 26 38.1 | |
| | baz=190,slow=75,SNR=38 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **47.58** | **18** | T | T | 08 26 14.2 | |
| | baz=190,slow=75,SNR=35 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **48.67** | **18** | T | T | 08 27 50.1 | |
| | baz=189,slow=75,SNR=9.4 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **48.68** | **18** | T | T | 08 27 39.6 | |
| | baz=189,slow=75,SNR=25 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **48.69** | **18** | T | T | 08 27 55.3 | |
| | baz=189,slow=75,SNR=17 | | | | | | |
| **LPAZ** | **La Paz** | **49.74** | **306** | P | **P** | **07 35 01.6** | **+0.9** |
| | 1.8nm,0.6s,baz=136,slow=5.7,SNR=14 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.74** | **30** | P | **P** | **07 37 36.2** | **+0.6** |
| | 2.1nm,0.6s,baz=199,slow=6.3,SNR=22 | | | | | | |
| **FINES** | **FINESS Array B** | **124.04** | **28** | PKP | **PKPdf** | **07 45 03.9** | **-0.4** |
| | 2.6nm,0.7s,baz=236,slow=2.1,SNR=5.9 | | | | | | |
| **INK** | **Inuvik** | **145.12** | **321** | PKPbc | **PKPbc** | **07 45 42.3** | **-0.6** |
| | 2.2nm,0.8s,baz=73,slow=1.3,SNR=4.9 | | | | | | |
| **ILAR** | **Eielson Array** | **149.46** | **313** | PKPbc | **PKPbc** | **07 45 55.0** | **-0.1** |
| | 2.7nm,0.7s,baz=127,slow=2.5,SNR=29 | | | | | | |

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*ATH **06** 07:42:02.5, 36°.54N×28°.84E, h23km±1km, MD3.2/6*

*DDA **06** 07:42:04.4, 36°.52N×28°.64E, h37km, Md3.0*

*CSEM **06** 07:42:04.9±0.3, 36°.50N×28°.73E, h16km±1km, MD3.1, Error ellipse: s-maj=6.0km s-min=4.1km az=160.0*

*ISK **06** 07:42:04.5, 36°.53N×28°.70E, h20km, MD3.1*

*ISCJB **06** 07:42:05.1±0.6, 36°.49N±0°.03×28°.72E±0°.03, h24km±4km, Error ellipse: s-maj=5.6km s-min=4.4km az=169.9*

**ISC 06 07:42:05.5±1.0, 36°.54N±0°.03×28°.71E±0°.02, h18km±7km, n55, σ0s.88/90, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DALY** | **Dalyan (Mu˜la** | **0.28** | **351** | PG | **Pg** | **07 42 11.5** | **-0.1** |
| DALY | | | | *e*SG | **Sb** | **07 42 16.6** | **+0.3** |
| **DALY** | **Dalyan (Mu˜la** | **0.28** | **351** | *i* Pg | **Pg** | **07 42 11.5** | **-0.1** |
| DALY | | | | *e*Sg | **Sb** | **07 42 16.6** | **+0.3** |
| **FETY** | **Fethiye** | **0.31** | **73** | PG | **Pg** | **07 42 11.9** | **-0.4** |
| FETY | | | | *e*SG | **Sb** | **07 42 17.6** | **+0.2** |
| **FETY** | **Fethiye** | **0.31** | **73** | *i* Pg | **Pg** | **07 42 11.9** | **-0.4** |
| FETY | | | | *e*Sg | **Sb** | **07 42 17.6** | **+0.2** |
| **TURN** | **Turunc** | **0.34** | **345** | *i* P | **Pb** | **07 42 14.0** | **+1.0** |
| TURN | | | | *i* S | **Sn** | **07 42 20.6** | **-1.4** |
| **TURN** | **Turunc** | **0.34** | **345** | P | **Pb** | **07 42 14.0** | **+1.0** |
| TURN | | | | S | **Sn** | **07 42 20.6** | **-1.4** |
| **ARG** | **Arkhangelos** | **0.57** | **235** | *e*PN | **Pg** | **07 42 15.6** | **-1.3** |
| ARG | | | | *e*SN | **Sb** | **07 42 25.6** | **+0.8** |
| **ARG** | **Arkhangelos** | **0.57** | **235** | *e*Pn | **Pg** | **07 42 15.6** | **-1.3** |
| ARG | | | | *e*Sn | **Sb** | **07 42 25.6** | **+0.8** |
| **YER** | **Yerkesik** | **0.68** | **330** | *e*PG | **Pb** | **07 42 18.4** | **-0.5** |
| YER | | | | *e*SG | **Sg** | **07 42 28.6** | **+0.6** |
| **YER** | **Yerkesik** | **0.68** | **330** | *e*Pg | **Pb** | **07 42 18.4** | **-0.5** |
| YER | | | | *e*Sg | **Sg** | **07 42 28.6** | **+0.6** |
| **GOLH** | **Golhisar** | **0.97** | **44** | *i* P | **Pb** | **07 42 24.0** | **+0.1** |
| GOLH | | | | *i* S | **Sn** | **07 42 38.5** | **+0.7** |
| **GOLH** | **Golhisar** | **0.97** | **44** | P | **Pb** | **07 42 24.0** | **+0.1** |
| GOLH | | | | S | **Sn** | **07 42 38.5** | **+0.7** |
| **ELL** | **Elmali** | **0.99** | **78** | *e*PG | **Pb** | **07 42 23.6** | **-0.5** |
| **ELL** | **Elmali** | **0.99** | **78** | *e*Pg | **Pb** | **07 42 23.6** | **-0.5** |
| **BDRM** | **Kayabasi** | **1.14** | **298** | *i* P | **Pn** | **07 42 24.1** | **-2.5** |
| BDRM | | | | *i* S | **Sg** | **07 42 42.2** | **-0.3** |
| **BDRM** | **Kayabasi** | **1.14** | **298** | P | **Pn** | **07 42 24.1** | **-2.5** |
| BDRM | | | | S | **Sg** | **07 42 42.2** | **-0.3** |
| **DNZL** | **Cakiroluk** | **1.18** | **13** | *i* P | **Pn** | **07 42 26.9** | **-0.3** |
| DNZL | | | | *i* S | **Sg** | **07 42 44.3** | **+0.6** |
| **DNZL** | **Cakiroluk** | **1.18** | **13** | P | **Pn** | **07 42 26.9** | **-0.3** |
| DNZL | | | | S | **Sg** | **07 42 44.3** | **+0.6** |
| **NIS1** | **Nisyros Isl.** | **1.23** | **273** | *e*PN | **Pn** | **07 42 27.3** | **-0.6** |
| **NIS1** | **Nisyros Isl.** | **1.23** | **273** | *e*PN | **Pn** | **07 42 27.5** | **-0.4** |
| NIS1 | | | | *e*SN | **Sg** | **07 42 46.3** | **+0.8** |
| **NIS1** | **Nisyros Isl.** | **1.23** | **273** | *e*Pn | **Pn** | **07 42 27.5** | **-0.4** |
| NIS1 | | | | *e*Sn | **Sg** | **07 42 46.3** | **+0.8** |
| **DENT** | **Denizli** | **1.23** | **12** | *e*PN | **Pn** | **07 42 26.6** | **-1.3** |
| **DENT** | **Denizli** | **1.23** | **12** | *e*Pn | **Pn** | **07 42 26.6** | **-1.3** |
| **BODT** | **Bodrum** | **1.24** | **295** | *e*PN | **Pn** | **07 42 27.3** | **-0.6** |
| **BODT** | **Bodrum** | **1.24** | **295** | *e*Pn | **Pn** | **07 42 27.3** | **-0.6** |
| **AYDN** | **Tasoluk** | **1.30** | **329** | *i* P | **Pg** | **07 42 30.9** | **+0.3** |
| AYDN | | | | *i* S | **Sg** | **07 42 48.4** | **+0.9** |
| **AYDN** | **Tasoluk** | **1.30** | **329** | P | **Pg** | **07 42 30.9** | **+0.3** |
| AYDN | | | | S | **Sg** | **07 42 48.4** | **+0.9** |
| **KORT** | **Korkueli** | **1.39** | **70** | *i* P | **Pb** | **07 42 31.1** | **0.0** |
| KORT | | | | *i* S | **Sg** | **07 42 51.9** | **+1.3** |
| **KORT** | **Korkueli** | **1.39** | **70** | P | **Pb** | **07 42 31.1** | **0.0** |
| KORT | | | | S | **Sg** | **07 42 51.9** | **+1.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.54** | **335** | *e*PN | **Pn** | **07 42 32.1** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.54** | **335** | *e*Pn | **Pn** | **07 42 32.2** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **1.65** | **315** | *i* P | **Pn** | **07 42 33.9** | **+0.3** |
| GCAM | | | | *i* S | **Sn** | **07 42 53.9** | **-0.4** |
| **GCAM** | **G?zelcaml?** | **1.65** | **315** | P | **Pn** | **07 42 33.9** | **+0.3** |
| GCAM | | | | S | **Sn** | **07 42 53.9** | **-0.4** |
| **SMG** | **Samos** | **1.90** | **308** | *e*PN | **Pn** | **07 42 37.2** | **+0.2** |
| SMG | | | | *e*SN | **Sb** | **07 43 01.9** | **-1.0** |
| **SMG** | **Samos** | **1.90** | **308** | *e*Pn | **Pn** | **07 42 37.2** | **+0.2** |
| SMG | | | | *e*Sn | **Sb** | **07 43 01.9** | **-1.0** |
| **KHAL** | **Karahalli** | **1.93** | **19** | *i* P | **Pn** | **07 42 36.5** | **-1.0** |
| KHAL | | | | *i* S | **Sn** | **07 42 59.6** | **-1.8** |
| **KHAL** | **Karahalli** | **1.93** | **19** | P | **Pn** | **07 42 36.5** | **-1.0** |
| KHAL | | | | S | **Sn** | **07 42 59.6** | **-1.8** |
| **ISP** | **Isparta** | **1.93** | **48** | *e*PN | **Pn** | **07 42 37.5** | **0.0** |
| **ISP** | **Isparta** | **1.93** | **48** | *e*Pn | **Pn** | **07 42 37.5** | **0.0** |
| **KULA** | **Kula-Manisa** | **1.97** | **359** | *e*PN | **Pn** | **07 42 37.6** | **-0.4** |
| **KULA** | **Kula-Manisa** | **1.97** | **359** | *e*Pn | **Pn** | **07 42 37.7** | **-0.4** |
| **SUTC** | **Sutluce-Ispart** | **2.06** | **62** | *e*PN | **Pn** | **07 42 39.0** | **-0.3** |
| **SUTC** | **Sutluce-Ispart** | **2.06** | **62** | *e*Pn | **Pn** | **07 42 39.0** | **-0.3** |
| **AKS** | **Akhisar** | **2.44** | **343** | *e*PN | **Pn** | **07 42 44.1** | **-0.3** |
| **AKS** | **Akhisar** | **2.44** | **343** | *e*Pn | **Pn** | **07 42 44.1** | **-0.3** |
| **ZEY** | **˜zmir** | **2.44** | **315** | P | **Pn** | **07 42 44.2** | **-0.2** |
| ZEY | | | | S | **Sn** | **07 43 13.5** | **-0.3** |
| **URLA** | **Izmir** | **2.47** | **318** | *i* P | **Pn** | **07 42 46.2** | **+1.2** |
| URLA | | | | *i* S | **Sn** | **07 43 16.6** | **+1.8** |
| **URLA** | **Izmir** | **2.47** | **318** | P | **Pn** | **07 42 46.2** | **+1.2** |
| URLA | | | | S | **Sn** | **07 43 16.6** | **+1.8** |
| **ZKR** | **Zakros** | **2.48** | **236** | *e*PN | **Pn** | **07 42 44.9** | **-0.1** |
| ZKR | | | | *e*SN | **Sn** | **07 43 16.2** | **+1.4** |
| **ZKR** | **Zakros** | **2.48** | **236** | *e*Pn | **Pn** | **07 42 44.9** | **-0.1** |
| ZKR | | | | *e*Sn | **Sn** | **07 43 16.2** | **+1.4** |
| **CHOS** | **Chios island** | **2.80** | **312** | *e*PN | **Pn** | **07 42 49.6** | **+0.1** |
| **CHOS** | **Chios island** | **2.80** | **312** | *e*PN | **Pn** | **07 42 49.7** | **+0.1** |
| CHOS | | | | *e*SN | **Sn** | **07 43 23.5** | **+0.6** |
| **CHOS** | **Chios island** | **2.80** | **312** | *e*Pn | **Pn** | **07 42 49.6** | **+0.1** |
| CHOS | | | | *e*Sn | **Sn** | **07 43 23.5** | **+0.6** |
| **IDI** | **Anoyia** | **3.34** | **249** | *e*PN | **Pn** | **07 42 56.8** | **-0.2** |
| **IDI** | **Anoyia** | **3.34** | **249** | *e*Pn | **Pn** | **07 42 56.8** | **-0.2** |

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*ISCJB **06** 07:43:43.8±0.5, 24°.16S±0°.04×67°.03W±0°.07, h181km, mb3.5/5, Error ellipse: s-maj=9.1km s-min=5.8km az=165.1*

*SJA **06** 07:43:43.3±0.5, 24°.18S×66°.93W, h205km±6km, ML3.5*

*IDC **06** 07:43:43.1±1.0, 24°.24S×66°.85W, h177km±10km, mb3.4/5, mb1 3.6/9, mb1mx3.5/21, mbtmp3.9/9, Error ellipse: s-maj=15.4km s-min=11.5km az=76.0*

**ISC 06 07:43:43.6±0.7, 24°.23S±0°.06×66°.99W±0°.07, h181km, n27, σ1s.96/29, mb3.6/5, Salta Province**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.44** | **110** | *e*P | **Pn** | **07 44 17.8** | **+2.6** |
| SLA | | | | *e*S | **Sn** | **07 44 42.6** | **+2.9** |
| SLA | | | | AML | AML | 07 44 44.2 | |
| | comp=Z,252nm,0.8s | | | | | | |
| **AZAP** | **Zapla** | **1.75** | **90** | *e*P | **Pn** | **07 44 20.2** | **+1.8** |
| AZAP | | | | AML | AML | 07 44 49.1 | |
| | comp=Z,108nm,0.7s | | | | | | |
| **HJA** | **Humahuaca** | **1.77** | **55** | *e*P | **Pn** | **07 44 20.5** | **+1.8** |
| **FSA** | **Cafayete** | **2.05** | **155** | *e*P | **Pn** | **07 44 23.9** | **+2.5** |
| **ASTB** | **Santa Barbara** | **2.31** | **83** | *e*P | **Pn** | **07 44 26.0** | **+1.8** |
| **LVC** | **Limon Verde** | **2.39** | **312** | P | **Pn** | **07 44 27.4** | **+2.0** |
| | comp=Z,1μm,0.3s,baz=136,slow=7.5,SNR=698 | | | | | | |
| LVC | | | | S | **Sn** | **07 44 59.5** | **+1.7** |
| | comp=Z,2μm,0.3s,baz=22,slow=21,SNR=5.8 | | | | | | |
| **LVC** | **Limon Verde** | **2.39** | **312** | *e*P | **Pn** | **07 44 27.3** | **+2.0** |
| LVC | | | | AML | AML | 07 45 04.5 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **YJA** | **Yavi** | **2.46** | **34** | *e*P | **Pn** | **07 44 27.8** | **+1.5** |
| **AHML** | **Horco Molle** | **2.95** | **150** | *e*P | **Pn** | **07 44 33.4** | **+1.7** |
| **CYA** | **Choya** | **4.33** | **166** | *e*P | **Pn** | **07 44 50.8** | **+1.9** |
| CYA | | | | AML | AML | 07 45 44.2 | |
| | comp=N,12nm,0.7s | | | | | | |
| **VCA** | **Vinchina** | **4.62** | **193** | AML | AML | 07 45 59.7 | |
| | comp=Z,16nm,0.5s | | | | | | |
| **ACLC** | **CERRO LA CRUZ** | **5.17** | **180** | *e*P | **Pn** | **07 45 01.2** | **+1.2** |
| **AGUA** | **GUANDACOL** | **5.40** | **194** | *e*P | **Pn** | **07 45 04.7** | **+1.8** |
| **AVFE** | **Valle Fertil** | **6.42** | **184** | AML | AML | 07 46 31.3 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **CFAA** | **Coronel Fontan** | **7.43** | **188** | P | **Pn** | **07 45 29.5** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=49,slow=18,SNR=33 | | | | | | |
| CFAA | | | | S | **Sn** | **07 46 48.4** | **-4.6** |
| | comp=Z,0.3nm,0.3s,baz=161,slow=18,SNR=10 | | | | | | |
| **LPAZ** | **La Paz** | **7.98** | **352** | P | **Pn** | **07 45 37.4** | **+0.2** |
| | comp=Z,1.1nm,0.3s,baz=154,slow=8.7,SNR=49 | | | | | | |
| LPAZ | | | | S | **Sn** | **07 47 03.1** | **-4.0** |
| | comp=Z,0.1nm,0.3s,baz=334,slow=23,SNR=2.5 | | | | | | |
| **CPUP** | **Villa Florida** | **8.99** | **105** | P | **Pn** | **07 45 48.7** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=284,slow=13,SNR=6.8 | | | | | | |
| **SIV** | **San Ignacio** | **9.90** | **35** | P | **Pn** | **07 46 00.3** | **-1.7** |
| | comp=Z,0.6nm,0.3s,baz=230,slow=0.5,SNR=11 | | | | | | |
| **BDFB** | **Brasilia** | **19.76** | **68** | P | **P** | **07 47 59.5** | **-0.5** |
| | comp=Z,1.7nm,0.3s,baz=236,slow=11,SNR=40 | | | | | | |
| **PTGA** | **Pitinga** | **24.33** | **17** | P | **P** | **07 48 44.3** | **-0.5** |
| | comp=Z,0.9nm,0.5s,baz=194,slow=18,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **63.87** | **324** | P | **P** | **07 53 57.6** | **+0.6** |
| | comp=Z,0.5nm,0.7s,baz=150,slow=6.5,SNR=5.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.64** | **69** | P | **P** | **07 55 13.7** | **-1.1** |
| | comp=Z,1.4nm,0.6s,baz=255,slow=5.4,SNR=23 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.73** | **321** | P | **P** | **07 55 26.6** | **+0.5** |
| | comp=Z,0.4nm,0.6s,baz=152,slow=6.7,SNR=4.0 | | | | | | |
| **MAW** | **Mawson** | **81.21** | **163** | P | **P** | **07 55 39.5** | **+0.8** |
| | comp=Z,1.1nm,0.7s,baz=225,slow=5.7,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **128.25** | **205** | PKP | **PKPdf** | **08 02 29.1** | **0.0** |
| | comp=Z,0.4nm,0.6s,baz=143,slow=1.8,SNR=7.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.43** | **207** | PKP | **PKPdf** | **08 02 35.2** | **0.0** |
| | comp=Z,0.4nm,0.4s,baz=160,slow=1.8,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.69** | **40** | PKPbc | **PKPdf** | **08 03 02.2** | **+0.2** |
| | comp=Z,1.0nm,0.5s,baz=29,slow=2.8,SNR=13 | | | | | | |

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**KRSC 06 07:54:20.2±0.5, 55°.14N×160°.37E, h-2km±3km, ML3.6, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZV** | **Kizimen** | **0.05** | **240** | P | Pg | 07 54 22.4 | +1.0 |
| **TUMR** | **Tumrok** | **0.19** | **319** | P | Pg | 07 54 25.2 | +1.1 |
| **KMNR** | **Kamenistaya** | **0.62** | **353** | P | Pb | 07 54 33.6 | -0.6 |
| KMNR | | | | *e*S | Sb | 07 54 44.2 | +0.6 |
| **BZMR** | **Bezymyannaya** | **0.80** | **5** | P | Pn | 07 54 38.3 | -0.7 |
| BZMR | | | | S | Sn | 07 54 50.8 | -1.0 |
| **KIRR** | **Kirishev** | **0.82** | **359** | *e*P | Pb | 07 54 37.3 | -0.2 |
| KIRR | | | | *e*S | Sb | 07 54 50.4 | +1.1 |
| **BZWR** | **Bezymyannyi-We** | **0.83** | **5** | *e*P | Pb | 07 54 38.2 | +0.4 |
| BZWR | | | | *e*S | Sb | 07 54 50.2 | +0.5 |
| **KPT** | **Kopyto** | **0.83** | **354** | *e*P | Pb | 07 54 38.2 | +0.5 |
| KPT | | | | *e*S | Sn | 07 54 51.3 | -1.2 |
| **KOZ** | **Kozyrevsk** | **0.96** | **343** | *e*P | Pb | 07 54 40.1 | +0.3 |
| KOZ | | | | *e*S | Sb | 07 54 53.9 | +0.7 |
| **KLY** | **Klyuchi** | **1.19** | **8** | *e*P | Pn | 07 54 44.7 | +0.6 |
| KLY | | | | *e*S | Sn | 07 55 02.5 | +1.6 |
| **KII** | **Karymskiy** | **1.23** | **206** | P | Pb | 07 54 44.5 | +0.1 |
| **ESO** | **Esso** | **1.23** | **310** | *e*P | Pg | 07 54 42.6 | -1.3 |
| ESO | | | | *e*S | Sb | 07 55 01.1 | +0.2 |
| **SRDR** | **Sredinnyy** | **1.24** | **343** | P | Pb | 07 54 44.6 | 0.0 |
| **KBTR** | **Krutoberegovo** | **1.75** | **51** | *e*P | Pn | 07 54 52.1 | +0.2 |
| KBTR | | | | *e*S | Sb | 07 55 16.1 | +0.3 |
| **GNL** | **Ganaly** | **2.02** | **225** | *e*P | Pn | 07 54 56.5 | +0.8 |
| GNL | | | | *e*S | Sg | 07 55 25.0 | -0.5 |
| **KRX** | **Arik** | **2.05** | **210** | P | Pb | 07 54 57.7 | -0.7 |
| **SPN** | **Mys Shipunski** | **2.05** | **186** | P | Pn | 07 54 56.0 | +0.1 |
| SPN | | | | *e*S | Sn | 07 55 22.0 | -0.2 |
| **SDLR** | **Sedlovina** | **2.06** | **206** | P | Pb | 07 54 57.7 | -0.9 |
| SDLR | | | | *e*S | Sb | 07 55 25.2 | +0.4 |
| **NLC** | **Nalytchevo** | **2.06** | **197** | S | Sg | 07 55 27.7 | +1.4 |
| **SMAR** | **Somma** | **2.09** | **207** | *e*P | Pb | 07 54 58.6 | -0.7 |
| SMAR | | | | *e*S | Sb | 07 55 26.7 | +0.7 |
| **AVH** | **Avacha** | **2.11** | **208** | *e*P | Pb | 07 54 58.9 | -0.5 |
| **KOK** | **Koryaka** | **2.11** | **210** | *e*P | Pb | 07 54 58.9 | -0.5 |
| **UGLR** | **Uglovaya** | **2.13** | **206** | *e*P | Pb | 07 54 58.8 | -1.1 |
| **APC** | **Apacha** | **2.92** | **222** | P | Pn | 07 55 09.2 | +1.4 |
| **RUS** | **Russkaya** | **2.92** | **203** | *e*P | Pn | 07 55 10.4 | +2.5 |
| **PAU** | **Pauzhetka** | **4.25** | **212** | P | Pb | 07 55 32.4 | -3.4 |

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*IDC **06** 08:00:12.3±0.6, 51°.05N×179°.05W, h0km, mb4.4/29, mb1 4.5/31, mb1mx4.4/49, mbtmp4.4/31, ML3.6/3, MS3.8/18, Ms1 3.8/18, ms1mx3.6/40, Error ellipse: s-maj=18.6km s-min=12.1km az=163.0*

*NEIC **06** 08:00:15.1, 50°.90N×179°.16W, h7km, mb4.8/104, ML4.3(AEIC), After AEIC.*

*NEIC Felt on Adak.*

*ISCJB **06** 08:00:18.1±0.5, 51°.03N±0°.05×179°.14W±0°.03, h51km±3km, mb4.7/141, MS3.9/19, Error ellipse: s-maj=7.6km s-min=2.6km az=4.3*

*MOS **06** 08:00:18.6±1.0, 51°.13N×179°.18W, h52km, mb4.8/50, Error ellipse: s-maj=7.7km s-min=5.8km az=92.9*

*BJI **06** 08:00:21.4, 51°.78N×179°.91W, h46km, mb4.8/41, mB5.0/29, Ms4.7/18, Ms7 4.4/18*

**ISC 06 08:00:19.9±0.4, 51°.10N±0°.07×179°.18W±0°.03, h49km±2km, h49km:pP-P, n630, σ0s.96/650, mb4.8/144, MS3.8/19, 23C-14D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GALAA** | **Gareloi Lava P** | **0.71** | **21** | P | **Pn** | **08 00 32.5** | **-1.2** |
| **GAEA** | **Gareloi East** | **0.73** | **21** | P | **Pn** | **08 00 32.9** | **-1.2** |
| **GANE** | **Gareloi Northe** | **0.76** | **19** | P | **Pn** | **08 00 33.1** | **-1.3** |
| **AMKA** | **Amchitka** | **1.00** | **287** | *e*Pn | **Pn** | **08 00 35.0** | **-2.6** |
| **TAFL** | **Tanaga Flats** | **1.03** | **50** | P | **Pn** | **08 00 36.3** | **-1.8** |
| **CERAA** | **Semis' Rag'd T** | **1.07** | **319** | P | **Pn** | **08 00 37.8** | **-0.9** |
| **TAFP** | **Tanaga Falls P** | **1.09** | **43** | P | **Pn** | **08 00 37.5** | **-1.4** |
| **TAPA** | **Tanaga Point A** | **1.11** | **50** | P | **Pn** | **08 00 37.5** | **-1.6** |
| **CESW** | **Semis' Southwe** | **1.12** | **316** | P | **Pn** | **08 00 38.2** | **-1.0** |
| **CEAP** | **Semis' Anvil P** | **1.19** | **320** | P | **Pn** | **08 00 39.9** | **-0.3** |
| **KIKV** | **Kanaga Island** | **1.48** | **57** | P | **Pn** | **08 00 42.6** | **-1.5** |
| KIKV | | | | S | **Sn** | **08 01 03.5** | **+1.3** |
| **KICM** | **Kanaga Island** | **1.48** | **56** | P | **Pn** | **08 00 43.3** | **-0.9** |
| **KIRH** | **Kanaga Island** | **1.53** | **58** | P | **Pn** | **08 00 43.7** | **-1.1** |
| **LSPA** | **Little Sitkin** | **1.65** | **302** | P | **Pn** | **08 00 45.9** | **-0.5** |
| LSPA | | | | S | **Sn** | **08 01 09.4** | **+3.0** |
| **LSSA** | **Little Sitkin** | **1.67** | **301** | P | **Pn** | **08 00 45.9** | **-0.9** |
| **LSNW** | **Little Sitkin** | **1.68** | **302** | P | **Pn** | **08 00 46.4** | **-0.5** |
| **ADAG** | **Mount Adagdak** | **1.83** | **60** | P | **Pn** | **08 00 48.4** | **-0.5** |
| **ETKA** | **Kagalaska Isla** | **1.89** | **65** | P | **Pn** | **08 00 48.4** | **-1.4** |
| **GSCK** | **Great Sitkin C** | **2.09** | **63** | P | **Pn** | **08 00 52.0** | **-0.4** |
| **GSTD** | **Great Sitkin T** | **2.12** | **62** | P | **Pn** | **08 00 52.1** | **-0.8** |
| GSTD | | | | S | **Sn** | **08 01 19.8** | **+1.7** |
| **GSMY** | **Great Sitkin M** | **2.16** | **63** | P | **Pn** | **08 00 52.6** | **-0.9** |
| **GSTR** | **Great Sitkin T** | **2.18** | **62** | *e*Pn | **Pn** | **08 00 53.5** | **-0.3** |
| **ATKA** | **Atka Island** | **3.29** | **69** | *e*Pn | **Pn** | **08 01 07.9** | **-1.0** |
| **KOWE** | **Korovin West** | **3.31** | **66** | P | **Pn** | **08 01 09.4** | **+0.1** |
| **KOKL** | **Mount Kliuchef** | **3.33** | **67** | P | **Pn** | **08 01 09.0** | **-0.5** |
| **KOFP** | **Korovin Flat P** | **3.37** | **68** | P | **Pn** | **08 01 09.8** | **-0.3** |
| **KOSE** | **Korovin Southe** | **3.42** | **67** | P | **Pn** | **08 01 11.3** | **+0.5** |
| **SMY** | **Shemya** | **4.47** | **294** | *e*P | **Pn** | **08 01 27.3** | **+2.3** |
| **SMY** | **Shemya** | **4.47** | **294** | *e*Pn | **Pn** | **08 01 27.3** | **+2.3** |
| **NIKH** | **Nikolski High** | **6.64** | **70** | P | **Pn** | **08 01 54.3** | **-0.5** |
| **OKSO** | **Okmok South** | **7.13** | **67** | P | **Pn** | **08 02 02.2** | **+0.6** |
| **OKTU** | **Okmok Mt. Tuli** | **7.21** | **67** | P | **Pn** | **08 02 03.4** | **+0.8** |
| **MSOM** | **Makushin Julie** | **7.95** | **65** | P | **Pn** | **08 02 13.1** | **+0.4** |
| **MSOM** | **Makushin Julie** | **7.95** | **65** | P | **Pn** | **08 02 13.1** | **+0.4** |
| **SPIA** | **Saint Paul Isl** | **8.03** | **37** | *e*Pn | **Pn** | **08 02 11.8** | **-2.0** |
| **MSW** | **Makushin Switc** | **8.07** | **65** | P | **Pn** | **08 02 14.8** | **+0.4** |
| **UNV** | **Unalaska Valle** | **8.21** | **66** | P | **Pn** | **08 02 17.0** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **14.34** | **287** | Pn | **Pn** | **08 03 39.6** | **-0.3** |
| | 0.2nm,0.3s,baz=95,slow=14,SNR=3.5 | | | | | | |
| PETK | | | | LR | LR | 08 08 58.2 | |
| | comp=Z,273nm,21.7s,baz=96,slow=36 | | | | | | |
| **OHAK** | **Old Harbor** | **16.29** | **58** | *e*Pn | **Pn** | **08 04 04.5** | **-0.5** |
| | 531nm,2.6s | | | | | | |
| **SVW2** | **Sparrevohn** | **16.43** | **43** | *e*Pn | **P** | **08 04 09.5** | **+0.5** |
| | 20nm,1.0s | | | | | | |
| **KDAK** | **Kodiak Island** | **16.77** | **56** | Pn | Pn | 08 04 05.8 | -5.3 |
| | 1.5nm,0.3s,baz=280,slow=6.2,SNR=21 | | | | | | |
| **KDAK** | **Kodiak Island** | **16.77** | **56** | P | Pn | 08 04 05.8 | -5.3 |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **TTA** | **Tatalina** | **17.18** | **38** | *e*P | **P** | **08 04 19.0** | **+1.8** |
| TTA | | | | pmax | pmax | | |
| | comp=Z,26nm,1.3s | | | | | | |
| **TTA** | **Tatalina** | **17.18** | **38** | *e*Pn | **P** | **08 04 19.0** | **+1.8** |
| | comp=Z,26nm,1.3s | | | | | | |
| **RSO** | **Redoubt South** | **17.45** | **47** | *e*Pn | **P** | **08 04 20.2** | **-0.2** |
| **SPU** | **Mount Spurr** | **18.03** | **46** | *e*Pn | **Pn** | **08 04 28.4** | **+1.8** |
| **BILL** | **Bilibino** | **18.42** | **343** | ⇓*e*P | **Pn** | **08 04 32.2** | **+0.9** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,26nm,1.2s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,275nm,17.0s | | | | | | |
| **PPLA** | **Purkeypile** | **18.68** | **40** | *e*P | **Pn** | **08 04 36.6** | **+2.0** |
| | comp=Z,96nm,1.5s | | | | | | |
| **SUA** | **Susitna One** | **18.72** | **45** | *e*P | **Pn** | **08 04 38.7** | **+3.6** |
| | comp=Z,113nm,2.0s | | | | | | |
| **SEW** | **Seward** | **18.90** | **50** | *e*P | **Pn** | **08 04 38.1** | **+1.0** |
| | comp=Z,300nm,2.3s | | | | | | |
| **CAST** | **Castle Rocks** | **18.96** | **39** | *e*P | **Pn** | **08 04 37.4** | **-0.4** |
| | comp=Z,20nm,0.9s | | | | | | |
| **SEY** | **Seymchan** | **19.29** | **319** | P | **Pn** | **08 04 41.1** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=109,slow=9.0,SNR=6.5 | | | | | | |
| **KTH** | **Kantishna Hill** | **19.49** | **39** | *e*P | **P** | **08 04 42.6** | **0.0** |
| | comp=Z,47nm,0.9s | | | | | | |
| **TRF** | **Thorofare Moun** | **19.70** | **40** | *e*P | **P** | **08 04 45.1** | **+0.1** |
| | comp=Z,37nm,1.1s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **19.71** | **38** | *e*P | **P** | **08 04 45.4** | **+0.4** |
| | comp=Z,20nm,0.8s | | | | | | |
| **SML** | **Sawmill** | **19.92** | **46** | *e*P | **Pn** | **08 04 50.0** | **+0.8** |
| SML | | | | pmax | pmax | | |
| | comp=Z,44nm,1.3s | | | | | | |
| **SML** | **Sawmill** | **19.92** | **46** | *e*P | **Pn** | **08 04 50.0** | **+0.8** |
| | comp=Z,44nm,1.3s | | | | | | |
| **MLY** | **Manley** | **20.26** | **36** | *e*P | **P** | **08 04 51.4** | **+0.5** |
| | comp=Z,18nm,0.8s | | | | | | |
| **RND** | **Reindeer** | **20.27** | **41** | *e*P | **P** | **08 04 50.0** | **-1.0** |

RND pmax pmax
comp=Z,20nm,1.0s
**RND Reindeer 20.27 41** *e*P **P 08 04 50.0 -1.0**
comp=Z,20nm,1.0s
**BWN Browne 20.34 39** *e*P **P 08 04 52.1 +0.4**
comp=Z,49nm,1.0s
**MCK McKinley 20.36 40** *e*P **P 08 04 52.7 +0.7**
MCK pmax pmax
comp=Z,76nm,1.9s
**MCK McKinley 20.36 40** *e*P **P 08 04 52.7 +0.7**
comp=Z,76nm,1.9s
**SCM Sheep Creek Mo 20.38 46** *e*P **P 08 04 52.7 +0.4**
SCM pmax pmax
comp=Z,53nm,1.2s
**SCM Sheep Creek Mo 20.38 46** *e*P **P 08 04 52.7 +0.4**
comp=Z,53nm,1.2s
**DIV Divide 20.92 48** *e*P **P 08 04 59.5 +1.5**
comp=Z,149nm,2.0s
**KLU Klutina 20.93 47** *e*P Pn 08 05 01.9 +0.5
comp=Z,16nm,0.9s
KLU *ep*P pP 08 05 10.3 +0.6
**WRH Wood River Hil 21.01 39** *e*P **P 08 04 59.0 0.0**
comp=Z,13nm,1.0s
**MDM Murphy Dome 21.17 37** *e*P **P 08 05 00.5 -0.2**
comp=Z,19nm,0.8s
**CCB Clear Creek Bu 21.20 38** *e*P **P 08 05 02.1 +1.2**
comp=Z,13nm,1.0s
**COLA College 21.27 38**⇑ *e*P **P 08 05 01.9 +0.2**
COLA pmax pmax
comp=Z,10.0nm,0.8s
**COLA College 21.27 38** *e*P **P 08 05 02.0 +0.3**
comp=Z,16nm,0.9s
**HDA Harding Lake 21.43 39** *e*P **P 08 05 02.9 -0.6**
comp=Z,10nm,0.6s
**BMRM Bremner River 21.43 49** *e*P **P 08 05 05.1 +1.5**
comp=Z,120nm,1.8s
**PAX Paxson 21.55 44** *e*P **P 08 05 05.2 +0.3**
PAX pmax pmax
comp=Z,15nm,0.8s
**PAX Paxson 21.55 44** *e*P **P 08 05 05.2 +0.3**
comp=Z,16nm,0.8s
**ILAR Eielson Array 21.61 38** P **P 08 05 02.6 -2.7**
comp=Z,2.7nm,0.7s,baz=242,slow=9.1,SNR=28
**ILAR Eielson Array 21.61 38** P **P 08 05 02.6 -2.7**
ILAR pmax pmax
comp=Z,3.0nm,0.7s
**COLD Coldfoot 21.61 31** *e*P **P 08 05 06.1 +0.7**
comp=Z,18nm,1.0s
**MENT Mentasta 22.31 44** *e*P **P 08 05 12.4 -0.5**
**DOT Dot Lake 22.36 42** *e*P **P 08 05 12.6 -0.9**
comp=Z,71nm,0.8s
**KUR Kuril'sk 22.62 268** P **P 08 05 17.0 +0.6**
KUR pmax pmax
comp=Z,42nm,0.2s
**FYU Fort Yukon 22.98 35** *e*P **P 08 05 19.5 -0.4**
comp=Z,61nm,1.4s
**EGAK Eagle 23.91 41** *e*P **P 08 05 28.2 -0.6**
**DAWY Dawson 24.47 43** *e*P **P 08 05 32.8 -1.1**
comp=Z,10nm,0.8s
**YSS Yuzh-Sakhalins 25.11 276**⇓ *e*P **P 08 05 39.5 -0.3**
YSS pmax pmax
comp=Z,40nm,1.1s
YSS MLR MLR
comp=Z,200nm,19.0s
**YSS Yuzh-Sakhalins 25.11 276** *e*P **P 08 05 41.1 +1.3**
comp=Z,44nm,1.1s
**ASAJ Asahikawa 26.47 270** P **P 08 05 51.0 -1.2**
comp=Z,11nm,1.0s,baz=83,slow=7.5,SNR=5.4
**ASAJ Asahikawa 26.47 270** P **P 08 05 51.0 -1.2**
ASAJ pmax pmax
comp=Z,11nm,1.0s
**INK Inuvik 27.82 35** P **P 08 06 02.8 -1.2**
comp=Z,2.6nm,0.8s,baz=233,slow=9.3,SNR=16
**INK Inuvik 27.82 35** P **P 08 06 02.8 -1.2**
INK pmax pmax
comp=Z,3.0nm,0.8s
**HABR Khabarovsk 29.30 283** *e*P **P 08 06 16.0 -1.4**
HABR *e**PP **pP 08 06 28.9 -1.3**
HABR *e**SP **sP 08 06 35.2 -0.8**
HABR *e* 08 07 11.4
HABR *e* 08 09 21.0
HABR *e*S **S 08 11 06.8 -0.1**
HABR *e**SS **sS 08 11 29.1 +0.6**
HABR *e*SS **SnSn 08 12 37.2 +1.1**
HABR *e* 08 13 03.8
HABR *e* 08 16 52.7
HABR pmax pmax
comp=N,10.0nm,0.8s
HABR pmax pmax
comp=Z,13nm,1.2s
HABR pmax pmax
comp=E,21nm,0.9s
HABR MLR MLR
comp=Z,74nm,19.0s
**YAK Yakutsk 29.42 312** *e*P **P 08 06 18.8 +0.5**
YAK pmax pmax
comp=Z,19nm,1.0s
**KLR Kul'dur 31.03 286** *e*P P 08 06 28.2 -4.5
KLR pmax pmax
comp=Z,48nm,1.4s
**USRK Ussuriysk Ar. 33.10 277** P **P 08 06 50.3 -0.5**
comp=Z,2.1nm,0.5s,baz=57,slow=10,SNR=6.4
USRK LR LR 08 22 05.6
comp=Z,100nm,18.8s,baz=42,slow=40
**H11N2 WAKE ISLAND Hy 33.18 204** T T 08 42 03.6
baz=17,slow=76,SNR=36
**H11N3 WAKE ISLAND Hy 33.19 204** T T 08 42 04.0
baz=17,slow=76,SNR=57
**H11N1 WAKE ISLAND Hy 33.20 204** T T 08 42 05.0
baz=17,slow=76,SNR=48
**MJAR Matsushiro Arr 33.51 261** LR LR 08 19 56.9
comp=Z,111nm,20.4s,baz=70,slow=35
**MAJO Matsushiro 33.51 261** *de*P **P 08 06 54.3 -0.2**
MAJO pmax pmax
comp=Z,78nm,1.4s
**H11S1 WAKE ISLAND Hy 34.40 204** T T 08 43 35.8
baz=18,slow=76,SNR=58
**H11S2 WAKE ISLAND Hy 34.42 204** T T 08 43 35.6
baz=18,slow=76,SNR=35
**H11S3 WAKE ISLAND Hy 34.42 204** T T 08 43 43.7
baz=18,slow=76,SNR=30
**MSHR Mys Shultsa 34.45 275**⇓ *e*P **P 08 07 02.8 +0.3**
**NLWA Neilton Lookou 35.58 74** *e*P **P 08 07 13.8 +1.5**
comp=Z,15nm,1.0s
**YKA Yellowknife Ar 35.59 46** P **P 08 07 11.0 -1.2**
comp=Z,6.0nm,0.8s,baz=284,slow=8.7,SNR=9.0
**A04D Lummi Island 35.68 71** P **P 08 07 14.1 +0.9**
baz=36
**B05A Bryant 36.25 72** P **P 08 07 19.0 +1.0**
baz=36
**D05A Enumclaw 36.80 73** *e*P **P 08 07 24.4 +1.6**
comp=Z,40nm,1.2s
**G03D McMinnville, O 36.98 77** P **P 08 07 26.3 +2.0**
baz=37
**LON Longmire 37.12 74** *e*P **P 08 07 27.0 +1.5**
LON pmax pmax
comp=Z,5.0nm,0.8s
**LON Longmire 37.12 74** *e*P **P 08 07 27.0 +1.5**
comp=Z,4.9nm,0.8s
**CN2 Changchun 37.37 281** *e*P **P 08 07 26.6 -0.9**
CN2 PMZ
comp=Z,10.0nm,0.7s
CN2 PMZ
comp=Z,200nm,5.0s
CN2 LZ
comp=Z,200nm,18.0s
**LTY Liberty 37.57 72** *e*P **P 08 07 29.6 +0.3**
comp=Z,6.5nm,1.0s
**BOD Bodaibo 37.95 307**⇓ *i*P **P 08 07 30.8 -1.5**
BOD pmax pmax
comp=Z,19nm,1.1s
**G05D Wamic, OR 38.16 76** P **P 08 07 35.5 +1.2**
baz=38
**I04A Tendick Farm, 38.23 78** P **P 08 07 35.6 +0.7**
baz=38
**I05D Terrebonne, OR 38.60 77** P **P 08 07 39.2 +1.1**
baz=38
**HAWA Hanford 38.67 73** *e*P **P 08 07 39.2 +0.7**
comp=Z,18nm,1.1s
**D08A Wollman Farm, 38.71 72** *e*P **P 08 07 39.0 +0.2**
comp=Z,8.2nm,0.9s
**C09A Chrisman Ranch 38.74 70** *e*P **P 08 07 39.5 +0.4**
comp=Z,14nm,1.2s
**EDM Edmonton 39.15 60** *e*P **P 08 07 42.0 -0.5**
**EDM Edmonton 39.15 60** *e*P **P 08 07 42.0 -0.5**
comp=Z,352nm,3.0s
**NEW Newport 39.20 69** *e*P **P 08 07 43.1 +0.1**
NEW pmax pmax
comp=Z,20nm,1.2s
**NEW Newport 39.20 69** P **P 08 07 42.8 -0.2**
baz=39,SNR=8.4
**NEW Newport 39.20 69** *e*P **P 08 07 43.1 +0.1**
comp=Z,20nm,1.2s
**J05D Fort Rock, OR 39.23 78** P **P 08 07 44.0 +0.6**
baz=39
**KSRS Korea Array 39.41 271** P **P 08 07 45.5 +0.8**
comp=Z,6.3nm,1.0s,baz=58,slow=8.2,SNR=17
KSRS LR LR 08 22 48.0
comp=Z,65nm,19.8s,baz=34,slow=34
**KSAR Wonju Array Be 39.44 271** P **P 08 07 45.5 +0.5**
**KSAR Wonju Array Be 39.44 271** P **P 08 07 45.5 +0.5**
**G08A Pilot Rock 39.57 74** *e*P **P 08 07 46.7 +0.6**
comp=Z,7.8nm,1.2s
**I07A Izee 39.86 76** *e*P **P 08 07 49.3 +0.6**
comp=Z,42nm,2.3s
**F10A Beach Ranch, E 40.26 72** *e*P **P 08 07 52.4 +0.5**
comp=Z,106nm,2.9s
**TJN Taejon 40.42 270** *di*P **P 08 07 53.1 0.0**
**O03D Paynes Creek 40.53 82** P **P 08 07 54.9 +0.8**
baz=40
**WALA Waterton Lakes 40.70 66** *e*P **P 08 07 55.6 +0.2**
comp=Z,36nm,1.3s
**BSMT Bassoo Peak 40.77 68** *e*P **P 08 07 56.5 +0.3**
**J08A Circle Bar Ran 40.88 76** *e*P **P 08 07 58.0 +1.0**
comp=Z,72nm,2.7s
**BLMT Blacktail Moun 40.94 68** *e*P **P 08 07 57.9 +0.3**
**JTMT Jette 41.12 68** *e*P **P 08 07 59.0 0.0**
comp=Z,4.3nm,1.1s
**YBMT Yellow Bay 41.22 68** *e*P **P 08 07 60.0 +0.2**
**WVOR Wild Horse Val 41.29 78** *e*P **P 08 08 01.5 +1.1**
WVOR pmax pmax
comp=Z,6.0nm,1.0s
**WVOR Wild Horse Val 41.29 78** *e*P **P 08 08 01.5 +1.1**
comp=Z,6.4nm,1.0s
**MSO Missoula 41.78 69** P **P 08 08 04.1 -0.3**
baz=42,SNR=6.6
**MSO Missoula 41.78 69** *e*P **P 08 08 04.3 0.0**
comp=Z,14nm,1.2s
**SLMT Seeley Lake 41.84 69** *e*P **P 08 08 04.7 -0.2**
**MFID Camas Ranch 42.47 75** *e*P **P 08 08 10.6 +0.6**
comp=Z,9.9nm,1.4s
**HRY Holter Researc 43.09 68** *e*P **P 08 08 14.9 -0.1**
**HLID Hailey 43.24 74** P **P 08 08 16.6 +0.3**
baz=43,SNR=9.8
**HLID Hailey 43.24 74** *e*P **P 08 08 16.7 +0.3**
comp=Z,8.2nm,0.9s
**MCMT McKenzie Canyo 43.49 71** *e*P **P 08 08 17.9 -0.5**
**EGMT Eagleton 43.61 66** P **P 08 08 18.2 -0.9**
baz=44,SNR=6.8
**EGMT Eagleton 43.61 66** *e*P **P 08 08 18.8 -0.3**
comp=Z,24nm,1.0s
**BOZ Bozeman (W) 43.77 70** *e*P **P 08 08 19.9 -0.6**
BOZ pmax pmax
comp=Z,12nm,0.8s
**BOZ Bozeman (W) 43.77 70** P **P 08 08 20.2 -0.3**
baz=44,SNR=14
**BOZ Bozeman (W) 43.77 70** *e*P **P 08 08 19.9 -0.6**
comp=Z,12nm,0.8s
**NVAR Mina Array Bea 43.82 82** P **P 08 08 20.8 -0.3**
comp=Z,1.7nm,0.8s,baz=284,slow=8.3,SNR=10
NVAR PcP **PcP 08 10 07.1 +0.2**
comp=Z,1.3nm,1.0s,baz=304,slow=3.4,SNR=4.0
NVAR LR LR 08 25 19.5
comp=Z,103nm,18.1s,baz=278,slow=34
**QLMT Earthquake Lak 44.33 70** *e*P **P 08 08 25.6 +0.5**
**YNR Norris Junctio 44.84 70** *e*P **P 08 08 27.8 -1.4**
comp=Z,18nm,0.9s
**YFT Old Faithful 44.90 71** *e*P **P 08 08 30.4 +0.7**
comp=Z,15nm,0.9s
**VES Vestal, Richgr 44.93 86** P **P 08 08 29.1 -0.6**
baz=45
**H17A Grant Village 45.08 70** P **P 08 08 32.4 +1.2**
baz=45
**H17A Grant Village 45.08 70** *e*P **P 08 08 31.8 +0.7**
comp=Z,12nm,0.9s
**LKWY Lake 45.09 70** *e*P **P 08 08 32.6 +1.4**
LKWY pmax pmax
comp=Z,8.0nm,0.8s
**LKWY Lake 45.09 70** *e*P **P 08 08 32.6 +1.4**
comp=Z,7.5nm,0.8s
**IMW Indian Meadow 45.15 71** *e*P **P 08 08 32.6 +0.9**
comp=Z,7.4nm,0.9s
IMW *ep*P **pP 08 08 44.6 -0.4**
**FLWY Flagg Ranch 45.18 71** *e*P **P 08 08 33.0 +1.1**
comp=Z,9.2nm,0.8s
**CWC Cottonwood Cre 45.19 84** P **P 08 08 32.1 +0.2**
baz=45
**BJI Beijing 45.20 282** P **P 08 08 31.3 -0.5**
BJI PMZ
comp=Z,8.0nm,1.0s
BJI PMZ
comp=Z,79nm,5.5s
BJI LN
comp=Z,130nm,19.0s
BJI LE
comp=Z,180nm,20.4s
BJI LZ
comp=Z,100nm,24.5s
**FXWY Fox Creek 45.24 72** *e*P **P 08 08 33.6 +1.2**
comp=Z,54nm,2.9s
**HVU Hansel Valley 45.25 75** *e*P **P 08 08 32.7 +0.3**
HVU pmax pmax
comp=Z,6.0nm,0.9s
**HVU Hansel Valley 45.25 75** *e*P **P 08 08 32.7 +0.3**
comp=Z,6.2nm,0.9s
**MOOW Moose Ponds 45.34 71** *e*P **P 08 08 33.5 +0.3**
comp=Z,5.3nm,1.2s
**TPAW Teton Pass 45.37 72** *e*P **P 08 08 32.7 -0.7**
TPAW *ep*P **pP 08 08 48.2 +1.5**
**ISA Isabella 45.43 85** P **P 08 08 33.4 -0.4**
baz=45
**RLMT Red Lodge 45.45 69** P **P 08 08 34.1 +0.1**
baz=45,SNR=7.8
**RLMT Red Lodge 45.45 69** *e*P **P 08 08 34.3 +0.3**
comp=Z,16nm,1.0s
**REDW Red Top Meadow 45.50 72** *e*P **P 08 08 35.4 +1.0**
comp=Z,7.4nm,1.2s
**SNOW Snow King Moun 45.50 72** *e*P **P 08 08 35.6 +1.1**
SNOW *ep*P **pP 08 08 47.9 +0.1**
**LOHW Long Hollow 45.51 71** *e*P **P 08 08 35.2 +0.7**
comp=Z,53nm,2.5s
**R11A Troy Canyon, C 45.56 80** P **P 08 08 35.0 0.0**
baz=45
**BGU Big Grassy Mou 45.59 76** *e*P **P 08 08 36.1 +0.9**
comp=Z,54nm,2.5s
**EPU East Promontor 45.70 75** *e*P P 08 08 31.6 -4.3
EPU *ep*P pP 08 08 39.8 -9.4
**MPMC Manual Prospec 45.80 84** P **P 08 08 36.9 +0.1**
baz=46
**HDU Hyde Park 45.85 74** *e*P **P 08 08 35.4 -1.8**
**FURC Furnace Creek, 45.93 83** P **P 08 08 37.9 +0.3**
baz=46
**TPNV Topopah Spring 46.02 82** *e*P **P 08 08 38.5 0.0**
TPNV pmax pmax
comp=Z,7.0nm,0.9s
**TPNV Topopah Spring 46.02 82** P **P 08 08 38.2 -0.3**
baz=46,SNR=5.7
**TPNV Topopah Spring 46.02 82** *e*P **P 08 08 38.5 0.0**
comp=Z,7.1nm,0.9s
**LRMC Laurel Mountai 46.04 85** P **P 08 08 38.7 0.0**
baz=46
**HWUT Hardware Ranch 46.09 74** *e*P **P 08 08 39.7 +0.6**
comp=Z,3.4nm,0.8s
**DUG Dugway 46.16 77** *e*P **P 08 08 39.9 +0.3**
DUG pmax pmax
comp=Z,19nm,1.3s
**DUG Dugway 46.16 77** P **P 08 08 39.4 -0.2**
baz=46,SNR=13
**DUG Dugway 46.16 77** *e*P **P 08 08 39.9 +0.3**
comp=Z,19nm,1.3s
**ULN Ulaanbaatar 46.17 296** *ce*P **P 08 08 39.7 +0.1**
ULN pmax pmax
comp=Z,8.0nm,1.0s
**ULN Ulaanbaatar 46.17 296** *e*P **P 08 08 40.2 +0.6**
comp=Z,5.8nm,0.7s
**EDW2 Edwards Air Fo 46.23 86** P **P 08 08 40.0 -0.1**
baz=46
**LAO LASA Array 46.35 65** P **P 08 08 40.7 -0.2**
baz=46,SNR=9.6
**LAO LASA Array 46.35 65** *e*P **P 08 08 41.2 +0.3**
comp=Z,23nm,0.8s
**TCUT Toone Canyon 46.47 75** *e*P **P 08 08 42.9 +0.7**
comp=Z,13nm,1.1s
**SONA1 Songino Array 46.55 297** *e*P **P 08 08 42.8 +0.3**
**SONM Songino Array 46.56 297** P **P 08 08 43.2 +0.6**
comp=Z,5.2nm,1.0s,baz=55,slow=9.1,SNR=21
SONM PcP **PcP 08 10 16.4 +0.3**
comp=Z,1.0nm,0.5s,baz=76,slow=1.4,SNR=3.5
SONM LR LR 08 29 59.9
comp=Z,265nm,18.3s,baz=62,slow=38
**SONM Songino Array 46.56 297** P **P 08 08 43.2 +0.6**
SONM 08 10 16.4
SONM pmax pmax
comp=Z,5.0nm,1.0s
SONM pmax pmax
comp=Z,1.0nm,0.5s
SONM MLR MLR
comp=Z,265nm,18.3s
**BW06 Boulder Array 46.62 72** *e*P **P 08 08 43.2 -0.1**
comp=Z,16nm,0.9s
**GSC Goldstone 46.71 85** P **P 08 08 43.6 -0.3**
baz=47
**NLU North Lily Min 46.76 76** *e*P **P 08 08 44.9 +0.6**
comp=Z,6.4nm,1.1s
**BFSC Mount Baldy Ra 46.86 86** P **P 08 08 44.8 -0.3**
baz=47
**ZAK Zakamensk 46.89 301** *e*P **P 08 08 44.9 -0.2**
ZAK pmax pmax
comp=Z,16nm,1.2s
**O16A Springville 46.96 76** *e*P P 08 08 55.9 +10
comp=Z,4.3nm,0.8s
**SCI San Clemente I 47.12 88** P **P 08 08 47.5 +0.5**
baz=47
**TUQ Turquoise Moun 47.18 84** P **P 08 08 47.6 0.0**
baz=47
**BBRC Big Bear Solar 47.31 86** P **P 08 08 49.4 +0.7**
baz=47
**HEC Hector,Ludlow 47.31 85** P **P 08 08 48.9 +0.3**
baz=47
**HHC Hu-ho-hao-te 47.54 286** *e*P **P 08 08 52.1 +1.8**
HHC pP **pP 08 09 04.0 +0.4**
HHC sP **sP 08 09 12.2 +2.9**
HHC PP **PP 08 10 40.2 -1.6**
HHC S **S 08 15 36.8 -4.8**
HHC ScS **ScS 08 18 41.9 +2.5**
HHC PMZ
comp=Z,30nm,1.0s
HHC PMZ
comp=Z,100nm,6.1s
HHC LN
comp=Z,170nm,14.5s
HHC LE
comp=Z,170nm,14.7s
HHC LZ
comp=Z,130nm,14.1s
**MURC Murrieta 47.56 87** P **P 08 08 50.7 +0.2**
baz=47
**MSU Marysvale 47.58 78** *e*P **P 08 08 51.3 +0.5**
MSU pmax pmax
comp=Z,3.0nm,0.9s
**MSU Marysvale 47.58 78** *e*P **P 08 08 51.3 +0.5**
comp=Z,3.4nm,0.9s
**TMUT Trail Mountain 47.69 77** *e*P **P 08 08 52.5 +0.8**
comp=Z,36nm,1.0s
**A27A Ledoux Ranch, 47.89 60** P **P 08 08 52.7 -0.1**
baz=48
**BELC Belle Mtn. Jos 48.06 85** P **P 08 08 54.2 -0.3**
baz=48
**E25A Miller Ranch, 48.06 64** P **P 08 08 54.6 +0.3**
baz=48
**P18A Preston Nutter 48.08 76** *e*P **P 08 08 55.6 +0.8**
comp=Z,10nm,1.2s
**SRU San Rafael 48.22 76** *e*P **P 08 08 57.2 +1.5**
SRU pmax pmax
comp=Z,9.0nm,0.9s
**SRU San Rafael 48.22 76** *e*P **P 08 08 57.1 +1.5**
comp=Z,8.8nm,0.9s
**D26A Manning 48.31 63** P **P 08 08 56.3 +0.2**
baz=48
**F25A Bowman 48.36 65** P **P 08 08 56.8 +0.2**
baz=48
**C27A Sayler Ranch, 48.44 62** P **P 08 08 57.6 +0.6**
baz=48
**IRM Iron Mountain 48.48 85** P **P 08 08 57.5 -0.1**
baz=48
**K22A Casper 48.49 70** P **P 08 08 57.3 -0.5**
baz=48
**K22A Casper 48.49 70** *e*P **P 08 08 56.5 -1.2**
comp=Z,7.7nm,0.9s
**MONP Monument Peak 48.52 87** P **P 08 08 57.9 -0.2**
baz=48
**NJ2 Nanjing 48.58 272** *e*P **P 08 08 59.2 +0.9**
NJ2 PMZ
comp=Z,30nm,1.0s
**E26A Carlson Angus 48.61 64** P **P 08 08 58.5 +0.1**
baz=48
**B28A Dugan Ranch, T 48.65 60** P **P 08 08 59.2 +0.5**
baz=48
**D27A Center 48.77 63** P **P 08 08 59.4 -0.3**
baz=49
**G25A Newell 48.81 66** P **P 08 08 59.9 -0.1**
baz=49
**F26A Lodgepole 48.85 64** P **P 08 09 00.5 +0.2**
baz=49
**O20A White River Ci 48.98 74** P **P 08 09 01.7 +0.1**
baz=49
**O20A White River Ci 48.98 74** *e*P **P 08 09 01.3 -0.3**
comp=Z,45nm,1.4s
**PDMCI Parker Dam,Lak 49.03 84** P **P 08 09 01.8 +0.1**
baz=49
**H25A Fruitdale 49.04 66** P **P 08 09 01.8 0.0**
baz=49
**RSSD Black Hills 49.08 67** *e*P **P 08 09 02.1 -0.2**
RSSD pmax pmax
comp=Z,13nm,1.4s
**RSSD Black Hills 49.08 67** *e*P **P 08 09 02.1 -0.2**
comp=Z,13nm,1.4s
**E27A Carson 49.15 63** P **P 08 09 02.6 +0.1**
baz=49
**F27A Lemmon 49.21 64** P **P 08 09 03.0 0.0**
baz=49
**G26A Maurine 49.22 65** P **P 08 09 03.0 -0.1**
baz=49
**PV09 Paradox Valley 49.45 76** *e*P **P 08 09 04.9 -0.4**
**H26A Fairpoint 49.52 66** P **P 08 09 05.0 -0.4**
baz=49
**E28A Huff 49.55 63** P **P 08 09 05.7 +0.1**
baz=49
**G27A Dupree 49.55 65** P **P 08 09 05.3 -0.3**
baz=49
**PV10 Paradox Valley 49.59 76** *e*P **P 08 09 06.7 +0.4**
**J25A Sunshine Ranch 49.65 68** P **P 08 09 06.1 -0.4**
baz=50
**PV04 Paradox Valley 49.66 76** *e*P **P 08 09 06.3 -0.4**
**PV05 Paradox Valley 49.74 76** *e*P **P 08 09 08.4 +1.1**
**B30A Myrvik Farm, E 49.76 59** P **P 08 09 07.4 +0.3**
baz=50
**N23A Red Feather La 49.90 72** P **P 08 09 08.3 -0.3**
baz=50
**F28A McLaughlin 49.92 63** P **P 08 09 07.7 -0.7**
baz=50
**WUAZ Wupatki 49.97 81** P **P 08 09 09.0 0.0**
baz=50
**WUAZ Wupatki 49.97 81** *e*P **P 08 09 09.2 +0.1**
WUAZ *ep*P pP 08 09 13.8 -8.7
**PV01 Paradox Valley 50.03 76** *e*P **P 08 09 09.1 -0.5**
**ULM Lac du Bonnet 50.03 56** LR LR 08 32 09.8
comp=Z,104nm,18.1s,baz=294,slow=38
**J26A Sides Ranch, S 50.12 67** P **P 08 09 09.9 -0.1**
baz=50
**E29A Napoleon 50.14 62** P **P 08 09 10.4 +0.4**
baz=50
**I27A Quinn 50.26 66** P **P 08 09 11.2 +0.2**
baz=50
**G28A Parade 50.31 64** P **P 08 09 11.5 +0.1**
baz=50
**D30A Buchanan 50.31 61** P **P 08 09 10.9 -0.5**
baz=50
**F29A Eureka 50.47 63** P **P 08 09 12.3 -0.2**
baz=50
**H28A Mission Ridge 50.49 65** P **P 08 09 12.8 +0.1**
baz=50
**SPITS Spitsbergen Ar 50.63 356** P **P 08 09 12.9 -0.4**
comp=Z,14nm,0.7s,baz=34,slow=8.0,SNR=15
SPITS pmax pmax
comp=Z,14nm,0.7s
**MVCO Mesa Verde 50.66 77** P **P 08 09 14.1 -0.3**
baz=50
**MVCO Mesa Verde 50.66 77** *e*P **P 08 09 16.4 +2.0**
comp=Z,17nm,1.5s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| B32A | Ashes, Strandq | 50.76 | 59 | P | P | 08 09 15.0 | +0.3 |
| | baz=51 | | | | | | |
| ISCO | Idaho Springs | 50.78 | 73 | eP | P | 08 09 16.1 | +0.8 |
| ISCO | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | |
| ISCO | Idaho Springs | 50.78 | 73 | P | P | 08 09 15.4 | +0.1 |
| | baz=51,SNR=5.7 | | | | | | |
| ISCO | Idaho Springs | 50.78 | 73 | eP | P | 08 09 16.1 | +0.8 |
| | comp=Z,10nm,1.3s | | | | | | |
| J27A | Elkhorn Farm, | 50.78 | 67 | P | P | 08 09 14.8 | -0.2 |
| | baz=51 | | | | | | |
| I28A | Midland | 50.81 | 66 | P | P | 08 09 15.6 | +0.4 |
| | baz=51 | | | | | | |
| H29A | Onida | 50.98 | 64 | P | P | 08 09 16.7 | +0.3 |
| | baz=51 | | | | | | |
| J28A | Allard Ranch, | 51.12 | 66 | P | P | 08 09 17.9 | +0.3 |
| | baz=51 | | | | | | |
| W18A | Petrified Fore | 51.24 | 80 | P | P | 08 09 18.3 | -0.3 |
| | baz=51 | | | | | | |
| G30A | Faulkton | 51.28 | 63 | P | P | 08 09 18.3 | -0.3 |
| | baz=51 | | | | | | |
| I29A | Vivian Onida | 51.29 | 65 | P | P | 08 09 18.0 | -0.7 |
| | baz=51 | | | | | | |
| S22A | 4UR Ranch, Cre | 51.34 | 75 | P | P | 08 09 19.5 | 0.0 |
| | baz=51 | | | | | | |
| F31A | Hecla | 51.34 | 62 | P | P | 08 09 18.4 | -0.7 |
| | baz=51 | | | | | | |
| HVS | Khovu-Aksy | 51.48 | 306 | d iP | P | 08 09 20.6 | +0.4 |
| HVS | | | | pmax | pmax | | |
| | comp=Z,48nm,1.2s | | | | | | |
| J29A | Okreek | 51.66 | 66 | P | P | 08 09 21.4 | -0.1 |
| | baz=52 | | | | | | |
| B34A | Aery, Baudette | 51.72 | 58 | P | P | 08 09 22.9 | +1.1 |
| | baz=52 | | | | | | |
| SUSD | South Dakota S | 51.80 | 64 | P | P | 08 09 22.4 | -0.2 |
| | baz=52 | | | | | | |
| I30A | Oacoma | 51.86 | 65 | P | P | 08 09 23.0 | 0.0 |
| | baz=52 | | | | | | |
| H31A | Wolsey | 52.05 | 64 | P | P | 08 09 23.7 | -0.6 |
| | baz=52 | | | | | | |
| K29A | Lazy Trails An | 52.06 | 66 | P | P | 08 09 24.6 | 0.0 |
| | baz=52 | | | | | | |
| SDCO | Great Sand Dun | 52.15 | 74 | P | P | 08 09 25.4 | -0.1 |
| | baz=52 | | | | | | |
| SDCO | Great Sand Dun | 52.15 | 74 | eP | P | 08 09 25.6 | +0.1 |
| | comp=Z,5.8nm,1.0s | | | | | | |
| J30A | Dallas | 52.19 | 65 | P | P | 08 09 25.1 | -0.4 |
| | baz=52 | | | | | | |
| P26A | Davis Ranch, A | 52.29 | 71 | P | P | 08 09 26.5 | +0.1 |
| | baz=52 | | | | | | |
| F33A | 5 Mile Ranch, | 52.44 | 61 | P | P | 08 09 26.3 | -0.9 |
| | baz=52 | | | | | | |
| K30A | Basset | 52.52 | 66 | P | P | 08 09 27.7 | -0.2 |
| | baz=52 | | | | | | |
| H32A | Carlson Farm, | 52.62 | 63 | P | P | 08 09 28.2 | -0.4 |
| | baz=52 | | | | | | |
| J31A | Geddes | 52.64 | 65 | P | P | 08 09 28.2 | -0.6 |
| | baz=52 | | | | | | |
| M29A | Burnside Ranch | 52.67 | 68 | P | P | 08 09 29.4 | +0.3 |
| | baz=52 | | | | | | |
| P27A | Ficken Ranch, | 52.75 | 71 | P | P | 08 09 30.4 | +0.6 |
| | baz=53 | | | | | | |
| O28A | Krutsinger Ran | 52.86 | 70 | P | P | 08 09 30.8 | +0.2 |
| | baz=53 | | | | | | |
| D35A | Remer | 52.89 | 59 | P | P | 08 09 30.4 | -0.2 |
| | baz=53 | | | | | | |
| H33A | Prehn Over Nor | 52.90 | 62 | P | P | 08 09 30.1 | -0.6 |
| | baz=53 | | | | | | |
| L30A | Spencer Herefo | 52.91 | 67 | P | P | 08 09 30.6 | -0.3 |
| | baz=53 | | | | | | |
| E35A | Pequot Lakes | 53.03 | 59 | P | P | 08 09 30.8 | -0.7 |
| | baz=53 | | | | | | |
| R26A | Arlington | 53.03 | 73 | P | P | 08 09 32.2 | +0.3 |
| | baz=53 | | | | | | |
| KSCO | Kaye Shedlock' | 53.07 | 71 | P | P | 08 09 32.5 | +0.3 |
| | baz=53 | | | | | | |
| KSCO | Kaye Shedlock' | 53.07 | 71 | eP | P | 08 09 32.5 | +0.3 |
| | comp=Z,22nm,1.1s | | | | | | |
| J32A | Parkston | 53.10 | 64 | P | P | 08 09 31.6 | -0.6 |
| | baz=53 | | | | | | |
| T25A | Trinidad | 53.20 | 74 | P | P | 08 09 33.2 | 0.0 |
| | baz=53 | | | | | | |
| L31A | Butterfield Fa | 53.28 | 66 | P | P | 08 09 33.7 | +0.2 |
| | baz=53 | | | | | | |
| LAZ | Ladron | 53.32 | 79 | eP | P | 08 09 34.0 | -0.1 |
| | comp=Z,4.9nm,1.5s | | | | | | |
| F35A | Swanville | 53.37 | 60 | P | P | 08 09 33.2 | -0.9 |
| | baz=53 | | | | | | |
| ANMO | Albuquerque | 53.38 | 78 | deP | P | 08 09 34.0 | -0.6 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| ANMO | Albuquerque | 53.38 | 78 | eP | P | 08 09 34.9 | +0.3 |
| | comp=Z,57nm,3.0s | | | | | | |
| R27A | Eads | 53.43 | 72 | P | P | 08 09 34.4 | -0.4 |
| | baz=53 | | | | | | |
| O29A | 4D Ranch, Culb | 53.44 | 69 | P | P | 08 09 34.8 | 0.0 |
| | baz=53 | | | | | | |
| H34A | Spellman Lake, | 53.45 | 62 | P | P | 08 09 34.3 | -0.3 |
| | baz=53 | | | | | | |
| S26A | Kim | 53.45 | 73 | P | P | 08 09 34.4 | -0.6 |
| | baz=53 | | | | | | |
| C37A | Embarrass | 53.49 | 57 | P | P | 08 09 34.5 | -0.5 |
| | baz=53 | | | | | | |
| Q28A | Sharon Springs | 53.51 | 71 | P | P | 08 09 35.2 | -0.1 |
| | baz=53 | | | | | | |
| ECSD | EROS Data Cent | 53.57 | 63 | P | P | 08 09 33.3 | -2.2 |
| | baz=53,SNR=6.1 | | | | | | |
| ECSD | EROS Data Cent | 53.57 | 63 | eP | P | 08 09 34.5 | -1.1 |
| | comp=Z,11nm,1.0s | | | | | | |
| SUMG | Summit | 53.62 | 14 | i P | P | 08 09 35.4 | -0.6 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| SUMG | Summit | 53.62 | 14 | i P | P | 08 09 35.4 | -0.6 |
| | comp=Z,15nm,1.1s | | | | | | |
| J33A | Davis | 53.63 | 64 | P | P | 08 09 35.2 | -0.8 |
| | baz=54 | | | | | | |
| P29A | Atwood | 53.70 | 70 | P | P | 08 09 36.4 | -0.3 |
| | baz=54 | | | | | | |
| EYMN | Ely | 53.72 | 56 | P | P | 08 09 35.5 | -1.2 |
| | baz=54 | | | | | | |
| EYMN | Ely | 53.72 | 56 | eP | P | 08 09 36.1 | -0.5 |
| | comp=Z,91nm,2.2s | | | | | | |
| O30A | MW Ranch, Wils | 53.84 | 69 | P | P | 08 09 37.9 | +0.2 |
| | baz=54 | | | | | | |
| L32A | Elgin | 53.87 | 66 | P | P | 08 09 37.5 | -0.3 |
| | baz=54 | | | | | | |
| F36A | Milaca | 53.94 | 60 | P | P | 08 09 38.6 | +0.4 |
| | baz=54 | | | | | | |
| C38A | Sawbill Land. | 53.98 | 57 | P | P | 08 09 37.6 | -0.9 |
| | baz=54 | | | | | | |
| R28A | Tribune | 53.99 | 72 | P | P | 08 09 38.7 | -0.1 |
| | baz=54 | | | | | | |
| ZALV | Zalesovo Beam | 54.05 | 313 | LR | LR | 08 33 31.6 | |
| | comp=Z,91nm,21.2s,baz=70,slow=37 | | | | | | |
| Q29A | Oakley | 54.13 | 71 | P | P | 08 09 40.0 | +0.1 |
| | baz=54 | | | | | | |
| P30A | Selden | 54.14 | 69 | P | P | 08 09 39.8 | 0.0 |
| | baz=54 | | | | | | |
| BGNE | Belgrade | 54.17 | 66 | P | P | 08 09 40.1 | +0.1 |
| | baz=54 | | | | | | |
| 121A | Cookes Peak, D | 54.17 | 81 | P | P | 08 09 40.3 | 0.0 |
| | baz=54 | | | | | | |
| NVS | Novosibirsk | 54.20 | 315 | eP | P | 08 09 38.2 | -1.8 |
| O31A | Woolen Ranch, | 54.29 | 68 | P | P | 08 09 40.9 | 0.0 |
| | baz=54 | | | | | | |
| R29A | Marienthal | 54.33 | 71 | P | P | 08 09 41.7 | +0.3 |
| | baz=54 | | | | | | |
| S28A | Manter | 54.42 | 72 | P | P | 08 09 42.3 | +0.3 |
| | baz=54 | | | | | | |
| Q30A | Quinter | 54.52 | 70 | P | P | 08 09 42.8 | +0.1 |
| | baz=54 | | | | | | |
| K34A | Le Mars | 54.52 | 64 | P | P | 08 09 42.6 | +0.1 |
| | baz=54 | | | | | | |
| T28A | Walsh | 54.60 | 73 | P | P | 08 09 43.4 | 0.0 |
| | baz=54 | | | | | | |
| U27A | Thompson Grove | 54.63 | 74 | P | P | 08 09 43.6 | 0.0 |
| | baz=54 | | | | | | |
| P31A | Stockton | 54.66 | 69 | P | P | 08 09 43.9 | +0.2 |
| | baz=54 | | | | | | |
| L34A | Svendsen Farm, | 54.83 | 65 | P | P | 08 09 44.3 | -0.5 |
| | baz=55 | | | | | | |
| S29A | Ulysses | 54.87 | 72 | P | P | 08 09 45.3 | +0.1 |
| | baz=55 | | | | | | |
| CBKS | Cedar Bluff | 54.91 | 70 | eP | P | 08 09 46.0 | +0.5 |
| CBKS | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| CBKS | Cedar Bluff | 54.91 | 70 | P | P | 08 09 45.5 | +0.1 |
| | baz=55 | | | | | | |
| CBKS | Cedar Bluff | 54.91 | 70 | eP | P | 08 09 46.0 | +0.5 |
| | comp=Z,17nm,0.9s | | | | | | |
| R30A | Dighton | 54.94 | 71 | P | P | 08 09 46.0 | +0.3 |
| | baz=55 | | | | | | |
| K35A | Storm Lake | 54.99 | 63 | P | P | 08 09 46.0 | +0.1 |
| | baz=55 | | | | | | |
| Q31A | Ellis | 54.99 | 69 | P | P | 08 09 45.7 | -0.3 |
| | baz=55 | | | | | | |
| U28A | Mallet | 55.02 | 74 | P | P | 08 09 47.1 | +0.7 |
| | baz=55 | | | | | | |
| LZH | Lanzhou | 55.23 | 286 | eP | P | 08 09 48.5 | +0.5 |
| LZH | | | | pP | pP | 08 10 01.3 | -0.3 |
| LZH | | | | sP | sP | 08 10 06.6 | -0.6 |
| LZH | | | | PP | PP | 08 11 53.7 | +2.2 |
| LZH | | | | PMZ | | | |
| | comp=Z,20nm,1.5s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,85nm,8.0s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,380nm,15.0s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,400nm,15.4s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,460nm,18.3s | | | | | | |
| S30A | Montezuma | 55.25 | 71 | P | P | 08 09 48.3 | +0.3 |
| | baz=55 | | | | | | |
| O33A | Hebron | 55.35 | 67 | P | P | 08 09 48.6 | 0.0 |
| | baz=55 | | | | | | |
| R31A | Burdett | 55.38 | 70 | P | P | 08 09 48.7 | -0.1 |
| | baz=55 | | | | | | |
| GTA | Gaotai | 55.45 | 292 | eP | P | 08 09 50.0 | +0.6 |
| GTA | | | | pP | pP | 08 10 02.8 | -0.2 |
| GTA | | | | sP | sP | 08 10 07.7 | -1.0 |
| GTA | | | | PcP | PcP | 08 10 52.5 | +3.4 |
| GTA | | | | S | S | 08 17 33.2 | +2.6 |
| GTA | | | | ScS | ScS | 08 19 28.2 | -6.0 |
| GTA | | | | PMZ | | | |
| | comp=Z,12nm,1.3s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,69nm,5.4s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,150nm,17.1s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,190nm,16.6s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,150nm,14.3s | | | | | | |
| N34A | Lincoln | 55.48 | 66 | P | P | 08 09 49.4 | -0.1 |
| | baz=55 | | | | | | |
| Q32A | Meitler Ranch, | 55.49 | 69 | P | P | 08 09 49.8 | +0.2 |
| | baz=55 | | | | | | |
| M35A | Neola | 55.54 | 65 | P | P | 08 09 50.1 | +0.2 |
| | baz=55 | | | | | | |
| R32A | Long Quarter, | 55.78 | 70 | P | P | 08 09 51.1 | -0.6 |
| | baz=56 | | | | | | |
| O34A | Beatrice | 55.80 | 67 | P | P | 08 09 51.6 | -0.2 |
| | baz=56 | | | | | | |
| S31A | Mullinville | 55.85 | 71 | P | P | 08 09 51.8 | -0.4 |
| | baz=56 | | | | | | |
| Q33A | Connelly Farm, | 55.91 | 68 | P | P | 08 09 52.3 | -0.3 |
| | baz=56 | | | | | | |
| N35A | Tabor | 55.96 | 65 | P | P | 08 09 52.8 | -0.1 |
| | baz=56 | | | | | | |
| T31A | Randall Ranch, | 56.08 | 71 | P | P | 08 09 53.9 | +0.1 |
| | baz=56 | | | | | | |
| P34A | Walnut Farm, R | 56.14 | 67 | P | P | 08 09 54.0 | -0.2 |
| | baz=56 | | | | | | |
| MNTX | Cornudas Mount | 56.23 | 80 | P | P | 08 09 54.3 | -0.7 |
| | baz=56,SNR=5.5 | | | | | | |
| MNTX | Cornudas Mount | 56.23 | 80 | eP | P | 08 09 54.9 | -0.1 |
| | comp=Z,56nm,2.6s | | | | | | |
| R33A | Olander Ranch, | 56.28 | 69 | P | P | 08 09 55.2 | -0.1 |
| | baz=56 | | | | | | |
| MSTX | Muleshoe | 56.30 | 76 | P | P | 08 09 55.3 | -0.2 |
| | baz=56 | | | | | | |
| AMTX | Amarillo | 56.35 | 75 | P | P | 08 09 55.8 | -0.1 |
| | baz=56 | | | | | | |
| T32A | Huddler Ranch, | 56.47 | 71 | P | P | 08 09 56.5 | -0.2 |
| | baz=56 | | | | | | |
| Q34A | Chapman | 56.49 | 68 | P | P | 08 09 56.2 | -0.5 |
| | baz=56 | | | | | | |
| P35A | Duane Minner, | 56.62 | 67 | P | P | 08 09 57.0 | -0.7 |
| | baz=56 | | | | | | |
| Y28A | McKinney Farm, | 56.66 | 76 | P | P | 08 09 57.2 | -1.0 |
| | baz=56 | | | | | | |
| R34A | Isabella, Hill | 56.72 | 69 | P | P | 08 09 58.0 | -0.3 |
| | baz=57 | | | | | | |
| S33A | Kaszmaul Farm, | 56.74 | 70 | P | P | 08 09 58.4 | -0.1 |
| | baz=57 | | | | | | |
| O36A | Bolckow | 56.83 | 66 | P | P | 08 09 59.0 | -0.2 |
| | baz=57 | | | | | | |
| U32A | Winter Ranch, | 56.96 | 72 | P | P | 08 09 59.7 | -0.4 |
| | baz=57 | | | | | | |
| Z28A | Tucker Farm, M | 56.99 | 76 | P | P | 08 09 59.5 | -0.9 |
| | baz=57 | | | | | | |
| Y29A | Porterfield Fa | 57.04 | 76 | P | P | 08 10 00.1 | -0.7 |
| | baz=57 | | | | | | |
| Q35A | Mercer Eighty, | 57.06 | 67 | P | P | 08 09 60.0 | -0.8 |
| | baz=57 | | | | | | |
| X30A | Coker Ranch, T | 57.13 | 74 | P | P | 08 10 00.9 | -0.5 |
| | baz=57 | | | | | | |
| W31A | Holland Ranch, | 57.20 | 73 | P | P | 08 10 01.8 | 0.0 |
| | baz=57 | | | | | | |
| S34A | Willow Spring | 57.20 | 69 | P | P | 08 10 01.6 | -0.1 |
| | baz=57 | | | | | | |
| R35A | Emporia Munici | 57.32 | 68 | P | P | 08 10 02.5 | -0.1 |
| | baz=57 | | | | | | |
| 128A | Castleberry Fa | 57.39 | 77 | P | P | 08 10 03.1 | -0.2 |
| | baz=57 | | | | | | |
| Z29A | Hungry Hill Ra | 57.43 | 76 | P | P | 08 10 03.1 | -0.5 |
| | baz=57 | | | | | | |
| U33A | Lingo Farm, Me | 57.45 | 71 | P | P | 08 10 02.9 | -0.7 |
| | baz=57 | | | | | | |
| X31A | McDonald Ranch | 57.55 | 74 | P | P | 08 10 03.8 | -0.5 |
| | baz=57 | | | | | | |
| T34A | McClaskey Farm | 57.61 | 70 | P | P | 08 10 04.3 | -0.4 |
| | baz=58 | | | | | | |
| JFWS | Jewell Farm | 57.64 | 60 | eP | P | 08 10 03.6 | -1.2 |
| JFWS | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| JFWS | Jewell Farm | 57.64 | 60 | eP | P | 08 10 03.6 | -1.2 |
| | comp=Z,13nm,1.0s | | | | | | |
| W32A | Sentinel | 57.66 | 73 | P | P | 08 10 04.1 | -0.9 |
| | baz=58 | | | | | | |
| 228A | UT Block 9, Go | 57.67 | 78 | P | P | 08 10 04.8 | -0.4 |
| | baz=58 | | | | | | |
| S35A | Otter Creek Ra | 57.68 | 69 | P | P | 08 10 04.8 | -0.4 |
| | baz=58 | | | | | | |
| R36A | Gordon, Harris | 57.72 | 68 | P | P | 08 10 05.4 | -0.1 |
| | baz=58 | | | | | | |
| Z30A | Sanderson Ranc | 57.77 | 76 | P | P | 08 10 05.9 | 0.0 |
| | baz=58 | | | | | | |
| U34A | Anderson Ranch | 57.80 | 71 | P | P | 08 10 06.3 | +0.3 |
| | baz=58 | | | | | | |
| S36A | Lake Cedric, C | 58.08 | 68 | P | P | 08 10 07.8 | -0.1 |
| | baz=58 | | | | | | |
| T35A | Sooner Cattle | 58.08 | 69 | P | P | 08 10 07.6 | -0.4 |
| | baz=58 | | | | | | |
| W33A | Caddo, Fort Co | 58.11 | 72 | P | P | 08 10 08.0 | -0.2 |
| | baz=58 | | | | | | |
| X32A | Elmer | 58.11 | 73 | P | P | 08 10 07.8 | -0.5 |
| | baz=58 | | | | | | |
| WMOK | Wichita Mounta | 58.20 | 73 | eP | P | 08 10 08.6 | -0.3 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,88nm,3.0s | | | | | | |
| WMOK | Wichita Mounta | 58.20 | 73 | eP | P | 08 10 08.6 | -0.3 |
| | comp=Z,88nm,3.0s | | | | | | |
| Y32A | R-V Farms, Ver | 58.30 | 74 | P | P | 08 10 09.1 | -0.5 |
| | baz=58 | | | | | | |
| ARCES | ARCESS Array B | 58.32 | 350 | P | P | 08 10 08.6 | -0.6 |
| | comp=Z,4.4nm,0.8s,baz=33,slow=9.2,SNR=9.9 | | | | | | |
| ARCES | ARCESS Array B | 58.32 | 350 | P | P | 08 10 08.6 | -0.6 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| Z31A | Sharp Cattle R | 58.34 | 75 | P | P | 08 10 10.1 | +0.2 |
| | baz=58 | | | | | | |
| W34A | Bridge Creek, | 58.47 | 72 | P | P | 08 10 10.7 | 0.0 |
| | baz=58 | | | | | | |
| S37A | Fort Scott | 58.50 | 68 | P | P | 08 10 09.8 | -1.0 |
| | baz=58 | | | | | | |
| 230A | Sterling City | 58.74 | 77 | P | P | 08 10 11.7 | -0.9 |
| | baz=59 | | | | | | |
| Z32A | Haskell | 58.76 | 75 | P | P | 08 10 11.8 | -0.9 |
| | baz=59 | | | | | | |
| Y33A | Hilltop Ranch, | 58.79 | 73 | P | P | 08 10 11.6 | -1.4 |
| | baz=59 | | | | | | |
| CD2 | Chengdu | 58.80 | 282 | eP | P | 08 10 12.8 | -0.3 |
| CD2 | | | | pP | pP | 08 10 25.8 | -1.0 |
| CD2 | | | | PP | PP | 08 12 22.9 | -0.3 |
| CD2 | | | | PcS | PcS | 08 15 04.1 | -0.1 |
| CD2 | | | | S | S | 08 18 14.4 | -0.3 |
| CD2 | | | | sS | sS | 08 18 36.7 | -1.0 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| T37A | Cheneyville 18 | 58.88 | 68 | P | P | 08 10 12.9 | -0.6 |
| | baz=59 | | | | | | |
| TXAR | Lajitas Array | 58.93 | 81 | P | P | 08 10 13.3 | -0.7 |
| | comp=Z,1.6nm,0.8s,baz=298,slow=4.8,SNR=22 | | | | | | |
| TXAR | Lajitas Array | 58.93 | 81 | P | P | 08 10 13.4 | -0.7 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| 330A | Mertzon | 59.03 | 77 | P | P | 08 10 13.8 | -0.9 |
| | baz=59 | | | | | | |
| KURK | Kurchatov | 59.04 | 314 | eP | P | 08 10 14.0 | -0.4 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| KURK | Kurchatov | 59.04 | 314 | eP | P | 08 10 14.0 | -0.4 |
| | comp=Z,24nm,0.8s | | | | | | |
| ABTX | Abilene, Hawle | 59.13 | 75 | P | P | 08 10 15.1 | -0.3 |
| | baz=59 | | | | | | |
| ABTX | Abilene, Hawle | 59.13 | 75 | eP | P | 08 10 14.7 | -0.7 |
| | comp=Z,17nm,1.3s | | | | | | |
| 429A | Davenport Ranc | 59.13 | 78 | P | P | 08 10 14.8 | -0.7 |
| | baz=59 | | | | | | |
| V36A | Jenks | 59.18 | 70 | P | P | 08 10 15.7 | 0.0 |
| | baz=59 | | | | | | |
| TUL1 | Tulsa | 59.19 | 70 | P | P | 08 10 15.2 | -0.4 |
| | baz=59 | | | | | | |
| Z33A | Whitaker Ranch | 59.20 | 74 | P | P | 08 10 14.9 | -1.0 |
| | baz=59 | | | | | | |
| U37A | Salina | 59.25 | 69 | P | P | 08 10 15.7 | -0.4 |
| | baz=59 | | | | | | |
| WMQ | Urumqi | 59.29 | 303 | P | P | 08 10 17.2 | +0.8 |
| WMQ | | | | pP | pP | 08 10 30.0 | -0.1 |
| WMQ | | | | sP | sP | 08 10 37.0 | +1.3 |
| WMQ | | | | PP | PP | 08 12 32.0 | +4.7 |
| WMQ | | | | S | S | 08 18 21.0 | +0.1 |
| WMQ | | | | PMZ | | | |
| | comp=Z,18nm,0.9s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,31nm,6.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,180nm,16.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,220nm,17.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,190nm,15.0s | | | | | | |
| Y34A | Reagan Ranch, | 59.35 | 73 | P | P | 08 10 16.8 | 0.0 |
| | baz=59 | | | | | | |
| 430A | Baggett Ranch, | 59.42 | 78 | P | P | 08 10 17.0 | -0.5 |
| | baz=59 | | | | | | |
| X35A | Drake | 59.52 | 72 | P | P | 08 10 17.5 | -0.5 |
| | baz=59 | | | | | | |
| 331A | San Angelo | 59.56 | 77 | P | P | 08 10 17.6 | -0.7 |
| | baz=59 | | | | | | |
| 133A | Hamilton Ranch | 59.58 | 75 | P | P | 08 10 18.0 | -0.5 |
| | baz=60 | | | | | | |
| V37A | Hulbert | 59.59 | 69 | P | P | 08 10 18.2 | -0.2 |
| | baz=60 | | | | | | |
| U38A | Gravette | 59.65 | 69 | P | P | 08 10 17.8 | -1.1 |
| | baz=60 | | | | | | |
| HDIL | Hopedale | 59.75 | 62 | P | P | 08 10 18.3 | -1.2 |
| | baz=60,SNR=5.7 | | | | | | |
| HDIL | Hopedale | 59.75 | 62 | eP | P | 08 10 18.9 | -0.6 |
| | comp=Z,30nm,0.9s | | | | | | |
| X36A | Centrahoma | 59.77 | 71 | P | P | 08 10 19.5 | -0.2 |
| | baz=60 | | | | | | |
| 530A | J-C Ranch, Com | 59.80 | 78 | P | P | 08 10 18.7 | -1.4 |
| | baz=60 | | | | | | |
| 431A | Sonora | 59.88 | 77 | P | P | 08 10 19.7 | -0.9 |
| | baz=60 | | | | | | |
| 332A | Millersview | 59.93 | 76 | P | P | 08 10 19.9 | -1.0 |
| | baz=60 | | | | | | |
| W37A | Quinton | 59.93 | 70 | P | P | 08 10 20.1 | -0.7 |
| | baz=60 | | | | | | |
| 233A | Rising Star | 60.00 | 75 | P | P | 08 10 20.1 | -1.2 |
| | baz=60 | | | | | | |
| MKAR | Makanchi Array | 60.02 | 308 | P | P | 08 10 20.6 | -0.7 |
| | comp=Z,2.9nm,0.5s,baz=51,slow=6.5,SNR=31 | | | | | | |
| MKAR | | | | LR | LR | 08 36 53.1 | |
| | comp=Z,86nm,20.4s,baz=27,slow=37 | | | | | | |
| MKAR | Makanchi Array | 60.02 | 308 | P | P | 08 10 20.6 | -0.7 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| MKAR | | | | MLR | MLR | | |
| | comp=Z,86nm,20.4s | | | | | | |
| V38A | Canehill | 60.04 | 69 | P | P | 08 10 20.4 | -1.2 |
| | baz=60 | | | | | | |
| 134A | White-Moore Ra | 60.11 | 74 | P | P | 08 10 21.4 | -0.7 |
| | baz=60 | | | | | | |
| GYA | Guiyang | 60.12 | 276 | eP | P | 08 10 24.0 | +1.7 |
| GYA | | | | pP | pP | 08 10 37.4 | +1.3 |
| GYA | | | | PP | PP | 08 12 38.2 | +3.1 |
| GYA | | | | S | S | 08 18 31.0 | -1.0 |
| GYA | | | | sS | sS | 08 18 52.8 | -2.2 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,90nm,5.0s | | | | | | |
| 432A | Menard | 60.25 | 77 | P | P | 08 10 22.1 | -1.0 |
| | baz=60 | | | | | | |
| 531A | Rocksprings | 60.28 | 78 | P | P | 08 10 22.4 | -0.9 |
| | baz=60 | | | | | | |
| X37A | Clayton | 60.34 | 71 | P | P | 08 10 22.4 | -1.2 |
| | baz=60 | | | | | | |
| 333A | Richland Sprin | 60.43 | 76 | P | P | 08 10 23.8 | -0.5 |
| | baz=60 | | | | | | |
| 234A | Clairette | 60.47 | 75 | P | P | 08 10 24.1 | -0.5 |
| | baz=60 | | | | | | |
| W38A | Poteau | 60.52 | 70 | P | P | 08 10 24.3 | -0.5 |
| | baz=60 | | | | | | |
| JCT | Junction City | 60.52 | 77 | eP | P | 08 10 24.5 | -0.4 |
| JCT | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| JCT | Junction City | 60.52 | 77 | P | P | 08 10 24.0 | -0.9 |
| | baz=60 | | | | | | |
| JCT | Junction City | 60.52 | 77 | eP | P | 08 10 24.5 | -0.4 |
| | comp=Z,7.8nm,1.1s | | | | | | |
| 135A | Vickery Place, | 60.53 | 74 | P | P | 08 10 24.7 | -0.3 |
| | baz=60 | | | | | | |
| 532A | Rocksprings | 60.70 | 77 | P | P | 08 10 25.3 | -1.0 |
| | baz=61 | | | | | | |
| 433A | Art | 60.76 | 76 | P | P | 08 10 25.6 | -1.0 |
| | baz=61 | | | | | | |
| 631A | Perdido Creek | 60.79 | 78 | P | P | 08 10 25.0 | -1.8 |
| | baz=61 | | | | | | |
| 334A | Lometa | 60.88 | 75 | P | P | 08 10 26.8 | -0.5 |
| | baz=61 | | | | | | |
| BVAR | Borovoye Array | 60.95 | 320 | P | P | 08 10 26.8 | -0.6 |
| | comp=Z,3.2nm,0.8s,baz=46,slow=6.4,SNR=12 | | | | | | |
| BVAR | | | | PcP | PcP | 08 11 10.9 | +0.5 |
| | comp=Z,2.3nm,0.6s,baz=45,slow=2.3,SNR=5.5 | | | | | | |
| BVAR | Borovoye Array | 60.95 | 320 | P | P | 08 10 26.8 | -0.6 |
| BVAR | | | | | | 08 11 10.9 | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| BRVK | Borovoye | 60.97 | 320 | ⇓eP | P | 08 10 27.0 | -0.6 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| BRVK | Borovoye | 60.97 | 320 | eP | P | 08 10 28.7 | +1.1 |
| | comp=Z,8.8nm,1.2s | | | | | | |
| SFIN | Scholer Farm | 61.09 | 61 | P | P | 08 10 28.0 | -0.6 |
| | baz=61 | | | | | | |
| SFIN | Scholer Farm | 61.09 | 61 | eP | P | 08 10 28.4 | -0.2 |
| | comp=Z,49nm,0.9s | | | | | | |
| 136A | Ennis | 61.12 | 73 | P | P | 08 10 28.4 | -0.5 |
| | baz=61 | | | | | | |
| 434A | Burnet | 61.22 | 76 | P | P | 08 10 29.7 | 0.0 |
| | baz=61 | | | | | | |
| 533A | Kerrville | 61.28 | 77 | P | P | 08 10 29.6 | -0.5 |
| | baz=61 | | | | | | |
| MIAR | Mount Ida | 61.44 | 70 | eP | P | 08 10 31.2 | +0.1 |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | |
| MIAR | Mount Ida | 61.44 | 70 | P | P | 08 10 30.8 | -0.3 |
| | baz=61 | | | | | | |
| MIAR | Mount Ida | 61.44 | 70 | eP | P | 08 10 31.2 | +0.1 |
| | comp=Z,16nm,1.3s | | | | | | |
| TMCR | Tamitsa | 61.46 | 342 | eP | P | 08 10 29.9 | -0.8 |
| TMCR | | | | pmax | pmax | | |
| | comp=Z,37nm,1.0s | | | | | | |
| 633A | Saathoff Ranch | 61.62 | 77 | P | P | 08 10 31.7 | -0.7 |

baz=62
**732A Laxson Ranch, 61.65 79** P **P** **08 10 32.2 -0.4**
baz=62
**534A Blanco 61.65 77** P **P** **08 10 31.9 -0.7**
baz=62
**OLIL Olney 61.68 63** *e*P **P** **08 10 32.3 -0.3**
comp=Z,28nm,1.0s
**336A Riesel 61.69 74** P **P** **08 10 33.0 +0.2**
baz=62
**PBMO Poplar Bluff 61.72 66** *e*P **P** **08 10 31.8 -1.1**
comp=Z,23nm,1.4s
**832A Faith Ranch, C 61.96 79** P **P** **08 10 34.8 +0.1**
baz=62
**H06E1 SOCORRO T-PHAS 61.98 95** T T 09 18 05.0
SNR=2.5
**BLO Bloomington 62.25 61** *e*P **P** **08 10 36.1 -0.3**
BLO pmax pmax
comp=Z,27nm,1.0s
**BLO Bloomington 62.25 61** *e*P **P** **08 10 36.1 -0.3**
comp=Z,27nm,1.0s
**USIN University of 62.46 63** *e*P **P** **08 10 37.7 -0.1**
comp=Z,26nm,1.0s
**ARU Arti 62.71 328** *d i*P **P** **08 10 38.7 -0.5**
ARU 08 11 16.9
ARU 08 12 53.9
ARU S **S** **08 19 04.2 +0.4**
ARU SS **SS** **08 23 08.8 +0.7**
ARU pmax pmax
comp=Z,9.0nm,1.7s
**438A Sam Houston St 62.97 74** P **P** **08 10 41.3 0.0**
baz=63
**WCI Wyandotte Cave 63.04 62** *e*P **P** **08 10 41.2 -0.6**
WCI pmax pmax
comp=Z,71nm,1.0s
**WCI Wyandotte Cave 63.04 62** *e*P **P** **08 10 41.2 -0.6**
comp=Z,71nm,1.0s
**835A Beeville 63.28 77** P **P** **08 10 43.5 +0.1**
baz=63
**934A Benavides 63.35 78** P **P** **08 10 44.7 +0.8**
baz=63
**637A Eagle Lake 63.38 75** P **P** **08 10 44.8 +0.7**
baz=63
**340A Bronson 63.45 72** P **P** **08 10 44.3 -0.3**
baz=63
**KMI Kunming 63.53 278** P P 08 10 49.8 +4.4
KMI PMZ
comp=Z,9.0nm,1.3s
**034A Hebbronville 63.63 79** P **P** **08 10 45.0 -0.8**
baz=64
**WVT Waverly 63.66 65** *e*P **P** **08 10 46.1 +0.2**
**WVT Waverly 63.66 65** *e*P **P** **08 10 46.1 +0.2**
**OXF Oxford 63.90 67** *e*P **P** **08 10 48.1 +0.7**
OXF pmax pmax
comp=Z,65nm,1.5s
**OXF Oxford 63.90 67** *e*P **P** **08 10 48.1 +0.7**
comp=Z,65nm,1.5s
**KLMR Klimovskoe 64.15 340** *e*P **P** **08 10 46.7 -2.0**
KLMR pmax pmax
comp=Z,33nm,1.3s
**TZTN Tazewell 65.77 62** *e*P **P** **08 10 59.7 +0.1**
**FINES FINESS Array B 66.00 347** P **P** **08 10 59.7 -0.9**
comp=Z,8.8nm,0.9s,baz=46,slow=5.5,SNR=12
FINES LR LR 08 43 23.9
comp=Z,73nm,18.9s,baz=360,slow=39
**FINES FINESS Array B 66.00 347** P **P** **08 10 59.7 -0.9**
FINES pmax pmax
comp=Z,9.0nm,0.9s
FINES MLR MLR
comp=Z,73nm,18.9s
**CPCT Cooper Cave 66.02 63** *e*P **P** **08 11 00.9 -0.3**
**TKM2 Tokmak 2 66.11 309** *e*P **P** **08 11 03.4 +1.5**
**TKM2 Tokmak 2 66.11 309** P **P** **08 11 03.5 +1.5**
SNR=7.6
**TKM2 Tokmak 2 66.11 309** *e*P **P** **08 11 03.4 +1.5**
**USP Ospenovka 66.38 310** P **P** **08 11 04.9 +1.5**
SNR=6.5
**AAK Ala-Archa 66.86 310** P **P** **08 11 07.6 +0.9**
comp=Z,10nm,0.9s,baz=104,slow=5.3,SNR=17
**AAK Ala-Archa 66.86 310** *e*P **P** **08 11 07.1 +0.4**
**AAK Ala-Archa 66.86 310** P **P** **08 11 08.0 +1.3**
SNR=10.0
**AAK Ala-Archa 66.86 310** *e*P **P** **08 11 07.1 +0.4**
**UCH Uchtor 67.16 309** P **P** **08 11 10.4 +1.4**
SNR=7.5
**EKS2 Erkin-Say 67.19 310** *e*P **P** **08 11 09.7 +1.0**
**EKS2 Erkin-Say 67.19 310** P **P** **08 11 10.2 +1.5**
SNR=13
**EKS2 Erkin-Say 67.19 310** *e*P **P** **08 11 09.7 +1.0**
**AKTO Aktyubinsk 67.77 325** P **P** **08 11 11.8 -0.3**
comp=Z,2.8nm,0.7s,baz=49,slow=6.9,SNR=6.9
AKTO LR LR 08 43 57.7
comp=Z,164nm,18.0s,baz=27,slow=39
**AKTO Aktyubinsk 67.77 325** P **P** **08 11 11.8 -0.3**
AKTO pmax pmax
comp=Z,3.0nm,0.7s
AKTO MLR MLR
comp=Z,164nm,18.0s
**NB2 NORSAR Subarra 67.90 355** P **P** **08 11 12.4 -0.4**
comp=Z,1.0nm,0.5s,baz=9.1,slow=6.9
**NOA NORSAR Array B 67.90 355** P **P** **08 11 12.4 -0.4**
comp=Z,21nm,0.9s,baz=12,slow=6.8,SNR=7.8
**NOA NORSAR Array B 67.90 355** P **P** **08 11 12.4 -0.4**
NOA pmax pmax
comp=Z,2.0nm,0.9s
**KMSC Kings Mountain 68.02 61** P **P** **08 11 14.3 +0.4**
baz=68
**KSH Kashi 68.47 307** P P 08 11 21.0 +4.2
KSH *es*P sP 08 11 39.6 +3.2
KSH *e*PP PP 08 13 54.9 +7.0
KSH *e*ScP 08 15 45.6
KSH S **S** **08 20 20.1 +5.2**
KSH sS sS 08 20 42.5 +4.1
KSH ScS **ScS** **08 21 13.9 +1.5**
KSH PMZ
comp=Z,22nm,0.8s
KSH PMZ
comp=Z,130nm,4.0s
KSH LN
comp=Z,250nm,8.2s
KSH LE
comp=Z,140nm,7.4s
KSH LZ
comp=Z,190nm,5.2s
**HFS Hagfors 68.63 353** P **P** **08 11 16.1 -1.2**
comp=Z,2.9nm,0.7s,baz=52,slow=5.8,SNR=10
**HFS Hagfors 68.63 353** P **P** **08 11 16.1 -1.2**
HFS pmax pmax
comp=Z,3.0nm,0.7s
**OBN Obninsk 70.04 339** LR LR 08 47 58.9
comp=Z,99nm,18.1s,baz=89,slow=41
**OBN Obninsk 70.04 339** ⇑*i*P **P** **08 11 26.3 +0.2**
OBN *e* 08 11 37.1
OBN S **S** **08 20 29.0 -3.6**
OBN pmax pmax
comp=Z,11nm,0.4s
**CMAR Chiang Mai Arr 70.81 276** P **P** **08 11 31.5 +0.2**
comp=Z,0.9nm,0.3s,baz=29,slow=5.7,SNR=6.0
CMAR LR LR 08 45 13.5
comp=Z,35nm,18.6s,baz=280,slow=38
**CMAR Chiang Mai Arr 70.81 276** P **P** **08 11 31.5 +0.2**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
CMAR MLR MLR
comp=Z,35nm,18.6s
**TAPN Taplejung 71.08 290** *e*P **P** **08 11 33.9 +0.6**
comp=Z,45nm,1.0s
**PMOR Pomariorio Ree 71.28 148** *e*T T 09 29 27.4
comp=Z,3.5nm,0.2s
**GUN Gumba 71.74 292** *e*P **P** **08 11 37.8 +0.5**
comp=Z,48nm,0.6s
**LPSR Galich'ya Gora 71.79 337** *e*P **P** **08 11 35.8 -0.9**
LPSR pmax pmax
comp=N,5.0nm,0.5s
LPSR pmax pmax
comp=Z,7.0nm,0.5s
LPSR pmax pmax
comp=E,8.0nm,0.4s
**RAMN Ramite 72.03 291** *e*P **P** **08 11 39.1 +0.2**
comp=E,44nm,0.6s
**KKN Kakani 72.18 292** *e*P **P** **08 11 40.0 +0.2**
comp=E,17nm,0.5s
**PKI Pulchoki 72.27 292** *e*P **P** **08 11 40.2 -0.2**
comp=E,17nm,0.7s
**PKIN Phulchoki 72.27 292** *e*P **P** **08 11 40.4 0.0**
comp=E,9.3nm,0.5s
**VRH Novokhopyorsk 72.33 334** *e*P P 08 11 36.7 -3.3
VRH pmax pmax
comp=Z,10.0nm,0.4s
VRH pmax pmax
comp=N,10.0nm,0.9s
VRH pmax pmax
comp=E,20nm,0.7s
**GKN Gorkha 72.39 293** *e*P **P** **08 11 41.4 +0.4**
comp=E,20nm,0.5s
**VSR Storozhevoye 72.99 336** *e*P **P** **08 11 43.3 -0.6**
VSR pmax pmax
comp=Z,10.0nm,0.7s
VSR pmax pmax
comp=N,10.0nm,1.2s
VSR pmax pmax
comp=E,10.0nm,0.8s
**PPT Papeete 73.14 151** LR LR 08 37 30.1
comp=E,85nm,19.9s,baz=358,slow=31
**PPT2 Papeete2 73.16 151** *e*LR LR 08 34 04.8
comp=E,136nm,27.0s
**PPT2 Papeete2 73.16 151** *e*T T 09 31 49.1
comp=E,1.2nm,0.2s
**KOLN Koldanda 73.17 293** *e*P **P** **08 11 45.9 +0.3**
comp=E,17nm,1.0s
**VORD Divnogorie 73.19 336** *e*P **P** **08 11 43.7 -1.4**
VORD pmax pmax
comp=Z,10.0nm,0.6s
VORD pmax pmax
comp=N,30nm,0.5s
VORD pmax pmax
comp=E,60nm,0.8s
**AKASG Malin Array Be 75.74 342** P **P** **08 11 59.1 -0.7**
comp=E,11nm,0.5s,baz=20,slow=5.8,SNR=48
**AKASG Malin Array Be 75.74 342** *i* P **P** **08 11 59.0 -0.9**
AKASG pmax pmax
comp=E,11nm,0.5s
**KIEV Kiev 75.75 342** *ce*P **P** **08 11 59.3 -0.6**
KIEV pmax pmax
comp=Z,28nm,1.0s
**KIEV Kiev 75.75 342** *e*P **P** **08 11 59.4 -0.5**
**KBL Kabul 75.82 308** *e*P **P** **08 12 01.2 +0.3**
**KBL Kabul 75.82 308** *e*P **P** **08 12 01.2 +0.3**
**CLL Collm 77.44 352** *e*P **P** **08 12 09.0 -0.5**
CLL pmax pmax
comp=Z,9.0nm,1.3s
**CLL Collm 77.44 352** *e*(P) **P** **08 12 09.0 -0.5**
comp=Z,9.0nm,1.3s
**LVV L'vov 77.52 345** *e*P **P** **08 12 09.8 -0.2**
**OJC Ojcow 77.77 348** *e*P **P** **08 12 11.9 +0.5**
**OJC Ojcow 77.77 348** *e*P **P** **08 12 11.9 +0.5**
**BRG Berggiesshubel 77.79 352** *e*P **P** **08 12 11.3 -0.2**
comp=Z,8.8nm,1.1s
**BRG Berggiesshubel 77.79 352** *e*P **P** **08 12 11.3 -0.2**
BRG pmax pmax
comp=Z,9.0nm,1.1s
**GEYT Alibeck 78.13 317** P **P** **08 12 14.2 +0.6**
comp=Z,2.0nm,0.3s,baz=305,slow=5.2,SNR=4.3
GEYT LR LR 08 50 52.7
comp=Z,104nm,18.1s,baz=335,slow=39
**STHS Stebnicka Huta 78.35 347** *e*P **P** **08 12 15.7 +1.1**
STHS pmax pmax
comp=Z,9.0nm,0.9s
**STHS Stebnicka Huta 78.35 347** *e*P **P** **08 12 15.7 +1.1**
**OKC Ostrava-Krasne 78.36 349** *e*P **P** **08 12 15.0 +0.4**
**OKC Ostrava-Krasne 78.36 349** *e*P **P** **08 12 15.0 +0.4**
**MEM Membach 78.57 357** P **P** **08 12 16.4 +0.6**
comp=Z,12nm,1.2s
**TBI Tubuai 78.62 152** *e*LR LR 08 36 32.1
comp=Z,138nm,24.0s
**KOLS Kolonicke sedl 78.66 346** *e*P **P** **08 12 16.9 +0.6**
KOLS pmax pmax
comp=Z,11nm,1.1s
**KOLS Kolonicke sedl 78.66 346** *e*P **P** **08 12 16.9 +0.6**
**KBZ Khabaz 78.73 330** P **P** **08 12 16.7 0.0**
comp=Z,3.7nm,1.0s,baz=61,slow=2.2,SNR=4.9
KBZ LR LR 08 50 38.7
comp=Z,126nm,20.8s,baz=2.5,slow=38
**KBZ Khabaz 78.73 330** P **P** **08 12 16.7 0.0**
KBZ pmax pmax
comp=Z,4.0nm,1.0s
KBZ MLR MLR
comp=Z,126nm,20.8s
**LANS Liptovska Anna 78.86 348** *e*P **P** **08 12 18.5 +1.0**
**LANS Liptovska Anna 78.86 348** *e*P **P** **08 12 18.5 +1.0**
**VRAC Vranov 79.06 350** P **P** **08 12 18.7 +0.2**
comp=Z,2.2nm,0.3s,baz=350,slow=9.2,SNR=5.2
**VRAC Vranov 79.06 350** P **P** **08 12 18.7 +0.2**
VRAC pmax pmax
comp=Z,2.0nm,0.3s
**DOU Dourbes 79.13 358** P **P** **08 12 18.9 +0.1**
**ZEI Tsey 79.26 329** *e*P **P** **08 12 19.5 -0.5**
ZEI pmax pmax
comp=Z,43nm,0.9s
**TRPA Tarpa 79.40 345** ⇑*i*P **P** **08 12 21.5 +1.2**
**BURAR Bucovina Array 79.45 343** ⇑*i*P **P** **08 12 21.6 +0.8**
**BURAR Bucovina Array 79.45 343** ⇑*i*P **P** **08 12 21.6 +0.8**
**KHC Kasperske Hory 79.55 352** *e*P **P** **08 12 21.5 +0.3**
**KHC Kasperske Hory 79.55 352** *e*P **P** **08 12 20.2 -1.0**
KHC *e*PCP **PcP** **08 12 24.4 -4.6**
KHC *es*P **sP** **08 12 39.2 -1.8**
**KHC Kasperske Hory 79.55 352** *e*P **P** **08 12 21.5 +0.3**
**VYHS Vyhne 79.59 348** *e*P **P** **08 12 21.6 +0.2**
VYHS pmax pmax
comp=Z,5.0nm,1.2s
**VYHS Vyhne 79.59 348** *e*P **P** **08 12 21.6 +0.2**
**GERES GERESS Array B 79.82 351** P **P** **08 12 22.2 -0.6**
comp=Z,1.5nm,0.7s,baz=31,slow=5.4,SNR=9.9
**GERES GERESS Array B 79.82 351** P **P** **08 12 22.2 -0.6**
GERES pmax pmax
comp=Z,2.0nm,0.7s
**PSZ Piszkesteto 80.01 347** ⇑*i*P **P** **08 12 25.1 +1.3**
**PSZ Piszkesteto 80.01 347** ⇑*i*P **P** **08 12 25.1 +1.3**
**PSZ Piszkesteto 80.01 347** *e*P **P** **08 12 24.4 +0.7**
**DRGR 80.68 345** ⇑P **P** **08 12 28.1 +0.7**
**DRGR 80.68 345** ⇑*i*P **P** **08 12 28.0 +0.7**
**PLOR Plostina 80.88 342** ⇑P **P** **08 12 28.5 +0.1**
**PLOR Plostina 80.88 342** ⇑*i*P **P** **08 12 28.5 +0.1**
**MLR Muntele Rosu 81.36 342** ⇑P **P** **08 12 32.5 +1.4**
**MLR Muntele Rosu 81.36 342** ⇑*i*P **P** **08 12 32.5 +1.4**
**VOIR 81.58 343** ⇓P **P** **08 12 33.4 +1.2**
**VOIR 81.58 343** ⇓*i*P **P** **08 12 33.4 +1.2**
**KBA Koelnbreinsper 81.61 351** ⇑*i*P **P** **08 12 32.9 +0.4**
comp=Z,24nm,0.9s
**WRA Warramunga Arr 81.65 224** P **P** **08 12 30.7 -2.0**
comp=Z,1.5nm,0.8s,baz=34,slow=6.1,SNR=7.0
**WRA Warramunga Arr 81.65 224** P **P** **08 12 30.7 -2.0**
WRA pmax pmax
comp=Z,2.0nm,0.8s
**TLB Topalu 81.81 341** ⇓P **P** **08 12 33.3 0.0**
**TLB Topalu 81.81 341** ⇓*i*P **P** **08 12 33.3 0.0**
**SOKA Soboth 81.83 350** ⇑*i*P **P** **08 12 33.8 +0.3**
comp=Z,17nm,1.1s
**TIRR Tirgusor 81.86 340** ⇑P P 08 12 39.3 +5.8
**TIRR Tirgusor 81.86 340** ⇑*i*P P 08 12 39.3 +5.8
**FETA Feichen 81.88 353** ⇑*i*P **P** **08 12 31.2 -2.7**
comp=Z,9.4nm,1.0s
**BZS Buzias 82.00 345** ⇑P **P** **08 12 33.8 -0.5**
**BZS Buzias 82.00 345** ⇑*i*P **P** **08 12 33.8 -0.5**
**DAVOX Davos/Dischmat 82.18 354** P **P** **08 12 35.7 +0.2**
comp=Z,1.6nm,0.3s,baz=317,slow=7.4,SNR=3.7
**DAVOX Davos/Dischmat 82.18 354** P **P** **08 12 35.7 +0.2**
DAVOX pmax pmax
comp=Z,2.0nm,0.3s
**DIVS Divibare 83.73 346** ⇑*i*P **P** **08 12 43.2 -0.2**
**BNI Bardonecchia 84.09 356** *e*P **P** **08 12 46.3 +1.0**
**BNI Bardonecchia 84.09 356** *e*P **P** **08 12 46.3 +1.0**
**BRTR Keskin Array B 85.10 335** P **P** **08 12 50.5 0.0**
comp=Z,5.0nm,0.9s,baz=46,slow=3.6,SNR=15
BRTR LR LR 08 56 50.7
comp=Z,32nm,18.1s,baz=357,slow=40
**ASAR Alice Springs 85.12 222** P **P** **08 12 49.6 -0.9**
comp=Z,1.5nm,0.8s,baz=24,slow=4.1,SNR=10
ASAR LR LR 08 54 59.4
comp=Z,33nm,18.4s,baz=329,slow=39
**ASAR Alice Springs 85.12 222** P **P** **08 12 49.6 -0.9**
ASAR pmax pmax
comp=Z,2.0nm,0.9s
ASAR MLR MLR
comp=Z,33nm,18.5s
**ESDC Sonseca Array 89.50 4** P **P** **08 13 10.8 -0.9**
comp=Z,0.3nm,0.4s,baz=7.6,slow=4.5,SNR=5.8
**MAW Mawson 146.12 217** PKPbc **PKPdf** **08 19 51.3 -0.6**
comp=Z,2.6nm,0.8s,baz=21,slow=3.5,SNR=7.0
**MAW Mawson 146.12 217** PKP2 **PKPdf** **08 19 51.3 -0.6**
MAW pmax pmax
comp=Z,3.0nm,0.8s
**BOSA Boshof 150.99 311** PKPbc **PKPbc** **08 20 06.2 -0.9**
comp=Z,5.2nm,0.9s,baz=64,slow=4.8,SNR=3.9
**BOSA Boshof 150.99 311** PKIKP **PKPbc** **08 20 06.2 -0.9**
BOSA pmax pmax
comp=Z,5.0nm,0.9s

*IDC **06** 08:10:18.6±0.7,29.°54N×142.°85E,h0km,mb4.0/14, mb1 4.2/17,mb1mx4.0/39,mbtmp4.0/17,ML3.8/3, Error ellipse: s-maj=21.5km s-min=17.4km az=69.0*
*ISCJB **06** 08:10:20.2±0.5,29.°59N±0.°03×142.°6E±0.°1,h24km, mb4.0/14, Error ellipse: s-maj=14.5km s-min=4.5km az=172.1*
*JMA **06** 08:10:20.9±0.3,29.°57N×142.°70E,h48km,M4.0*

**ISC 06 08:10:22.3±0.6, 29.°56N±0.°06×142.°8E±0.°1, h24km, n26, σ1s15/29, mb4.1/14, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CBIJ** | **Chichi jima** | **2.50** | **192** | P | **Pn** | **08 11 00.4** | **-1.1** |
| CBIJ | | | | S | **Sn** | **08 11 29.6** | **-1.6** |
| **JHHJ** | **Haha-jima-NKT** | **2.96** | **190** | P | **Pn** | **08 11 06.9** | **-0.9** |
| JHHJ | | | | S | **Sn** | **08 11 41.5** | **-1.0** |
| **JHJ** | **Hachijo jima 2** | **4.37** | **325** | Pn | **Pn** | **08 11 25.9** | **-1.2** |
| | 9.4nm,0.3s,baz=275,slow=23,SNR=5.4 | | | | | | |
| **BSO3** | **Boso 3** | **5.56** | **341** | P | **Pn** | **08 11 42.0** | **-1.3** |
| **JOD2** | **Odawara 2** | **6.48** | **332** | P | **Pn** | **08 11 55.2** | **-1.0** |
| **JHU** | **Hanno** | **6.93** | **336** | P | **Pn** | **08 12 00.6** | **-1.7** |
| **JRY** | **Ryogami san** | **7.21** | **334** | P | **Pn** | **08 12 05.3** | **-0.9** |
| JRY | | | | *e*S | **Sn** | **08 13 24.6** | **-2.8** |
| **JHO** | **Hitachi** | **7.27** | **346** | P | Pn | 08 12 03.5 | -3.5 |
| **MJAR** | **Matsushiro Arr** | **7.94** | **332** | Pn | **Pn** | **08 12 15.3** | **-1.0** |
| | 2.4nm,0.3s,baz=152,slow=11,SNR=19 | | | | | | |
| **MAT** | **Matsushiro** | **7.94** | **332** | P | **Pn** | **08 12 15.3** | **-1.0** |
| MAT | | | | S | **Sn** | **08 13 45.4** | **0.0** |
| **KSRS** | **Korea Array** | **14.65** | **306** | Pn | **Pn** | **08 13 50.1** | **+2.0** |
| | 0.3nm,0.3s,baz=112,slow=14,SNR=5.3 | | | | | | |
| **SONM** | **Songino Array** | **33.34** | **313** | P | **P** | **08 16 59.7** | **+1.2** |
| | 1.1nm,0.7s,baz=134,slow=8.5,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.33** | **308** | P | **P** | **08 19 10.5** | **+1.0** |
| | 2.0nm,0.7s,baz=89,slow=9.4,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.87** | **190** | P | **P** | **08 19 13.4** | **-0.4** |
| | 1.5nm,0.5s,baz=8.0,slow=7.8,SNR=34 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.71** | **313** | P | **P** | **08 19 27.9** | **+0.5** |
| | 1.6nm,0.6s,baz=90,slow=7.3,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **53.60** | **190** | P | **P** | **08 19 41.4** | **-0.2** |
| | 0.4nm,0.5s,baz=2.9,slow=5.5,SNR=10.0 | | | | | | |
| **ILAR** | **Eielson Array** | **55.33** | **29** | P | **P** | **08 19 53.0** | **-0.7** |
| | 0.5nm,0.6s,baz=257,slow=6.4,SNR=8.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **56.59** | **316** | P | **P** | **08 20 03.6** | **+0.6** |
| | 1.0nm,0.5s,baz=103,slow=7.9,SNR=5.3 | | | | | | |
| **INK** | **Inuvik** | **60.59** | **25** | P | **P** | **08 20 30.7** | **+0.2** |
| | 1.5nm,0.5s,baz=326,slow=6.8,SNR=5.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **69.75** | **29** | P | **P** | **08 21 29.1** | **-0.9** |
| | 0.5nm,0.4s,baz=306,slow=4.3,SNR=4.3 | | | | | | |
| **FINES** | **FINESS Array B** | **75.97** | **334** | P | **P** | **08 22 07.3** | **+0.4** |
| | 1.3nm,0.5s,baz=82,slow=4.0,SNR=5.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.62** | **52** | P | **P** | **08 22 22.9** | **+0.3** |
| | 1.0nm,0.7s,baz=305,slow=5.2,SNR=6.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **80.94** | **324** | P | **P** | **08 22 34.3** | **-0.2** |
| | 0.5nm,0.4s,baz=52,slow=5.4,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **84.70** | **313** | P | **P** | **08 22 55.1** | **+0.6** |
| | 1.0nm,0.8s,baz=94,slow=1.7,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **93.73** | **53** | P | **P** | **08 23 38.6** | **+1.1** |
| | 0.8nm,0.8s,baz=298,slow=2.9,SNR=10 | | | | | | |
| **LPAZ** | **La Paz** | **148.75** | **72** | PKPbc | **PKPbc** | **08 30 09.6** | **+0.5** |
| | 0.9nm,0.8s,baz=11,slow=5.2,SNR=4.2 | | | | | | |

*ISCJB **06** 08:26:35.5±0.8, 40.°00N±0.°03×31.°76E±0.°06,h0km, Error ellipse: s-maj=6.2km s-min=5.0km az=175.4*
*ISK **06** 08:26:35.8, 40.°00N×31.°73E, h8km, MD2.7*
*CSEM **06** 08:26:35.6±0.3, 39.°99N×31.°76E, h1km, MD2.7, Error ellipse: s-maj=6.0km s-min=4.9km az=74.0, Mining explosion.*
*DDA **06** 08:26:36.5, 40.°03N×31.°65E, h7km, Md2.6*

**ISC 06 08:26:36.2±1.0, 40.°00N±0.°03×31.°72E±0.°03, h0km, n19, σ0s72/28, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUMIH** | **MIHALICIK** | **0.22** | **234** | P | **Pg** | **08 26 40.1** | **-0.3** |
| AUMIH | | | | S | **Sg** | **08 26 44.4** | **+1.1** |
| **SVRH** | **Sivrihisar-ESK** | **0.57** | **195** | *e*PG | **Pg** | **08 26 47.4** | **+0.3** |
| SVRH | | | | *e*SG | **Sg** | **08 26 55.9** | **+1.4** |
| **SVRH** | **Sivrihisar-ESK** | **0.57** | **195** | *e*Pg | **Pg** | **08 26 47.4** | **+0.3** |
| SVRH | | | | *e*Sg | **Sg** | **08 26 55.9** | **+1.4** |
| **MDUB** | **Mudurnu** | **0.62** | **320** | *e*PG | **Pg** | **08 26 48.3** | **+0.2** |
| MDUB | | | | *e*SG | **Sg** | **08 26 57.4** | **+1.3** |
| **MDUB** | **Mudurnu** | **0.62** | **320** | *e*Pg | **Pg** | **08 26 48.3** | **+0.2** |
| MDUB | | | | *e*Sg | **Sg** | **08 26 57.4** | **+1.3** |
| **ESKT** | **Eskisehir** | **0.82** | **235** | *i* P | **Pg** | **08 26 52.5** | **+0.6** |
| **SEYT** | **Eskypehyr** | **0.82** | **235** | *i* P | **Pg** | **08 26 52.5** | **+0.6** |
| **BCAM** | **Yenicaga** | **0.86** | **18** | *i* P | **Pg** | **08 26 53.0** | **+0.3** |
| BCAM | | | | *i* S | **Sn** | **08 27 08.7** | **-0.4** |
| **BCAM** | **Yenicaga** | **0.86** | **18** | P | **Pg** | **08 26 53.0** | **+0.3** |
| BCAM | | | | S | **Sn** | **08 27 08.7** | **-0.4** |
| **BORA** | **Eskisehir** | **0.98** | **263** | *i* P | **Pg** | **08 26 54.3** | **-0.7** |
| BORA | | | | *i* S | **Sb** | **08 27 08.9** | **-0.7** |
| **BORA** | **Eskisehir** | **0.98** | **263** | P | **Pg** | **08 26 54.3** | **-0.7** |
| BORA | | | | S | **Sb** | **08 27 08.9** | **-0.7** |
| **GULT** | **Gulveren** | **1.02** | **296** | *e*PG | **Pg** | **08 26 55.9** | **+0.2** |
| **GULT** | **Gulveren** | **1.02** | **296** | *e*Pg | **Pg** | **08 26 55.9** | **+0.2** |
| **KIZT** | **Kizilcal** | **1.12** | **173** | *e*PN | **Pg** | **08 26 57.8** | **+0.1** |
| **KIZT** | **Kizilcal** | **1.12** | **173** | *e*Pn | **Pg** | **08 26 57.8** | **+0.1** |
| **AFSR** | **Af˙ar-Bala (A** | **1.18** | **117** | *e*PN | **Pg** | **08 26 58.6** | **-0.3** |
| **AFSR** | **Af˙ar-Bala (A** | **1.18** | **117** | *e*Pn | **Pg** | **08 26 58.6** | **-0.3** |
| **CAVI** | **Cavuskoy** | **1.45** | **279** | *e*PN | **Pn** | **08 27 03.1** | **-0.7** |
| **CAVI** | **Cavuskoy** | **1.45** | **279** | *e*Pn | **Pn** | **08 27 03.1** | **-0.7** |

*GUC **06** 08:53:48.3±0.6, 36.°27S×74.°15W, h45km±3km, ML4.5*

**ISC 06 08:53:55.2±3.5, 36.°4S±0.°1×73.°8W±0.°2, h35km, n18, σ2s13/18, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **0.89** | **72** | *e*P | Pn | 08 54 08.4 | -2.8 |
| COCH | | | | *e*S | **Sn** | **08 54 24.0** | **+1.1** |
| COCH | | | | AML | AML | 08 54 25.9 | |
| | comp=N,8μm,0.5s | | | | | | |
| **CCHI** | **Chillan** | **1.43** | **98** | *e*P | **Pn** | **08 54 17.4** | **-1.2** |
| CCHI | | | | *e*S | **Sn** | **08 54 39.6** | **+3.4** |
| **TALC** | **Talca** | **2.05** | **61** | *e*P | Pn | 08 54 24.6 | -2.6 |
| TALC | | | | *e*S | **Sn** | **08 54 52.4** | **+0.8** |
| **NICH** | **Los Niches** | **2.54** | **57** | *e*P | Pn | 08 54 30.5 | -3.5 |
| NICH | | | | *e*S | **Sn** | **08 55 03.6** | **-0.1** |
| **CANA** | **Caviahue** | **2.66** | **124** | *e*P | Pn | 08 54 46.9 | +11 |
| CANA | | | | *e*S | Sn | 08 55 25.2 | +18 |
| CANA | | | | AML | AML | 08 55 40.2 | |
| | comp=Z,213nm,0.7s | | | | | | |
| **CHCH** | **Chadas Angostu** | **3.59** | **47** | *e*P | Pn | 08 54 45.3 | -3.2 |
| **CLCH** | **Cerro Calan** | **4.05** | **43** | *e*P | **Pn** | **08 54 54.3** | **-0.5** |
| CLCH | | | | *e*S | **Sn** | **08 55 42.0** | **+1.0** |
| CLCH | | | | AML | AML | 08 56 11.0 | |
| | comp=N,528nm,0.8s | | | | | | |
| **PEL** | **Peldehue** | **4.17** | **39** | *e*P | Pn | 08 54 52.4 | -3.9 |
| PEL | | | | *e*S | **Sn** | **08 55 40.6** | **-3.2** |
| PEL | | | | AML | AML | 08 56 11.4 | |
| | comp=E,338nm,0.7s | | | | | | |
| **AAGR** | **Agrelo** | **5.29** | **53** | *e*P | **Pn** | **08 55 14.2** | **+2.3** |
| **ARCO** | **CERRO ARCO** | **5.39** | **50** | AML | AML | 08 57 03.6 | |
| | comp=Z,18nm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **5.57** | **43** | *e*P | **Pn** | **08 55 17.8** | **+1.9** |
| AUSP | | | | *e*S | **Sn** | **08 56 17.3** | **-1.4** |
| **ASAL** | **Salagasta** | **5.62** | **49** | *e*P | **Pn** | **08 55 19.2** | **+2.8** |
| **RTLS** | **Leoncito** | **5.95** | **41** | *e*P | **Pn** | **08 55 23.2** | **+2.2** |
| **RTCV** | **Cerro Valdivia** | **6.31** | **46** | *e*P | **Pn** | **08 55 28.0** | **+2.2** |
| **CFAA** | **Coronel Fontan** | **6.68** | **46** | *e*P | **Pn** | **08 55 32.7** | **+1.9** |
| **RTLL** | **Cerro Villicun** | **6.75** | **43** | *e*P | **Pn** | **08 55 32.8** | **+1.0** |
| **ACAN** | **Cantantal** | **6.87** | **55** | *e*P | **Pn** | **08 55 36.3** | **+2.8** |
| **AVFE** | **Valle Fertil** | **7.83** | **45** | *e*P | **Pn** | **08 55 46.9** | **+0.3** |
| AVFE | | | | AML | AML | 08 57 41.9 | |
| | comp=Z,10.0nm,0.7s | | | | | | |

**GUC 06 08:56:01.9±0.6, 35.°99S×73.°66W, h44km±4km, ML4.2, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **0.72** | **101** | *e*P | Pn | 08 56 16.6 | +0.9 |
| COCH | | | | *e*S | Sn | 08 56 27.2 | +1.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| COCH | | | | AML | AML | 08 56 28.7 | |
| | comp=N,9µm,0.1s | | | | | | |
| CCHI | Chillan | 1.42 | 116 | eP | Pn | 08 56 27.0 | +1.8 |
| CCHI | | | | eS | Sn | 08 56 46.0 | +3.3 |
| CCHI | | | | AML | AML | 08 56 54.1 | |
| | comp=E,3µm,3.5s | | | | | | |
| TALC | Talca | 1.75 | 71 | eP | Pn | 08 56 34.2 | +4.4 |
| TALC | | | | eS | Sn | 08 56 57.2 | +6.2 |
| CHCH | Chadas Angostu | 3.21 | 51 | eP | Pn | 08 56 51.6 | +1.7 |
| TACH | Talagante | 3.24 | 45 | eP | Pn | 08 56 52.5 | +2.2 |
| ANTU | Antumapu | 3.47 | 47 | eP | Pn | 08 56 55.7 | +2.2 |
| ANTU | | | | eS | Sn | 08 57 36.5 | +3.0 |
| ANTU | | | | AML | AML | 08 58 02.3 | |
| | comp=N,434nm,0.8s | | | | | | |
| CLCH | Cerro Calan | 3.65 | 46 | eS | Sn | 08 57 40.6 | +2.6 |
| CLCH | | | | AML | AML | 08 58 14.7 | |
| | comp=N,417nm,0.6s | | | | | | |
| PEL | Peldehue | 3.76 | 42 | eS | Sn | 08 57 43.5 | +3.0 |
| PEL | | | | AML | AML | 08 58 14.5 | |
| | comp=E,347nm,0.4s | | | | | | |

*IGQ **06** 09:06:22±0.4, 1°.40S×77°.80W, h3km±16km, Mb4.0, Error ellipse: s-maj=1.9km s-min=1.0km az=210.7*
*ISCJB **06** 09:06:25.0±0.3, 1°.43S±0°.04×77°.93W±0°.06, h200km, mb3.7/8, Error ellipse: s-maj=7.9km s-min=5.1km az=172.7*
*IDC **06** 09:06:28.5±2.4, 1°.50S×77°.71W, h214km±28km, mb3.5/8, mb1 3.6/13, mb1mx3.4/47, mbtmp4.1/13, Error ellipse: s-maj=24.8km s-min=13.0km az=38.0*
**ISC 06 09:06:25.5**±0.7, **1°.42S**±0°.06×**77°.94W**±0°.07, **h200**km, **n56, σ1s.00**/52, **mb3.7**/8, **17C, Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BULB | Ulba Tungurahu | 0.47 | 268 | ⇑P | Pn | 09 06 52.7 | -0.2 |
| BRUN | Tungurahua Vol | 0.47 | 270 | ⇑P | Pn | 09 06 52.8 | -0.1 |
| RUN5 | Runtun | 0.48 | 271 | ⇑P | Pn | 09 06 52.9 | -0.1 |
| BPAT | Tungurahua Vol | 0.50 | 260 | ⇑P | Pn | 09 06 52.1 | -1.1 |
| PAT1 | Patacocha | 0.50 | 260 | P | Pn | 09 06 52.1 | -1.1 |
| RETU | Refugio | 0.50 | 267 | P | Pn | 09 06 53.0 | -0.3 |
| ARRY | Arrayan | 0.52 | 261 | ⇑P | Pn | 09 06 52.7 | -0.5 |
| JUI6 | Juive | 0.53 | 270 | ⇑P | Pn | 09 06 52.9 | -0.2 |
| BMAS | Trigal station | 0.54 | 261 | ⇑P | Pn | 09 06 52.8 | -0.4 |
| BBIL | Ulba Tungurahu | 0.55 | 267 | ⇑P | Pn | 09 06 52.8 | -0.4 |
| IGUA | Igualata | 0.70 | 264 | P | Pn | 09 06 53.2 | -1.0 |
| RIOE | Riobamba | 0.76 | 244 | ⇑P | Pn | 09 06 53.5 | -0.8 |
| TAMB | Tambo | 0.84 | 329 | P | Pn | 09 06 54.7 | -0.3 |
| BMOR | Cotopaxi Volca | 0.86 | 323 | ⇑P | Pn | 09 06 54.2 | -0.9 |
| MOV1 | Cotopaxi Vol s | 0.86 | 325 | P | Pn | 09 06 54.4 | -0.8 |
| BTAM | Cotopaxi Volca | 0.87 | 328 | ⇑P | Pn | 09 06 54.0 | -1.1 |
| BVC2 | Cotopaxi Volca | 0.89 | 328 | P | Pn | 09 06 54.2 | -1.1 |
| BREF | Cotopaxi Volca | 0.90 | 326 | ⇑P | Pn | 09 06 55.6 | +0.2 |
| VC1 | Cotopaxi 1 | 0.90 | 329 | P | Pn | 09 06 54.0 | -1.2 |
| BNAS | Cotopaxi Volca | 0.92 | 324 | ⇑P | Pn | 09 06 55.8 | +0.4 |
| CAMI | Rancho Maria | 0.93 | 323 | P | Pn | 09 06 55.8 | +0.4 |
| NAS2 | Nasa | 0.93 | 326 | P | Pn | 09 06 55.9 | +0.4 |
| PITA | Cotopaxi Volc | 0.99 | 330 | P | Pn | 09 06 55.8 | +0.1 |
| ANTI | Antisana | 0.99 | 347 | P | Pn | 09 06 54.3 | -1.6 |
| LAV4 | Lava4-Reventad | 1.36 | 13 | ⇑P | Pn | 09 06 56.3 | -2.1 |
| JUA2 | San Juan 2 | 1.37 | 331 | P | Pn | 09 06 57.5 | -1.2 |
| CONE | Cono NE Rev Vo | 1.37 | 13 | P | Pn | 09 06 57.5 | -1.0 |
| GGP | Refugio Guagua | 1.40 | 332 | P | Pn | 09 06 58.8 | -0.2 |
| TERV | Terraza Guagua | 1.40 | 332 | P | Pn | 09 06 58.4 | -0.6 |
| PINO | Pino | 1.42 | 332 | P | Pn | 09 06 58.1 | -1.1 |
| CAYA | Cayambe | 1.48 | 358 | P | Pn | 09 06 59.5 | -0.2 |
| OTAV | Otavalo | 1.72 | 343 | ⇑P | Pn | 09 07 00.2 | -1.6 |
| COTA | Cotacachi | 1.79 | 347 | P | Pn | 09 07 01.5 | -1.0 |
| URCU | Urcuqui | 1.87 | 350 | P | Pn | 09 07 03.0 | -0.3 |
| PECV | Mancha de Ca P | 2.20 | 287 | P | Pn | 09 07 10.5 | +4.3 |
| LITE | Lita | 2.25 | 349 | P | Pn | 09 07 05.5 | -1.4 |
| MAG1 | Magdalena | 2.27 | 306 | P | Pn | 09 07 06.2 | -0.7 |
| JAMA | Jama | 2.54 | 297 | P | Pn | 09 07 08.5 | -1.5 |
| YANT | Yantaza | 2.56 | 199 | ⇑P | Pn | 09 07 09.2 | -1.0 |
| YANT | Yantaza | 2.56 | 199 | ⇑S | Sn | 09 07 44.7 | -0.4 |
| CHIS | Cerro-Chispas- | 2.81 | 278 | P | Pn | 09 07 12.1 | -0.9 |
| CHIS | Cerro-Chispas- | 2.81 | 278 | S | Sn | 09 07 48.5 | -1.4 |
| ATAH | Atahualpa | 5.70 | 185 | P | Pn | 09 07 50.2 | +0.9 |
| | 15nm,0.3s,baz=22,slow=8.3,SNR=45 | | | | | | |
| ATAH | | | | S | Sn | 09 08 53.0 | -2.5 |
| | 13nm,0.3s,baz=236,slow=13,SNR=6.9 | | | | | | |
| NNA | Nana | 10.55 | 174 | P | Pn | 09 08 52.1 | +0.1 |
| | 2.9nm,0.3s,baz=294,slow=10,SNR=6.1 | | | | | | |
| NNA | | | | S | Sn | 09 10 40.4 | -10 |
| | 2.6nm,0.3s,baz=51,slow=19,SNR=2.9 | | | | | | |
| PCRV | Puerto La Cruz | 17.55 | 49 | P | Pn | 09 10 18.2 | -0.3 |
| | 0.8nm,0.3s,baz=232,slow=4.0,SNR=4.0 | | | | | | |
| LPAZ | La Paz | 17.66 | 147 | P | Pn | 09 10 20.2 | 0.0 |
| | 0.3nm,0.3s,baz=330,slow=6.1,SNR=14 | | | | | | |
| PTGA | Pitinga | 17.99 | 88 | P | P | 09 10 20.6 | -0.7 |
| | 0.6nm,0.3s,baz=262,slow=19,SNR=7.6 | | | | | | |
| SIV | San Ignacio | 22.05 | 132 | P | P | 09 11 04.4 | 0.0 |
| | 1.9nm,0.4s,baz=320,slow=7.6,SNR=6.8 | | | | | | |
| BDFB | Brasilia | 32.72 | 117 | P | P | 09 12 40.1 | +0.4 |
| | 2.2nm,0.4s,baz=153,slow=23,SNR=3.6 | | | | | | |
| TXAR | Lajitas Array | 39.25 | 323 | P | P | 09 13 38.8 | +3.9 |
| | 0.2nm,0.3s,baz=287,slow=13,SNR=19 | | | | | | |
| ANMO | Albuquerque | 44.96 | 326 | P | P | 09 14 25.1 | +4.0 |
| | 2.2nm,0.6s,baz=138,slow=9.3,SNR=9.5 | | | | | | |
| YKA | Yellowknife Ar | 69.48 | 343 | P | P | 09 17 13.2 | +1.3 |
| | 0.9nm,0.7s,baz=139,slow=6.6,SNR=3.2 | | | | | | |
| INK | Inuvik | 79.21 | 342 | P | P | 09 18 10.2 | +2.4 |
| | 2.8nm,0.7s,baz=120,slow=4.7,SNR=6.2 | | | | | | |
| TORD | Torodi Ar. Bea | 80.23 | 76 | P | P | 09 18 13.9 | -0.6 |
| | 0.6nm,0.4s,baz=279,slow=6.0,SNR=25 | | | | | | |
| ILAR | Eielson Array | 82.43 | 336 | P | P | 09 18 27.2 | +2.2 |
| | 0.9nm,0.8s,baz=120,slow=4.5,SNR=11 | | | | | | |
| WRA | Warramunga Arr | 141.88 | 234 | PKhKP | PKPpre | 09 25 31.6 | |
| | 0.2nm,0.4s,baz=115,slow=2.8,SNR=7.7 | | | | | | |

*DDA **06** 09:14:37.7, 35°.80N×30°.41E, h7km, Md3.1*
*ISCJB **06** 09:14:40.5±0.9, 36°.00N±0°.06×30°.28E±0°.05, h10km, Error ellipse: s-maj=9.0km s-min=5.9km az=16.6*
*ISK **06** 09:14:41.5, 36°.04N×30°.16E, h13km, MD3.1*
*CSEM **06** 09:14:42.3±0.7, 36°.03N×30°.28E, h20km, MD3.1, Error ellipse: s-maj=16.1km s-min=9.3km az=5.0*
**ISC 06 09:14:39.7**±1.3, **35°.97N**±0°.07×**30°.44E**±0°.03, **h10**km, **n31, σ1s.48**/41, **Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ELL | Elmali | 0.89 | 331 | ePG | Pg | 09 14 56.1 | -0.6 |
| ELL | | | | eSG | Sg | 09 15 07.2 | -1.2 |
| ELL | Elmali | 0.89 | 331 | ePg | Pg | 09 14 56.2 | -0.6 |
| ELL | | | | eSg | Sg | 09 15 07.2 | -1.2 |
| ANTB | Antalya | 0.94 | 11 | ePG | Pn | 09 15 00.2 | +1.2 |
| ANTB | Antalya | 0.94 | 11 | ePg | Pn | 09 15 00.2 | +1.2 |
| KORT | Korkueli | 1.03 | 356 | i P | Pb | 09 14 59.7 | 0.0 |
| KORT | | | | i S | Sb | 09 15 12.1 | -1.3 |
| KORT | Korkueli | 1.03 | 356 | P | Pb | 09 14 59.7 | 0.0 |
| KORT | | | | S | Sb | 09 15 12.1 | -1.3 |
| FETY | Fethiye | 1.28 | 302 | ePG | Pn | 09 15 02.3 | -1.4 |
| FETY | Fethiye | 1.28 | 302 | ePg | Pn | 09 15 02.3 | -1.4 |
| GOLH | Golhisar | 1.45 | 331 | i P | Pb | 09 15 07.2 | +0.4 |
| GOLH | Golhisar | 1.45 | 331 | P | Pb | 09 15 07.2 | +0.4 |
| GOLH | | | | S | Sg | 09 15 30.7 | +4.4 |
| GAZI | Gazipasa | 1.54 | 80 | i P | Pg | 09 15 08.0 | -1.3 |
| GAZI | | | | i S | Sg | 09 15 30.8 | +1.5 |
| GAZI | Gazipasa | 1.54 | 80 | P | Pg | 09 15 08.0 | -1.3 |
| GAZI | | | | S | Sg | 09 15 30.8 | +1.5 |
| SUTC | Sutluce-Ispart | 1.57 | 17 | ePN | Pb | 09 15 09.9 | +1.0 |
| SUTC | Sutluce-Ispart | 1.57 | 17 | ePn | Pb | 09 15 09.9 | +1.0 |
| DALY | Dalyan (Mu˜la | 1.67 | 301 | ePN | Pn | 09 15 08.2 | -0.8 |
| DALY | Dalyan (Mu˜la | 1.67 | 301 | ePn | Pn | 09 15 08.2 | -0.8 |
| TURN | Turunc | 1.73 | 302 | P | Pg | 09 15 15.3 | +2.3 |
| HDMB | Hadim | 1.93 | 58 | ePN | Pg | 09 15 17.4 | +0.7 |
| HDMB | Hadim | 1.93 | 58 | ePn | Pg | 09 15 17.4 | +0.7 |
| YER | Yerkesik | 2.09 | 304 | ePN | Pn | 09 15 14.0 | -0.9 |
| YER | Yerkesik | 2.09 | 304 | ePn | Pn | 09 15 14.0 | -0.9 |
| KHAL | Karahalli | 2.51 | 343 | i P | Pn | 09 15 20.6 | -0.1 |
| KHAL | | | | i S | Sn | 09 15 48.6 | -2.9 |
| KHAL | Karahalli | 2.51 | 343 | P | Pn | 09 15 20.6 | -0.1 |
| KHAL | | | | S | Sn | 09 15 48.6 | -2.9 |
| AYDN | Tasoluk | 2.66 | 310 | i P | Pn | 09 15 24.5 | +1.9 |
| AYDN | Tasoluk | 2.66 | 310 | P | Pn | 09 15 24.6 | +1.9 |
| AYDN | | | | S | Sn | 09 15 57.6 | +2.6 |
| BODT | Bodrum | 2.75 | 294 | ePN | Pn | 09 15 23.2 | -0.6 |
| BODT | Bodrum | 2.75 | 294 | ePn | Pn | 09 15 23.2 | -0.6 |
| AYDB | Zeytinkoy-Aydi | 2.84 | 315 | ePN | Pn | 09 15 25.0 | -0.2 |
| AYDB | Zeytinkoy-Aydi | 2.84 | 315 | ePn | Pn | 09 15 25.0 | -0.2 |
| KULA | Kula-Manisa | 2.91 | 331 | ePN | Pn | 09 15 25.8 | -0.3 |
| KULA | Kula-Manisa | 2.91 | 331 | ePn | Pn | 09 15 25.8 | -0.3 |

*NEIC **06** 09:14:45.9, 38°.84S×175°.89E, h126km, MG4.0(WEL), After WEL.*
**WEL 06 09:14:45.9**±0.1, **38°.84S**×**175°.89E, h126**km±1km, **ML4.0**/22, **36C-13D, Error ellipse: s-maj=0.9km s-min=0.9km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RATZ | Rangitukua | 0.10 | 250 | ⇓PN | Pn | 09 15 02.8 | -0.4 |
| RATZ | | | | SN | Sn | 09 15 16.9 | +0.6 |
| RATZ | Rangitukua | 0.10 | 250 | Pn | Pn | 09 15 02.8 | -0.4 |
| RATZ | | | | Sn | Sn | 09 15 16.9 | +0.6 |
| RITZ | Rihia Road | 0.15 | 190 | PN | Pn | 09 15 03.1 | -0.2 |
| RITZ | Rihia Road | 0.15 | 190 | Pn | Pn | 09 15 03.1 | -0.2 |
| WATZ | Wairara | 0.18 | 315 | ⇓PN | Pn | 09 15 03.1 | -0.2 |
| WATZ | | | | SN | Sn | 09 15 16.6 | +0.2 |
| WATZ | Wairara | 0.18 | 315 | Pn | Pn | 09 15 03.1 | -0.2 |
| WATZ | | | | Sn | Sn | 09 15 16.6 | +0.2 |
| KRVZ | Karewarewa | 0.33 | 217 | PN | Pn | 09 15 03.7 | -0.2 |
| KRVZ | Karewarewa | 0.33 | 217 | Pn | Pn | 09 15 03.7 | -0.2 |
| KUTZ | Kaahu Road | 0.35 | 351 | ⇓PN | Pn | 09 15 03.7 | -0.2 |
| KUTZ | Kaahu Road | 0.35 | 351 | Pn | Pn | 09 15 03.7 | -0.2 |
| WTVZ | West Tongariro | 0.37 | 220 | PN | Pn | 09 15 04.0 | -0.1 |
| WTVZ | | | | SN | Sn | 09 15 17.7 | -0.1 |
| WTVZ | West Tongariro | 0.37 | 220 | Pn | Pn | 09 15 04.0 | -0.1 |
| WTVZ | | | | Sn | Sn | 09 15 17.7 | -0.1 |
| OTVZ | Oturere | 0.37 | 208 | PN | Pn | 09 15 04.1 | -0.1 |
| OTVZ | | | | SN | Sn | 09 15 18.2 | +0.3 |
| OTVZ | Oturere | 0.37 | 208 | Pn | Pn | 09 15 04.1 | -0.1 |
| OTVZ | | | | Sn | Sn | 09 15 18.2 | +0.3 |
| NGZ | Ngauruhoe | 0.41 | 213 | PN | Pn | 09 15 04.1 | -0.2 |
| NGZ | Ngauruhoe | 0.41 | 213 | Pn | Pn | 09 15 04.1 | -0.2 |
| MRHZ | Matea Rd | 0.41 | 90 | ⇑PN | Pn | 09 15 03.7 | -0.5 |
| MRHZ | | | | SN | Sn | 09 15 16.5 | -1.5 |
| TWVZ | Taurewa | 0.43 | 236 | ⇓PN | Pn | 09 15 04.1 | -0.2 |
| TWVZ | | | | SN | Sn | 09 15 17.7 | -0.5 |
| TWVZ | Taurewa | 0.43 | 236 | Pn | Pn | 09 15 04.1 | -0.2 |
| TWVZ | | | | Sn | Sn | 09 15 17.7 | -0.5 |
| ALRZ | Allen Road | 0.45 | 53 | PN | Pn | 09 15 04.0 | -0.3 |
| ALRZ | | | | SN | Sn | 09 15 18.4 | +0.2 |
| ALRZ | Allen Road | 0.45 | 53 | Pn | Pn | 09 15 04.0 | -0.3 |
| COVZ | Chateau Observ | 0.45 | 217 | ⇓PN | Pn | 09 15 04.3 | -0.1 |
| COVZ | | | | SN | Sn | 09 15 17.7 | -0.8 |
| COVZ | Chateau Observ | 0.45 | 217 | Pn | Pn | 09 15 04.3 | -0.1 |
| WPVZ | Whakapapa | 0.46 | 216 | PN | Pn | 09 15 04.5 | -0.1 |
| WPVZ | Whakapapa | 0.46 | 216 | Pn | Pn | 09 15 04.5 | -0.1 |
| TUVZ | Tukino | 0.47 | 203 | ⇑PN | Pn | 09 15 04.6 | 0.0 |
| TUVZ | Tukino | 0.47 | 203 | Pn | Pn | 09 15 04.6 | 0.0 |
| FWVZ | Far West T-bar | 0.50 | 212 | PN | Pn | 09 15 04.7 | -0.1 |
| FWVZ | Far West T-bar | 0.50 | 212 | Pn | Pn | 09 15 04.8 | -0.1 |
| WHVZ | Whangaehu Hut | 0.51 | 208 | PN | Pn | 09 15 04.7 | -0.2 |
| WHVZ | | | | SN | Sn | 09 15 18.3 | -1.0 |
| WHVZ | Whangaehu Hut | 0.51 | 208 | Pn | Pn | 09 15 04.7 | -0.2 |
| DRZ | Dome Shelter | 0.51 | 210 | ⇓PN | Pn | 09 15 05.0 | 0.0 |
| DRZ | | | | SN | Sn | 09 15 19.2 | -0.3 |
| DRZ | Dome Shelter | 0.51 | 210 | Pn | Pn | 09 15 05.0 | 0.0 |
| TRVZ | Turoa | 0.54 | 210 | Pn | Pn | 09 15 05.2 | +0.1 |
| WNVZ | Wahianoa | 0.54 | 205 | ⇑PN | Pn | 09 15 04.9 | -0.1 |
| WNVZ | Wahianoa | 0.54 | 205 | Pn | Pn | 09 15 05.0 | -0.1 |
| BKZ | Black Stump Fm | 0.57 | 126 | ⇑PN | Pn | 09 15 04.9 | -0.2 |
| BKZ | | | | AML | AML | 09 15 20.2 | |
| BKZ | | | | AML | AML | 09 15 21.2 | |
| BKZ | Black Stump Fm | 0.57 | 126 | ⇑Pn | Pn | 09 15 04.9 | -0.2 |
| TLZ | Tolley Road | 0.58 | 331 | ⇓PN | Pn | 09 15 05.0 | -0.1 |
| TLZ | Tolley Road | 0.58 | 331 | ⇓Pn | Pn | 09 15 05.0 | -0.1 |
| MOVZ | Moawhango | 0.58 | 191 | ⇑PN | Pn | 09 15 04.8 | -0.4 |
| MOVZ | | | | SN | Sn | 09 15 18.3 | -1.6 |
| MOVZ | Moawhango | 0.58 | 191 | Pn | Pn | 09 15 04.8 | -0.4 |
| MOVZ | | | | Sn | Sn | 09 15 18.3 | -1.6 |
| PKVZ | Pokaka | 0.62 | 223 | PN | Pn | 09 15 05.3 | -0.2 |
| PKVZ | | | | SN | Sn | 09 15 20.3 | 0.0 |
| PKVZ | Pokaka | 0.62 | 223 | Pn | Pn | 09 15 05.3 | -0.2 |
| PKVZ | | | | Sn | Sn | 09 15 20.3 | 0.0 |
| MTVZ | Mangateitei | 0.64 | 211 | PN | Pn | 09 15 05.5 | -0.1 |
| MTVZ | Mangateitei | 0.64 | 211 | Pn | Pn | 09 15 05.5 | -0.1 |
| BHHZ | Black Hill Sta | 0.67 | 169 | ⇑PN | Pn | 09 15 05.5 | -0.3 |
| BHHZ | Black Hill Sta | 0.67 | 169 | Pn | Pn | 09 15 05.5 | -0.2 |
| RRRZ | Republican Roa | 0.69 | 45 | PN | Pn | 09 15 05.6 | -0.3 |
| RRRZ | Republican Roa | 0.69 | 45 | Pn | Pn | 09 15 05.6 | -0.3 |
| KWHZ | Kaweka Forest | 0.72 | 145 | ⇑PN | Pn | 09 15 06.2 | +0.1 |
| NMHZ | Naumai | 0.76 | 111 | ⇑PN | Pn | 09 15 07.1 | +0.6 |
| NMHZ | Naumai | 0.76 | 111 | Pn | Pn | 09 15 07.1 | +0.6 |
| HIZ | Hauiti | 0.87 | 291 | PN | Pn | 09 15 06.8 | -0.5 |
| HIZ | Hauiti | 0.87 | 291 | Pn | Pn | 09 15 06.8 | -0.5 |
| MCHZ | McNeill Hill | 0.87 | 134 | ⇑PN | Pn | 09 15 08.1 | +0.8 |
| MCHZ | McNeill Hill | 0.87 | 134 | Pn | Pn | 09 15 08.1 | +0.8 |
| KRHZ | Kereru | 0.89 | 155 | PN | Pn | 09 15 07.5 | 0.0 |
| VRZ | Vera Road | 0.93 | 251 | PN | Pn | 09 15 07.4 | -0.4 |
| VRZ | Vera Road | 0.93 | 251 | Pn | Pn | 09 15 07.4 | -0.4 |
| RAHZ | Arahi | 0.94 | 95 | ⇑PN | Pn | 09 15 08.3 | +0.3 |
| RAHZ | | | | SN | Sn | 09 15 24.8 | +0.2 |
| RAHZ | Arahi | 0.94 | 95 | Pn | Pn | 09 15 08.3 | +0.3 |
| RAHZ | | | | Sn | Sn | 09 15 24.8 | +0.2 |
| ARHZ | Aropaoanui | 0.96 | 117 | ⇑PN | Pn | 09 15 08.6 | +0.4 |
| ARHZ | Aropaoanui | 0.96 | 117 | Pn | Pn | 09 15 08.6 | +0.4 |
| WHHZ | Waihua | 1.07 | 103 | ⇑PN | Pn | 09 15 09.4 | +0.2 |
| WHHZ | | | | SN | Sn | 09 15 27.3 | +0.3 |
| PNHZ | Pukenui | 1.10 | 168 | ⇑PN | Pn | 09 15 09.3 | -0.3 |
| PNHZ | Pukenui | 1.10 | 168 | Pn | Pn | 09 15 09.3 | -0.3 |
| URZ | Urewera | 1.11 | 59 | ⇑PN | Pn | 09 15 08.9 | -0.7 |
| URZ | | | | AML | AML | 09 15 25.8 | |
| URZ | | | | AML | AML | 09 15 26.3 | |
| URZ | Urewera | 1.11 | 59 | Pn | Pn | 09 15 08.9 | -0.7 |
| SNGZ | Shannon Statio | 1.13 | 88 | ⇑PN | Pn | 09 15 10.0 | +0.1 |
| SNGZ | Shannon Statio | 1.13 | 88 | Pn | Pn | 09 15 10.0 | +0.1 |
| TOZ | Tahuroa Road | 1.14 | 344 | PN | Pn | 09 15 09.9 | 0.0 |
| TOZ | Tahuroa Road | 1.14 | 344 | Pn | Pn | 09 15 09.9 | 0.0 |
| WAZ | Wanganui | 1.16 | 217 | PN | Pn | 09 15 10.1 | 0.0 |
| WAZ | Wanganui | 1.16 | 217 | Pn | Pn | 09 15 10.1 | 0.0 |
| TSZ | Takapari Road | 1.23 | 178 | ⇓PN | Pn | 09 15 10.4 | -0.4 |
| TSZ | | | | AML | AML | 09 15 29.5 | |
| TSZ | | | | AML | AML | 09 15 31.2 | |
| TSZ | Takapari Road | 1.23 | 178 | Pn | Pn | 09 15 10.4 | -0.4 |
| KAHZ | Kahuranaki | 1.23 | 142 | ⇑PN | Pn | 09 15 11.0 | +0.2 |
| KAHZ | Kahuranaki | 1.23 | 142 | Pn | Pn | 09 15 11.0 | +0.2 |
| CKHZ | Cape Kidnapper | 1.24 | 132 | ⇑PN | Pn | 09 15 11.1 | +0.3 |
| CKHZ | Cape Kidnapper | 1.24 | 132 | Pn | Pn | 09 15 11.1 | +0.3 |
| RAGZ | Rawiri | 1.24 | 75 | PN | Pn | 09 15 10.7 | -0.3 |
| RAGZ | Rawiri | 1.24 | 75 | Pn | Pn | 09 15 10.7 | -0.3 |
| MHEZ | Mangahewa | 1.25 | 258 | PN | Pn | 09 15 11.3 | +0.4 |
| MHEZ | Mangahewa | 1.25 | 258 | Pn | Pn | 09 15 11.3 | +0.4 |
| WPHZ | Waipukurau | 1.30 | 161 | ⇑PN | Pn | 09 15 11.3 | -0.2 |
| WPHZ | Waipukurau | 1.30 | 161 | Pn | Pn | 09 15 11.3 | -0.2 |
| LREZ | Lake Rotokare | 1.31 | 241 | PN | Pn | 09 15 11.7 | 0.0 |
| DREZ | Durham Road | 1.36 | 254 | PN | Pn | 09 15 12.5 | +0.3 |
| MWZ | Matawai | 1.38 | 69 | ⇓PN | Pn | 09 15 12.0 | -0.5 |
| MWZ | | | | AML | AML | 09 15 31.4 | |
| MWZ | | | | AML | AML | 09 15 32.1 | |
| MWZ | Matawai | 1.38 | 69 | Pn | Pn | 09 15 12.0 | -0.5 |
| KNZ | Kokohu | 1.40 | 98 | ⇑PN | Pn | 09 15 12.3 | -0.3 |
| KNZ | | | | AML | AML | 09 15 32.2 | |
| KNZ | | | | AML | AML | 09 15 33.8 | |
| KNZ | Kokohu | 1.40 | 98 | Pn | Pn | 09 15 12.3 | -0.3 |
| PXZ | Pawanui | 1.41 | 148 | ⇑PN | Pn | 09 15 12.5 | -0.3 |
| PXZ | | | | AML | AML | 09 15 35.9 | |
| PXZ | | | | AML | AML | 09 15 38.1 | |
| PXZ | Pawanui | 1.41 | 148 | ⇑Pn | Pn | 09 15 12.5 | -0.3 |
| NEZ | North Egmont | 1.46 | 252 | ⇓PN | Pn | 09 15 13.8 | +0.3 |
| NEZ | North Egmont | 1.46 | 252 | Pn | Pn | 09 15 13.8 | +0.3 |
| RIGZ | Rimuhau | 1.47 | 86 | PN | Pn | 09 15 13.3 | -0.2 |
| DVHZ | Dannevirke | 1.48 | 172 | ⇑PN | Pn | 09 15 12.9 | -0.7 |
| DVHZ | Dannevirke | 1.48 | 172 | Pn | Pn | 09 15 12.9 | -0.7 |
| KHEZ | Kahui Hut | 1.53 | 252 | ⇓PN | Pn | 09 15 14.4 | +0.2 |
| KHEZ | Kahui Hut | 1.53 | 252 | Pn | Pn | 09 15 14.4 | +0.2 |
| PRHZ | Porangahau | 1.54 | 158 | ⇑PN | Pn | 09 15 13.9 | -0.4 |
| PRHZ | Porangahau | 1.54 | 158 | Pn | Pn | 09 15 13.9 | -0.4 |
| PRGZ | Paritu Road | 1.56 | 94 | PN | Pn | 09 15 14.1 | -0.3 |
| PRGZ | Paritu Road | 1.56 | 94 | Pn | Pn | 09 15 14.2 | -0.3 |
| POWZ | Post Office Ro | 1.56 | 183 | PN | Pn | 09 15 13.7 | -0.7 |
| POWZ | Post Office Ro | 1.56 | 183 | Pn | Pn | 09 15 13.7 | -0.7 |
| TKGZ | Te Karaka | 1.58 | 76 | PN | Pn | 09 15 14.7 | 0.0 |
| TKGZ | Te Karaka | 1.58 | 76 | Pn | Pn | 09 15 14.7 | 0.0 |
| MHGZ | Mahia Peninsul | 1.60 | 102 | PN | Pn | 09 15 14.8 | -0.2 |
| MHGZ | Mahia Peninsul | 1.60 | 102 | Pn | Pn | 09 15 14.8 | -0.2 |
| NWEZ | Newall Road | 1.64 | 254 | PN | Pn | 09 15 15.3 | 0.0 |
| ANWZ | Angora Road | 1.69 | 165 | PN | Pn | 09 15 15.4 | -0.5 |
| PRWZ | Pori Road | 1.72 | 178 | ⇑PN | Pn | 09 15 15.7 | -0.7 |
| PRWZ | Pori Road | 1.72 | 178 | Pn | Pn | 09 15 15.7 | -0.7 |
| TWGZ | Tauwhareparae | 1.77 | 69 | PN | Pn | 09 15 16.7 | -0.2 |
| TWGZ | Tauwhareparae | 1.77 | 69 | Pn | Pn | 09 15 16.7 | -0.2 |
| MKAZ | Moumakai | 1.81 | 341 | ⇑PN | Pn | 09 15 17.5 | 0.0 |
| MKAZ | Moumakai | 1.81 | 341 | Pn | Pn | 09 15 17.5 | 0.0 |
| HAZ | Te Kaha | 1.84 | 55 | PN | Pn | 09 15 16.4 | -1.3 |
| MRZ | Mangatainoka R | 1.84 | 187 | ⇓PN | Pn | 09 15 16.5 | -1.2 |
| MRZ | | | | AML | AML | 09 15 41.5 | |
| MRZ | | | | AML | AML | 09 15 41.5 | |
| MRZ | Mangatainoka R | 1.84 | 187 | Pn | Pn | 09 15 16.5 | -1.2 |
| BFZ | Birch Farm | 1.86 | 172 | PN | Pn | 09 15 16.8 | -1.2 |
| BFZ | | | | AML | AML | 09 15 41.9 | |
| BFZ | | | | AML | AML | 09 15 42.4 | |
| BFZ | Birch Farm | 1.86 | 172 | Pn | Pn | 09 15 16.8 | -1.2 |
| TIWZ | Tintock | 1.94 | 180 | ⇑PN | Pn | 09 15 17.8 | -1.2 |
| TIWZ | | | | AML | AML | 09 15 43.3 | |
| TIWZ | | | | AML | AML | 09 15 44.0 | |
| TIWZ | Tintock | 1.94 | 180 | Pn | Pn | 09 15 17.8 | -1.2 |
| PUZ | Puketiti | 2.01 | 68 | PN | Pn | 09 15 18.9 | -0.9 |
| PUZ | | | | AML | AML | 09 15 44.1 | |
| PUZ | | | | AML | AML | 09 15 44.3 | |
| PUZ | Puketiti | 2.01 | 68 | Pn | Pn | 09 15 18.9 | -0.9 |
| OGWZ | Otaki Gorge | 2.06 | 195 | ⇑PN | Pn | 09 15 19.1 | -1.2 |
| OGWZ | Otaki Gorge | 2.06 | 195 | Pn | Pn | 09 15 19.1 | -1.2 |
| HOWZ | Holdsworth Sta | 2.08 | 188 | ⇑PN | Pn | 09 15 19.2 | -1.6 |
| HOWZ | Holdsworth Sta | 2.08 | 188 | Pn | Pn | 09 15 19.2 | -1.6 |
| CPWZ | Castlepoint | 2.09 | 174 | PN | Pn | 09 15 20.0 | -0.7 |
| CPWZ | Castlepoint | 2.09 | 174 | Pn | Pn | 09 15 20.0 | -0.7 |
| KUZ | Kuaotunu | 2.09 | 356 | ⇑PN | Pn | 09 15 20.4 | -0.4 |
| KUZ | Kuaotunu | 2.09 | 356 | Pn | Pn | 09 15 20.4 | -0.4 |
| KIW | Kapiti Island | 2.16 | 200 | PN | Pn | 09 15 20.0 | -1.7 |
| KIW | | | | AML | AML | 09 15 46.9 | |
| KIW | | | | AML | AML | 09 15 51.9 | |
| KIW | Kapiti Island | 2.16 | 200 | Pn | Pn | 09 15 20.0 | -1.7 |
| WMGZ | Waiomatatini S | 2.23 | 64 | PN | Pn | 09 15 21.6 | -0.9 |
| WMGZ | Waiomatatini S | 2.23 | 64 | Pn | Pn | 09 15 21.6 | -0.9 |
| TMWZ | Te Maipa | 2.27 | 180 | ⇑PN | Pn | 09 15 21.4 | -1.7 |
| TMWZ | Te Maipa | 2.27 | 180 | Pn | Pn | 09 15 21.4 | -1.7 |
| MXZ | Matakaoa Point | 2.29 | 57 | PN | Pn | 09 15 22.6 | -0.6 |
| MXZ | Matakaoa Point | 2.29 | 57 | Pn | Pn | 09 15 22.6 | -0.6 |
| MTW | Mount Morrison | 2.34 | 187 | ⇑PN | Pn | 09 15 22.0 | -2.0 |
| MTW | | | | AML | AML | 09 15 50.8 | |
| MTW | | | | AML | AML | 09 15 51.1 | |
| MTW | Mount Morrison | 2.34 | 187 | Pn | Pn | 09 15 22.0 | -1.9 |
| CAW | Cannon Point | 2.36 | 195 | PN | Pn | 09 15 22.3 | -1.8 |
| CAW | | | | AML | AML | 09 15 51.6 | |
| CAW | | | | AML | AML | 09 15 53.6 | |
| CAW | Cannon Point | 2.36 | 195 | Pn | Pn | 09 15 22.3 | -1.8 |
| DUWZ | D'Urville Isla | 2.48 | 217 | PN | Pn | 09 15 23.8 | -2.0 |
| DUWZ | D'Urville Isla | 2.48 | 217 | Pn | Pn | 09 15 23.8 | -2.0 |
| TRWZ | Traveller | 2.57 | 183 | PN | Pn | 09 15 24.7 | -2.1 |
| TRWZ | | | | AML | AML | 09 15 56.2 | |
| TRWZ | | | | AML | AML | 09 15 56.5 | |
| TRWZ | Traveller | 2.57 | 183 | Pn | Pn | 09 15 24.7 | -2.1 |
| PAWZ | Paruwai Farm | 2.57 | 188 | ⇑PN | Pn | 09 15 24.7 | -2.2 |
| PAWZ | | | | AML | AML | 09 15 55.7 | |
| PAWZ | | | | AML | AML | 09 15 56.7 | |
| PAWZ | Paruwai Farm | 2.57 | 188 | Pn | Pn | 09 15 24.7 | -2.2 |
| WEL | Wellington | 2.59 | 199 | AML | AML | 09 15 56.5 | |
| WEL | | | | AML | AML | 09 15 57.6 | |
| MSWZ | Moikau Station | 2.62 | 191 | ⇑PN | Pn | 09 15 25.3 | -2.3 |
| MSWZ | | | | AML | AML | 09 15 56.8 | |
| MSWZ | | | | AML | AML | 09 15 57.2 | |
| MSWZ | Moikau Station | 2.62 | 191 | Pn | Pn | 09 15 25.3 | -2.3 |
| TCW | Tory Channel | 2.68 | 207 | PN | Pn | 09 15 26.1 | -2.1 |
| TCW | | | | AML | AML | 09 15 59.0 | |
| TCW | | | | AML | AML | 09 15 59.3 | |
| TCW | Tory Channel | 2.68 | 207 | Pn | Pn | 09 15 26.1 | -2.1 |
| BHW | Baring Head | 2.69 | 197 | ⇑PN | Pn | 09 15 26.0 | -2.3 |
| BHW | | | | AML | AML | 09 15 58.6 | |
| BHW | | | | AML | AML | 09 15 59.1 | |
| BHW | Baring Head | 2.69 | 197 | Pn | Pn | 09 15 26.0 | -2.3 |
| PLWZ | Palliser | 2.78 | 190 | ⇑PN | Pn | 09 15 27.0 | -2.6 |
| PLWZ | Palliser | 2.78 | 190 | Pn | Pn | 09 15 27.0 | -2.6 |
| TUWZ | Tuamarina | 2.99 | 209 | PN | Pn | 09 15 29.9 | -2.4 |
| TUWZ | | | | AML | AML | 09 16 05.5 | |
| TUWZ | | | | AML | AML | 09 16 05.6 | |
| TUWZ | Tuamarina | 2.99 | 209 | Pn | Pn | 09 15 29.9 | -2.4 |
| NNZ | Nelson | 3.06 | 218 | PN | Pn | 09 15 30.7 | -2.4 |
| NNZ | Nelson | 3.06 | 218 | Pn | Pn | 09 15 30.7 | -2.4 |
| BSWZ | Blackbirch Sta | 3.26 | 208 | AML | AML | 09 16 13.5 | |
| BSWZ | | | | AML | AML | 09 16 13.8 | |
| QRZ | Quartz Range | 3.27 | 231 | PN | Pn | 09 15 33.5 | -2.4 |
| QRZ | Quartz Range | 3.27 | 231 | Pn | Pn | 09 15 33.5 | -2.4 |
| THZ | Tophouse | 3.71 | 217 | PN | Pn | 09 15 39.1 | -2.7 |
| THZ | Tophouse | 3.71 | 217 | Pn | Pn | 09 15 39.1 | -2.7 |
| KHZ | Kahutara | 4.00 | 206 | PN | Pn | 09 15 42.7 | -2.8 |
| KHZ | | | | AML | AML | 09 16 28.4 | |
| KHZ | | | | AML | AML | 09 16 28.6 | |
| KHZ | Kahutara | 4.00 | 206 | Pn | Pn | 09 15 42.7 | -2.8 |
| DSZ | Denniston Nort | 4.27 | 226 | PN | Pn | 09 15 45.9 | -3.3 |
| DSZ | Denniston Nort | 4.27 | 226 | Pn | Pn | 09 15 45.9 | -3.3 |
| LTZ | Lake Taylor | 4.81 | 214 | PN | Pn | 09 15 52.4 | -4.0 |
| LTZ | Lake Taylor | 4.81 | 214 | Pn | Pn | 09 15 52.4 | -4.0 |
| OXZ | Oxford | 5.35 | 212 | PN | Pn | 09 15 59.3 | -4.3 |
| OXZ | Oxford | 5.35 | 212 | Pn | Pn | 09 15 59.3 | -4.3 |
| MQZ | McQueen's Vall | 5.45 | 206 | PN | Pn | 09 15 59.9 | -4.9 |
| MQZ | McQueen's Vall | 5.45 | 206 | Pn | Pn | 09 15 59.9 | -4.9 |

**GUC 06 09:38:17.7**±0.7, **22°.68S**×**70°.26W, h57**km±7km, **ML3.7, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB04 | IPOC Station P | 0.36 | 17 | eP | Pn | 09 38 28.3 | +0.1 |
| PB04 | | | | eS | Sn | 09 38 36.8 | +1.0 |
| PB04 | | | | AML | AML | 09 38 38.8 | |
| | comp=N,6µm,0.5s | | | | | | |
| PB06 | IPOC Station P | 0.64 | 93 | eP | Pn | 09 38 31.4 | +0.2 |
| PB06 | | | | eS | Sn | 09 38 41.9 | +0.8 |
| PB06 | | | | AML | AML | 09 38 43.2 | |
| | comp=N,6µm,0.3s | | | | | | |
| ANCH | Antofagasta | 1.01 | 188 | eP | Pn | 09 38 27.4 | -8.3 |
| ANCH | | | | eS | Sn | 09 38 41.0 | -8.0 |
| PB07 | IPOC Station P | 1.01 | 20 | eP | Pn | 09 38 35.5 | -0.6 |
| PB07 | | | | eS | Sn | 09 38 49.1 | -0.4 |
| PB07 | | | | AML | AML | 09 38 50.9 | |
| | comp=N,5µm,0.8s | | | | | | |
| LVC | Limon Verde | 1.25 | 87 | eP | Pn | 09 38 40.1 | +0.8 |
| LVC | | | | eS | Sn | 09 38 57.1 | +1.7 |

*CSEM **06** 09:43:04.1±0.1, 76°.94N×18°.44E, h5km, ML3.0, Error ellipse: s-maj=3.7km s-min=2.4km az=40.0*
*NAO **06** 09:43:04.1±1.4, 76°.84N×18°.26E, h10km±11km, ML4.3*
*ISCJB **06** 09:43:05.0±0.8, 76°.9N±0°.1×18°.3E±0°.2, h16km, Error ellipse: s-maj=20.4km s-min=5.8km az=11.4*
*BER **06** 09:43:07.9±2.9, 76°.94N×18°.13E, h22km±17km, MD2.2, ML3.0, ML4.3(NAO)*
**ISC 06 09:43:05.5**±0.8, **76°.85N**±0°.05×**18°.13E**±0°.05, **h16**km, **n19, σ0s.60**/27, **Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HSP | Hornsund | 0.61 | 287 | Pg | Pg | 09 43 17.1 | -0.4 |
| HSP | | | | Lg | Lg | 09 43 25.4 | |
| HSP | Hornsund | 0.61 | 287 | Pg | Pg | 09 43 17.1 | -0.4 |
| HSPB | Hornsund (broa | 0.61 | 286 | Pg | Pg | 09 43 17.1 | -0.4 |
| HSPB | | | | Lg | Lg | 09 43 25.4 | |
| HSPB | Hornsund (broa | 0.61 | 286 | Pg | Pg | 09 43 17.1 | -0.4 |
| | SNR=104 | | | | | | |
| HSPB | Hornsund (broa | 0.61 | 286 | ePn | Pn | 09 43 19.2 | -0.3 |
| HSPB | | | | eSg | Sg | 09 43 25.2 | -0.4 |
| HSPB | | | | Lg | Lg | 09 43 25.4 | |
| | SNR=92 | | | | | | |
| SPA0 | Spitsbergen Ar | 1.39 | 345 | Pn | Pn | 09 43 29.6 | -0.6 |
| | baz=150,slow=16 | | | | | | |
| SPA0 | | | | Lg | Lg | 09 43 47.3 | |
| | baz=158,slow=22 | | | | | | |
| SPA0 | Spitsbergen Ar | 1.39 | 345 | Pn | Pn | 09 43 29.6 | -0.6 |
| | baz=150,slow=16 | | | | | | |
| SPA0 | | | | Lg | Lg | 09 43 47.3 | |
| | baz=158,slow=22 | | | | | | |
| SPA0 | Spitsbergen Ar | 1.39 | 345 | Pn | Pn | 09 43 29.6 | -0.6 |
| | SNR=55 | | | | | | |
| SPA0 | | | | Lg | Lg | 09 43 47.3 | |
| | SNR=90 | | | | | | |
| HOPEN | Hopen | 1.63 | 99 | Pn | Pn | 09 43 33.1 | -0.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HOPEN | | | | Sn | Sn | 09 43 53.3 | -0.7 |
| HOPEN | | | | Lg | Lg | 09 43 55.8 | |
| HOPEN | Hopen | 1.63 | 99 | eP | Pn | 09 43 33.3 | -0.1 |
| HOPEN | | | | eS | Sn | 09 43 53.6 | -0.4 |
| HOPEN | | | | IAML | | 09 43 58.4 | |
| | comp=Z,257nm,0.6s | | | | | | |
| HOPEN | Hopen | 1.63 | 99 | Pn | Pn | 09 43 33.1 | -0.3 |
| HOPEN | | | | Sn | Sn | 09 43 53.3 | -0.7 |
| HOPEN | | | | eS | Sn | 09 43 53.6 | -0.4 |
| | SNR=55 | | | | | | |
| HOPEN | | | | Lg | Lg | 09 43 55.8 | |
| BJO | Bjornoya | 2.37 | 173 | ePg | Pg | 09 43 50.9 | +0.1 |
| BJO | | | | eSg | Sg | 09 44 21.4 | -0.1 |
| BJO | | | | IAML | | 09 44 26.2 | |
| | comp=Z,95nm,0.6s | | | | | | |
| BJO | Bjornoya | 2.37 | 173 | ePg | Pg | 09 43 50.9 | +0.1 |
| | SNR=92 | | | | | | |
| BJO | | | | eSg | Sg | 09 44 21.4 | -0.1 |
| | SNR=92 | | | | | | |
| KBS | Kingsbay | 2.46 | 331 | Pn | Pn | 09 43 44.3 | -0.6 |
| KBS | | | | Pg | Pb | 09 43 50.1 | +0.8 |
| KBS | | | | Lg | Lg | 09 44 20.7 | |
| KBS | Kingsbay | 2.46 | 331 | eP | Pn | 09 43 44.2 | -0.7 |
| KBS | | | | eSg | Sb | 09 44 20.5 | +1.2 |
| KBS | | | | IAML | | 09 44 29.2 | |
| | comp=Z,299nm,0.4s | | | | | | |
| KBS | Kingsbay | 2.46 | 331 | Pn | Pn | 09 43 44.3 | -0.6 |
| KBS | Kingsbay | 2.46 | 331 | Pg | Pb | 09 43 50.1 | +0.8 |
| KBS | | | | eSg | Sb | 09 44 20.5 | +1.2 |
| | SNR=92 | | | | | | |
| KBS | | | | Lg | Lg | 09 44 20.7 | |
| ARA0 | ARCESS Array S | 7.64 | 160 | Sn | Sn | 09 46 15.3 | -6.9 |
| ARA0 | ARCESS Array S | 7.64 | 160 | S | Sn | 09 46 15.3 | -6.9 |

**IDC 06 09:49:15.2±1.6, 17°.56S×176°.71W, h0km, mb3.9/7, mb1 4.2/8, mb1mx4.0/25, mbtmp3.9/8, ML3.9/1, MS3.8/12, Ms1 3.8/12, ms1mx3.7/23, Error ellipse: s-maj=65.9km s-min=21.4km az=154.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 5.98 | 53 | Pn | Pn | 09 50 43.4 | -1.7 |
| | 2.8nm,0.3s,baz=71,slow=6.2,SNR=6.3 | | | | | | |
| AFI | | | | LR | LR | 09 52 45.9 | |
| | comp=Z,865nm,21.1s,baz=249,slow=35 | | | | | | |
| AFI | | | | T | T | 09 56 42.1 | |
| | 7.5nm,0.3s,baz=350,slow=22,SNR=4.7 | | | | | | |
| RAR | Rarotonga | 16.39 | 106 | LR | LR | 09 58 19.1 | |
| | comp=Z,214nm,20.0s,baz=291,slow=33 | | | | | | |
| DZM | Mont Dzumac | 16.47 | 251 | eLR | LR | 09 56 58.4 | |
| | 1μm,28.8s | | | | | | |
| DZM | Mont Dzumac | 16.47 | 251 | LR | LR | 09 58 16.3 | |
| | comp=Z,522nm,21.8s,baz=316,slow=33 | | | | | | |
| PAE | Paea | 25.85 | 94 | eT | T | 10 22 12.0 | |
| | 1.4nm,0.3s | | | | | | |
| PPT2 | Papeete2 | 25.86 | 94 | eS | S | 09 59 20.9 | +1.0 |
| | 83nm,26.0s | | | | | | |
| PPT2 | | | | eLR | LR | 10 01 28.4 | |
| | 633nm,26.5s,baz=269 | | | | | | |
| PPT | Papeete | 25.86 | 94 | LR | LR | 10 02 44.8 | |
| | comp=Z,138nm,21.5s,baz=186,slow=31 | | | | | | |
| TBI | Tubuai | 26.15 | 107 | eLQ | LQ | 10 00 27.6 | |
| | 375nm,31.5s | | | | | | |
| TBI | | | | eLR | LR | 10 01 45.7 | |
| | 676nm,29.0s,baz=283 | | | | | | |
| VAH | Vaihoa | 27.98 | 90 | eT | T | 10 24 44.7 | |
| | 6.1nm,0.2s | | | | | | |
| RKT | Rikitea | 39.43 | 105 | eLR | LR | 10 07 50.5 | |
| | 464nm,27.2s,baz=274 | | | | | | |
| RKT | Rikitea | 39.43 | 105 | eT | T | 10 39 19.1 | |
| | 2.4nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 46.29 | 259 | P | P | 09 57 43.4 | +0.4 |
| | 0.7nm,1.1s,baz=88,slow=7.2,SNR=4.2 | | | | | | |
| WRA | | | | LR | LR | 10 16 17.5 | |
| | comp=Z,75nm,20.4s,baz=110,slow=35 | | | | | | |
| ASAR | Alice Springs | 46.44 | 254 | P | P | 09 57 43.3 | -1.0 |
| | 3.3nm,0.9s,baz=85,slow=8.4,SNR=19 | | | | | | |
| ASAR | | | | LR | LR | 10 16 11.4 | |
| | comp=Z,309nm,18.5s,baz=94,slow=35 | | | | | | |
| FITZ | Fitzroy Crossi | 54.68 | 260 | LR | LR | 10 20 38.7 | |
| | comp=Z,207nm,19.4s,slow=34 | | | | | | |
| RPN | Rapa Nui | 62.42 | 112 | LR | LR | 10 18 45.1 | |
| | comp=Z,58nm,21.6s,baz=261,slow=28 | | | | | | |
| PETK | Petropavlovsk- | 73.77 | 344 | LR | LR | 10 28 29.9 | |
| | comp=Z,36nm,19.6s,baz=137,slow=32 | | | | | | |
| KSRS | Korea Array | 75.53 | 317 | P | P | 10 01 02.1 | +0.5 |
| | 2.5nm,1.0s,baz=132,slow=6.9,SNR=6.9 | | | | | | |
| USRK | Ussuriysk Ar. | 77.25 | 325 | P | P | 10 01 12.2 | +0.9 |
| | 2.0nm,0.9s,baz=96,slow=5.7,SNR=4.7 | | | | | | |
| NVAR | Mina Array Bea | 78.06 | 43 | P | P | 10 01 16.9 | +0.7 |
| | 0.2nm,0.3s,baz=248,slow=8.7,SNR=3.0 | | | | | | |
| TXAR | Lajitas Array | 84.44 | 57 | P | P | 10 01 51.3 | +1.0 |
| | 0.3nm,0.7s,baz=48,slow=1.9,SNR=4.4 | | | | | | |
| TXAR | | | | LR | LR | 10 33 48.2 | |
| | comp=Z,27nm,18.4s,baz=0.0,slow=32 | | | | | | |
| MAW | Mawson | 84.73 | 199 | LR | LR | 10 37 58.1 | |
| | comp=Z,70nm,19.2s,baz=61,slow=34 | | | | | | |
| ILAR | Eielson Array | 85.19 | 12 | P | P | 10 01 51.4 | -1.7 |
| | 1.9nm,1.1s,baz=239,slow=4.5,SNR=5.8 | | | | | | |
| ILAR | | | | LR | LR | 10 31 22.0 | |
| | comp=Z,69nm,20.5s,baz=200,slow=30 | | | | | | |
| BRTR | Keskin Array B | 145.67 | 316 | PKPbc | PKPdf | 10 08 55.0 | -1.1 |
| | 4.7nm,0.9s,baz=98,slow=2.6,SNR=13 | | | | | | |

*IDC **06** 10:11:42.7±0.7, 24°.51S×176°.95W, h0km, mb4.3/11, mb1 4.5/13, mb1mx4.2/34, mbtmp4.3/13, ML4.3/2, MS3.7/4, Ms1 3.7/4, ms1mx3.2/30, Error ellipse: s-maj=24.3km s-min=17.5km az=101.0*

*NEIC **06** 10:11:58.9±2.5, 24°.61S×177°.16W, h134km±21km, mb4.6/6, Error ellipse: s-maj=18.7km s-min=13.3km az=92.0*

*ISCJB **06** 10:11:59.8±0.6, 24°.64S±0°.08×177°.3W±0°.1, h150km, mb4.2/16, Error ellipse: s-maj=16.2km s-min=10.4km az=161.2*

**ISC 06 10:12:01.2±0.7, 24°.63S±0°.09×177°.3W±0°.1, h150km, n33, σ1s.05/26, mb4.3/16, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 8.12 | 327 | ePn | Pn | 10 13 55.2 | -1.1 |
| | 59nm,0.8s | | | | | | |
| AFI | Afiamalu | 11.87 | 27 | Pn | Pn | 10 14 31.8 | -14 |
| | 3.5nm,0.3s,baz=220,slow=3.2,SNR=7.6 | | | | | | |
| AFI | | | | Sn | Sn | 10 16 32.0 | -25 |
| | 2.2nm,0.3s,baz=77,slow=22,SNR=3.4 | | | | | | |
| HAZ | Te Kaha | 13.74 | 197 | ePN | Pn | 10 15 02.3 | -7.4 |
| HAZ | | | | SN | Sn | 10 17 27.9 | -14 |
| MWZ | Matawai | 14.35 | 197 | ePN | Pn | 10 15 16.1 | -1.3 |
| URZ | Urewera | 14.39 | 198 | Pn | Pn | 10 15 12.1 | -5.8 |
| | 0.8nm,0.3s,baz=291,slow=1.7,SNR=8.0 | | | | | | |
| URZ | | | | Sn | Sn | 10 17 45.6 | -12 |
| | 1.2nm,0.3s,baz=170,slow=20,SNR=6.0 | | | | | | |
| URZ | Urewera | 14.39 | 198 | ePN | Pn | 10 15 11.5 | -6.4 |
| URZ | Urewera | 14.39 | 198 | Pn | Pn | 10 15 12.1 | -5.8 |
| | 6.8nm,0.5s | | | | | | |
| URZ | | | | eSn | Sn | 10 17 45.1 | -12 |
| URZ | | | | Sn | Sn | 10 17 45.6 | -12 |
| RPZ | Rata Peaks | 21.30 | 204 | P | P | 10 16 33.5 | -2.4 |
| | 6.8nm,0.5s,baz=44,slow=3.5,SNR=6.6 | | | | | | |
| RPZ | | | | LR | LR | 10 23 50.4 | |
| | comp=Z,155nm,19.9s,baz=62,slow=34 | | | | | | |
| HNR | Honiara | 26.42 | 301 | LR | LR | 10 25 57.8 | |
| | comp=Z,69nm,20.1s,baz=246,slow=32 | | | | | | |
| HNR | Honiara | 26.42 | 301 | eP | P | 10 17 22.3 | -1.8 |
| | 150nm,1.3s | | | | | | |
| EIDS | Eidsvold | 28.63 | 262 | P | P | 10 17 44.4 | +0.7 |
| | 45nm,2.1s | | | | | | |
| CTA | Charters Tower | 33.94 | 270 | P | P | 10 18 32.0 | +1.7 |
| | 7.9nm,0.4s,baz=92,slow=10,SNR=26 | | | | | | |
| CTAO | Charters Tower | 33.94 | 270 | eP | P | 10 18 31.6 | +1.3 |
| | 7.8nm,0.5s | | | | | | |
| PMG | Port Moresby | 37.06 | 288 | eP | P | 10 18 57.4 | +0.5 |
| | 4.7nm,0.5s | | | | | | |
| ASAR | Alice Springs | 44.35 | 261 | P | P | 10 19 57.6 | +0.9 |
| | 1.5nm,0.5s,baz=91,slow=7.0,SNR=25 | | | | | | |
| ASAR | | | | LR | LR | 10 39 05.2 | |
| | comp=Z,121nm,18.3s,baz=336,slow=37 | | | | | | |
| WRAB | Tennant Creek | 44.81 | 266 | eP | P | 10 20 00.3 | 0.0 |
| | 3.4nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 44.81 | 266 | P | P | 10 20 00.8 | +0.4 |
| | 4.6nm,0.5s,baz=104,slow=8.0,SNR=58 | | | | | | |
| WRA | | | | ScP | ScP | 10 25 33.2 | +15 |
| | 0.9nm,0.8s,baz=100,slow=3.8,SNR=5.6 | | | | | | |
| VNDA | Vanda | 53.87 | 186 | P | P | 10 21 09.6 | +1.3 |
| | 2.0nm,0.7s,baz=14,slow=7.3,SNR=18 | | | | | | |
| CASY | Casey | 60.54 | 206 | eP | P | 10 21 54.8 | -0.4 |
| | 4.1nm,0.4s | | | | | | |
| QSPA | South Pole Qui | 65.46 | 180 | P | P | 10 22 28.2 | +0.4 |
| | 3.1nm,0.8s,baz=24,slow=1.2,SNR=19 | | | | | | |
| MAW | Mawson | 77.91 | 200 | P | P | 10 23 43.3 | +1.3 |
| | 5.6nm,0.6s,baz=134,slow=7.0,SNR=31 | | | | | | |
| PETK | Petropavlovsk- | 80.41 | 345 | P | P | 10 23 55.8 | +0.1 |
| | 2.0nm,0.8s,baz=141,slow=9.6,SNR=3.2 | | | | | | |
| NVAR | Mina Array Bea | 83.59 | 43 | P | P | 10 24 12.3 | -0.6 |
| | 0.5nm,0.6s,baz=224,slow=8.1,SNR=5.2 | | | | | | |
| SNAA | Sanae | 83.88 | 178 | P | P | 10 24 13.1 | -0.6 |
| SNAA | Sanae | 83.88 | 178 | P | P | 10 24 13.1 | -0.6 |
| | 1.5nm,0.8s,baz=180,slow=2.9,SNR=14 | | | | | | |
| VNA3 | Neumayer Olymp | 84.00 | 176 | P | P | 10 24 13.7 | -0.5 |
| VNA2 | Neumayer--Watz | 84.44 | 177 | P | P | 10 24 16.6 | +0.1 |
| | baz=179,slow=4.3 | | | | | | |
| VNA1 | Neumayer--Stat | 84.67 | 176 | P | P | 10 24 17.7 | +0.2 |
| ILAR | Eielson Array | 92.19 | 13 | P | P | 10 24 53.0 | -0.2 |
| | 0.4nm,0.9s,baz=222,slow=5.5,SNR=4.2 | | | | | | |
| ILAR | | | | LR | LR | 11 02 06.6 | |
| | comp=Z,46nm,18.1s,baz=110,slow=33 | | | | | | |
| FINES | FINESS Array B | 139.90 | 343 | PKhKP | PKPpre | 10 31 08.2 | |
| | 1.2nm,0.7s,baz=321,slow=15,SNR=3.3 | | | | | | |
| AKASG | Malin Array Be | 146.90 | 329 | PKPbc | PKPbc | 10 31 25.0 | -0.6 |
| | 3.3nm,0.5s,baz=42,slow=4.2,SNR=15 | | | | | | |
| BRTR | Keskin Array B | 149.98 | 308 | PKPbc | PKPbc | 10 31 34.8 | +0.6 |
| | 1.1nm,0.7s,baz=134,slow=3.6,SNR=3.9 | | | | | | |
| CLL | Collm | 152.21 | 346 | ePKPbc | PKPbc | 10 31 40.0 | +1.3 |

*ISCJB **06** 10:24:31.6±0.6, 4°.94S±0°.04×133°.67E±0°.07, h25km, mb4.2/2, MS3.7/2, Error ellipse: s-maj=10.2km s-min=5.0km az=159.1*

*NEIC **06** 10:24:34.8±0.9, 5°.02S×133°.47E, h35km, mb4.7/1, Error ellipse: s-maj=19.9km s-min=10.1km az=67.0*

*DJA **06** 10:24:34.0±0.7, 5°S±4°×13°4E±°, h10km, M4.4/8, mb4.7/6, mB5.1/3, MLv4.3/8, Mw(mB)4.4/3*

*IDC **06** 10:24:34.0±3.0, 5°.13S×133°.22E, h0km, mb3.8/1, mb1 4.4/4, mb1mx3.7/28, mbtmp4.1/4, ML4.1/3, MS3.7/2, Ms1 3.7/2, ms1mx3.0/26, Error ellipse: s-maj=125.2km s-min=28.8km az=81.0*

**ISC 06 10:24:32.6±0.9, 5°.02S±0°.06×133°.49E±0°.07, h25km, n19, σ2s.34/20, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.43 | 329 | P | Pn | 10 25 11.8 | +1.1 |
| FAKI | | | | S | Sn | 10 25 38.4 | -1.3 |
| FAKI | Fak Fak | 2.43 | 329 | ePn | Pn | 10 25 11.9 | +1.2 |
| FAKI | | | | eSn | Sn | 10 25 39.2 | -0.4 |
| RKPI | Ransiki, Papua | 3.55 | 11 | S | Sn | 10 26 05.1 | -2.3 |
| BNDI | Bandanaira | 3.61 | 278 | P | Pb | 10 25 33.2 | -2.6 |
| BNDI | | | | S | Sb | 10 26 18.4 | -0.8 |
| SWI | Sorong | 4.69 | 332 | P | Pn | 10 25 43.1 | +1.2 |
| SWI | | | | S | Sn | 10 26 35.0 | -0.6 |
| MSAI | Masohi | 4.84 | 290 | S | Sn | 10 26 42.9 | +3.5 |
| AAI | Ambon | 5.45 | 284 | P | Pn | 10 25 57.7 | +5.4 |
| | 73nm,0.6s,0.4nm | | | | | | |
| NLAI | Namlea | 6.62 | 285 | P | Pn | 10 26 15.7 | +7.3 |
| | 29nm,0.6s,966nm0.2nm | | | | | | |
| LBMI | Labuha | 7.40 | 306 | P | Pn | 10 26 23.0 | +3.9 |
| | 24nm,1.0s,565nm0.1nm | | | | | | |
| APSI | Ampana | 12.51 | 289 | P | Pn | 10 27 34.7 | +5.5 |
| COEN | Coen | 13.04 | 134 | ePn | Pn | 10 27 37.8 | +1.4 |
| COEN | | | | eSn | Sn | 10 29 51.3 | -9.4 |
| WRAB | Tennant Creek | 14.85 | 177 | ePn | Pn | 10 28 02.3 | +1.1 |
| | 4.9nm,0.6s | | | | | | |
| WRAB | | | | eSn | Sn | 10 30 41.7 | -3.3 |
| WRA | Warramunga Arr | 14.86 | 177 | Pn | Pn | 10 28 02.8 | +1.5 |
| | 0.7nm,0.3s,baz=356,slow=13,SNR=27 | | | | | | |
| WRA | | | | Sn | Sn | 10 30 41.0 | -4.2 |
| | 0.5nm,0.3s,baz=355,slow=24,SNR=5.7 | | | | | | |
| FITZ | Fitzroy Crossi | 15.10 | 210 | Pn | Pn | 10 28 05.5 | +1.0 |
| | 0.9nm,0.3s,baz=24,slow=9.5,SNR=21 | | | | | | |
| FITZ | | | | Sn | Sn | 10 30 49.3 | -1.7 |
| | 1.1nm,0.3s,baz=233,slow=14,SNR=8.9 | | | | | | |
| ASAR | Alice Springs | 18.55 | 179 | P | Pn | 10 28 51.8 | +3.8 |
| | 0.9nm,0.3s,baz=1.6,slow=12,SNR=43 | | | | | | |
| ASAR | | | | S | Sn | 10 32 11.7 | -3.0 |
| | 0.3nm,0.3s,baz=2.8,slow=28,SNR=5.1 | | | | | | |
| BBOO | Buckleboo | 27.75 | 175 | eP | P | 10 30 20.1 | +0.7 |
| | 32nm,1.6s | | | | | | |
| MJAR | Matsushiro Arr | 41.58 | 6 | LR | LR | 10 47 32.9 | |
| | comp=Z,64nm,19.5s,baz=90,slow=33 | | | | | | |
| MKAR | Makanchi Array | 68.55 | 325 | P | P | 10 35 38.2 | +5.0 |
| | 0.5nm,0.5s,baz=124,slow=8.1,SNR=3.2 | | | | | | |
| VNDA | Vanda | 74.01 | 174 | LR | LR | 11 09 17.3 | |
| | comp=Z,53nm,18.1s,baz=338,slow=36 | | | | | | |

*DDA **06** 10:27:25.5, 38°.53N×31°.27E, h10km, Md2.8*

*ISK **06** 10:27:25.2, 38°.58N×31°.24E, h14km, MD2.8*

*CSEM **06** 10:27:25.6±0.2, 38°.52N×31°.28E, h2km, MD2.8, Error ellipse: s-maj=4.3km s-min=3.2km az=164.0*

**ISC 06 10:27:26.1±1.1, 38°.55N±0°.02×31°.26E±0°.02, h5km±12km, n22, σ0s.37/38, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BOLV | Bolvadin | 0.29 | 305 | i P | Pg | 10 27 31.5 | -0.3 |
| BOLV | | | | i S | Sg | 10 27 35.7 | 0.0 |
| BOLV | Bolvadin | 0.29 | 305 | P | Pg | 10 27 31.5 | -0.3 |
| BOLV | | | | S | Sg | 10 27 35.7 | 0.0 |
| SHUT | Suhut-Afyon | 0.55 | 270 | ePG | Pg | 10 27 36.4 | -0.3 |
| SHUT | | | | eSG | Sg | 10 27 44.5 | +0.6 |
| SHUT | Suhut-Afyon | 0.55 | 270 | ePg | Pg | 10 27 36.4 | -0.3 |
| SHUT | | | | eSg | Sg | 10 27 44.5 | +0.6 |
| KIZT | Kizilcal | 0.59 | 56 | ePG | Pg | 10 27 37.6 | +0.2 |
| KIZT | | | | eSG | Sg | 10 27 45.7 | +0.7 |
| KIZT | Kizilcal | 0.59 | 56 | ePg | Pg | 10 27 37.6 | +0.2 |
| KIZT | | | | eSg | Sg | 10 27 45.7 | +0.7 |
| BAGO | Egridir - ISPA | 0.67 | 213 | P | Pg | 10 27 39.2 | +0.2 |
| BAGO | | | | S | Sg | 10 27 47.9 | +0.2 |
| KDHN | Kadinhani | 0.68 | 92 | i P | Pg | 10 27 38.8 | -0.2 |
| KDHN | | | | i S | Sg | 10 27 47.7 | -0.1 |
| KDHN | Kadinhani | 0.68 | 92 | P | Pg | 10 27 38.9 | -0.2 |
| KDHN | | | | S | Sg | 10 27 47.7 | -0.1 |
| SVRH | Sivrihisar-ESK | 0.92 | 13 | ePG | Pg | 10 27 42.8 | -0.9 |
| SVRH | | | | eSG | Sg | 10 27 55.7 | +0.1 |
| SVRH | Sivrihisar-ESK | 0.92 | 13 | ePg | Pg | 10 27 42.8 | -0.9 |
| SVRH | | | | eSg | Sg | 10 27 55.7 | +0.1 |
| ISP | Isparta | 0.93 | 219 | ePG | Pg | 10 27 43.6 | -0.3 |
| ISP | Isparta | 0.93 | 219 | ePg | Pg | 10 27 43.6 | -0.3 |
| KONT | Konya--Tatoy | 1.06 | 125 | ePN | Pg | 10 27 46.3 | -0.1 |
| KONT | Konya--Tatoy | 1.06 | 125 | ePn | Pg | 10 27 46.3 | -0.1 |
| SUTC | Sutluce-Ispart | 1.09 | 191 | ePN | Pb | 10 27 47.2 | -0.3 |
| SUTC | Sutluce-Ispart | 1.09 | 191 | ePn | Pb | 10 27 47.2 | -0.3 |
| AUMIH | MIHALICIK | 1.32 | 8 | P | Pn | 10 27 51.4 | 0.0 |
| AUMIH | | | | S | Sn | 10 28 09.7 | +0.2 |
| KHAL | Karahalli | 1.40 | 263 | i P | Pg | 10 27 53.0 | +0.2 |
| KHAL | | | | i S | Sg | 10 28 11.1 | +0.1 |
| KHAL | Karahalli | 1.40 | 263 | P | Pg | 10 27 53.0 | +0.2 |
| KHAL | | | | S | Sg | 10 28 11.1 | +0.1 |
| BORA | Eskisehir | 1.47 | 335 | i P | Pb | 10 27 54.0 | +0.1 |
| BORA | | | | i S | Sg | 10 28 13.6 | +0.5 |
| BORA | Eskisehir | 1.47 | 335 | P | Pb | 10 27 54.0 | +0.1 |
| BORA | | | | S | Sg | 10 28 13.6 | +0.5 |

**IDC 06 10:38:04.3±543.0, 48°.35N×44°.71E, h0km, Error ellipse: s-maj=194.6km s-min=160.0km az=35.0, Ukraine - Moldova - Southwestern Russia region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I31KZ | AKTYUBINSK INF | 8.94 | 72 | i | | 11 30 40.0 | |
| | baz=263,slow=320,SNR=8.1 | | | | | | |
| I43RU | DUBNA INFRASON | 9.54 | 334 | i | | 11 37 00.0 | |
| | baz=148,slow=320,SNR=1.6 | | | | | | |
| I46RU | ZALESOVO INFRA | 25.51 | 62 | i | | 13 16 10.0 | |
| | baz=270,slow=322,SNR=3.3 | | | | | | |

*ISCJB **06** 10:44:38.4±0.8, 43°.13N±0°.03×126°.51W±0°.07, h14km, mb3.8/5, MS3.1/1, Error ellipse: s-maj=7.9km s-min=3.6km az=170.9*

*IDC **06** 10:44:39.9±1.9, 43°.26N×126°.26W, h0km, mb3.6/3, mb1 3.9/7, mb1mx3.6/52, mbtmp3.7/7, ML3.8/4, MS2.9/2, Ms1 2.9/2, ms1mx2.7/31, Error ellipse: s-maj=30.3km s-min=13.6km az=61.0*

*NEIC **06** 10:44:40.1±1.2, 43°.09N×126°.43W, h10km, mb4.0/5, Error ellipse: s-maj=15.0km s-min=6.0km az=80.0*

**ISC 06 10:44:41.8±1.3, 43°.15N±0°.05×126°.34W±0°.10, h14km, n88, σ1s.20/93, mb4.0/5, 22C-2D, Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KEBM | Edson Butte | 1.50 | 100 | ⇑P | Pn | 10 45 06.0 | -2.3 |
| TAKO | Tahkenitch | 1.75 | 69 | ⇑P | Pn | 10 45 10.1 | -1.6 |
| KBO | Bosley Butte | 1.82 | 120 | ePn | Pn | 10 45 10.0 | -2.9 |
| RNO | Roman Nose | 2.04 | 67 | ⇑P | Pn | 10 45 14.6 | -1.1 |
| UMPQ | Umpqua Communi | 2.21 | 85 | ⇑P | Pn | 10 45 16.4 | -1.6 |
| I03D | Drain, OR | 2.25 | 75 | P | Pn | 10 45 17.1 | -1.5 |
| | baz=2.3,SNR=958 | | | | | | |
| I03D | | | | S | Sn | 10 45 46.4 | +0.3 |
| | baz=2.3 | | | | | | |
| KSXB | Camp Six Broad | 2.25 | 125 | ⇑P | Pn | 10 45 16.0 | -2.8 |
| L02D | Cave Junction, | 2.25 | 115 | P | Pn | 10 45 16.7 | -1.9 |
| | baz=2.3,SNR=342 | | | | | | |
| L02D | | | | S | Sn | 10 45 46.5 | +0.3 |
| | baz=2.3 | | | | | | |
| DBO | Dodson Butte | 2.27 | 90 | ⇑P | Pn | 10 45 17.6 | -1.4 |
| HSO | Harness Mounta | 2.40 | 80 | ⇑P | Pn | 10 45 19.6 | -1.2 |
| MPOR | Mary's Peak | 2.43 | 55 | ⇑P | Pn | 10 45 19.8 | -1.4 |
| KTRM | Thompson Ridge | 2.52 | 119 | P | Pn | 10 45 20.1 | -2.4 |
| COR | Corvallis | 2.62 | 56 | ⇑P | Pn | 10 45 23.0 | -0.8 |
| I04A | Tendick Farm, | 2.93 | 76 | P | Pn | 10 45 27.5 | -0.6 |
| | baz=3.0,SNR=74 | | | | | | |
| I04A | | | | S | Sn | 10 46 04.3 | +1.2 |
| | baz=3.0 | | | | | | |
| KHMM | Horse Mountain | 2.99 | 139 | ePn | Pn | 10 45 25.5 | -3.5 |
| G03D | McMinnville, O | 3.02 | 46 | P | Pn | 10 45 28.5 | -0.8 |
| | baz=3.1,SNR=7.2 | | | | | | |
| G03D | | | | S | Sn | 10 46 05.9 | +0.6 |
| | baz=3.1 | | | | | | |
| YBH | Yreka Blue Hor | 3.04 | 117 | Pn | Pn | 10 45 28.8 | -0.8 |
| | 8.4nm,0.3s,baz=316,slow=13,SNR=270 | | | | | | |
| YBH | | | | Sn | Sn | 10 46 07.1 | +1.3 |
| | 2.8nm,0.3s,baz=138,slow=6.3,SNR=5.9 | | | | | | |
| YBH | Yreka Blue Hor | 3.04 | 117 | Pn | Pn | 10 45 28.8 | -0.8 |
| YBH | | | | Sn | Sn | 10 46 07.1 | +1.3 |
| YBH | | | | eSn | Sn | 10 46 07.1 | +1.3 |
| IRO | Indian Ridge | 3.09 | 73 | ⇑P | Pn | 10 45 30.1 | -0.2 |
| J04D | Umpqua Nationa | 3.10 | 87 | P | Pn | 10 45 30.8 | +0.3 |
| | baz=3.2,SNR=101 | | | | | | |
| M02C | Callahan | 3.13 | 123 | P | Pn | 10 45 29.2 | -1.6 |
| | baz=3.1,SNR=46 | | | | | | |
| M02C | | | | S | Sn | 10 46 07.7 | -0.3 |
| | baz=3.1 | | | | | | |
| BUOR | Burton Butte | 3.14 | 105 | ⇑P | Pn | 10 45 31.1 | +0.1 |
| VSP | Spence Mountai | 3.33 | 103 | P | Pn | 10 45 34.0 | +0.3 |
| H04A | Detroit Lake | 3.37 | 62 | ⇑P | Pn | 10 45 33.8 | -0.2 |
| HUOR | Husband | 3.40 | 72 | ⇑P | Pn | 10 45 34.8 | +0.1 |
| WIFE | Three Sisters- | 3.41 | 73 | ⇑P | Pn | 10 45 34.8 | 0.0 |
| K04D | Chiloquin, OR | 3.41 | 97 | P | Pn | 10 45 33.9 | -0.8 |
| | baz=3.5,SNR=10 | | | | | | |
| G04A | Mulino | 3.46 | 52 | ⇑P | Pn | 10 45 35.2 | 0.0 |
| N02D | Trinity Center | 3.47 | 128 | P | Pn | 10 45 33.4 | -2.1 |
| | baz=3.5,SNR=20 | | | | | | |
| N02D | | | | S | Sn | 10 46 16.9 | +0.4 |
| | baz=3.5 | | | | | | |
| M04C | Macdoel | 3.60 | 111 | P | Pn | 10 45 36.9 | -0.4 |
| | baz=3.6,SNR=23 | | | | | | |
| BPO | Bald Peter | 3.68 | 64 | ⇑P | Pn | 10 45 38.8 | +0.3 |
| J05D | Fort Rock, OR | 3.74 | 86 | P | Pn | 10 45 38.7 | -0.5 |
| | baz=3.8,SNR=153 | | | | | | |
| BEND | Bend | 3.76 | 74 | ⇑P | Pn | 10 45 39.1 | -0.3 |
| F04D | Rainier, OR | 3.77 | 38 | P | Pn | 10 45 39.3 | -0.2 |
| | baz=3.9,SNR=10 | | | | | | |
| F04D | | | | S | Sn | 10 46 25.3 | +1.6 |
| | baz=3.9 | | | | | | |
| I05D | Terrebonne, OR | 3.81 | 70 | P | Pn | 10 45 40.0 | -0.2 |
| | baz=3.9,SNR=202 | | | | | | |
| TDH | Tom, Dick, Har | 3.91 | 55 | ⇓P | Pn | 10 45 41.8 | +0.3 |
| F04A | Amboy | 3.95 | 44 | ⇑P | Pn | 10 45 41.9 | -0.1 |
| LVP | Lakeview Peak | 4.05 | 43 | ⇑P | Pn | 10 45 43.4 | 0.0 |
| MTMW | Mount Mitchell | 4.12 | 44 | ⇑P | Pn | 10 45 44.1 | -0.3 |
| FL2 | Flat Top 2 | 4.17 | 42 | ⇓P | Pn | 10 45 45.4 | +0.3 |
| G05D | Wamic, OR | 4.17 | 58 | P | Pn | 10 45 45.2 | +0.2 |
| | baz=4.2,SNR=56 | | | | | | |
| SHW | Mount Saint He | 4.22 | 43 | ⇑P | Pn | 10 45 46.1 | +0.3 |
| STD | Studebaker Rid | 4.26 | 42 | ⇑P | Pn | 10 45 46.4 | +0.1 |
| O03D | Paynes Creek | 4.44 | 129 | P | Pn | 10 45 47.3 | -1.4 |
| | baz=4.4 | | | | | | |
| MOD | Modoc | 4.63 | 104 | ePn | Pn | 10 45 50.8 | -0.8 |
| LON | Longmire | 4.83 | 40 | ePn | Pn | 10 45 54.2 | +0.2 |
| LON | | | | eSn | Sn | 10 46 51.3 | +1.5 |
| WVOR | Wild Horse Val | 5.71 | 95 | ePn | Pn | 10 46 04.8 | -1.6 |
| | 4.5nm,0.4s | | | | | | |
| HAWA | Hanford | 5.83 | 54 | ePn | Pn | 10 46 07.7 | -0.1 |
| | 13nm,0.6s | | | | | | |
| PGC | Sidney | 5.86 | 19 | ePn | Pn | 10 46 06.5 | -1.6 |
| | 14nm,0.8s | | | | | | |
| B05A | Bryant | 5.91 | 29 | P | Pn | 10 46 08.2 | -0.7 |
| | baz=6.0 | | | | | | |
| B05A | | | | S | Sn | 10 47 16.3 | -0.1 |
| | baz=6.0 | | | | | | |
| C06D | Leavenworth | 6.11 | 37 | P | Pn | 10 46 11.7 | -0.1 |
| | baz=6.2,SNR=10 | | | | | | |
| C06D | | | | S | Sn | 10 47 23.1 | +1.6 |
| | baz=6.2 | | | | | | |
| A04D | Lummi Island | 6.12 | 23 | S | Sn | 10 47 21.7 | +0.2 |
| | baz=6.2 | | | | | | |
| CMB | Columbia Colle | 6.83 | 136 | ePn | Pn | 10 46 20.9 | -0.7 |
| | 4.1nm,0.8s | | | | | | |
| NVAR | Mina Array Bea | 7.71 | 125 | Pn | Pn | 10 46 35.7 | +1.9 |
| | 0.4nm,0.3s,baz=294,slow=14,SNR=13 | | | | | | |
| NEW | Newport | 8.23 | 48 | Pn | Pn | 10 46 40.9 | +0.1 |
| | 0.8nm,0.3s,baz=244,slow=12,SNR=12 | | | | | | |
| NEW | | | | LR | LR | 10 49 16.5 | |
| | comp=Z,39nm,20.8s,baz=246,slow=34 | | | | | | |
| NEW | Newport | 8.23 | 48 | P | Pn | 10 46 40.4 | -0.4 |
| | baz=8.3 | | | | | | |
| NEW | Newport | 8.23 | 48 | Pn | Pn | 10 46 40.9 | +0.1 |
| | 0.2nm,0.8s | | | | | | |
| HLID | Hailey | 8.70 | 83 | ePn | Pn | 10 46 47.5 | +0.1 |
| | 6.6nm,0.6s | | | | | | |
| BSMT | Bassoo Peak | 9.37 | 56 | ePn | Pn | 10 46 57.3 | +0.7 |
| | 3.4nm,0.6s | | | | | | |
| MSO | Missoula | 9.52 | 63 | P | Pn | 10 46 58.2 | -0.4 |
| | baz=9.6 | | | | | | |
| BLMT | Blacktail Moun | 9.70 | 56 | ePn | Pn | 10 47 01.6 | +0.5 |
| | 9.0nm,0.8s | | | | | | |
| MCMT | McKenzie Canyo | 9.87 | 76 | ePn | Pn | 10 47 03.6 | +0.1 |
| | 2.8nm,0.7s | | | | | | |
| CHMT | Chamberlain Mo | 10.00 | 63 | ePn | Pn | 10 47 05.4 | +0.2 |
| | 3.3nm,0.9s | | | | | | |
| DLMT | Dillon | 10.11 | 73 | ePn | Pn | 10 47 08.0 | +1.4 |
| | 4.1nm,0.6s | | | | | | |
| WALA | Waterton Lakes | 10.45 | 51 | Pn | Pn | 10 47 10.4 | -0.9 |
| | 6.2nm,0.7s | | | | | | |
| BOZ | Bozeman (W) | 10.82 | 72 | P | Pn | 10 47 16.6 | +0.2 |
| | baz=11 | | | | | | |
| BOZ | Bozeman (W) | 10.82 | 72 | ePn | Pn | 10 47 16.9 | +0.6 |
| | 6.6nm,0.6s | | | | | | |
| BOZ | | | | eSn | Sn | 10 49 11.8 | -5.4 |
| TPAW | Teton Pass | 11.22 | 83 | ePn | Pn | 10 47 23.9 | +1.9 |
| | 17nm,0.9s | | | | | | |
| SNOW | Snow King Moun | 11.37 | 83 | ePn | Pn | 10 47 26.9 | +2.9 |
| | 5.0nm,0.7s | | | | | | |
| LOHW | Long Hollow | 11.47 | 82 | Pn | Pn | 10 47 24.8 | -0.5 |
| | 18nm,1.4s | | | | | | |
| MSU | Marysvale | 11.69 | 109 | Pn | Pn | 10 47 29.2 | +0.9 |
| | 6.6nm,1.2s | | | | | | |
| DLBC | Dease Lake | 15.48 | 353 | Pn | P | 10 48 24.4 | +0.4 |
| | 0.1nm,0.3s,baz=184,slow=12,SNR=6.8 | | | | | | |
| ISCO | Idaho Springs | 15.89 | 95 | ePn | Pn | 10 48 24.4 | -0.8 |
| | 6.1nm,1.0s | | | | | | |
| SDCO | Great Sand Dun | 16.74 | 102 | ePn | Pn | 10 48 36.3 | +0.2 |
| | 4.2nm,1.0s | | | | | | |
| ANMO | Albuquerque | 17.46 | 111 | P | Pn | 10 48 45.1 | +0.1 |
| | 0.1nm,0.3s,baz=317,slow=11,SNR=15 | | | | | | |
| AMTX | Amarillo | 20.81 | 105 | eP | P | 10 49 22.7 | -0.1 |
| | 12nm,1.0s | | | | | | |
| ULM | Lac du Bonnet | 21.96 | 61 | P | P | 10 49 35.5 | +0.6 |
| | 3.9nm,0.6s,baz=276,slow=8.6,SNR=4.0 | | | | | | |
| KSU1 | Kansas State U | 22.70 | 90 | P | P | 10 49 42.0 | -1.0 |
| | 11nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 22.81 | 120 | P | P | 10 49 46.3 | +2.0 |
| | 0.7nm,0.7s,baz=302,slow=7.5,SNR=10 | | | | | | |
| WMOK | Wichita Mounta | 22.95 | 102 | eP | P | 10 49 45.8 | +0.2 |
| | 5.9nm,0.8s | | | | | | |
| LPIG | La Paz | 23.15 | 140 | LR | LR | 10 58 21.6 | |
| | comp=Z,65nm,21.1s,baz=341,slow=35 | | | | | | |
| ILAR | Eielson Array | 24.57 | 339 | P | P | 10 50 00.0 | -1.0 |
| | 1.6nm,1.0s,baz=151,slow=8.5,SNR=12 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 59.95 | 269 | T | T | 11 59 23.9 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=51,slow=75,SNR=212 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **59.95** | **269** | T | T | 11 59 24.2 | |
| | baz=51,slow=75,SNR=207 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **59.97** | **269** | T | T | 11 59 25.2 | |
| | baz=51,slow=75,SNR=197 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **60.87** | **269** | T | T | 12 00 33.0 | |
| | baz=50,slow=75,SNR=465 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **60.87** | **269** | T | T | 12 00 38.3 | |
| | baz=50,slow=75,SNR=310 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **60.88** | **269** | T | T | 12 00 32.6 | |
| | baz=50,slow=75,SNR=287 | | | | | | |

**IDC 06 10:47:37.8**±3.5**, 5°74S×146°66E, h0km, mb4.0**/2**, mb1 4.2**/4**, mb1mx3.6**/33**, mbtmp4.0**/4**, ML4.1**/1**, Error ellipse: s-maj=60.7km s-min=48.1km az=78.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.67** | **172** | Pn | Pn | 10 48 37.6 | +1.7 |
| | 5.0nm,0.3s,baz=34,slow=6.6,SNR=16 | | | | | | |
| PMG | | | | Sn | Sn | 10 49 13.6 | -6.4 |
| | 20nm,0.3s,baz=165,slow=21,SNR=14 | | | | | | |
| PMG | | | | Lg | Lg | 10 49 28.9 | |
| | 5.8nm,0.3s,baz=342,slow=8.2,SNR=7.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.51** | **219** | P | P | 10 51 55.4 | -0.5 |
| | 0.6nm,0.3s,baz=46,slow=12,SNR=40 | | | | | | |
| **ASAR** | **Alice Springs** | **21.64** | **213** | P | P | 10 52 29.4 | -0.6 |
| | 1.0nm,0.3s,baz=57,slow=8.8,SNR=28 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.92** | **237** | P | P | 10 52 53.7 | 0.0 |
| | 5.3nm,0.5s,baz=40,slow=4.7,SNR=64 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.70** | **285** | PKP | PKPbc | 11 07 16.9 | +0.4 |
| | 2.8nm,0.8s,baz=65,slow=3.2,SNR=18 | | | | | | |

**MAN 06 10:59:23, 19°05N×121°19E, h20km, mb4.8, ML3.7, MS3.7, 3C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGCP** | **Mt. Cagua** | **1.14** | **134** | *e*P | Pn | 10 59 43.9 | 0.0 |
| SGCP | | | | *e*S | Sn | 11 00 00.3 | +1.4 |
| **APYP** | **Conner** | **1.18** | **177** | *e*P | Pn | 10 59 44.1 | -0.3 |
| APYP | | | | *e*S | Sn | 11 00 01.7 | +1.8 |
| **SIPP** | **Brgy, Tapao** | **1.32** | **212** | ⇑*e*P | Pb | 10 59 46.8 | -0.3 |
| **ABRA** | **Dolores** | **1.46** | **198** | *e*P | Pn | 10 59 47.6 | -0.7 |
| ABRA | | | | *e*S | Sb | 11 00 09.4 | +1.6 |
| **CVP** | **Callao Caves** | **1.47** | **156** | ⇑*i*P | Pn | 10 59 49.0 | +0.6 |
| CVP | | | | *i* S | Sb | 11 00 09.2 | +1.3 |
| **PALP** | **Palanan** | **2.30** | **149** | *e*P | Pn | 11 00 01.1 | +1.4 |
| **BCPH** | **Baguio City Da** | **2.72** | **192** | ⇑*i*P | Pn | 11 00 06.8 | +1.0 |
| BCPH | | | | *i* S | Sn | 11 00 37.1 | -1.1 |
| **BALP** | **Baler** | **3.31** | **174** | *e*P | Pn | 11 00 15.9 | +2.2 |

**NNC 06 11:02:28.1**±2.0**, 51°24N×74°46E, h0km, mb3.0, mpv2.7, 3C-7D, Error ellipse: s-maj=42.8km s-min=13.5km az=36.0, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VOSK** | **Vostochnaya** | **2.62** | **306** | ⇑Pn | Pn | 11 03 10.9 | -0.8 |
| | 2.4nm,0.7s | | | | | | |
| VOSK | | | | ⇓Sn | Sn | 11 03 44.5 | +0.3 |
| | 14nm,0.8s | | | | | | |
| VOSK | | | | ⇑Rg | Rg | 11 04 06.5 | |
| | 28nm,1.4s | | | | | | |
| **BVA0** | **Borovoye Array** | **3.08** | **307** | ⇓Pn | Pn | 11 03 19.2 | +1.1 |
| | 2.3nm,0.8s,baz=142,slow=16,SNR=9.6 | | | | | | |
| BVA0 | | | | ⇓Sn | Sn | 11 03 57.7 | +2.0 |
| | 0.9nm,0.7s,baz=125,slow=27,SNR=11 | | | | | | |
| BVA0 | | | | ⇓Rg | Rg | 11 04 24.2 | |
| | 11nm,1.1s | | | | | | |
| **CHKZ** | **Chkalovo** | **3.39** | **318** | ⇓Pn | Pn | 11 03 22.2 | -0.1 |
| | 1.4nm,0.7s | | | | | | |
| CHKZ | | | | ⇓Sn | Sn | 11 04 04.1 | +0.9 |
| **ZRNK** | **Zerenda** | **3.78** | **299** | ⇑Pn | Pn | 11 03 28.4 | +0.8 |
| | 1.1nm,0.6s | | | | | | |
| ZRNK | | | | ⇓Sn | Sn | 11 04 13.6 | +0.8 |

*IDC **06** 11:15:51.9±0.6, 22°44S×68°44W, h92km±7km, mb3.3/6, mb1 3.4/10, mb1mx3.4/29, mbtmp3.6/10, Error ellipse: s-maj=19.2km s-min=19.0km az=46.0*
*ISCJB **06** 11:15:52.1±0.4, 22°45S±0°07×68°65W±0°06, h115km±5km, mb3.4/5, Error ellipse: s-maj=12.3km s-min=7.4km az=28.7*
*GUC **06** 11:15:52.6±0.9, 22°46S×68°66W, h105km±8km, ML4.0*
**ISC 06 11:15:53.2**±0.7**, 22°48S**±0°08×**68°65W**±0°05**, h108**km±6km**, n22,** σ**1§31**/28**, mb3.4**/5**, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **0.27** | **240** | P | **Pn** | **11 16 08.4** | **-0.6** |
| | 14μm,0.3s,baz=67,slow=6.6,SNR=3496 | | | | | | |
| LVC | | | | S | **Sn** | **11 16 20.0** | **-0.8** |
| | 41μm,0.3s,baz=72,slow=19,SNR=165 | | | | | | |
| **LVC** | **Limon Verde** | **0.27** | **240** | *e*P | **Pn** | **11 16 08.1** | **-1.0** |
| LVC | | | | *e*S | **Sn** | **11 16 20.6** | **-0.2** |
| **PB06** | **IPOC Station P** | **0.88** | **255** | *e*P | **Pn** | **11 16 12.9** | **-0.3** |
| PB06 | | | | *e*S | **Sn** | **11 16 28.4** | **+0.1** |
| PB06 | | | | AML | AML | 11 16 30.7 | |
| | comp=N,5μm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.36** | **303** | *e*P | **Pn** | **11 16 18.3** | **-0.2** |
| PB07 | | | | *e*S | **Sn** | **11 16 37.6** | **0.0** |
| PB07 | | | | AML | AML | 11 16 38.9 | |
| | comp=N,4μm,0.8s | | | | | | |
| **PB04** | **IPOC Station P** | **1.39** | **276** | *e*P | **Pn** | **11 16 18.4** | **-0.4** |
| PB04 | | | | *e*S | **Sn** | **11 16 38.5** | **+0.4** |
| PB04 | | | | AML | AML | 11 16 42.2 | |
| | comp=E,3μm,2.0s | | | | | | |
| **ANCH** | **Antofagasta** | **2.01** | **233** | *e*P | Pn | 11 16 18.3 | -8.0 |
| ANCH | | | | *e*S | Sn | 11 16 43.0 | -8.6 |
| **YJA** | **Yavi** | **2.92** | **85** | *e*P | **Pn** | **11 16 40.4** | **+1.8** |
| YJA | | | | *e*S | **Sn** | **11 17 16.2** | **+2.7** |
| **SLA** | **San Lorenzo** | **3.65** | **128** | *e*P | **Pn** | **11 16 48.8** | **+0.7** |
| SLA | | | | AML | AML | 11 17 36.4 | |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **AZAP** | **Zapla** | **3.73** | **119** | *e*P | **Pn** | **11 16 49.5** | **+0.3** |
| AZAP | | | | AML | AML | 11 17 32.3 | |
| | comp=Z,7.7nm,0.4s | | | | | | |
| **ASTB** | **Santa Barbara** | **4.11** | **112** | *e*P | **Pn** | **11 16 54.5** | **+0.4** |
| **FSA** | **Cafayete** | **4.33** | **147** | *e*P | **Pn** | **11 16 58.0** | **+0.8** |
| **LPAZ** | **La Paz** | **6.17** | **5** | P | **Pn** | **11 17 20.5** | **-2.1** |
| | comp=Z,0.2nm,0.3s,baz=191,slow=16,SNR=3.6 | | | | | | |
| **CFAA** | **Coronel Fontan** | **9.10** | **178** | P | **Pn** | **11 17 59.5** | **-2.2** |
| | comp=Z,0.1nm,0.3s,baz=312,slow=12,SNR=2.2 | | | | | | |
| CFAA | | | | S | Sn | 11 19 33.8 | -8.5 |
| | comp=Z,0.1nm,0.3s,baz=301,slow=15,SNR=2.4 | | | | | | |
| **SIV** | **San Ignacio** | **9.64** | **49** | P | Pn | 11 18 05.5 | -3.6 |
| | comp=Z,0.6nm,0.3s,baz=258,slow=12,SNR=7.6 | | | | | | |
| SIV | | | | S | Sn | 11 19 45.3 | -10 |
| | comp=Z,0.2nm,0.3s,baz=292,slow=19,SNR=3.6 | | | | | | |
| **CPUP** | **Villa Florida** | **11.01** | **113** | P | **Pn** | **11 18 25.0** | **-2.5** |
| | comp=Z,0.1nm,0.3s,baz=271,slow=10,SNR=3.7 | | | | | | |
| **BDFB** | **Brasilia** | **20.65** | **74** | P | **P** | **11 20 22.4** | **-2.2** |
| | comp=Z,1.4nm,0.5s,baz=294,slow=11,SNR=3.1 | | | | | | |
| **PTGA** | **Pitinga** | **23.21** | **23** | P | **P** | **11 20 49.4** | **-1.5** |
| | comp=Z,1.6nm,0.4s,baz=218,slow=19,SNR=5.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **61.56** | **325** | P | **P** | **11 25 59.7** | **+0.4** |
| | comp=Z,0.2nm,0.6s,baz=138,slow=9.6,SNR=2.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.40** | **322** | P | **P** | **11 27 32.8** | **+1.6** |
| | comp=Z,0.3nm,0.8s,baz=177,slow=6.0,SNR=2.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.46** | **70** | P | **P** | **11 27 36.5** | **-0.8** |
| | comp=Z,0.6nm,0.4s,baz=246,slow=5.3,SNR=11 | | | | | | |
| TORD | | | | pP | **pP** | **11 28 05.1** | **+0.3** |
| | comp=Z,0.7nm,0.7s,baz=248,slow=5.2,SNR=3.1 | | | | | | |
| **MAW** | **Mawson** | **83.33** | **163** | P | **P** | **11 28 08.4** | **+0.6** |
| | comp=Z,0.4nm,0.7s,baz=211,slow=12,SNR=4.4 | | | | | | |
| MAW | | | | pP | **pP** | **11 28 36.5** | **+0.8** |
| | comp=Z,1.9nm,1.2s,baz=54,slow=5.2,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.27** | **37** | PKPbc | **PKPdf** | **11 35 20.3** | **+0.4** |
| | comp=Z,0.6nm,0.5s,baz=298,slow=2.6,SNR=5.3 | | | | | | |

*IDC **06** 11:29:09.5±2.6, 5°27S×133°59E, h0km, mb3.7/2, mb1 4.0/5, mb1mx3.6/26, mbtmp3.8/5, ML3.7/3, Error ellipse: s-maj=122.2km s-min=26.7km az=84.0*
*AUST **06** 11:30:04.7±5.5, 8°91S×132°86E, h182km±1km, Error ellipse: s-maj=5.0km s-min=2.1km az=41.0*
**ISC 06 11:29:11.2**±1.5**, 5°41S**±0°09×**133°6E**±0°2**, h10**km**, n10,** σ**1§45**/9**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDU** | **Kakadu** | **7.31** | **189** | P | Pn | 11 31 03.4 | +5.3 |
| | baz=3.8,SNR=15 | | | | | | |
| **MTN** | **Manton Dam** | **7.77** | **198** | P | Pn | 11 31 09.7 | +5.2 |
| | baz=4.3,SNR=26 | | | | | | |
| **KNRA** | **Kununurra** | **11.25** | **205** | P | Pn | 11 31 55.7 | +3.6 |
| | baz=7.9,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.46** | **177** | Pn | **Pn** | **11 32 36.7** | **+0.6** |
| | 0.3nm,0.3s,baz=354,slow=13,SNR=19 | | | | | | |
| WRA | | | | Sn | **Sn** | **11 35 15.3** | **-1.4** |
| | baz=359,slow=23,SNR=2.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.81** | **211** | Pn | **Pn** | **11 32 41.6** | **+0.8** |
| | 0.3nm,0.3s,baz=36,slow=14,SNR=11 | | | | | | |
| FITZ | | | | Sn | **Sn** | **11 35 23.5** | **-1.6** |
| | 0.4nm,0.3s,baz=0.0,slow=20,SNR=3.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.81** | **211** | P | **Pn** | **11 32 42.7** | **+1.8** |
| | baz=12,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **18.16** | **179** | P | **P** | **11 33 25.3** | **+1.4** |
| | 0.2nm,0.3s,baz=1.2,slow=13,SNR=15 | | | | | | |
| ASAR | | | | S | **Sn** | **11 36 46.3** | **-0.1** |
| | 0.0nm,0.3s,baz=358,slow=22,SNR=3.5 | | | | | | |
| **WRKA** | **Warakurna** | **20.16** | **194** | P | Pn | 11 33 49.6 | +1.8 |
| | baz=17,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.92** | **325** | P | **P** | **11 40 16.3** | **-0.1** |
| | 0.3nm,0.6s,baz=114,slow=7.8,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.80** | **332** | P | **P** | **11 40 32.4** | **-1.4** |
| | 0.6nm,0.4s,baz=111,slow=8.2,SNR=2.2 | | | | | | |

**IDC 06 11:30:30.2**±2.5**, 5°90S×133°48E, h0km, mb3.5**/1**, mb1 4.2**/4**, mb1mx3.7**/25**, mbtmp4.0**/4**, ML3.9**/3**, Error ellipse: s-maj=83.3km s-min=25.8km az=85.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **13.98** | **177** | Pn | Pn | 11 33 49.1 | -0.7 |
| | 0.4nm,0.3s,baz=355,slow=13,SNR=6.3 | | | | | | |
| WRA | | | | Sn | Sn | 11 36 25.0 | -0.9 |
| | 0.0nm,0.3s,baz=357,slow=24,SNR=2.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.34** | **212** | Pn | Pn | 11 33 55.1 | +0.5 |
| | 0.6nm,0.3s,baz=35,slow=12,SNR=7.2 | | | | | | |
| FITZ | | | | Sn | Sn | 11 36 33.9 | -0.6 |
| | 0.1nm,0.3s,baz=132,slow=15,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **17.67** | **179** | P | P | 11 34 39.0 | 0.0 |
| | 0.5nm,0.3s,baz=3.6,slow=12,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.26** | **325** | P | P | 11 41 39.2 | -0.1 |
| | 0.3nm,0.6s,baz=111,slow=7.9,SNR=3.4 | | | | | | |

**MEX 06 11:44:23.5**±0.6**, 18°47N×103°51W, h37**km±8km**, MD3.8, Near coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMIG** | **Aquila** | **0.24** | **140** | *i* P | Pn | 11 44 29.2 | -2.8 |
| MMIG | | | | *e*S | Sn | 11 44 34.4 | -5.7 |
| **R15V** | | **0.82** | **327** | *i* P | Pn | 11 44 36.7 | -2.0 |
| R15V | | | | *i* S | Sn | 11 44 47.6 | -2.2 |
| **EZ5V** | | **1.00** | **355** | *e*P | Pn | 11 44 39.9 | -1.6 |
| EZ5V | | | | *i* S | Sn | 11 44 51.3 | -3.2 |
| **ZIIG** | **Zihuatanejo** | **2.13** | **114** | *i* P | Pn | 11 44 55.0 | -1.5 |

*IDC **06** 12:08:41.9±2.1, 6°74S×129°68E, h0km, mb3.6/1, mb1 3.7/4, mb1mx3.4/41, mbtmp3.5/4, ML3.5/3, Error ellipse: s-maj=87.4km s-min=27.6km az=77.0*
*AUST **06** 12:08:50.2, 6°98S×129°54E, h100km*
**ISC 06 12:08:44.1**±1.1**, 6°8S**±0°1×**129°8E**±0°2**, h10**km**, n10,** σ**1§17**/7**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **4.52** | **32** | P | **Pb** | **12 10 04.4** | **+0.7** |
| | baz=4.9,SNR=5.1 | | | | | | |
| **MTN** | **Manton Dam** | **6.18** | **168** | P | Pn | 12 10 21.2 | +5.8 |
| | baz=6.1,SNR=23 | | | | | | |
| **KDU** | **Kakadu** | **6.44** | **156** | P | Pn | 12 10 24.1 | +5.1 |
| | baz=6.4,SNR=15 | | | | | | |
| **KNRA** | **Kununurra** | **8.92** | **187** | P | Pn | 12 10 56.2 | +3.1 |
| | baz=8.7,SNR=11 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.98** | **200** | Pn | **Pn** | **12 11 34.4** | **-0.8** |
| | 0.2nm,0.3s,baz=26,slow=13,SNR=19 | | | | | | |
| FITZ | | | | Sn | Sn | 12 13 35.0 | -14 |
| | 0.8nm,0.3s,baz=74,slow=20,SNR=10.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **11.98** | **200** | P | **Pn** | **12 11 35.8** | **+0.7** |
| | baz=12,SNR=8.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.81** | **162** | Pn | **Pn** | **12 11 59.1** | **-1.1** |
| | 0.2nm,0.3s,baz=343,slow=13,SNR=10 | | | | | | |
| WRA | | | | Sn | Sn | 12 14 18.4 | -15 |
| | 0.7nm,0.3s,baz=336,slow=23,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **17.26** | **167** | P | **Pn** | **12 12 45.4** | **0.0** |
| | 0.2nm,0.3s,baz=340,slow=9.7,SNR=16 | | | | | | |
| ASAR | | | | S | Sn | 12 15 43.0 | -15 |
| | 0.1nm,0.3s,baz=344,slow=23,SNR=4.0 | | | | | | |
| **WRKA** | **Warakurna** | **18.23** | **184** | P | **P** | **12 12 58.7** | **+1.1** |
| | baz=18,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.93** | **327** | P | **P** | **12 19 42.0** | **-1.2** |
| | 0.2nm,0.4s,baz=114,slow=7.3,SNR=3.1 | | | | | | |

*NEIC **06** 12:11:06.6, 40°28S×173°59E, h173km, MG4.2(WEL), After WEL.*
**WEL 06 12:11:06.7**±0.2**, 40°28S×173°59E, h173**km±2km**, ML4.2**/21**, 27C-14D, Error ellipse: s-maj=1.6km s-min=0.8km az=90.0, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUWZ** | **D'Urville Isla** | **0.58** | **154** | ⇑PN | Pn | 12 11 31.1 | +0.2 |
| DUWZ | | | | SN | Sn | 12 11 49.1 | -0.7 |
| **DUWZ** | **D'Urville Isla** | **0.58** | **154** | Pn | Pn | 12 11 31.1 | +0.2 |
| DUWZ | | | | Sn | Sn | 12 11 49.1 | -0.7 |
| **NMEZ** | **Namu Road** | **0.90** | **14** | PN | Pn | 12 11 32.8 | -0.1 |
| NMEZ | | | | SN | Sn | 12 11 52.7 | -0.3 |
| **NMEZ** | **Namu Road** | **0.90** | **14** | Pn | Pn | 12 11 32.8 | -0.1 |
| NMEZ | | | | Sn | Sn | 12 11 52.7 | -0.3 |
| **NNZ** | **Nelson** | **0.95** | **190** | ⇑PN | Pn | 12 11 33.1 | -0.1 |
| NNZ | | | | SN | Sn | 12 11 52.4 | -1.4 |
| **NNZ** | **Nelson** | **0.95** | **190** | Pn | Pn | 12 11 33.1 | -0.1 |
| NNZ | | | | Sn | Sn | 12 11 52.4 | -1.4 |
| **QRZ** | **Quartz Range** | **0.97** | **236** | ⇓PN | Pn | 12 11 32.9 | -0.5 |
| QRZ | | | | SN | Sn | 12 11 52.1 | -2.0 |
| **QRZ** | **Quartz Range** | **0.97** | **236** | Pn | Pn | 12 11 32.9 | -0.5 |
| QRZ | | | | Sn | Sn | 12 11 52.1 | -2.0 |
| **LREZ** | **Lake Rotokare** | **1.03** | **37** | ⇓PN | Pn | 12 11 33.9 | +0.1 |
| LREZ | | | | SN | Sn | 12 11 54.4 | -0.4 |
| **KHEZ** | **Kahui Hut** | **1.04** | **18** | ⇑PN | Pn | 12 11 33.9 | -0.1 |
| KHEZ | | | | SN | Sn | 12 11 54.3 | -0.8 |
| **KHEZ** | **Kahui Hut** | **1.04** | **18** | Pn | Pn | 12 11 34.0 | -0.1 |
| KHEZ | | | | Sn | Sn | 12 11 54.4 | -0.8 |
| **TCW** | **Tory Channel** | **1.06** | **151** | PN | Pn | 12 11 34.4 | +0.3 |
| TCW | | | | AML | AML | 12 11 55.5 | |
| TCW | | | | AML | AML | 12 11 55.5 | |
| **TCW** | **Tory Channel** | **1.06** | **151** | Pn | Pn | 12 11 34.4 | +0.3 |
| **NEZ** | **North Egmont** | **1.08** | **21** | ⇓PN | Pn | 12 11 34.0 | -0.4 |
| **NEZ** | **North Egmont** | **1.08** | **21** | Pn | Pn | 12 11 34.0 | -0.4 |
| **KIW** | **Kapiti Island** | **1.16** | **120** | ⇑PN | Pn | 12 11 34.9 | +0.1 |
| KIW | | | | AML | AML | 12 11 57.3 | |
| KIW | | | | AML | AML | 12 11 57.6 | |
| **KIW** | **Kapiti Island** | **1.16** | **120** | Pn | Pn | 12 11 34.9 | +0.1 |
| **TUWZ** | **Tuamarina** | **1.18** | **167** | PN | Pn | 12 11 35.0 | 0.0 |
| TUWZ | | | | AML | AML | 12 11 55.7 | |
| TUWZ | | | | AML | AML | 12 11 57.6 | |
| **TUWZ** | **Tuamarina** | **1.18** | **167** | Pn | Pn | 12 11 35.0 | 0.0 |
| **DREZ** | **Durham Road** | **1.19** | **23** | PN | Pn | 12 11 35.0 | -0.2 |
| DREZ | | | | SN | Sn | 12 11 56.6 | -0.5 |
| **DREZ** | **Durham Road** | **1.19** | **23** | Pn | Pn | 12 11 35.0 | -0.2 |
| DREZ | | | | Sn | Sn | 12 11 56.6 | -0.5 |
| **WAZ** | **Wanganui** | **1.19** | **64** | ⇑PN | Pn | 12 11 35.6 | +0.4 |
| **WAZ** | **Wanganui** | **1.19** | **64** | Pn | Pn | 12 11 35.6 | +0.4 |
| **OGWZ** | **Otaki Gorge** | **1.31** | **114** | ⇑PN | Pn | 12 11 36.4 | +0.2 |
| **OGWZ** | **Otaki Gorge** | **1.31** | **114** | Pn | Pn | 12 11 36.4 | +0.2 |
| **MHEZ** | **Mangahewa** | **1.33** | **25** | ⇓PN | Pn | 12 11 36.6 | +0.2 |
| MHEZ | | | | SN | Sn | 12 11 58.7 | -0.6 |
| **MHEZ** | **Mangahewa** | **1.33** | **25** | Pn | Pn | 12 11 36.6 | +0.2 |
| MHEZ | | | | Sn | Sn | 12 11 58.7 | -0.6 |
| **WEL** | **Wellington** | **1.34** | **139** | ⇑PN | Pn | 12 11 36.6 | +0.2 |
| WEL | | | | AML | AML | 12 11 59.9 | |
| WEL | | | | AML | AML | 12 12 00.5 | |
| **WEL** | **Wellington** | **1.34** | **139** | Pn | Pn | 12 11 36.6 | +0.2 |
| **CAW** | **Cannon Point** | **1.39** | **127** | ⇑PN | Pn | 12 11 37.1 | +0.2 |
| CAW | | | | AML | AML | 12 12 00.9 | |
| CAW | | | | AML | AML | 12 12 01.1 | |
| **CAW** | **Cannon Point** | **1.39** | **127** | Pn | Pn | 12 11 37.1 | +0.2 |
| **BSWZ** | **Blackbirch Sta** | **1.45** | **172** | PN | Pn | 12 11 38.0 | +0.6 |
| BSWZ | | | | AML | AML | 12 12 01.5 | |
| BSWZ | | | | AML | AML | 12 12 02.3 | |
| **BSWZ** | **Blackbirch Sta** | **1.45** | **172** | Pn | Pn | 12 11 38.0 | +0.6 |
| **VRZ** | **Vera Road** | **1.47** | **38** | ⇑PN | Pn | 12 11 37.0 | -0.6 |
| **VRZ** | **Vera Road** | **1.47** | **38** | Pn | Pn | 12 11 37.0 | -0.6 |
| **BHW** | **Baring Head** | **1.48** | **140** | ⇑PN | Pn | 12 11 37.7 | 0.0 |
| BHW | | | | SN | Sn | 12 11 59.7 | -2.2 |
| BHW | | | | AML | AML | 12 12 00.5 | |
| **BHW** | **Baring Head** | **1.48** | **140** | Pn | Pn | 12 11 37.7 | 0.0 |
| BHW | | | | Sn | Sn | 12 11 59.7 | -2.2 |
| **CMWZ** | **Cape Campbell** | **1.54** | **162** | PN | Pn | 12 11 39.0 | +0.6 |
| CMWZ | | | | AML | AML | 12 12 04.4 | |
| CMWZ | | | | AML | AML | 12 12 04.9 | |
| **CMWZ** | **Cape Campbell** | **1.54** | **162** | Pn | Pn | 12 11 39.0 | +0.7 |
| **MRZ** | **Mangatainoka R** | **1.56** | **105** | PN | Pn | 12 11 38.4 | -0.1 |
| MRZ | | | | AML | AML | 12 12 02.5 | |
| MRZ | | | | AML | AML | 12 12 02.6 | |
| **MRZ** | **Mangatainoka R** | **1.56** | **105** | Pn | Pn | 12 11 38.4 | -0.1 |
| **THZ** | **Tophouse** | **1.57** | **199** | ⇓PN | Pn | 12 11 38.4 | -0.3 |
| **THZ** | **Tophouse** | **1.57** | **199** | Pn | Pn | 12 11 38.4 | -0.3 |
| **HOWZ** | **Holdsworth Sta** | **1.59** | **113** | ⇑PN | Pn | 12 11 38.8 | 0.0 |
| **HOWZ** | **Holdsworth Sta** | **1.59** | **113** | Pn | Pn | 12 11 38.9 | 0.0 |
| **POWZ** | **Post Office Ro** | **1.67** | **94** | PN | Pn | 12 11 39.5 | -0.2 |
| **POWZ** | **Post Office Ro** | **1.67** | **94** | Pn | Pn | 12 11 39.5 | -0.2 |
| **PKVZ** | **Pokaka** | **1.68** | **54** | ⇑PN | Pn | 12 11 39.3 | -0.5 |
| **PKVZ** | **Pokaka** | **1.68** | **54** | Pn | Pn | 12 11 39.3 | -0.5 |
| **MSWZ** | **Moikau Station** | **1.69** | **133** | ⇑PN | Pn | 12 11 39.7 | -0.1 |
| MSWZ | | | | SN | Sn | 12 12 03.6 | -2.1 |
| MSWZ | | | | AML | AML | 12 12 05.5 | |
| **MSWZ** | **Moikau Station** | **1.69** | **133** | Pn | Pn | 12 11 39.8 | -0.1 |
| MSWZ | | | | Sn | Sn | 12 12 03.6 | -2.1 |
| **MTW** | **Mount Morrison** | **1.69** | **122** | ⇑PN | Pn | 12 11 39.8 | -0.1 |
| MTW | | | | AML | AML | 12 12 04.4 | |
| MTW | | | | AML | AML | 12 12 05.4 | |
| **MTW** | **Mount Morrison** | **1.69** | **122** | Pn | Pn | 12 11 39.9 | -0.1 |
| **MTVZ** | **Mangateitei** | **1.70** | **59** | PN | Pn | 12 11 39.7 | -0.4 |
| **MTVZ** | **Mangateitei** | **1.70** | **59** | Pn | Pn | 12 11 39.7 | -0.4 |
| **PAWZ** | **Paruwai Farm** | **1.77** | **129** | ⇑PN | Pn | 12 11 40.5 | -0.2 |
| PAWZ | | | | SN | Sn | 12 12 05.1 | -2.1 |
| PAWZ | | | | AML | AML | 12 12 07.0 | |
| **PAWZ** | **Paruwai Farm** | **1.77** | **129** | Pn | Pn | 12 11 40.5 | -0.2 |
| PAWZ | | | | Sn | Sn | 12 12 05.1 | -2.1 |
| **TRVZ** | **Turoa** | **1.80** | **58** | PN | Pn | 12 11 40.5 | -0.8 |
| **TRVZ** | **Turoa** | **1.80** | **58** | Pn | Pn | 12 11 40.5 | -0.8 |
| **PLWZ** | **Palliser** | **1.80** | **136** | PN | Pn | 12 11 40.8 | -0.3 |
| **PLWZ** | **Palliser** | **1.80** | **136** | Pn | Pn | 12 11 40.8 | -0.3 |
| **TIWZ** | **Tintock** | **1.82** | **106** | ⇑PN | Pn | 12 11 41.2 | 0.0 |
| TIWZ | | | | AML | AML | 12 12 07.0 | |
| TIWZ | | | | AML | AML | 12 12 07.7 | |
| **TIWZ** | **Tintock** | **1.82** | **106** | Pn | Pn | 12 11 41.2 | 0.0 |
| **WNVZ** | **Wahianoa** | **1.82** | **59** | ⇑PN | Pn | 12 11 40.7 | -0.7 |
| **WNVZ** | **Wahianoa** | **1.82** | **59** | Pn | Pn | 12 11 40.7 | -0.7 |
| **DRZ** | **Dome Shelter** | **1.82** | **57** | PN | Pn | 12 11 41.2 | -0.5 |
| **DRZ** | **Dome Shelter** | **1.82** | **57** | Pn | Pn | 12 11 41.2 | -0.5 |
| **FWVZ** | **Far West T-bar** | **1.83** | **56** | ⇑PN | Pn | 12 11 40.7 | -0.9 |
| **FWVZ** | **Far West T-bar** | **1.83** | **56** | Pn | Pn | 12 11 40.7 | -0.9 |
| **TSZ** | **Takapari Road** | **1.83** | **84** | ⇑PN | Pn | 12 11 40.9 | -0.4 |
| TSZ | | | | AML | AML | 12 12 08.8 | |
| TSZ | | | | AML | AML | 12 12 08.9 | |
| **TSZ** | **Takapari Road** | **1.83** | **84** | Pn | Pn | 12 11 40.9 | -0.4 |
| **WHVZ** | **Whangaehu Hut** | **1.83** | **58** | PN | Pn | 12 11 41.1 | -0.7 |
| **WHVZ** | **Whangaehu Hut** | **1.83** | **58** | Pn | Pn | 12 11 41.1 | -0.7 |
| **PRWZ** | **Pori Road** | **1.84** | **99** | ⇑PN | Pn | 12 11 41.5 | +0.1 |
| **PRWZ** | **Pori Road** | **1.84** | **99** | Pn | Pn | 12 11 41.5 | +0.1 |
| **WPVZ** | **Whakapapa** | **1.85** | **55** | PN | Pn | 12 11 41.1 | -0.7 |
| **WPVZ** | **Whakapapa** | **1.85** | **55** | Pn | Pn | 12 11 41.1 | -0.7 |
| **COVZ** | **Chateau Observ** | **1.85** | **55** | ⇓PN | Pn | 12 11 41.0 | -0.7 |
| **COVZ** | **Chateau Observ** | **1.85** | **55** | Pn | Pn | 12 11 41.0 | -0.7 |
| **TWVZ** | **Taurewa** | **1.87** | **50** | PN | Pn | 12 11 41.0 | -0.9 |
| **TWVZ** | **Taurewa** | **1.87** | **50** | Pn | Pn | 12 11 41.0 | -0.9 |
| **MOVZ** | **Moawhango** | **1.88** | **63** | PN | Pn | 12 11 41.0 | -1.0 |
| **MOVZ** | **Moawhango** | **1.88** | **63** | Pn | Pn | 12 11 41.0 | -1.0 |
| **TUVZ** | **Tukino** | **1.88** | **58** | ⇓PN | Pn | 12 11 41.6 | -0.5 |
| **TUVZ** | **Tukino** | **1.88** | **58** | Pn | Pn | 12 11 41.6 | -0.5 |
| **NGZ** | **Ngauruhoe** | **1.90** | **55** | PN | Pn | 12 11 41.5 | -0.9 |
| **NGZ** | **Ngauruhoe** | **1.90** | **55** | Pn | Pn | 12 11 41.5 | -0.9 |
| **TMWZ** | **Te Maipa** | **1.93** | **116** | ⇑PN | Pn | 12 11 42.3 | -0.1 |
| **TMWZ** | **Te Maipa** | **1.93** | **116** | Pn | Pn | 12 11 42.3 | -0.1 |
| **WTVZ** | **West Tongariro** | **1.93** | **54** | PN | Pn | 12 11 41.9 | -0.7 |
| **WTVZ** | **West Tongariro** | **1.93** | **54** | Pn | Pn | 12 11 41.9 | -0.7 |
| **TRWZ** | **Traveller** | **1.94** | **126** | ⇑PN | Pn | 12 11 42.4 | -0.2 |
| TRWZ | | | | AML | AML | 12 12 10.5 | |
| TRWZ | | | | AML | AML | 12 12 11.9 | |
| **TRWZ** | **Traveller** | **1.94** | **126** | Pn | Pn | 12 11 42.4 | -0.1 |
| **OTVZ** | **Oturere** | **1.95** | **56** | PN | Pn | 12 11 42.2 | -0.7 |
| **OTVZ** | **Oturere** | **1.95** | **56** | Pn | Pn | 12 11 42.2 | -0.7 |
| **DVHZ** | **Dannevirke** | **1.97** | **91** | ⇑PN | Pn | 12 11 42.5 | -0.4 |
| **DVHZ** | **Dannevirke** | **1.97** | **91** | Pn | Pn | 12 11 42.5 | -0.4 |
| **KRVZ** | **Karewarewa** | **1.98** | **54** | PN | Pn | 12 11 42.3 | -0.9 |
| **KRVZ** | **Karewarewa** | **1.98** | **54** | Pn | Pn | 12 11 42.3 | -0.9 |
| **DSZ** | **Denniston Nort** | **1.99** | **222** | ⇓PN | Pn | 12 11 42.5 | -0.6 |
| **DSZ** | **Denniston Nort** | **1.99** | **222** | Pn | Pn | 12 11 42.5 | -0.6 |
| **HIZ** | **Hauiti** | **2.02** | **29** | ⇓PN | Pn | 12 11 42.4 | -1.0 |
| **HIZ** | **Hauiti** | **2.02** | **29** | Pn | Pn | 12 11 42.4 | -1.0 |
| **PNHZ** | **Pukenui** | **2.03** | **80** | PN | Pn | 12 11 43.1 | -0.5 |
| **PNHZ** | **Pukenui** | **2.03** | **80** | Pn | Pn | 12 11 43.1 | -0.5 |
| **BHHZ** | **Black Hill Sta** | **2.06** | **68** | PN | Pn | 12 11 42.9 | -1.1 |
| **BHHZ** | **Black Hill Sta** | **2.06** | **68** | Pn | Pn | 12 11 42.9 | -1.1 |
| **BFZ** | **Birch Farm** | **2.06** | **102** | PN | Pn | 12 11 43.6 | -0.2 |
| BFZ | | | | AML | AML | 12 12 10.6 | |
| BFZ | | | | AML | AML | 12 12 12.4 | |
| **BFZ** | **Birch Farm** | **2.06** | **102** | Pn | Pn | 12 11 43.6 | -0.2 |
| **CPWZ** | **Castlepoint** | **2.08** | **108** | PN | Pn | 12 11 44.4 | +0.3 |
| **CPWZ** | **Castlepoint** | **2.08** | **108** | Pn | Pn | 12 11 44.4 | +0.3 |
| **KHZ** | **Kahutara** | **2.13** | **181** | PN | Pn | 12 11 43.9 | -0.6 |
| KHZ | | | | AML | AML | 12 12 12.3 | |
| KHZ | | | | AML | AML | 12 12 12.9 | |
| **KHZ** | **Kahutara** | **2.13** | **181** | Pn | Pn | 12 11 44.0 | -0.6 |
| **WPHZ** | **Waipukurau** | **2.19** | **85** | ⇑PN | Pn | 12 11 45.0 | -0.3 |
| **WPHZ** | **Waipukurau** | **2.19** | **85** | Pn | Pn | 12 11 45.0 | -0.3 |
| **ANWZ** | **Angora Road** | **2.21** | **96** | ⇑PN | Pn | 12 11 45.4 | -0.1 |
| **KRHZ** | **Kereru** | **2.23** | **74** | PN | Pn | 12 11 45.0 | -0.8 |
| **PRHZ** | **Porangahau** | **2.33** | **91** | ⇓PN | Pn | 12 11 46.8 | -0.1 |
| **PRHZ** | **Porangahau** | **2.33** | **91** | Pn | Pn | 12 11 46.8 | -0.1 |
| **TLZ** | **Tolley Road** | **2.47** | **38** | ⇓PN | Pn | 12 11 47.2 | -1.4 |
| **TLZ** | **Tolley Road** | **2.47** | **38** | Pn | Pn | 12 11 47.2 | -1.4 |
| **BKZ** | **Black Stump Fm** | **2.50** | **64** | ⇑PN | Pn | 12 11 47.6 | -1.3 |
| BKZ | | | | AML | AML | 12 12 19.9 | |
| BKZ | | | | AML | AML | 12 12 20.3 | |
| **BKZ** | **Black Stump Fm** | **2.50** | **64** | Pn | Pn | 12 11 47.6 | -1.3 |
| **PXZ** | **Pawanui** | **2.52** | **85** | ⇑PN | Pn | 12 11 48.6 | -0.5 |
| PXZ | | | | AML | AML | 12 12 22.1 | |
| PXZ | | | | AML | AML | 12 12 22.4 | |
| **PXZ** | **Pawanui** | **2.52** | **85** | Pn | Pn | 12 11 48.6 | -0.5 |
| **MCHZ** | **McNeill Hill** | **2.53** | **72** | ⇓PN | Pn | 12 11 48.9 | -0.4 |
| **MCHZ** | **McNeill Hill** | **2.53** | **72** | Pn | Pn | 12 11 49.0 | -0.4 |
| **KAHZ** | **Kahuranaki** | **2.57** | **80** | PN | Pn | 12 11 49.2 | -0.6 |
| **KAHZ** | **Kahuranaki** | **2.57** | **80** | Pn | Pn | 12 11 49.2 | -0.6 |
| **LTZ** | **Lake Taylor** | **2.69** | **201** | PN | Pn | 12 11 50.1 | -1.0 |
| **LTZ** | **Lake Taylor** | **2.69** | **201** | Pn | Pn | 12 11 50.1 | -1.0 |
| **NMHZ** | **Naumai** | **2.75** | **66** | PN | Pn | 12 11 51.5 | -0.5 |
| **NMHZ** | **Naumai** | **2.75** | **66** | Pn | Pn | 12 11 51.5 | -0.5 |
| **ARHZ** | **Aropaoanui** | **2.81** | **70** | *e*PN | Pn | 12 11 51.3 | -1.3 |
| **TOZ** | **Tahuroa Road** | **2.95** | **31** | PN | Pn | 12 11 52.5 | -1.8 |
| **OXZ** | **Oxford** | **3.25** | **200** | PN | Pn | 12 11 56.1 | -1.9 |
| **OXZ** | **Oxford** | **3.25** | **200** | Pn | Pn | 12 11 56.1 | -1.9 |
| **CRLZ** | **Canterbury Las** | **3.37** | **192** | PN | Pn | 12 11 57.3 | -2.1 |
| **KNZ** | **Kokohu** | **3.39** | **69** | PN | Pn | 12 11 58.1 | -1.6 |
| **KNZ** | **Kokohu** | **3.39** | **69** | Pn | Pn | 12 11 58.2 | -1.5 |
| **URZ** | **Urewera** | **3.40** | **55** | PN | Pn | 12 11 57.6 | -2.2 |
| URZ | | | | AML | AML | 12 12 38.1 | |
| URZ | | | | AML | AML | 12 12 40.3 | |
| **URZ** | **Urewera** | **3.40** | **55** | Pn | Pn | 12 11 57.6 | -2.2 |
| **MKAZ** | **Moumakai** | **3.40** | **22** | PN | Pn | 12 11 59.0 | -0.9 |
| **MQZ** | **McQueen's Vall** | **3.49** | **191** | PN | Pn | 12 11 58.4 | -2.5 |
| **MQZ** | **McQueen's Vall** | **3.49** | **191** | Pn | Pn | 12 11 58.5 | -2.5 |
| **WVZ** | **Waitaha Valley** | **3.52** | **217** | PN | Pn | 12 11 59.3 | -1.9 |
| **WVZ** | **Waitaha Valley** | **3.52** | **217** | Pn | Pn | 12 11 59.3 | -1.9 |
| **PRGZ** | **Paritu Road** | **3.58** | **69** | PN | Pn | 12 12 00.8 | -1.4 |
| **PRGZ** | **Paritu Road** | **3.58** | **69** | Pn | Pn | 12 12 00.8 | -1.4 |
| **RIGZ** | **Rimuhau** | **3.59** | **65** | PN | Pn | 12 12 00.9 | -1.5 |
| **MWZ** | **Matawai** | **3.62** | **59** | PN | Pn | 12 12 00.6 | -2.2 |
| MWZ | | | | AML | AML | 12 12 43.9 | |
| **MWZ** | **Matawai** | **3.62** | **59** | Pn | Pn | 12 12 00.6 | -2.2 |
| **TKGZ** | **Te Karaka** | **3.78** | **62** | PN | Pn | 12 12 02.9 | -1.8 |
| **TKGZ** | **Te Karaka** | **3.78** | **62** | Pn | Pn | 12 12 02.9 | -1.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RPZ | Rata Peaks | 3.92 | 208 | PN | Pn | 12 12 04.4 | -2.1 |
| RPZ | Rata Peaks | 3.92 | 208 | Pn | Pn | 12 12 04.4 | -2.1 |
| TWGZ | Tauwhareparae | 4.00 | 60 | PN | Pn | 12 12 05.9 | -1.7 |
| TWGZ | Tauwhareparae | 4.00 | 60 | Pn | Pn | 12 12 05.9 | -1.7 |
| HAZ | Te Kaha | 4.13 | 54 | ⇓PN | Pn | 12 12 06.1 | -3.0 |
| PUZ | Puketiti | 4.24 | 60 | PN | Pn | 12 12 08.0 | -2.7 |
| PUZ | Puketiti | 4.24 | 60 | Pn | Pn | 12 12 08.0 | -2.7 |
| FOZ | Fox Glacier | 4.38 | 220 | ⇓PN | Pn | 12 12 08.6 | -3.7 |
| FOZ | Fox Glacier | 4.38 | 220 | Pn | Pn | 12 12 08.7 | -3.7 |
| MXZ | Matakaoa Point | 4.57 | 55 | PN | Pn | 12 12 12.5 | -2.4 |
| MXZ | Matakaoa Point | 4.57 | 55 | Pn | Pn | 12 12 12.5 | -2.4 |
| LBZ | Lake Benmore | 4.81 | 211 | PN | Pn | 12 12 15.4 | -2.6 |
| LBZ | Lake Benmore | 4.81 | 211 | Pn | Pn | 12 12 15.4 | -2.5 |
| JCZ | Jackson Bay | 5.22 | 222 | PN | Pn | 12 12 20.4 | -3.0 |
| JCZ | Jackson Bay | 5.22 | 222 | Pn | Pn | 12 12 20.4 | -3.0 |
| ODZ | Otahua Downs | 5.23 | 204 | PN | Pn | 12 12 21.2 | -2.2 |
| ODZ | Otahua Downs | 5.23 | 204 | Pn | Pn | 12 12 21.2 | -2.2 |
| WKZ | Wanaka | 5.66 | 215 | PN | Pn | 12 12 25.5 | -3.6 |
| WKZ | Wanaka | 5.66 | 215 | Pn | Pn | 12 12 25.5 | -3.6 |
| TUZ | Tuapeka | 6.37 | 206 | PN | Pn | 12 12 35.8 | -2.4 |

**IDC 06 12:27:24.1±1.9, 20°.01N×93°.71E, h0km, mb3.3/2, mb1 3.5/3, mb1mx3.1/38, mbtmp3.2/3, ML3.5/1, Error ellipse: s-maj=62.2km s-min=37.5km az=35.0, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 5.18 | 106 | Pn | Pn | 12 28 44.9 | +2.0 |
| | 0.4nm,0.3s,baz=289,slow=14,SNR=11 | | | | | | |
| CMAR | | | | Sn | Sn | 12 29 44.9 | +1.4 |
| | 0.4nm,0.3s,baz=292,slow=15,SNR=4.6 | | | | | | |
| WRA | Warramunga Arr | 56.21 | 133 | P | P | 12 37 05.4 | -1.0 |
| | 0.4nm,1.0s,baz=319,slow=7.5,SNR=6.4 | | | | | | |
| ASAR | Alice Springs | 58.47 | 136 | P | P | 12 37 21.8 | -0.5 |
| | 0.1nm,0.5s,baz=317,slow=6.7,SNR=5.1 | | | | | | |
| TXAR | Lajitas Array | 128.16 | 19 | PKP | PKPdf | 12 46 33.6 | +0.4 |
| | 0.1nm,0.4s,baz=337,slow=1.2,SNR=1.9 | | | | | | |

*CSEM 06 12:42:17.6, 42°.87N×42°.39E, h0km, ML1.3, After TIF*
**TIF 06 12:42:17.6, 42°.87N×42°.39E, h12km±2km, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHVG | Ch'k'valeri | 0.27 | 237 | P | Pb | 12 42 24.1 | -0.3 |
| CHVG | | | | S | Sb | 12 42 29.2 | +0.3 |
| CHVG | Ch'k'valeri | 0.27 | 237 | P | Pb | 12 42 24.1 | -0.3 |
| CHVG | | | | S | Sb | 12 42 29.2 | +0.2 |
| ONI | Oni | 0.83 | 109 | P | Pg | 12 42 33.8 | +0.1 |
| ONI | | | | S | Sb | 12 42 45.4 | +0.2 |
| ONI | Oni | 0.83 | 109 | P | Pg | 12 42 33.8 | 0.0 |
| ONI | | | | S | Sb | 12 42 45.4 | +0.2 |

**TIF 06 12:42:34.9, 41°.42N×43°.91E, h19km±1km, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKH | Akhalkalaki | 0.32 | 269 | P | Pg | 12 42 42.0 | 0.0 |
| AKH | | | | S | Sg | 12 42 46.4 | -0.5 |
| AKH | Akhalkalaki | 0.32 | 269 | P | Pg | 12 42 42.0 | -0.1 |
| AKH | | | | S | Sg | 12 42 46.4 | -0.6 |
| KZR | Kazreti | 0.38 | 95 | P | Pb | 12 42 43.5 | +0.3 |
| KZR | | | | S | Sb | 12 42 49.0 | +0.1 |
| KZR | Kazreti | 0.38 | 95 | P | Pb | 12 42 43.5 | +0.2 |
| KZR | | | | S | Sb | 12 42 49.0 | +0.1 |
| TBLG | Delisi | 0.69 | 63 | P | Pn | 12 42 49.6 | -0.2 |
| TBLG | | | | S | Sn | 12 42 59.6 | -0.5 |
| TBLG | Delisi | 0.69 | 63 | P | Pn | 12 42 49.6 | -0.2 |
| TBLG | | | | S | Sn | 12 42 59.6 | -0.5 |
| DIGO | Kars | 1.08 | 202 | P | Pg | 12 42 56.0 | -0.2 |
| DGRG | David-gareji | 1.10 | 88 | P | Pg | 12 42 57.2 | +0.9 |
| DGRG | | | | S | Sg | 12 43 12.9 | +2.1 |
| DGRG | David-gareji | 1.10 | 88 | P | Pg | 12 42 57.2 | +0.9 |
| DGRG | | | | S | Sg | 12 43 12.9 | +2.1 |

**MAN 06 12:48:38, 10°.27N×124°.94E, h63km, mb4.5, ML3.4, MS3.3, 1D, Leyte**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSLP | Maasin | 0.15 | 210 | eP | Pn | 12 48 49.5 | +1.9 |
| MSLP | | | | eS | Sn | 12 48 57.7 | +3.2 |
| OCLP | Ormoc | 0.84 | 337 | eP | Pn | 12 48 56.4 | +2.2 |
| OCLP | | | | eS | Sn | 12 49 08.9 | +2.8 |
| PLP | Palo | 0.89 | 3 | ⇓eP | Pn | 12 48 56.0 | +1.2 |
| PLP | | | | eS | Sn | 12 49 07.6 | +0.3 |
| PAGZ | Pagadian | 2.85 | 213 | eP | Pn | 12 49 24.4 | +3.3 |
| IPIL | Ipil | 3.40 | 224 | eP | Pn | 12 49 29.9 | +1.3 |

*DDA 06 12:48:46.5, 37°.18N×28°.43E, h7km, Md2.6*
*ISCJB 06 12:48:47.3±0.9, 37°.12N±0°.06×28°.11E±0°.06, h0km, Error ellipse: s-maj=9.7km s-min=5.4km az=35.3*
*CSEM 06 12:48:47.6±0.4, 37°.13N×28°.14E, h1km, MD2.5, Error ellipse: s-maj=11.8km s-min=6.4km az=37.0, Mining explosion.*
*ISK 06 12:48:47.2, 37°.18N×28°.15E, h9km, MD2.5*
**ISC 06 12:48:47.3±1.1, 37°.28N±0°.07×28°.22E±0°.06, h0km, n12, σ0s.91/16, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.15 | 159 | ePG | Pg | 12 48 50.3 | +0.1 |
| YER | | | | eSG | Sg | 12 48 52.6 | +0.4 |
| YER | Yerkesik | 0.15 | 159 | ePg | Pg | 12 48 50.3 | +0.1 |
| YER | | | | eSg | Sg | 12 48 52.6 | +0.4 |
| AYDN | Tasoluk | 0.47 | 325 | i P | Pb | 12 48 59.1 | +0.6 |
| AYDN | | | | i S | Sb | 12 49 06.3 | +0.3 |
| AYDN | Tasoluk | 0.47 | 325 | P | Pb | 12 48 59.1 | +0.6 |
| AYDN | | | | S | Sb | 12 49 06.2 | +0.3 |
| TURN | Turunc | 0.51 | 142 | i P | Pg | 12 48 55.1 | -1.9 |
| TURN | Turunc | 0.51 | 142 | P | Pg | 12 48 55.1 | -1.9 |
| DALY | Dalyan (Mu˜la | 0.58 | 143 | ePG | Pg | 12 48 58.2 | -0.2 |
| DALY | Dalyan (Mu˜la | 0.58 | 143 | ePg | Pg | 12 48 58.2 | -0.2 |
| AYDB | Zeytinkoy-Aydi | 0.71 | 339 | ePG | Pb | 12 49 02.9 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 0.71 | 339 | ePg | Pb | 12 49 02.9 | +0.1 |
| BODT | Bodrum | 0.76 | 254 | ePG | Pg | 12 49 00.8 | -0.9 |
| BODT | Bodrum | 0.76 | 254 | ePg | Pg | 12 49 00.8 | -0.9 |

*IDC 06 13:10:22.9±3.6, 6°.03S×132°.04E, h0km, mb3.7/1, mb1 3.6/3, mb1mx3.3/26, mbtmp3.4/3, ML3.4/2, Error ellipse: s-maj=234.9km s-min=31.1km az=74.0*
*AUST 06 13:10:31.3, 6°.48S×130°.03E, h100km*
**ISC 06 13:10:26.5±2.0, 6°.2S±0°.2×131°.2E±0°.5, h10km, n10, σ2s.69/5, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDU | Kakadu | 6.53 | 169 | P | Pn | 13 12 05.4 | +2.6 |
| | baz=6.7,SNR=14 | | | | | | |
| MTN | Manton Dam | 6.56 | 180 | P | Pn | 13 12 06.1 | +3.0 |
| | baz=6.5,SNR=7.3 | | | | | | |
| KNRA | Kununurra | 9.66 | 194 | P | Pn | 13 12 45.6 | -0.1 |
| | baz=9.3,SNR=4.0 | | | | | | |
| LUWI | Luwuk | 9.83 | 301 | P | Pn | 13 12 42.2 | -5.8 |
| | baz=9.1,SNR=4.3 | | | | | | |
| FITZ | Fitzroy Crossi | 12.96 | 204 | P | Pn | 13 13 28.1 | -2.7 |
| | baz=12,SNR=8.0 | | | | | | |
| PALU | Palau | 13.90 | 14 | P | P | 13 13 56.2 | +4.2 |
| | baz=14,SNR=4.3 | | | | | | |
| WRA | Warramunga Arr | 13.97 | 167 | Pn | Pn | 13 13 42.4 | -2.2 |
| | 0.2nm,0.3s,baz=351,slow=13,SNR=10 | | | | | | |
| WRA | | | | Sn | Sn | 13 16 05.2 | -15 |
| | 0.4nm,0.3s,baz=346,slow=21,SNR=8.0 | | | | | | |
| MANU | Manus Island | 16.70 | 76 | P | P | 13 14 31.1 | +8.0 |
| | baz=18,SNR=3.8 | | | | | | |
| ASAR | Alice Springs | 17.52 | 172 | P | Pn | 13 14 30.5 | -0.6 |
| | 0.2nm,0.3s,baz=360,slow=9.3,SNR=20 | | | | | | |
| ASAR | | | | S | Sn | 13 17 29.6 | -17 |
| | 0.1nm,0.3s,baz=355,slow=39,SNR=3.9 | | | | | | |
| MKAR | Makanchi Array | 68.23 | 326 | P | P | 13 21 27.5 | +0.1 |
| | 0.3nm,0.4s,baz=126,slow=6.7,SNR=9.2 | | | | | | |

*ISCJB 06 13:27:02.8±0.4, 4°.95S±0°.04×133°.59E±0°.05, h25km, mb3.8/3, MS3.6/4, Error ellipse: s-maj=7.0km s-min=4.8km az=154.1*
*IDC 06 13:27:02.0±1.0, 4°.92S×133°.54E, h0km, mb3.8/3, mb1 4.0/7, mb1mx3.8/26, mbtmp3.9/7, ML3.9/4, MS3.7/8, Ms1 3.7/8, ms1mx3.3/31, Error ellipse: s-maj=40.2km s-min=19.4km az=68.0*
*AUST 06 13:27:05.8, 4°.96S×133°.53E, h35km*
*NEIC 06 13:27:06.6±0.8, 4°.94S×133°.51E, h35km, mb4.0/1, Error ellipse: s-maj=18.8km s-min=14.5km az=70.0*
*DJA 06 13:27:07.7±0.6, 5°S±3°×13°4E±°, h40km±41km, M4.3/14, mb4.4/9, mB5.0/5, MLv4.3/14, Mw(mB)4.3/5*
**ISC 06 13:27:05.3±0.7, 4°.92S±0°.07×133°.53E±0°.06, h25km, n43, σ1s.46/37, mb3.6/3, MS3.7/4, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.36 | 327 | P | Pn | 13 27 41.7 | -0.9 |
| | baz=2.4,SNR=58 | | | | | | |
| FAKI | Fak Fak | 2.36 | 327 | P | Pn | 13 27 41.6 | -0.9 |
| FAKI | Fak Fak | 2.36 | 327 | eP | Pn | 13 27 41.6 | -0.9 |
| RKPI | Ransiki, Papua | 3.45 | 11 | P | Pn | 13 27 57.0 | -0.5 |
| BNDI | Bandanaira | 3.63 | 276 | P | Pn | 13 28 02.0 | +2.0 |
| BNDI | | | | S | Sb | 13 28 49.1 | -3.4 |
| SAUI | Saumlaki | 3.76 | 216 | P | Pn | 13 28 05.7 | +3.9 |
| SIJI | Sorong | 4.62 | 331 | Pn | Pn | 13 28 13.1 | -0.5 |
| | 3.1nm,0.3s,baz=270,slow=23,SNR=16 | | | | | | |
| SIJI | | | | Sn | Sn | 13 29 06.3 | -0.1 |
| | 6.5nm,0.3s,baz=337,slow=23,SNR=11 | | | | | | |
| SWI | Sorong | 4.62 | 331 | P | Pn | 13 28 13.7 | 0.0 |
| | baz=4.7,SNR=4.8 | | | | | | |
| SWI | Sorong | 4.62 | 331 | P | Pn | 13 28 13.5 | -0.2 |
| SWI | | | | S | Sn | 13 29 06.0 | -0.6 |
| MSAI | Masohi | 4.84 | 289 | P | Pn | 13 28 18.2 | +1.5 |
| MSAI | | | | S | Sn | 13 29 14.6 | +2.5 |
| AAI | Ambon | 5.46 | 283 | P | Pn | 13 28 26.7 | +1.6 |
| | 94nm,0.5s,1µm0.4nm | | | | | | |
| SMPI | Sarmi | 5.94 | 61 | P | Pn | 13 28 32.0 | +0.3 |
| | 15nm,1.4s,0.1nm | | | | | | |
| NLAI | Namlea | 6.62 | 284 | P | Pn | 13 28 44.2 | +3.0 |
| | 36nm,0.5s,2µm0.2nm | | | | | | |
| LBMI | Labuha | 7.37 | 305 | P | Pn | 13 28 52.5 | +1.1 |
| | 21nm,1.1s,726nm0.1nm | | | | | | |
| JAY | Jayapura | 7.55 | 72 | Pn | Pn | 13 28 52.8 | -1.2 |
| | 1.1nm,0.3s,baz=32,slow=19,SNR=4.3 | | | | | | |
| KDU | Kakadu | 7.79 | 188 | P | Pn | 13 28 57.4 | +0.3 |
| | baz=7.8,SNR=48 | | | | | | |
| SANI | Sanana | 8.05 | 291 | P | Pn | 13 29 02.1 | +1.4 |
| | 19nm,0.7s | | | | | | |
| MTN | Manton Dam | 8.22 | 197 | P | Pn | 13 29 02.9 | -0.1 |
| | baz=8.2,SNR=92 | | | | | | |
| SOEI | Soe | 10.36 | 242 | P | Pn | 13 29 37.0 | +4.5 |
| | baz=10,SNR=5.3 | | | | | | |
| SOEI | Soe | 10.36 | 242 | P | Pn | 13 29 32.0 | -0.6 |
| KNRA | Kununurra | 11.67 | 203 | P | Pn | 13 29 49.7 | -0.6 |
| | baz=12,SNR=26 | | | | | | |
| KAPI | Kappang | 13.72 | 269 | LR | LR | 13 37 18.8 | |
| | comp=Z,214nm,19.2s,baz=127,slow=45 | | | | | | |
| PMG | Port Moresby | 14.24 | 109 | LR | LR | 13 37 35.0 | |
| | comp=Z,316nm,21.6s,baz=319,slow=44 | | | | | | |
| WRAB | Tennant Creek | 14.94 | 177 | eP | Pn | 13 30 30.6 | -4.4 |
| | 6.4nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 14.95 | 177 | Pn | Pn | 13 30 30.2 | -5.0 |
| | 0.4nm,0.3s,baz=0.3,slow=13,SNR=21 | | | | | | |
| WRA | | | | Sn | Sn | 13 33 06.8 | -13 |
| | 0.4nm,0.3s,baz=354,slow=23,SNR=7.5 | | | | | | |
| WRA | | | | LR | LR | 13 37 24.6 | |
| | comp=Z,266nm,18.7s,baz=25,slow=42 | | | | | | |
| FITZ | Fitzroy Crossi | 15.20 | 210 | Pn | Pn | 13 30 35.1 | -3.4 |
| | 0.8nm,0.3s,baz=45,slow=11,SNR=28 | | | | | | |
| FITZ | | | | Sn | Sn | 13 33 11.9 | -14 |
| | 0.1nm,0.3s,baz=288,slow=19,SNR=2.0 | | | | | | |
| FITZ | Fitzroy Crossi | 15.20 | 210 | P | Pn | 13 30 36.8 | -1.7 |
| | baz=15,SNR=26 | | | | | | |
| FITZ | Fitzroy Crossi | 15.20 | 210 | eP | Pn | 13 30 36.8 | -1.7 |
| | 10nm,1.1s | | | | | | |
| FITZ | | | | Sn | Sn | 13 33 11.9 | -14 |
| ASAR | Alice Springs | 18.64 | 179 | P | P | 13 31 19.5 | -1.9 |
| | 0.6nm,0.3s,baz=8.4,slow=13,SNR=52 | | | | | | |
| ASAR | | | | S | Sn | 13 34 36.0 | -14 |
| | 0.1nm,0.3s,baz=354,slow=24,SNR=3.8 | | | | | | |
| ASAR | | | | LR | LR | 13 39 39.9 | |
| | comp=Z,230nm,18.8s,baz=351,slow=41 | | | | | | |
| CTA | Charters Tower | 19.51 | 142 | P | P | 13 31 31.2 | +0.3 |
| | 0.4nm,0.3s,baz=318,slow=14,SNR=4.9 | | | | | | |
| CTAO | Charters Tower | 19.51 | 142 | eP | Pn | 13 31 32.2 | -0.1 |
| WRKA | Warakurna | 20.62 | 194 | P | P | 13 31 43.5 | +0.5 |
| | baz=21,SNR=13 | | | | | | |
| QLP | Quilpie | 23.85 | 156 | P | P | 13 32 17.5 | +0.8 |
| | baz=24,SNR=3.8 | | | | | | |
| HNR | Honiara | 26.59 | 101 | LR | LR | 13 42 46.9 | |
| | comp=Z,84nm,20.9s,baz=266,slow=36 | | | | | | |
| MJAR | Matsushiro Arr | 41.48 | 6 | LR | LR | 13 50 40.5 | |
| | comp=Z,138nm,19.2s,baz=185,slow=34 | | | | | | |
| KSRS | Korea Array | 42.48 | 353 | LR | LR | 13 51 43.3 | |
| | comp=Z,70nm,20.2s,baz=208,slow=35 | | | | | | |
| USRK | Ussuriysk Ar. | 48.92 | 359 | P | P | 13 35 49.5 | +0.2 |
| | 1.9nm,0.5s,baz=190,slow=7.4,SNR=4.6 | | | | | | |
| URZ | Urewera | 51.63 | 136 | LR | LR | 13 57 33.0 | |
| | comp=Z,87nm,18.3s,baz=337,slow=36 | | | | | | |
| MKAR | Makanchi Array | 68.49 | 325 | P | P | 13 38 06.2 | +0.7 |
| | 0.3nm,0.6s,baz=118,slow=6.2,SNR=3.1 | | | | | | |
| VNDA | Vanda | 74.10 | 174 | P | P | 13 38 40.0 | +1.0 |
| | 0.6nm,0.9s,baz=307,slow=7.2,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 131.80 | 283 | PKP | PKPdf | 13 46 19.4 | +1.9 |
| | 0.3nm,0.6s,baz=48,slow=2.1,SNR=2.4 | | | | | | |
| CPUP | Villa Florida | 147.20 | 162 | PKPbc | PKPab | 13 46 48.0 | -0.8 |
| | 1.3nm,0.6s,baz=237,slow=9.0,SNR=3.5 | | | | | | |
| LPAZ | La Paz | 149.95 | 135 | PKPbc | PKPbc | 13 46 55.6 | +0.2 |
| | 0.7nm,0.7s,baz=248,slow=5.4,SNR=1.8 | | | | | | |

*ISCJB 06 13:29:45.4±0.7, 25°.83S±0°.04×29°.32E±0°.05, h0km, Error ellipse: s-maj=6.5km s-min=5.8km az=138.6*
*PRE 06 13:29:46.2±0.3, 25°.93S×29°.36E, h0km, ML2.5, Explosion*
**ISC 06 13:29:46.5±1.2, 25°.95S±0°.05×29°.25E±0°.05, h0km, n6, σ2s.17/12, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNON | Benoni | 0.86 | 256 | eP | Pb | 13 30 04.6 | +0.3 |
| BNON | | | | eS | Sn | 13 30 18.3 | -1.0 |
| BNON | | | | AML | AML | 13 30 26.5 | |
| | comp=Z,54nm,0.5s | | | | | | |
| PRYS | Parys | 1.95 | 240 | eP | Pn | 13 30 20.4 | -0.6 |
| PRYS | | | | eS | Sn | 13 30 42.0 | -4.2 |
| PRYS | | | | AML | AML | 13 30 50.9 | |
| | comp=Z,28nm,0.5s | | | | | | |
| POGA | Pongola | 2.54 | 124 | eP | Pn | 13 30 29.2 | +0.2 |
| POGA | | | | eS | Sn | 13 31 00.7 | -0.1 |
| POGA | | | | AML | AML | 13 31 13.5 | |
| | comp=Z,18nm,0.5s | | | | | | |
| SWZ | Schweizer | 3.71 | 250 | eP | Pn | 13 30 47.4 | +2.2 |
| SWZ | | | | eS | Sn | 13 31 31.7 | +1.9 |
| SWZ | | | | AML | AML | 13 31 45.4 | |
| | comp=Z,15nm,0.5s | | | | | | |
| MATP | Matopo | 5.54 | 353 | i P | Pn | 13 31 11.0 | +0.6 |
| MATP | | | | i | | 13 31 11.0 | |
| | baz=220,slow=28 | | | | | | |
| MATP | | | | i S | Sn | 13 32 12.3 | -2.6 |
| BLWY | Bulawayo | 5.81 | 354 | i P | Pn | 13 31 16.3 | +2.1 |
| BLWY | | | | i | | 13 31 16.4 | |
| | baz=99,slow=18 | | | | | | |
| BLWY | | | | i S | Sn | 13 32 19.9 | -1.8 |

*IDC 06 13:45:01.5±0.8, 21°.36S×174°.24W, h0km, mb4.2/11, mb1 4.4/13, mb1mx4.3/25, mbtmp4.3/13, ML3.7/2, MS3.7/8, Ms1 3.7/8, ms1mx3.5/21, Error ellipse: s-maj=30.0km s-min=20.1km az=135.0*
*NEIC 06 13:45:07.9±0.6, 21°.09S×174°.37W, h35km, mb4.5/3, Error ellipse: s-maj=19.1km s-min=13.5km az=130.0*
**ISC 06 13:45:06.8±0.7, 21°.1S±0°.1×174°.4W±0°.2, h27km, n35, σ1s.12/24, mb4.3/14, MS3.6/6, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 7.56 | 19 | Pn | Pn | 13 46 49.1 | -6.3 |
| | 16nm,0.3s,baz=144,slow=2.3,SNR=24 | | | | | | |
| AFI | | | | Sn | Sn | 13 48 02.0 | -18 |
| | 3.0nm,0.3s,baz=78,slow=20,SNR=2.2 | | | | | | |
| AFI | Afiamalu | 7.56 | 19 | ePn | Pn | 13 46 49.0 | -6.5 |
| | 52nm,0.4s | | | | | | |
| AFI | | | | Sn | Sn | 13 48 02.0 | -18 |
| MSVF | Nonsavu | 7.92 | 294 | ePn | Pn | 13 47 07.4 | +7.0 |
| | 48nm,0.9s | | | | | | |
| RAR | Rarotonga | 13.60 | 93 | Pn | Pn | 13 48 06.2 | -12 |
| | 4.8nm,0.3s,baz=250,slow=7.8,SNR=6.3 | | | | | | |
| RAR | | | | Sn | Sn | 13 50 21.7 | -27 |
| | 0.8nm,0.3s,baz=306,slow=19,SNR=2.0 | | | | | | |
| RAR | | | | LR | LR | 13 54 08.6 | |
| | comp=Z,189nm,18.5s,baz=280,slow=41 | | | | | | |
| DZM | Mont Dzumac | 17.89 | 263 | eLR | LR | 13 53 49.4 | |
| | 320nm,20.8s | | | | | | |
| DZM | Mont Dzumac | 17.89 | 263 | P | P | 13 49 14.7 | +0.2 |
| | 0.5nm,0.3s,baz=179,slow=17,SNR=3.7 | | | | | | |
| DZM | | | | LR | LR | 13 54 55.0 | |
| | comp=Z,434nm,18.0s,baz=210,slow=33 | | | | | | |
| URZ | Urewera | 18.62 | 201 | P | P | 13 49 17.6 | -4.6 |
| | 0.2nm,0.3s,baz=343,slow=17,SNR=1.9 | | | | | | |
| URZ | | | | S | Sn | 13 52 30.1 | -20 |
| | 0.1nm,0.3s,baz=286,slow=20,SNR=2.3 | | | | | | |
| URZ | Urewera | 18.62 | 201 | eP | Pn | 13 49 23.4 | +0.8 |
| URZ | | | | S | Sn | 13 52 30.1 | -20 |
| TBI | Tubuai | 23.14 | 100 | eLQ | LQ | 13 54 28.8 | |
| | 555nm,38.5s | | | | | | |
| TBI | | | | eLR | LR | 13 55 34.3 | |
| | 353nm,30.0s | | | | | | |
| PPT2 | Papeete2 | 23.62 | 86 | eLR | LR | 13 55 46.0 | |
| | 394nm,27.2s | | | | | | |
| PPT | Papeete | 23.63 | 86 | LR | LR | 13 59 14.1 | |
| | comp=Z,100nm,18.2s,baz=246,slow=36 | | | | | | |
| HNR | Honiara | 27.33 | 291 | LR | LR | 14 00 58.0 | |
| | comp=Z,137nm,18.3s,baz=122,slow=35 | | | | | | |
| RKT | Rikitea | 36.46 | 101 | eLR | LR | 14 01 30.9 | |
| | 190nm,29.8s | | | | | | |
| ASAR | Alice Springs | 47.71 | 257 | P | P | 13 53 40.5 | -1.1 |
| | 6.0nm,0.7s,baz=101,slow=6.6,SNR=4.0 | | | | | | |
| ASAR | | | | PcP | PcP | 13 55 10.3 | -0.4 |
| | 0.6nm,0.7s,baz=97,slow=4.8,SNR=3.1 | | | | | | |
| WRAB | Tennant Creek | 47.89 | 262 | eP | P | 13 53 41.9 | -1.2 |
| | 3.5nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 47.90 | 262 | P | P | 13 53 41.2 | -1.9 |
| | 2.5nm,0.8s,baz=96,slow=8.0,SNR=15 | | | | | | |
| WRA | | | | PcP | PcP | 13 55 11.6 | +0.1 |
| | 0.5nm,0.4s,baz=94,slow=4.0,SNR=3.5 | | | | | | |
| SBA | Scott Base | 57.52 | 185 | eP | P | 13 54 55.3 | +2.0 |
| | 4.0nm,1.1s | | | | | | |
| MJAR | Matsushiro Arr | 72.76 | 322 | P | P | 13 56 32.1 | -0.7 |
| | 5.5nm,0.8s,baz=148,slow=5.6,SNR=16 | | | | | | |
| MAJO | Matsushiro | 72.76 | 322 | eP | P | 13 56 32.7 | -0.2 |
| | 8.7nm,0.9s | | | | | | |
| MAT | Matsushiro | 72.76 | 322 | P | P | 13 56 32.1 | -0.7 |
| ASAJ | Asahikawa | 75.93 | 330 | P | P | 13 56 52.8 | +1.7 |
| | 2.5nm,0.8s,baz=142,slow=5.4,SNR=4.2 | | | | | | |
| PETK | Petropavlovsk- | 77.78 | 343 | P | P | 13 57 00.6 | -0.6 |
| | 1.2nm,0.7s,baz=128,slow=12,SNR=3.9 | | | | | | |
| PETK | | | | LR | LR | 14 27 13.8 | |
| | comp=Z,24nm,19.8s,baz=137,slow=32 | | | | | | |
| NVAR | Mina Array Bea | 79.16 | 42 | P | P | 13 57 09.6 | +0.1 |
| | 1.4nm,0.8s,baz=232,slow=9.0,SNR=8.0 | | | | | | |
| KSRS | Korea Array | 79.63 | 317 | P | P | 13 57 12.9 | +1.1 |
| | 2.3nm,0.9s,baz=144,slow=5.1,SNR=8.4 | | | | | | |
| KSRS | | | | LR | LR | 14 27 59.7 | |
| | comp=Z,36nm,20.0s,baz=226,slow=32 | | | | | | |
| KSAR | Wonju Array Be | 79.65 | 317 | P | P | 13 57 12.9 | +1.0 |
| MAW | Mawson | 82.13 | 199 | P | P | 13 57 22.2 | -2.6 |
| | 0.8nm,0.7s,baz=185,slow=8.0,SNR=2.3 | | | | | | |
| TXAR | Lajitas Array | 84.53 | 56 | P | P | 13 57 37.3 | -0.6 |
| | 0.7nm,1.0s,baz=247,slow=4.6,SNR=2.9 | | | | | | |
| TXAR | | | | LR | LR | 14 26 38.6 | |
| | comp=Z,33nm,21.2s,baz=0.0,slow=30 | | | | | | |
| HLID | Hailey | 84.59 | 39 | P | P | 13 57 37.6 | -0.3 |
| ILAR | Eielson Array | 88.18 | 11 | P | P | 13 57 54.4 | -0.5 |
| | 1.6nm,1.2s,baz=224,slow=5.4,SNR=5.1 | | | | | | |
| CMAR | Chiang Mai Arr | 93.54 | 288 | P | P | 13 58 21.9 | +1.0 |
| | 2.5nm,0.8s,baz=119,slow=3.0,SNR=15 | | | | | | |
| LPAZ | La Paz | 98.66 | 111 | LR | LR | 14 36 02.3 | |
| | comp=Z,56nm,18.4s,baz=161,slow=31 | | | | | | |
| MKAR | Makanchi Array | 114.10 | 313 | PKP | PKPdf | 14 03 41.9 | -1.7 |
| | 0.3nm,0.6s,baz=90,slow=1.4,SNR=3.3 | | | | | | |
| AKASG | Malin Array Be | 145.13 | 334 | PKPbc | PKPbc | 14 04 40.7 | -0.5 |
| | 2.2nm,0.4s,baz=40,slow=4.1,SNR=14 | | | | | | |
| BRTR | Keskin Array B | 149.74 | 314 | PKPbc | PKPbc | 14 04 54.6 | 0.0 |
| | 1.3nm,0.7s,baz=103,slow=1.6,SNR=5.8 | | | | | | |
| GERES | GERESS Array B | 151.58 | 349 | PKPbc | PKPbc | 14 04 58.8 | +0.2 |
| | 0.7nm,0.6s,baz=29,slow=3.0,SNR=6.0 | | | | | | |

*CSEM 06 13:47:05.4±0.4, 39°.00N×40°.83E, h2km, MD2.9, Error ellipse: s-maj=17.4km s-min=8.5km az=150.0*
*DDA 06 13:47:05.9, 39°.07N×40°.76E, h7km, Md2.7*
*ISK 06 13:47:05.6, 39°.00N×40°.86E, h6km, MD2.9*
*ISCJB 06 13:47:06.6±0.7, 39°.10N±0°.04×40°.80E±0°.04, h6km±5km, Error ellipse: s-maj=7.4km s-min=5.5km az=168.4*
**ISC 06 13:47:06.2±1.0, 39°.03N±0°.04×40°.84E±0°.03, h9km±8km, n21, σ0s.33/27, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNGB | Bingˆ¶l | 0.13 | 252 | ePG | Pg | 13 47 09.0 | -0.3 |
| BNGB | | | | eSG | Sg | 13 47 11.6 | +0.2 |
| BNGL | BINGOL | 0.26 | 108 | P | Pb | 13 47 12.9 | -0.3 |
| BNGL | | | | S | Sb | 13 47 18.1 | +0.3 |
| BINT | Bingol | 0.31 | 240 | ePg | Pg | 13 47 09.0 | -3.5 |
| ECAT | Cat-ERZURUM | 0.58 | 10 | i P | Pg | 13 47 17.2 | -0.4 |
| ECAT | Cat-ERZURUM | 0.58 | 10 | P | Pg | 13 47 17.1 | -0.4 |
| EKAR | Karacoban | 0.98 | 76 | i P | Pg | 13 47 24.7 | -0.4 |
| EKAR | Karacoban | 0.98 | 76 | P | Pg | 13 47 24.7 | -0.4 |
| ERZN | Erzincan | 1.03 | 303 | ePG | Pb | 13 47 26.5 | +0.2 |
| PTK | Pertek | 1.14 | 263 | ePN | Pb | 13 47 28.0 | -0.2 |
| PTK | | | | eSN | Sn | 13 47 44.3 | -0.1 |
| PTK | Pertek | 1.14 | 263 | ePn | Pb | 13 47 28.0 | -0.2 |
| PTK | | | | eSn | Sn | 13 47 44.3 | -0.1 |
| SVRC | Sivrice-ELAZID | 1.36 | 242 | ePN | Pg | 13 47 32.2 | -0.2 |
| SVRC | Sivrice-ELAZID | 1.36 | 242 | ePn | Pg | 13 47 32.2 | -0.2 |
| EATA | Eleskirt | 1.52 | 57 | i P | Pb | 13 47 35.2 | +0.3 |
| EATA | Eleskirt | 1.52 | 57 | P | Pb | 13 47 35.2 | +0.3 |
| MAZI | Mazidag | 1.60 | 191 | ePN | Pn | 13 47 34.8 | -0.1 |
| MAZI | Mazidag | 1.60 | 191 | ePn | Pn | 13 47 34.8 | -0.1 |
| MARD | Mardin | 1.72 | 182 | P | Pb | 13 47 37.9 | -0.1 |
| MARD | | | | S | Sg | 13 48 02.3 | +0.8 |
| AGRB | Hanur-Agry | 1.76 | 71 | ePN | Pn | 13 47 37.1 | 0.0 |
| AGRB | Hanur-Agry | 1.76 | 71 | ePn | Pn | 13 47 37.1 | 0.0 |
| KEMA | Kemaliye | 1.84 | 278 | i P | Pb | 13 47 40.1 | 0.0 |
| KEMA | | | | i S | Sg | 13 48 05.8 | +0.4 |
| KEMA | Kemaliye | 1.84 | 278 | P | Pb | 13 47 40.1 | 0.0 |
| KEMA | | | | S | Sg | 13 48 05.8 | +0.4 |

*ISCJB 06 13:47:53.2±0.7, 2°.59S±0°.07×129°.43E±0°.06, h10km, mb2.9/1, Error ellipse: s-maj=10.0km s-min=8.7km az=16.1*
*DJA 06 13:47:54.3±0.3, 3°S±3°×12°9E±°, h10km, M3.6/12, mb4.4/3, MLv3.2/12*
*IDC 06 13:48:42.1±5.3, 5°.45S×132°.72E, h0km, mb3.9/1, mb1 3.8/3, mb1mx3.5/22, mbtmp3.6/3, ML3.3/2, Error ellipse: s-maj=336.5km s-min=31.3km az=75.0*
**ISC 06 13:47:54.3±1.3, 2°.64S±0°.07×129°.45E±0°.09, h10km, n12, σ1s.42/11, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSAI | Masohi | 0.87 | 216 | P | Pg | 13 48 09.4 | -1.7 |
| AAI | Ambon | 1.62 | 230 | P | Pn | 13 48 22.9 | -0.1 |
| BNDI | Bandanaira | 1.92 | 166 | P | Pn | 13 48 27.3 | +0.1 |
| NLAI | Namlea | 2.42 | 256 | P | Pn | 13 48 32.8 | -1.1 |
| SWI | Sorong | 2.53 | 46 | P | Pn | 13 48 34.7 | -0.8 |
| LBMI | Labuha | 2.78 | 316 | P | Pn | 13 48 39.4 | +0.4 |
| FAKI | Fak Fak | 2.81 | 96 | P | Pn | 13 48 38.6 | -0.8 |
| SANI | Sanana | 3.50 | 280 | P | Pn | 13 48 49.5 | +0.6 |
| KMSI | Cibinong | 6.33 | 300 | P | Pn | 13 49 27.1 | -0.7 |
| | 58nm,1.0s,0.2nm | | | | | | |
| MRSI | Marisa | 8.12 | 292 | P | Pn | 13 49 53.0 | +0.7 |
| | 10nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 17.85 | 165 | Pn | P | 13 52 06.7 | +3.0 |
| | 0.1nm,0.3s,baz=352,slow=13,SNR=2.7 | | | | | | |
| WRA | | | | Sn | Sn | 13 54 42.9 | -39 |
| | 0.0nm,0.3s,baz=351,slow=24,SNR=2.4 | | | | | | |
| ASAR | Alice Springs | 21.34 | 169 | P | P | 13 52 56.7 | +15 |
| | 0.2nm,0.3s,baz=358,slow=11,SNR=8.6 | | | | | | |

*ISCJB 06 13:50:48.1±0.7, 50°.09N±0°.04×18°.28E±0°.04, h0km, Error ellipse: s-maj=6.0km s-min=3.1km az=22.5*
*IPEC 06 13:50:48.2±0.2, 50°.09N×18°.44E, h0km, ML1.6/3, Error ellipse: s-maj=2.0km s-min=1.1km az=160.0*
*CSEM 06 13:50:48.3±0.4, 50°.10N×18°.33E, h2km, ML2.6/9, Error ellipse: s-maj=7.5km s-min=3.8km az=22.0*

**ISC 06 13:50:48.8±0.9, 50.08N±0.04×18.35E±0.03, h0km, n25, σ0.71/44, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKC | Ostrava-Krasne | 0.28 | 208 | ePG | Pg | 13 50 53.7 | -0.3 |
| OKC | | | | eSG | Sg | 13 50 57.4 | -0.2 |
| | comp=Z,21nm,0.4s | | | | | | |
| OKC | Ostrava-Krasne | 0.28 | 208 | Pg | Pg | 13 50 53.7 | -0.3 |
| OKC | | | | Sg | Sg | 13 50 57.4 | -0.2 |
| | 21nm,0.4s | | | | | | |
| MORC | Moravsky Berou | 0.60 | 240 | ePg | Pg | 13 51 00.8 | +0.5 |
| MORC | | | | eSg | Sg | 13 51 08.8 | +0.7 |
| | 8.2nm,0.2s | | | | | | |
| KRLC | Kraliky | 1.01 | 270 | ePG | Pg | 13 51 07.4 | -0.7 |
| KRLC | | | | eSG | Sg | 13 51 21.8 | +0.6 |
| KRLC | Kraliky | 1.01 | 270 | Pg | Pg | 13 51 07.4 | -0.7 |
| KRLC | | | | Sg | Sg | 13 51 21.8 | +0.6 |
| LANS | Liptovska Anna | 1.18 | 142 | ePG | Pg | 13 51 10.8 | -0.6 |
| LANS | | | | eSG | Sb | 13 51 27.9 | 0.0 |
| LANS | Liptovska Anna | 1.18 | 142 | ePg | Pg | 13 51 10.8 | -0.6 |
| LANS | | | | eSg | Sb | 13 51 27.9 | 0.0 |
| DPC | Dobruska-Polom | 1.33 | 283 | ePG | Pg | 13 51 13.3 | -0.9 |
| DPC | | | | eSG | Sb | 13 51 32.2 | 0.0 |
| | comp=Z,7.8nm,0.3s | | | | | | |
| DPC | Dobruska-Polom | 1.33 | 283 | Pg | Pg | 13 51 13.3 | -0.9 |
| DPC | | | | Sg | Sb | 13 51 32.2 | 0.0 |
| | 7.8nm,0.3s | | | | | | |
| VRAC | Vranov | 1.38 | 237 | ePg | Pn | 13 51 14.7 | -0.6 |
| VRAC | | | | eSg | Sb | 13 51 33.3 | -0.2 |
| | 11nm,0.3s | | | | | | |
| UPC | Upice | 1.56 | 287 | ePG | Pn | 13 51 17.4 | -0.4 |
| UPC | | | | eSG | Sg | 13 51 39.6 | +0.8 |
| | comp=Z,3.4nm,0.3s | | | | | | |
| UPC | Upice | 1.56 | 287 | Pg | Pn | 13 51 17.4 | -0.4 |
| UPC | | | | Sg | Sg | 13 51 39.6 | +0.8 |
| | 3.4nm,0.3s | | | | | | |
| VYHS | Vyhne | 1.62 | 168 | ePN | Pn | 13 51 18.2 | -0.4 |
| VYHS | | | | eSN | Sn | 13 51 40.2 | 0.0 |
| VYHS | Vyhne | 1.62 | 168 | ePn | Pn | 13 51 18.2 | -0.4 |
| VYHS | | | | eSn | Sn | 13 51 40.2 | 0.0 |
| KRUC | Moravsky | 1.63 | 232 | ePn | Pn | 13 51 19.0 | +0.3 |
| KRUC | | | | eSg | Sb | 13 51 40.9 | +0.1 |
| | 5.4nm,0.3s | | | | | | |
| STHS | Stebnicka Huta | 1.99 | 108 | ePN | Pn | 13 51 24.1 | +0.4 |
| STHS | | | | eSN | Sg | 13 51 52.5 | -0.2 |
| STHS | Stebnicka Huta | 1.99 | 108 | ePn | Pn | 13 51 24.1 | +0.4 |
| STHS | | | | eSn | Sg | 13 51 52.5 | -0.2 |
| GOPC | GO Pecny, Ondr | 2.30 | 267 | eSG | Sb | 13 52 01.3 | +1.1 |
| | comp=Z,3.5nm,0.3s | | | | | | |
| GOPC | GO Pecny, Ondr | 2.30 | 267 | Sg | Sb | 13 52 01.3 | +1.1 |
| | 3.5nm,0.3s | | | | | | |
| PRU | Pruhonice | 2.46 | 269 | eSG | Sg | 13 52 06.6 | -1.0 |
| | comp=Z,2.9nm,0.3s | | | | | | |
| PRU | Pruhonice | 2.46 | 269 | Sg | Sg | 13 52 06.6 | -1.0 |
| | 2.9nm,0.3s | | | | | | |
| PVCC | Panska Ves | 2.46 | 282 | eSG | Sg | 13 52 07.2 | -0.7 |
| | comp=Z,6.7nm,0.3s | | | | | | |
| PVCC | Panska Ves | 2.46 | 282 | Sg | Sg | 13 52 07.2 | -0.7 |
| | 6.7nm,0.3s | | | | | | |
| KHC | Kasperske Hory | 3.25 | 255 | ePG | Pb | 13 51 48.2 | +1.0 |
| KHC | | | | eSG | Sg | 13 52 31.3 | -1.7 |
| | comp=Z,3.8nm,0.6s | | | | | | |
| KHC | Kasperske Hory | 3.25 | 255 | Pg | Pb | 13 51 48.2 | +1.0 |
| KHC | | | | Sg | Sg | 13 52 31.3 | -1.7 |
| | 3.8nm,0.6s | | | | | | |

**DJA 06 13:56:25.6±1.7, 4°N±7°×9°6E±2°5, h15km±12km, M3.5/3, MLv3.5/3, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MLSI | Meulaboh, Aceh | 0.16 | 189 | P | Pb | 13 56 30.5 | +0.1 |
| MLSI | | | | S | Sb | 13 56 34.7 | +1.1 |
| LHMI | Lhok Sumawe | 0.95 | 33 | P | Pb | 13 56 42.7 | -1.0 |
| LHMI | | | | S | Sb | 13 56 55.7 | -0.4 |

*IDC 06 14:34:38.9±3.1, 4.77S×133.64E, h0km, mb3.8/1, mb1 4.0/4, mb1mx3.6/21, mbtmp3.8/4, ML3.8/3, Error ellipse: s-maj=130.7km s-min=28.8km az=82.0*
*AUST 06 14:35:04.3, 6.46S×133.05E, h0km*
**ISC 06 14:34:40.7±2.1, 4.7S±0.2×133.6E±0.3, h10km, n10, σ1.93/8, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SWI | Sorong | 4.49 | 328 | P | Sn | 14 36 33.0 | -8.1 |
| | baz=5.9,SNR=4.0 | | | | | | |
| KDU | Kakadu | 8.01 | 188 | P | Pn | 14 36 38.5 | +1.3 |
| | baz=6.3,SNR=13 | | | | | | |
| MTN | Manton Dam | 8.45 | 197 | P | Pn | 14 36 43.8 | +0.5 |
| | baz=6.7,SNR=51 | | | | | | |
| KNRA | Kununurra | 11.90 | 203 | P | Pn | 14 37 30.5 | 0.0 |
| | baz=10,SNR=6.7 | | | | | | |
| WRA | Warramunga Arr | 15.16 | 177 | Pn | Pn | 14 38 11.9 | -3.1 |
| | 0.3nm,0.3s,baz=360,slow=13,SNR=5.3 | | | | | | |
| WRA | | | | Sn | Sn | 14 40 50.3 | -13 |
| | 0.2nm,0.3s,baz=2.5,slow=22,SNR=5.7 | | | | | | |
| FITZ | Fitzroy Crossi | 15.44 | 210 | Pn | Pn | 14 38 16.6 | -2.1 |
| | 0.4nm,0.3s,baz=36,slow=13,SNR=10.0 | | | | | | |
| FITZ | | | | Sn | Sn | 14 40 56.4 | -13 |
| | 0.1nm,0.3s,baz=172,slow=15,SNR=2.4 | | | | | | |
| FITZ | Fitzroy Crossi | 15.44 | 210 | P | Pn | 14 38 17.2 | -1.5 |
| | baz=14,SNR=9.7 | | | | | | |
| ASAR | Alice Springs | 18.85 | 179 | P | Pn | 14 39 01.0 | -0.6 |
| | 0.4nm,0.3s,baz=5.4,slow=12,SNR=24 | | | | | | |
| ASAR | | | | S | Sn | 14 42 20.2 | -13 |
| | 0.1nm,0.3s,baz=0.0,slow=28,SNR=3.9 | | | | | | |
| WRKA | Warakurna | 20.85 | 194 | P | Pn | 14 39 28.7 | +3.3 |
| | baz=19,SNR=4.0 | | | | | | |
| MKAR | Makanchi Array | 68.37 | 325 | P | P | 14 45 42.7 | +0.2 |
| | 0.6nm,0.5s,baz=115,slow=8.2,SNR=7.7 | | | | | | |

**DJA 06 14:44:18.9±2.1, 8°S±18°×10°7E±°, h18km±14km, M3.8/10, MLv3.8/10, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNJI | Cibinong | 0.69 | 26 | P | Pb | 14 44 31.9 | -0.4 |
| SKJI | Sukabumi | 0.96 | 344 | P | Pb | 14 44 37.0 | 0.0 |
| LEM | Lembang | 1.35 | 36 | P | Pn | 14 44 42.1 | -0.9 |
| CMJI | Cimerak | 1.61 | 85 | P | Pn | 14 44 45.9 | -0.5 |
| CGJI | Cibinong | 1.73 | 319 | P | Pn | 14 44 47.7 | -0.4 |
| KPJI | Karang Pucung | 2.17 | 74 | P | Pn | 14 44 53.9 | -0.2 |
| KASI | Kota Agung | 3.33 | 316 | P | Pn | 14 45 10.2 | +0.1 |
| KLI | Kotabumi | 3.62 | 327 | P | Pn | 14 45 14.4 | +0.2 |
| UGM | Wanagama | 3.66 | 90 | P | Pn | 14 45 14.8 | +0.1 |

*AUST 06 14:45:27.3±5.2, 4.71S×133.90E, h111km, Error ellipse: s-maj=5.2km s-min=1.4km az=253.0*
*ISCJB 06 14:45:28.4±0.8, 5.33S±0.06×133.4E±0.1, h10km, mb3.7/5, MS3.2/2, Error ellipse: s-maj=20.0km s-min=8.7km az=1.0*
*IDC 06 14:45:28.4±1.4, 5.25S×133.46E, h0km, mb3.8/5, mb1 4.1/9, mb1mx3.8/30, mbtmp4.0/9, ML3.9/4, MS3.3/3, Ms1 3.3/3, ms1mx2.9/22, Error ellipse: s-maj=57.0km s-min=21.4km az=84.0*
**ISC 06 14:45:29.8±1.1, 5.42S±0.08×133.5E±0.2, h10km, n18, σ2.06/13, mb3.9/5, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.79 | 333 | P | Pn | 14 46 05.9 | -8.8 |
| | baz=2.4,SNR=9.4 | | | | | | |
| KDU | Kakadu | 7.29 | 188 | P | Pn | 14 47 22.8 | +6.2 |
| | baz=8.1,SNR=55 | | | | | | |
| MTN | Manton Dam | 7.74 | 198 | P | Pn | 14 47 28.2 | +5.5 |
| | baz=8.6,SNR=103 | | | | | | |
| BATI | Baumata | 10.87 | 243 | Pn | Pn | 14 48 06.2 | +0.6 |
| | 0.8nm,0.3s,baz=82,slow=19,SNR=2.0 | | | | | | |
| KNRA | Kununurra | 11.21 | 204 | P | Pn | 14 48 15.0 | +4.7 |
| | baz=12,SNR=37 | | | | | | |
| KAPI | Kappang | 13.73 | 271 | LR | LR | 14 56 02.3 | |
| | comp=Z,134nm,18.3s,baz=83,slow=46 | | | | | | |
| WRA | Warramunga Arr | 14.46 | 177 | Pn | Pn | 14 48 56.1 | +1.5 |
| | 0.5nm,0.3s,baz=356,slow=13,SNR=16 | | | | | | |
| WRA | | | | Sn | Sn | 14 51 31.5 | -3.6 |
| | 0.3nm,0.3s,baz=358,slow=24,SNR=4.6 | | | | | | |
| FITZ | Fitzroy Crossi | 14.77 | 211 | Pn | Pn | 14 48 59.2 | +0.2 |
| | 0.4nm,0.3s,baz=29,slow=9.5,SNR=35 | | | | | | |
| FITZ | | | | Sn | Sn | 14 51 41.6 | -1.3 |
| | 0.3nm,0.3s,baz=84,slow=18,SNR=4.3 | | | | | | |
| FITZ | Fitzroy Crossi | 14.77 | 211 | P | Pn | 14 49 01.8 | +2.8 |
| | baz=16,SNR=7.8 | | | | | | |
| ASAR | Alice Springs | 18.14 | 179 | P | P | 14 49 44.4 | +2.0 |
| | 0.5nm,0.3s,baz=357,slow=14,SNR=40 | | | | | | |
| ASAR | | | | S | Sn | 14 53 02.1 | -2.6 |
| | 0.1nm,0.3s,baz=356,slow=27,SNR=4.0 | | | | | | |
| WRKA | Warakurna | 20.14 | 194 | P | Pn | 14 50 09.4 | +3.2 |
| | baz=21,SNR=4.0 | | | | | | |
| HNR | Honiara | 26.49 | 100 | LR | LR | 15 02 08.6 | |
| | comp=Z,62nm,20.9s,baz=223,slow=38 | | | | | | |
| MJAR | Matsushiro Arr | 41.97 | 6 | LR | LR | 15 08 34.9 | |
| | comp=Z,32nm,20.2s,baz=215,slow=33 | | | | | | |
| SONM | Songino Array | 58.16 | 339 | P | P | 14 55 23.6 | -0.4 |
| | 0.2nm,0.4s,baz=134,slow=6.2,SNR=2.7 | | | | | | |
| MKAR | Makanchi Array | 68.90 | 325 | P | P | 14 56 34.1 | -0.8 |
| | 1.2nm,0.8s,baz=123,slow=7.1,SNR=9.5 | | | | | | |
| ZALV | Zalesovo Beam | 71.78 | 332 | P | P | 14 56 50.9 | -1.5 |
| | 0.4nm,0.3s,baz=101,slow=2.9,SNR=3.4 | | | | | | |
| VNDA | Vanda | 73.60 | 174 | P | P | 14 57 04.4 | +1.5 |
| | 0.5nm,0.8s,baz=319,slow=8.4,SNR=2.9 | | | | | | |
| BVAR | Borovoye Array | 78.64 | 327 | P | P | 14 57 30.9 | -1.1 |
| | 0.9nm,0.7s,baz=111,slow=7.9,SNR=5.1 | | | | | | |

*DDA 06 14:54:36.5, 40.38N×37.71E, h6km, Md2.9*
*CSEM 06 14:54:37.4±0.2, 40.37N×37.73E, h2km, MD2.9, Error ellipse: s-maj=6.0km s-min=4.1km az=150.0*
*ISK 06 14:54:37.1, 40.37N×37.70E, h5km, MD3.0*
**ISC 06 14:54:37.2±1.1, 40.38N±0.03×37.71E±0.02, h7km±12km, n42, σ0.72/60, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SUSE | Susehri | 0.41 | 114 | iP | Pg | 14 54 45.1 | -0.2 |
| SUSE | | | | iS | Sg | 14 54 51.7 | +1.0 |
| SUSE | Susehri | 0.41 | 114 | P | Pg | 14 54 45.1 | -0.2 |
| SUSE | | | | S | Sg | 14 54 51.7 | +1.0 |
| CUZAR | Zara_SIVAS | 0.49 | 174 | P | Pg | 14 54 46.1 | -0.6 |
| CUZAR | | | | S | Sg | 14 54 53.8 | +0.7 |
| SCER | sogukcermik | 0.68 | 221 | iP | Pg | 14 54 49.8 | -0.5 |
| SCER | | | | iS | Sg | 14 54 59.4 | +0.1 |
| SCER | sogukcermik | 0.68 | 221 | P | Pg | 14 54 49.8 | -0.5 |
| SCER | | | | S | Sg | 14 54 59.4 | +0.1 |
| GRSN | GIRESUNGRSN | 0.69 | 38 | iP | Pg | 14 54 50.6 | 0.0 |
| GRSN | | | | iS | Sb | 14 55 01.0 | -0.4 |
| GRSN | GIRESUNGRSN | 0.69 | 38 | P | Pg | 14 54 50.6 | 0.0 |
| GRSN | | | | S | Sb | 14 55 01.0 | -0.4 |
| SVSK | Karacayir | 0.71 | 230 | ePG | Pg | 14 54 50.7 | -0.2 |
| SVSK | | | | eSG | Sb | 14 55 01.3 | -0.6 |
| SVSK | Karacayir | 0.71 | 230 | ePg | Pg | 14 54 50.7 | -0.2 |
| SVSK | | | | eSg | Sb | 14 55 01.3 | -0.6 |
| CUKAN | kangal_SIVAS | 1.07 | 190 | P | Pg | 14 54 56.6 | -1.2 |
| CUKAN | | | | S | Sb | 14 55 12.7 | +0.2 |
| ILIC | ilic-Erzincan | 1.14 | 144 | ePN | Pb | 14 54 59.7 | +0.5 |
| ILIC | ilic-Erzincan | 1.14 | 144 | ePn | Pb | 14 54 59.7 | +0.5 |
| KELT | Kelkit | 1.21 | 100 | iP | Pg | 14 54 59.5 | -0.8 |
| KELT | | | | iS | Sg | 14 55 15.5 | -0.5 |
| KELT | Kelkit | 1.21 | 100 | P | Pg | 14 54 59.5 | -0.8 |
| KELT | | | | S | Sg | 14 55 15.5 | -0.5 |
| KEMA | Kemaliye | 1.26 | 151 | iP | Pg | 14 55 00.0 | -1.4 |
| KEMA | | | | iS | Sg | 14 55 18.1 | +0.4 |
| KEMA | Kemaliye | 1.26 | 151 | P | Pg | 14 55 00.0 | -1.4 |
| KEMA | | | | S | Sg | 14 55 18.1 | +0.4 |
| GUMT | Gumushane | 1.35 | 86 | ePN | Pn | 14 55 02.5 | -0.1 |
| GUMT | Gumushane | 1.35 | 86 | ePn | Pn | 14 55 02.5 | -0.1 |
| EZC | Erzincan | 1.41 | 116 | ePn | Pg | 14 55 08.7 | +4.5 |
| KVT | Kavak | 1.45 | 300 | ePN | Pg | 14 55 04.6 | -0.4 |
| KVT | Kavak | 1.45 | 300 | ePn | Pg | 14 55 04.6 | -0.4 |
| CUSAR | Sarkisla-SIVAS | 1.48 | 230 | P | Pb | 14 55 04.9 | -0.2 |
| CUSAR | | | | S | Sg | 14 55 25.6 | +0.8 |
| MACK | Trabzon | 1.67 | 69 | iP | Pn | 14 55 07.0 | +0.2 |
| MACK | | | | iS | Sg | 14 55 30.7 | -0.1 |
| MACK | Trabzon | 1.67 | 69 | P | Pn | 14 55 07.0 | +0.2 |
| MACK | | | | S | Sg | 14 55 30.7 | -0.1 |
| KTUT | Trabzon | 1.68 | 68 | ePN | Pn | 14 55 07.9 | +0.9 |
| KTUT | Trabzon | 1.68 | 68 | ePn | Pn | 14 55 07.9 | +0.9 |
| ERZN | Erzincan | 1.74 | 116 | ePN | Pn | 14 55 08.7 | +0.8 |
| DARE | Darende-Malaty | 1.81 | 186 | ePN | Pn | 14 55 09.8 | +0.9 |
| DARE | Darende-Malaty | 1.81 | 186 | ePn | Pn | 14 55 09.8 | +0.9 |
| BAYT | Ayd˜–ntepe-Bay | 1.86 | 89 | ePN | Pn | 14 55 10.7 | +1.1 |
| BAYT | Ayd˜–ntepe-Bay | 1.86 | 89 | ePn | Pn | 14 55 10.7 | +1.1 |
| PTK | Pertek | 1.97 | 138 | ePN | Pn | 14 55 11.9 | +0.7 |
| PTK | Pertek | 1.97 | 138 | ePn | Pn | 14 55 11.9 | +0.7 |
| YOZ | Yozgat | 1.98 | 249 | ePN | Pb | 14 55 12.7 | -0.9 |
| YOZ | Yozgat | 1.98 | 249 | ePn | Pb | 14 55 12.7 | -0.9 |
| AKCD | Akcadag | 2.08 | 175 | iP | Pb | 14 55 15.5 | +0.1 |
| AKCD | Akcadag | 2.08 | 175 | P | Pb | 14 55 15.5 | +0.1 |
| AKCD | | | | S | Sg | 14 55 45.5 | +1.3 |
| ELZG | Elazig | 2.12 | 152 | iP | Pb | 14 55 15.7 | -0.3 |
| ELZG | Elazig | 2.12 | 152 | P | Pb | 14 55 15.7 | -0.3 |
| ELZG | | | | S | Sg | 14 55 44.4 | -1.0 |
| MALT | Malatya | 2.13 | 165 | ePN | Pn | 14 55 14.4 | +1.1 |
| MALT | Malatya | 2.13 | 165 | ePn | Pn | 14 55 14.4 | +1.1 |
| SARI | SarD1z-Kayseri | 2.21 | 207 | ePN | Pn | 14 55 15.4 | +1.0 |

*CSEM 06 15:10:59.5±0.9, 37.43N×37.59E, h5km, MD2.7, Error ellipse: s-maj=20.6km s-min=11.1km az=101.0*
*DDA 06 15:11:02.4, 37.26N×37.14E, h7km, Md2.7*
*ISK 06 15:11:02.8, 37.35N×37.23E, h5km, MD2.7*
*ISCJB 06 15:11:03.1±0.7, 37.31N±0.07×37.15E±0.04, h4km±7km, Error ellipse: s-maj=11.0km s-min=5.4km az=173.9*
**ISC 06 15:11:01.9±1.5, 37.32N±0.06×37.22E±0.05, h1km±13km, n13, σ0.73/19, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GZT | Gaziantep | 0.28 | 83 | P | Pb | 15 11 09.3 | -0.5 |
| GZT | | | | S | Sb | 15 11 14.9 | -0.1 |
| AYKD | Aykdinkavak | 0.34 | 286 | P | Pg | 15 11 08.6 | +0.2 |
| AYKD | | | | S | Sg | 15 11 13.6 | +0.8 |
| KAMA | Osmaniye | 0.46 | 253 | P | Pg | 15 11 10.0 | -0.7 |
| KAMA | | | | S | Sg | 15 11 15.8 | -0.8 |
| ANDN | Andirin | 0.74 | 291 | iP | Pn | 15 11 20.3 | +0.6 |
| ANDN | | | | iS | Sn | 15 11 30.8 | -0.9 |
| ANDN | Andirin | 0.74 | 291 | P | Pn | 15 11 20.3 | +0.6 |
| ANDN | | | | S | Sn | 15 11 30.8 | -0.9 |
| KOZT | Kozan | 1.12 | 279 | ePN | Pn | 15 11 24.8 | +0.1 |
| KOZT | Kozan | 1.12 | 279 | ePn | Pn | 15 11 24.8 | +0.1 |
| CEYT | Ceyhan | 1.21 | 256 | ePN | Pn | 15 11 26.9 | +0.9 |
| CEYT | Ceyhan | 1.21 | 256 | ePn | Pn | 15 11 26.9 | +0.9 |
| TAHT | Tahtakopru-Hat | 1.25 | 222 | ePN | Pn | 15 11 27.6 | +1.0 |
| TAHT | Tahtakopru-Hat | 1.25 | 222 | ePn | Pn | 15 11 27.6 | +1.0 |
| SARI | SarD1z-Kayseri | 1.26 | 330 | ePN | Pn | 15 11 26.9 | +0.1 |
| SARI | | | | eSN | Sn | 15 11 44.5 | 0.0 |
| MALT | Malatya | 1.38 | 44 | ePN | Pb | 15 11 28.9 | +0.3 |

*ISCJB 06 15:42:34.5±0.5, 26.29S±0.05×179.4E±0.1, h495km, mb3.9/11, Error ellipse: s-maj=13.4km s-min=6.9km az=174.7*
*IDC 06 15:42:36.5±1.6, 26.42S×179.38E, h512km±19km, mb3.6/11, mb1 3.7/14, mb1mx3.5/32, mbtmp4.5/14, Error ellipse: s-maj=23.6km s-min=15.8km az=175.0*
**ISC 06 15:42:35.5±0.7, 26.40S±0.08×179.4E±0.1, h495km, n34, σ1.18/35, mb3.8/11, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 3.73 | 140 | P | P | 15 43 53.2 | +1.8 |
| | 64nm,0.3s,baz=144,slow=21,SNR=4.1 | | | | | | |
| MKAZ | Moumakai | 11.25 | 197 | PN | P | 15 45 09.9 | +3.9 |
| HAZ | Te Kaha | 11.40 | 186 | PN | P | 15 45 09.6 | +2.1 |
| PUZ | Puketiti | 11.67 | 184 | PN | P | 15 45 11.5 | +1.0 |
| PUZ | | | | SN | S | 15 47 17.8 | -0.4 |
| URZ | Urewera | 11.97 | 189 | P | P | 15 45 14.0 | +0.4 |
| | 10nm,0.3s,baz=358,slow=0.8,SNR=56 | | | | | | |
| URZ | | | | S | S | 15 47 19.9 | -4.1 |
| | 0.4nm,0.3s,baz=255,slow=6.7,SNR=2.6 | | | | | | |
| URZ | Urewera | 11.97 | 189 | PN | P | 15 45 14.0 | +0.4 |
| MWZ | Matawai | 12.00 | 187 | PN | P | 15 45 14.6 | +0.7 |
| RIGZ | Rimuhau | 12.34 | 186 | PN | P | 15 45 18.1 | +0.5 |
| DZM | Mont Dzumac | 12.54 | 287 | P | P | 15 45 21.2 | +1.2 |
| | 1.3nm,0.3s,baz=177,slow=5.2,SNR=13 | | | | | | |
| BKZ | Black Stump Fm | 12.95 | 190 | ePN | P | 15 45 23.7 | -0.4 |
| TSZ | Takapari Road | 13.91 | 191 | PN | P | 15 45 33.1 | -1.1 |
| AFI | Afiamalu | 14.95 | 35 | P | P | 15 45 40.3 | -5.2 |
| | 4.4nm,0.3s,baz=259,slow=11,SNR=4.7 | | | | | | |
| AFI | | | | S | S | 15 48 10.9 | -11 |
| | 1.3nm,0.3s,baz=349,slow=8.6,SNR=1.8 | | | | | | |
| QRZ | Quartz Range | 15.46 | 200 | PN | P | 15 45 52.3 | +1.9 |
| NNZ | Nelson | 15.58 | 197 | PN | P | 15 45 51.9 | +0.3 |
| THZ | Tophouse | 16.22 | 198 | PN | P | 15 45 58.8 | +0.4 |
| DSZ | Denniston Nort | 16.52 | 200 | PN | P | 15 46 02.5 | +0.9 |
| KHZ | Kahutara | 16.67 | 195 | ePN | P | 15 46 03.0 | -0.1 |
| LTZ | Lake Taylor | 17.34 | 198 | PN | P | 15 46 09.9 | +0.1 |
| LTZ | | | | SN | S | 15 49 06.7 | +1.5 |
| RPZ | Rata Peaks | 18.54 | 199 | P | P | 15 46 20.9 | -0.1 |
| | 1.8nm,0.3s,baz=157,slow=1.8,SNR=15 | | | | | | |
| CTA | Charters Tower | 31.00 | 275 | P | P | 15 48 12.8 | +0.8 |
| | 20nm,0.4s,baz=97,slow=11,SNR=58 | | | | | | |
| PMG | Port Moresby | 34.84 | 293 | P | P | 15 48 44.3 | -0.3 |
| | 5.4nm,0.5s,baz=117,slow=16,SNR=5.3 | | | | | | |
| ASAR | Alice Springs | 41.11 | 264 | P | P | 15 49 35.9 | 0.0 |
| | 6.0nm,0.5s,baz=94,slow=8.0,SNR=277 | | | | | | |
| WRA | Warramunga Arr | 41.72 | 269 | P | P | 15 49 40.1 | -0.6 |
| | 9.0nm,0.5s,baz=104,slow=7.9,SNR=65 | | | | | | |
| FITZ | Fitzroy Crossi | 50.10 | 268 | P | P | 15 50 44.5 | -0.2 |
| | 3.2nm,0.5s,baz=101,slow=5.1,SNR=19 | | | | | | |
| ASAJ | Asahikawa | 77.83 | 334 | P | P | 15 53 41.4 | +0.2 |
| | 3.4nm,0.9s,baz=160,slow=18,SNR=3.4 | | | | | | |
| KSRS | Korea Array | 79.80 | 321 | P | P | 15 53 51.1 | -0.7 |
| | 1.2nm,0.7s,baz=136,slow=6.2,SNR=7.6 | | | | | | |
| PETK | Petropavlovsk- | 81.39 | 347 | P | P | 15 53 58.7 | -1.0 |
| | 1.3nm,0.9s,baz=124,slow=7.2,SNR=3.2 | | | | | | |
| USRK | Ussuriysk Ar. | 82.55 | 328 | P | P | 15 54 05.3 | -0.5 |
| | 1.7nm,0.7s,baz=74,slow=7.2,SNR=4.0 | | | | | | |
| NVAR | Mina Array Bea | 86.95 | 44 | P | P | 15 54 27.4 | -0.4 |
| | 1.0nm,0.6s,baz=218,slow=8.1,SNR=7.5 | | | | | | |
| TXAR | Lajitas Array | 92.24 | 58 | P | P | 15 54 52.2 | -0.1 |
| | 0.3nm,0.7s,baz=195,slow=6.5,SNR=4.6 | | | | | | |
| HFS | Hagfors | 144.87 | 348 | PKP | PKPdf | 16 01 13.6 | -1.5 |
| | 1.0nm,0.3s,baz=66,slow=3.6,SNR=10 | | | | | | |
| MMAI | Mount Meron Ar | 148.11 | 291 | PKPbc | PKPbc | 16 01 24.6 | -0.9 |
| | 1.0nm,0.3s,baz=98,slow=5.1,SNR=3.1 | | | | | | |
| EIL | Elat | 148.49 | 284 | PKPbc | PKPbc | 16 01 26.1 | -0.3 |
| | 2.8nm,0.6s,baz=108,slow=3.2,SNR=3.6 | | | | | | |
| BRTR | Keskin Array B | 148.54 | 304 | PKPbc | PKPdf | 16 01 23.7 | +1.6 |
| | 0.8nm,0.5s,baz=140,slow=3.1,SNR=4.2 | | | | | | |

*ISCJB 06 15:48:26.0±0.7, 4.94S±0.07×135.11E±0.06, h10km, mb3.7/1, Error ellipse: s-maj=10.2km s-min=8.6km az=165.4*
*IDC 06 15:48:26.5±1.5, 4.83S×135.05E, h0km, mb3.6/1, mb1 4.4/8, mb1mx3.9/34, mbtmp4.3/8, ML4.1/6, Error ellipse: s-maj=26.0km s-min=25.3km az=109.0*
*DJA 06 15:48:42.8±0.9, 1°S±12°×13°1E±°, h10km, M3.9/8, MLv3.9/8*
**ISC 06 15:48:27.9±0.7, 4.84S±0.07×135.10E±0.08, h10km, n11, σ2.02/11, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 3.43 | 304 | P | Pn | 15 49 22.7 | +1.3 |
| RKPI | Ransiki, Papua | 3.44 | 344 | P | Pg | 15 49 34.2 | +0.4 |
| BNDI | Bandanaira | 5.19 | 273 | P | Pn | 15 49 41.2 | -4.4 |
| SIJI | Sorong | 5.50 | 316 | Pn | Pn | 15 49 50.2 | +0.2 |
| | 6.2nm,0.3s,baz=263,slow=22,SNR=35 | | | | | | |
| SIJI | | | | Sn | Sn | 15 50 48.4 | -4.9 |
| | 7.6nm,0.3s,baz=114,slow=23,SNR=10 | | | | | | |
| JAY | Jayapura | 6.05 | 68 | Pn | Pn | 15 49 58.0 | +0.4 |
| | 0.9nm,0.3s,baz=240,slow=9.4,SNR=7.0 | | | | | | |
| BATI | Baumata | 12.52 | 244 | Pn | Pn | 15 51 26.9 | +0.6 |
| | 2.3nm,0.3s,baz=300,slow=6.5,SNR=4.7 | | | | | | |
| BATI | | | | Sn | Sn | 15 53 47.3 | +1.2 |
| | 2.5nm,0.3s,baz=160,slow=19,SNR=5.2 | | | | | | |
| PMG | Port Moresby | 12.79 | 111 | Pn | Pn | 15 51 30.8 | +0.8 |
| | 0.3nm,0.3s,baz=266,slow=16,SNR=2.6 | | | | | | |
| WRA | Warramunga Arr | 15.03 | 183 | Pn | Pn | 15 51 59.1 | -1.4 |
| | 0.4nm,0.3s,baz=356,slow=13,SNR=8.7 | | | | | | |
| WRA | | | | Sn | Sn | 15 54 33.9 | -13 |
| | 0.3nm,0.3s,baz=12,slow=22,SNR=5.5 | | | | | | |
| FITZ | Fitzroy Crossi | 16.10 | 214 | Pn | Pn | 15 52 12.7 | -1.8 |
| | 1.2nm,0.3s,baz=38,slow=12,SNR=48 | | | | | | |
| FITZ | | | | Sn | Sn | 15 54 59.9 | -13 |
| | 0.5nm,0.3s,baz=23,slow=15,SNR=4.5 | | | | | | |
| ASAR | Alice Springs | 18.75 | 183 | P | Pn | 15 52 48.1 | +0.5 |
| | 2.3nm,0.3s,baz=6.1,slow=11,SNR=141 | | | | | | |
| ASAR | | | | S | Sn | 15 56 07.1 | -10 |
| | 0.1nm,0.3s,baz=12,slow=28,SNR=3.9 | | | | | | |
| MKAR | Makanchi Array | 69.33 | 324 | P | P | 15 59 35.1 | -0.6 |
| | 0.3nm,0.3s,baz=130,slow=5.8,SNR=3.7 | | | | | | |

**DJA 06 16:12:57.4±0.5, 0°S±6°×12°4E±°, h55km±16km, M4.0/12, mb4.4/3, mB4.9/1, MLv3.9/10, MLv3.9/12, Mw(mB)4.2/1, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KMSI | Cibinong | 0.97 | 347 | P | Pn | 16 13 14.7 | -0.2 |
| KMSI | | | | S | Sn | 16 13 29.1 | +1.3 |
| GTOI | Gorontalo | 1.56 | 310 | P | Pn | 16 13 25.0 | +2.2 |
| LUWI | Luwuk | 1.57 | 245 | P | Pn | 16 13 22.5 | -0.5 |
| MRSI | Marisa | 2.41 | 291 | P | Pn | 16 13 34.4 | -0.1 |
| SANI | Sanana | 2.44 | 133 | P | Pn | 16 13 34.5 | -0.3 |
| APSI | Ampana | 2.60 | 258 | P | Pn | 16 13 37.0 | -0.1 |
| LBMI | Labuha | 3.31 | 94 | P | Pn | 16 13 46.3 | -0.5 |
| TNTI | Ternate | 3.37 | 70 | P | Pn | 16 13 47.4 | -0.1 |
| NLAI | Namlea | 4.06 | 134 | P | Pn | 16 13 57.2 | +0.2 |
| TTSI | Tana Toraja | 5.12 | 239 | P | Pn | 16 14 11.6 | +0.1 |
| | 20nm,0.6s,0.1nm0.1nm | | | | | | |
| AAI | Ambon | 5.17 | 130 | P | Pn | 16 14 12.1 | -0.2 |

**DJA 06 16:36:40.6±0.4, 5°S±6°×13°4E±°, h66km±45km, M4.3/11, mb4.5/9, mB4.8/3, MLv4.2/11, Mw(mB)4.0/3, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.57 | 315 | P | Pn | 16 37 19.9 | -0.1 |
| FAKI | | | | S | Sn | 16 37 47.3 | -2.9 |
| BNDI | Bandanaira | 4.16 | 273 | P | Pn | 16 37 41.3 | -0.3 |
| BNDI | | | | S | Sn | 16 38 25.8 | -3.2 |
| MSAI | Masohi | 5.32 | 285 | P | Pn | 16 37 56.9 | -0.6 |
| | 11nm,0.6s,399nm0.1nm | | | | | | |
| AAI | Ambon | 5.95 | 280 | P | Pn | 16 38 05.7 | -0.5 |
| | 46nm,0.6s,0.2nm | | | | | | |
| GENI | Genyem | 6.45 | 71 | P | Pn | 16 38 12.7 | -0.3 |
| | 37nm,1.4s,0.2nm | | | | | | |
| JAY | Jayapura | 6.98 | 72 | P | Pn | 16 38 19.8 | -0.6 |
| | 314nm,1.2s,1.3nm | | | | | | |
| NLAI | Namlea | 7.11 | 282 | P | Pn | 16 38 23.2 | +1.1 |
| | 24nm,0.6s,0.1nm | | | | | | |
| SANI | Sanana | 8.50 | 288 | P | Pn | 16 38 39.7 | -1.4 |
| | 11nm,0.6s | | | | | | |

*ISCJB 06 16:46:20.7±0.6, 9.52S±0.07×124.31E±0.06, h77km±12km, Error ellipse: s-maj=12.1km s-min=8.8km az=37.8*
*AUST 06 16:46:21.9, 9.50S×124.52E, h60km*
*DJA 06 16:46:22.4±0.4, 10°S±5°×12°4E±°, h58km±9km, M4.2/11, mb4.2/6, mB5.5/1, MLv4.1/11, Mw(mB)4.9/1*
**ISC 06 16:46:22.1±1.3, 9.5S±0.1×124.31E±0.08, h55km±31km, n17, σ0.81/15, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOEI | Soe | 0.22 | 191 | P | Pn | 16 46 33.0 | +1.6 |
| | baz=0.4,SNR=328 | | | | | | |
| SOEI | Soe | 0.22 | 191 | P | Pn | 16 46 33.1 | +1.7 |
| BATI | Baumata | 0.92 | 224 | P | Pn | 16 46 39.5 | +0.5 |
| MMRI | Maumere | 2.23 | 294 | P | Pn | 16 46 56.0 | -0.8 |
| EDFI | Ende, Flores | 2.70 | 287 | P | Pn | 16 47 03.1 | -0.2 |
| BASI | Baing, Sumba | 3.74 | 259 | P | Pn | 16 47 17.6 | +0.2 |
| WSI | Waingapu | 3.96 | 268 | P | Pn | 16 47 20.4 | 0.0 |
| NLAI | Namlea | 6.84 | 24 | P | Pn | 16 48 00.2 | +0.2 |
| | 13nm,1.1s,0.1nm | | | | | | |
| TWSI | Taliwang, Sumb | 7.38 | 276 | P | Pn | 16 48 06.2 | -1.1 |
| | 17nm,1.6s,0.1nm | | | | | | |
| MTN | Manton Dam | 7.46 | 117 | P | Pn | 16 48 08.5 | +0.2 |
| | baz=7.3,SNR=40 | | | | | | |
| KNRA | Kununurra | 7.49 | 145 | P | Pn | 16 48 08.2 | -0.6 |
| | baz=7.4,SNR=65 | | | | | | |
| LUWI | Luwuk | 8.58 | 350 | P | Pn | 16 48 24.3 | +0.5 |
| | baz=8.6,SNR=3.4 | | | | | | |
| KDU | Kakadu | 8.60 | 112 | P | Pn | 16 48 24.4 | +0.3 |
| | baz=8.4,SNR=12 | | | | | | |
| FITZ | Fitzroy Crossi | 8.61 | 172 | P | Pn | 16 48 23.6 | -0.6 |
| | baz=8.7,SNR=26 | | | | | | |
| WRKA | Warakurna | 15.87 | 167 | P | Pn | 16 50 00.6 | -1.5 |
| | baz=16,SNR=21 | | | | | | |
| MEEK | Meekatharra | 17.84 | 197 | P | P | 16 50 27.9 | +1.2 |
| | baz=18,SNR=3.9 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **QIS** | **Mount Isa** | **18.37** | **128** | P | **Pn** | **16 50 33.6** | **+0.5** |
| | baz=18,SNR=5.4 | | | | | | |

*IDC* ***06*** *16:55:30.1±25.0, 35.°87N×70.°61E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.3/29, mbtmp3.5/3, Error ellipse: s-maj=826.9km s-min=42.6km az=91.0*
*ISCJB* ***06*** *16:55:52.6±1.2, 36.°8N±0.°1×71.°0E±0.°3, h200km, mb3.0/2, Error ellipse: s-maj=35.2km s-min=12.7km az=161.7*
*NNC* ***06*** *16:55:57.7±8.8, 36.°98N×70.°09E, h142km±120km, mb2.8, mpv3.3, Error ellipse: s-maj=78.1km s-min=65.9km az=27.0*
**ISC 06 16:55:53.6±1.5, 36.°8N±0.°1×71.°0E±0.°3, h200km, n6, σ1.s21/7, 1C-1D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **6.31** | **357** | P | **Pn** | **16 57 26.0** | **+1.3** |
| | 1.1nm,0.3s,baz=180,slow=13,SNR=18 | | | | | | |
| KK31 | | | | S | **Sn** | **16 58 35.6** | **-1.4** |
| | 2.0nm,0.3s,baz=185,slow=20,SNR=18 | | | | | | |
| **AB31** | **Akbulak array** | **14.83** | **331** | ⇑P | **P** | **16 59 13.4** | **-1.0** |
| | 0.3nm,0.5s,baz=146,slow=12,SNR=8.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.53** | **330** | ⇓P | **Pn** | **16 59 35.1** | **+1.0** |
| | 3.1nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.63** | **25** | P | **Pn** | **17 00 10.8** | **+0.2** |
| | 0.9nm,0.4s,baz=224,slow=12,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.13** | **122** | P | **P** | **17 07 51.9** | **-0.2** |
| | 0.2nm,0.4s,baz=326,slow=5.0,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **84.41** | **125** | P | **P** | **17 08 03.2** | **-0.4** |
| | 0.2nm,0.7s,baz=321,slow=4.8,SNR=4.5 | | | | | | |

*ISCJB* ***06*** *17:03:31.7±0.5, 37.°00N±0.°04×71.°62E±0.°06, h106km, mb3.7/3, Error ellipse: s-maj=8.1km s-min=4.5km az=145.4*
*IDC* ***06*** *17:03:32.0±6.8, 36.°93N×71.°80E, h97km±31km, mb3.4/3, mb1 3.5/9, mb1mx3.2/49, mbtmp3.9/9, Error ellipse: s-maj=96.5km s-min=27.0km az=157.0*
*NNC* ***06*** *17:03:42.9±4.0, 37.°65N×70.°57E, h62km±137km, mb4.1, mpv4.4, Error ellipse: s-maj=72.6km s-min=27.8km az=85.0*
**ISC 06 17:03:32.9±0.8, 37.°07N±0.°07×71.°69E±0.°07, h106km, n32, σ1.s13/34, mb4.0/3, 2C-1D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **5.29** | **16** | P | **Pn** | **17 04 51.0** | **+1.1** |
| | SNR=18 | | | | | | |
| **UCH** | **Uchtor** | **5.60** | **22** | P | **Pn** | **17 04 55.2** | **+1.1** |
| | SNR=16 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.81** | **15** | P | **Pn** | **17 04 58.2** | **+1.5** |
| | SNR=27 | | | | | | |
| **AAK** | **Ala-Archa** | **5.96** | **20** | P | **Pn** | **17 05 00.1** | **+1.3** |
| | 6.4nm,0.3s,baz=152,slow=5.8,SNR=47 | | | | | | |
| AAK | | | | S | **Sn** | **17 06 02.6** | **-3.2** |
| | 3.0nm,0.3s,baz=323,slow=18,SNR=22 | | | | | | |
| **AAK** | **Ala-Archa** | **5.96** | **20** | P | **Pn** | **17 05 00.3** | **+1.5** |
| | SNR=27 | | | | | | |
| **KK31** | **Karatay Array** | **6.10** | **352** | P | **Pn** | **17 05 01.4** | **+0.9** |
| | 13nm,0.2s,baz=175,slow=14,SNR=335 | | | | | | |
| KK31 | | | | ⇑S | Sn | 17 06 03.8 | -5.1 |
| | 15nm,0.3s,baz=172,slow=22,SNR=23 | | | | | | |
| **ULHL** | **Ulahol** | **6.25** | **33** | P | **Pn** | **17 05 03.9** | **+1.1** |
| | SNR=9.0 | | | | | | |
| **CHMS** | **Chumysh** | **6.37** | **21** | P | **Pn** | **17 05 05.4** | **+1.1** |
| | SNR=9.3 | | | | | | |
| **USP** | **Ospenovka** | **6.56** | **18** | P | **Pn** | **17 05 07.3** | **+0.6** |
| | SNR=15 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.57** | **26** | P | **Pn** | **17 05 08.3** | **+1.2** |
| | SNR=13 | | | | | | |
| **SMLA** | **Simla** | **7.46** | **141** | *i* P | Pn | 17 05 23.3 | +4.2 |
| SMLA | | | | *i* S | **Sn** | **17 06 41.4** | **-0.8** |
| SMLA | | | | AML | AML | 17 06 43.8 | |
| | comp=N,620nm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 17 06 43.9 | |
| | comp=E,1μm,0.2s | | | | | | |
| **GEYT** | **Alibeck** | **10.82** | **279** | P | **Pn** | **17 06 05.0** | **+0.3** |
| | comp=E,1.8nm,0.3s,baz=113,slow=11,SNR=13 | | | | | | |
| GEYT | | | | S | **Sn** | **17 08 00.8** | **-2.8** |
| | comp=E,1.7nm,0.3s,baz=340,slow=24,SNR=6.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.51** | **36** | P | **Pn** | **17 06 26.7** | **-0.3** |
| | comp=E,0.1nm,0.3s,baz=225,slow=14,SNR=4.3 | | | | | | |
| **KOLN** | **Koldanda** | **13.67** | **129** | *e*P | **Pn** | **17 06 42.6** | **+0.1** |
| | comp=E,15nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **14.17** | **126** | *e*P | **Pn** | **17 06 48.8** | **-0.1** |
| | comp=E,30nm,0.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.41** | **18** | P | **P** | **17 06 55.1** | **-0.4** |
| | comp=E,0.2nm,0.3s,baz=205,slow=11,SNR=24 | | | | | | |
| **KKN** | **Kakani** | **14.73** | **125** | *e*P | **Pn** | **17 06 55.8** | **-0.3** |
| | comp=E,18nm,0.5s | | | | | | |
| **DMN** | **Daman** | **14.74** | **126** | *e*P | **Pn** | **17 06 56.3** | **0.0** |
| | comp=E,13nm,0.4s | | | | | | |
| **AB31** | **Akbulak array** | **14.87** | **329** | P | **Pn** | **17 06 56.9** | **-0.6** |
| | comp=E,2.6nm,0.6s,baz=137,slow=14,SNR=92 | | | | | | |
| AB31 | | | | S | Sn | 17 09 28.1 | -13 |
| | comp=E,3.2nm,0.5s,baz=146,slow=24,SNR=12 | | | | | | |
| **PKIN** | **Phulchoki** | **14.95** | **125** | *e*P | **Pn** | **17 06 58.7** | **-0.3** |
| | comp=E,7.9nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **14.96** | **125** | *e*P | **Pn** | **17 06 58.9** | **-0.3** |
| | comp=E,11nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **15.04** | **123** | *e*P | **Pn** | **17 06 59.9** | **-0.4** |
| **BVAR** | **Borovoye Array** | **15.98** | **357** | P | **P** | **17 07 12.8** | **-0.1** |
| | comp=E,0.4nm,0.3s,baz=166,slow=10,SNR=5.6 | | | | | | |
| **RAMN** | **Ramite** | **16.16** | **124** | *e*P | **Pn** | **17 07 13.8** | **-0.3** |
| | comp=E,30nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.58** | **328** | ⇑P | **P** | **17 07 19.8** | **+0.3** |
| | comp=E,2.3nm,0.7s | | | | | | |
| AKTO | | | | ⇓S | Sn | 17 10 12.5 | -10 |
| | comp=E,1.5nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.58** | **328** | P | **P** | **17 07 20.5** | **+1.0** |
| | comp=E,0.6nm,0.3s,baz=145,slow=12,SNR=10 | | | | | | |
| AKTO | | | | S | Sn | 17 10 10.0 | -13 |
| | comp=E,0.2nm,0.3s,baz=90,slow=12,SNR=2.3 | | | | | | |
| **TAPN** | **Taplejung** | **16.65** | **121** | *e*P | **Pn** | **17 07 20.0** | **-0.1** |
| | comp=E,16nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **16.75** | **123** | *e*P | **Pn** | **17 07 20.8** | **-0.5** |
| | comp=E,20nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.17** | **24** | P | **P** | **17 07 48.0** | **+0.1** |
| | comp=E,1.2nm,0.3s,baz=228,slow=11,SNR=19 | | | | | | |
| **ARU** | **Arti** | **21.28** | **340** | P | **P** | **17 08 11.3** | **+0.7** |
| | comp=E,0.2nm,0.2s,baz=311,slow=23,SNR=1.2 | | | | | | |
| **FINES** | **FINESS Array B** | **37.32** | **326** | P | **P** | **17 10 36.1** | **+1.6** |
| | comp=E,3.6nm,1.0s,baz=130,slow=8.7,SNR=7.3 | | | | | | |
| **HFS** | **Hagfors** | **42.96** | **321** | P | **P** | **17 11 22.3** | **+1.2** |
| | comp=E,1.1nm,0.4s,baz=98,slow=9.1,SNR=9.3 | | | | | | |

*ISCJB* ***06*** *17:21:02.0±0.5, 49.°84N±0.°04×18.°39E±0.°03, h0km, Error ellipse: s-maj=5.3km s-min=2.7km az=11.6*
*IPEC* ***06*** *17:21:02.7±0.2, 49.°84N×18.°56E, h0km±3km, ML1.5/3, Error ellipse: s-maj=2.1km s-min=1.1km az=161.0*
*CSEM* ***06*** *17:21:02.2±0.2, 49.°87N×18.°48E, h1km, ML2.7/7, Error ellipse: s-maj=5.8km s-min=3.0km az=16.0*
*PRU* ***06*** *17:21:04.0, 49.°84N×18.°43E, h0km*
**ISC 06 17:21:03.0±0.8, 49.°84N±0.°03×18.°47E±0.°02, h0km, n27, σ0.s78/54, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKC** | **Ostrava-Krasne** | **0.21** | **270** | *e*PG | **Pg** | **17 21 07.9** | **+0.9** |
| OKC | | | | *e*SG | **Sg** | **17 21 10.8** | **+1.2** |
| | comp=Z,30nm,0.3s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.21** | **270** | Pg | **Pg** | **17 21 07.9** | **+0.9** |
| OKC | | | | Sg | **Sg** | **17 21 10.8** | **+1.2** |
| | 30nm,0.3s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.60** | **264** | *e*Pg | **Pg** | **17 21 15.5** | **+1.0** |
| MORC | | | | *e*Sg | **Sg** | **17 21 23.3** | **+1.0** |
| | 12nm,0.3s,baz=84 | | | | | | |
| **OJC** | **Ojcow** | **0.94** | **66** | *e*Pg | **Pg** | **17 21 20.3** | **-0.7** |
| OJC | | | | *e*Sg | **Sb** | **17 21 35.6** | **+0.5** |
| **OJC** | **Ojcow** | **0.94** | **66** | *e*Pg | **Pg** | **17 21 20.3** | **-0.7** |
| OJC | | | | *e*Sg | **Sb** | **17 21 35.3** | **+0.2** |
| **LANS** | **Liptovska Anna** | **0.95** | **136** | *e*PG | **Pg** | **17 21 20.9** | **-0.2** |
| LANS | | | | *e*SG | **Sg** | **17 21 34.2** | **+0.8** |
| **LANS** | **Liptovska Anna** | **0.95** | **136** | *e*Pg | **Pg** | **17 21 20.9** | **-0.2** |
| LANS | | | | *e*Sg | **Sg** | **17 21 34.2** | **+0.8** |
| **KRLC** | **Kraliky** | **1.11** | **283** | *e*PG | **Pg** | **17 21 23.8** | **-0.5** |
| KRLC | | | | *e*SG | **Sg** | **17 21 39.2** | **+0.4** |
| **KRLC** | **Kraliky** | **1.11** | **283** | Pg | **Pg** | **17 21 23.8** | **-0.5** |
| KRLC | | | | Sg | **Sg** | **17 21 39.2** | **+0.4** |
| **VRAC** | **Vranov** | **1.33** | **247** | *e*Pg | **Pg** | **17 21 28.5** | **0.0** |
| VRAC | | | | *e*Sg | **Sb** | **17 21 46.0** | **-0.4** |
| | 5.4nm,0.2s,baz=67 | | | | | | |
| **VYHS** | **Vyhne** | **1.37** | **170** | *e*PN | **Pg** | **17 21 28.5** | **-0.7** |
| VYHS | | | | *e*SN | **Sb** | **17 21 47.2** | **-0.3** |
| **VYHS** | **Vyhne** | **1.37** | **170** | *e*Pn | **Pg** | **17 21 28.5** | **-0.7** |
| VYHS | | | | *e*Sn | **Sb** | **17 21 47.2** | **-0.3** |
| **DPC** | **Dobruska-Polom** | **1.47** | **291** | *e*PG | **Pn** | **17 21 30.2** | **-0.6** |
| DPC | | | | *e*SG | **Sb** | **17 21 50.6** | **0.0** |
| | comp=Z,6.8nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.47** | **291** | Pg | **Pn** | **17 21 30.2** | **-0.6** |
| DPC | | | | Sg | **Sb** | **17 21 50.6** | **0.0** |
| | 6.8nm,0.2s | | | | | | |
| **KRUC** | **Moravsky** | **1.56** | **241** | *e*Pg | **Pn** | **17 21 31.8** | **-0.2** |
| | baz=60 | | | | | | |
| KRUC | | | | *e*Sg | **Sg** | **17 21 53.1** | **0.0** |
| | 4.2nm,0.2s,baz=60 | | | | | | |
| **UPC** | **Upice** | **1.71** | **294** | *e*PG | **Pn** | **17 21 34.4** | **+0.3** |
| UPC | | | | *e*SG | **Sg** | **17 21 58.2** | **+0.1** |
| | comp=Z,6.1nm,0.2s | | | | | | |
| **UPC** | **Upice** | **1.71** | **294** | Pg | **Pn** | **17 21 34.4** | **+0.3** |
| UPC | | | | Sg | **Sg** | **17 21 58.2** | **+0.1** |
| | 6.1nm,0.2s | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.85** | **102** | *e*PN | **Pg** | **17 21 38.2** | **-0.2** |
| STHS | | | | *e*SN | **Sg** | **17 22 04.1** | **+1.6** |
| **STHS** | **Stebnicka Huta** | **1.85** | **102** | *e*Pn | **Pg** | **17 21 38.3** | **-0.2** |
| **GOPC** | **GO Pecny, Ondr** | **2.38** | **273** | *e*PG | **Pb** | **17 21 47.0** | **+0.2** |
| GOPC | | | | *e*SG | **Sb** | **17 22 18.0** | **+1.3** |
| **GOPC** | **GO Pecny, Ondr** | **2.38** | **273** | Pg | **Pb** | **17 21 47.0** | **+0.2** |
| GOPC | | | | Sg | **Sb** | **17 22 18.0** | **+1.3** |
| **PRU** | **Pruhonice** | **2.54** | **275** | *e*PG | **Pb** | **17 21 50.5** | **+1.0** |
| PRU | | | | *e*SG | **Sg** | **17 22 23.4** | **-1.2** |
| | comp=Z,2.2nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **2.54** | **275** | Pg | **Pb** | **17 21 50.5** | **+1.0** |
| PRU | | | | Sg | **Sg** | **17 22 23.4** | **-1.2** |
| | 2.2nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **2.60** | **287** | *e*PG | **Pg** | **17 21 51.9** | **-0.9** |
| PVCC | | | | *e*SG | **Sg** | **17 22 25.8** | **-0.7** |
| | comp=Z,7.1nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **2.60** | **287** | Pg | **Pg** | **17 21 51.9** | **-0.9** |
| PVCC | | | | Sg | **Sg** | **17 22 25.8** | **-0.7** |
| | 7.1nm,0.2s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.27** | **259** | *e*PN | **Pn** | **17 21 55.4** | **-0.1** |
| KHC | | | | *e*PG | **Pg** | **17 22 03.8** | **-1.8** |
| KHC | | | | *e*SN | **Sn** | **17 22 34.1** | **-0.9** |
| KHC | | | | *e*SG | **Sg** | **17 22 46.7** | **-1.2** |
| **KHC** | **Kasperske Hory** | **3.27** | **259** | Pn | **Pn** | **17 21 55.4** | **-0.1** |

*JMA* ***06*** *17:33:38.4±0.3, 35.°90N×129.°87E, h3km*
**KMA 06 17:33:40.3±0.8, 35.°87N×129.°79E, h4km±4km, 5C-6D, Error ellipse: s-maj=6.8km s-min=1.9km az=97.0, South Korea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSPHA** | **Pohang** | **0.47** | **314** | ⇑P | Pg | 17 33 50.1 | +0.7 |
| | SNR=90 | | | | | | |
| **KSPHA** | **Pohang** | **0.47** | **314** | ⇑P | Pg | 17 33 50.1 | +0.7 |
| | SNR=90 | | | | | | |
| KSPHA | | | | ⇓S | Sg | 17 33 56.1 | +0.7 |
| **KSYOC** | **YEONGCHEON** | **0.69** | **279** | P | Pg | 17 33 53.7 | +0.1 |
| | SNR=43 | | | | | | |
| **KSYOC** | **YEONGCHEON** | **0.69** | **279** | P | Pg | 17 33 53.7 | +0.1 |
| | SNR=43 | | | | | | |
| **KSYOD** | **Yeongdeok** | **0.70** | **334** | P | Pb | 17 33 54.8 | -0.4 |
| | SNR=26 | | | | | | |
| **KSYOD** | **Yeongdeok** | **0.70** | **334** | P | Pb | 17 33 54.8 | -0.4 |
| | SNR=26 | | | | | | |
| **KSDAG** | **Daegu** | **0.73** | **262** | P | Pg | 17 33 54.4 | 0.0 |
| | SNR=99 | | | | | | |
| **KSDAG** | **Daegu** | **0.73** | **262** | P | Pg | 17 33 54.4 | 0.0 |
| | SNR=99 | | | | | | |
| **KSBUS** | **Busan** | **0.83** | **222** | ⇓P | Pg | 17 33 56.6 | +0.4 |
| | SNR=26 | | | | | | |
| **KSBUS** | **Busan** | **0.83** | **222** | ⇓P | Pg | 17 33 56.6 | +0.4 |
| | SNR=26 | | | | | | |
| KSBUS | | | | ⇓S | Sg | 17 34 07.3 | +0.4 |
| **KSULJ** | **Uljin** | **0.89** | **340** | P | Pg | 17 33 57.3 | 0.0 |
| | SNR=132 | | | | | | |
| **KSULJ** | **Uljin** | **0.89** | **340** | P | Pg | 17 33 57.3 | 0.0 |
| | SNR=132 | | | | | | |
| KSULJ | | | | ⇑S | Sg | 17 34 09.0 | +0.1 |
| **JTU** | **Tsushima** | **1.38** | **194** | P | Pn | 17 34 05.0 | -1.3 |
| JTU | | | | *e*S | Sg | 17 34 23.9 | -0.7 |
| **KSTBA** | **Taebaek** | **1.42** | **332** | ⇓P | Pn | 17 34 06.8 | -0.3 |
| | SNR=15 | | | | | | |
| **KSTBA** | **Taebaek** | **1.42** | **332** | ⇓P | Pn | 17 34 06.8 | -0.3 |
| | SNR=15 | | | | | | |
| **KSSAJ** | **Sangju** | **1.43** | **293** | P | Pn | 17 34 06.5 | -0.5 |
| | SNR=12 | | | | | | |
| **KSSAJ** | **Sangju** | **1.43** | **293** | P | Pn | 17 34 06.5 | -0.5 |
| | SNR=12 | | | | | | |
| **KSCPR** | **CHUPUNGNYEONG** | **1.52** | **284** | P | Pn | 17 34 08.0 | -0.3 |
| | SNR=15 | | | | | | |
| **KSCPR** | **CHUPUNGNYEONG** | **1.52** | **284** | P | Pn | 17 34 08.0 | -0.3 |
| | SNR=15 | | | | | | |
| **KSBON** | **Boeun** | **1.73** | **292** | P | Pn | 17 34 11.9 | +0.7 |
| | SNR=16 | | | | | | |
| **KSBON** | **Boeun** | **1.73** | **292** | P | Pn | 17 34 11.9 | +0.7 |
| | SNR=16 | | | | | | |
| **KSCHJ** | **Chungju** | **1.77** | **305** | ⇑P | Pn | 17 34 12.3 | +0.5 |
| | SNR=7.6 | | | | | | |
| **KSCHJ** | **Chungju** | **1.77** | **305** | ⇑P | Pn | 17 34 12.3 | +0.5 |
| | SNR=7.6 | | | | | | |
| **KSDGY** | **Daegwallycong** | **2.03** | **334** | P | Pb | 17 34 17.5 | -0.3 |
| | SNR=9.4 | | | | | | |
| **JII** | **Iki** | **2.07** | **181** | P | Pn | 17 34 15.5 | -0.3 |
| **KSJMJ** | **Jumunjin** | **2.17** | **338** | P | Pb | 17 34 20.8 | +0.6 |
| | SNR=8.5 | | | | | | |
| **JGT** | **Gotsu** | **2.24** | **111** | *e*S | Sn | 17 34 44.4 | -1.9 |
| **KSCEA** | **Cheonan** | **2.25** | **296** | P | Pb | 17 34 21.4 | -0.2 |
| | SNR=8.4 | | | | | | |
| **KSJEU** | **Jeongeup** | **2.36** | **262** | P | Pb | 17 34 22.8 | -0.5 |
| | SNR=12 | | | | | | |
| **KSKWJ** | **Gwangju** | **2.39** | **254** | P | Pn | 17 34 19.4 | -0.9 |
| | SNR=9.7 | | | | | | |

*NIED* ***06*** *17:36:00, 29.°90N×131.°80E, h11km, Mw3.9 Best double couple: $M_0$9.03000×10^14 NP1:$\phi_s$40.00000°, δ29.00000°, λ-81.00000°. NP2:$\phi_s$209.00000°, δ62.00000°, λ-95.00000°.*
*ISCJB* ***06*** *17:36:07.0±0.8, 29.°89N±0.°03×131.°83E±0.°07, h37km±8km, mb3.7/8, MS4.2/1, Error ellipse: s-maj=10.2km s-min=4.8km az=12.3*
*JMA* ***06*** *17:36:07.4±0.2, 29.°92N×131.°85E, h65km±4km, M3.8*
*NEIC* ***06*** *17:36:09.3±0.9, 29.°87N×131.°66E, h37km±9km, mb4.4/1, Error ellipse: s-maj=13.2km s-min=7.9km az=93.0*
*IDC* ***06*** *17:36:09.2±3.7, 29.°87N×131.°66E, h35km±31km, mb3.5/7, mb1 3.6/11, mb1mx3.4/38, mbtmp3.6/11, ML3.1/4, MS4.1/1, Ms1 4.1/1, ms1mx2.7/28, Error ellipse: s-maj=31.8km s-min=15.6km az=81.0*
**ISC 06 17:36:07.2±2.2, 29.°87N±0.°05×131.°80E±0.°08, h26km±15km, n33, σ0.s99/41, mb4.0/8, Southeast of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTN** | **Tanegashima 3** | **1.05** | **318** | P | **Pn** | **17 36 26.4** | **0.0** |
| **JYAK** | **Yakushimahirau** | **1.18** | **289** | P | **Pb** | **17 36 28.6** | **-0.3** |
| JYAK | | | | *e*S | **Sb** | **17 36 44.0** | **+0.3** |
| **JTSR** | **Tashiro 2** | **1.50** | **330** | P | **Pn** | **17 36 32.2** | **-0.3** |
| JTSR | | | | S | **Sn** | **17 36 50.3** | **-0.9** |
| **JKC** | **Kuchinoerabu** | **1.51** | **294** | P | **Pn** | **17 36 33.0** | **+0.4** |
| **JNN** | **Nakanoshima** | **1.67** | **270** | P | **Pn** | **17 36 35.8** | **+1.0** |
| **JNAR** | **Kushima--Naru** | **1.71** | **345** | P | **Pn** | **17 36 35.2** | **-0.2** |
| JNAR | | | | *e*S | **Sn** | **17 36 55.2** | **-1.3** |
| **JTZ** | **Takazaki** | **2.12** | **343** | P | **Pn** | **17 36 40.9** | **-0.1** |
| JTZ | | | | S | **Sn** | **17 37 05.7** | **-0.7** |
| **JZK** | **Kikaishima** | **2.22** | **226** | P | **Pn** | **17 36 43.3** | **+0.9** |
| **JTAJ** | **Takarajima** | **2.37** | **253** | P | **Pn** | **17 36 45.2** | **+0.8** |
| **JAM** | **Amami Oshima** | **2.40** | **233** | P | **Pn** | **17 36 45.4** | **+0.5** |
| **JSJ** | **Shimokoshiki** | **2.54** | **316** | P | **Pn** | **17 36 45.9** | **-0.9** |
| JSJ | | | | *e*S | **Sn** | **17 37 15.3** | **-1.7** |
| **JIU2** | **Izumi 2** | **2.80** | **343** | P | **Pn** | **17 36 50.3** | **-0.1** |
| **JAMN** | **Amaminishikomi** | **2.81** | **235** | P | **Pn** | **17 36 51.1** | **+0.6** |
| JAMN | | | | *e*S | **Sn** | **17 37 24.0** | **+0.5** |
| **JTO** | **Tosashimizu** | **3.10** | **16** | P | **Pn** | **17 36 52.5** | **-2.0** |
| **JTK** | **Tokunoshima** | **3.25** | **231** | P | **Pn** | **17 36 57.1** | **+0.6** |
| **JNU** | **Nakatsue** | **3.34** | **347** | Pn | **Pn** | **17 36 57.9** | **+0.1** |
| | 16nm,0.3s,baz=349,slow=6.6,SNR=92 | | | | | | |
| JNU | | | | Sn | **Sn** | **17 37 35.9** | **-0.7** |
| | 7.8nm,0.3s,baz=295,slow=23,SNR=6.7 | | | | | | |
| **JOKE** | **Okinoerabujima** | **3.78** | **229** | P | **Pn** | **17 37 04.2** | **+0.4** |
| **JOW** | **Kunigami** | **4.33** | **227** | P | **Pn** | **17 37 11.5** | **0.0** |
| **JOW** | **Kunigami** | **4.33** | **227** | Pn | **Pn** | **17 37 11.7** | **+0.2** |
| | 0.3nm,0.3s,baz=105,slow=24,SNR=23 | | | | | | |
| JOW | | | | Sn | **Sn** | **17 37 59.6** | **-1.6** |
| | 0.7nm,0.3s,baz=120,slow=30,SNR=2.5 | | | | | | |
| **JIH** | **Iheya** | **4.40** | **231** | P | **Pn** | **17 37 12.2** | **-0.1** |
| JIH | | | | S | **Sn** | **17 38 00.2** | **-2.5** |
| **KSRS** | **Korea Array** | **8.22** | **338** | Pn | **Pn** | **17 38 06.1** | **+1.3** |
| | 0.3nm,0.3s,baz=156,slow=15,SNR=3.7 | | | | | | |
| KSRS | | | | LR | LR | 17 41 53.1 | |
| | comp=Z,62nm,18.2s,baz=210,slow=42 | | | | | | |
| **KSAR** | **Wonju Array Be** | **8.23** | **338** | Pn | **Pn** | **17 38 06.1** | **+1.2** |
| **MJAR** | **Matsushiro Arr** | **8.55** | **37** | Pn | **Pn** | **17 38 11.9** | **+2.5** |
| | 0.4nm,0.3s,baz=249,slow=13,SNR=4.5 | | | | | | |
| **SONM** | **Songino Array** | **26.52** | **320** | P | **P** | **17 41 42.2** | **-0.5** |
| | 0.3nm,0.4s,baz=141,slow=10,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.62** | **308** | P | **P** | **17 43 53.3** | **+0.1** |
| | 0.1nm,0.3s,baz=119,slow=12,SNR=2.0 | | | | | | |
| **KURK** | **Kurchatov** | **44.48** | **313** | P | **P** | **17 44 16.8** | **+0.5** |
| **KURBB** | **Kurchatov Arra** | **44.53** | **313** | P | **P** | **17 44 16.8** | **+0.2** |
| | 0.3nm,0.6s,baz=105,slow=11,SNR=3.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **49.57** | **177** | *e*P | **P** | **17 44 56.9** | **+0.7** |
| | 3.2nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **49.58** | **177** | P | **P** | **17 44 56.5** | **+0.2** |
| | 1.7nm,0.7s,baz=353,slow=8.3,SNR=8.2 | | | | | | |
| **ASAR** | **Alice Springs** | **53.27** | **178** | P | **P** | **17 45 24.7** | **+0.8** |
| | 0.8nm,0.5s,baz=10,slow=13,SNR=36 | | | | | | |
| **AFI** | **Afiamalu** | **69.63** | **120** | LR | LR | 18 10 56.1 | |
| | comp=Z,138nm,20.5s,baz=250,slow=30 | | | | | | |
| **FINES** | **FINESS Array B** | **71.25** | **331** | P | **P** | **17 47 24.4** | **+0.5** |
| | 1.1nm,0.6s,baz=103,slow=6.1,SNR=7.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **77.27** | **308** | P | **P** | **17 47 59.5** | **-0.1** |
| | 1.4nm,0.9s,baz=51,slow=4.9,SNR=4.9 | | | | | | |

*ISCJB* ***06*** *17:49:41.6±0.1, 29.°71N±0.°02×69.°59E±0.°02, h10km, mb5.0/136, MS4.0/38, Error ellipse: s-maj=3.0km s-min=2.0km az=25.7*
*BJI* ***06*** *17:49:41.9, 29.°80N×69.°60E, h10km, mb4.8/61, mB4.9/46, Ms4.6/61, Ms7 4.2/58*
*IDC* ***06*** *17:49:41.8±0.5, 29.°70N×69.°61E, h0km, mb4.7/33, mb1 4.7/36, mb1mx4.7/45, mbtmp4.7/36, ML4.1/3, MS4.0/33, Ms1 4.0/33, ms1mx3.9/43, Error ellipse: s-maj=11.5km s-min=9.8km az=168.0*
*NEIC* ***06*** *17:49:43.4±0.2, 29.°72N×69.°59E, h10km, mb5.2/35, Error ellipse: s-maj=5.6km s-min=4.2km az=172.0*
*TEH* ***06*** *17:49:44.0, 29.°75N×69.°56E, h10km, ML5.2*
*MOS* ***06*** *17:49:45.4±1.1, 29.°78N×69.°63E, h33km, mb5.1/51, Error ellipse: s-maj=6.0km s-min=4.0km az=110.5*
*NNC* ***06*** *17:49:45.9±5.5, 30.°15N×69.°45E, h0km, mb4.9, Error ellipse: s-maj=73.3km s-min=51.8km az=175.0*
*SZGRF* ***06*** *17:49:46.4, 29.°68N×69.°75E, h33km, mb5.1/1(BGR)*
**ISC 06 17:49:44.3±0.5, 29.°67N±0.°04×69.°57E±0.°03, h16km±2km, n430, σ1.s46/473, mb5.0/135, MS4.0/38, 52C-20D, Pakistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SARP** | **Sargodha** | **3.48** | **49** | P | **Pn** | **17 50 38.8** | **+0.9** |
| **THW** | **Thamme Wali** | **3.62** | **30** | ⇑P | **Pn** | **17 50 41.3** | **+1.5** |
| **CEP** | **Cherat** | **4.59** | **25** | ⇑P | **Pn** | **17 50 54.7** | **+1.5** |
| **CHCP** | **Chirah Chowk** | **5.07** | **37** | ⇑P | **Pn** | **17 51 00.8** | **+1.1** |
| **BHK** | **Bhakra** | **6.15** | **72** | *e*x | **Sn** | **17 52 23.0** | **-1.7** |
| **DHRM** | **DHARAMSHALA** | **6.32** | **64** | *e*P | **Pn** | **17 51 17.4** | **+0.3** |
| DHRM | | | | *e*S | **Sn** | **17 52 29.1** | **-0.1** |
| DHRM | | | | AML | AML | 17 53 17.0 | |
| | comp=N,4μm,0.6s | | | | | | |
| DHRM | | | | AML | AML | 17 53 19.7 | |
| | comp=E,3μm,0.6s | | | | | | |
| **BHJ** | **Bhuj** | **6.39** | **179** | *e*P | **Pn** | **17 51 17.5** | **-0.4** |
| BHJ | | | | *e*x | Sn | 17 52 24.4 | -6.2 |
| **SMLA** | **Simla** | **6.72** | **76** | *i* P | **Pn** | **17 51 23.0** | **+0.7** |
| SMLA | | | | *e*S | **Sn** | **17 52 36.6** | **-1.9** |
| SMLA | | | | AML | AML | 17 53 23.1 | |
| | comp=N,1μm,0.8s | | | | | | |
| SMLA | | | | AML | AML | 17 53 28.4 | |
| | comp=E,2μm,1.0s | | | | | | |
| **NDI** | **New Delhi** | **6.76** | **97** | *e*P | **Pn** | **17 51 23.0** | **+0.1** |
| NDI | | | | *e*S | **Sn** | **17 52 36.0** | **-3.5** |
| **DDI** | **Dehra Dun** | **7.39** | **83** | *e*P | **Pn** | **17 51 30.4** | **-1.2** |
| **IDAH** | **Dahanechah** | **8.85** | **293** | *e*P | **Pn** | **17 51 51.1** | **-0.8** |
| **IKOO** | **Kooshah** | **9.47** | **289** | *e*P | **Pn** | **17 52 00.4** | **0.0** |
| **BHPL** | **Bhopal** | **9.51** | **131** | *e*P | **Pn** | **17 51 58.1** | **-2.7** |
| BHPL | | | | *e*x | **Sn** | **17 53 42.2** | **-5.2** |
| **ITEG** | **Tejag** | **9.80** | **292** | *e*P | **Pn** | **17 52 04.7** | **-0.1** |
| **IMYA** | **Miami** | **10.36** | **312** | *e*P | **Pn** | **17 52 13.4** | **+1.0** |
| **IMOG** | **Moghan** | **10.73** | **309** | *e*P | **Pn** | **17 52 18.1** | **+0.5** |
| **ISRO** | **Mashad** | **10.75** | **311** | *e*P | **Pn** | **17 52 20.3** | **+2.5** |
| **KSH** | **Kashi** | **11.14** | **27** | P | Pn | 17 52 18.1 | -5.0 |
| KSH | | | | *e*pP | | 17 52 21.5 | |
| KSH | | | | *e*sP | | 17 52 24.2 | |
| KSH | | | | S | Sn | 17 54 16.0 | -12 |
| KSH | | | | sS | | 17 54 23.1 | |
| KSH | | | | PMZ | | | |
| | comp=E,180nm,1.2s | | | | | | |
| KSH | | | | LN | | | |
| | comp=E,2μm,6.3s | | | | | | |
| KSH | | | | LE | | | |
| | comp=E,2μm,6.3s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=E,1μm,10.9s | | | | | | |
| **IAKL** | **Akhelmad** | **11.39** | **310** | *e*P | **Pn** | **17 52 28.3** | **+1.6** |
| **IKRD** | **Kardeh** | **11.65** | **310** | *e*P | Pn | 17 52 23.5 | -6.7 |
| **IEMG** | **Emamgholi** | **11.93** | **313** | *e*P | **Pn** | **17 52 34.7** | **+0.6** |
| **NGP** | **Nagpur** | **12.05** | **133** | *e*P | **Pn** | **17 52 34.8** | **-0.7** |
| NGP | | | | *e*x | Sn | 17 54 37.5 | -12 |
| **BANOM** | **Banah** | **12.33** | **256** | ⇑P | **Pn** | **17 52 36.9** | **-2.4** |
| **KOLN** | **Koldanda** | **12.46** | **95** | *e*P | **Pn** | **17 52 39.4** | **-1.8** |
| | comp=E,93nm,0.6s | | | | | | |
| **DANN** | **Dangsing** | **12.49** | **93** | *e*P | **Pn** | **17 52 39.2** | **-2.5** |
| | comp=E,30nm,0.8s | | | | | | |
| **GEYT** | **Alibeck** | **12.58** | **314** | Pn | **Pn** | **17 52 42.4** | **-0.3** |
| | comp=E,0.2nm,0.3s,baz=128,slow=4.5,SNR=11 | | | | | | |
| **ISHV** | **Shirvan** | **12.62** | **312** | *e*P | **Pn** | **17 52 44.3** | **+1.0** |
| **UOSS** | **Wadi Hilu** | **12.78** | **252** | Pn | Pn | 17 52 41.3 | -4.2 |
| | comp=E,151nm,0.6s,SNR=5.6 | | | | | | |
| **UOSS** | **Wadi Hilu** | **12.78** | **252** | *e*Pn | Pn | 17 52 41.6 | -3.9 |
| **AML** | **Almayashu** | **12.87** | **14** | P | **Pn** | **17 52 45.3** | **-1.6** |
| | SNR=35 | | | | | | |
| **IMEH** | **Mehriz** | **13.01** | **281** | *e*P | **Pn** | **17 52 49.6** | **+0.8** |
| **ASHO** | **Ashiyiah** | **13.01** | **251** | P | **Pn** | **17 52 49.3** | **+0.6** |
| | SNR=6.9 | | | | | | |
| **ASHO** | **Ashiyiah** | **13.01** | **251** | ⇑*i*P | **Pn** | **17 52 45.7** | **-2.9** |
| | SNR=20 | | | | | | |
| **UCH** | **Uchtor** | **13.15** | **16** | P | **Pn** | **17 52 49.2** | **-1.6** |
| | SNR=78 | | | | | | |
| **GKN** | **Gorkha** | **13.31** | **94** | *e*P | Pn | 17 52 49.7 | -3.1 |
| | comp=E,76nm,0.5s | | | | | | |
| GKN | | | | *e*S | Sn | 17 55 11.7 | -8.9 |
| **FAQ** | **Al Faqa, Dubai** | **13.37** | **252** | ⇓P | **Pn** | **17 52 52.7** | **-0.8** |
| **EKS2** | **Erkin-Say** | **13.39** | **14** | *e*P | **Pn** | **17 52 52.0** | **-1.9** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **EKS2** | **Erkin-Say** | **13.39** | **14** | P | **Pn** | **17 52 52.2** | **-1.6** |
| | SNR=17 | | | | | | |
| **EKS2** | **Erkin-Say** | **13.39** | **14** | *e*P | **Pn** | **17 52 52.0** | **-1.9** |
| | comp=Z,23nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **13.42** | **3** | ⇑Pn | **Pn** | **17 52 52.6** | **-1.6** |
| | comp=Z,39nm,0.9s,baz=182,slow=12 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 17 55 16.9 | -6.1 |
| | comp=Z,31nm,0.8s,baz=190,slow=24 | | | | | | |
| **KKAR** | **Karatay Array** | **13.42** | **3** | *e*P | **Pn** | **17 52 52.6** | **-1.5** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,42nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **13.42** | **3** | *e*Pn | **Pn** | **17 52 52.6** | **-1.5** |
| | comp=Z,42nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **13.53** | **16** | Pn | **Pn** | **17 52 54.4** | **-1.3** |
| | comp=Z,5.0nm,0.3s,baz=183,slow=7.7,SNR=64 | | | | | | |
| AAK | | | | Sn | **Sn** | **17 55 20.4** | **-5.3** |
| | comp=Z,0.4nm,0.3s,baz=316,slow=18,SNR=2.5 | | | | | | |
| **AAK** | **Ala-Archa** | **13.53** | **16***c* | *i*P | **Pn** | **17 52 54.0** | **-1.7** |
| **AAK** | **Ala-Archa** | **13.53** | **16** | Pn | **Pn** | **17 52 54.0** | **-1.7** |
| | comp=Z,306nm,0.6s,SNR=25 | | | | | | |
| **AAK** | **Ala-Archa** | **13.53** | **16** | P | **Pn** | **17 52 54.6** | **-1.1** |
| | SNR=28 | | | | | | |
| **AAK** | **Ala-Archa** | **13.53** | **16** | P | **Pn** | **17 52 54.4** | **-1.3** |
| | SNR=37 | | | | | | |
| **KBK** | **Karagaybulak** | **13.66** | **17** | P | **Pn** | **17 52 57.5** | **0.0** |
| | SNR=9.7 | | | | | | |
| **FRU** | **Bishkek** | **13.74** | **16** | *e*P | **Pn** | **17 52 56.0** | **-2.5** |
| FRU | | | | *e*S | **Sn** | **17 55 26.0** | **-4.9** |
| FRU | | | | pmax | pmax | | |
| | comp=Z,100nm,1.4s | | | | | | |
| FRU | | | | smax | smax | | |

comp=E,150nm,2.0s
FRU MLR MLR
comp=E,4µm,8.0s
**DMN Daman 13.80 95** *e*P **Pn** **17 52 56.7 -2.9**
comp=E,74nm,0.6s
**ISAD Sadrabad 13.84 283** *e*P **Pn** **17 53 00.5 +0.3**
**KKN Kakani 13.91 94** *e*P Pn 17 52 57.8 -3.3
comp=E,102nm,0.6s
**CHMS Chumnysh 13.93 16** P **Pn** **17 52 59.4 -1.7**
SNR=40
**RPR Rampur 13.94 138** *e*Pn **Pn** **17 52 58.5 -2.8**
RPR IAmb IAmb 17 53 02.6
comp=Z,15nm,0.9s
RPR *e*Sn **Sn** **17 55 36.3 +0.5**
RPR IVMs_BB IVMs_BB 17 57 56.7
comp=Z,2µm,4.0s
**PKIN Phulchoki 14.06 95** *e*P **Pn** **17 53 00.1 -3.0**
comp=Z,65nm,0.5s
**PKI Pulchoki 14.07 95** *e*P **Pn** **17 53 00.5 -2.8**
comp=Z,93nm,0.7s
**TKM2 Tokmak 2 14.08 18** *e*P **Pn** **17 53 00.9 -2.4**
TKM2 pmax pmax
comp=Z,32nm,0.9s
**TKM2 Tokmak 2 14.08 18** P **Pn** **17 53 01.2 -2.1**
SNR=25
**TKM2 Tokmak 2 14.08 18** *e*P **Pn** **17 53 00.9 -2.4**
comp=Z,32nm,0.9s
**USP Ospenovka 14.13 15** P **Pn** **17 53 01.4 -2.4**
SNR=7.0
**ISRV Sarvestan 14.34 273** *e*P **Pn** **17 53 05.4 -1.6**
**GUN Gumba 14.41 93** *e*P Pn 17 53 03.6 -4.4
comp=Z,151nm,0.4s
**GOA Goa 14.65 164** *e*P **Pn** **17 53 09.4 -1.6**
GOA AMB AMB 17 53 17.2
comp=Z,19nm,0.5s
**HYBB Hyderabad (bro 14.71 144** *e*Pn **Pn** **17 53 10.3 -1.6**
HYBB IAmb IAmb 17 53 10.3
comp=Z,21nm,1.1s
HYBB *e*Sn **Sn** **17 55 57.3 +2.7**
HYBB IVMs_BB IVMs_BB 17 59 55.0
comp=Z,2µm,5.5s
**HYB Hyderabad 14.71 144** *i* P **Pn** **17 53 09.5 -2.4**
HYB *e*S **Sn** **17 55 56.5 +1.9**
HYB LR LR 17 59 44.0
comp=E,5.1nm,8.0s
**HYB Hyderabad 14.71 144** *e*P **Pn** **17 53 10.2 -1.7**
**AAA Alma-Ata 14.80 22** *i* P **Pn** **17 53 10.8 -2.2**
AAA *i* S **Sn** **17 55 54.4 -2.2**
AAA pmax pmax
comp=Z,400nm,3.3s
AAA smax smax
comp=E,200nm,2.0s
AAA MLR MLR
comp=Z,1µm,4.0s
**IKIA Kiasar 14.84 300** *e*P Pn 17 53 07.1 -6.6
**IGLO Ghaloghah 14.84 301** *e*P **Pn** **17 53 15.5 +1.8**
**IRAM Ramesheh 14.94 283** *e*P **Pn** **17 53 15.1 0.0**
**IZEF Zefreh 15.09 287** *e*P **Pn** **17 53 18.1 +0.9**
**RAMN Ramite 15.24 96** *e*P **Pn** **17 53 15.6 -3.6**
comp=Z,74nm,0.6s
**BOK Bokaro 15.70 108** *ex* **Pn** **17 53 22.0 -2.9**
**IKLH Kolahrood 15.77 288** *e*P **Pn** **17 53 26.8 +0.7**
**NJS Nagarjunasagar 15.82 144** *e*Pn **Pn** **17 53 25.1 -1.4**
NJS IAmb IAmb 17 53 30.7
comp=Z,19nm,0.8s
NJS *e*Sn **Sn** **17 56 22.3 +0.6**
NJS IVMs_BB IVMs_BB 18 00 34.8
comp=Z,2µm,5.6s
**ODAN Odare 15.95 96** *e*P **Pn** **17 53 25.1 -3.2**
comp=Z,103nm,1.2s
**TAPN Taplejung 16.11 94** *e*P **Pn** **17 53 26.1 -4.4**
comp=Z,36nm,0.6s
**IPIR Pirpir 16.27 285** *e*P **Pn** **17 53 32.2 -0.3**
**URV Uravakonda 16.28 153** *e*Pn **P** **17 53 34.4 -1.1**
URV IAmb IAmb 17 53 35.9
comp=Z,37nm,1.1s
URV *e*Sn **Sn** **17 56 35.2 +2.3**
URV IVMs_BB IVMs_BB 18 00 17.6
comp=Z,1µm,6.4s
**PVM Polavaram 16.57 136** *e*Pn **Pn** **17 53 36.0 -0.1**
PVM IAmb IAmb 17 53 41.7
comp=Z,6.2nm,0.8s
PVM *e*Sn **Sn** **17 56 41.2 +1.3**
PVM IVMs_BB IVMs_BB 17 58 54.5
comp=Z,1µm,3.8s
**IR3 Iran Long-Peri 16.66 295** *e*P **Pn** **17 53 38.0 +0.7**
**CHLP Challavanipeta 17.26 127** *e*Pn **P** **17 53 45.8 -0.4**
CHLP IAmb IAmb 17 53 48.2
comp=Z,52nm,1.1s
CHLP *e*Sn **Sn** **17 56 56.0 -0.5**
CHLP IVMs_BB IVMs_BB 18 02 22.5
comp=Z,4µm,5.4s
**VIS Vishakhapatnam 17.31 130** *e*P **Pn** **17 53 45.5 +0.1**
**IGZV Ghazvin 17.54 297** *e*P **P** **17 53 52.2 +2.7**
**SKHT Srikalahasti 18.42 147** *e*Pn **Pn** **17 53 59.3 +0.2**
SKHT IAmb IAmb 17 54 02.0
comp=Z,140nm,2.0s
SKHT *e*Sn **Sn** **17 57 25.8 +1.0**
SKHT IVMs_BB IVMs_BB 18 01 50.5
comp=Z,2µm,4.6s
**LSA Lhasa 18.75 85** P **Pn** **17 54 03.7 +0.2**
LSA S **Sn** **17 57 31.9 -1.3**
LSA LN
comp=Z,250nm,10.9s
LSA LE
comp=Z,820nm,11.8s
LSA LZ
comp=Z,940nm,10.0s
**LSA Lhasa 18.75 85** *e*P **P** **17 54 02.2 -0.9**
LSA pmax pmax
comp=Z,31nm,1.0s
**LSA Lhasa 18.75 85** *e*P **P** **17 54 02.2 -0.9**
comp=Z,31nm,1.0s
**MK31 Makanchi Array 19.75 27** P **P** **17 54 13.0 -0.5**
comp=Z,12nm,0.8s,baz=206,slow=11,SNR=62
**MKAR Makanchi Array 19.75 27** P **P** **17 54 13.4 -0.1**
comp=Z,0.8nm,0.3s,baz=207,slow=12,SNR=76
MKAR LR LR 18 03 28.9
comp=Z,235nm,18.1s,baz=210,slow=42
**MKAR Makanchi Array 19.75 27** *i* P **P** **17 54 13.5 0.0**
MKAR pmax pmax
comp=Z,10.0nm,0.7s
**IVIS Veis 19.84 290** *e*P **P** **17 54 14.1 -0.5**
**IGHG Ghaleghazi 20.04 289** *e*P **P** **17 54 16.3 -0.7**
**SHL Shillong 20.18 96** *e*P **P** **17 54 18.2 -0.3**
**WMQ Urumqi 20.19 41** P Pn 17 54 19.6 -0.7
WMQ pP pP 17 54 24.2 +1.3
WMQ sP sP 17 54 27.8 +2.8
WMQ PP **PnPn** **17 54 39.9 +5.0**
WMQ S **S** **17 58 02.0 -2.5**
WMQ SS **SnSn** **17 58 30.0 +8.2**
WMQ PMZ
comp=Z,45nm,1.0s
WMQ PMZ
comp=Z,54nm,4.0s
WMQ LN
comp=Z,1µm,9.0s
WMQ LE
comp=Z,520nm,9.0s
WMQ LZ
comp=Z,340nm,9.0s
**IDHR Dehrash 20.24 290** *e*P **P** **17 54 18.7 -0.4**
**AB31 Akbulak array 20.89 342** ⇑P **P** **17 54 25.4 -0.3**
comp=Z,35nm,1.2s,baz=149,slow=11,SNR=104
**ABKAR Akbulak array 20.89 342** *e*P **P** **17 54 25.0 -0.7**
comp=Z,12nm,0.8s
**KURBB Kurchatov Arra 21.98 15** ⇑P **P** **17 54 36.1 -1.4**
comp=Z,120nm,0.9s
**KURBB Kurchatov Arra 21.98 15** P **P** **17 54 36.8 -0.7**
comp=Z,92nm,0.9s,baz=208,slow=9.6,SNR=467
KURBB S **S** **17 58 38.4 -1.1**
comp=Z,0.8nm,0.8s,baz=208,slow=20,SNR=2.5
**KURK Kurchatov 22.09 15** P **P** **17 54 36.8 -1.8**
KURK S **S** **17 58 38.4 -3.1**
KURK pmax pmax
comp=Z,92nm,0.9s
KURK smax smax
comp=N,1.0nm,0.8s
**KURK Kurchatov 22.09 15** P **P** **17 54 38.4 -0.3**
SNR=37
**KURK Kurchatov 22.09 15** P **P** **17 54 38.2 -0.4**
comp=N,682nm,1.0s,SNR=92
**KURK Kurchatov 22.09 15** *e*P **P** **17 54 37.5 -1.1**
KURK S **S** **17 58 38.4 -3.1**
**MAK Makhachkala 22.10 313** *e*P **P** **17 54 38.2 -0.6**
MAK *e* 17 55 05.6
MAK *e*S **S** **17 58 41.3 -0.5**
MAK pmax pmax
comp=Z,1µm,1.9s
**RAYN Ar Rayn 22.36 260** P **P** **17 54 41.0 -0.8**
comp=Z,261nm,1.2s,SNR=58
**RAYN Ar Rayn 22.36 260** *e*P **P** **17 54 41.2 -0.6**
comp=Z,77nm,1.2s
**AKTO Aktyubinsk 22.49 340** ⇓P **P** **17 54 41.8 -1.2**
comp=Z,61nm,1.2s
**AKTO Aktyubinsk 22.49 340** P **P** **17 54 42.5 -0.5**
comp=Z,16nm,1.0s,baz=165,slow=9.4,SNR=20
AKTO LR LR 18 04 49.5
comp=Z,744nm,19.5s,baz=146,slow=40
**AKTO Aktyubinsk 22.49 340** P **P** **17 54 42.5 -0.5**
AKTO pmax pmax
comp=Z,16nm,1.0s
AKTO MLR MLR
comp=Z,744nm,19.5s
**DGRG David-gareji 22.85 307** P **P** **17 54 48.2 +1.3**
DGRG S Sn 17 59 13.2 +2.2
**DGRG David-gareji 22.85 307** P **P** **17 54 48.1 +1.3**
**VOSK Vostochnaya 23.05 2** ⇓P **P** **17 54 47.8 -1.0**
comp=Z,75nm,1.4s
**ZRNK Zerenda 23.26 359** ⇓P **P** **17 54 50.0 -0.9**
comp=Z,106nm,1.4s
**BVA0 Borovoye Array 23.34 1** ⇑P **P** **17 54 50.9 -0.8**
comp=Z,62nm,1.2s,baz=171,slow=8.8,SNR=205
**BVAR Borovoye Array 23.34 1** P **P** **17 54 51.4 -0.3**
comp=Z,30nm,0.9s,baz=169,slow=9.1,SNR=142
BVAR LR LR 18 06 20.1
comp=Z,267nm,21.4s,baz=227,slow=43
**BVAR Borovoye Array 23.34 1** P **P** **17 54 51.4 -0.3**
BVAR pmax pmax
comp=Z,30nm,0.9s
BVAR MLR MLR
comp=Z,267nm,21.4s
**BRVK Borovoye 23.37 1***c i*P **P** **17 54 51.6 -0.4**
BRVK pmax pmax
comp=Z,99nm,1.2s
**BRVK Borovoye 23.37 1** P **P** **17 54 52.8 +0.8**
comp=Z,375nm,1.2s,SNR=57
**BRVK Borovoye 23.37 1** P **P** **17 54 52.3 +0.3**
SNR=41
**BRVK Borovoye 23.37 1** *e*P **P** **17 54 50.9 -1.2**
comp=Z,101nm,1.2s
**TBLG Delisi 23.39 308** P **P** **17 54 52.9 +0.5**
**TBLG Delisi 23.39 308** P **P** **17 54 52.9 +0.5**
**CHKZ Chkalovo 24.00 2** ⇑P **P** **17 54 56.6 -1.5**
comp=Z,23nm,1.0s
**AKH Akhalkalaki 24.14 306** P **P** **17 55 01.6 +1.8**
**AKH Akhalkalaki 24.14 306** P **P** **17 55 01.6 +1.8**
**ZEI Tsey 24.39 309** *e*P **P** **17 55 02.1 0.0**
ZEI pmax pmax
comp=Z,54nm,0.9s
**PALK Pallekele 24.62 153** LR LR 18 05 45.8
comp=Z,293nm,20.1s,baz=296,slow=39
**KBZ Khabaz 25.44 311** P **P** **17 55 12.2 +0.9**
comp=Z,12nm,1.0s,baz=90,slow=12,SNR=10
**KBZ Khabaz 25.44 311** P **P** **17 55 12.2 +0.9**
KBZ pmax pmax
comp=Z,12nm,1.0s
**KIV Kislovodsk 25.67 311***d i*P **P** **17 55 14.8 +1.2**
KIV PPP PPP 17 55 56.0
KIV pmax pmax
comp=Z,84nm,1.7s
**KIV Kislovodsk 25.67 311** P **P** **17 55 15.2 +1.6**
SNR=6.8
**KIV Kislovodsk 25.67 311** ⇓*i*P **P** **17 55 12.3 -1.3**
SNR=6.0
**KIV Kislovodsk 25.67 311** *e*P **P** **17 55 14.8 +1.2**
comp=Z,67nm,1.3s
**GTA Gaotai 26.63 61** *e*P **P** **17 55 24.2 +1.9**
GTA pP **pP** **17 55 28.5 +1.3**
GTA sP **sP** **17 55 31.2 +1.9**
GTA PcP **PcP** **17 58 47.2 +1.1**
GTA S **S** **17 59 59.7 +2.9**
GTA sS **sS** **18 00 06.4 +1.5**
GTA PMZ
comp=Z,14nm,1.2s
GTA PMZ
comp=Z,150nm,4.6s
GTA LN
comp=Z,570nm,19.5s
GTA LE
comp=Z,310nm,12.8s
GTA LZ
comp=Z,450nm,12.8s
**ZALV Zalesovo Beam 26.67 20** P **P** **17 55 22.0 -0.3**
comp=Z,3.6nm,0.4s,baz=220,slow=9.7,SNR=18
ZALV LR LR 18 07 15.7
comp=Z,251nm,18.2s,baz=248,slow=40
**ZALV Zalesovo Beam 26.67 20** P **P** **17 55 22.0 -0.3**
ZALV pmax pmax
comp=Z,4.0nm,0.4s
ZALV MLR MLR
comp=Z,251nm,18.2s
**NVS Novosibirsk 27.01 18** *e*P **P** **17 55 24.6 -0.8**
NVS pmax pmax
comp=Z,19nm,1.1s
NVS pmax pmax
comp=N,9.0nm,0.9s
**ARU Arti 27.86 347** P **P** **17 55 33.5 +0.5**
comp=N,0.2nm,0.3s,baz=338,slow=24,SNR=6.2
ARU LR LR 18 07 27.4
comp=N,490nm,21.1s,baz=159,slow=38
**ARU Arti 27.86 347***c i*P **P** **17 55 33.4 +0.5**
ARU 17 56 16.7
ARU S **S** **18 00 19.3 +3.9**
ARU SS **SnSn** **18 01 36.5 +7.6**
ARU pmax pmax
comp=Z,45nm,1.7s
ARU MLR MLR
comp=Z,506nm,22.0s
**ARU Arti 27.86 347** P **P** **17 55 33.2 +0.2**
comp=Z,122nm,1.2s,SNR=9.9
**ARU Arti 27.86 347** *e*P **P** **17 55 33.8 +0.9**
comp=Z,27nm,1.1s
**SVE Sverdlovsk 27.86 349**⇑*i*P **P** **17 55 33.9 +0.9**
SVE *e*S **S** **18 00 11.2 -4.3**
SVE pmax pmax
comp=Z,18nm,1.3s
SVE MLR MLR
comp=Z,777nm,14.0s
**HVS Khovu-Aksy 28.01 33**⇑*i*P **P** **17 55 34.6 +0.1**
HVS pmax pmax
comp=Z,35nm,1.5s
**ASF Jabal al Asfar 28.08 283** P **P** **17 55 36.4 +1.0**
comp=Z,1.2nm,0.4s,baz=91,slow=9.8,SNR=5.4
**ASF Jabal al Asfar 28.08 283** P **P** **17 55 36.4 +1.0**
ASF pmax pmax
comp=Z,1.0nm,0.4s
**CHTO Chiang Mai 28.80 105** P **P** **17 55 42.0 +0.1**
comp=Z,144nm,1.0s
**CHTO Chiang Mai 28.80 105** *e*P **P** **17 55 41.9 +0.1**
CHTO pmax pmax
comp=Z,25nm,0.9s
**CHTO Chiang Mai 28.80 105** *e*P **P** **17 55 41.9 +0.1**
comp=Z,25nm,0.9s
**CMAR Chiang Mai Arr 28.97 106** P **P** **17 55 43.2 -0.1**
comp=Z,7.0nm,0.8s,baz=296,slow=8.5,SNR=30
CMAR LR LR 18 07 44.9
comp=Z,262nm,19.1s,baz=198,slow=37
**CMAR Chiang Mai Arr 28.97 106** P **P** **17 55 43.2 -0.1**
CMAR pmax pmax
comp=Z,7.0nm,0.8s
CMAR MLR MLR
comp=Z,262nm,19.1s
**MMAI Mount Meron Ar 29.30 285** P **P** **17 55 47.2 +1.1**
comp=Z,1.9nm,0.7s,baz=81,slow=18,SNR=3.6
MMAI LR LR 18 09 36.3
comp=Z,322nm,19.0s,baz=50,slow=41
**LZH Lanzhou 29.38 68** *e*P **P** **17 55 46.5 -0.5**
LZH pP pP 17 55 58.6 +6.7
LZH PP **PnPn** **17 56 42.6 +1.9**
LZH S S 18 00 34.0 -6.2
LZH SS **SnSn** **18 02 09.3 +2.5**
LZH PMZ
comp=Z,35nm,1.2s
LZH PMZ
comp=Z,190nm,4.7s
LZH LN
comp=Z,560nm,12.0s
LZH LE
comp=Z,440nm,11.4s
LZH LZ
comp=Z,790nm,15.6s
**CD2 Chengdu 29.48 79** *e*P **P** **17 55 47.2 -0.6**
CD2 pP **pP** **17 55 50.3 -2.4**
CD2 S **S** **18 00 42.2 +0.5**
CD2 sS **sS** **18 00 47.5 -2.3**
CD2 PMZ
comp=Z,20nm,0.6s
CD2 PMZ
comp=Z,180nm,5.2s
CD2 LN
comp=Z,670nm,12.2s
CD2 LZ
comp=Z,520nm,12.2s
**KMI Kunming 29.73 91** P **P** **17 55 50.9 +0.6**
KMI pP **pP** **17 55 52.9 -2.3**
KMI PP **PnPn** **17 56 47.7 +2.0**
KMI S **S** **18 00 42.4 -3.7**
KMI SS **SnSn** **18 02 18.9 +3.2**
KMI PMZ
comp=Z,12nm,1.1s
KMI PMZ
comp=Z,170nm,3.6s
KMI LN
comp=Z,690nm,17.1s
KMI LE
comp=Z,370nm,11.2s
KMI LZ
comp=Z,270nm,12.5s
**VRH Novokhopyorsk 29.89 324** *e*P **P** **17 55 50.5 -0.6**
VRH pmax pmax
comp=Z,20nm,0.7s
VRH pmax pmax
comp=N,30nm,1.1s
VRH pmax pmax
comp=E,10.0nm,0.6s
**EIL Elat 30.02 279** P **P** **17 55 53.3 +0.8**
comp=E,7.4nm,1.0s,baz=82,slow=4.5,SNR=5.1
EIL LR LR 18 09 11.5
comp=E,175nm,19.1s,baz=88,slow=39
**PHRA Phrae 30.03 105** P **P** **17 55 53.8 +1.1**
comp=E,94nm,1.2s
**NANT Nan 30.29 104** P P 17 56 00.0 +5.0
comp=E,2.3nm,1.3s
**BRTR Keskin Array B 31.02 299** P **P** **17 56 01.6 +0.3**
comp=E,13nm,0.8s,baz=112,slow=8.9,SNR=61
BRTR PcP **PcP** **17 58 57.6 +0.5**
comp=E,1.8nm,0.9s,baz=147,slow=2.9,SNR=4.1
BRTR LR LR 18 11 14.6
comp=E,190nm,19.4s,baz=116,slow=42
**BRTR Keskin Array B 31.02 299** P **P** **17 56 01.7 +0.3**
BRTR 17 58 57.6
BRTR pmax pmax
comp=Z,13nm,0.8s
BRTR pmax pmax
comp=Z,2.0nm,1.0s
BRTR MLR MLR
comp=Z,190nm,19.4s
**VORD Divnogorie 31.04 322** *e*P **P** **17 56 00.9 -0.3**
VORD pmax pmax
comp=Z,20nm,1.1s
VORD pmax pmax
comp=N,30nm,0.9s
VORD pmax pmax
comp=E,10.0nm,0.6s
**KRAR Krasnoyarsk 31.08 25***de*P **P** **17 56 02.9 +1.4**
KRAR pmax pmax
comp=Z,28nm,1.3s
**VSR Storozhevoye 31.24 322** *e*P **P** **17 56 02.7 -0.3**
VSR pmax pmax
comp=N,10.0nm,1.0s
VSR pmax pmax
comp=Z,20nm,1.0s
VSR pmax pmax
comp=E,30nm,1.1s
**LOEI Loei 31.36 106** P **P** **17 56 07.3 +2.9**
comp=E,24nm,1.0s
**PBKT Sadao Pong 31.57 107** P **P** **17 56 06.9 +0.6**
comp=E,22nm,1.0s,comp=E,1µm
**ANTO Ankara 31.68 299** *e*P **P** **17 56 08.2 +1.0**
ANTO pmax pmax
comp=Z,37nm,1.0s
**ANTO Ankara 31.68 299** P **P** **17 56 08.6 +1.4**
SNR=5.4
**ANTO Ankara 31.68 299** *e*P **P** **17 56 08.2 +1.0**
comp=Z,37nm,1.0s
**MOY Mondy 32.02 38** *e*P **P** **17 56 12.0 +2.0**
MOY pmax pmax
comp=Z,19nm,1.4s
**LPSR Galich'ya Gora 32.11 324** *e*P **P** **17 56 10.8 +0.1**
LPSR pmax pmax
comp=Z,40nm,1.0s
LPSR pmax pmax
comp=N,4.0nm,0.7s
LPSR pmax pmax
comp=E,20nm,0.9s
**ZAK Zakamensk 32.66 41** *e*P P 17 56 08.8 -6.9
ZAK pmax pmax
comp=Z,6.0nm,1.4s
**NONG Nongkai 32.69 103** P **P** **17 56 16.6 +0.5**
comp=Z,107nm,0.8s
**GYA Guiyang 32.80 86**⇑*i*P **P** **17 56 17.1 -0.1**
GYA PP **PnPn** **17 57 27.8 +2.2**
GYA PcP **PcP** **17 59 04.0 +1.8**
GYA S **S** **18 01 34.5 +0.7**
GYA ScP **ScP** **18 02 47.2 +1.6**
GYA SS **SnSn** **18 03 31.6 +1.6**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,4.9s
GYA LN
comp=Z,620nm,17.8s
GYA LE
comp=Z,690nm,18.0s
GYA LZ
comp=Z,520nm,18.2s
**TLY Talaya 33.46 39** LR LR 18 11 34.7
comp=Z,199nm,21.9s,baz=237,slow=39
**SONM Songino Array 33.56 47** P **P** **17 56 24.9 +1.4**
comp=Z,14nm,1.0s,baz=248,slow=8.3,SNR=73
SONM LR LR 18 13 02.2
comp=Z,398nm,18.5s,baz=254,slow=42
**SONM Songino Array 33.56 47** P **P** **17 56 24.9 +1.4**
SONM pmax pmax
comp=Z,14nm,1.0s
SONM MLR MLR
comp=Z,398nm,18.5s
**XAN Xi'an 33.56 72** P **P** **17 56 23.2 -0.5**
XAN pP **pP** **17 56 27.2 -1.4**
XAN PP **PnPn** **17 57 35.0 -0.2**
XAN S **S** **18 01 42.2 -3.2**
XAN PMZ
comp=Z,4.0nm,1.2s
XAN PMZ
comp=Z,45nm,5.8s
XAN LN
comp=Z,520nm,18.4s
XAN LE
comp=Z,210nm,18.4s
XAN LZ
comp=Z,260nm,20.7s
**ULN Ulaanbaatar 33.98 47***c i*P **P** **17 56 28.6 +1.3**
ULN pmax pmax
comp=Z,16nm,1.0s
**ULN Ulaanbaatar 33.98 47** P **P** **17 56 29.0 +1.7**
SNR=8.2
**ULN Ulaanbaatar 33.98 47** *e*P **P** **17 56 28.7 +1.4**
comp=Z,17nm,1.1s
**IRK Irkutsk 34.07 39** *e*P **P** **17 56 28.5 +0.7**
IRK pmax pmax
comp=Z,24nm,1.3s
**ENH Enshi 34.46 79** *e*P **P** **17 56 30.5 -1.0**
**MOS Moscow 34.53 328** *e*P **P** **17 56 30.9 -0.8**
MOS pmax pmax
comp=Z,63nm,1.7s
**OBN Obninsk 34.67 327** P **P** **17 56 31.9 -1.0**
comp=Z,20nm,0.4s,baz=126,slow=18,SNR=8.9
OBN PcP **PcP** **17 59 07.4 +0.7**
comp=Z,12nm,0.6s,baz=163,slow=5.5,SNR=3.8
OBN LR LR 18 14 17.9
comp=Z,691nm,19.4s,baz=106,slow=43
**OBN Obninsk 34.67 327***de*P **P** **17 56 33.3 +0.4**
OBN *e* 17 56 46.2
OBN *e* 17 57 54.0
OBN PPP PPP 17 58 01.1
OBN *e* 17 59 06.9

OBN *e*SS SS 18 04 16.5 -16
OBN *e*SSS SSS 18 04 35.8
OBN pmax pmax
comp=Z,52nm,1.2s
OBN MLR MLR
comp=Z,813nm,18.0s
**HHC Hu-ho-hao-te 35.75 60** *e*P **P** **17 56 44.6 +2.0**
HHC pP **pP** **17 56 50.2 +2.7**
HHC sP sP 17 56 54.8 +5.3
HHC PcP **PcP** **17 59 05.7 -4.7**
HHC S **S** **18 02 24.7 +5.7**
HHC PMZ
comp=Z,24nm,0.8s
HHC PMZ
comp=Z,96nm,5.3s
HHC LN
comp=Z,310nm,13.1s
HHC LE
comp=Z,290nm,13.1s
HHC LZ
comp=Z,220nm,13.1s
**UBPT Khong Chiam 35.97 106** P **P** **17 56 45.2 +0.7**
comp=Z,40nm,1.0s
**AKASG Malin Array Be 36.69 316** P **P** **17 56 49.7 -0.6**
comp=Z,13nm,0.9s,baz=102,slow=7.0,SNR=33
AKASG PP **PnPn** **17 58 13.0 -0.6**
comp=Z,4.0nm,0.9s,baz=109,slow=11,SNR=7.9
AKASG PcP **PcP** **17 59 12.6 -0.2**
comp=Z,4.0nm,1.0s,baz=90,slow=2.2,SNR=6.4
AKASG LR LR 18 14 36.6
comp=Z,184nm,20.2s,baz=35,slow=41
**AKASG Malin Array Be 36.69 316** *ce*P **P** **17 56 49.9 -0.4**
AKASG pmax pmax
comp=Z,13nm,0.9s
**KIEV Kiev 36.69 316** *c i*P **P** **17 56 49.7 -0.7**
KIEV pmax pmax
comp=Z,20nm,0.9s
**KLMR Klimovskoe 37.04 336** *e*P **P** **17 56 51.3 -1.8**
KLMR *e* 17 58 18.7
KLMR *e* 17 59 10.5
KLMR pmax pmax
comp=Z,39nm,1.3s
KLMR MLR MLR
comp=Z,884nm,20.0s
**VRI Vrincioaia 37.04 308** ⇓P **P** **17 56 53.9 +0.5**
**VRI Vrincioaia 37.04 308** ⇓*i*P **P** **17 56 53.9 +0.5**
**PLOR Plostina 37.09 308** ⇓P **P** **17 56 54.9 +1.0**
**PLOR Plostina 37.09 308** ⇓*i*P **P** **17 56 54.9 +1.0**
**TESR Tescani 37.22 309** ⇑*i*P **P** **17 56 55.8 +0.9**
**SANT Santorini 37.33 292** *e*P **P** **17 56 55.0 -1.1**
comp=Z,58nm,1.1s
**MLR Muntele Rosu 37.51 307** ⇓P **P** **17 56 59.2 +1.6**
**MLR Muntele Rosu 37.51 307** ⇓*i*P **P** **17 56 59.2 +1.6**
**IDI Anoyia 37.86 290** P **P** **17 57 00.1 -0.5**
comp=Z,10nm,0.7s,baz=63,slow=9.0,SNR=4.7
**IDI Anoyia 37.86 290** *e*P **P** **17 57 00.5 -0.1**
**DOPR Dopca 37.98 308** ⇓*i*P **P** **17 57 01.8 +0.4**
**QIZ Qiongzhong 38.02 97** P P 17 57 07.3 +5.3
QIZ PMZ
comp=Z,59nm,3.2s
**VOIR 38.13 307** ⇑P **P** **17 57 03.2 +0.5**
**VOIR 38.13 307** ⇑*i*P **P** **17 57 03.2 +0.5**
**BURAR Bucovina Array 38.40 310** ⇑P **P** **17 57 05.3 +0.3**
**BURAR Bucovina Array 38.40 310** ⇑*i*P **P** **17 57 05.3 +0.3**
**WHN Wuhan 38.55 77** P **P** **17 57 07.8 +1.4**
WHN S **S** **18 03 04.6 +2.9**
WHN LN
comp=Z,1μm,11.2s
WHN LE
comp=Z,660nm,10.3s
WHN LZ
comp=Z,700nm,14.0s
**MICGM Minsk 38.82 322** *e* **P** **17 57 06.0 -2.3**
**MNK Minsk 38.84 322** *e*P **P** **17 57 06.0 -2.5**
**BJT Baijiatuau 39.22 62** *e*P **P** **17 57 13.8 +2.0**
BJT pmax pmax
comp=Z,10.0nm,0.8s
**BJT Baijiatuau 39.22 62** *e*P **P** **17 57 13.8 +2.0**
comp=Z,9.7nm,0.8s
**BJI Beijing 39.23 62** P P **17 57 13.4 +1.5**
BJI S **S** **18 03 14.5 +2.9**
BJI PMZ
comp=Z,27nm,1.3s
BJI LN
comp=Z,400nm,19.4s
BJI LE
comp=Z,180nm,17.2s
BJI LZ
comp=Z,110nm,20.1s
**CIT Chita 39.26 43** *e*P **P** **17 57 12.5 +0.4**
CIT *e* 17 57 17.7
CIT *e* 17 57 25.7
**LVV L'vov 39.64 314** *e*P **P** **17 57 14.2 -1.0**
**DRGR 39.94 309** ⇑P **P** **17 57 18.3 +0.5**
**DRGR 39.94 309** ⇑*i*P **P** **17 57 18.3 +0.5**
**TIA Tai'an 40.12 68** ⇓P **P** **17 57 20.9 +1.5**
TIA S S 18 03 31.3 +6.1
TIA PMZ
comp=Z,30nm,1.1s
TIA LN
comp=Z,290nm,11.9s
TIA LE
comp=Z,330nm,17.8s
TIA LZ
comp=Z,130nm,9.0s
**TRPA Tarpa 40.27 311** ⇑*i*P **P** **17 57 19.0 -1.4**
**KWP Kalwaria Pacla 40.44 313** *e*P **P** **17 57 22.0 +0.1**
**KWP Kalwaria Pacla 40.44 313** *e*P **P** **17 57 22.0 +0.1**
**UZH Uzhgorod 40.51 311** *e*P **P** **17 57 22.5 0.0**
UZH *e* 17 57 34.3
**BZS Buzias 40.54 307** ⇑P **P** **17 57 22.8 0.0**
**BZS Buzias 40.54 307** ⇑*i*P **P** **17 57 22.8 0.0**
**KOLS Kolonicke sedl 40.58 312** *e*P **P** **17 57 23.5 +0.4**
KOLS pmax pmax
comp=Z,8.0nm,1.1s
**KOLS Kolonicke sedl 40.58 312** *e*P **P** **17 57 23.5 +0.4**
KOLS *e* 18 30 19.9
**VSU Vasula 41.02 327** *de*P **P** **17 57 26.2 -0.3**
VSU pmax pmax
comp=Z,149nm,2.5s
**SUW Suwalki 41.25 320** *e*P **P** **17 57 27.9 -0.5**
**SUW Suwalki 41.25 320** *e*P **P** **17 57 28.0 -0.5**
**BOD Bodaibo 41.52 34** *e*P **P** **17 57 29.8 -0.9**
BOD pmax pmax
comp=Z,7.0nm,1.1s
**DIVS Divibare 41.57 304** ⇑*i*P **P** **17 57 31.5 +0.1**
**BKNI Bangkinang 41.84 128** P **P** **17 57 35.8 +2.1**
comp=Z,94nm,0.6s
**NIE Niedzica 41.94 312** *e*P **P** **17 57 35.2 +0.9**
**NIE Niedzica 41.94 312** *e*P **P** **17 57 35.2 +0.9**
**PSZ Piszkesteto 41.99 310** ⇑P **P** **17 57 35.6 +0.9**
**PSZ Piszkesteto 41.99 310** ⇑*i*P **P** **17 57 35.6 +0.9**
**PSZ Piszkesteto 41.99 310** ⇑*e*P **P** **17 57 35.2 +0.5**
**PSZ Piszkesteto 41.99 310** *e*P **P** **17 57 35.4 +0.7**
comp=Z,26nm,1.0s
**NJ2 Nanjing 42.08 74** *e*P **P** **17 57 36.4 +0.8**
NJ2 PMZ
comp=Z,50nm,0.6s
**OJC Ojcow 42.39 313** *e*P **P** **17 57 38.3 +0.4**
**OJC Ojcow 42.39 313** *e*P **P** **17 57 38.3 +0.4**
**FINES FINESS Array B 42.66 331** P **P** **17 57 39.5 -0.4**
comp=Z,5.3nm,0.6s,baz=126,slow=9.1,SNR=27
FINES PP **PP** **17 59 18.0 -0.8**
comp=Z,8.4nm,1.0s,baz=129,slow=18,SNR=4.1
FINES PcP **PcP** **17 59 32.0 +0.4**
comp=Z,4.5nm,1.0s,baz=104,slow=5.9,SNR=3.7
**FINES FINESS Array B 42.66 331** *i* P **P** **17 57 39.7 -0.2**
FINES pmax pmax
comp=Z,5.0nm,0.6s
**VYHS Vyhne 42.76 311** *e*P **P** **17 57 41.0 0.0**
VYHS pmax pmax
comp=Z,5.0nm,1.2s
**VYHS Vyhne 42.76 311** *e*P **P** **17 57 41.0 0.0**
**OKC Ostrava-Krasne 43.39 313** *e*P **P** **17 57 45.6 -0.3**
OKC *e* 17 57 57.8
**OKC Ostrava-Krasne 43.39 313** *e*P **P** **17 57 45.6 -0.3**
OKC *ex* x 17 57 57.8
**KMBO Kilima Mbogo 43.47 231** P **P** **17 57 48.1 +0.9**
comp=Z,1.0nm,0.5s,baz=47,slow=11,SNR=5.8
**KMBO Kilima Mbogo 43.47 231** *ce*P **P** **17 57 48.2 +0.9**
KMBO pmax pmax
comp=Z,1.0nm,0.5s
**APA Apatity 43.58 341** *e*P **P** **17 57 48.4 +1.2**
APA MLR MLR
comp=Z,500nm,13.0s
**MORC Moravsky Berou 43.77 312** ⇑P **P** **17 57 48.8 -0.3**
**MORC Moravsky Berou 43.77 312** ⇑*i*P **P** **17 57 48.8 -0.3**
**MORC Moravsky Berou 43.77 312** *e*P **P** **17 57 49.2 +0.2**
**KRLC Kraliky 44.29 313** *e*P **P** **17 57 53.4 +0.1**
KRLC *e* 17 58 12.0
KRLC *e* 17 59 36.6
**KRLC Kraliky 44.29 313** *e*P **P** **17 57 53.4 +0.1**
KRLC *ex* x 17 58 12.0
KRLC *e*PP **PP** **17 59 36.6 +0.1**
**DPC Dobruska-Polom 44.62 313** *e*P **P** **17 57 56.4 +0.5**
DPC *e* 17 58 12.1
**DPC Dobruska-Polom 44.62 313** *e*P **P** **17 57 56.4 +0.5**
DPC *ex* x 17 58 12.1
**CONA Conrad Observa 44.69 310** ⇑*i*P **P** **17 57 56.4 -0.1**
comp=Z,3.1nm,0.7s
**CUC Castrocucco 44.72 298** *e*P **P** **17 57 56.9 0.0**
comp=Z,60nm,0.9s
**UPC Upice 44.84 313** *e*P **P** **17 57 57.9 +0.3**
**UPC Upice 44.84 313** *e*P **P** **17 57 57.9 +0.3**
UPC *ex* x 17 58 23.9
**ARSA Arzberg 44.88 309** ⇑*i*P **P** **17 57 58.3 +0.4**
comp=Z,15nm,1.0s
**BOJS Bojanci 45.00 306** *i* P **P** **17 57 59.0 +0.1**
**PERS Pernice 45.12 308** *i* P **P** **17 57 59.5 -0.5**
**SOKA Soboth 45.18 308** ⇑*i*P **P** **17 58 00.3 -0.2**
comp=Z,11nm,1.5s
**VISS Visnje 45.29 307** *e*P **P** **17 58 00.2 -1.1**
**GOPC GO Pecny, Ondr 45.56 312** *e*P **P** **17 58 03.2 -0.1**
**GOPC GO Pecny, Ondr 45.56 312** *e*P **P** **17 58 03.2 -0.1**
**PRU Pruhonice 45.72 312** *e*P **P** **17 58 04.1 -0.5**
**PRU Pruhonice 45.72 312** *e*P **P** **17 58 04.1 -0.5**
**PVCC Panska Ves 45.75 313** *e*P **P** **17 58 05.1 +0.3**
**PVCC Panska Ves 45.75 313** *e*P **P** **17 58 05.1 +0.3**
**MOA Molln 45.76 309** ⇑*i*P **P** **17 58 04.8 -0.1**
comp=Z,20nm,1.1s
**PRA Prague 45.80 312** *e*P **P** **17 58 04.8 -0.4**
**PRA Prague 45.80 312** *e*P **P** **17 58 04.8 -0.4**
**JAVS Javornik 45.84 307** *e*P **P** **17 58 05.6 -0.1**
**CN2 Changchun 46.11 56** *e*P **P** **17 58 07.9 +0.1**
CN2 PMZ
comp=Z,10.0nm,0.7s
CN2 PMZ
comp=Z,100nm,5.0s
CN2 LN
comp=Z,200nm,14.0s
CN2 LE
comp=Z,300nm,14.0s
CN2 LZ
comp=Z,200nm,13.0s
**BRG Berggiesshubel 46.18 314** *e*P **P** **17 58 08.6 +0.4**
comp=Z,8.9nm,1.1s
**BRG Berggiesshubel 46.18 314** *e*P **P** **17 58 08.6 +0.4**
BRG pmax pmax
comp=Z,9.0nm,1.1s
**GERES GERESS Array B 46.18 311** P **P** **17 58 07.9 -0.5**
comp=Z,2.6nm,0.8s,baz=100,slow=6.9,SNR=18
GERES PcP **PcP** **17 59 43.4 -0.7**
comp=Z,2.0nm,0.9s,baz=98,slow=2.7,SNR=6.2
GERES LR LR 18 24 01.3
comp=Z,114nm,18.4s,baz=90,slow=45
**GERES GERESS Array B 46.18 311** P **P** **17 58 07.9 -0.5**
GERES 17 59 43.4
GERES pmax pmax
comp=Z,3.0nm,0.8s
GERES MLR MLR
comp=Z,114nm,18.4s
**KHC Kasperske Hory 46.28 311** *e*P **P** **17 58 08.3 -0.8**
KHC *e* 17 58 16.0
KHC *e* 17 59 58.7
**KHC Kasperske Hory 46.28 311** *e*P **P** **17 58 08.3 -0.8**
KHC *ex* x 17 58 16.0
KHC *e*PP **PP** **17 59 58.7 +1.0**
**KBA Koelnbreinsper 46.35 308** ⇑*i*P **P** **17 58 09.6 -0.2**
comp=Z,12nm,1.1s
**CLL Collm 46.81 314** *e*P **P** **17 58 13.0 -0.1**
CLL pmax pmax
comp=Z,8.0nm,1.4s
**CLL Collm 46.81 314** *e*P **P** **17 58 13.0 -0.1**
comp=Z,8.0nm,1.4s
**ABTA Abfaltersbach 46.92 308** ⇑*i*P **P** **17 58 13.2 -1.0**
comp=Z,7.4nm,1.2s
**NKC Novy Kostel 47.08 313** *e*P **P** **17 58 15.2 -0.1**
**NKC Novy Kostel 47.08 313** *e*P **P** **17 58 15.2 -0.1**
**WTTA Wattenberg 47.52 309** ⇑*i*P **P** **17 58 18.1 -0.9**
comp=Z,15nm,1.2s
**GRF Grafenberg Arr 47.85 312** *e*P **P** **17 58 21.4 +0.1**
comp=Z,25nm,1.4s,baz=100,slow=7.6
**GRFO Grafenberg 47.85 312** *e*P **P** **17 58 22.4 +1.1**
**GRFO Grafenberg 47.85 312** *e*P **P** **17 58 22.4 +1.1**
**MOTA Moosalm 47.88 309** ⇑*i*P **P** **17 58 20.1 -1.7**
comp=Z,17nm,1.1s
**RETA Reutte 48.12 309** ⇑*i*P **P** **17 58 22.3 -1.1**
comp=Z,7.6nm,1.1s
**FETA Feichten 48.14 308** ⇑*i*P **P** **17 58 21.7 -2.0**
comp=Z,13nm,1.1s
**TJN Taejon 48.30 66** *ce*P **P** **17 58 24.5 -0.4**
**KSAR Wonju Array Be 48.54 65** P **P** **17 58 27.2 +0.4**
KSAR 17 59 52.2
**KSAR Wonju Array Be 48.54 65** P **P** **17 58 27.1 +0.4**
KSAR PcP **PcP** **17 59 52.2 -0.3**
**KSRS Korea Array 48.57 65** P **P** **17 58 27.1 +0.2**
comp=Z,12nm,1.0s,baz=270,slow=6.8,SNR=42
KSRS PcP **PcP** **17 59 52.2 -0.4**
comp=Z,2.9nm,1.0s,baz=265,slow=3.6,SNR=5.0
KSRS LR LR 18 22 20.4
comp=Z,89nm,20.1s,baz=270,slow=40
**KSRS Korea Array 48.57 65** P **P** **17 58 27.2 +0.2**
KSRS 17 59 52.2
KSRS pmax pmax
comp=Z,12nm,1.0s
KSRS pmax pmax
comp=Z,3.0nm,1.0s
KSRS MLR MLR
comp=Z,89nm,20.1s
**DAVA Damuels 48.72 309** ⇑*i*P **P** **17 58 27.2 -1.0**
comp=Z,21nm,1.1s
**MDJ Mudanjiang 49.05 55** P **P** **17 58 31.1 +0.5**
MDJ PMZ
comp=Z,13nm,1.3s
MDJ PMZ
comp=Z,27nm,5.4s
MDJ LN
comp=Z,270nm,15.8s
MDJ LE
comp=Z,170nm,13.5s
MDJ LZ
comp=Z,270nm,13.5s
**MDJ Mudanjiang 49.05 55** *e*P **P** **17 58 30.1 -0.5**
comp=Z,35nm,1.6s
**NB2 NORSAR Subarra 49.27 327** P **P** **17 58 30.9 -1.2**
comp=Z,14nm,0.9s,baz=102,slow=7.9
**NOA NORSAR Array B 49.27 327** P **P** **17 58 31.1 -1.0**
comp=Z,11nm,0.9s,baz=102,slow=7.7,SNR=20
**NOA NORSAR Array B 49.27 327** P **P** **17 58 31.1 -1.0**
NOA pmax pmax
comp=Z,11nm,0.9s
**BFO Black Forest 49.74 310** *i* P **P** **17 58 35.7 -0.2**
**YAK Yakutsk 50.29 32** P **P** **17 58 39.4 -0.4**
comp=Z,3.7nm,0.3s,baz=270,slow=5.1,SNR=3.5
**YAK Yakutsk 50.29 32** *e*P **P** **17 58 38.3 -1.4**
YAK pmax pmax
comp=Z,20nm,1.0s
YAK pmax pmax
comp=E,12nm,1.5s
YAK pmax pmax
comp=N,7.0nm,1.5s
**KLR Kul'dur 50.34 49** *e*P P 17 58 35.7 -4.6
KLR pmax pmax
comp=E,45nm,1.6s
KLR pmax pmax
comp=Z,45nm,1.6s
KLR MLR MLR
comp=Z,500nm,12.0s
**KEST Kesra 50.36 293** P **P** **17 58 41.9 +1.1**
comp=Z,28nm,1.0s,baz=52,slow=3.0,SNR=23
KEST PcP **PcP** **17 59 58.7 -0.6**
comp=Z,2.7nm,0.8s,baz=68,slow=5.4,SNR=3.4
KEST LR LR 18 23 38.3
comp=Z,66nm,18.6s,baz=256,slow=40
**SENIN Lac Senin/Sane 50.53 307** *e*P **P** **17 58 41.5 -0.6**
**USRK Ussuriysk Ar. 50.80 55** P **P** **17 58 43.9 0.0**
comp=Z,3.3nm,1.0s,baz=274,slow=5.0,SNR=8.8
USRK LR LR 18 23 43.3
comp=Z,158nm,21.5s,baz=252,slow=40
**BNI Bardonecchia 51.06 306** *e*P **P** **17 58 44.8 -1.2**
**BNI Bardonecchia 51.06 306** *e*P **P** **17 58 44.8 -1.2**
**WLF Walferdange 51.14 312** P **P** **17 58 46.9 +0.6**
**LEM Lembang 51.51 129** LR LR 18 21 08.2
comp=Z,193nm,18.8s,baz=278,slow=37
**CMAH Djebel Manchou 51.71 295** P **P** **17 58 51.6 +0.7**
**JNU Nakatsue 51.79 70** LR LR 18 21 34.7
comp=Z,123nm,18.9s,baz=292,slow=37
**JNU Nakatsue 51.79 70** *e*P **P** **17 58 53.3 +1.7**
**CAEH 'Ain El Ouahch 52.13 295** P **P** **17 58 53.7 -0.3**
**DOU Dourbes 52.13 312** P **P** **17 58 54.5 +0.8**
**SNF Seneffe 52.31 313** P **P** **17 58 55.5 +0.4**
**SSB Saint Sauveur 52.54 306** *e*P **P** **17 58 56.0 -0.9**
SSB pmax pmax
comp=Z,39nm,1.6s
**SSB Saint Sauveur 52.54 306** *e*P **P** **17 58 56.0 -0.9**
comp=Z,39nm,1.6s
**HABR Khabarovsk 52.55 50** *e*P **P** **17 58 54.9 -2.0**
HABR *e* 18 00 05.0
HABR 18 00 54.4
HABR *e*PPP PPP 18 01 56.7
HABR *e*S **S** **18 06 22.4 -0.7**
HABR *e*SS **SS** **18 10 01.8 +0.8**
HABR *e*SSS SSS 18 11 45.5
HABR pmax pmax
comp=N,3.0nm,0.9s
HABR pmax pmax
comp=Z,21nm,2.0s
HABR pmax pmax
comp=E,5.0nm,1.0s
HABR MLR MLR
comp=Z,109nm,20.0s
**CTEI Djebel Teioual 52.63 295** P **P** **17 58 58.6 +0.8**
**DFRA Djebel Bou Aff 52.94 295** P **P** **17 58 58.6 -1.6**
**SET Setif 53.39 295** P **P** **17 59 05.0 +1.5**
**SPITS Spitsbergen Ar 53.88 348** P **P** **17 59 07.2 +0.9**
comp=Z,13nm,0.6s,baz=104,slow=9.5,SNR=28
**SPITS Spitsbergen Ar 53.88 348** P **P** **17 59 07.2 +0.9**
SPITS pmax pmax
comp=Z,13nm,0.6s
**KBS Kingsbay 55.02 349** *e*P **P** **17 59 15.8 +1.3**
**KBS Kingsbay 55.02 349** *e*P **P** **17 59 15.8 +1.3**
**MPSI Mapaga 56.05 112** P **P** **17 59 24.7 +1.9**
comp=Z,8.8nm,1.3s,comp=Z,438nm
**MAJO Matsushiro 56.81 64** ⇓*e*P **P** **17 59 28.0 -0.1**
MAJO pmax pmax
comp=Z,78nm,1.1s
**MAJO Matsushiro 56.81 64** *e*P **P** **17 59 28.2 +0.1**
**MJAR Matsushiro Arr 56.82 64** P **P** **17 59 28.3 +0.2**
comp=Z,8.5nm,1.1s,baz=285,slow=10,SNR=20
MJAR LR LR 18 26 15.4
comp=Z,93nm,21.0s,baz=285,slow=39
**MJAR Matsushiro Arr 56.82 64** P **P** **17 59 28.3 +0.2**
MJAR pmax pmax
comp=Z,9.0nm,1.1s
MJAR MLR MLR
comp=Z,93nm,21.0s
**TAM Tamanrasset 57.24 279** *e*P **P** **17 59 30.3 -1.1**
TAM pmax pmax
comp=Z,11nm,1.3s
**TAM Tamanrasset 57.24 279** *e*P **P** **17 59 30.3 -1.1**
comp=Z,11nm,1.3s
**YSS Yuzh-Sakhalins 57.91 51** ⇑*i*P **P** **17 59 34.0 -1.5**
YSS pmax pmax
comp=Z,40nm,1.1s
**YSS Yuzh-Sakhalins 57.91 51** *e*P **P** **17 59 35.1 -0.5**
**KAPI Kappang 59.17 117** LR LR 18 31 09.3
comp=Z,111nm,18.4s,baz=324,slow=42
**ESDC Sonseca Array 59.76 301** P **P** **17 59 47.8 -0.9**
comp=Z,7.3nm,0.8s,baz=62,slow=7.4,SNR=37
ESDC LR LR 18 29 56.7
comp=Z,59nm,18.3s,baz=320,slow=40
**LSZ Lusaka 59.92 228** *e*P **P** **17 59 50.1 +0.1**
**LSZ Lusaka 59.92 228** *e*P **P** **17 59 50.1 +0.1**
**PAB San Pablo 60.08 301** *e*P **P** **17 59 50.3 -0.6**
**PAB San Pablo 60.08 301** *e*P **P** **17 59 50.3 -0.6**
**MA2 Magadan 60.54 35** *e*P **P** **17 59 54.1 +0.5**
**SEY Seymchan 60.80 31** P **P** **17 59 55.2 -0.1**
comp=Z,8.8nm,0.9s,baz=272,slow=6.4,SNR=12
**SEY Seymchan 60.80 31** ⇑*e*P **P** **17 59 55.4 +0.1**
**DAG Danmarks Havn 60.95 345** *i* P **P** **17 59 56.3 +0.2**
DAG pmax pmax
comp=Z,23nm,0.9s
**DAG Danmarks Havn 60.95 345** *i* P **P** **17 59 56.3 +0.2**
comp=Z,28nm,0.9s
**MVO Moncorvo 61.62 303** *e*P **P** **18 00 01.6 +0.2**
comp=Z,100nm,1.7s
**PVRL Vila Real 62.09 304** *e*P **P** **18 00 04.7 +0.2**
comp=Z,39nm,1.7s
**POLO Lamas de Olo 62.12 304** *e*P **P** **18 00 03.8 -0.9**
comp=Z,27nm,1.8s
**MTE Manteigas 62.21 303** *e*P **P** **18 00 05.5 +0.2**
comp=Z,82nm,1.4s
**PGAV Gavieira, Arco 62.30 305** *e*P **P** **18 00 05.9 0.0**
comp=Z,62nm,1.6s
**PCBR Castelo Branco 62.32 302** *e*P **P** **18 00 06.0 0.0**
comp=Z,44nm,1.4s
**PMRV Marv??o 62.38 302** *e*P **P** **18 00 06.1 -0.3**
comp=Z,24nm,1.3s
**PVIS Viseu 62.38 303** *e*P **P** **18 00 06.7 +0.3**
comp=Z,38nm,1.7s
**PBAR Barrancos 62.48 300** *e*P **P** **18 00 05.7 -1.4**
comp=Z,71nm,2.0s
**LBMI Labuha 62.83 108** P **P** **18 00 10.9 +1.2**
comp=Z,19nm,1.0s
**PTOM Tomar 63.08 302** *e*P **P** **18 00 10.0 -1.0**
comp=Z,87nm,1.4s
**EVO Evora 63.11 301** *e*P **P** **18 00 11.1 -0.1**
comp=Z,31nm,1.9s
**PBEJ Beja 63.15 300** *e*P **P** **18 00 11.2 -0.3**
comp=Z,20nm,1.4s
**PVAQ Vaqueiros 63.23 300** *e*P **P** **18 00 11.6 -0.5**
comp=Z,38nm,1.9s
**PCVE Castro Verde 63.40 300** *e*P **P** **18 00 12.4 -0.8**
comp=Z,28nm,1.6s
**MESJ Messejana 63.48 300** *e*P **P** **18 00 13.4 -0.3**
comp=Z,60nm,1.6s
**PNCL Nicolau / Gran 63.62 301** *e*P **P** **18 00 14.7 +0.1**
comp=Z,43nm,1.4s
**PFVI Vila Bisbo 64.16 300** *e*P **P** **18 00 18.3 +0.1**
comp=Z,102nm,1.6s
**TORD Torodi Ar. Bea 64.50 271** P **P** **18 00 19.5 -1.2**
comp=Z,2.9nm,0.7s,baz=55,slow=5.8,SNR=24
TORD LR LR 18 31 38.5
comp=Z,124nm,18.5s,baz=10.0,slow=39
**BILL Bilibino 65.28 24** ⇓*e*P **P** **18 00 25.9 +0.9**
BILL *e* 18 00 34.4
BILL *e* 18 00 59.5
BILL pmax pmax
comp=Z,24nm,1.7s
BILL MLR MLR
comp=Z,149nm,19.0s
**BILL Bilibino 65.28 24** *e*P **P** **18 00 25.6 +0.6**
comp=Z,8.9nm,0.8s
**BATI Baumata 65.43 119** LR LR 18 32 43.1
comp=Z,495nm,19.6s,baz=266,slow=40
**PETK Petropavlovsk- 65.79 41** LR LR 18 32 10.1
comp=Z,114nm,19.8s,baz=284,slow=39
**SUMG Summit 67.14 342** *e*P **P** **18 00 38.1 +0.8**
SUMG pmax pmax
comp=Z,29nm,0.9s
**SUMG Summit 67.14 342** *i* P **P** **18 00 38.1 +0.8**
comp=Z,31nm,1.0s
SUMG *i* 18 01 01.7
**SUMG Summit 67.14 342** *e*P **P** **18 00 38.1 +0.8**
comp=Z,29nm,0.9s
**GUMO Guam 70.74 85** LR LR 18 31 46.3
comp=Z,47nm,21.4s,baz=293,slow=36
**BOSA Boshof 71.77 220** P **P** **18 01 05.8 -0.4**
comp=Z,8.6nm,0.9s,baz=51,slow=7.9,SNR=7.5
BOSA LR LR 18 33 34.1
comp=Z,60nm,18.1s,baz=26,slow=37
**BOSA Boshof 71.77 220** P **P** **18 01 05.8 -0.4**
BOSA pmax pmax
comp=Z,9.0nm,0.9s
BOSA MLR MLR
comp=Z,61nm,18.1s
**DBIC Dimbokro 73.21 268** LR LR 18 38 12.6
comp=Z,115nm,19.6s,baz=34,slow=40
**COLD Coldfoot 78.85 15** *e*P **P** **18 01 46.5 +0.2**
comp=Z,45nm,1.0s
**WRA Warramunga Arr 79.51 120** P **P** **18 01 49.6 -1.0**
comp=Z,6.9nm,0.9s,baz=319,slow=5.3,SNR=38
**WRA Warramunga Arr 79.51 120** P **P** **18 01 49.6 -1.0**
WRA pmax pmax
comp=Z,7.0nm,0.9s

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRAB | Tennant Creek | 79.52 | 120 | ⇓eP | P | 18 01 50.1 | -0.5 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,96nm,2.5s | | | | | | |
| WRAB | Tennant Creek | 79.52 | 120 | P | P | 18 01 49.9 | -0.7 |
| | comp=Z,77nm,1.0s,SNR=6.4 | | | | | | |
| WRAB | Tennant Creek | 79.52 | 120 | eP | P | 18 01 49.8 | -0.7 |
| | comp=Z,17nm,1.1s | | | | | | |
| INK | Inuvik | 80.81 | 8 | eP | P | 18 01 56.9 | +0.1 |
| INK | | | | pmax | pmax | | |
| | comp=Z,44nm,1.1s | | | | | | |
| INK | Inuvik | 80.81 | 8 | eP | P | 18 01 56.9 | +0.1 |
| | comp=Z,44nm,1.1s | | | | | | |
| BPAW | Bear Paw Mtn. | 81.25 | 17 | eP | P | 18 01 58.8 | -0.5 |
| | comp=Z,5.3nm,1.1s | | | | | | |
| COLA | College | 81.36 | 15 | eP | P | 18 01 59.8 | +0.1 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,44nm,1.0s | | | | | | |
| COLA | College | 81.36 | 15 | eP | P | 18 01 59.9 | +0.1 |
| | comp=Z,48nm,1.0s | | | | | | |
| ASAR | Alice Springs | 81.43 | 123 | P | P | 18 01 59.8 | -1.1 |
| | comp=Z,4.9nm,0.9s,baz=306,slow=5.5,SNR=60 | | | | | | |
| ASAR | Alice Springs | 81.43 | 123 | P | P | 18 01 59.8 | -1.1 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| ILAR | Eielson Array | 81.66 | 15 | P | P | 18 02 00.6 | -0.9 |
| | comp=Z,12nm,1.0s,baz=318,slow=3.8,SNR=62 | | | | | | |
| ILAR | | | | PP | PP | 18 05 05.1 | -2.3 |
| | comp=Z,0.4nm,0.4s,baz=331,slow=10,SNR=4.9 | | | | | | |
| ILAR | | | | LR | LR | 18 41 45.1 | |
| | comp=Z,58nm,20.1s,baz=322,slow=38 | | | | | | |
| ILAR | Eielson Array | 81.66 | 15 | P | P | 18 02 00.6 | -0.9 |
| ILAR | | | | | | 18 05 05.1 | |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| ILAR | | | | MLR | MLR | | |
| | comp=Z,58nm,20.1s | | | | | | |
| KTH | Kantishna Hill | 81.72 | 17 | eP | P | 18 02 01.3 | -0.6 |
| | comp=Z,36nm,1.3s | | | | | | |
| PPLA | Purkeypile | 81.92 | 18 | eP | P | 18 02 02.6 | -0.4 |
| TRF | Thorofare Moun | 81.96 | 17 | eP | P | 18 02 02.1 | -1.2 |
| | comp=Z,14nm,1.0s | | | | | | |
| MCK | McKinley | 82.06 | 16 | eP | P | 18 02 03.4 | -0.2 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,33nm,1.1s | | | | | | |
| MCK | McKinley | 82.06 | 16 | eP | P | 18 02 03.4 | -0.2 |
| | comp=Z,33nm,1.1s | | | | | | |
| EGAK | Eagle | 82.85 | 13 | eP | P | 18 02 07.3 | -0.3 |
| | comp=Z,22nm,1.1s | | | | | | |
| DOT | Dot Lake | 83.26 | 14 | eP | P | 18 02 09.4 | -0.5 |
| | comp=Z,45nm,1.0s | | | | | | |
| PAX | Paxson | 83.53 | 15 | eP | P | 18 02 10.7 | -0.7 |
| PAX | | | | pmax | pmax | | |
| | comp=Z,28nm,1.1s | | | | | | |
| PAX | Paxson | 83.53 | 15 | eP | P | 18 02 10.7 | -0.7 |
| | comp=Z,28nm,1.1s | | | | | | |
| RSO | Redoubt South | 83.74 | 20 | eP | P | 18 02 12.7 | +0.1 |
| | comp=Z,47nm,1.0s | | | | | | |
| PMR | Palmer | 83.81 | 18 | eP | P | 18 02 12.2 | -0.5 |
| PMR | | | | pmax | pmax | | |
| | comp=Z,65nm,1.5s | | | | | | |
| PMR | Palmer | 83.81 | 18 | eP | P | 18 02 12.2 | -0.5 |
| | comp=Z,65nm,1.5s | | | | | | |
| DAWY | Dawson | 83.83 | 12 | eP | P | 18 02 12.5 | -0.2 |
| | comp=Z,31nm,1.1s | | | | | | |
| SML | Sawmill | 83.84 | 17 | eP | P | 18 02 12.4 | -0.5 |
| SML | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| SML | Sawmill | 83.84 | 17 | eP | P | 18 02 12.4 | -0.5 |
| | comp=Z,14nm,1.0s | | | | | | |
| MENT | Mentasta | 83.96 | 15 | eP | P | 18 02 13.4 | -0.1 |
| RC01 | Rabbit Creek A | 84.07 | 18 | eP | P | 18 02 13.7 | -0.3 |
| | comp=Z,18nm,0.9s | | | | | | |
| KDAK | Kodiak Island | 85.97 | 21 | i P | P | 18 02 23.6 | 0.0 |
| KDAK | Kodiak Island | 85.97 | 21 | eP | P | 18 02 23.7 | +0.1 |
| | comp=Z,53nm,1.3s | | | | | | |
| SCHQ | Schefferville | 87.88 | 336 | LR | LR | 18 42 36.6 | |
| | comp=Z,172nm,18.6s,baz=86,slow=36 | | | | | | |
| YKA | Yellowknife Ar | 88.09 | 2 | P | P | 18 02 34.2 | +0.4 |
| | comp=Z,12nm,0.9s,baz=346,slow=4.9,SNR=17 | | | | | | |
| YKA | Yellowknife Ar | 88.09 | 2 | P | P | 18 02 34.2 | +0.4 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| MAW | Mawson | 97.11 | 183 | P | Pdif | 18 03 15.7 | +0.6 |
| | comp=Z,2.2nm,1.0s,baz=26,slow=11,SNR=5.0 | | | | | | |
| MAW | | | | LR | LR | 18 39 43.8 | |
| | comp=Z,56nm,21.6s,baz=61,slow=31 | | | | | | |
| MAW | Mawson | 97.11 | 183 | P | Pdif | 18 03 15.7 | +0.7 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| MAW | | | | MLR | MLR | | |
| | comp=Z,56nm,21.6s | | | | | | |
| ULM | Lac du Bonnet | 99.39 | 351 | LR | LR | 18 51 50.6 | |
| | comp=Z,88nm,19.6s,baz=154,slow=38 | | | | | | |
| SYO | Syowa Base | 100.83 | 191 | ⇑ePdiff | Pdif | 18 03 33.4 | +1.8 |
| TXAR | Lajitas Array | 120.97 | 353 | PKP | PKPdf | 18 08 36.9 | +0.3 |
| | comp=Z,1.1nm,0.9s,baz=350,slow=1.5,SNR=6.5 | | | | | | |
| TXAR | | | | PP | PP | 18 10 01.2 | -2.9 |
| | comp=Z,0.7nm,0.9s,baz=27,slow=5.8,SNR=4.0 | | | | | | |
| TXAR | Lajitas Array | 120.97 | 353 | PKIKP | PKPdf | 18 08 36.9 | +0.3 |
| TXAR | | | | | | 18 10 01.3 | |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| SAML | Samuel | 131.29 | 285 | ePKPdf | PKPdf | 18 08 56.9 | +0.4 |
| OTAV | Otavalo | 137.41 | 309 | ePKPdf | PKPdf | 18 09 09.8 | +1.2 |

**IDC 06 17:54:29.1±3.0, 31°.45S×178°.05W, h0km, mb4.0/2, mb1 4.2/3, mb1mx3.6/22, mbtmp3.9/3, ML3.0/1, Error ellipse: s-maj=71.1km s-min=46.1km az=125.0, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 7.88 | 209 | Pn | Pn | 17 56 24.6 | -0.3 |
| | 0.2nm,0.3s,baz=159,slow=4.7,SNR=1.5 | | | | | | |
| URZ | | | | Sn | Sn | 17 57 49.6 | -5.2 |
| | 0.3nm,0.3s,baz=168,slow=20,SNR=1.3 | | | | | | |
| ASAR | Alice Springs | 43.02 | 268 | P | P | 18 02 30.5 | -0.2 |
| | 0.8nm,0.5s,baz=108,slow=7.6,SNR=19 | | | | | | |
| WRA | Warramunga Arr | 44.10 | 273 | P | P | 18 02 39.3 | -0.1 |
| | 1.2nm,0.3s,baz=111,slow=8.1,SNR=20 | | | | | | |
| FINES | FINESS Array B | 146.11 | 339 | PKPbc | PKPdf | 18 14 09.6 | +0.1 |
| | 1.6nm,0.8s,baz=41,slow=4.4,SNR=3.6 | | | | | | |

*ISCJB **06** 17:58:05.6±0.4, 33°.13N±0°.01×116°.45W±0°.02, h12km±3km, Error ellipse: s-maj=3.1km s-min=2.2km az=157.3*
*NEIC **06** 17:58:06.9, 33°.15N×116°.49W, h4km, ML3.8(ECX), ML3.9(PAS), After PAS.*
*NEIC Felt [III] at Alpine and Julian; [II] at Aliso Viejo, Bonsall, Borrego Springs, El Cajon, Encinitas, Escondido, Hemet, Indio, La Jolla, La Mesa, La Quinta, Lakeside, Palm Desert, Ramona, San Diego, San Marcos, Santa Ysabel, Santee, Spring Valley, Valley Center and Vista. Felt in much of San Diego County and in parts of Orange, Los Angeles and Riverside Counties.*
*ECX **06** 17:58:06.9±0.8, 33°.14N×116°.48W, h4km, MD3.7, ML3.9*
*MEX **06** 17:58:08.5±0.5, 33°.15N×116°.46W, h14km±76km, MD3.9*
**ISC 06 17:58:06.1±0.8, 33°.13N±0°.02×116°.44W±0°.02, h13km±6km, n65, σ0s.75/93, 5C-8D, Southern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BORC | Borrego Spring | 0.14 | 8 | ⇑iP | Pg | 17 58 09.6 | -0.1 |
| BORC | | | | i S | Sg | 17 58 11.3 | -0.8 |
| MONP | Monument Peak | 0.24 | 176 | P | Pg | 17 58 11.7 | +0.3 |
| | baz=0.3 | | | | | | |
| MONP | Monument Peak | 0.24 | 176 | ⇓iP | Pg | 17 58 11.0 | -0.3 |
| CBKC | Canebrake | 0.28 | 146 | ⇓iP | Pb | 17 58 12.8 | -0.1 |
| FRD | Ford Ranch | 0.39 | 340 | ⇓iP | Pg | 17 58 13.9 | -0.1 |
| PLM | Palomar | 0.42 | 302 | ⇑iP | Pg | 17 58 14.5 | 0.0 |
| PFO | Pinyon Flat Ob | 0.48 | 358 | P | Pg | 17 58 15.4 | -0.2 |
| | baz=0.5 | | | | | | |
| PFO | | | | S | Sg | 17 58 21.4 | -0.6 |
| | baz=0.5 | | | | | | |
| PFO | Pinyon Flat Ob | 0.48 | 358 | ePg | Pg | 17 58 15.1 | -0.5 |
| BAR | Barrett | 0.49 | 204 | ⇓iP | Pg | 17 58 16.0 | +0.3 |
| BAR | | | | i S | Sg | 17 58 22.5 | +0.2 |
| BAR | Barrett | 0.49 | 204 | ePg | Pg | 17 58 15.9 | +0.1 |
| BAR | | | | eSg | Sg | 17 58 22.4 | +0.1 |
| IBP | Imperial Bould | 0.55 | 148 | P | Pb | 17 58 17.8 | +0.2 |
| | baz=0.6 | | | | | | |
| IBP | | | | S | Sb | 17 58 25.8 | +0.4 |
| | baz=0.6 | | | | | | |
| IBP | Imperial Bould | 0.55 | 148 | ⇓iP | Pb | 17 58 17.8 | +0.2 |
| IBP | | | | eS | Sb | 17 58 25.8 | +0.4 |
| SWSC | Sam W. Stewart | 0.57 | 109 | P | Pg | 17 58 18.1 | +0.9 |
| | baz=0.6 | | | | | | |
| SWSC | | | | S | Sb | 17 58 26.3 | +0.4 |
| | baz=0.6 | | | | | | |
| SDRC | San Diego Road | 0.58 | 227 | ⇑iP | Pg | 17 58 17.2 | -0.2 |
| SDRC | | | | eS | Sg | 17 58 24.6 | -0.4 |
| RMX | La Rumorosa | 0.61 | 150 | ⇓eP | Pg | 17 58 18.6 | +0.6 |
| RMX | | | | eS | Sb | 17 58 28.5 | +1.4 |
| 109C | Camp Elliot, M | 0.61 | 247 | P | Pg | 17 58 17.5 | -0.5 |
| | baz=0.6 | | | | | | |
| 109C | | | | S | Sg | 17 58 25.3 | -0.7 |
| | baz=0.6 | | | | | | |
| WESC | Westside Schoo | 0.70 | 122 | eP | Pb | 17 58 20.8 | +0.8 |
| MURC | Murrieta | 0.79 | 307 | P | Pg | 17 58 20.6 | -0.9 |
| | baz=0.7 | | | | | | |
| MURC | | | | S | Sg | 17 58 30.4 | -1.4 |
| | baz=0.7 | | | | | | |
| CBX | Cerro Bola | 0.84 | 193 | eP | Pg | 17 58 22.1 | -0.2 |
| CBX | | | | eS | Sg | 17 58 32.6 | -0.6 |
| CBX | Cerro Bola | 0.84 | 193 | ⇓eP | Pg | 17 58 22.1 | -0.2 |
| CBX | | | | eS | Sg | 17 58 33.2 | -0.1 |
| CBX | | | | ⇓e | | 17 58 39.8 | |
| CBX | | | | IAML | | 17 58 39.8 | |
| | comp=E,5μm,0.6s | | | | | | |
| CBX | Cerro Bola | 0.84 | 193 | eP | Pg | 17 58 22.1 | -0.2 |
| CBX | | | | eS | Sg | 17 58 32.6 | -0.6 |
| BELC | Belle Mtn. Jos | 0.94 | 23 | P | Pg | 17 58 24.0 | -0.3 |
| | baz=0.9 | | | | | | |
| BELC | | | | S | Sg | 17 58 36.1 | -0.7 |
| | baz=0.9 | | | | | | |
| CPBX | Cerro Prieto | 1.19 | 126 | eP | Pn | 17 58 28.1 | -0.3 |
| CPBX | | | | eS | Sb | 17 58 44.8 | +1.0 |
| CPBX | Cerro Prieto | 1.19 | 126 | eP | Pn | 17 58 27.6 | -0.7 |
| CPBX | | | | eS | Sb | 17 58 43.9 | +0.2 |
| BBRC | Big Bear Solar | 1.20 | 341 | P | Pn | 17 58 28.4 | -0.3 |
| | baz=1.2 | | | | | | |
| BBRC | | | | S | Sb | 17 58 43.6 | -0.7 |
| | baz=1.2 | | | | | | |
| RDX | Rancho Dawling | 1.27 | 161 | ⇑eP | Pn | 17 58 29.9 | +0.3 |
| RDX | | | | eS | Sb | 17 58 46.6 | +0.4 |
| RDX | | | | IAML | | 17 58 47.9 | |
| | comp=N,1μm,0.3s | | | | | | |
| RDX | | | | ⇑e | | 17 58 47.9 | |
| MBIG | Mexicali | 1.27 | 124 | eP | Pn | 17 58 29.3 | -0.1 |
| MBIG | | | | i S | Sb | 17 58 44.2 | -1.8 |
| GLA | Glamis | 1.36 | 93 | P | Pn | 17 58 29.8 | -0.9 |
| | baz=1.4 | | | | | | |
| GLA | Glamis | 1.36 | 93 | ePn | Pn | 17 58 29.6 | -1.1 |
| IRM | Iron Mountain | 1.49 | 46 | P | Pn | 17 58 31.9 | -0.6 |
| | baz=1.5 | | | | | | |
| IRM | | | | Sb | Sb | 17 58 53.2 | +0.8 |
| | baz=1.5 | | | | | | |
| BFSC | Mount Baldy Ra | 1.50 | 318 | P | Pn | 17 58 32.4 | -0.4 |
| | baz=1.5 | | | | | | |
| BFSC | | | | S | Sn | 17 58 51.4 | -0.9 |
| | baz=1.5 | | | | | | |
| FMP | Fort Macarthur | 1.66 | 291 | P | Pn | 17 58 34.2 | -0.5 |
| | baz=1.6 | | | | | | |
| FMP | | | | Sb | Sn | 17 58 56.4 | +0.5 |
| | baz=1.6 | | | | | | |
| HEC | Hector,Ludlow | 1.70 | 3 | P | Pn | 17 58 35.0 | -0.5 |
| | baz=1.7 | | | | | | |
| Y12C | Blythe | 1.72 | 68 | P | Pn | 17 58 35.0 | -0.6 |
| | baz=1.7 | | | | | | |
| MWC | Mount Wilson | 1.74 | 309 | ePn | Pn | 17 58 36.1 | 0.0 |
| GMRC | Granite Mounta | 1.77 | 21 | P | Pn | 17 58 36.0 | -0.5 |
| | baz=1.8 | | | | | | |
| GMRC | | | | Sb | Sb | 17 59 01.4 | +0.8 |
| | baz=1.8 | | | | | | |
| SCI | San Clemente I | 1.78 | 266 | P | Pn | 17 58 35.9 | -0.6 |
| | baz=1.7 | | | | | | |
| PASC | Pasadena Art C | 1.79 | 306 | ePn | Pn | 17 58 37.6 | +0.9 |
| RRX | Edison Barstow | 1.81 | 345 | Sb | Sb | 17 59 02.1 | +0.6 |
| | baz=1.8 | | | | | | |
| DECC | Green Verdugo | 1.93 | 306 | Sb | Sb | 17 59 05.3 | +0.1 |
| | baz=1.9 | | | | | | |
| EDW2 | Edwards Air Fo | 2.17 | 324 | P | Pn | 17 58 42.0 | +0.1 |
| | baz=2.1 | | | | | | |
| EDW2 | | | | Sb | Sb | 17 59 12.1 | +0.1 |
| | baz=2.1 | | | | | | |
| GSC | Goldstone | 2.19 | 352 | P | Pn | 17 58 42.1 | -0.1 |
| | baz=2.2 | | | | | | |
| GSC | Goldstone | 2.19 | 352 | ePn | Pn | 17 58 41.7 | -0.5 |
| GSC | | | | ePg | Pb | 17 58 46.2 | +0.6 |
| LDFC | Landfair | 2.23 | 29 | ePg | Pg | 17 58 48.2 | -0.7 |
| SPIG | San Pedro Mart | 2.24 | 158 | eP | Pn | 17 58 41.9 | -1.1 |
| SPIG | | | | eS | Sn | 17 59 09.9 | -0.7 |
| SPIG | San Pedro Mart | 2.24 | 158 | eP | Pn | 17 58 41.9 | -1.1 |
| SPIG | | | | eS | Sn | 17 59 09.9 | -0.7 |
| SPX | San Pedro Mart | 2.24 | 158 | eP | Pn | 17 58 43.0 | -0.1 |
| SPX | | | | eS | Sn | 17 59 09.3 | -1.4 |
| TUQ | Turquoise Moun | 2.34 | 10 | P | Pn | 17 58 44.0 | -0.4 |
| | baz=2.3 | | | | | | |
| LRMC | Laurel Mountai | 2.56 | 337 | P | Pn | 17 58 47.2 | -0.1 |
| | baz=2.5 | | | | | | |
| LRMC | | | | Sb | Sb | 17 59 24.6 | +1.3 |
| | baz=2.5 | | | | | | |
| SNCC | San Nicolas Is | 2.59 | 273 | ePn | Pn | 17 58 47.0 | -0.7 |
| ISA | Isabella | 3.04 | 327 | ePn | Pn | 17 58 53.6 | -0.3 |
| DAC | Darwin (Calif) | 3.28 | 343 | ePn | Pn | 17 58 57.4 | 0.0 |
| DAC | | | | ePg | Pb | 17 59 06.7 | +2.5 |
| SHPR | Sheep Range | 3.53 | 17 | ePn | Pn | 17 59 00.9 | +0.2 |
| SHPR | | | | ePg | Pg | 17 59 11.7 | -2.0 |
| WUAZ | Wupatki | 4.82 | 59 | ePn | Pn | 17 59 19.6 | +1.1 |
| TUC | Tucson | 4.84 | 98 | ePn | Pn | 17 59 18.1 | -0.5 |
| CCUT | Cedar City | 5.08 | 29 | ePn | Pn | 17 59 23.3 | +1.3 |
| | comp=N,18nm,1.0s | | | | | | |
| R11A | Troy Canyon, C | 5.25 | 7 | ePn | Pn | 17 59 25.5 | +1.1 |
| | comp=N,17nm,0.7s | | | | | | |
| R11A | | | | ePg | Pb | 17 59 42.6 | +4.8 |
| CMB | Columbia Colle | 5.86 | 328 | Pn | Pn | 17 59 32.8 | +0.3 |
| | comp=N,6.4nm,0.8s | | | | | | |
| W18A | Petrified Fore | 5.90 | 69 | ePn | Pn | 17 59 32.6 | -0.7 |
| MSU | Marysvale | 6.39 | 32 | Pn | Pn | 17 59 44.2 | +4.1 |
| | comp=N,7.9nm,0.7s | | | | | | |
| SRIG | Santa Rosalia | 6.83 | 147 | eP | Pn | 17 59 53.4 | +7.4 |
| SRIG | Santa Rosalia | 6.83 | 147 | eP | Pn | 17 59 53.4 | +7.4 |
| 121A | Cookes Peak, D | 7.31 | 92 | ePn | Pn | 17 59 53.6 | +1.0 |
| | comp=N,7.6nm,0.5s | | | | | | |
| PV04 | Paradox Valley | 8.06 | 47 | ePn | Pn | 18 00 06.6 | +3.6 |
| MNTX | Cornudas Mount | 9.46 | 96 | ePn | Pn | 18 00 22.3 | +0.4 |

*ISCJB **06** 18:03:13.3±1.2, 4°.67S±0°.07×134°.0E±0°.2, h10km, mb3.7/4, MS3.9/1, Error ellipse: s-maj=36.2km s-min=8.5km az=169.8*
*IDC **06** 18:03:13.0±4.9, 4°.59S×134°.28E, h0km, mb3.8/4, mb1 3.9/6, mb1mx3.5/32, mbtmp3.8/6, ML3.7/2, MS3.9/1, Ms1 3.9/1, ms1mx3.0/25, Error ellipse: s-maj=302.8km s-min=27.0km az=79.0*
*AUST **06** 18:03:26.3±0.0, 4°.79S×132°.05E, h104km, Error ellipse: s-maj=2.0km s-min=1.3km az=265.0*
**ISC 06 18:03:15.6±1.7, 4°.6S±0°.1×134°.0E±0°.3, h10km, n13, σ1s.43/11, mb3.9/4, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.40 | 315 | P | Pn | 18 03 53.4 | -1.6 |
| | baz=1.9,SNR=22 | | | | | | |
| SWI | Sorong | 4.60 | 324 | P | Pn | 18 04 26.1 | +0.8 |
| | baz=4.0,SNR=7.3 | | | | | | |
| MMPI | Merauke | 7.44 | 121 | P | Pg | 18 05 36.0 | -2.0 |
| | baz=9.1,SNR=3.9 | | | | | | |
| KDU | Kakadu | 8.15 | 190 | P | Pn | 18 05 15.1 | +1.0 |
| | baz=7.9,SNR=15 | | | | | | |
| MTN | Manton Dam | 8.64 | 199 | P | Pn | 18 05 21.5 | +0.8 |
| | baz=8.1,SNR=14 | | | | | | |
| KNRA | Kununurra | 12.12 | 205 | P | Pn | 18 06 07.6 | -0.9 |
| | baz=11,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 15.24 | 179 | Pn | Pn | 18 06 47.8 | -3.2 |
| | 0.3nm,0.3s,baz=360,slow=13,SNR=11 | | | | | | |
| WRA | | | | Sn | Sn | 18 09 29.7 | -10 |
| | 0.3nm,0.3s,baz=356,slow=22,SNR=7.9 | | | | | | |
| ASAR | Alice Springs | 18.94 | 180 | P | Pn | 18 07 36.9 | -0.7 |
| | 0.2nm,0.3s,baz=360,slow=10,SNR=20 | | | | | | |
| ASAR | | | | S | Sn | 18 10 56.3 | -14 |
| | 0.0nm,0.3s,baz=3.9,slow=29,SNR=3.9 | | | | | | |
| URZ | Urewera | 51.55 | 137 | LR | LR | 18 35 22.7 | |
| | comp=Z,105nm,18.3s,baz=275,slow=38 | | | | | | |
| MKAR | Makanchi Array | 68.49 | 325 | P | P | 18 14 18.6 | +0.4 |
| | 1.1nm,0.8s,baz=110,slow=8.0,SNR=7.9 | | | | | | |
| ZALV | Zalesovo Beam | 71.28 | 332 | P | P | 18 14 35.1 | +0.1 |
| | 0.3nm,0.4s,baz=111,slow=3.2,SNR=2.3 | | | | | | |
| KURBB | Kurchatov Arra | 72.62 | 327 | P | P | 18 14 43.0 | -0.3 |
| | 0.7nm,0.8s,baz=128,slow=5.7,SNR=7.8 | | | | | | |
| BVAR | Borovoye Array | 78.21 | 326 | P | P | 18 15 15.4 | +0.1 |
| | 1.1nm,0.7s,baz=128,slow=9.3,SNR=5.4 | | | | | | |

*IDC **06** 18:10:07.6±1.0, 16°.67N×120°.63E, h0km, mb3.5/8, mb1 3.6/8, mb1mx3.4/37, mbtmp3.5/8, Error ellipse: s-maj=41.8km s-min=18.6km az=73.0*
*ISCJB **06** 18:10:20.0±0.5, 16°.83N±0°.05×120°.63E±0°.08, h120km±4km, mb3.5/8, Error ellipse: s-maj=12.8km s-min=8.1km az=10.9*
*MAN **06** 18:10:23, 16°.82N×120°.58E, h51km, mb4.9, ML3.8, MS3.8*
**ISC 06 18:10:20.5±0.8, 16°.83N±0°.05×120°.62E±0°.07, h109km±7km, n20, σ1s.78/25, mb3.5/8, 3C-1D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BCPH | Baguio City Da | 0.45 | 185 | ⇑iP | Pn | 18 10 38.3 | +1.1 |
| BCPH | | | | i S | Sn | 18 10 51.3 | +1.6 |
| ABRA | Dolores | 0.81 | 6 | eP | Pn | 18 10 39.9 | +0.1 |
| ABRA | | | | eS | Sn | 18 10 49.7 | -4.7 |
| BOLP | Bolinao | 0.82 | 237 | eP | Pn | 18 10 40.7 | +0.9 |
| BOLP | | | | eS | Sn | 18 10 51.7 | -2.7 |
| SIPP | Brgy, Tapao | 1.09 | 352 | ⇑eP | Pn | 18 10 43.5 | +0.9 |
| SIPP | | | | i S | Sn | 18 10 59.4 | +0.1 |
| CAUP | Cauayan | 1.15 | 84 | eP | Pn | 18 10 45.5 | +2.3 |
| APYP | Conner | 1.18 | 30 | eP | Pn | 18 10 44.1 | +0.5 |
| APYP | | | | eS | Sn | 18 11 02.0 | +1.0 |
| SCZP | Santa Cruz | 1.25 | 213 | eP | Pn | 18 10 44.8 | +0.4 |
| BALP | Baler | 1.42 | 140 | eP | Pn | 18 10 48.6 | +2.3 |
| CVP | Callao Caves | 1.43 | 53 | ⇑eP | Pn | 18 10 47.2 | +0.7 |
| PIP | Pasuquin | 1.48 | 360 | ⇓iP | Pn | 18 10 49.3 | +2.2 |
| PALP | Palanan | 1.74 | 82 | eP | Pn | 18 10 48.2 | -2.0 |
| SGCP | Mt. Cagua | 1.95 | 44 | eP | Pn | 18 10 53.5 | +0.7 |
| KSRS | Korea Array | 21.53 | 16 | P | P | 18 15 00.3 | -0.5 |
| | 0.8nm,0.6s,baz=193,slow=10,SNR=4.3 | | | | | | |
| SONM | Songino Array | 33.06 | 342 | P | P | 18 16 46.5 | +0.7 |
| | 0.3nm,0.6s,baz=165,slow=7.4,SNR=2.9 | | | | | | |
| WRA | Warramunga Arr | 38.95 | 159 | P | P | 18 17 33.7 | -2.4 |
| | 0.1nm,0.3s,baz=326,slow=11,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 42.29 | 162 | P | P | 18 18 02.2 | -1.4 |
| | 0.4nm,0.3s,baz=339,slow=7.2,SNR=30 | | | | | | |
| MKAR | Makanchi Array | 43.51 | 322 | P | P | 18 18 13.7 | +0.5 |
| | 0.7nm,1.0s,baz=126,slow=7.3,SNR=3.7 | | | | | | |
| PETK | Petropavlovsk- | 46.35 | 30 | P | P | 18 18 35.9 | +0.4 |
| | 2.1nm,1.0s,baz=225,slow=5.1,SNR=2.4 | | | | | | |
| KURBB | Kurchatov Arra | 47.58 | 325 | P | P | 18 18 46.1 | +1.0 |
| | 0.4nm,0.4s,baz=122,slow=7.6,SNR=6.4 | | | | | | |
| BVAR | Borovoye Array | 53.17 | 325 | P | P | 18 19 28.0 | +0.8 |
| | 0.2nm,0.4s,baz=102,slow=3.5,SNR=2.2 | | | | | | |

*ISCJB **06** 18:29:35.1±0.6, 50°.25N±0°.05×18°.99E±0°.03, h0km, Error ellipse: s-maj=7.7km s-min=3.0km az=4.6*
*CSEM **06** 18:29:36.1±0.3, 50°.21N×19°.03E, h2km, ML2.6/6, Error ellipse: s-maj=9.8km s-min=3.8km az=3.0*
*PRU **06** 18:29:37.1, 50°.16N×19°.05E, h0km*
**ISC 06 18:29:36.2±0.9, 50°.16N±0°.05×19°.04E±0°.02, h0km, n26, σ0s.86/46, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OJC | Ojcow | 0.49 | 82 | ePg | Pg | 18 29 45.4 | -0.2 |
| OJC | | | | eSg | Sg | 18 29 51.6 | -0.4 |
| OJC | Ojcow | 0.49 | 82 | ePg | Pg | 18 29 45.4 | -0.2 |
| OJC | | | | eSg | Sg | 18 29 51.6 | -0.4 |
| OKC | Ostrava-Krasne | 0.66 | 241 | ePG | Pg | 18 29 49.4 | +0.5 |
| OKC | | | | eSG | Sg | 18 29 58.9 | +1.5 |
| | comp=Z,15nm,0.4s | | | | | | |
| OKC | Ostrava-Krasne | 0.66 | 241 | Pg | Pg | 18 29 49.4 | +0.5 |
| OKC | | | | Sg | Sg | 18 29 58.9 | +1.5 |
| | 15nm,0.4s | | | | | | |
| MORC | Moravsky Berou | 1.04 | 249 | ePg | Pb | 18 29 57.2 | +0.1 |
| MORC | | | | eSg | Sb | 18 30 12.1 | +0.8 |
| KRLC | Kraliky | 1.46 | 268 | eSG | Sn | 18 30 24.5 | +0.8 |
| KRLC | Kraliky | 1.46 | 268 | Sg | Sn | 18 30 24.5 | +0.8 |
| STHS | Stebnicka Huta | 1.61 | 117 | ePN | Pb | 18 30 06.8 | 0.0 |
| STHS | | | | eSN | Sg | 18 30 29.9 | +2.0 |
| STHS | Stebnicka Huta | 1.61 | 117 | ePn | Pb | 18 30 06.8 | 0.0 |
| STHS | | | | eSn | Sg | 18 30 29.9 | +2.0 |
| VYHS | Vyhne | 1.67 | 185 | ePN | Pn | 18 30 06.4 | -0.3 |
| VYHS | | | | eSN | Sn | 18 30 27.7 | -1.2 |
| VYHS | Vyhne | 1.67 | 185 | ePn | Pn | 18 30 06.4 | -0.3 |
| VYHS | | | | eSn | Sn | 18 30 27.7 | -1.2 |
| DPC | Dobruska-Polom | 1.76 | 277 | ePG | Pb | 18 30 09.3 | 0.0 |
| DPC | | | | eSG | Sg | 18 30 33.8 | +1.2 |
| | comp=Z,10nm,0.6s | | | | | | |
| DPC | Dobruska-Polom | 1.76 | 277 | Pg | Pb | 18 30 09.3 | 0.0 |
| DPC | | | | Sg | Sg | 18 30 33.8 | +1.2 |
| | 10nm,0.6s | | | | | | |
| VRAC | Vranov | 1.80 | 243 | ePn | Pb | 18 30 09.7 | -0.4 |
| VRAC | | | | eSg | Sg | 18 30 34.1 | 0.0 |
| UPC | Upice | 1.97 | 281 | ePG | Pb | 18 30 13.1 | +0.1 |
| UPC | | | | eSG | Sg | 18 30 40.7 | +1.1 |
| | comp=Z,5.0nm,0.6s | | | | | | |
| UPC | Upice | 1.97 | 281 | Pg | Pb | 18 30 13.1 | +0.1 |
| UPC | | | | Sg | Sg | 18 30 40.7 | +1.1 |
| | 5.0nm,0.6s | | | | | | |
| GOPC | GO Pecny, Ondr | 2.75 | 267 | ePG | Pg | 18 30 28.4 | -0.6 |
| GOPC | | | | eSG | Sg | 18 31 04.8 | +0.1 |
| | comp=Z,3.3nm,0.3s | | | | | | |
| GOPC | GO Pecny, Ondr | 2.75 | 267 | Pg | Pg | 18 30 28.4 | -0.6 |
| GOPC | | | | Sg | Sg | 18 31 04.8 | +0.1 |
| | 3.3nm,0.3s | | | | | | |
| PVCC | Panska Ves | 2.89 | 279 | eSG | Sg | 18 31 09.5 | +0.5 |
| | comp=Z,5.7nm,0.4s | | | | | | |
| PVCC | Panska Ves | 2.89 | 279 | Sg | Sg | 18 31 09.5 | +0.5 |
| | 5.7nm,0.4s | | | | | | |
| PRU | Pruhonice | 2.90 | 268 | ePG | Pg | 18 30 31.1 | -0.8 |
| PRU | | | | eSG | Sg | 18 31 09.1 | -0.4 |
| PRU | Pruhonice | 2.90 | 268 | Pg | Pg | 18 30 31.1 | -0.8 |
| PRU | | | | Sg | Sg | 18 31 09.1 | -0.4 |
| KHC | Kasperske Hory | 3.70 | 256 | ePN | Pn | 18 30 34.6 | 0.0 |
| KHC | | | | ePG | Pg | 18 30 45.2 | -1.8 |
| KHC | | | | eSG | Sg | 18 31 33.6 | -1.3 |
| | comp=Z,2.8nm,0.5s | | | | | | |
| KHC | Kasperske Hory | 3.70 | 256 | Pn | Pn | 18 30 34.6 | 0.0 |
| NKC | Novy Kostel | 4.24 | 274 | eSG | Sg | 18 31 52.4 | +0.1 |
| NKC | Novy Kostel | 4.24 | 274 | Sg | Sg | 18 31 52.4 | +0.1 |

*ISCJB **06** 18:33:25.3±1.0, 20°.6N±0°.1×145°.2E±0°.3, h129km, mb3.6/8, Error ellipse: s-maj=37.4km s-min=16.4km az=172.8*
*IDC **06** 18:33:27.1±7.9, 20°.62N×145°.10E, h127km±71km, mb3.4/8, mb1 3.6/8, mb1mx3.4/31, mbtmp3.8/8, Error ellipse: s-maj=38.7km s-min=16.5km az=84.0*
**ISC 06 18:33:27.1±1.1, 20°.6N±0°.1×145°.1E±0°.3, h129km, n15, σ0s.72/12, mb3.6/8, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H11S3 | WAKE ISLAND Hy | 20.48 | 92 | T | T | 18 59 11.9 | |
| | baz=280 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 20.49 | 92 | T | T | 18 59 04.0 | |
| | baz=280 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 20.50 | 92 | T | T | 18 59 10.6 | |
| | baz=280 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 20.50 | 89 | T | T | 18 59 01.7 | |
| | baz=276 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 20.51 | 89 | T | T | 18 58 57.1 | |
| | baz=276 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 20.52 | 89 | T | T | 18 58 59.4 | |
| | baz=276 | | | | | | |
| KSRS | Korea Array | 22.46 | 322 | P | P | 18 38 15.8 | +0.3 |
| | 2.3nm,0.7s,baz=148,slow=8.6,SNR=14 | | | | | | |
| SONM | Songino Array | 41.31 | 320 | P | P | 18 41 00.3 | +0.3 |
| | 0.4nm,0.4s,baz=110,slow=5.6,SNR=4.0 | | | | | | |
| SONM | | | | PcP | PcP | 18 42 56.3 | +0.2 |
| | 0.2nm,0.5s,baz=132,slow=6.0,SNR=3.0 | | | | | | |
| WRA | Warramunga Arr | 41.63 | 195 | P | P | 18 41 03.5 | +0.8 |
| | 0.6nm,0.5s,baz=18,slow=8.7,SNR=8.6 | | | | | | |
| WRA | | | | pP | pP | 18 41 30.9 | -0.9 |
| | 0.4nm,0.6s,baz=18,slow=8.7,SNR=1.8 | | | | | | |
| ASAR | Alice Springs | 45.31 | 194 | P | P | 18 41 32.2 | 0.0 |
| | 0.6nm,0.7s,baz=12,slow=6.9,SNR=8.3 | | | | | | |
| ZALV | Zalesovo Beam | 56.17 | 322 | P | P | 18 42 52.9 | -0.3 |
| | 0.9nm,0.5s,baz=108,slow=4.7,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 56.74 | 313 | P | P | 18 42 58.3 | +0.9 |
| | 0.7nm,0.5s,baz=86,slow=7.7,SNR=9.5 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MKAR | | | | pP | **pP** | **18 43 27.0** | **-1.0** |
| | 0.4nm,0.7s,baz=90,slow=9.8,SNR=2.6 | | | | | | |
| **ILAR** | **Eielson Array** | **62.23** | **27** | P | **P** | **18 43 35.0** | **+0.3** |
| | 0.5nm,0.8s,baz=234,slow=12,SNR=3.8 | | | | | | |
| **FINES** | **FINESS Array B** | **84.93** | **335** | P | **P** | **18 45 46.5** | **-0.9** |
| | 1.1nm,0.4s,baz=71,slow=3.9,SNR=14 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **130.80** | **310** | PKP | **PKPdf** | **18 52 24.6** | **+0.6** |
| | 0.2nm,0.4s,baz=54,slow=3.0,SNR=4.3 | | | | | | |

**IDC 06 18:34:50.2**±2.0**,2°.69N×125°.51E,h0**km**,mb3.5**/3**, mb1 3.8**/3**,mb1mx3.3**/31**,mbtmp3.5**/3**,Error ellipse: s-maj=202.6km s-min=24.4km az=65.0,Talaud Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.10** | **159** | P | P | 18 40 06.2 | -1.6 |
| | 0.5nm,0.4s,baz=337,slow=10,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **27.44** | **163** | P | P | 18 40 39.6 | +1.6 |
| | 1.2nm,0.8s,baz=344,slow=11,SNR=28 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.73** | **326** | P | P | 18 44 42.7 | -0.3 |
| | 0.2nm,0.4s,baz=110,slow=7.2,SNR=3.3 | | | | | | |

**IDC 06 18:53:36.0**±4.2**,3°.07N×96°.47E,h0**km**,mb3.4**/4**,mb1 3.5**/4**, mb1mx3.3**/33**,mbtmp3.4**/4**,Error ellipse: s-maj=158.3km s-min=29.8km az=58.0,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **26.18** | **246** | T | T | 19 25 22.0 | |
| | baz=68,slow=75,SNR=40 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.19** | **246** | T | T | 19 25 21.3 | |
| | baz=68,slow=75,SNR=40 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.20** | **246** | T | T | 19 25 22.2 | |
| | baz=68,slow=75,SNR=36 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **41.24** | **158** | T | T | 19 44 04.4 | |
| | baz=332,slow=76,SNR=15 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **41.26** | **158** | T | T | 19 44 05.1 | |
| | baz=332,slow=76,SNR=15 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **41.26** | **158** | T | T | 19 44 02.6 | |
| | baz=332,slow=76,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.65** | **123** | P | P | 19 01 42.6 | -0.2 |
| | 0.3nm,0.5s,baz=304,slow=9.1,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.26** | **346** | P | P | 19 01 55.1 | -0.2 |
| | 0.5nm,0.7s,baz=152,slow=9.1,SNR=4.9 | | | | | | |
| **SONM** | **Songino Array** | **45.41** | **9** | P | P | 19 01 56.7 | +0.2 |
| | 0.2nm,0.5s,baz=193,slow=7.1,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.61** | **351** | P | P | 19 02 43.6 | -0.4 |
| | 0.9nm,0.5s,baz=176,slow=7.0,SNR=5.0 | | | | | | |

**SJA 06 19:11:32.3**±0.9**,31°.20S×68°.05W,h10**km±8km**,ML3.7,San Juan Province**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLL** | **Cerro Villicun** | **0.39** | **251** | *e*P | Pg | 19 11 40.6 | +0.5 |
| RTLL | | | | *e*S | Sb | 19 11 46.6 | -1.0 |
| **CFAA** | **Coronel Fontan** | **0.43** | **202** | *e*P | Pg | 19 11 41.5 | +0.6 |
| CFAA | | | | *e*S | Sg | 19 11 47.7 | +1.0 |
| **AMOG** | **MOGNA** | **0.46** | **304** | *e*P | Pb | 19 11 42.2 | -0.5 |
| **SJA** | **San Juan** | **0.54** | **233** | *e*P | Pg | 19 11 43.4 | +0.4 |
| **AVFE** | **Valle Fertil** | **0.74** | **44** | *e*P | Pb | 19 11 47.2 | -0.3 |
| AVFE | | | | AML | AML | 19 11 57.9 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **0.78** | **212** | *e*P | Pg | 19 11 47.1 | -0.5 |
| **ACHE** | **Chepes** | **1.19** | **89** | *e*P | Pb | 19 11 55.0 | -0.2 |
| **ACAN** | **Cantantal** | **1.30** | **146** | *e*P | Pg | 19 11 57.4 | +0.1 |
| **APLL** | **PUNTA DE LOS L** | **1.54** | **59** | *e*P | Pb | 19 12 00.5 | -0.4 |
| **AGUA** | **GUANDACOL** | **1.75** | **347** | *e*P | Pb | 19 12 04.7 | 0.0 |
| **ARCO** | **CERRO ARCO** | **1.80** | **204** | *e*P | Pb | 19 12 05.3 | -0.4 |
| ARCO | | | | AML | AML | 19 12 32.2 | |
| | comp=Z,470nm,0.3s | | | | | | |
| **AAGR** | **Agrelo** | **1.99** | **199** | *e*P | Pb | 19 12 09.0 | +0.1 |
| **ACLC** | **CERRO LA CRUZ** | **2.01** | **28** | *e*P | Pb | 19 12 08.5 | -0.7 |
| **MRA** | **San Martin** | **2.33** | **122** | AML | AML | 19 12 47.5 | |
| | comp=Z,473nm,0.6s | | | | | | |
| **VCA** | **Vinchina** | **2.46** | **357** | *e*P | Pb | 19 12 15.0 | -1.9 |
| VCA | | | | AML | AML | 19 12 56.7 | |
| | comp=Z,379nm,0.5s | | | | | | |

*IDC **06** 19:15:41.9±4.3, 3°.91N×76°.84W, h91km±33km, mb3.6/6, mb1 3.9/7, mb1mx3.5/26, mbtmp4.0/7, MS3.1/3, Ms1 3.1/3, ms1mx2.8/27, Error ellipse: s-maj=53.0km s-min=21.3km az=25.0*

**ISC 06 19:15:34.5**±1.1**,3°.7N**±0°.2**×76°.94W**±0°.09**,h33**km**,n11, σ1§15**/11**,mb4.0**/6**,Colombia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ROSC** | **El Rosal** | **2.86** | **65** | P | **Pb** | **19 16 23.4** | **-1.7** |
| | 59nm,0.3s,baz=310,slow=3.1,SNR=43 | | | | | | |
| ROSC | | | | S | **Sb** | **19 17 01.9** | **+2.0** |
| | 18nm,0.3s,baz=103,slow=23,SNR=1.8 | | | | | | |
| ROSC | | | | LR | LR | 19 17 36.3 | |
| | comp=Z,94nm,18.9s,baz=228,slow=43 | | | | | | |
| **PTGA** | **Pitinga** | **17.52** | **104** | LR | LR | 19 26 26.8 | |
| | comp=Z,56nm,20.8s,baz=136,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **35.98** | **318** | P | **P** | **19 22 33.0** | **+0.4** |
| | 0.2nm,0.3s,baz=178,slow=40,SNR=2.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **51.13** | **318** | P | **P** | **19 24 35.4** | **+0.8** |
| | 1.0nm,0.7s,baz=130,slow=6.9,SNR=8.1 | | | | | | |
| NVAR | | | | PcP | **PcP** | **19 25 50.8** | **+0.8** |
| | 0.7nm,0.6s,baz=124,slow=5.4,SNR=4.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **64.97** | **342** | P | **P** | **19 26 09.8** | **-1.0** |
| | 1.4nm,0.6s,baz=137,slow=6.4,SNR=7.1 | | | | | | |
| **DBIC** | **Dimbokro** | **71.80** | **84** | P | **P** | **19 26 55.4** | **+0.9** |
| | 2.6nm,0.6s,baz=207,slow=7.4,SNR=3.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.11** | **77** | P | **P** | **19 27 30.6** | **-0.4** |
| | 0.8nm,0.5s,baz=281,slow=6.6,SNR=18 | | | | | | |
| **ILAR** | **Eielson Array** | **78.23** | **336** | P | **P** | **19 27 30.1** | **-0.6** |
| | 0.6nm,0.5s,baz=104,slow=4.7,SNR=5.0 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **87.12** | **12** | LR | LR | 20 04 42.5 | |
| | comp=Z,30nm,19.8s,baz=75,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **144.19** | **233** | PKP | **PKPab** | **19 35 05.8** | **0.0** |
| | 0.9nm,0.9s,baz=121,slow=3.5,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **145.48** | **240** | PKPbc | **PKPbc** | **19 35 10.4** | **+0.1** |
| | 1.0nm,0.7s,baz=108,slow=2.9,SNR=8.4 | | | | | | |

*AUST **06** 19:43:28.5±0.3, 17°.73S×174°.01W, h0km, Error ellipse: s-maj=7.2km s-min=5.7km az=162.0*

*ISCJB **06** 19:43:37.2±0.1, 17°.78S±0°.02×174°.01W±0°.02, h86km, mb5.3/211, Error ellipse: s-maj=3.9km s-min=2.1km az=136.2*

*BJI **06** 19:43:38.1, 17°.59S×173°.90W, h85km, mb5.2/57, mB5.3/49, Ms5.2/58, Ms7 5.0/57*

*IDC **06** 19:43:38.9±0.4, 17°.72S×173°.86W, h83km±3km, mb4.9/18, mb1 5.1/19, mb1mx5.0/23, mbtmp5.2/19, MS4.6/22, Ms1 4.6/22, ms1mx4.5/29, Error ellipse: s-maj=15.3km s-min=13.3km az=100.0*

*NEIC **06** 19:43:38.0±0.0, 17°.85S×173°.98W, h89km, Moment Tensor Solution. s31 Moment tensor: Scale 10^17 Nm; $M_{rr}$-2.00; $M_{\theta\theta}$0.26; $M_{\phi\phi}$1.74; $M_{r\theta}$1.39; $M_{\theta\phi}$-2.31; $M_{\phi r}$3.14; Best double couple: $M_0$4.50000×10^17 NP1:$\phi_s$181.00000°, δ73.00000°, λ-54.00000°. NP2:$\phi_s$293.00000°, δ38.00000°, λ-153.00000°. Principal axes: T 4.0800, Plg21.0000°, Azm246.0000°; N 0.8100, Plg34.0000°, Azm350.0000°; P -4.9000, Plg49.0000°, Azm130.0000°;*

*NEIC **06** 19:43:38.5±0.1, 17°.82S×173°.99W, mb5.4/153, MW5.7, MW5.7 Error ellipse: s-maj=6.0km s-min=3.3km az=145.0, Moment Tensor Solution. s42 Moment tensor: Scale 10^17 Nm; $M_{rr}$-2.23; $M_{\theta\theta}$0.46; $M_{\phi\phi}$1.77; $M_{r\theta}$-0.19; $M_{\theta\phi}$-2.82; $M_{\phi r}$4.04; Best double couple: $M_0$5.30000×10^17 NP1: $\phi_s$287.00000°, δ32.00000°, λ-151.00000°. NP2: $\phi_s$172.00000°, δ75.00000°, λ-61.00000°. Principal axes: T 5.5500, Plg25.0000°, Azm240.0000°; N -0.4400, Plg27.0000°, Azm344.0000°; P -5.1000, Plg51.0000°, Azm115.0000°;*

*NEIC Felt at Neiafu. Also felt at Apia, Samoa and at Fagatogo, American Samoa.*

*GCMT **06** 19:43:38.5±0.1, 17°.75S×173°.45W, h82km, MW5.8/119, Moment Tensor Solution. s119,c244; s118,c308; Duration: 1§8 Moment tensor: Scale 10^17 Nm; $M_{rr}$-2.25±.05; $M_{\theta\theta}$1.55±.06; $M_{\phi\phi}$0.70±.06; $M_{r\theta}$-0.00±.04; $M_{\theta\phi}$-3.43±.05; $M_{\phi r}$3.34±.04; Best double couple: $M_0$5.18200×10^17 NP1:$\phi_s$166.00000°, δ73.00000°, λ-50.00000°. NP2:$\phi_s$276.00000°, δ43.00000°, λ-154.00000°. Principal axes: T 5.3120, Plg18.0000°, Azm228.0000°; N -0.2530, Plg38.0000°, Azm332.0000°; P -5.0520, Plg47.0000°, Azm117.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*MOS **06** 19:43:40.7±1.2, 17°.06S×173°.83W, h90km, mb5.4/46, MS4.6/7 Error ellipse: s-maj=9.7km s-min=7.4km az=66.1*

*SZGRF **06** 19:43:43.5, 16°.48S×174°.35W, h86km*

**ISC 06 19:43:38.6**±0.2**,17°.93S**±0°.04**×173°.99W**±0°.05**,h87**km±1km**, h86**km**:pP-P,n1249,σ1§22**/1355**,mb5.4**/210**,63C-41D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **4.02** | **107** | P | Pn | 19 44 33.0 | -4.9 |
| | baz=4.1,SNR=270 | | | | | | |
| **AFI** | **Afiamalu** | **4.53** | **28** | P | Pn | 19 44 36.0 | -8.9 |
| | 1μm,0.3s,baz=166,slow=1.2,SNR=312 | | | | | | |
| AFI | | | | S | Sn | 19 45 21.2 | -15 |
| | 2μm,0.3s,baz=59,slow=22,SNR=10 | | | | | | |
| AFI | | | | LR | LR | 19 46 27.8 | |
| | comp=Z,6μm,18.6s,baz=311,slow=39 | | | | | | |
| **MSVF** | **Nonsavu** | **7.59** | **270** | *e*P | Pn | 19 45 34.6 | +8.0 |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,4μm,1.0s | | | | | | |
| **MSVF** | **Nonsavu** | **7.59** | **270** | Pn | Pn | 19 45 34.0 | +7.4 |
| | comp=Z,20μm,0.9s | | | | | | |
| **MSVF** | **Nonsavu** | **7.59** | **270** | *e*P | Pn | 19 45 34.6 | +8.0 |
| | comp=Z,4μm,1.0s | | | | | | |
| **RAO** | **Raoul Island** | **11.83** | **197** | P | **Pn** | **19 46 22.2** | **-2.1** |
| | comp=Z,274nm,0.3s,baz=71,slow=11,SNR=9.4 | | | | | | |
| RAO | | | | S | **Sn** | **19 48 31.2** | **-3.2** |
| | comp=Z,364nm,0.3s,baz=237,slow=23,SNR=11 | | | | | | |
| **RAO** | **Raoul Island** | **11.83** | **197** | *e*P | **Pn** | **19 46 21.9** | **-2.4** |
| | comp=Z,851nm,0.5s | | | | | | |
| RAO | | | | S | **Sn** | **19 48 31.2** | **-3.2** |
| **RAR** | **Rarotonga** | **13.79** | **106** | P | Pn | 19 46 45.5 | -4.9 |
| | comp=Z,32nm,0.3s,baz=260,slow=7.8,SNR=42 | | | | | | |
| RAR | | | | S | Sn | 19 49 07.0 | -15 |
| | comp=Z,24nm,0.3s,baz=109,slow=21,SNR=9.4 | | | | | | |
| RAR | | | | LR | LR | 19 51 14.1 | |
| | comp=Z,2μm,19.8s,baz=286,slow=33 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.84** | **254** | *e*P | **Pn** | **19 47 53.7** | **+0.3** |
| | comp=Z,607nm,1.1s | | | | | | |
| DZM | | | | *e*LQ | LQ | 19 51 16.8 | |
| | comp=Z,2μm,24.1s | | | | | | |
| DZM | | | | *e*LQ | LQ | 19 51 43.9 | |
| | comp=Z,16μm,29.8s | | | | | | |
| DZM | | | | *e*LR | LR | 19 52 22.4 | |
| | comp=Z,19μm,28.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.84** | **254** | P | **Pn** | **19 47 53.6** | **+0.2** |
| | comp=Z,2.0nm,0.3s,baz=0.2,slow=7.5,SNR=24 | | | | | | |
| DZM | | | | LR | LR | 19 54 20.9 | |
| | comp=Z,3μm,21.6s,baz=173,slow=34 | | | | | | |
| **OUZ** | **Omahuta** | **20.46** | **210** | PN | Pn | 19 48 10.9 | -1.2 |
| **OUZ** | **Omahuta** | **20.46** | **210** | *e*P | Pn | 19 48 10.9 | -1.2 |
| | comp=Z,236nm,0.8s | | | | | | |
| **GRZ** | **Great Barrier** | **20.50** | **205** | PN | Pn | 19 48 12.0 | -0.6 |
| **MXZ** | **Matakaoa Point** | **20.70** | **198** | *e*PN | **P** | **19 48 13.1** | **+1.3** |
| **WCZ** | **Waipu Caves** | **20.71** | **208** | PN | Pn | 19 48 14.7 | -0.4 |
| **KUZ** | **Kuaotunu** | **20.83** | **204** | PN | Pn | 19 48 15.6 | -0.9 |
| **WMGZ** | **Waiomatatini S** | **20.91** | **197** | PN | Pn | 19 48 15.7 | -1.7 |
| WMGZ | | | | SN | **S** | **19 51 56.3** | **-5.9** |
| **ABAZ** | **Army Bay** | **21.06** | **206** | *e*PN | **P** | **19 48 18.4** | **+2.7** |
| **WIAZ** | **Waiheke Island** | **21.10** | **205** | *e*PN | **P** | **19 48 18.6** | **+2.5** |
| **MKAZ** | **Moumakai** | **21.36** | **204** | PN | **P** | **19 48 21.1** | **+2.2** |
| **TWGZ** | **Tauwhareparae** | **21.36** | **198** | PN | **P** | **19 48 20.2** | **+1.3** |
| **WTAZ** | **Waiatarua** | **21.45** | **206** | *e*PN | **P** | **19 48 22.6** | **+2.7** |
| **TGRZ** | **Tauranga** | **21.50** | **201** | *e*PN | **P** | **19 48 22.8** | **+2.4** |
| **OPRZ** | **Ohinepanea** | **21.51** | **201** | PN | **P** | **19 48 21.8** | **+1.4** |
| **CNGZ** | **Carnagh Statio** | **21.59** | **197** | PN | **P** | **19 48 24.8** | **+3.5** |
| **MARZ** | **Manawahe** | **21.59** | **200** | *e*PN | **P** | **19 48 22.8** | **+1.4** |
| **MWZ** | **Matawai** | **21.64** | **198** | PN | **P** | **19 48 22.5** | **+0.5** |
| **URZ** | **Urewera** | **21.70** | **199** | P | **P** | **19 48 22.2** | **-0.3** |
| | comp=Z,488nm,0.5s,baz=295,slow=3.1,SNR=161 | | | | | | |
| URZ | | | | S | **S** | **19 52 16.5** | **-1.3** |
| | comp=Z,20nm,0.5s,baz=106,slow=23,SNR=2.8 | | | | | | |
| **URZ** | **Urewera** | **21.70** | **199** | PN | **P** | **19 48 22.4** | **-0.1** |
| URZ | | | | *e*SN | **S** | **19 52 12.9** | **-5.0** |
| **URZ** | **Urewera** | **21.70** | **199** | *e*P | **P** | **19 48 22.4** | **-0.1** |
| | comp=Z,1μm,0.9s | | | | | | |
| URZ | | | | S | **S** | **19 52 16.5** | **-1.3** |
| **KARZ** | **Kaharoa** | **21.77** | **201** | PN | **P** | **19 48 25.7** | **+2.4** |
| **TOZ** | **Tahuroa Road** | **21.78** | **203** | *e*PN | **P** | **19 48 25.8** | **+2.5** |
| **OMRZ** | **Omania** | **21.80** | **201** | *e*PN | **P** | **19 48 25.5** | **+1.9** |
| **RAGZ** | **Rawiri** | **21.82** | **198** | *e*PN | **P** | **19 48 24.1** | **+0.1** |
| **TARZ** | **Mount Tarawera** | **21.88** | **200** | *e*PN | **P** | **19 48 26.6** | **+2.1** |
| **RIGZ** | **Rimuhau** | **21.92** | **198** | PN | **P** | **19 48 26.5** | **+1.6** |
| **UTU** | **Utuhina** | **21.93** | **201** | *e*PN | **P** | **19 48 28.0** | **+3.1** |
| **HLRZ** | **Highlands Stat** | **21.94** | **201** | PN | **P** | **19 48 27.5** | **+2.4** |
| **RRRZ** | **Republican Roa** | **21.97** | **200** | *e*PN | **P** | **19 48 26.6** | **+1.3** |
| **HSRZ** | **Hossack Road** | **22.03** | **201** | *e*PN | **P** | **19 48 28.6** | **+2.6** |
| **PRGZ** | **Paritu Road** | **22.09** | **197** | *e*PN | **P** | **19 48 29.3** | **+2.7** |
| **SNGZ** | **Shannon Statio** | **22.11** | **198** | PN | **P** | **19 48 27.8** | **+0.8** |
| **PRRZ** | **Plateau Road** | **22.15** | **200** | *e*PN | **P** | **19 48 27.5** | **+0.2** |
| **RAHZ** | **Arahi** | **22.31** | **199** | *e*PN | **P** | **19 48 29.1** | **0.0** |
| **NMHZ** | **Naumai** | **22.57** | **199** | PN | **P** | **19 48 32.0** | **+0.2** |
| **HIZ** | **Hauiti** | **22.71** | **203** | PN | **P** | **19 48 35.6** | **+2.4** |
| **KWHZ** | **Kaweka Forest** | **22.98** | **199** | *e*PN | **P** | **19 48 36.3** | **+0.2** |
| **OTVZ** | **Oturere** | **23.00** | **201** | *e*PN | **P** | **19 48 35.5** | **-0.8** |
| **NGZ** | **Ngauruhoe** | **23.03** | **201** | *e*PN | **P** | **19 48 36.7** | **+0.1** |
| **TUVZ** | **Tukino** | **23.09** | **201** | PN | **P** | **19 48 36.3** | **-0.9** |
| **BHHZ** | **Black Hill Sta** | **23.16** | **200** | *e*PN | **P** | **19 48 35.6** | **-2.1** |
| **KAHZ** | **Kahuranaki** | **23.18** | **198** | PN | **P** | **19 48 39.7** | **+1.8** |
| **PAE** | **Paea** | **23.24** | **93** | *e*P | **P** | **19 48 36.8** | **-1.8** |
| | comp=Z,148nm,1.2s | | | | | | |
| **PAE** | **Paea** | **23.24** | **93** | *e*T | T | 20 12 03.5 | |
| | comp=Z,42nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **23.25** | **93** | *e*P | **P** | **19 48 37.4** | **-1.4** |
| | comp=Z,811nm,1.3s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 19 53 23.1 | |
| | comp=Z,6μm,29.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 19 53 56.0 | |
| | comp=Z,15μm,31.2s,baz=263 | | | | | | |
| **PPT2** | **Papeete2** | **23.25** | **93** | *e*T | T | 20 12 05.2 | |
| | comp=Z,35nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **23.25** | **93** | P | **P** | **19 48 37.7** | **-1.0** |
| | comp=Z,438nm,1.0s,baz=219,slow=0.3,SNR=23 | | | | | | |
| PPT | | | | LR | LR | 19 55 43.9 | |
| | comp=Z,1μm,20.9s,baz=274,slow=31 | | | | | | |
| **TIAR** | **Tiarei** | **23.47** | **93** | *e*P | **P** | **19 48 39.4** | **-1.4** |
| | comp=Z,173nm,1.0s | | | | | | |
| **TIAR** | **Tiarei** | **23.47** | **93** | *e*T | T | 20 12 21.1 | |
| | comp=Z,16nm,0.3s | | | | | | |
| **TVO** | **Taravao** | **23.54** | **93** | *e*P | **P** | **19 48 39.8** | **-1.7** |
| | comp=Z,89nm,0.8s | | | | | | |
| **TVO** | **Taravao** | **23.54** | **93** | *e*T | T | 20 12 26.2 | |
| | comp=Z,25nm,0.4s | | | | | | |
| **TBI** | **Tubuai** | **23.56** | **107** | *e*P | **P** | **19 48 40.7** | **-0.8** |
| | comp=Z,1μm,1.2s | | | | | | |
| TBI | | | | *e*LQ | LQ | 19 53 08.8 | |
| | comp=Z,9μm,31.5s | | | | | | |
| TBI | | | | *e*LR | LR | 19 54 14.4 | |
| | comp=Z,13μm,32.8s,baz=285 | | | | | | |
| **TBI** | **Tubuai** | **23.56** | **107** | *e*T | T | 20 12 26.9 | |
| | comp=Z,93nm,0.3s | | | | | | |
| **NEZ** | **North Egmont** | **23.66** | **204** | *e*PN | **P** | **19 48 44.2** | **+2.0** |
| **PRHZ** | **Porangahau** | **23.69** | **198** | *e*PN | **P** | **19 48 44.2** | **+1.8** |
| **TSZ** | **Takapari Road** | **23.71** | **199** | PN | **P** | **19 48 41.8** | **-0.9** |
| **BFZ** | **Birch Farm** | **24.19** | **198** | PN | **P** | **19 48 47.5** | **+0.6** |
| **MRZ** | **Mangatainoka R** | **24.38** | **199** | PN | **P** | **19 48 48.4** | **-0.2** |
| **MEH** | **Mehetia** | **24.66** | **94** | *e*P | **P** | **19 48 49.5** | **-2.0** |
| | comp=Z,183nm,1.5s | | | | | | |
| **MEH** | **Mehetia** | **24.66** | **94** | *e*T | T | 20 13 50.0 | |
| | comp=Z,54nm,0.3s | | | | | | |
| **PMOR** | **Pomariorio Ree** | **25.18** | **87** | *e*P | **P** | **19 48 54.4** | **-1.8** |
| | comp=Z,1μm,1.2s | | | | | | |
| **PMOR** | **Pomariorio Ree** | **25.18** | **87** | *e*T | T | 20 14 29.9 | |
| | comp=Z,35nm,0.3s | | | | | | |
| **SNZO** | **South Karori** | **25.24** | **200** | *e*P | **P** | **19 48 56.1** | **-0.4** |
| | comp=Z,102nm,0.7s | | | | | | |
| **VAH** | **Vaihoa** | **25.40** | **88** | *e*P | **P** | **19 48 56.0** | **-2.2** |
| | comp=Z,552nm,1.0s | | | | | | |
| **VAH** | **Vaihoa** | **25.40** | **88** | *e*T | T | 20 14 41.4 | |
| | comp=Z,45nm,0.2s | | | | | | |
| **QRZ** | **Quartz Range** | **25.60** | **204** | *e*PN | **P** | **19 49 00.7** | **+0.9** |
| **TUWZ** | **Tuamarina** | **25.61** | **201** | PN | **P** | **19 49 01.3** | **+1.5** |
| **THZ** | **Tophouse** | **26.27** | **203** | PN | **P** | **19 49 06.2** | **+0.3** |
| **KHZ** | **Kahutara** | **26.62** | **201** | PN | **P** | **19 49 09.2** | **+0.2** |
| **KHZ** | **Kahutara** | **26.62** | **201** | *e*P | **P** | **19 49 08.6** | **-0.4** |
| | comp=Z,190nm,0.8s | | | | | | |
| **HNR** | **Honiara** | **26.67** | **285** | LR | LR | 19 57 02.3 | |
| | comp=Z,1μm,21.3s,baz=112,slow=30 | | | | | | |
| **HNR** | **Honiara** | **26.67** | **285** | P | **P** | **19 49 10.1** | **+0.4** |
| HNR | | | | pmax | pmax | | |
| | comp=Z,187nm,0.8s | | | | | | |
| **HNR** | **Honiara** | **26.67** | **285** | P | **P** | **19 49 10.1** | **+0.4** |
| | comp=Z,186nm,0.8s | | | | | | |
| **LTZ** | **Lake Taylor** | **27.39** | **202** | PN | **P** | **19 49 14.9** | **-1.0** |
| **WVZ** | **Waitaha Valley** | **28.22** | **204** | *e*PN | **P** | **19 49 22.6** | **-0.6** |
| **RPZ** | **Rata Peaks** | **28.64** | **203** | P | **P** | **19 49 27.8** | **+0.8** |
| | comp=Z,67nm,0.8s,baz=355,slow=1.1,SNR=20 | | | | | | |
| **RPZ** | **Rata Peaks** | **28.64** | **203** | PN | **P** | **19 49 27.5** | **+0.5** |
| **FOZ** | **Fox Glacier** | **29.04** | **205** | *e*PN | **P** | **19 49 28.9** | **-1.6** |
| **JCZ** | **Jackson Bay** | **29.84** | **205** | PN | **P** | **19 49 37.9** | **+0.1** |
| **ODZ** | **Otahua Downs** | **29.94** | **202** | *e*P | **P** | **19 49 39.1** | **+0.7** |
| | comp=Z,219nm,1.6s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **31.67** | **204** | *e*P | **P** | **19 49 53.1** | **-0.6** |
| | comp=Z,104nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **33.23** | **251** | P | **P** | **19 50 06.9** | **-0.7** |
| | baz=33,SNR=12 | | | | | | |
| **EIDS** | **Eidsvold** | **33.23** | **251** | *e*P | **P** | **19 50 06.6** | **-1.0** |
| | comp=Z,64nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **33.61** | **242** | P | **P** | **19 50 11.4** | **+0.4** |
| | baz=34,SNR=13 | | | | | | |
| **ARMA** | **Armidale** | **33.61** | **242** | *e*P | **P** | **19 50 11.0** | **0.0** |
| | comp=Z,43nm,1.0s | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **34.08** | **79** | *e*T | T | 20 25 38.4 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **RMQ** | **Roma** | **35.42** | **249** | P | **P** | **19 50 26.8** | **+0.1** |
| | baz=36,SNR=14 | | | | | | |
| **CNB** | **Canberra Magne** | **36.80** | **235** | P | **P** | **19 50 38.7** | **+0.4** |
| | baz=37,SNR=7.0 | | | | | | |
| **RKT** | **Rikitea** | **36.83** | **105** | *e*P | P | 19 50 35.1 | -3.4 |
| | comp=Z,136nm,1.3s | | | | | | |
| RKT | | | | *e*S | S | 19 56 07.5 | -9.2 |
| | comp=Z,849nm,30.0s | | | | | | |
| RKT | | | | *e*LQ | LQ | 19 58 53.9 | |
| | comp=Z,2μm,31.5s | | | | | | |
| RKT | | | | *e*LR | LR | 20 00 18.3 | |
| | comp=Z,8μm,32.0s,baz=276 | | | | | | |
| **RKT** | **Rikitea** | **36.83** | **105** | *e*T | T | 20 29 00.7 | |
| | comp=Z,32nm,0.3s | | | | | | |
| **CAN** | **Canberra** | **37.08** | **235** | *e*P | **P** | **19 50 39.7** | **-1.0** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,67nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **37.08** | **235** | *e*P | **P** | **19 50 39.7** | **-1.0** |
| | comp=Z,67nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **37.59** | **260** | PcP | **PcP** | **19 53 02.6** | **+1.2** |
| | comp=Z,16nm,0.9s,baz=29,slow=5.1,SNR=3.7 | | | | | | |
| **CTAO** | **Charters Tower** | **37.59** | **260** | *e*P | **P** | **19 50 43.3** | **-1.8** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,129nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **37.59** | **260** | *e*P | **P** | **19 50 43.3** | **-1.8** |
| | comp=Z,129nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **38.62** | **277** | LR | LR | 20 04 21.5 | |
| | comp=Z,2μm,21.9s,baz=101,slow=32 | | | | | | |
| **PMG** | **Port Moresby** | **38.62** | **277** | *c i*P | **P** | **19 50 53.7** | **-0.1** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,352nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **38.62** | **277** | P | **P** | **19 50 54.4** | **+0.6** |
| | baz=39,SNR=7.6 | | | | | | |
| **PMG** | **Port Moresby** | **38.62** | **277** | *e*P | **P** | **19 50 54.1** | **+0.2** |
| | comp=Z,290nm,1.5s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **38.83** | **242** | P | **P** | **19 50 55.6** | **+0.3** |
| | baz=39,SNR=24 | | | | | | |
| **QLP** | **Quilpie** | **39.47** | **250** | P | **P** | **19 51 00.3** | **-0.5** |
| | baz=40,SNR=28 | | | | | | |
| **TOO** | **Toolangi** | **40.46** | **233** | P | **P** | **19 51 09.8** | **+0.9** |
| | baz=41,SNR=7.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.87** | **331** | T | T | 20 32 44.1 | |
| | baz=146,slow=76,SNR=107 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.88** | **331** | T | T | 20 32 45.2 | |
| | baz=146,slow=76,SNR=81 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.88** | **331** | T | T | 20 32 47.3 | |
| | baz=146,slow=76,SNR=35 | | | | | | |
| **COEN** | **Coen** | **41.31** | **269** | P | **P** | **19 51 15.7** | **-0.4** |
| | baz=41,SNR=21 | | | | | | |
| **COEN** | **Coen** | **41.31** | **269** | *e*P | **P** | **19 51 15.4** | **-0.7** |
| | comp=Z,48nm,0.8s | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.85** | **332** | T | T | 20 36 27.2 | |
| | baz=152,slow=77,SNR=72 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.85** | **332** | T | T | 20 35 59.4 | |
| | baz=152,slow=77,SNR=67 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.87** | **332** | T | T | 20 36 26.9 | |
| | baz=152,slow=77,SNR=70 | | | | | | |
| **KIP** | **Kipapa** | **42.12** | **22** | ⇑*e*P | **P** | **19 51 21.6** | **-0.9** |
| KIP | | | | pmax | pmax | | |
| | comp=Z,943nm,1.3s | | | | | | |
| **KIP** | **Kipapa** | **42.12** | **22** | *e*P | **P** | **19 51 21.5** | **-0.9** |
| | comp=Z,1μm,1.0s | | | | | | |
| **ARPS** | **Mount Arapiles** | **43.06** | **235** | P | **P** | **19 51 31.0** | **+1.0** |
| | baz=43,SNR=4.9 | | | | | | |
| **QIS** | **Mount Isa** | **43.78** | **259** | P | **P** | **19 51 35.0** | **-1.1** |
| | baz=44,SNR=12 | | | | | | |
| **JAY** | **Jayapura** | **46.98** | **284** | LR | LR | 20 12 23.9 | |
| | comp=Z,534nm,18.8s,baz=76,slow=37 | | | | | | |
| **BBOO** | **Buckleboo** | **47.09** | **242** | P | **P** | **19 52 01.4** | **-0.6** |
| | baz=47,SNR=22 | | | | | | |
| **BBOO** | **Buckleboo** | **47.09** | **242** | *e*P | **P** | **19 52 00.3** | **-1.8** |
| | comp=Z,82nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **48.75** | **259** | *c i*P | **P** | **19 52 14.0** | **-1.1** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,287nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **48.75** | **259** | P | **P** | **19 52 14.6** | **-0.5** |
| | comp=Z,473nm,0.9s,SNR=31 | | | | | | |
| **WRAB** | **Tennant Creek** | **48.75** | **259** | *e*P | **P** | **19 52 13.7** | **-1.4** |
| | comp=Z,112nm,1.1s | | | | | | |
| WRAB | | | | *e* | | 19 52 37.0 | |
| **WRA** | **Warramunga Arr** | **48.76** | **259** | P | **P** | **19 52 13.5** | **-1.7** |
| | comp=Z,33nm,0.5s,baz=93,slow=7.4,SNR=148 | | | | | | |
| WRA | | | | pP | **pP** | **19 52 35.4** | **-0.8** |
| | comp=Z,21nm,0.5s,baz=96,slow=7.7,SNR=3.1 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 53 39.8** | **+0.8** |
| | comp=Z,24nm,1.0s,baz=91,slow=4.1,SNR=4.7 | | | | | | |
| WRA | | | | S | **S** | **19 59 08.5** | **-3.4** |
| | comp=Z,2.4nm,0.9s,baz=101,slow=12,SNR=5.1 | | | | | | |
| WRA | | | | LR | LR | 20 11 51.6 | |
| | comp=Z,2μm,20.4s,baz=105,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **48.83** | **254** | P | **P** | **19 52 14.6** | **-1.1** |
| | comp=Z,267nm,0.7s,baz=90,slow=8.2,SNR=1475 | | | | | | |
| ASAR | | | | S | **S** | **19 59 10.1** | **-2.8** |
| | comp=Z,2.8nm,0.8s,baz=91,slow=16,SNR=7.6 | | | | | | |
| ASAR | | | | LR | LR | 20 12 24.8 | |
| | comp=Z,748nm,19.0s,baz=96,slow=35 | | | | | | |
| **MTN** | **Manton Dam** | **53.00** | **267** | P | **P** | **19 52 46.5** | **-0.5** |
| | baz=53,SNR=5.2 | | | | | | |
| **FORT** | **Forrest** | **53.80** | **245** | P | **P** | **19 52 52.4** | **-0.2** |
| | baz=54,SNR=12 | | | | | | |
| **FORT** | **Forrest** | **53.80** | **245** | *e*P | **P** | **19 52 52.2** | **-0.5** |
| | comp=Z,70nm,0.6s | | | | | | |
| **WRKA** | **Warakurna** | **53.84** | **252** | P | **P** | **19 52 52.2** | **-0.9** |
| | baz=54,SNR=126 | | | | | | |
| **KNRA** | **Kununurra** | **54.67** | **263** | P | **P** | **19 52 58.5** | **-0.7** |
| | baz=55,SNR=28 | | | | | | |
| **SWI** | **Sorong** | **56.36** | **281** | P | **P** | **19 53 11.4** | **+0.1** |
| | baz=56,SNR=12 | | | | | | |
| **SWI** | **Sorong** | **56.36** | **281** | P | **P** | **19 53 10.8** | **-0.5** |
| | comp=Z,141nm,1.2s,comp=Z,2μm | | | | | | |
| **BNDI** | **Bandanaira** | **56.41** | **277** | P | **P** | **19 53 10.9** | **-0.7** |
| | comp=Z,120nm,1.0s,comp=Z,2μm | | | | | | |
| **DRV** | **Dumont d'Urvil** | **57.04** | **200** | S | S | 20 00 51.0 | -12 |
| DRV | | | | L | L | 20 07 00.0 | |
| DRV | | | | R | | 20 10 00.0 | |
| **KMBL** | **Kambalda** | **59.08** | **244** | P | **P** | **19 53 29.3** | **-0.9** |
| | baz=59,SNR=8.1 | | | | | | |
| **NLAI** | **Namlea** | **59.47** | **277** | P | **P** | **19 53 32.7** | **-0.3** |
| | comp=Z,63nm,1.7s,comp=Z,851nm | | | | | | |
| **LBMI** | **Labuha** | **59.96** | **280** | P | **P** | **19 53 36.6** | **+0.2** |
| | comp=Z,74nm,2.1s,comp=Z,1μm | | | | | | |
| **SOEI** | **Soe** | **60.28** | **269** | P | **P** | **19 53 39.8** | **+1.0** |
| | baz=60,SNR=13 | | | | | | |
| **SOEI** | **Soe** | **60.28** | **269** | P | **P** | **19 53 38.5** | **-0.2** |
| | comp=Z,324nm,1.1s,comp=Z,3μm | | | | | | |
| **SOEI** | **Soe** | **60.28** | **269** | *e*P | **P** | **19 53 39.0** | **+0.3** |
| **TNTI** | **Ternate** | **60.58** | **281** | P | **P** | **19 53 40.2** | **-0.4** |
| | comp=Z,169nm,1.8s,comp=Z,2μm | | | | | | |
| **TNTI** | **Ternate** | **60.58** | **281** | *e*P | **P** | **19 53 40.0** | **-0.7** |
| | comp=Z,378nm,1.4s | | | | | | |
| **SBA** | **Scott Base** | **60.70** | **185** | *e*P | P | 19 53 44.3 | +3.9 |
| SBA | | | | *e* | | 19 54 05.5 | |
| SBA | | | | pmax | pmax | | |
| | comp=Z,96nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **60.70** | **185** | *e*P | P | 19 53 44.3 | +3.9 |
| | comp=Z,96nm,1.0s | | | | | | |
| SBA | | | | *e* | | 19 54 05.5 | |
| **BATI** | **Baumata** | **60.74** | **268** | P | **P** | **19 53 41.7** | **-0.1** |
| | comp=Z,42nm,1.3s | | | | | | |
| **VNDA** | **Vanda** | **60.82** | **186** | P | **P** | **19 53 44.2** | **+3.0** |
| | comp=Z,41nm,1.0s,baz=7.5,slow=6.6,SNR=125 | | | | | | |

SANI **Sanana** 60.91 278 P P 19 53 42.7 -0.2
comp=Z,61nm,1.3s,comp=Z,1µm
MBWA **Marble Bar** 62.14 255 *eP* P 19 53 50.2 -0.9
comp=Z,47nm,1.0s
MEEK **Meekatharra** 62.36 249 P P 19 53 51.5 -1.0
baz=62,SNR=24
MMRI **Maumere** 62.51 269 P P 19 53 52.7 -0.9
comp=Z,86nm,1.2s
KLBR **Kellerberrin** 62.58 243 P P 19 53 53.4 -0.5
baz=63,SNR=18
NWAO **Narrogin (SRO)** 62.91 242 P P 19 53 57.2 +1.2
baz=63,SNR=4.5
EDFI **Ende, Flores** 63.00 269 P P 19 53 56.1 -0.9
comp=Z,78nm,1.0s
RKGY **Rocky Gully** 63.00 240 P P 19 53 58.3 +1.7
baz=63,SNR=6.5
BLDU **Ballidu** 63.57 244 P P 19 54 00.5 +0.1
baz=64,SNR=42
KMSI **Cibinong** 63.68 280 P P 19 54 00.4 -1.0
comp=Z,139nm,0.8s,comp=Z,2µm
LUWI **Luwuk** 64.27 278 P P 19 54 06.0 +0.7
baz=64,SNR=6.4
LUWI **Luwuk** 64.27 278 P P 19 54 05.4 +0.1
comp=Z,149nm,1.4s,comp=Z,2µm
LUWI **Luwuk** 64.27 278 *eP* P 19 54 05.5 +0.3
comp=Z,145nm,1.1s
MORW **Morawa** 64.32 246 P P 19 54 05.4 0.0
baz=64,SNR=4.7
BSSI **Bau Bau, Buton** 64.86 272 P P 19 54 07.7 -1.4
comp=Z,45nm,1.0s,comp=Z,747nm
APSI **Ampana** 65.37 277 P P 19 54 12.8 +0.4
comp=Z,130nm,1.5s,comp=Z,2µm
KAPI **Kappang** 65.90 273 *eP* P 19 54 13.1 -2.7
comp=Z,37nm,1.1s
SPSI **Sidrap Palu** 66.19 274 P P 19 54 16.6 -1.1
comp=Z,26nm,1.0s
GIRL **Giralia** 66.91 253 P P 19 54 23.0 +0.8
baz=67,SNR=4.0
JHJ **Hachijo jima 2** 67.27 319 LR LR 20 23 00.4
comp=Z,166nm,18.3s,slow=35
MPSI **Mapaga** 67.44 278 P P 19 54 25.3 -0.3
comp=Z,48nm,1.5s,comp=Z,911nm
TWSI **Taliwang, Sumb** 67.58 268 P P 19 54 25.7 -0.8
comp=Z,97nm,1.0s,comp=Z,1µm
CASY **Casey** 67.89 205 *eP* P 19 54 28.8 +1.3
comp=Z,55nm,1.0s
AMKA **Amchitka** 69.26 356 *eP* P 19 54 34.7 -1.4
comp=Z,86nm,0.9s
KBKI **Kotabaru** 69.82 273 P P 19 54 40.3 -0.1
comp=Z,48nm,1.3s,comp=Z,740nm
MJAR **Matsushiro Arr** 70.51 321 P P 19 54 43.2 -1.0
comp=Z,15nm,1.0s,baz=160,slow=6.0,SNR=30
MJAR pP PcP 19 55 05.3 +0.3
comp=Z,6.7nm,0.9s,baz=345,slow=21,SNR=5.2
MJAR LR LR 20 19 49.8
comp=Z,190nm,21.2s,baz=130,slow=31
MAJO **Matsushiro** 70.51 321 *c i*P P 19 54 43.7 -0.5
MAJO *i* *PP pP 19 55 06.3 -0.3
MAJO pmax pmax
comp=Z,199nm,1.1s
MAJO **Matsushiro** 70.51 321 *eP* P 19 54 43.4 -0.9
comp=Z,61nm,1.3s
TSM **Tawau** 70.69 281 ⇓P P 19 54 47.1 +1.4
BBKI **Banjar Baru** 71.03 273 P P 19 54 47.8 0.0
comp=Z,128nm,1.0s
SMY **Shemya** 71.12 352 *eP* P 19 54 46.0 -1.4
SMY pmax pmax
comp=Z,86nm,1.0s
SMY **Shemya** 71.12 352 *eP* P 19 54 46.0 -1.4
comp=Z,86nm,1.0s
YUK **Yuzh-Kuril'sk** 71.77 331 *c i*P P 19 54 49.4 -2.1
YUK *i* 19 55 06.7
YUK *i* 19 57 35.6
YUK *i* S S 20 04 03.3 -1.5
UNV **Unalaska Valle** 71.77 5 *eP* P 19 54 49.6 -1.7
comp=Z,67nm,1.0s
KUR **Kuril'sk** 71.79 333 *d i*P P 19 54 49.9 -1.7
KUR *i* 19 55 08.9
KUR *i* 19 57 24.8
KUR *i* S S 20 03 59.2 -5.8
KUR *i* SS SS 20 08 28.7 -15
KUR MLR MLR
comp=N,245nm,23.0s
KUR MLR MLR
comp=E,80nm,23.0s
KUR MLR MLR
comp=Z,273nm,23.0s
H06S1 **SOCORRO T** 71.85 63 T T 21 13 12.4
SNR=51
H06E1 **SOCORRO T-PHAS** 71.90 63 T T 21 13 15.2
SNR=55
QSPA **South Pole Qui** 72.13 180 *eP* P 19 54 55.4 +1.7
comp=Z,180nm,1.0s
SNCC **San Nicolas Is** 72.74 46 P P 19 54 57.2 -0.4
baz=73
KKM **Kota Kinabalu** 72.84 282 P P 19 54 60.0 +1.2
baz=73,SNR=5.9
KKM **Kota Kinabalu** 72.84 282 ⇓P P 19 55 00.1 +1.3
KKM **Kota Kinabalu** 72.84 282 *eP* P 19 54 59.4 +0.6
comp=Z,67nm,1.1s
BSC **Santa Cruz Isl** 73.10 45 P P 19 54 59.1 -0.7
baz=73,SNR=6.8
JNU **Nakatsue** 73.12 314 *eP* P 19 54 59.6 -0.3
comp=Z,20nm,1.0s
PCJI **Pacitan** 73.15 267 P P 19 55 00.3 -0.2
SKR **Severo-Kuril's** 73.20 341 ⇓*eP* P 19 54 59.0 -0.9
SCI **San Clemente I** 73.25 46 P P 19 54 59.9 -0.8
baz=73
SBC **Santa Barbara** 73.31 44 P P 19 55 00.7 -0.3
baz=73
ASAJ **Asahikawa** 73.39 329 *eP* P 19 55 02.0 +0.8
comp=Z,22nm,1.0s
PKM **Peak Mountain** 73.51 44 P P 19 55 02.1 -0.3
baz=74,SNR=10.0
BLG **Laguna Peak** 73.55 45 P P 19 55 01.3 -1.1
baz=74
SMMC **Simmler** 73.64 44 P P 19 55 02.7 -0.2
baz=74
FMP **Fort Macarthur** 73.84 46 P P 19 55 03.1 -1.0
baz=74
UGM **Wanagama** 73.85 267 P P 19 55 06.0 +1.3
baz=74,SNR=7.3
OSI **Osito Adit** 74.07 45 P P 19 55 04.8 -0.7
baz=74
DECC **Green Verdugo** 74.13 45 P P 19 55 04.9 -0.9
baz=74
SMRI **Semarang** 74.17 268 *eP* P 19 55 06.7 +0.2
comp=Z,87nm,0.9s
109C **Camp Elliot, M** 74.20 47 P P 19 55 05.4 -0.8
baz=74
MWC **Mount Wilson** 74.30 45 *eP* P 19 55 06.0 -1.0
MWC *e* 19 55 26.9
MWC pmax pmax
comp=Z,33nm,0.9s
MWC **Mount Wilson** 74.30 45 *eP* P 19 55 06.0 -1.0
comp=Z,33nm,0.9s
MWC *e* 19 55 26.9
ARVC **Arvin** 74.30 44 P P 19 55 06.2 -0.5
baz=74
PET **Petropavlovsk** 74.52 343 *eP* P 19 55 17.2 +10
PET pmax pmax
comp=Z,51nm,1.2s
PET pmax pmax
comp=Z,300nm,15.1s
PET pmax pmax
comp=Z,400nm,15.4s
MURC **Murrieta** 74.53 46 P P 19 55 06.4 -1.8
baz=75,SNR=7.7
VES **Vestal, Richgr** 74.55 44 P P 19 55 07.3 -0.9
baz=75,SNR=12
BFSC **Mount Baldy Ra** 74.58 46 P P 19 55 07.4 -1.2
baz=75,SNR=8.5
MONP **Monument Peak** 74.68 47 P P 19 55 08.8 -0.5
baz=75,SNR=10
EDW2 **Edwards Air Fo** 74.72 45 P P 19 55 08.4 -0.9
baz=75,SNR=36
RCTC **Rector, Farmer** 74.72 43 P P 19 55 08.1 -1.0
baz=75
IBP **Imperial Bould** 74.78 48 P P 19 55 09.2 -0.5
baz=75
BTM **Bintulu** 74.81 278 ⇓P P 19 55 11.5 +1.3
ISA **Isabella** 74.85 44 *eP* P 19 55 09.4 -0.6
ISA pmax pmax
comp=Z,83nm,1.2s
ISA **Isabella** 74.85 44 P P 19 55 09.9 -0.1
baz=75,SNR=42
ISA **Isabella** 74.85 44 *eP* P 19 55 09.4 -0.6
comp=Z,83nm,1.2s
PETK **Petropavlovsk-** 74.86 343 P P 19 55 08.6 -1.0
comp=Z,20nm,0.8s,baz=141,slow=9.6,SNR=24
PETK pP pP 19 55 30.6 -1.6
comp=Z,98nm,0.9s,baz=126,slow=7.5,SNR=22
PETK LR LR 20 24 36.6
comp=Z,156nm,19.6s,baz=146,slow=33
MIR **Mirnyy** 74.90 204 ⇑*eP* P 19 55 20.0 +10
MIR pmax pmax
comp=Z,120nm,1.5s
CMB **Columbia Colle** 75.03 41 *eP* P 19 55 10.2 -0.7
CMB pmax pmax
comp=Z,48nm,1.2s
CMB **Columbia Colle** 75.03 41 *eP* P 19 55 10.2 -0.7
comp=Z,48nm,1.2s
PFO **Pinyon Flat Ob** 75.05 47 *eP* P 19 55 10.6 -0.7
PFO pmax pmax
comp=Z,24nm,1.1s
PFO **Pinyon Flat Ob** 75.05 47 P P 19 55 10.2 -1.1
comp=Z,151nm,1.2s,SNR=6.7
PFO **Pinyon Flat Ob** 75.05 47 P P 19 55 10.9 -0.4
comp=Z,151nm,1.2s,SNR=6.7
PFO **Pinyon Flat Ob** 75.05 47 P P 19 55 10.4 -0.9
baz=75,SNR=9.9
PFO **Pinyon Flat Ob** 75.05 47 *eP* P 19 55 10.6 -0.7
comp=Z,24nm,1.1s
BBRC **Big Bear Solar** 75.09 46 P P 19 55 10.8 -0.9
baz=75
CHGN **Chignik** 75.10 9 *eP* P 19 55 09.2 -1.6
SWSC **Sam W. Stewart** 75.14 48 P P 19 55 10.8 -0.8
baz=75
LRMC **Laurel Mountai** 75.26 45 P P 19 55 11.8 -0.6
baz=75,SNR=26
WDC **Whiskeytown Da** 75.31 38 *eP* P 19 55 11.8 -0.6
WDC pmax pmax
comp=Z,40nm,1.2s
WDC **Whiskeytown Da** 75.31 38 *eP* P 19 55 11.8 -0.6
comp=Z,40nm,1.2s
SBUM **Sibu** 75.37 277 ⇑P P 19 55 14.9 +1.5
RRX **Edison Barstow** 75.39 45 P P 19 55 12.3 -0.8
baz=76
YSS **Yuzh-Sakhalins** 75.40 331 ⇓*eP* P 19 55 12.0 -0.8
YSS *e**PP pP 19 55 35.0 -0.4
YSS *eS* S 20 04 46.0 +0.3
YSS *e**SS sS 20 05 22.0 -2.4
YSS pmax pmax
comp=Z,40nm,1.0s
YSS smax smax
comp=N,400nm,10.0s
YSS MLR MLR
comp=E,300nm,18.0s
YSS MLR MLR
comp=Z,300nm,18.0s
YSS **Yuzh-Sakhalins** 75.40 331 *eP* P 19 55 13.2 +0.4
comp=Z,40nm,1.0s
YSS *epP* pP 19 55 34.4 -1.0
N02D **Trinity Center** 75.46 38 P P 19 55 12.9 -0.5
baz=76,SNR=5.5
NACB **Ninganciao** 75.47 302 *eP* P 19 55 12.4 -1.3
comp=Z,77nm,1.3s
NACB *epP* pP 19 55 37.3 +1.0
CWC **Cottonwood Cre** 75.56 44 P P 19 55 13.7 -0.5
baz=76,SNR=7.1
O03D **Paynes Creek** 75.56 39 P P 19 55 12.9 -1.1
baz=76,SNR=13
BELC **Belle Mtn. Jos** 75.58 47 P P 19 55 13.7 -0.6
baz=76,SNR=11
M02C **Callahan** 75.64 37 P P 19 55 14.5 +0.1
baz=76,SNR=5.4
L02D **Cave Junction,** 75.71 36 P P 19 55 14.3 -0.5
baz=76
MPMC **Manual Prospec** 75.73 44 P P 19 55 14.6 -0.6
baz=76,SNR=76
GSC **Goldstone** 75.76 45 *eP* P 19 55 14.3 -0.9
GSC *e**PP pP 19 55 41.4 +3.5
GSC pmax pmax
comp=Z,46nm,1.1s
GSC **Goldstone** 75.76 45 P P 19 55 14.3 -0.9
baz=76,SNR=13
GSC **Goldstone** 75.76 45 *eP* P 19 55 14.3 -0.9
comp=Z,46nm,1.1s
GSC *epP* pP 19 55 41.4 +3.5
MLAC **Mammoth Lakes** 75.77 42 P P 19 55 14.5 -0.9
baz=76
DAC **Darwin (Calif)** 75.79 44 *eP* P 19 55 15.1 -0.4
DAC pmax pmax
comp=Z,34nm,1.3s
DAC **Darwin (Calif)** 75.79 44 *eP* P 19 55 15.1 -0.4
comp=Z,34nm,1.3s
HEC **Hector,Ludlow** 75.82 46 P P 19 55 14.7 -0.8
baz=76,SNR=17
TIN **Tinemaha** 75.82 43 P P 19 55 15.2 -0.4
baz=76,SNR=6.3
TPUB **Ta-pu** 75.86 300 *eP* P 19 55 15.3 -0.7
comp=Z,96nm,1.1s
YHNB **Yeheng** 75.88 302 *eP* P 19 55 16.5 +0.4
comp=Z,109nm,1.3s
YHNB *epP* pP 19 55 38.7 -0.1
GLA **Glamis** 75.89 48 *eP* P 19 55 16.1 +0.1
GLA *e**PP pP 19 55 38.0 -0.6
GLA pmax pmax
comp=Z,129nm,1.7s
GLA **Glamis** 75.89 48 P P 19 55 15.5 -0.5
baz=76,SNR=8.8
GLA **Glamis** 75.89 48 *eP* P 19 55 16.1 +0.1
comp=Z,129nm,1.7s
GLA *epP* pP 19 55 38.0 -0.6
YBH **Yreka Blue Hor** 75.94 37 *eP* P 19 55 16.1 0.0
YBH pmax pmax
comp=Z,29nm,1.0s
YBH **Yreka Blue Hor** 75.94 37 *eP* P 19 55 16.1 0.0
comp=Z,29nm,1.0s
LBCM **Butte Creek Ri** 76.17 38 P P 19 55 16.9 -0.7
GMRC **Granite Mounta** 76.25 46 P P 19 55 17.5 -0.6
baz=76,SNR=22
IRM **Iron Mountain** 76.26 47 P P 19 55 17.9 -0.2
baz=76,SNR=30
GRAC **Grapevine Rang** 76.35 43 P P 19 55 18.4 -0.1
baz=76,SNR=18
FURC **Furnace Creek,** 76.38 44 P P 19 55 18.3 -0.3
baz=76,SNR=6.1
TUQ **Turquoise Moun** 76.43 45 P P 19 55 18.6 -0.5
baz=76,SNR=5.6
Y12C **Blythe** 76.48 48 P P 19 55 18.7 -0.5
baz=77,SNR=7.8
M04C **Macdoel** 76.48 37 P P 19 55 18.9 -0.4
baz=77,SNR=6.9
NVAR **Mina Array Bea** 76.58 42 P P 19 55 19.2 -0.8
comp=Z,31nm,1.0s,baz=226,slow=8.9,SNR=104
NVAR pP pP 19 55 41.7 -1.0
comp=Z,15nm,0.8s,baz=228,slow=9.4,SNR=5.7
NVAR LR LR 20 21 04.4
comp=Z,1µm,21.3s,baz=245,slow=29
LDFC **Landfair** 76.79 46 *eP* P 19 55 21.5 +0.3
comp=Z,150nm,1.2s
OHAK **Old Harbor** 76.84 11 *eP* P 19 55 19.1 -1.6
comp=Z,237nm,1.9s
I03D **Drain, OR** 76.86 35 P P 19 55 20.6 -0.6
baz=77,SNR=6.6
KSM **Kuching** 76.87 276 P P 19 55 23.1 +1.2
baz=77,SNR=27
KSM **Kuching** 76.87 276 ⇓P P 19 55 23.2 +1.3
KSM **Kuching** 76.87 276 *eP* P 19 55 22.4 +0.5
comp=Z,82nm,0.9s
LEM **Lembang** 76.92 267 P P 19 55 23.3 +0.9
baz=77,SNR=7.9
PDMCI **Parker Dam,Lak** 77.04 47 P P 19 55 21.6 -0.7
baz=77,SNR=14
TPNV **Topopah Spring** 77.06 44 P P 19 55 22.0 -0.7
baz=77,SNR=29
K04D **Chiloquin, OR** 77.06 37 P P 19 55 22.0 -0.4
baz=77
KSJEU **Jeongeup** 77.16 314 P P 19 55 23.4 +0.4
SNR=9.4
KSDGY **Daegwallycong** 77.21 317 P P 19 55 24.7 +1.3
SNR=7.4
J04D **Umpqua Nationa** 77.25 36 P P 19 55 23.1 -0.5
baz=77,SNR=6.3
TJN **Taejon** 77.34 315 *de*P P 19 55 24.6 +0.6
I04A **Tendick Farm,** 77.44 36 P P 19 55 23.3 -1.2
baz=78,SNR=7.8
MOD **Modoc** 77.45 38 *eP* P 19 55 23.7 -1.0
comp=Z,44nm,1.2s
KDAK **Kodiak Island** 77.50 12 P P 19 55 23.4 -0.9
comp=Z,32nm,1.2s,baz=191,slow=2.4,SNR=4.0
KDAK **Kodiak Island** 77.50 12 *eP* P 19 55 23.6 -0.7
KDAK pmax pmax
comp=Z,224nm,1.8s
KDAK **Kodiak Island** 77.50 12 *e*P P 19 55 23.6 -0.7
comp=Z,224nm,1.8s
SHPR **Sheep Range** 77.54 45 *e*P P 19 55 25.0 -0.4
comp=Z,71nm,1.2s
SHPR *epP* pP 19 55 47.0 -1.1
KSRS **Korea Array** 77.57 316 P P 19 55 26.6 +1.3
comp=Z,19nm,0.9s,baz=130,slow=6.3,SNR=62
KSRS pP pP 19 55 49.0 +1.0
comp=Z,37nm,1.0s,baz=130,slow=6.4,SNR=6.6
KSRS LR LR 20 26 32.9
comp=Z,146nm,18.4s,baz=130,slow=33
KSAR **Wonju Array Be** 77.59 316 P P 19 55 26.6 +1.2
KSAR *PP pP 19 55 49.0 +0.9
KSAR **Wonju Array Be** 77.59 316 P P 19 55 26.6 +1.2
KSAR pP pP 19 55 49.0 +0.9
J05D **Fort Rock, OR** 77.77 36 P P 19 55 26.0 -0.4
baz=78,SNR=22
KSICN **Icheon** 77.81 316 P P 19 55 28.5 +1.9
SNR=5.6
KSCHC **Chuncheon** 77.82 316 P P 19 55 28.6 +1.9
SNR=10
G03D **McMinnville, O** 77.90 34 P P 19 55 26.3 -0.6
baz=78
KSCWO **Cheorwon** 78.19 317 P P 19 55 30.7 +2.0
SNR=7.3
KSSEO **Seoul** 78.25 316 P P 19 55 31.0 +1.9
SNR=7.5
R11A **Troy Canyon, C** 78.28 43 P P 19 55 28.4 -1.0
baz=78,SNR=36
R11A **Troy Canyon, C** 78.28 43 *eP* P 19 55 28.5 -0.9
comp=Z,49nm,1.4s
I05D **Terrebonne, OR** 78.38 36 P P 19 55 28.9 -0.8
baz=78,SNR=7.3
TUC **Tucson** 78.42 50 *eP* P 19 55 30.1 -0.2
TUC pmax pmax
comp=Z,78nm,1.2s
TUC **Tucson** 78.42 50 *eP* P 19 55 30.1 -0.2
comp=Z,78nm,1.2s
BMN **Battle Mountai** 78.43 41 *eP* P 19 55 29.3 -0.9
BMN pmax pmax
comp=Z,49nm,1.2s
BMN **Battle Mountai** 78.43 41 *eP* P 19 55 29.2 -0.9
comp=Z,48nm,1.2s
VLA **Vladivostok** 78.46 323 ⇑*eP* P 19 55 31.0 +1.0
VLA pmax pmax
comp=Z,20nm,0.8s
MSHR **Mys Shultsa** 78.55 322 *de*P P 19 55 31.0 +0.4
YNCB **YEONCHEON** 78.55 316 P P 19 55 32.6 +1.9
SNR=10
KSMUS **Musan** 78.58 316 P P 19 55 32.3 +1.4
SNR=13
F04D **Rainier, OR** 78.61 33 P P 19 55 30.6 -0.2
baz=79
KSGAH **Ganghwa** 78.69 316 P P 19 55 33.0 +1.6
SNR=12
WVOR **Wild Horse Val** 78.75 38 *eP* P 19 55 31.2 -0.7
WVOR *e**PP pP 19 55 54.0 -0.7
WVOR pmax pmax
comp=Z,63nm,1.2s
WVOR **Wild Horse Val** 78.75 38 *eP* P 19 55 31.2 -0.7
comp=Z,63nm,1.2s
WVOR *epP* pP 19 55 54.0 -0.7
VFP **Flag Point** 78.94 35 P P 19 55 32.4 -0.5
G05D **Wamic, OR** 78.97 35 P P 19 55 32.0 -0.8
baz=79,SNR=6.6
SSE **Sheshan** 79.04 308 P P 19 55 33.5 0.0
SSE pP pP 19 55 57.3 +1.0
SSE S S 20 05 26.5 +0.7
SSE PMZ
comp=Z,25nm,0.8s
SSE PMZ
comp=Z,330nm,11.2s
SSE LN
comp=Z,590nm,28.8s
SSE LZ
comp=Z,1µm,33.4s
USRK **Ussuriysk Ar.** 79.06 324 P P 19 55 34.1 +0.8
comp=Z,12nm,1.0s,baz=90,slow=2.3,SNR=23
USRK pP pP 19 55 56.8 +0.6
comp=Z,14nm,1.1s,baz=98,slow=3.9,SNR=4.3
USRK LR LR 20 24 28.5
comp=Z,514nm,21.5s,baz=118,slow=31
ERK **Elk Rock** 79.10 34 P P 19 55 33.6 -0.1
CCUT **Cedar City** 79.31 45 *eP* P 19 55 35.0 -0.1
comp=Z,52nm,1.2s
VTHM **Trough** 79.34 35 P P 19 55 34.6 -0.4
OSD **Olympics--Snow** 79.40 32 P P 19 55 35.5 +0.1
WUAZ **Wupatki** 79.61 47 P P 19 55 36.5 -0.3
baz=80
WUAZ **Wupatki** 79.61 47 *eP* P 19 55 36.6 -0.2
comp=Z,57nm,1.3s
LON **Longmire** 79.67 34 *eP* P 19 55 35.4 -1.3
LON pmax pmax
comp=Z,13nm,0.9s
LON **Longmire** 79.67 34 *eP* P 19 55 35.4 -1.3
comp=Z,12nm,0.9s
ELK **Elko** 79.84 41 *eP* P 19 55 37.0 -1.0
ELK pmax pmax
comp=Z,36nm,1.3s
ELK **Elko** 79.84 41 *eP* P 19 55 37.0 -1.0
comp=Z,36nm,1.3s
RSO **Redoubt South** 79.98 10 *eP* P 19 55 36.9 -1.3
comp=Z,111nm,1.0s
TRW **Toppenish Ridg** 80.05 34 P P 19 55 38.6 -0.2
PGC **Sidney** 80.08 31 *eP* P 19 55 38.3 -0.4
comp=Z,39nm,0.9s
PGC *epP* pP 19 56 00.7 -0.9
HABR **Khabarovsk** 80.17 328 *de*P P 19 55 38.1 -1.1
HABR *e* 19 55 45.0
HABR *e**PP pP 19 56 01.6 -0.5
HABR *e**SP sP 19 56 11.7 +0.2
HABR *e* 19 58 40.4
HABR *eS* S 20 05 34.7 -2.4
HABR *e* 20 05 54.3
HABR *e**SS sS 20 06 15.6 -0.5
HABR *eSS* SS 20 10 47.0 -3.1
HABR pmax pmax
comp=N,20nm,1.5s
HABR pmax pmax
comp=E,38nm,1.5s
HABR pmax pmax
comp=Z,137nm,1.5s
HABR MLR MLR
comp=Z,187nm,18.0s
SEW **Seward** 80.27 12 *eP* P 19 55 37.2 -2.3
comp=Z,47nm,1.0s
A04D **Lummi Island** 80.50 32 P P 19 55 40.8 -0.1
baz=81
B05A **Bryant** 80.50 32 P P 19 55 40.6 -0.4
baz=81,SNR=14
W18A **Petrified Fore** 80.57 48 P P 19 55 41.7 -0.2
baz=81
W18A **Petrified Fore** 80.57 48 *eP* P 19 55 42.1 +0.1
comp=Z,252nm,2.3s
MSU **Marysvale** 80.61 44 *eP* P 19 55 42.1 -0.1
MSU *e**PP pP 19 56 04.5 -0.5
MSU pmax pmax
comp=Z,67nm,1.3s
MSU **Marysvale** 80.61 44 *eP* P 19 55 42.1 -0.1
comp=Z,67nm,1.3s
MSU *epP* pP 19 56 04.5 -0.5
HAWA **Hanford** 80.66 35 *eP* P 19 55 41.1 -0.9
comp=Z,150nm,1.5s
MDJ **Mudanjiang** 80.68 323 P P 19 55 43.1 +1.0
MDJ pP pP 19 56 05.8 +0.8
MDJ sP sP 19 56 14.8 +0.5
MDJ PP PP 19 58 48.6 +1.3
MDJ S S 20 05 46.1 +3.5
MDJ sS sS 20 06 19.5 -2.2
MDJ PMZ
comp=Z,25nm,1.2s
MDJ PMZ
comp=Z,74nm,4.2s
MDJ LN
comp=Z,460nm,34.1s
MDJ LE
comp=Z,630nm,34.1s
MDJ LZ
comp=Z,1µm,32.4s
MDJ **Mudanjiang** 80.68 323 *eP* P 19 55 43.4 +1.3
comp=Z,37nm,1.0s
MDJ *epP* pP 19 56 05.9 +1.0
121A **Cookes Peak, D** 80.75 52 P P 19 55 43.4 +0.4
baz=81
121A **Cookes Peak, D** 80.75 52 *eP* P 19 55 43.0 +0.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,72nm,1.1s | | | | | | |
| 121A | | | | *e*pP | **pP** | **19 56 05.3** | **-0.6** |
| **WRW** | **Wenatchee Ridg** | **80.87** | **33** | P | **P** | **19 55 42.4** | **-0.7** |
| **C06D** | **Leavenworth** | **80.90** | **33** | P | **P** | **19 55 43.8** | **+0.6** |
| | baz=81 | | | | | | |
| **MFID** | **Camas Ranch** | **81.00** | **39** | *e*P | **P** | **19 55 42.9** | **-1.1** |
| | comp=Z,45nm,1.4s | | | | | | |
| **DUG** | **Dugway** | **81.09** | **43** | *e*P | **P** | **19 55 43.0** | **-1.6** |
| DUG | | | | *e**PP | **pP** | **19 56 05.3** | **-2.1** |
| DUG | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| **DUG** | **Dugway** | **81.09** | **43** | P | **P** | **19 55 43.9** | **-0.7** |
| | baz=81,SNR=6.4 | | | | | | |
| **DUG** | **Dugway** | **81.09** | **43** | *e*P | **P** | **19 55 43.0** | **-1.6** |
| | comp=Z,20nm,1.0s | | | | | | |
| DUG | | | | *e*pP | **pP** | **19 56 05.3** | **-2.1** |
| **RC01** | **Rabbit Creek A** | **81.12** | **12** | *e*P | **P** | **19 55 43.1** | **-0.9** |
| | comp=Z,115nm,1.6s | | | | | | |
| RC01 | | | | *e*pP | **pP** | **19 56 07.2** | **+0.2** |
| **NJ2** | **Nanjing** | **81.24** | **308** | *e*P | **P** | **19 55 45.0** | **-0.3** |
| NJ2 | | | | pP | **pP** | **19 56 07.1** | **-1.1** |
| NJ2 | | | | sP | **sP** | **19 56 16.2** | **-1.4** |
| NJ2 | | | | S | **S** | **20 05 48.5** | **-0.4** |
| NJ2 | | | | sS | **sS** | **20 06 25.5** | **-2.6** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| NJ2 | | | | PMZ | | | |
| | comp=Z,300nm,7.9s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=Z,3µm,27.5s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=Z,2µm,29.7s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=Z,2µm,25.0s | | | | | | |
| **BGU** | **Big Grassy Mou** | **81.34** | **42** | *e*P | **P** | **19 55 45.0** | **-0.9** |
| | comp=Z,37nm,1.5s | | | | | | |
| **TMUT** | **Trail Mountain** | **81.67** | **44** | *e*P | **P** | **19 55 47.7** | **-0.2** |
| | comp=Z,84nm,0.9s | | | | | | |
| **PMR** | **Palmer** | **81.70** | **12** | *e*P | **P** | **19 55 46.2** | **-0.8** |
| PMR | | | | *e**PP | **pP** | **19 56 09.9** | **-0.1** |
| PMR | | | | pmax | pmax | | |
| | comp=Z,123nm,1.5s | | | | | | |
| **PMR** | **Palmer** | **81.70** | **12** | *e*P | **P** | **19 55 46.2** | **-0.8** |
| | comp=Z,122nm,1.5s | | | | | | |
| PMR | | | | *e*pP | **pP** | **19 56 09.8** | **-0.1** |
| **MPU** | **Maple Canyon** | **81.76** | **43** | *e*P | **P** | **19 55 47.0** | **-1.2** |
| | comp=Z,68nm,1.2s | | | | | | |
| **SPUT** | **South Promonto** | **81.92** | **42** | *e*P | **P** | **19 55 46.1** | **-2.8** |
| | comp=Z,88nm,1.8s | | | | | | |
| **HLID** | **Hailey** | **81.93** | **39** | P | **P** | **19 55 48.6** | **-0.4** |
| | baz=82 | | | | | | |
| **HLID** | **Hailey** | **81.93** | **39** | *e*P | **P** | **19 55 48.6** | **-0.4** |
| | comp=Z,24nm,0.9s | | | | | | |
| **HVU** | **Hansel Valley** | **81.96** | **41** | *e*P | **P** | **19 55 48.3** | **-0.8** |
| HVU | | | | pmax | pmax | | |
| | comp=Z,22nm,1.0s | | | | | | |
| **HVU** | **Hansel Valley** | **81.96** | **41** | *e*P | **P** | **19 55 48.3** | **-0.8** |
| | comp=Z,22nm,1.0s | | | | | | |
| **DIV** | **Divide** | **81.97** | **13** | *e*P | **P** | **19 55 47.6** | **-1.0** |
| | comp=Z,68nm,0.9s | | | | | | |
| DIV | | | | *e*pP | **pP** | **19 56 12.1** | **+0.5** |
| **SRU** | **San Rafael** | **82.03** | **45** | *e*P | **P** | **19 55 49.5** | **-0.1** |
| SRU | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| **SRU** | **San Rafael** | **82.03** | **45** | *e*P | **P** | **19 55 49.5** | **-0.1** |
| | comp=Z,16nm,1.1s | | | | | | |
| **CTU** | **Camp Tracy** | **82.04** | **43** | *e*P | **P** | **19 55 49.2** | **-0.4** |
| | comp=Z,79nm,1.8s | | | | | | |
| **DLV** | **T Lat** | **82.05** | **285** | *e*P | **P** | **19 55 49.7** | **-0.5** |
| | comp=Z,54nm,1.6s | | | | | | |
| **SML** | **Sawmill** | **82.05** | **12** | *e*P | **P** | **19 55 51.9** | **+2.9** |
| SML | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | |
| **SML** | **Sawmill** | **82.05** | **12** | *e*P | **P** | **19 55 51.9** | **+2.9** |
| | comp=Z,9.5nm,1.5s | | | | | | |
| **BMRM** | **Bremner River** | **82.09** | **14** | *e*P | **P** | **19 55 47.8** | **-1.5** |
| | comp=Z,77nm,1.1s | | | | | | |
| **LAZ** | **Ladron** | **82.10** | **50** | *e*P | **P** | **19 55 50.4** | **+0.3** |
| | comp=Z,14nm,1.1s | | | | | | |
| **MNTX** | **Cornudas Mount** | **82.18** | **53** | P | **P** | **19 55 50.5** | **+0.2** |
| | baz=82 | | | | | | |
| **MNTX** | **Cornudas Mount** | **82.18** | **53** | *e*P | **P** | **19 55 50.2** | **-0.1** |
| | comp=Z,62nm,1.1s | | | | | | |
| **KLR** | **Kul'dur** | **82.33** | **328** | *e*P | P | 19 55 47.2 | -3.5 |
| KLR | | | | *e* | | 19 56 11.0 | |
| KLR | | | | *e*S | **S** | **20 06 00.0** | **+0.6** |
| KLR | | | | *e*SS | **SS** | **20 11 19.0** | **-3.2** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,43nm,1.4s | | | | | | |
| **MA2** | **Magadan** | **82.39** | **343** | *e*P | **P** | **19 55 51.1** | **+0.3** |
| **LPM** | **Los Pinos Moun** | **82.43** | **50** | *e*P | **P** | **19 55 51.6** | **-0.2** |
| | comp=Z,40nm,1.2s | | | | | | |
| **MVCO** | **Mesa Verde** | **82.47** | **47** | P | **P** | **19 55 51.6** | **-0.4** |
| | baz=83 | | | | | | |
| **TCUT** | **Toone Canyon** | **82.48** | **43** | *e*P | **P** | **19 55 51.6** | **-0.4** |
| | comp=Z,322nm,1.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **82.48** | **56** | P | **P** | **19 55 52.3** | **+0.2** |
| | comp=Z,31nm,1.2s,baz=225,slow=5.1,SNR=93 | | | | | | |
| TXAR | | | | LR | LR | 20 24 31.9 | |
| | comp=Z,453nm,21.8s,baz=0.0,slow=30 | | | | | | |
| **DL2** | **Dalian** | **82.54** | **315** | P | P | 19 55 56.2 | +4.2 |
| DL2 | | | | pP | pP | 19 56 17.6 | +2.6 |
| DL2 | | | | S | **S** | **20 06 07.3** | **+5.3** |
| DL2 | | | | PMZ | | | |
| | comp=Z,43nm,1.1s | | | | | | |
| DL2 | | | | PMZ | | | |
| | comp=Z,120nm,3.7s | | | | | | |
| DL2 | | | | LN | | | |
| | comp=Z,240nm,19.4s | | | | | | |
| DL2 | | | | LZ | | | |
| | comp=Z,280nm,16.5s | | | | | | |
| **CN2** | **Changchun** | **82.66** | **321** | *e*P | **P** | **19 55 53.4** | **+0.9** |
| CN2 | | | | *e*pP | **pP** | **19 56 16.9** | **+1.4** |
| CN2 | | | | *e*S | **S** | **20 06 02.1** | **-0.9** |
| CN2 | | | | PMZ | | | |
| | comp=Z,30nm,0.8s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,200nm,4.0s | | | | | | |
| **SNY** | **Shenyang** | **82.76** | **318** | ⇑P | **P** | **19 55 53.6** | **+0.5** |
| SNY | | | | S | **S** | **20 06 07.7** | **+3.6** |
| SNY | | | | PMZ | | | |
| | comp=Z,32nm,1.2s | | | | | | |
| SNY | | | | PMZ | | | |
| | comp=Z,380nm,11.4s | | | | | | |
| SNY | | | | LN | | | |
| | comp=Z,420nm,25.1s | | | | | | |
| SNY | | | | LZ | | | |
| | comp=Z,500nm,33.6s | | | | | | |
| **PV04** | **Paradox Valley** | **82.76** | **46** | *e*P | **P** | **19 55 53.2** | **-0.2** |
| **ANMO** | **Albuquerque** | **82.85** | **50** | *d i*P | **P** | **19 55 53.7** | **-0.3** |
| ANMO | | | | *i* *PP | **pP** | **19 56 18.0** | **+1.0** |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,64nm,1.3s | | | | | | |
| **ANMO** | **Albuquerque** | **82.85** | **50** | *e*P | **P** | **19 55 53.8** | **-0.2** |
| | comp=Z,63nm,1.3s | | | | | | |
| ANMO | | | | *e*pP | **pP** | **19 56 16.1** | **-0.9** |
| **PV01** | **Paradox Valley** | **82.87** | **46** | *e*P | **P** | **19 55 53.8** | **-0.2** |
| **NEW** | **Newport** | **83.10** | **34** | *e*P | **P** | **19 55 53.8** | **-1.0** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,29nm,1.3s | | | | | | |
| **NEW** | **Newport** | **83.10** | **34** | P | **P** | **19 55 53.4** | **-1.4** |
| | baz=83,SNR=9.1 | | | | | | |
| **NEW** | **Newport** | **83.10** | **34** | *e*P | **P** | **19 55 53.8** | **-1.0** |
| | comp=Z,29nm,1.3s | | | | | | |
| **GDL2** | **Guadalupe Moun** | **83.18** | **53** | *e*P | **P** | **19 55 55.8** | **+0.1** |
| | comp=Z,27nm,1.1s | | | | | | |
| **KTH** | **Kantishna Hill** | **83.19** | **10** | *e*P | **P** | **19 55 53.2** | **-1.7** |
| | comp=Z,42nm,1.2s | | | | | | |
| **TRF** | **Thorofare Moun** | **83.20** | **10** | *e*P | **P** | **19 55 53.8** | **-1.3** |
| | comp=Z,69nm,0.8s | | | | | | |
| **QIZ** | **Qiongzhong** | **83.33** | **292** | P | **P** | **19 55 56.1** | **-0.4** |
| QIZ | | | | S | S | 20 06 18.1 | +7.3 |
| QIZ | | | | PMZ | | | |
| | comp=Z,41nm,2.3s | | | | | | |
| **AHID** | **Auburn Hatcher** | **83.54** | **41** | *e*P | **P** | **19 55 57.0** | **-0.4** |
| | comp=Z,17nm,0.6s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **83.57** | **39** | *e*P | **P** | **19 55 57.0** | **-0.5** |
| **BPAW** | **Bear Paw Mtn.** | **83.69** | **10** | *e*P | **P** | **19 55 55.5** | **-1.9** |
| | comp=Z,6.1nm,1.3s | | | | | | |
| **MCK** | **McKinley** | **83.70** | **11** | *e*P | **P** | **19 55 56.0** | **-1.5** |
| MCK | | | | *e**PP | **pP** | **19 56 21.0** | **+0.5** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,91nm,0.8s | | | | | | |
| **MCK** | **McKinley** | **83.70** | **11** | *e*P | **P** | **19 55 56.0** | **-1.5** |
| | comp=Z,91nm,0.8s | | | | | | |
| MCK | | | | *e*pP | **pP** | **19 56 20.9** | **+0.5** |
| **S22A** | **4UR Ranch, Cre** | **83.89** | **47** | P | **P** | **19 55 59.3** | **0.0** |
| | baz=84,SNR=43 | | | | | | |
| **CPRX** | **Cap Rock** | **83.92** | **53** | *e*P | **P** | **19 55 59.6** | **+0.2** |
| | comp=Z,9.5nm,0.8s | | | | | | |
| **529A** | **Stev Forest Ra** | **83.96** | **56** | P | **P** | **19 55 59.4** | **-0.2** |
| | baz=84 | | | | | | |
| **REDW** | **Red Top Meadow** | **84.01** | **41** | *e*P | **P** | **19 55 58.8** | **-1.0** |
| | comp=Z,67nm,1.2s | | | | | | |
| **DLMT** | **Dillon** | **84.01** | **38** | *e*P | **P** | **19 55 59.0** | **-0.6** |
| | comp=Z,49nm,1.2s | | | | | | |
| **TPAW** | **Teton Pass** | **84.01** | **41** | *e*P | **P** | **19 55 59.4** | **-0.4** |
| | comp=Z,63nm,1.2s | | | | | | |
| **MENT** | **Mentasta** | **84.03** | **13** | *e*P | **P** | **19 55 58.3** | **-0.9** |
| **MSO** | **Missoula** | **84.03** | **37** | P | **P** | **19 55 58.2** | **-1.4** |
| | baz=84,SNR=12 | | | | | | |
| **WHN** | **Wuhan** | **84.05** | **305** | P | **P** | **19 56 00.0** | **+0.1** |
| WHN | | | | S | **S** | **20 06 21.9** | **+4.4** |
| WHN | | | | PMZ | | | |
| | comp=Z,1µm,6.7s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,3µm,33.2s | | | | | | |
| **O20A** | **White River Ci** | **84.07** | **45** | P | **P** | **19 55 59.4** | **-0.7** |
| | baz=84,SNR=6.9 | | | | | | |
| **SNOW** | **Snow King Moun** | **84.12** | **41** | *e*P | **P** | **19 56 00.3** | **0.0** |
| | comp=Z,64nm,1.1s | | | | | | |
| **BSMT** | **Bassoo Peak** | **84.14** | **36** | *e*P | **P** | **19 55 58.8** | **-1.4** |
| | comp=Z,78nm,1.5s | | | | | | |
| **IMW** | **Indian Meadow** | **84.23** | **40** | *e*P | **P** | **19 56 00.3** | **-0.6** |
| | comp=Z,66nm,1.2s | | | | | | |
| **MOOW** | **Moose Ponds** | **84.27** | **41** | *e*P | **P** | **19 56 00.3** | **-0.8** |
| | comp=Z,30nm,1.3s | | | | | | |
| **LOHW** | **Long Hollow** | **84.29** | **41** | *e*P | **P** | **19 56 00.4** | **-0.8** |
| | comp=Z,43nm,1.3s | | | | | | |
| **LRM** | **Limekiln Ridge** | **84.34** | **38** | *e*P | **P** | **19 56 00.3** | **-1.1** |
| | comp=Z,2µm,2.2s | | | | | | |
| **JTMT** | **Jette** | **84.36** | **36** | *e*P | **P** | **19 55 59.8** | **-1.5** |
| | comp=Z,15nm,1.2s | | | | | | |
| **SWMT** | **Swartz Lake** | **84.38** | **36** | *e*P | **P** | **19 55 59.9** | **-1.6** |
| | comp=Z,20nm,1.3s | | | | | | |
| **TIA** | **Tai'an** | **84.41** | **311** | ⇓P | **P** | **19 56 02.6** | **+0.9** |
| TIA | | | | S | **S** | **20 06 21.2** | **+0.2** |
| TIA | | | | PMZ | | | |
| | comp=Z,30nm,1.0s | | | | | | |
| TIA | | | | LN | | | |
| | comp=Z,400nm,17.6s | | | | | | |
| TIA | | | | LE | | | |
| | comp=Z,460nm,21.8s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=Z,780nm,26.1s | | | | | | |
| **429A** | **Davenport Ranc** | **84.42** | **56** | P | **P** | **19 56 01.5** | **-0.4** |
| | baz=84,SNR=37 | | | | | | |
| **QLMT** | **Earthquake Lak** | **84.42** | **39** | *e*P | **P** | **19 56 01.8** | **-0.1** |
| | comp=Z,10.0nm,1.1s | | | | | | |
| QLMT | | | | *e*pP | **pP** | **19 56 23.9** | **-0.9** |
| **SMCO** | **Snowmass** | **84.46** | **46** | *e*P | **P** | **19 56 02.2** | **-0.2** |
| | comp=Z,56nm,1.3s | | | | | | |
| **CHMT** | **Chamberlain Mo** | **84.47** | **37** | *e*P | **P** | **19 56 00.8** | **-1.3** |
| | comp=Z,19nm,1.1s | | | | | | |
| **FLWY** | **Flagg Ranch** | **84.47** | **40** | *e*P | **P** | **19 56 02.2** | **+0.1** |
| | comp=Z,21nm,0.5s | | | | | | |
| **228A** | **UT Block 9, Go** | **84.50** | **54** | P | **P** | **19 56 02.0** | **-0.3** |
| | baz=85,SNR=6.4 | | | | | | |
| **BW06** | **Boulder Array** | **84.51** | **42** | *e*P | **P** | **19 56 01.0** | **-1.4** |
| | comp=Z,48nm,1.2s | | | | | | |
| **SLMT** | **Seeley Lake** | **84.52** | **37** | *e*P | **P** | **19 56 00.4** | **-1.8** |
| | comp=Z,40nm,1.4s | | | | | | |
| **DOT** | **Dot Lake** | **84.58** | **13** | *e*P | **P** | **19 56 01.0** | **-1.0** |
| | comp=Z,99nm,0.9s | | | | | | |
| **YFT** | **Old Faithful** | **84.58** | **40** | *e*P | **P** | **19 56 03.9** | **+1.2** |
| | comp=Z,48nm,1.2s | | | | | | |
| **YMR** | **Madison River** | **84.62** | **40** | *e*P | **P** | **19 56 03.0** | **+0.2** |
| | comp=Z,45nm,0.9s | | | | | | |
| **530A** | **J-C Ranch, Com** | **84.66** | **56** | P | **P** | **19 56 02.8** | **-0.3** |
| | baz=85,SNR=9.2 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **84.71** | **55** | P | **P** | **19 56 03.2** | **-0.2** |
| | baz=85 | | | | | | |
| **H17A** | **Grant Village** | **84.71** | **40** | P | **P** | **19 56 03.3** | **0.0** |
| | baz=85 | | | | | | |
| **H17A** | **Grant Village** | **84.71** | **40** | *e*P | **P** | **19 56 04.2** | **+0.8** |
| | comp=Z,34nm,1.1s | | | | | | |
| H17A | | | | *e*pP | **pP** | **19 56 25.9** | **-0.5** |
| **BOZ** | **Bozeman (W)** | **84.73** | **39** | *e*P | **P** | **19 56 02.4** | **-0.9** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,59nm,1.1s | | | | | | |
| **BOZ** | **Bozeman (W)** | **84.73** | **39** | P | **P** | **19 56 02.8** | **-0.5** |
| | baz=85 | | | | | | |
| **BOZ** | **Bozeman (W)** | **84.73** | **39** | *e*P | **P** | **19 56 02.4** | **-0.9** |
| | comp=Z,59nm,1.1s | | | | | | |
| **128A** | **Castleberry Fa** | **84.79** | **53** | P | **P** | **19 56 03.4** | **-0.4** |
| | baz=85,SNR=23 | | | | | | |
| **SEY** | **Seymchan** | **84.80** | **345** | P | **P** | **19 56 01.5** | **-1.5** |
| | comp=Z,11nm,0.8s,baz=147,slow=5.0,SNR=16 | | | | | | |
| SEY | | | | pP | **pP** | **19 56 25.2** | **-0.8** |
| | comp=Z,77nm,1.0s,baz=146,slow=5.8,SNR=17 | | | | | | |
| **SEY** | **Seymchan** | **84.80** | **345** | *ce*P | **P** | **19 56 02.8** | **-0.2** |
| **YNR** | **Norris Junctio** | **84.82** | **40** | *e*P | **P** | **19 56 04.4** | **+0.6** |
| | comp=Z,97nm,1.3s | | | | | | |
| **SDCO** | **Great Sand Dun** | **84.82** | **48** | P | **P** | **19 56 03.6** | **-0.5** |
| | baz=85,SNR=8.2 | | | | | | |
| **SDCO** | **Great Sand Dun** | **84.82** | **48** | *e*P | **P** | **19 56 03.4** | **-0.7** |
| | comp=Z,27nm,1.1s | | | | | | |
| **LKWY** | **Lake** | **84.91** | **40** | *e*P | **P** | **19 56 05.5** | **+1.2** |
| LKWY | | | | pmax | pmax | | |
| | comp=Z,41nm,1.0s | | | | | | |
| **LKWY** | **Lake** | **84.91** | **40** | *e*P | **P** | **19 56 05.5** | **+1.2** |
| | comp=Z,41nm,1.0s | | | | | | |
| **COLA** | **College** | **84.94** | **11** | *d i*P | **P** | **19 56 02.0** | **-1.6** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,111nm,1.0s | | | | | | |
| **COLA** | **College** | **84.94** | **11** | *e*P | **P** | **19 56 02.7** | **-0.9** |
| | comp=Z,87nm,0.8s | | | | | | |
| **631A** | **Perdido Creek** | **84.97** | **57** | P | **P** | **19 56 04.3** | **-0.3** |
| | baz=85,SNR=8.1 | | | | | | |
| **430A** | **Baggett Ranch,** | **85.00** | **56** | P | **P** | **19 56 04.2** | **-0.6** |
| | baz=85,SNR=10 | | | | | | |
| **832A** | **Faith Ranch, C** | **85.01** | **58** | P | **P** | **19 56 04.3** | **-0.6** |
| | baz=85,SNR=8.9 | | | | | | |
| **ILAR** | **Eielson Array** | **85.02** | **11** | P | **P** | **19 56 02.6** | **-1.5** |
| | comp=Z,8.7nm,0.8s,baz=221,slow=5.7,SNR=67 | | | | | | |
| ILAR | | | | pP | **pP** | **19 56 26.5** | **-0.7** |
| | comp=Z,24nm,1.0s,baz=210,slow=2.7,SNR=7.5 | | | | | | |
| ILAR | | | | LR | LR | 20 30 08.4 | |
| | comp=Z,113nm,18.5s,baz=212,slow=33 | | | | | | |
| **229A** | **Bryant Ranch,** | **85.04** | **54** | P | **P** | **19 56 04.7** | **-0.4** |
| | baz=85 | | | | | | |
| **MSTX** | **Muleshoe** | **85.15** | **52** | P | **P** | **19 56 05.0** | **-0.5** |
| | baz=85,SNR=23 | | | | | | |
| **MSTX** | **Muleshoe** | **85.15** | **52** | *e*P | **P** | **19 56 05.3** | **-0.3** |
| | comp=Z,110nm,1.1s | | | | | | |
| **Z28A** | **Tucker Farm, M** | **85.15** | **53** | P | **P** | **19 56 04.9** | **-0.7** |
| | baz=85,SNR=10 | | | | | | |
| **HRY** | **Holter Researc** | **85.18** | **38** | *e*P | **P** | **19 56 05.1** | **-0.4** |
| **732A** | **Laxson Ranch,** | **85.19** | **58** | P | **P** | **19 56 05.9** | **+0.1** |
| | baz=85 | | | | | | |
| **MAW** | **Mawson** | **85.23** | **199** | P | **P** | **19 56 06.9** | **+1.6** |
| | comp=Z,22nm,0.8s,baz=127,slow=6.4,SNR=70 | | | | | | |
| MAW | | | | LR | LR | 20 31 09.7 | |
| | comp=Z,538nm,21.7s,baz=100,slow=33 | | | | | | |
| **MAW** | **Mawson** | **85.23** | **199** | P | **P** | **19 56 06.8** | **+1.6** |
| | baz=85,SNR=16 | | | | | | |
| **129A** | **Stewart Farms,** | **85.27** | **54** | P | **P** | **19 56 05.8** | **-0.4** |
| | baz=85 | | | | | | |
| **531A** | **Rocksprings** | **85.30** | **56** | P | **P** | **19 56 06.4** | **+0.1** |
| | baz=85,SNR=7.6 | | | | | | |
| **330A** | **Mertzon** | **85.30** | **55** | P | **P** | **19 56 05.2** | **-1.2** |
| | baz=85 | | | | | | |
| **933A** | **Laredo** | **85.31** | **59** | P | **P** | **19 56 06.7** | **+0.3** |
| | baz=85,SNR=11 | | | | | | |
| **T25A** | **Trinidad** | **85.32** | **49** | P | **P** | **19 56 05.9** | **-0.6** |
| | baz=85 | | | | | | |
| **431A** | **Sonora** | **85.45** | **56** | P | **P** | **19 56 06.3** | **-0.8** |
| | baz=86,SNR=5.5 | | | | | | |
| **833A** | **Chaparral WMA,** | **85.49** | **58** | P | **P** | **19 56 07.4** | **+0.1** |
| | baz=86 | | | | | | |
| **Y28A** | **McKinney Farm,** | **85.52** | **52** | P | **P** | **19 56 06.8** | **-0.6** |
| | baz=86,SNR=8.0 | | | | | | |
| **230A** | **Sterling City** | **85.55** | **55** | P | **P** | **19 56 06.9** | **-0.7** |
| | baz=86,SNR=6.2 | | | | | | |
| **034A** | **Hebbronville** | **85.59** | **60** | P | **P** | **19 56 08.9** | **+1.1** |
| | baz=86,SNR=24 | | | | | | |
| **Q24A** | **Divide** | **85.62** | **47** | P | **P** | **19 56 07.4** | **-0.7** |
| | baz=86 | | | | | | |
| **632A** | **Uvalde** | **85.64** | **57** | P | **P** | **19 56 08.2** | **+0.2** |
| | baz=86,SNR=5.3 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **85.66** | **53** | P | **P** | **19 56 07.4** | **-0.7** |
| | baz=86,SNR=12 | | | | | | |
| **ISCO** | **Idaho Springs** | **85.69** | **46** | P | **P** | **19 56 07.5** | **-0.9** |
| | baz=86 | | | | | | |
| **733A** | **Divot King Ran** | **85.73** | **58** | P | **P** | **19 56 08.5** | **+0.1** |
| | baz=86 | | | | | | |
| **532A** | **Rocksprings** | **85.79** | **57** | P | **P** | **19 56 08.6** | **-0.1** |
| | baz=86,SNR=20 | | | | | | |
| **X28A** | **Dimmitt** | **85.81** | **52** | P | **P** | **19 56 08.6** | **-0.3** |
| | baz=86 | | | | | | |
| **331A** | **San Angelo** | **85.85** | **55** | P | **P** | **19 56 08.1** | **-1.0** |
| | baz=86,SNR=8.1 | | | | | | |
| **V27A** | **Dan Oppiter Fa** | **85.86** | **51** | P | **P** | **19 56 08.4** | **-0.7** |
| | baz=86 | | | | | | |
| **035Z** | **Hargill** | **85.87** | **61** | P | **P** | **19 56 09.6** | **+0.4** |
| | baz=86 | | | | | | |
| **RLMT** | **Red Lodge** | **85.89** | **40** | P | **P** | **19 56 08.5** | **-0.7** |
| | baz=86 | | | | | | |
| **RLMT** | **Red Lodge** | **85.89** | **40** | *e*P | **P** | **19 56 08.8** | **-0.3** |
| | comp=Z,16nm,1.0s | | | | | | |
| RLMT | | | | *e*pP | **pP** | **19 56 28.9** | **-3.3** |
| **T26A** | **Comanche Natio** | **85.92** | **49** | P | **P** | **19 56 08.6** | **-0.9** |
| | baz=86,SNR=5.1 | | | | | | |
| **934A** | **Benavides** | **85.93** | **59** | P | **P** | **19 56 10.4** | **+0.9** |
| | baz=86,SNR=6.6 | | | | | | |
| **Y29A** | **Porterfield Fa** | **85.93** | **53** | P | **P** | **19 56 08.9** | **-0.6** |
| | baz=86,SNR=11 | | | | | | |
| **130A** | **Snyder** | **85.95** | **54** | P | **P** | **19 56 09.1** | **-0.4** |
| | baz=86,SNR=8.9 | | | | | | |
| **N23A** | **Red Feather La** | **85.97** | **45** | P | **P** | **19 56 09.1** | **-0.6** |
| | baz=86 | | | | | | |
| **GCMT** | **Greycliff** | **85.98** | **39** | *e*P | **P** | **19 56 09.4** | **-0.1** |
| | comp=Z,23nm,1.1s | | | | | | |
| GCMT | | | | *e*pP | **pP** | **19 56 32.0** | **-0.6** |
| **DAWY** | **Dawson** | **86.00** | **14** | *e*P | **P** | **19 56 07.9** | **-1.1** |
| **JCT** | **Junction City** | **86.01** | **56** | *e*P | **P** | **19 56 09.6** | **-0.3** |
| JCT | | | | pmax | pmax | | |
| | comp=Z,15nm,0.3s | | | | | | |
| **JCT** | **Junction City** | **86.01** | **56** | P | **P** | **19 56 09.2** | **-0.6** |
| | baz=86,SNR=5.2 | | | | | | |
| **JCT** | **Junction City** | **86.01** | **56** | *e*P | **P** | **19 56 09.6** | **-0.3** |
| | comp=Z,15nm,0.3s | | | | | | |
| **035A** | **Encino** | **86.02** | **60** | P | **P** | **19 56 10.8** | **+0.9** |
| | baz=86,SNR=7.3 | | | | | | |
| **834A** | **Tilden** | **86.10** | **59** | P | **P** | **19 56 11.1** | **+0.8** |
| | baz=86,SNR=18 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **86.11** | **53** | P | **P** | **19 56 09.3** | **-1.0** |
| | baz=86,SNR=18 | | | | | | |
| **633A** | **Saathoff Ranch** | **86.11** | **58** | P | **P** | **19 56 10.7** | **+0.4** |
| | baz=86,SNR=18 | | | | | | |
| **W28A** | **Vega** | **86.11** | **51** | P | **P** | **19 56 09.4** | **-0.9** |
| | baz=86 | | | | | | |
| **X29A** | **Tulia** | **86.15** | **52** | P | **P** | **19 56 10.3** | **-0.2** |
| | baz=86 | | | | | | |
| **U27A** | **Thompson Grove** | **86.15** | **50** | P | **P** | **19 56 09.4** | **-1.1** |
| | baz=86 | | | | | | |
| **432A** | **Menard** | **86.17** | **56** | P | **P** | **19 56 10.0** | **-0.7** |
| | baz=86,SNR=20 | | | | | | |
| **231A** | **Bronte** | **86.19** | **55** | P | **P** | **19 56 10.1** | **-0.6** |
| | baz=86,SNR=25 | | | | | | |
| **EGAK** | **Eagle** | **86.20** | **13** | *e*P | **P** | **19 56 09.2** | **-0.7** |
| | comp=Z,48nm,0.9s | | | | | | |
| **S26A** | **Kim** | **86.21** | **49** | P | **P** | **19 56 09.9** | **-0.9** |
| | baz=86,SNR=7.8 | | | | | | |
| **V28A** | **Channing** | **86.31** | **51** | P | **P** | **19 56 10.6** | **-0.7** |
| | baz=86 | | | | | | |
| **AMTX** | **Amarillo** | **86.35** | **52** | P | **P** | **19 56 11.0** | **-0.5** |
| | baz=86 | | | | | | |
| **AMTX** | **Amarillo** | **86.35** | **52** | *e*P | **P** | **19 56 10.8** | **-0.6** |
| | comp=Z,40nm,0.9s | | | | | | |
| AMTX | | | | *e*pP | **pP** | **19 56 32.5** | **-2.1** |
| **734A** | **La Parita Cree** | **86.37** | **58** | P | **P** | **19 56 11.7** | **+0.1** |
| | baz=86 | | | | | | |
| **K22A** | **Casper** | **86.41** | **43** | P | **P** | **19 56 10.7** | **-0.9** |
| | baz=86 | | | | | | |
| **K22A** | **Casper** | **86.41** | **43** | *e*P | **P** | **19 56 10.6** | **-1.1** |
| | comp=Z,9.9nm,1.0s | | | | | | |
| K22A | | | | *e*pP | **pP** | **19 56 34.6** | **-0.2** |
| **332A** | **Millersview** | **86.42** | **56** | P | **P** | **19 56 11.3** | **-0.5** |
| | baz=86,SNR=45 | | | | | | |
| **131A** | **Roby** | **86.43** | **54** | P | **P** | **19 56 11.2** | **-0.7** |
| | baz=86,SNR=7.8 | | | | | | |
| **533A** | **Kerrville** | **86.46** | **57** | P | **P** | **19 56 11.8** | **-0.3** |
| | baz=86,SNR=26 | | | | | | |
| **W29A** | **Amraillo** | **86.47** | **51** | P | **P** | **19 56 11.3** | **-0.7** |
| | baz=86 | | | | | | |
| **PHWY** | **Pilot Hill** | **86.48** | **45** | *e*P | P | 19 56 08.8 | -3.4 |
| | comp=Z,9.4nm,1.1s | | | | | | |
| **T27A** | **Campo** | **86.50** | **49** | P | **P** | **19 56 10.9** | **-1.4** |
| | baz=87 | | | | | | |
| **R26A** | **Arlington** | **86.52** | **48** | P | **P** | **19 56 11.2** | **-1.0** |
| | baz=87,SNR=8.7 | | | | | | |
| **Y30A** | **Stafford Cattl** | **86.52** | **53** | P | **P** | **19 56 11.6** | **-0.8** |
| | baz=87,SNR=8.0 | | | | | | |
| **U28A** | **Mallet** | **86.57** | **50** | P | **P** | **19 56 11.3** | **-1.3** |
| | baz=87 | | | | | | |
| **IPM** | **Ipoh** | **86.61** | **276** | *e*P | **P** | **19 56 13.9** | **+0.8** |
| | comp=Z,36nm,0.8s | | | | | | |
| **S27A** | **Las Animas** | **86.64** | **49** | P | **P** | **19 56 11.4** | **-1.5** |
| | baz=87 | | | | | | |
| **433A** | **Art** | **86.68** | **56** | P | **P** | **19 56 12.7** | **-0.5** |
| | baz=87,SNR=49 | | | | | | |
| **232A** | **Coleman** | **86.69** | **55** | P | **P** | **19 56 12.7** | **-0.5** |
| | baz=87,SNR=34 | | | | | | |
| **COLD** | **Coldfoot** | **86.71** | **9** | *e*P | **P** | **19 56 12.3** | **-0.1** |
| | comp=Z,40nm,1.0s | | | | | | |
| COLD | | | | *e*pP | **pP** | **19 56 34.3** | **-1.2** |
| **Q26A** | **Hugo** | **86.74** | **47** | P | **P** | **19 56 12.3** | **-1.1** |
| | baz=87 | | | | | | |
| **634A** | **China Grove, S** | **86.75** | **58** | P | **P** | **19 56 13.5** | **+0.1** |
| | baz=87 | | | | | | |
| **835A** | **Beeville** | **86.75** | **59** | P | **P** | **19 56 14.8** | **+1.3** |
| | baz=87 | | | | | | |
| **X30A** | **Coker Ranch, T** | **86.77** | **52** | P | **P** | **19 56 13.0** | **-0.5** |
| | baz=87 | | | | | | |
| **BJT** | **Baijiatuau** | **86.79** | **314** | *e*P | **P** | **19 56 13.8** | **+0.4** |
| BJT | | | | *e**PP | **pP** | **19 56 37.1** | **+0.6** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,39nm,1.5s | | | | | | |
| **BJT** | **Baijiatuau** | **86.79** | **314** | *e*P | **P** | **19 56 13.8** | **+0.4** |
| | comp=Z,39nm,1.5s | | | | | | |
| BJT | | | | *e*pP | **pP** | **19 56 37.1** | **+0.6** |
| **BJI** | **Beijing** | **86.80** | **314** | P | **P** | **19 56 14.4** | **+1.0** |
| BJI | | | | pP | **pP** | **19 56 36.9** | **+0.4** |
| BJI | | | | PP | **PP** | **19 59 41.2** | **+3.9** |
| BJI | | | | SKS | **SKSac** | **20 06 32.9** | **+0.4** |
| BJI | | | | S | **S** | **20 06 47.6** | **+3.4** |
| BJI | | | | SS | **SS** | **20 12 32.1** | **+3.7** |
| BJI | | | | PMZ | | | |
| | comp=Z,30nm,1.2s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,290nm,4.3s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,390nm,18.1s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,190nm,17.2s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,540nm,40.8s | | | | | | |
| **Z31A** | **Sharp Cattle R** | **86.87** | **54** | P | **P** | **19 56 13.5** | **-0.5** |
| | baz=87,SNR=13 | | | | | | |
| **V29A** | **Stinnett** | **86.88** | **51** | P | **P** | **19 56 13.2** | **-0.9** |
| | baz=87 | | | | | | |
| **534A** | **Blanco** | **86.89** | **57** | P | **P** | **19 56 14.0** | **-0.1** |
| | baz=87,SNR=30 | | | | | | |
| **BILL** | **Bilibino** | **86.93** | **353** | *d i*P | **P** | **19 56 12.7** | **-0.7** |
| BILL | | | | *i* *PP | **pP** | **19 56 36.1** | **-0.5** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,51nm,1.6s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,225nm,19.0s | | | | | | |
| **BILL** | **Bilibino** | **86.93** | **353** | *e*P | **P** | **19 56 12.9** | **-0.5** |
| | comp=Z,80nm,1.0s | | | | | | |
| BILL | | | | *e*pP | **pP** | **19 56 36.8** | **+0.2** |
| **T28A** | **Walsh** | **86.97** | **50** | P | **P** | **19 56 13.2** | **-1.3** |
| | baz=87 | | | | | | |
| **R27A** | **Eads** | **86.97** | **48** | P | **P** | **19 56 13.4** | **-1.1** |
| | baz=87 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **86.98** | **54** | P | **P** | **19 56 14.1** | **-0.5** |
| | baz=87,SNR=27 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **86.98** | **54** | *e*P | **P** | **19 56 14.2** | **-0.3** |
| | comp=Z,180nm,1.1s | | | | | | |
| **735A** | **Kenedy** | **86.98** | **59** | P | **P** | **19 56 15.1** | **+0.5** |
| | baz=87 | | | | | | |
| **333A** | **Richland Sprin** | **86.99** | **56** | P | **P** | **19 56 14.0** | **-0.6** |
| | baz=87,SNR=29 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **87.04** | **53** | P | **P** | **19 56 13.9** | **-0.9** |
| | baz=87 | | | | | | |
| **EGMT** | **Eagleton** | **87.07** | **37** | P | **P** | **19 56 13.8** | **-0.9** |
| | baz=87,SNR=5.1 | | | | | | |
| **EGMT** | **Eagleton** | **87.07** | **37** | *e*P | **P** | **19 56 13.9** | **-0.7** |
| **P26A** | **Davis Ranch, A** | **87.14** | **47** | P | **P** | **19 56 13.9** | **-1.5** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=87 | | | | | | |
| 635A | Leesville | 87.21 | 58 | P | P | 19 56 15.9 | +0.2 |
| | baz=87,SNR=14 | | | | | | |
| W30A | Crocket Farms | 87.30 | 52 | P | P | 19 56 15.3 | -0.8 |
| | baz=87 | | | | | | |
| U29A | Oasis Ranch, S | 87.30 | 50 | P | P | 19 56 14.9 | -1.2 |
| | baz=87 | | | | | | |
| S28A | Manter | 87.32 | 49 | P | P | 19 56 13.9 | -2.3 |
| | baz=87 | | | | | | |
| 233A | Rising Star | 87.32 | 55 | P | P | 19 56 15.8 | -0.4 |
| | baz=87 | | | | | | |
| 434A | Burnet | 87.36 | 57 | P | P | 19 56 16.1 | -0.3 |
| | baz=87,SNR=49 | | | | | | |
| Z32A | Haskell | 87.38 | 54 | P | P | 19 56 16.0 | -0.5 |
| | baz=88,SNR=32 | | | | | | |
| KSCO | Kaye Shedlock’ | 87.41 | 48 | P | P | 19 56 15.4 | -1.1 |
| | baz=88 | | | | | | |
| V30A | Spur Ranch, Mi | 87.45 | 51 | P | P | 19 56 16.4 | -0.4 |
| | baz=88 | | | | | | |
| O26A | Horse Wrangler | 87.46 | 46 | P | P | 19 56 15.7 | -1.2 |
| | baz=88 | | | | | | |
| M25A | Palm-Egli Farm | 87.48 | 45 | P | P | 19 56 16.1 | -0.8 |
| | baz=88 | | | | | | |
| X31A | McDonald Ranch | 87.52 | 53 | P | P | 19 56 16.2 | -0.9 |
| | baz=88 | | | | | | |
| 133A | Hamilton Ranch | 87.54 | 55 | P | P | 19 56 17.1 | -0.1 |
| | baz=88,SNR=16 | | | | | | |
| T29A | Hugoton | 87.58 | 50 | P | P | 19 56 15.8 | -1.6 |
| | baz=88 | | | | | | |
| 334A | Lometa | 87.58 | 56 | P | P | 19 56 17.3 | -0.2 |
| | baz=88,SNR=74 | | | | | | |
| 535A | Dale | 87.62 | 58 | P | P | 19 56 17.8 | +0.2 |
| | baz=88 | | | | | | |
| 736A | Circle Diamond | 87.62 | 59 | P | P | 19 56 18.6 | +1.0 |
| | baz=88,SNR=7.4 | | | | | | |
| P27A | Ficken Ranch, | 87.67 | 47 | P | P | 19 56 16.8 | -1.0 |
| | baz=88 | | | | | | |
| Y32A | R-V Farms, Ver | 87.68 | 53 | P | P | 19 56 17.5 | -0.3 |
| | baz=88,SNR=5.8 | | | | | | |
| R28A | Tribune | 87.70 | 49 | P | P | 19 56 17.2 | -0.8 |
| | baz=88,SNR=5.6 | | | | | | |
| W31A | Holland Ranch, | 87.77 | 52 | P | P | 19 56 17.6 | -0.7 |
| | baz=88 | | | | | | |
| N26A | Koester Ranch, | 87.78 | 46 | P | P | 19 56 17.4 | -0.9 |
| | baz=88 | | | | | | |
| U30A | WK&E Inc. Balk | 87.79 | 51 | P | P | 19 56 17.0 | -1.4 |
| | baz=88 | | | | | | |
| ENH | Enshi | 87.80 | 303 | *e*P | P | 19 56 20.1 | +1.6 |
| | comp=Z,143nm,1.8s | | | | | | |
| 636A | Smothers Creek | 87.83 | 58 | P | P | 19 56 19.4 | +0.8 |
| | baz=88 | | | | | | |
| L25A | Engebretsen Ra | 87.86 | 44 | P | P | 19 56 17.5 | -1.2 |
| | baz=88 | | | | | | |
| 435B | Jarrell | 87.89 | 57 | P | P | 19 56 19.0 | +0.1 |
| | baz=88,SNR=6.4 | | | | | | |
| S29A | Ulysses | 87.90 | 49 | P | P | 19 56 17.9 | -1.0 |
| | baz=88 | | | | | | |
| 234A | Clairette | 87.92 | 56 | P | P | 19 56 18.6 | -0.4 |
| | baz=88,SNR=19 | | | | | | |
| Z33A | Whitaker Ranch | 87.92 | 54 | P | P | 19 56 18.7 | -0.3 |
| | baz=88,SNR=14 | | | | | | |
| EDM | Edmonton | 87.92 | 32 | *e*P | P | 19 56 17.4 | -1.2 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,137nm,1.3s | | | | | | |
| EDM | Edmonton | 87.92 | 32 | *e*P | P | 19 56 17.4 | -1.2 |
| | comp=Z,137nm,1.3s | | | | | | |
| X32A | Elmer | 87.97 | 53 | P | P | 19 56 18.5 | -0.7 |
| | baz=88 | | | | | | |
| Q28A | Sharon Springs | 87.99 | 48 | P | P | 19 56 18.5 | -0.8 |
| | baz=88 | | | | | | |
| O27A | Beecher Island | 88.02 | 47 | P | P | 19 56 18.7 | -0.7 |
| | baz=88 | | | | | | |
| 536A | Bastrop | 88.04 | 58 | P | P | 19 56 19.9 | +0.3 |
| | baz=88,SNR=6.4 | | | | | | |
| 737A | Port Lavaca | 88.06 | 59 | P | P | 19 56 19.5 | -0.2 |
| | baz=88 | | | | | | |
| PSI | Prapat | 88.08 | 274 | LR | LR | 20 35 45.5 | |
| | comp=Z,334nm,19.1s,slow=36 | | | | | | |
| PSI | Prapat | 88.08 | 274 | P | P | 19 56 20.6 | +0.2 |
| | baz=88,SNR=13 | | | | | | |
| V31A | Spring Creek L | 88.08 | 52 | P | P | 19 56 19.7 | -0.1 |
| | baz=88,SNR=7.9 | | | | | | |
| T30A | Plains | 88.09 | 50 | P | P | 19 56 20.5 | +0.7 |
| | baz=88 | | | | | | |
| M26A | McRoberts Ranc | 88.11 | 45 | P | P | 19 56 19.7 | -0.1 |
| | baz=88 | | | | | | |
| 134A | White-Moore Ra | 88.18 | 55 | P | P | 19 56 20.1 | -0.2 |
| | baz=88,SNR=11 | | | | | | |
| 335A | Moody | 88.20 | 56 | P | P | 19 56 20.3 | -0.1 |
| | baz=88,SNR=5.7 | | | | | | |
| PLCA | Paso Flores | 88.24 | 132 | P | P | 19 56 22.1 | +1.5 |
| | baz=88,SNR=3.5 | | | | | | |
| P28A | Saint Francis | 88.26 | 47 | P | P | 19 56 20.3 | -0.3 |
| | baz=88 | | | | | | |
| W32A | Sentinel | 88.27 | 52 | P | P | 19 56 20.3 | -0.4 |
| | baz=88 | | | | | | |
| Y33A | Hilltop Ranch, | 88.31 | 54 | P | P | 19 56 20.4 | -0.4 |
| | baz=88 | | | | | | |
| U31A | Nine Bar Ranch | 88.32 | 51 | P | P | 19 56 20.3 | -0.6 |
| | baz=88 | | | | | | |
| S30A | Montezuma | 88.38 | 50 | P | P | 19 56 20.1 | -1.0 |
| | baz=88 | | | | | | |
| 637A | Eagle Lake | 88.40 | 58 | P | P | 19 56 21.8 | +0.5 |
| | baz=88 | | | | | | |
| WHTX | Lake Whitney | 88.45 | 56 | P | P | 19 56 21.3 | -0.2 |
| | baz=88,SNR=8.3 | | | | | | |
| WHTX | Lake Whitney | 88.45 | 56 | *e*P | P | 19 56 21.5 | 0.0 |
| | comp=Z,299nm,1.8s | | | | | | |
| WMOK | Wichita Mounta | 88.47 | 53 | *e*P | P | 19 56 18.0 | -3.6 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,22nm,1.6s | | | | | | |
| WMOK | Wichita Mounta | 88.47 | 53 | *e*P | P | 19 56 18.0 | -3.6 |
| | comp=Z,22nm,1.6s | | | | | | |
| O28A | Krutsinger Ran | 88.48 | 47 | P | P | 19 56 20.4 | -1.1 |
| | baz=89 | | | | | | |
| LAO | LASA Array | 88.50 | 40 | P | P | 19 56 20.9 | -0.7 |
| | baz=89,SNR=6.5 | | | | | | |
| LAO | LASA Array | 88.50 | 40 | *e*P | P | 19 56 21.2 | -0.3 |
| 436A | Wall Ranch, Ga | 88.52 | 57 | P | P | 19 56 22.2 | +0.4 |
| | baz=89,SNR=12 | | | | | | |
| J25A | Sunshine Ranch | 88.52 | 43 | P | P | 19 56 21.4 | -0.3 |
| | baz=89 | | | | | | |
| Q29A | Oakley | 88.52 | 48 | P | P | 19 56 21.5 | -0.3 |
| | baz=89 | | | | | | |
| X33A | Lawton | 88.61 | 53 | P | P | 19 56 21.3 | -0.9 |
| | baz=89 | | | | | | |
| Z34A | Collier Ranch, | 88.61 | 54 | P | P | 19 56 21.8 | -0.5 |
| | baz=89 | | | | | | |
| OGNE | Ogallala | 88.64 | 46 | P | P | 19 56 21.3 | -1.0 |
| | baz=89 | | | | | | |
| 537A | Green Hill Far | 88.65 | 58 | P | P | 19 56 22.5 | +0.1 |
| | baz=89,SNR=7.0 | | | | | | |
| M27A | Reverse DX Ran | 88.65 | 45 | P | P | 19 56 21.1 | -1.3 |
| | baz=89 | | | | | | |
| V32A | Arapaho | 88.66 | 52 | P | P | 19 56 22.1 | -0.4 |
| | baz=89 | | | | | | |
| RSSD | Black Hills | 88.69 | 43 | *e*P | P | 19 56 20.5 | -2.2 |
| RSSD | | | | *e**PP | pP | 19 56 45.3 | -0.6 |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| RSSD | Black Hills | 88.69 | 43 | *e*P | P | 19 56 20.5 | -2.2 |
| | comp=Z,11nm,0.8s | | | | | | |
| RSSD | | | | *e*pP | pP | 19 56 45.3 | -0.6 |
| 135A | Vickery Place, | 88.70 | 55 | P | P | 19 56 22.5 | -0.1 |
| | baz=89,SNR=5.0 | | | | | | |
| 336A | Riesel | 88.70 | 57 | P | P | 19 56 22.6 | -0.2 |
| | baz=89 | | | | | | |
| GYA | Guiyang | 88.73 | 298 | ⇑*i*P | P | 19 56 24.1 | +1.0 |
| GYA | | | | pP | pP | 19 56 47.9 | +1.5 |
| GYA | | | | sP | sP | 19 56 58.0 | +2.4 |
| GYA | | | | PP | PP | 19 59 55.6 | +2.3 |
| GYA | | | | SKS | SKSac | 20 06 41.4 | -3.8 |
| GYA | | | | S | S | 20 07 01.0 | -2.5 |
| GYA | | | | sS | sS | 20 07 43.2 | -0.1 |
| GYA | | | | SS | SS | 20 12 58.8 | +1.4 |
| GYA | | | | PMZ | | | |
| | comp=Z,30nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,250nm,8.3s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,860nm,20.8s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,790nm,21.4s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,810nm,20.2s | | | | | | |
| 738A | Farr-Stevens R | 88.74 | 59 | P | P | 19 56 24.6 | +1.7 |
| | baz=89 | | | | | | |
| R30A | Dighton | 88.78 | 49 | P | P | 19 56 22.5 | -0.5 |
| | baz=89 | | | | | | |
| I25A | Rochford | 88.84 | 43 | P | P | 19 56 22.2 | -1.2 |
| | baz=89 | | | | | | |
| W33A | Caddo, Fort Co | 88.87 | 53 | P | P | 19 56 24.6 | +1.2 |
| | baz=89 | | | | | | |
| TRTT | Trang | 88.91 | 279 | P | P | 19 56 26.7 | +2.6 |
| | comp=Z,73nm,1.2s,comp=Z,921nm | | | | | | |
| GSI | Gunungsitoli | 88.91 | 272 | *e*P | P | 19 56 25.4 | +1.3 |
| | comp=Z,134nm,1.1s | | | | | | |
| U32A | Winter Ranch, | 88.95 | 51 | P | P | 19 56 23.4 | -0.4 |
| | baz=89 | | | | | | |
| Y34A | Reagan Ranch, | 88.95 | 54 | P | P | 19 56 23.3 | -0.6 |
| | baz=89,SNR=6.5 | | | | | | |
| J26A | Sides Ranch, S | 88.96 | 44 | P | P | 19 56 22.9 | -0.9 |
| | baz=89 | | | | | | |
| HKT | Hockley | 88.99 | 58 | *e*P | P | 19 56 24.3 | +0.3 |
| HKT | | | | pmax | pmax | | |
| | comp=Z,256nm,1.8s | | | | | | |
| HKT | Hockley | 88.99 | 58 | *e*P | P | 19 56 24.3 | +0.3 |
| | comp=Z,256nm,1.8s | | | | | | |
| 437A | Phantom Ranch, | 89.06 | 57 | P | P | 19 56 25.1 | +0.7 |
| | baz=89 | | | | | | |
| S31A | Mullinville | 89.08 | 50 | P | P | 19 56 23.8 | -0.6 |
| | baz=89 | | | | | | |
| Q30A | Quinter | 89.10 | 48 | P | P | 19 56 23.7 | -0.8 |
| | baz=89 | | | | | | |
| Z35A | Perchaven, San | 89.11 | 55 | P | P | 19 56 24.2 | -0.4 |
| | baz=89 | | | | | | |
| X34A | Smith Ranch, M | 89.14 | 53 | P | P | 19 56 25.2 | +0.5 |
| | baz=89 | | | | | | |
| O29A | 4D Ranch, Culb | 89.16 | 47 | P | P | 19 56 23.8 | -0.9 |
| | baz=89 | | | | | | |
| 236A | Katherine and | 89.18 | 56 | P | P | 19 56 24.9 | -0.1 |
| | baz=89,SNR=6.5 | | | | | | |
| H25A | Fruitdale | 89.20 | 42 | P | P | 19 56 23.9 | -0.9 |
| | baz=89 | | | | | | |
| V33A | Lossen Ranch, | 89.27 | 52 | P | P | 19 56 24.3 | -1.0 |
| | baz=89 | | | | | | |
| P30A | Selden | 89.31 | 48 | P | P | 19 56 24.8 | -0.7 |
| | baz=89 | | | | | | |
| R31A | Burdett | 89.32 | 49 | P | P | 19 56 24.7 | -0.9 |
| | baz=89 | | | | | | |
| T32A | Huddler Ranch, | 89.32 | 51 | P | P | 19 56 25.0 | -0.6 |
| | baz=89 | | | | | | |
| 136A | Ennis | 89.36 | 56 | P | P | 19 56 25.5 | -0.2 |
| | baz=89 | | | | | | |
| 538A | Harpers Horsep | 89.36 | 58 | P | P | 19 56 26.6 | +0.7 |
| | baz=89 | | | | | | |
| CBKS | Cedar Bluff | 89.38 | 49 | P | P | 19 56 25.3 | -0.5 |
| | baz=90 | | | | | | |
| I26A | New Underwood | 89.42 | 43 | P | P | 19 56 25.0 | -0.9 |
| | baz=90 | | | | | | |
| W34A | Bridge Creek, | 89.43 | 53 | P | P | 19 56 25.8 | -0.3 |
| | baz=90 | | | | | | |
| W34A | Bridge Creek, | 89.43 | 53 | *e*P | P | 19 56 27.1 | +1.0 |
| | comp=Z,17nm,0.9s | | | | | | |
| 337A | Centerville | 89.44 | 57 | P | P | 19 56 26.4 | +0.3 |
| | baz=90 | | | | | | |
| Y35A | Marietta | 89.49 | 54 | P | P | 19 56 25.9 | -0.4 |
| | baz=90 | | | | | | |
| S32A | Newby Ranch, P | 89.51 | 50 | P | P | 19 56 25.7 | -0.7 |
| | baz=90 | | | | | | |
| G25A | Newell | 89.57 | 42 | P | P | 19 56 25.4 | -1.1 |
| | baz=90 | | | | | | |
| 438A | Sam Houston St | 89.57 | 58 | P | P | 19 56 27.8 | +1.1 |
| | baz=90,SNR=7.4 | | | | | | |
| J27A | Elkhorn Farm, | 89.64 | 44 | P | P | 19 56 26.4 | -0.5 |
| | baz=90 | | | | | | |
| XAN | Xi’an | 89.65 | 306 | P | P | 19 56 28.4 | +1.2 |
| XAN | | | | pP | pP | 19 56 53.4 | +3.0 |
| XAN | | | | sP | sP | 19 57 04.2 | +4.5 |
| XAN | | | | PMZ | | | |
| | comp=Z,29nm,1.3s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,62nm,5.6s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,190nm,26.1s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,460nm,30.2s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,690nm,32.7s | | | | | | |
| O30A | MW Ranch, Wils | 89.70 | 47 | P | P | 19 56 26.7 | -0.5 |
| | baz=90 | | | | | | |
| Q31A | Ellis | 89.70 | 49 | P | P | 19 56 27.1 | -0.1 |
| | baz=90 | | | | | | |
| Z36A | Blue Ridge | 89.72 | 55 | P | P | 19 56 27.4 | 0.0 |
| | baz=90 | | | | | | |
| X35A | Drake | 89.72 | 54 | P | P | 19 56 26.7 | -0.7 |
| | baz=90,SNR=5.5 | | | | | | |
| H26A | Fairpoint | 89.72 | 43 | P | P | 19 56 26.4 | -0.9 |
| | baz=90 | | | | | | |
| 237A | Washetta, Mont | 89.75 | 56 | P | P | 19 56 28.2 | +0.6 |
| | baz=90,SNR=5.2 | | | | | | |
| M29A | Burnside Ranch | 89.77 | 46 | P | P | 19 56 27.3 | -0.4 |
| | baz=90 | | | | | | |
| T33A | Patterson Ranc | 89.78 | 51 | P | P | 19 56 27.3 | -0.4 |
| | baz=90 | | | | | | |
| K28A | Ten Mile Ranch | 89.84 | 45 | P | P | 19 56 26.9 | -1.0 |
| | baz=90 | | | | | | |
| V34A | Guthrie | 89.85 | 52 | P | P | 19 56 26.8 | -1.2 |
| | baz=90 | | | | | | |
| F25A | Bowman | 89.86 | 41 | P | P | 19 56 26.9 | -1.0 |
| | baz=90 | | | | | | |
| P31A | Stockton | 89.91 | 48 | P | P | 19 56 28.0 | -0.3 |
| | baz=90 | | | | | | |
| 338A | Crockett | 89.92 | 57 | P | P | 19 56 28.4 | 0.0 |
| | baz=90 | | | | | | |
| N30A | Hueftle Ranch, | 89.92 | 47 | P | P | 19 56 27.8 | -0.4 |
| | baz=90 | | | | | | |
| 539A | Cross D Ranch, | 89.94 | 58 | P | P | 19 56 29.6 | +1.0 |
| | baz=90 | | | | | | |
| I27A | Quinn | 89.96 | 43 | P | P | 19 56 27.5 | -0.9 |
| | baz=90 | | | | | | |
| R32A | Long Quarter, | 89.96 | 49 | P | P | 19 56 27.7 | -0.8 |
| | baz=90 | | | | | | |
| 137A | Heron Place, G | 90.01 | 56 | P | P | 19 56 29.2 | +0.4 |
| | baz=90 | | | | | | |
| SYO | Syowa Base | 90.02 | 191 | ⇑*i*P | P | 19 56 27.9 | -0.3 |
| SYO | Syowa Base | 90.02 | 191 | ⇓*e*P | P | 19 56 32.0 | +3.8 |
| U34A | Anderson Ranch | 90.06 | 52 | P | P | 19 56 28.2 | -0.8 |
| | baz=90 | | | | | | |
| Y36A | Durant | 90.07 | 54 | P | P | 19 56 29.0 | 0.0 |
| | baz=90,SNR=7.3 | | | | | | |
| W35A | Tecumseh | 90.08 | 53 | P | P | 19 56 28.6 | -0.5 |
| | baz=90 | | | | | | |
| G26A | Maurine | 90.13 | 42 | P | P | 19 56 28.2 | -1.0 |
| | baz=90 | | | | | | |
| E25A | Miller Ranch, | 90.15 | 41 | P | P | 19 56 28.5 | -0.7 |
| | baz=90 | | | | | | |
| 439A | Center Grove, | 90.15 | 58 | P | P | 19 56 30.0 | +0.5 |
| | baz=90 | | | | | | |
| S33A | Kaszmaul Farm, | 90.16 | 50 | P | P | 19 56 28.9 | -0.5 |
| | baz=90 | | | | | | |
| L29A | Maesberg Ranch | 90.17 | 46 | P | P | 19 56 28.1 | -1.3 |
| | baz=90 | | | | | | |
| H27A | Howes | 90.18 | 43 | P | P | 19 56 28.7 | -0.7 |
| | baz=90 | | | | | | |
| O31A | Woolen Ranch, | 90.20 | 48 | P | P | 19 56 28.4 | -1.1 |
| | baz=90 | | | | | | |
| J28A | Allard Ranch, | 90.22 | 44 | P | P | 19 56 28.8 | -0.9 |
| | baz=90 | | | | | | |
| X36A | Centrahoma | 90.26 | 54 | P | P | 19 56 29.8 | -0.2 |
| | baz=90 | | | | | | |
| Q32A | Meitler Ranch, | 90.29 | 49 | P | P | 19 56 28.8 | -1.2 |
| | baz=90 | | | | | | |
| 238A | Jacksonville | 90.30 | 56 | P | P | 19 56 30.6 | +0.5 |
| | baz=90 | | | | | | |
| F26A | Lodgepole | 90.33 | 41 | P | P | 19 56 29.2 | -0.9 |
| | baz=90 | | | | | | |
| HHC | Hu-ho-hao-te | 90.33 | 313 | *e*P | P | 19 56 31.3 | +1.1 |
| HHC | | | | pP | pP | 19 56 55.3 | +1.8 |
| HHC | | | | sP | sP | 19 57 03.7 | +0.9 |
| HHC | | | | PP | PP | 20 00 11.5 | +5.8 |
| HHC | | | | S | ScS | 20 07 20.2 | -1.1 |
| HHC | | | | sS | sS | 20 08 01.7 | +4.1 |
| HHC | | | | PMZ | | | |
| | comp=Z,41nm,1.3s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,190nm,7.6s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,300nm,17.4s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,190nm,17.2s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,260nm,17.5s | | | | | | |
| Z37A | Pogue Cattle C | 90.33 | 55 | P | P | 19 56 29.9 | -0.3 |
| | baz=90 | | | | | | |
| V35A | Meyer Ranch, C | 90.33 | 52 | P | P | 19 56 29.6 | -0.6 |
| | baz=90 | | | | | | |
| M30A | Dale-Ortello V | 90.37 | 46 | P | P | 19 56 29.4 | -1.0 |
| | baz=90 | | | | | | |
| VNA3 | Neumayer Olymp | 90.40 | 175 | P | P | 19 56 31.4 | +1.4 |
| SNAA | Sanae | 90.42 | 177 | P | P | 19 56 31.4 | +1.3 |
| SNAA | Sanae | 90.42 | 177 | *de*P | P | 19 56 31.0 | +0.8 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| SNAA | Sanae | 90.42 | 177 | *e*P | P | 19 56 30.8 | +0.6 |
| | comp=Z,12nm,0.9s | | | | | | |
| R33A | Olander Ranch, | 90.44 | 50 | P | P | 19 56 29.8 | -0.9 |
| | baz=90 | | | | | | |
| PBKT | Sadao Pong | 90.45 | 287 | P | P | 19 56 33.6 | +2.5 |
| | comp=Z,29nm,1.4s,comp=Z,1µm | | | | | | |
| D25A | Fairfield | 90.49 | 40 | P | P | 19 56 30.3 | -0.5 |
| | baz=91 | | | | | | |
| P32A | Huiting Farm, | 90.50 | 48 | P | P | 19 56 29.8 | -1.2 |
| | baz=91 | | | | | | |
| I28A | Midland | 90.51 | 44 | P | P | 19 56 29.7 | -1.2 |
| | baz=91 | | | | | | |
| PHET | Kaeng Krachan | 90.54 | 283 | P | P | 19 56 35.1 | +3.5 |
| | comp=Z,9.1nm,0.9s,comp=Z,152nm | | | | | | |
| T34A | McClaskey Farm | 90.54 | 51 | P | P | 19 56 30.6 | -0.6 |
| | baz=91 | | | | | | |
| DGMT | Dagmar | 90.55 | 39 | P | P | 19 56 30.4 | -0.5 |
| | baz=91,SNR=8.7 | | | | | | |
| DGMT | Dagmar | 90.55 | 39 | *e*P | P | 19 56 30.2 | -0.8 |
| | comp=Z,78nm,1.0s | | | | | | |
| DGMT | | | | *e*pP | pP | 19 56 54.0 | -0.2 |
| 138A | Matatall Enter | 90.56 | 56 | P | P | 19 56 31.8 | +0.4 |
| | baz=91 | | | | | | |
| K29A | Lazy Trails An | 90.56 | 45 | P | P | 19 56 30.6 | -0.6 |
| | baz=91 | | | | | | |
| W36A | Wetumka | 90.57 | 53 | P | P | 19 56 30.9 | -0.5 |
| | baz=91 | | | | | | |
| NATX | Nacogdoches | 90.58 | 57 | P | P | 19 56 31.2 | -0.2 |
| | baz=91 | | | | | | |
| 540A | Vidor | 90.58 | 58 | P | P | 19 56 32.5 | +1.0 |
| | baz=91 | | | | | | |
| G27A | Dupree | 90.59 | 42 | P | P | 19 56 30.2 | -1.1 |
| | baz=91,SNR=6.6 | | | | | | |
| Y37A | Hugo | 90.61 | 54 | P | P | 19 56 31.3 | -0.3 |
| | baz=91 | | | | | | |
| U35A | Pawnee | 90.64 | 52 | P | P | 19 56 31.1 | -0.5 |
| | baz=91 | | | | | | |
| L30A | Spencer Herefo | 90.64 | 46 | P | P | 19 56 29.6 | -2.1 |
| | baz=91 | | | | | | |
| E26A | Carlson Angus | 90.72 | 41 | P | P | 19 56 31.4 | -0.5 |
| | baz=91 | | | | | | |
| F27A | Lemmon | 90.75 | 42 | P | P | 19 56 31.3 | -0.7 |
| | baz=91 | | | | | | |
| C25A | Freed Ranch, W | 90.77 | 40 | P | P | 19 56 31.5 | -0.6 |
| | baz=91 | | | | | | |
| 440A | Kirbyville | 90.79 | 58 | P | P | 19 56 32.7 | +0.2 |
| | baz=91 | | | | | | |
| Q33A | Connelly Farm, | 90.82 | 49 | P | P | 19 56 31.8 | -0.7 |
| | baz=91 | | | | | | |
| 239A | Gary | 90.82 | 57 | P | P | 19 56 33.0 | +0.4 |
| | baz=91 | | | | | | |
| J29A | Okreek | 90.82 | 44 | P | P | 19 56 31.7 | -0.7 |
| | baz=91 | | | | | | |
| INK | Inuvik | 90.84 | 14 | P | P | 19 56 31.2 | -0.6 |
| | comp=Z,10nm,0.9s,baz=226,slow=8.5,SNR=6.6 | | | | | | |
| Z38A | Mt. Pleasant | 90.85 | 55 | P | P | 19 56 32.6 | -0.1 |
| | baz=91 | | | | | | |
| S34A | Willow Spring | 90.85 | 51 | P | P | 19 56 31.8 | -0.9 |
| | baz=91 | | | | | | |
| H28A | Mission Ridge | 90.88 | 43 | P | P | 19 56 31.9 | -0.7 |
| | baz=91 | | | | | | |
| VNA2 | Neumayer--Watz | 90.89 | 176 | P | P | 19 56 34.0 | +1.7 |
| | baz=176,slow=3.5 | | | | | | |
| M31A | Lambtecht Ranc | 90.91 | 47 | P | P | 19 56 32.0 | -0.9 |
| | baz=91 | | | | | | |
| R34A | Isabella, Hill | 90.98 | 50 | P | P | 19 56 32.4 | -0.8 |
| | baz=91 | | | | | | |
| D26A | Manning | 90.98 | 40 | P | P | 19 56 32.1 | -0.9 |
| | baz=91 | | | | | | |
| K30A | Basset | 91.00 | 45 | P | P | 19 56 33.0 | -0.3 |
| | baz=91 | | | | | | |
| T35A | Sooner Cattle | 91.00 | 51 | P | P | 19 56 32.9 | -0.5 |
| | baz=91 | | | | | | |
| V36A | Jenks | 91.02 | 53 | P | P | 19 56 32.9 | -0.5 |
| | baz=91 | | | | | | |
| X37A | Clayton | 91.02 | 54 | P | P | 19 56 33.1 | -0.4 |
| | baz=91 | | | | | | |
| 340A | Bronson | 91.07 | 57 | P | P | 19 56 34.1 | +0.3 |
| | baz=91 | | | | | | |
| B25A | Knox Farm, Ray | 91.08 | 39 | P | P | 19 56 33.1 | -0.3 |
| | baz=91 | | | | | | |
| P33A | Williams Farm, | 91.08 | 49 | P | P | 19 56 33.1 | -0.6 |
| | baz=91 | | | | | | |
| I29A | Vivian Onida | 91.08 | 44 | P | P | 19 56 32.7 | -0.9 |
| | baz=91 | | | | | | |
| VNA1 | Neumayer--Stat | 91.09 | 175 | P | P | 19 56 34.9 | +1.7 |
| 139A | Bunkhouse Ranc | 91.11 | 56 | P | P | 19 56 34.1 | +0.2 |
| | baz=91 | | | | | | |
| G28A | Parade | 91.12 | 43 | P | P | 19 56 33.5 | -0.2 |
| | baz=91 | | | | | | |
| TUL1 | Tulsa | 91.18 | 53 | P | P | 19 56 33.7 | -0.5 |
| | baz=91 | | | | | | |
| W37A | Quinton | 91.18 | 53 | P | P | 19 56 34.0 | -0.2 |
| | baz=91 | | | | | | |
| YAK | Yakutsk | 91.20 | 337 | *e*P | P | 19 56 32.1 | -1.5 |
| YAK | | | | *e* | | 20 00 10.6 | |
| YAK | | | | *e*S | SKSac | 20 07 00.9 | +3.3 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,5.0nm,1.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,8.0nm,1.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,59nm,16.2s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,111nm,17.1s | | | | | | |
| YAK | Yakutsk | 91.20 | 337 | *e*P | P | 19 56 32.4 | -1.2 |
| | comp=N,16nm,0.9s | | | | | | |
| E27A | Carson | 91.27 | 41 | P | P | 19 56 33.6 | -0.8 |
| | baz=91 | | | | | | |
| Y38A | Idabel | 91.28 | 55 | P | P | 19 56 34.2 | -0.5 |
| | baz=91 | | | | | | |
| BTO | Baotou | 91.31 | 312 | *e*P | P | 19 56 34.6 | -0.2 |
| J30A | Dallas | 91.34 | 45 | P | P | 19 56 34.0 | -0.8 |
| | baz=91 | | | | | | |
| H29A | Onida | 91.39 | 43 | P | P | 19 56 33.8 | -1.2 |
| | baz=92 | | | | | | |
| NANT | Nan | 91.39 | 289 | P | P | 19 56 37.5 | +2.0 |
| | comp=N,8.8nm,1.1s | | | | | | |
| A25A | Svangstu Ranch | 91.40 | 39 | P | P | 19 56 34.3 | -0.6 |
| | baz=92 | | | | | | |
| U36A | Oologah | 91.40 | 52 | P | P | 19 56 34.8 | -0.4 |
| | baz=92 | | | | | | |
| S35A | Otter Creek Ra | 91.43 | 51 | P | P | 19 56 34.5 | -0.8 |
| | baz=92 | | | | | | |
| NVL | N’lazarevskaya | 91.44 | 182 | *e*P | P | 19 56 36.6 | +1.8 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,32nm,1.1s | | | | | | |
| X38A | Whitesboro | 91.47 | 54 | P | P | 19 56 35.5 | 0.0 |
| | baz=92,SNR=11 | | | | | | |
| Z39A | Irene McRaven, | 91.47 | 56 | P | P | 19 56 36.2 | +0.6 |
| | baz=92,SNR=5.4 | | | | | | |
| F28A | McLaughlin | 91.51 | 42 | P | P | 19 56 34.6 | -0.9 |
| | baz=92 | | | | | | |
| C26A | Wahner Farm, P | 91.53 | 40 | P | P | 19 56 34.9 | -0.7 |
| | baz=92 | | | | | | |
| T36A | Boggs Farm, Ca | 91.53 | 52 | P | P | 19 56 35.6 | -0.2 |
| | baz=92 | | | | | | |
| K31A | O’Neill | 91.57 | 46 | P | P | 19 56 34.7 | -1.2 |
| | baz=92 | | | | | | |
| D27A | Center | 91.58 | 41 | P | P | 19 56 35.0 | -0.8 |
| | baz=92 | | | | | | |
| KMI | Kunming | 91.61 | 296 | P | P | 19 56 38.4 | +1.7 |
| KMI | | | | pP | pP | 19 57 02.5 | +2.5 |
| KMI | | | | sP | sP | 19 57 10.5 | +1.2 |
| KMI | | | | PP | PP | 20 00 14.2 | -2.2 |
| KMI | | | | SKS | SKSac | 20 07 03.2 | +1.1 |
| KMI | | | | S | S | 20 07 29.8 | -0.5 |
| KMI | | | | SS | SS | 20 13 38.4 | -0.9 |
| KMI | | | | PMZ | | | |
| | comp=Z,20nm,1.2s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,210nm,3.3s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,410nm,17.2s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,390nm,20.0s | | | | | | |

KMI LZ
comp=Z,950nm,28.4s
**I30A Oacoma 91.62 44** P **P** **19 56 35.2 -0.9**
baz=92
**V37A Hulbert 91.66 53** P **P** **19 56 35.8 -0.6**
baz=92,SNR=6.2
**B26A Jensen Ranch, 91.68 39** P **P** **19 56 35.4 -0.8**
baz=92
**KSU1 Kansas State U 91.74 49** P **P** **19 56 35.4 -1.3**
baz=92
**P34A Walnut Farm, R 91.75 49** P **P** **19 56 36.1 -0.7**
baz=92
**R35A Emporia Munici 91.75 50** P **P** **19 56 36.0 -0.7**
baz=92
**Y39A Lockesburg 91.78 55** P **P** **19 56 36.4 -0.6**
baz=92
**G29A Hoven 91.81 43** P **P** **19 56 36.6 -0.3**
baz=92
**C27A Sayler Ranch, 91.84 40** P **P** **19 56 36.2 -0.8**
baz=92
**W38A Poteau 91.85 54** P **P** **19 56 37.1 -0.2**
baz=92,SNR=6.7
**U37A Salina 91.87 52** P **P** **19 56 36.7 -0.6**
baz=92
**E28A Huff 91.88 41** P **P** **19 56 36.0 -1.2**
baz=92
**S36A Lake Cedric, C 91.98 51** P **P** **19 56 37.4 -0.5**
baz=92
**A26A Wade Farm, Ken 92.02 39** P **P** **19 56 37.0 -0.8**
baz=92
**Q35A Mercer Eighty, 92.06 50** P **P** **19 56 37.5 -0.8**
baz=92
**O34A Beatrice 92.08 48** P **P** **19 56 37.1 -1.2**
baz=92
**K32A Verdigre 92.11 46** P **P** **19 56 36.7 -1.6**
baz=92
**F29A Eureka 92.12 42** P **P** **19 56 36.8 -1.5**
baz=92
**SUSD South Dakota S 92.14 44** P **P** **19 56 37.1 -1.4**
baz=92
**D28A Regan 92.20 41** P **P** **19 56 37.4 -1.3**
baz=92
**JTS JuntasAbangare 92.21 80** *de*P **P** **19 56 38.3 -1.2**
**JTS JuntasAbangare 92.21 80** P **P** **19 56 40.9 +1.4**
comp=Z,399nm,1.0s,SNR=7.2
**JTS JuntasAbangare 92.21 80** *e*P **P** **19 56 39.6 +0.2**
comp=Z,286nm,1.8s
**V38A Canehill 92.21 53** P **P** **19 56 38.5 -0.5**
baz=92,SNR=10
**M33A Taylor Creek F 92.24 47** P **P** **19 56 37.6 -1.4**
baz=92
**R36A Gordon, Harris 92.26 50** P **P** **19 56 38.2 -1.0**
baz=92
**T37A Cheneyville 18 92.27 52** P **P** **19 56 38.7 -0.5**
baz=92,SNR=7.4
**B27A Peters Farms, 92.28 40** P **P** **19 56 38.0 -1.0**
baz=92
**P35A Duane Minner, 92.32 49** P **P** **19 56 38.5 -0.9**
baz=92
**MIAR Mount Ida 92.40 55** P **P** **19 56 39.6 -0.3**
baz=92,SNR=7.4
**U38A Gravette 92.43 53** P **P** **19 56 39.6 -0.4**
baz=92,SNR=5.4
**N34A Lincoln 92.45 48** P **P** **19 56 38.5 -1.4**
baz=92
**H31A Wolsey 92.47 44** P **P** **19 56 39.7 -0.3**
baz=92
**A27A Ledoux Ranch, 92.52 39** P **P** **19 56 39.9 -0.1**
baz=93
**Q36A Arnold C. Orve 92.52 50** P **P** **19 56 40.1 -0.2**
baz=93
**LCO Las Campanas 92.52 121** *e*P **P** **19 56 42.6 +1.5**
comp=Z,100nm,1.5s
LCO *ep*P **pP** **19 57 06.6 +2.3**
**E29A Napoleon 92.54 42** P **P** **19 56 38.6 -1.7**
baz=93
**S37A Fort Scott 92.56 51** P **P** **19 56 39.7 -0.8**
baz=93
**YKA Yellowknife Ar 92.63 24** P **P** **19 56 39.6 -0.6**
comp=Z,4.0nm,0.9s,baz=234,slow=4.6,SNR=9.3
**M34A Aspy Farms, Fr 92.64 47** P **P** **19 56 39.7 -1.1**
baz=93
**CD2 Chengdu 92.64 302** *e*P **P** **19 56 40.5 -0.6**
CD2 pP **pP** **19 57 04.4 0.0**
CD2 sP **sP** **19 57 14.2 +0.5**
CD2 SKS **SKSac** **20 07 05.4 -1.9**
CD2 S **S** **20 07 37.9 -1.0**
CD2 sS **sS** **20 08 19.6 +0.6**
CD2 SS **SS** **20 13 53.8 +0.2**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,220nm,5.4s
CD2 LN
comp=Z,1μm,17.1s
CD2 LE
comp=Z,790nm,24.0s
CD2 LZ
comp=Z,610nm,28.0s
**O35A Humboldt 92.67 49** P **P** **19 56 40.3 -0.7**
baz=93
**R37A Teagarden Farm 92.75 51** P **P** **19 56 40.3 -1.1**
baz=93
**B28A Dugan Ranch, T 92.84 40** P **P** **19 56 40.2 -1.4**
baz=93
**CMAR Chiang Mai Arr 92.87 288** P **P** **19 56 43.9 +1.5**
comp=Z,9.5nm,0.9s,baz=100,slow=2.7,SNR=45
CMAR pP **pP** **19 57 07.3 +1.7**
comp=Z,9.4nm,0.9s,baz=104,slow=3.0,SNR=5.0
CMAR PKKPbc **PKKPdf** **20 13 51.8 +0.7**
comp=Z,0.6nm,0.7s,baz=272,slow=5.4,SNR=4.9
**P36A Good Intent, A 92.94 49** P **P** **19 56 41.6 -0.6**
baz=93
**L34A Svendsen Farm, 92.95 47** P **P** **19 56 40.8 -1.5**
baz=93
**I32A Karley and Nic 92.97 45** P **P** **19 56 40.7 -1.6**
baz=93
**CHTO Chiang Mai 92.98 289** P **P** **19 56 44.7 +1.8**
comp=Z,80nm,1.7s
**CHTO Chiang Mai 92.98 289** *e*P **P** **19 56 44.0 +1.1**
CHTO *e**PP **pP** **19 57 07.9 +1.7**
CHTO pmax pmax
comp=Z,20nm,1.0s
**CHTO Chiang Mai 92.98 289** *e*P **P** **19 56 44.0 +1.1**
comp=Z,20nm,1.0s
CHTO *ep*P **pP** **19 57 07.8 +1.7**
**J33A Davis 93.04 45** P **P** **19 56 41.3 -1.4**
baz=93
**MDND Maddock 93.07 41** P **P** **19 56 41.5 -1.2**
baz=93
**N35A Tabor 93.07 48** P **P** **19 56 42.1 -0.7**
baz=93
**A28A Rude Farm, Bot 93.09 39** P **P** **19 56 42.2 -0.6**
baz=93
**H32A Carlson Farm, 93.17 44** P **P** **19 56 42.3 -0.9**
baz=93
**Q37A Longview Farm, 93.23 50** P **P** **19 56 42.8 -0.7**
baz=93
**M35A Neola 93.25 47** P **P** **19 56 43.4 -0.2**
baz=93
**O36A Bolckow 93.29 49** P **P** **19 56 43.3 -0.5**
baz=93
**D30A Buchanan 93.31 41** P **P** **19 56 42.4 -1.4**
baz=93
**K34A Le Mars 93.41 46** P **P** **19 56 43.0 -1.4**
baz=94
**G32A Webster 93.41 43** P **P** **19 56 42.5 -1.8**
baz=94
**I33A Coleman 93.43 45** P **P** **19 56 43.4 -1.0**
baz=94
**UALR University of 93.43 55** *e*P **P** **19 56 44.7 +0.1**
comp=Z,40nm,1.0s
**ECSD EROS Data Cent 93.44 45** P **P** **19 56 44.7 +0.2**
baz=94,SNR=7.8
**B29A Wagenman Farm, 93.47 40** P **P** **19 56 43.2 -1.3**
baz=94
**L35A Bielow Farm, R 93.58 47** P **P** **19 56 43.9 -1.2**
baz=94
**CIT Chita 93.63 324** *e*P P **19 56 41.0 -4.2**
CIT *e* **19 57 10.1**
**E31A Nome 93.65 42** P **P** **19 56 44.2 -1.2**
baz=94
**C30A Mose, Pekin 93.71 41** P **P** **19 56 44.4 -1.2**
baz=94
**A29A Manning Farm, 93.72 40** P **P** **19 56 44.2 -1.4**
baz=94
**D31A Mcclaflin, Tow 93.94 42** P **P** **19 56 45.0 -1.6**
baz=94
**I34A Hadley 94.05 45** P **P** **19 56 45.9 -1.4**
baz=94
**LZH Lanzhou 94.26 306** *e*P **P** **19 56 48.9 +0.3**
LZH pP **pP** **19 57 12.8 +0.9**
LZH sP **sP** **19 57 22.1 +0.9**
LZH PP **PP** **20 00 39.0 +2.1**
LZH SKS **SKSac** **20 07 13.0 -3.2**
LZH S **S** **20 07 49.1 -4.1**
LZH sS **sS** **20 08 33.1 -0.3**
LZH SS **SS** **20 14 17.0 +0.2**
LZH PMZ
comp=Z,35nm,1.3s
LZH PMZ
comp=Z,180nm,6.0s
LZH LN
comp=Z,550nm,17.0s
LZH LE
comp=Z,630nm,16.5s
LZH LZ
comp=Z,2μm,19.4s
**A30A Hoffart Farm, 94.29 40** P **P** **19 56 47.0 -1.3**
baz=94
**F33A 5 Mile Ranch, 94.41 43** P **P** **19 56 47.8 -1.0**
baz=94
**I35A Creekview Farm 94.58 45** P **P** **19 56 48.2 -1.5**
baz=95
**B32A Ashes, Strandq 95.18 41** P **P** **19 56 50.8 -1.5**
baz=95
**I36A Fitzsimmons Fa 95.30 46** P **P** **19 56 51.5 -1.5**
baz=95
**E34A Wadena 95.38 43** P **P** **19 56 51.6 -1.7**
baz=96
**C33A Trail 95.43 42** P **P** **19 56 55.7 +2.2**
baz=96
**F35A Swanville 95.55 44** P **P** **19 56 52.4 -1.6**
baz=96
**AGMN Agassiz Nation 95.56 41** P **P** **19 56 52.8 -1.3**
baz=96
**AGMN Agassiz Nation 95.56 41** *e*P **P** **19 56 52.6 -1.4**
comp=Z,12nm,0.9s
**BOD Bodaibo 95.80 329** *e*P **P** **19 56 52.2 -2.7**
BOD pmax pmax
comp=Z,5.0nm,2.0s
**G36A St. Michael 95.88 44** P **P** **19 56 54.9 -0.6**
baz=96
**ULN Ulaanbaatar 95.94 318** *de*P **P** **19 56 56.2 +0.2**
ULN pmax pmax
comp=Z,8.0nm,0.9s
**ULN Ulaanbaatar 95.94 318** *e*P **P** **19 56 55.9 -0.1**
comp=Z,6.7nm,0.8s
ULN LR LR 20 33 06.8
comp=Z,913nm,21.8s,baz=252,slow=31
**D35A Remer 96.30 43** P **P** **19 56 56.3 -1.2**
baz=96
**SONM Songino Array 96.34 318** P **P** **19 56 57.4 -0.4**
comp=Z,1.8nm,0.9s,baz=129,slow=3.6,SNR=9.4
SONM PP PP 20 00 42.6 -10
comp=Z,1.5nm,1.1s,baz=103,slow=6.4,SNR=4.8
SONM LR LR 20 35 35.0
comp=Z,226nm,21.0s,baz=108,slow=32
**B34A Aery, Baudette 96.39 41** P **P** **19 56 56.8 -1.0**
baz=96
**SPMN St. Paul 96.51 45** P **P** **19 56 57.2 -1.3**
baz=97
**SPMN St. Paul 96.51 45** *e*P **P** **19 56 57.9 -0.5**
comp=Z,26nm,1.0s
SPMN *ep*P **pP** **19 57 21.4 -0.3**
**C35A Jirik Farms, M 96.55 42** P **P** **19 56 56.2 -2.4**
baz=97
**D36A Goodland 96.90 43** P **P** **19 56 59.0 -1.2**
baz=97
**C36A Pine Crest Far 97.30 42** P **P** **19 57 00.8 -1.2**
baz=97
**WVT Waverly 97.35 55** *e*P **P** **19 57 02.0 -0.5**
WVT pmax pmax
comp=Z,9.0nm,0.9s
**WVT Waverly 97.35 55** *e*P **P** **19 57 02.0 -0.5**
comp=Z,8.7nm,0.9s
**D37A Cotton 97.37 43** P **P** **19 57 01.1 -1.2**
baz=97
**HDIL Hopedale 97.53 50** P **P** **19 57 02.2 -1.0**
baz=98
**C37A Embarrass 97.70 42** P **P** **19 57 02.5 -1.3**
baz=98
**C38A Sawbill Land. 98.29 43** P **P** **19 57 05.3 -1.1**
baz=98
**GTA Gaotai 98.31 309** P Pdif 19 57 07.6 +0.7
GTA pP pP 19 57 32.0 +1.8
GTA sP sP 19 57 40.9 +1.4
GTA SKS **SKSac** **20 07 38.1 +1.0**
GTA S **ScS** **20 08 28.2 +0.3**
GTA sS sS 20 09 04.6 -3.6
GTA PMZ
comp=Z,7.0nm,1.1s
GTA PMZ
comp=Z,110nm,4.9s
GTA LN
comp=Z,280nm,20.0s
GTA LE
comp=Z,430nm,24.7s
GTA LZ
comp=Z,920nm,25.7s
**SFIN Scholer Farm 99.09 51** P **Pdif** **19 57 09.3 -0.9**
baz=99
**COWI Conover 99.22 45** *e*P **Pdif** **19 57 09.9 -0.7**
comp=Z,6.7nm,0.8s
**TLY Talaya 99.25 321** *e*P **Pdif** **19 57 14.5 +3.9**
TLY *e*SSS SSS 20 19 05.5
TLY pmax pmax
comp=Z,11nm,1.3s
TLY MLR MLR
comp=Z,170nm,18.0s
**LPAZ La Paz 99.47 111** PP PP 20 01 17.5 -0.1
comp=Z,0.9nm,0.7s,baz=236,slow=10,SNR=3.8
LPAZ LR LR 20 31 40.2
comp=Z,490nm,20.2s,baz=252,slow=29
**LPAZ La Paz 99.47 111** P **Pdif** **19 57 14.5 +1.3**
baz=100,SNR=8.7
**WMQ Urumqi 108.11 311** Pdif **Pdif** **19 57 48.0 -2.3**
WMQ SS SS 20 17 26.0 -2.3
WMQ PPMZ
comp=Z,92nm,9.0s
WMQ LN
comp=Z,260nm,24.0s
WMQ LE
comp=Z,400nm,26.0s
WMQ LZ
comp=Z,460nm,26.0s
**ZALV Zalesovo Beam 110.86 322** PKiKP **PKiKP** **20 02 00.6 -0.8**
comp=Z,1.3nm,0.5s,baz=122,slow=1.9,SNR=9.1
ZALV PKKPbc **PKKPab** **20 13 08.3 -0.5**
comp=Z,0.5nm,0.6s,baz=272,slow=5.2,SNR=4.4
**NVS Novosibirsk 111.80 323** *e*PKIKP PKiKP 20 01 55.6 -7.5
NVS *i* **SKSac** **20 08 38.8 +1.7**
NVS pmax pmax
comp=Z,11nm,1.6s
**MKAR Makanchi Array 112.18 314** Pdiff **Pdif** **19 58 13.8 +5.5**
comp=Z,0.1nm,0.2s,baz=91,slow=6.1,SNR=4.0
MKAR PKiKP **PKiKP** **20 02 03.6 -0.6**
comp=Z,3.1nm,0.7s,baz=80,slow=1.2,SNR=15
MKAR PKKPbc **PKKPbc** **20 12 56.3 -0.5**
comp=Z,0.3nm,0.5s,baz=289,slow=3.7,SNR=4.4
**KURK Kurchatov 114.65 318** *e*PKIKP PKPdf 20 02 08.7 0.0
**KURK Kurchatov 114.65 318** *e*PKiKP PKPdf 20 02 08.7 0.0
**KSH Kashi 116.50 306** PKP **PKPdf** **20 02 14.0 +1.1**
KSH *es*PKP 20 02 50.3
KSH PKS **PKSdf** **20 05 51.8 +2.2**
KSH PPMZ
comp=Z,130nm,5.4s
KSH LN
comp=Z,160nm,5.8s
KSH LE
comp=Z,140nm,6.2s
KSH LZ
comp=Z,180nm,6.5s
**TKM2 Tokmak 2 116.84 310** *e*PKIKP **PKPdf** **20 02 12.9 -0.6**
TKM2 *e* 20 02 38.4
**TKM2 Tokmak 2 116.84 310** *e*PKPdf **PKPdf** **20 02 12.9 -0.6**
TKM2 *ep*PKPdf pPKPdf 20 02 38.4 +0.6
**AAK Ala-Archa 117.66 309** ⇑ *i*PKIKP **PKPdf** **20 02 15.6 +0.6**
**AAK Ala-Archa 117.66 309** *e*PKPdf **PKPdf** **20 02 14.6 -0.5**
**EKS2 Erkin-Say 118.19 309** *e*PKIKP **PKPdf** **20 02 16.5 +0.5**
**EKS2 Erkin-Say 118.19 309** *e*PKPdf **PKPdf** **20 02 16.5 +0.5**
**BRVK Borovoye 119.56 321** *e*PKIKP **PKPdf** **20 02 17.9 -0.2**
**BRVK Borovoye 119.56 321** *e*PKPdf **PKPdf** **20 02 17.9 -0.2**
**KKAR Karatay Array 120.56 310** *e*PKIKP **PKPdf** **20 02 20.3 -0.1**
**KKAR Karatay Array 120.56 310** *e*PKPdf **PKPdf** **20 02 20.3 -0.1**
**SVE Sverdlovsk 123.96 327** *i* PKIKP **PKPdf** **20 02 27.3 +0.9**
SVE pmax pmax
comp=Z,17nm,0.9s
SVE MLR MLR
comp=Z,651nm,21.0s
**ARU Arti 125.17 327** PKP **PKPdf** **20 02 28.8 0.0**
comp=Z,0.3nm,0.4s,baz=107,slow=19,SNR=2.4
**ARU Arti 125.17 327** *i* PKIKP **PKPdf** **20 02 29.1 +0.3**
ARU 20 04 19.1
ARU 20 09 23.7
**ABKAR Akbulak array 126.75 319** *e*PKPdf **PKPdf** **20 02 32.6 +0.6**
**LVZ Lovozero 126.83 347** *i* PKIKP **PKPdf** **20 02 31.2 -0.5**
**APA Apatity 127.37 347** ⇓ *i*PKIKP PKPdf 20 02 43.0 +10
APA *i* SS SS 20 21 35.0 -0.7
APA MLR MLR
comp=Z,700nm,20.0s
**AKTO Aktyubinsk 127.59 321** PKP **PKPdf** **20 02 34.1 +0.5**
comp=Z,4.2nm,0.9s,baz=71,slow=2.9,SNR=11
**BOSA Boshof 130.13 202** PKP **PKPdf** **20 02 40.3 +0.9**
comp=Z,11nm,1.0s,baz=147,slow=4.8,SNR=6.2
**GEYT Alibeck 130.52 305** PKP **PKPdf** **20 02 40.4 +0.8**
comp=Z,8.0nm,0.9s,baz=242,slow=3.2,SNR=16
GEYT pPKP **pPKPdf** **20 03 03.1 -0.7**
comp=Z,4.3nm,0.8s,baz=225,slow=0.6,SNR=4.1
GEYT PP **PP** **20 04 52.8 -2.4**
comp=Z,2.8nm,0.9s,baz=84,slow=6.1,SNR=3.8
**KLMR Klimovskoe 130.95 339** *e*PKIKP **PKPdf** **20 02 39.7 0.0**
KLMR *e* 20 03 02.0
KLMR pmax pmax
comp=Z,24nm,1.8s
**HATD Hatta, Dubai 133.03 287** *i* PKiKP **PKPdf** **20 02 45.2 +0.5**
SNR=8.0
**ASHO Ashiyiah 133.10 287** *i* PKiKP **PKPdf** **20 02 45.0 +0.1**
SNR=8.1
**ASUD Al Ashush, Dub 133.76 287** ⇓ *i*PKiKP **PKiKP** **20 02 47.2 -0.1**
**FINES FINESS Array B 134.27 347** PKhKP PKPpre 20 02 38.3
comp=Z,3.4nm,0.8s,baz=134,slow=5.5,SNR=4.0
FINES PKP **PKiKP** **20 02 47.4 +0.2**
comp=Z,6.8nm,0.8s,baz=57,slow=3.0,SNR=9.7
FINES pPKP pPKPdf 20 03 09.1 -1.0
comp=Z,12nm,0.9s,baz=54,slow=3.3,SNR=5.5
**OBN Obninsk 136.17 335** ⇑ *e*PKIKP **PKPdf** **20 02 51.4 +1.7**
comp=Z,7.9nm,0.5s,baz=300,slow=12,SNR=3.6
**OBN Obninsk 136.17 335** ⇑ *e*PKIKP **PKPdf** **20 02 51.3 +1.7**
OBN *e* 20 03 16.1
OBN pmax pmax
comp=Z,37nm,2.2s
OBN MLR MLR
comp=Z,182nm,18.0s
**VRH Novokhopyorsk 136.40 328** *i* PKIKP **PKPdf** **20 02 51.7 +1.5**
VRH *e**PP PKiKP 20 03 16.0 +24
VRH pmax pmax
comp=Z,10.0nm,0.9s
VRH pmax pmax
comp=N,9.0nm,0.6s
VRH pmax pmax
comp=E,8.0nm,0.6s
**NB2 NORSAR Subarra 136.78 356** PKPdf PKPdf 20 02 56.5 +5.8
comp=Z,12nm,1.1s,baz=6.6,slow=1.8
**NB2 NORSAR Subarra 136.78 356** PKPdf PKPdf 20 02 56.5 +5.8
baz=6.6,slow=1.8
**NOA NORSAR Array B 136.78 356** pPKP pPKPdf 20 03 15.1 +0.2
comp=Z,5.3nm,0.9s,baz=13,slow=4.0,SNR=5.8
**LPSR Galich'ya Gora 136.88 331** *i* PKIKP **PKPdf** **20 02 50.8 -0.2**
LPSR pmax pmax
comp=Z,7.0nm,0.7s
LPSR pmax pmax
comp=N,10.0nm,1.1s
LPSR pmax pmax
comp=E,6.0nm,0.9s
**HFS Hagfors 137.49 354** PKhKP PKPpre 20 02 47.2
comp=E,2.6nm,0.7s,baz=20,slow=4.7,SNR=6.1
**VSR Storozhevoye 137.66 329** *i* PKIKP **PKPdf** **20 02 53.9 +1.4**
VSR *e**PP PKiKP 20 03 17.3 +23
VSR pmax pmax
comp=Z,10.0nm,1.3s
VSR pmax pmax
comp=N,5.0nm,1.1s
VSR pmax pmax
comp=E,9.0nm,1.1s
**VORD Divnogorie 137.76 329** *i* PKIKP **PKPdf** **20 02 53.3 +0.6**
VORD *e**PP PKiKP 20 03 17.4 +23
VORD pmax pmax
comp=Z,10.0nm,1.3s
VORD pmax pmax
comp=N,9.0nm,0.8s
VORD pmax pmax
comp=E,6.0nm,0.8s
**ZEI Tsey 139.48 316** *e*PKIKP **PKPdf** **20 02 58.3 +1.9**
ZEI pmax pmax
comp=Z,28nm,1.0s
**MICGM Minsk 139.81 340** *e* PKPpre 20 02 50.0
**MNK Minsk 139.82 340** *e*PKHKP PKPpre 20 02 50.0
**LSZ Lusaka 140.42 215** *e*PKHKP PKPpre 20 02 54.4
**LSZ Lusaka 140.42 215** *e*PKPdf PKPpre 20 02 54.4
**SOC Sochi 141.79 319** *i* PKIKP **PKPdf** **20 03 01.8 +1.5**
SOC *e* 20 03 27.4
SOC *e* 20 06 04.2
SOC pmax pmax
comp=Z,39nm,1.0s
**CUKT Cukurca 141.84 308** *e*P **PKPdf** **20 02 56.9 -3.9**
**EKA Eskdalemuir Ar 142.01 9** PKhKP PKPpre 20 02 54.9
comp=Z,2.5nm,1.0s,baz=18,slow=3.0,SNR=3.7
**AKASG Malin Array Be 142.42 336** PKhKP PKPpre 20 02 57.0
comp=Z,5.6nm,0.7s,baz=37,slow=4.2,SNR=21
**KIEV Kiev 142.44 336** *ce*PKHKP PKPpre 20 02 56.9
**KIEV Kiev 142.44 336** *e*PKPpre PKPpre 20 02 56.5
**ANN Anapa 142.49 322** *i* PKHKP PKPpre 20 02 57.4
ANN pmax pmax
comp=Z,55nm,1.0s
**SIRT Sirnak 142.63 309** *e*P **PKPdf** **20 02 57.8 -4.4**
**SIRN S¨¨rnak 142.65 309** P PKPdf 20 02 56.8 -5.3
**RAYN Ar Rayn 142.73 285** *e*PKPpre PKPpre 20 02 58.6
**DAMY Dhamar 143.05 271** *e*PKPdf **PKPdf** **20 03 02.3 -1.4**
**KELT Kelkit 143.79 315** P PKPbc 20 03 02.4 +0.4
**KMBO Kilima Mbogo 143.89 242** PKP **PKPdf** **20 03 05.2 -0.1**
comp=Z,77nm,0.9s,baz=75,slow=4.3,SNR=145
**BSEG Bad Segeberg 143.91 356** *e*PKPdf **PKPdf** **20 03 06.5 +2.8**
**MARD Mardin 143.92 309** P PKPab 20 02 58.7 -3.1
**MAZI Mazidag 144.11 310** *e*P PKPbc 20 03 03.8 +0.8
**PTK Pertek 144.26 313** *e*P **PKPdf** **20 03 05.0 -0.1**
**SIM Simferopol' 144.27 325** *i* PKIKP **PKPdf** **20 03 04.4 -0.2**
SIM *e* 20 03 27.0
SIM *e**PP PKiKP 20 03 36.0 +28
SIM pmax pmax
comp=Z,17nm,1.0s
**SHEL Horse Pasture 144.39 160** *i* PKP2 **PKPdf** **20 03 06.8 +1.0**
**SHEL Horse Pasture 144.39 160** *e*PKPdf **PKPdf** **20 03 05.1 -0.7**
**SUSE Susehri 144.47 315** P **PKPab** **20 03 02.4 -1.4**
**SVRC Sivrice-ELAZID 144.55 312** *e*P **PKPdf** **20 03 06.2 +0.6**
**KEMA Kemaliye 144.72 314** P PKPbc 20 03 05.3 +0.4
**CUZAR Zara_SIVAS 144.91 315** P **PKPdf** **20 03 06.2 +0.1**
**LVV L'vov 145.04 340** *e*PKIKP **PKPab** **20 03 05.4 0.0**
**MALT Malatya 145.20 312** *e*P **PKPdf** **20 03 08.6 +1.9**
**MALT Malatya 145.20 312** ⇑ PKIKP **PKPdf** **20 03 08.1 +1.5**
**MALT Malatya 145.20 312** ⇑ *i*P **PKPdf** **20 03 08.1 +1.5**
**URFA Urfa 145.30 311** *e*P **PKPab** **20 03 07.8 +0.9**
**NRDL Niedersach Rie 145.36 356** *e*PKPdf **PKPdf** **20 03 05.7 -0.5**
NRDL *ep*PKPdf **pPKPdf** **20 03 30.2 -0.2**
**CUKAN kangal_SIVAS 145.40 315** P **PKPdf** **20 03 06.2 -0.8**
**KIS Kishinev 145.46 332** ⇓ *i*PKP **PKPab** **20 03 07.0 -0.1**
comp=Z,300nm,1.4s
KIS *ep*PKP **pPKPdf** **20 03 31.0 +0.1**
KIS *es*PKP 20 03 44.0
KIS *e*L L 21 00 30.0
KIS LRM MLR 21 04 54.0
comp=Z,400nm,22.0s
**KIS Kishinev 145.46 332** ⇓ *i*PKIKP **PKPab** **20 03 07.0 -0.1**
KIS *e* 20 03 31.0
KIS *e* 20 03 44.0
KIS pmax pmax
comp=Z,250nm,1.4s
KIS MLR MLR
comp=Z,400nm,22.0s
**TOKA Tokat 145.55 317** P **PKPab** **20 03 08.1 +0.4**

AKCD Akcadag 145.56 313 P PKPab 20 03 09.6 +1.7
MNKR ALMNKUR 145.57 308 eP PKPab 20 03 09.8 +1.9
DIKM Dikmen 145.60 320 eP PKPdf 20 03 07.0 0.0
KWP Kalwaria Pacla 145.63 341 ePKP PKPab 20 03 07.6 0.0
KWP Kalwaria Pacla 145.63 341 ePKIKP PKPab 20 03 07.7 +0.1
IBBN Ibbenburen 145.67 358 ePKPdf PKPab 20 03 07.5 -0.1
IBBN epPKPdf pPKPdf 20 03 30.3 -0.8
DARE Darende-Malaty 145.74 313 eP PKPab 20 03 09.9 +1.3
KSRV Kasrt alli 145.80 308 eP PKPab 20 03 09.7 +1.0
OJC Ojcow 145.94 344 ePKP PKPdf 20 03 07.7 +0.4
OJC Ojcow 145.94 344 ePKIKP PKPdf 20 03 07.8 +0.4
CLZ Clausthal 145.99 355 ePKPdf PKPbc 20 03 08.3 0.0
CLZ epPKPdf pPKPdf 20 03 31.8 +0.1
WTSB Winterswijk 146.03 359 ePKP PKPdf 20 03 07.5 +0.1
comp=Z,223nm,1.6s
WTSB epPKP pPKPdf 20 03 29.1 -2.5
KSP Ksiaz 146.15 348 ePKP PKPab 20 03 09.2 -0.3
KSP Ksiaz 146.15 348 ePKIKP PKPab 20 03 09.3 -0.3
CUSAR Sarkisla-SIVAS 146.17 316 P PKPab 20 03 10.0 -0.2
CLL Collm 146.24 352⇓iPKIKP PKPbc 20 03 09.0 0.0
CLL i 20 03 32.6
CLL pmax pmax
comp=Z,92nm,1.0s
CLL Collm 146.24 352 ePKPdf PKPbc 20 03 08.4 -0.6
CLL epPKPdf pPKPdf 20 03 32.8 +0.8
CLL Collm 146.24 352⇓iPKPbc PKPbc 20 03 09.0 0.0
comp=Z,92nm,1.0s
CLL i (PKiKP) PKiKP 20 03 14.3 +2.2
CLL i pPKPdf pPKPdf 20 03 32.6 +0.5
CLL esPKPdf sPKPdf 20 03 38.0 -3.1
CLL i sPKiKP sPKiKP 20 03 46.7 +1.4
CLL eSS SS 20 25 24.0 +4.2
CLL eSSS SSS 20 31 06.0
STHS Stebnicka Huta 146.26 342 ePKP2 PKPab 20 03 10.3 +0.2
STHS Stebnicka Huta 146.26 342 ePKP PKPab 20 03 10.3 +0.2
PRAR RASCA 146.28 335⇑iP PKPab 20 03 10.4 +0.2
GTTG Gvttingen 146.31 356 ePKPdf PKPbc 20 03 09.1 -0.2
GTTG epPKPdf pPKPdf 20 03 33.5 +1.3
KOLS Kolonicke sedl 146.38 341 ePKP2 PKPab 20 03 10.9 +0.4
KOLS Kolonicke sedl 146.38 341 ePKP PKPab 20 03 10.9 +0.4
KOLS e 20 03 35.3
PINB Pinarbasi 146.43 314 P PKPbc 20 03 10.0 -0.4
BURAR Bucovina Array 146.47 336 ⇑PKP2 PKPab 20 03 11.5 +0.5
BURAR Bucovina Array 146.47 336⇑iP PKPab 20 03 11.5 +0.5
UPC Upice 146.53 348 ePKP2 PKPbc 20 03 09.3 -0.6
UPC Upice 146.53 348 ePKP PKPbc 20 03 09.3 -0.6
UPC ex x 20 03 28.0
UPC epPKP pPKPdf 20 03 33.2 +0.6
UPC esPKP 20 03 40.0
UPC ex x 20 03 47.5
UPC eSS SS 20 25 27.2 +4.0
BRG Berggiesshubel 146.53 351 ePKP PKPbc 20 03 09.4 -0.5
comp=Z,51nm,1.1s
BRG i pPKP pPKPdf 20 03 33.2 +0.7
comp=Z,83nm,1.3s
BRG Berggiesshubel 146.53 351 ePKP2 PKPbc 20 03 09.4 -0.5
BRG pmax pmax
comp=Z,51nm,1.1s
BRG Berggiesshubel 146.53 351 ePKPdf PKPbc 20 03 09.6 -0.3
NIE Niedzica 146.53 343 ePKP PKPbc 20 03 10.4 +0.4
NIE Niedzica 146.53 343 ePKP2 PKPbc 20 03 10.4 +0.4
BUG Bochum--Univer 146.55 359 ePKPbc PKPbc 20 03 09.8 -0.1
baz=9.7,slow=3.0
BUG epPKPbc pPKPbc 20 03 33.3 -0.5
SARI SarD1z-Kayseri 146.55 314 eP PKPbc 20 03 10.7 0.0
DPC Dobruska-Polom 146.62 348 ePKIKP PKPdf 20 03 07.4 -1.2
DPC e 20 03 10.2
DPC e 20 03 33.7
DPC Dobruska-Polom 146.62 348 ePKP PKPdf 20 03 07.4 -1.2
DPC ex x 20 03 10.2
DPC epPKP pPKPdf 20 03 33.7 +0.9
DPC ex x 20 03 47.2
UZH Uzhgorod 146.64 340 ePKIKP PKPbc 20 03 09.5 -0.7
UZH e 20 03 33.2
UZH e 20 03 42.5
UZH e 20 10 08.3
UZH eSS SS 20 25 23.5 -1.2
KMRS Kahramanmaras 146.64 312 eP PKPbc 20 03 10.2 -0.5
OKC Ostrava-Krasne 146.70 346 ePKIKP PKPdf 20 03 09.3 +0.7
OKC e 20 03 11.1
OKC e 20 03 33.5
OKC e 20 03 41.0
OKC Ostrava-Krasne 146.70 346 ePKP PKPdf 20 03 09.3 +0.7
OKC ex x 20 03 11.1
OKC ex x 20 03 17.4
OKC ex x 20 03 29.1
OKC epPKP pPKPdf 20 03 33.5 +0.6
OKC esPKP 20 03 41.0
OKC ex x 20 03 48.3
BNN Bunyan 146.72 315 eP PKPab 20 03 12.9 +0.6
AYKD Aykdinkavak 146.75 312 P PKPab 20 03 12.0 -0.4
PVCC Panska Ves 146.76 350 ePKP2 PKPbc 20 03 09.7 -0.9
PVCC e 20 03 11.0
PVCC e 20 03 33.9
PVCC e 20 03 47.3
PVCC Panska Ves 146.76 350 ePKP PKPbc 20 03 09.7 -0.9
PVCC ex x 20 03 11.0
PVCC ex x 20 03 28.9
PVCC epPKP pPKPdf 20 03 33.9 +0.9
PVCC esPKP 20 03 40.5
PVCC ex x 20 03 47.3
KRLC Kraliky 146.78 347 ePKP2 PKPbc 20 03 09.8 -0.9
KRLC Kraliky 146.78 347 ePKP PKPbc 20 03 09.8 -0.9
KRLC ex x 20 03 30.8
KRLC epPKP pPKPdf 20 03 33.9 +0.8
KRLC esPKP 20 03 42.3
TESR Tescani 146.78 334⇓iP PKPbc 20 03 11.3 +0.5
TLCR 146.82 330 ⇑PKP2 PKPab 20 03 12.4 +0.1
TLCR 146.82 330⇑iP PKPab 20 03 12.4 +0.1
KUZU Kuzuini 146.84 311 P PKPdf 20 03 09.0 -0.4
GIUM Giurgiulesti 146.88 331⇑iP PKPab 20 03 12.6 +0.1
MORC Moravsky Berou 146.90 346 ⇑PKP2 PKPab 20 03 12.0 -0.5
MORC Moravsky Berou 146.90 346⇑iP PKPab 20 03 12.0 -0.5
MORC Moravsky Berou 146.90 346 ePKPdf PKPdf 20 03 10.0 +0.9
TRPA Tarpa 146.99 340⇑iP PKPab 20 03 12.9 0.0
TRPA Tarpa 146.99 340⇓ePKPdf PKPab 20 03 12.2 -0.7
ANDN Andirin 147.00 313 P PKPab 20 03 12.9 -0.5
LANS Liptovska Anna 147.00 344 ePKP2 PKPab 20 03 13.1 +0.1
LANS Liptovska Anna 147.00 344 ePKP PKPab 20 03 13.1 +0.1
LANS e 20 03 35.0
FURI Furi 147.03 259 i P PKPab 20 03 15.2 +0.7
MOX Moxa 147.05 353 ePKPbc PKPbc 20 03 11.7 +0.3
baz=9.7,slow=3.0
BMR Baia Mare 147.06 338 ⇑PKP2 PKPab 20 03 13.8 +0.6
BMR Baia Mare 147.06 338⇑iP PKPab 20 03 13.8 +0.6
PETR Petresti 147.15 332⇑iP PKPab 20 03 14.9 +1.4
CFR Carcaliu 147.15 331 ⇓PKP2 PKPab 20 03 12.8 -0.8
CFR Carcaliu 147.15 331⇓iP PKPab 20 03 12.8 -0.8
TANN Tannenbergstha 147.18 352 ePKPbc PKPbc 20 03 11.9 +0.1
baz=9.7,slow=3.0
DRWC Darouich 147.21 311 eP PKPab 20 03 20.2 +6.0
BEBN Eben Emael 147.21 0 PKP PKPbc 20 03 12.6 +0.8
BEBN APKP pPKPdf 20 03 36.1 +2.4
PRA Prague 147.23 350 ePKIKP PKPdf 20 03 09.4 -0.1
PRA e 20 03 12.3
PRA e 20 03 34.7
PRA e 20 03 43.5
PRA Prague 147.23 350 ePKP PKPdf 20 03 09.4 -0.1
PRA ex x 20 03 12.3
PRA epPKP pPKPdf 20 03 34.7 +0.9
PRA esPKP 20 03 43.5
PRA eSS SS 20 25 36.0 +5.0
ARCR ARCALIA 147.24 337⇑iP PKPbc 20 03 12.3 +0.3
HGN Heimansgroeve 147.24 0 ePKP PKPbc 20 03 12.6 +0.8
comp=Z,172nm,1.8s
HGN epPKP pPKPdf 20 03 36.0 +2.2
CDAG Cicekdag 147.29 317 P PKPbc 20 03 12.8 +0.2
PRU Pruhonice 147.29 350 ePKP2 PKPbc 20 03 12.9 +0.8
PRU Pruhonice 147.29 350 ePKP PKPbc 20 03 12.9 +0.8
PRU ex x 20 03 14.2
PRU ex x 20 03 17.9
PRU epPKP pPKPdf 20 03 34.5 +0.6
PRU esPKP 20 03 43.3
PRU eSS SS 20 25 41.4 +10
PRU AMS AMS 21 12 30.0
PLOR Plostina 147.30 333 ⇑PKP2 PKPbc 20 03 11.7 -0.6
PLOR Plostina 147.30 333⇑iP PKPbc 20 03 11.7 -0.6
GOPC GO Pecny, Ondr 147.32 349 ePKIKP PKPdf 20 03 09.9 +0.2
GOPC e 20 03 13.2
GOPC e 20 03 33.8
GOPC e 20 03 43.4
GOPC GO Pecny, Ondr 147.32 349 ePKP PKPdf 20 03 09.9 +0.2
GOPC ex x 20 03 13.2
GOPC ex x 20 03 31.2
GOPC epPKP pPKPdf 20 03 33.8 -0.2
GOPC esPKP 20 03 43.4
NKC Novy Kostel 147.36 352 ePKIKP PKPdf 20 03 10.5 +0.7
NKC e 20 03 12.8
NKC e 20 03 35.1
NKC e 20 03 41.5
NKC Novy Kostel 147.36 352 ePKP PKPdf 20 03 10.5 +0.7
NKC ex x 20 03 12.8
NKC ex x 20 03 14.8
NKC epPKP pPKPdf 20 03 35.1 +1.1
NKC ex x 20 03 41.5
NKC ex x 20 03 49.5
MEM Membach 147.40 0 PKP PKPbc 20 03 12.9 +0.6
MEM APKP pPKPdf 20 03 31.5 -2.5
SAFT Safranbolu 147.40 321 eP PKPbc 20 03 13.5 +0.8
KOZT Kozan 147.41 313 eP PKPbc 20 03 13.1 +0.3
SNF Seneffe 147.47 2 PKP PKPbc 20 03 12.9 +0.4
SNF APKP pPKPdf 20 03 35.1 +0.9
VRAC Vranov 147.55 347 PKPbc PKPab 20 03 14.0 -1.1
comp=Z,18nm,0.9s,baz=2.9,slow=3.1,SNR=13
VRAC pPKPbc pPKPbc 20 03 35.4 -1.4
comp=Z,38nm,1.0s,baz=21,slow=4.2,SNR=6.6
VRAC Vranov 147.55 347 ⇑PKP2 PKPbc 20 03 12.2 -0.6
VRAC Vranov 147.55 347⇑iP PKPbc 20 03 12.2 -0.6
TIRR Tirgusor 147.55 329 ⇑PKP2 PKPab 20 03 14.2 -1.0
TIRR Tirgusor 147.55 329⇑iP PKPab 20 03 14.2 -1.0
BCLA Clavier 147.58 1 PKP PKPbc 20 03 13.5 +0.7
BCLA APKP pPKPdf 20 03 37.8 +3.4
BTCH Batrach 147.61 310 eP PKPbc 20 03 14.4 +0.9
TLB Topalu 147.64 330 ⇑PKP2 PKPbc 20 03 12.9 -0.2
TLB Topalu 147.64 330⇑iP PKPbc 20 03 12.9 -0.2
TAHT Tahtakopru-Hat 147.66 311 eP PKPab 20 03 14.8 -1.2
CEYT Ceyhan 147.68 312 eP PKPab 20 03 15.3 -0.7
BRTR Keskin Array B 147.70 318 PKPbc PKPbc 20 03 14.2 +0.4
comp=Z,40nm,0.9s,baz=128,slow=2.0,SNR=93
BRTR pPKPbc pPKPbc 20 03 37.0 -0.8
comp=Z,24nm,0.8s,baz=162,slow=2.1,SNR=5.5
RABH Abou Rabah 147.71 307 eP PKPbc 20 03 14.7 +0.9
TNS Taunus Mts 147.72 357 ePKPbc PKPbc 20 03 14.0 +0.7
baz=9.7,slow=3.0
DOPR Dopca 147.74 334⇑iP PKPab 20 03 15.9 -0.1
ROOS tl_alroos 147.75 306 eP PKPbc 20 03 14.9 +1.0
VYHS Vyhne 147.77 344 ePKIKP PKPdf 20 03 11.5 +1.0
VYHS e 20 03 14.6
VYHS e 20 03 37.9
VYHS Vyhne 147.77 344 ePKP PKPdf 20 03 11.5 +1.0
VYHS e 20 03 14.6
VYHS e 20 03 37.9
CJR Cluj-Napoca 147.83 337 ⇑PKP2 PKPbc 20 03 15.0 +1.3
CJR Cluj-Napoca 147.83 337⇑iP PKPbc 20 03 15.0 +1.3
ROTZ Rotzenmuhle 147.85 352 ePKPbc PKPbc 20 03 14.3 +0.7
baz=9.7,slow=3.0
YURE YUREGIR 147.85 312 P PKPbc 20 03 12.8 -1.3
KAMT Kaman 147.85 317 eP PKPbc 20 03 15.0 +0.9
YAYL Yayladag 147.87 310 P PKPbc 20 03 13.7 -0.5
WRDH Warideh 147.87 309 eP PKPbc 20 03 14.7 +0.5
DOU Dourbes 147.89 2 PKP PKPbc 20 03 14.3 +0.7
DOU APKP pPKPdf 20 03 35.4 +0.5
MLR Muntele Rosu 147.89 333 ⇑PKP2 PKPab 20 03 16.1 -0.6
MLR Muntele Rosu 147.89 333⇑iP PKPab 20 03 16.1 -0.6
NIG Nigde 147.93 315 eP PKPbc 20 03 15.1 +0.5
PSZ Piszkesteto 148.00 342 ⇑PKP2 PKPab 20 03 16.8 -0.2
PSZ Piszkesteto 148.00 342⇑iP PKPab 20 03 16.8 -0.2
PSZ Piszkesteto 148.00 342⇓ePKPdf PKPbc 20 03 15.0 +0.8
PSZ Piszkesteto 148.00 342 ePKPdf PKPdf 20 03 11.6 +0.6
YAYX Yaylak 148.03 317 eP PKPbc 20 03 15.6 +1.0
BCAM Yenicaga 148.03 321 P PKPbc 20 03 13.7 -0.8
GRF Grafenberg Arr 148.04 354 ePKPbc PKPbc 20 03 15.5 +1.4
baz=9.7,slow=3.0
GRFO Grafenberg 148.04 354 ePKIKP PKPdf 20 03 11.3 +0.4
GRFO Grafenberg 148.04 354 ePKPdf PKPdf 20 03 11.3 +0.4
ARNB Al Arnab 148.04 310 eP PKPbc 20 03 15.6 +0.9
KARA Karaisali 148.05 313 eP PKPbc 20 03 16.0 +1.4
GULA Gulagac 148.06 315 eP PKPbc 20 03 14.7 0.0
DRGR 148.09 338 ⇑PKP2 PKPab 20 03 16.0 -1.4
DRGR 148.09 338⇑iP PKPab 20 03 16.0 -1.4
SMOL Smolenice 148.11 346 ePKP2 PKPbc 20 03 15.8 +1.5
SMOL Smolenice 148.11 346 ePKP PKPbc 20 03 15.8 +1.5
BIDA Albida 148.15 308 eP PKPab 20 03 16.8 -1.2
ANTO Ankara 148.16 319 ⇓PKIKP PKPbc 20 03 13.9 -0.9
ANTO Ankara 148.16 319⇓iP PKPbc 20 03 13.9 -0.9
ANTO Ankara 148.16 319 ePKPdf PKPdf 20 03 12.3 +0.8
ZALF Zalf 148.16 304 eP PKPbc 20 03 15.9 +0.9
SECR 148.20 333⇑iP PKPab 20 03 16.8 -1.0
AFSR Af¯ar-Bala (A 148.22 318 eP PKPbc 20 03 16.4 +1.4
GULE Gulek 148.23 313 P PKPab 20 03 17.5 -1.0
KHC Kasperske Hory 148.28 351 ePKP PKPdf 20 03 09.1 -2.2
KHC ex x 20 03 11.8
KHC ex x 20 03 15.3
KHC epPKP pPKPdf 20 03 36.9 +1.3
KHC eSS SS 20 25 49.2 +6.2
KHC Kasperske Hory 148.28 351 ePKPdf PKPdf 20 03 11.7 +0.3
HAWK Haweek 148.28 307 eP PKPbc 20 03 16.6 +1.2
VOIR 148.31 334 ⇓PKP2 PKPab 20 03 17.1 -1.2
VOIR 148.31 334⇓iP PKPab 20 03 17.1 -1.2
WLF Walferdange 148.34 360 PKP PKPbc 20 03 16.3 +1.4
WLF APKP pPKPdf 20 03 37.6 +2.0
WLF Walferdange 148.34 360 ePKP2 PKPbc 20 03 15.9 +1.0
WLF Walferdange 148.34 360 ePKPbc PKPbc 20 03 15.9 +1.0
baz=9.7,slow=3.0
WLF Walferdange 148.34 360 ePKPbc PKPbc 20 03 15.9 +1.0
WET Wettzell 148.37 351 ePKPbc PKPbc 20 03 15.4 +0.4
baz=9.7,slow=3.0
GEC2 GERESS Array S 148.53 350 ePKPbc PKPbc 20 03 15.5 -0.1
baz=9.7,slow=3.0
GERES GERESS Array B 148.53 350 PKPbc PKPbc 20 03 16.2 +0.7
comp=Z,36nm,1.1s,baz=36,slow=2.5,SNR=41
GERES pPKPbc pPKPbc 20 03 37.9 -1.8
comp=Z,11nm,0.7s,baz=45,slow=2.1,SNR=6.2
YESY Yesilyurt 148.69 315 eP PKPbc 20 03 16.2 -0.1
SALA Sala 148.71 304 eP PKPbc 20 03 17.8 +1.2
ASF Jabal al Asfar 148.76 303 PKPbc PKPbc 20 03 17.4 +0.8
comp=Z,25nm,0.9s,baz=70,slow=3.5,SNR=4.7
MDUB Mudurnu 148.77 321 eP PKPbc 20 03 17.8 +1.3
BTAS Taskesti 148.82 322 P PKPbc 20 03 17.5 +1.0
CHBY Cihanbeyli 148.82 317 eP PKPbc 20 03 17.9 +1.3
AUMIH MIHALICIK 148.97 320 P PKPbc 20 03 17.3 +0.3
PKS7 Kunszentmiklos 149.01 342⇓ePKPdf PKPbc 20 03 18.5 +1.9
CONA Conrad Observa 149.01 347⇑iPKiKP PKiKP 20 03 18.1 +0.1
comp=Z,144nm,2.0s,SNR=13
BRBR Barbar 149.06 306 eP PKPbc 20 03 18.7 +1.1
HUMR Humele 149.07 333⇑iP PKPbc 20 03 17.8 +0.9
SOP Sopron 149.09 346⇓ePKPdf PKPbc 20 03 17.6 +0.8
PKST T˜'s 149.12 344⇓ePKPdf PKPbc 20 03 17.3 +0.3
STU Stuttgart 149.13 356 ePKPdf PKPdf 20 03 11.8 -0.8
GULT Gulveren 149.20 322 eP PKPbc 20 03 16.7 -0.8
PKS6 Bocsa 149.29 342⇓ePKPdf PKPbc 20 03 18.3 +0.9
KIZT Kizilcal 149.31 318 eP PKPbc 20 03 18.9 +1.1
TCHB Talchebab 149.33 304 eP PKPbc 20 03 18.8 +0.9
MOA Molln 149.40 349 i PKiKP PKiKP 20 03 18.5 -0.3
comp=Z,34nm,1.1s,SNR=9.1
BZS Buzias 149.49 338 ⇑PKIKP PKPbc 20 03 16.9 -1.0
BZS Buzias 149.49 338⇑iP PKPbc 20 03 16.9 -1.0
EREN Erenkoy 149.50 311 eP PKPbc 20 03 19.8 +1.5
KONT Konya--Tatoy 149.52 316 eP PKPbc 20 03 18.3 0.0
BORA Eskisehir 149.58 321 P PKPbc 20 03 18.4 0.0
BFO Black Forest 149.62 357 i PKP2 PKPbc 20 03 19.0 +0.8
BFO Black Forest 149.62 357 ePKPbc PKPbc 20 03 18.3 +0.2
baz=9.7,slow=3.0
BFO Black Forest 149.62 357 ePKPbc PKPbc 20 03 18.8 +0.6
SZH Strazhica 149.63 331 eP PKPbc 20 03 18.8 +0.5
MMAI Mount Meron Ar 149.64 305 PKPbc PKPbc 20 03 19.8 +1.0
comp=Z,66nm,0.9s,baz=65,slow=6.5,SNR=66
ADVT Abdulvahap 149.65 323 eP PKPbc 20 03 17.9 -0.6
ARSA Arzberg 149.73 347⇓iPKiKP PKPbc 20 03 18.6 +0.1
comp=Z,24nm,1.2s,SNR=10
RJOB Jochberg 149.75 351 ePKPbc PKPbc 20 03 19.5 +0.9
baz=9.7,slow=3.0
CTKS Kestanelik-??a 149.80 325 eP PKPbc 20 03 19.1 +0.3
MMLI Mount Malkishu 149.84 304 eP PKPbc 20 03 20.5 +1.2
BANR Banloc 149.86 339⇑iP PKPab 20 03 21.9 -2.6
HDMB Hadim 149.97 314 eP PKPbc 20 03 20.3 +0.7
BOLV Bolvadin 149.99 319 P PKPbc 20 03 18.4 -1.1
ARMT Armutlu 150.06 324 eP PKPbc 20 03 20.0 +0.5
LFK Lefkose 150.08 311 eP PKPbc 20 03 20.3 +0.6
RETA Reutte 150.26 353⇓iPKiKP PKPbc 20 03 20.1 +0.2
comp=Z,25nm,1.1s
EDRB Edirne 150.30 328 eP PKPbc 20 03 20.3 +0.3
KBA Koelnbreinsper 150.31 350⇑iPKPbc PKPbc 20 03 18.4 -1.7
comp=Z,24nm,0.6s
WATA Walderalm 150.32 352⇓iPKiKP PKPbc 20 03 20.3 +0.2
comp=Z,10nm,0.5s
SHUT Suhut-Afyon 150.34 319 eP PKPbc 20 03 19.9 -0.4
MOTA Moosalm 150.37 353 i PKiKP PKiKP 20 03 20.7 -0.3
comp=Z,36nm,0.8s,SNR=26
CSS Prodhromos 150.37 310 eP PKPbc 20 03 19.5 -1.0
CSS Prodhromos 150.37 310 ePKPbc PKPbc 20 03 20.7 +0.3
SOKA Soboth 150.38 347⇑iPKPdf PKPdf 20 03 14.8 -0.1
comp=Z,6.9nm,1.4s
SOKA ⇑iPKiKP PKPbc 20 03 20.3 +0.1
comp=Z,27nm,1.1s,SNR=6.5
WTTA Wattenberg 150.38 352⇑iPKiKP PKiKP 20 03 21.0 0.0
comp=Z,38nm,0.7s,SNR=13
MPEP Malo Peshtene 150.55 333 eP PKPbc 20 03 22.0 +1.4
DAVA Damuels 150.55 355⇑iPKPdf PKPdf 20 03 15.1 -0.1
comp=Z,11nm,1.8s
DAVA ⇑iPKiKP PKiKP 20 03 21.2 -0.1
comp=Z,59nm,1.0s,SNR=15
KCTX Karacabey (Bur 150.55 324 eP PKPbc 20 03 21.2 +0.6
LEF Lefka 150.62 311 eP PKPbc 20 03 21.4 +0.4
SUTC Sutluce-Ispart 150.68 317 eP PKPbc 20 03 21.2 -0.1
MYKA Terra Mystica 150.69 349⇓iPKiKP PKiKP 20 03 21.2 -0.3
comp=Z,21nm,0.7s
FETA Feichten 150.73 353 i PKPbc PKPbc 20 03 20.2 -0.9
comp=Z,37nm,0.8s,SNR=18
DIM Dimitrovgrad 150.75 329 eP PKPbc 20 03 22.5 +1.5
ABTA Abfaltersbach 150.76 351⇑iPKPdf PKPdf 20 03 16.2 +0.7
comp=Z,5.3nm,1.0s
ABTA i PKiKP PKPbc 20 03 21.3 +0.2
comp=Z,59nm,1.0s,SNR=24
ISP Isparta 150.79 318 ⇑PKIKP PKPbc 20 03 21.3 -0.1
ISP Isparta 150.79 318⇑iP PKPbc 20 03 21.3 -0.1
ISP Isparta 150.79 318 ePKPbc PKPbc 20 03 21.3 -0.1
DST Dursunbey 150.84 322 eP PKPbc 20 03 19.1 -2.3
PGB Panagyurishte 151.00 332 eP PKPab 20 03 25.7 -3.7
DAVOX Davos/Dischmat 151.05 355 PKPbc PKPbc 20 03 22.6 +0.7
comp=Z,39nm,0.9s,baz=145,slow=0.8,SNR=20
LJU Ljubljana 151.09 348 ePKPdf PKPbc 20 03 21.7 0.0
KHAL Karahalli 151.11 320 P PKPbc 20 03 21.2 -0.9
EIL Elat 151.14 299 eP PKPbc 20 03 23.6 +1.2
EIL Elat 151.14 299 PKPbc PKPbc 20 03 23.1 +0.8
comp=Z,48nm,0.9s,baz=353,slow=2.1,SNR=30
DEMI Demirci 151.15 321 P PKPbc 20 03 21.2 -1.0
VISS Visnje 151.25 347 i PKPdf PKPbc 20 03 20.1 -2.0
VISS i 20 03 45.2
ERIK Erikli-Kesan 151.27 326 eP PKPbc 20 03 21.5 -0.8
BALY Balya 151.32 324 P PKPbc 20 03 22.9 +0.4
JAVS Javornik 151.32 348 i PKPdf PKPbc 20 03 23.3 +0.9
JAVS i 20 03 44.7
KORT Korkueli 151.38 316 P PKPbc 20 03 22.2 -0.7
DIVS Divibare 151.38 339⇑iP PKPbc 20 03 23.7 +1.1
VTS Vitosha 151.39 333 eP PKPbc 20 03 23.7 +0.9
TUE Stuetta 151.40 355 ePKPdf PKPdf 20 03 16.9 +0.3
RZN Rozhen 151.42 330 eP PKPbc 20 03 26.7 +3.8
BOJS Bojanci 151.44 346 ePKPdf PKPbc 20 03 20.7 -1.9
BOJS e 20 03 23.6
BOJS i 20 03 40.3
BOJS i 20 03 46.1
GELI Tayfur-Gelibol 151.49 326 eP PKPbc 20 03 22.3 -0.5
KULA Kula-Manisa 151.52 321 eP PKPbc 20 03 22.8 -0.3
ELL Elmali 151.81 316 eP PKPbc 20 03 24.8 +0.9
MMB Musomiste 151.96 331 eP PKPbc 20 03 25.0 +1.1
EZN Ezine 151.98 325 eP PKPbc 20 03 23.1 -0.8
AYDB Zeytinkoy-Aydi 152.35 321 eP PKPbc 20 03 25.2 +0.1
FETY Fethiye 152.41 317 eP PKPbc 20 03 25.6 +0.5
IZM Izmir 152.43 322 eP PKPdf 20 03 20.7 +2.6
AYDN Tasoluk 152.54 320 P PKPbc 20 03 27.7 +2.3
TURN Turunc 152.58 318 P PKPbc 20 03 26.0 +0.6
SKO Skopje 152.65 334 ePKP PKPbc 20 03 26.9 +1.5
VAY Valandovo 152.70 332 ePKP PKPbc 20 03 26.9 +1.4
SSB Saint Sauveur 152.70 2 ePKIKP PKPdf 20 03 19.6 +1.2
SSB Saint Sauveur 152.70 2 ePKPdf PKPdf 20 03 19.6 +1.2
BNI Bardonecchia 152.95 359 ePKIKP PKPdf 20 03 19.9 +1.0
BNI Bardonecchia 152.95 359 ePKPdf PKPdf 20 03 19.9 +1.0
PGAV Gavieira, Arco 153.11 24 ePKPab PKPab 20 03 34.5 -3.8
CHOS Chios island 153.13 323 eP PKPbc 20 03 26.8 +0.1
OHR Ohrid 153.63 334 ePKP PKPdf 20 03 20.7 +0.9
POLO Lamas de Olo 153.80 24 ePKPbc PKPbc 20 03 26.6 -1.5
POLO Lamas de Olo 153.80 24 ePKPab PKPab 20 03 41.4 +0.2
PBRG Braganca 153.82 22 ePKPab PKPab 20 03 41.0 -0.2
PVRL Vila Real 153.92 24 ePKPab PKPab 20 03 41.8 +0.1
MVO Moncorvo 154.28 23 ePKPbc PKPbc 20 03 27.9 -1.2
PVIS Viseu 154.32 25 ePKPab PKPab 20 03 43.5 +0.1
PCAS Casmilo, Conde 154.63 27 i P PKPab 20 03 37.4 -7.3
MTE Manteigas 154.73 25 ePKPdf PKPdf 20 03 22.5 +1.1
MTE i P PKiKP 20 03 30.3 +0.2
PTOM Tomar 155.03 27 ePKPdf PKPdf 20 03 22.9 +1.1
PTOM Tomar 155.03 27 ePKPbc PKPdf 20 03 31.4 +10
PTOM Tomar 155.03 27 ePKPab PKPab 20 03 46.4 0.0
PTOM i P PKPab 20 03 51.4 +5.0
PCBR Castelo Branco 155.24 25 i P PKPdf 20 03 31.0 +9.0
PCBR Castelo Branco 155.24 25 ePKPab PKPab 20 03 47.3 +0.1
PMRV Marv??o 155.62 26 ePKPdf PKPdf 20 03 24.4 +1.8
PMRV Marv??o 155.62 26 ePKPab PKPab 20 03 48.3 -0.6
EVO Evora 156.10 28 ePKPdf PKPdf 20 03 24.7 +1.5
EVO Evora 156.10 28 ePKPab PKPab 20 03 49.9 -1.1
PNCL Nicolau / Gran 156.20 29 i P PKPab 20 03 41.6 -10
PNCL Nicolau / Gran 156.20 29 ePKPab PKPab 20 03 49.9 -1.5
MESJ Messejana 156.57 29 ePKPdf PKPdf 20 03 25.6 +1.8
MESJ Messejana 156.57 29 ePKPab PKPab 20 03 49.5 -3.5
PBEJ Beja 156.58 28 ePKPdf PKPdf 20 03 25.8 +1.9
PBEJ Beja 156.58 28 ePKPab PKPab 20 03 50.4 -2.7
PAB San Pablo 156.66 21 ePKIKP PKPdf 20 03 23.5 -0.6
PAB San Pablo 156.66 21 ePKPdf PKPdf 20 03 23.5 -0.6
ESDC Sonseca Array 156.67 20 PKP PKPdf 20 03 24.4 +0.3
comp=Z,1.3nm,0.8s,baz=0.0,slow=4.4,SNR=5.8
ESDC PKPab PKPab 20 03 52.8 -0.6
comp=Z,1.7nm,0.7s,baz=334,slow=3.5,SNR=8.2
MORF Marmelete 156.79 31 ePKPdf PKPdf 20 03 26.2 +2.0
MORF Marmelete 156.79 31 ePKPab PKPab 20 03 50.5 -3.6
PCVE Castro Verde 156.82 29 ePKPab PKPab 20 03 54.2 +0.1
PBAR Barrancos 156.82 27 ePKPdf PKPdf 20 03 26.9 +2.7
PBAR Barrancos 156.82 27 ePKPab PKPab 20 03 50.6 -3.5
PFVI Vila Bisbo 156.84 31 ePKPdf PKPdf 20 03 26.1 +1.9
PFVI i P PKPab 20 03 50.9 -3.3
PVAQ Vaqueiros 157.15 29 ePKPab PKPab 20 03 51.2 -4.4
PBDV Barranco-do-Ve 157.18 30 ePKPdf PKPdf 20 03 27.0 +2.3
PBDV Barranco-do-Ve 157.18 30 ePKPab PKPab 20 03 51.7 -4.0
MDT Midelt 162.36 31 PKP PKPdf 20 03 32.4 +1.5
comp=Z,11nm,1.2s,baz=224,slow=0.3,SNR=13
MDT PKPab PKPab 20 04 18.2 -0.3
comp=Z,14nm,1.1s,baz=332,slow=6.1,SNR=5.7
DBIC Dimbokro 164.59 135 PKPab PKPab 20 04 28.8 +0.2
comp=Z,6.7nm,0.9s,baz=218,slow=4.9,SNR=3.1
TORD Torodi Ar. Bea 173.68 138 PKP PKPdf 20 03 38.2 -0.7
comp=Z,5.5nm,1.2s,baz=300,slow=1.1,SNR=18
TORD pPKP pPKPdf 20 04 01.1 -2.2
comp=Z,18nm,1.2s,baz=301,slow=1.8,SNR=9.0
TORD PKPab PKPab 20 05 10.1 +1.3
comp=Z,10nm,0.9s,baz=248,slow=4.6,SNR=12
TORD PP PP 20 08 59.9 -0.2
comp=Z,6.3nm,1.3s,baz=229,slow=5.3,SNR=6.7
TAM Tamanrasset 175.14 5 ePKIKP PKPdf 20 03 40.6 +1.2
TAM Tamanrasset 175.14 5 ePKPdf PKPdf 20 03 40.6 +1.2

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*IDC **06** 19:47:58.9±1.7, 35°.69N×26°.02E, h0km, mb3.4/3, mb1 3.4/3, mb1mx3.2/31, mbtmp3.4/3, Error ellipse: s-maj=375.3km s-min=30.1km az=141.0*
*DDA **06** 19:47:58.6, 35°.00N×26°.20E, h28km, Md3.4*
*ATH **06** 19:48:00.4, 35°.01N×26°.51E, h27km±2km, MD3.5/13*
*ISCJB **06** 19:48:00.1±0.8, 35°.04N±0°.05×26°.53E±0°.03, h10km±4km, mb3.3/3, Error ellipse: s-maj=8.2km s-min=3.0km az=165.2*
*THE **06** 19:48:00.6, 35°.02N×26°.49E, h1km±1km, ML3.1/4, Error ellipse: s-maj=2.7km s-min=0.8km az=162.0*
*CSEM **06** 19:48:01.0±0.5, 35°.04N×26°.50E, h10km, ML3.1, Error ellipse: s-maj=12.0km s-min=3.8km az=165.0*
*ISK **06** 19:48:05.1, 35°.58N×26°.52E, h5km, MD3.3*
**ISC 06 19:48:00.6**±1.1, **35°.09N**±0°.05×**26°.52E**±0°.02, **h11**km±7km, **n132**, σ1§**47**/172, **mb3.4**/3, **Crete**

Code Station Name Δ° AZ° Phase ID (Op, ISC) Time (h m s) Res (ISC)
ZKR Zakros 0.25 275 P Pg 19 48 05.7 -0.1
ZKR S Sg 19 48 09.9 +0.6
ZKR Zakros 0.25 275 P Pg 19 48 05.7 -0.1
ZKR S Sg 19 48 09.9 +0.6

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KARP | Karpathos | 0.69 | 49 | ePB | Pg | 19 48 14.4 | +0.4 |
| KARP | | | | eSN | Sn | 19 48 27.2 | 0.0 |
| KARP | Karpathos | 0.69 | 49 | P | Pg | 19 48 14.4 | +0.4 |
| KARP | | | | S | Sn | 19 48 26.8 | -0.4 |
| KARP | Karpathos | 0.69 | 49 | P | Pg | 19 48 14.4 | +0.4 |
| KARP | | | | S | Sn | 19 48 26.8 | -0.4 |
| KARP | | | | eSn | Sn | 19 48 27.2 | 0.0 |
| LAST | Lasithi | 0.86 | 275 | ePN | Pg | 19 48 15.9 | -1.3 |
| LAST | | | | eSN | Sb | 19 48 29.8 | +0.6 |
| LAST | Lasithi | 0.86 | 275 | P | Pg | 19 48 15.9 | -1.3 |
| LAST | | | | S | Sb | 19 48 30.1 | +0.9 |
| LAST | Lasithi | 0.86 | 275 | P | Pg | 19 48 15.9 | -1.3 |
| LAST | | | | eSn | Sb | 19 48 29.8 | +0.6 |
| LAST | | | | S | Sb | 19 48 30.1 | +0.9 |
| IDI | Anoyia | 1.35 | 279 | ePN | Pn | 19 48 25.0 | -0.5 |
| IDI | | | | eSN | Sg | 19 48 44.4 | +0.2 |
| IDI | Anoyia | 1.35 | 279 | P | Pn | 19 48 24.6 | -0.9 |
| IDI | | | | S | Sg | 19 48 44.2 | 0.0 |
| IDI | Anoyia | 1.35 | 279 | P | Pn | 19 48 24.6 | -0.9 |
| IDI | Anoyia | 1.35 | 279 | ePn | Pn | 19 48 25.0 | -0.5 |
| IDI | | | | S | Sg | 19 48 44.2 | 0.0 |
| SIVA | Sivas | 1.41 | 267 | ePN | Pn | 19 48 25.6 | -0.6 |
| SIVA | | | | eSN | Sb | 19 48 45.1 | +0.2 |
| SIVA | Sivas | 1.41 | 267 | P | Pn | 19 48 25.6 | -0.6 |
| SIVA | | | | S | Sb | 19 48 44.7 | -0.2 |
| SIVA | Sivas | 1.41 | 267 | P | Pn | 19 48 25.6 | -0.6 |
| SIVA | | | | S | Sb | 19 48 44.7 | -0.2 |
| SIVA | | | | eSn | Sb | 19 48 45.1 | +0.2 |
| SANT | Santorini | 1.54 | 326 | ePB | Pn | 19 48 28.2 | +0.2 |
| SANT | Santorini | 1.54 | 326 | P | Pn | 19 48 28.3 | +0.2 |
| SANT | Santorini | 1.54 | 326 | P | Pn | 19 48 28.3 | +0.2 |
| THR1 | Thera Island | 1.54 | 326 | ePN | Pn | 19 48 28.9 | +0.8 |
| THR1 | Thera Island | 1.54 | 326 | ePn | Pn | 19 48 28.9 | +0.8 |
| THR6 | Thira Island, | 1.56 | 324 | P | Pn | 19 48 28.8 | +0.5 |
| THR6 | Thira Island, | 1.56 | 324 | P | Pn | 19 48 28.8 | +0.5 |
| NISR | Nisiros | 1.59 | 18 | ePB | Pn | 19 48 29.4 | +0.6 |
| NISR | Nisiros | 1.59 | 18 | ePb | Pn | 19 48 29.4 | +0.6 |
| NIS1 | Nisyros Isl. | 1.60 | 19 | ePN | Pn | 19 48 28.1 | -0.7 |
| NIS1 | Nisyros Isl. | 1.60 | 19 | P | Pn | 19 48 29.8 | +0.9 |
| NIS1 | Nisyros Isl. | 1.60 | 19 | ePn | Pn | 19 48 28.2 | -0.7 |
| NIS1 | Nisyros Isl. | 1.60 | 19 | P | Pn | 19 48 29.8 | +0.9 |
| THR3 | Thira Island, | 1.60 | 326 | P | Pn | 19 48 29.3 | +0.4 |
| THR3 | Thira Island, | 1.60 | 326 | P | Pn | 19 48 29.3 | +0.4 |
| THR5 | Thira Island, | 1.63 | 324 | ePN | Pn | 19 48 30.3 | +1.0 |
| THR5 | Thira Island, | 1.63 | 324 | P | Pn | 19 48 29.6 | +0.3 |
| THR5 | Thira Island, | 1.63 | 324 | P | Pn | 19 48 29.6 | +0.3 |
| THR5 | Thira Island, | 1.63 | 324 | ePn | Pn | 19 48 30.3 | +1.0 |
| ARG | Arkhangelos | 1.72 | 49 | ePN | Pb | 19 48 32.8 | +0.5 |
| ARG | Arkhangelos | 1.72 | 49 | P | Pn | 19 48 31.4 | +0.9 |
| ARG | | | | S | Sb | 19 48 55.1 | +1.2 |
| ARG | Arkhangelos | 1.72 | 49 | P | Pn | 19 48 31.4 | +0.9 |
| ARG | Arkhangelos | 1.72 | 49 | ePn | Pb | 19 48 32.8 | +0.5 |
| ARG | | | | S | Sb | 19 48 55.1 | +1.2 |
| VAM | Vamos | 1.93 | 280 | ePN | Pn | 19 48 34.9 | +1.5 |
| VAM | Vamos | 1.93 | 280 | ePn | Pn | 19 48 34.9 | +1.5 |
| BODT | Bodrum | 2.07 | 18 | ePN | Pn | 19 48 35.8 | +0.5 |
| BODT | Bodrum | 2.07 | 18 | ePn | Pn | 19 48 35.8 | +0.5 |
| BDRM | Kayabasi | 2.10 | 20 | iP | Pn | 19 48 37.2 | +1.4 |
| BDRM | | | | iS | Sn | 19 49 01.7 | -0.3 |
| BDRM | Kayabasi | 2.10 | 20 | P | Pn | 19 48 37.2 | +1.4 |
| BDRM | | | | S | Sn | 19 49 01.7 | -0.3 |
| IMMV | Iera Moni Meta | 2.11 | 281 | ePB | Pn | 19 48 37.9 | +2.0 |
| IMMV | Iera Moni Meta | 2.11 | 281 | ePb | Pn | 19 48 37.9 | +2.0 |
| APE | Apeiranthos | 2.13 | 338 | ePN | Pn | 19 48 36.6 | +0.5 |
| APE | Apeiranthos | 2.13 | 338 | ePN | Pn | 19 48 36.7 | +0.5 |
| APE | Apeiranthos | 2.13 | 338 | P | Pn | 19 48 37.1 | +0.9 |
| APE | | | | S | Sb | 19 49 05.1 | -0.6 |
| APE | Apeiranthos | 2.13 | 338 | ePn | Pn | 19 48 36.7 | +0.5 |
| APE | Apeiranthos | 2.13 | 338 | P | Pn | 19 48 37.1 | +0.9 |
| APE | | | | S | Sb | 19 49 05.1 | -0.6 |
| MHLO | Agia Marina, M | 2.35 | 313 | ePB | Pn | 19 48 40.9 | +1.8 |
| MHLO | Agia Marina, M | 2.35 | 313 | P | Pn | 19 48 39.8 | +0.7 |
| MHLO | | | | S | Sn | 19 49 09.1 | +1.1 |
| MHLO | Agia Marina, M | 2.35 | 313 | P | Pn | 19 48 39.8 | +0.7 |
| MHLO | Agia Marina, M | 2.35 | 313 | ePb | Pn | 19 48 40.9 | +1.8 |
| MHLO | | | | S | Sn | 19 49 09.1 | +1.1 |
| DALY | Dalyan (Mu˜la | 2.44 | 45 | ePN | Pb | 19 48 43.3 | -1.2 |
| DALY | | | | eSN | Sn | 19 49 11.0 | +0.8 |
| DALY | Dalyan (Mu˜la | 2.44 | 45 | ePn | Pb | 19 48 43.3 | -1.2 |
| DALY | | | | eSn | Sn | 19 49 11.0 | +0.8 |
| TURN | Turunc | 2.45 | 43 | iP | Pn | 19 48 38.8 | -1.8 |
| TURN | | | | iS | Sn | 19 49 06.8 | -3.7 |
| TURN | Turunc | 2.45 | 43 | P | Pn | 19 48 38.8 | -1.8 |
| TURN | | | | S | Sn | 19 49 06.8 | -3.7 |
| YER | Yerkesik | 2.49 | 34 | ePN | Pn | 19 48 43.3 | +2.2 |
| YER | Yerkesik | 2.49 | 34 | ePn | Pn | 19 48 43.3 | +2.2 |
| FETY | Fethiye | 2.59 | 53 | ePN | Pn | 19 48 45.4 | +2.9 |
| FETY | Fethiye | 2.59 | 53 | ePn | Pn | 19 48 45.4 | +2.9 |
| SMG | Samos | 2.62 | 5 | ePN | Pn | 19 48 43.5 | +0.5 |
| SMG | Samos | 2.62 | 5 | ePn | Pn | 19 48 43.5 | +0.5 |
| SERI | Serifos | 2.64 | 322 | ePN | Pn | 19 48 44.5 | +1.3 |
| SERI | Serifos | 2.64 | 322 | ePn | Pn | 19 48 44.5 | +1.3 |
| KSL | Kastellorizon | 2.71 | 66 | ePN | Pn | 19 48 44.4 | +0.3 |
| ANKY | Antikythira Is | 2.74 | 287 | ePB | Pn | 19 48 46.2 | +1.6 |
| ANKY | Antikythira Is | 2.74 | 287 | ePb | Pn | 19 48 46.2 | +1.6 |
| AYDN | Tasoluk | 2.79 | 23 | iP | Pb | 19 48 48.8 | -1.7 |
| AYDN | | | | iS | Sb | 19 49 23.8 | -0.9 |
| AYDN | Tasoluk | 2.79 | 23 | P | Pb | 19 48 48.8 | -1.7 |
| AYDN | | | | S | Sb | 19 49 23.8 | -0.9 |
| AYDB | Zeytinkoy-Aydi | 3.05 | 21 | ePN | Pn | 19 48 50.1 | +1.1 |
| AYDB | Zeytinkoy-Aydi | 3.05 | 21 | ePn | Pn | 19 48 50.1 | +1.1 |
| KYTH | Kithira | 3.08 | 294 | ePN | Pn | 19 48 50.1 | +0.9 |
| KYTH | Kithira | 3.08 | 294 | P | Pn | 19 48 49.1 | -0.1 |
| KYTH | Kithira | 3.08 | 294 | P | Pn | 19 48 49.1 | -0.1 |
| KYTH | Kithira | 3.08 | 294 | ePn | Pn | 19 48 50.1 | +0.9 |
| ZEY | ˜zmir | 3.14 | 360 | P | Pn | 19 48 50.1 | +0.1 |
| ZEY | | | | S | Sn | 19 49 22.6 | -4.9 |
| ELL | Elmali | 3.21 | 58 | ePN | Pb | 19 48 55.3 | -2.3 |
| ELL | Elmali | 3.21 | 58 | ePn | Pb | 19 48 55.3 | -2.3 |
| GOLH | Golhisar | 3.26 | 48 | iP | Pn | 19 48 53.8 | +2.0 |
| GOLH | | | | iS | Sn | 19 49 30.0 | -0.7 |
| GOLH | Golhisar | 3.26 | 48 | P | Pn | 19 48 53.8 | +2.0 |
| GOLH | | | | S | Sn | 19 49 29.9 | -0.7 |
| URLA | Izmir | 3.26 | 1 | iP | Pn | 19 48 51.6 | -0.1 |
| URLA | | | | iS | Sn | 19 49 28.4 | -2.2 |
| URLA | Izmir | 3.26 | 1 | P | Pn | 19 48 51.6 | -0.1 |
| URLA | | | | S | Sn | 19 49 28.4 | -2.2 |
| DNZL | Cakiroluk | 3.29 | 37 | iP | Pn | 19 48 53.4 | +1.1 |
| DNZL | | | | iS | Sn | 19 49 34.8 | +3.2 |
| DNZL | Cakiroluk | 3.29 | 37 | P | Pn | 19 48 53.4 | +1.1 |
| DNZL | | | | S | Sn | 19 49 34.8 | +3.2 |
| CHOS | Chios island | 3.31 | 354 | ePN | Pn | 19 48 53.9 | +1.4 |
| CHOS | Chios island | 3.31 | 354 | ePN | Pn | 19 48 53.1 | +0.7 |
| CHOS | Chios island | 3.31 | 354 | P | Pn | 19 48 53.6 | +1.2 |
| CHOS | | | | S | Sn | 19 49 34.4 | +2.6 |
| CHOS | Chios island | 3.31 | 354 | ePn | Pn | 19 48 53.1 | +0.7 |
| CHOS | Chios island | 3.31 | 354 | P | Pn | 19 48 53.6 | +1.2 |
| CHOS | | | | S | Sn | 19 49 34.4 | +2.6 |
| VLI | Veliai | 3.33 | 300 | ePN | Pn | 19 48 53.5 | +0.8 |
| VLI | Veliai | 3.33 | 300 | P | Pn | 19 48 53.4 | +0.8 |
| VLI | | | | S | Sn | 19 49 33.4 | +1.1 |
| VLI | Veliai | 3.33 | 300 | ePn | Pn | 19 48 53.5 | +0.8 |
| VLI | | | | S | Sn | 19 49 33.4 | +1.1 |
| KRND | KRANIDI | 3.56 | 311 | ePN | Pn | 19 48 58.2 | +2.4 |
| KRND | KRANIDI | 3.56 | 311 | ePn | Pn | 19 48 58.2 | +2.4 |
| DIDY | Didyma | 3.58 | 313 | ePN | Pn | 19 48 58.0 | +1.8 |
| DIDY | Didyma | 3.58 | 313 | ePn | Pn | 19 48 58.0 | +1.8 |
| DID | Didima | 3.58 | 313 | ePN | Pn | 19 48 58.1 | +1.9 |
| DID | Didima | 3.58 | 313 | P | Pn | 19 48 57.5 | +1.3 |
| DID | Didima | 3.58 | 313 | P | Pn | 19 48 57.5 | +1.3 |
| DID | Didima | 3.58 | 313 | ePn | Pn | 19 48 58.1 | +1.9 |
| KULA | Kula-Manisa | 3.82 | 26 | ePN | Pn | 19 49 00.9 | +1.4 |
| KULA | Kula-Manisa | 3.82 | 26 | ePn | Pn | 19 49 00.9 | +1.4 |
| VILL | Villia | 4.01 | 321 | ePn | Pn | 19 49 03.0 | +1.0 |
| KHAL | Karahalli | 4.05 | 35 | iP | Pn | 19 49 02.8 | +0.2 |
| KHAL | Karahalli | 4.05 | 35 | P | Pn | 19 49 02.8 | +0.2 |
| KHAL | | | | S | Sn | 19 49 44.6 | -5.5 |
| VLX | Vlachokerasia | 4.05 | 305 | ePN | Pn | 19 49 04.7 | +2.1 |
| VLX | Vlachokerasia | 4.05 | 305 | ePn | Pn | 19 49 04.7 | +2.1 |
| VIL2 | Platees | 4.07 | 321 | ePN | Pn | 19 49 03.0 | +0.2 |
| SIGR | SIGRI | 4.14 | 353 | ePN | Pn | 19 49 04.3 | +0.5 |
| SIGR | SIGRI | 4.14 | 353 | ePN | Pn | 19 49 04.8 | +0.9 |
| SIGR | SIGRI | 4.14 | 353 | ePn | Pn | 19 49 04.8 | +0.9 |
| PYL | PYLOS | 4.27 | 296 | ePN | Pn | 19 49 07.4 | +1.8 |
| PYL | PYLOS | 4.27 | 296 | ePn | Pn | 19 49 07.4 | +1.8 |
| SUTC | Sutluce-Ispart | 4.33 | 55 | ePN | Pn | 19 49 11.4 | +4.9 |
| SUTC | Sutluce-Ispart | 4.33 | 55 | ePn | Pn | 19 49 11.4 | +4.9 |
| GUR | Goura | 4.40 | 311 | ePN | Pn | 19 49 09.6 | +2.1 |
| GUR | Goura | 4.40 | 311 | ePn | Pn | 19 49 09.6 | +2.1 |
| DESF | Desfina | 4.61 | 317 | ePN | Pn | 19 49 13.5 | +3.2 |
| DESF | Desfina | 4.61 | 317 | ePn | Pn | 19 49 13.5 | +3.2 |
| SMIA | Simia | 4.62 | 326 | ePN | Pn | 19 49 11.9 | +1.5 |
| SMIA | Simia | 4.62 | 326 | ePn | Pn | 19 49 11.9 | +1.5 |
| DRO | Drossia | 4.81 | 308 | ePN | Pn | 19 49 14.8 | +1.7 |
| DRO | Drossia | 4.81 | 308 | ePn | Pn | 19 49 14.8 | +1.7 |
| AGG | Agios Georgios | 5.16 | 321 | ePN | Pn | 19 49 21.1 | +3.2 |
| AGG | Agios Georgios | 5.16 | 321 | ePN | Pn | 19 49 21.0 | +3.2 |
| AGG | Agios Georgios | 5.16 | 321 | ePn | Pn | 19 49 21.0 | +3.2 |
| TORD | Torodi Ar. Bea | 31.32 | 232 | P | P | 19 54 21.4 | +0.4 |
| | 0.2nm,0.4s,baz=34,slow=8.7,SNR=2.5 | | | | | | |
| MKAR | Makanchi Array | 42.88 | 57 | P | P | 19 55 58.9 | -0.1 |
| | 0.2nm,0.4s,baz=266,slow=8.7,SNR=1.9 | | | | | | |
| ZALV | Zalesovo Beam | 44.24 | 46 | P | P | 19 56 08.7 | -1.1 |
| | 0.3nm,0.3s,baz=270,slow=5.8,SNR=2.4 | | | | | | |

**MEX 06 19:55:29.3±0.4, 13°.91N×91°.62W, h20km±364km, MD3.8, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 2.36 | 319 | eP | Pn | 19 56 04.8 | -2.1 |
| PCIG | | | | eS | Sn | 19 56 32.2 | -3.1 |

**CSEM 06 20:01:15.1, 42°.64N×1°.18W, h0km, ML0.9, Mining explosion. After MDD, Pyrenees**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YARA | Arangoiti | 0.01 | 304 | Pg | Pg | 20 01 15.2 | -0.3 |
| | 57nm,0.1s,SNR=7.9 | | | | | | |
| YARA | | | | Lg | Lg | 20 01 15.5 | |
| | 37nm,0.1s,SNR=7.9 | | | | | | |
| YUND | Undues | 0.07 | 153 | Pg | Pg | 20 01 16.1 | -0.5 |
| | SNR=7.9 | | | | | | |
| YUND | | | | Lg | Lg | 20 01 17.5 | |
| | 16nm,0.2s,SNR=7.9 | | | | | | |
| YASP | Aspurt | 0.09 | 7 | Pg | Pg | 20 01 16.9 | 0.0 |
| | SNR=7.9 | | | | | | |
| YASP | | | | Lg | Lg | 20 01 18.0 | |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | |
| YMUS | Peˆ–a Musera | 0.13 | 116 | Pg | Pg | 20 01 17.5 | -0.2 |
| | SNR=7.9 | | | | | | |
| YMUS | | | | Lg | Lg | 20 01 19.3 | |
| | 1.2nm,0.1s,SNR=7.9 | | | | | | |
| YSIG | Sigues | 0.14 | 91 | Pg | Pg | 20 01 17.6 | -0.2 |
| | SNR=7.9 | | | | | | |
| YSIG | | | | Lg | Lg | 20 01 19.5 | |
| | 0.6nm,0.1s,SNR=7.9 | | | | | | |
| YNAR | Nardues-Alduna | 0.14 | 268 | Pg | Pg | 20 01 17.8 | -0.1 |
| | SNR=7.9 | | | | | | |
| YNAR | | | | Lg | Lg | 20 01 19.6 | |
| | 7.3nm,0.1s,SNR=7.9 | | | | | | |
| IEPA | Eparoz | 0.15 | 334 | Pg | Pg | 20 01 17.7 | -0.5 |
| | SNR=7.9 | | | | | | |
| IEPA | | | | Lg | Lg | 20 01 20.0 | |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | |
| YSOS | Sos del Rey Ca | 0.19 | 173 | Pg | Pg | 20 01 18.8 | 0.0 |
| | SNR=7.9 | | | | | | |
| YSOS | | | | Lg | Lg | 20 01 21.1 | |
| | 2.1nm,0.1s,SNR=7.9 | | | | | | |
| YBER | Berdun | 0.20 | 107 | Pg | Pg | 20 01 18.6 | -0.4 |
| | SNR=7.9 | | | | | | |
| YBER | | | | Lg | Lg | 20 01 21.5 | |
| | 0.5nm,0.1s,SNR=7.9 | | | | | | |

*GUC 06 20:20:04.9±0.5, 34°.76S×71°.87W, h43km±2km, ML4.0*
**ISC 06 20:20:04.9±1.2, 34°.75S±0°.04×71°.88W±0°.06, h26km±13km, n26, σ1s.51/39, 1C-6D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHPI | Pichilemu | 0.38 | 345⇑ | iP | Pb | 20 20 14.4 | +1.3 |
| CHPI | | | | iS | Sn | 20 20 21.2 | +0.1 |
| TALC | Talca | 0.68 | 162⇓ | iP | Pb | 20 20 18.5 | +0.4 |
| TALC | | | | iS | Sn | 20 20 28.3 | -0.3 |
| TACH | Talagante | 1.35 | 36⇓ | iP | Pn | 20 20 28.3 | +0.1 |
| COCH | Cobquecura | 1.56 | 208⇓ | iP | Pn | 20 20 30.8 | -0.2 |
| COCH | | | | eS | Sb | 20 20 51.9 | -0.5 |
| COCH | | | | AML | AML | 20 20 57.1 | |
| | comp=E,1μm,0.2s | | | | | | |
| ANTU | Antumapu | 1.57 | 42 | eP | Pn | 20 20 31.5 | +0.3 |
| ANTU | | | | iS | Sn | 20 20 51.0 | +0.2 |
| ANTU | | | | AML | AML | 20 20 54.7 | |
| | comp=E,5μm,0.4s | | | | | | |
| PCH | Pirque | 1.60 | 46⇓ | iP | Pn | 20 20 31.8 | +0.1 |
| PCH | | | | eS | Sn | 20 20 52.2 | +0.6 |
| SAN | Santiago | 1.65 | 38 | eP | Pn | 20 20 32.4 | +0.1 |
| SAN | | | | iS | Sn | 20 20 52.5 | -0.1 |
| LACH | Col Las Americ | 1.72 | 41 | eS | Sn | 20 20 54.5 | +0.1 |
| LACH | | | | AML | AML | 20 20 59.1 | |
| | comp=N,1μm,0.5s | | | | | | |
| CLCH | Cerro Calan | 1.75 | 40⇓ | iP | Pn | 20 20 33.8 | 0.0 |
| CLCH | | | | eS | Sn | 20 20 55.8 | +0.4 |
| CLCH | | | | AML | AML | 20 21 01.4 | |
| | comp=E,3μm,0.2s | | | | | | |
| CCHI | Chillan | 1.85 | 185 | AML | AML | 20 21 09.1 | |
| | comp=E,2μm,0.4s | | | | | | |
| PEL | Peldehue | 1.89 | 32 | eP | Pn | 20 20 36.0 | +0.4 |
| PEL | | | | eS | Sn | 20 20 59.0 | +0.3 |
| PEL | | | | AML | AML | 20 21 11.5 | |
| | comp=N,3μm,0.5s | | | | | | |
| AAGR | Agrelo | 3.04 | 58 | eP | Pn | 20 20 53.8 | +2.4 |
| ARCO | CERRO ARCO | 3.11 | 53 | eP | Pn | 20 20 55.0 | +2.5 |
| ARCO | | | | AML | AML | 20 21 43.0 | |
| | comp=Z,96nm,0.3s | | | | | | |
| AUSP | Uspallata | 3.27 | 40 | eP | Pn | 20 20 57.2 | +2.3 |
| AUSP | | | | eS | Sb | 20 21 41.6 | -0.4 |
| ASAL | Salagasta | 3.33 | 51 | eP | Pn | 20 20 58.0 | +2.4 |
| ASAL | | | | eS | Sb | 20 21 43.6 | 0.0 |
| RTLS | Leoncito | 3.66 | 37 | eP | Pn | 20 21 02.1 | +2.0 |
| RTLS | | | | eS | Sb | 20 21 53.5 | +0.5 |
| RTCV | Cerro Valdivia | 4.02 | 45 | eP | Pn | 20 21 06.3 | +1.4 |
| RTCV | | | | eS | Sb | 20 22 01.3 | -2.0 |
| CFAA | Coronel Fontan | 4.38 | 45 | eP | Pn | 20 21 10.6 | +0.7 |
| CFAA | | | | eS | Sn | 20 22 06.5 | +6.4 |
| RTLL | Cerro Villicun | 4.46 | 41 | eP | Pn | 20 21 11.8 | +0.8 |
| RTLL | | | | eS | Sb | 20 22 11.5 | -4.3 |
| ACAN | Cantantal | 4.64 | 59 | eP | Pn | 20 21 13.9 | +0.5 |
| AMOG | MOGNA | 4.75 | 38 | eP | Pn | 20 21 15.2 | +0.2 |
| AMOG | | | | eS | Sb | 20 22 20.1 | -4.3 |
| AVFE | Valle Fertil | 5.53 | 44 | eP | Pn | 20 21 25.6 | -0.2 |
| AVFE | | | | AML | AML | 20 22 42.9 | |
| | comp=Z,44nm,0.7s | | | | | | |
| MRA | San Martin | 5.65 | 67 | eP | Pn | 20 21 28.7 | +1.3 |
| MRA | | | | AML | AML | 20 23 07.0 | |
| | comp=Z,17nm,0.7s | | | | | | |
| AGUA | GUANDACOL | 5.99 | 30 | eP | Pn | 20 21 32.3 | +0.3 |
| AGUA | | | ⇓ | eS | Sb | 20 22 53.3 | -6.6 |
| APLL | PUNTA DE LOS L | 6.27 | 48 | eP | Pn | 20 21 34.4 | -1.4 |
| VCA | Vinchina | 6.77 | 29 | eP | Pn | 20 21 42.4 | -0.4 |
| VCA | | | | AML | AML | 20 23 20.4 | |
| | comp=Z,59nm,0.6s | | | | | | |

*IDC 06 20:41:35.1±2.1, 6°.30S×129°.80E, h0km, mb3.9/1, mb1 4.2/3, mb1mx3.5/27, mbtmp4.0/3, ML4.1/2, Error ellipse: s-maj=125.7km s-min=30.6km az=69.0*
*DJA 06 20:41:51.5±0.4, 6°S±3°×13°0E±°, h159km±15km, M4.3/15, mb4.2/9, mB5.1/5, MLv4.4/15, Mw(mB)4.4/5*
**ISC 06 20:41:51.2±1.1, 6°.43S±0°.06×130°.29E±0°.08, h150km, n15, σ1s.15/16, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SAUI | Saumlaki | 1.84 | 147 | P | Pn | 20 42 25.9 | +1.4 |
| BNDI | Bandanaira | 1.93 | 348 | P | Pn | 20 42 26.8 | +1.2 |
| MSAI | Masohi | 3.35 | 336 | P | Pn | 20 42 45.0 | +1.9 |
| AAI | Ambon | 3.43 | 322 | P | Pn | 20 42 45.0 | +0.8 |
| FAKI | Fak Fak | 3.99 | 29 | P | Pn | 20 42 51.8 | +0.3 |
| FAKI | | | | S | Sn | 20 43 39.7 | +1.4 |
| SIJI | Sorong | 5.61 | 10 | Pn | Pn | 20 43 13.2 | +0.4 |
| | 2.0nm,0.3s,baz=40,slow=20,SNR=15 | | | | | | |
| SIJI | | | | Sn | Sn | 20 44 14.3 | -2.2 |
| | 7.2nm,0.3s,baz=230,slow=22,SNR=4.3 | | | | | | |
| SWI | Sorong | 5.61 | 10 | P | Pn | 20 43 13.4 | +0.6 |
| | 14nm,1.2s,2μm0.5nm | | | | | | |
| SANI | Sanana | 6.11 | 315 | P | Pn | 20 43 19.9 | +0.4 |
| | 12nm,0.9s,0.0nm | | | | | | |
| RKPI | Ransiki, Papua | 6.23 | 39 | P | Pn | 20 43 21.0 | -0.1 |
| | 202nm,1.0s,6μm1.2nm | | | | | | |
| LBMI | Labuha | 6.39 | 334 | P | Pn | 20 43 24.1 | +0.9 |
| | 40nm,0.8s,0.1nm | | | | | | |
| SOEI | Soe | 6.82 | 241 | P | Pn | 20 43 29.0 | -0.1 |
| | 32nm,1.2s,0.2nm | | | | | | |
| BATI | Baumata | 7.56 | 240 | P | Pn | 20 43 39.2 | +0.4 |
| WRA | Warramunga Arr | 14.00 | 164 | Pn | Pn | 20 44 57.8 | -5.5 |
| | 0.8nm,0.3s,baz=342,slow=9.7,SNR=16 | | | | | | |
| WRA | | | | Sn | Sn | 20 47 24.9 | -14 |
| | 1.3nm,0.3s,baz=326,slow=24,SNR=7.3 | | | | | | |
| ASAR | Alice Springs | 17.49 | 169 | P | P | 20 45 43.9 | -1.1 |
| | 0.6nm,0.3s,baz=356,slow=10,SNR=33 | | | | | | |
| ASAR | | | | S | S | 20 48 45.0 | -14 |
| | 0.1nm,0.3s,baz=347,slow=25,SNR=4.7 | | | | | | |
| MKAR | Makanchi Array | 67.91 | 327 | P | P | 20 52 33.4 | -0.3 |
| | 0.6nm,0.5s,baz=121,slow=7.9,SNR=9.8 | | | | | | |

*SJA 06 20:48:51.3±0.4, 37°.35S×67°.80W, h33km, ML4.2*
*ISCJB 06 20:48:58.1±0.3, 35°.95S±0°.03×72°.25W±0°.07, h61km±3km, mb4.4/14, Error ellipse: s-maj=9.6km s-min=4.3km az=25.9*
*NEIC 06 20:48:58.4±0.6, 35°.95S×72°.23W, mb4.4/2, Error ellipse: s-maj=14.9km s-min=9.3km az=90.0*
*GUC 06 20:48:58.7±0.5, 35°.99S×72°.22W, h45km±2km, ML4.4*
*IDC 06 20:48:58.8±0.8, 35°.96S×71°.90W, h47km±7km, mb4.1/11, mb1 4.2/13, mb1mx4.0/31, mbtmp4.4/13, ML5.0/2, MS3.3/3, Ms1 3.3/3, ms1mx3.0/23, Error ellipse: s-maj=25.0km s-min=14.4km az=90.0*
**ISC 06 20:48:58.7±0.5, 35°.94S±0°.04×72°.27W±0°.06, h52km±5km, h52km:pP-P, n58, σ1s.28/70, mb4.3/14, 2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| COCH | Cobquecura | 0.46 | 245 | eP | Pn | 20 49 09.4 | -0.1 |
| COCH | | | | iS | Sn | 20 49 17.9 | +0.5 |
| COCH | | | | AML | AML | 20 49 19.0 | |
| | comp=N,41μm,0.5s | | | | | | |
| CCHI | Chillan | 0.68 | 167 | iP | Pn | 20 49 11.5 | -0.8 |
| CCHI | | | | iS | Sn | 20 49 21.3 | -0.8 |
| CCHI | | | | AML | AML | 20 49 27.0 | |
| | comp=N,49μm,0.5s | | | | | | |
| TALC | Talca | 0.75 | 44 | iP | Pn | 20 49 13.4 | +0.3 |
| TALC | | | | iS | Sn | 20 49 24.7 | +1.1 |
| CCSP | San Pedro de C | 1.13 | 216 | iP | Pn | 20 49 18.9 | +0.7 |
| CCSP | | | | eS | Sn | 20 49 33.4 | +0.8 |
| CCSP | | | | AML | AML | 20 49 39.0 | |
| | comp=N,14μm,0.5s | | | | | | |
| CHPI | Pichilemu | 1.56 | 8 | eP | Pn | 20 49 24.5 | +0.5 |
| CANA | Caviahue | 2.17 | 154 | eP | Pn | 20 49 34.4 | +1.8 |
| CANA | | | | eS | Sn | 20 50 06.2 | +7.7 |
| TACH | Talagante | 2.53 | 26 | eP | Pn | 20 49 38.5 | +1.2 |
| ANTU | Antumapu | 2.72 | 30 | eP | Pn | 20 49 41.0 | +1.1 |
| RCDM | Rinconada Maip | 2.73 | 27 | iP | Pn | 20 49 40.9 | +0.9 |
| RCDM | | | | eS | Sn | 20 50 12.3 | +0.6 |
| AAGR | Agrelo | 4.02 | 46 | eP | Pn | 20 50 00.9 | +3.1 |
| ARCO | CERRO ARCO | 4.14 | 43 | eP | Pn | 20 50 02.2 | +2.6 |
| ARCO | | | | AML | AML | 20 51 21.4 | |
| | comp=Z,109nm,0.7s | | | | | | |
| ASAL | Salagasta | 4.39 | 41 | eP | Pn | 20 50 05.5 | +2.6 |
| AUSP | Uspallata | 4.41 | 34 | eP | Pn | 20 50 05.5 | +2.2 |
| RTLS | Leoncito | 4.81 | 32 | eP | Pn | 20 50 10.9 | +2.1 |
| RTLS | | | | eS | Sn | 20 51 18.6 | +15 |
| RTCV | Cerro Valdivia | 5.11 | 38 | eP | Pn | 20 50 14.2 | +1.4 |
| CFAA | Coronel Fontan | 5.47 | 39 | P | Pn | 20 50 18.4 | +0.7 |
| | comp=Z,1.2nm,0.3s,baz=214,slow=12,SNR=38 | | | | | | |
| CFAA | | | | S | Sn | 20 51 19.9 | +0.5 |
| | comp=Z,1.0nm,0.3s,baz=28,slow=19,SNR=2.6 | | | | | | |
| CFAA | | | | LR | LR | 20 52 31.9 | |
| | comp=Z,30nm,18.8s,baz=240,slow=40 | | | | | | |
| CFAA | Coronel Fontan | 5.47 | 39 | eP | Pn | 20 50 18.4 | +0.7 |
| ACAN | Cantantal | 5.58 | 51 | eP | Pn | 20 50 20.1 | +0.9 |
| RTLL | Cerro Villicun | 5.58 | 36 | eP | Pn | 20 50 19.6 | +0.4 |
| AMOG | MOGNA | 5.90 | 33 | eP | Pn | 20 50 23.8 | +0.1 |
| MRA | San Martin | 6.47 | 59⇓ | eP | Pn | 20 50 33.8 | +2.5 |
| MRA | | | | AML | AML | 20 52 44.0 | |
| | comp=Z,41nm,0.6s | | | | | | |
| AVFE | Valle Fertil | 6.63 | 39 | eP | Pn | 20 50 33.5 | -0.1 |
| AVFE | | | | eS | Sn | 20 51 54.6 | +6.7 |
| AVFE | | | | AML | AML | 20 52 06.7 | |
| | comp=Z,75nm,0.6s | | | | | | |
| ACHE | Chepes | 6.68 | 46 | eP | Pn | 20 50 34.2 | 0.0 |
| LCO | Las Campanas | 7.03 | 11 | ePn | Pn | 20 50 38.0 | -1.2 |
| | comp=Z,38nm,0.6s | | | | | | |
| ACLC | CERRO LA CRUZ | 7.89 | 36 | eP | Pn | 20 50 49.0 | -1.9 |
| VCA | Vinchina | 7.96 | 27 | eP | Pn | 20 50 54.3 | +2.4 |
| VCA | | | | eS | Sn | 20 52 29.6 | +8.9 |
| VCA | | | | AML | AML | 20 52 58.9 | |
| | comp=Z,74nm,0.8s | | | | | | |
| TRQA | Tornquist | 8.50 | 107 | ePn | Pn | 20 50 59.8 | +0.6 |
| | comp=Z,41nm,1.1s | | | | | | |
| CYA | Choya | 9.27 | 38⇓ | eP | Pn | 20 51 07.7 | -2.0 |
| LVC | Limon Verde | 13.60 | 13 | P | Pn | 20 52 09.0 | 0.0 |
| | comp=Z,57nm,0.3s,baz=186,slow=9.1,SNR=10.0 | | | | | | |
| LVC | | | | S | S | 20 54 57.6 | -1.8 |
| | comp=Z,14nm,0.3s,baz=92,slow=1.7,SNR=6.5 | | | | | | |
| LVC | | | | LR | LR | 20 57 30.4 | |
| | comp=Z,463nm,21.2s,baz=218,slow=38 | | | | | | |
| CPUP | Villa Florida | 15.96 | 57 | P | Pn | 20 52 40.3 | +0.5 |
| | comp=Z,0.2nm,0.3s,baz=279,slow=7.8,SNR=3.3 | | | | | | |
| CPUP | | | | LR | LR | 20 59 28.8 | |
| | comp=Z,224nm,18.0s,baz=228,slow=40 | | | | | | |
| LPAZ | La Paz | 19.91 | 12 | P | Pn | 20 53 28.1 | -0.6 |
| | comp=Z,0.5nm,0.3s,baz=179,slow=4.5,SNR=18 | | | | | | |
| SIV | San Ignacio | 22.24 | 30 | P | P | 20 53 50.4 | -0.7 |
| | comp=Z,12nm,0.6s,baz=219,slow=8.1,SNR=26 | | | | | | |
| BDFB | Brasilia | 29.61 | 53 | P | P | 20 54 58.1 | -1.1 |
| | comp=Z,2.0nm,0.5s,baz=223,slow=12,SNR=4.5 | | | | | | |
| PTGA | Pitinga | 36.85 | 21 | P | P | 20 56 01.5 | -0.5 |
| | comp=Z,3.5nm,0.5s,baz=193,slow=9.4,SNR=11 | | | | | | |
| SDV | Santo Domingo | 44.61 | 2 | eP | P | 20 57 05.4 | -0.7 |
| | comp=Z,3.2nm,0.7s | | | | | | |
| SDV | | | | epP | pP | 20 57 19.1 | -0.8 |
| VNA3 | Neumayer Olymp | 47.65 | 157 | P | P | 20 57 29.5 | +0.3 |
| VNA1 | Neumayer--Stat | 47.98 | 156 | P | P | 20 57 32.5 | +0.8 |
| VNA2 | Neumayer--Watz | 48.31 | 157 | P | P | 20 57 34.5 | +0.1 |
| | baz=300,slow=11 | | | | | | |
| SNAA | Sanae | 49.87 | 157 | P | P | 20 57 46.1 | -0.2 |
| SNAA | Sanae | 49.87 | 157 | P | P | 20 57 46.1 | -0.2 |
| | comp=Z,1.5nm,0.9s,baz=291,slow=6.2,SNR=15 | | | | | | |
| QSPA | South Pole Qui | 54.30 | 180 | P | P | 20 58 20.5 | +1.1 |
| | comp=Z,3.5nm,0.7s,baz=159,slow=0.9,SNR=17 | | | | | | |
| QSPA | South Pole Qui | 54.30 | 180 | eP | P | 20 58 20.2 | +0.8 |
| | comp=Z,3.8nm,0.8s | | | | | | |
| QSPA | | | | epP | pP | 20 58 34.6 | +1.1 |
| TXAR | Lajitas Array | 71.33 | 331 | P | P | 21 00 14.4 | +1.5 |
| | comp=Z,0.6nm,0.5s,baz=157,slow=8.3,SNR=7.2 | | | | | | |
| TXAR | | | | pP | pP | 21 00 28.2 | +0.7 |
| | comp=Z,1.7nm,0.6s,baz=149,slow=7.7,SNR=12 | | | | | | |
| MAW | Mawson | 71.38 | 163 | P | P | 21 00 11.9 | -0.8 |
| | comp=Z,2.5nm,0.8s,baz=226,slow=9.6,SNR=7.7 | | | | | | |
| LIC | Lamto | 75.58 | 71 | ePKIKP | P | 21 00 40.2 | +2.0 |
| | comp=Z,106nm,1.9s | | | | | | |
| TIC | Toumodi | 75.85 | 71 | ePKIKP | P | 21 00 40.0 | +0.3 |
| KIC | Kosan Boka | 75.88 | 71 | ePKIKP | P | 21 00 39.6 | -0.3 |
| | comp=Z,24nm,0.8s | | | | | | |
| DBIC | Dimbokro | 75.99 | 71 | P | P | 21 00 40.3 | -0.2 |
| | comp=Z,6.7nm,0.7s,baz=216,slow=5.8,SNR=9.4 | | | | | | |
| BOSA | Boshof | 79.35 | 118 | P | P | 21 00 59.0 | -0.3 |
| | comp=Z,8.0nm,0.7s,baz=231,slow=3.2,SNR=14 | | | | | | |
| TORD | Torodi Ar. Bea | 85.05 | 70 | P | P | 21 01 28.2 | -0.8 |
| | comp=Z,1.5nm,0.8s,baz=258,slow=5.7,SNR=18 | | | | | | |
| TORD | | | | pP | pP | 21 01 41.8 | -2.2 |
| | comp=Z,1.2nm,0.8s,baz=302,slow=3.6,SNR=6.2 | | | | | | |
| NVAR | Mina Array Bea | 85.36 | 325 | P | P | 21 01 32.3 | +1.9 |
| | comp=Z,0.3nm,0.3s,baz=159,slow=6.6,SNR=4.0 | | | | | | |
| NVAR | | | | pP | pP | 21 01 46.1 | +0.8 |
| | comp=Z,1.3nm,0.7s,baz=155,slow=6.6,SNR=6.2 | | | | | | |
| ABKAR | Akbulak array | 143.01 | 54 | ePKPdf | PKPbc | 21 08 22.8 | -0.3 |
| KKAR | Karatay Array | 150.60 | 64 | ePKPbc | PKPbc | 21 08 44.2 | -0.3 |
| KURBB | Kurchatov Arra | 154.38 | 46 | PKPab | PKPab | 21 09 06.2 | -0.9 |
| | comp=Z,1.0nm,0.8s,baz=290,slow=4.4,SNR=8.2 | | | | | | |
| KURK | Kurchatov | 154.40 | 46 | PKPab | PKPab | 21 09 06.2 | -0.9 |
| ZALV | Zalesovo Beam | 155.95 | 34 | PKPab | PKPab | 21 09 11.7 | -2.0 |
| | comp=Z,1.0nm,0.5s,baz=284,slow=6.0,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 158.14 | 52 | PKPab | PKPab | 21 09 21.9 | -1.6 |
| | comp=Z,0.7nm,0.6s,baz=289,slow=3.7,SNR=6.6 | | | | | | |
| SONM | Songino Array | 168.07 | 4 | PKPab | PKPab | 21 10 08.1 | +1.1 |
| | comp=Z,0.5nm,0.8s,baz=329,slow=5.4,SNR=3.4 | | | | | | |
| SONM | | | | pPKPab | pPKPab | 21 10 22.7 | +0.6 |
| | comp=Z,0.7nm,0.8s,baz=340,slow=6.2,SNR=4.7 | | | | | | |

*ISCJB 06 21:07:10.2±0.2, 6°.07S±0°.03×150°.82E±0°.03, h33km,*

*mb5.0/40, MS4.7/12, Error ellipse: s-maj=5.2km s-min=3.9km az=26.1*

*BJI **06** 21:07:10.6, 5°.80S×150°.97E, h29km, mb4.6/44, mB5.1/35, Ms5.0/38, Ms7 4.7/37*

*GCMT **06** 21:07:12.6±0.2, 6°.15S×150°.88E, h25km, MW5.2/89, Moment Tensor Solution. s62,c77; s89,c141; Duration: 1s0 Moment tensor: Scale 10^17Nm; Mrr-0.60±.02; Mθθ-0.10±.01; Mφφ0.69±.02; Mrθ0.45±.04; Mθφ-0.13±.01; Mφr0.17±.03; Best double couple: M0 0.80700×10^17 NP1:φs199.00000°, δ57.00000°, λ-52.00000°. NP2: φs324.00000°, δ48.00000°, λ-133.00000°. Principal axes: T 0.7240, Plg5.0000°, Azm264.0000°; N 0.1670, Plg31.0000°, Azm357.0000°; P -0.8910, Plg59.0000°, Azm165.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **06** 21:07:12.6±1.6, 6°.02S×150°.85E, h45km±14km, mb5.2/23 Error ellipse: s-maj=9.1km s-min=6.7km az=74.0*

*IDC **06** 21:07:12.4±2.0, 6°.02S×150°.82E, h41km±17km, mb4.4/18, mb1 4.5/20, mb1mx4.3/38, mbtmp4.6/20, ML3.2/2, MS4.5/13, Ms1 4.5/13, ms1mx4.3/29, Error ellipse: s-maj=12.9km s-min=9.1km az=119.0*

*AUST **06** 21:07:13.3±0.6, 6°.08S×150°.87E, h54km±6km, Error ellipse: s-maj=7.9km s-min=6.0km az=138.0*

*DJA **06** 21:07:21.7±2.8, 6°S±15°×15°1E±1°7, h94km±17km, M5.2/12, mb4.7/12, mB5.5/3, MLv5.5/1, Mw(mB)5.0/3*

**ISC 06 21:07:11.8**±0.4, **6°.08S**±0°.04×**150°.88E**±0°.05, **h34**km±1km, **h35**km**:pP-P, n178,** σ**1s43**/209, **mb5.0**/40, **MS4.7**/12, **5C-2D, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | Rabaul | 2.27 | 34 | P | Pn | 21 07 48.3 | +1.3 |
| | baz=2.3,SNR=301 | | | | | | |
| PMG | Port Moresby | 4.95 | 228 | P | Pn | 21 08 26.2 | +2.4 |
| | 15nm,0.3s,baz=68,slow=9.0,SNR=25 | | | | | | |
| PMG | | | | S | Sn | 21 09 20.3 | +0.3 |
| | 141nm,0.3s,baz=122,slow=16,SNR=12 | | | | | | |
| PMG | | | | LR | LR | 21 10 27.9 | |
| | comp=Z,3µm,21.3s,baz=22,slow=40 | | | | | | |
| PMG | Port Moresby | 4.95 | 228 | P | Pn | 21 08 26.2 | +2.4 |
| | baz=5.0,SNR=17 | | | | | | |
| PMG | Port Moresby | 4.95 | 228 | ePn | Pn | 21 08 25.9 | +2.0 |
| PMG | | | | S | Sn | 21 09 20.3 | +0.3 |
| HNR | Honiara | 9.58 | 111 | LR | LR | 21 12 42.0 | |
| | comp=Z,4µm,20.2s,baz=276,slow=34 | | | | | | |
| JAY | Jayapura | 10.75 | 289 | LR | LR | 21 14 25.3 | |
| | comp=Z,5µm,18.3s,baz=92,slow=41 | | | | | | |
| COEN | Coen | 10.90 | 224 | P | Pn | 21 09 46.4 | +0.9 |
| | baz=11,SNR=6.7 | | | | | | |
| COEN | Coen | 10.90 | 224 | ePn | Pn | 21 09 45.2 | -0.3 |
| COEN | | | | eSn | Sn | 21 11 42.2 | -4.1 |
| CTA | Charters Tower | 14.63 | 197 | P | Pn | 21 10 39.1 | +2.6 |
| | 0.3nm,0.3s,baz=29,slow=13,SNR=4.1 | | | | | | |
| CTA | | | | LR | LR | 21 15 34.0 | |
| | comp=Z,1µm,19.1s,baz=17,slow=34 | | | | | | |
| CTAO | Charters Tower | 14.63 | 197 | eP | Pn | 21 10 37.5 | +1.0 |
| | 102nm,1.5s | | | | | | |
| QIS | Mount Isa | 18.08 | 216 | P | P | 21 11 20.8 | +0.2 |
| | baz=18,SNR=20 | | | | | | |
| EIDS | Eidsvold | 19.18 | 179 | P | Pn | 21 11 33.4 | -0.4 |
| | baz=19,SNR=11 | | | | | | |
| EIDS | Eidsvold | 19.18 | 179 | ePn | Pn | 21 11 33.4 | -0.4 |
| | 118nm,1.7s | | | | | | |
| KDU | Kakadu | 19.30 | 249 | P | P | 21 11 33.2 | -0.9 |
| | baz=19,SNR=26 | | | | | | |
| SAUI | Saumlaki | 19.52 | 263 | P | Pn | 21 11 38.0 | 0.0 |
| | 121nm,1.0s | | | | | | |
| SWI | Sorong | 20.25 | 284 | P | Pn | 21 11 46.3 | -0.3 |
| | 23nm,1.4s | | | | | | |
| RMQ | Roma | 20.39 | 185 | P | Pn | 21 11 47.2 | -1.0 |
| | baz=20,SNR=26 | | | | | | |
| GUMO | Guam | 20.43 | 343 | P | Pn | 21 11 48.0 | -0.6 |
| | 66nm,0.8s,baz=158,slow=6.4,SNR=3.8 | | | | | | |
| GUMO | | | | LR | LR | 21 17 47.5 | |
| | comp=Z,1µm,21.7s,baz=145,slow=31 | | | | | | |
| MTN | Manton Dam | 20.60 | 250 | P | P | 21 11 48.2 | 0.0 |
| | baz=21,SNR=18 | | | | | | |
| MTN | Manton Dam | 20.60 | 250 | eP | P | 21 11 48.2 | 0.0 |
| | 64nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 21.16 | 228 | P | P | 21 11 54.0 | -0.3 |
| | 511nm,0.5s | | | | | | |
| WRAB | Tennant Creek | 21.16 | 228 | eP | P | 21 11 54.0 | -0.3 |
| | 58nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 21.17 | 228 | P | P | 21 11 53.7 | -0.7 |
| | 28nm,0.6s,baz=52,slow=10,SNR=78 | | | | | | |
| WRA | | | | S | S | 21 15 47.5 | -0.7 |
| | 8.2nm,1.1s,baz=53,slow=22,SNR=12 | | | | | | |
| WRA | | | | PcP | PcP | 21 15 59.0 | -0.5 |
| | 4.8nm,0.7s,baz=43,slow=1.6,SNR=7.1 | | | | | | |
| QLP | Quilpie | 21.35 | 197 | P | P | 21 11 56.7 | +0.5 |
| | baz=22,SNR=16 | | | | | | |
| DZM | Mont Dzumac | 21.89 | 138 | eP | P | 21 12 02.2 | +0.1 |
| | 140nm,1.4s | | | | | | |
| DZM | | | | eLR | LR | 21 17 24.5 | |
| | 4µm,22.6s | | | | | | |
| DZM | Mont Dzumac | 21.89 | 138 | P | P | 21 12 03.0 | +0.9 |
| | 35nm,0.9s,baz=178,slow=1.6,SNR=16 | | | | | | |
| DZM | | | | LR | LR | 21 19 03.3 | |
| | comp=Z,3µm,20.8s,baz=12,slow=32 | | | | | | |
| SARN | Sarigan | 23.19 | 348 | eP | P | 21 12 12.8 | -3.0 |
| KNRA | Kununurra | 23.70 | 244 | P | P | 21 12 20.4 | -0.3 |
| | baz=24,SNR=43 | | | | | | |
| AS01 | Alice Springs | 23.90 | 221 | eP | P | 21 12 21.3 | -1.3 |
| AS31 | Alice Springs | 23.93 | 221 | eP | P | 21 12 20.2 | -2.7 |
| AS12 | Alice Springs | 23.93 | 221 | eP | P | 21 12 22.6 | -0.4 |
| ASAR | Alice Springs | 23.93 | 221 | P | P | 21 12 22.6 | -0.4 |
| | 26nm,0.5s,baz=58,slow=8.6,SNR=315 | | | | | | |
| ASAR | | | | S | S | 21 16 39.4 | +2.0 |
| | 1.7nm,0.7s,baz=41,slow=17,SNR=2.6 | | | | | | |
| ASAR | | | | LR | LR | 21 23 26.8 | |
| | comp=Z,1µm,18.1s,baz=38,slow=41 | | | | | | |
| ARMA | Armidale | 24.22 | 178 | P | P | 21 12 26.4 | +0.8 |
| | baz=24,SNR=3.9 | | | | | | |
| ARMA | Armidale | 24.22 | 178 | eP | P | 21 12 27.2 | +1.6 |
| | 57nm,1.3s | | | | | | |
| CMSA | Cobar Meteorol | 25.79 | 190 | P | P | 21 12 39.3 | -0.4 |
| | baz=26,SNR=7.6 | | | | | | |
| SOEI | Soe | 26.61 | 260 | P | P | 21 12 51.1 | +3.6 |
| SOEI | Soe | 26.61 | 260 | eP | P | 21 12 49.1 | +1.7 |
| | 57nm,0.8s | | | | | | |
| BATI | Baumata | 27.25 | 260 | P | P | 21 12 53.8 | +0.7 |
| | 34nm,0.9s | | | | | | |
| MMRI | Maumere | 28.52 | 263 | P | P | 21 13 03.6 | -0.8 |
| WRKA | Warakurna | 28.70 | 227 | P | P | 21 13 05.1 | -0.8 |
| | baz=29,SNR=43 | | | | | | |
| EDFI | Ende, Flores | 29.06 | 263 | P | P | 21 13 09.2 | -0.2 |
| HTT | Hallett | 29.40 | 201 | P | P | 21 13 11.2 | -0.9 |
| | baz=30,SNR=11 | | | | | | |
| FORT | Forrest | 32.60 | 218 | P | P | 21 13 40.0 | -0.3 |
| | baz=33,SNR=7.8 | | | | | | |
| OUZ | Omahuta | 35.76 | 147 | eP | P | 21 14 06.4 | -1.2 |
| | 168nm,2.2s | | | | | | |
| MEEK | Meekatharra | 36.91 | 233 | P | P | 21 14 17.2 | -0.5 |
| | baz=37,SNR=7.8 | | | | | | |
| KMBL | Kambalda | 37.01 | 224 | P | P | 21 14 17.7 | -0.8 |
| | baz=37,SNR=8.1 | | | | | | |
| AFI | Afiamalu | 37.55 | 105 | P | P | 21 14 24.4 | +1.2 |
| | 68nm,1.1s,baz=178,slow=3.3,SNR=4.4 | | | | | | |
| URZ | Urewera | 39.90 | 147 | P | P | 21 14 42.7 | +0.1 |
| | 5.8nm,0.5s,baz=130,slow=6.3,SNR=8.7 | | | | | | |
| KLBR | Kellerberrin | 40.04 | 226 | P | P | 21 14 42.9 | -1.0 |
| | baz=40,SNR=16 | | | | | | |
| MORW | Morawa | 40.06 | 231 | P | P | 21 14 43.8 | -0.2 |
| | baz=40,SNR=5.1 | | | | | | |
| BLDU | Ballidu | 40.30 | 228 | P | P | 21 14 46.6 | +0.5 |
| | baz=40,SNR=6.6 | | | | | | |
| BFZ | Birch Farm | 41.26 | 150 | eP | P | 21 14 52.5 | -1.3 |
| | 206nm,2.1s | | | | | | |
| RPZ | Rata Peaks | 41.47 | 158 | P | P | 21 14 55.7 | +0.2 |
| | 7.2nm,0.6s,baz=11,slow=2.1,SNR=5.5 | | | | | | |
| LEM | Lembang | 42.98 | 267 | P | P | 21 15 08.1 | -0.4 |
| | 39nm,0.7s,baz=80,slow=6.6,SNR=10 | | | | | | |
| JNU | Nakatsue | 43.37 | 335 | P | P | 21 15 11.0 | 0.0 |
| | 33nm,0.9s,baz=145,slow=3.5,SNR=14 | | | | | | |
| JNU | Nakatsue | 43.37 | 335 | eP | P | 21 15 11.4 | +0.3 |
| QZH | Quanzhou | 44.02 | 316 | ⇑iP | P | 21 15 16.4 | 0.0 |
| QZH | | | | eS | S | 21 21 45.9 | -0.6 |
| QZH | | | | LN | | | |
| | 3µm,20.4s | | | | | | |
| QZH | | | | LE | | | |
| | 870nm,13.2s | | | | | | |
| QZH | | | | LZ | | | |
| | 2µm,19.8s | | | | | | |
| MJAR | Matsushiro Arr | 44.03 | 345 | LR | LR | 21 33 03.9 | |
| | comp=Z,423nm,19.4s,baz=175,slow=35 | | | | | | |
| QIZ | Qiongzhong | 47.51 | 303 | P | P | 21 15 44.8 | +0.8 |
| QIZ | | | | pP | pP | 21 15 53.8 | -0.5 |
| QIZ | | | | S | S | 21 22 37.3 | +0.4 |
| QIZ | | | | sS | sS | 21 22 51.0 | -2.8 |
| QIZ | | | | PMZ | | | |
| | 81nm,2.8s | | | | | | |
| QIZ | | | | LZ | | | |
| | 1µm,4.3s | | | | | | |
| KSRS | Korea Array | 48.32 | 335 | P | P | 21 15 49.6 | -0.3 |
| | 7.5nm,1.0s,baz=153,slow=8.9,SNR=19 | | | | | | |
| KS15 | Wonju Array Si | 48.32 | 335 | eP | P | 21 15 49.6 | -0.4 |
| KSAR | Wonju Array Be | 48.32 | 335 | P | P | 21 15 49.6 | -0.4 |
| KS01 | Wonju Array Si | 48.35 | 335 | eP | P | 21 15 50.2 | 0.0 |
| NJ2 | Nanjing | 48.67 | 323 | eP | P | 21 15 52.6 | -0.2 |
| NJ2 | | | | pP | pP | 21 16 01.7 | -1.4 |
| NJ2 | | | | sP | sP | 21 16 06.4 | -0.8 |
| NJ2 | | | | S | S | 21 22 55.0 | +2.0 |
| NJ2 | | | | sS | sS | 21 23 09.0 | -0.9 |
| NJ2 | | | | PMZ | | | |
| | 30nm,0.6s | | | | | | |
| NJ2 | | | | PMZ | | | |
| | 450nm,8.5s | | | | | | |
| NJ2 | | | | LN | | | |
| | 1µm,27.6s | | | | | | |
| NJ2 | | | | LE | | | |
| | 1µm,26.2s | | | | | | |
| NJ2 | | | | LZ | | | |
| | 1µm,26.3s | | | | | | |
| INCN | Inchon | 48.89 | 334 | eP | P | 21 15 52.4 | -2.0 |
| | 198nm,2.1s | | | | | | |
| RAR | Rarotonga | 50.03 | 113 | LR | LR | 21 33 40.7 | |
| | comp=Z,138nm,20.9s,baz=297,slow=32 | | | | | | |
| WHN | Wuhan | 50.49 | 318 | P | P | 21 16 10.4 | +3.7 |
| WHN | | | | S | S | 21 23 17.4 | -1.1 |
| WHN | | | | LN | | | |
| | 3µm,22.4s | | | | | | |
| WHN | | | | LE | | | |
| | 1µm,12.6s | | | | | | |
| WHN | | | | LZ | | | |
| | 2µm,16.9s | | | | | | |
| TIA | Tai'an | 52.64 | 326 | ⇓P | P | 21 16 23.2 | +0.5 |
| TIA | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| TIA | | | | PMZ | | | |
| | 190nm,3.6s | | | | | | |
| TIA | | | | LN | | | |
| | 430nm,21.4s | | | | | | |
| TIA | | | | LE | | | |
| | 350nm,20.2s | | | | | | |
| TIA | | | | LZ | | | |
| | 600nm,21.1s | | | | | | |
| USRK | Ussuriysk Ar. | 52.87 | 343 | P | P | 21 16 22.6 | -1.6 |
| | 2.8nm,1.0s,baz=167,slow=12,SNR=4.8 | | | | | | |
| USRK | | | | LR | LR | 21 38 33.4 | |
| | comp=Z,280nm,18.2s,baz=151,slow=36 | | | | | | |
| GYA | Guiyang | 53.68 | 309 | P | P | 21 16 33.0 | +2.3 |
| GYA | | | | pP | pP | 21 16 42.8 | +1.7 |
| GYA | | | | PP | PP | 21 18 35.2 | +3.3 |
| GYA | | | | ScP | ScP | 21 21 32.5 | +0.2 |
| GYA | | | | S | S | 21 24 03.0 | +0.3 |
| GYA | | | | sS | sS | 21 24 20.6 | +0.8 |
| GYA | | | | SS | SKiKP | 21 27 43.4 | +0.1 |
| GYA | | | | PMZ | | | |
| | 20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| GYA | | | | LN | | | |
| | 440nm,19.0s | | | | | | |
| GYA | | | | LE | | | |
| | 390nm,18.8s | | | | | | |
| GYA | | | | LZ | | | |
| | 480nm,19.5s | | | | | | |
| MDJ | Mudanjiang | 53.98 | 341 | P | P | 21 16 35.4 | +3.0 |
| MDJ | | | | pP | pP | 21 16 44.5 | +1.8 |
| MDJ | | | | sP | sP | 21 16 48.1 | +1.3 |
| MDJ | | | | PP | PP | 21 18 38.4 | +4.3 |
| MDJ | | | | ScP | ScP | 21 21 32.7 | -0.3 |
| MDJ | | | | PcS | PcS | 21 21 35.3 | -1.2 |
| MDJ | | | | S | S | 21 24 09.9 | +4.1 |
| MDJ | | | | PMZ | | | |
| | 7.0nm,0.8s | | | | | | |
| MDJ | | | | PMZ | | | |
| | 98nm,6.5s | | | | | | |
| MDJ | | | | LN | | | |
| | 110nm,16.4s | | | | | | |
| MDJ | | | | LE | | | |
| | 210nm,18.2s | | | | | | |
| MDJ | | | | LZ | | | |
| | 300nm,21.9s | | | | | | |
| CN2 | Changchun | 54.71 | 338 | eP | P | 21 16 40.6 | +2.9 |
| CN2 | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| CN2 | | | | PMZ | | | |
| | 200nm,5.0s | | | | | | |
| CN2 | | | | LN | | | |
| | 200nm,17.0s | | | | | | |
| CN2 | | | | LE | | | |
| | 200nm,17.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | 400nm,16.0s | | | | | | |
| BJI | Beijing | 55.93 | 328 | P | P | 21 16 45.9 | -0.7 |
| BJI | | | | S | S | 21 24 30.0 | -2.1 |
| BJI | | | | SS | SS | 21 28 14.7 | -3.9 |
| BJI | | | | PMZ | | | |
| | 9.0nm,2.5s | | | | | | |
| BJI | | | | PMZ | | | |
| | 130nm,3.5s | | | | | | |
| BJI | | | | LN | | | |
| | 380nm,19.2s | | | | | | |
| BJI | | | | LE | | | |
| | 250nm,19.2s | | | | | | |
| BJI | | | | LZ | | | |
| | 350nm,24.8s | | | | | | |
| KMI | Kunming | 56.14 | 306 | P | P | 21 16 49.7 | +1.0 |
| KMI | | | | pP | pP | 21 17 02.9 | +3.8 |
| KMI | | | | PP | PP | 21 18 59.2 | +5.1 |
| KMI | | | | S | S | 21 24 37.3 | +1.3 |
| KMI | | | | SS | SS | 21 28 22.3 | -0.7 |
| KMI | | | | PMZ | | | |
| | 5.0nm,1.7s | | | | | | |
| KMI | | | | PMZ | | | |
| | 86nm,3.9s | | | | | | |
| KMI | | | | LN | | | |
| | 410nm,14.6s | | | | | | |
| KMI | | | | LE | | | |
| | 490nm,14.9s | | | | | | |
| KMI | | | | LZ | | | |
| | 460nm,18.2s | | | | | | |
| XAN | Xi'an | 56.26 | 318 | P | P | 21 16 47.3 | -1.8 |
| XAN | | | | pP | pP | 21 16 57.3 | -2.3 |
| XAN | | | | sP | sP | 21 17 01.5 | -2.1 |
| XAN | | | | PP | PP | 21 18 53.3 | -1.5 |
| XAN | | | | S | S | 21 24 29.7 | -7.2 |
| XAN | | | | PMZ | | | |
| | 6.0nm,1.3s | | | | | | |
| XAN | | | | LN | | | |
| | 400nm,18.0s | | | | | | |
| XAN | | | | LE | | | |
| | 340nm,19.2s | | | | | | |
| XAN | | | | LZ | | | |
| | 820nm,18.6s | | | | | | |
| CM01 | Chiang Mai Arr | 56.69 | 297 | eP | P | 21 16 51.7 | -0.7 |
| CM31 | Chiang Mai Arr | 56.71 | 297 | eP | P | 21 16 53.6 | +1.0 |
| CMAR | Chiang Mai Arr | 56.71 | 297 | P | P | 21 16 53.6 | +1.0 |
| | 0.5nm,0.5s,baz=123,slow=6.6,SNR=4.5 | | | | | | |
| CD2 | Chengdu | 58.14 | 312 | eP | P | 21 17 03.1 | +0.6 |
| CD2 | | | | pP | pP | 21 17 13.6 | +0.6 |
| CD2 | | | | sP | sP | 21 17 17.9 | +0.9 |
| CD2 | | | | PcS | PcS | 21 21 55.5 | 0.0 |
| CD2 | | | | S | S | 21 25 03.2 | +1.4 |
| CD2 | | | | sS | sS | 21 25 21.1 | +2.0 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 140nm,5.2s | | | | | | |
| CD2 | | | | LN | | | |
| | 890nm,19.0s | | | | | | |
| CD2 | | | | LE | | | |
| | 670nm,18.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | 1µm,17.6s | | | | | | |
| HHC | Hu-ho-hao-te | 59.00 | 326 | eP | P | 21 17 11.7 | +3.4 |
| HHC | | | | pP | pP | 21 17 23.4 | +4.6 |
| HHC | | | | PP | PP | 21 19 20.1 | +1.0 |
| HHC | | | | PcS | PcS | 21 22 01.6 | +2.6 |
| HHC | | | | S | S | 21 25 14.6 | +1.9 |
| HHC | | | | sS | sS | 21 25 27.6 | -2.4 |
| HHC | | | | PMZ | | | |
| | 19nm,1.2s | | | | | | |
| HHC | | | | PMZ | | | |
| | 110nm,6.4s | | | | | | |
| HHC | | | | LN | | | |
| | 520nm,16.4s | | | | | | |
| HHC | | | | LE | | | |
| | 390nm,16.5s | | | | | | |
| HHC | | | | LZ | | | |
| | 550nm,15.3s | | | | | | |
| PPT2 | Papeete2 | 59.18 | 107 | eS | S | 21 25 18.6 | +2.8 |
| | 146nm,23.8s | | | | | | |
| PPT2 | | | | eLR | LR | 21 34 35.5 | |
| | 198nm,24.2s | | | | | | |
| PETK | Petropavlovsk- | 59.24 | 5 | P | P | 21 17 08.4 | -1.3 |
| | 2.0nm,0.7s,baz=116,slow=5.1,SNR=4.6 | | | | | | |
| PEA2 | Petropavlovsk- | 59.25 | 5 | eP | P | 21 17 08.4 | -1.3 |
| TBI | Tubuai | 59.79 | 113 | eLQ | LQ | 21 32 21.0 | |
| | 807nm,35.2s | | | | | | |
| TBI | | | | eLR | LR | 21 34 56.5 | |
| | 622nm,32.2s | | | | | | |
| LZH | Lanzhou | 60.84 | 317 | eP | P | 21 17 21.7 | +0.5 |
| LZH | | | | pP | pP | 21 17 32.5 | +0.8 |
| LZH | | | | sP | sP | 21 17 36.3 | +0.6 |
| LZH | | | | ePP | PP | 21 19 35.6 | 0.0 |
| LZH | | | | eS | S | 21 25 38.0 | +1.3 |
| LZH | | | | sS | sS | 21 25 52.8 | -1.2 |
| LZH | | | | eSS | SS | 21 29 36.5 | +0.1 |
| LZH | | | | PMZ | | | |
| | 25nm,1.2s | | | | | | |
| LZH | | | | PMZ | | | |
| | 110nm,7.0s | | | | | | |
| LZH | | | | LN | | | |
| | 560nm,16.0s | | | | | | |
| LZH | | | | LE | | | |
| | 580nm,15.3s | | | | | | |
| LZH | | | | LZ | | | |
| | 860nm,17.0s | | | | | | |
| GTA | Gaotai | 65.32 | 318 | eP | P | 21 17 54.4 | +3.6 |
| GTA | | | | pP | pP | 21 18 04.4 | +3.0 |
| GTA | | | | sP | sP | 21 18 08.4 | +3.0 |
| GTA | | | | PMZ | | | |
| | 2.0nm,1.1s | | | | | | |
| GTA | | | | PMZ | | | |
| | 140nm,4.0s | | | | | | |
| GTA | | | | LN | | | |
| | 200nm,16.2s | | | | | | |
| GTA | | | | LE | | | |
| | 320nm,18.5s | | | | | | |
| GTA | | | | LZ | | | |
| | 530nm,19.0s | | | | | | |
| ULN | Ulaanbaatar | 66.09 | 329 | eP | P | 21 17 55.7 | 0.0 |
| | 83nm,3.0s | | | | | | |
| CASY | Casey | 66.24 | 197 | eP | P | 21 17 56.0 | -0.1 |
| | 18nm,1.3s | | | | | | |
| SONA0 | Songino Array | 66.41 | 329 | eP | P | 21 17 57.0 | -0.7 |
| SONM | Songino Array | 66.41 | 329 | P | P | 21 17 57.0 | -0.7 |
| | 1.3nm,0.5s,baz=149,slow=3.5,SNR=11 | | | | | | |
| SONM | | | | LR | LR | 21 49 20.1 | |
| | comp=Z,400nm,18.0s,baz=132,slow=38 | | | | | | |
| SONA1 | Songino Array | 66.41 | 329 | eP | P | 21 17 57.1 | -0.5 |
| LSA | Lhasa | 67.40 | 306 | eP | P | 21 18 08.8 | +4.0 |
| | 20nm,1.8s | | | | | | |
| AKUT | Akutan | 70.09 | 25 | eP | P | 21 18 17.7 | -2.6 |
| | 384nm,1.7s | | | | | | |
| VNDA | Vanda | 71.64 | 178 | P | P | 21 18 29.6 | +0.2 |
| | 4.2nm,0.7s,baz=327,slow=6.8,SNR=29 | | | | | | |
| SBA | Scott Base | 72.22 | 177 | eP | P | 21 18 34.8 | +1.9 |
| | 212nm,3.0s | | | | | | |
| WMQ | Urumqi | 75.40 | 318 | P | P | 21 18 54.0 | +1.7 |
| WMQ | | | | PP | PP | 21 21 45.0 | +3.4 |
| WMQ | | | | S | S | 21 28 29.5 | -0.5 |
| WMQ | | | | SS | SS | 21 33 23.0 | +2.0 |
| WMQ | | | | PMZ | | | |
| | 12nm,1.0s | | | | | | |
| WMQ | | | | PMZ | | | |
| | 39nm,6.0s | | | | | | |
| WMQ | | | | LN | | | |
| | 190nm,20.0s | | | | | | |
| WMQ | | | | LE | | | |
| | 230nm,20.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | 290nm,20.0s | | | | | | |
| MK32 | Makanchi Array | 80.04 | 320 | eP | P | 21 19 16.7 | -1.4 |
| MKAR | Makanchi Array | 80.04 | 320 | P | P | 21 19 16.7 | -1.4 |
| | 0.8nm,0.8s,baz=99,slow=6.3,SNR=6.4 | | | | | | |
| ZAA0 | Zalesovo Array | 81.16 | 327 | eP | P | 21 19 21.6 | -2.2 |
| ZALV | Zalesovo Beam | 81.16 | 327 | P | P | 21 19 22.0 | -1.8 |
| | 2.0nm,0.6s,baz=136,slow=5.1,SNR=5.5 | | | | | | |
| ZAA1 | Zalesovo Array | 81.16 | 327 | eP | P | 21 19 22.0 | -1.8 |
| KSH | Kashi | 82.32 | 311 | eP | P | 21 19 34.5 | +4.0 |
| KSH | | | | esP | sP | 21 19 48.8 | +3.5 |
| KSH | | | | ePP | PP | 21 22 46.0 | +6.5 |
| KSH | | | | S | SKSac | 21 29 46.8 | -2.3 |
| KSH | | | | PMZ | | | |
| | 110nm,5.0s | | | | | | |
| KSH | | | | LN | | | |
| | 270nm,12.4s | | | | | | |
| KSH | | | | LE | | | |
| | 210nm,10.2s | | | | | | |
| KSH | | | | LZ | | | |
| | 170nm,7.4s | | | | | | |
| RND | Reindeer | 82.64 | 23 | eP | P | 21 19 29.5 | -2.0 |
| | 144nm,2.8s | | | | | | |
| MLY | Manley | 82.76 | 21 | eP | P | 21 19 30.4 | -1.7 |
| | 48nm,2.2s | | | | | | |
| KURK | Kurchatov | 83.60 | 322 | eP | P | 21 19 34.8 | -1.9 |
| | 16nm,1.1s | | | | | | |
| MAW | Mawson | 83.66 | 203 | P | P | 21 19 35.8 | -0.8 |
| | 2.5nm,0.6s,baz=83,slow=6.8,SNR=11 | | | | | | |
| MAW | | | | LR | LR | 21 53 57.5 | |
| | comp=Z,321nm,21.1s,baz=62,slow=34 | | | | | | |
| MAW | Mawson | 83.66 | 203 | P | P | 21 19 36.6 | 0.0 |
| | baz=84,SNR=6.2 | | | | | | |
| QSPA | South Pole Qui | 83.89 | 180 | eP | P | 21 19 37.9 | -0.1 |
| | 30nm,1.1s | | | | | | |
| IL1 | Eielson Array | 84.06 | 22 | eP | P | 21 19 35.4 | -3.3 |
| ILAR | Eielson Array | 84.06 | 22 | P | P | 21 19 35.8 | -2.9 |
| | 2.0nm,0.8s,baz=253,slow=5.3,SNR=17 | | | | | | |
| ILB | Eielson Array | 84.06 | 22 | eP | P | 21 19 35.8 | -2.9 |
| AAK | Ala-Archa | 84.16 | 314 | eP | P | 21 19 47.8 | +7.9 |
| | 3.3nm,0.8s | | | | | | |
| KIPM | Iron Peak | 90.51 | 50 | eP | P | 21 20 08.6 | -2.1 |
| I03D | Drain, OR | 91.10 | 46 | P | P | 21 20 13.6 | +0.5 |
| | baz=91 | | | | | | |
| I04A | Tendick Farm, | 91.79 | 46 | P | P | 21 20 16.1 | -0.3 |
| | baz=92 | | | | | | |
| SYO | Syowa Base | 91.83 | 200 | ⇓eP | P | 21 20 20.4 | +4.4 |
| O03D | Paynes Creek | 91.84 | 50 | P | P | 21 20 16.4 | -0.4 |
| | baz=92 | | | | | | |
| J04D | Umpqua Nationa | 91.94 | 47 | P | P | 21 20 17.2 | -0.1 |
| | baz=92 | | | | | | |
| M04C | Macdoel | 91.98 | 48 | P | P | 21 20 17.9 | +0.5 |
| | baz=92 | | | | | | |
| J05D | Fort Rock, OR | 92.58 | 47 | P | P | 21 20 19.8 | -0.4 |
| | baz=93 | | | | | | |
| PKM | Peak Mountain | 92.86 | 55 | P | P | 21 20 22.4 | +0.7 |
| | baz=93 | | | | | | |
| TJR | Tejon Ranch | 93.75 | 55 | eP | P | 21 20 25.6 | 0.0 |
| ISA | Isabella | 94.03 | 55 | P | P | 21 20 27.1 | +0.2 |
| | baz=94 | | | | | | |
| ISA | Isabella | 94.03 | 55 | eP | P | 21 20 27.8 | +0.8 |
| | 6.5nm,1.1s | | | | | | |
| HAWA | Hanford | 94.07 | 44 | eP | P | 21 20 25.0 | -1.8 |
| | 24nm,0.2s | | | | | | |
| MTUM | Tungsten Hills | 94.08 | 53 | eP | P | 21 20 28.3 | +1.0 |
| EDW2 | Edwards Air Fo | 94.36 | 56 | P | P | 21 20 29.1 | +0.6 |
| | baz=94 | | | | | | |
| NV01 | Mina Array Sit | 94.37 | 52 | eP | P | 21 20 28.8 | +0.1 |
| NVAR | Mina Array Bea | 94.37 | 52 | P | P | 21 20 28.8 | +0.1 |
| | 4.5nm,0.8s,baz=256,slow=6.6,SNR=22 | | | | | | |
| NVAR | | | | LR | LR | 21 59 44.1 | |
| | comp=Z,470nm,18.4s,baz=271,slow=33 | | | | | | |
| LRMC | Laurel Mountai | 94.65 | 55 | P | P | 21 20 31.1 | +1.2 |
| | baz=95 | | | | | | |
| DAC | Darwin (Calif) | 94.78 | 54 | eP | P | 21 20 31.2 | +0.7 |
| | 10.0nm,1.1s | | | | | | |
| MPMC | Manual Prospec | 94.85 | 54 | P | P | 21 20 31.7 | +0.8 |
| | baz=95 | | | | | | |
| GSC | Goldstone | 95.36 | 55 | P | P | 21 20 33.7 | +0.6 |
| | baz=95 | | | | | | |
| FURC | Furnace Creek, | 95.39 | 54 | eP | P | 21 20 28.5 | -4.5 |
| MONP | Monument Peak | 95.52 | 58 | P | P | 21 20 35.6 | +1.5 |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=96 | | | | | | |
| PFO | Pinyon Flat Ob | 95.54 | 57 | P | P | 21 20 34.8 | +0.7 |
| | baz=96 | | | | | | |
| HEC | Hector,Ludlow | 95.72 | 56 | P | P | 21 20 36.6 | +1.8 |
| | baz=96 | | | | | | |
| TPNV | Topopah Spring | 95.90 | 54 | P | P | 21 20 35.6 | 0.0 |
| | baz=96 | | | | | | |
| TPNV | Topopah Spring | 95.90 | 54 | eP | P | 21 20 36.4 | +0.7 |
| | 96nm,2.6s | | | | | | |
| TUQ | Turquoise Moun | 96.08 | 55 | P | P | 21 20 36.3 | -0.2 |
| | baz=96 | | | | | | |
| GMRC | Granite Mounta | 96.27 | 56 | P | P | 21 20 37.5 | +0.2 |
| | baz=96 | | | | | | |
| R11A | Troy Canyon, C | 96.50 | 52 | P | P | 21 20 39.1 | +0.7 |
| | baz=96 | | | | | | |
| HLID | Hailey | 97.56 | 47 | P | P | 21 20 42.4 | -0.6 |
| | baz=98 | | | | | | |
| HLID | Hailey | 97.56 | 47 | eP | Pdif | 21 20 43.3 | +0.3 |
| | 29nm,2.5s | | | | | | |
| HVU | Hansel Valley | 98.74 | 49 | eP | Pdif | 21 20 49.1 | +0.7 |
| | 8.3nm,1.5s | | | | | | |
| BOZ | Bozeman (W) | 99.55 | 45 | P | Pdif | 21 20 51.5 | -0.3 |
| | baz=100 | | | | | | |
| TXAR | Lajitas Array | 106.42 | 61 | PP | PP | 21 25 44.4 | -3.3 |
| | 0.8nm,0.9s,baz=284,slow=5.0,SNR=4.9 | | | | | | |
| BR101 | Keskin Array S | 114.71 | 311 | ePKiKP | PKPdf | 21 25 48.6 | -0.7 |
| BRTR | Keskin Array B | 114.71 | 311 | PKP | PKPdf | 21 25 48.6 | -0.7 |
| | 1.0nm,0.7s,baz=132,slow=3.5,SNR=4.9 | | | | | | |
| KOLS | Kolonicke sedl | 119.23 | 324 | ePKP | PKPdf | 21 25 57.3 | -0.2 |
| VYHS | Vyhne | 121.44 | 325 | ePKP | PKPdf | 21 26 01.7 | -0.1 |
| DPC | Dobruska-Polom | 121.86 | 327 | ePKPdf | PKPdf | 21 26 03.0 | +0.4 |
| DPC | | | | ex | x | 21 26 09.4 | |
| DPC | | | | epPKP | pPKPdf | 21 26 14.6 | +0.8 |
| DPC | | | | AMS | AMS | 22 21 30.0 | |
| | comp=Z,400nm,17.3s | | | | | | |
| UPC | Upice | 121.93 | 328 | AMS | AMS | 22 20 10.0 | |
| | comp=Z,400nm,17.7s | | | | | | |
| BRG | Berggiesshubel | 122.80 | 329 | ePKP | PKPdf | 21 26 04.3 | 0.0 |
| | 5.2nm,0.9s | | | | | | |
| PRU | Pruhonice | 123.01 | 328 | ePKPdf | PKPdf | 21 26 04.0 | -0.7 |
| PRU | | | | ex | x | 21 26 10.0 | |
| CLL | Collm | 123.02 | 330 | ePKPdf | PKPdf | 21 26 04.0 | -0.7 |
| | comp=Z,7.0nm,1.1s | | | | | | |
| CLL | | | | LmV | | 22 25 00.0 | |
| | comp=Z,200nm,19.5s | | | | | | |
| CLL | Collm | 123.02 | 330 | ePKPdf | PKPdf | 21 26 04.5 | -0.2 |
| NKC | Novy Kostel | 123.95 | 329 | ePKPdf | PKPdf | 21 26 05.9 | -0.7 |
| NKC | | | | ex | x | 21 26 14.1 | |
| KHC | Kasperske Hory | 124.01 | 327 | ePKPdf | PKPdf | 21 26 05.8 | -1.0 |
| KHC | | | | ex | x | 21 26 12.3 | |
| KHC | | | | epPKP | pPKPdf | 21 26 17.5 | -0.5 |
| KHC | | | | AMS | AMS | 22 23 50.0 | |
| | comp=Z,500nm,19.9s | | | | | | |
| KHC | Kasperske Hory | 124.01 | 327 | ePKPdf | PKPdf | 21 26 05.5 | -1.3 |
| GEC2 | GERESS Array S | 124.11 | 327 | ePKPdf | PKPdf | 21 26 07.1 | 0.0 |
| GERES | GERESS Array B | 124.11 | 327 | PKP | PKPdf | 21 26 06.4 | -0.6 |
| | comp=Z,2.4nm,0.8s,baz=80,slow=1.6,SNR=18 | | | | | | |
| ABTA | Abfaltersbach | 125.98 | 326 | ⇑iPKiKP | PKPdf | 21 26 09.9 | -0.8 |
| | comp=Z,7.6nm,1.3s | | | | | | |
| WTTA | Wattenberg | 126.16 | 327 | ⇑iPKiKP | PKPdf | 21 26 11.1 | 0.0 |
| | comp=Z,15nm,1.3s | | | | | | |
| MOTA | Moosalm | 126.41 | 327 | ⇑iPKiKP | PKPdf | 21 26 11.0 | -0.6 |
| | comp=Z,7.3nm,0.9s | | | | | | |
| FETA | Feichten | 126.80 | 327 | ⇑iPKiKP | PKPdf | 21 26 11.6 | -0.7 |
| | comp=Z,6.4nm,0.9s | | | | | | |
| PAL | Palisades | 127.08 | 42 | ePKPdf | PKPdf | 21 26 12.9 | +0.1 |
| FUORN | Ofenpass-Fuorn | 127.30 | 327 | ePKPdf | PKPdf | 21 26 14.1 | +0.7 |
| WLF | Walferdange | 127.41 | 332 | APKP | pPKPdf | 21 26 24.1 | -0.4 |
| LPAZ | La Paz | 135.46 | 120 | PKP | PKPdf | 21 26 31.2 | +1.1 |
| | comp=Z,1.9nm,0.8s,baz=291,slow=3.2,SNR=5.9 | | | | | | |
| CPUP | Villa Florida | 137.73 | 141 | PKP | PKPdf | 21 26 33.5 | +0.2 |
| | comp=Z,1.6nm,0.8s,baz=229,slow=0.6,SNR=5.2 | | | | | | |
| SDV | Santo Domingo | 138.76 | 83 | ePKPdf | PKPdf | 21 26 35.8 | 0.0 |
| HUMP | Col San Antoni | 142.23 | 68 | ePKPdf | PKPdf | 21 26 42.9 | +1.3 |
| PTGA | Pitinga | 148.47 | 101 | ePKPbc | PKPbc | 21 26 55.8 | -0.3 |
| TOA0 | Torodi Ar. Sit | 148.84 | 285 | ePKPdf | PKPdf | 21 26 52.1 | -1.0 |
| TOA0 | | | | ePKPbc | PKPbc | 21 26 55.4 | -1.6 |
| TORD | Torodi Ar. Bea | 148.84 | 285 | PKPbc | PKPbc | 21 26 55.4 | -1.6 |
| | comp=Z,21nm,0.6s,baz=49,slow=2.4,SNR=130 | | | | | | |
| BDFB | Brasilia | 151.44 | 139 | PKPbc | PKPbc | 21 27 02.6 | -0.7 |
| | comp=Z,11nm,0.6s,baz=219,slow=8.2,SNR=3.4 | | | | | | |
| DBIC | Dimbokro | 155.88 | 273 | PKPab | PKPab | 21 27 29.1 | -1.4 |
| | comp=Z,2.7nm,0.6s,baz=81,slow=5.5,SNR=5.6 | | | | | | |

*IDC **06** 21:15:02.4±0.8, 12.°59N×144.°80E, h0km, mb4.0/11, mb1 4.2/11, mb1mx3.9/41, mbtmp4.0/11, MS4.3/5, Ms1 4.3/5, ms1mx3.6/33, Error ellipse: s-maj=27.1km s-min=20.7km az=96.0*

*ISCJB **06** 21:15:06.0±0.5, 12.°42N±0.°07×144.°50E±0.°09, h30km, mb4.3/18, MS4.3/5, Error ellipse: s-maj=14.0km s-min=8.4km az=28.0*

*NEIC **06** 21:15:09.6±1.5, 12.°54N×144.°62E, h48km±12km, mb4.7/6, Error ellipse: s-maj=13.9km s-min=11.3km az=129.0*

**ISC 06 21:15:07.2**±0.7**, 12.°45N**±0.°09×**144.°7E**±0.°2**, h30**km**, n40, σ1.°15**/37**, mb4.2**/18**, MS4.2**/5**, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | Guam | 1.15 | 10 | Pn | Pn | 21 15 27.1 | -0.1 |
| | 90nm,0.3s,baz=166,slow=7.1,SNR=39 | | | | | | |
| GUMO | | | | Sn | Sb | 21 15 44.1 | +1.1 |
| | 251nm,0.3s,baz=209,slow=20,SNR=11 | | | | | | |
| SARN | Sarigan | 4.36 | 14 | ePn | Pn | 21 16 13.3 | +1.8 |
| H11N1 | WAKE ISLAND Hy | 22.54 | 68 | T | T | 21 43 44.5 | |
| | baz=255,slow=75,SNR=13 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 22.55 | 68 | T | T | 21 43 48.3 | |
| | baz=255,slow=75,SNR=8.2 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 22.55 | 68 | T | T | 21 43 50.3 | |
| | baz=255,slow=75,SNR=7.9 | | | | | | |
| WRA | Warramunga Arr | 33.76 | 198 | P | P | 21 21 46.1 | -0.4 |
| | 2.0nm,0.7s,baz=21,slow=9.8,SNR=7.9 | | | | | | |
| AS12 | Alice Springs | 37.41 | 196 | eP | P | 21 22 18.9 | +1.2 |
| ASAR | Alice Springs | 37.41 | 196 | P | P | 21 22 18.9 | +1.2 |
| | 0.5nm,0.8s,baz=17,slow=11,SNR=5.6 | | | | | | |
| CM01 | Chiang Mai Arr | 44.36 | 284 | eP | P | 21 23 15.9 | +0.7 |
| CM31 | Chiang Mai Arr | 44.37 | 284 | eP | P | 21 23 16.4 | +1.1 |
| CM31 | | | | ePcP | PcP | 21 25 00.3 | +1.2 |
| CMAR | Chiang Mai Arr | 44.37 | 284 | P | P | 21 23 16.4 | +1.1 |
| | 1.4nm,0.6s,baz=81,slow=6.6,SNR=13 | | | | | | |
| CMAR | | | | PcP | PcP | 21 25 00.3 | +1.2 |
| | 0.5nm,0.4s,baz=109,slow=0.7,SNR=4.8 | | | | | | |
| PSI | Prapat | 46.26 | 262 | LR | LR | 21 45 23.6 | |
| | comp=Z,290nm,19.1s,baz=180,slow=39 | | | | | | |
| SONA0 | Songino Array | 47.54 | 326 | eP | P | 21 23 40.6 | +0.5 |
| SONA0 | | | | ePcP | PcP | 21 25 09.8 | 0.0 |
| SONM | Songino Array | 47.54 | 326 | P | P | 21 23 40.6 | +0.5 |
| | 0.4nm,0.6s,baz=143,slow=7.2,SNR=3.7 | | | | | | |
| SONM | | | | PcP | PcP | 21 25 09.8 | 0.0 |
| | 0.7nm,0.7s,baz=132,slow=4.1,SNR=4.8 | | | | | | |
| RPZ | Rata Peaks | 60.87 | 158 | LR | LR | 21 49 34.0 | |
| | comp=Z,155nm,21.0s,baz=304,slow=34 | | | | | | |
| MK32 | Makanchi Array | 62.16 | 317 | eP | P | 21 25 25.5 | -0.3 |
| MKAR | Makanchi Array | 62.16 | 317 | P | P | 21 25 25.5 | -0.3 |
| | 0.3nm,0.4s,baz=90,slow=8.6,SNR=5.9 | | | | | | |
| ZALV | Zalesovo Beam | 62.42 | 325 | P | P | 21 25 26.4 | -1.0 |
| | 0.3nm,0.3s,baz=104,slow=6.1,SNR=2.5 | | | | | | |
| ZAA1 | Zalesovo Array | 62.42 | 325 | eP | P | 21 25 26.4 | -1.0 |
| ILAR | Eielson Array | 69.68 | 25 | P | P | 21 26 11.8 | -2.0 |
| | 0.9nm,0.5s,baz=250,slow=5.4,SNR=8.1 | | | | | | |
| ILB | Eielson Array | 69.68 | 25 | eP | P | 21 26 11.8 | -2.0 |
| KBL | Kabul | 71.26 | 302 | eP | P | 21 26 24.1 | -0.2 |
| | 4.9nm,1.0s | | | | | | |
| GEYT | Alibeck | 79.76 | 307 | P | P | 21 27 12.3 | -0.5 |
| | 2.4nm,0.8s,baz=45,slow=1.0,SNR=4.4 | | | | | | |
| GEYT | | | | LR | LR | 22 06 05.5 | |
| | comp=Z,352nm,19.1s,baz=100,slow=38 | | | | | | |
| YKA | Yellowknife Ar | 83.96 | 27 | P | P | 21 27 32.9 | -1.4 |
| | 0.9nm,0.6s,baz=293,slow=5.6,SNR=4.3 | | | | | | |
| YKB5 | Yellowknife Ar | 83.96 | 27 | eP | P | 21 27 32.9 | -1.4 |
| NV01 | Mina Array Sit | 87.79 | 51 | eP | P | 21 27 55.2 | +1.1 |
| NVAR | Mina Array Bea | 87.79 | 51 | P | P | 21 27 53.6 | -0.5 |
| | 0.4nm,0.4s,baz=277,slow=5.1,SNR=5.3 | | | | | | |
| MFID | Camas Ranch | 88.33 | 46 | eP | P | 21 27 57.5 | +1.0 |
| | 6.0nm,0.8s | | | | | | |
| DAC | Darwin (Calif) | 88.87 | 53 | eP | P | 21 28 00.0 | +0.8 |
| | 3.3nm,0.7s | | | | | | |
| HLID | Hailey | 89.28 | 46 | eP | P | 21 28 02.0 | +1.0 |
| | 38nm,2.5s | | | | | | |
| ELK | Elko | 89.48 | 48 | eP | P | 21 28 03.7 | +1.6 |
| | 2.0nm,0.8s | | | | | | |
| KBZ | Khabaz | 89.81 | 315 | LR | LR | 22 11 44.9 | |
| | comp=Z,189nm,21.8s,baz=68,slow=38 | | | | | | |
| IMW | Indian Meadow | 91.58 | 44 | eP | P | 21 28 13.5 | +1.6 |
| | 2.9nm,0.9s | | | | | | |
| FIA0 | FINESS Array S | 92.10 | 335 | eP | P | 21 28 11.8 | -1.6 |
| FINES | FINESS Array B | 92.10 | 335 | P | P | 21 28 11.8 | -1.6 |
| | 4.5nm,1.0s,baz=39,slow=3.6,SNR=7.6 | | | | | | |
| LAO | LASA Array | 93.72 | 41 | eP | P | 21 28 22.1 | +0.8 |
| | 139nm,2.4s | | | | | | |
| BRTR | Keskin Array B | 97.69 | 313 | LR | LR | 22 16 35.0 | |
| | comp=Z,78nm,21.6s,baz=70,slow=38 | | | | | | |
| TORD | Torodi Ar. Bea | 135.32 | 303 | PKP | PKPdf | 21 34 24.3 | -0.9 |
| | 0.9nm,1.0s,baz=23,slow=1.5,SNR=4.1 | | | | | | |
| DBIC | Dimbokro | 144.23 | 300 | PKP | PKPbc | 21 34 39.5 | 0.0 |
| | 3.7nm,0.8s,baz=120,slow=3.0,SNR=3.3 | | | | | | |
| LPAZ | La Paz | 148.03 | 101 | PKPbc | PKPbc | 21 34 52.9 | +1.3 |
| | 1.3nm,0.7s,baz=259,slow=5.1,SNR=4.8 | | | | | | |

**IDC 06 21:38:09.3**±2.2**, 4.°27N**×**126.°17E, h0**km**, mb3.8**/3**, mb1 4.0**/3**, mb1mx3.4**/38**, mbtmp3.8**/3**, Error ellipse: s-maj=193.3km s-min=25.8km az=65.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 25.36 | 162 | P | P | 21 43 38.8 | +0.4 |
| | 2.7nm,0.6s,baz=342,slow=10,SNR=18 | | | | | | |
| ASAR | Alice Springs | 28.77 | 165 | P | P | 21 44 08.6 | -0.5 |
| | 0.4nm,0.5s,baz=341,slow=7.3,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 56.80 | 325 | P | P | 21 47 55.5 | 0.0 |
| | 0.3nm,0.5s,baz=125,slow=6.8,SNR=5.9 | | | | | | |

*ISCJB **06** 21:38:17.9±1.6, 20.°8S±0.°5×178.°0W±0.°2, h495km, mb4.2/7, Error ellipse: s-maj=69.6km s-min=24.6km az=169.0*

*IDC **06** 21:38:27.3±3.2, 20.°80S×178.°15W, h598km±32km, mb3.7/7, mb1 3.8/8, mb1mx3.2/31, mbtmp4.6/8, Error ellipse: s-maj=51.8km s-min=18.2km az=160.0*

**ISC 06 21:38:18.4**±1.6**, 20.°9S**±0.°5×**178.°0W**±0.°2**, h495**km**, n11, σ0.°96**/10**, mb4.4**/7**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 14.57 | 262 | P | P | 21 41 31.7 | +7.3 |
| | 1.0nm,0.3s,baz=356,slow=3.3,SNR=8.0 | | | | | | |
| PMG | Port Moresby | 35.46 | 283 | P | P | 21 44 33.1 | +0.4 |
| | 20nm,0.7s,baz=85,slow=8.4,SNR=4.7 | | | | | | |
| JAY | Jayapura | 44.19 | 289 | P | P | 21 45 43.6 | +0.5 |
| | 28nm,0.6s,baz=172,slow=3.0,SNR=13 | | | | | | |
| ASAR | Alice Springs | 44.48 | 257 | P | P | 21 45 45.7 | +0.5 |
| | 7.2nm,0.6s,baz=98,slow=7.7,SNR=86 | | | | | | |
| ASAR | | | | PcP | pP | 21 47 16.6 | -0.7 |
| | 1.0nm,0.7s,baz=99,slow=4.3,SNR=6.4 | | | | | | |
| ASAR | | | | S | S | 21 51 38.2 | -5.7 |
| | 1.0nm,0.8s,baz=93,slow=15,SNR=8.7 | | | | | | |
| WRA | Warramunga Arr | 44.59 | 262 | P | P | 21 45 46.2 | 0.0 |
| | 4.1nm,0.6s,baz=98,slow=8.5,SNR=33 | | | | | | |
| SIJI | Sorong | 53.37 | 285 | P | P | 21 46 51.0 | -0.4 |
| | 14nm,0.6s,baz=92,slow=4.7,SNR=5.1 | | | | | | |
| TXAR | Lajitas Array | 87.21 | 57 | P | P | 21 50 12.5 | +0.4 |
| | 0.4nm,0.7s,baz=214,slow=6.9,SNR=6.0 | | | | | | |
| CMAR | Chiang Mai Arr | 90.27 | 290 | P | P | 21 50 26.1 | -0.3 |
| | 0.9nm,0.7s,baz=126,slow=3.2,SNR=6.2 | | | | | | |
| AKASG | Malin Array Be | 143.34 | 331 | PKP | PKPab | 21 56 51.1 | -2.6 |
| | 1.3nm,0.5s,baz=42,slow=4.2,SNR=12 | | | | | | |
| BRTR | Keskin Array B | 147.10 | 312 | PKPbc | PKPdf | 21 57 03.9 | +1.1 |
| | 0.8nm,0.8s,baz=135,slow=53,SNR=4.8 | | | | | | |
| GERES | GERESS Array B | 150.54 | 344 | PKPbc | PKPbc | 21 57 11.9 | -1.9 |
| | 0.4nm,0.6s,baz=2.9,slow=2.7,SNR=5.4 | | | | | | |

*ISCJB **06** 21:41:10.5±1.2, 36.°39N±0.°06×28.°37E±0.°04, h2km±7km, Error ellipse: s-maj=10.0km s-min=5.3km az=6.2*

*ISK **06** 21:41:10.7, 36.°42N×28.°37E, h13km, MD2.8*

*CSEM **06** 21:41:11.1±0.5, 36.°40N×28.°39E, h10km, MD2.8, Error ellipse: s-maj=9.8km s-min=4.9km az=8.0*

*DDA **06** 21:41:12.1, 36.°41N×28.°42E, h23km, Md2.8*

**ISC 06 21:41:12.3**±1.6**, 36.°47N**±0.°07×**28.°42E**±0.°03**, h17**km±8km**, n26, σ0.°72**/44**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DALY | Dalyan (Mu˜la | 0.40 | 29 | ePG | Pg | 21 41 20.2 | -0.2 |
| DALY | | | | eSG | Sb | 21 41 27.1 | +0.4 |
| DALY | Dalyan (Mu˜la | 0.40 | 29 | ePg | Pg | 21 41 20.2 | -0.2 |
| DALY | | | | eSg | Sb | 21 41 27.1 | +0.4 |
| TURN | Turunc | 0.43 | 20 | i P | Pg | 21 41 20.4 | -0.7 |
| TURN | | | | i S | Sg | 21 41 26.9 | -0.1 |
| TURN | Turunc | 0.43 | 20 | P | Pg | 21 41 20.4 | -0.7 |
| TURN | | | | S | Sg | 21 41 26.9 | -0.1 |
| FETY | Fethiye | 0.56 | 72 | ePG | Pg | 21 41 23.0 | -0.5 |
| FETY | | | | eSG | Sb | 21 41 32.1 | +0.7 |
| FETY | Fethiye | 0.56 | 72 | ePg | Pg | 21 41 23.0 | -0.5 |
| FETY | | | | eSg | Sb | 21 41 32.2 | +0.7 |
| YER | Yerkesik | 0.68 | 351 | ePG | Pg | 21 41 25.3 | -0.3 |
| YER | Yerkesik | 0.68 | 351 | ePg | Pg | 21 41 25.3 | -0.3 |
| BDRM | Kayabasi | 0.98 | 308 | i P | Pb | 21 41 30.1 | -0.8 |
| BDRM | | | | i S | Sn | 21 41 44.8 | -0.1 |
| BDRM | Kayabasi | 0.98 | 308 | P | Pb | 21 41 30.1 | -0.8 |
| BDRM | | | | S | Sn | 21 41 44.8 | -0.1 |
| BODT | Bodrum | 1.07 | 304 | ePG | Pb | 21 41 31.6 | -0.7 |
| BODT | Bodrum | 1.07 | 304 | ePg | Pb | 21 41 31.6 | -0.7 |
| GOLH | Golhisar | 1.20 | 50 | i P | Pn | 21 41 34.3 | -0.1 |
| GOLH | | | | i S | Sg | 21 41 52.0 | +0.9 |
| GOLH | Golhisar | 1.20 | 50 | P | Pn | 21 41 34.3 | -0.1 |
| GOLH | | | | S | Sg | 21 41 52.0 | +0.9 |
| ELL | Elmali | 1.23 | 76 | ePN | Pb | 21 41 35.3 | +0.1 |
| ELL | Elmali | 1.23 | 76 | ePn | Pb | 21 41 35.3 | +0.1 |
| AYDN | Tasoluk | 1.27 | 340 | i P | Pg | 21 41 37.6 | +0.8 |
| AYDN | | | | i S | Sg | 21 41 54.5 | +1.2 |
| AYDN | Tasoluk | 1.27 | 340 | P | Pg | 21 41 37.5 | +0.8 |
| AYDN | | | | S | Sg | 21 41 54.5 | +1.2 |
| DNZL | Cakiroluk | 1.32 | 22 | i P | Pn | 21 41 36.1 | 0.0 |
| DNZL | | | | i S | Sn | 21 41 53.6 | +0.2 |
| DNZL | Cakiroluk | 1.32 | 22 | P | Pn | 21 41 36.1 | 0.0 |
| DNZL | | | | S | Sn | 21 41 53.6 | +0.2 |
| AYDB | Zeytinkoy-Aydi | 1.54 | 344 | ePN | Pn | 21 41 39.0 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 1.54 | 344 | ePn | Pn | 21 41 39.0 | 0.0 |
| KORT | Korkueli | 1.64 | 71 | i P | Pb | 21 41 41.7 | -0.5 |
| KORT | | | | i S | Sg | 21 42 06.3 | +1.0 |
| KORT | Korkueli | 1.64 | 71 | P | Pb | 21 41 41.7 | -0.5 |
| KORT | | | | S | Sg | 21 42 06.3 | +1.0 |
| KHAL | Karahalli | 2.08 | 24 | i P | Pn | 21 41 46.7 | +0.2 |
| KHAL | | | | i S | Sn | 21 42 10.3 | -1.9 |
| KHAL | Karahalli | 2.08 | 24 | P | Pn | 21 41 46.7 | +0.2 |
| KHAL | | | | S | Sn | 21 42 10.3 | -1.9 |

**IDC 06 21:46:29.3**±3.3**, 13.°54S**×**166.°83E, h192**km±28km**, mb3.5**/6**, mb1 3.6**/7**, mb1mx3.4**/33**, mbtmp4.0**/7**, Error ellipse: s-maj=34.9km s-min=28.3km az=99.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 8.49 | 182 | P | Pn | 21 48 29.4 | +0.3 |
| | 1.2nm,0.3s,baz=1.1,slow=12,SNR=7.7 | | | | | | |
| DZM | | | | S | Sn | 21 50 05.3 | +0.8 |
| | 0.9nm,0.3s,baz=179,slow=18,SNR=1.4 | | | | | | |
| CTA | Charters Tower | 20.73 | 249 | P | P | 21 50 56.2 | +1.0 |
| | 2.2nm,0.3s,baz=72,slow=10.0,SNR=3.7 | | | | | | |
| WRA | Warramunga Arr | 31.72 | 254 | P | P | 21 52 34.5 | -0.8 |
| | 0.7nm,0.7s,baz=79,slow=7.8,SNR=4.2 | | | | | | |
| ASAR | Alice Springs | 32.71 | 247 | P | P | 21 52 43.5 | -0.5 |
| | 1.6nm,0.6s,baz=74,slow=9.4,SNR=31 | | | | | | |
| ASAR | | | | ScP | ScP | 21 58 51.0 | +0.1 |
| | 0.7nm,0.8s,baz=88,slow=3.9,SNR=6.0 | | | | | | |
| CMAR | Chiang Mai Arr | 74.08 | 294 | P | P | 21 57 46.0 | +1.2 |
| | 1.0nm,0.7s,baz=128,slow=5.1,SNR=5.9 | | | | | | |
| SONM | Songino Array | 81.29 | 324 | P | P | 21 58 24.1 | -0.1 |
| | 0.5nm,0.7s,baz=144,slow=4.1,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 96.05 | 317 | P | P | 21 59 34.7 | -0.2 |
| | 0.7nm,0.5s,baz=86,slow=7.0,SNR=8.2 | | | | | | |
| KEST | Kesra | 150.02 | 321 | PKPbc | PKPbc | 22 05 56.5 | -1.1 |
| | 2.4nm,0.6s,baz=308,slow=2.7,SNR=5.0 | | | | | | |

**WEL 06 21:47:55.6**±0.2**, 40.°14S**×**174.°81E, h20**km±2km**, ML3.5**/35**, 6C-6D, Error ellipse: s-maj=1.5km s-min=0.8km az=90.0, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WAZ | Wanganui | 0.41 | 19 | ⇑P* | Pb | 21 48 05.0 | +0.9 |
| WAZ | | | | S* | Sb | 21 48 10.7 | +0.9 |
| WAZ | | | | AML | AML | 21 48 14.3 | |
| KIW | Kapiti Island | 0.73 | 174 | ⇑P* | Pb | 21 48 09.1 | -0.5 |
| KIW | | | | S* | Sb | 21 48 18.2 | -1.0 |
| KIW | | | | AML | AML | 21 48 19.0 | |
| OGWZ | Otaki Gorge | 0.73 | 158 | P* | Pb | 21 48 09.4 | -0.2 |
| OGWZ | | | | S* | Sb | 21 48 18.9 | -0.4 |
| LREZ | Lake Rotokare | 0.75 | 335 | P* | Pn | 21 48 11.0 | -0.1 |
| LREZ | | | | S* | Sn | 21 48 22.8 | +1.1 |
| POWZ | Post Office Ro | 0.78 | 109 | P* | Pb | 21 48 10.4 | 0.0 |
| POWZ | | | | S* | Sb | 21 48 20.7 | +0.2 |
| MRZ | Mangatainoka R | 0.79 | 132 | ⇑P* | Pb | 21 48 10.4 | -0.2 |
| MRZ | | | | S* | Sb | 21 48 21.0 | +0.1 |
| MRZ | | | | AML | AML | 21 48 21.2 | |
| TSZ | Takapari Road | 0.89 | 85 | P* | Pb | 21 48 12.5 | +0.1 |
| TSZ | | | | S* | Sb | 21 48 23.2 | -0.6 |
| TSZ | | | | AML | AML | 21 48 25.8 | |
| MTVZ | Mangateitei | 0.91 | 34 | P* | Pb | 21 48 12.2 | -0.6 |
| MTVZ | | | | AML | AML | 21 48 28.0 | |
| MTVZ | | | | AML | AML | 21 48 28.3 | |
| HOWZ | Holdsworth Sta | 0.93 | 145 | P* | Pb | 21 48 12.6 | -0.5 |
| HOWZ | | | | S* | Sb | 21 48 25.4 | +0.3 |
| PREZ | Palmer Road | 0.94 | 328 | P* | Pn | 21 48 14.2 | +0.5 |
| PKVZ | Pokaka | 0.94 | 26 | ⇑P* | Pb | 21 48 12.7 | -0.7 |
| PKVZ | | | | AML | AML | 21 48 27.7 | |
| PKVZ | | | | AML | AML | 21 48 30.4 | |
| DUWZ | D'Urville Isla | 0.95 | 225 | P* | Pb | 21 48 12.8 | -0.7 |
| DUWZ | | | | AML | AML | 21 48 27.7 | |
| DUWZ | | | | AML | AML | 21 48 30.6 | |
| PRWZ | Pori Road | 0.98 | 116 | P* | Pn | 21 48 14.2 | -0.1 |
| CAW | Cannon Point | 0.99 | 169 | P* | Pb | 21 48 13.1 | -1.0 |
| CAW | | | | AML | AML | 21 48 27.3 | |
| CAW | | | | AML | AML | 21 48 28.1 | |
| WNVZ | Wahianoa | 1.01 | 37 | ⇓P* | Pb | 21 48 13.6 | -1.0 |
| VRZ | Vera Road | 1.01 | 358 | ⇓P* | Pn | 21 48 14.6 | -0.1 |
| VRZ | | | | AML | AML | 21 48 30.4 | |
| VRZ | | | | AML | AML | 21 48 31.8 | |
| NMEZ | Namu Road | 1.02 | 315 | P* | Pn | 21 48 15.4 | +0.7 |
| NMEZ | | | | S* | Sn | 21 48 30.7 | +2.3 |
| NEZ | North Egmont | 1.03 | 327 | P* | Pn | 21 48 15.3 | +0.3 |
| MOVZ | Moawhango | 1.03 | 45 | ⇓PN | Pb | 21 48 13.5 | -1.3 |
| MOVZ | | | | AML | AML | 21 48 28.9 | |
| MOVZ | | | | AML | AML | 21 48 29.7 | |
| DRZ | Dome Shelter | 1.04 | 34 | ⇓PN | Pb | 21 48 14.2 | -1.1 |
| DRZ | | | | AML | AML | 21 48 30.8 | |
| DRZ | | | | AML | AML | 21 48 31.1 | |
| TIWZ | Tintock | 1.04 | 128 | PN | Pb | 21 48 14.7 | -0.2 |
| TIWZ | | | | AML | AML | 21 48 30.9 | |
| TIWZ | | | | AML | AML | 21 48 32.3 | |
| KHEZ | Kahui Hut | 1.04 | 324 | PN | Pn | 21 48 15.8 | +0.6 |
| WHVZ | Whangaehu Hut | 1.04 | 35 | ⇓PN | Pb | 21 48 13.9 | -1.4 |
| FWVZ | Far West T-bar | 1.05 | 33 | AML | AML | 21 48 30.9 | |
| FWVZ | | | | AML | AML | 21 48 31.1 | |
| DVHZ | Dannevirke | 1.05 | 99 | ⇓PN | Pn | 21 48 15.4 | +0.2 |
| DVHZ | | | | S* | Sn | 21 48 29.4 | +0.1 |
| DREZ | Durham Road | 1.06 | 333 | PN | Pn | 21 48 15.9 | +0.6 |
| DREZ | | | | SN | Sn | 21 48 31.5 | +2.0 |
| TUVZ | Tukino | 1.08 | 37 | PN | Pn | 21 48 14.7 | -1.1 |
| TUVZ | | | | AML | AML | 21 48 31.7 | |
| TUVZ | | | | AML | AML | 21 48 34.2 | |
| PNHZ | Pukenui | 1.09 | 79 | PN | Pn | 21 48 15.3 | -0.4 |
| WPVZ | Whakapapa | 1.09 | 32 | PN | Pn | 21 48 14.7 | -1.2 |
| WPVZ | | | | AML | AML | 21 48 32.0 | |
| WPVZ | | | | AML | AML | 21 48 34.5 | |
| MHEZ | Mangahewa | 1.12 | 340 | PN | Pb | 21 48 17.3 | +1.0 |
| NWEZ | Newall Road | 1.13 | 320 | PN | Pb | 21 48 17.2 | +0.8 |
| PKE | Pukeiti | 1.14 | 326 | PN | Pb | 21 48 17.4 | +0.8 |
| PKE | | | | AML | AML | 21 48 35.1 | |
| PKE | | | | AML | AML | 21 48 36.5 | |
| NGZ | Ngauruhoe | 1.14 | 33 | PN | Pn | 21 48 15.4 | -1.2 |
| NGZ | | | | AML | AML | 21 48 36.5 | |
| NGZ | | | | AML | AML | 21 48 38.2 | |
| MTW | Mount Morrison | 1.15 | 153 | PN | Pn | 21 48 16.3 | -0.3 |
| MTW | | | | SN | Sn | 21 48 32.5 | +0.8 |
| MTW | | | | AML | AML | 21 48 32.8 | |
| TCW | Tory Channel | 1.15 | 201 | ⇑PN | Pn | 21 48 15.3 | -1.2 |
| TCW | | | | AML | AML | 21 48 32.5 | |
| TCW | | | | AML | AML | 21 48 32.7 | |
| BHHZ | Black Hill Sta | 1.16 | 56 | PN | Pn | 21 48 15.5 | -1.3 |
| TWVZ | Taurewa | 1.17 | 25 | PN | Pn | 21 48 15.7 | -1.3 |
| TWVZ | | | | AML | AML | 21 48 33.7 | |
| TWVZ | | | | AML | AML | 21 48 34.7 | |
| OTVZ | Oturere | 1.18 | 34 | ⇑PN | Pn | 21 48 16.1 | -1.0 |
| OTVZ | | | | AML | AML | 21 48 35.5 | |
| OTVZ | | | | AML | AML | 21 48 35.8 | |
| WTVZ | West Tongariro | 1.18 | 31 | PN | Pn | 21 48 16.1 | -1.1 |
| WTVZ | | | | AML | AML | 21 48 36.4 | |
| WTVZ | | | | AML | AML | 21 48 37.5 | |
| BFZ | Birch Farm | 1.22 | 117 | ePN | Pn | 21 48 16.6 | -1.0 |
| BFZ | | | | AML | AML | 21 48 40.9 | |
| BFZ | | | | AML | AML | 21 48 44.4 | |
| KRVZ | Karewarewa | 1.22 | 32 | PN | Pn | 21 48 16.6 | -1.1 |
| KRVZ | | | | AML | AML | 21 48 37.3 | |
| KRVZ | | | | AML | AML | 21 48 38.7 | |
| BHW | Baring Head | 1.27 | 178 | PN | Pn | 21 48 18.1 | -0.1 |
| BHW | | | | AML | AML | 21 48 35.7 | |
| BHW | | | | AML | AML | 21 48 36.1 | |
| TMWZ | Te Maipa | 1.27 | 140 | PN | Pn | 21 48 18.0 | -0.3 |
| KRHZ | Kereru | 1.30 | 68 | PN | Pn | 21 48 18.6 | 0.0 |
| MSWZ | Moikau Station | 1.32 | 166 | PN | Pn | 21 48 18.8 | -0.1 |
| MSWZ | | | | AML | AML | 21 48 39.5 | |
| MSWZ | | | | AML | AML | 21 48 40.0 | |
| PAWZ | Paruwai Farm | 1.33 | 160 | PN | Pn | 21 48 18.9 | -0.1 |
| PAWZ | | | | AML | AML | 21 48 39.8 | |
| PAWZ | | | | AML | AML | 21 48 40.1 | |
| TRWZ | Traveller | 1.43 | 152 | AML | AML | 21 48 44.1 | |
| KWHZ | Kaweka Forest | 1.43 | 61 | PN | Pn | 21 48 20.5 | -0.1 |
| TUWZ | Tuamarina | 1.45 | 207 | PN | Pn | 21 48 19.8 | -0.8 |
| TUWZ | | | | AML | AML | 21 48 45.3 | |
| TUWZ | | | | AML | AML | 21 48 45.4 | |
| RATZ | Rangitukua | 1.47 | 31 | AML | AML | 21 48 51.0 | |
| RATZ | | | | AML | AML | 21 48 51.5 | |
| NNZ | Nelson | 1.53 | 225 | PN | Pn | 21 48 21.6 | -0.2 |
| MCHZ | McNeill Hill | 1.61 | 65 | ePN | Pb | 21 48 24.0 | -0.7 |
| BKZ | Black Stump Fm | 1.62 | 54 | PN | Pn | 21 48 23.2 | 0.0 |
| BKZ | | | | AML | AML | 21 48 49.4 | |
| BKZ | | | | AML | AML | 21 48 50.1 | |
| HIZ | Hauiti | 1.62 | 1 | PN | Pn | 21 48 23.3 | +0.2 |
| HIZ | | | | AML | AML | 21 48 47.4 | |
| HIZ | | | | AML | AML | 21 48 54.6 | |
| BSWZ | Blackbirch Sta | 1.73 | 204 | PN | Pn | 21 48 25.2 | +0.7 |
| BSWZ | | | | AML | AML | 21 48 54.0 | |
| BSWZ | | | | AML | AML | 21 48 54.7 | |
| MRHZ | Matea Rd | 1.80 | 44 | PN | Pn | 21 48 26.6 | +1.0 |
| KUTZ | Kaahu Road | 1.82 | 26 | PN | Pb | 21 48 28.8 | +0.4 |
| NMHZ | Naumai | 1.86 | 57 | PN | Pn | 21 48 27.3 | +0.9 |
| QRZ | Quartz Range | 1.87 | 248 | PN | Pn | 21 48 26.2 | -0.3 |
| QRZ | | | | AML | AML | 21 48 50.0 | |
| QRZ | | | | AML | AML | 21 48 58.4 | |
| THZ | Tophouse | 2.17 | 221 | PN | Pn | 21 48 31.1 | +0.4 |
| THZ | | | | AML | AML | 21 49 10.2 | |
| THZ | | | | AML | AML | 21 49 11.7 | |
| KHZ | Kahutara | 2.47 | 202 | PN | Pn | 21 48 34.2 | -0.4 |
| URZ | Urewera | 2.59 | 44 | PN | Pn | 21 48 35.7 | -0.6 |
| DSZ | Denniston Nort | 2.79 | 234 | PN | Pn | 21 48 39.4 | +0.2 |
| MQZ | McQueen's Vall | 3.91 | 204 | PN | Pn | 21 48 51.2 | -3.3 |
| MQZ | | | | SN | Sn | 21 49 34.9 | -4.9 |

**IDC 06 21:50:12.8**±8.3**, 6.°10S**×**150.°27E, h109**km±56km**, mb3.2**/2**, mb1 3.4**/3**, mb1mx2.9**/37**, mbtmp3.6**/3**, Error ellipse: s-maj=126.0km s-min=56.1km az=120.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.50 | 223 | P | Pn | 21 51 19.5 | +0.6 |
| | 1.4nm,0.3s,baz=242,slow=20,SNR=2.2 | | | | | | |
| PMG | | | | S | Sn | 21 52 10.4 | +0.1 |
| | 4.4nm,0.3s,baz=116,slow=23,SNR=3.9 | | | | | | |
| WRA | Warramunga Arr | 20.71 | 227 | P | P | 21 54 45.1 | +0.5 |
| | 0.7nm,0.4s,baz=51,slow=10.0,SNR=6.0 | | | | | | |
| ASAR | Alice Springs | 23.51 | 220 | P | P | 21 55 13.3 | +0.1 |
| | 1.3nm,0.6s,baz=56,slow=8.7,SNR=17 | | | | | | |
| TORD | Torodi Ar. Bea | 148.26 | 285 | PKPbc | PKPbc | 22 09 46.3 | -1.0 |
| | 0.9nm,0.7s,baz=62,slow=3.3,SNR=5.5 | | | | | | |

*ROM **06** 21:54:46.3±0.1, 45.°73N×7.°19E, h12km±4km, Md2.3/11, Ml2.0/7, Error ellipse: s-maj=1.9km s-min=1.6km az=57.0*

*CSEM **06** 21:54:46.5±0.1, 45.°74N×7.°14E, h10km, ML2.6/31, Error ellipse: s-maj=2.2km s-min=1.4km az=87.0*

*ZUR **06** 21:54:47.3, 45.°73N×7.°21E, h2km±2km, ML2.0/13*

*LDG **06** 21:54:47.3±0.1, 45.°73N×7.°15E, h2km, Md2.7/3, Ml2.6/24,*

*Error ellipse: s-maj=1.9km s-min=1.1km az=96.0*
*GEN **06** 21:54:47.0, 45.°73N×7.°20E, h8km, ML2.1*
*STR **06** 21:54:50.6±0.5, 45.°64N×6.°97E, h5km, Ml2.7, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
**ISC 06 21:54:47.2**±0.8**, 45.°74N**±0.°01×**7.°17E**±0.°02**, h9**km±5km**,**
**n121,** σ**1.s11**/203**, 19C-2D, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MRGE | Morge | 0.08 | 292 | ⇑iPg | Pg | 21 54 49.5 | -0.1 |
| | 5µm,0.0s | | | | | | |
| MRGE | Morge | 0.08 | 292 | Pg | Pg | 21 54 49.5 | -0.1 |
| MRGE | | | | Sg | Sg | 21 54 51.0 | -0.4 |
| | 845nm,0.1s | | | | | | |
| MRGE | Morge | 0.08 | 292 | ⇑iPg | Pg | 21 54 49.5 | -0.1 |
| | 5µm,0.0s | | | | | | |
| MRGE | | | | Sg | Sg | 21 54 51.0 | -0.4 |
| | 845nm,0.1s | | | | | | |
| LSD | Lago del Serru | 0.28 | 186 | ⇑iPg | Pg | 21 54 52.7 | -0.2 |
| | 2µm,0.3s | | | | | | |
| LSD | Lago del Serru | 0.28 | 186 | Pg | Pg | 21 54 52.7 | -0.2 |
| LSD | | | | Sg | Sg | 21 54 56.2 | -0.5 |
| | 440nm,0.2s | | | | | | |
| LSD | Lago del Serru | 0.28 | 186 | P | Pg | 21 54 52.6 | -0.3 |
| LSD | | | | Sg | Sg | 21 54 56.2 | -0.5 |
| | 440nm,0.2s | | | | | | |
| CIRO | Champorcher | 0.31 | 116 | Pg | Pg | 21 54 53.1 | -0.3 |
| CIRO | | | | Sg | Sg | 21 54 57.0 | -0.6 |
| CIRO | Champorcher | 0.31 | 116 | P | Pg | 21 54 53.1 | -0.3 |
| CIRO | | | | S | Sg | 21 54 57.0 | -0.6 |
| EMV | Vieux Emosson | 0.38 | 330 | ⇑iPg | Pg | 21 54 54.9 | +0.2 |
| | 326nm,0.2s | | | | | | |
| EMV | | | | iSg | Sg | 21 54 59.9 | +0.2 |
| | 326nm,0.2s | | | | | | |
| EMV | Vieux Emosson | 0.38 | 330 | Pg | Pg | 21 54 54.9 | +0.2 |
| EMV | | | | Sg | Sg | 21 54 59.9 | +0.2 |
| EMV | Vieux Emosson | 0.38 | 330 | ⇑iPg | Pg | 21 54 54.9 | +0.2 |
| | 326nm,0.2s | | | | | | |
| EMV | | | | iSg | Sg | 21 54 59.9 | +0.2 |
| | 326nm,0.2s | | | | | | |
| DIX | Grande Dixence | 0.38 | 26 | ⇑iPg | Pg | 21 54 54.5 | -0.3 |
| | 321nm,0.2s | | | | | | |
| DIX | Grande Dixence | 0.38 | 26 | Pg | Pg | 21 54 54.5 | -0.3 |
| DIX | | | | Sg | Sg | 21 54 59.4 | -0.4 |
| DIX | Grande Dixence | 0.38 | 26 | ⇑iPg | Pg | 21 54 54.5 | -0.3 |
| | 321nm,0.2s | | | | | | |
| DIX | | | | Sg | Sg | 21 54 59.4 | -0.4 |
| LPL | La Plagne | 0.38 | 235 | ePg | Pg | 21 54 54.5 | -0.2 |
| LPL | | | | eSg | Sg | 21 54 59.1 | -0.7 |
| | 26nm,0.2s | | | | | | |
| LPL | La Plagne | 0.38 | 235 | ePg | Pg | 21 54 54.5 | -0.2 |
| LPL | | | | eSg | Sg | 21 54 59.1 | -0.7 |
| | 13nm,0.2s | | | | | | |
| LPG | La Plagne | 0.38 | 231 | ePg | Pg | 21 54 54.4 | -0.4 |
| LPG | | | | eSg | Sg | 21 54 58.9 | -0.9 |
| | 99nm,0.2s | | | | | | |
| LPG | La Plagne | 0.38 | 231 | ePg | Pg | 21 54 54.4 | -0.4 |
| LPG | | | | eSg | Sg | 21 54 58.9 | -0.9 |
| | 50nm,0.2s | | | | | | |
| RSL | Roselend | 0.39 | 263 | Pg | Pg | 21 54 55.1 | +0.3 |
| RSL | | | | Sg | Sg | 21 54 59.9 | 0.0 |
| RSL | Roselend | 0.39 | 263 | Pg | Pg | 21 54 55.1 | +0.3 |
| RSL | | | | Sg | Sg | 21 54 59.9 | 0.0 |
| SALAN | Lac Salanfe | 0.43 | 341 | ⇑iPg | Pg | 21 54 55.9 | +0.2 |
| | 54nm,0.4s | | | | | | |
| SALAN | | | | iSg | Sg | 21 55 01.5 | +0.2 |
| | 54nm,0.4s | | | | | | |
| SALAN | Lac Salanfe | 0.43 | 341 | ⇑iPg | Pg | 21 54 55.9 | +0.2 |
| | 54nm,0.4s | | | | | | |
| SALAN | | | | iSg | Sg | 21 55 01.5 | +0.2 |
| | 54nm,0.4s | | | | | | |
| TRAV | Traversella | 0.46 | 119 | Pg | Pg | 21 54 55.8 | -0.4 |
| TRAV | | | | Sg | Sg | 21 55 01.4 | -0.9 |
| TRAV | Traversella | 0.46 | 119 | P | Pg | 21 54 55.8 | -0.4 |
| TRAV | | | | Sg | Sg | 21 55 01.4 | -0.9 |
| SATI | Passo dei Sala | 0.51 | 74 | Pg | Pg | 21 54 56.4 | -0.7 |
| SATI | | | | Sg | Sg | 21 55 03.4 | -0.4 |
| | 41nm,0.2s | | | | | | |
| SATI | Passo dei Sala | 0.51 | 74 | P | Pg | 21 54 56.6 | -0.5 |
| SATI | | | | Sg | Sg | 21 55 03.4 | -0.4 |
| | 41nm,0.2s | | | | | | |
| GRYON | Gryon | 0.52 | 355 | ⇑iPg | Pg | 21 54 57.3 | +0.1 |
| | 54nm,0.1s | | | | | | |
| GRYON | Gryon | 0.52 | 355 | ⇑iPg | Pg | 21 54 57.3 | +0.1 |
| | 54nm,0.1s | | | | | | |
| VANNI | Vissoie, Val d | 0.56 | 32 | ⇑iPg | Pg | 21 54 57.6 | -0.4 |
| | 112nm,0.3s | | | | | | |
| VANNI | Vissoie, Val d | 0.56 | 32 | ⇑iPg | Pg | 21 54 57.6 | -0.4 |
| | 112nm,0.3s | | | | | | |
| RSP | Reno Superiore | 0.59 | 174 | Pg | Pg | 21 54 58.2 | -0.5 |
| RSP | | | | Sg | Sg | 21 55 05.8 | -0.7 |
| | 93nm,0.2s | | | | | | |
| RSP | Reno Superiore | 0.59 | 174 | P | Pg | 21 54 58.2 | -0.5 |
| RSP | | | | Sg | Sg | 21 55 05.8 | -0.7 |
| | 93nm,0.2s | | | | | | |
| SENIN | Lac Senin/Sane | 0.63 | 8 | ⇑iP | Pg | 21 54 59.2 | -0.3 |
| | 116nm,0.3s | | | | | | |
| SENIN | Lac Senin/Sane | 0.63 | 8 | ⇑iP | Pg | 21 54 59.2 | -0.3 |
| | 116nm,0.3s | | | | | | |
| EMBD | Embd, Matterta | 0.66 | 44 | ⇓iP | Pg | 21 54 59.2 | -0.8 |
| | 65nm,0.2s | | | | | | |
| EMBD | Embd, Matterta | 0.66 | 44 | ⇓iP | Pg | 21 54 59.2 | -0.8 |
| | 65nm,0.2s | | | | | | |
| NOV2 | NOV2 | 0.67 | 342 | ⇑iP | Pg | 21 55 00.2 | +0.1 |
| | 88nm,0.3s | | | | | | |
| NOV2 | NOV2 | 0.67 | 342 | ⇑iP | Pg | 21 55 00.2 | +0.1 |
| | 88nm,0.3s | | | | | | |
| NOV1 | NOV1 | 0.70 | 339 | iP | Pg | 21 55 00.7 | 0.0 |
| | 210nm,0.3s | | | | | | |
| NOV1 | NOV1 | 0.70 | 339 | iP | Pg | 21 55 00.7 | 0.0 |
| | 210nm,0.3s | | | | | | |
| LKBD2 | Leukerbad 2 | 0.72 | 27 | eP | Pg | 21 55 00.8 | -0.3 |
| LKBD2 | Leukerbad 2 | 0.72 | 27 | eP | Pg | 21 55 00.8 | -0.3 |
| LKBD | Leukerbad | 0.72 | 26 | iP | Pg | 21 55 00.9 | -0.3 |
| | 31nm,0.4s | | | | | | |
| LKBD | Leukerbad | 0.72 | 26 | iP | Pg | 21 55 00.9 | -0.3 |
| | 31nm,0.4s | | | | | | |
| BNI | Bardonecchia | 0.77 | 207 | Pg | Pg | 21 55 01.4 | -0.6 |
| BNI | | | | Sg | Sg | 21 55 11.0 | -1.0 |
| | 14nm,0.2s | | | | | | |
| BNI | Bardonecchia | 0.77 | 207 | Pg | Pg | 21 55 01.4 | -0.6 |
| BNI | | | | Sg | Sg | 21 55 11.0 | -1.0 |
| | 14nm,0.2s | | | | | | |
| SIMPL | Simplonpass | 0.78 | 49 | eP | Pg | 21 55 01.3 | -0.9 |
| | 75nm,0.3s | | | | | | |
| SIMPL | Simplonpass | 0.78 | 49 | eP | Pg | 21 55 01.3 | -0.9 |
| | 75nm,0.3s | | | | | | |
| RRL | Rocca Remolon | 0.86 | 198 | P | Pg | 21 55 03.1 | -0.7 |
| RRL | | | | S | Sg | 21 55 14.1 | -0.9 |
| BHB | Bricherasio | 0.90 | 176 | Pg | Pg | 21 55 04.0 | -0.5 |
| BHB | | | | Sg | Sg | 21 55 15.4 | -0.7 |
| | 30nm,0.3s | | | | | | |
| BHB | Bricherasio | 0.90 | 176 | P | Pg | 21 55 03.6 | -0.9 |
| BHB | Bricherasio | 0.90 | 176 | Pg | Pg | 21 55 04.0 | -0.5 |
| BHB | | | | S | Sg | 21 55 14.8 | -1.3 |
| BHB | | | | Sg | Sg | 21 55 15.4 | -0.7 |
| | 30nm,0.3s | | | | | | |
| OG22 | Abries | 0.93 | 190 | Pg | Pb | 21 55 05.8 | +0.2 |
| OG22 | | | | Sg | Sg | 21 55 16.6 | -0.6 |
| OG22 | Abries | 0.93 | 190 | Pg | Pb | 21 55 05.8 | +0.2 |
| OG22 | | | | Sg | Sg | 21 55 16.6 | -0.6 |
| GIMEL | St. Georges / | 1.02 | 322 | ⇑iP | Pg | 21 55 07.3 | +0.6 |
| | 62nm,0.3s | | | | | | |
| GIMEL | St. Georges / | 1.02 | 322 | ⇑iP | Pg | 21 55 07.3 | +0.6 |
| | 62nm,0.3s | | | | | | |
| MBDF | Montbardon | 1.05 | 196 | ePg | Pg | 21 55 06.8 | -0.6 |
| MBDF | | | | eSg | Sg | 21 55 19.5 | -1.5 |
| | 18nm,0.2s | | | | | | |
| MBDF | Montbardon | 1.05 | 196 | ePg | Pg | 21 55 06.8 | -0.6 |
| MBDF | | | | eSg | Sg | 21 55 19.5 | -1.5 |
| | 8.9nm,0.2s | | | | | | |
| CABF | La Chapelle | 1.15 | 320 | ePg | Pb | 21 55 09.3 | -0.1 |
| CABF | | | | eSg | Sg | 21 55 24.3 | -0.1 |
| | 12nm,0.2s | | | | | | |
| CABF | La Chapelle | 1.15 | 320 | ePg | Pb | 21 55 09.3 | -0.1 |
| CABF | | | | eSg | Sg | 21 55 24.3 | -0.1 |
| | 5.9nm,0.2s | | | | | | |
| ORIF | Oris-en-Rattie | 1.23 | 229 | ePg | Pn | 21 55 10.0 | -0.6 |
| ORIF | | | | eSg | Sb | 21 55 24.7 | -1.9 |
| | 13nm,0.3s | | | | | | |
| ORIF | Oris-en-Rattie | 1.23 | 229 | ePg | Pn | 21 55 10.0 | -0.6 |
| ORIF | | | | eSg | Sb | 21 55 24.7 | -1.9 |
| | 6.6nm,0.3s | | | | | | |
| PZZ | Stroppo | 1.23 | 182 | Pg | Pn | 21 55 09.6 | -1.1 |
| PZZ | | | | Sg | Sb | 21 55 25.6 | -1.2 |
| | 37nm,0.5s | | | | | | |
| PZZ | Stroppo | 1.23 | 182 | P | Pn | 21 55 09.3 | -1.4 |
| PZZ | Stroppo | 1.23 | 182 | Pg | Pn | 21 55 09.6 | -1.1 |
| PZZ | | | | S | Sb | 21 55 23.9 | -2.9 |
| PZZ | | | | Sg | Sb | 21 55 25.6 | -1.2 |
| | 37nm,0.5s | | | | | | |
| MVIF | Mont Vial | 1.84 | 180 | Pn | Pn | 21 55 20.2 | +1.1 |
| MVIF | Mont Vial | 1.84 | 180 | Pg | Pg | 21 55 23.6 | +1.1 |
| MVIF | | | | Sg | Sg | 21 55 48.3 | +1.9 |
| MVIF | Mont Vial | 1.84 | 180 | Pn | Pn | 21 55 20.2 | +1.1 |
| MVIF | Mont Vial | 1.84 | 180 | Pg | Pg | 21 55 23.6 | +1.1 |
| MVIF | | | | Sg | Sg | 21 55 48.3 | +1.9 |
| LUCF | Luceram | 1.85 | 176 | Pn | Pb | 21 55 21.3 | +0.1 |
| LUCF | Luceram | 1.85 | 176 | Pg | Pg | 21 55 24.1 | +1.5 |
| LUCF | Luceram | 1.85 | 176 | Pn | Pb | 21 55 21.3 | +0.1 |
| LUCF | Luceram | 1.85 | 176 | Pg | Pg | 21 55 24.1 | +1.5 |
| SBF | Sospel | 1.88 | 174 | ePn | Pn | 21 55 19.0 | -0.6 |
| SBF | Sospel | 1.88 | 174 | ePg | Pb | 21 55 22.3 | +0.5 |
| SBF | | | | eSg | Sb | 21 55 46.0 | +0.5 |
| | 26nm,0.6s | | | | | | |
| SBF | Sospel | 1.88 | 174 | ePn | Pn | 21 55 19.0 | -0.6 |
| SBF | Sospel | 1.88 | 174 | ePg | Pb | 21 55 22.3 | +0.5 |
| SBF | | | | eSg | Sb | 21 55 46.0 | +0.5 |
| | 13nm,0.6s | | | | | | |
| VIVF | Saint-Julien-l | 1.97 | 244 | ePn | Pn | 21 55 19.8 | -1.0 |
| VIVF | Saint-Julien-l | 1.97 | 244 | ePg | Pb | 21 55 23.4 | +0.1 |
| VIVF | | | | eSg | Sb | 21 55 48.5 | +0.5 |
| | 8.2nm,0.4s | | | | | | |
| VIVF | Saint-Julien-l | 1.97 | 244 | ePn | Pn | 21 55 19.8 | -1.0 |
| VIVF | Saint-Julien-l | 1.97 | 244 | ePg | Pb | 21 55 23.4 | +0.1 |
| VIVF | | | | eSg | Sb | 21 55 48.5 | +0.5 |
| | 4.1nm,0.4s | | | | | | |
| CALN | Calern | 2.00 | 186 | Pg | Pg | 21 55 26.0 | +0.6 |
| CALN | | | | Sg | Sg | 21 55 53.1 | +1.8 |
| CALN | Calern | 2.00 | 186 | Pg | Pg | 21 55 26.0 | +0.6 |
| CALN | | | | Sg | Sg | 21 55 53.1 | +1.8 |
| REVF | Revere | 2.00 | 176 | Pg | Pg | 21 55 26.8 | +1.2 |
| REVF | | | | Sg | Sg | 21 55 53.1 | +1.6 |
| REVF | Revere | 2.00 | 176 | Pg | Pg | 21 55 26.8 | +1.2 |
| REVF | | | | Sg | Sg | 21 55 53.1 | +1.6 |
| HINF | Hinteralfeld | 2.09 | 354 | ePn | Pn | 21 55 22.3 | -0.2 |
| HINF | Hinteralfeld | 2.09 | 354 | ePg | Pb | 21 55 26.3 | +1.0 |
| HINF | | | | eSg | Sg | 21 55 53.4 | -1.0 |
| | 12nm,0.2s | | | | | | |
| HINF | Hinteralfeld | 2.09 | 354 | ePn | Pn | 21 55 22.3 | -0.2 |
| HINF | Hinteralfeld | 2.09 | 354 | ePg | Pb | 21 55 26.3 | +1.0 |
| HINF | | | | eSg | Sg | 21 55 53.4 | -1.0 |
| | 5.8nm,0.2s | | | | | | |
| SMRF | Simiane la Rot | 2.10 | 213 | ePg | Pb | 21 55 25.9 | +0.5 |
| SMRF | | | | eSg | Sb | 21 55 52.3 | +0.8 |
| | 3.7nm,0.5s | | | | | | |
| SMRF | Simiane la Rot | 2.10 | 213 | ePg | Pb | 21 55 25.9 | +0.5 |
| SMRF | | | | eSg | Sb | 21 55 52.3 | +0.8 |
| | 1.9nm,0.5s | | | | | | |
| FRF | La Foret Royal | 2.21 | 190 | ePg | Pb | 21 55 28.0 | +0.7 |
| FRF | | | | eSg | Sb | 21 55 56.0 | +1.3 |
| | 7.2nm,0.4s | | | | | | |
| FRF | La Foret Royal | 2.21 | 190 | ePg | Pb | 21 55 28.0 | +0.7 |
| FRF | | | | eSg | Sb | 21 55 56.0 | +1.3 |
| | 3.6nm,0.4s | | | | | | |
| HAU | Haudompre | 2.34 | 346 | ePn | Pn | 21 55 25.4 | -0.5 |
| HAU | Haudompre | 2.34 | 346 | ePg | Pg | 21 55 31.4 | -0.6 |
| HAU | | | | eSg | Sg | 21 56 01.1 | -1.2 |
| | 8.7nm,0.3s | | | | | | |
| HAU | Haudompre | 2.34 | 346 | ePn | Pn | 21 55 25.4 | -0.5 |
| HAU | Haudompre | 2.34 | 346 | ePg | Pg | 21 55 31.4 | -0.6 |
| HAU | | | | eSg | Sg | 21 56 01.1 | -1.2 |
| | 4.3nm,0.3s | | | | | | |
| LMR | La Mourre | 2.45 | 191 | ePn | Pn | 21 55 26.4 | -0.9 |
| LMR | La Mourre | 2.45 | 191 | ePg | Pb | 21 55 32.2 | +0.8 |
| LMR | | | | eSg | Sb | 21 56 03.2 | +1.5 |
| | 4.4nm,0.5s | | | | | | |
| LMR | La Mourre | 2.45 | 191 | ePn | Pn | 21 55 26.4 | -0.9 |
| LMR | La Mourre | 2.45 | 191 | ePg | Pb | 21 55 32.2 | +0.8 |
| LMR | | | | eSg | Sb | 21 56 03.2 | +1.5 |
| | 2.2nm,0.5s | | | | | | |
| SMF | Signal de Mont | 2.49 | 293 | ePg | Pb | 21 55 33.3 | +1.3 |
| SMF | | | | eSg | Sb | 21 56 05.1 | +2.4 |
| | 4.5nm,0.2s | | | | | | |
| SMF | Signal de Mont | 2.49 | 293 | ePg | Pb | 21 55 33.3 | +1.3 |
| SMF | | | | eSg | Sb | 21 56 05.1 | +2.4 |
| | 2.2nm,0.2s | | | | | | |
| CDF | Champ du Feu | 2.68 | 1 | ePg | Pg | 21 55 37.9 | -0.6 |
| CDF | | | | eSg | Sg | 21 56 12.8 | -0.4 |
| | 6.2nm,0.4s | | | | | | |
| CDF | Champ du Feu | 2.68 | 1 | ePg | Pg | 21 55 37.9 | -0.6 |
| CDF | | | | eSg | Sg | 21 56 12.8 | -0.4 |
| | 3.1nm,0.4s | | | | | | |
| LOR | Lormes | 2.75 | 305 | ePg | Pg | 21 55 38.7 | -1.2 |
| | baz=126 | | | | | | |
| LOR | | | | eSg | Sg | 21 56 13.7 | -1.9 |
| | 5.3nm,0.2s,baz=126 | | | | | | |
| LOR | Lormes | 2.75 | 305 | ePg | Pg | 21 55 38.7 | -1.2 |
| LOR | | | | eSg | Sg | 21 56 13.7 | -1.9 |
| | 2.7nm,0.2s | | | | | | |
| AVF | Avril sur Loir | 2.85 | 293 | ePg | Pg | 21 55 40.5 | -1.3 |
| AVF | | | | eSg | Sb | 21 56 16.5 | +3.3 |
| | 3.0nm,0.3s | | | | | | |
| AVF | Avril sur Loir | 2.85 | 293 | ePg | Pg | 21 55 40.5 | -1.3 |
| AVF | | | | eSg | Sb | 21 56 16.5 | +3.3 |
| | 1.5nm,0.3s | | | | | | |
| SSF | Saint Saulge | 2.86 | 299 | ePg | Pb | 21 55 40.5 | +2.1 |
| SSF | | | | eSg | Sg | 21 56 17.0 | -2.1 |
| | 3.1nm,0.3s | | | | | | |
| SSF | Saint Saulge | 2.86 | 299 | ePg | Pb | 21 55 40.5 | +2.1 |
| SSF | | | | eSg | Sg | 21 56 17.0 | -2.1 |
| | 1.5nm,0.3s | | | | | | |
| SFTF | Sexfontaines | 2.87 | 330 | ePg | Pg | 21 55 40.9 | -1.2 |
| | baz=155 | | | | | | |
| SFTF | | | | eSg | Sg | 21 56 18.0 | -1.3 |
| | 9.5nm,0.6s,baz=142 | | | | | | |
| SFTF | Sexfontaines | 2.87 | 330 | ePg | Pg | 21 55 40.9 | -1.2 |
| SFTF | | | | eSg | Sg | 21 56 18.0 | -1.3 |
| | 4.8nm,0.6s | | | | | | |
| PAGF | Fort de Pagny | 2.99 | 341 | ePg | Pg | 21 55 43.2 | -1.2 |
| PAGF | | | | eSg | Sg | 21 56 21.9 | -1.2 |
| | 1.2nm,0.4s | | | | | | |
| PAGF | Fort de Pagny | 2.99 | 341 | ePg | Pg | 21 55 43.2 | -1.2 |
| PAGF | | | | eSg | Sg | 21 56 21.9 | -1.2 |
| | 0.6nm,0.4s | | | | | | |
| BGF | Bois d'Agland | 3.12 | 287 | ePg | Pb | 21 55 44.7 | +1.9 |
| BGF | | | | eSg | Sg | 21 56 24.8 | -2.5 |
| | 6.1nm,0.4s | | | | | | |
| BGF | Bois d'Agland | 3.12 | 287 | ePg | Pb | 21 55 44.7 | +1.9 |
| BGF | | | | eSg | Sg | 21 56 24.8 | -2.5 |
| | 3.0nm,0.4s | | | | | | |
| MEZF | Maizieres J'vi | 3.12 | 333 | ePg | Pg | 21 55 45.6 | -1.4 |
| MEZF | | | | eSg | Sg | 21 56 25.9 | -1.5 |
| | 12nm,0.6s,baz=154 | | | | | | |
| MEZF | Maizieres J'vi | 3.12 | 333 | ePg | Pg | 21 55 45.6 | -1.4 |
| MEZF | | | | eSg | Sg | 21 56 25.9 | -1.5 |
| | 5.8nm,0.6s | | | | | | |
| TCF | Toulx Ste Croi | 3.50 | 281 | ePg | Pb | 21 55 51.9 | +2.6 |
| TCF | | | | eSg | Sg | 21 56 36.7 | -2.9 |
| | 3.7nm,0.5s | | | | | | |
| TCF | Toulx Ste Croi | 3.50 | 281 | ePg | Pb | 21 55 51.9 | +2.6 |
| TCF | | | | eSg | Sg | 21 56 36.7 | -2.9 |
| | 1.9nm,0.5s | | | | | | |

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*MAN **06** 21:57:36, 6.°67N×124.°80E, h8km, mb5.7, ML4.8, MS5.2*
*MAN INTENSITY IV - ISULAN SULTAN KUDARAT; MATAN-AO DAVAO DEL SUR; INTENSITY III - KIDAPAWAN CITY; KABACAN N. COTABATO; MALITA DAVAO DEL SUR; TULUNAN N. COTABATO; PIGCAWAYAN N. COTABATO.*
*MOS **06** 21:57:37.7±1.0, 6.°65N×124.°78E, h34km, mb5.7/43, MS4.4/7, Error ellipse: s-maj=8.4km s-min=4.6km az=115.0*
*BJI **06** 21:57:37.4, 6.°30N×125.°11E, h53km, mb5.2/77, mB5.1/60, Ms4.8/80, Ms7 4.6/78*
*ISCJB **06** 21:57:39.2±0.3, 6.°66N±0.°01×124.°91E±0.°02, h45km±2km, mb5.3/186, MS4.4/32, Error ellipse: s-maj=3.2km s-min=2.3km az=168.6*
*DJA **06** 21:57:40.1±0.8, 7°N±3°×12°5E±°, h13km±7km, M5.2/78, mb5.3/78, mB5.6/52, MLv5.8/8, Mw(mB)5.1/52, Mwp6.4/3*
*NEIC **06** 21:57:41.4±0.5, 6.°63N×124.°84E, h52km±4km, mb5.5/114, Error ellipse: s-maj=4.1km s-min=3.2km az=68.0*
*NEIC Felt [IV PIVS] at Isulan and Matanao; [III PIVS] at Kabacan, Kidapawan, Makilala, Malita, Matalam, Padada, Pigcawayan, Santa Cruz, Tacurong and Tulunan; [II PIVS] at Davao, Digos, General Santos and Koronadal. Also felt at Marbel.*
*GCMT **06** 21:57:41.4±0.2, 6.°73N×124.°74E, h26km, MW5.3/93, Moment Tensor Solution. s66,c96; s93,c145; Duration: 1.s0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$0.66±.02; $M_{\theta\theta}$0.19±.01; $M_{\phi\phi}$-0.84±.02; $M_{r\theta}$-0.47±.03; $M_{\theta\phi}$0.30±.01; $M_{\phi r}$-0.10±.03; Best double couple: $M_0$0.95600×$10^{17}$ NP1:$\phi_s$316.00000°, δ55.00000°, λ47.00000°. NP2: $\phi_s$194.00000°, δ53.00000°, λ134.00000°. Principal axes: T 0.9820, Plg56.0000°, Azm166.0000°; N -0.0500, Plg34.0000°, Azm344.0000°; P -0.9310, Plg1.0000°, Azm75.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*IDC **06** 21:57:43.1±2.2, 6.°60N×124.°85E, h69km±20km, mb4.8/34, mb1 4.8/37, mb1mx4.8/42, mbtmp5.1/37, MS4.3/26, Ms1 4.3/26, ms1mx4.2/36 Error ellipse: s-maj=12.7km s-min=8.3km az=75.0*
*AUST **06** 21:57:43.2±0.9, 6.°51N×124.°91E, h71km±8km, Error ellipse: s-maj=8.0km s-min=4.4km az=39.0*
*KLM **06** 21:57:51.1, 6.°74N×124.°39E, h102km, mb5.2, MS5.4*
**ISC 06 21:57:39.0**±0.8**, 6.°67N**±0.°03×**124.°87E**±0.°03**, h30**km±5km**,**
**n760,** σ**1.s26**/790**, mb5.4**/194**, MS4.4**/32**, 40C-24D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KCP | Kidapawan | 0.40 | 33 | ⇓iP | Pb | 21 57 45.3 | -2.6 |
| KCP | | | | iS | Sb | 21 57 52.3 | -1.7 |
| GSPH | General Santos | 0.59 | 173 | eP | Pn | 21 57 51.4 | 0.0 |
| GSPH | | | | eS | Sn | 21 58 02.7 | +2.6 |
| DAV | Davao City (W) | 0.81 | 61 | ePn | Pn | 21 57 54.6 | +0.4 |
| DAV | | | | eSn | Sn | 21 58 07.9 | +2.6 |
| BUKP | Musuan | 1.21 | 9 | eP | Pn | 21 57 59.3 | -0.6 |
| BUKP | | | | eS | Sn | 21 58 15.1 | -0.3 |
| MATI | Mati | 1.40 | 79 | eP | Pb | 21 58 03.2 | -1.4 |
| MATI | | | | eS | Sb | 21 58 23.4 | +1.3 |
| PAGZ | Pagadian | 1.88 | 308 | eP | Pn | 21 58 07.7 | -1.4 |
| BIPH | Bislig | 2.10 | 44 | ⇓iP | Pn | 21 58 13.4 | +1.2 |
| BIPH | | | | iS | Sb | 21 58 41.0 | -1.3 |
| BUTP | Butuan | 2.40 | 18 | eP | Pn | 21 58 17.6 | +1.4 |
| BUTP | Butuan | 2.40 | 18 | eP | Pn | 21 58 18.0 | +1.8 |
| DCPH | Dipolog City | 2.42 | 322 | ⇓eP | Pn | 21 58 17.6 | +1.1 |
| DCPH | | | | eS | Sb | 21 58 48.0 | -3.4 |
| IPIL | Ipil | 2.54 | 296 | ⇓eP | Pn | 21 58 17.6 | -0.5 |
| IPIL | Ipil | 2.54 | 296 | eP | Pn | 21 58 18.1 | 0.0 |
| SGSI | Sangihe | 3.04 | 168 | P | Pn | 21 58 26.1 | +1.1 |
| SNPH | Sibulan | 3.11 | 329 | ⇓iP | Pn | 21 58 28.3 | +2.3 |
| SCPH | Surigao | 3.15 | 11 | eP | Pn | 21 58 26.0 | -0.6 |
| SCPH | | | | iS | Sn | 21 58 56.5 | -6.6 |
| MSLP | Maasin | 3.44 | 360 | eP | Pn | 21 58 30.8 | +0.3 |
| OCLP | Ormoc | 4.36 | 357 | eP | Pn | 21 58 44.1 | +1.0 |
| PLP | Palo | 4.46 | 1 | ⇓eP | Pn | 21 58 44.1 | -0.6 |
| GUIM | Jordan | 4.53 | 330 | eP | Pn | 21 58 43.1 | -2.5 |
| GUIM | Jordan | 4.53 | 330 | eP | Pn | 21 58 47.5 | +1.9 |
| RCP | Roxas | 5.29 | 337 | ⇑eP | Pn | 21 58 57.9 | +1.9 |
| CUYO | Cuyo Island | 5.63 | 318 | eP | Pn | 21 59 01.5 | +0.8 |
| KMSI | Cibinong | 6.12 | 188 | P | Pn | 21 59 08.5 | +1.0 |
| | 3µm,0.8s,24µm9.4nm | | | | | | |
| OTRP | Odiongan | 6.31 | 334 | eP | Pn | 21 59 13.7 | +3.6 |
| TNTI | Ternate | 6.37 | 157 | P | Pn | 21 59 12.4 | +1.6 |
| | 762nm,1.0s,8µm2.8nm | | | | | | |
| TNTI | Ternate | 6.37 | 157 | ePn | Pn | 21 59 12.0 | +1.2 |
| TNTI | | | | eSn | Sn | 22 00 21.0 | -1.6 |
| MYLDM | Lahad Datu | 6.51 | 257 | ePn | Pn | 21 59 14.2 | +1.4 |
| MRSI | Marisa | 6.81 | 206 | P | Pn | 21 59 16.8 | -0.2 |
| | 754nm,0.8s,32µm9.9nm | | | | | | |
| PPR | Puerto Princes | 6.82 | 297 | ⇓iP | Pn | 21 59 16.1 | -0.9 |
| SJMP | San Jose | 6.84 | 328 | eP | Pn | 21 59 19.1 | +1.8 |
| PVCP | Virac | 6.92 | 354 | eP | Pn | 21 59 16.4 | -2.0 |
| PVCP | Virac | 6.92 | 354 | eP | Pn | 21 59 20.1 | +1.7 |
| ENPP | El Nido | 7.02 | 310 | eP | Pn | 21 59 19.1 | -0.7 |
| BUSP | Coron | 7.02 | 319 | eP | Pn | 21 59 11.3 | -8.5 |
| LBMI | Labuha | 7.72 | 160 | P | Pn | 21 59 30.5 | +1.1 |
| | 353nm,0.9s,5µm2.1nm | | | | | | |
| LUWI | Luwuk | 7.95 | 195 | P | Pn | 21 59 34.4 | +1.9 |
| | baz=7.8,SNR=184 | | | | | | |
| LUWI | Luwuk | 7.95 | 195 | P | Pn | 21 59 34.2 | +1.8 |
| | 2µm,1.0s,14µm9µm | | | | | | |
| LUWI | Luwuk | 7.95 | 195 | ePn | Pn | 21 59 34.3 | +1.8 |
| LUWI | | | | eSn | Sn | 22 01 04.7 | +3.3 |
| MPSI | Mapaga | 8.02 | 218 | P | Pn | 21 59 34.6 | +1.1 |
| | 64nm,0.9s,2µm | | | | | | |
| APSI | Ampana | 8.19 | 203 | P | Pn | 21 59 40.3 | +4.4 |
| | 1µm,1.0s,10µm | | | | | | |
| KKM | Kota Kinabalu | 8.63 | 266 | P | Pn | 21 59 45.4 | +3.4 |
| | baz=8.7,SNR=7.9 | | | | | | |
| KKM | Kota Kinabalu | 8.63 | 266 | ePn | Pn | 21 59 42.8 | +0.8 |
| SANI | Sanana | 8.74 | 173 | P | Pn | 21 59 44.5 | +1.1 |
| | 310nm,1.0s,3µm | | | | | | |
| PCI | Palu | 9.05 | 214 | P | Pn | 21 59 52.5 | +4.8 |
| | 133nm,1.1s,1µm | | | | | | |
| I39PW | PALAU INFRASON | 9.64 | 84 | i | | 22 54 20.0 | |
| | baz=266,slow=316,SNR=1.4 | | | | | | |
| SWI | Sorong | 9.83 | 139 | P | Pn | 22 00 00.2 | +1.9 |
| | baz=9.7,SNR=3.2 | | | | | | |
| SWI | Sorong | 9.83 | 139 | P | Pn | 21 59 59.5 | +1.1 |
| | 129nm,0.9s,1µm | | | | | | |
| SIJI | Sorong | 9.84 | 139 | P | Pn | 21 59 59.6 | +1.1 |
| | 7.3nm,0.3s,baz=344,slow=10,SNR=24 | | | | | | |
| SIJI | | | | S | Sn | 22 01 45.8 | -2.3 |
| | baz=23,slow=22,SNR=2.1 | | | | | | |
| NLAI | Namlea | 10.09 | 167 | P | Pn | 22 00 01.5 | -0.5 |
| | 345nm,0.8s,3µm | | | | | | |
| MSAI | Masohi | 10.74 | 158 | P | Pn | 22 00 13.2 | +2.3 |
| | 42nm,1.2s | | | | | | |
| KDI | Kendari | 10.80 | 192 | P | Pn | 22 00 14.7 | +3.1 |
| | 171nm,1.0s,2µm | | | | | | |
| AAI | Ambon | 10.81 | 162 | P | Pn | 22 00 12.9 | +1.1 |
| | 306nm,0.7s,3µm | | | | | | |
| TTSI | Tana Toraja | 10.89 | 208 | P | Pn | 22 00 14.7 | +1.8 |
| | 235nm,0.9s,2µm | | | | | | |
| BKB | Balikpapan | 11.20 | 226 | P | Pn | 22 00 19.8 | +2.6 |
| | 201nm,1.2s,3µm | | | | | | |
| SPSI | Sidrap Palu | 11.73 | 206 | P | Pn | 22 00 27.6 | +3.2 |
| | 80nm,1.1s,1µm | | | | | | |
| FAKI | Fak Fak | 12.04 | 142 | P | Pn | 22 00 30.2 | +1.5 |
| | baz=12,SNR=12 | | | | | | |
| FAKI | Fak Fak | 12.04 | 142 | P | Pn | 22 00 30.6 | +1.9 |
| | 159nm,1.1s,2µm | | | | | | |
| FAKI | Fak Fak | 12.04 | 142 | ePn | Pn | 22 00 28.1 | -0.6 |
| BNDI | Bandanaira | 12.20 | 156 | P | Pn | 22 00 33.6 | +2.7 |
| | 272nm,1.1s,4µm | | | | | | |
| KAPI | Kappang | 12.69 | 204 | P | Pn | 22 00 40.1 | +2.7 |
| | 4.5nm,0.3s,baz=38,slow=9.3,SNR=16 | | | | | | |
| KAPI | | | | LR | LR | 22 05 44.8 | |
| | comp=Z,3µm,19.4s,baz=21,slow=38 | | | | | | |
| KAPI | Kappang | 12.69 | 204 | Pn | Pn | 22 00 40.4 | +2.9 |
| | 254nm,0.8s,SNR=5.5 | | | | | | |
| KAPI | Kappang | 12.69 | 204 | P | P | 22 00 43.0 | -5.3 |
| | SNR=9.3 | | | | | | |
| BKSI | Bulukumba | 12.82 | 202 | P | Pn | 22 00 43.9 | +4.5 |
| | 67nm,2.2s,1µm | | | | | | |
| KBKI | Kotabaru | 13.18 | 222 | P | Pn | 22 00 46.3 | +2.1 |
| | 80nm,1.2s,2µm | | | | | | |
| SBUM | Sibu | 13.29 | 252 | ⇑P | Pn | 22 00 49.8 | +4.0 |
| SBUM | Sibu | 13.29 | 252 | ePn | Pn | 22 00 48.3 | +2.6 |
| BSSI | Bau Bau, Buton | 13.46 | 199 | P | Pn | 22 00 51.9 | +3.8 |
| | 98nm,1.1s,2µm | | | | | | |
| KMPI | Kaimana, Papua | 13.53 | 139 | P | Pn | 22 00 50.9 | +1.9 |
| | 167nm,1.6s,3µm | | | | | | |
| BBKI | Banjar Baru | 14.20 | 225 | P | P | 22 01 02.1 | -3.1 |
| | 219nm,1.4s,3µm | | | | | | |
| KSM | Kuching | 15.41 | 251 | P | P | 22 01 17.2 | -1.5 |
| | baz=15,SNR=22 | | | | | | |
| KSM | Kuching | 15.41 | 251 | ⇑P | P | 22 01 17.6 | -1.1 |
| KSM | Kuching | 15.41 | 251 | ePn | Pn | 22 01 14.9 | +0.5 |
| | 193nm,1.4s | | | | | | |
| MMRI | Maumere | 15.43 | 190 | P | P | 22 01 19.7 | +0.8 |
| | 294nm,1.2s,4µm | | | | | | |
| MMRI | Maumere | 15.43 | 190 | ePn | Pn | 22 01 15.2 | +0.5 |
| | 415nm,1.2s | | | | | | |
| EDFI | Ende, Flores | 15.65 | 192 | P | P | 22 01 21.9 | +0.5 |
| | 90nm,1.3s,2µm | | | | | | |
| SAUI | Saumlaki | 15.91 | 156 | P | P | 22 01 23.7 | -0.5 |
| | 202nm,0.8s | | | | | | |
| SAUI | Saumlaki | 15.91 | 156 | ePn | Pn | 22 01 19.4 | -1.4 |
| | 144nm,0.7s | | | | | | |
| SMPI | Sarmi | 16.27 | 121 | P | Pn | 22 01 26.7 | +1.2 |
| | 57nm,1.1s,45µm | | | | | | |
| SOEI | Soe | 16.33 | 182 | P | P | 22 01 29.0 | 0.0 |
| | baz=16,SNR=7.1 | | | | | | |
| SOEI | Soe | 16.33 | 182 | P | P | 22 01 30.1 | +1.1 |
| | 300nm,1.0s,4µm | | | | | | |

**SOEI Soe** 16.33 182 *e*Pn **P** 22 01 28.5 -0.5
297nm,1.0s
**BATI Baumata** 16.81 184 P **P** 22 01 34.5 +0.2
22nm,0.3s,baz=292,slow=0.9,SNR=49
BATI LR LR 22 10 28.1
comp=Z,1µm,19.4s,baz=11,slow=46
**BATI Baumata** 16.81 184 P **P** 22 01 34.6 +0.3
332nm,0.7s,3µm
**YULB Yu-li** 16.98 349 *e*Pn **Pn** 22 01 32.9 -1.4
38nm,1.0s
**DLV T Lat** 16.99 289 *e*P **P** 22 01 37.3 +0.9
216nm,1.7s
**TPUB Ta-pu** 17.03 347 *e*P **P** 22 01 37.6 +1.0
**TWSI Taliwang, Sumb** 17.26 208 P **P** 22 01 40.9 +1.7
149nm,1.1s
**SSLB Suanglung** 17.43 348 *e*Pn **P** 22 01 41.8 +0.8
38nm,0.9s
**KMMI Kalianget** 17.44 219 P **P** 22 01 43.9 +2.7
258nm,1.2s,4µm
**SRBI Singaraja** 17.54 213 P **P** 22 01 46.0 +3.7
99nm,1.4s
**GENI Genyem** 17.83 121 P **P** 22 01 46.4 +0.9
338nm,0.9s,3µm
**IGBI Denpasar** 18.19 212 P **P** 22 01 53.3 +3.9
240nm,0.9s,3µm
**YHNB Yeheng** 18.21 350 *e*P Pn 22 01 43.0 -6.6
53nm,0.9s
**BLJI Banyuglugur** 18.21 218 P P 22 01 55.2 +5.5
97nm,1.2s
**JAY Jayapura** 18.25 120 P **P** 22 01 50.8 +0.6
2.1nm,0.3s,baz=85,slow=2.3,SNR=7.6
JAY LR LR 22 08 47.8
comp=Z,957nm,18.1s,baz=322,slow=36
**JAY Jayapura** 18.25 120 P **Pn** 22 01 50.1 -0.2
baz=18,SNR=5.2
**JAY Jayapura** 18.25 120 P **P** 22 01 50.8 +0.6
596nm,0.9s
**TBJI Tambak Boyo** 18.67 224 P **Pn** 22 01 58.3 +3.1
340nm,1.4s,7µm
**UWJI Ujung Watu** 19.03 227 P Pn 22 02 04.5 +4.9
227nm,1.5s,4µm
**QIZ Qiongzhong** 19.10 311 P Pn 22 02 04.4 +4.0
QIZ pP pP 22 02 12.8 +5.2
QIZ S **S** 22 05 34.9 +0.5
QIZ sS sS 22 05 55.4 +7.8
QIZ PMZ
94nm,1.9s
QIZ LZ
2µm,18.0s
**QIZ Qiongzhong** 19.10 311 *e*P **P** 22 01 56.7 -2.7
314nm,1.6s
**QZH Quanzhou** 19.14 342⇑ *i*P **Pn** 22 02 04.5 +3.7
QZH S **S** 22 05 36.1 +1.0
QZH PMZ
220nm,1.2s
QZH PMZ
2µm,4.7s
QZH LN
1µm,12.7s
QZH LE
1µm,12.0s
QZH LZ
3µm,23.8s
**NGJI Ngawi** 19.33 224 P **Pn** 22 02 07.1 +3.9
173nm,1.2s
**SMRI Semarang** 19.83 227 P Pn 22 02 14.0 +4.8
313nm,1.8s
**SMRI Semarang** 19.83 227 *e*P **Pn** 22 02 12.8 +3.7
171nm,1.0s
**WOJI Wonogiri, Jawa** 20.03 224 P Pn 22 02 17.0 +5.4
200nm,0.7s
**JOW Kunigami** 20.31 9 P Pn 22 02 14.5 -0.2
2.3nm,0.8s,baz=50,slow=14,SNR=4.6
**JOW Kunigami** 20.31 9 *e*P Pn 22 02 14.5 -0.2
96nm,0.8s
**MTN Manton Dam** 20.36 162 *e*P **P** 22 02 13.4 +0.2
731nm,1.4s
**UGM Wanagama** 20.36 225 *e*P **P** 22 02 11.4 -1.9
924nm,1.5s
**PPBI Pangkal Pinang** 20.66 245 P Pn 22 02 17.6 -1.3
69nm,1.9s,1µm
**KDU Kakadu** 20.66 159 P **P** 22 02 16.4 -0.1
baz=21,SNR=240
**GUMO Guam** 20.84 69 P Pn 22 02 21.1 +0.1
76nm,0.8s,baz=205,slow=13,SNR=4.1
GUMO LR LR 22 08 57.8
comp=Z,633nm,20.9s,baz=228,slow=32
**UBPT Khong Chiam** 20.86 296 P Pn 22 02 22.4 +1.1
85nm,1.0s
**TPRI Tanjung Pinang** 21.08 255 P P 22 02 25.1 +4.0
145nm,1.2s
**KPJI Karang Pucung** 21.13 229 P P 22 02 26.9 +5.3
164nm,1.0s
**MYKOM Kota Tinggi** 21.51 258 *e*P **P** 22 02 26.7 +1.0
127nm,1.4s
**MMPI Merauke** 21.57 134 P P 22 02 35.7 +9.4
**BTDF Bukit Timah Da** 21.69 257 P **P** 22 02 28.7 +1.0
baz=22,SNR=3.6
**LEM Lembang** 21.82 232 P **P** 22 02 32.5 +3.3
84nm,0.9s,baz=35,slow=10.0,SNR=14
LEM LR LR 22 12 33.8
comp=Z,951nm,18.2s,baz=42,slow=41
**LEM Lembang** 21.82 232 P P 22 02 33.8 +4.6
1µm,0.9s,24µm
**PMBI Palembang** 22.22 245 P P 22 02 41.6 +8.3
230nm,0.5s
**KNRA Kununurra** 22.54 170 P **P** 22 02 35.5 -1.2
baz=22,SNR=69
**JMBI JAMBI** 22.74 249 P P 22 02 43.1 +4.2
453nm,1.1s
**SKNT Sakolnakorn** 22.84 298 P **P** 22 02 41.2 +1.3
88nm,1.6s,3µm
**KLI Kotabumi** 23.03 241 P **P** 22 02 44.6 +2.7
243nm,0.9s
**CGJI Cibinong** 23.25 236 P P 22 02 53.1 +9.1
117nm,1.3s
**MDSI Maura Dua** 23.44 242 P **P** 22 02 46.6 +0.6
90nm,0.9s
**KHON Khomkaen** 23.62 296 P **P** 22 02 50.0 +2.3
32nm,1.0s,452nm
**KASI Kota Agung** 23.67 240 P P 22 02 53.8 +5.6
140nm,0.9s
**LHSI Lahat** 23.73 245 P **P** 22 02 50.5 +1.8
140nm,0.9s
**LWLI Liwa** 23.80 241 P **P** 22 02 51.1 +1.6
272nm,0.9s,103µm
**IPM Ipoh** 23.83 266 ⇓P **P** 22 02 50.3 +0.6
**IPM Ipoh** 23.83 266 *e*P **P** 22 02 49.8 0.0
57nm,1.0s
**NONG Nongkai** 24.02 300 P P 22 02 57.3 +5.9
101nm,1.4s,7µm
**SKLT Songkhla** 24.08 273 P P 22 03 00.1 +8.1
81nm,1.8s
**KULM Kulim** 24.13 268 *e*P **P** 22 02 53.2 +0.7
356nm,1.8s
**MNAI Manna** 24.47 244 P **P** 22 02 56.3 +0.7
baz=24,SNR=3.8
**SSE Sheshan** 24.54 352 P **P** 22 02 57.2 +1.2
SSE sP sP 22 03 16.2 +7.6
SSE S **S** 22 07 17.0 +2.1
SSE PMZ
62nm,0.7s
SSE PMZ
370nm,4.8s
SSE LN
470nm,18.7s
SSE LZ
640nm,22.2s
**BKNI Bangkinang** 24.60 256 P **P** 22 02 58.8 +2.0
149nm,1.3s,2µm
**BKNI Bangkinang** 24.60 256 *e*P **P** 22 02 57.9 +1.1
131nm,1.0s
**SLVN Son La** 24.97 308 *e*P **P** 22 03 01.4 +1.2
**TRTT Trang** 25.00 274 P **P** 22 03 04.5 +4.0
58nm,1.7s,1µm
**SRIT Nakonsritamara** 25.12 276 P **P** 22 03 04.2 +2.7
129nm,1.4s
**SURA Surathani** 25.12 277 P P 22 03 11.2 +10
**PBKT Sadao Pong** 25.36 295 P **P** 22 03 05.0 +1.3
35nm,2.1s
**PPI Padang Panjang** 25.43 255 P **P** 22 03 05.2 +0.9
baz=25,SNR=4.3
**LOEI Loei** 25.44 297 P **P** 22 03 01.8 -2.6
44nm,0.7s
**PHET Kaeng Krachan** 25.62 286 P **P** 22 03 09.2 +3.2
14nm,1.0s,173nm
**XMIS Christmas Isla** 25.63 228 P **P** 22 03 06.5 +0.5
baz=26,SNR=3.8

**XMIS Christmas Isla** 25.63 228 *e*P **P** 22 03 04.8 -1.3
356nm,1.4s
**WHN Wuhan** 25.72 339 P **P** 22 03 08.9 +2.2
WHN S **S** 22 07 39.8 +6.1
WHN PMZ
40nm,0.8s
WHN PMZ
720nm,5.8s
WHN LN
4µm,19.0s
WHN LE
2µm,18.1s
WHN LZ
4µm,19.8s
**NJ2 Nanjing** 25.87 348 *e*P **P** 22 03 10.0 +1.9
NJ2 pP pP 22 03 21.8 +4.9
NJ2 sP sP 22 03 28.0 +7.4
NJ2 S **S** 22 07 39.0 +3.0
NJ2 PMZ
100nm,0.8s
NJ2 PMZ
1µm,6.3s
NJ2 LN
3µm,24.6s
NJ2 LE
1µm,22.5s
NJ2 LZ
1µm,22.8s
**MNSI Mandailing Nat** 25.89 258 P **P** 22 03 09.8 +1.3
**PSI Prapat** 26.14 263 P **P** 22 03 11.8 +0.9
29nm,1.0s,baz=85,slow=6.5,SNR=16
PSI PcP **PcP** 22 06 36.9 -1.2
6.0nm,0.3s,baz=201,slow=5.4,SNR=9.0
PSI LR LR 22 16 32.9
comp=Z,823nm,18.3s,baz=113,slow=43
**PSI Prapat** 26.14 263 *e*P **P** 22 03 11.8 +0.9
PSI *e* 22 06 36.4
**PSI Prapat** 26.14 263 P **P** 22 03 11.9 +1.0
baz=26,SNR=13
**PSI Prapat** 26.14 263 *e*P **P** 22 03 11.8 +0.9
PSI *e*PcP **PcP** 22 06 36.4 -1.7
**CBIJ Chichi jima** 26.14 37 *e*P **P** 22 03 10.5 -0.1
170nm,0.8s
**UTTA Uttaradit** 26.15 297 P **P** 22 03 12.3 +1.5
7.9nm,0.9s,61nm
**GYA Guiyang** 26.23 321⇑ *i*P **P** 22 03 12.5 +0.9
GYA pP pP 22 03 27.8 +7.4
GYA sP sP 22 03 34.0 +10
GYA PP PnPn 22 03 59.2 +8.0
GYA PcP **PcP** 22 06 39.6 +1.6
GYA S **S** 22 07 41.3 -0.9
GYA sS sS 22 08 04.5 +7.7
GYA SS SnSn 22 08 53.2 +10
GYA PMZ
20nm,1.0s
GYA PMZ
260nm,6.2s
GYA LN
1µm,18.3s
GYA LE
1µm,20.2s
GYA LZ
1µm,18.0s
**PKDT Phuket** 26.35 274 P P 22 03 22.2 +10
**NANT Nan** 26.43 299 P **P** 22 03 14.4 +1.0
12nm,0.8s,469nm
**PHRA Phrae** 26.72 298 P **P** 22 03 17.5 +1.5
214nm,1.5s,20µm
**JNU Nakatsue** 26.90 11 P **P** 22 03 17.8 +0.3
26nm,1.0s,baz=176,slow=7.2,SNR=6.6
JNU LR LR 22 14 18.0
comp=Z,349nm,21.2s,baz=176,slow=37
**JNU Nakatsue** 26.90 11 *e*P **P** 22 03 18.0 +0.5
39nm,1.1s
**UMPA Umpang Tak** 27.17 293 P **P** 22 03 23.8 +3.8
16nm,1.1s,207nm
**CRAI Chiangrai** 27.32 302 P **P** 22 03 17.6 -3.7
82nm,1.2s,9µm
**PMG Port Moresby** 27.36 125 P **P** 22 03 21.3 -0.4
92nm,0.8s,baz=268,slow=8.2,SNR=20
PMG LR LR 22 15 24.7
comp=Z,299nm,20.8s,baz=286,slow=39
**PMG Port Moresby** 27.36 125 *ce*P **P** 22 03 20.9 -0.8
PMG pmax pmax
comp=Z,441nm,1.0s
**PMG Port Moresby** 27.36 125 P **P** 22 03 21.7 0.0
baz=27,SNR=10
**PMG Port Moresby** 27.36 125 *e*P **P** 22 03 21.8 0.0
**COEN Coen** 27.39 138 P **P** 22 03 21.3 -0.7
baz=27,SNR=8.1
**COEN Coen** 27.39 138 *e*P **P** 22 03 21.7 -0.3
comp=Z,69nm,1.0s
**ENH Enshi** 27.57 330 *e*P **P** 22 03 25.7 +2.2
comp=Z,21nm,1.1s
**GSI Gunungsitoli** 27.74 260 *e*P **P** 22 03 25.0 -0.2
comp=Z,67nm,0.8s
GSI *e*PcP **PcP** 22 06 41.9 +0.2
**CM01 Chiang Mai Arr** 27.81 297 *e*P **P** 22 03 25.3 -0.5
CM01 *e*PcP **PcP** 22 06 41.5 -0.2
**CM31 Chiang Mai Arr** 27.84 297 P **P** 22 03 27.5 +1.5
baz=28,SNR=4.0
**CM31 Chiang Mai Arr** 27.84 297 *e*P **P** 22 03 26.8 +0.8
CM31 *e*PcP **PcP** 22 06 42.0 +0.2
**CMAR Chiang Mai Arr** 27.84 297 P **P** 22 03 26.8 +0.8
comp=Z,7.8nm,0.8s,baz=113,slow=7.2,SNR=52
CMAR PcP **PcP** 22 06 42.0 +0.2
comp=Z,3.8nm,0.8s,baz=123,slow=0.5,SNR=12
**CHTO Chiang Mai** 27.97 298 P **P** 22 03 28.2 +1.0
comp=Z,104nm,1.0s
**CHTO Chiang Mai** 27.97 298 *e*P **P** 22 03 27.8 +0.6
CHTO *e* 22 06 42.2
CHTO pmax pmax
comp=Z,14nm,0.8s
**CHTO Chiang Mai** 27.97 298 *e*P **P** 22 03 27.8 +0.6
comp=Z,14nm,0.8s
CHTO *e*PcP **PcP** 22 06 42.2 +0.1
**KMI Kunming** 28.02 313⇑ P **P** 22 03 29.4 +1.6
KMI pP pP 22 03 46.6 +10
KMI sP sP 22 03 51.4 +11
KMI S **S** 22 08 13.0 +2.4
KMI sS sS 22 08 35.3 +10
KMI SS **SnSn** 22 09 34.4 +7.8
KMI PMZ
comp=Z,23nm,1.1s
KMI PMZ
comp=Z,130nm,3.1s
KMI LN
comp=Z,650nm,17.5s
KMI LE
comp=Z,880nm,17.5s
KMI LZ
comp=Z,1µm,16.0s
**WRAB Tennant Creek** 28.04 161 *c* *i*P **P** 22 03 26.6 -1.1
WRAB pmax pmax
comp=Z,222nm,1.1s
**WRAB Tennant Creek** 28.04 161 P **P** 22 03 26.0 -1.7
comp=Z,552nm,0.8s
**WRAB Tennant Creek** 28.04 161 *e*P **P** 22 03 26.1 -1.7
comp=Z,86nm,0.9s
**WRA Warramunga Arr** 28.04 161 P **P** 22 03 26.3 -1.5
comp=Z,51nm,0.8s,baz=337,slow=9.7,SNR=112
**MBWA Marble Bar** 28.12 190 *e*P **P** 22 03 27.6 -0.8
comp=Z,88nm,1.4s
**CMAI Chiengmai2** 28.32 300 P **P** 22 03 31.6 +1.1
comp=Z,245nm,0.8s
**JHJ Hachijo jima 2** 29.74 26 LR LR 22 16 20.8
comp=Z,863nm,18.7s,baz=341,slow=38
**TIA Tai'an** 30.24 347 ⇓P **P** 22 03 47.9 +0.7
TIA S **S** 22 08 46.2 +1.2
TIA PMZ
comp=Z,20nm,1.9s
TIA LN
comp=Z,410nm,21.4s
TIA LE
comp=Z,780nm,21.4s
TIA LZ
comp=Z,640nm,22.0s
**QIS Mount Isa** 30.69 152 P **P** 22 03 50.7 -0.6
baz=31,SNR=48
**KS15 Wonju Array Si** 30.75 5 *e*P **P** 22 03 53.1 +1.5
KS15 *e*PcP **PcP** 22 06 48.4 -0.5
**KSAR Wonju Array Be** 30.75 5 P **P** 22 03 53.1 +1.5
**KSAR Wonju Array Be** 30.75 5 P **P** 22 03 53.1 +1.5
**KSRS Korea Array** 30.77 5 P **P** 22 03 53.1 +1.4
comp=Z,11nm,0.7s,baz=182,slow=10,SNR=53
KSRS PcP **PcP** 22 06 48.4 -0.5
comp=Z,2.2nm,0.8s,baz=185,slow=2.9,SNR=5.6
KSRS LR LR 22 15 57.7
comp=Z,320nm,19.7s,baz=191,slow=36
**KS01 Wonju Array Si** 30.79 5 *e*P **P** 22 03 53.0 +1.1
KS01 *e*PcP **PcP** 22 06 48.3 -0.6
**XAN Xi'an** 30.97 334 P **P** 22 03 53.6 -0.1
XAN pP pP 22 04 06.2 +3.6
XAN sP sP 22 04 11.6 +5.3
XAN PMZ
comp=Z,13nm,0.9s
XAN PMZ
comp=Z,100nm,4.1s
XAN LN
comp=Z,340nm,15.5s
XAN LE
comp=Z,420nm,19.7s
XAN LZ
comp=Z,820nm,16.9s
**CD2 Chengdu** 31.19 323⇓ *e*P **P** 22 03 56.5 +0.8
CD2 pP pP 22 04 09.9 +5.3
CD2 PP **PP** 22 05 08.0 +1.5
CD2 S **S** 22 09 00.7 +0.6
CD2 sS sS 22 09 23.9 +9.2
CD2 PcS **PcS** 22 10 33.6 -0.9
CD2 PMZ
comp=Z,70nm,1.0s
CD2 PMZ
comp=Z,200nm,5.4s
CD2 LN
comp=Z,2µm,17.6s
CD2 LE
comp=Z,1µm,17.8s
CD2 LZ
comp=Z,920nm,14.5s
**AS12 Alice Springs** 31.42 164 *e*P **P** 22 03 56.9 -0.8
AS12 *e*PcP **PcP** 22 06 49.8 -1.1
**ASAR Alice Springs** 31.42 164 P **P** 22 03 56.9 -0.8
comp=Z,14nm,0.5s,baz=348,slow=8.0,SNR=171
ASAR PcP **PcP** 22 06 49.8 -1.1
comp=Z,5.3nm,0.7s,baz=345,slow=2.3,SNR=5.1
**AS01 Alice Springs** 31.43 164 *e*P **P** 22 03 57.4 -0.4
**WRKA Warakurna** 31.70 174 P **P** 22 03 59.5 -0.6
baz=32,SNR=30
**MAJO Matsushiro** 32.13 20 *d* *i*P **P** 22 04 03.5 -0.3
MAJO pmax pmax
comp=Z,76nm,0.9s
**MAJO Matsushiro** 32.13 20 *e*P **P** 22 04 03.7 -0.2
comp=Z,18nm,1.1s
MAJO *e*PcP **PcP** 22 06 53.0 +0.4
**MAT Matsushiro** 32.13 20 P **P** 22 04 03.0 -0.8
MAT S S 22 09 23.8 +9.2
**MJAR Matsushiro Arr** 32.13 20 P **P** 22 04 03.0 -0.8
comp=Z,11nm,0.9s,baz=194,slow=9.1,SNR=24
MJAR PcP **PcP** 22 06 52.3 -0.3
comp=Z,4.1nm,0.7s,baz=180,slow=3.5,SNR=8.3
MJAR LR LR 22 17 13.6
comp=Z,534nm,19.2s,baz=210,slow=36
**DL2 Dalian** 32.22 355 P **P** 22 04 05.5 +1.0
DL2 S **S** 22 09 16.1 +0.3
DL2 PMZ
comp=Z,76nm,1.1s
DL2 PMZ
comp=Z,17nm,4.1s
DL2 LN
comp=Z,280nm,14.9s
DL2 LE
comp=Z,360nm,21.8s
DL2 LZ
comp=Z,400nm,16.7s
**MEEK Meekatharra** 33.66 190 P **P** 22 04 16.2 -1.2
baz=34,SNR=9.3
**CTA Charters Tower** 33.91 142 P **P** 22 04 20.1 +0.5
comp=Z,55nm,1.1s,baz=317,slow=11,SNR=17
**CTAO Charters Tower** 33.91 142 *e*P **P** 22 04 19.6 +0.1
CTAO pmax pmax
comp=Z,104nm,1.3s
**CTAO Charters Tower** 33.91 142 *e*P **P** 22 04 19.6 +0.1
comp=Z,104nm,1.3s
**BJT Baijiatuau** 34.11 348 *e*P **P** 22 04 21.7 +0.7
BJT pmax pmax
comp=Z,73nm,1.1s
**BJT Baijiatuau** 34.11 348 *e*P **P** 22 04 21.7 +0.7
comp=Z,73nm,1.1s
**BJI Beijing** 34.13 348 P **P** 22 04 21.4 +0.2
BJI S **S** 22 09 43.6 -1.7
BJI PMZ
comp=Z,53nm,1.0s
BJI PMZ
comp=Z,350nm,8.0s
BJI LN
comp=Z,340nm,23.1s
BJI LE
comp=Z,580nm,25.3s
BJI LZ
comp=Z,520nm,25.3s
**SNY Shenyang** 35.03 358⇑ P **P** 22 04 29.6 +0.7
SNY S **S** 22 10 02.5 +3.4
SNY PMZ
comp=Z,51nm,1.0s
SNY PMZ
comp=Z,320nm,10.4s
SNY LN
comp=Z,460nm,16.8s
SNY LE
comp=Z,330nm,16.8s
SNY LZ
comp=Z,480nm,27.6s
**LZH Lanzhou** 35.05 330⇑ P **P** 22 04 31.3 +1.9
LZH pP pP 22 04 44.8 +6.5
LZH sP sP 22 04 51.2 +9.2
LZH PP **PP** 22 05 51.5 +2.3
LZH *e*S **S** 22 10 00.0 0.0
LZH sS sS 22 10 23.5 +8.7
LZH SS **SnSn** 22 12 18.5 +1.2
LZH PMZ
comp=Z,75nm,1.3s
LZH PMZ
comp=Z,260nm,5.0s
LZH LN
comp=Z,510nm,14.0s
LZH LE
comp=Z,970nm,15.0s
LZH LZ
comp=Z,1µm,17.2s
**HHC Hu-ho-hao-te** 36.05 343 *e*P **P** 22 04 39.0 +1.1
HHC sP sP 22 04 59.9 +9.4
HHC PP **PP** 22 06 04.0 +3.8
HHC S **S** 22 10 16.0 +0.8
HHC sS ScP 22 10 36.7 -11
HHC PMZ
comp=Z,51nm,0.8s
HHC PMZ
comp=Z,280nm,5.2s
HHC LN
comp=Z,910nm,12.8s
HHC LE
comp=Z,560nm,12.1s
HHC LZ
comp=Z,970nm,12.4s
**MSHR Mys Shultsa** 36.19 8 *de*P **P** 22 04 40.6 +1.7
**BTO Baotou** 36.31 341 *e*P **P** 22 04 39.2 -0.9
**MORW Morawa** 36.54 193 P **P** 22 04 41.0 -1.0
baz=37,SNR=6.3
**SHL Shillong** 36.67 305 *e*P **P** 22 04 43.9 +0.4
SHL AMB AMB 22 04 45.2
comp=Z,106nm,1.4s
**VLA Vladivostok** 36.82 9⇑ *i*P **P** 22 04 45.6 +1.3
VLA *e* 22 07 05.9
VLA S **S** 22 10 27.7 +1.1
VLA pmax pmax
comp=Z,94nm,1.1s
**CN2 Changchun** 36.98 1 *e*P **P** 22 04 45.9 +0.2
CN2 *ep*P pP 22 04 58.0 +3.4
CN2 *eS* **S** 22 10 29.7 +0.6
CN2 PMZ
comp=Z,10.0nm,0.7s
CN2 PMZ
comp=Z,200nm,5.0s
CN2 LN
comp=Z,300nm,18.0s
CN2 LE
comp=Z,300nm,18.0s
CN2 LZ
comp=Z,400nm,17.0s
**FORT Forrest** 37.36 175 P **P** 22 04 48.5 -0.5
baz=37,SNR=32

**FORT Forrest** 37.36 175 *e*P P 22 04 48.5 -0.5
comp=Z,169nm,0.9s
**BLDU Ballidu** 37.89 191 P P 22 04 52.5 -1.0
baz=38,SNR=7.1
**USRK Ussuriysk Ar.** 37.90 8 P P 22 04 54.5 +1.1
comp=Z,30nm,0.7s,baz=193,slow=7.3,SNR=67
USRK LR LR 22 21 45.4
comp=Z,329nm,20.1s,baz=173,slow=38
**KMBL Kambalda** 37.93 184 P P 22 04 53.1 -0.8
baz=38,SNR=11
**QLP Quilpie** 38.02 151 P P 22 04 54.0 -0.7
baz=38,SNR=31
**MDJ Mudanjiang** 38.02 5 P P 22 04 55.7 +1.3
MDJ pP pP 22 05 08.5 +5.1
MDJ sP sP 22 05 14.4 +7.3
MDJ PP **PnPn** **22 06 23.4 +0.2**
MDJ PcP **PcP** **22 07 08.9 -0.6**
MDJ S **S** **22 10 47.5 +2.7**
MDJ PMZ
comp=Z,61nm,0.8s
MDJ PMZ
comp=Z,160nm,4.3s
MDJ LN
comp=Z,350nm,16.6s
MDJ LE
comp=Z,310nm,18.5s
MDJ LZ
comp=Z,500nm,20.3s
**MDJ Mudanjiang** 38.02 5 *e*P P 22 04 56.0 +1.6
comp=Z,63nm,0.9s
**KLBR Kellerberrin** 38.65 190 P P 22 04 59.0 -0.9
baz=39,SNR=11
**LSA Lhasa** 39.13 310 P P 22 05 05.9 +1.4
LSA PMZ
comp=Z,31nm,1.0s
LSA LE
comp=Z,710nm,25.6s
LSA LZ
comp=Z,650nm,22.0s
**LSA Lhasa** 39.13 310 *e*P P 22 05 05.9 +1.4
LSA pmax pmax
comp=Z,103nm,1.6s
**LSA Lhasa** 39.13 310 *e*P P 22 05 05.9 +1.4
comp=Z,103nm,1.6s
**GTA Gaotai** 39.64 329 ⇑P P 22 05 09.8 +1.6
GTA pP pP 22 05 24.9 +7.6
GTA sP sP 22 05 32.4 +11
GTA PcP **PcP** **22 07 14.6 -0.3**
GTA PcS **PcS** **22 11 04.0 -1.0**
GTA S **S** **22 11 09.4 -0.3**
GTA sS sS 22 11 35.6 +11
GTA SS **SS** **22 14 01.4 -4.2**
GTA PMZ
comp=Z,55nm,0.9s
GTA PMZ
comp=Z,300nm,4.1s
GTA LN
comp=Z,570nm,19.0s
GTA LE
comp=Z,650nm,15.7s
GTA LZ
comp=Z,810nm,17.6s
**NWAO Narrogin (SRO)** 40.05 190 P P 22 05 10.9 -0.6
comp=Z,34nm,0.8s,baz=268,slow=0.1,SNR=11
**NWAO Narrogin (SRO)** 40.05 190 P P 22 05 11.2 -0.3
baz=40,SNR=7.9
**RMQ Roma** 40.29 146 P P 22 05 13.4 -0.2
baz=40,SNR=7.6
**ASAJ Asahikawa** 40.40 20 P P 22 05 15.9 +1.6
comp=Z,13nm,0.7s,baz=243,slow=18,SNR=8.5
**ASAJ Asahikawa** 40.40 20 *e*P P 22 05 17.8 +3.5
comp=Z,71nm,1.4s
**BBOO Buckleboo** 40.68 165 P P 22 05 16.6 -0.2
baz=41,SNR=134
**BBOO Buckleboo** 40.68 165 *e*P P 22 05 16.7 -0.1
comp=Z,144nm,0.9s
**EIDS Eidsvold** 40.80 142 P P 22 05 17.0 -0.8
baz=41,SNR=16
**EIDS Eidsvold** 40.80 142 *e*P P 22 05 17.1 -0.8
comp=Z,48nm,0.9s
EIDS *e*PP **PnPn** **22 06 54.7 -1.8**
**TAPN Taplejung** 40.81 305 *e*P P 22 05 19.0 +0.6
comp=Z,149nm,0.9s
**ODAN Odare** 40.88 304 *e*P P 22 05 19.4 +0.5
comp=Z,187nm,0.8s
**BOK Bokaro** 41.10 299 *e*P P 22 05 21.6 +1.2
**CHLP Challavanipeta** 41.43 290 *e*P P 22 05 23.8 +0.6
CHLP IAmb IAmb 22 05 25.3
comp=Z,77nm,1.1s
**YUK Yuzh-Kuril'sk** 41.51 23*c i*P P 22 05 24.4 +1.0
YUK *i* PPP PPP 22 07 39.8
YUK *i* S **S** **22 11 36.3 -0.8**
**RAMN Ramite** 41.57 304 *e*P P 22 05 25.2 +0.6
comp=Z,223nm,0.8s
**RKGY Rocky Gully** 41.73 190 P P 22 05 26.0 +0.7
baz=42,SNR=9.7
**VIS Vishakhapatnam** 41.97 289 *e*P P 22 05 28.1 +0.6
**GUN Gumba** 42.52 305 *e*P P 22 05 32.9 +0.4
comp=Z,298nm,0.8s
**HABR Khabarovsk** 42.54 10 *e*P P 22 05 30.5 -1.3
HABR *e**PP pP 22 05 43.7 +2.8
HABR *e* 22 07 10.1
HABR *e* 22 07 21.5
HABR *e*PPP PPP 22 07 42.6
HABR *e*S **S** **22 11 50.5 -1.7**
HABR pmax pmax
comp=N,19nm,1.1s
HABR pmax pmax
comp=Z,97nm,2.3s
HABR pmax pmax
comp=E,18nm,1.1s
HABR MLR MLR
comp=Z,285nm,18.0s
**PKI Pulchoki** 42.78 304 *e*P P 22 05 34.3 -0.2
comp=Z,118nm,0.9s
**PKIN Phulchoki** 42.80 304 *e*P P 22 05 34.6 0.0
comp=Z,46nm,0.7s
**KLR Kul'dur** 42.81 7 *e*P P 22 05 30.4 -3.6
KLR pmax pmax
comp=Z,74nm,1.8s
**CMSA Cobar Meteorol** 42.89 154 P P 22 05 35.6 +0.7
baz=43,SNR=62
**KKN Kakani** 42.97 304 *e*P P 22 05 36.0 +0.1
comp=Z,105nm,0.8s
**YSS Yuzh-Sakhalins** 42.97 18 *e*P P 22 05 35.0 -0.3
YSS *e**PP pP 22 05 45.3 +0.9
YSS *e*S **S** **22 12 00.0 +1.4**
YSS pmax pmax
comp=Z,20nm,1.0s
YSS MLR MLR
comp=E,300nm,18.0s
YSS MLR MLR
comp=Z,300nm,18.0s
**YSS Yuzh-Sakhalins** 42.97 18 *e*P P 22 05 34.7 -0.6
comp=Z,45nm,1.1s
**DMN Daman** 43.05 304 *e*P P 22 05 36.7 +0.1
comp=Z,145nm,0.9s
**KUR Kuril'sk** 43.30 24*c i*P P 22 05 38.7 +0.7
KUR *i* PPP PPP 22 07 50.8
KUR *i* S S 22 11 54.8 -8.6
KUR *i* 22 15 36.6
**PVM Polavaram** 43.50 288 *e*P P 22 05 40.1 +0.1
PVM IAmb IAmb 22 05 43.5
comp=Z,28nm,0.9s
**GKN Gorkha** 43.58 304 *e*P P 22 05 40.6 -0.2
comp=Z,92nm,0.9s
**ULN Ulaanbaatar** 43.77 343*de*P P 22 05 43.0 +1.0
ULN pmax pmax
comp=Z,29nm,1.7s
**ULN Ulaanbaatar** 43.77 343 P P 22 05 42.6 +0.6
SNR=21
**ULN Ulaanbaatar** 43.77 343 *e*P P 22 05 42.2 +0.2
comp=Z,62nm,1.3s
**SONA0 Songino Array** 43.94 342 *e*P P 22 05 43.9 +0.6
SONA0 *e*PP **PcP** **22 07 27.9 -1.0**
**SONM Songino Array** 43.94 342 P P 22 05 43.9 +0.6
comp=Z,6.3nm,0.7s,baz=161,slow=7.9,SNR=26
SONM PcP **PcP** **22 07 27.9 -1.0**
comp=Z,4.9nm,0.8s,baz=161,slow=3.4,SNR=5.0
SONM LR LR 22 24 51.7
comp=Z,1μm,21.8s,baz=158,slow=37
**SONA1 Songino Array** 43.95 342 *e*P P 22 05 43.6 +0.2
**KOLN Koldanda** 44.35 303 *e*P P 22 05 47.3 +0.3
comp=Z,157nm,0.8s
**DANN Dangsing** 44.43 304 *e*P P 22 05 47.9 +0.2
comp=Z,23nm,0.7s

**ARMA Armidale** 44.93 147 P P 22 05 52.0 +0.6
baz=45,SNR=25
**ARMA Armidale** 44.93 147 *e*P P 22 05 52.0 +0.6
comp=Z,102nm,0.9s
**SKHT Srikalahasti** 44.94 283 *e*P P 22 05 51.8 +0.2
SKHT IAmb IAmb 22 05 55.2
comp=Z,32nm,0.8s
**NJS Nagarjunasagar** 45.60 287 *e*P P 22 05 56.7 -0.1
NJS IAmb IAmb 22 05 58.1
comp=Z,37nm,0.8s
**RPR Rampur** 45.93 290 *e*P P 22 05 59.4 -0.1
RPR IAmb IAmb 22 06 00.8
comp=Z,47nm,0.9s
**ARPS Mount Arapiles** 46.05 161 P P 22 06 00.6 +0.6
baz=46,SNR=27
**HYB Hyderabad** 46.42 288⇑ *i*P P 22 06 02.5 -0.9
HYB *es*P sP 22 06 24.0 +7.8
**HYB Hyderabad** 46.42 288 *e*P P 22 06 03.9 +0.5
HYB AMB AMB 22 06 04.2
comp=Z,48nm,0.2s
**HYBB Hyderabad (bro** 46.43 288 *e*P P 22 06 03.0 -0.4
HYBB IAmb IAmb 22 06 04.5
comp=Z,44nm,0.8s
**YNG Young** 46.43 153 P P 22 06 04.3 +1.2
baz=46,SNR=30
**NGP Nagpur** 46.56 293 *e*P P 22 06 05.0 +0.6
**ZAK Zakamensk** 47.16 341 *e*P P 22 06 08.3 -0.4
ZAK pmax pmax
comp=Z,7.0nm,1.4s
**URV Uravakonda** 47.40 284 *e*P P 22 06 10.3 -0.8
URV IAmb IAmb 22 06 13.8
comp=Z,23nm,0.9s
**CAN Canberra** 47.55 153 *e*P P 22 06 13.4 +1.5
CAN pmax pmax
comp=Z,230nm,1.0s
**CAN Canberra** 47.55 153 *e*P P 22 06 13.4 +1.5
comp=Z,230nm,1.0s
**CNB Canberra Magne** 47.72 153 P P 22 06 14.4 +1.3
baz=48,SNR=38
**TOO Toolangi** 48.04 158 P P 22 06 17.1 +1.4
baz=48,SNR=28
**TLY Talaya** 48.18 342 P P 22 06 17.1 +0.6
comp=Z,7.8nm,0.7s,baz=324,slow=2.1,SNR=12
**TLY Talaya** 48.18 342 *e*P P 22 06 17.4 +0.9
TLY pmax pmax
comp=Z,13nm,0.9s
TLY MLR MLR
comp=Z,589nm,18.0s
**TLY Talaya** 48.18 342 *e*P P 22 06 17.4 +0.9
**TARA Tarawa** 48.20 94 *e*P P 22 06 16.3 -1.0
comp=Z,143nm,1.0s
**BHPL Bhopal** 48.46 295 *e*P P 22 06 19.4 +0.2
**MOY Mondy** 49.01 340 *e*P P 22 06 23.7 +0.7
MOY pmax pmax
comp=Z,49nm,4.0s
**MILA Mila** 49.07 154 P P 22 06 25.2 +1.6
baz=49,SNR=5.5
**WMQ Urumqi** 49.27 325 P P 22 06 26.0 +0.9
WMQ pP pP 22 06 40.0 +5.7
WMQ sP sP 22 06 46.0 +8.1
WMQ PP **PP** **22 08 22.0 +2.8**
WMQ S **S** **22 13 28.7 -0.7**
WMQ SS SS 22 16 55.0 -6.1
WMQ PMZ
comp=Z,54nm,1.0s
WMQ PMZ
comp=Z,180nm,4.0s
WMQ LN
comp=Z,970nm,16.0s
WMQ LE
comp=Z,540nm,18.0s
WMQ LZ
comp=Z,460nm,20.0s
**DDI Dehra Dun** 49.78 304 *e*P P 22 06 29.9 +0.7
**CLNS Chul'man** 50.03 0 *e*P P 22 06 23.5 -7.1
CLNS pmax pmax
comp=Z,16nm,1.0s
CLNS pmax pmax
comp=N,10.0nm,0.8s
CLNS pmax pmax
comp=E,8.0nm,1.2s
**GOA Goa** 50.75 284 *e*P P 22 06 36.9 +0.3
**SMLA Simla** 50.76 305 *e*P P 22 06 37.4 +0.9
SMLA AMB AMB 22 06 38.5
comp=Z,60nm,1.2s
**SKR Severo-Kuril's** 51.00 25 *e*P P 22 06 38.8 +0.9
SKR *e* 22 13 54.0
SKR pmax pmax
comp=N,80nm,0.9s
SKR pmax pmax
comp=E,70nm,0.9s
SKR pmax pmax
comp=Z,80nm,0.9s
SKR MLR MLR
comp=Z,1μm,20.0s
**POO Poona** 51.00 288 *e*P P 22 06 37.6 -1.0
POO AMB AMB 22 06 46.6
comp=Z,35nm,0.7s
**POO Poona** 51.00 288 *e*P P 22 06 35.0 -3.6
**HVS Khovu-Aksy** 51.31 335⇑ *e*P P 22 06 41.4 +1.0
HVS pmax pmax
comp=Z,46nm,1.1s
**BOD Bodaibo** 51.72 353 *e*P P 22 06 42.1 -1.1
BOD *e* 22 06 55.1
BOD pmax pmax
comp=Z,9.0nm,1.5s
**DHRM DHARAMSHALA** 51.81 306 *e*P P 22 06 45.0 +0.3
DHRM AMB AMB 22 06 54.6
comp=Z,73nm,0.3s
**PEA0 Petropavlovsk-** 53.46 24 *e*P P 22 06 57.3 +1.0
**PETK Petropavlovsk-** 53.46 24 P P 22 06 57.5 +1.2
comp=Z,38nm,0.9s,baz=195,slow=5.9,SNR=43
PETK LR LR 22 33 10.9
comp=Z,184nm,18.0s,baz=218,slow=40
**PEA2 Petropavlovsk-** 53.47 24 *e*P P 22 06 57.5 +1.2
**PET Petropavlovsk** 53.79 25 *e*P P 22 07 00.2 +1.6
PET *e*S **S** **22 14 33.2 +2.0**
PET pmax pmax
comp=Z,35nm,1.5s
PET pmax pmax
comp=Z,400nm,4.8s
PET pmax pmax
comp=Z,200nm,12.1s
PET MLR MLR
comp=Z,300nm,19.0s
PET MLR MLR
comp=Z,300nm,18.0s
**PET Petropavlovsk** 53.79 25 *e*P P 22 06 58.0 -0.6
comp=Z,76nm,1.4s
**MK32 Makanchi Array** 54.10 325 *e*P P 22 07 01.8 +0.7
MK32 *e*PcP **PcP** **22 08 04.5 -1.2**
**MKAR Makanchi Array** 54.10 325 P P 22 07 01.8 +0.7
comp=Z,58nm,0.8s,baz=127,slow=8.0,SNR=446
MKAR PcP **PcP** **22 08 04.5 -1.2**
comp=Z,9.2nm,0.7s,baz=116,slow=3.5,SNR=4.1
MKAR LR LR 22 32 27.7
comp=Z,415nm,18.1s,baz=128,slow=38
**MKAR Makanchi Array** 54.10 325 *e*P P 22 07 01.9 +0.8
**MAKZ Makanchi** 54.29 325 *e*P P 22 07 03.2 +0.7
comp=Z,67nm,1.0s
**KSH Kashi** 54.67 314 P P 22 07 07.6 +2.1
KSH *es*P sP 22 07 24.8 +6.4
KSH *e*PP **PP** **22 09 12.2 +4.0**
KSH *e*ScP **ScP** **22 12 03.0 -1.6**
KSH S **S** **22 14 41.5 -2.4**
KSH ScS ScS 22 16 48.1 -4.8
KSH PMZ
comp=Z,24nm,1.3s
KSH PMZ
comp=Z,74nm,3.7s
KSH LN
comp=Z,190nm,9.1s
KSH LE
comp=Z,580nm,16.2s
KSH LZ
comp=Z,650nm,19.0s
**YAK Yakutsk** 55.36 3 *e*P P 22 07 08.8 -1.0
YAK *e* 22 08 07.6
YAK *e*PPP PPP 22 10 28.5
YAK *e*S S 22 14 46.4 -5.6
YAK *e* 22 16 47.5
YAK *e*SS **SS** **22 18 35.8 -0.9**
YAK pmax pmax
comp=Z,43nm,0.9s
YAK pmax pmax
comp=N,11nm,1.1s
YAK pmax pmax
comp=Z,210nm,3.2s
YAK pmax pmax
comp=N,197nm,3.0s
YAK pmax pmax
comp=E,168nm,3.2s
YAK smax smax
comp=N,187nm,3.0s
YAK smax smax
comp=E,80nm,2.9s
**YAK Yakutsk** 55.36 3 *e*P P 22 07 09.7 -0.1
comp=E,52nm,0.8s
**BHJ Bhuj** 55.50 294 *e*P P 22 07 15.0 +3.5
**TKM2 Tokmak 2** 56.33 318 *e*P P 22 07 18.2 +0.7
TKM2 pmax pmax
comp=Z,13nm,0.8s
**TKM2 Tokmak 2** 56.33 318 P P 22 07 18.2 +0.7
SNR=16
**TKM2 Tokmak 2** 56.33 318 *e*P P 22 07 18.2 +0.7
comp=Z,14nm,0.8s
**MA2 Magadan** 56.35 15 *e*P P 22 07 17.8 +0.8
**KBK Karagaybulak** 56.65 317 P P 22 07 21.3 +1.5
SNR=10
**UCH Uchtor** 56.77 317 P P 22 07 22.2 +1.3
SNR=28
**CHMS Chumysh** 56.93 318 P P 22 07 22.3 +0.8
SNR=8.1
**AAK Ala-Archa** 56.95 317 P P 22 07 22.7 +0.8
comp=Z,3.9nm,0.7s,baz=102,slow=6.8,SNR=14
AAK PcP **PcP** **22 08 16.4 -0.5**
comp=Z,8.3nm,0.8s,baz=122,slow=6.5,SNR=5.0
**AAK Ala-Archa** 56.95 317*ce*P P 22 07 22.6 +0.8
AAK pmax pmax
comp=Z,28nm,1.8s
**AAK Ala-Archa** 56.95 317 P P 22 07 23.0 +1.2
comp=Z,82nm,1.0s,SNR=5.0
**AAK Ala-Archa** 56.95 317 P P 22 07 23.6 +1.7
SNR=9.4
**AAK Ala-Archa** 56.95 317 P P 22 07 22.8 +1.0
SNR=6.5
**AAK Ala-Archa** 56.95 317 *e*P P 22 07 22.2 +0.4
comp=Z,21nm,1.0s
AAK *e*PcP **PcP** **22 08 16.4 -0.5**
**FRU Bishkek** 56.95 318 *e*P P 22 07 22.0 +0.3
FRU *e* 22 07 34.0
FRU pmax pmax
comp=Z,60nm,2.0s
**ZAA0 Zalesovo Array** 57.14 333 P P 22 07 22.5 -0.3
baz=57,SNR=5.2
**ZAA0 Zalesovo Array** 57.14 333 *e*P P 22 07 21.9 -0.8
**ZALV Zalesovo Beam** 57.14 333 P P 22 07 22.4 -0.3
comp=Z,7.9nm,0.7s,baz=119,slow=6.4,SNR=36
ZALV LR LR 22 33 11.8
comp=Z,328nm,19.2s,baz=72,slow=37
ZALV PKPPKP P'P'df 22 37 20.3 +6.4
comp=Z,1.2nm,0.7s,baz=306,slow=5.4,SNR=5.4
**ZAA1 Zalesovo Array** 57.15 333 *e*P P 22 07 22.4 -0.3
**USP Ospenovka** 57.21 318 P P 22 07 23.9 +0.4
SNR=18
**EKS2 Erkin-Say** 57.45 317 *e*P P 22 07 26.6 +1.3
EKS2 pmax pmax
comp=Z,22nm,0.9s
**EKS2 Erkin-Say** 57.45 317 P P 22 07 26.0 +0.7
SNR=14
**EKS2 Erkin-Say** 57.45 317 *e*P P 22 07 26.6 +1.3
comp=Z,22nm,0.9s
**MSVF Nonsavu** 57.83 116 *e*P P 22 07 29.8 +1.5
MSVF pmax pmax
comp=Z,86nm,1.0s
**MSVF Nonsavu** 57.83 116 P P 22 07 30.0 +1.7
comp=Z,425nm,0.9s,SNR=6.8
**MSVF Nonsavu** 57.83 116 *e*P P 22 07 29.8 +1.5
comp=Z,86nm,1.0s
**KURBB Kurchatov Arra** 58.28 327 P P 22 07 31.0 +0.2
comp=Z,56nm,0.8s,baz=126,slow=6.3,SNR=467
**KURK Kurchatov** 58.28 327 *e*P P 22 07 29.9 -0.9
KURK pmax pmax
comp=Z,214nm,0.9s
**KURK Kurchatov** 58.28 327 P P 22 07 31.3 +0.5
SNR=52
**KURK Kurchatov** 58.28 327 P P 22 07 31.3 +0.5
comp=Z,748nm,0.6s
**KURK Kurchatov** 58.28 327 *e*P P 22 07 29.9 -0.9
comp=Z,214nm,0.9s
**KBL Kabul** 58.28 307 *e*P P 22 07 31.3 -0.1
KBL pmax pmax
comp=Z,19nm,0.8s
**KBL Kabul** 58.28 307 *e*P P 22 07 31.3 -0.1
comp=Z,19nm,0.8s
**NVS Novosibirsk** 58.43 333⇑ *i*P P 22 07 30.7 -1.0
NVS *e* 22 07 39.1
NVS pmax pmax
comp=N,28nm,1.5s
NVS pmax pmax
comp=E,28nm,1.5s
NVS pmax pmax
comp=Z,58nm,1.5s
**SEY Seymchan** 59.62 14‖ *e*P P 22 07 41.7 +1.8
**KKAR Karatay Array** 59.83 316 *e*P P 22 07 41.8 0.0
**KKAR Karatay Array** 59.83 316 *e*P P 22 07 41.8 0.0
**OUZ Omahuta** 61.95 136 *e*P P 22 07 57.7 +1.6
comp=Z,37nm,1.1s
**AMKA Amchitka** 63.12 35 *e*P P 22 08 04.5 +0.8
**BVAR Borovoye Array** 63.86 327 P P 22 08 08.4 -0.3
comp=Z,36nm,0.8s,baz=120,slow=8.7,SNR=157
BVAR PcP **PcP** **22 08 41.9 -2.4**
comp=Z,8.8nm,0.7s,baz=108,slow=4.8,SNR=3.8
**BRVK Borovoye** 63.93 327*c i*P P 22 08 08.9 -0.1
BRVK pmax pmax
comp=Z,119nm,1.2s
**BRVK Borovoye** 63.93 327 P P 22 08 09.0 -0.1
comp=Z,498nm,0.9s,SNR=53
**BRVK Borovoye** 63.93 327 P P 22 08 09.4 +0.3
SNR=34
**BRVK Borovoye** 63.93 327 *e*P P 22 08 09.0 -0.1
comp=Z,78nm,0.9s
**JCZ Jackson Bay** 64.15 146 PN P 22 08 11.7 +0.9
**DCZ Deep Cove** 64.21 148 *e*P P 22 08 11.6 +0.7
comp=Z,96nm,0.9s
**QRZ Quartz Range** 64.37 142 PN P 22 08 12.7 +0.5
**JOHN Johnston Islan** 64.77 75 *e*P P 22 08 10.6 -4.7
comp=Z,138nm,0.9s
**WKZ Wanaka** 64.78 147 *e*P P 22 08 14.4 -0.4
comp=Z,414nm,2.1s
**WHZ Wether Hill Ro** 64.91 148 *e*P P 22 08 15.5 -0.1
comp=Z,80nm,1.2s
**THZ Tophouse** 65.14 142 PN P 22 08 17.0 -0.3
**THZ Tophouse** 65.14 142 *e*P P 22 08 17.1 -0.1
comp=Z,128nm,0.7s
**RPZ Rata Peaks** 65.22 145 *e*P P 22 08 17.0 -0.6
comp=Z,99nm,0.8s
**IDAH Dahanechah** 65.42 303 *e*P P 22 08 20.3 +0.7
**IMYA Miami** 65.80 307 *e*P P 22 08 22.2 +0.4
**ODZ Otahua Downs** 65.81 146 PN P 22 08 21.5 +0.1
**ODZ Otahua Downs** 65.81 146 *e*P P 22 08 21.9 +0.5
comp=Z,375nm,2.3s
**KHZ Kahutara** 65.91 142 PN P 22 08 21.6 -0.5
**KHZ Kahutara** 65.91 142 *e*P P 22 08 21.8 -0.3
comp=Z,48nm,0.8s
**URZ Urewera** 65.94 137 *e*P P 22 08 22.1 -0.2
comp=Z,41nm,0.9s
**BKZ Black Stump Fm** 66.00 138 *e*P P 22 08 22.8 0.0
comp=Z,135nm,0.8s
**AFI Afiamalu** 66.11 108 *e*P P 22 08 25.6 +1.6
AFI pmax pmax
comp=Z,69nm,1.1s
**AFI Afiamalu** 66.11 108 *e*P P 22 08 25.6 +1.6
comp=Z,69nm,1.1s
**IKOO Kooshah** 66.11 302 *e*P P 22 08 24.3 +0.4
**ISRO Mashad** 66.30 307 *e*P P 22 08 24.8 -0.2
**IMOG Moghan** 66.37 306 *e*P P 22 08 25.2 -0.4
**ITEG Tejag** 66.38 303 *e*P P 22 08 26.4 +0.7
**BFZ Birch Farm** 66.63 140 *e*P P 22 08 26.4 -0.4
comp=Z,68nm,1.0s
**IAKL Akhelmad** 66.91 307 *e*P P 22 08 29.3 +0.2
**IKRD Kardeh** 67.13 307 *e*P P 22 08 26.1 -4.3
**BILL Bilibino** 67.22 16*ce*P P 22 08 29.7 -0.3
BILL *e* 22 08 38.4
BILL 22 08 59.7
BILL pmax pmax
comp=Z,23nm,1.7s
**ABKT Ailbek** 67.62 308 P P 22 08 33.6 +0.3
comp=Z,124nm,0.9s,SNR=7.7
**GEYT Alibeck** 67.62 308 P P 22 08 33.6 +0.3
comp=Z,13nm,0.8s,baz=150,slow=4.5,SNR=32

GEYT LR LR 22 41 37.4
comp=Z,334nm,19.7s,baz=315,slow=39
**BANOM Banah 67.85 295** ⇓*i*P **P 22 08 35.3 +0.4**
SNR=6.4
**ISHV Shirvan 67.89 308** *e*P **P 22 08 35.9 +0.8**
**HATD Hatta, Dubai 67.95 294** ⇑P **P 22 08 36.8 +1.3**
**ASHO Ashiyiah 68.01 294** P **P 22 08 37.4 +1.5**
SNR=5.1
**ASHO Ashiyiah 68.01 294** *i* P **P 22 08 37.1 +1.2**
SNR=8.1
**ASUD Al Ashush, Dub 68.67 294** ⇑*i*P **P 22 08 41.3 +1.3**
SNR=6.1
**ABKAR Akbulak array 68.72 320** *e*P **P 22 08 39.5 -0.3**
**IMEH Mehriz 69.71 301** *e*P **P 22 08 45.3 -1.4**
**AKTO Aktyubinsk 70.22 321** P **P 22 08 48.8 -0.3**
comp=Z,44nm,0.7s,baz=100,slow=7.6,SNR=143
**SVE Sverdlovsk 70.50 328** ⇓*i*P **P 22 08 50.1 -0.6**
SVE pmax pmax
comp=Z,82nm,0.9s
**ISAD Sadrabad 70.54 301** *e*P **P 22 08 50.7 -1.1**
**IGLO Ghaloghah 70.83 306** *e*P **P 22 08 53.0 -0.4**
**ISRV Sarvestan 70.87 299** *e*P **P 22 08 53.6 -0.3**
**IPAR Pars 70.95 299** *e*P **P 22 08 54.0 -0.4**
**MRIV Mauritius Mete 71.41 246** *e*P **P 22 08 54.7 -2.2**
**ARU Arti 71.48 328***c i*P **P 22 08 55.5 -1.1**
ARU *PP **PcP 22 09 13.1 -2.9**
ARU 22 11 31.9
ARU S **S 22 18 10.2 -2.9**
ARU pmax pmax
comp=Z,49nm,0.7s
**ARU Arti 71.48 328** P **P 22 08 55.5 -1.1**
comp=Z,414nm,0.6s,SNR=31
**ARU Arti 71.48 328** *e*P **P 22 08 55.6 -1.1**
comp=Z,49nm,0.7s
**IRAM Ramesheh 71.64 301** *e*P **P 22 08 56.9 -1.5**
**IKAZ Kazeroun 72.00 299** *e*P **P 22 08 59.3 -1.4**
**UNV Unalaska Valle 72.09 35** *e*P **P 22 09 00.6 +0.3**
comp=Z,68nm,1.0s
**IKLH Kolahrood 72.41 303** *e*P **P 22 09 03.5 +0.5**
**IMHD Mahdasht 73.31 305** *e*P **P 22 09 07.8 -0.4**
**FALS False Pass 74.07 35** *e*P **P 22 09 12.7 +0.7**
comp=Z,73nm,0.8s
**SDPT Sand Point 75.82 35** *e*P **P 22 09 24.3 +2.2**
comp=Z,80nm,1.0s
**IHRS Heris 76.35 308** *e*P **P 22 09 25.2 -0.6**
**CHGN Chignik 77.11 34** *e*P **P 22 09 29.3 -0.1**
**IMRD Marand 77.41 308** *e*P **P 22 09 31.6 -0.2**
**ISHB Shabestar 77.47 308** *e*P **P 22 09 31.9 -0.3**
**RAYN Ar Rayn 77.64 293** P **P 22 09 32.0 -1.2**
comp=Z,159nm,1.0s,SNR=26
**RAYN Ar Rayn 77.64 293** *e*P **P 22 09 32.1 -1.0**
comp=Z,24nm,0.9s
**DGRG David-gareji 77.75 311** P **P 22 09 34.4 +1.0**
**DGRG David-gareji 77.75 311** P **P 22 09 34.4 +1.0**
**TBLG Delisi 78.23 311** P **P 22 09 36.0 0.0**
**TBLG Delisi 78.23 311** P **P 22 09 36.0 0.0**
**HAKT HAKKARI 78.97 307** P **P 22 09 40.8 +0.4**
**EAK Akyaka 79.07 310** P **P 22 09 42.1 +1.2**
**NCK Nalchik 79.12 313**⇓*e*P **P 22 09 40.4 -0.5**
**SVW2 Sparrevohn 79.14 29** *e*P **P 22 09 41.7 +1.1**
comp=Z,40nm,1.7s
**AKH Akhalkalaki 79.16 311** P **P 22 09 41.6 +0.2**
**AKH Akhalkalaki 79.16 311** P **P 22 09 41.5 +0.2**
**DAMY Dhamar 79.17 284** *e*P **P 22 09 39.6 -2.4**
comp=Z,20nm,1.1s
**ONI Oni 79.21 312** P **P 22 09 42.9 +1.5**
**ONI Oni 79.21 312** P **P 22 09 42.9 +1.5**
**KBZ Khabaz 79.63 313** P **P 22 09 43.0 -0.5**
comp=Z,9.9nm,0.9s,baz=119,slow=5.6,SNR=14
KBZ LR LR 22 49 42.2
comp=Z,181nm,19.4s,baz=68,slow=39
**TUTA Tutak 79.67 309** P **P 22 09 44.7 +0.5**
**KIV Kislovodsk 79.78 313***de*P **P 22 09 44.8 +0.2**
KIV *i* 22 09 53.2
KIV *PP PcP 22 10 00.0 +7.8
KIV 22 12 48.0
KIV pmax pmax
comp=Z,22nm,1.0s
KIV MLR MLR
comp=Z,187nm,18.0s
**KIV Kislovodsk 79.78 313** *e*P **P 22 09 45.3 +0.7**
comp=Z,21nm,0.9s
**EATA Eleskirt 79.92 309** P **P 22 09 46.4 +0.7**
**OHAK Old Harbor 80.00 33** *e*P **P 22 09 45.1 -0.2**
comp=Z,62nm,1.1s
**EKAR Karacoban 80.25 309** P **P 22 09 48.7 +1.2**
**ARTV Artvin 80.34 311** P **P 22 09 48.0 +0.2**
**KDAK Kodiak Island 80.41 33** *i* P **P 22 09 48.0 +0.5**
**KDAK Kodiak Island 80.41 33** P **P 22 09 48.3 +0.8**
comp=Z,220nm,1.5s,SNR=8.1
**KDAK Kodiak Island 80.41 33** *e*P **P 22 09 48.5 +1.0**
comp=Z,137nm,1.6s
**RSO Redoubt South 80.47 30** *e*P **P 22 09 48.2 +0.1**
**DDEM Demirkent 80.47 310** P **P 22 09 48.4 0.0**
**DBOC Borcka 80.53 311** P **P 22 09 47.0 -1.7**
**VRH Novokhopyorsk 80.55 321** *e*P **P 22 09 47.1 -1.3**
VRH pmax pmax
comp=Z,20nm,0.6s
VRH pmax pmax
comp=N,40nm,1.1s
VRH pmax pmax
comp=E,50nm,1.1s
**ERZM Erzurum 80.78 309** P **P 22 09 51.3 +1.0**
**SPU Mount Spurr 80.85 29** *e*P **P 22 09 49.8 -0.1**
**PPLA Purkeypile 80.88 27** *e*P **P 22 09 51.0 +0.9**
comp=E,138nm,1.9s
**CAST Castle Rocks 80.95 27** *e*P **P 22 09 51.0 +0.6**
comp=E,36nm,0.9s
**BRLK Bradley Lake 81.37 31** *e*P **P 22 09 52.7 0.0**
comp=E,43nm,0.9s
**KOPT Kop Dagi 81.45 309** P **P 22 09 54.7 +0.9**
**BPAW Bear Paw Mtn. 81.48 26** *e*P **P 22 09 53.8 +0.6**
comp=E,46nm,0.9s
**KTH Kantishna Hill 81.48 27** *e*P **P 22 09 54.6 +1.3**
**SUA Susitna One 81.49 29** *e*P **P 22 09 53.5 +0.1**
comp=E,44nm,0.8s
**MLY Manley 81.62 25** *e*P **P 22 09 54.6 +0.7**
comp=E,23nm,0.9s
**TRF Thorofare Moun 81.76 27** *e*P **P 22 09 55.2 +0.3**
comp=E,337nm,2.4s
**COLD Coldfoot 81.92 23** *e*P **P 22 09 56.4 +1.0**
comp=E,18nm,1.0s
**KLMR Klimovskoe 81.95 330** *e*P **P 22 09 53.8 -1.8**
KLMR pmax pmax
comp=Z,53nm,0.7s
**RC01 Rabbit Creek A 81.97 29** *e*P **P 22 09 55.9 +0.1**
comp=Z,22nm,0.8s
**VORD Divnogorie 82.08 320** *e*P **P 22 09 54.2 -2.3**
VORD pmax pmax
comp=Z,20nm,0.9s
VORD pmax pmax
comp=N,40nm,0.7s
VORD pmax pmax
comp=E,30nm,0.5s
**SEW Seward 82.10 30** *e*P **P 22 09 57.0 +0.5**
comp=E,154nm,1.8s
**BWN Browne 82.14 26** *e*P P 22 09 59.9 +3.2
comp=E,27nm,0.8s
**VSR Storozhevoye 82.15 321** *e*P **P 22 09 55.5 -1.4**
VSR pmax pmax
comp=E,20nm,0.9s
VSR pmax pmax
comp=Z,20nm,0.9s
VSR pmax pmax
comp=N,7.0nm,0.7s
**PMR Palmer 82.27 29** *e*P **P 22 09 57.5 +0.2**
PMR pmax pmax
comp=Z,25nm,0.9s
**PMR Palmer 82.27 29** *e*P **P 22 09 57.5 +0.2**
comp=Z,24nm,0.9s
**LPSR Galich'ya Gora 82.28 322** *e*P **P 22 09 56.9 -0.6**
LPSR pmax pmax
comp=N,9.0nm,1.1s
LPSR pmax pmax
comp=Z,40nm,1.1s
LPSR pmax pmax
comp=E,10.0nm,0.9s
**MCK McKinley 82.37 27** *e*P **P 22 09 57.9 0.0**
MCK pmax pmax
comp=Z,61nm,1.1s
**MCK McKinley 82.37 27** *e*P **P 22 09 57.9 0.0**
comp=Z,61nm,1.1s
**KELT Kelkit 82.40 310** P **P 22 09 58.5 -0.2**
**RND Reindeer 82.41 27** *e*P **P 22 09 58.1 0.0**
RND pmax pmax
comp=Z,127nm,1.7s
**RND Reindeer 82.41 27** *e*P **P 22 09 58.1 0.0**
comp=Z,127nm,1.7s
**SML Sawmill 82.65 29** *e*P P 22 09 54.9 -4.5
SML pmax pmax
comp=Z,46nm,1.0s
**SML Sawmill 82.65 29** *e*P P 22 09 54.9 -4.5
comp=Z,46nm,1.0s
**TMCR Tamitsa 82.66 334** *e*P **P 22 09 58.0 -1.3**
TMCR pmax pmax
comp=Z,38nm,0.7s
**MDM Murphy Dome 82.68 25** *e*P **P 22 09 59.6 +0.1**
comp=Z,18nm,1.1s
**WRH Wood River Hil 82.75 26** *e*P **P 22 09 59.9 +0.1**
comp=Z,175nm,2.0s
**COLA College 82.85 25***d i*P **P 22 10 00.2 0.0**
COLA *i* *PP pP 22 10 16.3 +6.3
COLA pmax pmax
comp=Z,8.0nm,0.9s
**COLA College 82.85 25** *e*P **P 22 10 00.2 0.0**
**CCB Clear Creek Bu 82.87 26** *e*P **P 22 10 00.2 -0.2**
comp=Z,111nm,1.9s
**MOS Moscow 82.98 325** *e*P **P 22 09 58.9 -2.2**
MOS pmax pmax
comp=Z,73nm,0.9s
MOS pmax pmax
comp=Z,300nm,2.0s
**DHY Denali Highway 83.08 27** *e*P **P 22 10 02.6 +0.8**
**SCM Sheep Creek Mo 83.12 29** *e*P **P 22 10 02.7 +0.8**
SCM pmax pmax
comp=Z,135nm,1.6s
**SCM Sheep Creek Mo 83.12 29** *e*P **P 22 10 02.7 +0.8**
comp=Z,135nm,1.6s
**SUSE Susehri 83.20 310** P **P 22 10 02.2 -0.6**
**HDA Harding Lake 83.24 26** *e*P **P 22 10 01.4 -0.9**
comp=Z,127nm,2.0s
**IL1 Eielson Array 83.26 26** *e*P **P 22 10 00.9 -1.5**
**ILAR Eielson Array 83.26 26** P **P 22 10 01.6 -0.9**
comp=Z,5.5nm,0.7s,baz=238,slow=5.4,SNR=50
ILAR LR LR 22 45 27.9
comp=Z,100nm,21.9s,baz=270,slow=34
**ILB Eielson Array 83.26 26** *e*P **P 22 10 01.6 -0.9**
**AKCD Akcadag 83.52 308** P **P 22 10 05.4 +0.8**
**ANN Anapa 83.53 314** *e*P P 22 09 59.9 -4.3
ANN *e* *PP pP 22 10 11.6 -2.3
ANN *eS* S 22 20 15.9 -8.2
ANN pmax pmax
comp=Z,117nm,1.6s
**OBN Obninsk 83.61 325***ce*P **P 22 10 03.1 -1.2**
OBN *e* 22 10 12.7
OBN pmax pmax
comp=Z,129nm,1.7s
OBN MLR MLR
comp=Z,215nm,16.0s
**OBN Obninsk 83.61 325** *e*P **P 22 10 03.6 -0.8**
comp=Z,64nm,0.9s
**KLU Klutina 83.81 29** *e*P **P 22 10 06.3 +0.9**
comp=Z,91nm,1.8s
**CUKAN kangal_SIVAS 83.82 309** P **P 22 10 07.1 +1.1**
**GZT Gaziantep 83.86 307** P **P 22 10 06.3 0.0**
**FYU Fort Yukon 83.89 24** *e*P **P 22 10 07.2 +1.7**
comp=Z,188nm,1.9s
**DIV Divide 83.89 29** *e*P **P 22 10 06.9 +1.1**
comp=Z,104nm,1.5s
**LVZ Lovozero 83.95 338**⇓*e*P **P 22 10 05.0 -0.9**
LVZ pmax pmax
comp=Z,49nm,1.7s
**LVZ Lovozero 83.95 338** *e*P **P 22 10 04.8 -1.1**
comp=Z,62nm,1.2s
**PAX Paxson 83.95 27** *e*P **P 22 10 06.6 +0.5**
PAX pmax pmax
comp=Z,74nm,1.5s
**PAX Paxson 83.95 27** *e*P **P 22 10 06.6 +0.5**
comp=Z,74nm,1.5s
**SCER sogukcermik 84.04 309** P **P 22 10 07.6 +0.5**
**HARP HAARP 84.12 28** *e*P **P 22 10 08.7 +1.8**
comp=Z,104nm,1.4s
**ROOS tl_alroos 84.30 304** *e*P **P 22 10 08.6 +0.1**
**RABH Abou Rabah 84.35 304** *e*P **P 22 10 10.2 +1.5**
**ZALF Zalf 84.36 302** *e*P **P 22 10 08.6 -0.2**
**APA Apatity 84.44 337** ⇑*i*P **P 22 10 08.0 -0.4**
APA pmax pmax
comp=Z,34nm,1.0s
APA MLR MLR
comp=Z,1µm,15.0s
**AYKD Aykdinkavak 84.46 307** P **P 22 10 09.2 0.0**
**DOT Dot Lake 84.55 27** *e*P **P 22 10 09.2 +0.2**
comp=Z,130nm,1.4s
**PINB Pinarbasi 84.69 308** P **P 22 10 10.1 -0.5**
**CUSAR Sarkisla-SIVAS 84.75 309** P **P 22 10 10.4 -0.3**
**ASF Jabal al Asfar 84.78 302** P **P 22 10 10.9 -0.1**
comp=Z,7.5nm,0.8s,baz=69,slow=2.2,SNR=10.0
**ANDN Andirin 84.81 307** P **P 22 10 11.3 +0.2**
**BTCH Batrach 84.84 306** *e*P **P 22 10 11.0 -0.2**
**SALA Sala 84.88 302** *e*P **P 22 10 10.7 -0.9**
**WRDA Warideh 84.92 305** *e*P **P 22 10 10.9 -0.7**
**HAWK Haweek 85.00 304** *e*P **P 22 10 12.9 +0.8**
**YAYL Yayladag 85.13 306** P **P 22 10 12.1 -0.6**
**FURI Furi 85.25 278** *e*P **P 22 10 15.5 +1.5**
comp=Z,26nm,1.1s
**ARNB Al Arnab 85.25 305** *e*P **P 22 10 13.9 +0.6**
**BRBR Barbar 85.47 303** *e*P **P 22 10 14.2 -0.4**
**TCHB Talchebab 85.52 302** *e*P **P 22 10 14.3 -0.3**
**EGAK Eagle 85.71 25** *e*P **P 22 10 14.8 0.0**
comp=Z,16nm,1.0s
**MAW Mawson 85.87 200** P **P 22 10 14.6 -0.9**
comp=Z,7.5nm,1.0s,baz=71,slow=7.3,SNR=15
MAW LR LR 22 43 42.8
comp=Z,175nm,21.2s,baz=60,slow=32
**MAW Mawson 85.87 200** *e*P **P 22 10 14.5 -0.9**
MAW pmax pmax
comp=Z,2.0nm,1.0s
**MAW Mawson 85.87 200** P **P 22 10 14.5 -0.9**
baz=86,SNR=11
**MAW Mawson 85.87 200** *e*P **P 22 10 14.5 -0.9**
comp=Z,2.3nm,1.0s
**VNDA Vanda 86.56 172** P **P 22 10 17.3 -1.4**
comp=Z,8.1nm,1.0s,baz=311,slow=5.5,SNR=27
VNDA LR LR 22 51 19.7
comp=Z,131nm,18.3s,baz=338,slow=37
**VNDA Vanda 86.56 172** *e*P **P 22 10 17.6 -1.1**
VNDA pmax pmax
comp=Z,10.0nm,1.0s
**VNDA Vanda 86.56 172** *e*P **P 22 10 17.6 -1.1**
comp=Z,10.0nm,1.0s
**EIL Elat 86.67 299** P **P 22 10 20.1 -0.2**
baz=87,SNR=4.3
**BR101 Keskin Array S 86.73 309** *e*P **P 22 10 19.1 -1.5**
**BR131 Keskin Array S 86.73 309** P **P 22 10 20.6 0.0**
baz=87,SNR=4.3
**BRTR Keskin Array B 86.73 309** P **P 22 10 19.1 -1.6**
comp=Z,4.1nm,0.8s,baz=133,slow=5.7,SNR=21
**BR231 Keskin MP Arra 87.38 310** *e*P P 22 10 19.9 -3.8
BR231 *e* *PP PP 22 13 57.2 +9.0
**CSS Prodhromos 87.48 305** *e*P **P 22 10 23.5 -0.7**
comp=Z,3.4nm,0.8s
**SBA Scott Base 87.49 172** *e*P **P 22 10 23.6 +0.4**
SBA pmax pmax
comp=Z,37nm,1.6s
**SBA Scott Base 87.49 172** *e*P **P 22 10 23.6 +0.4**
comp=Z,37nm,1.6s
**KMBO Kilima Mbogo 87.77 269** P **P 22 10 25.6 -0.6**
comp=Z,24nm,1.0s,baz=57,slow=6.0,SNR=50
KMBO LR LR 22 51 43.3
comp=Z,105nm,18.0s,baz=56,slow=37
**KMBO Kilima Mbogo 87.77 269** *i* P **P 22 10 26.3 +0.1**
KMBO pmax pmax
comp=Z,24nm,1.0s
**KMBO Kilima Mbogo 87.77 269** *e*P **P 22 10 26.2 0.0**
comp=Z,35nm,1.0s
**GAZI Gazipasa 88.16 306** P **P 22 10 25.3 -2.1**
**AUMIH MIHALICIK 88.37 310** P **P 22 10 26.9 -1.5**
**FIA0 FINESS Array S 88.38 332** *e*P **P 22 10 26.1 -1.7**
**FIA0 FINESS Array S 88.38 332** *e*P **P 22 10 26.1 -1.7**
**FINES FINESS Array B 88.38 332** P **P 22 10 26.1 -1.7**
comp=Z,22nm,0.7s,baz=98,slow=4.1,SNR=45
FINES LR LR 22 53 51.7
comp=Z,345nm,20.2s,baz=74,slow=38
**AKASG Malin Array Be 88.46 321** P **P 22 10 26.5 -1.9**
comp=Z,11nm,0.9s,baz=70,slow=4.4,SNR=34
AKASG LR LR 22 53 54.9
comp=Z,231nm,19.8s,baz=115,slow=38
**AKBB Malin Array Si 88.46 321** *e*P **P 22 10 26.5 -1.9**
**AKBB Malin Array Si 88.46 321** *e*P **P 22 10 26.5 -1.9**
**KIEV Kiev 88.47 321***d i*P **P 22 10 26.8 -1.7**
KIEV pmax pmax
comp=Z,13nm,1.0s
**KIEV Kiev 88.47 321** *e*P **P 22 10 26.9 -1.6**
comp=Z,15nm,1.0s
**AK11 Malin Array Si 88.50 321** *e*P **P 22 10 26.9 -1.6**
**VSU Vasula 88.61 329***d i*P **P 22 10 27.4 -1.5**
VSU pmax pmax
comp=Z,143nm,1.2s
**KORT Korkueli 89.63 307** P **P 22 10 32.8 -1.6**
**TESR Tescani 90.84 317** ⇑*i*P **P 22 10 38.3 -1.4**
**VRI Vrincioaia 90.90 316** ⇓P **P 22 10 39.7 -0.3**
**VRI Vrincioaia 90.90 316** ⇓*i*P **P 22 10 39.7 -0.3**
**PLOR Plostina 90.96 316** ⇑P **P 22 10 39.8 -0.5**
**PLOR Plostina 90.96 316** ⇑*i*P **P 22 10 39.8 -0.5**
**SUW Suwalki 91.47 325** *e*P **P 22 10 40.6 -1.8**
**SUW Suwalki 91.47 325** *e*P **P 22 10 40.6 -1.8**
**MLR Muntele Rosu 91.51 316** ⇑P **P 22 10 41.7 -1.3**
**MLR Muntele Rosu 91.51 316** ⇑*i*P **P 22 10 41.7 -1.3**
**BURAR Bucovina Array 91.59 318** ⇑P **P 22 10 42.2 -1.1**
**BURAR Bucovina Array 91.59 318** ⇑*i*P **P 22 10 42.2 -1.1**
**BUR04 Bucovina Ar. S 91.59 318** *e*P **P 22 10 42.0 -1.3**
**KOLS Kolonicke sedl 93.22 320** *e*P **P 22 10 49.0 -1.6**
**KOLS Kolonicke sedl 93.22 320** *e* **P 22 10 49.0 -1.6**
**UZH Uzhgorod 93.28 320** *e*P **P 22 10 48.9 -2.0**
UZH *e* 22 10 56.1
UZH *e* 22 11 03.3
**BEL Belsk 93.41 323** *e*P **P 22 10 50.7 -0.7**
**BEL Belsk 93.41 323** *e*P **P 22 10 50.8 -0.7**
**GZR Gura Zlata 93.71 316** ⇑P **P 22 10 52.5 -0.6**
**GZR Gura Zlata 93.71 316** ⇑*i*P **P 22 10 52.5 -0.6**
**STHS Stebnicka Huta 93.75 321** *e*P **P 22 10 53.1 0.0**
STHS pmax pmax
comp=Z,4.0nm,1.0s
**STHS Stebnicka Huta 93.75 321** *e*P **P 22 10 53.1 0.0**
**OJC Ojcow 94.44 322** *e*P **P 22 10 54.7 -1.5**
**OJC Ojcow 94.44 322** *e*P **P 22 10 54.7 -1.5**
**OJC Ojcow 94.44 322** *e*P **P 22 10 55.5 -0.8**
comp=Z,50nm,1.8s
**BZS Buzias 94.45 317** ⇑P **P 22 10 54.4 -2.0**
**BZS Buzias 94.45 317** ⇑*i*P **P 22 10 54.4 -2.0**
**SYO Syowa Base 94.49 201**⇑*e*P **P 22 10 53.6 -2.3**
**PSZ Piszkesteto 95.01 319** *e*P **P 22 10 57.6 -1.4**
PSZ pmax pmax
comp=Z,20nm,1.5s
**PSZ Piszkesteto 95.01 319** *e*P **P 22 10 57.6 -1.4**
comp=Z,20nm,1.5s
**NB2 NORSAR Subarra 95.34 333** P **P 22 10 57.7 -2.5**
comp=Z,7.4nm,0.8s,baz=68,slow=4.6
**NB2 NORSAR Subarra 95.34 333** P **P 22 10 57.7 -2.5**
baz=68,slow=4.6
**NB200 NORSAR Array S 95.34 333** *e*P **P 22 10 57.6 -2.6**
**NOA NORSAR Array B 95.34 333** P **P 22 10 57.6 -2.6**
comp=Z,5.6nm,0.7s,baz=65,slow=4.6,SNR=14
NOA LR LR 22 58 37.2
comp=Z,194nm,19.1s,baz=65,slow=38
**VYHS Vyhne 95.53 320** *e*P **P 22 11 00.1 -1.2**
**VYHS Vyhne 95.53 320** *e*P **P 22 11 00.1 -1.2**
**OKC Ostrava-Krasne 95.57 321** *e*P **P 22 10 59.5 -1.9**
OKC *e* 22 11 07.2
OKC *e* 22 11 12.6
**OKC Ostrava-Krasne 95.57 321** *e*P **P 22 10 59.5 -1.9**
OKC *ep*P pP 22 11 12.6 +1.4
**DIVS Divibare 95.95 316** ⇑*i*P **P 22 11 01.8 -1.6**
**MORC Moravsky Berou 95.97 322** *e*P **P 22 11 02.6 -0.7**
MORC pmax pmax
comp=Z,20nm,1.0s
**MORC Moravsky Berou 95.97 322** *e*P **P 22 11 02.6 -0.7**
comp=Z,20nm,1.0s
**KRLC Kraliky 96.34 322** *e*P **P 22 11 04.7 -0.3**
KRLC *e* 22 11 11.8
**KRLC Kraliky 96.34 322** *e*P **P 22 11 04.7 -0.3**
**DPC Dobruska-Polom 96.53 322** *e*P **P 22 11 05.5 -0.3**
DPC *e* 22 11 15.8
**DPC Dobruska-Polom 96.53 322** *e*P **P 22 11 05.5 -0.3**
DPC *ep*P pP 22 11 15.8 +0.1
DPC *es*P sP 22 11 26.2 +7.0
**QSPA South Pole Qui 96.56 180** *e*P **P 22 11 08.7 +3.1**
comp=Z,115nm,3.0s
**UPC Upice 96.67 323** *e*P **P 22 11 05.5 -0.9**
UPC *e* 22 11 12.2
**UPC Upice 96.67 323** *e*P **P 22 11 05.5 -0.9**
**PVCC Panska Ves 97.53 323** *e*P **P 22 11 09.2 -1.1**
PVCC *e* 22 11 16.6
**PVCC Panska Ves 97.53 323** *e*P **P 22 11 09.2 -1.1**
**YKA Yellowknife Ar 97.58 24** P **P 22 11 09.9 -0.3**
comp=Z,2.0nm,0.8s,baz=305,slow=4.7,SNR=5.4
**YKB5 Yellowknife Ar 97.58 24** *e*P **P 22 11 09.9 -0.3**
**GOPC GO Pecny, Ondr 97.61 322** *e*P **P 22 11 10.2 -0.5**
GOPC *e* 22 11 20.7
**GOPC GO Pecny, Ondr 97.61 322** *e*P **P 22 11 10.2 -0.5**
GOPC *ep*P pP 22 11 20.7 +0.2
**PRU Pruhonice 97.73 322** *e*P **P 22 11 09.9 -1.3**
PRU *e* 22 11 21.0
**PRU Pruhonice 97.73 322** *e*P **P 22 11 09.9 -1.3**
PRU *ep*P pP 22 11 21.0 0.0
**PRA Prague 97.77 322** *e*P **P 22 11 09.8 -1.6**
PRA *e* 22 11 20.8
**PRA Prague 97.77 322** *e*P **P 22 11 09.8 -1.6**
PRA *ep*P pP 22 11 20.8 -0.4
**BRG Berggiesshubel 97.79 323** *e*P **P 22 11 10.3 -1.1**
comp=Z,18nm,0.9s
BRG *e* 22 11 17.6
comp=Z,11nm,1.1s
**BRG Berggiesshubel 97.79 323** *e*P **P 22 11 10.3 -1.1**
BRG *e* 22 11 17.6
BRG pmax pmax
comp=Z,18nm,1.0s
**BRG Berggiesshubel 97.79 323** *e*Pdiff **P 22 11 10.5 -1.0**
**LSZ Lusaka 98.15 256** *e*P **P 22 11 11.5 -2.4**
LSZ pmax pmax
comp=Z,4.0nm,0.9s
**LSZ Lusaka 98.15 256** *e*P **P 22 11 11.5 -2.4**
comp=Z,4.4nm,0.9s
**CLL Collm 98.19 324** *i* P **P 22 11 11.9 -1.3**
CLL *i* 22 11 22.7
CLL pmax pmax
comp=Z,11nm,1.1s
CLL MLR MLR
comp=Z,300nm,19.6s
**CLL Collm 98.19 324** *e*Pdiff **P 22 11 11.9 -1.3**
**CLL Collm 98.19 324** *i* Pdif **P 22 11 11.9 -1.3**
comp=Z,11nm,1.1s
CLL *i* (pPdif) 22 11 22.7
CLL *e* 22 14 50.0
CLL Lm MLR 22 59 00.0
comp=Z,300nm,19.6s
**CLL Collm 98.19 324** *e*P **P 22 11 11.9 -1.3**
comp=Z,14nm,1.1s
**KHC Kasperske Hory 98.62 322** *e*P **P 22 11 14.2 -1.1**
KHC *e* 22 11 22.7
KHC *e* 22 11 28.6
**KHC Kasperske Hory 98.62 322** *e*P **P 22 11 14.2 -1.1**
KHC *ex* x 22 11 22.7
KHC *ep*P pP 22 11 28.6 +3.5
**MOA Molln 98.64 320** ⇑*i*Pdiff **P 22 11 14.3 -1.0**
comp=Z,4.5nm,0.9s
**GEC2 GERESS Array S 98.64 321** *e*P **P 22 11 14.5 -1.0**
**GEC2 GERESS Array S 98.64 321** *e*Pdiff **P 22 11 14.4 -1.0**
**GEC2 GERESS Array S 98.64 321** *e*P **P 22 11 14.5 -1.0**
**GERES GERESS Array B 98.64 321** P **P 22 11 13.8 -1.7**
comp=Z,1.7nm,0.8s,baz=74,slow=4.9,SNR=16
GERES PKKPbc **PKKPbc 22 27 42.5 -3.4**
comp=Z,0.3nm,0.6s,baz=131,slow=4.1,SNR=4.1
GERES LR LR 22 58 46.5
comp=Z,170nm,18.8s,baz=60,slow=37
**NKC Novy Kostel 98.91 323** *e*P **P 22 11 14.1 -2.4**
NKC *e* 22 11 26.0
**NKC Novy Kostel 98.91 323** *e*P **P 22 11 14.1 -2.4**
NKC *ep*P pP 22 11 26.0 -0.3
**MOX Moxa 99.25 324** *e*Pdiff **Pdif 22 11 17.2 -0.8**
**NRDL Niedersach Rie 99.38 326** *e*Pdiff **Pdif 22 11 18.2 -0.2**
**CLZ Clausthal 99.50 325** *e*Pdiff **Pdif 22 11 18.8 -0.3**
**GRF Grafenberg Arr 99.85 323** *e*Pdiff **Pdif 22 11 19.9 -0.8**
**WTTA Wattenberg 100.51 320** ⇑*i*Pdiff **Pdif 22 11 22.9 -1.0**
comp=Z,7.1nm,1.1s
**NVAR Mina Array Bea 106.30 47** Pdiff **Pdif 22 11 50.4 +0.5**
comp=Z,0.4nm,0.3s,baz=266,slow=6.5,SNR=5.1
NVAR PKKPbc **PKKPbc 22 27 21.7 -1.5**
comp=Z,1.1nm,0.7s,baz=118,slow=3.3,SNR=5.5
**NV01 Mina Array Sit 106.30 47** *e*Pdif **Pdif 22 11 50.4 +0.5**
**G27A Dupree 113.41 34** P **PKiKP 22 16 13.7 -0.6**
baz=113
**ESDC Sonseca Array 114.04 319** PP **PP 22 17 09.3 -0.2**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,1.3nm,0.9s,baz=54,slow=6.7,SNR=6.3 | | | | | | |
| **SDCO** | **Great Sand Dun** | **115.58** | **43** | P | **PKPdf** | **22 16 18.2** | **-0.8** |
| | baz=116 | | | | | | |
| **LAZ** | **Ladron** | **116.14** | **47** | *e*PKPdf | **PKPdf** | **22 16 19.8** | **-0.3** |
| **ANMO** | **Albuquerque** | **116.36** | **46** | *e*PKIKP | **PKPdf** | **22 16 21.1** | **+0.6** |
| **ANMO** | **Albuquerque** | **116.36** | **46** | *e*PKPdf | **PKPdf** | **22 16 21.1** | **+0.6** |
| **121A** | **Cookes Peak, D** | **116.56** | **49** | P | **PKPdf** | **22 16 21.0** | **+0.1** |
| | baz=116 | | | | | | |
| **R26A** | **Arlington** | **116.64** | **41** | P | **PKPdf** | **22 16 20.6** | **-0.2** |
| | baz=117 | | | | | | |
| **S26A** | **Kim** | **117.00** | **42** | P | **PKPdf** | **22 16 21.3** | **-0.3** |
| | baz=117 | | | | | | |
| **R27A** | **Eads** | **117.08** | **41** | P | **PKPdf** | **22 16 21.5** | **-0.2** |
| | baz=117 | | | | | | |
| **T26A** | **Comanche Natio** | **117.17** | **42** | P | **PKPdf** | **22 16 21.4** | **-0.6** |
| | baz=117 | | | | | | |
| **F36A** | **Milaca** | **117.48** | **29** | P | **PKPdf** | **22 16 21.0** | **-1.0** |
| | baz=117 | | | | | | |
| **R28A** | **Tribune** | **117.68** | **40** | P | **PKPdf** | **22 16 22.4** | **-0.4** |
| | baz=118 | | | | | | |
| **MNTX** | **Cornudas Mount** | **118.75** | **48** | P | **PKPdf** | **22 16 24.7** | **-0.2** |
| | baz=119 | | | | | | |
| **MNTX** | **Cornudas Mount** | **118.75** | **48** | *e*PKPdf | **PKPdf** | **22 16 25.4** | **+0.5** |
| **Q32A** | **Meitler Ranch,** | **119.33** | **38** | P | **PKPdf** | **22 16 24.9** | **-0.9** |
| | baz=119 | | | | | | |
| **R32A** | **Long Quarter,** | **119.59** | **39** | P | **PKPdf** | **22 16 25.6** | **-0.7** |
| | baz=120 | | | | | | |
| **Q33A** | **Connelly Farm,** | **119.77** | **38** | P | **PKPdf** | **22 16 26.2** | **-0.5** |
| | baz=120 | | | | | | |
| **T32A** | **Huddler Ranch,** | **120.21** | **40** | P | **PKPdf** | **22 16 27.2** | **-0.4** |
| | baz=120 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **120.23** | **289** | *e*PKPdf | **PKPdf** | **22 16 26.1** | **-2.0** |
| TOA0 | | | | *e*PKPdf | **PKiKP** | **22 16 26.6** | **-1.7** |
| TOA0 | | | | *e*PP | PP | 22 17 46.3 | -7.4 |
| **TORD** | **Torodi Ar. Bea** | **120.23** | **289** | PKP | **PKPdf** | **22 16 26.6** | **-1.6** |
| | comp=Z,5.7nm,0.9s,baz=54,slow=1.8,SNR=36 | | | | | | |
| TORD | | | | PP | PP | 22 17 46.3 | -7.4 |
| | comp=Z,1.4nm,0.9s,baz=65,slow=5.0,SNR=4.3 | | | | | | |
| TORD | | | | PKKPbc | **PKKPbc** | **22 26 34.5** | **-0.8** |
| | comp=Z,3.4nm,1.3s,baz=285,slow=2.6,SNR=5.4 | | | | | | |
| **Q34A** | **Chapman** | **120.35** | **37** | P | **PKPdf** | **22 16 27.0** | **-0.8** |
| | baz=120 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **120.60** | **45** | P | **PKPdf** | **22 16 27.9** | **-0.6** |
| | baz=120 | | | | | | |
| **T33A** | **Patterson Ranc** | **120.70** | **39** | P | **PKPdf** | **22 16 27.8** | **-0.8** |
| | baz=121 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **120.99** | **45** | P | **PKPdf** | **22 16 28.6** | **-0.6** |
| | baz=121 | | | | | | |
| **V32A** | **Arapaho** | **121.01** | **41** | P | **PKPdf** | **22 16 28.8** | **-0.4** |
| | baz=121 | | | | | | |
| **X31A** | **McDonald Ranch** | **121.02** | **43** | P | **PKPdf** | **22 16 28.6** | **-0.6** |
| | baz=121 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **121.20** | **50** | *e*PKPdf | **PKPdf** | **22 16 29.2** | **-0.6** |
| **TXAR** | **Lajitas Array** | **121.20** | **50** | PKP | **PKPdf** | **22 16 29.4** | **-0.4** |
| | comp=Z,1.4nm,0.7s,baz=210,slow=1.0,SNR=15 | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **22 26 30.4** | **-1.8** |
| | comp=Z,0.9nm,0.9s,baz=134,slow=5.4,SNR=6.3 | | | | | | |
| **U34A** | **Anderson Ranch** | **121.55** | **40** | P | **PKPdf** | **22 16 29.8** | **-0.4** |
| | baz=122 | | | | | | |
| **R36A** | **Gordon, Harris** | **121.59** | **37** | P | **PKPdf** | **22 16 29.7** | **-0.5** |
| | baz=122 | | | | | | |
| **429A** | **Davenport Ranc** | **121.87** | **48** | P | **PKPdf** | **22 16 30.6** | **-0.5** |
| | baz=122 | | | | | | |
| **529A** | **Stev Forest Ra** | **121.89** | **48** | P | **PKPdf** | **22 16 30.9** | **-0.2** |
| | baz=122 | | | | | | |
| **U35A** | **Pawnee** | **122.09** | **39** | P | **PKPdf** | **22 16 30.8** | **-0.4** |
| | baz=122 | | | | | | |
| **Z32A** | **Haskell** | **122.12** | **44** | P | **PKPdf** | **22 16 31.3** | **-0.1** |
| | baz=122 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **122.19** | **38** | P | **PKPdf** | **22 16 30.6** | **-0.8** |
| | baz=122 | | | | | | |
| **430A** | **Baggett Ranch,** | **122.27** | **47** | P | **PKPdf** | **22 16 31.5** | **-0.3** |
| | baz=122 | | | | | | |
| **S37A** | **Fort Scott** | **122.37** | **37** | P | **PKPdf** | **22 16 30.7** | **-1.0** |
| | baz=122 | | | | | | |
| **530A** | **J-C Ranch, Com** | **122.53** | **48** | P | **PKPdf** | **22 16 32.2** | **-0.1** |
| | baz=122 | | | | | | |
| **331A** | **San Angelo** | **122.57** | **46** | P | **PKPdf** | **22 16 32.1** | **-0.2** |
| | baz=122 | | | | | | |
| **T37A** | **Cheneyville 18** | **122.73** | **37** | P | **PKPdf** | **22 16 31.4** | **-1.0** |
| | baz=123 | | | | | | |
| **W35A** | **Tecumseh** | **122.76** | **40** | P | **PKPdf** | **22 16 31.9** | **-0.6** |
| | baz=123 | | | | | | |
| **431A** | **Sonora** | **122.78** | **47** | P | **PKPdf** | **22 16 32.6** | **-0.1** |
| | baz=123 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **122.91** | **42** | P | **PKPdf** | **22 16 32.2** | **-0.6** |
| | baz=123 | | | | | | |
| **V36A** | **Jenks** | **122.96** | **39** | P | **PKPdf** | **22 16 32.2** | **-0.7** |
| | baz=123 | | | | | | |
| **TUL1** | **Tulsa** | **122.97** | **39** | P | **PKPdf** | **22 16 31.8** | **-1.1** |
| | baz=123 | | | | | | |
| **332A** | **Millersview** | **123.02** | **46** | P | **PKPdf** | **22 16 32.9** | **-0.2** |
| | baz=123 | | | | | | |
| **U37A** | **Salina** | **123.08** | **38** | P | **PKPdf** | **22 16 32.2** | **-0.9** |
| | baz=123 | | | | | | |
| **531A** | **Rocksprings** | **123.10** | **47** | P | **PKPdf** | **22 16 33.0** | **-0.3** |
| | baz=123 | | | | | | |
| **X35A** | **Drake** | **123.16** | **41** | P | **PKPdf** | **22 16 32.7** | **-0.6** |
| | baz=123 | | | | | | |
| **W36A** | **Wetumka** | **123.19** | **40** | P | **PKPdf** | **22 16 33.1** | **-0.2** |
| | baz=123 | | | | | | |
| **V37A** | **Hulbert** | **123.40** | **39** | P | **PKPdf** | **22 16 32.9** | **-0.8** |
| | baz=123 | | | | | | |
| **Y35A** | **Marietta** | **123.42** | **42** | P | **PKPdf** | **22 16 33.4** | **-0.4** |
| | baz=123 | | | | | | |
| **X36A** | **Centrahoma** | **123.46** | **41** | P | **PKPdf** | **22 16 33.6** | **-0.3** |
| | baz=123 | | | | | | |
| **JCT** | **Junction City** | **123.47** | **47** | *e*PKIKP | **PKPdf** | **22 16 33.8** | **-0.3** |
| **JCT** | **Junction City** | **123.47** | **47** | P | **PKPdf** | **22 16 33.7** | **-0.4** |
| | baz=123 | | | | | | |
| **JCT** | **Junction City** | **123.47** | **47** | *e*PKPdf | **PKPdf** | **22 16 33.8** | **-0.3** |
| **631A** | **Perdido Creek** | **123.48** | **48** | P | **PKPdf** | **22 16 33.8** | **-0.2** |
| | baz=123 | | | | | | |
| **U38A** | **Gravette** | **123.50** | **38** | P | **PKPdf** | **22 16 32.9** | **-1.0** |
| | baz=123 | | | | | | |
| **134A** | **White-Moore Ra** | **123.50** | **44** | P | **PKPdf** | **22 16 33.8** | **-0.3** |
| | baz=123 | | | | | | |
| **333A** | **Richland Sprin** | **123.59** | **45** | P | **PKPdf** | **22 16 33.7** | **-0.5** |
| | baz=124 | | | | | | |
| **532A** | **Rocksprings** | **123.59** | **47** | P | **PKPdf** | **22 16 33.7** | **-0.6** |
| | baz=124 | | | | | | |
| **Z35A** | **Perchaven, San** | **123.62** | **42** | P | **PKPdf** | **22 16 33.7** | **-0.5** |
| | baz=124 | | | | | | |
| **W37A** | **Quinton** | **123.69** | **40** | P | **PKPdf** | **22 16 34.0** | **-0.3** |
| | baz=124 | | | | | | |
| **234A** | **Clairette** | **123.80** | **44** | P | **PKPdf** | **22 16 34.4** | **-0.2** |
| | baz=124 | | | | | | |
| **433A** | **Art** | **123.83** | **46** | P | **PKPdf** | **22 16 34.1** | **-0.7** |
| | baz=124 | | | | | | |
| **V38A** | **Canehill** | **123.86** | **38** | P | **PKPdf** | **22 16 33.9** | **-0.8** |
| | baz=124 | | | | | | |
| **Y36A** | **Durant** | **123.91** | **41** | P | **PKPdf** | **22 16 34.3** | **-0.5** |
| | baz=124 | | | | | | |
| **632A** | **Uvalde** | **124.01** | **48** | P | **PKPdf** | **22 16 35.0** | **-0.1** |
| | baz=124 | | | | | | |
| **X37A** | **Clayton** | **124.08** | **40** | P | **PKPdf** | **22 16 34.8** | **-0.3** |
| | baz=124 | | | | | | |
| **334A** | **Lometa** | **124.11** | **45** | P | **PKPdf** | **22 16 34.6** | **-0.7** |
| | baz=124 | | | | | | |
| **WHTX** | **Lake Whitney** | **124.27** | **44** | P | **PKPdf** | **22 16 35.6** | **+0.1** |
| | baz=124 | | | | | | |
| **732A** | **Laxson Ranch,** | **124.29** | **49** | P | **PKPdf** | **22 16 35.4** | **-0.2** |
| | baz=124 | | | | | | |
| **W38A** | **Poteau** | **124.31** | **39** | P | **PKPdf** | **22 16 35.3** | **-0.2** |
| | baz=124 | | | | | | |
| **X38A** | **Whitesboro** | **124.37** | **40** | P | **PKPdf** | **22 16 35.5** | **-0.1** |
| | baz=124 | | | | | | |
| **434A** | **Burnet** | **124.38** | **45** | P | **PKPdf** | **22 16 35.2** | **-0.6** |
| | baz=124 | | | | | | |
| **832A** | **Faith Ranch, C** | **124.52** | **49** | P | **PKPdf** | **22 16 36.3** | **+0.2** |
| | baz=124 | | | | | | |
| **534A** | **Blanco** | **124.68** | **46** | P | **PKPdf** | **22 16 35.8** | **-0.6** |
| | baz=125 | | | | | | |
| **SFIN** | **Scholer Farm** | **124.70** | **29** | P | **PKPdf** | **22 16 36.4** | **+0.3** |
| | baz=125 | | | | | | |
| **335A** | **Moody** | **124.71** | **44** | P | **PKPdf** | **22 16 36.1** | **-0.3** |
| | baz=125 | | | | | | |
| **Z37A** | **Pogue Cattle C** | **124.78** | **42** | P | **PKPdf** | **22 16 36.6** | **+0.2** |
| | baz=125 | | | | | | |
| **236A** | **Katherine and** | **124.90** | **43** | P | **PKPdf** | **22 16 36.6** | **-0.1** |
| | baz=125 | | | | | | |
| **MIAR** | **Mount Ida** | **125.24** | **39** | *e*PKIKP | **PKPdf** | **22 16 37.4** | **+0.1** |
| **MIAR** | **Mount Ida** | **125.24** | **39** | P | **PKPdf** | **22 16 37.1** | **-0.2** |
| | baz=125 | | | | | | |
| **MIAR** | **Mount Ida** | **125.24** | **39** | *e*PKPdf | **PKPdf** | **22 16 37.4** | **+0.1** |
| **OLIL** | **Olney** | **125.44** | **31** | *e*PKPdf | **PKPdf** | **22 16 37.5** | **-0.1** |
| **PBMO** | **Poplar Bluff** | **125.59** | **35** | *e*PKPdf | **PKPdf** | **22 16 37.4** | **-0.5** |
| **HKT** | **Hockley** | **126.60** | **45** | *e*PKIKP | **PKPdf** | **22 16 40.5** | **+0.6** |
| **HKT** | **Hockley** | **126.60** | **45** | *e*PKPdf | **PKPdf** | **22 16 40.5** | **+0.6** |
| **WVT** | **Waverly** | **127.51** | **33** | *e*PKIKP | **PKPdf** | **22 16 40.9** | **-0.7** |
| **WVT** | **Waverly** | **127.51** | **33** | *e*PKPdf | **PKPdf** | **22 16 40.9** | **-0.7** |
| **DBIC** | **Dimbokro** | **128.12** | **284** | PKP | **PKPdf** | **22 16 41.7** | **-1.6** |
| | comp=Z,5.6nm,0.9s,baz=216,slow=20,SNR=3.5 | | | | | | |
| **KSPA** | **Keystone Colle** | **128.41** | **20** | *e*PKPdf | **PKPdf** | **22 16 43.1** | **-0.1** |
| **TKL** | **Tuckaleechee C** | **130.01** | **31** | *e*PKIKP | **PKPdf** | **22 16 46.9** | **+0.5** |
| **TKL** | **Tuckaleechee C** | **130.01** | **31** | *e*PKPdf | **PKPdf** | **22 16 46.9** | **+0.5** |
| **JTS** | **JuntasAbangare** | **145.85** | **61** | *e*PKP2 | **PKPdf** | **22 17 15.8** | **-0.1** |
| **JTS** | **JuntasAbangare** | **145.85** | **61** | *e*PKPdf | **PKPdf** | **22 17 15.8** | **-0.1** |
| **MTDJ** | **Mount Denham** | **146.82** | **41** | *e*PKPdf | **PKPbc** | **22 17 19.5** | **+0.2** |
| **GTBY** | **Guantanamo Bay** | **147.06** | **36** | *e*PKPdf | **PKPbc** | **22 17 20.1** | **+0.3** |
| **SDDR** | **Presa de Saban** | **149.94** | **32** | *e*PKPbc | **PKPbc** | **22 17 27.4** | **0.0** |
| **BCIP** | **Isla Barro Col** | **150.78** | **58** | *e*PKPbc | **PKPbc** | **22 17 29.2** | **-0.2** |
| **LRS** | **Lares** | **152.63** | **25** | *e*PKPbc | **PKPbc** | **22 17 32.8** | **-0.9** |
| **LCO** | **Las Campanas** | **153.35** | **148** | *e*PKPdf | **PKPdf** | **22 17 28.0** | **+0.3** |
| **OTAV** | **Otavalo** | **155.74** | **74** | *e*PKPdf | **PKPdf** | **22 17 32.9** | **+1.2** |
| **SDV** | **Santo Domingo** | **158.14** | **45** | *e*PKPdf | **PKPdf** | **22 17 33.9** | **-0.5** |
| **CPUP** | **Villa Florida** | **160.34** | **174** | PKP | **PKPdf** | **22 17 35.7** | **-0.7** |
| | comp=Z,6.8nm,0.9s,baz=97,slow=1.6,SNR=13 | | | | | | |
| **CPUP** | **Villa Florida** | **160.34** | **174** | *e*PKIKP | **PKPdf** | **22 17 36.2** | **-0.2** |
| **CPUP** | **Villa Florida** | **160.34** | **174** | *e*PKPdf | **PKPdf** | **22 17 36.2** | **-0.2** |
| **LPAZ** | **La Paz** | **164.08** | **128** | PKP | **PKPdf** | **22 17 41.1** | **0.0** |
| | comp=Z,13nm,1.0s,baz=80,slow=0.7,SNR=31 | | | | | | |
| LPAZ | | | | PKPab | **PKPab** | **22 18 34.9** | **+0.4** |
| | comp=Z,4.8nm,0.8s,baz=343,slow=1.6,SNR=4.8 | | | | | | |
| **LPAZ** | **La Paz** | **164.08** | **128** | *e*PKIKP | **PKPdf** | **22 17 41.3** | **+0.1** |
| LPAZ | | | | *e* | | 22 22 19.7 | |
| **LPAZ** | **La Paz** | **164.08** | **128** | *e*PKPdf | **PKPdf** | **22 17 41.3** | **+0.1** |
| LPAZ | | | | *e*PKPab | **PKPab** | **22 18 34.9** | **+0.4** |
| LPAZ | | | | *e*PP | **PP** | **22 22 19.7** | **-0.1** |
| **BDFB** | **Brasilia** | **168.68** | **217** | PKP | **PKPdf** | **22 17 42.6** | **-1.5** |
| | comp=Z,7.0nm,1.0s,baz=48,slow=4.3,SNR=7.4 | | | | | | |
| BDFB | | | | PKPab | **PKPab** | **22 18 53.5** | **-0.5** |
| | comp=Z,4.0nm,1.0s,baz=27,slow=4.7,SNR=3.3 | | | | | | |
| **SAML** | **Samuel** | **171.71** | **106** | *e*PKPdf | **PKPdf** | **22 17 44.6** | **-1.2** |
| SAML | | | | *e*PKPab | **PKPab** | **22 19 07.9** | **+0.3** |
| **PTGA** | **Pitinga** | **172.38** | **39** | *e*PKPdf | **PKPdf** | **22 17 45.0** | **-1.1** |
| PTGA | | | | *e*PKPab | **PKPab** | **22 19 09.6** | **-0.7** |

**IDC 06 22:10:36.2**±1.8**, 6°.61S**×**121°.48E, h378**km±21km**, mb2.5**/3**, mb1 2.7**/5**, mb1mx2.5**/31**, mbtmp3.4**/5**, Error ellipse: s-maj=131.2km s-min=20.9km az=59.0, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **4.18** | **149** | P | Pn | 22 11 49.8 | +1.0 |
| | 2.6nm,0.3s,baz=159,slow=17,SNR=2.0 | | | | | | |
| BATI | | | | S | S | 22 12 47.2 | -0.2 |
| | 5.3nm,0.3s,baz=126,slow=21,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.21** | **138** | P | P | 22 14 23.8 | -0.3 |
| | 0.2nm,0.3s,baz=319,slow=11,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **20.74** | **146** | P | P | 22 14 49.4 | +0.2 |
| | 0.6nm,0.5s,baz=340,slow=15,SNR=6.9 | | | | | | |
| **SONM** | **Songino Array** | **55.82** | **348** | P | P | 22 19 37.1 | +1.3 |
| | 0.2nm,0.5s,baz=163,slow=5.4,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.52** | **331** | P | P | 22 20 26.4 | -1.2 |
| | 0.3nm,0.5s,baz=134,slow=8.3,SNR=5.3 | | | | | | |

*CSEM **06** 22:14:24.5±0.6, 61°.34N×4°.80E, h5km, ML2.3, Error ellipse: s-maj=14.1km s-min=6.0km az=105.0*
*BER **06** 22:14:24.6±3.2, 61°.42N×4°.39E, h10km, MD2.5, ML2.3, ML2.7(NAO)*
*NAO **06** 22:14:24.4±3.0, 61°.31N×4°.66E, ML2.7*
*UPP **06** 22:14:26.3, 61°.18N×4°.79E, h0km, ML1.3*
**ISC 06 22:14:24.2**±1.6**, 61°.37N**±0°.04×**4°.66E**±0°.08**, h11**km±9km**, n40,** σ**1s.19**/61**, Southern Norway**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FOO** | **Floro** | **0.30** | **38** | *e*P | **Pg** | **22 14 30.8** | **+0.5** |
| FOO | | | | *e*S | **Sb** | **22 14 36.6** | **+0.1** |
| FOO | | | | IAML | | 22 14 37.2 | |
| | comp=Z,380nm,0.1s | | | | | | |
| **FOO** | **Floro** | **0.30** | **38** | *e*P | **Pg** | **22 14 30.8** | **+0.5** |
| | SNR=104 | | | | | | |
| FOO | | | | *e*S | **Sb** | **22 14 36.6** | **+0.1** |
| | SNR=104 | | | | | | |
| **ASK** | **Askoy** | **0.92** | **163** | *e*P | **Pb** | **22 14 42.1** | **-0.1** |
| ASK | | | | *e*S | **Sn** | **22 14 57.3** | **+1.0** |
| ASK | | | | IAML | | 22 14 59.0 | |
| | comp=Z,94nm,0.3s | | | | | | |
| **RUND** | **Rundenannen** | **1.02** | **160** | *e*P | **Pb** | **22 14 43.9** | **0.0** |
| RUND | | | | *e*S | **Sn** | **22 14 59.7** | **+1.0** |
| RUND | | | | IAML | | 22 15 01.5 | |
| | comp=Z,80nm,0.2s | | | | | | |
| **RUND** | **Rundenannen** | **1.02** | **160** | *e*P | **Pb** | **22 14 43.8** | **0.0** |
| | SNR=70 | | | | | | |
| RUND | | | | *e*S | **Sn** | **22 14 59.7** | **+1.0** |
| | SNR=70 | | | | | | |
| **BER** | **Bergen** | **1.04** | **161** | *e*P | **Pb** | **22 14 44.0** | **-0.1** |
| BER | | | | IAML | | 22 15 03.0 | |
| | comp=Z,99nm,0.3s | | | | | | |
| **BER** | **Bergen** | **1.04** | **161** | *e*P | **Pb** | **22 14 44.0** | **-0.1** |
| | SNR=70 | | | | | | |
| **AKN** | **Aaknes** | **1.38** | **53** | Pg | **Pn** | **22 14 49.4** | **0.0** |
| AKN | | | | Lg | Lg | 22 15 09.3 | |
| **AKN** | **Aaknes** | **1.38** | **53** | Pg | **Pn** | **22 14 49.4** | **0.0** |
| AKN | | | | Lg | Lg | 22 15 09.3 | |
| **AKN** | **Aaknes** | **1.38** | **53** | Pg | **Pn** | **22 14 49.4** | **0.0** |
| | SNR=94 | | | | | | |
| AKN | | | | Lg | Lg | 22 15 09.3 | |
| **ODD1** | **Odda** | **1.75** | **145** | *e*P | **Pn** | **22 14 55.1** | **+0.6** |
| ODD1 | | | | *e*S | **Sg** | **22 15 19.3** | **-1.2** |
| ODD1 | | | | IAML | | 22 15 19.6 | |
| | comp=Z,40nm,0.6s | | | | | | |
| **ODD1** | **Odda** | **1.75** | **145** | *e*P | **Pn** | **22 14 55.1** | **+0.6** |
| | SNR=50 | | | | | | |
| ODD1 | | | | *e*S | **Sg** | **22 15 19.3** | **-1.2** |
| | SNR=50 | | | | | | |
| **MOL** | **Molde** | **1.82** | **47** | *e*P | **Pn** | **22 14 55.5** | **+0.1** |
| MOL | | | | *e*S | **Sn** | **22 15 19.9** | **+1.4** |
| MOL | | | | IAML | | 22 15 23.3 | |
| | comp=Z,57nm,0.3s | | | | | | |
| **MOL** | **Molde** | **1.82** | **47** | *e*P | **Pn** | **22 14 55.5** | **+0.1** |
| | SNR=50 | | | | | | |
| **BLS5** | **Blasjo** | **2.14** | **155** | *e*P | **Pn** | **22 14 59.7** | **-0.2** |
| BLS5 | | | | *e*S | **Sn** | **22 15 26.2** | **-0.3** |
| BLS5 | | | | IAML | | 22 15 34.6 | |
| | comp=Z,29nm,0.1s | | | | | | |
| **BLS5** | **Blasjo** | **2.14** | **155** | *e*P | **Pn** | **22 14 59.7** | **-0.2** |
| | SNR=50 | | | | | | |
| BLS5 | | | | *e*S | **Sn** | **22 15 26.2** | **-0.3** |
| | SNR=50 | | | | | | |
| **KMY** | **Karmoy** | **2.18** | **172** | *e*P | **Pn** | **22 14 59.1** | **-1.2** |
| KMY | | | | IAML | | 22 15 34.4 | |
| | comp=Z,30nm,0.2s | | | | | | |
| **KMY** | **Karmoy** | **2.18** | **172** | *e*P | **Pn** | **22 14 59.1** | **-1.2** |
| | SNR=50 | | | | | | |
| **DOMB** | **Dombas** | **2.21** | **70** | *e*P | **Pn** | **22 15 02.1** | **+1.3** |
| DOMB | | | | *e*S | **Sb** | **22 15 31.9** | **+0.4** |
| **DOMB** | **Dombas** | **2.21** | **70** | *e*P | **Pn** | **22 15 02.1** | **+1.3** |
| | SNR=50 | | | | | | |
| **KONO** | **Kongsberg** | **2.99** | **123** | *e*P | **Pn** | **22 15 11.9** | **+0.4** |
| KONO | | | | *e*S | **Sn** | **22 15 49.3** | **+2.0** |
| **KONO** | **Kongsberg** | **2.99** | **123** | *e*P | **Pn** | **22 15 11.9** | **+0.4** |
| | SNR=50 | | | | | | |
| KONO | | | | *e*S | **Sn** | **22 15 49.3** | **+2.0** |
| | SNR=50 | | | | | | |
| **NB2** | **NORSAR Subarra** | **3.19** | **93** | Pn | **Pn** | **22 15 15.2** | **+0.9** |
| | baz=278,slow=14 | | | | | | |
| NB2 | | | | Pg | **Pb** | **22 15 21.0** | **+0.1** |
| | baz=280,slow=18 | | | | | | |
| NB2 | | | | Lg | Lg | 22 16 04.6 | |
| | baz=280,slow=37 | | | | | | |
| **NB2** | **NORSAR Subarra** | **3.19** | **93** | Pn | **Pn** | **22 15 15.2** | **+0.9** |
| | baz=278,slow=14 | | | | | | |
| NB2 | | | | Pg | **Pb** | **22 15 21.0** | **+0.1** |
| | baz=280,slow=18 | | | | | | |
| NB2 | | | | Lg | Lg | 22 16 04.6 | |
| | baz=280,slow=37 | | | | | | |
| **NB2** | **NORSAR Subarra** | **3.19** | **93** | Pn | **Pn** | **22 15 15.2** | **+0.9** |
| | SNR=50 | | | | | | |
| **NB2** | **NORSAR Subarra** | **3.19** | **93** | Pg | **Pb** | **22 15 21.0** | **+0.1** |
| | SNR=92 | | | | | | |
| NB2 | | | | Lg | Lg | 22 16 04.6 | |
| | SNR=4.9 | | | | | | |
| **SNART** | **Snartemo** | **3.30** | **156** | *i* P | **Pn** | **22 15 15.6** | **-0.1** |
| | SNR=49 | | | | | | |
| **UDD** | **Uddeholm** | **4.58** | **102** | P | **Pn** | **22 15 34.3** | **+1.0** |
| UDD | | | | S | **Sn** | **22 16 26.7** | **+0.3** |
| **HFS** | **Hagfors** | **4.60** | **102** | Pn | **Pn** | **22 15 34.8** | **+1.1** |
| | baz=285,slow=16 | | | | | | |
| HFS | | | | Sn | **Sn** | **22 16 26.8** | **-0.2** |
| | baz=281,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 22 16 49.6 | |
| | baz=284,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **4.60** | **102** | Pn | **Pn** | **22 15 34.8** | **+1.1** |
| | baz=285,slow=16 | | | | | | |
| HFS | | | | Sn | **Sn** | **22 16 26.8** | **-0.2** |
| | baz=281,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 22 16 49.6 | |
| | baz=284,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **4.60** | **102** | Pn | **Pn** | **22 15 34.8** | **+1.1** |
| | SNR=50 | | | | | | |
| HFS | | | | Sn | **Sn** | **22 16 26.8** | **-0.2** |
| | SNR=7.4 | | | | | | |
| HFS | | | | Lg | Lg | 22 16 49.6 | |
| | SNR=1.1 | | | | | | |
| **NRAU** | **Nora** | **5.44** | **105** | P | **Pn** | **22 15 46.2** | **+1.0** |
| **MUD** | **Monsted U'grnd** | **5.45** | **153** | *i* P | **Pn** | **22 15 45.0** | **-0.3** |
| **MUD** | **Monsted U'grnd** | **5.45** | **153** | *i* P | **Pn** | **22 15 45.0** | **-0.3** |
| **BORU** | **Boraas** | **5.57** | **129** | P | **Pn** | **22 15 46.7** | **-0.2** |
| **FABU** | **Falkenberg** | **6.02** | **133** | P | **Pn** | **22 15 52.9** | **-0.2** |
| **ESKU** | **Eskilstuna** | **6.21** | **105** | P | **Pn** | **22 15 56.6** | **+0.9** |
| **FIA0** | **FINESS Array S** | **10.26** | **80** | Pn | **Pn** | **22 16 50.8** | **-0.4** |
| | baz=268,slow=11 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **22 18 41.2** | **-4.8** |
| | baz=270,slow=22 | | | | | | |
| FIA0 | | | | Lg | Lg | 22 19 44.7 | |
| | baz=273,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **10.26** | **80** | Pn | **Pn** | **22 16 50.8** | **-0.4** |
| | baz=268,slow=11 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **22 18 41.2** | **-4.8** |
| | baz=270,slow=22 | | | | | | |
| FIA0 | | | | Lg | Lg | 22 19 44.7 | |
| | baz=273,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **10.26** | **80** | Pn | **Pn** | **22 16 50.8** | **-0.4** |
| | SNR=50 | | | | | | |

*NEIC **06** 22:21:04.3, 37°.71S×176°.31E, h202km, MG4.1(WEL), After WEL.*
**WEL 06 22:21:04.0**±0.3**, 37°.71S**×**176°.32E, h206**km±2km**, ML4.1**/20**, 26C-5D, Error ellipse: s-maj=2.0km s-min=2.0km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPRZ** | **Ohinepanea** | **0.24** | **127** | ⇑PN | Pn | 22 21 31.1 | 0.0 |
| **OPRZ** | **Ohinepanea** | **0.24** | **127** | Pn | Pn | 22 21 31.1 | 0.0 |
| **TARZ** | **Mount Tarawera** | **0.55** | **164** | PN | Pn | 22 21 32.4 | +0.3 |
| **TOZ** | **Tahuroa Road** | **0.65** | **268** | ⇓PN | Pn | 22 21 32.6 | +0.2 |
| **TOZ** | **Tahuroa Road** | **0.65** | **268** | Pn | Pn | 22 21 32.6 | +0.2 |
| **RRRZ** | **Republican Roa** | **0.65** | **166** | ⇓PN | Pn | 22 21 32.7 | +0.3 |
| **RRRZ** | **Republican Roa** | **0.65** | **166** | Pn | Pn | 22 21 32.7 | +0.3 |
| **PRRZ** | **Plateau Road** | **0.79** | **176** | ⇑PN | Pn | 22 21 33.3 | +0.1 |
| **PRRZ** | **Plateau Road** | **0.79** | **176** | Pn | Pn | 22 21 33.3 | +0.1 |
| **URZ** | **Urewera** | **0.84** | **132** | PN | Pn | 22 21 32.9 | -0.5 |
| URZ | | | | SN | S | 22 21 55.1 | -1.1 |
| URZ | | | | AML | AML | 22 21 58.6 | |
| **URZ** | **Urewera** | **0.84** | **132** | Pn | Pn | 22 21 32.9 | -0.5 |
| URZ | | | | Sn | S | 22 21 55.1 | -1.1 |
| **KUZ** | **Kuaotunu** | **1.07** | **333** | PN | Pn | 22 21 34.4 | -0.5 |
| **MKAZ** | **Moumakai** | **1.09** | **303** | PN | Pn | 22 21 34.7 | -0.3 |
| MKAZ | | | | SN | S | 22 21 59.0 | +0.2 |
| **MKAZ** | **Moumakai** | **1.09** | **303** | Pn | Pn | 22 21 34.7 | -0.3 |
| **MRHZ** | **Matea Rd** | **1.13** | **176** | ⇑PN | Pn | 22 21 35.2 | -0.2 |
| MRHZ | | | | SN | S | 22 21 59.6 | -0.1 |
| **MWZ** | **Matawai** | **1.15** | **124** | ⇑PN | Pn | 22 21 35.0 | -0.5 |
| MWZ | | | | AML | AML | 22 22 01.6 | |
| MWZ | | | | AML | AML | 22 22 08.8 | |
| **MWZ** | **Matawai** | **1.15** | **124** | Pn | Pn | 22 21 35.0 | -0.5 |
| **HAZ** | **Te Kaha** | **1.16** | **93** | ⇑PN | Pn | 22 21 34.7 | -0.8 |
| **RAGZ** | **Rawiri** | **1.17** | **133** | PN | Pn | 22 21 35.7 | 0.0 |
| RAGZ | | | | SN | S | 22 22 00.1 | -0.1 |
| **RAGZ** | **Rawiri** | **1.17** | **133** | Pn | Pn | 22 21 35.7 | 0.0 |
| RAGZ | | | | Sn | S | 22 22 00.1 | -0.1 |
| **RATZ** | **Rangitukua** | **1.24** | **200** | ⇑PN | Pn | 22 21 36.2 | 0.0 |
| **RATZ** | **Rangitukua** | **1.24** | **200** | Pn | Pn | 22 21 36.2 | 0.0 |
| **SNGZ** | **Shannon Statio** | **1.34** | **143** | ⇑PN | Pn | 22 21 37.2 | +0.2 |
| SNGZ | | | | SN | S | 22 22 02.2 | -0.2 |
| **SNGZ** | **Shannon Statio** | **1.34** | **143** | Pn | Pn | 22 21 37.2 | +0.2 |
| SNGZ | | | | Sn | S | 22 22 02.2 | -0.2 |
| **RAHZ** | **Arahi** | **1.35** | **154** | ⇑PN | Pn | 22 21 37.5 | +0.4 |
| **RAHZ** | **Arahi** | **1.35** | **154** | Pn | Pn | 22 21 37.5 | +0.4 |
| **TWGZ** | **Tauwhareparae** | **1.40** | **110** | ⇑PN | Pn | 22 21 37.5 | +0.1 |
| **TWGZ** | **Tauwhareparae** | **1.40** | **110** | Pn | Pn | 22 21 37.5 | +0.1 |
| **HIZ** | **Hauiti** | **1.41** | **235** | ⇓PN | Pn | 22 21 37.5 | +0.1 |
| **HIZ** | **Hauiti** | **1.41** | **235** | Pn | Pn | 22 21 37.5 | +0.1 |
| **TKGZ** | **Te Karaka** | **1.41** | **122** | ⇑PN | Pn | 22 21 37.6 | +0.1 |
| **TKGZ** | **Te Karaka** | **1.41** | **122** | Pn | Pn | 22 21 37.6 | +0.1 |
| **NMHZ** | **Naumai** | **1.44** | **165** | ⇓PN | Pn | 22 21 38.4 | +0.6 |
| **NMHZ** | **Naumai** | **1.44** | **165** | Pn | Pn | 22 21 38.4 | +0.6 |
| **BKZ** | **Black Stump Fm** | **1.47** | **175** | ⇑PN | Pn | 22 21 37.5 | -0.5 |
| BKZ | | | | SN | S | 22 22 03.1 | -1.3 |
| BKZ | | | | AML | AML | 22 22 04.4 | |
| **BKZ** | **Black Stump Fm** | **1.47** | **175** | Pn | Pn | 22 21 37.5 | -0.5 |
| BKZ | | | | Sn | S | 22 22 03.1 | -1.3 |
| **RIGZ** | **Rimuhau** | **1.52** | **132** | ⇑PN | Pn | 22 21 38.8 | +0.4 |
| **WTVZ** | **West Tongariro** | **1.52** | **202** | PN | Pn | 22 21 38.4 | -0.2 |
| **WTVZ** | **West Tongariro** | **1.52** | **202** | Pn | Pn | 22 21 38.4 | -0.2 |
| **TWVZ** | **Taurewa** | **1.53** | **207** | PN | Pn | 22 21 38.4 | -0.2 |
| **TWVZ** | **Taurewa** | **1.53** | **207** | Pn | Pn | 22 21 38.5 | -0.2 |
| **OTVZ** | **Oturere** | **1.54** | **199** | ⇑PN | Pn | 22 21 38.8 | 0.0 |
| **OTVZ** | **Oturere** | **1.54** | **199** | Pn | Pn | 22 21 38.8 | 0.0 |
| **WHHZ** | **Waihua** | **1.55** | **152** | ⇑PN | Pn | 22 21 38.9 | +0.3 |
| **NGZ** | **Ngauruhoe** | **1.57** | **201** | PN | Pn | 22 21 39.1 | +0.1 |
| **NGZ** | **Ngauruhoe** | **1.57** | **201** | Pn | Pn | 22 21 39.1 | +0.1 |
| **PUZ** | **Puketiti** | **1.58** | **104** | PN | Pn | 22 21 38.4 | -0.5 |
| PUZ | | | | AML | AML | 22 22 17.5 | |
| PUZ | | | | AML | AML | 22 22 17.9 | |
| **PUZ** | **Puketiti** | **1.58** | **104** | Pn | Pn | 22 21 38.4 | -0.5 |
| **MXZ** | **Matakaoa Point** | **1.59** | **85** | ⇑PN | Pn | 22 21 38.7 | -0.3 |
| MXZ | | | | AML | AML | 22 22 13.6 | |
| MXZ | | | | AML | AML | 22 22 16.2 | |
| **MXZ** | **Matakaoa Point** | **1.59** | **85** | Pn | Pn | 22 21 38.7 | -0.3 |
| **WPVZ** | **Whakapapa** | **1.61** | **202** | PN | Pn | 22 21 39.1 | -0.3 |
| **WPVZ** | **Whakapapa** | **1.61** | **202** | Pn | Pn | 22 21 39.1 | -0.3 |
| **ARHZ** | **Aropaoanui** | **1.64** | **161** | ⇑PN | Pn | 22 21 39.8 | +0.3 |
| **ARHZ** | **Aropaoanui** | **1.64** | **161** | Pn | Pn | 22 21 39.8 | +0.3 |
| **WMGZ** | **Waiomatatini S** | **1.67** | **95** | PN | Pn | 22 21 39.5 | -0.2 |
| **WMGZ** | **Waiomatatini S** | **1.67** | **95** | Pn | Pn | 22 21 39.5 | -0.2 |
| **WHVZ** | **Whangaehu Hut** | **1.67** | **200** | ⇑PN | Pn | 22 21 39.7 | -0.4 |
| **WHVZ** | **Whangaehu Hut** | **1.67** | **200** | Pn | Pn | 22 21 39.7 | -0.4 |
| **KNZ** | **Kokohu** | **1.69** | **141** | ⇑PN | Pn | 22 21 40.0 | +0.1 |
| KNZ | | | | AML | AML | 22 22 09.1 | |
| KNZ | | | | AML | AML | 22 22 10.6 | |
| **KNZ** | **Kokohu** | **1.69** | **141** | Pn | Pn | 22 21 40.0 | +0.1 |
| **WNVZ** | **Wahianoa** | **1.71** | **199** | PN | Pn | 22 21 39.9 | -0.5 |
| **WNVZ** | **Wahianoa** | **1.71** | **199** | Pn | Pn | 22 21 39.9 | -0.5 |
| **KWHZ** | **Kaweka Forest** | **1.72** | **177** | PN | Pn | 22 21 40.1 | -0.2 |
| **PRGZ** | **Paritu Road** | **1.73** | **135** | PN | Pn | 22 21 40.5 | +0.1 |
| **PRGZ** | **Paritu Road** | **1.73** | **135** | Pn | Pn | 22 21 40.5 | +0.1 |
| **MOVZ** | **Moawhango** | **1.76** | **194** | PN | Pn | 22 21 39.8 | -0.8 |
| **MOVZ** | **Moawhango** | **1.76** | **194** | Pn | Pn | 22 21 39.8 | -0.8 |
| **PKVZ** | **Pokaka** | **1.76** | **205** | PN | Pn | 22 21 40.4 | -0.2 |
| **PKVZ** | **Pokaka** | **1.76** | **205** | Pn | Pn | 22 21 40.4 | -0.2 |
| **MCHZ** | **McNeill Hill** | **1.76** | **170** | ⇑PN | Pn | 22 21 40.9 | +0.3 |
| **MCHZ** | **McNeill Hill** | **1.76** | **170** | Pn | Pn | 22 21 40.9 | +0.3 |
| **BHHZ** | **Black Hill Sta** | **1.79** | **186** | PN | Pn | 22 21 40.2 | -0.8 |
| **BHHZ** | **Black Hill Sta** | **1.79** | **186** | Pn | Pn | 22 21 40.2 | -0.8 |
| **MTVZ** | **Mangateitei** | **1.80** | **201** | Pn | Pn | 22 21 39.4 | -1.7 |
| **MHGZ** | **Mahia Peninsul** | **1.91** | **140** | ⇑PN | Pn | 22 21 42.2 | +0.1 |
| **MHGZ** | **Mahia Peninsul** | **1.91** | **140** | Pn | Pn | 22 21 42.2 | +0.1 |
| **KRHZ** | **Kereru** | **1.94** | **179** | ⇑PN | Pn | 22 21 41.8 | -0.5 |
| **CKHZ** | **Cape Kidnapper** | **2.04** | **163** | PN | Pn | 22 21 43.3 | 0.0 |
| **CKHZ** | **Cape Kidnapper** | **2.04** | **163** | Pn | Pn | 22 21 43.3 | 0.0 |
| **KAHZ** | **Kahuranaki** | **2.13** | **168** | ⇑PN | Pn | 22 21 44.1 | -0.2 |
| **KAHZ** | **Kahuranaki** | **2.13** | **168** | Pn | Pn | 22 21 44.1 | -0.2 |
| **PNHZ** | **Pukenui** | **2.21** | **182** | PN | Pn | 22 21 44.3 | -0.9 |
| **PNHZ** | **Pukenui** | **2.21** | **182** | Pn | Pn | 22 21 44.3 | -0.9 |
| **WAZ** | **Wanganui** | **2.30** | **207** | Pn | Pn | 22 21 45.8 | -0.3 |
| **NEZ** | **North Egmont** | **2.34** | **227** | PN | Pn | 22 21 47.2 | +0.6 |
| **NEZ** | **North Egmont** | **2.34** | **227** | Pn | Pn | 22 21 47.2 | +0.6 |
| **WPHZ** | **Waipukurau** | **2.36** | **178** | PN | Pn | 22 21 45.9 | -0.9 |
| **WPHZ** | **Waipukurau** | **2.36** | **178** | Pn | Pn | 22 21 45.9 | -0.8 |
| **PXZ** | **Pawanui** | **2.36** | **170** | PN | Pn | 22 21 46.1 | -0.6 |
| PXZ | | | | AML | AML | 22 22 21.2 | |
| PXZ | | | | AML | AML | 22 22 24.0 | |
| **PXZ** | **Pawanui** | **2.36** | **170** | Pn | Pn | 22 21 46.1 | -0.6 |
| **TSZ** | **Takapari Road** | **2.37** | **187** | ⇑PN | Pn | 22 21 45.6 | -1.2 |
| TSZ | | | | AML | AML | 22 22 20.2 | |
| TSZ | | | | AML | AML | 22 22 21.0 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TSZ** | **Takapari Road** | **2.37** | **187** | Pn | Pn | 22 21 45.6 | -1.2 |
| **PRHZ** | **Porangahau** | **2.57** | **175** | PN | Pn | 22 21 48.2 | -0.8 |
| **PRHZ** | **Porangahau** | **2.57** | **175** | Pn | Pn | 22 21 48.2 | -0.8 |
| **DVHZ** | **Dannevirke** | **2.59** | **183** | PN | Pn | 22 21 47.8 | -1.5 |
| **DVHZ** | **Dannevirke** | **2.59** | **183** | Pn | Pn | 22 21 47.8 | -1.5 |
| **POWZ** | **Post Office Ro** | **2.72** | **189** | PN | Pn | 22 21 49.3 | -1.4 |
| **POWZ** | **Post Office Ro** | **2.72** | **189** | Pn | Pn | 22 21 49.3 | -1.4 |
| **ANWZ** | **Angora Road** | **2.75** | **177** | PN | Pn | 22 21 50.1 | -1.0 |
| **PRWZ** | **Pori Road** | **2.86** | **185** | PN | Pn | 22 21 51.0 | -1.3 |
| **PRWZ** | **Pori Road** | **2.86** | **185** | Pn | Pn | 22 21 51.0 | -1.3 |
| **BFZ** | **Birch Farm** | **2.97** | **181** | PN | Pn | 22 21 51.9 | -1.7 |
| **BFZ** | **Birch Farm** | **2.97** | **181** | Pn | Pn | 22 21 51.9 | -1.7 |
| **MRZ** | **Mangatainoka R** | **3.01** | **191** | PN | Pn | 22 21 51.9 | -2.2 |
| MRZ | | | | AML | AML | 22 22 31.5 | |
| MRZ | | | | AML | AML | 22 22 32.4 | |
| **MRZ** | **Mangatainoka R** | **3.01** | **191** | Pn | Pn | 22 21 51.9 | -2.2 |
| **TIWZ** | **Tintock** | **3.09** | **186** | PN | Pn | 22 21 53.1 | -1.8 |
| TIWZ | | | | AML | AML | 22 22 33.2 | |
| TIWZ | | | | AML | AML | 22 22 34.5 | |
| **TIWZ** | **Tintock** | **3.09** | **186** | Pn | Pn | 22 21 53.1 | -1.8 |
| **CPWZ** | **Castlepoint** | **3.20** | **182** | PN | Pn | 22 21 55.3 | -1.0 |
| **CPWZ** | **Castlepoint** | **3.20** | **182** | Pn | Pn | 22 21 55.3 | -1.0 |
| **OGWZ** | **Otaki Gorge** | **3.23** | **196** | PN | Pn | 22 21 54.7 | -1.9 |
| **OGWZ** | **Otaki Gorge** | **3.23** | **196** | Pn | Pn | 22 21 54.7 | -1.9 |
| **HOWZ** | **Holdsworth Sta** | **3.25** | **191** | PN | Pn | 22 21 54.5 | -2.3 |
| **HOWZ** | **Holdsworth Sta** | **3.25** | **191** | Pn | Pn | 22 21 54.5 | -2.3 |
| **KIW** | **Kapiti Island** | **3.34** | **199** | PN | Pn | 22 21 55.3 | -2.6 |
| KIW | | | | AML | AML | 22 22 38.4 | |
| KIW | | | | AML | AML | 22 22 39.0 | |
| **KIW** | **Kapiti Island** | **3.34** | **199** | Pn | Pn | 22 21 55.3 | -2.6 |
| **TMWZ** | **Te Maipa** | **3.41** | **185** | PN | Pn | 22 21 56.7 | -2.2 |
| **TMWZ** | **Te Maipa** | **3.41** | **185** | Pn | Pn | 22 21 56.7 | -2.2 |
| **MTW** | **Mount Morrison** | **3.51** | **190** | ⇓PN | Pn | 22 21 57.2 | -2.8 |
| MTW | | | | AML | AML | 22 22 41.3 | |
| MTW | | | | AML | AML | 22 22 41.7 | |
| **MTW** | **Mount Morrison** | **3.51** | **190** | Pn | Pn | 22 21 57.2 | -2.8 |
| **CAW** | **Cannon Point** | **3.53** | **195** | PN | Pn | 22 21 57.9 | -2.4 |
| CAW | | | | AML | AML | 22 22 42.8 | |
| CAW | | | | AML | AML | 22 22 43.9 | |
| **CAW** | **Cannon Point** | **3.53** | **195** | Pn | Pn | 22 21 57.9 | -2.4 |
| **DUWZ** | **D'Urville Isla** | **3.61** | **210** | PN | Pn | 22 21 58.3 | -2.9 |
| **DUWZ** | **D'Urville Isla** | **3.61** | **210** | Pn | Pn | 22 21 58.3 | -2.9 |
| **TRWZ** | **Traveller** | **3.72** | **187** | PN | Pn | 22 22 00.0 | -2.5 |
| TRWZ | | | | AML | AML | 22 22 46.2 | |
| TRWZ | | | | AML | AML | 22 22 46.4 | |
| **TRWZ** | **Traveller** | **3.72** | **187** | Pn | Pn | 22 22 00.1 | -2.5 |
| **PAWZ** | **Paruwai Farm** | **3.74** | **190** | PN | Pn | 22 21 59.9 | -2.8 |
| PAWZ | | | | AML | AML | 22 22 47.4 | |
| PAWZ | | | | AML | AML | 22 22 48.1 | |
| **PAWZ** | **Paruwai Farm** | **3.74** | **190** | Pn | Pn | 22 21 59.9 | -2.8 |
| **WEL** | **Wellington** | **3.77** | **198** | Pn | Pn | 22 22 00.5 | -2.6 |
| **MSWZ** | **Moikau Station** | **3.80** | **192** | PN | Pn | 22 22 00.5 | -3.0 |
| MSWZ | | | | AML | AML | 22 22 46.8 | |
| MSWZ | | | | AML | AML | 22 22 47.6 | |
| **MSWZ** | **Moikau Station** | **3.80** | **192** | Pn | Pn | 22 22 00.5 | -3.0 |
| **TCW** | **Tory Channel** | **3.84** | **204** | PN | Pn | 22 22 01.1 | -2.9 |
| TCW | | | | AML | AML | 22 22 48.2 | |
| TCW | | | | AML | AML | 22 22 48.9 | |
| **TCW** | **Tory Channel** | **3.84** | **204** | Pn | Pn | 22 22 01.1 | -2.9 |
| **BHW** | **Baring Head** | **3.86** | **196** | PN | Pn | 22 22 01.1 | -3.1 |
| BHW | | | | AML | AML | 22 22 48.8 | |
| **BHW** | **Baring Head** | **3.86** | **196** | Pn | Pn | 22 22 01.1 | -3.1 |
| **PLWZ** | **Palliser** | **3.95** | **192** | PN | Pn | 22 22 02.1 | -3.3 |
| **PLWZ** | **Palliser** | **3.95** | **192** | Pn | Pn | 22 22 02.1 | -3.3 |
| **TUWZ** | **Tuamarina** | **4.15** | **205** | ⇑PN | Pn | 22 22 04.6 | -3.2 |
| TUWZ | | | | AML | AML | 22 22 54.3 | |
| TUWZ | | | | AML | AML | 22 22 55.8 | |
| **TUWZ** | **Tuamarina** | **4.15** | **205** | Pn | Pn | 22 22 04.6 | -3.2 |
| **NNZ** | **Nelson** | **4.18** | **212** | ⇑PN | Pn | 22 22 05.2 | -3.0 |
| **NNZ** | **Nelson** | **4.18** | **212** | Pn | Pn | 22 22 05.2 | -3.0 |
| **QRZ** | **Quartz Range** | **4.28** | **222** | PN | Pn | 22 22 05.8 | -3.6 |
| **QRZ** | **Quartz Range** | **4.28** | **222** | Pn | Pn | 22 22 05.8 | -3.6 |
| **THZ** | **Tophouse** | **4.83** | **212** | PN | Pn | 22 22 12.8 | -3.7 |
| **THZ** | **Tophouse** | **4.83** | **212** | Pn | Pn | 22 22 12.8 | -3.7 |
| **KHZ** | **Kahutara** | **5.17** | **203** | PN | Pn | 22 22 17.0 | -3.5 |
| KHZ | | | | AML | AML | 22 23 15.6 | |
| KHZ | | | | AML | AML | 22 23 16.6 | |
| **KHZ** | **Kahutara** | **5.17** | **203** | Pn | Pn | 22 22 17.0 | -3.5 |
| **OXZ** | **Oxford** | **6.49** | **209** | PN | Pn | 22 22 32.7 | -4.9 |
| **OXZ** | **Oxford** | **6.49** | **209** | Pn | Pn | 22 22 32.7 | -4.9 |
| **MQZ** | **McQueen's Vall** | **6.61** | **204** | ⇑PN | Pn | 22 22 34.0 | -5.1 |
| **MQZ** | **McQueen's Vall** | **6.61** | **204** | Pn | Pn | 22 22 34.0 | -5.1 |
| **FOZ** | **Fox Glacier** | **7.72** | **219** | PN | Pn | 22 22 48.8 | -4.7 |
| **FOZ** | **Fox Glacier** | **7.72** | **219** | Pn | Pn | 22 22 48.8 | -4.7 |
| **ODZ** | **Otahua Downs** | **8.48** | **208** | PN | Pn | 22 22 59.1 | -4.3 |
| **ODZ** | **Otahua Downs** | **8.48** | **208** | Pn | Pn | 22 22 59.1 | -4.3 |

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**IDC 06 22:39:00.3**±5.9**, 39°43N**×**110°75E, h0**km**, mb3.3**/3**, mb1 3.5**/4**, mb1mx3.2**/40**, mbtmp3.4**/4**, ML2.4**/1**, MS3.6**/1**, Ms1 3.6**/1**, ms1mx2.6**/19**, Error ellipse: s-maj=124.7km s-min=29.4km az=85.0, Western Nei Mongol**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **8.97** | **341** | Pn | Pn | 22 41 11.8 | +0.5 |
| | 0.0nm,0.3s,baz=153,slow=14,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **21.96** | **299** | P | P | 22 43 55.6 | +0.1 |
| | 1.1nm,0.7s,baz=100,slow=12,SNR=9.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.79** | **318** | P | P | 22 44 03.8 | -0.5 |
| | 0.5nm,0.6s,baz=124,slow=7.8,SNR=1.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.27** | **209** | P | P | 22 44 09.6 | 0.0 |
| | 0.8nm,0.7s,baz=11,slow=9.7,SNR=5.5 | | | | | | |
| **KAPI** | **Kappang** | **45.00** | **167** | LR | LR | 23 05 34.6 | |
| | comp=Z,63nm,18.6s,baz=139,slow=35 | | | | | | |

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*ISK **06** 22:49:44.7, 37°46N×26°53E, h24km, MD2.4*
*ISCJB **06** 22:49:46.3±1.0, 37°55N±0°04×26°67E±0°07, h7km±9km, Error ellipse: s-maj=11.6km s-min=4.5km az=146.0*
*CSEM **06** 22:49:46.1±0.6, 37°55N×26°63E, h15km, MD2.7, Error ellipse: s-maj=15.2km s-min=6.5km az=53.0*
*DDA **06** 22:49:47.9, 37°60N×26°82E, h7km, Md2.7*
**ISC 06 22:49:45.7**±1.4**, 37°56N**±0°04×**26°63E**±0°05**, h5**km±13km**, n17, σ0s44**/28**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GCAM** | **G?zelcaml?** | **0.50** | **74** | *i* P | **Pg** | **22 49 55.3** | **+0.1** |
| GCAM | | | | *i* S | **Sg** | **22 50 01.3** | **-0.4** |
| **GCAM** | **G?zelcaml?** | **0.50** | **74** | P | **Pg** | **22 49 55.3** | **+0.1** |
| GCAM | | | | S | **Sg** | **22 50 01.3** | **-0.4** |
| **ZEY** | **˜zmir** | **0.68** | **352** | P | **Pn** | **22 50 01.0** | **-1.0** |
| ZEY | | | | S | **Sb** | **22 50 10.9** | **+1.1** |
| **BODT** | **Bodrum** | **0.74** | **132** | *e*PG | **Pg** | **22 49 59.7** | **-0.1** |
| BODT | | | | *e*SG | **Sb** | **22 50 10.8** | **-0.5** |
| **BODT** | **Bodrum** | **0.74** | **132** | *e*Pg | **Pg** | **22 49 59.7** | **-0.1** |
| BODT | | | | *e*Sg | **Sb** | **22 50 10.8** | **-0.5** |
| **URLA** | **Izmir** | **0.80** | **358** | *i* P | **Pn** | **22 50 03.4** | **-0.2** |
| URLA | | | | *i* S | **Sb** | **22 50 13.2** | **+0.1** |
| **URLA** | **Izmir** | **0.80** | **358** | P | **Pn** | **22 50 03.4** | **-0.2** |
| URLA | | | | S | **Sb** | **22 50 13.2** | **+0.1** |
| **BDRM** | **Kayabasi** | **0.82** | **127** | *i* P | **Pb** | **22 50 02.6** | **+0.3** |
| BDRM | | | | *i* S | **Sg** | **22 50 12.2** | **+0.3** |
| **BDRM** | **Kayabasi** | **0.82** | **127** | P | **Pb** | **22 50 02.6** | **+0.3** |
| BDRM | | | | S | **Sg** | **22 50 12.2** | **+0.3** |
| **CHOS** | **Chios island** | **0.94** | **331** | *e*PG | **Pg** | **22 50 03.7** | **0.0** |
| **CHOS** | **Chios island** | **0.94** | **331** | *e*Pg | **Pg** | **22 50 03.7** | **0.0** |
| **IZM** | **Izmir** | **0.97** | **31** | *e*PN | **Pb** | **22 50 05.2** | **+0.2** |
| **IZM** | **Izmir** | **0.97** | **31** | *e*Pn | **Pb** | **22 50 05.2** | **+0.2** |
| **AYDN** | **Tasoluk** | **1.00** | **84** | *i* P | **Pn** | **22 50 06.8** | **+0.5** |
| AYDN | | | | *i* S | **Sb** | **22 50 18.3** | **-0.6** |
| **AYDN** | **Tasoluk** | **1.00** | **84** | P | **Pn** | **22 50 06.8** | **+0.5** |
| AYDN | | | | S | **Sb** | **22 50 18.3** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.07** | **69** | *e*PN | **Pg** | **22 50 06.3** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.07** | **69** | *e*Pn | **Pg** | **22 50 06.3** | **+0.1** |

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*ISCJB **06** 23:39:50.7±0.3, 60°75N±0°06×177°86W±0°06, h10km, mb4.2/25, MS3.9/21, Error ellipse: s-maj=8.7km s-min=3.9km az=165.4*
*IDC **06** 23:39:50.4±0.9, 60°59N×177°78W, h0km, mb4.0/18, mb1 4.2/19, mb1mx3.9/61, mbtmp4.1/19, ML3.6/1, MS3.9/23, Ms1 3.9/23, ms1mx3.7/38, Error ellipse: s-maj=27.4km s-min=13.5km az=1.0*
*NEIC **06** 23:39:53.1±0.4, 60°82N×177°83W, h10km, mb4.5/13, Error ellipse: s-maj=11.0km s-min=6.0km az=169.0*
**ISC 06 23:39:52.4**±0.5**, 60°75N**±0°08×**177°80W**±0°06**, h10**km**, n88, σ1s42**/75**, mb4.3**/25**, MS4.0**/21**, Bering Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GAMB** | **Gambell** | **4.16** | **41** | *e*Pn | **Pn** | **23 40 54.5** | **-1.4** |
| GAMB | | | | *e*Sn | **Sn** | **23 41 45.3** | **+0.8** |
| **SPIA** | **Saint Paul Isl** | **5.30** | **129** | *e*Pn | Pn | 23 41 04.1 | -7.4 |
| **TNA** | **Tin City** | **6.58** | **39** | *e*Pn | **Pn** | **23 41 27.0** | **-2.0** |
| **ATKA** | **Atka Island** | **8.80** | **165** | *e*Pn | Pn | 23 41 48.9 | -11 |
| **AMKA** | **Amchitka** | **9.53** | **191** | *e*Pn | **Pn** | **23 42 11.7** | **+2.2** |
| **CHGN** | **Chignik** | **11.05** | **105** | *e*Pn | **Pn** | **23 42 27.6** | **-2.7** |
| **CAST** | **Castle Rocks** | **12.31** | **66** | *e*Pn | **Pn** | **23 42 46.8** | **-0.7** |
| **BPAW** | **Bear Paw Mtn.** | **12.82** | **63** | *e*Pn | **Pn** | **23 42 53.3** | **-1.1** |
| **KDAK** | **Kodiak Island** | **13.20** | **92** | Pn | **Pn** | **23 43 02.3** | **+2.7** |
| | 0.2nm,0.3s,baz=329,slow=5.9,SNR=3.2 | | | | | | |
| KDAK | | | | LR | LR | 23 48 34.6 | |
| | comp=Z,1µm,18.0s,baz=294,slow=40 | | | | | | |
| **COLD** | **Coldfoot** | **13.64** | **50** | *e*Pn | **Pn** | **23 43 07.8** | **+2.2** |
| **RND** | **Reindeer** | **13.76** | **66** | *e*Pn | **Pn** | **23 43 10.1** | **+2.8** |
| **MDM** | **Murphy Dome** | **14.06** | **60** | *e*Pn | **Pn** | **23 43 10.9** | **-0.4** |
| **WRH** | **Wood River Hil** | **14.09** | **62** | *e*Pn | **Pn** | **23 43 13.6** | **+1.8** |
| **SEY** | **Seymchan** | **14.18** | **292** | Pn | **Pn** | **23 43 15.2** | **+2.3** |
| | 0.1nm,0.3s,baz=110,slow=8.5,SNR=5.5 | | | | | | |
| **COLA** | **College** | **14.21** | **60** | *e*Pn | **Pn** | **23 43 14.6** | **+1.2** |
| **CCB** | **Clear Creek Bu** | **14.22** | **61** | *e*Pn | **Pn** | **23 43 15.7** | **+2.2** |
| **HDA** | **Harding Lake** | **14.59** | **62** | *e*Pn | **Pn** | **23 43 20.1** | **+1.6** |
| **IL1** | **Eielson Array** | **14.62** | **61** | *e*Pn | **Pn** | **23 43 21.9** | **+2.9** |
| **ILAR** | **Eielson Array** | **14.62** | **61** | Pn | **Pn** | **23 43 19.4** | **+0.5** |
| | 0.2nm,0.3s,baz=254,slow=10,SNR=19 | | | | | | |
| **ILB** | **Eielson Array** | **14.62** | **61** | *e*Pn | **Pn** | **23 43 19.4** | **+0.5** |
| **PET** | **Petropavlovsk** | **14.95** | **249** | *e*Pn | **Pn** | **23 43 21.1** | **-2.3** |
| **PEA2** | **Petropavlovsk-** | **15.33** | **251** | *e*Pn | **Pn** | **23 43 28.8** | **+0.3** |
| **PEA0** | **Petropavlovsk-** | **15.33** | **251** | *e*Pn | **P** | **23 43 33.0** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **15.33** | **251** | Pn | **Pn** | **23 43 28.8** | **+0.2** |
| | 1.2nm,0.3s,baz=80,slow=16,SNR=14 | | | | | | |
| PETK | | | | LR | LR | 23 49 46.1 | |
| | comp=Z,89nm,19.2s,baz=56,slow=39 | | | | | | |
| **KLU** | **Klutina** | **15.34** | **73** | *e*Pn | **Pn** | **23 43 27.8** | **-0.9** |
| | 159nm,2.7s | | | | | | |
| **DOT** | **Dot Lake** | **15.89** | **65** | *e*Pn | **Pn** | **23 43 32.2** | **-3.6** |
| | 24nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **17.07** | **61** | *e*Pn | **Pn** | **23 43 51.0** | **+0.2** |
| | 52nm,2.0s | | | | | | |
| **DAWY** | **Dawson** | **17.90** | **63** | *e*Pn | **Pn** | **23 43 59.0** | **-2.1** |
| | 11nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **20.05** | **49** | P | **P** | **23 44 24.7** | **-0.5** |
| | 7.6nm,0.6s,baz=289,slow=10,SNR=13 | | | | | | |
| **INK** | **Inuvik** | **20.05** | **49** | *e*P | **P** | **23 44 25.2** | **+0.1** |
| **DLBC** | **Dease Lake** | **23.87** | **74** | LR | LR | 23 55 08.0 | |
| | comp=Z,518nm,18.9s,baz=308,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **24.62** | **296** | P | **P** | **23 45 11.9** | **-0.4** |
| | 5.6nm,0.4s,baz=250,slow=23,SNR=1.4 | | | | | | |
| YAK | | | | LR | LR | 23 56 07.2 | |
| | comp=Z,515nm,18.3s,baz=81,slow=40 | | | | | | |
| **BBB** | **Bella Bella** | **28.11** | **85** | LR | LR | 23 56 40.9 | |
| | comp=Z,403nm,18.3s,baz=296,slow=36 | | | | | | |
| **YKA** | **Yellowknife Ar** | **29.03** | **59** | P | **P** | **23 45 50.7** | **-1.4** |
| | 0.7nm,0.6s,baz=294,slow=8.7,SNR=2.9 | | | | | | |
| **YKB5** | **Yellowknife Ar** | **29.03** | **59** | *e*P | **P** | **23 45 50.7** | **-1.4** |
| **USRK** | **Ussuriysk Ar.** | **33.77** | **264** | LR | LR | 23 59 39.2 | |
| | comp=Z,118nm,21.7s,baz=43,slow=35 | | | | | | |
| **MAJO** | **Matsushiro** | **36.78** | **249** | *e*P | **P** | **23 46 58.0** | **-1.9** |
| | 49nm,2.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.78** | **249** | P | **P** | **23 46 58.0** | **-1.9** |
| | 2.5nm,0.9s,baz=21,slow=8.3,SNR=4.9 | | | | | | |
| MJAR | | | | LR | LR | 00 02 20.9 | |
| | comp=Z,55nm,19.5s,baz=35,slow=37 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **38.00** | **94** | P | **P** | **23 47 11.1** | **+0.8** |
| | 2.5nm,0.9s,baz=263,slow=4.9,SNR=5.5 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **38.00** | **94** | *e*P | **P** | **23 47 11.1** | **+0.8** |
| | 105nm,2.5s | | | | | | |
| **WVOR** | **Wild Horse Val** | **39.47** | **90** | *e*P | **P** | **23 47 22.4** | **-0.2** |
| | 22nm,1.9s | | | | | | |
| **KSRS** | **Korea Array** | **40.91** | **261** | P | **P** | **23 47 32.6** | **-1.8** |
| | 2.9nm,0.9s,baz=39,slow=8.6,SNR=8.8 | | | | | | |
| KSRS | | | | LR | LR | 00 02 59.3 | |
| | comp=Z,43nm,21.8s,baz=55,slow=34 | | | | | | |
| **KS15** | **Wonju Array Si** | **40.94** | **261** | *e*P | **P** | **23 47 32.6** | **-2.1** |
| **TLY** | **Talaya** | **42.07** | **294** | LR | LR | 00 06 42.3 | |
| | comp=Z,192nm,18.3s,baz=24,slow=38 | | | | | | |
| **IMW** | **Indian Meadow** | **42.15** | **82** | *e*P | **P** | **23 47 47.2** | **+2.2** |
| | 4.6nm,1.0s | | | | | | |
| **FXWY** | **Fox Creek** | **42.30** | **82** | *e*P | **P** | **23 47 48.1** | **+2.0** |
| | 9.3nm,1.5s | | | | | | |
| **LOHW** | **Long Hollow** | **42.52** | **82** | *e*P | **P** | **23 47 50.0** | **+2.1** |
| | 64nm,2.8s | | | | | | |
| **NV01** | **Mina Array Sit** | **42.70** | **94** | *e*P | **P** | **23 47 49.0** | **-0.4** |
| **NVAR** | **Mina Array Bea** | **42.70** | **94** | P | **P** | **23 47 49.0** | **-0.4** |
| | 1.2nm,0.8s,baz=307,slow=6.1,SNR=5.1 | | | | | | |
| NVAR | | | | LR | LR | 00 04 00.3 | |
| | comp=Z,247nm,20.4s,baz=273,slow=34 | | | | | | |
| **JNU** | **Nakatsue** | **43.00** | **254** | LR | LR | 00 04 47.1 | |
| | comp=Z,58nm,18.9s,baz=50,slow=35 | | | | | | |
| **SONA0** | **Songino Array** | **43.54** | **289** | *e*P | **P** | **23 47 56.0** | **0.0** |
| **SONM** | **Songino Array** | **43.54** | **289** | P | **P** | **23 47 56.0** | **0.0** |
| | 0.9nm,0.9s,baz=80,slow=7.9,SNR=3.8 | | | | | | |
| SONM | | | | LR | LR | 00 08 08.4 | |
| | comp=Z,296nm,19.3s,baz=46,slow=39 | | | | | | |
| **BW06** | **Boulder Array** | **43.66** | **82** | *e*P | **P** | **23 47 57.5** | **+0.4** |
| **RCWM** | **Renegade Canyo** | **44.97** | **95** | *e*P | **P** | **23 48 07.0** | **-0.5** |
| **GSC** | **Goldstone** | **45.90** | **95** | *e*P | **P** | **23 48 14.4** | **-0.4** |
| | 8.0nm,1.3s | | | | | | |
| **ZAA1** | **Zalesovo Array** | **48.29** | **308** | *e*P | **P** | **23 48 34.5** | **+1.4** |
| **ZALV** | **Zalesovo Beam** | **48.29** | **308** | P | **P** | **23 48 34.5** | **+1.4** |
| | 0.8nm,0.5s,baz=30,slow=7.2,SNR=3.2 | | | | | | |
| ZALV | | | | LR | LR | 00 10 48.8 | |
| | comp=Z,137nm,18.2s,baz=70,slow=38 | | | | | | |
| **IBP** | **Imperial Bould** | **48.38** | **96** | *e*P | **P** | **23 48 36.3** | **+2.1** |
| **KURK** | **Kurchatov** | **53.19** | **309** | *e*P | **P** | **23 49 11.2** | **+1.0** |
| | 19nm,1.2s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **53.30** | **309** | P | **P** | **23 49 12.1** | **+1.2** |
| | 4.1nm,0.9s,baz=41,slow=7.8,SNR=35 | | | | | | |
| **BVAR** | **Borovoye Array** | **54.27** | **316** | P | **P** | **23 49 19.4** | **+1.4** |
| | 1.7nm,0.7s,baz=44,slow=6.6,SNR=8.9 | | | | | | |
| **BRVK** | **Borovoye** | **54.27** | **316** | *e*P | P | 23 49 22.0 | +4.0 |
| | 3.3nm,0.8s | | | | | | |
| **MK32** | **Makanchi Array** | **54.91** | **304** | *e*P | **P** | **23 49 22.8** | **0.0** |
| **MKAR** | **Makanchi Array** | **54.91** | **304** | P | **P** | **23 49 22.8** | **0.0** |
| | 0.6nm,0.4s,baz=27,slow=5.6,SNR=8.3 | | | | | | |
| MKAR | | | | LR | LR | 00 15 21.4 | |
| | comp=Z,126nm,20.1s,baz=24,slow=39 | | | | | | |
| **FIA0** | **FINESS Array S** | **56.76** | **347** | *e*P | **P** | **23 49 36.5** | **+0.8** |
| **FINES** | **FINESS Array B** | **56.76** | **347** | P | **P** | **23 49 36.5** | **+0.8** |
| | 2.6nm,0.8s,baz=244,slow=31,SNR=3.9 | | | | | | |
| FINES | | | | LR | LR | 00 16 00.9 | |
| | comp=Z,73nm,19.1s,baz=2.5,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **57.19** | **88** | P | **P** | **23 49 39.4** | **0.0** |
| | 0.8nm,0.7s,baz=322,slow=7.9,SNR=4.6 | | | | | | |
| TXAR | | | | LR | LR | 00 14 36.3 | |
| | comp=Z,167nm,18.1s,baz=0.0,slow=36 | | | | | | |
| **AKTO** | **Aktyubinsk** | **60.45** | **323** | P | **P** | **23 50 02.3** | **+0.7** |
| | 1.5nm,0.6s,baz=18,slow=7.4,SNR=7.5 | | | | | | |
| **AAK** | **Ala-Archa** | **61.47** | **307** | P | **P** | **23 50 10.3** | **+1.4** |
| | 1.6nm,0.7s,baz=198,slow=8.1,SNR=5.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **66.79** | **342** | LR | LR | 00 23 29.9 | |
| | comp=Z,91nm,19.7s,baz=335,slow=39 | | | | | | |
| **TAPN** | **Taplejung** | **68.66** | **288** | *e*P | **P** | **23 50 55.0** | **-1.0** |
| | 12nm,0.9s | | | | | | |
| **GUN** | **Gumba** | **69.03** | **290** | *e*P | **P** | **23 50 58.0** | **-0.4** |
| | 29nm,0.8s | | | | | | |
| **KKN** | **Kakani** | **69.42** | **290** | *e*P | **P** | **23 51 00.1** | **-0.5** |
| | 12nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **69.52** | **288** | *e*P | **P** | **23 51 00.4** | **-0.9** |
| | 22nm,0.9s | | | | | | |
| **GKN** | **Gorkha** | **69.53** | **291** | *e*P | **P** | **23 51 00.8** | **-0.4** |
| | 16nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **69.54** | **290** | *e*P | **P** | **23 51 01.0** | **-0.5** |
| | 13nm,0.8s | | | | | | |
| **PKIN** | **Phulchoki** | **69.54** | **290** | *e*P | **P** | **23 51 00.8** | **-0.6** |
| | 8.1nm,0.6s | | | | | | |
| **DANN** | **Dangsing** | **69.64** | **292** | *e*P | **P** | **23 51 02.1** | **+0.1** |
| | 7.6nm,0.9s | | | | | | |
| **DMN** | **Daman** | **69.65** | **290** | *e*P | **P** | **23 51 01.6** | **-0.5** |
| | 21nm,0.9s | | | | | | |
| **KOLN** | **Koldanda** | **70.20** | **291** | *e*P | **P** | **23 51 04.5** | **-0.9** |
| | 12nm,0.8s | | | | | | |
| **GEC2** | **GERESS Array S** | **70.36** | **352** | *e*P | **P** | **23 51 05.6** | **-0.4** |
| **GERES** | **GERESS Array B** | **70.36** | **352** | P | **P** | **23 51 05.6** | **-0.4** |
| | 0.6nm,0.6s,baz=15,slow=5.7,SNR=6.0 | | | | | | |
| GERES | | | | LR | LR | 00 23 19.5 | |
| | comp=Z,58nm,18.0s,baz=13,slow=37 | | | | | | |
| **KBZ** | **Khabaz** | **70.72** | **330** | LR | LR | 00 24 40.0 | |
| | comp=Z,87nm,19.9s,baz=6.5,slow=38 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.80** | **273** | LR | LR | 00 23 54.2 | |
| | comp=Z,47nm,21.1s,baz=50,slow=37 | | | | | | |
| **GEYT** | **Alibeck** | **71.60** | **316** | LR | LR | 00 24 59.1 | |
| | comp=Z,126nm,20.0s,baz=50,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.62** | **336** | LR | LR | 00 31 15.9 | |
| | comp=Z,60nm,19.2s,baz=18,slow=40 | | | | | | |
| **ESDC** | **Sonseca Array** | **79.80** | **5** | P | **P** | **23 52 00.7** | **+0.2** |
| | 0.8nm,0.6s,baz=353,slow=5.3,SNR=8.2 | | | | | | |
| **KEST** | **Kesra** | **83.68** | **354** | LR | LR | 00 32 57.5 | |
| | comp=Z,46nm,18.0s,baz=224,slow=38 | | | | | | |

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**DJA 06 23:46:45.5**±0.6**, 0°S**±4°×**12°3E**±°**, h134**km±7km**, M3.8**/9**, MLv3.8**/9**, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GTOI** | **Gorontalo** | **0.84** | **332** | P | Pn | 23 47 10.8 | +3.4 |
| GTOI | | | | S | Sn | 23 47 28.3 | +4.3 |
| **KMSI** | **Cibinong** | **0.89** | **40** | P | Pn | 23 47 07.9 | +0.1 |
| **LUWI** | **Luwuk** | **1.12** | **215** | P | Pn | 23 47 11.7 | +1.7 |
| LUWI | | | | S | Sn | 23 47 30.0 | +1.4 |
| **MRSI** | **Marisa** | **1.58** | **292** | P | Pn | 23 47 14.6 | -0.2 |
| MRSI | | | | S | Sn | 23 47 36.7 | -0.4 |
| **APSI** | **Ampana** | **1.93** | **246** | P | Pn | 23 47 20.8 | +1.9 |
| **SANI** | **Sanana** | **3.22** | **127** | P | Pn | 23 47 37.2 | +2.1 |
| SANI | | | | S | Sn | 23 48 12.6 | -0.8 |
| **MPSI** | **Mapaga** | **3.54** | **277** | P | Pn | 23 47 38.8 | -0.5 |
| **PCI** | **Palu** | **3.66** | **258** | P | Pn | 23 47 40.2 | -0.7 |
| **LBMI** | **Labuha** | **4.12** | **97** | P | Pn | 23 47 47.1 | +0.1 |

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*IDC **06** 23:47:58.0±1.2, 33°49N×57°19E, h0km, mb3.9/9, mb1 4.0/13, mb1mx3.7/51, mbtmp3.9/13, ML3.6/4, MS3.2/4, Ms1 3.2/4, ms1mx2.8/36, Error ellipse: s-maj=26.0km s-min=16.5km az=164.0*
*THR **06** 23:47:58.2±0.5, 33°47N×57°24E, h15km±2km, ML4.0*
*CSEM **06** 23:47:58.5±0.1, 33°43N×57°23E, h2km, ML4.0, Error ellipse: s-maj=3.5km s-min=3.1km az=1.0*
*NEIC **06** 23:47:59.4, 33°39N×57°21E, h2km, MN4.2(TEH), After TEH.*
*ISCJB **06** 23:47:59.2±0.2, 33°45N±0°02×57°16E±0°03, h16km, mb3.8/9, MS3.2/1, Error ellipse: s-maj=3.5km s-min=3.3km az=5.0*
*TEH **06** 23:47:59.4, 33°39N×57°21E, h2km, ML4.2*
**ISC 06 23:47:59.6**±0.6**, 33°45N**±0°03×**57°24E**±0°03**, h16**km**, n132, σ1s07**/142**, mb3.9**/9**, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TABS** | **Tabas** | **0.23** | **334** | *e*Pg | **Pg** | **23 48 03.0** | **-1.8** |
| TABS | | | | *e*Sg | **Sg** | **23 48 06.9** | **-1.5** |
| TABS | | | | AML | AML | 23 48 07.6 | |
| | comp=N,24µm,0.4s | | | | | | |
| TABS | | | | AML | AML | 23 48 09.2 | |
| | comp=E,11µm,0.6s | | | | | | |
| **TABS** | **Tabas** | **0.23** | **334** | *e*Pg | **Pg** | **23 48 03.0** | **-1.8** |
| TABS | | | | *e*Sg | **Sg** | **23 48 06.9** | **-1.5** |
| **ITEG** | **Tejag** | **1.38** | **113** | *e*Pg | **Pn** | **23 48 24.2** | **-0.2** |
| ITEG | | | | *e*Sg | **Sg** | **23 48 43.1** | **-1.1** |
| ITEG | | | | *e* | | 23 48 45.4 | |
| | comp=Z,27µm,0.1s | | | | | | |
| **ITEG** | **Tejag** | **1.38** | **113** | Pg | **Pn** | **23 48 24.1** | **-0.3** |
| ITEG | | | | Sg | **Sg** | **23 48 43.1** | **-1.1** |
| **ITEG** | **Tejag** | **1.38** | **113** | *e*Pg | **Pn** | **23 48 24.2** | **-0.2** |
| ITEG | | | | Sg | **Sg** | **23 48 43.1** | **-1.1** |
| **IKOO** | **Kooshah** | **1.80** | **124** | *e*Pn | **Pn** | **23 48 30.5** | **+0.2** |
| IKOO | | | | *e*Sg | **Sb** | **23 48 55.0** | **+0.2** |
| IKOO | | | | *e* | | 23 48 58.8 | |
| | comp=Z,21µm,0.1s | | | | | | |
| **IKOO** | **Kooshah** | **1.80** | **124** | Pn | **Pn** | **23 48 30.4** | **+0.2** |
| IKOO | | | | Sg | **Sb** | **23 48 54.9** | **+0.2** |
| **IKOO** | **Kooshah** | **1.80** | **124** | *e*Pn | **Pn** | **23 48 30.5** | **+0.2** |
| IKOO | | | | *e*Sg | **Sb** | **23 48 55.0** | **+0.2** |
| **IMON** | **Monand** | **2.05** | **96** | *e*Pn | **Pn** | **23 48 34.5** | **+0.8** |
| IMON | | | | *e* | | 23 49 05.9 | |
| | comp=Z,17µm,0.2s | | | | | | |
| **IMON** | **Monand** | **2.05** | **96** | Pn | **Pn** | **23 48 34.4** | **+0.8** |
| **IMON** | **Monand** | **2.05** | **96** | Pn | **Pn** | **23 48 34.4** | **+0.8** |
| **IDAH** | **Dahanechah** | **2.32** | **107** | *e*Pn | **Pn** | **23 48 38.0** | **+0.6** |
| IDAH | | | | *e* | | 23 49 18.3 | |
| | comp=Z,4µm,0.3s | | | | | | |
| **IDAH** | **Dahanechah** | **2.32** | **107** | Pn | **Pn** | **23 48 37.9** | **+0.6** |
| **IDAH** | **Dahanechah** | **2.32** | **107** | Pn | **Pn** | **23 48 37.9** | **+0.6** |
| **SHRT** | **Shahrakht** | **2.56** | **85** | *e*Pn | **Pn** | **23 48 41.2** | **+0.7** |
| **SHRT** | **Shahrakht** | **2.56** | **85** | *e*Pn | **Pn** | **23 48 41.2** | **+0.7** |
| **ICHK** | **Chekchek** | **2.67** | **244** | *e*Pn | **Pn** | **23 48 42.0** | **-0.1** |
| ICHK | | | | *e*Sg | **Sb** | **23 49 20.7** | **+0.9** |
| ICHK | | | | *e* | | 23 49 31.5 | |
| | comp=Z,34µm,0.2s | | | | | | |
| **ICHK** | **Chekchek** | **2.67** | **244** | Pn | **Pn** | **23 48 42.0** | **-0.1** |
| ICHK | | | | Sg | **Sb** | **23 49 20.6** | **+0.9** |
| **ICHK** | **Chekchek** | **2.67** | **244** | *e*Pn | **Pn** | **23 48 42.0** | **-0.1** |
| ICHK | | | | Sg | **Sb** | **23 49 20.6** | **+0.9** |
| **SHRO** | **Shahrood** | **2.73** | **339** | *e*Pn | **Pn** | **23 48 43.4** | **+0.5** |
| SHRO | | | | AML | AML | 23 49 35.5 | |
| | comp=E,397nm,0.5s | | | | | | |
| SHRO | | | | AML | AML | 23 49 38.1 | |
| | comp=N,346nm,0.4s | | | | | | |
| **SHRO** | **Shahrood** | **2.73** | **339** | *e*Pn | **Pn** | **23 48 43.4** | **+0.5** |
| **IMEH** | **Mehriz** | **3.02** | **228** | *e*Pn | **Pn** | **23 48 47.1** | **+0.1** |
| IMEH | | | | *e* | | 23 49 40.1 | |
| | comp=Z,11µm,0.2s | | | | | | |
| **IMEH** | **Mehriz** | **3.02** | **228** | Pn | **Pn** | **23 48 47.1** | **+0.1** |
| **IMEH** | **Mehriz** | **3.02** | **228** | *e*Pn | **Pn** | **23 48 47.1** | **+0.1** |
| **KHGB** | **Koh Gabri** | **3.13** | **192** | *e*Pn | **Pn** | **23 48 49.3** | **+0.8** |
| **KHGB** | **Koh Gabri** | **3.13** | **192** | *e*Pn | **Pn** | **23 48 49.3** | **+0.8** |
| **IMOG** | **Moghan** | **3.17** | **32** | *e*Pn | **Pn** | **23 48 50.9** | **+1.7** |
| IMOG | | | | *e* | | 23 49 47.9 | |
| | comp=Z,2µm,0.5s | | | | | | |
| **IMOG** | **Moghan** | **3.17** | **32** | Pn | **Pn** | **23 48 50.8** | **+1.7** |
| **IMOG** | **Moghan** | **3.17** | **32** | *e*Pn | **Pn** | **23 48 50.8** | **+1.7** |
| **IPAY** | **Payeh** | **3.33** | **25** | *e*Pn | **Pn** | **23 48 53.0** | **+1.8** |
| IPAY | | | | *e* | | 23 49 07.2 | |
| | comp=Z,3µm,0.3s | | | | | | |
| **IPAY** | **Payeh** | **3.33** | **25** | Pn | **Pn** | **23 48 53.0** | **+1.8** |
| **IPAY** | **Payeh** | **3.33** | **25** | *e*Pn | **Pn** | **23 48 53.0** | **+1.8** |
| **ISAD** | **Sadrabad** | **3.36** | **244** | *e*Pn | **Pn** | **23 48 51.6** | **-0.2** |
| ISAD | | | | *e* | | 23 49 54.5 | |
| | comp=Z,11µm,0.1s | | | | | | |
| **ISAD** | **Sadrabad** | **3.36** | **244** | Pn | **Pn** | **23 48 51.5** | **-0.2** |
| **ISAD** | **Sadrabad** | **3.36** | **244** | *e*Pn | **Pn** | **23 48 51.6** | **-0.2** |
| **ISRO** | **Mashad** | **3.39** | **32** | *e*Pn | **Pn** | **23 48 54.0** | **+2.0** |
| **ISRO** | **Mashad** | **3.39** | **32** | *e*Pn | **Pn** | **23 48 54.0** | **+2.0** |
| **TVBK** | **TV Kerman** | **3.47** | **187** | *e*Pn | **Pn** | **23 48 54.3** | **+1.0** |
| **TVBK** | **TV Kerman** | **3.47** | **187** | *e*Pn | **Pn** | **23 48 54.3** | **+1.0** |
| **KRBR** | **Kerman** | **3.48** | **187** | *e*Pn | **Pn** | **23 48 54.3** | **+1.0** |
| KRBR | | | | AML | AML | 23 49 57.7 | |
| | comp=N,874nm,0.4s | | | | | | |
| KRBR | | | | AML | AML | 23 49 58.6 | |
| | comp=E,779nm,0.5s | | | | | | |
| **KRBR** | **Kerman** | **3.48** | **187** | *e*P | **Pn** | **23 48 54.4** | **+1.0** |
| **IKRD** | **Kardeh** | **3.48** | **17** | *e*Pn | **Pb** | **23 49 00.2** | **-0.8** |
| IKRD | | | | *e* | | 23 49 16.2 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **IKRD** | **Kardeh** | **3.48** | **17** | Pn | **Pb** | **23 49 00.2** | **-0.8** |
| **CHMN** | **Cheshme madani** | **3.58** | **176** | *e*Pn | **Pn** | **23 48 55.1** | **+0.3** |
| **CHMN** | **Cheshme madani** | **3.58** | **176** | *e*Pn | **Pn** | **23 48 55.1** | **+0.3** |
| **IMYA** | **Miami** | **3.73** | **38** | *e*Pn | **Pn** | **23 48 58.9** | **+2.3** |
| IMYA | | | | *e* | | 23 50 07.9 | |
| | comp=Z,3µm,0.4s | | | | | | |
| **IMYA** | **Miami** | **3.73** | **38** | Pn | **Pn** | **23 48 58.9** | **+2.3** |
| **IMYA** | **Miami** | **3.73** | **38** | *e*Pn | **Pn** | **23 48 58.9** | **+2.3** |
| **IKIA** | **Kiasar** | **4.02** | **314** | *e*Pn | **Pn** | **23 49 01.5** | **+0.8** |
| IKIA | | | | *e* | | 23 50 16.5 | |
| | comp=Z,2µm,0.2s | | | | | | |
| **IKIA** | **Kiasar** | **4.02** | **314** | Pn | **Pn** | **23 49 01.5** | **+0.8** |
| **IKIA** | **Kiasar** | **4.02** | **314** | *e*Pn | **Pn** | **23 49 01.5** | **+0.8** |
| **IGLO** | **Ghaloghah** | **4.14** | **318** | *e*Pn | **Pn** | **23 49 04.5** | **+2.1** |
| IGLO | | | | *e* | | 23 50 21.8 | |
| | comp=Z,6µm,0.3s | | | | | | |
| **IGLO** | **Ghaloghah** | **4.14** | **318** | Pn | **Pn** | **23 49 04.4** | **+2.1** |
| **IZEF** | **Zefreh** | **4.15** | **264** | *e*Pn | **Pn** | **23 49 03.2** | **+0.6** |
| IZEF | | | | *e* | | 23 50 19.9 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **IZEF** | **Zefreh** | **4.15** | **264** | Pn | **Pn** | **23 49 03.2** | **+0.6** |
| **IZEF** | **Zefreh** | **4.15** | **264** | *e*Pn | **Pn** | **23 49 03.2** | **+0.6** |
| **IFIR** | **Firoozkooh** | **4.30** | **302** | *e*Pn | **Pn** | **23 49 04.8** | **+0.1** |
| IFIR | | | | *e* | | 23 49 55.3 | |
| | comp=Z,2µm,0.1s | | | | | | |
| **IFIR** | **Firoozkooh** | **4.30** | **302** | Pn | **Pn** | **23 49 04.7** | **+0.1** |
| **IFIR** | **Firoozkooh** | **4.30** | **302** | *e*Pn | **Pn** | **23 49 04.8** | **+0.1** |
| **IRAM** | **Ramesheh** | **4.41** | **250** | *e*Pn | **Pn** | **23 49 06.1** | **0.0** |
| IRAM | | | | *e* | | 23 50 25.4 | |
| | comp=Z,2µm,0.2s | | | | | | |
| **IRAM** | **Ramesheh** | **4.41** | **250** | Pn | **Pn** | **23 49 06.1** | **0.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **IRAM** | **Ramesheh** | **4.41** | **250** | *e*Pn | **Pn** | **23 49 06.1** | **0.0** |
| **IGAR** | **Gharneh** | **4.49** | **258** | *e*Pn | **Pn** | **23 49 07.3** | **+0.1** |
| IGAR | | | | *e* | | 23 50 24.7 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **IALA** | **Alasht** | **4.50** | **307** | *e*Pn | **Pn** | **23 49 08.4** | **+1.1** |
| IALA | | | | *e* | | 23 50 34.0 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **IALA** | **Alasht** | **4.50** | **307** | Pn | **Pn** | **23 49 08.3** | **+1.0** |
| **IALA** | **Alasht** | **4.50** | **307** | Pn | **Pn** | **23 49 08.3** | **+1.0** |
| **GEYT** | **Alibeck** | **4.53** | **9** | Pn | **Pn** | **23 49 09.1** | **+1.5** |
| | comp=Z,7.1nm,0.3s,baz=191,slow=14,SNR=109 | | | | | | |
| GEYT | | | | Sn | **Sn** | **23 50 03.1** | **+3.2** |
| | comp=Z,4.1nm,0.3s,baz=220,slow=23,SNR=3.6 | | | | | | |
| GEYT | | | | LR | LR | 23 51 27.3 | |
| | comp=Z,193nm,21.6s,baz=205,slow=46 | | | | | | |
| **IKLH** | **Kolahrood** | **4.74** | **270** | *e*Pn | **Pn** | **23 49 11.4** | **+0.7** |
| IKLH | | | | *e* | | 23 50 32.7 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **IKLH** | **Kolahrood** | **4.74** | **270** | Pn | **Pn** | **23 49 11.3** | **+0.7** |
| **IKLH** | **Kolahrood** | **4.74** | **270** | Pn | **Pn** | **23 49 11.3** | **+0.7** |
| **IDMV** | **Damavand** | **4.80** | **298** | *e*Pn | **Pn** | **23 49 11.9** | **+0.5** |
| IDMV | | | | *e* | | 23 50 50.1 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IDMV** | **Damavand** | **4.80** | **298** | Pn | **Pn** | **23 49 11.9** | **+0.5** |
| **IDMV** | **Damavand** | **4.80** | **298** | *e*Pn | **Pn** | **23 49 11.9** | **+0.5** |
| **QAM** | **Ghamsar** | **4.85** | **275** | *e*Pn | **Pn** | **23 49 12.1** | **0.0** |
| QAM | | | | *e* | | 23 50 48.1 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **DAMV** | **Damavand** | **4.86** | **298** | *e*P | **Pn** | **23 49 13.1** | **+0.7** |
| **DAMV** | **Damavand** | **4.86** | **298** | *e*P | **Pn** | **23 49 13.1** | **+0.7** |
| **IPRN** | **Peran** | **4.90** | **306** | *e*Pn | **Pn** | **23 49 14.2** | **+1.5** |
| IPRN | | | | *e* | | 23 50 48.2 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **IPRN** | **Peran** | **4.90** | **306** | Pn | **Pn** | **23 49 14.2** | **+1.5** |
| **GHVR** | **GHOM** | **5.05** | **283** | *e*P | **Pn** | **23 49 16.1** | **+1.4** |
| **GHVR** | **GHOM** | **5.05** | **283** | *e*P | **Pn** | **23 49 16.1** | **+1.4** |
| **IPAR** | **Pars** | **5.07** | **226** | *e*Pn | **Pn** | **23 49 17.2** | **+1.9** |
| IPAR | | | | *e* | | 23 49 47.4 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **IPAR** | **Pars** | **5.07** | **226** | Pn | **Pn** | **23 49 17.1** | **+1.9** |
| **IPAR** | **Pars** | **5.07** | **226** | Pn | **Pn** | **23 49 17.1** | **+1.9** |
| **ISRV** | **Sarvestan** | **5.37** | **222** | *e*Pn | **Pn** | **23 49 20.0** | **+0.5** |
| ISRV | | | | *e* | | 23 51 14.1 | |
| | comp=Z,2μm,0.6s | | | | | | |
| **ISRV** | **Sarvestan** | **5.37** | **222** | Pn | **Pn** | **23 49 19.9** | **+0.5** |
| **ISRV** | **Sarvestan** | **5.37** | **222** | Pn | **Pn** | **23 49 19.9** | **+0.5** |
| **IPIR** | **Pirpir** | **5.38** | **264** | *e*Pn | **Pn** | **23 49 20.4** | **+0.8** |
| IPIR | | | | *e* | | 23 50 60.0 | |
| | comp=Z,998nm,0.2s | | | | | | |
| **IPIR** | **Pirpir** | **5.38** | **264** | Pn | **Pn** | **23 49 20.3** | **+0.8** |
| **IPIR** | **Pirpir** | **5.38** | **264** | Pn | **Pn** | **23 49 20.3** | **+0.8** |
| **IR5** | **Iran Long-Peri** | **5.78** | **290** | *e*Pn | **Pn** | **23 49 25.0** | **+0.1** |
| **IR5** | **Iran Long-Peri** | **5.78** | **290** | *e*Pn | **Pn** | **23 49 25.0** | **+0.1** |
| **IMHD** | **Mahdasht** | **5.86** | **294** | *e*Pn | **Pn** | **23 49 26.1** | **+0.2** |
| IMHD | | | | *e* | | 23 51 20.0 | |
| | comp=Z,742nm,0.4s | | | | | | |
| **IMHD** | **Mahdasht** | **5.86** | **294** | Pn | **Pn** | **23 49 26.1** | **+0.2** |
| **IMHD** | **Mahdasht** | **5.86** | **294** | *e*Pn | **Pn** | **23 49 26.1** | **+0.2** |
| **IKAZ** | **Kazeroun** | **5.88** | **233** | *e*Pn | **Pn** | **23 49 26.7** | **+0.3** |
| IKAZ | | | | *e* | | 23 49 53.2 | |
| | comp=Z,786nm,0.2s | | | | | | |
| **IKAZ** | **Kazeroun** | **5.88** | **233** | Pn | **Pn** | **23 49 26.6** | **+0.3** |
| **IKAZ** | **Kazeroun** | **5.88** | **233** | *e*Pn | **Pn** | **23 49 26.7** | **+0.3** |
| **KHMZ** | **Khomeyn** | **6.08** | **275** | *e*P | **Pn** | **23 49 30.0** | **+0.9** |
| **KHMZ** | **Khomeyn** | **6.08** | **275** | *e*P | **Pn** | **23 49 30.0** | **+0.9** |
| **BNDS** | **Bandar-Abbas** | **6.10** | **189** | *e*P | **Pn** | **23 49 30.6** | **+1.3** |
| **BNDS** | **Bandar-Abbas** | **6.10** | **189** | *e*P | **Pn** | **23 49 30.4** | **+1.2** |
| **GHIR** | **Ghir-Karzin** | **6.31** | **217** | *e*P | **Pn** | **23 49 32.9** | **+0.8** |
| **GHIR** | **Ghir-Karzin** | **6.31** | **217** | *e*P | **Pn** | **23 49 33.0** | **+0.8** |
| **IRAZ** | **Razeghan** | **6.35** | **290** | *e*Pn | **Pn** | **23 49 32.9** | **+0.2** |
| IRAZ | | | | *e* | | 23 49 35.0 | |
| | comp=Z,767nm,0.1s | | | | | | |
| **IRAZ** | **Razeghan** | **6.35** | **290** | Pn | **Pn** | **23 49 32.9** | **+0.2** |
| **IRAZ** | **Razeghan** | **6.35** | **290** | *e*Pn | **Pn** | **23 49 32.9** | **+0.2** |
| **IGZV** | **Ghazvin** | **6.47** | **299** | *e*Pn | **Pn** | **23 49 35.8** | **+1.4** |
| IGZV | | | | *e* | | 23 51 55.6 | |
| | comp=Z,671nm,0.4s | | | | | | |
| **IGZV** | **Ghazvin** | **6.47** | **299** | Pn | **Pn** | **23 49 35.8** | **+1.4** |
| **IGZV** | **Ghazvin** | **6.47** | **299** | *e*Pn | **Pn** | **23 49 35.8** | **+1.4** |
| **RAYN** | **Ar Rayn** | **14.28** | **229** | *e*Pn | Pn | 23 51 15.2 | -6.0 |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **15.92** | **6** | *e*Pn | **P** | **23 51 45.3** | **-1.2** |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **15.92** | **6** | *e*Pn | **P** | **23 51 45.3** | **-1.2** |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **EKS2** | **Erkin-Say** | **15.93** | **50** | *e*Pn | **P** | **23 51 45.0** | **-1.7** |
| | comp=Z,4.4nm,0.8s | | | | | | |
| **EKS2** | **Erkin-Say** | **15.93** | **50** | *e*Pn | **P** | **23 51 45.0** | **-1.7** |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **16.37** | **51** | Pn | **Pn** | **23 51 49.3** | **+0.4** |
| | comp=Z,0.3nm,0.3s,baz=188,slow=6.4,SNR=3.1 | | | | | | |
| AAK | | | | LR | LR | 23 58 53.3 | |
| | comp=Z,75nm,19.1s,baz=246,slow=40 | | | | | | |
| **AAK** | **Ala-Archa** | **16.37** | **51** | *e*Pn | **P** | **23 51 51.2** | **-0.5** |
| **AAK** | **Ala-Archa** | **16.37** | **51** | *e*Pn | **P** | **23 51 51.2** | **-0.5** |
| **AKTO** | **Aktyubinsk** | **16.99** | **2** | Pn | **Pn** | **23 51 54.8** | **-1.6** |
| | comp=Z,0.2nm,0.3s,baz=173,slow=14,SNR=3.2 | | | | | | |
| AKTO | | | | LR | LR | 23 59 57.3 | |
| | comp=Z,102nm,18.5s,baz=173,slow=42 | | | | | | |
| **BRTR** | **Keskin Array B** | **19.93** | **295** | P | **P** | **23 52 31.1** | **+0.2** |
| | comp=Z,0.1nm,0.3s,baz=114,slow=10,SNR=3.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **21.72** | **22** | P | **P** | **23 52 50.6** | **+0.7** |
| | comp=Z,5.7nm,0.8s,baz=203,slow=7.6,SNR=14 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.20** | **36** | P | **P** | **23 53 06.7** | **+1.1** |
| | comp=Z,3.9nm,0.2s,baz=236,slow=10,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **23.22** | **48** | P | **P** | **23 53 07.8** | **+2.0** |
| | comp=Z,1.7nm,0.7s,baz=240,slow=9.7,SNR=8.8 | | | | | | |
| **KURK** | **Kurchatov** | **23.31** | **36** | P | **P** | **23 53 06.7** | **0.0** |
| **KURK** | **Kurchatov** | **23.31** | **36** | P | **P** | **23 53 06.7** | **0.0** |
| **OBN** | **Obninsk** | **26.05** | **332** | LR | LR | 00 03 54.1 | |
| | comp=Z,70nm,21.0s,baz=270,slow=37 | | | | | | |
| **AKASG** | **Malin Array Be** | **26.78** | **318** | P | **P** | **23 53 38.3** | **-0.3** |
| | comp=Z,0.8nm,0.4s,baz=125,slow=8.6,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **28.29** | **35** | P | **P** | **23 53 52.0** | **-0.1** |
| | comp=Z,1.5nm,0.7s,baz=242,slow=10,SNR=6.1 | | | | | | |
| **GERES** | **GERESS Array B** | **35.69** | **309** | P | **P** | **23 54 57.1** | **-0.1** |
| | comp=Z,0.6nm,0.8s,baz=120,slow=7.9,SNR=5.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.08** | **101** | P | **P** | **23 55 35.0** | **+0.5** |
| | comp=Z,1.0nm,0.3s,baz=296,slow=10,SNR=6.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.08** | **101** | P | **P** | **23 55 35.0** | **+0.5** |
| **ESDC** | **Sonseca Array** | **48.73** | **296** | P | **P** | **23 56 43.0** | **-0.5** |
| | comp=Z,0.6nm,0.7s,baz=63,slow=7.8,SNR=5.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **54.21** | **262** | P | **P** | **23 57 26.7** | **+1.9** |
| | comp=Z,0.8nm,0.7s,baz=59,slow=6.8,SNR=6.7 | | | | | | |

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**IDC 06 23:56:16.9**±3.6**, 19°.54N×145°.96E, h0**km**, mb3.8**/4**, mb1 4.0**/4**, mb1mx3.6**/37**, mbtmp3.8**/4**, Error ellipse: s-maj=175.6km s-min=25.5km az=85.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **40.85** | **197** | P | P | 00 04 00.2 | -0.5 |
| | 1.3nm,0.5s,baz=17,slow=9.2,SNR=9.2 | | | | | | |
| **ASAR** | **Alice Springs** | **44.52** | **196** | P | P | 00 04 30.8 | +0.3 |
| | 0.4nm,0.7s,baz=13,slow=6.7,SNR=6.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.50** | **322** | P | P | 00 06 08.2 | +0.4 |
| | 0.6nm,0.5s,baz=102,slow=9.0,SNR=2.7 | | | | | | |
| **FINES** | **FINESS Array B** | **86.23** | **335** | P | P | 00 08 59.6 | -0.5 |
| | 0.8nm,0.5s,baz=90,slow=5.6,SNR=8.5 | | | | | | |

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**IDC 07 00:01:04.1**±3.4**, 7°.03S×151°.28E, h0**km**, mb3.6**/2**, mb1 3.9**/3**, mb1mx3.4**/29**, mbtmp3.7**/3**, ML1.5**/1**, Error ellipse: s-maj=110.6km s-min=47.5km az=128.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.71** | **240** | Pn | Pn | 00 02 16.8 | +0.3 |
| | 1.5nm,0.3s,baz=31,slow=7.0,SNR=4.5 | | | | | | |
| PMG | | | | Sn | Sn | 00 03 03.3 | -8.6 |
| | 4.3nm,0.3s,baz=226,slow=19,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.85** | **230** | P | P | 00 05 47.0 | -0.7 |
| | 2.9nm,0.7s,baz=56,slow=11,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **23.49** | **223** | P | P | 00 06 15.8 | 0.0 |
| | 1.2nm,0.9s,baz=55,slow=8.6,SNR=10.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.46** | **284** | PKPbc | PKPbc | 00 20 56.4 | 0.0 |
| | 0.3nm,0.9s,baz=71,slow=2.7,SNR=2.1 | | | | | | |

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**SKHL 07 00:06:08.4**±0.3**, 53°.52N×124°.45E, h10**km±1km**, mb3.5**/2**, Priamurye-Northeastern China border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZEA** | **Zeya** | **1.68** | **81** | *e*Pg | Pb | 00 06 40.0 | +0.6 |
| ZEA | | | | AMB | AMB | 00 06 40.2 | |
| | 26nm,0.4s | | | | | | |
| ZEA | | | | pPg | Pg | 00 06 42.7 | +2.0 |
| ZEA | | | | *e*Sg | Sg | 00 07 02.3 | -0.2 |
| ZEA | | | | A | A | 00 07 05.2 | |
| | 240nm,0.5s | | | | | | |
| **KROS** | **Kirovskiy** | **1.75** | **57** | *e*Pn | Pn | 00 06 39.0 | +0.2 |
| KROS | | | | *e*Pg | Pg | 00 06 41.6 | -0.4 |
| KROS | | | | AMB | AMB | 00 06 42.4 | |
| | 16nm,0.4s | | | | | | |
| KROS | | | | pPg | Pb | 00 06 45.2 | +4.6 |
| KROS | | | | *e*Sg | Sg | 00 07 05.0 | +0.3 |
| KROS | | | | A | A | 00 07 07.5 | |
| | 160nm,0.4s | | | | | | |
| KROS | | | | A | A | 00 07 07.5 | |
| | 120nm,0.4s | | | | | | |
| **TUP** | **Tupik** | **2.81** | **291** | *e*Pn | Pn | 00 06 53.4 | 0.0 |
| **BMKR** | **Bomnak** | **2.85** | **63** | *e*Pn | Pn | 00 06 52.9 | -1.0 |
| BMKR | | | | sPn | Sn | 00 06 58.5 | -30 |
| BMKR | | | | *e*Sg | Sb | 00 07 35.5 | +1.3 |
| BMKR | | | | A | A | 00 07 36.2 | |
| | 45nm,0.5s | | | | | | |
| **EKMR** | **Ekimchan** | **5.12** | **92** | *e*Pn | Pn | 00 07 24.1 | -1.0 |
| EKMR | | | | *e*Sg | Sg | 00 08 48.7 | -4.1 |
| EKMR | | | | A | A | 00 08 50.6 | |
| | 16nm,0.6s | | | | | | |

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**SKHL 07 00:06:14.6**±0.5**, 53°.28N×124°.35E, h10**km±2km**, mb4.3**/6**, Priamurye-Northeastern China border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZEA** | **Zeya** | **1.79** | **74** | *e*Pg | Pb | 00 06 47.3 | -0.2 |
| ZEA | | | | AMB | AMB | 00 06 48.8 | |
| | 73nm,0.4s | | | | | | |
| ZEA | | | | pPg | Pg | 00 06 51.0 | +2.0 |
| ZEA | | | | *e*Sg | Sb | 00 07 10.6 | +0.6 |
| ZEA | | | | A | A | 00 07 11.0 | |
| | 1μm,1.0s | | | | | | |
| ZEA | | | | A | A | 00 07 11.0 | |
| | 600nm,1.0s | | | | | | |
| ZEA | | | | A | A | 00 07 11.0 | |
| | 700nm,1.0s | | | | | | |
| ZEA | | | | A | A | 00 07 11.2 | |
| | 820nm,0.5s | | | | | | |
| ZEA | | | | A | A | 00 07 11.2 | |
| | 600nm,0.5s | | | | | | |
| ZEA | | | | A | A | 00 07 11.2 | |
| | 360nm,0.5s | | | | | | |
| **KROS** | **Kirovskiy** | **1.94** | **52** | *e*Pn | Pn | 00 06 48.5 | +0.9 |
| KROS | | | | *e*Pg | Pb | 00 06 49.6 | -0.4 |
| KROS | | | | AMB | AMB | 00 06 50.6 | |
| | 160nm,0.4s | | | | | | |
| KROS | | | | pPg | Pg | 00 06 52.2 | +0.5 |
| KROS | | | | *e*Sg | Sb | 00 07 14.0 | -0.2 |
| KROS | | | | A | A | 00 07 15.1 | |
| | 420nm,0.3s | | | | | | |
| **TUP** | **Tupik** | **2.84** | **296** | *e*Pn | Pn | 00 07 01.4 | +1.3 |
| TUP | | | | *e*Pg | Pb | 00 07 07.0 | +1.5 |
| TUP | | | | AMB | AMB | 00 07 10.7 | |
| | 58nm,0.3s | | | | | | |
| TUP | | | | *e*Sn | Sn | 00 07 36.1 | +1.6 |
| TUP | | | | *e*Sg | Sg | 00 07 44.4 | -1.7 |
| TUP | | | | A | A | 00 07 51.0 | |
| | 508nm,0.6s | | | | | | |
| **BMKR** | **Bomnak** | **3.01** | **60** | *e*Pn | Pn | 00 07 01.0 | -1.4 |
| BMKR | | | | *e*Pg | Pb | 00 07 09.8 | +1.5 |
| BMKR | | | | AMB | AMB | 00 07 11.8 | |
| | 70nm,0.4s | | | | | | |
| BMKR | | | | AMB | AMB | 00 07 11.8 | |
| | 94nm,0.4s | | | | | | |
| BMKR | | | | *e*Sg | Sb | 00 07 48.0 | +2.8 |
| BMKR | | | | A | A | 00 07 50.4 | |
| | 360nm,0.4s | | | | | | |
| BMKR | | | | A | A | 00 07 50.4 | |
| | 310nm,0.4s | | | | | | |
| BMKR | | | | A | A | 00 07 50.4 | |
| | 194nm,0.4s | | | | | | |
| **EKMR** | **Ekimchan** | **5.18** | **89** | *e*Pn | Pn | 00 07 32.0 | -0.1 |
| EKMR | | | | pPn | pPn | 00 07 36.5 | +2.1 |
| EKMR | | | | *e*Pg | Pb | 00 07 49.0 | +3.8 |
| EKMR | | | | AMB | AMB | 00 07 56.2 | |
| | 8.0nm,0.3s | | | | | | |
| EKMR | | | | AMB | AMB | 00 07 56.2 | |
| | 5.0nm,0.3s | | | | | | |
| EKMR | | | | AMB | AMB | 00 07 56.2 | |
| | 9.0nm,0.3s | | | | | | |
| EKMR | | | | *e*Sg | Sg | 00 08 55.2 | -5.7 |
| **KLR** | **Kul'dur** | **6.17** | **128** | *e*rx | rx | 00 07 54.2 | |
| KLR | | | | *e*rx | rx | 00 09 04.6 | |
| KLR | | | | *e*Sg | Sg | 00 09 25.0 | -7.4 |
| **GRNR** | **Gornyy** | **7.86** | **104** | *e*Sg | Sg | 00 10 21.1 | -5.7 |

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*ISCJB **07** 00:19:30.6±0.9, 10°.78N±0°.10×62°.38W±0°.04, h99km±7km, Error ellipse: s-maj=15.9km s-min=6.2km az=174.3*
*FUNV **07** 00:19:31.9, 10°.78N×62°.29W, h92km, MW2.6*
*TRN **07** 00:19:34.2, 11°.11N×62°.16W, h83km, MD3.0*
**ISC 07 00:19:29.6**±1.5**, 10°.81N**±0°.09**×62°.35W**±0°.04**, h109**km±10km**, n15, σ1s.75**/24**, 2C-1D, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUIV** | **Guiria** | **0.20** | **144**⇑ | *e*P | **Pn** | **00 19 44.9** | **0.0** |
| GUIV | | | | *e*S | **Sn** | **00 19 53.9** | **-2.5** |
| **TCE** | **Chacachacare** | **0.59** | **101** | *e*P | **Pn** | **00 19 48.9** | **+1.9** |
| TCE | | | | *e*S | **Sn** | **00 20 00.1** | **0.0** |
| **GUNV** | **Guanoco** | **0.88** | **222** | *e*P | **Pn** | **00 19 50.8** | **+1.3** |
| GUNV | | | | *e*S | **Sn** | **00 20 04.4** | **0.0** |
| **CRUV** | **Carupano** | **0.89** | **261**⇓ | *i*P | **Pn** | **00 19 50.2** | **+0.7** |
| CRUV | | | | *e*S | **Sn** | **00 20 03.3** | **-1.3** |
| **TRN** | **Trinidad (W)** | **0.94** | **100** | *e*P | **Pn** | **00 19 52.2** | **+2.2** |
| TRN | | | | *e*S | **Sn** | **00 20 05.4** | **-0.2** |
| **TOSP** | **Speyside** | **1.84** | **75** | *e*P | **Pn** | **00 20 01.4** | **+1.0** |
| TOSP | | | | *e*S | **Sn** | **00 20 21.0** | **-3.1** |
| **ORIV** | **Oritupano** | **2.03** | **211** | *e*P | **Pn** | **00 20 03.6** | **+0.8** |
| **PCRV** | **Puerto La Cruz** | **2.34** | **254** | *e*P | **Pn** | **00 20 08.4** | **+1.5** |
| PCRV | | | | *e*S | **Sn** | **00 20 34.9** | **-0.7** |
| **PRGV** | **PARIAGUAN** | **3.05** | **228** | *e*P | **Pn** | **00 20 18.3** | **+2.1** |
| **GURV** | **El Guri** | **3.12** | **194** | *e*P | **Pn** | **00 20 18.4** | **+1.2** |
| **CUPV** | **Cœpira** | **3.47** | **258**⇑ | *e*P | **Pn** | **00 20 23.7** | **+1.8** |
| CUPV | | | | *e*S | **Sn** | **00 21 01.6** | **-0.7** |
| **BIRV** | **Birongo** | **3.87** | **265** | *e*P | **Pn** | **00 20 28.2** | **+1.0** |
| **FUNV** | **FUNVISIS** | **4.40** | **266** | *e*P | **Pn** | **00 20 36.6** | **+2.2** |
| **LUEV** | **Luepa** | **5.02** | **170** | *e*P | **Pn** | **00 20 43.0** | **+0.1** |
| LUEV | | | | *e*S | Sn | 00 21 34.9 | -4.9 |
| **BAUV** | **El Baul** | **5.91** | **252** | *e*P | **Pn** | **00 20 55.2** | **+0.5** |
| BAUV | | | | *e*S | **Sn** | **00 21 57.6** | **-3.6** |

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*CSEM **07** 00:43:38.7, 37°.53N×20°.80E, h29km, MD2.7, After ATH*
**ATH 07 00:43:38.7, 37°.53N×20°.80E, h29**km**, MD2.7**/8**, Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZKS** | **Zakynthos** | **0.17** | **356** | *e*PB | Pb | 00 43 44.6 | +0.1 |
| ZKS | | | | *e*SB | Sb | 00 43 48.2 | -0.3 |
| **ZKS** | **Zakynthos** | **0.17** | **356** | *e*Pb | Pb | 00 43 44.6 | +0.1 |
| ZKS | | | | *e*Sb | Sb | 00 43 48.2 | -0.3 |
| **VLS** | **Valsamata** | **0.67** | **346** | *e*PN | Pn | 00 43 52.6 | +0.3 |
| VLS | | | | *e*SN | Sn | 00 44 02.4 | +0.6 |
| **VLS** | **Valsamata** | **0.67** | **346** | *e*Pn | Pn | 00 43 52.6 | +0.3 |
| VLS | | | | *e*Sn | Sn | 00 44 02.4 | +0.6 |
| **AMT** | **Artemida-Makis** | **0.72** | **90** | *e*PN | Pn | 00 43 53.3 | +0.3 |
| AMT | | | | *e*SN | Sn | 00 44 03.8 | +0.6 |
| **AMT** | **Artemida-Makis** | **0.72** | **90** | *e*Pn | Pn | 00 43 53.3 | +0.3 |
| AMT | | | | *e*Sn | Sn | 00 44 03.8 | +0.6 |
| **DRO** | **Drossia** | **0.84** | **59** | *e*PN | Pb | 00 43 55.1 | +0.4 |
| **DRO** | **Drossia** | **0.84** | **59** | *e*Pn | Pb | 00 43 55.1 | +0.4 |
| **ITM** | **Ithomi** | **0.96** | **111** | *e*PN | Pb | 00 43 57.5 | +0.6 |
| **ITM** | **Ithomi** | **0.96** | **111** | *e*Pn | Pb | 00 43 57.5 | +0.6 |
| **PYL** | **PYLOS** | **0.98** | **130** | *e*PN | Pb | 00 43 57.7 | +0.5 |
| **PYL** | **PYLOS** | **0.98** | **130** | *e*Pn | Pb | 00 43 57.7 | +0.5 |
| **PDO** | **Prodromos** | **1.11** | **16** | *e*PN | Pb | 00 43 59.7 | +0.4 |
| **PDO** | **Prodromos** | **1.11** | **16** | *e*Pn | Pb | 00 43 59.7 | +0.4 |
| **GUR** | **Goura** | **1.29** | **71** | *e*PN | Pb | 00 44 02.4 | -0.1 |
| **GUR** | **Goura** | **1.29** | **71** | *e*Pn | Pb | 00 44 02.4 | -0.1 |

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*ISCJB **07** 00:44:17.2±0.5, 38°.36N±0°.02×27°.17E±0°.03, h5km±4km, Error ellipse: s-maj=3.8km s-min=3.7km az=163.4*
*DDA **07** 00:44:17.1, 38°.38N×27°.15E, h7km, Md2.9*
*ATH **07** 00:44:17.2, 38°.34N×27°.15E, h34km±4km, MD3.0/5*
*ISK **07** 00:44:17.5, 38°.39N×27°.20E, h6km, MD2.8*
*CSEM **07** 00:44:17.7±0.2, 38°.38N×27°.20E, h5km, MD2.8, Error ellipse: s-maj=4.0km s-min=3.5km az=74.0*
**ISC 07 00:44:17.3**±0.9**, 38°.36N**±0°.02**×27°.18E**±0°.02**, h11**km±6km**, n63, σ0s.94**/84**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IZM** | **Izmir** | **0.07** | **62** | *e*PG | **Pg** | **00 44 19.6** | **-0.2** |
| **IZM** | **Izmir** | **0.07** | **62** | *e*Pg | **Pg** | **00 44 19.6** | **-0.2** |
| **URLA** | **Izmir** | **0.46** | **270** | *i* P | **Pg** | **00 44 25.7** | **-0.6** |
| URLA | | | | *i* S | **Sg** | **00 44 32.1** | **-0.4** |
| **URLA** | **Izmir** | **0.46** | **270** | P | **Pg** | **00 44 25.8** | **-0.6** |
| URLA | | | | S | **Sg** | **00 44 32.1** | **-0.4** |
| **ZEY** | **˜zmir** | **0.55** | **257** | P | **Pg** | **00 44 27.3** | **-0.7** |
| ZEY | | | | S | **Sg** | **00 44 35.4** | **+0.2** |
| **GCAM** | **G?zelcaml?** | **0.66** | **177** | *i* P | **Pg** | **00 44 29.8** | **-0.3** |
| GCAM | | | | *i* S | **Sg** | **00 44 39.2** | **+0.3** |
| **GCAM** | **G?zelcaml?** | **0.66** | **177** | P | **Pg** | **00 44 29.8** | **-0.3** |
| GCAM | | | | S | **Sg** | **00 44 39.2** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.70** | **126** | *e*PG | **Pb** | **00 44 31.4** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.70** | **126** | *e*Pg | **Pb** | **00 44 31.4** | **-0.1** |
| **SMG** | **Samos** | **0.71** | **203** | *e*PN | **Pg** | **00 44 30.8** | **-0.2** |
| SMG | | | | *e*SN | **Sb** | **00 44 41.7** | **+0.4** |
| **SMG** | **Samos** | **0.71** | **203** | *e*Pn | **Pg** | **00 44 30.8** | **-0.2** |
| SMG | | | | *e*Sn | **Sb** | **00 44 41.7** | **+0.4** |
| **AKS** | **Akhisar** | **0.71** | **44** | *e*PG | **Pg** | **00 44 30.6** | **-0.5** |
| **AKS** | **Akhisar** | **0.71** | **44** | *e*Pg | **Pg** | **00 44 30.6** | **-0.5** |
| **AKHS** | **Akhisar** | **0.71** | **44** | *i* P | **Pg** | **00 44 28.5** | **-2.6** |
| AKHS | | | | *i* S | **Sb** | **00 44 41.0** | **-0.5** |
| **AKHS** | **Akhisar** | **0.71** | **44** | P | **Pg** | **00 44 28.5** | **-2.6** |
| AKHS | | | | S | **Sb** | **00 44 41.0** | **-0.5** |
| **DKL** | **Dikili** | **0.74** | **343** | *e*PG | **Pb** | **00 44 32.0** | **-0.1** |
| **DKL** | **Dikili** | **0.74** | **343** | *e*Pg | **Pb** | **00 44 32.0** | **-0.1** |
| **CHOS** | **Chios island** | **0.89** | **272** | *e*PG | **Pn** | **00 44 35.5** | **-0.2** |
| CHOS | | | | *e*SG | **Sb** | **00 44 47.8** | **+1.3** |
| **CHOS** | **Chios island** | **0.89** | **272** | *e*PN | **Pg** | **00 44 33.8** | **-0.6** |
| **CHOS** | **Chios island** | **0.89** | **272** | *e*Pn | **Pg** | **00 44 33.8** | **-0.6** |
| **CHOS** | **Chios island** | **0.89** | **272** | *e*Pg | **Pn** | **00 44 35.5** | **-0.2** |
| CHOS | | | | *e*Sg | **Sb** | **00 44 47.8** | **+1.3** |
| **AYDN** | **Tasoluk** | **0.89** | **142** | *i* P | **Pn** | **00 44 36.6** | **+0.9** |
| AYDN | | | | *i* S | **Sn** | **00 44 49.4** | **+0.7** |
| **AYDN** | **Tasoluk** | **0.89** | **142** | P | **Pn** | **00 44 36.6** | **+0.9** |
| AYDN | | | | S | **Sn** | **00 44 49.4** | **+0.7** |
| **AYVA** | **Ayvalik** | **1.02** | **338** | *i* P | **Pn** | **00 44 37.5** | **+0.1** |
| AYVA | | | | *i* S | **Sg** | **00 44 50.3** | **+0.1** |
| **AYVA** | **Ayvalik** | **1.02** | **338** | P | **Pn** | **00 44 37.5** | **+0.1** |
| AYVA | | | | S | **Sg** | **00 44 50.3** | **+0.1** |
| **MANT** | **Manisa** | **1.09** | **83** | *i* P | **Pn** | **00 44 39.1** | **+0.5** |
| MANT | | | | *i* S | **Sg** | **00 44 52.7** | **+0.3** |
| **MANT** | **Manisa** | **1.09** | **83** | P | **Pn** | **00 44 39.1** | **+0.5** |
| MANT | | | | S | **Sg** | **00 44 52.7** | **+0.3** |
| **PRK** | **Paraskevi** | **1.13** | **321** | *e*PN | **Pb** | **00 44 38.6** | **-0.2** |
| **PRK** | **Paraskevi** | **1.13** | **321** | *e*Pn | **Pb** | **00 44 38.6** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.17** | **82** | *e*PN | **Pg** | **00 44 40.0** | **+0.3** |
| **KULA** | **Kula-Manisa** | **1.17** | **82** | *e*Pn | **Pg** | **00 44 40.1** | **+0.3** |
| **BODT** | **Bodrum** | **1.30** | **175** | *e*PN | **Pg** | **00 44 43.2** | **+1.0** |
| **BODT** | **Bodrum** | **1.30** | **175** | *e*Pn | **Pg** | **00 44 43.3** | **+1.0** |
| **SIGR** | **SIGRI** | **1.34** | **310** | *e*PN | **Pg** | **00 44 43.7** | **+0.7** |
| **SIGR** | **SIGRI** | **1.34** | **310** | *e*PN | **Pn** | **00 44 41.5** | **-0.3** |
| **SIGR** | **SIGRI** | **1.34** | **310** | *e*Pn | **Pg** | **00 44 43.7** | **+0.7** |
| **BALB** | **Balikesir** | **1.39** | **23** | *e*PN | **Pg** | **00 44 43.9** | **0.0** |
| **BALB** | **Balikesir** | **1.39** | **23** | *e*Pn | **Pg** | **00 44 43.9** | **0.0** |
| **BALY** | **Balya** | **1.42** | **14** | *i* P | **Pn** | **00 44 42.7** | **-0.3** |
| BALY | | | | *i* S | **Sb** | **00 45 02.3** | **+0.5** |
| **BALY** | **Balya** | **1.42** | **14** | P | **Pn** | **00 44 42.7** | **-0.3** |
| BALY | | | | S | **Sb** | **00 45 02.3** | **+0.5** |
| **YER** | **Yerkesik** | **1.50** | **144** | *e*PN | **Pb** | **00 44 45.6** | **+0.4** |
| **YER** | **Yerkesik** | **1.50** | **144** | *e*Pn | **Pb** | **00 44 45.6** | **+0.4** |
| **EZN** | **Ezine** | **1.60** | **336** | *e*PN | **Pb** | **00 44 47.0** | **+0.1** |
| **EZN** | **Ezine** | **1.60** | **336** | *e*Pn | **Pb** | **00 44 47.0** | **+0.1** |
| **DST** | **Dursunbey** | **1.67** | **42** | *e*PN | **Pb** | **00 44 47.7** | **-0.3** |
| **DST** | **Dursunbey** | **1.67** | **42** | *e*Pn | **Pb** | **00 44 47.7** | **-0.3** |
| **APE** | **Apeiranthos** | **1.84** | **226** | *e*PN | **Pb** | **00 44 50.7** | **-0.2** |
| **APE** | **Apeiranthos** | **1.84** | **226** | *e*PN | **Pn** | **00 44 48.0** | **-0.8** |
| **APE** | **Apeiranthos** | **1.84** | **226** | *e*Pn | **Pb** | **00 44 50.7** | **-0.2** |
| **TURN** | **Turunc** | **1.87** | **142** | *i* P | **Pn** | **00 44 48.4** | **-0.7** |
| TURN | | | | *i* S | **Sn** | **00 45 09.6** | **-3.0** |
| **TURN** | **Turunc** | **1.87** | **142** | P | **Pn** | **00 44 48.4** | **-0.7** |
| TURN | | | | S | **Sn** | **00 45 09.6** | **-3.0** |
| **KRBG** | **Karabiga-Canak** | **2.03** | **2** | *e*PN | **Pn** | **00 44 52.6** | **+1.3** |
| **KRBG** | **Karabiga-Canak** | **2.03** | **2** | *e*Pn | **Pn** | **00 44 52.6** | **+1.3** |
| **EDC** | **Edincik** | **2.05** | **15** | *e*PN | **Pn** | **00 44 52.6** | **+1.0** |
| **EDC** | **Edincik** | **2.05** | **15** | *e*Pn | **Pn** | **00 44 52.6** | **+1.0** |
| **GELI** | **Tayfur-Gelibol** | **2.10** | **345** | *e*PN | **Pn** | **00 44 53.6** | **+1.3** |
| **GELI** | **Tayfur-Gelibol** | **2.10** | **345** | *e*Pn | **Pn** | **00 44 53.7** | **+1.3** |
| **KCTX** | **Karacabey (Bur** | **2.11** | **25** | *e*PN | **Pn** | **00 44 53.6** | **+1.2** |
| **KCTX** | **Karacabey (Bur** | **2.11** | **25** | *e*Pn | **Pn** | **00 44 53.7** | **+1.2** |
| **ERIK** | **Erikli-Kesan** | **2.36** | **348** | *e*PN | **Pn** | **00 44 57.8** | **+1.9** |
| **ERIK** | **Erikli-Kesan** | **2.36** | **348** | *e*Pn | **Pn** | **00 44 57.8** | **+1.9** |
| **ARMT** | **Armutlu** | **2.55** | **30** | *e*PN | **Pn** | **00 44 59.9** | **+1.3** |
| **ARMT** | **Armutlu** | **2.55** | **30** | *e*Pn | **Pn** | **00 44 59.9** | **+1.3** |

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*CSEM **07** 00:49:38.5, 42°.74N×13°.39E, h14km, MD1.7/9, After ROM*
**ROM 07 00:49:38.5**±0.1**, 42°.74N×13°.39E, h14**km±1km**, Md1.7**/9**, Ml1.3**/8**, Error ellipse: s-maj=1.3km s-min=0.8km az=87.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMA1** | **SAN MARTINO** | **0.11** | **200** | Pg | Pg | 00 49 42.2 | +0.2 |
| SMA1 | | | | Sg | Sg | 00 49 44.5 | +0.2 |
| | 233nm,0.1s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.11** | **200** | Pg | Pg | 00 49 42.2 | +0.2 |
| SMA1 | | | | Sg | Sg | 00 49 44.5 | +0.2 |
| | 233nm,0.1s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.18** | **202** | Pg | Pg | 00 49 43.2 | +0.3 |
| RM32 | | | | Sg | Sb | 00 49 46.7 | -0.7 |
| | 57nm,0.2s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.18** | **202** | Pg | Pg | 00 49 43.2 | +0.3 |
| RM32 | | | | Sg | Sb | 00 49 46.7 | -0.7 |
| | 57nm,0.2s | | | | | | |
| **TERO** | **Teramo** | **0.20** | **126** | Pg | Pg | 00 49 43.3 | +0.2 |
| TERO | | | | Sg | Sg | 00 49 46.9 | +0.7 |
| | 27nm,0.2s | | | | | | |
| **TERO** | **Teramo** | **0.20** | **126** | Pg | Pg | 00 49 43.3 | +0.2 |
| TERO | | | | Sg | Sg | 00 49 46.9 | +0.7 |
| | 27nm,0.2s | | | | | | |
| **RM29** | **Verrico (Monte** | **0.22** | **218** | Pg | Pg | 00 49 43.9 | +0.3 |
| RM29 | | | | Sg | Sg | 00 49 47.7 | +0.6 |
| | 14nm,0.3s | | | | | | |
| **RM29** | **Verrico (Monte** | **0.22** | **218** | Pg | Pg | 00 49 43.9 | +0.3 |
| RM29 | | | | Sg | Sg | 00 49 47.7 | +0.6 |
| | 14nm,0.3s | | | | | | |
| **RM33** | **Pellescritta (** | **0.26** | **209** | Pg | Pg | 00 49 44.3 | +0.1 |
| RM33 | | | | Sg | Sg | 00 49 48.7 | +0.6 |
| | 40nm,0.3s | | | | | | |
| **RM33** | **Pellescritta (** | **0.26** | **209** | Pg | Pg | 00 49 44.3 | +0.1 |
| RM33 | | | | Sg | Sg | 00 49 48.7 | +0.6 |
| | 40nm,0.3s | | | | | | |
| **LNSS** | **Leonessa** | **0.29** | **242** | Pg | Pg | 00 49 44.9 | +0.2 |
| LNSS | | | | Sg | Sg | 00 49 49.5 | +0.6 |
| | 18nm,0.3s | | | | | | |
| **LNSS** | **Leonessa** | **0.29** | **242** | Pg | Pg | 00 49 44.9 | +0.2 |
| LNSS | | | | Sg | Sg | 00 49 49.5 | +0.6 |
| | 18nm,0.3s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.37** | **324** | Pg | Pg | 00 49 45.9 | -0.2 |
| FDMO | | | | Sg | Sg | 00 49 51.8 | +0.6 |
| | 12nm,0.2s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.37** | **324** | Pg | Pg | 00 49 45.9 | -0.2 |
| FDMO | | | | Sg | Sg | 00 49 51.8 | +0.6 |
| | 12nm,0.2s | | | | | | |
| **T0106** | **Roio Piano** | **0.43** | **180** | Pg | Pb | 00 49 47.9 | -0.2 |
| T0106 | | | | Sg | Sb | 00 49 54.1 | -0.5 |
| **GUMA** | **Gualdo di Mace** | **0.52** | **51** | Pg | Pg | 00 49 45.7 | -3.1 |
| GUMA | | | | Sg | Sg | 00 49 51.3 | -4.5 |
| | 37nm,0.3s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.52** | **51** | Pg | Pg | 00 49 45.7 | -3.1 |
| GUMA | | | | Sg | Sg | 00 49 51.3 | -4.5 |
| | 37nm,0.3s | | | | | | |

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*ISCJB **07** 00:50:41.6±0.2, 51°.51N±0°.01×16°.06E±0°.02, h0km, mb4.0/14, Error ellipse: s-maj=2.1km s-min=1.6km az=175.0*

*LDG* **07** *00:50:41.8±0.2, 51.64N×16.28E, h1km, Ml4.3/26, Suspected Mining induced.*
*BNS* **07** *00:50:41.0±0.7, 51.57N×16.55E, h1km, ML3.7*
*MOS* **07** *00:50:42.9±1.0, 51.59N×16.12E, h10km, mb4.1/9, Error ellipse: s-maj=7.8km s-min=4.3km az=88.4*
*IPEC* **07** *00:50:43.4±0.4, 51.58N×16.18E, h0km±2km, ML3.6/3, Error ellipse: s-maj=3.8km s-min=1.8km az=59.0*
*CSEM* **07** *00:50:43.2±0.1, 51.55N×16.06E, h2km, mb4.0/10, ML4.3/18, Ms4.0, Error ellipse: s-maj=3.0km s-min=2.2km az=174.0*
*IDC* **07** *00:50:44.0±0.5, 51.53N×16.01E, h0km, mb3.8/9, mb1 3.9/17, mb1mx3.7/41, mbtmp3.9/17, ML3.7/8, Error ellipse: s-maj=9.6km s-min=5.5km az=113.0*
*BGR* **07** *00:50:44.9±0.5, 51.54N×16.08E, h1km, ML3.9/14, Error ellipse: s-maj=4.4km s-min=2.2km az=27.0*
*PRU* **07** *00:50:45.0, 51.49N×16.08E, h0km*
*VIE* **07** *00:50:46.2±0.5, 51.33N×15.99E, h0km±2km, mb3.5/18, ml3.5/16, ms4.0/4, Error ellipse: s-maj=2.5km s-min=1.4km az=20.0, Suspected Mining induced.*
*UPP* **07** *00:50:51.8, 52.08N×15.97E, h0km, ML3.2, Suspected Mining explosion.*
**ISC 07 00:50:42.8**±0.4**, 51.53N**±0.02×**16.11E**±0.02**, h0**km**, n306,** σ**1.34**/419**, mb4.0**/14**, 31C-31D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.70** | **171** | *e*Pg | **Pb** | **00 50 58.2** | **+0.3** |
| KSP | | | | *e*Sg | **Sb** | **00 51 07.9** | **-0.1** |
| **KSP** | **Ksiaz** | **0.70** | **171** | *i* Pg | **Pb** | **00 50 58.1** | **+0.3** |
| KSP | | | | *e*Sg | **Sb** | **00 51 07.8** | **-0.2** |
| KSP | | | | *e* | | 00 51 11.3 | |
| **KSP** | **Ksiaz** | **0.70** | **171** | ⇓*i*P | **Pb** | **00 50 58.1** | **+0.3** |
| KSP | | | | *e* | | 00 51 11.3 | |
| **KSP** | **Ksiaz** | **0.70** | **171** | *i* P | **Pb** | **00 50 58.1** | **+0.3** |
| KSP | | | | Sg | **Sb** | **00 51 07.9** | **-0.1** |
| KSP | | | | *e*S | **Sn** | **00 51 11.3** | **-0.1** |
| **UPC** | **Upice** | **1.03** | **184** | ⇓*i*P | **Pn** | **00 51 04.1** | **-0.3** |
| UPC | | | | *e* | | 00 51 16.2 | |
| UPC | | | | smax | smax | | |
| | comp=N,1µm,0.4s | | | | | | |
| UPC | | | | MLR | MLR | | |
| | comp=Z,1µm,2.1s | | | | | | |
| **UPC** | **Upice** | **1.03** | **184** | ⇓*i*PG | **Pn** | **00 51 04.1** | **-0.3** |
| UPC | | | | *e*SG | **Sg** | **00 51 16.2** | **+0.5** |
| | comp=Z,1µm,0.4s | | | | | | |
| UPC | | | | AMS | AMS | 00 51 40.0 | |
| | comp=Z,1µm,2.1s | | | | | | |
| **UPC** | **Upice** | **1.03** | **184** | *i* P | **Pn** | **00 51 04.1** | **-0.3** |
| | comp=Z,1µm,0.4s | | | | | | |
| UPC | | | | *e*S | **Sg** | **00 51 16.2** | **+0.5** |
| | comp=Z,1µm,2.1s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.19** | **174** | *e*Pg | **Pn** | **00 51 07.0** | **+0.3** |
| DPC | | | | *e*Sg | **Sb** | **00 51 22.9** | **+0.7** |
| **DPC** | **Dobruska-Polom** | **1.19** | **174** | ⇓*i*P | **Pn** | **00 51 07.0** | **+0.3** |
| DPC | | | | *e* | | 00 51 21.4 | |
| DPC | | | | smax | smax | | |
| | comp=N,442nm,0.4s | | | | | | |
| DPC | | | | MLR | MLR | | |
| | comp=Z,2µm,2.7s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.19** | **174** | ⇓*i*PG | **Pn** | **00 51 07.0** | **+0.3** |
| DPC | | | | *e*SG | **Sg** | **00 51 21.4** | **+0.4** |
| | comp=Z,442nm,0.4s | | | | | | |
| DPC | | | | AMS | AMS | 00 51 40.0 | |
| | comp=Z,2µm,2.7s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.19** | **174** | Pg | **Pn** | **00 51 07.0** | **+0.3** |
| DPC | | | | *e*S | **Sg** | **00 51 21.4** | **+0.4** |
| | comp=Z,2µm,2.7s | | | | | | |
| DPC | | | | Sg | **Sb** | **00 51 22.9** | **+0.7** |
| **PVCC** | **Panska Ves** | **1.40** | **225** | ⇓*i*P | **Pb** | **00 51 10.3** | **+0.5** |
| PVCC | | | | *e* | | 00 51 28.5 | |
| PVCC | | | | smax | smax | | |
| | comp=N,1µm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.40** | **225** | ⇓*i*PG | **Pb** | **00 51 10.3** | **+0.5** |
| PVCC | | | | *e*SG | **Sn** | **00 51 28.5** | **-0.2** |
| | comp=N,1µm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.40** | **225** | *i* P | **Pb** | **00 51 10.3** | **+0.5** |
| | comp=N,1µm,0.3s | | | | | | |
| PVCC | | | | *e*S | **Sn** | **00 51 28.5** | **-0.2** |
| **BRG** | **Berggiesshubel** | **1.52** | **245** | PN | **Pn** | **00 51 11.0** | **-0.1** |
| BRG | | | | PG | **Pg** | **00 51 12.8** | **+1.0** |
| BRG | | | | SG | **Sn** | **00 51 32.9** | **+1.3** |
| | comp=N,570nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **245** | *e*Pn | **Pn** | **00 51 11.2** | **+0.1** |
| BRG | | | | *e*Pg | **Pg** | **00 51 13.0** | **+1.2** |
| BRG | | | | *e*Sg | **Sn** | **00 51 33.0** | **+1.5** |
| **BRG** | **Berggiesshubel** | **1.52** | **245** | P | **Pn** | **00 51 11.0** | **-0.1** |
| BRG | | | | | | 00 51 32.9 | |
| BRG | | | | smax | smax | | |
| | comp=N,570nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **245** | Pn | **Pn** | **00 51 11.2** | **+0.1** |
| **KRLC** | **Kraliky** | **1.52** | **163** | ⇓*i*P | **Pg** | **00 51 12.2** | **+0.3** |
| KRLC | | | | *e* | | 00 51 32.0 | |
| **KRLC** | **Kraliky** | **1.52** | **163** | ⇓*i*PG | **Pg** | **00 51 12.2** | **+0.3** |
| KRLC | | | | *e*SG | **Sn** | **00 51 32.0** | **+0.3** |
| **KRLC** | **Kraliky** | **1.52** | **163** | Pg | **Pg** | **00 51 12.2** | **+0.3** |
| KRLC | | | | *e*S | **Sn** | **00 51 32.0** | **+0.3** |
| **PRA** | **Prague** | **1.81** | **217** | ⇓*i*P | **Pn** | **00 51 15.8** | **+0.6** |
| PRA | | | | *e* | | 00 51 41.4 | |
| PRA | | | | smax | smax | | |
| | comp=N,609nm,0.7s | | | | | | |
| PRA | | | | MLR | MLR | | |
| | comp=Z,900nm,3.7s | | | | | | |
| **PRA** | **Prague** | **1.81** | **217** | ⇓*i*PN | **Pn** | **00 51 15.8** | **+0.6** |
| PRA | | | | *e*PG | **Pg** | **00 51 17.7** | **+0.3** |
| PRA | | | | *e*SG | **Sg** | **00 51 41.4** | **+0.5** |
| | comp=Z,609nm,0.7s | | | | | | |
| PRA | | | | AMS | AMS | 00 52 10.0 | |
| | comp=Z,900nm,3.7s | | | | | | |
| **PRA** | **Prague** | **1.81** | **217** | *i* P | **Pn** | **00 51 15.8** | **+0.6** |
| PRA | | | | *e*S | **Sg** | **00 51 41.4** | **+0.5** |
| | comp=Z,900nm,3.7s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.82** | **208** | *e*P | **Pn** | **00 51 16.1** | **+0.7** |
| GOPC | | | | *e* | | 00 51 41.5 | |
| GOPC | | | | smax | smax | | |
| | comp=N,434nm,0.6s | | | | | | |
| GOPC | | | | MLR | MLR | | |
| | comp=Z,900nm,2.6s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.82** | **208** | ⇓*e*PN | **Pn** | **00 51 16.1** | **+0.7** |
| GOPC | | | | *e*PG | **Pg** | **00 51 17.8** | **+0.1** |
| GOPC | | | | *e*x | x | 00 51 34.9 | |
| GOPC | | | | *e*SG | **Sg** | **00 51 41.5** | **+0.1** |
| | comp=Z,434nm,0.6s | | | | | | |
| GOPC | | | | AMS | AMS | 00 52 10.0 | |
| | comp=Z,900nm,2.6s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.82** | **208** | *e*P | **Pn** | **00 51 16.1** | **+0.7** |
| | comp=Z,434nm,0.6s | | | | | | |
| GOPC | | | | *e*S | **Sg** | **00 51 41.5** | **+0.1** |
| | comp=Z,900nm,2.6s | | | | | | |
| **FBE** | **Freiberg** | **1.84** | **252** | *e*Pn | **Pn** | **00 51 15.8** | **+0.2** |
| FBE | | | | *e*Pg | **Pg** | **00 51 18.4** | **+0.4** |
| FBE | | | | *e*Sg | **Sg** | **00 51 42.5** | **+0.7** |
| **FBE** | **Freiberg** | **1.84** | **252** | Pn | **Pn** | **00 51 15.8** | **+0.2** |
| **PRU** | **Pruhonice** | **1.84** | **213** | *e*P | **Pn** | **00 51 16.1** | **+0.5** |
| PRU | | | | *e* | | 00 51 41.8 | |
| PRU | | | | smax | smax | | |
| | comp=N,491nm,0.8s | | | | | | |
| PRU | | | | MLR | MLR | | |
| | comp=Z,1µm,2.7s | | | | | | |
| **PRU** | **Pruhonice** | **1.84** | **213** | ⇓*e*PN | **Pn** | **00 51 16.1** | **+0.5** |
| PRU | | | | *e*PG | **Pg** | **00 51 18.3** | **+0.3** |
| PRU | | | | *e*x | x | 00 51 35.7 | |
| PRU | | | | *e*SG | **Sg** | **00 51 41.8** | **0.0** |
| | comp=Z,491nm,0.8s | | | | | | |
| PRU | | | | AMS | AMS | 00 52 20.0 | |
| | comp=Z,1µm,2.7s | | | | | | |
| **PRU** | **Pruhonice** | **1.84** | **213** | *e*P | **Pn** | **00 51 16.1** | **+0.5** |
| | comp=Z,491nm,0.8s | | | | | | |
| PRU | | | | *e*S | **Sg** | **00 51 41.8** | **0.0** |
| | comp=Z,1µm,2.7s | | | | | | |
| **GKP** | **Gorka Klasztor** | **1.87** | **21** | *e*Pn | **Pg** | **00 51 19.0** | **+0.3** |
| GKP | | | | *e*Pg | Pg | 00 51 24.2 | +5.5 |
| GKP | | | | *e*Sn | **Sg** | **00 51 45.1** | **+2.2** |
| GKP | | | | *e*Sg | Sb | 00 51 51.1 | +9.3 |
| **GKP** | **Gorka Klasztor** | **1.87** | **21** | *e*P | **Pg** | **00 51 19.0** | **+0.3** |
| GKP | | | | *e* | | 00 51 45.2 | |
| **GKP** | **Gorka Klasztor** | **1.87** | **21** | *e*P | **Pg** | **00 51 19.0** | **+0.3** |
| **GKP** | **Gorka Klasztor** | **1.87** | **21** | *e*Pg | Pg | 00 51 24.2 | +5.5 |
| GKP | | | | *e*S | **Sg** | **00 51 45.2** | **+2.3** |
| **CLL** | **Collm** | **1.96** | **265** | *e*Pn | **Pn** | **00 51 17.1** | **-0.1** |
| CLL | | | | *e*Pg | **Pg** | **00 51 20.9** | **+0.6** |
| CLL | | | | *e*Sg | **Sg** | **00 51 46.4** | **+0.7** |
| **CLL** | **Collm** | **1.96** | **265** | *i* P | **Pn** | **00 51 17.2** | **-0.1** |
| CLL | | | | *i* | | 00 51 46.2 | |
| CLL | | | | pmax | pmax | | |
| | comp=Z,128nm,0.5s | | | | | | |
| **CLL** | **Collm** | **1.96** | **265** | *i* Pn | **Pn** | **00 51 17.2** | **-0.1** |
| | comp=Z,128nm,0.5s | | | | | | |
| CLL | | | | *i* Pg | **Pg** | **00 51 20.7** | **+0.4** |
| CLL | | | | *i* | | 00 51 24.2 | |
| CLL | | | | *i* Sg | **Sg** | **00 51 46.2** | **+0.5** |
| | comp=Z,239nm,0.7s | | | | | | |
| **CLL** | **Collm** | **1.96** | **265** | *i* P | **Pn** | **00 51 17.2** | **-0.1** |
| | comp=Z,128nm,0.5s | | | | | | |
| **RAC** | **Raciborz** | **1.96** | **137** | *e*P | **Pn** | **00 51 17.7** | **+0.4** |
| RAC | | | | *e* | | 00 51 47.5 | |
| **RAC** | **Raciborz** | **1.96** | **137** | *e*P | **Pn** | **00 51 17.7** | **+0.4** |
| **RAC** | **Raciborz** | **1.96** | **137** | *e*Pg | **Pg** | **00 51 21.8** | **+1.5** |
| RAC | | | | *e*S | **Sg** | **00 51 47.5** | **+1.8** |
| **MORC** | **Moravsky Berou** | **1.98** | **152** | ⇓*i*P | **Pb** | **00 51 18.8** | **-0.9** |
| **MORC** | **Moravsky Berou** | **1.98** | **152** | *e*Pn | **Pn** | **00 51 18.4** | **+0.8** |
| MORC | | | | *e*Sg | **Sg** | **00 51 46.1** | **-0.2** |
| **OKC** | **Ostrava-Krasne** | **2.13** | **142** | *e*P | **Pn** | **00 51 19.9** | **+0.3** |
| OKC | | | | *e* | | 00 51 51.7 | |
| OKC | | | | smax | smax | | |
| | comp=N,988nm,0.7s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.13** | **142** | ⇑*e*PN | **Pn** | **00 51 19.9** | **+0.3** |
| OKC | | | | *e*PG | **Pg** | **00 51 23.5** | **-0.1** |
| OKC | | | | *e*SG | **Sg** | **00 51 51.7** | **+0.4** |
| | comp=N,988nm,0.7s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.13** | **142** | *e*P | **Pn** | **00 51 19.9** | **+0.3** |
| OKC | | | | *e*S | **Sg** | **00 51 51.7** | **+0.4** |
| | comp=N,988nm,0.7s | | | | | | |
| **CHZP** | **Chorzow** | **2.21** | **123** | Pn | **Pn** | **00 51 20.7** | **+0.1** |
| CHZP | | | | *e*Pg | **Pg** | **00 51 27.9** | **+2.9** |
| CHZP | | | | Sn | **Sn** | **00 51 49.3** | **+0.7** |
| CHZP | | | | Sb | **Sg** | **00 51 56.5** | **+2.9** |
| CHZP | | | | *e*Sg | Sg | 00 52 02.3 | +8.7 |
| **VRAC** | **Vranov** | **2.25** | **172** | Pn | **Pn** | **00 51 22.6** | **+1.4** |
| | comp=N,18nm,0.3s,baz=338,slow=17,SNR=86 | | | | | | |
| VRAC | | | | Lg | Lg | 00 51 54.9 | |
| | comp=N,35nm,0.3s,baz=60,slow=23,SNR=9.6 | | | | | | |
| **VRAC** | **Vranov** | **2.25** | **172** | ⇓*i*P | **Pn** | **00 51 22.5** | **+1.3** |
| **KRUC** | **Moravsky** | **2.48** | **176** | *e*Pn | **Pn** | **00 51 25.5** | **+1.1** |
| KRUC | | | | *e*Sg | **Sg** | **00 52 02.5** | **+0.1** |
| | comp=N,258nm,0.7s | | | | | | |
| **TANN** | **Tannenbergstha** | **2.56** | **246** | *e*Pn | **Pn** | **00 51 26.3** | **+0.7** |
| TANN | | | | *e*Pg | **Pg** | **00 51 33.6** | **+1.7** |
| TANN | | | | *e*Sg | **Sg** | **00 52 05.8** | **+0.7** |
| **TANN** | **Tannenbergstha** | **2.56** | **246** | Pn | **Pn** | **00 51 26.3** | **+0.7** |
| **WERD** | **Werda** | **2.64** | **247** | *e*Pn | **Pn** | **00 51 27.3** | **+0.7** |
| WERD | | | | *e*Pg | **Pg** | **00 51 33.6** | **+0.2** |
| WERD | | | | *e*Sg | **Sg** | **00 52 07.8** | **+0.3** |
| **WERD** | **Werda** | **2.64** | **247** | Pn | **Pn** | **00 51 27.3** | **+0.7** |
| **NKC** | **Novy Kostel** | **2.66** | **242** | ⇑*i*P | **Pn** | **00 51 27.8** | **+0.9** |
| NKC | | | | *e* | | 00 52 09.3 | |
| NKC | | | | smax | smax | | |
| | comp=N,664nm,0.7s | | | | | | |
| **NKC** | **Novy Kostel** | **2.66** | **242** | ⇑*i*PN | **Pn** | **00 51 27.8** | **+0.9** |
| NKC | | | | *e*PG | **Pg** | **00 51 33.6** | **-0.1** |
| NKC | | | | *e*SG | **Sg** | **00 52 09.3** | **+1.1** |
| | comp=N,664nm,0.7s | | | | | | |
| **NKC** | **Novy Kostel** | **2.66** | **242** | Pn | **Pn** | **00 51 27.8** | **+0.9** |
| **OJC** | **Ojcow** | **2.68** | **118** | *e*Pn | **Pn** | **00 51 26.5** | **-0.6** |
| OJC | | | | *e*Pg | **Pg** | **00 51 35.8** | **+1.7** |
| OJC | | | | *e*Sg | **Sg** | **00 52 11.5** | **+2.7** |
| **OJC** | **Ojcow** | **2.68** | **118** | *e*P | **Pn** | **00 51 26.5** | **-0.6** |
| **OJC** | **Ojcow** | **2.68** | **118** | *e*P | **Pn** | **00 51 26.5** | **-0.6** |
| OJC | | | | *e*Sg | **Sg** | **00 52 11.5** | **+2.7** |
| **KHC** | **Kasperske Hory** | **2.90** | **215** | *e*P | **Pn** | **00 51 30.9** | **+0.7** |
| KHC | | | | *e* | | 00 52 05.7 | |
| KHC | | | | smax | smax | | |
| | comp=N,174nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.90** | **215** | ⇓*e*PN | **Pn** | **00 51 30.9** | **+0.7** |
| KHC | | | | *e*PG | **Pg** | **00 51 37.2** | **-1.1** |
| KHC | | | | *e*SN | **Sn** | **00 52 05.7** | **-0.1** |
| KHC | | | | *e*SG | **Sg** | **00 52 15.9** | **0.0** |
| | comp=N,174nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.90** | **215** | Pn | **Pn** | **00 51 30.9** | **+0.7** |
| **MOX** | **Moxa** | **2.97** | **254** | *e*Pn | **Pn** | **00 51 31.6** | **+0.4** |
| MOX | | | | *e*Pg | **Pg** | **00 51 40.1** | **+0.4** |
| MOX | | | | *e*Sg | **Sg** | **00 52 18.6** | **+0.4** |
| **MOX** | **Moxa** | **2.97** | **254** | Pn | **Pn** | **00 51 31.6** | **+0.4** |
| **MANZ** | **Manzenberg** | **2.98** | **240** | *e*Pn | **Pn** | **00 51 32.4** | **+1.1** |
| MANZ | | | | *e*Pg | **Pg** | **00 51 40.9** | **+1.1** |
| MANZ | | | | *e*Sg | **Sg** | **00 52 18.5** | **+0.2** |
| **MANZ** | **Manzenberg** | **2.98** | **240** | Pn | **Pn** | **00 51 32.4** | **+1.1** |
| **ROTZ** | **Rotzenmuhle** | **3.05** | **236** | *e*Pn | **Pn** | **00 51 33.0** | **+0.8** |
| **ROTZ** | **Rotzenmuhle** | **3.05** | **236** | Pn | **Pn** | **00 51 33.0** | **+0.8** |
| **GEC2** | **GERESS Array S** | **3.10** | **211** | *e*Pn | **Pn** | **00 51 34.1** | **+1.0** |
| GEC2 | | | | *e*Pg | **Pg** | **00 51 43.0** | **+0.8** |
| GEC2 | | | | *e*Sg | **Sg** | **00 52 21.8** | **-0.6** |
| **GEC2** | **GERESS Array S** | **3.10** | **211** | Pn | **Pn** | **00 51 34.1** | **+1.0** |
| **GEC2** | **GERESS Array S** | **3.10** | **211** | Pg | **Pg** | **00 51 43.0** | **+0.8** |
| GEC2 | | | | Sg | **Sg** | **00 52 21.8** | **-0.6** |
| **GERES** | **GERESS Array B** | **3.10** | **211** | Pn | **Pn** | **00 51 34.7** | **+1.6** |
| | comp=N,13nm,0.3s,baz=31,slow=12,SNR=318 | | | | | | |
| GERES | | | | Pg | **Pb** | **00 51 40.2** | **+1.4** |
| | comp=N,23nm,0.3s,baz=34,slow=16,SNR=57 | | | | | | |
| GERES | | | | Sn | **Sn** | **00 52 09.5** | **-1.4** |
| | comp=N,12nm,0.3s,baz=33,slow=24,SNR=5.5 | | | | | | |
| GERES | | | | Lg | Lg | 00 52 21.3 | |
| | comp=N,36nm,0.3s,baz=31,slow=28,SNR=16 | | | | | | |
| **SMOL** | **Smolenice** | **3.14** | **164** | *e*P | **Pn** | **00 51 35.7** | **+2.2** |
| **SMOL** | **Smolenice** | **3.14** | **164** | *e*PN | **Pn** | **00 51 35.7** | **+2.2** |
| SMOL | | | | *e*PG | **Pg** | **00 51 43.8** | **+0.9** |
| SMOL | | | | *e*SG | **Sg** | **00 52 25.5** | **+2.0** |
| **SMOL** | **Smolenice** | **3.14** | **164** | *e*P | **Pn** | **00 51 35.7** | **+2.2** |
| **WET** | **Wettzell** | **3.16** | **222** | *e*Pn | **Pn** | **00 51 34.8** | **+1.0** |
| **WET** | **Wettzell** | **3.16** | **222** | Pn | **Pn** | **00 51 34.8** | **+1.0** |
| **LANS** | **Liptovska Anna** | **3.21** | **137** | *e*P | **Pn** | **00 51 35.9** | **+1.4** |
| **LANS** | **Liptovska Anna** | **3.21** | **137** | *e*PN | **Pn** | **00 51 35.9** | **+1.4** |
| LANS | | | | *e*PG | **Pg** | **00 51 44.8** | **+0.5** |
| LANS | | | | *e*SG | **Sg** | **00 52 26.6** | **+0.8** |
| **LANS** | **Liptovska Anna** | **3.21** | **137** | *e*P | **Pn** | **00 51 35.9** | **+1.4** |
| **ZST** | **Bratislava** | **3.40** | **169** | *e*P | **Pn** | **00 51 38.4** | **+1.4** |
| **ZST** | **Bratislava** | **3.40** | **169** | *e*PN | **Pn** | **00 51 38.4** | **+1.4** |
| ZST | | | | *e*PG | **Pg** | **00 51 48.5** | **+0.6** |
| ZST | | | | *e*SG | **Sg** | **00 52 29.8** | **-2.1** |
| **ZST** | **Bratislava** | **3.40** | **169** | *e*P | **Pn** | **00 51 38.4** | **+1.4** |
| **NIE** | **Niedzica** | **3.41** | **127** | *e*Pn | **Pn** | **00 51 38.7** | **+1.5** |
| NIE | | | | *i* | | 00 51 52.3 | |
| NIE | | | | *e*S | **Sg** | **00 52 34.9** | **+2.6** |
| **NIE** | **Niedzica** | **3.41** | **127** | *e*P | **Pn** | **00 51 38.7** | **+1.5** |
| **NIE** | **Niedzica** | **3.41** | **127** | *e*P | **Pn** | **00 51 38.7** | **+1.5** |
| **VYHS** | **Vyhne** | **3.51** | **149** | *e*P | **Pn** | **00 51 39.7** | **+1.1** |
| **VYHS** | **Vyhne** | **3.51** | **149** | *e*PN | **Pn** | **00 51 39.7** | **+1.1** |
| VYHS | | | | *e*PG | **Pg** | **00 51 49.9** | **-0.1** |
| VYHS | | | | *e*SG | **Sg** | **00 52 33.0** | **-2.5** |
| **VYHS** | **Vyhne** | **3.51** | **149** | *e*P | **Pn** | **00 51 39.7** | **+1.1** |
| **CLZ** | **Clausthal** | **3.59** | **277** | *e*Pn | **Pn** | **00 51 40.6** | **+1.0** |
| **CLZ** | **Clausthal** | **3.59** | **277** | Pn | **Pn** | **00 51 40.6** | **+1.0** |
| **CONA** | **Conrad Observa** | **3.61** | **183** | ⇑*i*Pn | **Pn** | **00 51 41.2** | **+1.2** |
| | SNR=26 | | | | | | |
| CONA | | | | ⇓*i*Pg | **Pg** | **00 51 51.4** | **-0.6** |
| CONA | | | | ⇑*i*Sg | **Sg** | **00 52 39.2** | **+0.5** |
| | comp=N,324nm,0.7s | | | | | | |
| **CONA** | **Conrad Observa** | **3.61** | **183** | Pn | **Pn** | **00 51 41.2** | **+1.2** |
| | SNR=26 | | | | | | |
| **GRA1** | **Grafenberg Arr** | **3.62** | **241** | Pn | **Pn** | **00 51 40.9** | **+0.8** |
| GRA1 | | | | Sg | **Sg** | **00 52 40.3** | **+1.4** |
| **GRF** | **Grafenberg Arr** | **3.62** | **241** | *e*Pn | **Pn** | **00 51 40.9** | **+0.8** |
| GRF | | | | *e*Sg | **Sg** | **00 52 40.3** | **+1.4** |
| **BSD** | **Bornholm Skovb** | **3.66** | **349** | *i* P | **Pn** | **00 51 40.1** | **-0.5** |
| BSD | | | | *i* S | **Sn** | **00 52 20.3** | **-4.1** |
| **MOA** | **Molln** | **3.88** | **199** | ⇓*i*Pn | **Pn** | **00 51 44.8** | **+1.2** |
| | SNR=36 | | | | | | |
| MOA | | | | ⇑*i*Sg | **Sg** | **00 52 47.6** | **+0.4** |
| | comp=N,237nm,0.8s | | | | | | |
| **MOA** | **Molln** | **3.88** | **199** | Pn | **Pn** | **00 51 44.8** | **+1.2** |
| | SNR=36 | | | | | | |
| MOA | | | | Sg | **Sg** | **00 52 47.6** | **+0.4** |
| | comp=N,237nm,0.8s | | | | | | |
| **STHS** | **Stebnicka Huta** | **3.90** | **121** | *e*P | **Pn** | **00 51 45.5** | **+1.5** |
| **STHS** | **Stebnicka Huta** | **3.90** | **121** | *e*PN | **Pn** | **00 51 45.5** | **+1.5** |
| STHS | | | | *e*PG | **Pg** | **00 51 59.4** | **+1.9** |
| STHS | | | | *e*SG | **Sg** | **00 52 50.1** | **+2.1** |
| **STHS** | **Stebnicka Huta** | **3.90** | **121** | *e*P | **Pn** | **00 51 45.5** | **+1.5** |
| **KLNR** | **Kaliningrad** | **3.95** | **37** | *e*P | **Pn** | **00 51 45.7** | **+1.2** |
| **KLNR** | **Kaliningrad** | **3.95** | **37** | *e*P | **Pn** | **00 51 45.7** | **+1.2** |
| **ARSA** | **Arzberg** | **4.30** | **185** | ⇑*i*Pn | **Pn** | **00 51 50.9** | **+1.4** |
| | SNR=13 | | | | | | |
| ARSA | | | | ⇑*i*Sg | **Sg** | **00 53 01.5** | **+0.6** |
| | comp=N,158nm,0.8s | | | | | | |
| **ARSA** | **Arzberg** | **4.30** | **185** | Pn | **Pn** | **00 51 50.9** | **+1.4** |
| | SNR=13 | | | | | | |
| ARSA | | | | Sg | **Sg** | **00 53 01.5** | **+0.6** |
| | comp=N,158nm,0.8s | | | | | | |
| **PSZ** | **Piszkesteto** | **4.37** | **144** | ⇑*i*P | **Pn** | **00 51 52.2** | **+1.8** |
| **PSZ** | **Piszkesteto** | **4.37** | **144** | ⇑*e*Pn | **Pn** | **00 51 52.2** | **+1.8** |
| **PKST** | **T`'s** | **4.46** | **163** | ⇑*e*Pn | **Pn** | **00 51 53.0** | **+1.4** |
| **BUD** | **Budapest** | **4.47** | **154** | ⇑*e* | **Pn** | **00 51 53.5** | **+1.7** |
| BUD | | | | *e* | | 00 52 52.8 | |
| **BUD** | **Budapest** | **4.47** | **154** | ⇑*e*Pn | **Pn** | **00 51 53.5** | **+1.7** |
| **KWP** | **Kalwaria Pacla** | **4.61** | **112** | *e*Pn | **Pn** | **00 51 52.0** | **-1.7** |
| KWP | | | | *e*Pg | **Pg** | **00 52 09.3** | **-1.8** |
| **KWP** | **Kalwaria Pacla** | **4.61** | **112** | *e*P | **Pn** | **00 51 52.0** | **-1.7** |
| **KWP** | **Kalwaria Pacla** | **4.61** | **112** | *e*P | **Pn** | **00 51 52.0** | **-1.7** |
| **KWP** | **Kalwaria Pacla** | **4.61** | **112** | *e*Pg | **Pg** | **00 52 09.4** | **-1.7** |
| **KOLS** | **Kolonicke sedl** | **4.73** | **121** | *e*P | **Pn** | **00 51 56.0** | **+0.6** |
| **KOLS** | **Kolonicke sedl** | **4.73** | **121** | *e*PN | **Pn** | **00 51 56.0** | **+0.6** |
| KOLS | | | | *e*PG | **Pg** | **00 52 11.4** | **-2.0** |
| KOLS | | | | *e*SG | **Sg** | **00 53 13.9** | **-0.8** |
| **KOLS** | **Kolonicke sedl** | **4.73** | **121** | *e*P | **Pn** | **00 51 56.0** | **+0.6** |
| **BLEU** | **Blekinge** | **4.79** | **358** | P | **Pn** | **00 51 56.1** | **+0.1** |
| **KBA** | **Koelnbreinsper** | **4.81** | **203** | ⇓*i*Pn | **Pn** | **00 51 58.0** | **+1.4** |
| | SNR=30 | | | | | | |
| KBA | | | | ⇓*i*Sg | **Sg** | **00 53 17.5** | **+0.3** |
| | comp=N,143nm,0.6s | | | | | | |
| **KBA** | **Koelnbreinsper** | **4.81** | **203** | Pn | **Pn** | **00 51 58.0** | **+1.4** |
| | SNR=30 | | | | | | |
| KBA | | | | Sg | **Sg** | **00 53 17.5** | **+0.3** |
| | comp=N,143nm,0.6s | | | | | | |
| **SOKA** | **Soboth** | **4.91** | **189** | ⇓*i*Pn | **Pn** | **00 51 59.0** | **+1.1** |
| | SNR=5.7 | | | | | | |
| **SOKA** | **Soboth** | **4.91** | **189** | Pn | **Pn** | **00 51 59.0** | **+1.1** |
| | SNR=5.7 | | | | | | |
| **UZH** | **Uzhgorod** | **4.92** | **124** | *e*P | **Pn** | **00 51 57.0** | **-1.0** |
| UZH | | | | *e*S | **Sn** | **00 52 55.0** | **-0.6** |
| UZH | | | | MLR | MLR | | |
| | comp=Z,100nm,1.0s | | | | | | |
| **UZH** | **Uzhgorod** | **4.92** | **124** | *e*P | **Pn** | **00 51 57.0** | **-1.0** |
| | comp=Z,100nm,1.0s | | | | | | |
| UZH | | | | *e*S | **Sn** | **00 52 55.0** | **-0.6** |
| **BEHE** | **Becsehely** | **5.08** | **175** | ⇑*e*Pn | **Pn** | **00 52 03.0** | **+2.8** |
| **GROS** | **Grobnik** | **5.09** | **185** | *i* Pn | **Pn** | **00 52 02.3** | **+2.0** |
| **GROS** | **Grobnik** | **5.09** | **185** | *i* Pn | **Pn** | **00 52 02.3** | **+2.0** |
| **OBKA** | **Obir** | **5.13** | **192** | ⇓*i*Pn | **Pn** | **00 52 01.8** | **+0.9** |
| **OBKA** | **Obir** | **5.13** | **192** | Pn | **Pn** | **00 52 01.8** | **+0.9** |
| **WATA** | **Walderalm** | **5.14** | **217** | ⇓*i*Pn | **Pn** | **00 52 01.5** | **+0.4** |
| | SNR=16 | | | | | | |
| WATA | | | | ⇑*i*Sg | **Sg** | **00 53 29.1** | **+1.4** |
| | comp=Z,75nm,0.7s | | | | | | |
| **WATA** | **Walderalm** | **5.14** | **217** | Pn | **Pn** | **00 52 01.5** | **+0.4** |
| | SNR=16 | | | | | | |
| WATA | | | | Sg | **Sg** | **00 53 29.1** | **+1.4** |
| | comp=Z,75nm,0.7s | | | | | | |
| **MYKA** | **Terra Mystica** | **5.17** | **199** | ⇓*i*Pn | **Pn** | **00 52 02.5** | **+1.1** |
| MYKA | | | | ⇑*i*Sg | **Sg** | **00 53 29.7** | **+1.0** |
| | comp=Z,38nm,0.8s | | | | | | |
| **MYKA** | **Terra Mystica** | **5.17** | **199** | Pn | **Pn** | **00 52 02.5** | **+1.1** |
| MYKA | | | | Sg | **Sg** | **00 53 29.7** | **+1.0** |
| | comp=Z,38nm,0.8s | | | | | | |
| **WTTA** | **Wattenberg** | **5.17** | **216** | ⇑*i*Pn | **Pn** | **00 52 02.3** | **+0.7** |
| | SNR=11 | | | | | | |
| **WTTA** | **Wattenberg** | **5.17** | **216** | Pn | **Pn** | **00 52 02.3** | **+0.7** |
| | SNR=11 | | | | | | |
| **MOTA** | **Moosalm** | **5.31** | **220** | ⇑*i*Pn | **Pn** | **00 52 04.2** | **+0.7** |
| | SNR=22 | | | | | | |
| MOTA | | | | ⇓*i*Sg | **Sg** | **00 53 34.8** | **+1.5** |
| | comp=Z,102nm,0.7s | | | | | | |
| **MOTA** | **Moosalm** | **5.31** | **220** | Pn | **Pn** | **00 52 04.2** | **+0.7** |
| | SNR=22 | | | | | | |
| MOTA | | | | Sg | **Sg** | **00 53 34.8** | **+1.5** |
| | comp=Z,102nm,0.7s | | | | | | |
| **LVV** | **L'vov** | **5.32** | **106** | *e*P | Pn | 00 52 07.3 | +3.9 |
| LVV | | | | *e*S | **Sn** | **00 53 06.1** | **+0.8** |
| **LVV** | **L'vov** | **5.32** | **106** | *e*P | Pn | 00 52 07.3 | +3.9 |
| LVV | | | | *e*S | **Sn** | **00 53 06.1** | **+0.8** |
| **ABTA** | **Abfaltersbach** | **5.34** | **208** | ⇑*i*Pn | **Pn** | **00 52 05.5** | **+1.7** |
| | SNR=16 | | | | | | |
| **ABTA** | **Abfaltersbach** | **5.34** | **208** | Pn | **Pn** | **00 52 05.5** | **+1.7** |
| | SNR=16 | | | | | | |
| **RETA** | **Reutte** | **5.34** | **223** | ⇑*i*Pn | **Pn** | **00 52 04.6** | **+0.8** |
| | SNR=9.1 | | | | | | |
| RETA | | | | ⇑*i*Pg | **Pg** | **00 52 24.3** | **-0.8** |
| **RETA** | **Reutte** | **5.34** | **223** | Pn | **Pn** | **00 52 04.6** | **+0.8** |
| | SNR=9.1 | | | | | | |
| **TRPA** | **Tarpa** | **5.37** | **127** | ⇓*i*P | **Pn** | **00 52 04.7** | **+0.6** |
| **TRPA** | **Tarpa** | **5.37** | **127** | ⇓*i*P | **Pn** | **00 52 04.7** | **+0.6** |
| **KOE** | **Koeppel** | **5.41** | **261** | *e*Pn | **Pn** | **00 52 05.0** | **+0.3** |
| **KOE** | **Koeppel** | **5.41** | **261** | Pn | **Pn** | **00 52 05.0** | **+0.3** |
| **HOBG** | **Hohbusch** | **5.54** | **268** | *e*Pn | **Pn** | **00 52 06.8** | **+0.4** |
| **HOBG** | **Hohbusch** | **5.54** | **268** | Pn | **Pn** | **00 52 06.8** | **+0.4** |
| **BNS** | **Bensberg** | **5.64** | **268** | *e*Pn | **Pn** | **00 52 08.4** | **+0.6** |
| **BNS** | **Bensberg** | **5.64** | **268** | Pn | **Pn** | **00 52 08.4** | **+0.6** |
| **BGG** | **Burgeitz** | **5.71** | **260** | *e*Pn | **Pn** | **00 52 09.7** | **+0.9** |
| **BGG** | **Burgeitz** | **5.71** | **260** | Pn | **Pn** | **00 52 09.7** | **+0.9** |
| **FETA** | **Feichten** | **5.72** | **220** | ⇑*i*Pn | **Pn** | **00 52 10.1** | **+0.9** |
| **LAUG** | **Laupendahl** | **5.74** | **272** | *e*Pn | **Pn** | **00 52 10.0** | **+0.9** |
| **LAUG** | **Laupendahl** | **5.74** | **272** | Pn | **Pn** | **00 52 10.0** | **+0.9** |
| **DAVA** | **Damuels** | **5.88** | **226** | ⇓*i*Pn | **Pn** | **00 52 11.5** | **+0.2** |
| DAVA | | | | ⇓*i*Pg | **Pg** | **00 52 34.5** | **-0.9** |
| DAVA | | | | ⇓*i*Sg | **Sg** | **00 53 54.4** | **+2.9** |
| | comp=Z,75nm,0.7s | | | | | | |
| **STB** | **Steinbach** | **5.92** | **265** | *e*Pn | **Pn** | **00 52 13.0** | **+1.3** |
| STB | | | | *e*Sn | **Sn** | **00 53 21.6** | **+1.4** |
| | comp=Z,26nm,0.8s | | | | | | |
| **STB** | **Steinbach** | **5.92** | **265** | Pn | **Pn** | **00 52 13.0** | **+1.3** |
| STB | | | | Sn | **Sn** | **00 53 21.6** | **+1.4** |
| | comp=Z,26nm,0.8s | | | | | | |
| **BFO** | **Black Forest** | **5.96** | **241** | *i* P | Pn | 00 52 19.3 | +7.1 |
| **BFO** | **Black Forest** | **5.96** | **241** | *i* P | Pn | 00 52 19.3 | +7.1 |
| **HILG** | **Hillesheim** | **6.09** | **262** | *e*Pn | **Pn** | **00 52 14.8** | **+0.7** |
| **HILG** | **Hillesheim** | **6.09** | **262** | Pn | **Pn** | **00 52 14.8** | **+0.7** |
| **KLL** | **Kalltalsperre** | **6.24** | **266** | *e*Pn | **Pn** | **00 52 16.3** | **+0.2** |
| **KLL** | **Kalltalsperre** | **6.24** | **266** | Pn | **Pn** | **00 52 16.3** | **+0.2** |
| **DAVOX** | **Davos/Dischmat** | **6.27** | **223** | Pn | **Pn** | **00 52 17.2** | **+0.6** |
| | comp=Z,2.1nm,0.3s,baz=31,slow=13,SNR=20 | | | | | | |
| DAVOX | | | | Sn | **Sn** | **00 53 24.7** | **-4.3** |
| | comp=Z,0.5nm,0.3s,baz=7.5,slow=19,SNR=3.1 | | | | | | |
| DAVOX | | | | Lg | Lg | 00 54 03.2 | |
| | comp=Z,1.3nm,0.3s,baz=7.0,slow=5.8,SNR=6.9 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **6.27** | **223** | P | **Pn** | **00 52 17.2** | **+0.6** |
| DAVOX | | | | | | 00 53 24.7 | |
| DAVOX | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| DAVOX | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| **MUD** | **Monsted U'grnd** | **6.41** | **323** | *e*P | **Pn** | **00 52 20.6** | **+2.3** |
| **MUD** | **Monsted U'grnd** | **6.41** | **323** | *i* P | **Pn** | **00 52 20.6** | **+2.3** |
| **MUD** | **Monsted U'grnd** | **6.41** | **323** | *e*P | **Pn** | **00 52 20.6** | **+2.3** |
| **DRGR** | | **6.42** | **135** | ⇑*i*P | **Pn** | **00 52 20.5** | **+1.9** |
| **DRGR** | | **6.42** | **135** | ⇑*i*P | **Pn** | **00 52 20.5** | **+1.9** |
| **CDF** | **Champ du Feu** | **6.50** | **245** | *e*Pn | **Pn** | **00 52 18.2** | **-1.5** |
| **CDF** | **Champ du Feu** | **6.50** | **245** | *e*Pg | **Pg** | **00 52 46.3** | **-0.9** |
| CDF | | | | *e*Sg | **Sg** | **00 54 11.4** | **0.0** |
| | comp=N,204nm,1.1s | | | | | | |
| **CDF** | **Champ du Feu** | **6.50** | **245** | *e*Pn | **Pn** | **00 52 18.2** | **-1.5** |
| **CDF** | **Champ du Feu** | **6.50** | **245** | *e*Pg | **Pg** | **00 52 46.3** | **-0.9** |
| CDF | | | | *e*Sg | **Sg** | **00 54 11.4** | **0.0** |
| | comp=N,102nm,1.1s | | | | | | |
| **BZS** | **Buzias** | **6.95** | **146** | ⇑*i*P | **Pn** | **00 52 28.0** | **+2.2** |
| **HINF** | **Hinteralfeld** | **7.06** | **242** | *e*Pn | **Pn** | **00 52 25.8** | **-1.6** |
| **HINF** | **Hinteralfeld** | **7.06** | **242** | *e*Pg | **Pg** | **00 52 56.1** | **-1.9** |
| HINF | | | | *e*Sg | **Sg** | **00 54 28.9** | **-0.6** |
| | comp=N,57nm,0.7s | | | | | | |
| **HINF** | **Hinteralfeld** | **7.06** | **242** | *e*Pn | **Pn** | **00 52 25.8** | **-1.6** |
| **HINF** | **Hinteralfeld** | **7.06** | **242** | *e*Pg | **Pg** | **00 52 56.1** | **-1.9** |
| HINF | | | | *e*Sg | **Sg** | **00 54 28.9** | **-0.6** |
| | comp=N,28nm,0.7s | | | | | | |
| **BURAR** | **Bucovina Array** | **7.10** | **120** | ⇑*i*P | **Pn** | **00 52 29.0** | **+1.1** |
| **IIGN** | **Ignalina** | **7.15** | **54** | *e*P | **Pg** | **00 53 01.1** | **+1.5** |
| IIGN | | | | IAmb | IAmb | 00 53 03.2 | |
| | comp=Z,12nm,0.8s | | | | | | |
| **IIGN** | **Ignalina** | **7.15** | **54** | *e*P | **Pg** | **00 53 01.1** | **+1.5** |
| **ISAL** | **Salakas** | **7.21** | **52** | *e*P | **Pg** | **00 53 00.7** | **0.0** |
| ISAL | | | | IAmb | IAmb | 00 53 03.3 | |
| | comp=Z,19nm,1.4s | | | | | | |
| **ISAL** | **Salakas** | **7.21** | **52** | *e*P | **Pg** | **00 53 00.7** | **0.0** |
| **HAU** | **Haudompre** | **7.24** | **245** | *e*Pn | **Pn** | **00 52 28.6** | **-1.2** |
| **HAU** | **Haudompre** | **7.24** | **245** | *e*Pg | **Pg** | **00 53 00.0** | **-1.4** |
| HAU | | | | *e*Sg | **Sg** | **00 54 34.3** | **-0.9** |
| | comp=Z,85nm,0.8s | | | | | | |
| **HAU** | **Haudompre** | **7.24** | **245** | *e*Pn | **Pn** | **00 52 28.6** | **-1.2** |
| **HAU** | **Haudompre** | **7.24** | **245** | *e*Pg | **Pg** | **00 53 00.0** | **-1.4** |
| HAU | | | | *e*Sg | **Sg** | **00 54 34.3** | **-0.9** |
| | comp=Z,42nm,0.8s | | | | | | |

NACGM Naroch 7.24 58 e Pg 00 53 04.0 +2.6
GIVF Givet 7.29 263 ePn Pn 00 52 30.3 -0.2
GIVF eSg Sg 00 54 37.7 +0.8
comp=Z,78nm,1.0s
GIVF Givet 7.29 263 ePn Pn 00 52 30.3 -0.2
GIVF eSg Sg 00 54 37.7 +0.8
comp=Z,39nm,1.0s
PAGF Fort de Pagny 7.32 250 ePn Pn 00 52 29.4 -1.5
PAGF Fort de Pagny 7.32 250 ePg Pg 00 53 01.2 -1.8
PAGF eSg Sg 00 54 36.8 -1.0
comp=Z,30nm,1.0s
PAGF Fort de Pagny 7.32 250 ePn Pn 00 52 29.4 -1.5
PAGF Fort de Pagny 7.32 250 ePg Pg 00 53 01.2 -1.8
PAGF eSg Sg 00 54 36.8 -1.0
comp=Z,15nm,1.0s
IZAR Zarasai 7.36 51 eP Pg 00 53 01.6 -2.0
IZAR IAmb IAmb 00 53 06.0
comp=Z,9.2nm,0.8s
IZAR Zarasai 7.36 51 eP Pg 00 53 01.6 -2.0
IDID Didziasalis 7.39 55 eP Pg 00 53 01.2 -3.1
IDID Didziasalis 7.39 55 eP Pg 00 53 01.2 -3.1
BAIF Baives 7.69 264 ePn Pn 00 52 34.7 -1.2
BAIF eSg Sg 00 54 49.4 -0.1
comp=Z,111nm,1.5s
BAIF Baives 7.69 264 ePn Pn 00 52 34.7 -1.2
BAIF eSg Sg 00 54 49.4 -0.1
comp=Z,55nm,1.5s
MICGM Minsk 7.70 63 eP Pb 00 53 03.0 +6.0
MEZF Maizieres J'vi 7.74 251 ePn Pn 00 52 35.5 -1.2
MEZF eSg Sg 00 54 50.3 -1.0
comp=Z,78nm,1.0s
MEZF Maizieres J'vi 7.74 251 ePn Pn 00 52 35.5 -1.2
MEZF eSg Sg 00 54 50.3 -1.0
comp=Z,39nm,1.0s
SFTF Sexfontaines 7.89 249 ePn Pn 00 52 37.4 -1.3
SFTF eSg Sg 00 54 54.4 -1.6
comp=Z,228nm,1.4s
SFTF Sexfontaines 7.89 249 ePn Pn 00 52 37.4 -1.3
SFTF eSg Sg 00 54 54.4 -1.6
comp=Z,114nm,1.4s
CABF La Chapelle 8.22 237 ePn Pn 00 52 41.9 -1.4
CABF La Chapelle 8.22 237 ePg Pg 00 53 17.0 -3.1
CABF eSg Sg 00 55 04.5 -2.0
comp=Z,177nm,1.2s
CABF La Chapelle 8.22 237 ePn Pn 00 52 41.9 -1.4
CABF La Chapelle 8.22 237 ePg Pg 00 53 17.0 -3.1
CABF eSg Sg 00 55 04.5 -2.0
comp=Z,88nm,1.2s
KIEV Kiev 8.29 91 ceP Pn 00 52 43.4 -0.7
KIEV Kiev 8.29 91 eP Pn 00 52 43.4 -0.7
AKASG Malin Array Be 8.29 91 Pn Pn 00 52 43.3 -0.9
comp=Z,6.1nm,0.3s,baz=280,slow=12,SNR=19
AKASG Sn Sn 00 54 14.1 -4.5
comp=Z,3.0nm,0.3s,baz=272,slow=23,SNR=6.1
AKASG Lg Lg 00 55 16.2
comp=Z,0.5nm,0.3s,baz=266,slow=24,SNR=5.1
AKASG Malin Array Be 8.29 91 iP Pn 00 52 43.7 -0.5
AKASG pmax pmax
comp=Z,7.0nm,0.4s
AKASG Malin Array Be 8.29 91 iP Pn 00 52 43.7 -0.5
comp=Z,7.0nm,0.4s
LPL La Plagne 8.65 230 ePn Pn 00 52 48.0 -1.4
LPL La Plagne 8.65 230 ePg Pg 00 53 24.3 -4.2
LPL eSg Sg 00 55 17.3 -3.2
comp=Z,52nm,1.3s
LPL La Plagne 8.65 230 ePn Pn 00 52 48.0 -1.4
LPL La Plagne 8.65 230 ePg Pg 00 53 24.3 -4.2
LPL eSg Sg 00 55 17.3 -3.2
comp=Z,26nm,1.3s
LPG La Plagne 8.66 229 ePn Pn 00 52 47.3 -2.2
LPG La Plagne 8.66 229 ePg Pg 00 53 24.9 -3.7
LPG eSg Sg 00 55 17.9 -2.8
comp=Z,63nm,1.2s
LPG La Plagne 8.66 229 ePn Pn 00 52 47.3 -2.2
LPG La Plagne 8.66 229 ePg Pg 00 53 24.9 -3.7
LPG eSg Sg 00 55 17.9 -2.8
comp=Z,31nm,1.2s
HFS Hagfors 8.73 352 Pn Pn 00 52 49.3 -0.8
comp=Z,0.4nm,0.3s,baz=167,slow=16,SNR=8.9
HFS Sn Sn 00 54 24.4 -4.8
comp=Z,0.3nm,0.3s,baz=170,slow=25,SNR=2.5
HFS Lg Lg 00 55 20.8
comp=Z,0.6nm,0.3s,baz=177,slow=29,SNR=2.8
LOR Lormes 9.05 247 ePn Pn 00 52 53.9 -0.8
baz=68
LOR Lormes 9.05 247 ePg Pn 00 53 31.9 +37
baz=62
LOR eSg Sn 00 55 32.4 +55
comp=Z,75nm,1.3s
LOR Lormes 9.05 247 ePn Pn 00 52 53.9 -0.8
LOR Lormes 9.05 247 ePg Pn 00 53 31.9 +37
LOR eSg Sn 00 55 32.4 +55
comp=Z,37nm,1.3s
MBDF Montbardon 9.23 226 ePn Pn 00 52 54.6 -2.7
MBDF eSg Sn 00 55 35.5 +53
comp=Z,55nm,1.2s
MBDF Montbardon 9.23 226 ePn Pn 00 52 54.6 -2.7
MBDF eSg Sn 00 55 35.5 +53
comp=Z,28nm,1.2s
VSU Vasula 9.24 37⇑eP Pn 00 52 57.9 +0.8
VSU Vasula 9.24 37 eP Pn 00 52 57.9 +0.8
SSF Saint Saulge 9.37 246 ePn Pn 00 52 57.7 -1.3
SSF Saint Saulge 9.37 246 ePg Pn 00 53 38.8 +40
SSF eSg Sn 00 55 40.7 +56
comp=Z,22nm,1.0s
SSF Saint Saulge 9.37 246 ePn Pn 00 52 57.7 -1.3
SSF Saint Saulge 9.37 246 ePg Pn 00 53 38.8 +40
SSF eSg Sn 00 55 40.7 +56
comp=Z,11nm,1.0s
SMF Signal de Mont 9.42 244 ePn Pn 00 52 58.3 -1.3
SMF eSg Sn 00 55 42.3 +56
comp=Z,16nm,0.7s
SMF Signal de Mont 9.42 244 ePn Pn 00 52 58.3 -1.3
SMF eSg Sn 00 55 42.3 +56
comp=Z,7.8nm,0.7s
ORIF Oris-en-Rattie 9.50 230 ePn Pn 00 52 59.2 -1.7
ORIF eSg Sn 00 55 44.3 +56
comp=Z,32nm,1.0s
ORIF Oris-en-Rattie 9.50 230 ePn Pn 00 52 59.2 -1.7
ORIF eSg Sn 00 55 44.3 +56
comp=Z,16nm,1.0s
BARS Barje 9.54 154 ePn Pn 00 53 04.3 +3.0
AVF Avril sur Loir 9.61 245 ePn Pn 00 53 01.0 -1.2
AVF eSg Sn 00 55 48.1 +57
comp=Z,62nm,1.3s
AVF Avril sur Loir 9.61 245 ePn Pn 00 53 01.0 -1.2
AVF eSg Sn 00 55 48.1 +57
comp=Z,31nm,1.3s
SBF Sospel 9.64 221 ePn Pn 00 53 01.7 -1.1
SBF Sospel 9.64 221 ePn Pn 00 53 01.7 -1.1
HYF Humbligny 9.76 249 ePn Pn 00 53 03.5 -0.8
HYF eSg Sn 00 55 53.0 +58
HYF Humbligny 9.76 249 ePn Pn 00 53 03.5 -0.8
NOA NORSAR Array B 9.91 346 Pn Pn 00 53 03.4 -3.0
comp=Z,0.3nm,0.3s,baz=164,slow=12,SNR=2.9
NOA Sn Sn 00 54 48.9 -9.3
comp=Z,0.2nm,0.3s,baz=122,slow=19,SNR=2.8
NOA Lg Lg 00 56 01.6
comp=Z,0.5nm,0.3s,baz=195,slow=8.2,SNR=3.9
BGF Bois d'Agland 10.03 245 ePn Pn 00 53 06.6 -1.4
BGF eSg 00 56 01.1
comp=Z,44nm,0.9s
BGF Bois d'Agland 10.03 245 ePn Pn 00 53 06.6 -1.4
BGF eSg 00 56 01.1
comp=Z,22nm,0.9s
VIVF Saint-Julien-l 10.14 233 ePn Pn 00 53 08.1 -1.4
VIVF eSg 00 56 04.0
comp=Z,47nm,1.2s
VIVF Saint-Julien-l 10.14 233 ePn Pn 00 53 08.1 -1.4
VIVF eSg 00 56 04.0
comp=Z,23nm,1.2s
FRF La Foret Royal 10.22 222 ePn Pn 00 53 08.5 -2.1
FRF La Foret Royal 10.22 222 ePn Pn 00 53 08.5 -2.1
SMRF Simiane la Rot 10.36 227 ePn Pn 00 53 10.2 -2.4
SMRF Simiane la Rot 10.36 227 ePn Pn 00 53 10.2 -2.4
LMR La Mourre 10.46 222 ePn Pn 00 53 12.2 -1.7
LMR La Mourre 10.46 222 ePn Pn 00 53 12.2 -1.7
TCF Toulx Ste Croi 10.54 246 ePn Pn 00 53 13.7 -1.4
TCF eSg 00 56 17.7
comp=Z,25nm,1.0s
TCF Toulx Ste Croi 10.54 246 ePn Pn 00 53 13.7 -1.4
LASF Ste Croix 11.11 233 ePn Pn 00 53 20.3 -2.5
LASF eSg 00 56 34.4
comp=Z,56nm,1.5s
LASF Ste Croix 11.11 233 ePn Pn 00 53 20.3 -2.5
LASF eSg 00 56 34.4
comp=Z,28nm,1.5s
FINES FINESS Array B 11.34 25 Pn Pn 00 53 24.2 -1.7
comp=Z,0.9nm,0.3s,baz=206,slow=12,SNR=32
FINES Sn Sn 00 55 24.1 -9.1
comp=Z,0.7nm,0.3s,baz=199,slow=20,SNR=4.4
FINES Lg Lg 00 56 45.7
comp=Z,0.5nm,0.3s,baz=220,slow=26,SNR=2.7
EKA Eskdalemuir Ar 12.10 296 Pn Pn 00 53 32.0 -4.2
baz=102,slow=14,SNR=6.0
OBN Obninsk 12.73 66 Pn Pn 00 53 40.3 -4.6
comp=Z,1.1nm,0.3s,baz=0.0,slow=20,SNR=2.8
OBN Sn Sn 00 55 54.6 -13
comp=Z,0.8nm,0.3s,baz=0.0,slow=20,SNR=2.4
OBN Lg Lg 00 57 22.8
comp=Z,1.9nm,0.3s,baz=180,slow=20,SNR=2.5
OBN Obninsk 12.73 66⇓eP Pn 00 53 42.8 -2.1
OBN pmax pmax
comp=Z,4.0nm,0.9s
OBN MLR MLR
comp=Z,53nm,11.0s
OBN Obninsk 12.73 66 eP Pn 00 53 42.8 -2.1
comp=Z,53nm,11.0s
KLMR Klimovskoe 15.94 45 eP Pn 00 54 19.2 -8.9
KLMR pmax pmax
comp=Z,20nm,1.8s
KIV Kislovodsk 19.33 103 eP Pn 00 55 10.6 0.0
KIV pmax pmax
comp=Z,3.0nm,1.0s
KIV MLR MLR
comp=Z,33nm,15.0s
KIV Kislovodsk 19.33 103 eP Pn 00 55 10.6 0.0
comp=Z,33nm,15.0s
ARU Arti 25.13 62 P P 00 56 09.2 +0.2
comp=Z,0.2nm,0.3s,baz=90,slow=20,SNR=3.6
ARU Arti 25.13 62c iP P 00 56 09.5 +0.4
ARU 00 56 41.7
ARU S S 01 00 37.4 +2.9
ARU SS SnSn 01 01 27.3 +4.1
ARU pmax pmax
comp=Z,7.0nm,1.0s
ARU Arti 25.13 62 iP P 00 56 09.5 +0.4
comp=Z,7.0nm,1.0s
AKTK Aktyubinsk 26.15 76 P P 00 56 18.5 +0.1
comp=Z,2.0nm,0.6s
AKTO Aktyubinsk 26.15 76 P P 00 56 18.4 +0.1
comp=Z,1.9nm,0.6s,baz=280,slow=11,SNR=9.2
AKTO Aktyubinsk 26.15 76 P P 00 56 18.5 +0.1
AKTO pmax pmax
comp=Z,2.0nm,0.6s
BRVK Borovoye 32.51 66⇑eP P 00 57 14.3 -0.6
BRVK pmax pmax
comp=Z,3.0nm,1.5s
BRVK Borovoye 32.51 66 eP P 00 57 14.3 -0.6
comp=Z,3.0nm,1.5s
BVAR Borovoye Array 32.58 66 P P 00 57 16.5 +1.0
comp=Z,1.1nm,0.5s,baz=295,slow=7.5,SNR=8.5
BVAR Borovoye Array 32.58 66 P P 00 57 16.5 +1.0
BVAR pmax pmax
comp=Z,1.0nm,0.5s
KURK Kurchatov 38.18 66 eP P 00 58 04.5 +0.9
KURK pmax pmax
comp=Z,2.0nm,1.0s
KURK Kurchatov 38.18 66 eP P 00 58 04.5 +0.9
comp=Z,2.0nm,1.0s
NVS Novosibirsk 38.97 58 eP P 00 58 12.2 +2.0
NVS Novosibirsk 38.97 58 eP P 00 58 12.2 +2.0
AAK Ala-Archa 39.77 79⇑eP P 00 58 18.0 +0.7
AAK pmax pmax
comp=Z,8.0nm,1.0s
AAK Ala-Archa 39.77 79 eP P 00 58 18.0 +0.7
comp=Z,8.0nm,1.0s
TORD Torodi Ar. Bea 40.02 202 P P 00 58 19.8 +0.4
comp=Z,1.1nm,0.8s,baz=8.6,slow=8.7,SNR=10
ZALV Zalesovo Beam 40.19 59 P P 00 58 21.5 +1.1
comp=Z,0.4nm,0.4s,baz=307,slow=11,SNR=4.1
MKAR Makanchi Array 42.20 69 P P 00 58 38.0 +0.9
comp=Z,0.7nm,0.7s,baz=294,slow=9.2,SNR=3.8
MKAR Makanchi Array 42.20 69 iP P 00 58 38.7 +1.6
MKAR pmax pmax
comp=Z,1.0nm,0.7s
MKAR Makanchi Array 42.20 69 iP P 00 58 38.7 +1.6
comp=Z,1.0nm,0.7s
SONM Songino Array 54.90 55 P P 01 00 16.8 +1.8
comp=Z,1.0nm,0.9s,baz=300,slow=9.9,SNR=7.6
SONM Songino Array 54.90 55 P P 01 00 16.8 +1.8
SONM pmax pmax
comp=Z,1.0nm,0.9s
YAK Yakutsk 55.19 32 eP P 01 00 16.6 0.0
YAK Yakutsk 55.19 32 eP P 01 00 16.6 0.0
YKA Yellowknife Ar 59.84 336 P P 01 00 50.1 +0.7
comp=Z,1.6nm,0.7s,baz=29,slow=6.6,SNR=9.6
YKA Yellowknife Ar 59.84 336 P P 01 00 50.1 +0.7
YKA pmax pmax
comp=Z,2.0nm,0.7s
HHC Hu-ho-hao-te 62.37 58 eP P 01 01 07.1 0.0
HHC pmax pmax
comp=Z,14nm,0.9s
HHC pmax pmax
comp=Z,92nm,4.0s
CMAR Chiang Mai Arr 71.35 84 P P 01 02 05.8 +1.3
comp=Z,0.5nm,0.5s,baz=306,slow=7.7,SNR=4.3
CMAR Chiang Mai Arr 71.35 84 P P 01 02 05.8 +1.3
CMAR pmax pmax
comp=Z,1.0nm,0.5s
ASAR Alice Springs 125.36 84 PKP PKPdf 01 09 45.9 +0.5
comp=Z,0.3nm,0.7s,baz=298,slow=2.0,SNR=3.8

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*TEH **07** 01:21:00.0, 28°.84N×65°.94E, h10km, ML5.0*
*BJI **07** 01:21:24.5, 28°.80N×65°.90E, h10km, mb4.6/41, mB4.9/26, Ms4.7/32, Ms7 4.3/31*
*IDC **07** 01:21:24.2±0.5, 28°.60N×66°.15E, h0km, mb4.2/30, mb1 4.3/32, mb1mx4.2/52, mbtmp4.2/32, ML3.8/2, MS4.1/28, Ms1 4.1/28, ms1mx3.9/46, Error ellipse: s-maj=10.9km s-min=10.1km az=147.0*
*MOS **07** 01:21:25.3±1.2, 28°.66N×66°.11E, h15km, mb4.6/39, Error ellipse: s-maj=7.6km s-min=4.7km az=89.8*
*NEIC **07** 01:21:26.1±0.4, 28°.67N×66°.08E, h10km, mb4.6/19, Error ellipse: s-maj=8.7km s-min=6.4km az=161.0*
*NEIC Felt at Kalat.*
**ISC 07 01:21:27.2**±0.5**, 28°.61N**±0°.04×**66°.10E**±0°.03**, h18**km±2km**, h17km:pP-P, n250, σ1s61**/262**, mb4.5**/67**, MS4.1**/30**, 25C-15D, Pakistan**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
BHJ Bhuj 6.22 148 eP Pn 01 22 57.3 -0.8
BHJ AMB AMB 01 22 58.9
comp=Z,253nm,0.8s
THW Thamme Wali 6.41 48 ⇑P Pn 01 22 59.3 -1.5
KBL Kabul 6.43 22 eP Pn 01 23 01.6 +0.3
KBL Kabul 6.43 22 ePn Pn 01 23 01.6 +0.3
SARP Sargodha 6.58 58 P Pn 01 23 01.8 -1.3
CEP Cherat 7.20 42 ⇓P Pn 01 23 10.8 -1.0
CHCP Chirah Chowk 7.94 49 ⇓P Pn 01 23 20.8 -1.1
CHCP S Sn 01 24 46.0 -5.3
WBK Wadi Bani Khal 8.77 229 ⇑P Pn 01 23 31.5 -1.8
SNR=14
WBK ml 01 23 50.2
SNR=10.0
SMDO Samad 9.11 235 ⇑P Pn 01 23 35.9 -2.1
SMDO P Pn 01 23 37.6 -0.4
SNR=12
SMDO P Pn 01 23 37.6 -0.4
SNR=17
SMDO ml 01 23 53.8
SNR=9.6
BANOM Banah 9.12 255 ⇑P Pn 01 23 37.5 -0.5
SNR=66
BANOM ⇓P Pn 01 23 37.6 -0.5
BANOM ml 01 23 46.5
SNR=72
BANOM Banah 9.12 255⇑iP Pn 01 23 37.8 -0.2
SNR=66
IMYA Miami 9.22 328 eP Pn 01 23 40.7 +1.1
IMOG Moghan 9.41 324 eP Pn 01 23 43.9 +1.6
ISRO Mashad 9.50 326 eP Pn 01 23 45.0 +1.6
JMDO Jabal Madar 9.52 231 P Pn 01 23 43.5 -0.1
SNR=11
JMDO ml 01 24 07.2
SNR=14
DHRM DHARAMSHALA 9.53 65 eP Pn 01 23 43.0 -0.8
DHRM eS Sn 01 25 26.0 -4.6
DHRM AML AML 01 27 20.9
comp=E,231nm,0.7s
DHRM AML AML 01 27 24.2
comp=N,164nm,0.8s
UOSS Wadi Hilu 9.56 250 ePn Pn 01 23 42.4 -1.7
HATD Hatta, Dubai 9.67 249⇓iP Pn 01 23 44.4 -1.2
SNR=63
NDI New Delhi 9.77 87 eP Pn 01 23 46.0 -0.9
NDI eS Sn 01 25 30.5 -5.8
ASHO Ashiyiah 9.79 249 P Pn 01 23 46.5 -0.7
SNR=54
ASHO ⇑P Pn 01 23 46.6 -0.7
ASHO Ashiyiah 9.79 249⇓iP Pn 01 23 46.5 -0.7
SNR=95
IPAY Payeh 9.85 324 eP Pn 01 23 49.3 +1.1
SMLA Simla 9.93 73 iP Pn 01 23 47.0 -2.1
SMLA eS Sn 01 25 34.7 -5.5
NAZ Nazwa, Dubai 9.99 251⇓iP Pn 01 23 50.9 +0.9
SNR=11
ARQ Araqi 10.09 241 P Pn 01 23 52.8 +1.5
SNR=29
ARQ ml 01 23 54.4
SNR=23
IAKL Akhelmad 10.09 324 eP Pn 01 23 53.9 +2.4
FAQ Al Faqa, Dubai 10.15 250 iP Pn 01 23 53.5 +1.3
SNR=44
IKRD Kardeh 10.35 324 eP Pn 01 23 49.6 -5.5
ASUD Al Ashush, Dub 10.42 250⇓iP Pn 01 23 57.1 +1.3
SNR=14
DZET Dzherino 10.42 12 P Pn 01 23 57.0 +1.0
DDI Dehra Dun 10.56 78 ex Pn 01 23 52.7 -5.1
DDI ex Sn 01 25 48.1 -7.7
DDI AML AML 01 27 47.8
comp=E,105nm,0.2s
DDI AML AML 01 27 48.9
comp=N,181nm,0.5s
IEMG Emamgholi 10.78 327 eP Pn 01 24 03.6 +2.7
ISFR Sfrayin 10.83 323 eP Pn 01 23 52.5 -9.1
ISRV Sarvestan 11.39 277 eP Pn 01 24 08.8 -0.6
GEYT Alibeck 11.44 326 Pn Pn 01 24 09.1 -0.7
comp=N,0.3nm,0.3s,baz=153,slow=13,SNR=3.0
GEYT Lg Lg 01 27 36.9
baz=172,slow=34,SNR=3.4
GEYT LR LR 01 28 38.6
comp=N,601nm,20.6s,baz=145,slow=38
IPAR Pars 11.47 279 eP Pn 01 24 10.9 +0.5
BHPL Bhopal 11.51 115 eP Pn 01 24 09.1 -1.6
BHPL AMB AMB 01 24 17.2
comp=Z,42nm,0.5s
IRAM Ramesheh 12.29 288 eP Pn 01 24 27.1 +5.6
POO Poona 12.29 143 eP Pn 01 24 18.0 -3.5
comp=Z,1.5nm,1.0s
POO ePP PnPn 01 24 27.0 -2.4
POO ePPP PPP 01 24 34.5
POO eLQ LQ 01 26 19.0
POO iS Sn 01 26 28.0 -10
POO eSS SnSn 01 26 52.0 +1.6
POO eLR LR 01 26 57.0
IKAZ Kazeroun 12.51 279 eP Pn 01 24 23.0 -1.8
IZEF Zefreh 12.59 293 eP Pn 01 24 30.0 +4.3
SFK Sufi-Kurgan 12.91 26 P Pn 01 24 29.7 -0.4
IGLO Ghaloghah 12.99 310 eP Pn 01 24 35.5 +4.3
KSH Kashi 13.61 34 P Pn 01 24 32.7 -6.8
KSH esP 01 24 39.4
KSH S Sn 01 26 54.8 -16
KSH PMZ
comp=Z,52nm,0.5s
KSH LN
comp=Z,3μm,13.0s
KSH LE
comp=Z,4μm,9.5s
KSH LZ
comp=Z,3μm,13.2s
IPIR Pirpir 13.71 291 eP P 01 24 48.4 -1.3
NGP Nagpur 13.90 119 eP Pn 01 24 40.5 -2.9
NGP AMB AMB 01 24 43.1
comp=Z,32nm,1.7s
NGP ex Sn 01 27 12.0 -5.3
KK31 Karatay Array 14.90 13 iP Pn 01 24 55.5 -1.5
KK31 pmax pmax
comp=Z,9.0nm,0.5s
IRAZ Razeghan 15.29 300 eP P 01 25 06.8 -0.4
EKS2 Erkin-Say 15.34 22 eP Pn 01 24 59.7 -3.3
EKS2 eS Sn 01 27 42.7 -10
EKS2 pmax pmax
comp=Z,68nm,1.6s
EKS2 Erkin-Say 15.34 22 ePn Pn 01 24 59.7 -3.3
comp=Z,68nm,1.6s
EKS2 eS Sn 01 27 42.7 -10
KOLN Koldanda 15.46 89 eP Pn 01 25 03.6 -1.1
comp=Z,50nm,0.5s
RPR Rampur 15.48 126 ePn Pn 01 25 04.0 -0.8
DANN Dangsing 15.54 87 eP Pn 01 25 07.0 +1.2
comp=Z,16nm,0.7s
AAK Ala-Archa 15.56 24 Pn Pn 01 25 05.2 -0.7
comp=Z,1.0nm,0.3s,baz=204,slow=9.2,SNR=12
AAK Sn Sn 01 27 55.6 -2.3
comp=Z,0.3nm,0.3s,baz=198,slow=16,SNR=4.7
AAK Ala-Archa 15.56 24⇑iP Pn 01 25 04.5 -1.4
AAK pmax pmax
comp=Z,20nm,1.6s
AAK Ala-Archa 15.56 24 P Pn 01 25 05.0 -0.9
SNR=9.9
AAK Ala-Archa 15.56 24 ePn Pn 01 25 03.8 -2.1
comp=Z,14nm,0.6s
AAK eS Sn 01 27 47.5 -11
FRU Bishkek 15.78 24 eP Pn 01 25 07.0 -1.6
FRU pmax pmax
comp=Z,60nm,1.8s
HYBB Hyderabad (bro 15.97 132 eP Pn 01 25 12.7 +1.5
HYB Hyderabad 15.97 132 iP P 01 25 15.0 +0.4
HYB eS Sn 01 28 13.0 +5.1
HYB Hyderabad 15.97 132 eP Pn 01 25 10.9 -0.2
HYB AMB AMB 01 25 18.8
comp=Z,23nm,0.7s
TKM2 Tokmak 2 16.21 26 eP Pn 01 25 11.6 -2.8
TKM2 pmax pmax
comp=Z,17nm,0.8s
TKM2 Tokmak 2 16.21 26 ePn Pn 01 25 11.6 -2.8
comp=Z,17nm,0.8s
ABTO Aybut 16.24 229 P Pn 01 25 13.4 -1.3
SNR=5.4
GKN Gorkha 16.34 88 eP Pn 01 25 15.8 -0.2
comp=Z,39nm,0.7s
IKOM Komasi 16.81 294 eP P 01 25 23.0 -1.0
KKN Kakani 16.93 88 eP Pn 01 25 22.3 -1.3
comp=Z,47nm,0.7s
PKIN Phulchoki 17.06 89 eP Pn 01 25 23.4 -1.9
comp=Z,34nm,0.6s
PKI Pulchoki 17.08 89 eP Pn 01 25 23.6 -1.9
comp=Z,35nm,0.6s
URV Uravakonda 17.08 140 ePn Pn 01 25 26.0 +0.7
NJS Nagarjunasagar 17.09 132 eP P 01 25 27.3 +0.3
IVIS Veis 17.42 295 eP Pn 01 25 28.4 -1.2
GUN Gumba 17.45 88 eP Pn 01 25 29.3 -0.8
comp=Z,263nm,0.8s
IGHG Ghaleghazi 17.60 294 eP Pn 01 25 30.1 -1.8
IDHR Dehrash 17.84 295 eP Pn 01 25 30.7 -4.1
PVM Polavaram 18.21 125 ePn P 01 25 39.4 +0.1
PVM eSn Sn 01 29 03.4 +1.3
PDGK Podgornoye 18.22 33 P P 01 25 39.8 +0.5
RAMN Ramite 18.22 90 eP Pn 01 25 36.5 -3.1
comp=Z,62nm,0.6s
BOK Bokaro 18.39 101 eP P 01 25 41.4 0.0
IBST Bostanabad 18.43 304 eP Pn 01 25 42.3 +0.2
ODAN Odare 18.93 90 eP P 01 25 45.4 -2.1
comp=Z,72nm,0.7s
TAPN Taplejung 19.13 89 eP P 01 25 49.2 -0.6
comp=Z,37nm,0.6s
RAYN Ar Rayn 19.17 259 eP P 01 25 49.2 -0.9
RAYN eS Sn 01 29 14.4 -11
CHLP Challavanipeta 19.27 118 eP Pn 01 25 53.9 +1.8
SKHT Srikalahasti 19.46 137 eP P 01 25 52.3 -0.9
OTUK Ortayu 20.20 12 P P 01 26 01.2 +0.2
AB31 Akbulak array 21.15 349 iP P 01 26 11.7 +0.4
AB31 pmax pmax
comp=Z,21nm,0.8s
LSA Lhasa 21.90 81 P P 01 26 20.8 +0.8
LSA S S 01 30 22.0 +0.4
LSA PMZ
comp=Z,6.0nm,1.0s
LSA LN
comp=Z,1μm,20.7s

LSA LE
comp=Z,500nm,18.2s
LSA LZ
comp=Z,620nm,20.1s
**LSA Lhasa 21.90 81** *e*P **P 01 26 20.6 +0.6**
LSA pmax pmax
comp=Z,24nm,0.9s
**LSA Lhasa 21.90 81** *e*P **P 01 26 20.6 +0.6**
comp=Z,24nm,0.9s
**EAK Akyaka 22.01 309** P **P 01 26 21.9 +1.1**
**TUTA Tutak 22.04 305** P **P 01 26 22.4 +1.2**
**MKAR Makanchi Array 22.14 31** P **P 01 26 21.2 -0.8**
comp=Z,9.8nm,0.7s,baz=211,slow=11,SNR=31
MKAR S **S 01 30 25.7 +0.5**
comp=Z,0.5nm,0.6s,baz=248,slow=22,SNR=2.4
MKAR LR LR 01 35 35.1
comp=Z,683nm,18.3s,baz=220,slow=38
**MKAR Makanchi Array 22.14 31** *ce*P **P 01 26 22.3 +0.3**
MKAR pmax pmax
comp=Z,10.0nm,0.7s
**MK31 Makanchi Array 22.14 31** P **P 01 26 20.7 -1.3**
MK31 pmax pmax
comp=Z,26nm,1.0s
**EATA Eleskirt 22.45 306** P **P 01 26 25.9 +0.3**
**EKAR Karacoban 22.53 304** P **P 01 26 28.6 +2.1**
**AKTO Aktyubinsk 22.65 346** P **P 01 26 27.3 0.0**
comp=Z,7.1nm,0.6s,baz=174,slow=11,SNR=25
AKTO S **S 01 30 37.5 +3.0**
comp=Z,0.6nm,0.3s,baz=162,slow=20,SNR=5.6
**AKTO Aktyubinsk 22.65 346** P **P 01 26 27.9 +0.6**
AKTO pmax pmax
comp=Z,24nm,1.3s
**WMQ Urumqi 23.02 43** P **P 01 26 32.6 +1.3**
WMQ pP **pP 01 26 36.0 -0.4**
WMQ sP **sP 01 26 40.0 +1.4**
WMQ PP **PnPn 01 27 02.0 +5.7**
WMQ S **S 01 30 38.0 -3.2**
WMQ SS SnSn 01 31 25.0 +11
WMQ PMZ
comp=Z,19nm,1.0s
WMQ PMZ
comp=Z,320nm,3.5s
WMQ LN
comp=Z,2μm,11.0s
WMQ LE
comp=Z,1μm,10.0s
WMQ LZ
comp=Z,660nm,10.0s
**SHL Shillong 23.14 91** *e*P **P 01 26 32.4 -0.5**
SHL AMB AMB 01 26 35.0
comp=Z,17nm,2.0s
**NCK Nalchik 23.39 315**⇑ *e*P **P 01 26 34.7 -0.3**
**KURBB Kurchatov Arra 23.92 20** P **P 01 26 39.6 -0.5**
comp=Z,6.6nm,0.9s,baz=211,slow=9.1,SNR=27
**KBZ Khabaz 23.94 315** P **P 01 26 40.2 -0.1**
comp=Z,4.1nm,0.8s,baz=139,slow=8.8,SNR=9.6
KBZ LR LR 01 39 28.1
comp=Z,127nm,18.4s,baz=128,slow=45
**KBZ Khabaz 23.94 315** P **P 01 26 40.2 -0.1**
KBZ pmax pmax
comp=Z,4.0nm,0.8s
KBZ MLR MLR
comp=Z,127nm,18.4s
**KURK Kurchatov 24.03 20** *e*P **P 01 26 41.0 -0.1**
KURK pmax pmax
comp=Z,20nm,0.9s
**KURK Kurchatov 24.03 20** P **P 01 26 42.4 +1.3**
SNR=6.2
**KURK Kurchatov 24.03 20** *e*P **P 01 26 41.0 -0.1**
comp=Z,20nm,0.9s
**KIV Kislovodsk 24.19 316** *ce*P **P 01 26 44.5 +1.7**
KIV *e* 01 27 10.0
KIV *e* 01 30 23.6
KIV pmax pmax
comp=Z,18nm,1.0s
KIV MLR MLR
comp=Z,181nm,16.0s
**KIV Kislovodsk 24.19 316** *e*P **P 01 26 43.1 +0.4**
comp=Z,13nm,0.8s
**VOSK Vostochnaya 24.36 7** P **P 01 26 43.1 -1.1**
VOSK pmax pmax
comp=Z,11nm,0.7s
**ZRNK Zerenda 24.42 4** P **P 01 26 43.5 -1.1**
ZRNK pmax pmax
comp=Z,34nm,2.3s
**DAMY Dhamar 24.48 240** *e*P **P 01 26 48.3 +2.4**
comp=Z,41nm,1.1s
**BVAR Borovoye Array 24.60 6** P **P 01 26 46.8 +0.5**
comp=Z,7.2nm,0.6s,baz=169,slow=9.8,SNR=24
**BVAR Borovoye Array 24.60 6** P **P 01 26 46.8 +0.5**
BVAR pmax pmax
comp=Z,7.0nm,0.6s
**BRVK Borovoye 24.62 6** *de*P **P 01 26 47.7 +1.1**
BRVK pmax pmax
comp=Z,32nm,1.2s
**BRVK Borovoye 24.62 6** P **P 01 26 47.6 +1.1**
SNR=12
**BRVK Borovoye 24.62 6** *e*P **P 01 26 46.7 +0.2**
comp=Z,19nm,0.9s
**KELT Kelkit 24.87 305** P **P 01 26 47.3 -1.8**
**CHKZ Chkalovo 25.27 6** P **P 01 26 52.7 +0.4**
CHKZ pmax pmax
comp=Z,15nm,1.8s
**PALK Pallekele 25.31 144** LR LR 01 37 51.1
comp=Z,304nm,21.2s,baz=124,slow=39
**AKCD Akcadag 25.33 300** P **P 01 26 53.5 +0.2**
**ASF Jabal al Asfar 25.40 285** P **P 01 26 55.2 +1.3**
comp=Z,10nm,1.1s,baz=52,slow=5.5,SNR=9.1
**ASF Jabal al Asfar 25.40 285** P **P 01 26 55.2 +1.3**
ASF pmax pmax
comp=Z,10.0nm,1.1s
**SUSE Susehri 25.65 304** P **P 01 26 56.5 +0.3**
**ANDN Andirin 26.40 298** P **P 01 27 00.1 -2.8**
**MMAI Mount Meron Ar 26.68 287** P **P 01 27 07.2 +1.7**
comp=Z,1.4nm,0.7s,baz=104,slow=18,SNR=3.2
**EIL Elat 27.19 280** P **P 01 27 10.4 +0.5**
comp=Z,2.4nm,0.5s,baz=111,slow=8.6,SNR=3.3
**ARU Arti 28.32 351** P **P 01 27 20.7 +0.9**
comp=Z,0.3nm,0.3s,baz=163,slow=19,SNR=2.5
**ARU Arti 28.32 351** *c i*P **P 01 27 20.4 +0.6**
ARU 01 28 13.1
ARU S **S 01 32 07.5 +2.2**
ARU SS **SnSn 01 33 21.4 -1.5**
ARU pmax pmax
comp=Z,11nm,1.7s
**ARU Arti 28.32 351** *e*P **P 01 27 18.7 -1.0**
comp=Z,9.3nm,1.3s
**ZALV Zalesovo Beam 28.79 23** P **P 01 27 23.2 -0.7**
comp=Z,2.6nm,0.5s,baz=219,slow=9.7,SNR=12
ZALV LR LR 01 40 07.7
comp=Z,636nm,20.0s,baz=248,slow=39
**ZALV Zalesovo Beam 28.79 23** P **P 01 27 23.2 -0.7**
ZALV pmax pmax
comp=Z,3.0nm,0.5s
ZALV MLR MLR
comp=Z,636nm,20.0s
**BRTR Keskin Array B 28.91 301** P **P 01 27 25.2 -0.2**
comp=Z,0.8nm,1.0s,baz=106,slow=12,SNR=3.3
BRTR LR LR 01 40 25.4
comp=Z,195nm,18.7s,baz=114,slow=39
**BRTR Keskin Array B 28.91 301** P **P 01 27 25.2 -0.2**
BRTR pmax pmax
comp=Z,1.0nm,1.0s
BRTR MLR MLR
comp=Z,195nm,18.7s
**NVS Novosibirsk 29.01 21** *e*P **P 01 27 25.3 -0.6**
NVS pmax pmax
comp=Z,29nm,2.5s
**GTA Gaotai 29.80 60** *e*P **P 01 27 35.9 +2.6**
GTA pP **pP 01 27 40.3 +1.6**
GTA sP **sP 01 27 42.9 +2.0**
GTA S **S 01 32 32.3 +3.1**
GTA sS **sS 01 32 39.0 +0.9**
GTA SS ScP 01 34 09.5 -8.4
GTA PMZ
comp=Z,4.0nm,1.2s
GTA PMZ
comp=Z,120nm,4.3s
GTA LN
comp=Z,950nm,17.6s
GTA LE
comp=Z,360nm,19.5s
GTA LZ
comp=Z,280nm,18.0s
**CHTO Chiang Mai 31.53 101** *e*P P 01 27 51.9 +3.3
CHTO pmax pmax
comp=Z,7.0nm,1.0s
**CHTO Chiang Mai 31.53 101** *e*P P 01 27 51.9 +3.3
comp=Z,7.3nm,1.0s
**CMAR Chiang Mai Arr 31.67 101** P **P 01 27 49.3 -0.5**
comp=Z,1.0nm,0.4s,baz=300,slow=11,SNR=3.1
CMAR LR LR 01 41 55.0
comp=Z,146nm,20.0s,baz=271,slow=39
**CMAR Chiang Mai Arr 31.67 101** P **P 01 27 49.3 -0.5**
CMAR pmax pmax
comp=Z,1.0nm,0.4s
CMAR MLR MLR
comp=Z,146nm,20.0s
**CD2 Chengdu 32.68 77** *e*P **P 01 28 00.1 +1.5**
CD2 pP **pP 01 28 03.1 -0.9**
CD2 PP **PP 01 29 13.9 +1.4**
CD2 S **S 01 33 17.3 +3.1**
CD2 sS **sS 01 33 22.5 -0.6**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
CD2 LE
comp=Z,410nm,16.2s
CD2 LZ
comp=Z,440nm,16.6s
**KMI Kunming 32.79 87** P **P 01 28 02.9 +3.0**
KMI S **S 01 33 16.2 -0.2**
KMI SS **SnSn 01 35 16.2 +3.5**
KMI PMZ
comp=Z,9.0nm,0.8s
KMI PMZ
comp=Z,59nm,3.3s
KMI LN
comp=Z,420nm,12.9s
KMI LE
comp=Z,430nm,12.5s
KMI LZ
comp=Z,360nm,15.3s
**OBN Obninsk 33.96 330**⇑ *e*P **P 01 28 08.9 -0.5**
OBN *e* 01 29 19.2
OBN pmax pmax
comp=Z,24nm,1.7s
OBN MLR MLR
comp=Z,242nm,17.0s
**PLOR Plostina 35.39 310**⇓ P **P 01 28 24.6 +2.6**
**PLOR Plostina 35.39 310**⇓ *i*P **P 01 28 24.6 +2.6**
**IDI Anoyia 35.40 292** LR LR 01 48 17.6
comp=Z,113nm,19.1s,baz=99,slow=46
**AKASG Malin Array Be 35.42 319** P **P 01 28 20.5 -1.6**
comp=Z,1.2nm,0.6s,baz=115,slow=7.8,SNR=4.2
**KIEV Kiev 35.43 319**⇓ *e*P **P 01 28 21.2 -1.0**
KIEV pmax pmax
comp=Z,5.0nm,1.1s
**ZAK Zakamensk 35.47 42** *e*P **P 01 28 21.6 -1.2**
ZAK pmax pmax
comp=Z,4.0nm,1.6s
**MLR Muntele Rosu 35.78 309**⇓ P P 01 28 28.6 +3.1
**MLR Muntele Rosu 35.78 309**⇓ *i*P P 01 28 28.6 +3.1
**GYA Guiyang 35.92 84** *e*P **P 01 28 28.9 +2.0**
GYA PMZ
comp=Z,10.0nm,0.8s
**TLY Talaya 36.22 40** LR LR 01 45 20.1
comp=Z,622nm,19.6s,baz=244,slow=40
**DOPR Dopca 36.27 310**⇑ *i*P **P 01 28 29.4 -0.2**
**VOIR 36.38 309**⇑ P **P 01 28 30.8 +0.3**
**VOIR 36.38 309**⇑ *i*P **P 01 28 30.8 +0.3**
**SONM Songino Array 36.51 47** P **P 01 28 32.1 +0.4**
comp=Z,6.0nm,0.8s,baz=251,slow=8.4,SNR=24
SONM LR LR 01 46 24.2
comp=Z,730nm,19.4s,baz=240,slow=41
**SONM Songino Array 36.51 47** P **P 01 28 32.1 +0.4**
SONM pmax pmax
comp=Z,6.0nm,0.8s
SONM MLR MLR
comp=Z,730nm,19.4s
**BURAR Bucovina Array 36.82 312**⇑ P **P 01 28 32.1 -2.2**
**BURAR Bucovina Array 36.82 312**⇑ *i*P **P 01 28 32.1 -2.2**
**KLMR Klimovskoe 36.84 339** *e*P **P 01 28 32.4 -1.8**
KLMR pmax pmax
comp=Z,30nm,1.4s
**ULN Ulaanbaatar 36.94 47**⇓ *e*P **P 01 28 37.2 +1.8**
ULN pmax pmax
comp=Z,8.0nm,1.0s
**ULN Ulaanbaatar 36.94 47** *e*P **P 01 28 36.6 +1.2**
comp=Z,6.4nm,0.9s
**ENH Enshi 37.66 77** P **P 01 28 43.3 +1.7**
comp=Z,3.9nm,0.4s
**BZS Buzias 38.78 308**⇓ P **P 01 28 48.2 -2.5**
**BZS Buzias 38.78 308**⇓ *i*P **P 01 28 48.2 -2.5**
**HHC Hu-ho-hao-te 38.91 59** *e*P **P 01 28 52.8 +0.7**
HHC pP **pP 01 28 57.5 0.0**
HHC PP **PnPn 01 30 25.7 +2.1**
HHC S **S 01 34 50.8 +1.1**
HHC sS **sS 01 34 57.7 -1.0**
HHC PMZ
comp=Z,10.0nm,1.0s
HHC PMZ
comp=Z,110nm,5.1s
HHC LN
comp=Z,330nm,13.9s
HHC LE
comp=Z,470nm,14.7s
HHC LZ
comp=Z,360nm,15.1s
**UZH Uzhgorod 38.98 313** *e*P P 01 28 45.3 -7.1
UZH *e* 01 28 49.3
UZH *e* 01 28 51.7
**KOLS Kolonicke sedl 39.07 314** *e*P **P 01 28 53.7 +0.6**
KOLS pmax pmax
comp=Z,54nm,2.8s
**KOLS Kolonicke sedl 39.07 314** *e*P **P 01 28 53.7 +0.6**
**PSZ Piszkesteto 40.38 311** *e*P **P 01 29 04.4 +0.3**
PSZ pmax pmax
comp=Z,4.0nm,1.1s
**PSZ Piszkesteto 40.38 311** *e*P **P 01 29 04.4 +0.3**
comp=Z,3.8nm,1.1s
**PSI Prapat 40.44 123** LR LR 01 46 50.4
comp=Z,234nm,18.2s,baz=303,slow=38
**KMBO Kilima Mbogo 40.47 228** P **P 01 29 05.5 +0.1**
comp=Z,2.2nm,0.8s,baz=36,slow=11,SNR=5.5
KMBO LR LR 01 47 28.7
comp=Z,151nm,18.5s,baz=24,slow=39
**KMBO Kilima Mbogo 40.47 228** P **P 01 29 05.5 +0.1**
KMBO pmax pmax
comp=Z,2.0nm,0.8s
KMBO MLR MLR
comp=Z,151nm,18.5s
**GSI Gunungsitoli 40.50 126** *e*P P 01 29 11.2 +5.8
comp=Z,20nm,0.9s
**VYHS Vyhne 41.19 312** *e*P **P 01 29 10.2 -0.5**
VYHS pmax pmax
comp=Z,4.0nm,1.3s
**VYHS Vyhne 41.19 312** *e*P **P 01 29 10.2 -0.5**
**OKC Ostrava-Krasne 41.90 314** *e*P P 01 29 20.7 +4.2
**OKC Ostrava-Krasne 41.90 314** *e*P P 01 29 20.7 +4.2
**FINES FINESS Array B 42.16 333** P **P 01 29 18.1 -0.3**
comp=Z,1.6nm,0.3s,baz=135,slow=8.8,SNR=15
FINES LR LR 01 49 06.5
comp=Z,206nm,19.0s,baz=120,slow=39
**FINES FINESS Array B 42.16 333** *i*P **P 01 29 19.1 +0.6**
FINES pmax pmax
comp=Z,2.0nm,0.3s
**BJI Beijing 42.40 61** P **P 01 29 20.9 +0.1**
BJI S **S 01 35 42.6 +1.1**
BJI PMZ
comp=Z,5.0nm,0.5s
BJI PMZ
comp=Z,96nm,3.8s
BJI LN
comp=Z,770nm,16.5s
BJI LE
comp=Z,380nm,21.3s
BJI LZ
comp=Z,360nm,22.6s
**VRAC Vranov 42.79 313** LR LR 01 49 56.2
comp=Z,229nm,21.8s,baz=106,slow=40
**DPC Dobruska-Polom 43.16 314** *e*P **P 01 29 27.0 +0.2**
DPC *e* 01 29 30.9
**DPC Dobruska-Polom 43.16 314** *e*P **P 01 29 27.0 +0.2**
DPC *e*pP **pP 01 29 30.9 -1.4**
**TIA Tai'an 43.33 66**⇑ P **P 01 29 31.2 +2.8**
TIA PMZ
comp=Z,10.0nm,0.6s
TIA LN
comp=Z,340nm,16.7s
TIA LE
comp=Z,320nm,18.4s
TIA LZ
comp=Z,280nm,20.2s
**UPC Upice 43.38 315** *e*P **P 01 29 28.8 +0.2**
UPC *e* 01 29 33.2
**UPC Upice 43.38 315** *e*P **P 01 29 28.8 +0.2**
UPC *e*pP **pP 01 29 33.2 -0.9**
**MOA Molln 44.11 310**⇑ *i*pP **P 01 29 34.9 +0.5**
comp=Z,3.7nm,0.9s
**PVCC Panska Ves 44.29 314** *e*P **P 01 29 36.6 +0.7**
**PVCC Panska Ves 44.29 314** *e*P **P 01 29 36.6 +0.7**
**PRA Prague 44.30 314** *e*P **P 01 29 36.3 +0.4**
**PRA Prague 44.30 314** *e*P **P 01 29 36.3 +0.4**
**GEC2 GERESS Array S 44.60 312** *e*P **P 01 29 38.4 -0.1**
**GEC2 GERESS Array S 44.60 312** *e*P **P 01 29 38.4 -0.1**
**GERES GERESS Array B 44.60 312** P **P 01 29 37.9 -0.6**
comp=Z,1.6nm,0.6s,baz=99,slow=8.2,SNR=13
GERES LR LR 01 52 31.8
comp=Z,149nm,19.9s,baz=103,slow=42
**GERES GERESS Array B 44.60 312** P **P 01 29 37.9 -0.6**
GERES pmax pmax
comp=Z,2.0nm,0.6s
GERES MLR MLR
comp=Z,149nm,19.9s
**KHC Kasperske Hory 44.72 312** *e*P **P 01 29 39.7 +0.3**
KHC *e* 01 29 42.9
**KHC Kasperske Hory 44.72 312** *e*P **P 01 29 39.7 +0.3**
KHC *e*pP **pP 01 29 42.9 -2.0**
**BRG Berggiesshubel 44.74 315** *e*P **P 01 29 40.5 +1.0**
comp=Z,14nm,1.7s
**BRG Berggiesshubel 44.74 315** *e*P **P 01 29 40.4 +1.0**
BRG pmax pmax
comp=Z,14nm,1.7s
**ABTA Abfaltersbach 45.19 309**⇑ *i*pP **P 01 29 43.5 +0.3**
comp=Z,6.2nm,0.8s
**NJ2 Nanjing 45.30 72** *e*P **P 01 29 45.8 +1.7**
NJ2 PMZ
comp=Z,20nm,0.5s
**MOTA Moosalm 46.19 309**⇑ *i*P **P 01 29 49.1 -2.1**
comp=Z,3.6nm,0.6s
**FETA Feichten 46.43 309**⇑ *i*P **P 01 29 51.1 -2.0**
comp=Z,6.1nm,0.8s
**RETA Reutte 46.43 310**⇑ *i*P **P 01 29 51.3 -1.8**
comp=Z,2.8nm,0.7s
**DAVOX Davos/Dischmat 47.00 309** LR LR 01 54 47.3
comp=Z,100nm,18.2s,baz=107,slow=43
**DAVA Damuels 47.02 309**⇑ *i*P **P 01 29 56.2 -1.5**
comp=Z,6.4nm,0.8s
**HFS Hagfors 47.09 327** P **P 01 29 57.9 +0.1**
comp=Z,4.1nm,0.6s,baz=123,slow=11,SNR=11
HFS LR LR 01 53 21.7
comp=Z,234nm,19.5s,baz=108,slow=41
**HFS Hagfors 47.09 327** P **P 01 29 57.9 +0.1**
HFS pmax pmax
comp=Z,4.0nm,0.6s
HFS MLR MLR
comp=Z,234nm,19.5s
**TUE Stuetta 47.36 308** *e*P **P 01 29 58.5 -1.9**
comp=Z,9.3nm,1.2s
**KEST Kesra 48.00 294** P **P 01 30 06.0 +0.6**
comp=Z,3.4nm,0.9s,baz=90,slow=5.1,SNR=3.6
**NB2 NORSAR Subarra 48.53 328** P **P 01 30 08.1 -0.9**
comp=Z,3.6nm,1.0s,baz=109,slow=7.9
**NOA NORSAR Array B 48.53 328** P **P 01 30 08.8 -0.3**
comp=Z,1.3nm,0.7s,baz=108,slow=7.6,SNR=3.1
**NOA NORSAR Array B 48.53 328** P **P 01 30 08.8 -0.3**
NOA pmax pmax
comp=Z,1.0nm,0.7s
**BNI Bardonecchia 49.23 306** *e*P **P 01 30 13.0 -1.8**
BNI pmax pmax
comp=Z,48nm,2.2s
**BNI Bardonecchia 49.23 306** *e*P **P 01 30 13.0 -1.8**
comp=Z,48nm,2.2s
**KSAR Wonju Array Be 51.74 63** P **P 01 30 34.2 +0.5**
**KSAR Wonju Array Be 51.74 63** P **P 01 30 34.1 +0.5**
**KSRS Korea Array 51.77 63** P **P 01 30 34.2 +0.3**
comp=Z,2.5nm,0.9s,baz=276,slow=7.7,SNR=8.9
**KSRS Korea Array 51.77 63** P **P 01 30 34.2 +0.3**
KSRS pmax pmax
comp=Z,3.0nm,0.9s
**YAK Yakutsk 52.81 32** *e*P **P 01 30 41.6 +0.4**
YAK pmax pmax
comp=Z,14nm,0.9s
**KLR Kul'dur 53.32 48** *e*P **P 01 30 44.8 -0.5**
**USRK Ussuriysk Ar. 53.90 54** P **P 01 30 50.3 +0.7**
comp=Z,1.6nm,0.6s,baz=265,slow=11,SNR=4.7
**SPITS Spitsbergen Ar 54.32 349** LR LR 01 56 47.0
comp=Z,128nm,19.2s,baz=55,slow=39
**ESDC Sonseca Array 57.70 301** P **P 01 31 16.8 -0.3**
comp=Z,0.3nm,0.4s,baz=81,slow=7.9,SNR=3.8
ESDC LR LR 01 59 28.7
comp=Z,44nm,18.7s,baz=190,slow=40
**MJAR Matsushiro Arr 60.01 62** LR LR 01 59 31.9
comp=Z,174nm,20.9s,baz=290,slow=38
**KAPI Kappang 61.46 114** LR LR 02 01 56.1
comp=Z,160nm,18.8s,baz=301,slow=40
**TORD Torodi Ar. Bea 61.46 270** P **P 01 31 42.1 -1.1**
comp=Z,1.1nm,0.6s,baz=54,slow=6.0,SNR=30
TORD LR LR 02 01 59.3
comp=Z,347nm,18.2s,baz=80,slow=40
**BILL Bilibino 67.49 24** *e*P **P 01 32 23.1 +1.3**
BILL *e* 01 32 52.4
BILL pmax pmax
comp=Z,7.0nm,1.2s
BILL MLR MLR
comp=Z,306nm,18.0s
**PETK Petropavlovsk- 68.58 40** LR LR 02 06 01.6
comp=Z,226nm,19.6s,baz=291,slow=39
**BOSA Boshof 69.03 218** P **P 01 32 31.6 -0.4**
comp=Z,6.4nm,1.1s,baz=45,slow=11,SNR=3.1
BOSA LR LR 02 01 09.3
comp=Z,149nm,20.1s,baz=29,slow=34
**DBIC Dimbokro 70.12 267** LR LR 02 07 37.1
comp=Z,182nm,18.2s,baz=32,slow=40
**FITZ Fitzroy Crossi 73.93 121** P **P 01 33 01.1 -0.6**
comp=Z,2.6nm,0.9s,baz=306,slow=8.7,SNR=3.1
**WRA Warramunga Arr 81.66 118** P **P 01 33 44.1 -0.7**
comp=Z,4.2nm,0.8s,baz=315,slow=4.7,SNR=22
**WRA Warramunga Arr 81.66 118** P **P 01 33 44.1 -0.7**
WRA pmax pmax
comp=Z,4.0nm,0.8s
**WRAB Tennant Creek 81.66 118** *e*P **P 01 33 44.5 -0.3**
WRAB pmax pmax
comp=Z,10.0nm,1.1s
**WRAB Tennant Creek 81.66 118** *e*P **P 01 33 44.5 -0.3**
comp=Z,9.6nm,1.1s
**INK Inuvik 82.28 7** P **P 01 33 47.8 +0.5**
INK pmax pmax
comp=Z,2.0nm,0.8s
**INK Inuvik 82.28 7** P **P 01 33 47.8 +0.5**
comp=Z,1.7nm,0.8s
**ASAR Alice Springs 83.43 121** P **P 01 33 53.1 -0.8**
comp=Z,3.2nm,0.5s,baz=308,slow=5.3,SNR=34
**ASAR Alice Springs 83.43 121** P **P 01 33 53.2 -0.8**
ASAR pmax pmax
comp=Z,3.0nm,0.5s
**ILAR Eielson Array 83.44 14** P **P 01 33 53.8 +0.4**
comp=Z,0.4nm,0.4s,baz=326,slow=3.9,SNR=5.8
ILAR LR LR 02 16 05.3
comp=Z,107nm,18.7s,baz=320,slow=39
**DHY Denali Highway 84.83 15** *e*P **P 01 33 59.9 -0.7**
comp=Z,33nm,1.7s
**SCHQ Schefferville 87.59 335** LR LR 02 14 34.6
comp=Z,67nm,18.6s,baz=76,slow=36
**YKA Yellowknife Ar 89.22 0** P **P 01 34 20.2 -1.6**
comp=Z,1.0nm,0.9s,baz=350,slow=5.0,SNR=3.4
**YKA Yellowknife Ar 89.22 0** P **P 01 34 20.2 -1.6**
YKA pmax pmax
comp=Z,1.0nm,0.9s
**MAW Mawson 95.94 181** LR LR 02 12 31.5
comp=Z,91nm,18.6s,baz=61,slow=32

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**IDC 07 01:30:13.8**,2.8,**6°67N**,**123°65E**,**h601**km,32km,**mb3.0**/5, **mb1 3.1**/5,**mb1mx2.5**/44,**mbtmpg4.0**/5,**Error ellipse: s-maj=113.7km s-min=14.5km az=66.0**,**Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **FITZ** | **Fitzroy Crossi** | **24.69** | **175** | P | | P | | 01 34 49.2 | -0.1 |
| | 0.6nm,0.4s,baz=348,slow=9.3,SNR=4.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.46** | **159** | P | | P | | 01 35 22.1 | -0.3 |
| | 1.6nm,0.3s,baz=338,slow=9.4,SNR=11 | | | | | | | | |
| WRA | | | | ScP | | ScP | | 01 40 58.9 | -0.7 |
| | 0.3nm,0.3s,baz=342,slow=3.0,SNR=3.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **31.77** | **162** | P | | P | | 01 35 50.9 | +0.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | 1.6nm,0.3s,baz=338,slow=7.6,SNR=24 | | | | | | |
| MKAR | Makanchi Array | 53.41 | 326 | P | P | 01 38 38.7 | 0.0 |
| | 0.9nm,0.5s,baz=122,slow=7.6,SNR=9.4 | | | | | | |
| KURBB | Kurchatov Arra | 57.63 | 328 | P | P | 01 39 07.6 | -0.1 |
| | 0.3nm,0.7s,baz=133,slow=6.2,SNR=4.5 | | | | | | |

**NEIC 07 01:32:14.4, 59°.94N×152°.88W, h112km, MG2.6(AEIC), After AEIC., Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ILS | Iliamna Low So | 0.10 | 282 | P | Pn | 01 32 29.3 | -0.7 |
| IVE | Iliamna Volcan | 0.10 | 320 | P | Pn | 01 32 29.5 | -0.6 |
| ILW | Iliamna West | 0.18 | 314 | P | Pn | 01 32 29.6 | -0.7 |
| ILW | | | | S | Sn | 01 32 42.1 | -0.1 |
| OPT | Oil Point | 0.34 | 212 | P | Pn | 01 32 30.2 | -0.5 |
| RSO | Redoubt South | 0.53 | 7 | ePg | Pn | 01 32 31.2 | -0.8 |
| RSO | | | | eS | Sn | 01 32 44.3 | -0.9 |
| RDWB | Redoubt West | 0.55 | 2 | P | Pn | 01 32 31.3 | -0.8 |
| RDWB | | | | S | Sn | 01 32 44.0 | -1.4 |
| REF | Redoubt East F | 0.56 | 9 | P | Pn | 01 32 31.4 | -0.8 |
| REF | | | | S | Sn | 01 32 44.6 | -0.9 |
| AUL | Augustine Lava | 0.62 | 207 | P | Pn | 01 32 31.9 | -0.5 |
| AUL | | | | S | Sn | 01 32 46.0 | +0.1 |
| NCT | North Crescent | 0.63 | 358 | P | Pn | 01 32 31.8 | -0.8 |
| AUE | Augustine Isla | 0.63 | 203 | P | Pn | 01 32 31.8 | -0.6 |
| AUP | Augustine Pinn | 0.64 | 206 | P | Pn | 01 32 32.1 | -0.5 |
| AUW | Augustine West | 0.64 | 208 | P | Pn | 01 32 32.1 | -0.5 |
| AUI | Augustine Isla | 0.67 | 205 | P | Pn | 01 32 32.0 | -0.7 |
| AUI | | | | S | Sn | 01 32 46.5 | 0.0 |
| BGRM | Barrier Glacie | 0.85 | 15 | P | Pn | 01 32 33.8 | -0.7 |
| CNPM | China Poot | 0.93 | 116 | P | Pn | 01 32 34.5 | -0.6 |
| CNPM | | | | S | Sn | 01 32 50.2 | -0.6 |
| BRLK | Bradley Lake | 1.02 | 99 | P | Pn | 01 32 35.5 | -0.6 |
| BRLK | | | | S | Sn | 01 32 52.2 | -0.3 |
| MCNL | McNeil River | 1.06 | 225 | P | Pn | 01 32 35.6 | -0.9 |
| CDD | Cape Douglas | 1.08 | 201 | P | Pn | 01 32 35.8 | -0.9 |
| FOPK | Fourpeaked Vol | 1.22 | 195 | P | Pn | 01 32 37.5 | -0.7 |
| CKL | Chakachamna La | 1.29 | 12 | P | Pn | 01 32 38.2 | -0.8 |
| SPCR | Spurr Chakacha | 1.31 | 14 | P | Pn | 01 32 38.4 | -0.9 |
| CKN | Chakachatna No | 1.34 | 15 | P | Pn | 01 32 39.7 | +0.2 |
| SPBG | Spurr Blockage | 1.35 | 11 | P | Pn | 01 32 39.1 | -0.6 |
| SPBG | | | | S | Sn | 01 32 58.5 | -0.4 |
| BGL | Barrier Glacie | 1.35 | 10 | P | Pn | 01 32 39.2 | -0.6 |
| SLKM | Skilak Lake | 1.45 | 66 | P | Pn | 01 32 39.8 | -1.0 |
| KAPH | Katmai Pasha | 1.54 | 210 | P | Pn | 01 32 41.3 | -0.6 |
| STLK | Strandline Lak | 1.65 | 18 | P | Pn | 01 32 42.4 | -0.8 |
| KAHC | Katmai Hardscr | 1.69 | 221 | P | Pn | 01 32 43.0 | -0.9 |
| SEW | Seward | 1.73 | 83 | ePn | Pn | 01 32 43.4 | -0.7 |
| SEW | | | | eS | Sn | 01 33 04.8 | -1.9 |
| FIB | Fire Island | 1.82 | 46 | P | Pn | 01 32 45.1 | -0.1 |
| KAWH | Katmai | 1.85 | 213 | P | Pn | 01 32 44.9 | -0.8 |
| SUA | Susitna One | 1.86 | 34 | P | Pn | 01 32 45.1 | -0.7 |
| SUA | | | | S | Sn | 01 33 08.9 | -0.9 |
| RC01 | Rabbit Creek A | 1.94 | 52 | ePn | Pn | 01 32 45.9 | -0.8 |
| RC01 | | | | S | Sn | 01 33 09.8 | -1.5 |
| KAKN | Katmai Knife C | 1.99 | 215 | P | Pn | 01 32 46.7 | -0.8 |
| KELA | Mount Kelaz | 2.10 | 226 | P | Pn | 01 32 48.0 | -0.9 |
| KABR | Katmai Barrier | 2.11 | 212 | P | Pn | 01 32 48.0 | -1.0 |
| SKT | Skwentna | 2.15 | 17 | P | Pn | 01 32 48.3 | -1.2 |
| KDAK | Kodiak Island | 2.17 | 176 | ePn | Pn | 01 32 48.1 | -1.4 |
| KDAK | | | | eS | Sn | 01 33 12.5 | -4.0 |
| PWL | Port Wells | 2.44 | 66 | P | Pn | 01 32 52.5 | -0.6 |
| PMR | Palmer | 2.48 | 46 | ePn | Pn | 01 32 51.8 | -1.7 |
| PMR | | | | eS | Sn | 01 33 15.4 | -8.2 |
| OHAK | Old Harbor | 2.73 | 185 | P | Pn | 01 32 54.8 | -2.1 |
| CUT | Chulitna | 2.78 | 26 | P | Pn | 01 32 56.3 | -1.2 |
| SML | Sawmill | 2.91 | 48 | ePn | Pn | 01 32 57.5 | -1.8 |
| SML | | | | eS | Sn | 01 33 30.2 | -3.7 |
| PPLA | Purkeypile | 2.99 | 6 | P | Pn | 01 32 60.0 | -0.5 |
| GLI | Glacier Island | 3.02 | 69 | P | Pn | 01 32 59.6 | -1.1 |
| HIN | Hinchinbrook I | 3.22 | 79 | P | Pn | 01 33 02.2 | -1.2 |
| FID | Port Fidalgo | 3.29 | 73 | P | Pn | 01 33 02.2 | -2.0 |
| JPK | Jack Peak | 3.31 | 67 | P | Pn | 01 33 03.9 | -0.7 |
| SCM | Sheep Creek Mo | 3.31 | 53 | P | Pn | 01 33 03.0 | -1.7 |
| TT01 | Tatalina | 3.34 | 335 | P | Pn | 01 33 03.0 | -1.9 |
| HUR | Hurricane | 3.42 | 26 | P | Pn | 01 33 05.5 | -0.5 |
| SII | Sitkinak Islan | 3.46 | 192 | P | Pn | 01 33 04.2 | -2.3 |
| CAST | Castle Rocks | 3.52 | 6 | P | Pn | 01 33 06.0 | -1.3 |
| DIV | Divide | 3.71 | 68 | ePn | Pn | 01 33 09.4 | -0.6 |
| DIV | | | | eS | Sn | 01 33 48.5 | -4.4 |
| TRF | Thorofare Moun | 3.74 | 18 | P | Pn | 01 33 08.8 | -1.6 |
| KLU | Klutina | 3.76 | 62 | P | Pn | 01 33 08.6 | -2.0 |
| RND | Reindeer | 3.97 | 27 | P | Pn | 01 33 12.2 | -1.3 |
| DHY | Denali Highway | 4.11 | 38 | P | Pn | 01 33 13.8 | -1.6 |
| BPAW | Bear Paw Mtn. | 4.27 | 11 | P | Pn | 01 33 16.5 | -0.9 |
| BWN | Browne | 4.54 | 19 | P | Pn | 01 33 20.1 | -0.9 |
| GLB | Gilahina Butte | 4.71 | 67 | P | Pn | 01 33 22.7 | -0.6 |
| WRH | Wood River Hil | 5.07 | 24 | P | Pn | 01 33 26.4 | -1.8 |
| MLY | Manley | 5.21 | 10 | P | Pn | 01 33 28.8 | -1.3 |
| HDA | Harding Lake | 5.27 | 29 | P | Pn | 01 33 29.5 | -1.4 |
| CCB | Clear Creek Bu | 5.29 | 24 | P | Pn | 01 33 28.6 | -2.3 |
| MDM | Murphy Dome | 5.48 | 21 | P | Pn | 01 33 31.9 | -1.8 |
| IL1 | Eielson Array | 5.59 | 27 | P | Pn | 01 33 33.4 | -1.8 |
| ILB | Eielson Array | 5.59 | 27 | P | Pn | 01 33 33.3 | -1.9 |
| IM3 | Indian Mountai | 6.08 | 357 | P | Pn | 01 33 40.8 | -1.0 |

*IDC **07** 01:39:49.6±10.0, 36°.07N×71°.02E, h239km±74km, mb3.4/4, mb1 3.5/5, mb1mx2.9/56, mbtmp4.0/5, Error ellipse: s-maj=95.2km s-min=33.3km az=123.0*
*ISCJB **07** 01:39:51.1±0.8, 36°.3N±0°.1×70°.9E±0°.2, h250km, mb3.6/4, Error ellipse: s-maj=27.8km s-min=9.6km az=147.1*
**ISC 07 01:39:51.9±1.0, 36°.3N±0°.1×70°.9E±0°.2, h250km, n8, σ0s.47/9, mb3.7/4, 2C, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CEP | Cherat | 2.58 | 161 | ⇑P | Pn | 01 40 40.4 | +0.2 |
| CEP | | | | S | S | 01 41 18.0 | -0.3 |
| CHCP | Chirah Chowk | 3.25 | 143 | P | Pn | 01 40 47.1 | -0.1 |
| THW | Thamme Wali | 3.54 | 168 | ⇑P | Pn | 01 40 51.2 | +0.7 |
| GEYT | Alibeck | 10.34 | 283 | P | Pn | 01 42 14.5 | -0.2 |
| | 0.6nm,0.3s,baz=103,slow=12,SNR=7.8 | | | | | | |
| FINES | FINESS Array B | 37.62 | 326 | P | P | 01 46 43.0 | +0.5 |
| | 2.4nm,0.8s,baz=123,slow=10,SNR=4.2 | | | | | | |
| HFS | Hagfors | 43.19 | 322 | P | P | 01 47 28.3 | +0.3 |
| | 1.8nm,0.7s,baz=88,slow=11,SNR=5.8 | | | | | | |
| TORD | Torodi Ar. Bea | 65.63 | 269 | P | P | 01 50 09.1 | -0.5 |
| | 0.7nm,0.4s,baz=50,slow=6.0,SNR=33 | | | | | | |
| YKA | Yellowknife Ar | 81.47 | 3 | P | P | 01 51 40.8 | 0.0 |
| | 0.6nm,0.7s,baz=352,slow=5.4,SNR=5.0 | | | | | | |

*KRNET **07** 01:40:01.6±0.1, 39°.29N×69°.86E, mb5.4*
*ISCJB **07** 01:40:02.4±0.7, 39°.11N±0°.02×70°.24E±0°.02, h5km±4km, mb5.0/162, MS4.0/13, Error ellipse: s-maj=3.1km s-min=2.1km az=159.5*
*IDC **07** 01:40:02.6±0.4, 39°.12N×70°.33E, h0km, mb4.8/42, mb1 4.9/49, mb1mx4.8/60, mbtmp4.8/49, ML4.4/7, MS3.9/11, Ms1 3.9/11, ms1mx3.7/29, Error ellipse: s-maj=8.8km s-min=6.7km az=161.0*
*NEIC **07** 01:40:03.4±1.9, 39°.15N×70°.29E, h4km±11km, mb5.1/71, Error ellipse: s-maj=5.2km s-min=3.8km az=165.0*
*NEIC Felt [II] at Dushanbe. Also felt at Istaravshan and Khujand.*
*BJI **07** 01:40:03.1, 39°.34N×70°.09E, h16km, mb4.8/51, mB4.9/34, ML4.9/4, Ms4.5/42, Ms7 4.3/42*
*SZGRF **07** 01:40:07.0, 39°.32N×71°.02E, h33km, mb4.9/9(BGR)*
*MOS **07** 01:40:06.5±1.0, 39°.17N×70°.24E, h35km, mb5.1/68, Error ellipse: s-maj=5.0km s-min=4.2km az=111.2*
*MOS Felt (II) at Dushanbe.*
*NNC **07** 01:40:08.8±2.0, 39°.52N×69°.92E, h22km±8km, mb5.5, mpv5.4, Error ellipse: s-maj=14.9km s-min=8.4km az=9.0*
**ISC 07 01:40:05.2±0.4, 39°.31N±0°.03×70°.21E±0°.02, h15km±2km, h15km:pP-P, n628, σ1s.85/677, mb5.0/172, MS3.9/14, 89C-47D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BTK | Batken | 0.88 | 32 | ⇓iP | Pb | 01 40 21.8 | -0.5 |
| | baz=44 | | | | | | |
| BTK | | | | ⇓iS | Sg | 01 40 34.5 | +0.5 |
| | baz=44 | | | | | | |
| DZET | Dzherino | 1.19 | 245 | P | Pn | 01 40 25.2 | -2.1 |
| SFK | Sufi-Kurgan | 2.64 | 74 | PN | Pb | 01 40 51.2 | -1.1 |
| SFK | Sufi-Kurgan | 2.64 | 74 | ⇓iP | Pb | 01 40 51.9 | -0.4 |
| | baz=74 | | | | | | |
| SFK | | | | ⇓iS | Sg | 01 41 28.8 | -1.2 |
| | baz=74 | | | | | | |
| SFK | Sufi-Kurgan | 2.64 | 74 | ⇑iP | Pb | 01 40 51.5 | -0.8 |
| | baz=74 | | | | | | |
| SFK | | | | ⇑iS | Sg | 01 41 28.8 | -1.2 |
| | baz=74 | | | | | | |
| ARSB | Arslanbob | 2.92 | 46 | ⇑iP | Pn | 01 40 54.1 | +2.9 |
| | baz=48 | | | | | | |
| ARSB | | | | ⇑iS | Sb | 01 41 34.5 | +1.8 |
| | baz=48 | | | | | | |
| MNAS | Manas | 3.62 | 28 | PN | Pn | 01 41 03.8 | +3.0 |
| MNAS | Manas | 3.62 | 28 | ⇑iP | Pn | 01 41 03.6 | +2.8 |
| | baz=31 | | | | | | |
| MNAS | | | | ⇑iS | Sb | 01 41 49.4 | -3.3 |
| | baz=31 | | | | | | |
| MNAS | Manas | 3.62 | 28 | ⇑iP | Pn | 01 41 04.4 | +3.6 |
| | baz=31 | | | | | | |
| MNAS | | | | ⇑iS | Sb | 01 41 49.2 | -3.5 |
| | baz=31 | | | | | | |
| KK31 | Karatay Array | 3.80 | 3 | ⇓Pn | Pn | 01 41 06.7 | +3.6 |
| | 136nm,0.4s,baz=195,slow=14,SNR=2550 | | | | | | |
| KK31 | | | | ⇑Pg | Pg | 01 41 18.2 | +0.3 |
| | 735nm,0.8s | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 01 42 07.4 | |
| | 2µm,0.8s,baz=183,slow=33,SNR=4.9 | | | | | | |
| KK31 | Karatay Array | 3.80 | 3 | i PN | Pn | 01 41 07.1 | +4.0 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,275nm,0.4s | | | | | | |
| AML | Almayashu | 3.87 | 42 | ⇑iP | Pn | 01 41 07.0 | +2.5 |
| | baz=44 | | | | | | |
| AML | | | | ⇑iS | Sb | 01 41 55.3 | -4.8 |
| | baz=44 | | | | | | |
| AML | Almayashu | 3.87 | 42 | P | Pn | 01 41 07.2 | +2.7 |
| | SNR=105 | | | | | | |
| ARLS | Aral | 4.04 | 50 | ⇑iP | Pn | 01 41 10.5 | +3.9 |
| | baz=51 | | | | | | |
| ARLS | | | | ⇑iS | Sb | 01 42 00.2 | -4.6 |
| | baz=51 | | | | | | |
| EKS2 | Erkin-Say | 4.30 | 38 | ePN | Pn | 01 41 13.3 | +3.2 |
| EKS2 | | | | eS | Sb | 01 42 11.6 | -0.7 |
| EKS2 | Erkin-Say | 4.30 | 38 | ⇓eP | Pn | 01 41 13.4 | +3.2 |
| | baz=40 | | | | | | |
| EKS2 | | | | ⇓iS | Sn | 01 42 05.7 | +5.6 |
| | baz=40 | | | | | | |
| EKS2 | Erkin-Say | 4.30 | 38 | P | Pn | 01 41 13.4 | +3.2 |
| | SNR=110 | | | | | | |
| EKS2 | Erkin-Say | 4.30 | 38 | ePn | Pn | 01 41 13.3 | +3.2 |
| EKS2 | | | | eS | Sb | 01 42 11.6 | -0.7 |
| EKS | Erkin-Say | 4.31 | 38 | ⇑iP | Pn | 01 41 13.8 | +3.5 |
| | baz=40 | | | | | | |
| EKS | | | | ⇑iS | Sb | 01 42 09.0 | -3.6 |
| | baz=40 | | | | | | |
| UCH | Uchtor | 4.38 | 47 | ⇑iP | Pn | 01 41 14.4 | +2.8 |
| | baz=49 | | | | | | |
| UCH | | | | ⇑iS | Sb | 01 42 10.3 | -4.6 |
| | baz=49 | | | | | | |
| UCH | Uchtor | 4.38 | 47 | P | Pn | 01 41 14.3 | +2.8 |
| | SNR=209 | | | | | | |
| KSH | Kashi | 4.47 | 86 | ePn | Pn | 01 41 10.7 | -1.8 |
| KSH | | | | Sn | Sn | 01 41 58.9 | -5.4 |
| KSH | | | | SMN | | | |
| | comp=Z,2µm,0.7s | | | | | | |
| KSH | | | | SME | | | |
| | comp=Z,1µm,0.7s | | | | | | |
| AAK | Ala-Archa | 4.64 | 43 | ⇓Pn | Pn | 01 41 18.3 | +3.4 |
| | comp=Z,260nm,0.7s | | | | | | |
| AAK | | | | ⇑Pg | Pg | 01 41 33.6 | -0.4 |
| | comp=Z,530nm,0.8s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 01 42 11.5 | +2.9 |
| | comp=Z,616nm,0.7s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 01 42 38.0 | |
| | comp=Z,1µm,1.0s | | | | | | |
| AAK | Ala-Archa | 4.64 | 43 | Pn | Pn | 01 41 17.3 | +2.4 |
| | comp=Z,32nm,0.3s,baz=225,slow=14,SNR=102 | | | | | | |
| AAK | | | | Sn | Sn | 01 42 14.7 | +6.1 |
| | comp=Z,47nm,0.3s,baz=253,slow=20,SNR=2.4 | | | | | | |
| AAK | | | | Lg | Lg | 01 42 34.6 | |
| | comp=Z,46nm,0.3s,baz=120,slow=20,SNR=3.1 | | | | | | |
| AAK | | | | LR | LR | 01 43 22.8 | |
| | comp=Z,3µm,18.3s,baz=214,slow=42 | | | | | | |
| AAK | Ala-Archa | 4.64 | 43 | c iPN | Pn | 01 41 17.8 | +2.9 |
| AAK | Ala-Archa | 4.64 | 43 | Pn | Pn | 01 41 18.0 | +3.2 |
| | comp=Z,3µm,0.5s | | | | | | |
| AAK | Ala-Archa | 4.64 | 43 | Pn | Pn | 01 41 18.2 | +3.3 |
| | SNR=127 | | | | | | |
| AAK | Ala-Archa | 4.64 | 43 | ⇑iP | Pn | 01 41 18.1 | +3.2 |
| | baz=45 | | | | | | |
| AAK | | | | ⇑iS | Sn | 01 42 14.5 | +5.9 |
| | baz=45 | | | | | | |
| AAK | Ala-Archa | 4.64 | 43 | P | Pn | 01 41 17.8 | +2.9 |
| | SNR=146 | | | | | | |
| AAK | Ala-Archa | 4.64 | 43 | ePn | Pn | 01 41 18.3 | +3.4 |
| AAK | | | | eS | Sn | 01 42 14.8 | +6.1 |
| AAK | | | | Lg | Lg | 01 42 34.6 | |
| KZA | Kyzart | 4.73 | 53 | ⇑eP | Pn | 01 41 19.5 | +3.2 |
| | baz=54 | | | | | | |
| KZA | | | | ⇑iS | Sn | 01 42 16.9 | +5.9 |
| | baz=54 | | | | | | |
| KZA | Kyzart | 4.73 | 53 | P | Pn | 01 41 19.5 | +3.2 |
| | SNR=222 | | | | | | |
| FRU | Bishkek | 4.85 | 42 | i PN | Pn | 01 41 23.0 | +5.4 |
| FRU | | | | i | | 01 42 23.0 | |
| FRU | | | | pmax | pmax | | |
| | comp=Z,360nm,1.4s | | | | | | |
| FRU | | | | pmax | pmax | | |
| | comp=E,1µm,1.8s | | | | | | |
| KBL | Kabul | 4.85 | 191 | ePN | Pn | 01 41 15.0 | -2.8 |
| KBL | Kabul | 4.85 | 191 | ePn | Pn | 01 41 15.0 | -2.8 |
| KBK | Karagaybulak | 4.90 | 45 | ⇑eP | Pn | 01 41 21.6 | +3.1 |
| | baz=47 | | | | | | |
| KBK | | | | ⇑iS | Sn | 01 42 21.7 | +6.7 |
| | baz=47 | | | | | | |
| KBK | Karagaybulak | 4.90 | 45 | P | Pn | 01 41 21.9 | +3.5 |
| | SNR=142 | | | | | | |
| NRN | Naryn | 4.91 | 63 | ⇑iP | Pn | 01 41 21.5 | +2.9 |
| | baz=64 | | | | | | |
| NRN | | | | ⇑iS | Sn | 01 42 20.4 | +5.1 |
| | baz=64 | | | | | | |
| CHMS | Chumysh | 5.04 | 41 | ⇑iP | Pn | 01 41 22.9 | +2.8 |
| | baz=43 | | | | | | |
| CHMS | | | | ⇑iS | Sn | 01 42 23.6 | +5.6 |
| | baz=43 | | | | | | |
| CHMS | Chumysh | 5.04 | 41 | P | Pn | 01 41 22.7 | +2.6 |
| | SNR=106 | | | | | | |
| USP | Ospenovka | 5.11 | 38 | P | Pn | 01 41 24.4 | +3.3 |
| | SNR=85 | | | | | | |
| BOOM | Boomskoye usch | 5.38 | 52 | ⇓iP | Pn | 01 41 28.9 | +3.9 |
| | baz=53 | | | | | | |
| BOOM | | | | ⇓iS | Sn | 01 42 32.2 | +5.4 |
| | baz=53 | | | | | | |
| TKM2 | Tokmak 2 | 5.44 | 47 | ⇑Pn | Pn | 01 41 28.7 | +2.9 |
| | comp=E,316nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Pg | Pg | 01 41 48.3 | -1.0 |
| | comp=E,384nm,0.8s | | | | | | |
| TKM2 | | | | ⇑Sn | Sn | 01 42 32.8 | +4.5 |
| | comp=E,571nm,1.1s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 01 43 03.2 | |
| | comp=E,664nm,0.8s | | | | | | |
| TKM2 | Tokmak 2 | 5.44 | 47 | ePN | Pn | 01 41 28.5 | +2.7 |
| TKM2 | Tokmak 2 | 5.44 | 47 | ⇑iP | Pn | 01 41 28.6 | +2.7 |
| | baz=48 | | | | | | |
| TKM2 | | | | ⇑iS | Sn | 01 42 32.9 | +4.7 |
| | baz=48 | | | | | | |
| TKM2 | Tokmak 2 | 5.44 | 47 | P | Pn | 01 41 28.6 | +2.7 |
| | SNR=233 | | | | | | |
| TKM2 | Tokmak 2 | 5.44 | 47 | ePn | Pn | 01 41 28.5 | +2.7 |
| TKM2 | | | | eS | Sn | 01 42 26.9 | -1.4 |
| ULHL | Ulahol | 5.44 | 55 | P | Pn | 01 41 30.8 | +4.9 |
| | SNR=53 | | | | | | |
| KNDC | Almaty | 6.42 | 50 | ⇑Pn | Pn | 01 41 43.2 | +4.1 |
| | comp=E,419nm,0.8s | | | | | | |
| KNDC | | | | ⇓Pg | Pg | 01 42 04.8 | -3.2 |
| | comp=E,459nm,0.8s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 01 43 33.6 | |
| | comp=E,2µm,1.2s | | | | | | |
| AAA | Alma-Ata | 6.44 | 50 | ePN | Pn | 01 41 46.4 | +7.0 |
| AAA | | | | eS | Sn | 01 42 59.9 | +7.3 |
| AAA | | | | pmax | pmax | | |
| | comp=Z,600nm,0.7s | | | | | | |
| AAA | | | | smax | smax | | |
| | comp=E,1µm,2.4s | | | | | | |
| AAA | | | | MLR | MLR | | |
| | comp=Z,3µm,4.0s | | | | | | |
| PDGK | Podgornoye | 8.05 | 57 | P | Pn | 01 42 05.2 | +3.7 |
| DHRM | DHARAMSHALA | 8.61 | 143 | eP | Pn | 01 42 08.6 | -0.8 |
| DHRM | | | | eS | Sn | 01 43 39.3 | -7.0 |
| OTUK | Ortayu | 9.06 | 9 | P | Pn | 01 42 18.5 | +3.1 |
| IEMG | Emamgholi | 9.27 | 262 | eP | Pn | 01 42 17.9 | -0.7 |
| BHK | Bhakra | 9.36 | 145 | ex | Pn | 01 42 23.2 | +3.7 |
| IAKL | Akhelmad | 9.44 | 257 | eP | Pn | 01 42 19.9 | -1.0 |
| ABKT | Ailbek | 9.56 | 266 | Pn | Pn | 01 42 22.6 | +0.3 |
| | comp=Z,823nm,0.8s,SNR=12 | | | | | | |
| GEYT | Alibeck | 9.56 | 266 | Pn | Pn | 01 42 22.3 | 0.0 |
| | comp=Z,7.7nm,0.3s,baz=95,slow=9.8,SNR=47 | | | | | | |
| GEYT | | | | Sn | Sn | 01 44 07.6 | -1.8 |
| | comp=Z,13nm,0.3s,baz=97,slow=12,SNR=4.9 | | | | | | |
| GEYT | | | | Lg | Lg | 01 45 19.3 | |
| | baz=96,slow=34,SNR=2.5 | | | | | | |
| ISFR | Sfrayin | 9.87 | 261 | eP | Pn | 01 42 26.6 | -0.1 |
| SMLA | Simla | 9.95 | 143 | i P | Pn | 01 42 26.4 | -1.1 |
| SMLA | | | | i x | Sn | 01 44 05.6 | -13 |
| ISHV | Shirvan | 9.97 | 264 | eP | Pn | 01 42 29.0 | +1.0 |
| DDI | Dehra Dun | 11.04 | 142 | eP | Pn | 01 42 41.6 | -1.0 |
| DDI | | | | ex | Sn | 01 44 32.4 | -13 |
| MK31 | Makanchi Array | 11.57 | 46 | Pn | Pn | 01 42 51.8 | +2.1 |
| | comp=Z,52nm,1.2s,baz=232,slow=12,SNR=67 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 01 46 17.9 | |
| | comp=Z,110nm,1.2s,baz=257,slow=23,SNR=3.7 | | | | | | |
| MK31 | Makanchi Array | 11.57 | 46 | i P | Pn | 01 42 51.8 | +2.1 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,23nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 11.57 | 46 | Pn | Pn | 01 42 51.5 | +1.8 |
| | comp=Z,0.9nm,0.3s,baz=233,slow=12,SNR=30 | | | | | | |
| MKAR | | | | Lg | Lg | 01 46 13.7 | |
| | comp=Z,1.1nm,0.3s,baz=233,slow=38,SNR=3.9 | | | | | | |
| MKAR | | | | LR | LR | 01 47 38.2 | |
| | comp=Z,1µm,19.6s,baz=226,slow=39 | | | | | | |
| MKAR | Makanchi Array | 11.57 | 46 | i P | Pn | 01 42 51.5 | +1.8 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| NDI | New Delhi | 12.08 | 149 | eP | Pn | 01 42 55.5 | -1.3 |
| NDI | | | | ex | x | 01 44 59.5 | |
| AB31 | Akbulak array | 12.36 | 327 | Pn | Pn | 01 42 59.5 | -0.9 |
| | comp=Z,98nm,0.3s,baz=146,slow=9.1,SNR=2940 | | | | | | |
| AB31 | | | | ⇓Sn | Sn | 01 45 13.2 | -4.5 |
| | comp=Z,150nm,0.6s | | | | | | |
| AB31 | | | | ⇑Lg | Lg | 01 46 28.1 | |
| | comp=Z,292nm,1.2s | | | | | | |
| AB31 | Akbulak array | 12.36 | 327 | eP | Pn | 01 42 59.5 | -0.9 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,98nm,0.4s | | | | | | |
| KURBB | Kurchatov Arra | 12.74 | 25 | ⇑Pn | Pn | 01 43 04.0 | -1.7 |
| | comp=Z,48nm,1.2s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 01 46 50.7 | |
| | comp=Z,293nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 12.74 | 25 | Pn | Pn | 01 43 04.0 | -1.7 |
| | comp=Z,0.3nm,0.3s,baz=216,slow=12,SNR=20 | | | | | | |
| KURBB | | | | Lg | Lg | 01 46 49.3 | |
| | comp=Z,0.6nm,0.3s,baz=213,slow=29,SNR=5.0 | | | | | | |
| KURK | Kurchatov | 12.85 | 25 | ⇑Pn | Pn | 01 43 05.2 | -2.0 |
| | comp=Z,65nm,1.2s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 01 46 51.8 | |
| | comp=Z,589nm,1.1s | | | | | | |
| KURK | Kurchatov | 12.85 | 25 | P | Pn | 01 43 04.0 | -3.2 |
| KURK | Kurchatov | 12.85 | 25 | ⇓Pn | Pn | 01 43 06.4 | -0.8 |
| | SNR=16 | | | | | | |
| KURK | Kurchatov | 12.85 | 25 | Pn | Pn | 01 43 05.3 | -1.9 |
| | comp=Z,153nm,1.0s,SNR=10 | | | | | | |
| KURK | Kurchatov | 12.85 | 25 | ePn | Pn | 01 43 05.5 | -1.7 |
| KURK | | | | eS | Sn | 01 45 36.9 | +7.1 |
| KURK | | | | Lg | Lg | 01 46 49.3 | |
| IGLO | Ghaloghah | 13.23 | 263 | eP | Pn | 01 43 11.9 | -0.8 |
| VOSK | Vostochnaya | 13.43 | 2 | ⇑Pn | Pn | 01 43 15.3 | +0.2 |
| | comp=Z,49nm,1.4s | | | | | | |
| VOSK | | | | ⇑Sn | Sn | 01 45 39.1 | -4.8 |
| | comp=Z,94nm,1.3s | | | | | | |
| VOSK | | | | ⇑Lg | Lg | 01 47 11.6 | |
| | comp=Z,466nm,1.9s | | | | | | |
| VOSK | Vostochnaya | 13.43 | 2 | P | Pn | 01 43 15.2 | +0.2 |
| VOSK | | | | pmax | pmax | | |
| | comp=Z,49nm,1.4s | | | | | | |
| IKIA | Kiasar | 13.44 | 262 | eP | Pn | 01 43 15.8 | +0.3 |
| ZRNK | Zerenda | 13.67 | 357 | ⇑Pn | Pn | 01 43 17.9 | -0.4 |
| | comp=Z,40nm,0.8s | | | | | | |
| ZRNK | | | | ⇓Sn | Sn | 01 45 47.5 | -2.3 |
| | comp=Z,83nm,1.0s | | | | | | |
| ZRNK | | | | ⇓Lg | Lg | 01 47 17.5 | |
| | comp=Z,354nm,1.3s | | | | | | |
| ZRNK | Zerenda | 13.67 | 357 | P | Pn | 01 43 17.9 | -0.4 |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,40nm,0.8s | | | | | | |
| BVA0 | Borovoye Array | 13.72 | 0 | Pn | Pn | 01 43 17.7 | -1.4 |
| | comp=Z,48nm,1.0s,baz=251,slow=34,SNR=78 | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 01 47 17.2 | |
| | comp=Z,261nm,1.4s,baz=175,slow=26,SNR=4.6 | | | | | | |
| BVA0 | Borovoye Array | 13.72 | 0 | eP | Pn | 01 43 17.6 | -1.4 |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,29nm,0.5s | | | | | | |
| BVAR | Borovoye Array | 13.72 | 0 | Pn | Pn | 01 43 19.2 | +0.2 |
| | comp=Z,3.8nm,0.3s,baz=167,slow=14,SNR=40 | | | | | | |
| BVAR | | | | Sn | Sn | 01 45 46.5 | -4.5 |
| | comp=Z,1.3nm,0.3s,baz=186,slow=22,SNR=3.0 | | | | | | |
| BVAR | | | | Lg | Lg | 01 47 15.6 | |
| | comp=Z,1.0nm,0.3s,baz=186,slow=27,SNR=3.9 | | | | | | |
| BVAR | | | | LR | LR | 01 49 00.5 | |
| | comp=Z,826nm,20.3s,baz=199,slow=39 | | | | | | |
| BVAR | Borovoye Array | 13.72 | 0 | P | Pn | 01 43 19.2 | +0.2 |
| BVAR | | | | | | 01 45 46.5 | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| BVAR | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| BVAR | | | | MLR | MLR | | |
| | comp=Z,826nm,20.3s | | | | | | |
| BRVK | Borovoye | 13.75 | 0 | ⇓Pn | Pn | 01 43 19.7 | +0.2 |
| | comp=Z,62nm,0.7s | | | | | | |
| BRVK | | | | ⇓Lg | Lg | 01 47 17.7 | |
| | comp=Z,477nm,1.2s | | | | | | |
| BRVK | Borovoye | 13.75 | 0 | c iP | Pn | 01 43 19.2 | -0.2 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,29nm,0.6s | | | | | | |
| BRVK | Borovoye | 13.75 | 0 | ⇓Pn | Pn | 01 43 19.6 | +0.2 |
| | SNR=18 | | | | | | |
| BRVK | Borovoye | 13.75 | 0 | ePn | Pn | 01 43 19.4 | -0.1 |
| BRVK | | | | eS | Sn | 01 45 47.0 | -4.8 |
| WMQ | Urumqi | 13.84 | 65 | P | Pn | 01 43 24.0 | +3.2 |
| WMQ | | | | sP | | 01 43 29.8 | |
| WMQ | | | | PP | P | 01 43 34.0 | +4.9 |
| WMQ | | | | S | Sn | 01 45 56.0 | +1.8 |
| WMQ | | | | SS | S | 01 46 15.0 | -1.4 |
| WMQ | | | | PMZ | | | |
| | comp=Z,32nm,0.8s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,150nm,3.5s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,3µm,5.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,2µm,5.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,2µm,5.0s | | | | | | |
| AKTO | Aktyubinsk | 14.06 | 326 | ⇑Pn | Pn | 01 43 22.2 | -1.6 |
| | comp=Z,137nm,1.1s | | | | | | |
| AKTO | | | | ⇑Sn | Sn | 01 45 54.7 | -4.8 |
| | comp=Z,260nm,1.1s | | | | | | |
| AKTO | | | | ⇓Lg | Lg | 01 47 22.6 | |
| | comp=Z,331nm,1.4s | | | | | | |
| AKTO | Aktyubinsk | 14.06 | 326 | Pn | Pn | 01 43 23.1 | -0.7 |
| | comp=Z,3.7nm,0.3s,baz=143,slow=11,SNR=38 | | | | | | |
| AKTO | | | | Sn | Sn | 01 45 55.1 | -4.4 |
| | comp=Z,1.9nm,0.3s,baz=102,slow=20,SNR=4.2 | | | | | | |
| AKTO | | | | Lg | Lg | 01 47 38.7 | |
| | baz=198,slow=20,SNR=1.6 | | | | | | |
| AKTO | | | | LR | LR | 01 49 44.7 | |
| | comp=Z,290nm,18.2s,baz=141,slow=41 | | | | | | |
| AKTO | Aktyubinsk | 14.06 | 326 | P | Pn | 01 43 22.1 | -1.6 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,67nm,0.8s | | | | | | |
| IALA | Alasht | 14.15 | 262 | eP | Pn | 01 43 24.9 | -0.3 |
| IFIR | Firoozkooh | 14.34 | 261 | eP | Pn | 01 43 27.8 | 0.0 |
| CHKZ | Chkalovo | 14.38 | 1 | ⇑Pn | Pn | 01 43 27.2 | -0.8 |
| | comp=Z,26nm,0.8s | | | | | | |
| CHKZ | | | | ⇑Lg | Lg | 01 47 37.4 | |
| | comp=Z,294nm,1.4s | | | | | | |
| CHKZ | Chkalovo | 14.38 | 1 | P | Pn | 01 43 27.1 | -0.8 |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,26nm,0.8s | | | | | | |
| IPRN | Peran | 14.46 | 263 | eP | Pn | 01 43 28.1 | -1.2 |
| ICHK | Chekchek | 14.62 | 246 | eP | Pn | 01 43 31.2 | -0.5 |
| ISAD | Sadrabad | 15.32 | 246 | eP | Pn | 01 43 40.0 | -1.0 |
| IZEF | Zefreh | 15.79 | 252 | eP | Pn | 01 43 46.9 | -0.3 |
| BHJ | Bhuj | 16.01 | 182 | eP | Pn | 01 43 45.4 | -4.5 |
| BHJ | | | | AMB | AMB | 01 43 50.1 | |
| | comp=Z,127nm,1.4s | | | | | | |
| IGZV | Ghazvin | 16.06 | 266 | eP | Pn | 01 43 51.1 | +0.5 |

**IRAM Ramesheh 16.31 248** *e*P **Pn 01 43 54.0 +0.2**
**IRAZ Razeghan 16.58 263** *e*P **Pn 01 43 57.2 -0.1**
**IPIR Pirpir 16.96 253** *e*P **Pn 01 44 01.0 -1.1**
**IPAR Pars 16.97 241** *e*P **Pn 01 44 02.0 -0.3**
**BHPL Bhopal 17.15 157** *e*P **Pn 01 44 03.0 -1.4**
BHPL AMB AMB 01 44 08.4
comp=Z,60nm,1.9s
**ISRV Sarvestan 17.22 240** *e*P **Pn 01 44 04.3 -1.1**
**MAK Makhachkala 17.48 289** *e*P **Pn 01 44 07.5 -0.7**
MAK *e*S **Sn 01 47 21.4 -1.0**
MAK MLR MLR
comp=Z,1µm,11.0s
**ZAA0 Zalesovo Array 17.70 29** *e*Pn **Pn 01 44 10.7 -0.1**
**ZALV Zalesovo Beam 17.70 29** P **Pn 01 44 11.1 +0.3**
comp=Z,5.9nm,0.3s,baz=224,slow=11,SNR=114
ZALV S **S 01 47 36.0 +1.2**
baz=221,slow=17,SNR=2.0
ZALV LR LR 01 51 20.6
comp=Z,745nm,18.7s,baz=246,slow=38
**ZALV Zalesovo Beam 17.70 29** P **Pn 01 44 11.1 +0.3**
ZALV S **S 01 47 36.0 +1.2**
ZALV pmax pmax
comp=Z,6.0nm,0.3s
ZALV MLR MLR
comp=Z,745nm,18.7s
**BANOM Banah 17.73 225** ⇑Pn **Pn 01 44 10.8 -0.7**
SNR=14
**BANOM Banah 17.73 225** ⇑*i*P **Pn 01 44 11.4 -0.1**
SNR=22
**NVS Novosibirsk 17.84 25** *e*P **P 01 44 13.1 -0.2**
NVS *e*S **S 01 47 39.9 +2.2**
NVS pmax pmax
comp=N,47nm,0.8s
NVS pmax pmax
comp=Z,54nm,0.8s
NVS pmax pmax
comp=E,29nm,0.9s
NVS smax smax
comp=E,91nm,2.4s
NVS smax smax
comp=N,44nm,2.0s
**UOSS Wadi Hilu 18.56 224** Pn **Pn 01 44 22.5 +0.8**
comp=N,147nm,1.0s,SNR=5.0
**UOSS Wadi Hilu 18.56 224** *e*P **P 01 44 18.1 -3.3**
comp=N,30nm,1.0s
**SVE Sverdlovsk 18.63 343** *e*P **Pn 01 44 23.0 +0.8**
SVE *e*S **S 01 47 54.2 +0.6**
SVE pmax pmax
comp=Z,60nm,0.9s
SVE MLR MLR
comp=Z,2µm,10.0s
**HATD Hatta, Dubai 18.70 224** ⇑*i*P **Pn 01 44 24.7 +1.4**
SNR=5.6
**ARU Arti 18.78 340** P **Pn 01 44 24.1 0.0**
comp=Z,0.0nm,0.3s,baz=325,slow=23,SNR=14
ARU LR LR 01 50 55.1
comp=Z,219nm,21.3s,baz=146,slow=34
**ARU Arti 18.78 340** *d*⇓P **P 01 44 23.2 -0.4**
ARU S **Sn 01 47 54.3 +0.5**
ARU pmax pmax
comp=Z,36nm,0.8s
ARU MLR MLR
comp=Z,715nm,10.0s
**ARU Arti 18.78 340** P **P 01 44 23.7 +0.1**
comp=Z,644nm,0.8s,SNR=20
**ARU Arti 18.78 340** *e*Pn **P 01 44 23.9 +0.2**
comp=Z,82nm,0.8s
ARU *e*S Sn 01 47 34.4 -19
**NAZ Nazwa, Dubai 18.82 225** *i*P **P 01 44 24.6 +0.3**
SNR=12
**ASHO Ashiyiah 18.85 223** ⇓P **P 01 44 24.4 -0.2**
SNR=17
**ASHO Ashiyiah 18.85 223** ⇑*i*P **P 01 44 23.7 -0.9**
SNR=22
**DGRG David-gareji 19.03 284** P **Pn 01 44 28.6 +1.3**
**DGRG David-gareji 19.03 284** P **Pn 01 44 28.5 +1.3**
**FAQ Al Faqa, Dubai 19.05 225** ⇑*i*P **P 01 44 25.7 -1.1**
SNR=6.4
**WBK Wadi Bani Khal 19.20 213** P **P 01 44 28.5 0.0**
SNR=6.3
**IVIS Veis 19.26 263** *e*P **Pn 01 44 30.7 +0.5**
**ASUD Al Ashush, Dub 19.29 225** ⇓*i*P **P 01 44 29.2 -0.2**
SNR=8.6
**TBLG Delisi 19.49 285** *e*P **Pn 01 44 33.0 +0.1**
**TBLG Delisi 19.49 285** P **Pn 01 44 33.1 +0.2**
TBLG S **S 01 48 15.3 +3.9**
**TBLG Delisi 19.49 285** P **Pn 01 44 33.1 +0.2**
TBLG S **S 01 48 15.2 +3.9**
**IDHR Dehrash 19.55 264** *e*P **Pn 01 44 33.7 -0.1**
**NGP Nagpur 19.62 155** *e*P **P 01 44 30.1 -3.1**
NGP *ex* **Sn 01 48 16.0 +1.4**
**LSA Lhasa 19.70 113** P **Pn 01 44 37.4 +1.5**
LSA S S 01 48 03.5 -13
LSA PMZ
comp=Z,13nm,1.0s
LSA LN
comp=Z,300nm,13.3s
LSA LE
comp=Z,570nm,12.4s
LSA LZ
comp=Z,940nm,10.5s
**LSA Lhasa 19.70 113** *e*P **P 01 44 34.8 +0.4**
**LSA Lhasa 19.70 113** *e*P **P 01 44 34.8 +0.4**
**ARQ Araqi 19.71 220** P **P 01 44 34.7 +0.6**
SNR=13
**HVS Khovu-Aksy 20.24 47** ⇓*e*P **Pn** 01 44 41.1 -0.6
HVS pmax pmax
comp=Z,53nm,1.1s
**CLDR Caldiran 20.35 278** *e*P **Pn** 01 44 44.9 +1.6
**NCK Nalchik 20.36 290** *c i*P **P 01 44 41.9 +0.9**
**BOK Bokaro 20.39 135** *e*P **P 01 44 39.2 -2.2**
BOK AMB AMB 01 44 44.2
comp=Z,94nm,0.9s
**AKH Akhalkalaki 20.44 284** *e*P **Pn** 01 44 45.4 +1.1
**AKH Akhalkalaki 20.44 284** P **Pn** 01 44 49.5 +5.2
AKH S **Sn** 01 48 43.4 +8.9
**AKH Akhalkalaki 20.44 284** P **Pn** 01 44 49.4 +5.1
**ONI Oni 20.44 288** P **Pn** 01 44 45.2 +1.0
ONI S **Sn** 01 48 34.6 +0.3
**ONI Oni 20.44 288** P **Pn** 01 44 45.1 +1.0
ONI S **Sn** 01 48 34.5 +0.3
**HKR Hakkari 20.78 274** *e*P **Pn** 01 44 47.4 -0.9
**KARS Kars 20.81 282** *e*P **Pn** 01 44 49.4 +0.9
**KBZ Khabaz 20.88 291** P **P 01 44 47.2 +0.6**
comp=Z,20nm,0.7s,baz=128,slow=8.6,SNR=25
KBZ LR LR 01 54 57.8
comp=Z,249nm,18.9s,baz=94,slow=43
**KBZ Khabaz 20.88 291** P **P 01 44 47.2 +0.6**
KBZ pmax pmax
comp=Z,20nm,0.7s
KBZ MLR MLR
comp=Z,249nm,18.9s
**POO Poona 20.95 170** *e*P **P 01 44 45.5 -2.0**
**CUKT Cukurca 20.96 273** *e*P **Pn** 01 44 49.4 -0.9
**AGRB Hanur-Agry 21.00 279** *e*P **P 01 44 51.5 +3.4**
**KIV Kislovodsk 21.04 292** *de*P **P 01 44 49.3 +0.8**
KIV *e* 01 45 08.1
KIV *e* 01 48 49.4
KIV pmax pmax
comp=Z,33nm,0.6s
KIV MLR MLR
comp=Z,273nm,16.0s
**KIV Kislovodsk 21.04 292** P **P 01 44 49.2 +0.8**
comp=Z,571nm,0.7s,SNR=14
**KIV Kislovodsk 21.04 292** ⇑*i*P **P 01 44 49.4 +0.8**
SNR=14
**KIV Kislovodsk 21.04 292** *e*P **P 01 44 49.1 +0.6**
comp=Z,90nm,0.7s
KIV *e*S **S 01 48 43.5 +1.2**
**CHVG Ch'k'valeri 21.45 288** *e*P **P 01 44 56.1 +3.3**
**CHVG Ch'k'valeri 21.45 288** P **P 01 44 55.6 +2.8**
**SIRT Sirnak 21.81 274** *e*P **P 01 44 57.6 +0.9**
**BCA Borcka 21.84 285** *e*P **P 01 45 00.5 +3.5**
**RPR Rampur 21.85 156** *e*P **P 01 44 57.4 +0.2**
**EZM Erzurum 22.20 281** *e*P **P 01 45 05.0 +4.0**
**VRTB Varto-Mus 22.24 279** *e*P **P 01 45 05.5 +4.1**
**KRAR Krasnoyarsk 22.47 34** ⇓*e*P **P 01 45 05.9 +2.4**
KRAR pmax pmax
comp=Z,25nm,1.0s
**SHL Shillong 22.78 121** *e*P **P 01 45 06.2 -1.1**
SHL AMB AMB 01 45 11.1
comp=Z,70nm,1.3s
**GTA Gaotai 22.85 80** P **P 01 45 08.7 +0.8**
GTA pP **pP 01 45 13.0 +0.7**
GTA sP **sP 01 45 15.8 +1.6**
GTA S **S 01 49 16.7 -0.2**
GTA sS **sS 01 49 23.4 -1.0**
GTA SS SnSn 01 50 00.9 +13
GTA PMZ
comp=Z,13nm,1.4s
GTA PMZ
comp=Z,270nm,5.5s
GTA LN
comp=Z,760nm,14.2s
GTA LE
comp=Z,670nm,14.7s
GTA LZ
comp=Z,620nm,14.0s
**HYBB Hyderabad (bro 22.99 159** *e*P **P 01 45 07.3 -2.0**
**HYB Hyderabad 22.99 159** *i*P **P 01 45 07.5 -1.9**
**HYB Hyderabad 22.99 159** *e*P **P 01 45 05.4 -4.0**
**BAYT Ayd¯–ntepe-Bay 23.06 282** *e*P **P 01 45 13.7 +3.6**
**VRH Novokhopyorsk 23.16 310** *e*P **P 01 45 13.6 +2.8**
VRH pmax pmax
comp=Z,30nm,0.5s
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.7s
**SOC Sochi 23.18 291** *e*P **P 01 45 12.6 +1.5**
SOC *e*S **S 01 49 20.3 -1.9**
SOC *e*SS SnSn 01 50 08.4 +13
SOC pmax pmax
comp=Z,48nm,0.6s
SOC MLR MLR
comp=Z,185nm,13.0s
**MAZI Mazidag 23.36 275** *e*P **P 01 45 11.2 -1.9**
**DYBB Diyarbakir 23.48 276** *e*P **P 01 45 17.4 +3.1**
**PTK Pertek 23.86 279** *e*P **P 01 45 20.3 +2.1**
**CHLP Challavanipeta 23.96 146** *e*P **P 01 45 17.6 -1.2**
**NJS Nagarjunasagar 24.02 158** *e*P **P 01 45 18.5 -1.0**
**SVRC Sivrice-ELAZIĞ 24.03 278** *e*P **P 01 45 22.7 +3.0**
**PVM Polavaram 24.13 152** *e*P **P 01 45 18.9 -1.5**
**ILIC ilic-Erzincan 24.40 280** *e*P **P 01 45 27.0 +4.0**
**VORD Divnogorie 24.54 309** *e*P **P 01 45 24.3 +0.3**
VORD pmax pmax
comp=Z,20nm,0.9s
VORD pmax pmax
comp=N,150nm,0.5s
VORD pmax pmax
comp=E,190nm,0.6s
**URFA Urfa 24.62 276** *e*P **P 01 45 27.3 +2.3**
**MOY Mondy 24.67 50** *e*P **P 01 45 29.5 +4.2**
MOY pmax pmax
comp=Z,45nm,2.0s
**VSR Storozhevoye 24.69 309** *e*P **P 01 45 25.9 +0.6**
VSR pmax pmax
comp=Z,50nm,1.1s
VSR pmax pmax
comp=N,10.0nm,0.8s
VSR pmax pmax
comp=E,70nm,0.9s
**MALT Malatya 24.72 278** *e*P **P 01 45 29.7 +3.8**
**ANN Anapa 24.84 293** *e*P **P 01 45 29.0 +2.3**
ANN pmax pmax
comp=Z,103nm,0.9s
**URV Uravakonda 25.05 164** *e*P **P 01 45 27.2 -1.6**
**LPSR Galich'ya Gora 25.25 312** *e*P **P 01 45 30.8 +0.4**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=N,6.0nm,0.6s
LPSR pmax pmax
comp=E,10.0nm,1.1s
**DARE Darende-Malaty 25.39 279** *e*P **P 01 45 36.3 +4.3**
**SVSK Karacayir 25.51 282** *e*P **P 01 45 36.3 +3.4**
**ZAK Zakamensk 25.72 54** *e*P **P 01 45 35.6 +0.7**
ZAK pmax pmax
comp=Z,69nm,1.2s
**RBK Rabkut 25.81 217** P **P 01 45 35.9 +0.1**
SNR=5.1
**KVT Kavak 26.06 285** *e*P **P 01 45 40.4 +2.5**
**RAYN Ar Rayn 26.19 240** P **P 01 45 39.0 -0.2**
comp=Z,204nm,0.8s,SNR=28
**RAYN Ar Rayn 26.19 240** *e*P **P 01 45 39.5 +0.2**
comp=Z,27nm,0.8s
**SARI SarD1z-Kayseri 26.24 279** *e*P **P 01 45 42.9 +3.1**
**TLY Talaya 26.25 51** P **P 01 45 40.3 +0.7**
comp=Z,3.1nm,0.4s,baz=199,slow=10,SNR=6.3
**TLY Talaya 26.25 51** *e*P **P 01 45 41.9 +2.3**
TLY pmax pmax
comp=Z,11nm,0.8s
TLY MLR MLR
comp=Z,267nm,12.0s
**TLY Talaya 26.25 51** P **P 01 45 41.9 +2.3**
SNR=8.7
**TLY Talaya 26.25 51** *e*P **P 01 45 41.4 +1.8**
comp=Z,19nm,1.2s
**ABTO Aybut 26.37 219** P **P 01 45 40.7 -0.2**
SNR=19
**DIKM Dikmen 26.58 286** *e*P **P 01 45 45.0 +2.4**
**BNN Bunyan 26.59 280** *e*P **P 01 45 47.2 +4.4**
**LZH Lanzhou 26.72 86** *e*P **P 01 45 42.2 -1.9**
LZH pP **pP 01 45 46.5 -2.2**
LZH *e*PP **PnPn 01 46 26.5 +1.3**
LZH *e*S **S 01 50 15.0 -4.2**
LZH *e*SS **SnSn 01 51 25.4 +2.8**
LZH PMZ
comp=Z,25nm,1.0s
LZH PMZ
comp=Z,110nm,4.1s
LZH LN
comp=Z,630nm,12.5s
LZH LE
comp=Z,500nm,12.7s
LZH LZ
comp=Z,790nm,16.0s
**RABH Abou Rabah 26.75 270** *e*P **P 01 45 47.0 +2.7**
**ROOS tl_alroos 26.78 269** *e*P **P 01 45 47.1 +2.5**
**SKHT Srikalahasti 26.81 159** *e*P **P 01 45 42.8 -2.0**
**BTCH Batrach 26.82 274** *e*P **P 01 45 47.2 +2.3**
**KOZT Kozan 26.92 277** *e*P **P 01 45 46.6 +0.9**
**WRDH Warideh 27.02 273** *e*P **P 01 45 48.2 +1.5**
**MOS Moscow 27.12 318** *e*P **P 01 45 48.0 +0.8**
MOS pmax pmax
comp=Z,60nm,0.8s
**SIM Simferopol' 27.20 294** *d i*P **P 01 45 49.8 +1.7**
SIM pmax pmax
comp=Z,48nm,1.1s
**ZALF Zalf 27.21 267** *e*P **P 01 45 49.8 +1.5**
**BIDA Albida 27.25 272** *e*P **P 01 45 51.8 +3.0**
**SONM Songino Array 27.36 60** P **P 01 45 50.5 +0.8**
comp=Z,9.8nm,0.8s,baz=266,slow=10,SNR=20
**SONM Songino Array 27.36 60** P **P 01 45 50.5 +0.8**
SONM pmax pmax
comp=Z,10.0nm,0.8s
**SONA1 Songino Array 27.37 60** *e*P **P 01 45 49.4 -0.4**
**OBN Obninsk 27.44 316** P **P 01 45 51.7 +1.7**
comp=Z,42nm,0.4s,baz=34,slow=3.3,SNR=18
**OBN Obninsk 27.44 316** *d i*P **P 01 45 51.6 +1.5**
OBN *e* 01 46 41.5
OBN *e*SS SS 01 51 42.4 -43
OBN pmax pmax
comp=Z,40nm,0.6s
OBN MLR MLR
comp=Z,139nm,11.0s
**OBN Obninsk 27.44 316** P **P 01 45 51.1 +1.0**
comp=Z,584nm,0.5s,SNR=5.8
**OBN Obninsk 27.44 316** *e*P **P 01 45 51.3 +1.2**
comp=Z,53nm,0.6s
OBN *e*PcP **PcP 01 49 07.6 -0.7**
**NIG Nigde 27.70 279** *e*P **P 01 45 56.1 +3.1**
**SALA Sala 27.76 267** *e*P **P 01 45 52.1 -1.4**
**ULN Ulaanbaatar 27.81 60** *ce*P **P 01 45 53.9 +0.2**
ULN pmax pmax
comp=Z,31nm,1.2s
**ULN Ulaanbaatar 27.81 60** P **P 01 45 54.9 +1.2**
SNR=9.1
**ULN Ulaanbaatar 27.81 60** *e*P **P 01 45 53.6 -0.1**
comp=Z,22nm,1.0s
**ASF Jabal al Asfar 27.85 266** P **P 01 45 55.6 +1.5**
comp=Z,3.2nm,0.8s,baz=42,slow=2.9,SNR=8.9
**ASF Jabal al Asfar 27.85 266** P **P 01 45 55.6 +1.5**
ASF pmax pmax
comp=Z,3.0nm,0.9s
**CANT Cankiri 27.95 284** *e*P **P 01 45 58.1 +3.1**
**BRTR Keskin Array B 28.09 283** P **P 01 45 58.0 +1.7**
comp=Z,26nm,0.8s,baz=87,slow=7.2,SNR=122
**BRTR Keskin Array B 28.09 283** P **P 01 45 58.0 +1.7**
BRTR pmax pmax
comp=Z,26nm,0.8s
**BRBR Barbar 28.10 269** *e*P **P 01 45 57.1 +0.6**
**YAYX Yaylak 28.12 281** *e*P **P 01 45 57.8 +1.2**
**SULT Sultanhani-AKS 28.51 280** *e*P **P** 01 46 04.3 +4.2
**CD2 Chengdu 28.57 97** *e*P **P 01 46 00.2 -0.4**
CD2 pP **pP 01 46 04.6 -0.6**
CD2 S **S 01 50 48.1 -0.1**
CD2 sS **sS 01 50 55.6 -0.3**
CD2 PMZ
comp=Z,30nm,0.6s
CD2 PMZ
comp=Z,180nm,5.4s
CD2 LE
comp=Z,430nm,13.7s
CD2 LZ
comp=Z,570nm,13.2s
**AFSR Af'ar-Bala (A 28.58 282** *e*P **P 01 46 01.0 +0.4**
**MMAI Mount Meron Ar 28.67 268** P **P 01 46 02.8 +1.3**
comp=Z,0.9nm,0.6s,baz=72,slow=9.3,SNR=3.0
**ANTO Ankara 28.70 283** *e*P **P 01 46 01.8 +0.1**
ANTO pmax pmax
comp=Z,52nm,1.1s
**ANTO Ankara 28.70 283** P **P 01 46 04.7 +3.0**
SNR=6.2
**ANTO Ankara 28.70 283** *e*P **P 01 46 01.8 +0.1**
comp=Z,52nm,1.1s
**BR231 Keskin MP Arra 28.72 283** *e*P **P** 01 45 58.7 -3.2
**KLMR Klimovskoe 28.74 329** *e*P **P 01 46 02.5 +0.8**
KLMR pmax pmax
comp=Z,37nm,0.7s
**HDMB Hadim 29.62 278** *e*P **P 01 46 10.9 +0.8**
**LEF Lefka 29.87 274** *e*P **P** 01 46 17.0 +5.0
**GULT Gulveren 30.31 285** *e*P **P 01 46 17.4 +1.5**
**EIL Elat 30.45 262** P **P 01 46 18.5 +1.4**
comp=Z,8.0nm,1.0s,baz=18,slow=6.9,SNR=4.2
**SUTC Sutluce-Ispart 30.62 279** *e*P **P 01 46 19.9 +1.1**
**SHUT Suhut-Afyon 30.69 281** *e*P **P 01 46 20.3 +1.0**
**AKASG Malin Array Be 30.75 305** P **P 01 46 20.4 +0.8**
comp=Z,2.1nm,0.4s,baz=78,slow=7.9,SNR=27
**AKASG Malin Array Be 30.75 305** *ce*P **P 01 46 20.7 +1.1**
AKASG pmax pmax
comp=Z,4.0nm,0.5s
**KMI Kunming 30.76 108** P **P 01 46 21.0 +0.8**
KMI S **S 01 51 23.3 +0.3**
KMI PMZ
comp=Z,6.0nm,1.0s
KMI PMZ
comp=Z,160nm,6.9s
KMI LN
comp=Z,320nm,11.5s
KMI LE
comp=Z,360nm,12.6s
KMI LZ
comp=Z,330nm,10.9s
**KIEV Kiev 30.76 305** ⇓*e*P **P 01 46 20.6 +0.9**
KIEV pmax pmax
comp=Z,7.0nm,0.9s
**KIEV Kiev 30.76 305** *e*P **P 01 46 20.8 +1.1**
comp=Z,16nm,0.9s
**AK11 Malin Array Si 30.79 305** *e*P **P 01 46 20.2 +0.3**
**ISP Isparta 30.90 280** *e*P **P 01 46 22.1 +0.9**
ISP *e* 01 47 32.5
ISP pmax pmax
comp=Z,20nm,0.8s
**ISP Isparta 30.90 280** ⇑*i*P **P 01 46 22.5 +1.3**
**ISP Isparta 30.90 280** *e*P **P 01 46 22.1 +0.9**
comp=Z,20nm,0.8s
ISP *e*PP **PP 01 47 32.5 +1.6**
**IZI Iznik 31.11 285** *e*P **P 01 46 26.1 +3.1**
**TMCR Tamitsa 31.25 333** *e*P **P 01 46 25.2 +1.4**
TMCR *e*S **S 01 51 34.2 +4.7**
TMCR pmax pmax
comp=Z,44nm,0.8s
**XAN Xi'an 31.32 87** P **P 01 46 27.8 +2.9**
XAN pP **pP 01 46 31.8 +2.2**
XAN PP **PP 01 47 31.5 -4.1**
XAN S **S 01 51 33.7 +2.3**
XAN sS **sS 01 51 41.0 +1.9**
XAN SS **SnSn 01 53 21.0 +6.3**
XAN PMZ
comp=Z,11nm,0.6s
XAN PMZ
comp=Z,63nm,5.1s
XAN LN
comp=Z,420nm,14.5s
XAN LE
comp=Z,600nm,14.1s
XAN LZ
comp=Z,490nm,15.7s
**CFR Carcaliu 31.42 295** ⇑*i*P **P 01 46 27.2 +1.7**
**HHC Hu-ho-hao-te 31.48 74** *e*P **P 01 46 27.7 +1.4**
HHC PP **PP 01 47 35.3 -2.0**
HHC S **S 01 51 33.7 -0.1**
HHC sS **sS 01 51 41.1 -0.3**
HHC PMZ
comp=Z,17nm,1.0s
HHC PMZ
comp=Z,100nm,5.5s
HHC LN
comp=Z,440nm,15.1s
HHC LE
comp=Z,250nm,10.4s
HHC LZ
comp=Z,230nm,12.2s
**ELL Elmali 31.67 278** *e*P **P 01 46 29.8 +1.8**
**CRAI Chiangrai 32.14 117** P **P 01 46 31.3 -0.8**
comp=Z,9.8nm,1.3s,comp=Z,563nm
**VRI Vrincioaia 32.36 296** ⇓*i*P **P 01 46 36.9 +3.1**
**TESR Tescani 32.37 297** ⇓*i*P **P 01 46 36.0 +2.1**
**CMAR Chiang Mai Arr 32.41 122** P **P 01 46 32.3 -2.2**
comp=Z,1.4nm,0.3s,baz=297,slow=9.8,SNR=2.5
CMAR PcP **PcP 01 49 22.2 +0.4**
comp=Z,2.9nm,0.5s,baz=298,slow=4.0,SNR=4.8
**CMAR Chiang Mai Arr 32.41 122** *ce*P **P 01 46 37.0 +2.5**
CMAR pmax pmax
comp=Z,3.0nm,0.4s
**PLOR Plostina 32.41 296** ⇑*i*P **P 01 46 37.0 +2.6**
**MLR Muntele Rosu 32.94 295** ⇑*i*P **P 01 46 42.0 +3.0**
**GYA Guiyang 32.97 102** *e*P **P 01 46 39.7 +0.2**
GYA PP **PnPn 01 47 49.2 +0.6**
GYA S **S 01 51 55.0 -2.3**
GYA ScP **ScP 01 53 06.5 -0.4**
GYA SS **SnSn 01 53 53.4 -1.5**
GYA PMZ
comp=Z,10.0nm,0.8s
GYA PMZ
comp=Z,110nm,4.8s
GYA LN
comp=Z,480nm,18.3s
GYA LE
comp=Z,450nm,20.2s
GYA LZ
comp=Z,420nm,18.0s
**PHRA Phrae 33.23 120** P P 01 46 47.2 +5.5
comp=Z,223nm,1.2s
**DOPR Dopca 33.28 296** ⇑*i*P **P 01 46 44.4 +2.5**
**BURAR Bucovina Array 33.30 299** ⇑*i*P **P 01 46 44.0 +1.9**
**BUR04 Bucovina Ar. S 33.30 299** *e*P **P 01 46 44.0 +1.8**
**DAMY Dhamar 33.49 230** *e*P **P 01 46 43.9 -0.4**
comp=Z,21nm,1.4s
**VOIR 33.57 295** ⇑*i*P **P 01 46 47.1 +2.6**
**VSU Vasula 33.62 319** *ce*P **P 01 46 45.7 +1.0**
VSU pmax pmax
comp=Z,60nm,0.8s
**HUMR Humele 33.72 294** ⇓*i*P **P 01 46 48.3 +2.6**
**ARCR ARCALIA 33.91 298** ⇓*i*P **P** 01 46 50.6 +3.2
**UTTA Uttaradit 33.98 121** P P 01 46 52.9 +4.7
comp=Z,3.2nm,1.1s
**LVV L'vov 34.04 303** ⇓*i*P **P 01 46 49.9 +1.5**
LVV *e* 01 48 03.7
**LOT Lotru 34.46 296** ⇓*i*P **P 01 46 55.2 +2.9**
**PGB Panagyurishte 34.61 291** *e*P **P 01 46 55.8 +2.3**
**LVZ Lovozero 34.63 337** ⇓*e*P **P 01 46 55.5 +2.2**
LVZ pmax pmax
comp=Z,12nm,0.9s
**LVZ Lovozero 34.63 337** *e*P **P 01 46 54.2 +0.9**
comp=Z,44nm,1.1s
**LOEI Loei 34.63 120** P P 01 47 00.3 +6.5
comp=Z,8.1nm,1.1s
**MPEP Malo Peshtene 34.78 292** *e*P **P 01 46 57.7 +2.8**
**APA Apatity 34.81 336** ⇑*i*P **P 01 46 56.4 +1.5**
APA pmax pmax
comp=Z,8.0nm,0.6s
APA MLR MLR
comp=Z,1µm,11.0s

**FINES FINESS Array B 34.82 324** P **P** **01 46 56.6 +1.5**
comp=Z,30nm,0.6s,baz=118,slow=9.7,SNR=108
FINES LR LR 02 00 29.3
comp=Z,129nm,18.2s,baz=151,slow=35
**UTHA Uthaitani 34.85 125** P P 01 46 58.8 +3.1
comp=Z,11nm,0.8s,comp=Z,91nm
**KWP Kalwaria Pacla 34.90 303** *e*P **P** **01 46 58.1 +2.2**
**KWP Kalwaria Pacla 34.90 303** *e*P **P** **01 46 58.1 +2.2**
**APE Apeiranthos 34.92 281**⇑*i*P **P** **01 46 57.4 +1.1**
**DRGR 35.06 298**⇑*i*P **P** **01 46 59.3 +1.9**
**TRPA Tarpa 35.07 300**⇑*i*P **P** **01 46 59.4 +2.1**
**TRPA Tarpa 35.07 300** *e*P **P** **01 46 59.5 +2.1**
**BJI Beijing 35.09 74** P **P** **01 46 57.3 -0.3**
BJI PMZ
comp=Z,8.0nm,0.8s
BJI PMZ
comp=Z,270nm,10.8s
**PBKT Sadao Pong 35.10 121** P P 01 47 01.5 +3.6
comp=Z,17nm,1.2s
**KOLS Kolonicke sedl 35.20 302** *e*P **P** **01 47 00.2 +1.6**
KOLS pmax pmax
comp=Z,8.0nm,0.9s
**KOLS Kolonicke sedl 35.20 302** *e*P **P** **01 47 00.2 +1.6**
KOLS *e* 01 48 14.6
**UZH Uzhgorod 35.21 301**⇑*i*P **P** **01 46 59.7 +1.2**
UZH *e* 01 47 05.9
UZH *e*S **S** **01 52 32.7 +1.5**
**VTS Vitosha 35.30 291** *e*P **P** **01 47 01.1 +1.5**
**STHS Stebnicka Huta 35.86 303** *e*P **P** **01 47 05.8 +1.6**
STHS pmax pmax
comp=Z,4.0nm,0.8s
**STHS Stebnicka Huta 35.86 303** *e*P **P** **01 47 05.8 +1.6**
**BZS Buzias 35.94 296**⇑*i*P **P** **01 47 07.3 +2.4**
**IDI Anoyia 35.99 278** P **P** **01 47 06.5 +1.0**
comp=Z,11nm,0.9s,baz=70,slow=12,SNR=24
**IDI Anoyia 35.99 278** *e*P **P** **01 47 05.8 +0.4**
comp=Z,23nm,1.0s
**NIE Niedzica 36.47 303** *e*P **P** **01 47 11.8 +2.3**
**NIE Niedzica 36.47 303** *e*P **P** **01 47 11.9 +2.4**
**KHON Khomkaen 36.50 120** P P 01 47 15.3 +5.4
comp=Z,13nm,0.9s
**OJC Ojcow 36.76 304** *e*P **P** **01 47 12.9 +1.1**
**OJC Ojcow 36.76 304** *e*P **P** **01 47 12.7 +0.8**
OJC pmax pmax
comp=Z,26nm,1.0s
**OJC Ojcow 36.76 304** *e*P **P** **01 47 12.7 +0.8**
comp=Z,26nm,1.0s
**SKNT Sakolnakorn 36.85 117** P P 01 47 18.1 +5.2
comp=Z,98nm,0.9s
**PSZ Piszkesteto 36.86 300** *e*P **P** **01 47 14.9 +2.1**
PSZ pmax pmax
comp=Z,7.0nm,0.8s
**PSZ Piszkesteto 36.86 300**⇑*i*P **P** **01 47 15.1 +2.3**
**PSZ Piszkesteto 36.86 300** *e*P **P** **01 47 14.7 +1.9**
**PSZ Piszkesteto 36.86 300** *e*P **P** **01 47 14.9 +2.1**
comp=Z,7.0nm,0.8s
PSZ *e*PP PP 01 48 27.5 -9.1
**PHET Kaeng Krachan 36.97 127** P P 01 47 17.1 +3.2
comp=Z,12nm,0.9s,comp=Z,136nm
**LANS Liptovska Anna 37.03 302** *e*P **P** **01 47 16.6 +2.4**
**LANS Liptovska Anna 37.03 302** *e*P **P** **01 47 16.6 +2.4**
**DIVS Divibare 37.32 294**⇑*i*P **P** **01 47 18.7 +1.9**
**VYHS Vyhne 37.51 301** *e*P **P** **01 47 20.0 +1.8**
VYHS pmax pmax
comp=Z,4.0nm,1.1s
**VYHS Vyhne 37.51 301** *e*P **P** **01 47 20.0 +1.8**
VYHS *e* 01 48 42.0
**OKC Ostrava-Krasne 37.84 304** *e*P **P** **01 47 23.7 +2.7**
OKC *e* 01 47 35.8
OKC *e* 01 48 49.8
**OKC Ostrava-Krasne 37.84 304** *e*P **P** **01 47 23.7 +2.7**
OKC *ex* x 01 47 26.6
OKC *e*PP **PnPn** **01 48 49.8 +1.3**
OKC *ex* x 01 49 04.0
**MORC Moravsky Berou 38.24 304** *e*P **P** **01 47 25.4 +1.0**
MORC *e* 01 48 52.9
MORC pmax pmax
comp=Z,44nm,1.1s
**MORC Moravsky Berou 38.24 304**⇓*i*P **P** **01 47 26.5 +2.1**
**MORC Moravsky Berou 38.24 304** *e*P **P** **01 47 25.4 +1.0**
comp=Z,44nm,1.1s
MORC *e*PP **PnPn** **01 48 52.9 -0.5**
**GKP Gorka Klasztor 38.27 309** *e*P **P** **01 47 26.2 +1.6**
**GKP Gorka Klasztor 38.27 309** *e*P **P** **01 47 26.2 +1.6**
**SMOL Smolenice 38.44 302** *e*P **P** **01 47 28.6 +2.6**
**SMOL Smolenice 38.44 302** *e*P **P** **01 47 28.6 +2.6**
**KRLC Kraliky 38.70 304** *e*P **P** **01 47 29.8 +1.5**
KRLC *e* 01 49 00.6
**KRLC Kraliky 38.70 304** *e*P **P** **01 47 29.8 +1.5**
KRLC *ex* x 01 47 33.8
KRLC *e*PP **PnPn** **01 49 00.6 +1.6**
KRLC *ex* x 01 49 11.0
**VRAC Vranov 38.90 303** P **P** **01 47 32.0 +2.1**
comp=Z,11nm,0.9s,baz=81,slow=9.1,SNR=16
**VRAC Vranov 38.90 303** P **P** **01 47 32.0 +2.1**
VRAC pmax pmax
comp=Z,11nm,0.9s
**VRAC Vranov 38.90 303**⇑*i*P **P** **01 47 32.1 +2.2**
**DPC Dobruska-Polom 38.98 305** *e*P **P** **01 47 32.4 +1.8**
DPC *e* 01 47 43.2
DPC *e* 01 49 01.8
**DPC Dobruska-Polom 38.98 305** *e*P **P** **01 47 32.4 +1.8**
DPC *e*pP **pP** **01 47 35.8 +0.5**
DPC *e*PP **PnPn** **01 49 01.8 -0.4**
**SOP Sopron 39.12 300** *e*P **P** **01 47 33.6 +1.8**
**UPC Upice 39.16 305** *e*P **P** **01 47 32.2 +0.1**
**UPC Upice 39.16 305** *e*P **P** **01 47 32.2 +0.1**
UPC *e*pP **pP** **01 47 33.8 -3.0**
UPC *e*sP **sP** **01 47 37.5 -1.2**
UPC *e*PP **PP** **01 48 59.3 -2.5**
**KOGS Kog 39.52 299** *i* P **P** **01 47 37.0 +1.9**
**CONA Conrad Observa 39.55 301**⇑*i*sP **P** **01 47 37.3 +1.8**
comp=Z,23nm,1.2s,SNR=9.1
**QIZ Qiongzhong 39.67 109** P **P** **01 47 34.2 -2.5**
QIZ S **S** **01 53 37.1 -2.5**
QIZ PMZ
comp=Z,62nm,3.0s
**NJ2 Nanjing 39.78 85** *e*P **P** **01 47 37.5 0.0**
NJ2 PMZ
comp=Z,40nm,0.7s
**ARSA Arzberg 39.88 300**⇑*i*sP **P** **01 47 39.6 +1.5**
comp=Z,5.7nm,0.8s
**GOPC GO Pecny, Ondr 40.00 304** *e*P **P** **01 47 40.7 +1.6**
**GOPC GO Pecny, Ondr 40.00 304** *e*P **P** **01 47 40.7 +1.6**
GOPC *e*pP **pP** **01 47 44.0 +0.1**
**GOLS Golise 40.02 298** *i* P **P** **01 47 41.5 +2.2**
**PVCC Panska Ves 40.08 305** *e*P **P** **01 47 41.6 +1.9**
PVCC *e* 01 49 14.5
**PVCC Panska Ves 40.08 305** *e*P **P** **01 47 41.6 +1.9**
PVCC *e*PP **PnPn** **01 49 14.5 -0.7**
**PRU Pruhonice 40.15 304** *e*P **P** **01 47 41.9 +1.6**
PRU *e* 01 49 16.6
**PRU Pruhonice 40.15 304** *e*P **P** **01 47 41.9 +1.6**
PRU *e*pP **pP** **01 47 45.4 +0.3**
PRU *e*PP **PnPn** **01 49 16.6 +0.5**
PRU *ex* x 01 49 24.2
**PRA Prague 40.21 304** *e*P **P** **01 47 42.7 +1.9**
PRA *e* 01 47 50.0
**PRA Prague 40.21 304** *e*P **P** **01 47 42.7 +1.9**
PRA *e*pP **pP** **01 47 46.5 +1.0**
**SOKA Soboth 40.30 299** *i* sP **P** **01 47 43.3 +1.5**
comp=Z,9.2nm,0.7s,SNR=6.3
**BRG Berggiesshubel 40.44 306** *i* P **P** **01 47 44.8 +2.1**
comp=Z,19nm,0.9s
**BRG Berggiesshubel 40.44 306** *i* P **P** **01 47 44.7 +2.1**
BRG pmax pmax
comp=Z,19nm,0.9s
**BRG Berggiesshubel 40.44 306** *e*P **P** **01 47 44.9 +2.2**
comp=Z,19nm,0.9s,baz=80,slow=8.1
**HFS Hagfors 40.49 320** P **P** **01 47 44.4 +1.4**
comp=Z,26nm,0.4s,baz=98,slow=11,SNR=164
**HFS Hagfors 40.49 320** P **P** **01 47 44.4 +1.4**
HFS pmax pmax
comp=Z,26nm,0.4s
**MOA Molln 40.62 301**⇑*i*pP **P** **01 47 45.6 +1.3**
comp=Z,12nm,1.2s
**GEC2 GERESS Array S 40.84 303** *e*P **P** **01 47 48.7 +2.5**
**GEC2 GERESS Array S 40.84 303** *e*P **P** **01 47 48.7 +2.5**
**GERES GERESS Array B 40.84 303** P **P** **01 47 48.0 +1.9**
comp=Z,3.1nm,0.7s,baz=68,slow=7.8,SNR=28
**GERES GERESS Array B 40.84 303** P **P** **01 47 48.1 +1.9**
GERES pmax pmax
comp=Z,3.0nm,0.7s

**KHC Kasperske Hory 40.88 303** *e*P **P** **01 47 48.1 +1.6**
KHC *e* 01 47 53.9
KHC *e* 01 49 25.3
**KHC Kasperske Hory 40.88 303** *e*P **P** **01 47 48.1 +1.6**
KHC *ex* x 01 47 51.9
KHC *e*PP **PnPn** **01 49 25.3 +0.5**
KHC *ex* x 01 49 31.6
**KHC Kasperske Hory 40.88 303** *e*P **P** **01 47 48.1 +1.6**
comp=Z,5.2nm,0.9s
**CLL Collm 40.98 306** *e*P **P** **01 47 48.7 +1.6**
CLL pmax pmax
comp=Z,13nm,0.9s
**CLL Collm 40.98 306** *e*P **P** **01 47 48.8 +1.6**
comp=Z,12nm,0.9s,baz=80,slow=8.1
**CLL Collm 40.98 306** *i* P **P** **01 47 48.3 +1.1**
comp=Z,12nm,0.9s
CLL *e*PP **PP** **01 49 22.0 +0.5**
CLL *e*PPPP 01 49 56.0
CLL Lm MLR 02 07 00.0
comp=N,100nm,20.9s
CLL Lm MLR 02 07 00.0
comp=E,200nm,18.6s
**CLL Collm 40.98 306** *e*P **P** **01 47 48.6 +1.6**
comp=E,13nm,0.9s
**CADS Cadrg 41.27 299** *i* P **P** **01 47 51.3 +1.6**
**CUC Castrococco 41.33 289** *e*P **P** **01 47 49.8 -0.5**
comp=E,19nm,0.8s
**WET Wettzell 41.34 303** *e*P **P** **01 47 52.1 +1.9**
comp=E,16nm,1.2s,baz=80,slow=8.1
**KBA Koelnbreinsper 41.37 300**⇑*i*sP **P** **01 47 51.9 +1.3**
comp=E,17nm,1.4s
**NKC Novy Kostel 41.46 305** *e*P **P** **01 47 52.9 +1.8**
NKC *e* 01 48 01.0
NKC *e* 01 48 05.8
NKC *e* 01 49 31.5
**NKC Novy Kostel 41.46 305** *e*P **P** **01 47 52.9 +1.8**
NKC *ex* x 01 48 01.0
NKC *e*PP **PP** **01 49 27.0 +0.2**
**NB2 NORSAR Subarra 41.78 321** P **P** **01 47 54.7 +1.0**
comp=Z,30nm,0.8s,baz=94,slow=8.6
**NB2 NORSAR Subarra 41.78 321** P **P** **01 47 54.7 +1.0**
baz=94,slow=8.6
**NOA NORSAR Array B 41.78 321** P **P** **01 47 54.5 +0.8**
comp=Z,29nm,0.8s,baz=94,slow=8.2,SNR=30
NOA PP **PnPn** **01 49 35.7 +0.6**
comp=Z,4.3nm,0.8s,baz=92,slow=11,SNR=3.3
NOA LR LR 02 08 27.7
comp=Z,147nm,19.1s,baz=120,slow=41
**NOA NORSAR Array B 41.78 321** P **P** **01 47 54.5 +0.8**
NOA 01 49 35.7
NOA pmax pmax
comp=Z,29nm,0.8s
NOA pmax pmax
comp=Z,4.0nm,0.8s
NOA MLR MLR
comp=Z,147nm,19.1s
**MOX Moxa 41.93 306** *e*P **P** **01 47 56.9 +1.9**
comp=Z,16nm,1.2s,baz=80,slow=8.1
**NBO02 NORSAR Array S 41.95 321** *e*P **P** **01 47 56.2 +1.1**
**ABTA Abfaltersbach 41.99 300**⇑*i*pP **P** **01 47 56.2 +0.5**
comp=Z,7.5nm,0.8s
**YAK Yakutsk 42.08 37** P **P** **01 47 56.7 +0.7**
comp=Z,13nm,0.5s,baz=248,slow=19,SNR=4.8
**YAK Yakutsk 42.08 37** *e*P **P** **01 47 55.9 -0.1**
YAK *e* 01 49 35.3
YAK *e* 01 49 47.8
YAK *e*PPP PPP 01 50 04.6
YAK *e*S S 01 54 07.9 -6.6
YAK *e*SS **SS** **01 57 15.1 -6.5**
YAK *e* 01 57 48.4
YAK *e*SSS SSS 01 58 04.7
YAK pmax pmax
comp=Z,57nm,0.8s
YAK pmax pmax
comp=N,11nm,1.5s
YAK pmax pmax
comp=E,32nm,1.1s
YAK pmax pmax
comp=Z,266nm,3.4s
YAK pmax pmax
comp=N,318nm,3.5s
YAK pmax pmax
comp=E,148nm,3.1s
YAK smax smax
comp=N,191nm,3.1s
YAK smax smax
comp=E,146nm,3.7s
**YAK Yakutsk 42.08 37** *e*P **P** **01 47 56.0 0.0**
comp=E,77nm,0.7s
**GRC1 Grafenberg Arr 42.24 303** *e*P **P** **01 47 59.6 +2.0**
baz=80,slow=8.1
**GRF Grafenberg Arr 42.32 304** *e*P **P** **01 48 01.1 +2.9**
comp=E,32nm,1.1s,baz=80,slow=8.1
**GRFO Grafenberg 42.32 304** *e*P **P** **01 47 59.9 +1.7**
GRFO pmax pmax
comp=Z,24nm,1.0s
**GRFO Grafenberg 42.32 304** *e*P **P** **01 47 59.9 +1.7**
comp=Z,24nm,1.0s
**WTTA Wattenberg 42.48 301**⇓*i*sP **P** **01 48 00.9 +1.2**
comp=Z,16nm,1.1s
**WATA Walderalm 42.51 301**⇓*i*pP **P** **01 48 00.9 +1.0**
comp=Z,13nm,0.9s
**FUR Furstenfeldbru 42.55 302** *e*P **P** **01 48 02.5 +2.5**
comp=Z,38nm,1.3s,baz=80,slow=8.1
**MOTA Moosalm 42.82 301**⇓*i*pP **P** **01 48 02.9 +0.5**
comp=Z,12nm,0.8s,SNR=8.0
**FETA Feichten 43.14 300**⇓*i*sP **P** **01 48 06.2 +1.2**
comp=Z,10nm,1.1s
**FUORN Ofenpass-Fuorn 43.53 300** *e*P **P** **01 48 10.0 +1.6**
comp=Z,7.8nm,0.8s
**MDJ Mudanjiang 43.63 63** P **P** **01 48 08.6 -0.2**
MDJ PMZ
comp=Z,5.0nm,0.7s
MDJ PMZ
comp=Z,73nm,5.8s
**DAVA Damuels 43.65 301**⇑*i*pP **P** **01 48 09.9 +0.8**
comp=Z,22nm,1.0s,SNR=7.1
**DAVOX Davos/Dischmat 43.76 300** P **P** **01 48 11.1 +1.0**
comp=Z,6.1nm,0.4s,baz=68,slow=3.3,SNR=36
DAVOX PP **PP** **01 49 51.2 -0.5**
comp=Z,2.7nm,0.7s,baz=96,slow=10,SNR=1.9
**DAVOX Davos/Dischmat 43.76 300** P **P** **01 48 11.1 +1.0**
DAVOX 01 49 51.2
DAVOX pmax pmax
comp=Z,6.0nm,0.4s
DAVOX pmax pmax
comp=Z,3.0nm,0.7s
**VLC Villacollemand 44.05 297** *e*P **P** **01 48 15.1 +2.8**
comp=Z,17nm,1.0s
**TUE Stuetta 44.18 300** *e*P **P** **01 48 14.0 +0.5**
comp=Z,34nm,1.9s
TUE *e* 01 49 59.9
**BFO Black Forest 44.44 303** *i* P **P** **01 48 17.3 +1.9**
**BFO Black Forest 44.44 303** *e*P **P** **01 48 16.9 +1.5**
comp=Z,9.7nm,0.9s,baz=80,slow=8.1
**BFO Black Forest 44.44 303** *e*P **P** **01 48 16.9 +1.5**
comp=Z,5.6nm,0.8s
**BUG Bochum--Univer 44.52 307** *e*P **P** **01 48 17.8 +2.0**
comp=Z,32nm,1.2s,baz=80,slow=8.1
**TJN Taejon 44.59 75***de*P **P** **01 48 18.9 +2.3**
**KSAR Wonju Array Be 44.59 73** P **P** **01 48 15.8 -0.8**
KSAR 01 49 59.6
**KSAR Wonju Array Be 44.59 73** P **P** **01 48 15.8 -0.8**
KSAR PcP **PcP** **01 49 59.6 +0.2**
**KSRS Korea Array 44.62 73** P **P** **01 48 15.8 -1.0**
comp=Z,14nm,1.0s,baz=282,slow=6.8,SNR=15
KSRS PcP **PcP** **01 49 59.6 +0.1**
comp=Z,2.8nm,0.9s,baz=288,slow=3.7,SNR=4.4
**KSRS Korea Array 44.62 73** P **P** **01 48 15.8 -1.0**
KSRS 01 49 59.6
KSRS pmax pmax
comp=Z,14nm,1.0s
KSRS pmax pmax
comp=Z,3.0nm,0.9s
**SPB2 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 18.9 +2.6**
**SPB1 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 18.9 +2.6**
**SPA2 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 19.1 +2.7**
**SPA0 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 19.0 +2.6**
**SPA1 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 19.0 +2.6**
**SPITS Spitsbergen Ar 44.62 346** P **P** **01 48 18.4 +2.0**
comp=Z,12nm,0.6s,baz=104,slow=9.8,SNR=12
**SPITS Spitsbergen Ar 44.62 346** P **P** **01 48 18.4 +2.0**
SPITS pmax pmax
comp=Z,12nm,0.6s
**SPB3 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 19.0 +2.6**
**SPA3 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 19.0 +2.6**

**SPB5 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 19.0 +2.6**
**SPB4 Spitsbergen Ar 44.62 346** *e*P **P** **01 48 19.0 +2.6**
**MSHR Mys Shultsa 45.28 65**⇓*e*P **P** **01 48 25.1 +3.0**
**USRK Ussuriysk Ar. 45.40 63** P **P** **01 48 22.7 -0.2**
comp=Z,3.8nm,0.6s,baz=260,slow=8.2,SNR=8.4
**MEM Membach 45.46 306** P **P** **01 48 25.0 +1.7**
**WLF Walferdange 45.56 305** P **P** **01 48 26.3 +2.2**
comp=Z,16nm,1.5s
**WLF Walferdange 45.56 305** *e*P **P** **01 48 25.6 +1.4**
WLF pmax pmax
comp=Z,23nm,0.9s
**WLF Walferdange 45.56 305** *e*P **P** **01 48 26.5 +2.3**
comp=Z,29nm,0.9s,baz=80,slow=8.1
**WLF Walferdange 45.56 305** *e*P **P** **01 48 25.6 +1.4**
comp=Z,23nm,0.9s
**SENIN Lac Senin/Sane 45.59 300** *e*P **P** **01 48 25.7 +1.0**
comp=Z,16nm,0.9s
**KBS Kingsbay 45.74 347** *e*P **P** **01 48 26.5 +1.3**
KBS pmax pmax
comp=Z,36nm,0.8s
**KBS Kingsbay 45.74 347** *e*P **P** **01 48 26.5 +1.3**
comp=Z,36nm,0.8s
**BNI Bardonecchia 46.35 299** *e*P **P** **01 48 31.2 +0.5**
BNI pmax pmax
comp=Z,20nm,1.1s
**BNI Bardonecchia 46.35 299** *e*P **P** **01 48 31.2 +0.5**
comp=Z,20nm,1.1s
**DOU Dourbes 46.45 306** P **P** **01 48 33.3 +2.1**
**KEST Kesra 47.61 286** P **P** **01 48 41.8 +1.3**
comp=Z,4.8nm,0.5s,baz=65,slow=10,SNR=20
**KEST Kesra 47.61 286** *e*P **P** **01 48 43.0 +2.4**
**SSB Saint Sauveur 47.74 300** *e*P **P** **01 48 42.5 +1.1**
SSB pmax pmax
comp=Z,17nm,0.9s
**SSB Saint Sauveur 47.74 300** *e*P **P** **01 48 42.5 +1.1**
comp=Z,17nm,0.9s
**JNU Nakatsue 48.54 77** P **P** **01 48 47.6 -0.2**
comp=Z,45nm,0.9s,baz=282,slow=7.8,SNR=5.1
**JNU Nakatsue 48.54 77** *e*P **P** **01 48 47.1 -0.6**
comp=Z,60nm,1.0s
**EKA Eskdalemuir Ar 49.86 314** P **P** **01 48 58.3 +0.9**
comp=Z,12nm,0.7s,baz=87,slow=8.0,SNR=34
**EKA Eskdalemuir Ar 49.86 314** P **P** **01 48 58.3 +0.9**
EKA pmax pmax
comp=Z,12nm,0.7s
**KMBO Kilima Mbogo 50.32 225** P **P** **01 49 02.0 +0.3**
comp=Z,7.6nm,1.1s,baz=29,slow=8.4,SNR=12
**KMBO Kilima Mbogo 50.32 225***ce*P **P** **01 49 02.7 +1.1**
KMBO pmax pmax
comp=Z,6.0nm,1.0s
**YSS Yuzh-Sakhalins 51.75 56** *e*P **P** **01 49 11.5 -0.3**
YSS *e*S S 01 56 27.0 -6.0
YSS MLR MLR
comp=Z,500nm,14.0s
**YSS Yuzh-Sakhalins 51.75 56** *e*P **P** **01 49 12.1 +0.3**
comp=Z,46nm,1.1s
**MAJO Matsushiro 52.55 70**⇓*e*P **P** **01 49 16.9 -1.0**
MAJO pmax pmax
comp=Z,33nm,0.8s
**MAJO Matsushiro 52.55 70** *e*P **P** **01 49 18.2 +0.3**
comp=Z,18nm,1.0s
**MAT Matsushiro 52.55 70** P **P** **01 49 16.8 -1.1**
MAT S **S** **01 56 49.2 +5.0**
**MJAR Matsushiro Arr 52.55 70** P **P** **01 49 17.5 -0.5**
comp=Z,13nm,1.1s,baz=291,slow=9.0,SNR=17
**MJAR Matsushiro Arr 52.55 70** P **P** **01 49 17.5 -0.5**
MJAR pmax pmax
comp=Z,13nm,1.1s
**ASAJ Asahikawa 52.65 60** P **P** **01 49 18.1 -0.4**
comp=Z,2.8nm,0.4s,baz=259,slow=10,SNR=2.9
**ASAJ Asahikawa 52.65 60** P **P** **01 49 18.1 -0.4**
ASAJ pmax pmax
comp=Z,3.0nm,0.4s
**SBUM Sibu 52.94 123** *e*P P 01 49 25.3 +4.3
**YUK Yuzh-Kuril'sk 54.85 59** *e*P **P** **01 49 36.7 +2.1**
YUK *e* 01 51 43.8
YUK *e*S **S** **01 57 12.5 -2.6**
YUK SSS SSS 02 03 04.2
YUK pmax pmax
comp=N,52nm,1.6s
YUK pmax pmax
comp=E,77nm,1.6s
YUK pmax pmax
comp=Z,111nm,1.6s
YUK pmax pmax
comp=Z,125nm,1.5s
YUK MLR MLR
comp=Z,242nm,19.0s
**ESDC Sonseca Array 55.63 296** P **P** **01 49 41.2 +0.8**
comp=Z,9.5nm,0.5s,baz=58,slow=7.5,SNR=128
**PAB San Pablo 55.95 296** *e*P **P** **01 49 43.7 +0.9**
PAB pmax pmax
comp=Z,10.0nm,0.7s
**PAB San Pablo 55.95 296** *e*P **P** **01 49 43.7 +0.9**
comp=Z,10nm,0.7s
**ALE Alert 56.18 353** P P **01 49 45.3 +1.6**
comp=Z,51nm,0.5s,SNR=6.1
**BILL Bilibino 56.37 27**⇓*e*P **P** **01 49 46.4 +1.2**
BILL *e* 01 50 43.8
BILL *e* 01 51 55.0
BILL *e*SS **SS** **02 01 23.3 +2.2**
BILL pmax pmax
comp=Z,8.0nm,1.0s
BILL MLR MLR
comp=Z,242nm,16.0s
**PBRG Braganca 56.63 299** *e*P **P** **01 49 47.7 +0.1**
comp=Z,43nm,2.0s
**MVO Moncorvo 57.10 299** *e*P **P** **01 49 52.7 +1.8**
comp=Z,21nm,0.7s
**PVRL Vila Real 57.52 299** *e*P **P** **01 49 55.8 +1.9**
comp=Z,57nm,2.0s
**POLO Lamas de Olo 57.53 299** *e*P **P** **01 49 55.6 +1.6**
comp=Z,18nm,1.4s
**PCAB Cabril 57.54 300** *e*P **P** **01 49 55.7 +1.7**
comp=Z,68nm,1.1s
**PGAV Gavieira, Arco 57.59 300** *e*P **P** **01 49 56.5 +2.1**
comp=Z,37nm,1.1s
**MTE Manteigas 57.79 298** *e*P **P** **01 49 57.8 +2.0**
comp=Z,40nm,1.3s
**PVIS Viseu 57.89 299** *e*P **P** **01 49 58.3 +1.8**
comp=Z,38nm,1.4s
**PMRV Marv??o 58.12 297** *e*P **P** **01 49 59.1 +1.1**
comp=Z,36nm,1.3s
**SUMG Summit 58.21 340** *e*P **P** **01 50 00.0 +1.4**
**SUMG Summit 58.21 340** *e*P **P** **01 50 00.0 +1.4**
**PETK Petropavlovsk- 58.41 45** P **P** **01 49 59.7 -0.1**
comp=Z,5.3nm,0.8s,baz=264,slow=3.0,SNR=4.0
**PETK Petropavlovsk- 58.41 45** P **P** **01 49 59.7 -0.1**
PETK pmax pmax
comp=Z,5.0nm,0.8s
**PBAR Barrancos 58.44 296** *e*P **P** **01 50 01.4 +1.1**
comp=Z,66nm,1.1s
**SKR Severo-Kuril's 58.53 48** *e*P P 01 49 57.6 -3.1
**PTOM Tomar 58.73 298** *e*P **P** **01 50 04.4 +2.1**
comp=Z,56nm,0.9s
**EVO Evora 58.96 296** *e*P **P** **01 50 05.3 +1.4**
comp=Z,25nm,1.7s
**PET Petropavlovsk 58.97 45** *e*P **P** **01 50 03.1 -0.6**
PET pmax pmax
comp=Z,18nm,1.2s
**PBEJ Beja 59.09 296** *e*P **P** **01 50 06.4 +1.6**
comp=Z,36nm,1.8s
**PVAQ Vaqueiros 59.28 295** *e*P **P** **01 50 07.7 +1.6**
comp=Z,41nm,1.1s
**PCVE Castro Verde 59.40 295** *e*P **P** **01 50 08.2 +1.3**
comp=Z,20nm,1.4s
**MESJ Messejana 59.42 296** *e*P **P** **01 50 09.0 +1.9**
comp=Z,29nm,1.3s
**PBDV Barranco-do-Ve 59.50 295** *e*P **P** **01 50 09.9 +2.2**
comp=Z,80nm,1.4s
**PNCL Nicolau / Gran 59.51 296** *e*P **P** **01 50 09.7 +2.0**
comp=Z,47nm,1.4s
**PTEO Sao Teotonio 59.92 296** *e*P **P** **01 50 12.4 +1.9**
comp=Z,93nm,1.7s
**ABPO Ambohimpanom 61.88 205** *e*P **P** **01 50 24.3 +0.2**
ABPO pmax pmax
comp=Z,32nm,0.9s
**ABPO Ambohimpanom 61.88 205** *e*P **P** **01 50 24.3 +0.2**
comp=Z,32nm,0.9s
**TORD Torodi Ar. Bea 65.20 267** P **P** **01 50 45.4 -0.7**
comp=Z,8.0nm,0.7s,baz=52,slow=5.4,SNR=65
**SIJI Sorong 68.54 110** P **P** **01 51 05.2 -2.1**
comp=Z,4.3nm,0.4s,baz=345,slow=12,SNR=3.3
**COLD Coldfoot 69.44 16** *e*P **P** **01 51 12.5 +0.4**
comp=Z,22nm,0.9s
**AMKA Amchitka 70.57 39** *e*P **P** **01 51 17.5 -1.9**

comp=Z,52nm,1.0s
**INK Inuvik 71.24 9** P **P 01 51 24.1 +1.0**
comp=Z,12nm,0.8s,baz=5.2,slow=6.4,SNR=18
**INK Inuvik 71.24 9** P **P 01 51 24.1 +1.0**
INK pmax pmax
comp=Z,12nm,0.8s
**INK Inuvik 71.24 9** *e*P **P 01 51 24.0 +0.9**
comp=Z,31nm,1.0s
**BPAW Bear Paw Mtn. 71.91 18** *e*P **P 01 51 27.4 +0.1**
comp=Z,3.2nm,1.1s
**COLA College 71.96 16** *e*P **P 01 51 28.1 +0.6**
COLA pmax pmax
comp=Z,16nm,0.9s
**COLA College 71.96 16** *e*P **P 01 51 28.0 +0.5**
comp=Z,23nm,0.9s
**ILAR Eielson Array 72.25 16** P **P 01 51 29.6 +0.3**
comp=Z,5.3nm,0.9s,baz=322,slow=5.1,SNR=43
**ILAR Eielson Array 72.25 16** P **P 01 51 29.6 +0.3**
ILAR pmax pmax
comp=Z,5.0nm,0.9s
**KTH Kantishna Hill 72.39 18** *e*P **P 01 51 29.9 -0.3**
comp=Z,22nm,1.0s
**TRF Thorofare Moun 72.63 18** *e*P **P 01 51 33.4 +1.6**
comp=Z,7.4nm,1.0s
**PPLA Purkeypile 72.64 19** *e*P **P 01 51 31.6 -0.2**
comp=Z,6.9nm,0.7s
**EGAK Eagle 73.37 13** *e*P **P 01 51 36.9 +1.0**
comp=Z,10nm,1.0s
**DOT Dot Lake 73.83 15** *e*P **P 01 51 39.0 +0.4**
comp=Z,20nm,1.0s
**DBIC Dimbokro 74.25 266** P **P 01 51 41.5 -0.4**
comp=Z,3.4nm,0.7s,baz=21,slow=6.3,SNR=5.6
DBIC LR LR 02 28 21.1
comp=Z,70nm,19.0s,baz=18,slow=39
**DBIC Dimbokro 74.25 266** P **P 01 51 41.5 -0.4**
DBIC pmax pmax
comp=Z,3.0nm,0.7s
DBIC MLR MLR
comp=Z,70nm,19.0s
**SML Sawmill 74.51 18** *e*P **P 01 51 43.2 +0.5**
SML pmax pmax
comp=Z,6.0nm,0.9s
**SML Sawmill 74.51 18** *e*P **P 01 51 43.1 +0.5**
comp=Z,5.7nm,0.9s
**RSO Redoubt South 74.53 21** *e*P **P 01 51 44.1 +1.1**
comp=Z,37nm,1.0s
**BMRM Bremner River 76.11 17** *e*P **P 01 51 53.0 +1.1**
comp=Z,19nm,1.2s
**KDAK Kodiak Island 76.83 22** *i*P **P 01 51 56.5 +0.5**
**FITZ Fitzroy Crossi 77.07 127** P **P 01 51 57.3 -0.5**
comp=Z,5.6nm,1.0s,baz=330,slow=8.1,SNR=3.3
**OHAK Old Harbor 77.10 23** *e*P **P 01 51 57.8 +0.4**
comp=Z,29nm,1.1s
**YKA Yellowknife 78.47 2** P **P 01 52 05.5 +0.5**
comp=Z,9.7nm,0.6s,baz=351,slow=5.4,SNR=68
**SCHQ Schefferville 79.27 336** P **P 01 52 09.9 +0.2**
comp=Z,14nm,0.7s,baz=34,slow=4.7,SNR=10.0
**BOSA Boshof 79.51 219** P **P 01 52 10.6 -0.6**
BOSA LR LR 02 31 04.4
comp=Z,34nm,19.4s,baz=28,slow=39
**BOSA Boshof 79.51 219** P **P 01 52 10.6 -0.6**
BOSA pmax pmax
comp=Z,17nm,1.1s
BOSA MLR MLR
comp=Z,34nm,19.4s
**WRA Warramunga Arr 84.00 122** P **P 01 52 33.2 -1.8**
comp=Z,4.4nm,0.6s,baz=324,slow=4.9,SNR=8.8
**WRA Warramunga Arr 84.00 122** P **P 01 52 33.2 -1.8**
WRA pmax pmax
comp=Z,4.0nm,0.6s
**WRAB Tennant Creek 84.00 122** *e*P **P 01 52 34.1 -0.9**
WRAB pmax pmax
comp=Z,14nm,1.0s
**FFC Flin Flon 86.10 355** *e*P **P 01 52 45.8 +0.7**
FFC pmax pmax
comp=Z,29nm,1.0s
**FFC Flin Flon 86.10 355** P **P 01 52 46.5 +1.4**
comp=Z,146nm,1.0s,SNR=6.6
**FFC Flin Flon 86.10 355** *e*P **P 01 52 45.8 +0.7**
comp=Z,30nm,1.0s
**ASAR Alice Springs 86.37 125** P **P 01 52 46.3 -0.5**
comp=Z,3.6nm,0.8s,baz=318,slow=6.4,SNR=7.0
**ASAR Alice Springs 86.37 125** P **P 01 52 46.3 -0.5**
ASAR pmax pmax
comp=Z,4.0nm,0.8s
**EDM Edmonton 87.79 2** *e*P **P 01 52 54.2 +0.7**
EDM pmax pmax
comp=Z,37nm,0.7s
**EDM Edmonton 87.79 2** *e*P **P 01 52 54.2 +0.7**
comp=Z,37nm,0.7s
**ULM Lac du Bonnet 89.98 351** P **P 01 53 04.2 +0.4**
comp=Z,11nm,0.9s,baz=354,slow=5.2,SNR=7.1
**ULM Lac du Bonnet 89.98 351** P **P 01 53 04.2 +0.4**
ULM pmax pmax
comp=Z,11nm,0.9s
**A33A Warroad 91.21 351** P **P 01 53 09.9 +0.4**
baz=91
**B34A Aery, Baudette 91.56 350** P **P 01 53 11.7 +0.5**
baz=91
**EYMN Ely 91.61 348** P **P 01 53 12.1 +0.7**
baz=91
**EYMN Ely 91.61 348** *e*P **P 01 53 11.8 +0.4**
comp=Z,20nm,1.0s
**C38A Sawbill Land. 91.80 348** P **P 01 53 12.9 +0.6**
baz=92
**B32A Ashes, Strandq 91.89 351** P **P 01 53 13.1 +0.5**
baz=92
**AGMN Agassiz Nation 91.90 351** P **P 01 53 13.3 +0.6**
baz=92
**AGMN Agassiz Nation 91.90 351** *e*P **P 01 53 13.2 +0.6**
comp=Z,25nm,1.3s
**C37A Embarrass 91.94 348** P **P 01 53 13.6 +0.7**
baz=92
**WALA Waterton Lakes 91.94 3** *e*P **P 01 53 13.6 +0.6**
comp=Z,23nm,1.4s
**C36A Pine Crest Far 92.01 349** P **P 01 53 13.8 +0.5**
baz=92
**B30A Myrvik Farm, E 92.03 352** P **P 01 53 13.8 +0.4**
baz=92
**B05A Bryant 92.12 8** P **P 01 53 14.4 +0.7**
baz=92
**B28A Dugan Ranch, T 92.22 354** P **P 01 53 14.5 +0.3**
baz=92
**C35A Jirik Farms, M 92.23 349** P **P 01 53 14.8 +0.5**
baz=92
**CTA Charters Tower 92.27 114** P **P 01 53 14.3 -0.4**
comp=Z,9.4nm,0.9s,baz=332,slow=6.6,SNR=4.8
**CTA Charters Tower 92.27 114** P **P 01 53 14.3 -0.4**
CTA pmax pmax
comp=Z,9.0nm,0.9s
**C33A Trail 92.42 351** P **P 01 53 15.4 +0.3**
baz=92
**DGMT Dagmar 92.46 356** P **P 01 53 16.0 +0.7**
baz=92
**NEW Newport 92.56 5** *e*P **P 01 53 16.8 +0.9**
NEW pmax pmax
comp=Z,13nm,0.8s
**NEW Newport 92.56 5** P **P 01 53 16.8 +0.9**
baz=92
**NEW Newport 92.56 5** *e*P **P 01 53 16.8 +0.9**
comp=Z,13nm,0.8s
**C31A Landman Farms, 92.62 352** P **P 01 53 16.7 +0.6**
baz=92
**D36A Goodland 92.62 349** P **P 01 53 16.2 +0.1**
baz=92
**NLWA Neilton Lookou 92.77 10** *e*P **P 01 53 18.8 +2.0**
comp=Z,9.1nm,0.9s
**D34A Park Rapids 93.00 350** P **P 01 53 18.3 +0.5**
baz=93
**EGMT Eagleton 93.05 360** P **P 01 53 18.5 +0.4**
baz=93
**BSMT Bassoo Peak 93.11 3** *e*P **P 01 53 19.9 +1.3**
comp=Z,8.3nm,0.7s
**JTMT Jette 93.23 3** *e*P **P 01 53 20.1 +1.1**
comp=Z,6.8nm,1.1s
**D30A Buchanan 93.40 352** P **P 01 53 20.6 +0.9**
baz=93
**SWMT Swartz Lake 93.48 3** *e*P **P 01 53 21.6 +1.5**
comp=Z,2.3nm,0.6s
**D28A Regan 93.49 354** P **P 01 53 21.0 +0.9**
baz=93
**D27A Center 93.65 354** P **P 01 53 22.5 +1.7**
baz=93
**LON Longmire 93.65 8** *e*P **P 01 53 22.0 +1.1**
LON pmax pmax
comp=Z,8.0nm,0.8s
**LON Longmire 93.65 8** *e*P **P 01 53 22.0 +1.1**
comp=Z,8.1nm,0.8s
**D25A Fairfield 93.73 356** P **P 01 53 23.2 +2.0**
baz=94
**SLMT Seeley Lake 93.77 3** *e*P **P 01 53 22.3 +0.8**
comp=Z,16nm,0.7s
**D26A Manning 93.79 355** P **P 01 53 23.1 +1.6**
baz=94
**F36A Milaca 93.96 349** P **P 01 53 22.7 +0.4**
baz=94
**E29A Napoleon 94.02 353** P **P 01 53 23.5 +0.9**
baz=94
**CHMT Chamberlain Mo 94.10 2** *e*P **P 01 53 23.8 +0.6**
comp=Z,8.2nm,0.6s
**E28A Huff 94.11 354** P **P 01 53 24.3 +1.4**
baz=94
**MSO Missoula 94.16 3** P **P 01 53 23.4 +0.1**
baz=94
**LAO LASA Array 94.32 358** P **P 01 53 25.3 +1.3**
baz=94
**LAO LASA Array 94.32 358** *e*P **P 01 53 24.7 +0.7**
comp=Z,13nm,0.8s
**E27A Carson 94.33 354** P **P 01 53 25.3 +1.3**
baz=94
**HRY Holter Researc 94.34 1** *e*P **P 01 53 25.0 +0.9**
comp=Z,11nm,0.6s
**E26A Carlson Angus 94.35 355** P **P 01 53 25.5 +1.4**
baz=94
**F33A 5 Mile Ranch, 94.37 351** P **P 01 53 25.2 +1.0**
baz=94
**SPMN St. Paul 94.47 348** *e*P **P 01 53 25.6 +1.0**
**F28A McLaughlin 94.84 354** P **P 01 53 27.2 +0.9**
baz=95
**F27A Lemmon 94.91 355** P **P 01 53 27.7 +1.0**
baz=95
**F26A Lodgepole 94.98 355** P **P 01 53 28.0 +1.0**
baz=95
**H37A Dierke Farm, C 95.12 348** P **P 01 53 28.3 +0.8**
baz=95
**LRM Limekiln Ridge 95.22 2** *e*P **P 01 53 29.5 +1.2**
comp=Z,66nm,1.0s
**GCMT Greycliff 95.28 360** *e*P **P 01 53 29.1 +0.6**
comp=Z,6.2nm,0.8s
**G27A Dupree 95.40 354** P **P 01 53 29.7 +0.8**
baz=95
**BOZ Bozeman (W) 95.41 1** *e*P **P 01 53 29.9 +0.8**
BOZ pmax pmax
comp=Z,5.0nm,0.9s
**BOZ Bozeman (W) 95.41 1** P **P 01 53 29.7 +0.6**
baz=95
**BOZ Bozeman (W) 95.41 1** *e*P **P 01 53 29.9 +0.8**
comp=Z,5.4nm,0.9s
**G26A Maurine 95.53 355** P **P 01 53 30.0 +0.4**
baz=95
**G28A Parade 95.62 354** P **P 01 53 30.1 +0.1**
baz=95
**DLMT Dillon 95.67 2** *e*P **P 01 53 31.6 +1.3**
comp=Z,9.1nm,1.1s
**RLMT Red Lodge 95.95 360** P **P 01 53 32.4 +0.8**
baz=96
**H28A Mission Ridge 96.02 354** P **P 01 53 32.3 +0.5**
baz=96
**MCMT McKenzie Canyo 96.20 2** *e*P **P 01 53 33.3 +0.5**
comp=Z,3.7nm,1.2s
**JFWS Jewell Farm 96.26 346** *e*P **P 01 53 33.2 +0.4**
JFWS pmax pmax
comp=Z,18nm,0.8s
**JFWS Jewell Farm 96.26 346** *e*P **P 01 53 33.2 +0.4**
comp=Z,18nm,0.8s
**ECSD EROS Data Cent 96.48 350** P **P 01 53 34.6 +0.7**
baz=96
**I28A Midland 96.71 354** P **P 01 53 35.4 +0.5**
baz=96
**I27A Quinn 96.71 354** P **P 01 53 35.6 +0.6**
baz=96
**J30A Dallas 97.22 352** P Pdif 01 53 37.8 +0.5
baz=97
**J29A Okreek 97.22 353** P Pdif 01 53 38.1 +0.8
baz=97
**J28A Allard Ranch, 97.28 354** P Pdif 01 53 38.7 +1.1
baz=97
**HLID Hailey 97.40 3** P Pdif 01 53 39.1 +0.8
baz=97
**K28A Ten Mile Ranch 98.00 354** P Pdif 01 53 41.2 +0.3
baz=98
**HWUT Hardware Ranch 99.45 1** *e*Pdif **Pdif 01 53 47.5 +0.1**
comp=Z,4.6nm,0.9s
**SNAA Sanae 121.80 201** P **PKPdf 01 58 59.1 +1.7**
**VNA2 Neumayer--Watz 122.76 202** P **PKPdf 01 58 58.0 -1.1**
baz=31,slow=3.5
**VNA1 Neumayer--Stat 122.90 203** P **PKPdf 01 58 59.7 +0.4**
**VNA3 Neumayer Olymp 123.57 202** P **PKPdf 01 59 00.7 0.0**
**SAML Samuel 128.61 293** *e*PKPdf **PKPdf 01 59 12.0 0.0**
**QSPA South Pole Qui 129.10 180** *e*PKPdf **PKPdf 01 59 11.4 -0.1**
**LPAZ La Paz 137.10 290** PKP **PKPdf 01 59 28.1 -0.6**
comp=Z,1.2nm,0.8s,baz=214,slow=3.6,SNR=2.9
**LPAZ La Paz 137.10 290** PKIKP **PKPdf 01 59 28.1 -0.6**
LPAZ pmax pmax
comp=Z,1.0nm,0.8s

*BJI **07** 01:42:47.0, 0.˚59N× 124.˚64E, h171km, mb4.6/21, mB4.7/14*
*ISCJB **07** 01:42:50.9± 0.3, 0.˚95N± 0.˚03× 124.˚38E± 0.˚03, h190km± 3km, mb4.4/32, Error ellipse: s-maj=5.1km s-min=4.3km az=35.6*
*IDC **07** 01:42:51.8± 1.5, 1.˚06N× 124.˚27E, h184km± 14km, mb4.0/24, mb1 4.0/29, mb1mx3.9/51, mbtmp4.5/29, MS3.6/2, Ms1 3.7/2, ms1mx2.9/31, Error ellipse: s-maj=13.5km s-min=8.5km az=69.0*
*NEIC **07** 01:42:51.9± 0.6, 1.˚04N× 124.˚40E, h188km± 6km, mb5.1/13, Error ellipse: s-maj=7.4km s-min=4.9km az=223.0*
*DJA **07** 01:42:53.2± 0.3, 1.˚1N± 3.˚3× 12.˚4E± .˚1, h159km± 5km, M4.8/17, mb4.6/7, mB5.1/3, MLv4.9/17, Mw(mB)4.4/3*
**ISC 07 01:42:51.4± 0.4, 0.˚90N± 0.˚04× 124.˚41E± 0.˚04, h180km± 2km, n95, σ 1°51/133, mb4.3/31, 1C, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.54** | **233** | P | **Pn** | **01 43 17.1** | **+0.8** |
| KMSI | | | | S | **Sn** | **01 43 36.9** | **+1.4** |
| **GTOI** | **Gorontalo** | **1.43** | **259** | P | **Pn** | **01 43 23.7** | **+1.1** |
| **MRSI** | **Marisa** | **2.51** | **260** | P | **Pn** | **01 43 35.2** | **+1.0** |
| **LUWI** | **Luwuk** | **2.53** | **220** | *e*Pn | **Pn** | **01 43 34.8** | **+0.3** |
| LUWI | | | | *e*S | **Sn** | **01 44 07.4** | **-0.6** |
| **TNTI** | **Ternate** | **2.96** | **92** | P | **Pn** | **01 43 40.1** | **+0.5** |
| TNTI | | | | S | **Sn** | **01 44 17.1** | **+0.1** |
| **TNTI** | **Ternate** | **2.96** | **92** | *e*Pn | **Pn** | **01 43 40.0** | **+0.5** |
| TNTI | | | | *e*S | **Sn** | **01 44 16.5** | **-0.5** |
| **SGSI** | **Sangihe** | **2.99** | **22** | P | **Pn** | **01 43 41.5** | **+1.6** |
| SGSI | | | | S | **Sn** | **01 44 18.6** | **+0.8** |
| **APSI** | **Ampana** | **3.30** | **237** | P | **Pn** | **01 43 44.2** | **+0.5** |
| **SANI** | **Sanana** | **3.33** | **152** | P | **Pn** | **01 43 44.5** | **+0.5** |
| **LBMI** | **Labuha** | **3.44** | **116** | P | **Pn** | **01 43 46.4** | **+0.9** |
| **MPSI** | **Mapaga** | **4.55** | **263** | P | **Pn** | **01 44 00.7** | **+1.2** |
| **NLAI** | **Namlea** | **4.91** | **147** | P | **Pn** | **01 44 05.3** | **+1.1** |
| **TTSI** | **Tana Toraja** 70nm,0.6s,1μm0.2nm | **6.04** | **230** | P | **Pn** | **01 44 20.3** | **+1.4** |
| **MSAI** | **Masohi** 32nm,0.7s,2μm1.5nm | **6.18** | **133** | P | **Pn** | **01 44 23.1** | **+2.3** |
| **SPSI** | **Sidrap Palu** 59nm,0.7s,0.2nm | **6.70** | **224** | P | **Pn** | **01 44 29.1** | **+1.5** |
| **SWI** | **Sorong** | **7.07** | **104** | P | Pn | 01 44 38.2 | +5.7 |
| **SIJI** | **Sorong** 4.6nm,0.3s,baz=318,slow=14,SNR=6.4 | **7.07** | **104** | P | **Pn** | **01 44 34.4** | **+1.8** |
| SIJI | | | | S | **Sn** | **01 45 52.0** | **-0.5** |
| **MYLDM** | **Lahad Datu** 2.7nm,0.3s,baz=192,slow=14,SNR=3.2 | **7.28** | **306** | *e*Pn | **Pn** | **01 44 36.4** | **+1.1** |
| **KAPI** | **Kappang** 1.8nm,0.3s,baz=23,slow=5.2,SNR=12 | **7.49** | **218** | P | **Pn** | **01 44 39.7** | **+1.6** |
| KAPI | | | | S | **Sn** | **01 46 01.7** | **-0.8** |
| **FAKI** | **Fak Fak** 1.5nm,0.3s,baz=286,slow=18,SNR=2.6 | **8.70** | **116** | *e*Pn | **Pn** | **01 44 54.2** | **+0.2** |
| FAKI | | | | *e*S | **Sn** | **01 46 26.4** | **-5.0** |
| **BATI** | **Baumata** 6.1nm,0.3s,baz=76,slow=2.1,SNR=5.3 | **11.06** | **184** | P | Pn | 01 45 28.2 | +3.4 |
| **BATI** | **Baumata** | **11.06** | **184** | P | P | 01 45 28.7 | -3.2 |
| **TWSI** | **Taliwang, Sumb** | **12.16** | **218** | P | **P** | **01 45 46.8** | **+2.6** |
| **SBUM** | **Sibu** | **12.28** | **277** | *e*Pn | **Pn** | **01 45 40.9** | **+0.3** |
| **KSM** | **Kuching** | **14.11** | **272** | *e*Pn | **Pn** | **01 46 04.3** | **+0.6** |
| **MTN** | **Manton Dam** 80nm,0.4s | **15.19** | **154** | *e*Pn | **Pn** | **01 46 17.8** | **+0.8** |
| **JAY** | **Jayapura** 1.5nm,0.3s,baz=190,slow=7.0,SNR=6.0 | **16.64** | **102** | P | **Pn** | **01 46 35.6** | **+1.0** |
| **FITZ** | **Fitzroy Crossi** | **18.92** | **176** | P | **P** | **01 46 59.8** | **+1.1** |
| | 4.4nm,0.3s,baz=14,slow=8.8,SNR=148 | | | | | | |
| FITZ | | | | S | **S** | **01 50 20.5** | **-3.7** |
| | 0.2nm,0.3s,baz=170,slow=18,SNR=5.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** 40nm,0.6s | **18.92** | **176** | *e*P | **P** | **01 46 59.8** | **+1.1** |
| FITZ | | | | *e*S | S | 01 50 16.5 | -7.6 |
| FITZ | | | | S | **S** | **01 50 20.5** | **-3.7** |
| **DLV** | **T Lat** 38nm,0.7s | **19.24** | **305** | *e*P | **P** | **01 47 03.3** | **+0.9** |
| **MBWA** | **Marble Bar** 5.0nm,0.6s | **22.39** | **192** | *e*P | **P** | **01 47 35.3** | **+0.1** |
| **WRAB** | **Tennant Creek** 82nm,0.5s | **22.88** | **155** | *e*P | **P** | **01 47 40.6** | **+1.1** |
| **WRA** | **Warramunga Arr** 58nm,0.6s,baz=337,slow=10,SNR=268 | **22.88** | **155** | P | **P** | **01 47 40.9** | **+1.3** |
| WRA | | | | S | **S** | **01 51 34.2** | **-1.5** |
| | 4.8nm,0.8s,baz=335,slow=16,SNR=8.2 | | | | | | |
| WRA | | | | ScP | **ScP** | **01 54 45.2** | **-0.4** |
| | 0.6nm,0.6s,baz=329,slow=2.7,SNR=2.9 | | | | | | |
| **IPM** | **Ipoh** 18nm,0.7s | **23.63** | **279** | *e*P | **P** | **01 47 46.4** | **-0.1** |
| **COEN** | **Coen** 26nm,0.7s | **23.73** | **129** | *e*P | **P** | **01 47 48.4** | **+1.0** |
| **PMG** | **Port Moresby** 34nm,1.1s,baz=283,slow=9.9,SNR=4.8 | **24.86** | **115** | P | **P** | **01 47 59.8** | **+2.2** |
| **PMG** | **Port Moresby** 31nm,0.9s | **24.86** | **115** | *e*P | **P** | **01 47 58.6** | **+1.0** |
| **PSI** | **Prapat** 4.5nm,0.3s,baz=99,slow=8.6,SNR=6.6 | **25.54** | **275** | P | **P** | **01 48 03.7** | **-0.3** |
| **PSI** | **Prapat** 11nm,0.8s | **25.54** | **275** | *e*P | **P** | **01 48 03.7** | **-0.3** |
| **ASAR** | **Alice Springs** 11nm,0.5s,baz=341,slow=7.6,SNR=252 | **26.10** | **160** | P | **P** | **01 48 10.2** | **+1.5** |
| ASAR | | | | PcP | **PcP** | **01 51 32.6** | **+0.9** |
| | 0.7nm,0.3s,baz=351,slow=2.3,SNR=3.8 | | | | | | |
| ASAR | | | | S | **S** | **01 52 26.1** | **-0.9** |
| | 2.9nm,0.8s,baz=345,slow=18,SNR=8.4 | | | | | | |
| ASAR | | | | ScP | **ScP** | **01 54 54.5** | **-0.1** |
| | 1.3nm,0.5s,baz=344,slow=3.0,SNR=6.3 | | | | | | |
| **AS01** | **Alice Springs** | **26.12** | **160** | *e*P | **P** | **01 48 10.1** | **+1.2** |
| **GSI** | **Gunungsitoli** 23nm,0.7s | **26.84** | **271** | *e*P | **P** | **01 48 14.1** | **-1.3** |
| **CTA** | **Charters Tower** 1.8nm,0.6s,baz=329,slow=12,SNR=2.9 | **29.89** | **135** | P | **P** | **01 48 44.0** | **+1.6** |
| **CMAR** | **Chiang Mai Arr** 1.7nm,0.3s,baz=128,slow=5.8,SNR=4.6 | **30.49** | **306** | P | **P** | **01 48 46.2** | **-1.5** |
| CMAR | | | | PcP | **PcP** | **01 51 43.5** | **+0.9** |
| | 0.7nm,0.4s,baz=160,slow=2.2,SNR=4.7 | | | | | | |
| CMAR | | | | LR | LR | 02 02 20.7 | |
| | comp=Z,67nm,18.8s,baz=310,slow=39 | | | | | | |
| **GYA** | **Guiyang** | **30.62** | **328** | *e*P | **P** | **01 48 51.2** | **+2.3** |
| GYA | | | | pP | **pP** | **01 49 27.8** | **+1.6** |
| GYA | | | | sP | **sP** | **01 49 48.4** | **+1.5** |
| GYA | | | | PP | **PP** | **01 50 00.3** | **-1.5** |
| GYA | | | | S | **S** | **01 53 39.4** | **+1.4** |
| GYA | | | | sS | **sS** | **01 54 43.0** | **-1.0** |
| GYA | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| **NJ2** | **Nanjing** | **31.43** | **351** | *e*P | **P** | **01 48 56.9** | **+1.1** |
| NJ2 | | | | PMZ | | | |
| | 50nm,0.5s | | | | | | |
| **FORT** | **Forrest** 100nm,0.6s | **31.69** | **174** | *e*P | **P** | **01 48 59.6** | **+1.5** |
| **KMI** | **Kunming** | **31.91** | **321** | P | P | 01 49 04.6 | +4.2 |
| KMI | | | | pP | pP | 01 49 39.4 | +1.6 |
| KMI | | | | S | **S** | **01 54 00.6** | **+2.3** |
| KMI | | | | SS | **SnSn** | **01 56 05.3** | **-4.6** |
| KMI | | | | PMZ | | | |
| | 5.0nm,0.9s | | | | | | |
| KMI | | | | PMZ | | | |
| | 140nm,5.0s | | | | | | |
| KMI | | | | LN | | | |
| | 310nm,15.2s | | | | | | |
| KMI | | | | LE | | | |
| | 360nm,18.0s | | | | | | |
| KMI | | | | LZ | | | |
| | 330nm,12.7s | | | | | | |
| **BBOO** | **Buckleboo** 243nm,2.3s | **35.28** | **163** | *e*P | **P** | **01 49 30.4** | **+1.3** |
| **CD2** | **Chengdu** | **35.70** | **329** | *e*P | **P** | **01 49 33.6** | **+0.8** |
| CD2 | | | | pP | **pP** | **01 50 10.2** | **-0.5** |
| CD2 | | | | sP | **sP** | **01 50 30.2** | **-1.1** |
| CD2 | | | | S | **S** | **01 54 58.4** | **+2.2** |
| CD2 | | | | PcS | **PcS** | **01 55 45.0** | **+0.3** |
| CD2 | | | | sS | **sS** | **01 56 03.5** | **+0.5** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 140nm,5.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** 2.0nm,0.7s,baz=202,slow=11,SNR=5.5 | **37.70** | **18** | P | **P** | **01 49 48.8** | **-0.8** |
| **HHC** | **Hu-ho-hao-te** | **41.44** | **345** | *e*P | **P** | **01 50 22.5** | **+2.0** |
| HHC | | | | pP | **pP** | **01 50 59.1** | **-0.3** |
| HHC | | | | PP | **PnPn** | **01 52 04.0** | **-2.7** |
| HHC | | | | S | **S** | **01 56 24.5** | **+2.3** |
| HHC | | | | PMZ | | | |
| | 21nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | 160nm,7.7s | | | | | | |
| **CN2** | **Changchun** | **42.73** | **1** | *e*P | **P** | **01 50 31.5** | **+0.7** |
| CN2 | | | | *e*S | **S** | **01 56 44.3** | **+3.6** |
| CN2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CN2 | | | | PMZ | | | |
| | 100nm,3.0s | | | | | | |
| CN2 | | | | LN | | | |
| | 300nm,19.0s | | | | | | |
| CN2 | | | | LE | | | |
| | 400nm,19.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | 200nm,16.0s | | | | | | |
| **CHLP** | **Challavanipeta** | **43.28** | **296** | *e*P | **P** | **01 50 35.3** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** 2.7nm,0.4s,baz=194,slow=7.3,SNR=11 | **43.64** | **8** | P | **P** | **01 50 38.0** | **-0.1** |
| USRK | | | | LR | LR | 02 10 22.8 | |
| | comp=Z,114nm,20.3s,baz=269,slow=38 | | | | | | |
| **TAPN** | **Taplejung** | **43.93** | **310** | *e*P | **P** | **01 50 40.5** | **-0.6** |
| **ODAN** | **Odare** 37nm,0.8s | **43.93** | **309** | *e*P | **P** | **01 50 40.2** | **-0.8** |
| **GTA** | **Gaotai** | **44.43** | **333** | P | **P** | **01 50 45.0** | **+0.4** |
| GTA | | | | pP | **pP** | **01 51 23.5** | **-0.4** |
| GTA | | | | sP | **sP** | **01 51 43.1** | **-1.0** |
| GTA | | | | S | **S** | **01 57 07.0** | **+1.2** |
| GTA | | | | sS | **sS** | **01 58 14.2** | **-0.4** |
| GTA | | | | SS | **ScS** | **02 00 24.6** | **+0.9** |
| GTA | | | | PMZ | | | |
| | 9.0nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | 100nm,5.9s | | | | | | |
| GTA | | | | LN | | | |
| | 120nm,15.9s | | | | | | |
| GTA | | | | LE | | | |
| | 140nm,14.5s | | | | | | |
| GTA | | | | LZ | | | |
| | 130nm,14.7s | | | | | | |
| **RAMN** | **Ramite** | **44.59** | **309** | *e*P | **P** | **01 50 46.0** | **-0.3** |
| **PVM** | **Polavaram** | **45.11** | **294** | *e*P | **P** | **01 50 49.8** | **-0.4** |
| **GUN** | **Gumba** 27nm,0.4s | **45.62** | **310** | *e*P | **P** | **01 50 54.2** | **-0.2** |
| **PKI** | **Pulchoki** | **45.82** | **309** | *e*P | **P** | **01 50 54.9** | **-1.1** |
| **PKIN** | **Phulchoki** | **45.83** | **309** | *e*P | **P** | **01 50 55.0** | **-1.0** |
| **KKN** | **Kakani** | **46.02** | **309** | *e*P | **P** | **01 50 57.0** | **-0.5** |
| **SKHT** | **Srikalahasti** | **46.03** | **288** | *e*P | **P** | **01 50 56.1** | **-1.3** |
| **ADKI** | **Addanki** | **46.27** | **291** | *e*P | **P** | **01 50 56.9** | **-2.3** |
| **GKN** | **Gorkha** | **46.63** | **309** | *e*P | **P** | **01 51 01.5** | **-0.6** |
| **NJS** | **Nagarjunasagar** | **47.06** | **292** | *e*P | **P** | **01 51 04.2** | **-1.2** |
| **KOLN** | **Koldanda** 46nm,0.7s | **47.33** | **308** | *e*P | **P** | **01 51 07.8** | **+0.2** |
| **DANN** | **Dangsing** | **47.47** | **309** | *e*P | **P** | **01 51 08.7** | **-0.1** |
| **RPR** | **Rampur** | **47.69** | **295** | *e*P | **P** | **01 51 10.0** | **-0.2** |
| **HYBB** | **Hyderabad (bro** | **47.98** | **293** | *e*P | **P** | **01 51 10.5** | **-2.0** |
| **SONM** | **Songino Array** 1.0nm,0.8s,baz=170,slow=8.8,SNR=3.5 | **49.30** | **344** | P | **P** | **01 51 20.9** | **-1.3** |
| SONM | | | | PcP | **PcP** | **01 52 41.5** | **-0.7** |
| | 1.0nm,0.6s,baz=175,slow=2.0,SNR=3.5 | | | | | | |
| **WMQ** | **Urumqi** | **53.78** | **328** | *e*P | **P** | **01 51 57.0** | **+1.5** |
| WMQ | | | | PMZ | | | |
| | 12nm,1.0s | | | | | | |
| **KSH** | **Kashi** | **58.47** | **317** | *e*P | **P** | **01 52 30.6** | **+1.8** |
| KSH | | | | *es*P | **sP** | **01 53 30.4** | **+0.5** |
| KSH | | | | PcS | **PcS** | **01 57 20.5** | **+1.1** |
| KSH | | | | S | **S** | **02 00 15.5** | **-2.7** |
| KSH | | | | PMZ | | | |
| | 81nm,3.3s | | | | | | |
| KSH | | | | LN | | | |
| | 150nm,6.3s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSH | | | | LE | | | |
| | 110nm,5.8s | | | | | | |
| KSH | | | | LZ | | | |
| | 190nm,6.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **58.61** | **327** | P | **P** | **01 52 28.0** | **-1.6** |
| | 1.9nm,0.3s,baz=124,slow=8.0,SNR=27 | | | | | | |
| MKAR | | | | PcP | **PcP** | **01 53 16.6** | **-1.1** |
| | 2.6nm,0.6s,baz=167,slow=3.5,SNR=4.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.91** | **23** | P | **P** | **01 52 31.2** | **-0.3** |
| | 3.4nm,0.7s,baz=191,slow=4.4,SNR=4.0 | | | | | | |
| **YAK** | **Yakutsk** | **61.11** | **3** | P | **P** | **01 52 45.7** | **-0.5** |
| | 3.5nm,0.3s,baz=240,slow=8.1,SNR=2.9 | | | | | | |
| **YAK** | **Yakutsk** | **61.11** | **3** | *e*P | **P** | **01 52 45.6** | **-0.5** |
| | 34nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.10** | **335** | P | **P** | **01 52 50.2** | **-2.8** |
| | 1.1nm,0.3s,baz=141,slow=6.9,SNR=5.7 | | | | | | |
| ZALV | | | | PcP | **PcP** | **01 53 29.5** | **-2.0** |
| | 1.1nm,0.4s,baz=129,slow=3.9,SNR=2.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.91** | **329** | P | **P** | **01 52 56.6** | **-1.8** |
| | 2.9nm,0.7s,baz=117,slow=6.4,SNR=12 | | | | | | |
| **KURK** | **Kurchatov** | **62.92** | **329** | P | **P** | **01 52 56.6** | **-1.9** |
| **AKTO** | **Aktyubinsk** | **74.45** | **323** | P | **P** | **01 54 08.4** | **-1.5** |
| | 2.0nm,0.4s,baz=87,slow=4.8,SNR=7.4 | | | | | | |
| **MAW** | **Mawson** | **80.32** | **200** | P | **P** | **01 54 42.7** | **+0.7** |
| | 0.8nm,0.5s,baz=94,slow=5.9,SNR=6.2 | | | | | | |
| **VNDA** | **Vanda** | **80.94** | **172** | P | **P** | **01 54 46.6** | **+1.4** |
| | 0.5nm,0.4s,baz=324,slow=6.4,SNR=11 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **87.18** | **269** | P | **P** | **01 55 17.4** | **-1.0** |
| | 3.5nm,1.0s,baz=56,slow=9.3,SNR=7.8 | | | | | | |
| **ASF** | **Jabal al Asfar** | **87.42** | **302** | P | **P** | **01 55 17.7** | **-1.3** |
| | 3.2nm,0.8s,baz=275,slow=3.7,SNR=7.8 | | | | | | |
| **ILAR** | **Eielson Array** | **88.64** | **25** | P | **P** | **01 55 22.6** | **-1.3** |
| | 0.3nm,0.5s,baz=247,slow=4.5,SNR=5.2 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **88.68** | **303** | P | **P** | **01 55 24.0** | **-0.9** |
| | 0.6nm,0.4s,baz=104,slow=6.1,SNR=4.2 | | | | | | |
| **SYO** | **Syowa Base** | **88.97** | **201**⇑ | *e*P | P | 01 55 29.8 | +4.5 |
| **BRTR** | **Keskin Array B** | **90.03** | **310** | P | **P** | **01 55 29.0** | **-2.1** |
| | 1.1nm,0.8s,baz=109,slow=3.4,SNR=4.2 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **92.79** | **349** | P | **P** | **01 55 42.0** | **-0.9** |
| | 1.9nm,0.4s,baz=88,slow=8.4,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **93.21** | **332** | P | **P** | **01 55 42.2** | **-2.9** |
| | 4.1nm,0.9s,baz=100,slow=3.2,SNR=3.9 | | | | | | |
| **HFS** | **Hagfors** | **99.41** | **332** | P | **Pdif** | **01 56 10.5** | **-2.8** |
| | 4.9nm,1.0s,baz=108,slow=4.7,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.53** | **286** | PKP | **PKPdf** | **02 01 23.8** | **-0.9** |
| | 2.0nm,0.7s,baz=82,slow=2.0,SNR=18 | | | | | | |

*ISCJB **07** 01:52:10.6±0.6, 39°.13N±0°.03×33°.19E±0°.05, h8km, Error ellipse: s-maj=6.2km s-min=4.5km az=171.1*
*CSEM **07** 01:52:10.8±0.1, 39°.15N×33°.21E, h10km, MD2.5, Error ellipse: s-maj=2.6km s-min=2.2km az=85.0*
*ISK **07** 01:52:10.5, 39°.15N×33°.21E, h8km, MD2.5*
**ISC 07 01:52:11.0**±1.0**, 39°.15N**±0°.03×**33°.21E**±0°.03**, h8**km**, n22, σ0s.34**/28**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFSR** | **Af¯ar-Bala (A** | **0.32** | **341** | *e*PG | **Pg** | **01 52 17.2** | **-0.1** |
| AFSR | | | | *e*SG | **Sg** | **01 52 22.1** | **+0.5** |
| **AFSR** | **Af¯ar-Bala (A** | **0.32** | **341** | *e*Pg | **Pg** | **01 52 17.2** | **-0.1** |
| AFSR | | | | *e*Sg | **Sg** | **01 52 22.1** | **+0.5** |
| **SERE** | **Sereflikochisa** | **0.34** | **125** | *e*PG | **Pg** | **01 52 17.8** | **0.0** |
| **SERE** | **Sereflikochisa** | **0.34** | **125** | *e*Pg | **Pg** | **01 52 17.8** | **0.0** |
| **BBAL** | **Bala** | **0.40** | **351** | *i* P | **Pg** | **01 52 18.8** | **-0.1** |
| BBAL | | | | *i* S | **Sg** | **01 52 24.5** | **+0.3** |
| **BBAL** | **Bala** | **0.40** | **351** | P | **Pg** | **01 52 18.8** | **-0.1** |
| BBAL | | | | S | **Sg** | **01 52 24.4** | **+0.3** |
| **KAMT** | **Kaman** | **0.45** | **60** | *e*PG | **Pg** | **01 52 19.5** | **-0.3** |
| **KAMT** | **Kaman** | **0.45** | **60** | *e*Pg | **Pg** | **01 52 19.5** | **-0.3** |
| **YAYX** | **Yaylak** | **0.52** | **113** | *e*PG | **Pg** | **01 52 21.0** | **0.0** |
| **YAYX** | **Yaylak** | **0.52** | **113** | *e*Pg | **Pg** | **01 52 21.0** | **0.0** |
| **CHBY** | **Cihanbeyli** | **0.61** | **204** | *e*PG | **Pg** | **01 52 22.7** | **-0.2** |
| **CHBY** | **Cihanbeyli** | **0.61** | **204** | *e*Pg | **Pg** | **01 52 22.7** | **-0.2** |
| **SULT** | **Sultanhani-AKS** | **0.98** | **165** | *e*PG | **Pb** | **01 52 30.1** | **-0.1** |
| **SULT** | **Sultanhani-AKS** | **0.98** | **165** | *e*Pg | **Pb** | **01 52 30.1** | **-0.1** |
| **CDAG** | **Cicekdag** | **1.02** | **62** | *i* P | **Pg** | **01 52 29.9** | **-0.7** |
| CDAG | | | | *i* S | **Sb** | **01 52 45.0** | **+0.3** |
| **CDAG** | **Cicekdag** | **1.02** | **62** | P | **Pg** | **01 52 29.9** | **-0.7** |
| CDAG | | | | S | **Sb** | **01 52 45.0** | **+0.3** |
| **KIZT** | **Kizilcal** | **1.07** | **256** | *e*PG | **Pg** | **01 52 31.2** | **-0.3** |
| **KIZT** | **Kizilcal** | **1.07** | **256** | *e*Pg | **Pg** | **01 52 31.2** | **-0.3** |
| **GULA** | **Gulagac** | **1.14** | **134** | *e*PN | **Pb** | **01 52 32.9** | **-0.1** |
| **GULA** | **Gulagac** | **1.14** | **134** | *e*Pn | **Pb** | **01 52 32.9** | **-0.1** |
| **KONT** | **Konya--Tatoy** | **1.37** | **209** | *e*PN | **Pb** | **01 52 36.5** | **-0.4** |
| **KONT** | **Konya--Tatoy** | **1.37** | **209** | *e*Pn | **Pb** | **01 52 36.5** | **-0.4** |

**GUC 07 01:54:53.4**±0.4**, 38°.36S**×**73°.65W, h12**km±3km**, ML3.5, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSCH** | **Puerto Saavedr** | **0.48** | **156** | *e*P | Pg | 01 55 03.0 | +0.2 |
| PSCH | | | | *e*S | Sb | 01 55 10.4 | -0.4 |
| PSCH | | | | AML | AML | 01 55 11.7 | |
| | comp=N,19μm,0.3s | | | | | | |
| **VLCH** | **Valdivia** | **1.48** | **168** | *e*P | Pn | 01 55 19.1 | -0.7 |
| VLCH | | | | *e*S | Sn | 01 55 38.3 | -0.8 |
| **CCSP** | **San Pedro de C** | **1.57** | **16** | *e*S | Sn | 01 55 41.1 | -0.4 |
| CCSP | | | | AML | AML | 01 55 49.4 | |
| | comp=N,416nm,0.7s | | | | | | |
| **CCHI** | **Chillan** | **2.15** | **36** | *e*P | Pn | 01 55 29.8 | +0.6 |
| CCHI | | | | *e*S | Sn | 01 55 57.4 | +1.6 |

*AUST **07** 01:59:22.2, 4°.96S×133°.03E, h60km*
*DJA **07** 01:59:23.4±1.5, 5°S±7°×13°3E±°, h10km, M4.1/3, MLv4.1/3*
**ISC 07 01:59:20.0**±1.4**, 4°.99S**±0°.07×**133°.3E**±0°.1**, h25**km**, n9, σ2s.17**/15**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.30** | **334** | P | **Pn** | **01 59 56.7** | **+0.2** |
| | baz=2.2,SNR=34 | | | | | | |
| **FAKI** | **Fak Fak** | **2.30** | **334** | P | **Pn** | **01 59 56.6** | **+0.2** |
| FAKI | | | | S | **Sn** | **02 00 22.8** | **-1.1** |
| **BNDI** | **Bandanaira** | **3.39** | **278** | P | **Pb** | **02 00 18.7** | **-0.7** |
| BNDI | | | | S | **Sb** | **02 01 02.8** | **+2.6** |
| **SWI** | **Sorong** | **4.57** | **334** | P | **Pn** | **02 00 29.7** | **+2.1** |
| | baz=4.5,SNR=3.4 | | | | | | |
| **KDU** | **Kakadu** | **7.69** | **186** | P | **Pn** | **02 01 13.2** | **+2.8** |
| | baz=7.7,SNR=51 | | | | | | |
| **MTN** | **Manton Dam** | **8.08** | **195** | P | **Pn** | **02 01 15.6** | **-0.3** |
| | baz=8.1,SNR=56 | | | | | | |
| **KNRA** | **Kununurra** | **11.50** | **202** | P | **Pn** | **02 02 05.7** | **+2.9** |
| | baz=12,SNR=8.5 | | | | | | |
| **PALU** | **Palau** | **12.31** | **6** | P | P | 02 02 31.9 | +6.0 |
| | baz=12,SNR=5.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.01** | **209** | P | **Pn** | **02 02 51.8** | **+1.0** |
| | baz=15,SNR=19 | | | | | | |

*CSEM **07** 02:06:55.3±0.7, 37°.56N×36°.14E, h5km, MD2.4, Error ellipse: s-maj=17.5km s-min=14.0km az=152.0*
*DDA **07** 02:06:56.6, 37°.39N×36°.15E, h7km, Md2.7*
*ISK **07** 02:06:56.0, 37°.41N×36°.13E, h5km, MD2.4*
**ISC 07 02:06:56.8**±1.0**, 37°.40N**±0°.03×**36°.14E**±0°.03**, h6**km±10km**, n17, σ0s.67**/25**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANDN** | **Andirin** | **0.24** | **42** | *i* P | **Pg** | **02 07 01.2** | **-0.4** |
| ANDN | | | | *i* S | **Sg** | **02 07 06.0** | **+1.1** |
| **ANDN** | **Andirin** | **0.24** | **42** | P | **Pg** | **02 07 01.1** | **-0.4** |
| ANDN | | | | S | **Sg** | **02 07 06.0** | **+1.1** |
| **KOZT** | **Kozan** | **0.26** | **288** | *e*PG | **Pg** | **02 07 01.4** | **-0.5** |
| KOZT | | | | *e*SG | **Sg** | **02 07 05.8** | **+0.4** |
| **KOZT** | **Kozan** | **0.26** | **288** | *e*Pg | **Pg** | **02 07 01.4** | **-0.5** |
| KOZT | | | | *e*Sg | **Sg** | **02 07 05.8** | **+0.4** |
| **KAMA** | **Osmaniye** | **0.47** | **117** | P | **Pg** | **02 07 05.5** | **-0.4** |
| **CEYT** | **Ceyhan** | **0.50** | **219** | *e*PG | **Pg** | **02 07 06.4** | **0.0** |
| **CEYT** | **Ceyhan** | **0.50** | **219** | *e*Pg | **Pg** | **02 07 06.4** | **0.0** |
| **AYKD** | **Aykdinkavak** | **0.53** | **88** | P | **Pg** | **02 07 06.9** | **-0.2** |
| AYKD | | | | S | **Sg** | **02 07 14.1** | **+0.2** |
| **KMRS** | **Kahramanmaras** | **0.61** | **80** | *e*PG | **Pg** | **02 07 08.3** | **-0.3** |
| **KMRS** | **Kahramanmaras** | **0.61** | **80** | *e*Pg | **Pg** | **02 07 08.3** | **-0.3** |
| **KUZU** | **Kuzuini** | **0.97** | **130** | *i* P | **Pb** | **02 07 16.3** | **+0.2** |
| KUZU | | | | *i* S | **Sb** | **02 07 29.6** | **+0.3** |
| **KUZU** | **Kuzuini** | **0.97** | **130** | P | **Pb** | **02 07 16.3** | **+0.2** |
| KUZU | | | | S | **Sb** | **02 07 29.6** | **+0.3** |
| **TAHT** | **Tahtakopru-Hat** | **1.02** | **178** | *e*PG | **Pg** | **02 07 16.2** | **-0.1** |
| **TAHT** | **Tahtakopru-Hat** | **1.02** | **178** | *e*Pg | **Pg** | **02 07 16.3** | **-0.1** |
| **SARI** | **SarD1z-Kayseri** | **1.03** | **12** | *e*PG | **Pg** | **02 07 16.4** | **-0.2** |
| **PINB** | **Pinarbasi** | **1.29** | **9** | P | **Pg** | **02 07 21.5** | **-0.1** |
| PINB | | | | S | **Sn** | **02 07 40.9** | **+1.5** |
| **BNGB** | **Bingˆ¶l** | **3.91** | **65** | *e*PN | **Pn** | **02 07 55.9** | **-1.6** |

*ISK **07** 02:07:32.7, 39°.53N×42°.19E, h22km, MD2.8*
*DDA **07** 02:07:33.5, 39°.28N×42°.30E, h7km, Md2.9*
*CSEM **07** 02:07:33.5±0.3, 39°.25N×42°.32E, h2km, MD2.9, Error ellipse: s-maj=9.3km s-min=4.2km az=169.0*
**ISC 07 02:07:33.7**±1.0**, 39°.28N**±0°.04×**42°.29E**±0°.03**, h14**km±8km**, n24, σ0s.74**/33**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EKAR** | **Karacoban** | **0.18** | **262** | *i* P | **Pg** | **02 07 38.2** | **+0.2** |
| **EKAR** | **Karacoban** | **0.18** | **262** | P | **Pg** | **02 07 38.2** | **+0.2** |
| **TUTA** | **Tutak** | **0.42** | **73** | *i* P | **Pg** | **02 07 41.8** | **-0.4** |
| TUTA | | | | *i* S | **Sg** | **02 07 48.2** | **+0.2** |
| **TUTA** | **Tutak** | **0.42** | **73** | P | **Pg** | **02 07 41.8** | **-0.4** |
| TUTA | | | | S | **Sg** | **02 07 48.2** | **+0.2** |
| **EATA** | **Eleskirt** | **0.60** | **15** | *i* P | **Pg** | **02 07 44.7** | **-0.8** |
| EATA | | | | *i* S | **Sg** | **02 07 53.0** | **-0.6** |
| **EATA** | **Eleskirt** | **0.60** | **15** | P | **Pg** | **02 07 44.7** | **-0.8** |
| EATA | | | | S | **Sg** | **02 07 53.0** | **-0.6** |
| **AGRB** | **Hanur-Agry** | **0.62** | **61** | *e*PG | **Pg** | **02 07 45.5** | **-0.3** |
| AGRB | | | | *e*SG | **Sb** | **02 07 55.0** | **-0.1** |
| **AGRB** | **Hanur-Agry** | **0.62** | **61** | *e*Pg | **Pg** | **02 07 45.5** | **-0.3** |
| AGRB | | | | *e*Sg | **Sb** | **02 07 55.0** | **-0.1** |
| **VRTB** | **Varto-Mus** | **0.66** | **260** | *e*PG | **Pb** | **02 07 46.6** | **-0.5** |
| **VRTB** | **Varto-Mus** | **0.66** | **260** | *e*Pg | **Pb** | **02 07 46.6** | **-0.5** |
| **HOMI** | **Horasan** | **0.82** | **339** | P | **Pg** | **02 07 49.0** | **-0.6** |
| HOMI | | | | S | **Sb** | **02 08 00.4** | **-0.5** |
| **BNGL** | **BINGOL** | **0.94** | **250** | P | **Pg** | **02 07 50.4** | **-1.6** |
| **ERZM** | **Erzurum** | **0.95** | **311** | *i* P | **Pn** | **02 07 52.4** | **-0.4** |
| **ERZM** | **Erzurum** | **0.95** | **311** | P | **Pn** | **02 07 52.4** | **-0.4** |
| **EZM** | **Erzurum** | **0.95** | **311** | *e*PG | Pg | 02 07 47.8 | -4.3 |
| **ECAT** | **Cat-ERZURUM** | **1.07** | **288** | *i* P | **Pn** | **02 07 54.3** | **-0.2** |
| ECAT | | | | *i* S | **Sn** | **02 08 10.5** | **+1.3** |
| **ECAT** | **Cat-ERZURUM** | **1.07** | **288** | P | **Pn** | **02 07 54.3** | **-0.2** |
| ECAT | | | | S | **Sn** | **02 08 10.5** | **+1.3** |
| **CLDR** | **Caldiran** | **1.27** | **96** | *e*PN | **Pn** | **02 07 57.4** | **+0.1** |
| **CLDR** | **Caldiran** | **1.27** | **96** | *e*Pn | **Pn** | **02 07 57.4** | **+0.1** |
| **DIGO** | **Kars** | **1.41** | **36** | *i* P | **Pg** | **02 08 00.6** | **-0.2** |
| DIGO | | | | *i* S | **Sg** | **02 08 20.7** | **+1.6** |
| **DIGO** | **Kars** | **1.41** | **36** | P | **Pg** | **02 08 00.6** | **-0.2** |
| DIGO | | | | S | **Sg** | **02 08 20.7** | **+1.6** |
| **BINT** | **Bingol** | **1.46** | **254** | *e*Pn | Pn | 02 07 55.9 | -3.8 |
| **KOPT** | **Kop Dagi** | **1.57** | **299** | *i* P | **Pg** | **02 08 04.3** | **+0.5** |
| **KOPT** | **Kop Dagi** | **1.57** | **299** | P | **Pg** | **02 08 04.3** | **+0.5** |

*MOS **07** 02:25:39.4±1.3, 54°.18N×169°.05E, h6km, mb4.1/8, Error ellipse: s-maj=19.1km s-min=11.9km az=3.0*
*IDC **07** 02:25:40.7±0.8, 54°.26N×168°.97E, h0km, mb3.8/10, mb1 4.1/11, mb1mx3.8/30, mbtmp3.8/11, ML3.1/1, MS2.9/1, Ms1 2.9/1, ms1mx2.5/36, Error ellipse: s-maj=27.0km s-min=18.7km az=168.0*
*ISCJB **07** 02:25:42.8±0.6, 54°.06N±0°.09×168°.78E±0°.06, h25km, mb3.8/10, Error ellipse: s-maj=12.3km s-min=5.3km az=175.9*
*KRSC **07** 02:25:42.5±2.1, 53°.94N×168°.36E, h6km±5km, ML4.2*
**ISC 07 02:25:44.0**±0.7**, 54°.03N**±0°.09×**168°.90E**±0°.07**, h25**km**, n48, σ1s.30**/50**, mb3.9**/10**, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **4.12** | **304** | P | **Pn** | **02 26 45.9** | **+0.6** |
| KBTR | | | | S | **Sn** | **02 27 34.0** | **+1.4** |
| **KBTR** | **Krutoberegovo** | **4.12** | **304** | PN | **Pn** | **02 26 45.9** | **+0.6** |
| KBTR | | | | S | **Sn** | **02 27 34.0** | **+1.4** |
| **MKZ** | **Mys Kozlova** | **4.24** | **280** | P | **Pn** | **02 26 45.8** | **-1.1** |
| MKZ | | | | S | **Sn** | **02 27 32.9** | **-2.6** |
| **MKZ** | **Mys Kozlova** | **4.24** | **280** | PN | **Pn** | **02 26 45.8** | **-1.1** |
| **KZV** | **Kizimen** | **5.13** | **286** | P | **Pn** | **02 26 59.6** | **+0.3** |
| KZV | | | | S | **Sn** | **02 27 56.3** | **-1.3** |
| **TUMR** | **Tumrok** | **5.24** | **287** | P | **Pn** | **02 27 02.5** | **+1.7** |
| **TUMR** | **Tumrok** | **5.24** | **287** | PN | **Pn** | **02 27 02.5** | **+1.7** |
| **SPN** | **Mys Shipunski** | **5.38** | **264** | P | **Pn** | **02 27 02.5** | **0.0** |
| SPN | | | | S | **Sn** | **02 28 02.9** | **-0.7** |
| **SPN** | **Mys Shipunski** | **5.38** | **264** | PN | **Pn** | **02 27 02.5** | **0.0** |
| **NLC** | **Nalytchevo** | **5.76** | **265** | S | **Sn** | **02 28 10.5** | **-2.4** |
| **SDLR** | **Sedlovina** | **6.01** | **267** | P | **Pn** | **02 27 12.0** | **+0.7** |
| SDLR | | | | S | **Sn** | **02 28 19.6** | **+0.3** |
| **SDLR** | **Sedlovina** | **6.01** | **267** | PN | **Pn** | **02 27 12.0** | **+0.7** |
| **SMAR** | **Somma** | **6.06** | **267** | P | **Pn** | **02 27 13.7** | **+1.6** |
| **SMAR** | **Somma** | **6.06** | **267** | PN | **Pn** | **02 27 13.7** | **+1.6** |
| **AVH** | **Avacha** | **6.09** | **267** | P | **Pn** | **02 27 13.6** | **+1.1** |
| **AVH** | **Avacha** | **6.09** | **267** | PN | **Pn** | **02 27 13.6** | **+1.1** |
| **KRX** | **Arik** | **6.13** | **268** | P | **Pn** | **02 27 13.8** | **+0.8** |
| **RUS** | **Russkaya** | **6.44** | **260** | P | **Pn** | **02 27 17.6** | **+0.4** |
| RUS | | | | S | **Sn** | **02 28 28.5** | **-1.3** |
| **RUS** | **Russkaya** | **6.44** | **260** | PN | **Pn** | **02 27 17.6** | **+0.4** |
| **GNL** | **Ganaly** | **6.50** | **271** | P | **Pn** | **02 27 19.7** | **+1.7** |
| GNL | | | | S | **Sn** | **02 28 31.2** | **-0.1** |
| **GNL** | **Ganaly** | **6.50** | **271** | PN | **Pn** | **02 27 19.7** | **+1.7** |
| **PETK** | **Petropavlovsk-** | **6.74** | **267** | Pn | **Pn** | **02 27 22.9** | **+1.6** |
| | 1.8nm,0.3s,baz=105,slow=17,SNR=5.2 | | | | | | |
| PETK | | | | LR | LR | 02 29 52.5 | |
| | comp=Z,88nm,19.5s,baz=63,slow=37 | | | | | | |
| **PETK** | **Petropavlovsk-** | **6.74** | **267** | PN | **Pn** | **02 27 22.9** | **+1.6** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,88nm,19.5s | | | | | | |
| **ILAR** | **Eielson Array** | **24.39** | **46** | P | **P** | **02 30 57.9** | **-2.0** |
| | comp=Z,0.7nm,0.6s,baz=252,slow=7.6,SNR=8.6 | | | | | | |
| **ILAR** | **Eielson Array** | **24.39** | **46** | P | **P** | **02 30 57.9** | **-2.0** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.27** | **183** | T | T | 03 08 51.3 | |
| | baz=2.3,slow=76,SNR=475 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.29** | **183** | T | T | 03 08 50.6 | |
| | baz=2.3,slow=76,SNR=309 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.29** | **183** | T | T | 03 08 52.2 | |
| | baz=2.3,slow=76,SNR=381 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.50** | **184** | T | T | 03 10 23.2 | |
| | baz=2.6,slow=76,SNR=173 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.51** | **184** | T | T | 03 10 24.7 | |
| | baz=2.6,slow=76,SNR=139 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.51** | **184** | T | T | 03 10 24.9 | |
| | baz=2.6,slow=76,SNR=232 | | | | | | |
| **SONM** | **Songino Array** | **38.73** | **287** | P | **P** | **02 33 07.1** | **+1.2** |
| | comp=Z,0.7nm,0.7s,baz=51,slow=8.8,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **38.73** | **287** | P | **P** | **02 33 07.1** | **+1.2** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **50.44** | **77** | P | **P** | **02 34 40.6** | **+1.1** |
| | comp=Z,1.0nm,0.8s,baz=296,slow=7.7,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.37** | **300** | P | **P** | **02 34 52.9** | **-0.7** |
| | comp=Z,0.8nm,0.7s,baz=56,slow=6.5,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.37** | **300** | P | **P** | **02 34 52.9** | **-0.7** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **63.91** | **348** | P | **P** | **02 36 12.6** | **-1.6** |
| | comp=Z,1.1nm,0.7s,baz=4.9,slow=5.7,SNR=2.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **63.91** | **348** | P | **P** | **02 36 12.6** | **-1.6** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **65.38** | **74** | P | **P** | **02 36 24.2** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=300,slow=4.4,SNR=8.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **65.38** | **74** | P | **P** | **02 36 24.2** | **-0.1** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **AKASG** | **Malin Array Be** | **70.30** | **334** | P | **P** | **02 36 53.8** | **-1.0** |
| | comp=Z,1.4nm,0.6s,baz=26,slow=6.0,SNR=5.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **70.30** | **334** | P | **P** | **02 36 53.8** | **-1.0** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **79.00** | **326** | P | **P** | **02 37 46.4** | **+0.7** |
| | comp=Z,1.1nm,0.7s,baz=28,slow=3.4,SNR=6.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **79.00** | **326** | P | **P** | **02 37 46.4** | **+0.7** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **79.44** | **213** | P | **P** | **02 37 49.0** | **+1.1** |
| | comp=Z,0.5nm,0.4s,baz=25,slow=5.9,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **79.44** | **213** | P | **P** | **02 37 49.0** | **+1.1** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **83.06** | **212** | P | **P** | **02 38 08.9** | **+1.8** |
| | comp=Z,0.8nm,0.9s,baz=359,slow=5.1,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **83.06** | **212** | P | **P** | **02 38 08.9** | **+1.8** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |

*IDC **07** 02:51:12.1±1.0, 15°.88S×177°.74W, h0km, mb4.0/7, mb1 4.3/7, mb1mx4.0/26, mbtmp4.0/7, Error ellipse: s-maj=59.6km s-min=21.8km az=149.0*
*ISCJB **07** 02:51:16.0±1.0, 15°.8S±0°.3×177°.9W±0°.2, h33km, mb4.0/7, Error ellipse: s-maj=56.2km s-min=20.6km az=149.4*
**ISC 07 02:51:17.6**±1.0**, 15°.9S**±0°.4×**177°.8W**±0°.3**, h35**km**, n7, σ1s.24**/7**, mb3.9**/7**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.62** | **257** | P | **P** | **02 59 34.6** | **-0.3** |
| | 0.5nm,0.3s,baz=89,slow=7.4,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **45.94** | **252** | P | **P** | **02 59 37.1** | **-0.4** |
| | 5.3nm,0.5s,baz=86,slow=8.3,SNR=55 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.97** | **259** | P | **P** | **03 00 38.1** | **-0.3** |
| | 4.0nm,1.2s,baz=76,slow=8.3,SNR=3.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.54** | **44** | P | **P** | **03 03 10.8** | **+0.6** |
| | 0.4nm,0.7s,baz=231,slow=8.4,SNR=4.3 | | | | | | |
| **ILAR** | **Eielson Array** | **83.76** | **13** | P | **P** | **03 03 43.8** | **+1.1** |
| | 0.4nm,0.5s,baz=224,slow=5.2,SNR=9.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **84.40** | **58** | P | **P** | **03 03 45.1** | **-1.8** |
| | 0.3nm,0.7s,baz=213,slow=6.5,SNR=3.2 | | | | | | |
| **MAW** | **Mawson** | **85.98** | **200** | P | **P** | **03 03 54.9** | **+0.9** |
| | 0.9nm,0.5s,baz=84,slow=9.2,SNR=6.6 | | | | | | |

*IDC **07** 02:57:06.4±1.4, 5°.69S×150°.62E, h0km, mb4.1/5, mb1 4.4/5, mb1mx3.9/28, mbtmp4.1/5, MS3.2/2, Ms1 3.2/2, ms1mx2.9/19, Error ellipse: s-maj=105.6km s-min=23.0km az=133.0*
*AUST **07** 02:57:13.4, 5°.70S×150°.61E, h60km*
**ISC 07 02:57:07.7**±0.8**, 5°.8S**±0°.2×**150°.7E**±0°.2**, h10**km**, n17, σ0s.88**/15**, mb4.1**/5**, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.17** | **43** | P | **Pg** | **02 57 49.3** | **-0.2** |
| | baz=2.2,SNR=31 | | | | | | |
| **PMG** | **Port Moresby** | **5.01** | **224** | Pn | Pn | 02 58 26.5 | +3.5 |
| | 2.9nm,0.3s,baz=6.7,slow=9.2,SNR=4.3 | | | | | | |
| PMG | | | | Sn | **Sn** | **02 59 19.8** | **-1.1** |
| | 6.6nm,0.3s,baz=139,slow=18,SNR=9.0 | | | | | | |
| PMG | | | | LR | LR | 03 00 29.2 | |
| | comp=Z,246nm,19.6s,baz=53,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **5.01** | **224** | P | Pn | 02 58 26.9 | +4.0 |
| | baz=5.1,SNR=6.5 | | | | | | |
| **QIS** | **Mount Isa** | **18.19** | **215** | P | **P** | **03 01 22.6** | **+1.7** |
| | baz=18,SNR=4.0 | | | | | | |
| **RMQ** | **Roma** | **20.66** | **185** | P | **P** | **03 01 47.6** | **-0.2** |
| | baz=21,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.22** | **227** | P | **P** | **03 01 53.9** | **0.0** |
| | 5.8nm,0.7s,baz=52,slow=10,SNR=32 | | | | | | |
| **QLP** | **Quilpie** | **21.57** | **196** | P | **P** | **03 01 57.1** | **-0.5** |
| | baz=22,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **24.01** | **221** | P | **P** | **03 02 22.9** | **0.0** |
| | 7.8nm,0.7s,baz=57,slow=8.4,SNR=62 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.33** | **241** | P | **P** | **03 02 53.7** | **+0.6** |
| | 2.4nm,0.5s,baz=65,slow=6.9,SNR=15 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.33** | **241** | P | **P** | **03 02 53.7** | **+0.6** |
| | baz=27,SNR=9.7 | | | | | | |
| **WRKA** | **Warakurna** | **28.75** | **226** | P | **P** | **03 03 05.2** | **-0.5** |
| | baz=29,SNR=3.8 | | | | | | |
| **MEEK** | **Meekatharra** | **36.93** | **232** | P | **P** | **03 04 17.4** | **+0.2** |
| | baz=37,SNR=4.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.70** | **345** | LR | LR | 03 22 07.2 | |
| | comp=Z,25nm,18.6s,baz=180,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **83.87** | **22** | P | **P** | **03 09 36.0** | **-1.5** |
| | 0.3nm,0.7s,baz=237,slow=5.4,SNR=4.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.36** | **52** | P | **P** | **03 10 29.5** | **+1.2** |
| | 0.5nm,0.7s,baz=245,slow=5.4,SNR=5.3 | | | | | | |
| **GERES** | **GERESS Array B** | **123.76** | **327** | PKP | **PKPdf** | **03 16 06.2** | **+0.1** |
| | 0.2nm,0.4s,baz=72,slow=3.2,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.57** | **286** | PKPbc | **PKPbc** | **03 16 56.0** | **-0.1** |
| | 5.5nm,0.7s,baz=39,slow=2.9,SNR=67 | | | | | | |

*IDC **07** 02:59:39.5±1.8, 31°.55S×178°.43W, h0km, mb4.5/3, mb1 4.6/4, mb1mx4.0/24, mbtmp4.4/4, ML3.9/1, Error ellipse: s-maj=45.1km s-min=31.1km az=60.0*
*ISCJB **07** 02:59:50.7±1.1, 31°.87S±0°.07×179°.4W±0°.2, h50km, mb4.4/3, Error ellipse: s-maj=25.6km s-min=8.5km az=12.5*
**ISC 07 02:59:49.2**±1.7**, 31°.8S**±0°.1×**178°.9W**±0°.3**, h61**km**, n13, σ1s.72**/16**, mb4.6**/3**, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **6.17** | **201** | PN | **Pn** | **03 01 18.4** | **+0.7** |
| MXZ | | | | SN | **Sn** | **03 02 27.9** | **+0.9** |
| **WMGZ** | **Waiomatatini S** | **6.38** | **199** | PN | **Pn** | **03 01 21.8** | **+1.2** |
| WMGZ | | | | SN | **Sn** | **03 02 33.5** | **+1.5** |
| **HAZ** | **Te Kaha** | **6.52** | **204** | PN | **Pn** | **03 01 23.5** | **+1.0** |
| HAZ | | | | SN | **Sn** | **03 02 36.0** | **+0.5** |
| **MWZ** | **Matawai** | **7.13** | **203** | *e*PN | **Pn** | **03 01 27.9** | **-3.0** |
| MWZ | | | | SN | **Sn** | **03 02 50.6** | **+0.2** |
| **URZ** | **Urewera** | **7.21** | **206** | Pn | **Pn** | **03 01 31.3** | **-0.7** |
| | 1.9nm,0.3s,baz=279,slow=3.8,SNR=15 | | | | | | |
| URZ | | | | Sn | **Sn** | **03 02 49.7** | **-2.7** |
| | 2.9nm,0.3s,baz=166,slow=13,SNR=10 | | | | | | |
| **URZ** | **Urewera** | **7.21** | **206** | *e*PN | **Pn** | **03 01 29.0** | **-2.9** |
| URZ | | | | SN | **Sn** | **03 02 52.2** | **-0.1** |
| **ASAR** | **Alice Springs** | **42.27** | **269** | P | **P** | **03 07 38.4** | **+1.5** |
| | 2.0nm,0.6s,baz=105,slow=7.6,SNR=24 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.39** | **274** | P | **P** | **03 07 47.2** | **+1.2** |
| | 4.3nm,0.4s,baz=113,slow=7.7,SNR=22 | | | | | | |
| **QSPA** | **South Pole Qui** | **58.30** | **180** | P | **P** | **03 09 37.8** | **+0.2** |
| | 4.3nm,0.7s,baz=212,slow=1.5,SNR=17 | | | | | | |
| **SNAA** | **Sanae** | **76.77** | **179** | P | P | 03 11 37.5 | +3.7 |
| **VNA3** | **Neumayer Olymp** | **76.95** | **176** | P | P | 03 11 39.1 | +4.3 |
| **VNA2** | **Neumayer--Watz** | **77.37** | **177** | P | P | 03 11 41.7 | +4.6 |
| | baz=179,slow=5.1 | | | | | | |
| **FINES** | **FINESS Array B** | **146.19** | **339** | PKPbc | **PKPbc** | **03 19 19.9** | **-2.0** |
| | 2.3nm,0.5s,baz=66,slow=4.3,SNR=19 | | | | | | |

*SKO **07** 03:05:49.0, 41°.51N×20°.19E, h9km, M2.1, ML2.8*
*ATH **07** 03:05:51.7, 41°.53N×20°.46E, h5km±5km, MD3.2/11*
*BEO **07** 03:05:53.1±0.4, 41°.43N×20°.45E, h0km, ML2.6/1*
*CSEM **07** 03:05:53.0±0.1, 41°.47N×20°.48E, h2km, ML2.6, Error ellipse: s-maj=4.2km s-min=2.6km az=50.0*
*PDG **07** 03:05:53.2±0.3, 41°.52N×20°.44E, h5km±1km, ML2.8/11, Error ellipse: s-maj=0.4km s-min=0.7km az=0.0*
*THE **07** 03:05:55.2, 41°.40N×20°.64E, h0km±2km, ML2.8/3, Error ellipse: s-maj=2.3km s-min=1.0km az=273.0*
**ISC 07 03:05:52.7**±1.1**, 41°.47N**±0°.02×**20°.46E**±0°.02**, h5**km±10km**, n100, σ1s.01**/151**, 21C-8D, Albania**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OHR** | **Ohrid** | **0.44** | **144**⇑ | *i*Pg | **Pg** | **03 06 01.3** | **+0.1** |
| OHR | | | | *i* Sg | **Sb** | **03 06 08.9** | **-1.1** |
| OHR | | | | *e*Lg | Lg | 03 06 09.0 | |
| | comp=E,458nm,0.4s | | | | | | |
| OHR | | | | *e*Lg | Lg | 03 06 09.2 | |
| | comp=N,938nm,0.7s | | | | | | |
| **OHR** | **Ohrid** | **0.44** | **144**⇑ | *i*Pg | **Pg** | **03 06 01.3** | **+0.1** |
| OHR | | | | *i* Sg | **Sb** | **03 06 08.8** | **-1.1** |
| OHR | | | | *e*Lg | Lg | 03 06 08.9 | |
| | comp=N,458nm,0.4s | | | | | | |
| **TIR** | **Tirane** | **0.46** | **255** | *i* Pg | **Pg** | **03 06 01.6** | **0.0** |
| TIR | | | | *e*Sg | **Sg** | **03 06 07.1** | **-0.5** |
| **TIR** | **Tirane** | **0.46** | **255** | *i* Pg | **Pg** | **03 06 01.6** | **0.0** |
| TIR | | | | *e*Sg | **Sg** | **03 06 07.1** | **-0.5** |
| **SKO** | **Skopje** | **0.89** | **55** | *e*Pg | **Pg** | **03 06 09.3** | **-0.6** |
| SKO | | | | *i* Sg | **Sb** | **03 06 22.6** | **-0.3** |
| SKO | | | | *e*Lg | Lg | 03 06 22.8 | |
| | comp=N,33nm,0.3s | | | | | | |
| SKO | | | | *e*Lg | Lg | 03 06 22.9 | |
| | comp=E,28nm,0.5s | | | | | | |
| **SKO** | **Skopje** | **0.89** | **55** | P | **Pg** | **03 06 08.8** | **-1.0** |
| SKO | | | | S | **Sb** | **03 06 21.9** | **-1.0** |
| **SKO** | **Skopje** | **0.89** | **55** | P | **Pg** | **03 06 08.8** | **-1.0** |
| **SKO** | **Skopje** | **0.89** | **55** | *e*Pg | **Pg** | **03 06 09.2** | **-0.6** |
| SKO | | | | S | **Sb** | **03 06 21.9** | **-1.0** |
| SKO | | | | *i* Sg | **Sb** | **03 06 22.6** | **-0.3** |
| SKO | | | | *e*Lg | Lg | 03 06 22.7 | |
| | comp=E,33nm,0.3s | | | | | | |
| **FNA** | **Florina** | **0.98** | **134** | *e*PG | **Pg** | **03 06 10.8** | **-0.6** |
| FNA | | | | *e*SB | **Sb** | **03 06 25.7** | **+0.4** |
| **FNA** | **Florina** | **0.98** | **134** | P | **Pg** | **03 06 10.8** | **-0.6** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNA | | | | S | Sg | 03 06 23.2 | -0.9 |
| FNA | Florina | 0.98 | 134 | P | Pg | 03 06 10.8 | -0.6 |
| FNA | | | | S | Sg | 03 06 23.2 | -0.9 |
| FNA | | | | eSb | Sb | 03 06 25.7 | +0.4 |
| ULC | Ulcinj | 1.03 | 299 | ⇓iPg | Pg | 03 06 11.5 | -1.0 |
| ULC | | | | eSg | Sb | 03 06 27.4 | +0.5 |
| ULC | Ulcinj | 1.03 | 299 | ⇓iPg | Pg | 03 06 11.5 | -1.0 |
| ULC | | | | eSg | Sb | 03 06 27.4 | +0.5 |
| NEST | Nestorio | 1.15 | 157 | ePB | Pb | 03 06 14.3 | -0.8 |
| NEST | | | | eSB | Sg | 03 06 30.2 | +0.7 |
| NEST | Nestorio | 1.15 | 157 | P | Pb | 03 06 14.2 | -0.8 |
| NEST | | | | S | Sb | 03 06 29.9 | -0.3 |
| NEST | Nestorio | 1.15 | 157 | P | Pb | 03 06 14.2 | -0.8 |
| NEST | | | | S | Sb | 03 06 29.9 | -0.3 |
| NEST | | | | eSb | Sg | 03 06 30.2 | +0.7 |
| PVY | Plav | 1.18 | 342 | ⇑iPg | Pb | 03 06 14.1 | -1.6 |
| PVY | | | | eSg | Sg | 03 06 31.8 | +1.1 |
| PVY | Plav | 1.18 | 342 | ⇑iPg | Pb | 03 06 14.1 | -1.6 |
| PVY | | | | eSg | Sg | 03 06 31.8 | +1.1 |
| DRME | Dracevica, Mon | 1.19 | 307 | ⇑iPg | Pb | 03 06 13.8 | -1.9 |
| DRME | | | | eSg | Sn | 03 06 32.5 | -0.1 |
| DRME | Dracevica, Mon | 1.19 | 307 | ⇑iPg | Pb | 03 06 13.8 | -1.9 |
| DRME | | | | eSg | Sn | 03 06 32.5 | -0.1 |
| PDG | Podgorica | 1.31 | 317 | i Pg | Pn | 03 06 16.4 | -1.3 |
| PDG | | | | eSg | Sb | 03 06 35.0 | +0.1 |
| PDG | Podgorica | 1.31 | 317 | i Pg | Pn | 03 06 16.4 | -1.3 |
| PDG | | | | eSg | Sg | 03 06 36.3 | +1.4 |
| TTG | Podgorica | 1.31 | 317 | ⇑iPg | Pn | 03 06 16.2 | -1.5 |
| TTG | | | | eSg | Sg | 03 06 36.3 | +1.4 |
| BUM | Brajici-Budva | 1.43 | 306 | ⇑iPg | Pn | 03 06 18.9 | -0.5 |
| BUM | | | | eSg | Sg | 03 06 40.6 | +1.9 |
| BUM | Brajici-Budva | 1.43 | 306 | ⇑iPg | Pn | 03 06 18.9 | -0.5 |
| BUM | | | | eSg | Sg | 03 06 40.6 | +1.9 |
| BEY | Berane | 1.46 | 344 | ⇑iPg | Pn | 03 06 19.4 | -0.4 |
| BEY | | | | eSg | Sg | 03 06 41.4 | +1.7 |
| IVA | Berane | 1.46 | 344 | ⇑iPg | Pn | 03 06 19.4 | -0.4 |
| IVA | | | | eSg | Sg | 03 06 41.4 | +1.7 |
| KZN | Kozani | 1.53 | 139 | ePB | Pb | 03 06 21.8 | +0.2 |
| KZN | Kozani | 1.53 | 139 | P | Pb | 03 06 21.1 | -0.5 |
| KZN | Kozani | 1.53 | 139 | P | Pb | 03 06 21.1 | -0.5 |
| KZN | Kozani | 1.53 | 139 | ePb | Pb | 03 06 21.8 | +0.2 |
| GRG | Griva | 1.56 | 109 | ePB | Pn | 03 06 21.1 | +0.1 |
| GRG | | | | eSB | Sg | 03 06 42.6 | -0.1 |
| GRG | Griva | 1.56 | 109 | P | Pn | 03 06 21.1 | +0.1 |
| GRG | | | | S | Sb | 03 06 41.6 | -0.4 |
| GRG | Griva | 1.56 | 109 | P | Pn | 03 06 21.1 | +0.1 |
| GRG | | | | S | Sb | 03 06 41.6 | -0.4 |
| GRG | | | | eSb | Sg | 03 06 42.6 | -0.1 |
| VAY | Valandovo | 1.60 | 95 | i Pn | Pb | 03 06 22.4 | -0.3 |
| VAY | | | | i Sg | Sg | 03 06 44.6 | +0.6 |
| VAY | | | | eLg | Lg | 03 06 44.9 | |
| | comp=E,59nm,0.7s | | | | | | |
| VAY | | | | eLg | Lg | 03 06 44.9 | |
| | comp=N,82nm,0.6s | | | | | | |
| VAY | Valandovo | 1.60 | 95 | ⇓iPg | Pb | 03 06 22.0 | -0.7 |
| VAY | | | | eSg | Sg | 03 06 44.4 | +0.4 |
| VAY | Valandovo | 1.60 | 95 | ⇓iPg | Pb | 03 06 22.0 | -0.7 |
| VAY | Valandovo | 1.60 | 95 | i Pn | Pb | 03 06 22.4 | -0.3 |
| VAY | | | | eSg | Sg | 03 06 44.4 | +0.4 |
| VAY | | | | eLg | Lg | 03 06 44.8 | |
| | comp=N,82nm,0.6s | | | | | | |
| BARS | Barje | 1.68 | 36 | i Pg | Pb | 03 06 23.5 | -0.7 |
| BARS | | | | eSg | Sg | 03 06 48.6 | +1.8 |
| BARS | Barje | 1.68 | 36 | i Pg | Pb | 03 06 23.5 | -0.7 |
| BARS | | | | eSg | Sg | 03 06 48.6 | +1.8 |
| NKME | Niksic | 1.71 | 320 | ⇓iPn | Pn | 03 06 23.8 | +0.6 |
| NKME | | | | eSn | Sg | 03 06 49.7 | +2.0 |
| NKME | Niksic | 1.71 | 320 | ⇓iPn | Pn | 03 06 23.8 | +0.6 |
| NKME | | | | eSn | Sg | 03 06 49.7 | +2.0 |
| NKY | Niksic | 1.73 | 321 | ePn | Pb | 03 06 24.4 | -0.6 |
| NKY | | | | eSn | Sg | 03 06 50.0 | +1.8 |
| NKY | Niksic | 1.73 | 321 | ePn | Pb | 03 06 24.4 | -0.6 |
| NKY | | | | eSn | Sg | 03 06 50.0 | +1.8 |
| HCY | Herceg Novi | 1.76 | 304 | ⇑iPn | Pn | 03 06 24.5 | +0.7 |
| HCY | | | | eSn | Sg | 03 06 51.0 | +1.8 |
| HCY | Herceg Novi | 1.76 | 304 | ⇑iPn | Pn | 03 06 24.5 | +0.7 |
| HCY | | | | eSn | Sg | 03 06 51.0 | +1.8 |
| SELS | Selova | 1.82 | 15 | ePn | Pn | 03 06 25.3 | +0.7 |
| KEK | Kerkira | 1.82 | 196 | ePN | Pb | 03 06 25.9 | -0.6 |
| KEK | Kerkira | 1.82 | 196 | ePn | Pb | 03 06 25.9 | -0.6 |
| SJES | Sjenica | 1.83 | 349 | eSg | Sg | 03 06 53.1 | +1.7 |
| JAN | Janina | 1.84 | 170 | ePG | Pg | 03 06 27.8 | -0.1 |
| JAN | Janina | 1.84 | 170 | ePg | Pg | 03 06 27.8 | -0.1 |
| SGD | Sagiada | 1.86 | 185 | P | Pb | 03 06 27.0 | -0.2 |
| SGD | Sagiada | 1.86 | 185 | P | Pb | 03 06 27.0 | -0.2 |
| KNT | Kendrikon | 1.87 | 99 | ePN | Pb | 03 06 26.1 | -1.2 |
| KNT | Kendrikon | 1.87 | 99 | ePn | Pb | 03 06 26.1 | -1.2 |
| IGT | Igoumenitsa | 1.94 | 183 | ePN | Pb | 03 06 28.4 | -0.1 |
| IGT | Igoumenitsa | 1.94 | 183 | P | Pb | 03 06 28.1 | -0.4 |
| IGT | Igoumenitsa | 1.94 | 183 | P | Pb | 03 06 28.1 | -0.4 |
| IGT | Igoumenitsa | 1.94 | 183 | ePn | Pb | 03 06 28.4 | -0.1 |
| BRY | Bratogost | 2.02 | 316 | ⇑iPn | Pb | 03 06 28.9 | -1.0 |
| BRY | | | | eSn | Sg | 03 06 57.1 | -0.5 |
| BRY | Bratogost | 2.02 | 316 | ⇑iPn | Pb | 03 06 28.9 | -1.0 |
| BRY | | | | eSn | Sg | 03 06 57.1 | -0.5 |
| PLE | Pljevlja | 2.02 | 337 | ⇓iPn | Pb | 03 06 29.2 | -0.8 |
| PLE | | | | eSn | Sg | 03 06 57.0 | -0.6 |
| PLE | Pljevlja | 2.02 | 337 | ⇓iPn | Pb | 03 06 29.2 | -0.8 |
| PLE | | | | eSn | Sg | 03 06 57.0 | -0.6 |
| UPM | Unac-Piva | 2.08 | 327 | ⇑iPn | Pb | 03 06 29.9 | -1.1 |
| UPM | | | | eSn | Sb | 03 06 58.2 | +1.0 |
| UPM | Unac-Piva | 2.08 | 327 | ⇑iPn | Pb | 03 06 29.9 | -1.1 |
| UPM | | | | eSn | Sb | 03 06 58.2 | +1.0 |
| THL | Klokotos Trika | 2.24 | 148 | ePG | Pb | 03 06 33.5 | -0.2 |
| THL | Klokotos Trika | 2.24 | 148 | ePg | Pb | 03 06 33.5 | -0.2 |
| SOH | Sokhos | 2.28 | 106 | ePN | Pn | 03 06 32.3 | +1.2 |
| SOH | Sokhos | 2.28 | 106 | ePn | Pn | 03 06 32.3 | +1.2 |
| DSL | Palaion Diasel | 2.38 | 168 | ePN | Pb | 03 06 35.5 | -0.6 |
| DSL | Palaion Diasel | 2.38 | 168 | ePn | Pb | 03 06 35.5 | -0.6 |
| SRS | Serrai | 2.39 | 97 | ePN | Pn | 03 06 33.2 | +0.7 |
| SRS | Serrai | 2.39 | 97 | ePn | Pn | 03 06 33.2 | +0.7 |
| ZAPS | Zavoj | 2.42 | 41 | ePn | Pb | 03 06 35.2 | -1.5 |
| GRUS | Gruza | 2.42 | 4 | ⇑iPn | Pn | 03 06 34.4 | +1.4 |
| GRUS | Gruza | 2.42 | 4 | ⇑iPn | Pn | 03 06 34.4 | +1.4 |
| STON | Ston | 2.48 | 305 | ePn | Pb | 03 06 36.3 | -1.4 |
| STON | | | | eSn | Sb | 03 07 07.5 | -1.1 |
| STON | Ston | 2.48 | 305 | ePn | Pb | 03 06 36.3 | -1.4 |
| STON | | | | eSn | Sb | 03 07 07.5 | -1.1 |
| BBLS | Lazići | 2.52 | 342 | ePn | Pn | 03 06 35.9 | +1.6 |
| BBLS | Lazići | 2.52 | 342 | ePn | Pn | 03 06 35.9 | +1.6 |
| PLG | Polygyros | 2.52 | 115 | ePN | Pn | 03 06 35.4 | +1.1 |
| PLG | Polygyros | 2.52 | 115 | ePn | Pn | 03 06 35.4 | +1.1 |
| NVR | Nevrokopi | 2.56 | 92 | ePN | Pn | 03 06 36.5 | +1.6 |
| NVR | Nevrokopi | 2.56 | 92 | ePn | Pn | 03 06 36.5 | +1.6 |
| DIVS | Divibare | 2.65 | 353 | ⇑iPn | Pn | 03 06 37.5 | +1.4 |
| DIVS | Divibare | 2.65 | 353 | ⇑iPn | Pn | 03 06 37.5 | +1.4 |
| TRUS | Trudelj | 2.75 | 359 | ePn | Pn | 03 06 38.6 | +1.1 |
| TRUS | Trudelj | 2.75 | 359 | ePn | Pn | 03 06 38.6 | +1.1 |
| EVR | Evrytania | 2.75 | 157 | ePB | Pn | 03 06 38.5 | +0.9 |
| EVR | Evrytania | 2.75 | 157 | ePb | Pn | 03 06 38.5 | +0.9 |
| AGG | Agios Georgios | 2.83 | 149 | ePB | Pn | 03 06 39.5 | +0.9 |
| AGG | Agios Georgios | 2.83 | 149 | ePb | Pn | 03 06 39.5 | +0.9 |
| KUBS | Kucevo | 3.07 | 17 | ePn | Pn | 03 06 41.7 | -0.2 |
| KUBS | Kucevo | 3.07 | 17 | ePn | Pn | 03 06 41.7 | -0.2 |
| TEKS | Tekeris | 3.15 | 348 | ePn | Pn | 03 06 44.4 | +1.4 |
| TEKS | Tekeris | 3.15 | 348 | ePn | Pn | 03 06 44.4 | +1.4 |
| FGSL | Fruska Gora | 3.72 | 353 | ePn | Pn | 03 06 51.8 | +1.1 |
| FRGS | Fruska Gora | 3.72 | 353 | ePn | Pn | 03 06 51.8 | +1.1 |
| VYHS | Vyhne | 7.12 | 351 | ePG | Pg | 03 08 03.8 | -5.1 |
| VYHS | | | | e | | 03 09 00.5 | |

*ISCJB **07** 03:11:46.3±0.6, 21˚31S±0˚04×68˚32W±0˚10, h101km±9km, mb4.2/7, Error ellipse: s-maj=15.2km s-min=5.7km az=10.4*

*IDC **07** 03:11:47.3±1.4, 21˚10S×68˚36W, h94km±12km, mb3.9/7, mb1 4.0/8, mb1mx3.7/23, mbtmp4.3/8, MS2.0/1, Ms1 2.0/1, ms1mx2.0/18, Error ellipse: s-maj=31.5km s-min=13.7km az=117.0*

*NEIC **07** 03:11:47.0, 21˚24S×68˚70W, h124km, mb4.3/1, After GUC.*

*GUC **07** 03:11:47.7±0.5, 21˚24S×68˚70W, h124km±6km, ML4.2*

**ISC 07 03:11:47.4**±0.8, **21˚27S**±0˚05×**68˚40W**±0˚10, **h101**km±9km, **n27**, σ**1s56**/35, **mb4.2**/7, **3C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB01 | IPOC Station P | 1.04 | 282 | ⇑eP | Pn | 03 12 08.4 | -0.1 |
| PB01 | | | | eS | Sn | 03 12 23.9 | -0.5 |
| PB01 | | | | AML | AML | 03 12 27.1 | |
| | comp=E,5μm,0.4s | | | | | | |
| LVC | Limon Verde | 1.42 | 200 | P | Pn | 03 12 15.7 | +2.7 |
| | comp=E,18μm,0.3s,baz=9.3,slow=9.8,SNR=4360 | | | | | | |
| LVC | | | | S | Sn | 03 12 35.3 | +2.9 |
| | comp=E,3μm,0.3s,baz=282,slow=21,SNR=20 | | | | | | |
| PB07 | IPOC Station P | 1.46 | 252 | ⇑eP | Pn | 03 12 13.1 | -0.3 |
| PB07 | | | | eS | Sn | 03 12 32.5 | -0.7 |
| PB07 | | | | AML | AML | 03 12 39.2 | |
| | comp=E,2μm,0.4s | | | | | | |
| PB06 | IPOC Station P | 1.80 | 217 | ⇑eP | Pn | 03 12 18.6 | +1.0 |
| PB06 | | | | eS | Sn | 03 12 41.5 | +0.9 |
| PB06 | | | | AML | AML | 03 12 44.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| PB04 | IPOC Station P | 1.94 | 237 | eP | Pn | 03 12 19.0 | -0.5 |
| PB04 | | | | AML | AML | 03 12 53.5 | |
| | comp=E,1μm,0.5s | | | | | | |
| MNMC | Minimini | 2.41 | 332 | eP | Pn | 03 12 26.0 | +0.3 |
| MNMC | | | | eS | Sn | 03 12 55.2 | +0.3 |
| MNMC | | | | AML | AML | 03 13 01.2 | |
| | comp=E,2μm,0.3s | | | | | | |
| PB10 | IPOC Station P | 2.99 | 221 | eP | Pn | 03 12 33.1 | 0.0 |
| PB10 | | | | eS | Sn | 03 13 07.6 | -0.8 |
| PB10 | | | | AML | AML | 03 13 22.2 | |
| | comp=E,2μm,0.2s | | | | | | |
| PB13 | IPOC Station P | 3.10 | 340 | eP | Pn | 03 12 36.3 | +1.2 |
| PB13 | | | | eS | Sn | 03 13 13.3 | +1.5 |
| PB13 | | | | AML | AML | 03 13 21.7 | |
| | comp=E,3μm,0.4s | | | | | | |
| LPAZ | La Paz | 4.96 | 3 | P | Pn | 03 13 02.4 | +2.1 |
| | comp=E,9.5nm,0.3s,baz=163,slow=8.2,SNR=124 | | | | | | |
| LCO | Las Campanas | 7.98 | 195 | ePn | Pn | 03 13 38.6 | -2.3 |
| LCO | | | | eS | Sn | 03 15 05.6 | -4.1 |
| SIV | San Ignacio | 8.70 | 54 | P | Pn | 03 13 50.0 | -0.6 |
| | comp=E,9.5nm,0.3s,baz=254,slow=12,SNR=177 | | | | | | |
| CFAA | Coronel Fontan | 10.29 | 179 | P | Pn | 03 14 10.4 | -1.7 |
| | comp=E,0.1nm,0.3s,baz=26,slow=13,SNR=4.6 | | | | | | |
| CFAA | | | | S | Sn | 03 15 58.5 | -7.1 |
| | comp=E,0.1nm,0.3s,baz=235,slow=12,SNR=3.0 | | | | | | |
| CFAA | | | | LR | LR | 03 19 10.6 | |
| | comp=E,9.0nm,20.9s,baz=162,slow=42 | | | | | | |
| SAML | Samuel | 13.24 | 23 | ePn | Pn | 03 14 50.1 | -1.4 |
| | comp=E,1.1nm,0.6s | | | | | | |
| BDFB | Brasilia | 20.12 | 77 | P | P | 03 16 13.1 | -0.5 |
| | comp=E,2.3nm,0.4s,baz=241,slow=10,SNR=6.1 | | | | | | |
| PTGA | Pitinga | 22.01 | 23 | P | P | 03 16 31.4 | -2.3 |
| | comp=E,8.2nm,0.3s,baz=214,slow=18,SNR=22 | | | | | | |
| VNA3 | Neumayer Olymp | 60.14 | 161 | P | P | 03 21 45.7 | +1.8 |
| VNA2 | Neumayer--Watz | 60.71 | 161 | P | P | 03 21 49.5 | +1.7 |
| | baz=282,slow=8.5 | | | | | | |
| SNAA | Sanae | 62.34 | 161 | P | P | 03 21 60.0 | +1.1 |
| SNAA | Sanae | 62.34 | 161 | P | P | 03 22 00.5 | +1.7 |
| | comp=E,0.7nm,0.7s,baz=276,slow=8.5,SNR=19 | | | | | | |
| DBIC | Dimbokro | 68.21 | 73 | P | P | 03 22 37.4 | -0.2 |
| | comp=E,4.1nm,0.8s,baz=14,slow=23,SNR=3.9 | | | | | | |
| QSPA | South Pole Qui | 68.92 | 180 | eP | P | 03 22 41.8 | +0.5 |
| | comp=E,2.4nm,0.4s | | | | | | |
| TORD | Torodi Ar. Bea | 76.83 | 70 | P | P | 03 23 28.4 | -0.2 |
| | comp=E,1.8nm,0.5s,baz=254,slow=5.6,SNR=39 | | | | | | |
| MAW | Mawson | 84.41 | 163 | P | P | 03 24 09.9 | +1.7 |
| | comp=E,1.9nm,0.6s,baz=184,slow=7.4,SNR=9.3 | | | | | | |
| YKA | Yellowknife Ar | 91.13 | 340 | P | P | 03 24 40.1 | -0.2 |
| | comp=E,0.7nm,0.6s,baz=135,slow=4.8,SNR=12 | | | | | | |
| ASAR | Alice Springs | 130.33 | 207 | PKP | PKPdf | 03 30 46.8 | +0.1 |
| | comp=E,0.4nm,0.5s,baz=176,slow=3.8,SNR=4.5 | | | | | | |
| WRA | Warramunga Arr | 133.39 | 210 | PKP | PKPdf | 03 30 53.6 | +1.1 |
| | comp=E,0.5nm,0.5s,baz=153,slow=1.8,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 145.17 | 36 | PKPbc | PKPdf | 03 31 13.4 | +0.3 |
| | comp=E,0.7nm,0.4s,baz=325,slow=3.9,SNR=7.0 | | | | | | |

**MEX 07 03:29:33.2**±0.4, **17˚56N**×**101˚18W**, **h36**km±5km, **MD4.0**, **Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZIIG | Zihuatanejo | 0.28 | 280 | eP | Pn | 03 29 39.3 | -1.9 |
| ZIIG | | | | eS | Sn | 03 29 44.5 | -3.0 |
| CAIG | El Cayaco | 1.00 | 120 | i P | Pn | 03 29 49.0 | -1.8 |
| CAIG | | | | eS | Sn | 03 30 01.6 | -2.1 |
| ARIG | Puente Sto Nin | 1.07 | 47 | i P | Pn | 03 29 50.1 | -1.6 |
| ARIG | | | | i S | Sn | 03 30 02.6 | -2.7 |
| MEIG | Mezcala | 1.53 | 76 | eP | Pn | 03 29 56.8 | -1.3 |
| MEIG | | | | eS | Sn | 03 30 13.8 | -3.0 |
| PLIG | Platanillo | 1.80 | 62 | eP | Pn | 03 30 00.9 | -0.9 |
| PLIG | | | | i S | Sn | 03 30 20.5 | -3.0 |
| MMIG | Aquila | 2.19 | 290 | i P | Pn | 03 30 05.6 | -1.5 |
| MMIG | | | | i S | Sn | 03 30 31.0 | -2.0 |
| TLIG | Tlapa | 2.49 | 89 | eP | Pn | 03 30 02.4 | -9.0 |
| TLIG | | | | i S | Sn | 03 30 38.7 | -2.0 |

*NEIC **07** 03:33:07.9, 43˚61S×172˚31E, h12km, ML3.9(WEL), After WEL.*

*NEIC Felt in Canterbury.*

**WEL 07 03:33:07.9**±0.1, **43˚59S**×**172˚32E**, **h12**km, **ML3.9**/18, **3C-6D, Error ellipse: s-maj=1.0km s-min=1.0km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.22 | 88 | ⇓P* | Pg | 03 33 13.0 | +0.3 |
| CRLZ | | | | S* | Sg | 03 33 16.8 | +1.0 |
| CRLZ | | | | AML | AML | 03 33 17.1 | |
| CRLZ | Canterbury Las | 0.22 | 88 | ⇓P* | Pg | 03 33 13.0 | +0.3 |
| CRLZ | | | | S* | Sg | 03 33 16.8 | +1.0 |
| MQZ | McQueen's Vall | 0.27 | 117 | ⇓P* | Pg | 03 33 13.4 | -0.2 |
| MQZ | | | | S* | Sg | 03 33 17.9 | +0.5 |
| MQZ | | | | AML | AML | 03 33 18.0 | |
| MQZ | McQueen's Vall | 0.27 | 117 | ⇓P* | Pg | 03 33 13.4 | -0.2 |
| OXZ | Oxford | 0.33 | 322 | P* | Pg | 03 33 14.2 | -0.4 |
| OXZ | | | | S* | Sg | 03 33 19.2 | +0.1 |
| OXZ | Oxford | 0.33 | 322 | P* | Pg | 03 33 14.2 | -0.4 |
| OXZ | | | | S* | Sg | 03 33 19.2 | +0.1 |
| LTZ | Lake Taylor | 0.80 | 357 | ⇑P* | Pb | 03 33 23.8 | -0.1 |
| LTZ | | | | S* | Sg | 03 33 33.9 | -0.2 |
| LTZ | | | | AML | AML | 03 33 37.4 | |
| LTZ | Lake Taylor | 0.80 | 357 | ⇑P* | Pb | 03 33 23.8 | -0.1 |
| LTZ | | | | S* | Sb | 03 33 35.4 | +0.6 |
| RPZ | Rata Peaks | 0.93 | 261 | P* | Pg | 03 33 25.0 | -0.8 |
| RPZ | | | | S* | Sg | 03 33 37.9 | -0.1 |
| RPZ | | | | AML | AML | 03 33 40.5 | |
| RPZ | Rata Peaks | 0.93 | 261 | ePg | Pg | 03 33 25.1 | -0.7 |
| RPZ | | | | eS | Sg | 03 33 37.8 | -0.2 |
| WVZ | Waitaha Valley | 1.26 | 293 | ⇓P* | Pb | 03 33 31.5 | -0.1 |
| WVZ | | | | AML | AML | 03 33 51.1 | |
| WVZ | | | | AML | AML | 03 33 54.5 | |
| WVZ | Waitaha Valley | 1.26 | 293 | P* | Pb | 03 33 31.5 | -0.1 |
| KHZ | Kahutara | 1.47 | 38 | PN | Pn | 03 33 33.3 | -1.0 |
| KHZ | | | | SN | Sn | 03 33 52.8 | -0.6 |
| KHZ | | | | AML | AML | 03 34 03.8 | |
| KHZ | Kahutara | 1.47 | 38 | ePn | Pn | 03 33 33.3 | -1.0 |
| KHZ | | | | eS | Sn | 03 33 53.0 | -0.4 |
| LBZ | Lake Benmore | 1.74 | 242 | PN | Pn | 03 33 37.1 | -0.8 |
| LBZ | | | | AML | AML | 03 34 04.0 | |
| LBZ | | | | AML | AML | 03 34 04.5 | |
| LBZ | Lake Benmore | 1.74 | 242 | Pn | Pn | 03 33 37.1 | -0.8 |
| THZ | Tophouse | 1.87 | 14 | ⇑PN | Pn | 03 33 38.9 | -0.9 |
| THZ | | | | AML | AML | 03 34 15.0 | |
| THZ | | | | AML | AML | 03 34 22.5 | |
| THZ | Tophouse | 1.87 | 14 | Pn | Pn | 03 33 38.9 | -0.9 |
| DSZ | Denniston Nort | 1.88 | 348 | PN | Pn | 03 33 39.3 | -0.6 |
| DSZ | | | | AML | AML | 03 34 10.6 | |
| DSZ | | | | AML | AML | 03 34 16.2 | |
| DSZ | Denniston Nort | 1.88 | 348 | Pn | Pn | 03 33 39.3 | -0.6 |
| ODZ | Otahua Downs | 1.89 | 219 | ⇓PN | Pn | 03 33 38.7 | -1.4 |
| ODZ | | | | AML | AML | 03 34 18.0 | |
| ODZ | | | | AML | AML | 03 34 18.3 | |
| ODZ | Otahua Downs | 1.89 | 219 | ePn | Pn | 03 33 40.5 | +0.5 |
| ODZ | | | | eS | Sg | 03 34 11.3 | +2.5 |
| FOZ | Fox Glacier | 1.91 | 270 | AML | AML | 03 34 13.2 | |
| FOZ | | | | AML | AML | 03 34 14.1 | |
| FOZ | Fox Glacier | 1.91 | 270 | Pn | Pn | 03 33 39.6 | -0.7 |
| NNZ | Nelson | 2.49 | 19 | PN | Pn | 03 33 48.2 | -0.1 |
| NNZ | Nelson | 2.49 | 19 | Pn | Pn | 03 33 48.2 | -0.1 |
| JCZ | Jackson Bay | 2.62 | 258 | PN | Pn | 03 33 49.4 | -0.8 |
| JCZ | | | | AML | AML | 03 34 37.8 | |
| JCZ | | | | AML | AML | 03 34 41.2 | |
| JCZ | Jackson Bay | 2.62 | 258 | Pn | Pn | 03 33 49.4 | -0.8 |
| WKZ | Wanaka | 2.68 | 241 | PN | Pn | 03 33 50.2 | -0.7 |
| WKZ | | | | AML | AML | 03 34 36.6 | |
| WKZ | | | | AML | AML | 03 34 44.7 | |
| WKZ | Wanaka | 2.68 | 241 | Pn | Pn | 03 33 50.2 | -0.7 |
| EAZ | Earnscleugh | 2.71 | 232 | PN | Pn | 03 33 49.9 | -1.4 |
| EAZ | | | | AML | AML | 03 34 37.7 | |
| EAZ | | | | AML | AML | 03 34 39.1 | |
| EAZ | Earnscleugh | 2.71 | 232 | Pn | Pn | 03 33 50.0 | -1.4 |
| QRZ | Quartz Range | 2.76 | 3 | PN | Pn | 03 33 51.2 | -0.8 |
| QRZ | | | | AML | AML | 03 34 01.1 | |
| QRZ | | | | AML | AML | 03 34 43.4 | |
| QRZ | Quartz Range | 2.76 | 3 | Pn | Pn | 03 33 51.2 | -0.8 |
| SNZO | South Karori | 2.88 | 39 | ePn | Pn | 03 33 52.6 | -1.0 |
| SNZO | | | | eS | Sn | 03 34 25.8 | -2.3 |
| TUZ | Tuapeka | 3.04 | 218 | PN | Pn | 03 33 54.8 | -1.1 |
| TUZ | | | | AML | AML | 03 34 54.9 | |
| TUZ | | | | AML | AML | 03 34 56.2 | |
| TUZ | Tuapeka | 3.04 | 218 | Pn | Pn | 03 33 54.8 | -1.1 |
| MLZ | Mavora Lakes | 3.45 | 238 | PN | Pn | 03 34 01.6 | +0.1 |
| MLZ | | | | AML | AML | 03 35 03.4 | |
| MLZ | | | | AML | AML | 03 35 05.5 | |
| MLZ | Mavora Lakes | 3.45 | 238 | Pn | Pn | 03 34 01.6 | +0.1 |
| SYZ | Scrubby Hill | 3.71 | 216 | PN | Pn | 03 34 04.6 | -0.5 |
| SYZ | | | | AML | AML | 03 35 14.8 | |
| SYZ | | | | AML | AML | 03 35 16.5 | |
| SYZ | Scrubby Hill | 3.71 | 216 | Pn | Pn | 03 34 04.6 | -0.5 |
| KHEZ | Kahui Hut | 4.47 | 17 | Pn | Pn | 03 34 16.9 | +1.3 |

*NIED **07** 03:40:00, 25˚90N×124˚30E, h180km, Mw4.7 Best double couple: Mo1.39000×10^16 NP1:φs276.00000°, δ42.00000°, λ-2.00000°. NP2:φs8.00000°, δ89.00000°, λ-132.00000°.*

*ISCJB **07** 03:40:42.7±0.3, 25˚92N±0˚07×124˚46E±0˚06, h181km±6km, mb3.9/12, Error ellipse: s-maj=12.9km s-min=4.4km az=144.7*

*IDC **07** 03:40:43.4±1.8, 26˚04N×124˚52E, h172km±20km, mb3.7/12, mb1 3.7/13, mb1mx3.5/36, mbtmp4.1/13, MS3.3/2, Ms1 3.3/2, ms1mx2.6/32, Error ellipse: s-maj=18.4km s-min=14.0km az=71.0*

*JMA **07** 03:40:45.2±0.3, 25˚92N×124˚31E, h160km, M4.1*

**ISC 07 03:40:43.9**±0.7, **25˚90N**±0˚08×**124˚50E**±0˚06, **h182**km±8km, **n45**, σ**1s49**/63, **mb3.9**/12, **Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JIKM | Ikemajima | 1.19 | 145 | P | Pn | 03 41 14.0 | +0.8 |
| JIKM | | | | S | Sn | 03 41 36.2 | +0.3 |
| JIRB | Irabujima | 1.23 | 150 | P | Pn | 03 41 14.0 | +0.4 |
| JIRB | | | | S | Sn | 03 41 35.5 | -1.1 |
| JTJ | Tarama | 1.27 | 172 | P | Pn | 03 41 14.3 | +0.4 |
| JTJ | | | | S | Sn | 03 41 36.1 | -1.1 |
| JMJ | Miyako jima 2 | 1.30 | 146 | P | Pn | 03 41 15.3 | +1.1 |
| JMJ | | | | S | Sn | 03 41 37.5 | -0.1 |
| JISG | Ishigakijimahi | 1.32 | 187 | P | Pn | 03 41 14.0 | -0.4 |
| JISG | | | | S | Sn | 03 41 36.2 | -1.8 |
| JOGS | Gusukube | 1.40 | 144 | P | Pn | 03 41 16.2 | +1.1 |
| JOGS | | | | S | Sn | 03 41 39.7 | +0.4 |
| JIJ | Ishigaki jima | 1.56 | 192 | P | Pn | 03 41 15.7 | -0.9 |
| JIJ | | | | S | Sn | 03 41 39.5 | -2.5 |
| IRIF | Iriomote-Funau | 1.71 | 204 | P | Pn | 03 41 17.2 | -0.8 |
| IRIF | | | | S | Sn | 03 41 42.5 | -2.0 |
| JKRS | Kuro-shima | 1.71 | 195 | P | Pn | 03 41 17.5 | -0.6 |
| JKRS | | | | S | Sn | 03 41 41.7 | -3.0 |
| HATJ | Hateruma jima | 1.94 | 199 | P | Pn | 03 41 19.8 | -0.7 |
| HATJ | | | | S | Sn | 03 41 46.5 | -2.3 |
| YOJ | Yonaguni jima | 1.97 | 224 | P | Pn | 03 41 20.2 | -0.5 |
| JYNG | Yonagunijimaku | 2.01 | 225 | P | Pn | 03 41 20.8 | -0.4 |
| JKE | Kume jima 2 | 2.10 | 78 | P | Pn | 03 41 23.0 | +0.9 |
| JKE | | | | eS | Sn | 03 41 52.2 | +0.3 |
| JAGN | Aguni-jima | 2.56 | 74 | P | Pn | 03 41 28.1 | +0.8 |
| JAGN | | | | S | Sn | 03 41 59.6 | -1.6 |
| JJT2 | Tamagusuku 2 | 2.93 | 85 | P | Pn | 03 41 33.0 | +1.2 |
| JNTH | Nagotoyohara | 3.23 | 78 | P | Pn | 03 41 36.0 | +0.7 |
| JNTH | | | | S | Sn | 03 42 12.7 | -2.8 |
| JIH | Iheya | 3.31 | 69 | P | Pn | 03 41 37.0 | +0.6 |
| JIH | | | | S | Sn | 03 42 15.1 | -2.3 |
| JOW | Kunigami | 3.51 | 74 | P | Pn | 03 41 38.9 | 0.0 |
| JOW | | | | S | Sn | 03 42 18.7 | -3.2 |
| JOW | Kunigami | 3.51 | 74 | P | Pn | 03 41 39.1 | +0.2 |
| | 3.0nm,0.3s,baz=111,slow=26,SNR=296 | | | | | | |
| JOW | | | | S | Sn | 03 42 19.2 | -2.7 |
| | 18nm,0.3s,baz=332,slow=19,SNR=25 | | | | | | |
| JOKE | Okinoerabujima | 3.93 | 67 | P | Pn | 03 41 43.9 | -0.2 |
| JOKE | | | | S | Sn | 03 42 28.5 | -2.7 |
| JMZ | Minamidaito 2 | 6.06 | 89 | P | Pn | 03 42 11.5 | -0.1 |
| JMZ | | | | S | Sn | 03 43 15.3 | -5.5 |
| JNU | Nakatsue | 9.09 | 36 | P | Pn | 03 42 53.5 | +2.0 |
| | 1.3nm,0.3s,baz=158,slow=5.6,SNR=12 | | | | | | |
| KSRS | Korea Array | 11.88 | 13 | P | Pn | 03 43 29.1 | +1.5 |
| | 1.4nm,0.3s,baz=194,slow=13,SNR=28 | | | | | | |
| KSRS | | | | LR | LR | 03 48 49.8 | |
| | comp=Z,43nm,18.4s,baz=168,slow=42 | | | | | | |
| USRK | Ussuriysk Ar. | 19.24 | 17 | P | P | 03 44 54.6 | +0.4 |
| | 0.6nm,0.3s,baz=199,slow=8.5,SNR=5.0 | | | | | | |
| ASAJ | Asahikawa | 23.36 | 34 | P | P | 03 45 34.7 | -1.2 |
| | 5.1nm,0.3s,baz=214,slow=8.9,SNR=5.7 | | | | | | |
| CMAR | Chiang Mai Arr | 24.77 | 258 | P | P | 03 45 49.0 | +0.1 |
| | 1.0nm,0.3s,baz=51,slow=7.4,SNR=5.5 | | | | | | |
| SONM | Songino Array | 26.12 | 332 | P | P | 03 46 01.5 | +0.4 |
| | 0.9nm,0.5s,baz=156,slow=11,SNR=5.3 | | | | | | |
| TAPN | Taplejung | 32.84 | 281 | eP | P | 03 47 01.3 | +0.5 |
| | 10.0nm,0.5s | | | | | | |
| ODAN | Odare | 33.18 | 280 | eP | P | 03 47 03.9 | +0.2 |
| | 14nm,0.6s | | | | | | |
| RAMN | Ramite | 33.87 | 280 | eP | P | 03 47 09.4 | -0.3 |
| GUN | Gumba | 34.40 | 282 | eP | P | 03 47 14.5 | +0.2 |
| | 12nm,0.5s | | | | | | |
| PKI | Pulchoki | 34.85 | 282 | eP | P | 03 47 18.0 | -0.2 |
| | 15nm,0.8s | | | | | | |
| KKN | Kakani | 34.94 | 282 | eP | P | 03 47 18.8 | 0.0 |
| | 28nm,0.8s | | | | | | |
| DMN | Daman | 35.12 | 282 | eP | P | 03 47 20.3 | 0.0 |
| | 14nm,0.7s | | | | | | |
| GKN | Gorkha | 35.49 | 283 | eP | P | 03 47 22.9 | -0.5 |
| | 17nm,0.7s | | | | | | |
| KOLN | Koldanda | 36.42 | 282 | eP | P | 03 47 31.5 | +0.1 |
| | 13nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 39.28 | 313 | P | P | 03 47 54.2 | -0.6 |
| | 4.8nm,0.6s,baz=98,slow=11,SNR=30 | | | | | | |
| ZALV | Zalesovo Beam | 40.52 | 324 | P | P | 03 48 03.5 | -1.4 |
| | 2.8nm,0.3s,baz=114,slow=8.1,SNR=6.8 | | | | | | |
| WRA | Warramunga Arr | 46.56 | 167 | P | P | 03 48 54.5 | +1.0 |
| | 0.7nm,0.4s,baz=348,slow=8.0,SNR=3.5 | | | | | | |
| ASAR | Alice Springs | 50.11 | 169 | P | P | 03 49 22.9 | +2.2 |
| | 0.3nm,0.5s,baz=356,slow=13,SNR=6.5 | | | | | | |
| ASAR | | | | LR | LR | 04 14 03.0 | |
| | comp=Z,92nm,18.8s,baz=111,slow=40 | | | | | | |
| GEYT | Alibeck | 56.54 | 300 | P | P | 03 50 08.6 | +1.1 |
| | 8.2nm,0.7s,baz=96,slow=3.0,SNR=10.0 | | | | | | |
| ILAR | Eielson Array | 66.31 | 28 | P | P | 03 51 12.2 | -0.2 |
| | 0.2nm,0.5s,baz=279,slow=5.9,SNR=3.3 | | | | | | |
| KBZ | Khabaz | 66.76 | 309 | P | P | 03 51 16.3 | +0.8 |
| | 3.0nm,0.9s,baz=70,slow=4.5,SNR=4.6 | | | | | | |
| FINES | FINESS Array B | 71.48 | 330 | P | P | 03 51 43.8 | -0.5 |
| | 1.5nm,0.6s,baz=104,slow=12,SNR=2.4 | | | | | | |
| BRTR | Keskin Array B | 74.56 | 307 | P | P | 03 52 02.8 | -0.3 |
| | 1.3nm,0.7s,baz=90,slow=4.9,SNR=8.1 | | | | | | |

*NIED **07** 03:41:00, 42˚20N×137˚60E, h300km, Mw4.2 Best double couple: Mo2.23000×10^15 NP1:φs352.00000°, δ32.00000°, λ28.00000°. NP2:φs238.00000°, δ76.00000°, λ119.00000°.*

*ISCJB **07** 03:41:09.6±0.2, 42˚20N±0˚03×137˚49E±0˚03, h284km, mb3.9/25, Error ellipse: s-maj=3.9km s-min=3.4km az=167.9*

*NEIC **07** 03:41:10.6±0.5, 42˚20N×137˚53E, h291km±9km, mb4.2/7, Error ellipse: s-maj=13.5km s-min=9.0km az=72.0*

*JMA **07** 03:41:11.2±0.2, 42˚21N×137˚56E, h289km±2km, M3.8*

*IDC **07** 03:41:11.3±1.0, 42˚19N×137˚37E, h289km±9km, mb3.5/18, mb1 3.6/24, mb1mx3.5/42, mbtmp4.1/24, Error ellipse: s-maj=10.4km s-min=9.2km az=80.0*

**ISC 07 03:41:10.5**±0.4, **42˚15N**±0˚05×**137˚59E**±0˚05, **h284**km, **n73**, σ**1s39**/90, **mb4.0**/25, **Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOSM | Okushiri--Mats | 1.41 | 92 | P | Pn | 03 41 52.8 | +1.4 |
| JOSM | | | | eS | S | 03 42 25.4 | +1.5 |
| JSH | Shimam | 1.88 | 74 | P | Pn | 03 41 56.4 | +1.6 |
| JSK | Shakotan | 2.44 | 60 | P | Pn | 03 42 00.8 | +1.2 |
| JSK | | | | eS | S | 03 42 39.7 | +1.0 |
| JKB | Kayabe | 2.58 | 95 | P | Pn | 03 42 02.3 | +1.4 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| JKB | | | | eS | S | 03 42 42.4 | +1.3 |
| JOT | Ohata | 2.70 | 105 | P | Pn | 03 42 03.3 | +1.2 |
| JEW | Eniwo | 2.94 | 75 | eS | S | 03 42 48.8 | +1.4 |
| JHR | Hokuryu | 3.43 | 61 | P | Pn | 03 42 11.2 | +1.7 |
| JHR | | | | eS | S | 03 42 56.9 | +0.3 |
| JANG | Nango | 3.45 | 120 | P | Pn | 03 42 09.8 | -0.1 |
| JANG | | | | eS | S | 03 42 56.5 | -0.8 |
| JYG | Yagishiri | 3.61 | 50 | P | Pn | 03 42 12.4 | +1.0 |
| JFR | Furan | 3.83 | 73 | P | Pn | 03 42 14.9 | +1.0 |
| JFR | | | | eS | S | 03 43 02.9 | -1.7 |
| JNBK | Urakawa-nobuka | 3.84 | 86 | P | Pn | 03 42 14.4 | +0.4 |
| JNBK | | | | eS | S | 03 43 02.3 | -2.5 |
| JOM | Ohasama | 3.88 | 132 | P | Pn | 03 42 14.9 | +0.3 |
| JAW | Awa shima | 3.90 | 160 | P | Pn | 03 42 16.2 | +1.4 |
| JSD | Sado | 4.14 | 173 | P | Pn | 03 42 19.3 | +1.8 |
| JSD | | | | eS | S | 03 43 13.1 | +1.9 |
| ERM | Erimo | 4.15 | 90 | ePn | Pn | 03 42 18.1 | +0.6 |
| ERM | | | | eS | S | 03 43 06.2 | -4.8 |
| JKK2 | Kamakawa 2 | 4.16 | 64 | P | Pn | 03 42 18.7 | +1.2 |
| JKK2 | | | | eS | S | 03 43 09.8 | -1.4 |
| ASAJ | Asahikawa | 4.16 | 60 | P | Pn | 03 42 18.6 | +1.0 |
| | baz=309,slow=1.2 | | | | | | |
| ASAJ | | | | S | S | 03 43 09.9 | -1.3 |
| | baz=22,slow=18 | | | | | | |
| ASAJ | Asahikawa | 4.16 | 60 | ePn | Pn | 03 42 18.5 | +1.0 |
| ASAJ | | | | eS | S | 03 43 11.1 | -0.1 |
| JMK | Ichinoseki | 4.23 | 138 | P | Pn | 03 42 18.4 | -0.1 |
| JCH | Churui | 4.30 | 82 | P | Pn | 03 42 19.5 | +0.3 |
| JCH | | | | eS | S | 03 43 11.7 | -2.5 |
| JWK2 | Keihoku | 4.44 | 43 | P | Pn | 03 42 22.7 | +1.9 |
| USRK | Ussuriysk Ar. | 4.58 | 298 | P | Pn | 03 42 22.1 | -0.2 |
| | 7.2nm,0.3s,baz=108,slow=10,SNR=156 | | | | | | |
| USRK | | | | S | S | 03 43 18.0 | -1.9 |
| | baz=115,slow=16,SNR=2.2 | | | | | | |
| JTKR | Abashiri--Toko | 4.97 | 66 | P | Pn | 03 42 27.7 | +0.7 |
| JTKR | | | | eS | S | 03 43 25.8 | -2.5 |
| MAJO | Matsushiro | 5.62 | 175 | ePn | Pn | 03 42 36.5 | +1.6 |
| MAJO | | | | eS | S | 03 43 22.8 | -20 |
| MAT | Matsushiro | 5.62 | 175 | P | Pn | 03 42 36.4 | +1.5 |
| MAT | | | | eS | S | 03 43 39.8 | -2.9 |
| MJAR | Matsushiro Arr | 5.62 | 175 | P | Pn | 03 42 36.7 | +1.8 |
| | 2.7nm,0.3s,baz=5.8,slow=11,SNR=16 | | | | | | |
| YSS | Yuzh-Sakhalins | 6.05 | 36 | ePn | Pn | 03 42 40.6 | +0.7 |
| NEM2 | Nemuro 2 | 6.12 | 76 | P | Pn | 03 42 39.6 | -1.2 |
| NEM2 | | | | eS | S | 03 43 46.5 | -6.9 |
| JRY | Ryogami san | 6.21 | 170 | P | Pn | 03 42 41.9 | -0.1 |
| JRY | | | | eS | S | 03 43 54.7 | -1.0 |
| MDJ | Mudanjiang | 6.33 | 296 | ePn | Pn | 03 42 43.1 | -0.1 |
| KSRS | Korea Array | 8.79 | 241 | P | Pn | 03 43 14.8 | +1.1 |
| | 0.8nm,0.3s,baz=56,slow=12,SNR=22 | | | | | | |
| JHJ | Hachijo jima 2 | 9.18 | 168 | P | Pn | 03 43 17.3 | -1.4 |
| | 47nm,0.3s,baz=96,slow=23,SNR=11 | | | | | | |
| JHJ | | | | S | S | 03 44 54.4 | -8.5 |
| | 34nm,0.3s,baz=242,slow=22,SNR=5.7 | | | | | | |
| JHJ2 | Mitsune | 9.20 | 168 | ePn | Pn | 03 43 17.7 | -1.1 |
| JNU | Nakatsue | 10.46 | 213 | P | P | 03 43 36.5 | -1.7 |
| | 2.5nm,0.3s,baz=49,slow=5.0,SNR=10 | | | | | | |
| PETK | Petropavlovsk- | 17.36 | 44 | P | P | 03 44 54.5 | +0.5 |
| | 0.2nm,0.3s,baz=226,slow=9.8,SNR=3.2 | | | | | | |
| ULN | Ulaanbaatar | 22.24 | 295 | eP | P | 03 45 41.7 | -2.2 |
| | 4.6nm,0.8s | | | | | | |
| SEY | Seymchan | 22.56 | 18 | P | P | 03 45 47.2 | +0.8 |
| | 1.7nm,0.3s,baz=180,slow=20,SNR=2.9 | | | | | | |
| SONM | Songino Array | 22.68 | 295 | P | P | 03 45 46.4 | -1.5 |
| | 1.2nm,0.3s,baz=84,slow=8.9,SNR=10.0 | | | | | | |
| ZALV | Zalesovo Beam | 36.37 | 307 | P | P | 03 47 46.8 | -0.9 |
| | 5.3nm,0.6s,baz=84,slow=8.0,SNR=14 | | | | | | |
| MKAR | Makanchi Array | 39.04 | 296 | P | P | 03 48 09.1 | -1.1 |
| | 3.5nm,0.7s,baz=82,slow=9.9,SNR=10 | | | | | | |
| MKAR | Makanchi Array | 39.04 | 296 | eP | P | 03 48 09.2 | -0.9 |
| MAKZ | Makanchi | 39.25 | 296 | eP | P | 03 48 10.9 | -0.9 |
| KURK | Kurchatov | 40.55 | 303 | eP | P | 03 48 21.3 | -1.0 |
| | 28nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 40.63 | 303 | P | P | 03 48 22.1 | -0.8 |
| | 12nm,0.7s,baz=79,slow=8.8,SNR=77 | | | | | | |
| BRVK | Borovoye | 45.07 | 308 | eP | P | 03 48 57.8 | -0.6 |
| | 6.5nm,0.7s | | | | | | |
| SBUM | Sibu | 45.60 | 217 | eP | P | 03 49 04.3 | +1.4 |
| | 5.9nm,0.6s | | | | | | |
| AAK | Ala-Archa | 45.61 | 293 | P | P | 03 49 02.0 | -0.9 |
| | 1.9nm,0.4s,baz=69,slow=2.8,SNR=4.1 | | | | | | |
| ILAR | Eielson Array | 46.86 | 35 | P | P | 03 49 13.6 | +1.4 |
| | 0.4nm,0.6s,baz=285,slow=9.1,SNR=9.0 | | | | | | |
| ILAR | | | | pP | pP | 03 50 15.1 | +3.8 |
| | 0.4nm,0.8s,baz=291,slow=7.0,SNR=4.4 | | | | | | |
| KKAR | Karatay Array | 48.14 | 295 | eP | P | 03 49 21.5 | -0.7 |
| ARU | Arti | 50.61 | 315 | eP | P | 03 49 38.9 | -1.6 |
| | 6.3nm,0.7s | | | | | | |
| INK | Inuvik | 51.24 | 28 | P | P | 03 49 46.0 | +1.0 |
| | 0.8nm,0.4s,baz=331,slow=11,SNR=5.0 | | | | | | |
| ABKAR | Akbulak array | 52.46 | 306 | eP | P | 03 49 52.1 | -2.2 |
| MTN | Manton Dam | 55.04 | 188 | eP | P | 03 50 13.5 | +0.3 |
| | 8.1nm,0.5s | | | | | | |
| YKA | Yellowknife Ar | 60.88 | 30 | P | P | 03 50 53.7 | +0.7 |
| | 0.2nm,0.5s,baz=312,slow=6.5,SNR=4.9 | | | | | | |
| FITZ | Fitzroy Crossi | 60.96 | 193 | P | P | 03 50 54.1 | +0.1 |
| | 3.1nm,0.7s,baz=15,slow=5.1,SNR=6.4 | | | | | | |
| WRAB | Tennant Creek | 61.84 | 183 | eP | P | 03 50 59.7 | -0.2 |
| | 2.5nm,0.3s | | | | | | |
| WRA | Warramunga Arr | 61.85 | 183 | P | P | 03 50 59.9 | -0.1 |
| | 2.1nm,0.4s,baz=0.2,slow=7.2,SNR=19 | | | | | | |
| FINES | FINESS Array B | 62.91 | 330 | P | P | 03 51 05.8 | -0.6 |
| | 3.7nm,0.6s,baz=42,slow=9.0,SNR=19 | | | | | | |
| ASAR | Alice Springs | 65.58 | 184 | P | P | 03 51 24.6 | +0.5 |
| | 1.7nm,0.5s,baz=356,slow=5.7,SNR=25 | | | | | | |
| NB2 | NORSAR Subarra | 68.32 | 335 | P | P | 03 51 40.2 | -0.7 |
| | comp=Z,1.7nm,0.8s,baz=41,slow=6.2 | | | | | | |
| NOA | NORSAR Array B | 68.32 | 335 | P | P | 03 51 40.4 | -0.5 |
| | comp=Z,2.0nm,0.8s,baz=38,slow=6.3,SNR=4.9 | | | | | | |
| AKASG | Malin Array Be | 68.47 | 320 | P | P | 03 51 40.8 | -1.1 |
| | comp=Z,1.3nm,0.4s,baz=44,slow=6.1,SNR=9.0 | | | | | | |
| BRTR | Keskin Array B | 73.30 | 309 | P | P | 03 52 10.8 | -0.5 |
| | comp=Z,1.2nm,0.8s,baz=70,slow=2.8,SNR=4.3 | | | | | | |
| NVAR | Mina Array Bea | 74.25 | 52 | P | P | 03 52 19.0 | +2.1 |
| | comp=Z,0.3nm,0.6s,baz=300,slow=9.0,SNR=3.0 | | | | | | |
| GERES | GERESS Array B | 76.82 | 326 | P | P | 03 52 30.9 | -0.1 |
| | comp=Z,0.4nm,0.7s,baz=15,slow=5.5,SNR=3.7 | | | | | | |
| VNDA | Vanda | 120.34 | 174 | PKP | PKPdf | 03 59 26.9 | +0.4 |
| | comp=Z,0.3nm,0.5s,baz=334,slow=4.1,SNR=4.1 | | | | | | |
| MAW | Mawson | 122.85 | 206 | PKP | PKPdf | 03 59 32.2 | +0.7 |
| | comp=Z,0.7nm,0.5s,baz=96,slow=7.0,SNR=4.3 | | | | | | |
| SNAA | Sanae | 144.65 | 200 | P | PKPbc | 04 00 11.6 | 0.0 |
| SNAA | Sanae | 144.65 | 200 | PKP | PKPab | 04 00 11.7 | 0.0 |
| | comp=Z,1.5nm,0.4s,baz=184,slow=4.1,SNR=92 | | | | | | |
| LPAZ | La Paz | 146.07 | 48 | PKPbc | PKPbc | 04 00 17.6 | -0.6 |
| | comp=Z,0.6nm,0.4s,baz=32,slow=3.2,SNR=8.4 | | | | | | |
| VNA2 | Neumayer--Watz | 146.27 | 200 | P | PKPbc | 04 00 16.7 | +0.2 |
| | baz=96,slow=2.4 | | | | | | |
| VNA3 | Neumayer Olymp | 146.62 | 199 | P | PKPbc | 04 00 17.1 | -0.4 |
| VNA1 | Neumayer--Stat | 146.67 | 200 | P | PKPbc | 04 00 17.7 | +0.2 |

**MEX 07 04:13:47.1±0.3, 14°.89N×93°.28W, h16km±353km, MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.81 | 4 | i P | Pb | 04 13 60.0 | -2.9 |
| PCIG | | | | eP | Pg | 04 14 00.1 | -2.9 |
| PCIG | | | | eS | Sb | 04 14 10.0 | -3.6 |

*IDC 07 04:13:52.3±3.6, 7°.46S×128°.70E, h109km±32km, mb3.9/8, mb1 4.2/11, mb1mx3.9/29, mbtmp4.4/11, MS3.1/2, Ms1 3.1/2, ms1mx2.7/24, Error ellipse: s-maj=38.5km s-min=14.1km az=74.0*

*ISCJB 07 04:13:55.5±0.3, 7°.50S±0°.03×128°.61E±0°.04, h151km, mb4.1/14, Error ellipse: s-maj=6.0km s-min=4.2km az=167.0*

*NEIC 07 04:13:55.0±0.9, 7°.54S×128°.70E, h137km±9km, mb4.4/8, Error ellipse: s-maj=11.2km s-min=8.2km az=84.0*

*AUST 07 04:13:55.2±0.3, 7°.59S×128°.62E, h117km, Error ellipse: s-maj=0.8km s-min=0.8km az=267.0*

*DJA 07 04:13:57.1±0.3, 8°S±3°×12°9E±°, h189km±17km, M4.6/12, mb4.5/10, mB5.0/4, MLv4.7/12, Mw(mB)4.3/4*

**ISC 07 04:13:56.3±0.4, 7°.54S±0°.05×128°.66E±0°.05, h151km, n72, σ2s.02/72, mb4.1/14, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SAUI | Saumlaki | 2.66 | 100 | P | Pn | 04 14 41.9 | +2.5 |
| BNDI | Bandanaira | 3.25 | 23 | P | Pn | 04 14 47.8 | +1.0 |
| AAI | Ambon | 3.86 | 353 | P | Pn | 04 14 56.3 | +1.6 |
| MSAI | Masohi | 4.18 | 4 | P | Pn | 04 15 00.8 | +1.9 |
| NLAI | Namlea | 4.54 | 340 | P | Pn | 04 15 06.4 | +2.7 |
| SOEI | Soe | 4.87 | 243 | P | Pn | 04 15 09.1 | +1.0 |
| SOEI | | | | S | Sn | 04 16 01.8 | -2.2 |
| SOEI | Soe | 4.87 | 243 | ePn | Pn | 04 15 08.8 | +0.7 |
| SOEI | | | | eS | Sn | 04 15 58.0 | -6.0 |
| BATI | Baumata | 5.60 | 241 | P | Pn | 04 15 18.1 | +0.4 |
| | 116nm,0.7s,2μm0.9nm | | | | | | |
| BATI | | | | S | Sn | 04 16 17.1 | -4.2 |
| | 116nm,0.7s,2μm0.9nm | | | | | | |
| MTN | Manton Dam | 5.81 | 155 | P | Pn | 04 15 20.7 | +0.3 |
| | baz=5.8,SNR=270 | | | | | | |
| FAKI | Fak Fak | 5.82 | 38 | P | Pn | 04 15 19.5 | -1.2 |
| | baz=5.9,SNR=15 | | | | | | |
| FAKI | Fak Fak | 5.82 | 38 | P | Pn | 04 15 19.4 | -1.2 |
| | 34nm,1.2s,1μm0.3nm | | | | | | |
| FAKI | | | | S | Sn | 04 16 21.7 | -4.9 |
| | 34nm,1.2s,1μm0.3nm | | | | | | |
| FAKI | Fak Fak | 5.82 | 38 | ePn | Pn | 04 15 19.1 | -1.5 |
| | 20nm,0.4s | | | | | | |
| FAKI | | | | eS | Sn | 04 16 22.3 | -4.3 |
| SANI | Sanana | 6.07 | 334 | P | Pn | 04 15 26.9 | +3.0 |
| | 43nm,1.1s,0.1nm | | | | | | |
| KDU | Kakadu | 6.35 | 144 | P | Pn | 04 15 28.0 | +0.4 |
| | baz=6.3,SNR=288 | | | | | | |
| MMRI | Maumere | 6.45 | 260 | P | Pn | 04 15 32.0 | +3.0 |
| LBMI | Labuha | 6.95 | 350 | P | Pn | 04 15 39.4 | +3.6 |
| | 127nm,0.9s,0.4nm | | | | | | |
| EDFI | Ende, Flores | 7.00 | 260 | P | Pn | 04 15 39.0 | +2.5 |
| SWI | Sorong | 7.12 | 21 | P | Pn | 04 15 37.9 | -0.1 |
| | baz=7.2,SNR=9.2 | | | | | | |
| SWI | Sorong | 7.12 | 21 | P | Pn | 04 15 37.7 | -0.3 |
| | 29nm,0.9s,1μm0.3nm | | | | | | |
| KNRA | Kununurra | 8.09 | 179 | P | Pn | 04 15 50.3 | -0.5 |
| | baz=8.1,SNR=252 | | | | | | |
| KAPI | Kappang | 9.20 | 285 | LR | LR | 04 19 21.7 | |
| | comp=Z,100nm,19.1s,baz=251,slow=36 | | | | | | |
| WBSI | Waikabubak, Su | 9.40 | 257 | P | Pn | 04 16 07.6 | -0.8 |
| | 49nm,0.9s | | | | | | |
| FITZ | Fitzroy Crossi | 10.90 | 195 | P | Pn | 04 16 25.6 | -2.6 |
| | 8.3nm,0.3s,baz=23,slow=10,SNR=253 | | | | | | |
| FITZ | | | | S | Sn | 04 18 19.6 | -9.2 |
| | 4.5nm,0.3s,baz=90,slow=20,SNR=3.3 | | | | | | |
| FITZ | | | | LR | LR | 04 21 24.0 | |
| | comp=Z,97nm,20.6s,baz=245,slow=41 | | | | | | |
| FITZ | Fitzroy Crossi | 10.90 | 195 | P | Pn | 04 16 25.6 | -2.6 |
| | baz=11,SNR=320 | | | | | | |
| FITZ | Fitzroy Crossi | 10.90 | 195 | ePn | Pn | 04 16 25.6 | -2.6 |
| FITZ | | | | eS | Sn | 04 18 23.9 | -4.9 |
| WRAB | Tennant Creek | 13.50 | 156 | ePn | Pn | 04 16 59.6 | -2.3 |
| | 18nm,0.6s | | | | | | |
| WRAB | | | | eS | Sn | 04 19 21.0 | -10 |
| WRA | Warramunga Arr | 13.50 | 156 | P | Pn | 04 16 59.6 | -2.3 |
| | 7.1nm,0.3s,baz=333,slow=13,SNR=54 | | | | | | |
| WRA | | | | S | Sn | 04 19 21.6 | -10 |
| | 6.4nm,0.3s,baz=326,slow=25,SNR=8.3 | | | | | | |
| JAGI | Jajag, Banyuwa | 14.39 | 265 | P | Pn | 04 17 13.7 | +0.5 |
| | baz=14,SNR=3.9 | | | | | | |
| COEN | Coen | 15.62 | 115 | P | P | 04 17 30.7 | +1.3 |
| | baz=16,SNR=5.0 | | | | | | |
| COEN | Coen | 15.62 | 115 | ePn | P | 04 17 29.0 | -0.3 |
| COEN | | | | eS | Sn | 04 20 07.0 | -15 |
| MBWA | Marble Bar | 16.05 | 212 | ePn | P | 04 17 33.2 | -0.9 |
| MBWA | | | | eS | S | 04 20 20.5 | -12 |
| QIS | Mount Isa | 16.73 | 142 | P | Pn | 04 17 43.1 | +1.2 |
| | baz=17,SNR=15 | | | | | | |
| ASAR | Alice Springs | 16.81 | 163 | P | Pn | 04 17 43.1 | +0.2 |
| | 3.2nm,0.3s,baz=337,slow=9.6,SNR=203 | | | | | | |
| ASAR | | | | S | S | 04 20 45.3 | -4.5 |
| | 2.5nm,0.3s,baz=342,slow=26,SNR=6.7 | | | | | | |
| WRKA | Warakurna | 17.40 | 181 | P | Pn | 04 17 49.6 | -0.4 |
| | baz=17,SNR=113 | | | | | | |
| KSM | Kuching | 20.38 | 295 | P | Pn | 04 18 24.2 | -0.9 |
| | baz=20,SNR=5.3 | | | | | | |
| MEEK | Meekatharra | 21.26 | 205 | P | P | 04 18 32.9 | +2.2 |
| | baz=21,SNR=8.4 | | | | | | |
| FORT | Forrest | 23.13 | 181 | P | P | 04 18 51.2 | +2.2 |
| | baz=23,SNR=8.5 | | | | | | |
| QLP | Quilpie | 24.04 | 144 | P | P | 04 19 00.5 | +3.0 |
| | baz=24,SNR=10 | | | | | | |
| MORW | Morawa | 24.49 | 207 | P | P | 04 19 04.4 | +2.8 |
| | baz=24,SNR=6.7 | | | | | | |
| KMBL | Kambalda | 24.54 | 194 | P | P | 04 19 03.8 | +1.8 |
| | baz=25,SNR=7.4 | | | | | | |
| KLBR | Kellerberrin | 26.00 | 202 | P | P | 04 19 17.0 | +1.8 |
| | baz=26,SNR=6.3 | | | | | | |
| BBOO | Buckleboo | 26.07 | 166 | P | P | 04 19 17.8 | +2.1 |
| | baz=26,SNR=5.2 | | | | | | |
| NWAO | Narrogin (SRO) | 27.39 | 201 | P | P | 04 19 30.3 | +2.7 |
| | baz=27,SNR=4.5 | | | | | | |
| HTT | Hallett | 27.46 | 161 | P | P | 04 19 30.1 | +1.8 |
| | baz=28,SNR=6.0 | | | | | | |
| CMSA | Cobar Meteorol | 28.68 | 149 | P | P | 04 19 41.7 | +2.6 |
| | baz=29,SNR=13 | | | | | | |
| ARPS | Mount Arapiles | 31.48 | 159 | P | P | 04 20 07.0 | +3.3 |
| | baz=32,SNR=5.7 | | | | | | |
| CMAR | Chiang Mai Arr | 39.07 | 312 | P | P | 04 21 09.5 | +0.6 |
| | 1.7nm,0.5s,baz=139,slow=6.4,SNR=8.2 | | | | | | |
| KSAR | Wonju Array Be | 44.75 | 359 | P | P | 04 21 54.6 | 0.0 |
| KSRS | Korea Array | 44.76 | 359 | P | P | 04 21 54.6 | -0.1 |
| | 0.6nm,0.5s,baz=183,slow=11,SNR=4.4 | | | | | | |
| ODAN | Odare | 52.62 | 312 | eP | P | 04 22 54.8 | -0.4 |
| | 15nm,0.4s | | | | | | |
| TAPN | Taplejung | 52.66 | 313 | eP | P | 04 22 55.1 | -0.5 |
| | 12nm,0.4s | | | | | | |
| RAMN | Ramite | 53.25 | 312 | eP | P | 04 22 59.6 | -0.3 |
| | 30nm,0.5s | | | | | | |
| GUN | Gumba | 54.31 | 312 | eP | P | 04 23 07.2 | -0.5 |
| | 28nm,0.5s | | | | | | |
| PKI | Pulchoki | 54.47 | 312 | eP | P | 04 23 08.2 | -0.6 |
| | 14nm,0.5s | | | | | | |
| PKIN | Phulchoki | 54.49 | 312 | eP | P | 04 23 07.8 | -1.1 |
| | 9.7nm,0.5s | | | | | | |
| GKN | Gorkha | 55.28 | 312 | eP | P | 04 23 13.8 | -0.6 |
| | 33nm,0.4s | | | | | | |
| KOLN | Koldanda | 55.93 | 311 | eP | P | 04 23 18.7 | -0.4 |
| | 17nm,0.5s | | | | | | |
| SONM | Songino Array | 58.54 | 343 | P | P | 04 23 37.8 | +0.9 |
| | 3.1nm,0.6s,baz=162,slow=6.5,SNR=17 | | | | | | |
| MKAR | Makanchi Array | 67.95 | 328 | P | P | 04 24 39.2 | +0.3 |
| | 5.6nm,0.7s,baz=120,slow=8.9,SNR=30 | | | | | | |
| TKM2 | Tokmak 2 | 69.56 | 321 | eP | P | 04 24 49.5 | +0.3 |
| | 2.3nm,0.7s | | | | | | |
| AAK | Ala-Archa | 70.10 | 320 | eP | P | 04 24 53.4 | +1.0 |
| | 1.4nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 71.48 | 334 | P | P | 04 24 59.9 | -0.4 |
| | 4.3nm,0.5s,baz=135,slow=5.6,SNR=12 | | | | | | |
| VNDA | Vanda | 72.08 | 173 | P | P | 04 25 05.2 | +1.8 |
| | 0.8nm,0.5s,baz=320,slow=6.2,SNR=13 | | | | | | |
| KURK | Kurchatov | 72.29 | 329 | eP | P | 04 25 05.4 | +0.3 |
| | 9.9nm,0.4s | | | | | | |
| MAW | Mawson | 73.96 | 201 | P | P | 04 25 15.6 | +0.9 |
| | 1.3nm,0.8s,baz=79,slow=7.1,SNR=4.2 | | | | | | |
| BRVK | Borovoye | 77.89 | 328 | eP | P | 04 25 37.1 | -0.1 |
| | 4.9nm,0.9s | | | | | | |
| ABKAR | Akbulak array | 82.11 | 322 | eP | P | 04 25 59.8 | -0.1 |
| | 7.2nm,0.6s | | | | | | |
| QSPA | South Pole Qui | 82.44 | 180 | eP | P | 04 26 02.8 | +1.2 |
| | 2.0nm,0.7s | | | | | | |
| ILAR | Eielson Array | 94.40 | 25 | P | P | 04 26 57.3 | -1.4 |
| | 0.3nm,0.7s,baz=263,slow=4.3,SNR=4.3 | | | | | | |
| TXAR | Lajitas Array | 126.35 | 59 | PKP | PKPdf | 04 32 42.4 | +0.5 |
| | 0.2nm,0.5s,baz=172,slow=2.7,SNR=3.3 | | | | | | |
| TORD | Torodi Ar. Bea | 127.60 | 281 | PKP | PKPdf | 04 32 44.7 | +0.2 |
| | 1.0nm,0.8s,baz=36,slow=2.2,SNR=6.2 | | | | | | |
| LPAZ | La Paz | 151.08 | 145 | PKPbc | PKPbc | 04 33 35.3 | +2.0 |
| | 2.1nm,0.4s,baz=225,slow=2.9,SNR=29 | | | | | | |

*ISCJB 07 04:18:10.7±0.4, 16°.06S±0°.03×69°.55W±0°.08, h213km, mb3.8/9, Error ellipse: s-maj=10.9km s-min=4.5km az=174.9*

*IDC 07 04:18:13.3±0.7, 15°.99S×69°.46W, h233km±5km, mb3.6/10, mb1 3.6/14, mb1mx3.6/33, mbtmp4.2/14, Error ellipse: s-maj=18.9km s-min=11.5km az=29.0*

**ISC 07 04:18:11.0±0.6, 16°.12S±0°.06×69°.63W±0°.08, h213km, n32, σ1s.77/36, mb3.8/9, 3C, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 1.45 | 97 | P | Pn | 04 18 50.2 | +4.0 |
| | 128nm,0.3s,baz=318,slow=6.6,SNR=5144 | | | | | | |
| LPAZ | | | | S | S | 04 19 17.5 | +4.3 |
| | 42nm,0.3s,baz=34,slow=23,SNR=24 | | | | | | |
| PB13 | IPOC Station P | 2.21 | 177⇑ | eP | Pn | 04 18 58.3 | +5.0 |
| PB13 | | | | eS | S | 04 19 33.8 | +7.7 |
| PB13 | | | | AML | AML | 04 19 35.1 | |
| | comp=N,5μm,0.5s | | | | | | |
| MNMC | Minimini | 3.00 | 179⇑ | eP | Pn | 04 19 05.3 | +3.7 |
| MNMC | | | | eS | S | 04 19 44.8 | +3.8 |
| MNMC | | | | AML | AML | 04 19 49.1 | |
| | comp=E,4μm,0.4s | | | | | | |
| PB01 | IPOC Station P | 4.90 | 178 | eP | Pn | 04 19 25.9 | +1.3 |
| PB01 | | | | eS | S | 04 20 21.9 | -0.7 |
| PB01 | | | | AML | AML | 04 20 25.5 | |
| | comp=E,1μm,0.6s | | | | | | |
| PB07 | IPOC Station P | 5.59 | 182⇑ | eP | Pn | 04 19 35.4 | +2.0 |
| PB07 | | | | eS | S | 04 20 38.6 | +0.1 |
| PB04 | IPOC Station P | 6.21 | 184 | eP | Pn | 04 19 41.8 | +0.5 |
| PB04 | | | | eS | S | 04 20 51.0 | -1.9 |
| LVC | Limon Verde | 6.50 | 174 | P | Pn | 04 19 47.8 | +2.7 |
| | comp=E,1μm,0.3s,baz=10,slow=11,SNR=238 | | | | | | |
| LVC | | | | S | S | 04 20 59.5 | -0.4 |
| | comp=E,944nm,0.3s,baz=66,slow=20,SNR=6.6 | | | | | | |
| PB06 | IPOC Station P | 6.56 | 180 | eP | Pn | 04 19 47.2 | +1.5 |
| PB06 | | | | eS | S | 04 20 59.3 | -1.7 |
| YJA | Yavi | 7.17 | 148 | eP | Pn | 04 19 56.2 | +2.2 |
| YJA | | | | eS | S | 04 20 41.8 | -34 |
| PB10 | IPOC Station P | 7.41 | 187 | eP | Pn | 04 19 58.5 | +1.9 |
| PB10 | | | | eS | S | 04 21 19.8 | -1.1 |
| HJA | Humahuaca | 8.10 | 151 | eP | Pn | 04 20 07.8 | +1.8 |
| NNA | Nana | 8.11 | 299 | P | Pn | 04 20 09.8 | +3.9 |
| | comp=E,0.9nm,0.3s,baz=121,slow=12,SNR=2.4 | | | | | | |
| NNA | | | | S | S | 04 21 48.9 | +11 |
| | comp=E,3.6nm,0.3s,baz=219,slow=14,SNR=4.1 | | | | | | |
| AZAP | Zapla | 9.13 | 153 | eP | Pn | 04 20 19.5 | +0.3 |
| AZAP | | | | AML | AML | 04 22 05.6 | |
| | comp=Z,18nm,0.7s | | | | | | |
| ASTB | Santa Barbara | 9.17 | 149 | eP | Pn | 04 20 20.5 | +0.9 |
| SLA | San Lorenzo | 9.39 | 156 | eP | Pn | 04 20 23.6 | +1.1 |
| SLA | | | | AML | AML | 04 22 12.2 | |
| | comp=Z,8.7nm,0.6s | | | | | | |
| FSA | Cafayete | 10.48 | 162 | eP | Pn | 04 20 38.3 | +1.8 |
| AHML | Horco Molle | 11.34 | 160 | eP | Pn | 04 20 48.0 | +0.7 |
| ATAH | Atahualpa | 12.38 | 315 | P | Pn | 04 21 02.4 | +1.6 |
| | comp=Z,0.6nm,0.3s,baz=148,slow=19,SNR=4.1 | | | | | | |
| CFAA | Coronel Fontan | 15.47 | 176 | P | Pn | 04 21 42.1 | +3.7 |
| | comp=Z,0.2nm,0.3s,baz=354,slow=12,SNR=20 | | | | | | |
| PTGA | Pitinga | 18.01 | 33 | P | P | 04 22 06.5 | +0.2 |
| | comp=Z,1.7nm,0.3s,baz=212,slow=11,SNR=26 | | | | | | |
| BDFB | Brasilia | 20.80 | 92 | P | P | 04 22 36.4 | 0.0 |
| | comp=Z,6.4nm,0.5s,baz=264,slow=12,SNR=14 | | | | | | |
| ROSC | El Rosal | 21.35 | 347 | P | P | 04 22 41.5 | -0.9 |
| | comp=Z,2.9nm,0.4s,baz=108,slow=20,SNR=3.0 | | | | | | |
| CMIG | Matias Romero | 41.34 | 322 | P | P | 04 25 38.2 | +1.9 |
| | comp=Z,1.8nm,0.5s,baz=137,slow=3.9,SNR=6.0 | | | | | | |
| TXAR | Lajitas Array | 55.87 | 324 | P | P | 04 27 27.5 | +0.6 |
| | comp=Z,0.8nm,0.6s,baz=144,slow=9.3,SNR=8.0 | | | | | | |
| DBIC | Dimbokro | 67.97 | 76 | P | P | 04 28 46.5 | -1.2 |
| | comp=Z,3.3nm,0.5s,baz=218,slow=5.2,SNR=14 | | | | | | |
| ULM | Lac du Bonnet | 70.00 | 342 | P | P | 04 28 57.8 | -1.6 |
| | comp=Z,2.4nm,0.4s,baz=143,slow=10,SNR=3.3 | | | | | | |
| NVAR | Mina Array Bea | 70.87 | 321 | P | P | 04 29 04.5 | -0.7 |
| | comp=Z,0.5nm,0.8s,baz=139,slow=6.2,SNR=4.5 | | | | | | |
| TORD | Torodi Ar. Bea | 76.26 | 72 | P | P | 04 29 35.4 | -1.4 |
| | comp=Z,2.7nm,0.4s,baz=266,slow=5.3,SNR=77 | | | | | | |
| ESDC | Sonseca Array | 82.52 | 45 | P | P | 04 30 09.9 | -0.2 |
| | comp=Z,0.4nm,0.4s,baz=256,slow=5.2,SNR=4.7 | | | | | | |
| YKA | Yellowknife Ar | 85.91 | 341 | P | P | 04 30 25.8 | -0.7 |
| | comp=Z,1.1nm,0.9s,baz=131,slow=4.9,SNR=7.1 | | | | | | |
| ASAR | Alice Springs | 134.26 | 211 | PKP | PKPdf | 04 37 05.0 | +0.7 |
| | comp=Z,0.2nm,0.5s,baz=103,slow=1.4,SNR=4.0 | | | | | | |
| WRA | Warramunga Arr | 137.12 | 214 | PKP | PKPdf | 04 37 11.0 | +1.4 |
| | comp=Z,0.3nm,0.4s,baz=145,slow=2.0,SNR=3.1 | | | | | | |

**IDC 07 04:27:17.2±8.5, 19°.20S×174°.31W, h0km, mb3.7/3, mb1 4.0/3, mb1mx3.6/25, mbtmp3.7/3, Error ellipse: s-maj=370.8km s-min=37.8km az=142.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 48.20 | 255 | P | P | 04 36 00.2 | +0.3 |
| | 2.0nm,0.6s,baz=90,slow=8.6,SNR=38 | | | | | | |
| WRA | Warramunga Arr | 48.23 | 260 | P | P | 04 35 59.4 | -0.7 |
| | 0.2nm,0.2s,baz=99,slow=6.2,SNR=4.0 | | | | | | |
| ILAR | Eielson Array | 86.32 | 11 | P | P | 04 40 00.7 | 0.0 |
| | 0.2nm,0.5s,baz=219,slow=6.1,SNR=6.4 | | | | | | |

*CSEM 07 04:49:01.7±0.1, 42°.56N×20°.17E, h2km, ML3.1, Error ellipse: s-maj=3.1km s-min=2.3km az=162.0*

*SKO 07 04:49:02.8, 42°.50N×20°.14E, h1km*

*PDG 07 04:49:02.2±0.3, 42°.55N×20°.13E, h9km, MD2.7/3, ML2.7/11, Error ellipse: s-maj=0.4km s-min=0.6km az=0.0*

*BEO 07 04:49:03.2±0.3, 42°.57N×20°.15E, h0km, ML2.4/1*

**ISC 07 04:49:02.2±1.1, 42°.54N±0°.02×20°.14E±0°.02, h3km±9km, n60, σ0s.69/103, 18C-16D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PVY | Plav | 0.14 | 294⇑ | iPg | Pg | 04 49 05.0 | -0.1 |
| PVY | | | | eSg | Sg | 04 49 07.6 | +0.5 |
| PVY | Plav | 0.14 | 294⇑ | iPg | Pg | 04 49 05.0 | -0.1 |
| PVY | | | | eSg | Sg | 04 49 07.6 | +0.5 |
| PEJK | Peje | 0.15 | 44 | P | Pg | 04 49 05.1 | -0.1 |
| PEJK | | | | S | Sg | 04 49 07.7 | +0.5 |
| BEY | Berane | 0.38 | 332 | P | Pg | 04 49 09.1 | -0.5 |
| BEY | | | | eSg | Sg | 04 49 14.9 | +0.3 |
| IVA | Berane | 0.38 | 332 | ePg | Pg | 04 49 09.0 | -0.5 |
| IVA | | | | eSg | Sg | 04 49 14.9 | +0.3 |
| PDG | Podgorica | 0.66 | 261⇓ | iPg | Pg | 04 49 14.0 | -0.9 |
| PDG | | | | eSg | Sg | 04 49 23.8 | +0.3 |
| PDG | Podgorica | 0.66 | 261⇓ | iPg | Pg | 04 49 14.0 | -0.9 |
| PDG | | | | eSg | Sg | 04 49 23.8 | +0.3 |
| TTG | Podgorica | 0.66 | 261⇓ | iPg | Pg | 04 49 14.0 | -0.9 |
| TTG | | | | eSg | Sg | 04 49 24.7 | +1.2 |
| SMRK | Smrekonice | 0.68 | 60 | P | Pg | 04 49 14.9 | -0.4 |
| SMRK | | | | S | Sg | 04 49 24.7 | +0.6 |
| SJES | Sjenica | 0.73 | 351⇑ | iPg | Pg | 04 49 15.4 | -0.9 |
| SJES | | | | eSg | Sg | 04 49 25.7 | -0.2 |
| DRME | Dracevica, Mon | 0.79 | 244⇓ | iPg | Pg | 04 49 16.2 | -1.1 |
| DRME | | | | eSg | Sb | 04 49 29.1 | -0.6 |
| DRME | Dracevica, Mon | 0.79 | 244⇓ | iPg | Pg | 04 49 16.2 | -1.1 |
| DRME | | | | eSg | Sb | 04 49 29.1 | -0.6 |
| ULC | Ulcinj | 0.88 | 229⇑ | iPg | Pg | 04 49 18.8 | -0.2 |
| ULC | | | | eSg | Sb | 04 49 32.5 | +0.3 |
| ULC | Ulcinj | 0.88 | 229⇑ | iPg | Pg | 04 49 18.8 | -0.2 |
| ULC | Ulcinj | 0.88 | 229 | P | Pg | 04 49 19.2 | +0.2 |
| ULC | | | | eSg | Sb | 04 49 32.5 | +0.3 |
| NKY | Niksic | 0.89 | 289⇑ | iPg | Pg | 04 49 18.8 | -0.5 |
| NKY | | | | eSg | Sb | 04 49 32.3 | -0.4 |
| NKY | Niksic | 0.89 | 289⇑ | iPg | Pg | 04 49 18.8 | -0.5 |
| NKY | | | | eSg | Sb | 04 49 32.3 | -0.4 |
| NKME | Niksic | 0.90 | 285⇑ | iPg | Pg | 04 49 19.0 | -0.6 |
| NKME | | | | eSg | Sb | 04 49 32.8 | -0.3 |
| NKME | Niksic | 0.90 | 285⇑ | iPg | Pg | 04 49 19.0 | -0.6 |
| NKME | | | | eSg | Sb | 04 49 32.8 | -0.3 |
| BUM | Brajici-Budva | 0.95 | 256⇓ | iPg | Pg | 04 49 19.6 | -0.9 |
| BUM | | | | eSg | Sb | 04 49 34.4 | 0.0 |
| BUM | Brajici-Budva | 0.95 | 256⇓ | iPg | Pg | 04 49 19.6 | -0.9 |
| BUM | | | | eSg | Sb | 04 49 34.4 | 0.0 |
| GJIK | Gjilan | 0.96 | 94 | P | Pg | 04 49 20.4 | -0.3 |
| PLE | Pljevlja | 0.96 | 326⇓ | iPg | Pg | 04 49 19.9 | -0.9 |
| PLE | | | | eSg | Sg | 04 49 34.6 | +1.3 |
| PLE | Pljevlja | 0.96 | 326⇓ | iPg | Pg | 04 49 19.9 | -0.9 |
| PLE | | | | eSg | Sg | 04 49 34.6 | +1.3 |
| SELS | Selova | 0.99 | 46 | i Pg | Pg | 04 49 20.0 | -1.3 |
| SELS | | | | eSg | Sg | 04 49 33.5 | -0.7 |
| SKO | Skopje | 1.12 | 120 | ePg | Pg | 04 49 23.2 | -0.5 |
| SKO | | | | i Sg | Sg | 04 49 38.2 | 0.0 |
| SKO | Skopje | 1.12 | 120 | ePg | Pg | 04 49 23.2 | -0.5 |
| SKO | | | | i Sg | Sg | 04 49 38.1 | 0.0 |
| UPM | Unac-Piva | 1.12 | 307⇓ | iPg | Pg | 04 49 22.6 | -1.2 |
| UPM | | | | eSg | Sb | 04 49 40.1 | +0.5 |
| UPM | Unac-Piva | 1.12 | 307⇓ | iPg | Pg | 04 49 22.6 | -1.2 |
| UPM | Unac-Piva | 1.12 | 307 | P | Pg | 04 49 23.0 | -0.8 |
| UPM | | | | eSg | Sb | 04 49 40.1 | +0.5 |
| TIR | Tirane | 1.21 | 190 | ePg | Pg | 04 49 25.0 | -0.3 |
| TIR | | | | eSg | Sn | 04 49 43.0 | +0.2 |
| TIR | Tirane | 1.21 | 190 | ePg | Pg | 04 49 25.0 | -0.3 |
| TIR | | | | eSg | Sn | 04 49 43.0 | +0.2 |
| HCY | Herceg Novi | 1.22 | 266⇑ | iPg | Pg | 04 49 24.7 | -0.9 |
| HCY | | | | eSg | Sn | 04 49 43.9 | +0.7 |
| HCY | Herceg Novi | 1.22 | 266⇑ | iPg | Pg | 04 49 24.7 | -0.9 |
| HCY | | | | eSg | Sn | 04 49 43.9 | +0.7 |
| BRY | Bratogost | 1.23 | 288⇓ | iPg | Pg | 04 49 24.7 | -1.2 |

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BRY | | | | eSg | Sn | 04 49 44.1 | +0.3 |
| BRY | Bratogost | 1.23 | 288 | ⇓iPg | Pg | 04 49 24.7 | -1.2 |
| BRY | | | | eSg | Sn | 04 49 44.1 | +0.3 |
| BARS | Barje | 1.27 | 77 | ⇑iPg | Pg | 04 49 26.2 | -0.3 |
| BARS | | | | eSg | Sn | 04 49 44.1 | -0.3 |
| BARS | Barje | 1.27 | 77 | ⇑iPg | Pg | 04 49 26.2 | -0.3 |
| BARS | | | | eSg | Sn | 04 49 44.1 | -0.3 |
| GRUS | Gruza | 1.42 | 17 | ⇑iPg | Pn | 04 49 28.8 | -0.1 |
| GRUS | | | | eSg | Sg | 04 49 47.4 | -0.3 |
| GRUS | Gruza | 1.42 | 17 | ⇑iPg | Pn | 04 49 28.8 | -0.1 |
| GRUS | | | | eSg | Sg | 04 49 47.4 | -0.3 |
| BBLS | Lazići | 1.43 | 338 | ⇓ePg | Pn | 04 49 28.1 | -1.1 |
| BBLS | Lazići | 1.43 | 338 | ⇓ePg | Pn | 04 49 28.1 | -1.1 |
| OHR | Ohrid | 1.51 | 161 | i Pn | Pg | 04 49 31.0 | -0.2 |
| OHR | | | | i Sg | Sg | 04 49 49.9 | -0.7 |
| OHR | Ohrid | 1.51 | 161 | i Pn | Pg | 04 49 30.9 | -0.2 |
| OHR | | | | i Sg | Sg | 04 49 49.9 | -0.7 |
| DIVS | Divibare | 1.56 | 356 | ⇓iP | Pg | 04 49 40.3 | +8.1 |
| TRUS | Trudelj | 1.70 | 7 | ePg | Pn | 04 49 33.2 | +0.4 |
| TRUS | | | | eSg | Sg | 04 49 56.8 | 0.0 |
| TRUS | Trudelj | 1.70 | 7 | ePg | Pn | 04 49 33.2 | +0.4 |
| TRUS | | | | eSg | Sg | 04 49 56.8 | 0.0 |
| STON | Ston | 1.83 | 281 | ePn | Pb | 04 49 36.2 | -0.1 |
| STON | | | | eSg | Sg | 04 50 02.8 | +1.9 |
| STON | Ston | 1.83 | 281 | ePn | Pb | 04 49 36.2 | -0.1 |
| STON | | | | eSg | Sg | 04 50 02.8 | +1.9 |
| BOLS | Boljevac | 1.85 | 45 | ePg | Pn | 04 49 35.7 | +0.8 |
| BOLS | Boljevac | 1.85 | 45 | ePg | Pn | 04 49 35.7 | +0.8 |
| ZAPS | Zavoj | 1.98 | 67 | ePg | Pn | 04 49 37.1 | +0.4 |
| ZAPS | Zavoj | 1.98 | 67 | ePg | Pn | 04 49 37.1 | +0.4 |
| TEKS | Tekeris | 2.06 | 348 | ePn | Pn | 04 49 37.5 | -0.3 |
| TEKS | Tekeris | 2.06 | 348 | ePn | Pn | 04 49 37.5 | -0.3 |
| KUBS | Kucevo | 2.18 | 30 | ePg | Pb | 04 49 42.6 | +0.2 |
| KUBS | | | | eSg | Sb | 04 50 10.8 | +0.9 |
| KUBS | Kucevo | 2.18 | 30 | ePg | Pb | 04 49 42.6 | +0.2 |
| KUBS | | | | eSg | Sb | 04 50 10.8 | +0.9 |
| BZS | Buzias | 3.26 | 19 | ⇑iP | Pn | 04 49 54.1 | -0.1 |
| BZS | Buzias | 3.26 | 19 | ⇑iP | Pn | 04 49 54.1 | -0.1 |
| LOT | Lotru | 3.92 | 41 | ⇑iP | Pg | 04 50 23.7 | +6.4 |

*ISCJB **07** 05:04:53.0±0.9, 34°.11N±0°.03×25°.23E±0°.07, h21km±8km, Error ellipse: s-maj=9.3km s-min=4.8km az=170.0*
*ATH **07** 05:04:53.7, 34°.19N×25°.21E, h28km±1km, MD3.3/7*
*CSEM **07** 05:04:54.7±0.2, 34°.19N×25°.21E, h20km, MD3.3, Error ellipse: s-maj=5.1km s-min=3.0km az=85.0*
*THE **07** 05:04:55.3, 34°.27N×25°.20E, h4km±1km, Error ellipse: s-maj=1.9km s-min=0.6km az=255.0*
*HLW **07** 05:04:57.8, 33°.88N×25°.76E, h14km±4km, Md3.0, Ml3.0*
**ISC 07 05:04:54.2**±1.2**, 34°.16N**±0°.03×**25°.21E**±0°.05**, h22**km±5km**, n30, σ0s.80**/48**, Crete**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIVA | Sivas | 0.91 | 339 | ePN | Pb | 05 05 11.1 | -0.3 |
| SIVA | | | | eSN | Sn | 05 05 24.3 | 0.0 |
| SIVA | Sivas | 0.91 | 339 | P | Pb | 05 05 11.0 | -0.3 |
| SIVA | | | | S | Sb | 05 05 23.2 | +0.1 |
| SIVA | Sivas | 0.91 | 339 | P | Pb | 05 05 11.0 | -0.3 |
| SIVA | | | | S | Sb | 05 05 23.2 | +0.1 |
| SIVA | | | | eSn | Sn | 05 05 24.3 | 0.0 |
| LAST | Lasithi | 1.02 | 12 | ePN | Pb | 05 05 12.6 | -0.6 |
| LAST | | | | eSN | Sn | 05 05 27.0 | 0.0 |
| LAST | Lasithi | 1.02 | 12 | P | Pb | 05 05 12.6 | -0.6 |
| LAST | | | | S | Sb | 05 05 26.4 | +0.2 |
| LAST | Lasithi | 1.02 | 12 | P | Pb | 05 05 12.6 | -0.6 |
| LAST | | | | S | Sb | 05 05 26.4 | +0.2 |
| LAST | | | | eSn | Sn | 05 05 27.0 | 0.0 |
| NPS | Neapolis | 1.15 | 17 | ePN | Pn | 05 05 14.5 | -0.5 |
| NPS | Neapolis | 1.15 | 17 | ePn | Pn | 05 05 14.5 | -0.5 |
| IDI | Anoyia | 1.15 | 347 | ePN | Pn | 05 05 14.9 | -0.2 |
| IDI | | | | eSN | Sn | 05 05 30.6 | +0.3 |
| IDI | Anoyia | 1.15 | 347 | P | Pn | 05 05 14.8 | -0.3 |
| IDI | | | | S | Sb | 05 05 30.2 | +0.2 |
| IDI | Anoyia | 1.15 | 347 | P | Pn | 05 05 14.8 | -0.3 |
| IDI | | | | S | Sb | 05 05 30.2 | +0.2 |
| IDI | | | | eSn | Sn | 05 05 30.6 | +0.3 |
| ZKR | Zakros | 1.26 | 41 | P | Pb | 05 05 17.2 | -0.1 |
| ZKR | | | | S | Sb | 05 05 33.8 | +0.8 |
| ZKR | Zakros | 1.26 | 41 | P | Pb | 05 05 17.2 | -0.1 |
| ZKR | | | | S | Sb | 05 05 33.8 | +0.8 |
| VAM | Vamos | 1.49 | 326 | ePN | Pn | 05 05 20.4 | +0.7 |
| VAM | Vamos | 1.49 | 326 | P | Pn | 05 05 19.9 | +0.2 |
| VAM | Vamos | 1.49 | 326 | P | Pn | 05 05 19.9 | +0.2 |
| VAM | Vamos | 1.49 | 326 | ePn | Pn | 05 05 20.4 | +0.7 |
| KARP | Karpathos | 2.12 | 49 | ePB | Pn | 05 05 29.5 | +1.2 |
| KARP | Karpathos | 2.12 | 49 | P | Pn | 05 05 29.3 | +1.0 |
| KARP | Karpathos | 2.12 | 49 | P | Pn | 05 05 29.3 | +1.0 |
| ANKY | Antikythira Is | 2.31 | 318 | ePN | Pn | 05 05 31.9 | +0.9 |
| ANKY | Antikythira Is | 2.31 | 318 | ePn | Pn | 05 05 31.9 | +0.9 |
| SLUM | | 2.66 | 180 | P | Pn | 05 05 37.2 | +1.4 |
| | baz=192 | | | | | | |
| SLUM | | | | S | Sn | 05 06 07.0 | -0.4 |
| | baz=192 | | | | | | |
| SLUM | | 2.66 | 180 | P | Pn | 05 05 37.2 | +1.4 |
| SLUM | | | | S | Sn | 05 06 07.0 | -0.4 |
| KYTH | Kithira | 2.76 | 320 | P | Pn | 05 05 38.0 | +0.8 |
| KYTH | Kithira | 2.76 | 320 | P | Pn | 05 05 38.0 | +0.8 |
| SWA2 | | 4.91 | 178 | P | Pn | 05 06 07.7 | +1.0 |
| | baz=184 | | | | | | |
| SWA2 | | | | S | Sn | 05 07 00.9 | -1.9 |
| | baz=184 | | | | | | |
| SWA2 | | 4.91 | 178 | P | Pn | 05 06 07.7 | +1.0 |
| SWA2 | | | | S | Sn | 05 07 00.9 | -1.9 |
| HFRF | Wahat Farafira | 7.48 | 158 | P | Pn | 05 06 41.6 | -0.5 |
| | baz=161 | | | | | | |
| AMAG | Maghara | 7.62 | 115 | P | Pn | 05 06 42.1 | -1.9 |
| | baz=115 | | | | | | |

*NEIC **07** 05:09:43.6, 59°.31N×136°.30W, h1km, ML2.6(OTT), After OTT.*
**PGC 07 05:09:43.6**±0.1**, 59°.31N×136°.30W, h1km, ML2.6**/4**, 64km west of Haines, Ak Southeastern Alaska, Southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PLBC | Pleasant Camp | 0.15 | 347 | P | Pg | 05 09 46.3 | -0.3 |
| PLBC | | | | S | Sg | 05 09 48.3 | -0.3 |
| PLBC | Pleasant Camp | 0.15 | 347 | P | Pg | 05 09 46.3 | -0.3 |
| PLBC | | | | S | Sg | 05 09 48.3 | -0.3 |
| WHY | Whitehorse | 1.53 | 27 | Pn | Pn | 05 10 11.1 | -1.1 |
| WHY | | | | Sg | Sn | 05 10 31.2 | -1.7 |
| WHY | Whitehorse | 1.53 | 27 | Pn | Pn | 05 10 11.1 | -1.1 |
| WHY | | | | Sg | Sn | 05 10 12.7 | -20 |
| HYT | Haines Junctio | 1.64 | 339 | Pn | Pn | 05 10 12.7 | -1.1 |
| HYT | | | | Sg | Sn | 05 10 35.7 | +0.1 |
| HYT | Haines Junctio | 1.64 | 339 | Pn | Pn | 05 10 12.7 | -1.1 |
| HYT | | | | Sg | Sn | 05 10 35.7 | +0.1 |
| YUK4 | Talbot Arm | 2.35 | 331 | Pg | Pb | 05 10 27.1 | +0.1 |
| YUK4 | | | | Sg | Sg | 05 10 59.7 | 0.0 |
| YUK4 | Talbot Arm | 2.35 | 331 | Pg | Pb | 05 10 27.1 | +0.1 |
| YUK4 | | | | Sg | Sg | 05 10 59.7 | 0.0 |
| YUK3 | Moose Creek | 3.22 | 322 | Pn | Pn | 05 10 35.0 | -0.5 |
| YUK3 | | | | Pg | Pb | 05 10 42.0 | +0.2 |
| YUK3 | | | | Sg | Sg | 05 11 26.0 | -1.5 |
| YUK3 | Moose Creek | 3.22 | 322 | Pn | Pn | 05 10 35.0 | -0.5 |
| YUK3 | | | | Pg | Pb | 05 10 42.0 | +0.2 |
| YUK3 | | | | Sg | Sg | 05 11 26.0 | -1.5 |
| YUK2 | White River | 3.35 | 320 | Pn | Pn | 05 10 37.2 | 0.0 |
| YUK2 | | | | Sg | Sg | 05 11 29.9 | -1.6 |
| YUK2 | White River | 3.35 | 320 | Pn | Pn | 05 10 37.2 | 0.0 |
| YUK2 | | | | Sg | Sg | 05 11 29.9 | -1.6 |
| DLBC | Dease Lake | 3.37 | 102 | Pn | Pn | 05 10 34.3 | -3.2 |
| DLBC | | | | Sg | Sb | 05 11 27.7 | +1.9 |
| DLBC | Dease Lake | 3.37 | 102 | Pn | Pn | 05 10 34.3 | -3.2 |
| DLBC | | | | Sg | Sb | 05 11 27.7 | +1.9 |
| YUK1 | Sand Pete Hill | 3.53 | 326 | Pg | Pb | 05 10 46.9 | -0.1 |
| YUK1 | | | | Sg | Sg | 05 11 38.2 | +0.8 |
| YUK1 | Sand Pete Hill | 3.53 | 326 | Pg | Pb | 05 10 46.9 | -0.1 |
| YUK1 | | | | Sg | Sg | 05 11 38.2 | +0.8 |
| WRAK | Wrangell Islan | 3.58 | 142 | Pn | Pn | 05 10 37.1 | -3.1 |
| WRAK | | | | ePg | Pb | 05 10 49.9 | +2.2 |
| WRAK | | | | eSn | Sn | 05 11 27.1 | +4.0 |
| BVCY | Beaver Creek | 3.83 | 326 | Pg | Pb | 05 10 52.4 | +0.3 |
| BVCY | Beaver Creek | 3.83 | 326 | Pg | Pb | 05 10 52.4 | +0.3 |
| DAWY | Dawson | 5.00 | 344 | Sg | Sg | 05 12 19.5 | -4.6 |
| DAWY | Dawson | 5.00 | 344 | Sg | Sg | 05 12 19.5 | -4.6 |

**IDC 07 05:17:28.0**±7.1**, 17°.81S×176°.72W, h0km, mb4.2**/2**, mb1 4.5**/2**, mb1mx3.7**/29**, mbtmp4.2**/2**, Error ellipse: s-maj=364.8km s-min=53.7km az=146.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 46.23 | 259 | P | P | 05 25 55.0 | -0.5 |
| | 1.2nm,0.7s,baz=94,slow=7.5,SNR=7.3 | | | | | | |
| ASAR | Alice Springs | 46.37 | 254 | P | P | 05 25 56.5 | +0.1 |
| | 5.0nm,0.5s,baz=89,slow=8.2,SNR=77 | | | | | | |
| GERES | GERESS Array B | 147.91 | 347 | PKPbc | PKPbc | 05 37 14.7 | -0.7 |
| | 0.3nm,0.3s,baz=353,slow=5.4,SNR=3.7 | | | | | | |

*GUC **07** 05:32:43.0±0.3, 17°.15S×71°.81W, h40km±74km, ML4.3*
*IDC **07** 05:32:44.7±6.3, 16°.73S×71°.35W, h137km±38km, mb3.6/3, mb1 3.7/6, mb1mx3.4/32, mbtmp4.2/6, Error ellipse: s-maj=79.2km s-min=23.3km az=129.0*
**ISC 07 05:32:45.6**±1.7**, 16°.96S**±0°.08×**71°.3W**±0°.1**, h150km, n13, σ1s.32**/21**, mb3.7**/3**, Southern Peru**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB13 | IPOC Station P | 2.22 | 128 | eP | Pn | 05 33 24.1 | +0.1 |
| PB13 | | | | eS | Sn | 05 33 55.4 | +2.1 |
| PB13 | | | | AML | AML | 05 33 57.9 | |
| | comp=N,3μm,0.2s | | | | | | |
| MNMC | Minimini | 2.72 | 143 | eP | Pn | 05 33 28.8 | -1.0 |
| MNMC | | | | eS | Sn | 05 34 03.5 | -0.2 |
| MNMC | | | | AML | AML | 05 34 13.4 | |
| | comp=E,579nm,0.3s | | | | | | |
| LPAZ | La Paz | 3.14 | 78 | P | Pn | 05 33 34.4 | -1.0 |
| | comp=E,35nm,0.3s,baz=279,slow=9.9,SNR=1138 | | | | | | |
| LPAZ | | | | S | Sn | 05 34 11.9 | -1.9 |
| | baz=55,slow=19,SNR=2.1 | | | | | | |
| PB01 | IPOC Station P | 4.42 | 157 | eP | Pn | 05 33 50.9 | -0.5 |
| PB01 | | | | eS | Sn | 05 34 41.7 | -1.1 |
| PB07 | IPOC Station P | 4.93 | 164 | eP | Pn | 05 33 57.1 | -1.3 |
| PB07 | | | | eS | Sn | 05 34 53.4 | -1.6 |
| PB04 | IPOC Station P | 5.46 | 168 | eP | Pn | 05 34 03.7 | -1.6 |
| PB04 | | | | eS | Sn | 05 35 05.2 | -2.3 |
| PB06 | IPOC Station P | 5.95 | 164 | eP | Pn | 05 34 11.1 | -0.8 |
| PB06 | | | | eS | Sn | 05 35 17.8 | -1.4 |
| LVC | Limon Verde | 6.07 | 158 | P | Pn | 05 34 14.2 | +0.7 |
| | comp=E,96nm,0.3s,baz=2.0,slow=7.3,SNR=17 | | | | | | |
| LVC | | | | S | Sn | 05 35 22.5 | +0.4 |
| | comp=E,150nm,0.3s,baz=251,slow=23,SNR=12 | | | | | | |
| SIV | San Ignacio | 9.89 | 86 | P | Pn | 05 35 03.4 | -0.9 |
| | comp=E,1.0nm,0.3s,baz=287,slow=11,SNR=13 | | | | | | |
| CFAA | Coronel Fontan | 14.85 | 170 | P | P | 05 36 12.1 | +2.0 |
| | comp=E,0.0nm,0.3s,baz=339,slow=12,SNR=4.0 | | | | | | |
| BDFB | Brasilia | 22.42 | 90 | P | P | 05 37 32.4 | +0.1 |
| | comp=E,1.2nm,0.3s,baz=262,slow=10,SNR=5.3 | | | | | | |
| DBIC | Dimbokro | 69.76 | 76 | P | P | 05 43 40.4 | +0.3 |
| | comp=E,2.6nm,0.8s,baz=222,slow=7.9,SNR=4.1 | | | | | | |
| TORD | Torodi Ar. Bea | 78.08 | 72 | P | P | 05 44 28.6 | +0.2 |
| | comp=E,0.5nm,0.4s,baz=269,slow=4.5,SNR=13 | | | | | | |

**GUC 07 05:45:45.6**±0.3**, 23°.80S×67°.68W, h228**km±9km**, ML3.9, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB06 | IPOC Station P | 2.06 | 302 | eP | Pn | 05 46 28.6 | +1.5 |
| PB06 | | | | eS | S | 05 47 01.2 | +1.8 |
| PB06 | | | | AML | AML | 05 47 04.3 | |
| | comp=N,307nm,0.1s | | | | | | |
| PB10 | IPOC Station P | 2.65 | 276 | eP | Pn | 05 46 34.8 | +1.8 |
| PB10 | | | | eS | S | 05 47 11.8 | +1.8 |
| PB10 | | | | AML | AML | 05 47 17.3 | |
| | comp=E,373nm,0.3s | | | | | | |
| PB04 | IPOC Station P | 2.70 | 302 | eP | Pn | 05 46 35.7 | +1.9 |
| PB04 | | | | eS | S | 05 47 14.0 | +2.5 |
| PB04 | | | | AML | AML | 05 47 20.7 | |
| | comp=N,164nm,0.3s | | | | | | |
| PB07 | IPOC Station P | 2.90 | 315 | eP | Pn | 05 46 37.9 | +2.0 |
| PB07 | | | | eS | S | 05 47 17.7 | +2.3 |
| PB07 | | | | AML | AML | 05 47 25.7 | |
| | comp=E,128nm,0.7s | | | | | | |
| PB01 | IPOC Station P | 3.21 | 328 | eP | Pn | 05 46 41.4 | +2.0 |
| PB01 | | | | eS | S | 05 47 24.0 | +2.4 |
| PB01 | | | | AML | AML | 05 47 29.6 | |
| | comp=E,60nm,0.2s | | | | | | |

*ISCJB **07** 05:49:35.7±0.4, 38°.54N±0°.02×26°.88E±0°.03, h7km±4km, Error ellipse: s-maj=3.6km s-min=3.4km az=149.8*
*DDA **07** 05:49:35.1, 38°.51N×26°.88E, h20km, Md2.3*
*ISK **07** 05:49:35.4, 38°.56N×26°.91E, h12km, MD2.8*
*CSEM **07** 05:49:35.9±0.1, 38°.52N×26°.89E, h8km, MD2.3, Error ellipse: s-maj=3.2km s-min=2.8km az=40.0*
*ATH **07** 05:49:36.5, 38°.46N×26°.74E, h38km±7km, MD2.9/4*
**ISC 07 05:49:35.7**±1.0**, 38°.53N**±0°.02×**26°.87E**±0°.02**, h19**km±2km**, n45, σ0s.52**/74**, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URLA | Izmir | 0.28 | 232 | i P | Pg | 05 49 41.4 | -0.5 |
| URLA | | | | i S | Sb | 05 49 46.0 | -0.1 |
| URLA | Izmir | 0.28 | 232 | P | Pg | 05 49 41.4 | -0.5 |
| URLA | | | | S | Sb | 05 49 46.0 | -0.1 |
| IZM | Izmir | 0.33 | 113 | ePG | Pg | 05 49 42.4 | -0.5 |
| IZM | | | | eSG | Sg | 05 49 47.7 | -0.1 |
| IZM | Izmir | 0.33 | 113 | ePg | Pg | 05 49 42.4 | -0.5 |
| IZM | | | | eSg | Sg | 05 49 47.7 | -0.1 |
| ZEY | ˜zmir | 0.41 | 225 | P | Pg | 05 49 43.5 | -0.7 |
| ZEY | | | | S | Sb | 05 49 50.2 | -0.1 |
| DKL | Dikili | 0.54 | 3 | ePG | Pb | 05 49 45.8 | -0.8 |
| DKL | Dikili | 0.54 | 3 | ePg | Pb | 05 49 45.8 | -0.8 |
| CHOS | Chios island | 0.66 | 258 | ePG | Pg | 05 49 49.2 | +0.5 |
| CHOS | | | | eSG | Sn | 05 49 59.4 | -0.6 |
| CHOS | Chios island | 0.66 | 258 | ePN | Pb | 05 49 48.0 | -0.6 |
| CHOS | Chios island | 0.66 | 258 | eP | Pb | 05 49 48.0 | -0.6 |
| CHOS | Chios island | 0.66 | 258 | ePg | Pg | 05 49 49.2 | +0.5 |
| CHOS | | | | eSg | Sn | 05 49 59.4 | -0.6 |
| AYVA | Ayvalik | 0.79 | 350 | i P | Pg | 05 49 51.5 | +0.3 |
| AYVA | | | | i S | Sn | 05 50 02.9 | -0.3 |
| AYVA | Ayvalik | 0.79 | 350 | P | Pg | 05 49 51.5 | +0.3 |
| AYVA | | | | S | Sn | 05 50 02.9 | -0.3 |
| AKHS | Akhisar | 0.81 | 64 | i P | Pb | 05 49 51.3 | 0.0 |
| AKHS | | | | i S | Sg | 05 50 02.9 | +0.4 |
| AKHS | Akhisar | 0.81 | 64 | P | Pb | 05 49 51.3 | 0.0 |
| AKHS | | | | S | Sg | 05 50 02.9 | +0.4 |
| AKS | Akhisar | 0.81 | 64 | ePG | Pb | 05 49 51.1 | -0.2 |
| AKS | Akhisar | 0.81 | 64 | ePg | Pb | 05 49 51.1 | -0.2 |
| SMG | Samos | 0.82 | 182 | ePN | Pb | 05 49 50.8 | -0.5 |
| SMG | | | | eSN | Sn | 05 50 03.5 | -0.3 |
| SMG | Samos | 0.82 | 182 | eP | Pb | 05 49 50.8 | -0.5 |
| SMG | | | | eS | Sn | 05 50 03.5 | -0.3 |
| PRK | Paraskevi | 0.86 | 327 | ePN | Pn | 05 49 53.6 | +0.8 |
| PRK | | | | eSN | Sn | 05 50 05.9 | +1.1 |
| PRK | Paraskevi | 0.86 | 327 | eP | Pn | 05 49 53.6 | +0.8 |
| PRK | | | | eS | Sn | 05 50 05.9 | +1.1 |
| GCAM | G?zelcaml? | 0.87 | 161 | i P | Pb | 05 49 51.5 | -0.7 |
| GCAM | | | | i S | Sb | 05 50 03.3 | -0.3 |
| GCAM | G?zelcaml? | 0.87 | 161 | P | Pb | 05 49 51.5 | -0.7 |
| GCAM | | | | S | Sb | 05 50 03.3 | -0.3 |
| AYDB | Zeytinkoy-Aydi | 0.99 | 126 | ePG | Pb | 05 49 54.4 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 0.99 | 126 | ePg | Pb | 05 49 54.4 | +0.1 |
| SIGR | SIGRI | 1.05 | 311 | ePG | Pg | 05 49 56.2 | +0.2 |
| SIGR | SIGRI | 1.05 | 311 | ePN | Pg | 05 49 56.5 | +0.5 |
| SIGR | | | | eSN | Sg | 05 50 09.9 | +0.1 |
| SIGR | SIGRI | 1.05 | 311 | ePg | Pg | 05 49 56.2 | +0.2 |
| SIGR | SIGRI | 1.05 | 311 | eP | Pg | 05 49 56.5 | +0.5 |
| SIGR | | | | eS | Sg | 05 50 09.9 | +0.1 |
| AYDN | Tasoluk | 1.18 | 137 | i P | Pg | 05 49 59.4 | +0.9 |
| AYDN | | | | i S | Sg | 05 50 14.5 | +0.6 |
| AYDN | Tasoluk | 1.18 | 137 | P | Pg | 05 49 59.5 | +0.9 |
| AYDN | | | | S | Sg | 05 50 14.5 | +0.6 |
| MANT | Manisa | 1.32 | 91 | i P | Pg | 05 50 01.3 | 0.0 |
| MANT | | | | i S | Sg | 05 50 17.9 | -0.8 |
| MANT | Manisa | 1.32 | 91 | P | Pg | 05 50 01.3 | 0.0 |
| MANT | | | | S | Sg | 05 50 17.9 | -0.8 |
| BALY | Balya | 1.34 | 25 | i P | Pb | 05 50 00.2 | -0.1 |
| BALY | | | | i S | Sg | 05 50 18.5 | -0.7 |
| BALY | Balya | 1.34 | 25 | P | Pb | 05 50 00.1 | -0.1 |
| BALY | | | | S | Sg | 05 50 18.5 | -0.7 |
| BALB | Balikesir | 1.36 | 35 | ePN | Pb | 05 50 00.1 | -0.5 |
| BALB | Balikesir | 1.36 | 35 | ePn | Pb | 05 50 00.1 | -0.5 |
| KULA | Kula-Manisa | 1.40 | 90 | ePN | Pb | 05 50 00.9 | -0.4 |
| KULA | Kula-Manisa | 1.40 | 90 | ePn | Pb | 05 50 01.0 | -0.4 |
| BODT | Bodrum | 1.50 | 167 | ePN | Pb | 05 50 03.5 | +0.4 |
| BODT | Bodrum | 1.50 | 167 | ePn | Pb | 05 50 03.5 | +0.4 |
| DURS | Dursunbey | 1.64 | 49 | i P | Pb | 05 50 04.8 | -0.7 |
| DURS | | | | i S | Sb | 05 50 25.3 | -0.5 |
| DURS | Dursunbey | 1.64 | 49 | P | Pb | 05 50 04.8 | -0.7 |
| DURS | | | | S | Sb | 05 50 25.3 | -0.5 |
| KHAL | Karahalli | 2.06 | 94 | eP | Pb | 05 50 12.7 | +0.1 |
| KHAL | | | | i S | Sb | 05 50 37.5 | -0.4 |
| KHAL | Karahalli | 2.06 | 94 | P | Pb | 05 50 12.7 | +0.1 |
| KHAL | | | | S | Sb | 05 50 37.5 | -0.4 |

*ISK **07** 06:00:11.7, 37°.22N×28°.20E, h7km, MD2.7*
*ISCJB **07** 06:00:12.2±0.8, 37°.16N±0°.06×28°.14E±0°.07, h0km, Error ellipse: s-maj=10.7km s-min=4.3km az=42.6*
*CSEM **07** 06:00:12.5±0.2, 37°.19N×28°.18E, h1km, MD2.7, Error ellipse: s-maj=9.9km s-min=3.8km az=46.0, Mining explosion.*
*DDA **07** 06:00:12.3, 37°.23N×28°.29E, h7km, Md2.6*
**ISC 07 06:00:12.1**±1.0**, 37°.24N**±0°.05×**28°.20E**±0°.05**, h0km, n14, σ0s.54**/20**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.12 | 146 | ePG | Pg | 06 00 14.5 | +0.1 |
| YER | | | | eSG | Sg | 06 00 16.8 | +0.8 |
| YER | Yerkesik | 0.12 | 146 | ePg | Pg | 06 00 14.5 | +0.1 |
| YER | | | | eSg | Sg | 06 00 16.8 | +0.8 |
| TURN | Turunc | 0.49 | 138 | i P | Pg | 06 00 20.8 | -0.6 |
| TURN | | | | i S | Sg | 06 00 28.5 | +0.8 |
| TURN | Turunc | 0.49 | 138 | P | Pg | 06 00 20.8 | -0.6 |
| TURN | | | | S | Sg | 06 00 28.5 | +0.8 |
| AYDN | Tasoluk | 0.49 | 329 | i P | Pb | 06 00 23.2 | -0.5 |
| AYDN | | | | i S | Sb | 06 00 31.0 | -0.5 |
| AYDN | Tasoluk | 0.49 | 329 | P | Pb | 06 00 23.2 | -0.5 |
| AYDN | | | | S | Sb | 06 00 31.0 | -0.5 |
| DALY | Dalyan (Mu˜la | 0.56 | 139 | ePG | Pg | 06 00 22.9 | +0.2 |
| DALY | Dalyan (Mu˜la | 0.56 | 139 | ePg | Pg | 06 00 22.9 | +0.2 |
| BODT | Bodrum | 0.73 | 257 | ePG | Pg | 06 00 26.1 | +0.1 |
| BODT | Bodrum | 0.73 | 257 | ePg | Pg | 06 00 26.1 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 0.75 | 341 | ePG | Pg | 06 00 26.9 | +0.4 |
| AYDB | Zeytinkoy-Aydi | 0.75 | 341 | ePg | Pg | 06 00 26.9 | +0.4 |
| FETY | Fethiye | 0.93 | 130 | ePG | Pg | 06 00 29.7 | -0.2 |
| FETY | Fethiye | 0.93 | 130 | ePg | Pg | 06 00 29.7 | -0.2 |

**IDC 07 07:02:53.8**±3.0**, 32°.25S×177°.94W, h0km, mb4.1**/3**, mb1 4.2**/4**, mb1mx3.9**/21**, mbtmp4.0**/4**, ML3.3**/1**, Error ellipse: s-maj=64.4km s-min=45.5km az=122.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 7.23 | 213 | Pn | Pn | 07 04 40.6 | -0.1 |
| | 0.5nm,0.3s,baz=72,slow=6.4,SNR=3.9 | | | | | | |
| URZ | | | | Sn | Sn | 07 05 59.3 | -4.2 |
| | 4.0nm,0.3s,baz=208,slow=20,SNR=12 | | | | | | |
| CTA | Charters Tower | 34.19 | 282 | P | P | 07 09 41.9 | +0.8 |
| | 1.6nm,0.5s,baz=100,slow=15,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 43.09 | 269 | P | P | 07 10 55.4 | -0.5 |
| | 1.0nm,0.6s,baz=107,slow=7.7,SNR=20 | | | | | | |
| WRA | Warramunga Arr | 44.25 | 274 | P | P | 07 11 04.6 | -0.6 |
| | 1.9nm,0.5s,baz=114,slow=7.8,SNR=17 | | | | | | |
| FINES | FINESS Array B | 146.89 | 339 | PKPbc | PKPbc | 07 22 36.5 | -0.8 |
| | 1.8nm,0.6s,baz=66,slow=2.3,SNR=6.1 | | | | | | |

**IDC 07 07:05:08.1**±6.3**, 30°.66S×178°.74W, h0km, mb4.0**/2**, mb1 4.2**/2**, mb1mx3.8**/20**, mbtmp4.0**/2**, Error ellipse: s-maj=250.3km s-min=58.3km az=155.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | Alice Springs | 42.46 | 268 | P | P | 07 13 04.5 | -0.6 |
| | 0.4nm,0.3s,baz=106,slow=7.6,SNR=7.4 | | | | | | |
| WRA | Warramunga Arr | 43.47 | 273 | P | P | 07 13 13.8 | +0.5 |
| | 1.3nm,0.3s,baz=113,slow=8.0,SNR=6.0 | | | | | | |
| FINES | FINESS Array B | 145.16 | 339 | PKPbc | PKPbc | 07 24 45.5 | -0.9 |
| | 3.1nm,0.8s,baz=110,slow=7.6,SNR=6.0 | | | | | | |

*NNC **07** 07:08:05.1±0.6, 39°.29N×70°.07E, h0km, mb3.5, mpv3.2, Error ellipse: s-maj=12.0km s-min=2.9km az=145.0*
*KRNET **07** 07:08:07.8±0.1, 39°.51N×70°.18E, mb2.8*
**ISC 07 07:08:08.8**±1.8**, 39°.50N**±0°.09×**70°.21E**±0°.07**, h10km, n14, σ2s.42**/24**, 18C-12D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BTK | Batken | 0.73 | 40 | ⇓iP | Pg | 07 08 22.5 | -0.4 |
| | baz=42 | | | | | | |
| BTK | | | | ⇓iS | Sb | 07 08 32.7 | -1.1 |
| | baz=42 | | | | | | |
| DZET | Dzherino | 1.28 | 238 | ⇑P | Pn | 07 08 24.9 | -7.9 |
| | 19nm,0.3s | | | | | | |
| DZET | | | | ⇓S | Sb | 07 08 41.2 | -8.3 |
| | 125nm,0.5s | | | | | | |
| SFK | Sufi-Kurgan | 2.59 | 77 | ⇑Pn | Pn | 07 08 51.5 | +0.5 |
| | 5.7nm,0.4s | | | | | | |
| SFK | | | | ⇓Lg | Lg | 07 09 32.3 | |
| | 32nm,0.5s | | | | | | |
| SFK | Sufi-Kurgan | 2.59 | 77 | ⇑iP | Pb | 07 08 54.0 | -1.4 |
| | baz=78 | | | | | | |
| SFK | | | | ⇑eS | Sb | 07 09 28.3 | +0.9 |
| | baz=78 | | | | | | |
| SFK | Sufi-Kurgan | 2.59 | 77 | ⇑iP | Pn | 07 08 51.5 | +0.5 |
| | baz=78 | | | | | | |
| SFK | | | | ⇑iS | Sb | 07 09 28.3 | +0.9 |
| | baz=78 | | | | | | |
| ARK | Arkit | 2.66 | 30 | ⇑iP | Pb | 07 08 54.9 | -1.6 |
| | baz=31 | | | | | | |
| ARK | | | | ⇑eS | Sb | 07 09 29.3 | 0.0 |
| | baz=31 | | | | | | |
| MNAS | Manas | 3.46 | 29 | ⇑Pn | Pn | 07 09 04.0 | +1.2 |
| MNAS | | | | ⇓Pg | Pb | 07 09 11.9 | +1.7 |
| | 3.8nm,0.5s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 07 10 00.7 | |
| | 7.0nm,0.7s | | | | | | |
| MNAS | Manas | 3.46 | 29 | ⇓iP | Pn | 07 09 05.9 | +3.1 |
| | baz=30 | | | | | | |
| MNAS | | | | ⇓iS | Sn | 07 09 46.8 | +3.0 |
| | baz=30 | | | | | | |
| MNAS | Manas | 3.46 | 29 | ⇑iP | Pn | 07 09 05.4 | +2.6 |
| | baz=30 | | | | | | |
| MNAS | | | | ⇑iS | Sb | 07 09 50.6 | -1.6 |
| | baz=30 | | | | | | |
| KK31 | Karatay Array | 3.61 | 4 | ⇑Pn | Pn | 07 09 06.7 | +1.9 |
| | 1.9nm,0.4s,baz=189,slow=13,SNR=9.7 | | | | | | |
| KK31 | | | | ⇓Pg | Pg | 07 09 16.0 | -2.0 |
| | 0.8nm,0.3s,baz=163,slow=19,SNR=6.7 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 07 10 05.9 | |
| | 2.8nm,0.3s,baz=168,slow=27,SNR=9.3 | | | | | | |
| EKS2 | Erkin-Say | 4.16 | 39 | ⇓iP | Pn | 07 09 14.0 | +1.6 |
| | baz=40 | | | | | | |
| EKS2 | | | | ⇓iS | Sb | 07 10 08.0 | -4.4 |
| | baz=40 | | | | | | |
| UCH | Uchtor | 4.25 | 49 | ⇑iP | Pn | 07 09 15.2 | +1.2 |
| | baz=49 | | | | | | |
| UCH | | | | ⇑iS | Sb | 07 10 09.7 | -5.8 |
| | baz=49 | | | | | | |
| TKM2 | Tokmak 2 | 5.31 | 48 | ⇓Pn | Pn | 07 09 28.6 | +0.3 |
| | 1.9nm,0.4s | | | | | | |
| TKM2 | | | | ⇓Sn | Sn | 07 10 34.4 | +4.7 |
| | 3.1nm,0.8s | | | | | | |
| AB31 | Akbulak array | 12.20 | 326 | ⇑Pn | Pn | 07 11 00.9 | -1.6 |
| | 1.0nm,0.4s,baz=137,slow=14,SNR=22 | | | | | | |
| AB31 | | | | ⇑Sn | Sn | 07 13 20.2 | +1.7 |
| | 0.4nm,0.4s,baz=146,slow=24,SNR=2.7 | | | | | | |

*ISCJB **07** 07:11:12.8±0.6, 45°.55N±0°.03×14°.26E±0°.03, h14km±3km, Error ellipse: s-maj=5.4km s-min=3.1km az=9.2*
*ROM **07** 07:11:12.6±0.7, 45°.45N×14°.17E, h10km, Md2.4/5, Ml2.2/2, Error ellipse: s-maj=10.2km s-min=5.9km az=55.0*
*CSEM **07** 07:11:13.3±0.1, 45°.56N×14°.23E, h12km, ML2.7/11, Error ellipse: s-maj=2.8km s-min=1.4km az=15.0*
*VIE **07** 07:11:13.8±0.2, 45°.60N×14°.25E, h12km±1km, mb1.5/2, ml2.1/3, Error ellipse: s-maj=1.7km s-min=0.7km az=175.0*
*LJU **07** 07:11:13.3, 45°.57N×14°.25E, h12km, ML1.8*
**ISC 07 07:11:13.4**±0.8**, 45°.57N**±0°.03×**14°.24E**±0°.02**, h12**km±6km**,**

n56, σ0s37/92, 11C-5D, Northwestern Balkan Peninsula

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KNDS | Knezji Dol | 0.11 | 114 | ⇑iPg | Pg | 07 11 16.3 | -0.1 |
| KNDS | | | | iSg | Sg | 07 11 18.1 | -0.5 |
| | comp=Z,208nm,0.1s | | | | | | |
| KNDS | Knezji Dol | 0.11 | 114 | ⇑iPg | Pg | 07 11 16.3 | -0.1 |
| KNDS | | | | iSg | Sg | 07 11 18.1 | -0.5 |
| | comp=Z,208nm,0.1s | | | | | | |
| SKDS | Skadanscina | 0.16 | 260 | ⇑iPg | Pg | 07 11 17.4 | +0.3 |
| SKDS | | | | iSg | Sg | 07 11 20.3 | +0.6 |
| | comp=Z,441nm,0.1s | | | | | | |
| SKDS | Skadanscina | 0.16 | 260 | ⇑iPg | Pg | 07 11 17.4 | +0.3 |
| SKDS | | | | iSg | Sg | 07 11 20.3 | +0.6 |
| | comp=Z,441nm,0.1s | | | | | | |
| CEY | Cerknica | 0.21 | 39 | ⇓iPg | Pg | 07 11 17.9 | -0.1 |
| CEY | | | | iSg | Sg | 07 11 21.1 | -0.1 |
| | comp=Z,119nm,0.1s | | | | | | |
| CEY | Cerknica | 0.21 | 39 | ⇓iPg | Pg | 07 11 17.9 | -0.1 |
| CEY | | | | iSg | Sg | 07 11 21.1 | -0.1 |
| | comp=Z,119nm,0.1s | | | | | | |
| JAVS | Javornik | 0.34 | 339 | iPg | Pg | 07 11 20.4 | 0.0 |
| JAVS | | | | iSg | Sb | 07 11 26.1 | -1.0 |
| | comp=Z,44nm,0.1s | | | | | | |
| JAVS | Javornik | 0.34 | 339 | iPg | Pg | 07 11 20.4 | 0.0 |
| JAVS | | | | iSg | Sb | 07 11 26.1 | -1.0 |
| | comp=Z,44nm,0.1s | | | | | | |
| TRI | Trieste | 0.36 | 292 | ⇑ePg | Pg | 07 11 20.8 | +0.2 |
| TRI | | | | eSg | Sb | 07 11 26.8 | -0.6 |
| TRI | Trieste | 0.36 | 292 | Pn | Pg | 07 11 20.8 | +0.2 |
| TRI | | | | Sn | Sb | 07 11 26.8 | -0.6 |
| TRI | Trieste | 0.36 | 292 | eP | Pg | 07 11 20.8 | +0.2 |
| TRI | | | | eSg | Sb | 07 11 26.8 | -0.6 |
| GBRS | Gornja Briga | 0.41 | 96 | iPg | Pg | 07 11 21.6 | +0.1 |
| VISS | Visnje | 0.48 | 61 | iPg | Pg | 07 11 23.1 | +0.1 |
| VISS | | | | iSg | Sg | 07 11 29.5 | +0.3 |
| | comp=Z,12nm,0.1s | | | | | | |
| VISS | Visnje | 0.48 | 61 | iPg | Pg | 07 11 23.0 | +0.1 |
| VISS | | | | iSg | Sg | 07 11 29.5 | +0.3 |
| | comp=Z,12nm,0.1s | | | | | | |
| CRNS | Crni Vrh | 0.51 | 2 | iPg | Pg | 07 11 23.2 | -0.2 |
| | comp=Z,16nm,0.1s | | | | | | |
| LJU | Ljubljana | 0.51 | 23 | iPg | Pg | 07 11 23.8 | +0.3 |
| LJU | Ljubljana | 0.51 | 23 | iPg | Pg | 07 11 23.8 | +0.3 |
| VOJS | Vojsko | 0.52 | 332 | iPg | Pg | 07 11 23.6 | -0.1 |
| VOJS | | | | iSg | Sb | 07 11 32.1 | -0.1 |
| | comp=Z,24nm,0.1s | | | | | | |
| VOJS | Vojsko | 0.52 | 332 | iPg | Pg | 07 11 23.6 | -0.1 |
| VOJS | | | | iSg | Sb | 07 11 32.1 | -0.1 |
| | comp=Z,24nm,0.1s | | | | | | |
| SABO | M.te Sabotino | 0.60 | 313 | ⇓ePg | Pg | 07 11 25.0 | -0.3 |
| SABO | | | | eSg | Sb | 07 11 34.5 | 0.0 |
| SABO | M.te Sabotino | 0.60 | 313 | Pn | Pg | 07 11 24.9 | -0.3 |
| SABO | | | | Sn | Sb | 07 11 34.5 | 0.0 |
| | comp=Z,80nm,0.3s | | | | | | |
| SABO | M.te Sabotino | 0.60 | 313 | ⇓ePg | Pg | 07 11 25.0 | -0.3 |
| SABO | | | | eSg | Sb | 07 11 34.5 | 0.0 |
| VNDS | Vrh nad Dolski | 0.62 | 31 | iPg | Pg | 07 11 25.6 | 0.0 |
| VNDS | | | | iSg | Sb | 07 11 34.5 | -0.5 |
| | comp=Z,14nm,0.1s | | | | | | |
| BOJS | Bojanci | 0.72 | 95 | iPg | Pg | 07 11 27.1 | -0.2 |
| BOJS | Bojanci | 0.72 | 95 | iPg | Pg | 07 11 27.1 | -0.2 |
| PDKS | Podkum | 0.72 | 47 | iPg | Pb | 07 11 27.8 | -0.2 |
| PDKS | | | | iSg | Sb | 07 11 38.1 | +0.2 |
| | comp=Z,19nm,0.1s | | | | | | |
| PDKS | Podkum | 0.72 | 47 | iPg | Pb | 07 11 27.8 | -0.2 |
| PDKS | | | | iSg | Sb | 07 11 38.1 | +0.2 |
| | comp=Z,19nm,0.1s | | | | | | |
| DRE | Drenchia | 0.73 | 326 | ⇑ePg | Pg | 07 11 27.3 | -0.3 |
| DRE | | | | eSg | Sb | 07 11 38.8 | +0.6 |
| DRE | Drenchia | 0.73 | 326 | eP | Pg | 07 11 27.3 | -0.3 |
| DRE | | | | eSg | Sb | 07 11 38.8 | +0.6 |
| MOZS | Mozjanca | 0.73 | 11 | iPg | Pb | 07 11 28.0 | -0.2 |
| MOZS | Mozjanca | 0.73 | 11 | iPg | Pb | 07 11 28.0 | -0.2 |
| CADS | Cadrg | 0.74 | 332 | iPg | Pg | 07 11 27.7 | -0.1 |
| CADS | | | | eSg | Sb | 07 11 39.4 | +0.9 |
| | comp=Z,16nm,0.1s | | | | | | |
| CADS | Cadrg | 0.74 | 332 | iPg | Pg | 07 11 27.7 | -0.1 |
| CADS | | | | eSg | Sb | 07 11 39.4 | +0.9 |
| | comp=Z,16nm,0.1s | | | | | | |
| GORS | Gorjuse | 0.76 | 347 | iPg | Pb | 07 11 28.5 | -0.3 |
| GORS | Gorjuse | 0.76 | 347 | iPg | Pb | 07 11 28.5 | -0.3 |
| LEGS | Legarje | 0.84 | 63 | iPg | Pb | 07 11 30.2 | +0.1 |
| LEGS | Legarje | 0.84 | 63 | iPg | Pb | 07 11 30.2 | +0.1 |
| CRES | Cresnjev | 0.89 | 73 | iPg | Pb | 07 11 30.8 | -0.1 |
| | comp=Z,9.0nm,0.1s | | | | | | |
| CRES | Cresnjev | 0.89 | 73 | iPg | Pb | 07 11 30.8 | -0.1 |
| | comp=Z,9.0nm,0.1s | | | | | | |
| VINO | Villanova | 0.95 | 316 | ⇑ePg | Pg | 07 11 31.2 | -0.7 |
| VINO | | | | eSg | Sn | 07 11 46.1 | -0.3 |
| VINO | Villanova | 0.95 | 316 | Pn | Pg | 07 11 31.1 | -0.8 |
| VINO | | | | Sn | Sn | 07 11 46.2 | -0.2 |
| VINO | Villanova | 0.95 | 316 | ⇑ePg | Pg | 07 11 31.2 | -0.7 |
| VINO | | | | Sn | Sn | 07 11 46.2 | -0.2 |
| OBKA | Obir | 0.96 | 13 | ⇑iPg | Pg | 07 11 31.9 | -0.1 |
| OBKA | | | | ⇑iSg | Sb | 07 11 45.1 | +0.2 |
| | comp=Z,7.1nm,0.2s | | | | | | |
| OBKA | Obir | 0.96 | 13 | Pg | Pg | 07 11 31.9 | -0.1 |
| OBKA | | | | Sg | Sb | 07 11 45.1 | +0.2 |
| | comp=Z,7.1nm,0.2s | | | | | | |
| GCIS | Gornji Cirnik | 1.02 | 73 | iPg | Pn | 07 11 33.3 | -0.3 |
| GCIS | | | | iSg | Sb | 07 11 47.0 | +0.6 |
| | comp=Z,9.0nm,0.2s | | | | | | |
| GCIS | Gornji Cirnik | 1.02 | 73 | iPg | Pn | 07 11 33.3 | -0.3 |
| GCIS | | | | iSg | Sb | 07 11 47.0 | +0.6 |
| | comp=Z,9.0nm,0.2s | | | | | | |
| PTCC | Patocco-Chiusa | 1.04 | 324 | Pn | Pg | 07 11 33.5 | +0.1 |
| PTCC | | | | Sn | Sn | 07 11 48.7 | +0.3 |
| PTCC | Patocco-Chiusa | 1.04 | 324 | Pn | Pg | 07 11 33.5 | +0.1 |
| PTCC | | | | Sn | Sn | 07 11 48.7 | +0.3 |
| GOLS | Golise | 1.06 | 65 | iPg | Pn | 07 11 34.4 | +0.1 |
| GOLS | Golise | 1.06 | 65 | iPg | Pn | 07 11 34.4 | +0.1 |
| ACOM | Acomizza, Ital | 1.10 | 333 | Pn | Pn | 07 11 35.3 | +0.4 |
| ACOM | | | | Sn | Sn | 07 11 50.0 | -0.1 |
| | comp=Z,49nm,0.4s | | | | | | |
| ACOM | Acomizza, Ital | 1.10 | 333 | Pn | Pn | 07 11 35.3 | +0.4 |
| ACOM | | | | Sn | Sn | 07 11 50.0 | -0.1 |
| | comp=Z,49nm,0.4s | | | | | | |
| MYKA | Terra Mystica | 1.14 | 339 | ⇓iPg | Pb | 07 11 35.0 | -0.1 |
| MYKA | Terra Mystica | 1.14 | 339 | Pg | Pb | 07 11 35.0 | -0.1 |
| SOKA | Soboth | 1.24 | 26 | ⇑iPg | Pb | 07 11 36.9 | +0.1 |
| SOKA | Soboth | 1.24 | 26 | Pg | Pb | 07 11 36.9 | +0.1 |

*NNC **07** 07:11:51.6±0.7, 39°.71N×73°.89E, h0km, mb4.0, mpv3.7, Error ellipse: s-maj=6.4km s-min=3.9km az=30.0*

**ISC 07 07:11:53.9±0.8, 39°.89N±0°.05×73°.55E±0°.06, h14km, n20, σ1s68/25, 12C-13D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 0.13 | 344 | ⇓P | Pb | 07 11 59.8 | +1.4 |
| | 182nm,0.4s | | | | | | |
| SFK | | | | ⇓S | Sb | 07 12 06.3 | +5.0 |
| | 1μm,0.7s | | | | | | |
| AML | Almayashu | 2.25 | 3 | P | Pb | 07 12 35.7 | +1.2 |
| | SNR=10 | | | | | | |
| UCH | Uchtor | 2.45 | 17 | P | Pn | 07 12 31.6 | -2.3 |
| | SNR=8.8 | | | | | | |
| MNAS | Manas | 2.72 | 343 | ⇑Pn | Pb | 07 12 42.3 | -0.1 |
| | 7.4nm,0.5s | | | | | | |
| MNAS | | | | ⇓Pg | Pg | 07 12 46.0 | 0.0 |
| | 18nm,0.5s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 07 13 25.4 | |
| | 123nm,0.8s | | | | | | |
| EKS2 | Erkin-Say | 2.78 | 3 | P | Pb | 07 12 45.4 | +1.9 |
| | SNR=11 | | | | | | |
| AAK | Ala-Archa | 2.84 | 14 | ⇑Pg | Pb | 07 12 44.4 | 0.0 |
| | 17nm,0.5s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 07 13 25.0 | |
| | 103nm,1.3s | | | | | | |
| AAK | Ala-Archa | 2.84 | 14 | P | Pb | 07 12 44.8 | +0.4 |
| | SNR=10.0 | | | | | | |
| KBK | Karagaybulak | 2.96 | 20 | P | Pb | 07 12 46.2 | -0.4 |
| | SNR=15 | | | | | | |
| ULHL | Ulahol | 3.12 | 40 | P | Pb | 07 12 48.0 | -1.2 |
| | SNR=7.3 | | | | | | |
| TKM2 | Tokmak 2 | 3.40 | 26 | ⇓Pg | Pb | 07 12 54.8 | +0.7 |
| | 14nm,0.6s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 07 13 41.0 | |
| | 23nm,0.6s | | | | | | |
| USP | Ospenovka | 3.45 | 12 | P | Pg | 07 12 58.0 | -2.1 |
| | SNR=9.4 | | | | | | |
| DZET | Dzherino | 3.82 | 255 | ⇓Pn | Pn | 07 12 55.6 | +3.2 |
| | 9.7nm,0.5s | | | | | | |
| DZET | | | | ⇑Pg | Pg | 07 13 05.4 | -1.7 |
| | 38nm,0.4s | | | | | | |
| DZET | | | | ⇑Lg | Lg | 07 14 01.0 | |
| | 147nm,0.5s | | | | | | |
| KK31 | Karatay Array | 3.94 | 326 | ⇓Pn | Pb | 07 12 58.8 | -4.4 |
| | 2.1nm,0.3s,baz=134,slow=12,SNR=13 | | | | | | |
| KK31 | | | | ⇑Pg | Pg | 07 13 08.7 | -0.7 |
| | 2.5nm,0.3s,baz=143,slow=16,SNR=13 | | | | | | |
| KK31 | | | | ⇑Sn | Sb | 07 13 49.7 | -1.1 |
| | 20nm,0.6s,baz=132,slow=22,SNR=5.9 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 07 14 06.9 | |
| | 14nm,0.4s,baz=139,slow=29,SNR=6.2 | | | | | | |
| KNDC | Almaty | 4.20 | 36 | ⇓Pg | Pb | 07 13 08.4 | +0.8 |
| | 18nm,0.5s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 07 14 05.2 | |
| | 147nm,1.1s | | | | | | |
| PDGK | Podgornoye | 5.62 | 50 | ⇓Pn | Pn | 07 13 16.6 | -0.4 |
| | 3.7nm,0.8s | | | | | | |
| PDGK | | | | ⇓Pg | Pb | 07 13 34.0 | +2.2 |
| | 5.2nm,0.6s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 07 14 47.7 | |
| | 33nm,1.2s | | | | | | |
| CEP | Cherat | 6.19 | 193 | P | Pn | 07 13 24.9 | -0.1 |
| CHCP | Chirah Chowk | 6.22 | 182 | P | Pn | 07 13 25.6 | +0.3 |
| OTUK | Ortayu | 8.40 | 354 | ⇓Lg | Lg | 07 16 24.5 | |
| | 10nm,0.8s | | | | | | |
| AB31 | Akbulak array | 13.46 | 319 | ⇑Pn | Pn | 07 15 08.0 | +3.5 |
| | 1.7nm,0.8s,baz=132,slow=13,SNR=9.0 | | | | | | |
| AB31 | | | | ⇑Sn | Sn | 07 17 39.5 | +5.7 |
| | 0.5nm,0.5s,baz=128,slow=24,SNR=4.2 | | | | | | |
| AKTO | Aktyubinsk | 15.18 | 319 | ⇓Pn | Pn | 07 15 29.2 | +1.5 |
| | 1.7nm,0.8s | | | | | | |

*DHMR **07** 07:15:14.3±1.4, 11°.58N×42°.91E, h10km±20km, ML3.9*

**ISC 07 07:15:13.6±1.4, 11°.5N±0°.1×42°.9E±0°.1, h10km, n5, σ3s10/10, 1C, Ethiopia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| UDYN | Al ‘Udayn | 2.65 | 24 | iP | Pn | 07 15 58.2 | +1.7 |
| UDYN | | | | iS | Sb | 07 16 34.3 | +0.4 |
| UDYN | | | | AML | AML | 07 16 44.0 | |
| | comp=E,1μm,0.6s | | | | | | |
| LBOS | | 3.29 | 45 | ⇑iP | Pn | 07 16 08.3 | +2.9 |
| LBOS | | | | iS | Sb | 07 16 50.3 | -2.0 |
| DHBB | Dhamar BB | 3.37 | 26 | iP | Pn | 07 16 09.2 | +2.7 |
| DHBB | | | | iS | Sb | 07 16 51.5 | -3.1 |
| BDHA | Al Bayda’ | 3.58 | 47 | iP | Pn | 07 16 12.4 | +3.0 |
| BDHA | | | | iS | Sb | 07 16 55.9 | -5.0 |
| BDHA | | | | AML | AML | 07 17 14.3 | |
| | comp=N,577nm,0.5s | | | | | | |
| FURI | Furi | 4.89 | 238 | ePN | Pg | 07 16 46.7 | -0.6 |
| FURI | | | | eS | Sg | 07 17 49.8 | -0.9 |

*ISCJB **07** 07:22:31.1±0.5, 51°.46N±0°.02×16°.10E±0°.04, h0km, Error ellipse: s-maj=3.9km s-min=3.1km az=166.0*
*CSEM **07** 07:22:32.6±0.2, 51°.46N×16°.09E, h2km, ML3.4/11, Error ellipse: s-maj=3.8km s-min=2.5km az=92.0*
*IPEC **07** 07:22:33.1±0.6, 51°.47N×16°.18E, h1km±2km, ML2.2/3, Error ellipse: s-maj=3.6km s-min=2.6km az=36.0*
*PRU **07** 07:22:34.4, 51°.39N×16°.19E, h0km*
*UPP **07** 07:22:39.1, 51°.88N×15°.79E, h0km, ML2.0, Suspected Mining explosion.*

**ISC 07 07:22:32.4±0.9, 51°.50N±0°.03×16°.14E±0°.03, h0km, n37, σ1s00/64, 1D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.66 | 172 | iPg | Pb | 07 22 46.0 | -0.7 |
| KSP | | | | eSg | Sg | 07 22 54.6 | +1.1 |
| KSP | Ksiaz | 0.66 | 172 | ⇓iPg | Pb | 07 22 46.0 | -0.7 |
| KSP | | | | eSg | Sg | 07 22 54.6 | +1.1 |
| UPC | Upice | 0.99 | 185 | ePG | Pg | 07 22 51.4 | +0.1 |
| UPC | | | | eSG | Sg | 07 23 02.8 | -1.4 |
| | comp=Z,65nm,0.3s | | | | | | |
| UPC | Upice | 0.99 | 185 | Pg | Pg | 07 22 51.4 | +0.1 |
| UPC | | | | Sg | Sg | 07 23 02.8 | -1.4 |
| | 65nm,0.3s | | | | | | |
| DPC | Dobruska-Polom | 1.15 | 174 | ePG | Pg | 07 22 54.4 | 0.0 |
| DPC | | | | eSG | Sg | 07 23 08.2 | -1.1 |
| | comp=Z,36nm,0.4s | | | | | | |
| DPC | Dobruska-Polom | 1.15 | 174 | Pg | Pg | 07 22 54.4 | 0.0 |
| DPC | | | | Sg | Sg | 07 23 08.2 | -1.1 |
| | 36nm,0.4s | | | | | | |
| PVCC | Panska Ves | 1.39 | 226 | ePG | Pg | 07 22 59.1 | +0.2 |
| PVCC | | | | eSG | Sg | 07 23 16.4 | -0.5 |
| | comp=Z,130nm,0.2s | | | | | | |
| PVCC | Panska Ves | 1.39 | 226 | Pg | Pg | 07 22 59.1 | +0.2 |
| PVCC | | | | Sg | Sg | 07 23 16.4 | -0.5 |
| | 130nm,0.2s | | | | | | |
| KRLC | Kraliky | 1.48 | 164 | ePG | Pn | 07 23 00.5 | +0.2 |
| KRLC | | | | eSG | Sg | 07 23 18.9 | -0.9 |
| KRLC | Kraliky | 1.48 | 164 | Pg | Pn | 07 23 00.5 | +0.2 |
| KRLC | | | | Sg | Sg | 07 23 18.9 | -0.9 |
| BRG | Berggiesshubel | 1.52 | 247 | PG | Pn | 07 23 01.4 | +0.6 |
| BRG | | | | SG | Sn | 07 23 32.6 | +11 |
| | 93nm,0.3s | | | | | | |
| PRA | Prague | 1.79 | 218 | ePN | Pn | 07 23 04.4 | -0.1 |
| PRA | | | | ePG | Pb | 07 23 06.0 | 0.0 |
| PRA | | | | eSG | Sb | 07 23 28.8 | -0.2 |
| | comp=Z,26nm,0.5s | | | | | | |
| PRA | Prague | 1.79 | 218 | Pn | Pn | 07 23 04.4 | -0.1 |
| GOPC | GO Pecny, Ondr | 1.80 | 209 | ePN | Pn | 07 23 04.8 | +0.1 |
| GOPC | | | | ePG | Pb | 07 23 06.1 | -0.1 |
| GOPC | | | | eSG | Sn | 07 23 28.7 | +0.4 |
| | comp=Z,17nm,0.2s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.80 | 209 | Pn | Pn | 07 23 04.8 | +0.1 |
| PRU | Pruhonice | 1.82 | 215 | ePN | Pn | 07 23 04.8 | -0.1 |
| PRU | | | | ePG | Pb | 07 23 06.4 | -0.1 |
| PRU | | | | ex | x | 07 23 22.7 | |
| PRU | | | | eSG | Sn | 07 23 29.4 | +0.8 |
| | comp=Z,44nm,0.3s | | | | | | |
| PRU | Pruhonice | 1.82 | 215 | Pn | Pn | 07 23 04.8 | -0.1 |
| MORC | Moravsky Berou | 1.94 | 152 | ePn | Pn | 07 23 06.6 | 0.0 |
| | baz=333 | | | | | | |
| MORC | | | | eSg | Sb | 07 23 32.8 | -0.5 |
| | 13nm,0.2s,baz=333 | | | | | | |
| CLL | Collm | 1.98 | 266 | ePn | Pn | 07 23 07.0 | -0.1 |
| CLL | | | | ePg | Pb | 07 23 10.0 | +0.8 |
| CLL | | | | eSg | Sb | 07 23 36.0 | +1.7 |
| | comp=Z,25nm,0.5s | | | | | | |
| OKC | Ostrava-Krasne | 2.09 | 142 | ePG | Pg | 07 23 12.3 | -0.1 |
| OKC | Ostrava-Krasne | 2.09 | 142 | Pg | Pg | 07 23 12.3 | -0.1 |
| VRAC | Vranov | 2.21 | 172 | ePn | Pn | 07 23 10.6 | +0.3 |
| VRAC | | | | eSg | Sb | 07 23 41.3 | +0.3 |
| | comp=Z,14nm,0.4s,baz=353 | | | | | | |
| KRUC | Moravsky | 2.44 | 176 | ePn | Pn | 07 23 13.7 | +0.3 |
| | baz=357 | | | | | | |
| KRUC | | | | eSg | Sb | 07 23 48.8 | +1.1 |
| | comp=Z,13nm,0.3s,baz=357 | | | | | | |
| NKC | Novy Kostel | 2.66 | 243 | ePN | Pn | 07 23 17.1 | +0.6 |
| NKC | | | | ePG | Pb | 07 23 22.5 | +1.6 |
| NKC | | | | eSG | Sg | 07 23 57.2 | -0.6 |
| | comp=Z,45nm,0.3s | | | | | | |
| NKC | Novy Kostel | 2.66 | 243 | Pn | Pn | 07 23 17.1 | +0.6 |
| KHC | Kasperske Hory | 2.88 | 216 | ePN | Pn | 07 23 19.9 | +0.4 |
| KHC | | | | ePG | Pb | 07 23 25.3 | +0.7 |
| KHC | | | | eSN | Sn | 07 23 53.1 | -1.8 |
| KHC | | | | eSG | Sg | 07 24 03.1 | -1.8 |
| | comp=Z,11nm,0.4s | | | | | | |
| KHC | Kasperske Hory | 2.88 | 216 | Pn | Pn | 07 23 19.9 | +0.4 |
| LANS | Liptovska Anna | 3.17 | 136 | ePG | Pn | 07 23 25.5 | +2.0 |
| LANS | | | | eSG | Sn | 07 23 38.5 | -24 |
| NIE | Niedzica | 3.37 | 126 | ePg | Pn | 07 23 27.7 | +1.4 |
| NIE | | | | eSg | Sn | 07 23 42.2 | -25 |
| VYHS | Vyhne | 3.47 | 149 | ePG | Pb | 07 23 35.6 | +1.0 |
| VYHS | | | | eSG | Sn | 07 23 56.3 | -13 |
| VYHS | Vyhne | 3.47 | 149 | ePg | Pb | 07 23 35.6 | +1.0 |
| STHS | Stebnicka Huta | 3.87 | 121 | ePG | Pn | 07 23 35.7 | +2.6 |
| STHS | | | | eSG | Sn | 07 23 49.7 | -30 |
| BLEU | Blekinge | 4.82 | 358 | P | Pn | 07 23 46.5 | +0.4 |
| BLEU | | | | S | Sn | 07 24 38.7 | -3.9 |
| FABU | Falkenberg | 5.87 | 341 | P | Pn | 07 23 59.8 | -0.7 |
| ASPU | Aespoe | 5.94 | 2 | P | Pn | 07 24 02.2 | +0.7 |
| VSTU | Vaestervik | 6.18 | 2 | P | Pn | 07 24 05.3 | +0.5 |
| FKPU | Falk | 6.82 | 349 | P | Pn | 07 24 14.0 | +0.4 |

*KRSC **07** 07:25:26.0±1.4, 53°.27N×160°.68E, h48km±16km, ML5.0, FELT [IV-V] at GMS Semyachiki; NO FELT at cape Shipunskiy.*
*BJI **07** 07:25:27.2, 53°.77N×160°.38E, h47km, mb4.7/33, mB4.8/21, Ms4.8/15, Ms7 4.3/16*
*MOS **07** 07:25:28.4±1.3, 53°.37N×160°.28E, h65km, mb4.6/42, Error ellipse: s-maj=7.7km s-min=4.5km az=80.5*
*ISCJB **07** 07:25:28.7±0.3, 53°.34N±0°.02×160°.48E±0°.04, h64km±2km, mb4.5/82, Error ellipse: s-maj=5.3km s-min=2.5km az=42.8*
*NEIC **07** 07:25:30.1±0.8, 53°.48N×160°.27E, h58km±8km, mb4.7/31, Error ellipse: s-maj=7.9km s-min=4.6km az=159.0*
*IDC **07** 07:25:32.4±1.3, 53°.53N×160°.18E, h80km±11km, mb4.0/26, mb1 4.3/28, mb1mx4.2/37, mbtmp4.4/28, MS3.7/21, Ms1 3.7/21, ms1mx3.5/36, Error ellipse: s-maj=15.0km s-min=9.4km az=151.0*

**ISC 07 07:25:28.4±0.4, 53°.32N±0°.03×160°.50E±0°.03, h47km±2km, n275, σ1s63/336, mb4.5/83, MS3.7/19, 20C-4D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SPN | Mys Shipunski | 0.37 | 232 | iP | Pn | 07 25 37.6 | -0.3 |
| SPN | Mys Shipunski | 0.37 | 232 | PN | Pn | 07 25 37.6 | -0.3 |
| NLC | Nalytchevo | 0.71 | 258 | iP | Pn | 07 25 42.1 | 0.0 |
| NLC | Nalytchevo | 0.71 | 258 | PN | Pn | 07 25 42.1 | 0.0 |
| KII | Karymskiy | 0.95 | 319 | iP | Pn | 07 25 45.1 | -0.3 |
| KII | Karymskiy | 0.95 | 319 | PN | Pn | 07 25 45.1 | -0.3 |
| SDLR | Sedlovina | 0.97 | 268 | iP | Pn | 07 25 46.3 | +0.6 |
| SDLR | Sedlovina | 0.97 | 268 | PN | Pn | 07 25 46.3 | +0.6 |
| UGLR | Uglovaya | 1.01 | 264 | iP | Pn | 07 25 47.1 | +0.8 |
| SMAR | Somma | 1.02 | 267 | iP | Pn | 07 25 46.9 | +0.4 |
| SMAR | | | | iS | Sn | 07 26 01.6 | +1.8 |
| SMAR | Somma | 1.02 | 267 | PN | Pn | 07 25 46.9 | +0.4 |
| SMAR | | | | S | Sn | 07 26 01.6 | +1.8 |
| AVH | Avacha | 1.06 | 267 | iP | Pn | 07 25 47.7 | +0.8 |
| AVH | Avacha | 1.06 | 267 | PN | Pn | 07 25 47.7 | +0.8 |
| KRX | Arik | 1.11 | 273 | iP | Pn | 07 25 48.0 | +0.4 |
| KOK | Koryaka | 1.12 | 269 | iP | Pn | 07 25 48.4 | +0.7 |
| KOK | Koryaka | 1.12 | 269 | PN | Pn | 07 25 48.4 | +0.7 |
| PET | Petropavlovsk | 1.15 | 256 | iP | Pn | 07 25 48.4 | +0.4 |
| PET | | | | iS | Sn | 07 26 04.1 | +1.5 |
| PET | Petropavlovsk | 1.15 | 256 | ⇓iPN | Pn | 07 25 48.4 | +0.4 |
| PET | | | | eS | Sn | 07 26 02.8 | +0.2 |
| PET | | | | pmax | pmax | | |
| | comp=Z,1μm,0.6s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,2μm,2.3s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,600nm,5.0s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,5μm,0.5s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,3μm,0.5s | | | | | | |
| PET | Petropavlovsk | 1.15 | 256 | ePn | Pn | 07 25 48.5 | +0.4 |
| PET | | | | eSn | Sn | 07 26 04.6 | +2.0 |
| MKZ | Mys Kozlova | 1.43 | 30 | iP | Pn | 07 25 50.5 | -1.3 |
| MKZ | | | | eS | Sn | 07 26 07.1 | -2.4 |
| MKZ | Mys Kozlova | 1.43 | 30 | PN | Pn | 07 25 50.5 | -1.3 |
| MKZ | | | | S | Sn | 07 26 07.1 | -2.4 |
| RUS | Russkaya | 1.50 | 234 | iP | Pn | 07 25 52.8 | 0.0 |
| RUS | | | | iS | Sn | 07 26 11.2 | +0.1 |
| RUS | Russkaya | 1.50 | 234 | PN | Pn | 07 25 52.8 | 0.0 |
| RUS | | | | S | Sn | 07 26 11.2 | +0.1 |
| GNL | Ganaly | 1.57 | 285 | iP | Pn | 07 25 54.9 | +1.0 |
| GNL | Ganaly | 1.57 | 285 | PN | Pn | 07 25 54.9 | +1.0 |
| MTVR | Mutnovka | 1.64 | 240 | iP | Pn | 07 25 55.3 | +0.5 |
| MTVR | | | | iS | Sn | 07 26 15.8 | +1.1 |
| GRL | Gorelyy | 1.66 | 243 | iP | Pn | 07 25 56.3 | +1.2 |
| GRL | Gorelyy | 1.66 | 243 | PN | Pn | 07 25 56.3 | +1.2 |
| I44RU | PETROPAVLOVSK- | 1.69 | 264 | P | Pn | 07 25 57.2 | +1.8 |
| | baz=90,slow=19,SNR=0.7 | | | | | | |
| I44RU | | | | S | Sn | 07 26 19.1 | +3.3 |
| | baz=86,slow=49 | | | | | | |
| PETK | Petropavlovsk- | 1.70 | 264 | P | Pn | 07 25 56.8 | +1.3 |
| | comp=N,327nm,0.3s,baz=87,slow=20,SNR=5233 | | | | | | |
| PETK | | | | S | Sn | 07 26 18.5 | +2.4 |
| | comp=N,181nm,0.3s,baz=84,slow=21,SNR=7.0 | | | | | | |
| PETK | | | | LR | LR | 07 26 46.8 | |
| | comp=N,2μm,18.2s,baz=136,slow=48 | | | | | | |
| PETK | Petropavlovsk- | 1.70 | 264 | PN | Pn | 07 25 56.8 | +1.3 |
| PETK | | | | S | Sn | 07 26 18.5 | +2.4 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,327nm,0.3s | | | | | | |
| PETK | | | | smax | smax | | |
| | comp=N,181nm,0.3s | | | | | | |
| KZV | Kizimen | 1.80 | 356 | iP | Pn | 07 25 57.5 | +0.5 |
| ASAK | Asacha | 1.84 | 240 | iP | Pn | 07 25 58.8 | +1.3 |
| ASAK | | | | iS | Sn | 07 26 21.1 | +1.5 |
| TUMR | Tumrok | 1.97 | 354 | iP | Pn | 07 26 00.7 | +1.3 |
| TUMR | | | | eS | Sn | 07 26 24.9 | +1.9 |
| TUMR | Tumrok | 1.97 | 354 | PN | Pn | 07 26 00.7 | +1.3 |
| TUMR | | | | S | Sn | 07 26 24.9 | +1.9 |
| APC | Apacha | 2.05 | 260 | iP | Pn | 07 26 01.9 | +1.6 |
| APC | | | | iS | Sn | 07 26 27.3 | +2.6 |
| APC | Apacha | 2.05 | 260 | PN | Pn | 07 26 01.9 | +1.6 |
| APC | | | | S | Sn | 07 26 27.3 | +2.6 |
| KMNR | Kamenistaya | 2.44 | 357 | eP | Pn | 07 26 07.6 | +1.8 |
| KMNR | | | | eS | Sn | 07 26 37.0 | +2.6 |
| KMNR | Kamenistaya | 2.44 | 357 | PN | Pn | 07 26 07.6 | +1.8 |
| KMNR | | | | S | Sn | 07 26 37.0 | +2.6 |
| MIPR | Malaya Ipel’ka | 2.50 | 247 | eP | Pn | 07 26 08.4 | +1.9 |
| MIPR | | | | eP | Pn | 07 26 08.8 | +2.3 |
| BZMR | Bezymyannaya | 2.62 | 360 | eP | Pn | 07 26 10.2 | +2.0 |
| BZMR | | | | eP | Pn | 07 26 10.6 | +2.4 |
| BZWR | Bezymyannyi-We | 2.65 | 360 | eP | Pn | 07 26 09.8 | +1.2 |
| BZWR | | | | eP | Pn | 07 26 11.7 | +3.1 |
| KPT | Kopyto | 2.65 | 357 | eP | Pn | 07 26 10.7 | +2.0 |
| KPT | Kopyto | 2.65 | 357 | PN | Pn | 07 26 10.7 | +2.0 |
| KOZ | Kozyrevsk | 2.76 | 353 | eP | Pn | 07 26 12.3 | +2.2 |
| KOZ | Kozyrevsk | 2.76 | 353 | PN | Pn | 07 26 12.3 | +2.2 |
| LGNR | Loginova | 2.77 | 2 | eP | Pn | 07 26 13.0 | +2.6 |
| LGNR | | | | eS | Sn | 07 26 48.0 | +5.3 |
| LGNR | Loginova | 2.77 | 2 | PN | Pn | 07 26 13.0 | +2.6 |
| CIRR | Tsirk | 2.80 | 3 | eS | Sn | 07 26 48.2 | +4.9 |
| ESO | Esso | 2.81 | 339 | iP | Pn | 07 26 11.7 | +1.0 |
| ESO | | | | eS | Sn | 07 26 44.9 | +1.6 |
| ESO | Esso | 2.81 | 339 | PN | Pn | 07 26 11.7 | +1.0 |
| ESO | | | | S | Sn | 07 26 44.9 | +1.6 |
| PAU | Pauzhetka | 2.93 | 232 | iP | Pn | 07 26 14.3 | +2.0 |
| PAU | | | | iS | Sn | 07 26 49.7 | +3.5 |
| PAU | Pauzhetka | 2.93 | 232 | PN | Pn | 07 26 14.3 | +2.0 |
| PAU | | | | S | Sn | 07 26 49.7 | +3.5 |
| KLY | Klyuchi | 3.00 | 2 | eP | Pn | 07 26 14.8 | +1.5 |
| KLY | | | | eS | Sn | 07 26 49.7 | +1.8 |
| SRDR | Sredinnyy | 3.03 | 352 | eP | Pn | 07 26 15.0 | +1.1 |
| SRDR | Sredinnyy | 3.03 | 352 | PN | Pn | 07 26 15.0 | +1.1 |
| KBTR | Krutoberegovo | 3.19 | 24 | eP | Pn | 07 26 16.2 | +0.3 |
| KBTR | | | | S | Sn | 07 26 51.9 | -0.7 |
| KBTR | Krutoberegovo | 3.19 | 24 | PN | Pn | 07 26 16.2 | +0.3 |
| KBTR | | | | S | Sn | 07 26 51.9 | -0.7 |
| BDR | Baidarnaya | 3.28 | 7 | eP | Pn | 07 26 20.0 | +2.8 |
| BDR | | | | eS | Sn | 07 26 59.9 | +5.0 |
| SMKR | Semkarok | 3.31 | 9 | eP | Pn | 07 26 19.2 | +1.5 |
| SMKR | | | | eS | Sn | 07 26 57.9 | +2.1 |
| SMKR | Semkarok | 3.31 | 9 | PN | Pn | 07 26 19.2 | +1.5 |
| SMKR | | | | S | Sn | 07 26 57.9 | +2.1 |
| SRKR | Sorokina | 3.36 | 6 | eP | Pn | 07 26 21.4 | +3.1 |
| SRKR | | | | eS | Sn | 07 27 00.8 | +3.9 |
| SRKR | Sorokina | 3.36 | 6 | PN | Pn | 07 26 21.4 | +3.1 |
| SRKR | | | | S | Sn | 07 27 00.8 | +3.9 |
| SKR | Severo-Kuril’s | 3.79 | 227 | eP | Pn | 07 26 25.8 | +1.7 |
| SKR | | | | eS | Sn | 07 27 09.3 | +2.0 |
| SKR | Severo-Kuril’s | 3.79 | 227 | ePN | Pn | 07 26 22.0 | -2.1 |
| SKR | | | | eS | Sn | 07 27 05.5 | -1.8 |
| SKR | | | | smax | smax | | |
| | comp=N,2μm,20.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,2μm,20.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,140nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,420nm,0.5s | | | | | | |
| OSSR | Ossora | 6.11 | 12 | eP | Pn | 07 26 58.4 | +2.5 |
| TILK | Tilichiki | 7.78 | 21 | eP | Pn | 07 27 20.3 | +1.6 |
| KUR | Kuril’sk | 11.55 | 231 | ⇑iPN | Pn | 07 28 15.3 | +4.9 |
| KUR | | | | iS | Sn | 07 30 24.9 | +7.1 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,156nm,14.0s | | | | | | |
| UGL | Uglegorsk | 12.31 | 257 | ePN | Pn | 07 28 18.4 | -2.4 |

**YSS Yuzh-Sakhalins 13.03 248** *e*PN P 07 28 35.5 -4.3
YSS MLR MLR
comp=E,500nm,14.0s
YSS MLR MLR
comp=Z,600nm,14.0s
**ASAJ Asahikawa 14.95 239** P **Pn** **07 28 57.7 +1.3**
comp=Z,1.3nm,0.3s,baz=80,slow=11,SNR=19
ASAJ LR LR 07 34 19.4
comp=Z,279nm,20.3s,baz=70,slow=35
**ASAJ Asahikawa 14.95 239** P **Pn** **07 28 57.7 +1.3**
ASAJ pmax pmax
comp=Z,1.0nm,0.3s
ASAJ MLR MLR
comp=Z,279nm,20.3s
**BILL Bilibino 15.02 8** *e*P **Pn** **07 28 56.0 -1.2**
BILL pmax pmax
comp=Z,3.0nm,1.0s
**ERM Erimo 16.21 233** *e*P **Pn** **07 29 10.5 -2.2**
**ERM Erimo 16.21 233** *e*Pn **P** **07 29 14.1 -1.0**
comp=Z,12nm,0.4s
ERM *e*Sn **Sn** **07 32 12.8 +1.5**
**HABR Khabarovsk 16.73 263** P **Pn** **07 29 16.5 -2.6**
HABR *e*S **Sn** **07 32 20.9 -2.9**
HABR pmax pmax
comp=Z,26nm,0.9s
HABR pmax pmax
comp=N,14nm,1.0s
HABR MLR MLR
comp=Z,194nm,18.0s
**KLR Kul'dur 18.38 269** *e*P **P** **07 29 38.2 -0.9**
**YAK Yakutsk 18.47 310** P **P** **07 29 38.9 -1.1**
comp=Z,0.0nm,0.3s,baz=274,slow=22,SNR=7.8
YAK LR LR 07 37 43.1
comp=Z,206nm,18.0s,baz=116,slow=40
**YAK Yakutsk 18.47 310** *e*P **P** **07 29 38.8 -1.1**
YAK *e*S **Sn** **07 33 03.8 -1.9**
YAK pmax pmax
comp=Z,33nm,0.8s
YAK smax smax
comp=N,511nm,4.3s
YAK smax smax
comp=E,86nm,3.0s
**YAK Yakutsk 18.47 310** P **P** **07 29 38.9 -1.1**
YAK *e*Pn **Pn** **07 29 39.2 -1.3**
YAK *e*Sn **Sn** **07 33 01.7 -4.0**
**USRK Ussuriysk Ar. 20.77 255** P **P** **07 30 04.7 -0.4**
comp=E,6.4nm,0.9s,baz=58,slow=9.7,SNR=9.3
USRK LR LR 07 39 10.4
comp=E,225nm,18.1s,baz=62,slow=40
**VLA Vladivostok 21.49 253**‖ *e*P **P** **07 30 11.0 -1.8**
VLA *i* 07 30 32.8
VLA pmax pmax
comp=Z,12nm,0.6s
**MAJO Matsushiro 22.88 232** *d i*P **P** **07 30 28.4 +0.6**
MAJO pmax pmax
comp=Z,270nm,0.9s
**MAJO Matsushiro 22.88 232** *e*P **P** **07 30 28.3 +0.5**
comp=Z,57nm,0.7s
**MAT Matsushiro 22.88 232** P **P** **07 30 28.7 +0.9**
MAT *e*S **S** **07 34 35.2 +1.3**
**MJAR Matsushiro Arr 22.88 232** P **P** **07 30 28.3 +0.6**
comp=Z,32nm,0.9s,baz=18,slow=11,SNR=49
MJAR LR LR 07 40 59.1
comp=Z,65nm,19.3s,baz=55,slow=40
**MJAR Matsushiro Arr 22.88 232** P **P** **07 30 28.3 +0.6**
MJAR pmax pmax
comp=Z,32nm,0.9s
MJAR MLR MLR
comp=Z,65nm,19.3s
**CN2 Changchun 24.85 262** *e*P **P** **07 30 47.4 +1.3**
CN2 *e*S **S** **07 35 02.8 -2.8**
CN2 PMZ
comp=Z,10.0nm,0.8s
CN2 PMZ
comp=Z,100nm,4.0s
CN2 LN
comp=Z,300nm,19.0s
CN2 LE
comp=Z,200nm,19.0s
CN2 LZ
comp=Z,300nm,19.0s
**PPLA Purkeypile 26.17 50** *e*P **P** **07 30 58.2 +0.1**
**BOD Bodaibo 26.25 299** *e*P **P** **07 30 55.8 -2.9**
BOD pmax pmax
comp=Z,9.0nm,1.0s
**KDAK Kodiak Island 26.48 61** P **P** **07 30 59.9 -0.8**
comp=Z,6.1nm,0.9s,baz=147,slow=1.0,SNR=7.9
**KDAK Kodiak Island 26.48 61** *i*P **P** **07 31 01.2 +0.5**
**KSRS Korea Array 27.53 248** P **P** **07 31 11.3 +1.0**
comp=Z,3.3nm,0.8s,baz=40,slow=9.6,SNR=7.5
KSRS LR LR 07 40 57.4
comp=Z,117nm,21.6s,baz=48,slow=34
**KSRS Korea Array 27.53 248** P **P** **07 31 11.3 +1.0**
KSRS pmax pmax
comp=Z,3.0nm,0.8s
KSRS MLR MLR
comp=Z,117nm,21.6s
**KSAR Wonju Array Be 27.56 248** P **P** **07 31 11.3 +0.7**
**KSAR Wonju Array Be 27.56 248** P **P** **07 31 11.3 +0.7**
**COLA College 28.06 45** *e*P **P** **07 31 13.9 -0.9**
COLA pmax pmax
comp=Z,3.0nm,1.0s
**CCB Clear Creek Bu 28.09 46** *e*P **P** **07 31 15.5 +0.5**
comp=Z,6.6nm,1.2s
**HDA Harding Lake 28.46 46** *e*P **P** **07 31 19.0 +0.6**
comp=Z,5.8nm,0.4s
**ILAR Eielson Array 28.48 46** P **P** **07 31 18.6 0.0**
comp=Z,2.0nm,0.7s,baz=262,slow=8.2,SNR=34
ILAR PcP **PcP** **07 34 28.2 -0.9**
comp=Z,0.2nm,0.5s,baz=297,slow=3.3,SNR=4.6
ILAR LR LR 07 43 10.6
comp=Z,61nm,18.4s,baz=274,slow=37
**ILAR Eielson Array 28.48 46** P **P** **07 31 18.6 0.0**
ILAR 07 34 28.3
ILAR pmax pmax
comp=Z,2.0nm,0.7s
ILAR MLR MLR
comp=Z,61nm,18.4s
**JNU Nakatsue 29.22 238** P P 07 31 29.6 +4.1
comp=Z,5.3nm,0.7s,baz=184,slow=3.2,SNR=4.8
JNU LR LR 07 43 20.5
comp=Z,75nm,20.2s,baz=107,slow=37
**DOT Dot Lake 29.79 48** *e*P **P** **07 31 29.3 -0.9**
comp=Z,26nm,1.4s
**EGAK Eagle 30.93 45** *e*P **P** **07 31 39.9 -0.3**
comp=Z,3.1nm,0.5s
**INK Inuvik 33.54 38** P **P** **07 32 03.4 +0.4**
comp=Z,3.4nm,0.7s,baz=259,slow=5.8,SNR=11
INK PcP **PcP** **07 34 42.8 +0.4**
comp=Z,3.0nm,0.6s,baz=312,slow=4.9,SNR=7.6
**INK Inuvik 33.54 38** P **P** **07 32 03.4 +0.4**
INK 07 34 42.8
INK pmax pmax
comp=Z,3.0nm,0.7s
INK pmax pmax
comp=Z,3.0nm,0.6s
**ULN Ulaanbaatar 33.69 283** *e*P **P** **07 32 02.4 -2.4**
ULN pmax pmax
comp=Z,1.0nm,1.0s
**TLY Talaya 33.87 291** LR LR 07 47 06.2
comp=Z,132nm,18.4s,baz=45,slow=38
**TLY Talaya 33.87 291** *e*P **P** **07 32 06.0 -0.1**
TLY pmax pmax
comp=Z,4.0nm,1.4s
TLY MLR MLR
comp=Z,97nm,15.0s
**H11N2 WAKE ISLAND Hy 33.89 169** T T 08 09 09.9
baz=354,slow=74,SNR=420
**H11N3 WAKE ISLAND Hy 33.91 169** T T 08 08 38.7
baz=354,slow=74,SNR=530
**H11N1 WAKE ISLAND Hy 33.91 169** T T 08 09 33.5
baz=354,slow=74,SNR=838
**SONM Songino Array 34.09 283** P **P** **07 32 06.6 -1.6**
comp=Z,3.6nm,1.0s,baz=55,slow=7.5,SNR=9.5
SONM PcP **PcP** **07 34 44.5 -0.1**
comp=Z,1.9nm,0.5s,baz=35,slow=1.5,SNR=9.6
SONM LR LR 07 47 09.8
comp=Z,135nm,19.7s,baz=70,slow=38
**SONM Songino Array 34.09 283** P **P** **07 32 06.6 -1.6**
SONM 07 34 44.5
SONM pmax pmax
comp=Z,4.0nm,1.0s
SONM pmax pmax
comp=Z,2.0nm,0.5s
SONM MLR MLR
comp=Z,135nm,19.7s

**HHC Hu-ho-hao-te 34.89 269** *e*P **P** **07 32 16.5 +1.3**
HHC S **S** **07 37 42.0 -1.1**
HHC PMZ
comp=Z,26nm,1.0s
HHC PMZ
comp=Z,110nm,5.6s
HHC LN
comp=Z,140nm,12.2s
HHC LE
comp=Z,160nm,13.7s
HHC LZ
comp=Z,130nm,11.8s
**H11S1 WAKE ISLAND Hy 35.08 170** T T 08 09 58.9
baz=352,slow=76,SNR=11
**H11S3 WAKE ISLAND Hy 35.09 170** T T 08 09 37.5
baz=352,slow=76,SNR=26
**H11S2 WAKE ISLAND Hy 35.10 170** T T 08 10 05.3
baz=352,slow=76,SNR=12
**JOW Kunigami 35.64 235** P **P** **07 32 23.1 +1.4**
comp=Z,0.6nm,0.5s,baz=14,slow=14,SNR=6.2
**NJ2 Nanjing 36.56 251** *e*P **P** **07 32 31.0 +1.6**
NJ2 PMZ
comp=Z,40nm,1.0s
**DLBC Dease Lake 37.71 54** P **P** **07 32 40.9 +1.9**
comp=Z,1.9nm,0.6s,baz=285,slow=8.2,SNR=8.7
**LZH Lanzhou 42.59 270** *e*P **P**
LZH pP **pP** **07 33 18.8 -0.9**
LZH sP **sP** **07 33 32.0 -0.4**
LZH PP **PP** **07 33 37.5 -0.4**
LZH PMZ **07 35 01.0 +2.1**
comp=Z,25nm,1.3s
LZH PMZ
comp=Z,97nm,6.0s
LZH LN
comp=Z,400nm,13.6s
LZH LE
comp=Z,440nm,14.0s
LZH LZ
comp=Z,550nm,17.5s
**GTA Gaotai 42.82 276** ⇑P **P** **07 33 21.6 0.0**
GTA pP **pP** **07 33 34.0 -0.3**
GTA sP **sP** **07 33 39.3 -0.5**
GTA S **S** **07 39 40.8 -1.7**
GTA sS **sS** **07 40 02.4 -1.3**
GTA SS SS 07 42 45.8 -8.6
GTA PMZ
comp=Z,7.0nm,1.5s
GTA PMZ
comp=Z,160nm,4.7s
GTA LN
comp=Z,470nm,13.8s
GTA LE
comp=Z,300nm,13.8s
GTA LZ
comp=Z,210nm,13.3s
**YKA Yellowknife Ar 42.83 43** P **P** **07 33 21.6 +0.5**
comp=Z,3.8nm,0.7s,baz=298,slow=8.1,SNR=7.2
**ZALV Zalesovo Beam 42.86 303** PcP **PcP** **07 35 10.5 -1.1**
comp=Z,1.9nm,0.6s,baz=111,slow=3.3,SNR=4.0
ZALV LR LR 07 52 40.0
comp=Z,141nm,18.1s,baz=70,slow=38
**NVS Novosibirsk 43.19 304** *e*P **P** **07 33 21.0 -3.1**
NVS *e* 07 39 36.8
NVS pmax pmax
comp=Z,11nm,1.3s
NVS pmax pmax
comp=E,7.0nm,1.2s
**CD2 Chengdu 46.23 264** *e*P **P** **07 33 48.2 -0.6**
CD2 pP **pP** **07 34 01.0 -0.6**
CD2 sP **sP** **07 34 06.8 -0.2**
CD2 PcS **PcS** **07 39 18.4 0.0**
CD2 S **S** **07 40 30.7 -1.2**
CD2 sS **sS** **07 40 52.8 -0.5**
CD2 PMZ
comp=E,10.0nm,0.5s
CD2 PMZ
comp=E,120nm,5.2s
**SPB5 Spitsbergen Ar 46.94 350** *e*P **P** **07 33 53.8 +0.1**
**SPA1 Spitsbergen Ar 46.95 350** *e*P **P** **07 33 53.8 +0.1**
**SPA0 Spitsbergen Ar 46.95 350** *e*P **P** **07 33 53.9 +0.1**
**SPB4 Spitsbergen Ar 46.95 350** *e*P **P** **07 33 53.9 +0.1**
**SPA3 Spitsbergen Ar 46.95 350** *e*P **P** **07 33 53.9 +0.1**
**SPB3 Spitsbergen Ar 46.95 350** *e*P **P** **07 33 53.9 +0.1**
**WMQ Urumqi 47.12 289** *e*P **P** **07 33 57.0 +1.4**
WMQ sP **sP** **07 34 15.0 +1.1**
WMQ PP **PP** **07 35 47.0 +0.5**
WMQ S **S** **07 40 44.0 -0.4**
WMQ SS **SS** **07 44 05.0 -6.4**
WMQ PMZ
comp=E,12nm,1.0s
WMQ LN
comp=E,130nm,17.0s
WMQ LE
comp=E,500nm,20.0s
WMQ LZ
comp=E,150nm,18.0s
**GYA Guiyang 47.79 258** *e*P **P** **07 34 03.0 +2.0**
GYA PMZ
comp=E,10.0nm,1.0s
**KURK Kurchatov 47.82 302** *e*P **P** **07 33 58.5 -2.3**
KURK pmax pmax
comp=Z,10.0nm,0.4s
**KURK Kurchatov 47.82 302** *e*P **P** **07 33 58.5 -2.3**
comp=Z,9.7nm,0.4s
**MKAR Makanchi Array 48.27 296** P **P** **07 34 02.3 -2.1**
comp=Z,1.6nm,0.5s,baz=64,slow=6.8,SNR=15
**MKAR Makanchi Array 48.27 296** P **P** **07 34 02.3 -2.1**
MKAR pmax pmax
comp=Z,2.0nm,0.5s
**EDM Edmonton 48.43 53** *e*P **P** **07 34 06.3 +0.7**
EDM pmax pmax
comp=Z,125nm,2.5s
**EDM Edmonton 48.43 53** *e*P **P** **07 34 06.3 +0.7**
comp=Z,125nm,2.5s
**NEW Newport 49.58 60** P **P** **07 34 13.6 -0.8**
comp=Z,1.7nm,0.8s,baz=9.1,slow=5.7,SNR=5.4
**NEW Newport 49.58 60** P **P** **07 34 13.6 -0.8**
NEW pmax pmax
comp=Z,2.0nm,0.8s
**BVAR Borovoye Array 50.44 308** P **P** **07 34 17.9 -2.9**
comp=Z,2.0nm,0.5s,baz=59,slow=6.5,SNR=9.2
BVAR PcP **PcP** **07 35 38.0 -0.4**
comp=Z,1.2nm,0.7s,baz=169,slow=0.3,SNR=4.4
**BVAR Borovoye Array 50.44 308** P **P** **07 34 17.9 -2.9**
BVAR 07 35 38.0
BVAR pmax pmax
comp=Z,2.0nm,0.5s
BVAR pmax pmax
comp=Z,1.0nm,0.7s
**BRVK Borovoye 50.47 308** *i*P **P** **07 34 18.0 -3.0**
BRVK pmax pmax
comp=Z,3.0nm,0.8s
**BSMT Bassoo Peak 51.05 60** *e*P **P** **07 34 26.8 +1.1**
comp=Z,4.4nm,0.6s
**KMI Kunming 51.10 260** P **P** **07 34 28.8 +2.4**
KMI pP **pP** **07 34 41.7 +2.3**
KMI sP **sP** **07 34 47.0 +2.2**
KMI PP **PP** **07 36 26.2 +3.0**
KMI S **S** **07 41 40.6 -0.3**
KMI sS **sS** **07 42 03.4 +0.8**
KMI SS **SS** **07 45 13.5 -2.7**
KMI PMZ
comp=Z,9.0nm,0.5s
KMI PMZ
comp=Z,93nm,3.3s
KMI LN
comp=Z,400nm,7.6s
KMI LE
comp=Z,260nm,11.0s
KMI LZ
comp=Z,230nm,13.9s
**SWMT Swartz Lake 51.68 59** *e*P **P** **07 34 30.9 +0.6**
comp=Z,1.5nm,0.5s
**QIZ Qiongzhong 51.75 249** P **P** **07 34 32.9 +1.9**
QIZ pP **pP** **07 34 44.7 +0.7**
QIZ sP **sP** **07 34 49.2 -0.2**
QIZ S **S** **07 41 52.4 +2.9**
QIZ PMZ
comp=Z,45nm,2.7s
**ARU Arti 53.39 317** *d i*P **P** **07 34 40.8 -1.9**
ARU 07 36 37.7
ARU S **S** **07 42 10.1 -0.9**
ARU pmax pmax
comp=Z,6.0nm,1.2s
**BOZ Bozeman (W) 54.14 60** *e*P **P** **07 34 49.9 +1.4**

BOZ pmax pmax
comp=Z,44nm,2.7s
**BOZ Bozeman (W) 54.14 60** *e*P **P** **07 34 49.9 +1.4**
comp=Z,44nm,2.7s
**BMN Battle Mountai 54.66 68** *e*P **P** **07 34 54.4 +2.0**
BMN pmax pmax
comp=Z,4.0nm,0.8s
**BMN Battle Mountai 54.66 68** *e*P **P** **07 34 54.4 +2.0**
comp=Z,3.7nm,0.8s
**AAK Ala-Archa 55.20 296** LR LR 07 57 54.9
comp=Z,114nm,21.4s,baz=69,slow=35
**AAK Ala-Archa 55.20 296** *e*P **P** **07 34 55.2 -1.1**
AAK pmax pmax
comp=Z,5.0nm,1.1s
**AAK Ala-Archa 55.20 296** *e*P **P** **07 34 55.1 -1.1**
comp=Z,5.5nm,1.1s
**NVAR Mina Array Bea 55.43 70** P **P** **07 34 59.9 +1.8**
comp=Z,2.5nm,0.7s,baz=296,slow=7.8,SNR=18
**EKS2 Erkin-Say 55.56 297** *e*P **P** **07 35 00.0 +1.2**
EKS2 pmax pmax
comp=Z,5.0nm,0.8s
**EKS2 Erkin-Say 55.56 297** *e*P **P** **07 35 00.0 +1.2**
comp=Z,5.2nm,0.8s
**IMW Indian Meadow 55.69 61** *e*P **P** **07 35 01.2 +1.3**
comp=Z,71nm,3.0s
**LAO LASA Array 56.17 56** *e*P **P** **07 35 04.6 +1.5**
comp=Z,25nm,1.5s
**KSH Kashi 56.54 293** *e*P P 07 35 10.6 +4.7
KSH *e*pP pP 07 35 23.4 +4.4
KSH S **S** **07 42 57.1 +3.1**
KSH ScS **ScS** **07 44 52.4 +1.5**
KSH SS **SS** **07 46 46.4 +5.2**
KSH PMZ
comp=Z,140nm,4.7s
KSH LN
comp=Z,140nm,6.5s
KSH LE
comp=Z,210nm,9.8s
KSH LZ
comp=Z,200nm,6.8s
**HWUT Hardware Ranch 56.94 63** *e*P **P** **07 35 10.4 +1.6**
comp=Z,77nm,2.8s
**KKAR Karatay Array 56.99 299** *e*P **P** **07 35 09.1 +0.3**
KKAR pmax pmax
comp=Z,3.0nm,0.7s
**KKAR Karatay Array 56.99 299** *e*P **P** **07 35 09.1 +0.3**
comp=Z,3.4nm,0.7s
**BW06 Boulder Array 57.20 61** *e*P **P** **07 35 11.8 +1.2**
comp=Z,11nm,1.4s
**DUG Dugway 57.25 65** *e*P **P** **07 35 13.1 +2.2**
DUG pmax pmax
comp=Z,5.0nm,1.0s
**DUG Dugway 57.25 65** *e*P **P** **07 35 13.1 +2.2**
comp=Z,4.8nm,1.0s
**ABKAR Akbulak array 57.83 310** *e*P **P** **07 35 13.4 -1.3**
comp=Z,0.7nm,0.4s
**AKTO Aktyubinsk 57.85 312** P **P** **07 35 12.4 -2.4**
comp=Z,1.7nm,0.4s,baz=45,slow=8.6,SNR=9.2
AKTO PcP **PcP** **07 36 05.2 -1.6**
comp=Z,0.8nm,0.4s,baz=34,slow=6.6,SNR=3.8
AKTO LR LR 08 01 47.1
comp=Z,57nm,19.6s,slow=38
**AKTO Aktyubinsk 57.85 312** P P **07 35 12.4 -2.4**
AKTO 07 36 05.2
AKTO pmax pmax
comp=Z,2.0nm,0.4s
AKTO pmax pmax
comp=Z,1.0nm,0.4s
AKTO MLR MLR
comp=Z,57nm,19.6s
**TAPN Taplejung 58.43 274** *e*P **P** **07 35 19.1 -0.4**
**CMAR Chiang Mai Arr 58.47 258** P **P** **07 35 18.4 -1.1**
comp=Z,1.0nm,0.3s,baz=24,slow=6.6,SNR=9.6
CMAR LR LR 08 02 31.5
comp=Z,64nm,19.2s,baz=185,slow=38
**CMAR Chiang Mai Arr 58.47 258** P **P** **07 35 18.4 -1.1**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
CMAR MLR MLR
comp=Z,65nm,19.2s
**ULM Lac du Bonnet 58.48 47** P **P** **07 35 19.9 +0.7**
comp=Z,3.6nm,0.5s,baz=317,slow=9.5,SNR=5.7
ULM LR LR 08 01 38.9
comp=Z,136nm,18.4s,baz=314,slow=37
**ULM Lac du Bonnet 58.48 47** P **P** **07 35 19.9 +0.7**
ULM pmax pmax
comp=Z,4.0nm,0.5s
ULM MLR MLR
comp=Z,136nm,18.4s
**TMUT Trail Mountain 58.76 65** *e*P **P** **07 35 22.9 +1.2**
comp=Z,3.4nm,0.5s
**RSSD Black Hills 59.07 57** *e*P **P** **07 35 24.7 +1.0**
RSSD pmax pmax
comp=Z,11nm,0.8s
**RSSD Black Hills 59.07 57** *e*P **P** **07 35 24.6 +1.0**
comp=Z,11nm,0.8s
**GUN Gumba 59.11 276** *e*P **P** **07 35 23.9 -0.4**
comp=Z,6.2nm,0.4s
**SRU San Rafael 59.27 65** *e*P **P** **07 35 26.7 +1.6**
SRU pmax pmax
comp=Z,6.0nm,1.0s
**SRU San Rafael 59.27 65** *e*P **P** **07 35 26.7 +1.6**
comp=Z,5.9nm,1.0s
**RAMN Ramite 59.39 275** *e*P **P** **07 35 24.5 -1.6**
comp=Z,12nm,0.5s
**KKN Kakani 59.56 276** *e*P **P** **07 35 26.6 -0.6**
comp=Z,11nm,0.4s
**PKI Pulchoki 59.64 276** *e*P **P** **07 35 27.3 -0.7**
comp=Z,11nm,0.7s
**GKN Gorkha 59.78 277** *e*P **P** **07 35 28.0 -0.7**
comp=Z,6.5nm,0.5s
**FINES FINESS Array B 60.01 337** P **P** **07 35 28.1 -1.3**
comp=Z,7.3nm,0.5s,baz=46,slow=7.1,SNR=43
FINES LR LR 08 07 22.5
comp=Z,30nm,19.4s,baz=18,slow=42
**FINES FINESS Array B 60.01 337** *i*P **P** **07 35 28.5 -1.0**
FINES pmax pmax
comp=Z,7.0nm,0.5s
**KOLN Koldanda 60.57 278** *e*P **P** **07 35 33.3 -0.9**
comp=Z,7.6nm,0.5s
**VSU Vasula 62.45 335** *i*P **P** **07 35 45.0 -1.0**
VSU pmax pmax
comp=Z,54nm,1.2s
**OBN Obninsk 62.45 327** P **P** **07 35 43.7 -2.4**
OBN pmax pmax
comp=Z,5.0nm,0.8s
**NB2 NORSAR Subarra 63.39 344** P **P** **07 35 51.1 -1.3**
comp=Z,2.2nm,1.0s,baz=25,slow=6.9
**NOA NORSAR Array B 63.39 344** P **P** **07 35 51.1 -1.3**
comp=Z,4.2nm,0.6s,baz=22,slow=6.7,SNR=11
**NOA NORSAR Array B 63.39 344** P **P** **07 35 51.1 -1.3**
NOA pmax pmax
comp=Z,4.0nm,0.6s
**ANMO Albuquerque 64.53 65** *i*P **P** **07 36 00.6 +0.2**
ANMO pmax pmax
comp=Z,3.0nm,1.7s
**GEYT Alibeck 67.17 303** LR LR 08 07 41.8
comp=Z,109nm,20.2s,baz=10.0,slow=38
**MSTX Muleshoe 67.26 63** *e*P **P** **07 36 19.2 +1.3**
comp=Z,8.0nm,0.9s
**AKASG Malin Array Be 68.54 329** P **P** **07 36 23.6 -1.9**
comp=Z,1.8nm,0.4s,baz=28,slow=6.6,SNR=5.7
**AKASG Malin Array Be 68.54 329** P **P** **07 36 23.6 -1.9**
AKASG pmax pmax
comp=Z,2.0nm,0.4s
**KIEV Kiev 68.55 329** *e*P **P** **07 36 23.9 -1.7**
KIEV pmax pmax
comp=Z,4.0nm,1.1s
**WMOK Wichita Mounta 68.78 60** *e*P **P** **07 36 27.9 +0.6**
WMOK pmax pmax
comp=Z,8.0nm,0.8s
**WMOK Wichita Mounta 68.78 60** *e*P **P** **07 36 27.9 +0.6**
comp=Z,8.0nm,0.8s
**KBZ Khabaz 69.53 317** P **P** **07 36 30.9 -0.9**
comp=Z,1.6nm,0.5s,baz=48,slow=2.3,SNR=4.1
KBZ LR LR 08 11 42.6
comp=Z,60nm,18.7s,baz=36,slow=40
**KBZ Khabaz 69.53 317** P **P** **07 36 30.9 -0.9**
KBZ pmax pmax
comp=Z,2.0nm,0.5s
KBZ MLR MLR
comp=Z,60nm,18.7s
**TXAR Lajitas Array 70.32 67** P **P** **07 36 37.9 +0.9**
comp=Z,2.8nm,0.7s,baz=297,slow=5.2,SNR=41
**TXAR Lajitas Array 70.32 67** P **P** **07 36 37.9 +0.9**
TXAR pmax pmax
comp=Z,3.0nm,0.7s

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PARMO | Parma | 71.78 | 53 | eP | P | 07 36 46.3 | +0.8 |
| STHS | Stebnicka Huta | 72.00 | 333 | eP | P | 07 36 46.2 | -0.5 |
| STHS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| STHS | Stebnicka Huta | 72.00 | 333 | eP | P | 07 36 46.2 | -0.5 |
| KOLS | Kolonicke sedl | 72.15 | 333 | eP | P | 07 36 46.4 | -1.3 |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| KOLS | Kolonicke sedl | 72.15 | 333 | eP | P | 07 36 46.4 | -1.3 |
| CLL | Collm | 72.22 | 339 | i P | P | 07 36 47.4 | -0.6 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| CLL | Collm | 72.22 | 339 | i P | P | 07 36 47.4 | -0.6 |
| | comp=Z,15nm,1.1s | | | | | | |
| DPC | Dobruska-Polom | 72.38 | 337 | eP | P | 07 36 49.1 | +0.1 |
| DPC | Dobruska-Polom | 72.38 | 337 | eP | P | 07 36 49.1 | +0.1 |
| BRG | Berggiesshubel | 72.43 | 339 | eP | P | 07 36 48.0 | -1.3 |
| | comp=Z,4.7nm,1.0s | | | | | | |
| BRG | Berggiesshubel | 72.43 | 339 | eP | P | 07 36 48.0 | -1.3 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| BURAR | Bucovina Array | 72.50 | 330 | ⇑P | P | 07 36 48.9 | -0.9 |
| BURAR | Bucovina Array | 72.50 | 330 | ⇑iP | P | 07 36 48.9 | -0.9 |
| LANS | Liptovska Anna | 72.71 | 334 | eP | P | 07 36 51.9 | +0.9 |
| LANS | Liptovska Anna | 72.71 | 334 | eP | P | 07 36 51.9 | +0.9 |
| TRPA | Tarpa | 72.81 | 332 | ⇑iP | P | 07 36 45.3 | -6.2 |
| WVT | Waverly | 73.12 | 52 | eP | P | 07 36 53.2 | -0.4 |
| WVT | Waverly | 73.12 | 52 | eP | P | 07 36 53.2 | -0.4 |
| PRU | Pruhonice | 73.13 | 338 | eP | P | 07 36 52.8 | -0.6 |
| PRU | Pruhonice | 73.13 | 338 | eP | P | 07 36 52.8 | -0.6 |
| VRAC | Vranov | 73.28 | 336 | ⇑P | P | 07 36 57.1 | +2.8 |
| VRAC | Vranov | 73.28 | 336 | ⇑iP | P | 07 36 57.1 | +2.8 |
| NKC | Novy Kostel | 73.36 | 339 | eP | P | 07 36 54.0 | -0.8 |
| NKC | Novy Kostel | 73.36 | 339 | eP | P | 07 36 54.0 | -0.8 |
| NKC | | | | ex | x | 07 36 57.3 | |
| VYHS | Vyhne | 73.48 | 335 | eP | P | 07 36 55.1 | -0.4 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| VYHS | Vyhne | 73.48 | 335 | eP | P | 07 36 55.1 | -0.4 |
| DRGR | | 73.98 | 331 | ⇑P | P | 07 36 57.2 | -1.3 |
| DRGR | | 73.98 | 331 | ⇑iP | P | 07 36 57.2 | -1.3 |
| KHC | Kasperske Hory | 74.15 | 338 | eP | P | 07 36 59.3 | -0.2 |
| KHC | Kasperske Hory | 74.15 | 338 | eP | P | 07 36 59.3 | -0.2 |
| KHC | Kasperske Hory | 74.15 | 338 | eP | P | 07 37 00.1 | +0.6 |
| | comp=Z,3.9nm,1.0s | | | | | | |
| MLR | Muntele Rosu | 74.18 | 329 | ⇑P | P | 07 36 59.5 | -0.3 |
| MLR | Muntele Rosu | 74.18 | 329 | ⇑iP | P | 07 36 59.5 | -0.3 |
| MEM | Membach | 74.23 | 343 | P | P | 07 37 00.0 | +0.2 |
| | comp=Z,15nm,1.0s | | | | | | |
| GERES | GERESS Array B | 74.39 | 338 | P | P | 07 37 00.5 | -0.4 |
| | comp=Z,2.0nm,0.5s,baz=40,slow=4.4,SNR=16 | | | | | | |
| GERES | | | | LR | LR | 08 17 48.0 | |
| | comp=Z,32nm,18.8s,baz=16,slow=42 | | | | | | |
| BFO | Black Forest | 76.00 | 341 | i P | P | 07 37 11.0 | +0.9 |
| SOKA | Soboth | 76.11 | 336 | ⇑iP | P | 07 37 11.0 | +0.2 |
| | comp=Z,6.8nm,0.9s | | | | | | |
| KBA | Koelnbreinsper | 76.14 | 338 | ⇑iP | P | 07 37 11.7 | +0.6 |
| | comp=Z,27nm,1.0s | | | | | | |
| WTTA | Wattenberg | 76.34 | 339 | ⇑iP | P | 07 37 12.7 | +0.5 |
| | comp=Z,5.1nm,0.6s | | | | | | |
| MOTA | Moosalm | 76.38 | 339 | ⇑iP | P | 07 37 12.5 | 0.0 |
| | comp=Z,5.0nm,0.6s | | | | | | |
| WRAB | Tennant Creek | 76.38 | 205 | i P | P | 07 37 12.3 | -0.1 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,37nm,2.5s | | | | | | |
| WRAB | Tennant Creek | 76.38 | 205 | eP | P | 07 37 12.8 | +0.4 |
| | comp=Z,8.0nm,1.0s | | | | | | |
| OBKA | Obir | 76.39 | 337 | ⇑iP | P | 07 37 12.8 | +0.3 |
| | comp=Z,14nm,1.2s | | | | | | |
| WRA | Warramunga Arr | 76.39 | 205 | P | P | 07 37 12.7 | +0.2 |
| | comp=Z,5.9nm,0.9s,baz=19,slow=6.1,SNR=21 | | | | | | |
| WRA | Warramunga Arr | 76.39 | 205 | i P | P | 07 37 12.6 | +0.1 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| BRTR | Keskin Array B | 76.60 | 321 | P | P | 07 37 13.0 | -0.8 |
| | comp=Z,0.8nm,0.6s,baz=25,slow=3.8,SNR=3.4 | | | | | | |
| BRTR | | | | LR | LR | 08 17 23.0 | |
| | comp=Z,36nm,18.3s,baz=34,slow=41 | | | | | | |
| ABTA | Abfaltersbach | 76.64 | 338 | ⇑iP | P | 07 37 14.1 | +0.3 |
| | comp=Z,13nm,0.9s | | | | | | |
| DAVA | Damuels | 76.69 | 340 | ⇑iP | P | 07 37 14.8 | +0.5 |
| | comp=Z,12nm,1.2s | | | | | | |
| FETA | Feichten | 76.77 | 339 | ⇑iP | P | 07 37 15.0 | +0.3 |
| | comp=Z,10nm,0.9s | | | | | | |
| DIVS | Divibare | 77.21 | 332 | ⇓iP | P | 07 37 16.5 | -0.6 |
| TUE | Stuetta | 77.58 | 340 | eP | P | 07 37 20.0 | +0.7 |
| | comp=Z,9.0nm,0.6s | | | | | | |
| PALK | Pallekele | 78.11 | 266 | LR | LR | 08 15 51.0 | |
| | comp=Z,47nm,19.1s,baz=135,slow=39 | | | | | | |
| BNI | Bardonecchia | 79.47 | 341 | eP | P | 07 37 30.8 | +1.2 |
| BNI | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| BNI | Bardonecchia | 79.47 | 341 | eP | P | 07 37 30.8 | +1.2 |
| | comp=Z,4.0nm,0.6s | | | | | | |
| ASAR | Alice Springs | 80.07 | 205 | P | P | 07 37 33.6 | +0.9 |
| | comp=Z,5.3nm,0.8s,baz=16,slow=5.3,SNR=46 | | | | | | |
| ASAR | Alice Springs | 80.07 | 205 | P | P | 07 37 33.7 | +0.9 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| PMOR | Pomariorio Ree | 81.13 | 130 | eT | T | 09 07 15.6 | |
| | comp=Z,3.6nm,0.2s | | | | | | |
| PPT | Papeete | 82.62 | 133 | LR | LR | 08 04 49.5 | |
| | comp=Z,26nm,21.3s,baz=306,slow=28 | | | | | | |
| PPT2 | Papeete2 | 82.64 | 133 | eLR | LR | 08 03 20.4 | |
| | comp=Z,58nm,24.8s | | | | | | |
| RAYN | Ar Rayn | 85.13 | 303 | eP | P | 07 37 58.2 | -1.2 |
| | comp=Z,6.9nm,0.7s | | | | | | |
| ESDC | Sonseca Array | 86.40 | 348 | P | P | 07 38 05.5 | 0.0 |
| | comp=Z,0.6nm,0.5s,baz=358,slow=5.3,SNR=3.8 | | | | | | |
| KEST | Kesra | 87.84 | 337 | P | P | 07 38 11.9 | -0.6 |
| | comp=Z,2.8nm,0.6s,baz=350,slow=19,SNR=3.7 | | | | | | |
| RKT | Rikitea | 94.29 | 124 | eT | T | 09 23 47.6 | |
| | comp=Z,1.2nm,0.3s | | | | | | |
| VNDA | Vanda | 130.58 | 180 | PKP | PKPdf | 07 44 33.0 | +1.0 |
| | comp=Z,0.7nm,0.9s,baz=311,slow=5.2,SNR=5.4 | | | | | | |
| VNDA | Vanda | 130.58 | 180 | PKIKP | PKPdf | 07 44 33.0 | +1.0 |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| MAW | Mawson | 140.31 | 216 | PKP | PKPdf | 07 44 52.9 | +2.5 |
| | comp=Z,1.1nm,0.8s,baz=0.0,slow=1.0,SNR=2.8 | | | | | | |
| MAW | Mawson | 140.31 | 216 | PKIKP | PKPdf | 07 44 52.9 | +2.5 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |

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**KRSC 07 07:28:43.2±0.4, 55.10N×160.15E, h4km±3km, ML3.6, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KZV | Kizimen | 0.08 | 81 | eP | Pg | 07 28 45.5 | +0.3 |
| TUMR | Tumrok | 0.18 | 359 | eP | Pg | 07 28 47.6 | +0.6 |
| TUMR | | | | eS | Sg | 07 28 50.8 | +1.3 |
| KMNR | Kamenistaya | 0.66 | 4 | eP | Pg | 07 28 56.7 | +0.7 |
| KMNR | | | | eS | Sg | 07 29 05.8 | +1.1 |
| BZMR | Bezymyannaya | 0.86 | 13 | P | Pb | 07 29 00.8 | -0.1 |
| BZMR | | | | S | Sb | 07 29 13.2 | +0.2 |
| KIRR | Kirishev | 0.86 | 7 | eP | Pb | 07 29 00.9 | -0.1 |
| KIRR | | | | eS | Sb | 07 29 14.1 | +1.0 |
| KPT | Kopyto | 0.87 | 3 | eP | Pb | 07 29 00.8 | -0.2 |
| KPT | | | | eS | Sn | 07 29 15.0 | -0.7 |
| BZWR | Bezymyannyi-We | 0.89 | 13 | P | Pb | 07 29 01.4 | -0.1 |
| BZWR | | | | S | Sn | 07 29 15.1 | -1.2 |
| KOZ | Kozyrevsk | 0.97 | 351 | eP | Pb | 07 29 02.4 | -0.3 |
| KOZ | | | | eS | Sg | 07 29 14.8 | +0.2 |
| MKZ | Mys Kozlova | 1.06 | 120 | eP | Pg | 07 29 03.2 | -0.4 |
| KII | Karymskiy | 1.14 | 201 | P | Pb | 07 29 05.6 | 0.0 |
| ESO | Esso | 1.17 | 316 | eP | Pg | 07 29 04.5 | -1.1 |
| ESO | | | | eS | Sb | 07 29 21.3 | -0.3 |
| SRDR | Sredinnyy | 1.25 | 349 | eP | Pg | 07 29 06.4 | -0.8 |
| SRDR | | | | eS | Sg | 07 29 23.2 | -0.2 |
| KLY | Klyuchi | 1.25 | 13 | eP | Pn | 07 29 08.2 | +0.7 |
| KLY | | | | S | Sn | 07 29 26.1 | +1.4 |
| KBTR | Krutoberegovo | 1.88 | 53 | P | Pn | 07 29 16.1 | 0.0 |
| GNL | Ganaly | 1.91 | 223 | eP | Pn | 07 29 17.6 | +0.9 |
| GNL | | | | S | Sb | 07 29 43.3 | +0.2 |
| KRX | Arik | 1.95 | 207 | P | Pn | 07 29 17.0 | -0.4 |
| SDLR | Sedlovina | 1.97 | 203 | eP | Pb | 07 29 19.1 | -0.7 |
| NLC | Nalytchevo | 1.99 | 194 | S | Sb | 07 29 45.6 | +0.6 |
| SMAR | Somma | 2.00 | 204 | eP | Pb | 07 29 19.7 | -0.8 |
| SPN | Mys Shipunski | 2.01 | 182 | eP | Pn | 07 29 18.1 | +0.2 |
| SPN | | | | eS | Sn | 07 29 44.2 | +0.8 |
| AVH | Avacha | 2.02 | 205 | P | Pb | 07 29 20.7 | +0.2 |
| APC | Apacha | 2.80 | 220 | P | Pn | 07 29 30.6 | +1.8 |

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**NNC 07 07:35:34.6±0.4, 50.08N×78.74E, h9km±3km, mb3.5, mpv3.2, 25C-15D, Error ellipse: s-maj=5.6km s-min=2.5km az=65.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUR07 | Kurchatov Arra | 0.53 | 344 | ⇑P | Pb | 07 35 45.7 | -0.4 |
| KUR07 | | | | ⇑S | Sb | 07 35 54.5 | +0.7 |
| KUR06 | Kurchatov Arra | 0.55 | 345 | ⇑P | Pb | 07 35 46.0 | -0.3 |
| KUR06 | | | | ⇓S | Sb | 07 35 54.6 | +0.3 |
| KUR14 | Kurchatov Arra | 0.55 | 350 | ⇑P | Pb | 07 35 46.2 | -0.2 |
| KUR14 | | | | ⇑S | Sb | 07 35 54.4 | +0.1 |
| KUR15 | Kurchatov Arra | 0.55 | 348 | ⇑P | Pb | 07 35 46.2 | -0.3 |
| KUR15 | | | | ⇑S | Sb | 07 35 54.6 | 0.0 |
| KURBB | Kurchatov Arra | 0.56 | 346 | ⇑P | Pb | 07 35 46.3 | -0.4 |
| | 35nm,0.3s | | | | | | |
| KURBB | | | | ⇓S | Sb | 07 35 54.8 | 0.0 |
| | 284nm,0.7s | | | | | | |
| KUR16 | Kurchatov Arra | 0.57 | 344 | ⇑P | Pg | 07 35 46.2 | +0.5 |
| KUR16 | | | | ⇑S | Sb | 07 35 55.1 | 0.0 |
| KUR05 | Kurchatov Arra | 0.58 | 347 | ⇓P | Pb | 07 35 46.5 | -0.5 |
| KUR05 | | | | ⇓S | Sb | 07 35 55.5 | +0.2 |
| KUR17 | Kurchatov Arra | 0.58 | 343 | ⇑P | Pb | 07 35 46.7 | -0.3 |
| KUR17 | | | | ⇓S | Sb | 07 35 55.6 | +0.2 |
| KUR04 | Kurchatov Arra | 0.60 | 348 | ⇑P | Pb | 07 35 47.0 | -0.3 |
| KUR04 | | | | ⇓S | Sb | 07 35 56.0 | +0.1 |
| KURK | Kurchatov | 0.64 | 353 | ⇑P | Pb | 07 35 47.6 | -0.4 |
| | 41nm,0.4s | | | | | | |
| KURK | | | | ⇑S | Sb | 07 35 57.0 | -0.2 |
| | 136nm,0.5s | | | | | | |
| MK31 | Makanchi Array | 4.05 | 143 | ⇑Pn | Pn | 07 36 38.5 | +1.7 |
| | 0.9nm,0.3s,baz=327,slow=13,SNR=15 | | | | | | |
| MK31 | | | | ⇑Pg | Pb | 07 36 46.6 | +0.6 |
| | 1.2nm,0.3s,baz=331,slow=16,SNR=6.1 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 37 42.6 | |
| | 4.9nm,0.4s,baz=330,slow=25,SNR=13 | | | | | | |
| OTUK | Ortayu | 4.58 | 249 | ⇓Pn | Pn | 07 36 45.4 | +1.3 |
| | 2.7nm,0.3s | | | | | | |
| OTUK | | | | ⇓Pg | Pb | 07 36 57.3 | +2.0 |
| | 4.8nm,0.9s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 07 37 58.2 | |
| | 12nm,0.4s | | | | | | |
| VOSK | Vostochnaya | 5.53 | 302 | ⇓Pn | Pn | 07 36 57.9 | +0.8 |
| | 0.9nm,0.5s | | | | | | |
| VOSK | | | | ⇑Pg | Pb | 07 37 15.3 | +4.0 |
| | 1.0nm,0.4s | | | | | | |
| VOSK | | | | ⇓Sn | Sn | 07 38 02.2 | +1.3 |
| | 1.9nm,0.5s | | | | | | |
| VOSK | | | | ⇑Lg | Lg | 07 38 28.4 | |
| | 3.2nm,0.6s | | | | | | |
| BVA0 | Borovoye Array | 5.99 | 303 | ⇑Pn | Pn | 07 37 04.9 | +1.6 |
| | 0.8nm,0.3s,baz=119,slow=16,SNR=4.1 | | | | | | |
| BVA0 | | | | ⇓Sn | Sn | 07 38 12.0 | 0.0 |
| | 1.5nm,0.4s,baz=117,slow=23,SNR=5.5 | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 07 38 44.7 | |
| | 2.9nm,0.6s,baz=274,slow=48,SNR=5.3 | | | | | | |
| BRVK | Borovoye | 6.06 | 303 | ⇑Sn | Sn | 07 38 14.3 | +0.5 |
| | 4.2nm,0.5s | | | | | | |
| CHKZ | Chkalovo | 6.19 | 309 | ⇓Sn | Sn | 07 38 18.0 | +1.2 |
| | 1.4nm,0.5s | | | | | | |
| CHKZ | | | | ⇑Lg | Lg | 07 38 50.8 | |
| | 4.5nm,0.6s | | | | | | |
| ZRNK | Zerenda | 6.72 | 299 | ⇑Pn | Pn | 07 37 13.4 | -0.1 |
| | 1.3nm,0.5s | | | | | | |
| ZRNK | | | | ⇑Sn | Sn | 07 38 29.9 | -0.3 |
| | 3.6nm,0.7s | | | | | | |
| ZRNK | | | | ⇓Lg | Lg | 07 39 06.1 | |
| | 3.4nm,0.6s | | | | | | |
| PDGK | Podgornoye | 6.77 | 175 | ⇑Lg | Lg | 07 39 10.3 | |
| | 8.0nm,0.7s | | | | | | |

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**MEX 07 07:36:58.5±0.4, 17.78N×101.46W, h51km±4km, MD4.1, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZIIG | Zihuatanejo | 0.17 | 182 | eP | Pn | 07 37 05.6 | -1.2 |
| ZIIG | | | | eS | Sn | 07 37 10.6 | -2.0 |
| ARIG | Puente Sto Nin | 1.17 | 64 | i P | Pn | 07 37 17.4 | -1.2 |
| ARIG | | | | eS | Sn | 07 37 31.3 | -2.3 |
| CAIG | El Cayaco | 1.35 | 122 | eP | Pn | 07 37 19.2 | -1.7 |
| MMIG | Aquila | 1.87 | 286 | eP | Pn | 07 37 25.8 | -2.2 |
| MMIG | | | | i S | Sn | 07 37 48.2 | -2.2 |
| PLIG | Platanillo | 1.96 | 71 | eP | Pn | 07 37 28.3 | -1.1 |
| PLIG | | | | eS | Sn | 07 37 50.7 | -2.3 |
| TLIG | Tlapa | 2.77 | 94 | eP | Pn | 07 37 39.2 | -1.4 |
| TLIG | | | | i S | Sn | 07 38 10.9 | -2.0 |

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*IDC **07** 07:47:09.2±0.9, 33.53N×90.96E, h0km, mb4.1/7, mb1 4.2/11, mb1mx3.9/38, mbtmp4.0/11, ML3.5/4, MS3.9/2, Ms1 3.9/2, ms1mx2.9/45, Error ellipse: s-maj=30.2km s-min=16.7km az=59.0*

*BJI **07** 07:47:10.0, 33.29N×91.38E, h10km, mb3.7/3, ML3.3/3, Ms7 3.2/2*

*ISCJB **07** 07:47:12.4±0.5, 33.62N±0.05×91.03E±0.09, h33km, mb4.0/6, MS3.9/2, Error ellipse: s-maj=11.9km s-min=5.9km az=29.4*

**ISC 07 07:47:14.6±0.7, 33.59N±0.08×91.04E±0.10, h35km, n25, σ1.35/23, mb3.9/6, Qinghai**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LSA | Lhasa | 3.88 | 179 | Pg | Pn | 07 48 16.0 | +3.8 |
| TAPN | Taplejung | 6.85 | 206 | eP | Pn | 07 48 54.6 | +1.8 |
| | 21nm,0.8s | | | | | | |
| GUN | Gumba | 7.19 | 219 | eP | Pn | 07 48 58.5 | +0.9 |
| | 35nm,0.5s | | | | | | |
| ODAN | Odare | 7.41 | 206 | eP | Pn | 07 49 01.4 | +0.9 |
| | 57nm,0.6s | | | | | | |
| KKN | Kakani | 7.62 | 222 | eP | Pn | 07 49 04.1 | +0.8 |
| | 21nm,0.5s | | | | | | |
| RAMN | Ramite | 7.65 | 211 | eP | Pn | 07 49 04.1 | +0.3 |
| | 111nm,0.6s | | | | | | |
| PKI | Pulchoki | 7.71 | 220 | eP | Pn | 07 49 05.5 | +0.8 |
| | 51nm,0.6s | | | | | | |
| PKIN | Phulchoki | 7.72 | 221 | eP | Pn | 07 49 05.7 | +1.0 |
| | 22nm,0.6s | | | | | | |
| GKN | Gorkha | 7.83 | 226 | eP | Pn | 07 49 06.7 | +0.6 |
| | 43nm,0.5s | | | | | | |
| DMN | Daman | 7.85 | 222 | eP | Pn | 07 49 07.2 | +0.7 |
| | 16nm,0.5s | | | | | | |
| KOLN | Koldanda | 8.64 | 230 | eP | Pn | 07 49 17.7 | +0.4 |
| | 7.7nm,0.5s | | | | | | |
| GTA | Gaotai | 9.14 | 48 | eP | Pn | 07 49 25.6 | +1.5 |
| GTA | | | | pP | | 07 49 29.7 | |
| GTA | | | | sP | | 07 49 32.6 | |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.2s | | | | | | |
| MKAR | Makanchi Array | 14.77 | 336 | Pn | Pn | 07 50 38.4 | -2.4 |
| | 0.0nm,0.3s,baz=141,slow=16,SNR=4.5 | | | | | | |
| AAK | Ala-Archa | 15.82 | 310 | Pn | P | 07 51 01.0 | +2.8 |
| | 0.3nm,0.3s,baz=137,slow=9.6,SNR=5.9 | | | | | | |
| CMAR | Chiang Mai Arr | 16.65 | 153 | Pn | Pn | 07 51 02.2 | -3.0 |
| | 0.5nm,0.3s,baz=337,slow=15,SNR=4.1 | | | | | | |
| SONM | Songino Array | 18.33 | 35 | P | Pn | 07 51 26.7 | +0.6 |
| | 0.1nm,0.3s,baz=219,slow=12,SNR=10.0 | | | | | | |
| KURBB | Kurchatov Arra | 19.34 | 335 | P | Pn | 07 51 37.1 | -0.9 |
| | 0.1nm,0.3s,baz=143,slow=12,SNR=22 | | | | | | |
| ZALV | Zalesovo Beam | 20.82 | 350 | P | P | 07 51 52.8 | -0.1 |
| | 4.7nm,0.5s,baz=167,slow=11,SNR=15 | | | | | | |
| BVAR | Borovoye Array | 24.40 | 329 | P | P | 07 52 29.6 | +0.1 |
| | 1.4nm,0.6s,baz=146,slow=8.4,SNR=9.2 | | | | | | |
| KSRS | Korea Array | 30.14 | 72 | P | P | 07 53 20.8 | -0.3 |
| | 1.0nm,0.5s,baz=142,slow=11,SNR=3.6 | | | | | | |
| KAPI | Kappang | 47.04 | 139 | LR | LR | 08 18 52.0 | |
| | comp=Z,154nm,19.3s,baz=139,slow=40 | | | | | | |
| WRA | Warramunga Arr | 67.37 | 136 | P | P | 07 58 06.7 | +0.3 |
| | 6.0nm,1.0s,baz=332,slow=6.5,SNR=22 | | | | | | |
| ASAR | Alice Springs | 70.05 | 138 | P | P | 07 58 23.9 | +0.9 |
| | 4.9nm,0.8s,baz=324,slow=6.4,SNR=62 | | | | | | |
| ILAR | Eielson Array | 72.09 | 22 | P | P | 07 58 34.4 | -0.5 |
| | 0.7nm,0.8s,baz=288,slow=4.5,SNR=9.6 | | | | | | |
| TORD | Torodi Ar. Bea | 82.31 | 281 | P | P | 07 59 32.1 | -0.9 |
| | 1.1nm,0.7s,baz=51,slow=5.0,SNR=8.0 | | | | | | |
| TORD | | | | LR | LR | 08 40 18.8 | |
| | comp=Z,43nm,18.6s,baz=105,slow=39 | | | | | | |

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*CSEM **07** 07:58:37.5±0.3, 39.13N×34.26E, h15km, MD2.6, Error ellipse: s-maj=6.4km s-min=4.3km az=78.0*

*ISK **07** 07:58:37.2, 39.13N×34.26E, h4km, MD2.6*

*ISCJB **07** 07:58:38.1±0.6, 39.10N±0.04×34.20E±0.05, h8km, Error ellipse: s-maj=5.5km s-min=5.3km az=154.9*

**ISC 07 07:58:37.6±1.0, 39.13N±0.03×34.23E±0.03, h8km, n17, σ0.37/22, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YAYX | Yaylak | 0.38 | 240 | ePG | Pg | 07 58 45.3 | +0.2 |
| YAYX | Yaylak | 0.38 | 240 | ePg | Pg | 07 58 45.3 | +0.2 |
| KAMT | Kaman | 0.47 | 301 | ePG | Pg | 07 58 47.2 | +0.5 |
| KAMT | | | | eSG | Sb | 07 58 54.7 | -0.6 |
| KAMT | Kaman | 0.47 | 301 | ePg | Pg | 07 58 47.2 | +0.5 |
| KAMT | | | | eSg | Sb | 07 58 54.7 | -0.6 |
| CDAG | Cicekdag | 0.50 | 12 | i P | Pg | 07 58 47.1 | -0.3 |
| CDAG | | | | i S | Sb | 07 58 56.1 | -0.2 |
| CDAG | Cicekdag | 0.50 | 12 | P | Pg | 07 58 47.1 | -0.3 |
| CDAG | | | | S | Sb | 07 58 56.1 | -0.2 |
| SERE | Sereflikochisa | 0.55 | 251 | ePG | Pb | 07 58 49.3 | -0.3 |
| SERE | Sereflikochisa | 0.55 | 251 | ePg | Pb | 07 58 49.3 | -0.3 |
| GULA | Gulagac | 0.79 | 180 | ePG | Pb | 07 58 53.6 | 0.0 |
| GULA | Gulagac | 0.79 | 180 | ePg | Pb | 07 58 53.6 | 0.0 |
| AFSR | Af¯ar-Bala (A | 0.95 | 290 | ePG | Pb | 07 58 56.5 | 0.0 |
| AFSR | Af¯ar-Bala (A | 0.95 | 290 | ePg | Pb | 07 58 56.5 | 0.0 |
| NIG | Nigde | 1.06 | 164 | ePG | Pg | 07 58 57.9 | -0.1 |
| NIG | Nigde | 1.06 | 164 | ePg | Pg | 07 58 57.9 | -0.1 |
| SULT | Sultanhani-AKS | 1.09 | 211 | ePN | Pb | 07 58 58.7 | -0.1 |
| SULT | Sultanhani-AKS | 1.09 | 211 | ePn | Pb | 07 58 58.7 | -0.1 |
| CUSAR | Sarkisla-SIVAS | 1.59 | 79 | P | Pb | 07 59 07.3 | 0.0 |
| CUSAR | | | | S | Sg | 07 59 29.6 | +0.9 |

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*ISCJB **07** 08:04:50.4±0.8, 13.07N±0.05×124.71E±0.08, h10km, mb3.9/5, Error ellipse: s-maj=11.0km s-min=6.3km az=161.7*

*IDC **07** 08:04:50.0±1.7, 13.07N×124.99E, h0km, mb3.9/5, mb1 4.0/5, mb1mx3.7/32, mbtmp3.9/5, Error ellipse: s-maj=206.8km s-min=19.0km az=69.0*

*MAN **07** 08:04:51, 13.04N×124.62E, h13km, mb5.0, ML4.0, MS4.1*

**ISC 07 08:04:51.7±0.9, 13.05N±0.05×124.60E±0.08, h10km, n21, σ0.96/19, mb3.8/5, 2C-3D, Luzon**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNP | Catarman | 0.54 | 174 | eP | Pb | 08 05 02.9 | -0.4 |
| PVCP | Virac | 0.70 | 321 | ⇑iP | Pb | 08 05 05.2 | -0.8 |
| AUQP | San Andres | 1.90 | 278 | eP | Pg | 08 05 27.2 | -0.9 |
| PLP | Palo | 1.91 | 169 | ⇓eP | Pn | 08 05 24.4 | +0.1 |
| PLP | | | | eS | Sn | 08 05 48.0 | -0.5 |
| GQP | Guinayangan | 2.27 | 292 | ⇓eP | Pn | 08 05 29.9 | +0.6 |
| GQP | | | | eS | Sg | 08 06 04.2 | -0.4 |
| RCP | Roxas | 2.34 | 231 | ⇑eP | Pn | 08 05 30.8 | +0.4 |
| RCP | | | | eS | Sn | 08 06 00.1 | +0.9 |
| OTRP | Odiongan | 2.61 | 255 | eP | Pn | 08 05 34.3 | +0.2 |
| MSLP | Maasin | 2.91 | 175 | eP | Pb | 08 05 43.0 | -0.8 |
| MSLP | | | | eS | Sg | 08 06 26.5 | +1.2 |
| GUIM | Jordan | 3.11 | 220 | eP | Pn | 08 05 41.6 | +0.7 |
| PCPH | Palayan | 4.22 | 307 | ⇓eP | Pn | 08 05 57.2 | +1.0 |
| WRA | Warramunga Arr | 34.16 | 164 | P | P | 08 11 37.1 | -0.2 |
| | 0.3nm,0.3s,baz=340,slow=9.6,SNR=3.1 | | | | | | |
| ASAR | Alice Springs | 37.61 | 166 | P | P | 08 12 05.3 | -1.6 |
| | 0.8nm,0.5s,baz=348,slow=6.9,SNR=12 | | | | | | |
| SONM | Songino Array | 37.86 | 340 | P | P | 08 12 08.5 | -0.4 |
| | 1.3nm,0.7s,baz=160,slow=9.5,SNR=5.4 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 40.79 | 77 | T | T | 08 56 09.6 | |
| | baz=246,slow=78,SNR=82 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 40.80 | 77 | T | T | 08 56 06.7 | |
| | baz=246,slow=78,SNR=36 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 40.81 | 77 | T | T | 08 56 12.0 | |
| | baz=246,slow=78,SNR=54 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 41.03 | 75 | T | T | 08 56 26.7 | |
| | baz=267,slow=74,SNR=231 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.03 | 75 | T | T | 08 56 28.6 | |
| | baz=267,slow=74,SNR=185 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 41.04 | 75 | T | T | 08 56 28.0 | |
| | baz=267,slow=74,SNR=311 | | | | | | |
| ZALV | Zalesovo Beam | 51.42 | 331 | P | P | 08 13 58.4 | +1.6 |
| | 2.8nm,0.7s,baz=124,slow=8.5,SNR=9.7 | | | | | | |
| BVAR | Borovoye Array | 58.47 | 325 | P | P | 08 14 49.5 | +1.6 |
| | 1.5nm,0.7s,baz=123,slow=5.3,SNR=2.1 | | | | | | |

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**IDC 07 08:05:32.2±3.5, 6.52S×151.04E, h0km, mb3.3/2, mb1 3.7/2, mb1mx3.2/28, mbtmp3.4/2, Error ellipse: s-maj=144.0km s-min=46.5km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 21.00 | 229 | P | P | 08 10 17.1 | -0.4 |
| | 0.7nm,0.5s,baz=54,slow=11,SNR=4.3 | | | | | | |
| ASAR | Alice Springs | 23.71 | 222 | P | P | 08 10 46.0 | 0.0 |
| | 0.7nm,0.6s,baz=57,slow=9.1,SNR=7.2 | | | | | | |
| TORD | Torodi Ar. Bea | 149.11 | 285 | PKPbc | PKPbc | 08 25 23.2 | -0.4 |
| | 0.2nm,0.6s,baz=99,slow=2.4,SNR=2.4 | | | | | | |

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*ISCJB **07** 08:19:19.8±1.1, 39.82N±0.08×35.38E±0.05, h8km, Error ellipse: s-maj=11.4km s-min=5.7km az=5.5*

*CSEM **07** 08:19:21.5±0.3, 39.75N×35.28E, h10km, MD2.6, Error ellipse: s-maj=8.8km s-min=3.9km az=2.0*

*ISK **07** 08:19:21.3, 39.74N×35.32E, h13km, MD2.6*

**ISC 07 08:19:20.4±1.2, 39.78N±0.07×35.35E±0.03, h8km, n16, σ0.96/21, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YOZ | Yozgat | 0.14 | 189 | ePG | Pg | 08 19 24.2 | +0.6 |
| YOZ | | | | eSG | Sg | 08 19 27.1 | +1.3 |
| YOZ | Yozgat | 0.14 | 189 | ePg | Pg | 08 19 24.2 | +0.6 |
| YOZ | | | | eSg | Sg | 08 19 27.1 | +1.3 |
| CDAG | Cicekdag | 0.77 | 258 | i P | Pg | 08 19 34.9 | -0.3 |
| CDAG | | | | i S | Sb | 08 19 45.9 | -0.9 |
| CDAG | Cicekdag | 0.77 | 258 | P | Pg | 08 19 35.0 | -0.3 |
| CDAG | | | | S | Sb | 08 19 45.9 | -0.9 |
| CUSAR | Sarkisla-SIVAS | 0.78 | 118 | P | Pg | 08 19 32.9 | -2.6 |
| CUSAR | | | | S | Sg | 08 19 45.1 | -0.5 |
| SVSK | Karacayir | 1.28 | 83 | ePN | Pg | 08 19 46.2 | +1.3 |
| SVSK | Karacayir | 1.28 | 83 | ePn | Pg | 08 19 46.2 | +1.3 |
| KAMT | Kaman | 1.33 | 252 | ePN | Pg | 08 19 46.0 | +0.1 |
| KAMT | Kaman | 1.33 | 252 | ePn | Pg | 08 19 46.0 | +0.1 |
| YAYX | Yaylak | 1.46 | 235 | ePN | Pn | 08 19 46.9 | -0.3 |
| YAYX | Yaylak | 1.46 | 235 | ePn | Pn | 08 19 46.9 | -0.3 |
| SARI | SarD1z-Kayseri | 1.61 | 148 | ePN | Pn | 08 19 49.4 | +0.1 |
| SERE | Sereflikochisa | 1.62 | 239 | ePN | Pn | 08 19 49.4 | +0.1 |
| SERE | Sereflikochisa | 1.62 | 239 | ePn | Pn | 08 19 49.4 | +0.1 |
| GULA | Gulagac | 1.68 | 211 | ePN | Pn | 08 19 50.2 | 0.0 |
| GULA | Gulagac | 1.68 | 211 | ePn | Pn | 08 19 50.2 | 0.0 |

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*IDC **07** 08:23:18.6±6.8, 29.72S×179.20W, h291km±55km, mb3.6/3, mb1 3.8/4, mb1mx3.3/24, mbtmp4.3/4, Error ellipse: s-maj=59.1km s-min=20.7km az=45.0*

**ISC 07 08:23:22.5±1.3, 30.05S±0.07×179.7W±0.2, h300km, n37, σ1.23/38, mb3.8/3, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 7.67 | 192 | PN | Pn | 08 25 15.3 | +3.4 |
| MXZ | | | | SN | S | 08 26 41.2 | +0.7 |
| WMGZ | Waiomatatini S | 7.90 | 191 | PN | Pn | 08 25 19.4 | +4.7 |
| WMGZ | | | | SN | S | 08 26 46.1 | +0.5 |
| HAZ | Te Kaha | 7.96 | 194 | PN | Pn | 08 25 18.4 | +3.0 |
| HAZ | | | | SN | S | 08 26 46.5 | -0.5 |
| PUZ | Puketiti | 8.17 | 191 | PN | Pn | 08 25 21.9 | +3.8 |
| PUZ | | | | eSN | S | 08 26 50.4 | -1.5 |
| TWGZ | Tauwhareparae | 8.32 | 193 | PN | Pn | 08 25 25.0 | +5.1 |
| TWGZ | | | | SN | S | 08 26 54.5 | -0.8 |
| URZ | Urewera | 8.60 | 197 | P | Pn | 08 25 24.7 | +1.5 |
| | 1.0nm,0.3s,baz=67,slow=7.7,SNR=16 | | | | | | |
| URZ | | | | S | S | 08 26 60.0 | -1.4 |
| | 3.6nm,0.3s,baz=90,slow=21,SNR=13 | | | | | | |
| URZ | Urewera | 8.60 | 197 | PN | Pn | 08 25 25.8 | +2.6 |
| URZ | | | | SN | S | 08 27 01.1 | -0.2 |
| TKGZ | Te Karaka | 8.60 | 193 | PN | Pn | 08 25 27.2 | +3.8 |
| RAGZ | Rawiri | 8.75 | 195 | PN | P | 08 25 28.7 | -1.5 |
| KNZ | Kokohu | 9.20 | 193 | PN | P | 08 25 35.1 | 0.0 |
| MRHZ | Matea Rd | 9.32 | 199 | ePN | P | 08 25 35.0 | -1.6 |
| NMHZ | Naumai | 9.46 | 197 | PN | P | 08 25 37.6 | -0.6 |
| ARHZ | Aropaoanui | 9.57 | 195 | PN | P | 08 25 38.5 | -0.8 |
| BKZ | Black Stump Fm | 9.61 | 198 | PN | P | 08 25 39.2 | -0.6 |
| MCHZ | McNeill Hill | 9.82 | 196 | PN | P | 08 25 41.8 | -0.2 |
| KWHZ | Kaweka Forest | 9.87 | 198 | PN | P | 08 25 41.4 | -1.3 |
| WNVZ | Wahianoa | 10.02 | 201 | PN | P | 08 25 43.7 | -0.8 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KAHZ | Kahuranaki | 10.11 | 195 | PN | Pn | 08 25 43.7 | +1.8 |
| PXZ | Pawanui | 10.34 | 195 | ePN | Pn | 08 25 44.8 | +0.2 |
| PXZ | | | | eSN | S | 08 27 34.6 | -6.2 |
| PNHZ | Pukenui | 10.39 | 198 | PN | Pn | 08 25 46.6 | +1.3 |
| TSZ | Takapari Road | 10.59 | 198 | PN | Pn | 08 25 48.5 | +0.7 |
| PRHZ | Porangahau | 10.62 | 195 | PN | P | 08 25 50.2 | -0.7 |
| BFZ | Birch Farm | 11.10 | 196 | PN | Pn | 08 25 55.0 | +1.1 |
| MRZ | Mangatainoka R | 11.26 | 199 | PN | Pn | 08 25 54.8 | -1.1 |
| MRZ | | | | eSN | S | 08 27 54.0 | -7.5 |
| TIWZ | Tintock | 11.28 | 197 | PN | P | 08 25 58.0 | -0.3 |
| HOWZ | Holdsworth Sta | 11.49 | 198 | PN | Pn | 08 25 59.5 | +0.7 |
| OGWZ | Otaki Gorge | 11.52 | 200 | PN | Pn | 08 25 60.0 | +1.0 |
| KIW | Kapiti Island | 11.63 | 201 | PN | Pn | 08 26 00.7 | +0.2 |
| TUWZ | Tuamarina | 12.46 | 203 | PN | Pn | 08 26 09.5 | -0.9 |
| QRZ | Quartz Range | 12.46 | 208 | PN | Pn | 08 26 10.5 | 0.0 |
| KHZ | Kahutara | 13.48 | 202 | PN | Pn | 08 26 22.5 | -0.2 |
| ASAR | Alice Springs | 41.63 | 267 | P | P | 08 30 42.2 | -0.1 |
| | 0.9nm,0.4s,baz=104,slow=7.2,SNR=16 | | | | | | |
| WRA | Warramunga Arr | 42.59 | 273 | P | P | 08 30 50.9 | +1.0 |
| | 4.4nm,0.6s,baz=111,slow=7.7,SNR=14 | | | | | | |
| QSPA | South Pole Qui | 60.05 | 180 | P | P | 08 32 57.6 | -0.5 |
| | 2.5nm,0.7s,baz=356,slow=0.4,SNR=23 | | | | | | |
| FINES | FINESS Array B | 144.30 | 339 | PKP | PKPab | 08 42 18.6 | -2.4 |
| | 1.9nm,0.4s,baz=72,slow=4.5,SNR=22 | | | | | | |
| AKASG | Malin Array Be | 150.11 | 322 | PKPbc | PKPdf | 08 42 34.2 | +2.1 |
| | 0.8nm,0.5s,baz=49,slow=2.0,SNR=3.3 | | | | | | |
| TORD | Torodi Ar. Bea | 163.12 | 185 | PKPab | PKPab | 08 43 38.7 | -2.6 |
| | 0.5nm,0.5s,baz=183,slow=5.4,SNR=7.2 | | | | | | |

*ISCJB **07** 08:24:17.3±0.6, 51°.49N±0°.03×16°.09E±0°.04, h0km, Error ellipse: s-maj=4.5km s-min=3.0km az=16.0*
*CSEM **07** 08:24:18.1±0.3, 51°.52N×16°.10E, h2km, ML3.5/11, Error ellipse: s-maj=5.1km s-min=4.7km az=3.0, Suspected Mining induced.*
*VIE **07** 08:24:22.8±0.3, 51°.22N×16°.27E, h0km, mb2.5/4, ml2.8/4, Error ellipse: s-maj=2.3km s-min=2.0km az=173.0, Suspected Mining induced.*
**ISC 07 08:24:18.2**±1.0, **51°.52N**±0°.04×**16°.12E**±0°.03, **h0km, n26, σ0s.69**/56, **3C-1D, Poland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.69 | 171 | i Pg | Pb | 08 24 32.6 | -0.5 |
| KSP | | | | eSg | Sb | 08 24 42.0 | -1.2 |
| UPC | Upice | 1.02 | 184 | ePG | Pg | 08 24 38.1 | +0.4 |
| UPC | | | | eSG | Sg | 08 24 50.6 | -0.3 |
| | comp=Z,106nm,0.2s | | | | | | |
| DPC | Dobruska-Polom | 1.18 | 174 | ePG | Pb | 08 24 41.2 | -0.3 |
| DPC | | | | eSG | Sg | 08 24 55.8 | -0.3 |
| | comp=Z,33nm,0.3s | | | | | | |
| PVCC | Panska Ves | 1.40 | 225 | ePG | Pb | 08 24 45.4 | +0.3 |
| PVCC | | | | eSG | Sb | 08 25 03.5 | 0.0 |
| | comp=Z,164nm,0.2s | | | | | | |
| KRLC | Kraliky | 1.51 | 164 | ePG | Pg | 08 24 47.0 | -0.1 |
| KRLC | | | | eSG | Sb | 08 25 06.4 | -0.4 |
| KRLC | Kraliky | 1.51 | 164 | Pg | Pg | 08 24 47.0 | -0.1 |
| KRLC | | | | Sg | Sb | 08 25 06.4 | -0.4 |
| BRG | Berggiesshubel | 1.52 | 245 | PN | Pn | 08 24 46.8 | +0.2 |
| BRG | | | | PG | Pb | 08 24 47.6 | +0.4 |
| BRG | | | | SG | Sn | 08 25 07.8 | +0.8 |
| | 124nm,0.4s | | | | | | |
| PRA | Prague | 1.81 | 217 | ePN | Pn | 08 24 50.6 | +0.1 |
| PRA | | | | ePG | Pb | 08 24 52.5 | +0.4 |
| PRA | | | | eSG | Sg | 08 25 16.0 | -0.2 |
| | comp=Z,45nm,0.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.82 | 208 | ePN | Pn | 08 24 50.7 | -0.1 |
| GOPC | | | | ePG | Pb | 08 24 52.6 | +0.2 |
| GOPC | | | | eSG | Sg | 08 25 16.3 | -0.3 |
| | comp=Z,37nm,0.5s | | | | | | |
| PRU | Pruhonice | 1.83 | 214 | ePN | Pn | 08 24 50.8 | -0.1 |
| PRU | | | | ePG | Pb | 08 24 52.9 | +0.3 |
| PRU | | | | ex | x | 08 25 09.8 | |
| PRU | | | | eSG | Sg | 08 25 16.9 | -0.2 |
| | comp=Z,37nm,0.4s | | | | | | |
| CLL | Collm | 1.96 | 265 | ePn | Pn | 08 24 52.0 | -0.7 |
| CLL | | | | ePg | Pb | 08 24 55.0 | +0.2 |
| CLL | | | | eSg | Sb | 08 25 21.0 | +1.2 |
| | comp=Z,46nm,0.7s | | | | | | |
| MORC | Moravsky Berou | 1.97 | 152 | ePn | Pn | 08 24 52.7 | -0.1 |
| MORC | | | | eSg | Sg | 08 25 21.3 | -0.1 |
| OKC | Ostrava-Krasne | 2.13 | 142 | ePG | Pb | 08 24 58.1 | +0.6 |
| OKC | | | | eSG | Sg | 08 25 26.5 | +0.1 |
| | comp=Z,27nm,0.5s | | | | | | |
| OKC | Ostrava-Krasne | 2.13 | 142 | Pg | Pb | 08 24 58.1 | +0.6 |
| OKC | | | | Sg | Sg | 08 25 26.5 | +0.1 |
| | comp=Z,27nm,0.5s | | | | | | |
| VRAC | Vranov | 2.24 | 172 | ePn | Pn | 08 24 57.7 | +1.2 |
| VRAC | | | | eSg | Sb | 08 25 26.6 | -1.1 |
| NKC | Novy Kostel | 2.66 | 242 | ePN | Pn | 08 25 02.7 | +0.4 |
| NKC | | | | ePG | Pg | 08 25 08.4 | -0.7 |
| NKC | | | | eSG | Sg | 08 25 44.5 | +0.9 |
| | comp=Z,89nm,0.3s | | | | | | |
| NKC | Novy Kostel | 2.66 | 242 | Pn | Pn | 08 25 02.7 | +0.4 |
| OJC | Ojcow | 2.67 | 118 | ePg | Pg | 08 25 09.6 | +0.2 |
| OJC | | | | eSg | Sg | 08 25 45.4 | +1.4 |
| OJC | Ojcow | 2.67 | 118 | ePg | Pg | 08 25 09.6 | +0.2 |
| KHC | Kasperske Hory | 2.90 | 215 | ePN | Pn | 08 25 05.7 | +0.1 |
| KHC | | | | ePG | Pb | 08 25 11.8 | +1.1 |
| KHC | | | | eSN | Sn | 08 25 40.3 | -0.8 |
| KHC | | | | eSG | Sg | 08 25 50.6 | -0.6 |
| | comp=Z,14nm,0.4s | | | | | | |
| CONA | Conrad Observa | 3.60 | 183 | ⇓iPn | Pn | 08 25 15.8 | +0.5 |
| CONA | | | | ⇑iSg | Sg | 08 26 12.2 | -1.7 |
| | comp=Z,15nm,0.5s | | | | | | |
| CONA | Conrad Observa | 3.60 | 183 | Pn | Pn | 08 25 15.8 | +0.5 |
| CONA | | | | Sg | Sg | 08 26 12.2 | -1.7 |
| | comp=Z,15nm,0.5s | | | | | | |
| BSD | Bornholm Skovb | 3.67 | 349 | i P | Pn | 08 25 15.2 | -0.9 |
| BSD | | | | i S | Sn | 08 25 54.5 | -5.5 |
| BSD | Bornholm Skovb | 3.67 | 349 | i P | Pn | 08 25 15.2 | -0.9 |
| BSD | | | | i S | Sn | 08 25 54.5 | -5.5 |
| MOA | Molln | 3.87 | 199 | ⇑iPn | Pn | 08 25 19.9 | +1.0 |
| MOA | | | | ⇑iSg | Sg | 08 26 22.7 | +0.3 |
| | comp=Z,22nm,0.5s | | | | | | |
| MOA | Molln | 3.87 | 199 | Pn | Pn | 08 25 19.9 | +1.0 |
| MOA | | | | Sg | Sg | 08 26 22.7 | +0.3 |
| | comp=Z,22nm,0.5s | | | | | | |

*NNC **07** 08:42:29.2±0.8, 39°.15N×70°.21E, h0km, mb3.7, mpv3.4, Error ellipse: s-maj=13.0km s-min=3.3km az=147.0*
*KRNET **07** 08:42:30.2±0.1, 39°.45N×70°.09E, mb3.1*
*ISCJB **07** 08:42:31.1±0.7, 39°.32N±0°.07×70°.05E±0°.07, h10km, Error ellipse: s-maj=12.2km s-min=4.3km az=145.5*
**ISC 07 08:42:30.6**±0.9, **39°.48N**±0°.06×**70°.00E**±0°.04, **h10km, n19, σ2s.79**/29, **26C-9D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BTK | Batken | 0.85 | 47 | ⇓eP | Pg | 08 42 46.6 | -0.4 |
| | baz=42 | | | | | | |
| BTK | | | | ⇓iS | Sb | 08 42 58.7 | -0.4 |
| | baz=42 | | | | | | |
| DZET | Dzherino | 1.14 | 234 | ⇓P | Pb | 08 42 50.7 | -1.7 |
| | 22nm,0.3s | | | | | | |
| DZET | | | | ⇑S | Sb | 08 43 06.3 | -1.0 |
| | 161nm,0.4s | | | | | | |
| SFK | Sufi-Kurgan | 2.75 | 78 | ⇑Pg | Pb | 08 43 17.8 | -2.2 |
| | 6.9nm,0.3s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 08 43 54.9 | |
| | 106nm,0.5s | | | | | | |
| SFK | Sufi-Kurgan | 2.75 | 78 | ⇑iP | Pb | 08 43 17.6 | -2.4 |
| | baz=77 | | | | | | |
| SFK | | | | ⇑iS | Sb | 08 43 52.1 | -1.7 |
| | baz=77 | | | | | | |
| SFK | Sufi-Kurgan | 2.75 | 78 | ⇑iP | Pb | 08 43 16.6 | -3.4 |
| | baz=77 | | | | | | |
| SFK | | | | ⇑iS | Sb | 08 43 52.3 | -1.5 |
| | baz=77 | | | | | | |
| ARK | Arkit | 2.75 | 32 | ⇓iP | Pb | 08 43 19.3 | -0.7 |
| | baz=31 | | | | | | |
| ARK | | | | ⇓iS | Sb | 08 43 54.6 | +0.8 |
| | baz=31 | | | | | | |
| ARSB | Arslanbob | 2.92 | 50 | ⇑eP | Pb | 08 43 19.9 | -3.0 |
| | baz=49 | | | | | | |
| ARSB | | | | ⇑eS | Sb | 08 43 56.9 | -1.9 |
| | baz=49 | | | | | | |
| MNAS | Manas | 3.55 | 31 | ⇑Pn | Pn | 08 43 29.2 | +3.4 |
| | 5.5nm,0.5s | | | | | | |
| MNAS | | | | ⇑Sn | Sb | 08 44 15.6 | -1.1 |
| | 9.0nm,0.4s | | | | | | |
| MNAS | Manas | 3.55 | 31 | ⇑iP | Pb | 08 43 29.4 | -4.2 |
| | baz=30 | | | | | | |
| MNAS | | | | ⇑iS | Sb | 08 44 12.1 | -4.6 |
| | baz=30 | | | | | | |
| MNAS | Manas | 3.55 | 31 | ⇓iP | Pn | 08 43 29.3 | +3.4 |
| | baz=30 | | | | | | |
| MNAS | | | | ⇓iS | Sb | 08 44 15.0 | -1.7 |
| | baz=30 | | | | | | |
| KK31 | Karatay Array | 3.64 | 6 | ⇑Pn | Pb | 08 43 32.6 | -2.4 |
| | 1.0nm,0.2s,baz=189,slow=13,SNR=14 | | | | | | |
| KK31 | | | | ⇓Pg | Pg | 08 43 39.7 | -0.6 |
| | 3.6nm,0.5s,baz=188,slow=11,SNR=8.1 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 08 44 32.2 | |
| | 14nm,0.6s,baz=202,slow=23,SNR=5.9 | | | | | | |
| AML | Almayashu | 3.85 | 45 | ⇑iP | Pn | 08 43 32.3 | +2.0 |
| | baz=44 | | | | | | |
| AML | | | | ⇑iS | Sb | 08 44 21.9 | -3.8 |
| | baz=44 | | | | | | |
| EKS2 | Erkin-Say | 4.27 | 41 | ⇑iP | Pn | 08 43 38.5 | +2.7 |
| | baz=40 | | | | | | |
| EKS2 | | | | ⇑iS | Sb | 08 44 32.7 | -4.7 |
| | baz=40 | | | | | | |
| AAK | Ala-Archa | 4.63 | 46 | ⇑iP | Pn | 08 43 43.2 | +2.4 |
| | baz=45 | | | | | | |
| AAK | | | | ⇑iS | Sn | 08 44 39.7 | +5.1 |
| | baz=45 | | | | | | |
| KZA | Kyzart | 4.75 | 55 | ⇑iP | Pn | 08 43 45.2 | +2.5 |
| | baz=54 | | | | | | |
| KZA | | | | ⇑iS | Sn | 08 44 42.1 | +4.1 |
| | baz=54 | | | | | | |
| USP | Ospenovka | 5.07 | 40 | ⇑iP | Pn | 08 43 48.6 | +1.9 |
| | baz=40 | | | | | | |
| USP | | | | ⇑iS | Sn | 08 44 49.8 | +4.4 |
| | baz=40 | | | | | | |
| TKM2 | Tokmak 2 | 5.44 | 49 | Pn | Pn | 08 43 53.5 | +1.6 |
| TKM2 | | | | Sn | Sn | 08 44 57.9 | +3.2 |
| AB31 | Akbulak array | 12.12 | 327 | ⇑Pn | Pn | 08 45 25.4 | +2.1 |
| | 0.7nm,0.3s,baz=133,slow=14,SNR=37 | | | | | | |
| AKTO | Aktyubinsk | 13.83 | 326 | ⇑Pn | P | 08 45 52.4 | -2.7 |
| | 1.9nm,0.9s | | | | | | |

*ISCJB **07** 08:45:39.3±0.8, 26°.13S±0°.05×29°.54E±0°.05, h0km, Error ellipse: s-maj=6.9km s-min=5.8km az=17.7*
*PRE **07** 08:45:42.0±2.0, 26°.26S×29°.38E, h0km, ML3.0, Explosion*
**ISC 07 08:45:41.3**±1.0, **26°.15S**±0°.06×**29°.47E**±0°.04, **h0km, n9, σ1s.99**/14, **South Africa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNON | Benoni | 1.03 | 269 | eP | Pg | 08 46 00.8 | -0.3 |
| BNON | | | | eS | Sg | 08 46 13.1 | -1.4 |
| BNON | | | | AML | AML | 08 46 23.2 | |
| | comp=Z,104nm,0.3s | | | | | | |
| POGA | Pongola | 2.27 | 123 | eP | Pn | 08 46 20.8 | +0.6 |
| POGA | | | | eS | Sb | 08 46 52.9 | +1.0 |
| POGA | | | | AML | AML | 08 46 53.1 | |
| | comp=Z,170nm,0.3s | | | | | | |
| POGA | Pongola | 2.27 | 123 | eP | Pn | 08 46 13.8 | -6.4 |
| POGA | | | | i P | Pg | 08 46 31.3 | +6.4 |
| POGA | | | | i S | Sn | 08 46 43.6 | -5.3 |
| POGA | | | | eSg | Sb | 08 46 51.8 | -0.1 |
| KSR | Koster | 2.33 | 277 | eP | Pb | 08 46 22.9 | -1.5 |
| KSR | | | | eS | Sn | 08 46 50.8 | +0.3 |
| KSR | | | | AML | AML | 08 47 05.9 | |
| | comp=Z,26nm,0.2s | | | | | | |
| MSNA | Messina | 3.82 | 8 | eP | Pn | 08 46 43.4 | +2.0 |
| MSNA | | | | eS | Sn | 08 47 27.5 | +0.4 |
| MSNA | | | | AML | AML | 08 47 43.9 | |
| | comp=Z,46nm,0.5s | | | | | | |
| SWZ | Schweizer | 3.84 | 253 | eP | Pn | 08 46 43.2 | +1.3 |
| SWZ | | | | eS | Sn | 08 47 24.7 | -3.1 |
| SWZ | | | | AML | AML | 08 47 41.7 | |
| | comp=Z,71nm,0.4s | | | | | | |
| BOSA | Boshof | 4.48 | 236 | i P | Pn | 08 46 42.9 | -7.7 |
| BOSA | | | | i | | 08 46 43.0 | |
| | baz=96,slow=28 | | | | | | |
| BOSA | | | | i S | Sb | 08 47 59.8 | +4.3 |
| MATP | Matopo | 5.76 | 351 | i S | Sn | 08 48 13.9 | -1.3 |
| BLWY | Bulawayo | 6.03 | 352 | i S | Sn | 08 48 20.1 | -1.7 |

*IDC **07** 09:10:59.8±0.4, 33°.55N×90°.99E, h0km, mb4.5/32, mb1 4.5/36, mb1mx4.5/44, mbtmp4.5/36, ML4.1/4, MS3.8/17, Ms1 3.8/17, ms1mx3.6/37, Error ellipse: s-maj=13.0km s-min=9.9km az=6.0*
*ISCJB **07** 09:11:00.8±1.1, 33°.60N±0°.02×90°.92E±0°.02, h12km±7km, mb4.7/91, MS4.0/21, Error ellipse: s-maj=3.8km s-min=3.1km az=34.7*
*BJI **07** 09:11:00.8, 33°.64N×90°.88E, h10km, mb4.7/52, mB4.8/39, ML4.5/6, Ms4.6/61, Ms7 4.4/54*
*MOS **07** 09:11:03.3±0.9, 33°.59N×91°.02E, h33km, mb4.8/44, Error ellipse: s-maj=7.9km s-min=4.6km az=114.2*
*NEIC **07** 09:11:06.8±0.9, 33°.60N×90°.96E, h49km±8km, mb4.8/27, Error ellipse: s-maj=7.1km s-min=5.0km az=48.0*
*SZGRF **07** 09:11:10.4, 33°.58N×91°.02E, h33km, mb4.9/1(BGR)*
**ISC 07 09:11:01.7**±0.8, **33°.57N**±0°.04×**90°.85E**±0°.03, **h8km**±5km, **n267, σ1s.62**/291, **mb4.8**/91, **MS3.9**/21, **17C-10D, Qinghai**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LSA | Lhasa | 3.86 | 176 | Pg | Pb | 09 12 07.6 | -2.7 |
| LSA | | | | LN | | | |
| | 3μm,8.0s | | | | | | |
| LSA | | | | LE | | | |
| | 3μm,6.2s | | | | | | |
| LSA | | | | LZ | | | |
| | 6μm,7.6s | | | | | | |
| LSA | Lhasa | 3.86 | 176 | eP | Pb | 09 12 07.4 | -2.9 |
| LSA | Lhasa | 3.86 | 176 | ePn | Pb | 09 12 07.4 | -2.9 |
| GUN | Gumba | 7.07 | 218 | eP | Pn | 09 12 49.4 | +3.6 |
| | 156nm,0.6s | | | | | | |
| ODAN | Odare | 7.32 | 205 | eP | Pn | 09 12 52.3 | +3.2 |
| | 140nm,0.6s | | | | | | |
| KKN | Kakani | 7.49 | 221 | eP | Pn | 09 12 55.3 | +3.9 |
| | 55nm,0.5s | | | | | | |
| RAMN | Ramite | 7.54 | 210 | eP | Pn | 09 12 55.1 | +2.9 |
| | 705nm,0.9s | | | | | | |
| PKI | Pulchoki | 7.59 | 220 | eP | Pn | 09 12 56.5 | +3.6 |
| | 94nm,0.4s | | | | | | |
| PKIN | Phulchoki | 7.59 | 220 | eP | Pn | 09 12 56.8 | +4.0 |
| | 72nm,0.6s | | | | | | |
| GKN | Gorkha | 7.70 | 226 | eP | Pn | 09 12 57.4 | +3.2 |
| | 126nm,0.5s | | | | | | |
| DMN | Daman | 7.72 | 221 | eP | Pn | 09 12 58.2 | +3.6 |
| | 105nm,0.7s | | | | | | |
| SHL | Shillong | 8.02 | 173 | eP | Pn | 09 13 02.5 | +3.9 |
| SHL | | | | ex | Sn | 09 14 36.0 | +6.3 |
| KOLN | Koldanda | 8.50 | 229 | eP | Pn | 09 13 08.4 | +3.2 |
| | 27nm,0.6s | | | | | | |
| GTA | Gaotai | 9.28 | 48 | ⇑P | Pn | 09 13 16.8 | +1.0 |
| GTA | | | | pP | | 09 13 20.0 | |
| GTA | | | | sP | | 09 13 22.8 | |
| GTA | | | | S | Sn | 09 15 03.7 | +3.2 |
| GTA | | | | sS | | 09 15 08.7 | |
| GTA | | | | PMZ | | | |
| | 26nm,1.4s | | | | | | |
| GTA | | | | PMZ | | | |
| | 130nm,5.0s | | | | | | |
| GTA | | | | LN | | | |
| | 2μm,14.7s | | | | | | |
| GTA | | | | LE | | | |
| | 1μm,14.5s | | | | | | |
| GTA | | | | LZ | | | |
| | 760nm,15.4s | | | | | | |
| WMQ | Urumqi | 10.53 | 347 | P | Pn | 09 13 36.0 | +3.1 |
| WMQ | | | | sP | | 09 13 42.0 | |
| WMQ | | | | S | Sn | 09 15 35.0 | +4.0 |
| WMQ | | | | SS | SnSn | 09 15 46.0 | +2.9 |
| WMQ | | | | PMZ | | | |
| | 22nm,0.8s | | | | | | |
| WMQ | | | | PMZ | | | |
| | 130nm,4.0s | | | | | | |
| WMQ | | | | LN | | | |
| | 990nm,10.0s | | | | | | |
| WMQ | | | | LE | | | |
| | 2μm,16.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | 1μm,10.0s | | | | | | |
| BOK | Bokaro | 10.66 | 205 | eP | Pn | 09 13 36.4 | +1.7 |
| LZH | Lanzhou | 10.98 | 73 | eP | Pn | 09 13 38.5 | -0.6 |
| LZH | | | | pP | | 09 13 40.6 | |
| LZH | | | | PP | PnPn | 09 13 47.0 | +0.3 |
| LZH | | | | eS | Sn | 09 15 42.4 | +0.2 |
| LZH | | | | eSS | SnSn | 09 15 56.4 | +2.5 |
| LZH | | | | PMZ | | | |
| | 33nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | 150nm,4.0s | | | | | | |
| LZH | | | | LN | | | |
| | 3μm,8.0s | | | | | | |
| LZH | | | | LE | | | |
| | 3μm,8.6s | | | | | | |
| LZH | | | | LZ | | | |
| | 3μm,10.0s | | | | | | |
| CD2 | Chengdu | 11.25 | 100 | eP | Pn | 09 13 43.6 | +0.8 |
| CD2 | | | | sP | | 09 13 52.0 | |
| CD2 | | | | S | Sn | 09 15 49.8 | +1.1 |
| CD2 | | | | sS | | 09 15 57.7 | |
| CD2 | | | | SS | SnSn | 09 16 06.7 | +6.2 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 140nm,5.2s | | | | | | |
| CD2 | | | | LN | | | |
| | 3μm,8.2s | | | | | | |
| CD2 | | | | LE | | | |
| | 4μm,7.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | 2μm,8.1s | | | | | | |
| DDI | Dehra Dun | 11.33 | 257 | eP | Pn | 09 13 45.5 | +1.6 |
| DDI | | | | AML | AML | 09 18 08.7 | |
| | comp=N,166nm,0.7s | | | | | | |
| DDI | | | | AML | AML | 09 18 11.0 | |
| | comp=E,228nm,0.5s | | | | | | |
| SMLA | Simla | 11.82 | 262 | eP | Pn | 09 13 50.6 | +0.2 |
| SMLA | | | | AMB | AMB | 09 14 02.0 | |
| | comp=Z,23nm,1.1s | | | | | | |
| DHRM | DHARAMSHALA | 12.29 | 268 | eP | Pn | 09 13 58.5 | +1.3 |
| DHRM | | | | AMB | AMB | 09 14 06.4 | |
| | comp=Z,19nm,2.5s | | | | | | |
| PDGK | Podgornoye | 13.19 | 321 | P | Pn | 09 14 12.7 | +3.6 |
| KSH | Kashi | 13.35 | 301 | P | Pn | 09 14 14.9 | +3.5 |
| KSH | | | | esP | | 09 14 21.4 | |
| KSH | | | | S | Sn | 09 16 46.3 | +6.3 |
| KSH | | | | SS | S | 09 17 02.0 | -2.4 |
| KSH | | | | PMZ | | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,140nm,6.4s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,770nm,14.2s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,750nm,10.4s | | | | | | |
| KMI | Kunming | 13.35 | 126 | P | Pn | 09 14 13.1 | +1.5 |
| KMI | | | | pP | P | 09 14 15.1 | -6.3 |
| KMI | | | | sP | | 09 14 16.3 | |
| KMI | | | | PP | PnPn | 09 14 23.3 | +3.8 |
| KMI | | | | S | Sn | 09 16 42.3 | +2.0 |
| KMI | | | | SS | SnSn | 09 16 58.3 | +5.7 |
| KMI | | | | PMZ | | | |
| | comp=Z,11nm,0.9s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,140nm,3.5s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,2μm,7.0s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,1μm,12.8s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,960nm,7.9s | | | | | | |
| MK31 | Makanchi Array | 14.73 | 336 | P | Pn | 09 14 30.6 | +0.4 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 14.73 | 336 | Pn | Pn | 09 14 30.6 | +0.4 |
| | comp=Z,0.5nm,0.3s,baz=148,slow=15,SNR=21 | | | | | | |
| MKAR | Makanchi Array | 14.73 | 336 | P | Pn | 09 14 30.6 | +0.4 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KZA | Kyzart | 14.95 | 309 | P | P | 09 14 46.3 | +7.0 |
| | SNR=17 | | | | | | |
| XAN | Xi'an | 15.04 | 83 | P | P | 09 14 38.8 | -1.1 |
| XAN | | | | PMZ | | | |
| | comp=Z,24nm,1.1s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,62nm,5.1s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,830nm,7.2s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,1μm,8.3s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,1μm,9.0s | | | | | | |
| TKM2 | Tokmak 2 | 15.17 | 312 | i P | P | 09 14 43.8 | +2.3 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,35nm,0.9s | | | | | | |
| TKM2 | Tokmak 2 | 15.17 | 312 | P | P | 09 14 44.8 | +3.3 |
| | SNR=15 | | | | | | |
| TKM2 | Tokmak 2 | 15.17 | 312 | ePn | Pn | 09 14 37.7 | +1.3 |
| | comp=Z,37nm,1.0s | | | | | | |
| GYA | Guiyang | 15.42 | 113 | ⇑iP | Pn | 09 14 39.2 | -0.4 |
| GYA | | | | PP | PnPn | 09 14 52.0 | +4.2 |
| GYA | | | | S | Sn | 09 17 33.0 | +2.4 |
| GYA | | | | SS | S | 09 17 50.3 | +3.4 |
| GYA | | | | PcP | PcP | 09 19 44.3 | +0.8 |
| GYA | | | | PMZ | | | |
| | comp=Z,40nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,140nm,4.8s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,510nm,10.0s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,680nm,12.2s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,1μm,11.2s | | | | | | |
| CMAI | Chiengmai2 | 15.42 | 150 | P | Pn | 09 14 40.7 | +1.0 |
| | comp=Z,29nm,1.5s | | | | | | |
| KBK | Karagaybulak | 15.44 | 311 | P | P | 09 14 48.6 | +4.1 |
| | SNR=28 | | | | | | |
| UCH | Uchtor | 15.51 | 309 | P | P | 09 14 52.3 | +6.8 |
| | SNR=16 | | | | | | |
| BHPL | Bhopal | 15.64 | 232 | eP | Pn | 09 14 43.0 | +0.5 |
| BHPL | | | | AMB | AMB | 09 14 50.0 | |
| | comp=Z,21nm,1.0s | | | | | | |
| AAK | Ala-Archa | 15.71 | 310 | Pn | Pn | 09 14 45.1 | +1.7 |
| | comp=Z,0.2nm,0.3s,baz=35,slow=1.9,SNR=7.4 | | | | | | |
| AAK | | | | LR | LR | 09 21 37.2 | |
| | comp=Z,274nm,18.2s,baz=107,slow=40 | | | | | | |
| AAK | Ala-Archa | 15.71 | 310 | i P | P | 09 14 45.5 | -2.0 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,40nm,0.9s | | | | | | |
| AAK | Ala-Archa | 15.71 | 310 | P | P | 09 14 51.1 | +3.6 |
| | SNR=21 | | | | | | |
| AAK | Ala-Archa | 15.71 | 310 | Pn | Pn | 09 14 45.1 | +1.7 |
| AAK | | | | eP | P | 09 14 47.4 | -0.1 |
| FRU | Bishkek | 15.74 | 311 | i P | P | 09 14 50.0 | +2.4 |
| FRU | | | | pmax | pmax | | |
| | comp=Z,80nm,1.3s | | | | | | |
| CHMS | Chumysh | 15.74 | 311 | P | P | 09 14 50.8 | +3.2 |
| | SNR=11 | | | | | | |
| USP | Ospenovka | 16.04 | 312 | P | P | 09 14 54.6 | +3.6 |
| | SNR=5.9 | | | | | | |
| ENH | Enshi | 16.17 | 97 | eP | P | 09 14 53.5 | +1.1 |
| | comp=Z,81nm,1.6s | | | | | | |
| CHLP | Challavanipeta | 16.18 | 204 | ePn | Pn | 09 14 50.1 | +0.7 |
| NGP | Nagpur | 16.19 | 223 | eP | Pn | 09 14 48.5 | -1.0 |
| NGP | | | | AMB | AMB | 09 14 51.0 | |
| | comp=Z,51nm,1.7s | | | | | | |
| EKS2 | Erkin-Say | 16.19 | 309 | eP | P | 09 14 52.7 | -0.1 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,29nm,0.9s | | | | | | |
| EKS2 | Erkin-Say | 16.19 | 309 | P | P | 09 14 59.7 | +7.0 |
| | SNR=9.2 | | | | | | |
| EKS2 | Erkin-Say | 16.19 | 309 | ePn | P | 09 14 52.7 | -0.1 |
| | comp=Z,29nm,0.9s | | | | | | |
| CHTO | Chiang Mai | 16.38 | 152 | P | P | 09 14 57.7 | +2.9 |
| | comp=Z,85nm,1.3s | | | | | | |
| CHTO | Chiang Mai | 16.38 | 152 | eP | Pn | 09 14 51.2 | -0.8 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| CHTO | Chiang Mai | 16.38 | 152 | ePn | Pn | 09 14 51.1 | -0.8 |
| | comp=Z,13nm,0.9s | | | | | | |
| CMAR | Chiang Mai Arr | 16.70 | 152 | Pn | Pn | 09 14 55.3 | -0.8 |
| | comp=Z,0.9nm,0.3s,baz=333,slow=12,SNR=25 | | | | | | |
| CMAR | | | | LR | LR | 09 22 32.6 | |
| | comp=Z,74nm,21.0s,baz=335,slow=42 | | | | | | |
| CMAR | Chiang Mai Arr | 16.70 | 152 | ceP | Pn | 09 14 55.2 | -0.8 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| SLVN | Son La | 16.80 | 133 | eP | P | 09 15 01.0 | +1.5 |
| LAMP | Lampang | 16.92 | 150 | P | Pn | 09 14 59.6 | +0.8 |
| | comp=Z,7.3nm,0.9s,comp=Z,76nm | | | | | | |
| MNAS | Manas | 16.95 | 307 | P | P | 09 15 03.8 | +2.6 |

**PHRA Phrae 17.20 148** P **Pn** 09 15 02.9 +0.6
comp=Z,396nm,1.1s
**HVS Khovu-Aksy 17.68 6** *e*P **Pn** 09 15 07.8 -0.4
HVS pmax pmax
comp=Z,29nm,1.0s
**UTTA Uttaradit 18.00 149** P **P** 09 15 12.6 -0.2
comp=Z,4.4nm,0.9s
**HHC Hu-ho-hao-te 18.01 60** *e*P **P** 09 15 12.5 -0.4
HHC PP **PnPn** 09 15 26.5 +3.2
HHC S **Sn** 09 18 31.6 -1.9
HHC sS **S** 09 18 38.0 -1.7
HHC PMZ
comp=Z,20nm,0.9s
HHC PMZ
comp=Z,92nm,4.5s
HHC LN
comp=Z,520nm,8.8s
HHC LE
comp=Z,590nm,7.8s
HHC LZ
comp=Z,370nm,9.1s
**TIY Taiyuan 18.02 71** *e*P **Pn** 09 15 11.9 -0.6
TIY S **S** 09 18 39.5 -0.4
TIY PMZ
comp=Z,100nm,1.1s
TIY LN
comp=Z,440nm,6.7s
TIY LE
comp=Z,890nm,11.2s
TIY LZ
comp=Z,880nm,10.0s
**PVM Polavaram 18.24 209** *e*P **P** 09 15 16.9 +1.5
**SONM Songino Array 18.45 35** P **Pn** 09 15 17.8 +0.1
comp=Z,1.2nm,0.3s,baz=220,slow=13,SNR=33
SONM PcP **PcP** 09 19 47.0 -0.9
comp=Z,0.4nm,0.3s,baz=270,slow=3.5,SNR=4.6
SONM LR LR 09 23 23.4
comp=Z,182nm,20.9s,baz=222,slow=40
**DZET Dzherino 18.51 293** P **Pn** 09 15 19.0 +0.5
**LOEI Loei 18.53 147** P **Pn** 09 15 21.2 +2.5
comp=Z,17nm,1.3s,comp=Z,563nm
**KKAR Karatay Array 18.54 307** *e*P **Pn** 09 15 20.7 +2.0
KKAR pmax pmax
comp=Z,9.0nm,0.7s
**KKAR Karatay Array 18.54 307** *e*P **Pn** 09 15 20.7 +2.0
comp=Z,9.0nm,0.7s
**UMPA Umpang Tak 18.74 155** P **Pn** 09 15 24.3 +3.0
comp=Z,7.5nm,0.9s,comp=Z,2µm
**ULN Ulaanbaatar 18.79 36** *d i*P **P** 09 15 20.5 -0.9
ULN pmax pmax
comp=Z,43nm,1.7s
**ULN Ulaanbaatar 18.79 36** *e*Pn **Pn** 09 15 22.0 +0.2
comp=Z,22nm,0.9s
**NONG Nongkai 18.97 141** P **Pn** 09 15 24.7 +0.6
comp=Z,59nm,0.9s
**ZAK Zakamensk 19.13 25** *e*P **Pn** 09 15 25.7 -0.3
ZAK pmax pmax
comp=Z,21nm,1.2s
**PBKT Sadao Pong 19.23 149** P **Pn** 09 15 28.0 +0.8
comp=Z,49nm,1.6s,comp=Z,1µm
**KURBB Kurchatov Arra 19.29 336** P **Pn** 09 15 27.8 0.0
comp=Z,0.3nm,0.3s,baz=145,slow=12,SNR=26
KURBB PcP **PcP** 09 19 49.4 +0.3
comp=Z,0.2nm,0.3s,baz=168,slow=1.6,SNR=5.1
**KURK Kurchatov 19.34 336** *e*P **P** 09 15 26.8 -0.5
KURK pmax pmax
comp=Z,46nm,0.8s
**KURK Kurchatov 19.34 336** *e*P **P** 09 15 26.8 -0.5
comp=Z,46nm,0.8s
KURK P **Pn** 09 15 27.8 -0.6
KURK PcP **PcP** 09 19 49.4 +0.2
**HYBB Hyderabad (bro 19.51 217** *e*P **Pn** 09 15 30.5 -0.1
**HYB Hyderabad 19.51 217** *i* P **P** 09 15 28.0 -1.4
**MOY Mondy 19.54 19** *e*P **Pn** 09 15 31.6 +0.8
MOY pmax pmax
comp=Z,84nm,1.9s
**NJS Nagarjunasagar 19.88 214** *e*P **Pn** 09 15 34.9 -0.1
**WHN Wuhan 20.14 92** ⇑P Pn 09 15 37.0 -1.0
WHN S **S** 09 19 19.0 -3.5
WHN LN
comp=Z,1µm,5.0s
WHN LE
comp=Z,2µm,6.1s
WHN LZ
comp=Z,2µm,9.4s
**OTUK Ortayu 20.19 322** P Pn 09 15 38.0 -0.5
**KHON Khomkaen 20.27 145** P **P** 09 15 38.3 +0.6
comp=Z,34nm,0.6s,comp=Z,5µm
**SKNT Sakolnakorn 20.31 141** P **P** 09 15 38.4 +0.3
comp=Z,85nm,0.9s
**TLY Talaya 20.35 23** P **P** 09 15 37.7 -0.6
comp=Z,14nm,0.7s,baz=242,slow=7.9,SNR=6.1
TLY LR LR 09 24 13.7
comp=Z,184nm,21.5s,baz=198,slow=39
**TLY Talaya 20.35 23** *e*P **P** 09 15 38.7 +0.3
TLY pmax pmax
comp=Z,44nm,1.4s
TLY MLR MLR
comp=Z,133nm,8.0s
**TLY Talaya 20.35 23** P **P** 09 15 37.7 -0.6
TLY *e*P **pP** 09 15 38.4 -2.3
**ZALV Zalesovo Beam 20.82 350** P **P** 09 15 43.7 +0.3
comp=Z,44nm,0.5s,baz=170,slow=11,SNR=128
ZALV LR LR 09 23 54.9
comp=Z,204nm,18.2s,baz=250,slow=37
**ZALV Zalesovo Beam 20.82 350** P **P** 09 15 43.7 +0.3
ZALV pmax pmax
comp=Z,44nm,0.5s
ZALV MLR MLR
comp=Z,205nm,18.3s
**BJI Beijing 21.25 65** P **P** 09 15 48.8 +0.7
BJI S **S** 09 19 46.2 +1.9
BJI PMZ
comp=Z,21nm,1.3s
BJI PMZ
comp=Z,290nm,8.4s
BJI LN
comp=Z,430nm,14.3s
BJI LE
comp=Z,380nm,12.6s
BJI LZ
comp=Z,180nm,22.2s
**POO Poona 21.34 230** *e*P **P** 09 15 50.8 +1.6
POO AMB AMB 09 15 56.2
comp=Z,57nm,1.6s
**TIA Tai'an 21.70 76** ⇓P **P** 09 15 52.5 -0.5
TIA pP pP 09 16 01.7 +6.3
TIA PMZ
comp=Z,40nm,0.9s
TIA PMZ
comp=Z,320nm,3.5s
TIA LN
comp=Z,290nm,10.1s
TIA LE
comp=Z,600nm,9.0s
TIA LZ
comp=Z,680nm,9.0s
**NVS Novosibirsk 21.93 348** ⇓*i*P **P** 09 15 55.0 -0.3
NVS *e*S **S** 09 19 58.9 +1.4
NVS pmax pmax
comp=Z,37nm,1.1s
NVS pmax pmax
comp=N,24nm,1.0s
NVS smax smax
comp=E,33nm,2.4s
**PHET Kaeng Krachan 22.07 157** P **P** 09 15 58.7 +1.7
comp=E,53nm,0.9s,comp=E,424nm
**SKHT Srikalahasti 22.18 210** *e*P **P** 09 15 59.5 +1.2
**URV Uravakonda 22.25 217** *e*P **P** 09 16 00.1 +1.1
**QIZ Qiongzhong 22.30 126** P **P** 09 15 56.7 -2.8
QIZ S **S** 09 20 06.8 +1.8
QIZ PMZ
comp=E,50nm,3.0s
QIZ LZ
comp=E,1µm,4.5s
**PATY Pattaya 22.49 154** P **P** 09 16 03.8 +2.3
comp=E,33nm,0.8s,comp=E,656nm
**KRAR Krasnoyarsk 22.49 3** *e*P **P** 09 16 00.6 -0.6
KRAR pmax pmax
comp=Z,10.0nm,0.7s
**UBPT Khong Chiam 22.51 140** P **P** 09 16 02.7 +0.9
comp=Z,76nm,0.9s
**NJ2 Nanjing 23.57 86** *e*P **P** 09 16 11.9 -0.7
NJ2 S **S** 09 20 28.0 +1.1
NJ2 PMZ
comp=Z,30nm,0.7s
NJ2 LN
comp=Z,1µm,16.8s
NJ2 LE
comp=Z,1µm,10.9s
NJ2 LZ
comp=Z,1µm,11.0s
**VOSK Vostochnaya 23.87 329** *ce*P **P** 09 16 15.7 +0.3
VOSK pmax pmax
comp=Z,29nm,0.7s
**BVA0 Borovoye Array 24.34 329** *i* P **P** 09 16 20.2 +0.4
BVA0 pmax pmax
comp=Z,29nm,1.4s
**BVAR Borovoye Array 24.34 329** P **P** 09 16 20.8 +1.0
comp=Z,17nm,0.8s,baz=128,slow=9.6,SNR=33
BVAR PcP **PcP** 09 19 59.1 0.0
comp=Z,2.2nm,0.7s,baz=131,slow=4.1,SNR=6.2
BVAR LR LR 09 26 31.2
comp=Z,253nm,20.6s,baz=182,slow=38
**BVAR Borovoye Array 24.34 329** P **P** 09 16 20.8 +1.0
BVAR 09 19 59.1
BVAR pmax pmax
comp=Z,17nm,0.8s
BVAR pmax pmax
comp=Z,2.0nm,0.7s
BVAR MLR MLR
comp=Z,253nm,20.6s
**BRVK Borovoye 24.41 329** *d i*P **P** 09 16 20.9 +0.5
BRVK pmax pmax
comp=Z,36nm,0.8s
**BRVK Borovoye 24.41 329** *e*P **P** 09 16 21.1 +0.7
comp=Z,35nm,0.8s
**CHKZ Chkalovo 24.71 331** *i* P **P** 09 16 23.1 0.0
CHKZ pmax pmax
comp=Z,39nm,0.9s
**ZRNK Zerenda 24.89 328** *i* P **P** 09 16 24.6 -0.2
ZRNK pmax pmax
comp=Z,15nm,0.9s
**DL2 Dalian 25.33 69** *e*P P 09 16 34.6 +5.8
DL2 S S 09 21 09.1 +14
DL2 pmax pmax
comp=Z,34nm,1.7s
DL2 pmax pmax
comp=Z,150nm,4.7s
DL2 LR LR
comp=E,330nm,11.2s
DL2 LR LR
comp=Z,350nm,12.7s
**GEYT Alibeck 26.84 289** P **P** 09 16 43.8 +1.3
comp=Z,2.2nm,0.4s,baz=104,slow=6.1,SNR=1.9
GEYT PcP **PcP** 09 20 05.2 +0.1
comp=Z,2.2nm,0.3s,baz=217,slow=1.5,SNR=3.8
**AB31 Akbulak array 27.73 314** P **P** 09 16 51.6 +1.2
AB31 pmax pmax
comp=Z,2.0nm,0.6s
**ABKAR Akbulak array 27.73 314** *e*P **P** 09 16 51.5 +1.1
comp=Z,2.1nm,0.6s
**CN2 Changchun 28.70 59** *e*P **P** 09 16 58.0 -1.1
CN2 *e*S **S** 09 21 45.6 -2.6
CN2 PMZ
comp=Z,10.0nm,0.6s
CN2 PMZ
comp=Z,100nm,5.0s
CN2 LN
comp=Z,200nm,16.0s
CN2 LE
comp=Z,400nm,16.0s
CN2 LZ
comp=Z,700nm,16.0s
**BOD Bodaibo 28.87 26** *e*P P 09 16 55.5 -5.0
BOD pmax pmax
comp=Z,5.0nm,1.6s
**AKTO Aktyubinsk 29.34 315** P **P** 09 17 05.7 +1.0
comp=Z,2.1nm,0.6s,baz=94,slow=11,SNR=8.2
AKTO PcP **PcP** 09 20 11.2 +0.3
comp=Z,3.2nm,0.6s,baz=120,slow=8.0,SNR=6.0
AKTO LR LR 09 30 34.8
comp=Z,251nm,18.6s,baz=123,slow=40
**AKTO Aktyubinsk 29.34 315** P **P** 09 17 05.5 +0.8
AKTO pmax pmax
comp=Z,3.0nm,0.7s
**KSAR Wonju Array Be 30.27 72** P **P** 09 17 11.7 -1.4
KSAR 09 20 13.3
**KSAR Wonju Array Be 30.27 72** P **P** 09 17 11.7 -1.4
KSAR PcP **PcP** 09 20 13.3 -0.3
**KSRS Korea Array 30.30 72** P **P** 09 17 11.7 -1.7
comp=Z,5.8nm,0.6s,baz=272,slow=9.4,SNR=31
KSRS PcP **PcP** 09 20 13.3 -0.3
comp=Z,3.0nm,0.7s,baz=299,slow=1.8,SNR=12
**KSRS Korea Array 30.30 72** P **P** 09 17 11.7 -1.7
KSRS 09 20 13.3
KSRS pmax pmax
comp=Z,6.0nm,0.6s
**SVE Sverdlovsk 31.09 328** ⇓*e*P **P** 09 17 21.6 +1.5
SVE pmax pmax
comp=Z,19nm,0.8s
SVE MLR MLR
comp=Z,393nm,12.0s
**MDJ Mudanjiang 31.76 58** P **P** 09 17 26.7 +0.5
MDJ PP **PP** 09 18 36.9 -0.9
MDJ PcP **PcP** 09 20 13.7 -3.7
MDJ S **S** 09 22 38.7 +2.5
MDJ ScP **ScP** 09 23 58.9 -2.1
MDJ PMZ
comp=Z,3.0nm,0.5s
MDJ PMZ
comp=Z,43nm,4.6s
MDJ LN
comp=Z,720nm,19.3s
MDJ LE
comp=Z,210nm,20.0s
MDJ LZ
comp=Z,370nm,16.1s
**ARU Arti 31.82 326** P **P** 09 17 26.9 +0.4
comp=Z,0.4nm,0.2s,baz=197,slow=20,SNR=1.7
ARU LR LR 09 32 09.2
comp=Z,260nm,19.4s,baz=114,slow=40
**ARU Arti 31.82 326** *c i*P **P** 09 17 27.0 +0.5
ARU 09 18 26.9
ARU S **S** 09 22 37.3 +0.5
ARU SS **SnSn** 09 24 24.9 +0.9
ARU pmax pmax
comp=Z,14nm,1.7s
ARU MLR MLR
comp=Z,281nm,21.0s
**VLA Vladivostok 33.29 61** *e*P **P** 09 17 38.9 -0.6
VLA pmax pmax
comp=Z,14nm,0.8s
**JNU Nakatsue 33.30 79** P **P** 09 17 38.0 -1.8
comp=Z,5.3nm,0.9s,baz=292,slow=11,SNR=2.6
**USRK Ussuriysk Ar. 33.43 59** P **P** 09 17 39.6 -1.1
comp=Z,4.9nm,1.0s,baz=254,slow=7.3,SNR=7.2
USRK PcP **PcP** 09 20 19.5 -2.5
comp=Z,1.0nm,0.6s,baz=69,slow=6.3,SNR=4.6
USRK LR LR 09 31 36.4
comp=Z,214nm,18.3s,baz=262,slow=37
**KLR Kul'dur 33.98 50** *e*P P 09 17 41.2 -4.3
KLR MLR MLR
comp=E,800nm,10.0s
KLR MLR MLR
comp=Z,3µm,10.0s
**YAK Yakutsk 37.63 29** LR LR 09 34 31.8
comp=Z,170nm,18.4s,baz=122,slow=38
**MYLDM Lahad Datu 38.19 132** *e*P **P** 09 18 23.5 +1.6
comp=Z,18nm,0.9s
**KIV Kislovodsk 38.47 300** *e*P **P** 09 18 23.8 -0.3
KIV pmax pmax
comp=Z,8.0nm,1.5s
KIV MLR MLR
comp=Z,74nm,17.0s
**MAJO Matsushiro 38.58 72** *e*P **P** 09 18 22.8 -2.3
MAJO pmax pmax
comp=Z,34nm,0.8s
**MJAR Matsushiro Arr 38.59 72** P **P** 09 18 23.6 -1.5
comp=Z,2.6nm,0.7s,baz=277,slow=9.6,SNR=9.6
MJAR PcP **PcP** 09 20 37.1 -0.4
comp=Z,2.7nm,0.9s,baz=292,slow=1.1,SNR=6.8
**MJAR Matsushiro Arr 38.59 72** P **P** 09 18 23.6 -1.5
MJAR 09 20 37.1
MJAR pmax pmax
comp=Z,3.0nm,0.7s
MJAR pmax pmax
comp=Z,3.0nm,0.9s
**RAYN Ar Rayn 40.79 268** *e*P **P** 09 18 43.3 -0.4
comp=Z,10nm,1.1s
**ASAJ Asahikawa 41.06 59** P **P** 09 18 44.2 -1.2
comp=Z,3.7nm,0.6s,baz=265,slow=12
**ASAJ Asahikawa 41.06 59** P **P** 09 18 44.3 -1.2
ASAJ pmax pmax
comp=Z,4.0nm,0.6s
**YSS Yuzh-Sakhalins 41.08 55** *e*P **P** 09 18 43.8 -1.9
YSS pmax pmax
comp=Z,9.0nm,1.0s
**ERM Erimo 41.64 63** *e*P **P** 09 18 47.9 -2.4
ERM pmax pmax
comp=Z,23nm,1.0s
**ANN Anapa 42.20 302** *e*P **P** 09 18 52.9 -2.0
ANN pmax pmax
comp=Z,28nm,0.9s
**KLMR Klimovskoe 42.67 326** *e*P **P** 09 18 58.3 -0.1
KLMR *e* 09 20 41.3
KLMR pmax pmax
comp=Z,21nm,0.8s
KLMR MLR MLR
comp=Z,260nm,12.0s
**OBN Obninsk 43.07 317** *e*P **P** 09 19 01.4 -0.3
OBN *e* 09 20 47.7
OBN pmax pmax
comp=Z,7.0nm,0.9s
OBN MLR MLR
comp=Z,144nm,16.0s
**TMCR Tamitsa 44.29 330** *e*P P 09 19 05.5 -5.9
TMCR pmax pmax
comp=Z,9.0nm,0.4s
**KUR Kuril'sk 44.72 57** P **P** 09 19 15.1 -0.1
KUR S **S** 09 25 52.4 +0.5
KUR MLR MLR
comp=N,174nm,18.0s
KUR MLR MLR
comp=E,52nm,18.0s
KUR MLR MLR
comp=Z,141nm,18.0s
**ASF Jabal al Asfar 44.90 284** P **P** 09 19 17.9 +1.0
comp=Z,1.0nm,0.3s,baz=100,slow=12,SNR=3.4
**ASF Jabal al Asfar 44.90 284** P **P** 09 19 17.9 +1.0
ASF pmax pmax
comp=Z,1.0nm,0.3s
**BRTR Keskin Array B 45.65 295** P **P** 09 19 23.4 +0.6
comp=Z,1.6nm,0.6s,baz=98,slow=7.8,SNR=7.9
BRTR PcP **PcP** 09 21 00.7 -0.2
comp=Z,0.7nm,0.6s,baz=103,slow=6.2,SNR=3.0
**BRTR Keskin Array B 45.65 295** *i* P **P** 09 19 27.3 +4.5
BRTR pmax pmax
comp=Z,2.0nm,0.8s
**EIL Elat 47.27 281** P **P** 09 19 35.8 +0.2
comp=Z,2.2nm,0.5s,baz=22,slow=15,SNR=2.6
**AKASG Malin Array Be 47.38 311** P **P** 09 19 36.0 -0.1
comp=Z,2.7nm,0.7s,baz=80,slow=6.7,SNR=9.5
AKASG LR LR 09 43 56.7
comp=Z,98nm,18.8s,baz=305,slow=42
**AKASG Malin Array Be 47.38 311** *ce*P **P** 09 19 38.2 +2.1
AKASG pmax pmax
comp=Z,6.0nm,0.8s
**KIEV Kiev 47.40 311** *e*P **P** 09 19 35.8 -0.4
KIEV pmax pmax
comp=Z,9.0nm,1.0s
**KIEV Kiev 47.40 311** *e*P **P** 09 19 39.0 +2.8
comp=Z,12nm,1.0s
**SEY Seymchan 47.83 33** P **P** 09 19 36.3 -3.1
comp=Z,1.3nm,0.5s,baz=346,slow=4.2,SNR=3.1
**SEY Seymchan 47.83 33** P **P** 09 19 36.3 -3.1
SEY pmax pmax
comp=Z,1.0nm,0.5s
**FINES FINESS Array B 49.18 325** P **P** 09 19 50.0 +0.1
comp=Z,3.1nm,0.6s,baz=103,slow=6.2,SNR=7.4
FINES LR LR 09 42 45.4
comp=Z,160nm,18.2s,baz=145,slow=39
**FINES FINESS Array B 49.18 325** *i* P **P** 09 19 50.4 +0.6
FINES pmax pmax
comp=Z,3.0nm,0.6s
**VRI Vrincioaia 49.58 304** ⇑P **P** 09 19 55.6 +2.4
**VRI Vrincioaia 49.58 304** ⇑*i*P **P** 09 19 55.5 +2.4
**BURAR Bucovina Array 50.33 307** ⇓P **P** 09 19 59.8 +0.9
**BURAR Bucovina Array 50.33 307** ⇓*i*P **P** 09 19 59.8 +0.9
**PETK Petropavlovsk- 50.44 46** P **P** 09 19 56.4 -3.1
comp=Z,2.2nm,0.7s,baz=305,slow=5.1,SNR=3.2
**PETK Petropavlovsk- 50.44 46** P **P** 09 19 56.4 -3.1
PETK pmax pmax
comp=Z,2.0nm,0.7s
**LVV L'vov 50.79 310** *e*P **P** 09 20 05.1 +2.9
**VOIR 50.82 304** ⇓P **P** 09 20 03.6 +1.0
**VOIR 50.82 304** ⇓*i*P **P** 09 20 03.6 +1.0
**DRGR 52.16 306** ⇑P **P** 09 20 13.6 +1.0
**DRGR 52.16 306** ⇑*i*P **P** 09 20 13.6 +1.0
**GZR Gura Zlata 52.39 304** ⇑P **P** 09 20 14.5 +0.1
**GZR Gura Zlata 52.39 304** ⇑*i*P **P** 09 20 14.5 +0.1
**STHS Stebnicka Huta 52.64 310** *e*P **P** 09 20 16.5 +0.4
STHS pmax pmax
comp=Z,5.0nm,1.0s
**STHS Stebnicka Huta 52.64 310** *e*P **P** 09 20 16.5 +0.4
**FAKI Fak Fak 53.30 125** *e*P **P** 09 20 20.2 -1.1
comp=Z,40nm,0.9s
**SOEI Soe 53.54 138** *e*P **P** 09 20 20.6 -2.5
comp=Z,79nm,0.9s
**BILL Bilibino 53.92 27** *e*P **P** 09 20 25.8 +0.6
BILL *e* 09 22 22.3
BILL pmax pmax
comp=Z,5.0nm,0.9s
**VYHS Vyhne 54.38 309** *e*P **P** 09 20 29.1 +0.3
VYHS pmax pmax
comp=Z,21nm,2.6s
**VYHS Vyhne 54.38 309** *e*P **P** 09 20 29.1 +0.3
**KRLC Kraliky 55.35 311** *e*P **P** 09 20 36.3 +0.4
**KRLC Kraliky 55.35 311** *e*P **P** 09 20 36.3 +0.4
**DPC Dobruska-Polom 55.58 312** *e*P **P** 09 20 38.4 +0.9
DPC *e* 09 20 52.0
**DPC Dobruska-Polom 55.58 312** *e*P **P** 09 20 38.4 +0.9
DPC *ep*P pP 09 20 52.0 +12
**UPC Upice 55.74 312** *e*P **P** 09 20 39.7 +1.1
**UPC Upice 55.74 312** *e*P **P** 09 20 39.7 +1.1
**NB2 NORSAR Subarra 56.37 325** P **P** 09 20 42.3 -0.7
comp=Z,2.2nm,0.6s,baz=80,slow=7.4
**NOA NORSAR Array B 56.37 325** P **P** 09 20 42.7 -0.3
comp=Z,3.1nm,0.7s,baz=81,slow=7.2,SNR=10.0
NOA LR LR 09 46 50.1
comp=Z,170nm,18.9s,baz=100,slow=38
**NOA NORSAR Array B 56.37 325** P **P** 09 20 42.7 -0.3
NOA pmax pmax
comp=Z,3.0nm,0.7s
NOA MLR MLR
comp=Z,170nm,18.9s
**CONA Conrad Observa 56.44 309** ⇑*i*P **P** 09 20 44.1 +0.3
comp=Z,8.2nm,0.8s
**GOPC GO Pecny, Ondr 56.64 311** *e*P **P** 09 20 45.8 +0.7
**GOPC GO Pecny, Ondr 56.64 311** *e*P **P** 09 20 45.8 +0.7
**PRU Pruhonice 56.77 311** *e*P **P** 09 20 47.0 +1.0
**PRU Pruhonice 56.77 311** *e*P **P** 09 20 47.0 +1.0
PRU *ex* x 09 20 48.5
**BRG Berggiesshubel 56.93 313** *e*P **P** 09 20 47.6 +0.5
comp=Z,7.5nm,0.9s
**BRG Berggiesshubel 56.93 313** *e*P **P** 09 20 47.6 +0.5
BRG pmax pmax
comp=Z,8.0nm,0.9s
**CLL Collm 57.40 313** *e*P **P** 09 20 50.0 -0.4
CLL *i* *PP **pP** 09 20 55.0 +1.9
CLL pmax pmax
comp=Z,3.0nm,0.8s
**CLL Collm 57.40 313** *e*P **P** 09 20 50.0 -0.4
comp=Z,3.0nm,0.8s
CLL *ep*P pP 09 21 04.0 +11
CLL LmH 09 43 00.0
comp=N,200nm,21.3s
CLL LmH 09 43 00.0
comp=E,100nm,20.4s
CLL LmV 09 46 00.0
comp=Z,100nm,20.1s
**MOA Molln 57.50 309** ⇑*i*P **P** 09 20 48.6 -2.6
comp=Z,7.2nm,1.2s
**GEC2 GERESS Array S 57.60 310** *e*P **P** 09 20 53.0 +1.0
**GEC2 GERESS Array S 57.60 310** *e*P **P** 09 20 53.0 +1.0
**GERES GERESS Array B 57.60 310** P **P** 09 20 52.5 +0.5
comp=Z,1.3nm,0.5s,baz=76,slow=6.1,SNR=11
GERES LR LR 09 49 11.6
comp=Z,93nm,18.8s,baz=79,slow=40
**GERES GERESS Array B 57.60 310** P **P** 09 20 52.5 +0.5
GERES pmax pmax
comp=Z,1.0nm,0.5s
GERES MLR MLR
comp=Z,93nm,18.8s
**KHC Kasperske Hory 57.60 311** *e*P **P** 09 20 49.3 -2.6
**KHC Kasperske Hory 57.60 311** *e*P **P** 09 20 49.3 -2.6
KHC *ex* x 09 20 53.4

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| GRF | Grafenberg Arr | 58.93 | 312 | eP | P | 09 21 01.6 | +0.4 |
| | comp=Z,11nm,0.9s,baz=78,slow=6.3 | | | | | | |
| DAVOX | Davos/Dischmat | 60.67 | 309 | P | P | 09 21 13.4 | -0.1 |
| | comp=Z,3.6nm,0.6s,baz=114,slow=10.0,SNR=4.9 | | | | | | |
| DAVOX | Davos/Dischmat | 60.67 | 309 | P | P | 09 21 13.4 | -0.1 |
| DAVOX | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| MBWA | Marble Bar | 60.99 | 149 | eP | P | 09 21 14.8 | -0.8 |
| | comp=Z,69nm,1.2s | | | | | | |
| KMBO | Kilima Mbogo | 61.01 | 247 | P | P | 09 21 15.3 | -0.9 |
| | comp=Z,2.4nm,0.5s,baz=37,slow=5.9,SNR=8.3 | | | | | | |
| KMBO | Kilima Mbogo | 61.01 | 247c | eP | P | 09 21 17.7 | +1.5 |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| SENIN | Lac Senin/Sane | 62.48 | 309 | eP | P | 09 21 25.7 | 0.0 |
| | comp=Z,7.3nm,0.9s | | | | | | |
| KEST | Kesra | 65.14 | 298 | P | P | 09 21 44.2 | +0.9 |
| | comp=Z,22nm,1.4s,baz=260,slow=6.5,SNR=3.8 | | | | | | |
| MBAR | Mbarara | 65.77 | 252 | P | P | 09 21 46.8 | -0.9 |
| | comp=Z,3.2nm,0.2s,baz=74,slow=7.1,SNR=6.2 | | | | | | |
| MBAR | Mbarara | 65.77 | 252 | P | P | 09 21 46.8 | -0.9 |
| MBAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| OPO | Ambohidratompo | 66.50 | 226 | P | P | 09 21 52.0 | -0.2 |
| | comp=Z,8.8nm,0.7s,baz=37,slow=1.3,SNR=12 | | | | | | |
| WRAB | Tennant Creek | 67.46 | 135c | iP | P | 09 21 57.5 | -0.6 |
| WRAB | Tennant Creek | 67.46 | 135 | eP | P | 09 21 57.5 | -0.6 |
| | comp=Z,41nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 67.47 | 135 | P | P | 09 21 57.9 | -0.2 |
| | comp=Z,30nm,0.8s,baz=331,slow=6.5,SNR=147 | | | | | | |
| WRA | Warramunga Arr | 67.47 | 135 | P | P | 09 21 57.9 | -0.2 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| COLD | Coldfoot | 69.54 | 21 | eP | P | 09 22 11.1 | +0.6 |
| | comp=Z,14nm,1.0s | | | | | | |
| ASAR | Alice Springs | 70.14 | 138 | P | P | 09 22 14.7 | -0.1 |
| | comp=Z,44nm,0.9s,baz=325,slow=6.5,SNR=454 | | | | | | |
| ASAR | Alice Springs | 70.14 | 138 | P | P | 09 22 14.7 | -0.1 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,44nm,0.9s | | | | | | |
| BPAW | Bear Paw Mtn. | 71.26 | 24 | eP | P | 09 22 21.2 | +0.2 |
| | comp=Z,13nm,1.3s | | | | | | |
| CAST | Castle Rocks | 71.31 | 25 | eP | P | 09 22 21.6 | +0.3 |
| | comp=Z,6.1nm,0.8s | | | | | | |
| PPLA | Purkeypile | 71.59 | 25 | eP | P | 09 22 23.6 | +0.3 |
| | comp=Z,12nm,0.6s | | | | | | |
| KTH | Kantishna Hill | 71.63 | 25 | eP | P | 09 22 23.7 | +0.3 |
| | comp=Z,18nm,1.2s | | | | | | |
| COLA | College | 71.80 | 23d | iP | P | 09 22 24.0 | -0.2 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| COLA | College | 71.80 | 23 | eP | P | 09 22 24.2 | 0.0 |
| | comp=Z,18nm,0.8s | | | | | | |
| RES | Resolute Bay | 71.96 | 2 | LR | LR | 09 54 42.2 | |
| | comp=Z,49nm,19.4s,baz=326,slow=36 | | | | | | |
| CCB | Clear Creek Bu | 71.96 | 23 | eP | P | 09 22 24.8 | -0.4 |
| | comp=Z,5.4nm,0.9s | | | | | | |
| ILAR | Eielson Array | 72.17 | 22 | P | P | 09 22 25.7 | -0.8 |
| | comp=Z,7.1nm,0.8s,baz=298,slow=5.1,SNR=69 | | | | | | |
| ILAR | Eielson Array | 72.17 | 22 | P | P | 09 22 25.7 | -0.8 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| ESDC | Sonseca Array | 72.79 | 306 | P | P | 09 22 30.6 | -0.1 |
| | comp=Z,3.0nm,0.8s,baz=51,slow=6.4,SNR=11 | | | | | | |
| EGAK | Eagle | 73.92 | 21 | eP | P | 09 22 36.9 | 0.0 |
| | comp=Z,8.1nm,1.0s | | | | | | |
| MVO | Moncorvo | 74.07 | 309 | eP | P | 09 22 38.7 | +0.4 |
| | comp=Z,31nm,2.0s | | | | | | |
| KDAK | Kodiak Island | 74.66 | 30 | iP | P | 09 22 40.5 | -0.7 |
| MTE | Manteigas | 74.80 | 308 | eP | P | 09 22 42.7 | +0.2 |
| | comp=Z,34nm,1.7s | | | | | | |
| PVIS | Viseu | 74.86 | 309 | eP | P | 09 22 43.2 | +0.3 |
| | comp=Z,30nm,1.5s | | | | | | |
| PBAR | Barrancos | 75.61 | 306 | eP | P | 09 22 47.6 | +0.4 |
| | comp=Z,42nm,1.8s | | | | | | |
| EVO | Evora | 76.08 | 307 | eP | P | 09 22 50.6 | +0.8 |
| | comp=Z,19nm,1.3s | | | | | | |
| MESJ | Messejana | 76.58 | 307 | eP | P | 09 22 53.5 | +0.8 |
| | comp=Z,29nm,1.6s | | | | | | |
| PBDV | Barranco-do-Ve | 76.70 | 306 | eP | P | 09 22 54.2 | +0.8 |
| | comp=Z,44nm,1.8s | | | | | | |
| EIDS | Eidsvold | 81.92 | 128 | eP | P | 09 23 22.2 | +0.3 |
| | comp=Z,11nm,0.9s | | | | | | |
| YKA | Yellowknife Ar | 82.11 | 12 | P | P | 09 23 21.5 | -0.8 |
| | comp=Z,8.8nm,0.9s,baz=332,slow=5.1,SNR=12 | | | | | | |
| YKA | Yellowknife Ar | 82.11 | 12 | P | P | 09 23 21.5 | -0.8 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| TORD | Torodi Ar. Bea | 82.16 | 281 | P | P | 09 23 23.1 | -0.3 |
| | comp=Z,12nm,1.0s,baz=48,slow=4.9,SNR=38 | | | | | | |
| TORD | | | | LR | LR | 10 04 55.9 | |
| | comp=Z,38nm,19.3s,baz=345,slow=39 | | | | | | |
| BOSA | Boshof | 87.64 | 233 | P | P | 09 23 49.7 | -1.1 |
| | comp=Z,10nm,0.9s,baz=40,slow=4.1,SNR=6.3 | | | | | | |
| BOSA | Boshof | 87.64 | 233 | P | P | 09 23 49.7 | -1.1 |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| SCHQ | Schefferville | 89.89 | 347 | P | P | 09 23 59.9 | -1.1 |
| | comp=Z,6.8nm,0.8s,baz=63,slow=9.0,SNR=3.1 | | | | | | |
| EDM | Edmonton | 91.05 | 14 | eP | P | 09 24 06.4 | 0.0 |
| EDM | Edmonton | 91.05 | 14 | eP | P | 09 24 06.4 | 0.0 |
| | comp=Z,127nm,2.5s | | | | | | |
| DBIC | Dimbokro | 91.08 | 279 | P | P | 09 24 06.5 | -0.7 |
| | comp=Z,3.1nm,0.9s,baz=59,slow=10,SNR=4.3 | | | | | | |
| DBIC | | | | LR | LR | 10 09 44.1 | |
| | comp=Z,44nm,19.6s,baz=44,slow=39 | | | | | | |
| FFC | Flin Flon | 91.38 | 7 | eP | P | 09 24 07.4 | -0.5 |
| FFC | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| FFC | Flin Flon | 91.38 | 7 | eP | P | 09 24 07.3 | -0.5 |
| | comp=Z,21nm,1.1s | | | | | | |
| CBN | Corbin | 107.76 | 350 | ePdif | Pdif | 09 25 13.8 | -8.2 |
| TXAR | Lajitas Array | 115.95 | 14 | PKP | PKPdf | 09 29 44.7 | -0.8 |
| | comp=Z,0.4nm,0.6s,baz=21,slow=2.2,SNR=8.5 | | | | | | |
| VNDA | Vanda | 118.56 | 166 | PKP | PKPdf | 09 29 47.9 | -0.9 |
| | comp=Z,1.0nm,0.8s,baz=289,slow=4.6,SNR=7.2 | | | | | | |
| VNDA | Vanda | 118.56 | 166 | PKIKP | PKPdf | 09 29 47.9 | -0.9 |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| SNAA | Sanae | 122.62 | 202 | P | PKPdf | 09 29 56.1 | -0.7 |
| SNAA | Sanae | 122.62 | 202 | ePKIKP | PKPdf | 09 29 56.1 | -0.7 |
| SNAA | Sanae | 122.62 | 202 | ePKPdf | PKPdf | 09 29 56.1 | -0.7 |
| QSPA | South Pole Qui | 123.34 | 180 | ePKPdf | PKPdf | 09 29 57.6 | -0.7 |
| VNA2 | Neumayer--Watz | 123.99 | 203 | P | PKPdf | 09 29 59.2 | -0.2 |
| | baz=50,slow=3.0 | | | | | | |
| VNA1 | Neumayer--Stat | 124.26 | 203 | P | PKPdf | 09 29 59.5 | -0.3 |
| VNA3 | Neumayer Olymp | 124.75 | 203 | P | PKPdf | 09 30 00.3 | -0.6 |
| OTAV | Otavalo | 144.90 | 341 | ePKPdf | PKPbc | 09 30 39.6 | 0.0 |

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*ISCJB **07** 10:09:58.5±0.3, 43°.62S±0°.03×172°.38E±0°.04, h16km, mb3.5/2, Error ellipse: s-maj=4.9km s-min=3.3km az=138.0*
*IDC **07** 10:10:00.2±1.8, 43°.16S×172°.09E, h0km, mb3.3/2, mb1 3.6/3, mb1mx3.4/26, mbtmp3.4/3, ML3.1/1, Error ellipse: s-maj=44.0km s-min=13.0km az=136.0*
*NEIC **07** 10:10:00.0, 43°.61S×172°.30E, h5km, ML4.2(WEL), After WEL.*
*NEIC Felt in Canterbury.*
*WEL **07** 10:10:00.1±0.2, 43°.62S×172°.30E, h5km, ML4.2/31, Error ellipse: s-maj=1.1km s-min=1.0km az=0.0*
*WEL Felt in the Canterbury region, maximum reported intensity MM 5.*
**ISC 07 10:09:59.2**±0.8, **43°.60S**±0°.04×**172°.39E**±0°.03, **h16**km, **n82**, σ1s**09**/90, **8C-8D**, **South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.17 | 83 | ⇓PG | Pb | 10 10 04.7 | +0.8 |
| CRLZ | | | | SG | Sb | 10 10 08.0 | +1.0 |
| CRLZ | | | | AML | AML | 10 10 08.3 | |
| CRLZ | | | | AML | AML | 10 10 08.3 | |
| CRLZ | | | | AML | AML | 10 10 08.3 | |
| CRLZ | Canterbury Las | 0.17 | 83 | ⇓Pg | Pb | 10 10 04.7 | +0.8 |
| CRLZ | | | | Sg | Sb | 10 10 08.0 | +1.0 |
| MQZ | McQueen's Vall | 0.22 | 120 | ⇓PG | Pb | 10 10 05.5 | +0.7 |
| MQZ | | | | SG | Sb | 10 10 09.5 | +1.0 |
| MQZ | | | | AML | AML | 10 10 11.0 | |
| MQZ | McQueen's Vall | 0.22 | 120 | ⇓Pg | Pb | 10 10 05.5 | +0.7 |
| MQZ | | | | Sg | Sb | 10 10 09.6 | +1.0 |
| OXZ | Oxford | 0.37 | 317 | ⇑PG | Pg | 10 10 06.9 | +0.1 |
| OXZ | | | | SG | Sg | 10 10 11.6 | -0.5 |
| OXZ | Oxford | 0.37 | 317 | ⇑Pg | Pg | 10 10 06.9 | +0.1 |
| OXZ | | | | Sg | Sg | 10 10 11.6 | -0.5 |
| LTZ | Lake Taylor | 0.82 | 354 | ⇑P* | Pn | 10 10 15.9 | -0.2 |
| LTZ | | | | S* | Sg | 10 10 26.4 | +0.4 |
| LTZ | | | | AML | AML | 10 10 27.7 | |
| LTZ | Lake Taylor | 0.82 | 354 | ⇑P* | Pn | 10 10 15.9 | -0.2 |
| RPZ | Rata Peaks | 0.98 | 263 | ⇓P* | Pb | 10 10 18.1 | +0.4 |
| RPZ | | | | AML | AML | 10 10 31.3 | |
| RPZ | | | | AML | AML | 10 10 32.6 | |
| RPZ | Rata Peaks | 0.98 | 263 | Pg | Pb | 10 10 18.1 | +0.4 |
| | 419nm,0.3s,baz=94,slow=1.4,SNR=1938 | | | | | | |
| RPZ | | | | Lg | Lg | 10 10 31.0 | |
| | 753nm,0.3s,baz=62,slow=17,SNR=38 | | | | | | |
| WVZ | Waitaha Valley | 1.31 | 293 | ⇓P* | Pn | 10 10 23.0 | +0.2 |
| WVZ | | | | AML | AML | 10 10 42.4 | |
| WVZ | | | | AML | AML | 10 10 47.5 | |
| WVZ | Waitaha Valley | 1.31 | 293 | P* | Pn | 10 10 23.0 | +0.2 |
| KHZ | Kahutara | 1.45 | 36 | ⇓PN | Pn | 10 10 24.8 | +0.1 |
| KHZ | | | | AML | AML | 10 10 56.3 | |
| KHZ | | | | AML | AML | 10 10 56.7 | |
| KHZ | Kahutara | 1.45 | 36 | Pn | Pn | 10 10 24.8 | +0.1 |
| LBZ | Lake Benmore | 1.78 | 243 | PN | Pn | 10 10 29.5 | +0.3 |
| LBZ | | | | AML | AML | 10 10 57.3 | |
| LBZ | | | | AML | AML | 10 11 02.6 | |
| LBZ | Lake Benmore | 1.78 | 243 | Pn | Pn | 10 10 29.5 | +0.3 |
| THZ | Tophouse | 1.87 | 12 | PN | Pn | 10 10 30.7 | +0.1 |
| THZ | | | | AML | AML | 10 11 06.2 | |
| THZ | | | | AML | AML | 10 11 07.4 | |
| THZ | Tophouse | 1.87 | 12 | Pn | Pn | 10 10 30.7 | +0.1 |
| DSZ | Denniston Nort | 1.90 | 347 | ⇑PN | Pn | 10 10 31.2 | +0.3 |
| DSZ | | | | AML | AML | 10 11 01.8 | |
| DSZ | | | | AML | AML | 10 11 05.6 | |
| DSZ | Denniston Nort | 1.90 | 347 | Pn | Pn | 10 10 31.2 | +0.3 |
| ODZ | Otahua Downs | 1.91 | 220 | PN | Pn | 10 10 31.1 | 0.0 |
| ODZ | | | | AML | AML | 10 11 00.9 | |
| ODZ | | | | AML | AML | 10 11 01.5 | |
| ODZ | Otahua Downs | 1.91 | 220 | Pn | Pn | 10 10 31.1 | 0.0 |
| FOZ | Fox Glacier | 1.96 | 270 | PN | Pn | 10 10 31.7 | -0.1 |
| FOZ | | | | AML | AML | 10 10 56.3 | |
| FOZ | | | | AML | AML | 10 11 03.7 | |
| FOZ | Fox Glacier | 1.96 | 270 | Pn | Pn | 10 10 31.7 | -0.1 |
| BSWZ | Blackbirch Sta | 2.18 | 31 | PN | Pn | 10 10 35.1 | +0.4 |
| BSWZ | | | | AML | AML | 10 11 04.5 | |
| BSWZ | | | | AML | AML | 10 11 07.3 | |
| BSWZ | Blackbirch Sta | 2.18 | 31 | Pn | Pn | 10 10 35.1 | +0.4 |
| NNZ | Nelson | 2.49 | 17 | PN | Pn | 10 10 39.8 | +0.8 |
| NNZ | | | | AML | AML | 10 11 12.6 | |
| NNZ | | | | AML | AML | 10 11 15.9 | |
| NNZ | Nelson | 2.49 | 17 | Pn | Pn | 10 10 39.8 | +0.8 |
| HHSZ | Highcliff Hill | 2.62 | 209 | PN | Pn | 10 10 40.9 | +0.1 |
| HHSZ | Highcliff Hill | 2.62 | 209 | Pn | Pn | 10 10 40.9 | +0.1 |
| JCZ | Jackson Bay | 2.67 | 258 | PN | Pn | 10 10 41.5 | -0.1 |
| JCZ | | | | AML | AML | 10 11 32.8 | |
| JCZ | | | | AML | AML | 10 11 34.4 | |
| JCZ | Jackson Bay | 2.67 | 258 | Pn | Pn | 10 10 41.5 | -0.1 |
| WKZ | Wanaka | 2.72 | 242 | PN | Pn | 10 10 41.7 | -0.5 |
| WKZ | | | | AML | AML | 10 11 33.9 | |
| WKZ | | | | AML | AML | 10 11 40.4 | |
| WKZ | Wanaka | 2.72 | 242 | Pn | Pn | 10 10 41.7 | -0.5 |
| EAZ | Earnscleugh | 2.75 | 232 | PN | Pn | 10 10 42.4 | -0.1 |
| EAZ | | | | AML | AML | 10 11 27.0 | |
| EAZ | | | | AML | AML | 10 11 31.7 | |
| EAZ | Earnscleugh | 2.75 | 232 | Pn | Pn | 10 10 42.4 | -0.1 |
| QRZ | Quartz Range | 2.77 | 2 | PN | Pn | 10 10 43.2 | +0.4 |
| QRZ | | | | AML | AML | 10 10 53.2 | |
| QRZ | | | | AML | AML | 10 11 28.8 | |
| QRZ | Quartz Range | 2.77 | 2 | Pn | Pn | 10 10 43.2 | +0.4 |
| WEL | Wellington | 2.91 | 38 | PN | Pn | 10 10 44.8 | +0.1 |
| WEL | Wellington | 2.91 | 38 | Pn | Pn | 10 10 44.9 | +0.1 |
| MSWZ | Moikau Station | 3.04 | 45 | PN | Pn | 10 10 45.9 | -0.7 |
| MSWZ | | | | AML | AML | 10 11 22.5 | |
| MSWZ | | | | AML | AML | 10 11 25.0 | |
| MSWZ | Moikau Station | 3.04 | 45 | Pn | Pn | 10 10 45.9 | -0.7 |
| TUZ | Tuapeka | 3.07 | 219 | ⇑PN | Pn | 10 10 46.9 | -0.1 |
| TUZ | | | | AML | AML | 10 11 46.7 | |
| TUZ | | | | AML | AML | 10 11 47.1 | |
| TUZ | Tuapeka | 3.07 | 219 | Pn | Pn | 10 10 46.9 | -0.1 |
| CAW | Cannon Point | 3.18 | 39 | PN | Pn | 10 10 48.0 | -0.5 |
| CAW | | | | AML | AML | 10 11 25.9 | |
| CAW | | | | AML | AML | 10 11 31.7 | |
| CAW | Cannon Point | 3.18 | 39 | Pn | Pn | 10 10 48.0 | -0.5 |
| KIW | Kapiti Island | 3.31 | 35 | PN | Pn | 10 10 50.2 | -0.2 |
| KIW | | | | AML | AML | 10 11 33.1 | |
| KIW | | | | AML | AML | 10 11 40.0 | |
| KIW | Kapiti Island | 3.31 | 35 | Pn | Pn | 10 10 50.2 | -0.2 |
| MTW | Mount Morrison | 3.35 | 44 | PN | Pn | 10 10 50.3 | -0.6 |
| MTW | | | | AML | AML | 10 11 32.9 | |
| MTW | | | | AML | AML | 10 11 34.0 | |
| MTW | Mount Morrison | 3.35 | 44 | Pn | Pn | 10 10 50.3 | -0.6 |
| MSZ | Milford Sound | 3.39 | 250 | ⇑PN | Pn | 10 10 51.1 | -0.3 |
| MSZ | | | | AML | AML | 10 11 49.6 | |
| MSZ | | | | AML | AML | 10 11 55.9 | |
| MSZ | Milford Sound | 3.39 | 250 | Pn | Pn | 10 10 51.1 | -0.3 |
| OGWZ | Otaki Gorge | 3.46 | 38 | PN | Pn | 10 10 52.0 | -0.3 |
| OGWZ | Otaki Gorge | 3.46 | 38 | Pn | Pn | 10 10 52.0 | -0.3 |
| MLZ | Mavora Lakes | 3.49 | 238 | PN | Pn | 10 10 53.0 | +0.2 |
| MLZ | | | | AML | AML | 10 11 54.1 | |
| MLZ | | | | AML | AML | 10 11 59.5 | |
| MLZ | Mavora Lakes | 3.49 | 238 | Pn | Pn | 10 10 53.0 | +0.2 |
| SYZ | Scrubby Hill | 3.73 | 217 | PN | Pn | 10 10 56.3 | +0.2 |
| SYZ | | | | AML | AML | 10 12 06.2 | |
| SYZ | | | | AML | AML | 10 12 09.2 | |
| SYZ | Scrubby Hill | 3.73 | 217 | Pn | Pn | 10 10 56.3 | +0.2 |
| MRZ | Mangatainoka R | 3.77 | 40 | PN | Pn | 10 10 55.3 | -1.4 |
| MRZ | | | | AML | AML | 10 11 41.1 | |
| MRZ | | | | AML | AML | 10 11 41.9 | |
| MRZ | Mangatainoka R | 3.77 | 40 | Pn | Pn | 10 10 55.8 | -0.9 |
| MRZ | | | | Sn | Sn | 10 11 38.3 | -2.4 |
| WHZ | Wether Hill Ro | 3.91 | 233 | ⇓PN | Pn | 10 10 57.5 | -1.1 |
| WHZ | | | | AML | AML | 10 12 17.5 | |
| WHZ | | | | AML | AML | 10 12 17.7 | |
| WHZ | Wether Hill Ro | 3.91 | 233 | Pn | Pn | 10 10 57.5 | -1.1 |
| BFZ | Birch Farm | 4.09 | 46 | ⇑PN | Pn | 10 11 00.1 | -0.9 |
| BFZ | Birch Farm | 4.09 | 46 | Pn | Pn | 10 11 00.1 | -0.9 |
| DCZ | Deep Cove | 4.19 | 242 | AML | AML | 10 12 20.6 | |
| DCZ | | | | AML | AML | 10 12 24.7 | |
| WAZ | Wanganui | 4.30 | 28 | PN | Pn | 10 11 05.7 | +1.7 |
| WAZ | | | | AML | AML | 10 12 01.2 | |
| WAZ | Wanganui | 4.30 | 28 | Pn | Pn | 10 11 05.7 | +1.7 |
| TSZ | Takapari Road | 4.43 | 38 | PN | Pn | 10 11 04.6 | -1.1 |
| TSZ | Takapari Road | 4.43 | 38 | Pn | Pn | 10 11 04.6 | -1.1 |
| KHEZ | Kahui Hut | 4.47 | 16 | PN | Pn | 10 11 08.6 | +2.3 |
| KHEZ | Kahui Hut | 4.47 | 16 | Pn | Pn | 10 11 08.7 | +2.3 |
| APZ | The Paps | 4.49 | 222 | PN | Pn | 10 11 06.0 | -0.5 |
| APZ | | | | AML | AML | 10 12 30.0 | |
| APZ | | | | AML | AML | 10 12 30.1 | |
| APZ | The Paps | 4.49 | 222 | Pn | Pn | 10 11 06.0 | -0.5 |
| NEZ | North Egmont | 4.51 | 17 | PN | Pn | 10 11 09.2 | +2.4 |
| NEZ | North Egmont | 4.51 | 17 | Pn | Pn | 10 11 09.2 | +2.4 |
| PKE | Pukeiti | 4.56 | 16 | PN | Pn | 10 11 09.3 | +1.8 |
| PKE | | | | AML | AML | 10 12 03.1 | |
| PKE | Pukeiti | 4.56 | 16 | Pn | Pn | 10 11 09.3 | +1.8 |
| PXZ | Pawanui | 4.88 | 45 | Pn | Pn | 10 11 12.2 | +0.3 |
| URZ | Urewera | 6.42 | 35 | Pn | Pn | 10 11 30.8 | -2.2 |
| | 0.4nm,0.3s,baz=220,slow=7.9,SNR=3.1 | | | | | | |
| URZ | | | | Sn | Sn | 10 12 40.1 | -5.8 |
| | 3.4nm,0.3s,baz=131,slow=4.0,SNR=9.6 | | | | | | |
| ASAR | Alice Springs | 37.28 | 290 | P | P | 10 17 11.0 | +0.6 |
| | 0.3nm,0.5s,baz=131,slow=7.7,SNR=7.2 | | | | | | |
| WRA | Warramunga Arr | 39.54 | 294 | P | P | 10 17 29.8 | +0.4 |
| | 0.5nm,0.3s,baz=134,slow=7.8,SNR=3.8 | | | | | | |
| TORD | Torodi Ar. Bea | 148.62 | 198 | PKPbc | PKPab | 10 29 50.4 | +1.3 |
| | 0.3nm,0.7s,baz=172,slow=1.9,SNR=2.2 | | | | | | |

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*NNC **07** 10:11:02.3±2.4, 36°.56N×68°.79E, h0km, mb4.1, mpv3.9, Error ellipse: s-maj=18.0km s-min=14.7km az=34.0*
**ISC 07 10:11:03.9**±3.0, **36°.6N**±0°.2×**68°.7E**±0°.1, **h10**km, **n17**, σ1s**14**/20, **7C-7D**, **Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.21 | 2 | ⇓Pn | Pn | 10 11 41.0 | +0.2 |
| | 8.1nm,0.2s | | | | | | |
| DZET | | | | ⇓Sn | Sb | 10 12 10.7 | -0.8 |
| | 291nm,0.5s | | | | | | |
| SFK | Sufi-Kurgan | 5.09 | 46 | ⇑Pn | Pn | 10 12 20.2 | -0.3 |
| | 4.5nm,0.3s | | | | | | |
| SFK | | | | ⇓Sn | Sn | 10 13 22.3 | +2.9 |
| | 9.1nm,0.3s | | | | | | |
| MNAS | Manas | 6.58 | 25 | ⇑Pn | Pn | 10 12 40.5 | -0.3 |
| | 6.3nm,0.3s | | | | | | |
| MNAS | | | | ⇑Sn | Sn | 10 13 55.9 | 0.0 |
| | 5.3nm,0.4s | | | | | | |
| KK31 | Karatay Array | 6.65 | 12 | ⇑Pn | Pn | 10 12 41.3 | -0.4 |
| | 1.7nm,0.3s,baz=162,slow=14,SNR=3.5 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 10 13 58.5 | +1.0 |
| | 2.0nm,0.3s,baz=200,slow=24,SNR=3.8 | | | | | | |
| AML | Almayashu | 6.75 | 33 | P | Pn | 10 12 42.4 | -0.9 |
| | SNR=15 | | | | | | |
| IMYA | Miami | 6.94 | 270 | ePn | Pn | 10 12 41.5 | -4.3 |
| EKS2 | Erkin-Say | 7.21 | 31 | P | Pn | 10 12 50.0 | +0.5 |
| | SNR=9.6 | | | | | | |
| KZA | Kyzart | 7.46 | 41 | P | Pn | 10 12 53.0 | -0.2 |
| | SNR=8.0 | | | | | | |
| AAK | Ala-Archa | 7.50 | 35 | ⇓Pn | Pn | 10 12 52.8 | -0.7 |
| | 5.6nm,0.6s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 10 14 18.7 | -0.1 |
| | 5.6nm,0.7s | | | | | | |
| AAK | Ala-Archa | 7.50 | 35 | P | Pn | 10 12 52.7 | -0.9 |
| | SNR=9.8 | | | | | | |
| KBK | Karagaybulak | 7.74 | 37 | P | Pn | 10 12 57.5 | +0.7 |
| | SNR=9.3 | | | | | | |
| CHMS | Chumysh | 7.91 | 34 | P | Pn | 10 12 58.4 | -0.6 |
| | SNR=7.0 | | | | | | |
| IAKL | Akhelmad | 8.00 | 273 | ePn | Pn | 10 12 54.6 | -5.9 |
| TKM2 | Tokmak 2 | 8.25 | 38 | ⇓Pn | Pn | 10 13 01.4 | -2.4 |
| | 3.9nm,0.7s | | | | | | |
| TKM2 | | | | ⇓Sn | Sn | 10 14 36.9 | -0.3 |
| | 6.4nm,0.7s | | | | | | |
| TKM2 | Tokmak 2 | 8.25 | 38 | P | Pn | 10 13 02.5 | -1.3 |
| | SNR=6.6 | | | | | | |
| AB31 | Akbulak array | 14.18 | 336 | ⇑P | Pn | 10 14 19.8 | -4.9 |
| | 0.6nm,0.3s,baz=160,slow=12,SNR=17 | | | | | | |
| AKTO | Aktyubinsk | 15.83 | 334 | ⇓P | Pn | 10 14 47.2 | +0.4 |
| | 2.5nm,0.8s | | | | | | |

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**IDC 07 10:11:21.6**±2.1, **16°.46S**×**178°.73W**, **h0**km, **mb3.6**/5, **mb1 4.0**/5, **mb1mx3.7**/35, **mbtmp3.6**/5, **Error ellipse: s-maj=133.5km s-min=25.1km az=152.0**, **Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 44.60 | 258 | P | P | 10 19 35.9 | -0.3 |
| | 0.3nm,0.6s,baz=91,slow=7.4,SNR=3.1 | | | | | | |
| ASAR | Alice Springs | 44.90 | 253 | P | P | 10 19 38.5 | 0.0 |
| | 2.6nm,0.5s,baz=88,slow=8.2,SNR=63 | | | | | | |
| NVAR | Mina Array Bea | 78.60 | 44 | P | P | 10 23 26.6 | +0.9 |
| | 0.3nm,0.7s,baz=236,slow=6.4,SNR=3.0 | | | | | | |
| ILAR | Eielson Array | 84.55 | 13 | P | P | 10 23 55.8 | -0.6 |
| | 0.2nm,0.4s,baz=225,slow=5.3,SNR=5.3 | | | | | | |
| TXAR | Lajitas Array | 85.49 | 58 | P | P | 10 24 01.1 | -0.9 |
| | 0.2nm,0.7s,baz=218,slow=5.7,SNR=3.4 | | | | | | |

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*IDC **07** 10:14:00.9±0.8, 7°.89N×91°.87E, h0km, mb4.0/8, mb1 4.1/11, mb1mx3.7/61, mbtmp4.0/11, ML4.0/3, MS3.3/1, Ms1 3.3/1, ms1mx2.6/36, Error ellipse: s-maj=32.2km s-min=16.0km az=47.0*
*ISCJB **07** 10:14:02.4±0.7, 7°.9N±0°.1×91°.90E±0°.09, h25km, mb3.9/8, Error ellipse: s-maj=16.1km s-min=11.3km az=34.3*
**ISC 07 10:14:04.4**±0.7, **7°.9N**±0°.1×**91°.97E**±0°.10, **h25**km, **n14**, σ1s**45**/14, **mb4.0**/8, **Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PSI | Prapat | 8.55 | 126 | Pn | Pn | 10 16 08.3 | +1.5 |
| | 2.1nm,0.3s,baz=309,slow=13,SNR=8.7 | | | | | | |
| PSI | | | | Sn | Sn | 10 17 38.9 | -3.7 |
| | 0.7nm,0.3s,baz=300,slow=20,SNR=2.5 | | | | | | |
| PALK | Pallekele | 11.18 | 268 | Pn | Pn | 10 16 42.9 | +0.1 |
| | 1.9nm,0.3s,baz=115,slow=13,SNR=9.1 | | | | | | |
| PALK | | | | Sn | Sn | 10 18 36.3 | -11 |
| | 5.5nm,0.3s,baz=116,slow=12,SNR=7.8 | | | | | | |
| PALK | | | | LR | LR | 10 20 46.5 | |
| | comp=Z,148nm,18.1s,baz=116,slow=37 | | | | | | |
| CMAR | Chiang Mai Arr | 12.54 | 32 | Pn | Pn | 10 17 01.6 | +0.2 |
| | 0.2nm,0.3s,baz=238,slow=15,SNR=5.9 | | | | | | |
| H08S3 | Diego Garcia H | 24.77 | 232 | T | T | 10 45 32.4 | |
| | baz=52,slow=75,SNR=160 | | | | | | |
| H08S2 | Diego Garcia H | 24.77 | 232 | T | T | 10 45 29.6 | |
| | baz=52,slow=75,SNR=115 | | | | | | |
| H08S1 | Diego Carcia H | 24.79 | 232 | T | T | 10 45 31.3 | |
| | baz=52,slow=75,SNR=102 | | | | | | |
| MKAR | Makanchi Array | 39.68 | 350 | P | P | 10 21 34.4 | -0.1 |
| | 0.4nm,0.6s,baz=167,slow=8.9,SNR=2.0 | | | | | | |
| SONM | Songino Array | 41.70 | 15 | P | P | 10 21 51.4 | +0.1 |
| | 0.7nm,0.5s,baz=203,slow=6.3,SNR=5.1 | | | | | | |
| GEYT | Alibeck | 42.80 | 320 | P | P | 10 21 58.8 | -1.5 |
| | 1.5nm,0.4s,baz=108,slow=9.4,SNR=2.8 | | | | | | |
| KURBB | Kurchatov Arra | 44.08 | 348 | P | P | 10 22 10.4 | +0.1 |
| | 1.8nm,0.2s,baz=174,slow=6.7,SNR=5.6 | | | | | | |
| WRA | Warramunga Arr | 50.01 | 124 | P | P | 10 22 58.1 | +0.9 |
| | 1.8nm,0.8s,baz=305,slow=8.6,SNR=15 | | | | | | |
| WRA | | | | PcP | PcP | 10 24 17.8 | +0.9 |
| | 0.4nm,0.7s,baz=319,slow=3.0,SNR=2.2 | | | | | | |
| ASAR | Alice Springs | 51.57 | 129 | P | P | 10 23 09.7 | +0.9 |
| | 1.0nm,0.8s,baz=310,slow=6.8,SNR=11 | | | | | | |
| ASAR | | | | PcP | PcP | 10 24 24.0 | +1.3 |
| | 0.6nm,0.8s,baz=306,slow=3.6,SNR=4.2 | | | | | | |
| BRTR | Keskin Array B | 60.82 | 311 | P | P | 10 24 14.2 | -0.7 |
| | 0.8nm,0.5s,baz=141,slow=11,SNR=5.6 | | | | | | |
| GERES | GERESS Array B | 76.41 | 318 | P | P | 10 25 51.8 | -0.2 |
| | 0.7nm,0.6s,baz=84,slow=5.5,SNR=6.6 | | | | | | |

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*ISCJB **07** 10:23:27.6±0.4, 81°.86N±0°.06×19°.8W±0°.3, h10km, mb4.0/27, MS3.4/4, Error ellipse: s-maj=8.3km s-min=6.1km az=179.4*
*IDC **07** 10:23:27.3±0.6, 81°.95N×19°.40W, h0km, mb3.9/18, mb1 4.2/19, mb1mx4.0/43, mbtmp4.0/19, ML4.8/1, MS3.2/7, Ms1 3.3/7, ms1mx2.9/39, Error ellipse: s-maj=21.1km s-min=11.6km az=25.0*
*CSEM **07** 10:23:28.6±0.2, 81°.95N×19°.49W, h10km, mb4.4/9, Error ellipse: s-maj=11.8km s-min=7.2km az=20.0*
*NEIC **07** 10:23:28.6±0.4, 81°.92N×18°.83W, h10km, mb4.6/9, Error ellipse: s-maj=12.7km s-min=6.5km az=197.0*
**ISC 07 10:23:28.6**±0.5, **81°.94N**±0°.08×**18°.80W**±0°.05, **h10**km, **n57**, σ1s**60**/60, **mb4.1**/27, **MS3.2**/4, **Near north coast of Kalaallit Nunaat**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KBS | Kingsbay | 5.87 | 105 | ePn | Pn | 10 24 52.5 | -2.9 |
| KBS | | | | eSn | Sn | 10 25 59.5 | -3.0 |
| SPITS | Spitsbergen Ar | 7.02 | 104 | Pn | Pn | 10 25 08.5 | -2.7 |
| | baz=339,slow=11,SNR=38 | | | | | | |
| SPITS | | | | Sn | Sn | 10 26 26.2 | -4.7 |
| | baz=317,slow=14,SNR=1.9 | | | | | | |
| SPITS | | | | LR | LR | 10 27 09.4 | |
| | comp=Z,49nm,18.5s,baz=75,slow=31 | | | | | | |
| SUMG | Summit | 10.25 | 215 | ePn | Pn | 10 25 56.2 | +0.4 |
| SUMG | | | | eSn | Sn | 10 27 50.2 | -0.5 |
| SUMG | Summit | 10.25 | 215 | ePn | Pn | 10 25 56.2 | +0.4 |
| SUMG | | | | eSn | Sn | 10 27 50.2 | -0.5 |
| KULLO | Kullorsuaq | 10.43 | 247 | iP | Pn | 10 25 57.5 | -0.3 |
| KULLO | | | | iS | Sn | 10 27 52.0 | -2.5 |
| RES | Resolute Bay | 15.55 | 286 | Pn | Pn | 10 27 02.3 | -5.1 |
| | 1.0nm,0.3s,baz=26,slow=14,SNR=18 | | | | | | |
| RES | | | | Sn | Sn | 10 29 46.5 | -13 |
| | 0.9nm,0.3s,baz=126,slow=19,SNR=3.7 | | | | | | |
| RES | | | | LR | LR | 10 33 04.5 | |
| | comp=Z,101nm,19.6s,baz=50,slow=37 | | | | | | |
| SFJD | Kangerlussuaq | 16.77 | 226 | Pn | Pn | 10 27 20.5 | -2.6 |
| | 3.5nm,0.3s,baz=5.9,slow=12,SNR=14 | | | | | | |
| SFJD | | | | Sn | Sn | 10 30 16.7 | -12 |
| | 4.9nm,0.3s,baz=276,slow=19,SNR=7.4 | | | | | | |
| SFJD | | | | LR | LR | 10 32 58.5 | |
| | comp=Z,33nm,20.0s,baz=18,slow=34 | | | | | | |
| SFJD | Kangerlussuaq | 16.77 | 226 | iP | Pn | 10 27 20.9 | -2.2 |
| SFJD | | | | iS | Sn | 10 30 18.4 | -11 |
| SFJD | Kangerlussuaq | 16.77 | 226 | ePn | Pn | 10 27 20.1 | -3.0 |
| | 13nm,0.5s | | | | | | |
| SFJD | | | | eSn | Sn | 10 30 18.6 | -10 |
| SFJD | Kangerlussuaq | 16.77 | 226 | ePn | Pn | 10 27 20.1 | -3.0 |
| | 13nm,0.5s | | | | | | |
| NB2 | NORSAR Subarra | 22.43 | 140 | P | P | 10 28 30.6 | +3.5 |
| | comp=Z,1.8nm,0.7s,baz=352,slow=9.3 | | | | | | |
| NB2 | NORSAR Subarra | 22.43 | 140 | P | P | 10 28 30.6 | +3.5 |
| | comp=Z,1.8nm,0.7s,SNR=3.9 | | | | | | |
| NOA | NORSAR Array B | 22.43 | 140 | P | P | 10 28 28.6 | +1.5 |
| | comp=Z,1.0nm,0.6s,baz=346,slow=9.3,SNR=4.2 | | | | | | |
| HFS | Hagfors | 23.56 | 138 | P | P | 10 28 38.5 | -0.1 |
| | comp=Z,3.8nm,0.5s,baz=10,slow=9.0,SNR=13 | | | | | | |
| HFS | | | | LR | LR | 10 36 52.3 | |
| | comp=Z,62nm,21.2s,baz=1.0,slow=34 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **23.61** | **122** | P | **P** | **10 28 39.3** | **+0.1** |
| | comp=Z,3.4nm,0.6s,baz=338,slow=8.0,SNR=14 | | | | | | |
| **INK** | **Inuvik** | **26.22** | **310** | P | **P** | **10 29 01.4** | **-1.5** |
| | comp=Z,2.5nm,0.7s,baz=5.3,slow=6.1,SNR=8.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **29.52** | **290** | P | **P** | **10 29 31.9** | **-0.6** |
| | comp=Z,1.2nm,0.7s,baz=19,slow=8.3,SNR=3.8 | | | | | | |
| **SCHQ** | **Schefferville** | **30.45** | **238** | P | **P** | **10 29 40.0** | **-0.7** |
| | comp=Z,2.5nm,0.5s,baz=90,slow=20,SNR=2.8 | | | | | | |
| **ILAR** | **Eielson Array** | **31.00** | **319** | P | **P** | **10 29 44.8** | **-0.8** |
| | comp=Z,0.5nm,0.9s,baz=3.3,slow=9.3,SNR=7.0 | | | | | | |
| ILAR | | | | PcP | **PcP** | **10 32 39.9** | **-1.1** |
| | comp=Z,0.6nm,0.7s,baz=333,slow=3.9,SNR=6.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **34.51** | **123** | P | **P** | **10 30 16.8** | **+0.5** |
| | comp=Z,1.7nm,0.5s,baz=342,slow=8.9,SNR=4.2 | | | | | | |
| **GERES** | **GERESS Array B** | **34.73** | **141** | P | **P** | **10 30 20.5** | **+2.2** |
| | comp=Z,0.9nm,0.7s,baz=8.9,slow=9.5,SNR=5.6 | | | | | | |
| **EDM** | **Edmonton** | **38.34** | **285** | *e*P | **P** | **10 30 49.5** | **+0.4** |
| **EDM** | **Edmonton** | **38.34** | **285** | *e*P | **P** | **10 30 49.5** | **+0.4** |
| **AKTO** | **Aktyubinsk** | **38.59** | **93** | P | **P** | **10 30 52.5** | **+1.4** |
| | comp=Z,1.6nm,0.6s,baz=350,slow=6.4,SNR=6.3 | | | | | | |
| **ULM** | **Lac du Bonnet** | **38.80** | **267** | P | **P** | **10 30 53.2** | **+0.4** |
| | comp=Z,2.6nm,0.4s,baz=14,slow=17,SNR=4.1 | | | | | | |
| ULM | | | | LR | LR | 10 47 07.2 | |
| | comp=Z,47nm,19.7s,baz=12,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.84** | **66** | LR | LR | 10 48 43.8 | |
| | comp=Z,31nm,19.0s,baz=70,slow=39 | | | | | | |
| **ESDC** | **Sonseca Array** | **42.71** | **163** | P | **P** | **10 31 26.1** | **+0.9** |
| | comp=Z,0.4nm,0.4s,baz=3.3,slow=9.0,SNR=4.0 | | | | | | |
| **KBZ** | **Khabaz** | **43.08** | **111** | P | **P** | **10 31 28.5** | **+0.4** |
| | comp=Z,3.9nm,1.1s,baz=293,slow=12,SNR=2.7 | | | | | | |
| **BSMT** | **Bassoo Peak** | **43.79** | **285** | P | **P** | **10 31 34.9** | **+0.8** |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **BSMT** | **Bassoo Peak** | **43.79** | **285** | P | **P** | **10 31 34.9** | **+0.8** |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **JTMT** | **Jette** | **43.83** | **284** | *e*P | **P** | **10 31 34.4** | **+0.1** |
| **JTMT** | **Jette** | **43.83** | **284** | *e*P | **P** | **10 31 34.4** | **+0.1** |
| **SWMT** | **Swartz Lake** | **44.02** | **284** | *e*P | **P** | **10 31 36.2** | **+0.3** |
| **SWMT** | **Swartz Lake** | **44.02** | **284** | *e*P | **P** | **10 31 36.2** | **+0.3** |
| **SLMT** | **Seeley Lake** | **44.21** | **283** | P | **P** | **10 31 36.4** | **-1.1** |
| **SLMT** | **Seeley Lake** | **44.21** | **283** | P | **P** | **10 31 36.4** | **-1.1** |
| **CHMT** | **Chamberlain Mo** | **44.50** | **283** | *e*P | **P** | **10 31 39.7** | **-0.1** |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **CHMT** | **Chamberlain Mo** | **44.50** | **283** | *e*P | **P** | **10 31 39.7** | **-0.1** |
| | comp=Z,2.8nm,1.0s | | | | | | |
| **HRY** | **Holter Researc** | **44.50** | **281** | *e*P | **P** | **10 31 39.9** | **+0.1** |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **HRY** | **Holter Researc** | **44.50** | **281** | *e*P | **P** | **10 31 39.9** | **+0.1** |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.52** | **71** | P | **P** | **10 31 48.1** | **+0.4** |
| | comp=Z,0.4nm,0.5s,baz=352,slow=8.7,SNR=3.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **45.85** | **122** | P | **P** | **10 31 53.6** | **+3.1** |
| | comp=Z,0.5nm,0.6s,baz=10,slow=5.5,SNR=2.8 | | | | | | |
| **MCMT** | **McKenzie Canyo** | **46.49** | **282** | *e*P | **P** | **10 31 56.4** | **+0.7** |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **46.49** | **282** | *e*P | **P** | **10 31 56.4** | **+0.7** |
| | comp=Z,1.1nm,0.7s | | | | | | |
| **IMW** | **Indian Meadow** | **47.14** | **280** | P | **P** | **10 32 02.2** | **+1.4** |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **IMW** | **Indian Meadow** | **47.14** | **280** | P | **P** | **10 32 02.2** | **+1.4** |
| | comp=Z,2.9nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **47.41** | **48** | P | **P** | **10 32 04.6** | **+1.9** |
| | comp=Z,0.3nm,0.3s,baz=330,slow=5.5,SNR=2.9 | | | | | | |
| **K22A** | **Casper** | **47.74** | **275** | *e*P | **P** | **10 32 05.0** | **-0.4** |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **K22A** | **Casper** | **47.74** | **275** | *e*P | **P** | **10 32 04.9** | **-0.4** |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **HWUT** | **Hardware Ranch** | **49.47** | **280** | *e*P | **P** | **10 32 18.5** | **-0.2** |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **HWUT** | **Hardware Ranch** | **49.47** | **280** | *e*P | **P** | **10 32 18.5** | **-0.2** |
| | comp=Z,2.9nm,0.4s | | | | | | |
| **TMUT** | **Trail Mountain** | **51.69** | **279** | *e*P | **P** | **10 32 36.3** | **+0.7** |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **TMUT** | **Trail Mountain** | **51.69** | **279** | *e*P | **P** | **10 32 36.3** | **+0.7** |
| | comp=Z,6.8nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **53.52** | **286** | P | **P** | **10 32 49.4** | **+0.3** |
| | comp=Z,1.5nm,0.7s,baz=24,slow=4.9,SNR=16 | | | | | | |
| **TXAR** | **Lajitas Array** | **60.43** | **269** | P | **P** | **10 33 38.0** | **+0.1** |
| | comp=Z,1.5nm,0.7s,baz=29,slow=5.2,SNR=18 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.36** | **159** | P | **P** | **10 34 35.9** | **-0.1** |
| | comp=Z,0.8nm,0.6s,baz=9.5,slow=5.4,SNR=6.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.57** | **60** | LR | LR | 11 10 15.4 | |
| | comp=Z,82nm,18.3s,baz=196,slow=37 | | | | | | |

**MEX 07 10:31:30.5**±0.6**, 17.°28N**×**99.°91W, h16**km±999km**, MD3.7, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MEIG** | **Mezcala** | **0.70** | **23** | *i* P | Pg | 10 31 41.6 | -2.7 |
| MEIG | | | | *i* S | Sg | 10 31 50.7 | -3.0 |
| **ARIG** | **Puente Sto Nin** | **1.08** | **337** | *e*P | Pb | 10 31 47.2 | -3.7 |
| ARIG | | | | *e*S | Sb | 10 32 00.3 | -4.5 |
| **PLIG** | **Platanillo** | **1.17** | **19** | *i* P | Pn | 10 31 49.1 | -3.3 |
| PLIG | | | | *i* S | Sb | 10 32 03.0 | -4.5 |
| **TLIG** | **Tlapa** | **1.31** | **77** | *e*P | Pn | 10 31 50.7 | -3.6 |
| TLIG | | | | *e*S | Sn | 10 32 06.4 | -5.2 |

*ISCJB **07** 10:33:40.9±0.5, 4.°31S±0.°05×101.°81E±0.°04, h58km, mb4.2/13, Error ellipse: s-maj=7.8km s-min=4.2km az=33.0*
*IDC **07** 10:33:42.3±1.0, 4.°18S×101.°92E, h49km±6km, mb4.0/11, mb1 4.1/13, mb1mx3.8/33, mbtmp4.2/13, MS3.2/1, Ms1 3.2/1, ms1mx2.6/28, Error ellipse: s-maj=33.9km s-min=12.4km az=58.0*
*AUST **07** 10:33:42.7, 4.°36S×101.°95E, h60km*
*NEIC **07** 10:33:42.8±0.9, 4.°21S×101.°93E, h56km±7km, mb4.5/2, Error ellipse: s-maj=18.4km s-min=5.6km az=46.0*
*NEIC Felt [III] at Bengkulu.*
*DJA **07** 10:33:43.2±0.7, 4°S±4°×10°2E±°, h33km±6km, M4.7/19, mb5.1/5, mB6.2/1, MLv4.6/4, MLv4.5/19, Mw(mB)5.9/1*
**ISC 07 10:33:42.7**±0.6**, 4.°24S**±0.°08×**101.°86E**±0.°06**, h58**km**, n51, σ1.§07**/54**, mb4.4**/13**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSI** | **Kapahiang** | **0.94** | **52** | P | **Pn** | **10 33 59.6** | **-0.3** |
| KSI | | | | S | **Sn** | **10 34 12.7** | **+0.1** |
| **MNAI** | **Manna** | **1.10** | **96** | P | **Pn** | **10 34 01.3** | **-0.7** |
| | baz=1.0,SNR=132 | | | | | | |
| **MNAI** | **Manna** | **1.10** | **96** | P | **Pn** | **10 34 01.7** | **-0.3** |
| **MNAI** | **Manna** | **1.10** | **96** | *e*Pn | **Pn** | **10 34 01.6** | **-0.4** |
| MNAI | | | | *e*Sn | **Sn** | **10 34 13.7** | **-2.7** |
| **MASI** | **Maura Aman, Be** | **1.15** | **19** | P | **Pn** | **10 34 03.8** | **+1.1** |
| **LHSI** | **Lahat** | **1.71** | **76** | P | **Pn** | **10 34 11.2** | **+1.0** |
| LHSI | | | | S | **Sn** | **10 34 32.2** | **+1.2** |
| **LWLI** | **Liwa** | **2.33** | **110** | P | **Pn** | **10 34 19.1** | **+0.4** |
| **MDSI** | **Maura Dua** | **2.33** | **96** | P | **Pn** | **10 34 19.1** | **+0.5** |
| MDSI | | | | S | **Sn** | **10 34 46.4** | **+0.4** |
| **KASI** | **Kota Agung** | **2.92** | **116** | P | **Pn** | **10 34 26.7** | **0.0** |
| **KLI** | **Kotabumi** | **3.05** | **102** | P | **Pn** | **10 34 29.2** | **+0.7** |
| **SDSI** | **Sungai Dareh** | **3.31** | **353** | P | **Pn** | **10 34 32.8** | **+0.7** |
| **PDSI** | **Padang** | **3.59** | **337** | P | **Pn** | **10 34 37.3** | **+1.4** |
| **SISI** | **Saibi** | **4.00** | **316** | P | **Pn** | **10 34 43.0** | **+1.5** |
| **PPI** | **Padang Panjang** | **4.03** | **339** | P | **Pn** | **10 34 43.8** | **+1.8** |
| | baz=4.2,SNR=9.7 | | | | | | |
| **PPI** | **Padang Panjang** | **4.03** | **339** | P | **Pn** | **10 34 43.6** | **+1.7** |
| **DSRI** | **Dabo** | **4.62** | **36** | P | **Pn** | **10 34 50.9** | **+0.9** |
| **MNSI** | **Mandailing Nat** | **5.49** | **335** | P | **Pn** | **10 35 02.9** | **+0.9** |
| | 89nm,0.5s,24µm0.9nm | | | | | | |
| **LEM** | **Lembang** | **6.28** | **114** | P | **Pn** | **10 35 12.2** | **-0.7** |
| | 5.4nm,0.3s,baz=285,slow=20,SNR=1.8 | | | | | | |
| LEM | | | | LR | LR | 10 38 00.7 | |
| | comp=Z,233nm,21.2s,baz=232,slow=41 | | | | | | |
| **GSI** | **Gunungsitoli** | **6.97** | **322** | P | **Pn** | **10 35 23.0** | **+0.7** |
| | 70nm,0.6s,0.3nm | | | | | | |
| **GSI** | **Gunungsitoli** | **6.97** | **322** | *e*Pn | **Pn** | **10 35 22.5** | **+0.2** |
| | 48nm,0.5s | | | | | | |
| GSI | | | | *e*Sn | **Sn** | **10 36 37.5** | **-2.7** |
| **XMIS** | **Christmas Isla** | **7.25** | **149** | P | Pn | 10 35 20.0 | -6.1 |
| | baz=7.1,SNR=6.0 | | | | | | |
| **PSI** | **Prapat** | **7.58** | **337** | P | **Pn** | **10 35 29.4** | **-1.3** |
| | 1.1nm,0.3s,baz=173,slow=10.0,SNR=6.2 | | | | | | |
| **UGM** | **Wanagama** | **9.36** | **113** | P | **Pn** | **10 35 55.0** | **+0.1** |
| | baz=9.2,SNR=5.9 | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **10.05** | **327** | P | **Pn** | **10 36 04.6** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **12.92** | **110** | P | **Pn** | **10 36 42.5** | **-1.2** |
| | baz=13,SNR=3.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.73** | **353** | P | **P** | **10 38 40.5** | **+0.4** |
| | 1.1nm,0.5s,baz=185,slow=9.1,SNR=7.4 | | | | | | |
| **KNRA** | **Kununurra** | **28.79** | **115** | P | **P** | **10 39 34.1** | **-1.3** |
| | baz=29,SNR=5.0 | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.40** | **262** | T | T | 11 09 57.4 | |
| | baz=85,slow=75,SNR=29 | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.41** | **262** | T | T | 11 09 56.2 | |
| | baz=85,slow=75,SNR=28 | | | | | | |
| **H08S1** | **Diego Carcia H** | **29.42** | **262** | T | T | 11 09 55.5 | |
| | baz=85,slow=75,SNR=26 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **32.55** | **161** | T | T | 11 14 06.6 | |
| | baz=338,slow=76,SNR=14 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **32.56** | **161** | T | T | 11 14 06.1 | |
| | baz=338,slow=76,SNR=13 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **32.56** | **161** | T | T | 11 14 06.1 | |
| | baz=338,slow=76,SNR=15 | | | | | | |
| **WRKA** | **Warakurna** | **32.76** | **132** | P | P | 10 40 18.6 | +8.2 |
| | baz=33,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.28** | **119** | P | **P** | **10 40 31.7** | **-0.6** |
| | 2.5nm,0.6s,baz=298,slow=9.2,SNR=16 | | | | | | |
| WRA | | | | pP | **pP** | **10 40 44.7** | **-2.2** |
| | 2.5nm,0.8s,baz=292,slow=10,SNR=6.7 | | | | | | |
| WRA | | | | PcP | **PcP** | **10 43 02.1** | **+0.1** |
| | 0.3nm,0.4s,baz=295,slow=3.2,SNR=3.5 | | | | | | |
| **WRAB** | **Tennant Creek** | **35.28** | **119** | *e*P | **P** | **10 40 31.8** | **-0.6** |
| | 4.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **36.45** | **125** | P | **P** | **10 40 42.4** | **0.0** |
| | 2.0nm,0.7s,baz=296,slow=7.4,SNR=23 | | | | | | |
| ASAR | | | | pP | **pP** | **10 40 56.3** | **-0.7** |
| | 2.5nm,0.7s,baz=302,slow=8.1,SNR=7.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 43 06.1** | **+0.6** |
| | 0.4nm,0.4s,baz=302,slow=2.4,SNR=3.8 | | | | | | |
| **QIS** | **Mount Isa** | **40.13** | **117** | P | **P** | **10 41 13.0** | **-0.2** |
| | baz=40,SNR=4.5 | | | | | | |
| **QLP** | **Quilpie** | **46.18** | **123** | P | **P** | **10 42 03.1** | **+1.1** |
| | baz=46,SNR=4.5 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.02** | **28** | P | **P** | **10 42 16.1** | **-0.1** |
| **KSRS** | **Korea Array** | **48.05** | **28** | P | **P** | **10 42 16.1** | **-0.3** |
| | 1.0nm,0.6s,baz=229,slow=8.1,SNR=6.4 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **49.27** | **129** | P | **P** | **10 42 27.3** | **+1.4** |
| | baz=49,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **52.01** | **4** | P | **P** | **10 42 47.0** | **+0.7** |
| | 2.9nm,0.6s,baz=186,slow=9.8,SNR=14 | | | | | | |
| SONM | | | | PcP | **PcP** | **10 43 57.9** | **-0.1** |
| | 0.6nm,0.4s,baz=180,slow=4.6,SNR=3.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.68** | **343** | P | **P** | **10 42 58.5** | **-0.1** |
| | 3.7nm,0.5s,baz=154,slow=9.4,SNR=26 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.29** | **26** | P | **P** | **10 43 09.7** | **-0.5** |
| | 3.4nm,0.6s,baz=221,slow=6.7,SNR=8.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.71** | **348** | P | **P** | **10 43 40.6** | **-0.5** |
| | 5.4nm,0.4s,baz=169,slow=4.7,SNR=17 | | | | | | |
| ZALV | | | | pP | **pP** | **10 43 54.1** | **-2.6** |
| | 0.7nm,0.3s,baz=79,slow=32,SNR=2.2 | | | | | | |
| **ABKAR** | **Akbulak array** | **64.48** | **331** | *e*P | **P** | **10 44 13.4** | **+0.2** |
| | 3.5nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **76.19** | **312** | P | **P** | **10 45 25.7** | **+0.5** |
| | 0.4nm,0.6s,baz=126,slow=6.4,SNR=3.8 | | | | | | |
| **VNDA** | **Vanda** | **79.62** | **169** | P | **P** | **10 45 44.6** | **+1.3** |
| | 0.8nm,0.9s,baz=293,slow=6.5,SNR=4.0 | | | | | | |
| **FINES** | **FINESS Array B** | **86.94** | **332** | P | **P** | **10 46 21.7** | **+0.5** |
| | 4.4nm,1.0s,baz=146,slow=8.5,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.25** | **41** | PKPbc | **PKPdf** | **10 53 15.3** | **+0.6** |
| | 6.7nm,0.5s,baz=282,slow=0.7,SNR=209 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 10 53 28.9 | -2.7 |
| | 1.0nm,0.5s,baz=287,slow=0.4,SNR=4.6 | | | | | | |

**IDC 07 10:57:00.8**±549.0**, 48.°24N**×**44.°53E, h0**km**, Error ellipse: s-maj=198.2km s-min=161.5km az=31.0, Ukraine - Moldova - Southwestern Russia region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **9.09** | **71** | *i* | | 11 48 30.0 | |
| | baz=264,slow=317,SNR=7.7 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **9.59** | **335** | *i* | | 11 58 30.0 | |
| | baz=150,slow=321,SNR=0.7 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **25.68** | **62** | *i* | | 13 36 00.0 | |
| | baz=270,slow=323,SNR=1.6 | | | | | | |

*NIED **07** 11:23:00, 24.°30N×125.°30E, h35km, Mw4.0 Best double couple: Mo1.00000×10^15 NP1:φs11.00000°, δ80.00000°, λ-176.00000°. NP2:φs280.00000°, δ86.00000°, λ-10.00000°.*
*IDC **07** 11:23:08.4±1.0, 24.°25N×125.°19E, h0km, mb3.7/7, mb1 3.8/11, mb1mx3.6/54, mbtmp3.7/11, ML3.3/4, MS3.1/2, Ms1 3.1/2, ms1mx2.6/48, Error ellipse: s-maj=29.4km s-min=19.0km az=77.0*
*JMA **07** 11:23:13.3±0.1, 24.°26N×125.°32E, h53km±4km, M4.0*
**ISC 07 11:23:10.1**±1.7**, 24.°17N**±0.°06×**125.°40E**±0.°05**, h17**km±11km**, n48, σ0.§93**/53**, mb3.8**/7**, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOGS** | **Gusukube** | **0.59** | **1** | P | **Pn** | **11 23 24.8** | **+1.1** |
| JOGS | | | | S | **Sn** | **11 23 33.5** | **+0.5** |
| **JMJ** | **Miyako jima 2** | **0.65** | **352** | P | **Pn** | **11 23 25.3** | **+0.7** |
| JMJ | | | | S | **Sn** | **11 23 34.2** | **-0.3** |
| **JIRB** | **Irabujima** | **0.69** | **343** | P | **Pn** | **11 23 25.6** | **+0.5** |
| JIRB | | | | S | **Sb** | **11 23 34.4** | **+1.5** |
| **JIKM** | **Ikemajima** | **0.76** | **350** | P | **Pn** | **11 23 26.8** | **+0.7** |
| JIKM | | | | S | **Sn** | **11 23 37.1** | **-0.2** |
| **JTJ** | **Tarama** | **0.79** | **307** | P | **Pn** | **11 23 26.8** | **+0.3** |
| JTJ | | | | S | **Sb** | **11 23 36.8** | **+1.0** |
| **JISG** | **Ishigakijimahi** | **1.07** | **293** | P | **Pn** | **11 23 31.0** | **+0.6** |
| JISG | | | | S | **Sb** | **11 23 43.9** | **-0.1** |
| **JIJ** | **Ishigaki jima** | **1.16** | **280** | P | **Pg** | **11 23 32.6** | **+0.1** |
| JIJ | | | | S | **Sb** | **11 23 46.2** | **-0.3** |
| **JKRS** | **Kuro-shima** | **1.27** | **273** | P | **Pg** | **11 23 34.6** | **0.0** |
| JKRS | | | | S | **Sb** | **11 23 49.7** | **+0.1** |
| **HATJ** | **Hateruma jima** | **1.46** | **266** | P | **Pb** | **11 23 36.8** | **0.0** |
| HATJ | | | | S | **Sn** | **11 23 53.9** | **-0.5** |
| **IRIF** | **Iriomote-Funau** | **1.53** | **277** | P | **Pb** | **11 23 37.9** | **-0.1** |
| **YOJ** | **Yonaguni jima** | **2.19** | **278** | P | **Pn** | **11 23 47.0** | **+1.2** |
| YOJ | | | | S | **Sn** | **11 24 11.0** | **-1.6** |
| **JYNG** | **Yonagunijimaku** | **2.25** | **278** | P | **Pn** | **11 23 47.5** | **+0.9** |
| JYNG | | | | S | **Sn** | **11 24 12.5** | **-1.5** |
| **JKE** | **Kume jima 2** | **2.49** | **30** | P | **Pn** | **11 23 50.2** | **+0.3** |
| **JJT2** | **Tamagusuku 2** | **2.90** | **47** | P | **Pn** | **11 23 57.1** | **+1.6** |
| **JAGN** | **Aguni-jima** | **2.93** | **34** | P | **Pn** | **11 23 56.9** | **+0.9** |
| **JNTH** | **Nagotoyohara** | **3.34** | **45** | P | **Pn** | **11 24 02.5** | **+1.0** |
| **JIH** | **Iheya** | **3.68** | **39** | P | **Pn** | **11 24 07.9** | **+1.7** |
| **JOW** | **Kunigami** | **3.72** | **44** | P | **Pn** | **11 24 07.7** | **+0.9** |
| **JOW** | **Kunigami** | **3.72** | **44** | Pn | **Pn** | **11 24 07.7** | **+0.9** |
| | 0.6nm,0.3s,baz=300,slow=29,SNR=54 | | | | | | |
| **JOKE** | **Okinoerabujima** | **4.28** | **41** | P | **Pn** | **11 24 14.9** | **+0.4** |
| **JTK** | **Tokunoshima** | **4.82** | **41** | P | **Pn** | **11 24 21.7** | **-0.2** |
| **JAMN** | **Amaminishikomi** | **5.29** | **39** | P | **Pn** | **11 24 27.5** | **-0.9** |
| **JMZ** | **Minamidaito 2** | **5.54** | **72** | P | **Pn** | **11 24 30.4** | **-1.4** |
| **JAM** | **Amami Oshima** | **5.67** | **41** | P | **Pn** | **11 24 33.1** | **-0.5** |
| **JAM** | **Amami Oshima** | **5.67** | **41** | P | **Pn** | **11 24 33.1** | **-0.5** |
| JAM | | | | *e*S | Pb | 11 24 44.4 | -4.2 |
| **JZK** | **Kikaishima** | **5.83** | **44** | P | **Pn** | **11 24 35.7** | **0.0** |
| **JTAJ** | **Takarajima** | **6.02** | **34** | P | **Pn** | **11 24 38.3** | **-0.1** |
| JTAJ | | | | *e*S | **Pb** | **11 24 53.3** | **-1.3** |
| **JNN** | **Nakanoshima** | **6.92** | **34** | P | **Pn** | **11 24 50.4** | **-0.4** |
| **JYAK** | **Yakushimahirau** | **7.57** | **36** | P | **Pn** | **11 24 57.8** | **-1.9** |
| **JNAR** | **Kushima--Naru** | **8.99** | **34** | P | **Pn** | **11 25 18.0** | **-1.1** |
| **JTZ** | **Takazaki** | **9.20** | **32** | P | **Pn** | **11 25 21.1** | **-0.9** |
| **JNU** | **Nakatsue** | **10.13** | **27** | Pn | **Pn** | **11 25 34.8** | **-0.2** |
| | 0.7nm,0.3s,baz=314,slow=3.6,SNR=6.3 | | | | | | |
| **KSRS** | **Korea Array** | **13.42** | **9** | Pn | **Pn** | **11 26 19.8** | **+0.1** |
| | 0.1nm,0.3s,baz=186,slow=13,SNR=3.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **16.54** | **39** | Pn | **P** | **11 27 04.3** | **+0.4** |
| | 0.5nm,0.3s,baz=223,slow=11,SNR=14 | | | | | | |
| MJAR | | | | LR | LR | 11 32 34.0 | |
| | comp=Z,27nm,19.9s,baz=255,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **28.03** | **332** | P | **P** | **11 28 59.8** | **-0.7** |
| | 0.4nm,0.4s,baz=153,slow=9.7,SNR=2.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **38.65** | **88** | T | T | 12 11 53.4 | |
| | baz=290 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **38.65** | **88** | T | T | 12 11 54.3 | |
| | baz=290 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **38.66** | **88** | T | T | 12 11 55.6 | |
| | baz=290 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.77** | **90** | T | T | 12 12 01.8 | |
| | baz=286 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.78** | **90** | T | T | 12 12 04.6 | |
| | baz=286 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.79** | **90** | T | T | 12 12 04.3 | |
| | baz=286 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.06** | **314** | P | **P** | **11 30 52.6** | **-0.2** |
| | 0.9nm,0.4s,baz=98,slow=9.8,SNR=7.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.63** | **319** | P | **P** | **11 31 20.1** | **-1.5** |
| | 0.9nm,0.7s,baz=110,slow=8.4,SNR=7.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.70** | **168** | P | **P** | **11 31 23.9** | **+1.4** |
| | 0.4nm,0.5s,baz=350,slow=9.9,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **48.26** | **170** | P | **P** | **11 31 52.3** | **+1.9** |
| | 0.2nm,0.4s,baz=356,slow=6.9,SNR=8.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **50.14** | **320** | P | **P** | **11 32 04.1** | **-0.4** |
| | 0.7nm,0.5s,baz=82,slow=11,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **73.38** | **330** | P | **P** | **11 34 41.3** | **+0.4** |
| | 1.1nm,0.7s,baz=104,slow=5.9,SNR=2.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **80.00** | **333** | LR | LR | 12 15 48.6 | |
| | comp=Z,20nm,18.6s,baz=290,slow=40 | | | | | | |

*ISK **07** 12:08:24.7, 38.°51N×37.°34E, h5km, MD2.4*
*CSEM **07** 12:08:26.5±0.8, 38.°68N×37.°48E, h2km, MD2.4, Error ellipse: s-maj=17.0km s-min=11.1km az=89.0*
*DDA **07** 12:08:27.0, 38.°69N×37.°41E, h18km, Md2.7*
**ISC 07 12:08:26.5**±1.0**, 38.°65N**±0.°03×**37.°47E**±0.°04**, h6**km±8km**, n14, σ1.§39**/25**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DARE** | **Darende-Malaty** | **0.07** | **172** | *e*PG | **Pg** | **12 08 28.0** | **-0.4** |
| DARE | | | | *e*SG | **Sg** | **12 08 30.2** | **+0.6** |
| **DARE** | **Darende-Malaty** | **0.07** | **172** | *e*Pg | **Pg** | **12 08 28.0** | **-0.4** |
| DARE | | | | *e*Sg | **Sg** | **12 08 30.2** | **+0.6** |
| **AKCD** | **Akcadag** | **0.50** | **134** | *i* P | **Pb** | **12 08 36.6** | **-1.2** |
| AKCD | | | | *i* S | **Sb** | **12 08 45.7** | **+0.3** |
| **AKCD** | **Akcadag** | **0.50** | **134** | P | **Pb** | **12 08 36.6** | **-1.2** |
| AKCD | | | | S | **Sb** | **12 08 45.7** | **+0.3** |
| **CUKAN** | **kangal_SIVAS** | **0.67** | **360** | P | **Pb** | **12 08 40.3** | **-0.4** |
| CUKAN | | | | S | **Sg** | **12 08 47.7** | **-0.5** |
| **MALT** | **Malatya** | **0.82** | **114** | *e*PG | **Pg** | **12 08 42.1** | **-0.2** |
| MALT | | | | *e*SG | **Sb** | **12 08 56.0** | **+1.3** |
| **MALT** | **Malatya** | **0.82** | **114** | *e*Pg | **Pg** | **12 08 42.1** | **-0.2** |
| MALT | | | | *e*Sg | **Sb** | **12 08 56.0** | **+1.3** |
| **KEMA** | **Kemaliye** | **1.01** | **52** | *i* P | **Pg** | **12 08 43.4** | **-2.6** |
| KEMA | | | | *i* S | **Sg** | **12 08 59.4** | **+0.3** |
| **KEMA** | **Kemaliye** | **1.01** | **52** | P | **Pg** | **12 08 43.4** | **-2.6** |
| KEMA | | | | S | **Sg** | **12 08 59.4** | **+0.3** |
| **SVSK** | **Karacayir** | **1.32** | **344** | *e*PN | **Pg** | **12 08 52.8** | **+0.9** |
| **SVSK** | **Karacayir** | **1.32** | **344** | *e*Pn | **Pg** | **12 08 52.8** | **+0.9** |
| **AYKD** | **Aykdinkavak** | **1.34** | **203** | P | Pn | 12 08 46.8 | -5.0 |
| AYKD | | | | S | **Sn** | **12 09 09.1** | **-0.8** |
| **PTK** | **Pertek** | **1.52** | **80** | *e*PN | **Pg** | **12 08 55.9** | **+0.2** |
| PTK | | | | *e*SN | **Sg** | **12 09 18.4** | **+2.9** |
| **PTK** | **Pertek** | **1.52** | **80** | *e*Pn | **Pg** | **12 08 55.9** | **+0.2** |
| PTK | | | | *e*Sn | **Sg** | **12 09 18.4** | **+2.9** |

**IDC 07 12:21:38.0**±3.7**, 6.°20S**×**149.°68E, h0**km**, mb2.9**/2**, mb1 3.3**/2**, mb1mx3.2**/23**, mbtmp3.1**/2**, Error ellipse: s-maj=135.4km s-min=48.2km az=115.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.22** | **226** | P | P | 12 26 15.4 | +0.5 |
| | 0.6nm,0.5s,baz=52,slow=11,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **23.07** | **220** | P | P | 12 26 45.0 | -0.5 |
| | 0.3nm,0.8s,baz=51,slow=9.4,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.72** | **285** | PKPbc | PKPbc | 12 41 25.1 | -0.8 |
| | 0.2nm,0.5s,baz=64,slow=2.2,SNR=2.6 | | | | | | |

*IDC **07** 12:43:02.1±2.4, 12.°60N×125.°38E, h0km, mb3.7/4, mb1 3.9/4, mb1mx3.5/35, mbtmp3.7/4, Error ellipse: s-maj=229.2km s-min=21.1km az=67.0*
*ISCJB **07** 12:43:05.5±1.1, 12.°80N±0.°05×125.°5E±0.°1, h33km, mb3.8/4, Error ellipse: s-maj=18.0km s-min=7.7km az=174.9*
*MAN **07** 12:43:06, 12.°78N×125.°34E, h38km, mb4.6, ML3.5, MS3.4*
**ISC 07 12:43:05.3**±1.3**, 12.°64N**±0.°07×**125.°6E**±0.°1**, h33**km**, n18, σ2.§03**/13**, mb3.8**/4**, 2C-1D, Samar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLP** | **Palo** | **1.57** | **202**⇓ | *e*P | **Pb** | **12 43 33.8** | **-0.1** |
| PLP | | | | *e*S | **Sb** | **12 43 53.8** | **+0.3** |
| **PVCP** | **Virac** | **1.68** | **305**⇑ | *i*P | **Pn** | **12 43 29.7** | **-2.7** |
| **OCLP** | **Ormoc** | **1.84** | **211** | *e*P | **Pb** | **12 43 38.0** | **-0.4** |
| **MSLP** | **Maasin** | **2.58** | **196** | *e*P | **Pb** | **12 43 48.8** | **-2.2** |
| MSLP | | | | *e*S | **Sb** | **12 44 18.5** | **-3.9** |
| **SCPH** | **Surigao** | **2.84** | **182** | *e*P | **Pb** | **12 43 53.6** | **-1.7** |
| **RCP** | **Roxas** | **2.97** | **249**⇑ | *e*P | **Pn** | **12 43 51.4** | **+1.3** |
| **GUIM** | **Jordan** | **3.54** | **236** | *e*P | **Pn** | **12 43 58.9** | **+0.9** |
| **PAGZ** | **Pagadian** | **5.23** | **205** | *e*P | Pn | 12 44 25.0 | +3.8 |
| **WRA** | **Warramunga Arr** | **33.51** | **165** | P | **P** | **12 49 42.7** | **+0.7** |
| | 0.5nm,0.4s,baz=344,slow=9.2,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **36.99** | **167** | P | **P** | **12 50 14.2** | **+2.3** |
| | 0.7nm,0.3s,baz=349,slow=7.6,SNR=32 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.97** | **76** | T | T | 13 33 42.4 | |
| | baz=268,slow=75,SNR=9.8 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.98** | **76** | T | T | 13 33 41.9 | |
| | baz=268,slow=75,SNR=17 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.98** | **76** | T | T | 13 33 41.8 | |
| | baz=268,slow=75,SNR=20 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.22** | **74** | T | T | 13 34 00.3 | |
| | baz=268,slow=74,SNR=54 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.23** | **74** | T | T | 13 34 01.1 | |
| | baz=268,slow=74,SNR=47 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.24** | **74** | T | T | 13 34 02.6 | |
| | baz=268 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.75** | **322** | P | **P** | **12 51 55.7** | **+1.1** |
| | 0.4nm,0.7s,baz=117,slow=7.7,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.23** | **331** | P | **P** | **12 52 14.3** | **+1.2** |
| | 0.5nm,0.4s,baz=121,slow=5.8,SNR=2.8 | | | | | | |

*CSEM **07** 12:43:23.7±0.4, 39.°02N×40.°79E, h2km, MD2.9, Error ellipse: s-maj=11.5km s-min=7.5km az=160.0*
*ISCJB **07** 12:43:24.7±0.7, 38.°92N±0.°03×40.°86E±0.°03, h1km±7km, Error ellipse: s-maj=5.8km s-min=4.4km az=169.5*
*DDA **07** 12:43:25.7, 38.°81N×41.°06E, h7km, Md3.1*
*ISK **07** 12:43:25.4, 38.°91N×40.°86E, h8km, MD2.9*
**ISC 07 12:43:24.8**±1.1**, 38.°91N**±0.°03×**40.°87E**±0.°03**, h3**km±13km**, n23, σ1.§06**/31**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNGB** | **Bingˆ¶l** | **0.17** | **298** | *e*PG | **Pg** | **12 43 28.7** | **+0.4** |
| BNGB | | | | *e*SG | **Sg** | **12 43 32.4** | **+1.9** |
| **BNGL** | **BINGOL** | **0.22** | **79** | P | **Pg** | **12 43 28.6** | **-0.5** |
| BNGL | | | | S | **Sg** | **12 43 32.5** | **+0.5** |
| **BINT** | **Bingol** | **0.30** | **264** | *e*Pg | **Pg** | **12 43 28.7** | **-2.0** |
| BINT | | | | *e*Sg | **Sg** | **12 43 32.4** | **-2.3** |
| **SVAN** | **Silvan-Diyarba** | **0.80** | **161** | *e*PG | **Pb** | **12 43 41.2** | **-0.2** |
| SVAN | | | | *e*SG | **Sb** | **12 43 52.8** | **+0.2** |
| **SVAN** | **Silvan-Diyarba** | **0.80** | **161** | *e*Pg | **Pb** | **12 43 41.2** | **-0.2** |
| SVAN | | | | *e*Sg | **Sb** | **12 43 52.8** | **+0.2** |
| **EKAR** | **Karacoban** | **0.99** | **69** | *i* P | **Pg** | **12 43 43.2** | **-0.6** |
| **EKAR** | **Karacoban** | **0.99** | **69** | P | **Pg** | **12 43 43.2** | **-0.6** |
| **DYBB** | **Diyarbakir** | **1.12** | **211** | *e*PN | **Pb** | **12 43 47.0** | **+0.2** |
| **ERZN** | **Erzincan** | **1.12** | **307** | *e*PN | **Pn** | **12 43 47.4** | **-0.1** |
| **DIY** | **Diyarbakir** | **1.13** | **207** | *e*Pn | **Pg** | **12 43 47.0** | **+0.4** |
| **PTK** | **Pertek** | **1.16** | **270** | *e*PN | **Pn** | **12 43 47.7** | **-0.4** |
| **PTK** | **Pertek** | **1.16** | **270** | *e*Pn | **Pn** | **12 43 47.7** | **-0.4** |
| **SVRC** | **Sivrice-ELAZID** | **1.34** | **247** | *e*PN | **Pg** | **12 43 51.1** | **+0.6** |
| **SVRC** | **Sivrice-ELAZID** | **1.34** | **247** | *e*Pn | **Pg** | **12 43 51.1** | **+0.6** |
| **HOMI** | **Horasan** | **1.39** | **35** | P | **Pg** | **12 43 51.8** | **+0.4** |
| HOMI | | | | S | **Sg** | **12 44 12.8** | **+3.4** |
| **EZC** | **Erzincan** | **1.45** | **306** | *e*Pn | Pn | 12 43 47.4 | -4.6 |
| **MAZI** | **Mazidag** | **1.49** | **193** | *e*PN | **Pn** | **12 43 52.7** | **+0.2** |
| **MAZI** | **Mazidag** | **1.49** | **193** | *e*Pn | **Pn** | **12 43 52.7** | **+0.2** |
| **TUTA** | **Tutak** | **1.59** | **71** | *i* P | **Pn** | **12 43 53.6** | **-0.4** |
| TUTA | | | | *i* S | **Sb** | **12 44 14.8** | **-0.6** |
| **TUTA** | **Tutak** | **1.59** | **71** | P | **Pn** | **12 43 53.6** | **-0.4** |
| TUTA | | | | S | **Sb** | **12 44 14.8** | **-0.6** |
| **MARD** | **Mardin** | **1.60** | **183** | P | **Pn** | **12 43 54.4** | **+0.4** |
| MARD | | | | S | **Sg** | **12 44 16.6** | **+0.5** |
| **AGRB** | **Hanur-Agry** | **1.77** | **67** | *e*PN | **Pb** | **12 43 57.3** | **-0.8** |
| **AGRB** | **Hanur-Agry** | **1.77** | **67** | *e*Pn | **Pb** | **12 43 57.3** | **-0.8** |

*ISCJB **07** 12:54:48.9±0.6, 6.°36S±0.°05×128.°78E±0.°07, h250km, mb3.1/1, Error ellipse: s-maj=9.3km s-min=6.5km az=13.6*
*IDC **07** 12:54:49.8±1.8, 6.°32S×128.°80E, h242km±23km, mb2.9/1, mb1 3.5/5, mb1mx3.1/32, mbtmp4.1/5, Error ellipse: s-maj=33.2km s-min=18.7km az=88.0*
*AUST **07** 12:54:50.2, 6.°48S×129.°03E, h200km*
**ISC 07 12:54:49.6**±0.9**, 6.°47S**±0.°07×**128.°78E**±0.°08**, h250**km**, n14, σ1.§51**/17**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **4.93** | **45** | P | **Pn** | **12 56 04.2** | **-0.4** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=4.8,SNR=26 | | | | | | |
| SOEI | Soe | 5.54 | 234 | P | Pn | 12 56 14.1 | +2.0 |
| | baz=5.7,SNR=7.2 | | | | | | |
| SIJI | Sorong | 6.09 | 24 | P | Pn | 12 56 17.3 | -1.6 |
| | 4.9nm,0.3s,baz=212,slow=19,SNR=29 | | | | | | |
| SIJI | | | | S | S | 12 57 23.4 | -7.0 |
| | 1.3nm,0.3s,baz=180,slow=23,SNR=5.6 | | | | | | |
| SWI | Sorong | 6.09 | 24 | P | Pn | 12 56 17.7 | -1.2 |
| | baz=6.0,SNR=8.6 | | | | | | |
| BATI | Baumata | 6.28 | 233 | P | Pn | 12 56 22.7 | +1.4 |
| | 8.6nm,0.3s,baz=29,slow=1.9,SNR=4.6 | | | | | | |
| BATI | | | | S | S | 12 57 33.1 | -1.7 |
| | 0.9nm,0.3s,baz=38,slow=17,SNR=2.3 | | | | | | |
| MTN | Manton Dam | 6.75 | 160 | P | Pn | 12 56 28.7 | +1.6 |
| | baz=6.7,SNR=36 | | | | | | |
| KDU | Kakadu | 7.17 | 150 | P | Pn | 12 56 34.2 | +1.7 |
| | baz=7.1,SNR=13 | | | | | | |
| KNRA | Kununurra | 9.15 | 180 | P | Pn | 12 56 58.7 | +1.2 |
| | baz=9.2,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 14.44 | 159 | P | P | 12 58 03.9 | +0.6 |
| | 0.5nm,0.3s,baz=342,slow=12,SNR=16 | | | | | | |
| WRA | | | | S | S | 13 00 39.8 | -3.3 |
| | 0.2nm,0.3s,baz=334,slow=21,SNR=8.2 | | | | | | |
| COEN | Coen | 15.99 | 119 | P | Pn | 12 58 22.8 | +1.1 |
| | baz=16,SNR=8.1 | | | | | | |
| QIS | Mount Isa | 17.50 | 144 | P | Pn | 12 58 39.6 | +0.2 |
| | baz=17,SNR=6.7 | | | | | | |
| ASAR | Alice Springs | 17.80 | 164 | P | Pn | 12 58 42.9 | -0.1 |
| | 0.8nm,0.3s,baz=343,slow=11,SNR=118 | | | | | | |
| ASAR | | | | S | S | 13 01 51.0 | -0.7 |
| | 0.1nm,0.3s,baz=348,slow=21,SNR=9.3 | | | | | | |
| WRKA | Warakurna | 18.47 | 181 | P | Pn | 12 58 50.5 | -0.3 |
| | baz=19,SNR=6.5 | | | | | | |
| MKAR | Makanchi Array | 67.12 | 327 | P | P | 13 05 16.8 | +0.3 |
| | 0.5nm,0.9s,baz=123,slow=7.9,SNR=3.2 | | | | | | |

**IDC 07 12:55:51.9±1.1, 10°88N×42°96W, h0km, mb3.8/6, mb1 4.0/6, mb1mx3.7/45, mbtmp3.8/6, MS3.2/4, Ms1 3.1/4, ms1mx2.8/30, Error ellipse: s-maj=40.0km s-min=22.8km az=163.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H05S1 | Guadeloupe/Mar | 17.80 | 283 | T | T | 13 18 12.5 | |
| | SNR=8.2 | | | | | | |
| RCBR | Riachuelo | 18.02 | 157 | LR | LR | 13 05 01.4 | |
| | comp=Z,36nm,18.3s,baz=156,slow=30 | | | | | | |
| PTGA | Pitinga | 20.47 | 237 | P | P | 13 00 31.4 | -0.1 |
| | 10.0nm,0.4s,baz=52,slow=13,SNR=11 | | | | | | |
| PTGA | | | | LR | LR | 13 07 23.8 | |
| | comp=Z,75nm,19.1s,baz=122,slow=34 | | | | | | |
| BDFB | Brasilia | 26.82 | 191 | LR | LR | 13 11 24.1 | |
| | comp=Z,48nm,19.3s,baz=40,slow=35 | | | | | | |
| H10N3 | ASCENSION HYDR | 33.88 | 122 | T | T | 13 38 21.4 | |
| | baz=303,slow=75,SNR=20 | | | | | | |
| H10N2 | ASCENSION HYDR | 33.88 | 122 | T | T | 13 38 21.7 | |
| | baz=303,slow=75,SNR=21 | | | | | | |
| H10N1 | ASCENSION HYDR | 33.90 | 122 | T | T | 13 38 22.9 | |
| | baz=303,slow=75,SNR=19 | | | | | | |
| H10S3 | ASCENSION HYDR | 34.36 | 124 | T | T | 13 38 54.1 | |
| | baz=304,slow=75,SNR=26 | | | | | | |
| H10S1 | ASCENSION HYDR | 34.37 | 124 | T | T | 13 38 53.3 | |
| | baz=304,slow=75,SNR=22 | | | | | | |
| H10S2 | ASCENSION HYDR | 34.38 | 124 | T | T | 13 38 55.5 | |
| | baz=304,slow=75,SNR=22 | | | | | | |
| LPAZ | La Paz | 36.73 | 223 | P | P | 13 03 01.9 | -0.1 |
| | 1.1nm,1.0s,baz=41,slow=9.4,SNR=3.3 | | | | | | |
| DBIC | Dimbokro | 37.87 | 93 | P | P | 13 03 10.8 | -0.2 |
| | 4.0nm,0.9s,baz=276,slow=9.5,SNR=3.1 | | | | | | |
| TORD | Torodi Ar. Bea | 43.69 | 82 | P | P | 13 03 59.0 | -0.1 |
| | 0.6nm,0.7s,baz=275,slow=8.2,SNR=4.0 | | | | | | |
| ULM | Lac du Bonnet | 58.40 | 323 | LR | LR | 13 29 57.5 | |
| | comp=Z,29nm,18.3s,baz=82,slow=35 | | | | | | |
| TXAR | Lajitas Array | 59.27 | 298 | P | P | 13 05 55.7 | -0.1 |
| | 0.1nm,0.3s,baz=116,slow=6.1,SNR=2.7 | | | | | | |
| JMIC | Jan Mayen | 63.73 | 12 | LR | LR | 13 27 04.8 | |
| | comp=Z,398nm,21.4s,baz=248,slow=29 | | | | | | |
| ILAR | Eielson Array | 86.10 | 335 | P | P | 13 08 34.6 | +0.1 |
| | 0.2nm,0.8s,baz=74,slow=4.7,SNR=5.0 | | | | | | |

**MEX 07 13:12:12.9±0.5, 14°76N×93°79W, h10km, MD3.9, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.09 | 30 | eP | Pb | 13 12 30.4 | -3.4 |
| PCIG | | | | i S | Sg | 13 12 44.0 | -4.1 |

**IDC 07 13:18:36.4±1.1, 55°62S×25°92W, h0km, mb3.8/4, mb1 3.9/4, mb1mx3.8/14, mbtmp3.8/4, Error ellipse: s-maj=46.1km s-min=27.1km az=68.0, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MAW | Mawson | 40.07 | 143 | P | P | 13 26 12.7 | -0.1 |
| | 0.4nm,0.6s,baz=270,slow=7.1,SNR=3.5 | | | | | | |
| VNDA | Vanda | 47.03 | 182 | P | P | 13 27 08.7 | -0.2 |
| | 0.8nm,0.7s,baz=192,slow=6.8,SNR=6.8 | | | | | | |
| LPAZ | La Paz | 50.73 | 304 | P | P | 13 27 38.5 | -0.2 |
| | 1.2nm,0.6s,baz=172,slow=7.3,SNR=6.0 | | | | | | |
| TORD | Torodi Ar. Bea | 72.33 | 28 | P | P | 13 30 03.8 | 0.0 |
| | 0.9nm,0.8s,baz=207,slow=6.0,SNR=4.8 | | | | | | |
| ILAR | Eielson Array | 150.36 | 312 | PKPbc | PKPbc | 13 38 27.8 | -0.3 |
| | 0.7nm,0.8s,baz=119,slow=2.5,SNR=10 | | | | | | |

**MEX 07 13:22:08.9±0.4, 14°84N×93°72W, h5km, MD4.0, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.99 | 29 | eP | Pg | 13 22 25.4 | -2.4 |
| PCIG | | | | i S | Sg | 13 22 38.4 | -2.4 |

*ISCJB 07 13:24:34.6±0.4, 32°55N±0°05×115°72W±0°04, h11km±6km, Error ellipse: s-maj=8.5km s-min=3.4km az=28.1*
*ECX 07 13:24:35.4±0.6, 32°56N×115°72W, h4km, MD2.3, ML2.5*
*MEX 07 13:24:35.4±0.8, 32°68N×115°60W, h31km±23km, MD4.0*
**ISC 07 13:24:34.1±0.9, 32°57N±0°03×115°72W±0°03, h16km±7km, n16, σ0s37/29, 5C-7D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGL | Mount Signal | 0.08 | 357 | ⇑iP | Pg | 13 24 36.9 | -0.5 |
| ERPC | Ernies Place | 0.18 | 15 | ⇑iP | Pb | 13 24 39.0 | 0.0 |
| WESC | Westside Schoo | 0.19 | 357 | ⇑iP | Pg | 13 24 39.1 | +0.3 |
| WESC | | | | eS | Sb | 13 24 42.6 | -0.1 |
| COK | Cook Ranch | 0.28 | 359 | ⇑iP | Pb | 13 24 40.9 | +0.1 |
| RMX | La Rumorosa | 0.31 | 277 | ⇓eP | Pb | 13 24 41.2 | 0.0 |
| RMX | | | | eS | Sg | 13 24 45.2 | 0.0 |
| RMX | | | | IAML | | 13 24 46.9 | |
| | comp=N,888nm,0.1s | | | | | | |
| RMX | | | | ⇓e | | 13 24 46.9 | |
| IBP | Imperial Bould | 0.33 | 287 | ⇓eP | Pb | 13 24 41.7 | +0.1 |
| IBP | | | | eS | Sb | 13 24 46.5 | -0.2 |
| CPBX | Cerro Prieto | 0.38 | 113 | eP | Pb | 13 24 42.4 | 0.0 |
| CPBX | | | | ⇓eP | Pg | 13 24 42.7 | +0.7 |
| CPBX | | | | eS | Sb | 13 24 48.2 | +0.1 |
| CPBX | | | | IAML | | 13 24 49.9 | |
| | comp=E,2μm,0.1s | | | | | | |
| CPBX | | | | ⇓e | | 13 24 49.9 | |
| CRR | Carrizo Plain | 0.38 | 327 | ⇓iP | Pb | 13 24 42.5 | 0.0 |
| MBIG | Mexicali | 0.47 | 110 | eP | Pg | 13 24 43.7 | +0.2 |
| MBIG | | | | eS | Sg | 13 24 50.0 | +0.1 |
| RDX | Rancho Dawling | 0.66 | 197 | ⇑eP | Pg | 13 24 47.2 | 0.0 |
| RDX | | | | eS | Sg | 13 24 56.0 | -0.1 |
| BAR | Barrett | 0.81 | 278 | eP | Pg | 13 24 50.3 | +0.3 |
| BAR | | | | eS | Sg | 13 25 00.9 | +0.2 |
| CBX | Cerro Bola | 0.84 | 253 | eP | Pn | 13 24 51.1 | -0.2 |
| CBX | | | | i S | Sg | 13 25 01.9 | +0.4 |
| CBX | Cerro Bola | 0.84 | 253 | eP | Pg | 13 24 50.6 | +0.2 |
| CBX | | | | eS | Sg | 13 25 01.9 | +0.4 |
| CBX | | | | IAML | | 13 25 02.7 | |
| | comp=E,174nm,0.2s | | | | | | |
| CBX | | | | IAML | | 13 25 03.0 | |
| | comp=N,145nm,0.3s | | | | | | |
| CBX | | | | ⇓e | | 13 25 03.0 | |
| SDRC | San Diego Road | 1.05 | 280 | eP | Pn | 13 24 54.1 | +0.1 |
| SDRC | | | | eS | Sb | 13 25 07.6 | +0.4 |
| ECBX | El Chinero | 1.23 | 152 | eP | Pb | 13 24 57.1 | +0.2 |
| ECBX | | | | eS | Sg | 13 25 13.7 | -0.2 |
| SPIG | San Pedro Mart | 1.53 | 172 | eP | Pb | 13 25 02.5 | +0.3 |
| SPIG | | | | eS | Sn | 13 25 19.5 | -1.2 |

*IDC 07 13:30:40.0±1.6, 6°46S×151°90E, h0km, mb3.8/4, mb1 4.1/5, mb1mx3.6/33, mbtmp4.0/5, ML2.4/1, MS3.7/1, Ms1 3.7/1, ms1mx2.6/24, Error ellipse: s-maj=55.8km s-min=25.6km az=132.0*
*ISCJB 07 13:30:44.4±1.4, 6°3S±0°2×151°5E±0°2, h30km, mb3.6/3, MS3.6/1, Error ellipse: s-maj=39.0km s-min=13.4km az=135.4*
*AUST 07 13:31:49.7±3.6, 9°46S×146°25E, h0km, Error ellipse: s-maj=2.0km s-min=1.2km az=292.0*
**ISC 07 13:30:45.5±1.6, 6°3S±0°3×151°6E±0°3, h30km, n11, σ1s55/10, mb3.9/4, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 5.38 | 235 | Pn | Pn | 13 32 05.7 | +2.0 |
| | 7.5nm,0.3s,baz=55,slow=7.6,SNR=30 | | | | | | |
| PMG | | | | Sn | Sn | 13 33 02.8 | -1.9 |
| | 32nm,0.3s,baz=17,slow=19,SNR=11 | | | | | | |
| PMG | Port Moresby | 5.38 | 235 | P | Pn | 13 32 05.7 | +2.0 |
| | baz=0.9,SNR=9.4 | | | | | | |
| KDU | Kakadu | 19.91 | 250 | P | P | 13 35 13.2 | -1.8 |
| | baz=14,SNR=7.6 | | | | | | |
| SIJI | Sorong | 21.04 | 284 | P | P | 13 35 28.0 | +0.9 |
| | 5.3nm,0.6s,baz=158,slow=4.6,SNR=4.6 | | | | | | |
| MTN | Manton Dam | 21.21 | 251 | P | P | 13 35 22.0 | -7.0 |
| | baz=15,SNR=4.3 | | | | | | |
| WRA | Warramunga Arr | 21.56 | 230 | P | P | 13 35 32.0 | -0.8 |
| | 1.9nm,0.4s,baz=58,slow=11,SNR=33 | | | | | | |
| ASAR | Alice Springs | 24.24 | 223 | P | P | 13 36 00.1 | +0.1 |
| | 2.5nm,0.7s,baz=55,slow=9.3,SNR=22 | | | | | | |
| KNRA | Kununurra | 24.27 | 246 | P | P | 13 35 59.8 | -0.4 |
| | baz=18,SNR=19 | | | | | | |
| LEM | Lembang | 43.72 | 267 | LR | LR | 13 59 33.9 | |
| | comp=Z,76nm,18.3s,baz=187,slow=39 | | | | | | |
| ILAR | Eielson Array | 84.02 | 22 | P | P | 13 43 12.4 | -0.3 |
| | 0.2nm,0.6s,baz=252,slow=5.6,SNR=4.2 | | | | | | |
| TORD | Torodi Ar. Bea | 149.63 | 285 | PKPbc | PKPbc | 13 50 32.4 | -0.8 |
| | 0.4nm,0.4s,baz=83,slow=2.3,SNR=9.1 | | | | | | |

**DJA 07 13:31:19.7±0.4, 4°S±3°×10°3E±°, h10km, M3.5/8, MLv3.5/8, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MNAI | Manna | 0.20 | 157 | P | Pg | 13 31 23.8 | 0.0 |
| KSI | Kapahiang | 0.60 | 331 | P | Pg | 13 31 30.0 | -1.4 |
| KSI | | | | S | Sb | 13 31 41.0 | +0.1 |
| LHSI | Lahat | 0.73 | 61 | P | Pg | 13 31 32.7 | -1.2 |
| LHSI | | | | S | Sg | 13 31 43.3 | -0.1 |
| MDSI | Maura Dua | 1.33 | 103 | P | Pn | 13 31 42.9 | -1.4 |
| LWLI | Liwa | 1.44 | 125 | P | Pn | 13 31 44.9 | -1.1 |
| KASI | Kota Agung | 2.09 | 130 | P | Pn | 13 31 55.5 | +0.7 |
| KASI | | | | S | Sb | 13 32 22.8 | -1.0 |

**IDC 07 13:36:39.2±3.3, 6°24S×151°12E, h0km, mb3.1/2, mb1 3.5/3, mb1mx3.2/28, mbtmp3.3/3, ML1.7/1, MS2.8/1, Ms1 2.8/1, ms1mx2.5/12, Error ellipse: s-maj=129.5km s-min=43.4km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 5.03 | 231 | Pn | Pn | 13 37 56.4 | +0.5 |
| | 1.9nm,0.3s,baz=40,slow=15,SNR=5.7 | | | | | | |
| PMG | | | | Sn | Sn | 13 38 46.6 | -8.2 |
| | 3.1nm,0.3s,baz=43,slow=18,SNR=4.4 | | | | | | |
| GUMO | Guam | 20.65 | 343 | LR | LR | 13 49 12.2 | |
| | comp=Z,26nm,18.1s,baz=80,slow=36 | | | | | | |
| WRA | Warramunga Arr | 21.24 | 229 | P | P | 13 41 26.5 | -0.6 |
| | 0.5nm,0.5s,baz=54,slow=11,SNR=5.5 | | | | | | |
| ASAR | Alice Springs | 23.96 | 222 | P | P | 13 41 55.9 | +0.4 |
| | 0.1nm,0.3s,baz=53,slow=11,SNR=3.1 | | | | | | |
| TORD | Torodi Ar. Bea | 149.11 | 285 | PKPbc | PKPbc | 13 56 30.0 | -0.7 |
| | 0.4nm,0.8s,baz=86,slow=3.3,SNR=3.0 | | | | | | |

*CSEM 07 13:55:42.9±0.1, 43°00N×45°21E, h5km, mb4.2, Error ellipse: s-maj=4.4km s-min=2.2km az=10.0*
*MOS 07 13:55:42.6±1.0, 43°03N×45°16E, h7km, mb4.2/1, Error ellipse: s-maj=7.5km s-min=5.6km az=20.9*
*TIF 07 13:55:43.5, 43°02N×45°25E, h24km±2km*
**ISC 07 13:55:42.9±1.0, 43°02N±0°02×45°20E±0°01, h8km±8km, n61, σ0s73/110, 1C-8D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KMGR | Komgaron | 0.25 | 278 | ⇓iPG | Pg | 13 55 47.2 | -0.7 |
| KMGR | | | | i S | Sg | 13 55 52.7 | +1.5 |
| KMGR | Komgaron | 0.25 | 278 | i Pg | Pg | 13 55 47.2 | -0.7 |
| KMGR | | | | i Sg | Sg | 13 55 52.7 | +1.5 |
| VLKR | Vladikavkaz | 0.38 | 274 | ⇓iPG | Pg | 13 55 50.0 | -0.5 |
| VLKR | | | | i S | Sb | 13 55 57.2 | -0.9 |
| VLKR | Vladikavkaz | 0.38 | 274 | i Pg | Pg | 13 55 50.0 | -0.5 |
| VLKR | | | | i Sg | Sb | 13 55 57.2 | -0.9 |
| GROC | Groznyy | 0.47 | 68 | ePG | Pg | 13 55 51.3 | -0.8 |
| GROC | | | | eS | Sg | 13 55 57.9 | -0.4 |
| GROC | Groznyy | 0.47 | 68 | ePg | Pg | 13 55 51.3 | -0.8 |
| GROC | | | | eSg | Sg | 13 55 57.9 | -0.4 |
| BTKR | Batakoyurt | 0.59 | 306 | ⇓iPG | Pg | 13 55 54.8 | +0.4 |
| BTKR | | | | eS | Sb | 13 56 05.3 | +1.1 |
| BTKR | Batakoyurt | 0.59 | 306 | i Pg | Pg | 13 55 54.8 | +0.4 |
| BTKR | | | | eSg | Sb | 13 56 05.3 | +1.1 |
| LACR | Lac | 0.69 | 254 | ⇓iPG | Pg | 13 55 55.8 | -0.5 |
| LACR | | | | eS | Sb | 13 56 06.5 | -0.5 |
| LACR | Lac | 0.69 | 254 | i Pg | Pg | 13 55 55.8 | -0.5 |
| LACR | | | | eSg | Sb | 13 56 06.5 | -0.5 |
| TRKR | Terskaya | 0.78 | 334 | ePG | Pb | 13 55 58.2 | -0.5 |
| TRKR | | | | eS | Sn | 13 56 11.2 | -0.8 |
| TRKR | Terskaya | 0.78 | 334 | ePg | Pb | 13 55 58.2 | -0.5 |
| TRKR | | | | eSg | Sn | 13 56 11.2 | -0.8 |
| KORR | Kora | 0.83 | 275 | ePG | Pb | 13 55 59.7 | +0.1 |
| KORR | | | | eS | Sn | 13 56 12.8 | -0.6 |
| KORR | Kora | 0.83 | 275 | ePg | Pb | 13 55 59.7 | +0.1 |
| STDR | Stavd-Durt | 0.90 | 293 | ePG | Pn | 13 56 02.4 | +0.5 |
| STDR | | | | eS | Sn | 13 56 16.7 | +1.6 |
| STDR | Stavd-Durt | 0.90 | 293 | ePg | Pn | 13 56 02.4 | +0.5 |
| ZEI | Tsey | 0.98 | 257 | ⇓iPG | Pg | 13 56 00.9 | -0.9 |
| ZEI | | | | i S | Sb | 13 56 15.5 | 0.0 |
| ZEI | Tsey | 0.98 | 257 | i Pg | Pg | 13 56 00.9 | -0.9 |
| ZEI | | | | i Sg | Sb | 13 56 15.5 | 0.0 |
| PRTR | Priterechnaya | 0.99 | 318 | ePG | Pb | 13 56 02.5 | +0.2 |
| PRTR | | | | eS | Sn | 13 56 18.2 | +1.0 |
| PRTR | Priterechnaya | 0.99 | 318 | ePg | Pb | 13 56 02.5 | +0.2 |
| DUS | Dusheti | 1.00 | 202 | P | Pg | 13 56 01.6 | -0.7 |
| DUS | | | | S | Sn | 13 56 18.0 | +0.2 |
| DUS | Dusheti | 1.00 | 202 | PG | Pg | 13 56 01.5 | -0.7 |
| DUS | | | | S | Sn | 13 56 17.9 | +0.2 |
| DUS | Dusheti | 1.00 | 202 | P | Pg | 13 56 01.6 | -0.6 |
| DUS | | | | S | Sn | 13 56 18.0 | +0.3 |
| LSNR | Lesken | 1.04 | 285 | ⇓iPG | Pb | 13 56 03.2 | +0.1 |
| LSNR | | | | eS | Sn | 13 56 19.2 | +0.7 |
| LSNR | Lesken | 1.04 | 285 | i Pg | Pb | 13 56 03.2 | +0.1 |
| LSNR | | | | eSg | Sn | 13 56 19.2 | +0.7 |
| DLMR | Dylym | 1.05 | 87 | ePG | Pn | 13 56 04.0 | +0.1 |
| DLMR | | | | eS | Sn | 13 56 19.0 | +0.2 |
| DLMR | | | | pmax | pmax | | |
| | comp=Z,92nm,0.2s | | | | | | |
| DLMR | Dylym | 1.05 | 87 | ePg | Pn | 13 56 04.0 | +0.1 |
| | comp=Z,92nm,0.2s | | | | | | |
| DIGR | Digorskoe uzhe | 1.20 | 265 | ePG | Pb | 13 56 04.6 | -1.3 |
| DIGR | | | | i S | Sn | 13 56 22.1 | -0.5 |
| DIGR | Digorskoe uzhe | 1.20 | 265 | ePg | Pb | 13 56 04.6 | -1.3 |
| DIGR | | | | i Sg | Sn | 13 56 22.1 | -0.5 |
| DBC | Dubki | 1.20 | 90 | ⇓iPG | Pb | 13 56 05.3 | -0.6 |
| DBC | | | | i S | Sb | 13 56 21.5 | 0.0 |
| DBC | Dubki | 1.20 | 90 | i Pg | Pb | 13 56 05.3 | -0.6 |
| DBC | | | | i Sg | Sb | 13 56 21.5 | 0.0 |
| XNZR | Khunzakh | 1.21 | 113 | ⇑iPG | Pb | 13 56 05.5 | -0.6 |
| XNZR | | | | eS | Sn | 13 56 23.5 | +0.6 |
| XNZR | | | | pmax | pmax | | |
| | comp=Z,71nm,0.3s | | | | | | |
| XNZR | Khunzakh | 1.21 | 113 | i Pg | Pb | 13 56 05.5 | -0.6 |
| | comp=Z,71nm,0.3s | | | | | | |
| UNCR | Uncukul | 1.21 | 104 | ePG | Pb | 13 56 05.5 | -0.6 |
| UNCR | | | | eS | Sg | 13 56 22.0 | +0.1 |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,64nm,0.3s | | | | | | |
| UNCR | Uncukul | 1.21 | 104 | ePg | Pb | 13 56 05.5 | -0.6 |
| | comp=Z,64nm,0.3s | | | | | | |
| UNCR | | | | eSg | Sg | 13 56 22.0 | +0.1 |
| KRNR | Karanay | 1.27 | 98 | ePG | Pn | 13 56 06.5 | -0.6 |
| KRNR | | | | i S | Sn | 13 56 25.0 | +0.7 |
| KRNR | | | | pmax | pmax | | |
| | comp=Z,50nm,0.3s | | | | | | |
| KRNR | Karanay | 1.27 | 98 | ePg | Pn | 13 56 06.5 | -0.6 |
| | comp=Z,50nm,0.3s | | | | | | |
| KRNR | | | | i Sg | Sn | 13 56 25.0 | +0.7 |
| TBLG | Delisi | 1.34 | 195 | P | Pn | 13 56 07.7 | -0.3 |
| TBLG | | | | S | Sg | 13 56 26.7 | +0.8 |
| TBLG | Delisi | 1.34 | 195 | PG | Pn | 13 56 07.6 | -0.3 |
| TBLG | | | | S | Sg | 13 56 26.7 | +0.8 |
| TBLG | Delisi | 1.34 | 195 | P | Pn | 13 56 07.7 | -0.2 |
| TBLG | | | | Sg | Sg | 13 56 26.7 | +0.8 |
| ONI | Oni | 1.36 | 252 | P | Pn | 13 56 07.8 | -0.5 |
| ONI | | | | S | Sn | 13 56 26.5 | +0.1 |
| ONI | Oni | 1.36 | 252 | PG | Pn | 13 56 07.7 | -0.5 |
| ONI | | | | S | Sn | 13 56 26.5 | +0.1 |
| ONI | Oni | 1.36 | 252 | P | Pn | 13 56 07.8 | -0.4 |
| ONI | | | | S | Sn | 13 56 26.5 | +0.1 |
| ARKR | Arakani | 1.39 | 107 | ePG | Pg | 13 56 09.5 | 0.0 |
| ARKR | | | | i S | Sg | 13 56 28.5 | +1.0 |
| ARKR | Arakani | 1.39 | 107 | ePg | Pg | 13 56 09.5 | 0.0 |
| ARKR | | | | i Sg | Sg | 13 56 28.5 | +1.0 |
| BUJR | Buynaksk | 1.42 | 97 | ePG | Pg | 13 56 10.0 | -0.1 |
| BUJR | | | | eS | Sg | 13 56 31.5 | +3.1 |
| BUJR | | | | pmax | pmax | | |
| | comp=Z,81nm,0.3s | | | | | | |
| BUJR | Buynaksk | 1.42 | 97 | ePg | Pg | 13 56 10.0 | -0.1 |
| | comp=Z,81nm,0.3s | | | | | | |
| GNBR | Gunib | 1.45 | 115 | ⇓iPG | Pb | 13 56 09.8 | -0.3 |
| GNBR | | | | i S | Sb | 13 56 28.6 | -0.1 |
| GNBR | Gunib | 1.45 | 115 | i Pg | Pb | 13 56 09.8 | -0.3 |
| GNBR | | | | i Sg | Sb | 13 56 28.6 | -0.1 |
| DGRG | David-gareji | 1.58 | 175 | P | Pb | 13 56 11.9 | -0.4 |
| DGRG | David-gareji | 1.58 | 175 | PG | Pb | 13 56 11.9 | -0.4 |
| DGRG | David-gareji | 1.58 | 175 | P | Pb | 13 56 11.9 | -0.4 |
| KMKR | Kumukh | 1.66 | 122 | ePN | Pb | 13 56 14.0 | +0.1 |
| KMKR | | | | eS | Sg | 13 56 37.0 | +0.6 |
| KMKR | Kumukh | 1.66 | 122 | ePn | Pb | 13 56 14.0 | +0.1 |
| KMKR | | | | eSg | Sg | 13 56 37.0 | +0.6 |
| AKH | Akhalkalaki | 2.05 | 219 | P | Pn | 13 56 18.6 | +0.7 |
| AKH | | | | S | Sb | 13 56 47.1 | +0.9 |
| AKH | Akhalkalaki | 2.05 | 219 | PN | Pn | 13 56 18.6 | +0.7 |
| AKH | | | | S | Sb | 13 56 47.1 | +0.9 |
| AKH | Akhalkalaki | 2.05 | 219 | P | Pn | 13 56 18.6 | +0.7 |
| AKH | | | | S | Sb | 13 56 47.1 | +0.9 |
| KIV | Kislovodsk | 2.05 | 298 | ePN | Pn | 13 56 16.5 | -1.3 |
| KIV | | | | e | | 13 56 49.7 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,50nm,0.4s | | | | | | |
| KIV | Kislovodsk | 2.05 | 298 | ePn | Pn | 13 56 16.5 | -1.3 |
| | comp=Z,50nm,0.4s | | | | | | |
| KIV | | | | eSg | Sg | 13 56 49.7 | +0.8 |
| CHVG | Ch'k'valeri | 2.31 | 263 | P | Pg | 13 56 26.3 | -0.9 |
| CHVG | Ch'k'valeri | 2.31 | 263 | P | Pg | 13 56 26.3 | -0.9 |

**MEX 07 13:55:53.8±0.8, 14°79N×93°77W, h16km±507km, MD4.0, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.05 | 30 | i P | Pb | 13 56 09.9 | -3.8 |
| PCIG | | | | i S | Sb | 13 56 22.9 | -4.4 |

**IDC 07 13:59:01.9±2.3, 3°33N×128°76E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.2/27, mbtmp3.2/3, Error ellipse: s-maj=157.6km s-min=25.3km az=68.0, North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 23.77 | 167 | P | P | 14 04 15.8 | -0.5 |
| | 0.5nm,0.6s,baz=347,slow=11,SNR=5.2 | | | | | | |
| ASAR | Alice Springs | 27.29 | 170 | P | P | 14 04 48.7 | +0.3 |
| | 0.1nm,0.5s,baz=359,slow=9.5,SNR=2.6 | | | | | | |
| MKAR | Makanchi Array | 59.05 | 324 | P | P | 14 09 03.8 | -0.1 |
| | 0.2nm,0.4s,baz=121,slow=6.8,SNR=2.9 | | | | | | |

*CSEM 07 13:59:30.1, 42°93N×45°23E, h0km, ML3.2, After TIF*
**TIF 07 13:59:30.1, 42°93N×45°23E, h13km±1km, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DUS | Dusheti | 0.93 | 205 | P | Pg | 13 59 48.3 | +0.2 |
| DUS | | | | S | Sn | 14 00 04.7 | +2.6 |
| DUS | Dusheti | 0.93 | 205 | P | Pg | 13 59 48.3 | +0.2 |
| TBLG | Delisi | 1.25 | 197 | P | Pg | 13 59 54.3 | 0.0 |
| TBLG | | | | S | Sg | 14 00 13.4 | +2.8 |
| TBLG | Delisi | 1.25 | 197 | P | Pg | 13 59 54.3 | 0.0 |
| ONI | Oni | 1.35 | 256 | P | Pn | 13 59 54.6 | -0.2 |
| ONI | | | | S | Sg | 14 00 13.7 | -0.3 |
| ONI | Oni | 1.35 | 256 | P | Pn | 13 59 54.6 | -0.2 |
| DGRG | David-gareji | 1.48 | 176 | P | Pg | 13 59 59.5 | +0.8 |
| DGRG | David-gareji | 1.48 | 176 | P | Pg | 13 59 59.5 | +0.9 |
| AKH | Akhalkalaki | 1.99 | 221 | P | Pb | 14 00 06.4 | 0.0 |
| AKH | | | | S | Sg | 14 00 35.5 | +0.8 |
| AKH | Akhalkalaki | 1.99 | 221 | P | Pb | 14 00 06.4 | -0.1 |
| AKH | | | | S | Sg | 14 00 35.5 | +0.8 |
| CHVG | Ch'k'valeri | 2.33 | 266 | P | Pg | 14 00 14.4 | -0.4 |
| CHVG | Ch'k'valeri | 2.33 | 266 | P | Pg | 14 00 14.4 | -0.3 |

*ISK 07 14:01:37.7, 40°11N×39°48E, h3km, MD2.6*
*ISCJB 07 14:01:38.7±0.5, 40°11N±0°03×39°49E±0°04, h9km±6km, Error ellipse: s-maj=5.7km s-min=5.0km az=41.0*
*CSEM 07 14:01:38.2±0.2, 40°06N×39°49E, h2km, MD2.6, Error ellipse: s-maj=4.8km s-min=3.7km az=140.0*
*DDA 07 14:01:40.9, 40°03N×39°25E, h7km, Md2.7*
**ISC 07 14:01:38.7±0.9, 40°08N±0°03×39°47E±0°03, h12km±8km, n19, σ0s55/30, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KELT | Kelkit | 0.18 | 292 | i P | Pg | 14 01 42.7 | -0.1 |
| KELT | | | | i S | Sg | 14 01 46.0 | +0.3 |
| KELT | Kelkit | 0.18 | 292 | P | Pg | 14 01 42.7 | -0.1 |
| KELT | | | | S | Sg | 14 01 46.0 | +0.3 |
| GUMT | Gumushane | 0.38 | 1 | ePG | Pg | 14 01 45.8 | -0.5 |
| GUMT | | | | eSG | Sg | 14 01 51.2 | -0.1 |
| GUMT | Gumushane | 0.38 | 1 | ePg | Pg | 14 01 45.8 | -0.5 |
| GUMT | | | | eSg | Sg | 14 01 51.2 | -0.1 |
| ERZN | Erzincan | 0.53 | 158 | ePG | Pg | 14 01 49.0 | -0.2 |
| ERZN | | | | eSG | Sb | 14 01 58.3 | +0.5 |
| BAYT | Ayd˜–ntepe-Bay | 0.60 | 59 | ePG | Pg | 14 01 50.0 | -0.4 |
| BAYT | | | | eSG | Sg | 14 01 58.4 | 0.0 |
| BAYT | Ayd˜–ntepe-Bay | 0.60 | 59 | ePg | Pg | 14 01 50.0 | -0.4 |
| BAYT | | | | eSg | Sg | 14 01 58.4 | 0.0 |
| SUSE | Susehri | 0.98 | 278 | i P | Pg | 14 01 56.8 | -0.8 |
| SUSE | | | | i S | Sb | 14 02 11.7 | +1.0 |
| SUSE | Susehri | 0.98 | 278 | P | Pg | 14 01 56.8 | -0.8 |
| SUSE | | | | S | Sb | 14 02 11.7 | +1.0 |
| ESPY | Espiye-Giresun | 1.01 | 326 | ePG | Pg | 14 01 57.5 | -0.6 |
| ESPY | | | | eSG | Sb | 14 02 11.7 | +0.3 |
| ESPY | Espiye-Giresun | 1.01 | 326 | ePg | Pg | 14 01 57.5 | -0.6 |
| ESPY | | | | eSg | Sb | 14 02 11.7 | +0.3 |
| KEMA | Kemaliye | 1.11 | 223 | i P | Pb | 14 01 59.3 | -0.6 |
| KEMA | Kemaliye | 1.11 | 223 | P | Pb | 14 01 59.3 | -0.6 |
| PTK | Pertek | 1.19 | 183 | ePN | Pn | 14 02 01.6 | +0.2 |
| PTK | Pertek | 1.19 | 183 | ePn | Pn | 14 02 01.6 | +0.2 |
| SVSK | Karacayir | 1.91 | 266 | ePN | Pb | 14 02 13.0 | -0.4 |
| SVSK | Karacayir | 1.91 | 266 | ePn | Pb | 14 02 13.0 | -0.4 |
| BCA | Borcka | 2.13 | 50 | ePN | Pn | 14 02 14.8 | +0.7 |
| BCA | Borcka | 2.13 | 50 | ePn | Pn | 14 02 14.9 | +0.7 |

*IDC 07 14:14:28.5±1.0, 2°35S×136°69E, h0km, mb3.7/6, mb1 4.0/8, mb1mx3.7/25, mbtmp3.8/8, ML3.7/2, MS3.2/4, Ms1 3.2/4, ms1mx2.8/32, Error ellipse: s-maj=31.0km s-min=21.7km az=54.0*
*ISCJB 07 14:14:31.5±0.6, 2°55S±0°07×136°70E±0°06, h42km, mb3.6/6, MS3.2/3, Error ellipse: s-maj=9.9km s-min=8.6km*

*az=176.0*

**ISC 07 14:14:33.2**±0.7**, 2.52S**±0.08×**136.64E**±0.07**, h42km, n12, σ2.23**/13**, mb3.6**/6**, MS3.2**/3**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **4.06** | **90** | Pn | **Pn** | **14 15 31.9** | **-1.1** |
| | 8.0nm,0.3s,baz=250,slow=12,SNR=60 | | | | | | |
| JAY | | | | Sn | **Sn** | **14 16 17.4** | **-1.9** |
| | 1.5nm,0.3s,baz=197,slow=17,SNR=1.7 | | | | | | |
| **SIJI** | **Sorong** | **5.61** | **287** | Pn | **Pn** | **14 15 53.7** | **-0.5** |
| | 1.4nm,0.3s,baz=131,slow=22,SNR=7.5 | | | | | | |
| SIJI | | | | Sn | **Sn** | **14 16 54.7** | **-2.8** |
| | 1.0nm,0.3s,baz=90,slow=20,SNR=2.8 | | | | | | |
| SIJI | | | | LR | LR | 14 18 37.0 | |
| | comp=Z,205nm,21.7s,baz=216,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.47** | **187** | P | **Pn** | **14 18 32.6** | **-1.2** |
| | 0.2nm,0.3s,baz=7.8,slow=12,SNR=12 | | | | | | |
| WRA | | | | S | **Sn** | **14 21 43.4** | **-4.0** |
| | 0.2nm,0.3s,baz=6.7,slow=23,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **21.19** | **187** | P | **P** | **14 19 17.3** | **+1.9** |
| | 2.9nm,0.5s,baz=12,slow=11,SNR=42 | | | | | | |
| ASAR | | | | S | **S** | **14 23 10.9** | **+2.0** |
| | 0.6nm,0.7s,baz=10,slow=22,SNR=3.8 | | | | | | |
| **LEM** | **Lembang** | **29.23** | **261** | LR | LR | 14 33 29.3 | |
| | comp=Z,38nm,18.3s,baz=248,slow=39 | | | | | | |
| **DZM** | **Mont Dzumac** | **34.87** | **126** | LR | LR | 14 37 16.5 | |
| | comp=Z,44nm,18.1s,baz=358,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.55** | **301** | P | **P** | **14 22 25.6** | **+0.3** |
| | 0.5nm,0.3s,baz=124,slow=8.1,SNR=3.2 | | | | | | |
| **YAK** | **Yakutsk** | **64.59** | **356** | LR | LR | 14 54 44.1 | |
| | comp=Z,22nm,18.2s,baz=168,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.38** | **323** | P | **P** | **14 25 31.4** | **+0.8** |
| | 0.4nm,0.7s,baz=123,slow=5.3,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.74** | **331** | P | **P** | **14 25 46.6** | **+1.7** |
| | 0.7nm,0.7s,baz=122,slow=7.0,SNR=2.4 | | | | | | |
| **VNDA** | **Vanda** | **76.16** | **175** | P | **P** | **14 26 19.2** | **+2.8** |
| | 0.7nm,0.9s,baz=338,slow=6.5,SNR=5.8 | | | | | | |
| **ILAR** | **Eielson Array** | **86.52** | **25** | P | **P** | **14 27 11.2** | **-0.3** |
| | 0.2nm,0.7s,baz=241,slow=5.0,SNR=4.3 | | | | | | |

**GUC 07 14:19:17.3**±0.3**, 23.32S×67.21W, h247km**±13km**, ML4.1, 3C, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **2.26** | **285** | ⇑iP | Pn | 14 20 03.2 | +1.0 |
| PB06 | | | | eS | S | 14 20 38.0 | +0.5 |
| PB06 | | | | AML | AML | 14 20 38.8 | |
| | comp=N,305nm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **2.41** | **309** | eP | Pn | 14 20 04.9 | +1.1 |
| PB09 | | | | AML | AML | 14 20 43.8 | |
| | comp=N,320nm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **2.88** | **289** | eP | Pn | 14 20 09.6 | +1.1 |
| PB04 | | | | eS | S | 14 20 49.7 | +0.7 |
| PB04 | | | | AML | AML | 14 20 55.9 | |
| | comp=N,169nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **2.94** | **302** | AML | AML | 14 20 54.9 | |
| | comp=E,214nm,0.3s | | | | | | |
| **ANCH** | **Antofagasta** | **2.96** | **262** | ⇑iP | Pn | 14 20 02.6 | -6.5 |
| ANCH | | | | i S | S | 14 20 42.8 | -7.1 |
| **PB10** | **IPOC Station P** | **3.07** | **266** | ⇑iP | Pn | 14 20 11.8 | +1.3 |
| PB10 | | | | i S | S | 14 20 53.0 | +0.6 |
| PB10 | | | | AML | AML | 14 20 55.4 | |
| | comp=E,281nm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **3.10** | **317** | i S | S | 14 20 53.9 | +0.8 |
| PB01 | | | | AML | AML | 14 20 56.0 | |
| | comp=E,221nm,0.1s | | | | | | |

**MEX 07 14:23:14.9**±1.4**, 14.81N×93.75W, h16km**±786km**, MD4.1, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.03** | **30** | eP | Pb | 14 23 30.3 | -4.1 |
| PCIG | | | | eS | Sb | 14 23 43.4 | -4.2 |

*IDC **07** 14:25:21.7±2.9, 0.79S×99.45E, h0km, mb3.8/4, mb1 3.9/4, mb1mx3.5/34, mbtmp3.8/4, Error ellipse: s-maj=163.5km s-min=23.2km az=56.0*
*ISCJB **07** 14:25:26.1±0.6, 0.67S±0.05×99.42E±0.07, h54km, mb3.8/5, Error ellipse: s-maj=10.4km s-min=7.0km az=4.6*
*DJA **07** 14:25:26.3±0.6, 1°S±5°×9°9E±°, h34km±13km, M3.3/2, MLv3.3/2*
*NEIC **07** 14:25:27.9±0.9, 0.36S×99.99E, h35km, mb4.1/1, Error ellipse: s-maj=23.0km s-min=12.3km az=215.0*
**ISC 07 14:25:28.3**±0.9**, 0.71S**±0.05×**99.36E**±0.06**, h54km, n15, σ2.49**/16**, mb4.1**/5**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SISI** | **Saibi** | **0.67** | **204** | P | **Pn** | **14 25 41.8** | **0.0** |
| SISI | | | | S | **Sn** | **14 25 49.6** | **-1.9** |
| **MNSI** | **Mandailing Nat** | **1.52** | **8** | P | **Pn** | **14 25 54.8** | **+1.7** |
| MNSI | | | | S | **Sn** | **14 26 08.7** | **-3.0** |
| **BKNI** | **Bangkinang** | **1.97** | **58** | P | Pn | 14 26 03.2 | +3.9 |
| BKNI | | | | S | **Sn** | **14 26 17.5** | **-5.4** |
| **BKNI** | **Bangkinang** | **1.97** | **58** | Pn | Pn | 14 25 48.2 | -11 |
| **SDSI** | **Sungai Dareh** | **2.08** | **96** | S | **Sn** | **14 26 27.7** | **+2.2** |
| **GSI** | **Gunungsitoli** | **2.68** | **318** | P | **Pn** | **14 26 11.3** | **+2.3** |
| GSI | | | | S | **Sn** | **14 26 36.9** | **-3.4** |
| **GSI** | **Gunungsitoli** | **2.68** | **318** | ePn | **Pn** | **14 26 10.8** | **+1.8** |
| **H08S2** | **Diego Garcia H** | **27.65** | **255** | T | T | 14 59 06.7 | |
| | baz=77,slow=75,SNR=13 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.65** | **255** | T | T | 14 59 00.3 | |
| | baz=77,slow=75,SNR=13 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.66** | **255** | T | T | 14 59 06.6 | |
| | baz=77,slow=75,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.20** | **121** | P | **P** | **14 32 50.2** | **-1.3** |
| | 0.4nm,0.6s,baz=296,slow=9.0,SNR=3.6 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 35 00.5** | **+0.5** |
| | 0.2nm,0.4s,baz=314,slow=2.3,SNR=2.9 | | | | | | |
| **WRAB** | **Tennant Creek** | **39.21** | **121** | eP | **P** | **14 32 49.5** | **-2.1** |
| | 4.9nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **40.53** | **127** | P | **P** | **14 33 02.1** | **-0.4** |
| | 0.7nm,0.7s,baz=294,slow=7.5,SNR=9.3 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 35 05.5** | **+1.3** |
| | 0.3nm,0.6s,baz=315,slow=1.7,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.63** | **345** | P | **P** | **14 34 15.6** | **+1.2** |
| | 0.8nm,0.4s,baz=155,slow=8.6,SNR=6.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.80** | **350** | P | **P** | **14 35 00.8** | **+1.1** |
| | 1.2nm,0.5s,baz=156,slow=7.7,SNR=5.9 | | | | | | |

*ISK **07** 14:29:27.6, 37.21N×28.24E, h17km, MD2.5*
*ISCJB **07** 14:29:28.4±0.8, 37.18N±0.05×28.26E±0.05, h17km±12km, Error ellipse: s-maj=7.9km s-min=7.0km az=146.7*
*DDA **07** 14:29:28.2, 37.19N×28.21E, h7km, Md2.5*
*CSEM **07** 14:29:28.0±0.2, 37.19N×28.25E, h17km±2km, MD2.5, Error ellipse: s-maj=4.6km s-min=4.5km az=102.0*
**ISC 07 14:29:28.0**±1.0**, 37.19N**±0.04×**28.25E**±0.04**, h16km**±7km**, n17, σ0.46**/25**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.06** | **156** | ePG | **Pg** | **14 29 31.1** | **0.0** |
| **YER** | **Yerkesik** | **0.06** | **156** | ePg | **Pg** | **14 29 31.1** | **0.0** |
| **TURN** | **Turunc** | **0.42** | **138** | i P | **Pb** | **14 29 37.2** | **+0.2** |
| **TURN** | **Turunc** | **0.42** | **138** | P | **Pb** | **14 29 37.2** | **+0.2** |
| **AYDN** | **Tasoluk** | **0.56** | **328** | i P | **Pb** | **14 29 39.9** | **+0.5** |
| AYDN | | | | i S | **Sb** | **14 29 47.3** | **+0.2** |
| **AYDN** | **Tasoluk** | **0.56** | **328** | P | **Pb** | **14 29 39.9** | **+0.5** |
| AYDN | | | | S | **Sb** | **14 29 47.3** | **+0.2** |
| **BDRM** | **Kayabasi** | **0.66** | **259** | i P | **Pg** | **14 29 40.8** | **-0.1** |
| BDRM | | | | i S | **Sg** | **14 29 48.8** | **-0.9** |
| **BDRM** | **Kayabasi** | **0.66** | **259** | P | **Pg** | **14 29 40.8** | **-0.1** |
| BDRM | | | | S | **Sg** | **14 29 48.8** | **-0.9** |
| **BODT** | **Bodrum** | **0.76** | **261** | ePG | **Pg** | **14 29 43.0** | **+0.1** |
| BODT | | | | eSG | **Sg** | **14 29 53.8** | **+0.8** |
| **BODT** | **Bodrum** | **0.76** | **261** | ePg | **Pg** | **14 29 43.0** | **+0.1** |
| BODT | | | | eSg | **Sg** | **14 29 53.8** | **+0.8** |
| **DNZL** | **Cakiroluk** | **0.81** | **51** | P | **Pb** | **14 29 43.7** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.81** | **339** | ePG | **Pb** | **14 29 43.1** | **-0.5** |
| AYDB | | | | eSG | **Sg** | **14 29 54.8** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.81** | **339** | ePg | **Pb** | **14 29 43.2** | **-0.5** |
| AYDB | | | | eSg | **Sg** | **14 29 54.8** | **+0.3** |
| **NIS1** | **Nisyros Isl.** | **1.04** | **236** | ePG | **Pg** | **14 29 48.0** | **-0.2** |
| **NIS1** | **Nisyros Isl.** | **1.04** | **236** | ePg | **Pg** | **14 29 48.0** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.36** | **14** | ePN | **Pn** | **14 29 52.2** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.36** | **14** | ePn | **Pn** | **14 29 52.2** | **-0.2** |

*ISCJB **07** 15:02:17.6±0.7, 32.20N±0.03×115.23W±0.05, h15km±25km, Error ellipse: s-maj=7.8km s-min=5.1km az=159.1*
*ECX **07** 15:02:18.6±0.4, 32.18N×115.23W, h7km, MD2.4, ML2.6*
*MEX **07** 15:02:19.5±0.6, 32.26N×115.15W, h16km±999km, MD3.7*
**ISC 07 15:02:17.0**±1.0**, 32.18N**±0.03×**115.24W**±0.04**, h16km**±10km**, n17, σ0.32**/25**, 4C-7D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.23** | **9** | eP | **Pb** | **15 02 23.1** | **+0.3** |
| MBIG | | | | eS | **Sg** | **15 02 25.1** | **-0.5** |
| **MBIG** | **Mexicali** | **0.23** | **9** | ⇓eP | **Pb** | **15 02 23.1** | **+0.3** |
| **CPBX** | **Cerro Prieto** | **0.24** | **347** | ⇓eP | **Pb** | **15 02 23.1** | **0.0** |
| CPBX | | | | ⇓eP | **Pb** | **15 02 23.1** | **0.0** |
| CPBX | | | | eS | **Sg** | **15 02 26.6** | **+0.5** |
| CPBX | | | | ⇑e | | 15 02 29.1 | |
| CPBX | | | | IAML | | 15 02 29.1 | |
| | comp=E,3μm,0.2s | | | | | | |
| **EMSC** | **East Mesa** | **0.60** | **21** | eP | **Pg** | **15 02 29.0** | **+0.2** |
| **SGL** | **Mount Signal** | **0.62** | **319** | eP | **Pg** | **15 02 29.3** | **+0.1** |
| **RDX** | **Rancho Dawling** | **0.65** | **247** | ⇑eP | **Pb** | **15 02 30.5** | **+0.5** |
| RDX | | | | eS | **Sb** | **15 02 39.3** | **+0.4** |
| RDX | | | | IAML | | 15 02 40.1 | |
| | comp=N,156nm,0.2s | | | | | | |
| **COA** | **Coachella** | **0.69** | **8** | eP | **Pg** | **15 02 30.2** | **-0.3** |
| **ECBX** | **El Chinero** | **0.72** | **167** | ⇓eP | **Pb** | **15 02 31.5** | **+0.3** |
| ECBX | | | | eS | **Sb** | **15 02 41.6** | **+0.6** |
| ECBX | | | | ⇑e | | 15 02 43.0 | |
| ECBX | | | | IAML | | 15 02 43.0 | |
| | comp=E,258nm,0.3s | | | | | | |
| **YUH** | **Yuha Desert** | **0.74** | **309** | eP | **Pg** | **15 02 31.3** | **-0.2** |
| **RMX** | **La Rumorosa** | **0.82** | **301** | ⇓eP | **Pg** | **15 02 33.0** | **0.0** |
| RMX | | | | eS | **Sg** | **15 02 43.9** | **0.0** |
| RMX | | | | ⇓e | | 15 02 46.0 | |
| RMX | | | | IAML | | 15 02 46.0 | |
| | comp=N,171nm,0.2s | | | | | | |
| **IBP** | **Imperial Bould** | **0.86** | **304** | eP | **Pb** | **15 02 33.8** | **+0.1** |
| **SPIG** | **San Pedro Mart** | **1.15** | **190** | eP | **Pb** | **15 02 38.4** | **-0.3** |
| SPIG | | | | eS | **Sb** | **15 02 53.5** | **-0.1** |
| **SPIG** | **San Pedro Mart** | **1.15** | **190** | ⇓eP | **Pb** | **15 02 38.4** | **-0.3** |
| **SPX** | **San Pedro Mart** | **1.15** | **190** | eP | **Pb** | **15 02 38.9** | **+0.2** |
| **CBX** | **Cerro Bola** | **1.21** | **277** | i P | **Pn** | **15 02 39.1** | **-0.4** |
| CBX | | | | eS | **Sb** | **15 02 55.1** | **-0.1** |
| **CBX** | **Cerro Bola** | **1.21** | **277** | eP | **Pb** | **15 02 40.0** | **+0.3** |
| CBX | | | | e | | 15 02 57.1 | |
| CBX | | | | IAML | | 15 02 57.1 | |
| | comp=E,94nm,0.4s | | | | | | |
| **BAR** | **Barrett** | **1.31** | **293** | ⇑eP | **Pb** | **15 02 41.4** | **+0.2** |

*IDC **07** 15:07:41.0±5.8, 5.35S×133.65E, h0km, mb4.0/1, mb1 3.7/3, mb1mx3.4/25, mbtmp3.5/3, ML3.2/2, Error ellipse: s-maj=329.7km s-min=32.5km az=77.0*
*AUST **07** 15:07:40.1±8.2, 5.09S×134.11E, h0km, Error ellipse: s-maj=1.5km s-min=0.9km az=253.0*
*ISCJB **07** 15:07:41.1±0.8, 5.20S±0.07×134.1E±0.1, h28km, mb3.9/1, Error ellipse: s-maj=16.7km s-min=9.4km az=170.1*
**ISC 07 15:07:43.1**±1.0**, 5.17S**±0.10×**134.2E**±0.1**, h28km, n9, σ1.39**/9**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.95** | **319** | P | **Pn** | **15 08 26.7** | **-1.4** |
| | baz=2.9,SNR=60 | | | | | | |
| **SWI** | **Sorong** | **5.17** | **326** | P | **Pn** | **15 08 58.5** | **-0.2** |
| | baz=5.1,SNR=3.6 | | | | | | |
| **KDU** | **Kakadu** | **7.65** | **193** | P | **Pn** | **15 09 34.5** | **+1.7** |
| | baz=7.8,SNR=12 | | | | | | |
| **MTN** | **Manton Dam** | **8.19** | **201** | P | **Pn** | **15 09 41.2** | **+1.0** |
| | baz=8.3,SNR=17 | | | | | | |
| **KNRA** | **Kununurra** | **11.71** | **207** | P | **Pn** | **15 10 27.6** | **-0.9** |
| | baz=12,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.68** | **179** | Pn | **Pn** | **15 11 07.5** | **-1.6** |
| | 0.1nm,0.3s,baz=356,slow=13,SNR=3.0 | | | | | | |
| WRA | | | | Sn | Sn | 15 13 41.7 | -9.3 |
| | 0.1nm,0.3s,baz=356,slow=26,SNR=2.7 | | | | | | |
| **RABL** | **Rabaul** | **17.96** | **88** | P | **Pn** | **15 11 51.1** | **+0.1** |
| | baz=18,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **18.39** | **181** | P | **P** | **15 11 55.5** | **-0.5** |
| | 0.1nm,0.3s,baz=3.0,slow=12,SNR=19 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.06** | **325** | P | **P** | **15 18 47.9** | **+1.4** |
| | 0.9nm,0.6s,baz=112,slow=7.3,SNR=4.8 | | | | | | |

**IDC 07 15:10:41.6**±4.5**, 16.28S×168.10E, h220km**±62km**, mb3.3**/7**, mb1 3.5**/8**, mb1mx3.3**/25**, mbtmp3.9**/8**, Error ellipse: s-maj=66.6km s-min=27.5km az=141.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **5.97** | **195** | P | Pn | 15 12 09.2 | +0.3 |
| | 3.6nm,0.3s,baz=356,slow=8.0,SNR=70 | | | | | | |
| DZM | | | | S | S | 15 13 18.5 | +0.2 |
| | 2.1nm,0.3s,baz=1.2,slow=18,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.26** | **258** | P | P | 15 16 49.2 | -0.6 |
| | 0.5nm,0.7s,baz=83,slow=8.3,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **32.91** | **252** | P | P | 15 16 55.6 | +0.2 |
| | 1.4nm,0.6s,baz=78,slow=8.8,SNR=12 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **59.64** | **332** | P | P | 15 20 21.5 | -1.1 |
| | 1.7nm,0.8s,baz=163,slow=7.2,SNR=4.4 | | | | | | |
| **KSRS** | **Korea Array** | **65.46** | **326** | P | P | 15 21 01.2 | +0.1 |
| | 0.5nm,0.7s,baz=152,slow=5.6,SNR=4.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **68.62** | **333** | P | P | 15 21 21.7 | +0.9 |
| | 1.9nm,0.7s,baz=128,slow=6.1,SNR=5.8 | | | | | | |
| **SONM** | **Songino Array** | **84.21** | **323** | P | P | 15 22 48.9 | +0.5 |
| | 0.7nm,0.5s,baz=143,slow=5.2,SNR=4.3 | | | | | | |
| **ILAR** | **Eielson Array** | **87.75** | **18** | P | P | 15 23 04.5 | -0.6 |
| | 0.2nm,0.5s,baz=234,slow=4.9,SNR=5.0 | | | | | | |

**IDC 07 15:10:57.0**±2.2**, 6.93S×151.02E, h0km, mb3.4**/3**, mb1 3.8**/4**, mb1mx3.5**/26**, mbtmp3.6**/4**, ML1.5**/1**, Error ellipse: s-maj=127.6km s-min=28.0km az=130.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.54** | **237** | Pn | Pn | 15 12 07.3 | +0.2 |
| | 1.5nm,0.3s,baz=67,slow=7.7,SNR=6.4 | | | | | | |
| PMG | | | | Sn | Sn | 15 12 55.2 | -5.5 |
| | 3.5nm,0.3s,baz=132,slow=15,SNR=6.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.72** | **230** | P | P | 15 15 37.8 | -1.5 |
| | 1.9nm,0.8s,baz=56,slow=12,SNR=8.0 | | | | | | |
| **ASAR** | **Alice Springs** | **23.39** | **223** | P | P | 15 16 08.4 | +0.6 |
| | 0.3nm,0.4s,baz=53,slow=8.9,SNR=7.4 | | | | | | |
| **ILAR** | **Eielson Array** | **84.79** | **22** | P | P | 15 23 33.1 | 0.0 |
| | 0.4nm,0.7s,baz=245,slow=5.8,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.19** | **284** | PKPbc | PKPbc | 15 30 48.4 | -0.3 |
| | 0.2nm,0.3s,baz=92,slow=2.5,SNR=5.4 | | | | | | |

*ISCJB **07** 16:02:40.0±0.7, 11.30N±0.03×62.06W±0.04, h126km±7km, Error ellipse: s-maj=7.8km s-min=4.5km az=32.7*
*TRN **07** 16:02:41.0, 11.31N×62.03W, h127km, MD3.2*
*FUNV **07** 16:02:42.4, 11.27N×62.01W, h121km, MW2.9*
**ISC 07 16:02:38.8**±1.4**, 11.27N**±0.04×**62.03W**±0.05**, h143km**±9km**, n21, σ1.70**/35**, 3C, Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TCE** | **Chacachacare** | **0.63** | **155** | eP | **Pn** | **16 03 00.7** | **+0.5** |
| TCE | | | | eS | **Sn** | **16 03 15.5** | **-0.9** |
| **GUIV** | **Guiria** | **0.65** | **197** | eP | **Pn** | **16 03 01.0** | **+0.8** |
| GUIV | | | | eS | **Sn** | **16 03 14.8** | **-1.7** |
| **TRN** | **Trinidad (W)** | **0.87** | **135** | ⇑iP | **Pn** | **16 03 03.5** | **+1.7** |
| TRN | | | | eS | **Sn** | **16 03 18.5** | **-0.9** |
| **GRGR** | **Grenville** | **0.93** | **23** | ⇑iP | **Pn** | **16 03 02.6** | **+0.2** |
| GRGR | | | | eS | **Sn** | **16 03 18.6** | **-1.7** |
| **TPP** | **Pointe-a-Pierr** | **1.11** | **149** | eS | **Sn** | **16 03 23.0** | **0.0** |
| **TBH** | **Brigand Hill** | **1.23** | **130** | eS | **Sn** | **16 03 24.5** | **-0.5** |
| **CRUV** | **Carupano** | **1.32** | **244** | eP | **Pn** | **16 03 06.9** | **+0.9** |
| CRUV | | | | eS | **Sn** | **16 03 25.2** | **-1.5** |
| **GUNV** | **Guanoco** | **1.42** | **219** | eP | **Pn** | **16 03 08.7** | **+1.7** |
| GUNV | | | | eS | **Sn** | **16 03 28.7** | **+0.2** |
| **TOSP** | **Speyside** | **1.47** | **89** | ⇑iP | **Pn** | **16 03 08.4** | **+1.0** |
| TOSP | | | | eS | **Sn** | **16 03 28.7** | **-0.6** |
| **SVB** | **Belmont** | **2.13** | **21** | eP | **Pn** | **16 03 15.6** | **+0.5** |
| SVB | | | | eS | **Sn** | **16 03 41.9** | **-1.1** |
| **SVV** | **Soufriere Volc** | **2.18** | **21** | eP | **Pn** | **16 03 16.7** | **+1.0** |
| SVV | | | | eS | **Sn** | **16 03 43.6** | **-0.6** |
| **SSV** | **Crater Summit** | **2.20** | **22** | eS | **Sn** | **16 03 44.2** | **-0.4** |
| **ORIV** | **Oritupano** | **2.58** | **212** | eP | **Pn** | **16 03 22.5** | **+2.0** |
| ORIV | | | | eS | **Sn** | **16 03 51.9** | **-0.9** |
| **PCRV** | **Puerto La Cruz** | **2.78** | **247** | eP | **Pn** | **16 03 24.3** | **+1.1** |
| PCRV | | | | eS | **Sn** | **16 03 56.4** | **-1.1** |
| **PRGV** | **PARIAGUAN** | **3.59** | **226** | eP | **Pn** | **16 03 34.9** | **+1.3** |
| **GURV** | **El Guri** | **3.64** | **197** | eP | **Pn** | **16 03 36.7** | **+2.4** |
| GURV | | | | eS | **Sn** | **16 04 15.6** | **-1.6** |
| **CUPV** | **Cœpira** | **3.89** | **252** | eP | **Pn** | **16 03 39.8** | **+2.3** |
| **BIRV** | **Birongo** | **4.24** | **260** | eP | **Pn** | **16 03 44.8** | **+2.7** |
| **LUEV** | **Luepa** | **5.42** | **174** | eP | **Pn** | **16 03 58.6** | **+0.7** |
| LUEV | | | | eS | **Sn** | **16 04 56.0** | **-3.7** |
| **TURV** | **Turiamo** | **5.77** | **262** | eP | **Pn** | **16 04 04.5** | **+2.2** |
| **BAUV** | **El Baul** | **6.36** | **249** | eP | **Pn** | **16 04 10.6** | **+0.3** |
| BAUV | | | | eS | **Sn** | **16 05 17.4** | **-4.4** |

**MAN 07 16:08:55, 16.30N×120.82E, h43km, mb4.7, ML3.6, MS3.5, 1C, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BCPH** | **Baguio City Da** | **0.24** | **289** | ⇑iP | Pn | 16 09 04.3 | +1.2 |
| BCPH | | | | i S | Sn | 16 09 11.8 | +2.9 |
| **BOLP** | **Bolinao** | **0.87** | **275** | eP | Pn | 16 09 16.7 | +5.8 |
| **BALP** | **Baler** | **0.92** | **127** | eP | Pn | 16 09 13.1 | +1.5 |
| BALP | | | | eS | Sn | 16 09 25.9 | +2.3 |
| **CAUP** | **Cauayan** | **1.16** | **56** | eP | Pn | 16 09 14.8 | 0.0 |
| CAUP | | | | eS | Sn | 16 09 30.3 | +0.9 |
| **ABRA** | **Dolores** | **1.34** | **356** | eP | Pn | 16 09 19.0 | +1.7 |
| **APYP** | **Conner** | **1.60** | **15** | eP | Pn | 16 09 23.1 | +2.2 |

**IDC 07 16:20:53.5**±999.0**, 53.73N×3.58E, h0km, Error ellipse: s-maj=468.8km s-min=145.6km az=123.0, North Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I26DE** | **FREYUNG INFRAS** | **8.01** | **123** | i | | 17 08 00.0 | |
| | baz=313,slow=331,SNR=1.8 | | | | | | |
| **I48TN** | **KESRA INFRASON** | **18.36** | **165** | i | | 18 12 00.0 | |
| | baz=349,slow=319,SNR=0.3 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **32.95** | **73** | i | | 19 45 40.0 | |
| | baz=301,slow=308,SNR=4.4 | | | | | | |

**IDC 07 16:23:33.7**±999.0**, 56.81N×34.38E, h0km, Error ellipse: s-maj=842.7km s-min=47.2km az=92.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **1.57** | **92** | i | | 16 32 10.0 | |
| | baz=276,slow=309,SNR=2.2 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **15.39** | **105** | i | | 17 53 50.0 | |
| | baz=300,slow=330,SNR=0.4 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **28.27** | **74** | i | | 19 20 30.0 | |
| | baz=296,slow=323,SNR=1.2 | | | | | | |

*ISCJB **07** 16:28:18.3±0.3, 4.91S±0.03×126.81E±0.05, h400km, mb3.7/9, Error ellipse: s-maj=6.5km s-min=4.4km az=20.7*
*IDC **07** 16:28:18.6±1.0, 4.90S×126.77E, h401km±11km, mb3.4/9, mb1 3.6/14, mb1mx3.4/33, mbtmp4.3/14, Error ellipse: s-maj=16.7km s-min=8.3km az=92.0*
*DJA **07** 16:28:19.7±0.4, 5°S±4°×12°7E±°, h397km±7km, M4.3/17, mb4.3/11, mB4.9/7, MLv4.5/17, Mw(mB)4.2/7*
*AUST **07** 16:28:19.1±0.0, 4.86S×126.77E, h414km, Error ellipse: s-maj=1.5km s-min=1.2km az=348.0*
**ISC 07 16:28:19.0**±0.5**, 4.93S**±0.05×**126.84E**±0.06**, h400km, n48, σ1.32**/55**, mb3.8**/9**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NLAI** | **Namlea** | **1.69** | **9** | P | **Pn** | **16 29 13.5** | **+0.3** |
| **AAI** | **Ambon** | **1.83** | **48** | P | **Pn** | **16 29 14.6** | **+0.7** |
| **MSAI** | **Masohi** | **2.61** | **53** | P | **Pn** | **16 29 18.2** | **-0.9** |
| MSAI | | | | S | **S** | **16 30 06.1** | **-1.6** |
| **SANI** | **Sanana** | **2.98** | **343** | P | **Pn** | **16 29 22.4** | **+0.3** |
| **BNDI** | **Bandanaira** | **3.08** | **83** | P | **Pn** | **16 29 23.1** | **+0.3** |
| **LBMI** | **Labuha** | **4.31** | **9** | P | **Pn** | **16 29 35.5** | **+1.4** |
| **SOEI** | **Soe** | **5.44** | **208** | P | **Pn** | **16 29 47.0** | **+1.3** |
| | baz=5.5,SNR=24 | | | | | | |
| **SOEI** | **Soe** | **5.44** | **208** | P | **Pn** | **16 29 46.9** | **+1.2** |
| | 84nm,0.9s,0.8nm | | | | | | |
| **LUWI** | **Luwuk** | **5.60** | **313** | P | **Pn** | **16 29 47.6** | **+0.2** |
| | baz=5.5,SNR=3.8 | | | | | | |
| **LUWI** | **Luwuk** | **5.60** | **313** | P | **Pn** | **16 29 47.5** | **+0.2** |
| | 51nm,0.8s,521nm0.2nm | | | | | | |
| **FAKI** | **Fak Fak** | **5.75** | **70** | P | **Pn** | **16 29 49.6** | **+0.6** |
| | baz=5.8,SNR=59 | | | | | | |
| **FAKI** | **Fak Fak** | **5.75** | **70** | P | **Pn** | **16 29 49.6** | **+0.6** |
| | 72nm,0.8s,4μm0.6nm | | | | | | |
| FAKI | | | | S | **S** | **16 31 00.0** | **-2.2** |
| | 72nm,0.8s,4μm0.6nm | | | | | | |
| **MMRI** | **Maumere** | **5.87** | **231** | P | **Pn** | **16 29 51.9** | **+1.7** |
| | 118nm,1.0s,0.4nm | | | | | | |
| **SWI** | **Sorong** | **5.98** | **48** | P | **Pn** | **16 29 52.9** | **+1.5** |
| | baz=6.0,SNR=29 | | | | | | |
| **SWI** | **Sorong** | **5.98** | **48** | P | **Pn** | **16 29 52.8** | **+1.4** |
| | 101nm,0.8s,1μm0.4nm | | | | | | |
| **SIJI** | **Sorong** | **5.98** | **48** | P | **Pn** | **16 29 52.2** | **+0.8** |
| | 9.9nm,0.3s,baz=223,slow=4.4,SNR=80 | | | | | | |
| SIJI | | | | S | **S** | **16 31 05.6** | **-1.1** |
| | 4.3nm,0.3s,baz=204,slow=20,SNR=9.3 | | | | | | |
| **BATI** | **Baumata** | **6.12** | **211** | P | **Pn** | **16 29 53.5** | **+0.6** |
| | 17nm,0.3s,baz=85,slow=3.3,SNR=26 | | | | | | |
| BATI | | | | S | **S** | **16 31 06.9** | **-2.6** |
| | 16nm,0.3s,baz=90,slow=19,SNR=12 | | | | | | |
| **BATI** | **Baumata** | **6.12** | **211** | P | **Pn** | **16 29 53.8** | **+0.8** |
| | 33nm,0.9s,976nm0.4nm | | | | | | |
| **KMSI** | **Cibinong** | **6.17** | **332** | P | **Pn** | **16 29 53.9** | **+0.5** |
| | 83nm,0.9s,0.3nm | | | | | | |
| **GTOI** | **Gorontalo** | **6.72** | **325** | P | **P** | **16 30 02.1** | **+1.9** |
| | 85nm,0.7s,334μm0.4nm | | | | | | |
| **MRSI** | **Marisa** | **7.26** | **317** | P | **Pn** | **16 30 05.5** | **-0.2** |
| | 31nm,0.6s,4μm0.4nm | | | | | | |
| **KDU** | **Kakadu** | **9.51** | **145** | P | **Pn** | **16 30 32.9** | **+1.6** |
| | baz=9.6,SNR=4.2 | | | | | | |
| **KNRA** | **Kununurra** | **10.85** | **170** | P | **Pn** | **16 30 47.6** | **+0.7** |
| | baz=11,SNR=26 | | | | | | |
| **JAY** | **Jayapura** | **14.04** | **81** | P | **P** | **16 31 22.8** | **+1.6** |
| | 0.8nm,0.3s,baz=231,slow=11,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **16.62** | **155** | P | **P** | **16 31 49.4** | **+0.5** |
| | 3.3nm,0.3s,baz=332,slow=10,SNR=28 | | | | | | |
| WRA | | | | S | **S** | **16 34 38.1** | **-4.5** |
| | 1.4nm,0.3s,baz=328,slow=20,SNR=27 | | | | | | |
| **COEN** | **Coen** | **18.43** | **120** | P | **P** | **16 32 09.2** | **+1.0** |
| | baz=19,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **19.84** | **161** | P | **P** | **16 32 23.0** | **+1.0** |
| | 2.7nm,0.3s,baz=352,slow=14,SNR=278 | | | | | | |
| ASAR | | | | S | **S** | **16 35 41.5** | **+0.9** |
| | 0.1nm,0.3s,baz=350,slow=20,SNR=8.6 | | | | | | |
| ASAR | | | | ScP | **ScP** | **16 39 17.0** | **-1.6** |
| | 0.0nm,0.3s,baz=349,slow=2.4,SNR=4.7 | | | | | | |
| **QIS** | **Mount Isa** | **19.89** | **143** | P | **P** | **16 32 23.9** | **+1.4** |
| | baz=20,SNR=43 | | | | | | |
| **WRKA** | **Warakurna** | **20.05** | **176** | P | **P** | **16 32 25.0** | **+1.1** |
| | baz=20,SNR=41 | | | | | | |
| **GIRL** | **Giralia** | **21.42** | **214** | P | **P** | **16 32 37.9** | **+1.5** |
| | baz=22,SNR=4.5 | | | | | | |
| **MEEK** | **Meekatharra** | **22.98** | **199** | P | **P** | **16 32 50.4** | **-0.2** |
| | baz=23,SNR=20 | | | | | | |
| **MORW** | **Morawa** | **26.10** | **202** | P | **P** | **16 33 18.8** | **+0.4** |
| | baz=26,SNR=3.8 | | | | | | |
| **KMBL** | **Kambalda** | **26.71** | **189** | P | **P** | **16 33 24.2** | **+0.4** |
| | baz=27,SNR=6.1 | | | | | | |
| **BLDU** | **Ballidu** | **27.28** | **199** | P | **P** | **16 33 28.4** | **-0.4** |
| | baz=27,SNR=8.4 | | | | | | |
| **KLBR** | **Kellerberrin** | **27.87** | **197** | P | **P** | **16 33 34.1** | **+0.1** |
| | baz=28,SNR=17 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **29.27** | **197** | P | **P** | **16 33 46.6** | **+0.4** |
| | 10nm,0.4s,baz=333,slow=0.0,SNR=18 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **29.27** | **197** | P | **P** | **16 33 46.8** | **+0.4** |
| | baz=29,SNR=5.6 | | | | | | |
| **HTT** | **Hallett** | **30.51** | **160** | P | **P** | **16 33 56.1** | **-1.1** |
| | baz=31,SNR=8.5 | | | | | | |
| **RKGY** | **Rocky Gully** | **30.92** | **196** | P | **P** | **16 34 02.5** | **+1.9** |
| | baz=31,SNR=5.1 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.84** | **148** | P | **P** | **16 34 10.5** | **+1.8** |
| | baz=32,SNR=6.1 | | | | | | |
| **KSRS** | **Korea Array** | **42.17** | **1** | P | **P** | **16 35 34.3** | **0.0** |
| | 1.0nm,0.5s,baz=178,slow=8.7,SNR=5.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **42.60** | **14** | P | **P** | **16 35 36.4** | **-1.4** |
| | 1.5nm,0.7s,baz=192,slow=8.8,SNR=4.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.12** | **5** | P | **P** | **16 36 26.6** | **-1.2** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 2.4nm,0.5s,baz=200,slow=7.2,SNR=7.4 | | | | | | |
| SONM | Songino Array | 55.53 | 343 | P | P | 16 37 13.7 | -0.8 |
| | 0.7nm,0.5s,baz=163,slow=6.0,SNR=2.9 | | | | | | |
| PETK | Petropavlovsk- | 63.41 | 20 | P | P | 16 38 07.5 | +0.1 |
| | 3.3nm,0.7s,baz=231,slow=3.1,SNR=6.3 | | | | | | |
| MKAR | Makanchi Array | 64.79 | 328 | P | P | 16 38 15.7 | -0.8 |
| | 1.1nm,0.4s,baz=114,slow=8.6,SNR=15 | | | | | | |
| ZALV | Zalesovo Beam | 68.36 | 335 | P | P | 16 38 37.0 | -1.5 |
| | 0.8nm,0.4s,baz=103,slow=4.7,SNR=4.4 | | | | | | |
| VNDA | Vanda | 74.89 | 173 | P | P | 16 39 15.3 | -1.3 |
| | 0.4nm,0.7s,baz=336,slow=6.5,SNR=3.5 | | | | | | |

*MOS **07** 16:41:17.2±2.9, 54.°23N×166.°64E, h17km, mb4.5/1, Error ellipse: s-maj=17.0km s-min=11.9km az=6.4*
*KRSC **07** 16:41:17.2±2.1, 54.°21N×166.°64E, h17km±36km, ML4.3*
**ISC 07 16:41:17.7**±3.5**, 54.°25N**±0.°08×**167.°2E**±0.°2**, h35km, n33,** σ**1.°65**/55**, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BKI | Bering | 1.19 | 324 | *i* P | Pn | 16 41 35.2 | -2.6 |
| BKI | | | | *e*S | Sn | 16 41 50.1 | -2.6 |
| BKI | Bering | 1.19 | 324 | PN | Pn | 16 41 35.2 | -2.6 |
| BKI | | | | S | Sn | 16 41 50.1 | -2.6 |
| KBTR | Krutoberegovo | 3.18 | 310 | *e*P | Pn | 16 42 05.3 | +0.1 |
| KBTR | | | | *e*S | Sn | 16 42 42.7 | +0.9 |
| KBTR | Krutoberegovo | 3.18 | 310 | PN | Pn | 16 42 05.3 | +0.1 |
| KBTR | | | | S | Sn | 16 42 42.7 | +0.9 |
| MKZ | Mys Kozlova | 3.20 | 278 | *e*P | Pn | 16 42 05.4 | -0.1 |
| MKZ | | | | *e*S | Sn | 16 42 40.6 | -1.8 |
| MKZ | Mys Kozlova | 3.20 | 278 | PN | Pn | 16 42 05.4 | -0.1 |
| MKZ | | | | S | Sn | 16 42 40.6 | -1.8 |
| KZV | Kizimen | 4.09 | 285 | *e*P | Pn | 16 42 18.6 | +0.7 |
| KZV | | | | *e*S | Sn | 16 43 02.9 | -1.7 |
| TUMR | Tumrok | 4.21 | 287 | *e*P | Pn | 16 42 21.7 | +2.3 |
| TUMR | Tumrok | 4.21 | 287 | PN | Pn | 16 42 21.7 | +2.3 |
| KMNR | Kamenistaya | 4.28 | 293 | *e*P | Pn | 16 42 21.2 | +0.8 |
| KMNR | Kamenistaya | 4.28 | 293 | PN | Pn | 16 42 21.2 | +0.8 |
| SPN | Mys Shipunski | 4.41 | 258 | *e*P | Pn | 16 42 23.1 | +1.0 |
| SPN | | | | *e*S | Sn | 16 43 10.1 | -2.1 |
| SPN | Mys Shipunski | 4.41 | 258 | PN | Pn | 16 42 23.1 | +1.0 |
| SPN | | | | S | Sn | 16 43 10.1 | -2.1 |
| KII | Karymskiy | 4.55 | 270 | P | Pn | 16 42 27.3 | +3.1 |
| KII | | | | *e*S | Sn | 16 43 15.0 | -0.9 |
| KII | Karymskiy | 4.55 | 270 | PN | Pn | 16 42 27.3 | +3.1 |
| KII | | | | S | Sn | 16 43 15.0 | -0.9 |
| NLC | Nalytchevo | 4.78 | 260 | *e*P | Pn | 16 42 28.3 | +1.1 |
| NLC | | | | *e*S | Sn | 16 43 19.9 | -1.4 |
| NLC | Nalytchevo | 4.78 | 260 | PN | Pn | 16 42 28.3 | +1.1 |
| NLC | | | | S | Sn | 16 43 19.9 | -1.4 |
| SDLR | Sedlovina | 5.02 | 262 | *e*P | Pn | 16 42 32.1 | +1.5 |
| SDLR | | | | *e*S | Sn | 16 43 26.8 | -0.6 |
| SDLR | Sedlovina | 5.02 | 262 | PN | Pn | 16 42 32.1 | +1.5 |
| SDLR | | | | S | Sn | 16 43 26.8 | -0.6 |
| SMAR | Somma | 5.07 | 262 | *e*P | Pn | 16 42 33.8 | +2.4 |
| SMAR | Somma | 5.07 | 262 | PN | Pn | 16 42 33.8 | +2.4 |
| AVH | Avacha | 5.11 | 262 | *e*P | Pn | 16 42 33.2 | +1.4 |
| AVH | | | | *e*S | Sn | 16 43 29.3 | -0.2 |
| AVH | Avacha | 5.11 | 262 | PN | Pn | 16 42 33.2 | +1.4 |
| AVH | | | | S | Sn | 16 43 29.3 | -0.2 |
| KRX | Arik | 5.14 | 263 | *e*P | Pn | 16 42 33.2 | +1.0 |
| KRX | | | | *e*S | Sn | 16 43 29.5 | -0.8 |
| PET | Petropavlovsk | 5.22 | 260 | *e*P | Pn | 16 42 34.3 | +1.0 |
| PET | | | | *e*S | Sn | 16 43 31.4 | -0.8 |
| PET | Petropavlovsk | 5.22 | 260 | *e*PN | Pn | 16 42 36.8 | +3.5 |
| PET | | | | *e*S | Sn | 16 43 30.5 | -1.7 |
| PET | | | | smax | smax | | |
| | comp=N,59nm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,49nm,0.6s | | | | | | |
| GNL | Ganaly | 5.49 | 268 | *e*P | Pn | 16 42 39.0 | +2.0 |
| GNL | | | | *e*S | Sn | 16 43 39.7 | +0.9 |
| GNL | Ganaly | 5.49 | 268 | PN | Pn | 16 42 39.0 | +2.0 |
| GNL | | | | S | Sn | 16 43 39.7 | +0.9 |
| RUS | Russkaya | 5.50 | 254 | *e*P | Pn | 16 42 37.9 | +0.8 |
| RUS | | | | *e*S | Sn | 16 43 37.0 | -2.1 |
| RUS | Russkaya | 5.50 | 254 | PN | Pn | 16 42 37.9 | +0.8 |
| MTVR | Mutnovka | 5.67 | 255 | *e*P | Pn | 16 42 41.8 | +2.2 |
| MTVR | | | | *e*S | Sn | 16 43 42.0 | -1.5 |
| APC | Apacha | 6.12 | 262 | *e*S | Sn | 16 43 53.7 | -0.5 |
| SKR | Severo-Kuril's | 7.64 | 247 | *e*P | Pn | 16 43 07.6 | +1.1 |
| SKR | | | | *e*S | Sn | 16 44 27.8 | -3.9 |

*ISCJB **07** 17:17:06.3±0.3, 43.°84S±0.°03×172.°60E±0.°05, h16km, mb3.5/2, MS3.1/2, Error ellipse: s-maj=6.6km s-min=2.8km az=43.8*
*IDC **07** 17:17:08.5±1.8, 43.°31S×172.°27E, h0km, mb3.6/2, mb1 3.9/3, mb1mx3.7/14, mbtmp3.7/3, ML3.6/1, MS3.2/3, Ms1 3.3/3, ms1mx2.9/15, Error ellipse: s-maj=46.7km s-min=12.8km az=147.0*
*NEIC **07** 17:17:08.8, 43.°74S×172.°34E, h5km, ML4.4(WEL), After WEL.*
*NEIC Felt [IV] at Christchurch, Halswell, Leeston, Rangiora and Riccarton. Felt widely in Canterbury.*
*WEL **07** 17:17:09.0±0.1, 43.°72S×172.°34E, h5km, ML4.4/53, Error ellipse: s-maj=1.0km s-min=0.8km az=0.0*
*WEL Felt in the Canterbury region, maximum reported intensity MM 6.*
**ISC 07 17:17:08.2**±0.8**, 43.°73S**±0.°04×**172.°43E**±0.°03**, h16km, n147,** σ**0.°99**/139**, 8C-11D, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MQZ | McQueen's Vall | 0.16 | 82 | ⇓PG | Pb | 17 17 13.8 | +0.9 |
| MQZ | | | | SG | Sb | 17 17 17.0 | +1.0 |
| MQZ | | | | AML | AML | 17 17 17.3 | |
| MQZ | McQueen's Vall | 0.16 | 82 | ⇓Pg | Pb | 17 17 13.8 | +0.9 |
| MQZ | | | | Sg | Sb | 17 17 17.0 | +1.0 |
| CRLZ | Canterbury Las | 0.21 | 42 | ⇓PG | Pb | 17 17 14.2 | +0.6 |
| CRLZ | | | | SG | Sb | 17 17 17.6 | +0.4 |
| CRLZ | | | | AML | AML | 17 17 18.2 | |
| CRLZ | | | | AML | AML | 17 17 18.3 | |
| CRLZ | | | | AML | AML | 17 17 18.3 | |
| CRLZ | Canterbury Las | 0.21 | 42 | ⇓Pg | Pb | 17 17 14.2 | +0.6 |
| CRLZ | | | | Sg | Sb | 17 17 17.6 | +0.4 |
| OXZ | Oxford | 0.49 | 325 | ⇑PG | Pg | 17 17 17.8 | -0.2 |
| OXZ | Oxford | 0.49 | 325 | ⇑Pg | Pg | 17 17 17.9 | -0.2 |
| LTZ | Lake Taylor | 0.95 | 353 | ⇑P* | Pb | 17 17 26.6 | +0.2 |
| LTZ | | | | S* | Sg | 17 17 39.5 | +0.2 |
| LTZ | | | | AML | AML | 17 17 44.8 | |
| LTZ | Lake Taylor | 0.95 | 353 | P* | Pb | 17 17 26.6 | +0.2 |
| RPZ | Rata Peaks | 1.00 | 270 | ⇓P* | Pb | 17 17 27.1 | 0.0 |
| RPZ | | | | AML | AML | 17 17 42.9 | |
| RPZ | | | | AML | AML | 17 17 44.1 | |
| RPZ | Rata Peaks | 1.00 | 270 | Pg | Pb | 17 17 27.1 | 0.0 |
| | 3μm,0.3s,baz=107,slow=4.1,SNR=7935 | | | | | | |
| RPZ | | | | Lg | Lg | 17 17 40.1 | |
| | 727nm,0.3s,baz=24,slow=19,SNR=27 | | | | | | |
| RPZ | | | | LR | LR | 17 17 51.1 | |
| | comp=Z,358nm,20.1s,baz=224,slow=44 | | | | | | |
| WVZ | Waitaha Valley | 1.40 | 297 | ⇓P* | Pn | 17 17 32.9 | -0.1 |
| WVZ | | | | AML | AML | 17 17 55.1 | |
| WVZ | | | | AML | AML | 17 17 56.0 | |
| WVZ | Waitaha Valley | 1.40 | 297 | P* | Pn | 17 17 32.9 | -0.1 |
| KHZ | Kahutara | 1.54 | 32 | ⇑PN | Pn | 17 17 35.2 | +0.2 |
| KHZ | | | | AML | AML | 17 18 03.6 | |
| KHZ | | | | AML | AML | 17 18 07.3 | |
| KHZ | Kahutara | 1.54 | 32 | Pn | Pn | 17 17 35.2 | +0.2 |
| LBZ | Lake Benmore | 1.75 | 247 | ⇓PN | Pn | 17 17 38.2 | +0.3 |
| LBZ | | | | AML | AML | 17 18 05.6 | |
| LBZ | | | | AML | AML | 17 18 12.9 | |
| LBZ | Lake Benmore | 1.75 | 247 | Pn | Pn | 17 17 38.2 | +0.3 |
| ODZ | Otahua Downs | 1.83 | 224 | ⇑PN | Pn | 17 17 39.3 | +0.2 |
| ODZ | | | | AML | AML | 17 18 15.8 | |
| ODZ | | | | AML | AML | 17 18 18.4 | |
| ODZ | Otahua Downs | 1.83 | 224 | Pn | Pn | 17 17 39.3 | +0.2 |
| FOZ | Fox Glacier | 2.00 | 274 | ⇑PN | Pn | 17 17 40.9 | -0.4 |
| FOZ | | | | AML | AML | 17 18 19.5 | |
| FOZ | | | | AML | AML | 17 18 19.7 | |
| FOZ | Fox Glacier | 2.00 | 274 | Pn | Pn | 17 17 40.9 | -0.4 |
| THZ | Tophouse | 2.00 | 10 | PN | Pn | 17 17 41.0 | -0.4 |
| THZ | | | | AML | AML | 17 18 20.4 | |
| THZ | | | | AML | AML | 17 18 20.9 | |
| THZ | Tophouse | 2.00 | 10 | Pn | Pn | 17 17 41.0 | -0.4 |
| DSZ | Denniston Nort | 2.04 | 347 | PN | Pn | 17 17 41.8 | -0.1 |
| DSZ | | | | AML | AML | 17 18 11.6 | |
| DSZ | | | | AML | AML | 17 18 18.2 | |
| DSZ | Denniston Nort | 2.04 | 347 | Pn | Pn | 17 17 41.8 | -0.1 |
| BSWZ | Blackbirch Sta | 2.28 | 28 | PN | Pn | 17 17 45.5 | +0.3 |
| BSWZ | | | | AML | AML | 17 18 15.9 | |
| BSWZ | | | | AML | AML | 17 18 16.7 | |
| BSWZ | Blackbirch Sta | 2.28 | 28 | Pn | Pn | 17 17 45.5 | +0.3 |
| HHSZ | Highcliff Hill | 2.52 | 211 | PN | Pn | 17 17 48.2 | -0.3 |
| HHSZ | Highcliff Hill | 2.52 | 211 | Pn | Pn | 17 17 48.2 | -0.3 |
| TUWZ | Tuamarina | 2.56 | 26 | PN | Pn | 17 17 49.0 | 0.0 |
| TUWZ | | | | AML | AML | 17 18 21.9 | |
| TUWZ | | | | AML | AML | 17 18 27.8 | |
| TUWZ | Tuamarina | 2.56 | 26 | Pn | Pn | 17 17 49.0 | 0.0 |
| NNZ | Nelson | 2.61 | 16 | PN | Pn | 17 17 50.2 | +0.6 |
| NNZ | | | | AML | AML | 17 18 27.2 | |
| NNZ | | | | AML | AML | 17 18 27.3 | |
| NNZ | Nelson | 2.61 | 16 | Pn | Pn | 17 17 50.2 | +0.6 |
| JCZ | Jackson Bay | 2.68 | 261 | ⇑PN | Pn | 17 17 50.5 | -0.2 |
| JCZ | | | | AML | AML | 17 18 36.5 | |
| JCZ | | | | AML | AML | 17 18 39.2 | |
| JCZ | Jackson Bay | 2.68 | 261 | Pn | Pn | 17 17 50.5 | -0.2 |
| WKZ | Wanaka | 2.69 | 245 | PN | Pn | 17 17 50.7 | -0.1 |
| WKZ | | | | AML | AML | 17 18 44.1 | |
| WKZ | | | | AML | AML | 17 18 50.5 | |
| WKZ | Wanaka | 2.69 | 245 | Pn | Pn | 17 17 50.7 | -0.1 |
| EAZ | Earnscleugh | 2.69 | 235 | ⇓PN | Pn | 17 17 51.0 | +0.1 |
| EAZ | | | | AML | AML | 17 18 37.9 | |
| EAZ | | | | AML | AML | 17 18 45.5 | |
| EAZ | Earnscleugh | 2.69 | 235 | Pn | Pn | 17 17 51.0 | +0.1 |
| TCW | Tory Channel | 2.86 | 29 | PN | Pn | 17 17 53.0 | -0.2 |
| TCW | | | | AML | AML | 17 18 28.5 | |
| TCW | | | | AML | AML | 17 18 28.6 | |
| TCW | Tory Channel | 2.86 | 29 | Pn | Pn | 17 17 53.0 | -0.2 |
| QRZ | Quartz Range | 2.90 | 1 | PN | Pn | 17 17 53.4 | -0.3 |
| QRZ | | | | AML | AML | 17 18 07.0 | |
| QRZ | | | | AML | AML | 17 18 31.8 | |
| QRZ | Quartz Range | 2.90 | 1 | Pn | Pn | 17 17 53.4 | -0.3 |
| BHW | Baring Head | 2.94 | 39 | PN | Pn | 17 17 53.8 | -0.4 |
| BHW | | | | AML | AML | 17 18 28.4 | |
| BHW | | | | AML | AML | 17 18 28.6 | |
| BHW | Baring Head | 2.94 | 39 | Pn | Pn | 17 17 53.8 | -0.4 |
| TUZ | Tuapeka | 2.98 | 221 | PN | Pn | 17 17 55.1 | +0.2 |
| TUZ | | | | AML | AML | 17 18 53.3 | |
| TUZ | | | | AML | AML | 17 18 54.4 | |
| TUZ | Tuapeka | 2.98 | 221 | Pn | Pn | 17 17 55.1 | +0.2 |
| WEL | Wellington | 2.99 | 36 | PN | Pn | 17 17 54.8 | -0.2 |
| WEL | Wellington | 2.99 | 36 | Pn | Pn | 17 17 54.8 | -0.2 |
| PLWZ | Palliser | 3.00 | 45 | PN | Pn | 17 17 54.7 | -0.4 |
| PLWZ | Palliser | 3.00 | 45 | Pn | Pn | 17 17 54.7 | -0.4 |
| MSWZ | Moikau Station | 3.11 | 43 | ⇑PN | Pn | 17 17 56.0 | -0.6 |
| MSWZ | | | | AML | AML | 17 18 33.5 | |
| MSWZ | | | | AML | AML | 17 18 36.7 | |
| MSWZ | Moikau Station | 3.11 | 43 | Pn | Pn | 17 17 56.0 | -0.6 |
| DUWZ | D'Urville Isla | 3.13 | 21 | PN | Pn | 17 17 58.7 | +1.8 |
| DUWZ | | | | AML | AML | 17 18 42.3 | |
| DUWZ | | | | AML | AML | 17 18 46.5 | |
| DUWZ | D'Urville Isla | 3.13 | 21 | Pn | Pn | 17 17 58.7 | +1.8 |
| PAWZ | Paruwai Farm | 3.23 | 44 | ⇓PN | Pn | 17 17 57.5 | -0.7 |
| PAWZ | | | | AML | AML | 17 18 34.6 | |
| PAWZ | | | | AML | AML | 17 18 39.0 | |
| PAWZ | Paruwai Farm | 3.23 | 44 | Pn | Pn | 17 17 57.5 | -0.7 |
| CAW | Cannon Point | 3.27 | 38 | ⇓PN | Pn | 17 17 58.2 | -0.5 |
| CAW | | | | AML | AML | 17 18 37.4 | |
| CAW | | | | AML | AML | 17 18 40.0 | |
| CAW | Cannon Point | 3.27 | 38 | Pn | Pn | 17 17 58.2 | -0.5 |
| TRWZ | Traveller | 3.35 | 47 | PN | Pn | 17 17 59.2 | -0.7 |
| TRWZ | | | | AML | AML | 17 18 39.5 | |
| TRWZ | | | | AML | AML | 17 18 42.3 | |
| TRWZ | Traveller | 3.35 | 47 | Pn | Pn | 17 17 59.2 | -0.7 |
| MSZ | Milford Sound | 3.37 | 252 | PN | Pn | 17 17 59.9 | -0.2 |
| MSZ | | | | AML | AML | 17 19 02.1 | |
| MSZ | | | | AML | AML | 17 19 02.7 | |
| MSZ | Milford Sound | 3.37 | 252 | Pn | Pn | 17 17 59.9 | -0.2 |
| KIW | Kapiti Island | 3.41 | 34 | AML | AML | 17 18 41.5 | |
| KIW | | | | AML | AML | 17 18 44.3 | |
| MTW | Mount Morrison | 3.43 | 43 | AML | AML | 17 18 38.8 | |
| MTW | | | | AML | AML | 17 18 40.8 | |
| MLZ | Mavora Lakes | 3.45 | 241 | PN | Pn | 17 18 01.5 | +0.3 |
| MLZ | | | | AML | AML | 17 19 07.1 | |
| MLZ | | | | AML | AML | 17 19 09.9 | |
| MLZ | Mavora Lakes | 3.45 | 241 | Pn | Pn | 17 18 01.5 | +0.3 |
| SYZ | Scrubby Hill | 3.65 | 219 | ⇓PN | Pn | 17 18 04.4 | +0.5 |
| SYZ | | | | AML | AML | 17 19 15.0 | |
| SYZ | | | | AML | AML | 17 19 15.8 | |
| SYZ | Scrubby Hill | 3.65 | 219 | Pn | Pn | 17 18 04.5 | +0.5 |
| TMWZ | Te Maipa | 3.66 | 46 | PN | Pn | 17 18 03.2 | -1.1 |
| TMWZ | Te Maipa | 3.66 | 46 | Pn | Pn | 17 18 03.2 | -1.1 |
| WHZ | Wether Hill Ro | 3.85 | 234 | PN | Pn | 17 18 05.8 | -1.0 |
| WHZ | | | | AML | AML | 17 19 18.4 | |
| WHZ | | | | AML | AML | 17 19 27.2 | |
| WHZ | Wether Hill Ro | 3.85 | 234 | Pn | Pn | 17 18 05.8 | -1.0 |
| MRZ | Mangatainoka R | 3.86 | 38 | PN | Pn | 17 18 05.7 | -1.2 |
| MRZ | | | | AML | AML | 17 18 52.6 | |
| MRZ | | | | AML | AML | 17 18 53.5 | |
| MRZ | Mangatainoka R | 3.86 | 38 | Pn | Pn | 17 18 05.7 | -1.2 |
| TIWZ | Tintock | 3.91 | 42 | AML | AML | 17 18 51.5 | |
| TIWZ | | | | AML | AML | 17 18 54.4 | |
| PRWZ | Pori Road | 4.12 | 41 | PN | Pn | 17 18 09.4 | -1.1 |
| PRWZ | Pori Road | 4.12 | 41 | Pn | Pn | 17 18 09.4 | -1.1 |
| DCZ | Deep Cove | 4.15 | 243 | PN | Pn | 17 18 10.8 | -0.1 |
| DCZ | | | | AML | AML | 17 19 21.2 | |
| DCZ | | | | AML | AML | 17 19 26.5 | |
| DCZ | Deep Cove | 4.15 | 243 | Pn | Pn | 17 18 10.8 | -0.1 |
| BFZ | Birch Farm | 4.16 | 44 | PN | Pn | 17 18 09.6 | -1.5 |
| BFZ | | | | AML | AML | 17 18 58.6 | |
| BFZ | | | | AML | AML | 17 18 58.9 | |
| BFZ | Birch Farm | 4.16 | 44 | Pn | Pn | 17 18 09.6 | -1.5 |
| WAZ | Wanganui | 4.41 | 27 | AML | AML | 17 19 15.0 | |
| WAZ | | | | AML | AML | 17 19 15.4 | |
| WAZ | Wanganui | 4.41 | 27 | Pn | Pn | 17 18 16.6 | +2.1 |
| APZ | The Paps | 4.41 | 224 | PN | Pn | 17 18 14.3 | -0.2 |
| APZ | | | | AML | AML | 17 19 37.2 | |
| APZ | The Paps | 4.41 | 224 | Pn | Pn | 17 18 14.3 | -0.2 |
| DVHZ | Dannevirke | 4.42 | 40 | PN | Pn | 17 18 13.1 | -1.5 |
| DVHZ | Dannevirke | 4.42 | 40 | Pn | Pn | 17 18 13.1 | -1.5 |
| NMEZ | Namu Road | 4.45 | 15 | PN | Pn | 17 18 16.5 | +1.5 |
| NMEZ | Namu Road | 4.45 | 15 | Pn | Pn | 17 18 16.5 | +1.5 |
| LREZ | Lake Rotokare | 4.52 | 20 | PN | Pn | 17 18 17.9 | +2.0 |
| TSZ | Takapari Road | 4.52 | 37 | PN | Pn | 17 18 14.5 | -1.4 |
| TSZ | | | | AML | AML | 17 19 07.3 | |
| TSZ | | | | AML | AML | 17 19 08.1 | |
| TSZ | Takapari Road | 4.52 | 37 | Pn | Pn | 17 18 14.5 | -1.4 |
| PREZ | Palmer Road | 4.57 | 17 | PN | Pn | 17 18 18.3 | +1.5 |
| PREZ | Palmer Road | 4.57 | 17 | Pn | Pn | 17 18 18.3 | +1.5 |
| NWEZ | Newall Road | 4.58 | 14 | PN | Pn | 17 18 18.7 | +1.9 |
| NWEZ | Newall Road | 4.58 | 14 | Pn | Pn | 17 18 18.7 | +1.9 |
| KHEZ | Kahui Hut | 4.59 | 16 | PN | Pn | 17 18 18.7 | +1.7 |
| KHEZ | Kahui Hut | 4.59 | 16 | Pn | Pn | 17 18 18.7 | +1.7 |
| NEZ | North Egmont | 4.63 | 16 | PN | Pn | 17 18 19.1 | +1.6 |
| NEZ | North Egmont | 4.63 | 16 | Pn | Pn | 17 18 19.1 | +1.6 |
| PRHZ | Porangahau | 4.67 | 44 | Pn | Pn | 17 18 16.9 | -1.1 |
| PKE | Pukeiti | 4.68 | 15 | PN | Pn | 17 18 19.7 | +1.5 |
| PKE | | | | AML | AML | 17 19 15.8 | |
| PKE | | | | AML | AML | 17 19 20.5 | |
| PKE | Pukeiti | 4.68 | 15 | Pn | Pn | 17 18 19.7 | +1.5 |
| PNHZ | Pukenui | 4.74 | 38 | Pn | Pn | 17 18 17.6 | -1.5 |
| PYZ | Puysegur Point | 4.75 | 237 | PN | Pn | 17 18 18.4 | -0.8 |
| PYZ | Puysegur Point | 4.75 | 237 | Pn | Pn | 17 18 18.4 | -0.7 |
| VRZ | Vera Road | 4.92 | 22 | PN | Pn | 17 18 22.9 | +1.4 |
| VRZ | | | | AML | AML | 17 19 26.5 | |
| VRZ | | | | AML | AML | 17 19 29.6 | |
| VRZ | Vera Road | 4.92 | 22 | Pn | Pn | 17 18 22.9 | +1.4 |
| PKVZ | Pokaka | 4.95 | 27 | Pn | Pn | 17 18 23.4 | +1.5 |
| PXZ | Pawanui | 4.96 | 43 | AML | AML | 17 19 19.7 | |
| MOVZ | Moawhango | 4.99 | 31 | AML | AML | 17 19 21.6 | |
| MOVZ | | | | AML | AML | 17 19 25.0 | |
| MOVZ | Moawhango | 4.99 | 31 | Pn | Pn | 17 18 22.6 | +0.2 |
| TRVZ | Turoa | 5.01 | 29 | PN | Pn | 17 18 23.9 | +1.0 |
| TRVZ | | | | AML | AML | 17 19 21.9 | |
| TRVZ | | | | AML | AML | 17 19 23.6 | |
| TRVZ | Turoa | 5.01 | 29 | Pn | Pn | 17 18 23.9 | +1.0 |
| KRHZ | Kereru | 5.04 | 37 | PN | Pn | 17 18 21.4 | -1.7 |
| BHHZ | Black Hill Sta | 5.04 | 34 | PN | Pn | 17 18 22.9 | -0.3 |
| BHHZ | Black Hill Sta | 5.04 | 34 | Pn | Pn | 17 18 22.9 | -0.3 |
| WHVZ | Whangaehu Hut | 5.04 | 29 | PN | Pn | 17 18 24.0 | +0.7 |
| WHVZ | Whangaehu Hut | 5.04 | 29 | Pn | Pn | 17 18 24.0 | +0.7 |
| FWVZ | Far West T-bar | 5.05 | 29 | PN | Pn | 17 18 24.1 | +0.7 |
| FWVZ | | | | AML | AML | 17 19 23.0 | |
| FWVZ | | | | AML | AML | 17 19 23.0 | |
| FWVZ | Far West T-bar | 5.05 | 29 | Pn | Pn | 17 18 24.1 | +0.7 |
| TUVZ | Tukino | 5.07 | 30 | PN | Pn | 17 18 24.4 | +0.7 |
| TUVZ | | | | AML | AML | 17 19 26.9 | |
| TUVZ | Tukino | 5.07 | 30 | Pn | Pn | 17 18 24.4 | +0.7 |
| WPVZ | Whakapapa | 5.09 | 28 | AML | AML | 17 19 28.2 | |
| WPVZ | | | | AML | AML | 17 19 28.5 | |
| WPVZ | Whakapapa | 5.09 | 28 | Pn | Pn | 17 18 24.9 | +1.0 |
| NGZ | Ngauruhoe | 5.14 | 29 | AML | AML | 17 19 27.1 | |
| NGZ | | | | AML | AML | 17 19 30.4 | |
| NGZ | Ngauruhoe | 5.14 | 29 | Pn | Pn | 17 18 25.4 | +0.8 |
| KAHZ | Kahuranaki | 5.15 | 42 | PN | Pn | 17 18 23.8 | -0.8 |
| KAHZ | Kahuranaki | 5.15 | 42 | Pn | Pn | 17 18 23.8 | -0.8 |
| OTVZ | Oturere | 5.17 | 29 | PN | Pn | 17 18 25.7 | +0.7 |
| OTVZ | | | | AML | AML | 17 19 32.3 | |
| OTVZ | | | | AML | AML | 17 19 33.4 | |
| OTVZ | Oturere | 5.17 | 29 | Pn | Pn | 17 18 25.7 | +0.7 |
| TWVZ | Taurewa | 5.17 | 27 | PN | Pn | 17 18 25.5 | +0.5 |
| TWVZ | Taurewa | 5.17 | 27 | Pn | Pn | 17 18 25.6 | +0.5 |
| WTVZ | West Tongariro | 5.18 | 28 | PN | Pn | 17 18 26.2 | +0.9 |
| WTVZ | | | | AML | AML | 17 19 32.5 | |
| WTVZ | | | | AML | AML | 17 19 33.3 | |
| WTVZ | West Tongariro | 5.18 | 28 | Pn | Pn | 17 18 26.2 | +0.9 |
| MCHZ | McNeill Hill | 5.34 | 38 | Pn | Pn | 17 18 26.3 | -1.1 |
| BKZ | Black Stump Fm | 5.49 | 35 | AML | AML | 17 19 32.0 | |
| BKZ | | | | AML | AML | 17 19 38.2 | |
| HIZ | Hauiti | 5.52 | 20 | AML | AML | 17 19 57.3 | |
| URZ | Urewera | 6.51 | 35 | Pn | Pn | 17 18 41.0 | -2.3 |
| | 1.5nm,0.3s,baz=222,slow=12,SNR=11 | | | | | | |
| URZ | | | | Sn | Sn | 17 19 52.7 | -4.5 |
| | 4.7nm,0.3s,baz=72,slow=18,SNR=11 | | | | | | |
| MWZ | Matawai | 6.62 | 37 | AML | AML | 17 20 01.2 | |
| MKAZ | Moumakai | 6.93 | 18 | Pn | Pn | 17 18 49.7 | +0.5 |
| RAO | Raoul Island | 16.38 | 31 | LR | LR | 17 26 23.5 | |
| | comp=Z,177nm,21.8s,baz=134,slow=34 | | | | | | |
| VNDA | Vanda | 34.17 | 184 | LR | LR | 17 34 38.9 | |
| | comp=Z,37nm,19.1s,baz=20,slow=30 | | | | | | |
| ASAR | Alice Springs | 37.35 | 290 | P | P | 17 24 20.7 | +0.6 |
| | 0.4nm,0.6s,baz=128,slow=7.3,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 39.62 | 294 | P | P | 17 24 40.0 | +0.9 |
| | 0.5nm,0.3s,baz=132,slow=7.7,SNR=5.0 | | | | | | |
| GUMO | Guam | 62.35 | 329 | LR | LR | 17 55 13.0 | |
| | comp=Z,12nm,18.7s,baz=38,slow=37 | | | | | | |
| TORD | Torodi Ar. Bea | 148.50 | 197 | PKPbc | PKPab | 17 36 57.9 | +0.2 |
| | 0.7nm,0.9s,baz=194,slow=3.0,SNR=2.9 | | | | | | |

**WEL 07 17:26:09.0**±0.2**, 37.°30S**×**177.°72E, h60km**±2km**, ML3.8**/5**, 7C-9D, Error ellipse: s-maj=2.0km s-min=1.5km az=0.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HAZ | Te Kaha | 0.46 | 174 | ⇑P* | Pn | 17 26 19.1 | -1.4 |
| HAZ | | | | S* | Sn | 17 26 28.2 | -0.7 |
| WIZ | White Island | 0.48 | 242 | P* | Pn | 17 26 20.5 | -0.3 |
| WIZ | | | | S* | Sn | 17 26 29.8 | +0.4 |
| MXZ | Matakaoa Point | 0.53 | 120 | ⇑P* | Pn | 17 26 19.3 | -2.0 |
| MXZ | | | | S* | Sn | 17 26 30.6 | +0.2 |
| MXZ | | | | AML | AML | 17 26 31.0 | |
| WMGZ | Waiomatatini S | 0.76 | 134 | ⇑PN | Pn | 17 26 23.8 | -0.2 |
| WMGZ | | | | SN | Sn | 17 26 35.1 | +0.2 |
| PUZ | Puketiti | 0.88 | 151 | ⇑PN | Pn | 17 26 25.2 | -0.4 |
| PUZ | | | | SN | Sn | 17 26 38.6 | +0.8 |
| PUZ | | | | AML | AML | 17 26 41.1 | |
| TWGZ | Tauwhareparae | 0.90 | 167 | PN | Pn | 17 26 25.7 | -0.1 |
| TWGZ | | | | SN | Sn | 17 26 38.6 | +0.3 |
| MWZ | Matawai | 1.04 | 189 | ⇑P* | Pn | 17 26 26.8 | -1.0 |
| MWZ | | | | S* | Sn | 17 26 40.2 | -1.4 |
| MWZ | | | | AML | AML | 17 26 40.6 | |
| URZ | Urewera | 1.07 | 207 | ⇑P* | Pn | 17 26 27.4 | -0.6 |
| URZ | | | | AML | AML | 17 26 41.7 | |
| URZ | | | | S* | Sn | 17 26 41.8 | -0.4 |
| OPRZ | Ohinepanea | 1.08 | 239 | ⇓P* | Pn | 17 26 27.9 | -0.2 |
| OPRZ | | | | S* | Sn | 17 26 42.1 | -0.1 |
| MARZ | Manawahe | 1.08 | 230 | ⇓P* | Pn | 17 26 27.9 | -0.2 |
| MARZ | | | | S* | Sn | 17 26 42.5 | +0.2 |
| EDRZ | Edgecumbe | 1.12 | 224 | ⇑P* | Pn | 17 26 28.7 | -0.1 |
| TKGZ | Te Karaka | 1.14 | 175 | ⇓PN | Pn | 17 26 29.1 | +0.2 |
| TKGZ | | | | SN | Sn | 17 26 45.2 | +1.5 |
| MYRZ | Mayor Island | 1.18 | 270 | ⇓P* | Pn | 17 26 29.7 | +0.2 |
| RAGZ | Rawiri | 1.22 | 191 | P* | Pn | 17 26 29.9 | -0.2 |
| RAGZ | | | | S* | Sn | 17 26 45.9 | +0.1 |
| TGRZ | Tauranga | 1.24 | 249 | P* | Pn | 17 26 30.3 | +0.1 |
| CNGZ | Carnagh Statio | 1.24 | 162 | PN | Pn | 17 26 29.9 | -0.4 |
| LIRZ | Lichensteins R | 1.27 | 236 | P* | Pn | 17 26 31.3 | +0.6 |
| TARZ | Mount Tarawera | 1.34 | 226 | P* | Pn | 17 26 32.5 | +0.8 |
| KARZ | Kaharoa | 1.38 | 238 | P* | Pn | 17 26 32.5 | +0.4 |
| RIGZ | Rimuhau | 1.40 | 179 | PN | Pn | 17 26 32.2 | -0.3 |
| RRRZ | Republican Roa | 1.41 | 222 | P* | Pn | 17 26 32.8 | +0.2 |
| SNGZ | Shannon Statio | 1.51 | 191 | PN | Pn | 17 26 34.5 | +0.6 |
| PRRZ | Plateau Road | 1.59 | 221 | P* | Pn | 17 26 35.1 | +0.1 |
| PRGZ | Paritu Road | 1.63 | 176 | PN | Pn | 17 26 34.8 | -0.7 |
| KUZ | Kuaotunu | 1.70 | 288 | PN | Pn | 17 26 36.4 | +0.1 |
| KNZ | Kokohu | 1.72 | 181 | PN | Pn | 17 26 35.6 | -1.0 |
| WHHZ | Waihua | 1.81 | 192 | PN | Pn | 17 26 38.7 | +0.7 |
| TOZ | Tahuroa Road | 1.82 | 256 | ⇓P* | Pn | 17 26 38.3 | +0.3 |
| MRHZ | Matea Rd | 1.85 | 214 | P* | Pn | 17 26 38.4 | 0.0 |
| MHGZ | Mahia Peninsul | 1.86 | 176 | PN | Pn | 17 26 37.6 | -0.9 |
| NMHZ | Naumai | 1.94 | 202 | PN | Pn | 17 26 40.9 | +1.2 |
| TLZ | Tolley Road | 2.01 | 239 | ⇓P* | Pn | 17 26 41.0 | +0.3 |
| ARHZ | Aropaoanui | 2.04 | 196 | PN | Pn | 17 26 41.4 | +0.3 |
| GRZ | Great Barrier | 2.10 | 299 | ⇓PN | Pn | 17 26 42.1 | +0.3 |
| BKZ | Black Stump Fm | 2.10 | 207 | P* | Pn | 17 26 42.1 | +0.2 |
| BKZ | | | | AML | AML | 17 27 18.9 | |
| ETAZ | East Tamaki Re | 2.26 | 278 | ⇓PN | Pn | 17 26 45.0 | +1.0 |
| KBAZ | Karaka Road Bo | 2.27 | 274 | PN | Pn | 17 26 45.5 | +1.3 |
| MCHZ | McNeill Hill | 2.29 | 200 | PN | Pn | 17 26 44.4 | 0.0 |
| KWHZ | Kaweka Forest | 2.35 | 205 | P* | Pn | 17 26 45.3 | -0.1 |
| CKHZ | Cape Kidnapper | 2.41 | 192 | PN | Pn | 17 26 45.2 | -0.9 |
| ABAZ | Army Bay | 2.42 | 286 | PN | Pn | 17 26 47.3 | +1.1 |
| OTVZ | Oturere | 2.47 | 220 | P* | Pn | 17 26 47.9 | +0.8 |
| NGZ | Ngauruhoe | 2.51 | 221 | P* | Pn | 17 26 49.0 | +1.4 |
| TWVZ | Taurewa | 2.52 | 225 | P* | Pn | 17 26 48.9 | +1.2 |
| BHHZ | Black Hill Sta | 2.55 | 210 | P* | Pn | 17 26 48.6 | +0.6 |
| HIZ | Hauiti | 2.57 | 241 | PN | Pn | 17 26 48.3 | 0.0 |
| KAHZ | Kahuranaki | 2.58 | 195 | PN | Pn | 17 26 47.4 | -1.0 |
| FWVZ | Far West T-bar | 2.60 | 221 | P* | Pn | 17 26 49.9 | +1.1 |
| MOVZ | Moawhango | 2.61 | 216 | P* | Pn | 17 26 49.0 | +0.1 |
| WNVZ | Wahianoa | 2.63 | 219 | ⇓P* | Pn | 17 26 50.0 | +0.7 |
| PKVZ | Pokaka | 2.73 | 223 | P* | Pn | 17 26 51.5 | +1.0 |
| PXZ | Pawanui | 2.81 | 194 | PN | Pn | 17 26 49.4 | -2.1 |
| PXZ | | | | SN | Sn | 17 27 23.5 | -0.6 |
| PNHZ | Pukenui | 2.87 | 204 | PN | Pn | 17 26 50.9 | -1.5 |
| VRZ | Vera Road | 2.96 | 231 | P* | Pn | 17 26 54.8 | +1.2 |
| TSZ | Takapari Road | 3.08 | 206 | PN | Pn | 17 26 53.6 | -1.7 |
| PRHZ | Porangahau | 3.08 | 196 | PN | Pn | 17 26 53.1 | -2.1 |
| BFZ | Birch Farm | 3.57 | 198 | PN | Pn | 17 26 59.4 | -2.4 |
| MRZ | Mangatainoka R | 3.75 | 206 | PN | Pn | 17 27 02.0 | -2.4 |
| HOWZ | Holdsworth Sta | 3.98 | 205 | PN | Pn | 17 27 04.5 | -3.1 |
| TMWZ | Te Maipa | 4.06 | 200 | PN | Pn | 17 27 05.9 | -2.8 |
| KIW | Kapiti Island | 4.18 | 211 | PN | Pn | 17 27 07.6 | -2.6 |
| MTW | Mount Morrison | 4.22 | 203 | PN | Pn | 17 27 07.4 | -3.4 |
| CAW | Cannon Point | 4.33 | 208 | PN | Pn | 17 27 09.1 | -3.2 |

*NEIC **07** 17:29:44.8, 43.°70S×172.°37E, h12km, ML4.2(WEL), After WEL.*
*NEIC Felt in Canterbury.*
**WEL 07 17:29:44.6**±0.1**, 43.°72S**×**172.°36E, h12km, ML4.2**/33**, 6C-8D, Error ellipse: s-maj=0.9km s-min=0.8km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MQZ | McQueen's Vall | 0.21 | 87 | P* | Pg | 17 29 49.2 | +0.1 |
| MQZ | | | | SG | Sg | 17 29 52.5 | +0.3 |
| MQZ | McQueen's Vall | 0.21 | 87 | P* | Pg | 17 29 49.2 | +0.1 |
| MQZ | | | | Sg | Sg | 17 29 52.5 | +0.3 |
| CRLZ | Canterbury Las | 0.23 | 53 | P* | Pg | 17 29 49.6 | +0.1 |
| CRLZ | | | | S* | Sg | 17 29 53.1 | +0.2 |
| CRLZ | | | | AML | AML | 17 29 53.6 | |
| CRLZ | | | | AML | AML | 17 29 53.7 | |
| CRLZ | | | | AML | AML | 17 29 53.8 | |
| CRLZ | Canterbury Las | 0.23 | 53 | P* | Pg | 17 29 49.6 | +0.1 |
| CRLZ | | | | S* | Sg | 17 29 53.1 | +0.2 |
| OXZ | Oxford | 0.46 | 329 | ⇓P* | Pg | 17 29 53.1 | -0.6 |
| OXZ | | | | S* | Sg | 17 29 59.5 | -0.4 |
| OXZ | Oxford | 0.46 | 329 | P* | Pg | 17 29 53.1 | -0.6 |
| OXZ | | | | S* | Sg | 17 29 59.5 | -0.4 |
| LTZ | Lake Taylor | 0.94 | 356 | ⇑P* | Pg | 17 30 02.0 | -0.8 |
| LTZ | | | | S* | Sg | 17 30 14.8 | -0.3 |
| LTZ | | | | AML | AML | 17 30 15.5 | |
| LTZ | Lake Taylor | 0.94 | 356 | P* | Pg | 17 30 02.0 | -0.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RPZ** | **Rata Peaks** | **0.95** | **270** | ⇓P* | Pg | 17 30 02.6 | -0.4 |
| RPZ | | | | AML | AML | 17 30 18.4 | |
| RPZ | | | | AML | AML | 17 30 19.6 | |
| **RPZ** | **Rata Peaks** | **0.95** | **270** | ⇓P* | Pg | 17 30 02.6 | -0.4 |
| **WVZ** | **Waitaha Valley** | **1.35** | **298** | ⇓PN | Pn | 17 30 08.4 | -0.9 |
| WVZ | | | | AML | AML | 17 30 30.5 | |
| WVZ | | | | AML | AML | 17 30 31.4 | |
| **WVZ** | **Waitaha Valley** | **1.35** | **298** | Pn | Pn | 17 30 08.4 | -0.9 |
| **KHZ** | **Kahutara** | **1.56** | **34** | PN | Pn | 17 30 10.6 | -1.6 |
| KHZ | | | | AML | AML | 17 30 39.0 | |
| KHZ | | | | AML | AML | 17 30 42.7 | |
| **KHZ** | **Kahutara** | **1.56** | **34** | Pn | Pn | 17 30 10.6 | -1.6 |
| **LBZ** | **Lake Benmore** | **1.71** | **246** | ⇓PN | Pn | 17 30 13.7 | -0.6 |
| LBZ | | | | AML | AML | 17 30 40.3 | |
| LBZ | | | | AML | AML | 17 30 41.0 | |
| **LBZ** | **Lake Benmore** | **1.71** | **246** | Pn | Pn | 17 30 13.7 | -0.6 |
| **FOZ** | **Fox Glacier** | **1.95** | **274** | ⇑PN | Pn | 17 30 16.4 | -1.1 |
| FOZ | | | | AML | AML | 17 30 51.0 | |
| FOZ | | | | AML | AML | 17 30 55.1 | |
| **FOZ** | **Fox Glacier** | **1.95** | **274** | Pn | Pn | 17 30 16.4 | -1.1 |
| **THZ** | **Tophouse** | **2.00** | **12** | ⇑PN | Pn | 17 30 16.7 | -1.5 |
| THZ | | | | AML | AML | 17 30 53.9 | |
| THZ | | | | AML | AML | 17 30 55.8 | |
| **THZ** | **Tophouse** | **2.00** | **12** | Pn | Pn | 17 30 16.7 | -1.5 |
| **DSZ** | **Denniston Nort** | **2.01** | **348** | ⇓PN | Pn | 17 30 17.5 | -1.0 |
| DSZ | | | | AML | AML | 17 30 46.8 | |
| DSZ | | | | AML | AML | 17 30 53.5 | |
| **DSZ** | **Denniston Nort** | **2.01** | **348** | Pn | Pn | 17 30 17.5 | -1.0 |
| **BSWZ** | **Blackbirch Sta** | **2.29** | **30** | PN | Pn | 17 30 21.1 | -1.2 |
| BSWZ | | | | AML | AML | 17 30 49.8 | |
| BSWZ | | | | AML | AML | 17 30 51.3 | |
| **BSWZ** | **Blackbirch Sta** | **2.29** | **30** | Pn | Pn | 17 30 21.1 | -1.2 |
| **HHSZ** | **Highcliff Hill** | **2.50** | **210** | PN | Pn | 17 30 24.5 | -0.7 |
| **HHSZ** | **Highcliff Hill** | **2.50** | **210** | Pn | Pn | 17 30 24.5 | -0.7 |
| **TUWZ** | **Tuamarina** | **2.57** | **28** | PN | Pn | 17 30 24.4 | -1.6 |
| TUWZ | | | | AML | AML | 17 30 57.4 | |
| TUWZ | | | | AML | AML | 17 31 03.5 | |
| **TUWZ** | **Tuamarina** | **2.57** | **28** | Pn | Pn | 17 30 24.4 | -1.6 |
| **NNZ** | **Nelson** | **2.61** | **17** | ⇑PN | Pn | 17 30 25.7 | -0.9 |
| NNZ | | | | AML | AML | 17 31 00.3 | |
| NNZ | | | | AML | AML | 17 31 01.9 | |
| **NNZ** | **Nelson** | **2.61** | **17** | Pn | Pn | 17 30 25.7 | -0.9 |
| **JCZ** | **Jackson Bay** | **2.63** | **261** | ⇑PN | Pn | 17 30 26.0 | -1.1 |
| JCZ | | | | AML | AML | 17 31 13.8 | |
| JCZ | | | | AML | AML | 17 31 14.6 | |
| **JCZ** | **Jackson Bay** | **2.63** | **261** | Pn | Pn | 17 30 26.0 | -1.1 |
| **WKZ** | **Wanaka** | **2.65** | **244** | PN | Pn | 17 30 26.3 | -0.9 |
| WKZ | | | | AML | AML | 17 31 19.6 | |
| WKZ | | | | AML | AML | 17 31 26.0 | |
| **WKZ** | **Wanaka** | **2.65** | **244** | Pn | Pn | 17 30 26.3 | -0.9 |
| **EAZ** | **Earnscleugh** | **2.66** | **234** | ⇓PN | Pn | 17 30 26.5 | -0.9 |
| EAZ | | | | AML | AML | 17 31 12.9 | |
| EAZ | | | | AML | AML | 17 31 13.4 | |
| **EAZ** | **Earnscleugh** | **2.66** | **234** | Pn | Pn | 17 30 26.5 | -0.9 |
| **TCW** | **Tory Channel** | **2.88** | **30** | PN | Pn | 17 30 28.5 | -1.8 |
| TCW | | | | AML | AML | 17 31 04.0 | |
| TCW | | | | AML | AML | 17 31 07.2 | |
| **TCW** | **Tory Channel** | **2.88** | **30** | Pn | Pn | 17 30 28.5 | -1.8 |
| **QRZ** | **Quartz Range** | **2.89** | **2** | PN | Pn | 17 30 29.0 | -1.5 |
| QRZ | | | | AML | AML | 17 30 42.4 | |
| QRZ | | | | AML | AML | 17 30 42.4 | |
| QRZ | | | | AML | AML | 17 31 06.6 | |
| QRZ | | | | AML | AML | 17 31 06.6 | |
| **QRZ** | **Quartz Range** | **2.89** | **2** | Pn | Pn | 17 30 29.0 | -1.5 |
| **BHW** | **Baring Head** | **2.96** | **40** | PN | Pn | 17 30 29.2 | -2.2 |
| BHW | | | | AML | AML | 17 31 04.6 | |
| **BHW** | **Baring Head** | **2.96** | **40** | Pn | Pn | 17 30 29.2 | -2.2 |
| **TUZ** | **Tuapeka** | **2.96** | **220** | PN | Pn | 17 30 30.7 | -0.8 |
| TUZ | | | | AML | AML | 17 31 25.8 | |
| TUZ | | | | AML | AML | 17 31 25.8 | |
| TUZ | | | | AML | AML | 17 31 29.9 | |
| TUZ | | | | AML | AML | 17 31 29.9 | |
| **TUZ** | **Tuapeka** | **2.96** | **220** | Pn | Pn | 17 30 30.7 | -0.8 |
| **WEL** | **Wellington** | **3.01** | **37** | PN | Pn | 17 30 30.4 | -1.7 |
| **WEL** | **Wellington** | **3.01** | **37** | Pn | Pn | 17 30 30.4 | -1.7 |
| **PLWZ** | **Palliser** | **3.03** | **46** | PN | Pn | 17 30 30.2 | -2.2 |
| **PLWZ** | **Palliser** | **3.03** | **46** | Pn | Pn | 17 30 30.2 | -2.2 |
| **DUWZ** | **D'Urville Isla** | **3.13** | **22** | PN | Pn | 17 30 34.2 | +0.3 |
| DUWZ | | | | AML | AML | 17 31 17.7 | |
| **DUWZ** | **D'Urville Isla** | **3.13** | **22** | Pn | Pn | 17 30 34.2 | +0.3 |
| **MSWZ** | **Moikau Station** | **3.14** | **44** | PN | Pn | 17 30 31.5 | -2.4 |
| MSWZ | | | | AML | AML | 17 31 09.0 | |
| MSWZ | | | | AML | AML | 17 31 09.5 | |
| **MSWZ** | **Moikau Station** | **3.14** | **44** | Pn | Pn | 17 30 31.5 | -2.4 |
| **CAW** | **Cannon Point** | **3.29** | **38** | PN | Pn | 17 30 33.7 | -2.3 |
| CAW | | | | AML | AML | 17 31 11.7 | |
| CAW | | | | AML | AML | 17 31 12.2 | |
| **CAW** | **Cannon Point** | **3.29** | **38** | Pn | Pn | 17 30 33.7 | -2.2 |
| **MSZ** | **Milford Sound** | **3.33** | **252** | PN | Pn | 17 30 35.4 | -1.1 |
| MSZ | | | | AML | AML | 17 31 36.5 | |
| MSZ | | | | AML | AML | 17 31 36.8 | |
| MSZ | | | | AML | AML | 17 31 38.1 | |
| MSZ | | | | AML | AML | 17 31 38.1 | |
| **MSZ** | **Milford Sound** | **3.33** | **252** | Pn | Pn | 17 30 35.4 | -1.1 |
| **TRWZ** | **Traveller** | **3.38** | **48** | PN | Pn | 17 30 34.8 | -2.4 |
| TRWZ | | | | AML | AML | 17 31 14.9 | |
| TRWZ | | | | AML | AML | 17 31 16.8 | |
| **TRWZ** | **Traveller** | **3.38** | **48** | Pn | Pn | 17 30 34.8 | -2.4 |
| **MLZ** | **Mavora Lakes** | **3.41** | **240** | PN | Pn | 17 30 36.6 | -1.1 |
| MLZ | | | | AML | AML | 17 31 44.3 | |
| MLZ | | | | AML | AML | 17 31 45.3 | |
| **MLZ** | **Mavora Lakes** | **3.41** | **240** | Pn | Pn | 17 30 36.6 | -1.1 |
| **KIW** | **Kapiti Island** | **3.42** | **34** | PN | Pn | 17 30 36.1 | -1.7 |
| KIW | | | | AML | AML | 17 31 17.8 | |
| **KIW** | **Kapiti Island** | **3.42** | **34** | Pn | Pn | 17 30 36.1 | -1.7 |
| **MTW** | **Mount Morrison** | **3.46** | **43** | PN | Pn | 17 30 35.6 | -2.7 |
| MTW | | | | AML | AML | 17 31 16.8 | |
| MTW | | | | AML | AML | 17 31 18.3 | |
| **MTW** | **Mount Morrison** | **3.46** | **43** | Pn | Pn | 17 30 35.6 | -2.7 |
| **OGWZ** | **Otaki Gorge** | **3.57** | **37** | ⇑PN | Pn | 17 30 37.7 | -2.1 |
| **OGWZ** | **Otaki Gorge** | **3.57** | **37** | Pn | Pn | 17 30 37.7 | -2.1 |
| **SYZ** | **Scrubby Hill** | **3.63** | **218** | ⇓PN | Pn | 17 30 40.0 | -0.6 |
| SYZ | | | | AML | AML | 17 31 51.2 | |
| SYZ | | | | AML | AML | 17 31 57.8 | |
| **SYZ** | **Scrubby Hill** | **3.63** | **218** | Pn | Pn | 17 30 40.0 | -0.6 |
| **HOWZ** | **Holdsworth Sta** | **3.66** | **41** | PN | Pn | 17 30 38.5 | -2.6 |
| **HOWZ** | **Holdsworth Sta** | **3.66** | **41** | Pn | Pn | 17 30 38.5 | -2.6 |
| **TMWZ** | **Te Maipa** | **3.69** | **46** | PN | Pn | 17 30 38.7 | -2.9 |
| **TMWZ** | **Te Maipa** | **3.69** | **46** | Pn | Pn | 17 30 38.7 | -2.9 |
| **WHZ** | **Wether Hill Ro** | **3.82** | **234** | PN | Pn | 17 30 41.3 | -2.0 |
| WHZ | | | | AML | AML | 17 31 54.1 | |
| WHZ | | | | AML | AML | 17 31 55.8 | |
| **WHZ** | **Wether Hill Ro** | **3.82** | **234** | Pn | Pn | 17 30 41.4 | -2.0 |
| **MRZ** | **Mangatainoka R** | **3.88** | **39** | PN | Pn | 17 30 41.3 | -2.8 |
| MRZ | | | | AML | AML | 17 31 28.1 | |
| MRZ | | | | AML | AML | 17 31 28.3 | |
| **MRZ** | **Mangatainoka R** | **3.88** | **39** | Pn | Pn | 17 30 41.3 | -2.8 |
| **DCZ** | **Deep Cove** | **4.12** | **243** | PN | Pn | 17 30 46.1 | -1.2 |
| DCZ | | | | AML | AML | 17 31 56.7 | |
| DCZ | | | | AML | AML | 17 32 02.0 | |
| **DCZ** | **Deep Cove** | **4.12** | **243** | Pn | Pn | 17 30 46.1 | -1.2 |
| **BFZ** | **Birch Farm** | **4.19** | **45** | PN | Pn | 17 30 45.1 | -3.2 |
| **BFZ** | **Birch Farm** | **4.19** | **45** | Pn | Pn | 17 30 45.1 | -3.2 |
| **DVHZ** | **Dannevirke** | **4.44** | **41** | PN | Pn | 17 30 48.4 | -3.4 |
| **DVHZ** | **Dannevirke** | **4.44** | **41** | Pn | Pn | 17 30 48.5 | -3.4 |
| **TSZ** | **Takapari Road** | **4.54** | **38** | PN | Pn | 17 30 50.4 | -2.8 |
| TSZ | | | | AML | AML | 17 31 43.6 | |
| **TSZ** | **Takapari Road** | **4.54** | **38** | Pn | Pn | 17 30 50.4 | -2.8 |
| **PREZ** | **Palmer Road** | **4.58** | **18** | PN | Pn | 17 30 53.7 | -0.1 |
| **PREZ** | **Palmer Road** | **4.58** | **18** | Pn | Pn | 17 30 53.6 | -0.1 |
| **KHEZ** | **Kahui Hut** | **4.59** | **16** | PN | Pn | 17 30 54.0 | 0.0 |
| **KHEZ** | **Kahui Hut** | **4.59** | **16** | Pn | Pn | 17 30 54.0 | 0.0 |
| **NEZ** | **North Egmont** | **4.63** | **17** | PN | Pn | 17 30 54.2 | -0.3 |
| **NEZ** | **North Egmont** | **4.63** | **17** | Pn | Pn | 17 30 54.2 | -0.3 |
| **PKE** | **Pukeiti** | **4.68** | **16** | PN | Pn | 17 30 55.2 | 0.0 |
| **PKE** | **Pukeiti** | **4.68** | **16** | Pn | Pn | 17 30 55.2 | 0.0 |
| **PRHZ** | **Porangahau** | **4.69** | **44** | PN | Pn | 17 30 52.4 | -2.9 |
| **PRHZ** | **Porangahau** | **4.69** | **44** | Pn | Pn | 17 30 52.4 | -2.9 |
| **PYZ** | **Puysegur Point** | **4.72** | **237** | PN | Pn | 17 30 54.0 | -1.6 |
| **PYZ** | **Puysegur Point** | **4.72** | **237** | Pn | Pn | 17 30 54.0 | -1.6 |
| **DREZ** | **Durham Road** | **4.73** | **18** | PN | Pn | 17 30 55.6 | -0.1 |
| **DREZ** | **Durham Road** | **4.73** | **18** | Pn | Pn | 17 30 55.6 | -0.1 |
| **PNHZ** | **Pukenui** | **4.76** | **38** | PN | Pn | 17 30 53.0 | -3.3 |
| **PNHZ** | **Pukenui** | **4.76** | **38** | Pn | Pn | 17 30 53.0 | -3.3 |
| **PKVZ** | **Pokaka** | **4.96** | **28** | Pn | Pn | 17 30 58.9 | -0.1 |
| **PXZ** | **Pawanui** | **4.98** | **44** | Pn | Pn | 17 30 56.0 | -3.3 |
| **WNVZ** | **Wahianoa** | **5.01** | **30** | Pn | Pn | 17 30 59.4 | -0.5 |
| **BHHZ** | **Black Hill Sta** | **5.05** | **35** | Pn | Pn | 17 30 58.3 | -2.0 |
| **FWVZ** | **Far West T-bar** | **5.06** | **29** | AML | AML | 17 31 58.4 | |
| FWVZ | | | | AML | AML | 17 31 59.2 | |
| **FWVZ** | **Far West T-bar** | **5.06** | **29** | Pn | Pn | 17 30 59.6 | -1.0 |
| **TUVZ** | **Tukino** | **5.09** | **30** | Pn | Pn | 17 30 59.9 | -1.0 |
| **KAHZ** | **Kahuranaki** | **5.17** | **42** | Pn | Pn | 17 30 59.1 | -2.8 |
| **TWVZ** | **Taurewa** | **5.19** | **28** | Pn | Pn | 17 31 01.4 | -0.8 |
| **MCHZ** | **McNeill Hill** | **5.37** | **39** | Pn | Pn | 17 31 02.5 | -2.0 |
| **TLZ** | **Tolley Road** | **5.89** | **25** | Pn | Pn | 17 31 10.8 | -1.1 |
| **MWZ** | **Matawai** | **6.64** | **38** | PN | Pn | 17 31 18.1 | -4.1 |
| **MWZ** | **Matawai** | **6.64** | **38** | Pn | Pn | 17 31 18.1 | -4.1 |
| **MKAZ** | **Moumakai** | **6.94** | **19** | Pn | Pn | 17 31 25.1 | -1.0 |

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*KRNET **07** 17:37:43.9±0.1, 42.85N×77.23E, h17km, mb2.5*
*NNC **07** 17:37:44.7±2.1, 43.52N×77.06E, h10km±10km, mb3.0, mpv2.4, Error ellipse: s-maj=22.0km s-min=7.7km az=168.0*
**ISC 07 17:37:44.0**±1.1**, 42.88N**±0.06×**77.23E**±0.03**, h15**km±15km**, n15, σ0.83**/26**, 19C-9D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNDC** | **Almaty** | **0.39** | **330** | ⇑P | **Pg** | **17 37 52.2** | **+0.2** |
| | 5.2nm,0.2s | | | | | | |
| KNDC | | | | ⇓S | **Sg** | **17 37 57.4** | **0.0** |
| | 13nm,0.2s | | | | | | |
| **ULHL** | **Ulahol** | **0.97** | **230** | ⇑*i*P | **Pn** | **17 38 03.2** | **0.0** |
| | baz=230 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sg** | **17 38 15.4** | **0.0** |
| | baz=230 | | | | | | |
| **TKM2** | **Tokmak 2** | **1.20** | **273** | ⇑P | **Pg** | **17 38 07.2** | **0.0** |
| | 1.2nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sg** | **17 38 23.3** | **+0.4** |
| | 8.0nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **1.20** | **273** | ⇓*i*P | **Pg** | **17 38 07.1** | **-0.1** |
| | baz=274 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sg** | **17 38 23.3** | **+0.4** |
| | baz=274 | | | | | | |
| **KZA** | **Kyzart** | **1.67** | **242** | ⇑*i*P | **Pg** | **17 38 15.8** | **-0.3** |
| | baz=243 | | | | | | |
| KZA | | | | ⇑*i*S | **Sg** | **17 38 38.3** | **+0.5** |
| | baz=243 | | | | | | |
| **KBK** | **Karagaybulak** | **1.70** | **263** | ⇑*i*P | **Pb** | **17 38 15.4** | **+0.4** |
| | baz=264 | | | | | | |
| KBK | | | | ⇑*i*S | **Sg** | **17 38 38.2** | **-0.4** |
| | baz=264 | | | | | | |
| **PDGK** | **Podgornoye** | **1.71** | **74** | ⇓P | **Pb** | **17 38 15.6** | **+0.5** |
| | 2.2nm,0.3s | | | | | | |
| PDGK | | | | ⇓S | **Sg** | **17 38 38.3** | **-0.8** |
| | 9.3nm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **1.71** | **74** | ⇓*i*P | **Pb** | **17 38 15.5** | **+0.4** |
| | baz=73 | | | | | | |
| PDGK | | | | ⇓*i*S | **Sg** | **17 38 38.2** | **-0.8** |
| | baz=73 | | | | | | |
| **CHMS** | **Chumysh** | **1.82** | **275** | ⇑*i*P | **Pb** | **17 38 17.8** | **+0.7** |
| | baz=276 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sg** | **17 38 41.8** | **-0.9** |
| | baz=276 | | | | | | |
| **AAK** | **Ala-Archa** | **2.03** | **264** | ⇑P | **Pb** | **17 38 21.7** | **+1.0** |
| | 0.9nm,0.3s | | | | | | |
| AAK | | | | ⇓S | **Sg** | **17 38 48.2** | **-1.1** |
| | 6.8nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **2.03** | **264** | ⇑*i*P | **Pb** | **17 38 21.3** | **+0.6** |
| | baz=265 | | | | | | |
| AAK | | | | ⇑*i*S | **Sg** | **17 38 47.8** | **-1.5** |
| | baz=265 | | | | | | |
| **USP** | **Ospenovka** | **2.04** | **282** | ⇑*i*P | **Pb** | **17 38 21.1** | **+0.4** |
| | baz=283 | | | | | | |
| USP | | | | ⇑*i*S | **Sg** | **17 38 48.0** | **-1.5** |
| | baz=283 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.55** | **266** | ⇑*i*P | **Pb** | **17 38 30.0** | **+0.5** |
| | baz=267 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sg** | **17 39 04.1** | **-1.9** |
| | baz=267 | | | | | | |
| **MNAS** | **Manas** | **3.51** | **265** | ⇓Lg | Lg | 17 39 35.9 | |
| | 1.2nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **4.93** | **275** | ⇑Lg | Lg | 17 40 17.7 | |
| | 2.4nm,0.8s,baz=141,slow=46,SNR=9.5 | | | | | | |

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*IDC **07** 17:46:22.9±8.2, 13.73N×121.07E, h84km±76km, mb3.8/11, mb1 3.9/11, mb1mx3.5/35, mbtmp4.1/11, Error ellipse: s-maj=43.4km s-min=13.6km az=62.0*
*NEIC **07** 17:46:23.9±0.4, 13.71N×121.03E, mb4.1/2, Error ellipse: s-maj=16.1km s-min=6.8km az=67.0*
*ISCJB **07** 17:46:26.5±0.4, 13.62N±0.04×120.68E±0.08, h128km±4km, mb4.1/14, Error ellipse: s-maj=13.6km s-min=6.2km az=175.4*
*MAN **07** 17:46:27, 13.66N×120.57E, h109km, mb4.6, ML3.5, MS3.5*
**ISC 07 17:46:26.5**±0.7**, 13.60N**±0.04×**120.66E**±0.08**, h111**km±6km**, n31, σ1.93**/38**, mb4.1**/14**, 1C-3D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TGY** | **Tagaytay City** | **0.56** | **29** | ⇓*i*P | **Pn** | **17 46 46.6** | **+2.7** |
| TGY | | | | *i* S | **Sn** | **17 46 59.3** | **+2.2** |
| **LQP** | **Lukban** | **0.99** | **59** | *e*P | **Pn** | **17 46 48.3** | **+0.4** |
| **SJMP** | **San Jose** | **1.22** | **158** | *e*P | **Pn** | **17 46 52.7** | **+2.6** |
| SJMP | | | | *e*S | **Sn** | **17 47 08.3** | **+0.3** |
| **BUSP** | **Coron** | **1.65** | **196** | *e*P | **Pn** | **17 46 57.2** | **+2.0** |
| BUSP | | | | *e*S | **Sn** | **17 47 15.0** | **-2.1** |
| **GQP** | **Guinayangan** | **1.76** | **80** | ⇓*i*P | **Pn** | **17 46 59.2** | **+2.7** |
| GQP | | | | *e*S | Sn | 17 47 27.3 | +7.9 |
| **PCPH** | **Palayan** | **1.99** | **12** | ⇓*e*P | **Pn** | **17 46 59.8** | **+0.4** |
| PCPH | | | | *e*S | **Sn** | **17 47 26.4** | **+1.8** |
| **SCZP** | **Santa Cruz** | **2.28** | **342** | *e*P | **Pn** | **17 47 02.7** | **-0.4** |
| **BALP** | **Baler** | **2.30** | **23** | *e*P | **Pn** | **17 47 05.2** | **+1.8** |
| **ENPP** | **El Nido** | **2.67** | **207** | *e*P | **Pn** | **17 47 10.7** | **+2.6** |
| **CUYO** | **Cuyo Island** | **2.76** | **173** | *e*P | **Pn** | **17 47 11.7** | **+2.3** |
| **BCPH** | **Baguio City Da** | **2.76** | **358** | ⇑*i*P | **Pn** | **17 47 09.4** | **-0.2** |
| BCPH | | | | *i* S | Sn | 17 47 37.1 | -5.5 |
| **BOLP** | **Bolinao** | **2.85** | **345** | *e*P | **Pn** | **17 47 11.7** | **+1.1** |
| **PVCP** | **Virac** | **3.40** | **90** | *e*P | Pn | 17 47 20.7 | +2.9 |
| **CAUP** | **Cauayan** | **3.51** | **19** | *e*P | **Pn** | **17 47 21.0** | **+1.8** |
| **CMAR** | **Chiang Mai Arr** | **21.41** | **286** | P | **P** | **17 51 08.3** | **+2.6** |
| | 1.1nm,0.8s,baz=90,slow=7.4,SNR=5.0 | | | | | | |
| **BATI** | **Baumata** | **23.84** | **173** | P | **P** | **17 51 29.7** | **0.0** |
| | 15nm,0.4s,baz=188,slow=0.6,SNR=6.3 | | | | | | |
| **PSI** | **Prapat** | **24.01** | **245** | P | **P** | **17 51 33.9** | **+2.5** |
| | 1.8nm,0.3s,baz=180,slow=13,SNR=2.9 | | | | | | |
| **WRAB** | **Tennant Creek** | **35.95** | **158** | *e*P | **P** | **17 53 15.9** | **-0.6** |
| WRAB | | | | *e*pP | **pP** | **17 53 38.4** | **-3.0** |
| **WRA** | **Warramunga Arr** | **35.95** | **158** | P | **P** | **17 53 15.2** | **-1.4** |
| | 0.5nm,0.5s,baz=336,slow=9.5,SNR=9.1 | | | | | | |
| WRA | | | | pP | **pP** | **17 53 37.8** | **-3.7** |
| | 0.6nm,0.8s,baz=341,slow=9.0,SNR=1.3 | | | | | | |
| **SONM** | **Songino Array** | **36.14** | **344** | P | **P** | **17 53 16.7** | **-1.4** |
| | 1.4nm,0.5s,baz=152,slow=9.5,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **39.24** | **161** | P | **P** | **17 53 43.1** | **-1.2** |
| | 0.3nm,0.5s,baz=337,slow=6.9,SNR=20 | | | | | | |
| ASAR | | | | pP | **pP** | **17 54 04.8** | **-4.7** |
| | 0.5nm,0.6s,baz=337,slow=6.8,SNR=4.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 55 51.0** | **-0.3** |
| | 0.1nm,0.4s,baz=339,slow=3.0,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.09** | **324** | P | **P** | **17 54 40.3** | **+0.9** |
| | 1.5nm,0.5s,baz=117,slow=7.8,SNR=13 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **46.38** | **184** | *e*P | **P** | **17 54 41.2** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **49.12** | **333** | P | **P** | **17 55 02.3** | **-0.4** |
| | 2.5nm,0.4s,baz=125,slow=6.8,SNR=13 | | | | | | |
| **KURK** | **Kurchatov** | **50.25** | **326** | *e*P | **P** | **17 55 11.9** | **+0.7** |
| | 29nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **55.90** | **326** | *e*P | **P** | **17 55 52.6** | **-0.1** |
| | 2.2nm,0.9s | | | | | | |
| **GEYT** | **Alibeck** | **60.16** | **306** | P | **P** | **17 56 24.1** | **+1.4** |
| | 1.9nm,0.7s,baz=142,slow=3.3,SNR=4.5 | | | | | | |
| **ABKAR** | **Akbulak array** | **60.78** | **319** | *e*P | **P** | **17 56 26.8** | **+0.1** |
| | 0.8nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.16** | **339** | P | **P** | **17 58 18.1** | **-0.6** |
| | 5.2nm,0.9s,baz=64,slow=8.2,SNR=5.9 | | | | | | |
| **FINES** | **FINESS Array B** | **80.35** | **331** | P | **P** | **17 58 24.5** | **-0.7** |
| | 1.8nm,0.8s,baz=76,slow=7.6,SNR=3.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **119.57** | **45** | PKP | **PKPdf** | **18 05 03.5** | **-0.6** |
| | 0.2nm,0.4s,baz=337,slow=2.1,SNR=4.4 | | | | | | |

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*AUST **07** 17:55:42.0±4.9, 1.83N×96.37E, h10km, Error ellipse: s-maj=1.8km s-min=1.0km az=273.0*
*IDC **07** 17:55:44.1±0.7, 2.25N×96.70E, h0km, mb4.2/15, mb1 4.4/17, mb1mx4.2/31, mbtmp4.3/17, ML4.0/2, MS3.7/10, Ms1 3.7/10, ms1mx3.4/43, Error ellipse: s-maj=23.2km s-min=15.1km az=45.0*
*MOS **07** 17:55:46.8±0.9, 2.21N×96.72E, h33km, mb4.9/25, Error ellipse: s-maj=11.3km s-min=6.0km az=103.2*
*ISCJB **07** 17:55:46.0±0.3, 2.15N±0.04×96.61E±0.04, h28km, mb4.5/55, MS3.7/8, Error ellipse: s-maj=7.5km s-min=4.1km az=138.5*
*BJI **07** 17:55:47.2, 2.00N×96.77E, h54km, mb4.7/27, mB5.0/17, Ms4.3/9, Ms7 4.1/8*
*NEIC **07** 17:55:48.0±3.0, 2.19N×96.70E, h26km±20km, mb4.5/9, Error ellipse: s-maj=14.1km s-min=6.2km az=58.0*
*DJA **07** 17:55:48.1±1.2, 2°N±3°×9°7E±°, h23km±14km, M4.6/14, mb4.8/6, mB5.1/1, MLv4.5/14, Mw(mB)4.5/1*
**ISC 07 17:55:48.1**±0.5**, 2.20N**±0.05×**96.68E**±0.08**, h28**km**, n141, σ0.97**/132**, mb4.6**/55**, MS3.7**/8**, 6C-2D, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **1.26** | **135** | P | **Pn** | **17 56 09.9** | **-0.1** |
| **GSI** | **Gunungsitoli** | **1.26** | **135** | *e*Pn | **Pn** | **17 56 09.6** | **-0.3** |
| **MLSI** | **Meulaboh, Aceh** | **2.07** | **352** | P | **Pn** | **17 56 21.2** | **+0.2** |
| MLSI | | | | S | **Sb** | **17 56 49.6** | **-0.7** |
| **TSI** | **Tuntungan** | **2.28** | **56** | P | **Pn** | **17 56 25.5** | **+1.6** |
| **PSI** | **Prapat** | **2.32** | **75** | Pn | **Pn** | **17 56 24.5** | **-0.1** |
| | 6.8nm,0.3s,baz=260,slow=8.1,SNR=33 | | | | | | |
| PSI | | | | LR | LR | 17 57 14.7 | |
| | comp=Z,655nm,21.4s,baz=301,slow=40 | | | | | | |
| **PSI** | **Prapat** | **2.32** | **75** | P | **Pn** | **17 56 25.1** | **+0.5** |
| | baz=2.7,SNR=20 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **3.02** | **5** | P | **Pn** | **17 56 35.3** | **+1.1** |
| | baz=3.4,SNR=14 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **3.02** | **5** | P | **Pn** | **17 56 35.2** | **+1.1** |
| **LHMI** | **Lhok Sumawe** | **3.02** | **5** | *e*Pn | **Pn** | **17 56 35.0** | **+0.9** |
| **MNSI** | **Mandailing Nat** | **3.22** | **116** | P | **Pn** | **17 56 37.3** | **+0.5** |
| **SISI** | **Saibi** | **4.25** | **146** | P | **Pn** | **17 56 51.1** | **0.0** |
| **PPI** | **Padang Panjang** | **4.56** | **125** | P | **Pn** | **17 56 57.6** | **+2.3** |
| **BKNI** | **Bangkinang** | **4.74** | **113** | P | **Pn** | **17 56 59.9** | **+2.1** |
| **PDSI** | **Padang** | **4.88** | **129** | P | **Pn** | **17 57 00.7** | **+0.9** |
| **IPM** | **Ipoh** | **4.89** | **62** | *e*Pn | **Pn** | **17 57 00.7** | **+0.8** |
| **KULM** | **Kulim** | **5.01** | **52** | *e*Pn | **Pn** | **17 57 02.1** | **+0.7** |
| | 140nm,0.6s | | | | | | |
| **TRTT** | **Trang** | **6.35** | **28** | P | **Pn** | **17 57 20.0** | **+0.1** |
| | 62nm,0.7s,0.3nm | | | | | | |
| **SURA** | **Surathani** | **7.51** | **23** | P | **Pn** | **17 57 36.2** | **+0.3** |
| | 51nm,0.8s,0.2nm | | | | | | |
| **MNAI** | **Manna** | **9.04** | **136** | P | **Pn** | **17 57 56.6** | **-0.4** |
| | 191nm,1.2s | | | | | | |
| MNAI | | | | S | Sn | 17 59 30.8 | -7.2 |
| | 191nm,1.2s | | | | | | |
| **MDSI** | **Maura Dua** | **10.01** | **132** | P | **Pn** | **17 58 10.3** | **+0.1** |
| | 18nm,1.4s | | | | | | |
| **DGPR** | **DIGLIPUR** | **11.52** | **341** | *e*P | **Pn** | **17 58 30.7** | **-0.2** |
| DGPR | | | | AMB | AMB | 17 58 44.2 | |
| | comp=Z,98nm,3.4s | | | | | | |
| **PBKT** | **Sadao Pong** | **14.89** | **16** | P | **P** | **17 59 22.2** | **0.0** |
| | comp=Z,29nm,0.7s | | | | | | |
| **KHON** | **Khomkaen** | **15.29** | **23** | P | **P** | **17 59 29.1** | **+2.3** |
| **LOEI** | **Loei** | **15.86** | **16** | P | **P** | **17 59 34.3** | **+1.2** |
| | comp=Z,16nm,0.8s,comp=Z,6µm | | | | | | |
| **UTTA** | **Uttaradit** | **15.90** | **14** | P | **P** | **17 59 33.4** | **-0.2** |
| | comp=Z,8.1nm,0.8s,comp=Z,66nm | | | | | | |
| **CM31** | **Chiang Mai Arr** | **16.30** | **8** | P | **P** | **17 59 37.9** | **-0.2** |
| | baz=17,SNR=6.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **16.30** | **8** | Pn | **Pn** | **17 59 34.4** | **-0.9** |
| | comp=Z,0.7nm,0.3s,baz=197,slow=11,SNR=76 | | | | | | |
| CMAR | | | | LR | LR | 18 06 27.3 | |
| | comp=Z,271nm,18.2s,baz=210,slow=40 | | | | | | |
| **LAMP** | **Lampang** | **16.47** | **10** | P | **P** | **17 59 40.7** | **+0.8** |
| | comp=Z,6.8nm,0.9s | | | | | | |
| **PHRA** | **Phrae** | **16.56** | **12** | P | **Pn** | **17 59 38.7** | **+0.1** |
| | comp=Z,228nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **16.66** | **7** | P | **P** | **17 59 41.4** | **-0.5** |
| | comp=Z,43nm,1.3s | | | | | | |
| **CHTO** | **Chiang Mai** | **16.66** | **7** | *e*P | **Pn** | **17 59 39.2** | **-0.6** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,23nm,1.3s | | | | | | |
| **CHTO** | **Chiang Mai** | **16.66** | **7** | *e*P | **Pn** | **17 59 39.1** | **-0.6** |
| | comp=Z,23nm,1.3s | | | | | | |
| **PALK** | **Pallekele** | **16.70** | **288** | LR | LR | 18 05 49.0 | |
| | comp=Z,264nm,19.4s,baz=116,slow=36 | | | | | | |
| **CMAI** | **Chiengmai2** | **17.77** | **7** | P | **P** | **17 59 55.3** | **+0.9** |
| | comp=Z,11nm,1.2s,comp=Z,5µm | | | | | | |
| **VIS** | **Vishakhapatnam** | **20.24** | **320** | *e*P | **P** | **18 00 20.5** | **-0.8** |
| **KMI** | **Kunming** | **23.52** | **14** | ⇓P | **P** | **18 00 57.0** | **+0.7** |
| KMI | | | | PMZ | | | |
| | comp=Z,16nm,1.2s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,30nm,3.1s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,250nm,9.7s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,220nm,12.6s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,310nm,13.5s | | | | | | |
| **SHL** | **Shillong** | **23.68** | **349** | *e*P | **P** | **18 00 56.1** | **-1.7** |
| **BOK** | **Bokaro** | **23.87** | **335** | *e*P | **P** | **18 01 00.3** | **+0.8** |
| BOK | | | | AMB | AMB | 18 01 01.8 | |
| | comp=Z,37nm,2.2s | | | | | | |
| **KAPI** | **Kappang** | **24.14** | **107** | LR | LR | 18 10 45.7 | |
| | comp=Z,77nm,19.5s,baz=297,slow=37 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.04** | **248** | T | T | 18 28 06.1 | |
| | baz=69,slow=75,SNR=2024 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.04** | **248** | T | T | 18 28 05.6 | |
| | baz=69,slow=75,SNR=1383 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.06** | **248** | T | T | 18 28 07.2 | |
| | baz=69,slow=75,SNR=1427 | | | | | | |
| **ODAN** | **Odare** | **26.09** | **341** | *e*P | **P** | **18 01 20.5** | **+0.6** |
| | comp=Z,29nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **26.44** | **339** | *e*P | **P** | **18 01 23.9** | **+0.8** |
| **TAPN** | **Taplejung** | **26.44** | **342** | *e*P | **P** | **18 01 23.5** | **+0.4** |
| **PKI** | **Pulchoki** | **27.44** | **338** | *e*P | **P** | **18 01 32.6** | **+0.5** |
| **PKIN** | **Phulchoki** | **27.45** | **338** | *e*P | **P** | **18 01 32.4** | **+0.3** |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **27.57** | **339** | *e*P | **P** | **18 01 34.0** | **+0.6** |
| | comp=Z,34nm,0.7s | | | | | | |
| **DMN** | **Daman** | **27.59** | **337** | *e*P | **P** | **18 01 34.0** | **+0.6** |
| **KKN** | **Kakani** | **27.68** | **338** | *e*P | **P** | **18 01 34.4** | **+0.2** |
| | comp=Z,35nm,1.0s | | | | | | |
| **LSA** | **Lhasa** | **27.85** | **350** | *e*P | **P** | **18 01 35.9** | **0.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **LSA** | **Lhasa** | **27.85** | **350** | *e*P | **P** | **18 01 35.9** | **0.0** |
| | comp=Z,4.4nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **28.12** | **337** | *e*P | **P** | **18 01 38.2** | **+0.2** |
| **KOLN** | **Koldanda** | **28.34** | **335** | *e*P | **P** | **18 01 40.9** | **+0.9** |
| | comp=Z,21nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **29.56** | **115** | P | P | 18 01 54.5 | +3.7 |
| | comp=Z,5.0nm,0.4s,baz=139,slow=20,SNR=2.8 | | | | | | |
| **DDI** | **Dehra Dun** | **33.07** | **330** | *e*P | **P** | **18 02 19.8** | **-1.9** |
| **SMLA** | **Simla** | **34.17** | **329** | *e*P | **P** | **18 02 31.8** | **+0.7** |
| SMLA | | | | AMB | AMB | 18 02 33.5 | |
| | comp=Z,8.8nm,1.3s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **35.51** | **329** | *e*P | **P** | **18 02 43.1** | **+0.1** |
| DHRM | | | | AMB | AMB | 18 02 57.1 | |
| | comp=Z,20nm,1.8s | | | | | | |
| **GTA** | **Gaotai** | **37.14** | **4** | ⇑P | **P** | **18 02 56.3** | **-0.4** |
| GTA | | | | PMZ | | | |
| | comp=Z,26nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,160nm,5.5s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,100nm,14.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,120nm,16.4s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,150nm,17.1s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.36** | **158** | T | T | 18 46 12.5 | |
| | baz=334,slow=76 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.38** | **158** | T | T | 18 46 13.4 | |
| | baz=334,slow=76 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.38** | **158** | T | T | 18 46 10.4 | |
| | baz=334,slow=76 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **40.76** | **17** | *e*P | **P** | **18 03 27.4** | **+0.5** |
| HHC | | | | sP | **sP** | **18 03 43.5** | **+4.8** |
| HHC | | | | PP | **PnPn** | **18 05 04.9** | **-0.5** |
| HHC | | | | S | **S** | **18 09 35.0** | **-0.9** |
| HHC | | | | PMZ | | | |
| | comp=Z,19nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,84nm,3.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,150nm,14.8s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,110nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,130nm,12.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.01** | **123** | P | **P** | **18 03 44.9** | **-0.6** |
| | comp=Z,2.9nm,0.7s,baz=300,slow=9.2,SNR=28 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 05 35.3** | **-0.4** |

comp=Z,0.5nm,0.7s,baz=315,slow=2.5,SNR=2.8
**WRAB Tennant Creek 43.01 123** *i* P **P** **18 03 45.2 -0.3**
WRAB pmax pmax
comp=Z,52nm,2.5s
**WRAB Tennant Creek 43.01 123** *e*P **P** **18 03 44.9 -0.6**
**SFK Sufi-Kurgan 43.12 334** P **P** **18 03 47.7 +1.3**
SFK pmax pmax
comp=Z,14nm,1.3s
**PDGK Podgornoye 43.72 342** P **P** **18 03 51.6 +0.7**
PDGK pmax pmax
comp=Z,20nm,1.0s
**TJN Taejon 44.27 36***c i*P **P** **18 03 54.4 -1.0**
**ASAR Alice Springs 44.41 128** P **P** **18 03 56.5 -0.3**
comp=Z,2.5nm,0.8s,baz=300,slow=8.1,SNR=39
ASAR PcP **PP** **18 05 40.8 +0.1**
comp=Z,0.4nm,0.7s,baz=305,slow=3.3,SNR=3.4
**DZET Dzherino 44.43 329** P **P** **18 03 56.4 -0.4**
DZET pmax pmax
comp=Z,4.0nm,0.5s
**AAK Ala-Archa 44.88 337** *e*P **P** **18 04 01.0 +0.6**
AAK pmax pmax
comp=Z,20nm,1.1s
**AAK Ala-Archa 44.88 337** P **P** **18 04 02.3 +1.9**
comp=Z,9.0nm,1.1s
**KSAR Wonju Array Be 45.30 35** P **P** **18 04 03.2 -0.4**
**KSAR Wonju Array Be 45.30 35** P **P** **18 04 03.2 -0.4**
**KSRS Korea Array 45.33 35** P **P** **18 04 03.2 -0.6**
comp=Z,3.9nm,0.8s,baz=226,slow=8.9,SNR=18
**MNAS Manas 45.57 335** P **P** **18 04 07.0 +1.1**
MNAS pmax pmax
comp=Z,5.0nm,1.0s
**MK31 Makanchi Array 46.15 346** P **P** **18 04 09.9 -0.3**
MK31 pmax pmax
comp=Z,7.0nm,0.6s
**MKAR Makanchi Array 46.15 346** P **P** **18 04 10.2 -0.1**
comp=Z,11nm,0.7s,baz=154,slow=8.7,SNR=72
MKAR LR LR 18 25 40.9
comp=Z,62nm,20.5s,baz=173,slow=39
**SONM Songino Array 46.23 9** P **P** **18 04 11.0 +0.1**
comp=Z,4.3nm,0.4s,baz=188,slow=9.0,SNR=16
SONM PcP **PcP** **18 05 46.0 -0.3**
comp=Z,1.3nm,0.6s,baz=191,slow=1.5,SNR=3.3
**ULN Ulaanbaatar 46.36 10***c i*P **P** **18 04 11.9 -0.2**
ULN pmax pmax
comp=Z,7.0nm,1.0s
**ULN Ulaanbaatar 46.36 10** *e*P **P** **18 04 11.8 -0.2**
comp=Z,7.1nm,0.9s
**KK31 Karatay Array 46.93 334** P **P** **18 04 16.9 +0.5**
KK31 pmax pmax
comp=Z,1.0nm,0.3s
**KKAR Karatay Array 46.93 334** *e*P **P** **18 04 17.2 +0.8**
KKAR pmax pmax
comp=Z,3.0nm,0.6s
**KKAR Karatay Array 46.93 334** *e*P **P** **18 04 17.2 +0.8**
comp=Z,2.8nm,0.6s
**ZAK Zakamensk 48.33 6** *e*P **P** **18 04 26.3 -0.9**
ZAK pmax pmax
comp=Z,3.0nm,1.0s
**HVS Khovu-Aksy 48.82 358** *e*P **P** **18 04 31.1 +0.1**
HVS pmax pmax
comp=Z,15nm,1.0s
**TLY Talaya 49.65 6** LR LR 18 27 30.5
comp=Z,158nm,18.9s,baz=173,slow=38
**TLY Talaya 49.65 6** *e*P **P** **18 04 38.6 +1.4**
TLY pmax pmax
comp=Z,5.0nm,0.8s
TLY MLR MLR
comp=Z,98nm,13.0s
**TLY Talaya 49.65 6** *e*P **P** **18 04 37.9 +0.7**
comp=Z,4.3nm,0.7s
**GEYT Alibeck 50.12 320** P **P** **18 04 41.5 +0.4**
comp=Z,2.3nm,0.7s,baz=165,slow=8.4,SNR=5.3
GEYT LR LR 18 28 42.2
comp=Z,68nm,18.8s,baz=115,slow=40
**OTUK Ortayu 50.43 339** P **P** **18 04 44.4 +1.1**
**KURK Kurchatov 50.70 345** *e*P **P** **18 04 45.4 +0.3**
KURK pmax pmax
comp=Z,24nm,0.9s
**KURK Kurchatov 50.70 345** *e*P **P** **18 04 45.4 +0.3**
comp=Z,24nm,0.9s
**MDJ Mudanjiang 51.25 30** *e*P **P** **18 04 50.6 +1.2**
**MAJO Matsushiro 51.31 43** *e*P **P** **18 04 48.2 -1.9**
MAJO pmax pmax
comp=Z,36nm,1.3s
**MJAR Matsushiro Arr 51.31 43** P **P** **18 04 50.0 -0.1**
comp=Z,2.7nm,0.9s,baz=208,slow=6.1,SNR=6.0
**MJAR Matsushiro Arr 51.31 43** P **P** **18 04 50.0 -0.1**
**USRK Ussuriysk Ar. 52.19 32** P **P** **18 04 55.7 -0.7**
comp=Z,1.7nm,0.4s,baz=224,slow=5.3,SNR=8.7
**ZAA0 Zalesovo Array 52.49 351** P **P** **18 04 58.8 +0.2**
baz=53,SNR=12
**ZALV Zalesovo Beam 52.49 351** P **P** **18 04 58.7 +0.2**
comp=Z,20nm,0.8s,baz=182,slow=6.4,SNR=90
ZALV LR LR 18 32 39.4
comp=Z,47nm,18.4s,baz=72,slow=42
**CTAO Charters Tower 53.41 117** *e*P **P** **18 05 05.3 -0.6**
**CTAO Charters Tower 53.41 117** *e*P **P** **18 05 05.3 -0.6**
**NVS Novosibirsk 53.61 350**⇑*i*P **P** **18 05 06.4 -0.3**
NVS pmax pmax
comp=N,9.0nm,0.8s
NVS pmax pmax
comp=E,6.0nm,0.8s
NVS pmax pmax
comp=Z,11nm,0.8s
**KRAR Krasnoyarsk 53.73 357** *e*P **P** **18 05 08.0 +0.4**
KRAR pmax pmax
comp=Z,6.0nm,0.9s
**QLP Quilpie 54.06 125** P P 18 05 20.7 +10
baz=54,SNR=3.3
**VOSK Vostochnaya 54.69 341** *i* P **P** **18 05 14.2 -0.5**
VOSK pmax pmax
comp=Z,5.0nm,0.6s
**BVA0 Borovoye Array 55.14 341** *i* P **P** **18 05 17.5 -0.4**
BVA0 pmax pmax
comp=Z,6.0nm,0.9s
**BRVK Borovoye 55.20 341***c i*P **P** **18 05 17.6 -0.8**
BRVK pmax pmax
comp=Z,8.0nm,1.0s
**BRVK Borovoye 55.20 341** *e*P **P** **18 05 17.9 -0.4**
comp=Z,6.0nm,0.8s
**ZRNK Zerenda 55.54 340** *i* P **P** **18 05 19.9 -0.9**
ZRNK pmax pmax
comp=Z,3.0nm,0.7s
**KLR Kul'dur 55.60 27** *e*P **P** **18 05 18.2 -3.1**
**CHKZ Chkalovo 55.62 342** *i* P **P** **18 05 20.8 -0.5**
CHKZ pmax pmax
comp=Z,9.0nm,0.7s
**AB31 Akbulak array 56.39 332** *i* P **P** **18 05 26.9 0.0**
AB31 pmax pmax
comp=Z,3.0nm,0.5s
**ABKAR Akbulak array 56.39 332** *e*P **P** **18 05 26.9 0.0**
comp=Z,3.4nm,0.7s
**AKTO Aktyubinsk 58.11 332** P **P** **18 05 38.4 -0.7**
AKTO pmax pmax
comp=Z,9.0nm,1.1s
**KMBO Kilima Mbogo 59.51 267** P P 18 05 42.6 -7.2
baz=59,SNR=3.5
**YSS Yuzh-Sakhalins 59.82 35** *i* P **P** **18 05 51.7 +0.7**
YSS pmax pmax
comp=Z,10.0nm,1.0s
**SVE Sverdlovsk 61.57 338**⇑*e*P **P** **18 06 03.2 +0.5**
SVE pmax pmax
comp=Z,11nm,0.9s
**ARU Arti 62.06 337***d i*P **P** **18 06 05.3 -0.8**
ARU S **S** **18 14 29.8 +0.8**
ARU pmax pmax
comp=Z,5.0nm,1.0s
**KBZ Khabaz 62.98 319** P **P** **18 06 13.1 +0.7**
comp=Z,1.6nm,0.7s,baz=176,slow=3.8,SNR=4.3
**KIV Kislovodsk 63.21 319** *e*P **P** **18 06 16.7 +2.6**
KIV *e* 18 06 50.7
KIV *e* 18 08 30.0
KIV pmax pmax
comp=Z,8.0nm,1.0s
**YAK Yakutsk 64.61 17** *e*P **P** **18 06 21.4 -1.4**
YAK *e* 18 06 54.8
YAK *e* 18 08 45.7
YAK *e*PPP PPP 18 10 16.4
YAK *e*S S 18 14 53.3 -7.3
YAK *e**SS sS 18 15 37.1 +22
YAK *i* 18 16 06.0
YAK pmax pmax
comp=Z,15nm,0.9s
YAK pmax pmax
comp=Z,143nm,3.5s
YAK pmax pmax
comp=N,261nm,3.8s
YAK pmax pmax
comp=E,121nm,5.3s
YAK smax smax
comp=N,132nm,3.9s
YAK smax smax
comp=E,145nm,3.2s
**BRTR Keskin Array B 68.06 312** P **P** **18 06 45.0 -0.6**
comp=E,0.6nm,0.8s,baz=120,slow=8.5,SNR=3.0
**BRTR Keskin Array B 68.06 312** P **P** **18 06 45.0 -0.6**
**OBN Obninsk 71.50 328** *e*P **P** **18 07 06.7 +0.5**
OBN *e* 18 07 23.4
OBN pmax pmax
comp=Z,9.0nm,1.4s
OBN MLR MLR
comp=Z,33nm,13.0s
**KLMR Klimovskoe 72.63 334** *e*P P 18 07 08.3 -4.6
KLMR pmax pmax
comp=Z,11nm,1.3s
**SEY Seymchan 73.05 23** *e*P **P** **18 07 14.1 -1.2**
**AKASG Malin Array Be 74.15 322** P **P** **18 07 21.1 -1.0**
comp=Z,0.3nm,0.5s,baz=93,slow=3.8,SNR=4.8
**KIEV Kiev 74.16 322** *e*P **P** **18 07 21.6 -0.5**
KIEV pmax pmax
comp=Z,4.0nm,1.1s
**TMCR Tamitsa 74.80 337** *e*P P 18 07 21.9 -3.6
TMCR *e* 18 07 35.7
TMCR pmax pmax
comp=Z,17nm,0.9s
**BOSA Boshof 74.83 240** LR LR 18 37 01.4
comp=Z,58nm,18.5s,baz=52,slow=33
**FINES FINESS Array B 78.88 332** P **P** **18 07 48.5 -0.1**
comp=Z,1.1nm,0.8s,baz=72,slow=6.2,SNR=4.8
**FINES FINESS Array B 78.88 332** *i* P **P** **18 07 49.0 +0.4**
FINES pmax pmax
comp=Z,1.0nm,0.8s
**BILL Bilibino 80.42 21** *e*P **P** **18 07 57.2 +0.3**
BILL *e* 18 10 59.5
BILL pmax pmax
comp=Z,3.0nm,1.0s
**ARCES ARCESS Array B 81.42 340** P **P** **18 08 01.6 -0.6**
comp=Z,3.4nm,0.9s,baz=94,slow=5.5,SNR=4.8
**GERES GERESS Array B 83.72 319** P **P** **18 08 15.1 +0.4**
comp=Z,1.0nm,0.7s,baz=123,slow=4.9,SNR=6.3
**TORD Torodi Ar. Bea 94.36 283** LR LR 18 50 17.0
comp=Z,66nm,18.3s,baz=20,slow=35
**NVAR Mina Array Bea 128.27 35** PKP **PKPdf** **18 14 54.3 +1.5**
comp=Z,0.2nm,0.6s,baz=300,slow=2.0,SNR=2.9
**TXAR Lajitas Array 143.08 30** PKhKP PKPpre 18 15 17.7
comp=Z,0.2nm,0.4s,baz=162,slow=0.3,SNR=3.0
**CPUP Villa Florida 145.38 224** PKPbc **PKPab** **18 15 26.3 +2.0**
baz=98,slow=17

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*NIED* ***07*** *18:18:00, 26.°20N×128.°60E, h11km, Mw4.4 Best double couple: M0 3.97000×10^15 NP1:ϕs215.00000°, δ29.00000°, λ75.00000°. NP2:ϕs52.00000°, δ62.00000°, λ98.00000°.*
*IDC* ***07*** *18:18:44.2±0.7, 26.°16N×128.°63E, h0km, mb4.1/21, mb1 4.2/24, mb1mx4.1/49, mbtmp4.1/24, ML3.3/3, MS3.5/11, Ms1 3.5/11, ms1mx3.3/35, Error ellipse: s-maj=24.0km s-min=13.2km az=76.0*
*ISCJB* ***07*** *18:18:46.0±0.3, 26.°12N±0.°03×128.°69E±0.°04, h27km, mb4.2/29, MS3.6/9, Error ellipse: s-maj=5.2km s-min=4.0km az=41.9*
*NEIC* ***07*** *18:18:48.0±1.8, 26.°14N×128.°55E, h23km±11km, mb4.6/5, MW4.3(NIED), Error ellipse: s-maj=13.2km s-min=9.7km az=85.0*
*JMA* ***07*** *18:18:48.4±0.4, 26.°21N×128.°60E, h40km±5km, M3.6*
**ISC 07 18:18:47.9**±0.5**, 26.°13N**±0.°04**×128.°69E**±0.°04**, h27**km**, n74, σ1.s18**/78**, mb4.2**/29**, MS3.6**/9**, Ryukyu Islands**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
**JNTH Nagotoyohara 0.71 303** P **Pb** **18 19 00.3 -1.5**
JNTH *e*S **Sb** **18 19 08.7 -2.5**
**JOW Kunigami 0.79 332** P **Pb** **18 19 01.7 -1.4**
**JOW Kunigami 0.79 332** Pn **Pb** **18 19 01.8 -1.3**
49nm,0.3s,baz=105,slow=24,SNR=3066
JOW Sn **Sb** **18 19 12.5 -0.9**
62nm,0.3s,baz=313,slow=19,SNR=32
**JOW Kunigami 0.79 332** *e*P **Pb** **18 19 01.6 -1.4**
JOW Pn **Pb** **18 19 01.8 -1.3**
JOW Sn **Sb** **18 19 12.5 -0.9**
**JJT2 Tamagusuku 2 0.85 271** P **Pb** **18 19 03.0 -1.1**
**JIH Iheya 1.11 324** P **Pn** **18 19 06.7 -1.0**
**JOKE Okinoerabujima 1.23 355** P **Pn** **18 19 08.4 -1.0**
**JAGN Aguni-jima 1.38 290** P **Pn** **18 19 10.7 -0.7**
**JTK Tokunoshima 1.66 8** P **Pn** **18 19 14.3 -1.0**
JTK *e*S **Sn** **18 19 33.8 -2.0**
**JKE Kume jima 2 1.72 277** P **Pn** **18 19 14.7 -1.4**
**JAMN Amaminishikomi 2.15 12** P **Pn** **18 19 20.9 -1.1**
**JMZ Minamidaito 2 2.30 97** P **Pn** **18 19 22.2 -1.9**
JMZ *e*S **Sn** **18 19 47.6 -3.9**
**JAM Amami Oshima 2.41 20** P **Pn** **18 19 24.3 -1.3**
**JZK Kikaishima 2.45 27** P **Pn** **18 19 25.5 -0.7**
**JTAJ Takarajima 3.04 8** P **Pn** **18 19 33.1 -1.2**
**JOGS Gusukube 3.27 246** P **Pn** **18 19 36.7 -0.7**
**JIKM Ikemajima 3.33 250** P **Pn** **18 19 37.7 -0.6**
**JIRB Irabujima 3.43 249** P **Pn** **18 19 38.6 -1.1**
JIRB *e*S **Sn** **18 20 18.2 -1.3**
**JTJ Tarama 3.90 248** P **Pn** **18 19 44.4 -1.7**
**JISG Ishigakijimahi 4.25 250** P **Pn** **18 19 48.7 -2.2**
**JIJ Ishigaki jima 4.48 248** P **Pn** **18 19 53.4 -0.7**
**JKRS Kuro-shima 4.64 247** P **Pn** **18 19 54.6 -1.7**
**JNU Nakatsue 7.22 15** Pn **Pn** **18 20 32.0 +0.3**
1.7nm,0.3s,baz=186,slow=10,SNR=25
JNU Sn **Sn** **18 21 51.3 -1.6**
0.3nm,0.3s,baz=317,slow=19,SNR=3.7
**JNU Nakatsue 7.22 15** *e*P **Pn** **18 20 32.7 +0.9**
7.1nm,0.9s
JNU Sn **Sn** **18 21 51.3 -1.6**
**SSLB Suanglung 7.40 253** *e*P Pn 18 20 30.5 -3.7
12nm,0.6s
**TPUB Ta-pu 7.85 251** *e*P Pn 18 20 36.8 -3.7
**KSAR Wonju Array Be 11.29 357** Pn **Pn** **18 21 28.0 +0.5**
**KSRS Korea Array 11.30 357** Pn **Pn** **18 21 28.0 +0.4**
0.0nm,0.3s,baz=169,slow=14,SNR=5.0
KSRS LR LR 18 26 08.8
comp=Z,237nm,19.1s,baz=182,slow=40
**USRK Ussuriysk Ar. 18.22 8** P **P** **18 22 59.5 +0.6**
0.2nm,0.3s,baz=136,slow=42,SNR=6.3
**GUMO Guam 19.65 126** LR LR 18 29 13.6
comp=Z,76nm,19.1s,baz=302,slow=32
**ASAJ Asahikawa 21.19 29** LR LR 18 32 02.1
comp=Z,116nm,21.0s,baz=218,slow=38
**YSS Yuzh-Sakhalins 23.58 25** *e*P **P** **18 23 57.7 +1.3**
35nm,1.1s
**SIJI Sorong 26.96 174** P **P** **18 24 26.9 -0.5**
3.6nm,0.3s,baz=150,slow=23,SNR=3.7
**ULN Ulaanbaatar 27.56 328** *e*P **P** **18 24 33.8 +1.1**
21nm,1.3s
**SONM Songino Array 27.86 327** P **P** **18 24 36.4 +1.0**
6.5nm,0.9s,baz=139,slow=10.0,SNR=13
**CMAR Chiang Mai Arr 28.52 261** P **P** **18 24 42.0 +0.6**
1.1nm,0.9s,baz=42,slow=11,SNR=4.8
CMAR LR LR 18 36 17.3
comp=Z,86nm,19.0s,baz=82,slow=37
**PETK Petropavlovsk- 34.56 31** LR LR 18 42 05.8
comp=Z,48nm,18.8s,baz=242,slow=40
**TAPN Taplejung 36.50 281** *e*P **P** **18 25 51.7 +0.2**
5.3nm,0.5s
**ODAN Odare 36.85 281** *e*P **P** **18 25 54.8 +0.4**
38nm,0.8s
**RAMN Ramite 37.54 281** *e*P **P** **18 26 00.4 +0.2**
**GUN Gumba 38.04 283** *e*P **P** **18 26 04.9 +0.3**
17nm,0.8s
**PKI Pulchoki 38.50 282** *e*P **P** **18 26 08.5 +0.1**
27nm,1.0s
**PKIN Phulchoki 38.51 282** *e*P **P** **18 26 08.4 -0.1**
**KKN Kakani 38.58 282** *e*P **P** **18 26 09.2 +0.2**
30nm,1.0s
**DMN Daman 38.76 282** *e*P **P** **18 26 10.6 +0.1**
25nm,1.1s
**GKN Gorkha 39.12 283** *e*P **P** **18 26 13.5 +0.1**
19nm,0.9s
**SEY Seymchan 39.99 17** P **P** **18 26 22.8 +2.8**
3.7nm,0.8s,baz=243,slow=6.8,SNR=3.5
**KOLN Koldanda 40.06 283** *e*P **P** **18 26 21.8 +0.5**
15nm,1.0s
**MKAR Makanchi Array 41.91 312** P **P** **18 26 35.6 -0.5**
1.2nm,0.7s,baz=91,slow=10,SNR=8.8
MKAR PcP **PcP** **18 28 32.7 +1.3**
0.5nm,0.6s,baz=116,slow=3.4,SNR=2.7
**ZALV Zalesovo Beam 42.57 323** P **P** **18 26 40.5 -0.8**
0.7nm,0.4s,baz=99,slow=6.3,SNR=4.5
ZALV LR LR 18 43 43.9
comp=Z,23nm,19.8s,baz=70,slow=35
**KURK Kurchatov 45.17 317** *e*P **P** **18 27 01.6 -0.7**
25nm,1.4s
**KURBB Kurchatov Arra 45.21 316** P **P** **18 27 01.8 -0.7**
1.3nm,0.5s,baz=102,slow=8.5,SNR=14
**WRAB Tennant Creek 46.12 173** *e*P **P** **18 27 10.7 +0.6**
**WRA Warramunga Arr 46.13 173** P **P** **18 27 10.4 +0.3**
1.8nm,0.7s,baz=353,slow=8.4,SNR=5.7
**ASAR Alice Springs 49.76 174** P **P** **18 27 39.3 +1.0**
1.4nm,0.8s,baz=0.6,slow=8.2,SNR=18
**BVAR Borovoye Array 50.62 318** P **P** **18 27 44.3 -0.2**
1.0nm,0.5s,baz=90,slow=7.4,SNR=7.7
**BRVK Borovoye 50.69 318** *e*P **P** **18 27 45.4 +0.4**
1.4nm,0.6s
**ABKAR Akbulak array 57.01 313** *e*P **P** **18 28 31.9 +0.7**
3.6nm,0.8s
ABKAR *e* 18 28 40.4
**ARU Arti 57.72 322** P **P** **18 28 35.0 -1.1**
0.3nm,0.2s,baz=308,slow=19,SNR=1.8
**AKTO Aktyubinsk 58.19 315** P **P** **18 28 38.4 -1.2**
0.3nm,0.3s,baz=79,slow=13,SNR=3.7
**GEYT Alibeck 59.70 300** P **P** **18 28 51.2 +0.9**
2.2nm,0.7s,baz=132,slow=2.2,SNR=6.0
**ILAR Eielson Array 64.33 28** P **P** **18 29 21.1 +0.3**
0.7nm,0.8s,baz=248,slow=5.3,SNR=6.8
**SPITS Spitsbergen Ar 69.00 348** P **P** **18 29 49.3 -1.2**
3.6nm,0.9s,baz=352,slow=8.7,SNR=2.8
**KBZ Khabaz 69.54 309** P **P** **18 29 55.2 +0.9**
1.6nm,0.8s,baz=25,slow=3.4,SNR=3.8
KBZ LR LR 19 06 02.5
comp=Z,30nm,18.6s,baz=102,slow=41
**FINES FINESS Array B 73.15 331** P **P** **18 30 15.7 -0.1**
3.9nm,0.9s,baz=111,slow=1.9,SNR=4.2
FINES LR LR 19 05 41.1
comp=Z,48nm,18.6s,baz=108,slow=38
**AKASG Malin Array Be 75.87 320** P **P** **18 30 31.4 -0.5**
2.4nm,0.8s,baz=55,slow=6.2,SNR=9.7
AKASG LR LR 19 06 48.7
comp=Z,70nm,19.7s,baz=0.0,slow=38
**BRTR Keskin Array B 77.42 308** P **P** **18 30 41.7 +0.7**
4.3nm,0.9s,baz=96,slow=6.2,SNR=15
**YKA Yellowknife Ar 78.44 25** P **P** **18 30 47.1 +1.1**
1.2nm,0.8s,baz=312,slow=9.1,SNR=4.3
**HFS Hagfors 79.10 332** P **P** **18 30 47.8 -1.9**
5.4nm,1.0s,baz=66,slow=14,SNR=3.1
**NB2 NORSAR Subarra 79.58 334** P **P** **18 30 52.3 -0.1**
comp=Z,0.3nm,0.7s,baz=58,slow=6.2
**NOA NORSAR Array B 79.58 334** P **P** **18 30 52.4 0.0**
comp=Z,2.6nm,0.8s,baz=52,slow=5.6,SNR=7.1
**CLL Collm 84.47 325** *e*P **P** **18 31 19.0 +0.8**
comp=Z,5.0nm,0.8s
**GERES GERESS Array B 85.52 323** P **P** **18 31 24.6 +0.9**
comp=Z,0.3nm,0.6s,baz=51,slow=7.0,SNR=4.3
GERES LR LR 19 12 55.4
comp=Z,103nm,18.3s,baz=76,slow=38
**ULM Lac du Bonnet 94.32 27** LR LR 19 16 13.8
comp=Z,26nm,21.8s,baz=267,slow=37

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**DJA 07 18:22:40.5**±0.5**, 0°N**±8°**×12°4E**±°**, h81**km±33km**, M3.8**/11**, mb3.8**/4**, MLv3.9**/11**, Minahassa Peninsula, Sulawesi**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
**KMSI Cibinong 0.46 14** P Pn 18 22 58.1 +4.1
**LUWI Luwuk 1.60 223** P Pn 18 23 06.9 -0.3
**MRSI Marisa 1.96 280** P Pn 18 23 10.7 -1.2
**APSI Ampana 2.45 245** P Pn 18 23 18.5 0.0
**SANI Sanana 3.03 136** P Pn 18 23 25.1 -1.2
**LBMI Labuha 3.71 102** P Pn 18 23 35.1 -0.4
**PCI Palu 4.16 256** P Pn 18 23 41.1 -0.6
**NLAI Namlea 4.65 136** P Pn 18 23 47.8 -0.5
**SPSI Sidrap Palu 5.77 225** P Pn 18 24 04.3 +0.6
8.6nm,1.4s,0.0nm
**MSAI Masohi 6.12 124** P Pn 18 24 09.4 +1.0
8.1nm,0.8s,0.0nm
**FAKI Fak Fak 8.91 110** P Pn 18 24 44.9 -1.6

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**IDC 07 18:25:29.9**±999.0**, 56.°81N×34.°48E, h0**km**, Error ellipse: s-maj=849.6km s-min=47.9km az=92.0, Baltic States - Belarus - Northwestern Russia**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
**I43RU DUBNA INFRASON 1.51 92** *i* 18 33 40.0
baz=275,slow=310,SNR=3.3
**I31KZ AKTYUBINSK INF 15.33 105** *i* 20 00 12.7
baz=301,slow=322
**I46RU ZALESOVO INFRA28.22 74** *i* 21 20 47.8
baz=296,slow=322,SNR=0.7

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**GUC 07 18:26:05.3**±0.5**, 22.°14S×68.°75W, h122**km±5km**, ML2.8, 4C-1D, Northern Chile**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
**PB09 IPOC Station P 0.57 306**⇑*i*P Pn 18 26 24.8 +0.6
PB09 *i* S Sn 18 26 39.3 +0.9
PB09 AML AML 18 26 40.2
comp=N,592nm,0.8s
**MACH Maria Elena 0.94 266** *e*P Pn 18 26 27.6 +0.4
MACH *e*S Sn 18 26 44.9 +1.1
**PB06 IPOC Station P 0.95 233**⇑*i*P Pn 18 26 27.8 +0.5
PB06 *i* S Sn 18 26 44.5 +0.7
PB06 AML AML 18 26 45.5
comp=E,184nm,0.3s
**PB07 IPOC Station P 1.13 291**⇑*i*P Pn 18 26 29.8 +0.7
PB07 *i* S Sn 18 26 48.4 +1.3
PB07 AML AML 18 26 49.2
comp=E,237nm,0.3s
**PB01 IPOC Station P 1.29 328**⇓*i*P Pn 18 26 31.0 +0.4
PB01 *i* S Sn 18 26 50.5 +0.7
PB01 AML AML 18 26 51.5
comp=N,118nm,0.5s
**PB04 IPOC Station P 1.31 261**⇑*i*P Pn 18 26 31.6 +0.6
PB04 *i* S Sn 18 26 51.5 +1.0
PB04 AML AML 18 26 53.6
comp=E,222nm,0.5s

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*ISCJB* ***07*** *18:45:21.5±1.3, 21.°34S±0.°07×67.°84W±0.°09, h169km±21km, Error ellipse: s-maj=14.8km s-min=9.9km az=152.4*
*GUC* ***07*** *18:45:21.9±0.7, 21.°32S×68.°10W, h183km±17km, ML3.6*
*SJA* ***07*** *18:45:28.9±0.7, 21.°54S×66.°64W, h208km±10km, ML3.2*
**ISC 07 18:45:21.2**±2.4**, 21.°33S**±0.°07**×67.°84W**±0.°08**, h176**km±26km**, n13, σ0.s75**/18**, 7C, Chile-Bolivia border region**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
**PB09 IPOC Station P 1.39 250**⇑*i*P **Pn** **18 45 52.8 +0.9**
PB09 *i* S **Sn** **18 46 16.1 +0.5**
PB09 AML AML 18 46 18.3
comp=N,635nm,0.4s
**PB01 IPOC Station P 1.57 280**⇑*i*P **Pn** **18 45 53.6 +0.1**
PB01 *i* S **Sn** **18 46 17.8 -0.7**
PB01 AML AML 18 46 19.8
comp=E,291nm,0.2s
**LVC Limon Verde 1.62 218** *e*P Sn 18 46 12.9 -6.9
LVC AML AML 18 46 20.7
comp=Z,518nm,0.2s
**PB07 IPOC Station P 1.95 258**⇑*i*P **Pn** **18 45 57.9 +0.4**
PB07 *i* S **Sn** **18 46 24.5 -1.2**
PB07 AML AML 18 46 25.8
comp=E,350nm,0.4s
**MACH Maria Elena 1.98 244**⇑*i*P **Pn** **18 45 58.4 +0.4**
MACH *i* S **Sn** **18 46 25.6 -0.9**
**PB06 IPOC Station P 2.11 229**⇑*i*P **Pn** **18 45 59.7 +0.4**
PB06 *i* S **Sn** **18 46 28.4 -0.5**
PB06 AML AML 18 46 29.5
comp=E,413nm,0.2s
**YJA Yavi 2.32 112** *e*P **Pn** **18 46 02.3 +0.4**
YJA *e*S Sn 18 46 27.5 -6.0
YJA AML AML 18 46 35.0
comp=N,69nm,0.8s
**PB04 IPOC Station P 2.37 245**⇑*i*P **Pn** **18 46 02.5 +0.2**
PB04 AML AML 18 46 35.4
comp=E,165nm,0.1s
**MNMC Minimini 2.74 323**⇑*i*P **Pn** **18 46 07.5 +0.6**
MNMC *i* S **Sn** **18 46 41.9 -0.4**
MNMC AML AML 18 46 43.4

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=N,391nm,0.2s | | | | | | |
| **HJA** | **Humahuaca** | **2.92** | **130** | eP | **Pn** | **18 46 09.4** | **+0.4** |
| **AZAP** | **Zapla** | **3.85** | **139** | eP | **Pn** | **18 46 20.8** | **+0.3** |
| AZAP | | | | AML | AML | 18 47 09.2 | |
| | comp=Z,16nm,0.5s | | | | | | |
| **SLA** | **San Lorenzo** | **4.00** | **148** | eP | **Pn** | **18 46 23.5** | **+1.3** |
| **ASTB** | **Santa Barbara** | **4.05** | **131** | eP | **Pn** | **18 46 22.0** | **-0.9** |

*IDC **07** 18:46:34.7±5.3, 17.°85S×178.°64W, h560$^{km}$±59$^{km}$, mb3.4/5, mb1 3.7/6, mb1mx3.1/35, mbtmp4.4/6, Error ellipse: s-maj=61.3km s-min=24.8km az=155.0*

*ISCJB **07** 18:46:35.4±1.4, 17.°8S±0.°5×178.°8W±0.°3, h579$^{km}$, mb3.9/5, Error ellipse: s-maj=74.8km s-min=18.6km az=157.9*

**ISC 07 18:46:36.1**±1.4**, 17.°9S**±0.°5×**178.°7W**±0.°2**, h579$^{km}$, n7, σ0$^s$.44**/8**, mb3.9**/5**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.56** | **251** | P | **P** | **18 49 40.4** | **-0.4** |
| | 0.9nm,0.3s,baz=90,slow=20,SNR=10 | | | | | | |
| **JAY** | **Jayapura** | **42.62** | **286** | P | **P** | **18 53 43.1** | **+0.3** |
| | 8.6nm,0.9s,baz=116,slow=9.0,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.35** | **260** | P | **P** | **18 53 56.0** | **-0.2** |
| | 1.7nm,0.5s,baz=92,slow=6.8,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **44.52** | **254** | P | **P** | **18 53 57.9** | **+0.4** |
| | 16nm,0.4s,baz=90,slow=7.7,SNR=596 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 55 28.5** | **+0.5** |
| | 0.2nm,0.4s,baz=100,slow=4.8,SNR=2.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.60** | **44** | P | **P** | **18 57 44.1** | **-0.2** |
| | 0.5nm,0.6s,baz=240,slow=7.1,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.22** | **58** | P | **P** | **18 58 17.6** | **+0.1** |
| | 0.4nm,0.3s,baz=210,slow=5.0,SNR=5.2 | | | | | | |
| **GERES** | **GERESS Array B** | **147.50** | **345** | PKPbc | **PKPbc** | **19 05 15.4** | **-0.4** |
| | 0.4nm,0.5s,baz=27,slow=3.9,SNR=3.5 | | | | | | |

*MOS **07** 18:50:24.1±0.9, 48.°42N×152.°85E, h127$^{km}$, mb4.1/14, Error ellipse: s-maj=14.6km s-min=9.3km az=77.4*

*SKHL **07** 18:50:24.8±0.3, 48.°02N×153.°03E, h136$^{km}$±1$^{km}$, mb5.1/1, mbh4.1/1, msh4.7/2*

*ISCJB **07** 18:50:26.3±0.5, 48.°33N±0.°06×152.°89E±0.°09, h150$^{km}$, mb3.9/26, Error ellipse: s-maj=11.7km s-min=3.8km az=137.1*

*IDC **07** 18:50:28.1±2.5, 48.°32N×152.°85E, h151$^{km}$±23$^{km}$, mb3.5/20, mb1 3.7/23, mb1mx3.5/48, mbtmp4.0/23, MS3.3/1, Ms1 3.3/1, ms1mx2.3/28, Error ellipse: s-maj=18.0km s-min=11.0km az=140.0*

**ISC 07 18:50:27.5**±0.6**, 48.°29N**±0.°08×**152.°91E**±0.°08**, h150$^{km}$, n87, σ0$^s$.96**/84**, mb3.9**/26**, 5C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **3.18** | **40** | iPN | Pn | 18 51 12.1 | -5.0 |
| SKR | | | | eS | Sn | 18 51 50.9 | -4.5 |
| SKR | | | | pmax | pmax | | |
| | comp=N,40nm,0.4s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,50nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,280nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,200nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,800nm,20.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,1µm,20.0s | | | | | | |
| **SKR** | **Severo-Kuril's** | **3.18** | **40** | eP | **Pn** | **18 51 16.0** | **-1.1** |
| SKR | | | | AMB | AMB | 18 51 20.1 | |
| | comp=E,70nm,0.4s | | | | | | |
| SKR | | | | AMB | AMB | 18 51 20.1 | |
| | comp=E,30nm,0.4s | | | | | | |
| SKR | | | | AMB | AMB | 18 51 20.1 | |
| | comp=E,80nm,0.4s | | | | | | |
| SKR | | | | eS | **Sn** | **18 51 54.6** | **-0.8** |
| SKR | | | | A | A | 18 52 00.0 | |
| | comp=E,280nm,0.4s | | | | | | |
| SKR | | | | A | A | 18 52 00.0 | |
| | comp=E,200nm,0.4s | | | | | | |
| SKR | | | | A | A | 18 52 00.0 | |
| | comp=E,90nm,0.4s | | | | | | |
| **PAU** | **Pauzhetka** | **4.06** | **37** | eP | **Pn** | **18 51 27.5** | **-0.9** |
| PAU | | | | AMB | AMB | 18 51 29.8 | |
| | comp=E,128nm,0.5s | | | | | | |
| PAU | | | | eS | **Sn** | **18 52 14.3** | **-1.5** |
| PAU | | | | A | A | 18 52 14.9 | |
| | comp=E,30nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **4.62** | **230** | c iPN | **Pn** | **18 51 34.7** | **-1.2** |
| KUR | | | | iS | **Sn** | **18 52 28.9** | **-0.2** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,21nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,31nm,0.8s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,10.0nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **4.62** | **230** | eP | **Pn** | **18 51 34.7** | **-1.2** |
| KUR | | | | AMB | AMB | 18 51 39.3 | |
| | comp=N,40nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 18 51 39.3 | |
| | comp=N,80nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 18 51 39.3 | |
| | comp=N,21nm,0.3s | | | | | | |
| KUR | | | | eS | **Sn** | **18 52 28.9** | **-0.2** |
| KUR | | | | A | A | 18 52 35.8 | |
| | comp=N,100nm,0.5s | | | | | | |
| KUR | | | | A | A | 18 52 35.8 | |
| | comp=N,31nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **5.70** | **30** | P | **Pn** | **18 51 50.1** | **-0.1** |
| | comp=N,0.6nm,0.3s,baz=281,slow=16,SNR=6.6 | | | | | | |
| PETK | | | | S | **Sn** | **18 52 55.4** | **+0.6** |
| | comp=N,0.4nm,0.3s,baz=142,slow=16,SNR=3.1 | | | | | | |
| **PET** | **Petropavlovsk** | **5.98** | **35** | eP | **Pn** | **18 51 53.5** | **-0.3** |
| PET | | | | AMB | AMB | 18 51 54.9 | |
| | comp=N,50nm,1.1s | | | | | | |
| PET | | | | eS | **Sn** | **18 52 58.9** | **-2.5** |
| PET | | | | A | A | 18 53 02.1 | |
| | comp=N,40nm,0.4s | | | | | | |
| PET | | | | A | A | 18 53 09.0 | |
| | comp=N,400nm,3.0s | | | | | | |
| **SHO** | **Shikotan** | **6.12** | **226** | eP | Pn | 18 51 50.8 | -4.9 |
| SHO | | | | AMB | AMB | 18 51 53.5 | |
| | comp=N,40nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 18 52 09.2 | |
| | comp=N,380nm,4.0s | | | | | | |
| SHO | | | | eS | Sn | 18 52 55.0 | -10 |
| SHO | | | | A | A | 18 53 02.7 | |
| | comp=N,70nm,0.3s | | | | | | |
| SHO | | | | A | A | 18 53 13.6 | |
| | comp=N,260nm,4.0s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.49** | **232** | c iPN | **Pn** | **18 51 58.1** | **-2.5** |
| YUK | | | | iS | **Sn** | **18 53 10.7** | **-2.9** |
| YUK | | | | pmax | pmax | | |
| | comp=N,45nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,59nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,56nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **6.49** | **232** | eP | Pn | 18 51 56.2 | -4.4 |
| YUK | | | | AMB | AMB | 18 51 58.5 | |
| | comp=Z,45nm,0.5s | | | | | | |
| YUK | | | | AMB | AMB | 18 51 58.5 | |
| | comp=Z,59nm,0.5s | | | | | | |
| YUK | | | | AMB | AMB | 18 51 58.5 | |
| | comp=Z,56nm,0.5s | | | | | | |
| YUK | | | | AMB | AMB | 18 52 03.0 | |
| | comp=Z,40nm,2.0s | | | | | | |
| YUK | | | | eS | Sn | 18 53 05.0 | -8.6 |
| **YSS** | **Yuzh-Sakhalins** | **7.00** | **263** | ePN | **Pn** | **18 52 09.0** | **+1.6** |
| **YSS** | **Yuzh-Sakhalins** | **7.00** | **263** | eP | **Pn** | **18 52 05.0** | **-2.4** |
| YSS | | | | AMB | AMB | 18 52 12.0 | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **UGL** | **Uglegorsk** | **7.23** | **280** | ePN | Pn | 18 51 58.2 | -12 |
| **HABR** | **Khabarovsk** | **11.88** | **278** | PN | Pn | 18 53 01.9 | -10 |
| HABR | | | | pmax | pmax | | |
| | comp=N,2.0nm,0.7s | | | | | | |
| **EKMR** | **Ekimchan** | **13.52** | **298** | eP | **Pn** | **18 53 34.0** | **+0.9** |
| EKMR | | | | AMB | AMB | 18 53 41.5 | |
| | comp=N,5.0nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.03** | **262** | P | **Pn** | **18 53 52.4** | **+0.2** |
| | comp=N,0.5nm,0.3s,baz=63,slow=12,SNR=6.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.96** | **228** | P | **Pn** | **18 54 03.8** | **+0.1** |
| | comp=N,0.8nm,0.3s,baz=8.1,slow=14,SNR=7.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.96** | **228** | P | **Pn** | **18 54 03.8** | **+0.1** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KROS** | **Kirovskiy** | **17.27** | **301** | eP | **P** | **18 54 17.0** | **-1.5** |
| KROS | | | | AMB | AMB | 18 54 24.5 | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| **YAK** | **Yakutsk** | **18.97** | **325** | eP | **P** | **18 54 34.3** | **-2.6** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,22nm,2.5s | | | | | | |
| **BILL** | **Bilibino** | **20.93** | **14** | eP | **P** | **18 54 58.3** | **+0.4** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **BILL** | **Bilibino** | **20.93** | **14** | eP | **P** | **18 54 58.3** | **+0.4** |
| **KSRS** | **Korea Array** | **21.18** | **248** | P | **P** | **18 55 01.4** | **+0.4** |
| | comp=Z,7.2nm,0.6s,baz=47,slow=9.8,SNR=26 | | | | | | |
| **KSRS** | **Korea Array** | **21.18** | **248** | eP | **P** | **18 55 01.3** | **+0.4** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **TJN** | **Taejon** | **22.21** | **247** | eP | **P** | **18 55 11.5** | **-0.2** |
| **JNU** | **Nakatsue** | **22.44** | **236** | P | **P** | **18 55 13.9** | **0.0** |
| | comp=Z,3.7nm,0.7s,baz=18,slow=9.0,SNR=5.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.65** | **153** | T | T | 19 28 46.3 | |
| | baz=342,slow=76,SNR=22 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.67** | **154** | T | T | 19 28 46.4 | |
| | baz=342,slow=76,SNR=19 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.67** | **153** | T | T | 19 28 52.6 | |
| | baz=342,slow=76,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **30.73** | **287** | LR | LR | 19 08 44.8 | |
| | comp=Z,52nm,18.3s,baz=42,slow=36 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.75** | **155** | T | T | 19 30 06.2 | |
| | baz=343,slow=76,SNR=44 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.76** | **155** | T | T | 19 30 05.7 | |
| | baz=343,slow=76,SNR=43 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.77** | **155** | T | T | 19 30 02.3 | |
| | baz=343,slow=76,SNR=43 | | | | | | |
| **ILAR** | **Eielson Array** | **35.44** | **40** | P | **P** | **18 57 08.9** | **+0.1** |
| | comp=Z,0.3nm,0.5s,baz=302,slow=7.4,SNR=6.3 | | | | | | |
| **INK** | **Inuvik** | **40.43** | **33** | P | **P** | **18 57 51.1** | **+0.6** |
| | comp=Z,2.9nm,0.9s,baz=318,slow=15,SNR=3.1 | | | | | | |
| **INK** | **Inuvik** | **40.43** | **33** | P | **P** | **18 57 51.1** | **+0.6** |
| INK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.62** | **304** | P | **P** | **18 58 00.1** | **-0.3** |
| | comp=Z,1.9nm,0.6s,baz=67,slow=7.4,SNR=10 | | | | | | |
| ZALV | | | | PcP | **PcP** | **18 59 53.9** | **-0.5** |
| | comp=Z,0.4nm,0.3s,baz=127,slow=4.5,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.62** | **304** | eP | **P** | **18 58 00.4** | **0.0** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **DLBC** | **Dease Lake** | **44.63** | **47** | P | **P** | **18 58 26.7** | **+2.0** |
| | comp=Z,1.3nm,0.7s,baz=164,slow=16,SNR=5.8 | | | | | | |
| **MK31** | **Makanchi Array** | **46.13** | **296** | iP | **P** | **18 58 36.8** | **+0.2** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.13** | **296** | P | **P** | **18 58 37.0** | **+0.4** |
| | comp=Z,3.7nm,0.7s,baz=66,slow=8.3,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.13** | **296** | P | **P** | **18 58 37.0** | **+0.4** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **46.13** | **296** | eP | **P** | **18 58 37.0** | **+0.4** |
| **CHKZ** | **Chkalovo** | **49.35** | **309** | iP | **P** | **18 59 00.1** | **-1.0** |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.78** | **37** | P | **P** | **18 59 05.0** | **+0.7** |
| | comp=Z,0.5nm,0.5s,baz=299,slow=6.7,SNR=4.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.78** | **37** | P | **P** | **18 59 05.0** | **+0.7** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **49.78** | **37** | eP | **P** | **18 59 05.0** | **+0.7** |
| **BRVK** | **Borovoye** | **49.83** | **308** | ceP | **P** | **18 59 05.6** | **+0.8** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **49.83** | **308** | eP | **P** | **18 59 05.6** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** | **52.62** | **255** | P | **P** | **18 59 27.1** | **+1.0** |
| | comp=Z,1.8nm,0.6s,baz=34,slow=7.0,SNR=13 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.62** | **255** | P | **P** | **18 59 27.1** | **+1.0** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **ARU** | **Arti** | **53.79** | **317** | d iP | **P** | **18 59 34.1** | **0.0** |
| ARU | | | | | | 19 00 38.4 | |
| ARU | | | | S | **S** | **19 06 57.9** | **+1.2** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **ARU** | **Arti** | **53.79** | **317** | eP | **P** | **18 59 34.1** | **0.0** |
| **GUN** | **Gumba** | **54.75** | **274** | eP | **P** | **18 59 42.4** | **+0.5** |
| | comp=Z,11nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **54.90** | **272** | eP | **P** | **18 59 43.4** | **+0.6** |
| | comp=Z,17nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **55.23** | **274** | eP | **P** | **18 59 46.0** | **+0.9** |
| | comp=Z,3.3nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **55.28** | **274** | eP | **P** | **18 59 46.3** | **+0.6** |
| | comp=Z,2.8nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **55.29** | **274** | eP | **P** | **18 59 46.0** | **+0.3** |
| | comp=Z,2.8nm,0.4s | | | | | | |
| **DMN** | **Daman** | **55.46** | **274** | eP | **P** | **18 59 47.3** | **+0.4** |
| | comp=Z,16nm,0.9s | | | | | | |
| **GKN** | **Gorkha** | **55.51** | **275** | eP | **P** | **18 59 48.0** | **+0.9** |
| | comp=Z,5.9nm,0.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.35** | **340** | P | **P** | **18 59 51.6** | **-0.7** |
| | comp=Z,3.4nm,0.9s,baz=30,slow=7.3,SNR=4.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.35** | **340** | P | **P** | **18 59 51.6** | **-0.7** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KOLN** | **Koldanda** | **56.36** | **275** | eP | **P** | **18 59 53.5** | **+0.3** |
| | comp=Z,2.2nm,0.2s | | | | | | |
| **AB31** | **Akbulak array** | **57.34** | **309** | iP | **P** | **18 59 59.5** | **-0.1** |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **62.59** | **334** | P | **P** | **19 00 34.9** | **-0.2** |
| | comp=Z,1.8nm,0.4s,baz=44,slow=6.6,SNR=38 | | | | | | |
| **FINES** | **FINESS Array B** | **62.59** | **334** | eP | **P** | **19 00 35.2** | **+0.1** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **62.59** | **334** | eP | **P** | **19 00 35.1** | **0.0** |
| **GEYT** | **Alibeck** | **65.70** | **300** | P | **P** | **19 00 55.9** | **0.0** |
| | comp=Z,1.3nm,0.6s,baz=38,slow=10.0,SNR=3.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **66.73** | **341** | P | **P** | **19 01 02.2** | **+0.2** |
| | comp=Z,0.8nm,0.6s,baz=30,slow=4.7,SNR=3.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **66.73** | **341** | eP | **P** | **19 01 02.6** | **+0.6** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **66.73** | **341** | eP | **P** | **19 01 02.6** | **+0.6** |
| **KBZ** | **Khabaz** | **69.70** | **313** | P | **P** | **19 01 21.4** | **+0.7** |
| | comp=Z,1.0nm,0.6s,baz=112,slow=6.2,SNR=4.6 | | | | | | |
| **KBZ** | **Khabaz** | **69.70** | **313** | P | **P** | **19 01 21.4** | **+0.7** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **69.93** | **199** | P | **P** | **19 01 23.8** | **+1.5** |
| | comp=Z,0.2nm,0.4s,baz=16,slow=6.4,SNR=3.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **70.19** | **326** | P | **P** | **19 01 22.3** | **-1.3** |
| | comp=Z,0.7nm,0.4s,baz=33,slow=6.2,SNR=2.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **70.19** | **326** | P | **P** | **19 01 22.3** | **-1.3** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **73.63** | **198** | P | **P** | **19 01 43.9** | **-0.4** |
| | comp=Z,0.8nm,1.1s,baz=13,slow=5.5,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **73.63** | **198** | P | **P** | **19 01 43.9** | **-0.4** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| **CLL** | **Collm** | **75.01** | **335** | ⇑iP | **P** | **19 01 52.3** | **+0.3** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **CLL** | **Collm** | **75.01** | **335** | eP | **P** | **19 01 52.3** | **+0.3** |
| **CLL** | **Collm** | **75.01** | **335** | ⇑iP | **P** | **19 01 52.3** | **+0.3** |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **76.85** | **61** | P | **P** | **19 02 02.9** | **-0.2** |
| | comp=Z,0.2nm,0.4s,baz=292,slow=4.8,SNR=2.5 | | | | | | |
| **GERES** | **GERESS Array B** | **77.01** | **334** | P | **P** | **19 02 03.8** | **+0.3** |
| | comp=Z,0.7nm,0.5s,baz=18,slow=5.6,SNR=5.6 | | | | | | |
| **GERES** | **GERESS Array B** | **77.01** | **334** | eP | **P** | **19 02 04.2** | **+0.6** |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **77.01** | **334** | eP | **P** | **19 02 04.2** | **+0.6** |
| **BRTR** | **Keskin Array B** | **77.18** | **316** | P | **P** | **19 02 05.3** | **+0.6** |
| | comp=Z,1.0nm,0.8s,baz=7.6,slow=4.4,SNR=3.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **77.18** | **316** | P | **P** | **19 02 05.3** | **+0.6** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |

*CSEM **07** 18:54:58.6, 63.°70N×26.°34E, h0$^{km}$, ML1.3, Mining explosion. After HEL*

**HEL 07 18:54:58.6**±0.3**, 63.°70N×26.°34E, h0$^{km}$, ML1.3, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OUL** | **Oulu** | **1.40** | **352** | PG | Pn | 18 55 23.9 | -1.5 |
| OUL | | | | SN | Sb | 18 55 44.0 | 0.0 |
| **OUL** | **Oulu** | **1.40** | **352** | Pg | Pn | 18 55 23.8 | -1.5 |
| OUL | | | | Sn | Sb | 18 55 44.0 | 0.0 |
| **KAF** | **Kangasniemi** | **1.60** | **181** | PN | Pn | 18 55 28.3 | +0.3 |
| KAF | | | | MSG | | 18 55 46.5 | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **KAF** | **Kangasniemi** | **1.60** | **181** | Pn | Pn | 18 55 28.3 | +0.2 |
| **KEF** | **Keuruu** | **1.68** | **204** | PG | Pn | 18 55 28.6 | -0.6 |
| KEF | | | | SN | Sg | 18 55 53.0 | +0.4 |
| **KEF** | **Keuruu** | **1.68** | **204** | Pg | Pn | 18 55 28.6 | -0.6 |
| KEF | | | | Sn | Sg | 18 55 53.0 | +0.4 |
| **VAF** | **Ylistaro** | **1.78** | **250** | PG | Pn | 18 55 31.0 | +0.4 |
| | baz=60 | | | | | | |
| VAF | | | | SB | Sn | 18 55 51.0 | -2.9 |
| VAF | | | | MSG | | 18 55 51.7 | |
| | comp=Z,2.3nm,0.2s | | | | | | |
| **VAF** | **Ylistaro** | **1.78** | **250** | Pg | Pn | 18 55 31.0 | +0.4 |
| VAF | | | | Sb | Sn | 18 55 51.0 | -2.9 |
| **FIA0** | **FINESS Array S** | **2.27** | **183** | PG | Pb | 18 55 39.4 | -1.0 |
| | baz=355 | | | | | | |
| FIA0 | | | | SN | Sn | 18 56 01.3 | -4.7 |
| **FIA0** | **FINESS Array S** | **2.27** | **183** | Pg | Pb | 18 55 39.4 | -1.0 |
| FIA0 | | | | Sn | Sn | 18 56 01.3 | -4.7 |
| **UMAU** | **Umeaa** | **2.52** | **277** | SB | Sn | 18 56 13.0 | +1.0 |
| **UMAU** | **Umeaa** | **2.52** | **277** | Sb | Sn | 18 56 13.0 | +0.9 |

*ISCJB **07** 18:59:21.1±0.6, 5.°84S±0.°08×154.°4E±0.°1, h400$^{km}$, mb3.8/14, Error ellipse: s-maj=15.8km s-min=10.9km az=10.7*

*IDC **07** 18:59:22.5±2.5, 5.°86S×154.°47E, h398$^{km}$±25$^{km}$, mb3.4/13, mb1 3.5/15, mb1mx3.3/26, mbtmp4.1/15, Error ellipse: s-maj=21.1km s-min=11.3km az=86.0*

**ISC 07 18:59:22.5**±0.7**, 5.°85S**±0.°10×**154.°4E**±0.°1**, h400$^{km}$, n23, σ0$^s$.92**/28**, mb3.8**/14**, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **8.03** | **244** | P | **P** | **19 01 18.9** | **+0.5** |
| | 0.7nm,0.3s,baz=245,slow=14,SNR=3.7 | | | | | | |
| **JAY** | **Jayapura** | **14.09** | **283** | P | **P** | **19 02 24.8** | **-0.5** |
| | 0.8nm,0.3s,baz=192,slow=6.3,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.04** | **233** | P | **P** | **19 04 03.7** | **-0.1** |
| | 0.8nm,0.4s,baz=58,slow=8.9,SNR=5.7 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 07 33.2** | **+0.3** |
| | 0.4nm,0.3s,baz=67,slow=2.5,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **26.54** | **226** | P | **P** | **19 04 25.4** | **-0.6** |
| | 0.6nm,0.3s,baz=56,slow=9.1,SNR=16 | | | | | | |
| ASAR | | | | pP | **PP** | **19 05 38.7** | **+2.3** |
| | 0.6nm,0.9s,baz=56,slow=10,SNR=2.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 07 39.3** | **+0.7** |
| | 0.7nm,0.6s,baz=64,slow=2.3,SNR=11 | | | | | | |
| ASAR | | | | S | **S** | **19 08 28.1** | **-2.7** |
| | 0.8nm,0.7s,baz=56,slow=14,SNR=7.5 | | | | | | |
| **RAO** | **Raoul Island** | **34.97** | **135** | P | **P** | **19 05 39.1** | **0.0** |
| | 194nm,0.5s,baz=270,slow=20,SNR=3.2 | | | | | | |
| **JNU** | **Nakatsue** | **44.75** | **332** | P | **P** | **19 06 58.5** | **+0.1** |
| | baz=225,slow=1.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.83** | **341** | P | **P** | **19 06 58.2** | **-0.7** |
| | 2.6nm,0.6s,baz=168,slow=9.2,SNR=9.1 | | | | | | |
| **MAT** | **Matsushiro** | **44.83** | **341** | P | **P** | **19 06 58.6** | **-0.3** |
| **KSRS** | **Korea Array** | **49.68** | **332** | P | **P** | **19 07 36.4** | **+0.6** |
| | 2.9nm,0.6s,baz=148,slow=7.6,SNR=12 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.78** | **340** | P | **P** | **19 08 06.3** | **+0.8** |
| | 2.6nm,0.7s,baz=149,slow=7.1,SNR=6.5 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.80** | **2** | P | **P** | **19 08 40.8** | **+0.4** |
| | 4.0nm,0.9s,baz=158,slow=9.4,SNR=4.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **59.80** | **295** | P | **P** | **19 08 48.6** | **+0.7** |
| | 1.6nm,0.6s,baz=125,slow=5.5,SNR=15 | | | | | | |
| **SONM** | **Songino Array** | **68.08** | **327** | P | **P** | **19 09 41.3** | **+0.6** |
| | 2.3nm,0.6s,baz=141,slow=6.8,SNR=7.2 | | | | | | |
| **VNDA** | **Vanda** | **71.73** | **178** | P | **P** | **19 10 02.8** | **+0.8** |
| | 0.6nm,0.6s,baz=326,slow=6.5,SNR=9.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **82.19** | **319** | P | **P** | **19 11 00.5** | **+0.3** |
| | 1.8nm,0.7s,baz=106,slow=4.4,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **82.52** | **22** | P | **P** | **19 11 00.2** | **-1.2** |
| | 0.7nm,0.6s,baz=254,slow=4.9,SNR=6.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.93** | **326** | P | **P** | **19 11 02.8** | **-0.9** |
| | 1.1nm,0.5s,baz=130,slow=6.0,SNR=4.7 | | | | | | |
| **MAW** | **Mawson** | **85.23** | **203** | P | **P** | **19 11 14.6** | **-0.4** |
| | 0.7nm,0.5s,baz=58,slow=5.2,SNR=6.1 | | | | | | |
| **FINES** | **FINESS Array B** | **112.68** | **336** | PKiKP | **PKiKP** | **19 17 11.9** | **-0.1** |
| | 4.6nm,1.1s,baz=107,slow=3.3,SNR=4.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **116.30** | **325** | PKP | **PKPdf** | **19 17 18.5** | **-0.7** |
| | 0.6nm,0.5s,baz=57,slow=2.0,SNR=3.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **117.22** | **312** | PKP | **PKPdf** | **19 17 21.2** | **-0.4** |
| | 0.6nm,0.9s,baz=121,slow=2.5,SNR=3.0 | | | | | | |
| **GERES** | **GERESS Array B** | **125.80** | **329** | PKP | **PKPdf** | **19 17 38.2** | **+0.4** |
| | 0.5nm,0.6s,baz=325,slow=1.6,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.18** | **287** | PKPbc | **PKPbc** | **19 18 32.2** | **-0.3** |
| | 1.0nm,0.3s,baz=72,slow=1.9,SNR=32 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **19 18 43.7** | **-0.4** |
| | 0.4nm,0.8s,baz=92,slow=5.1,SNR=4.0 | | | | | | |

*ISCJB **07** 19:28:22.2±0.5, 49.°81N±0.°04×18.°38E±0.°03, h0$^{km}$, Error ellipse: s-maj=5.2km s-min=2.8km az=1.2*

*CSEM **07** 19:28:22.6±0.3, 49.°84N×18.°48E, h1$^{km}$, ML2.6/12, Error ellipse: s-maj=7.2km s-min=3.8km az=179.0*

*IPEC **07** 19:28:23.3±0.2, 49.°80N×18.°55E, h0$^{km}$±3$^{km}$, ML1.7/3, Error ellipse: s-maj=2.1km s-min=1.1km az=161.0*

*PRU **07** 19:28:23.7, 49.°86N×18.°47E, h0$^{km}$*

*VIE **07** 19:28:24.6±0.6, 49.°67N×18.°42E, h0$^{km}$, mb2.1/2, ml2.1/3, Error ellipse: s-maj=4.4km s-min=2.8km az=111.0, Suspected Mining induced.*

**ISC 07 19:28:23.6**±0.8**, 49.°82N**±0.°04×**18.°48E**±0.°03**, h0$^{km}$, n28, σ0$^s$.88**/54**, 2C, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKC** | **Ostrava-Krasne** | **0.21** | **275** | ePG | **Pg** | **19 28 28.5** | **+0.8** |
| OKC | | | | eSG | **Sg** | **19 28 31.3** | **+0.9** |
| | comp=Z,118nm,0.7s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.21** | **275** | Pg | **Pg** | **19 28 28.5** | **+0.8** |
| OKC | | | | Sg | **Sg** | **19 28 31.3** | **+0.9** |
| | 118nm,0.7s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.61** | **266** | ePg | **Pg** | **19 28 35.7** | **+0.5** |
| | baz=88 | | | | | | |
| MORC | | | | eSg | **Sg** | **19 28 43.7** | **+0.6** |
| | 12nm,0.3s,baz=88 | | | | | | |
| **OJC** | **Ojcow** | **0.94** | **64** | ePg | **Pg** | **19 28 41.0** | **-0.6** |
| OJC | | | | eSg | **Sb** | **19 28 56.3** | **+0.5** |
| **OJC** | **Ojcow** | **0.94** | **64** | ePg | **Pg** | **19 28 41.0** | **-0.6** |
| OJC | | | | eSg | **Sb** | **19 28 56.3** | **+0.5** |
| **KRLC** | **Kraliky** | **1.12** | **284** | ePG | **Pg** | **19 28 44.3** | **-0.8** |
| KRLC | | | | eSG | **Sg** | **19 29 00.0** | **+0.3** |
| **KRLC** | **Kraliky** | **1.12** | **284** | Pg | **Pg** | **19 28 44.3** | **-0.8** |
| KRLC | | | | Sg | **Sg** | **19 29 00.0** | **+0.3** |
| **NIE** | **Niedzica** | **1.25** | **108** | ePg | **Pg** | **19 28 47.2** | **-0.3** |
| NIE | | | | eSg | **Sn** | **19 29 06.7** | **+0.8** |
| **VRAC** | **Vranov** | **1.33** | **248** | ePg | **Pg** | **19 28 48.9** | **-0.1** |
| | baz=68 | | | | | | |
| VRAC | | | | eSg | **Sg** | **19 29 05.9** | **-0.3** |
| | 17nm,0.5s,baz=68 | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.49** | **292** | ePG | **Pn** | **19 28 51.0** | **-0.6** |
| DPC | | | | eSG | **Sg** | **19 29 11.3** | **0.0** |
| | comp=Z,11nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.49** | **292** | Pg | **Pn** | **19 28 51.0** | **-0.6** |
| DPC | | | | Sg | **Sg** | **19 29 11.3** | **0.0** |
| | 11nm,0.5s | | | | | | |
| **KRUC** | **Moravsky** | **1.56** | **242** | ePg | **Pn** | **19 28 52.2** | **-0.3** |
| | baz=62 | | | | | | |
| KRUC | | | | eSg | **Sn** | **19 29 12.9** | **-0.5** |
| | 6.1nm,0.3s,baz=62 | | | | | | |
| **UPC** | **Upice** | **1.73** | **294** | ePG | **Pn** | **19 28 55.1** | **+0.2** |
| UPC | | | | eSG | **Sg** | **19 29 19.0** | **-0.1** |
| | comp=Z,12nm,0.6s | | | | | | |
| **UPC** | **Upice** | **1.73** | **294** | Pg | **Pn** | **19 28 55.1** | **+0.2** |
| UPC | | | | Sg | **Sg** | **19 29 19.0** | **-0.1** |
| | 12nm,0.6s | | | | | | |
| **KSP** | **Ksiaz** | **1.73** | **307** | ePg | **Pb** | **19 28 56.5** | **+0.2** |
| KSP | | | | eSg | **Sg** | **19 29 19.3** | **0.0** |
| **GOPC** | **GO Pecny, Ondr** | **2.39** | **274** | ePG | **Pb** | **19 29 07.7** | **+0.2** |
| GOPC | | | | eSG | **Sg** | **19 29 39.7** | **-0.6** |
| | comp=Z,4.9nm,0.5s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.39** | **274** | Pg | **Pb** | **19 29 07.7** | **+0.2** |
| GOPC | | | | Sg | **Sg** | **19 29 39.7** | **-0.6** |
| | 4.9nm,0.5s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **PRU** | **Pruhonice** | **2.55** | **275** | *e*PG | **Pb** | **19 29 10.5** | **+0.3** |
| PRU | | | | *e*SG | **Sg** | **19 29 43.8** | **-1.7** |
| | comp=Z,2.9nm,0.5s | | | | | | |
| **PRU** | **Pruhonice** | **2.55** | **275** | Pg | **Pb** | **19 29 10.5** | **+0.3** |
| PRU | | | | Sg | **Sg** | **19 29 43.8** | **-1.7** |
| | 2.9nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **2.61** | **287** | *e*SG | **Sg** | **19 29 46.8** | **-0.6** |
| | comp=Z,9.3nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **2.61** | **287** | Sg | **Sg** | **19 29 46.8** | **-0.6** |
| | 9.3nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.09** | **292** | PG | **Pb** | **19 29 20.3** | **+0.9** |
| BRG | | | | SG | **Sg** | **19 30 00.8** | **-2.0** |
| | 3.5nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.27** | **260** | *e*PN | **Pn** | **19 29 15.7** | **-0.4** |
| KHC | | | | *e*PG | **Pg** | **19 29 24.2** | **-2.0** |
| KHC | | | | *e*SG | **Sg** | **19 30 08.1** | **-0.4** |
| | comp=Z,3.7nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.27** | **260** | Pn | **Pn** | **19 29 15.7** | **-0.4** |
| **MOA** | **Molln** | **3.41** | **236** | ⇑*i*Pg | **Pg** | **19 29 27.7** | **-1.2** |
| MOA | | | | ⇑*i*Sg | **Sg** | **19 30 13.4** | **+0.3** |
| | 4.6nm,0.7s | | | | | | |
| **MOA** | **Molln** | **3.41** | **236** | Pg | **Pg** | **19 29 27.7** | **-1.2** |
| MOA | | | | Sg | **Sg** | **19 30 13.4** | **+0.3** |
| | 4.6nm,0.7s | | | | | | |
| **NKC** | **Novy Kostel** | **3.91** | **278** | *e*PG | **Pb** | **19 29 35.6** | **+2.2** |
| NKC | | | | *e*SG | **Sg** | **19 30 28.3** | **-0.8** |
| | comp=Z,6.1nm,0.4s | | | | | | |
| **NKC** | **Novy Kostel** | **3.91** | **278** | Pg | **Pb** | **19 29 35.6** | **+2.2** |
| NKC | | | | Sg | **Sg** | **19 30 28.3** | **-0.8** |
| | 6.1nm,0.4s | | | | | | |

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*MOS **07** 19:51:19.6±1.4, 43°.14N×27°.53E, h14km, mb4.4/12, Error ellipse: s-maj=5.3km s-min=3.9km az=103.2*
*IDC **07** 19:51:20.7±0.6, 43°.16N×27°.42E, h0km, mb3.8/18, mb1 3.9/26, mb1mx3.9/52, mbtmp3.8/26, ML3.6/8, MS3.4/21, Ms1 3.4/21, ms1mx3.3/43, Error ellipse: s-maj=10.7km s-min=8.5km az=40.0*
*PRU **07** 19:51:21.7, 43°.07N×27°.56E, h4km, M4.4*
*NEIC **07** 19:51:21.9, 43°.07N×27°.57E, h10km, mb4.4/3, ML4.5(CSEM), ML4.8(BUC), After BUC.*
*NEIC Felt at Provadiya, Ruse and Sofia. Also felt at Bucharest and Constanta, Romania.*
*ISCJB **07** 19:51:21.3±0.4, 43°.13N±0°.01×27°.43E±0°.02, h11km±2km, mb3.9/23, MS3.3/12, Error ellipse: s-maj=2.1km s-min=1.8km az=8.1*
*PDG **07** 19:51:21.6±0.5, 43°.13N×27°.46E, h7km, ML4.3/9, Error ellipse: s-maj=0.4km s-min=0.7km az=0.0*
*CSEM **07** 19:51:21.9±0.1, 43°.14N×27°.47E, h2km, MD4.2, Error ellipse: s-maj=2.4km s-min=1.8km az=73.0*
*SOF **07** 19:51:21.3, 43°.16N×27°.50E, h2km, MD4.2*
*THE **07** 19:52:04.2, 41°.18N×24°.43E, h28km, ML2.4/9, Error ellipse: s-maj=1.2km s-min=0.4km az=45.0*

**ISC 07 19:51:21.2**±0.8**, 43°.15N**±0°.01×**27°.49E**±0°.02**, h7**km±5km**,**
**n568,** σ1s**66**/655**, mb3.9**/23**, MS3.3**/12**, 46C-60D, Bulgaria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRD** | **Provadia** | **0.08** | **307** | P | **Pg** | **19 51 23.0** | **-0.2** |
| **PRD** | **Provadia** | **0.08** | **307** | P | **Pg** | **19 51 22.4** | **-0.8** |
| **PRD** | **Provadia** | **0.08** | **307** | P | **Pg** | **19 51 22.4** | **-0.8** |
| **ROIA** | **ROIAK** | **0.10** | **234** | P | **Pg** | **19 51 23.4** | **-0.1** |
| **AVR** | **AVREN** | **0.14** | **103** | P | **Pg** | **19 51 24.4** | **+0.3** |
| **AVR** | **AVREN** | **0.14** | **103** | P | **Pg** | **19 51 24.4** | **+0.3** |
| **NEF** | **NEVSHA** | **0.19** | **306** | P | **Pg** | **19 51 25.1** | **0.0** |
| **NEF** | **NEVSHA** | **0.19** | **306** | P | **Pg** | **19 51 25.1** | **0.0** |
| **PSN** | **Preselentsi** | **0.73** | **43** | P | **Pg** | **19 51 35.2** | **-0.1** |
| **PSN** | **Preselentsi** | **0.73** | **43** | P | **Pg** | **19 51 34.6** | **-0.7** |
| **PSN** | **Preselentsi** | **0.73** | **43** | P | **Pg** | **19 51 34.6** | **-0.7** |
| **JMB** | **Yambol** | **0.95** | **225** | P | **Pn** | **19 51 40.9** | **-0.1** |
| **JMB** | **Yambol** | **0.95** | **225** | P | **Pn** | **19 51 40.7** | **-0.3** |
| **JMB** | **Yambol** | **0.95** | **225** | Pn | **Pn** | **19 51 40.9** | **-0.1** |
| **JMB** | **Yambol** | **0.95** | **225** | Pn | **Pn** | **19 51 40.9** | **-0.1** |
| **MSAB** | **Monastry St. A** | **0.97** | **15** | ⇓*i*P | **Pb** | **19 51 40.2** | **-0.2** |
| **MSAB** | **Monastry St. A** | **0.97** | **15** | S | **Sn** | **19 51 56.2** | **+0.9** |
| **MSAB** | **Monastry St. A** | **0.97** | **15** | ⇓*i*P | **Pb** | **19 51 40.2** | **-0.2** |
| MSAB | | | | S | **Sn** | **19 51 56.2** | **+0.9** |
| **MANR** | **Mangalia** | **1.04** | **50** | ⇑*i*P | **Pb** | **19 51 41.7** | **+0.1** |
| **MANR** | **Mangalia** | **1.04** | **50** | S | **Sn** | **19 52 00.2** | **+3.2** |
| **MANR** | **Mangalia** | **1.04** | **50** | ⇑*i*P | **Pb** | **19 51 41.7** | **+0.1** |
| MANR | | | | S | **Sn** | **19 52 00.2** | **+3.2** |
| **SZH** | **Strazhica** | **1.14** | **276** | P | **Pb** | **19 51 43.4** | **+0.1** |
| **SZH** | **Strazhica** | **1.14** | **276** | P | **Pb** | **19 51 43.4** | **+0.1** |
| **CVD** | **Cernavoda** | **1.23** | **19** | ⇓*i*P | **Pn** | **19 51 45.7** | **+0.9** |
| **CVD** | **Cernavoda** | **1.23** | **19** | S | **Sn** | **19 52 03.4** | **+1.8** |
| **CVD** | **Cernavoda** | **1.23** | **19** | ⇓*i*P | **Pn** | **19 51 45.7** | **+0.9** |
| CVD | | | | S | **Sn** | **19 52 03.4** | **+1.8** |
| **EFOR** | **EFORIE** | **1.25** | **41** | ⇑*i*P | **Pg** | **19 51 45.6** | **+0.5** |
| **EFOR** | **EFORIE** | **1.25** | **41** | S | **Sn** | **19 52 04.5** | **+2.4** |
| **EFOR** | **EFORIE** | **1.25** | **41** | ⇑*i*P | **Pg** | **19 51 45.6** | **+0.5** |
| EFOR | | | | S | **Sn** | **19 52 04.5** | **+2.4** |
| **EDRB** | **Edirne** | **1.42** | **203** | *e*PN | **Pb** | **19 51 48.0** | **+0.1** |
| EDRB | | | | *e*SN | **Sg** | **19 52 08.1** | **+1.4** |
| **EDRB** | **Edirne** | **1.42** | **203** | *e*Pn | **Pb** | **19 51 48.0** | **+0.1** |
| EDRB | | | | *e*Sn | **Sg** | **19 52 08.1** | **+1.4** |
| **AMRR** | **Amara** | **1.46** | **356** | ⇓*i*P | **Pb** | **19 51 48.9** | **+0.1** |
| **AMRR** | **Amara** | **1.46** | **356** | S | **Sg** | **19 52 10.5** | **+2.3** |
| **AMRR** | **Amara** | **1.46** | **356** | ⇓*i*P | **Pb** | **19 51 48.9** | **+0.1** |
| AMRR | | | | S | **Sg** | **19 52 10.5** | **+2.3** |
| **TIRR** | **Tirgusor** | **1.47** | **27** | *e*PN | **Pg** | **19 51 49.6** | **+0.3** |
| **TIRR** | **Tirgusor** | **1.47** | **27** | *e*P | **Pb** | **19 51 48.6** | **-0.3** |
| TIRR | | | | *e* | | 19 52 08.6 | |
| **TIRR** | **Tirgusor** | **1.47** | **27** | ⇓*i*P | **Pb** | **19 51 48.9** | **+0.1** |
| **TIRR** | **Tirgusor** | **1.47** | **27** | S | **Sg** | **19 52 08.7** | **+0.3** |
| **TIRR** | **Tirgusor** | **1.47** | **27** | *e*Pn | **Pb** | **19 51 48.6** | **-0.3** |
| TIRR | | | | *e*Sn | **Sg** | **19 52 08.6** | **+0.3** |
| **TIRR** | **Tirgusor** | **1.47** | **27** | ⇓*i*P | **Pb** | **19 51 48.9** | **+0.1** |
| **TIRR** | **Tirgusor** | **1.47** | **27** | *e*Pn | **Pg** | **19 51 49.7** | **+0.3** |
| TIRR | | | | S | **Sg** | **19 52 08.7** | **+0.3** |
| **PHSR** | **Pinarhisar** | **1.52** | **179** | *e*PN | **Pb** | **19 51 49.5** | **-0.2** |
| PHSR | | | | *e*SN | **Sg** | **19 52 11.3** | **+1.3** |
| **PHSR** | **Pinarhisar** | **1.52** | **179** | *e*Pn | **Pb** | **19 51 49.5** | **-0.2** |
| PHSR | | | | *e*Sn | **Sg** | **19 52 11.3** | **+1.3** |
| **PVL** | **Pavlikeni** | **1.58** | **273** | P | **Pg** | **19 51 54.0** | **+2.5** |
| **BUC1** | **Bucharest** | **1.60** | **319** | ⇑*i*P | **Pb** | **19 51 51.0** | **0.0** |
| **BUC1** | **Bucharest** | **1.60** | **319** | ⇓*i*P | **Pg** | **19 51 52.2** | **+0.4** |
| BUC1 | | | | S | **Sg** | **19 52 15.3** | **+2.8** |
| **BVCR** | **Bucharest-Old** | **1.63** | **322** | ⇑*i*P | **Pg** | **19 51 52.3** | **-0.1** |
| **BVCR** | **Bucharest-Old** | **1.63** | **322** | S | **Sg** | **19 52 15.9** | **+2.4** |
| **BVCR** | **Bucharest-Old** | **1.63** | **322** | ⇑*i*P | **Pg** | **19 51 52.3** | **-0.1** |
| BVCR | | | | S | **Sg** | **19 52 15.9** | **+2.4** |
| **BTMR** | **Bucharest-Geot** | **1.63** | **323** | ⇓*i*P | **Pg** | **19 51 52.6** | **+0.2** |
| **BTMR** | **Bucharest-Geot** | **1.63** | **323** | S | **Sg** | **19 52 15.2** | **+1.6** |
| **BTMR** | **Bucharest-Geot** | **1.63** | **323** | ⇓*i*P | **Pg** | **19 51 52.6** | **+0.2** |
| BTMR | | | | S | **Sg** | **19 52 15.2** | **+1.6** |
| **CIOR** | **Ciorogarla** | **1.74** | **319** | ⇓*i*P | **Pb** | **19 51 53.1** | **-0.4** |
| **CIOR** | **Ciorogarla** | **1.74** | **319** | S | **Sg** | **19 52 18.6** | **+1.4** |
| **CIOR** | **Ciorogarla** | **1.74** | **319** | ⇓*i*P | **Pb** | **19 51 53.1** | **-0.4** |
| CIOR | | | | S | **Sg** | **19 52 18.6** | **+1.4** |
| **SULR** | | **1.77** | **330** | ⇑*i*P | **Pb** | **19 51 53.5** | **-0.4** |
| **SULR** | | **1.77** | **330** | S | **Sg** | **19 52 19.1** | **+1.1** |
| **SULR** | | **1.77** | **330** | ⇑*i*P | **Pb** | **19 51 53.5** | **-0.4** |
| SULR | | | | S | **Sg** | **19 52 19.1** | **+1.1** |
| **CTYL** | **Yal??k??y-??at** | **1.78** | **160** | *e*PN | **Pb** | **19 51 53.6** | **-0.5** |
| **CTYL** | **Yal??k??y-??at** | **1.78** | **160** | *e*Pn | **Pb** | **19 51 53.6** | **-0.5** |
| **PGOR** | **Pogoanele** | **1.79** | **348** | ⇑*i*P | **Pg** | **19 51 55.5** | **-0.1** |
| **PGOR** | **Pogoanele** | **1.79** | **348** | S | **Sg** | **19 52 20.0** | **+1.1** |
| **PGOR** | **Pogoanele** | **1.79** | **348** | ⇑*i*P | **Pg** | **19 51 55.5** | **-0.1** |
| PGOR | | | | S | **Sg** | **19 52 20.0** | **+1.1** |
| **DIM** | **Dimitrovgrad** | **1.81** | **233** | P | **Pn** | **19 51 53.7** | **+0.8** |
| **DIM** | **Dimitrovgrad** | **1.81** | **233** | P | **Pn** | **19 51 53.7** | **+0.8** |
| **SLVT** | **Silivri** | **1.99** | **164** | *i* P | **Pg** | **19 52 01.5** | **+2.1** |
| **CRLT** | **Corlu** | **2.03** | **175** | *e*PN | **Pn** | **19 51 56.8** | **+1.0** |
| **CRLT** | **Corlu** | **2.03** | **175** | *e*Pn | **Pn** | **19 51 56.8** | **+1.0** |
| **PLAR** | **PLOIESTI** | **2.05** | **330** | ⇑*i*P | **Pb** | **19 51 58.1** | **-0.7** |
| **PLAR** | **PLOIESTI** | **2.05** | **330** | S | **Sg** | **19 52 29.7** | **+2.5** |
| **PLAR** | **PLOIESTI** | **2.05** | **330** | ⇑*i*P | **Pb** | **19 51 58.1** | **-0.7** |
| **CTKS** | **Kestanelik-??a** | **2.06** | **158** | *e*PN | **Pn** | **19 51 57.0** | **+0.8** |
| **CTKS** | **Kestanelik-??a** | **2.06** | **158** | *e*Pn | **Pn** | **19 51 57.0** | **+0.8** |
| **CFR** | **Carcaliu** | **2.08** | **13** | ⇓*i*P | **Pn** | **19 51 57.7** | **+1.2** |
| **CFR** | **Carcaliu** | **2.08** | **13** | S | **Sg** | **19 52 26.9** | **-1.1** |
| **CFR** | **Carcaliu** | **2.08** | **13** | ⇓*i*P | **Pn** | **19 51 57.7** | **+1.2** |
| CFR | | | | S | **Sg** | **19 52 26.9** | **-1.1** |
| **ISR** | **Istrita** | **2.08** | **341** | ⇓*i*P | **Pb** | **19 51 59.5** | **+0.2** |
| **ISR** | **Istrita** | **2.08** | **341** | S | **Sg** | **19 52 29.6** | **+1.5** |
| **ISR** | **Istrita** | **2.08** | **341** | ⇓*i*P | **Pb** | **19 51 59.5** | **+0.2** |
| **SECR** | | **2.14** | **332** | ⇑*i*P | **Pb** | **19 52 00.3** | **-0.1** |
| **SECR** | | **2.14** | **332** | S | **Sg** | **19 52 30.1** | **0.0** |
| **SECR** | | **2.14** | **332** | ⇑*i*P | **Pb** | **19 52 00.3** | **-0.1** |
| **TKR** | **Tekirdag** | **2.16** | **179** | *e*PN | **Pn** | **19 51 58.2** | **+0.6** |
| **TKR** | **Tekirdag** | **2.16** | **179** | *e*Pn | **Pn** | **19 51 58.2** | **+0.6** |
| **BGKT** | **Bogazkoy** | **2.19** | **154** | *e*PN | **Pn** | **19 51 59.3** | **+1.3** |
| **BGKT** | **Bogazkoy** | **2.19** | **154** | *e*Pn | **Pn** | **19 51 59.3** | **+1.3** |
| **KLYT** | **Kilyos** | **2.22** | **148** | *e*PN | **Pn** | **19 52 00.0** | **+1.6** |
| **KLYT** | **Kilyos** | **2.22** | **148** | *e*Pn | **Pn** | **19 52 00.0** | **+1.6** |
| **TLCR** | | **2.25** | **25** | ⇑*i*P | **Pn** | **19 52 00.2** | **+1.4** |
| **TLCR** | | **2.25** | **25** | S | **Sb** | **19 52 28.6** | **-1.5** |
| **TLCR** | | **2.25** | **25** | ⇑*i*P | **Pn** | **19 52 00.2** | **+1.4** |
| TLCR | | | | S | **Sb** | **19 52 28.6** | **-1.5** |
| **GRER** | | **2.26** | **351** | ⇓*i*P | **Pb** | **19 52 02.0** | **-0.3** |
| **GRER** | | **2.26** | **351** | S | **Sg** | **19 52 33.0** | **-0.8** |
| **GRER** | | **2.26** | **351** | ⇓*i*P | **Pb** | **19 52 02.0** | **-0.3** |
| **HUMR** | **Humele** | **2.28** | **308** | ⇑*i*P | **Pn** | **19 51 59.9** | **+0.7** |
| **HUMR** | **Humele** | **2.28** | **308** | S | **Sb** | **19 52 29.8** | **-1.2** |
| **HUMR** | **Humele** | **2.28** | **308** | ⇑*i*P | **Pn** | **19 51 59.9** | **+0.7** |
| HUMR | | | | S | **Sb** | **19 52 29.8** | **-1.2** |
| **GIUM** | **Giurgiulesti** | **2.39** | **12** | ⇑*i*P | **Pn** | **19 52 02.5** | **+1.7** |
| **GIUM** | **Giurgiulesti** | **2.39** | **12** | S | **Sb** | **19 52 33.5** | **-0.7** |
| **GIUM** | **Giurgiulesti** | **2.39** | **12** | ⇑*i*P | **Pn** | **19 52 02.5** | **+1.7** |
| GIUM | | | | S | **Sb** | **19 52 33.5** | **-0.7** |
| **ISK** | **Istanbul-Kandi** | **2.39** | **150** | *e*PN | **Pn** | **19 52 01.9** | **+1.1** |
| **ISK** | **Istanbul-Kandi** | **2.39** | **150** | *e*Pn | **Pn** | **19 52 01.9** | **+1.1** |
| **RKY** | **Sarkoy-Tekirda** | **2.47** | **185** | *e*PN | **Pn** | **19 52 02.9** | **+1.0** |
| **RKY** | **Sarkoy-Tekirda** | **2.47** | **185** | *e*Pn | **Pn** | **19 52 02.9** | **+1.0** |
| **PGB** | **Panagyurishte** | **2.52** | **257** | P | **Pn** | **19 52 03.4** | **+0.8** |
| **PGB** | **Panagyurishte** | **2.52** | **257** | P | **Pn** | **19 52 03.4** | **+0.8** |
| **RZN** | **Rozhen** | **2.52** | **235** | P | **Pn** | **19 52 03.7** | **+1.0** |
| **RZN** | **Rozhen** | **2.52** | **235** | P | **Pn** | **19 52 03.7** | **+1.0** |
| **MRMT** | **Marmara Adasi** | **2.55** | **178** | *e*PN | **Pn** | **19 52 04.4** | **+1.4** |
| **MRMT** | **Marmara Adasi** | **2.55** | **178** | *e*Pn | **Pn** | **19 52 04.4** | **+1.4** |
| **SILT** | **Sile** | **2.56** | **141** | *e*PN | **Pn** | **19 52 04.8** | **+1.7** |
| **SILT** | **Sile** | **2.56** | **141** | *e*Pn | **Pn** | **19 52 04.8** | **+1.7** |
| **PETR** | **Petresti** | **2.58** | **356** | ⇓*i*P | **Pb** | **19 52 07.0** | **-0.8** |
| **PETR** | **Petresti** | **2.58** | **356** | S | **Sg** | **19 52 45.9** | **+1.9** |
| **PETR** | **Petresti** | **2.58** | **356** | ⇓*i*P | **Pb** | **19 52 07.0** | **-0.8** |
| **ERIK** | **Erikli-Kesan** | **2.58** | **197** | *e*PN | **Pn** | **19 52 04.4** | **+1.0** |
| **ERIK** | **Erikli-Kesan** | **2.58** | **197** | *e*Pn | **Pn** | **19 52 04.4** | **+1.0** |
| **MLR** | **Muntele Rosu** | **2.59** | **335** | ⇓*i*P | **Pg** | **19 52 12.0** | **+1.2** |
| **MLR** | **Muntele Rosu** | **2.59** | **335** | S | **Sg** | **19 52 49.3** | **+4.9** |
| **BUY** | **Buyukada** | **2.60** | **152** | *i* P | **Pb** | **19 52 06.0** | **-2.1** |
| **BUY** | **Buyukada** | **2.60** | **152** | P | **Pb** | **19 52 06.0** | **-2.1** |
| **ENEZ** | **Enez** | **2.61** | **203** | *e*PN | **Pn** | **19 52 04.8** | **+1.0** |
| **ENEZ** | **Enez** | **2.61** | **203** | *e*Pn | **Pn** | **19 52 04.8** | **+1.0** |
| **ODBI** | **Odobesti** | **2.63** | **353** | S | **Sb** | **19 52 42.0** | **+0.9** |
| **KRBG** | **Karabiga-Canak** | **2.76** | **183** | *e*PN | **Pn** | **19 52 06.6** | **+0.8** |
| **KRBG** | **Karabiga-Canak** | **2.76** | **183** | *e*Pn | **Pn** | **19 52 06.6** | **+0.8** |
| **PLOR** | **Plostina** | **2.77** | **348** | ⇑*i*P | **Pg** | **19 52 16.6** | **+2.4** |
| **PLOR** | **Plostina** | **2.77** | **348** | S | Sg | 19 52 56.9 | +6.9 |
| **VRI** | **Vrincioaia** | **2.77** | **349** | ⇓*i*P | **Pg** | **19 52 14.1** | **-0.2** |
| **VRI** | **Vrincioaia** | **2.77** | **349** | S | **Sg** | **19 52 52.9** | **+2.8** |
| **ARMT** | **Armutlu** | **2.78** | **158** | *e*PN | **Pn** | **19 52 07.3** | **+1.1** |
| **ARMT** | **Armutlu** | **2.78** | **158** | *e*Pn | **Pn** | **19 52 07.3** | **+1.1** |
| **BNT** | **Bandirma** | **2.81** | **173** | *e*PN | **Pn** | **19 52 07.6** | **+1.0** |
| **BNT** | **Bandirma** | **2.81** | **173** | *e*Pn | **Pn** | **19 52 07.6** | **+1.0** |
| **EDC** | **Edincik** | **2.82** | **174** | *e*PN | **Pn** | **19 52 08.0** | **+1.4** |
| **EDC** | **Edincik** | **2.82** | **174** | *e*Pn | **Pn** | **19 52 08.0** | **+1.4** |
| **LPK** | **Lapseki** | **2.83** | **191** | *e*PN | **Pn** | **19 52 08.0** | **+1.2** |
| **LPK** | **Lapseki** | **2.83** | **191** | *e*Pn | **Pn** | **19 52 08.0** | **+1.2** |
| **HRT** | **Hereke** | **2.84** | **144** | *e*PN | **Pn** | **19 52 08.4** | **+1.4** |
| **HRT** | **Hereke** | **2.84** | **144** | *e*Pn | **Pn** | **19 52 08.4** | **+1.4** |
| **GELI** | **Tayfur-Gelibol** | **2.85** | **196** | *e*PN | **Pn** | **19 52 08.4** | **+1.3** |
| **GELI** | **Tayfur-Gelibol** | **2.85** | **196** | *e*Pn | **Pn** | **19 52 08.4** | **+1.3** |
| **VOIR** | | **2.88** | **323** | ⇓*i*P | **Pn** | **19 52 08.9** | **+1.3** |
| **VOIR** | | **2.88** | **323** | S | **Sg** | **19 52 53.4** | **-0.3** |
| **VOIR** | | **2.88** | **323** | ⇓*i*P | **Pn** | **19 52 08.9** | **+1.3** |
| **CRAR** | **CRAIOVA** | **2.92** | **295** | ⇑*i*P | **Pb** | **19 52 13.8** | **+0.2** |
| **CRAR** | **CRAIOVA** | **2.92** | **295** | S | **Sg** | **19 52 55.3** | **+0.3** |
| **KCTX** | **Karacabey (Bur** | **2.96** | **167** | *e*PN | **Pn** | **19 52 09.5** | **+0.9** |
| **KCTX** | **Karacabey (Bur** | **2.96** | **167** | *e*Pn | **Pn** | **19 52 09.5** | **+0.9** |
| **MDNY** | **Mudanya-Bursa** | **2.97** | **159** | *e*PN | **Pn** | **19 52 09.8** | **+1.1** |
| **MDNY** | **Mudanya-Bursa** | **2.97** | **159** | *e*Pn | **Pn** | **19 52 09.8** | **+1.1** |
| **RMVG** | **GOVORA** | **2.98** | **310** | S | **Sg** | **19 52 59.2** | **+2.3** |
| **GEMT** | **Gemlik** | **3.00** | **154** | *e*PN | **Pn** | **19 52 11.3** | **+2.2** |
| **GEMT** | **Gemlik** | **3.00** | **154** | *e*Pn | **Pn** | **19 52 11.3** | **+2.2** |
| **SMTH** | **Samothraki Isl** | **3.05** | **209** | *e*PN | **Pn** | **19 52 08.7** | **-1.2** |
| **SMTH** | **Samothraki Isl** | **3.05** | **209** | *e*PN | **Pn** | **19 52 08.7** | **-1.2** |
| **KAVA** | **Kavala** | **3.09** | **227** | P | **Pn** | **19 52 09.8** | **-0.6** |
| KAVA | | | | S | **Pb** | **19 52 14.5** | **-2.0** |
| **KAVA** | **Kavala** | **3.09** | **227** | P | **Pn** | **19 52 09.8** | **-0.6** |
| KAVA | | | | S | **Pb** | **19 52 14.5** | **-2.0** |
| **IGD** | **Bursa** | **3.16** | **155** | P | **Pn** | **19 52 10.8** | **-0.5** |
| IGD | | | | S | **Sb** | **19 52 59.2** | **+2.9** |
| **IZI** | **Iznik** | **3.18** | **151** | *e*PN | **Pn** | **19 52 13.5** | **+1.8** |
| **IZI** | **Iznik** | **3.18** | **151** | *e*Pn | **Pn** | **19 52 13.5** | **+1.8** |
| **GADA** | **Gvkgeada** | **3.19** | **202** | *e*PN | **Pn** | **19 52 13.1** | **+1.4** |
| **GADA** | **Gvkgeada** | **3.19** | **202** | *e*Pn | **Pn** | **19 52 13.1** | **+1.4** |
| **DOPR** | **Dopca** | **3.19** | **333** | ⇓*i*P | **Pn** | **19 52 13.9** | **+2.1** |
| **DOPR** | **Dopca** | **3.19** | **333** | S | **Sg** | **19 53 04.0** | **+0.3** |
| **DOPR** | **Dopca** | **3.19** | **333** | ⇓*i*P | **Pn** | **19 52 13.9** | **+2.1** |
| **ADVT** | **Abdulvahap** | **3.19** | **147** | *e*PN | **Pn** | **19 52 14.6** | **+2.8** |
| **ADVT** | **Abdulvahap** | **3.19** | **147** | *e*Pn | **Pn** | **19 52 14.6** | **+2.8** |
| **VTS** | **Vitosha** | **3.19** | **261** | P | **Pn** | **19 52 12.0** | **0.0** |
| **VTS** | **Vitosha** | **3.19** | **261** | P | **Pn** | **19 52 12.0** | **0.0** |
| **NVR** | **Nevrokopi** | **3.24** | **237** | *e*PN | **Pn** | **19 52 13.1** | **+0.6** |
| **NVR** | **Nevrokopi** | **3.24** | **237** | *e*PN | **Pn** | **19 52 13.1** | **+0.6** |
| **NVR** | **Nevrokopi** | **3.24** | **237** | P | **Pn** | **19 52 13.5** | **+1.0** |
| NVR | | | | S | **Pg** | **19 52 20.9** | **-2.4** |
| **NVR** | **Nevrokopi** | **3.24** | **237** | P | **Pn** | **19 52 13.5** | **+1.0** |
| NVR | | | | S | **Pg** | **19 52 20.9** | **-2.4** |
| **SPNC** | **Sapanca-Adapaz** | **3.24** | **139** | *e*PN | **Pn** | **19 52 14.6** | **+2.2** |
| **SPNC** | **Sapanca-Adapaz** | **3.24** | **139** | *e*Pn | **Pn** | **19 52 14.6** | **+2.2** |
| **ORLT** | **Orhaneli** | **3.28** | **161** | *e*PN | **Pn** | **19 52 14.9** | **+1.9** |
| **ORLT** | **Orhaneli** | **3.28** | **161** | *e*Pn | **Pn** | **19 52 14.9** | **+1.9** |
| **BALY** | **Balya** | **3.41** | **178** | *i* P | **Pn** | **19 52 15.4** | **+0.6** |
| BALY | | | | *i* S | **Sn** | **19 52 57.2** | **+1.7** |
| **BALY** | **Balya** | **3.41** | **178** | P | **Pn** | **19 52 15.4** | **+0.6** |
| BALY | | | | S | **Sn** | **19 52 57.2** | **+1.7** |
| **TESR** | **Tescani** | **3.41** | **350** | ⇓*i*P | **Pn** | **19 52 16.4** | **+1.5** |
| **TESR** | **Tescani** | **3.41** | **350** | S | **Sn** | **19 52 57.8** | **+2.2** |
| **TESR** | **Tescani** | **3.41** | **350** | ⇓*i*P | **Pn** | **19 52 16.4** | **+1.5** |
| TESR | | | | S | **Sn** | **19 52 57.8** | **+2.2** |
| **CAVI** | **Cavuskoy** | **3.43** | **148** | *e*PN | **Pn** | **19 52 17.5** | **+2.3** |
| **CAVI** | **Cavuskoy** | **3.43** | **148** | *e*Pn | **Pn** | **19 52 17.5** | **+2.3** |
| **EZN** | **Ezine** | **3.44** | **195** | *e*PN | **Pn** | **19 52 16.4** | **+1.3** |
| **EZN** | **Ezine** | **3.44** | **195** | *e*Pn | **Pn** | **19 52 16.4** | **+1.3** |
| **SRE** | **Strehaia** | **3.44** | **297** | ⇓*i*P | **Pg** | **19 52 26.2** | **-1.0** |
| **SRE** | **Strehaia** | **3.44** | **297** | S | **Sg** | **19 53 12.7** | **+0.9** |
| **KDZE** | **Karadeniz Ereo** | **3.46** | **121** | *e*PN | **Pn** | **19 52 17.3** | **+1.7** |
| **KDZE** | **Karadeniz Ereo** | **3.46** | **121** | *e*Pn | **Pn** | **19 52 17.3** | **+1.7** |
| **BALB** | **Balikesir** | **3.52** | **175** | *e*PN | **Pn** | **19 52 17.9** | **+1.6** |
| **BALB** | **Balikesir** | **3.52** | **175** | *e*Pn | **Pn** | **19 52 17.9** | **+1.6** |
| **LOT** | **Lotru** | **3.52** | **312** | ⇑*i*P | **Pn** | **19 52 18.4** | **+2.0** |
| **LOT** | **Lotru** | **3.52** | **312** | S | **Sn** | **19 53 00.7** | **+2.3** |
| **LOT** | **Lotru** | **3.52** | **312** | ⇑*i*P | **Pn** | **19 52 18.4** | **+2.0** |
| LOT | | | | S | **Sn** | **19 53 00.7** | **+2.3** |
| **GULT** | **Gulveren** | **3.54** | **139** | *e*PN | **Pn** | **19 52 18.6** | **+2.1** |
| **GULT** | **Gulveren** | **3.54** | **139** | *e*Pn | **Pn** | **19 52 18.7** | **+2.1** |
| **SRS** | **Serrai** | **3.54** | **236** | *e*PB | **Pn** | **19 52 17.3** | **+0.7** |
| **SRS** | **Serrai** | **3.54** | **236** | *e*PB | **Pn** | **19 52 17.3** | **+0.7** |
| **SRS** | **Serrai** | **3.54** | **236** | P | **Pn** | **19 52 16.3** | **-0.3** |
| SRS | | | | S | **Pb** | **19 52 26.1** | **+1.9** |
| **SRS** | **Serrai** | **3.54** | **236** | P | **Pn** | **19 52 16.3** | **-0.3** |
| SRS | | | | S | **Pb** | **19 52 26.1** | **+1.9** |
| **GPA** | **Golpazari** | **3.56** | **143** | *e*PN | **Pn** | **19 52 18.9** | **+2.1** |
| **GPA** | **Golpazari** | **3.56** | **143** | *e*Pn | **Pn** | **19 52 18.9** | **+2.1** |
| **DST** | **Dursunbey** | **3.65** | **166** | *e*PN | **Pn** | **19 52 20.0** | **+1.9** |
| **DST** | **Dursunbey** | **3.65** | **166** | *e*Pn | **Pn** | **19 52 20.0** | **+1.9** |
| **LIA** | **Limnos Island** | **3.68** | **209** | *e*PB | **Pn** | **19 52 18.1** | **-0.4** |
| **LIA** | **Limnos Island** | **3.68** | **209** | *e*PB | **Pn** | **19 52 18.1** | **-0.4** |
| **MDB** | **Medias** | **3.72** | **325** | ⇓*i*P | **Pn** | **19 52 21.4** | **+2.3** |
| **MDB** | **Medias** | **3.72** | **325** | S | **Sn** | **19 53 07.1** | **+3.9** |
| **MDB** | **Medias** | **3.72** | **325** | ⇓*i*P | **Pn** | **19 52 21.4** | **+2.3** |
| MDB | | | | S | **Sn** | **19 53 07.1** | **+3.9** |
| **RMGR** | **Halanga-Turnu** | **3.78** | **295** | ⇑*i*P | **Pg** | **19 52 35.1** | **+1.5** |
| **RMGR** | **Halanga-Turnu** | **3.78** | **295** | S | **Sg** | **19 53 20.9** | **-1.7** |
| **OUR** | **Ouranopolis** | **3.85** | **224** | *e*PN | **Pn** | **19 52 21.4** | **+0.6** |
| **OUR** | **Ouranopolis** | **3.85** | **224** | *e*PN | **Pn** | **19 52 20.2** | **-0.6** |
| **OUR** | **Ouranopolis** | **3.85** | **224** | *e*PN | **Pn** | **19 52 20.2** | **-0.6** |
| **OUR** | **Ouranopolis** | **3.85** | **224** | P | **Pn** | **19 52 20.1** | **-0.7** |
| OUR | | | | S | Pb | 19 52 32.8 | +3.4 |
| **OUR** | **Ouranopolis** | **3.85** | **224** | P | **Pn** | **19 52 20.1** | **-0.7** |
| OUR | | | | S | Pb | 19 52 32.8 | +3.4 |
| **OUR** | **Ouranopolis** | **3.85** | **224** | *e*Pn | **Pn** | **19 52 21.4** | **+0.6** |
| **MDUB** | **Mudurnu** | **3.85** | **133** | *e*PN | **Pn** | **19 52 22.6** | **+1.6** |
| **MDUB** | **Mudurnu** | **3.85** | **133** | *e*Pn | **Pn** | **19 52 22.6** | **+1.6** |
| **SOH** | **Sokhos** | **3.86** | **234** | *e*PN | **Pn** | **19 52 21.8** | **+0.7** |
| **SOH** | **Sokhos** | **3.86** | **234** | *e*PN | **Pn** | **19 52 21.8** | **+0.7** |
| **SOH** | **Sokhos** | **3.86** | **234** | P | **Pn** | **19 52 20.2** | **-0.9** |
| SOH | | | | S | **Pb** | **19 52 32.5** | **+2.8** |
| **SOH** | **Sokhos** | **3.86** | **234** | P | **Pn** | **19 52 20.2** | **-0.9** |
| SOH | | | | S | **Pb** | **19 52 32.5** | **+2.8** |
| **AYVA** | **Ayvalik** | **3.89** | **189** | *i* P | **Pn** | **19 52 21.8** | **+0.5** |
| **AYVA** | **Ayvalik** | **3.89** | **189** | P | **Pn** | **19 52 21.8** | **+0.5** |
| AYVA | | | | S | **Sg** | **19 53 24.5** | **-1.5** |
| **KNT** | **Kendrikon** | **3.95** | **241** | *e*PN | **Pn** | **19 52 23.4** | **+1.2** |
| **KNT** | **Kendrikon** | **3.95** | **241** | *e*PN | **Pn** | **19 52 22.8** | **+0.6** |
| **KNT** | **Kendrikon** | **3.95** | **241** | *e*PN | **Pn** | **19 52 22.8** | **+0.6** |
| **KNT** | **Kendrikon** | **3.95** | **241** | P | **Pn** | **19 52 23.9** | **+1.7** |
| KNT | | | | S | **Pg** | **19 52 38.9** | **+2.0** |
| **KNT** | **Kendrikon** | **3.95** | **241** | P | **Pn** | **19 52 23.9** | **+1.7** |
| KNT | | | | S | **Pg** | **19 52 38.9** | **+2.0** |
| **KNT** | **Kendrikon** | **3.95** | **241** | *e*Pn | **Pn** | **19 52 23.4** | **+1.2** |
| **KIS** | **Kishinev** | **3.96** | **13** | *e*P | **Pn** | **19 52 23.0** | **+0.7** |
| KIS | | | | *i* S | **Sn** | **19 53 10.5** | **+1.5** |
| KIS | | | | SM1 | | 19 53 11.0 | |
| | 1μm,1.0s | | | | | | |
| KIS | | | | SM2 | | 19 53 32.0 | |
| | 4μm,1.0s | | | | | | |
| **KIS** | **Kishinev** | **3.96** | **13** | *e*P | **Pn** | **19 52 23.0** | **+0.7** |
| KIS | | | | *i* S | **Sn** | **19 53 10.5** | **+1.5** |
| **KIS** | **Kishinev** | **3.96** | **13** | *e*P | **Pn** | **19 52 23.0** | **+0.7** |
| KIS | | | | *i* S | **Sn** | **19 53 10.5** | **+1.5** |
| **PRK** | **Paraskevi** | **4.01** | **194** | *e*PB | **Pn** | **19 52 24.2** | **+1.2** |
| **PRK** | **Paraskevi** | **4.01** | **194** | *e*PB | **Pn** | **19 52 24.2** | **+1.2** |
| **IAS** | **Iasi** | **4.04** | **1** | S | **Sn** | **19 53 13.6** | **+2.6** |
| **IAS** | **Iasi** | **4.04** | **1** | S | **Sn** | **19 53 13.6** | **+2.6** |
| **GZR** | **Gura Zlata** | **4.06** | **305** | ⇑*i*P | **Pn** | **19 52 24.6** | **+0.8** |
| **GZR** | **Gura Zlata** | **4.06** | **305** | S | **Sn** | **19 53 10.7** | **-0.9** |
| **GZR** | **Gura Zlata** | **4.06** | **305** | ⇑*i*P | **Pn** | **19 52 24.6** | **+0.8** |
| GZR | | | | S | **Sn** | **19 53 10.7** | **-0.9** |
| **BOLS** | **Boljevac** | **4.08** | **281** | *e*Pn | **Pn** | **19 52 22.4** | **-1.7** |
| **VAY** | **Valandovo** | **4.08** | **245** | *i* Pn | **Pn** | **19 52 23.0** | **-1.0** |
| VAY | | | | *e*Sn | **Sg** | **19 53 30.7** | **-1.6** |
| **VAY** | **Valandovo** | **4.08** | **245** | *i* Pn | **Pn** | **19 52 23.0** | **-1.0** |
| **DKL** | **Dikili** | **4.10** | **186** | *e*PN | **Pn** | **19 52 26.6** | **+2.3** |
| **DKL** | **Dikili** | **4.10** | **186** | *e*Pn | **Pn** | **19 52 26.6** | **+2.3** |
| **PLG** | **Polygyros** | **4.10** | **229** | *e*PB | **Pn** | **19 52 24.7** | **+0.3** |
| **PLG** | **Polygyros** | **4.10** | **229** | *e*PB | **Pn** | **19 52 24.7** | **+0.3** |
| **PLG** | **Polygyros** | **4.10** | **229** | P | **Pn** | **19 52 22.8** | **-1.6** |
| PLG | | | | S | Pb | 19 52 37.5 | +3.7 |
| **PLG** | **Polygyros** | **4.10** | **229** | P | **Pn** | **19 52 22.8** | **-1.6** |
| PLG | | | | S | Pb | 19 52 37.5 | +3.7 |
| **SIGR** | **SIGRI** | **4.12** | **198** | *e*PN | **Pn** | **19 52 26.8** | **+2.2** |
| **SIGR** | **SIGRI** | **4.12** | **198** | *e*PN | **Pn** | **19 52 24.9** | **+0.3** |
| **SIGR** | **SIGRI** | **4.12** | **198** | *e*PN | **Pn** | **19 52 24.9** | **+0.3** |
| **SIGR** | **SIGRI** | **4.12** | **198** | *e*Pn | **Pn** | **19 52 26.8** | **+2.2** |
| **HORT** | **Hortiatis** | **4.15** | **234** | *e*PN | **Pn** | **19 52 26.8** | **+1.7** |
| **HORT** | **Hortiatis** | **4.15** | **234** | *e*PN | **Pn** | **19 52 25.8** | **+0.7** |
| **HORT** | **Hortiatis** | **4.15** | **234** | *e*PN | **Pn** | **19 52 25.8** | **+0.7** |
| **HORT** | **Hortiatis** | **4.15** | **234** | P | **Pn** | **19 52 24.0** | **-1.1** |
| HORT | | | | S | **Pg** | **19 52 39.3** | **-1.5** |
| **HORT** | **Hortiatis** | **4.15** | **234** | P | **Pn** | **19 52 24.0** | **-1.1** |
| HORT | | | | S | **Pg** | **19 52 39.3** | **-1.5** |
| **HORT** | **Hortiatis** | **4.15** | **234** | *e*Pn | **Pn** | **19 52 26.8** | **+1.7** |
| **THE** | **Thessaloniki** | **4.21** | **235** | *e*PB | **Pn** | **19 52 27.2** | **+1.4** |
| **THE** | **Thessaloniki** | **4.21** | **235** | *e*PB | **Pn** | **19 52 27.2** | **+1.4** |
| **BOVS** | **Bovan** | **4.24** | **279** | *e*Pn | **Pn** | **19 52 27.2** | **+1.0** |
| **DEV** | **Deva** | **4.27** | **311** | ⇓*i*P | **Pn** | **19 52 28.8** | **+2.2** |
| **DEV** | **Deva** | **4.27** | **311** | S | **Sn** | **19 53 19.2** | **+2.6** |
| **DEV** | **Deva** | **4.27** | **311** | ⇓*i*P | **Pn** | **19 52 28.8** | **+2.2** |
| DEV | | | | S | **Sn** | **19 53 19.2** | **+2.6** |
| **AKS** | **Akhisar** | **4.28** | **177** | *e*PN | **Pn** | **19 52 28.4** | **+1.7** |
| **AKS** | **Akhisar** | **4.28** | **177** | *e*Pn | **Pn** | **19 52 28.4** | **+1.7** |
| **PAIG** | **Paliouri** | **4.31** | **223** | *e*PN | **Pn** | **19 52 26.8** | **-0.4** |
| **PAIG** | **Paliouri** | **4.31** | **223** | *e*PN | **Pn** | **19 52 26.8** | **-0.4** |
| **PAIG** | **Paliouri** | **4.31** | **223** | P | **Pn** | **19 52 26.7** | **-0.4** |
| PAIG | | | | S | **Pg** | **19 52 44.2** | **+0.5** |
| **PAIG** | **Paliouri** | **4.31** | **223** | P | **Pn** | **19 52 26.7** | **-0.4** |
| PAIG | | | | S | **Pg** | **19 52 44.2** | **+0.5** |
| **GRG** | **Griva** | **4.38** | **242** | *e*PN | **Pn** | **19 52 27.3** | **-0.8** |
| **GRG** | **Griva** | **4.38** | **242** | *e*PN | **Pn** | **19 52 27.3** | **-0.8** |
| **GRG** | **Griva** | **4.38** | **242** | P | **Pn** | **19 52 29.5** | **+1.4** |
| GRG | | | | S | Pg | 19 52 48.7 | +3.7 |
| **GRG** | **Griva** | **4.38** | **242** | P | **Pn** | **19 52 29.5** | **+1.4** |
| GRG | | | | S | Pg | 19 52 48.7 | +3.7 |
| **KUBS** | **Kucevo** | **4.39** | **289** | *i* Pn | **Pn** | **19 52 26.7** | **-1.6** |
| **CJR** | **Cluj-Napoca** | **4.51** | **324** | ⇑*i*P | **Pn** | **19 52 31.4** | **+1.5** |
| **CJR** | **Cluj-Napoca** | **4.51** | **324** | S | **Sn** | **19 53 25.8** | **+3.2** |
| **CJR** | **Cluj-Napoca** | **4.51** | **324** | ⇑*i*P | **Pn** | **19 52 31.4** | **+1.5** |
| CJR | | | | S | **Sn** | **19 53 25.8** | **+3.2** |
| **ARCR** | **ARCALIA** | **4.52** | **332** | ⇓*i*P | **Pn** | **19 52 32.4** | **+2.4** |
| **ARCR** | **ARCALIA** | **4.52** | **332** | S | **Sn** | **19 53 23.9** | **+1.1** |
| **ARCR** | **ARCALIA** | **4.52** | **332** | ⇓*i*P | **Pn** | **19 52 32.4** | **+2.4** |
| ARCR | | | | S | **Sn** | **19 53 23.9** | **+1.1** |
| **SKO** | **Skopje** | **4.62** | **257** | *i* Pn | **Pn** | **19 52 34.0** | **+2.6** |
| SKO | | | | *e*Sn | **Sb** | **19 53 37.8** | **-0.6** |
| **SKO** | **Skopje** | **4.62** | **257** | *i* Pn | **Pn** | **19 52 34.0** | **+2.6** |
| **SELS** | **Selova** | **4.66** | **273** | *i* Pn | **Pn** | **19 52 32.5** | **+0.5** |
| **SEV** | **Sevastopol'** | **4.68** | **71** | *e*P | **Pn** | **19 52 31.8** | **-0.4** |
| SEV | | | | *e*S | **Sn** | **19 53 27.5** | **+0.7** |
| **SEV** | **Sevastopol'** | **4.68** | **71** | *e*P | **Pn** | **19 52 31.8** | **-0.4** |
| SEV | | | | *e*S | **Sn** | **19 53 27.5** | **+0.7** |
| **KULA** | **Kula-Manisa** | **4.72** | **169** | *e*PN | **Pn** | **19 52 35.3** | **+2.5** |
| **KULA** | **Kula-Manisa** | **4.72** | **169** | *e*Pn | **Pn** | **19 52 35.3** | **+2.5** |
| **MANT** | **Manisa** | **4.73** | **170** | *i* P | **Pn** | **19 52 34.0** | **+0.9** |
| **MANT** | **Manisa** | **4.73** | **170** | P | **Pn** | **19 52 34.0** | **+0.9** |
| **BURAR** | **Bucovina Array** | **4.74** | **341** | ⇓*i*P | **Pn** | **19 52 35.8** | **+2.6** |
| **BURAR** | **Bucovina Array** | **4.74** | **341** | S | **Sn** | **19 53 32.1** | **+3.7** |
| **BURAR** | **Bucovina Array** | **4.74** | **341** | ⇓*i*P | **Pn** | **19 52 35.8** | **+2.6** |
| BURAR | | | | S | **Sn** | **19 53 32.1** | **+3.7** |
| **IZM** | **Izmir** | **4.75** | **182** | *e*PN | **Pn** | **19 52 35.7** | **+2.4** |
| **IZM** | **Izmir** | **4.75** | **182** | *e*Pn | **Pn** | **19 52 35.7** | **+2.4** |
| **LIT** | **Litokhoron** | **4.83** | **233** | *e*PN | **Pn** | **19 52 35.2** | **+0.9** |
| **LIT** | **Litokhoron** | **4.83** | **233** | *e*PN | **Pn** | **19 52 35.2** | **+0.9** |
| **BZS** | **Buzias** | **4.88** | **302** | ⇓*i*P | **Pg** | **19 52 54.0** | **-0.6** |
| **BZS** | **Buzias** | **4.88** | **302** | S | **Sg** | **19 53 55.2** | **-2.6** |
| **CHOS** | **Chios island** | **4.88** | **193** | *e*PN | **Pn** | **19 52 37.2** | **+2.1** |
| **CHOS** | **Chios island** | **4.88** | **193** | *e*PN | **Pn** | **19 52 34.6** | **-0.5** |
| **CHOS** | **Chios island** | **4.88** | **193** | *e*PN | **Pn** | **19 52 34.6** | **-0.5** |
| **CHOS** | **Chios island** | **4.88** | **193** | *e*Pn | **Pn** | **19 52 37.2** | **+2.1** |
| **DRGR** | | **4.97** | **319** | ⇑*i*P | **Pn** | **19 52 37.3** | **+1.0** |
| **DRGR** | | **4.97** | **319** | S | **Sn** | **19 53 39.8** | **+5.7** |
| **DRGR** | | **4.97** | **319** | ⇑*i*P | **Pn** | **19 52 37.3** | **+1.0** |
| **XOR** | **Xorichti** | **4.98** | **222** | *e*PN | **Pn** | **19 52 36.0** | **-0.4** |
| **XOR** | **Xorichti** | **4.98** | **222** | *e*PN | **Pn** | **19 52 36.0** | **-0.4** |
| **GRUS** | **Gruza** | **4.98** | **281** | ⇓*i*Pn | **Pn** | **19 52 37.3** | **+0.9** |
| **SKIA** | **Skiathos** | **5.01** | **219** | *e*PN | **Pn** | **19 52 36.1** | **-0.6** |
| **SKIA** | **Skiathos** | **5.01** | **219** | *e*PN | **Pn** | **19 52 36.1** | **-0.6** |
| **YAL** | **Yalta** | **5.01** | **72** | *e*P | **Pn** | **19 52 37.0** | **+0.3** |
| YAL | | | | *e*S | **Sn** | **19 53 34.7** | **-0.1** |
| **YAL** | **Yalta** | **5.01** | **72** | *e*P | **Pn** | **19 52 37.0** | **+0.3** |
| YAL | | | | *e*S | **Sn** | **19 53 34.7** | **-0.1** |
| **NEO** | **Neokhori** | **5.01** | **221** | *e*PN | **Pn** | **19 52 36.1** | **-0.7** |
| **NEO** | **Neokhori** | **5.01** | **221** | *e*PN | **Pn** | **19 52 36.1** | **-0.7** |
| **SORM** | **Soroca** | **5.02** | **7** | ⇓*i*P | **Pn** | **19 52 38.0** | **+1.1** |
| **SORM** | **Soroca** | **5.02** | **7** | S | **Sn** | **19 53 33.6** | **-1.5** |
| **SORM** | **Soroca** | **5.02** | **7** | ⇓*i*P | **Pn** | **19 52 38.0** | **+1.1** |
| SORM | | | | S | **Sn** | **19 53 33.6** | **-1.5** |
| **BANR** | **Banloc** | **5.08** | **298** | ⇑*i*P | **Pb** | **19 52 51.0** | **+0.7** |
| **BANR** | **Banloc** | **5.08** | **298** | S | **Sg** | **19 54 01.8** | **-2.4** |
| **SIM** | **Simferopol'** | **5.10** | **67** | *d i*P | **Pn** | **19 52 38.0** | **-0.1** |
| SIM | | | | *e*S | **Sn** | **19 53 34.9** | **-2.3** |
| SIM | | | | pmax | pmax | | |
| | comp=Z,64nm,0.5s | | | | | | |
| SIM | | | | smax | smax | | |
| | comp=N,35nm,1.1s | | | | | | |
| SIM | | | | smax | smax | | |
| | comp=E,164nm,1.1s | | | | | | |
| SIM | | | | MLR | MLR | | |
| | comp=Z,190nm,10.1s | | | | | | |
| **SIM** | **Simferopol'** | **5.10** | **67** | *i* P | **Pn** | **19 52 38.0** | **-0.1** |
| | comp=Z,64nm,0.5s | | | | | | |
| SIM | | | | *e*S | **Sn** | **19 53 34.9** | **-2.3** |
| | comp=Z,190nm,10.1s | | | | | | |
| **FNA** | **Florina** | **5.13** | **245** | *e*PN | **Pn** | **19 52 41.1** | **+2.6** |
| **FNA** | **Florina** | **5.13** | **245** | *e*PN | **Pn** | **19 52 41.1** | **+2.6** |
| **KZN** | **Kozani** | **5.13** | **238** | *e*PB | Pn | 19 52 42.4 | +3.8 |
| **KZN** | **Kozani** | **5.13** | **238** | *e*PB | Pn | 19 52 42.4 | +3.8 |
| **ANTO** | **Ankara** | **5.16** | **128** | *e*P | Pn | 19 52 34.9 | -4.0 |
| ANTO | | | | pmax | pmax | | |
| | comp=Z,63nm,0.8s | | | | | | |
| **ANTO** | **Ankara** | **5.16** | **128** | *e*Pn | Pn | 19 52 34.9 | -4.0 |
| | comp=Z,63nm,0.8s | | | | | | |
| **ALU** | **Alushta** | **5.22** | **71** | *e*P | **Pn** | **19 52 38.7** | **-1.0** |
| ALU | | | | *e*S | **Sn** | **19 53 38.8** | **-1.4** |
| **ALU** | **Alushta** | **5.22** | **71** | *e*P | **Pn** | **19 52 38.7** | **-1.0** |
| ALU | | | | *e*S | **Sn** | **19 53 38.8** | **-1.4** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TRUS** | **Trudelj** | **5.25** | **284**⇑ | *i*Pn | **Pn** | **19 52 38.9** | **-1.1** |
| **BMR** | **Baia Mare** | **5.32** | **330**⇑ | *i*P | **Pn** | **19 52 43.0** | **+1.9** |
| **BMR** | **Baia Mare** | **5.32** | **330** | S | **Sn** | **19 53 46.3** | **+3.7** |
| **BMR** | **Baia Mare** | **5.32** | **330**⇑ | *i*P | **Pn** | **19 52 43.0** | **+1.9** |
| BMR | | | | S | **Sn** | **19 53 46.3** | **+3.7** |
| **MRKA** | **Markates** | **5.33** | **215** | *e*PN | **Pn** | **19 52 40.6** | **-0.7** |
| **MRKA** | **Markates** | **5.33** | **215** | *e*PN | **Pn** | **19 52 40.6** | **-0.7** |
| **SMIA** | **Simia** | **5.36** | **219** | *e*PN | **Pn** | **19 52 42.0** | **+0.4** |
| **SMIA** | **Simia** | **5.36** | **219** | *e*PN | **Pn** | **19 52 42.0** | **+0.4** |
| **IVAS** | **Ivanjica** | **5.37** | **277** | *i* Pn | **Pn** | **19 52 42.5** | **+0.8** |
| **OHR** | **Ohrid** | **5.38** | **250** | *i* Pn | Pb | 19 52 48.8 | -6.7 |
| OHR | | | | *e*Sn | **Sg** | **19 54 08.8** | **-5.0** |
| **THL** | **Klokotos Trika** | **5.46** | **231** | *e*PN | **Pn** | **19 52 43.1** | **+0.2** |
| **THL** | **Klokotos Trika** | **5.46** | **231** | *e*PN | **Pn** | **19 52 43.1** | **+0.2** |
| **SMG** | **Samos** | **5.46** | **185** | *e*PN | **Pn** | **19 52 42.8** | **-0.2** |
| **SMG** | **Samos** | **5.46** | **185** | *e*PN | **Pn** | **19 52 42.8** | **-0.2** |
| **AYDN** | **Tasoluk** | **5.49** | **177** | P | **Pn** | **19 52 45.4** | **+1.9** |
| **DIVS** | **Divibare** | **5.52** | **282**⇓ | *i*P | **Pn** | **19 52 44.3** | **+0.4** |
| **DIVS** | **Divibare** | **5.52** | **282** | S | **Sg** | **19 54 21.0** | **+2.5** |
| **NEST** | **Nestorio** | **5.54** | **243** | *e*PN | **Pn** | **19 52 45.8** | **+1.7** |
| **NEST** | **Nestorio** | **5.54** | **243** | *e*PN | **Pn** | **19 52 45.8** | **+1.7** |
| **PVY** | **Plav** | **5.56** | **267**⇓ | *i*Pn | **Pn** | **19 52 45.7** | **+1.2** |
| PVY | | | | *e*Sn | **Sn** | **19 53 50.2** | **+1.5** |
| **PVY** | **Plav** | **5.56** | **267**⇓ | *i*Pn | **Pn** | **19 52 45.7** | **+1.2** |
| PVY | | | | *e*Sn | **Sn** | **19 53 50.2** | **+1.5** |
| **BEY** | **Berane** | **5.58** | **270**⇑ | *i*Pn | **Pn** | **19 52 46.2** | **+1.6** |
| BEY | | | | *e*Sn | **Sn** | **19 53 50.0** | **+1.0** |
| **IVA** | **Berane** | **5.58** | **270**⇑ | *i*Pn | **Pn** | **19 52 46.2** | **+1.6** |
| IVA | | | | *e*Sn | **Sn** | **19 53 50.0** | **+1.0** |
| **AGG** | **Agios Georgios** | **5.67** | **225** | *e*PN | **Pn** | **19 52 45.5** | **-0.4** |
| **AGG** | **Agios Georgios** | **5.67** | **225** | *e*PN | **Pn** | **19 52 45.5** | **-0.4** |
| **SUDU** | **Sudak** | **5.69** | **70** | *e*P | **Pn** | **19 52 46.1** | **0.0** |
| SUDU | | | | *e*S | **Sn** | **19 53 51.5** | **-0.1** |
| **AXAR** | **Agios Charalam** | **5.70** | **221** | *e*PN | **Pn** | **19 52 45.4** | **-1.0** |
| **AXAR** | **Agios Charalam** | **5.70** | **221** | *e*PN | **Pn** | **19 52 45.4** | **-1.0** |
| **BRTR** | **Keskin Array B** | **5.75** | **124** | Pn | **Pn** | **19 52 47.4** | **+0.3** |
| | comp=Z,0.8nm,0.3s,baz=305,slow=10.0,SNR=15 | | | | | | |
| BRTR | | | | Sn | **Sn** | **19 53 50.2** | **-3.2** |
| | comp=Z,0.6nm,0.3s,baz=311,slow=13,SNR=3.7 | | | | | | |
| BRTR | | | | LR | LR | 19 55 42.1 | |
| | comp=Z,514nm,18.5s,baz=331,slow=45 | | | | | | |
| **BRTR** | **Keskin Array B** | **5.75** | **124** | P | **Pn** | **19 52 47.4** | **+0.3** |
| BRTR | | | | | | 19 53 50.2 | |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| BRTR | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| BRTR | | | | MLR | MLR | | |
| | comp=Z,514nm,18.5s | | | | | | |
| **MAKR** | **Makrakomi, Fth** | **5.78** | **226** | *e*PN | **Pn** | **19 52 48.0** | **+0.5** |
| **MAKR** | **Makrakomi, Fth** | **5.78** | **226** | *e*PN | **Pn** | **19 52 48.0** | **+0.5** |
| **VIL2** | **Platees** | **5.88** | **214** | *e*PN | **Pn** | **19 52 48.6** | **-0.2** |
| **VIL2** | **Platees** | **5.88** | **214** | *e*PN | **Pn** | **19 52 48.6** | **-0.2** |
| **PLE** | **Pljevlja** | **5.92** | **274**⇓ | *i*Pn | **Pn** | **19 52 50.9** | **+1.5** |
| PLE | | | | *e*Sn | **Sn** | **19 53 58.5** | **+1.0** |
| **PLE** | **Pljevlja** | **5.92** | **274**⇓ | *i*Pn | **Pn** | **19 52 50.9** | **+1.5** |
| PLE | | | | *e*Sn | **Sn** | **19 53 58.5** | **+1.0** |
| **FEO** | **Feodosiya** | **5.99** | **69** | *e*P | **Pn** | **19 52 52.7** | **+2.5** |
| FEO | | | | *e*S | **Sn** | **19 54 00.5** | **+1.5** |
| **EVR** | **Evrytania** | **6.03** | **227** | *e*PN | **Pn** | **19 52 51.7** | **+0.8** |
| **EVR** | **Evrytania** | **6.03** | **227** | *e*PN | **Pn** | **19 52 51.7** | **+0.8** |
| **DESF** | **Desfina** | **6.04** | **220** | *e*PN | **Pn** | **19 52 50.6** | **-0.5** |
| **DESF** | **Desfina** | **6.04** | **220** | *e*PN | **Pn** | **19 52 50.6** | **-0.5** |
| **DSF** | **Desfina** | **6.05** | **220** | *e*PN | **Pn** | **19 52 50.3** | **-0.8** |
| **DSF** | **Desfina** | **6.05** | **220** | *e*PN | **Pn** | **19 52 50.3** | **-0.8** |
| **TRPA** | **Tarpa** | **6.07** | **327**⇓ | *i*P | **Pn** | **19 52 51.6** | **+0.3** |
| **TRPA** | **Tarpa** | **6.07** | **327** | S | **Sn** | **19 54 00.8** | **-0.1** |
| **TRPA** | **Tarpa** | **6.07** | **327**⇓ | *e*Pn | **Pn** | **19 52 51.6** | **+0.3** |
| TRPA | | | | *e*Sn | **Sn** | **19 54 00.4** | **-0.5** |
| **TRPA** | **Tarpa** | **6.07** | **327**⇓ | *i*P | **Pn** | **19 52 51.6** | **+0.3** |
| TRPA | | | | S | **Sn** | **19 54 00.8** | **-0.1** |
| **PDG** | **Podgorica** | **6.10** | **266**⇓ | *i*Pn | **Pn** | **19 52 54.0** | **+2.3** |
| PDG | | | | *e*Sn | **Sn** | **19 54 02.7** | **+0.9** |
| **TTG** | **Podgorica** | **6.10** | **266**⇓ | *i*Pn | **Pn** | **19 52 54.0** | **+2.3** |
| TTG | | | | *e*Sn | **Sn** | **19 54 02.7** | **+0.9** |
| **DRME** | **Dracevica, Mon** | **6.20** | **264**⇑ | *i*Pn | **Pn** | **19 52 55.1** | **+2.0** |
| DRME | | | | *e*Sn | **Sn** | **19 54 05.5** | **+1.3** |
| **DRME** | **Dracevica, Mon** | **6.20** | **264**⇑ | *i*Pn | **Pn** | **19 52 55.1** | **+2.0** |
| DRME | | | | *e*Sn | **Sn** | **19 54 05.5** | **+1.3** |
| **LOUT** | **Loutraki** | **6.20** | **215** | *e*PN | **Pn** | **19 52 51.6** | **-1.5** |
| **LOUT** | **Loutraki** | **6.20** | **215** | *e*PN | **Pn** | **19 52 51.6** | **-1.5** |
| **ULC** | **Ulcinj** | **6.20** | **262**⇓ | *i*Pn | **Pn** | **19 52 55.3** | **+2.1** |
| ULC | | | | *e*Sn | **Sn** | **19 54 04.6** | **+0.2** |
| **ULC** | **Ulcinj** | **6.20** | **262**⇓ | *i*Pn | **Pn** | **19 52 55.3** | **+2.1** |
| ULC | | | | *e*Sn | **Sn** | **19 54 04.6** | **+0.2** |
| **KALE** | **Kalithea** | **6.25** | **222** | *e*PN | **Pn** | **19 52 54.1** | **+0.2** |
| **KALE** | **Kalithea** | **6.25** | **222** | *e*PN | **Pn** | **19 52 54.1** | **+0.2** |
| **APE** | **Apeiranthos** | **6.26** | **195** | *e*P | **Pn** | **19 52 53.8** | **-0.2** |
| **APE** | **Apeiranthos** | **6.26** | **195** | *e*PN | **Pn** | **19 52 51.7** | **-2.3** |
| **APE** | **Apeiranthos** | **6.26** | **195** | *e*PN | **Pn** | **19 52 51.7** | **-2.3** |
| **NKME** | **Niksic** | **6.28** | **269** | *e*Pn | **Pn** | **19 52 55.7** | **+1.5** |
| NKME | | | | *e*Sn | **Sn** | **19 54 07.0** | **+0.8** |
| **NKME** | **Niksic** | **6.28** | **269** | *e*Pn | **Pn** | **19 52 55.7** | **+1.5** |
| NKME | | | | *e*Sn | **Sn** | **19 54 07.0** | **+0.8** |
| **SERG** | **Sergoula** | **6.28** | **223** | *e*PN | **Pn** | **19 52 54.2** | **0.0** |
| **SERG** | **Sergoula** | **6.28** | **223** | *e*PN | **Pn** | **19 52 54.2** | **0.0** |
| **UPM** | **Unac-Piva** | **6.28** | **273**⇓ | *i*Pn | **Pn** | **19 52 55.5** | **+1.1** |
| **UPM** | **Unac-Piva** | **6.28** | **273**⇓ | *i*Pn | **Pn** | **19 52 55.5** | **+1.1** |
| **BUM** | **Brajici-Budva** | **6.39** | **265**⇓ | *i*Pn | **Pn** | **19 52 57.5** | **+1.7** |
| BUM | | | | *e*Sn | **Sn** | **19 54 09.7** | **+0.8** |
| **BUM** | **Brajici-Budva** | **6.39** | **265**⇓ | *i*Pn | **Pn** | **19 52 57.5** | **+1.7** |
| BUM | | | | *e*Sn | **Sn** | **19 54 09.7** | **+0.8** |
| **LAKA** | **Lakka** | **6.45** | **222** | *e*PN | **Pn** | **19 52 57.7** | **+1.1** |
| **LAKA** | **Lakka** | **6.45** | **222** | *e*PN | **Pn** | **19 52 57.7** | **+1.1** |
| **DID** | **Didima** | **6.51** | **211** | *e*PN | **Pn** | **19 52 57.0** | **-0.4** |
| **DID** | **Didima** | **6.51** | **211** | *e*PN | **Pn** | **19 52 57.0** | **-0.4** |
| **GUR** | **Goura** | **6.52** | **219** | *e*PN | **Pn** | **19 52 57.4** | **-0.2** |
| **GUR** | **Goura** | **6.52** | **219** | *e*PN | **Pn** | **19 52 57.4** | **-0.2** |
| **KLV** | **Kalavryta, Ach** | **6.52** | **220** | *e*PN | **Pn** | **19 52 57.8** | **+0.2** |
| **KLV** | **Kalavryta, Ach** | **6.52** | **220** | *e*PN | **Pn** | **19 52 57.8** | **+0.2** |
| **BRY** | **Bratogost** | **6.56** | **271**⇑ | *i*Pn | **Pn** | **19 53 00.3** | **+2.0** |
| BRY | | | | *e*Sn | **Sn** | **19 54 13.6** | **+0.2** |
| **BRY** | **Bratogost** | **6.56** | **271**⇑ | *i*Pn | **Pn** | **19 53 00.3** | **+2.0** |
| BRY | | | | *e*Sn | **Sn** | **19 54 13.6** | **+0.2** |
| **UZH** | **Uzhgorod** | **6.57** | **328** | *e*P | **Pn** | **19 52 57.9** | **-0.3** |
| UZH | | | | *e*S | **Sn** | **19 54 13.3** | **0.0** |
| UZH | | | | MLR | MLR | | |
| | comp=N,700nm,8.0s | | | | | | |
| UZH | | | | MLR | MLR | | |
| | comp=E,900nm,8.0s | | | | | | |
| UZH | | | | MLR | MLR | | |
| | comp=Z,600nm,8.0s | | | | | | |
| **PDO** | **Prodromos** | **6.59** | **229** | *e*PN | **Pn** | **19 53 01.2** | **+2.6** |
| **PDO** | **Prodromos** | **6.59** | **229** | *e*PN | **Pn** | **19 53 01.2** | **+2.6** |
| **HCY** | **Herceg Novi** | **6.65** | **267**⇑ | *i*Pn | **Pn** | **19 53 01.0** | **+1.6** |
| HCY | | | | *e*Sn | **Sn** | **19 54 16.0** | **+0.6** |
| **HCY** | **Herceg Novi** | **6.65** | **267**⇑ | *i*Pn | **Pn** | **19 53 01.0** | **+1.6** |
| HCY | | | | *e*Sn | **Sn** | **19 54 16.0** | **+0.6** |
| **DRO** | **Drossia** | **6.80** | **222** | *e*PN | **Pn** | **19 53 04.6** | **+3.1** |
| **DRO** | **Drossia** | **6.80** | **222** | *e*PN | **Pn** | **19 53 04.6** | **+3.1** |
| **KOLS** | **Kolonicke sedl** | **6.83** | **330** | *e*P | **Pn** | **19 53 03.2** | **+1.5** |
| KOLS | | | | MLR | MLR | | |
| | comp=Z,300nm,2.0s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **6.83** | **330** | *e*PN | **Pn** | **19 53 03.2** | **+1.5** |
| KOLS | | | | *e* | | 19 55 17.2 | |
| **VLX** | **Vlachokerasia** | **6.97** | **216** | *e*PN | **Pn** | **19 53 04.1** | **+0.3** |
| **VLX** | **Vlachokerasia** | **6.97** | **216** | *e*PN | **Pn** | **19 53 04.1** | **+0.3** |
| **LVV** | **L'vov** | **7.08** | **342** | *e*P | **Pn** | **19 53 06.3** | **+1.1** |
| LVV | | | | *e*S | **Sn** | **19 54 26.1** | **+0.2** |
| **PSZ** | **Piszkesteto** | **7.15** | **314** | *e*P | **Pn** | **19 53 06.3** | **0.0** |
| PSZ | | | | pmax | pmax | | |
| | comp=Z,24nm,1.0s | | | | | | |
| **PSZ** | **Piszkesteto** | **7.15** | **314** | *e*Pn | **Pn** | **19 53 06.7** | **+0.5** |
| **PSZ** | **Piszkesteto** | **7.15** | **314** | *e*Pn | **Pn** | **19 53 06.3** | **0.0** |
| | comp=Z,24nm,1.0s | | | | | | |
| **PSZ** | **Piszkesteto** | **7.15** | **314** | *e*P | **Pn** | **19 53 06.7** | **+0.5** |
| **KWP** | **Kalwaria Pacla** | **7.27** | **335** | *e*Pn | Pn | 19 53 11.8 | +3.9 |
| **KWP** | **Kalwaria Pacla** | **7.27** | **335** | *e*P | Pn | 19 53 11.8 | +3.9 |
| **VLI** | **Veliai** | **7.31** | **210** | *e*PN | **Pn** | **19 53 06.8** | **-1.6** |
| **VLI** | **Veliai** | **7.31** | **210** | *e*PN | **Pn** | **19 53 06.8** | **-1.6** |
| **ITM** | **Ithomi** | **7.33** | **217** | *e*PN | **Pn** | **19 53 10.0** | **+1.4** |
| **ITM** | **Ithomi** | **7.33** | **217** | *e*PN | **Pn** | **19 53 10.0** | **+1.4** |
| **ANN** | **Anapa** | **7.36** | **74** | *e*P | **Pn** | **19 53 07.7** | **-1.3** |
| ANN | | | | *e*S | **Sn** | **19 54 28.7** | **-4.1** |
| ANN | | | | pmax | pmax | | |
| | comp=Z,46nm,0.8s | | | | | | |
| ANN | | | | smax | smax | | |
| | comp=N,112nm,0.7s | | | | | | |
| ANN | | | | smax | smax | | |
| | comp=E,73nm,0.8s | | | | | | |
| ANN | | | | MLR | MLR | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,165nm,11.0s | | | | | | |
| **STHS** | **Stebnicka Huta** | **7.61** | **328** | *e*P | **Pn** | **19 53 14.1** | **+1.6** |
| **STHS** | **Stebnicka Huta** | **7.61** | **328** | *e*PN | **Pn** | **19 53 14.1** | **+1.6** |
| **KIEV** | **Kiev** | **7.64** | **8** | *e*P | **Pn** | **19 53 11.5** | **-1.3** |
| **KIEV** | **Kiev** | **7.64** | **8** | *e*Pn | **Pn** | **19 53 12.2** | **-0.7** |
| | comp=Z,11nm,0.4s | | | | | | |
| **PYL** | **PYLOS** | **7.64** | **217** | *e*PN | **Pn** | **19 53 14.8** | **+1.8** |
| **PYL** | **PYLOS** | **7.64** | **217** | *e*PN | **Pn** | **19 53 14.8** | **+1.8** |
| **AKASG** | **Malin Array Be** | **7.65** | **8** | Pn | **Pn** | **19 53 12.7** | **-0.2** |
| | comp=Z,4.9nm,0.3s,baz=190,slow=12,SNR=18 | | | | | | |
| AKASG | | | | Sn | **Sn** | **19 54 36.4** | **-3.4** |
| | comp=Z,23nm,0.3s,baz=191,slow=21,SNR=8.7 | | | | | | |
| AKASG | | | | Lg | Lg | 19 55 17.0 | |
| | comp=Z,16nm,0.3s,baz=184,slow=29,SNR=5.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **7.65** | **8** | *i* P | **Pn** | **19 53 12.6** | **-0.3** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **PKST** | **T^'s** | **7.84** | **305**⇓ | *e*Pn | **Pn** | **19 53 16.4** | **+0.8** |
| **NIE** | **Niedzica** | **8.00** | **324** | *e*Pn | **Pn** | **19 53 20.9** | **+3.0** |
| **NIE** | **Niedzica** | **8.00** | **324** | *e*P | **Pn** | **19 53 20.9** | **+3.0** |
| **VYHS** | **Vyhne** | **8.06** | **314** | *e*P | **Pn** | **19 53 18.3** | **-0.4** |
| VYHS | | | | MLR | MLR | | |
| | comp=Z,100nm,1.8s | | | | | | |
| **VYHS** | **Vyhne** | **8.06** | **314** | *e*PN | **Pn** | **19 53 18.3** | **-0.4** |
| **LANS** | **Liptovska Anna** | **8.18** | **320** | *e*P | **Pn** | **19 53 23.4** | **+3.0** |
| **LANS** | **Liptovska Anna** | **8.18** | **320** | *e*PN | **Pn** | **19 53 23.4** | **+3.0** |
| LANS | | | | *e* | | 19 55 44.3 | |
| **OJC** | **Ojcow** | **8.82** | **326** | *e*P | **Pn** | **19 53 29.6** | **+0.5** |
| **OJC** | **Ojcow** | **8.82** | **326** | *e*P | **Pn** | **19 53 29.7** | **+0.6** |
| **SOC** | **Sochi** | **8.92** | **83***c* | *i*P | **Pn** | **19 53 29.1** | **-1.3** |
| SOC | | | | *e* | | 19 55 06.0 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,163nm,0.9s | | | | | | |
| SOC | | | | smax | smax | | |
| | comp=E,152nm,0.9s | | | | | | |
| **BOJS** | **Bojanci** | **9.08** | **289** | *i* PKPbc | | 20 23 20.6 | |
| **OKC** | **Ostrava-Krasne** | **9.28** | **319** | *e*P | **Pn** | **19 53 36.2** | **+0.8** |
| OKC | | | | *e* | | 19 55 17.1 | |
| OKC | | | | MLR | MLR | | |
| | comp=Z,500nm,8.2s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **9.28** | **319** | *e*PN | **Pn** | **19 53 36.2** | **+0.8** |
| OKC | | | | *e*x | x | 19 53 44.8 | |
| OKC | | | | *e*SN | **Sn** | **19 55 17.1** | **-2.8** |
| OKC | | | | *e*x | x | 19 55 53.3 | |
| OKC | | | | AMS | AMS | 19 58 30.0 | |
| | comp=Z,500nm,8.2s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **9.28** | **319** | Pn | **Pn** | **19 53 36.2** | **+0.8** |
| OKC | | | | Sn | **Sn** | **19 55 17.1** | **-2.8** |
| **CUC** | **Castrocucco** | **9.30** | **254** | *e*Pn | **Pn** | **19 53 38.7** | **+3.0** |
| | comp=Z,11nm,0.8s | | | | | | |
| **VRAC** | **Vranov** | **9.74** | **313** | Pn | **Pn** | **19 53 41.8** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=149,slow=13,SNR=2.9 | | | | | | |
| VRAC | | | | Sn | **Sn** | **19 55 27.1** | **-4.0** |
| | comp=Z,0.5nm,0.3s,baz=96,slow=12,SNR=3.2 | | | | | | |
| VRAC | | | | LR | LR | 19 58 28.0 | |
| | comp=Z,325nm,19.2s,baz=115,slow=44 | | | | | | |
| **VRAC** | **Vranov** | **9.74** | **313** | P | **Pn** | **19 53 41.8** | **+0.2** |
| VRAC | | | | | | 19 55 27.1 | |
| VRAC | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| VRAC | | | | MLR | MLR | | |
| | comp=Z,325nm,19.2s | | | | | | |
| **KRLC** | **Kraliky** | **10.10** | **317** | *e*P | **Pn** | **19 53 46.8** | **+0.1** |
| **KRLC** | **Kraliky** | **10.10** | **317** | *e*P | **Pn** | **19 53 46.8** | **+0.1** |
| KRLC | | | | *e*x | x | 19 53 57.0 | |
| **KRLC** | **Kraliky** | **10.10** | **317** | P | **Pn** | **19 53 46.8** | **+0.1** |
| **TREC** | **Trest** | **10.33** | **311** | AMS | AMS | 19 58 50.0 | |
| | comp=Z,1µm,11.6s | | | | | | |
| **DPC** | **Dobruska-Polom** | **10.51** | **317** | *e*P | **Pn** | **19 53 53.2** | **+1.0** |
| DPC | | | | *e*S | **Sn** | **19 55 46.2** | **-3.9** |
| DPC | | | | MLR | MLR | | |
| | comp=Z,700nm,8.8s | | | | | | |
| **DPC** | **Dobruska-Polom** | **10.51** | **317** | *e*P | **Pn** | **19 53 53.2** | **+1.0** |
| DPC | | | | *e*x | x | 19 54 03.0 | |
| DPC | | | | *e*S | **Sn** | **19 55 46.2** | **-3.9** |
| DPC | | | | AMS | AMS | 19 59 10.0 | |
| | comp=Z,700nm,8.8s | | | | | | |
| **DPC** | **Dobruska-Polom** | **10.51** | **317** | P | **Pn** | **19 53 53.2** | **+1.0** |
| DPC | | | | S | **Sn** | **19 55 46.2** | **-3.9** |
| **CHVG** | **Ch'k'valeri** | **10.71** | **87** | P | **Pn** | **19 53 52.4** | **-2.7** |
| **UPC** | **Upice** | **10.76** | **317** | *e*P | **Pn** | **19 53 55.9** | **+0.3** |
| UPC | | | | *e*S | **Sn** | **19 55 52.2** | **-4.0** |
| UPC | | | | MLR | MLR | | |
| | comp=Z,800nm,9.4s | | | | | | |
| **UPC** | **Upice** | **10.76** | **317** | *e*P | **Pn** | **19 53 55.9** | **+0.3** |
| UPC | | | | *e*S | **Sn** | **19 55 52.2** | **-4.0** |
| UPC | | | | AMS | AMS | 19 59 20.0 | |
| | comp=Z,800nm,9.4s | | | | | | |
| **UPC** | **Upice** | **10.76** | **317** | P | **Pn** | **19 53 55.9** | **+0.3** |
| UPC | | | | S | **Sn** | **19 55 52.2** | **-4.0** |
| **GOPC** | **GO Pecny, Ondr** | **11.05** | **312** | AMS | AMS | 19 59 30.0 | |
| | comp=Z,1µm,13.4s | | | | | | |
| **KIV** | **Kislovodsk** | **11.06** | **81** | *i* P | **Pn** | **19 53 57.5** | **-2.4** |
| KIV | | | | *e*S | **Sn** | **19 56 00.1** | **-3.8** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,132nm,22.0s | | | | | | |
| **KIV** | **Kislovodsk** | **11.06** | **81** | *e*Pn | **Pn** | **19 53 57.5** | **-2.4** |
| | comp=Z,26nm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | **11.15** | **305** | Pn | **Pn** | **19 54 02.4** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=126,slow=14,SNR=7.5 | | | | | | |
| GERES | | | | LR | LR | 19 59 17.2 | |
| | comp=Z,248nm,18.9s,baz=102,slow=43 | | | | | | |
| **VORD** | **Divnogorie** | **11.21** | **42** | *e*P | **Pn** | **19 54 02.9** | **+1.1** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.4s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,30nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **11.22** | **82** | Pn | **Pn** | **19 54 00.5** | **-1.5** |
| | comp=E,0.3nm,0.3s,baz=126,slow=2.9,SNR=5.9 | | | | | | |
| KBZ | | | | Sn | **Sn** | **19 56 08.6** | **+1.0** |
| | comp=E,0.2nm,0.3s,baz=279,slow=1.8,SNR=4.9 | | | | | | |
| **PRU** | **Pruhonice** | **11.22** | **312** | *e*P | **Pn** | **19 54 02.1** | **+0.1** |
| PRU | | | | MLR | MLR | | |
| | comp=Z,1µm,12.5s | | | | | | |
| **PRU** | **Pruhonice** | **11.22** | **312** | *e*P | **Pn** | **19 54 02.1** | **+0.1** |
| PRU | | | | AMS | AMS | 19 59 30.0 | |
| | comp=Z,1µm,12.5s | | | | | | |
| **PRU** | **Pruhonice** | **11.22** | **312** | P | **Pn** | **19 54 02.1** | **+0.1** |
| **SUW** | **Suwalki** | **11.23** | **347** | *e*P | **Pn** | **19 54 00.3** | **-1.8** |
| SUW | | | | *e*S | **Sn** | **19 56 02.2** | **-5.5** |
| **SUW** | **Suwalki** | **11.23** | **347** | *e*P | **Pn** | **19 54 00.4** | **-1.7** |
| SUW | | | | *e*S | **Sn** | **19 56 02.3** | **-5.5** |
| **VSR** | **Storozhevoye** | **11.31** | **40** | *e*P | **Pn** | **19 54 03.8** | **+0.6** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,20nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | |
| **PRA** | **Prague** | **11.33** | **312** | AMS | AMS | 19 59 40.0 | |
| | comp=E,1µm,11.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **11.35** | **307** | *e*P | **Pn** | **19 54 04.0** | **+0.3** |
| KHC | | | | *e*S | **Sn** | **19 56 05.8** | **-4.8** |
| KHC | | | | MLR | MLR | | |
| | comp=Z,800nm,8.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **11.35** | **307** | *e*P | **Pn** | **19 54 04.0** | **+0.3** |
| KHC | | | | *e*x | x | 19 54 20.3 | |
| KHC | | | | *e*S | **Sn** | **19 56 05.8** | **-4.8** |
| KHC | | | | *e*x | x | 19 56 24.3 | |
| KHC | | | | AMS | AMS | 19 59 40.0 | |
| | comp=Z,800nm,8.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **11.35** | **307** | P | **Pn** | **19 54 04.0** | **+0.3** |
| **MNK** | **Minsk** | **11.36** | **1** | *e*P | **Pn** | **19 54 01.0** | **-2.8** |
| MNK | | | | *e*S | Sn | 19 56 04.0 | -6.9 |
| **MICGM** | **Minsk** | **11.36** | **1** | *e*P | **Pn** | **19 54 01.0** | **-2.8** |
| **PVCC** | **Panska Ves** | **11.51** | **314** | AMS | AMS | 19 59 50.0 | |
| | comp=Z,800nm,13.4s | | | | | | |
| **ONI** | **Oni** | **11.73** | **87** | P | **Pn** | **19 54 07.9** | **-1.2** |
| **ONI** | **Oni** | **11.73** | **87** | P | **Pn** | **19 54 07.8** | **-1.2** |
| **NCK** | **Nalchik** | **11.74** | **83** | *i* P | **Pn** | **19 54 08.1** | **-1.0** |
| **NACGM** | **Naroch** | **11.77** | **358** | *e*P | **Pn** | **19 54 07.0** | **-2.4** |
| **MMAI** | **Mount Meron Ar** | **11.88** | **146** | Pn | **Pn** | **19 54 11.8** | **+0.7** |
| | comp=Z,0.6nm,0.3s,baz=283,slow=10,SNR=3.1 | | | | | | |
| MMAI | | | | LR | LR | 19 59 34.6 | |
| | comp=Z,118nm,20.0s,baz=320,slow=42 | | | | | | |
| **ZEI** | **Tsey** | **12.03** | **86** | *e*P | **Pn** | **19 54 11.6** | **-1.7** |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,60nm,0.8s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **12.16** | **35** | *e*P | **Pn** | **19 54 16.2** | **+1.4** |
| LPSR | | | | pmax | pmax | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,10.0nm,0.9s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,20nm,1.5s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.4s | | | | | | |
| **IDID** | **Didziasalis** | **12.19** | **358** | *e*P | **Pn** | **19 54 12.4** | **-2.7** |
| IDID | | | | IAmb | IAmb | 19 54 15.6 | |
| | comp=Z,40nm,1.1s | | | | | | |
| **IDID** | **Didziasalis** | **12.19** | **358** | *e*P | **Pn** | **19 54 12.4** | **-2.7** |
| | SNR=40 | | | | | | |
| **IIGN** | **Ignalina** | **12.24** | **357** | *e*P | **Pn** | **19 54 13.1** | **-2.7** |
| IIGN | | | | IAmb | IAmb | 19 54 15.4 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **IIGN** | **Ignalina** | **12.24** | **357** | *e*P | **Pn** | **19 54 13.1** | **-2.7** |
| | SNR=40 | | | | | | |
| **ISAL** | **Salakas** | **12.46** | **356** | *e*P | Pn | 19 54 15.6 | -3.2 |
| ISAL | | | | IAmb | IAmb | 19 54 19.2 | |
| | comp=Z,23nm,1.1s | | | | | | |
| **NKC** | **Novy Kostel** | **12.51** | **310** | *e*P | **Pn** | **19 54 19.8** | **+0.3** |
| NKC | | | | *e*S | **Sn** | **19 56 33.3** | **-5.8** |
| NKC | | | | MLR | MLR | | |
| | comp=Z,700nm,9.0s | | | | | | |
| **NKC** | **Novy Kostel** | **12.51** | **310** | *e*P | **Pn** | **19 54 19.8** | **+0.3** |
| NKC | | | | *e*S | **Sn** | **19 56 33.3** | **-5.8** |
| NKC | | | | *e*x | x | 19 56 56.7 | |
| NKC | | | | AMS | AMS | 20 00 10.0 | |
| | comp=Z,700nm,9.0s | | | | | | |
| **NKC** | **Novy Kostel** | **12.51** | **310** | P | **Pn** | **19 54 19.8** | **+0.3** |
| NKC | | | | S | **Sn** | **19 56 33.3** | **-5.8** |
| **VRH** | **Novokhopyorsk** | **12.58** | **45** | *e*P | **Pn** | **19 54 20.1** | **-0.3** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,40nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,60nm,1.5s | | | | | | |
| **IZAR** | **Zarasai** | **12.64** | **357** | *e*P | Pn | 19 54 17.6 | -3.6 |
| IZAR | | | | IAmb | IAmb | 19 54 20.4 | |
| | comp=Z,18nm,1.1s | | | | | | |
| **IZAR** | **Zarasai** | **12.64** | **357** | *e*P | Pn | 19 54 17.6 | -3.6 |
| | SNR=35 | | | | | | |
| **CLL** | **Collm** | **12.77** | **315** | *e*P | **Pn** | **19 54 21.0** | **-2.0** |
| **CLL** | **Collm** | **12.77** | **315** | *e*(P) | **Pn** | **19 54 21.0** | **-2.0** |
| CLL | | | | Lmax | | 20 00 00.0 | |
| **DAVOX** | **Davos/Dischmat** | **12.98** | **292** | LR | LR | 19 59 48.8 | |
| | comp=Z,150nm,21.4s,baz=94,slow=39 | | | | | | |
| **TUE** | **Stuetta** | **13.30** | **291** | *e*Pn | Pn | 19 54 34.6 | +4.1 |
| | comp=Z,17nm,1.3s | | | | | | |
| **DGRG** | **David-gareji** | **13.35** | **91** | P | P | 19 54 36.9 | -3.9 |
| **DGRG** | **David-gareji** | **13.35** | **91** | P | P | 19 54 36.9 | -3.9 |
| **OBN** | **Obninsk** | **13.35** | **23** | Pn | **Pn** | **19 54 28.9** | **-2.1** |
| | comp=Z,2.4nm,0.3s,baz=254,slow=13,SNR=3.3 | | | | | | |
| OBN | | | | Sn | Sn | 19 56 50.2 | -9.3 |
| | comp=Z,1.6nm,0.3s,baz=17,slow=19,SNR=3.3 | | | | | | |
| OBN | | | | Lg | Lg | 19 58 16.5 | |
| | comp=Z,1.9nm,0.3s,baz=26,slow=22,SNR=3.8 | | | | | | |
| OBN | | | | LR | LR | 19 59 51.4 | |
| | comp=Z,162nm,18.4s,baz=270,slow=38 | | | | | | |
| **OBN** | **Obninsk** | **13.35** | **23** | *e*P | **Pn** | **19 54 28.7** | **-2.2** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,25nm,1.5s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,159nm,17.0s | | | | | | |
| **MOS** | **Moscow** | **14.20** | **24** | *e*P | Pn | 19 54 38.6 | -3.9 |
| MOS | | | | *e*S | Sn | 19 57 13.2 | -6.9 |
| **BFO** | **Black Forest** | **14.33** | **298** | *e*P | **P** | **19 54 52.5** | **+0.8** |
| BFO | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| **BFO** | **Black Forest** | **14.33** | **298** | *e*P | **P** | **19 54 52.5** | **+0.8** |
| | comp=Z,21nm,1.1s | | | | | | |
| **EIL** | **Elat** | **14.72** | **154** | LR | LR | 20 01 51.2 | |
| | comp=Z,74nm,19.6s,baz=287,slow=43 | | | | | | |
| **BNI** | **Bardonecchia** | **15.07** | **284** | *e*P | **Pn** | **19 54 56.7** | **+2.1** |
| BNI | | | | pmax | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | |
| **BNI** | **Bardonecchia** | **15.07** | **284** | *e*P | **Pn** | **19 54 56.7** | **+2.1** |
| | comp=Z,22nm,1.1s | | | | | | |
| **VSU** | **Vasula** | **15.34** | **359** | *e*P | **Pn** | **19 54 55.0** | **-2.9** |
| VSU | | | | pmax | pmax | | |
| | comp=Z,102nm,1.0s | | | | | | |
| **KEST** | **Kesra** | **15.84** | **248** | Pn | **Pn** | **19 55 04.7** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=79,slow=5.2,SNR=3.2 | | | | | | |
| KEST | | | | LR | LR | 20 02 14.0 | |
| | comp=Z,199nm,21.0s,baz=326,slow=41 | | | | | | |
| **FINES** | **FINESS Array B** | **18.34** | **358** | Pn | Pn | 19 55 30.7 | -5.1 |
| | comp=Z,0.6nm,0.3s,baz=170,slow=13,SNR=13 | | | | | | |
| FINES | | | | Sn | Sn | 19 58 44.5 | -16 |
| | comp=Z,0.6nm,0.3s,baz=166,slow=24,SNR=4.5 | | | | | | |
| **HFS** | **Hagfors** | **18.97** | **338** | P | **P** | **19 55 41.7** | **-1.1** |
| | comp=Z,0.5nm,0.3s,baz=148,slow=12,SNR=12 | | | | | | |
| HFS | | | | LR | LR | 20 03 33.2 | |
| | comp=Z,152nm,18.7s,baz=148,slow=39 | | | | | | |
| **HFS** | **Hagfors** | **18.97** | **338** | P | **P** | **19 55 41.7** | **-1.1** |
| HFS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| HFS | | | | MLR | MLR | | |
| | comp=Z,152nm,18.7s | | | | | | |
| **KLMR** | **Klimovskoe** | **19.16** | **18** | *e*P | **P** | **19 55 40.5** | **-4.4** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,41nm,1.5s | | | | | | |
| KLMR | | | | MLR | MLR | | |
| | comp=Z,177nm,9.0s | | | | | | |
| **NB2** | **NORSAR Subarra** | **20.41** | **337** | P | **P** | **19 55 59.2** | **+0.6** |
| | comp=Z,6.7nm,1.0s,baz=144,slow=11 | | | | | | |
| **NB2** | **NORSAR Subarra** | **20.41** | **337** | P | **P** | **19 55 59.2** | **+0.5** |
| | comp=Z,6.7nm,1.0s,SNR=1.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **20.41** | **337** | P | **P** | **19 55 59.1** | **+0.6** |
| | comp=Z,3.6nm,0.9s,baz=143,slow=10,SNR=10 | | | | | | |
| NOA | | | | LR | LR | 20 04 26.6 | |
| | comp=Z,105nm,19.0s,baz=150,slow=39 | | | | | | |
| **NOA** | **NORSAR Array B** | **20.41** | **337** | P | **P** | **19 55 59.1** | **+0.5** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,105nm,19.0s | | | | | | |
| **TMCR** | **Tamitsa** | **21.90** | **12** | *e*P | **P** | **19 56 16.6** | **+2.0** |
| TMCR | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.02** | **60** | P | **P** | **19 56 17.0** | **+1.0** |
| | comp=Z,4.0nm,0.9s,baz=261,slow=15,SNR=6.1 | | | | | | |
| AKTO | | | | LR | LR | 20 07 05.9 | |
| | comp=Z,114nm,21.2s,baz=272,slow=43 | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.02** | **60** | P | **P** | **19 56 17.0** | **+1.0** |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| AKTO | | | | MLR | MLR | | |
| | comp=Z,114nm,21.2s | | | | | | |
| **AKTO** | **Aktyubinsk** | **22.02** | **60** | P | **P** | **19 56 17.0** | **+1.0** |
| **ABKAR** | **Akbulak array** | **23.16** | **63** | *e*P | **P** | **19 56 28.5** | **+0.4** |
| | comp=Z,7.3nm,0.9s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.21** | **312** | P | **P** | **19 56 27.3** | **-1.2** |
| | comp=Z,1.5nm,0.7s,baz=98,slow=10,SNR=5.2 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.21** | **312** | P | **P** | **19 56 27.3** | **-1.2** |
| EKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **23.77** | **272** | P | **P** | **19 56 34.2** | **-0.1** |
| | comp=Z,2.4nm,1.0s,baz=73,slow=10.0,SNR=9.2 | | | | | | |
| ESDC | | | | LR | LR | 20 06 32.3 | |
| | comp=Z,110nm,20.1s,baz=50,slow=38 | | | | | | |
| **GEYT** | **Alibeck** | **23.78** | **92** | P | **P** | **19 56 36.2** | **+1.9** |
| | comp=Z,3.4nm,1.0s,baz=287,slow=15,SNR=7.7 | | | | | | |
| GEYT | | | | LR | LR | 20 09 15.7 | |
| | comp=Z,29nm,19.2s,baz=285,slow=45 | | | | | | |
| **ARU** | **Arti** | **23.81** | **45** | P | **P** | **19 56 35.8** | **+1.3** |
| | comp=Z,0.2nm,0.2s,baz=73,slow=20,SNR=3.9 | | | | | | |
| ARU | | | | LR | LR | 20 06 19.3 | |
| | comp=Z,87nm,20.6s,baz=244,slow=38 | | | | | | |
| **ARU** | **Arti** | **23.81** | **45***c* | *i*P | **P** | **19 56 34.1** | **-0.4** |
| ARU | | | | | | 19 57 03.8 | |
| ARU | | | | S | **S** | **20 00 51.7** | **+1.5** |
| ARU | | | | SS | **SnSn** | **20 01 32.2** | **+3.8** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,26nm,1.7s | | | | | | |
| **ARU** | **Arti** | **23.81** | **45** | *e*P | **P** | **19 56 34.2** | **-0.3** |
| | comp=Z,12nm,0.9s | | | | | | |
| **SVE** | **Sverdlovsk** | **25.03** | **45** | *e*P | **P** | **19 56 47.9** | **+2.3** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,23nm,1.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **26.47** | **358** | P | **P** | **19 56 59.3** | **+0.7** |
| | comp=Z,5.4nm,0.9s,baz=169,slow=5.4,SNR=3.6 | | | | | | |
| ARCES | | | | LR | LR | 20 06 49.0 | |
| | comp=Z,36nm,18.5s,baz=248,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **26.47** | **358** | P | **P** | **19 56 59.3** | **+0.7** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| ARCES | | | | MLR | MLR | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,36nm,18.5s | | | | | | |
| MDT | Midelt | 27.18 | 258 | P | P | 19 57 06.5 | +1.1 |
| | comp=Z,3.2nm,0.9s,baz=45,slow=9.1,SNR=6.0 | | | | | | |
| MDT | | | | LR | LR | 20 07 38.3 | |
| | comp=Z,83nm,19.1s,baz=73,slow=36 | | | | | | |
| BRVK | Borovoye | 29.83 | 56 | eP | P | 19 57 26.8 | -2.0 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.6s | | | | | | |
| BVAR | Borovoye Array | 29.90 | 56 | P | P | 19 57 32.1 | +2.8 |
| | comp=Z,0.3nm,0.4s,baz=263,slow=5.8,SNR=2.5 | | | | | | |
| AAK | Ala-Archa | 34.09 | 74 | eP | P | 19 58 06.3 | -0.1 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| TORD | Torodi Ar. Bea | 37.26 | 224 | P | P | 19 58 33.9 | +0.2 |
| | comp=Z,1.2nm,0.5s,baz=32,slow=9.2,SNR=15 | | | | | | |
| MKAR | Makanchi Array | 38.28 | 65 | P | P | 19 58 44.2 | +2.1 |
| | comp=Z,0.3nm,0.3s,baz=309,slow=6.9,SNR=3.4 | | | | | | |
| MKAR | | | | LR | LR | 20 16 47.1 | |
| | comp=Z,51nm,19.2s,baz=266,slow=40 | | | | | | |
| ZALV | Zalesovo Beam | 38.45 | 53 | P | P | 19 58 43.9 | +0.6 |
| | comp=Z,2.1nm,0.6s,baz=271,slow=8.9,SNR=11 | | | | | | |
| ZALV | Zalesovo Beam | 38.45 | 53 | P | P | 19 58 43.9 | +0.6 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| DBIC | Dimbokro | 46.15 | 227 | P | P | 19 59 47.3 | +0.9 |
| | comp=Z,4.9nm,0.9s,baz=37,slow=8.1,SNR=4.3 | | | | | | |
| DBIC | | | | LR | LR | 20 20 10.5 | |
| | comp=Z,32nm,19.7s,baz=30,slow=38 | | | | | | |
| DBIC | Dimbokro | 46.15 | 227 | P | P | 19 59 47.3 | +0.9 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| DBIC | | | | MLR | MLR | | |
| | comp=Z,32nm,19.7s | | | | | | |
| SONM | Songino Array | 53.24 | 56 | P | P | 20 00 41.5 | +1.2 |
| | comp=Z,0.9nm,0.6s,baz=297,slow=6.5,SNR=5.0 | | | | | | |
| SONM | Songino Array | 53.24 | 56 | P | P | 20 00 41.5 | +1.2 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| ULN | Ulaanbaatar | 53.62 | 55 | eP | P | 20 00 42.7 | -0.5 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| CMAR | Chiang Mai Arr | 64.19 | 88 | P | P | 20 01 56.9 | +0.1 |
| | comp=Z,0.2nm,0.4s,baz=312,slow=8.1,SNR=4.1 | | | | | | |
| CMAR | | | | LR | LR | 20 37 51.1 | |
| | comp=Z,69nm,18.3s,baz=204,slow=43 | | | | | | |
| YKA | Yellowknife Ar | 70.40 | 342 | P | P | 20 02 35.1 | -0.3 |
| | comp=Z,0.8nm,0.7s,baz=38,slow=5.8,SNR=3.3 | | | | | | |
| YKA | Yellowknife Ar | 70.40 | 342 | P | P | 20 02 35.1 | -0.3 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| ILAR | Eielson Array | 72.33 | 357 | P | P | 20 02 48.1 | +1.0 |
| | comp=Z,0.4nm,0.7s,baz=356,slow=4.6,SNR=3.6 | | | | | | |
| DOT | Dot Lake | 73.33 | 356 | eP | P | 20 02 53.6 | +0.5 |
| ULM | Lac du Bonnet | 74.69 | 326 | LR | LR | 20 36 23.1 | |
| | comp=Z,52nm,18.3s,baz=52,slow=36 | | | | | | |
| PETK | Petropavlovsk- | 75.00 | 28 | LR | LR | 20 37 39.1 | |
| | comp=Z,24nm,21.9s,baz=290,slow=37 | | | | | | |
| TXAR | Lajitas Array | 95.07 | 319 | P | P | 20 04 44.7 | -0.5 |
| | comp=Z,0.2nm,0.3s,baz=64,slow=2.1,SNR=3.5 | | | | | | |

*IDC **07** 19:57:15.6±1.1, 4°.96S×133°.65E, h0km, mb3.7/4, mb1 4.1/10, mb1mx3.9/32, mbtmp4.0/10, ML3.9/6, MS3.5/5, Ms1 3.5/5, ms1mx3.1/31, Error ellipse: s-maj=32.3km s-min=20.5km az=74.0*

*ISCJB **07** 19:57:16.8±0.5, 4°.94S±0°.04×133°.69E±0°.06, h25km, mb3.8/4, MS3.5/2, Error ellipse: s-maj=9.6km s-min=5.7km az=159.5*

*AUST **07** 19:57:16.2, 4°.83S×133°.78E, h20km*

*DJA **07** 19:57:20.0±3.0, 5°S±4°×13°4E±°, h22km±40km, M4.2/7, mb4.6/5, mB5.2/1, mB5.2/1, MLv4.0/5, MLv4.2/7, Mw(mB)4.6/1, Mw(mB)4.6/1*

**ISC 07 19:57:19.4**±0.8**, 4°.85S**±0°.07×**133°.52E**±0°.07**, h25km, n30,** σ**1s.65**/24**, mb3.8**/4**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.30 | 327 | P | Pn | 19 57 55.8 | 0.0 |
| | baz=2.4,SNR=39 | | | | | | |
| FAKI | Fak Fak | 2.30 | 327 | P | Pn | 19 57 55.7 | -0.1 |
| FAKI | | | | S | Sn | 19 58 24.1 | +0.7 |
| BNDI | Bandanaira | 3.62 | 275 | P | Pn | 19 58 17.2 | +3.3 |
| BNDI | | | | S | Sb | 19 59 04.5 | -1.7 |
| SIJI | Sorong | 4.55 | 330 | Pn | Pn | 19 58 27.8 | +1.0 |
| | 2.6nm,0.3s,baz=241,slow=23,SNR=38 | | | | | | |
| SIJI | | | | Sn | Sn | 19 59 14.9 | -4.0 |
| | 3.2nm,0.3s,baz=100,slow=14,SNR=4.7 | | | | | | |
| SWI | Sorong | 4.56 | 330 | P | Pn | 19 58 28.1 | +1.2 |
| | baz=4.7,SNR=11 | | | | | | |
| SWI | Sorong | 4.56 | 330 | P | Pn | 19 58 28.2 | +1.3 |
| MSAI | Masohi | 4.82 | 288 | P | Pn | 19 58 28.2 | -2.2 |
| AAI | Ambon | 5.44 | 282 | P | Pb | 19 58 47.2 | -6.5 |
| NLAI | Namlea | 6.60 | 284 | P | Pn | 19 58 56.8 | +1.9 |
| | 41nm,0.5s,0.1nm | | | | | | |
| LBMI | Labuha | 7.33 | 305 | P | Pn | 19 59 09.1 | +4.2 |
| JAY | Jayapura | 7.54 | 72 | Pn | Pn | 19 59 05.2 | -2.6 |
| | 0.3nm,0.3s,baz=346,slow=19,SNR=2.4 | | | | | | |
| KDU | Kakadu | 7.85 | 188 | P | Pn | 19 59 12.5 | +0.4 |
| | baz=8.0,SNR=30 | | | | | | |
| SANI | Sanana | 8.02 | 290 | P | Pn | 19 59 18.3 | +3.9 |
| | 15nm,0.7s | | | | | | |
| MTN | Manton Dam | 8.28 | 196 | P | Pn | 19 59 18.2 | +0.1 |
| | baz=8.4,SNR=29 | | | | | | |
| BATI | Baumata | 11.12 | 241 | Pn | Pn | 19 59 57.6 | +0.6 |
| | 2.2nm,0.3s,baz=137,slow=2.7,SNR=7.4 | | | | | | |
| BATI | | | | Sn | Sn | 20 02 00.7 | -0.1 |
| | 1.3nm,0.3s,baz=162,slow=20,SNR=2.8 | | | | | | |
| BATI | Baumata | 11.12 | 241 | P | Pn | 19 59 58.9 | +1.9 |
| KNRA | Kununurra | 11.73 | 203 | P | Pn | 20 00 04.6 | -0.6 |
| | baz=12,SNR=22 | | | | | | |
| KAPI | Kappang | 13.72 | 269 | LR | LR | 20 06 51.0 | |
| | comp=Z,136nm,20.9s,baz=119,slow=42 | | | | | | |
| PMG | Port Moresby | 14.27 | 109 | LR | LR | 20 07 59.3 | |
| | comp=Z,295nm,18.9s,baz=317,slow=46 | | | | | | |
| WRA | Warramunga Arr | 15.02 | 177 | Pn | Pn | 20 00 45.6 | -4.6 |
| | 0.5nm,0.3s,baz=356,slow=13,SNR=18 | | | | | | |
| WRA | | | | Sn | Sn | 20 03 23.9 | -12 |
| | 0.5nm,0.3s,baz=5.7,slow=23,SNR=5.1 | | | | | | |
| ASAR | Alice Springs | 18.71 | 179 | P | P | 20 01 34.0 | -2.3 |
| | 0.9nm,0.3s,baz=355,slow=12,SNR=31 | | | | | | |
| ASAR | | | | S | Sn | 20 04 53.2 | -12 |
| | 0.1nm,0.3s,baz=354,slow=24,SNR=4.8 | | | | | | |
| ASAR | | | | LR | LR | 20 09 21.4 | |
| | comp=Z,190nm,20.9s,baz=352,slow=39 | | | | | | |
| CTA | Charters Tower | 19.57 | 142 | P | P | 20 01 44.8 | -0.9 |
| | 0.3nm,0.3s,baz=304,slow=9.7,SNR=5.1 | | | | | | |
| WRKA | Warakurna | 20.69 | 194 | P | Pn | 20 01 58.7 | -1.5 |
| | baz=21,SNR=9.1 | | | | | | |
| QLP | Quilpie | 23.91 | 156 | P | P | 20 02 32.6 | +1.1 |
| | baz=24,SNR=5.4 | | | | | | |
| USRK | Ussuriysk Ar. | 48.85 | 359 | P | P | 20 06 03.6 | +0.8 |
| | 1.6nm,0.7s,baz=191,slow=7.8,SNR=4.1 | | | | | | |
| SONM | Songino Array | 57.63 | 339 | P | P | 20 07 09.1 | +1.5 |
| | 0.3nm,0.5s,baz=146,slow=10,SNR=2.2 | | | | | | |
| MKAR | Makanchi Array | 68.43 | 325 | P | P | 20 08 21.1 | +1.9 |
| | 0.5nm,0.7s,baz=130,slow=7.8,SNR=2.4 | | | | | | |
| ZALV | Zalesovo Beam | 71.28 | 332 | P | P | 20 08 36.8 | +0.2 |
| | 0.6nm,0.6s,baz=120,slow=2.0,SNR=3.0 | | | | | | |
| VNDA | Vanda | 74.17 | 174 | LR | LR | 20 42 28.9 | |
| | comp=Z,57nm,18.2s,baz=302,slow=37 | | | | | | |
| ATD | Arta Tunnel | 91.61 | 281 | LR | LR | 20 50 52.9 | |
| | comp=Z,7.3nm,19.7s,baz=189,slow=35 | | | | | | |

*SZGRF **07** 20:04:21.4, 20°.77S×178°.48W, h504km*

*MOS **07** 20:04:21.6±1.9, 20°.25S×178°.57W, h484km, mb4.6/23, Error ellipse: s-maj=10.9km s-min=9.7km az=73.5*

*IDC **07** 20:04:25.7±1.0, 20°.59S×178°.38W, h541km±10km, mb4.1/19, mb1 4.3/23, mb1mx4.2/26, mbtmp5.0/23, Error ellipse: s-maj=11.9km s-min=9.6km az=109.0*

*ISCJB **07** 20:04:26.3±0.7, 20°.65S±0°.04×178°.50W±0°.03, h557km±9km, mb4.6/94, Error ellipse: s-maj=7.0km s-min=4.3km az=160.5*

*NEIC **07** 20:04:26.5±0.4, 20°.60S×178°.45W, h550km±5km, mb4.7/58, Error ellipse: s-maj=7.4km s-min=5.0km az=135.0*

*BJI **07** 20:04:26.4, 20°.23S×178°.30W, h555km, mb4.7/28, mB4.9/21*

*AUST **07** 20:04:29.4, 20°.52S×178°.27W, h600km*

**ISC 07 20:04:26.6**±0.4**, 20°.61S**±0°.05×**178°.34W**±0°.06**, h556km**±3km**, h557km:pP-P, n470,** σ**1s.21**/528**, mb4.7**/96**, 45C-25D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 4.46 | 309 | eP | P | 20 05 53.9 | +1.3 |
| MSVF | Nonsavu | 4.46 | 309 | eP | P | 20 05 53.9 | +1.3 |
| RAO | Raoul Island | 8.61 | 178 | P | P | 20 06 30.0 | -0.5 |
| | 51nm,0.3s,baz=41,slow=19,SNR=3.2 | | | | | | |
| RAO | | | | S | S | 20 08 08.7 | -3.4 |
| | 93nm,0.3s,baz=275,slow=24,SNR=7.3 | | | | | | |
| RAO | Raoul Island | 8.61 | 178 | P | P | 20 06 30.0 | -0.5 |
| RAO | | | | eS | S | 20 08 13.2 | +1.1 |
| RAO | Raoul Island | 8.61 | 178 | P | P | 20 06 30.0 | -0.5 |
| RAO | | | | eS | S | 20 08 13.2 | +1.1 |
| AFI | Afiamalu | 9.15 | 44 | P | P | 20 06 33.6 | -2.6 |
| | 24nm,0.3s,baz=357,slow=1.0,SNR=23 | | | | | | |
| AFI | | | | S | S | 20 08 15.0 | -7.5 |
| | 6.3nm,0.3s,baz=60,slow=20,SNR=2.8 | | | | | | |
| AFI | Afiamalu | 9.15 | 44 | eP | P | 20 06 34.0 | -2.2 |
| AFI | | | | S | S | 20 08 15.0 | -7.5 |
| AFI | Afiamalu | 9.15 | 44 | eP | P | 20 06 34.0 | -2.2 |
| AFI | | | | S | S | 20 08 15.0 | -7.5 |
| DZM | Mont Dzumac | 14.26 | 261 | P | P | 20 07 28.7 | +0.1 |
| | 2.6nm,0.3s,baz=180,slow=4.6,SNR=22 | | | | | | |
| OUZ | Omahuta | 16.19 | 204 | eP | P | 20 07 49.2 | +1.6 |
| | 77nm,0.8s | | | | | | |
| URZ | Urewera | 18.02 | 192 | P | P | 20 08 02.4 | -1.8 |
| | 4.5nm,0.3s,baz=329,slow=3.8,SNR=28 | | | | | | |
| URZ | | | | S | S | 20 10 57.7 | -3.7 |
| | 0.6nm,0.3s,baz=53,slow=20,SNR=3.3 | | | | | | |
| URZ | Urewera | 18.02 | 192 | eP | P | 20 08 02.8 | -1.4 |
| | 44nm,0.7s | | | | | | |
| URZ | | | | S | S | 20 10 57.6 | -3.7 |
| BKZ | Black Stump Fm | 19.02 | 192 | eP | P | 20 08 12.3 | -1.1 |
| | 17nm,0.4s | | | | | | |
| BFZ | Birch Farm | 20.53 | 192 | eP | P | 20 08 27.1 | +0.1 |
| | 212nm,2.1s | | | | | | |
| THZ | Tophouse | 22.35 | 197 | eP | P | 20 08 43.4 | -0.1 |
| | 33nm,0.5s | | | | | | |
| THZ | | | | eS | S | 20 12 15.8 | +5.4 |
| KHZ | Kahutara | 22.79 | 196 | eP | P | 20 08 46.6 | -0.7 |
| | 32nm,1.1s | | | | | | |
| OXZ | Oxford | 24.04 | 197 | eP | P | 20 08 57.4 | -1.0 |
| | 467nm,2.6s | | | | | | |
| RPZ | Rata Peaks | 24.68 | 199 | P | P | 20 09 03.1 | -1.0 |
| | 13nm,0.5s,baz=58,slow=5.0,SNR=14 | | | | | | |
| WHZ | Wether Hill Ro | 27.62 | 201 | eP | P | 20 09 31.1 | +1.3 |
| | 55nm,0.7s | | | | | | |
| EIDS | Eidsvold | 28.51 | 255 | P | P | 20 09 38.3 | +0.3 |
| | baz=29,SNR=9.3 | | | | | | |
| EIDS | Eidsvold | 28.51 | 255 | eP | P | 20 09 38.3 | +0.3 |
| | 12nm,0.7s | | | | | | |
| ARMA | Armidale | 28.73 | 244 | P | P | 20 09 41.2 | +1.3 |
| | baz=29,SNR=12 | | | | | | |
| RMQ | Roma | 30.67 | 253 | P | P | 20 09 57.6 | +1.0 |
| | baz=31,SNR=8.9 | | | | | | |
| CNB | Canberra Magne | 31.90 | 236 | P | P | 20 10 09.0 | +2.0 |
| | baz=32,SNR=6.8 | | | | | | |
| CTA | Charters Tower | 33.16 | 265 | P | P | 20 10 18.0 | +0.1 |
| | 49nm,0.6s,baz=93,slow=11,SNR=95 | | | | | | |
| CTAO | Charters Tower | 33.16 | 265 | eP | P | 20 10 17.5 | -0.4 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,52nm,0.7s | | | | | | |
| CTAO | Charters Tower | 33.16 | 265 | eP | P | 20 10 17.5 | -0.4 |
| | comp=Z,52nm,0.7s | | | | | | |
| CMSA | Cobar Meteorol | 33.95 | 244 | P | P | 20 10 24.7 | +0.3 |
| | baz=34,SNR=23 | | | | | | |
| QLP | Quilpie | 34.72 | 253 | P | P | 20 10 31.0 | +0.1 |
| | baz=35,SNR=22 | | | | | | |
| PMG | Port Moresby | 35.06 | 283 | P | P | 20 10 33.5 | -0.3 |
| | comp=Z,42nm,0.9s,baz=78,slow=6.8,SNR=7.5 | | | | | | |
| PMG | Port Moresby | 35.06 | 283 | d iP | P | 20 10 33.5 | -0.3 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,218nm,1.0s | | | | | | |
| PMG | Port Moresby | 35.06 | 283 | P | P | 20 10 34.0 | +0.2 |
| | baz=35,SNR=5.4 | | | | | | |
| PMG | Port Moresby | 35.06 | 283 | eP | P | 20 10 34.1 | +0.2 |
| | comp=Z,53nm,0.9s | | | | | | |
| TOO | Toolangi | 35.58 | 234 | P | P | 20 10 38.5 | +0.7 |
| | baz=36,SNR=4.5 | | | | | | |
| COEN | Coen | 37.27 | 274 | P | P | 20 10 52.4 | +0.4 |
| | baz=37,SNR=10 | | | | | | |
| COEN | Coen | 37.27 | 274 | eP | P | 20 10 52.5 | +0.4 |
| | comp=Z,41nm,0.9s | | | | | | |
| QIS | Mount Isa | 39.29 | 262 | P | P | 20 11 07.5 | -0.9 |
| | baz=39,SNR=8.3 | | | | | | |
| HTT | Hallett | 39.89 | 242 | P | P | 20 11 11.1 | -2.0 |
| | baz=40,SNR=5.3 | | | | | | |
| BBOO | Buckleboo | 42.21 | 244 | P | P | 20 11 31.3 | -0.1 |
| | baz=42,SNR=20 | | | | | | |
| BBOO | Buckleboo | 42.21 | 244 | eP | P | 20 11 31.5 | 0.0 |
| | comp=Z,55nm,1.4s | | | | | | |
| JAY | Jayapura | 43.78 | 289 | P | P | 20 11 44.1 | +0.1 |
| | baz=44,SNR=17 | | | | | | |
| JAY | Jayapura | 43.78 | 289 | P | P | 20 11 43.3 | -0.6 |
| | comp=Z,1μm,0.8s,comp=Z,10μm | | | | | | |
| AS01 | Alice Springs | 44.14 | 257 | eP | P | 20 11 46.2 | -0.4 |
| AS01 | | | | eS | S | 20 17 38.2 | -1.5 |
| ASAR | Alice Springs | 44.18 | 257 | P | P | 20 11 46.8 | -0.2 |
| | comp=Z,49nm,0.8s,baz=94,slow=7.7,SNR=500 | | | | | | |
| ASAR | | | | PcP | PcP | 20 13 19.3 | -0.3 |
| | comp=Z,3.8nm,0.6s,baz=100,slow=4.1,SNR=7.5 | | | | | | |
| ASAR | | | | ScP | ScP | 20 16 20.4 | +1.6 |
| | comp=Z,1.6nm,0.7s,baz=103,slow=4.0,SNR=5.7 | | | | | | |
| ASAR | | | | S | S | 20 17 38.1 | -2.2 |
| | comp=Z,5.2nm,0.8s,baz=94,slow=16,SNR=23 | | | | | | |
| ASAR | | | | ScS | ScS | 20 20 44.2 | +0.3 |
| | comp=Z,0.6nm,0.9s,baz=91,slow=7.4,SNR=5.3 | | | | | | |
| GENI | Genyem | 44.22 | 288 | P | P | 20 11 47.9 | +0.6 |
| | comp=Z,144nm,0.8s | | | | | | |
| WRAB | Tennant Creek | 44.26 | 262 | eP | P | 20 11 46.4 | -1.2 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,38nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 44.26 | 262 | eP | P | 20 11 46.4 | -1.2 |
| | comp=Z,38nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 44.27 | 262 | P | P | 20 11 46.9 | -0.8 |
| | comp=Z,20nm,0.5s,baz=96,slow=8.5,SNR=60 | | | | | | |
| WRA | | | | PcP | PcP | 20 13 19.7 | -0.2 |
| | comp=Z,2.3nm,0.7s,baz=100,slow=3.5,SNR=3.9 | | | | | | |
| WRA | | | | ScP | ScP | 20 16 20.6 | +1.4 |
| | comp=Z,1.4nm,0.9s,baz=99,slow=3.7,SNR=3.6 | | | | | | |
| WRA | | | | S | S | 20 17 38.0 | -3.5 |
| | comp=Z,1.4nm,0.8s,baz=99,slow=13,SNR=5.6 | | | | | | |
| WRA | | | | ScS | ScS | 20 20 45.6 | +1.0 |
| | comp=Z,0.9nm,0.7s,baz=108,slow=5.1,SNR=4.0 | | | | | | |
| SMPI | Sarmi | 45.79 | 288 | P | P | 20 11 57.6 | -1.7 |
| | comp=Z,23nm,0.8s | | | | | | |
| KDU | Kakadu | 47.63 | 271 | P | P | 20 12 12.8 | -0.4 |
| | baz=48,SNR=6.0 | | | | | | |
| MTN | Manton Dam | 48.85 | 271 | P | P | 20 12 21.6 | -0.6 |
| | baz=49,SNR=8.6 | | | | | | |
| MTN | Manton Dam | 48.85 | 271 | eP | P | 20 12 21.6 | -0.6 |
| | comp=Z,44nm,0.8s | | | | | | |
| FORT | Forrest | 48.96 | 247 | P | P | 20 12 22.4 | -0.4 |
| | baz=49,SNR=17 | | | | | | |
| FORT | Forrest | 48.96 | 247 | eP | P | 20 12 21.0 | -1.8 |
| | comp=Z,38nm,0.7s | | | | | | |
| WRKA | Warakurna | 49.13 | 254 | P | P | 20 12 24.0 | -0.3 |
| | baz=49,SNR=99 | | | | | | |
| GUMO | Guam | 49.63 | 310 | P | P | 20 12 28.0 | +0.1 |
| | comp=Z,93nm,0.7s,baz=190,slow=18,SNR=4.8 | | | | | | |
| GUMO | Guam | 49.63 | 310 | P | P | 20 12 28.0 | +0.1 |
| KNRA | Kununurra | 50.34 | 266 | P | P | 20 12 32.6 | -0.5 |
| | baz=50,SNR=15 | | | | | | |
| FAKI | Fak Fak | 51.22 | 283 | P | P | 20 12 39.2 | -0.4 |
| | baz=51,SNR=11 | | | | | | |
| FAKI | Fak Fak | 51.22 | 283 | eP | P | 20 12 38.9 | -0.7 |
| | comp=Z,60nm,1.4s | | | | | | |
| SWI | Sorong | 52.97 | 285 | P | P | 20 12 52.1 | -0.1 |
| | baz=53,SNR=38 | | | | | | |
| SWI | Sorong | 52.97 | 285 | P | P | 20 12 51.8 | -0.3 |
| | comp=Z,247nm,0.8s,comp=Z,2μm | | | | | | |
| MSAI | Masohi | 54.09 | 281 | P | P | 20 13 02.0 | +1.9 |
| | comp=Z,12nm,0.6s,comp=Z,149nm | | | | | | |
| AAI | Ambon | 54.63 | 280 | P | P | 20 13 01.1 | -2.8 |
| | comp=Z,50nm,0.8s,comp=Z,1μm | | | | | | |
| NLAI | Namlea | 55.81 | 280 | P | P | 20 13 12.4 | +0.3 |
| | comp=Z,49nm,0.8s | | | | | | |
| SOEI | Soe | 56.19 | 272 | P | P | 20 13 15.9 | +1.1 |
| | baz=56,SNR=31 | | | | | | |
| SOEI | Soe | 56.19 | 272 | P | P | 20 13 15.7 | +0.9 |
| | comp=Z,153nm,0.8s | | | | | | |
| SOEI | Soe | 56.19 | 272 | eP | P | 20 13 15.8 | +0.9 |
| | comp=Z,103nm,0.8s | | | | | | |
| LBMI | Labuha | 56.47 | 283 | P | P | 20 13 16.7 | 0.0 |
| | comp=Z,67nm,0.9s,comp=Z,683nm | | | | | | |
| BATI | Baumata | 56.61 | 271 | P | P | 20 13 18.7 | +1.0 |
| | comp=Z,24nm,0.8s | | | | | | |
| TNTI | Ternate | 57.18 | 285 | eP | P | 20 13 20.3 | -1.2 |
| | comp=Z,83nm,0.9s | | | | | | |
| SANI | Sanana | 57.29 | 281 | P | P | 20 13 20.8 | -1.5 |
| | comp=Z,53nm,0.9s,comp=Z,448nm | | | | | | |
| MBWA | Marble Bar | 57.52 | 258 | eP | P | 20 13 22.4 | -1.3 |
| | comp=Z,30nm,1.2s | | | | | | |
| MEEK | Meekatharra | 57.58 | 251 | P | P | 20 13 23.2 | -1.0 |
| | baz=58,SNR=13 | | | | | | |
| KLBR | Kellerberrin | 57.72 | 245 | P | P | 20 13 24.4 | -0.5 |
| | baz=58,SNR=12 | | | | | | |
| SBA | Scott Base | 57.74 | 184 | eP | P | 20 13 27.3 | +3.1 |
| SBA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| SBA | Scott Base | 57.74 | 184 | eP | P | 20 13 27.3 | +3.1 |
| | comp=Z,8.0nm,0.8s | | | | | | |
| VNDA | Vanda | 57.77 | 185 | P | P | 20 13 26.1 | +1.6 |
| | comp=Z,4.3nm,0.6s,baz=357,slow=7.1,SNR=60 | | | | | | |
| VNDA | | | | ScP | ScP | 20 17 17.8 | +1.5 |
| | comp=Z,1.4nm,0.7s,baz=360,slow=6.1,SNR=6.6 | | | | | | |
| VNDA | Vanda | 57.77 | 185 | eP | P | 20 13 26.2 | +1.7 |
| VNDA | | | | | | 20 17 17.8 | |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| NWAO | Narrogin (SRO) | 58.03 | 243 | P | P | 20 13 27.2 | +0.2 |
| | baz=58,SNR=7.9 | | | | | | |
| MMRI | Maumere | 58.44 | 272 | P | P | 20 13 28.8 | -1.3 |
| | comp=Z,64nm,0.9s | | | | | | |
| BLDU | Ballidu | 58.72 | 246 | P | P | 20 13 31.0 | -0.7 |
| | baz=59,SNR=13 | | | | | | |
| MORW | Morawa | 59.49 | 248 | P | P | 20 13 36.3 | -0.6 |
| | baz=60,SNR=12 | | | | | | |
| KMSI | Cibinong | 60.18 | 283 | P | P | 20 13 40.8 | -0.8 |
| | comp=Z,76nm,0.8s | | | | | | |
| APSI | Ampana | 61.73 | 280 | P | P | 20 13 52.4 | +0.6 |
| | comp=Z,53nm,1.0s,comp=Z,586nm | | | | | | |
| MRSI | Marisa | 62.00 | 282 | P | P | 20 13 53.1 | -0.5 |
| | comp=Z,16nm,1.0s | | | | | | |
| GIRL | Giralia | 62.22 | 255 | P | P | 20 13 55.7 | +0.9 |
| | baz=62,SNR=4.2 | | | | | | |
| SPSI | Sidrap Palu | 62.33 | 276 | P | P | 20 13 56.2 | +0.4 |
| | comp=Z,20nm,0.9s | | | | | | |
| MPSI | Mapaga | 63.82 | 281 | P | P | 20 14 03.9 | -1.4 |
| | comp=Z,24nm,0.9s | | | | | | |
| MYLDM | Lahad Datu | 67.06 | 285 | eP | P | 20 14 27.5 | +2.0 |
| | comp=Z,15nm,0.8s | | | | | | |
| QSPA | South Pole Qui | 69.46 | 180 | eP | P | 20 14 40.1 | +0.8 |
| | comp=Z,12nm,0.6s | | | | | | |
| KKM | Kota Kinabalu | 69.48 | 285 | P | P | 20 14 41.1 | +0.8 |
| | baz=70,SNR=3.5 | | | | | | |
| UGM | Wanagama | 69.64 | 269 | P | P | 20 14 40.9 | -0.3 |
| | baz=70,SNR=3.7 | | | | | | |
| UGM | Wanagama | 69.64 | 269 | P | P | 20 14 39.8 | -1.5 |
| MJAR | Matsushiro Arr | 70.11 | 324 | P | P | 20 14 43.0 | -0.5 |
| | comp=Z,3.7nm,0.6s,baz=160,slow=6.5,SNR=22 | | | | | | |
| MJAR | Matsushiro Arr | 70.11 | 324 | P | P | 20 14 43.0 | -0.5 |
| MAJO | Matsushiro | 70.11 | 324 | eP | P | 20 14 41.6 | -1.9 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| MAJO | Matsushiro | 70.11 | 324 | eP | P | 20 14 43.2 | -0.3 |
| | comp=Z,99nm,2.5s | | | | | | |
| MAT | Matsushiro | 70.11 | 324 | P | P | 20 14 42.5 | -1.0 |
| SZP | Santa | 71.00 | 298 | ePcP | PcP | 20 15 04.1 | -1.3 |
| LEM | Lembang | 72.72 | 269 | P | P | 20 14 59.2 | -0.2 |
| | comp=Z,21nm,0.6s,baz=122,slow=19,SNR=5.7 | | | | | | |
| ASAJ | Asahikawa | 73.67 | 332 | eP | P | 20 15 05.3 | +1.3 |
| | comp=Z,27nm,1.0s | | | | | | |
| CGJI | Cibinong | 74.59 | 269 | P | P | 20 15 08.2 | -1.7 |
| YSS | Yuzh-Sakhalins | 75.85 | 334 | i P | P | 20 15 16.6 | +0.5 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,36nm,2.5s | | | | | | |
| YSS | Yuzh-Sakhalins | 75.85 | 334 | eP | P | 20 15 16.9 | +0.8 |
| | comp=Z,20nm,0.7s | | | | | | |
| PEA0 | Petropavlovsk- | 76.30 | 345 | eP | P | 20 15 18.1 | -0.3 |
| PETK | Petropavlovsk- | 76.30 | 345 | P | P | 20 15 18.1 | -0.3 |
| | comp=Z,11nm,0.5s,baz=150,slow=7.8,SNR=12 | | | | | | |
| KSRS | Korea Array | 76.76 | 319 | P | P | 20 15 21.9 | +0.6 |
| | comp=Z,3.4nm,0.6s,baz=125,slow=5.7,SNR=20 | | | | | | |
| KSAR | Wonju Array Be | 76.78 | 319 | P | P | 20 15 21.9 | +0.5 |
| KSAR | Wonju Array Be | 76.78 | 319 | P | P | 20 15 21.9 | +0.5 |
| KS01 | Wonju Array Si | 76.79 | 319 | eP | P | 20 15 21.7 | +0.2 |
| SCI | San Clemente I | 78.08 | 48 | P | P | 20 15 29.4 | +0.9 |
| | baz=78 | | | | | | |
| MSHR | Mys Shultsa | 78.22 | 324 | i P | P | 20 15 30.3 | +1.2 |
| PKM | Peak Mountain | 78.30 | 46 | P | P | 20 15 31.7 | +1.8 |
| | baz=79 | | | | | | |
| SAO | San Andreas Ge | 78.33 | 43 | eP | P | 20 15 31.6 | +1.8 |
| SAO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| SAO | San Andreas Ge | 78.33 | 43 | eP | P | 20 15 31.6 | +1.8 |
| | comp=Z,9.5nm,0.8s | | | | | | |
| USRK | Ussuriysk Ar. | 78.88 | 326 | P | P | 20 15 33.2 | +0.6 |
| | comp=Z,8.3nm,0.7s,baz=103,slow=3.8,SNR=26 | | | | | | |
| KMRM | Mail Ridge | 79.04 | 39 | eP | P | 20 15 36.1 | +2.5 |
| | comp=Z,27nm,0.8s | | | | | | |
| MYKOM | Kota Tinggi | 79.23 | 276 | eP | P | 20 15 34.8 | -0.3 |
| | comp=Z,76nm,1.9s | | | | | | |
| VES | Vestal, Richgr | 79.33 | 45 | P | P | 20 15 36.3 | +1.2 |
| | baz=80 | | | | | | |
| MURC | Murrieta | 79.36 | 48 | P | P | 20 15 36.7 | +1.3 |
| | baz=80 | | | | | | |
| BFSC | Mount Baldy Ra | 79.40 | 47 | P | P | 20 15 36.8 | +1.1 |
| | baz=80 | | | | | | |
| MONP | Monument Peak | 79.52 | 49 | P | P | 20 15 37.6 | +1.1 |
| | baz=80,SNR=5.5 | | | | | | |
| EDW2 | Edwards Air Fo | 79.53 | 47 | P | P | 20 15 36.9 | +0.6 |
| | baz=80,SNR=5.4 | | | | | | |
| IBP | Imperial Bould | 79.63 | 49 | P | P | 20 15 38.5 | +1.6 |
| | baz=80 | | | | | | |
| ISA | Isabella | 79.64 | 46 | eP | P | 20 15 38.8 | +1.9 |
| ISA | | | | pmax | pmax | | |
| | comp=Z,22nm,1.8s | | | | | | |
| ISA | Isabella | 79.64 | 46 | P | P | 20 15 38.4 | +1.5 |
| | baz=80 | | | | | | |
| ISA | Isabella | 79.64 | 46 | eP | P | 20 15 38.8 | +1.9 |
| | comp=Z,22nm,1.8s | | | | | | |
| NJ2 | Nanjing | 79.71 | 310 | eP | P | 20 15 36.7 | -0.5 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| CMB | Columbia Colle | 79.76 | 43 | eP | P | 20 15 38.4 | +1.0 |
| CMB | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| CMB | Columbia Colle | 79.76 | 43 | eP | P | 20 15 38.4 | +1.0 |
| | comp=Z,8.3nm,1.0s | | | | | | |
| PFO | Pinyon Flat Ob | 79.89 | 48 | P | P | 20 15 39.6 | +1.3 |
| | baz=80 | | | | | | |
| WDC | Whiskeytown Da | 79.96 | 40 | eP | P | 20 15 40.3 | +2.0 |
| WDC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| WDC | Whiskeytown Da | 79.96 | 40 | eP | P | 20 15 40.3 | +2.0 |
| | comp=Z,9.1nm,1.0s | | | | | | |
| SWSC | Sam W. Stewart | 79.99 | 49 | P | P | 20 15 39.6 | +0.9 |
| | baz=80 | | | | | | |
| LRMC | Laurel Mountai | 80.06 | 46 | P | P | 20 15 40.4 | +1.2 |
| | baz=80 | | | | | | |
| N02D | Trinity Center | 80.11 | 39 | P | P | 20 15 40.7 | +1.4 |
| | baz=80 | | | | | | |
| O03D | Paynes Creek | 80.23 | 40 | P | P | 20 15 41.0 | +1.1 |
| | baz=80,SNR=7.0 | | | | | | |
| M02C | Callahan | 80.28 | 39 | P | P | 20 15 41.7 | +1.6 |
| | baz=80,SNR=7.2 | | | | | | |
| CWC | Cottonwood Cre | 80.34 | 45 | P | P | 20 15 41.7 | +1.0 |
| | baz=81 | | | | | | |
| HABR | Khabarovsk | 80.39 | 331 | eP | P | 20 15 38.9 | -1.4 |
| HABR | | | | e | | 20 15 44.0 | |
| HABR | | | | e*SP | sP | 20 18 19.1 | -16 |
| HABR | | | | e | | 20 18 49.6 | |
| HABR | | | | ePPP | PPP | 20 20 43.3 | |
| HABR | | | | eS | S | 20 25 02.7 | +1.9 |
| HABR | | | | e | | 20 25 17.6 | |
| HABR | | | | eSS | SS | 20 30 27.7 | -1.7 |
| HABR | | | | eSSS | SSS | 20 33 59.1 | |
| HABR | | | | pmax | pmax | | |
| | comp=E,2.0nm,0.6s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,8.0nm,1.2s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,57nm,22.0s | | | | | | |
| BELC | Belle Mtn. Jos | 80.42 | 48 | P | P | 20 15 42.0 | +0.9 |
| | baz=81,SNR=5.0 | | | | | | |
| MPMC | Manual Prospec | 80.52 | 46 | P | P | 20 15 42.5 | +0.8 |
| | baz=81,SNR=5.8 | | | | | | |
| MTUM | Tungsten Hills | 80.54 | 44 | eP | P | 20 15 43.5 | +1.8 |
| GSC | Goldstone | 80.57 | 47 | eP | P | 20 15 43.4 | +1.6 |
| GSC | | | | pmax | pmax | | |
| | comp=Z,15nm,1.5s | | | | | | |
| GSC | Goldstone | 80.57 | 47 | P | P | 20 15 43.2 | +1.5 |

baz=81
GSC **Goldstone** 80.57 47 *e*P P 20 15 43.4 +1.6
comp=Z,15nm,1.5s
YBH **Yreka Blue Hor** 80.58 39 P P 20 15 43.6 +1.9
comp=Z,8.7nm,0.6s,baz=221,slow=0.8,SNR=20
YBH **Yreka Blue Hor** 80.58 39 *e*P P 20 15 43.7 +2.0
YBH pmax pmax
comp=Z,10.0nm,0.8s
YBH **Yreka Blue Hor** 80.58 39 *e*P P 20 15 43.7 +2.0
comp=Z,9.8nm,0.8s
TIN **Tinemaha** 80.59 45 P P 20 15 42.6 +0.7
baz=81
HEC **Hector,Ludlow** 80.64 47 P P 20 15 43.2 +1.0
baz=81
GLA **Glamis** 80.74 50 P P 20 15 44.2 +1.5
baz=81
HUMO **Hull Mountain** 80.98 38 *e*P P 20 15 45.9 +2.2
comp=Z,33nm,1.1s
GMRC **Granite Mounta** 81.07 48 P P 20 15 45.7 +1.3
baz=81
IRM **Iron Mountain** 81.10 49 P P 20 15 45.8 +1.3
baz=81
M04C **Macdoel** 81.12 39 P P 20 15 46.0 +1.5
baz=81
GRAC **Grapevine Rang** 81.13 45 P P 20 15 46.0 +1.4
baz=81
TUQ **Turquoise Moun** 81.24 47 P P 20 15 46.6 +1.3
baz=82
Y12C **Blythe** 81.32 49 P P 20 15 47.3 +1.7
baz=82
NV01 **Mina Array Sit** 81.32 43 *e*P P 20 15 46.6 +0.9
NVAR **Mina Array Bea** 81.32 43 P P 20 15 46.8 +1.0
comp=Z,3.8nm,0.6s,baz=226,slow=8.3,SNR=30
MAW **Mawson** 81.35 200 P P 20 15 45.5 +0.4
comp=Z,1.3nm,0.5s,baz=118,slow=6.9,SNR=8.5
214A **Organ Pipe Nat** 81.63 51 P P 20 15 48.5 +1.2
baz=82
TPNV **Topopah Spring** 81.85 46 *e*P P 20 15 49.9 +1.5
TPNV pmax pmax
comp=Z,7.0nm,0.8s
TPNV **Topopah Spring** 81.85 46 P P 20 15 49.6 +1.2
baz=82,SNR=9.4
TPNV **Topopah Spring** 81.85 46 *e*P P 20 15 49.9 +1.5
comp=Z,7.3nm,0.8s
J04D **Umpqua Nationa** 81.86 38 P P 20 15 49.4 +1.1
baz=82
PDMCI **Parker Dam,Lak** 81.88 49 P P 20 15 49.9 +1.5
baz=82
I04A **Tendick Farm,** 82.03 37 P P 20 15 50.4 +1.4
baz=82
CN2 **Changchun** 82.19 323 *e*P P 20 15 49.7 -0.1
CN2 PMZ
comp=Z,10.0nm,0.6s
K05A **Summer Lake** 82.25 39 *e*P P 20 15 51.9 +1.5
comp=Z,24nm,0.9s
SHPR **Sheep Range** 82.34 47 *e*P P 20 15 51.9 +1.0
J05D **Fort Rock, OR** 82.39 38 P P 20 15 52.7 +1.7
baz=83
IPM **Ipoh** 82.83 277 *e*P P 20 15 53.7 0.0
I05D **Terrebonne, OR** 82.97 37 P P 20 15 55.3 +1.5
baz=83
R11A **Troy Canyon, C** 83.05 45 P P 20 15 55.6 +1.1
baz=83
R11A **Troy Canyon, C** 83.05 45 *e*P P 20 15 55.6 +1.1
comp=Z,40nm,3.0s
BMN **Battle Mountai** 83.15 42 *e*P P 20 15 56.0 +1.1
BMN pmax pmax
comp=Z,10.0nm,0.9s
BMN **Battle Mountai** 83.15 42 *e*P P 20 15 56.0 +1.1
comp=Z,10nm,0.9s
TUC **Tucson** 83.30 52 *e*P P 20 15 57.6 +1.9
TUC pmax pmax
comp=Z,28nm,0.9s
TUC **Tucson** 83.30 52 *e*P P 20 15 57.6 +1.9
comp=Z,28nm,0.9s
WVOR **Wild Horse Val** 83.42 40 *e*P P 20 15 57.7 +1.6
WVOR pmax pmax
comp=Z,12nm,1.3s
WVOR **Wild Horse Val** 83.42 40 *e*P P 20 15 57.7 +1.6
comp=Z,12nm,1.3s
KULM **Kulim** 83.47 278 *e*P P 20 15 57.2 +0.3
comp=Z,9.4nm,0.8s
G05D **Wamic, OR** 83.54 37 P P 20 15 58.0 +1.5
baz=84
I07A **Izee** 83.87 38 *e*P P 20 16 00.2 +1.9
comp=Z,11nm,1.0s
J08A **Circle Bar Ran** 84.05 39 *e*P P 20 16 00.7 +1.5
comp=Z,16nm,1.3s
PSI **Prapat** 84.19 275 *e*P P 20 15 58.6 -2.0
PSI **Prapat** 84.19 275 *e*P P 20 15 58.6 -2.0
G08A **Pilot Rock** 84.90 38 *e*P P 20 16 04.8 +1.5
comp=Z,8.2nm,0.8s
GSI **Gunungsitoli** 84.92 273 *e*P P 20 16 04.8 +0.8
comp=Z,22nm,0.7s
B05A **Bryant** 84.98 34 P P 20 16 04.8 +1.4
baz=85
PMR **Palmer** 85.20 14 *e*P P 20 16 04.7 +0.5
PMR pmax pmax
comp=Z,29nm,1.3s
PMR **Palmer** 85.20 14 *e*P P 20 16 04.7 +0.5
comp=Z,29nm,1.3s
RAGM **Ragged Mountai** 85.21 16 *e*pP pP 20 18 04.0 -0.7
TRTT **Trang** 85.28 280 P P 20 16 07.5 +1.8
comp=Z,16nm,1.3s
DIV **Divide** 85.58 15 *e*P P 20 16 05.8 -0.3
comp=Z,9.8nm,1.0s
KHON **Khomkaen** 85.63 289 P P 20 16 09.3 +2.0
comp=Z,8.2nm,0.7s,comp=Z,584nm
121A **Cookes Peak, D** 85.63 53 P P 20 16 09.2 +2.0
baz=86
D08A **Wollman Farm,** 85.96 36 *e*P P 20 16 09.2 +1.0
comp=Z,11nm,1.0s
CAST **Castle Rocks** 86.25 12 *e*P P 20 16 07.4 -1.8
F10A **Beach Ranch, E** 86.28 38 *e*P P 20 16 10.8 +0.8
comp=Z,18nm,0.8s
SEY **Seymchan** 86.41 347 *e*P P 20 16 08.6 -1.3
GYA **Guiyang** 86.43 300 *e*P P 20 16 12.0 +0.9
GYA pP pP 20 18 12.8 +1.0
GYA sP sP 20 19 07.4 -0.5
GYA PP PP 20 19 45.0 +1.8
GYA SKS SKSac 20 25 44.2 -0.9
GYA S S 20 26 01.0 -0.3
GYA PMZ
comp=Z,10.0nm,1.0s
KTH **Kantishna Hill** 86.59 12 *e*P P 20 16 10.7 -0.2
HLID **Hailey** 86.62 41 P P 20 16 13.1 +1.5
baz=87
HLID **Hailey** 86.62 41 *e*P P 20 16 13.2 +1.6
TRF **Thorofare Moun** 86.63 12 *e*P P 20 16 10.4 -0.8
C09A **Chrisman Ranch** 86.75 36 *e*P P 20 16 13.4 +1.5
RND **Reindeer** 86.88 13 *e*P P 20 16 12.1 -0.2
RND **Reindeer** 86.88 13 *e*P P 20 16 12.1 -0.2
MNTX **Cornudas Mount** 87.07 55 P P 20 16 15.2 +1.3
baz=87
MNTX **Cornudas Mount** 87.07 55 *e*P P 20 16 15.2 +1.3
comp=Z,10nm,1.0s
BPAW **Bear Paw Mtn.** 87.08 12 *e*P P 20 16 12.3 -0.8
MCK **McKinley** 87.15 13 *e*P P 20 16 13.1 -0.4
MCK **McKinley** 87.15 13 *e*P P 20 16 13.1 -0.4
PV05 **Paradox Valley** 87.30 48 *e*P P 20 16 12.0 -3.1
PBKT **Sadao Pong** 87.36 289 P P 20 16 18.0 +2.6
comp=Z,9.3nm,1.0s
TX31 **Lajitas Ar. Si** 87.38 57 *e*P P 20 16 16.6 +1.1
TXAR **Lajitas Array** 87.38 57 P P 20 16 16.9 +1.5
comp=Z,6.7nm,0.9s,baz=224,slow=5.2,SNR=35
NEW **Newport** 87.65 36 P P 20 16 17.3 +1.1
baz=88
ANMO **Albuquerque** 87.72 51 *e*P P 20 16 16.4 -0.7
ANMO pmax pmax
comp=Z,5.0nm,1.2s
ANMO **Albuquerque** 87.72 51 *e*P P 20 16 18.0 +0.9
comp=Z,6.4nm,1.0s
SNAA **Sanae** 87.91 179 *e*pP pP 20 18 22.0 +3.8
XAN **Xi'an** 87.95 307 P P 20 16 18.5 +0.6
XAN PMZ
comp=Z,10.0nm,0.8s
XAN PMZ
comp=Z,73nm,7.1s
MLY **Manley** 87.97 11 *e*P P 20 16 16.0 -1.3
WRH **Wood River Hil** 87.98 13 *e*P P 20 16 16.5 -0.8
VNA3 **Neumayer Olymp** 88.05 176 P P 20 16 17.6 -0.2
DOT **Dot Lake** 88.15 15 *e*P P 20 16 18.2 0.0
HDA **Harding Lake** 88.16 13 *e*P P 20 16 17.4 -0.7
CCB **Clear Creek Bu** 88.19 13 *e*P P 20 16 17.4 -0.9
MCMT **McKenzie Canyo** 88.24 40 *e*P P 20 16 20.9 +1.6
MDM **Murphy Dome** 88.38 12 *e*P P 20 16 18.0 -1.2
COLA **College** 88.39 13 *e*P P 20 16 18.2 -0.9
COLA pmax pmax
comp=Z,13nm,0.9s
COLA **College** 88.39 13 *e*P P 20 16 18.3 -0.8
comp=Z,17nm,0.9s
VNA2 **Neumayer--Watz** 88.49 177 P P 20 16 19.8 0.0
baz=193,slow=3.5
ILAR **Eielson Array** 88.49 13 P P 20 16 18.6 -1.0
comp=Z,2.6nm,0.4s,baz=217,slow=5.4,SNR=49
MSO **Missoula** 88.65 38 P P 20 16 21.9 +0.9
baz=89
VNA1 **Neumayer--Stat** 88.72 177 P P 20 16 20.9 +0.1
S22A **4UR Ranch, Cre** 88.73 49 P P 20 16 22.9 +1.1
baz=89
REDW **Red Top Meadow** 88.73 42 *e*P P 20 16 23.0 +1.4
comp=Z,16nm,1.2s
PHRA **Phrae** 88.74 290 P P 20 16 24.4 +2.5
comp=Z,60nm,0.9s
FXWY **Fox Creek** 88.76 42 *e*P P 20 16 23.2 +1.5
IMW **Indian Meadow** 88.94 42 *e*P P 20 16 24.4 +1.7
comp=Z,8.0nm,0.9s
LOHW **Long Hollow** 89.01 42 *e*P P 20 16 23.9 +1.0
comp=Z,4.3nm,0.8s
BILL **Bilibino** 89.11 354 *e*P P 20 16 22.0 -0.5
BILL *e**PP pP 20 18 11.9 -12
BILL *e* 20 19 59.6
BILL pmax pmax
comp=Z,6.0nm,1.1s
KMI **Kunming** 89.12 297 P P 20 16 24.8 +1.0
KMI pP **pP** 20 18 25.8 +0.4
KMI sP **sP** 20 19 21.3 +0.1
KMI PP **PP** 20 20 07.2 +2.7
KMI S **S** 20 26 22.8 -3.7
KMI sS **sS** 20 30 01.4 -1.9
KMI PMZ
comp=Z,9.0nm,0.9s
KMI PMZ
comp=Z,66nm,3.8s
HHC **Hu-ho-hao-te** 89.20 314 *e*P P 20 16 26.5 +2.8
HHC PMZ
comp=Z,21nm,0.9s
HHC PMZ
comp=Z,110nm,5.7s
BW06 **Boulder Array** 89.26 43 *e*P P 20 16 25.0 +0.9
LAMP **Lampang** 89.27 290 P P 20 16 25.9 +1.5
comp=Z,8.6nm,0.8s
429A **Davenport Ranc** 89.32 57 P P 20 16 25.7 +1.2
baz=90
228A **UT Block 9, Go** 89.40 55 P P 20 16 25.5 +0.7
baz=90
BOZ **Bozeman (W)** 89.40 40 P P 20 16 25.8 +1.2
baz=90
H17A **Grant Village** 89.42 42 P P 20 16 25.9 +1.1
baz=90
530A **J-C Ranch, Com** 89.56 58 P P 20 16 26.2 +0.6
baz=90
329A **Wagon Wheel Ra** 89.61 56 P P 20 16 26.7 +1.0
baz=90
DAWY **Dawson** 89.65 16 *e*P P 20 16 25.6 +0.4
SDCO **Great Sand Dun** 89.67 49 P P 20 16 26.7 +0.6
baz=90
SDCO **Great Sand Dun** 89.67 49 *e*P P 20 16 27.1 +0.9
comp=Z,71nm,3.0s
128A **Castleberry Fa** 89.69 55 P P 20 16 26.9 +0.7
baz=90
CMAR **Chiang Mai Arr** 89.85 290 P P 20 16 28.3 +1.2
comp=Z,5.6nm,0.8s,baz=123,slow=2.8,SNR=46
CMAR **Chiang Mai Arr** 89.85 290 *ce*P P 20 16 28.2 +1.2
CMAR pmax pmax
comp=Z,6.0nm,0.7s
631A **Perdido Creek** 89.87 59 P P 20 16 27.8 +0.9
baz=90
CHTO **Chiang Mai** 89.98 290 P P 20 16 28.8 +1.1
comp=Z,73nm,0.7s
CHTO **Chiang Mai** 89.98 290 *e*P P 20 16 28.7 +1.1
CHTO **Chiang Mai** 89.98 290 *e*P P 20 16 28.7 +1.1
MSTX **Muleshoe** 90.03 54 P P 20 16 28.7 +1.0
baz=90
COLD **Coldfoot** 90.05 11 *e*P P 20 16 27.4 +0.6
129A **Stewart Farms,** 90.17 55 P P 20 16 29.2 +0.9
baz=90
T25A **Trinidad** 90.18 50 P P 20 16 29.5 +1.0
baz=90
933A **Laredo** 90.21 61 P P 20 16 29.1 +0.6
baz=90
CMAI **Chiengmai2** 90.31 291 P P 20 16 30.5 +1.2
833A **Chaparral WMA,** 90.39 60 P P 20 16 30.1 +0.7
baz=91
Q24A **Divide** 90.46 48 P P 20 16 30.2 +0.4
baz=91
Z29A **Hungry Hill Ra** 90.55 55 P P 20 16 30.9 +0.9
baz=91
CD2 **Chengdu** 90.58 303 *e*P P 20 16 31.0 +0.8
CD2 pP **pP** 20 18 32.4 +0.3
CD2 sP **sP** 20 19 28.4 +0.6
CD2 SKS **SKSac** 20 26 08.9 -0.1
CD2 S **S** 20 26 39.7 +0.7
CD2 sS **sS** 20 30 17.8 +1.0
CD2 SS **SS** 20 32 59.6 +1.6
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.6s
RLMT **Red Lodge** 90.59 41 *e*pP pP 20 18 29.1 -2.8
N23A **Red Feather La** 90.77 46 P P 20 16 31.8 +0.6
baz=91
633A **Saathoff Ranch** 91.01 59 P P 20 16 32.9 +0.7
baz=91
S26A **Kim** 91.06 50 P P 20 16 33.0 +0.6
baz=91
432A **Menard** 91.07 57 P P 20 16 33.2 +0.7
baz=91
231A **Bronte** 91.08 56 P P 20 16 33.4 +0.9
baz=91
332A **Millersview** 91.31 57 P P 20 16 34.1 +0.5
baz=92
131A **Roby** 91.32 56 P P 20 16 34.3 +0.6
baz=92
533A **Kerrville** 91.36 58 P P 20 16 34.9 +1.1
baz=92
R26A **Arlington** 91.37 49 P P 20 16 34.4 +0.6
baz=92
433A **Art** 91.58 58 P P 20 16 35.3 +0.5
baz=92
232A **Coleman** 91.59 57 P P 20 16 35.6 +0.7
baz=92
Z31A **Sharp Cattle R** 91.77 55 P P 20 16 36.4 +0.8
baz=92
534A **Blanco** 91.79 59 P P 20 16 36.8 +1.0
baz=92
R27A **Eads** 91.83 50 P P 20 16 36.6 +0.7
baz=92
YAK **Yakutsk** 92.10 338 *i* P P 20 16 35.0 -1.4
YAK pmax pmax
comp=Z,7.0nm,0.7s
434A **Burnet** 92.26 58 P P 20 16 38.8 +0.8
baz=92
133A **Hamilton Ranch** 92.44 56 P P 20 16 39.1 +0.4
baz=93
R28A **Tribune** 92.56 50 P P 20 16 40.1 +0.9
baz=93
LZH **Lanzhou** 92.59 308 *e*P P 20 16 40.6 +1.1
LZH pP **pP** 20 18 43.2 +1.7
LZH sP **sP** 20 19 40.3 +3.2
LZH PP **PP** 20 20 35.5 +4.3
LZH PMZ
comp=Z,19nm,1.4s
LZH PMZ
comp=Z,75nm,9.0s
636A **Smothers Creek** 92.72 60 P P 20 16 40.4 +0.3
baz=93
M26A **McRoberts Ranc** 92.92 47 P P 20 16 42.4 +1.5
baz=93
Q29A **Oakley** 93.37 50 P P 20 16 44.1 +1.1
baz=94
J26A **Sides Ranch, S** 93.74 45 P P 20 16 45.6 +1.1
baz=94
Q30A **Quinter** 93.95 50 P P 20 16 46.9 +1.4
baz=94
P30A **Selden** 94.16 49 P P 20 16 47.8 +1.4
baz=94
G26A **Maurine** 94.88 43 P P 20 16 51.0 +1.4
baz=95
ULN **Ulaanbaatar** 95.24 319 ⇑*i*P P 20 16 50.2 -1.1
ULN pmax pmax
comp=Z,2.0nm,0.8s
ULN **Ulaanbaatar** 95.24 319 *e*P P 20 16 50.5 -0.8
SONM **Songino Array** 95.63 319 P P 20 16 53.4 +0.4
comp=Z,1.0nm,0.6s,baz=142,slow=5.1,SNR=5.0
YKA **Yellowknife Ar** 96.75 25 P P 20 16 54.4 -3.0
comp=Z,0.7nm,0.7s,baz=242,slow=4.6,SNR=3.3
KMSC **Kings Mountain** 107.11 58 P PKiKP 20 21 51.0 +0.9
baz=107
ZALV **Zalesovo Beam** 110.38 321 PKiKP PKiKP 20 21 54.4 -1.2
comp=Z,1.5nm,0.5s,baz=126,slow=0.6,SNR=10
MKAR **Makanchi Array** 111.04 313 Pdiff Pdif 20 18 01.7 +0.2
comp=Z,0.2nm,0.2s,baz=87,slow=6.3,SNR=3.0
MKAR PKiKP PKiKP 20 21 56.2 -0.9
comp=Z,1.0nm,0.4s,baz=117,slow=1.0,SNR=15
KSH **Kashi** 114.69 305 *e*PKP PKPdf 20 22 03.7 -0.8
KSH *es*PKP 20 25 02.2
KSH PPMZ
comp=Z,79nm,4.8s
BVAR **Borovoye Array** 118.96 320 PKP PKPdf 20 22 11.0 -1.2
comp=Z,4.0nm,0.4s,baz=123,slow=2.2,SNR=45
BRVK **Borovoye** 119.02 320 *c i*PKIKP PKPdf 20 22 11.6 -0.6
BRVK pmax pmax
comp=Z,7.0nm,2.5s
ARU **Arti** 125.11 325 *i* PKIKP PKPdf 20 22 22.9 -0.9
ARU 20 24 16.0
ARU 20 28 37.4
AKTO **Aktyubinsk** 126.94 318 PKP PKPdf 20 22 27.1 -0.5
comp=Z,2.0nm,0.6s,baz=91,slow=3.6,SNR=6.2
GEYT **Alibeck** 128.58 303 PKP PKPdf 20 22 31.2 +0.1
comp=Z,1.8nm,0.6s,baz=174,slow=1.5,SNR=5.0
ARCES **ARCESS Array B** 128.97 349 PKP PKPdf 20 22 30.6 -0.3
comp=Z,2.5nm,0.4s,baz=41,slow=1.2,SNR=27
MATP **Matopo** 131.49 214 PKP PKPdf 20 22 37.0 -0.3
comp=Z,0.5nm,0.4s,baz=191,slow=5.2,SNR=3.5
MATP SKPbc SKPab 20 25 12.0 -0.2
comp=Z,5.0nm,0.6s,baz=150,slow=3.0,SNR=16
FINES **FINESS Array B** 135.79 343 PKhKP PKPpre 20 22 31.6
comp=Z,2.4nm,1.0s,baz=39,slow=1.4,SNR=7.2
FINES PKP PKPdf 20 22 44.4 +0.6
comp=Z,1.5nm,0.3s,baz=98,slow=2.8,SNR=10
FINES SKPbc SKPbc 20 25 24.1 +0.5
comp=Z,6.1nm,1.0s,baz=72,slow=4.5,SNR=3.6
FINES **FINESS Array B** 135.79 343 *c i*PKIKP PKPdf 20 22 43.9 +0.1
FINES pmax pmax
comp=Z,2.0nm,0.3s
OBN **Obninsk** 136.70 331 *c i*PKIKP PKPdf 20 22 45.4 -0.3
OBN pmax pmax
comp=Z,16nm,1.7s
KIV **Kislovodsk** 138.80 314 *c i*PKIKP PKPdf 20 22 51.1 +1.0
KIV pmax pmax
comp=Z,25nm,1.7s
NB2 **NORSAR Subarra** 139.05 353 PKP PKPpre 20 22 41.7
comp=Z,0.6nm,0.4s,baz=16,slow=3.2
NOA **NORSAR Array B** 139.05 353 PKhKP PKPpre 20 22 40.8
comp=Z,1.5nm,0.7s,baz=16,slow=4.8,SNR=8.4
NOA PKP PKiKP 20 22 51.5 -0.9
comp=Z,0.9nm,0.5s,baz=15,slow=3.9,SNR=4.4
NOA SKPbc SKPbc 20 25 33.7 +0.7
comp=Z,1.5nm,0.7s,baz=15,slow=4.4,SNR=5.2
HFS **Hagfors** 139.60 351 PKhKP PKPpre 20 22 42.2
comp=Z,4.3nm,0.4s,baz=68,slow=4.0,SNR=30
HFS PKP PKPdf 20 22 49.9 -1.0
comp=Z,2.7nm,0.7s,baz=64,slow=3.4,SNR=5.3
SUW **Suwalki** 142.83 339 *e*PKP PKPdf 20 22 53.8 -3.0
SUW **Suwalki** 142.83 339 *e*PKHKP PKPdf 20 22 53.8 -3.0
AKASG **Malin Array Be** 142.96 331 *c i*PKIKP PKPpre 20 22 53.6
comp=Z,32nm,0.6s,baz=42,slow=4.3,SNR=135
AKASG **Malin Array Be** 142.96 331 *c i*PKIKP PKPdf 20 22 59.0 +1.8
AKASG pmax pmax
comp=Z,2.0nm,0.4s
MALT **Malatya** 143.75 307 ⇓PKIKP PKPdf 20 22 58.8 -0.3
MALT **Malatya** 143.75 307 ⇓*i*P PKPdf 20 22 58.8 -0.3
MUD **Monsted U'grnd** 143.77 353 *i* P PKPbc 20 22 57.0 -0.5
comp=Z,8.2nm,0.4s
SIM **Simferopol'** 143.87 320 *d i*PKHKP PKPbc 20 22 58.3 +0.1
SIM pmax pmax
comp=Z,72nm,0.4s
BSD **Bornholm Skovb** 144.13 347 *i* PKIKP PKPbc 20 22 58.7 +0.1
BSD pmax pmax
comp=Z,5.0nm,0.4s
BSD **Bornholm Skovb** 144.13 347 *i* P PKPbc 20 22 58.7 +0.1
comp=Z,5.2nm,0.4s
MBAR **Mbarara** 144.59 237 PKP PKPdf 20 23 00.7 -0.7
comp=Z,2.0nm,0.3s,baz=312,slow=5.4,SNR=7.4
SORM **Soroca** 145.13 328 ⇓PKIKP PKPdf 20 23 00.9 -0.1
SORM **Soroca** 145.13 328 ⇓*i*P PKPdf 20 23 00.9 -0.1
EKA **Eskdalemuir Ar** 145.14 5 PKPbc PKPdf 20 23 01.2 +0.3
comp=Z,1.2nm,0.4s,baz=345,slow=3.6,SNR=11
GKP **Gorka Klasztor** 145.26 344 *e*PKP PKPbc 20 23 02.7 +0.6
GKP **Gorka Klasztor** 145.26 344 *e*PKIKP PKPbc 20 23 02.8 +0.6
BEL **Belsk** 145.45 339 *e*PKP PKPbc 20 23 02.8 0.0
BEL **Belsk** 145.45 339 *e*PKIKP PKPbc 20 23 02.9 +0.1
KIS **Kishinev** 145.65 326 *e*PKP PP 20 26 22.0 -7.7
LVV **Lvov** 145.87 334 *e*PKIKP PKPdf 20 23 02.6 +0.7
BSEG **Bad Segeberg** 146.08 351 *e*PKPbc PKPbc 20 23 04.3 -0.2
baz=16,slow=2.4
ASF **Jabal al Asfar** 146.55 297 PKPbc PKPbc 20 23 06.6 0.0
comp=Z,6.7nm,0.7s,baz=80,slow=2.8,SNR=20
KWP **Kalwaria Pacla** 146.55 335 *e*PKP PKPbc 20 23 05.7 -0.2
KWP **Kalwaria Pacla** 146.55 335 *e*PKIKP PKPbc 20 23 05.8 -0.2
BRTR **Keskin Array B** 146.68 312 PKPbc PKPbc 20 23 06.0 -0.8
comp=Z,6.2nm,0.6s,baz=133,slow=4.4,SNR=35
BRTR **Keskin Array B** 146.68 312 PKIKP PKPbc 20 23 06.0 -0.8
TLCR 146.81 324 ⇑PKIKP PKPbc 20 23 06.5 -0.3
TLCR 146.81 324 ⇑*i*P PKPbc 20 23 06.6 -0.3
TESR **Tescani** 147.09 328 ⇓*i*P PKPbc 20 23 07.2 -0.3
OJC **Ojcow** 147.15 338 *e*PKP PKPbc 20 23 07.0 -0.5
OJC **Ojcow** 147.15 338 *e*PKIKP PKPbc 20 23 07.1 -0.5
CFR **Carcaliu** 147.19 324 ⇑PKIKP PKPdf 20 23 05.9 +1.3
CFR **Carcaliu** 147.19 324 ⇑*i*P PKPdf 20 23 05.9 +1.3
KOLS **Kolonicke sedl** 147.28 335 *e*PKIKP PKPbc 20 23 08.0 +0.1
KOLS **Kolonicke sedl** 147.28 335 *e*PKP PKPbc 20 23 08.0 +0.1
STHS **Stebnicka Huta** 147.29 336 *e*PKIKP PKPbc 20 23 08.2 +0.3
STHS **Stebnicka Huta** 147.29 336 *e*PKP PKPbc 20 23 08.2 +0.3
VRI **Vrincioaia** 147.49 327 ⇓PKIKP PKPbc 20 23 08.2 -0.4
VRI **Vrincioaia** 147.49 327 ⇓*i*P PKPbc 20 23 08.1 -0.5
UZH **Uzhgorod** 147.51 334 ⇑*i*PKIKP PKPbc 20 23 07.1 -1.4
UZH *e* 20 23 12.9
NRDL **Niedersach Rie** 147.51 350 *e*PKPbc PKPbc 20 23 08.4 +0.1
baz=16,slow=2.4
PLOR **Plostina** 147.54 327 ⇓PKIKP PKPbc 20 23 07.9 -0.8
PLOR **Plostina** 147.54 327 ⇓*i*P PKPbc 20 23 07.9 -0.8
MMAI **Mount Meron Ar** 147.59 299 PKPbc PKPbc 20 23 09.6 +0.2
comp=Z,16nm,0.7s,baz=67,slow=6.4,SNR=33
NIE **Niedzica** 147.64 337 *e*PKP PKPbc 20 23 09.1 +0.2
NIE **Niedzica** 147.64 337 *e*PKIKP PKPbc 20 23 09.1 +0.2
KSP **Ksiaz** 147.70 343 *e*PKP PKPbc 20 23 09.4 +0.5
KSP **Ksiaz** 147.70 343 *e*PKIKP PKPbc 20 23 09.4 +0.5
MANR **Mangalia** 147.78 322 ⇓*i*P PKPbc 20 23 08.5 -0.8
ARCR **ARCALIA** 147.79 330 ⇑*i*P PKPab 20 23 14.6 +0.9
TRPA **Tarpa** 147.80 333 ⇓*i*P PKPbc 20 23 09.1 -0.1
OKC **Ostrava-Krasne** 148.03 340 *e*PKIKP PKPbc 20 23 08.8 -1.0
OKC *e* 20 23 14.1
OKC **Ostrava-Krasne** 148.03 340 ⇑*e*PKP PKPbc 20 23 08.8 -1.0
OKC *e*PKPAB PKPab 20 23 14.1 -0.5
MSAB **Monastry St. A** 148.05 323 ⇑*i*P PKPbc 20 23 10.5 +0.5
UPC **Upice** 148.08 343 *e*PKIKP PKPbc 20 23 09.8 -0.1
UPC *e* 20 23 14.7
UPC **Upice** 148.08 343 ⇑*e*PKP PKPbc 20 23 09.8 -0.1
UPC *ex* x 20 23 11.3
UPC *e*PKPAB PKPab 20 23 14.7 -0.1
DOPR **Dopca** 148.10 328 ⇓*i*P PKPbc 20 23 10.6 +0.5
CLZ **Clausthal** 148.10 350 *e*PKPbc PKPbc 20 23 10.0 +0.1
baz=16,slow=2.4
CLL **Collm** 148.10 346 ⇓*i*PKIKP PKPbc 20 23 09.6 -0.3
CLL *i* 20 23 13.9
CLL pmax pmax
comp=Z,19nm,0.8s
CLL **Collm** 148.10 346 *e*PKPbc PKPbc 20 23 09.6 -0.3
baz=16,slow=2.4
CLL *e*PKPab PKPab 20 23 13.9 -0.9
baz=17,slow=4.4
CLL **Collm** 148.10 346 ⇓*i*PKPbc PKPbc 20 23 09.6 -0.3
comp=Z,19nm,0.8s
CLL *i* PKPab PKPab 20 23 13.9 -0.9
comp=Z,12nm,0.6s
CLL *ep*PKPab **pPKPab** 20 25 21.0 +1.7
CLL *e*PKSdf PP 20 26 42.0 -1.3
DPC **Dobruska-Polom** 148.14 342 *e*PKPDF PKPdf 20 23 06.8 +0.8
DPC ⇑*e*PKP PKPbc 20 23 10.4 +0.3
DPC *e*PKPAB PKPab 20 23 14.1 -1.0
MLR **Muntele Rosu** 148.15 327 ⇓PKIKP PKPbc 20 23 09.9 -0.5
MLR **Muntele Rosu** 148.15 327 ⇓*i*P PKPbc 20 23 09.9 -0.5
LANS **Liptovska Anna** 148.16 338 *e*PKIKP PKPbc 20 23 10.8 +0.6
LANS **Liptovska Anna** 148.16 338 *e*PKP PKPbc 20 23 10.8 +0.6

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| WIMM | Wimmelburg | 148.20 | 348 | ePKPbc | PKPbc | 20 23 10.1 | 0.0 |
| | baz=16,slow=2.4 | | | | | | |
| KRLC | Kraliky | 148.25 | 341 | ePKIKP | PKPbc | 20 23 09.7 | -0.7 |
| KRLC | | | | e | | 20 23 15.4 | |
| KRLC | Kraliky | 148.25 | 341 | ⇑ePKP | PKPbc | 20 23 09.7 | -0.7 |
| KRLC | | | | ePKPAB | PKPab | 20 23 15.4 | -0.1 |
| MORC | Moravsky Berou | 148.28 | 340 | ⇓PKIKP | PKPbc | 20 23 10.6 | +0.1 |
| MORC | Moravsky Berou | 148.28 | 340 | ⇓iP | PKPbc | 20 23 10.6 | +0.1 |
| MORC | Moravsky Berou | 148.28 | 340 | ePKPbc | PKPbc | 20 23 10.5 | +0.1 |
| BRG | Berggiesshubel | 148.29 | 345 | ePKP | PKPbc | 20 23 10.2 | -0.2 |
| | comp=Z,12nm,0.9s | | | | | | |
| BRG | | | | e | | 20 23 15.4 | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| BRG | | | | e | | 20 25 57.6 | |
| BRG | | | | e | | 20 26 52.1 | |
| BRG | | | | e | | 20 27 41.5 | |
| | comp=Z,13nm,1.3s | | | | | | |
| BRG | Berggiesshubel | 148.29 | 345 | ePKHKP | PKPbc | 20 23 10.2 | -0.2 |
| BRG | | | | e | | 20 23 15.4 | |
| BRG | | | | e | | 20 26 52.1 | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| BRG | Berggiesshubel | 148.29 | 345 | ePKPbc | PKPbc | 20 23 10.5 | +0.1 |
| | baz=16,slow=2.4 | | | | | | |
| BRG | | | | ePKPab | PKPab | 20 23 15.9 | +0.3 |
| | baz=17,slow=4.4 | | | | | | |
| FBE | Freiberg | 148.38 | 346 | ePKPbc | PKPbc | 20 23 10.7 | +0.1 |
| | baz=16,slow=2.4 | | | | | | |
| FBE | | | | ePKPab | PKPab | 20 23 15.8 | -0.1 |
| | baz=17,slow=4.4 | | | | | | |
| CJR | Cluj-Napoca | 148.41 | 331 | ⇑PKHKP | PKPdf | 20 23 08.3 | +1.7 |
| CJR | Cluj-Napoca | 148.41 | 331 | ⇑iP | PKPdf | 20 23 08.3 | +1.7 |
| PVCC | Panska Ves | 148.45 | 344 | ePKHKP | PKPbc | 20 23 10.7 | -0.1 |
| PVCC | | | | e | | 20 23 16.5 | |
| PVCC | Panska Ves | 148.45 | 344 | ⇑ePKP | PKPbc | 20 23 10.7 | -0.1 |
| PVCC | | | | ePKPAB | PKPab | 20 23 16.5 | +0.2 |
| SULR | | 148.53 | 325 | ⇓iP | PKPab | 20 23 15.4 | -1.4 |
| EIL | Elat | 148.63 | 293 | PKPbc | PKPbc | 20 23 11.8 | -0.2 |
| | comp=Z,7.2nm,0.7s,baz=348,slow=2.9,SNR=9.2 | | | | | | |
| VOIR | | 148.64 | 328 | ⇑PKHKP | PKPbc | 20 23 11.8 | +0.2 |
| VOIR | | 148.64 | 328 | ⇑iP | PKPbc | 20 23 11.8 | +0.2 |
| TAUT | Tautenburg | 148.68 | 348 | ePKPbc | PKPbc | 20 23 11.3 | 0.0 |
| | baz=16,slow=2.4 | | | | | | |
| CSS | Prodhromos | 148.70 | 304 | ePKPbc | PKPbc | 20 23 10.0 | -2.0 |
| HKWD | Heukewalde | 148.71 | 347 | ePKPbc | PKPbc | 20 23 11.4 | 0.0 |
| | baz=16,slow=2.4 | | | | | | |
| DRGR | | 148.76 | 332 | ⇑PKHKP | PKPbc | 20 23 11.6 | -0.2 |
| DRGR | | 148.76 | 332 | ⇑iP | PKPbc | 20 23 11.6 | -0.2 |
| SCHF | Schoenfels | 148.82 | 347 | ePKPbc | PKPbc | 20 23 11.8 | +0.1 |
| | baz=16,slow=2.4 | | | | | | |
| SCHF | | | | ePKPab | PKPab | 20 23 17.7 | -0.1 |
| | baz=17,slow=4.4 | | | | | | |
| PRA | Prague | 148.91 | 344 | ePKHKP | PKPbc | 20 23 11.2 | -0.7 |
| PRA | | | | e | | 20 23 18.0 | |
| PRA | Prague | 148.91 | 344 | ⇑ePKP | PKPbc | 20 23 11.2 | -0.7 |
| PRA | | | | ePKPAB | PKPab | 20 23 18.0 | -0.2 |
| VYHS | Vyhne | 148.94 | 338 | ePKHKP | PKPbc | 20 23 12.0 | -0.1 |
| VYHS | Vyhne | 148.94 | 338 | ePKP | PKPbc | 20 23 12.0 | -0.1 |
| PRU | Pruhonice | 148.95 | 344 | ⇑ePKP | PKPbc | 20 23 11.8 | -0.3 |
| PRU | | | | ePKPAB | PKPab | 20 23 18.1 | -0.3 |
| GOPC | GO Pecny, Ondr | 148.96 | 343 | ⇑ePKP | PKPbc | 20 23 12.0 | -0.1 |
| GOPC | | | | ePKPAB | PKPab | 20 23 18.5 | +0.1 |
| MOX | Moxa | 149.02 | 348 | ePKPbc | PKPbc | 20 23 12.2 | 0.0 |
| | baz=16,slow=2.4 | | | | | | |
| MOX | | | | ePKPab | PKPab | 20 23 18.6 | 0.0 |
| | baz=17,slow=4.4 | | | | | | |
| PSZ | Piszkesteto | 149.03 | 336 | ⇑PKIKP | PKPdf | 20 23 07.6 | 0.0 |
| PSZ | Piszkesteto | 149.03 | 336 | ⇑iP | PKPdf | 20 23 07.6 | 0.0 |
| PSZ | Piszkesteto | 149.03 | 336 | ePKPbc | PKPbc | 20 23 12.0 | -0.4 |
| PLN | Plauen | 149.06 | 347 | ePKPbc | PKPbc | 20 23 12.3 | 0.0 |
| | baz=16,slow=2.4 | | | | | | |
| TANN | Tannenbergstha | 149.06 | 347 | ePKPbc | PKPbc | 20 23 12.2 | -0.1 |
| | baz=16,slow=2.4 | | | | | | |
| WERD | Werda | 149.06 | 347 | ePKPbc | PKPbc | 20 23 12.2 | -0.1 |
| | baz=16,slow=2.4 | | | | | | |
| MULD | Muldenberg | 149.07 | 347 | ePKPbc | PKPbc | 20 23 12.5 | +0.1 |
| | baz=16,slow=2.4 | | | | | | |
| TRIB | Obertriebel | 149.19 | 347 | ePKPbc | PKPbc | 20 23 12.9 | +0.3 |
| | baz=16,slow=2.4 | | | | | | |
| TRIB | | | | ePKPab | PKPab | 20 23 19.4 | +0.1 |
| | baz=17,slow=4.4 | | | | | | |
| WERN | Wernitzgruen | 149.19 | 347 | ePKPbc | PKPbc | 20 23 12.7 | +0.1 |
| | baz=16,slow=2.4 | | | | | | |
| WERN | | | | ePKPab | PKPab | 20 23 19.6 | +0.1 |
| | baz=17,slow=4.4 | | | | | | |
| SCHD | Schmiedefeld | 149.20 | 348 | ePKPbc | PKPbc | 20 23 12.9 | +0.1 |
| | baz=16,slow=2.4 | | | | | | |
| SCHD | | | | ePKPab | PKPab | 20 23 19.5 | 0.0 |
| | baz=17,slow=4.4 | | | | | | |
| NKC | Novy Kostel | 149.23 | 346 | ePKPbc | PKPbc | 20 23 12.9 | +0.2 |
| | baz=16,slow=2.4 | | | | | | |
| NKC | | | | ePKPab | PKPab | 20 23 19.8 | +0.3 |
| | baz=17,slow=4.4 | | | | | | |
| ROHR | Rohrbach | 149.26 | 347 | ePKPbc | PKPbc | 20 23 13.2 | +0.3 |
| | baz=16,slow=2.4 | | | | | | |
| ROHR | | | | ePKPab | PKPab | 20 23 19.8 | +0.1 |
| | baz=17,slow=4.4 | | | | | | |
| LOT | Lotru | 149.26 | 329 | ⇓iP | PKPpre | 20 22 56.7 | |
| HUMR | Humele | 149.30 | 326 | ⇑iP | PKPbc | 20 23 11.9 | -1.2 |
| ROTZ | Rotzenmuhle | 149.72 | 346 | ePKPbc | PKPbc | 20 23 14.0 | +0.1 |
| | baz=16,slow=2.4 | | | | | | |
| GZR | Gura Zlata | 149.78 | 330 | ⇑PKIKP | PKPbc | 20 23 13.4 | -0.9 |
| GZR | Gura Zlata | 149.78 | 330 | ⇑iP | PKPbc | 20 23 13.4 | -0.9 |
| MEM | Membach | 149.87 | 354 | PKPbc | PKPbc | 20 23 14.3 | +0.1 |
| TNS | Taunus Mts | 149.97 | 351 | ePKPbc | PKPbc | 20 23 14.7 | +0.1 |
| | baz=16,slow=2.4 | | | | | | |
| KHC | Kasperske Hory | 149.99 | 344 | ePKIKP | PKPdf | 20 23 10.2 | +1.2 |
| KHC | | | | e | | 20 23 14.5 | |
| KHC | | | | e | | 20 23 23.0 | |
| KHC | Kasperske Hory | 149.99 | 344 | ePKPDF | PKPdf | 20 23 10.2 | +1.2 |
| KHC | | | | ⇑ePKP | PKPbc | 20 23 14.5 | -0.1 |
| KHC | | | | ePKPAB | PKPab | 20 23 23.0 | +0.2 |
| KHC | Kasperske Hory | 149.99 | 344 | ePKPbc | PKPbc | 20 23 14.2 | -0.4 |
| KHC | | | | ePKPab | PKPab | 20 23 22.9 | +0.2 |
| CRAR | CRAIOVA | 150.05 | 327 | ⇑iP | PKPbc | 20 23 12.9 | -1.9 |
| BZS | Buzias | 150.15 | 331 | ⇑iP | PKPbc | 20 23 14.7 | -0.3 |
| WET | Wettzell | 150.15 | 345 | ePKPbc | PKPbc | 20 23 15.6 | +0.6 |
| | baz=16,slow=2.4 | | | | | | |
| WET | | | | ePKPab | PKPab | 20 23 23.7 | +0.3 |
| | baz=17,slow=4.4 | | | | | | |
| GERES | GERESS Array B | 150.22 | 344 | PKPbc | PKPbc | 20 23 14.8 | -0.5 |
| | comp=Z,2.8nm,0.5s,baz=25,slow=2.9,SNR=26 | | | | | | |
| GERES | | | | PKPab | PKPab | 20 23 23.2 | -0.6 |
| | comp=Z,1.6nm,0.6s,baz=41,slow=4.3,SNR=6.9 | | | | | | |
| DOU | Dourbes | 150.49 | 356 | PKPbc | PKPbc | 20 23 15.8 | +0.1 |
| BANR | Banloc | 150.54 | 331 | ⇓iP | PKPbc | 20 23 16.3 | +0.4 |
| WLF | Walferdange | 150.79 | 354 | PKPbc | PKPbc | 20 23 17.9 | +1.5 |
| FUR | Furstenfeldbru | 151.44 | 346 | ePKPbc | PKPbc | 20 23 17.6 | -0.3 |
| | baz=16,slow=2.4 | | | | | | |
| FUR | | | | ePKPab | PKPab | 20 23 29.0 | +0.2 |
| | baz=17,slow=4.4 | | | | | | |
| RJOB | Jochberg | 151.48 | 344 | ePKPbc | PKPbc | 20 23 17.5 | -0.6 |
| | baz=16,slow=2.4 | | | | | | |
| BFO | Black Forest | 151.83 | 351 | ePKPbc | PKPbc | 20 23 18.7 | -0.1 |
| | baz=16,slow=2.4 | | | | | | |
| BFO | | | | epPKPbc | pPKPbc | 20 25 16.8 | -11 |
| KBA | Koelnbreinsper | 151.94 | 343 | ⇑iPKPbc | PKPbc | 20 23 19.2 | 0.0 |
| | comp=Z,3.6nm,0.4s | | | | | | |
| DIVS | Divibare | 152.05 | 331 | ⇑iP | PKPbc | 20 23 18.0 | -1.5 |
| WATA | Walderalm | 152.15 | 345 | ⇓iPKPbc | PKPbc | 20 23 18.7 | -1.0 |
| | comp=Z,3.9nm,0.5s | | | | | | |
| WATA | | | | ⇑ipPKPdf | pPKPdf | 20 25 18.4 | -4.5 |
| | comp=Z,80nm,0.8s,SNR=42 | | | | | | |
| RETA | Reutte | 152.19 | 347 | ⇑ipPKPbc | pPKPbc | 20 25 25.6 | -3.3 |
| | comp=Z,9.5nm,0.5s | | | | | | |
| WTTA | Wattenberg | 152.21 | 345 | ⇓iPKPbc | PKPbc | 20 23 19.4 | -0.5 |
| | comp=Z,7.1nm,0.4s | | | | | | |
| WTTA | | | | ⇑ipPKPdf | pPKPdf | 20 25 16.9 | -6.2 |
| | comp=Z,135nm,1.2s,SNR=37 | | | | | | |
| MOTA | Moosalm | 152.25 | 346 | ⇑ipPKPdf | pPKPdf | 20 25 21.5 | -1.6 |
| | comp=Z,80nm,0.7s,SNR=95 | | | | | | |
| ABTA | Abfaltersbach | 152.47 | 344 | ⇑iPKPbc | PKPbc | 20 23 18.7 | -1.7 |
| | comp=Z,6.1nm,0.5s | | | | | | |
| DAVA | Damuels | 152.56 | 348 | ⇑ipPKiKP | pPKiKP | 20 25 32.4 | +2.0 |
| | comp=Z,19nm,1.2s | | | | | | |
| CRNS | Crni Vrh | 152.57 | 341 | i PKPbc | PKPbc | 20 23 19.4 | -1.1 |
| FETA | Feichten | 152.64 | 346 | ⇑ipPKPdf | pPKPdf | 20 25 21.6 | -2.1 |
| | comp=Z,29nm,1.1s,SNR=8.8 | | | | | | |
| DAVOX | Davos/Dischmat | 153.05 | 347 | PKPbc | PKPbc | 20 23 21.6 | -0.2 |
| | comp=Z,5.7nm,0.4s,baz=219,slow=3.3,SNR=24 | | | | | | |
| DAVOX | | | | PKPab | PKPab | 20 23 35.9 | -0.1 |
| | comp=Z,2.1nm,0.5s,baz=289,slow=4.4,SNR=3.6 | | | | | | |
| IDI | Anoyia | 154.89 | 311 | PKPbc | PKPbc | 20 23 26.4 | +0.6 |
| | comp=Z,8.9nm,0.7s,baz=127,slow=5.1,SNR=4.4 | | | | | | |
| IDI | | | | PKPab | PKPab | 20 23 43.8 | -0.4 |
| | comp=Z,7.6nm,0.6s,baz=112,slow=5.4,SNR=3.3 | | | | | | |
| ESDC | Sonseca Array | 160.40 | 13 | PKPab | PKPab | 20 24 07.9 | +0.2 |
| | comp=Z,1.1nm,0.7s,baz=349,slow=4.5,SNR=6.5 | | | | | | |
| DBIC | Dimbokro | 164.77 | 155 | PKPab | PKPab | 20 24 27.6 | +0.2 |
| | comp=Z,5.6nm,1.0s,baz=281,slow=2.6,SNR=3.9 | | | | | | |
| TORD | Torodi Ar. Bea | 172.58 | 180 | PKP | PKPdf | 20 23 31.5 | -1.5 |
| | comp=Z,0.5nm,0.8s,baz=41,slow=1.0,SNR=3.5 | | | | | | |
| TORD | | | | PKPab | PKPab | 20 25 01.6 | -0.4 |
| | comp=Z,0.9nm,0.8s,baz=181,slow=3.3,SNR=6.2 | | | | | | |

**WEL 07 20:20:59.4±0.1, 43.60S×172.42E, h12km, ML3.5/9, 2C-2D, Error ellipse: s-maj=1.2km s-min=0.9km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.15 | 81 | ⇑PG | Pg | 20 21 03.3 | +0.4 |
| CRLZ | | | | SG | Sg | 20 21 06.2 | +0.7 |
| CRLZ | | | | AML | AML | 20 21 06.5 | |
| MQZ | McQueen's Vall | 0.20 | 122 | ⇓P* | Pg | 20 21 03.9 | +0.1 |
| MQZ | | | | SG | Sg | 20 21 07.0 | +0.2 |
| OXZ | Oxford | 0.39 | 315 | P* | Pg | 20 21 07.0 | -0.2 |
| RPZ | Rata Peaks | 1.00 | 263 | P* | Pb | 20 21 18.1 | -0.6 |
| RPZ | | | | AML | AML | 20 21 32.4 | |
| RPZ | | | | AML | AML | 20 21 34.2 | |
| WVZ | Waitaha Valley | 1.33 | 293 | ⇑PN | Pn | 20 21 23.2 | -0.6 |
| WVZ | | | | AML | AML | 20 21 45.8 | |
| WVZ | | | | AML | AML | 20 21 46.0 | |
| LBZ | Lake Benmore | 1.79 | 243 | PN | Pn | 20 21 29.4 | -0.8 |
| LBZ | | | | AML | AML | 20 21 58.2 | |
| LBZ | | | | AML | AML | 20 22 01.8 | |
| LBZ | | | | AML | AML | 20 22 01.8 | |
| THZ | Tophouse | 1.87 | 11 | PN | Pn | 20 21 30.4 | -1.0 |
| THZ | | | | AML | AML | 20 22 00.6 | |
| THZ | | | | AML | AML | 20 22 06.2 | |
| DSZ | Denniston Nort | 1.91 | 346 | PN | Pn | 20 21 31.2 | -0.6 |
| ODZ | Otahua Downs | 1.92 | 221 | PN | Pn | 20 21 30.6 | -1.4 |
| ODZ | | | | AML | AML | 20 22 05.3 | |
| ODZ | | | | AML | AML | 20 22 05.3 | |
| ODZ | | | | AML | AML | 20 22 05.4 | |
| ODZ | | | | AML | AML | 20 22 06.6 | |
| FOZ | Fox Glacier | 1.98 | 270 | PN | Pn | 20 21 31.6 | -1.2 |
| JCZ | Jackson Bay | 2.69 | 259 | PN | Pn | 20 21 42.5 | -0.1 |
| EAZ | Earnscleugh | 2.76 | 233 | ⇓PN | Pn | 20 21 42.3 | -1.2 |
| EAZ | | | | AML | AML | 20 22 33.4 | |
| EAZ | | | | AML | AML | 20 22 33.7 | |
| TUZ | Tuapeka | 3.08 | 219 | AML | AML | 20 22 41.4 | |
| TUZ | | | | AML | AML | 20 22 43.0 | |
| CAW | Cannon Point | 3.17 | 39 | AML | AML | 20 19 55.1 | |
| CAW | | | | AML | AML | 20 20 06.5 | |

*SZGRF 07 20:23:08.5, 42.27N×22.48E, h10km, ML4.5(BGR)*
*ISCJB 07 20:23:09.5±0.3, 42.445N±0.008×21.61E±0.01, h6km±2km, mb4.2/33, MS3.3/2, Error ellipse: s-maj=1.7km s-min=1.3km az=155.7*
*MOS 07 20:23:09.3±1.0, 42.42N×21.60E, h11km, mb4.5/24, Error ellipse: s-maj=7.6km s-min=3.7km az=95.9*
*PDG 07 20:23:10.6±0.7, 42.42N×21.55E, h11km±1km, MD4.0/9, ML4.0/11, Error ellipse: s-maj=0.6km s-min=0.7km az=0.0*
*TIR 07 20:23:10.7±2.9, 42.33N×21.63E, h40km±999km, ML3.9*
*SKO 07 20:23:10.1, 42.43N×21.60E, h19km, M4.0, ML4.3*
*BEO 07 20:23:10.2±0.3, 42.43N×21.55E, h0km, ML4.0/1*
*NEIC 07 20:23:10.5, 42.40N×21.60E, h3km, mb4.6/6, ML4.3(SKO), After SKO.*
*PRU 07 20:23:10.4, 42.35N×21.63E, h0km, M4.6*
*SOF 07 20:23:10.4, 42.37N×21.61E, h5km, MD4.3*
*CSEM 07 20:23:10.3±0.1, 42.44N×21.59E, h2km, mb4.3/22, Error ellipse: s-maj=2.0km s-min=1.6km az=63.0*
*IDC 07 20:23:11.9±3.1, 42.45N×21.56E, h16km±20km, mb4.1/18, mb1 4.1/29, mb1mx4.0/46, mbtmp4.1/29, ML3.8/11, MS3.0/12, Ms1 3.0/12, ms1mx2.8/47, Error ellipse: s-maj=10.5km s-min=7.3km az=36.0*
*LDG 07 20:23:11.2±0.1, 42.44N×21.62E, h10km, Ml3.7/5, Error ellipse: s-maj=2.5km s-min=2.3km az=24.0*
*THE 07 20:23:13.6, 42.27N×21.75E, h2km, ML3.9/28, Error ellipse: s-maj=0.8km s-min=0.3km az=348.0*
**ISC 07 20:23:10.5±0.9, 42.43N±0.01×21.58E±0.01, h8km±6km, n641, σ1§25/759, mb4.2/33, 58C-49D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BARS | Barje | 0.42 | 24 | ⇑iPg | Pg | 20 23 18.5 | -0.3 |
| BARS | | | | eSg | Sg | 20 23 24.4 | 0.0 |
| SKO | Skopje | 0.47 | 193 | ⇑iPg | Pg | 20 23 19.9 | +0.4 |
| SKO | | | | i Sg | Sg | 20 23 26.5 | +0.9 |
| SKO | | | | eLg | Lg | 20 23 26.6 | |
| SKO | | | | eLg | Lg | 20 23 26.6 | |
| SKO | Skopje | 0.47 | 193 | P | Pg | 20 23 19.4 | -0.1 |
| SKO | Skopje | 0.47 | 193 | P | Pg | 20 23 19.7 | +0.2 |
| SKO | | | | S | Sg | 20 23 25.0 | -0.7 |
| SKO | Skopje | 0.47 | 193 | P | Pg | 20 23 19.7 | +0.2 |
| SKO | | | | S | Sg | 20 23 25.0 | -0.7 |
| SKO | | | | eLg | Lg | 20 23 26.6 | |
| SELS | Selova | 0.86 | 337 | ⇑iPg | Pg | 20 23 25.9 | -1.1 |
| BCI | Bajram Curri | 1.12 | 267 | i PG | Pg | 20 23 31.6 | -0.5 |
| BCI | | | | i SG | Sn | 20 23 49.4 | +1.2 |
| BCI | Bajram Curri | 1.12 | 267 | i Pg | Pg | 20 23 31.5 | -0.5 |
| | SNR=90 | | | | | | |
| BCI | | | | i Sg | Sn | 20 23 49.4 | +1.2 |
| | SNR=90 | | | | | | |
| PHP | Peshkopia | 1.13 | 229 | i PG | Pg | 20 23 30.7 | -1.4 |
| PHP | | | | i SG | Sg | 20 23 46.2 | -0.6 |
| PHP | Peshkopia | 1.13 | 229 | P | Pg | 20 23 30.9 | -1.2 |
| PHP | | | | S | Sb | 20 23 47.2 | +0.1 |
| PHP | Peshkopia | 1.13 | 229 | P | Pg | 20 23 30.9 | -1.2 |
| PHP | | | | i Sg | Sg | 20 23 46.2 | -0.6 |
| | SNR=90 | | | | | | |
| PHP | | | | S | Sb | 20 23 47.2 | +0.1 |
| ZAPS | Zavoj | 1.15 | 42 | ⇓iPg | Pb | 20 23 32.3 | -0.3 |
| ZAPS | | | | eSg | Sb | 20 23 47.8 | +0.2 |
| ZAPS | Zavoj | 1.15 | 42 | ⇓iPg | Pb | 20 23 32.3 | -0.3 |
| BOVS | Bovan | 1.21 | 4 | ePn | Pb | 20 23 32.7 | -0.9 |
| BOVS | Bovan | 1.21 | 4 | ePn | Pb | 20 23 32.7 | -0.9 |
| PVY | Plav | 1.21 | 278 | ⇓iPg | Pb | 20 23 32.5 | -1.2 |
| PVY | | | | eSg | Sn | 20 23 51.0 | +0.5 |
| PVY | Plav | 1.21 | 278 | ⇓iPg | Pb | 20 23 32.5 | -1.2 |
| PVY | | | | eSg | Sn | 20 23 51.0 | +0.5 |
| VTS | Vitosha | 1.21 | 82 | P | Pb | 20 23 33.6 | -0.2 |
| VTS | Vitosha | 1.21 | 82 | P | Pb | 20 23 33.6 | -0.2 |
| KKB | Krupnik | 1.25 | 116 | P | Pb | 20 23 34.3 | 0.0 |
| KKB | Krupnik | 1.25 | 116 | P | Pb | 20 23 34.3 | 0.0 |
| PUK | Puka | 1.31 | 253 | i PG | Pn | 20 23 34.7 | -0.5 |
| PUK | | | | i SG | Sg | 20 23 53.7 | +1.0 |
| PUK | Puka | 1.31 | 253 | i Pg | Pn | 20 23 34.7 | -0.5 |
| | SNR=90 | | | | | | |
| PUK | | | | i Sg | Sg | 20 23 53.7 | +1.0 |
| | SNR=90 | | | | | | |
| BEY | Berane | 1.32 | 290 | ⇓iPg | Pn | 20 23 34.6 | -0.7 |
| BEY | | | | eSg | Sg | 20 23 54.6 | +1.6 |
| IVA | Berane | 1.32 | 290 | ⇓iPg | Pn | 20 23 34.6 | -0.7 |
| IVA | | | | eSg | Sg | 20 23 54.6 | +1.6 |
| VAY | Valandovo | 1.33 | 146 | i Pg | Pn | 20 23 34.7 | -0.6 |
| VAY | | | | i Sg | Sg | 20 23 53.1 | -0.1 |
| VAY | | | | eLg | Lg | 20 23 53.2 | |
| | comp=N,6µm,0.7s | | | | | | |
| VAY | | | | eLg | Lg | 20 23 53.4 | |
| | comp=E,3µm,0.5s | | | | | | |
| VAY | Valandovo | 1.33 | 146 | ⇓iPg | Pn | 20 23 34.6 | -0.7 |
| VAY | | | | eSg | Sb | 20 23 52.2 | -0.6 |
| VAY | Valandovo | 1.33 | 146 | P | Pn | 20 23 35.0 | -0.3 |
| VAY | | | | S | Sb | 20 23 51.2 | -1.6 |
| VAY | Valandovo | 1.33 | 146 | i Pg | Pn | 20 23 34.7 | -0.6 |
| VAY | Valandovo | 1.33 | 146 | P | Pn | 20 23 35.0 | -0.3 |
| VAY | | | | S | Sb | 20 23 51.2 | -1.6 |
| VAY | | | | eSg | Sb | 20 23 52.2 | -0.6 |
| VAY | | | | eLg | Lg | 20 23 53.4 | |
| | comp=E,3µm,0.5s | | | | | | |
| BOLS | Boljevac | 1.43 | 11 | ⇑iPg | Pn | 20 23 35.1 | -1.6 |
| BOLS | | | | eSg | Sn | 20 23 54.2 | -1.4 |
| BOLS | Boljevac | 1.43 | 11 | ⇑iPg | Pn | 20 23 35.1 | -1.6 |
| BOLS | | | | eSg | Sn | 20 23 54.2 | -1.4 |
| OHR | Ohrid | 1.44 | 204 | ePg | Pn | 20 23 36.6 | -0.4 |
| OHR | | | | eSg | Sg | 20 23 56.7 | 0.0 |
| OHR | | | | eLg | Lg | 20 23 57.0 | |
| | comp=E,5µm,1.0s | | | | | | |
| OHR | | | | eLg | Lg | 20 23 57.1 | |
| | comp=N,5µm,0.8s | | | | | | |
| OHR | Ohrid | 1.44 | 204 | ePg | Pn | 20 23 36.5 | -0.4 |
| OHR | | | | eSg | Sg | 20 23 56.7 | 0.0 |
| OHR | | | | eLg | Lg | 20 23 57.0 | |
| | comp=N,5µm,0.8s | | | | | | |
| SJES | Sjenica | 1.45 | 306 | ⇑iPg | Pn | 20 23 36.7 | -0.3 |
| IVAS | Ivanjica | 1.55 | 318 | i Pn | Pn | 20 23 38.6 | +0.1 |
| IVAS | Ivanjica | 1.55 | 318 | i Pn | Pn | 20 23 38.6 | +0.1 |
| GRUS | Gruza | 1.59 | 337 | ⇑iPg | Pn | 20 23 39.1 | +0.2 |
| GRUS | Gruza | 1.59 | 337 | ⇑iPg | Pn | 20 23 39.1 | +0.2 |
| GRG | Griva | 1.59 | 157 | eP | Pn | 20 23 39.2 | +0.2 |
| GRG | Griva | 1.59 | 157 | ePN | Pb | 20 23 39.6 | -0.6 |
| GRG | Griva | 1.59 | 157 | ePN | Pb | 20 23 39.6 | -0.6 |
| GRG | Griva | 1.59 | 157 | P | Pn | 20 23 39.4 | +0.4 |
| GRG | | | | S | Sn | 20 23 59.1 | -0.7 |
| GRG | Griva | 1.59 | 157 | P | Pn | 20 23 39.4 | +0.4 |
| GRG | | | | S | Sn | 20 23 59.1 | -0.7 |
| KNT | Kendrikon | 1.60 | 142 | eP | Pn | 20 23 39.1 | -0.1 |
| KNT | Kendrikon | 1.60 | 142 | ePN | Pn | 20 23 39.1 | -0.1 |
| KNT | Kendrikon | 1.60 | 142 | ePN | Pn | 20 23 39.1 | -0.1 |
| KNT | Kendrikon | 1.60 | 142 | P | Pn | 20 23 39.0 | -0.1 |
| KNT | | | | S | Sn | 20 23 59.1 | -0.9 |
| KNT | Kendrikon | 1.60 | 142 | P | Pn | 20 23 39.0 | -0.1 |
| KNT | | | | S | Sn | 20 23 59.1 | -0.9 |
| FNA | Florina | 1.65 | 185 | eP | Pn | 20 23 40.2 | +0.4 |
| FNA | Florina | 1.65 | 185 | ePN | Pb | 20 23 40.8 | -0.4 |
| FNA | Florina | 1.65 | 185 | ePN | Pb | 20 23 40.8 | -0.4 |
| FNA | Florina | 1.65 | 185 | P | Pn | 20 23 40.4 | +0.6 |
| FNA | | | | S | Sb | 20 24 02.2 | +0.1 |
| FNA | Florina | 1.65 | 185 | P | Pn | 20 23 40.4 | +0.6 |
| FNA | | | | S | Sb | 20 24 02.2 | +0.1 |
| TIR | Tirane | 1.68 | 230 | P | Pg | 20 23 43.3 | +0.7 |
| TIR | | | | S | Sg | 20 24 06.4 | +2.1 |
| TIR | Tirane | 1.68 | 230 | ePn | Pb | 20 23 41.2 | -0.4 |
| TIR | Tirane | 1.68 | 230 | eP | Pb | 20 23 41.2 | -0.4 |
| PDG | Podgorica | 1.72 | 271 | ⇓ePn | Pn | 20 23 41.3 | +0.6 |
| PDG | Podgorica | 1.72 | 271 | P | Pb | 20 23 41.7 | -0.6 |
| PDG | | | | S | Sn | 20 24 02.9 | 0.0 |
| PDG | Podgorica | 1.72 | 271 | ⇓iPn | Pn | 20 23 41.4 | +0.7 |
| PDG | Podgorica | 1.72 | 271 | P | Pb | 20 23 41.7 | -0.6 |
| PDG | | | | S | Sn | 20 24 02.9 | 0.0 |
| PDG | | | | eSn | Sg | 20 24 05.1 | -0.7 |
| TTG | Podgorica | 1.72 | 271 | ⇓iPn | Pn | 20 23 41.4 | +0.7 |
| TTG | | | | eSn | Sg | 20 24 05.1 | -0.7 |
| DRME | Dracevica, Mon | 1.79 | 263 | ⇓iPn | Pb | 20 23 43.0 | -0.6 |
| DRME | | | | eSn | Sb | 20 24 07.0 | +0.8 |
| DRME | Dracevica, Mon | 1.79 | 263 | ⇓iPn | Pb | 20 23 43.0 | -0.6 |
| DRME | | | | eSn | Sb | 20 24 07.0 | +0.8 |
| ULC | Ulcinj | 1.80 | 256 | ⇓iPn | Pb | 20 23 43.0 | -0.6 |
| ULC | | | | eSn | Sb | 20 24 07.2 | +0.9 |
| ULC | Ulcinj | 1.80 | 256 | ⇓iPn | Pb | 20 23 43.0 | -0.6 |
| ULC | | | | eSn | Sb | 20 24 07.2 | +0.9 |
| MMB | Musomiste | 1.81 | 117 | P | Pn | 20 23 40.4 | -1.5 |
| MMB | Musomiste | 1.81 | 117 | P | Pn | 20 23 40.4 | -1.5 |
| MPEP | Malo Peshtene | 1.84 | 59 | P | Pg | 20 23 45.3 | -0.4 |
| PLE | Pljevlja | 1.85 | 300 | ⇑iPn | Pn | 20 23 43.5 | +0.9 |
| PLE | | | | eSn | Sb | 20 24 08.6 | +0.8 |
| PLE | Pljevlja | 1.85 | 300 | ⇑iPn | Pn | 20 23 43.5 | +0.9 |
| PLE | | | | eSn | Sb | 20 24 08.6 | +0.8 |
| SVIS | Svilajnac | 1.86 | 352 | ePn | Pn | 20 23 43.2 | +0.6 |
| KBN | Korca | 1.90 | 199 | P | Pb | 20 23 44.4 | -1.0 |
| KBN | | | | S | Sb | 20 24 08.7 | -0.6 |
| KBN | Korca | 1.90 | 199 | P | Pb | 20 23 44.4 | -1.0 |
| KBN | | | | S | Sb | 20 24 08.7 | -0.6 |
| PGB | Panagyurishte | 1.92 | 85 | P | Pn | 20 23 44.4 | +0.9 |
| PGB | Panagyurishte | 1.92 | 85 | P | Pn | 20 23 44.4 | +0.9 |
| NKY | Niksic | 1.95 | 282 | ⇑iPn | Pn | 20 23 44.9 | +1.0 |
| NKY | | | | eSn | Sb | 20 24 11.0 | +0.2 |
| NKY | Niksic | 1.95 | 282 | ⇑iPn | Pn | 20 23 44.9 | +1.0 |
| NKY | | | | eSn | Sb | 20 24 11.0 | +0.2 |
| NKME | Niksic | 1.97 | 281 | ⇓iPn | Pn | 20 23 44.8 | +0.6 |
| NKME | | | | eSn | Sb | 20 24 11.4 | +0.1 |
| NKME | Niksic | 1.97 | 281 | ⇓iPn | Pn | 20 23 44.8 | +0.6 |
| NKME | | | | eSn | Sb | 20 24 11.4 | +0.1 |
| KUBS | Kucevo | 1.98 | 2 | i Pn | Pn | 20 23 44.3 | -0.1 |
| KUBS | Kucevo | 1.98 | 2 | i Pn | Pn | 20 23 44.3 | -0.1 |
| TRUS | Trudelj | 1.99 | 335 | ⇓iPn | Pn | 20 23 43.3 | -1.1 |
| TRUS | Trudelj | 1.99 | 335 | ⇓iPn | Pn | 20 23 43.3 | -1.1 |
| SRS | Serrai | 2.00 | 130 | ePN | Pn | 20 23 44.4 | -0.1 |
| SRS | Serrai | 2.00 | 130 | ePN | Pn | 20 23 44.4 | -0.1 |
| SRS | Serrai | 2.00 | 130 | P | Pn | 20 23 45.1 | +0.6 |
| SRS | | | | S | Sn | 20 24 08.9 | -0.7 |
| SRS | Serrai | 2.00 | 130 | P | Pn | 20 23 45.1 | +0.6 |
| SRS | | | | S | Sn | 20 24 08.9 | -0.7 |
| BUM | Brajici-Budva | 2.00 | 267 | ⇑iPn | Pn | 20 23 45.7 | +1.1 |
| BUM | | | | eSn | Sb | 20 24 11.8 | -0.3 |
| BUM | Brajici-Budva | 2.00 | 267 | ⇑iPn | Pn | 20 23 45.7 | +1.1 |
| BUM | | | | eSn | Sb | 20 24 11.8 | -0.3 |
| NVR | Nevrokopi | 2.02 | 122 | ePB | Pn | 20 23 45.8 | +1.0 |
| NVR | Nevrokopi | 2.02 | 122 | ePB | Pn | 20 23 45.8 | +1.0 |
| NVR | Nevrokopi | 2.02 | 122 | P | Pn | 20 23 45.1 | +0.3 |
| NVR | | | | S | Sn | 20 24 10.2 | 0.0 |
| NVR | Nevrokopi | 2.02 | 122 | P | Pn | 20 23 45.1 | +0.3 |
| NVR | | | | S | Sn | 20 24 10.2 | 0.0 |
| DIVS | Divibare | 2.03 | 326 | ⇑iPn | Pn | 20 23 44.7 | -0.3 |
| DIVS | Divibare | 2.03 | 326 | ⇑iP | Pn | 20 23 44.8 | -0.3 |
| DIVS | Divibare | 2.03 | 326 | S | Sg | 20 24 21.1 | +5.3 |
| DIVS | Divibare | 2.03 | 326 | ⇑iP | Pn | 20 23 44.8 | -0.3 |
| NEST | Nestorio | 2.05 | 191 | ePN | Pn | 20 23 46.3 | +1.0 |
| NEST | Nestorio | 2.05 | 191 | ePN | Pn | 20 23 46.3 | +1.0 |
| NEST | Nestorio | 2.05 | 191 | P | Pn | 20 23 46.3 | +1.0 |
| NEST | | | | S | Sb | 20 24 12.5 | -1.2 |
| NEST | Nestorio | 2.05 | 191 | P | Pn | 20 23 46.3 | +1.0 |
| NEST | | | | S | Sb | 20 24 12.5 | -1.2 |
| THE | Thessaloniki | 2.07 | 149 | ePN | Pn | 20 23 45.4 | -0.1 |
| THE | Thessaloniki | 2.07 | 149 | ePN | Pn | 20 23 45.4 | -0.1 |
| THE | Thessaloniki | 2.07 | 149 | P | Pn | 20 23 45.7 | +0.2 |
| THE | | | | S | Sn | 20 24 10.7 | -0.8 |
| THE | Thessaloniki | 2.07 | 149 | P | Pn | 20 23 45.7 | +0.2 |
| THE | | | | S | Sn | 20 24 10.7 | -0.8 |
| SOH | Sokhos | 2.08 | 140 | ePN | Pn | 20 23 46.0 | +0.2 |
| SOH | Sokhos | 2.08 | 140 | ePN | Pn | 20 23 46.0 | +0.2 |
| SOH | Sokhos | 2.08 | 140 | P | Pn | 20 23 45.9 | +0.2 |
| SOH | | | | S | Sn | 20 24 11.4 | -0.5 |
| SOH | Sokhos | 2.08 | 140 | P | Pn | 20 23 45.9 | +0.2 |
| SOH | | | | S | Sn | 20 24 11.4 | -0.5 |
| UPM | Unac-Piva | 2.12 | 292 | ⇑iPn | Pn | 20 23 47.1 | +0.8 |
| UPM | | | | eSn | Sb | 20 24 15.4 | -0.3 |
| UPM | Unac-Piva | 2.12 | 292 | ⇑iPn | Pn | 20 23 47.1 | +0.8 |
| UPM | | | | eSn | Sb | 20 24 15.4 | -0.3 |
| KZN | Kozani | 2.12 | 176 | ePN | Pn | 20 23 47.2 | +0.9 |
| KZN | Kozani | 2.12 | 176 | ePN | Pn | 20 23 47.2 | +0.9 |
| KZN | Kozani | 2.12 | 176 | P | Pn | 20 23 47.1 | +0.8 |
| KZN | | | | S | Sn | 20 24 13.1 | +0.2 |
| KZN | Kozani | 2.12 | 176 | P | Pn | 20 23 47.1 | +0.8 |
| KZN | | | | S | Sn | 20 24 13.1 | +0.2 |
| BBLS | Lazići | 2.15 | 313 | ePn | Pn | 20 23 46.8 | +0.2 |
| BBLS | Lazići | 2.15 | 313 | ePn | Pn | 20 23 46.8 | +0.2 |
| HORT | Hortiatis | 2.15 | 148 | eP | Pn | 20 23 47.8 | +1.1 |
| HORT | Hortiatis | 2.15 | 148 | ePN | Pn | 20 23 47.0 | +0.2 |
| HORT | Hortiatis | 2.15 | 148 | ePN | Pn | 20 23 47.0 | +0.2 |
| HORT | Hortiatis | 2.15 | 148 | P | Pn | 20 23 47.0 | +0.2 |
| HORT | | | | S | Sn | 20 24 13.1 | -0.6 |
| HORT | Hortiatis | 2.15 | 148 | P | Pn | 20 23 47.0 | +0.2 |
| HORT | | | | S | Sn | 20 24 13.1 | -0.6 |
| HCY | Herceg Novi | 2.29 | 272 | ⇓iPn | Pn | 20 23 49.6 | +1.1 |
| HCY | | | | eSn | Sb | 20 24 19.2 | -1.2 |
| HCY | Herceg Novi | 2.29 | 272 | ⇓iPn | Pn | 20 23 49.6 | +1.1 |
| HCY | | | | eSn | Sb | 20 24 19.2 | -1.2 |
| BRY | Bratogost | 2.29 | 283 | ⇑iPn | Pn | 20 23 50.0 | +1.3 |
| BRY | | | | eSn | Sb | 20 24 19.3 | -1.4 |
| BRY | Bratogost | 2.29 | 283 | ⇑iPn | Pn | 20 23 50.0 | +1.3 |
| BRY | | | | eSn | Sb | 20 24 19.3 | -1.4 |
| DJES | Djerdap | 2.34 | 17 | ePn | Pn | 20 23 50.4 | +1.2 |
| RMGR | Halanga-Turnu | 2.38 | 20 | ⇑iP | Pb | 20 23 51.7 | -1.8 |
| RMGR | Halanga-Turnu | 2.38 | 20 | ⇑iP | Pb | 20 23 51.7 | -1.8 |
| TREB | Trebinje | 2.40 | 278 | ePn | Pn | 20 23 51.1 | +1.0 |
| TREB | Trebinje | 2.40 | 278 | ePn | Pn | 20 23 51.1 | +1.0 |
| LIT | Litokhoron | 2.42 | 163 | ePN | Pn | 20 23 51.0 | +0.5 |
| LIT | Litokhoron | 2.42 | 163 | ePN | Pn | 20 23 51.0 | +0.5 |
| LIT | Litokhoron | 2.42 | 163 | P | Pn | 20 23 50.9 | +0.5 |
| LIT | | | | S | Sn | 20 24 20.0 | -0.3 |
| LIT | Litokhoron | 2.42 | 163 | P | Pn | 20 23 50.9 | +0.5 |
| LIT | | | | S | Sn | 20 24 20.0 | -0.3 |
| RZN | Rozhen | 2.45 | 107 | P | Pb | 20 23 53.9 | -0.9 |
| RZN | Rozhen | 2.45 | 107 | P | Pb | 20 23 53.9 | -0.9 |
| PLG | Polygyros | 2.49 | 145 | ePB | Pn | 20 23 52.0 | +0.7 |
| PLG | Polygyros | 2.49 | 145 | ePB | Pn | 20 23 52.0 | +0.7 |
| PLG | Polygyros | 2.49 | 145 | P | Pn | 20 23 51.8 | +0.5 |

| Sta | Name | Dist | Az | Phase | Ph | Time | Res |
|---|---|---|---|---|---|---|---|
| PLG | | | | S | Sn | 20 24 21.7 | -0.1 |
| PLG | Polygyros | 2.49 | 145 | P | Pn | 20 23 51.8 | +0.5 |
| PLG | | | | S | Sn | 20 24 21.7 | -0.1 |
| CRAR | CRAIOVA | 2.49 | 40 | ⇑iP | Pn | 20 23 52.5 | +1.2 |
| CRAR | CRAIOVA | 2.49 | 40 | S | Sg | 20 24 34.6 | +4.1 |
| CRAR | CRAIOVA | 2.49 | 40 | ⇑iP | Pn | 20 23 52.5 | +1.2 |
| SRE | Strehaia | 2.53 | 27 | ⇑iP | Pn | 20 23 52.7 | +0.9 |
| SRE | Strehaia | 2.53 | 27 | ⇑iP | Pn | 20 23 52.7 | +0.9 |
| TEKS | Tekeris | 2.59 | 326 | iPn | Pn | 20 23 52.5 | -0.2 |
| TEKS | Tekeris | 2.59 | 326 | iPn | Pn | 20 23 52.5 | -0.2 |
| KAVA | Kavala | 2.62 | 122 | P | Pn | 20 23 53.8 | +0.7 |
| KAVA | | | | S | Sn | 20 24 25.0 | 0.0 |
| KAVA | Kavala | 2.62 | 122 | P | Pn | 20 23 53.8 | +0.7 |
| KAVA | | | | S | Sn | 20 24 25.0 | 0.0 |
| OUR | Ouranopolis | 2.76 | 138 | ePN | Pn | 20 23 55.4 | +0.4 |
| OUR | Ouranopolis | 2.76 | 138 | ePN | Pn | 20 23 55.4 | +0.4 |
| OUR | Ouranopolis | 2.76 | 138 | P | Pn | 20 23 55.5 | +0.4 |
| OUR | | | | S | Sn | 20 24 28.6 | 0.0 |
| OUR | Ouranopolis | 2.76 | 138 | P | Pn | 20 23 55.5 | +0.4 |
| OUR | | | | S | Sn | 20 24 28.6 | 0.0 |
| SRN | Sarande | 2.81 | 206 | P | Pn | 20 23 57.8 | +2.1 |
| SRN | | | | S | Sb | 20 24 32.6 | -2.9 |
| SRN | Sarande | 2.81 | 206 | P | Pn | 20 23 57.8 | +2.1 |
| SRN | | | | S | Sb | 20 24 32.6 | -2.9 |
| JAN | Janina | 2.82 | 192 | ePN | Pn | 20 23 57.9 | +2.0 |
| JAN | Janina | 2.82 | 192 | ePN | Pn | 20 23 57.9 | +2.0 |
| JAN | Janina | 2.82 | 192 | P | Pn | 20 23 57.6 | +1.7 |
| JAN | | | | S | Sn | 20 24 31.5 | +1.4 |
| JAN | Janina | 2.82 | 192 | P | Pn | 20 23 57.6 | +1.7 |
| JAN | | | | S | Sn | 20 24 31.5 | +1.4 |
| THL | Klokotos Trika | 2.88 | 173 | ePN | Pn | 20 23 57.5 | +0.9 |
| THL | Klokotos Trika | 2.88 | 173 | ePN | Pn | 20 23 57.5 | +0.9 |
| THL | Klokotos Trika | 2.88 | 173 | P | Pn | 20 23 57.5 | +0.9 |
| THL | | | | S | Sn | 20 24 31.9 | +0.5 |
| THL | Klokotos Trika | 2.88 | 173 | P | Pn | 20 23 57.5 | +0.9 |
| THL | | | | S | Sn | 20 24 31.9 | +0.5 |
| PAIG | Paliouri | 2.96 | 147 | ePN | Pn | 20 23 57.9 | +0.2 |
| PAIG | Paliouri | 2.96 | 147 | ePN | Pn | 20 23 57.9 | +0.2 |
| PAIG | Paliouri | 2.96 | 147 | P | Pn | 20 23 58.1 | +0.4 |
| PAIG | | | | S | Sn | 20 24 33.1 | -0.3 |
| PAIG | Paliouri | 2.96 | 147 | P | Pn | 20 23 58.1 | +0.4 |
| PAIG | | | | S | Sn | 20 24 33.1 | -0.3 |
| BANR | Banloc | 2.97 | 354 | ⇑iP | Pn | 20 23 57.9 | 0.0 |
| BANR | Banloc | 2.97 | 354 | S | Sg | 20 24 47.9 | +2.0 |
| BANR | Banloc | 2.97 | 354 | ⇑iP | Pn | 20 23 57.9 | 0.0 |
| SGD | Sagiada | 2.99 | 200 | ePN | Pn | 20 24 00.3 | +2.1 |
| SGD | Sagiada | 2.99 | 200 | ePN | Pn | 20 24 00.3 | +2.1 |
| SGD | Sagiada | 2.99 | 200 | P | Pn | 20 24 00.4 | +2.2 |
| SGD | | | | S | Sn | 20 24 36.5 | +2.3 |
| SGD | Sagiada | 2.99 | 200 | P | Pn | 20 24 00.4 | +2.2 |
| SGD | | | | S | Sn | 20 24 36.5 | +2.3 |
| FGSL | Fruska Gora | 3.01 | 335 | ePn | Pn | 20 23 58.3 | -0.2 |
| FRGS | Fruska Gora | 3.02 | 335 | ePn | Pn | 20 23 58.3 | -0.2 |
| KEK | Kerkira | 3.03 | 207 | ePN | Pn | 20 24 00.1 | +1.4 |
| KEK | Kerkira | 3.03 | 207 | ePN | Pn | 20 24 00.1 | +1.4 |
| IGT | Igoumenitsa | 3.04 | 199 | eP | Pn | 20 24 00.8 | +1.9 |
| IGT | Igoumenitsa | 3.04 | 199 | ePN | Pn | 20 24 01.2 | +2.3 |
| IGT | Igoumenitsa | 3.04 | 199 | ePN | Pn | 20 24 01.2 | +2.3 |
| IGT | Igoumenitsa | 3.04 | 199 | P | Pn | 20 24 01.1 | +2.2 |
| IGT | | | | S | Sn | 20 24 37.6 | +2.1 |
| IGT | Igoumenitsa | 3.04 | 199 | P | Pn | 20 24 01.1 | +2.2 |
| IGT | | | | S | Sn | 20 24 37.6 | +2.1 |
| GZR | Gura Zlata | 3.09 | 16 | ⇓iP | Pn | 20 23 59.7 | +0.1 |
| GZR | Gura Zlata | 3.09 | 16 | ⇓iP | Pn | 20 23 59.7 | +0.1 |
| BZS | Buzias | 3.19 | 0 | ⇑iPn | Pn | 20 24 00.5 | -0.3 |
| BZS | Buzias | 3.19 | 0 | ⇑iP | Pn | 20 24 00.6 | -0.3 |
| BZS | Buzias | 3.19 | 0 | S | Sg | 20 24 54.2 | +1.4 |
| BZS | Buzias | 3.19 | 0 | ⇑iP | Pn | 20 24 00.6 | -0.3 |
| HUMR | Humele | 3.24 | 49 | ⇑iP | Pn | 20 24 02.7 | +1.0 |
| HUMR | Humele | 3.24 | 49 | S | Sg | 20 24 58.6 | +4.0 |
| HUMR | Humele | 3.24 | 49 | ⇑iP | Pn | 20 24 02.7 | +1.0 |
| XOR | Xorichti | 3.29 | 158 | ePN | Pn | 20 24 02.6 | +0.2 |
| XOR | Xorichti | 3.29 | 158 | ePN | Pn | 20 24 02.6 | +0.2 |
| DSL | Palaion Diasel | 3.31 | 187 | ePN | Pn | 20 24 05.6 | +3.0 |
| DSL | Palaion Diasel | 3.31 | 187 | ePN | Pn | 20 24 05.6 | +3.0 |
| DSL | Palaion Diasel | 3.31 | 187 | P | Pn | 20 24 04.1 | +1.5 |
| DSL | | | | S | Sn | 20 24 43.2 | +1.0 |
| DSL | Palaion Diasel | 3.31 | 187 | P | Pn | 20 24 04.1 | +1.5 |
| DSL | | | | S | Sn | 20 24 43.2 | +1.0 |
| TIM | Timisoara | 3.32 | 356 | ⇓iP | Pg | 20 24 12.1 | -1.9 |
| TIM | Timisoara | 3.32 | 356 | S | Sg | 20 24 58.6 | +1.6 |
| NEO | Neokhori | 3.36 | 158 | ePN | Pn | 20 24 03.7 | +0.5 |
| NEO | Neokhori | 3.36 | 158 | ePN | Pn | 20 24 03.7 | +0.5 |
| LOT | Lotru | 3.41 | 27 | ⇓iP | Pn | 20 24 06.1 | +2.1 |
| LOT | Lotru | 3.41 | 27 | S | Sg | 20 24 58.9 | -1.0 |
| LOT | Lotru | 3.41 | 27 | ⇓iP | Pn | 20 24 06.1 | +2.1 |
| MAKR | Makrakomi, Fth | 3.44 | 173 | ePN | Pn | 20 24 05.4 | +1.1 |
| MAKR | Makrakomi, Fth | 3.44 | 173 | ePN | Pn | 20 24 05.4 | +1.1 |
| MAKR | Makrakomi, Fth | 3.44 | 173 | P | Pn | 20 24 05.5 | +1.1 |
| MAKR | | | | S | Sn | 20 24 45.8 | +0.5 |
| MAKR | Makrakomi, Fth | 3.44 | 173 | P | Pn | 20 24 05.5 | +1.1 |
| MAKR | | | | S | Sn | 20 24 45.8 | +0.5 |
| AGG | Agios Georgios | 3.45 | 170 | eP | Pn | 20 24 05.8 | +1.2 |
| AGG | Agios Georgios | 3.45 | 170 | ePN | Pn | 20 24 05.3 | +0.8 |
| AGG | Agios Georgios | 3.45 | 170 | ePN | Pn | 20 24 05.3 | +0.8 |
| AGG | Agios Georgios | 3.45 | 170 | P | Pn | 20 24 05.3 | +0.8 |
| AGG | | | | S | Sn | 20 24 46.4 | +0.8 |
| AGG | Agios Georgios | 3.45 | 170 | P | Pn | 20 24 05.3 | +0.8 |
| AGG | | | | S | Sn | 20 24 46.4 | +0.8 |
| EVR | Evrytania | 3.51 | 177 | ePN | Pn | 20 24 06.5 | +1.1 |
| EVR | Evrytania | 3.51 | 177 | ePN | Pn | 20 24 06.5 | +1.1 |
| EVR | Evrytania | 3.51 | 177 | P | Pn | 20 24 06.8 | +1.4 |
| EVR | | | | S | Sn | 20 24 48.3 | +1.1 |
| EVR | Evrytania | 3.51 | 177 | P | Pn | 20 24 06.8 | +1.4 |
| EVR | | | | S | Sn | 20 24 48.3 | +1.1 |
| SKIA | Skiathos | 3.56 | 156 | ePN | Pn | 20 24 05.1 | -0.9 |
| SKIA | Skiathos | 3.56 | 156 | ePN | Pn | 20 24 05.1 | -0.9 |
| DEV | Deva | 3.58 | 15 | ⇓iP | Pg | 20 24 16.6 | -2.5 |
| AOS | Alonnisos | 3.69 | 151 | eP | Pn | 20 24 08.1 | +0.3 |
| AOS | Alonnisos | 3.69 | 151 | ePN | Pn | 20 24 07.9 | +0.1 |
| AOS | Alonnisos | 3.69 | 151 | ePN | Pn | 20 24 07.9 | +0.1 |
| AOS | Alonnisos | 3.69 | 151 | eP | Pn | 20 24 08.1 | +0.3 |
| LKD2 | Lefkada island | 3.70 | 191 | ePN | Pn | 20 24 09.1 | +1.1 |
| LKD2 | Lefkada island | 3.70 | 191 | ePN | Pn | 20 24 09.1 | +1.1 |
| LKD2 | Lefkada island | 3.70 | 191 | P | Pn | 20 24 09.7 | +1.7 |
| LKD2 | | | | S | Sn | 20 24 53.3 | +1.5 |
| LKD2 | Lefkada island | 3.70 | 191 | P | Pn | 20 24 09.7 | +1.7 |
| LKD2 | | | | S | Sn | 20 24 53.3 | +1.5 |
| LIA | Limnos Island | 3.71 | 132 | ePN | Pn | 20 24 07.9 | -0.2 |
| LIA | Limnos Island | 3.71 | 132 | ePN | Pn | 20 24 07.9 | -0.2 |
| LIA | Limnos Island | 3.71 | 132 | P | Pn | 20 24 09.0 | +0.9 |
| LIA | | | | S | Sn | 20 24 52.0 | 0.0 |
| LIA | Limnos Island | 3.71 | 132 | P | Pn | 20 24 09.0 | +0.9 |
| LIA | | | | S | Sn | 20 24 52.0 | 0.0 |
| AXAR | Agios Charalam | 3.75 | 167 | ePN | Pn | 20 24 09.6 | +1.0 |
| AXAR | Agios Charalam | 3.75 | 167 | ePN | Pn | 20 24 09.6 | +1.0 |
| AXAR | Agios Charalam | 3.75 | 167 | P | Pn | 20 24 09.7 | +1.1 |
| AXAR | | | | S | Sn | 20 24 53.7 | +0.8 |
| AXAR | Agios Charalam | 3.75 | 167 | P | Pn | 20 24 09.7 | +1.1 |
| AXAR | | | | S | Sn | 20 24 53.7 | +0.8 |
| SMIA | Simia | 3.75 | 160 | ePN | Pn | 20 24 09.2 | +0.5 |
| SMIA | Simia | 3.75 | 160 | ePN | Pn | 20 24 09.2 | +0.5 |
| BAI | Bari | 3.76 | 251 | ePn | Pn | 20 24 10.7 | +2.0 |
| PVO | Paravola | 3.81 | 181 | ePN | Pn | 20 24 12.6 | +3.2 |
| PVO | Paravola | 3.81 | 181 | ePN | Pn | 20 24 12.6 | +3.2 |
| ENEZ | Enez | 3.82 | 115 | eP | Pn | 20 24 10.1 | +0.5 |
| ENEZ | Enez | 3.82 | 115 | eP | Pn | 20 24 10.1 | +0.5 |
| PDO | Prodromos | 3.84 | 185 | ePN | Pn | 20 24 11.1 | +1.3 |
| PDO | Prodromos | 3.84 | 185 | ePN | Pn | 20 24 11.1 | +1.3 |
| PDO | Prodromos | 3.84 | 185 | P | Pn | 20 24 11.8 | +2.0 |
| PDO | | | | S | Sn | 20 24 56.6 | +1.5 |
| PDO | Prodromos | 3.84 | 185 | P | Pn | 20 24 11.8 | +2.0 |
| PDO | | | | S | Sn | 20 24 56.6 | +1.5 |
| EDRB | Edirne | 3.88 | 97 | eP | Pn | 20 24 11.3 | +0.9 |
| EDRB | Edirne | 3.88 | 97 | eP | Pn | 20 24 11.3 | +0.9 |
| VOIR | | 3.91 | 39 | ⇑iP | Pn | 20 24 11.8 | +0.9 |
| VOIR | | 3.91 | 39 | ⇑iP | Pn | 20 24 11.8 | +0.9 |
| LKR | Lokris | 3.92 | 164 | ePN | Pn | 20 24 11.9 | +0.9 |
| LKR | Lokris | 3.92 | 164 | ePN | Pn | 20 24 11.9 | +0.9 |
| GADA | Gvkgeada | 3.95 | 123 | eP | Pn | 20 24 12.7 | +1.4 |
| GADA | Gvkgeada | 3.95 | 123 | eP | Pn | 20 24 12.7 | +1.4 |
| SG1 | Sgolgore (BA) | 4.00 | 248 | ePn | Pn | 20 24 14.0 | +1.9 |
| EFP | Efpalio | 4.00 | 176 | ePN | Pn | 20 24 13.8 | +1.7 |
| EFP | Efpalio | 4.00 | 176 | ePN | Pn | 20 24 13.8 | +1.7 |
| EFP | Efpalio | 4.00 | 176 | P | Pn | 20 24 13.6 | +1.5 |
| EFP | | | | S | Sn | 20 25 00.3 | +1.1 |
| EFP | Efpalio | 4.00 | 176 | P | Pn | 20 24 13.6 | +1.5 |
| EFP | | | | S | Sn | 20 25 00.3 | +1.1 |
| SERG | Sergoula | 4.03 | 175 | P | Pn | 20 24 13.6 | +1.2 |
| SERG | | | | S | Sn | 20 25 00.9 | +1.1 |
| SERG | Sergoula | 4.03 | 175 | P | Pn | 20 24 13.6 | +1.2 |
| SERG | | | | S | Sn | 20 25 00.9 | +1.1 |
| KALE | Kalithea | 4.05 | 174 | ePN | Pn | 20 24 13.9 | +1.0 |
| KALE | Kalithea | 4.05 | 174 | ePN | Pn | 20 24 13.9 | +1.0 |
| KALE | Kalithea | 4.05 | 174 | P | Pn | 20 24 13.8 | +0.9 |
| KALE | | | | S | Sn | 20 25 01.5 | +0.9 |
| KALE | Kalithea | 4.05 | 174 | P | Pn | 20 24 13.8 | +0.9 |
| KALE | | | | S | Sn | 20 25 01.5 | +0.9 |
| SULR | | 4.07 | 55 | ⇓iP | Pg | 20 24 27.3 | -1.2 |
| DESF | Desfina | 4.08 | 169 | ePN | Pn | 20 24 13.9 | +0.7 |
| DESF | Desfina | 4.08 | 169 | ePN | Pn | 20 24 13.9 | +0.7 |
| DSF | Desfina | 4.08 | 169 | ePN | Pn | 20 24 13.5 | +0.3 |
| DSF | Desfina | 4.08 | 169 | ePN | Pn | 20 24 13.5 | +0.3 |
| ERIK | Erikli-Kesan | 4.10 | 114 | eP | Pn | 20 24 14.5 | +1.1 |
| ERIK | Erikli-Kesan | 4.10 | 114 | eP | Pn | 20 24 14.5 | +1.1 |
| SECR | | 4.17 | 50 | ⇓iP | Pn | 20 24 16.2 | +1.9 |
| SECR | | 4.17 | 50 | ⇓iP | Pn | 20 24 16.2 | +1.9 |
| CDT | Castel del Mon | 4.19 | 253 | ePn | Pn | 20 24 15.8 | +1.1 |
| LAKA | Lakka | 4.20 | 176 | ePN | Pn | 20 24 16.7 | +1.9 |
| LAKA | Lakka | 4.20 | 176 | ePN | Pn | 20 24 16.7 | +1.9 |
| GELI | Tayfur-Gelibol | 4.20 | 117 | eP | Pn | 20 24 15.8 | +1.0 |
| GELI | Tayfur-Gelibol | 4.20 | 117 | eP | Pn | 20 24 15.8 | +1.0 |
| MS1 | Monte Sant'Ang | 4.26 | 262 | ePn | Pn | 20 24 15.7 | 0.0 |
| VLS | Valsamata | 4.31 | 190 | ePN | Pn | 20 24 16.3 | -0.1 |
| VLS | Valsamata | 4.31 | 190 | ePN | Pn | 20 24 16.3 | -0.1 |
| RLS | Riolos of Patr | 4.37 | 181 | ePN | Pn | 20 24 18.2 | +1.1 |
| RLS | Riolos of Patr | 4.37 | 181 | ePN | Pn | 20 24 18.2 | +1.1 |
| EREA | Eretria | 4.39 | 155 | ePN | Pn | 20 24 17.3 | -0.1 |
| EREA | Eretria | 4.39 | 155 | ePN | Pn | 20 24 17.3 | -0.1 |
| MLR | Muntele Rosu | 4.39 | 44 | ⇑iP | Pn | 20 24 20.3 | +2.7 |
| MLR | Muntele Rosu | 4.39 | 44 | ⇑iP | Pn | 20 24 20.3 | +2.7 |
| LPK | Lapseki | 4.40 | 116 | eP | Pn | 20 24 18.6 | +1.0 |
| LPK | Lapseki | 4.40 | 116 | eP | Pn | 20 24 18.6 | +1.0 |
| VIL2 | Platees | 4.41 | 162 | ePN | Pn | 20 24 19.2 | +1.6 |
| VIL2 | Platees | 4.41 | 162 | ePN | Pn | 20 24 19.2 | +1.6 |
| PKS6 | Bocsa | 4.41 | 342 | ⇑ePKPdf | Pn | 20 24 17.9 | +0.2 |
| PKS6 | | | | ePKKPdf | Sn | 20 25 10.2 | +1.0 |
| PKS6 | Bocsa | 4.41 | 342 | ⇑ePn | Pn | 20 24 17.9 | +0.2 |
| PKS6 | | | | eSn | Sn | 20 25 10.2 | +1.0 |
| EZN | Ezine | 4.43 | 124 | eP | Pn | 20 24 19.0 | +1.1 |
| EZN | Ezine | 4.43 | 124 | eP | Pn | 20 24 19.0 | +1.1 |
| DRGR | | 4.44 | 10 | ⇓iP | Pn | 20 24 18.9 | +0.8 |
| DRGR | | 4.44 | 10 | ⇓iP | Pn | 20 24 18.9 | +0.8 |
| DRO | Drossia | 4.47 | 179 | ePN | Pn | 20 24 20.1 | +1.5 |
| DRO | Drossia | 4.47 | 179 | ePN | Pn | 20 24 20.1 | +1.5 |
| DOPR | Dopca | 4.47 | 36 | ⇑iP | Pn | 20 24 19.8 | +1.2 |
| DOPR | Dopca | 4.47 | 36 | ⇑iP | Pn | 20 24 19.8 | +1.2 |
| PHSR | Pinarhisar | 4.50 | 98 | eP | Pn | 20 24 20.1 | +1.3 |
| PHSR | Pinarhisar | 4.50 | 98 | eP | Pn | 20 24 20.2 | +1.3 |
| CJR | Cluj-Napoca | 4.52 | 18 | ⇓iP | Pn | 20 24 21.5 | +2.3 |
| CJR | Cluj-Napoca | 4.52 | 18 | ⇓iP | Pn | 20 24 21.5 | +2.3 |
| GUR | Goura | 4.53 | 172 | ePN | Pn | 20 24 19.5 | +0.1 |
| GUR | Goura | 4.53 | 172 | ePN | Pn | 20 24 19.5 | +0.1 |
| LTK | Loutraki | 4.53 | 166 | ePN | Pn | 20 24 20.1 | +0.8 |
| LTK | Loutraki | 4.53 | 166 | ePN | Pn | 20 24 20.1 | +0.8 |
| RKY | Sarkoy-Tekirda | 4.54 | 111 | eP | Pn | 20 24 20.6 | +1.0 |
| RKY | Sarkoy-Tekirda | 4.54 | 111 | eP | Pn | 20 24 20.6 | +1.0 |
| LOUT | Loutraki | 4.56 | 166 | ePN | Pn | 20 24 19.7 | -0.1 |
| LOUT | Loutraki | 4.56 | 166 | ePN | Pn | 20 24 19.7 | -0.1 |
| SIGR | SIGRI | 4.56 | 133 | eP | Pn | 20 24 22.0 | +2.2 |
| SIGR | SIGRI | 4.56 | 133 | ePN | Pn | 20 24 20.3 | +0.5 |
| SIGR | SIGRI | 4.56 | 133 | ePN | Pn | 20 24 20.3 | +0.5 |
| SIGR | SIGRI | 4.56 | 133 | eP | Pn | 20 24 22.0 | +2.2 |
| PKSN | Nyarlorinc | 4.63 | 345 | ⇓ePKPdf | Pn | 20 24 21.4 | +0.7 |
| PKSN | Nyarlorinc | 4.63 | 345 | ⇓ePn | Pn | 20 24 21.4 | +0.7 |
| TKR | Tekirdag | 4.68 | 106 | eP | Pb | 20 24 35.1 | +2.3 |
| KRBG | Karabiga-Canak | 4.75 | 113 | eP | Pn | 20 24 23.7 | +1.3 |
| KRBG | Karabiga-Canak | 4.75 | 113 | eP | Pn | 20 24 23.7 | +1.3 |
| PRK | Paraskevi | 4.77 | 130 | ePN | Pn | 20 24 23.7 | +1.1 |
| PRK | Paraskevi | 4.77 | 130 | ePN | Pn | 20 24 23.7 | +1.1 |
| MRMT | Marmara Adasi | 4.87 | 110 | eP | Pn | 20 24 24.5 | +0.4 |
| MRMT | Marmara Adasi | 4.87 | 110 | eP | Pn | 20 24 24.5 | +0.4 |
| VLY | Voula,Athens | 4.88 | 159 | ePN | Pn | 20 24 25.1 | +1.0 |
| VLY | Voula,Athens | 4.88 | 159 | ePN | Pn | 20 24 25.1 | +1.0 |
| NAIG | Nisos Aigina | 4.89 | 162 | ePN | Pn | 20 24 25.1 | +0.8 |
| NAIG | Nisos Aigina | 4.89 | 162 | ePN | Pn | 20 24 25.1 | +0.8 |
| AMT | Artemida-Makis | 4.89 | 179 | ePN | Pn | 20 24 25.6 | +1.3 |
| AMT | Artemida-Makis | 4.89 | 179 | ePN | Pn | 20 24 25.6 | +1.3 |
| TIP | Timpagrande | 4.89 | 230 | ePn | Pn | 20 24 23.7 | -0.7 |
| TIP | Timpagrande | 4.89 | 230 | ePn | Pn | 20 24 23.7 | -0.7 |
| PKS7 | Kunszentmiklos | 4.93 | 340 | ⇓ePKPdf | Pn | 20 24 25.4 | +0.6 |
| PKS7 | | | | ePKKPbc | Sn | 20 25 22.1 | +0.1 |
| PKS7 | Kunszentmiklos | 4.93 | 340 | ⇓ePn | Pn | 20 24 25.4 | +0.6 |
| PKS7 | | | | eSn | Sn | 20 25 22.1 | +0.1 |
| CUC | Castrocucco | 4.98 | 243 | ePn | Pn | 20 24 26.1 | +0.5 |
| CUC | Castrocucco | 4.98 | 243 | ePn | Pn | 20 24 26.1 | +0.5 |
| PLOR | Plostina | 5.00 | 45 | ⇑iP | Pn | 20 24 28.8 | +3.0 |
| PLOR | Plostina | 5.00 | 45 | ⇑iP | Pn | 20 24 28.8 | +3.0 |
| VRI | Vrincioaia | 5.05 | 45 | ⇑iP | Pn | 20 24 28.5 | +2.0 |
| VRI | Vrincioaia | 5.05 | 45 | ⇑iP | Pn | 20 24 28.5 | +2.0 |
| VRI | | | | S | Sn | 20 25 28.7 | +3.7 |
| ARCR | ARCALIA | 5.06 | 22 | ⇑iP | Pg | 20 24 50.8 | +3.5 |
| DID | Didima | 5.08 | 165 | ePN | Pn | 20 24 27.7 | +0.8 |
| DID | Didima | 5.08 | 165 | ePN | Pn | 20 24 27.7 | +0.8 |
| CTYL | Yal??k??y-??at | 5.09 | 99 | eP | Pn | 20 24 28.4 | +1.4 |
| CTYL | Yal??k??y-??at | 5.09 | 99 | eP | Pn | 20 24 28.4 | +1.4 |
| DIDY | Didyma | 5.10 | 165 | ePN | Pn | 20 24 26.7 | -0.6 |
| DIDY | Didyma | 5.10 | 165 | ePN | Pn | 20 24 26.7 | -0.6 |
| EDC | Edincik | 5.16 | 112 | eP | Pn | 20 24 29.6 | +1.6 |
| EDC | Edincik | 5.16 | 112 | eP | Pn | 20 24 29.6 | +1.6 |
| KRND | KRANIDI | 5.18 | 166 | ePN | Pn | 20 24 28.8 | +0.5 |
| KRND | KRANIDI | 5.18 | 166 | ePN | Pn | 20 24 28.8 | +0.5 |
| ITM | Ithomi | 5.25 | 177 | ePN | Pn | 20 24 30.8 | +1.6 |
| ITM | Ithomi | 5.25 | 177 | ePN | Pn | 20 24 30.8 | +1.6 |
| DKL | Dikili | 5.25 | 128 | eP | Pn | 20 24 31.3 | +2.1 |
| DKL | Dikili | 5.25 | 128 | eP | Pn | 20 24 31.3 | +2.1 |
| CHOS | Chios island | 5.29 | 138 | ePN | Pn | 20 24 31.5 | +1.7 |
| CHOS | Chios island | 5.29 | 138 | ePN | Pn | 20 24 30.9 | +1.1 |
| CHOS | Chios island | 5.29 | 138 | ePN | Pn | 20 24 30.9 | +1.1 |
| CHOS | Chios island | 5.29 | 138 | eP | Pn | 20 24 31.5 | +1.7 |
| BEHE | Becsehely | 5.31 | 321 | ⇑e | Pn | 20 24 31.3 | +1.3 |
| BEHE | | | | eSn | Sn | 20 25 32.1 | +0.8 |
| BEHE | Becsehely | 5.31 | 321 | ⇑ePn | Pn | 20 24 31.3 | +1.3 |
| BEHE | | | | eSn | Sn | 20 25 32.1 | +0.8 |
| CTKS | Kestanelik-??a | 5.31 | 101 | eP | Pn | 20 24 30.9 | +0.9 |
| CTKS | Kestanelik-??a | 5.31 | 101 | eP | Pn | 20 24 30.9 | +0.9 |
| BUD | Budapest | 5.37 | 341 | ⇓ef | | 20 24 31.5 | |
| BUD | | | | eSn | Sn | 20 25 33.9 | +1.1 |
| BUD | Budapest | 5.37 | 341 | ⇓ePn | Pn | 20 24 31.5 | +0.7 |
| BUD | | | | eSn | Sn | 20 25 33.9 | +1.1 |
| TIRR | Tirgusor | 5.37 | 65 | ⇓iP | Pn | 20 24 31.4 | +0.5 |
| TIRR | Tirgusor | 5.37 | 65 | ⇓iP | Pn | 20 24 31.4 | +0.5 |
| PKST | T``s | 5.45 | 334 | ePn | Pn | 20 24 32.3 | +0.4 |
| PKST | | | | eSn | Sn | 20 25 35.5 | +0.7 |
| PKST | T``s | 5.45 | 334 | ePn | Pn | 20 24 32.3 | +0.4 |
| PKST | | | | eSn | Sn | 20 25 35.5 | +0.7 |
| TESR | Tescani | 5.46 | 40 | ⇓iP | Pn | 20 24 34.7 | +2.6 |
| BALB | Balikesir | 5.52 | 118 | eP | Pn | 20 24 34.9 | +2.0 |
| BGKT | Bogazkoy | 5.52 | 101 | eP | Pn | 20 24 34.1 | +1.2 |
| PYL | PYLOS | 5.53 | 179 | ePN | Pn | 20 24 33.2 | +0.2 |
| PYL | PYLOS | 5.53 | 179 | ePN | Pn | 20 24 33.2 | +0.2 |
| KCTX | Karacabey (Bur | 5.54 | 111 | eP | Pn | 20 24 34.8 | +1.6 |
| PSZ | Piszkesteto | 5.62 | 348 | eP | Pn | 20 24 34.2 | -0.1 |
| PSZ | Piszkesteto | 5.62 | 348 | ⇓iP | Pn | 20 24 33.8 | -0.5 |
| PSZ | Piszkesteto | 5.62 | 348 | ⇑ePKPdf | Pn | 20 24 34.4 | +0.1 |
| PSZ | Piszkesteto | 5.62 | 348 | ePn | Pn | 20 24 34.2 | -0.1 |
| PSZ | Piszkesteto | 5.62 | 348 | eP | Pn | 20 24 34.2 | -0.1 |
| KLYT | Kilyos | 5.70 | 99 | eP | Pn | 20 24 37.5 | +2.2 |
| TRPA | Tarpa | 5.74 | 6 | ⇑iP | Pn | 20 24 36.8 | +0.9 |
| TRPA | Tarpa | 5.74 | 6 | ⇓ePKPab | Pn | 20 24 38.5 | +2.6 |
| TRPA | Tarpa | 5.74 | 6 | ⇓ePn | Pn | 20 24 38.5 | +2.6 |
| ISK | Istanbul-Kandi | 5.76 | 101 | eP | Pn | 20 24 37.9 | +1.8 |
| ARMT | Armutlu | 5.78 | 106 | eP | Pn | 20 24 38.5 | +2.0 |
| BURAR | Bucovina Array | 5.79 | 25 | ⇑iP | Pn | 20 24 38.5 | +1.8 |
| VLI | Veliai | 5.80 | 169 | ePN | Pn | 20 24 37.7 | +0.9 |
| VLI | Veliai | 5.80 | 169 | ePN | Pn | 20 24 37.7 | +0.9 |
| MDNY | Mudanya-Bursa | 5.86 | 108 | eP | Pn | 20 24 40.3 | +2.6 |
| TLCR | | 5.92 | 60 | ⇓iP | Pn | 20 24 39.2 | +0.9 |
| IZM | Izmir | 5.92 | 131 | eP | Pn | 20 24 40.5 | +2.1 |
| APE | Apeiranthos | 6.16 | 149 | eP | Pn | 20 24 39.1 | -2.6 |
| APE | Apeiranthos | 6.16 | 149 | ePN | Pn | 20 24 42.0 | +0.3 |
| APE | Apeiranthos | 6.16 | 149 | ePN | Pn | 20 24 42.0 | +0.3 |
| SILT | Sile | 6.16 | 99 | eP | Pn | 20 24 43.3 | +1.6 |
| SMG | Samos | 6.20 | 138 | ePN | Pn | 20 24 43.1 | +0.8 |
| SMG | Samos | 6.20 | 138 | ePN | Pn | 20 24 43.1 | +0.8 |
| UZH | Uzhgorod | 6.22 | 4 | eP | Pn | 20 24 45.5 | +3.0 |
| UZH | | | | eS | Sn | 20 25 58.9 | +5.1 |
| IZI | Iznik | 6.29 | 107 | eP | Pn | 20 24 44.5 | +0.9 |
| SOKA | Soboth | 6.32 | 314 | ⇑iPn | Pn | 20 24 44.0 | +0.1 |
| SOP | Sopron | 6.34 | 328 | ⇓epPKPdf | Pn | 20 24 45.5 | +1.3 |
| SOP | | | | eSn | Sn | 20 25 56.2 | -0.6 |
| SOP | Sopron | 6.34 | 328 | ⇓ePn | Pn | 20 24 45.5 | +1.3 |
| SOP | | | | eSn | Sn | 20 25 56.2 | -0.6 |
| VYHS | Vyhne | 6.37 | 343 | eP | Pn | 20 24 45.6 | +1.1 |
| VYHS | Vyhne | 6.37 | 343 | ePN | Pn | 20 24 45.6 | +1.1 |
| VYHS | Vyhne | 6.37 | 343 | eP | Pn | 20 24 45.6 | +1.1 |
| ADVT | Abdulvahap | 6.45 | 105 | eP | Pn | 20 24 47.0 | +1.4 |
| ARSA | Arzberg | 6.46 | 320 | ⇑iPn | Pn | 20 24 45.8 | -0.1 |
| OBKA | Obir | 6.48 | 311 | ⇑iPn | Pn | 20 24 46.6 | +0.5 |
| TRI | Trieste | 6.51 | 303 | eP | Pn | 20 24 50.3 | +3.7 |
| TRI | | | | pmax | pmax | | |
| | comp=Z,29nm,0.6s | | | | | | |
| TRI | Trieste | 6.51 | 303 | ePn | Pn | 20 24 50.3 | +3.7 |
| | comp=Z,29nm,0.6s | | | | | | |
| TRI | Trieste | 6.51 | 303 | ePn | Pn | 20 24 50.3 | +3.7 |
| | comp=Z,29nm,0.6s | | | | | | |
| KOLS | Kolonicke sedl | 6.52 | 4 | eP | Pn | 20 24 48.4 | +1.7 |
| KOLS | | | | MLR | MLR | | |
| | comp=Z,100nm,1.3s | | | | | | |
| KOLS | Kolonicke sedl | 6.52 | 4 | ePN | Pn | 20 24 48.4 | +1.7 |
| KOLS | | | | e | | 20 26 39.9 | |
| KOLS | Kolonicke sedl | 6.52 | 4 | eP | Pn | 20 24 48.4 | +1.7 |
| | comp=Z,100nm,1.3s | | | | | | |
| KOLS | | | | eSg | Sg | 20 26 39.9 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 6.58 | 131 | eP | Pn | 20 24 50.0 | +2.4 |
| KULA | Kula-Manisa | 6.66 | 124 | eP | Pn | 20 24 50.9 | +2.1 |
| SMOL | Smolenice | 6.75 | 336 | eP | Pn | 20 24 50.9 | +1.1 |
| SMOL | Smolenice | 6.75 | 336 | eP | Pn | 20 24 50.9 | +1.1 |
| SMOL | Smolenice | 6.75 | 336 | ePN | Pn | 20 24 50.9 | +1.1 |
| SMOL | Smolenice | 6.75 | 336 | eP | Pn | 20 24 50.9 | +1.1 |
| LANS | Liptovska Anna | 6.88 | 348 | eP | Pn | 20 24 53.8 | +2.1 |
| LANS | Liptovska Anna | 6.88 | 348 | ePN | Pn | 20 24 53.8 | +2.1 |
| LANS | Liptovska Anna | 6.88 | 348 | eP | Pn | 20 24 53.8 | +2.1 |
| STHS | Stebnicka Huta | 6.99 | 358 | eP | Pn | 20 24 55.4 | +2.2 |
| STHS | Stebnicka Huta | 6.99 | 358 | ePN | Pn | 20 24 55.4 | +2.2 |
| STHS | Stebnicka Huta | 6.99 | 358 | eP | Pn | 20 24 55.4 | +2.2 |
| GULT | Gulveren | 7.00 | 104 | eP | Pn | 20 24 55.3 | +1.9 |
| NIE | Niedzica | 7.05 | 353 | ePn | Pn | 20 24 56.1 | +2.2 |
| NIE | Niedzica | 7.05 | 353 | eP | Pn | 20 24 56.1 | +2.2 |
| KWP | Kalwaria Pacla | 7.25 | 6 | ePn | Pn | 20 25 00.2 | +3.6 |
| KWP | Kalwaria Pacla | 7.25 | 6 | eP | Pn | 20 25 00.2 | +3.6 |
| KBA | Koelnbreinsper | 7.48 | 311 | ePn | Pn | 20 25 03.9 | +3.9 |
| KBA | Koelnbreinsper | 7.48 | 311 | ePn | Pn | 20 25 03.9 | +3.9 |
| MOA | Molln | 7.49 | 319 | ePn | Pn | 20 25 03.3 | +3.3 |
| MOA | | | | eSn | Sn | 20 26 28.5 | +3.4 |
| MOA | Molln | 7.49 | 319 | ePn | Pn | 20 25 03.3 | +3.3 |
| MOA | | | | eSn | Sn | 20 26 28.5 | +3.4 |
| IDI | Anoyia | 7.58 | 159 | Pn | Pn | 20 25 04.3 | +3.0 |
| | comp=Z,1.2nm,0.3s,baz=326,slow=11,SNR=6.4 | | | | | | |
| IDI | | | | Sn | Sn | 20 26 30.1 | +2.7 |
| | baz=354,slow=19,SNR=2.1 | | | | | | |
| VRAC | Vranov | 7.71 | 335 | Pn | Pn | 20 25 03.8 | +0.8 |
| | comp=Z,1.6nm,0.3s,baz=163,slow=12,SNR=12 | | | | | | |
| VRAC | | | | Sn | Sn | 20 26 28.7 | -1.7 |
| | comp=Z,1.2nm,0.3s,baz=84,slow=12,SNR=7.0 | | | | | | |
| VRAC | | | | LR | LR | 20 28 18.2 | |
| | comp=Z,124nm,18.7s,baz=136,slow=40 | | | | | | |
| VRAC | Vranov | 7.71 | 335 | P | Pn | 20 25 03.8 | +0.8 |
| VRAC | | | | | | 20 26 28.7 | |
| VRAC | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| VRAC | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| VRAC | | | | MLR | MLR | | |
| | comp=Z,124nm,18.7s | | | | | | |
| VRAC | Vranov | 7.71 | 335 | P | Pn | 20 25 03.8 | +0.8 |
| | comp=Z,2.0nm,0.3s | | | | | | |
| VRAC | | | | Sn | Sn | 20 26 28.7 | -1.7 |
| VRAC | | | | S | Sn | 20 26 31.7 | +1.3 |
| OKC | Ostrava-Krasne | 7.78 | 343 | eP | Pn | 20 25 04.7 | +0.7 |
| OKC | | | | e | | 20 26 31.3 | |
| OKC | | | | MLR | MLR | | |
| | comp=Z,500nm,5.7s | | | | | | |
| OKC | Ostrava-Krasne | 7.78 | 343 | ePN | Pn | 20 25 04.7 | +0.7 |
| OKC | | | | ex | x | 20 25 07.9 | |
| OKC | | | | eSN | Sn | 20 26 31.3 | -0.9 |
| OKC | | | | AMS | AMS | 20 27 40.0 | |
| | comp=Z,500nm,5.7s | | | | | | |
| OKC | Ostrava-Krasne | 7.78 | 343 | Pn | Pn | 20 25 04.7 | +0.7 |
| OKC | | | | Sn | Sn | 20 26 31.3 | -0.9 |
| SHUT | Suhut-Afyon | 7.85 | 117 | eP | Pn | 20 25 06.7 | +1.6 |
| MORC | Moravsky Berou | 7.87 | 341 | eP | Pn | 20 25 06.7 | +1.5 |
| MORC | | | | pmax | pmax | | |
| | comp=Z,43nm,0.8s | | | | | | |
| MORC | Moravsky Berou | 7.87 | 341 | ⇑iP | Pn | 20 24 59.5 | -5.7 |
| MORC | Moravsky Berou | 7.87 | 341 | ePn | Pn | 20 25 06.7 | +1.5 |
| | comp=Z,43nm,0.8s | | | | | | |
| MORC | Moravsky Berou | 7.87 | 341 | eP | Pn | 20 25 06.7 | +1.5 |
| | comp=Z,43nm,0.8s | | | | | | |
| OJC | Ojcow | 7.89 | 352 | ePn | Pn | 20 25 10.4 | +5.0 |
| OJC | Ojcow | 7.89 | 352 | eP | Pn | 20 25 10.5 | +5.0 |
| CLTB | Caltabellotta | 8.04 | 236 | ePn | Pn | 20 25 09.2 | +1.6 |
| | comp=Z,10nm,0.8s | | | | | | |
| CLTB | Caltabellotta | 8.04 | 236 | ePn | Pn | 20 25 09.2 | +1.6 |
| | comp=Z,10nm,0.8s | | | | | | |
| RJOB | Jochberg | 8.17 | 314 | ePn | Pn | 20 25 13.0 | +3.7 |
| RJOB | | | | eSn | Sn | 20 26 41.7 | -0.2 |
| RJOB | Jochberg | 8.17 | 314 | ePn | Pn | 20 25 13.0 | +3.7 |
| RJOB | | | | eSn | Sn | 20 26 41.7 | -0.2 |
| KRLC | Kraliky | 8.34 | 338 | eP | Pn | 20 25 12.6 | +1.0 |
| KRLC | | | | e | | 20 26 44.2 | |
| KRLC | Kraliky | 8.34 | 338 | ePN | Pn | 20 25 12.6 | +1.0 |
| KRLC | | | | eSN | Sn | 20 26 44.2 | -1.7 |
| KRLC | Kraliky | 8.34 | 338 | Pn | Pn | 20 25 12.6 | +1.0 |
| GERES | GERESS Array B | 8.46 | 322 | Pn | Pn | 20 25 14.4 | +1.1 |
| | comp=Z,0.8nm,0.3s,baz=148,slow=14,SNR=31 | | | | | | |
| GERES | | | | Sn | Sn | 20 26 48.1 | -0.9 |
| | baz=151,slow=20,SNR=2.0 | | | | | | |
| GERES | | | | LR | LR | 20 28 42.9 | |
| | comp=Z,123nm,19.8s,baz=144,slow=39 | | | | | | |
| GERES | GERESS Array B | 8.46 | 322 | P | Pn | 20 25 14.4 | +1.1 |
| GERES | | | | | | 20 26 48.1 | |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| GERES | | | | MLR | MLR | | |
| | comp=Z,123nm,19.8s | | | | | | |
| WTTA | Wattenberg | 8.56 | 308 | ePn | Pn | 20 25 17.5 | +2.7 |
| WTTA | Wattenberg | 8.56 | 308 | ePn | Pn | 20 25 17.5 | +2.7 |
| DPC | Dobruska-Polom | 8.71 | 337 | eP | Pn | 20 25 17.2 | +0.4 |
| DPC | | | | e | | 20 26 53.4 | |
| DPC | Dobruska-Polom | 8.71 | 337 | ePN | Pn | 20 25 17.2 | +0.4 |
| DPC | | | | ex | x | 20 25 21.3 | |
| DPC | | | | eSN | Sn | 20 26 53.4 | -1.8 |
| DPC | | | | ex | x | 20 27 08.2 | |
| DPC | Dobruska-Polom | 8.71 | 337 | Pn | Pn | 20 25 17.2 | +0.4 |
| KHC | Kasperske Hory | 8.72 | 323 | eP | Pn | 20 25 17.5 | +0.6 |
| KHC | | | | e | | 20 26 53.6 | |
| KHC | Kasperske Hory | 8.72 | 323 | ePN | Pn | 20 25 17.5 | +0.6 |
| KHC | | | | ex | x | 20 25 20.6 | |
| KHC | | | | eSN | Sn | 20 26 53.6 | -1.9 |
| KHC | | | | ex | x | 20 27 06.4 | |
| KHC | Kasperske Hory | 8.72 | 323 | ePn | Pn | 20 25 17.9 | +0.9 |
| KHC | Kasperske Hory | 8.72 | 323 | ePn | Pn | 20 25 17.9 | +0.9 |
| GOPC | GO Pecny, Ondr | 8.84 | 330 | eP | Pn | 20 25 19.2 | +0.7 |
| GOPC | | | | e | | 20 26 56.3 | |
| GOPC | GO Pecny, Ondr | 8.84 | 330 | ePN | Pn | 20 25 19.2 | +0.7 |
| GOPC | | | | eSN | Sn | 20 26 56.3 | -2.0 |
| GOPC | | | | ex | x | 20 27 10.5 | |
| GOPC | GO Pecny, Ondr | 8.84 | 330 | Pn | Pn | 20 25 19.2 | +0.7 |
| UPC | Upice | 8.95 | 337 | eP | Pn | 20 25 20.5 | +0.6 |
| UPC | | | | e | | 20 27 06.4 | |
| UPC | Upice | 8.95 | 337 | ePN | Pn | 20 25 20.5 | +0.6 |
| UPC | | | | ex | x | 20 25 24.7 | |
| UPC | | | | eSN | Sn | 20 26 57.2 | -3.6 |
| UPC | | | | ex | x | 20 27 06.4 | |
| UPC | Upice | 8.95 | 337 | Pn | Pn | 20 25 20.5 | +0.6 |
| PRU | Pruhonice | 8.99 | 330 | eP | Pn | 20 25 21.7 | +1.1 |
| PRU | | | | e | | 20 27 00.0 | |
| PRU | | | | MLR | MLR | | |
| | comp=Z,500nm,7.8s | | | | | | |
| PRU | Pruhonice | 8.99 | 330 | ePN | Pn | 20 25 21.7 | +1.1 |
| PRU | | | | ex | x | 20 25 27.6 | |
| PRU | | | | eSN | Sn | 20 27 00.0 | -2.0 |
| PRU | | | | ex | x | 20 28 07.0 | |
| PRU | | | | AMS | AMS | 20 29 00.0 | |
| | comp=Z,500nm,7.8s | | | | | | |
| PRU | Pruhonice | 8.99 | 330 | Pn | Pn | 20 25 21.7 | +1.1 |
| WET | Wettzell | 9.05 | 321 | ePn | Pn | 20 25 25.3 | +3.8 |
| WET | Wettzell | 9.05 | 321 | ePn | Pn | 20 25 25.3 | +3.8 |
| PRA | Prague | 9.10 | 330 | eP | Pn | 20 25 22.9 | +0.9 |
| PRA | | | | e | | 20 27 01.9 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRA** | **Prague** | **9.10** | **330** | *e*PN | **Pn** | **20 25 22.9** | **+0.9** |
| PRA | | | | *e*x | x | 20 25 33.1 | |
| PRA | | | | *e*SN | **Sn** | **20 27 01.9** | **-2.7** |
| **PRA** | **Prague** | **9.10** | **330** | Pn | **Pn** | **20 25 22.9** | **+0.9** |
| **FUR** | **Furstenfeldbru** | **9.25** | **312** | *e*Pn | Pn | 20 25 28.1 | +4.0 |
| FUR | | | | *e*Sn | **Sn** | **20 27 05.9** | **-2.5** |
| **FUR** | **Furstenfeldbru** | **9.25** | **312** | *e*Pn | Pn | 20 25 28.1 | +4.0 |
| FUR | | | | *e*Sn | **Sn** | **20 27 05.9** | **-2.5** |
| **PGF** | **Pioggiola** | **9.30** | **275** | *e*Pn | **Pn** | **20 25 22.8** | **-2.1** |
| **DAVOX** | **Davos/Dischmat** | **9.41** | **302** | Pn | **Pn** | **20 25 27.8** | **+1.3** |
| | comp=Z,1.1nm,0.3s,baz=152,slow=17,SNR=12 | | | | | | |
| DAVOX | | | | Sn | **Sn** | **20 27 13.1** | **+0.6** |
| | baz=106,slow=20 | | | | | | |
| DAVOX | | | | Lg | Lg | 20 28 01.5 | |
| | baz=168,slow=20,SNR=1.9 | | | | | | |
| DAVOX | | | | LR | LR | 20 29 46.1 | |
| | comp=Z,187nm,19.4s,baz=112,slow=42 | | | | | | |
| **PVCC** | **Panska Ves** | **9.43** | **332** | *e*P | **Pn** | **20 25 26.6** | **0.0** |
| PVCC | | | | *e* | | 20 27 10.2 | |
| PVCC | | | | smax | smax | | |
| | comp=N,4.0nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **9.43** | **332** | *e*PN | **Pn** | **20 25 26.6** | **0.0** |
| PVCC | | | | *e*SN | **Sn** | **20 27 10.2** | **-2.5** |
| **PVCC** | **Panska Ves** | **9.43** | **332** | Pn | **Pn** | **20 25 26.6** | **0.0** |
| **BRTR** | **Keskin Array B** | **9.50** | **102** | Pn | **Pn** | **20 25 28.4** | **+0.8** |
| | comp=N,0.2nm,0.3s,baz=284,slow=12,SNR=5.8 | | | | | | |
| BRTR | | | | Sn | **Sn** | **20 27 14.9** | **+0.3** |
| | comp=N,0.1nm,0.3s,baz=286,slow=16,SNR=2.5 | | | | | | |
| BRTR | | | | Lg | Lg | 20 28 13.8 | |
| | baz=296,slow=20,SNR=3.0 | | | | | | |
| **DAVA** | **Damuels** | **9.62** | **304** | *e*Pn | Pn | 20 25 33.7 | +4.4 |
| **DAVA** | **Damuels** | **9.62** | **304** | *e*Pn | Pn | 20 25 33.7 | +4.4 |
| **TUE** | **Stuetta** | **9.64** | **299** | *e*Pn | **Pn** | **20 25 32.1** | **+2.5** |
| | comp=N,14nm,0.8s | | | | | | |
| **TUE** | **Stuetta** | **9.64** | **299** | *e*Pn | **Pn** | **20 25 32.1** | **+2.5** |
| | comp=N,14nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | **9.79** | **30** | *e*P | **Pn** | **20 25 33.6** | **+2.2** |
| **KIEV** | **Kiev** | **9.79** | **30** | *e*P | **Pn** | **20 25 33.6** | **+2.2** |
| **AKASG** | **Malin Array Be** | **9.80** | **30** | Pn | **Pn** | **20 25 31.7** | **+0.1** |
| | comp=N,0.6nm,0.3s,baz=215,slow=12,SNR=4.8 | | | | | | |
| AKASG | | | | Lg | Lg | 20 28 20.5 | |
| | baz=225,slow=28,SNR=3.2 | | | | | | |
| **MANZ** | **Manzenberg** | **10.01** | **322** | *e*Pn | Pn | 20 25 37.7 | +3.3 |
| **MANZ** | **Manzenberg** | **10.01** | **322** | *e*Pn | Pn | 20 25 37.7 | +3.3 |
| **ROHR** | **Rohrbach** | **10.09** | **324** | *e*Pn | **Pn** | **20 25 35.4** | **-0.2** |
| **ROHR** | **Rohrbach** | **10.09** | **324** | *e*Pn | **Pn** | **20 25 35.4** | **-0.2** |
| **SBF** | **Sospel** | **10.44** | **283** | *e*Pn | **Pn** | **20 25 38.6** | **-1.9** |
| **SBF** | **Sospel** | **10.44** | **283** | *e*P | Pn | 20 25 44.4 | +3.9 |
| **CLL** | **Collm** | **10.64** | **330** | *e*P | **Pn** | **20 25 46.0** | **+2.9** |
| **CLL** | **Collm** | **10.64** | **330** | *e*(Pn) | **Pn** | **20 25 46.0** | **+2.9** |
| CLL | | | | *i* Sn | Sn | 20 27 24.7 | -18 |
| CLL | | | | *e* | | 20 27 43.0 | |
| CLL | | | | *e*(Sb) | | 20 28 00.0 | |
| CLL | | | | *e* | | 20 28 34.0 | |
| CLL | | | | *e*Sg | | 20 29 00.0 | |
| **CLL** | **Collm** | **10.64** | **330** | *e*P | **Pn** | **20 25 46.0** | **+2.9** |
| **MOX** | **Moxa** | **10.70** | **324** | *e*Pn | **Pn** | **20 25 44.9** | **+1.0** |
| **MOX** | **Moxa** | **10.70** | **324** | *e*Pn | **Pn** | **20 25 44.9** | **+1.0** |
| **STU** | **Stuttgart** | **10.74** | **310** | *e*Pn | Pn | 20 25 47.7 | +3.1 |
| **STU** | **Stuttgart** | **10.74** | **310** | *e*Pn | Pn | 20 25 47.7 | +3.1 |
| **SCHD** | **Schmiedefeld** | **10.80** | **322** | *e*Pn | **Pn** | **20 25 47.8** | **+2.5** |
| **SCHD** | **Schmiedefeld** | **10.80** | **322** | *e*Pn | **Pn** | **20 25 47.8** | **+2.5** |
| **MBDF** | **Montbardon** | **10.99** | **287** | *e*Pn | **Pn** | **20 25 46.0** | **-2.1** |
| MBDF | | | | *e*Sn | Sn | 20 27 42.4 | -8.8 |
| | comp=N,5.7nm,0.7s | | | | | | |
| **FRF** | **La Foret Royal** | **11.00** | **281** | *e*Pn | **Pn** | **20 25 46.7** | **-1.4** |
| **BFO** | **Black Forest** | **11.03** | **307** | *e*P | **Pn** | **20 25 49.1** | **+0.7** |
| BFO | | | | pmax | pmax | | |
| | comp=Z,13nm,0.4s | | | | | | |
| **BFO** | **Black Forest** | **11.03** | **307** | *e*Pn | **Pn** | **20 25 49.4** | **+1.0** |
| **BFO** | **Black Forest** | **11.03** | **307** | *e*Pn | **Pn** | **20 25 49.4** | **+1.0** |
| **BFO** | **Black Forest** | **11.03** | **307** | *e*Pn | **Pn** | **20 25 49.0** | **+0.7** |
| | comp=Z,13nm,0.4s | | | | | | |
| **BFO** | **Black Forest** | **11.03** | **307** | *e*P | **Pn** | **20 25 49.1** | **+0.7** |
| | comp=Z,13nm,0.4s | | | | | | |
| **BNI** | **Bardonecchia** | **11.10** | **289** | *e*P | **Pn** | **20 25 49.3** | **-0.2** |
| BNI | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **BNI** | **Bardonecchia** | **11.10** | **289** | *e*Pn | **Pn** | **20 25 49.3** | **-0.2** |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **BNI** | **Bardonecchia** | **11.10** | **289** | *e*P | **Pn** | **20 25 49.3** | **-0.2** |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **LMR** | **La Mourre** | **11.10** | **280** | *e*Pn | **Pn** | **20 25 47.0** | **-2.4** |
| **LPG** | **La Plagne** | **11.12** | **291** | *e*Pn | **Pn** | **20 25 48.3** | **-1.7** |
| LPG | | | | *e*Sn | Sn | 20 27 45.5 | -9.1 |
| | comp=Z,10nm,0.7s | | | | | | |
| **LPL** | **La Plagne** | **11.14** | **291** | *e*Pn | **Pn** | **20 25 49.0** | **-1.2** |
| LPL | | | | *e*Sn | Sn | 20 27 47.0 | -7.9 |
| | comp=Z,7.4nm,0.7s | | | | | | |
| **LPL** | **La Plagne** | **11.14** | **291** | *e*Pn | **Pn** | **20 25 49.0** | **-1.2** |
| **KEST** | **Kesra** | **11.62** | **239** | LR | LR | 20 31 48.5 | |
| | comp=Z,62nm,20.4s,baz=276,slow=44 | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **11.64** | **288** | *e*Pn | **Pn** | **20 25 54.6** | **-2.3** |
| **CDF** | **Champ du Feu** | **11.69** | **306** | *e*Pn | **Pn** | **20 25 57.0** | **-0.6** |
| **CDF** | **Champ du Feu** | **11.69** | **306** | *e*Pn | **Pn** | **20 25 57.0** | **-0.6** |
| **HINF** | **Hinteralfeld** | **11.71** | **302** | *e*Pn | **Pn** | **20 25 55.6** | **-2.2** |
| **HINF** | **Hinteralfeld** | **11.71** | **302** | *e*P | Pn | 20 26 01.3 | +3.5 |
| **HINF** | **Hinteralfeld** | **11.71** | **302** | *e*P | Pn | 20 26 01.3 | +3.5 |
| **TNS** | **Taunus Mts** | **11.95** | **315** | *e*Pn | Pn | 20 26 04.4 | +3.3 |
| TNS | | | | *e*Sn | **Sn** | **20 28 12.3** | **-2.3** |
| **TNS** | **Taunus Mts** | **11.95** | **315** | *e*Pn | Pn | 20 26 04.4 | +3.3 |
| TNS | | | | *e*Sn | **Sn** | **20 28 12.3** | **-2.3** |
| **HAU** | **Haudompre** | **12.10** | **303** | *e*Pn | **Pn** | **20 26 01.7** | **-1.4** |
| HAU | | | | *e*Sn | Sn | 20 28 09.4 | -8.7 |
| | comp=Z,1.8nm,0.3s | | | | | | |
| **HAU** | **Haudompre** | **12.10** | **303** | *e*Pn | **Pn** | **20 26 01.7** | **-1.4** |
| **VIVF** | **Saint-Julien-l** | **12.49** | **287** | *e*Pn | **Pn** | **20 26 07.0** | **-1.4** |
| **PAGF** | **Fort de Pagny** | **12.69** | **304** | *e*P | Pn | 20 26 15.4 | +4.2 |
| PAGF | | | | *e*Sn | Sn | 20 28 22.9 | -10 |
| | comp=Z,0.3nm,0.3s | | | | | | |
| **SMF** | **Signal de Mont** | **13.34** | **294** | *e*Pn | **Pn** | **20 26 17.5** | **-2.5** |
| **LOR** | **Lormes** | **13.47** | **297** | *e*Pn | **Pn** | **20 26 19.6** | **-2.2** |
| **LOR** | **Lormes** | **13.47** | **297** | *e*P | Pn | 20 26 25.1 | +3.3 |
| | baz=115 | | | | | | |
| **LOR** | **Lormes** | **13.47** | **297** | *e*P | Pn | 20 26 25.1 | +3.3 |
| **BGF** | **Bois d'Agland** | **13.99** | **294** | *e*Pn | **Pn** | **20 26 26.4** | **-2.5** |
| **BAIF** | **Baives** | **14.22** | **308** | *e*P | **Pn** | **20 26 34.6** | **+2.6** |
| **MMAI** | **Mount Meron Ar** | **14.40** | **126** | Pn | P | 20 26 38.3 | -3.4 |
| | comp=Z,1.1nm,0.3s,baz=330,slow=17,SNR=3.4 | | | | | | |
| MMAI | | | | LR | LR | 20 32 37.8 | |
| | comp=Z,58nm,21.3s,baz=245,slow=39 | | | | | | |
| **HLG** | **Helgoland** | **14.85** | **327** | *e*Pn | **Pn** | **20 26 38.2** | **-2.3** |
| **HLG** | **Helgoland** | **14.85** | **327** | *e*Pn | **Pn** | **20 26 38.2** | **-2.3** |
| **KIV** | **Kislovodsk** | **15.47** | **77** | *e*P | **Pn** | **20 26 48.9** | **-0.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **15.63** | **78** | Pn | **P** | **20 26 54.2** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=248,slow=9.9,SNR=4.4 | | | | | | |
| KBZ | | | | LR | LR | 20 33 48.8 | |
| | comp=Z,22nm,19.7s,baz=228,slow=41 | | | | | | |
| **OBN** | **Obninsk** | **16.04** | **33** | *e*P | **Pn** | **20 26 55.1** | **-1.0** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| **VSU** | **Vasula** | **16.38** | **10** | *e*P | **Pn** | **20 27 01.5** | **+1.0** |
| **VSU** | **Vasula** | **16.38** | **10** | *e*P | **Pn** | **20 27 01.5** | **+1.0** |
| **EIL** | **Elat** | **16.68** | **135** | LR | LR | 20 35 49.1 | |
| | comp=Z,24nm,18.2s,baz=290,slow=45 | | | | | | |
| **HFS** | **Hagfors** | **18.38** | **347** | P | **P** | **20 27 25.5** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=138,slow=11,SNR=4.0 | | | | | | |
| HFS | | | | LR | LR | 20 35 29.3 | |
| | comp=Z,39nm,19.9s,baz=162,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **19.24** | **7** | P | **P** | **20 27 34.0** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=188,slow=13,SNR=6.1 | | | | | | |
| FINES | | | | LR | LR | 20 35 35.5 | |
| | comp=Z,34nm,20.3s,baz=187,slow=39 | | | | | | |
| **ESDC** | **Sonseca Array** | **19.44** | **270** | P | **Pn** | **20 27 38.1** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=67,slow=12,SNR=4.7 | | | | | | |
| **NB2** | **NORSAR Subarra** | **19.67** | **345** | P | **Pn** | **20 27 40.9** | **-0.1** |
| | comp=Z,9.1nm,1.2s,baz=157,slow=11 | | | | | | |
| **NB2** | **NORSAR Subarra** | **19.67** | **345** | P | **Pn** | **20 27 40.9** | **-0.1** |
| | comp=Z,9.1nm,1.2s,SNR=5.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **19.67** | **345** | P | **Pn** | **20 27 40.6** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=157,slow=11,SNR=5.2 | | | | | | |
| NOA | | | | LR | LR | 20 35 40.8 | |
| | comp=Z,42nm,18.9s,baz=160,slow=38 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **20.63** | **317** | P | **P** | **20 27 49.9** | **-0.2** |
| | comp=Z,3.0nm,0.7s,baz=115,slow=11,SNR=9.6 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **20.63** | **317** | P | **P** | **20 27 49.9** | **-0.2** |
| EKA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **KLMR** | **Klimovskoe** | **21.41** | **24** | *e*P | **P** | **20 27 56.8** | **-1.7** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| **KLMR** | **Klimovskoe** | **21.41** | **24** | *e*P | **P** | **20 27 56.8** | **-1.7** |
| | comp=Z,14nm,0.7s | | | | | | |
| **MDT** | **Midelt** | **22.78** | **254** | P | **P** | **20 28 13.2** | **-0.4** |
| | comp=Z,4.6nm,0.8s,baz=42,slow=13,SNR=10 | | | | | | |
| **TAM** | **Tamanrasset** | **23.72** | **219** | *e*P | **P** | **20 28 24.4** | **+1.3** |
| TAM | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **TAM** | **Tamanrasset** | **23.72** | **219** | *e*P | **P** | **20 28 24.4** | **+1.3** |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **TAM** | **Tamanrasset** | **23.72** | **219** | *e*P | **P** | **20 28 24.4** | **+1.3** |
| | comp=Z,4.6nm,1.1s | | | | | | |
| **AKTK** | **Aktyubinsk** | **26.14** | **60** | P | **P** | **20 28 44.6** | **-0.3** |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **26.14** | **60** | P | **P** | **20 28 44.5** | **-0.3** |
| | comp=Z,1.8nm,0.6s,baz=267,slow=3.9,SNR=6.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **26.14** | **60** | P | **P** | **20 28 44.6** | **-0.3** |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **27.25** | **3** | P | **P** | **20 28 53.3** | **-1.4** |
| | comp=Z,1.8nm,0.7s,baz=178,slow=7.2,SNR=3.7 | | | | | | |
| ARCES | | | | LR | LR | 20 40 29.1 | |
| | comp=Z,42nm,19.2s,baz=245,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **27.25** | **3** | P | **P** | **20 28 53.3** | **-1.4** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ARCES | | | | MLR | MLR | | |
| | comp=Z,42nm,19.2s | | | | | | |
| **AB31** | **Akbulak array** | **27.36** | **62** | *e*P | **P** | **20 28 55.8** | **0.0** |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **AB31** | **Akbulak array** | **27.36** | **62** | *e*P | **P** | **20 28 55.8** | **0.0** |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **27.36** | **62** | *e*P | **P** | **20 28 56.0** | **+0.1** |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **27.36** | **62** | *e*P | **P** | **20 28 56.0** | **+0.1** |
| | comp=Z,1.6nm,0.8s | | | | | | |
| **ARU** | **Arti** | **27.44** | **46***d* | *i*P | **P** | **20 28 56.2** | **-0.3** |
| ARU | | | | | | 20 29 41.1 | |
| ARU | | | | S | **S** | **20 33 37.3** | **+0.4** |
| ARU | | | | SS | **SnSn** | **20 34 45.5** | **-0.6** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,12nm,1.2s | | | | | | |
| **ARU** | **Arti** | **27.44** | **46** | *e*P | **P** | **20 28 56.2** | **-0.3** |
| | comp=Z,11nm,1.1s | | | | | | |
| **ARU** | **Arti** | **27.44** | **46** | *e*P | **P** | **20 28 56.2** | **-0.3** |
| | comp=Z,11nm,1.1s | | | | | | |
| ARU | | | | S | **S** | **20 33 37.3** | **+0.4** |
| **GEYT** | **Alibeck** | **28.13** | **87** | P | **P** | **20 29 04.2** | **+1.3** |
| | comp=Z,2.0nm,0.7s,baz=278,slow=10,SNR=4.7 | | | | | | |
| **SVE** | **Sverdlovsk** | **28.65** | **46** | *e*P | **P** | **20 29 07.9** | **+0.6** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **SVE** | **Sverdlovsk** | **28.65** | **46** | *e*P | **P** | **20 29 07.9** | **+0.6** |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **33.81** | **55***c* | *i*P | **P** | **20 29 53.4** | **+0.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **BRVK** | **Borovoye** | **33.81** | **55** | *e*P | **P** | **20 29 53.5** | **+0.6** |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **33.81** | **55** | *i* P | **P** | **20 29 53.4** | **+0.6** |
| | comp=Z,12nm,1.0s | | | | | | |
| **BVAR** | **Borovoye Array** | **33.88** | **55** | P | **P** | **20 29 54.3** | **+0.9** |
| | comp=Z,3.5nm,0.7s,baz=266,slow=5.8,SNR=22 | | | | | | |
| **BVAR** | **Borovoye Array** | **33.88** | **55** | P | **P** | **20 29 54.3** | **+0.9** |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.89** | **216** | P | **P** | **20 29 54.2** | **+0.5** |
| | comp=Z,6.5nm,0.7s,baz=23,slow=8.9,SNR=51 | | | | | | |
| **KK31** | **Karatay Array** | **35.52** | **72** | *e*P | **P** | **20 30 08.4** | **+0.7** |
| **KK31** | **Karatay Array** | **35.52** | **72** | *e*P | **P** | **20 30 08.4** | **+0.7** |
| **AAK** | **Ala-Archa** | **38.45** | **71** | *e*P | **P** | **20 30 32.9** | **0.0** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | |
| **AAK** | **Ala-Archa** | **38.45** | **71** | *e*P | **P** | **20 30 32.9** | **0.0** |
| | comp=Z,13nm,1.2s | | | | | | |
| **NVS** | **Novosibirsk** | **41.27** | **51** | ⇑*i*P | **P** | **20 30 56.2** | **+0.4** |
| NVS | | | | pmax | pmax | | |
| | comp=E,4.0nm,1.0s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **NVS** | **Novosibirsk** | **41.27** | **51** | *i* P | **P** | **20 30 56.2** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **42.33** | **52** | P | **P** | **20 31 04.9** | **+0.3** |
| | comp=Z,8.5nm,0.6s,baz=280,slow=8.7,SNR=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.33** | **52** | P | **P** | **20 31 04.9** | **+0.3** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **42.50** | **62** | *e*P | **P** | **20 31 05.6** | **-0.5** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **MK31** | **Makanchi Array** | **42.50** | **62** | *e*P | **P** | **20 31 05.6** | **-0.5** |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **42.50** | **62** | P | **P** | **20 31 06.3** | **+0.2** |
| | comp=Z,2.5nm,0.8s,baz=289,slow=7.6,SNR=13 | | | | | | |
| MKAR | | | | PcP | **PcP** | **20 32 58.9** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=331,slow=3.2,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.50** | **62** | P | **P** | **20 31 06.3** | **+0.2** |
| MKAR | | | | | | 20 32 58.9 | |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **DBIC** | **Dimbokro** | **42.60** | **221** | P | **P** | **20 31 07.2** | **0.0** |
| | comp=Z,2.9nm,0.6s,baz=15,slow=7.6,SNR=6.0 | | | | | | |
| **DBIC** | **Dimbokro** | **42.60** | **221** | P | **P** | **20 31 07.2** | **0.0** |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **TLY** | **Talaya** | **53.87** | **50** | *e*P | **P** | **20 32 35.1** | **+1.3** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **TLY** | **Talaya** | **53.87** | **50** | *e*P | **P** | **20 32 35.1** | **+1.3** |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **57.19** | **53** | P | **P** | **20 32 58.2** | **+0.2** |
| | comp=Z,1.8nm,0.8s,baz=290,slow=7.9,SNR=6.3 | | | | | | |
| **SONM** | **Songino Array** | **57.19** | **53** | P | **P** | **20 32 58.2** | **+0.2** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.57** | **53** | *e*P | **P** | **20 33 00.9** | **+0.3** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.57** | **53** | *e*P | **P** | **20 33 00.9** | **+0.3** |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **BILL** | **Bilibino** | **66.70** | **14** | *e*P | **P** | **20 34 01.5** | **+0.1** |
| BILL | | | | *e* | | 20 34 30.2 | |
| BILL | | | | *e* | | 20 36 26.6 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **66.70** | **14** | *e*P | **P** | **20 34 01.5** | **+0.1** |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **66.70** | **14** | *e*PcP | **PcP** | **20 34 30.2** | **-0.2** |
| **LBTB** | **Lobatse** | **67.21** | **176** | P | **P** | **20 34 06.2** | **+1.1** |
| | comp=Z,2.7nm,0.6s,baz=352,slow=6.6,SNR=6.1 | | | | | | |
| **LBTB** | **Lobatse** | **67.21** | **176** | P | **P** | **20 34 06.2** | **+1.1** |
| LBTB | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **68.57** | **84** | P | **P** | **20 34 12.5** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=297,slow=8.0,SNR=3.8 | | | | | | |
| **BOSA** | **Boshof** | **70.77** | **177** | P | **P** | **20 34 27.5** | **+0.3** |
| | comp=Z,3.7nm,0.8s,baz=7.1,slow=8.1,SNR=4.4 | | | | | | |
| **BOSA** | **Boshof** | **70.77** | **177** | P | **P** | **20 34 27.5** | **+0.3** |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **BLA** | **Blacksburg** | **73.63** | **306** | *e*P | **P** | **20 34 45.0** | **+0.6** |
| BLA | | | | pmax | pmax | | |
| | comp=Z,46nm,0.9s | | | | | | |
| **BLA** | **Blacksburg** | **73.63** | **306** | *e*P | **P** | **20 34 45.0** | **+0.6** |
| | comp=Z,46nm,0.9s | | | | | | |
| **BLA** | **Blacksburg** | **73.63** | **306** | *e*P | **P** | **20 34 45.0** | **+0.6** |
| | comp=Z,46nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **73.66** | **45** | P | **P** | **20 34 44.8** | **+0.4** |
| | comp=Z,1.4nm,0.6s,baz=307,slow=5.1,SNR=5.4 | | | | | | |
| **KMSC** | **Kings Mountain** | **75.55** | **304** | *e*P | **P** | **20 34 55.6** | **+0.1** |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **KMSC** | **Kings Mountain** | **75.55** | **304** | *e*P | **P** | **20 34 55.6** | **+0.1** |
| | comp=Z,9.5nm,0.6s | | | | | | |
| **KSAR** | **Wonju Array Be** | **76.02** | **52** | P | **P** | **20 34 58.7** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **76.02** | **52** | P | **P** | **20 34 58.7** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **76.02** | **52** | P | **P** | **20 34 58.7** | **+0.5** |
| **KSRS** | **Korea Array** | **76.04** | **52** | P | **P** | **20 34 58.7** | **+0.4** |
| | comp=Z,1.9nm,0.9s,baz=311,slow=6.3,SNR=6.1 | | | | | | |
| **KSRS** | **Korea Array** | **76.04** | **52** | P | **P** | **20 34 58.7** | **+0.4** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **82.46** | **47** | P | **P** | **20 35 33.7** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=331,slow=4.7,SNR=4.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **82.46** | **47** | P | **P** | **20 35 33.7** | **+0.3** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **92.61** | **314** | P | **P** | **20 36 23.2** | **+0.3** |
| | comp=Z,1.1nm,1.1s,baz=54,slow=6.4,SNR=4.7 | | | | | | |
| TXAR | | | | LR | LR | 21 16 22.6 | |
| | comp=Z,24nm,20.6s,baz=0.0,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **92.61** | **314** | P | **P** | **20 36 23.2** | **+0.3** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.1s | | | | | | |
| TXAR | | | | MLR | MLR | | |
| | comp=Z,24nm,20.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **119.83** | **90** | PKP | **PKPdf** | **20 42 00.4** | **-1.1** |
| | comp=Z,0.5nm,0.8s,baz=307,slow=2.6,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **121.75** | **94** | PKP | **PKPdf** | **20 42 04.1** | **-1.1** |
| | comp=Z,1.3nm,0.8s,baz=308,slow=1.4,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **121.75** | **94** | PKIKP | **PKPdf** | **20 42 04.1** | **-1.1** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |

*SKO **07** 20:27:15.6, 42.57N×21.58E, h15$^{km}$, M2.2, ML2.8*
*CSEM **07** 20:27:17.6±0.2, 42.46N×21.65E, h2$^{km}$, ML2.9, Error ellipse: s-maj=4.3km s-min=3.8km az=107.0*
*BEO **07** 20:27:18.8±0.4, 42.46N×21.63E, h12$^{km}$±4$^{km}$, ML2.9/1*
*PDG **07** 20:27:18.4±0.1, 42.46N×21.58E, h10$^{km}$, ML2.9/10, Error ellipse: s-maj=0.4km s-min=0.4km az=0.0*
**ISC 07 20:27:17.5**±1.2**, 42.47N**±0.03**×21.64E**±0.03**, h5**$^{km}$±10$^{km}$**, n57, σ0.82**/86**, 12C-14D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GJIK** | **Gjilan** | **0.15** | **266** | S | **Sg** | **20 27 22.7** | **+0.1** |
| **BARS** | **Barje** | **0.37** | **21** | ⇑*i*Pg | **Pb** | **20 27 26.3** | **-0.2** |
| **BARS** | **Barje** | **0.37** | **21** | ⇑*i*Pg | **Pb** | **20 27 26.3** | **-0.2** |
| **SKO** | **Skopje** | **0.52** | **197** | *i* Pg | **Pg** | **20 27 27.8** | **+0.3** |
| SKO | | | | *e*Sg | **Sg** | **20 27 34.4** | **+0.1** |
| SKO | | | | *e*Lg | Lg | 20 27 34.4 | |
| | comp=E,104nm,0.4s | | | | | | |
| SKO | | | | *e*Lg | Lg | 20 27 34.9 | |
| | comp=N,81nm,0.3s | | | | | | |
| **SKO** | **Skopje** | **0.52** | **197** | *i* Pg | **Pg** | **20 27 27.8** | **+0.3** |
| SKO | | | | *e*Sg | **Sg** | **20 27 34.3** | **+0.1** |
| SKO | | | | *e*Lg | Lg | 20 27 34.4 | |
| | comp=N,104nm,0.4s | | | | | | |
| **SMRK** | **Smrekonice** | **0.66** | **308** | P | **Pg** | **20 27 28.2** | **-1.9** |
| SMRK | | | | S | **Sb** | **20 27 41.0** | **+0.1** |
| **SELS** | **Selova** | **0.84** | **333** | ⇑*i*Pg | **Pg** | **20 27 33.7** | **+0.1** |
| **PEJK** | **Peje** | **1.02** | **280** | P | **Pg** | **20 27 36.3** | **-0.8** |
| **ZAPS** | **Zavoj** | **1.08** | **42** | *e*Pg | **Pn** | **20 27 40.2** | **+0.8** |
| **BOVS** | **Bovan** | **1.16** | **2** | *e*Pg | **Pn** | **20 27 41.0** | **+0.6** |
| **BOVS** | **Bovan** | **1.16** | **2** | *e*Pg | **Pn** | **20 27 41.0** | **+0.6** |
| **PVY** | **Plav** | **1.25** | **276** | ⇑*i*Pg | **Pn** | **20 27 40.6** | **-1.1** |
| PVY | | | | *e*Sg | **Sn** | **20 27 58.9** | **-0.1** |
| **PVY** | **Plav** | **1.25** | **276** | ⇑*i*Pg | **Pn** | **20 27 40.6** | **-1.1** |
| PVY | | | | *e*Sg | **Sn** | **20 27 58.9** | **-0.1** |
| **VAY** | **Valandovo** | **1.34** | **149** | *i* Pg | **Pn** | **20 27 43.0** | **+0.1** |
| VAY | | | | *e*Sg | **Sg** | **20 28 01.5** | **+0.9** |
| VAY | | | | *e*Lg | Lg | 20 28 02.7 | |
| | comp=N,230nm,0.8s | | | | | | |
| VAY | | | | *e*Lg | Lg | 20 28 03.9 | |
| | comp=E,152nm,0.6s | | | | | | |
| **VAY** | **Valandovo** | **1.34** | **149** | *e*Pg | **Pn** | **20 27 43.0** | **+0.1** |
| VAY | | | | *e*Sg | **Sn** | **20 28 00.9** | **-0.2** |
| **VAY** | **Valandovo** | **1.34** | **149** | *e*Pg | **Pn** | **20 27 43.0** | **+0.1** |
| VAY | | | | *e*Sg | **Sn** | **20 28 00.9** | **-0.2** |
| VAY | | | | *e*Lg | Lg | 20 28 02.6 | |
| | comp=E,230nm,0.8s | | | | | | |
| **BEY** | **Berane** | **1.35** | **288** | P | **Pn** | **20 27 42.7** | **-0.4** |
| BEY | | | | *e*Sg | **Sg** | **20 28 03.1** | **+2.3** |
| **IVA** | **Berane** | **1.35** | **288** | ⇑*i*Pg | **Pn** | **20 27 42.6** | **-0.5** |
| IVA | | | | *e*Sg | **Sg** | **20 28 03.1** | **+2.3** |
| **BOLS** | **Boljevac** | **1.38** | **9** | ⇓*i*Pg | **Pn** | **20 27 42.7** | **-0.6** |
| **BOLS** | **Boljevac** | **1.38** | **9** | ⇓*i*Pg | **Pn** | **20 27 42.7** | **-0.6** |
| **SJES** | **Sjenica** | **1.46** | **303** | *i* Pg | **Pb** | **20 27 45.2** | **0.0** |
| **OHR** | **Ohrid** | **1.50** | **205** | *e*Pg | **Pn** | **20 27 45.0** | **-0.1** |
| OHR | | | | *e*Sg | **Sg** | **20 28 05.3** | **-0.3** |
| OHR | | | | *e*Lg | Lg | 20 28 07.5 | |
| | comp=E,168nm,0.7s | | | | | | |
| OHR | | | | *e*Lg | Lg | 20 28 07.7 | |
| | comp=N,117nm,0.7s | | | | | | |
| **OHR** | **Ohrid** | **1.50** | **205** | *e*Pg | **Pn** | **20 27 44.9** | **-0.1** |
| OHR | | | | *e*Lg | Lg | 20 28 07.5 | |
| | comp=N,168nm,0.7s | | | | | | |
| **IVAS** | **Ivanjica** | **1.55** | **316** | *e*Pn | **Pb** | **20 27 46.6** | **-0.1** |
| **IVAS** | **Ivanjica** | **1.55** | **316** | *e*Pn | **Pb** | **20 27 46.6** | **-0.1** |
| **GRUS** | **Gruza** | **1.57** | **335** | ⇑*i*Pn | **Pn** | **20 27 46.6** | **+0.6** |
| **GRUS** | **Gruza** | **1.57** | **335** | ⇑*i*Pn | **Pn** | **20 27 46.6** | **+0.6** |
| **PDG** | **Podgorica** | **1.77** | **269** | ⇓*i*Pn | **Pn** | **20 27 49.2** | **+0.5** |
| PDG | | | | *e*Sn | **Sg** | **20 28 13.8** | **-0.4** |
| **TTG** | **Podgorica** | **1.77** | **269** | ⇓*i*Pn | **Pn** | **20 27 49.2** | **+0.5** |
| TTG | | | | *e*Sn | **Sg** | **20 28 13.8** | **-0.4** |
| **ULC** | **Ulcinj** | **1.85** | **255** | ⇓*i*Pn | **Pn** | **20 27 50.8** | **+0.9** |
| ULC | | | | *e*Sn | **Sb** | **20 28 15.6** | **+0.4** |
| **ULC** | **Ulcinj** | **1.85** | **255** | ⇓*i*Pn | **Pn** | **20 27 50.8** | **+0.9** |
| ULC | | | | *e*Sn | **Sb** | **20 28 15.6** | **+0.4** |
| **PLE** | **Pljevlja** | **1.86** | **298** | ⇑*i*Pn | **Pn** | **20 27 50.9** | **+0.8** |
| PLE | | | | *e*Sn | **Sb** | **20 28 16.8** | **+1.1** |
| **PLE** | **Pljevlja** | **1.86** | **298** | ⇑*i*Pn | **Pn** | **20 27 50.9** | **+0.8** |
| PLE | | | | *e*Sn | **Sb** | **20 28 16.8** | **+1.1** |
| **KUBS** | **Kucevo** | **1.94** | **1** | *e*Pn | **Pn** | **20 27 50.5** | **-0.6** |
| **KUBS** | **Kucevo** | **1.94** | **1** | *e*Pn | **Pn** | **20 27 50.5** | **-0.6** |
| **TRUS** | **Trudelj** | **1.97** | **333** | *e*Pn | **Pn** | **20 27 51.2** | **-0.3** |
| **TRUS** | **Trudelj** | **1.97** | **333** | *e*Pn | **Pn** | **20 27 51.2** | **-0.3** |
| **NKY** | **Niksic** | **1.98** | **281** | ⇓*i*Pn | **Pn** | **20 27 52.4** | **+0.6** |
| NKY | | | | *e*Sn | **Sb** | **20 28 19.1** | **0.0** |
| **NKY** | **Niksic** | **1.98** | **281** | ⇓*i*Pn | **Pn** | **20 27 52.4** | **+0.6** |
| NKY | | | | *e*Sn | **Sb** | **20 28 19.1** | **0.0** |
| **NKME** | **Niksic** | **2.00** | **279** | *e*Pn | **Pn** | **20 27 52.9** | **+0.9** |
| NKME | | | | *e*Sn | **Sb** | **20 28 19.5** | **-0.2** |
| **NKME** | **Niksic** | **2.00** | **279** | *e*Pn | **Pn** | **20 27 52.9** | **+0.9** |
| NKME | | | | *e*Sn | **Sb** | **20 28 19.5** | **-0.2** |
| **DIVS** | **Divibare** | **2.02** | **324** | *e*Pn | **Pn** | **20 27 52.5** | **+0.2** |
| **DIVS** | **Divibare** | **2.02** | **324** | *e*Pn | **Pn** | **20 27 52.5** | **+0.2** |
| **BUM** | **Brajici-Budva** | **2.04** | **266** | ⇓*i*Pn | **Pn** | **20 27 53.2** | **+0.6** |
| BUM | | | | *e*Sn | **Sb** | **20 28 20.2** | **-0.6** |
| **BUM** | **Brajici-Budva** | **2.04** | **266** | ⇓*i*Pn | **Pn** | **20 27 53.2** | **+0.6** |
| BUM | | | | *e*Sn | **Sb** | **20 28 20.2** | **-0.6** |
| **UPM** | **Unac-Piva** | **2.14** | **291** | ⇓*i*Pn | **Pn** | **20 27 54.8** | **+0.8** |
| UPM | | | | *e*Sn | **Sb** | **20 28 23.4** | **-0.3** |
| **UPM** | **Unac-Piva** | **2.14** | **291** | ⇓*i*Pn | **Pn** | **20 27 54.8** | **+0.8** |
| UPM | | | | *e*Sn | **Sb** | **20 28 23.4** | **-0.3** |
| **BBLS** | **Lazići** | **2.15** | **311** | *e*Pn | **Pn** | **20 27 55.1** | **+1.1** |
| **BBLS** | **Lazići** | **2.15** | **311** | *e*Pn | **Pn** | **20 27 55.1** | **+1.1** |
| **BRY** | **Bratogost** | **2.33** | **282** | ⇓*i*Pn | **Pn** | **20 27 57.9** | **+1.4** |
| BRY | | | | *e*Sn | **Sb** | **20 28 27.8** | **-1.3** |
| **BRY** | **Bratogost** | **2.33** | **282** | ⇓*i*Pn | **Pn** | **20 27 57.9** | **+1.4** |
| BRY | | | | *e*Sn | **Sb** | **20 28 27.8** | **-1.3** |
| **HCY** | **Herceg Novi** | **2.33** | **270** | ⇑*i*Pn | **Pn** | **20 27 57.4** | **+1.0** |
| HCY | | | | *e*Sn | **Sb** | **20 28 27.1** | **-1.9** |
| **HCY** | **Herceg Novi** | **2.33** | **270** | ⇑*i*Pn | **Pn** | **20 27 57.4** | **+1.0** |
| HCY | | | | *e*Sn | **Sb** | **20 28 27.1** | **-1.9** |
| **TEKS** | **Tekeris** | **2.58** | **324** | *e*Pn | **Pn** | **20 28 01.1** | **+1.1** |
| **TEKS** | **Tekeris** | **2.58** | **324** | *e*Pn | **Pn** | **20 28 01.1** | **+1.1** |
| **FGSL** | **Fruska Gora** | **2.99** | **334** | *e*Pn | **Pn** | **20 28 06.3** | **+0.7** |
| **FRGS** | **Fruska Gora** | **2.99** | **334** | *e*Pn | **Pn** | **20 28 06.3** | **+0.7** |

*ISCJB **07** 20:37:16.5±0.3, 45.57N±0.02×14.26E±0.02, h10$^{km}$±2$^{km}$, Error ellipse: s-maj=3.4km s-min=2.3km az=5.5*
*LJU **07** 20:37:16.8, 45.57N×14.25E, h9$^{km}$, ML2.4*
*CSEM **07** 20:37:17.4±0.1, 45.62N×14.25E, h2$^{km}$, ML3.2/15, Error ellipse: s-maj=2.8km s-min=1.9km az=178.0*
*ROM **07** 20:37:17.3±0.4, 45.59N×14.25E, h10$^{km}$, Ml2.6/14, Error ellipse: s-maj=7.0km s-min=3.7km az=67.0*
*VIE **07** 20:37:17.1±0.2, 45.60N×14.24E, h13$^{km}$±1$^{km}$, mb2.1/6, ml2.9/6, Error ellipse: s-maj=1.7km s-min=0.7km az=174.0*
*LDG **07** 20:37:17.0±0.1, 45.58N×14.26E, h10$^{km}$, Ml2.7/6, Error ellipse: s-maj=1.9km s-min=1.4km az=173.0*
*PRU **07** 20:37:19.1, 45.65N×14.27E, h5$^{km}$*
**ISC 07 20:37:17.5**±0.8**, 45.61N**±0.02**×14.26E**±0.01**, h9**$^{km}$±6$^{km}$**, n151, σ0.91**/202**, 22C-13D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KNDS** | **Knezji Dol** | **0.12** | **134** | ⇑*i*Pg | **Pg** | **20 37 19.9** | **-0.4** |
| KNDS | | | | *i* Sg | **Sg** | **20 37 21.7** | **-0.5** |
| | comp=Z,827nm,0.2s | | | | | | |
| **KNDS** | **Knezji Dol** | **0.12** | **134** | Pg | **Pg** | **20 37 19.9** | **-0.4** |
| KNDS | | | | *i* Sg | **Sg** | **20 37 21.7** | **-0.5** |
| | comp=Z,827nm,0.2s | | | | | | |
| **CEY** | **Cerknica** | **0.17** | **42** | ⇓*i*Pg | **Pg** | **20 37 21.4** | **+0.2** |

CEY i Sg Sg 20 37 24.6 +0.8
comp=Z,180nm,0.1s
CEY Cerknica 0.17 42⇓iPg Pg 20 37 21.4 +0.2
CEY i Sg Sg 20 37 24.6 +0.8
comp=Z,180nm,0.1s
SKDS Skadanscina 0.18 250⇑iPg Pg 20 37 21.0 -0.4
SKDS i Sg Sg 20 37 23.9 -0.1
comp=Z,2µm,0.1s
SKDS Skadanscina 0.18 250⇑iPg Pg 20 37 21.0 -0.4
SKDS i Sg Sg 20 37 23.9 -0.1
comp=Z,2µm,0.1s
JAVS Javornik 0.32 334⇓iPg Pg 20 37 23.9 +0.1
JAVS i Sg Sb 20 37 29.6 -1.1
comp=Z,142nm,0.1s
JAVS Javornik 0.32 334⇓iPg Pg 20 37 24.0 +0.1
TRI Trieste 0.36 286⇑ePg Pg 20 37 24.3 -0.3
TRI eSg Sg 20 37 30.3 +0.9
TRI Trieste 0.36 286 Pg Pg 20 37 24.3 -0.3
TRI Sg Sg 20 37 30.3 +0.9
comp=Z,594nm,0.1s
TRI Trieste 0.36 286 eP Pg 20 37 24.3 -0.3
TRI Sg Sg 20 37 30.3 +0.9
comp=Z,594nm,0.1s
GBRS Gornja Briga 0.39 101 i Pg Pg 20 37 25.1 -0.1
VISS Visnje 0.45 64 i Pg Pg 20 37 26.5 +0.2
VISS i Sg Sg 20 37 32.9 +0.7
comp=Z,100nm,0.1s
VISS Visnje 0.45 64 i Pg Pg 20 37 26.5 +0.2
VISS i Sg Sg 20 37 32.9 +0.7
comp=Z,100nm,0.1s
CRNS Crni Vrh 0.47 0 i Pg Pg 20 37 26.6 -0.1
CRNS i Sg Sb 20 37 34.3 -0.9
comp=Z,119nm,0.2s
LJU Ljubljana 0.47 23 ePg Pb 20 37 27.3 -0.7
LJU eSg Sb 20 37 35.2 +0.1
LJU Ljubljana 0.47 23 ePg Pb 20 37 27.3 -0.7
VOJS Vojsko 0.50 328⇑iPg Pg 20 37 27.1 -0.1
VOJS i Sg Sb 20 37 35.7 -0.2
comp=Z,100nm,0.1s
VOJS Vojsko 0.50 328⇑iPg Pg 20 37 27.1 -0.1
VNDS Vrh nad Dolski 0.58 32⇓iPg Pg 20 37 29.1 +0.3
comp=Z,44nm,0.1s
SABO M.te Sabotino 0.59 309⇑ePg Pg 20 37 28.4 -0.5
SABO eSg Sb 20 37 38.1 -0.5
SABO M.te Sabotino 0.59 309 Pg Pg 20 37 28.4 -0.5
SABO Sg Sb 20 37 37.9 -0.7
comp=Z,422nm,0.2s
SABO M.te Sabotino 0.59 309 eP Pg 20 37 28.5 -0.5
SABO Sg Sb 20 37 37.9 -0.7
comp=Z,422nm,0.2s
PDKS Podkum 0.69 48 i Pg Pg 20 37 31.1 +0.3
comp=Z,77nm,0.1s
PDKS Podkum 0.69 48 i Pg Pg 20 37 31.0 +0.3
comp=Z,77nm,0.1s
MOZS Mozjanca 0.70 10 i Pg Pb 20 37 31.6 -0.3
comp=Z,57nm,0.2s
MOZS Mozjanca 0.70 10 i Pg Pb 20 37 31.6 -0.3
comp=Z,57nm,0.2s
BOJS Bojanci 0.70 98 i Pg Pg 20 37 30.4 -0.7
BOJS i Sg Sg 20 37 40.3 0.0
comp=Z,42nm,0.1s
BOJS Bojanci 0.70 98 i Pg Pg 20 37 30.4 -0.7
BOJS i Sg Sg 20 37 40.3 0.0
comp=Z,42nm,0.1s
DRE Drenchia 0.71 323⇓ePg Pg 20 37 30.6 -0.6
DRE eSg Sb 20 37 42.4 +0.4
DRE Drenchia 0.71 323 eP Pg 20 37 30.6 -0.6
DRE eSg Sb 20 37 42.4 +0.4
CADS Cadrg 0.72 330 i Pg Pg 20 37 30.8 -0.6
CADS i Sg Sb 20 37 42.5 +0.3
comp=Z,73nm,0.2s
CADS Cadrg 0.72 330 i Pg Pg 20 37 30.8 -0.6
GORS Gorjuse 0.73 345 ePg Pg 20 37 31.4 -0.3
comp=Z,56nm,0.1s
GORS Gorjuse 0.73 345 ePg Pg 20 37 31.4 -0.3
comp=Z,56nm,0.1s
COLI Coloredo 0.81 311⇓ePg Pg 20 37 32.5 -0.6
COLI eSg Sb 20 37 45.6 +0.8
COLI Coloredo 0.81 311 eP Pg 20 37 32.5 -0.6
COLI eSg Sb 20 37 45.6 +0.8
LEGS Legarje 0.81 65 i Pg Pb 20 37 33.5 -0.3
LEGS i Sg Sb 20 37 45.8 +0.8
LEGS Legarje 0.81 65 i Pg Pb 20 37 33.5 -0.3
LEGS i Sg Sb 20 37 45.8 +0.8
ROBS Robic 0.82 321 i Pg Pg 20 37 32.7 -0.7
ROBS Robic 0.82 321 i Pg Pg 20 37 32.7 -0.7
CRES Cresnjev 0.87 75 i Pg Pg 20 37 34.0 -0.2
comp=Z,42nm,0.2s
CRES Cresnjev 0.87 75 i Pg Pg 20 37 34.0 -0.2
comp=Z,42nm,0.2s
CESS Cesta pri Krsk 0.92 66 i Pg Pb 20 37 35.8 +0.2
comp=Z,70nm,0.2s
CESS Cesta pri Krsk 0.92 66 i Pg Pb 20 37 35.8 +0.2
comp=Z,70nm,0.2s
OBKA Obir 0.92 12 ePg Pg 20 37 35.2 0.0
SNR=24
OBKA ⇓iSg Sb 20 37 48.6 +0.5
comp=Z,27nm,0.2s
OBKA Obir 0.92 12 Pg Pg 20 37 35.2 0.0
SNR=24
OBKA Sg Sb 20 37 48.6 +0.5
comp=Z,27nm,0.2s
VINO Villanova 0.94 314⇑ePg Pg 20 37 34.5 -1.1
VINO eSg Sb 20 37 49.4 +0.8
VINO Villanova 0.94 314 Pg Pg 20 37 34.5 -1.1
comp=Z,72nm,0.5s
VINO Villanova 0.94 314 eP Pg 20 37 34.5 -1.1
VINO eSg Sb 20 37 49.4 +0.8
GCIS Gornji Cirnik 0.99 74 i Pg Pg 20 37 36.4 -0.1
comp=Z,30nm,0.2s
GCIS Gornji Cirnik 0.99 74 i Pg Pg 20 37 36.4 -0.1
comp=Z,30nm,0.2s
BUA Buia 1.00 308⇑ePg Pg 20 37 36.0 -0.7
BUA Buia 1.00 308⇑ePg Pg 20 37 36.0 -0.7
DOBS Dobrina 1.00 57 i Pg Pb 20 37 37.2 +0.1
DOBS Dobrina 1.00 57 i Pg Pb 20 37 37.2 +0.1
LSR Lussari 1.01 330⇑ePg Pg 20 37 36.1 -0.8
LSR eSg Sn 20 37 52.0 -0.4
LSR Lussari 1.01 330 eP Pg 20 37 36.1 -0.8
LSR eSg Sn 20 37 52.0 -0.4
PTCC Patocco-Chiusa 1.02 322 Pg Pg 20 37 36.0 -1.1
comp=Z,60nm,0.5s
PTCC Patocco-Chiusa 1.02 322 eP Pg 20 37 36.0 -1.1
PTCC eSg Sn 20 37 52.4 -0.1
GOLS Golise 1.03 67 i Pg Pg 20 37 37.3 -0.1
comp=Z,87nm,0.3s
GOLS Golise 1.03 67 i Pg Pg 20 37 37.3 -0.1
comp=Z,87nm,0.3s
ACOM Acomizza, Ital 1.07 331⇑ePg Pg 20 37 37.4 -0.8
ACOM eSg Sn 20 37 53.9 -0.2
ACOM Acomizza, Ital 1.07 331 Pg Pg 20 37 37.7 -0.5
comp=Z,257nm,0.5s
ACOM Acomizza, Ital 1.07 331 eP Pg 20 37 37.4 -0.8
ACOM Acomizza, Ital 1.07 331 Pg Pg 20 37 37.7 -0.5
comp=Z,257nm,0.5s
ACOM eSg Sn 20 37 53.9 -0.2
MPRI Monte Prat 1.09 306 ePg Pg 20 37 37.6 -0.8
MPRI eSg Sn 20 37 55.0 +0.7
MPRI Monte Prat 1.09 306 eP Pg 20 37 37.7 -0.8
MPRI eSg Sn 20 37 55.0 +0.7
PERS Pernice 1.19 30 i Pg Pb 20 37 39.9 -0.3
PERS i Sg Sn 20 37 56.4 -0.3
comp=Z,84nm,0.2s
PERS Pernice 1.19 30 i Pg Pb 20 37 39.9 -0.3
PERS i Sg Sn 20 37 56.4 -0.3
comp=Z,84nm,0.2s
FUSE Fusea 1.19 313 ePg Pb 20 37 39.6 -0.6
FUSE Fusea 1.19 313 ePg Pb 20 37 39.7 -0.6
SOKA Soboth 1.20 26⇑ePg Pg 20 37 40.4 -0.1
SNR=22
SOKA Soboth 1.20 26 Pg Pg 20 37 40.4 -0.1
SNR=22
BISS Bistriski jare 1.20 30 i Pg Pb 20 37 40.3 -0.1
BISS Bistriski jare 1.20 30 i Pg Pb 20 37 40.3 -0.1
GROS Grobnik 1.21 45 i Pg Pg 20 37 40.9 +0.1
comp=Z,95nm,0.3s
GROS Grobnik 1.21 45 i Pg Pg 20 37 40.9 +0.1
comp=Z,95nm,0.3s
STAL STALIGIAL 1.26 302 Pg Pn 20 37 40.4 -1.0
comp=Z,108nm,0.3s
STAL STALIGIAL 1.26 302 Pg Pn 20 37 40.4 -1.0
comp=Z,108nm,0.3s
POLC Polcenigo 1.30 289 ePg Pg 20 37 42.3 -0.1
ZOU Zoufplan 1.30 317 ePg Pn 20 37 41.7 -0.4

FVI Forni Avoltri 1.43 314 Pg Pg 20 37 45.1 +0.2
comp=Z,109nm,0.4s
FVI Forni Avoltri 1.43 314 Pg Pg 20 37 45.1 +0.2
comp=Z,109nm,0.4s
CSMI Casera Mimoias 1.44 309⇑ePg Pg 20 37 45.0 -0.1
CSMI Casera Mimoias 1.44 309⇑ePg Pg 20 37 45.0 -0.1
MTLO Montello 1.53 278⇑ePg Pb 20 37 45.9 -0.1
MTLO eSg Sg 20 38 07.9 +1.2
MTLO Montello 1.53 278 eP Pb 20 37 45.9 -0.1
MTLO eSg Sg 20 38 07.9 +1.2
KBA Koelnbreinsper 1.60 337⇑ePg Pg 20 37 47.9 -0.3
SNR=12
KBA ⇓iSg Sg 20 38 10.4 +1.4
comp=Z,32nm,0.4s
KBA Koelnbreinsper 1.60 337 Pg Pg 20 37 47.9 -0.3
SNR=12
KBA Sg Sg 20 38 10.4 +1.4
comp=Z,32nm,0.4s
ABTA Abfaltersbach 1.67 314⇑ePg Pb 20 37 48.7 +0.3
SNR=15
ABTA ⇓iSg Sg 20 38 12.1 +1.0
comp=Z,16nm,0.2s
ABTA Abfaltersbach 1.67 314 Pg Pb 20 37 48.7 +0.3
SNR=15
ABTA Sg Sg 20 38 12.1 +1.0
comp=Z,16nm,0.2s
AGOR Agordo 1.69 294 Pg Pb 20 37 48.0 -0.7
comp=Z,36nm,0.3s
CGRP Cima Grappa 1.75 280⇓ePn Pn 20 37 48.6 +0.5
CGRP Cima Grappa 1.75 280 Pg Pn 20 37 48.6 +0.5
comp=Z,48nm,1.0s
CGRP Cima Grappa 1.75 280 Pg Pn 20 37 48.6 +0.5
comp=Z,48nm,1.0s
TEOL Teolo 1.84 263 Pg Pb 20 37 50.8 -0.5
comp=Z,225nm,0.7s
TEOL Teolo 1.84 263 Pg Pb 20 37 50.8 -0.5
comp=Z,225nm,0.7s
ARSA Arzberg 1.86 28⇑ePn Pn 20 37 49.2 -0.4
SNR=6.6
ARSA ⇓iPg Pg 20 37 52.9 -0.2
ARSA ⇑iSn Sn 20 38 13.6 +0.3
ARSA Arzberg 1.86 28 Pn Pn 20 37 49.2 -0.4
SNR=6.6
RISI Rein 2.02 312 ePn Pb 20 37 54.0 -0.5
DDS Dosso del Somm 2.17 278 ePn Pn 20 37 54.5 +0.6
DDS Dosso del Somm 2.17 278 ePn Pn 20 37 54.5 +0.6
KOSI Kohlern 2.18 294⇓ePn Pn 20 37 55.2 +1.1
FSSB Fossombrone 2.19 209 Pg Pn 20 37 53.7 -0.4
comp=Z,7.0nm,0.2s
ROVR Rover˜¤ Verone 2.24 272 Pg Pn 20 37 55.2 +0.3
ROVR Rover˜¤ Verone 2.24 272 Pg Pn 20 37 55.2 +0.3
ABSI Aberstueckl 2.33 300⇑ePn Pn 20 37 57.5 +1.3
ROSI Rosskopf 2.38 305⇑ePn Pb 20 37 59.2 -1.4
PIEI Pieia 2.41 211 Pg Pn 20 37 56.7 -0.5
comp=Z,25nm,0.6s
SNTG Esanatoglia 2.54 202 Pg Pn 20 37 58.6 -0.3
comp=Z,33nm,1.2s
MAGA Magasa 2.55 275 Pg Pn 20 38 00.9 +1.7
CESI CESI - Serrava 2.78 201 Pg Pn 20 38 02.0 -0.2
comp=Z,4.0nm,0.4s
KHC Kasperske Hory 3.56 353 ePN Pn 20 38 14.2 +1.3
KHC ex x 20 38 21.1
KHC ePG Pb 20 38 22.4 +1.8
KHC eSN Sn 20 38 56.2 +1.2
KHC eSG Sg 20 39 10.5 -1.1
comp=Z,6.0nm,0.8s
KHC Kasperske Hory 3.56 353 Pn Pn 20 38 14.2 +1.3
GOPC GO Pecny, Ondr 4.32 5 eSG Sg 20 39 35.0 -1.2
GOPC GO Pecny, Ondr 4.32 5 Sg Sg 20 39 35.0 -1.2
PRU Pruhonice 4.39 2 eSN Sn 20 39 15.5 0.0
PRU eSG Sg 20 39 36.6 -1.7
comp=Z,1.7nm,0.3s
PRU Pruhonice 4.39 2 Sn Sn 20 39 15.5 0.0
PRU Sg Sg 20 39 36.6 -1.7
comp=Z,1.7nm,0.3s
PRA Prague 4.47 1 eSG Sg 20 39 39.3 -1.5
PRA Prague 4.47 1 Sg Sg 20 39 39.3 -1.5
KRLC Kraliky 4.78 20 eSG Sg 20 39 49.7 -1.2
KRLC Kraliky 4.78 20 Sg Sg 20 39 49.7 -1.2
NKC Novy Kostel 4.79 346 eSG Sg 20 39 49.8 -1.3
comp=Z,5.3nm,0.6s
NKC Novy Kostel 4.79 346 Sg Sg 20 39 49.8 -1.3
comp=Z,5.3nm,0.6s
PGF Pioggiola 4.87 233 eP Pn 20 38 32.1 +1.1
PGF eSn Sn 20 39 21.1 -6.5
comp=Z,3.0nm,0.4s
PGF Pioggiola 4.87 233 eP Pn 20 38 32.1 +1.1
PVCC Panska Ves 4.93 2 eSG Sg 20 39 54.7 -0.9
comp=Z,3.7nm,0.3s
PVCC Panska Ves 4.93 2 Sg Sg 20 39 54.7 -0.9
comp=Z,3.7nm,0.3s
DPC Dobruska-Polom 4.94 16 eSG Sg 20 39 55.2 -0.9
DPC Dobruska-Polom 4.94 16 Sg Sg 20 39 55.2 -0.9
UPC Upice 5.04 13 eSG Sg 20 39 57.9 -1.4
UPC Upice 5.04 13 Sg Sg 20 39 57.9 -1.4
SBF Sospel 5.17 253 eSn Sn 20 39 28.2 -6.6
comp=Z,2.8nm,0.3s
LPG La Plagne 5.28 271 eP Pn 20 38 38.1 +1.4
LPG eSn Sn 20 39 31.7 -6.1
comp=Z,0.5nm,0.2s
LPG La Plagne 5.28 271 eP Pn 20 38 38.1 +1.4
LPL La Plagne 5.29 272 eP Pn 20 38 38.0 +1.1
LPL La Plagne 5.29 272 eP Pn 20 38 38.0 +1.1
MBDF Montbardon 5.37 263 eP Pn 20 38 39.4 +1.5
MBDF eSn Sn 20 39 33.8 -6.1
comp=Z,2.2nm,0.4s
MBDF Montbardon 5.37 263 eP Pn 20 38 39.4 +1.5
HINF Hinteralfeld 5.55 296 ePn Pn 20 38 37.4 -2.9
HINF Hinteralfeld 5.55 296 eP Pn 20 38 42.2 +1.9
HINF eSn Sn 20 39 37.8 -6.5
comp=Z,2.9nm,0.4s
HINF Hinteralfeld 5.55 296 eP Pn 20 38 42.2 +1.9
CLL Collm 5.76 352 e(Pn) Pn 20 38 48.0 +4.8
CLL eSg Sg 20 40 20.0 -2.5
comp=Z,15nm,1.6s
LMR La Mourre 6.00 250 eSn Sn 20 39 48.3 -6.8
comp=Z,1.5nm,0.3s
SMF Signal de Mont 7.32 282 ePn Pn 20 39 01.4 -3.1
LOR Lormes 7.38 287 eP Pn 20 39 07.6 +2.3
baz=112
LOR Lormes 7.38 287 eP Pn 20 39 07.6 +2.3
AVF Avril sur Loir 7.66 283 ePn Pn 20 39 06.1 -3.1
AVF Avril sur Loir 7.66 283 eP Pn 20 39 10.8 +1.6
AVF Avril sur Loir 7.66 283 eP Pn 20 39 10.8 +1.6

*IDC **07** 20:42:24.1±1.3, 38.°93N×70.°35E, h0km, mb3.6/6, mb1 3.7/12, mb1mx3.6/43, mbtmp3.6/12, ML3.2/6, MS2.8/2, Ms1 2.8/2, ms1mx2.3/36, Error ellipse: s-maj=29.9km s-min=13.9km az=147.0*
*KRNET **07** 20:42:27.3±0.1, 39.°44N×70.°08E, mb3.7*
*NNC **07** 20:42:27.9±0.5, 39.°35N×70.°04E, h3km±6km, mb4.0, mpv3.8, Error ellipse: s-maj=8.2km s-min=2.5km az=145.0*
**ISC 07 20:42:26.2**±1.5**, 39.°31N**±0.°05×**70.°12E**±0.°04**, h0**km±10km**,** **n51,** σ**2.**s**16**/68**, mb3.6**/6**, 41C-27D, Tajikistan**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
BTK Batken 0.92 36⇓iP Pg 20 42 43.9 +0.1
baz=42
BTK ⇓iS Sg 20 42 56.1 +0.3
baz=42
DZET Dzherino 1.13 244 ⇑P Pb 20 42 48.3 -0.3
67nm,0.5s
DZET ⇑S Sb 20 43 03.8 -0.1
436nm,0.5s
SFK Sufi-Kurgan 2.70 74 ⇑Pn Pn 20 43 13.7 +2.6
19nm,0.7s
SFK ⇓Pg Pg 20 43 18.2 +0.2
41nm,0.6s
SFK ⇑Lg Lg 20 43 53.3
222nm,0.3s
SFK Sufi-Kurgan 2.70 74⇓iP Pb 20 43 14.2 -1.3
baz=77
SFK ⇓eS Sb 20 43 49.1 -0.2
baz=77
SFK Sufi-Kurgan 2.70 74⇑iP Pn 20 43 13.7 +2.6
baz=77
SFK ⇑iS Sb 20 43 50.1 +0.8
baz=77
ARK Arkit 2.85 29⇑iP Pb 20 43 16.8 -1.2
baz=31
ARK ⇑iS Sb 20 43 51.8 -1.8
baz=31

ARSB Arslanbob 2.97 46⇑eP Pb 20 43 17.4 -2.7
baz=49
ARSB ⇑eS Sb 20 43 54.0 -3.0
baz=49
MNAS Manas 3.65 29 ⇓Pn Pn 20 43 26.6 +2.5
7.9nm,0.5s
MNAS ⇓Pg Pg 20 43 35.4 -0.7
39nm,0.8s
MNAS ⇑Sn Sn 20 44 07.6 -0.3
29nm,0.5s
MNAS ⇓Lg Lg 20 44 22.0
42nm,0.4s
MNAS Manas 3.65 29⇑iP Pn 20 43 26.3 +2.3
baz=30
MNAS ⇑iS Sb 20 44 13.7 -2.8
baz=30
MNAS Manas 3.65 29⇓iP Pn 20 43 26.8 +2.8
baz=30
MNAS ⇓eS Sb 20 44 12.9 -3.6
baz=30
KK31 Karatay Array 3.80 4 Pn Pn 20 43 28.9 +3.0
4.1nm,0.5s,baz=198,slow=14,SNR=101
KK31 ⇑Pg Pb 20 43 36.4 +2.3
3.8nm,0.3s,baz=179,slow=12,SNR=33
KK31 ⇑Lg Lg 20 44 28.7
66nm,0.7s,baz=179,slow=28,SNR=6.2
AML Almayashu 3.91 43⇓iP Pn 20 43 29.3 +1.4
baz=44
AML ⇓iS Sb 20 44 19.5 -4.8
baz=44
AML Almayashu 3.91 43 P Pn 20 43 29.6 +1.7
SNR=13
ARLS Aral 4.09 50⇑eP Pn 20 43 33.6 +3.5
baz=52
ARLS ⇑iS Sn 20 44 20.7 +2.0
baz=52
EKS2 Erkin-Say 4.34 38⇓iP Pn 20 43 36.2 +2.7
baz=40
EKS2 ⇓iS Sn 20 44 28.8 +3.9
baz=40
EKS Erkin-Say 4.35 38⇑iP Pn 20 43 36.1 +2.5
baz=40
EKS ⇑eS Sn 20 44 26.8 +1.7
baz=40
AAK Ala-Archa 4.69 44 ⇑Pn Pn 20 43 40.5 +2.2
AAK ⇑Pg Pg 20 43 53.3 -2.7
AAK ⇑Sn Sn 20 44 36.8 +3.3
37nm,1.1s
AAK ⇓Lg Lg 20 44 58.6
40nm,0.7s
AAK Ala-Archa 4.69 44 Pn Pn 20 43 40.3 +2.0
3.4nm,0.3s,baz=199,slow=7.8,SNR=20
AAK Sn Sn 20 44 34.3 +0.9
2.6nm,0.3s,baz=181,slow=7.1,SNR=3.6
AAK Ala-Archa 4.69 44⇑iP Pn 20 43 40.9 +2.6
baz=45
AAK ⇑iS Sn 20 44 37.2 +3.7
baz=45
AAK Ala-Archa 4.69 44 P Pn 20 43 40.7 +2.4
SNR=9.2
KZA Kyzart 4.78 53⇑iP Pn 20 43 42.0 +2.2
baz=54
KZA ⇑iS Sn 20 44 39.7 +3.6
baz=54
KZA Kyzart 4.78 53 P Pn 20 43 44.0 +4.3
SNR=57
KBK Karagaybulak 4.95 46⇓iP Pn 20 43 43.6 +1.7
baz=47
KBK ⇓iS Sn 20 44 43.9 +3.9
baz=47
KBK Karagaybulak 4.95 46 P Pn 20 43 46.0 +4.0
SNR=14
USP Ospenovka 5.15 38⇑iP Pn 20 43 46.1 +1.6
baz=40
USP ⇑iS Sn 20 44 48.0 +3.4
baz=40
TKM2 Tokmak 2 5.49 47 ⇓Pn Pn 20 43 50.9 +1.6
9.6nm,0.5s
TKM2 ⇑Pg Pg 20 44 08.9 -2.4
9.0nm,0.5s
TKM2 ⇑Sn Sn 20 44 56.9 +3.7
22nm,0.7s
TKM2 ⇑Lg Lg 20 45 23.1
23nm,0.9s
TKM2 Tokmak 2 5.49 47 P Pn 20 43 54.1 +4.8
SNR=9.2
PDGK Podgornoye 8.11 57 ⇑Pn Pn 20 44 26.6 +1.5
5.9nm,1.3s
PDGK ⇑Lg Lg 20 46 46.0
13nm,1.2s
OTUK Ortayu 9.07 9 ⇓Pn Pn 20 44 41.7 +3.3
3.9nm,1.3s
OTUK ⇑Sn Sn 20 46 23.4 +2.3
4.2nm,0.6s
OTUK ⇓Lg Lg 20 47 15.7
40nm,1.5s
GEYT Alibeck 9.50 265 Pn Pn 20 44 44.3 +0.1
0.2nm,0.3s,baz=96,slow=8.9,SNR=2.5
GEYT Sn Sn 20 46 28.9 -2.7
0.5nm,0.3s,baz=134,slow=21,SNR=5.1
MKAR Makanchi Array 11.62 46 Pn Pn 20 45 15.5 +2.3
0.1nm,0.3s,baz=218,slow=14,SNR=3.7
MKAR LR LR 20 49 40.4
comp=Z,33nm,20.7s,baz=230,slow=37
AB31 Akbulak array 12.32 327 Pn Pn 20 45 22.2 -0.5
1.5nm,0.4s,baz=139,slow=12,SNR=31
AB31 ⇓Sn Sn 20 47 39.0 -1.6
3.2nm,0.6s,baz=151,slow=22,SNR=10
KURBB Kurchatov Arra 12.77 25 ⇓Lg Lg 20 49 11.4
8.4nm,0.8s
KURBB Kurchatov Arra 12.77 25 Pn Pn 20 45 29.4 +0.5
0.0nm,0.3s,baz=212,slow=12,SNR=6.3
KURBB Lg Lg 20 49 03.5
0.0nm,0.3s,baz=214,slow=34,SNR=6.6
KURK Kurchatov 12.88 25 ⇓Lg Lg 20 49 14.9
37nm,1.3s
VOSK Vostochnaya 13.43 2 ⇑Pn Pn 20 45 37.8 0.0
0.7nm,0.6s
VOSK ⇑Lg Lg 20 49 33.6
7.9nm,1.1s
ZRNK Zerenda 13.66 357 ⇑Pn Pn 20 45 40.0 -1.1
1.1nm,0.8s
ZRNK ⇓Sn Sn 20 48 14.6 +1.1
1.6nm,1.1s
ZRNK ⇓Lg Lg 20 49 41.0
8.1nm,1.2s
BVA0 Borovoye Array 13.72 1 ⇑Lg Lg 20 49 42.5
4.8nm,1.0s
BVAR Borovoye Array 13.72 1 Pn Pn 20 45 43.3 +1.4
0.3nm,0.3s,baz=155,slow=14,SNR=4.1
BRVK Borovoye 13.75 0 ⇑Lg Lg 20 49 45.6
14nm,1.2s
AKTO Aktyubinsk 14.03 326 ⇑Pn Pn 20 45 47.1 +1.1
2.6nm,0.8s
AKTO ⇓Sn Sn 20 48 23.1 +0.7
3.8nm,0.7s
AKTO Aktyubinsk 14.03 326 Sn Sn 20 48 20.9 -1.5
0.3nm,0.3s,baz=18,slow=7.9,SNR=3.9
CHKZ Chkalovo 14.37 1 ⇓Pn Pn 20 45 51.6 +0.8
0.9nm,0.8s
CHKZ ⇑Lg Lg 20 50 03.9
4.2nm,1.3s
ZALV Zalesovo Beam 17.73 30 P Pn 20 46 34.0 -0.3
0.3nm,0.3s,baz=224,slow=13,SNR=18
ARU Arti 18.76 340 P Pn 20 46 46.0 -0.8
0.0nm,0.3s,baz=163,slow=19,SNR=2.2
ARU LR LR 20 55 07.0
comp=Z,38nm,18.8s,baz=316,slow=40
BRTR Keskin Array B 28.03 283 P P 20 48 20.6 +1.6
0.9nm,0.7s,baz=77,slow=9.0,SNR=4.8
FINES FINESS Array B 34.78 324 P P 20 49 18.6 +0.6
2.5nm,0.8s,baz=123,slow=15,SNR=3.9
ESDC Sonseca Array 55.57 296 P P 20 52 03.6 +0.2
0.1nm,0.3s,baz=44,slow=7.0,SNR=3.5
TORD Torodi Ar. Bea 65.14 267 P P 20 53 07.1 -2.0
0.2nm,0.5s,baz=51,slow=6.0,SNR=2.9
YKA Yellowknife Ar 78.47 2 P P 20 54 27.8 -0.7
0.4nm,0.6s,baz=350,slow=6.4,SNR=4.0
ASAR Alice Springs 86.42 124 P P 20 55 08.1 -2.5
0.3nm,0.8s,baz=314,slow=3.3,SNR=3.3

*NNC **07** 20:54:57.8±0.5, 39.°31N×70.°06E, h0km, mb3.5, mpv3.2, Error ellipse: s-maj=11.2km s-min=3.2km az=146.0*
*ISCJB **07** 20:54:58.9±0.6, 39.°37N±0.°06×69.°99E±0.°06, h10km, Error ellipse: s-maj=9.5km s-min=4.2km az=148.4*
*KRNET **07** 20:54:58.0±0.1, 39.°49N×70.°06E, mb3.1*

**ISC 07 20:54:58.8**±0.9**, 39°.53N**±0°.05×**69°.93E**±0°.05**, h10$^{km}$, n20, $\sigma$2$^s$54**/34**, 33C-7D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BTK** | **Batken** | **0.86** | **52** | ⇑*i*P | **Pg** | **20 55 14.2** | **-1.3** |
| | baz=46 | | | | | | |
| BTK | | | | ⇑*i*S | **Sg** | **20 55 26.1** | **-0.7** |
| | baz=46 | | | | | | |
| **DZET** | **Dzherino** | **1.12** | **230** | ⇑P | **Pb** | **20 55 18.2** | **-2.1** |
| | 23nm,0.5s | | | | | | |
| DZET | | | | ⇑S | **Sb** | **20 55 33.7** | **-1.3** |
| | 76nm,0.3s | | | | | | |
| **ARK** | **Arkit** | **2.74** | **34** | ⇑*i*P | **Pb** | **20 55 47.1** | **-0.9** |
| | baz=32 | | | | | | |
| ARK | | | | ⇑*i*S | **Sb** | **20 56 21.4** | **-0.4** |
| | baz=32 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.79** | **79** | ⇑Pn | **Pn** | **20 55 44.3** | **+0.4** |
| | 1.2nm,0.3s | | | | | | |
| SFK | | | | ⇑Pg | **Pb** | **20 55 47.8** | **-1.2** |
| | 14nm,0.8s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 20 56 24.0 | |
| | 102nm,0.8s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.79** | **79** | ⇑*e*P | **Pn** | **20 55 45.5** | **+1.7** |
| | baz=78 | | | | | | |
| SFK | | | | ⇑*i*S | **Sb** | **20 56 20.9** | **-2.4** |
| | baz=78 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.79** | **79** | ⇓*i*P | **Pn** | **20 55 44.2** | **+0.4** |
| | baz=78 | | | | | | |
| SFK | | | | ⇓*i*S | **Sn** | **20 56 19.9** | **+2.2** |
| | baz=78 | | | | | | |
| **ARSB** | **Arslanbob** | **2.94** | **51** | ⇑*i*P | **Pn** | **20 55 47.6** | **+1.9** |
| | baz=49 | | | | | | |
| ARSB | | | | ⇑*i*S | **Sb** | **20 56 25.1** | **-2.3** |
| | baz=49 | | | | | | |
| **MNAS** | **Manas** | **3.54** | **33** | ⇓Pn | Pn | 20 55 57.1 | +3.2 |
| | 3.1nm,0.5s | | | | | | |
| MNAS | | | | ⇑Pg | **Pg** | **20 56 05.5** | **-1.1** |
| | 4.3nm,0.4s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 20 56 51.5 | |
| | 8.8nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **3.54** | **33** | ⇑*i*P | Pn | 20 55 57.3 | +3.3 |
| | baz=31 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **20 56 41.5** | **-3.2** |
| | baz=31 | | | | | | |
| **MNAS** | **Manas** | **3.54** | **33** | ⇓*i*P | **Pn** | **20 55 56.6** | **+2.6** |
| | baz=31 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sb** | **20 56 44.3** | **-0.4** |
| | baz=31 | | | | | | |
| **KK31** | **Karatay Array** | **3.60** | **7** | Pn | **Pb** | **20 55 59.4** | **-3.1** |
| | 1.3nm,0.4s,baz=200,slow=16,SNR=74 | | | | | | |
| KK31 | | | | ⇑Pg | **Pg** | **20 56 06.2** | **-1.6** |
| | 1.8nm,0.3s,baz=33,slow=50,SNR=9.6 | | | | | | |
| KK31 | | | | Lg | Lg | 20 56 59.2 | |
| | 6.0nm,0.3s,baz=178,slow=30,SNR=7.1 | | | | | | |
| **AML** | **Almayashu** | **3.86** | **46** | ⇑*i*P | **Pn** | **20 55 59.7** | **+1.1** |
| | baz=45 | | | | | | |
| AML | | | | ⇑*i*S | **Sb** | **20 56 50.1** | **-4.1** |
| | baz=45 | | | | | | |
| **ARLS** | **Aral** | **4.07** | **54** | ⇑*i*P | **Pn** | **20 56 03.6** | **+2.3** |
| | baz=52 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **20 56 51.0** | **+1.9** |
| | baz=52 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.27** | **42** | ⇑*i*P | **Pn** | **20 56 06.4** | **+2.4** |
| | baz=40 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **20 57 00.3** | **-5.4** |
| | baz=40 | | | | | | |
| **AAK** | **Ala-Archa** | **4.64** | **47** | ⇑*i*P | **Pn** | **20 56 11.4** | **+2.3** |
| | baz=45 | | | | | | |
| AAK | | | | ⇑*i*S | **Sn** | **20 57 07.0** | **+3.9** |
| | baz=45 | | | | | | |
| **KZA** | **Kyzart** | **4.77** | **56** | ⇑*i*P | **Pn** | **20 56 13.3** | **+2.2** |
| | baz=55 | | | | | | |
| KZA | | | | ⇑*i*S | **Sn** | **20 57 09.9** | **+3.2** |
| | baz=55 | | | | | | |
| **KBK** | **Karagaybulak** | **4.91** | **49** | ⇑*e*P | Pn | 20 56 15.7 | +2.8 |
| | baz=48 | | | | | | |
| KBK | | | | ⇑*i*S | **Sn** | **20 57 15.1** | **+5.3** |
| | baz=48 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.45** | **50** | ⇑Pn | **Pn** | **20 56 22.0** | **+1.7** |
| | 2.8nm,0.3s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sn** | **20 57 25.2** | **+2.0** |
| | 6.3nm,0.8s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 20 57 52.4 | |
| | 6.6nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **8.12** | **59** | ⇑Lg | Lg | 20 59 12.6 | |
| | 7.4nm,1.2s | | | | | | |
| **AB31** | **Akbulak array** | **12.05** | **327** | Pn | **Pn** | **20 57 52.3** | **+1.7** |
| | 0.5nm,0.3s,baz=144,slow=12,SNR=18 | | | | | | |
| AB31 | | | | ⇑Sn | Sn | 21 00 12.7 | +7.7 |
| | 0.7nm,0.5s,baz=143,slow=23,SNR=5.0 | | | | | | |

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*GCMT **07** 20:58:48.0±0.4, 18°.43S×65°.26E, h21$^{km}$±1$^{km}$, MW5.0/60, Moment Tensor Solution. s27,c33; s60,c79; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.75±.32; $M_{\theta\theta}$0.64±.22; $M_{\phi\phi}$3.12±.23; $M_{r\theta}$0.07±.39; $M_{\theta\phi}$-0.94±.15; $M_{\phi r}$1.77±.36; Best double couple: $M_0$4.00100×$10^{16}$ NP1:$\phi_s$170.00000°, δ58.00000°, λ-82.00000°. NP2: $\phi_s$334.00000°, δ33.00000°, λ-103.00000°. Principal axes: T 3.8050, Plg13.0000°, Azm254.0000°; N 0.3970, Plg7.0000°, Azm345.0000°; P -4.1970, Plg76.0000°, Azm104.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*IDC **07** 20:58:51.0±0.5, 18°.62S×65°.48E, h0$^{km}$, mb4.0/19, mb1 4.1/20, mb1mx4.0/39, mbtmp4.0/20, ML3.6/1 Error ellipse: s-maj=18.9km s-min=14.7km az=95.0*

*ISCJB **07** 20:58:51.7±0.4, 18°.67S±0°.08×65°.51E±0°.08, h15$^{km}$, mb4.1/24, Error ellipse: s-maj=11.3km s-min=11.1km az=0.6*

*NEIC **07** 20:58:52.6±0.3, 18°.64S×65°.49E, h10$^{km}$, mb4.5/5, Error ellipse: s-maj=10.0km s-min=9.2km az=151.0*

**ISC 07 20:58:53.5**±0.5**, 18°.7S**±0°.1×**65°.4E**±0°.1**, h15$^{km}$, n47, $\sigma$0$^s$91**/36**, mb4.2**/24**, 5C-5D, Mauritius - Reunion region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **12.90** | **33** | T | T | 21 15 01.4 | |
| | baz=211,slow=75,SNR=200 | | | | | | |
| **H08S2** | **Diego Garcia H** | **12.91** | **33** | T | T | 21 15 02.2 | |
| | baz=211,slow=75,SNR=146 | | | | | | |
| **H08S3** | **Diego Garcia H** | **12.92** | **33** | T | T | 21 15 03.0 | |
| | baz=211,slow=75,SNR=181 | | | | | | |
| **H08N3** | **Diego Garcia H** | **13.37** | **25** | T | T | 21 15 41.9 | |
| | baz=205 | | | | | | |
| **H08N1** | **Diego Carcia H** | **13.38** | **25** | T | T | 21 15 42.2 | |
| | baz=205,slow=74 | | | | | | |
| **H08N2** | **Diego Garcia H** | **13.39** | **25** | T | T | 21 15 43.6 | |
| | baz=205,slow=74 | | | | | | |
| **OPO** | **Ambohidratompo** | **17.30** | **267** | P | **P** | **21 02 56.6** | **+0.4** |
| | 0.2nm,0.3s,baz=105,slow=16,SNR=2.7 | | | | | | |
| **LSZ** | **Lusaka** | **35.74** | **270** | *e*P | **P** | **21 05 51.9** | **-0.4** |
| | 5.2nm,1.2s | | | | | | |
| **LBTB** | **Lobatse** | **37.42** | **253** | P | **P** | **21 06 06.5** | **0.0** |
| | 4.1nm,0.9s,baz=121,slow=7.7,SNR=3.0 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **45.94** | **121** | T | T | 21 56 23.0 | |
| | baz=279,slow=75,SNR=6.3 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **45.94** | **121** | T | T | 21 56 23.1 | |
| | baz=279,slow=75,SNR=7.5 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **45.96** | **121** | T | T | 21 56 22.3 | |
| | baz=279,slow=75,SNR=5.8 | | | | | | |
| **RAYN** | **Ar Rayn** | **46.21** | **334** | *e*P | **P** | **21 07 17.9** | **-0.3** |
| | 4.2nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **48.97** | **181** | P | **P** | **21 07 39.7** | **+0.7** |
| | 1.2nm,0.7s,baz=7.6,slow=11,SNR=6.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.43** | **44** | P | **P** | **21 07 42.9** | **-0.3** |
| | 2.2nm,1.0s,baz=232,slow=7.7,SNR=8.9 | | | | | | |
| **LSA** | **Lhasa** | **54.09** | **28** | *e*P | **P** | **21 08 19.9** | **+1.5** |
| | 5.3nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **63.52** | **108** | P | **P** | **21 09 23.1** | **-0.6** |
| | 0.5nm,0.7s,baz=274,slow=5.7,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.61** | **104** | P | **P** | **21 09 29.1** | **-1.9** |
| | 3.7nm,1.1s,baz=260,slow=5.3,SNR=5.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **64.62** | **104** | *e*P | **P** | **21 09 29.1** | **-1.9** |
| | 5.8nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **65.22** | **333** | P | **P** | **21 09 34.2** | **-0.3** |
| | 0.9nm,0.9s,baz=150,slow=6.0,SNR=3.4 | | | | | | |
| **SNAA** | **Sanae** | **65.64** | **199** | P | **P** | **21 09 37.0** | **+0.2** |
| | 0.5nm,0.7s,baz=90,slow=5.0,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.89** | **13** | P | **P** | **21 09 44.8** | **-0.2** |
| | 1.6nm,0.9s,baz=197,slow=4.5,SNR=7.6 | | | | | | |
| **KURK** | **Kurchatov** | **70.03** | **9** | *e*P | **P** | **21 10 03.8** | **-0.7** |
| | 18nm,1.2s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **70.32** | **292** | P | **P** | **21 10 06.9** | **-0.2** |
| | 0.3nm,0.8s,baz=132,slow=6.0,SNR=4.9 | | | | | | |
| **QSPA** | **South Pole Qui** | **71.46** | **180** | P | **P** | **21 10 13.4** | **+0.1** |
| | 2.8nm,0.7s,baz=292,slow=1.1,SNR=23 | | | | | | |
| **BVAR** | **Borovoye Array** | **71.50** | **3** | P | **P** | **21 10 12.9** | **-0.5** |
| | 2.1nm,0.8s,baz=177,slow=7.9,SNR=4.9 | | | | | | |
| **CFR** | **Carcaliu** | **72.01** | **333** | ⇓*i*P | **P** | **21 10 17.5** | **+0.9** |
| **VRI** | **Vrincioaia** | **73.16** | **333** | ⇑*i*P | **P** | **21 10 24.7** | **+1.2** |
| **MLR** | **Muntele Rosu** | **73.21** | **332** | ⇓*i*P | **P** | **21 10 25.4** | **+1.4** |
| **VNDA** | **Vanda** | **73.31** | **167** | P | **P** | **21 10 24.3** | **+0.3** |
| | 0.7nm,0.8s,baz=274,slow=8.0,SNR=4.8 | | | | | | |
| **VOIR** | | **73.57** | **332** | ⇓*i*P | **P** | **21 10 26.4** | **+0.4** |
| **DOPR** | **Dopca** | **73.83** | **332** | ⇑*i*P | **P** | **21 10 26.9** | **-0.6** |
| **LOT** | **Lotru** | **74.16** | **331** | ⇑*i*P | P | 21 10 33.5 | +3.9 |
| **ZALV** | **Zalesovo Beam** | **74.20** | **12** | P | **P** | **21 10 29.0** | **-0.4** |
| | 3.7nm,0.7s,baz=200,slow=6.1,SNR=15 | | | | | | |
| **GZR** | **Gura Zlata** | **74.58** | **330** | ⇑*i*P | **P** | **21 10 33.8** | **+1.9** |
| **BZS** | **Buzias** | **75.30** | **330** | ⇓*i*P | **P** | **21 10 36.7** | **+0.7** |
| **DRGR** | | **75.66** | **331** | ⇓*i*P | **P** | **21 10 38.4** | **+0.3** |
| **SONM** | **Songino Array** | **75.67** | **27** | P | **P** | **21 10 38.3** | **+0.1** |
| | 0.7nm,0.7s,baz=225,slow=4.7,SNR=4.7 | | | | | | |
| **BMR** | **Baia Mare** | **75.97** | **332** | ⇑*i*P | P | 21 10 45.7 | +5.9 |
| **AKASG** | **Malin Array Be** | **76.04** | **337** | P | **P** | **21 10 39.8** | **-0.3** |
| | 2.5nm,0.8s,baz=141,slow=4.9,SNR=9.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **80.99** | **46** | P | **P** | **21 11 09.1** | **+1.4** |
| **KSRS** | **Korea Array** | **81.02** | **46** | P | **P** | **21 11 09.1** | **+1.2** |
| | 1.4nm,0.9s,baz=219,slow=5.6,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **85.78** | **342** | P | **P** | **21 11 31.7** | **-0.2** |
| | 2.0nm,0.9s,baz=145,slow=5.1,SNR=3.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **86.82** | **314** | P | **P** | **21 11 36.4** | **-1.2** |
| | 0.2nm,0.5s,baz=109,slow=4.0,SNR=3.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **87.84** | **50** | P | **P** | **21 11 43.5** | **+1.0** |
| | 2.3nm,1.1s,baz=235,slow=4.3,SNR=3.7 | | | | | | |
| **ILAR** | **Eielson Array** | **129.09** | **17** | PKP | **PKPdf** | **21 17 59.7** | **-0.8** |
| | 0.1nm,0.3s,baz=273,slow=3.3,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **165.44** | **319** | PKPab | **PKPab** | **21 19 56.4** | **+0.2** |
| | 0.9nm,0.9s,baz=37,slow=3.3,SNR=5.9 | | | | | | |

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**IDC 07 21:01:48.3**±3.0**, 15°.09S**×**167°.98E, h0$^{km}$, mb3.6**/4**, mb1 3.8**/4**, mb1mx3.6**/23**, mbtmp3.6**/4**, MS3.5**/1**, Ms1 3.5**/1**, ms1mx2.8**/15**, Error ellipse: s-maj=130.9km s-min=32.2km az=143.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **19.19** | **140** | LR | LR | 21 12 02.9 | |
| | comp=Z,145nm,18.7s,baz=111,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.40** | **257** | P | P | 21 08 19.9 | -0.3 |
| | 0.4nm,0.8s,baz=85,slow=9.0,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **33.19** | **250** | P | P | 21 08 27.4 | +0.3 |
| | 0.5nm,0.6s,baz=71,slow=9.9,SNR=7.5 | | | | | | |
| **SONM** | **Songino Array** | **83.19** | **323** | P | P | 21 14 17.2 | +0.6 |
| | 0.2nm,0.4s,baz=119,slow=5.1,SNR=3.7 | | | | | | |
| **ILAR** | **Eielson Array** | **86.66** | **18** | P | P | 21 14 34.2 | +0.7 |
| | 0.2nm,0.4s,baz=240,slow=5.0,SNR=2.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **120.77** | **346** | PKP | PKPdf | 21 20 40.3 | -1.6 |
| | 4.3nm,1.0s,baz=61,slow=2.2,SNR=3.5 | | | | | | |

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*IDC **07** 21:03:09.7±0.5, 18°.62S×65°.31E, h0$^{km}$, mb4.2/19, mb1 4.3/20, mb1mx4.2/39, mbtmp4.2/20, ML3.5/1, MS4.0/19, Ms1 4.0/19, ms1mx3.9/27, Error ellipse: s-maj=18.5km s-min=15.0km az=95.0*

*BJI **07** 21:03:09.6, 18°.70S×65°.20E, h10$^{km}$, mb4.5/11, mB5.0/6, Ms4.8/2, Ms7 4.4/1*

*MOS **07** 21:03:10.2±1.4, 18°.63S×65°.49E, h10$^{km}$, mb4.9/15, Error ellipse: s-maj=15.2km s-min=8.5km az=101.7*

*ISCJB **07** 21:03:10.6±0.4, 18°.71S±0°.07×65°.35E±0°.07, h15$^{km}$, mb4.5/43, MS4.0/20, Error ellipse: s-maj=10.1km s-min=9.6km az=156.6*

*GCMT **07** 21:03:11.3±0.3, 18°.41S×65°.33E, h21$^{km}$±1$^{km}$, MW5.0/68, Moment Tensor Solution. s17,c19; s68,c86; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.59±.27; $M_{\theta\theta}$0.74±.18; $M_{\phi\phi}$2.85±.18; $M_{r\theta}$0.95±.39; $M_{\theta\phi}$-1.34±.14; $M_{\phi r}$0.23±.33; Best double couple: $M_0$3.66800×$10^{16}$ NP1:$\phi_s$321.00000°, δ48.00000°, λ-108.00000°. NP2: $\phi_s$167.00000°, δ45.00000°, λ-70.00000°. Principal axes: T 3.5060, Plg2.0000°, Azm64.0000°; N 0.3200, Plg14.0000°, Azm333.0000°; P -3.8290, Plg76.0000°, Azm161.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **07** 21:03:11.3±0.3, 18°.62S×65°.35E, h10$^{km}$, mb4.5/6 Error ellipse: s-maj=9.9km s-min=9.7km az=45.0*

**ISC 07 21:03:12.3**±0.5**, 18°.68S**±0°.09×**65°.33E**±0°.10**, h15$^{km}$, n126, $\sigma$1$^s$15**/102**, mb4.5**/43**, MS4.0**/20**, 18C-10D, Mauritius - Reunion region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **12.98** | **33** | T | T | 21 19 21.3 | |
| | baz=211,slow=75,SNR=140 | | | | | | |
| **H08S2** | **Diego Garcia H** | **12.99** | **33** | T | T | 21 19 19.6 | |
| | baz=211,slow=75,SNR=112 | | | | | | |
| **H08S3** | **Diego Garcia H** | **13.00** | **33** | T | T | 21 19 21.3 | |
| | baz=211,slow=75,SNR=147 | | | | | | |
| **H08N3** | **Diego Garcia H** | **13.45** | **25** | T | T | 21 20 02.8 | |
| | baz=203,slow=76,SNR=120 | | | | | | |
| **H08N1** | **Diego Carcia H** | **13.46** | **25** | T | T | 21 20 03.8 | |
| | baz=203,slow=76,SNR=64 | | | | | | |
| **H08N2** | **Diego Garcia H** | **13.47** | **25** | T | T | 21 20 04.5 | |
| | baz=203,slow=76,SNR=122 | | | | | | |
| **OPO** | **Ambohidratompo** | **17.19** | **267** | P | **Pn** | **21 07 13.0** | **+0.7** |
| | 0.2nm,0.3s,baz=94,slow=13,SNR=2.1 | | | | | | |
| OPO | | | | LR | LR | 21 12 15.7 | |
| | comp=Z,1μm,19.2s,baz=69,slow=32 | | | | | | |
| **PALK** | **Pallekele** | **29.92** | **32** | LR | LR | 21 18 52.5 | |
| | comp=Z,204nm,19.0s,baz=286,slow=32 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **32.59** | **299** | P | P | 21 09 47.3 | +3.5 |
| | 2.9nm,0.5s,baz=118,slow=17,SNR=13 | | | | | | |
| KMBO | | | | LR | LR | 21 20 59.3 | |
| | comp=Z,273nm,18.4s,baz=100,slow=33 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **32.59** | **299** | *ce*P | P | 21 09 47.9 | +4.1 |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **32.59** | **299** | *e*P | **P** | **21 09 45.3** | **+1.5** |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **37.31** | **253** | P | **P** | **21 10 25.0** | **+0.6** |
| | comp=Z,5.0nm,0.9s,baz=112,slow=8.0,SNR=4.3 | | | | | | |
| **LBTB** | **Lobatse** | **37.31** | **253** | P | **P** | **21 10 25.0** | **+0.6** |
| **BOSA** | **Boshof** | **37.86** | **247** | LR | LR | 21 23 25.6 | |
| | comp=Z,258nm,19.3s,baz=73,slow=32 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **46.02** | **121** | T | T | 22 00 36.6 | |
| | baz=278,slow=75,SNR=7.3 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **46.02** | **121** | T | T | 22 00 34.9 | |
| | baz=278,slow=75,SNR=8.1 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **46.03** | **121** | T | T | 22 00 36.6 | |
| | baz=278,slow=75,SNR=7.8 | | | | | | |
| **RAYN** | **Ar Rayn** | **46.19** | **334** | *e*P | **P** | **21 11 36.1** | **-0.7** |
| | comp=Z,6.6nm,1.0s | | | | | | |
| **MAW** | **Mawson** | **48.93** | **181** | P | **P** | **21 11 57.6** | **0.0** |
| | comp=Z,3.4nm,1.2s,baz=28,slow=7.8,SNR=4.5 | | | | | | |
| MAW | | | | LR | LR | 21 27 30.3 | |
| | comp=Z,161nm,21.6s,baz=58,slow=30 | | | | | | |
| **KOLN** | **Koldanda** | **49.45** | **21** | *e*P | **P** | **21 12 03.4** | **+1.1** |
| | comp=Z,31nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **49.52** | **44** | P | **P** | **21 12 03.0** | **+0.3** |
| | comp=Z,2.6nm,1.0s,baz=232,slow=8.5,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 21 29 32.9 | |
| | comp=Z,239nm,21.4s,baz=212,slow=32 | | | | | | |
| **RAMN** | **Ramite** | **49.83** | **25** | *e*P | **P** | **21 12 06.4** | **+1.2** |
| | comp=Z,54nm,1.2s | | | | | | |
| **DMN** | **Daman** | **49.84** | **23** | *e*P | **P** | **21 12 06.5** | **+1.2** |
| | comp=Z,51nm,1.3s | | | | | | |
| **PKI** | **Pulchoki** | **49.92** | **23** | *e*P | **P** | **21 12 06.6** | **+0.6** |
| **GKN** | **Gorkha** | **50.03** | **22** | *e*P | **P** | **21 12 07.5** | **+0.9** |
| | comp=Z,51nm,1.3s | | | | | | |
| **KKN** | **Kakani** | **50.07** | **23** | *e*P | **P** | **21 12 08.0** | **+1.0** |
| | comp=Z,36nm,1.2s | | | | | | |
| **TAPN** | **Taplejung** | **50.64** | **26** | *e*P | **P** | **21 12 12.3** | **+0.9** |
| | comp=Z,28nm,1.2s | | | | | | |
| **LSA** | **Lhasa** | **54.16** | **28** | *e*P | P | 21 12 33.6 | -4.2 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **54.16** | **28** | *e*P | P | 21 12 33.5 | -4.2 |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **KSH** | **Kashi** | **58.74** | **10** | P | **P** | **21 13 07.2** | **-2.6** |
| KSH | | | | PMZ | | | |
| | comp=Z,19nm,1.2s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,110nm,3.8s | | | | | | |
| **AAK** | **Ala-Archa** | **61.59** | **8** | *e*P | **P** | **21 13 30.3** | **+1.0** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,18nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **63.61** | **108** | P | **P** | **21 13 43.2** | **0.0** |
| | comp=Z,3.0nm,1.1s,baz=260,slow=6.2,SNR=9.5 | | | | | | |
| ASAR | | | | LR | LR | 21 37 27.5 | |
| | comp=Z,437nm,20.9s,baz=272,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.70** | **104** | P | **P** | **21 13 50.2** | **-0.1** |
| | comp=Z,4.0nm,1.1s,baz=265,slow=5.5,SNR=6.4 | | | | | | |
| WRA | | | | LR | LR | 21 39 20.2 | |
| | comp=Z,262nm,18.9s,baz=235,slow=34 | | | | | | |
| **WRAB** | **Tennant Creek** | **64.71** | **104** | P | **P** | **21 13 50.0** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **64.71** | **104** | P | **P** | **21 13 50.0** | **-0.5** |
| | comp=Z,5.5nm,1.1s | | | | | | |
| **BRTR** | **Keskin Array B** | **65.20** | **333** | P | **P** | **21 13 53.2** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=151,slow=9.2,SNR=3.9 | | | | | | |
| BRTR | | | | LR | LR | 21 40 00.6 | |
| | comp=Z,31nm,20.0s,baz=128,slow=34 | | | | | | |
| **KBZ** | **Khabaz** | **65.42** | **342** | P | **P** | **21 13 51.7** | **-2.7** |
| | comp=Z,2.0nm,0.8s,baz=131,slow=9.3,SNR=2.8 | | | | | | |
| KBZ | | | | LR | LR | 21 43 07.8 | |
| | comp=Z,44nm,19.0s,baz=164,slow=37 | | | | | | |
| **SNAA** | **Sanae** | **65.57** | **199** | P | **P** | **21 13 55.5** | **+0.3** |
| | comp=Z,0.4nm,0.9s,baz=76,slow=6.7,SNR=7.7 | | | | | | |
| **SNAA** | **Sanae** | **65.57** | **199** | *e*P | P | 21 13 59.1 | +3.9 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **KIV** | **Kislovodsk** | **65.69** | **342** | *i* P | **P** | **21 13 58.5** | **+2.3** |
| KIV | | | | *e* | | 21 14 30.7 | |
| KIV | | | | *e* | | 21 16 23.0 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,53nm,19.0s | | | | | | |
| **GTA** | **Gaotai** | **66.17** | **29** | *e*P | **P** | **21 14 00.6** | **+1.1** |
| GTA | | | | pP | **pP** | **21 14 04.7** | **+0.3** |
| GTA | | | | sP | **sP** | **21 14 07.7** | **+1.5** |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.94** | **13** | P | **P** | **21 14 03.1** | **-1.0** |
| | comp=Z,2.6nm,0.9s,baz=211,slow=6.6,SNR=9.9 | | | | | | |
| MKAR | | | | LR | LR | 21 40 10.0 | |
| | comp=Z,116nm,19.8s,baz=186,slow=33 | | | | | | |
| **ABKAR** | **Akbulak array** | **67.80** | **356** | *e*P | **P** | **21 14 08.3** | **-1.1** |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **ANN** | **Anapa** | **68.10** | **339** | *e*P | **P** | **21 14 13.1** | **+1.7** |
| ANN | | | | *e*S | **S** | **21 23 11.7** | **+1.1** |
| ANN | | | | pmax | pmax | | |
| | comp=Z,95nm,1.9s | | | | | | |
| **KURK** | **Kurchatov** | **70.08** | **9** | *e*P | **P** | **21 14 23.4** | **-0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,39nm,1.2s | | | | | | |
| **KURK** | **Kurchatov** | **70.08** | **9** | *e*P | **P** | **21 14 23.4** | **-0.2** |
| | comp=Z,39nm,1.2s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **70.23** | **292** | P | **P** | **21 14 24.2** | **-1.1** |
| | comp=Z,0.7nm,0.9s,baz=120,slow=5.3,SNR=4.1 | | | | | | |
| TORD | | | | LR | LR | 21 43 00.8 | |
| | comp=Z,112nm,20.2s,baz=135,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **71.43** | **180** | P | **P** | **21 14 31.8** | **-0.1** |
| | comp=Z,3.3nm,0.9s,baz=257,slow=2.9,SNR=7.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **71.54** | **3** | P | **P** | **21 14 31.3** | **-1.1** |
| | comp=Z,3.2nm,0.8s,baz=161,slow=5.8,SNR=13 | | | | | | |
| **VORD** | **Divnogorie** | **73.02** | **343** | *e*P | **P** | **21 14 43.7** | **+2.4** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.9s | | | | | | |
| **VRI** | **Vrincioaia** | **73.14** | **333** | ⇑P | P | 21 14 38.2 | -4.0 |
| **VRI** | **Vrincioaia** | **73.14** | **333** | ⇑*i*P | P | 21 14 38.2 | -4.0 |
| **PLOR** | **Plostina** | **73.17** | **333** | ⇑P | **P** | **21 14 42.0** | **-0.4** |
| **PLOR** | **Plostina** | **73.17** | **333** | ⇑*i*P | **P** | **21 14 42.0** | **-0.4** |
| **MLR** | **Muntele Rosu** | **73.19** | **332** | ⇓P | **P** | **21 14 43.8** | **+1.1** |
| **MLR** | **Muntele Rosu** | **73.19** | **332** | ⇓*i*P | **P** | **21 14 43.8** | **+1.1** |
| **VSR** | **Storozhevoye** | **73.28** | **343** | *e*P | P | 21 14 46.3 | +3.4 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,2.0nm,0.4s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **73.31** | **167** | P | **P** | **21 14 42.3** | **-0.5** |
| | comp=E,0.9nm,1.0s,baz=273,slow=5.5,SNR=4.3 | | | | | | |
| **VOIR** | | **73.55** | **332** | ⇑P | **P** | **21 14 44.2** | **-0.5** |
| **VOIR** | | **73.55** | **332** | ⇑*i*P | **P** | **21 14 44.2** | **-0.5** |
| **DBIC** | **Dimbokro** | **73.59** | **283** | LR | LR | 21 43 56.7 | |
| | comp=E,176nm,21.6s,baz=90,slow=33 | | | | | | |
| **TESR** | **Tescani** | **73.69** | **333** | ⇓*i*P | P | 21 14 52.8 | +7.4 |
| **DOPR** | **Dopca** | **73.81** | **332** | ⇑*i*P | P | 21 14 49.7 | +3.5 |
| **HVS** | **Khovu-Aksy** | **73.84** | **18** | *e*P | **P** | **21 14 48.3** | **+2.0** |
| HVS | | | | pmax | pmax | | |
| | comp=Z,26nm,1.5s | | | | | | |
| **LOT** | **Lotru** | **74.14** | **331** | ⇓*i*P | **P** | **21 14 47.8** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **74.25** | **12** | P | **P** | **21 14 46.8** | **-1.7** |
| | comp=Z,4.1nm,0.6s,baz=206,slow=5.8,SNR=20 | | | | | | |
| ZALV | | | | LR | LR | 21 44 43.5 | |
| | comp=Z,118nm,21.2s,baz=254,slow=34 | | | | | | |
| **GZR** | **Gura Zlata** | **74.56** | **330** | ⇑P | **P** | **21 14 52.0** | **+1.4** |
| **GZR** | **Gura Zlata** | **74.56** | **330** | ⇑*i*P | **P** | **21 14 52.0** | **+1.4** |
| **LPSR** | **Galich'ya Gora** | **74.59** | **344** | *e*P | P | 21 14 55.6 | +5.1 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.5s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.3s | | | | | | |
| **NVS** | **Novosibirsk** | **74.80** | **11** | ⇓*i*P | **P** | **21 14 50.2** | **-1.5** |
| NVS | | | | pmax | pmax | | |
| | comp=N,18nm,2.2s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,11nm,2.2s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,33nm,2.2s | | | | | | |
| **DIVS** | **Divibare** | **74.97** | **328** | ⇑*i*P | **P** | **21 14 51.8** | **-1.2** |
| **ARU** | **Arti** | **75.03** | **356** | *d i*P | **P** | **21 14 52.9** | **-0.1** |
| ARU | | | | S | **S** | **21 24 28.6** | **-1.6** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,14nm,1.7s | | | | | | |
| **BURAR** | **Bucovina Array** | **75.16** | **333** | ⇑P | P | 21 14 46.4 | -7.7 |
| **BURAR** | **Bucovina Array** | **75.16** | **333** | ⇑*i*P | P | 21 14 46.4 | -7.7 |
| **CJR** | **Cluj-Napoca** | **75.18** | **332** | ⇓P | P | 21 14 59.2 | +5.1 |
| **CJR** | **Cluj-Napoca** | **75.18** | **332** | ⇓*i*P | P | 21 14 59.2 | +5.1 |
| **BZS** | **Buzias** | **75.27** | **330** | ⇑P | **P** | **21 14 54.8** | **+0.2** |
| **BZS** | **Buzias** | **75.27** | **330** | ⇑*i*P | **P** | **21 14 54.8** | **+0.2** |
| **SVE** | **Sverdlovsk** | **75.31** | **357** | *e*P | **P** | **21 14 54.4** | **-0.2** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,19nm,1.5s | | | | | | |
| **DRGR** | | **75.64** | **331** | ⇑P | **P** | **21 14 56.5** | **-0.3** |
| **DRGR** | | **75.64** | **331** | ⇑*i*P | **P** | **21 14 56.5** | **-0.3** |
| **SONM** | **Songino Array** | **75.74** | **27** | P | **P** | **21 14 57.8** | **+0.3** |
| | comp=Z,2.7nm,1.0s,baz=222,slow=6.3,SNR=7.5 | | | | | | |
| SONM | | | | LR | LR | 21 47 12.5 | |
| | comp=Z,155nm,19.1s,baz=212,slow=35 | | | | | | |
| **AKASG** | **Malin Array Be** | **76.03** | **337** | P | **P** | **21 14 58.1** | **-0.7** |
| | comp=Z,2.6nm,0.7s,baz=140,slow=4.9,SNR=12 | | | | | | |
| **AKASG** | **Malin Array Be** | **76.03** | **337** | *ce*P | P | 21 15 02.5 | +3.7 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | **76.03** | **337** | *e*P | **P** | **21 15 01.1** | **+2.3** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **76.05** | **28** | *i* P | **P** | **21 14 58.1** | **-1.2** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **OBN** | **Obninsk** | **77.47** | **344** | *e*P | **P** | **21 15 08.0** | **+1.2** |
| OBN | | | | *e* | | 21 15 16.1 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,51nm,16.0s | | | | | | |
| **MOS** | **Moscow** | **77.75** | **344** | *e*P | **P** | **21 15 07.3** | **-1.1** |
| MOS | | | | pmax | pmax | | |
| | comp=Z,47nm,1.1s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **79.94** | **331** | *e*P | **P** | **21 15 20.0** | **-0.6** |
| OKC | | | | *e* | | 21 15 25.1 | |
| **OKC** | **Ostrava-Krasne** | **79.94** | **331** | *e*P | **P** | **21 15 20.0** | **-0.6** |
| OKC | | | | *e*pP | **pP** | **21 15 25.1** | **-0.5** |
| **VRAC** | **Vranov** | **80.30** | **330** | ⇓P | **P** | **21 15 22.7** | **+0.1** |
| **VRAC** | **Vranov** | **80.30** | **330** | ⇓*i*P | **P** | **21 15 22.7** | **+0.1** |
| **KRLC** | **Kraliky** | **80.74** | **331** | *e*P | **P** | **21 15 24.4** | **-0.6** |
| KRLC | | | | *e* | | 21 15 30.0 | |
| **KRLC** | **Kraliky** | **80.74** | **331** | *e*P | **P** | **21 15 24.4** | **-0.6** |
| KRLC | | | | *e*pP | **pP** | **21 15 30.0** | **0.0** |
| **KSAR** | **Wonju Array Be** | **81.08** | **46** | P | **P** | **21 15 27.3** | **+0.3** |
| **KSAR** | **Wonju Array Be** | **81.08** | **46** | P | **P** | **21 15 27.3** | **+0.3** |
| **KSRS** | **Korea Array** | **81.12** | **46** | P | **P** | **21 15 27.3** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=236,slow=6.2,SNR=5.4 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSRS | | | | LR | LR | 21 51 55.3 | |
| | comp=Z,37nm,18.8s,baz=218,slow=36 | | | | | | |
| **DPC** | **Dobruska-Polom** | **81.14** | **331** | *e*P | P | 21 15 20.7 | -6.4 |
| DPC | | | | *e* | | 21 15 25.7 | |
| **DPC** | **Dobruska-Polom** | **81.14** | **331** | *e*P | P | 21 15 20.7 | -6.4 |
| DPC | | | | *e*x | x | 21 15 25.7 | |
| DPC | | | | *e*pP | pP | 21 15 31.7 | -0.4 |
| **GOPC** | **GO Pecny, Ondr** | **81.57** | **330** | *e*P | **P** | **21 15 30.6** | **+1.2** |
| GOPC | | | | *e* | | 21 15 34.6 | |
| **GOPC** | **GO Pecny, Ondr** | **81.57** | **330** | *e*P | **P** | **21 15 30.6** | **+1.2** |
| GOPC | | | | *e*pP | **pP** | **21 15 34.6** | **+0.3** |
| **KHC** | **Kasperske Hory** | **81.63** | **329** | *e*P | **P** | **21 15 26.7** | **-3.1** |
| KHC | | | | *e* | | 21 15 33.7 | |
| **KHC** | **Kasperske Hory** | **81.63** | **329** | *e*P | **P** | **21 15 26.7** | **-3.1** |
| KHC | | | | *e*pP | **pP** | **21 15 33.7** | **-1.0** |
| **PRU** | **Pruhonice** | **81.73** | **330** | *e*P | **P** | **21 15 29.0** | **-1.2** |
| PRU | | | | *e* | | 21 15 35.4 | |
| **PRU** | **Pruhonice** | **81.73** | **330** | *e*P | **P** | **21 15 29.0** | **-1.2** |
| PRU | | | | *e*pP | **pP** | **21 15 35.4** | **+0.2** |
| **KLMR** | **Klimovskoe** | **81.94** | **348** | *e*P | **P** | **21 15 31.5** | **+0.5** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,26nm,1.3s | | | | | | |
| **PVCC** | **Panska Ves** | **82.08** | **330** | *e*P | **P** | **21 15 33.5** | **+1.5** |
| PVCC | | | | *e* | | 21 15 37.2 | |
| **PVCC** | **Panska Ves** | **82.08** | **330** | *e*P | **P** | **21 15 33.5** | **+1.5** |
| PVCC | | | | *e*pP | **pP** | **21 15 37.2** | **+0.2** |
| **BRG** | **Berggiesshubel** | **82.61** | **330** | *e*(P) | P | 21 15 39.4 | +4.6 |
| | comp=Z,7.2nm,1.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **82.61** | **330** | *e*P | P | 21 15 39.4 | +4.6 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **NKC** | **Novy Kostel** | **82.91** | **329** | *e*P | **P** | **21 15 34.8** | **-1.6** |
| NKC | | | | *e* | | 21 15 42.7 | |
| **NKC** | **Novy Kostel** | **82.91** | **329** | *e*P | **P** | **21 15 34.8** | **-1.6** |
| NKC | | | | *e*x | x | 21 15 42.7 | |
| **CLL** | **Collm** | **83.34** | **330** | *e*P | **P** | **21 15 40.0** | **+1.4** |
| **CLL** | **Collm** | **83.34** | **330** | *e*P | **P** | **21 15 40.0** | **+1.4** |
| **FINES** | **FINESS Array B** | **85.78** | **342** | P | **P** | **21 15 50.4** | **-0.2** |
| | comp=Z,3.6nm,0.9s,baz=213,slow=4.8,SNR=3.0 | | | | | | |
| FINES | | | | LR | LR | 21 55 15.8 | |
| | comp=Z,58nm,18.3s,baz=120,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **86.77** | **314** | P | **P** | **21 15 55.5** | **-0.6** |
| | comp=Z,0.5nm,0.7s,baz=99,slow=3.6,SNR=3.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **87.19** | **41** | LR | LR | 21 54 46.9 | |
| | comp=Z,63nm,18.0s,baz=222,slow=36 | | | | | | |
| **MAJO** | **Matsushiro** | **87.94** | **50** | *e*P | **P** | **21 16 02.5** | **+0.7** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,39nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **87.94** | **50** | P | **P** | **21 16 02.6** | **+0.8** |
| | comp=Z,5.7nm,1.1s,baz=245,slow=5.0,SNR=4.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **90.44** | **337** | LR | LR | 21 58 39.4 | |
| | comp=Z,13nm,19.0s,baz=100,slow=37 | | | | | | |
| **YKA** | **Yellowknife Ar** | **136.23** | **360** | PKP | **PKPdf** | **21 22 33.5** | **+0.7** |
| | comp=Z,1.4nm,0.9s,baz=354,slow=3.9,SNR=3.9 | | | | | | |
| **ULM** | **Lac du Bonnet** | **145.10** | **339** | PKPbc | **PKPbc** | **21 22 46.2** | **-2.4** |
| | comp=Z,5.5nm,0.9s,baz=89,slow=4.3,SNR=3.9 | | | | | | |
| **COWI** | **Conover** | **145.47** | **328** | *e*PKPdf | **PKPbc** | **21 22 49.0** | **-0.9** |
| **SWMT** | **Swartz Lake** | **151.24** | **359** | *e*PKPbc | **PKPbc** | **21 23 04.7** | **-0.7** |
| **NVAR** | **Mina Array Bea** | **160.07** | **8** | PKPab | **PKPab** | **21 23 52.2** | **+0.9** |
| | comp=Z,0.8nm,0.9s,baz=354,slow=0.9,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **165.39** | **319** | PKPab | **PKPab** | **21 24 14.8** | **0.0** |
| | comp=Z,0.8nm,0.8s,baz=78,slow=4.2,SNR=8.0 | | | | | | |

*ISCJB **07** 21:10:07.1±0.3, 32°.60N±0°.02×115°.72W±0°.02, h12km±3km, Error ellipse: s-maj=3.3km s-min=2.9km az=28.1*
*MEX **07** 21:10:07.9±0.9, 32°.75N×115°.65W, h20km±999km, MD3.9*
*NEIC **07** 21:10:08.3, 32°.59N×115°.75W, h3km, ML3.3(ECX), ML3.4(PAS), After ECX.*
*ECX **07** 21:10:08.3±0.6, 32°.59N×115°.75W, h3km, MD3.3, ML3.5*
**ISC 07 21:10:07.2**±0.9**, 32°.56N**±0°.02×**115°.71W**±0°.02**, h10**km±7km**, n44,** σ1**°.60**/72**, 8C-5D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGL** | **Mount Signal** | **0.09** | **350** | ⇓*i*P | **Pg** | **21 10 09.7** | **0.0** |
| **WESC** | **Westside Schoo** | **0.20** | **354** | ⇓*i*P | **Pg** | **21 10 11.4** | **0.0** |
| WESC | | | | *e*S | **Sg** | **21 10 14.5** | **+0.4** |
| **YUH** | **Yuha Desert** | **0.20** | **295** | ⇑*i*P | **Pg** | **21 10 11.3** | **-0.1** |
| **COK** | **Cook Ranch** | **0.29** | **357** | ⇓*i*P | **Pg** | **21 10 13.1** | **+0.1** |
| **RMX** | **La Rumorosa** | **0.32** | **277** | ⇑*e*P | **Pg** | **21 10 13.7** | **+0.1** |
| RMX | | | | *e*S | **Sg** | **21 10 17.8** | **-0.1** |
| RMX | | | | IAML | | 21 10 18.2 | |
| | comp=N,8μm,0.2s | | | | | | |
| RMX | | | | *e* | | 21 10 18.2 | |
| **DREC** | **Desert Rsrch C** | **0.33** | **42** | ⇑*e*P | **Pb** | **21 10 14.6** | **-0.5** |
| **IBP** | **Imperial Bould** | **0.34** | **287** | P | **Pg** | **21 10 14.0** | **0.0** |
| | baz=0.3 | | | | | | |
| IBP | | | | S | **Sg** | **21 10 18.2** | **-0.3** |
| | baz=0.3 | | | | | | |
| **IBP** | **Imperial Bould** | **0.34** | **287** | ⇑*e*P | **Pg** | **21 10 14.0** | **0.0** |
| IBP | | | | *e*S | **Sg** | **21 10 18.3** | **-0.3** |
| **CPBX** | **Cerro Prieto** | **0.37** | **113** | *e*P | **Pb** | **21 10 16.1** | **+0.2** |
| CPBX | | | | *e*S | **Sb** | **21 10 22.4** | **+0.6** |
| CPBX | | | | IAML | | 21 10 24.6 | |
| | comp=N,17μm,0.3s | | | | | | |
| CPBX | | | | ⇑*e* | | 21 10 24.6 | |
| **CPBX** | **Cerro Prieto** | **0.37** | **113** | *e*P | **Pb** | **21 10 16.1** | **+0.2** |
| **SWSC** | **Sam W. Stewart** | **0.39** | **349** | P | **Pg** | **21 10 14.3** | **-0.5** |
| | baz=0.3 | | | | | | |
| **CRR** | **Carrizo Plain** | **0.39** | **326** | ⇓*i*P | **Pg** | **21 10 14.5** | **-0.5** |
| **MBIG** | **Mexicali** | **0.46** | **110** | *i* P | **Pg** | **21 10 16.4** | **+0.3** |
| MBIG | | | | *e*P | **Pb** | **21 10 17.2** | **-0.1** |
| **MBIG** | **Mexicali** | **0.46** | **110** | *e*P | **Pb** | **21 10 17.1** | **-0.2** |
| **RDX** | **Rancho Dawling** | **0.66** | **198** | ⇓*e*P | **Pb** | **21 10 20.6** | **-0.4** |
| RDX | | | | *e*S | **Sb** | **21 10 29.6** | **-0.7** |
| RDX | | | | ⇑*e* | | 21 10 31.1 | |
| RDX | | | | IAML | | 21 10 31.1 | |
| | comp=N,934nm,0.2s | | | | | | |
| **MONP** | **Monument Peak** | **0.68** | **299** | P | **Pg** | **21 10 19.9** | **-0.6** |
| | baz=0.6 | | | | | | |
| MONP | | | | S | **Sg** | **21 10 28.3** | **-1.2** |
| | baz=0.6 | | | | | | |
| **BAR** | **Barrett** | **0.82** | **278** | ⇑*e*P | **Pg** | **21 10 22.5** | **-0.6** |
| **BAR** | **Barrett** | **0.82** | **278** | *e*Pg | **Pg** | **21 10 22.4** | **-0.7** |
| BAR | | | | *e*Sg | **Sg** | **21 10 32.3** | **-1.5** |
| **CBX** | **Cerro Bola** | **0.85** | **253** | *i* P | **Pg** | **21 10 23.4** | **-0.1** |
| CBX | | | | *i* S | **Sg** | **21 10 34.2** | **-0.3** |
| **CBX** | **Cerro Bola** | **0.85** | **253** | ⇑*e*P | **Pg** | **21 10 23.4** | **-0.1** |
| CBX | | | | *e*S | **Sg** | **21 10 34.5** | **-0.1** |
| **CBX** | **Cerro Bola** | **0.85** | **253** | *i* P | **Pg** | **21 10 23.4** | **-0.1** |
| CBX | | | | *i* S | **Sg** | **21 10 34.2** | **-0.3** |
| **GLA** | **Glamis** | **0.89** | **56** | P | **Pg** | **21 10 23.2** | **-1.1** |
| | baz=0.9 | | | | | | |
| GLA | | | | S | **Sg** | **21 10 34.7** | **-1.2** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.89** | **56** | *e*Pg | **Pg** | **21 10 23.3** | **-1.0** |
| GLA | | | | *e*Sg | **Sg** | **21 10 35.1** | **-0.8** |
| **ZAX** | **El Zacaton** | **1.15** | **205** | *e*P | **Pg** | **21 10 29.1** | **-0.2** |
| ZAX | | | | *e*S | **Sb** | **21 10 44.7** | **+0.4** |
| **ECNX** | **Esteban Cantu** | **1.18** | **220** | *e*P | **Pg** | **21 10 29.3** | **-0.5** |
| ECNX | | | | *e*S | **Sg** | **21 10 45.1** | **0.0** |
| **PBX** | **Punta Banda** | **1.19** | **227** | *e*P | **Pg** | **21 10 29.4** | **-0.7** |
| PBX | | | | *e*S | **Sg** | **21 10 45.3** | **-0.3** |
| **PFO** | **Pinyon Flat Ob** | **1.22** | **329** | P | **Pg** | **21 10 27.5** | **-3.2** |
| | baz=1.2 | | | | | | |
| PFO | | | | S | **Sg** | **21 10 42.1** | **-4.3** |
| | baz=1.2 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.22** | **329** | *e*Pn | **Pg** | **21 10 27.4** | **-3.2** |
| PFO | | | | *e*S | **Sg** | **21 10 42.2** | **-4.3** |
| **ECBX** | **El Chinero** | **1.22** | **153** | *e*P | **Pb** | **21 10 30.6** | **+0.2** |
| ECBX | | | | *e*S | **Sn** | **21 10 47.5** | **+0.5** |
| **109C** | **Camp Elliot, M** | **1.22** | **286** | P | **Pg** | **21 10 29.0** | **-1.6** |
| | baz=1.2 | | | | | | |
| 109C | | | | S | **Sg** | **21 10 44.1** | **-2.4** |
| | baz=1.2 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **1.46** | **350** | P | Pn | 21 10 31.1 | -2.7 |
| | baz=1.4 | | | | | | |
| **SPIG** | **San Pedro Mart** | **1.53** | **172** | *e*P | **Pn** | **21 10 33.8** | **-1.0** |
| SPIG | | | | *i* S | **Sn** | **21 10 54.1** | **-0.9** |
| **SPIG** | **San Pedro Mart** | **1.53** | **172** | *e*P | **Pn** | **21 10 35.1** | **+0.3** |
| **SPIG** | **San Pedro Mart** | **1.53** | **172** | *e*P | **Pn** | **21 10 33.8** | **-1.0** |
| SPIG | | | | *i* S | **Sn** | **21 10 54.1** | **-0.9** |
| **SPX** | **San Pedro Mart** | **1.53** | **172** | *e*P | **Pn** | **21 10 35.3** | **+0.4** |
| **SPX** | **San Pedro Mart** | **1.53** | **172** | *e*P | **Pn** | **21 10 34.2** | **-0.7** |
| SPX | | | | *i* S | **Sn** | **21 10 53.6** | **-1.4** |
| **MURC** | **Murrieta** | **1.62** | **310** | Sg | **Sn** | **21 10 56.6** | **-0.4** |
| | baz=1.6 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **2.34** | **316** | Sb | **Sn** | **21 11 16.9** | **+2.2** |
| | baz=2.3 | | | | | | |
| **MWC** | **Mount Wilson** | **2.57** | **311** | *e*Pn | **Pb** | **21 10 52.4** | **-1.2** |
| MWC | | | | *e*S | **Sb** | **21 11 24.5** | **-0.8** |
| **GSC** | **Goldstone** | **2.88** | **342** | *e*Pn | **Pn** | **21 10 55.2** | **+1.9** |
| GSC | | | | *e*S | **Sb** | **21 11 36.9** | **+2.7** |
| **ISA** | **Isabella** | **3.85** | **324** | *e*Pn | **Pn** | **21 11 07.3** | **+0.7** |
| ISA | | | | *e*S | **Sn** | **21 11 56.1** | **+4.1** |
| **SHPR** | **Sheep Range** | **3.96** | **6** | *e*Pn | Pn | 21 11 11.8 | +3.6 |
| SHPR | | | | *e*S | **Sg** | **21 12 10.3** | **-4.1** |
| **DAC** | **Darwin (Calif)** | **4.02** | **338** | *e*Pn | **Pn** | **21 11 11.6** | **+2.6** |
| DAC | | | | *e*S | **Sb** | **21 12 11.8** | **+4.8** |
| **TUC** | **Tucson** | **4.17** | **92** | *e*Pn | **Pn** | **21 11 11.3** | **+0.3** |
| TUC | | | | *e*S | **Sb** | **21 12 13.8** | **+2.6** |

**IGQ 07 21:28:44**±0.2**, 1°.09S**×**77°.55W, h2**km±27km**, Mb4.1, 26D, Error ellipse: s-maj=1.6km s-min=0.5km az=20.8, Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PISA** | **Pisayambo** | **0.83** | **272** | ⇓P | Pg | 21 29 00.4 | -0.3 |
| **ANTI** | **Antisana** | **0.88** | **316** | ⇓P | Pg | 21 29 01.9 | +0.3 |
| **COV1** | **Cotopaxi Volc** | **0.89** | **298** | ⇓P | Pb | 21 29 03.3 | +0.2 |
| **TAMB** | **Tambo** | **0.90** | **295** | ⇓P | Pb | 21 29 02.7 | -0.4 |
| **BRUN** | **Tungurahua Vol** | **0.92** | **249** | ⇓P | Pb | 21 29 03.0 | -0.2 |
| **BRUN** | **Tungurahua Vol** | **0.92** | **249** | ⇓S | Sg | 21 29 14.9 | +0.5 |
| **BULB** | **Ulba Tungurahu** | **0.92** | **248** | ⇓P | Pg | 21 29 02.8 | +0.5 |
| **BULB** | **Ulba Tungurahu** | **0.92** | **248** | ⇓S | Sg | 21 29 14.8 | +0.2 |
| **RUN5** | **Runtun** | **0.93** | **249** | ⇓P | Pb | 21 29 03.0 | -0.3 |
| **BTAM** | **Cotopaxi Volca** | **0.94** | **296** | ⇓P | Pg | 21 29 02.4 | -0.4 |
| **VC1** | **Cotopaxi 1** | **0.96** | **297** | ⇓P | Pb | 21 29 03.7 | -0.3 |
| **BVC2** | **Cotopaxi Volca** | **0.96** | **296** | ⇓P | Pb | 21 29 03.8 | -0.2 |
| **MOV1** | **Cotopaxi Vol s** | **0.96** | **293** | P | Pg | 21 29 03.6 | +0.3 |
| **RETU** | **Refugio** | **0.96** | **248** | P | Pg | 21 29 03.5 | +0.3 |
| **BMOR** | **Cotopaxi Volca** | **0.97** | **291** | ⇓P | Pg | 21 29 03.8 | +0.4 |
| **BPAT** | **Tungurahua Vol** | **0.97** | **245** | ⇓P | Pg | 21 29 03.8 | +0.4 |
| **BPAT** | **Tungurahua Vol** | **0.97** | **245** | ⇓S | Sg | 21 29 16.3 | -0.1 |
| **JUI6** | **Juive** | **0.97** | **250** | ⇓P | Pg | 21 29 02.4 | -0.7 |
| **BREF** | **Cotopaxi Volca** | **0.98** | **295** | ⇓P | Pg | 21 29 03.3 | -0.3 |
| **LAV4** | **Lava4-Reventad** | **0.99** | **356** | P | Pg | 21 29 03.7 | +0.3 |
| **ARRY** | **Arrayan** | **0.99** | **245** | P | Pg | 21 29 03.7 | +0.1 |
| **CHAR** | **Charly** | **1.00** | **353** | P | Pg | 21 29 04.0 | +0.2 |
| **BBIL** | **Ulba Tungurahu** | **1.00** | **249** | ⇓P | Pg | 21 29 03.0 | -0.6 |
| **BBIL** | **Ulba Tungurahu** | **1.00** | **249** | ⇓S | Sg | 21 29 16.0 | -1.0 |
| **CONE** | **Cono NE Rev Vo** | **1.01** | **355** | P | Pg | 21 29 03.6 | -0.3 |
| **BNAS** | **Cotopaxi Volca** | **1.01** | **294** | ⇓P | Pb | 21 29 04.8 | -0.1 |
| **NAS2** | **Nasa** | **1.01** | **296** | P | Pb | 21 29 04.6 | -0.4 |
| **BMAS** | **Trigal station** | **1.01** | **246** | ⇓P | Pg | 21 29 03.1 | -0.9 |
| **BMAS** | **Trigal station** | **1.01** | **246** | ⇓S | Sg | 21 29 17.9 | +0.4 |
| **BIL2** | **Estacion Bilba** | **1.02** | **249** | P | Pg | 21 29 03.2 | -0.7 |
| **BIL2** | **Estacion Bilba** | **1.02** | **249** | S | Sg | 21 29 16.2 | -1.2 |
| **PITA** | **Cotopaxi Volc** | **1.02** | **301** | ⇓P | Pg | 21 29 04.6 | +0.4 |
| **CAMI** | **Rancho Maria** | **1.03** | **293** | P | Pg | 21 29 04.6 | +0.2 |
| **PAST** | **Pastocalle** | **1.16** | **290** | P | Pn | 21 29 07.5 | -0.2 |
| **IGUA** | **Igualata** | **1.16** | **250** | ⇓P | Pg | 21 29 06.3 | -0.6 |
| **GGP** | **Refugio Guagua** | **1.38** | **311** | ⇓P | Pn | 21 29 10.2 | -0.8 |
| **TERV** | **Terraza Guagua** | **1.39** | **311** | P | Pn | 21 29 10.3 | -0.8 |
| **PINO** | **Pino** | **1.40** | **311** | ⇓P | Pb | 21 29 11.6 | -0.1 |
| **YANA** | **Yana** | **1.40** | **313** | P | Pn | 21 29 10.3 | -0.8 |
| **COTA** | **Cotacachi** | **1.61** | **331** | P | Pn | 21 29 14.5 | +0.3 |
| **MAG1** | **Magdalena** | **2.44** | **294** | P | Pb | 21 29 29.6 | +1.0 |

*IDC **07** 21:32:32.2±0.8, 17°.93N×76°.50W, h0km, mb4.1/8, mb1 4.3/8, mb1mx3.9/35, mbtmp4.1/8, MS3.3/7, Ms1 3.3/7, ms1mx3.0/32, Error ellipse: s-maj=31.1km s-min=21.7km az=35.0*
*ISCJB **07** 21:32:35.7±0.6, 18°.1N±0°.1×76°.52W±0°.06, h29km±5km, mb3.9/8, MS3.3/3, Error ellipse: s-maj=18.1km s-min=9.6km az=12.9*
*JSN **07** 21:32:36.9±0.6, 18°.20N×76°.54W, h18km±3km, MD4.4*
**ISC 07 21:32:36.5**±0.9**, 18°.13N**±0°.09×**76°.56W**±0°.05**, h25**km±6km**, n25,** σ0**°.92**/23**, mb3.9**/8**, MS3.4**/3**, Jamaica region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GWJ** | **Greenwich** | **0.17** | **250** | *i* P | **Pb** | **21 32 41.6** | **-0.4** |
| **CMJ** | **Castle Mountai** | **0.18** | **88** | *i* P | **Pb** | **21 32 41.6** | **-0.4** |
| **HOJ** | **Hope** | **0.22** | **235** | *i* P | **Pb** | **21 32 42.5** | **+0.1** |
| **STH** | **Stony Hill** | **0.24** | **257** | *i* P | **Pb** | **21 32 42.5** | **-0.2** |
| STH | | | | *i* S | **Sb** | **21 32 47.3** | **+0.3** |
| **YHJ** | **Yallahs** | **0.25** | **165** | *i* P | **Pb** | **21 32 43.1** | **+0.2** |
| **BNJ** | **Bonny Gate** | **0.42** | **297** | *i* P | **Pb** | **21 32 44.8** | **-0.6** |
| **BBJ** | **Bamboo Saint A** | **0.72** | **291** | *i* P | **Pb** | **21 32 49.8** | **-0.6** |
| **CVJ** | **Coleyville** | **0.93** | **276** | *i* P | **Pn** | **21 32 53.4** | **-0.7** |
| **MCJ** | **Malvern** | **1.09** | **259** | *i* P | **Pb** | **21 32 56.7** | **-0.1** |
| **JTS** | **JuntasAbangare** | **11.26** | **227** | LR | LR | 21 39 49.2 | |
| | comp=Z,162nm,19.5s,baz=25,slow=39 | | | | | | |
| **ROSC** | **El Rosal** | **13.37** | **170** | LR | LR | 21 42 20.6 | |
| | comp=Z,90nm,18.2s,baz=26,slow=45 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **14.00** | **123** | LR | LR | 21 41 43.3 | |
| | comp=Z,114nm,19.4s,baz=272,slow=40 | | | | | | |
| **TKL** | **Tuckaleechee C** | **18.59** | **341** | LR | LR | 21 43 55.7 | |
| | comp=Z,68nm,18.8s,baz=190,slow=36 | | | | | | |
| **PTGA** | **Pitinga** | **24.86** | **137** | P | **P** | **21 37 55.5** | **-1.8** |
| | 7.5nm,0.8s,baz=323,slow=20,SNR=4.9 | | | | | | |
| PTGA | | | | LR | LR | 21 48 03.4 | |
| | comp=Z,58nm,19.2s,baz=308,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **27.14** | **299** | P | **P** | **21 38 19.0** | **+1.1** |
| | 1.3nm,0.7s,baz=120,slow=8.0,SNR=19 | | | | | | |
| TXAR | | | | PcP | **PcP** | **21 41 38.4** | **+0.1** |
| | 0.5nm,0.8s,baz=108,slow=5.8,SNR=4.0 | | | | | | |
| **ULM** | **Lac du Bonnet** | **35.58** | **339** | LR | LR | 21 54 25.9 | |
| | comp=Z,78nm,19.6s,baz=198,slow=37 | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.52** | **308** | P | **P** | **21 40 24.0** | **+1.9** |
| | 1.8nm,0.9s,baz=118,slow=8.4,SNR=11 | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.56** | **339** | P | **P** | **21 41 40.2** | **0.0** |
| | 1.6nm,0.8s,baz=128,slow=7.8,SNR=8.3 | | | | | | |
| **ILAR** | **Eielson Array** | **65.38** | **334** | P | **P** | **21 43 17.2** | **+0.6** |
| | 0.3nm,0.5s,baz=106,slow=3.3,SNR=3.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.02** | **81** | P | **P** | **21 44 15.9** | **-0.7** |
| | 1.1nm,1.1s,baz=270,slow=7.2,SNR=3.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.31** | **21** | P | **P** | **21 44 29.4** | **+0.8** |
| | 4.5nm,0.9s,baz=272,slow=4.4,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **80.14** | **28** | P | **P** | **21 44 45.1** | **+0.9** |
| | 2.8nm,0.9s,baz=238,slow=11,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **93.23** | **46** | LR | LR | 22 21 32.5 | |
| | comp=Z,12nm,20.8s,baz=125,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **150.75** | **261** | PKPbc | **PKPbc** | **21 52 27.2** | **-0.3** |
| | 2.0nm,1.0s,baz=89,slow=2.2,SNR=12 | | | | | | |
| WRA | | | | PKPab | **PKPab** | **21 52 33.5** | **-1.1** |
| | 1.7nm,0.7s,baz=86,slow=2.3,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **151.04** | **254** | PKPbc | **PKPbc** | **21 52 27.9** | **-0.3** |
| | 1.1nm,0.8s,baz=86,slow=2.7,SNR=9.5 | | | | | | |
| ASAR | | | | PKPab | **PKPab** | **21 52 34.0** | **-1.7** |
| | 1.2nm,0.8s,baz=97,slow=2.9,SNR=8.7 | | | | | | |

*SKO **07** 21:41:26.4, 42°.54N×21°.54E, h15km, M2.7, ML3.0*
*CSEM **07** 21:41:27.6±0.1, 42°.47N×21°.63E, h2km, ML3.0, Error ellipse: s-maj=2.4km s-min=2.0km az=75.0*
*BEO **07** 21:41:28.4±0.3, 42°.45N×21°.58E, h7km±2km, ML3.1/1*
*PDG **07** 21:41:28.3±0.6, 42°.47N×21°.55E, h12km, ML3.0/10, Error ellipse: s-maj=0.7km s-min=0.8km az=0.0*
*THE **07** 21:41:30.4, 42°.50N×21°.66E, h22km±1km, ML3.0/9, Error ellipse: s-maj=1.4km s-min=0.4km az=4.0*
**ISC 07 21:41:27.3**±1.1**, 42°.47N**±0°.01×**21°.65E**±0°.02**, h4**km±9km**, n179,** σ1**°.08**/244**, 30C-19D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GJIK** | **Gjilan** | **0.16** | **266** | P | **Pg** | **21 41 30.9** | **+0.5** |
| GJIK | | | | S | **Sg** | **21 41 32.8** | **+0.3** |
| **BARS** | **Barje** | **0.37** | **20** | ⇑*i*Pg | **Pb** | **21 41 36.1** | **-0.3** |
| **BARS** | **Barje** | **0.37** | **20** | ⇑*i*Pg | **Pb** | **21 41 36.1** | **-0.3** |
| **SKO** | **Skopje** | **0.52** | **197** | ⇑*i*Pg | **Pg** | **21 41 38.0** | **+0.6** |
| SKO | | | | *i* Sg | **Sg** | **21 41 44.2** | **+0.1** |
| **SKO** | **Skopje** | **0.52** | **197** | P | **Pg** | **21 41 37.4** | **+0.1** |
| SKO | | | | S | **Sg** | **21 41 42.9** | **-1.2** |
| **SKO** | **Skopje** | **0.52** | **197** | P | **Pg** | **21 41 37.4** | **+0.1** |
| **SKO** | **Skopje** | **0.52** | **197** | ⇑*i*Pg | **Pg** | **21 41 37.9** | **+0.6** |
| SKO | | | | S | **Sg** | **21 41 42.9** | **-1.2** |
| SKO | | | | *i* Sg | **Sg** | **21 41 44.2** | **+0.1** |
| **SMRK** | **Smrekonice** | **0.66** | **308** | P | **Pg** | **21 41 40.5** | **+0.5** |
| SMRK | | | | S | **Sb** | **21 41 50.6** | **-0.4** |
| **SELS** | **Selova** | **0.84** | **333** | ⇑*i*Pg | **Pg** | **21 41 43.6** | **+0.1** |
| SELS | | | | *e*Sg | **Sg** | **21 41 54.7** | **+0.3** |
| **PEJK** | **Peje** | **1.03** | **280** | P | **Pg** | **21 41 46.5** | **-0.5** |
| PEJK | | | | S | **Sg** | **21 42 00.2** | **-0.1** |
| **ZAPS** | **Zavoj** | **1.08** | **42** | ⇑*i*Pg | **Pn** | **21 41 50.1** | **+0.8** |
| ZAPS | | | | *e*Sg | **Sn** | **21 42 05.4** | **+0.7** |
| **ZAPS** | **Zavoj** | **1.08** | **42** | ⇑*i*Pg | **Pn** | **21 41 50.1** | **+0.8** |
| ZAPS | | | | *e*Sg | **Sn** | **21 42 05.4** | **+0.7** |
| **BOVS** | **Bovan** | **1.16** | **2** | *e*Pg | **Pn** | **21 41 50.6** | **+0.2** |
| BOVS | | | | *e*Sg | **Sn** | **21 42 06.7** | **0.0** |
| **BOVS** | **Bovan** | **1.16** | **2** | *e*Pg | **Pn** | **21 41 50.6** | **+0.2** |
| BOVS | | | | *e*Sg | **Sn** | **21 42 06.7** | **0.0** |
| **PHP** | **Peshkopia** | **1.20** | **229** | P | **Pg** | **21 41 49.4** | **-0.8** |
| PHP | | | | S | **Sn** | **21 42 07.3** | **-0.3** |
| **PHP** | **Peshkopia** | **1.20** | **229** | P | **Pg** | **21 41 49.4** | **-0.8** |
| PHP | | | | S | **Sn** | **21 42 07.3** | **-0.3** |
| **PVY** | **Plav** | **1.26** | **276** | ⇓*i*Pg | **Pg** | **21 41 50.0** | **-1.4** |
| PVY | | | | *e*Sg | **Sb** | **21 42 07.8** | **-0.4** |
| **PVY** | **Plav** | **1.26** | **276** | ⇓*i*Pg | **Pg** | **21 41 50.0** | **-1.4** |
| PVY | | | | *e*Sg | **Sb** | **21 42 07.8** | **-0.4** |
| **VAY** | **Valandovo** | **1.34** | **149** | *i* Pg | **Pg** | **21 41 53.7** | **+0.8** |
| VAY | | | | *e*Lg | Lg | 21 42 13.0 | |
| | comp=E,201nm,0.4s | | | | | | |
| VAY | | | | *e*Lg | Lg | 21 42 13.1 | |
| | comp=N,343nm,0.6s | | | | | | |
| **VAY** | **Valandovo** | **1.34** | **149** | *e*Pg | **Pn** | **21 41 53.0** | **+0.2** |
| VAY | | | | *e*Sg | **Sg** | **21 42 10.6** | **+0.3** |
| **VAY** | **Valandovo** | **1.34** | **149** | P | **Pb** | **21 41 53.3** | **+0.3** |
| VAY | | | | S | **Sn** | **21 42 11.5** | **+0.5** |
| **VAY** | **Valandovo** | **1.34** | **149** | P | **Pb** | **21 41 53.3** | **+0.3** |
| **VAY** | **Valandovo** | **1.34** | **149** | *i* Pg | **Pg** | **21 41 53.7** | **+0.8** |
| VAY | | | | *e*Sg | **Sg** | **21 42 10.6** | **+0.3** |
| VAY | | | | S | **Sn** | **21 42 11.5** | **+0.5** |
| VAY | | | | *e*Lg | Lg | 21 42 13.0 | |
| | comp=N,201nm,0.4s | | | | | | |
| **BEY** | **Berane** | **1.36** | **288** | ⇑*i*Pg | **Pn** | **21 41 52.2** | **-0.9** |
| **BEY** | **Berane** | **1.36** | **288** | P | **Pn** | **21 41 52.7** | **-0.4** |
| BEY | | | | *e*Sg | **Sn** | **21 42 12.1** | **+0.5** |
| **IVA** | **Berane** | **1.36** | **288** | ⇑*i*Pg | **Pn** | **21 41 52.2** | **-0.9** |
| IVA | | | | *e*Sg | **Sn** | **21 42 12.1** | **+0.5** |
| **BOLS** | **Boljevac** | **1.38** | **9** | ⇑*i*Pg | **Pn** | **21 41 52.9** | **-0.4** |
| BOLS | | | | *e*Sg | **Sb** | **21 42 11.6** | **+0.1** |
| **BOLS** | **Boljevac** | **1.38** | **9** | ⇑*i*Pg | **Pn** | **21 41 52.9** | **-0.4** |
| BOLS | | | | *e*Sg | **Sb** | **21 42 11.6** | **+0.1** |
| **SJES** | **Sjenica** | **1.46** | **303** | ⇑*i*Pg | **Pn** | **21 41 54.5** | **-0.1** |
| SJES | | | | *e*Sg | **Sg** | **21 42 14.9** | **+0.6** |
| **OHR** | **Ohrid** | **1.50** | **205** | *i* Pn | **Pn** | **21 41 55.0** | **-0.1** |
| OHR | | | | *e*Lg | Lg | 21 42 18.5 | |
| | comp=E,145nm,0.5s | | | | | | |
| OHR | | | | *e*Lg | Lg | 21 42 20.5 | |
| | comp=N,201nm,0.9s | | | | | | |
| **OHR** | **Ohrid** | **1.50** | **205** | *i* Pn | **Pn** | **21 41 55.0** | **-0.1** |
| OHR | | | | *e*Lg | Lg | 21 42 18.4 | |
| | comp=N,145nm,0.5s | | | | | | |
| **IVAS** | **Ivanjica** | **1.56** | **316** | *e*Pn | **Pn** | **21 41 56.0** | **+0.1** |
| **IVAS** | **Ivanjica** | **1.56** | **316** | *e*Pn | **Pn** | **21 41 56.0** | **+0.1** |
| **GRUS** | **Gruza** | **1.57** | **335** | *e*Pg | **Pb** | **21 41 56.9** | **-0.1** |
| GRUS | | | | *e*Sg | **Sg** | **21 42 19.8** | **+2.0** |
| **GRUS** | **Gruza** | **1.57** | **335** | *e*Pg | **Pb** | **21 41 56.9** | **-0.1** |
| GRUS | | | | *e*Sg | **Sg** | **21 42 19.8** | **+2.0** |
| **KNT** | **Kendrikon** | **1.61** | **144** | *e*P | **Pn** | **21 41 57.2** | **+0.7** |
| **KNT** | **Kendrikon** | **1.61** | **144** | *e*P | **Pn** | **21 41 57.2** | **+0.7** |
| **KNT** | **Kendrikon** | **1.61** | **144** | P | **Pn** | **21 41 57.1** | **+0.6** |
| KNT | | | | S | **Sn** | **21 42 17.7** | **0.0** |
| **KNT** | **Kendrikon** | **1.61** | **144** | P | **Pn** | **21 41 57.1** | **+0.6** |
| KNT | | | | S | **Sn** | **21 42 17.7** | **0.0** |
| **GRG** | **Griva** | **1.61** | **159** | *e*P | **Pn** | **21 41 57.2** | **+0.6** |
| **GRG** | **Griva** | **1.61** | **159** | *e*P | **Pn** | **21 41 57.2** | **+0.6** |
| **GRG** | **Griva** | **1.61** | **159** | P | **Pn** | **21 41 57.3** | **+0.6** |
| GRG | | | | S | **Sn** | **21 42 18.3** | **+0.4** |
| **GRG** | **Griva** | **1.61** | **159** | P | **Pn** | **21 41 57.3** | **+0.6** |
| GRG | | | | S | **Sn** | **21 42 18.3** | **+0.4** |
| **FNA** | **Florina** | **1.70** | **187** | *e*P | **Pn** | **21 41 58.5** | **+0.7** |
| **FNA** | **Florina** | **1.70** | **187** | *e*P | **Pn** | **21 41 58.5** | **+0.7** |
| **FNA** | **Florina** | **1.70** | **187** | P | **Pn** | **21 41 58.5** | **+0.7** |
| FNA | | | | S | **Sb** | **21 42 20.6** | **-0.3** |
| **FNA** | **Florina** | **1.70** | **187** | P | **Pn** | **21 41 58.5** | **+0.7** |
| FNA | | | | S | **Sb** | **21 42 20.6** | **-0.3** |
| **PDG** | **Podgorica** | **1.77** | **269** | *e*Pg | **Pn** | **21 41 59.4** | **+0.7** |
| PDG | | | | *e*Sg | **Sn** | **21 42 21.5** | **-0.2** |
| **PDG** | **Podgorica** | **1.77** | **269** | ⇑*i*Pn | **Pn** | **21 41 59.0** | **+0.3** |
| **PDG** | **Podgorica** | **1.77** | **269** | *e*Pg | **Pn** | **21 41 59.4** | **+0.7** |
| PDG | | | | *e*Sg | **Sn** | **21 42 21.5** | **-0.2** |
| PDG | | | | *e*Sn | **Sb** | **21 42 22.2** | **-0.7** |
| **TTG** | **Podgorica** | **1.77** | **269** | ⇑*i*Pn | **Pn** | **21 41 59.0** | **+0.3** |
| TTG | | | | *e*Sn | **Sb** | **21 42 22.2** | **-0.7** |
| **SVIS** | **Svilajnac** | **1.82** | **350** | *e*Pn | **Pb** | **21 42 00.6** | **-0.6** |
| SVIS | | | | *e*Sg | **Sg** | **21 42 27.2** | **+1.4** |
| **DRME** | **Dracevica, Mon** | **1.85** | **262** | ⇑*i*Pn | **Pn** | **21 42 00.1** | **+0.3** |
| DRME | | | | *e*Sn | **Sb** | **21 42 24.8** | **-0.4** |
| **DRME** | **Dracevica, Mon** | **1.85** | **262** | ⇑*i*Pn | **Pn** | **21 42 00.1** | **+0.3** |
| DRME | | | | *e*Sn | **Sb** | **21 42 24.8** | **-0.4** |
| **ULC** | **Ulcinj** | **1.86** | **255** | ⇓*i*Pn | **Pb** | **21 42 00.9** | **-0.9** |
| ULC | | | | *e*Sn | **Sb** | **21 42 25.2** | **-0.2** |
| **ULC** | **Ulcinj** | **1.86** | **255** | ⇓*i*Pn | **Pb** | **21 42 00.9** | **-0.9** |
| ULC | | | | *e*Sn | **Sb** | **21 42 25.2** | **-0.2** |
| **PLE** | **Pljevlja** | **1.87** | **298** | ⇓*i*Pn | **Pn** | **21 42 00.4** | **+0.2** |
| PLE | | | | *e*Sn | **Sb** | **21 42 25.6** | **-0.3** |
| **PLE** | **Pljevlja** | **1.87** | **298** | ⇓*i*Pn | **Pn** | **21 42 00.4** | **+0.2** |
| PLE | | | | *e*Sn | **Sb** | **21 42 25.6** | **-0.3** |
| **KUBS** | **Kucevo** | **1.94** | **1** | *e*Pn | **Pn** | **21 42 00.3** | **-0.8** |
| KUBS | | | | *e*Sg | **Sg** | **21 42 29.5** | **-0.1** |
| **KUBS** | **Kucevo** | **1.94** | **1** | *e*Pn | **Pn** | **21 42 00.3** | **-0.8** |
| KUBS | | | | *e*Sg | **Sg** | **21 42 29.5** | **-0.1** |
| **KBN** | **Korca** | **1.96** | **200** | P | **Pn** | **21 42 02.3** | **+0.9** |
| KBN | | | | S | **Sn** | **21 42 26.7** | **+0.3** |
| **KBN** | **Korca** | **1.96** | **200** | P | **Pn** | **21 42 02.3** | **+0.9** |
| KBN | | | | S | **Sn** | **21 42 26.7** | **+0.3** |
| **TRUS** | **Trudelj** | **1.97** | **333** | *e*Pn | **Pn** | **21 42 01.0** | **-0.5** |
| TRUS | | | | *e*Sg | **Sg** | **21 42 32.0** | **+1.4** |
| **TRUS** | **Trudelj** | **1.97** | **333** | *e*Pn | **Pn** | **21 42 01.0** | **-0.5** |
| TRUS | | | | *e*Sg | **Sg** | **21 42 32.0** | **+1.4** |
| **SRS** | **Serrai** | **1.98** | **132** | *e*P | **Pn** | **21 42 01.4** | **-0.3** |
| **SRS** | **Serrai** | **1.98** | **132** | *e*P | **Pn** | **21 42 01.4** | **-0.3** |
| **SRS** | **Serrai** | **1.98** | **132** | P | **Pn** | **21 42 02.5** | **+0.8** |
| SRS | | | | S | **Sn** | **21 42 27.8** | **+0.8** |
| **SRS** | **Serrai** | **1.98** | **132** | P | **Pn** | **21 42 02.5** | **+0.8** |
| SRS | | | | S | **Sn** | **21 42 27.8** | **+0.8** |
| **NKY** | **Niksic** | **1.99** | **281** | ⇑*i*Pn | **Pn** | **21 42 02.8** | **+1.0** |
| NKY | | | | *e*Sn | **Sb** | **21 42 28.4** | **-0.9** |
| **NKY** | **Niksic** | **1.99** | **281** | ⇑*i*Pn | **Pn** | **21 42 02.8** | **+1.0** |
| NKY | | | | *e*Sn | **Sb** | **21 42 28.4** | **-0.9** |
| **NVR** | **Nevrokopi** | **2.00** | **123** | *e*P | **Pn** | **21 42 03.2** | **+1.3** |
| **NVR** | **Nevrokopi** | **2.00** | **123** | *e*P | **Pn** | **21 42 03.2** | **+1.3** |
| **NVR** | **Nevrokopi** | **2.00** | **123** | P | **Pn** | **21 42 02.7** | **+0.8** |
| NVR | | | | S | **Sn** | **21 42 27.6** | **+0.3** |
| **NVR** | **Nevrokopi** | **2.00** | **123** | P | **Pn** | **21 42 02.7** | **+0.8** |
| NVR | | | | S | **Sn** | **21 42 27.6** | **+0.3** |
| **NKME** | **Niksic** | **2.01** | **279** | *e*Pn | **Pn** | **21 42 01.8** | **-0.3** |
| NKME | | | | *e*Sn | **Sn** | **21 42 28.2** | **+0.5** |
| **NKME** | **Niksic** | **2.01** | **279** | *e*Pn | **Pn** | **21 42 01.8** | **-0.3** |
| NKME | | | | *e*Sn | **Sn** | **21 42 28.2** | **+0.5** |
| **DIVS** | **Divibare** | **2.03** | **324** | *i* Pn | **Pn** | **21 42 02.7** | **+0.4** |
| **DIVS** | **Divibare** | **2.03** | **324** | ⇓*i*P | **Pn** | **21 42 02.5** | **+0.2** |
| **DIVS** | **Divibare** | **2.03** | **324** | S | **Sg** | **21 42 37.3** | **+4.9** |
| **DIVS** | **Divibare** | **2.03** | **324** | P | **Pn** | **21 42 02.6** | **+0.2** |
| DIVS | | | | S | **Sn** | **21 42 27.7** | **-0.5** |
| **DIVS** | **Divibare** | **2.03** | **324** | *i* Pn | **Pn** | **21 42 02.7** | **+0.4** |
| DIVS | | | | S | **Sn** | **21 42 27.7** | **-0.5** |
| **BUM** | **Brajici-Budva** | **2.05** | **266** | ⇓*i*Pn | **Pn** | **21 42 02.6** | **0.0** |
| BUM | | | | *e*Sn | **Sb** | **21 42 29.8** | **-1.2** |
| **BUM** | **Brajici-Budva** | **2.05** | **266** | ⇓*i*Pn | **Pn** | **21 42 02.6** | **0.0** |
| BUM | | | | *e*Sn | **Sb** | **21 42 29.8** | **-1.2** |
| **SOH** | **Sokhos** | **2.09** | **142** | *e*P | **Pn** | **21 42 02.5** | **-0.6** |
| **SOH** | **Sokhos** | **2.09** | **142** | *e*P | **Pn** | **21 42 02.5** | **-0.6** |
| **SOH** | **Sokhos** | **2.09** | **142** | P | **Pn** | **21 42 03.9** | **+0.8** |
| SOH | | | | S | **Sn** | **21 42 29.9** | **+0.3** |
| **SOH** | **Sokhos** | **2.09** | **142** | P | **Pn** | **21 42 03.9** | **+0.8** |
| SOH | | | | S | **Sn** | **21 42 29.9** | **+0.3** |
| **THE** | **Thessaloniki** | **2.09** | **151** | *e*P | **Pn** | **21 42 03.1** | **+0.1** |
| **THE** | **Thessaloniki** | **2.09** | **151** | *e*P | **Pn** | **21 42 03.1** | **+0.1** |
| **NEST** | **Nestorio** | **2.10** | **193** | *e*P | **Pn** | **21 42 04.3** | **+0.9** |
| **NEST** | **Nestorio** | **2.10** | **193** | *e*P | **Pn** | **21 42 04.3** | **+0.9** |
| **NEST** | **Nestorio** | **2.10** | **193** | P | **Pn** | **21 42 04.4** | **+1.0** |
| NEST | | | | S | **Sn** | **21 42 30.8** | **+0.7** |
| **NEST** | **Nestorio** | **2.10** | **193** | P | **Pn** | **21 42 04.4** | **+1.0** |
| NEST | | | | S | **Sn** | **21 42 30.8** | **+0.7** |
| **BBLS** | **Lazići** | **2.15** | **311** | *i* Pn | **Pn** | **21 42 05.1** | **+1.0** |
| **BBLS** | **Lazići** | **2.15** | **311** | *i* Pn | **Pn** | **21 42 05.1** | **+1.0** |
| **KZN** | **Kozani** | **2.17** | **178** | *e*P | **Pn** | **21 42 05.1** | **+0.9** |
| **KZN** | **Kozani** | **2.17** | **178** | *e*P | **Pn** | **21 42 05.1** | **+0.9** |
| **KZN** | **Kozani** | **2.17** | **178** | P | **Pn** | **21 42 05.2** | **+1.0** |
| KZN | | | | S | **Sn** | **21 42 32.3** | **+0.7** |
| **KZN** | **Kozani** | **2.17** | **178** | P | **Pn** | **21 42 05.2** | **+1.0** |
| KZN | | | | S | **Sn** | **21 42 32.3** | **+0.7** |
| **HORT** | **Hortiatis** | **2.17** | **149** | *e*P | **Pn** | **21 42 02.2** | **-2.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HORT | Hortiatis | 2.17 | 149 | eP | Pn | 21 42 02.2 | -2.0 |
| DJES | Djerdap | 2.28 | 16 | eSg | Sg | 21 42 40.5 | -0.1 |
| RMGR | Halanga-Turnu | 2.32 | 19 | ⇓iP | Pn | 21 42 06.3 | +0.1 |
| RMGR | Halanga-Turnu | 2.32 | 19 | ⇓iP | Pn | 21 42 06.3 | +0.1 |
| BRY | Bratogost | 2.33 | 282 | ⇑iPn | Pn | 21 42 07.1 | +0.5 |
| BRY | | | | eSn | Sn | 21 42 36.1 | +0.3 |
| BRY | Bratogost | 2.33 | 282 | ⇑iPn | Pn | 21 42 07.1 | +0.5 |
| BRY | | | | eSn | Sn | 21 42 36.1 | +0.3 |
| HCY | Herceg Novi | 2.33 | 270 | ⇓iPn | Pn | 21 42 07.1 | +0.6 |
| HCY | | | | eSn | Sn | 21 42 36.1 | +0.4 |
| HCY | Herceg Novi | 2.33 | 270 | ⇓iPn | Pn | 21 42 07.1 | +0.6 |
| HCY | | | | eSn | Sn | 21 42 36.1 | +0.4 |
| PLG | Polygyros | 2.49 | 147 | eP | Pn | 21 42 09.8 | +1.1 |
| PLG | Polygyros | 2.49 | 147 | eP | Pn | 21 42 09.8 | +1.1 |
| TEKS | Tekeris | 2.59 | 324 | i Pn | Pn | 21 42 10.5 | +0.5 |
| TEKS | Tekeris | 2.59 | 324 | i Pn | Pn | 21 42 10.5 | +0.5 |
| OUR | Ouranopolis | 2.76 | 140 | eP | Pn | 21 42 13.0 | +0.6 |
| OUR | Ouranopolis | 2.76 | 140 | eP | Pn | 21 42 13.0 | +0.6 |
| JAN | Janina | 2.88 | 192 | eP | Pb | 21 42 16.8 | -2.4 |
| JAN | Janina | 2.88 | 192 | eP | Pb | 21 42 16.8 | -2.4 |
| THL | Klokotos Trika | 2.92 | 174 | eP | Pn | 21 42 15.6 | +1.1 |
| THL | Klokotos Trika | 2.92 | 174 | eP | Pn | 21 42 15.6 | +1.1 |
| BANR | Banloc | 2.93 | 353 | ⇑iP | Pg | 21 42 23.0 | -0.5 |
| FGSL | Fruska Gora | 3.00 | 334 | ePn | Pn | 21 42 16.1 | +0.5 |
| FRGS | Fruska Gora | 3.00 | 334 | ePn | Pn | 21 42 16.1 | +0.5 |
| GZR | Gura Zlata | 3.03 | 15 | ⇑iP | Pn | 21 42 17.3 | +1.2 |
| GZR | Gura Zlata | 3.03 | 15 | ⇑iP | Pn | 21 42 17.3 | +1.2 |
| SGD | Sagiada | 3.05 | 201 | eP | Pn | 21 42 18.7 | +2.4 |
| SGD | Sagiada | 3.05 | 201 | eP | Pn | 21 42 18.7 | +2.4 |
| KEK | Kerkira | 3.09 | 208 | eP | Pn | 21 42 17.9 | +1.0 |
| KEK | Kerkira | 3.09 | 208 | eP | Pn | 21 42 17.9 | +1.0 |
| IGT | Igoumenitsa | 3.10 | 199 | eP | Pn | 21 42 19.0 | +2.0 |
| IGT | Igoumenitsa | 3.10 | 199 | eP | Pn | 21 42 19.0 | +2.0 |
| BZS | Buzias | 3.14 | 360 | ePn | Pn | 21 42 18.3 | +0.7 |
| BZS | Buzias | 3.14 | 360 | ⇓iP | Pn | 21 42 18.6 | +1.0 |
| BZS | Buzias | 3.14 | 360 | ePn | Pn | 21 42 18.3 | +0.7 |
| BZS | Buzias | 3.14 | 360 | ⇓iP | Pn | 21 42 18.6 | +1.0 |
| HUMR | Humele | 3.18 | 49 | ⇓iP | Pn | 21 42 17.6 | -0.5 |
| HUMR | Humele | 3.18 | 49 | ⇓iP | Pn | 21 42 17.6 | -0.5 |
| LOT | Lotru | 3.35 | 26 | ⇑iP | Pn | 21 42 15.8 | -4.7 |
| DSL | Palaion Diasel | 3.36 | 187 | eP | Pn | 21 42 24.1 | +3.5 |
| DSL | Palaion Diasel | 3.36 | 187 | eP | Pn | 21 42 24.1 | +3.5 |
| NEO | Neokhori | 3.38 | 159 | eP | Pn | 21 42 21.0 | +0.1 |
| NEO | Neokhori | 3.38 | 159 | eP | Pn | 21 42 21.0 | +0.1 |
| MAKR | Makrakomi, Fth | 3.47 | 174 | eP | Pn | 21 42 23.2 | +1.0 |
| MAKR | Makrakomi, Fth | 3.47 | 174 | eP | Pn | 21 42 23.2 | +1.0 |
| AGG | Agios Georgios | 3.48 | 171 | eP | Pn | 21 42 23.2 | +0.9 |
| AGG | Agios Georgios | 3.48 | 171 | eP | Pn | 21 42 23.2 | +0.9 |
| DEV | Deva | 3.53 | 14 | ⇓iP | Pg | 21 42 34.4 | -0.5 |
| DEV | Deva | 3.53 | 14 | S | Sg | 21 43 19.0 | -1.6 |
| EVR | Evrytania | 3.55 | 178 | eP | Pn | 21 42 24.6 | +1.3 |
| EVR | Evrytania | 3.55 | 178 | eP | Pn | 21 42 24.6 | +1.3 |
| LKD2 | Lefkada island | 3.76 | 192 | eP | Pn | 21 42 22.0 | -4.0 |
| LKD2 | Lefkada island | 3.76 | 192 | eP | Pn | 21 42 22.0 | -4.0 |
| AXAR | Agios Charalam | 3.78 | 168 | eP | Pn | 21 42 26.5 | +0.1 |
| AXAR | Agios Charalam | 3.78 | 168 | eP | Pn | 21 42 26.5 | +0.1 |
| VOIR | | 3.85 | 38 | ⇑iP | Pn | 21 42 25.7 | -1.7 |
| VOIR | | 3.85 | 38 | ⇑iP | Pn | 21 42 25.7 | -1.7 |
| PDO | Prodromos | 3.88 | 185 | eP | Pb | 21 42 32.4 | -4.0 |
| PDO | Prodromos | 3.88 | 185 | eP | Pb | 21 42 32.4 | -4.0 |
| EFP | Efpalio | 4.04 | 177 | eP | Pn | 21 42 32.4 | +2.4 |
| EFP | Efpalio | 4.04 | 177 | eP | Pn | 21 42 32.4 | +2.4 |
| KALE | Kalithea | 4.09 | 175 | eP | Pn | 21 42 31.6 | +0.9 |
| KALE | Kalithea | 4.09 | 175 | eP | Pn | 21 42 31.6 | +0.9 |
| DESF | Desfina | 4.11 | 170 | eP | Pn | 21 42 30.6 | -0.4 |
| DESF | Desfina | 4.11 | 170 | eP | Pn | 21 42 30.6 | -0.4 |
| LAKA | Lakka | 4.24 | 176 | eP | Pn | 21 42 35.6 | +3.0 |
| LAKA | Lakka | 4.24 | 176 | eP | Pn | 21 42 35.6 | +3.0 |
| MLR | Muntele Rosu | 4.33 | 44 | ⇑iP | Pn | 21 42 32.4 | -1.6 |
| MLR | Muntele Rosu | 4.33 | 44 | S | Sb | 21 43 32.6 | -4.0 |
| MLR | Muntele Rosu | 4.33 | 44 | ⇑iP | Pn | 21 42 32.4 | -1.6 |
| DRGR | | 4.38 | 10 | ⇑iP | Pn | 21 42 36.0 | +1.3 |
| DRGR | | 4.38 | 10 | ⇑iP | Pn | 21 42 36.0 | +1.3 |
| KLV | Kalavryta, Ach | 4.44 | 175 | eP | Pn | 21 42 37.2 | +1.7 |
| KLV | Kalavryta, Ach | 4.44 | 175 | eP | Pn | 21 42 37.2 | +1.7 |
| DRO | Drossia | 4.51 | 179 | eP | Pn | 21 42 38.8 | +2.3 |
| DRO | Drossia | 4.51 | 179 | eP | Pn | 21 42 38.8 | +2.3 |
| VYHS | Vyhne | 6.34 | 343 | ePN | Pn | 21 43 03.8 | +2.3 |
| VYHS | | | | eSN | Sn | 21 44 12.6 | -1.7 |
| VYHS | Vyhne | 6.34 | 343 | ePn | Pn | 21 43 03.9 | +2.4 |
| ARSA | Arzberg | 6.46 | 320 | ⇓iPn | Pn | 21 43 05.4 | +2.2 |
| ARSA | Arzberg | 6.46 | 320 | Pn | Pn | 21 43 05.4 | +2.2 |
| KOLS | Kolonicke sedl | 6.48 | 4 | ePN | Pn | 21 43 08.0 | +4.6 |
| LANS | Liptovska Anna | 6.85 | 348 | eSN | Sn | 21 44 30.9 | +3.9 |

*NNC **07** 22:12:00.2±3.6, 36.°94N×70.°97E, h0km, mb4.0, mpv3.7, Error ellipse: s-maj=29.8km s-min=13.2km az=175.0*
**ISC 07 22:11:59.7**±3.8**, 36.°7N**±0.°2×**70.°89E**±0.°09**, h150**km**, n11, σ0.s67**/16**, 7C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.65 | 323 | ⇑P | Pn | 22 12 42.8 | 0.0 |
| | 11nm,0.4s | | | | | | |
| DZET | | | | ⇓S | Sn | 22 13 15.6 | -0.4 |
| | 100nm,0.4s | | | | | | |
| SFK | Sufi-Kurgan | 3.88 | 31 | ⇓P | Pn | 22 12 58.8 | +0.2 |
| | 36nm,0.4s | | | | | | |
| SFK | | | | ⇑S | Sn | 22 13 45.6 | +1.2 |
| | 6.4nm,0.2s | | | | | | |
| AML | Almayashu | 5.83 | 21 | P | Pn | 22 13 24.1 | -0.3 |
| | SNR=17 | | | | | | |
| MNAS | Manas | 5.90 | 12 | ⇑P | Pn | 22 13 25.0 | -0.1 |
| | 2.1nm,0.4s | | | | | | |
| MNAS | | | | ⇓S | Sn | 22 14 32.5 | +0.6 |
| | 12nm,1.1s | | | | | | |
| EKS2 | Erkin-Say | 6.34 | 20 | P | Pn | 22 13 31.1 | +0.1 |
| | SNR=12 | | | | | | |
| KK31 | Karatay Array | 6.39 | 358 | ⇑P | Pn | 22 13 32.1 | +0.6 |
| | 2.7nm,0.3s,baz=176,slow=12,SNR=21 | | | | | | |
| KK31 | | | | ⇑S | Sn | 22 14 43.4 | 0.0 |
| | 3.0nm,0.5s,baz=192,slow=21,SNR=8.2 | | | | | | |
| AAK | Ala-Archa | 6.53 | 24 | ⇑P | Pn | 22 13 33.7 | +0.1 |
| | 2.0nm,0.4s | | | | | | |
| AAK | | | | ⇓S | Sn | 22 14 45.3 | -1.8 |
| | 7.6nm,0.7s | | | | | | |
| AAK | Ala-Archa | 6.53 | 24 | P | Pn | 22 13 33.7 | +0.1 |
| | SNR=5.9 | | | | | | |
| CHMS | Chumysh | 6.95 | 24 | P | Pn | 22 13 38.9 | 0.0 |
| | SNR=5.1 | | | | | | |
| USP | Ospenovka | 7.11 | 22 | P | Pn | 22 13 41.0 | -0.1 |
| | SNR=6.0 | | | | | | |
| TKM2 | Tokmak 2 | 7.18 | 29 | ⇑P | Pn | 22 13 42.0 | -0.3 |
| | 2.4nm,0.8s | | | | | | |

*ISCJB **07** 22:13:23.2±0.8, 41.°89N±0.°04×24.°16E±0.°05, h4km±6km, Error ellipse: s-maj=7.0km s-min=5.5km az=139.5*
*CSEM **07** 22:13:23.6±0.2, 41.°89N×24.°20E, h2km, ML2.3, Error ellipse: s-maj=4.3km s-min=3.5km az=32.0*
*ATH **07** 22:13:24.7, 41.°82N×24.°18E, h20km±1km, MD3.2/10*
*THE **07** 22:13:25.2, 41.°80N×24.°19E, h10km, ML2.3/4, Error ellipse: s-maj=1.8km s-min=0.8km az=181.0*
*BEO **07** 22:13:30.7±1.2, 41.°94N×23.°83E, h0km, ML2.0/3*
**ISC 07 22:13:24.0**±1.2**, 41.°87N**±0.°03×**24.°18E**±0.°03**, h6**km±10km**, n39, σ0.s57**/58**, 1C-1D, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NVR | Nevrokopi | 0.57 | 205 | ePN | Pg | 22 13 35.0 | 0.0 |
| NVR | | | | eSN | Sg | 22 13 42.7 | +0.2 |
| NVR | Nevrokopi | 0.57 | 205 | P | Pg | 22 13 35.0 | 0.0 |
| NVR | | | | S | Sg | 22 13 42.6 | +0.1 |
| NVR | Nevrokopi | 0.57 | 205 | P | Pg | 22 13 35.0 | 0.0 |
| NVR | | | | eSn | Sg | 22 13 42.7 | +0.2 |
| SRS | Serrai | 0.87 | 211 | ePN | Pg | 22 13 40.7 | 0.0 |
| SRS | | | | eSN | Sg | 22 13 52.4 | +0.3 |
| SRS | Serrai | 0.87 | 211 | P | Pg | 22 13 40.8 | 0.0 |
| SRS | Serrai | 0.87 | 211 | P | Pg | 22 13 40.8 | 0.0 |
| SRS | | | | eSn | Sg | 22 13 52.4 | +0.3 |
| KAVA | Kavala | 0.91 | 164 | P | Pg | 22 13 40.7 | -0.7 |
| KAVA | | | | S | Sg | 22 13 53.4 | +0.2 |
| KAVA | Kavala | 0.91 | 164 | P | Pg | 22 13 40.7 | -0.7 |
| KAVA | | | | S | Sg | 22 13 53.4 | +0.2 |
| KNT | Kendrikon | 1.20 | 234 | ePN | Pg | 22 13 46.6 | -0.4 |
| KNT | | | | eSN | Sb | 22 14 02.9 | +0.1 |
| KNT | Kendrikon | 1.20 | 234 | P | Pg | 22 13 46.7 | -0.3 |
| KNT | | | | S | Sb | 22 14 02.8 | 0.0 |
| KNT | Kendrikon | 1.20 | 234 | P | Pg | 22 13 46.7 | -0.3 |
| KNT | | | | S | Sb | 22 14 02.8 | 0.0 |
| SOH | Sokhos | 1.22 | 211 | ePN | Pg | 22 13 46.8 | -0.6 |
| SOH | | | | eSN | Sb | 22 14 03.7 | +0.2 |
| SOH | Sokhos | 1.22 | 211 | P | Pg | 22 13 47.0 | -0.4 |
| SOH | | | | S | Sb | 22 14 03.6 | +0.1 |
| SOH | Sokhos | 1.22 | 211 | P | Pg | 22 13 47.0 | -0.4 |
| SOH | | | | S | Sb | 22 14 03.6 | +0.1 |
| RDO | Rodhopi | 1.25 | 125 | ePN | Pg | 22 13 47.9 | 0.0 |
| RDO | Rodhopi | 1.25 | 125 | ePn | Pg | 22 13 47.9 | 0.0 |
| VAY | Valandovo | 1.33 | 246 | ePg | Pb | 22 13 50.4 | +1.1 |
| VAY | Valandovo | 1.33 | 246 | ePg | Pb | 22 13 50.4 | +1.1 |
| HORT | Hortiatis | 1.51 | 213 | ePN | Pb | 22 13 52.2 | -0.3 |
| HORT | Hortiatis | 1.51 | 213 | ePn | Pb | 22 13 52.2 | -0.3 |
| OUR | Ouranopolis | 1.54 | 186 | ePN | Pn | 22 13 51.8 | -0.2 |
| OUR | Ouranopolis | 1.54 | 186 | ePn | Pn | 22 13 51.8 | -0.2 |
| PLG | Polygyros | 1.59 | 201 | ePN | Pn | 22 13 53.4 | +0.6 |
| PLG | | | | eSN | Sn | 22 14 13.2 | -0.5 |
| PLG | Polygyros | 1.59 | 201 | ePn | Pn | 22 13 53.4 | +0.6 |
| PLG | | | | eSn | Sn | 22 14 13.2 | -0.5 |
| GRG | Griva | 1.62 | 236 | ePN | Pg | 22 13 54.7 | -0.4 |
| GRG | | | | eSN | Sg | 22 14 15.8 | -0.3 |
| GRG | Griva | 1.62 | 236 | ePn | Pg | 22 13 54.7 | -0.4 |
| GRG | | | | eSn | Sg | 22 14 15.8 | -0.3 |
| ALN | Alexandroupoli | 1.71 | 124 | ePN | Pn | 22 13 54.8 | +0.5 |
| ALN | Alexandroupoli | 1.71 | 124 | ePn | Pn | 22 13 54.8 | +0.5 |
| SMTH | Samothraki Isl | 1.73 | 143 | ePN | Pn | 22 13 55.4 | +0.8 |
| SMTH | Samothraki Isl | 1.73 | 143 | ePn | Pn | 22 13 55.4 | +0.8 |
| ZAPS | Zavoj | 1.81 | 321 | ⇑iPg | Pg | 22 14 00.3 | +1.5 |
| ZAPS | | | | eSg | Sg | 22 14 21.4 | -0.9 |
| PAIG | Paliouri | 1.98 | 191 | ePB | Pn | 22 13 57.9 | -0.1 |
| PAIG | Paliouri | 1.98 | 191 | ePb | Pn | 22 13 57.9 | -0.1 |
| BARS | Barje | 2.00 | 299 | ⇓iPg | Pg | 22 14 02.6 | +0.3 |
| BARS | | | | eSg | Sb | 22 14 26.1 | +0.3 |
| SELS | Selova | 2.64 | 302 | ePn | Pb | 22 14 11.0 | -0.7 |
| THL | Klokotos Trika | 2.83 | 216 | ePN | Pn | 22 14 10.2 | +0.4 |
| THL | Klokotos Trika | 2.83 | 216 | ePn | Pn | 22 14 10.2 | +0.4 |
| BZS | Buzias | 4.18 | 334 | eSg | Sg | 22 15 36.8 | -1.5 |
| BZS | Buzias | 4.18 | 334 | eSg | Sg | 22 15 36.8 | -1.5 |

*AUST **07** 22:17:09.4, 5.°19S×151.°60E, h100km*
*BJI **07** 22:17:09.2, 5.°41S×151.°47E, h118km, mb4.8/28, mB4.9/19*
*IDC **07** 22:17:10.3±0.8, 5.°13S×151.°61E, h110km±6km, mb4.2/12, mb1 4.4/14, mb1mx4.1/28, mbtmp4.6/14, MS3.2/1, Ms1 3.2/1, ms1mx2.7/28, Error ellipse: s-maj=15.0km s-min=12.2km az=107.0*
*ISCJB **07** 22:17:10.7±0.8, 5.°19S±0.°04×151.°54E±0.°06, h125km±7km, mb4.8/37, Error ellipse: s-maj=9.5km s-min=6.8km az=8.7*
*NEIC **07** 22:17:13.3±1.8, 5.°15S×151.°46E, h137km±16km, mb4.9/19, Error ellipse: s-maj=12.0km s-min=9.9km az=223.0*
*DJA **07** 22:17:22.8±1.2, 5°S±5°×15°1E±°, h169km±9km, M5.4/15, mb4.8/15, mB5.3/2, MLv5.6/1, Mw(mB)4.7/2*
**ISC 07 22:17:11.3**±0.5**, 5.°19S**±0.°05×**151.°59E**±0.°07**, h117**km±2km**, h117**km**:pP-P, n111, σ1.s42**/150**, mb4.8**/38**, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RABL | Rabaul | 1.15 | 30 | P | Pn | 22 17 34.7 | +0.1 |
| | baz=1.2,SNR=136 | | | | | | |
| PMG | Port Moresby | 6.07 | 226 | P | Pn | 22 18 39.4 | +0.7 |
| | 45nm,0.3s,baz=48,slow=8.3,SNR=62 | | | | | | |
| PMG | | | | S | Sn | 22 19 46.6 | -0.2 |
| | 111nm,0.3s,baz=162,slow=20,SNR=15 | | | | | | |
| PMG | Port Moresby | 6.07 | 226 | P | Pn | 22 18 39.3 | +0.7 |
| | baz=6.1,SNR=49 | | | | | | |
| PMG | Port Moresby | 6.07 | 226 | ePn | Pn | 22 18 39.3 | +0.7 |
| PMG | | | | eS | Sn | 22 19 39.6 | -7.2 |
| HNR | Honiara | 9.30 | 117 | LR | LR | 22 23 08.3 | |
| | comp=Z,156nm,19.7s,baz=258,slow=38 | | | | | | |
| COEN | Coen | 12.02 | 223 | P | Pn | 22 20 00.2 | +1.2 |
| | baz=12,SNR=10.0 | | | | | | |
| COEN | Coen | 12.02 | 223 | ePn | Pn | 22 19 59.4 | +0.5 |
| COEN | | | | eS | Sn | 22 22 00.8 | -11 |
| SMPI | Sarmi | 13.24 | 283 | P | Pn | 22 20 14.9 | +0.1 |
| CTA | Charters Tower | 15.69 | 199 | P | P | 22 20 47.5 | -0.1 |
| | 2.0nm,0.3s,baz=22,slow=13,SNR=21 | | | | | | |
| CTAO | Charters Tower | 15.69 | 199 | ePn | P | 22 20 49.3 | +1.8 |
| | 20nm,0.7s | | | | | | |
| QIS | Mount Isa | 19.21 | 216 | P | Pn | 22 21 27.3 | -1.1 |
| | baz=19,SNR=24 | | | | | | |
| FAKI | Fak Fak | 19.42 | 276 | P | Pn | 22 21 29.5 | -1.5 |
| | baz=19,SNR=4.9 | | | | | | |
| EIDS | Eidsvold | 20.07 | 181 | P | P | 22 21 35.3 | -0.2 |
| | baz=20,SNR=3.4 | | | | | | |
| KDU | Kakadu | 20.29 | 247 | P | P | 22 21 37.5 | -0.5 |
| | baz=20,SNR=145 | | | | | | |
| SIJI | Sorong | 20.74 | 281 | P | P | 22 21 43.5 | +0.6 |
| | 29nm,0.7s,baz=97,slow=10,SNR=14 | | | | | | |
| SWI | Sorong | 20.75 | 281 | P | P | 22 21 43.4 | +0.5 |
| PALU | Palau | 21.13 | 306 | P | P | 22 21 47.9 | +0.9 |
| | baz=21,SNR=3.3 | | | | | | |
| RMQ | Roma | 21.35 | 187 | P | P | 22 21 50.7 | +1.4 |
| | baz=22,SNR=5.7 | | | | | | |
| MTN | Manton Dam | 21.57 | 248 | P | P | 22 21 50.9 | -0.8 |
| | baz=22,SNR=36 | | | | | | |
| MTN | Manton Dam | 21.57 | 248 | eP | P | 22 21 51.0 | -0.8 |
| | 208nm,1.5s | | | | | | |
| MTN | | | | eS | S | 22 25 41.9 | -2.1 |
| DZM | Mont Dzumac | 22.10 | 141 | P | P | 22 21 58.2 | +0.8 |
| | 33nm,0.7s,baz=0.1,slow=10,SNR=27 | | | | | | |
| DZM | Mont Dzumac | 22.10 | 141 | eP | P | 22 21 57.9 | +0.6 |
| | 32nm,0.8s | | | | | | |
| WRAB | Tennant Creek | 22.27 | 227 | eP | P | 22 21 58.4 | -0.7 |
| | 84nm,0.8s | | | | | | |
| WRAB | | | | e | | 22 25 56.5 | |
| WRA | Warramunga Arr | 22.29 | 227 | P | P | 22 21 58.5 | -0.7 |
| | 71nm,0.8s,baz=52,slow=9.9,SNR=75 | | | | | | |
| WRA | | | | PcP | PcP | 22 25 51.0 | 0.0 |
| | 1.7nm,0.7s,baz=46,slow=2.2,SNR=3.8 | | | | | | |
| WRA | | | | ScP | ScP | 22 29 17.4 | -0.5 |
| | 4.4nm,0.8s,baz=49,slow=2.6,SNR=12 | | | | | | |
| QLP | Quilpie | 22.40 | 198 | P | P | 22 22 00.9 | +0.6 |
| | baz=22,SNR=16 | | | | | | |
| LBMI | Labuha | 24.47 | 280 | P | P | 22 22 23.2 | +3.5 |
| KNRA | Kununurra | 24.72 | 243 | P | P | 22 22 21.9 | 0.0 |
| | baz=25,SNR=29 | | | | | | |
| AS01 | Alice Springs | 25.02 | 221 | eP | P | 22 22 24.3 | -0.3 |
| AS01 | | | | eScP | ScP | 22 29 24.9 | -0.4 |
| ASAR | Alice Springs | 25.05 | 221 | P | P | 22 22 24.8 | -0.2 |
| | 38nm,0.7s,baz=53,slow=9.0,SNR=150 | | | | | | |
| ASAR | | | | PcP | PcP | 22 25 57.2 | +0.4 |
| | 1.1nm,0.8s,baz=42,slow=2.9,SNR=3.1 | | | | | | |
| ASAR | | | | S | S | 22 26 44.7 | +3.8 |
| | 1.3nm,1.0s,baz=31,slow=19,SNR=2.8 | | | | | | |
| ASAR | | | | ScP | ScP | 22 29 25.1 | -0.3 |
| | 1.9nm,0.8s,baz=44,slow=3.9,SNR=9.4 | | | | | | |
| ARMA | Armidale | 25.09 | 180 | P | P | 22 22 27.8 | +2.5 |
| | baz=25,SNR=4.3 | | | | | | |
| SANI | Sanana | 25.73 | 276 | P | P | 22 22 33.9 | +2.7 |
| | 56nm,0.9s | | | | | | |
| SOEI | Soe | 27.46 | 259 | P | P | 22 22 49.7 | +2.9 |
| SOEI | Soe | 27.46 | 259 | eP | P | 22 22 43.7 | -3.1 |
| | 39nm,0.7s | | | | | | |
| BATI | Baumata | 28.11 | 258 | P | P | 22 22 53.1 | +0.6 |
| | 58nm,0.5s,baz=124,slow=5.1,SNR=14 | | | | | | |
| BATI | Baumata | 28.11 | 258 | P | P | 22 22 53.3 | +0.8 |
| WRKA | Warakurna | 29.81 | 226 | P | P | 22 23 06.7 | -0.8 |
| | baz=30,SNR=66 | | | | | | |
| EDFI | Ende, Flores | 29.88 | 262 | P | P | 22 23 07.8 | -0.5 |
| HTT | Hallett | 30.47 | 201 | P | P | 22 23 11.1 | -2.1 |
| | baz=31,SNR=13 | | | | | | |
| BBOO | Buckleboo | 31.07 | 206 | P | P | 22 23 18.0 | -0.4 |
| | baz=31,SNR=9.1 | | | | | | |
| FORT | Forrest | 33.73 | 218 | P | P | 22 23 41.0 | -0.6 |
| | baz=34,SNR=11 | | | | | | |
| FORT | Forrest | 33.73 | 218 | eP | P | 22 23 41.3 | -0.4 |
| | 29nm,0.8s | | | | | | |
| MBWA | Marble Bar | 34.73 | 240 | eP | P | 22 23 48.6 | -1.8 |
| | 22nm,0.8s | | | | | | |
| MEEK | Meekatharra | 38.01 | 232 | P | P | 22 24 17.7 | -0.6 |
| | baz=38,SNR=115 | | | | | | |
| KMBL | Kambalda | 38.14 | 223 | P | P | 22 24 18.6 | -0.7 |
| | baz=38,SNR=7.0 | | | | | | |
| GIRL | Giralia | 40.02 | 241 | P | P | 22 24 35.2 | +0.1 |
| | baz=40,SNR=13 | | | | | | |
| KLBR | Kellerberrin | 41.16 | 226 | P | P | 22 24 43.0 | -1.3 |
| | baz=41,SNR=15 | | | | | | |
| MORW | Morawa | 41.16 | 231 | P | P | 22 24 43.5 | -0.9 |
| | baz=41,SNR=6.1 | | | | | | |
| BLDU | Ballidu | 41.42 | 228 | P | P | 22 24 45.5 | -0.9 |
| | baz=42,SNR=12 | | | | | | |
| RKGY | Rocky Gully | 43.37 | 223 | P | P | 22 25 02.1 | -0.1 |
| | baz=44,SNR=8.4 | | | | | | |
| DLV | T Lat | 46.12 | 292 | eP | P | 22 25 23.6 | -0.9 |
| | 38nm,1.0s | | | | | | |
| MDSI | Maura Dua | 47.24 | 269 | P | P | 22 25 32.0 | -1.0 |
| QIZ | Qiongzhong | 47.63 | 302 | P | P | 22 25 36.1 | +0.1 |
| QIZ | | | | sP | sP | 22 26 14.0 | -2.3 |
| QIZ | | | | PP | PP | 22 27 28.5 | -0.2 |
| QIZ | | | | S | S | 22 32 23.1 | 0.0 |
| QIZ | | | | PMZ | | | |
| | 35nm,2.4s | | | | | | |
| NJ2 | Nanjing | 48.40 | 322 | eP | P | 22 25 41.1 | -0.6 |
| NJ2 | | | | PMZ | | | |
| | 20nm,1.0s | | | | | | |
| PPI | Padang Panjang | 51.33 | 274 | P | P | 22 26 03.0 | -1.2 |
| IPM | Ipoh | 51.41 | 280 | eP | P | 22 26 03.9 | -0.9 |
| | 11nm,1.0s | | | | | | |
| KULM | Kulim | 51.92 | 281 | eP | P | 22 26 07.0 | -1.5 |
| | 14nm,1.0s | | | | | | |
| MNSI | Mandailing Nat | 52.28 | 275 | P | P | 22 26 10.3 | -1.0 |
| PSI | Prapat | 53.20 | 277 | eP | P | 22 26 14.7 | -3.5 |
| | 10nm,1.1s | | | | | | |
| MDJ | Mudanjiang | 53.37 | 341 | P | P | 22 26 20.5 | +1.8 |
| MDJ | | | | PMZ | | | |
| | 5.0nm,0.5s | | | | | | |
| MDJ | | | | PMZ | | | |
| | 71nm,3.8s | | | | | | |
| GYA | Guiyang | 53.68 | 308 | eP | P | 22 26 22.4 | +1.0 |
| GYA | | | | pP | pP | 22 26 50.8 | +1.6 |
| GYA | | | | sP | sP | 22 27 04.2 | +2.0 |
| GYA | | | | PP | PP | 22 28 26.0 | +2.4 |
| GYA | | | | S | S | 22 33 45.4 | -1.4 |
| GYA | | | | sS | sS | 22 34 33.9 | -0.7 |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| GSI | Gunungsitoli | 54.33 | 275 | P | P | 22 26 24.8 | -1.5 |
| GSI | Gunungsitoli | 54.33 | 275 | eP | P | 22 26 21.6 | -4.8 |
| | 34nm,1.2s | | | | | | |
| LOEI | Loei | 54.56 | 296 | P | P | 22 26 26.4 | -1.4 |
| | 39nm,0.7s,4μm | | | | | | |
| UTTA | Uttaradit | 55.27 | 296 | P | P | 22 26 34.7 | +1.7 |
| | 5.2nm,0.8s,46nm | | | | | | |
| NANT | Nan | 55.50 | 297 | P | P | 22 26 35.6 | +1.0 |
| | 6.3nm,0.9s | | | | | | |
| PHRA | Phrae | 55.82 | 296 | P | P | 22 26 38.7 | +1.8 |
| | 98nm,1.1s | | | | | | |
| MLSI | Meulaboh, Aceh | 55.91 | 279 | P | P | 22 26 37.5 | -0.2 |
| KMI | Kunming | 56.21 | 305 | P | P | 22 26 40.7 | +0.9 |
| KMI | | | | pP | pP | 22 27 09.4 | +1.6 |
| KMI | | | | sP | sP | 22 27 22.5 | +1.8 |
| KMI | | | | PcP | PcP | 22 27 38.1 | +1.8 |
| KMI | | | | PP | PP | 22 28 49.6 | +3.2 |
| KMI | | | | S | S | 22 34 19.0 | -1.9 |
| KMI | | | | sS | sS | 22 35 08.5 | -0.5 |
| KMI | | | | PMZ | | | |
| | 7.0nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | 120nm,3.3s | | | | | | |
| KMI | | | | LN | | | |
| | 160nm,18.2s | | | | | | |
| KMI | | | | LE | | | |
| | 180nm,14.2s | | | | | | |
| KMI | | | | LZ | | | |
| | 95nm,14.5s | | | | | | |
| CRAI | Chiangrai | 56.29 | 298 | P | P | 22 26 35.5 | -4.7 |
| | 48nm,0.7s | | | | | | |
| LAMP | Lampang | 56.36 | 296 | P | P | 22 26 43.3 | +2.6 |
| | 5.6nm,0.9s | | | | | | |
| CM01 | Chiang Mai Arr | 56.93 | 296 | eP | P | 22 26 44.2 | -0.6 |
| CMAR | Chiang Mai Arr | 56.95 | 296 | P | P | 22 26 45.4 | +0.4 |
| | 8.8nm,0.9s,baz=120,slow=5.3,SNR=33 | | | | | | |
| CMAR | | | | pP | pP | 22 27 10.3 | -2.7 |
| | 1.0nm,0.3s,baz=100,slow=4.5,SNR=1.5 | | | | | | |
| CHTO | Chiang Mai | 57.07 | 296 | P | P | 22 26 47.2 | +1.4 |
| | 76nm,1.0s | | | | | | |
| CHTO | Chiang Mai | 57.07 | 296 | eP | P | 22 26 44.7 | -1.1 |
| | 11nm,1.0s | | | | | | |
| CMAI | Chiengmai2 | 57.36 | 298 | P | P | 22 26 49.6 | +1.6 |
| | 63nm,2.1s,5μm | | | | | | |
| CD2 | Chengdu | 58.08 | 311 | eP | P | 22 26 52.0 | -0.7 |
| CD2 | | | | pP | pP | 22 27 19.6 | -1.2 |
| CD2 | | | | sP | sP | 22 27 32.5 | -1.2 |
| CD2 | | | | PcS | PcS | 22 31 44.0 | -1.0 |
| CD2 | | | | S | S | 22 34 44.2 | -0.7 |
| CD2 | | | | sS | sS | 22 35 32.4 | -0.9 |
| CD2 | | | | SS | SS | 22 38 38.4 | +0.1 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| HHC | Hu-ho-hao-te | 58.67 | 325 | eP | P | 22 27 06.1 | +9.4 |
| HHC | | | | pP | pP | 22 27 32.5 | +7.7 |
| HHC | | | | sP | sP | 22 27 45.8 | +8.1 |
| HHC | | | | S | S | 22 35 04.1 | +12 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,110nm,5.1s | | | | | | |
| LZH | Lanzhou | 60.67 | 317 | eP | P | 22 27 11.7 | +1.1 |
| LZH | | | | pP | pP | 22 27 40.0 | +1.1 |
| LZH | | | | sP | sP | 22 27 52.5 | +0.7 |
| LZH | | | | PP | PP | 22 29 28.6 | +2.9 |
| LZH | | | | PMZ | | | |
| | comp=Z,21nm,1.4s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,83nm,8.7s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,300nm,14.7s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,300nm,15.0s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,370nm,19.1s | | | | | | |
| GTA | Gaotai | 65.13 | 318 | eP | P | 22 27 40.8 | +0.8 |
| GTA | | | | pP | PcP | 22 28 10.7 | -1.0 |
| GTA | | | | sP | sP | 22 28 23.3 | +1.9 |
| GTA | | | | PMZ | | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| ULN | Ulaanbaatar | 65.69 | 329 | eP | P | 22 27 41.0 | -2.4 |
| | comp=Z,26nm,2.3s | | | | | | |
| SONM | Songino Array | 66.02 | 328 | P | P | 22 27 45.8 | +0.3 |
| | comp=Z,1.1nm,0.3s,baz=145,slow=5.6,SNR=16 | | | | | | |
| SONA1 | Songino Array | 66.02 | 328 | eP | P | 22 27 45.8 | +0.3 |
| LSA | Lhasa | 67.47 | 305 | eP | P | 22 27 55.5 | 0.0 |
| | comp=Z,5.9nm,0.7s | | | | | | |
| TAPN | Taplejung | 69.58 | 302 | eP | P | 22 28 06.8 | -1.7 |
| | comp=Z,9.2nm,0.7s | | | | | | |
| ODAN | Odare | 69.70 | 301 | eP | P | 22 28 08.1 | -1.1 |
| GUN | Gumba | 71.29 | 302 | eP | P | 22 28 17.8 | -1.2 |
| | comp=Z,27nm,0.8s | | | | | | |
| PKI | Pulchoki | 71.60 | 301 | eP | P | 22 28 19.3 | -1.5 |
| | comp=Z,27nm,1.3s | | | | | | |
| KKN | Kakani | 71.77 | 301 | eP | P | 22 28 20.4 | -1.3 |
| | comp=Z,14nm,0.8s | | | | | | |
| DMN | Daman | 71.87 | 301 | eP | P | 22 28 21.3 | -1.0 |
| | comp=Z,21nm,0.8s | | | | | | |
| GKN | Gorkha | 72.37 | 301 | eP | P | 22 28 24.2 | -1.0 |
| | comp=Z,25nm,0.9s | | | | | | |
| VNDA | Vanda | 72.49 | 178 | P | P | 22 28 24.9 | +0.1 |
| | comp=Z,0.7nm,0.7s,baz=342,slow=6.4,SNR=8.6 | | | | | | |
| VNDA | | | | pP | pP | 22 28 53.2 | -0.8 |
| | comp=Z,1.0nm,0.8s,baz=326,slow=7.2,SNR=3.3 | | | | | | |
| KOLN | Koldanda | 73.19 | 301 | eP | P | 22 28 29.3 | -0.8 |
| | comp=Z,21nm,0.8s | | | | | | |
| WMQ | Urumqi | 75.21 | 318 | P | P | 22 28 41.8 | +0.5 |
| WMQ | | | | sP | sP | 22 29 22.0 | -1.3 |
| WMQ | | | | PP | PP | 22 31 34.0 | +2.6 |
| WMQ | | | | S | S | 22 38 07.0 | -4.0 |
| WMQ | | | | SS | SS | 22 43 03.0 | -0.1 |
| WMQ | | | | PMZ | | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,14nm,6.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,160nm,24.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,80nm,20.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,67nm,18.0s | | | | | | |
| MKAR | Makanchi Array | 79.83 | 319 | P | P | 22 29 06.5 | -0.4 |
| | comp=Z,2.8nm,0.9s,baz=99,slow=7.0,SNR=12 | | | | | | |
| MAKZ | Makanchi | 80.04 | 319 | eP | P | 22 29 08.0 | 0.0 |
| ZAA0 | Zalesovo Array | 80.81 | 327 | eP | P | 22 29 10.4 | -1.5 |
| ZALV | Zalesovo Beam | 80.81 | 327 | P | P | 22 29 10.6 | -1.4 |
| | comp=Z,1.7nm,0.4s,baz=108,slow=6.3,SNR=9.5 | | | | | | |
| KSH | Kashi | 82.27 | 311 | eP | P | 22 29 22.8 | +2.6 |
| KSH | | | | epP | pP | 22 29 51.1 | +1.1 |
| KSH | | | | esP | sP | 22 30 03.0 | +0.5 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSH | | | | *e*PP | **PP** | **22 32 34.8** | **+4.4** |
| KSH | | | | S | **S** | **22 39 26.7** | **+0.3** |
| KSH | | | | sS | **sS** | **22 40 18.3** | **+0.4** |
| KSH | | | | PMZ | | | |
| | comp=Z,130nm,5.5s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,110nm,5.2s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,140nm,11.0s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,140nm,7.1s | | | | | | |
| **ILAR** | **Eielson Array** | **82.97** | **22** | P | **P** | **22 29 21.5** | **-1.6** |
| | comp=Z,0.8nm,0.8s,baz=251,slow=5.0,SNR=5.4 | | | | | | |
| ILAR | | | | pP | **pP** | **22 29 50.9** | **-2.1** |
| | comp=Z,1.1nm,0.8s,baz=250,slow=4.1,SNR=3.9 | | | | | | |
| **TKM2** | **Tokmak 2** | **83.33** | **314** | *e*P | **P** | **22 29 25.3** | **-0.3** |
| | comp=Z,11nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **83.33** | **322** | *e*P | **P** | **22 29 24.3** | **-0.9** |
| | comp=Z,17nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **84.06** | **314** | *e*P | **P** | **22 29 28.3** | **-1.0** |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **84.75** | **203** | P | **P** | **22 29 31.9** | **-0.1** |
| | comp=Z,5.2nm,0.6s,baz=97,slow=5.8,SNR=40 | | | | | | |
| **MAW** | **Mawson** | **84.75** | **203** | P | **P** | **22 29 32.3** | **+0.3** |
| | baz=85,SNR=12 | | | | | | |
| **NV01** | **Mina Array Sit** | **93.28** | **52** | *e*P | **P** | **22 30 13.3** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **93.28** | **52** | P | **P** | **22 30 13.2** | **-0.2** |
| | comp=Z,2.0nm,0.9s,baz=254,slow=6.0,SNR=10.0 | | | | | | |
| **TPNV** | **Topopah Spring** | **94.81** | **53** | *e*P | **P** | **22 30 21.9** | **+1.4** |
| | comp=Z,70nm,3.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **105.38** | **61** | PKKPab | PKKPab | 22 47 04.4 | +0.1 |
| | comp=Z,0.4nm,0.8s,baz=104,slow=5.3,SNR=5.2 | | | | | | |
| **GERES** | **GERESS Array B** | **123.75** | **328** | PKP | **PKPdf** | **22 35 55.1** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=69,slow=1.4,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.27** | **287** | PKPbc | **PKPbc** | **22 36 46.5** | **-0.9** |
| | comp=Z,3.2nm,0.3s,baz=83,slow=2.1,SNR=77 | | | | | | |
| **BDFB** | **Brasilia** | **151.62** | **137** | PKPab | **PKPab** | **22 37 00.9** | **-1.1** |
| | comp=Z,0.9nm,0.3s,baz=165,slow=4.7,SNR=4.0 | | | | | | |

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*NNC **07** 22:27:56.3±3.9, 37°.13N×70°.43E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=28.9km s-min=26.1km az=165.0*

**ISC 07 22:27:52.9**±4.6**, 36°.8N**±0°.2×**70°.6E**±0°.2**, h10km, n13, σ1s.49**/14**, 3C-3D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **3.92** | **34** | ⇑P | **Pn** | **22 28 55.3** | **+1.9** |
| | 12nm,0.4s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **22 29 42.7** | **+3.0** |
| | 34nm,0.4s | | | | | | |
| **KSH** | **Kashi** | **5.01** | **56** | Pn | Pn | 22 29 02.6 | -5.6 |
| KSH | | | | Sn | Sn | 22 29 55.0 | -11 |
| KSH | | | | smax | smax | | |
| | comp=N,34nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,29nm,0.3s | | | | | | |
| **AML** | **Almayashu** | **5.83** | **23** | P | **Pn** | **22 29 19.8** | **0.0** |
| | SNR=37 | | | | | | |
| **MNAS** | **Manas** | **5.86** | **14** | ⇑P | **Pn** | **22 29 20.4** | **+0.5** |
| | comp=E,2.3nm,0.5s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **22 30 26.8** | **-0.5** |
| | comp=E,34nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **6.30** | **359** | ⇓P | **Pn** | **22 29 26.8** | **+1.0** |
| | comp=E,0.6nm,0.3s,baz=193,slow=15,SNR=19 | | | | | | |
| KK31 | | | | S | **Sn** | **22 30 36.4** | **-1.4** |
| | comp=E,3.7nm,0.4s,baz=190,slow=19,SNR=13 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.34** | **22** | P | **Pn** | **22 29 26.6** | **+0.1** |
| | SNR=16 | | | | | | |
| **KZA** | **Kyzart** | **6.37** | **33** | P | **Pn** | **22 29 25.5** | **-1.6** |
| | SNR=5.8 | | | | | | |
| **AAK** | **Ala-Archa** | **6.55** | **26** | ⇓S | **Sn** | **22 30 42.9** | **-1.2** |
| | comp=E,9.3nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **6.55** | **26** | P | **Pn** | **22 29 29.1** | **-0.3** |
| | SNR=12 | | | | | | |
| **CHMS** | **Chumysh** | **6.96** | **26** | P | Pn | 22 29 28.8 | -6.0 |
| | SNR=5.5 | | | | | | |
| **ULHL** | **Ulahol** | **6.96** | **37** | P | **Pn** | **22 29 33.4** | **-1.7** |
| | SNR=7.5 | | | | | | |
| **USP** | **Ospenovka** | **7.11** | **23** | P | **Pn** | **22 29 36.8** | **-0.2** |
| | SNR=5.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.21** | **30** | P | **Pn** | **22 29 37.4** | **-1.1** |
| | SNR=5.2 | | | | | | |

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*IDC **07** 22:28:58.7±0.8, 57°.76S×148°.37W, h0km, mb4.1/6, mb1 4.3/6, mb1mx4.1/27, mbtmp4.1/6, MS4.2/13, Ms1 4.2/13, ms1mx4.1/14, Error ellipse: s-maj=29.8km s-min=24.9km az=4.0*

*GCMT **07** 22:28:59.3±0.3, 57°.73S×147°.46W, h22km±2km, MW5.1/77, Moment Tensor Solution. s41,c50; s77,c106; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-1.14±.22; Mθθ4.32±.24; Mφφ-3.18±.18; Mrθ-0.79±.35; Mθφ3.48±.17; Mφr0.96±.30; Best double couple: Mo5.31400×10^16 NP1:φs112.00000°,δ80.00000°,λ-15.00000°. NP2: φs205.00000°,δ75.00000°,λ-170.00000°. Principal axes: T 5.7080, Plg3.0000°, Azm159.0000°; N -0.7870, Plg72.0000°, Azm259.0000°; P -4.9210, Plg18.0000°, Azm68.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **07** 22:28:59.3±0.6, 57°.68S×147°.91W, h10km, mb4.6/3 Error ellipse: s-maj=21.7km s-min=19.4km az=54.0*

**ISC 07 22:28:59.7**±0.9**, 57°.8S**±0°.2×**148°.1W**±0°.2**, h10km, n45, σ1s.19**/18**, mb4.5**/8**, MS4.2**/13**, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **26.00** | **202** | P | **P** | **22 34 31.9** | **-0.3** |
| | 0.3nm,0.6s,baz=333,slow=4.5,SNR=4.7 | | | | | | |
| VNDA | | | | LR | LR | 22 42 10.5 | |
| | comp=Z,426nm,20.0s,baz=75,slow=30 | | | | | | |
| **RPZ** | **Rata Peaks** | **28.92** | **281** | LR | LR | 22 44 08.7 | |
| | comp=Z,690nm,18.4s,baz=125,slow=32 | | | | | | |
| **URZ** | **Urewera** | **29.88** | **296** | LR | LR | 22 43 19.3 | |
| | comp=Z,368nm,21.5s,baz=64,slow=29 | | | | | | |
| **QSPA** | **South Pole Qui** | **32.38** | **180** | P | **P** | **22 35 29.0** | **-0.2** |
| | 1.5nm,0.7s,baz=62,slow=1.6,SNR=7.5 | | | | | | |
| **QSPA** | **South Pole Qui** | **32.38** | **180** | *e*P | **P** | **22 35 31.1** | **+1.9** |
| | 19nm,1.6s | | | | | | |
| **TBI** | **Tubuai** | **34.39** | **358** | *e*S | S | 22 40 37.0 | -37 |
| | 560nm,37.2s | | | | | | |
| TBI | | | | *e*LR | LR | 22 44 22.3 | |
| | 1μm,28.2s,baz=182 | | | | | | |
| **TBI** | **Tubuai** | **34.39** | **358** | *e*T | T | 23 11 48.8 | |
| | 30nm,0.3s | | | | | | |
| **RKT** | **Rikitea** | **35.88** | **21** | *e*LQ | LQ | 22 43 25.4 | |
| | 663nm,28.5s | | | | | | |
| RKT | | | | *e*LR | LR | 22 44 58.4 | |
| | 680nm,26.2s | | | | | | |
| **RKT** | **Rikitea** | **35.88** | **21** | *e*T | T | 23 13 24.4 | |
| | 5.5nm,0.3s | | | | | | |
| **MEH** | **Mehetia** | **39.82** | **0** | *e*T | T | 23 18 34.6 | |
| | 30nm,0.3s | | | | | | |
| **TVO** | **Taravao** | **39.92** | **358** | *e*T | T | 23 18 43.2 | |
| | 4.5nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **40.12** | **358** | *e*S | S | 22 42 03.1 | -39 |
| | 3μm,34.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 22 47 01.4 | |
| | 1μm,25.8s | | | | | | |
| **PPT** | **Papeete** | **40.14** | **358** | LR | LR | 22 49 50.1 | |
| | comp=Z,225nm,19.0s,baz=186,slow=31 | | | | | | |
| **TIAR** | **Tiarei** | **40.15** | **358** | *e*T | T | 23 19 00.0 | |
| | 3.9nm,0.3s | | | | | | |
| **VAH** | **Vaihoa** | **42.45** | **1** | *e*T | T | 23 21 50.9 | |
| | 51nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **48.39** | **298** | *e*LR | LR | 22 50 50.0 | |
| | 362nm,26.8s | | | | | | |
| **SNAA** | **Sanae** | **48.59** | **166** | P | **P** | **22 37 41.5** | **-1.2** |
| **SNAA** | **Sanae** | **48.59** | **166** | *e*P | **P** | **22 37 41.1** | **-1.7** |
| | 5.2nm,1.4s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **48.63** | **164** | P | **P** | **22 37 41.8** | **-1.2** |
| | baz=205,slow=7.7 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **48.74** | **163** | P | **P** | **22 37 43.9** | **+0.1** |
| **MAW** | **Mawson** | **52.87** | **194** | P | **P** | **22 38 15.8** | **+0.9** |
| | 1.4nm,0.9s,baz=149,slow=9.7,SNR=3.3 | | | | | | |
| MAW | | | | LR | LR | 22 58 21.8 | |
| | comp=Z,288nm,20.2s,baz=220,slow=33 | | | | | | |
| **TRQA** | **Tornquist** | **56.84** | **110** | *e*P | **P** | **22 38 42.1** | **-2.0** |
| | 10nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **63.96** | **267** | P | **P** | **22 39 33.0** | **-0.1** |
| | 4.9nm,1.0s,baz=141,slow=6.8,SNR=24 | | | | | | |
| ASAR | | | | LR | LR | 23 05 20.7 | |
| | comp=Z,113nm,18.0s,baz=144,slow=34 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **65.09** | **244** | T | T | 23 51 24.1 | |
| | baz=144,slow=76,SNR=147 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **65.10** | **244** | T | T | 23 51 31.9 | |
| | baz=144,slow=76,SNR=155 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **65.11** | **244** | T | T | 23 51 33.9 | |
| | baz=144,slow=76,SNR=130 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.76** | **269** | P | **P** | **22 39 50.8** | **-0.3** |
| | 4.2nm,1.0s,baz=143,slow=5.9,SNR=11 | | | | | | |
| WRA | | | | LR | LR | 23 05 46.3 | |
| | comp=Z,207nm,20.4s,baz=135,slow=33 | | | | | | |
| **CPUP** | **Villa Florida** | **68.52** | **105** | LR | LR | 23 05 52.4 | |
| | comp=Z,70nm,19.3s,baz=206,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **71.02** | **90** | P | **P** | **22 40 20.6** | **+2.1** |
| | 2.0nm,0.5s,baz=227,slow=7.3,SNR=4.4 | | | | | | |
| LPAZ | | | | LR | LR | 23 06 26.9 | |
| | comp=Z,57nm,18.0s,baz=184,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **82.19** | **107** | LR | LR | 23 14 44.6 | |
| | comp=Z,262nm,18.0s,baz=206,slow=33 | | | | | | |
| **ROSC** | **El Rosal** | **85.50** | **74** | LR | LR | 23 13 21.1 | |
| | comp=Z,94nm,18.1s,baz=196,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **93.78** | **174** | LR | LR | 23 20 06.6 | |
| | comp=Z,290nm,20.9s,baz=186,slow=33 | | | | | | |
| **NVAR** | **Mina Array Bea** | **99.04** | **23** | LR | LR | 23 17 41.5 | |
| | comp=Z,98nm,21.4s,baz=241,slow=30 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **103.50** | **132** | T | T | 00 39 13.4 | |
| | baz=205 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **103.50** | **132** | T | T | 00 38 56.8 | |
| | baz=205 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **103.52** | **132** | T | T | 00 39 03.2 | |
| | baz=205 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **104.58** | **132** | T | T | 00 40 18.0 | |
| | baz=205 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **104.58** | **132** | T | T | 00 40 24.2 | |
| | baz=205 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **104.59** | **132** | T | T | 00 40 21.9 | |
| | baz=205 | | | | | | |
| **ILAR** | **Eielson Array** | **122.21** | **1** | PKP | **PKPdf** | **22 47 52.3** | **-0.8** |
| | 0.8nm,0.9s,baz=222,slow=1.2,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **129.94** | **140** | PKP | **PKPdf** | **22 48 10.0** | **+0.6** |
| | 0.6nm,1.1s,baz=218,slow=1.4,SNR=2.3 | | | | | | |
| **MDT** | **Midelt** | **144.89** | **119** | PKPbc | **PKPdf** | **22 48 36.3** | **-0.2** |
| | 4.7nm,0.9s,baz=225,slow=2.9,SNR=8.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **148.03** | **272** | PKPbc | **PKPbc** | **22 48 43.5** | **-0.9** |
| | 4.3nm,1.0s,baz=110,slow=4.0,SNR=11 | | | | | | |
| **ESDC** | **Sonseca Array** | **150.69** | **112** | PKPbc | **PKPbc** | **22 48 51.9** | **+0.6** |
| | 2.8nm,0.9s,baz=229,slow=1.6,SNR=7.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.70** | **286** | PKPbc | **PKPbc** | **22 48 50.9** | **+0.1** |
| | 0.5nm,0.5s,baz=96,slow=4.3,SNR=2.4 | | | | | | |

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*IDC **07** 22:39:29.6±0.6, 15°.47N×120°.77E, h0km, mb4.0/22, mb1 4.1/23, mb1mx4.0/56, mbtmp4.0/23, ML3.8/1, MS3.2/6, Ms1 3.3/6, ms1mx3.0/32, Error ellipse: s-maj=21.4km s-min=12.9km az=78.0*

*MAN **07** 22:39:32, 15°.48N×120°.55E, h6km, MS3.7*

*MAN INTENSITY III - QUEZON CITY MALATE MANILA AND CLARK AIR BASE PAMPANGA; INTENSITY II - MAKATI CITY.*

*NEIC **07** 22:39:35.1±1.1, 15°.48N×120°.77E, h40km±10km, mb4.7/3, Error ellipse: s-maj=15.0km s-min=8.2km az=82.0*

*NEIC Felt [III PIVS] at Clark Field, Malate and Quezon City and [II PIVS] at Makati.*

**ISC 07 22:39:32.6**±1.1**, 15°.51N**±0°.03×**120°.71E**±0°.04**, h17km**±8km**, n63, σ1s.21**/61**, mb4.0**/24**, MS3.2**/6**, 3C-7D, Luzon**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCPH** | **Palayan** | **0.38** | **82** | ⇓*i*P | **Pn** | **22 39 43.8** | **+0.5** |
| PCPH | | | | *e*S | **Sn** | **22 39 51.0** | **+0.7** |
| **SCZP** | **Santa Cruz** | **0.81** | **289** | *e*P | **Pg** | **22 39 47.4** | **-1.0** |
| SCZP | | | | *e*S | **Sb** | **22 39 59.3** | **+0.4** |
| **BALP** | **Baler** | **0.87** | **74** | *e*P | **Pn** | **22 39 51.7** | **+1.6** |
| **BCPH** | **Baguio City Da** | **0.88** | **352** | ⇑*i*P | **Pb** | **22 39 49.5** | **0.0** |
| BCPH | | | | *i* S | **Sb** | **22 40 00.8** | **-0.3** |
| **BOLP** | **Bolinao** | **1.16** | **319** | *e*P | **Pn** | **22 39 53.9** | **-0.1** |
| BOLP | | | | *e*S | **Sb** | **22 40 09.4** | **+0.5** |
| **TGY** | **Tagaytay City** | **1.41** | **171** | ⇑*e*P | **Pg** | **22 40 00.4** | **+0.5** |
| TGY | | | | *e*S | **Sg** | **22 40 19.4** | **+1.1** |
| **LQP** | **Lukban** | **1.60** | **150** | ⇓*e*P | **Pn** | **22 40 00.5** | **+0.1** |
| **LUBP** | **Lubang** | **1.82** | **194** | *e*P | **Pn** | **22 40 03.4** | **+0.2** |
| **SZP** | **Santa** | **2.05** | **353** | *e*Pn | **Pn** | **22 40 07.6** | **+1.3** |
| SZP | | | | *e*S | **Sg** | **22 40 39.7** | **+1.2** |
| **ABRA** | **Dolores** | **2.13** | **0** | *e*P | **Pn** | **22 40 07.9** | **+0.5** |
| **GQP** | **Guinayangan** | **2.32** | **133** | ⇑*e*P | Pg | 22 40 30.2 | +13 |
| GQP | | | | *e*S | **Sg** | **22 40 45.9** | **-1.3** |
| **APYP** | **Conner** | **2.40** | **12** | *e*P | **Pb** | **22 40 14.2** | **-1.2** |
| **SIPP** | **Brgy, Tapao** | **2.41** | **354** | ⇓*e*P | **Pb** | **22 40 16.5** | **+0.9** |
| SIPP | | | | *e*S | **Sb** | **22 40 47.0** | **+1.9** |
| **CVP** | **Callao Caves** | **2.43** | **26** | ⇓*e*P | **Pb** | **22 40 14.5** | **-1.4** |
| CVP | | | | *i* S | Sn | 22 40 29.8 | -11 |
| **PIP** | **Pasuquin** | **2.80** | **358** | ⇓*e*P | **Pn** | **22 40 19.6** | **+2.8** |
| PIP | | | | *e*S | **Sb** | **22 40 56.2** | **-0.1** |
| **AUQP** | **San Andres** | **2.89** | **138** | *e*P | **Pg** | **22 40 27.5** | **-0.6** |
| **SGCP** | **Mt. Cagua** | **3.01** | **25** | *e*P | **Pb** | **22 40 23.1** | **-2.7** |
| **SJMP** | **San Jose** | **3.05** | **172** | *e*P | **Pn** | **22 40 23.1** | **+2.9** |
| **BUSP** | **Coron** | **3.52** | **188** | *e*P | **Pn** | **22 40 27.7** | **+1.2** |
| **PVCP** | **Virac** | **3.84** | **119** | ⇓*e*P | **Pn** | **22 40 33.8** | **+2.8** |
| **ENPP** | **El Nido** | **4.45** | **196** | *e*P | **Pn** | **22 40 40.4** | **+1.0** |
| **PPR** | **Puerto Princes** | **6.01** | **199** | ⇓*i*P | **Pn** | **22 41 02.4** | **+1.5** |
| **TPUB** | **Ta-pu** | **7.75** | **359** | *e*Pn | **Pn** | **22 41 22.9** | **-1.9** |
| **YULB** | **Yu-li** | **7.86** | **4** | *e*Pn | Pn | 22 41 30.3 | +4.0 |
| **SSLB** | **Suanglung** | **8.24** | **2** | *e*Pn | **Pn** | **22 41 33.7** | **+2.2** |
| | 8.7nm,0.6s | | | | | | |
| **YHNB** | **Yeheng** | **9.14** | **4** | *e*Pn | **Pn** | **22 41 44.3** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **9.17** | **13** | *e*Pn | **Pn** | **22 41 43.8** | **-0.3** |
| **JNU** | **Nakatsue** | **19.81** | **26** | P | **P** | **22 44 03.3** | **+0.8** |
| | 0.2nm,0.3s,baz=179,slow=6.2,SNR=9.0 | | | | | | |
| JNU | | | | LR | LR | 22 51 30.4 | |
| | comp=Z,55nm,19.8s,baz=284,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **20.41** | **183** | P | **P** | **22 44 09.2** | **+0.1** |
| | 3.0nm,0.5s,baz=18,slow=13,SNR=2.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.02** | **281** | P | **P** | **22 44 17.6** | **+2.0** |
| | 1.4nm,0.3s,baz=84,slow=9.5,SNR=16 | | | | | | |
| CMAR | | | | LR | LR | 22 52 21.9 | |
| | comp=Z,88nm,19.3s,baz=115,slow=37 | | | | | | |
| **KSAR** | **Wonju Array Be** | **22.76** | **15** | P | **P** | **22 44 34.0** | **0.0** |
| **KSRS** | **Korea Array** | **22.78** | **15** | P | **P** | **22 44 34.0** | **-0.3** |
| | 1.2nm,0.6s,baz=199,slow=11,SNR=5.7 | | | | | | |
| KSRS | | | | LR | LR | 22 53 13.2 | |
| | comp=Z,42nm,19.8s,baz=208,slow=36 | | | | | | |
| **BJT** | **Baijiatuau** | **24.74** | **352** | *e*P | **P** | **22 44 53.9** | **+0.7** |
| | 11nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **25.71** | **173** | P | **P** | **22 45 00.6** | **-1.7** |
| | 12nm,0.4s,baz=309,slow=6.5,SNR=3.9 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **26.11** | **33** | P | **P** | **22 45 05.6** | **-0.1** |
| | 0.8nm,0.6s,baz=195,slow=8.5,SNR=3.3 | | | | | | |
| **JAY** | **Jayapura** | **26.69** | **130** | LR | LR | 22 54 54.2 | |
| | comp=Z,40nm,20.4s,baz=217,slow=35 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **30.16** | **16** | P | **P** | **22 45 41.9** | **+0.1** |
| | 1.1nm,0.8s,baz=205,slow=6.4,SNR=4.3 | | | | | | |
| USRK | | | | LR | LR | 22 59 08.8 | |
| | comp=Z,51nm,18.6s,baz=150,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **34.34** | **343** | P | **P** | **22 46 18.1** | **-0.5** |
| | 0.8nm,0.7s,baz=160,slow=9.4,SNR=6.2 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.69** | **159** | *e*P | **P** | **22 46 46.3** | **-1.0** |
| | 12nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.69** | **159** | P | **P** | **22 46 46.5** | **-0.9** |
| | 8.8nm,0.7s,baz=338,slow=9.4,SNR=30 | | | | | | |
| **ASAR** | **Alice Springs** | **41.02** | **161** | P | **P** | **22 47 14.5** | **-0.6** |
| | 1.8nm,0.6s,baz=338,slow=7.0,SNR=18 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **43.99** | **79** | T | T | 23 33 59.3 | |
| | baz=274,slow=74,SNR=139 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **44.00** | **79** | T | T | 23 33 57.9 | |
| | baz=274,slow=74,SNR=28 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **44.00** | **79** | T | T | 23 33 58.1 | |
| | baz=274,slow=74,SNR=101 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **44.12** | **78** | T | T | 23 34 09.1 | |
| | baz=269,slow=74 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **44.12** | **78** | T | T | 23 34 13.6 | |
| | baz=269,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **44.14** | **78** | T | T | 23 34 13.3 | |
| | baz=269 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.60** | **323** | P | **P** | **22 47 44.4** | **+0.4** |
| | 0.3nm,0.4s,baz=120,slow=8.5,SNR=4.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **47.45** | **29** | P | **P** | **22 48 06.3** | **-0.1** |
| | 5.8nm,0.9s,baz=197,slow=9.0,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **47.47** | **332** | P | **P** | **22 48 06.0** | **-0.5** |
| | 0.3nm,0.3s,baz=130,slow=5.8,SNR=2.3 | | | | | | |
| **AAK** | **Ala-Archa** | **47.81** | **314** | LR | LR | 23 10 03.8 | |
| | comp=Z,48nm,20.0s,baz=62,slow=38 | | | | | | |
| **KURK** | **Kurchatov** | **48.70** | **325** | *e*P | **P** | **22 48 15.3** | **-0.7** |
| | 6.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.71** | **325** | P | **P** | **22 48 16.2** | **+0.2** |
| | 1.2nm,0.6s,baz=123,slow=8.5,SNR=11 | | | | | | |
| **SEY** | **Seymchan** | **52.30** | **18** | LR | LR | 23 11 06.7 | |
| | comp=Z,2μm,21.6s,baz=330,slow=36 | | | | | | |
| **BVAR** | **Borovoye Array** | **54.30** | **325** | P | **P** | **22 48 58.3** | **+0.4** |
| | 0.7nm,0.5s,baz=122,slow=6.5,SNR=3.6 | | | | | | |
| **GEYT** | **Alibeck** | **59.10** | **305** | P | **P** | **22 49 33.2** | **+0.8** |
| | 1.2nm,0.7s,baz=126,slow=9.8,SNR=2.4 | | | | | | |
| **ARU** | **Arti** | **61.89** | **326** | P | **P** | **22 49 50.4** | **-0.6** |
| | 0.2nm,0.3s,baz=143,slow=20,SNR=2.0 | | | | | | |
| **ILAR** | **Eielson Array** | **77.13** | **26** | P | **P** | **22 51 24.9** | **-0.1** |
| | 0.2nm,0.6s,baz=286,slow=4.6,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **77.41** | **339** | P | **P** | **22 51 25.6** | **-1.0** |
| | 2.8nm,0.9s,baz=73,slow=10,SNR=2.4 | | | | | | |
| **FINES** | **FINESS Array B** | **78.72** | **331** | P | **P** | **22 51 33.8** | **-0.1** |
| | 3.4nm,1.0s,baz=108,slow=4.5,SNR=2.7 | | | | | | |
| **HFS** | **Hagfors** | **84.90** | **331** | P | **P** | **22 52 04.8** | **-1.7** |
| | 5.1nm,1.0s,baz=119,slow=5.1,SNR=2.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **85.67** | **333** | P | **P** | **22 52 08.8** | **-1.6** |
| | 0.9nm,0.8s,baz=67,slow=4.8,SNR=3.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **91.11** | **22** | P | **P** | **22 52 36.2** | **-0.1** |
| | 0.4nm,0.6s,baz=312,slow=3.5,SNR=3.4 | | | | | | |

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*IDC **07** 22:45:44.7±2.8, 36°.30N×70°.93E, h194km±24km, mb3.4/10, mb1 3.5/14, mb1mx3.2/56, mbtmp4.0/14, Error ellipse: s-maj=20.6km s-min=16.1km az=8.0*

*ISCJB **07** 22:45:45.9±0.5, 36°.61N±0°.04×70°.75E±0°.07, h188km, mb3.6/9, Error ellipse: s-maj=7.6km s-min=5.6km az=163.2*

*NNC **07** 22:45:52.7±1.0, 37°.04N×70°.87E, h212km±8km, mb3.0, mpv4.0, Error ellipse: s-maj=10.9km s-min=5.0km az=159.0*

**ISC 07 22:45:46.5**±0.7**, 36°.62N**±0°.07×**70°.88E**±0°.06**, h188km, n38, σ1s.50**/43**, mb3.5**/9**, 10C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.72** | **324** | ⇑P | Pn | 22 46 36.2 | +3.9 |
| | 4.0nm,0.2s | | | | | | |
| DZET | | | | ⇑S | **Sn** | **22 47 10.7** | **+2.6** |
| | 129nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.96** | **31** | ⇑P | **Pn** | **22 46 50.2** | **+2.6** |
| | 24nm,0.3s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **22 47 36.6** | **+1.0** |
| | 83nm,0.6s | | | | | | |
| **AML** | **Almayashu** | **5.92** | **21** | P | **Pn** | **22 47 14.2** | **+1.4** |
| | SNR=99 | | | | | | |
| **MNAS** | **Manas** | **5.99** | **12** | ⇑P | **Pn** | **22 47 15.5** | **+1.9** |
| | 8.4nm,0.5s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **22 48 20.0** | **-2.3** |
| | 32nm,0.4s | | | | | | |
| **KZA** | **Kyzart** | **6.41** | **31** | P | **Pn** | **22 47 20.4** | **+1.0** |
| | SNR=19 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.43** | **19** | P | **Pn** | **22 47 21.1** | **+1.8** |
| | SNR=7.9 | | | | | | |
| **KK31** | **Karatay Array** | **6.48** | **358** | ⇑P | **Pn** | **22 47 21.9** | **+2.1** |
| | 1.2nm,0.2s,baz=176,slow=12,SNR=131 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **22 48 31.3** | **-2.3** |
| | 7.5nm,0.4s,baz=185,slow=19,SNR=15 | | | | | | |
| **AAK** | **Ala-Archa** | **6.62** | **24** | ⇓P | **Pn** | **22 47 23.6** | **+1.8** |
| | 12nm,0.3s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **22 48 36.6** | **-0.5** |
| | 27nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **6.62** | **24** | P | **Pn** | **22 47 23.6** | **+1.8** |
| | 11nm,0.3s,baz=185,slow=8.1,SNR=98 | | | | | | |
| AAK | | | | S | **Sn** | **22 48 36.6** | **-0.5** |
| | 2.2nm,0.3s,baz=318,slow=23,SNR=24 | | | | | | |
| **AAK** | **Ala-Archa** | **6.62** | **24** | P | **Pn** | **22 47 23.7** | **+1.8** |
| | SNR=35 | | | | | | |
| **KBK** | **Karagaybulak** | **6.79** | **26** | P | **Pn** | **22 47 26.1** | **+2.0** |
| | SNR=16 | | | | | | |
| **ULHL** | **Ulahol** | **6.98** | **35** | P | **Pn** | **22 47 27.9** | **+1.3** |
| | SNR=13 | | | | | | |
| **CHMS** | **Chumysh** | **7.03** | **24** | P | **Pn** | **22 47 28.9** | **+1.8** |
| | SNR=11 | | | | | | |
| **USP** | **Ospenovka** | **7.20** | **22** | P | **Pn** | **22 47 30.8** | **+1.6** |
| | SNR=16 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.26** | **29** | ⇓P | **Pn** | **22 47 31.5** | **+1.2** |
| | 21nm,0.7s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **22 48 49.8** | **-2.6** |
| | 9.9nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.26** | **29** | P | **Pn** | **22 47 31.7** | **+1.5** |
| | SNR=16 | | | | | | |
| **PDGK** | **Podgornoye** | **9.40** | **42** | ⇑P | **Pn** | **22 47 58.8** | **+0.8** |
| | 6.6nm,1.0s | | | | | | |
| **GEYT** | **Alibeck** | **10.26** | **281** | P | **Pn** | **22 48 08.8** | **-0.4** |
| | 0.4nm,0.3s,baz=119,slow=12,SNR=4.3 | | | | | | |
| GEYT | | | | S | **S** | **22 50 04.5** | **+0.4** |
| | 0.6nm,0.3s,baz=211,slow=8.1,SNR=4.2 | | | | | | |
| **KOLN** | **Koldanda** | **13.91** | **126** | *e*P | **Pn** | **22 48 55.7** | **-0.4** |
| | 4.2nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **14.45** | **123** | *e*P | **Pn** | **22 49 02.8** | **+0.1** |
| | 11nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **14.93** | **331** | P | **Pn** | **22 49 08.4** | **+0.2** |
| | 0.4nm,0.3s,baz=144,slow=12,SNR=10 | | | | | | |
| **PKIN** | **Phulchoki** | **15.24** | **122** | *e*P | **P** | **22 49 13.5** | **+0.4** |
| | 5.4nm,0.3s | | | | | | |
| **PKI** | **Pulchoki** | **15.25** | **122** | *e*P | **P** | **22 49 14.1** | **+0.8** |
| | 5.2nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **15.36** | **120** | *e*P | **P** | **22 49 15.5** | **+0.9** |
| | 12nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.41** | **359** | P | **Pn** | **22 49 27.0** | **+0.9** |
| | 0.4nm,0.3s,baz=155,slow=11,SNR=5.5 | | | | | | |
| **RAMN** | **Ramite** | **16.46** | **121** | *e*P | **Pn** | **22 49 29.7** | **+2.4** |
| | 3.8nm,0.2s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.63** | **330** | ⇓P | **Pn** | **22 49 29.3** | **+0.5** |
| | 4.1nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.63** | **330** | P | **Pn** | **22 49 29.2** | **+0.5** |
| | 0.7nm,0.3s,baz=144,slow=10,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.84** | **25** | P | **P** | **22 50 03.2** | **+0.4** |
| | 2.2nm,0.3s,baz=218,slow=11,SNR=10 | | | | | | |
| **FINES** | **FINESS Array B** | **37.33** | **326** | P | **P** | **22 52 40.4** | **+0.1** |
| | 1.3nm,0.4s,baz=127,slow=10,SNR=9.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.99** | **338** | P | **P** | **22 53 10.9** | **+0.3** |
| | 5.5nm,0.9s,baz=112,slow=8.4,SNR=9.7 | | | | | | |
| **HFS** | **Hagfors** | **42.91** | **322** | P | **P** | **22 53 26.0** | **-0.2** |
| | 1.5nm,0.5s,baz=95,slow=9.3,SNR=6.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.22** | **323** | P | **P** | **22 53 36.3** | **-0.4** |
| | 0.8nm,0.6s,baz=97,slow=7.8,SNR=3.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.62** | **269** | P | **P** | **22 56 08.3** | **-2.4** |
| | 0.3nm,0.4s,baz=51,slow=5.9,SNR=10.0 | | | | | | |
| **INK** | **Inuvik** | **73.80** | **9** | P | **P** | **22 56 59.2** | **-0.5** |
| | 0.8nm,0.4s,baz=17,slow=5.5,SNR=4.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.13** | **3** | P | **P** | **22 57 39.2** | **-1.3** |
| | 0.4nm,0.5s,baz=350,slow=5.5,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.14** | **122** | P | P | 22 57 43.2 | -3.2 |
| | 0.8nm,0.8s,baz=327,slow=5.0,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **84.40** | **125** | P | P | 22 57 54.1 | -3.8 |
| | 0.5nm,0.7s,baz=306,slow=4.5,SNR=5.5 | | | | | | |

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*IDC **07** 23:03:48.6±0.9, 31°.21N×103°.62E, h0km, mb3.8/12, mb1 3.9/14, mb1mx3.7/40, mbtmp3.8/14, ML3.7/2, MS3.2/3, Ms1 3.3/3, ms1mx2.9/26, Error ellipse: s-maj=27.0km s-min=16.9km az=49.0*

*ISCJB **07** 23:03:49.6±0.3, 31°.18N±0°.03×103°.36E±0°.04, h16km, mb3.8/12, MS3.1/2, Error ellipse: s-maj=5.4km s-min=4.7km az=139.2*

*BJI **07** 23:03:50.7, 31°.34N×103°.49E, h14km, mb4.1/7, ML4.1/25, Ms3.8/8, Ms7 3.6/10*

**ISC 07 23:03:51.5**±0.5**, 31°.11N**±0°.04×**103°.47E**±0°.05**, h16km, n31, σ1s.83**/40**, mb3.9**/12**, 1C, Sichuan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CD2** | **Chengdu** | **0.32** | **129** | ⇑*i*Pg | **Pg** | **23 03 58.0** | **-0.2** |
| CD2 | | | | Sg | **Sb** | **23 04 05.3** | **+1.6** |
| CD2 | | | | SMN | | | |
| | 11μm,0.8s | | | | | | |
| CD2 | | | | SME | | | |
| | 9μm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **4.97** | **3** | *e*Pn | **Pn** | **23 05 06.4** | **+0.8** |
| LZH | | | | Pg | **Pb** | **23 05 19.5** | **+1.3** |
| LZH | | | | Sg | **Sb** | **23 06 21.4** | **+3.6** |
| LZH | | | | SMN | | | |
| | 450nm,1.1s | | | | | | |
| LZH | | | | SME | | | |
| | 190nm,1.2s | | | | | | |
| LZH | | | | LZ | | | |
| | 860nm,6.6s | | | | | | |
| **GYA** | **Guiyang** | **5.42** | **148** | Pn | **Pn** | **23 05 13.6** | **+1.9** |
| GYA | | | | Pg | Pb | 23 05 30.7 | +4.9 |
| GYA | | | | Sn | **Sb** | **23 06 29.9** | **-0.7** |
| GYA | | | | SMN | | | |
| | 200nm,0.8s | | | | | | |
| GYA | | | | SME | | | |
| | 170nm,0.9s | | | | | | |
| **XAN** | **Xi'an** | **5.45** | **56** | Pn | **Pn** | **23 05 12.0** | **0.0** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| XAN | | | | Pg | **Pb** | **23 05 23.7** | **-2.6** |
| XAN | | | | Sn | **Sn** | **23 06 17.9** | **+3.5** |
| XAN | | | | Sg | **Sb** | **23 06 33.0** | **+1.6** |
| XAN | | | | SMN | | | |
| | 300nm,0.8s | | | | | | |
| XAN | | | | SME | | | |
| | 260nm,0.9s | | | | | | |
| **KMI** | **Kunming** | **6.00** | **186** | Pn | **Pn** | **23 05 21.7** | **+1.9** |
| KMI | | | | Sn | **Sn** | **23 06 30.6** | **+2.2** |
| KMI | | | | SMN | | | |
| | 36nm,1.4s | | | | | | |
| KMI | | | | SME | | | |
| | 61nm,1.1s | | | | | | |
| **GTA** | **Gaotai** | **8.80** | **341** | *e*P | Pn | 23 06 00.3 | +2.1 |
| GTA | | | | pP | | 23 06 04.2 | |
| GTA | | | | sP | | 23 06 06.4 | |
| GTA | | | | S | **Sn** | **23 07 35.8** | **-1.3** |
| GTA | | | | sS | | 23 07 40.8 | |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.5s | | | | | | |
| GTA | | | | LN | | | |
| | 270nm,13.5s | | | | | | |
| GTA | | | | LE | | | |
| | 210nm,14.0s | | | | | | |
| GTA | | | | LZ | | | |
| | 280nm,12.3s | | | | | | |
| **WHN** | **Wuhan** | **9.37** | **91** | P | **Pn** | **23 06 04.4** | **-1.4** |
| WHN | | | | LZ | | | |
| | 1μm,8.1s | | | | | | |
| **NJ2** | **Nanjing** | **13.15** | **82** | *e*P | **Pn** | **23 06 59.0** | **+1.5** |
| NJ2 | | | | S | **Sn** | **23 09 24.0** | **+0.5** |
| NJ2 | | | | PMZ | | | |
| | 30nm,0.8s | | | | | | |
| NJ2 | | | | LE | | | |
| | 440nm,20.0s | | | | | | |
| NJ2 | | | | LZ | | | |
| | 1μm,10.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **13.25** | **199** | Pn | **Pn** | **23 07 01.5** | **+2.5** |
| | 0.2nm,0.3s,baz=8.4,slow=10,SNR=3.9 | | | | | | |
| CMAR | | | | LR | LR | 23 12 21.9 | |
| | comp=Z,83nm,18.5s,baz=40,slow=38 | | | | | | |
| **TAPN** | **Taplejung** | **14.26** | **259** | *e*P | **Pn** | **23 07 12.9** | **-0.2** |
| | 20nm,1.0s | | | | | | |
| **ODAN** | **Odare** | **14.70** | **257** | *e*P | **Pn** | **23 07 18.0** | **-1.0** |
| | 27nm,1.1s | | | | | | |
| **GUN** | **Gumba** | **15.65** | **263** | *e*P | **Pn** | **23 07 29.9** | **-1.8** |
| | 39nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | **16.14** | **262** | *e*P | **Pn** | **23 07 35.8** | **-2.2** |
| | 28nm,0.7s | | | | | | |
| **PKIN** | **Phulchoki** | **16.15** | **262** | *e*P | **Pn** | **23 07 36.0** | **-2.1** |
| | 17nm,0.7s | | | | | | |
| **KKN** | **Kakani** | **16.19** | **263** | *e*P | **Pn** | **23 07 36.1** | **-2.4** |
| | 43nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | **16.68** | **264** | *e*P | **Pn** | **23 07 41.6** | **-3.1** |
| | 53nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **16.85** | **7** | Pn | **Pn** | **23 07 44.4** | **-2.3** |
| | 0.1nm,0.3s,baz=185,slow=13,SNR=4.9 | | | | | | |
| **KOLN** | **Koldanda** | **17.63** | **264** | *e*P | **Pn** | **23 07 53.8** | **-2.8** |
| | 15nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **21.14** | **66** | P | **P** | **23 08 32.5** | **-3.1** |
| | 3.6nm,0.7s,baz=259,slow=10,SNR=13 | | | | | | |
| KSRS | | | | LR | LR | 23 17 24.2 | |
| | comp=Z,45nm,20.4s,baz=186,slow=39 | | | | | | |
| **CN2** | **Changchun** | **21.48** | **48** | *e*P | **P** | **23 08 39.1** | **-0.2** |
| CN2 | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **22.62** | **320** | P | **P** | **23 08 50.7** | **-0.8** |
| | 1.5nm,0.7s,baz=120,slow=12,SNR=11 | | | | | | |
| MKAR | | | | LR | LR | 23 18 19.2 | |
| | comp=Z,103nm,18.0s,baz=138,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **25.75** | **305** | P | **P** | **23 09 22.2** | **+0.7** |
| | 3.1nm,0.8s,baz=74,slow=2.6,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.48** | **335** | P | **P** | **23 09 25.9** | **-1.8** |
| | 1.9nm,0.7s,baz=130,slow=10,SNR=9.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **26.91** | **324** | P | **P** | **23 09 30.4** | **-1.3** |
| | 1.8nm,0.6s,baz=127,slow=9.6,SNR=24 | | | | | | |
| **GEYT** | **Alibeck** | **37.69** | **293** | P | **P** | **23 11 06.8** | **+0.6** |
| | 1.9nm,0.8s,baz=64,slow=6.8,SNR=4.4 | | | | | | |
| **ARU** | **Arti** | **40.10** | **322** | P | **P** | **23 11 25.9** | **-0.2** |
| | 0.2nm,0.3s,baz=270,slow=20,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **57.26** | **326** | P | **P** | **23 13 37.7** | **-0.1** |
| | 1.5nm,0.7s,baz=122,slow=6.7,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.78** | **146** | P | **P** | **23 13 48.1** | **-1.0** |
| | 2.4nm,0.6s,baz=339,slow=7.4,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **61.78** | **148** | P | **P** | **23 14 09.1** | **-0.5** |
| | 0.3nm,0.5s,baz=326,slow=6.0,SNR=4.6 | | | | | | |
| **ILAR** | **Eielson Array** | **70.06** | **25** | P | **P** | **23 15 03.2** | **+0.8** |
| | 0.2nm,0.4s,baz=290,slow=5.5,SNR=3.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.84** | **17** | P | **P** | **23 16 09.3** | **-0.2** |
| | 0.3nm,0.7s,baz=330,slow=5.3,SNR=3.0 | | | | | | |

*NNC **07** 23:23:04.6±1.4, 39.37N×74.25E, h0km, mb3.0, mpv2.7, Error ellipse: s-maj=15.3km s-min=7.7km az=53.0*

*KRNET **07** 23:23:04.0±0.1, 39.15N×73.39E, mb2.6*

**ISC 07 23:23:03.9**±3.3**, 39.2N**±0.2×**73.53E**±0.08**, h28km, n12, σ2.08**/21**, 20C-6D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.84** | **359** | ⇓P | **Pn** | **23 23 21.1** | **+1.0** |
| | 4.5nm,0.3s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **23 23 33.5** | **+1.8** |
| | 23nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.84** | **359** | ⇑*e*P | **Pn** | **23 23 21.2** | **+1.0** |
| | baz=5.0 | | | | | | |
| SFK | | | | ⇑*i*S | **Sn** | **23 23 34.4** | **+2.7** |
| | baz=5.0 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.84** | **359** | ⇑*i*P | **Pn** | **23 23 21.2** | **+1.0** |
| | baz=5.0 | | | | | | |
| SFK | | | | ⇑*i*S | **Sn** | **23 23 33.1** | **+1.4** |
| | baz=5.0 | | | | | | |
| **ARLS** | **Aral** | **2.76** | **12** | ⇓*e*P | **Pb** | **23 23 52.9** | **+0.3** |
| | baz=14 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sb** | **23 24 27.7** | **+1.7** |
| | baz=14 | | | | | | |
| **NRN** | **Naryn** | **2.95** | **39** | ⇑*e*P | **Pb** | **23 23 54.2** | **-1.7** |
| | baz=40 | | | | | | |
| NRN | | | | ⇑*i*S | **Sb** | **23 24 31.3** | **-0.4** |
| | baz=40 | | | | | | |
| **AML** | **Almayashu** | **2.96** | **2** | ⇑*i*P | **Pb** | **23 23 54.9** | **-1.3** |
| | baz=4.0 | | | | | | |
| AML | | | | ⇑*i*S | **Sb** | **23 24 30.5** | **-1.6** |
| | baz=4.0 | | | | | | |
| **KZA** | **Kyzart** | **3.19** | **24** | ⇑*i*P | **Pb** | **23 23 57.9** | **-2.2** |
| | baz=25 | | | | | | |
| KZA | | | | ⇑*i*S | **Sb** | **23 24 38.8** | **+0.2** |
| | baz=25 | | | | | | |
| **MNAS** | **Manas** | **3.41** | **347** | ⇑Pg | **Pb** | **23 24 06.7** | **+3.1** |
| | 1.8nm,1.0s | | | | | | |
| MNAS | | | | ⇓Sn | **Sb** | **23 24 41.6** | **-3.0** |
| | 1.6nm,0.6s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 23 24 54.3 | |
| | 3.4nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **3.41** | **347** | ⇑*i*P | **Pb** | **23 24 02.1** | **-1.5** |
| | baz=349 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **23 24 44.8** | **+0.2** |
| | baz=349 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.50** | **3** | ⇑*i*P | **Pb** | **23 24 02.8** | **-2.3** |
| | baz=5.0 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **23 24 44.3** | **-2.9** |
| | baz=5.0 | | | | | | |
| **DZET** | **Dzherino** | **3.68** | **266** | ⇑Pg | Pb | 23 24 24.3 | +16 |
| | 2.6nm,0.5s | | | | | | |
| DZET | | | | ⇑Lg | Lg | 23 25 20.0 | |
| | 4.9nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **4.54** | **331** | ⇑Pn | Pn | 23 24 16.9 | +6.2 |
| | 0.1nm,0.3s,baz=136,slow=13,SNR=5.7 | | | | | | |
| KK31 | | | | ⇑Sn | **Sb** | **23 25 13.5** | **-3.7** |
| | 0.3nm,0.4s | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 23 25 34.8 | |
| | 1.1nm,0.7s,baz=200,slow=24,SNR=4.1 | | | | | | |

**WEL 07 23:38:40.1**±0.1**, 44.51S×167.79E, h12km, ML3.6**/12**, 2C-1D, Error ellipse: s-maj=1.1km s-min=0.7km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSZ** | **Milford Sound** | **0.19** | **149** | P* | Pg | 23 38 44.1 | -0.2 |
| MSZ | | | | SG | Sg | 23 38 46.9 | -0.3 |
| **JCZ** | **Jackson Bay** | **0.82** | **58** | P* | Pg | 23 38 55.5 | -0.7 |
| JCZ | | | | S* | Sg | 23 39 06.7 | -0.2 |
| JCZ | | | | AML | AML | 23 39 10.3 | |
| **MLZ** | **Mavora Lakes** | **0.88** | **162** | P* | Pg | 23 38 56.3 | -0.9 |
| MLZ | | | | S* | Sg | 23 39 08.7 | -0.1 |
| MLZ | | | | AML | AML | 23 39 15.4 | |
| **WKZ** | **Wanaka** | **0.93** | **110** | P* | Pg | 23 38 57.3 | -0.8 |
| WKZ | | | | S* | Sg | 23 39 09.2 | -1.2 |
| WKZ | | | | AML | AML | 23 39 10.5 | |
| WKZ | | | | AML | AML | 23 39 12.7 | |
| **DCZ** | **Deep Cove** | **1.07** | **205** | P* | Pb | 23 38 59.3 | -1.3 |
| DCZ | | | | S* | Sb | 23 39 13.3 | -1.1 |
| DCZ | | | | AML | AML | 23 39 15.2 | |
| DCZ | | | | AML | AML | 23 39 15.7 | |
| DCZ | | | | AML | AML | 23 39 15.7 | |
| **EAZ** | **Earnscleugh** | **1.30** | **124** | ⇓PN | Pn | 23 39 03.5 | -0.6 |
| EAZ | | | | SN | Sb | 23 39 20.4 | -0.7 |
| EAZ | | | | AML | AML | 23 39 24.0 | |
| EAZ | | | | AML | AML | 23 39 24.0 | |
| EAZ | | | | AML | AML | 23 39 24.1 | |
| **WHZ** | **Wether Hill Ro** | **1.39** | **176** | PN | Pn | 23 39 04.7 | -0.6 |
| WHZ | | | | AML | AML | 23 39 29.7 | |
| WHZ | | | | AML | AML | 23 39 30.2 | |
| **FOZ** | **Fox Glacier** | **1.66** | **56** | PN | Pn | 23 39 08.8 | -0.2 |
| FOZ | | | | AML | AML | 23 39 38.6 | |
| FOZ | | | | AML | AML | 23 39 38.6 | |
| FOZ | | | | AML | AML | 23 39 39.4 | |
| FOZ | | | | AML | AML | 23 39 40.3 | |
| **LBZ** | **Lake Benmore** | **1.72** | **87** | PN | Pn | 23 39 10.0 | +0.2 |
| LBZ | | | | AML | AML | 23 39 33.9 | |
| LBZ | | | | AML | AML | 23 39 35.9 | |
| **PYZ** | **Puysegur Point** | **1.83** | **205** | PN | Pn | 23 39 12.1 | +0.7 |
| **TUZ** | **Tuapeka** | **1.94** | **139** | PN | Pn | 23 39 13.6 | +0.7 |
| TUZ | | | | AML | AML | 23 39 42.0 | |
| TUZ | | | | AML | AML | 23 39 42.0 | |
| TUZ | | | | AML | AML | 23 39 43.1 | |
| TUZ | | | | AML | AML | 23 39 43.1 | |
| **ODZ** | **Otahua Downs** | **2.10** | **106** | ⇑PN | Pn | 23 39 15.4 | +0.3 |
| ODZ | | | | AML | AML | 23 39 47.5 | |
| ODZ | | | | AML | AML | 23 39 47.5 | |
| ODZ | | | | AML | AML | 23 39 48.0 | |
| ODZ | | | | AML | AML | 23 39 48.1 | |
| **SYZ** | **Scrubby Hill** | **2.24** | **155** | PN | Pn | 23 39 17.7 | +0.7 |
| SYZ | | | | AML | AML | 23 39 55.1 | |
| SYZ | | | | AML | AML | 23 39 58.8 | |
| **APZ** | **The Paps** | **2.33** | **177** | PN | Pn | 23 39 18.2 | -0.1 |
| **HHSZ** | **Highcliff Hill** | **2.41** | **126** | PN | Pn | 23 39 20.5 | +1.0 |
| **RPZ** | **Rata Peaks** | **2.48** | **72** | ⇑PN | Pn | 23 39 20.5 | +0.2 |
| RPZ | | | | AML | AML | 23 40 00.3 | |
| RPZ | | | | AML | AML | 23 40 05.9 | |
| **WVZ** | **Waitaha Valley** | **2.57** | **57** | PN | Pn | 23 39 19.9 | -1.7 |
| **MQZ** | **McQueen's Vall** | **3.59** | **79** | PN | Pn | 23 39 35.4 | -0.1 |
| **DSZ** | **Denniston Nort** | **4.03** | **48** | PN | Pn | 23 39 41.4 | -0.3 |
| **THZ** | **Tophouse** | **4.64** | **55** | PN | Pn | 23 39 48.9 | -1.2 |
| **QRZ** | **Quartz Range** | **5.07** | **45** | PN | Pn | 23 39 54.2 | -1.8 |

**MEX 07 23:41:46.7**±0.7**, 17.29N×101.66W, h5km, MD4.2, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZIIG** | **Zihuatanejo** | **0.36** | **30** | *i* P | Pg | 23 41 53.4 | -0.4 |
| ZIIG | | | | *i* S | Sg | 23 41 58.4 | -0.2 |
| **CAIG** | **El Cayaco** | **1.35** | **100** | *e*P | Pn | 23 42 08.0 | -4.2 |
| CAIG | | | | *e*S | Sb | 23 42 25.9 | -4.2 |
| **ARIG** | **Puente Sto Nin** | **1.59** | **52** | *e*P | Pn | 23 42 12.0 | -3.6 |
| ARIG | | | | *i* S | Sn | 23 42 31.5 | -5.0 |
| **ACX** | **Acapulco** | **1.77** | **103** | *e*P | Pn | 23 42 13.6 | -4.5 |
| ACX | | | | *i* S | Sn | 23 42 35.0 | -6.0 |
| **MMIG** | **Aquila** | **1.89** | **302** | *e*P | Pn | 23 42 15.9 | -3.8 |
| MMIG | | | | *e*S | Sn | 23 42 39.2 | -4.7 |
| **MEIG** | **Mezcala** | **2.04** | **72** | *e*P | Pn | 23 42 17.9 | -4.0 |
| MEIG | | | | *i* S | Sn | 23 42 44.0 | -3.8 |
| **PLIG** | **Platanillo** | **2.33** | **62** | *e*P | Pn | 23 42 23.1 | -2.7 |
| PLIG | | | | *i* S | Sn | 23 42 50.5 | -4.4 |
| **EZ5V** | | **2.85** | **320** | *e*P | Pn | 23 42 31.7 | -1.6 |
| EZ5V | | | | *i* S | Sn | 23 43 03.2 | -5.1 |
| **R15V** | | **2.90** | **311** | *e*P | Pn | 23 42 30.7 | -2.9 |
| **YAIG** | **Yautepec** | **2.92** | **57** | *i* P | Pn | 23 42 30.5 | -3.5 |
| YAIG | | | | *i* S | Sn | 23 43 05.8 | -3.8 |
| **TLIG** | **Tlapa** | **2.96** | **84** | *i* P | Pn | 23 42 32.0 | -2.6 |
| TLIG | | | | *i* S | Sn | 23 43 06.6 | -4.1 |
| **SFJM** | **Santa Fe** | **3.44** | **338** | *i* P | Pn | 23 42 38.8 | -2.5 |

**GUC 07 23:47:39.0**±0.5**, 37.30S×73.17W, h50km**±3km**, ML4.1, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCSP** | **San Pedro de C** | **0.45** | **7** | *e*P | Pn | 23 47 49.6 | -0.2 |
| CCSP | | | | *e*S | Sn | 23 47 57.5 | +0.1 |
| **CCHI** | **Chillan** | **1.12** | **52** | *e*P | Pn | 23 47 58.5 | +0.2 |
| CCHI | | | | *e*S | Sn | 23 48 13.8 | +1.2 |
| CCHI | | | | AML | AML | 23 48 14.1 | |
| | comp=N,5μm,0.5s | | | | | | |
| **COCH** | **Cobquecura** | **1.20** | **15** | *e*P | Pn | 23 47 60.0 | +0.5 |
| COCH | | | | *e*S | Sn | 23 48 16.0 | +1.3 |
| **PSCH** | **Puerto Saavedr** | **1.51** | **187** | *e*P | Pn | 23 48 04.5 | +0.8 |
| PSCH | | | | AML | AML | 23 48 28.3 | |
| | comp=N,7μm,0.5s | | | | | | |
| **LNCH** | **Linares** | **1.92** | **42** | *e*P | Pn | 23 48 10.2 | +0.9 |
| LNCH | | | | *e*S | Sn | 23 48 34.4 | +2.1 |
| **TALC** | **Talca** | **2.26** | **34** | *e*P | Pn | 23 48 14.9 | +1.0 |
| TALC | | | | *e*S | Sn | 23 48 42.0 | +1.3 |
| **NICH** | **Los Niches** | **2.78** | **35** | *e*P | Pn | 23 48 21.9 | +0.9 |

*IDC **08** 00:15:37.0±4.3, 37.87N×74.47E, h116km±31km, mb3.6/4, mb1 3.5/10, mb1mx3.2/42, mbtmp3.9/10, Error ellipse: s-maj=45.8km s-min=27.5km az=128.0*

*ISCJB **08** 00:15:41.1±0.4, 38.05N±0.04×74.18E±0.06, h152km, mb3.7/4, Error ellipse: s-maj=7.6km s-min=3.8km az=151.1*

*NNC **08** 00:15:45.9±4.4, 38.43N×73.96E, h175km±27km, mb2.9, mpv3.9, Error ellipse: s-maj=43.5km s-min=21.3km az=139.0*

**ISC 08 00:15:41.5**±0.7**, 38.07N**±0.05×**74.23E**±0.07**, h152km, n37, σ1.53**/44**, mb3.7**/4**, 8C-7D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **2.02** | **344** | ⇑P | **Pn** | **00 16 19.0** | **+1.7** |
| | 105nm,0.4s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **00 16 44.8** | **+0.1** |
| | 58nm,0.2s | | | | | | |
| **AML** | **Almayashu** | **4.08** | **354** | P | **Pn** | **00 16 44.4** | **+1.2** |
| | SNR=43 | | | | | | |
| **KZA** | **Kyzart** | **4.08** | **11** | P | **Pn** | **00 16 44.3** | **+1.0** |
| | SNR=48 | | | | | | |
| **DZET** | **Dzherino** | **4.30** | **282** | ⇓P | **Pn** | **00 16 46.4** | **+0.5** |
| | 6.8nm,0.3s | | | | | | |
| DZET | | | | ⇑S | **Sn** | **00 17 34.5** | **-1.4** |
| | 48nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **4.56** | **3** | ⇓P | **Pn** | **00 16 50.3** | **+1.0** |
| | 5.2nm,0.6s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **00 17 40.0** | **-2.2** |
| | 19nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **4.56** | **3** | P | **Pn** | **00 16 48.8** | **-0.6** |
| | 2.6nm,0.3s,baz=151,slow=7.5,SNR=22 | | | | | | |
| AAK | | | | S | **Sn** | **00 17 41.0** | **-1.2** |
| | 2.5nm,0.3s,baz=219,slow=22,SNR=6.9 | | | | | | |
| **AAK** | **Ala-Archa** | **4.56** | **3** | P | **Pn** | **00 16 50.9** | **+1.6** |
| | SNR=8.6 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.60** | **356** | P | **Pn** | **00 16 51.9** | **+2.1** |
| | SNR=42 | | | | | | |
| **MNAS** | **Manas** | **4.61** | **344** | ⇑P | **Pn** | **00 16 50.7** | **+0.9** |
| | 30nm,0.6s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **00 17 40.6** | **-2.6** |
| | 49nm,0.6s | | | | | | |
| **KBK** | **Karagaybulak** | **4.62** | **7** | P | **Pn** | **00 16 51.9** | **+1.9** |
| | SNR=10 | | | | | | |
| **CHMS** | **Chumysh** | **4.94** | **4** | P | **Pn** | **00 16 55.8** | **+1.6** |
| | SNR=20 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.96** | **12** | ⇓P | **Pn** | **00 16 55.6** | **+1.0** |
| | 3.4nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **00 17 49.5** | **-2.1** |
| | 17nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.96** | **12** | P | **Pn** | **00 16 55.8** | **+1.2** |
| | SNR=6.4 | | | | | | |
| **KK31** | **Karatay Array** | **5.77** | **332** | ⇓P | **Pn** | **00 17 05.6** | **+0.5** |
| | 25nm,0.8s,baz=135,slow=13,SNR=136 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **00 18 05.7** | **-4.8** |
| | 16nm,0.4s,baz=136,slow=21,SNR=11 | | | | | | |
| **SMLA** | **Simla** | **7.33** | **160** | *i* P | **Pn** | **00 17 28.7** | **+2.6** |
| SMLA | | | | *i* S | **Sn** | **00 18 45.2** | **-2.9** |
| SMLA | | | | AML | AML | 00 18 51.4 | |
| | comp=E,1μm,0.4s | | | | | | |
| SMLA | | | | AML | AML | 00 18 51.9 | |
| | comp=N,909nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **10.56** | **32** | P | Pn | 00 18 04.8 | -3.9 |
| | comp=N,0.1nm,0.3s,baz=210,slow=8.3,SNR=2.4 | | | | | | |
| **DANN** | **Dangsing** | **12.55** | **138** | *e*P | **Pn** | **00 18 34.5** | **-0.7** |
| **GEYT** | **Alibeck** | **12.71** | **274** | P | **Pn** | **00 18 35.8** | **-1.1** |
| | comp=N,0.4nm,0.3s,baz=106,slow=9.2,SNR=4.4 | | | | | | |
| GEYT | | | | S | Sn | 00 20 49.5 | -8.0 |
| | comp=N,0.6nm,0.3s,baz=92,slow=19,SNR=5.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.92** | **12** | ⇑P | **P** | **00 18 44.1** | **-0.2** |
| | comp=N,7.1nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.92** | **12** | P | **Pn** | **00 18 37.1** | **-2.3** |
| | comp=N,0.1nm,0.3s,baz=202,slow=12,SNR=4.6 | | | | | | |
| **KOLN** | **Koldanda** | **12.93** | **140** | *e*P | **Pn** | **00 18 40.6** | **+0.6** |
| | comp=N,7.7nm,0.2s | | | | | | |
| **GKN** | **Gorkha** | **13.29** | **136** | *e*P | **Pn** | **00 18 45.1** | **+0.5** |
| | comp=N,20nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **13.82** | **135** | *e*P | **Pn** | **00 18 51.1** | **-0.2** |
| | comp=N,11nm,0.5s | | | | | | |
| **DMN** | **Daman** | **13.86** | **136** | *e*P | **Pn** | **00 18 52.1** | **+0.2** |
| | comp=N,8.2nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **14.05** | **135** | *e*P | **Pn** | **00 18 54.2** | **0.0** |
| | comp=N,13nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **14.06** | **135** | *e*P | **Pn** | **00 18 54.4** | **0.0** |
| | comp=N,20nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **14.07** | **133** | *e*P | **Pn** | **00 18 55.2** | **+0.6** |
| | comp=N,16nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **15.19** | **351** | P | **Pn** | **00 19 08.7** | **+0.7** |
| | comp=N,0.6nm,0.3s,baz=145,slow=5.4,SNR=8.2 | | | | | | |
| **AB31** | **Akbulak array** | **15.20** | **322** | ⇑P | **Pn** | **00 19 08.8** | **+0.7** |
| | comp=N,0.7nm,0.4s | | | | | | |
| AB31 | | | | ⇑S | Sn | 00 21 43.8 | -13 |
| | comp=N,1.8nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **15.21** | **133** | *e*P | **Pn** | **00 19 08.9** | **+0.2** |
| | comp=N,15nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **15.57** | **129** | *e*P | **Pn** | **00 19 13.1** | **-0.1** |
| | comp=N,6.2nm,0.3s | | | | | | |
| **ODAN** | **Odare** | **15.74** | **131** | *e*P | **P** | **00 19 15.9** | **-0.2** |
| | comp=N,12nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.47** | **21** | P | **P** | **00 19 34.4** | **-0.3** |
| | comp=N,1.7nm,0.3s,baz=216,slow=12,SNR=34 | | | | | | |
| **FINES** | **FINESS Array B** | **37.67** | **324** | P | **P** | **00 22 43.0** | **+1.4** |
| | comp=N,0.8nm,0.3s,baz=123,slow=11,SNR=13 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.72** | **336** | P | **P** | **00 23 08.3** | **+1.5** |
| | comp=N,3.9nm,0.8s,baz=113,slow=9.0,SNR=14 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.70** | **322** | P | **P** | **00 23 39.7** | **+0.6** |
| | comp=N,0.8nm,0.6s,baz=91,slow=7.6,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.31** | **270** | P | **P** | **00 26 27.1** | **+0.6** |
| | comp=N,0.3nm,0.3s,baz=48,slow=5.7,SNR=14 | | | | | | |

**NNC 08 00:44:47.2**±8.1**, 37.17N×71.55E, h0km, mb3.6, mpv3.2, 3C-5D, Error ellipse: s-maj=65.6km s-min=29.4km az=163.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.70** | **308** | ⇓Pn | Pn | 00 45 32.0 | -0.1 |
| | 29nm,0.4s | | | | | | |
| DZET | | | | ⇑Sn | Sn | 00 46 07.4 | +1.8 |
| | 171nm,0.5s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.22** | **28** | ⇑Pn | Pb | 00 45 42.6 | -3.1 |
| | 1.2nm,0.2s | | | | | | |
| SFK | | | | ⇓Sn | Sb | 00 46 26.3 | +0.6 |
| | 17nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **5.36** | **8** | ⇓Pn | Pn | 00 46 08.2 | -0.5 |
| | 0.8nm,0.4s | | | | | | |
| MNAS | | | | ⇓Sn | Sn | 00 47 12.9 | +1.7 |
| | 4.2nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **5.90** | **22** | ⇑Pn | Pn | 00 46 15.4 | -0.7 |
| | 1.2nm,0.6s | | | | | | |
| AAK | | | | ⇓Sn | Sn | 00 47 26.9 | +2.3 |
| | 6.3nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **5.98** | **353** | Pn | Pn | 00 46 15.4 | -1.6 |
| | 0.4nm,0.4s,baz=174,slow=11,SNR=10 | | | | | | |
| KK31 | | | | Sn | Sn | 00 47 24.4 | -1.8 |
| | 2.8nm,0.4s,baz=184,slow=22,SNR=14 | | | | | | |

**IDC 08 00:45:38.2**±5.2**, 43.72N×86.33E, h0km, mb1 3.3**/3**, mb1mx3.0**/42**, mbtmp3.3**/3**, ML2.8**/2**, 2D, Error ellipse: s-maj=69.2km s-min=29.4km az=20.0, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MK31** | **Makanchi Array** | **4.19** | **319** | Pn | Pn | 00 46 44.6 | +1.2 |
| | 1.1nm,0.4s,baz=131,slow=14,SNR=24 | | | | | | |
| MK31 | | | | ⇓Pg | Pg | 00 46 56.3 | -2.2 |
| | 2.9nm,0.5s,baz=132,slow=15,SNR=11 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 00 47 54.8 | |
| | 4.3nm,0.7s,baz=132,slow=28,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.19** | **319** | Pn | Pn | 00 46 45.3 | +1.9 |
| | 0.8nm,0.3s,baz=137,slow=15,SNR=38 | | | | | | |
| MKAR | | | | Pg | Pb | 00 46 54.2 | +1.4 |
| | 1.4nm,0.3s,baz=137,slow=16,SNR=20 | | | | | | |
| MKAR | | | | Lg | Lg | 00 47 53.0 | |
| | 0.8nm,0.3s,baz=136,slow=28,SNR=5.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **10.28** | **355** | Pn | Pn | 00 48 04.8 | -2.0 |
| | 0.3nm,0.3s,baz=175,slow=12,SNR=7.9 | | | | | | |
| **SONM** | **Songino Array** | **14.59** | **67** | Pn | Pn | 00 49 07.2 | +1.3 |
| | baz=262,slow=11,SNR=1.9 | | | | | | |

**IDC 08 01:02:06.8**±1.2**, 55.81S×27.15W, h0km, mb3.8**/3**, mb1 4.0**/3**, mb1mx3.7**/14**, mbtmp3.8**/3**, Error ellipse: s-maj=46.6km s-min=31.4km az=89.0, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **46.82** | **183** | P | P | 01 10 37.5 | -0.1 |
| | 1.0nm,0.8s,baz=191,slow=10,SNR=7.9 | | | | | | |
| **LPAZ** | **La Paz** | **50.25** | **305** | P | P | 01 11 05.3 | -0.2 |
| | 1.2nm,0.4s,baz=153,slow=2.3,SNR=8.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.83** | **29** | P | P | 01 13 37.2 | 0.0 |
| | 0.3nm,0.5s,baz=195,slow=6.4,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **149.97** | **312** | PKPbc | PKPbc | 01 21 57.1 | -0.5 |
| | 0.6nm,0.8s,baz=108,slow=2.9,SNR=5.4 | | | | | | |

**PGC 08 01:09:44.1**±2.2**, 71.00N×136.93W, h35km, ML3.5**/1**, 327km northwest of Inuvik, Nt Beaufort Sea, Beaufort Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **INK** | **Inuvik** | **2.96** | **155** | Pn | Pn | 01 10 28.1 | -0.4 |
| INK | | | | Sn | Sn | 01 10 60.0 | -2.7 |
| **SMPN** | **Simpson Lake** | **4.55** | **123** | Pn | Pn | 01 10 49.9 | -0.5 |
| SMPN | | | | Sn | Sn | 01 11 38.4 | -3.7 |
| **CLVN** | **Colville Lake** | **5.56** | **130** | Pn | Pn | 01 11 03.1 | -1.2 |
| CLVN | | | | Sn | Sn | 01 12 02.7 | -4.2 |
| **DAWY** | **Dawson** | **7.03** | **189** | Pn | Pn | 01 11 22.9 | -1.6 |
| DAWY | | | | Sn | Sn | 01 12 36.3 | -6.8 |
| **KUKN** | **Kugluktuk,NWT** | **8.30** | **102** | Pn | Pn | 01 11 41.5 | -0.3 |
| KUKN | | | | Sn | Sn | 01 13 06.3 | -7.8 |
| **BVCY** | **Beaver Creek** | **8.76** | **192** | Pn | Pn | 01 11 46.5 | -1.7 |
| BVCY | | | | Sn | Sn | 01 13 20.6 | -5.0 |
| **YUK1** | **Sand Pete Hill** | **9.00** | **191** | Pn | Pn | 01 11 49.6 | -2.0 |
| YUK1 | | | | Sn | Sn | 01 13 23.8 | -7.9 |
| **YUK3** | **Moose Creek** | **9.37** | **190** | Pn | Pn | 01 11 54.7 | -2.1 |
| YUK3 | | | | Sn | Sn | 01 13 32.2 | -8.8 |
| **YUK2** | **White River** | **9.38** | **191** | Pn | Pn | 01 11 54.9 | -1.9 |
| YUK2 | | | | Sn | Sn | 01 13 32.8 | -8.3 |
| **YUK4** | **Talbot Arm** | **9.72** | **185** | Pn | Pn | 01 11 58.6 | -3.0 |
| YUK4 | | | | Sn | Sn | 01 13 37.6 | -12 |
| **YUK5** | **Granite Creek** | **9.92** | **183** | Pn | Pn | 01 12 02.4 | -1.8 |
| YUK5 | | | | Sn | Sn | 01 13 46.6 | -7.7 |
| **YUK6** | **Outpost Mounta** | **10.12** | **184** | Pn | Pn | 01 12 03.6 | -3.4 |
| YUK6 | | | | Sn | Sn | 01 13 53.1 | -6.3 |
| **HYT** | **Haines Junctio** | **10.22** | **182** | Pn | Pn | 01 12 06.1 | -2.2 |
| **YUK7** | **Dusty Glacier** | **10.53** | **183** | Pn | Pn | 01 12 08.4 | -4.2 |
| **YKR1** | **Yellowknife Ar** | **12.09** | **124** | Pn | Pn | 01 12 30.6 | -2.9 |
| YKR1 | | | | Sn | Sn | 01 14 34.0 | -13 |
| **YKB0** | **Yellowknife Ar** | **12.09** | **123** | Pn | Pn | 01 12 31.4 | -2.2 |
| YKB0 | | | | Sn | Sn | 01 14 33.8 | -13 |
| **YKR2** | **Yellowknife Ar** | **12.10** | **124** | Pn | Pn | 01 12 30.7 | -3.0 |
| YKR2 | | | | Sn | Sn | 01 14 34.9 | -12 |
| **YKB9** | **Yellowknife Ar** | **12.11** | **123** | Pn | Pn | 01 12 31.1 | -2.7 |
| YKB9 | | | | Sn | Sn | 01 14 33.6 | -14 |
| **YKR3** | **Yellowknife Ar** | **12.11** | **124** | Pn | Pn | 01 12 31.4 | -2.5 |
| YKR3 | | | | Sn | Sn | 01 14 34.1 | -13 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YKW3** | **Yellowknife Ar** | 12.12 | 123 | Pn | Pn | 01 12 31.2 | -2.8 |
| YKW3 | | | | Sn | Sn | 01 14 35.1 | -13 |
| **YKB8** | **Yellowknife Ar** | 12.12 | 123 | Pn | Pn | 01 12 31.4 | -2.6 |
| YKB8 | | | | Sn | Sn | 01 14 34.9 | -13 |
| **YKR4** | **Yellowknife Ar** | 12.12 | 124 | Pn | Pn | 01 12 31.4 | -2.6 |
| YKR4 | | | | Sn | Sn | 01 14 35.1 | -13 |
| **YKR5** | **Yellowknife Ar** | 12.14 | 124 | Pn | Pn | 01 12 31.9 | -2.4 |
| YKR5 | | | | Sn | Sn | 01 14 35.3 | -13 |
| **YKB7** | **Yellowknife Ar** | 12.14 | 123 | Pn | Pn | 01 12 31.6 | -2.7 |
| YKB7 | | | | Sn | Sn | 01 14 35.2 | -13 |
| **YKR6** | **Yellowknife Ar** | 12.15 | 123 | Pn | Pn | 01 12 31.7 | -2.7 |
| YKR6 | | | | Sn | Sn | 01 14 35.7 | -13 |
| **YKB6** | **Yellowknife Ar** | 12.16 | 123 | Pn | Pn | 01 12 32.3 | -2.3 |
| YKB6 | | | | Sn | Sn | 01 14 35.4 | -13 |
| **YKR7** | **Yellowknife Ar** | 12.16 | 123 | Pn | Pn | 01 12 31.6 | -3.1 |
| YKR7 | | | | Sn | Sn | 01 14 37.2 | -11 |
| **YKR8** | **Yellowknife Ar** | 12.18 | 123 | Pn | Pn | 01 12 31.8 | -3.0 |
| YKR8 | | | | Sn | Sn | 01 14 36.9 | -12 |
| **YKR9** | **Yellowknife Ar** | 12.19 | 123 | Pn | Pn | 01 12 31.9 | -3.0 |
| YKR9 | | | | Sn | Sn | 01 14 37.0 | -12 |
| **YKB4** | **Yellowknife Ar** | 12.20 | 123 | Pn | Pn | 01 12 32.3 | -2.7 |
| YKB4 | | | | Sn | Sn | 01 14 36.5 | -13 |
| **YKB3** | **Yellowknife Ar** | 12.21 | 123 | Pn | Pn | 01 12 32.5 | -2.8 |
| YKB3 | | | | Sn | Sn | 01 14 36.0 | -14 |
| **YKB2** | **Yellowknife Ar** | 12.23 | 123 | Pn | Pn | 01 12 33.2 | -2.3 |
| YKB2 | | | | Sn | Sn | 01 14 37.3 | -13 |
| **YKB1** | **Yellowknife Ar** | 12.25 | 124 | Pn | Pn | 01 12 33.3 | -2.5 |
| YKB1 | | | | Sn | Sn | 01 14 37.9 | -13 |
| **SNLN** | **Sandy Lake, NW** | 13.95 | 111 | Pn | Pn | 01 12 56.0 | -2.9 |
| SNLN | | | | Sn | Sn | 01 15 22.1 | -10 |
| **GDLN** | **Gardenia Lake,** | 15.06 | 111 | Pn | Pn | 01 13 11.3 | -2.7 |
| GDLN | | | | Sn | Sn | 01 15 46.4 | -13 |

*IDC **08** 01:24:14.5±2.8, 36.°02N×69.°34E, h0km, mb3.5/2, mb1 3.6/7, mb1mx3.3/47, mbtmp3.6/7, ML3.4/5, MS2.8/2, Ms1 2.9/2, ms1mx2.5/23, Error ellipse: s-maj=52.1km s-min=19.6km az=143.0*

*ISCJB **08** 01:24:16.1±0.8, 36.°27N±0.°07×68.°91E±0.°06, h10km, mb3.4/1, MS3.0/1, Error ellipse: s-maj=10.4km s-min=6.4km az=162.1*

*NNC **08** 01:24:24.4±4.8, 36.°55N×68.°73E, h143km±61km, mb2.9, mpv3.7, Error ellipse: s-maj=40.6km s-min=27.5km az=163.0*

**ISC 08 01:24:17.8**±0.9**, 36.°22N**±0.°06×**69.°02E**±0.°06**, h10km, n23, σ1.s80**/32**, 9C-3D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.59** | **357** | ⇓P | **Pn** | **01 25 02.2** | **+2.4** |
| | 8.9nm,0.4s | | | | | | |
| DZET | | | | ⇑S | **Sb** | **01 25 39.3** | **+3.0** |
| | 190nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **5.18** | **42** | ⇓P | **Pn** | **01 25 38.4** | **+2.8** |
| | 5.9nm,0.3s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **01 26 37.7** | **+2.1** |
| | 22nm,0.2s | | | | | | |
| **MNAS** | **Manas** | **6.82** | **22** | ⇑P | **Pn** | **01 26 00.0** | **+2.0** |
| | 2.1nm,0.3s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **01 27 12.8** | **-3.0** |
| | 3.5nm,0.3s | | | | | | |
| **AML** | **Almayashu** | **6.93** | **30** | P | **Pn** | **01 26 01.5** | **+1.7** |
| | SNR=14 | | | | | | |
| **KK31** | **Karatay Array** | **6.97** | **9** | P | **Pn** | **01 26 01.7** | **+1.7** |
| | 0.9nm,0.3s,baz=202,slow=13,SNR=62 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **01 27 18.0** | **-1.3** |
| | 2.9nm,0.5s,baz=200,slow=20,SNR=3.7 | | | | | | |
| **EKS2** | **Erkin-Say** | **7.42** | **28** | P | **Pn** | **01 26 08.3** | **+2.1** |
| | SNR=14 | | | | | | |
| **KZA** | **Kyzart** | **7.59** | **38** | P | **Pn** | **01 26 10.4** | **+1.6** |
| | SNR=8.2 | | | | | | |
| **AAK** | **Ala-Archa** | **7.68** | **32** | ⇓P | **Pn** | **01 26 11.7** | **+1.9** |
| | 3.2nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **01 27 35.4** | **-1.6** |
| | 21nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **7.68** | **32** | Pn | **Pn** | **01 26 09.7** | **-0.1** |
| | 1.8nm,0.3s,baz=182,slow=3.6,SNR=14 | | | | | | |
| AAK | | | | Sn | **Sn** | **01 27 34.9** | **-2.1** |
| | 2.2nm,0.3s,baz=322,slow=22,SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **7.68** | **32** | P | **Pn** | **01 26 11.3** | **+1.4** |
| | SNR=8.2 | | | | | | |
| **USP** | **Ospenovka** | **8.21** | **29** | P | **Pn** | **01 26 18.0** | **+1.0** |
| | SNR=8.4 | | | | | | |
| **ULHL** | **Ulahol** | **8.22** | **41** | P | **Pn** | **01 26 18.3** | **+1.0** |
| | SNR=23 | | | | | | |
| **TKM2** | **Tokmak 2** | **8.40** | **35** | ⇑P | **Pn** | **01 26 20.7** | **+1.0** |
| | 3.2nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **01 27 52.9** | **-1.9** |
| | 9.3nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **8.40** | **35** | P | **Pn** | **01 26 21.1** | **+1.3** |
| | SNR=7.1 | | | | | | |
| **SMLA** | **Simla** | **8.47** | **124** | *i* P | **Pn** | **01 26 22.3** | **+1.7** |
| SMLA | | | | *i* S | **Sn** | **01 27 54.6** | **-1.7** |
| SMLA | | | | *i* S | **Sn** | **01 27 55.5** | **-0.8** |
| SMLA | | | | AML | AML | 01 27 59.5 | |
| | comp=N,392nm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 01 28 00.3 | |
| | comp=E,482nm,0.4s | | | | | | |
| **GEYT** | **Alibeck** | **8.88** | **284** | Pn | **Pn** | **01 26 26.1** | **0.0** |
| | comp=E,1.7nm,0.3s,baz=127,slow=7.8,SNR=14 | | | | | | |
| GEYT | | | | Sn | **Sn** | **01 28 06.3** | **0.0** |
| | comp=E,1.3nm,0.3s,baz=121,slow=14,SNR=5.7 | | | | | | |
| GEYT | | | | LR | LR | 01 31 04.5 | |
| | comp=E,42nm,20.4s,baz=355,slow=45 | | | | | | |
| **MKAR** | **Makanchi Array** | **14.49** | **39** | Pn | **Pn** | **01 27 40.9** | **-1.9** |
| | comp=E,0.1nm,0.3s,baz=221,slow=11,SNR=2.1 | | | | | | |
| **AB31** | **Akbulak array** | **14.62** | **336** | P | **Pn** | **01 27 43.1** | **-1.5** |
| | comp=E,0.9nm,0.4s,baz=154,slow=12,SNR=36 | | | | | | |
| AB31 | | | | ⇑S | Sn | 01 30 15.8 | -11 |
| | comp=E,1.4nm,0.6s,baz=158,slow=23,SNR=4.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.28** | **334** | Pn | **Pn** | **01 28 06.0** | **-0.5** |
| | comp=E,0.2nm,0.3s,baz=149,slow=12,SNR=4.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.84** | **3** | Pn | **Pn** | **01 28 11.4** | **-2.0** |
| | comp=E,0.0nm,0.3s,baz=165,slow=12,SNR=2.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.86** | **27** | P | **P** | **01 28 58.4** | **-1.3** |
| | comp=E,1.3nm,0.3s,baz=218,slow=9.4,SNR=5.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.65** | **323** | LR | LR | 01 52 18.8 | |
| | comp=E,18nm,20.0s,baz=295,slow=38 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **64.11** | **268** | P | **P** | **01 34 52.5** | **0.0** |
| | comp=E,0.4nm,0.9s,baz=51,slow=6.8,SNR=4.1 | | | | | | |

**DJA 08 01:58:57.2**±1.4**, 7°S**±8°×**10°5E**±°**, h29km**±11km**, M4.6**/9**, mb6.2**/1**, mB6.8**/1**, MLv3.8**/9**, Mw(mB)6.7**/1**, Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CGJI** | **Cibinong** | **1.12** | **87** | P | Pn | 01 59 15.8 | -1.1 |
| CGJI | | | | S | Sn | 01 59 28.2 | -3.1 |
| **KASI** | **Kota Agung** | **1.14** | **356** | P | Pn | 01 59 17.2 | 0.0 |
| KASI | | | | S | Sn | 01 59 30.1 | -1.8 |
| **SBJI** | **Serang** | **1.64** | **71** | P | Pb | 01 59 25.8 | -1.1 |
| **LWLI** | **Liwa** | **1.72** | **343** | P | Pn | 01 59 26.2 | +0.8 |
| LWLI | | | | S | Sn | 01 59 47.3 | +0.8 |
| **KLI** | **Kotabumi** | **1.82** | **9** | P | Pb | 01 59 28.8 | -1.0 |
| **MDSI** | **Maura Dua** | **2.20** | **350** | P | Pn | 01 59 32.3 | +0.4 |
| **CBJI** | **Citeko** | **2.28** | **84** | P | Pn | 01 59 33.9 | +1.0 |
| **CNJI** | **Cibinong** | **2.62** | **104** | P | Pn | 01 59 36.7 | -0.9 |
| **RGRI** | **Rengat** | **6.66** | **340** | P | Pn | 02 00 31.5 | -1.7 |

*NNC **08** 02:01:56.2±2.6, 36.°73N×69.°85E, h157km±31km, mb2.6, mpv3.6, Error ellipse: s-maj=26.2km s-min=16.4km az=156.0*

**ISC 08 02:01:52.7**±2.9**, 36.°7N**±0.°2×**69.°8E**±0.°1**, h10km, n13, σ0.s89**/18**, 7C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.25** | **341** | ⇑P | **Pb** | **02 02 34.7** | **+1.2** |
| | 4.8nm,0.5s | | | | | | |
| DZET | | | | ⇑S | **Sg** | **02 03 04.6** | **-0.5** |
| | 43nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.43** | **40** | ⇑P | **Pn** | **02 03 01.0** | **+0.9** |
| | 8.5nm,0.3s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **02 03 52.4** | **+0.6** |
| | 6.0nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **6.17** | **19** | ⇑P | **Pn** | **02 03 24.9** | **+0.9** |
| | 2.3nm,0.5s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **02 04 34.9** | **+0.4** |
| | 2.1nm,0.4s | | | | | | |
| **AML** | **Almayashu** | **6.22** | **28** | P | **Pn** | **02 03 25.2** | **+0.2** |
| | SNR=21 | | | | | | |
| **KK31** | **Karatay Array** | **6.44** | **5** | ⇑P | **Pn** | **02 03 28.6** | **+1.1** |
| | 0.7nm,0.2s,baz=186,slow=12,SNR=33 | | | | | | |
| KK31 | | | | S | **Sn** | **02 04 40.6** | **-0.5** |
| | 1.3nm,0.3s,baz=190,slow=24,SNR=10 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.72** | **26** | P | **Pn** | **02 03 32.6** | **+1.2** |
| | SNR=8.4 | | | | | | |
| **AAK** | **Ala-Archa** | **6.96** | **30** | ⇓P | **Pn** | **02 03 35.0** | **+0.1** |
| | 3.3nm,0.5s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **02 04 53.0** | **-1.2** |
| | 5.4nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **6.96** | **30** | P | **Pn** | **02 03 35.5** | **+0.6** |
| | SNR=8.8 | | | | | | |
| **CHMS** | **Chumysh** | **7.37** | **30** | P | **Pn** | **02 03 40.0** | **-0.4** |
| | SNR=9.2 | | | | | | |
| **USP** | **Ospenovka** | **7.50** | **27** | P | **Pn** | **02 03 41.7** | **-0.5** |
| | SNR=7.1 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.67** | **34** | ⇑P | **Pn** | **02 03 43.8** | **-0.8** |
| | 3.9nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.67** | **34** | P | **Pn** | **02 03 44.8** | **+0.2** |
| | SNR=6.0 | | | | | | |
| **AB31** | **Akbulak array** | **14.47** | **333** | P | **Pn** | **02 05 15.9** | **-1.5** |
| | 0.2nm,0.4s,baz=165,slow=11,SNR=12 | | | | | | |
| AB31 | | | | ⇑S | Sn | 02 07 50.3 | -7.5 |
| | 0.5nm,0.7s,baz=163,slow=22,SNR=5.3 | | | | | | |

*SJA **08** 02:15:43.5±1.1, 33.°19S×70.°04W, h125km±6km, ML3.3, MW3.3*

*ISCJB **08** 02:15:44.0±0.8, 33.°17S±0.°05×70.°07W±0.°06, h121km±6km, Error ellipse: s-maj=11.2km s-min=4.6km az=138.8*

*GUC **08** 02:15:45.2±0.5, 33.°10S×70.°20W, h113km±3km, ML3.7*

**ISC 08 02:15:42.9**±2.0**, 33.°19S**±0.°07×**70.°12W**±0.°06**, h131km**±13km**, n26, σ0.s94**/47**, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLCH** | **Cerro Calan** | **0.41** | **240** | *e*P | **Pn** | **02 16 02.1** | **+0.4** |
| CLCH | | | | *e*S | **Sn** | **02 16 14.8** | **-1.1** |
| CLCH | | | | AML | AML | 02 16 15.9 | |
| | comp=E,4µm,0.4s | | | | | | |
| **LACH** | **Col Las Americ** | **0.43** | **233** | *e*P | **Pn** | **02 16 01.9** | **+0.1** |
| LACH | | | | *e*S | **Sn** | **02 16 15.0** | **-1.1** |
| **PEL** | **Peldehue** | **0.48** | **276** | *e*P | **Pn** | **02 16 02.2** | **+0.1** |
| PEL | | | | *e*S | **Sn** | **02 16 15.1** | **-1.4** |
| PEL | | | | AML | AML | 02 16 16.4 | |
| | comp=E,4µm,0.2s | | | | | | |
| **SAN** | **Santiago** | **0.53** | **240** | *e*P | **Pn** | **02 16 02.8** | **+0.5** |
| SAN | | | | *e*S | **Sn** | **02 16 16.1** | **-0.9** |
| **PCH** | **Pirque** | **0.54** | **218** | *e*P | **Pn** | **02 16 03.5** | **+1.0** |
| PCH | | | | *e*S | **Sn** | **02 16 17.1** | **-0.2** |
| **ANTU** | **Antumapu** | **0.57** | **229** | *e*P | **Pn** | **02 16 03.2** | **+0.6** |
| ANTU | | | | *e*S | **Sn** | **02 16 17.0** | **-0.5** |
| ANTU | | | | AML | AML | 02 16 18.8 | |
| | comp=N,2µm,0.2s | | | | | | |
| **RCDM** | **Rinconada Maip** | **0.65** | **243** | *e*P | **Pn** | **02 16 03.7** | **+0.6** |
| RCDM | | | | AML | AML | 02 16 17.9 | |
| | comp=E,7µm,0.1s | | | | | | |
| **ROC1** | **El Roble** | **0.78** | **286** | *e*P | **Pn** | **02 16 04.6** | **+0.2** |
| ROC1 | | | | *e*S | **Sn** | **02 16 19.8** | **-0.8** |
| **TACH** | **Talagante** | **0.83** | **236** | *e*P | **Pn** | **02 16 05.1** | **+0.7** |
| TACH | | | | *e*S | **Sn** | **02 16 20.1** | **-0.6** |
| **CHCH** | **Chadas Angostu** | **0.86** | **211** | *e*P | **Pn** | **02 16 06.0** | **+1.2** |
| CHCH | | | | *e*S | **Sn** | **02 16 22.2** | **+0.8** |
| **ARCO** | **CERRO ARCO** | **1.06** | **71** | *e*P | **Pn** | **02 16 07.2** | **+0.6** |
| ARCO | | | | *e*S | **Sn** | **02 16 24.0** | **-0.6** |
| **AAGR** | **Agrelo** | **1.09** | **85** | *e*P | **Pn** | **02 16 07.6** | **+0.7** |
| **AUSP** | **Uspallata** | **1.15** | **33** | *e*P | **Pn** | **02 16 08.3** | **+0.7** |
| AUSP | | | | *e*S | **Sn** | **02 16 25.5** | **-0.9** |
| **ASAL** | **Salagasta** | **1.23** | **61** | *e*P | **Pn** | **02 16 09.2** | **+0.8** |
| ASAL | | | | *e*S | **Sn** | **02 16 27.5** | **-0.1** |
| **RTLS** | **Leoncito** | **1.55** | **27** | *e*P | **Pn** | **02 16 13.4** | **+1.5** |
| RTLS | | | | *e*S | **Sn** | **02 16 35.0** | **+1.0** |
| **RTCV** | **Cerro Valdivia** | **1.88** | **46** | *e*P | **Pn** | **02 16 16.4** | **+0.8** |
| RTCV | | | | *e*S | **Sn** | **02 16 39.9** | **-0.6** |
| **SJA** | **San Juan** | **2.12** | **39** | *e*P | **Pn** | **02 16 19.6** | **+1.1** |
| SJA | | | | *e*S | **Sn** | **02 16 45.9** | **+0.2** |
| **CFAA** | **Coronel Fontan** | **2.24** | **46** | *e*P | **Pn** | **02 16 20.9** | **+0.9** |
| CFAA | | | | *e*S | **Sn** | **02 16 47.9** | **-0.6** |
| **RTLL** | **Cerro Villicun** | **2.32** | **37** | *e*P | **Pn** | **02 16 22.1** | **+1.1** |
| RTLL | | | | *e*S | **Sn** | **02 16 50.4** | **+0.3** |
| **ACAN** | **Cantantal** | **2.63** | **70** | *e*P | **Pn** | **02 16 25.9** | **+1.0** |
| ACAN | | | | *e*S | **Sn** | **02 16 55.8** | **-1.3** |
| **AMOG** | **MOGNA** | **2.64** | **32** | *e*P | **Pn** | **02 16 26.3** | **+1.4** |
| AMOG | | | | *e*S | **Sn** | **02 16 57.0** | **-0.3** |
| **AVFE** | **Valle Fertil** | **3.39** | **43** | *e*P | **Pn** | **02 16 35.4** | **+0.6** |
| AVFE | | | | *e*S | **Sn** | **02 17 13.3** | **-1.5** |
| AVFE | | | | AML | AML | 02 17 17.4 | |
| | comp=Z,60nm,0.2s | | | | | | |
| **ACHE** | **Chepes** | **3.56** | **56** | *e*P | **Pn** | **02 16 37.5** | **+0.5** |
| ACHE | | | | *e*S | **Sn** | **02 17 17.2** | **-1.6** |
| **AGUA** | **GUANDACOL** | **3.95** | **21** | *e*P | **Pn** | **02 16 43.5** | **+1.4** |
| **APLL** | **PUNTA DE LOS L** | **4.14** | **49** | *e*P | **Pn** | **02 16 45.2** | **+0.6** |
| **CYA** | **Choya** | **6.02** | **39** | *e*P | **Pn** | **02 17 07.9** | **-1.8** |

*NEIC **08** 02:40:35.0±0.7, 4.°85S×133.°49E, h10km, mb4.3/6, Error ellipse: s-maj=44.2km s-min=11.6km az=57.0*

*IDC **08** 02:40:35.2±1.1, 5.°12S×133.°41E, h0km, mb4.1/3, mb1 4.2/7, mb1mx3.8/31, mbtmp4.1/7, ML3.9/4, MS3.6/7, Ms1 3.7/7, ms1mx3.3/42, Error ellipse: s-maj=57.2km s-min=21.4km az=76.0*

*AUST **08** 02:40:37.4±1.3, 4.°68S×133.°50E, h47km, Error ellipse: s-maj=2.4km s-min=1.0km az=249.0*

*DJA **08** 02:40:39.9±0.9, 4°S±6°×13°4E±°, h10km, M4.4/8, mb4.8/5, mB6.7/1, MLv4.2/8, Mw(mB)6.5/1*

**ISC 08 02:40:36.4**±0.8**, 4.°80S**±0.°07×**133.°37E**±0.°09**, h21km, n39, σ1.s91**/24**, mb4.3**/6**, MS3.3**/5**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMPI** | **Kaimana, Papua** | **1.18** | **16** | P | Pn | 02 40 52.5 | -5.2 |
| **FAKI** | **Fak Fak** | **2.18** | **329** | P | **Pn** | **02 41 10.7** | **-0.8** |
| | baz=2.2,SNR=17 | | | | | | |
| **FAKI** | **Fak Fak** | **2.18** | **329** | P | **Pn** | **02 41 10.4** | **-1.1** |
| FAKI | | | | S | **Sn** | **02 41 38.0** | **+0.1** |
| **FAKI** | **Fak Fak** | **2.18** | **329** | *e*Pn | **Pn** | **02 41 10.7** | **-0.8** |
| **BNDI** | **Bandanaira** | **3.47** | **274** | P | **Pb** | **02 41 35.5** | **-1.6** |
| BNDI | | | | S | **Sb** | **02 42 19.5** | **+0.7** |
| **SIJI** | **Sorong** | **4.44** | **332** | Pn | **Pn** | **02 41 43.3** | **+0.7** |
| | 1.9nm,0.3s,baz=217,slow=22,SNR=9.3 | | | | | | |
| SIJI | | | | Sn | **Sn** | **02 42 30.0** | **-3.6** |
| | 2.8nm,0.3s,baz=105,slow=13,SNR=4.0 | | | | | | |
| SIJI | | | | LR | LR | 02 43 59.8 | |
| | comp=Z,529nm,19.5s,baz=244,slow=43 | | | | | | |
| **SWI** | **Sorong** | **4.45** | **332** | P | **Pn** | **02 41 44.2** | **+1.6** |
| **AAI** | **Ambon** | **5.28** | **282** | P | Pn | 02 42 00.4 | +6.3 |
| | 170nm,0.7s,0.6nm | | | | | | |
| **NLAI** | **Namlea** | **6.45** | **284** | P | Pn | 02 42 17.0 | +6.8 |
| | 86nm,0.6s,0.3nm | | | | | | |
| **KDU** | **Kakadu** | **7.88** | **186** | P | **Pn** | **02 42 30.9** | **+1.0** |
| | baz=8.1,SNR=37 | | | | | | |
| **MTN** | **Manton Dam** | **8.29** | **195** | P | **Pn** | **02 42 37.1** | **+1.6** |
| | baz=8.5,SNR=18 | | | | | | |
| **GTOI** | **Gorontalo** | **11.68** | **297** | P | Pn | 02 43 29.1 | +7.2 |
| | 31nm,1.4s,25µm | | | | | | |
| **KNRA** | **Kununurra** | **11.72** | **202** | P | Pn | 02 43 27.2 | +4.7 |
| | baz=12,SNR=5.0 | | | | | | |
| **APSI** | **Ampana** | **12.33** | **288** | P | Pn | 02 43 36.4 | +5.5 |
| **PMG** | **Port Moresby** | **14.42** | **109** | LR | LR | 02 51 38.9 | |
| | comp=Z,338nm,18.5s,baz=352,slow=46 | | | | | | |
| **WRAB** | **Tennant Creek** | **15.07** | **176** | *e*Pn | Pn | 02 44 03.8 | -4.4 |
| | 11nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.08** | **176** | Pn | **Pn** | **02 44 04.5** | **-3.9** |
| | 0.5nm,0.3s,baz=359,slow=13,SNR=20 | | | | | | |
| WRA | | | | Sn | Sn | 02 46 44.8 | -10 |
| | 0.3nm,0.3s,baz=354,slow=24,SNR=4.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.23** | **209** | Pn | **Pn** | **02 44 07.7** | **-2.6** |
| | 0.6nm,0.3s,baz=33,slow=10,SNR=11 | | | | | | |
| FITZ | | | | Sn | Sn | 02 46 52.6 | -5.9 |
| | 0.2nm,0.3s,baz=210,slow=18,SNR=3.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.23** | **209** | P | **Pn** | **02 44 13.5** | **+3.2** |
| | baz=16,SNR=3.8 | | | | | | |
| **QIS** | **Mount Isa** | **16.79** | **159** | P | **P** | **02 44 32.8** | **+0.3** |
| | baz=17,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **18.76** | **178** | P | **P** | **02 44 52.5** | **-1.7** |
| | 0.5nm,0.3s,baz=0.0,slow=11,SNR=41 | | | | | | |
| **CTA** | **Charters Tower** | **19.70** | **142** | P | **P** | **02 45 03.8** | **-0.8** |
| | 0.2nm,0.3s,baz=302,slow=13,SNR=2.7 | | | | | | |
| **CTAO** | **Charters Tower** | **19.70** | **142** | *e*P | **P** | **02 45 03.2** | **-1.4** |
| | 5.5nm,0.7s | | | | | | |
| **KKM** | **Kota Kinabalu** | **20.24** | **302** | *e*P | Pn | 02 45 13.3 | +0.7 |
| | 10nm,0.6s | | | | | | |
| **WRKA** | **Warakurna** | **20.70** | **193** | P | Pn | 02 45 18.7 | +0.8 |
| | baz=21,SNR=4.3 | | | | | | |
| **QLP** | **Quilpie** | **24.02** | **156** | P | **P** | **02 45 49.7** | **-0.2** |
| | baz=24,SNR=5.3 | | | | | | |
| **HNR** | **Honiara** | **26.76** | **101** | LR | LR | 02 58 41.7 | |
| | comp=Z,77nm,18.0s,baz=354,slow=41 | | | | | | |
| **PMBI** | **Palembang** | **28.59** | **273** | P | P | 02 46 28.7 | -2.8 |
| | baz=29,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.06** | **305** | LR | LR | 03 06 54.4 | |
| | comp=Z,41nm,19.5s,baz=180,slow=38 | | | | | | |
| **KSRS** | **Korea Array** | **42.34** | **354** | LR | LR | 03 08 11.5 | |
| | comp=Z,38nm,18.5s,baz=172,slow=39 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **48.79** | **359** | P | P | 02 49 24.3 | +4.3 |
| | 1.2nm,0.7s,baz=150,slow=3.2,SNR=4.7 | | | | | | |
| **RPZ** | **Rata Peaks** | **51.01** | **145** | LR | LR | 03 10 08.8 | |
| | comp=Z,150nm,18.7s,baz=267,slow=35 | | | | | | |
| **URZ** | **Urewera** | **51.82** | **136** | LR | LR | 03 12 19.9 | |
| | comp=Z,135nm,18.6s,baz=277,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.30** | **325** | P | P | 02 51 41.1 | +5.0 |
| | 3.7nm,0.7s,baz=112,slow=8.5,SNR=13 | | | | | | |
| **TKM2** | **Tokmak 2** | **70.49** | **319** | *e*P | **P** | **02 51 50.9** | **+1.0** |
| | 1.6nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.17** | **332** | P | **P** | **02 51 56.0** | **+2.5** |
| | 1.1nm,0.6s,baz=116,slow=6.8,SNR=3.6 | | | | | | |
| **KURK** | **Kurchatov** | **72.46** | **327** | *e*P | **P** | **02 52 01.4** | **+0.1** |
| | 5.5nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **78.12** | **327** | *e*P | **P** | **02 52 34.6** | **+0.8** |
| | 2.7nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **131.63** | **283** | PKP | **PKPdf** | **02 59 51.0** | **+2.3** |
| | 0.3nm,0.7s,baz=84,slow=1.9,SNR=2.5 | | | | | | |

*ISCJB **08** 02:46:25.7±0.8, 54.°93S±0.°09×0.°4W±0.°4, h10km, mb4.1/7, MS3.3/2, Error ellipse: s-maj=30.2km s-min=12.9km az=179.0*

*IDC **08** 02:46:26.2±1.4, 55.°04S×0.°50W, h0km, mb4.0/5, mb1 4.1/6, mb1mx3.9/22, mbtmp4.0/6, ML3.6/1, MS3.1/3, Ms1 3.1/3, ms1mx2.8/20, Error ellipse: s-maj=70.3km s-min=23.9km az=86.0*

*NEIC **08** 02:46:27.3±0.6, 54.°97S×0.°41W, h10km, mb4.3/2, Error ellipse: s-maj=28.6km s-min=12.9km az=82.0*

**ISC 08 02:46:27.3**±0.8**, 55.°0S**±0.°1×**0.°5W**±0.°2**, h10km, n16, σ0.s87**/12**, mb4.2**/7**, Bouvet Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **16.08** | **189** | P | **P** | **02 50 15.2** | **-1.2** |
| **VNA2** | **Neumayer--Watz** | **16.27** | **188** | P | **Pn** | **02 50 16.1** | **+0.6** |
| | baz=358,slow=15 | | | | | | |
| **SNAA** | **Sanae** | **16.76** | **183** | P | **P** | **02 50 24.0** | **-0.1** |
| **SNAA** | **Sanae** | **16.76** | **183** | Pn | **Pn** | **02 50 23.0** | **+1.1** |
| | 0.2nm,0.3s,baz=9.2,slow=18,SNR=36 | | | | | | |
| SNAA | | | | LR | LR | 02 55 01.3 | |
| | comp=Z,19nm,21.8s,baz=214,slow=31 | | | | | | |
| **MAW** | **Mawson** | **31.36** | **139** | P | **P** | **02 52 48.1** | **+0.6** |
| | 1.4nm,0.8s,baz=261,slow=13,SNR=2.8 | | | | | | |
| MAW | | | | LR | LR | 03 02 40.7 | |
| | comp=Z,62nm,21.8s,baz=242,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **35.24** | **180** | P | **P** | **02 53 21.1** | **-0.4** |
| | 3.6nm,1.0s,baz=240,slow=4.6,SNR=7.9 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **47.28** | **341** | T | T | 03 45 25.0 | |
| | baz=169,slow=75,SNR=20 | | | | | | |
| **VNDA** | **Vanda** | **47.28** | **175** | P | **P** | **02 55 00.3** | **+0.3** |
| | 6.7nm,0.8s,baz=215,slow=7.0,SNR=39 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **47.29** | **341** | T | T | 03 45 25.7 | |
| | baz=169,slow=75,SNR=10 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **47.30** | **341** | T | T | 03 45 26.4 | |
| | baz=169,slow=75,SNR=16 | | | | | | |
| **CPUP** | **Villa Florida** | **49.95** | **281** | LR | LR | 03 12 33.5 | |
| | comp=Z,38nm,20.7s,baz=195,slow=31 | | | | | | |
| **SAML** | **Samuel** | **67.20** | **288** | *e*P | **P** | **02 57 21.8** | **+0.2** |
| | 3.2nm,1.2s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.91** | **2** | P | **P** | **02 57 26.9** | **+1.0** |
| | 0.4nm,0.7s,baz=197,slow=7.3,SNR=3.0 | | | | | | |
| **TAM** | **Tamanrasset** | **77.65** | **6** | *e*P | **P** | **02 58 23.4** | **-0.4** |
| | 1.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **92.48** | **139** | P | **P** | **02 59 38.0** | **-0.5** |
| | 0.6nm,0.9s,baz=193,slow=5.0,SNR=4.6 | | | | | | |
| **EKS2** | **Erkin-Say** | **115.89** | **52** | *e*PKPdf | **PKPdf** | **03 05 08.1** | **-1.4** |

**NNC 08 02:52:04.1**±5.5**, 37.°13N**×**71.°26E, h0km, mb3.6, mpv3.3, 5C-5D, Error ellipse: s-maj=47.5km s-min=21.6km az=176.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.54** | **312** | ⇓Pn | Pn | 02 52 45.6 | -1.2 |
| | 1.0nm,0.3s | | | | | | |
| DZET | | | | ⇑Sn | Sb | 02 53 20.8 | -2.0 |
| | 15nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.37** | **31** | ⇓Pn | Pn | 02 53 00.5 | +2.2 |
| | 3.0nm,0.3s | | | | | | |
| SFK | | | | ⇑Sn | Sb | 02 53 45.9 | -1.0 |
| | 6.2nm,0.2s | | | | | | |
| **MNAS** | **Manas** | **5.43** | **10** | ⇓Pn | Pn | 02 53 25.9 | -0.6 |
| | 1.8nm,0.4s | | | | | | |
| MNAS | | | | ⇑Sn | Sn | 02 54 31.2 | +1.2 |
| | 9.6nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **5.99** | **355** | Pn | Pn | 02 53 32.0 | -2.0 |
| | 0.4nm,0.3s,baz=179,slow=12,SNR=18 | | | | | | |
| KK31 | | | | ⇓Sn | Sn | 02 54 40.8 | -2.6 |
| | 3.4nm,0.7s,baz=183,slow=24,SNR=14 | | | | | | |
| **AAK** | **Ala-Archa** | **6.03** | **23** | ⇓Pn | Pn | 02 53 33.8 | -1.0 |
| | 2.0nm,0.3s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 02 54 46.7 | +2.0 |
| | 3.9nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.67** | **29** | ⇑Pn | Pn | 02 53 41.9 | -1.8 |
| | 4.4nm,0.7s | | | | | | |

**IDC 08 02:58:48.2**±5.2**, 17.°82S**×**173.°84W, h0km, mb4.0**/3**, mb1 4.2**/4**, mb1mx3.8**/27**, mbtmp4.0**/4**, ML3.3**/1**, Error ellipse: s-maj=196.9km s-min=24.1km az=135.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.36** | **27** | Pn | Pn | 02 59 56.2 | +0.3 |
| | 1.7nm,0.3s,baz=120,slow=14,SNR=2.2 | | | | | | |
| AFI | | | | Sn | Sn | 03 00 49.0 | +1.4 |
| | 11nm,0.3s,baz=27,slow=15,SNR=6.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.92** | **259** | P | P | 03 07 36.2 | -0.3 |
| | 2.9nm,0.9s,baz=96,slow=8.6,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **49.00** | **254** | P | P | 03 07 37.3 | +0.2 |
| | 6.0nm,0.8s,baz=87,slow=8.5,SNR=48 | | | | | | |
| **ILAR** | **Eielson Array** | **84.88** | **11** | P | P | 03 11 24.2 | -0.3 |
| | 0.2nm,0.6s,baz=217,slow=5.9,SNR=6.2 | | | | | | |

*DDA **08** 03:11:29.3, 37.°02N×36.°07E, h7km, Md2.7*

*ISK **08** 03:11:29.0, 36.°99N×36.°04E, h5km, MD2.6*

*CSEM **08** 03:11:30.2±0.2, 36.°99N×36.°05E, h2km, MD2.6, Error ellipse: s-maj=3.9km s-min=3.5km az=98.0*

**ISC 08 03:11:29.7**±0.9**, 37.°01N**±0.°02×**36.°08E**±0.°03**, h13km**±10km**, n23, σ0.s50**/37**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CEYT** | **Ceyhan** | **0.26** | **271** | *e*PG | **Pg** | **03 11 34.9** | **-0.3** |
| CEYT | | | | *e*SG | **Sg** | **03 11 39.5** | **+0.6** |
| **CEYT** | **Ceyhan** | **0.26** | **271** | *e*Pg | **Pg** | **03 11 34.9** | **-0.3** |
| CEYT | | | | *e*Sg | **Sg** | **03 11 39.5** | **+0.6** |
| **YURE** | **YUREGIR** | **0.40** | **243** | *i* P | **Pg** | **03 11 37.3** | **-0.3** |
| **YURE** | **YUREGIR** | **0.40** | **243** | P | **Pg** | **03 11 37.4** | **-0.3** |
| **KAMA** | **Osmaniye** | **0.50** | **69** | P | **Pg** | **03 11 39.3** | **-0.3** |
| KAMA | | | | S | **Sg** | **03 11 46.6** | **+0.3** |
| **KOZT** | **Kozan** | **0.51** | **337** | *e*PG | **Pg** | **03 11 39.4** | **-0.3** |
| KOZT | | | | *e*SG | **Sb** | **03 11 48.2** | **+0.2** |
| **KOZT** | **Kozan** | **0.51** | **337** | *e*Pg | **Pg** | **03 11 39.4** | **-0.3** |
| KOZT | | | | *e*Sg | **Sb** | **03 11 48.2** | **+0.2** |
| **ANDN** | **Andirin** | **0.61** | **20** | *i* P | **Pg** | **03 11 41.9** | **+0.3** |
| ANDN | | | | *i* S | **Sb** | **03 11 51.6** | **+0.7** |
| **ANDN** | **Andirin** | **0.61** | **20** | P | **Pg** | **03 11 41.9** | **+0.3** |
| ANDN | | | | S | **Sb** | **03 11 51.6** | **+0.7** |
| **TAHT** | **Tahtakopru-Hat** | **0.64** | **172** | *e*PG | **Pg** | **03 11 41.7** | **-0.4** |
| TAHT | | | | *e*SG | **Sb** | **03 11 51.5** | **0.0** |
| **TAHT** | **Tahtakopru-Hat** | **0.64** | **172** | *e*Pg | **Pg** | **03 11 41.7** | **-0.4** |
| TAHT | | | | *e*Sg | **Sb** | **03 11 51.5** | **0.0** |
| **AYKD** | **Aykdinkavak** | **0.71** | **55** | P | **Pg** | **03 11 43.1** | **-0.4** |
| AYKD | | | | S | **Sb** | **03 11 53.4** | **-0.3** |
| **KMRS** | **Kahramanmaras** | **0.82** | **53** | *e*PG | **Pn** | **03 11 47.1** | **+0.1** |
| **KMRS** | **Kahramanmaras** | **0.82** | **53** | *e*Pg | **Pn** | **03 11 47.1** | **+0.1** |
| **KUZU** | **Kuzuini** | **0.83** | **106** | *i* P | **Pg** | **03 11 45.9** | **+0.1** |
| KUZU | | | | *i* S | **Sb** | **03 11 57.8** | **+0.6** |
| **KUZU** | **Kuzuini** | **0.83** | **106** | P | **Pg** | **03 11 45.9** | **+0.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KUZU | | | | S | Sb | 03 11 57.8 | +0.6 |
| YAYL | Yayladag | 0.97 | 179 | *i* P | Pb | 03 11 48.2 | -0.2 |
| YAYL | | | | *i* S | Sb | 03 12 02.1 | +0.9 |
| YAYL | Yayladag | 0.97 | 179 | P | Pb | 03 11 48.2 | -0.2 |
| YAYL | | | | S | Sb | 03 12 02.1 | +0.9 |
| SARI | SarD1z-Kayseri | 1.42 | 11 | *e*PN | Pg | 03 11 57.5 | +0.4 |
| URFA | Urfa | 2.23 | 78 | *e*PN | Pb | 03 12 09.1 | -0.8 |
| URFA | Urfa | 2.23 | 78 | *e*Pn | Pb | 03 12 09.1 | -0.8 |
| MALT | Malatya | 2.27 | 54 | *e*PN | Pb | 03 12 09.9 | -0.8 |
| MALT | Malatya | 2.27 | 54 | *e*Pn | Pb | 03 12 09.9 | -0.8 |

*ISCJB **08** 03:14:55.0±0.3, 9°.47S±0°.04×119°.35E±0°.02, h90$^{km}$±4$^{km}$, mb3.9/4, Error ellipse: s-maj=6.2km s-min=3.3km az=12.1*
*NEIC **08** 03:14:54.6±0.7, 9°.48S×119°.23E, h80$^{km}$±9$^{km}$, mb4.0/1, Error ellipse: s-maj=10.3km s-min=7.5km az=220.0*
*IDC **08** 03:14:54.1±2.9, 9°.38S×119°.28E, h73$^{km}$±27$^{km}$, mb3.8/4, mb1 3.9/10, mb1mx3.6/42, mbtmp4.1/10, MS3.0/2, Ms1 3.0/2, ms1mx2.8/34, Error ellipse: s-maj=30.8km s-min=11.2km az=59.0*
*DJA **08** 03:14:57.4±0.2, 9°S±2°×11°9E±°, h46$^{km}$±5$^{km}$, M4.9/33, mb4.7/29, mB5.5/6, MLv5.0/3, MLv4.8/33, Mw(mB)4.9/6*
**ISC 08 03:14:55.3**±0.7, **9°.49S**±0°.05×**119°.32E**±0°.03, **h87**$^{km}$±7$^{km}$, **n57**, σ1$^s$**66**/66, **mb4.0**/4, **Sumba region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WBSI | Waikabubak, Su | 0.16 | 154 | P | Pn | 03 15 06.4 | -1.5 |
| WBSI | | | | S | Sn | 03 15 14.8 | -2.3 |
| WSI | Waingapu | 0.98 | 100 | P | Pn | 03 15 14.2 | -0.4 |
| WSI | | | | S | Sn | 03 15 28.4 | -0.6 |
| BASI | Baing, Sumba | 1.44 | 120 | P | Pn | 03 15 21.4 | +1.3 |
| BASI | | | | S | Sn | 03 15 39.7 | +0.9 |
| EDFI | Ende, Flores | 2.46 | 73 | P | Pn | 03 15 33.7 | +0.1 |
| EDFI | | | | S | Sn | 03 16 01.4 | -1.5 |
| TWSI | Taliwang, Sumb | 2.52 | 287 | P | Pn | 03 15 35.8 | +1.4 |
| TWSI | | | | S | Sn | 03 16 05.5 | +1.2 |
| MMRI | Maumere | 3.01 | 74 | P | Pn | 03 15 41.5 | +0.6 |
| MMRI | | | | S | Sn | 03 16 15.8 | -0.2 |
| MMRI | Maumere | 3.01 | 74 | *e*Pn | Pn | 03 15 41.6 | +0.7 |
| MMRI | | | | *e*Sn | Sn | 03 16 18.7 | +2.6 |
| BSSI | Bau Bau, Buton | 3.52 | 19 | P | Pn | 03 15 48.0 | 0.0 |
| BSSI | | | | S | Sn | 03 16 27.7 | -0.9 |
| DNP | Denpasar | 4.14 | 281 | P | Pn | 03 15 59.7 | +3.5 |
| IGBI | Denpasar | 4.17 | 279 | P | Pn | 03 15 58.8 | +2.1 |
| IGBI | | | | S | Sn | 03 16 45.5 | +1.1 |
| BKSI | Bulukumba | 4.22 | 11 | P | Pn | 03 15 57.4 | 0.0 |
| BKSI | | | | S | Sn | 03 16 41.6 | -3.9 |
| SRBI | Singaraja | 4.29 | 289 | P | Pn | 03 15 59.4 | +1.1 |
| BATI | Baumata | 4.34 | 100 | P | Pn | 03 15 59.2 | +0.2 |
| | 48nm,0.3s,baz=284,slow=6.4,SNR=11 | | | | | | |
| BATI | | | | S | Sn | 03 16 48.6 | +0.1 |
| | 71nm,0.3s,baz=314,slow=11,SNR=11 | | | | | | |
| BATI | | | | LR | LR | 03 17 56.5 | |
| | comp=Z,175nm,19.0s,baz=237,slow=42 | | | | | | |
| BATI | Baumata | 4.34 | 100 | P | Pn | 03 16 00.7 | +1.7 |
| BATI | | | | S | Sn | 03 16 50.2 | +1.7 |
| KAPI | Kappang | 4.47 | 6 | P | Pn | 03 15 59.7 | -1.0 |
| | 21nm,0.3s,baz=219,slow=6.4,SNR=73 | | | | | | |
| KAPI | | | | S | Sn | 03 16 47.8 | -3.8 |
| | 26nm,0.3s,baz=354,slow=22,SNR=19 | | | | | | |
| KAPI | Kappang | 4.47 | 6 | *e*Pn | Pn | 03 16 00.5 | -0.3 |
| KAPI | | | | *e*Sn | Sn | 03 16 48.5 | -3.1 |
| SOEI | Soe | 4.89 | 93 | P | Pn | 03 16 08.0 | +1.4 |
| SOEI | | | | S | Sn | 03 17 01.8 | -0.2 |
| SOEI | Soe | 4.89 | 93 | *e*Pn | Pn | 03 16 07.8 | +1.3 |
| SOEI | | | | *e*Sn | Sn | 03 17 01.4 | -0.6 |
| JAGI | Jajag, Banyuwa | 5.20 | 281 | P | Pn | 03 16 10.3 | -0.5 |
| | 185nm,0.8s,3μm1.7nm | | | | | | |
| JAGI | Jajag, Banyuwa | 5.20 | 281 | *e*Pn | Pn | 03 16 09.7 | -1.1 |
| | 109nm,0.3s | | | | | | |
| JAGI | | | | *e*Sn | Sn | 03 17 00.2 | -9.3 |
| ABJI | Asem Bagus | 5.30 | 288 | P | Pn | 03 16 14.3 | +2.2 |
| | 75nm,0.5s,0.8nm | | | | | | |
| SPSI | Sidrap Palu | 5.51 | 5 | P | Pn | 03 16 16.5 | +1.5 |
| | 57nm,0.8s,607nm0.2nm | | | | | | |
| KMMI | Kalianget | 5.83 | 294 | P | Pn | 03 16 22.7 | +3.5 |
| | 51nm,0.9s,0.3nm | | | | | | |
| BLJI | Banyuglugur | 5.92 | 287 | P | Pn | 03 16 20.9 | +0.4 |
| | 86nm,0.5s,0.6nm | | | | | | |
| GMJI | Gumukmas | 5.93 | 281 | P | Pn | 03 16 21.7 | +1.0 |
| | 69nm,1.2s,0.6nm | | | | | | |
| GMJI | | | | S | Sn | 03 17 27.3 | +0.1 |
| | 69nm,1.2s,0.6nm | | | | | | |
| KDI | Kendari | 6.40 | 31 | P | Pn | 03 16 19.5 | -7.6 |
| TTSI | Tana Toraja | 6.42 | 4 | P | Pn | 03 16 30.0 | +2.6 |
| | 44nm,0.7s,0.2nm | | | | | | |
| KBKI | Kotabaru | 6.90 | 333 | P | Pn | 03 16 36.4 | +2.4 |
| | 32nm,0.8s,0.1nm | | | | | | |
| GRJI | Gresik | 7.24 | 290 | P | Pn | 03 16 41.0 | +2.5 |
| | 60nm,0.8s,0.3nm0.3nm | | | | | | |
| BBKI | Banjar Baru | 7.46 | 323 | P | Pn | 03 16 43.4 | +1.8 |
| | 101nm,1.1s,0.4nm0.4nm | | | | | | |
| PWJI | Pagerwojo | 7.57 | 281 | P | Pn | 03 16 45.6 | +2.6 |
| | 56nm,1.5s,0.6nm0.6nm | | | | | | |
| NGJI | Ngawi | 8.05 | 285 | P | Pn | 03 16 53.7 | +4.0 |
| | 56nm,4.2s | | | | | | |
| PCJI | Pacitan | 8.15 | 278 | P | Pn | 03 16 53.1 | +2.2 |
| | 84nm,1.7s | | | | | | |
| WOJI | Wonogiri, Jawa | 8.46 | 281 | P | Pn | 03 16 57.5 | +2.3 |
| | 93nm,1.6s | | | | | | |
| BKB | Balikpapan | 8.53 | 343 | P | Pn | 03 16 59.1 | +3.0 |
| | 99nm,1.1s | | | | | | |
| APSI | Ampana | 8.84 | 15 | P | Pn | 03 17 01.1 | +0.8 |
| | 24nm,1.3s,730nm | | | | | | |
| NLAI | Namlea | 9.92 | 52 | P | Pn | 03 17 18.1 | +3.0 |
| | 49nm,0.7s,7μm | | | | | | |
| SANI | Sanana | 9.93 | 42 | P | Pn | 03 17 17.2 | +1.9 |
| | 7.8nm,0.9s | | | | | | |
| PBKI | Pangkalan Bun | 10.16 | 311 | P | Pn | 03 17 20.3 | +1.9 |
| | 140nm,0.5s | | | | | | |
| FITZ | Fitzroy Crossi | 10.53 | 145 | P | Pn | 03 17 22.6 | -0.8 |
| | 0.6nm,0.3s,baz=332,slow=14,SNR=12 | | | | | | |
| FITZ | | | | S | Sn | 03 19 12.8 | -6.7 |
| | 2.9nm,0.3s,baz=179,slow=20,SNR=13 | | | | | | |
| FITZ | | | | LR | LR | 03 22 05.8 | |
| | comp=Z,67nm,18.6s,baz=328,slow=41 | | | | | | |
| FITZ | Fitzroy Crossi | 10.53 | 145 | *e*Pn | Pn | 03 17 22.9 | -0.5 |
| | 8.3nm,0.8s | | | | | | |
| FITZ | | | | *e*Sn | Sn | 03 19 13.5 | -6.0 |
| MBWA | Marble Bar | 11.61 | 178 | *e*Pn | Pn | 03 17 36.0 | -2.0 |
| MBWA | | | | *e*Sn | Sn | 03 19 36.7 | -9.0 |
| BNDI | Bandanaira | 11.61 | 66 | P | Pn | 03 17 40.0 | +1.9 |
| | 87nm,0.9s | | | | | | |
| FAKI | Fak Fak | 14.41 | 64 | *e*Pn | Pn | 03 18 13.8 | -1.5 |
| SIJI | Sorong | 14.65 | 55 | P | Pn | 03 18 16.9 | -1.5 |
| | 2.3nm,0.3s,baz=128,slow=18,SNR=6.6 | | | | | | |
| WRA | Warramunga Arr | 17.84 | 127 | P | P | 03 18 58.5 | +0.8 |
| | 0.3nm,0.3s,baz=305,slow=13,SNR=7.5 | | | | | | |
| WRA | | | | S | Sn | 03 22 06.2 | -11 |
| | 0.5nm,0.3s,baz=302,slow=24,SNR=6.3 | | | | | | |
| WRAB | Tennant Creek | 17.85 | 127 | *e*P | Pn | 03 18 59.1 | +1.0 |
| | 13nm,1.2s | | | | | | |
| ASAR | Alice Springs | 19.82 | 137 | P | P | 03 19 21.1 | +1.8 |
| | 0.5nm,0.3s,baz=314,slow=9.0,SNR=21 | | | | | | |
| ASAR | | | | S | S | 03 22 55.5 | -2.6 |
| | 0.3nm,0.3s,baz=317,slow=24,SNR=6.6 | | | | | | |
| PSI | Prapat | 23.71 | 300 | P | P | 03 19 58.0 | -1.8 |
| | 3.0nm,0.4s,baz=101,slow=9.7,SNR=5.2 | | | | | | |
| COEN | Coen | 23.77 | 103 | *e*P | P | 03 20 00.9 | +0.7 |
| H08S2 | Diego Garcia H | 46.31 | 268 | T | T | 04 12 39.7 | |
| | baz=95,slow=76,SNR=9.1 | | | | | | |
| H08S3 | Diego Garcia H | 46.33 | 268 | T | T | 04 12 41.9 | |
| | baz=95,slow=76,SNR=8.0 | | | | | | |
| H08S1 | Diego Carcia H | 46.33 | 268 | T | T | 04 12 41.7 | |
| | baz=95,slow=76,SNR=9.5 | | | | | | |
| SONM | Songino Array | 58.22 | 350 | P | P | 03 24 40.5 | -0.2 |
| | 1.7nm,0.7s,baz=171,slow=8.9,SNR=8.4 | | | | | | |
| MKAR | Makanchi Array | 65.04 | 333 | P | P | 03 25 25.9 | -0.5 |
| | 0.6nm,0.5s,baz=131,slow=5.9,SNR=7.6 | | | | | | |
| ZALV | Zalesovo Beam | 69.61 | 339 | P | P | 03 25 53.6 | -1.5 |
| | 0.8nm,0.4s,baz=138,slow=4.3,SNR=3.1 | | | | | | |
| TORD | Torodi Ar. Bea | 118.86 | 280 | PKP | PKPdf | 03 33 35.4 | +0.6 |
| | 0.3nm,0.8s,baz=127,slow=2.7,SNR=2.8 | | | | | | |

*NNC **08** 03:24:35.2±8.3, 39°.06N×73°.33E, h0$^{km}$, mb3.6, mpv3.4, Error ellipse: s-maj=61.0km s-min=46.1km az=171.0*
*KRNET **08** 03:24:36.5±0.1, 39°.50N×73°.69E, h11$^{km}$, mb3.3*
**ISC 08 03:24:36.9**±2.0, **39°.54N**±0°.08×**73°.68E**±0°.04, **h16**$^{km}$±11$^{km}$, **n30**, σ1$^s$**82**/52, **37C-11D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 0.49 | 344 | ⇓P | Pg | 03 24 47.1 | +0.2 |
| | 124nm,0.2s | | | | | | |
| SFK | | | | ⇑S | Sg | 03 24 54.8 | +1.2 |
| | 176nm,0.2s | | | | | | |
| SFK | Sufi-Kurgan | 0.49 | 344 | ⇓*i*P | Pg | 03 24 47.1 | +0.2 |
| | baz=344 | | | | | | |
| SFK | | | | ⇓*i*S | Sg | 03 24 55.0 | +1.5 |
| | baz=344 | | | | | | |
| SFK | Sufi-Kurgan | 0.49 | 344 | ⇑*i*P | Pg | 03 24 47.0 | +0.1 |
| | baz=344 | | | | | | |
| SFK | | | | ⇑*i*S | Sg | 03 24 54.7 | +1.2 |
| | baz=344 | | | | | | |
| ARSB | Arslanbob | 1.86 | 344 | ⇓*i*P | Pb | 03 25 12.1 | +1.5 |
| | baz=343 | | | | | | |
| ARSB | | | | ⇓*i*S | Sg | 03 25 38.7 | +1.9 |
| | baz=343 | | | | | | |
| BTK | Batken | 2.26 | 284 | ⇑*e*P | Pb | 03 25 18.6 | +1.1 |
| | baz=285 | | | | | | |
| BTK | | | | ⇑*i*S | Sb | 03 25 48.1 | +2.8 |
| | baz=285 | | | | | | |
| ARLS | Aral | 2.37 | 12 | ⇑*i*P | Pb | 03 25 20.1 | +0.8 |
| | baz=11 | | | | | | |
| ARLS | | | | ⇑*i*S | Sb | 03 25 51.1 | +2.7 |
| | baz=11 | | | | | | |
| AML | Almayashu | 2.59 | 0 | ⇑*i*P | Pb | 03 25 23.1 | -0.1 |
| | baz=360 | | | | | | |
| AML | | | | ⇑*i*S | Sb | 03 25 58.7 | +3.8 |
| | baz=360 | | | | | | |
| AML | Almayashu | 2.59 | 0 | P | Pb | 03 25 23.6 | +0.4 |
| | SNR=45 | | | | | | |
| NRN | Naryn | 2.59 | 42 | ⇓*i*P | Pb | 03 25 22.5 | -0.7 |
| | baz=42 | | | | | | |
| NRN | | | | ⇓*i*S | Sb | 03 25 55.5 | +0.6 |
| | baz=42 | | | | | | |
| ARK | Arkit | 2.61 | 330 | ⇑*i*P | Pb | 03 25 23.6 | +0.3 |
| | baz=331 | | | | | | |
| ARK | | | | ⇑*i*S | Sb | 03 25 57.3 | +2.2 |
| | baz=331 | | | | | | |
| UCH | Uchtor | 2.76 | 13 | ⇑*i*P | Pb | 03 25 26.4 | +0.3 |
| | baz=13 | | | | | | |
| UCH | | | | ⇑*i*S | Sb | 03 26 02.4 | +2.6 |
| | baz=13 | | | | | | |
| UCH | Uchtor | 2.76 | 13 | P | Pb | 03 25 26.6 | +0.5 |
| | SNR=18 | | | | | | |
| KZA | Kyzart | 2.80 | 25 | ⇓*i*P | Pb | 03 25 27.4 | +0.6 |
| | baz=24 | | | | | | |
| KZA | | | | ⇓*i*S | Sb | 03 26 04.9 | +3.9 |
| | baz=24 | | | | | | |
| KZA | Kyzart | 2.80 | 25 | P | Pb | 03 25 29.5 | +2.7 |
| | SNR=12 | | | | | | |
| MNAS | Manas | 3.08 | 344 | ⇑Pn | Pb | 03 25 29.7 | -1.6 |
| | 4.5nm,0.4s | | | | | | |
| MNAS | | | | ⇓Sn | Sg | 03 26 14.8 | -0.9 |
| | 31nm,0.7s | | | | | | |
| MNAS | Manas | 3.08 | 344 | ⇑*i*P | Pb | 03 25 29.5 | -1.8 |
| | baz=344 | | | | | | |
| MNAS | | | | ⇑*i*S | Sb | 03 26 09.9 | +1.2 |
| | baz=344 | | | | | | |
| MNAS | Manas | 3.08 | 344 | ⇑*i*P | Pb | 03 25 29.7 | -1.6 |
| | baz=344 | | | | | | |
| MNAS | | | | ⇑*i*S | Sb | 03 26 07.9 | -0.8 |
| | baz=344 | | | | | | |
| EKS2 | Erkin-Say | 3.12 | 1 | ⇑*i*P | Pb | 03 25 30.7 | -1.4 |
| | baz=1.0 | | | | | | |
| EKS2 | | | | ⇑*i*S | Sb | 03 26 12.1 | +2.2 |
| | baz=1.0 | | | | | | |
| EKS2 | Erkin-Say | 3.12 | 1 | P | Pb | 03 25 32.9 | +0.8 |
| | SNR=9.8 | | | | | | |
| EKS | Erkin-Say | 3.13 | 1 | ⇑*i*P | Pb | 03 25 30.0 | -2.2 |
| | baz=1.0 | | | | | | |
| EKS | | | | ⇑*i*S | Sb | 03 26 08.6 | -1.5 |
| | baz=1.0 | | | | | | |
| AAK | Ala-Archa | 3.15 | 11 | ⇑Pn | Pb | 03 25 33.0 | +0.4 |
| | 11nm,0.9s | | | | | | |
| AAK | | | | ⇑Sn | Sg | 03 26 19.0 | +0.8 |
| | 43nm,0.9s | | | | | | |
| AAK | Ala-Archa | 3.15 | 11 | ⇑*i*P | Pb | 03 25 31.6 | -1.0 |
| | baz=11 | | | | | | |
| AAK | | | | ⇑*i*S | Sb | 03 26 14.7 | +3.8 |
| | baz=11 | | | | | | |
| AAK | Ala-Archa | 3.15 | 11 | P | Pb | 03 25 33.1 | +0.5 |
| | SNR=9.7 | | | | | | |
| KBK | Karagaybulak | 3.26 | 17 | ⇑*i*P | Pb | 03 25 32.9 | -1.6 |
| | baz=16 | | | | | | |
| KBK | | | | ⇑*i*S | Sb | 03 26 16.9 | +3.0 |
| | baz=16 | | | | | | |
| ULHL | Ulahol | 3.33 | 35 | ⇑*i*P | Pb | 03 25 34.8 | -0.9 |
| | baz=34 | | | | | | |
| ULHL | | | | ⇑*i*S | Sg | 03 26 23.2 | -0.7 |
| | baz=34 | | | | | | |
| ULHL | Ulahol | 3.33 | 35 | P | Pg | 03 25 39.6 | -1.1 |
| | SNR=6.3 | | | | | | |
| BOOM | Boomskoye usch | 3.41 | 29 | ⇑*i*P | Pn | 03 25 33.8 | +4.2 |
| | baz=29 | | | | | | |
| BOOM | | | | ⇑*i*S | Sb | 03 26 18.9 | +0.6 |
| | baz=29 | | | | | | |
| CHMS | Chumysh | 3.55 | 13 | ⇑*i*P | Pb | 03 25 36.1 | -3.2 |
| | baz=13 | | | | | | |
| CHMS | | | | ⇑*i*S | Sg | 03 26 29.8 | -1.1 |
| | baz=13 | | | | | | |
| TKM2 | Tokmak 2 | 3.67 | 23 | ⇑Pn | Pb | 03 25 41.4 | -0.2 |
| | 5.6nm,0.8s | | | | | | |
| TKM2 | | | | ⇓Sn | Sg | 03 26 34.2 | -0.8 |
| | 12nm,0.4s | | | | | | |
| KK31 | Karatay Array | 4.29 | 327 | Pn | Pn | 03 25 46.0 | +4.6 |
| | 0.7nm,0.3s,baz=134,slow=12,SNR=31 | | | | | | |
| KK31 | | | | Pg | Pg | 03 25 56.6 | -2.4 |
| | 0.9nm,0.3s,baz=135,slow=16,SNR=5.4 | | | | | | |
| KK31 | | | | ⇑Sn | Sb | 03 26 39.2 | -4.1 |
| | 1.8nm,0.3s,baz=149,slow=19,SNR=3.9 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 03 26 53.0 | |
| | 3.7nm,0.4s,baz=134,slow=29,SNR=3.9 | | | | | | |

**ROM 08 03:26:03.1**±0.6, **40°.85N**×**15°.31E**, **h19**$^{km}$±5$^{km}$, **Md1.8**/3, **Ml1.5**/2, **Error ellipse: s-maj=7.2km s-min=2.8km az=178.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MCRV | Calabrutti - M | 0.13 | 238 | Pg | Pg | 03 26 07.6 | +0.2 |
| MCRV | | | | Sg | Sg | 03 26 10.6 | +0.2 |
| | 97nm,0.3s | | | | | | |
| MRLC | Muro Lucano | 0.17 | 125 | Pg | Pg | 03 26 07.5 | -0.3 |
| MRLC | | | | Sg | Sg | 03 26 11.6 | +0.7 |
| | 52nm,0.3s | | | | | | |
| SGO | Sicignano | 0.29 | 181 | Pg | Pb | 03 26 10.2 | +0.4 |
| SGO | | | | Sg | Sb | 03 26 14.6 | +0.4 |
| | 7.0nm,0.2s | | | | | | |

*BJI **08** 03:26:09.0, 51°.56N×175°.17W, h11$^{km}$, mb6.3/82, mB6.6/68, Ms6.6/93, Ms7 6.4/85*
*IDC **08** 03:26:12.0±1.9, 51°.47N×175°.28W, h10$^{km}$±10$^{km}$, mb5.4/36, mb1 5.5/37, mb1mx5.5/40, mbtmp5.5/37, ML2.9/1, MS6.2/40, Ms1 6.2/40, ms1mx6.1/51, Error ellipse: s-maj=15.1km s-min=9.1km az=167.0*
*NEIC **08** 03:26:13.7±0.1, 51°.37N×175°.36W, h19$^{km}$, mb6.2/297, ME6.1, MS6.3/299, MW6.3, MW6.4, MW6.2, ML6.0(AEIC), Error ellipse: s-maj=3.3km s-min=1.7km az=176.0, Moment Tensor Solution. s105 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$2.30; $M_{\theta\theta}$-2.05; $M_{\phi\phi}$-0.26; $M_{r\theta}$1.74; $M_{\theta\phi}$-0.13; $M_{\phi r}$0.93; Best double couple: $M_0$2.90000×$10^{18}$ NP1: $\phi_s$276.00000°, δ26.00000°, λ113.00000°. NP2: $\phi_s$71.00000°, δ66.00000°, λ79.00000°. Principal axes: T 3.1200, Plg67.0000°, Azm321.0000°; N -0.3900, Plg10.0000°, Azm75.0000°; P -2.7400, Plg21.0000°, Azm169.0000°; Broadband fault plane solution: P waves. NP1:$\phi_s$314.00000°, δ48.00000°, λ138.00000°. NP2: $\phi_s$75.00000°, δ60.00000°, λ50.00000°. Principal axes: T Plg55.0000°, Azm292.0000°; N Plg0.0000°, Azm0.0000°; P Plg7.0000°, Azm192.0000°; Depth from synthetics of broadband displacement seismograms. Energy computed from BB mechanism.*
*GCMT **08** 03:26:13.7±0.0, 51°.26N×175°.40W, h18$^{km}$, MW6.4/140, Moment Tensor Solution. s140,c336; s133,c562; Duration: 3$^s$8 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$3.43±.02; $M_{\theta\theta}$-3.09±.02; $M_{\phi\phi}$-0.33±.01; $M_{r\theta}$2.82±.05; $M_{\theta\phi}$-1.05±.01; $M_{\phi r}$1.72±.04; Best double couple: $M_0$4.76700×$10^{18}$ NP1:$\phi_s$63.00000°, δ67.00000°, λ83.00000°. NP2:$\phi_s$260.00000°, δ24.00000°, λ106.00000°. Principal axes: T 4.8000, Plg67.0000°, Azm320.0000°; N -0.0630, Plg6.0000°, Azm65.0000°; P -4.7340, Plg22.0000°, Azm158.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*MOS **08** 03:26:14.4±0.9, 51°.44N×175°.34W, h38$^{km}$, mb6.4/112, MS6.3/128 Error ellipse: s-maj=5.8km s-min=4.2km az=95.2*
*ISCJB **08** 03:26:15.0±0.2, 51°.36N±0°.02×175°.25W±0°.01, h42$^{km}$±2$^{km}$, mb6.2/532, MS6.3/417, Error ellipse: s-maj=2.9km s-min=1.3km az=178.0*
*NEIC **08** 03:26:16.0±0.0, 51°.43N×175°.09W, h15$^{km}$, Moment Tensor Solution. s64 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$3.17; $M_{\theta\theta}$-2.88; $M_{\phi\phi}$-0.29; $M_{r\theta}$4.28; $M_{\theta\phi}$-1.29; $M_{\phi r}$1.19; Best double couple: $M_0$5.50000×$10^{18}$ NP1:$\phi_s$73.00000°, δ71.00000°, λ93.00000°. NP2:$\phi_s$241.00000°, δ18.00000°, λ78.00000°. Principal axes: T 5.4300, Plg63.0000°, Azm349.0000°; N 0.2100, Plg4.0000°, Azm252.0000°; P -5.6300, Plg27.0000°, Azm160.0000°;*
*AUST **08** 03:26:24.6±2.6, 50°.98N×175°.16W, h114$^{km}$±23$^{km}$ Error ellipse: s-maj=10.2km s-min=7.4km az=129.0*
*SZGRF **08** 03:26:29.1, 52°.70N×177°.33W, h33$^{km}$, mb6.5/33(BGR), Ms6.0/2(BGR)*
*NEIC **08** 03:26:31.0±0.0, 51°.29N×175°.52W, h28$^{km}$, Moment Tensor Solution. s73 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$4.17; $M_{\theta\theta}$-3.52; $M_{\phi\phi}$-0.64; $M_{r\theta}$0.51; $M_{\theta\phi}$-1.24; $M_{\phi r}$0.89; Best double couple: $M_0$4.20000×$10^{18}$ NP1:$\phi_s$258.00000°, δ40.00000°, λ103.00000°. NP2:$\phi_s$61.00000°, δ51.00000°, λ80.00000°. Principal axes: T 4.3400, Plg80.0000°, Azm283.0000°; N -0.2800, Plg8.0000°, Azm68.0000°; P -4.0600, Plg6.0000°, Azm159.0000°;*
**ISC 08 03:26:14.2**±0.2, **51°.35N**±0°.03×**175°.32W**±0°.02, **h24**$^{km}$±1$^{km}$, **h24**$^{km}$**:pP-P, n2288**, σ1$^s$**24**/2525, **mb6.2**/565, **MS6.3**/423, **208C-26D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.84 | 327 | P | Pn | 03 26 31.4 | +1.0 |
| GSCK | Great Sitkin C | 0.85 | 322 | P | Pn | 03 26 31.6 | +1.0 |
| ETKA | Kagalaska Isla | 0.85 | 308 | P | Pn | 03 26 31.5 | +0.8 |
| GSTD | Great Sitkin T | 0.88 | 324 | P | Pn | 03 26 32.1 | +1.0 |
| GSTR | Great Sitkin T | 0.88 | 329 | *e*Pn | Pn | 03 26 32.3 | +1.2 |
| ADAG | Mount Adagdak | 1.02 | 309 | P | Pb | 03 26 34.8 | +1.6 |
| ATKA | Atka Island | 1.10 | 39 | P | Pn | 03 26 33.9 | -0.2 |
| ATKA | | | | S | Sb | 03 26 49.9 | +1.3 |
| KOKL | Mount Kliuchef | 1.20 | 35 | P | Pb | 03 26 36.5 | +0.3 |
| KOFP | Korovin Flat P | 1.20 | 39 | P | Pb | 03 26 36.5 | +0.2 |
| KOWE | Korovin West | 1.22 | 32 | P | Pb | 03 26 37.0 | +0.4 |
| KIRH | Kanaga Island | 1.24 | 297 | P | Pb | 03 26 37.2 | +0.3 |
| KIKV | Kanaga Island | 1.27 | 296 | P | Pb | 03 26 37.5 | 0.0 |
| KICM | Kanaga Island | 1.30 | 297 | P | Pb | 03 26 38.1 | +0.1 |
| TAPA | Tanaga Point A | 1.63 | 288 | P | Pb | 03 26 42.7 | -0.8 |
| TAFL | Tanaga Flats | 1.66 | 285 | P | Pn | 03 26 42.9 | +1.1 |
| TAFP | Tanaga Falls P | 1.75 | 290 | P | Pn | 03 26 44.4 | +1.4 |
| GAEA | Gareloi East | 2.19 | 283 | P | Pn | 03 26 50.7 | +1.7 |
| GALAA | Gareloi Lava P | 2.20 | 282 | P | Pn | 03 26 50.8 | +1.7 |
| GANE | Gareloi Northe | 2.21 | 284 | P | Pn | 03 26 51.1 | +1.8 |
| CERAA | Semis' Rag'd T | 3.17 | 282 | P | Pn | 03 27 03.9 | +1.5 |
| CESW | Semis' Southwe | 3.24 | 282 | P | Pn | 03 27 04.5 | +1.1 |
| CEAP | Semis' Anvil P | 3.25 | 284 | P | Pn | 03 27 05.0 | +1.4 |
| AMKA | Amchitka | 3.37 | 273 | P | Pn | 03 27 07.1 | +1.8 |
| AMKA | | | | S | Sn | 03 27 48.2 | +3.7 |
| LSPA | Little Sitkin | 3.85 | 282 | P | Pn | 03 27 13.9 | +2.0 |
| LSSA | Little Sitkin | 3.89 | 281 | P | Pn | 03 27 14.3 | +1.8 |
| LSNW | Little Sitkin | 3.89 | 282 | P | Pn | 03 27 13.9 | +1.5 |
| NIKH | Nikolski High | 4.30 | 65 | P | Pn | 03 27 19.5 | +1.5 |
| NIKH | | | | S | Sn | 03 28 09.4 | +2.0 |
| OKAK | Okmok | 4.81 | 60 | P | Pn | 03 27 26.2 | +1.2 |
| OKSO | Okmok South | 4.83 | 63 | P | Pn | 03 27 27.7 | +2.4 |
| OKSO | | | | S | Sn | 03 28 23.6 | +3.3 |
| OKCE | Okmok Cone E | 4.85 | 62 | P | Pn | 03 27 27.7 | +2.1 |
| OKTU | Okmok Mt. Tuli | 4.90 | 63 | P | Pn | 03 27 28.5 | +2.2 |
| OKFG | Magazine Ridge | 4.99 | 63 | P | Pn | 03 27 29.2 | +1.8 |
| OKFG | | | | S | Sn | 03 28 27.7 | +3.5 |
| MSOM | Makushin Julie | 5.67 | 61 | P | Pn | 03 27 38.8 | +2.0 |
| MSOM | Makushin Julie | 5.67 | 61 | P | Pn | 03 27 38.8 | +2.0 |
| MGOD | Makushin Gods | 5.70 | 61 | P | Pn | 03 27 39.7 | +2.4 |
| MSW | Makushin Switc | 5.80 | 60 | P | Pn | 03 27 40.7 | +2.1 |
| UNV | Unalaska Valle | 5.93 | 62 | P | Pn | 03 27 42.9 | +2.5 |
| UNV | | | | S | Sn | 03 28 50.2 | +2.8 |
| AKRB | Akutan Reef Bi | 6.27 | 60 | P | Pn | 03 27 47.2 | +2.1 |
| ZRO | Akutan Zero | 6.30 | 61 | P | Pn | 03 27 48.1 | +2.5 |
| AKGG | Akutan Green G | 6.34 | 60 | P | Pn | 03 27 48.7 | +2.6 |
| AKUT | Akutan | 6.43 | 61 | P | Pn | 03 27 49.7 | +2.4 |
| AKUT | | | | S | Sn | 03 29 02.4 | +2.5 |
| SPIA | Saint Paul Isl | 6.55 | 25 | *e*Pn | Pn | 03 27 47.7 | -1.2 |
| SPIA | | | | *e*Pg | Pg | 03 27 53.1 | |
| SMY | Shemya | 6.68 | 286 | P | Pn | 03 27 53.7 | +3.1 |
| SMY | | | | S | Sn | 03 29 11.7 | +5.8 |
| SMY | Shemya | 6.68 | 286 | P | Pn | 03 27 53.6 | +3.1 |
| SMY | | | | S | Sn | 03 29 11.7 | +5.8 |
| WECS | Westdahl Cape | 7.12 | 59 | P | Pn | 03 27 59.4 | +2.6 |
| WEBT | Westdahl Beart | 7.16 | 59 | P | Pn | 03 28 00.0 | +2.8 |
| WESN | West Dahl Nort | 7.24 | 59 | P | Pn | 03 28 01.2 | +2.8 |
| SSBA | Shishaldin | 7.57 | 59 | P | Pn | 03 28 05.2 | +2.3 |
| ISLZ | Isanotski Laza | 7.77 | 60 | P | Pn | 03 28 07.9 | +2.2 |
| FALS | False Pass | 7.98 | 59 | P | Pn | 03 28 10.4 | +1.9 |
| DT1 | Dutton Round H | 8.68 | 59 | P | Pn | 03 28 19.2 | +1.2 |
| DTNA | Dutton South F | 8.71 | 59 | P | Pn | 03 28 20.1 | +1.6 |
| PVV | Pavlof Volcano | 9.04 | 58 | P | Pn | 03 28 25.1 | +2.1 |
| SDPT | Sand Point | 9.73 | 60 | P | Pn | 03 28 33.4 | +0.9 |
| CHGN | Chignik | 11.14 | 57 | *e*Pn | Pn | 03 28 51.0 | -0.8 |
| GAMB | Gambell | 12.61 | 7 | *e*Pn | Pn | 03 29 15.4 | +3.6 |
| SII | Sitkinak Islan | 13.47 | 59 | *e*Pn | Pn | 03 29 21.6 | -2.0 |
| OHAK | Old Harbor | 14.11 | 57 | *e*Pn | Pn | 03 29 29.4 | -3.0 |
| OHAK | | | | *e*ScP | ScP | 03 38 21.4 | -0.9 |
| SVW2 | Sparrevohn | 14.63 | 41 | *e*Pn | Pn | 03 29 40.8 | +1.4 |
| SVW2 | | | | *e*ScP | ScP | 03 38 25.1 | +1.9 |
| KDAK | Kodiak Island | 14.63 | 55 | Pn | Pn | 03 29 35.9 | -3.5 |
| | 4.4nm,0.3s,baz=206,slow=5.3,SNR=54 | | | | | | |
| KDAK | Kodiak Island | 14.63 | 55 | *e*P | Pn | 03 29 36.4 | -3.0 |
| KDAK | | | | *e* | | 03 32 18.9 | |
| KDAK | Kodiak Island | 14.63 | 55 | Pn | Pn | 03 29 36.0 | -3.4 |
| | 4μm,0.4s,SNR=26 | | | | | | |
| KDAK | Kodiak Island | 14.63 | 55 | *e*Pn | Pn | 03 29 36.4 | -3.0 |
| KDAK | | | | *e*Sn | Sn | 03 32 18.9 | -1.7 |
| TNA | Tin City | 14.75 | 12 | *e*Pn | P | 03 29 44.8 | -2.0 |
| RSO | Redoubt South | 15.52 | 45 | *e*Pn | Pn | 03 29 53.0 | +1.6 |
| HOM | Homer | 15.71 | 49 | *e*Pn | P | 03 29 58.5 | +1.0 |
| | 1μm,1.0s | | | | | | |
| CNPM | China Poot | 15.85 | 50 | *e*Pn | Pn | 03 29 55.1 | -0.4 |
| PET | Petropavlovsk | 16.02 | 286 | *c i*P | Pn | 03 29 56.5 | -1.2 |
| PET | | | | *e*S | Sn | 03 32 51.7 | -2.8 |
| PET | | | | pmax | pmax | | |
| | comp=Z,17μm,18.9s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,736nm,1.5s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,22μm,12.2s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,193μm,21.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,135μm,22.0s | | | | | | |
| PET | Petropavlovsk | 16.02 | 286 | *e*Pn | Pn | 03 29 58.7 | +1.0 |
| | comp=Z,776nm,1.1s | | | | | | |
| BRLK | Bradley Lake | 16.11 | 49 | *e*Pn | Pn | 03 29 57.8 | -0.9 |
| | comp=Z,960nm,1.2s | | | | | | |
| SPU | Mount Spurr | 16.15 | 43 | *e*Pn | Pn | 03 30 00.8 | +1.4 |
| PEA0 | Petropavlovsk- | 16.59 | 287 | *e*Pn | P | 03 30 06.4 | -0.9 |
| PETK | Petropavlovsk- | 16.59 | 287 | Pn | Pn | 03 30 03.2 | -1.8 |
| | comp=Z,0.2nm,0.3s,baz=90,slow=16,SNR=7.7 | | | | | | |
| PETK | | | | LR | LR | 03 36 05.5 | |
| | comp=Z,110μm,21.6s,baz=100,slow=36 | | | | | | |
| SUA | Susitna One | 16.84 | 44 | *e*Pn | P | 03 30 09.5 | -0.7 |
| | comp=Z,1μm,1.8s | | | | | | |
| SEW | Seward | 16.90 | 49 | *e*Pn | Pn | 03 30 06.2 | -2.6 |
| | comp=Z,400nm,0.8s | | | | | | |
| SEW | | | | *e*ScP | ScP | 03 38 28.7 | +1.3 |
| PPLA | Purkeypile | 16.95 | 38 | *e*Pn | P | 03 30 11.3 | -0.1 |
| | comp=Z,5μm,1.8s | | | | | | |
| RC01 | Rabbit Creek A | 17.13 | 45 | *e*Pn | Pn | 03 30 05.8 | -5.9 |
| RC01 | | | | *e*P | P | 03 30 09.0 | -4.2 |
| CAST | Castle Rocks | 17.28 | 37 | *e*Pn | Pn | 03 30 10.6 | -3.0 |
| CAST | | | | *e*P | P | 03 30 15.1 | +0.2 |
| PMR | Palmer | 17.60 | 44 | *e*P | Pn | 03 30 16.3 | -1.2 |
| PMR | | | | pmax | pmax | | |
| | comp=Z,730nm,1.7s | | | | | | |
| PMR | Palmer | 17.60 | 44 | *e*Pn | Pn | 03 30 16.3 | -1.2 |

comp=Z,730nm,1.7s
**SKR Severo-Kuril's 17.94 279***c* *i*P **Pn 03 30 18.0 -3.8**
SKR *i* S **Sn 03 33 38.0 -3.0**
SKR pmax pmax
comp=N,2μm,2.0s
SKR pmax pmax
comp=E,4μm,2.0s
SKR pmax pmax
comp=Z,5μm,2.0s
SKR pmax pmax
comp=N,10μm,10.0s
SKR pmax pmax
comp=Z,24μm,10.0s
SKR pmax pmax
comp=E,26μm,16.0s
SKR smax smax
comp=N,5μm,2.0s
SKR smax smax
comp=E,5μm,2.0s
SKR smax smax
comp=N,55μm,22.0s
SKR smax smax
comp=E,22μm,16.0s
SKR MLR MLR
comp=N,73μm,20.0s
SKR MLR MLR
comp=E,120μm,20.0s
SKR MLR MLR
comp=Z,132μm,20.0s
**TRF Thorofare Moun 17.98 38** *e*Pn **Pn 03 30 22.1 -0.2**
comp=Z,4μm,1.8s
**SML Sawmill 18.04 44** *e*P **Pn 03 30 18.8 -4.1**
**SML Sawmill 18.04 44** *e*Pn **Pn 03 30 18.8 -4.1**
SML *e*P **P 03 30 21.4 -1.8**
**BPAW Bear Paw Mtn. 18.06 36** *e*Pn **Pn 03 30 21.5 -1.7**
BPAW *e*P **P 03 30 24.0 +0.5**
**SCM Sheep Creek Mo 18.49 45** *e*P **P 03 30 26.2 -2.0**
SCM pmax pmax
comp=Z,425nm,1.0s
**SCM Sheep Creek Mo 18.49 45** *e*P **P 03 30 26.2 -2.0**
comp=Z,425nm,1.0s
**RND Reindeer 18.52 39** *e*P **P 03 30 27.1 -1.5**
RND pmax pmax
comp=Z,2μm,1.6s
**RND Reindeer 18.52 39** *e*P **P 03 30 27.1 -1.5**
comp=Z,2μm,1.6s
**MCK McKinley 18.64 38** *e*P **P 03 30 28.7 -1.2**
MCK pmax pmax
comp=Z,4μm,2.1s
**MCK McKinley 18.64 38** *e*P **P 03 30 28.7 -1.2**
comp=Z,4μm,2.1s
**BWN Browne 18.66 37** *e*P **Pn 03 30 30.7 +0.2**
comp=Z,3μm,1.4s
**MLY Manley 18.68 33** *e*P **Pn 03 30 31.3 +0.5**
comp=Z,636nm,1.0s
**EYAK Cordova Ski Ar 18.79 49** *e*P **P 03 30 28.9 -2.6**
EYAK *e*Pn **Pn 03 30 30.9 -1.1**
**DIV Divide 18.95 47** *e*P **P 03 30 32.8 -0.5**
comp=Z,562nm,1.3s
**KLU Klutina 19.00 46** *e*P **P 03 30 33.2 -0.6**
comp=Z,683nm,1.4s
**BILL Bilibino 19.00 339***c* *i*P **Pn 03 30 35.4 +0.9**
BILL pmax pmax
comp=Z,2μm,1.2s
BILL MLR MLR
comp=Z,97μm,21.0s
**BILL Bilibino 19.00 339** *e*P **P 03 30 32.6 -1.1**
BILL *e*Pn **Pn 03 30 34.8 +0.2**
**RAGM Ragged Mountai 19.26 50** *e*P **P 03 30 35.6 -1.1**
comp=Z,611nm,1.2s
**WRH Wood River Hil 19.33 37** *e*P **P 03 30 35.6 -1.8**
comp=Z,3μm,2.1s
**BMRM Bremner River 19.45 48** *e*P **P 03 30 36.5 -2.2**
comp=Z,540nm,1.2s
**CCB Clear Creek Bu 19.53 37** *e*P **P 03 30 37.5 -2.0**
comp=Z,3μm,2.0s
**MDM Murphy Dome 19.53 35** *e*P **P 03 30 37.7 -1.9**
MDM *e*Pn **Pn 03 30 38.3 -2.6**
**COLA College 19.62 36***c* *i*P **P 03 30 39.0 -1.5**
COLA pmax pmax
comp=Z,259nm,0.9s
**COLA College 19.62 36** *e*P **P 03 30 39.6 -1.0**
comp=Z,4μm,2.0s
**HARP HAARP 19.65 44** *e*P **P 03 30 38.3 -2.5**
HARP *e*Pn **Pn 03 30 39.8 -2.5**
**PAX Paxson 19.72 42** *e*P **P 03 30 38.7 -3.0**
**PAX Paxson 19.72 42** *e*P **P 03 30 38.7 -3.0**
PAX *e*Pn **Pn 03 30 39.9 -3.3**
**HDA Harding Lake 19.73 38** *e*P **P 03 30 38.2 -3.6**
HDA *e*Pn **Pn 03 30 40.1 -3.2**
**IL1 Eielson Array 19.93 37** *e*P **P 03 30 39.7 -4.2**
IL1 *e*Pn **Pn 03 30 41.4 -4.3**
**ILAR Eielson Array 19.93 37** P **P 03 30 41.0 -2.9**
comp=Z,5.3nm,0.3s,baz=242,slow=10.0,SNR=112
ILAR S **S 03 34 23.4 -3.3**
comp=Z,0.6nm,0.3s,baz=230,slow=16,SNR=3.4
ILAR ScP **ScP 03 38 34.2 +0.2**
comp=Z,0.4nm,0.3s,baz=268,slow=4.5,SNR=4.3
ILAR LR LR 03 38 54.8
comp=Z,63μm,19.2s,baz=238,slow=38
**ILAR Eielson Array 19.93 37** P **P 03 30 41.0 -2.9**
ILAR S **S 03 34 23.4 -3.3**
ILAR pmax pmax
comp=Z,5.0nm,0.3s
ILAR smax smax
comp=N,1.0nm,0.3s
ILAR MLR MLR
comp=Z,63μm,19.2s
**COLD Coldfoot 20.20 29** *e*P Pn 03 30 48.0 -0.7
comp=Z,8μm,2.4s
COLD LR LR
comp=Z,216μm,18.0s
**MENT Mentasta 20.45 43** *e*P **P 03 30 50.5 +0.9**
**MA2 Magadan 20.72 307** *i* P **P 03 30 53.3 +0.8**
**SEY Seymchan 20.75 316** P **P 03 30 52.3 -0.5**
comp=Z,168nm,1.2s,baz=107,slow=12,SNR=61
SEY ScP **ScP 03 38 36.5 +0.6**
comp=Z,11nm,0.9s,baz=304,slow=3.6,SNR=3.0
SEY LR LR 03 39 25.6
comp=Z,205μm,18.2s,baz=104,slow=38
**SEY Seymchan 20.75 316***c* *i*P Pn 03 30 54.1 -1.2
**PCA Pinnacle 21.36 52** *e*P **P 03 30 57.2 -2.4**
PCA *e*pP pP 03 30 58.8 -7.4
PCA LR LR
comp=Z,140μm,22.0s
**FYU Fort Yukon 21.42 33** *e*P **P 03 30 59.5 -0.4**
comp=Z,3μm,1.7s
FYU LR LR
comp=Z,163μm,18.0s
**YKU2 Yakutat 21.58 54** *e*P **P 03 30 59.5 -2.2**
YKU2 LR LR
comp=Z,75μm,22.0s
**EGAK Eagle 22.16 40** *e*P **P 03 31 06.8 -1.1**
comp=Z,609nm,0.9s
EGAK LR LR
comp=Z,219μm,18.0s
**DHAK Deception Hill 22.29 55** *e*P **P 03 31 11.4 +2.0**
comp=Z,4μm,2.3s
DHAK LR LR
comp=Z,113μm,18.0s
**DAWY Dawson 22.65 42** *e*P **P 03 31 11.5 -1.7**
DAWY *e*pP pP 03 31 11.7 -8.3
DAWY LR LR
comp=Z,117μm,19.0s
**MIDW Midway 23.15 185** *e*P **P 03 31 22.8 +4.2**
comp=Z,526nm,1.1s
MIDW LR LR
comp=Z,67μm,18.0s
**KUR Kuril'sk 25.05 270***c* *i*P **P 03 31 36.9 +0.6**
KUR *i* PPP PPP 03 32 17.3
KUR *i* S **S 03 36 01.4 +2.4**
KUR pmax pmax
comp=N,169nm,1.5s
KUR pmax pmax
comp=E,573nm,1.5s
KUR pmax pmax
comp=Z,2μm,1.5s
KUR pmax pmax
comp=Z,10μm,2.8s
KUR MLR MLR
comp=N,30μm,19.0s
KUR MLR MLR
comp=E,10μm,19.0s
KUR MLR MLR
comp=Z,21μm,19.0s
**WRAK Wrangell Islan 25.50 62** *e*P **P 03 31 42.8 +2.5**
comp=Z,903nm,1.3s
WRAK LR LR
comp=Z,57μm,19.0s
**INK Inuvik 26.25 34** P **P 03 31 46.1 -0.8**
comp=Z,52nm,0.9s,baz=244,slow=8.9,SNR=70
INK PcP **PcP 03 35 12.7 +0.1**
comp=Z,43nm,0.7s,baz=270,slow=4.7,SNR=5.9
INK ScP **ScP 03 38 51.0 +0.4**
comp=Z,30nm,1.1s,baz=63,slow=12,SNR=6.9
**INK Inuvik 26.25 34** *e*P **P 03 31 46.0 -0.9**
INK 03 35 12.7
INK pmax pmax
comp=Z,377nm,1.4s
INK MLR MLR
comp=Z,108μm,18.0s
**INK Inuvik 26.25 34** *e*P **P 03 31 46.0 -0.9**
comp=Z,377nm,1.4s
INK PcP **PcP 03 35 12.7 +0.1**
INK ScP **ScP 03 38 51.0 +0.4**
INK LR LR
comp=Z,108μm,18.0s
**DLBC Dease Lake 26.55 57** P **P 03 31 50.3 +0.4**
comp=Z,127nm,1.1s,baz=278,slow=9.8,SNR=83
DLBC ScP **ScP 03 38 52.9 +1.1**
comp=Z,15nm,1.2s,baz=345,slow=4.1,SNR=3.7
**DLBC Dease Lake 26.55 57** *e*P **P 03 31 49.8 -0.1**
DLBC *e*pP pP 03 31 51.3 -5.8
DLBC ScP **ScP 03 38 52.9 +1.1**
**YUK Yuzh-Kuril'sk 26.88 270***c* *i*P **P 03 31 52.5 -0.4**
YUK *i* S **S 03 36 29.6 +1.7**
YUK pmax pmax
comp=Z,6μm,2.9s
YUK pmax pmax
comp=N,467nm,1.3s
YUK pmax pmax
comp=E,1μm,1.3s
YUK pmax pmax
comp=Z,2μm,1.3s
**YSS Yuzh-Sakhalins 27.49 277**⇑ *i*P **P 03 31 59.0 +0.7**
YSS *e**PP **pP 03 32 07.0 +1.4**
YSS *e**SP **sP 03 32 12.0 +3.4**
YSS *e*PPP PPP 03 32 51.0
YSS *e* 03 35 20.0
YSS *e*S **S 03 36 36.0 -1.5**
YSS *i* 03 36 56.0
YSS *e*SSS SSS 03 38 10.0
YSS pmax pmax
comp=E,6μm,2.5s
YSS pmax pmax
comp=Z,6μm,2.5s
YSS pmax pmax
comp=N,2μm,2.3s
YSS pmax pmax
comp=E,7μm,3.0s
YSS pmax pmax
comp=Z,5μm,3.0s
YSS smax smax
comp=N,5μm,5.0s
YSS smax smax
comp=E,8μm,6.0s
YSS MLR MLR
comp=N,41μm,19.0s
YSS MLR MLR
comp=Z,67μm,19.0s
YSS MLR MLR
comp=E,51μm,20.0s
**YSS Yuzh-Sakhalins 27.49 277** *e*P **P 03 31 59.5 +1.2**
comp=E,869nm,1.1s
**BBB Bella Bella 28.82 70** P **P 03 32 10.5 +0.4**
comp=E,61nm,0.9s,baz=282,slow=7.9,SNR=11
BBB LR LR 03 41 40.4
comp=E,41μm,21.2s,baz=294,slow=32
**ASAJ Asahikawa 28.89 272** P **P 03 32 11.7 +0.9**
comp=E,115nm,0.9s,baz=68,slow=11
ASAJ LR LR 03 45 09.1
comp=E,33μm,19.2s,baz=79,slow=39
**ASAJ Asahikawa 28.89 272** P **P 03 32 11.7 +0.9**
ASAJ pmax pmax
comp=Z,115nm,0.9s
ASAJ MLR MLR
comp=Z,33μm,19.2s
**ASAJ Asahikawa 28.89 272** *e*P **P 03 32 10.7 -0.1**
ASAJ *e*pP pP 03 32 11.2 -6.8
ASAJ LR LR
comp=Z,36μm,19.0s
**ERM Erimo 29.62 268***d* *i*P **P 03 32 17.8 +0.5**
ERM pmax pmax
comp=Z,708nm,2.5s
ERM MLR MLR
comp=Z,45μm,23.0s
**ERM Erimo 29.62 268** P **P 03 32 18.9 +1.6**
comp=Z,1μm,1.7s,SNR=15
**ERM Erimo 29.62 268** *e*P **P 03 32 19.1 +1.8**
comp=Z,2μm,2.2s
ERM LR LR
comp=Z,70μm,22.0s
**YAK Yakutsk 31.08 312** P **P 03 32 27.9 -2.0**
comp=Z,14nm,0.5s,baz=260,slow=23,SNR=21
YAK LR LR 03 45 24.7
comp=Z,81μm,19.2s,baz=94,slow=37
**YAK Yakutsk 31.08 312***c* *i*P **P 03 32 28.4 -1.5**
YAK *e* 03 33 39.6
YAK *e* 03 35 23.9
YAK pmax pmax
comp=Z,462nm,3.0s
YAK pmax pmax
comp=E,163nm,2.2s
YAK pmax pmax
comp=E,659nm,5.9s
YAK pmax pmax
comp=N,44nm,2.9s
YAK pmax pmax
comp=Z,940nm,7.2s
YAK MLR MLR
comp=Z,13μm,20.0s
**YAK Yakutsk 31.08 312** *e*P **P 03 32 28.8 -1.2**
comp=Z,213nm,0.8s
YAK LR LR
comp=Z,80μm,20.0s
**HABR Khabarovsk 31.60 285***c* *i*P **P 03 32 34.4 -0.3**
HABR *e**PP **pP 03 32 43.9 +1.9**
HABR *e**SP **sP 03 32 48.2 +3.2**
HABR *e* 03 33 38.7
HABR *e*PPP PPP 03 33 48.6
HABR *e* 03 35 25.8
HABR *e*S **S 03 37 42.0 0.0**
HABR *e**SS **sS 03 37 58.4 +4.4**
HABR *e*SS **SnSn 03 39 30.4 +2.2**
HABR *e*SSS SSS 03 39 46.6
HABR *e* 03 43 04.5
HABR pmax pmax
comp=Z,10μm,2.9s
HABR pmax pmax
comp=Z,5μm,2.2s
HABR pmax pmax
comp=E,3μm,2.2s
HABR pmax pmax
comp=N,1μm,2.2s
HABR MLR MLR
comp=E,75μm,23.0s
HABR MLR MLR
comp=Z,109μm,23.0s
HABR MLR MLR
comp=N,20μm,15.0s
**OPA Opana 32.53 149** *e*P **P 03 32 44.1 +1.0**
**OPA Opana 32.53 149** *e*P **P 03 32 44.1 +1.0**
**KIP Kipapa 32.78 149** *e*P **P 03 32 45.9 +0.6**
KIP pmax pmax
comp=Z,3μm,1.3s
**KIP Kipapa 32.78 149** *e*P **P 03 32 45.9 +0.6**
comp=Z,3μm,1.3s
**HON Honolulu 32.88 149** *e*P **P 03 32 45.9 -0.2**
HON *e**SP **sP 03 32 53.2 -3.2**
**HON Honolulu 32.88 149** *e*P **P 03 32 45.9 -0.2**
HON *e*SP **sP 03 32 53.2 -3.2**
**PGC Sidney 32.88 74** *e*P **P 03 32 47.6 +1.7**
comp=Z,282nm,1.4s
PGC *e*ScP **ScP 03 39 13.6 +1.4**
PGC LR LR
comp=Z,30μm,19.0s
**NLWA Neilton Lookou 33.17 76** *e*P **P 03 32 50.4 +1.8**
comp=Z,171nm,1.0s
NLWA *e*ScP **ScP 03 39 14.1 +0.8**
NLWA LR LR
comp=Z,39μm,20.0s
**KLR Kul'dur 33.28 288**K *i*P P 03 32 45.0 -4.4
KLR *e*S S 03 38 00.0 -8.1
KLR pmax pmax
comp=N,370nm,1.8s
KLR pmax pmax
comp=E,2μm,1.8s
KLR pmax pmax
comp=Z,4μm,1.8s
KLR pmax pmax
comp=N,4μm,10.0s
KLR pmax pmax
comp=E,4μm,10.0s
KLR pmax pmax
comp=Z,8μm,10.0s
**A04D Lummi Island 33.30 73** P **P 03 32 50.9 +1.3**
baz=33
**VDB Vedder Mountai 33.53 73** P **P 03 32 52.9 +1.2**
**A05A Maple Falls 33.55 73** *e*P **P 03 32 53.2 +1.4**
comp=Z,111nm,1.6s
A05A LR LR
comp=Z,3μm,22.0s
**YKA Yellowknife Ar 33.66 47** P **P 03 32 50.5 -2.1**
comp=Z,10.0nm,0.7s,baz=275,slow=9.1,SNR=27
YKA PcP **PcP 03 35 32.6 +0.7**
comp=Z,24nm,0.7s,baz=284,slow=3.3,SNR=13
**YKA Yellowknife Ar 33.66 47** P **P 03 32 50.5 -2.1**
YKA 03 35 32.6
YKA pmax pmax
comp=Z,10.0nm,0.7s
**E03A Lebam 33.74 77** *e*P **P 03 32 55.6 +2.1**
comp=Z,274nm,1.0s
E03A *e*ScP **ScP 03 39 15.8 +0.6**
E03A LR LR
comp=Z,42μm,18.0s
**B05A Bryant 33.86 74** P **P 03 32 55.8 +1.3**
baz=34,SNR=35
**JCW Jim Creek 33.99 74** P **P 03 32 57.1 +1.4**
**F03A Seaside 34.03 78** *e*P **P 03 32 58.1 +2.1**
comp=Z,521nm,1.4s
F03A LR LR
comp=Z,40μm,18.0s
**RPW Rockport 34.13 73** P **P 03 32 58.0 +1.0**
**F04D Rainier, OR 34.29 78** P **P 03 32 59.5 +1.2**
baz=34,SNR=6.7
**D05A Enumclaw 34.40 76** *e*P **P 03 33 01.4 +2.1**
comp=Z,895nm,1.3s
D05A LR LR
comp=Z,26μm,19.0s
**CLNS Chul'man 34.50 303** *e*P P 03 32 55.7 -4.3
CLNS *e**PP pP 03 33 09.5 +2.2
CLNS *e* 03 34 13.4
CLNS *e*S S 03 38 19.2 -7.7
CLNS pmax pmax
comp=Z,20nm,1.5s
CLNS pmax pmax
comp=N,9.0nm,1.5s
CLNS pmax pmax
comp=E,17nm,1.2s
CLNS pmax pmax
comp=N,41nm,0.9s
CLNS pmax pmax
comp=E,28nm,1.0s
CLNS pmax pmax
comp=Z,11nm,0.8s
CLNS smax smax
comp=N,1μm,13.4s
CLNS smax smax
comp=E,13μm,20.9s
CLNS MLR MLR
comp=E,31μm,16.0s
CLNS MLR MLR
comp=E,36μm,14.0s
CLNS MLR MLR
comp=Z,57μm,18.0s
**H11N2 WAKE ISLAND Hy 34.52 211** T T 04 09 39.9
baz=18,slow=76,SNR=9516
**H11N3 WAKE ISLAND Hy 34.53 210** T T 04 09 45.6
baz=18,slow=76
**H11N1 WAKE ISLAND Hy 34.54 211** T T 04 09 41.1
baz=18,slow=76,SNR=9183
**G03D McMinnville, O 34.56 79** P **P 03 33 02.0 +1.4**
baz=34
**TDL Tradedollar La 34.65 77** P **P 03 33 02.9 +1.4**
**LON Longmire 34.71 76** *e*P **P 03 33 03.2 +1.2**
LON pmax pmax
comp=Z,614nm,1.9s
LON MLR MLR
comp=Z,24μm,19.0s
**LON Longmire 34.71 76** *e*P **P 03 33 03.1 +1.2**
comp=Z,614nm,1.9s
LON LR LR
comp=Z,24μm,19.0s
**F04A Amboy 34.73 78** *e*P **P 03 33 03.5 +1.4**
comp=Z,408nm,1.4s
F04A LR LR
comp=Z,31μm,19.0s
**C06D Leavenworth 34.73 74** P **P 03 33 02.9 +0.8**
baz=35
**JOHN Johnston Islan 34.84 170** PFAKE 03 33 20.0 +17
JOHN LR LR
comp=Z,51μm,20.0s
**COR Corvallis 34.84 80** *e*P **P 03 33 05.4 +2.4**
COR pmax pmax
comp=Z,384nm,1.4s
COR MLR MLR
comp=Z,32μm,20.0s
**COR Corvallis 34.84 80** *e*P **P 03 33 05.4 +2.4**
comp=Z,384nm,1.4s
COR LR LR
comp=Z,32μm,20.0s
**PNT Penticton 34.89 71** *e*P **P 03 33 04.7 +1.3**
**PNT Penticton 34.89 71** *e*P **P 03 33 04.7 +1.3**
**WAKE Wake Island 35.01 211** PFAKE 03 33 20.0 +15
WAKE LR LR
comp=Z,30μm,18.0s
**G04A Mulino 35.04 79** *e*P **P 03 33 06.4 +1.6**
**KEBM Edson Butte 35.09 84** *e*P **P 03 33 07.9 +2.7**
comp=Z,208nm,1.2s
KEBM LR LR
comp=Z,30μm,18.0s
**ASR Mount Adams--S 35.13 77** P **P 03 33 06.8 +1.2**
**POHA Pohakuloa 35.16 146** *e*P **P 03 33 06.6 +0.4**
comp=Z,260nm,0.8s
POHA LR LR
comp=Z,51μm,18.0s
**LTY Liberty 35.17 75** P **P 03 33 06.7 +0.7**
**ETW Entiat 35.22 74** *e*P **P 03 33 07.2 +0.8**
**I03D Drain, OR 35.27 82** P **P 03 33 08.2 +1.5**
baz=35
**WTV Waterville 35.40 74** P **P 03 33 08.7 +0.8**
**USRK Ussuriysk Ar. 35.46 280** P **P 03 33 07.9 -0.5**
comp=Z,107nm,0.6s,baz=61,slow=5.5,SNR=113
USRK LR LR 03 48 39.6
comp=Z,29μm,20.4s,baz=48,slow=38
**H04A Detroit Lake 35.48 79** *e*P **P 03 33 09.9 +1.3**
comp=Z,635nm,1.4s
H04A LR LR
comp=Z,26μm,18.0s
**KBO Bosley Butte 35.51 84** *e*P **P 03 33 07.3 -1.7**
comp=Z,354nm,1.5s
KBO LR LR
comp=Z,25μm,18.0s
**H11S1 WAKE ISLAND Hy 35.73 210** T T 04 11 19.5
baz=16,slow=74
**SAW Saint Andrews 35.73 73** P **P 03 33 11.5 +0.7**
**G05D Wamic, OR 35.74 78** P **P 03 33 11.6 +0.8**
baz=36,SNR=23
**H11S2 WAKE ISLAND Hy 35.74 210** T T 04 11 19.5
baz=16,slow=74,SNR=4770
**H11S3 WAKE ISLAND Hy 35.74 210** T T 04 11 19.5
baz=16,SNR=2586
**I04A Tendick Farm, 35.80 81** P **P 03 33 12.3 +1.0**
baz=36,SNR=21
**L02D Cave Junction, 35.93 84** P **P 03 33 14.0 +1.6**
baz=36
L02D S **S 03 38 52.9 +3.9**
baz=36
**MJAR Matsushiro Arr 35.95 264** P **P 03 33 13.4 +0.8**
comp=Z,87nm,0.9s,baz=51,slow=6.5,SNR=182
MJAR LR LR 03 46 11.7
comp=Z,40μm,21.7s,baz=65,slow=33
**MJAR Matsushiro Arr 35.95 264** P **P 03 33 13.4 +0.8**
MJAR pmax pmax
comp=Z,83nm,0.9s
**MAJO Matsushiro 35.95 264***c* *i*P **P 03 33 13.0 +0.4**
MAJO pmax pmax
comp=Z,2μm,1.1s
MAJO MLR MLR

comp=Z,117µm,18.0s
**MAJO Matsushiro 35.95 264 eP P 03 33 13.4 +0.8**
comp=Z,4µm,2.3s
MAJO LR LR
comp=Z,48µm,21.0s
**MAT Matsushiro 35.95 264 P P 03 33 13.3 +0.7**
MAT S S 03 38 51.2 +1.7
**E07A Sunnyside 35.99 75 eP P 03 33 14.2 +1.3**
comp=Z,2µm,2.8s
E07A LR LR
comp=Z,21µm,20.0s
**MDW Midway 36.02 75 P P 03 33 14.6 +1.4**
**MDW Midway 36.02 75 P P 03 33 14.6 +1.4**
**VLA Vladivostok 36.09 278 c iP P 03 33 14.3 +0.6**
VLA e 03 34 36.0
VLA i S S 03 38 52.4 +1.0
VLA pmax pmax
comp=Z,551nm,1.6s
VLA MLR MLR
comp=E,483µm,16.0s
**G06A Carlson Farm, 36.16 78 eP P 03 33 15.0 +0.6**
comp=E,717nm,2.0s
G06A eScP ScP 03 39 24.4 +0.3
G06A LR LR
comp=Z,35µm,19.0s
**I05D Terrebonne, OR 36.18 79 P P 03 33 16.2 +1.6**
baz=36,SNR=22
**RSW Rattlesnake Hi 36.23 75 eP P 03 33 16.5 +1.4**
**HAWA Hanford 36.27 75 eP P 03 33 16.1 +0.8**
comp=Z,214nm,0.8s
HAWA eScP ScP 03 39 25.6 +1.2
HAWA LR LR
comp=Z,23µm,20.0s
**J04D Umpqua Nationa 36.28 82 P P 03 33 17.1 +1.4**
baz=36,SNR=18
**OD2 Odessa Site #2 36.29 73 P P 03 33 16.3 +0.8**
**WRD Warden 36.31 75 P P 03 33 15.7 +0.2**
**C09A Chrisman Ranch 36.36 73 eP P 03 33 16.8 +0.7**
comp=Z,351nm,1.3s
C09A eScP ScP 03 39 25.9 +1.2
C09A LR LR
comp=Z,26µm,19.0s
**KHMM Horse Mountain 36.56 86 eP P 03 33 20.5 +2.5**
comp=Z,433nm,1.8s
KHMM LR LR
comp=Z,32µm,20.0s
**YBH Yreka Blue Hor 36.72 84 ScP ScP 03 39 25.6 -0.7**
comp=Z,6.9nm,1.1s,baz=232,slow=0.8,SNR=5.0
YBH LR LR 03 45 38.8
comp=Z,25µm,19.8s,baz=304,slow=32
**YBH Yreka Blue Hor 36.72 84 eP P 03 33 21.3 +2.1**
YBH pmax pmax
comp=Z,75nm,1.0s
YBH MLR MLR
comp=Z,24µm,19.0s
**YBH Yreka Blue Hor 36.72 84 eP P 03 33 21.3 +2.1**
comp=Z,75nm,1.0s
YBH ScP ScP 03 39 25.6 -0.7
YBH LR LR
comp=Z,24µm,19.0s
**MDJ Mudanjiang 36.73 282 P P 03 33 18.5 -0.6**
MDJ pP pP 03 33 24.8 -1.7
MDJ sP sP 03 33 27.1 -2.4
MDJ PP PnPn 03 34 41.6 -1.2
MDJ S S 03 38 59.8 -1.4
MDJ sS sS 03 39 09.9 -3.4
MDJ PcS PcS 03 39 30.7 +1.6
MDJ ScS ScS 03 43 34.2 +1.4
MDJ PMZ
comp=Z,150nm,1.7s
MDJ PMZ
comp=Z,6µm,11.0s
MDJ LN
comp=Z,36µm,17.6s
MDJ LE
comp=Z,53µm,18.1s
MDJ LZ
comp=Z,58µm,20.6s
**MDJ Mudanjiang 36.73 282 eP P 03 33 18.6 -0.6**
comp=Z,350nm,1.5s
MDJ LR LR
comp=Z,62µm,20.0s
**J05D Fort Rock, OR 36.80 81 P P 03 33 21.5 +1.5**
baz=37,SNR=37
**M02C Callahan 36.82 85 P P 03 33 21.8 +1.8**
baz=37,SNR=7.7
**K04D Chiloquin, OR 36.83 82 P P 03 33 21.0 +0.8**
baz=37,SNR=12
**MSHR Mys Shultsa 36.83 278 c iP P 03 33 20.7 +0.7**
**NEW Newport 36.84 71 ScP ScP 03 39 24.9 -1.6**
comp=Z,10nm,0.9s,baz=244,slow=9.4,SNR=4.2
NEW LR LR 03 47 59.8
comp=Z,25µm,19.3s,baz=306,slow=36
**NEW Newport 36.84 71 eP P 03 33 20.5 +0.4**
NEW pmax pmax
comp=Z,222nm,1.1s
NEW MLR MLR
comp=Z,24µm,20.0s
**NEW Newport 36.84 71 P P 03 33 20.6 +0.4**
baz=37,SNR=71
**NEW Newport 36.84 71 eP P 03 33 20.5 +0.4**
comp=Z,222nm,1.1s
NEW ScP ScP 03 39 24.9 -1.6
NEW LR LR
comp=Z,24µm,20.0s
**EDM Edmonton 36.91 62 eP P 03 33 21.5 +0.8**
EDM pmax pmax
comp=Z,834nm,1.0s
EDM MLR MLR
comp=Z,43µm,21.0s
**EDM Edmonton 36.91 62 eP P 03 33 21.5 +0.8**
comp=Z,834nm,1.0s
EDM eScP ScP 03 39 27.7 +1.0
EDM LR LR
comp=Z,43µm,21.0s
**KMRM Mail Ridge 36.94 87 eP P 03 33 23.5 +2.3**
comp=Z,702nm,2.1s
KMRM LR LR
comp=Z,36µm,18.0s
**N02D Trinity Center 37.14 85 P P 03 33 24.5 +1.6**
baz=37,SNR=9.5
**G08A Pilot Rock 37.16 77 eP P 03 33 23.4 +0.4**
comp=Z,122nm,1.1s
G08A LR LR
comp=Z,27µm,19.0s
**JHJ2 Mitsune 37.20 258 PFAKE 03 33 40.0 +17**
JHJ2 LR LR
comp=Z,24µm,21.0s
**JHJ Hachijo jima 2 37.21 258 P P 03 33 23.7 +0.3**
comp=Z,425nm,0.8s,baz=113,slow=3.4,SNR=4.9
JHJ LR LR 03 46 39.7
comp=Z,19µm,21.6s,baz=58,slow=33
**M04C Macdoel 37.23 83 P P 03 33 25.3 +1.6**
baz=37,SNR=16
**K05A Summer Lake 37.30 81 eP P 03 33 26.2 +1.8**
comp=Z,619nm,1.6s
K05A eScP ScP 03 39 29.9 +1.3
K05A LR LR
comp=Z,24µm,20.0s
**KIPM Iron Peak 37.33 87 eP P 03 33 26.6 +2.1**
KIPM eScP ScP 03 39 29.2 +0.6
**KCPM Cahto Peak 37.33 87 eP P 03 33 25.6 +1.0**
comp=Z,60nm,1.0s
KCPM LR LR
comp=Z,19µm,18.0s
**I07A Izee 37.44 79 eP P 03 33 26.6 +1.2**
comp=Z,202nm,1.1s
I07A LR LR
comp=Z,39µm,19.0s
**WDC Whiskeytown Da 37.47 86 eP P 03 33 26.9 +1.4**
WDC pmax pmax
comp=Z,109nm,1.1s
WDC MLR MLR
comp=Z,27µm,20.0s
**WDC Whiskeytown Da 37.47 86 eP P 03 33 26.9 +1.4**
comp=Z,109nm,1.1s
WDC eScP ScP 03 39 28.9 -0.1
WDC LR LR
comp=Z,27µm,20.0s
**F10A Beach Ranch, E 37.87 75 eP P 03 33 29.6 +0.6**
comp=Z,2µm,2.3s
F10A LR LR
comp=Z,28µm,20.0s
**HOPS Hopland 38.06 88 eP P 03 33 32.1 +1.6**
comp=Z,283nm,1.4s
HOPS LR LR
comp=Z,49µm,20.0s
**O03D Paynes Creek 38.09 85 P P 03 33 31.4 +0.4**
baz=38,SNR=25
**MOD Modoc 38.12 82 eP P 03 33 32.5 +1.2**
comp=Z,444nm,1.7s
MOD LR LR
comp=Z,24µm,19.0s
**WALA Waterton Lakes 38.36 69 eP P 03 33 33.8 +0.6**
comp=Z,3µm,2.5s
WALA LR LR
comp=Z,38µm,19.0s
**BSMT Bassoo Peak 38.41 71 eP P 03 33 34.1 +0.4**
**J08A Circle Bar Ran 38.46 79 eP P 03 33 34.8 +0.8**
comp=Z,235nm,1.0s
J08A LR LR
comp=Z,30µm,19.0s
**BLMT Blacktail Moun 38.59 70 eP P 03 33 35.7 +0.6**
BLMT eS S 03 39 31.3 +1.5
**NSHM Saint Helena R 38.63 88 eP P 03 33 36.5 +1.1**
NSHM eS S 03 39 33.9 +3.6
**JTMT Jette 38.76 71 eP P 03 33 37.2 +0.7**
**OHCM Honcut 38.85 86 eP P 03 33 37.6 +0.5**
OHCM eS S 03 39 33.9 +0.4
**WVOR Wild Horse Val 38.86 80 eP P 03 33 38.1 +0.7**
WVOR pmax pmax
comp=Z,248nm,0.9s
WVOR MLR MLR
comp=Z,34µm,18.0s
**WVOR Wild Horse Val 38.86 80 eP P 03 33 38.1 +0.7**
comp=Z,248nm,0.9s
WVOR LR LR
comp=Z,34µm,18.0s
**RES Resolute Bay 38.87 25 PcP PcP 03 35 48.3 +1.0**
baz=233,slow=2.0
RES ScP ScP 03 39 34.0 +0.4
comp=Z,8.9nm,0.9s,baz=207,slow=4.5,SNR=4.5
RES LR LR 03 51 53.8
comp=Z,43µm,20.0s,baz=287,slow=40
**RES Resolute Bay 38.87 25 eP P 03 33 36.5 -0.3**
RES 03 35 48.3
RES 03 39 34.1
RES pmax pmax
comp=Z,969nm,2.9s
**RES Resolute Bay 38.87 25 eP P 03 33 36.5 -0.3**
comp=Z,969nm,2.9s
RES PcP PcP 03 35 48.3 +1.0
RES ScP ScP 03 39 34.0 +0.4
**YBMT Yellow Bay 38.87 70 eP P 03 33 38.1 +0.7**
**SWMT Swartz Lake 39.05 71 eP P 03 33 39.0 +0.1**
**SAC San Andreas 39.32 89 eP P 03 33 40.3 -0.8**
SAC e*PP pP 03 33 46.4 -2.1
SAC eS S 03 39 36.4 -4.2
**SAC San Andreas 39.32 89 eP P 03 33 40.3 -0.8**
SAC epP pP 03 33 46.4 -2.1
SAC eS S 03 39 36.4 -4.2
**MSO Missoula 39.42 72 P P 03 33 42.0 +0.1**
baz=39,SNR=57
**MSO Missoula 39.42 72 eP P 03 33 42.3 +0.3**
comp=Z,368nm,1.3s
MSO LR LR
comp=Z,15µm,18.0s
**SLMT Seeley Lake 39.48 71 eP P 03 33 42.6 0.0**
**CN2 Changchun 39.69 283 eP P 03 33 43.3 -0.8**
CN2 epP pP 03 33 49.2 -2.3
CN2 PP PnPn 03 35 18.5 0.0
CN2 eS S 03 39 45.2 -0.8
CN2 sS sS 03 39 53.5 -4.7
CN2 eSS SS 03 42 31.8 -10
CN2 PMZ
comp=Z,480nm,1.5s
CN2 PMZ
comp=Z,9µm,4.0s
CN2 LN
comp=Z,6µm,19.0s
CN2 LE
comp=Z,26µm,19.0s
CN2 LZ
comp=Z,61µm,19.0s
**BOD Bodaibo 39.73 308 ⇓ iP P 03 33 42.2 -2.1**
BOD e 03 35 24.5
BOD pmax pmax
comp=Z,252nm,2.0s
**CHMT Chamberlain Mo 39.78 71 eP P 03 33 44.9 -0.3**
**KSULL Ulleungdo 39.94 271 P P 03 33 47.3 +1.0**
SNR=11
**KSULL Ulleungdo 39.94 271 P P 03 33 47.3 +1.0**
SNR=11
**MFID Camas Ranch 40.05 77 eP P 03 33 47.6 +0.3**
comp=Z,184nm,1.3s
MFID LR LR
comp=Z,19µm,18.0s
**CBIJ Chichi jima 40.08 249 eP P 03 33 48.4 +0.9**
comp=Z,6µm,2.3s
**HIA Hailar 40.31 293 PFAKE 03 34 00.0 +11**
HIA LR LR
comp=Z,67µm,21.0s
**CMB Columbia Colle 40.32 87 eP P 03 33 50.4 +0.9**
CMB pmax pmax
comp=Z,344nm,1.8s
CMB MLR MLR
comp=Z,47µm,20.0s
**CMB Columbia Colle 40.32 87 eP P 03 33 50.4 +0.9**
comp=Z,344nm,1.8s
CMB LR LR
comp=Z,47µm,20.0s
**SAO San Andreas Ge 40.44 90 eP P 03 33 51.5 +1.1**
SAO pmax pmax
comp=Z,638nm,2.3s
SAO MLR MLR
comp=Z,36µm,18.0s
**SAO San Andreas Ge 40.44 90 eP P 03 33 51.5 +1.1**
comp=Z,638nm,2.3s
SAO eScP ScP 03 39 40.6 +0.2
SAO LR LR
comp=Z,36µm,18.0s
**HRY Holter Researc 40.73 71 eP P 03 33 53.1 +0.2**
**LRM Limekiln Ridge 40.82 72 eP P 03 33 53.8 0.0**
LRM eScP ScP 03 39 42.4 +0.3
**HLID Hailey 40.84 76 P P 03 33 54.4 +0.5**
baz=41,SNR=68
**HLID Hailey 40.84 76 eP P 03 33 54.3 +0.4**
comp=Z,160nm,1.0s
HLID LR LR
comp=Z,24µm,22.0s
**BMN Battle Mountai 40.87 82 eP P 03 33 55.1 +0.9**
BMN eS S 03 40 04.4 +0.4
BMN pmax pmax
comp=Z,95nm,0.9s
BMN MLR MLR
comp=Z,20µm,20.0s
**BMN Battle Mountai 40.87 82 eP P 03 33 55.1 +0.9**
comp=Z,95nm,0.9s
BMN eS S 03 40 04.4 +0.4
BMN LR LR
comp=Z,20µm,20.0s
**LRV Little Rabbit 40.92 90 eP P 03 33 56.1 +1.7**
**KSSKC Sokcho 40.94 274 P P 03 33 56.1 +1.6**
SNR=32
**KSSKC Sokcho 40.94 274 P P 03 33 55.9 +1.4**
SNR=31
**DLMT Dillon 40.97 73 eP P 03 33 55.1 +0.2**
comp=Z,325nm,1.4s
**KSJMJ Jumunjin 41.04 273 P P 03 33 56.9 +1.6**
SNR=42
**KSJMJ Jumunjin 41.04 273 P P 03 33 56.9 +1.6**
SNR=25
**MCMT McKenzie Canyo 41.10 74 eP P 03 33 55.8 -0.4**
**SEHB SEOHWA 41.12 274 P P 03 33 57.3 +1.3**
SNR=41
**SEHB SEOHWA 41.12 274 P P 03 33 57.3 +1.3**
SNR=41
**KSDGY Daegwallycong 41.20 273 P P 03 33 58.3 +1.4**
SNR=14
**KSDGY Daegwallycong 41.20 273 P P 03 33 57.9 +1.1**
SNR=25
**EGMT Eagleton 41.28 68 P P 03 33 57.4 0.0**
baz=41,SNR=58
**EGMT Eagleton 41.28 68 eP P 03 33 57.3 0.0**
comp=Z,2µm,2.3s
EGMT LR LR
comp=Z,28µm,22.0s
**KSULJ Uljin 41.36 271 P P 03 33 59.7 +1.8**
SNR=12
**KSULJ Uljin 41.36 271 P P 03 33 59.5 +1.5**
SNR=13
**KSJES JEONGSEON 41.37 273 P P 03 33 59.4 +1.3**
SNR=18
**KSJES JEONGSEON 41.37 273 P P 03 33 59.4 +1.3**
SNR=18
**BGMT Barton Gulch 41.37 73 eP P 03 33 58.6 +0.3**
**KSIJA INJE 41.38 274 P P 03 33 59.5 +1.4**
SNR=55
**KSIJA INJE 41.38 274 P P 03 33 59.5 +1.4**
SNR=55
**KSTBA Taebaek 41.38 272 P P 03 34 00.1 +1.8**
SNR=64
**KSTBA Taebaek 41.38 272 P P 03 34 00.1 +1.8**
SNR=64
**NV01 Mina Array Sit 41.38 85 eP P 03 33 58.5 +0.1**
**NVAR Mina Array Bea 41.38 85 P P 03 33 58.3 -0.2**
comp=Z,11nm,0.8s,baz=294,slow=8.0,SNR=59
NVAR ScP ScP 03 39 44.6 +0.2
comp=Z,4.2nm,0.8s,baz=283,slow=4.3,SNR=4.5
NVAR LR LR 03 48 24.3
comp=Z,33µm,19.8s,baz=304,slow=32
**BOZ Bozeman (W) 41.40 72 eP P 03 33 58.6 +0.2**
BOZ pmax pmax
comp=Z,347nm,1.3s
BOZ MLR MLR
comp=Z,20µm,19.0s
**BOZ Bozeman (W) 41.40 72 P P 03 33 58.4 0.0**
baz=41,SNR=96
**BOZ Bozeman (W) 41.40 72 eP P 03 33 58.6 +0.2**
comp=Z,347nm,1.3s
BOZ LR LR
comp=Z,20µm,19.0s
**MLAC Mammoth Lakes 41.54 87 P P 03 34 01.3 +1.6**
baz=41
**KSYOW Yeongwol 41.66 273 P P 03 34 01.8 +1.4**
SNR=15
**KSCHC Chuncheon 41.69 274 P P 03 34 02.3 +1.5**
SNR=8.5
**KSCHC Chuncheon 41.69 274 P P 03 34 02.1 +1.4**
SNR=44
**KSCWO Cheorwon 41.69 274 P P 03 34 02.3 +1.6**
SNR=100
**KSCWO Cheorwon 41.69 274 P P 03 34 02.1 +1.4**
SNR=70
**KSPHA Pohang 41.70 271 P P 03 34 02.6 +1.8**
SNR=6.1
**KSWJU Wonju 41.77 273 P P 03 34 02.4 +1.0**
SNR=18
**KSRS Korea Array 41.82 273 P P 03 34 02.8 +1.0**
comp=Z,150nm,1.0s,baz=57,slow=7.7,SNR=61
KSRS LR LR 03 50 56.2
comp=Z,19µm,20.9s,baz=54,slow=36
**KSRS Korea Array 41.82 273 P P 03 34 02.8 +1.0**
KSRS pmax pmax
comp=Z,150nm,1.0s
KSRS MLR MLR
comp=Z,19µm,20.9s
**KS01 Wonju Array Si 41.83 273 eP P 03 34 01.7 -0.1**
**KSAR Wonju Array Be 41.85 273 P P 03 34 02.8 +0.8**
**KSAR Wonju Array Be 41.85 273 P P 03 34 02.8 +0.8**
**MTUM Tungsten Hills 41.88 87 eP P 03 34 03.8 +1.3**
MTUM eScP ScP 03 39 46.9 +0.5
**ELK Elko 41.92 80 eP P 03 34 03.6 +0.7**
ELK pmax pmax
comp=Z,114nm,0.9s
**ELK Elko 41.92 80 eP P 03 34 03.6 +0.7**
comp=Z,114nm,0.9s
**SNY Shenyang 41.93 282 ⇑ P P 03 34 03.6 +1.0**
SNY PP PnPn 03 35 45.8 +1.1
SNY S S 03 40 11.8 -7.5
SNY PMZ
comp=Z,2µm,1.9s
SNY PMZ
comp=Z,20µm,3.6s
SNY LN
comp=Z,35µm,19.0s
SNY LE
comp=Z,22µm,20.6s
SNY LZ
comp=Z,35µm,20.0s
**QLMT Earthquake Lak 41.95 73 eP P 03 34 03.3 +0.2**
QLMT eScP ScP 03 39 47.6 +1.0
**KSEUS ULSEONG 42.03 272 P P 03 34 04.6 +1.2**
SNR=16
**YNCB YEONCHEON 42.09 275 P P 03 34 06.6 +2.7**
SNR=13
**YNCB YEONCHEON 42.09 275 P P 03 34 05.0 +1.1**
SNR=44
**KSDDC Dongducheon 42.09 275 P P 03 34 05.2 +1.2**
SNR=29
**KSYOC YEONGCHEON 42.10 271 P P 03 34 05.9 +1.8**
SNR=10
**RCTC Rector, Farmer 42.10 88 P P 03 34 04.5 +0.4**
baz=42,SNR=5.3
**KSCHJ Chungju 42.15 273 P P 03 34 05.6 +1.1**
SNR=31
**KSCHJ Chungju 42.15 273 P P 03 34 05.6 +1.1**
SNR=31
**KSICN Icheon 42.24 274 P P 03 34 06.3 +1.2**
SNR=40
**YMC Maple Creek 42.25 73 eP P 03 34 05.9 +0.5**
**SMMC Simmler 42.26 90 P P 03 34 06.7 +1.3**
baz=42,SNR=11
**KSDAG Daegu 42.27 271 P P 03 34 06.8 +1.4**
SNR=11
**ALE Alert 42.27 10 P P 03 34 04.9 0.0**
comp=Z,573nm,0.9s,SNR=26
**TIN Tinemaha 42.27 87 P P 03 34 06.7 +1.1**
baz=42
**KSMUS Musan 42.28 275 P P 03 34 06.5 +1.0**
SNR=54
**YMR Madison River 42.32 73 eP P 03 34 06.3 +0.2**
comp=Z,716nm,1.3s
YMR eScP ScP 03 39 45.5 -2.6
**YHH Holmes Hill 42.32 73 eP P 03 34 06.5 +0.4**
**KSSAJ Sangju 42.33 272 P P 03 34 07.3 +1.4**
SNR=24
**FFC Flin Flon 42.38 56 eP P 03 34 05.9 -0.2**
FFC pmax pmax
comp=Z,1µm,2.5s
FFC MLR MLR
comp=Z,33µm,20.0s
**FFC Flin Flon 42.38 56 P P 03 34 05.4 -0.7**
comp=Z,484nm,0.8s,SNR=23
**FFC Flin Flon 42.38 56 eP P 03 34 05.9 -0.2**
comp=Z,1µm,2.5s
FFC eScP ScP 03 39 48.7 +0.9
FFC LR LR
comp=Z,33µm,20.0s
**KSSEO Seoul 42.43 274 P P 03 34 07.7 +0.9**
SNR=34
**KSBUS Busan 42.46 270 P P 03 34 08.4 +1.4**
SNR=12
**CIT Chita 42.46 300 eP P 03 34 06.5 -0.4**
CIT e 03 35 55.5
CIT pmax pmax
comp=Z,717nm,2.2s
**YNR Norris Junctio 42.47 73 eP P 03 34 07.8 +0.5**
comp=Z,748nm,1.3s
YNR eScP ScP 03 39 49.0 +0.4
**GCMT Greycliff 42.49 71 eP P 03 34 07.8 +0.5**
**KSBON Boeun 42.49 272 P P 03 34 08.5 +1.2**
SNR=19
**VES Vestal, Richgr 42.50 89 P P 03 34 07.8 +0.5**
baz=42,SNR=22
**YFT Old Faithful 42.52 73 eP P 03 34 08.9 +1.2**
comp=Z,528nm,1.3s
YFT eScP ScP 03 39 49.3 +0.4
**KSSWO Suwon 42.53 274 P P 03 34 08.8 +1.2**
SNR=40
**KSCPR CHUPUNGNYEONG 42.56 272 P P 03 34 08.8 +1.0**
SNR=25
**KSGAH Ganghwa 42.59 275 P P 03 34 09.1 +1.1**
SNR=54
**INCN Inchon 42.61 274 P P 03 34 09.4 +1.2**
SNR=48
**INCN Inchon 42.61 274 eP P 03 34 09.4 +1.2**
comp=Z,1µm,1.4s
INCN LR LR
comp=Z,14µm,19.0s
**KSCEA Cheonan 42.63 273 P P 03 34 09.7 +1.4**
SNR=26
**KSCEJ CHEONGJU 42.63 273 P P 03 34 09.8 +1.4**
SNR=13
**PKM Peak Mountain 42.64 90 P P 03 34 09.7 +1.0**
baz=43,SNR=15
**H17A Grant Village 42.70 73 P P 03 34 11.0 +1.8**
baz=43,SNR=34
**H17A Grant Village 42.70 73 eP P 03 34 11.2 +2.0**
comp=Z,398nm,1.3s

H17A eScP ScP 03 39 51.3 +1.7
**LKWY Lake 42.71 73** eP P 03 34 11.4 +2.1
LKWY pmax pmax
comp=Z,594nm,1.4s
**LKWY Lake 42.71 73** eP P 03 34 11.4 +2.1
comp=Z,594nm,1.4s
**JNU Nakatsue 42.74 266** LR LR 03 50 40.7
comp=Z,43µm,21.8s,baz=61,slow=34
**JNU Nakatsue 42.74 266** eP P 03 34 09.9 +0.5
comp=Z,3µm,2.1s
JNU LR LR
comp=Z,45µm,21.0s
**CWC Cottonwood Cre 42.75 87** P P 03 34 10.4 +0.8
baz=43,SNR=5.9
**IMW Indian Meadow 42.76 74** eP P 03 34 10.3 +0.6
comp=Z,214nm,1.0s
**NPI North Pocatell 42.78 77** eP P 03 34 10.3 +0.6
**FLWY Flagg Ranch 42.80 73** eP P 03 34 10.6 +0.7
comp=Z,929nm,1.6s
**HVU Hansel Valley 42.84 77** eP P 03 34 11.1 +0.9
HVU pmax pmax
comp=Z,105nm,0.8s
**HVU Hansel Valley 42.84 77** eP P 03 34 11.1 +0.9
comp=Z,105nm,0.8s
HVU eScP ScP 03 39 49.5 -0.6
**TJN Taejon 42.84 273** *c i*P P 03 34 11.0 +0.9
**KSTEJ Daejeon 42.84 273** P P 03 34 11.4 +1.3
SNR=20
**GRAC Grapevine Rang 42.84 86** P P 03 34 11.3 +1.1
baz=43
**FXWY Fox Creek 42.85 74** eP P 03 34 10.8 +0.4
comp=Z,273nm,1.8s
FXWY LR LR
comp=Z,18µm,19.0s
**YTP The Promontory 42.88 73** eP P 03 34 12.0 +1.3
**KSKOJ Gongju 42.92 273** P P 03 34 11.9 +1.2
SNR=24
**MOOW Moose Ponds 42.96 74** eP P 03 34 11.8 +0.5
comp=Z,92nm,1.1s
**TPAW Teton Pass 42.98 74** eP P 03 34 12.3 +0.8
comp=Z,176nm,1.1s
TPAW LR LR
comp=Z,27µm,22.0s
**ISA Isabella 42.99 89** eP P 03 34 11.7 +0.3
ISA pmax pmax
comp=Z,93nm,1.1s
ISA MLR MLR
comp=Z,36µm,18.0s
**ISA Isabella 42.99 89** P P 03 34 11.5 +0.1
baz=43,SNR=22
**ISA Isabella 42.99 89** eP P 03 34 11.7 +0.3
comp=Z,93nm,1.1s
ISA LR LR
comp=Z,36µm,18.0s
**SBC Santa Barbara 43.00 91** P P 03 34 12.3 +0.9
baz=43
**RLMT Red Lodge 43.09 71** P P 03 34 12.8 +0.5
baz=43,SNR=85
**RLMT Red Lodge 43.09 71** eP P 03 34 12.8 +0.5
comp=Z,412nm,1.1s
RLMT eScP ScP 03 39 51.3 +0.1
RLMT LR LR
comp=Z,13µm,20.0s
**MLI Malad Range 43.09 77** eP P 03 34 12.8 +0.5
**REDW Red Top Meadow 43.11 74** eP P 03 34 13.4 +0.9
comp=Z,398nm,1.4s
REDW LR LR
comp=Z,30µm,22.0s
**SNOW Snow King Moun 43.11 74** eP P 03 34 13.2 +0.7
comp=Z,168nm,1.1s
SNOW LR LR
comp=Z,28µm,22.0s
**ARVC Arvin 43.11 89** P P 03 34 12.9 +0.5
baz=43
**LOHW Long Hollow 43.12 74** eP P 03 34 13.1 +0.5
comp=Z,348nm,1.7s
LOHW LR LR
comp=Z,23µm,22.0s
**R11A Troy Canyon, C 43.13 83** P P 03 34 12.8 +0.2
baz=43,SNR=58
**R11A Troy Canyon, C 43.13 83** eP P 03 34 12.9 +0.2
comp=Z,132nm,1.0s
R11A eScP ScP 03 39 50.5 -0.9
R11A LR LR
comp=Z,22µm,18.0s
**KSTOY TONGYEONG 43.15 270** P P 03 34 14.0 +1.4
SNR=5.6
**KSSES Seosan 43.15 274** P P 03 34 13.5 +0.9
SNR=22
**DAC Darwin (Calif) 43.16 87** eP P 03 34 13.7 +0.8
DAC pmax pmax
comp=Z,84nm,1.3s
DAC MLR MLR
comp=Z,32µm,20.0s
**DAC Darwin (Calif) 43.16 87** eP P 03 34 13.7 +0.8
comp=Z,84nm,1.3s
DAC LR LR
comp=Z,32µm,20.0s
**KSJEO Jeonju 43.16 272** P P 03 34 13.7 +0.9
SNR=17
**BGU Big Grassy Mou 43.17 79** eP P 03 34 13.7 +0.8
comp=Z,251nm,1.3s
BGU eScP ScP 03 39 51.0 -0.5
**KSJIN Jinju 43.20 271** P P 03 34 14.3 +1.3
SNR=15
**AHID Auburn Hatcher 43.30 75** eP P 03 34 15.2 +1.3
comp=Z,315nm,1.3s
AHID LR LR
comp=Z,33µm,19.0s
**SPUT South Promonto 43.31 78** eP P 03 34 15.4 +1.3
comp=Z,879nm,2.3s
SPUT LR LR
comp=Z,20µm,18.0s
**BSC Santa Cruz Isl 43.34 91** P P 03 34 14.7 +0.4
baz=43
**MPMC Manual Prospec 43.36 87** P P 03 34 15.0 +0.4
baz=43,SNR=24
**KSGUS GUNSAN 43.42 273** P P 03 34 16.3 +1.6
SNR=23
**HDU Hyde Park 43.44 77** eP P 03 34 15.8 +0.7
**KSNAH Namhae 43.48 270** P P 03 34 16.8 +1.5
SNR=16
**FURC Furnace Creek, 43.49 86** P P 03 34 16.2 +0.9
baz=43,SNR=21
**KSBAR Backryungdo 43.50 276** P P 03 34 16.8 +1.4
SNR=39
**OSI Osito Adit 43.51 90** P P 03 34 16.1 +0.5
baz=43
**OSI Osito Adit 43.51 90** PFAKE 03 34 30.0 +14
OSI LR LR
comp=Z,30µm,21.0s
**GZU Grizzly Peak 43.53 77** eP P 03 34 16.6 +0.6
**TPNV Topopah Spring 43.58 85** eP P 03 34 16.7 +0.4
TPNV pmax pmax
comp=Z,188nm,1.0s
TPNV MLR MLR
comp=Z,42µm,20.0s
**TPNV Topopah Spring 43.58 85** P P 03 34 16.4 +0.1
baz=44,SNR=68
**TPNV Topopah Spring 43.58 85** eP P 03 34 16.7 +0.4
comp=Z,188nm,1.0s
TPNV LR LR
comp=Z,42µm,20.0s
**LRMC Laurel Mountai 43.60 88** P P 03 34 16.3 -0.1
baz=44,SNR=11
**BLG Laguna Peak 43.63 91** P P 03 34 17.1 +0.6
baz=44,SNR=6.2
**FSU Fish Springs 43.66 80** eP P 03 34 17.5 +0.6
**KSJEU Jeongeup 43.67 272** P P 03 34 17.9 +1.0
SNR=50
**BMUT Black Mountain 43.67 76** eP P 03 34 18.0 +0.9
**HWUT Hardware Ranch 43.68 77** eP P 03 34 17.4 +0.3
comp=Z,112nm,1.1s
HWUT eScP ScP 03 39 52.7 -0.9
HWUT LR LR
comp=Z,19µm,18.0s
**DUG Dugway 43.74 79** eP P 03 34 18.3 +0.8
DUG pmax pmax
comp=Z,541nm,1.4s
DUG MLR MLR
comp=Z,27µm,18.0s
**DUG Dugway 43.74 79** P P 03 34 17.7 +0.2
baz=44,SNR=80
**DUG Dugway 43.74 79** eP P 03 34 18.3 +0.8
comp=Z,541nm,1.4s
DUG LR LR
comp=Z,27µm,18.0s

**RSUT Red Spur Mount 43.75 77** eP P 03 34 18.1 +0.4
**MCU Monte Cristo P 43.80 77** eP P 03 34 18.6 +0.4
**EDW2 Edwards Air Fo 43.80 89** P P 03 34 18.5 +0.5
baz=44,SNR=22
**FPU Francis Peak 43.85 78** eP P 03 34 18.8 +0.2
**KSKWJ Gwangju 43.85 272** P P 03 34 19.2 +1.0
SNR=24
**KSGWJ Gwangju-acc 43.90 272** P P 03 34 19.6 +0.9
SNR=21
**SNCC San Nicolas Is 43.91 92** P P 03 34 19.6 +0.9
baz=44
**SNCC San Nicolas Is 43.91 92** eP P 03 34 19.4 +0.7
comp=Z,144nm,1.0s
**DECC Green Verdugo 43.99 90** P P 03 34 20.2 +0.7
baz=44
**LAO LASA Array 44.03 68** P P 03 34 19.9 +0.2
baz=44,SNR=55
**LAO LASA Array 44.03 68** eP P 03 34 20.2 +0.6
comp=Z,3µm,2.3s
LAO eScP ScP 03 39 54.9 +0.2
LAO LR LR
comp=Z,31µm,18.0s
**KSKOH Goheung 44.03 271** P P 03 34 20.7 +1.0
SNR=26
**TCUT Toone Canyon 44.06 77** eP P 03 34 21.0 +0.8
comp=Z,291nm,1.1s
**CTU Camp Tracy 44.10 78** eP P 03 34 21.0 +0.6
comp=Z,94nm,0.9s
CTU eScP ScP 03 39 55.1 -0.2
**PASC Pasadena Art C 44.14 90** eP P 03 34 21.5 +0.9
comp=Z,208nm,1.5s
PASC LR LR
comp=Z,31µm,21.0s
**GMU Granite Mounta 44.16 78** eP P 03 34 21.4 +0.4
**MWC Mount Wilson 44.18 90** eP P 03 34 22.0 +0.8
MWC pmax pmax
comp=Z,343nm,1.4s
**MWC Mount Wilson 44.18 90** eP P 03 34 22.0 +0.8
comp=Z,343nm,1.4s
**BW06 Boulder Array 44.23 74** eP P 03 34 21.4 -0.1
comp=Z,388nm,1.1s
BW06 LR LR
comp=Z,24µm,20.0s
**DGMT Dagmar 44.24 64** P P 03 34 21.4 +0.1
baz=44,SNR=42
**DGMT Dagmar 44.24 64** eP P 03 34 21.8 +0.5
comp=Z,812nm,1.3s
DGMT eScP ScP 03 39 55.4 -0.2
DGMT LR LR
comp=Z,52µm,21.0s
**GSC Goldstone 44.27 88** eP P 03 34 22.5 +0.7
GSC pmax pmax
comp=Z,162nm,1.1s
GSC MLR MLR
comp=Z,27µm,18.0s
**GSC Goldstone 44.27 88** P P 03 34 22.2 +0.4
baz=44,SNR=40
**GSC Goldstone 44.27 88** eP P 03 34 22.5 +0.7
comp=Z,162nm,1.1s
GSC eScP ScP 03 39 55.0 -0.9
GSC LR LR
comp=Z,27µm,18.0s
**NLU North Lily Min 44.34 79** eP P 03 34 23.0 +0.6
comp=Z,158nm,1.2s
**FMP Fort Macarthur 44.37 91** P P 03 34 22.9 +0.5
baz=44
**FCC Fort Churchill 44.39 47** eP P 03 34 22.6 +0.3
FCC pmax pmax
comp=Z,67nm,0.8s
FCC MLR MLR
comp=Z,72µm,20.0s
**FCC Fort Churchill 44.39 47** eP P 03 34 22.6 +0.3
comp=Z,68nm,0.8s
FCC LR LR
comp=Z,72µm,20.0s
**RRX Edison Barstow 44.42 88** P P 03 34 23.5 +0.6
baz=44
**BFSC Mount Baldy Ra 44.42 90** P P 03 34 23.7 +0.6
baz=44,SNR=20
**KSWAN Wando 44.53 271** P P 03 34 24.7 +1.0
SNR=24
**SHPR Sheep Range 44.54 85** eP P 03 34 24.3 +0.3
SHPR eScP ScP 03 39 56.0 -1.1
**O16A Springville 44.54 78** eP P 03 34 32.7 +8.8
comp=Z,273nm,1.2s
**DAU Daniels Canyon 44.57 78** eP P 03 34 25.2 +0.9
**DAU Daniels Canyon 44.57 78** eP P 03 34 25.2 +0.9
**MPU Maple Canyon 44.57 79** eP P 03 34 25.1 +0.9
comp=Z,357nm,1.7s
**A25A Svangstu Ranch 44.60 63** P P 03 34 24.0 -0.2
baz=44,SNR=76
**KWAJ Kwajalein Atol 44.69 204** PFAKE 03 34 40.0 +15
KWAJ LR LR
comp=Z,16µm,21.0s
**SCI San Clemente I 44.70 92** P P 03 34 25.5 +0.5
baz=45
**KSJDO Jindo 44.72 271** P P 03 34 26.5 +1.3
SNR=9.5
**TUQ Turquoise Moun 44.74 87** P P 03 34 26.2 +0.7
baz=45,SNR=21
**LEVU Levan 44.77 79** eP P 03 34 26.4 +0.6
**DL2 Dalian 44.85 280** P P 03 34 26.5 +0.3
DL2 S S 03 41 03.2 +1.0
DL2 PMZ
comp=Z,860nm,1.4s
DL2 PMZ
comp=Z,3µm,9.8s
DL2 LE
comp=Z,15µm,18.6s
DL2 LZ
comp=Z,13µm,18.6s
**BBRC Big Bear Solar 44.87 89** P P 03 34 27.6 +0.9
baz=45
**HEC Hector,Ludlow 44.87 88** P P 03 34 27.0 +0.5
baz=45,SNR=12
**B25A Knox Farm, Ray 44.93 64** P P 03 34 26.9 +0.1
baz=45,SNR=35
**CCUT Cedar City 45.00 83** eP P 03 34 28.5 +0.7
comp=Z,1µm,3.0s
**SGU Sterling 45.07 80** eP P 03 34 29.5 +1.3
**KSHUK Heuksando 45.12 272** P P 03 34 29.7 +1.3
SNR=6.3
**MURC Murrieta 45.13 90** P P 03 34 29.3 +0.8
baz=45,SNR=7.5
**C25A Freed Ranch, W 45.18 65** P P 03 34 28.4 -0.4
baz=45,SNR=25
**A26A Wade Farm, Ken 45.23 63** P P 03 34 29.1 0.0
baz=45,SNR=78
**KSJJU Jeju 45.25 270** P P 03 34 31.1 +1.5
SNR=18
**TMUT Trail Mountain 45.27 79** eP P 03 34 31.2 +1.3
comp=Z,527nm,0.9s
**GMRC Granite Mounta 45.33 87** P P 03 34 30.5 +0.3
baz=45,SNR=20
**ARGU Argyle Ridge 45.36 78** eP P 03 34 31.7 +1.1
**KSSGP Seogwipo 45.40 270** P P 03 34 32.8 +2.2
SNR=9.7
**B26A Jensen Ranch, 45.40 64** P P 03 34 30.8 +0.3
baz=45,SNR=11
**P17A Butcher Ranch, 45.45 79** eP P 03 34 31.9 +0.7
comp=Z,1µm,2.1s
**D25A Fairfield 45.45 66** P P 03 34 31.4 +0.4
baz=45,SNR=17
**LDFC Landfair 45.48 87** eP P 03 34 31.6 +0.2
comp=Z,242nm,0.9s
LDFC LR LR
comp=Z,24µm,18.0s
**KSGOS Gosan 45.59 270** P P 03 34 34.3 +2.2
SNR=7.7
**PFO Pinyon Flat Ob 45.59 89** eP P 03 34 32.7 +0.4
PFO pmax pmax
comp=Z,402nm,2.1s
PFO MLR MLR
comp=Z,37µm,21.0s
**PFO Pinyon Flat Ob 45.59 89** P P 03 34 32.0 -0.3
comp=Z,122nm,1.6s,SNR=9.7
**PFO Pinyon Flat Ob 45.59 89** P P 03 34 32.6 +0.4
baz=46,SNR=12
**PFO Pinyon Flat Ob 45.59 89** P P 03 34 32.9 +0.6
comp=Z,122nm,1.6s,SNR=9.7
**PFO Pinyon Flat Ob 45.59 89** eP P 03 34 32.7 +0.4
comp=Z,402nm,2.1s
PFO eScP ScP 03 40 01.7 +0.2
PFO LR LR
comp=Z,37µm,21.0s
**BELC Belle Mtn. Jos 45.62 88** P P 03 34 32.8 +0.2
baz=46,SNR=11

**A27A Ledoux Ranch, 45.64 62** P P 03 34 32.3 -0.1
baz=46,SNR=94
**P18A Preston Nutter 45.66 78** eP P 03 34 33.8 +0.8
comp=Z,188nm,1.0s
**109C Camp Elliot, M 45.66 91** P P 03 34 33.7 +1.0
baz=46
**E25A Miller Ranch, 45.76 66** P P 03 34 33.9 +0.5
baz=46,SNR=28
**C26A Wahner Farm, P 45.77 64** P P 03 34 33.8 +0.3
baz=46,SNR=40
**SRU San Rafael 45.80 79** eP P 03 34 34.7 +0.7
SRU pmax pmax
comp=Z,500nm,1.5s
**SRU San Rafael 45.80 79** eP P 03 34 34.7 +0.7
comp=Z,500nm,1.5s
**MMU Miners Mountai 45.89 81** eP P 03 34 35.5 +0.7
**B27A Peters Farms, 45.93 63** P P 03 34 34.9 +0.3
baz=46,SNR=88
**D26A Manning 46.02 65** P P 03 34 35.2 -0.2
baz=46,SNR=16
**F25A Bowman 46.05 67** P P 03 34 36.2 +0.5
baz=46,SNR=14
**IRM Iron Mountain 46.05 88** P P 03 34 36.4 +0.6
baz=46,SNR=11
**BAR Barrett 46.07 90** eP P 03 34 37.0 +1.0
comp=Z,73nm,0.9s
BAR eScP ScP 03 40 02.2 -1.1
**MONP Monument Peak 46.09 90** P P 03 34 36.6 +0.2
baz=46,SNR=10
**K22A Casper 46.12 73** P P 03 34 36.2 -0.3
baz=46,SNR=30
**K22A Casper 46.12 73** eP P 03 34 36.0 -0.4
comp=Z,332nm,1.3s
**C27A Sayler Ranch, 46.17 64** P P 03 34 36.7 +0.1
baz=46,SNR=36
**A28A Rude Farm, Bot 46.21 62** P P 03 34 36.9 0.0
baz=46,SNR=91
**E26A Carlson Angus 46.31 66** P P 03 34 38.0 +0.2
baz=46,SNR=34
**B28A Dugan Ranch, T 46.41 63** P P 03 34 38.6 +0.2
baz=46,SNR=142
**IBP Imperial Bould 46.45 90** P P 03 34 39.4 +0.4
baz=46
**SWSC Sam W. Stewart 46.45 89** P P 03 34 39.5 +0.6
baz=46
**G25A Newell 46.48 68** P P 03 34 39.0 -0.2
baz=46,SNR=25
**D27A Center 46.49 65** P P 03 34 39.0 -0.1
baz=46,SNR=19
**F26A Lodgepole 46.55 67** P P 03 34 39.5 -0.1
baz=46,SNR=25
**O20A White River Ci 46.58 76** P P 03 34 40.0 -0.1
baz=46,SNR=61
**O20A White River Ci 46.58 76** eP P 03 34 39.5 -0.7
comp=Z,1µm,1.7s
O20A LR LR
comp=Z,19µm,22.0s
**PDMCI Parker Dam,Lak 46.59 87** P P 03 34 40.1 +0.2
baz=46,SNR=8.4
**H25A Fruitdale 46.71 69** P P 03 34 40.5 -0.4
baz=46,SNR=45
**Y12C Blythe 46.71 88** P P 03 34 40.8 -0.1
baz=47,SNR=11
**RSSD Black Hills 46.74 69** eP P 03 34 41.0 -0.4
RSSD pmax pmax
comp=Z,101nm,0.9s
**RSSD Black Hills 46.74 69** eP P 03 34 41.0 -0.4
comp=Z,101nm,0.9s
RSSD eScP ScP 03 40 05.5 -0.7
**A29A Manning Farm, 46.77 61** P P 03 34 40.8 -0.5
baz=47,SNR=75
**C28A Hausauer Farms 46.80 63** P P 03 34 41.6 +0.1
baz=47,SNR=24
**E27A Carson 46.85 66** P P 03 34 42.0 0.0
baz=47,SNR=45
**G26A Maurine 46.90 67** P P 03 34 42.4 0.0
baz=47,SNR=62
**F27A Lemmon 46.91 66** P P 03 34 42.3 -0.1
baz=47,SNR=58
**B29A Wagenman Farm, 46.96 62** P P 03 34 42.3 -0.4
baz=47,SNR=32
**I25A Rochford 46.98 69** P P 03 34 42.7 -0.5
baz=47,SNR=30
**GLA Glamis 46.98 89** eP P 03 34 44.1 +0.9
GLA pmax pmax
comp=Z,988nm,2.6s
GLA MLR MLR
comp=Z,29µm,21.0s
**GLA Glamis 46.98 89** P P 03 34 43.6 +0.5
baz=47
**GLA Glamis 46.98 89** eP P 03 34 44.1 +0.9
comp=Z,988nm,2.6s
GLA LR LR
comp=Z,29µm,21.0s
**D28A Regan 46.99 64** P P 03 34 43.2 +0.2
baz=47,SNR=47
**PV09 Paradox Valley 47.03 79** eP P 03 34 44.1 +0.3
**MDND Maddock 47.16 63** P P 03 34 44.6 +0.3
baz=47,SNR=58
**MDND Maddock 47.16 63** eP P 03 34 44.6 +0.3
comp=Z,2µm,1.1s
MDND eScP ScP 03 40 06.8 -0.9
MDND eS S 03 41 38.2 +2.9
MDND LR LR
comp=Z,58µm,21.0s
**PV10 Paradox Valley 47.17 79** eP P 03 34 45.6 +0.8
**H26A Fairpoint 47.19 68** P P 03 34 44.0 -0.7
baz=47,SNR=27
**PV04 Paradox Valley 47.24 79** eP P 03 34 45.1 -0.1
**G27A Dupree 47.24 67** P P 03 34 44.5 -0.5
baz=47,SNR=47
**E28A Huff 47.27 65** P P 03 34 45.3 +0.1
baz=47,SNR=32
**A30A Hoffart Farm, 47.27 61** P P 03 34 44.8 -0.4
baz=47,SNR=27
**IRK Irkutsk 47.28 304** eP P 03 34 43.6 -1.6
IRK e 03 36 16.6
IRK e 03 44 37.0
IRK pmax pmax
comp=Z,885nm,2.2s
**J25A Sunshine Ranch 47.30 70** P P 03 34 44.8 -0.8
baz=47,SNR=22
**PV05 Paradox Valley 47.32 79** eP P 03 34 46.2 +0.3
**I26A New Underwood 47.48 69** P P 03 34 46.6 -0.3
baz=47,SNR=22
**BJI Beijing 47.51 284** P P 03 34 47.7 +0.6
BJI S S 03 41 37.2 -3.0
BJI SS SS 03 45 07.3 -0.5
BJI PMZ
comp=Z,620nm,1.8s
BJI PMZ
comp=Z,15µm,3.6s
BJI LN
comp=Z,38µm,23.3s
BJI LE
comp=Z,30µm,24.0s
BJI LZ
comp=Z,53µm,22.2s
**N23A Red Feather La 47.51 74** P P 03 34 47.6 +0.1
baz=47,SNR=30
**N23A Red Feather La 47.51 74** eP P 03 34 47.8 +0.4
comp=Z,405nm,1.3s
N23A LR LR
comp=Z,24µm,22.0s
**BJT Baijiatuau 47.52 284** eP P 03 34 48.1 +0.9
BJT pmax pmax
comp=Z,692nm,1.1s
BJT MLR MLR
comp=Z,69µm,19.0s
**BJT Baijiatuau 47.52 284** eP P 03 34 48.1 +0.9
comp=Z,692nm,1.1s
BJT LR LR
comp=Z,69µm,19.0s
**WUAZ Wupatki 47.53 83** P P 03 34 48.3 +0.8
baz=47,SNR=14
**WUAZ Wupatki 47.53 83** eP P 03 34 48.5 +1.0
comp=Z,166nm,1.0s
WUAZ LR LR
comp=Z,37µm,20.0s
**B30A Myrvik Farm, E 47.53 62** P P 03 34 47.0 -0.2
baz=47,SNR=57
**PHWY Pilot Hill 47.56 73** eP P 03 34 47.2 -0.6
comp=Z,82nm,1.1s
**H27A Howes 47.59 68** P P 03 34 47.3 -0.4
baz=47,SNR=26
**PV01 Paradox Valley 47.61 79** eP P 03 34 48.0 -0.2
**D29A Pettibone, Tap 47.61 64** P P 03 34 47.7 -0.2

baz=47,SNR=11
**F28A McLaughlin** 47.62 66 P P 03 34 47.6 -0.4
baz=47,SNR=8.9
**J26A Sides Ranch, S** 47.78 70 P P 03 34 49.0 -0.2
baz=48
**KULLO Kullorsuaq** 47.82 19⇑*i*P P 03 34 48.6 -0.5
KULLO *i* 03 35 05.3
comp=Z,45µm,18.0s
**ULM Lac du Bonnet** 47.86 58 P P 03 34 49.3 -0.4
comp=Z,55nm,0.7s,baz=305,slow=8.4,SNR=52
ULM ScP **ScP** 03 40 10.6 +0.1
comp=Z,31nm,1.3s,baz=300,slow=5.5,SNR=6.3
ULM LR LR 03 55 45.4
comp=Z,35µm,19.4s,baz=315,slow=37
**ULM Lac du Bonnet** 47.86 58 P P 03 34 49.3 -0.4
ULM pmax pmax
comp=Z,55nm,0.7s
ULM pmax pmax
comp=N,31nm,1.3s
ULM MLR MLR
comp=Z,35µm,19.4s
**ULM Lac du Bonnet** 47.86 58 *e*P P 03 34 49.4 -0.3
comp=Z,888nm,1.6s
ULM *e*ScP **ScP** 03 40 11.2 +0.6
ULM *e*S **S** 03 41 45.8 +0.7
ULM LR LR
comp=Z,37µm,20.0s
**E29A Napoleon** 47.87 64 P P 03 34 49.7 -0.2
baz=48
**C30A Mose, Pekin** 47.87 62 P P 03 34 49.4 -0.4
baz=48,SNR=23
**A31A Linda, St. Vin** 47.89 60 P P 03 34 49.8 -0.1
baz=48
**TLY Talaya** 47.91 304 P P 03 34 49.4 -0.7
comp=Z,48nm,0.8s,baz=40,slow=6.7,SNR=64
TLY PcP **PcP** 03 36 17.8 -0.4
comp=Z,27nm,0.8s,baz=52,slow=4.7,SNR=4.0
**TLY Talaya** 47.91 304*c i*P P 03 34 49.7 -0.4
TLY *e* 03 36 17.3
TLY *e* 03 36 43.1
TLY *e*S S 03 41 52.6 +6.8
TLY *e* 03 44 43.6
TLY pmax pmax
comp=Z,793nm,2.3s
TLY MLR MLR
comp=Z,63µm,21.0s
**TLY Talaya** 47.91 304 P P 03 34 49.9 -0.2
comp=Z,1µm,1.5s,SNR=96
**TLY Talaya** 47.91 304 P P 03 34 50.1 +0.1
SNR=148
**TLY Talaya** 47.91 304 *e*P P 03 34 50.0 -0.1
comp=Z,801nm,1.6s
TLY *e*ScP **ScP** 03 40 11.1 +0.3
TLY LR LR
comp=Z,62µm,18.0s
**B31A Greenbush Farm** 47.92 61 P P 03 34 50.1 -0.1
baz=48,SNR=49
**I27A Quinn** 47.93 68 P P 03 34 50.3 -0.1
baz=48,SNR=46
**SMCO Snowmass** 47.94 77 *e*P P 03 34 50.9 0.0
comp=Z,167nm,1.4s
**G28A Parade** 48.00 67 P P 03 34 51.0 +0.1
baz=48,SNR=29
**D30A Buchanan** 48.05 63 P P 03 34 50.9 -0.3
baz=48,SNR=67
**H28A Mission Ridge** 48.17 67 P P 03 34 52.1 -0.2
baz=48,SNR=37
**F29A Eureka** 48.18 65 P P 03 34 51.8 -0.5
baz=48,SNR=35
**ULN Ulaanbaatar** 48.22 298*c i*P P 03 34 52.3 -0.4
ULN pmax pmax
comp=Z,332nm,1.7s
ULN MLR MLR
comp=Z,70µm,18.0s
**ULN Ulaanbaatar** 48.22 298 P P 03 34 52.7 0.0
SNR=108
**ULN Ulaanbaatar** 48.22 298 *e*P P 03 34 52.4 -0.4
comp=Z,390nm,1.5s
ULN *e*ScP **ScP** 03 40 09.1 -3.2
ULN LR LR
comp=Z,70µm,19.0s
**MVCO Mesa Verde** 48.23 80 P P 03 34 52.9 -0.2
baz=48,SNR=36
**MVCO Mesa Verde** 48.23 80 *e*P P 03 34 52.9 -0.2
comp=Z,867nm,2.0s
**C31A Landman Farms,** 48.23 62 P P 03 34 52.0 -0.6
baz=48,SNR=21
**E30A Jud** 48.32 64 P P 03 34 52.6 -0.7
baz=48
**M25A Palm-Egli Farm** 48.32 72 P P 03 34 54.6 +1.0
baz=48,SNR=15
**ISCO Idaho Springs** 48.38 75 *e*P P 03 34 54.6 +0.4
ISCO pmax pmax
comp=Z,216nm,1.3s
ISCO MLR MLR
comp=Z,32µm,19.0s
**ISCO Idaho Springs** 48.38 75 P P 03 34 54.6 +0.4
baz=48,SNR=24
**ISCO Idaho Springs** 48.38 75 *e*P P 03 34 54.6 +0.4
comp=Z,216nm,1.3s
ISCO LR LR
comp=Z,32µm,19.0s
**J27A Elkhorn Farm,** 48.44 69 P P 03 34 54.2 -0.2
baz=48,SNR=33
**I28A Midland** 48.49 68 P P 03 34 54.8 +0.1
baz=48,SNR=82
**G29A Hoven** 48.50 66 P P 03 34 54.4 -0.4
baz=48,SNR=14
**B32A Ashes, Strandq** 48.55 61 P P 03 34 54.4 -0.7
baz=48,SNR=74
**SONA1 Songino Array** 48.59 298 *e*P P 03 34 53.9 -1.6
**SONM Songino Array** 48.60 298 P P 03 34 55.5 -0.1
comp=Z,92nm,1.0s,baz=55,slow=6.2,SNR=281
SONM PcP **PcP** 03 36 20.9 0.0
comp=Z,47nm,1.0s,baz=73,slow=5.1,SNR=5.2
SONM ScP **ScP** 03 40 16.4 +2.6
comp=Z,19nm,1.0s,baz=41,slow=3.3,SNR=7.1
SONM LR LR 03 57 06.9
comp=Z,69µm,19.7s,baz=60,slow=38
**F30A Leola** 48.64 65 P P 03 34 55.0 -0.8
baz=48
**D31A Mcclaflin, Tow** 48.67 63 P P 03 34 55.4 -0.6
baz=48
**H29A Onida** 48.67 67 P P 03 34 55.9 -0.1
baz=48,SNR=22
**JOW Kunigami** 48.72 262 P P 03 34 57.2 +0.6
comp=Z,7.4nm,0.8s,baz=39,slow=13,SNR=38
**JOW Kunigami** 48.72 262 P P 03 34 57.2 +0.6
JOW LR LR
comp=Z,6µm,19.0s
**J28A Allard Ranch,** 48.79 69 P P 03 34 57.0 0.0
baz=49,SNR=61
**W18A Petrified Fore** 48.81 83 P P 03 34 58.2 +0.8
baz=49
**ZAK Zakamensk** 48.83 303 *e*P P 03 34 56.7 -0.6
ZAK *e* 03 36 18.3
ZAK *e* 03 44 46.0
ZAK pmax pmax
comp=Z,407nm,1.5s
**M26A McRoberts Ranc** 48.84 72 P P 03 34 58.1 +0.5
baz=49
**E31A Nome** 48.86 63 P P 03 34 56.7 -0.7
baz=49,SNR=25
**A33A Warroad** 48.86 60 P P 03 34 57.4 0.0
baz=49
**S22A 4UR Ranch, Cre** 48.92 78 P P 03 34 59.1 +0.7
baz=49,SNR=59
**S22A 4UR Ranch, Cre** 48.92 78 *e*P P 03 34 59.0 +0.6
comp=Z,952nm,2.0s
S22A LR LR
comp=Z,18µm,21.0s
**AGMN Agassiz Nation** 48.97 60 P P 03 34 57.6 -0.7
baz=49,SNR=58
**AGMN Agassiz Nation** 48.97 60 *e*P P 03 34 57.8 -0.5
comp=Z,435nm,1.1s
AGMN *e*ScP **ScP** 03 40 14.1 -1.2
AGMN *e*ScP ScP 03 40 15.9 +0.6
AGMN *e*S **S** 03 42 02.5 +1.7
AGMN LR LR
comp=Z,37µm,21.0s
**I29A Vivian Onida** 48.98 67 P P 03 34 58.2 -0.2
baz=49,SNR=21
**214A Organ Pipe Nat** 48.98 88 P P 03 34 58.8 +0.2
baz=49,SNR=11
**D32A Dogwood Acres,** 49.01 62 P P 03 34 57.9 -0.7
baz=49
**F31A Hecla** 49.06 64 P P 03 34 58.4 -0.6
baz=49
**K28A Ten Mile Ranch** 49.14 69 P P 03 34 59.6 -0.2
baz=49,SNR=32
**Q24A Divide** 49.18 76 P P 03 35 00.7 +0.3
baz=49
**Q24A Divide** 49.18 76 PFAKE 03 35 10.0 +10
Q24A LR LR
comp=Z,18µm,20.0s
**N26A Koester Ranch,** 49.19 73 P P 03 35 00.8 +0.6
baz=49,SNR=12
**M27A Reverse DX Ran** 49.26 71 P P 03 35 00.8 +0.1
baz=49
**MOY Mondy** 49.28 305 *e*P P 03 35 00.5 -0.3
**E32A Braaten, Kindr** 49.30 63 P P 03 34 59.8 -1.0
baz=49,SNR=9.7
**TIA Tai'an** 49.33 280 ⇑P P 03 35 01.1 -0.1
TIA pP **pP** 03 35 10.3 +1.6
TIA PP **PP** 03 36 56.1 +1.1
TIA S **S** 03 42 09.2 +3.1
TIA PMZ
comp=Z,890nm,1.5s
TIA LN
comp=Z,17µm,17.8s
TIA LE
comp=Z,9µm,21.4s
TIA LZ
comp=Z,35µm,20.8s
**J29A Okreek** 49.33 68 P P 03 35 01.1 0.0
baz=49,SNR=77
**C33A Trail** 49.33 61 P P 03 35 00.4 -0.7
baz=49,SNR=34
**PATS Pohnpei** 49.45 215 P P 03 35 03.3 +1.0
baz=49,SNR=3.5
**G31A Conde** 49.46 65 P P 03 35 01.4 -0.7
baz=49
**L28A Connealy Angus** 49.48 70 P P 03 35 02.2 -0.2
baz=49
**O26A Horse Wrangler** 49.49 73 P P 03 35 03.3 +0.7
baz=49,SNR=11
**SUSD South Dakota S** 49.50 66 P P 03 35 02.1 -0.3
baz=49,SNR=22
**B34A Aery, Baudette** 49.52 60 P P 03 35 02.0 -0.5
baz=49,SNR=80
**I30A Oacoma** 49.55 67 P P 03 35 02.6 -0.2
baz=49,SNR=19
**N27A Anderson Farm,** 49.61 72 P P 03 35 03.7 +0.3
baz=50,SNR=18
**D33A AnnSam, Waubun** 49.66 62 P P 03 35 02.7 -0.9
baz=50,SNR=57
**K29A Lazy Trails An** 49.73 69 P P 03 35 03.9 -0.3
baz=50,SNR=22
**SDCO Great Sand Dun** 49.73 77 P P 03 35 05.2 +0.6
baz=50,SNR=44
**SDCO Great Sand Dun** 49.73 77 *e*P P 03 35 05.0 +0.4
comp=Z,705nm,1.8s
SDCO *e*ScP **ScP** 03 40 19.1 0.0
SDCO LR LR
comp=Z,12µm,18.0s
**H31A Wolsey** 49.75 66 P P 03 35 03.9 -0.4
baz=50,SNR=18
**HHC Hu-ho-hao-te** 49.79 288 *e*P P 03 35 05.8 +1.0
HHC sP **sP** 03 35 14.4 -0.8
HHC PP **PP** 03 36 59.9 +0.7
HHC S **S** 03 42 17.6 +5.0
HHC sS **sS** 03 42 21.9 -3.1
HHC PMZ
comp=Z,750nm,1.6s
HHC PMZ
comp=Z,7µm,5.5s
HHC LN
comp=Z,34µm,18.2s
HHC LE
comp=Z,25µm,18.8s
HHC LZ
comp=Z,42µm,19.4s
**OGNE Ogallala** 49.83 72 P P 03 35 05.3 +0.3
baz=50,SNR=35
**OGNE Ogallala** 49.83 72 *e*P P 03 35 05.5 +0.5
comp=Z,778nm,1.5s
**G32A Webster** 49.85 65 P P 03 35 04.5 -0.5
baz=50,SNR=11
**J30A Dallas** 49.86 68 P P 03 35 04.8 -0.5
baz=50,SNR=41
**P26A Davis Ranch, A** 49.90 74 P P 03 35 06.1 +0.4
baz=50,SNR=68
**KBS Kingsbay** 49.92 358⇑*i*P P 03 35 05.3 +0.2
KBS IAmb IAmb 03 35 06.8
comp=Z,636nm,1.5s
KBS *e*S **S** 03 42 12.7 -0.6
**KBS Kingsbay** 49.92 358 *e*P P 03 35 06.2 +1.1
KBS *e* 03 36 27.1
KBS pmax pmax
comp=Z,222nm,0.8s
KBS MLR MLR
comp=Z,39µm,20.0s
**KBS Kingsbay** 49.92 358 *e*P P 03 35 06.2 +1.1
comp=Z,222nm,0.8s
KBS *e*PcP **PcP** 03 36 27.1 +2.1
KBS *e*ScP **ScP** 03 40 19.3 +0.5
KBS *e*ScP ScP 03 40 21.7 +2.9
KBS LR LR
comp=Z,39µm,20.0s
**M28A Bar X Bar Ranc** 49.94 71 P P 03 35 06.0 +0.1
baz=50,SNR=16
**E33A Westby DABS, E** 49.94 62 P P 03 35 05.1 -0.6
baz=50,SNR=15
**I31A Royce, Wessing** 49.99 66 P P 03 35 05.8 -0.3
baz=50
**TUC Tucson** 50.01 86 *e*P P 03 35 06.8 +0.3
TUC pmax pmax
comp=Z,67nm,0.9s
TUC MLR MLR
comp=Z,24µm,18.0s
**TUC Tucson** 50.01 86 *e*P P 03 35 06.8 +0.3
comp=Z,66nm,0.9s
TUC *e*ScP **ScP** 03 40 18.8 -1.3
TUC LR LR
comp=Z,24µm,18.0s
**O27A Beecher Island** 50.03 73 P P 03 35 07.0 +0.4
baz=50,SNR=23
**D34A Park Rapids** 50.05 61 P P 03 35 05.5 -1.0
baz=50,SNR=113
**L29A Maesberg Ranch** 50.06 70 P P 03 35 06.7 -0.1
baz=50
**F33A 5 Mile Ranch,** 50.18 63 P P 03 35 06.3 -1.3
baz=50,SNR=30
**SSE Sheshan** 50.18 272 ⇑P P 03 35 08.5 +0.8
SSE pP **pP** 03 35 14.9 -0.3
SSE sP **sP** 03 35 18.0 -0.2
SSE S **S** 03 42 15.9 -2.1
SSE sS **sS** 03 42 27.4 -3.0
SSE PMZ
comp=Z,310nm,1.4s
SSE PMZ
comp=Z,6µm,5.6s
SSE LN
comp=Z,12µm,21.3s
SSE LE
comp=Z,4µm,21.2s
SSE LZ
comp=Z,16µm,19.8s
**K30A Basset** 50.19 68 P P 03 35 07.9 +0.2
baz=50,SNR=39
**Q26A Hugo** 50.19 75 P P 03 35 08.3 +0.4
baz=50,SNR=18
**N28A Pribbeno Ranch** 50.28 72 P P 03 35 08.6 +0.2
baz=50,SNR=11
**M29A Burnside Ranch** 50.31 70 P P 03 35 08.7 0.0
baz=50,SNR=21
**J31A Geddes** 50.32 67 P P 03 35 08.3 -0.4
baz=50,SNR=53
**H32A Carlson Farm,** 50.33 65 P P 03 35 08.0 -0.7
baz=50,SNR=29
**C35A Jirik Farms, M** 50.35 60 P P 03 35 08.1 -0.7
baz=50,SNR=50
**P27A Ficken Ranch,** 50.36 73 P P 03 35 09.7 +0.5
baz=50,SNR=20
**E34A Wadena** 50.40 62 P P 03 35 08.5 -0.7
baz=50
**O28A Krutsinger Ran** 50.49 72 P P 03 35 10.2 +0.1
baz=50,SNR=14
**SPB5 Spitsbergen Ar** 50.54 357 *e*P P 03 35 09.9 +0.1
**SPB1 Spitsbergen Ar** 50.54 357 *e*P P 03 35 09.9 +0.1
**SPA1 Spitsbergen Ar** 50.54 357 *e*P P 03 35 09.9 +0.1
**SPA0 Spitsbergen Ar** 50.54 357⇑*i*P P 03 35 09.1 -0.8
SPA0 IAmb IAmb 03 35 10.8
comp=Z,629nm,1.2s
SPA0 *e*S **S** 03 42 22.2 +0.1
**SPA0 Spitsbergen Ar** 50.54 357 *e*P P 03 35 09.9 0.0
SPA0 *e*ScP **ScP** 03 40 24.4 +2.9
**SPB4 Spitsbergen Ar** 50.54 357 *e*P P 03 35 09.9 +0.1
**SPITS Spitsbergen Ar** 50.54 357 P P 03 35 08.6 -1.3
comp=Z,282nm,0.9s,baz=40,slow=7.9,SNR=100
SPITS LR LR 04 00 14.9
comp=Z,9µm,18.0s,baz=5.0,slow=40
**SPITS Spitsbergen Ar** 50.54 357 P P 03 35 08.6 -1.3
SPITS pmax pmax
comp=Z,282nm,0.9s
SPITS MLR MLR
comp=Z,9µm,18.0s
**SPA3 Spitsbergen Ar** 50.54 357 *e*P P 03 35 09.9 +0.1
**SPA2 Spitsbergen Ar** 50.55 357 *e*P P 03 35 10.0 +0.1
**SPB2 Spitsbergen Ar** 50.55 357 *e*P P 03 35 09.9 +0.1
**SPB3 Spitsbergen Ar** 50.55 357 *e*P P 03 35 10.0 +0.1
**L30A Spencer Herefo** 50.57 69 P P 03 35 09.9 -0.7
baz=50,SNR=15
**I32A Karley and Nic** 50.61 66 P P 03 35 10.1 -0.7
baz=50,SNR=14
**H33A Prehn Over Nor** 50.62 65 P P 03 35 10.1 -0.8
baz=50,SNR=36
**R26A Arlington** 50.63 75 P P 03 35 11.5 +0.3
baz=50,SNR=32
**D35A Remer** 50.68 61 P P 03 35 10.2 -1.0
baz=50,SNR=87
**KSCO Kaye Shedlock'** 50.68 74 P P 03 35 12.2 +0.7
baz=50,SNR=39
**KSCO Kaye Shedlock'** 50.68 74 *e*P P 03 35 12.0 +0.5
comp=Z,514nm,1.1s
KSCO LR LR
comp=Z,20µm,19.0s
**KRAR Krasnoyarsk** 50.70 314*c i*P P 03 35 10.5 -0.8
KRAR pmax pmax
comp=Z,191nm,1.2s
KRAR MLR MLR
comp=Z,33µm,17.0s
**K31A O'Neill** 50.72 68 P P 03 35 11.5 -0.2
baz=50,SNR=17
**M30A Dale-Ortello V** 50.74 70 P P 03 35 11.8 -0.1
baz=51
**N29A Votaw Ranch, W** 50.74 71 P P 03 35 12.0 +0.1
baz=51,SNR=13
**F34A Alexandria** 50.78 63 P P 03 35 11.4 -0.7
baz=51
**J32A Parkston** 50.79 67 P P 03 35 11.1 -1.1
baz=51,SNR=35
**T25A Trinidad** 50.79 77 P P 03 35 12.9 +0.4
baz=51,SNR=20
**T25A Trinidad** 50.79 77 *e*P P 03 35 13.3 +0.8
comp=Z,482nm,1.1s
T25A LR LR
comp=Z,13µm,18.0s
**TARA Tarawa** 50.79 195 PFAKE 03 35 20.0 +7.6
TARA LR LR
comp=Z,33µm,19.0s
**E35A Pequot Lakes** 50.80 62 P P 03 35 11.7 -0.5
baz=51,SNR=59
**P28A Saint Francis** 50.85 73 P P 03 35 13.2 +0.4
baz=51,SNR=12
**LAZ Ladron** 50.89 82 *e*P P 03 35 14.0 +0.8
**G34A Benson** 50.90 64 P P 03 35 11.8 -1.2
baz=51,SNR=18
**C36A Pine Crest Far** 50.93 59 P P 03 35 12.4 -0.8
baz=51,SNR=60
**L31A Butterfield Fa** 50.95 69 P P 03 35 13.4 -0.1
baz=51,SNR=62
**ANMO Albuquerque** 50.95 81 ScP **ScP** 03 40 24.9 +0.6
comp=Z,4.1nm,0.9s,baz=324,slow=2.2,SNR=4.6
**ANMO Albuquerque** 50.95 81*c i*P P 03 35 14.1 +0.3
ANMO pmax pmax
comp=Z,66nm,2.5s
**ANMO Albuquerque** 50.95 81 *e*P P 03 35 14.0 +0.2
comp=Z,552nm,2.3s
ANMO *e*ScP **ScP** 03 40 24.2 0.0
ANMO LR LR
comp=Z,20µm,19.0s
**I33A Coleman** 50.98 65 P P 03 35 12.4 -1.2
baz=51
**NJ2 Nanjing** 50.99 274 *e*P P 03 35 14.8 +1.0
NJ2 pP **pP** 03 35 20.1 -1.3
NJ2 sP **sP** 03 35 22.1 -2.2
NJ2 S **S** 03 42 30.0 +0.7
NJ2 sS **sS** 03 42 40.0 -1.7
NJ2 PMZ
comp=Z,300nm,0.7s
NJ2 PMZ
comp=Z,16µm,6.4s
NJ2 LN
comp=Z,36µm,21.4s
NJ2 LE
comp=Z,31µm,23.1s
NJ2 LZ
comp=Z,32µm,22.7s
**R27A Eads** 51.03 75 P P 03 35 14.8 +0.6
baz=51,SNR=46
**S26A Kim** 51.05 76 P P 03 35 14.3 -0.1
baz=51,SNR=54
**N30A Hueftle Ranch,** 51.07 71 P P 03 35 14.5 +0.1
baz=51
**O29A 4D Ranch, Culb** 51.07 72 P P 03 35 14.7 +0.3
baz=51,SNR=29
**D36A Goodland** 51.10 60 P P 03 35 13.2 -1.3
baz=51,SNR=40
**Q28A Sharon Springs** 51.12 73 P P 03 35 15.2 +0.3
baz=51,SNR=17
**F35A Swanville** 51.13 62 P P 03 35 14.0 -0.7
baz=51,SNR=51
**K32A Verdigre** 51.15 68 P P 03 35 14.2 -0.8
baz=51,SNR=24
**H34A Spellman Lake,** 51.18 64 P P 03 35 14.3 -0.8
baz=51,SNR=12
**TIY Taiyuan** 51.24 284⇑*i*P P 03 35 17.2 +1.5
TIY S **S** 03 42 34.4 +1.6
TIY PMZ
comp=Z,3µm,1.7s
TIY PMZ
comp=Z,8µm,6.4s
TIY LN
comp=Z,9µm,14.8s
TIY LE
comp=Z,47µm,22.2s
TIY LZ
comp=Z,37µm,20.7s
**Y22D IRIS PASSCAL I** 51.24 82 P P 03 35 17.3 +1.5
baz=51
**LPM Los Pinos Moun** 51.26 81 *e*P P 03 35 16.7 +0.6
**T26A Comanche Natio** 51.26 76 P P 03 35 16.1 0.0
baz=51,SNR=30
**ECSD EROS Data Cent** 51.27 66 P P 03 35 15.0 -0.8
baz=51,SNR=40
**ECSD EROS Data Cent** 51.27 66 *e*P P 03 35 14.8 -1.1
comp=Z,242nm,1.2s
ECSD *e*ScP **ScP** 03 40 24.7 -0.6
ECSD LR LR
comp=Z,34µm,20.0s
**C37A Embarrass** 51.30 59 P P 03 35 15.6 -0.4
baz=51,SNR=82
**P29A Atwood** 51.32 72 P P 03 35 16.9 +0.6
baz=51,SNR=27
**J33A Davis** 51.33 66 P P 03 35 15.5 -0.7
baz=51,SNR=17
**BNM Barren Site** 51.37 81 *e*P P 03 35 17.6 +0.6
**XMAS Kiritimati** 51.38 157 PFAKE 03 35 30.0 +13
XMAS LR LR
comp=Z,42µm,19.0s
**M31A Lambteht Ranc** 51.38 69 P P 03 35 16.4 -0.4
baz=51,SNR=18
**O30A MW Ranch, Wils** 51.48 71 P P 03 35 17.8 +0.3
baz=51,SNR=35
**I34A Hadley** 51.51 65 P P 03 35 16.6 -1.1
baz=51
**D37A Cotton** 51.52 60 P P 03 35 16.9 -0.7
baz=51,SNR=37
**L32A Elgin** 51.54 68 P P 03 35 17.6 -0.2
baz=51,SNR=19
**EYMN Ely** 51.54 59 P P 03 35 17.4 -0.4
baz=51,SNR=67
**EYMN Ely** 51.54 59 *e*P P 03 35 17.2 -0.5
comp=Z,819nm,1.6s
EYMN *e*ScP **ScP** 03 40 26.2 -0.1
EYMN LR LR
comp=Z,35µm,19.0s
**G35A Watkins** 51.56 63 P P 03 35 17.4 -0.6
baz=51,SNR=25
**R28A Tribune** 51.60 74 P P 03 35 18.9 +0.5

baz=51,SNR=32
**H35A Sunnyside Ranc** 51.69 64 P P 03 35 18.2 -0.7
baz=52
**F36A Milaca** 51.70 62 P P 03 35 18.3 -0.7
baz=52,SNR=35
**N31A Bailey Ranch,** 51.73 70 P P 03 35 19.3 +0.1
baz=52
**121A Cookes Peak, D** 51.73 84 P P 03 35 19.9 +0.3
baz=52,SNR=36
**HSPB Hornsund (broa** 51.74 357⇑ *i*P P 03 35 16.0 -2.8
HSPB IAmb IAmb 03 35 18.6
comp=Z,904nm,1.8s
HSPB *e*S S 03 42 37.9 -0.6
**Q29A Oakley** 51.75 73 P P 03 35 19.8 +0.3
baz=52,SNR=26
**K33A Hardington** 51.75 67 P P 03 35 18.7 -0.7
baz=52
**HOPEN Hopen** 51.75 354⇑ *i*P P 03 35 17.7 -1.2
HOPEN IAmb IAmb 03 35 20.0
comp=Z,375nm,1.3s
HOPEN *e*S S 03 42 37.3 -1.4
**P30A Selden** 51.77 72 P P 03 35 20.1 +0.5
baz=52,SNR=26
**C38A Sawbill Land.** 51.80 59 P P 03 35 19.1 -0.6
baz=52,SNR=50
**BGNE Belgrade** 51.83 69 P P 03 35 19.6 -0.4
baz=52,SNR=31
**BGNE Belgrade** 51.83 69 *e*P P 03 35 19.8 -0.2
comp=Z,353nm,0.8s
BGNE LR LR
comp=Z,28µm,18.0s
**L33A Hoskins** 51.87 68 P P 03 35 19.6 -0.7
baz=52,SNR=12
**T27A Campo** 51.87 76 P P 03 35 20.5 0.0
baz=52,SNR=12
**J34A George** 51.93 66 P P 03 35 20.2 -0.5
baz=52,SNR=8.5
**O31A Woolen Ranch,** 51.93 71 P P 03 35 20.9 +0.1
baz=52,SNR=23
**R29A Marienthal** 51.95 74 P P 03 35 21.5 +0.5
baz=52,SNR=24
**G36A St. Michael** 51.96 63 P P 03 35 20.3 -0.6
baz=52,SNR=20
**S28A Manter** 52.03 75 P P 03 35 22.0 +0.4
baz=52,SNR=64
**I35A Creekview Farm** 52.12 65 P P 03 35 21.5 -0.7
baz=52
**Q30A Quinter** 52.15 73 P P 03 35 22.8 +0.3
baz=52,SNR=25
**N32A Stulken Farm,** 52.15 70 P P 03 35 21.7 -0.7
baz=52,SNR=7.0
**T28A Walsh** 52.20 76 P P 03 35 23.0 0.0
baz=52,SNR=49
**K34A Le Mars** 52.22 66 P P 03 35 22.5 -0.4
baz=52,SNR=38
**U27A Thompson Grove** 52.22 77 P P 03 35 23.2 0.0
baz=52,SNR=27
**H36A Jessenland, He** 52.27 63 P P 03 35 23.0 -0.2
baz=52
**M33A Taylor Creek F** 52.28 68 P P 03 35 23.0 -0.4
baz=52,SNR=17
**P31A Stockton** 52.30 71 P P 03 35 23.7 +0.1
baz=52,SNR=50
**J35A Milford** 52.30 65 P P 03 35 22.7 -0.8
baz=52
**C39A Grand Marais** 52.35 58 P P 03 35 23.0 -0.8
baz=52
**S29A Ulysses** 52.48 74 P P 03 35 25.1 +0.1
baz=52,SNR=16
**O32A Brockman Farm,** 52.48 70 P P 03 35 24.3 -0.6
baz=52,SNR=21
**SPMN St. Paul** 52.50 62 P P 03 35 24.4 -0.5
baz=52,SNR=36
**SPMN St. Paul** 52.50 62 *e*P P 03 35 24.2 -0.7
comp=Z,452nm,1.4s
SPMN *e*ScP ScP 03 40 31.4 +0.9
SPMN LR LR
comp=Z,50µm,20.0s
**L34A Svendsen Farm,** 52.51 67 P P 03 35 24.3 -0.8
baz=52,SNR=25
**CBKS Cedar Bluff** 52.54 72 *e*P P 03 35 25.6 +0.3
CBKS pmax pmax
comp=Z,428nm,1.0s
CBKS MLR MLR
comp=Z,14µm,20.0s
**CBKS Cedar Bluff** 52.54 72 P P 03 35 25.4 +0.1
baz=52,SNR=29
**CBKS Cedar Bluff** 52.54 72 *e*P P 03 35 25.6 +0.3
comp=Z,428nm,1.0s
CBKS LR LR
comp=Z,14µm,20.0s
**R30A Dighton** 52.56 73 P P 03 35 25.5 -0.1
baz=52,SNR=50
**I36A Fitzsimmons Fa** 52.57 64 P P 03 35 24.6 -0.8
baz=52
**U28A Mallet** 52.62 76 P P 03 35 25.7 -0.3
baz=52,SNR=13
**Q31A Ellis** 52.62 72 P P 03 35 25.7 -0.2
baz=52,SNR=33
**V27A Dan Oppiter Fa** 52.65 77 P P 03 35 26.0 -0.3
baz=52,SNR=20
**N33A J Bar K, Exete** 52.66 69 P P 03 35 25.6 -0.7
baz=52,SNR=8.1
**T29A Hugoton** 52.67 75 P P 03 35 26.7 +0.3
baz=52,SNR=18
**M34A Aspy Farms, Fr** 52.68 68 P P 03 35 25.8 -0.6
baz=52
**K35A Storm Lake** 52.69 66 P P 03 35 25.6 -0.8
baz=52,SNR=10
**P32A Huiting Farm,** 52.70 71 P P 03 35 26.0 -0.5
baz=52,SNR=33
**SUMG Summit** 52.78 15 *e*P P 03 35 26.8 -0.3
SUMG pmax pmax
comp=Z,3µm,2.7s
SUMG MLR MLR
comp=Z,19µm,19.0s
**SUMG Summit** 52.78 15 *e*P P 03 35 26.8 -0.3
comp=Z,3µm,2.7s
SUMG LR LR
comp=Z,19µm,19.0s
**J36A Seneca 1, Swea** 52.82 65 P P 03 35 26.5 -0.8
baz=53
**H37A Dierke Farm, C** 52.83 63 P P 03 35 27.2 -0.2
baz=53
**S30A Montezuma** 52.86 74 P P 03 35 27.9 +0.2
baz=53,SNR=18
**L35A Bielow Farm, R** 52.90 67 P P 03 35 26.9 -1.0
baz=53
**R31A Burdett** 53.00 73 P P 03 35 28.7 -0.1
baz=53,SNR=39
**O33A Hebron** 53.01 70 P P 03 35 28.1 -0.7
baz=53,SNR=47
**ILULI Ilulissat** 53.01 22⇑ *i*P P 03 35 27.6 -0.7
ILULI *i* 03 36 35.8
comp=Z,32µm,18.0s
**V28A Channing** 53.03 77 P P 03 35 28.9 -0.2
baz=53,SNR=7.8
**Q32A Meitler Ranch,** 53.13 71 P P 03 35 29.5 -0.2
baz=53,SNR=77
**U29A Oasis Ranch, S** 53.15 76 P P 03 35 30.0 +0.1
baz=53,SNR=8.4
**N34A Lincoln** 53.15 68 P P 03 35 29.1 -0.7
baz=53,SNR=13
**T30A Plains** 53.20 75 P P 03 35 30.4 +0.1
baz=53,SNR=14
**M35A Neola** 53.22 67 P P 03 35 30.0 -0.3
baz=53
**HVS Khovu-Aksy** 53.27 308 *c i*P P 03 35 30.4 -0.2
HVS pmax pmax
comp=Z,418nm,1.2s
HVS MLR MLR
comp=Z,60µm,15.0s
**J37A Redenius Farm,** 53.28 64 P P 03 35 30.1 -0.6
baz=53
**P33A Williams Farm,** 53.35 71 P P 03 35 31.2 -0.1
baz=53
**W28A Vega** 53.37 77 P P 03 35 31.8 +0.2
baz=53
**V29A Stinnett** 53.38 76 P P 03 35 31.4 -0.2
baz=53
**R32A Long Quarter,** 53.40 72 P P 03 35 31.2 -0.5
baz=53
**O34A Beatrice** 53.46 69 P P 03 35 31.5 -0.6
baz=53
**S31A Mullinville** 53.46 73 P P 03 35 31.9 -0.3
baz=53,SNR=21
**U30A WK&E Inc. Balk** 53.47 75 P P 03 35 32.2 -0.1
baz=53,SNR=26

**Q33A Connelly Farm,** 53.55 71 P P 03 35 32.4 -0.4
baz=53,SNR=59
**N35A Tabor** 53.64 68 P P 03 35 33.0 -0.4
baz=54,SNR=12
**T31A Randall Ranch,** 53.69 74 P P 03 35 33.8 -0.1
baz=54,SNR=34
**YOJ Yonaguni jima** 53.71 264 *e*P P 03 35 33.3 -0.7
YOJ pmax pmax
comp=Z,2µm,2.2s
YOJ MLR MLR
comp=Z,19µm,21.0s
**YOJ Yonaguni jima** 53.71 264 *e*P P 03 35 33.3 -0.7
comp=Z,2µm,2.2s
YOJ LR LR
comp=Z,19µm,21.0s
**S32A Newby Ranch, P** 53.74 73 P P 03 35 33.7 -0.5
baz=54
**P34A Walnut Farm, R** 53.79 70 P P 03 35 33.8 -0.7
baz=54,SNR=24
**MNTX Cornudas Mount** 53.79 83 P P 03 35 34.8 +0.2
baz=54,SNR=80
**MNTX Cornudas Mount** 53.79 83 *e*P P 03 35 34.7 0.0
comp=Z,134nm,1.0s
MNTX LR LR
comp=Z,16µm,21.0s
**W29A Amraillo** 53.80 77 P P 03 35 34.5 -0.2
baz=54,SNR=8.9
**CPRX Cap Rock** 53.83 81 *e*P P 03 35 35.2 +0.1
**X28A Dimmitt** 53.86 78 P P 03 35 34.6 -0.6
baz=54,SNR=14
**O35A Humboldt** 53.87 69 P P 03 35 34.3 -0.8
baz=54
**MSTX Muleshoe** 53.88 79 P P 03 35 35.1 -0.3
baz=54,SNR=29
**MSTX Muleshoe** 53.88 79 *e*P P 03 35 35.0 -0.3
comp=Z,2µm,2.0s
MSTX LR LR
comp=Z,14µm,18.0s
**R33A Olander Ranch,** 53.91 72 P P 03 35 35.0 -0.4
baz=54,SNR=17
**AMTX Amarillo** 53.94 77 P P 03 35 35.9 +0.2
baz=54
**AMTX Amarillo** 53.94 77 *e*P P 03 35 36.0 +0.2
comp=Z,145nm,0.9s
AMTX LR LR
comp=Z,20µm,18.0s
**COWI Conover** 53.95 59 *e*P P 03 35 34.9 -0.7
comp=Z,161nm,1.0s
COWI *e*ScP ScP 03 40 36.6 -0.3
COWI *e*S S 03 43 08.2 -1.3
**V30A Spur Ranch, Mi** 53.96 76 P P 03 35 35.4 -0.4
baz=54
**BJO Bjornoya** 54.06 355⇑ *i*P P 03 35 35.6 -0.3
BJO IAmb IAmb 03 35 37.3
comp=Z,517nm,1.4s
BJO *e*S S 03 43 09.4 -0.7
**U31A Nine Bar Ranch** 54.06 75 P P 03 35 36.9 +0.3
baz=54
**T32A Huddler Ranch,** 54.09 73 P P 03 35 36.3 -0.5
baz=54,SNR=12
**Q34A Chapman** 54.13 71 P P 03 35 36.6 -0.4
baz=54,SNR=46
**KSU1 Kansas State U** 54.21 70 P P 03 35 36.9 -0.7
baz=54,SNR=8.3
**KSU1 Kansas State U** 54.21 70 *e*P P 03 35 37.6 0.0
comp=Z,193nm,1.0s
KSU1 LR LR
comp=Z,28µm,18.0s
**X29A Tulia** 54.22 78 P P 03 35 37.5 -0.3
baz=54,SNR=14
**Y28A McKinney Farm,** 54.24 79 P P 03 35 37.6 -0.4
baz=54,SNR=25
**P35A Duane Minner,** 54.28 69 P P 03 35 37.2 -0.9
baz=54,SNR=25
**TATO Taipei** 54.29 266 PFAKE 03 35 50.0 +12
TATO LR LR
comp=Z,40µm,22.0s
**R34A Isabella, Hill** 54.36 71 P P 03 35 38.0 -0.6
baz=54,SNR=39
**SCIA State Center** 54.36 65 *e*P P 03 35 38.8 +0.1
comp=Z,325nm,0.9s
SCIA LR LR
comp=Z,55µm,18.0s
**S33A Kaszmaul Farm,** 54.37 72 P P 03 35 38.1 -0.7
baz=54,SNR=26
**W30A Crocket Farms** 54.41 76 P P 03 35 39.2 0.0
baz=54
**V31A Spring Creek L** 54.46 75 P P 03 35 39.6 +0.1
baz=54
**O36A Bolckow** 54.51 68 P P 03 35 38.9 -0.8
baz=54,SNR=34
**T33A Patterson Ranc** 54.56 73 P P 03 35 39.4 -0.8
baz=54
**U32A Winter Ranch,** 54.57 74 P P 03 35 40.0 -0.3
baz=54,SNR=21
**Z28A Tucker Farm, M** 54.57 79 P P 03 35 39.8 -0.6
baz=54,SNR=21
**YHNB Yeheng** 54.58 266 *e*P P 03 35 39.9 -0.6
comp=Z,974nm,2.3s
YHNB LR LR
comp=Z,28µm,22.0s
**P36A Good Intent, A** 54.70 69 P P 03 35 40.1 -1.0
baz=54,SNR=40
**Q35A Mercer Eighty,** 54.71 70 P P 03 35 40.2 -1.0
baz=54,SNR=17
**X30A Coker Ranch, T** 54.72 77 P P 03 35 41.3 -0.1
baz=55,SNR=19
**W31A Holland Ranch,** 54.79 76 P P 03 35 41.8 -0.2
baz=55,SNR=21
**NACB Ninganchiao** 54.80 265 *e*P P 03 35 41.4 -0.7
comp=Z,373nm,1.3s
NACB LR LR
comp=Z,21µm,22.0s
**S34A Willow Spring** 54.83 72 P P 03 35 41.2 -0.9
baz=55,SNR=20
**WHN Wuhan** 54.83 276⇑ *i*P P 03 35 42.3 +0.1
WHN sP sP 03 35 56.9 +4.2
WHN S S 03 43 20.6 -1.1
WHN PMZ
comp=Z,2µm,1.8s
WHN PMZ
comp=Z,26µm,4.4s
WHN LN
comp=Z,10µm,13.0s
WHN LE
comp=Z,21µm,14.7s
WHN LZ
comp=Z,37µm,20.7s
**SFJD Kangerlussuaq** 54.84 23⇑ *i*P P 03 35 41.4 -0.3
SFJD *i* 03 36 44.2
SFJD MLR MLR
comp=Z,26µm,18.0s
**SFJD Kangerlussuaq** 54.84 23⇑ *i*P P 03 35 41.4 -0.3
SFJD *i* 03 36 44.2
comp=Z,26µm,18.0s
**SFJD Kangerlussuaq** 54.84 23 *e*P P 03 35 41.6 -0.1
comp=Z,263nm,1.3s
SFJD *e*ScP ScP 03 40 42.3 +2.0
SFJD LR LR
comp=Z,23µm,19.0s
**128A Castleberry Fa** 54.96 80 P P 03 35 43.0 -0.2
baz=55,SNR=30
**R35A Emporia Munici** 54.96 71 P P 03 35 42.5 -0.6
baz=55,SNR=26
**Q36A Arnold C. Orve** 54.98 70 P P 03 35 42.2 -1.0
baz=55
**V32A Arapaho** 54.98 75 P P 03 35 43.2 -0.1
baz=55,SNR=12
**Z29A Hungry Hill Ra** 55.01 79 P P 03 35 43.2 -0.3
baz=55,SNR=25
**U33A Lingo Farm, Me** 55.07 74 P P 03 35 43.1 -0.8
baz=55,SNR=12
**Y30A Stafford Cattl** 55.09 78 P P 03 35 44.3 +0.2
baz=55,SNR=15
**X31A McDonald Ranch** 55.14 76 P P 03 35 44.5 +0.1
baz=55,SNR=15
**T34A McClaskey Farm** 55.23 72 P P 03 35 44.3 -0.7
baz=55,SNR=35
**228A UT Block 9, Go** 55.24 81 P P 03 35 44.8 -0.5
baz=55,SNR=9.2
**W32A Sentinel** 55.26 76 P P 03 35 45.6 +0.4
baz=55,SNR=40
**S35A Otter Creek Ra** 55.31 71 P P 03 35 44.7 -0.9
baz=55,SNR=45
**129A Stewart Farms,** 55.34 80 P P 03 35 45.5 -0.4
baz=55,SNR=14
**Z30A Sanderson Ranc** 55.35 78 P P 03 35 45.9 -0.1
baz=55,SNR=37

**R36A Gordon, Harris** 55.37 70 P P 03 35 45.4 -0.7
baz=55,SNR=71
**V33A Lossen Ranch,** 55.37 74 P P 03 35 45.6 -0.5
baz=55,SNR=15
**JFWS Jewell Farm** 55.39 63 *e*P P 03 35 44.8 -1.3
JFWS *e*S S 03 43 31.3 +2.5
JFWS pmax pmax
comp=Z,188nm,0.8s
JFWS MLR MLR
comp=Z,51µm,21.0s
**JFWS Jewell Farm** 55.39 63 *e*P P 03 35 44.8 -1.3
comp=Z,188nm,0.8s
JFWS *e*ScP ScP 03 40 43.0 -0.2
JFWS *e*S S 03 43 31.3 +2.5
JFWS LR LR
comp=Z,51µm,21.0s
**U34A Anderson Ranch** 55.41 73 P P 03 35 46.0 -0.4
baz=55,SNR=28
**U34A Anderson Ranch** 55.41 73 *e*P P 03 35 46.1 -0.2
comp=Z,355nm,1.1s
U34A LR LR
comp=Z,14µm,19.0s
**Y31A Rekieta Farm,** 55.42 77 P P 03 35 45.9 -0.6
baz=55,SNR=14
**SSLB Suanglung** 55.48 266 *e*P P 03 35 47.6 +0.6
comp=Z,472nm,0.9s
SSLB *e*S S 03 43 31.0 +0.4
SSLB LR LR
comp=Z,19µm,22.0s
**YULB Yu-li** 55.55 265 *e*P P 03 35 45.8 -1.7
comp=Z,411nm,1.2s
YULB LR LR
comp=Z,16µm,22.0s
**ZAA0 Zalesovo Array** 55.62 315 *e*P P 03 35 45.6 -1.9
**ZALV Zalesovo Beam** 55.62 315 P P 03 35 46.1 -1.4
comp=Z,13nm,0.5s,baz=54,slow=5.9,SNR=36
ZALV PcP PcP 03 36 46.9 0.0
comp=Z,53nm,0.8s,baz=31,slow=4.8,SNR=13
ZALV ScP ScP 03 40 45.8 +1.8
comp=Z,7.6nm,0.9s,baz=57,slow=5.3,SNR=2.2
ZALV LR LR 04 01 36.7
comp=Z,55µm,19.5s,baz=44,slow=38
**Q37A Longview Farm,** 55.63 69 P P 03 35 46.2 -1.6
baz=56,SNR=12
**X32A Elmer** 55.71 76 P P 03 35 48.4 -0.1
baz=56,SNR=14
**T35A Sooner Cattle** 55.71 72 P P 03 35 47.7 -0.8
baz=56,SNR=23
**W33A Caddo, Fort Co** 55.71 75 P P 03 35 49.0 +0.5
baz=56,SNR=28
**NVS Novosibirsk** 55.71 317⇑ *i*P P 03 35 46.8 -1.4
NVS *i* 03 36 47.2
NVS *i* S S 03 43 23.6 -9.2
NVS *i* 03 45 35.8
NVS pmax pmax
comp=N,454nm,2.5s
NVS pmax pmax
comp=Z,1µm,2.5s
NVS smax smax
comp=N,700nm,3.1s
NVS smax smax
comp=E,2µm,3.3s
**S36A Lake Cedric, C** 55.72 71 P P 03 35 47.7 -0.8
baz=56,SNR=16
**R37A Teagarden Farm** 55.78 70 P P 03 35 47.4 -1.5
baz=56,SNR=18
**WMOK Wichita Mounta** 55.80 76 *e*P P 03 35 48.6 -0.6
WMOK pmax pmax
comp=Z,238nm,1.1s
WMOK MLR MLR
comp=Z,22µm,19.0s
**WMOK Wichita Mounta** 55.80 76 *e*P P 03 35 48.6 -0.6
comp=Z,238nm,1.1s
WMOK LR LR
comp=Z,22µm,19.0s
**XAN Xi'an** 55.80 283 P P 03 35 48.9 -0.3
XAN pP pP 03 35 55.0 -1.8
XAN sP sP 03 35 57.8 -1.9
XAN PP PP 03 37 55.1 +1.6
XAN S S 03 43 33.9 -0.8
XAN sS sS 03 43 44.0 -3.2
XAN SS SS 03 47 19.6 -0.3
XAN PMZ
comp=Z,620nm,1.5s
XAN PMZ
comp=Z,7µm,9.3s
XAN LN
comp=Z,14µm,17.4s
XAN LE
comp=Z,17µm,17.4s
XAN LZ
comp=Z,18µm,22.6s
**229A Bryant Ranch,** 55.83 80 P P 03 35 49.2 -0.2
baz=56
**V34A Guthrie** 55.83 74 P P 03 35 48.8 -0.5
baz=56,SNR=36
**Y32A R-V Farms, Ver** 55.89 77 P P 03 35 49.5 -0.3
baz=56,SNR=37
**130A Snyder** 55.92 79 P P 03 35 49.8 -0.3
baz=56,SNR=11
**Z31A Sharp Cattle R** 55.93 78 P P 03 35 49.7 -0.4
baz=56,SNR=28
**U35A Pawnee** 55.94 73 P P 03 35 49.3 -0.8
baz=56,SNR=20
**T36A Boggs Farm, Ca** 55.99 72 P P 03 35 49.2 -1.2
baz=56,SNR=14
**TPUB Ta-pu** 56.04 265 *e*P P 03 35 51.2 +0.3
comp=Z,1µm,1.9s
TPUB LR LR
comp=Z,24µm,22.0s
**329A Wagon Wheel Ra** 56.05 81 P P 03 35 50.9 -0.1
baz=56,SNR=19
**W34A Bridge Creek,** 56.08 74 P P 03 35 51.3 +0.1
baz=56,SNR=16
**X33A Lawton** 56.10 76 P P 03 35 51.1 -0.2
baz=56,SNR=17
**TWG Pinlang** 56.11 265 *e*P P 03 35 51.0 -0.5
comp=Z,3µm,2.0s
TWG LR LR
comp=Z,30µm,20.0s
**QZH Quanzhou** 56.12 268⇑ *i*P P 03 35 52.9 +1.4
QZH S S 03 43 38.8 -0.2
QZH PMZ
comp=Z,2µm,1.4s
QZH LN
comp=Z,17µm,16.1s
QZH LE
comp=Z,9µm,14.9s
QZH LZ
comp=Z,31µm,20.8s
**S37A Fort Scott** 56.15 70 P P 03 35 50.5 -1.0
baz=56,SNR=80
**131A Roby** 56.22 78 P P 03 35 51.9 -0.3
baz=56,SNR=27
**V35A Meyer Ranch, C** 56.28 73 P P 03 35 52.1 -0.5
baz=56,SNR=16
**230A Sterling City** 56.31 80 P P 03 35 52.5 -0.4
baz=56,SNR=56
**Z32A Haskell** 56.34 77 P P 03 35 52.8 -0.3
baz=56,SNR=56
**Y33A Hilltop Ranch,** 56.39 76 P P 03 35 52.9 -0.4
baz=56,SNR=22
**X34A Smith Ranch, M** 56.47 75 P P 03 35 54.4 +0.5
baz=56,SNR=26
**TX31 Lajitas Ar. Si** 56.49 84 *e*P P 03 35 53.1 -1.2
**TXAR Lajitas Array** 56.49 84 P P 03 35 53.4 -0.9
comp=Z,43nm,0.9s,baz=304,slow=5.0,SNR=173
TXAR LR LR 03 58 07.6
comp=Z,15µm,20.1s,baz=0.0,slow=34
TXAR PKP2bc 04 06 03.3
comp=Z,3.2nm,1.1s,baz=114,slow=5.6,SNR=4.1
**T37A Cheneyville 18** 56.52 71 P P 03 35 53.0 -1.2
baz=56,SNR=44
**U36A Oologah** 56.52 72 P P 03 35 53.6 -0.6
baz=56,SNR=12
**SLBS Sierra La Lagu** 56.58 93 *e*P P 03 35 55.8 +0.9
comp=Z,206nm,1.4s
SLBS LR LR
comp=Z,16µm,18.0s
**330A Mertzon** 56.60 80 P P 03 35 54.3 -0.7
baz=56,SNR=18
**W35A Tecumseh** 56.67 74 P P 03 35 55.3 0.0
baz=56,SNR=57
**429A Davenport Ranc** 56.70 81 P P 03 35 54.7 -1.0
baz=57,SNR=26
**ABTX Abilene, Hawle** 56.71 78 P P 03 35 55.4 -0.3
baz=57,SNR=35

**ABTX Abilene, Hawle** 56.71 78 *e*P P 03 35 55.6 -0.1
comp=Z,2µm,2.5s
ABTX LR LR
comp=Z,26µm,21.0s
**231A Bronte** 56.77 79 P P 03 35 55.0 -1.2
baz=57,SNR=17
**Z33A Whitaker Ranch** 56.80 77 P P 03 35 55.6 -0.7
baz=57,SNR=22
**V36A Jenks** 56.81 73 P P 03 35 55.8 -0.5
baz=57,SNR=23
**TUL1 Tulsa** 56.81 73 P P 03 35 55.7 -0.6
baz=57,SNR=24
**TUL1 Tulsa** 56.81 73 *e*P P 03 35 55.6 -0.6
comp=Z,206nm,1.1s
TUL1 LR LR
comp=Z,18µm,22.0s
**529A Stev Forest Ra** 56.84 82 P P 03 35 56.3 -0.4
baz=57,SNR=42
**U37A Salina** 56.88 72 P P 03 35 56.3 -0.5
baz=57,SNR=53
**Y34A Reagan Ranch,** 56.95 76 P P 03 35 57.0 -0.4
baz=57,SNR=60
**SCO Scoresbysund** 56.96 10 *i* P P 03 35 56.8 -0.1
SCO MLR MLR
comp=Z,26µm,16.0s
**SCO Scoresbysund** 56.96 10 *i* P P 03 35 56.8 -0.1
comp=Z,26µm,16.0s
**430A Baggett Ranch,** 56.99 81 P P 03 35 56.9 -0.8
baz=57,SNR=69
**W36A Wetumka** 57.07 73 P P 03 35 58.2 0.0
baz=57,SNR=33
**X35A Drake** 57.12 75 P P 03 35 58.2 -0.4
baz=57,SNR=61
**331A San Angelo** 57.13 80 P P 03 35 57.9 -0.8
baz=57,SNR=33
**133A Hamilton Ranch** 57.17 78 P P 03 35 58.9 0.0
baz=57,SNR=53
**232A Coleman** 57.21 79 P P 03 35 58.9 -0.4
baz=57,SNR=32
**V37A Hulbert** 57.22 72 P P 03 35 58.6 -0.6
baz=57,SNR=41
**Z34A Collier Ranch,** 57.26 76 P P 03 35 59.3 -0.2
baz=57,SNR=16
**U38A Gravette** 57.29 71 P P 03 35 58.6 -1.1
baz=57,SNR=13
**530A J-C Ranch, Com** 57.37 81 P P 03 35 59.9 -0.5
baz=57,SNR=110
**X36A Centrahoma** 57.38 74 P P 03 36 00.2 -0.2
baz=57,SNR=44
**Y35A Marietta** 57.42 75 P P 03 36 00.8 +0.2
baz=57,SNR=18
**431A Sonora** 57.45 80 P P 03 36 00.3 -0.7
baz=57,SNR=69
**LZH Lanzhou** 57.48 288 ⇑P P 03 36 02.3 +1.1
LZH pP **pP** 03 36 08.0 -0.9
LZH sP **sP** 03 36 10.5 -1.3
LZH PP **PP** 03 38 10.3 +1.8
LZH *e*S **S** 03 43 55.0 -2.1
LZH sS **sS** 03 44 05.0 -4.6
LZH *e*SS **SS** 03 47 43.2 -3.2
LZH PMZ
comp=Z,2µm,1.5s
LZH PMZ
comp=Z,8µm,4.0s
LZH LN
comp=Z,39µm,17.7s
LZH LE
comp=Z,56µm,17.2s
LZH LZ
comp=Z,86µm,18.8s
**HDIL Hopedale** 57.48 64 P P 03 36 00.2 -0.8
baz=57,SNR=34
**HDIL Hopedale** 57.48 64 *e*P P 03 36 00.1 -0.8
comp=Z,389nm,0.9s
HDIL *e*S **S** 03 43 56.8 +0.2
HDIL LR LR
comp=Z,39µm,21.0s
**332A Millersview** 57.50 79 P P 03 36 00.9 -0.4
baz=57,SNR=47
**HAMF Hammerfest** 57.55 353 ⇑*i*P P 03 35 59.5 -1.5
**W37A Quinton** 57.55 73 P P 03 36 01.6 0.0
baz=57,SNR=51
**233A Rising Star** 57.58 78 P P 03 36 01.4 -0.5
baz=57,SNR=28
**GTA Gaotai** 57.59 294 ⇑P P 03 36 01.9 0.0
GTA pP **pP** 03 36 12.0 +2.4
GTA sP **sP** 03 36 16.0 +3.5
GTA PP **PP** 03 38 11.1 +1.7
GTA S **S** 03 43 56.7 -1.7
GTA sS **sS** 03 44 12.2 +1.2
GTA SS **SS** 03 47 47.6 -0.4
GTA PMZ
comp=Z,270nm,2.3s
GTA PMZ
comp=Z,6µm,9.5s
GTA LN
comp=Z,46µm,20.0s
GTA LE
comp=Z,55µm,19.5s
GTA LZ
comp=Z,69µm,20.4s
**JMIC Jan Mayen** 57.61 5 *e*P P 03 35 56.4 -5.0
JMIC *e*S **S** 03 43 57.1 -0.4
**V38A Canehill** 57.67 72 P P 03 36 01.6 -0.8
baz=58,SNR=44
**Z35A Perchaven, San** 57.69 76 P P 03 36 02.0 -0.5
baz=58,SNR=9.1
**134A White-Moore Ra** 57.70 77 P P 03 36 02.5 -0.1
baz=58,SNR=39
**432A Menard** 57.82 80 P P 03 36 02.9 -0.6
baz=58,SNR=12
**531A Rocksprings** 57.85 81 P P 03 36 03.2 -0.6
baz=58,SNR=29
**Y36A Durant** 57.88 75 P P 03 36 04.0 +0.1
baz=58
**X37A Clayton** 57.96 73 P P 03 36 04.2 -0.3
baz=58,SNR=44
**333A Richland Sprin** 58.01 79 P P 03 36 04.4 -0.4
baz=58,SNR=28
**ENH Enshi** 58.04 280 *e*P P 03 36 05.3 +0.2
comp=Z,1µm,2.3s
ENH *e*S **S** 03 44 01.3 -3.0
**234A Clairette** 58.06 77 P P 03 36 04.9 -0.3
baz=58,SNR=35
**JCT Junction City** 58.09 80 *e*P P 03 36 04.7 -0.8
JCT pmax pmax
comp=Z,800nm,2.1s
JCT MLR MLR
comp=Z,25µm,20.0s
**JCT Junction City** 58.09 80 P P 03 36 04.5 -1.0
baz=58,SNR=18
**JCT Junction City** 58.09 80 *e*P P 03 36 04.7 -0.8
comp=Z,800nm,2.1s
JCT LR LR
comp=Z,25µm,20.0s
**KEV Kevo** 58.11 351 *e*P P 03 36 04.7 -0.3
KEV pmax pmax
comp=Z,195nm,1.3s
KEV MLR MLR
comp=Z,19µm,20.0s
**KEV Kevo** 58.11 351 *e*P P 03 36 04.7 -0.3
comp=Z,195nm,1.3s
KEV *e*ScP **ScP** 03 40 54.0 -0.7
KEV LR LR
comp=Z,19µm,20.0s
**135A Vickery Place,** 58.12 77 P P 03 36 05.6 0.0
baz=58,SNR=19
**W38A Poteau** 58.14 72 P P 03 36 05.4 -0.3
baz=58,SNR=46
**Z36A Blue Ridge** 58.22 75 P P 03 36 06.1 -0.2
baz=58,SNR=31
**Y37A Hugo** 58.23 74 P P 03 36 06.5 +0.2
baz=58,SNR=20
**X38A Whitesboro** 58.23 73 P P 03 36 06.2 -0.2
baz=58,SNR=31
**SLM Saint Louis** 58.23 67 *e*P P 03 36 05.8 -0.5
SLM pmax pmax
comp=Z,919nm,1.9s
SLM MLR MLR
comp=Z,27µm,18.0s
**SLM Saint Louis** 58.23 67 *e*P P 03 36 05.8 -0.5
comp=Z,919nm,1.9s
SLM LR LR
comp=Z,27µm,18.0s
**532A Rocksprings** 58.27 80 P P 03 36 05.5 -1.2
baz=58,SNR=24
**433A Art** 58.34 79 P P 03 36 06.4 -0.8
baz=58,SNR=28
**631A Perdido Creek** 58.36 81 P P 03 36 06.1 -1.2
baz=58,SNR=30
**334A Lometa** 58.46 78 P P 03 36 07.7 -0.3
baz=58,SNR=54
**ARA0 ARCESS Array S** 58.47 352 *e*P P 03 36 06.5 -0.9
ARA0 eScP **ScP** 03 40 58.0 +1.7
**ARCES ARCESS Array B** 58.47 352 P P 03 36 05.9 -1.6
comp=Z,40nm,0.8s,baz=0.2,slow=7.4,SNR=51
ARCES PcP **PcP** 03 36 58.5 +0.7
comp=Z,125nm,0.9s,baz=15,slow=5.0,SNR=18
ARCES ScP **ScP** 03 40 58.1 +1.8
comp=Z,34nm,1.0s,baz=28,slow=4.1,SNR=11
ARCES LR LR 04 03 23.7
comp=Z,6µm,18.2s,baz=15,slow=38
**ARE0 ARCESS Array S** 58.47 352 ⇑*i*P P 03 36 06.1 -1.4
ARE0 *e*S **S** 03 44 06.9 -1.9
ARE0 *e*SS **SS** 03 48 06.1 +5.8
**WHTX Lake Whitney** 58.48 77 P P 03 36 08.2 +0.1
baz=58,SNR=42
**SCHQ Schefferville** 58.65 40 P P 03 36 08.2 -0.8
comp=Z,59nm,0.7s,baz=322,slow=7.8,SNR=52
SCHQ LR LR 04 02 42.9
comp=Z,57µm,18.4s,baz=318,slow=37
**SCHQ Schefferville** 58.65 40 *e*P P 03 36 09.0 0.0
comp=Z,422nm,1.6s
SCHQ LR LR
comp=Z,69µm,18.0s
**136A Ennis** 58.72 76 P P 03 36 09.7 0.0
baz=59,SNR=11
**Z37A Pogue Cattle C** 58.77 75 P P 03 36 09.6 -0.4
baz=59,SNR=8.6
**632A Uvalde** 58.78 81 P P 03 36 09.1 -1.2
baz=59,SNR=13
**Y38A Idabel** 58.80 74 P P 03 36 09.8 -0.5
baz=59
**434A Burnet** 58.80 79 P P 03 36 10.1 -0.4
baz=59,SNR=28
**SFIN Scholer Farm** 58.84 63 P P 03 36 10.1 -0.3
baz=59,SNR=46
**SFIN Scholer Farm** 58.84 63 *e*P P 03 36 10.3 -0.1
comp=Z,283nm,0.9s
SFIN *e*S **S** 03 44 16.4 +2.1
SFIN LR LR
comp=Z,45µm,20.0s
**533A Kerrville** 58.85 80 P P 03 36 09.9 -0.8
baz=59,SNR=14
**TRO Tromso** 58.88 354 ⇑*i*P P 03 36 09.4 -0.9
TRO IAmb IAmb 03 36 11.2
comp=Z,69nm,0.8s
TRO *e*S **S** 03 44 12.6 -1.5
**SGCP Mt. Cagua** 58.92 260 *e*P P 03 36 11.7 +0.4
**LVZ Lovozero** 58.98 347 *c i*P P 03 36 09.8 -1.3
LVZ pmax pmax
comp=Z,87nm,0.7s
**LVZ Lovozero** 58.98 347 P P 03 36 09.2 -1.9
comp=Z,715nm,0.7s,SNR=8.2
**LVZ Lovozero** 58.98 347 *e*P P 03 36 09.6 -1.5
comp=Z,84nm,0.7s
LVZ *e*ScP **ScP** 03 40 57.8 -0.9
LVZ LR LR
comp=Z,12µm,19.0s
**335A Moody** 59.00 78 P P 03 36 11.6 -0.1
baz=59,SNR=13
**236A Katherine and** 59.04 76 P P 03 36 12.1 +0.1
baz=59,SNR=24
**MIAR Mount Ida** 59.07 72 *e*P P 03 36 11.7 -0.5
MIAR pmax pmax
comp=Z,410nm,1.3s
MIAR MLR MLR
comp=Z,24µm,20.0s
**MIAR Mount Ida** 59.07 72 P P 03 36 11.7 -0.5
baz=59,SNR=75
**MIAR Mount Ida** 59.07 72 *e*P P 03 36 11.7 -0.5
comp=Z,410nm,1.3s
MIAR LR LR
comp=Z,24µm,20.0s
**137A Heron Place, G** 59.10 75 P P 03 36 11.9 -0.4
baz=59
**Z38A Mt. Pleasant** 59.12 74 P P 03 36 12.2 -0.3
baz=59,SNR=22
**Y39A Lockesburg** 59.18 73 P P 03 36 12.5 -0.4
baz=59,SNR=20
**KTK1 Kautokeino** 59.18 352 *i*P P 03 36 11.3 -1.1
KTK1 IAmb IAmb 03 36 12.6
comp=Z,129nm,1.2s
**633A Saathoff Ranch** 59.19 80 P P 03 36 12.2 -0.9
baz=59,SNR=13
**732A Laxson Ranch,** 59.22 82 P P 03 36 12.9 -0.3
baz=59,SNR=53
**534A Blanco** 59.23 79 P P 03 36 12.4 -0.9
baz=59,SNR=23
**435B Jarrell** 59.25 78 P P 03 36 13.3 -0.2
baz=59,SNR=9.1
**336A Riesel** 59.28 77 P P 03 36 13.7 +0.1
baz=59,SNR=20
**PBMO Poplar Bluff** 59.39 68 *e*P P 03 36 12.7 -1.6
comp=Z,2µm,2.6s
PBMO *e*S **S** 03 44 23.2 +1.6
PBMO LR LR
comp=Z,21µm,18.0s
**OLIL Olney** 59.39 65 *e*P P 03 36 13.6 -0.7
comp=Z,682nm,1.4s
OLIL *e*S **S** 03 44 19.4 -2.1
OLIL LR LR
comp=Z,35µm,20.0s
**AAM Ann Arbor** 59.42 59 *e*P P 03 36 14.8 +0.4
AAM pmax pmax
comp=Z,512nm,1.6s
AAM MLR MLR
comp=Z,25µm,20.0s
**AAM Ann Arbor** 59.42 59 *e*P P 03 36 14.8 +0.4
comp=Z,512nm,1.6s
AAM LR LR
comp=Z,25µm,20.0s
**SIUC Southern Illin** 59.45 67 *e*P P 03 36 14.1 -0.6
comp=Z,600nm,1.8s
SIUC *e*S **S** 03 44 21.4 -0.9
SIUC LR LR
comp=Z,31µm,19.0s
**APA Apatity** 59.46 348 ⇑*i*P P 03 36 13.0 -1.3
APA *i* 03 37 02.0
APA *i* PPP PPP 03 39 57.0
APA *i* S **S** 03 44 19.0 -2.6
APA *i* 03 45 53.0
APA *i* SS **SS** 03 48 12.0 -3.8
APA pmax pmax
comp=Z,6µm,16.0s
APA MLR MLR
comp=Z,37µm,19.0s
**138A Matatall Enter** 59.46 75 P P 03 36 14.8 -0.1
baz=59,SNR=18
**237A Washetta, Mont** 59.48 76 P P 03 36 14.9 -0.1
baz=59,SNR=15
**832A Faith Ranch, C** 59.53 82 P P 03 36 15.0 -0.4
baz=59,SNR=70
**Z39A Irene McRaven,** 59.60 74 P P 03 36 15.9 0.0
baz=59
**733A Divot King Ran** 59.64 81 P P 03 36 16.1 -0.1
baz=60,SNR=26
**UALR University of** 59.64 71 *e*P P 03 36 15.8 -0.3
comp=Z,457nm,1.8s
UALR LR LR
comp=Z,33µm,19.0s
**APYP Conner** 59.70 261 *e*P P 03 36 16.5 -0.2
**436A Wall Ranch, Ga** 59.74 78 P P 03 36 17.2 +0.3
baz=60,SNR=9.9
**634A China Grove, S** 59.76 80 P P 03 36 16.8 -0.1
baz=60
**535A Dale** 59.78 79 P P 03 36 17.0 -0.1
baz=60,SNR=11
**833A Chaparral WMA,** 59.86 81 P P 03 36 17.5 -0.2
baz=60,SNR=12
**PARMO Parma** 59.86 68 *e*P P 03 36 17.5 -0.1
**139A Bunkhouse Ranc** 59.87 74 P P 03 36 17.6 -0.1
baz=60
**238A Jacksonville** 59.90 75 P P 03 36 18.3 +0.4
baz=60,SNR=12
**337A Centerville** 59.91 76 P P 03 36 18.6 +0.6
baz=60,SNR=6.2
**BLO Bloomington** 59.98 64 *e*P P 03 36 17.6 -0.8
BLO pmax pmax
comp=Z,265nm,1.1s
BLO MLR MLR
comp=Z,46µm,21.0s
**BLO Bloomington** 59.98 64 *e*P P 03 36 17.6 -0.8
comp=Z,264nm,1.1s
BLO LR LR
comp=Z,46µm,21.0s
**734A La Parita Cree** 60.01 80 P P 03 36 18.8 +0.1
baz=60,SNR=7.8
**536A Bastrop** 60.06 78 P P 03 36 19.6 +0.6
baz=60
**SADO Sadowa** 60.09 55 *e*P P 03 36 19.3 +0.2
comp=Z,2µm,1.8s
SADO LR LR
comp=Z,50µm,19.0s
**437A Phantom Ranch,** 60.10 77 P P 03 36 20.0 +0.7
baz=60
**HBAR Harrisburg** 60.10 69 *e*P P 03 36 19.1 -0.1
**635A Leesville** 60.11 79 P P 03 36 19.5 +0.1
baz=60,SNR=30
**USIN University of** 60.17 66 *e*P P 03 36 19.0 -0.7
comp=Z,457nm,1.1s
USIN LR LR
comp=Z,50µm,18.0s
**ABRA Dolores** 60.19 261 *e*P P 03 36 20.5 +0.5
**GNAR Gosnell** 60.19 69 *e*P P 03 36 19.8 0.0
**PALU Palau** 60.20 241 P P 03 36 20.1 0.0
baz=60,SNR=23
**338A Crockett** 60.24 76 P P 03 36 20.7 +0.5
baz=60
**239A Gary** 60.28 75 P P 03 36 20.6 0.0
baz=60
**NATX Nacogdoches** 60.35 75 P P 03 36 21.1 +0.1
baz=60
**NATX Nacogdoches** 60.35 75 *e*P P 03 36 21.9 +0.9
comp=Z,305nm,1.8s
NATX LR LR
comp=Z,21µm,18.0s
**GLAT Glass** 60.41 68 *e*P P 03 36 22.0 +0.7
**SZP Santa** 60.42 261 *e*P P 03 36 21.8 +0.2
comp=Z,11µm,2.1s
SZP *e*S **S** 03 44 36.0 +0.8
**933A Laredo** 60.44 82 P P 03 36 21.9 +0.2
baz=60,SNR=10
**735A Kenedy** 60.47 80 P P 03 36 22.5 +0.7
baz=60,SNR=7.8
**636A Smothers Creek** 60.49 79 P P 03 36 22.5 +0.6
baz=60,SNR=18
**537A Green Hill Far** 60.52 78 P P 03 36 23.3 +1.1
baz=60
**834A Tilden** 60.52 81 P P 03 36 22.8 +0.6
baz=60,SNR=13
**438A Sam Houston St** 60.56 77 P P 03 36 23.1 +0.6
baz=60,SNR=22
**KURK Kurchatov** 60.60 315 *e*P P 03 36 21.8 -0.6
KURK *e*S **S** 03 44 38.4 +1.7
KURK pmax pmax
comp=Z,6µm,2.3s
KURK MLR MLR
comp=Z,129µm,19.0s
**KURK Kurchatov** 60.60 315 P P 03 36 22.1 -0.3
SNR=266
**KURK Kurchatov** 60.60 315 P P 03 36 22.6 +0.2
comp=Z,2µm,0.6s
**KURK Kurchatov** 60.60 315 *e*P P 03 36 21.8 -0.6
comp=Z,6µm,2.3s
KURK *e*S **S** 03 44 38.4 +1.7
KURK LR LR
comp=Z,129µm,19.0s
**UTMT University of** 60.60 68 *e*P P 03 36 22.9 +0.2
comp=Z,1µm,1.6s
**HALT Halls** 60.62 68 *e*P P 03 36 23.1 +0.3
**LOF Lofoten** 60.66 356 *e*P P 03 36 20.0 -2.5
**339A Huntington** 60.71 76 P P 03 36 23.7 +0.3
baz=61
**GZH Guangzhou** 60.76 271 ⇑*i*P P 03 36 19.2 -4.7
GZH sP sP 03 36 26.5 -8.0
GZH S **S** 03 44 34.3 -5.1
**GZH Guangzhou** 60.76 271 SS SS 03 48 36.2 -1.9
GZH LR LR
comp=N,10µm,16.5s
GZH LR LR
comp=E,31µm,17.7s
**WCI Wyandotte Cave** 60.77 64 *e*P P 03 36 22.9 -0.9
WCI pmax pmax
comp=Z,512nm,0.8s
**WCI Wyandotte Cave** 60.77 64 *e*P P 03 36 22.9 -0.9
comp=Z,512nm,0.8s
**STEI Steigen** 60.78 355 *e*P P 03 36 23.3 -0.1
**HKC Hong Kong Obse** 60.81 270 ⇑*i*P P 03 36 24.0 -0.2
**MET Memphis--Engin** 60.83 69 *e*P P 03 36 25.1 +1.0
comp=Z,3µm,1.9s
MET LR LR
comp=Z,22µm,19.0s
**736A Circle Diamond** 60.85 79 P P 03 36 25.6 +1.2
baz=61,SNR=19
**835A Beeville** 60.85 80 P P 03 36 25.5 +1.0
baz=61,SNR=10
**HKT Hockley** 60.91 78 *e*P P 03 36 24.7 0.0
HKT MLR MLR
comp=Z,26µm,20.0s
**HKT Hockley** 60.91 78 *e*P P 03 36 24.6 0.0
HKT LR LR
comp=Z,26µm,20.0s
**NRS Narsarsuaq** 60.91 25 *i* P P 03 36 23.2 -1.2
NRS pmax pmax
comp=Z,280nm,1.6s
NRS MLR MLR
comp=Z,31µm,16.0s
**NRS Narsarsuaq** 60.91 25 *i* P P 03 36 23.2 -1.2
comp=Z,277nm,1.6s
comp=Z,31µm,16.0s
**934A Benavides** 60.92 81 P P 03 36 26.0 +1.1
baz=61,SNR=34
**538A Harpers Horsep** 60.92 77 P P 03 36 26.3 +1.4
baz=61
**637A Eagle Lake** 60.96 78 P P 03 36 26.1 +1.0
baz=61
**439A Center Grove,** 60.96 76 P P 03 36 25.8 +0.6
baz=61,SNR=9.9
**340A Bronson** 61.06 75 P P 03 36 25.8 0.0
baz=61,SNR=35
**BALP Baler** 61.11 259 *e*P P 03 36 26.5 +0.2
**CD2 Chengdu** 61.11 284 ⇑*i*P P 03 36 26.9 +0.6
CD2 pP **pP** 03 36 30.4 -3.5
CD2 PP **PP** 03 38 38.0 -2.7
CD2 PcS **PcS** 03 41 09.9 -2.1
CD2 S **S** 03 44 41.0 -2.9
CD2 sS **sS** 03 44 52.3 -4.2
CD2 SS **SS** 03 48 41.6 -1.8
CD2 PMZ
comp=Z,540nm,1.1s
CD2 PMZ
comp=Z,9µm,5.0s
CD2 LN
comp=Z,23µm,16.0s
CD2 LE
comp=Z,25µm,18.0s
CD2 LZ
comp=Z,25µm,16.0s
**WMQ Urumqi** 61.17 305 ⇑*i*P P 03 36 26.5 0.0
WMQ pP **pP** 03 36 33.5 -0.7
WMQ sP **sP** 03 36 35.9 -1.2
WMQ PcP **PcP** 03 37 10.0 +0.8
WMQ PP **PP** 03 38 45.0 +4.1
WMQ ScP **ScP** 03 41 07.0 -1.9
WMQ S **S** 03 44 43.0 -1.4
WMQ ScS **SKKSac** 03 46 14.0 -1.9
WMQ SS **SS** 03 48 44.6 +0.8
WMQ PMZ
comp=Z,430nm,1.4s
WMQ PMZ
comp=Z,4µm,6.2s
WMQ LN
comp=Z,51µm,20.0s
WMQ LE
comp=Z,37µm,19.0s
WMQ LZ
comp=Z,56µm,19.0s
**PVCP Virac** 61.19 255 *e*P P 03 36 28.6 +1.7
**034A Hebbronville** 61.20 82 P P 03 36 27.6 +0.8
baz=61,SNR=14
**ACSO Alum Creek Sta** 61.21 61 *e*P P 03 36 25.9 -0.9
comp=Z,260nm,1.2s
ACSO LR LR
comp=Z,33µm,20.0s
**KVTX Kingsville** 61.34 81 *e*P P 03 36 30.9 +3.1
comp=Z,143nm,0.8s
KVTX LR LR
comp=Z,17µm,18.0s
**WVT Waverly** 61.35 67 *e*P P 03 36 26.9 -0.8

WVT eS **S** 03 44 46.2 -0.5
WVT pmax pmax
comp=Z,2µm,2.8s
WVT MLR MLR
comp=Z,24µm,18.0s
**WVT Waverly** 61.35 67 eP **P** 03 36 26.9 -0.8
comp=Z,2µm,2.8s
WVT eS **S** 03 44 46.2 -0.5
WVT LR LR
comp=Z,24µm,18.0s
**737A Port Lavaca** 61.37 79 P **P** 03 36 29.6 +1.6
baz=61
**539A Cross D Ranch,** 61.47 77 P **P** 03 36 29.9 +1.2
baz=61
**440A Kirbyville** 61.49 76 P **P** 03 36 29.4 +0.6
baz=61
**ERPA Erie** 61.50 57 eP **P** 03 36 29.8 +1.1
comp=Z,2µm,1.9s
ERPA LR LR
comp=Z,33µm,19.0s
**OXF Oxford** 61.56 70 eP **P** 03 36 29.0 -0.2
OXF eS **S** 03 44 50.4 +1.0
OXF pmax pmax
comp=Z,577nm,1.0s
OXF MLR MLR
comp=Z,18µm,20.0s
**OXF Oxford** 61.56 70 eP **P** 03 36 29.0 -0.2
comp=Z,577nm,1.0s
OXF eS **S** 03 44 50.4 +1.0
OXF LR LR
comp=Z,18µm,20.0s
**BOLP Bolinao** 61.65 261 eP **P** 03 36 29.9 0.0
**035A Encino** 61.65 82 P **P** 03 36 30.7 +0.8
baz=62,SNR=12
**CHKZ Chkalovo** 61.71 322 P **P** 03 36 28.7 -1.2
CHKZ pmax pmax
comp=Z,387nm,1.6s
**MK31 Makanchi Array** 61.74 310 *i* P **P** 03 36 29.3 -1.0
MK31 pmax pmax
comp=Z,319nm,1.2s
**MKAR Makanchi Array** 61.74 310 P **P** 03 36 29.3 -1.0
comp=Z,62nm,0.7s,baz=54,slow=6.2,SNR=126
MKAR LR LR 04 05 40.4
comp=Z,30µm,18.6s,baz=34,slow=38
**MKAR Makanchi Array** 61.74 310 P **P** 03 36 29.3 -1.0
MKAR pmax pmax
comp=Z,63nm,0.7s
MKAR MLR MLR
comp=Z,30µm,18.6s
**MK01 Makanchi Array** 61.75 310 eP **P** 03 36 28.6 -1.7
MK01 eS **S** 03 44 51.8 +0.1
**936A North Padre Is** 61.80 81 P **P** 03 36 31.6 +0.8
baz=62
**738A Farr-Stevens R** 61.81 78 P **P** 03 36 32.1 +1.2
baz=62
**540A Vidor** 61.85 76 P **P** 03 36 32.3 +1.1
baz=62
**MAKZ Makanchi** 61.88 311 eP **P** 03 36 28.6 -2.6
MAKZ LR LR
comp=Z,84µm,18.0s
**TMCR Tamitsa** 61.93 344 eP **P** 03 36 30.2 -1.0
TMCR eS **S** 03 44 54.0 +0.8
TMCR pmax pmax
comp=Z,133nm,1.4s
**GQP Guinayangan** 61.99 257⇑ eP **P** 03 36 32.6 +0.4
**035Z Hargill** 62.01 82 P **P** 03 36 32.5 +0.2
baz=62,SNR=11
**MMNY Mt. Morris Dam** 62.16 56 eP **P** 03 36 33.9 +0.8
comp=Z,2µm,1.7s
MMNY LR LR
comp=Z,36µm,18.0s
**VOSK Vostochnaya** 62.30 321 P **P** 03 36 32.7 -1.2
VOSK pmax pmax
comp=Z,371nm,1.5s
**BVA0 Borovoye Array** 62.30 322 *i* P **P** 03 36 33.6 -0.3
BVA0 pmax pmax
comp=Z,505nm,1.5s
**KONS Konsvik** 62.31 356 eP **P** 03 36 33.8 +0.2
**BRVK Borovoye** 62.31 322 *c i*P **P** 03 36 33.8 -0.2
BRVK pmax pmax
comp=Z,703nm,2.5s
BRVK MLR MLR
comp=Z,102µm,19.0s
**BRVK Borovoye** 62.31 322 P **P** 03 36 33.9 -0.1
comp=Z,1µm,0.7s,SNR=94
**BRVK Borovoye** 62.31 322 P **P** 03 36 33.7 -0.2
SNR=130
**BRVK Borovoye** 62.31 322 eP **P** 03 36 33.8 -0.2
comp=Z,460nm,1.4s
BRVK LR LR
comp=Z,107µm,20.0s
**FLOS Flostrand** 62.46 356 eP **P** 03 36 35.3 +0.6
**STOK Stokkvaagen** 62.48 356 eP **P** 03 36 34.1 -0.8
**GYA Guiyang** 62.49 279⇑ *i*P **P** 03 36 35.6 -0.1
GYA sP **sP** 03 36 45.0 -1.3
GYA PcP **PcP** 03 37 15.6 +0.8
GYA PP **PP** 03 38 56.0 +3.0
GYA ScP **ScP** 03 41 17.9 +2.8
GYA S **S** 03 45 01.2 -0.4
GYA SS **SS** 03 49 04.6 -0.7
GYA PMZ
comp=Z,370nm,1.0s
GYA PMZ
comp=Z,7µm,10.6s
GYA LN
comp=Z,19µm,20.2s
GYA LE
comp=Z,24µm,18.9s
GYA LZ
comp=Z,22µm,21.4s
**BORG Borgarnes** 62.50 12 P **P** 03 36 34.9 -0.1
comp=Z,68nm,0.7s
**BORG Borgarnes** 62.50 12 *i* P **P** 03 36 37.0 +2.0
**BORG Borgarnes** 62.50 12 P **P** 03 36 36.0 +1.0
comp=Z,698nm,0.9s,SNR=10
**BORG Borgarnes** 62.50 12 eP **P** 03 36 36.4 +1.4
comp=Z,139nm,0.9s
BORG LR LR
comp=Z,19µm,18.0s
**LONY Lake Ozonia** 62.50 52 eP **P** 03 36 34.2 -1.2
comp=Z,69nm,0.6s
LONY LR LR
comp=Z,42µm,18.0s
**VBMS Vicksburg** 62.52 72 P **P** 03 36 35.4 -0.2
baz=62,SNR=20
**VBMS Vicksburg** 62.52 72 PFAKE 03 36 50.0 +14
VBMS LR LR
comp=Z,36µm,18.0s
**MOR8 Moi Rana** 62.58 356 eP **P** 03 36 33.9 -1.6
MOR8 IAmb IAmb 03 36 35.0
comp=Z,74nm,1.0s
**PLP Palo** 62.59 253⇓ eP **P** 03 36 33.7 -2.6
**SVE Sverdlovsk** 62.77 329 *d i*P **P** 03 36 37.2 +0.3
SVE *e* 03 37 16.2
SVE *e* 03 39 00.7
SVE ePPP PPP 03 40 32.7
SVE eS **S** 03 45 02.2 -1.8
SVE *e* 03 46 21.7
SVE eSS **SS** 03 49 03.7 -4.3
SVE *e* 03 51 48.8
SVE pmax pmax
comp=Z,229nm,2.5s
SVE pmax pmax
comp=Z,6µm,18.4s
SVE MLR MLR
comp=N,31µm,19.0s
SVE MLR MLR
comp=E,33µm,18.0s
SVE MLR MLR
comp=Z,55µm,18.0s
**FRNY Flat Rock** 62.83 52 eP **P** 03 36 36.6 -1.0
comp=Z,62nm,0.8s
**SWET Sewanee** 63.09 67 eP **P** 03 36 38.1 -1.4
comp=Z,131nm,1.7s
SWET LR LR
comp=Z,33µm,20.0s
**MCWV Mont Chateau** 63.32 59 eP **P** 03 36 41.0 +0.1
comp=Z,586nm,1.7s
MCWV LR LR
comp=Z,19µm,18.0s
**OTRP Odiongan** 63.44 256 eP **P** 03 36 43.5 +1.6
**MSLP Maasin** 63.48 252 eP **P** 03 36 42.7 +0.6
**TZTN Tazewell** 63.50 64 eP **P** 03 36 41.9 -0.3
comp=Z,2µm,2.1s
**BINY Binghamton** 63.53 55 eP **P** 03 36 42.7 +0.4
comp=Z,3µm,1.6s
BINY LR LR
comp=Z,31µm,18.0s
**RCP Roxas** 63.63 255⇑ eP **P** 03 36 44.1 +1.0
**MDV Middlebury** 63.64 52 eP **P** 03 36 42.3 -0.6
**SSPA Standing Stone** 63.67 57 eP **P** 03 36 43.0 -0.2
comp=Z,863nm,0.6s
**CPCT Cooper Cave** 63.73 66 eP **P** 03 36 43.0 -0.7
**ARU Arti** 63.75 330 *c i*P **P** 03 36 43.0 -0.5
ARU 03 37 17.1
ARU 03 39 03.5
ARU PPP PPP 03 40 35.3
ARU S **S** **03 45 17.2 +0.9**
ARU 03 46 26.7
ARU SS **SS** **03 49 22.8 -0.5**
ARU pmax pmax
comp=Z,259nm,2.5s
ARU pmax pmax
comp=Z,3µm,11.4s
ARU MLR MLR
comp=Z,31µm,18.0s
**ARU Arti** 63.75 330 P **P** 03 36 43.2 -0.3
comp=Z,544nm,0.6s,SNR=27
**ARU Arti** 63.75 330 eP **P** 03 36 42.8 -0.7
comp=Z,189nm,1.2s
ARU LR LR
comp=Z,28µm,18.0s
**ACCN Adirondack Com** 63.85 53 eP **P** 03 36 44.1 -0.2
comp=Z,549nm,1.8s
ACCN LR LR
comp=Z,20µm,18.0s
**TKL Tuckaleechee C** 64.01 65 eP **P** 03 36 45.3 -0.2
**TKL Tuckaleechee C** 64.01 65 eP **P** 03 36 45.3 -0.2
**LBNH Lisbon** 64.08 51 PFAKE 03 37 00.0 +14
LBNH LR LR
comp=Z,43µm,18.0s
**KSPA Keystone Colle** 64.11 55 PFAKE 03 37 00.0 +14
KSPA LR LR
comp=Z,42µm,18.0s
**HNR Honiara** 64.20 207 PFAKE 03 37 00.0 +13
HNR LR LR
comp=Z,18µm,20.0s
**NSS Namsos** 64.32 357⇑ *i*P **P** 03 36 44.6 -2.5
NSS IAmb IAmb 03 36 47.5
comp=Z,159nm,1.3s
NSS eS **S** 03 45 21.7 -1.4
**TRY Troy** 64.32 53 eP **P** 03 36 48.0 +0.6
comp=Z,546nm,1.7s
TRY LR LR
comp=Z,38µm,19.0s
**GUIM Jordan** 64.45 254 eP **P** 03 36 48.8 +0.2
**PKME Peaks-Kenny Pk** 64.58 49 eP **P** 03 36 49.4 +0.3
comp=Z,420nm,1.4s
PKME LR LR
comp=Z,49µm,18.0s
**KLMR Klimovskoe** 64.71 342 *c i*P **P** 03 36 48.4 -1.3
KLMR *e* 03 37 19.7
KLMR pmax pmax
comp=Z,135nm,1.3s
KLMR pmax pmax
comp=Z,2µm,3.7s
**BLA Blacksburg** 64.77 62 eP **P** 03 36 51.0 +0.5
BLA pmax pmax
comp=Z,4µm,2.6s
BLA MLR MLR
comp=Z,40µm,20.0s
**BLA Blacksburg** 64.77 62 eP **P** 03 36 51.0 +0.5
comp=Z,4µm,2.6s
BLA LR LR
comp=Z,40µm,20.0s
**WVL Waterville** 64.93 49 eP **P** 03 36 51.4 0.0
comp=Z,770nm,1.6s
WVL LR LR
comp=Z,63µm,18.0s
**MVL Millersville** 64.94 57 eP **P** 03 36 51.6 +0.1
comp=Z,560nm,1.9s
MVL LR LR
comp=Z,19µm,20.0s
**VWCC Virginia Weste** 64.99 61 eP **P** 03 36 51.8 -0.1
**LUPA Lehigh Univers** 65.01 56 eP **P** 03 36 52.5 +0.5
comp=Z,2µm,1.8s
LUPA LR LR
comp=Z,30µm,19.0s
**AFI Afiamalu** 65.05 176 PFAKE 03 37 10.0 +18
AFI LR LR
comp=Z,16µm,18.0s
**ODNJ Ogdensburg** 65.05 55 eP **P** 03 36 52.6 +0.4
comp=Z,777nm,1.5s
ODNJ eS **S** 03 45 36.7 +3.9
ODNJ LR LR
comp=Z,30µm,18.0s
**SDMD Soldier's Deli** 65.11 58 eP **P** 03 36 52.6 0.0
comp=Z,475nm,1.8s
SDMD LR LR
comp=Z,23µm,18.0s
**BUKP Musuan** 65.15 250 eP **P** 03 36 54.2 +1.0
**JAY Jayapura** 65.36 230 LR LR 04 09 02.7
comp=Z,3µm,18.2s,baz=12,slow=39
**JAY Jayapura** 65.36 230 P **P** 03 36 54.4 -0.1
baz=65,SNR=27
**JAY Jayapura** 65.36 230 P **P** 03 36 54.4 -0.1
comp=Z,1µm,2.0s,comp=Z,29µm
**BRNJ Basking Ridge** 65.37 55 eP **P** 03 36 54.6 +0.4
comp=Z,2µm,1.6s
BRNJ LR LR
comp=Z,32µm,20.0s
**BRAL Brewton** 65.44 71 eP **P** 03 36 54.8 -0.1
comp=Z,327nm,1.0s
BRAL LR LR
comp=Z,20µm,21.0s
**PAL Palisades** 65.47 55 eP **P** 03 36 55.4 +0.5
PAL pmax pmax
comp=Z,1µm,1.6s
PAL MLR MLR
comp=Z,36µm,18.0s
**PAL Palisades** 65.47 55 eP **P** 03 36 55.4 +0.5
comp=Z,1µm,1.6s
PAL LR LR
comp=Z,36µm,18.0s
**DAV Davao City (W)** 65.49 249⇑ *i*P **P** 03 36 55.1 -0.3
**HRV Adam Dziewonsk** 65.54 52 eP **P** 03 36 55.1 -0.3
HRV pmax pmax
comp=Z,236nm,1.1s
HRV MLR MLR
comp=Z,39µm,18.0s
**HRV Adam Dziewonsk** 65.54 52 eP **P** 03 36 55.1 -0.3
comp=Z,236nm,1.1s
HRV LR LR
comp=Z,39µm,18.0s
**CPNY Central Park** 65.60 55 eP **P** 03 36 55.7 0.0
comp=Z,2µm,1.6s
CPNY LR LR
comp=Z,32µm,18.0s
**TBLU Trondheim** 65.66 357⇑ *i*P **P** 03 36 54.2 -1.5
TBLU IAmb IAmb 03 36 55.7
comp=Z,364nm,1.3s
**GENI Genyem** 65.68 230 P **P** 03 36 57.3 +0.8
comp=Z,262nm,1.8s,comp=Z,12µm
**CBN Corbin** 65.70 59 eP **P** 03 36 57.2 +0.8
comp=Z,2µm,2.4s
CBN LR LR
comp=Z,40µm,18.0s
**YLE Yale** 65.73 54 eP **P** 03 36 57.2 +0.6
comp=Z,2µm,2.3s
YLE LR LR
comp=Z,40µm,18.0s
**KMSC Kings Mountain** 65.76 64 P **P** 03 36 56.7 -0.2
baz=66,SNR=94
**KMSC Kings Mountain** 65.76 64 eP **P** 03 36 56.7 -0.2
comp=Z,3µm,2.4s
KMSC LR LR
comp=Z,48µm,21.0s
**GOGA Godfrey** 65.80 66 eP **P** 03 36 56.0 -1.1
GOGA pmax pmax
comp=Z,138nm,1.0s
GOGA MLR MLR
comp=Z,34µm,20.0s
**GOGA Godfrey** 65.80 66 eP **P** 03 36 56.0 -1.1
comp=Z,138nm,1.0s
GOGA LR LR
comp=Z,34µm,20.0s
**EMMW East Machias** 65.86 48 eP **P** 03 36 57.5 +0.2
comp=Z,2µm,1.7s
EMMW LR LR
comp=Z,67µm,18.0s
**SMPI Sarmi** 65.87 232 P **P** 03 36 58.4 +0.6
comp=Z,84nm,1.8s,comp=Z,15µm
**KMI Kunming** 65.89 280 P **P** 03 36 58.4 +0.3
KMI pP **pP** 03 37 07.0 +1.1
KMI PP **PP** 03 39 24.1 +1.1
KMI S **S** 03 45 43.8 -0.1
KMI sS **sS** 03 46 00.1 +3.5
KMI PMZ
comp=Z,320nm,2.0s
KMI PMZ
comp=Z,9µm,4.9s
KMI LN
comp=Z,14µm,18.2s
KMI LE
comp=Z,10µm,19.7s
KMI LZ
comp=Z,14µm,17.2s
**QIZ Qiongzhong** 65.95 271 P **P** 03 36 58.2 -0.1
QIZ pP **pP** 03 37 05.1 -0.9
QIZ sP **sP** 03 37 06.6 -2.3
QIZ S **S** 03 45 44.5 +0.2
QIZ sS **sS** 03 46 01.6 +4.6
QIZ PMZ
comp=Z,290nm,2.5s
QIZ LN
comp=Z,12µm,21.3s
QIZ LZ
comp=Z,12µm,21.9s
**QIZ Qiongzhong** 65.95 271 eP **P** 03 37 00.3 +2.0
comp=Z,2µm,1.9s
QIZ LR LR
comp=Z,14µm,22.0s
**BRYW Bryant College** 65.99 53 eP **P** 03 36 58.9 +0.6
comp=Z,862nm,1.8s
BRYW LR LR
comp=Z,30µm,19.0s
**URVA University of** 66.08 59 eP **P** 03 36 59.4 +0.5
**PAGZ Pagadian** 66.17 252 eP **P** 03 36 59.6 -0.1
**FINES FINESS Array B** 66.27 349 P **P** 03 36 58.3 -1.4
comp=Z,23nm,0.6s,baz=101,slow=1.4,SNR=55
FINES PKP2bc P'P'bc 04 05 35.4 -8.8
comp=Z,7.8nm,0.9s,baz=149,slow=4.4,SNR=4.5
FINES LR LR 04 09 09.1
comp=Z,15µm,19.2s,baz=18,slow=39
**MOL Molde** 66.41 359⇑ *i*P **P** 03 37 00.0 -0.5
MOL IAmb IAmb 03 37 01.4
comp=Z,208nm,1.1s
**JSC Jenkinsville** 66.42 64 eP **P** 03 37 01.2 0.0
JSC pmax pmax
comp=Z,2µm,2.6s
JSC MLR MLR
comp=Z,40µm,22.0s
**JSC Jenkinsville** 66.42 64 eP **P** 03 37 01.2 0.0
comp=Z,2µm,2.6s
JSC LR LR
comp=Z,40µm,22.0s
**DRLN Deer Lake** 66.63 39 eP **P** 03 37 02.6 +0.4
comp=Z,716nm,1.5s
DRLN LR LR
comp=Z,108µm,18.0s
**AKN Aaknes** 66.81 359⇑ *i*P **P** 03 37 02.6 -0.6
AKN IAmb IAmb 03 37 04.5
comp=Z,295nm,1.2s
AKN eS **S** 03 45 52.4 -1.3
**AAA Alma-Ata** 66.89 311 eP **P** 03 37 05.2 +1.1
AAA eS **S** 03 45 56.3 +1.0
AAA pmax pmax
comp=Z,6µm,2.4s
AAA smax smax
comp=N,8µm,8.1s
AAA MLR MLR
comp=Z,33µm,18.0s
**TIGA Tifton** 67.16 68 P **P** 03 37 05.3 -0.6
baz=67
**TIGA Tifton** 67.16 68 eP **P** 03 37 05.8 -0.1
comp=Z,127nm,1.0s
TIGA LR LR
comp=Z,21µm,18.0s
**TAOE Nuku Hiva Isla** 67.20 142 eS **S** 03 45 57.3 -2.2
comp=Z,18µm,25.4s
**TAOE Nuku Hiva Isla** 67.20 142 eLR LR 03 57 17.3
comp=Z,21µm,21.6s,baz=348
**TAOE Nuku Hiva Isla** 67.20 142 eT T 04 50 27.3
comp=Z,351nm,0.3s
**FOO Floro** 67.41 360⇑ *i*P **P** 03 37 06.1 -0.8
FOO IAmb IAmb 03 37 07.4
comp=Z,177nm,1.4s
**CNNC Cliffs of the** 67.60 61 eP **P** 03 37 09.4 +0.8
comp=Z,2µm,2.5s
CNNC LR LR
comp=Z,42µm,20.0s
**TKM2 Tokmak 2** 67.80 311 P **P** 03 37 10.3 +0.3
SNR=135
**TKM2 Tokmak 2** 67.80 311 PFAKE 03 37 20.0 +10
TKM2 LR LR
comp=Z,30µm,20.0s
**HYA Hoyanger** 67.83 359⇑ *i*P **P** 03 37 08.6 -1.1
HYA IAmb IAmb 03 37 10.5
comp=Z,370nm,1.6s
**NB2 NORSAR Subarra** 67.84 357 P **P** 03 37 09.3 -0.5
comp=Z,283nm,1.4s,baz=5.1,slow=6.5
**NB2 NORSAR Subarra** 67.84 357 P **P** 03 37 09.3 -0.5
baz=5.1,slow=6.5
**NOA NORSAR Array B** 67.84 357 P **P** 03 37 08.3 -1.5
comp=Z,16nm,0.5s,baz=3.4,slow=7.2,SNR=104
NOA LR LR 04 05 10.3
comp=Z,8µm,21.4s,baz=10.0,slow=34
NOA PKP2bc P'P'bc 04 05 28.9 -11
comp=Z,3.8nm,0.9s,baz=176,slow=3.4,SNR=3.3
**NBO02 NORSAR Array S** 67.85 357 eP **P** 03 37 08.4 -1.4
**NHSC New Hope** 67.90 64 eP **P** 03 37 11.0 +0.5
comp=Z,4µm,2.3s
NHSC LR LR
comp=Z,44µm,21.0s
**SUE Sulen** 67.95 360⇑ *i*P **P** 03 37 09.6 -0.7
SUE IAmb IAmb 03 37 11.3
comp=Z,542nm,2.0s
**SLVN Son La** 67.95 277 eP **P** 03 37 12.2 +1.1
**ULHL Ulahol** 68.01 311 P **P** 03 37 11.7 +0.3
SNR=108
**RGRS Roger Stewart** 68.03 65 eP **P** 03 37 12.2 +0.8
**USP Ospenovka** 68.05 312 P **P** 03 37 12.3 +0.9
SNR=20
**CSU Charleston Sou** 68.05 64 eP **P** 03 37 12.0 +0.5
**NC602 NORSAR Array S** 68.14 356⇑ *i*P **P** 03 37 10.1 -1.5
NC602 IAmb IAmb 03 37 12.2
comp=Z,151nm,1.2s
NC602 eS **S** 03 46 08.6 -0.9
**CHMS Chumysh** 68.14 312 P **P** 03 37 13.4 +1.5
SNR=56
**KBK Karagaybulak** 68.31 312 P **P** 03 37 13.7 +0.5
SNR=121
**FRU Bishkek** 68.33 312⇑ *i*P **P** 03 37 14.0 +0.9
FRU *i* 03 37 32.0
FRU *i* 03 46 40.0
FRU *e* 03 50 32.0
FRU pmax pmax
comp=E,3µm,6.0s
FRU pmax pmax
comp=Z,4µm,2.7s
FRU MLR MLR
comp=Z,23µm,17.0s
FRU MLR MLR
comp=N,21µm,17.0s
FRU MLR MLR
comp=E,8µm,17.0s
**ASK Askoy** 68.52 360 eP **P** 03 37 12.9 -1.0
**AAK Ala-Archa** 68.54 312 *c i*P **P** 03 37 14.9 +0.3
AAK pmax pmax
comp=Z,480nm,1.3s
AAK MLR MLR
comp=Z,63µm,18.0s
**AAK Ala-Archa** 68.54 312 P **P** 03 37 15.0 +0.3
comp=Z,1µm,0.7s
**AAK Ala-Archa** 68.54 312 P **P** 03 37 15.2 +0.6
SNR=264
**AAK Ala-Archa** 68.54 312 P **P** 03 37 16.0 +1.3
SNR=19
**AAK Ala-Archa** 68.54 312 eP **P** 03 37 14.7 +0.1
comp=Z,1µm,1.7s
AAK LR LR
comp=Z,30µm,20.0s
**RUND Rundenannen** 68.59 360 eP **P** 03 37 14.7 +0.2
**KZA Kyzart** 68.61 311 P **P** 03 37 17.1 +1.7
SNR=83
**BER Bergen** 68.62 360⇑ *i*P **P** 03 37 13.9 -0.7
BER IAmb IAmb 03 37 15.8
comp=Z,522nm,2.0s
BER eS **S** 03 46 16.0 +0.7

BER eSS SS 03 50 46.0 +7.6
**PMG Port Moresby 68.63 220** c iP **P 03 37 15.0 -0.2**
PMG pmax pmax
comp=Z,969nm,2.5s
**PMG Port Moresby 68.63 220** P **P 03 37 15.6 +0.4**
baz=69,SNR=5.3
**PMG Port Moresby 68.63 220** eP **P 03 37 15.3 +0.1**
comp=Z,968nm,2.2s
PMG LR LR
comp=Z,14µm,20.0s
**WAL1 Walls 68.64** 3⇑eP **P 03 37 14.0 -0.7**
**HFS Hagfors 68.64 355** P **P 03 37 13.3 -1.4**
comp=Z,59nm,0.4s,baz=35,slow=5.3,SNR=7.9
**HFS Hagfors 68.64 355** P **P 03 37 13.3 -1.4**
HFS pmax pmax
comp=Z,59nm,0.4s
**LRW Lerwick 68.77** 3⇑eP **P 03 37 15.5 0.0**
LRW AMB AMB 03 37 16.2
comp=Z,224nm,1.7s
LRW AMS AMS 04 12 46.9
comp=Z,15µm,18.5s
**SWI Sorong 68.78 239** P **P 03 37 16.9 +0.8**
baz=69,SNR=9.6
**SWI Sorong 68.78 239** P **P 03 37 16.2 0.0**
comp=Z,533nm,1.2s,comp=Z,9µm
**UCH Uchtor 68.84 312** P **P 03 37 17.3 +0.4**
SNR=128
**EKS2 Erkin-Say 68.85 312** eP **P 03 37 17.3 +0.8**
EKS2 pmax pmax
comp=Z,1µm,1.7s
EKS2 MLR MLR
comp=Z,27µm,18.0s
**EKS2 Erkin-Say 68.85 312** P **P 03 37 17.5 +1.0**
SNR=47
**EKS2 Erkin-Say 68.85 312** eP **P 03 37 17.2 +0.8**
comp=Z,1µm,1.7s
EKS2 LR LR
comp=Z,27µm,18.0s
**SAN1 Sandwick 68.89** 3⇑eP **P 03 37 16.1 -0.2**
**AKTO Aktyubinsk 68.94 327** P **P 03 37 16.3 -0.5**
AKTO pmax pmax
comp=Z,329nm,1.4s
**OSL Oslo 68.96 357** eP **P 03 37 16.1 -0.6**
OSL IAmb IAmb 03 37 17.8
comp=Z,435nm,1.7s
**MSVF Nonsavu 69.03 187** eP **P 03 37 18.4 +0.8**
MSVF pmax pmax
comp=Z,2µm,2.9s
MSVF MLR MLR
comp=Z,27µm,20.0s
**MSVF Nonsavu 69.03 187** eP **P 03 37 18.4 +0.8**
comp=Z,2µm,2.9s
MSVF LR LR
comp=Z,27µm,20.0s
**VSU Vasula 69.08 348** c iP **P 03 37 16.7 -0.8**
VSU pmax pmax
comp=Z,482nm,1.2s
VSU MLR MLR
comp=Z,49µm,21.0s
**ODD1 Odda 69.09 359** eP **P 03 37 17.4 -0.2**
ODD1 IAmb IAmb 03 37 18.6
comp=Z,148nm,1.1s
**AB31 Akbulak array 69.25 325** P **P 03 37 18.6 -0.1**
AB31 pmax pmax
comp=Z,130nm,0.8s
**ABKAR Akbulak array 69.25 325** eP **P 03 37 18.7 0.0**
**KONO Kongsberg 69.29 357**⇑iP **P 03 37 17.0 -1.8**
KONO IAmb IAmb 03 37 20.1
comp=Z,90nm,0.9s
KONO eS **S 03 46 25.8 +2.6**
**KONO Kongsberg 69.29 357** eP **P 03 37 19.3 +0.5**
KONO pmax pmax
comp=Z,130nm,1.1s
KONO MLR MLR
comp=Z,14µm,21.0s
**KONO Kongsberg 69.29 357** eP **P 03 37 19.3 +0.5**
comp=Z,130nm,1.1s
KONO LR LR
comp=Z,14µm,21.0s
**AML Almayashu 69.30 312** P **P 03 37 20.3 +0.7**
SNR=139
**LSA Lhasa 69.49 292** PFAKE 03 37 30.0 +8.9
LSA LR LR
comp=Z,20µm,19.0s
**TNTI Ternate 69.57 244** eP **P 03 37 21.2 +0.1**
comp=Z,538nm,1.3s
**MNAS Manas 69.57 313** P **P 03 37 21.4 +0.4**
MNAS pmax pmax
comp=Z,427nm,1.6s
**BLS5 Blasjo 69.58 359**⇑iP **P 03 37 19.8 -0.8**
BLS5 IAmb IAmb 03 37 21.6
comp=Z,123nm,1.2s
BLS5 eS **S 03 46 25.1 -1.7**
**KMY Karmoy 69.80 360**⇑iP **P 03 37 21.9 +0.1**
**MOS Moscow 69.84 341** c iP **P 03 37 21.8 -0.4**
MOS e 03 37 45.0
MOS e 03 39 52.1
MOS ePPP PPP 03 41 33.7
MOS eS **S 03 46 26.8 -3.0**
MOS e 03 47 19.4
MOS pmax pmax
comp=Z,179nm,1.6s
MOS pmax pmax
comp=Z,3µm,4.0s
MOS pmax pmax
comp=N,2µm,4.0s
MOS pmax pmax
comp=E,800nm,4.0s
MOS smax smax
comp=E,1µm,4.5s
MOS smax smax
comp=N,900nm,3.7s
**FAKI Fak Fak 69.97 237** P **P 03 37 23.7 +0.1**
baz=70,SNR=16
**FAKI Fak Fak 69.97 237** eP **P 03 37 23.7 +0.1**
comp=N,429nm,1.2s
FAKI LR LR
comp=Z,14µm,22.0s
**KK31 Karatay Array 69.99 315** i P **P 03 37 23.4 0.0**
KK31 pmax pmax
comp=Z,117nm,0.5s
**KKAR Karatay Array 69.99 315** eP **P 03 37 23.1 -0.3**
**KKAR Karatay Array 69.99 315** eP **P 03 37 23.1 -0.3**
**KSH Kashi 70.25 309**⇑iP P 03 37 28.9 +3.7
KSH epP pP 03 37 35.0 +2.0
KSH esP sP 03 37 37.8 +1.9
KSH ePP **PP 03 40 03.6 +3.4**
KSH S **S 03 46 38.8 +3.4**
KSH ScS **ScS 03 47 27.1 +0.8**
KSH PMZ
comp=Z,1µm,1.5s
KSH LN
comp=Z,23µm,18.6s
KSH LE
comp=Z,23µm,15.3s
KSH LZ
comp=Z,33µm,21.6s
**PMOR Pomariorio Ree 70.27 152** eP **P 03 37 25.6 +0.4**
comp=Z,250nm,1.1s
**PMOR Pomariorio Ree 70.27 152** eT T 04 54 16.5
comp=Z,28nm,0.2s
**BIGH Upper Bighouse 70.30 5** eP **P 03 37 25.2 +0.3**
BIGH AMB AMB 03 37 26.0
comp=Z,581nm,1.7s
**RSC Scourie 70.37** 5⇑eP **P 03 37 24.9 -0.5**
**VAH Vaihoa 70.57 152** eP **P 03 37 27.4 +0.4**
comp=Z,165nm,0.9s
**OBN Obninsk 70.64 341** c iP **P 03 37 25.9 -1.2**
OBN e 03 37 47.7
OBN ePPP PPP 03 41 45.0
OBN i S SKiKP 03 46 58.0 -10
OBN pmax pmax
comp=Z,290nm,2.5s
OBN MLR MLR
comp=Z,16µm,21.0s
**OBN Obninsk 70.64 341** P **P 03 37 26.4 -0.7**
comp=Z,336nm,1.1s,SNR=13
**OBN Obninsk 70.64 341** eP **P 03 37 26.5 -0.6**
comp=Z,273nm,1.3s
OBN LR LR
comp=Z,14µm,18.0s
**SNART Snartemo 70.66 359** eP **P 03 37 27.3 +0.1**
**RRH Rhenigidale 70.70** 6⇑eP **P 03 37 26.8 -0.7**
**HOMB Homborsund 70.70 358**⇑iP **P 03 37 26.1 -1.3**
HOMB IAmb IAmb 03 37 28.4
comp=Z,235nm,1.4s
HOMB eS **S 03 46 42.6 +2.9**
**RRR Rubha Reidh 70.82** 6⇑eP **P 03 37 27.5 -0.7**
**MVH1 Achvaich 70.85** 5⇑eP **P 03 37 27.9 -0.4**
**KDM Kudat 70.86 257**⇑P **P 03 37 28.2 -0.8**
**DWPF Disney 70.88 69** eP **P 03 37 27.9 -1.1**
comp=Z,427nm,0.8s
**SFK Sufi-Kurgan 71.05 311** P **P 03 37 30.2 0.0**
SFK pmax pmax
comp=Z,462nm,1.5s
**SKNT Sakolnakorn 71.16 274** P **P 03 37 31.2 +0.4**
comp=Z,722nm,2.0s,comp=Z,10µm
**KAC Achnashellach 71.21** 6⇑eP **P 03 37 30.4 -0.2**
**MYLDM Lahad Datu 71.21 254**⇑P **P 03 37 31.9 +0.8**
**MYLDM Lahad Datu 71.21 254** eP **P 03 37 32.9 +1.7**
comp=Z,7µm,2.9s
**MCD Coleburn Disti 71.24** 5⇑eP **P 03 37 30.5 -0.2**
**MDO Dochfour 71.32** 5⇑eP **P 03 37 30.9 -0.3**
**KPL Plockton 71.34** 6⇑eP **P 03 37 31.4 0.0**
**KSB Sheil Bridge 71.49** 6⇑eP **P 03 37 31.9 -0.3**
**UBPT Khong Chiam 71.50 271** P **P 03 37 33.2 +0.3**
comp=Z,539nm,1.6s,comp=Z,11µm
**MME1 Meikle Cairn 71.52** 4⇑eP **P 03 37 32.0 -0.5**
**SDKM Sandakan 71.64 256**⇑P **P 03 37 34.2 +0.4**
**IZAR Zarasai 71.78 347** eP **P 03 37 33.2 -0.8**
IZAR IAmb IAmb 03 37 34.1
comp=Z,20nm,0.9s
**KKM Kota Kinabalu 71.92 257** P **P 03 37 36.8 +1.3**
baz=72,SNR=24
**KKM Kota Kinabalu 71.92 257**⇑P **P 03 37 34.1 -1.5**
**KKM Kota Kinabalu 71.92 257** eP **P 03 37 36.7 +1.1**
comp=Z,1µm,1.8s
KKM LR LR
comp=Z,12µm,21.0s
**DRUM Mains of Drumt 71.94 4** eP **P 03 37 34.4 -0.5**
DRUM AMB AMB 03 37 35.5
comp=Z,287nm,1.7s
DRUM AMS AMS 04 17 56.3
comp=Z,15µm,18.5s
**ISAL Salakas 71.97 347** eP **P 03 37 34.3 -0.8**
ISAL IAmb IAmb 03 37 35.1
comp=Z,105nm,1.8s
**CMAI Chiengmai2 72.01 279** P **P 03 37 36.6 +0.4**
comp=Z,210nm,1.5s,comp=Z,8µm
**IDID Didziasalis 72.14 347** eP **P 03 37 35.3 -0.8**
IDID IAmb IAmb 03 37 37.2
comp=Z,27nm,1.0s
**SHL Shillong 72.14 289** eP **P 03 37 37.3 +0.4**
**DLV T Lat 72.15 267** eP **P 03 37 37.1 +0.1**
comp=Z,999nm,1.7s
DLV LR LR
comp=Z,7µm,21.0s
**IIGN Ignalina 72.17 347** eP **P 03 37 35.6 -0.8**
IIGN IAmb IAmb 03 37 37.7
comp=Z,52nm,1.3s
**PPT Papeete 72.23 154** LR LR 04 05 59.5
comp=Z,29µm,18.6s,baz=318,slow=33
**PPT2 Papeete2 72.25 154** eP **P 03 37 37.4 +0.2**
comp=Z,120nm,1.4s
PPT2 eS **S 03 46 57.0 -1.6**
comp=Z,15µm,26.0s
PPT2 eSS **SS 03 51 35.1 -2.1**
comp=Z,7µm,25.5s
PPT2 eLR LR 03 59 40.7
comp=Z,32µm,21.2s,baz=345
**PPT2 Papeete2 72.25 154** eT T 04 56 44.6
comp=Z,40nm,0.3s
**TIAR Tiarei 72.28 154** eP **P 03 37 37.6 +0.2**
comp=Z,35nm,1.0s
**TIAR Tiarei 72.28 154** eT T 04 56 46.9
comp=Z,7.0nm,0.3s
**EDU Dundee 72.28** 4⇑eP **P 03 37 36.2 -0.8**
**TSM Tawau 72.29 254**⇑P **P 03 37 37.2 -0.5**
**PAE Paea 72.31 154** eP **P 03 37 37.6 +0.1**
**PAE Paea 72.31 154** eT T 04 56 49.4
comp=Z,8.0nm,0.3s
**PHRA Phrae 72.35 278** P **P 03 37 38.3 +0.3**
comp=Z,1µm,0.9s,comp=Z,51µm
**KHON Khomkaen 72.36 274** P **P 03 37 38.8 +0.7**
comp=Z,219nm,0.8s,comp=Z,2µm
**LOEI Loei 72.45 276** P **P 03 37 36.7 -1.9**
comp=Z,215nm,1.1s,comp=Z,6µm
**LPSR Galich'ya Gora 72.48 339** eP **P 03 37 37.9 -0.4**
LPSR pmax pmax
comp=Z,100nm,0.7s
LPSR pmax pmax
comp=N,40nm,1.3s
LPSR pmax pmax
comp=E,30nm,1.2s
LPSR MLR MLR
comp=E,19µm,17.0s
LPSR MLR MLR
comp=E,12µm,17.0s
LPSR MLR MLR
comp=N,9µm,16.0s
**MUD Monsted U'grnd 72.50 357**⇑iP **P 03 37 38.6 +0.3**
MUD MLR MLR
comp=Z,12µm,22.0s
**MUD Monsted U'grnd 72.50 357**⇑iP **P 03 37 38.6 +0.3**
MUD i S **SKiKP 03 47 10.4 -0.6**
comp=Z,12µm,22.0s
**TVO Taravao 72.52 154** eP **P 03 37 39.1 +0.2**
comp=Z,46nm,1.3s
**TVO Taravao 72.52 154** eT T 04 57 04.9
comp=Z,2.3nm,0.3s
**NACGM Naroch 72.53 347** eP **P 03 37 37.0 -1.5**
**EAB Aberfoyle 72.57** 5⇑eP **P 03 37 38.6 -0.1**
**TEIG Tepich 72.66 79** PFAKE 03 37 50.0 +10
TEIG LR LR
comp=Z,12µm,21.0s
**LAMP Lampang 72.71 278** P **P 03 37 41.1 +1.0**
comp=Z,54nm,0.9s,comp=Z,472nm
**UTTA Uttaradit 72.72 277** P **P 03 37 40.7 +0.5**
comp=Z,180nm,0.8s,comp=Z,1µm
**MICGM Minsk 72.76 346**⇓iP **P 03 37 38.0 -1.9**
**MNK Minsk 72.77 346**⇓iP **P 03 37 38.0 -1.9**
MNK e 03 38 03.0
MNK ePPP PPP 03 42 12.0
MNK eS S 03 46 52.0 -12
MNK ePS **PnS 03 47 30.0 -5.9**
MNK pmax pmax
comp=Z,400nm,1.0s
MNK pmax pmax
comp=Z,6µm,9.0s
MNK MLR MLR
comp=E,20µm,18.0s
MNK MLR MLR
comp=Z,38µm,20.0s
MNK MLR MLR
comp=N,11µm,20.0s
**EDI Edinburgh 72.90 5** eP **P 03 37 40.6 -0.1**
EDI AMB AMB 03 37 42.5
comp=Z,219nm,1.8s
EDI AMS AMS 04 16 24.4
comp=Z,14µm,18.6s
**CHTO Chiang Mai 72.91 279** P **P 03 37 41.3 -0.1**
comp=Z,1µm,1.6s,comp=Z,35µm
**CHTO Chiang Mai 72.91 279** eP **P 03 37 41.5 +0.1**
CHTO pmax pmax
comp=Z,604nm,1.8s
CHTO MLR MLR
comp=Z,12µm,20.0s
**CHTO Chiang Mai 72.91 279** P **P 03 37 41.8 +0.4**
SNR=59
**CHTO Chiang Mai 72.91 279** eP **P 03 37 41.5 +0.1**
comp=Z,604nm,1.8s
CHTO LR LR
comp=Z,12µm,20.0s
**ESY Stoneypath 72.93** 4⇑eP **P 03 37 40.4 -0.5**
**PGBU Glenifferbraes 72.94 5** eP **P 03 37 41.2 +0.3**
PGBU AMB AMB 03 37 42.0
comp=Z,398nm,1.7s
PGBU AMS AMS 04 14 38.0
comp=Z,9µm,17.3s
**VRH Novokhopyorsk 73.11 337** eP **P 03 37 41.9 -0.1**
VRH eS **S 03 47 02.9 -4.8**
VRH pmax pmax
comp=Z,100nm,0.6s
VRH pmax pmax
comp=N,90nm,1.0s
VRH pmax pmax
comp=E,90nm,1.4s
VRH smax smax
comp=E,790nm,5.8s
VRH smax smax
comp=Z,420nm,6.9s
VRH smax smax
comp=N,240nm,1.3s
VRH MLR MLR
comp=N,18µm,17.0s
VRH MLR MLR
comp=Z,29µm,17.0s
VRH MLR MLR
comp=E,14µm,16.0s
**COP Copenhagen 73.14 355**⇑iP **P 03 37 42.2 +0.1**
COP i 03 51 49.4
COP pmax pmax
comp=Z,70nm,0.8s
COP MLR MLR
comp=Z,6µm,20.0s
**COP Copenhagen 73.14 355**⇑iP **P 03 37 42.2 +0.1**
comp=Z,70nm,0.8s
COP i 03 51 49.4
comp=Z,7µm,20.0s
**CMAR Chiang Mai Arr 73.18 279** P **P 03 37 43.5 +0.5**
comp=Z,23nm,0.7s,baz=28,slow=5.2,SNR=84
CMAR LR LR 04 12 30.7
comp=Z,16µm,19.8s,baz=48,slow=38
**CMAR Chiang Mai Arr 73.18 279** P **P 03 37 43.5 +0.5**
CMAR pmax pmax
comp=Z,24nm,0.6s
CMAR MLR MLR
comp=Z,16µm,19.8s
**CM01 Chiang Mai Arr 73.20 279** eP **P 03 37 41.6 -1.5**
**TAPN Taplejung 73.25 293** eP **P 03 37 44.5 +0.9**
comp=Z,7µm,1.5s
**PBKT Sadao Pong 73.34 276** P **P 03 37 44.0 +0.1**
comp=Z,449nm,1.4s,comp=Z,7µm
**ESK Eskdalemuir 73.50 5** eP **P 03 37 44.4 +0.1**
ESK AMB AMB 03 37 46.2
comp=Z,269nm,1.7s
ESK AMS AMS 04 19 54.2
comp=Z,13µm,19.2s
**ESK Eskdalemuir 73.50 5** i P **P 03 37 45.0 +0.7**
**ESK Eskdalemuir 73.50 5** P **P 03 37 44.3 +0.1**
comp=Z,767nm,1.4s,SNR=10.0
**ESK Eskdalemuir 73.50 5** eP **P 03 37 45.0 +0.7**
comp=Z,212nm,1.2s
ESK LR LR
comp=Z,11µm,20.0s
**RAR Rarotonga 73.52 165** PFAKE 03 38 00.0 +15
RAR LR LR
comp=Z,28µm,19.0s
**BSD Bornholm Skovb 73.57 354**⇑iP **P 03 37 44.2 -0.4**
BSD MLR MLR
comp=Z,17µm,23.0s
**BSD Bornholm Skovb 73.57 354**⇑iP **P 03 37 44.2 -0.4**
comp=Z,17µm,23.0s
**BWH Wardlaw 73.62** 5⇑eP **P 03 37 44.7 -0.3**
**ECK Cauldkaine Hil 73.64** 5⇑eP **P 03 37 44.7 -0.4**
**LUWI Luwuk 73.67 247** P **P 03 37 45.7 -0.1**
baz=74,SNR=7.5
**LUWI Luwuk 73.67 247** eP **P 03 37 45.5 -0.3**
comp=Z,1µm,1.3s
**VSR Storozhevoye 73.72 338** eP **P 03 37 45.7 +0.1**
VSR eS **SKiKP 03 47 08.0 -5.0**
VSR pmax pmax
comp=Z,190nm,1.0s
VSR pmax pmax
comp=N,50nm,1.2s
VSR pmax pmax
comp=E,30nm,1.6s
VSR smax smax
comp=N,1µm,7.5s
VSR smax smax
comp=Z,810nm,7.6s
VSR smax smax
comp=E,510nm,2.8s
**BHH Howats Hill 73.72** 5⇑eP **P 03 37 45.5 0.0**
**ODAN Odare 73.81 293** eP **P 03 37 47.6 +0.8**
comp=E,5µm,1.7s
**GAL1 Galloway 73.87** 6⇑eP **P 03 37 46.2 -0.2**
GAL1 AMB AMB 03 37 47.4
comp=Z,239nm,1.5s
**GUN Gumba 73.88 294** eP **P 03 37 48.2 +0.8**
comp=Z,3µm,1.0s
**SUW Suwalki 73.88 349** i P **P 03 37 44.7 -1.8**
SUW eS **SKiKP 03 47 12.3 -0.9**
SUW eSKS ScS 03 48 03.6 +9.3
SUW LMZ LR 04 10 13.7
**SUW Suwalki 73.88 349**⇑iP **P 03 37 44.7 -1.8**
SUW eS **SKiKP 03 47 12.4 -0.8**
SUW e 03 48 03.6
SUW MLR MLR
comp=Z,21µm,22.4s
**GCD Castle Douglas 73.92** 5⇑eP **P 03 37 45.8 -0.9**
**VORD Divnogorie 73.92 338** eP **P 03 37 46.5 -0.3**
VORD eS **SKiKP 03 47 11.4 -1.9**
VORD pmax pmax
comp=E,20nm,0.9s
VORD pmax pmax
comp=Z,140nm,0.9s
VORD pmax pmax
comp=N,50nm,1.1s
VORD smax smax
comp=E,740nm,3.8s
VORD smax smax
comp=Z,120nm,2.8s
VORD smax smax
comp=N,320nm,2.4s
**DZET Dzherino 74.19 313** P **P 03 37 48.7 -0.1**
DZET pmax pmax
comp=Z,1µm,1.5s
**RAMN Ramite 74.19 293** eP **P 03 37 49.8 +0.7**
comp=Z,1µm,0.7s
**APSI Ampana 74.21 248** P **P 03 37 48.4 -0.6**
comp=Z,293nm,1.3s,comp=Z,8µm
**RGN Rugen 74.23 355** eP **P 03 37 49.1 +0.7**
comp=Z,792nm,1.6s,baz=5.3,slow=5.6
**RGN Rugen 74.23 355** eP **P 03 37 49.6 +1.1**
comp=Z,705nm,1.6s
RGN LR LR
comp=Z,18µm,22.0s
**MPSI Mapaga 74.23 250** P **P 03 37 48.8 -0.3**
comp=Z,293nm,2.7s,comp=Z,7µm
**KESW Keswick, Cumbr 74.23** 5⇑eP **P 03 37 49.0 +0.4**
KESW AMB AMB 03 37 50.6
comp=Z,293nm,1.8s
**KKN Kakani 74.31 295** eP **P 03 37 50.5 +0.8**
comp=Z,11µm,2.1s
**COEN Coen 74.38 222** P **P 03 37 50.1 +0.2**
baz=74,SNR=5.1
**COEN Coen 74.38 222** eP **P 03 37 50.0 +0.2**
comp=Z,763nm,2.3s
COEN LR LR
comp=Z,10µm,19.0s
**PKI Pulchoki 74.40 295** eP **P 03 37 51.0 +0.6**
comp=Z,5µm,1.5s
**PKIN Phulchoki 74.41 295** eP **P 03 37 51.1 +0.7**
comp=Z,2µm,1.7s
**GKN Gorkha 74.51 295** eP **P 03 37 51.4 +0.6**
comp=Z,7µm,1.6s
**DMN Daman 74.55 295** eP **P 03 37 52.0 +0.8**
comp=Z,6µm,1.6s
**DANN Dangsing 74.74 296** eP **P 03 37 53.0 +0.7**
comp=Z,2µm,2.1s
**HLG Helgoland 74.81 358** eP **P 03 37 52.6 +0.7**
comp=Z,1µm,1.9s,baz=5.3,slow=5.6
**DZM Mont Dzumac 74.84 198** eP **P 03 37 52.7 +0.3**
comp=Z,172nm,1.1s
DZM eS **S 03 47 25.6 -2.2**
comp=Z,20µm,26.1s
**DZM Mont Dzumac 74.84 198** eLR LR 04 00 39.6
comp=Z,19µm,21.4s
**DZM Mont Dzumac 74.84 198** eP **P 03 37 52.7 +0.3**
comp=Z,83nm,1.0s
**HPK Haverah Park 74.93 4** eP **P 03 37 53.0 +0.4**
HPK AMB AMB 03 37 53.8
comp=Z,321nm,1.7s
HPK AMS AMS 04 17 30.2
comp=Z,14µm,17.9s
**UMPA Umpang Tak 74.94 277** P **P 03 37 55.1 +1.9**
comp=Z,119nm,0.8s,comp=Z,1µm
**BSEG Bad Segeberg 74.98 357** eP **P 03 37 53.3 +0.4**
comp=Z,418nm,1.6s,baz=5.3,slow=5.6
**UTHA Uthaitani 75.06 276** P **P 03 37 54.9 +1.0**
comp=Z,116nm,1.0s,comp=Z,981nm
**GKP Gorka Klasztor 75.22 352** eP **P 03 37 53.5 -0.8**
GKP eS **S 03 47 32.0 +0.6**
GKP LMZ LR 04 12 44.8
**GKP Gorka Klasztor 75.22 352**⇑eP **P 03 37 53.5 -0.8**
GKP eS **S 03 47 32.0 +0.6**
GKP MLR MLR
comp=Z,27µm,21.3s

| | | | | | | |
|---|---|---|---|---|---|---|
| KOLN | Koldanda | 75.28 296 | eP | P | 03 37 55.8 | +0.5 |
| | comp=Z,2µm,1.5s | | | | | |
| LHO | Holmfirth | 75.34 4⇑ | eP | P | 03 37 54.5 | -0.5 |
| DSB | Dublin | 75.37 7 | eP | P | 03 37 55.8 | +0.7 |
| | comp=Z,75nm,0.9s | | | | | |
| DSB | | | LR | LR | | |
| | comp=Z,13µm,18.0s | | | | | |
| WLF1 | Llynfaes | 75.46 6⇑ | eP | P | 03 37 55.2 | -0.4 |
| WLF1 | | | AMS | AMS | 04 17 12.9 | |
| | comp=Z,11µm,18.6s | | | | | |
| DHRM | DHARAMSHALA | 75.76 304 | eP | P | 03 37 58.5 | +0.5 |
| DHRM | | | AMB | AMB | 03 38 01.5 | |
| | comp=Z,742nm,2.2s | | | | | |
| STNC | Stoke | 75.77 4⇑ | eP | P | 03 37 57.8 | +0.3 |
| STNC | | | AMB | AMB | 03 37 59.6 | |
| | comp=Z,361nm,1.6s | | | | | |
| STNC | | | AMS | AMS | 04 17 16.6 | |
| | comp=Z,9µm,19.6s | | | | | |
| FOEL | Foel Wylfa | 75.92 5⇑ | eP | P | 03 37 58.8 | +0.4 |
| FOEL | | | AMB | AMB | 03 37 59.7 | |
| | comp=Z,395nm,1.7s | | | | | |
| BTM | Bintulu | 76.06 257 | ⇑P | P | 03 37 58.4 | -1.3 |
| CWF | Charnwood Fore | 76.17 4 | eP | P | 03 37 59.7 | 0.0 |
| CWF | | | AMS | AMS | 04 18 05.0 | |
| | comp=Z,12µm,20.0s | | | | | |
| CWF | Charnwood Fore | 76.17 4 | eP | P | 03 38 00.3 | +0.6 |
| | comp=Z,152nm,1.2s | | | | | |
| CWF | | | LR | LR | | |
| | comp=Z,16µm,19.0s | | | | | |
| PATY | Pattaya | 76.18 273 | P | P | 03 38 01.3 | +1.0 |
| | comp=Z,50nm,0.9s,comp=Z,2µm | | | | | |
| SMLA | Simla | 76.19 303 | i P | P | 03 38 00.4 | +0.3 |
| SMLA | | | AMB | AMB | 03 38 00.8 | |
| | comp=Z,1µm,2.7s | | | | | |
| SMLA | | | i x | S | 03 47 40.5 | -2.2 |
| AKASG | Malin Array Be | 76.21 344 | P | P | 03 37 58.5 | -1.5 |
| | comp=Z,36nm,0.5s,baz=15,slow=5.7,SNR=73 | | | | | |
| AKASG | | | LR | LR | 04 17 36.7 | |
| | comp=Z,29µm,18.1s,baz=20,slow=40 | | | | | |
| KIEV | Kiev | 76.22 344c | iP | P | 03 37 58.4 | -1.7 |
| KIEV | | | pmax | pmax | | |
| | comp=Z,46nm,1.2s | | | | | |
| KIEV | | | MLR | MLR | | |
| | comp=Z,20µm,19.0s | | | | | |
| KIEV | Kiev | 76.22 344 | eP | P | 03 37 58.5 | -1.5 |
| | comp=Z,143nm,1.4s | | | | | |
| KIEV | | | LR | LR | | |
| | comp=Z,33µm,18.0s | | | | | |
| AK11 | Malin Array Si | 76.25 344 | eP | P | 03 37 59.5 | -0.7 |
| RUE | Ruedersdorf | 76.26 354 | eP | P | 03 38 00.2 | 0.0 |
| | comp=Z,458nm,1.6s,baz=5.3,slow=5.6 | | | | | |
| BEL | Belsk | 76.30 350 | eP | P | 03 38 00.4 | 0.0 |
| BEL | | | eS | S | 03 47 43.7 | +0.5 |
| BEL | | | LMZ | LR | 04 15 10.9 | |
| BEL | Belsk | 76.30 350⇑ | eP | P | 03 38 00.4 | 0.0 |
| BEL | | | eS | S | 03 47 43.7 | +0.5 |
| BEL | | | MLR | MLR | | |
| | comp=Z,14µm,20.3s | | | | | |
| HLM1 | Long Mynd | 76.31 5⇑ | eP | P | 03 38 00.4 | -0.2 |
| VAL | Valentia | 76.32 9 | eP | P | 03 38 01.2 | +0.6 |
| DDI | Dehra Dun | 76.34 302 | ex | P | 03 38 00.5 | -0.7 |
| DDI | | | eP | P | 03 38 01.4 | +0.3 |
| NRDL | Niedersach Rie | 76.43 357 | eP | P | 03 38 01.2 | +0.1 |
| | comp=Z,318nm,1.7s,baz=5.3,slow=5.6 | | | | | |
| IBBN | Ibbenburen | 76.69 358 | eP | P | 03 38 03.1 | +0.4 |
| | comp=Z,596nm,1.6s,baz=5.3,slow=5.6 | | | | | |
| ASSE | Asse, Remlinge | 76.77 356 | eP | P | 03 38 03.3 | +0.2 |
| | comp=Z,2µm,2.9s,baz=5.3,slow=5.6 | | | | | |
| BBSR | BB Station | 76.81 54 | eP | P | 03 38 04.7 | +1.0 |
| | comp=Z,2µm,2.2s | | | | | |
| BBSR | | | LR | LR | | |
| | comp=Z,20µm,19.0s | | | | | |
| MCH1 | Michaelchurch | 76.83 5⇑ | eP | P | 03 38 03.6 | +0.2 |
| MCH1 | | | AMB | AMB | 03 38 05.4 | |
| | comp=Z,258nm,1.8s | | | | | |
| MCH1 | | | AMS | AMS | 04 18 47.6 | |
| | comp=Z,11µm,18.8s | | | | | |
| SSW | Stow on the Wo | 76.91 4⇑ | eP | P | 03 38 03.4 | -0.5 |
| PHET | Kaeng Krachan | 76.96 274 | P | P | 03 38 05.8 | +1.1 |
| | comp=Z,70nm,1.0s,comp=Z,639nm | | | | | |
| SNET | Serv Nac Est T | 77.01 84 | PFAKE | | 03 38 20.0 | +15 |
| SNET | | | LR | LR | | |
| | comp=Z,15µm,22.0s | | | | | |
| BOK | Bokaro | 77.02 292 | eP | P | 03 38 05.3 | +0.2 |
| WTSB | Winterswijk | 77.05 359 | eP | P | 03 38 04.1 | -0.6 |
| | comp=Z,362nm,1.5s | | | | | |
| CLZ | Clausthal | 77.08 356 | eP | P | 03 38 05.3 | +0.4 |
| | comp=Z,468nm,1.6s,baz=5.3,slow=5.6 | | | | | |
| STRD | Stroud | 77.09 4⇑ | eP | P | 03 38 05.4 | +0.5 |
| STRD | | | AMB | AMB | 03 38 06.1 | |
| | comp=Z,456nm,1.8s | | | | | |
| STRD | | | AMS | AMS | 04 20 04.5 | |
| | comp=Z,11µm,17.7s | | | | | |
| SBUM | Sibu | 77.18 258 | ⇑P | P | 03 38 04.6 | -1.3 |
| SBUM | Sibu | 77.18 258 | eP | P | 03 38 06.5 | +0.5 |
| | comp=Z,2µm,2.2s | | | | | |
| SBUM | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | |
| OLDB | Oldbury-Upon-S | 77.19 5 | eP | P | 03 38 05.3 | -0.1 |
| OLDB | | | AMB | AMB | 03 38 06.5 | |
| | comp=Z,348nm,3.0s | | | | | |
| OLDB | | | AMS | AMS | 04 20 22.8 | |
| | comp=Z,12µm,18.3s | | | | | |
| SWN1 | Swindon | 77.37 4 | eP | P | 03 38 07.0 | +0.5 |
| SWN1 | | | AMB | AMB | 03 38 08.0 | |
| | comp=Z,564nm,1.8s | | | | | |
| SWN1 | | | AMS | AMS | 04 20 13.6 | |
| | comp=Z,12µm,19.5s | | | | | |
| GTTG | Gvttingen | 77.39 357 | eP | P | 03 38 06.9 | +0.3 |
| | comp=Z,378nm,1.6s,baz=5.3,slow=5.6 | | | | | |
| CLL | Collm | 77.48 355⇑ | iP | P | 03 38 06.7 | -0.4 |
| CLL | | | eS | S | 03 47 56.0 | -0.2 |
| CLL | | | pmax | pmax | | |
| | comp=Z,182nm,1.3s | | | | | |
| CLL | | | MLR | MLR | | |
| | comp=Z,10µm,19.7s | | | | | |
| CLL | Collm | 77.48 355 | eP | P | 03 38 06.7 | -0.4 |
| | comp=Z,246nm,1.5s,baz=5.3,slow=5.6 | | | | | |
| CLL | Collm | 77.48 355⇑ | iP | P | 03 38 06.7 | -0.4 |
| | comp=Z,182nm,1.3s | | | | | |
| CLL | | | ePlp | | 03 38 11.0 | |
| | comp=Z,4µm,21.0s | | | | | |
| CLL | | | ePP | PP | 03 41 06.0 | +5.0 |
| CLL | | | ePPP | PPP | 03 42 54.0 | |
| CLL | | | eS | S | 03 47 56.0 | -0.2 |
| CLL | | | eSKSac | SKSac | 03 48 15.0 | -3.4 |
| CLL | | | eSP | SPn | 03 48 36.0 | +2.4 |
| CLL | | | eSS | SS | 03 52 54.0 | +0.2 |
| CLL | | | e | | 03 55 12.0 | |
| CLL | | | eSSS | SSS | 03 56 18.0 | |
| CLL | | | e | | 03 58 12.0 | |
| CLL | | | LmH | | 04 16 00.0 | |
| | comp=N,12µm,20.0s | | | | | |
| CLL | | | LmH | | 04 16 00.0 | |
| | comp=E,9µm,18.2s | | | | | |
| CLL | Collm | 77.48 355 | eP | P | 03 38 06.5 | -0.6 |
| | comp=E,169nm,1.2s | | | | | |
| CLL | | | LR | LR | | |
| | comp=Z,13µm,20.0s | | | | | |
| KBL | Kabul | 77.55 310 | eP | P | 03 38 07.4 | -0.7 |
| KBL | | | pmax | pmax | | |
| | comp=Z,823nm,1.4s | | | | | |
| KBL | | | MLR | MLR | | |
| | comp=Z,16µm,18.0s | | | | | |
| KBL | Kabul | 77.55 310 | eP | P | 03 38 07.4 | -0.7 |
| | comp=Z,823nm,1.4s | | | | | |
| KBL | | | LR | LR | | |
| | comp=Z,16µm,18.0s | | | | | |
| BUG | Bochum--Univer | 77.57 358 | eP | P | 03 38 07.6 | 0.0 |
| | comp=Z,404nm,1.7s,baz=5.3,slow=5.6 | | | | | |
| WOL | Wolverton | 77.59 4 | eP | P | 03 38 07.9 | +0.1 |
| WOL | | | AMB | AMB | 03 38 08.8 | |
| | comp=Z,528nm,2.1s | | | | | |
| NEUB | Neuenburg | 77.64 355 | eP | P | 03 38 08.2 | +0.1 |
| | comp=Z,508nm,1.6s,baz=5.3,slow=5.6 | | | | | |
| HEX | Exmoor | 77.71 5⇑ | eP | P | 03 38 08.7 | +0.2 |
| KSP | Ksiaz | 77.71 352 | eP | P | 03 38 07.8 | -0.7 |
| KSP | | | eS | S | 03 47 57.2 | -1.5 |
| KSP | | | LMZ | LR | 04 10 14.3 | |
| KSP | Ksiaz | 77.71 352⇑ | eP | P | 03 38 07.8 | -0.7 |
| KSP | | | eS | S | 03 47 57.2 | -1.5 |
| TBI | Tubuai | 77.77 156 | eS | S | 03 47 57.8 | -1.9 |
| | comp=Z,8µm,30.0s | | | | | |
| TBI | | | eSS | SS | 03 52 58.8 | -2.1 |
| | comp=Z,5µm,26.8s | | | | | |
| TBI | | | eLR | LR | 04 02 07.8 | |
| | comp=Z,26µm,23.8s,baz=337 | | | | | |
| TBI | Tubuai | 77.77 156 | eT | T | 05 03 38.1 | |
| | comp=Z,23nm,0.3s | | | | | |
| FBE | Freiberg | 77.84 354 | eP | P | 03 38 09.3 | +0.1 |
| | comp=Z,586nm,1.9s,baz=5.3,slow=5.6 | | | | | |
| BRG | Berggiesshubel | 77.85 354 | i P | P | 03 38 08.9 | -0.3 |
| | comp=Z,257nm,1.6s | | | | | |
| BRG | | | S | S | 03 47 58.0 | -2.3 |
| BRG | | | SS | SS | 03 52 58.0 | -1.5 |
| BRG | Berggiesshubel | 77.85 354 | i P | P | 03 38 08.9 | -0.3 |
| BRG | | | S | S | 03 47 58.0 | -2.3 |
| BRG | | | SS | SS | 03 52 58.0 | -1.5 |
| BRG | | | pmax | pmax | | |
| | comp=Z,257nm,1.6s | | | | | |
| BRG | | | MLR | MLR | | |
| | comp=N,11µm,15.7s | | | | | |
| BRG | | | MLR | MLR | | |
| | comp=E,9µm,16.6s | | | | | |
| BRG | | | MLR | MLR | | |
| | comp=Z,13µm,16.5s | | | | | |
| BRG | Berggiesshubel | 77.85 354 | eP | P | 03 38 08.9 | -0.3 |
| | comp=Z,256nm,1.6s,baz=5.3,slow=5.6 | | | | | |
| LVV | L'vov | 77.87 347 | eP | P | 03 38 08.0 | -1.4 |
| LVV | | | eS | S | 03 48 12.0 | +11 |
| LVV | | | MLR | MLR | | |
| | comp=Z,25µm,20.0s | | | | | |
| TGUH | Tegucigalpa,Un | 77.95 83 | eP | P | 03 38 11.8 | +1.5 |
| | comp=Z,2µm,2.3s | | | | | |
| TGUH | | | LR | LR | | |
| | comp=Z,12µm,22.0s | | | | | |
| OJC | Ojcow | 78.00 350 | i P | P | 03 38 09.7 | -0.4 |
| OJC | | | eS | S | 03 48 00.8 | -1.1 |
| OJC | | | LMZ | LR | 04 12 55.6 | |
| OJC | Ojcow | 78.00 350⇑ | iP | P | 03 38 09.7 | -0.4 |
| OJC | | | eS | S | 03 48 00.9 | -1.0 |
| OJC | | | MLR | MLR | | |
| | comp=Z,15µm,22.0s | | | | | |
| OJC | Ojcow | 78.00 350 | eP | P | 03 38 09.1 | -1.0 |
| | comp=Z,1µm,2.9s | | | | | |
| UPC | Upice | 78.07 353 | eP | P | 03 38 10.4 | -0.1 |
| UPC | | | e | | 03 38 27.0 | |
| UPC | | | eS | S | 03 48 15.4 | +13 |
| UPC | | | MLR | MLR | | |
| | comp=Z,13µm,16.4s | | | | | |
| UPC | Upice | 78.07 353⇑ | eP | P | 03 38 10.4 | -0.1 |
| UPC | | | ex | x | 03 38 27.0 | |
| UPC | | | eS | S | 03 48 15.4 | +13 |
| UPC | | | ex | x | 03 53 17.6 | |
| UPC | | | AMS | AMS | 04 23 00.0 | |
| | comp=Z,13µm,16.4s | | | | | |
| NDI | New Delhi | 78.08 301 | eP | P | 03 38 09.0 | -1.9 |
| NDI | | | ex | x | 03 48 15.0 | |
| PVCC | Panska Ves | 78.16 354⇑ | iP | P | 03 38 10.8 | -0.1 |
| PVCC | | | e | | 03 38 28.7 | |
| PVCC | | | eS | S | 03 48 02.3 | -1.2 |
| PVCC | | | MLR | MLR | | |
| | comp=Z,15µm,16.8s | | | | | |
| PVCC | Panska Ves | 78.16 354⇑ | iP | P | 03 38 10.8 | -0.1 |
| PVCC | | | ex | x | 03 38 28.7 | |
| PVCC | | | eS | S | 03 48 02.3 | -1.2 |
| PVCC | | | eSS | SS | 03 53 16.3 | +12 |
| PVCC | | | AMS | AMS | 04 23 50.0 | |
| | comp=Z,15µm,16.8s | | | | | |
| KDU | Kakadu | 78.17 232 | P | P | 03 38 11.2 | -0.1 |
| | baz=78,SNR=12 | | | | | |
| DPC | Dobruska-Polom | 78.20 352⇑ | iP | P | 03 38 11.1 | -0.1 |
| DPC | | | e | | 03 38 28.4 | |
| DPC | | | eS | S | 03 47 59.9 | -4.2 |
| DPC | | | MLR | MLR | | |
| | comp=Z,11µm,15.8s | | | | | |
| DPC | Dobruska-Polom | 78.20 352⇑ | iP | P | 03 38 11.1 | -0.1 |
| DPC | | | ex | x | 03 38 28.4 | |
| DPC | | | eS | S | 03 47 59.9 | -4.2 |
| DPC | | | ex | x | 03 53 19.3 | |
| DPC | | | AMS | AMS | 04 26 50.0 | |
| | comp=Z,11µm,15.8s | | | | | |
| MOX | Moxa | 78.22 355 | eP | P | 03 38 11.3 | 0.0 |
| | comp=Z,1µm,2.6s,baz=5.3,slow=5.6 | | | | | |
| MOX | | | eL | L | 04 11 38.6 | |
| | comp=Z,7µm,21.7s | | | | | |
| BEBN | Eben Emael | 78.23 359 | P | P | 03 38 11.3 | 0.0 |
| KWP | Kalwaria Pacla | 78.23 348 | i P | P | 03 38 11.2 | -0.2 |
| KWP | | | eS | S | 03 48 03.2 | -1.2 |
| KWP | | | eSKSac | SKSac | 03 48 19.2 | -4.8 |
| KWP | | | LMZ | LR | 04 13 14.8 | |
| KWP | Kalwaria Pacla | 78.23 348⇑ | iP | P | 03 38 11.2 | -0.2 |
| KWP | | | eS | S | 03 48 03.3 | -1.2 |
| KWP | | | e | | 03 48 19.3 | |
| KWP | | | MLR | MLR | | |
| | comp=Z,28µm,21.8s | | | | | |
| UCC | Uccle | 78.23 0 | P | P | 03 38 11.4 | 0.0 |
| HGN | Heimansgroeve | 78.26 359 | eP | P | 03 38 11.0 | -0.5 |
| | comp=Z,650nm,1.8s | | | | | |
| RAC | Raciborz | 78.30 351 | eP | P | 03 38 11.9 | +0.2 |
| RAC | | | eS | S | 03 48 06.3 | +1.3 |
| PLN | Plauen | 78.35 355 | eP | P | 03 38 12.1 | +0.1 |
| | comp=Z,2µm,3.2s,baz=5.3,slow=5.6 | | | | | |
| WERD | Werda | 78.38 355 | eP | P | 03 38 12.2 | 0.0 |
| | comp=Z,1µm,2.8s,baz=5.3,slow=5.6 | | | | | |
| TANN | Tannenbergstha | 78.40 355 | eP | P | 03 38 12.5 | +0.1 |
| | comp=Z,2µm,3.1s,baz=5.3,slow=5.6 | | | | | |
| MEM | Membach | 78.42 359 | P | P | 03 38 12.3 | 0.0 |
| KRLC | Kraliky | 78.43 352 | eP | P | 03 38 12.8 | +0.3 |
| KRLC | Kraliky | 78.43 352⇑ | eP | P | 03 38 12.8 | +0.3 |
| GUNZ | Gunzen | 78.46 355 | eP | P | 03 38 12.8 | +0.1 |
| | comp=Z,1µm,2.6s,baz=5.3,slow=5.6 | | | | | |
| CCA1 | Carnmenellis | 78.49 6 | eP | P | 03 38 12.7 | -0.1 |
| CCA1 | | | AMB | AMB | 03 38 13.9 | |
| | comp=Z,310nm,1.7s | | | | | |
| CCA1 | | | AMS | AMS | 04 18 34.2 | |
| | comp=Z,15µm,18.8s | | | | | |
| SNF | Seneffe | 78.52 0 | P | P | 03 38 13.3 | +0.4 |
| WERN | Wernitzgruen | 78.53 355 | eP | P | 03 38 13.3 | +0.2 |
| | comp=Z,2µm,2.9s,baz=5.3,slow=5.6 | | | | | |
| OKC | Ostrava-Krasne | 78.54 351⇑ | iP | P | 03 38 12.7 | -0.4 |
| OKC | | | MLR | MLR | | |
| | comp=Z,11µm,16.4s | | | | | |
| OKC | Ostrava-Krasne | 78.54 351⇑ | iP | P | 03 38 12.7 | -0.4 |
| OKC | | | ex | x | 03 41 26.7 | |
| OKC | | | AMS | AMS | 04 22 40.0 | |
| | comp=Z,11µm,16.4s | | | | | |
| NKC | Novy Kostel | 78.58 355⇑ | iP | P | 03 38 13.3 | 0.0 |
| NKC | | | e | | 03 38 30.7 | |
| NKC | | | MLR | MLR | | |
| | comp=Z,13µm,17.5s | | | | | |
| NKC | Novy Kostel | 78.58 355⇑ | iP | P | 03 38 13.3 | 0.0 |
| NKC | | | ex | x | 03 38 30.7 | |
| NKC | | | AMS | AMS | 04 22 40.0 | |
| | comp=Z,13µm,17.5s | | | | | |
| BCLA | Clavier | 78.61 360 | P | P | 03 38 13.3 | -0.1 |
| | comp=Z,170nm,2.5s | | | | | |
| PRA | Prague | 78.62 354⇑ | iP | P | 03 38 13.0 | -0.5 |
| PRA | | | e | | 03 38 30.2 | |
| PRA | | | eS | S | 03 48 07.5 | -1.0 |
| PRA | | | eSS | SS | 03 53 19.2 | +8.2 |
| PRA | | | MLR | MLR | | |
| | comp=Z,14µm,17.3s | | | | | |
| PRA | Prague | 78.62 354⇑ | iP | P | 03 38 13.0 | -0.5 |
| PRA | | | ex | x | 03 38 30.2 | |
| PRA | | | eS | S | 03 48 07.5 | -1.0 |
| PRA | | | eSS | SS | 03 53 19.2 | +8.2 |
| PRA | | | AMS | AMS | 04 24 20.0 | |
| | comp=Z,14µm,17.3s | | | | | |
| STHS | Stebnicka Huta | 78.62 349 | eP | P | 03 38 14.1 | +0.5 |
| STHS | | | pmax | pmax | | |
| | comp=Z,49nm,1.5s | | | | | |
| STHS | Stebnicka Huta | 78.62 349 | eP | P | 03 38 14.1 | +0.5 |
| KAPI | Kappang | 78.63 247 | P | P | 03 38 14.0 | 0.0 |
| | comp=Z,947nm,1.3s,SNR=89 | | | | | |
| KAPI | Kappang | 78.63 247 | eP | P | 03 38 15.0 | +1.0 |
| | comp=Z,3µm,2.3s | | | | | |
| MORC | Moravsky Berou | 78.66 352 | eP | P | 03 38 12.8 | -1.0 |
| MORC | | | pmax | pmax | | |
| | comp=Z,4µm,2.8s | | | | | |
| MORC | | | MLR | MLR | | |
| | comp=Z,66µm,21.0s | | | | | |
| MORC | Moravsky Berou | 78.66 352⇑ | iP | P | 03 38 13.5 | -0.3 |
| MORC | Moravsky Berou | 78.66 352 | eP | P | 03 38 12.8 | -1.0 |
| | comp=Z,4µm,2.8s | | | | | |
| MORC | | | LR | LR | | |
| | comp=Z,66µm,21.0s | | | | | |
| PRU | Pruhonice | 78.69 354⇑ | iP | P | 03 38 13.7 | -0.2 |
| PRU | | | e | | 03 38 29.6 | |
| PRU | | | e | | 03 41 11.0 | |
| PRU | | | eS | S | 03 48 05.6 | -3.7 |
| PRU | | | eSS | SS | 03 53 15.8 | +3.7 |
| PRU | | | MLR | MLR | | |
| | comp=Z,16µm,20.0s | | | | | |
| PRU | Pruhonice | 78.69 354⇑ | iP | P | 03 38 13.7 | -0.2 |
| PRU | | | ex | x | 03 38 29.6 | |
| PRU | | | ePP | PP | 03 41 11.0 | -0.2 |
| PRU | | | eS | S | 03 48 05.6 | -3.7 |
| PRU | | | eSS | SS | 03 53 15.8 | +3.7 |
| PRU | | | AMS | AMS | 04 16 10.0 | |
| | comp=Z,16µm,20.0s | | | | | |
| CTAO | Charters Tower | 78.71 217 | eP | P | 03 38 13.2 | -1.0 |
| CTAO | | | pmax | pmax | | |
| | comp=Z,212nm,1.4s | | | | | |
| CTAO | Charters Tower | 78.71 217 | eP | P | 03 38 13.2 | -1.0 |
| | comp=Z,212nm,1.4s | | | | | |
| NIE | Niedzica | 78.73 350 | eP | P | 03 38 14.0 | -0.1 |
| NIE | | | LMZ | LR | 04 13 45.8 | |
| NIE | Niedzica | 78.73 350⇑ | eP | P | 03 38 14.1 | -0.1 |
| NIE | | | MLR | MLR | | |
| | comp=Z,8µm,20.9s | | | | | |
| GOPC | GO Pecny, Ondr | 78.75 353⇑ | iP | P | 03 38 13.7 | -0.6 |
| GOPC | | | MLR | MLR | | |
| | comp=Z,16µm,19.0s | | | | | |
| GOPC | GO Pecny, Ondr | 78.75 353⇑ | iP | P | 03 38 13.7 | -0.6 |
| GOPC | | | ex | x | 03 53 28.2 | |
| GOPC | | | AMS | AMS | 04 16 30.0 | |
| | comp=Z,16µm,19.0s | | | | | |
| TNS | Taunus Mts | 78.76 358 | eP | P | 03 38 14.5 | +0.2 |
| | comp=Z,1µm,2.7s,baz=5.3,slow=5.6 | | | | | |
| SORM | Soroca | 78.84 344⇓ | iP | P | 03 38 14.9 | +0.2 |
| MANZ | Manzenberg | 78.85 355 | eP | P | 03 38 14.7 | -0.1 |
| | comp=Z,782nm,2.7s,baz=5.3,slow=5.6 | | | | | |
| DOU | Dourbes | 78.94 0 | P | P | 03 38 15.1 | -0.2 |
| MTN | Manton Dam | 78.97 233 | P | P | 03 38 15.8 | 0.0 |
| | baz=79,SNR=36 | | | | | |
| MTN | Manton Dam | 78.97 233 | eP | P | 03 38 15.7 | 0.0 |
| | comp=Z,331nm,1.2s | | | | | |
| MTN | | | LR | LR | | |
| | comp=Z,12µm,20.0s | | | | | |
| KOLS | Kolonicke sedl | 78.97 348 | eP | P | 03 38 14.7 | -0.8 |
| KOLS | Kolonicke sedl | 78.97 348 | eP | P | 03 38 14.7 | -0.8 |
| KOLS | | | eS | S | 03 48 14.2 | +1.8 |
| MAK | Makhachkala | 78.98 329c | iP | P | 03 38 16.0 | +0.4 |
| MAK | | | e | | 03 38 24.2 | |
| MAK | | | e | | 03 41 18.9 | |
| MAK | | | ePPP | PPP | 03 43 07.9 | |
| MAK | | | eS | S | 03 48 14.1 | +1.6 |
| MAK | | | e | | 03 48 27.4 | |
| MAK | | | pmax | pmax | | |
| | comp=Z,6µm,3.6s | | | | | |
| MAK | | | pmax | pmax | | |
| | comp=Z,1µm,2.1s | | | | | |
| MAK | | | pmax | pmax | | |
| | comp=N,1µm,1.8s | | | | | |
| MAK | | | pmax | pmax | | |
| | comp=E,1µm,1.9s | | | | | |
| MAK | | | smax | smax | | |
| | comp=N,4µm,6.2s | | | | | |
| MAK | | | smax | smax | | |
| | comp=E,1µm,3.2s | | | | | |
| ROTZ | Rotzenmuhle | 79.06 355 | eP | P | 03 38 16.3 | +0.4 |
| | comp=E,1µm,2.7s,baz=5.3,slow=5.6 | | | | | |
| LANS | Liptovska Anna | 79.09 350 | eP | P | 03 38 17.2 | +1.0 |
| LANS | | | eS | S | 03 48 11.8 | -1.9 |
| LANS | Liptovska Anna | 79.09 350 | eP | P | 03 38 17.2 | +1.0 |
| LANS | | | eS | S | 03 48 11.8 | -1.9 |
| KSM | Kuching | 79.12 259 | P | P | 03 38 17.8 | +1.0 |
| | baz=79,SNR=108 | | | | | |
| KSM | Kuching | 79.12 259 | ⇑P | P | 03 38 16.4 | -0.4 |
| KSM | Kuching | 79.12 259 | eP | P | 03 38 17.3 | +0.6 |
| | comp=E,2µm,1.9s | | | | | |
| KSM | | | ePP | PP | 03 41 20.8 | +4.6 |
| KSM | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | |
| GRF | Grafenberg Arr | 79.19 356 | eP | P | 03 38 17.2 | +0.5 |
| | comp=Z,3µm,2.7s,baz=5.3,slow=5.6 | | | | | |
| GRF | | | eL | L | 04 16 59.3 | |
| | comp=Z,7µm,21.8s | | | | | |
| GRFO | Grafenberg | 79.19 356 | eP | P | 03 38 16.3 | -0.4 |
| GRFO | | | pmax | pmax | | |
| | comp=Z,336nm,1.5s | | | | | |
| GRFO | | | MLR | MLR | | |
| | comp=Z,7µm,20.0s | | | | | |
| GRFO | Grafenberg | 79.19 356 | eP | P | 03 38 16.2 | -0.4 |
| | comp=Z,336nm,1.5s | | | | | |
| GRFO | | | LR | LR | | |
| | comp=Z,7µm,20.0s | | | | | |
| VRAC | Vranov | 79.21 352⇑ | iP | P | 03 38 16.5 | -0.3 |
| UZH | Uzhgorod | 79.27 348 | eP | P | 03 38 15.0 | -2.1 |
| UZH | | | e | | 03 41 18.0 | |
| UZH | | | eS | S | 03 48 10.0 | -5.4 |
| UZH | | | i PS | PnS | 03 49 16.0 | +16 |
| UZH | | | MLR | MLR | | |
| | comp=Z,9µm,20.0s | | | | | |
| TREC | Trest | 79.31 353 | ⇑AMS | AMS | 04 19 30.0 | |
| | comp=Z,12µm,18.4s | | | | | |
| WLF | Walferdange | 79.36 359 | P | P | 03 38 18.4 | +0.9 |
| | comp=Z,254nm,2.7s | | | | | |
| WLF | Walferdange | 79.36 359 | eP | P | 03 38 18.5 | +0.9 |
| WLF | | | pmax | pmax | | |
| | comp=Z,2µm,2.6s | | | | | |
| WLF | | | MLR | MLR | | |
| | comp=Z,16µm,19.0s | | | | | |
| WLF | Walferdange | 79.36 359 | eP | P | 03 38 18.5 | +0.9 |
| | comp=Z,2µm,2.5s,baz=5.3,slow=5.6 | | | | | |
| WLF | Walferdange | 79.36 359 | eP | P | 03 38 18.4 | +0.9 |
| | comp=Z,2µm,2.6s | | | | | |
| WLF | | | LR | LR | | |
| | comp=Z,16µm,19.0s | | | | | |
| KIV | Kislovodsk | 79.52 333 | eP | P | 03 38 19.2 | +0.6 |
| KIV | Kislovodsk | 79.52 333c | iP | P | 03 38 18.7 | 0.0 |
| KIV | | | e | | 03 38 26.0 | |
| KIV | | | i | | 03 41 20.4 | |
| KIV | | | ePPP | PPP | 03 43 05.6 | |
| KIV | | | i S | S | 03 48 33.7 | +15 |
| KIV | | | pmax | pmax | | |
| | comp=Z,45nm,0.9s | | | | | |
| KIV | | | MLR | MLR | | |
| | comp=Z,13µm,21.0s | | | | | |
| KIV | Kislovodsk | 79.52 333 | P | P | 03 38 19.3 | +0.6 |
| | comp=Z,472nm,0.7s,SNR=21 | | | | | |
| KIV | Kislovodsk | 79.52 333 | P | P | 03 38 19.1 | +0.4 |
| | SNR=12 | | | | | |
| KIV | Kislovodsk | 79.52 333⇓ | iP | P | 03 38 18.7 | 0.0 |
| | SNR=29 | | | | | |
| KIV | Kislovodsk | 79.52 333 | eP | P | 03 38 18.6 | 0.0 |
| | comp=Z,804nm,2.2s | | | | | |
| KIV | | | LR | LR | | |
| | comp=Z,18µm,20.0s | | | | | |
| ABKT | Ailbek | 79.55 320 | P | P | 03 38 19.5 | +0.6 |
| | comp=Z,2µm,1.5s,SNR=89 | | | | | |
| GEYT | Alibeck | 79.55 320 | P | P | 03 38 19.3 | +0.4 |
| | comp=Z,178nm,1.0s,baz=352,slow=3.0,SNR=111 | | | | | |
| GEYT | | | LR | LR | 04 19 16.0 | |
| | comp=Z,25µm,18.0s,baz=30,slow=40 | | | | | |
| KHC | Kasperske Hory | 79.61 354⇑ | iP | P | 03 38 18.9 | -0.1 |
| KHC | | | e | | 03 38 36.3 | |
| KHC | | | eS | S | 03 48 18.1 | -1.1 |
| KHC | | | MLR | MLR | | |
| | comp=Z,18µm,17.3s | | | | | |
| KHC | Kasperske Hory | 79.61 354⇑ | iP | P | 03 38 18.9 | -0.1 |
| KHC | | | ex | x | 03 38 36.3 | |
| KHC | | | ePP | PP | 03 41 10.0 | -8.9 |
| KHC | | | eS | S | 03 48 18.1 | -1.1 |
| KHC | | | eSS | SS | 03 53 38.8 | +13 |
| KHC | | | AMS | AMS | 04 23 00.0 | |
| | comp=Z,18µm,17.3s | | | | | |
| KHC | Kasperske Hory | 79.61 354 | eP | P | 03 38 18.9 | -0.1 |
| | comp=Z,171nm,1.8s | | | | | |
| KHC | | | LR | LR | | |
| | comp=Z,6µm,21.0s | | | | | |
| WET | Wettzell | 79.64 355 | eP | P | 03 38 19.4 | +0.2 |
| | comp=Z,1µm,2.9s,baz=5.3,slow=5.6 | | | | | |
| JRS | Jersey | 79.67 5 | eP | P | 03 38 19.2 | 0.0 |
| JSA | Saint Aubin | 79.67 5⇑ | eP | P | 03 38 18.5 | -0.7 |
| JSA | | | AMB | AMB | 03 38 20.3 | |
| | comp=Z,320nm,1.8s | | | | | |
| JSA | | | AMS | AMS | 04 20 44.1 | |
| | comp=Z,15µm,19.2s | | | | | |
| KBZ | Khabaz | 79.67 333 | P | P | 03 38 19.6 | +0.3 |
| | comp=Z,26nm,0.6s,baz=36,slow=4.5,SNR=43 | | | | | |
| KBZ | | | LR | LR | 04 20 02.2 | |
| | comp=Z,18µm,18.4s,baz=12,slow=41 | | | | | |
| NCK | Nalchik | 79.69 332c | iP | P | 03 38 20.4 | +0.9 |

**TRPA Tarpa 79.73 348⇑ *i*P P 03 38 19.7 +0.1**
**VYHS Vyhne 79.80 350 *e*P P 03 38 19.9 -0.1**
**VYHS Vyhne 79.80 350 *e*P P 03 38 19.9 -0.1**
**SURA Surathani 79.83 272 P P 03 38 21.7 +1.1**
comp=Z,385nm,0.9s,comp=Z,10µm
**BUR04 Bucovina Ar. S 79.85 346 *e*P P 03 38 19.5 -0.9**
**BURAR Bucovina Array 79.85 346⇑ *i*P P 03 38 20.3 -0.1**
**KIS Kishinev 79.86 343⇑ *i*P P 03 38 19.0 -1.3**
comp=Z,1µm,2.4s
**KIS Kishinev 79.86 343** *i* PcP PcP 03 38 38.0 +10
**KIS Kishinev 79.86 343** *e*PP PP 03 41 26.0 +5.0
**KIS Kishinev 79.86 343** *e*PPP PPP 03 43 22.0
**KIS Kishinev 79.86 343** *i* PS PS 03 49 36.0
**IAS Iasi 79.89 344⇓ *i*P P 03 38 20.4 -0.1**
**GEC2 GERESS Array S 79.89 354 *e*P P 03 38 20.2 -0.4**
**GEC2 GERESS Array S 79.89 354 *e*P P 03 38 20.3 -0.4**
comp=Z,843nm,2.6s,baz=5.3,slow=5.6
**GEC2 GERESS Array S 79.89 354 *e*P P 03 38 20.1 -0.4**
**GERES GERESS Array B 79.89 354 P P 03 38 19.2 -1.3**
comp=Z,22nm,0.9s,baz=16,slow=4.4,SNR=59
**SMOL Smolenice 79.92 351 *e*P P 03 38 21.5 +0.8**
**SMOL Smolenice 79.92 351 *e*P P 03 38 21.4 +0.8**
**PRAR RASCA 79.94 345⇓ *i*P P 03 38 22.3 +1.5**
**SOEI Soe 79.97 241 P P 03 38 21.7 +0.3**
baz=80,SNR=5.2
**SOEI Soe 79.97 241 *e*P P 03 38 21.3 -0.1**
comp=Z,712nm,1.3s
**BMR Baia Mare 80.05 347⇓ *i*P P 03 38 21.6 +0.3**
**ANN Anapa 80.13 337 *e*P P 03 38 20.5 -1.3**
ANN *e* 03 41 23.5
ANN *e*S **S 03 48 23.7 -0.9**
ANN *e*SS **SS 03 53 36.4 +2.6**
ANN pmax pmax
comp=E,57nm,2.0s
ANN pmax pmax
comp=N,129nm,2.0s
ANN pmax pmax
comp=Z,282nm,2.0s
ANN smax smax
comp=N,2µm,9.8s
ANN smax smax
comp=E,3µm,9.8s
**MMRI Maumere 80.17 243 *e*P P 03 38 21.0 -1.4**
comp=E,364nm,1.1s
**STU Stuttgart 80.19 357 *e*P P 03 38 22.0 -0.1**
STU pmax pmax
comp=Z,81nm,1.0s
STU MLR MLR
comp=Z,9µm,20.0s
**STU Stuttgart 80.19 357 *e*P P 03 38 22.1 -0.1**
comp=Z,880nm,2.4s,baz=5.3,slow=5.6
**STU Stuttgart 80.19 357 *e*P P 03 38 22.0 -0.1**
comp=Z,81nm,1.0s
STU LR LR
comp=Z,9µm,20.0s
**ZEI Tsey 80.24 332 *e*P P 03 38 22.4 -0.4**
ZEI *e*S **S 03 48 24.6 -1.8**
ZEI pmax pmax
comp=Z,303nm,2.6s
ZEI pmax pmax
comp=Z,1µm,1.7s
ZEI pmax pmax
comp=N,778nm,1.7s
ZEI pmax pmax
comp=E,834nm,2.0s
**PSZ Piszkesteto 80.26 350 *e*P P 03 38 22.6 0.0**
PSZ pmax pmax
comp=Z,1µm,2.9s
PSZ MLR MLR
comp=Z,16µm,21.0s
**PSZ Piszkesteto 80.26 350⇑ *i*P P 03 38 22.9 +0.3**
**PSZ Piszkesteto 80.26 350 *e*P P 03 38 22.6 0.0**
comp=Z,1µm,2.9s
PSZ LR LR
comp=Z,16µm,21.0s
**RAO Raoul Island 80.28 182** PFAKE 03 38 30.0 +7.5
RAO LR LR
comp=Z,30µm,19.0s
**ARCR ARCALIA 80.50 347⇑ *i*P P 03 38 24.4 +0.6**
**ONI Oni 80.56 332 P P 03 38 24.4 +0.2**
**KTGM Kuala Trenggan 80.58 267 ⇑P P 03 38 24.0 -0.7**
**DUS Dusheti 80.64 331 P P 03 38 26.2 +1.5**
**DUS Dusheti 80.64 331 P P 03 38 26.2 +1.5**
**CONA Conrad Observa 80.64 352** *i* P **P 03 38 24.9 +0.2**
SNR=26
**BFO Black Forest 80.65 358** *i* P **P 03 38 25.1 +0.5**
**BFO Black Forest 80.65 358 P P 03 38 24.3 -0.3**
comp=Z,285nm,1.3s,SNR=15
**BFO Black Forest 80.65 358 *e*P P 03 38 24.7 +0.1**
comp=Z,963nm,2.5s,baz=5.3,slow=5.6
**BFO Black Forest 80.65 358 *e*P P 03 38 24.4 -0.2**
comp=Z,1µm,2.5s
BFO LR LR
comp=Z,10µm,20.0s
**SOC Sochi 80.68 335** *c* *i*P **P 03 38 24.4 -0.4**
SOC *e**SP **sP 03 38 38.8 +3.2**
SOC *e* 03 41 28.0
SOC *e*S **S 03 48 29.9 -0.6**
SOC *e*SSS SSS 03 57 10.9
SOC pmax pmax
comp=Z,127nm,1.2s
**TESR Tescani 80.70 345⇑ *i*P P 03 38 24.6 -0.3**
**FUR Furstenfeldbru 80.71 356 *e*P P 03 38 25.1 +0.2**
comp=Z,2µm,2.5s,baz=5.3,slow=5.6
**MTDJ Mount Denham 80.71 73 *e*P P 03 38 26.6 +1.1**
comp=Z,1µm,1.7s
MTDJ LR LR
comp=Z,16µm,20.0s
**SKLT Songkhla 80.74 270 P P 03 38 26.2 +0.7**
comp=Z,348nm,1.8s,comp=Z,9µm
**SIM Simferopol' 80.76 339** *c* *i*P **P 03 38 25.7 +0.5**
SIM *e* 03 41 31.0
SIM *e*S **S 03 48 32.0 +0.7**
SIM pmax pmax
comp=Z,43nm,0.9s
SIM pmax pmax
comp=Z,1µm,9.9s
SIM MLR MLR
comp=N,21µm,18.3s
**TRTT Trang 80.81 271 P P 03 38 26.4 +0.5**
comp=N,471nm,2.1s,comp=N,8µm
**GTBY Guantanamo Bay 80.83 70 *e*P P 03 38 26.7 +0.7**
comp=N,325nm,1.5s
GTBY LR LR
comp=Z,23µm,18.0s
**CHVG Ch'k'valeri 80.83 333 *e*P P 03 38 26.1 +0.4**
**CHVG Ch'k'valeri 80.83 333 P P 03 38 26.5 +0.8**
**CHVG Ch'k'valeri 80.83 333⇑ *i*P P 03 38 27.8 +2.1**
**MOA Molln 80.84 353** *i* P **P 03 38 26.4 +0.8**
SNR=14
**DGPR DIGLIPUR 80.92 280 *e*P P 03 38 27.6 +1.1**
**TBLG Delisi 80.96 331 *e*P P 03 38 26.9 +0.6**
**TBLG Delisi 80.96 331 P P 03 38 26.5 +0.1**
**TBLG Delisi 80.96 331 P P 03 38 26.4 +0.1**
**CJR Cluj-Napoca 80.97 347⇓ *i*P P 03 38 27.7 +1.3**
**DGRG David-gareji 81.02 330 P P 03 38 27.2 +0.5**
**DGRG David-gareji 81.02 330 P P 03 38 27.2 +0.5**
**DRGR 81.02 348⇑ *i*P P 03 38 26.4 -0.3**
**RJOB Jochberg 81.05 354 *e*P P 03 38 27.1 +0.3**
comp=Z,808nm,3.1s,baz=5.3,slow=5.6
**VRI Vrincioaia 81.31 345⇓ *i*P P 03 38 28.9 +0.7**
**ARSA Arzberg 81.34 353** *i* P **P 03 38 28.7 +0.4**
SNR=32
**PLOR Plostina 81.34 345⇑ *i*P P 03 38 28.7 +0.3**
**PETR Petresti 81.37 344⇑ *i*P P 03 38 28.7 +0.3**
**RETA Reutte 81.41 356** *i* P **P 03 38 29.6 +0.8**
SNR=29
**GIUM Giurgiulesti 81.43 344⇑ *i*P P 03 38 29.3 +0.6**
**DOPR Dopca 81.43 346⇑ *i*P P 03 38 29.6 +0.8**
**WATA Walderalm 81.52 355** *i* P **P 03 38 30.0 +0.6**
SNR=18
**MOTA Moosalm 81.53 356** *i* P **P 03 38 30.0 +0.5**
SNR=26
**WTTA Wattenberg 81.59 355** *i* P **P 03 38 30.0 +0.1**
SNR=34
**TLCR 81.61 343⇓ *i*P P 03 38 30.9 +1.2**
**PKDT Phuket 81.62 272 P P 03 38 30.9 +0.7**
comp=Z,769nm,2.0s,comp=Z,10µm
**AKH Akhalkalaki 81.63 332 P P 03 38 30.8 +0.7**
**AKH Akhalkalaki 81.63 332 P P 03 38 30.8 +0.7**
**AKH Akhalkalaki 81.63 332⇑ *i*P P 03 38 30.9 +0.7**
**DAVA Damuels 81.65 356** *i* P **P 03 38 30.3 +0.2**
SNR=11
**KBA Koelnbreinsper 81.67 354** *i* P **P 03 38 30.7 +0.5**
SNR=79

**CFR Carcaliu 81.74 343⇑ *i*P P 03 38 30.7 +0.3**
**GRER 81.75 344⇑ *i*P P 03 38 32.0 +1.6**
**QIS Mount Isa 81.77 222 P P 03 38 30.2 -0.5**
baz=82,SNR=4.9
**MLR Muntele Rosu 81.81 345⇑ *i*P P 03 38 30.6 -0.3**
**FETA Feichten 81.88 356** *i* P **P 03 38 31.3 0.0**
SNR=22
**GRTK Grand Turk 81.90 66 *e*P P 03 38 32.1 +0.5**
comp=Z,123nm,0.8s
GRTK LR LR
comp=Z,20µm,19.0s
**EIDS Eidsvold 81.91 210 P P 03 38 31.4 0.0**
baz=82,SNR=4.4
**EIDS Eidsvold 81.91 210 *e*P P 03 38 31.7 +0.3**
comp=Z,164nm,1.4s
EIDS *e*P'P'df P'P'df 04 05 07.5 +6.3
EIDS LR LR
comp=Z,23µm,21.0s
**SOKA Soboth 81.95 353** *i* P **P 03 38 31.7 +0.1**
SNR=43
**PERS Pernice 81.98 353 *e*P P 03 38 31.6 -0.2**
PERS *i*S **S 03 48 42.6 -1.5**
PERS *e*SS SS 03 54 32.6 +31
**VOIR 82.00 346⇑ *i*P P 03 38 32.4 +0.5**
**BEHE Becsehely 82.01 352⇑ *e*P P 03 38 32.2 +0.4**
**ABTA Abfaltersbach 82.05 355** *i* P **P 03 38 32.2 0.0**
SNR=26
**ISR Istrita 82.07 345⇑ *i*P P 03 38 33.8 +1.6**
**BCA Borcka 82.14 333 *e*P P 03 38 32.5 -0.2**
**OBKA Obir 82.16 353** *i* P **P 03 38 32.6 -0.1**
SNR=17
**KULM Kulim 82.17 269 *e*P P 03 38 33.2 +0.2**
comp=Z,997nm,1.8s
KULM LR LR
comp=Z,7µm,20.0s
**RKT Rikitea 82.18 143 *e*P P 03 38 33.3 +0.5**
comp=Z,46nm,0.9s
**RKT Rikitea 82.18 143 *e*S S 03 48 43.5 -2.7**
comp=Z,7µm,29.5s
RKT *e*SS **SS 03 54 05.1 -1.9**
RKT comp=Z,7µm,26.0s *e*LR LR 04 04 04.9
comp=Z,25µm,24.8s,baz=334
**RKT Rikitea 82.18 143** *e*T T 05 09 09.9
comp=Z,9.4nm,0.3s
**CHLP Challavanipeta 82.19 290 *e*P P 03 38 33.2 0.0**
CHLP IAmb IAmb 03 38 35.4
comp=Z,5µm,2.7s
CHLP *e*S **S 03 48 48.3 +1.6**
CHLP IVMs_BB IVMs_BB 04 17 44.5
comp=Z,3µm,19.5s
**CHLP Challavanipeta 82.19 290** IVMs_BB IVMs_BB 04 17 44.7
comp=Z,3µm,19.5s
**LOT Lotru 82.19 347⇓ *i*P P 03 38 32.9 0.0**
**PGOR Pogoanele 82.20 344⇑ *i*P P 03 38 34.6 +1.8**
**PBA Port Blair 82.21 279 *e*P P 03 38 32.9 -0.4**
**SECR 82.23 345⇓ *i*P P 03 38 34.8 +1.8**
**BHPL Bhopal 82.27 298 *e*P P 03 38 32.8 -0.9**
**JTS JuntasAbangare 82.28 83 *e*P P 03 38 32.8 -0.9**
JTS pmax pmax
comp=Z,42nm,0.9s
**JTS JuntasAbangare 82.28 83 *e*P P 03 38 32.8 -0.9**
comp=Z,42nm,0.9s
**FUORN Ofenpass-Fuorn 82.30 356 *e*P P 03 38 33.9 +0.2**
comp=Z,866nm,2.2s
FUORN LR LR
comp=Z,11µm,21.0s
**BZS Buzias 82.32 348⇑ *i*P P 03 38 33.3 -0.1**
**GZR Gura Zlata 82.38 347⇑ *i*P P 03 38 33.9 0.0**
**TIRR Tirgusor 82.39 343 *e*P P 03 38 33.5 -0.3**
**TIRR Tirgusor 82.39 343 *e*P P 03 38 34.2 +0.4**
TIRR pmax pmax
comp=Z,1µm,2.0s
TIRR MLR MLR
comp=Z,25µm,20.0s
**TIRR Tirgusor 82.39 343⇑ *i*P P 03 38 34.8 +1.0**
**TIRR Tirgusor 82.39 343 *e*P P 03 38 34.1 +0.4**
comp=Z,1µm,2.0s
TIRR LR LR
comp=Z,25µm,20.0s
**AMRR Amara 82.43 344⇑ *i*P P 03 38 35.5 +1.5**
**TUE Stuetta 82.48 357 *e*P P 03 38 34.7 +0.2**
comp=Z,796nm,2.3s
TUE LR LR
comp=Z,12µm,21.0s
**SULR 82.55 345⇑ *i*P P 03 38 34.4 -0.2**
**IPM Ipoh 82.56 268 *e*P P 03 38 34.6 -0.6**
comp=Z,419nm,1.5s
IPM LR LR
comp=Z,10µm,20.0s
**KNRA Kununurra 82.57 234 P P 03 38 35.0 0.0**
baz=83,SNR=7.4
**CVD Cernavoda 82.59 343⇓ *i*P P 03 38 36.8 +1.9**
**BANR Banloc 82.61 348⇑ *i*P P 03 38 35.5 +0.6**
**LJU Ljubljana 82.62 353 *e*P P 03 38 33.2 -1.8**
**SENIN Lac Senin/Sane 82.64 358 *e*P P 03 38 35.5 +0.1**
comp=Z,881nm,2.8s
SENIN LR LR
comp=Z,11µm,20.0s
**JAVS Javornik 82.80 353 *e*P P 03 38 35.2 -0.9**
JAVS *e*S **S 03 48 51.3 -1.2**
JAVS *e*SS SS 03 54 42.9 +29
**BUC Bucharest 82.83 345⇑ *i*P P 03 38 37.3 +1.2**
**MSAB Monastry St. A 82.85 343⇑ *i*P P 03 38 36.7 +0.5**
**MYKOM Kota Tinggi 82.88 264 *e*P P 03 38 37.3 +0.6**
comp=Z,947nm,2.0s
**HUMR Humele 82.90 346⇓ *i*P P 03 38 36.0 -0.5**
**BUC1 Bucharest 82.91 345⇑ *i*P P 03 38 37.9 +1.4**
**TRI Trieste 83.01 354 *e*P P 03 38 37.9 +0.9**
TRI pmax pmax
comp=Z,28nm,0.8s
TRI MLR MLR
comp=Z,14µm,20.0s
**TRI Trieste 83.01 354 *e*P P 03 38 37.9 +0.9**
comp=Z,28nm,0.8s
TRI LR LR
comp=Z,14µm,20.0s
**NGP Nagpur 83.01 295 *e*P P 03 38 36.7 -0.7**
NGP *e*S **S 03 48 54.3 -1.0**
**SRE Strehaia 83.04 347⇑ *i*P P 03 38 37.5 +0.3**
**BOJS Bojanci 83.10 353 *e*P P 03 38 37.0 -0.5**
BOJS *e*PP **PP 03 41 49.3 +1.6**
BOJS *e*S **S 03 48 52.2 -3.2**
BOJS *e*SS SS 03 54 45.8 +28
**FRIM Kepong 83.14 267 ⇑P P 03 38 37.9 -0.3**
**PSN Preselentsi 83.18 343** *i* P **P 03 38 38.0 +0.1**
**VIS Vishakhapatnam 83.23 290 *e*P P 03 38 36.8 -1.8**
VIS AMB AMB 03 38 39.9
comp=Z,610nm,1.6s
**LGNH L'Ogne 83.41 69 *e*P P 03 38 40.9 +1.4**
comp=Z,2µm,2.8s
LGNH LR LR
comp=Z,26µm,19.0s
**AGRB Hanur-Agry 83.46 331 *e*P P 03 38 40.7 +1.0**
**WRAB Tennant Creek 83.53 227** *c* *i*P **P 03 38 38.8 -1.1**
WRAB pmax pmax
comp=Z,95nm,1.0s
**WRAB Tennant Creek 83.53 227 P P 03 38 39.2 -0.7**
comp=Z,317nm,2.3s,SNR=14
**WRAB Tennant Creek 83.53 227 *e*P P 03 38 38.9 -1.0**
comp=Z,184nm,1.4s
**BAYT Ayd¯ıntepe-Bay 83.53 334 *e*P P 03 38 40.1 0.0**
**WRA Warramunga Arr 83.54 227 P P 03 38 38.8 -1.2**
comp=Z,19nm,0.8s,baz=37,slow=6.5,SNR=69
WRA LR LR 04 12 52.7
comp=Z,13µm,20.5s,baz=25,slow=34
**CLDR Caldiran 83.57 330 *e*P P 03 38 40.9 +0.5**
**PAPH Port-au-Prince 83.58 68 *e*P P 03 38 42.3 +1.9**
comp=Z,140nm,0.9s
PAPH LR LR
comp=Z,22µm,18.0s
**DIKM Dikmen 83.63 337 *e*P P 03 38 41.4 +1.1**
**EZM Erzurum 83.64 332 *e*P P 03 38 41.3 +0.5**
**ZIMR 83.69 345⇓ *i*P P 03 38 41.8 +1.3**
**RMQ Roma 83.70 212 P P 03 38 41.8 +1.2**
baz=84,SNR=34
**SRBI Singaraja 83.74 249 P P 03 38 40.3 -0.8**
comp=Z,171nm,2.2s,comp=Z,6µm
**SSB Saint Sauveur 83.75 0 *e*P P 03 38 41.2 +0.2**
SSB pmax pmax
comp=Z,2µm,2.4s
SSB MLR MLR
comp=Z,11µm,20.0s
**SSB Saint Sauveur 83.75 0 *e*P P 03 38 41.2 +0.2**
comp=Z,2µm,2.4s

SSB LR LR
comp=Z,11µm,20.0s
**PRD Provadia 83.79 343** *i* P **P 03 38 41.9 +0.9**
**SDDR Presa de Saban 83.80 67 *e*P P 03 38 42.4 +0.8**
comp=Z,117nm,1.3s
SDDR LR LR
comp=Z,15µm,21.0s
**BYBT Boyabat 83.92 338 *e*P P 03 38 44.1 +2.3**
**BNI Bardonecchia 83.97 359 *e*P P 03 38 43.3 +1.2**
BNI pmax pmax
comp=Z,2µm,2.2s
BNI MLR MLR
comp=Z,11µm,20.0s
**BNI Bardonecchia 83.97 359 *e*P P 03 38 43.3 +1.2**
comp=Z,2µm,2.2s
BNI LR LR
comp=Z,11µm,20.0s
**KVT Kavak 83.97 337 *e*P P 03 38 43.2 +1.1**
**SZH Strazhica 83.97 345** *i* P **P 03 38 41.9 -0.1**
**DIVS Divibare 84.01 349⇑ *i*P P 03 38 42.2 -0.1**
**DIVS Divibare 84.01 349 P P 03 38 41.9 -0.4**
**PVL Pavlikeni 84.12 345** *i* P **P 03 38 43.2 +0.4**
**DSRI Dabo 84.19 262 P P 03 38 43.8 +0.3**
comp=Z,1µm,1.8s,comp=Z,31µm
**VANB Van 84.24 330 *e*P P 03 38 44.5 +0.8**
**BLJI Banyuglugur 84.42 250 P P 03 38 43.8 -0.8**
comp=Z,183nm,2.4s
**TOS Tosya 84.50 338 *e*P P 03 38 47.1 +2.2**
**PPBI Pangkal Pinang 84.53 260 P P 03 38 45.4 +0.2**
comp=Z,372nm,2.1s,comp=Z,9µm
**LHMI Lhok Sumawe 84.54 272 P P 03 38 45.1 -0.1**
baz=85,SNR=3.0
**LHMI Lhok Sumawe 84.54 272 P P 03 38 46.2 +0.9**
comp=Z,744nm,2.2s,comp=Z,22µm
**LHMI Lhok Sumawe 84.54 272 *e*P P 03 38 46.5 +1.2**
comp=Z,6µm,2.4s
LHMI LR LR
comp=Z,9µm,20.0s
**PVM Polavaram 84.60 291 *e*P P 03 38 45.6 0.0**
PVM IAmb IAmb 03 38 47.5
comp=Z,561nm,1.3s
PVM *e*SKSac **SKSac 03 49 08.6 +0.5**
PVM IVMs_BB IVMs_BB 04 21 02.3
comp=Z,3µm,19.5s
**PVM Polavaram 84.60 291** IVMs_BB IVMs_BB 04 21 02.5
comp=Z,3µm,19.5s
**JAGI Jajag, Banyuwa 84.67 250 *e*P P 03 38 42.6 -3.2**
comp=Z,1µm,2.6s
**BNGB Bing ¶‖ 84.68 333 *e*P P 03 38 46.6 +0.7**
**RPR Rampur 84.69 294 *e*P P 03 38 46.1 +0.1**
RPR IAmb IAmb 03 38 47.6
comp=Z,2µm,1.8s
RPR *e*SKSac **SKSac 03 49 05.7 -3.0**
RPR IVMs_BB IVMs_BB 04 22 04.3
comp=Z,6µm,17.2s
**RPR Rampur 84.69 294** IVMs_BB IVMs_BB 04 22 04.5
comp=Z,6µm,17.2s
**TBJI Tambak Boyo 84.72 252 P P 03 38 45.5 -0.6**
comp=Z,332nm,1.8s,comp=Z,10µm
**VLC Villacollemand 84.75 356 *e*P P 03 38 46.0 0.0**
comp=Z,809nm,2.0s
VLC LR LR
comp=Z,11µm,22.0s
**SMN1 Samana, DR 84.80 66 *e*P P 03 38 47.2 +0.5**
**SVSK Karacayir 84.83 336 *e*P P 03 38 47.3 +0.9**
**PLE Pljevlja 84.84 349⇑ *i*P P 03 38 46.1 -0.5**
**TSI Tuntungan 84.86 269 P P 03 38 47.3 +0.4**
comp=Z,380nm,1.2s,comp=Z,10µm
**UPM Unac-Piva 85.02 350⇑ *i*P P 03 38 46.7 -0.9**
**CMBY CAMPBELL BAY 85.05 275 *e*P P 03 38 49.5 +1.6**
CMBY AMB AMB 03 38 52.2
comp=Z,396nm,5.2s
**VTS Vitosha 85.06 346** *i* P **P 03 38 47.0 -0.8**
**PTK Pertek 85.14 334 *e*P P 03 38 49.3 +1.0**
**CORM Corum 85.17 337 *e*P P 03 38 49.4 +1.1**
**PSI Prapat 85.17 268 *e*P P 03 38 48.6 -0.1**
PSI pmax pmax
comp=Z,2µm,2.1s
PSI MLR MLR
comp=Z,9µm,19.0s
**PSI Prapat 85.17 268 P P 03 38 48.9 +0.2**
baz=85,SNR=88
**PSI Prapat 85.17 268 *e*P P 03 38 48.6 -0.1**
comp=Z,2µm,2.1s
PSI LR LR
comp=Z,9µm,19.0s
**IVA Berane 85.23 349⇑ *i*P P 03 38 48.5 0.0**
**SVAN Silvan-Diyarba 85.31 332 *e*P P 03 38 49.7 +0.8**
**BRY Bratogost 85.36 350⇑ *i*P P 03 38 48.9 -0.3**
**QLP Quilpie 85.37 216 P P 03 38 49.6 +0.6**
baz=85,SNR=18
**NGJI Ngawi 85.39 252 P P 03 38 49.2 -0.3**
comp=Z,356nm,3.0s
**NKY Niksic 85.40 349⇑ *i*P P 03 38 49.1 -0.3**
**CUKT Cukurca 85.41 330 *e*P P 03 38 49.9 +0.4**
**NKME Niksic 85.45 350⇑ *i*P P 03 38 49.3 -0.2**
**PVY Plav 85.50 349⇑ *i*P P 03 38 49.8 -0.1**
**LHI Lord Howe Isla 85.54 202** PFAKE 03 39 00.0 +10
LHI LR LR
comp=Z,8µm,21.0s
**SVRC Sivrice-ELAZID 85.64 333 *e*P P 03 38 52.1 +1.3**
**PDG Podgorica 85.75 349 P P 03 38 49.9 -1.0**
**TTG Podgorica 85.75 349⇑ *i*P P 03 38 50.6 -0.3**
**TTG Podgorica 85.75 349 P P 03 38 49.9 -1.0**
**TTG Podgorica 85.75 349 P P 03 38 49.9 -1.0**
**SMRI Semarang 85.75 253 *e*P P 03 38 51.5 +0.2**
comp=Z,3µm,2.3s
**BKNI Bangkinang 85.77 265 *e*P P 03 38 52.3 +0.9**
comp=Z,2µm,1.9s
BKNI LR LR
comp=Z,6µm,22.0s
**KKB Krupnik 85.79 346** *i* P **P 03 38 51.8 +0.6**
**DYBB Diyarbakir 85.80 333 *e*P P 03 38 51.7 +0.3**
**HCY Herceg Novi 85.82 350⇑ *i*P P 03 38 50.8 -0.5**
**BRTR Keskin Array B 85.84 338 P P 03 38 51.5 -0.1**
comp=Z,43nm,1.0s,baz=45,slow=1.9,SNR=92
BRTR PKKPbc **PKKPbc 03 56 50.1 -0.3**
comp=Z,1.2nm,0.8s,baz=184,slow=5.9,SNR=3.8
BRTR LR LR 04 23 13.5
comp=Z,5µm,18.4s,baz=18,slow=40
**BRTR Keskin Array B 85.84 338** *i* P **P 03 38 51.5 -0.1**
BRTR pmax pmax
comp=Z,46nm,1.0s
**PTCN Pitcairn Islan 85.85 140** PFAKE 03 39 00.0 +8.5
PTCN LR LR
comp=Z,21µm,19.0s
**ANTO Ankara 85.90 339 *e*P P 03 38 52.9 +1.0**
ANTO pmax pmax
comp=Z,891nm,1.8s
ANTO MLR MLR
comp=Z,15µm,19.0s
**ANTO Ankara 85.90 339⇑ *i*P P 03 38 52.5 +0.6**
**ANTO Ankara 85.90 339 P P 03 38 52.7 +0.8**
SNR=46
**ANTO Ankara 85.90 339 *e*P P 03 38 52.9 +1.0**
comp=Z,891nm,1.8s
ANTO LR LR
comp=Z,15µm,19.0s
**BUM Brajici-Budva 85.92 349⇑ *i*P P 03 38 51.8 -0.1**
**SKO Skopje 85.92 348** *i* P **P 03 38 53.3 +1.5**
**SKO Skopje 85.92 348 P P 03 38 51.8 -0.1**
**SKO Skopje 85.92 348 P P 03 38 51.8 -0.1**
**SKO Skopje 85.92 348 P P 03 38 51.8 -0.1**
**BR231 Keskin MP Arra 85.93 339 *e*P P 03 38 51.4 -0.6**
**MALT Malatya 85.95 334 *e*P P 03 38 53.2 +1.1**
**DARE Darende-Malaty 85.96 335 *e*P P 03 38 52.5 +0.2**
**DRME Dracevica, Mon 85.99 349⇑ *i*P P 03 38 52.0 -0.2**
**ADH Angra Heroismo 86.12 25 *e*P P 03 38 53.6 +0.8**
comp=Z,474nm,1.5s
**BNN Bunyan 86.13 336 *e*P P 03 38 53.4 +0.3**
**KAMT Kaman 86.16 338 *e*P P 03 38 54.1 +0.9**
**NVR Nevrokopi 86.18 346 *e*P P 03 38 53.4 +0.2**
**NVR Nevrokopi 86.18 346 *e*P P 03 38 53.4 +0.2**
**NVR Nevrokopi 86.18 346 P P 03 38 53.1 -0.1**
**NVR Nevrokopi 86.18 346 P P 03 38 53.1 -0.1**
**FITZ Fitzroy Crossi 86.20 235 P P 03 38 53.8 +0.5**
baz=86,SNR=51
**FITZ Fitzroy Crossi 86.20 235 *e*P P 03 38 53.8 +0.5**
comp=Z,1µm,2.3s
**ULC Ulcinj 86.21 349⇑ *i*P P 03 38 52.6 -0.7**
**AFSR Af˙ar-Bala (A 86.23 338 *e*P P 03 38 52.9 -0.7**
**HYBB Hyderabad (bro 86.25 293 *e*P P 03 38 53.6 -0.3**
HYBB IAmb IAmb 03 38 55.1
comp=Z,1µm,1.7s
HYBB *e*SKSac **SKSac 03 49 14.7 -4.0**

HYBB IVMs_BB IVMs_BB 04 20 28.6
comp=Z,5µm,18.0s
**HYBB Hyderabad (bro 86.25 293** IVMs_BB IVMs_BB 04 20 28.9
comp=Z,5µm,18.0s
**HYB Hyderabad 86.25 293**⇑ *i*P **P 03 38 52.5 -1.4**
comp=Z,460nm,1.0s
HYB *e* 03 38 55.0
HYB *e*PcP **PcP 03 38 58.0 +1.6**
HYB *e*SKS **SKSac 03 49 14.0 -4.7**
HYB *e*S **S 03 49 28.0 +0.4**
HYB *e* 03 49 40.0
**HYB Hyderabad 86.25 293** *e*P **P 03 38 54.1 +0.2**
HYB AMB AMB 03 38 56.4
comp=Z,780nm,1.6s
**ALN Alexandroupoli 86.26 344** P **P 03 38 53.4 -0.1**
**ALN Alexandroupoli 86.26 344** P **P 03 38 53.4 -0.1**
**ALN Alexandroupoli 86.26 344** P **P 03 38 53.4 -0.1**
**MNSI Mandailing Nat 86.31 267** P **P 03 38 53.1 -1.0**
comp=Z,88nm,2.4s,comp=Z,11µm
**BCIP Isla Barro Col 86.32 80** *e*P **P 03 38 54.4 +0.2**
comp=Z,995nm,2.0s
BCIP LR LR
comp=Z,7µm,20.0s
**PHP Peshkopia 86.33 348** P **P 03 38 53.4 -0.6**
**PHP Peshkopia 86.33 348** P **P 03 38 53.4 -0.6**
**PHP Peshkopia 86.33 348** P **P 03 38 53.4 -0.6**
**PGAV Gavieira, Arco 86.39 10** *e*P **P 03 38 54.3 0.0**
comp=Z,192nm,1.9s
**PGAV Gavieira, Arco 86.39 10** *e*SKS **S 03 49 28.8 +0.4**
**PGAV Gavieira, Arco 86.39 10** *e*LR LR 04 07 44.4
comp=Z,7µm,18.0s
**UGM Wanagama 86.39 253** P **P 03 38 54.1 -0.3**
baz=86,SNR=3.7
**UGM Wanagama 86.39 253** P **P 03 38 54.3 -0.2**
comp=Z,660nm,1.7s,comp=Z,16µm
**UGM Wanagama 86.39 253** *e*P P 03 38 59.3 +4.8
comp=Z,3µm,1.9s
**SARI SarD1z-Kayseri 86.40 336** *e*P **P 03 38 55.1 +0.6**
**VAY Valandovo 86.40 347** *i*P **P 03 38 55.8 +1.6**
**VAY Valandovo 86.40 347** P **P 03 38 54.6 +0.4**
**VAY Valandovo 86.40 347** P **P 03 38 54.6 +0.4**
**VAY Valandovo 86.40 347** P **P 03 38 54.6 +0.4**
**KAVA Kavala 86.42 345** P **P 03 38 53.6 -0.7**
**KAVA Kavala 86.42 345** P **P 03 38 53.6 -0.7**
**SRS Serrai 86.45 346** P **P 03 38 54.1 -0.4**
**SRS Serrai 86.45 346** *e*P **P 03 38 54.2 -0.3**
**SRS Serrai 86.45 346** *e*P **P 03 38 54.2 -0.3**
**SRS Serrai 86.45 346** P **P 03 38 54.1 -0.4**
**SRS Serrai 86.45 346** P **P 03 38 54.1 -0.4**
**BHJ Bhuj 86.46 303** *e*P **P 03 38 55.0 +0.2**
BHJ AMB AMB 03 38 55.9
comp=Z,932nm,2.4s
**ARMA Armidale 86.46 208** P **P 03 38 53.1 -1.4**
baz=86,SNR=7.3
**ARMA Armidale 86.46 208** *e*P **P 03 38 55.8 +1.3**
comp=Z,304nm,1.4s
ARMA LR LR
comp=Z,12µm,19.0s
**SDSI Sungai Dareh 86.50 264** P **P 03 38 55.1 +0.1**
comp=Z,288nm,2.1s
**NJS Nagarjunasagar 86.50 292** *e*P **P 03 38 54.6 -0.4**
NJS IAmb IAmb 03 38 56.4
comp=Z,2µm,2.3s
NJS *e*SKSac **SKSac 03 49 15.9 -4.2**
NJS IVMs_BB IVMs_BB 04 19 07.3
comp=Z,4µm,24.3s
**NJS Nagarjunasagar 86.50 292** IVMs_BB IVMs_BB 04 19 07.5
comp=Z,4µm,24.3s
**KNT Kendrikon 86.51 346** *e*P **P 03 38 55.1 +0.3**
**KNT Kendrikon 86.51 346** P **P 03 38 54.7 -0.1**
**KNT Kendrikon 86.51 346** *e*P **P 03 38 54.9 +0.1**
**KNT Kendrikon 86.51 346** *e*P **P 03 38 54.9 +0.1**
**KNT Kendrikon 86.51 346** P **P 03 38 54.7 -0.1**
**KNT Kendrikon 86.51 346** P **P 03 38 54.7 -0.1**
**YAYX Yaylak 86.55 338** *e*P **P 03 38 55.7 +0.6**
**SERE Sereflikochisa 86.60 338** *e*P **P 03 38 56.3 +0.9**
**AGP Aguadilla 86.63 65** PFAKE 03 39 10.0 +14
AGP LR LR
comp=Z,19µm,22.0s
**PCAB Cabril 86.66 9** *e*P **P 03 38 55.4 -0.1**
comp=Z,112nm,2.4s
**ADKI Addanki 86.67 291** *e*P **P 03 38 56.2 +0.3**
ADKI IAmb IAmb 03 38 57.7
comp=Z,3µm,2.4s
ADKI *e*SKSac **SKSac 03 49 20.1 -1.0**
ADKI IVMs_BB IVMs_BB 04 25 21.4
comp=Z,5µm,16.9s
**ADKI Addanki 86.67 291** IVMs_BB IVMs_BB 04 25 21.6
comp=Z,5µm,16.9s
**PBRG Braganca 86.69 9** *e*P **P 03 38 55.9 +0.2**
comp=Z,193nm,2.1s
**TIR Tirane 86.74 349** *e*P **P 03 38 56.4 +0.5**
TIR pmax pmax
comp=Z,2µm,2.1s
TIR MLR MLR
comp=Z,14µm,21.0s
**TIR Tirane 86.74 349** P **P 03 38 55.6 -0.3**
**TIR Tirane 86.74 349** *e*P **P 03 38 56.4 +0.5**
comp=Z,2µm,2.1s
TIR LR LR
comp=Z,14µm,21.0s
**OUZ Omahuta 86.75 189** *e*P **P 03 38 57.1 +1.5**
comp=Z,89nm,1.2s
OUZ LR LR
comp=Z,19µm,20.0s
**PPI Padang Panjang 86.77 265** P **P 03 38 55.5 -0.9**
comp=Z,205nm,2.4s,comp=Z,8µm
**SOH Sokhos 86.77 346** P **P 03 38 55.3 -0.8**
**SOH Sokhos 86.77 346** *e*P **P 03 38 55.7 -0.4**
**SOH Sokhos 86.77 346** *e*P **P 03 38 55.7 -0.4**
**SOH Sokhos 86.77 346** P **P 03 38 55.3 -0.8**
**SOH Sokhos 86.77 346** P **P 03 38 55.3 -0.8**
**GRG Griva 86.78 347** *e*P **P 03 38 56.9 +0.7**
**GRG Griva 86.78 347** P **P 03 38 56.1 -0.1**
**GRG Griva 86.78 347** *e*P **P 03 38 56.2 0.0**
**GRG Griva 86.78 347** *e*P **P 03 38 56.2 0.0**
**GRG Griva 86.78 347** P **P 03 38 56.1 -0.1**
**GRG Griva 86.78 347** P **P 03 38 56.1 -0.1**
**OHR Ohrid 86.85 348** *i*P **P 03 38 56.4 -0.2**
**LRS Lares 86.89 64** *e*P **P 03 38 57.7 +0.7**
**AOPR Arecibo Observ 86.90 64** *e*P **P 03 38 57.6 +0.5**
comp=Z,61nm,0.6s
AOPR LR LR
comp=Z,10µm,21.0s
**AS01 Alice Springs 86.96 225** *e*P **P 03 38 55.7 -1.3**
AS01 *e*PKKPdf **PKKPdf 03 56 45.0 +1.8**
**CRPR Cabo Rojo, PR 86.97 65** PFAKE 03 39 10.0 +13
CRPR LR LR
comp=Z,12µm,22.0s
**ASAR Alice Springs 86.98 225** P **P 03 38 56.4 -0.7**
comp=Z,27nm,0.9s,baz=27,slow=4.5,SNR=112
ASAR PKKPbc **PKKPbc 03 56 49.2 +0.4**
comp=Z,1.5nm,0.7s,baz=198,slow=2.0,SNR=9.4
ASAR LR LR 04 14 23.3
comp=Z,16µm,20.7s,baz=30,slow=33
**GULA Gulagac 87.01 337** *e*P **P 03 38 57.6 +0.2**
**POLO Lamas de Olo 87.02 9** *e*P **P 03 38 57.0 -0.4**
comp=Z,111nm,2.3s
**HORT Hortiatis 87.03 346** *e*P **P 03 38 57.6 +0.2**
**HORT Hortiatis 87.03 346** *e*P **P 03 38 56.1 -1.3**
**HORT Hortiatis 87.03 346** *e*P **P 03 38 56.1 -1.3**
**HORT Hortiatis 87.03 346** P **P 03 38 56.1 -1.3**
**HORT Hortiatis 87.03 346** P **P 03 38 56.1 -1.3**
**KIZT Kizilcal 87.05 339** *e*P **P 03 38 57.3 -0.3**
**PDSI Padang 87.09 265** P **P 03 38 57.2 -0.7**
comp=Z,155nm,2.1s,comp=Z,5µm
**FNA Florina 87.10 347** *e*P **P 03 38 57.0 -0.7**
**FNA Florina 87.10 347** P **P 03 38 56.6 -1.1**
**FNA Florina 87.10 347** *e*P **P 03 38 57.9 +0.2**
**FNA Florina 87.10 347** *e*P **P 03 38 57.9 +0.2**
**FNA Florina 87.10 347** P **P 03 38 56.6 -1.1**
**FNA Florina 87.10 347** P **P 03 38 56.6 -1.1**
**SNSI Sinabang, Aceh 87.11 270** P **P 03 38 58.7 +0.7**
comp=Z,480nm,2.4s,comp=Z,17µm
**PVRL Vila Real 87.12 9** *e*P **P 03 38 57.2 -0.6**
comp=Z,196nm,2.4s
**OUR Ouranopolis 87.15 345** *e*P **P 03 38 57.4 -0.5**
**OUR Ouranopolis 87.15 345** *e*P **P 03 38 57.4 -0.5**
**PTO Porto 87.17 10** *e*P **P 03 38 57.9 0.0**
comp=Z,201nm,1.6s
**GSI Gunungsitoli 87.18 269** P **P 03 38 59.0 +0.6**
comp=Z,443nm,2.2s,comp=Z,16µm
**GSI Gunungsitoli 87.18 269** *e*P **P 03 38 58.6 +0.2**
comp=Z,3µm,2.3s
GSI LR LR
comp=Z,7µm,20.0s
**PLG Polygyros 87.20 346** P **P 03 38 56.5 -1.7**
**PLG Polygyros 87.20 346** *e*P **P 03 38 57.8 -0.4**
**PLG Polygyros 87.20 346** *e*P **P 03 38 57.8 -0.4**
**PLG Polygyros 87.20 346** P **P 03 38 56.5 -1.7**
**PLG Polygyros 87.20 346** P **P 03 38 56.5 -1.7**
**CELP Cerrillos 87.22 64** *e*P **P 03 38 59.5 +1.0**
**OBIP Obispado Ponce 87.23 64** *e*P **P 03 38 59.5 +0.9**
comp=Z,410nm,1.6s
**LEM Lembang 87.28 256** P **P 03 38 57.8 -1.2**
comp=Z,2µm,2.2s,comp=Z,48µm
**PSET Sete Cidades 87.29 24** *e*P **P 03 38 59.8 +1.1**
comp=Z,930nm,1.0s
**MVO Moncorvo 87.30 9** *e*P **P 03 38 58.5 -0.2**
comp=Z,286nm,1.6s
**MVO Moncorvo 87.30 9** *e*SKS S 03 49 43.9 +6.7
**MVO Moncorvo 87.30 9** *e*LR LR 04 08 00.4
comp=Z,7µm,22.0s
**KBN Korca 87.33 348** P **P 03 38 58.2 -0.7**
**KBN Korca 87.33 348** P **P 03 38 58.2 -0.7**
**KBN Korca 87.33 348** P **P 03 38 58.2 -0.7**
**PDA Ponta Delgada 87.38 24** *e*P **P 03 38 59.9 +0.9**
comp=Z,841nm,1.5s
**PAYG Puerto Ayora 87.41 94** PFAKE 03 39 10.0 +11
PAYG LR LR
comp=Z,7µm,19.0s
**KOZT Kozan 87.43 336** *e*P **P 03 38 59.6 +0.3**
**SJG San Juan 87.43 64** LR LR 04 17 49.3
comp=Z,12µm,21.7s,baz=317,slow=36
**SJG San Juan 87.43 64** *e*P **P 03 39 00.6 +1.1**
SJG pmax pmax
comp=Z,709nm,2.2s
SJG MLR MLR
comp=Z,14µm,21.0s
**SJG San Juan 87.43 64** *e*P **P 03 39 00.6 +1.1**
comp=Z,709nm,2.2s
SJG LR LR
comp=Z,14µm,21.0s
**KLI Kotabumi 87.43 259** P **P 03 39 00.0 +0.5**
comp=Z,155nm,1.5s,comp=Z,5µm
**LHSI Lahat 87.45 261** P **P 03 38 58.5 -1.1**
comp=Z,204nm,2.0s,comp=Z,7µm
**BART Pico Bartolome 87.47 23** *e*P **P 03 39 00.2 +0.6**
comp=Z,652nm,0.9s
**NEST Nestorio 87.50 348** *e*P **P 03 38 59.2 -0.5**
**NEST Nestorio 87.50 348** *e*P **P 03 38 59.2 -0.5**
**NEST Nestorio 87.50 348** P **P 03 38 58.5 -1.2**
**KZN Kozani 87.51 347** P **P 03 38 59.0 -0.7**
**KZN Kozani 87.51 347** *e*P **P 03 38 59.1 -0.7**
**KZN Kozani 87.51 347** *e*P **P 03 38 59.1 -0.7**
**KZN Kozani 87.51 347** P **P 03 38 59.0 -0.7**
**KZN Kozani 87.51 347** P **P 03 38 59.0 -0.7**
**MDSI Maura Dua 87.56 260** P **P 03 38 57.8 -2.3**
comp=Z,110nm,1.5s,comp=Z,4µm
**HUMP Coi San Antoni 87.58 64** *e*P **P 03 39 00.5 +0.3**
comp=Z,691nm,2.2s
HUMP LR LR
comp=Z,24µm,20.0s
**LIT Litokhoron 87.61 346** P **P 03 38 58.2 -2.0**
**LIT Litokhoron 87.61 346** P **P 03 38 58.2 -2.0**
**LIT Litokhoron 87.61 346** P **P 03 38 58.2 -2.0**
**CPD Cerro la Pandu 87.62 64** *e*P **P 03 39 00.8 +0.3**
**CPD Cerro la Pandu 87.62 64** *e*P **P 03 39 00.8 +0.3**
comp=Z,4µm,2.3s
**VLO Vlora 87.65 349** P **P 03 39 00.3 0.0**
**VLO Vlora 87.65 349** P **P 03 39 00.3 0.0**
**VLO Vlora 87.65 349** P **P 03 39 00.3 0.0**
**PVIS Viseu 87.66 10** *e*P **P 03 39 00.3 -0.1**
comp=Z,97nm,1.4s
**YESY Yesilyurt 87.66 337** *e*P **P 03 39 00.5 -0.1**
**KONT Konya--Tatoy 87.83 338** *e*P **P 03 39 01.3 0.0**
**KSI Kapahiang 87.89 262** P **P 03 38 59.3 -2.5**
comp=Z,350nm,1.6s,comp=Z,11µm
**STVI Saint Thomas 87.91 63** *e*P **P 03 39 03.6 +1.7**
comp=Z,2µm,2.6s
STVI LR LR
comp=Z,24µm,18.0s
**MTE Manteigas 88.01 9** *e*P **P 03 39 01.6 -0.5**
comp=Z,207nm,1.4s
**MTE Manteigas 88.01 9** *e*SKS **S 03 49 44.4 +0.4**
**MTE Manteigas 88.01 9** *e*LR LR 04 08 11.7
comp=Z,11µm,18.0s
**MTE Manteigas 88.01 9** *e*P **P 03 39 02.4 +0.2**
comp=Z,229nm,1.7s
MTE LR LR
comp=Z,10µm,18.0s
**POO Poona 88.03 297**⇑ *i*P P 03 38 59.0 -3.5
comp=Z,85nm,1.0s
POO *i*S **SKSac 03 49 29.0 -0.5**
POO *i*SCS **SKKSac 03 49 38.0 -1.7**
POO *e*PS PnS 03 50 28.0 -20
POO *e*PPS PPS 03 50 50.0
POO *e*LQ LQ 04 02 08.0
POO *e*LR LR 04 06 11.5
POO *i*M M 04 13 19.5
**POO Poona 88.03 297** *e*P **P 03 39 02.8 +0.3**
**LWLI Liwa 88.05 260** P **P 03 39 00.0 -2.6**
comp=Z,116nm,1.2s
**SRN Sarande 88.17 348** P **P 03 39 01.9 -0.9**
**SRN Sarande 88.17 348** P **P 03 39 01.9 -0.9**
**KASI Kota Agung 88.17 259** P **P 03 39 00.2 -2.9**
comp=Z,81nm,1.2s,comp=Z,3µm
**THL Klokotos Trika 88.20 347** *e*P **P 03 39 01.8 -1.1**
**THL Klokotos Trika 88.20 347** *e*P **P 03 39 01.8 -1.1**
**THL Klokotos Trika 88.20 347** P **P 03 39 00.9 -2.0**
**XOR Xorichti 88.22 346** *e*P **P 03 39 02.2 -0.9**
**XOR Xorichti 88.22 346** *e*P **P 03 39 02.2 -0.9**
**PSMA Santa Maria 88.22 23** *e*P **P 03 39 03.2 +0.1**
comp=Z,580nm,1.2s
**PSMN Pico do Norte, 88.23 23** *e*P **P 03 39 03.7 +0.6**
comp=Z,655nm,1.6s
**PCAS Casmilo, Conde 88.25 10** *e*P **P 03 39 02.2 -1.0**
comp=Z,270nm,1.5s
**PCAS Casmilo, Conde 88.25 10** *e*PP PP 03 42 30.6 +1.1
PCAS *e*SKS **S 03 49 43.8 -2.4**
**SISI Saibi 88.27 266** P **P 03 39 03.2 -0.3**
comp=Z,454nm,2.0s,comp=Z,12µm
**JAN Janina 88.28 348** P **P 03 39 02.1 -1.2**
**JAN Janina 88.28 348** *e*P **P 03 39 03.9 +0.6**
**JAN Janina 88.28 348** *e*P **P 03 39 03.9 +0.6**
**JAN Janina 88.28 348** P **P 03 39 02.1 -1.2**
**JAN Janina 88.28 348** P **P 03 39 02.1 -1.2**
**NEO Neokhori 88.28 346** *e*P **P 03 39 02.7 -0.6**
**NEO Neokhori 88.28 346** *e*P **P 03 39 02.7 -0.6**
**CGJI Cibinong 88.29 257** P **P 03 39 01.4 -2.2**
comp=Z,139nm,1.8s,comp=Z,5µm
**KEK Kerkira 88.36 348** *e*P **P 03 39 03.2 -0.5**
**KEK Kerkira 88.36 348** *e*P **P 03 39 03.2 -0.5**
**KEK Kerkira 88.36 348** P **P 03 39 03.0 -0.7**
**KEK Kerkira 88.36 348** P **P 03 39 03.0 -0.7**
**ISP Isparta 88.36 340** PFAKE 03 39 20.0 +16
ISP LR LR
comp=Z,15µm,21.0s
**SGD Sagiada 88.40 348** P **P 03 39 03.2 -0.7**
**IGT Igoumenitsa 88.47 348** P **P 03 39 03.3 -0.9**
**IGT Igoumenitsa 88.47 348** *e*P **P 03 39 03.3 -0.9**
**IGT Igoumenitsa 88.47 348** *e*P **P 03 39 03.3 -0.9**
**IGT Igoumenitsa 88.47 348** P **P 03 39 03.3 -0.9**
**IGT Igoumenitsa 88.47 348** P **P 03 39 03.3 -0.9**
**SKHT Srikalahasti 88.49 290** *e*P **P 03 39 04.6 0.0**
SKHT IAmb IAmb 03 39 06.4
comp=Z,2µm,2.7s
SKHT *e*SKSac **SKSac 03 49 28.8 -3.5**
**CUC Castrocucco 88.52 351** *e*P **P 03 39 03.8 -0.7**
comp=Z,122nm,1.5s
CUC LR LR
comp=Z,6µm,21.0s
**PCBR Castelo Branco 88.57 9** *e*P **P 03 39 04.2 -0.5**
comp=Z,75nm,1.3s
**SUTC Sutluce-Ispart 88.59 339** *e*P **P 03 39 05.3 +0.3**
**AGG Agios Georgios 88.69 346** *e*P **P 03 39 04.9 -0.5**
**AGG Agios Georgios 88.69 346** *e*P **P 03 39 04.8 -0.5**
AGG pmax pmax
comp=Z,307nm,2.0s
AGG MLR MLR
comp=Z,11µm,20.0s
**AGG Agios Georgios 88.69 346** *e*P **P 03 39 03.2 -2.1**
**AGG Agios Georgios 88.69 346** *e*P **P 03 39 03.2 -2.1**
**AGG Agios Georgios 88.69 346** *e*P **P 03 39 04.8 -0.5**
comp=Z,307nm,2.0s
AGG LR LR
comp=Z,11µm,20.0s
**PTOM Tomar 88.69 10** *e*P **P 03 39 04.5 -0.8**
comp=Z,211nm,1.2s
**MDRS Chennai 88.70 289** *e*P **P 03 39 05.9 +0.3**
MDRS AMB AMB 03 39 07.1
comp=Z,236nm,2.5s
**MAKR Makrakomi, Fth 88.73 346** *e*P **P 03 39 05.2 -0.3**
**MAKR Makrakomi, Fth 88.73 346** *e*P **P 03 39 05.2 -0.3**
**HDMB Hadim 88.74 338** *e*P **P 03 39 05.7 -0.1**
**DSL Palaion Diasel 88.76 347** *e*P **P 03 39 05.1 -0.5**
**DSL Palaion Diasel 88.76 347** *e*P **P 03 39 05.1 -0.5**
**DSL Palaion Diasel 88.76 347** P **P 03 39 04.8 -0.8**
**DSL Palaion Diasel 88.76 347** P **P 03 39 04.8 -0.8**
**PPSI Pulau Pagai 88.81 264** P **P 03 39 06.1 0.0**
comp=Z,422nm,2.5s,comp=Z,11µm
**EVR Evrytania 88.87 347** *e*P **P 03 39 06.2 0.0**
**EVR Evrytania 88.87 347** *e*P **P 03 39 06.2 0.0**
**EVR Evrytania 88.87 347** P **P 03 39 05.5 -0.7**
**EVR Evrytania 88.87 347** P **P 03 39 05.5 -0.7**
**LKR Lokris 88.95 346** *e*P **P 03 39 05.2 -1.3**
**LKR Lokris 88.95 346** *e*P **P 03 39 05.2 -1.3**
**URV Uravakonda 88.96 293** *e*P **P 03 39 06.4 -0.5**
URV IAmb IAmb 03 39 08.0
comp=Z,2µm,2.4s
URV *e*SKSac **SKSac 03 49 31.9 -3.2**
URV IVMs_BB IVMs_BB 04 22 46.9
comp=Z,6µm,17.5s
**URV Uravakonda 88.96 293** IVMs_BB IVMs_BB 04 22 46.9
comp=Z,6µm,17.5s
**PMRV Marv??o 88.99 9** *e*P **P 03 39 06.0 -0.7**
comp=Z,193nm,1.4s
**PMRV Marv??o 88.99 9** *e*SKS **S 03 49 51.0 -2.2**
**PMRV Marv??o 88.99 9** *e*LR LR 04 08 56.3
comp=Z,5µm,22.0s
**ES19 SONSECA Array 89.02 7** *e*P **P 03 39 06.2 -0.7**
**EREA Eretria 89.03 345** *e*P **P 03 39 05.9 -1.0**
**EREA Eretria 89.03 345** *e*P **P 03 39 05.9 -1.0**
**ESDC Sonseca Array 89.04 7** P **P 03 39 05.8 -1.2**
comp=Z,8.2nm,0.5s,baz=353,slow=4.2,SNR=58
ESDC LR LR 04 20 23.4
comp=Z,6µm,19.1s,baz=320,slow=37
**PAB San Pablo 89.14 7** *e*P **P 03 39 07.7 +0.2**
PAB pmax pmax
comp=Z,105nm,1.5s
PAB MLR MLR
comp=Z,9µm,20.0s
**PAB San Pablo 89.14 7** *e*P **P 03 39 07.7 +0.2**
comp=Z,105nm,1.5s
PAB LR LR
comp=Z,9µm,20.0s
**LKD2 Lefkada island 89.16 348** *e*P **P 03 39 07.2 -0.3**
**LKD2 Lefkada island 89.16 348** *e*P **P 03 39 07.2 -0.3**
**LKD2 Lefkada island 89.16 348** P **P 03 39 05.6 -1.9**
**LKD2 Lefkada island 89.16 348** P **P 03 39 05.6 -1.9**
**MGCD Mangrove Creek 89.23 208** P **P 03 39 09.2 +1.6**
baz=89,SNR=9.3
**TIP Timpagrande 89.23 351** P **P 03 39 07.3 -0.6**
**TIP Timpagrande 89.23 351** *e*P **P 03 39 07.8 -0.1**
comp=Z,327nm,1.7s
TIP LR LR
comp=Z,11µm,21.0s
**PMAFR Mafra 89.25 11** *e*P **P 03 39 07.7 -0.2**
comp=Z,528nm,1.4s
**PMAFR Mafra 89.25 11** *e*PP PP 03 42 40.8 +3.3
PMAFR *e*SKS **S 03 49 54.3 -1.3**
**DESF Desfina 89.26 346** *e*P **P 03 39 06.2 -1.8**
**DESF Desfina 89.26 346** *e*P **P 03 39 06.2 -1.8**
**DSF Desfina 89.26 346** *e*P **P 03 39 05.9 -2.1**
**DSF Desfina 89.26 346** *e*P **P 03 39 05.9 -2.1**
**PDO Prodromos 89.27 347** *e*P **P 03 39 08.0 0.0**
**PDO Prodromos 89.27 347** *e*P **P 03 39 08.0 0.0**
**PDO Prodromos 89.27 347** P **P 03 39 06.2 -1.8**
**EFP Efpalio 89.34 347** *e*P **P 03 39 08.8 +0.5**
**EFP Efpalio 89.34 347** *e*P **P 03 39 08.8 +0.5**
**EFP Efpalio 89.34 347** P **P 03 39 06.7 -1.6**
**KALE Kalithea 89.34 346** *e*P **P 03 39 07.4 -1.0**
**KALE Kalithea 89.34 346** *e*P **P 03 39 07.4 -1.0**
**VIL2 Platees 89.34 345** *e*P **P 03 39 07.4 -1.0**
**VIL2 Platees 89.34 345** *e*P **P 03 39 07.4 -1.0**
**CMSA Cobar Meteorol 89.38 212** P **P 03 39 09.0 +0.7**
baz=89,SNR=15
**VSL Villasalto 89.44 356** *e*P **P 03 39 08.7 -0.1**
comp=Z,16nm,0.9s
VSL LR LR
comp=Z,10µm,21.0s
**SABA Saba 89.45 62** PFAKE 03 39 20.0 +11
SABA LR LR
comp=Z,20µm,19.0s
**PMST Lisbon--Monsan 89.47 11** *e*P **P 03 39 08.5 -0.4**
comp=Z,198nm,1.6s
**URZ Urewera 89.48 186** LR LR 04 11 42.9
comp=Z,13µm,21.2s,baz=26,slow=30
**URZ Urewera 89.48 186** *e*P **P 03 39 07.9 -0.6**
comp=Z,45nm,1.0s
URZ LR LR
comp=Z,17µm,19.0s
**PACT Alcochete 89.48 11** *e*P P 03 39 03.5 -5.5
comp=Z,496nm,1.8s
**YER Yerkesik 89.49 341** *e*P **P 03 39 09.2 +0.1**
**LIS Lisbon 89.50 11** *e*P **P 03 39 07.9 -1.1**
LIS *e*PP **PP 03 42 39.3 -0.2**
LIS AMS AMS 04 27 48.8
comp=Z,12µm,19.0s
**LIS Lisbon 89.50 11** *e*P **P 03 39 08.5 -0.5**
comp=Z,239nm,1.3s
**LIS Lisbon 89.50 11** *e*P **P 03 39 07.9 -1.1**
LIS *e* 03 42 39.2
**LAKA Lakka 89.51 346** *e*P **P 03 39 08.9 -0.3**
**LAKA Lakka 89.51 346** *e*P **P 03 39 08.9 -0.3**
**LAKA Lakka 89.51 346** P **P 03 39 07.5 -1.7**
**LAKA Lakka 89.51 346** P **P 03 39 07.5 -1.7**
**ELL Elmali 89.53 340** *e*P **P 03 39 09.2 -0.2**
**LTK Loutraki 89.57 346** *e*P **P 03 39 08.1 -1.4**
**LTK Loutraki 89.57 346** *e*P **P 03 39 08.1 -1.4**
**KLV Kalavryta, Ach 89.68 346** *e*P **P 03 39 09.5 -0.5**
**KLV Kalavryta, Ach 89.68 346** *e*P **P 03 39 09.5 -0.5**
**KLV Kalavryta, Ach 89.68 346** P P 03 39 06.8 -3.2
**KLV Kalavryta, Ach 89.68 346** P P 03 39 06.8 -3.2
**SEUS St. Eustatius 89.70 62** PFAKE 03 39 20.0 +10
SEUS LR LR
comp=Z,15µm,20.0s
**GUR Goura 89.75 346** *e*P **P 03 39 09.7 -0.7**
**GUR Goura 89.75 346** *e*P **P 03 39 09.7 -0.7**
**GUR Goura 89.75 346** P **P 03 39 08.2 -2.2**
**GUR Goura 89.75 346** P **P 03 39 08.2 -2.2**
**RLS Riolos of Patr 89.76 347** *e*P **P 03 39 09.8 -0.5**
**RLS Riolos of Patr 89.76 347** *e*P **P 03 39 09.8 -0.5**
**RLS Riolos of Patr 89.76 347** P **P 03 39 09.4 -0.9**
**RLS Riolos of Patr 89.76 347** P **P 03 39 09.4 -0.9**
**VLS Valsamata 89.77 348** P **P 03 39 09.2 -1.2**
**VLS Valsamata 89.77 348** *e*P **P 03 39 10.0 -0.4**
**VLS Valsamata 89.77 348** *e*P **P 03 39 10.0 -0.4**
**VLS Valsamata 89.77 348** P **P 03 39 09.2 -1.2**
**VLS Valsamata 89.77 348** P **P 03 39 09.2 -1.2**
**EVO Evora 89.81 10** *e*P **P 03 39 09.8 -0.7**
comp=Z,181nm,1.8s
**EVO Evora 89.81 10** *e*PP PP 03 42 42.2 +0.2
**DRO Drossia 89.83 347** *e*P **P 03 39 10.9 +0.2**
**DRO Drossia 89.83 347** *e*P **P 03 39 10.9 +0.2**
**DRO Drossia 89.83 347** P **P 03 39 10.3 -0.4**
**HIZ Hauiti 89.90 188** *e*P P 03 39 14.7 +4.2
comp=Z,329nm,1.4s
HIZ LR LR
comp=Z,17µm,19.0s
**DIDY Didyma 90.07 345** *e*P **P 03 39 09.9 -2.0**
**DIDY Didyma 90.07 345** *e*P **P 03 39 09.9 -2.0**
**LFK Lefkose 90.09 337** *e*P **P 03 39 10.5 -1.5**
**PNCL Nicolau / Gran 90.17 10** *e*P **P 03 39 11.6 -0.6**
comp=Z,131nm,1.1s
**PNCL Nicolau / Gran 90.17 10** *e*PP PP 03 42 48.8 +4.0
PNCL *e*SKS **S 03 50 08.7 +4.6**
**KRND KRANIDI 90.17 345** *e*P **P 03 39 10.1 -2.1**
**KRND KRANIDI 90.17 345** *e*P **P 03 39 10.1 -2.1**
**ANWB Willy Bob 90.22 61** PFAKE 03 39 20.0 +7.3
ANWB LR LR
comp=Z,17µm,20.0s
**AMT Artemida-Makis 90.24 347** *e*P **P 03 39 12.5 -0.1**
**AMT Artemida-Makis 90.24 347** *e*P **P 03 39 12.5 -0.1**
**PBAR Barrancos 90.26 9** *e*P **P 03 39 12.0 -0.6**
comp=Z,529nm,1.7s
**PBAR Barrancos 90.26 9** *e*PP PP 03 42 54.2 +8.6
PBAR *e*SKS **S 03 50 03.3 -1.8**
**FKH Fakeheh 90.32 334** *e*P **P 03 39 12.8 -0.3**
**PBEJ Beja 90.32 10** *e*P **P 03 39 12.4 -0.5**
comp=Z,113nm,1.7s

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| LEF | Lefka | 90.40 | 337 | eP | P | 03 39 13.1 | -0.2 |
| HWQ | Hawqa | 90.42 | 335 | eP | P | 03 39 13.0 | -0.6 |
| BKZ | Black Stump Fm | 90.42 | 186 | eP | P | 03 39 10.9 | -2.1 |
| | comp=Z,141nm,1.5s | | | | | | |
| BKZ | | | | LR | LR | | |
| | comp=Z,26µm,20.0s | | | | | | |
| CSS | Prodhromos | 90.44 | 337 | eP | P | 03 39 13.4 | -0.2 |
| CSS | Prodhromos | 90.44 | 337 | P | P | 03 39 12.4 | -1.2 |
| CSS | Prodhromos | 90.44 | 337 | eP | P | 03 39 13.7 | +0.1 |
| | comp=Z,132nm,1.6s | | | | | | |
| MESJ | Messejana | 90.47 | 10 | eP | P | 03 39 12.5 | -1.1 |
| MESJ | | | | ePP | PP | 03 42 47.5 | +0.3 |
| MESJ | | | | AMS | AMS | 04 23 06.5 | |
| | comp=Z,12µm,20.0s | | | | | | |
| MESJ | Messejana | 90.47 | 10 | eP | P | 03 39 12.9 | -0.7 |
| | comp=Z,90nm,1.7s | | | | | | |
| MESJ | Messejana | 90.47 | 10 | eP | P | 03 39 12.5 | -1.1 |
| MESJ | | | | e | | 03 42 47.4 | |
| GOA | Goa | 90.49 | 296 | eP | P | 03 39 13.4 | -0.6 |
| GOA | | | | AMB | AMB | 03 39 14.7 | |
| | comp=Z,408nm,2.0s | | | | | | |
| ITM | Ithomi | 90.56 | 346 | P | P | 03 39 12.8 | -1.3 |
| ITM | Ithomi | 90.56 | 346 | P | P | 03 39 12.8 | -1.3 |
| BANOM | Banah | 90.69 | 315 | P | P | 03 39 14.5 | -0.4 |
| | SNR=52 | | | | | | |
| BANOM | Banah | 90.69 | 315⇓ | iP | P | 03 39 13.9 | -0.9 |
| | SNR=30 | | | | | | |
| PCVE | Castro Verde | 90.69 | 10 | eP | P | 03 39 13.1 | -1.6 |
| | comp=Z,133nm,1.8s | | | | | | |
| PCVE | Castro Verde | 90.69 | 10 | ePP | PP | 03 42 52.3 | +3.3 |
| PCVE | | | | eSKS | S | 03 50 09.2 | +0.1 |
| PTEO | Sao Teotonio | 90.70 | 11 | eP | P | 03 39 13.8 | -0.9 |
| | comp=Z,182nm,1.9s | | | | | | |
| WRKA | Warakurna | 90.74 | 229 | P | P | 03 39 15.0 | +0.2 |
| | baz=91,SNR=29 | | | | | | |
| SANT | Santorini | 90.77 | 343 | PFAKE | | 03 39 30.0 | +15 |
| SANT | | | | LR | LR | | |
| | comp=Z,14µm,20.0s | | | | | | |
| BHL | Bhannes | 90.85 | 335 | eP | P | 03 39 15.0 | -0.6 |
| PYL | PYLOS | 90.86 | 346 | eP | P | 03 39 14.5 | -1.0 |
| PYL | PYLOS | 90.86 | 346 | eP | P | 03 39 14.5 | -1.0 |
| PYL | PYLOS | 90.86 | 346 | P | P | 03 39 13.8 | -1.7 |
| PYL | PYLOS | 90.86 | 346 | P | P | 03 39 13.8 | -1.7 |
| MORF | Marmelete | 90.95 | 11 | eP | P | 03 39 15.0 | -1.0 |
| MORF | | | | AMS | AMS | 04 20 21.2 | |
| | comp=Z,11µm,18.9s | | | | | | |
| MORF | Marmelete | 90.95 | 11 | eP | P | 03 39 15.2 | -0.7 |
| | comp=Z,195nm,1.6s | | | | | | |
| MORF | Marmelete | 90.95 | 11 | ePP | PP | 03 42 56.6 | +5.5 |
| MORF | | | | eSKS | S | 03 50 10.3 | -1.2 |
| MORF | Marmelete | 90.95 | 11 | eP | P | 03 39 14.9 | -1.0 |
| PVAQ | Vaqueiros | 90.96 | 10 | eP | P | 03 39 15.0 | -0.9 |
| | comp=Z,200nm,1.9s | | | | | | |
| PVAQ | Vaqueiros | 90.96 | 10 | ePP | PP | 03 42 58.9 | +7.8 |
| PVAQ | | | | eSKS | S | 03 50 16.3 | +4.9 |
| PVAQ | Vaqueiros | 90.96 | 10 | eLR | LR | 04 10 04.2 | |
| YNG | Young | 91.05 | 209 | P | P | 03 39 17.0 | +1.0 |
| | baz=91,SNR=19 | | | | | | |
| DQRL | Deir Qamar | 91.06 | 335 | eP | P | 03 39 16.0 | -0.5 |
| PBDV | Barranco-do-Ve | 91.09 | 10 | eP | P | 03 39 13.8 | -2.8 |
| | comp=Z,142nm,2.2s | | | | | | |
| PBDV | Barranco-do-Ve | 91.09 | 10 | ePP | PP | 03 42 55.9 | +3.7 |
| PBDV | | | | eSKS | S | 03 50 05.6 | -7.2 |
| PFVI | Vila Bisbo | 91.10 | 11 | eP | P | 03 39 16.2 | -0.3 |
| | comp=Z,266nm,1.6s | | | | | | |
| PFVI | Vila Bisbo | 91.10 | 11 | ePP | PP | 03 42 55.4 | +3.2 |
| PFVI | | | | eSKS | S | 03 50 18.1 | +5.3 |
| PFVI | Vila Bisbo | 91.10 | 11 | PFAKE | | 03 39 30.0 | +13 |
| PFVI | | | | LR | LR | | |
| | comp=Z,15µm,18.0s | | | | | | |
| CLTB | Caltabellotta | 91.13 | 353 | eP | P | 03 39 16.1 | -0.7 |
| | comp=Z,178nm,1.5s | | | | | | |
| CLTB | | | | LR | LR | | |
| | comp=Z,11µm,19.0s | | | | | | |
| UOSS | Wadi Hilu | 91.58 | 315 | P | P | 03 39 17.0 | -2.0 |
| | comp=Z,678nm,1.4s,SNR=45 | | | | | | |
| UOSS | Wadi Hilu | 91.58 | 315 | eP | P | 03 39 17.6 | -1.3 |
| | comp=Z,365nm,1.6s | | | | | | |
| UOSS | | | | LR | LR | | |
| | comp=Z,11µm,20.0s | | | | | | |
| ECG | Echelle | 91.61 | 62 | eP | P | 03 39 20.3 | +0.9 |
| PHG | Guadaloupe-2 | 91.64 | 62 | eP | P | 03 39 20.7 | +1.2 |
| CNB | Canberra Magne | 91.70 | 208 | P | P | 03 39 20.1 | +1.0 |
| | baz=92,SNR=5.0 | | | | | | |
| HATD | Hatta, Dubai | 91.72 | 315⇓ | iP | P | 03 39 18.5 | -1.1 |
| | SNR=62 | | | | | | |
| NAZ | Nazwa, Dubai | 91.78 | 315⇓ | iP | P | 03 39 18.1 | -1.9 |
| | SNR=38 | | | | | | |
| MBWA | Marble Bar | 91.81 | 238 | P | P | 03 39 20.5 | +0.6 |
| | SNR=6.6 | | | | | | |
| MBWA | Marble Bar | 91.81 | 238 | eP | P | 03 39 19.7 | -0.2 |
| | comp=Z,98nm,1.0s | | | | | | |
| MBWA | | | | LR | LR | | |
| | comp=Z,7µm,20.0s | | | | | | |
| CAN | Canberra | 91.82 | 209 | eP | P | 03 39 20.5 | +0.9 |
| CAN | | | | pmax | pmax | | |
| | comp=Z,318nm,2.3s | | | | | | |
| CAN | | | | MLR | MLR | | |
| | comp=Z,8µm,22.0s | | | | | | |
| CAN | Canberra | 91.82 | 209 | eP | P | 03 39 20.5 | +0.9 |
| | comp=Z,318nm,2.3s | | | | | | |
| CAN | | | | LR | LR | | |
| | comp=Z,8µm,22.0s | | | | | | |
| ASHO | Ashiyiah | 91.87 | 315 | P | P | 03 39 19.6 | -0.8 |
| | SNR=59 | | | | | | |
| ASHO | Ashiyiah | 91.87 | 315⇑ | iP | P | 03 39 19.2 | -1.2 |
| | SNR=58 | | | | | | |
| IDI | Anoyia | 91.92 | 344 | PFAKE | | 03 39 30.0 | +10 |
| IDI | | | | LR | LR | | |
| | comp=Z,10µm,22.0s | | | | | | |
| BFZ | Birch Farm | 91.94 | 186 | PFAKE | | 03 39 30.0 | +10 |
| BFZ | | | | LR | LR | | |
| | comp=Z,21µm,18.0s | | | | | | |
| FAQ | Al Faqa, Dubai | 92.03 | 315⇓ | iP | P | 03 39 19.7 | -1.3 |
| | SNR=18 | | | | | | |
| SDV | Santo Domingo | 92.15 | 73 | PFAKE | | 03 39 30.0 | +8.0 |
| SDV | | | | LR | LR | | |
| | comp=Z,14µm,22.0s | | | | | | |
| ASUD | Al Ashush, Dub | 92.25 | 315⇑ | iP | P | 03 39 20.6 | -1.4 |
| | SNR=26 | | | | | | |
| HOQ | Hoqain | 92.26 | 313 | P | P | 03 39 21.5 | -0.7 |
| | SNR=31 | | | | | | |
| WBK | Wadi Bani Khal | 92.33 | 311 | P | P | 03 39 23.6 | +1.2 |
| | SNR=45 | | | | | | |
| SMDO | Samad | 92.37 | 312 | P | P | 03 39 22.6 | -0.2 |
| | SNR=54 | | | | | | |
| SNZO | South Karori | 92.69 | 188 | PFAKE | | 03 39 30.0 | +6.7 |
| SNZO | | | | LR | LR | | |
| | comp=Z,18µm,19.0s | | | | | | |
| WDD | Wield Dalam | 92.73 | 352 | PFAKE | | 03 39 40.0 | +16 |
| WDD | | | | LR | LR | | |
| | comp=Z,7µm,20.0s | | | | | | |
| ARQ | Araqi | 92.83 | 314 | P | P | 03 39 24.5 | -0.3 |
| | SNR=120 | | | | | | |
| JMDO | Jabal Madar | 92.94 | 312 | P | P | 03 39 25.2 | -0.1 |
| | SNR=64 | | | | | | |
| FDF | Fort de France | 92.96 | 62 | eP | P | 03 39 26.2 | +0.7 |
| FDF | | | | pmax | pmax | | |
| | comp=Z,75nm,1.1s | | | | | | |
| FDF | | | | MLR | MLR | | |
| | comp=Z,20µm,21.0s | | | | | | |
| FDF | Fort de France | 92.96 | 62 | eP | P | 03 39 24.9 | -0.6 |
| FDF | Fort de France | 92.96 | 62 | eP | P | 03 39 26.2 | +0.7 |
| | comp=Z,75nm,1.1s | | | | | | |
| FDF | | | | LR | LR | | |
| | comp=Z,20µm,21.0s | | | | | | |
| PALK | Pallekele | 93.00 | 285 | PP | PP | 03 43 11.6 | +3.2 |
| | comp=Z,31nm,1.1s,baz=113,slow=0.8,SNR=6.9 | | | | | | |
| PALK | Pallekele | 93.00 | 285 | i P | P | 03 39 27.6 | +1.9 |
| PALK | Pallekele | 93.00 | 285⇑ | iP | P | 03 39 25.7 | 0.0 |
| | SNR=5.6 | | | | | | |
| PALK | Pallekele | 93.00 | 285 | eP | P | 03 39 26.8 | +1.0 |
| | comp=Z,229nm,1.4s | | | | | | |
| PALK | | | | ePP | PP | 03 43 11.1 | +2.7 |
| PALK | | | | PP | PP | 03 43 11.6 | +3.2 |
| PALK | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| ROSC | El Rosal | 93.07 | 78 | P | P | 03 39 26.8 | +0.3 |
| | comp=Z,7.7nm,0.7s,baz=335,slow=4.0,SNR=12 | | | | | | |
| ROSC | | | | LR | LR | 04 22 05.6 | |
| | comp=Z,3µm,21.7s,baz=358,slow=36 | | | | | | |
| ROSC | El Rosal | 93.07 | 78 | eP | P | 03 39 28.0 | +1.5 |
| KEST | Kesra | 93.20 | 356 | P | P | 03 39 26.0 | -0.3 |
| | comp=Z,37nm,1.3s,baz=203,slow=0.9,SNR=14 | | | | | | |
| KEST | | | | PP | PP | 03 43 12.0 | +3.2 |
| | comp=Z,12nm,1.1s,baz=54,slow=4.1,SNR=5.8 | | | | | | |
| KEST | Kesra | 93.20 | 356 | eP | P | 03 39 26.7 | +0.3 |
| KEST | | | | ePP | PP | 03 43 12.8 | +3.9 |
| THZ | Tophouse | 93.30 | 189 | PFAKE | | 03 39 40.0 | +14 |
| THZ | | | | LR | LR | | |
| | comp=Z,25µm,19.0s | | | | | | |
| HTT | Hallett | 93.51 | 217 | P | P | 03 39 24.8 | -2.7 |
| | baz=94,SNR=8.3 | | | | | | |
| KHZ | Kahutara | 93.89 | 188 | PFAKE | | 03 39 40.0 | +11 |
| KHZ | | | | LR | LR | | |
| | comp=Z,24µm,20.0s | | | | | | |
| MCLT | Moule a Chique | 93.91 | 63 | eP | P | 03 39 29.5 | -0.3 |
| PMPST | Porto Santo, M | 93.92 | 18 | eP | P | 03 39 28.9 | -0.8 |
| | comp=Z,228nm,1.7s | | | | | | |
| PMPS | Porto Santo | 93.95 | 18 | eP | P | 03 39 30.4 | +0.7 |
| | comp=Z,212nm,1.5s | | | | | | |
| PMOZ | Porto Moniz, M | 94.01 | 18 | eP | P | 03 39 30.4 | +0.2 |
| | comp=Z,270nm,1.5s | | | | | | |
| PMOZ | Porto Moniz, M | 94.01 | 18 | ePP | PP | 03 43 14.8 | -0.5 |
| PMOZ | Porto Moniz, M | 94.01 | 18 | eLR | LR | 04 11 28.1 | |
| | comp=Z,13µm,18.0s | | | | | | |
| BBOO | Buckleboo | 94.07 | 219 | PFAKE | | 03 39 40.0 | +10 |
| BBOO | | | | LR | LR | | |
| | comp=Z,11µm,18.0s | | | | | | |
| SVB | Belmont | 94.09 | 63 | eP | P | 03 39 30.6 | -0.1 |
| OTAV | Otavalo | 94.11 | 84 | eP | P | 03 39 31.8 | +0.4 |
| | comp=Z,56nm,1.3s | | | | | | |
| OTAV | | | | ePP | PP | 03 43 16.4 | -1.4 |
| OTAV | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| PMAR | Madeira | 94.16 | 18 | eP | P | 03 39 28.2 | -2.8 |
| | comp=Z,272nm,1.8s | | | | | | |
| FUL | Funchal | 94.24 | 18 | eP | P | 03 39 30.4 | -0.7 |
| | comp=Z,259nm,1.5s | | | | | | |
| TRD | Trivandrum | 94.27 | 289 | eP | P | 03 39 31.1 | -0.3 |
| TRD | | | | AMB | AMB | 03 39 32.1 | |
| | comp=Z,164nm,6.9s | | | | | | |
| PCRV | Puerto La Cruz | 94.67 | 68 | LR | LR | 04 20 49.5 | |
| | comp=Z,18µm,21.9s,slow=35 | | | | | | |
| GRGR | Grenville | 94.79 | 64 | PFAKE | | 03 39 50.0 | +16 |
| GRGR | | | | LR | LR | | |
| | comp=Z,15µm,20.0s | | | | | | |
| OXZ | Oxford | 94.93 | 189 | PFAKE | | 03 39 50.0 | +16 |
| OXZ | | | | LR | LR | | |
| | comp=Z,15µm,19.0s | | | | | | |
| EIL | Elat | 95.04 | 334 | P | P | 03 39 35.0 | +0.1 |
| | baz=95,SNR=12 | | | | | | |
| BBGH | Gun Hill | 95.14 | 62 | PFAKE | | 03 39 50.0 | +15 |
| BBGH | | | | LR | LR | | |
| | comp=Z,20µm,22.0s | | | | | | |
| MQZ | McQueen's Vall | 95.25 | 189 | PFAKE | | 03 39 50.0 | +15 |
| MQZ | | | | LR | LR | | |
| | comp=Z,12µm,20.0s | | | | | | |
| RPZ | Rata Peaks | 95.42 | 190 | LR | LR | 04 19 01.4 | |
| | comp=Z,28µm,19.2s,baz=24,slow=33 | | | | | | |
| RPZ | Rata Peaks | 95.42 | 190 | PFAKE | | 03 39 50.0 | +14 |
| RPZ | | | | LR | LR | | |
| | comp=Z,32µm,20.0s | | | | | | |
| FORT | Forrest | 95.72 | 226 | eP | P | 03 39 37.9 | +0.3 |
| | comp=Z,65nm,1.1s | | | | | | |
| FORT | | | | LR | LR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| TOSP | Speyside | 96.10 | 64 | eP | P | 03 39 40.0 | +0.2 |
| WKZ | Wanaka | 96.75 | 191 | PFAKE | | 03 39 50.0 | +8.0 |
| WKZ | | | | LR | LR | | |
| | comp=Z,23µm,22.0s | | | | | | |
| ODZ | Otahua Downs | 96.78 | 190 | PFAKE | | 03 39 50.0 | +8.0 |
| ODZ | | | | LR | LR | | |
| | comp=Z,20µm,20.0s | | | | | | |
| RAYN | Ar Rayn | 97.27 | 323 | P | P | 03 39 44.9 | -0.2 |
| | comp=Z,649nm,1.4s,SNR=66 | | | | | | |
| DCZ | Deep Cove | 97.63 | 192 | PFAKE | | 03 40 00.0 | +14 |
| DCZ | | | | LR | LR | | |
| | comp=Z,12µm,20.0s | | | | | | |
| WHZ | Wether Hill Ro | 97.93 | 192 | PFAKE | | 03 40 00.0 | +13 |
| WHZ | | | | LR | LR | | |
| | comp=Z,13µm,20.0s | | | | | | |
| RBK | Rabkut | 98.96 | 313 | P | P | 03 39 52.6 | -0.1 |
| | SNR=7.1 | | | | | | |
| ABTO | Aybut | 99.50 | 313 | P | Pdif | 03 39 55.4 | +0.1 |
| | SNR=9.7 | | | | | | |
| NNA | Nana | 104.55 | 91 | PFAKE | | 03 40 30.0 | +12 |
| NNA | | | | LR | LR | | |
| | comp=Z,6µm,18.0s | | | | | | |
| DAMY | Dhamar | 105.81 | 320 | ePdif | Pdif | 03 40 24.9 | +1.3 |
| DAMY | | | | LR | LR | | |
| | comp=Z,24µm,19.0s | | | | | | |
| PTGA | Pitinga | 106.16 | 70 | ePdif | Pdif | 03 40 25.4 | +0.6 |
| PTGA | | | | ePKKPab | PKKPab | 03 56 14.4 | 0.0 |
| PTGA | | | | LR | LR | | |
| | comp=Z,12µm,19.0s | | | | | | |
| TAM | Tamanrasset | 106.18 | 359 | eP | Pdif | 03 40 25.2 | +0.2 |
| TAM | | | | MLR | MLR | | |
| | comp=Z,7µm,21.0s | | | | | | |
| TAM | Tamanrasset | 106.18 | 359 | ePdif | Pdif | 03 40 25.2 | +0.2 |
| TAM | | | | LR | LR | | |
| | comp=Z,7µm,21.0s | | | | | | |
| DGAR | Diego Garcia | 109.58 | 283 | PFAKE | | 03 44 50.0 | |
| DGAR | | | | LR | LR | | |
| | comp=Z,7µm,19.0s | | | | | | |
| SAML | Samuel | 110.72 | 78 | ePdif | Pdif | 03 40 48.7 | +3.7 |
| SAML | | | | ePP | PP | 03 45 21.1 | -0.8 |
| SAML | | | | ePKKPab | PKKPab | 03 55 54.2 | +0.5 |
| SAML | | | | LR | LR | | |
| | comp=Z,6µm,19.0s | | | | | | |
| AAE | Adis Abeba | 113.06 | 323 | i P | PP | 03 45 38.1 | -0.1 |
| FURI | Furi | 113.21 | 323 | PFAKE | | 03 45 00.0 | |
| FURI | | | | LR | LR | | |
| | comp=Z,11µm,20.0s | | | | | | |
| TOA0 | Torodi Ar. Sit | 115.73 | 3 | ePKP1 | PKPdf | 03 44 52.8 | -1.8 |
| TOA0 | Torodi Ar. Sit | 115.73 | 3 | ePKKPbc | PKKPbc | 03 55 25.2 | +0.6 |
| TORD | Torodi Ar. Bea | 115.73 | 3 | Pdiff | Pdif | 03 41 09.1 | +1.7 |
| | comp=Z,0.7nm,1.1s,baz=3.6,slow=3.7,SNR=3.8 | | | | | | |
| TORD | | | | PKP | PKiKP | 03 44 54.1 | -0.5 |
| | comp=Z,11nm,0.7s,baz=5.3,slow=3.9,SNR=4.6 | | | | | | |
| TORD | | | | SKiKP | SKiKP | 03 48 33.5 | +5.1 |
| | comp=Z,3.1nm,0.7s,baz=352,slow=2.3,SNR=6.2 | | | | | | |
| TORD | | | | PKKPbc | PKKPbc | 03 55 25.2 | +0.5 |
| | comp=Z,7.9nm,0.9s,baz=172,slow=2.8,SNR=10 | | | | | | |
| LVC | Limon Verde | 117.48 | 92 | ePKPdf | PKPdf | 03 44 58.5 | +0.5 |
| LVC | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| LCO | Las Campanas | 120.96 | 99 | ePKPdf | PKPdf | 03 45 03.8 | -0.7 |
| LCO | | | | LR | LR | | |
| | comp=Z,8µm,18.0s | | | | | | |
| DBIC | Dimbokro | 121.64 | 11 | eP | PKPdf | 03 45 05.7 | -0.3 |
| DBIC | Dimbokro | 121.64 | 11 | PKP | PKPdf | 03 45 05.7 | -0.3 |
| | comp=Z,14nm,0.7s,baz=30,slow=2.6,SNR=22 | | | | | | |
| DBIC | | | | PKKPbc | PKKPbc | 03 55 05.2 | +1.9 |
| | comp=Z,6.9nm,0.9s,baz=151,slow=8.1,SNR=3.5 | | | | | | |
| DBIC | Dimbokro | 121.64 | 11 | ePKIKP | PKPdf | 03 45 06.1 | +0.1 |
| DBIC | Dimbokro | 121.64 | 11 | ePKPdf | PKPdf | 03 45 06.0 | +0.1 |
| DBIC | | | | PKKPbc | PKKPbc | 03 55 05.2 | +1.9 |
| TIC | Toumodi | 121.64 | 11 | ePKP1 | PKPdf | 03 45 05.5 | -0.5 |
| KIC | Kosan Boka | 121.95 | 11 | ePKP1 | PKPdf | 03 45 06.2 | -0.4 |
| | comp=Z,136nm,1.3s | | | | | | |
| LIC | Lamto | 122.05 | 11 | ePKP1 | PKPdf | 03 45 06.4 | -0.4 |
| | comp=Z,80nm,1.2s | | | | | | |
| DRV | Dumont d'Urvil | 122.46 | 199 | PP | PP | 03 46 27.0 | -17 |
| DRV | | | | SP | SP | 03 56 21.0 | -13 |
| DRV | | | | SS | SKKSdf | 04 02 59.0 | +10 |
| DRV | | | | L | L | 04 17 00.0 | |
| DRV | | | | R | | 04 22 00.0 | |
| KMBO | Kilima Mbogo | 122.93 | 320 | PKP | PKPdf | 03 45 08.7 | -0.1 |
| | comp=Z,13nm,1.1s,baz=15,slow=1.5,SNR=20 | | | | | | |
| KMBO | Kilima Mbogo | 122.93 | 320 | P | PKPdf | 03 45 10.0 | +1.2 |
| | baz=123,SNR=4.7 | | | | | | |
| KMBO | Kilima Mbogo | 122.93 | 320 | ePKPdf | PKPdf | 03 45 09.6 | +0.8 |
| RCBR | Riachuelo | 123.53 | 51 | ePKPdf | PKPdf | 03 45 10.0 | +0.4 |
| RCBR | | | | LR | LR | | |
| | comp=Z,13µm,18.0s | | | | | | |
| MBAR | Mbarara | 124.86 | 328 | ePKIKP | PKPdf | 03 45 12.1 | -0.3 |
| MBAR | | | | MLR | MLR | | |
| | comp=Z,10µm,19.0s | | | | | | |
| MBAR | Mbarara | 124.86 | 328 | ePKPdf | PKPdf | 03 45 12.1 | -0.3 |
| MBAR | | | | LR | LR | | |
| | comp=Z,10µm,19.0s | | | | | | |
| BDFB | Brasilia | 125.09 | 69 | PKP | PKPdf | 03 45 11.5 | -1.1 |
| | comp=Z,7.5nm,0.7s,baz=238,slow=4.1,SNR=12 | | | | | | |
| CPUP | Villa Florida | 127.43 | 86 | PKP | PKPdf | 03 45 15.9 | -0.7 |
| | comp=Z,8.5nm,0.7s,baz=288,slow=2.3,SNR=22 | | | | | | |
| CPUP | Villa Florida | 127.43 | 86 | ePKIKP | PKPdf | 03 45 16.6 | 0.0 |
| CPUP | Villa Florida | 127.43 | 86 | ePKPdf | PKPdf | 03 45 16.6 | 0.0 |
| DODT | Dodoma, Tanzan | 128.14 | 319 | i P | PKPdf | 03 45 13.7 | -4.8 |
| PLCA | Paso Flores | 128.88 | 109 | ePKIKP | PKPdf | 03 45 19.7 | +0.6 |
| PLCA | Paso Flores | 128.88 | 109 | P | PKPdf | 03 45 17.4 | -1.6 |
| | baz=129,SNR=8.6 | | | | | | |
| PLCA | Paso Flores | 128.88 | 109 | ePKPdf | PKPdf | 03 45 19.6 | +0.6 |
| VNDA | Vanda | 129.38 | 186 | PKP | PKPdf | 03 45 18.3 | -0.5 |
| | comp=Z,1.7nm,0.9s,baz=332,slow=2.6,SNR=18 | | | | | | |
| VNDA | Vanda | 129.38 | 186 | ePKIKP | PKPdf | 03 45 19.0 | +0.2 |
| VNDA | Vanda | 129.38 | 186 | ePKPdf | PKPdf | 03 45 19.0 | +0.2 |
| SBA | Scott Base | 129.41 | 185 | ePKIKP | PKPdf | 03 45 19.7 | +0.9 |
| SBA | | | | MLR | MLR | | |
| | comp=Z,8µm,18.0s | | | | | | |
| SBA | Scott Base | 129.41 | 185 | ePKPdf | PKPdf | 03 45 19.7 | +0.9 |
| SBA | | | | LR | LR | | |
| | comp=Z,8µm,18.0s | | | | | | |
| CASY | Casey | 130.01 | 211 | PFAKE | | 03 45 30.0 | +10 |
| CASY | | | | LR | LR | | |
| | comp=Z,7µm,20.0s | | | | | | |
| TRQA | Tornquist | 132.40 | 101 | ePKPdf | PKPdf | 03 45 25.7 | 0.0 |
| TRQA | | | | eSKPbc | SKPbc | 03 48 49.9 | -0.8 |
| TRQA | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| ABPO | Ambohimpanom | 133.59 | 298 | ePKIKP | PKPdf | 03 45 29.8 | +1.1 |
| ABPO | | | | e | | 03 47 53.5 | |
| ABPO | | | | MLR | MLR | | |
| | comp=Z,14µm,19.0s | | | | | | |
| ABPO | Ambohimpanom | 133.59 | 298 | ePKPdf | PKPdf | 03 45 29.8 | +1.1 |
| ABPO | | | | ePP | PP | 03 47 53.5 | -3.6 |
| ABPO | | | | eSKP | | 03 48 58.7 | |
| ABPO | | | | LR | LR | | |
| | comp=Z,14µm,19.0s | | | | | | |
| QSPA | South Pole Qui | 141.10 | 180 | ePKPpre | PKPpre | 03 45 33.9 | |
| QSPA | | | | LR | LR | | |
| | comp=Z,9µm,19.0s | | | | | | |
| EFI | East Falkland | 142.03 | 116 | ePKIKP | PKPdf | 03 45 42.3 | -0.7 |
| EFI | | | | MLR | MLR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| EFI | East Falkland | 142.03 | 116 | ePKPdf | PKPdf | 03 45 42.3 | -0.7 |
| EFI | | | | LR | LR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| PMSA | Palmer Station | 143.25 | 138 | ePKPdf | PKPdf | 03 45 45.1 | +0.4 |
| PMSA | | | | LR | LR | | |
| | comp=Z,18µm,20.0s | | | | | | |
| SHEL | Horse Pasture | 143.72 | 17 | PFAKE | | 03 46 00.0 | +13 |
| SHEL | | | | LR | LR | | |
| | comp=Z,8µm,19.0s | | | | | | |
| MSNA | Messina | 145.00 | 316 | eP | PKPab | 03 45 48.7 | +0.1 |
| MSNA | | | | IAMs_20 | IAMs_20 | 05 21 07.6 | |
| | comp=Z,15µm,18.6s | | | | | | |
| MAW | Mawson | 147.79 | 218 | PKP | PKPdf | 03 45 52.0 | -0.5 |
| | comp=Z,33nm,0.6s,baz=89,slow=2.7,SNR=73 | | | | | | |
| MAW | | | | PKPbc | PKPbc | 03 45 55.4 | 0.0 |
| | comp=Z,55nm,0.9s,baz=91,slow=4.0,SNR=76 | | | | | | |
| MAW | Mawson | 147.79 | 218 | ePKIKP | PKPdf | 03 45 51.9 | -0.5 |
| MAW | | | | MLR | MLR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| MAW | Mawson | 147.79 | 218 | P | PKPdf | 03 45 52.0 | -0.5 |
| | baz=148,SNR=76 | | | | | | |
| MAW | Mawson | 147.79 | 218 | ePKPdf | PKPdf | 03 45 51.9 | -0.5 |
| MAW | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| POGA | Pongola | 148.59 | 309 | eP | PKPbc | 03 45 58.8 | +0.1 |
| SLR | Silverton | 148.73 | 316 | eP | PKPdf | 03 45 55.1 | -0.4 |
| SLR | | | | IAMs_20 | IAMs_20 | 04 54 41.9 | |
| | comp=Z,10µm,20.0s | | | | | | |
| LBTB | Lobatse | 149.21 | 321 | eP | PKPbc | 03 45 59.7 | -0.8 |
| LBTB | | | | IAMs_20 | IAMs_20 | 05 12 47.9 | |
| | comp=Z,9µm,18.5s | | | | | | |
| LBTB | Lobatse | 149.21 | 321 | ePKIKP | PKPdf | 03 45 56.7 | +0.4 |
| LBTB | Lobatse | 149.21 | 321 | ePKPdf | PKPdf | 03 45 56.6 | +0.4 |
| KSR | Koster | 149.43 | 318 | eP | PKPdf | 03 45 58.4 | +1.7 |
| KLOF | Kloof | 149.56 | 316 | eP | PKPbc | 03 46 01.3 | -0.1 |
| WDLM | Western Deep L | 149.70 | 317 | eP | PKPbc | 03 46 01.0 | -0.8 |
| PRYS | Parys | 150.17 | 316 | eP | PKPbc | 03 46 01.6 | -1.3 |
| PRYS | Parys | 150.17 | 316 | P | PKPbc | 03 46 01.6 | -1.3 |
| BFSD | Buffelsfontein | 150.36 | 317 | eP | PKPbc | 03 46 03.1 | -0.2 |
| BFSD | Buffelsfontein | 150.36 | 317 | P | PKPbc | 03 46 03.1 | -0.2 |
| SWZ | Schweizer | 151.25 | 319 | eP | PKPbc | 03 46 05.5 | 0.0 |
| SWZ | Schweizer | 151.25 | 319 | P | PKPbc | 03 46 05.5 | 0.0 |
| SEK | Senekal | 151.26 | 314 | eP | PKPbc | 03 46 05.3 | -0.2 |
| SEK | Senekal | 151.26 | 314 | P | PKPbc | 03 46 05.3 | -0.2 |
| KSD | Kokstad | 152.29 | 309 | eP | PKPbc | 03 46 07.2 | -0.5 |
| BOSA | Boshof | 152.54 | 318 | eP | PKPbc | 03 46 09.0 | +0.8 |
| BOSA | | | | IAMs_20 | IAMs_20 | 05 07 44.8 | |
| | comp=Z,10µm,20.3s | | | | | | |
| BOSA | Boshof | 152.54 | 318 | PKPbc | PKPbc | 03 46 07.5 | -0.8 |
| | comp=Z,38nm,0.5s,baz=32,slow=2.1,SNR=9.6 | | | | | | |
| BOSA | | | | PKPab | PKPab | 03 46 19.3 | +0.6 |
| | comp=Z,205nm,0.9s,baz=24,slow=6.3,SNR=18 | | | | | | |
| BOSA | Boshof | 152.54 | 318 | ePKIKP | PKPdf | 03 46 01.7 | +0.4 |
| BOSA | | | | | | 03 46 07.5 | |
| BOSA | Boshof | 152.54 | 318 | P | PKPdf | 03 46 01.3 | 0.0 |
| | baz=153,SNR=151 | | | | | | |
| BOSA | Boshof | 152.54 | 318 | ePKPdf | PKPdf | 03 46 01.7 | +0.4 |
| BOSA | | | | PKPbc | PKPbc | 03 46 07.5 | -0.8 |
| BOSA | | | | PKPab | PKPab | 03 46 19.3 | +0.6 |
| UPI | Upington | 153.88 | 325 | eP | PKPbc | 03 46 07.8 | -3.4 |
| HVD | Gariep Dam | 154.16 | 315 | eP | PKPbc | 03 46 12.0 | +0.2 |
| HOPE | Hope Point | 155.20 | 113 | PFAKE | | 03 46 20.0 | -9.1 |
| HOPE | | | | LR | LR | | |
| | comp=Z,18µm,19.0s | | | | | | |
| SYO | Syowa Base | 155.77 | 210⇓ | eX | PKPdf | 03 46 01.4 | -3.0 |
| KOMG | Komaggas | 156.45 | 331 | eP | PKPdf | 03 46 06.3 | -0.3 |
| CVNA | Calvinia | 157.24 | 325 | eP | PKPdf | 03 46 07.5 | -0.2 |
| SUR | Sutherland | 157.65 | 322 | ePKPdf | PKPdf | 03 46 08.4 | +0.1 |
| SUR | | | | ePKPab | PKPab | 03 46 40.4 | -0.2 |
| SUR | | | | LR | LR | | |
| | comp=Z,22µm,19.0s | | | | | | |
| VNA3 | Neumayer Olymp | 159.00 | 167 | P | PKPdf | 03 46 06.5 | -2.0 |
| SNAA | Sanae | 159.32 | 173 | P | PKPdf | 03 46 06.5 | -2.3 |
| SNAA | Sanae | 159.32 | 173 | ePKIKP | PKPdf | 03 46 06.6 | -2.3 |
| SNAA | | | | MLR | MLR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| SNAA | Sanae | 159.32 | 173 | ePKPdf | PKPdf | 03 46 06.6 | -2.3 |
| SNAA | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| VNA2 | Neumayer--Watz | 159.59 | 169 | P | PKPdf | 03 46 07.5 | -1.6 |
| | baz=273,slow=1.7 | | | | | | |
| VNA1 | Neumayer--Stat | 159.73 | 168 | P | PKPdf | 03 46 08.6 | -0.6 |

*IDC **08** 03:33:43.1±1.7, 51°.28N×175°.07W, h0km, mb4.2/7, mb1 4.2/10, mb1mx3.9/67, mbtmp4.2/10, ML3.6/3, Error ellipse: s-maj=42.1km s-min=24.2km az=148.0*

*ISCJB **08** 03:33:46.8±0.8, 51°.12N±0°.07×175°.10W±0°.06, h40km, mb4.3/7, Error ellipse: s-maj=10.7km s-min=5.4km az=169.9*

*NEIC **08** 03:33:48.6, 51°.26N×175°.25W, h24km, ML3.5(AEIC), After AEIC.*

**ISC 08 03:33:49.1**±1.1, **51°.3N**±0°.1×**175°.19W**±0°.05, **h40km, n29,** σ**0s.79**/33, **mb4.2**/7, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.94 | 325 | P | Pn | 03 34 05.5 | -0.4 |
| GSCK | Great Sitkin C | 0.96 | 321 | P | Pn | 03 34 05.8 | -0.3 |
| ETKA | Kagalaska Isla | 0.96 | 308 | P | Pn | 03 34 05.7 | -0.4 |
| ETKA | | | | S | Sn | 03 34 19.1 | +0.6 |
| GSTD | Great Sitkin T | 0.98 | 323 | P | Pn | 03 34 06.3 | -0.2 |
| GSTR | Great Sitkin T | 0.98 | 327 | ePn | Pn | 03 34 06.3 | -0.2 |
| ATKA | Atka Island | 1.12 | 33 | P | Pn | 03 34 07.9 | -0.4 |
| ATKA | | | | S | Sn | 03 34 23.5 | +1.1 |
| KOKL | Mount Kliuchef | 1.22 | 30 | P | Pn | 03 34 10.6 | +0.9 |
| KOWE | Korovin West | 1.24 | 28 | P | Pn | 03 34 11.1 | +1.1 |
| KOKV | Korovin Volcan | 1.26 | 30 | P | Pn | 03 34 11.6 | +1.2 |
| KIRH | Kanaga Island | 1.34 | 299 | P | Pn | 03 34 11.2 | -0.1 |
| KIKV | Kanaga Island | 1.38 | 297 | P | Pn | 03 34 11.6 | -0.3 |
| KIKV | | | | S | Sn | 03 34 30.2 | +1.4 |
| KICM | Kanaga Island | 1.41 | 298 | P | Pn | 03 34 12.3 | +0.1 |
| TAPA | Tanaga Point A | 1.72 | 289 | P | Pn | 03 34 16.6 | 0.0 |
| TAFL | Tanaga Flats | 1.76 | 287 | P | Pn | 03 34 17.1 | +0.1 |
| TAFP | Tanaga Falls P | 1.85 | 291 | P | Pn | 03 34 18.7 | +0.4 |
| TAFP | | | | S | Sn | 03 34 42.0 | +1.5 |
| TANO | Tanaga North | 1.94 | 291 | P | Pn | 03 34 20.1 | +0.6 |
| GALAA | Gareloi Lava P | 2.29 | 284 | P | Pn | 03 34 24.9 | +0.6 |
| GANE | Gareloi Northe | 2.30 | 285 | P | Pn | 03 34 25.2 | +0.6 |
| KDAK | Kodiak Island | 14.61 | 55 | Pn | Pn | 03 37 11.6 | -1.3 |
| | 0.1nm,0.3s,baz=255,slow=5.8,SNR=4.3 | | | | | | |
| PETK | Petropavlovsk- | 16.69 | 287 | Pn | Pn | 03 37 39.1 | -0.6 |
| | 0.2nm,0.3s,baz=84,slow=19,SNR=2.0 | | | | | | |
| ILAR | Eielson Array | 19.95 | 37 | P | P | 03 38 17.7 | +0.4 |
| | 0.3nm,0.3s,baz=228,slow=9.5,SNR=4.1 | | | | | | |
| SPITS | Spitsbergen Ar | 50.62 | 357 | P | P | 03 42 42.1 | -1.3 |
| | 11nm,1.1s,baz=357,slow=7.7,SNR=4.1 | | | | | | |
| KURK | Kurchatov | 60.71 | 316 | P | P | 03 43 57.2 | +1.2 |
| KURBB | Kurchatov Arra | 60.81 | 316 | P | P | 03 43 57.2 | +0.5 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 2.5nm,0.6s,baz=45,slow=6.5,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.85** | **310** | P | **P** | **03 44 03.8** | **-0.1** |
| | 1.3nm,0.6s,baz=44,slow=6.9,SNR=6.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.41** | **322** | P | **P** | **03 44 08.5** | **+1.1** |
| | 2.9nm,0.6s,baz=49,slow=8.8,SNR=4.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.92** | **357** | P | **P** | **03 44 42.8** | **-0.3** |
| | 0.5nm,0.6s,baz=7.1,slow=6.7,SNR=2.7 | | | | | | |
| **HFS** | **Hagfors** | **68.72** | **355** | P | **P** | **03 44 47.6** | **-0.5** |
| | 1.2nm,0.4s,baz=36,slow=3.7,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **83.55** | **227** | P | **P** | **03 46 13.1** | **+0.3** |
| | 1.6nm,1.1s,baz=24,slow=5.7,SNR=5.7 | | | | | | |

*IDC **08** 03:40:44.5±0.7, 51.°43N×175.°18W, h0km, mb4.2/25, mb1 4.3/27, mb1mx4.2/60, mbtmp4.2/27, ML4.2/2, Error ellipse: s-maj=19.6km s-min=13.2km az=165.0*

*ISCJB **08** 03:40:48.5±0.4, 51.°20N±0.°05×175.°15W±0.°04, h40km, mb4.3/33, Error ellipse: s-maj=6.8km s-min=3.5km az=163.9*

*NEIC **08** 03:40:49.4, 51.°25N×175.°20W, h30km, mb4.5/12, ML4.1(AEIC), After AEIC.*

**ISC 08 03:40:50.4**±0.6**, 51.°34N**±0.°08×**175.°21W**±0.°04**, h40km, n91,** σ**1.s24**/95**, mb4.3**/33**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.88** | **324** | P | **Pn** | **03 41 06.3** | **0.0** |
| **GSCK** | **Great Sitkin C** | **0.90** | **319** | P | **Pn** | **03 41 06.5** | **0.0** |
| **ETKA** | **Kagalaska Isla** | **0.91** | **306** | P | **Pn** | **03 41 06.5** | **-0.2** |
| **GSTR** | **Great Sitkin T** | **0.92** | **325** | *e*Pn | **Pn** | **03 41 06.9** | **0.0** |
| **GSTD** | **Great Sitkin T** | **0.92** | **321** | P | **Pn** | **03 41 07.1** | **+0.2** |
| **ATKA** | **Atka Island** | **1.07** | **36** | P | **Pn** | **03 41 08.3** | **-0.5** |
| ATKA | | | | S | **Sn** | **03 41 23.6** | **+1.2** |
| **ADAG** | **Mount Adagdak** | **1.08** | **307** | P | **Pn** | **03 41 09.8** | **+0.9** |
| **KOFP** | **Korovin Flat P** | **1.17** | **36** | P | **Pn** | **03 41 11.0** | **+0.8** |
| **KOKL** | **Mount Kliuchef** | **1.17** | **32** | P | **Pn** | **03 41 10.1** | **-0.2** |
| KOKL | | | | S | **Sn** | **03 41 27.7** | **+2.7** |
| **KOWE** | **Korovin West** | **1.19** | **30** | P | **Pn** | **03 41 11.6** | **+1.1** |
| **KIRH** | **Kanaga Island** | **1.30** | **296** | P | **Pn** | **03 41 12.1** | **+0.1** |
| KIRH | | | | S | **Sn** | **03 41 30.2** | **+2.0** |
| **KIKV** | **Kanaga Island** | **1.33** | **295** | P | **Pn** | **03 41 12.6** | **+0.1** |
| **KICM** | **Kanaga Island** | **1.36** | **296** | P | **Pn** | **03 41 13.1** | **+0.3** |
| **TAPA** | **Tanaga Point A** | **1.69** | **287** | P | **Pn** | **03 41 17.6** | **+0.2** |
| **TAFL** | **Tanaga Flats** | **1.73** | **285** | P | **Pn** | **03 41 18.2** | **+0.3** |
| **TAFP** | **Tanaga Falls P** | **1.82** | **289** | P | **Pn** | **03 41 19.7** | **+0.6** |
| TAFP | | | | S | **Sn** | **03 41 43.4** | **+2.6** |
| **GAEA** | **Gareloi East** | **2.25** | **283** | P | **Pn** | **03 41 25.9** | **+0.8** |
| **GALAA** | **Gareloi Lava P** | **2.26** | **282** | P | **Pn** | **03 41 26.1** | **+0.9** |
| **GANE** | **Gareloi Northe** | **2.27** | **284** | P | **Pn** | **03 41 26.3** | **+0.9** |
| **CERAA** | **Semis' Rag'd T** | **3.23** | **282** | P | **Pn** | **03 41 38.8** | **+0.3** |
| **CESW** | **Semis' Southwe** | **3.30** | **282** | P | **Pn** | **03 41 39.5** | **0.0** |
| **AMKA** | **Amchitka** | **3.44** | **273** | P | **Pn** | **03 41 40.7** | **-0.6** |
| **LSPA** | **Little Sitkin** | **3.92** | **281** | P | **Pn** | **03 41 48.2** | **+0.3** |
| **LSNW** | **Little Sitkin** | **3.96** | **282** | P | **Pn** | **03 41 48.8** | **+0.3** |
| **NIKH** | **Nikolski High** | **4.24** | **65** | P | **Pn** | **03 41 53.0** | **+0.6** |
| NIKH | | | | S | **Sn** | **03 42 44.8** | **+4.2** |
| **UNV** | **Unalaska Valle** | **5.87** | **61** | P | **Pn** | **03 42 16.8** | **+2.0** |
| **SPIA** | **Saint Paul Isl** | **6.53** | **24** | P | **Pn** | **03 42 26.1** | **+2.4** |
| **KDAK** | **Kodiak Island** | **14.58** | **55** | Pn | Pn | 03 44 08.9 | -4.8 |
| | 1.0nm,0.3s,baz=180,slow=3.9,SNR=9.5 | | | | | | |
| KDAK | | | | Sn | **S** | **03 47 05.8** | **-5.9** |
| | 0.2nm,0.3s,baz=157,slow=23,SNR=5.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.66** | **287** | Pn | **Pn** | **03 44 41.0** | **+0.4** |
| | 1.2nm,0.3s,baz=98,slow=17,SNR=5.1 | | | | | | |
| **MCK** | **McKinley** | **18.61** | **38** | *e*P | **P** | **03 45 04.1** | **+0.1** |
| | 5.1nm,0.4s | | | | | | |
| **BILL** | **Bilibino** | **19.03** | **339** | *e*P | **Pn** | **03 45 10.1** | **+0.5** |
| | 11nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **19.90** | **37** | P | **P** | **03 45 15.8** | **-2.3** |
| | 0.9nm,0.3s,baz=227,slow=9.3,SNR=35 | | | | | | |
| ILAR | | | | S | **S** | **03 48 56.6** | **-2.9** |
| | 0.0nm,0.3s,baz=236,slow=17,SNR=3.0 | | | | | | |
| **EGAK** | **Eagle** | **22.12** | **40** | *e*P | **P** | **03 45 41.3** | **-0.7** |
| | 12nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **26.22** | **34** | P | **P** | **03 46 20.0** | **-0.9** |
| | 2.1nm,0.8s,baz=211,slow=8.8,SNR=8.0 | | | | | | |
| **INK** | **Inuvik** | **26.22** | **34** | *e*P | **P** | **03 46 22.4** | **+1.4** |
| | 2.5nm,0.5s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.55** | **211** | T | T | 04 24 24.3 | |
| | baz=18,slow=76,SNR=8.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.55** | **211** | T | T | 04 24 24.1 | |
| | baz=18,slow=76,SNR=5.8 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.56** | **211** | T | T | 04 24 29.8 | |
| | baz=18,slow=76,SNR=8.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.52** | **280** | P | **P** | **03 47 42.8** | **-0.4** |
| | 1.9nm,0.5s,baz=59,slow=10,SNR=6.8 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.75** | **210** | T | T | 04 25 59.2 | |
| | baz=18,SNR=1.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.77** | **210** | T | T | 04 25 59.9 | |
| | baz=18 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.77** | **210** | T | T | 04 25 59.9 | |
| | baz=18 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.01** | **264** | P | **P** | **03 47 47.0** | **-0.5** |
| | 2.0nm,0.6s,baz=49,slow=7.2,SNR=5.8 | | | | | | |
| **MAJO** | **Matsushiro** | **36.01** | **264** | *e*P | **P** | **03 47 48.1** | **+0.7** |
| | 4.5nm,0.6s | | | | | | |
| **MAT** | **Matsushiro** | **36.01** | **264** | P | **P** | **03 47 48.1** | **+0.7** |
| **NEW** | **Newport** | **36.78** | **71** | P | **P** | **03 47 52.8** | **-1.1** |
| | 1.6nm,0.5s,baz=278,slow=19,SNR=4.8 | | | | | | |
| **MCMT** | **McKenzie Canyo** | **41.04** | **74** | *e*P | **P** | **03 48 30.3** | **+0.5** |
| | 2.4nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.32** | **85** | P | **P** | **03 48 32.8** | **+0.6** |
| | 0.5nm,0.8s,baz=295,slow=6.5,SNR=2.3 | | | | | | |
| **KSRS** | **Korea Array** | **41.89** | **274** | P | **P** | **03 48 37.7** | **+1.2** |
| | 3.1nm,0.8s,baz=59,slow=8.2,SNR=8.9 | | | | | | |
| **KSAR** | **Wonju Array Be** | **41.92** | **274** | P | **P** | **03 48 37.7** | **+0.9** |
| **FFC** | **Flin Flon** | **42.33** | **56** | *e*P | **P** | **03 48 40.3** | **+0.4** |
| **JNU** | **Nakatsue** | **42.81** | **266** | P | **P** | **03 48 45.2** | **+1.1** |
| | 8.4nm,0.8s,baz=65,slow=7.4,SNR=3.7 | | | | | | |
| **SONM** | **Songino Array** | **48.66** | **298** | P | **P** | **03 49 30.5** | **+0.3** |
| | 0.4nm,0.3s,baz=51,slow=7.6,SNR=6.6 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.55** | **357** | P | **P** | **03 49 43.6** | **-0.5** |
| | 2.8nm,0.5s,baz=49,slow=7.8,SNR=12 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.43** | **84** | P | **P** | **03 50 28.2** | **+0.3** |
| | 0.4nm,0.6s,baz=304,slow=5.7,SNR=5.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.48** | **352** | P | **P** | **03 50 39.8** | **-1.9** |
| | 7.4nm,1.1s,baz=15,slow=7.5,SNR=4.6 | | | | | | |
| ARCES | | | | PcP | **PcP** | **03 51 31.6** | **-0.2** |
| | 6.2nm,0.8s,baz=33,slow=4.9,SNR=6.6 | | | | | | |
| **KURK** | **Kurchatov** | **60.65** | **316** | *e*P | **P** | **03 50 56.8** | **0.0** |
| KURK | | | | PcP | **PcP** | **03 51 41.4** | **+0.6** |
| **KURBB** | **Kurchatov Arra** | **60.76** | **316** | P | **P** | **03 50 57.3** | **-0.3** |
| | 5.1nm,0.5s,baz=44,slow=6.5,SNR=69 | | | | | | |
| KURBB | | | | PcP | **PcP** | **03 51 41.4** | **+0.2** |
| | 1.8nm,0.6s,baz=40,slow=3.9,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.80** | **310** | P | **P** | **03 51 04.0** | **-0.7** |
| | 1.7nm,0.3s,baz=47,slow=6.6,SNR=25 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.34** | **322** | P | **P** | **03 51 08.3** | **0.0** |
| | 4.7nm,0.4s,baz=59,slow=5.8,SNR=19 | | | | | | |
| BVAR | | | | PcP | **PcP** | **03 51 47.6** | **0.0** |
| | 4.5nm,0.6s,baz=44,slow=3.2,SNR=6.9 | | | | | | |
| **BRVK** | **Borovoye** | **62.36** | **322** | *e*P | **P** | **03 51 09.2** | **+0.8** |
| | 3.3nm,0.5s | | | | | | |
| **FINES** | **FINESS Array B** | **66.28** | **349** | P | **P** | **03 51 33.0** | **-0.9** |
| | 2.3nm,0.8s,baz=28,slow=4.5,SNR=5.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **67.85** | **357** | P | **P** | **03 51 43.6** | **-0.3** |
| | comp=Z,0.8nm,0.4s,baz=7.0,slow=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.85** | **357** | P | **P** | **03 51 43.0** | **-1.0** |
| | comp=Z,1.2nm,0.6s,baz=4.1,slow=6.2,SNR=7.9 | | | | | | |
| **TKM2** | **Tokmak 2** | **67.85** | **311** | *e*P | **P** | **03 51 44.4** | **-0.1** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **68.59** | **312** | P | **P** | **03 51 48.7** | **-0.3** |
| | comp=Z,4.8nm,0.5s,baz=88,slow=4.0,SNR=10 | | | | | | |
| **AAK** | **Ala-Archa** | **68.59** | **312** | *e*P | **P** | **03 51 49.5** | **+0.4** |
| | comp=Z,2.6nm,0.4s | | | | | | |
| **HFS** | **Hagfors** | **68.65** | **355** | P | **P** | **03 51 48.4** | **-0.5** |
| | comp=Z,3.2nm,0.4s,baz=0.0,slow=1.6,SNR=40 | | | | | | |
| **EKS2** | **Erkin-Say** | **68.90** | **312** | *e*P | **P** | **03 51 51.7** | **+0.7** |
| | comp=Z,2.8nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **68.98** | **327** | P | **P** | **03 51 50.2** | **-1.0** |
| | comp=Z,1.6nm,0.3s,baz=57,slow=9.0,SNR=8.7 | | | | | | |
| **KKAR** | **Karatay Array** | **70.04** | **315** | *e*P | **P** | **03 51 58.0** | **+0.2** |
| | comp=Z,2.3nm,0.3s | | | | | | |
| **CHTO** | **Chiang Mai** | **72.98** | **279** | *e*P | **P** | **03 52 14.7** | **-1.1** |
| | comp=Z,2.4nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **73.31** | **293** | *e*P | **P** | **03 52 19.7** | **+1.7** |
| | comp=Z,28nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **73.94** | **295** | *e*P | **P** | **03 52 23.3** | **+1.5** |
| | comp=Z,42nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **74.25** | **293** | *e*P | **P** | **03 52 24.5** | **+1.0** |
| | comp=Z,49nm,0.8s | | | | | | |
| **KKN** | **Kakani** | **74.37** | **295** | *e*P | **P** | **03 52 25.6** | **+1.5** |
| | comp=Z,9.9nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **74.46** | **295** | *e*P | **P** | **03 52 25.9** | **+1.1** |
| | comp=Z,34nm,1.0s | | | | | | |
| **PKIN** | **Phulchoki** | **74.47** | **295** | *e*P | **P** | **03 52 25.9** | **+1.1** |
| | comp=Z,12nm,0.7s | | | | | | |
| **GKN** | **Gorkha** | **74.57** | **295** | *e*P | **P** | **03 52 26.0** | **+0.8** |
| | comp=Z,38nm,1.0s | | | | | | |
| **DMN** | **Daman** | **74.61** | **295** | *e*P | **P** | **03 52 27.1** | **+1.5** |
| | comp=Z,26nm,0.8s | | | | | | |
| **KOLN** | **Koldanda** | **75.34** | **296** | *e*P | **P** | **03 52 30.4** | **+0.7** |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **76.24** | **344** | P | **P** | **03 52 33.5** | **-0.7** |
| | comp=Z,1.3nm,0.3s,baz=18,slow=6.0,SNR=3.6 | | | | | | |
| **CLL** | **Collm** | **77.49** | **355** | *e*(P) | **P** | **03 52 41.0** | **-0.2** |
| **GEYT** | **Alibeck** | **79.60** | **320** | P | **P** | **03 52 54.0** | **+0.8** |
| | comp=Z,2.6nm,0.5s,baz=4.8,slow=1.7,SNR=3.3 | | | | | | |
| **GERES** | **GERESS Array B** | **79.90** | **354** | P | **P** | **03 52 54.8** | **+0.1** |
| | comp=Z,0.4nm,0.6s,baz=339,slow=7.1,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **83.59** | **227** | P | **P** | **03 53 13.0** | **-1.2** |
| | comp=Z,0.5nm,0.6s,baz=31,slow=5.4,SNR=4.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **85.87** | **338** | P | **P** | **03 53 26.1** | **+0.2** |
| | comp=Z,0.7nm,0.5s,baz=12,slow=2.1,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **87.02** | **225** | P | **P** | **03 53 31.4** | **+0.1** |
| | comp=Z,0.2nm,0.5s,baz=24,slow=5.0,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.73** | **3** | PKP | **PKPdf** | **03 59 28.3** | **-0.2** |
| | comp=Z,4.6nm,1.1s,baz=196,slow=0.4,SNR=4.6 | | | | | | |
| **MAW** | **Mawson** | **147.83** | **218** | PKPbc | **PKPbc** | **04 00 29.6** | **+0.2** |
| | comp=Z,1.4nm,0.6s,baz=90,slow=2.0,SNR=1.8 | | | | | | |
| **BOSA** | **Boshof** | **152.59** | **318** | PKPbc | **PKPbc** | **04 00 42.6** | **+0.3** |
| | comp=Z,4.5nm,0.7s,baz=14,slow=2.9,SNR=12 | | | | | | |

**IDC 08 03:41:07.3**±2.3**, 7.°02N**×**124.°42E, h0km, mb4.0**/3**, mb1 4.2**/3**, mb1mx3.5**/44**, mbtmp4.0**/3**, Error ellipse: s-maj=225.0km s-min=25.0km az=64.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **28.52** | **160** | P | P | 03 47 04.7 | -0.1 |
| | 2.1nm,0.5s,baz=340,slow=9.3,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **31.88** | **163** | P | P | 03 47 34.5 | 0.0 |
| | 0.5nm,0.4s,baz=338,slow=7.4,SNR=6.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.56** | **325** | P | P | 03 50 29.9 | -0.1 |
| | 1.0nm,0.5s,baz=120,slow=7.7,SNR=11 | | | | | | |

**PGC 08 03:48:59.2**±0.0**, 64.°95N**×**131.°17W, h5km, ML3.9**/2**, 211km west of Norman Wells, Nt Southern Yukon Territory, Canada, Southern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CLVN** | **Colville Lake** | **2.96** | **42** | Pn | Pn | 03 49 44.8 | -1.9 |
| CLVN | | | | Pg | Pb | 03 49 53.2 | +0.9 |
| CLVN | | | | Sn | Sn | 03 50 20.6 | -2.0 |
| CLVN | | | | Sg | Sb | 03 50 31.1 | +2.4 |
| **INK** | **Inuvik** | **3.50** | **346** | Pn | Pn | 03 49 52.9 | -1.3 |
| INK | | | | Sn | Sn | 03 50 33.7 | -2.3 |
| INK | | | | Sg | Sg | 03 50 49.3 | -2.3 |
| **DAWY** | **Dawson** | **3.67** | **260** | Pn | Pn | 03 49 56.1 | -0.4 |
| DAWY | | | | Sg | Sb | 03 50 52.9 | +3.7 |
| **SMPN** | **Simpson Lake** | **3.74** | **27** | Pn | Pn | 03 49 57.7 | +0.2 |
| SMPN | | | | Pg | Pb | 03 50 07.8 | +2.2 |
| SMPN | | | | Sn | Sn | 03 50 40.5 | -1.4 |
| **WHY** | **Whitehorse** | **4.63** | **203** | Pn | Pn | 03 50 09.1 | -0.8 |
| WHY | | | | Pg | Pb | 03 50 23.9 | +3.0 |
| WHY | | | | Sg | Sb | 03 51 22.3 | +5.3 |
| **YUK5** | **Granite Creek** | **4.89** | **222** | Pn | Pn | 03 50 12.9 | -0.6 |
| YUK5 | | | | Sn | Sn | 03 51 08.8 | -1.7 |
| YUK5 | | | | Sg | Sb | 03 51 28.5 | +3.8 |
| **YUK4** | **Talbot Arm** | **4.96** | **227** | Pn | Pn | 03 50 12.3 | -2.2 |
| YUK4 | | | | Sn | Sn | 03 51 06.5 | -5.7 |
| YUK4 | | | | Sg | Sb | 03 51 29.0 | +2.3 |
| **BVCY** | **Beaver Creek** | **5.01** | **244** | Pn | Pn | 03 50 14.2 | -0.8 |
| BVCY | | | | Sn | Sn | 03 51 11.1 | -2.0 |
| BVCY | | | | Sg | Sg | 03 51 34.9 | -5.1 |
| **YUK1** | **Sand Pete Hill** | **5.04** | **240** | Pn | Pn | 03 50 14.0 | -1.5 |
| YUK1 | | | | Sg | Sb | 03 51 31.6 | +2.7 |
| **HYT** | **Haines Junctio** | **5.05** | **218** | Pn | Pn | 03 50 14.7 | -0.9 |
| HYT | | | | Sn | Sn | 03 51 12.1 | -2.4 |
| HYT | | | | Sg | Sb | 03 51 34.0 | +4.8 |
| **YUK6** | **Outpost Mounta** | **5.19** | **223** | Pn | Pn | 03 50 16.9 | -0.8 |
| YUK6 | | | | Sn | Sn | 03 51 16.9 | -1.1 |
| YUK6 | | | | Sg | Sg | 03 51 40.7 | -5.5 |
| **YUK3** | **Moose Creek** | **5.25** | **237** | Pn | Pn | 03 50 15.7 | -2.9 |
| YUK3 | | | | Sg | Sb | 03 51 39.4 | +4.1 |
| **YUK2** | **White River** | **5.38** | **238** | Pn | Pn | 03 50 18.9 | -1.3 |
| YUK2 | | | | Sg | Sb | 03 51 44.2 | +5.5 |
| **YUK7** | **Dusty Glacier** | **5.47** | **219** | Pn | Pn | 03 50 21.0 | -0.5 |
| YUK7 | | | | Sg | Sg | 03 51 50.0 | -5.0 |
| **PLBC** | **Pleasant Camp** | **6.02** | **206** | Pn | Pn | 03 50 28.0 | -0.8 |
| **DLBC** | **Dease Lake** | **6.55** | **175** | Pn | Pn | 03 50 35.1 | -1.1 |
| DLBC | | | | Sg | Sb | 03 52 13.9 | +1.6 |
| **KUKN** | **Kugluktuk,NWT** | **7.07** | **59** | Pn | Pn | 03 50 40.5 | -2.6 |
| **YKR1** | **Yellowknife Ar** | **7.60** | **101** | Pn | Pn | 03 50 48.2 | -2.2 |
| **YKR2** | **Yellowknife Ar** | **7.62** | **101** | Pn | Pn | 03 50 48.3 | -2.4 |
| **YKR3** | **Yellowknife Ar** | **7.64** | **101** | Pn | Pn | 03 50 47.9 | -3.1 |
| **YKR4** | **Yellowknife Ar** | **7.66** | **101** | Pn | Pn | 03 50 49.6 | -1.7 |
| **YKR5** | **Yellowknife Ar** | **7.69** | **101** | Pn | Pn | 03 50 49.7 | -1.9 |
| **YKB0** | **Yellowknife Ar** | **7.70** | **100** | Pn | Pn | 03 50 50.3 | -1.4 |
| **YKR6** | **Yellowknife Ar** | **7.71** | **101** | Pn | Pn | 03 50 50.0 | -1.9 |
| **YKB9** | **Yellowknife Ar** | **7.71** | **100** | Pn | Pn | 03 50 50.4 | -1.5 |
| **YKW3** | **Yellowknife Ar** | **7.71** | **100** | Pn | Pn | 03 50 50.5 | -1.4 |
| YKW3 | | | | Sn | Sn | 03 52 12.6 | -6.9 |
| **YKB8** | **Yellowknife Ar** | **7.72** | **100** | Pn | Pn | 03 50 50.6 | -1.4 |
| **YKR7** | **Yellowknife Ar** | **7.72** | **101** | Pn | Pn | 03 50 50.3 | -1.8 |
| **YKB7** | **Yellowknife Ar** | **7.73** | **101** | Pn | Pn | 03 50 50.4 | -1.7 |
| **YKB6** | **Yellowknife Ar** | **7.74** | **101** | Pn | Pn | 03 50 50.8 | -1.5 |
| **YKR8** | **Yellowknife Ar** | **7.75** | **101** | Pn | Pn | 03 50 50.7 | -1.7 |
| **YKB4** | **Yellowknife Ar** | **7.75** | **101** | Pn | Pn | 03 50 50.7 | -1.9 |
| **YKB3** | **Yellowknife Ar** | **7.76** | **101** | Pn | Pn | 03 50 51.2 | -1.5 |
| **YKR9** | **Yellowknife Ar** | **7.77** | **101** | Pn | Pn | 03 50 50.5 | -2.2 |
| **YKB2** | **Yellowknife Ar** | **7.78** | **101** | Pn | Pn | 03 50 51.1 | -1.8 |
| **YKB1** | **Yellowknife Ar** | **7.79** | **102** | Pn | Pn | 03 50 51.2 | -1.8 |
| **SNLN** | **Sandy Lake, NW** | **10.57** | **91** | Pn | Pn | 03 51 29.2 | -1.8 |
| SNLN | | | | Sn | Sn | 03 53 20.6 | -9.0 |

*BJI **08** 03:49:07.7, 51.°59N×175.°22W, h26km, mb6.0/76, mB6.5/34, Ms6.2/55, Ms7 6.0/53*

*MOS **08** 03:49:09.6±0.9, 51.°47N×175.°25W, h33km, mb6.0/108, MS5.7/19, Error ellipse: s-maj=6.1km s-min=4.3km az=94.8*

*IDC **08** 03:49:09.7±1.9, 51.°49N×175.°22W, h21km±11km, mb5.4/31, mb1 5.4/33, mb1mx5.4/35, mbtmp5.5/33, ML4.8/2, MS5.7/38, Ms1 5.7/38, ms1mx5.6/61, Error ellipse: s-maj=15.5km s-min=9.1km az=172.0*

*NEIC **08** 03:49:10.7, 51.°29N×175.°18W, h28km, mb6.0/269, ML5.8(AEIC), After AEIC.*

*GCMT **08** 03:49:10.7±0.1, 51.°24N×175.°32W, h18km, MW6.0/127, Moment Tensor Solution. s104,c210; s127,c416; Duration: 2.s5 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$0.83±.01; $M_{\theta\theta}$-0.75±.01; $M_{\phi\phi}$-0.08±.01; $M_{r\theta}$0.86±.03; $M_{\theta\phi}$-0.26±.01; $M_{\phi r}$0.48±.03; Best double couple: $M_0$1.28700×$10^{18}$ NP1:$\phi_s$63.00000°, δ70.00000°, λ85.00000°. NP2:$\phi_s$258.00000°, δ21.00000°, λ104.00000°. Principal axes: T 1.2910, Plg65.0000°, Azm325.0000°; N -0.0080, Plg5.0000°, Azm65.0000°; P -1.2830, Plg25.0000°, Azm158.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*ISCJB **08** 03:49:11.3±0.3, 51.°42N±0.°02×175.°16W±0.°01, h46km±2km, mb5.9/423, MS5.8/42 Error ellipse: s-maj=3.6km s-min=1.5km az=0.3*

*SZGRF **08** 03:49:27.9, 51.°44N×176.°34W, h156km, mb5.8/32(BGR)*

**ISC 08 03:49:11.2**±0.3**, 51.°42N**±0.°04×**175.°19W**±0.°02**, h32km**±1km**, h32km:pP-P, n1768,** σ**0.s97**/1864**, mb5.9**/438**, MS5.8**/43**, 125C-24D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSTR** | **Great Sitkin T** | **0.86** | **322** | P | **Pb** | **03 49 27.6** | **-0.2** |
| **ETKA** | **Kagalaska Isla** | **0.88** | **301** | P | **Pb** | **03 49 27.6** | **-0.3** |
| **ATKA** | **Atka Island** | **0.99** | **38** | P | **Pn** | **03 49 29.3** | **+0.5** |
| ATKA | | | | S | **Sb** | **03 49 44.6** | **+2.0** |
| **KOKL** | **Mount Kliuchef** | **1.09** | **34** | P | **Pb** | **03 49 31.8** | **+0.3** |
| **KOWE** | **Korovin West** | **1.11** | **31** | P | **Pb** | **03 49 32.0** | **+0.1** |
| **KONE** | **Korovin Northe** | **1.18** | **34** | P | **Pb** | **03 49 33.4** | **+0.5** |
| **KICM** | **Kanaga Island** | **1.34** | **292** | P | **Pn** | **03 49 34.5** | **+0.9** |
| **TAFL** | **Tanaga Flats** | **1.72** | **282** | P | **Pn** | **03 49 39.5** | **+0.7** |
| **GAEA** | **Gareloi East** | **2.25** | **281** | P | **Pn** | **03 49 48.1** | **+2.0** |
| **GALAA** | **Gareloi Lava P** | **2.26** | **280** | P | **Pn** | **03 49 47.6** | **+1.3** |
| **CERAA** | **Semis' Rag'd T** | **3.23** | **281** | P | **Pn** | **03 50 00.4** | **+0.8** |
| **CESW** | **Semis' Southwe** | **3.30** | **280** | P | **Pn** | **03 50 01.0** | **+0.4** |
| **CEAP** | **Semis' Anvil P** | **3.31** | **282** | P | **Pn** | **03 50 01.8** | **+1.2** |
| **AMKA** | **Amchitka** | **3.45** | **271** | P | **Pn** | **03 50 02.8** | **+0.3** |
| AMKA | | | | S | **Sn** | **03 50 46.0** | **+3.7** |
| **LSPA** | **Little Sitkin** | **3.92** | **280** | P | **Pn** | **03 50 09.9** | **+0.8** |
| **LSNW** | **Little Sitkin** | **3.96** | **280** | P | **Pn** | **03 50 11.0** | **+1.5** |
| **LSSA** | **Little Sitkin** | **3.96** | **280** | P | **Pn** | **03 50 11.5** | **+1.9** |
| **NIKH** | **Nikolski High** | **4.20** | **66** | P | **Pn** | **03 50 13.9** | **+1.1** |
| NIKH | | | | S | **Sn** | **03 51 02.6** | **+2.0** |
| **OKAK** | **Okmok** | **4.70** | **60** | P | **Pn** | **03 50 21.5** | **+1.8** |
| **OKSO** | **Okmok South** | **4.72** | **63** | P | **Pn** | **03 50 23.0** | **+3.0** |
| **OKCE** | **Okmok Cone E** | **4.74** | **62** | P | **Pn** | **03 50 22.7** | **+2.4** |
| **OKTU** | **Okmok Mt. Tuli** | **4.80** | **63** | P | **Pn** | **03 50 23.7** | **+2.6** |
| **OKFG** | **Magazine Ridge** | **4.88** | **63** | P | **Pn** | **03 50 24.4** | **+2.2** |
| **MSOM** | **Makushin Julie** | **5.56** | **61** | P | **Pn** | **03 50 33.8** | **+2.2** |
| **MSOM** | **Makushin Julie** | **5.56** | **61** | P | **Pn** | **03 50 33.8** | **+2.2** |
| **MGOD** | **Makushin Gods** | **5.59** | **62** | P | **Pn** | **03 50 34.7** | **+2.6** |
| **MSW** | **Makushin Switc** | **5.69** | **61** | P | **Pn** | **03 50 35.8** | **+2.4** |
| **UNV** | **Unalaska Valle** | **5.82** | **62** | P | **Pn** | **03 50 37.5** | **+2.4** |
| **AKRB** | **Akutan Reef Bi** | **6.16** | **60** | P | Pn | 03 50 43.0 | +3.2 |
| **ZRO** | **Akutan Zero** | **6.20** | **61** | P | **Pn** | **03 50 43.2** | **+2.9** |
| **AKGG** | **Akutan Green G** | **6.23** | **60** | P | Pn | 03 50 44.0 | +3.2 |
| **AKUT** | **Akutan** | **6.33** | **61** | P | Pn | 03 50 45.5 | +3.4 |
| **SPIA** | **Saint Paul Isl** | **6.45** | **25** | P | Pn | 03 50 48.0 | +4.2 |
| **SMY** | **Shemya** | **6.73** | **285** | *e*P | **Pn** | **03 50 47.8** | **+0.2** |
| SMY | | | | pmax | pmax | | |
| | comp=Z,970nm,0.8s | | | | | | |
| **SMY** | **Shemya** | **6.73** | **285** | *e*Pn | **Pn** | **03 50 47.8** | **+0.2** |
| | comp=Z,970nm,0.8s | | | | | | |
| **WECS** | **Westdahl Cape** | **7.01** | **60** | P | **Pn** | **03 50 54.4** | **+2.8** |
| **WEBT** | **Westdahl Beart** | **7.05** | **59** | P | Pn | 03 50 56.0 | +4.0 |
| **WESN** | **West Dahl Nort** | **7.13** | **60** | P | Pn | 03 50 56.8 | +3.6 |
| **SSBA** | **Shishaldin** | **7.46** | **59** | P | **Pn** | **03 51 00.1** | **+2.5** |
| **SSLS** | **Shishaldin Sou** | **7.50** | **60** | P | Pn | 03 51 01.9 | +3.7 |
| **ISLZ** | **Isanotski Laza** | **7.66** | **60** | P | **Pn** | **03 51 03.0** | **+2.6** |
| **FALS** | **False Pass** | **7.87** | **59** | P | **Pn** | **03 51 05.7** | **+2.5** |
| **DT1** | **Dutton Round H** | **8.57** | **59** | P | **Pn** | **03 51 14.4** | **+1.6** |
| **DTNA** | **Dutton South F** | **8.60** | **59** | P | **Pn** | **03 51 14.9** | **+1.7** |
| **PS4A** | **Pavlof South-4** | **8.88** | **59** | P | **Pn** | **03 51 20.0** | **+2.9** |
| **PVV** | **Pavlof Volcano** | **8.93** | **58** | P | Pn | 03 51 21.9 | +4.2 |
| **SDPT** | **Sand Point** | **9.63** | **60** | P | **Pn** | **03 51 28.6** | **+1.3** |
| **CHGN** | **Chignik** | **11.03** | **57** | *e*Pn | **Pn** | **03 51 45.9** | **-0.6** |
| **GAMB** | **Gambell** | **12.53** | **7** | *e*Pn | **Pn** | **03 52 08.5** | **+1.7** |
| **SII** | **Sitkinak Islan** | **13.36** | **59** | *e*Pn | **Pn** | **03 52 17.0** | **-1.3** |
| **OHAK** | **Old Harbor** | **14.00** | **57** | *e*Pn | **Pn** | **03 52 24.6** | **-2.4** |
| **SVW2** | **Sparrevohn** | **14.52** | **41** | *e*Pn | **Pn** | **03 52 35.9** | **+1.8** |
| **KDAK** | **Kodiak Island** | **14.52** | **55** | Pn | Pn | 03 52 30.6 | -3.5 |
| | comp=Z,4.5nm,0.3s,baz=243,slow=6.7,SNR=25 | | | | | | |
| KDAK | | | | Sn | S | 03 55 25.1 | -7.3 |
| | comp=Z,9.5nm,0.3s,baz=223,slow=23,SNR=9.9 | | | | | | |
| KDAK | | | | LR | LR | 03 59 16.0 | |
| | comp=Z,62µm,18.3s,baz=242,slow=42 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.52** | **55** | P | **P** | **03 52 40.8** | **+0.5** |
| | comp=Z,3µm,0.6s,SNR=7.4 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.52** | **55** | *e*Pn | **Pn** | **03 52 35.7** | **+1.6** |
| KDAK | | | | Sn | S | 03 55 25.1 | -7.3 |
| **TNA** | **Tin City** | **14.66** | **12** | *e*Pn | **P** | **03 52 39.0** | **-2.8** |
| | comp=Z,201nm,0.8s | | | | | | |
| **RSO** | **Redoubt South** | **15.41** | **45** | *e*Pn | **Pn** | **03 52 46.3** | **+0.2** |
| | comp=Z,600nm,0.9s | | | | | | |
| **CNPM** | **China Poot** | **15.74** | **50** | *e*Pn | **Pn** | **03 52 51.0** | **+0.8** |
| | comp=Z,839nm,1.1s | | | | | | |
| **BRLK** | **Bradley Lake** | **15.99** | **49** | *e*Pn | **Pn** | **03 52 53.7** | **+0.2** |
| | comp=Z,2µm,1.8s | | | | | | |
| **PET** | **Petropavlovsk** | **16.08** | **286** | ⇓*i*P | **P** | **03 52 59.2** | **+1.6** |
| PET | | | | *e*S | **Sn** | **03 55 53.9** | **+2.2** |
| PET | | | | pmax | pmax | | |
| | comp=Z,332nm,1.2s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,57µm,20.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,42µm,22.0s | | | | | | |
| **PET** | **Petropavlovsk** | **16.08** | **286** | *e*Pn | **Pn** | **03 52 53.6** | **-0.9** |
| | comp=Z,358nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.65** | **286** | Pn | **Pn** | **03 53 01.1** | **-0.6** |
| | comp=Z,9.0nm,0.3s,baz=97,slow=14,SNR=66 | | | | | | |
| PETK | | | | LR | LR | 03 59 02.2 | |
| | comp=Z,28µm,21.7s,baz=102,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.65** | **286** | P | **Pn** | **03 53 01.2** | **-0.6** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.3s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,28µm,21.7s | | | | | | |
| **SEW** | **Seward** | **16.79** | **49** | *e*Pn | **Pn** | **03 53 00.9** | **-2.6** |
| | comp=Z,317nm,0.8s | | | | | | |
| **PPLA** | **Purkeypile** | **16.84** | **38** | *e*Pn | **Pn** | **03 53 04.2** | **-0.2** |
| | comp=Z,2µm,1.3s | | | | | | |
| **RC01** | **Rabbit Creek A** | **17.02** | **46** | *e*Pn | **Pn** | **03 53 05.6** | **-0.8** |
| | comp=Z,1.4nm,0.2s | | | | | | |
| **CAST** | **Castle Rocks** | **17.17** | **37** | *e*P | **P** | **03 53 10.2** | **+0.5** |
| | comp=Z,1µm,1.6s | | | | | | |
| **PMR** | **Palmer** | **17.49** | **44** | *e*P | **Pn** | **03 53 10.9** | **-1.3** |
| PMR | | | | pmax | pmax | | |
| | comp=Z,158nm,1.4s | | | | | | |
| **PMR** | **Palmer** | **17.49** | **44** | *e*Pn | **Pn** | **03 53 10.9** | **-1.3** |
| | comp=Z,158nm,1.4s | | | | | | |
| **KTH** | **Kantishna Hill** | **17.68** | **37** | *e*P | **P** | **03 53 15.2** | **-0.1** |
| | comp=Z,3µm,1.5s | | | | | | |
| **TRF** | **Thorofare Moun** | **17.87** | **38** | *e*Pn | **Pn** | **03 53 17.3** | **+0.2** |
| | comp=Z,1µm,1.2s | | | | | | |
| **SML** | **Sawmill** | **17.92** | **44** | *e*P | **Pn** | **03 53 16.0** | **-1.7** |
| SML | | | | pmax | pmax | | |
| | comp=Z,568nm,0.9s | | | | | | |
| **SML** | **Sawmill** | **17.92** | **44** | *e*Pn | **Pn** | **03 53 16.0** | **-1.7** |
| | comp=Z,568nm,0.9s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **17.95** | **36** | *e*Pn | **P** | **03 53 18.8** | **+0.5** |
| | comp=Z,1µm,1.1s | | | | | | |
| **SKR** | **Severo-Kuril's** | **18.01** | **279** | *e*P | **Pn** | **03 53 16.5** | **-2.2** |
| SKR | | | | S | **Sn** | **03 56 40.6** | **+2.2** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,450nm,1.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,360nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **18.53** | **38** | *e*P | **P** | **03 53 24.3** | **-0.4** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,530nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **18.53** | **38** | *e*P | **P** | **03 53 24.3** | **-0.4** |
| | comp=Z,530nm,1.1s | | | | | | |
| **BWN** | **Browne** | **18.55** | **37** | *e*P | **Pn** | **03 53 25.7** | **+0.4** |
| | comp=Z,2µm,1.1s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **18.68** | **49** | *e*P | **P** | **03 53 24.9** | **-1.4** |
| | comp=Z,213nm,1.0s | | | | | | |
| **DIV** | **Divide** | **18.84** | **48** | *e*P | **P** | **03 53 26.5** | **-1.6** |
| | comp=Z,298nm,1.0s | | | | | | |
| **KLU** | **Klutina** | **18.89** | **46** | *e*P | **P** | **03 53 27.7** | **-0.9** |
| | comp=Z,213nm,0.9s | | | | | | |
| **BILL** | **Bilibino** | **18.96** | **338** | *c i*P | **Pn** | **03 53 31.1** | **+1.0** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,646nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,28µm,18.0s | | | | | | |
| **BILL** | **Bilibino** | **18.96** | **338** | *e*P | **Pn** | **03 53 31.1** | **+1.0** |
| | comp=Z,941nm,1.0s | | | | | | |
| **BMRM** | **Bremner River** | **19.34** | **49** | *e*P | **P** | **03 53 31.9** | **-1.6** |
| | comp=Z,310nm,0.9s | | | | | | |
| **CCB** | **Clear Creek Bu** | **19.42** | **37** | *e*P | **P** | **03 53 32.8** | **-1.5** |
| | comp=Z,347nm,1.1s | | | | | | |
| **COLA** | **College** | **19.52** | **36** | *e*P | **P** | **03 53 34.6** | **-0.7** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,213nm,0.9s | | | | | | |
| **COLA** | **College** | **19.52** | **36** | *e*P | **P** | **03 53 34.0** | **-1.3** |
| | comp=Z,569nm,1.1s | | | | | | |
| **HARP** | **HAARP** | **19.54** | **44** | *e*P | **P** | **03 53 34.9** | **-0.8** |
| | comp=Z,414nm,0.9s | | | | | | |
| **PAX** | **Paxson** | **19.61** | **42** | *e*P | **P** | **03 53 35.3** | **-1.2** |
| PAX | | | | pmax | pmax | | |
| | comp=Z,243nm,1.0s | | | | | | |
| **PAX** | **Paxson** | **19.61** | **42** | *e*P | **P** | **03 53 35.3** | **-1.2** |
| | comp=Z,243nm,1.0s | | | | | | |
| **HDA** | **Harding Lake** | **19.62** | **38** | *e*P | **P** | **03 53 35.2** | **-1.3** |
| | comp=Z,521nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **19.82** | **37** | P | **P** | **03 53 36.2** | **-2.5** |
| | comp=Z,2.0nm,0.3s,baz=240,slow=9.6,SNR=85 | | | | | | |
| ILAR | | | | S | **S** | **03 57 16.4** | **-3.6** |
| | comp=Z,1.0nm,0.3s,baz=253,slow=12,SNR=4.6 | | | | | | |
| ILAR | | | | LR | LR | 04 01 49.4 | |
| | comp=Z,20µm,18.2s,baz=234,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **19.82** | **37** | P | **P** | **03 53 36.2** | **-2.5** |
| ILAR | | | | S | **S** | **03 57 16.4** | **-3.6** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| ILAR | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| ILAR | | | | MLR | MLR | | |

comp=Z,20µm,18.2s
COLD Coldfoot 20.09 29 eP Pn 03 53 43.4 -0.3
comp=Z,810nm,1.0s
MENT Mentasta 20.34 43 eP P 03 53 44.4 -0.1
MA2 Magadan 20.73 306 eP P 03 53 49.0 +0.3
SEY Seymchan 20.75 316 P P 03 53 48.5 -0.3
comp=Z,67nm,0.9s,baz=93,slow=12,SNR=59
SEY PcP PcP 03 57 57.5 +0.6
comp=Z,22nm,0.7s,baz=128,slow=2.6,SNR=4.8
SEY ScP ScP 04 01 32.4 +1.5
comp=Z,25nm,0.8s,baz=126,slow=3.4,SNR=16
SEY LR LR 04 02 31.2
comp=Z,53µm,18.3s,baz=107,slow=39
SEY Seymchan 20.75 316c iP P 03 53 49.9 +1.1
PCA Pinnacle 21.25 52 eP P 03 53 56.4 +2.1
comp=Z,708nm,1.0s
EGAK Eagle 22.05 40 eP P 03 54 02.4 -0.3
comp=Z,648nm,0.9s
DHAK Deception Hill 22.18 55 eP P 03 54 06.3 +2.1
comp=Z,356nm,0.9s
DAWY Dawson 22.54 42 eP P 03 54 07.5 -0.5
comp=Z,407nm,1.0s
KUR Kuril'sk 25.13 270c iP P 03 54 32.9 0.0
KUR i S S 03 58 57.0 +1.5
KUR pmax pmax
comp=Z,594nm,1.8s
KUR pmax pmax
comp=N,179nm,0.9s
KUR pmax pmax
comp=E,150nm,0.9s
KUR pmax pmax
comp=Z,3µm,4.7s
KUR MLR MLR
comp=N,13µm,21.0s
KUR MLR MLR
comp=E,3µm,21.0s
KUR MLR MLR
comp=Z,13µm,21.0s
WRAK Wrangell Islan 25.39 62 eP P 03 54 37.4 +2.2
comp=Z,974nm,1.0s
INK Inuvik 26.14 34 P P 03 54 41.5 -0.4
comp=Z,115nm,1.0s,baz=240,slow=9.8,SNR=83
INK PcP PcP 03 58 08.4 +0.3
comp=Z,49nm,1.0s,baz=274,slow=2.7,SNR=4.6
INK ScP ScP 04 01 46.2 +1.1
comp=Z,13nm,0.9s,baz=272,slow=10,SNR=9.1
INK Inuvik 26.14 34 P P 03 54 41.5 -0.4
INK 03 58 08.4
INK pmax pmax
comp=Z,115nm,1.0s
INK pmax pmax
comp=Z,49nm,1.0s
INK pmax pmax
comp=N,13nm,0.9s
INK Inuvik 26.14 34 eP P 03 54 41.0 -0.9
comp=N,166nm,1.0s
INK PcP PcP 03 58 08.4 +0.3
INK ScP ScP 04 01 46.2 +1.1
DLBC Dease Lake 26.44 57 P P 03 54 45.6 +0.7
comp=N,140nm,1.0s,baz=278,slow=9.8,SNR=94
DLBC Dease Lake 26.44 57 eP P 03 54 46.4 +1.5
comp=N,97nm,0.4s
YUK Yuzh-Kuril'sk 26.96 270c iP P 03 54 47.8 -1.7
YUK i S S 03 59 26.9 +2.5
YUK pmax pmax
comp=Z,2µm,3.4s
YUK pmax pmax
comp=N,452nm,1.4s
YUK pmax pmax
comp=Z,924nm,1.4s
YUK pmax pmax
comp=E,223nm,0.7s
YSS Yuzh-Sakhalins 27.56 277⇑ iP P 03 54 56.0 +1.1
YSS pmax pmax
comp=Z,2µm,2.5s
YSS pmax pmax
comp=E,1µm,2.1s
YSS Yuzh-Sakhalins 27.56 277 eP P 03 54 55.1 +0.3
comp=E,194nm,0.8s
BBB Bella Bella 28.72 70 P P 03 55 06.1 +1.0
comp=E,71nm,1.0s,baz=272,slow=8.9,SNR=9.0
BBB LR LR 04 05 04.5
comp=E,11µm,19.2s,baz=292,slow=33
ASAJ Asahikawa 28.97 272 P P 03 55 07.8 +0.4
comp=E,94nm,0.7s,baz=40,slow=4.4,SNR=31
ASAJ LR LR 04 08 06.4
comp=E,9µm,19.3s,baz=72,slow=39
ASAJ Asahikawa 28.97 272 P P 03 55 07.8 +0.4
ASAJ pmax pmax
comp=Z,94nm,0.7s
ASAJ MLR MLR
comp=Z,9µm,19.3s
ASAJ Asahikawa 28.97 272 eP P 03 55 07.6 +0.2
comp=Z,62nm,0.9s
ERM Erimo 29.71 268 eP P 03 55 14.7 +0.7
ERM pmax pmax
comp=Z,54nm,1.0s
ERM Erimo 29.71 268 P P 03 55 14.0 0.0
comp=Z,496nm,0.6s,SNR=11
ERM Erimo 29.71 268 eP P 03 55 14.3 +0.4
comp=Z,188nm,1.3s
YAK Yakutsk 31.09 311 P P 03 55 25.1 -0.9
comp=Z,13nm,0.7s,baz=261,slow=23,SNR=10
YAK PcP PcP 03 58 20.8 +0.2
comp=Z,4.2nm,0.3s,baz=328,slow=9.5,SNR=2.5
YAK LR LR 04 08 01.1
comp=Z,24µm,20.1s,baz=94,slow=36
YAK Yakutsk 31.09 311 eP P 03 55 24.5 -1.4
YAK e*PP pP 03 55 36.1 +0.8
YAK e 03 56 43.8
YAK e 03 58 20.7
YAK eS S 04 00 24.1 -4.7
YAK e 04 05 57.7
YAK pmax pmax
comp=Z,22nm,0.9s
YAK pmax pmax
comp=Z,2µm,14.4s
YAK pmax pmax
comp=E,851nm,11.1s
YAK pmax pmax
comp=N,2µm,14.8s
YAK smax smax
comp=E,2µm,12.9s
YAK smax smax
comp=N,1µm,14.6s
YAK MLR MLR
comp=Z,5µm,21.0s
YAK MLR MLR
comp=E,2µm,18.0s
YAK MLR MLR
comp=N,3µm,18.0s
YAK Yakutsk 31.09 311 eP P 03 55 24.9 -1.0
comp=N,149nm,0.9s
YAK PcP PcP 03 58 20.8 +0.2
HABR Khabarovsk 31.66 285ceP P 03 55 29.9 -1.2
HABR e*PP pP 03 55 39.2 -1.3
HABR e*SP sP 03 55 43.7 -0.8
HABR e 03 58 20.4
HABR eS S 04 00 38.2 +0.1
HABR e*SS sS 04 00 54.4 +0.8
HABR eSS SnSn 04 02 28.0 +2.5
HABR eSSS SSS 04 02 44.2
HABR e 04 05 59.3
HABR pmax pmax
comp=Z,3µm,2.2s
HABR pmax pmax
comp=Z,1µm,1.8s
HABR pmax pmax
comp=E,765nm,2.0s
HABR pmax pmax
comp=N,294nm,1.8s
HABR MLR MLR
comp=Z,23µm,18.0s
PGC Sidney 32.78 74 eP P 03 55 42.4 +1.4
comp=Z,201nm,1.4s
KIP Kipapa 32.80 149 eP P 03 55 41.6 +0.2
KIP pmax pmax
comp=Z,1µm,1.2s
KIP Kipapa 32.80 149 eP P 03 55 41.6 +0.2
comp=Z,1µm,1.2s
NLWA Neilton Lookou 33.07 76 eP P 03 55 45.8 +2.2
comp=Z,125nm,0.9s
A04D Lummi Island 33.20 74 P P 03 55 46.3 +1.7
baz=33
KLR Kul'dur 33.34 288⇓ iP P 03 55 41.2 -4.6
KLR pmax pmax
comp=N,100nm,1.8s
KLR pmax pmax
comp=E,660nm,1.8s
KLR pmax pmax
comp=Z,1µm,1.8s
YKA Yellowknife Ar 33.55 47 P P 03 55 46.3 -1.3
comp=Z,22nm,1.0s,baz=277,slow=9.6,SNR=26
YKA PcP PcP 03 58 27.6 +0.3
comp=Z,20nm,0.9s,baz=283,slow=3.1,SNR=9.6
YKA ScP ScP 04 02 09.5 +0.4
comp=Z,7.3nm,1.0s,baz=284,slow=3.4,SNR=4.9
YKA Yellowknife Ar 33.55 47 P P 03 55 46.3 -1.3
YKA 03 58 27.6
YKA pmax pmax
comp=Z,22nm,1.0s
YKA pmax pmax
comp=Z,20nm,0.9s
YKA pmax pmax
comp=N,7.0nm,1.0s
E03A Lebam 33.64 78 eP P 03 55 50.6 +2.2
comp=N,290nm,1.0s
E03A eScP ScP 04 02 11.1 +1.3
MBW Mount Baker 33.66 73 P P 03 55 50.2 +1.4
B05A Bryant 33.76 74 P P 03 55 51.1 +1.6
baz=34,SNR=37
F04D Rainier, OR 34.20 78 P P 03 55 55.2 +1.8
baz=34
D05A Enumclaw 34.31 76 eP P 03 55 56.6 +2.3
comp=N,429nm,1.0s
G03D McMinnville, O 34.46 80 P P 03 55 57.4 +1.8
baz=34
RCS Mount Rainier- 34.61 76 P P 03 55 58.8 +1.5
LON Longmire 34.62 76 eP P 03 55 58.7 +1.6
LON pmax pmax
comp=Z,98nm,1.2s
LON Longmire 34.62 76 eP P 03 55 58.7 +1.6
comp=Z,98nm,1.2s
H11N2 WAKE ISLAND Hy 34.62 211 T T 04 32 42.8
baz=18,slow=76,SNR=225
H11N3 WAKE ISLAND Hy 34.63 211 T T 04 32 50.0
baz=18,slow=76,SNR=346
C06D Leavenworth 34.64 74 P P 03 55 58.8 +1.6
baz=34
H11N1 WAKE ISLAND Hy 34.64 211 T T 04 32 39.6
baz=18,slow=76,SNR=166
COR Corvallis 34.75 80 eP P 03 55 59.6 +1.5
COR pmax pmax
comp=Z,479nm,1.4s
COR Corvallis 34.75 80 eP P 03 55 59.6 +1.5
comp=Z,479nm,1.4s
NLW Nelson Butte 34.90 73 P P 03 56 00.9 +1.3
KEBM Edson Butte 35.00 84 eP P 03 56 01.9 +1.5
comp=Z,351nm,1.2s
ETW Entiat 35.12 74 P P 03 56 02.6 +1.2
TBM Table Mountain 35.16 75 P P 03 56 03.2 +1.5
I03D Drain, OR 35.18 82 P P 03 56 03.5 +1.7
baz=35
POHA Pohakuloa 35.18 147 eP P 03 56 01.4 -0.9
comp=Z,173nm,0.8s
WTV Waterville 35.30 74 P P 03 56 03.9 +0.9
KBO Bosley Butte 35.42 85 eP P 03 56 03.9 -0.1
comp=Z,348nm,1.3s
USRK Ussuriysk Ar. 35.53 280 P P 03 56 04.2 -0.6
comp=Z,155nm,0.8s,baz=56,slow=7.4,SNR=70
USRK PcP PcP 03 58 33.6 +0.2
comp=Z,25nm,0.9s,baz=50,slow=3.0,SNR=6.3
USRK LR LR 04 11 15.3
comp=Z,10µm,20.6s,baz=44,slow=37
G05D Wamic, OR 35.65 78 P P 03 56 07.3 +1.4
baz=36,SNR=17
I04A Tendick Farm, 35.71 81 P P 03 56 07.8 +1.3
baz=36,SNR=19
H11S1 WAKE ISLAND Hy 35.83 210 T T 04 35 26.9
baz=20,slow=76,SNR=1042
L02D Cave Junction, 35.84 84 P P 03 56 09.3 +1.7
baz=36,SNR=14
H11S2 WAKE ISLAND Hy 35.85 210 T T 04 35 28.1
baz=20,slow=76,SNR=106
H11S3 WAKE ISLAND Hy 35.85 210 T T 04 35 16.9
baz=20,slow=76,SNR=157
CROR Criterion Ridg 35.98 78 P P 03 56 10.0 +1.2
BENWA Benson Ranch 36.00 75 P P 03 56 10.6 +1.7
MJAR Matsushiro Arr 36.03 264 P P 03 56 09.6 +0.3
comp=Z,48nm,0.8s,baz=52,slow=7.4,SNR=84
MJAR PcP PcP 03 58 35.8 +0.7
comp=Z,18nm,0.9s,baz=87,slow=1.4,SNR=5.2
MJAR ScP ScP 04 02 19.6 +1.0
comp=Z,0.5nm,0.4s,baz=74,slow=3.0,SNR=3.0
MJAR LR LR 04 09 19.7
comp=Z,12µm,21.4s,baz=60,slow=34
MJAR Matsushiro Arr 36.03 264 P P 03 56 09.6 +0.3
MJAR 03 58 35.8
MJAR pmax pmax
comp=Z,48nm,0.8s
MJAR pmax pmax
comp=Z,18nm,0.9s
MJAR pmax pmax
comp=N,1.0nm,0.4s
MAJO Matsushiro 36.03 264c iP P 03 56 09.7 +0.4
MAJO pmax pmax
comp=Z,870nm,0.9s
MAJO Matsushiro 36.03 264 eP P 03 56 09.6 +0.3
comp=Z,332nm,1.2s
MAT Matsushiro 36.03 264 P P 03 56 09.6 +0.3
MAT eS S 04 01 46.4 +0.4
SNIWA Snively Ranch 36.06 75 P P 03 56 11.1 +1.7
I05D Terrebonne, OR 36.09 80 P P 03 56 10.9 +1.2
baz=36,SNR=29
KTRM Thompson Ridge 36.12 84 P P 03 56 12.2 +2.1
RSW Rattlesnake Hi 36.13 76 P P 03 56 11.3 +1.2
VLA Vladivostok 36.16 278c iP P 03 56 10.8 +0.6
VLA i S S 04 01 49.7 +2.0
VLA pmax pmax
comp=Z,297nm,0.9s
HAWA Hanford 36.17 76 eP P 03 56 11.2 +0.8
comp=Z,135nm,0.8s
J04D Umpqua Nationa 36.19 82 P P 03 56 12.3 +1.6
baz=36,SNR=13
OD2 Odessa Site #2 36.19 74 P P 03 56 11.2 +0.7
H2OWA Water 36.23 75 P P 03 56 12.1 +1.3
KHMM Horse Mountain 36.47 86 eP P 03 56 15.6 +2.5
comp=Z,324nm,1.3s
YBH Yreka Blue Hor 36.63 84 ScP ScP 04 02 21.1 +0.3
comp=Z,12nm,1.1s,baz=50,slow=2.0,SNR=4.5
YBH LR LR 04 10 31.1
comp=Z,6µm,18.1s,baz=310,slow=35
YBH Yreka Blue Hor 36.63 84 eP P 03 56 16.4 +2.0
YBH pmax pmax
comp=Z,98nm,1.0s
YBH Yreka Blue Hor 36.63 84 eP P 03 56 16.4 +2.0
comp=Z,98nm,1.0s
YBH ScP ScP 04 02 21.1 +0.3
YBH eScP ScP 04 02 21.6 +0.8
J05D Fort Rock, OR 36.70 81 P P 03 56 16.9 +1.8
baz=37,SNR=36
M02C Callahan 36.73 85 P P 03 56 17.3 +2.0
baz=37,SNR=12
K04D Chiloquin, OR 36.73 82 P P 03 56 17.0 +1.7
baz=37,SNR=7.9
NEW Newport 36.73 71 P P 03 56 16.0 +0.8
baz=296,slow=8.9
NEW ScP ScP 04 02 20.9 -0.1
comp=Z,20nm,1.1s,baz=237,slow=8.1,SNR=5.0
NEW LR LR 04 09 37.6
comp=Z,9µm,18.2s,baz=312,slow=33
NEW Newport 36.73 71 P P 03 56 16.0 +0.8
baz=37,SNR=134
NEW Newport 36.73 71 eP P 03 56 15.9 +0.8
comp=Z,240nm,1.0s
NEW ScP ScP 04 02 20.9 -0.1
MDJ Mudanjiang 36.79 282 P P 03 56 14.8 -0.8
MDJ PMZ
comp=Z,80nm,1.1s
MDJ LN
comp=Z,8µm,19.7s
MDJ LE
comp=Z,16µm,19.7s
MDJ LZ
comp=Z,17µm,19.0s
MDJ Mudanjiang 36.79 282 eP P 03 56 14.6 -1.1
comp=Z,81nm,0.9s
EDM Edmonton 36.80 62 eP P 03 56 16.8 +1.1
EDM pmax pmax
comp=Z,1µm,1.1s
EDM Edmonton 36.80 62 eP P 03 56 16.8 +1.1
comp=Z,1µm,1.1s
KMRM Mail Ridge 36.86 87 eP P 03 56 19.0 +2.7
comp=Z,141nm,1.0s
MSHR Mys Shultsa 36.90 278c iP P 03 56 17.4 +0.9
N02D Trinity Center 37.06 85 P P 03 56 19.9 +1.9
baz=37,SNR=11
G08A Pilot Rock 37.06 77 eP P 03 56 18.7 +0.6
comp=Z,73nm,1.0s
M04C Macdoel 37.14 84 P P 03 56 20.3 +1.4
baz=37,SNR=26
K05A Summer Lake 37.21 82 eP P 03 56 21.3 +1.8
comp=Z,353nm,1.0s
K05A eScP ScP 04 02 24.2 +1.1
KIPM Iron Peak 37.24 87 eP P 03 56 21.4 +1.8
comp=Z,637nm,1.2s
KCPM Cahto Peak 37.25 88 eP P 03 56 21.4 +1.7
comp=Z,95nm,1.2s
I07A Izee 37.35 79 eP P 03 56 21.8 +1.3
comp=Z,160nm,1.1s
WDC Whiskeytown Da 37.38 86 eP P 03 56 22.4 +1.7
WDC pmax pmax
comp=Z,107nm,1.0s
WDC Whiskeytown Da 37.38 86 eP P 03 56 22.4 +1.7
comp=Z,107nm,1.0s
WDC eScP ScP 04 02 24.0 +0.5
O03D Paynes Creek 38.01 86 P P 03 56 27.1 +1.0
baz=38,SNR=37
MOD Modoc 38.03 82 eP P 03 56 27.4 +1.0
comp=Z,175nm,1.1s
MOD eScP ScP 04 02 25.9 -0.3
BSMT Bassoo Peak 38.31 71 P P 03 56 29.6 +0.8
J08A Circle Bar Ran 38.37 79 eP P 03 56 30.3 +1.2
comp=Z,215nm,1.3s
BLMT Blacktail Moun 38.49 70 eP P 03 56 31.1 +0.9
BLMT eScP S 04 02 25.4 +2.0
JTMT Jette 38.66 71 eP P 03 56 32.4 +0.8
RES Resolute Bay 38.76 25 ScP ScP 04 02 28.7 +0.5
comp=Z,9.2nm,1.0s,baz=338,slow=8.9,SNR=3.7
RES LR LR 04 17 26.8
comp=Z,10µm,18.4s,baz=271,slow=44
RES Resolute Bay 38.76 25 eP P 03 56 31.5 -0.4
RES e 03 58 43.0
RES 04 02 28.7
RES pmax pmax
comp=Z,30nm,0.9s
RES Resolute Bay 38.76 25 eP P 03 56 31.4 -0.4
comp=Z,30nm,0.9s
RES ePcP PcP 03 58 43.0 +0.3
RES ScP ScP 04 02 28.7 +0.5
WVOR Wild Horse Val 38.77 81 eP P 03 56 33.3 +0.8
WVOR e 04 02 29.4
WVOR pmax pmax
comp=Z,192nm,0.9s
WVOR Wild Horse Val 38.77 81 eP P 03 56 33.3 +0.8
comp=Z,192nm,0.9s
WVOR eScP ScP 04 02 29.4 +0.5
MSO Missoula 39.31 72 P P 03 56 37.5 +0.5
baz=39,SNR=112
MSO Missoula 39.31 72 eP P 03 56 37.5 +0.5
comp=Z,205nm,0.9s
BOD Bodaibo 39.75 308 eP P 03 56 38.4 -2.0
BOD pmax pmax
comp=Z,69nm,1.8s
CN2 Changchun 39.75 283 eP P 03 56 39.6 -0.9
CN2 epP pP 03 56 49.4 -0.7
CN2 PP PnPn 03 58 15.2 -0.1
CN2 PMZ
comp=Z,180nm,1.1s
CN2 LN
comp=Z,2µm,19.0s
CN2 LE
comp=Z,16µm,19.0s
CN2 LZ
comp=Z,18µm,19.0s
MFID Camas Ranch 39.96 77 eP P 03 56 42.9 +0.5
comp=Z,97nm,0.9s
MFID eScP ScP 04 02 34.5 +1.0
KSULL Ulleungdo 40.02 271 P P 03 56 45.9 +3.1
SNR=5.9
CBIJ Chichi jima 40.19 249 eP P 03 56 44.1 -0.2
comp=Z,154nm,0.9s
CMB Columbia Colle 40.23 87 eP P 03 56 45.7 +1.0
CMB pmax pmax
comp=Z,106nm,1.1s
CMB Columbia Colle 40.23 87 eP P 03 56 45.7 +1.0
comp=Z,106nm,1.1s
HLID Hailey 40.74 76 P P 03 56 50.0 +1.0
baz=41,SNR=83
HLID Hailey 40.74 76 eP P 03 56 49.6 +0.7
comp=Z,161nm,1.2s
HLID eScP ScP 04 02 38.0 +1.4
BMN Battle Mountai 40.78 82 eP P 03 56 50.2 +0.9
BMN pmax pmax
comp=Z,122nm,1.1s
BMN Battle Mountai 40.78 82 eP P 03 56 50.2 +0.9
comp=Z,122nm,1.1s
LRV Little Rabbit 40.84 90 eP P 03 56 51.3 +1.7
LRV eScP ScP 04 02 38.1 +1.2
MCMT McKenzie Canyo 41.00 74 P P 03 56 51.7 +0.5
KSSKC Sokcho 41.01 274 P P 03 56 51.9 +0.9
SNR=28
KSSKC Sokcho 41.01 274 P P 03 56 51.9 +0.9
SNR=10
KSJMJ Jumunjin 41.11 273 P P 03 56 53.3 +1.5
SNR=23
KSJMJ Jumunjin 41.11 273 P P 03 56 52.4 +0.5
SNR=11
EGMT Eagleton 41.18 68 P P 03 56 52.9 +0.5
baz=41,SNR=45
EGMT Eagleton 41.18 68 eP P 03 56 52.6 +0.2
comp=Z,114nm,0.9s
SEHB SEOHWA 41.19 274 P P 03 56 53.3 +0.7
SNR=36
SEHB SEOHWA 41.19 274 P P 03 56 53.3 +0.7
SNR=36
KSDGY Daegwallycong 41.28 273 P P 03 56 56.1 +2.8
SNR=8.5
KSDGY Daegwallycong 41.28 273 P P 03 56 54.2 +0.8
SNR=7.5
NVAR Mina Array Bea 41.30 85 P P 03 56 54.6 +1.0
comp=Z,22nm,0.9s,baz=294,slow=8.0,SNR=86
NVAR ScP ScP 04 02 39.9 +0.9
comp=Z,15nm,1.0s,baz=280,slow=4.4,SNR=9.9
NVAR LR LR 04 11 17.1
comp=Z,13µm,19.6s,baz=319,slow=32
BOZ Bozeman (W) 41.30 72 eP P 03 56 54.1 +0.6
BOZ pmax pmax
comp=Z,132nm,0.9s
BOZ Bozeman (W) 41.30 72 P P 03 56 54.3 +0.8
baz=41,SNR=107
BOZ Bozeman (W) 41.30 72 eP P 03 56 54.1 +0.6
comp=Z,132nm,0.9s
BOZ eScP ScP 04 02 38.9 +0.1
KSULJ Uljin 41.44 271 P P 03 56 57.3 +2.9
SNR=10
KSJES JEONGSEON 41.45 273 P P 03 56 56.1 +1.5
SNR=6.6
KSIJA INJE 41.45 274 P P 03 56 55.4 +0.7
SNR=44
KSIJA INJE 41.45 274 P P 03 56 55.4 +0.7
SNR=44
MLAC Mammoth Lakes 41.45 87 P P 03 56 56.6 +1.7
baz=41
KSTBA Taebaek 41.46 272 P P 03 56 55.9 +1.1
SNR=38
KSTBA Taebaek 41.46 272 P P 03 56 55.9 +1.1
SNR=14
KSCWO Cheorwon 41.76 274 P P 03 56 58.1 +0.9
SNR=108
KSCWO Cheorwon 41.76 274 P P 03 56 58.1 +0.9
SNR=108
KSCHC Chuncheon 41.77 274 P P 03 56 57.9 +0.7
SNR=50
KSCHC Chuncheon 41.77 274 P P 03 56 57.9 +0.7
SNR=50
KSWJU Wonju 41.85 273 P P 03 56 58.7 +0.8
SNR=9.1
KSRS Korea Array 41.90 273 P P 03 56 58.1 -0.2
comp=Z,118nm,0.9s,baz=57,slow=7.2,SNR=83
KSRS LR LR 04 17 35.5
comp=Z,5µm,18.0s,baz=42,slow=41
KSRS Korea Array 41.90 273 P P 03 56 58.1 -0.2
KSRS pmax pmax
comp=Z,118nm,0.9s
KSRS MLR MLR
comp=Z,5µm,18.0s
KSAR Wonju Array Be 41.93 273 P P 03 56 58.1 -0.4
KSAR Wonju Array Be 41.93 273 P P 03 56 58.1 -0.4
SNY Shenyang 41.99 282 ⇑P P 03 56 59.7 +0.7

SNY PMZ
comp=Z,830nm,1.2s
RCTC **Rector, Farmer** 42.02 89 P P 03 57 00.2 +0.9
baz=42,SNR=10
YNCB **YEONCHEON** 42.16 275 P P 03 57 00.9 +0.5
SNR=35
YNCB **YEONCHEON** 42.16 275 P P 03 57 00.9 +0.5
SNR=35
KSDDC **Dongducheon** 42.16 275 P P 03 57 01.9 +1.5
SNR=12
ALE **Alert** 42.18 10 P P 03 57 00.0 -0.1
comp=Z,466nm,1.2s,SNR=24
SMMC **Simmler** 42.18 90 P P 03 57 02.2 +1.5
baz=42,SNR=13
TIN **Tinemaha** 42.19 87 P P 03 57 02.2 +1.4
baz=42
KSCHJ **Chungju** 42.23 273 P P 03 57 01.9 +0.9
SNR=8.6
FFC **Flin Flon** 42.27 56 eP P 03 57 00.9 -0.1
FFC pmax pmax
comp=Z,104nm,0.9s
FFC **Flin Flon** 42.27 56 P P 03 57 01.0 -0.1
comp=Z,672nm,0.9s,SNR=26
FFC **Flin Flon** 42.27 56 eP P 03 57 00.9 -0.1
comp=Z,104nm,0.9s
KSICN **Icheon** 42.31 274 P P 03 57 02.4 +0.7
SNR=19
KSMUS **Musan** 42.36 275 P P 03 57 02.7 +0.7
SNR=22
YNR **Norris Junctio** 42.37 73 eP P 03 57 03.6 +1.3
comp=Z,343nm,1.0s
KSSAJ **Sangju** 42.40 272 P P 03 57 03.8 +1.4
SNR=7.6
VES **Vestal, Richgr** 42.42 89 P P 03 57 03.5 +0.9
baz=42,SNR=23
YFT **Old Faithful** 42.42 73 eP P 03 57 04.6 +1.9
comp=Z,264nm,1.2s
CIT **Chita** 42.49 300 eP P 03 57 02.0 -1.1
CIT e 03 57 15.3
CIT pmax pmax
comp=Z,263nm,3.8s
KSSEO **Seoul** 42.50 274 P P 03 57 04.1 +0.9
SNR=18
KSBUS **Busan** 42.54 270 P P 03 57 04.5 +0.9
SNR=7.0
PKM **Peak Mountain** 42.56 91 P P 03 57 05.3 +1.3
baz=42,SNR=23
KSBON **Boeun** 42.57 272 P P 03 57 04.3 +0.5
SNR=19
H17A **Grant Village** 42.60 73 P P 03 57 06.1 +1.8
baz=42,SNR=38
H17A **Grant Village** 42.60 73 eP P 03 57 06.4 +2.1
comp=Z,407nm,1.3s
KSSWO **Suwon** 42.61 274 P P 03 57 04.5 +0.4
SNR=20
LKWY **Lake** 42.62 73 eP P 03 57 05.3 +0.9
LKWY pmax pmax
comp=Z,187nm,0.9s
LKWY **Lake** 42.62 73 eP P 03 57 05.3 +0.9
comp=Z,188nm,0.9s
KSCPR **CHUPUNGNYEONG** 42.64 272 P P 03 57 05.1 +0.8
SNR=15
IMW **Indian Meadow** 42.66 74 eP P 03 57 05.7 +0.9
comp=Z,105nm,1.0s
IMW eScP ScP 04 02 44.7 +0.3
KSGAH **Ganghwa** 42.66 275 P P 03 57 04.9 +0.4
SNR=35
CWC **Cottonwood Cre** 42.67 88 P P 03 57 05.6 +0.8
baz=42,SNR=15
INCN **Inchon** 42.69 274 P P 03 57 06.0 +1.3
SNR=22
INCN **Inchon** 42.69 274 eP P 03 57 05.4 +0.7
comp=Z,286nm,1.0s
KSCEA **Cheonan** 42.70 273 P P 03 57 06.3 +1.4
SNR=9.8
HVU **Hansel Valley** 42.74 78 eP P 03 57 06.2 +0.9
HVU pmax pmax
comp=Z,111nm,0.8s
HVU **Hansel Valley** 42.74 78 eP P 03 57 06.2 +0.9
comp=Z,111nm,0.8s
GRAC **Grapevine Rang** 42.76 86 P P 03 57 06.5 +1.1
baz=43,SNR=12
JNU **Nakatsue** 42.83 266 LR LR 04 13 49.1
comp=Z,11µm,21.4s,baz=59,slow=35
JNU **Nakatsue** 42.83 266 eP P 03 57 06.5 +0.6
comp=Z,88nm,1.0s
MOOW **Moose Ponds** 42.86 74 eP P 03 57 06.7 +0.4
comp=Z,110nm,1.4s
TPAW **Teton Pass** 42.88 74 eP P 03 57 07.2 +0.7
comp=Z,108nm,1.0s
ISA **Isabella** 42.91 89 eP P 03 57 06.9 +0.2
ISA pmax pmax
comp=Z,120nm,1.3s
ISA **Isabella** 42.91 89 P P 03 57 07.1 +0.5
baz=43,SNR=28
ISA **Isabella** 42.91 89 eP P 03 57 06.9 +0.2
comp=Z,120nm,1.3s
TJN **Taejon** 42.92 273 eP P 03 57 06.4 -0.2
KSTEJ **Daejeon** 42.92 273 P P 03 57 07.7 +1.1
SNR=9.8
SBC **Santa Barbara** 42.92 91 P P 03 57 07.7 +1.0
baz=43
RLMT **Red Lodge** 42.98 71 P P 03 57 08.1 +0.8
baz=43,SNR=117
RLMT **Red Lodge** 42.98 71 eP P 03 57 08.2 +0.9
comp=Z,265nm,1.0s
KSKOJ **Gongju** 43.00 273 P P 03 57 07.9 +0.7
SNR=11
SNOW **Snow King Moun** 43.01 74 eP P 03 57 09.2 +1.6
comp=Z,132nm,1.2s
LOHW **Long Hollow** 43.02 74 eP P 03 57 08.2 +0.6
comp=Z,129nm,1.4s
ARVC **Arvin** 43.03 90 P P 03 57 08.5 +1.0
baz=43
R11A **Troy Canyon, C** 43.04 84 P P 03 57 08.4 +0.6
baz=43,SNR=112
R11A **Troy Canyon, C** 43.04 84 eP P 03 57 08.0 +0.2
comp=Z,113nm,1.1s
AHID **Auburn Hatcher** 43.20 75 eP P 03 57 10.1 +1.0
comp=Z,155nm,1.1s
KSTOY **TONGYEONG** 43.23 270 P P 03 57 10.0 +0.9
SNR=6.9
KSSES **Seosan** 43.23 274 P P 03 57 09.8 +0.7
SNR=7.1
KSJEO **Jeonju** 43.24 272 P P 03 57 10.4 +1.2
SNR=5.2
BSC **Santa Cruz Isl** 43.27 92 P P 03 57 10.2 +0.7
baz=43
MPMC **Manual Prospec** 43.27 88 P P 03 57 10.7 +0.9
baz=43,SNR=22
KSJIN **Jinju** 43.28 271 P P 03 57 10.0 +0.5
SNR=9.6
FURC **Furnace Creek,** 43.41 87 P P 03 57 11.5 +1.0
baz=43,SNR=28
OSI **Osito Adit** 43.43 90 P P 03 57 11.8 +1.0
baz=43
TPNV **Topopah Spring** 43.49 86 P P 03 57 12.4 +1.0
baz=43,SNR=69
KSGUS **GUNSAN** 43.50 273 P P 03 57 11.8 +0.6
SNR=12
LRMC **Laurel Mountai** 43.52 88 P P 03 57 12.1 +0.5
baz=43,SNR=6.4
BLG **Laguna Peak** 43.55 91 P P 03 57 12.8 +1.0
baz=43,SNR=9.6
KSNAH **Namhae** 43.56 270 P P 03 57 13.1 +1.3
SNR=8.3
KSBAR **Backryungdo** 43.58 276 P P 03 57 12.7 +0.9
SNR=42
HWUT **Hardware Ranch** 43.58 77 eP P 03 57 12.8 +0.7
comp=Z,70nm,0.9s
HWUT eScP ScP 04 02 48.2 +0.1
DUG **Dugway** 43.64 80 eP P 03 57 13.4 +0.8
DUG pmax pmax
comp=Z,276nm,1.2s
DUG **Dugway** 43.64 80 P P 03 57 13.6 +1.0
baz=44,SNR=88
DUG **Dugway** 43.64 80 eP P 03 57 13.4 +0.8
comp=Z,276nm,1.2s
DUG eScP ScP 04 02 48.0 -0.3
EDW2 **Edwards Air Fo** 43.72 89 P P 03 57 13.8 +0.7
baz=44,SNR=22
KSJEU **Jeongeup** 43.75 272 P P 03 57 14.3 +1.0
SNR=23
SNCC **San Nicolas Is** 43.83 92 P P 03 57 14.9 +1.0
baz=44
DECC **Green Verdugo** 43.91 90 P P 03 57 15.4 +0.7
baz=44
LAO **LASA Array** 43.92 68 P P 03 57 15.6 +0.9
baz=44,SNR=80
LAO **LASA Array** 43.92 68 eP P 03 57 15.6 +0.9
comp=Z,152nm,0.8s
LAO ePcP PcP 03 59 01.4 +1.2
LAO eScP ScP 04 02 49.0 -0.2
KSKWJ **Gwangju** 43.93 272 P P 03 57 15.3 +0.6
SNR=20
KSGWJ **Gwangju-acc** 43.98 272 P P 03 57 16.1 +0.9
SNR=7.8
CTU **Camp Tracy** 44.00 78 eP P 03 57 16.4 +0.9
comp=Z,116nm,1.0s
PASC **Pasadena Art C** 44.06 90 eP P 03 57 16.9 +1.1
comp=Z,93nm,1.2s
KSKOH **Goheung** 44.11 271 P P 03 57 17.2 +1.0
SNR=6.7
BW06 **Boulder Array** 44.13 74 eP P 03 57 17.0 +0.4
comp=Z,211nm,0.9s
DGMT **Dagmar** 44.13 65 P P 03 57 16.7 +0.4
baz=44,SNR=60
DGMT **Dagmar** 44.13 65 eP P 03 57 16.7 +0.4
comp=Z,472nm,1.4s
GSC **Goldstone** 44.19 88 eP P 03 57 17.6 +0.7
GSC pmax pmax
comp=Z,119nm,0.9s
GSC **Goldstone** 44.19 88 P P 03 57 17.8 +0.8
baz=44,SNR=47
GSC **Goldstone** 44.19 88 eP P 03 57 17.6 +0.7
comp=Z,119nm,0.9s
NLU **North Lily Min** 44.24 79 eP P 03 57 18.2 +0.7
comp=Z,206nm,1.3s
FCC **Fort Churchill** 44.28 48 eP P 03 57 16.7 -0.5
FCC pmax pmax
comp=Z,50nm,0.8s
FCC **Fort Churchill** 44.28 48 eP P 03 57 16.7 -0.5
comp=Z,50nm,0.8s
FMP **Fort Macarthur** 44.29 91 P P 03 57 18.8 +1.2
baz=44
RRX **Edison Barstow** 44.34 88 P P 03 57 18.8 +0.7
baz=44
BFSC **Mount Baldy Ra** 44.34 90 P P 03 57 18.9 +0.7
baz=44,SNR=29
O16A **Springville** 44.44 79 eP P 03 57 27.9 +8.8
comp=Z,328nm,1.3s
SHPR **Sheep Range** 44.45 85 eP P 03 57 19.6 +0.5
MPU **Maple Canyon** 44.48 79 eP P 03 57 20.0 +0.6
comp=Z,198nm,0.9s
A25A **Svangstu Ranch** 44.50 64 P P 03 57 19.7 +0.5
baz=44,SNR=96
KSWAN **Wando** 44.61 271 P P 03 57 21.2 +1.1
SNR=5.4
SCI **San Clemente I** 44.62 92 P P 03 57 20.8 +0.5
baz=44
TUQ **Turquoise Moun** 44.65 87 P P 03 57 21.2 +0.5
baz=44,SNR=24
BBRC **Big Bear Solar** 44.79 89 P P 03 57 22.9 +1.0
baz=45,SNR=10
HEC **Hector,Ludlow** 44.79 88 P P 03 57 22.4 +0.7
baz=45,SNR=14
KSJDO **Jindo** 44.80 271 P P 03 57 24.5 +2.7
SNR=7.7
B25A **Knox Farm, Ray** 44.83 64 P P 03 57 22.4 +0.5
baz=45,SNR=70
DL2 **Dalian** 44.92 280 P P 03 57 22.4 -0.2
DL2 S S 04 03 58.2 -0.1
DL2 PMZ
comp=Z,680nm,0.9s
DL2 LE
comp=Z,5µm,15.7s
DL2 LZ
comp=Z,7µm,16.2s
MURC **Murrieta** 45.05 90 P P 03 57 24.2 +0.4
baz=45,SNR=17
C25A **Freed Ranch, W** 45.07 65 P P 03 57 24.3 +0.4
baz=45,SNR=21
A26A **Wade Farm, Ken** 45.12 63 P P 03 57 24.3 +0.1
baz=45,SNR=55
GMRC **Granite Mounta** 45.24 88 P P 03 57 25.9 +0.5
baz=45,SNR=26
B26A **Jensen Ranch,** 45.29 64 P P 03 57 25.8 +0.3
baz=45,SNR=12
KSJJU **Jeju** 45.34 270 P P 03 57 27.7 +1.7
SNR=5.8
D25A **Fairfield** 45.34 66 P P 03 57 26.4 +0.4
baz=45,SNR=30
P17A **Butcher Ranch,** 45.35 79 eP P 03 57 27.1 +0.8
comp=Z,270nm,1.3s
LDFC **Landfair** 45.39 87 eP P 03 57 26.8 +0.2
comp=Z,181nm,1.0s
PFO **Pinyon Flat Ob** 45.51 89 eP P 03 57 26.7 -0.9
PFO pmax pmax
comp=Z,65nm,1.2s
PFO **Pinyon Flat Ob** 45.51 89 P P 03 57 28.0 +0.5
comp=Z,198nm,1.2s,SNR=7.5
PFO **Pinyon Flat Ob** 45.51 89 P P 03 57 28.3 +0.8
comp=Z,198nm,1.2s,SNR=7.5
PFO **Pinyon Flat Ob** 45.51 89 P P 03 57 27.5 0.0
baz=45,SNR=21
PFO **Pinyon Flat Ob** 45.51 89 eP P 03 57 26.7 -0.9
comp=Z,64nm,1.2s
A27A **Ledoux Ranch,** 45.53 63 P P 03 57 28.0 +0.6
baz=45,SNR=102
BELC **Belle Mtn. Jos** 45.54 89 P P 03 57 27.7 -0.1
baz=45,SNR=14
P18A **Preston Nutter** 45.56 78 eP P 03 57 29.0 +0.9
comp=Z,371nm,1.2s
109C **Camp Elliot, M** 45.58 91 P P 03 57 29.1 +1.2
baz=46,SNR=7.3
E25A **Miller Ranch,** 45.66 67 P P 03 57 29.4 +0.9
baz=46,SNR=53
C26A **Wahner Farm, P** 45.67 64 P P 03 57 29.3 +0.8
baz=46,SNR=52
SRU **San Rafael** 45.71 79 eP P 03 57 30.2 +1.1
SRU pmax pmax
comp=Z,203nm,1.0s
SRU **San Rafael** 45.71 79 eP P 03 57 30.2 +1.1
comp=Z,203nm,1.0s
B27A **Peters Farms,** 45.82 63 P P 03 57 30.4 +0.7
baz=46,SNR=21
D26A **Manning** 45.91 65 P P 03 57 30.7 +0.2
baz=46,SNR=18
F25A **Bowman** 45.94 67 P P 03 57 31.3 +0.5
baz=46,SNR=31
IRM **Iron Mountain** 45.96 88 P P 03 57 31.6 +0.6
baz=46,SNR=22
BAR **Barrett** 45.99 91 eP P 03 57 32.3 +1.0
comp=Z,59nm,1.0s
MONP **Monument Peak** 46.01 90 P P 03 57 31.9 +0.4
baz=46,SNR=17
K22A **Casper** 46.02 73 P P 03 57 31.7 +0.2
baz=46,SNR=37
K22A **Casper** 46.02 73 eP P 03 57 31.4 -0.1
comp=Z,235nm,1.4s
C27A **Sayler Ranch,** 46.06 64 P P 03 57 32.2 +0.6
baz=46,SNR=42
A28A **Rude Farm, Bot** 46.10 62 P P 03 57 32.2 +0.3
baz=46,SNR=97
E26A **Carlson Angus** 46.21 66 P P 03 57 33.2 +0.4
baz=46,SNR=70
B28A **Dugan Ranch, T** 46.30 63 P P 03 57 33.9 +0.4
baz=46,SNR=149
IBP **Imperial Bould** 46.37 90 P P 03 57 34.6 +0.4
baz=46
SWSC **Sam W. Stewart** 46.37 90 P P 03 57 34.4 +0.3
baz=46
G25A **Newell** 46.38 68 P P 03 57 34.3 +0.1
baz=46,SNR=36
D27A **Center** 46.39 65 P P 03 57 34.6 +0.4
baz=46,SNR=24
F26A **Lodgepole** 46.44 67 P P 03 57 35.0 +0.4
baz=46,SNR=16
O20A **White River Ci** 46.48 77 P P 03 57 35.2 0.0
baz=46,SNR=78
O20A **White River Ci** 46.48 77 eP P 03 57 35.4 +0.1
comp=Z,300nm,0.8s
PDMCI **Parker Dam,Lak** 46.50 87 P P 03 57 35.7 +0.6
baz=46,SNR=12
H25A **Fruitdale** 46.60 69 P P 03 57 36.1 +0.2
baz=46,SNR=88
Y12C **Blythe** 46.62 88 P P 03 57 36.7 +0.5
baz=46,SNR=14
RSSD **Black Hills** 46.64 70 eP P 03 57 36.2 -0.2
RSSD pmax pmax
comp=Z,204nm,1.5s
RSSD **Black Hills** 46.64 70 eP P 03 57 36.2 -0.2
comp=Z,204nm,1.5s
A29A **Manning Farm,** 46.66 62 P P 03 57 36.3 0.0
baz=46,SNR=102
C28A **Hausauer Farms** 46.69 64 P P 03 57 37.1 +0.6
baz=47,SNR=45
E27A **Carson** 46.75 66 P P 03 57 37.5 +0.5
baz=47,SNR=54
G26A **Maurine** 46.80 68 P P 03 57 37.7 +0.3
baz=47,SNR=80
F27A **Lemmon** 46.80 67 P P 03 57 37.8 +0.3
baz=47,SNR=72
B29A **Wagenman Farm,** 46.85 62 P P 03 57 38.0 +0.3
baz=47,SNR=29
I25A **Rochford** 46.87 70 P P 03 57 38.0 -0.2
baz=47,SNR=33
D28A **Regan** 46.88 64 P P 03 57 38.7 +0.7
baz=47,SNR=66
GLA **Glamis** 46.90 89 P P 03 57 39.2 +0.8
baz=47,SNR=8.9
MDND **Maddock** 47.05 63 P P 03 57 40.1 +0.7
baz=47,SNR=115
MDND **Maddock** 47.05 63 eP P 03 57 40.0 +0.7
comp=Z,801nm,1.0s
H26A **Fairpoint** 47.09 68 P P 03 57 39.8 +0.1
baz=47,SNR=32
G27A **Dupree** 47.13 67 P P 03 57 40.3 +0.3
baz=47,SNR=93
PV04 **Paradox Valley** 47.15 79 eP P 03 57 40.8 +0.4
E28A **Huff** 47.16 65 P P 03 57 40.6 +0.4
baz=47,SNR=36
A30A **Hoffart Farm,** 47.17 61 P P 03 57 40.2 0.0
baz=47,SNR=42
J25A **Sunshine Ranch** 47.20 70 P P 03 57 40.4 -0.3
baz=47,SNR=22
IRK **Irkutsk** 47.30 304 eP P 03 57 39.3 -1.9
IRK e 03 59 12.0
IRK e 04 07 32.5
IRK pmax pmax
comp=Z,295nm,2.1s
I26A **New Underwood** 47.38 69 P P 03 57 42.2 +0.2
baz=47,SNR=31
N23A **Red Feather La** 47.41 74 P P 03 57 43.3 +0.8
baz=47,SNR=41
B30A **Myrvik Farm, E** 47.42 62 P P 03 57 42.5 +0.2
baz=47,SNR=79
WUAZ **Wupatki** 47.44 84 P P 03 57 43.4 +0.7
baz=47,SNR=24
WUAZ **Wupatki** 47.44 84 eP P 03 57 43.8 +1.1
comp=Z,124nm,0.9s
H27A **Howes** 47.48 68 P P 03 57 42.8 0.0
baz=47,SNR=12
D29A **Pettibone, Tap** 47.50 64 P P 03 57 43.0 +0.1
baz=47,SNR=16
F28A **McLaughlin** 47.51 66 P P 03 57 43.1 +0.1
baz=47,SNR=28
BJI **Beijing** 47.57 284 P P 03 57 44.0 +0.6
BJI PMZ
comp=Z,310nm,1.2s
BJT **Baijiatuau** 47.58 284 eP P 03 57 44.0 +0.4
BJT pmax pmax
comp=Z,221nm,0.8s
BJT **Baijiatuau** 47.58 284 eP P 03 57 44.0 +0.4
comp=Z,221nm,0.8s
J26A **Sides Ranch, S** 47.67 70 P P 03 57 44.4 +0.1
baz=48
KULLO **Kullorsuaq** 47.72 19 i P P 03 57 44.3 +0.1
comp=Z,129nm,1.0s
ULM **Lac du Bonnet** 47.75 58 P P 03 57 44.6 -0.1
comp=Z,166nm,1.0s,baz=304,slow=8.1,SNR=78
ULM LR LR 04 18 28.5
comp=Z,14µm,19.2s,baz=314,slow=37
ULM **Lac du Bonnet** 47.75 58 P P 03 57 44.6 -0.1
ULM pmax pmax
comp=Z,166nm,1.0s
ULM MLR MLR
comp=Z,14µm,19.2s
ULM **Lac du Bonnet** 47.75 58 eP P 03 57 44.6 -0.1
comp=Z,431nm,1.3s
E29A **Napoleon** 47.76 64 P P 03 57 45.0 +0.1
baz=48,SNR=25
C30A **Mose, Pekin** 47.76 63 P P 03 57 44.9 0.0
baz=48,SNR=30
A31A **Linda, St. Vin** 47.78 61 P P 03 57 45.2 +0.3
baz=48,SNR=11
B31A **Greenbush Farm** 47.81 61 P P 03 57 45.4 +0.2
baz=48,SNR=62
I27A **Quinn** 47.83 69 P P 03 57 45.9 +0.4
baz=48,SNR=82
G28A **Parade** 47.90 67 P P 03 57 46.2 +0.3
baz=48,SNR=52
TLY **Talaya** 47.93 304 LR LR 04 20 19.2
comp=Z,12µm,19.0s,baz=48,slow=39
TLY **Talaya** 47.93 304 i P P 03 57 45.7 -0.4
TLY pmax pmax
comp=Z,74nm,1.0s
TLY **Talaya** 47.93 304 P P 03 57 45.3 -0.8
comp=Z,499nm,1.1s,SNR=23
TLY **Talaya** 47.93 304 P P 03 57 46.3 +0.1
SNR=45
TLY **Talaya** 47.93 304 eP P 03 57 45.9 -0.2
comp=Z,1µm,2.8s
D30A **Buchanan** 47.95 63 P P 03 57 46.2 -0.1
baz=48,SNR=96
H28A **Mission Ridge** 48.07 67 P P 03 57 47.8 +0.5
baz=48,SNR=65
F29A **Eureka** 48.08 65 P P 03 57 47.4 +0.1
baz=48,SNR=50
C31A **Landman Farms,** 48.12 62 P P 03 57 47.7 0.0
baz=48,SNR=28
MVCO **Mesa Verde** 48.14 80 P P 03 57 48.4 +0.2
baz=48,SNR=23
MVCO **Mesa Verde** 48.14 80 eP P 03 57 48.1 -0.1
comp=Z,191nm,1.2s
E30A **Jud** 48.21 64 P P 03 57 48.2 -0.2
baz=48,SNR=12
M25A **Palm-Egli Farm** 48.22 73 P P 03 57 49.5 +0.8
baz=48,SNR=41
ULN **Ulaanbaatar** 48.25 298 i P P 03 57 48.6 -0.2
ULN pmax pmax
comp=Z,99nm,0.9s
ULN **Ulaanbaatar** 48.25 298 P P 03 57 48.8 -0.1
SNR=37
ULN **Ulaanbaatar** 48.25 298 eP P 03 57 48.4 -0.4
comp=Z,111nm,0.9s
ULN eScP ScP 04 03 07.5 +0.1
ISCO **Idaho Springs** 48.28 75 eP P 03 57 49.9 +0.5
ISCO pmax pmax
comp=Z,59nm,1.0s
ISCO **Idaho Springs** 48.28 75 P P 03 57 50.1 +0.7
baz=48,SNR=28
ISCO **Idaho Springs** 48.28 75 eP P 03 57 49.9 +0.5
comp=Z,59nm,1.0s
J27A **Elkhorn Farm,** 48.34 69 P P 03 57 50.0 +0.5
baz=48,SNR=34
I28A **Midland** 48.38 68 P P 03 57 50.0 +0.3
baz=48,SNR=148
G29A **Hoven** 48.40 66 P P 03 57 49.6 -0.2
baz=48,SNR=28
B32A **Ashes, Strandq** 48.44 61 P P 03 57 49.9 -0.1
baz=48,SNR=77
F30A **Leola** 48.53 65 P P 03 57 50.5 -0.4
baz=48
D31A **Mcclaflin, Tow** 48.56 63 P P 03 57 50.6 -0.4
baz=48,SNR=6.9
H29A **Onida** 48.56 67 P P 03 57 51.3 +0.1
baz=48,SNR=58
SONM **Songino Array** 48.63 298 P P 03 57 51.7 -0.1
comp=Z,70nm,0.9s,baz=52,slow=9.4,SNR=250
SONM PcP PcP 03 59 17.6 +0.8
comp=Z,53nm,1.0s,baz=84,slow=2.6,SNR=8.9
SONM ScP ScP 04 03 09.7 +0.8
comp=Z,12nm,0.8s,baz=43,slow=3.7,SNR=6.2
SONM LR LR 04 20 03.4
comp=Z,21µm,19.6s,baz=55,slow=38
SONM **Songino Array** 48.63 298 P P 03 57 51.7 -0.1
SONM 03 59 17.6
SONM pmax pmax
comp=Z,70nm,0.9s
SONM pmax pmax
comp=Z,53nm,1.0s
SONM pmax pmax
comp=N,13nm,0.8s
SONM MLR MLR
comp=Z,21µm,19.6s
J28A **Allard Ranch,** 48.69 69 P P 03 57 52.6 +0.4
baz=48,SNR=108
W18A **Petrified Fore** 48.72 83 P P 03 57 53.3 +0.6
baz=49,SNR=6.5
M26A **McRoberts Ranc** 48.74 72 P P 03 57 53.6 +1.0
baz=49,SNR=7.1
A33A **Warroad** 48.75 60 P P 03 57 52.6 +0.1
baz=49

E31A **Nome** 48.75 64 P P 03 57 52.1 -0.4
baz=49,SNR=44
S22A **4UR Ranch, Cre** 48.83 78 P P 03 57 54.5 +0.9
baz=49,SNR=37
ZAK **Zakamensk** 48.85 303 *e*P P 03 57 52.9 -0.4
ZAK *e* 03 59 18.6
ZAK pmax pmax
comp=Z,169nm,1.3s
ZAK pmax pmax
comp=Z,89nm,1.1s
AGMN **Agassiz Nation** 48.86 61 P P 03 57 53.1 -0.2
baz=49,SNR=66
AGMN **Agassiz Nation** 48.86 61 *e*P P 03 57 53.1 -0.2
comp=Z,336nm,1.1s
AGMN *e*ScP ScP 04 03 09.6 -0.1
AGMN *e*S S 04 04 54.1 -0.3
I29A **Vivian Onida** 48.87 68 P P 03 57 53.4 0.0
baz=49,SNR=56
214A **Organ Pipe Nat** 48.89 88 P P 03 57 54.3 +0.5
baz=49,SNR=20
D32A **Dogwood Acres,** 48.90 62 P P 03 57 53.3 -0.3
baz=49
F31A **Hecla** 48.96 64 P P 03 57 53.7 -0.4
baz=49,SNR=9.3
K28A **Ten Mile Ranch** 49.04 70 P P 03 57 54.9 0.0
baz=49,SNR=44
Q24A **Divide** 49.08 76 P P 03 57 56.2 +0.7
baz=49,SNR=12
N26A **Koester Ranch,** 49.09 73 P P 03 57 56.1 +0.8
baz=49,SNR=13
M27A **Reverse DX Ran** 49.16 71 P P 03 57 55.8 +0.1
baz=49,SNR=6.8
E32A **Braaten, Kindr** 49.19 63 P P 03 57 56.0 +0.2
baz=49,SNR=6.0
C33A **Trail** 49.23 61 P P 03 57 55.9 -0.2
baz=49,SNR=30
J29A **Okreek** 49.23 68 P P 03 57 56.8 +0.5
baz=49,SNR=202
MOY **Mondy** 49.31 305 *e*P P 03 57 56.3 -0.5
MOY pmax pmax
comp=Z,321nm,2.8s
G31A **Conde** 49.36 65 P P 03 57 56.8 -0.4
baz=49,SNR=7.3
L28A **Connealy Angus** 49.38 70 P P 03 57 57.7 +0.2
baz=49
TIA **Tai'an** 49.39 280 ⇑P P 03 57 57.5 0.0
TIA PMZ
comp=Z,450nm,0.8s
O26A **Horse Wrangler** 49.40 73 P P 03 57 58.4 +0.7
baz=49,SNR=10
SUSD **South Dakota S** 49.40 66 P P 03 57 57.3 -0.2
baz=49,SNR=30
B34A **Aery, Baudette** 49.41 60 P P 03 57 57.3 -0.2
baz=49,SNR=77
I30A **Oacoma** 49.44 67 P P 03 57 57.9 +0.1
baz=49,SNR=20
N27A **Anderson Farm,** 49.51 72 P P 03 57 59.2 +0.7
baz=49,SNR=37
D33A **AnnSam, Waubun** 49.55 62 P P 03 57 58.2 -0.4
baz=49,SNR=58
GUMO **Guam** 49.55 235 LR LR 04 15 35.3
comp=Z,3µm,21.2s,baz=50,slow=32
GUMO **Guam** 49.55 235 *e*P P 03 57 57.2 -1.7
GUMO pmax pmax
comp=Z,376nm,1.4s
GUMO **Guam** 49.55 235 *e*P P 03 57 57.2 -1.7
comp=Z,376nm,1.4s
K29A **Lazy Trails An** 49.62 69 P P 03 57 59.7 +0.4
baz=50,SNR=47
SDCO **Great Sand Dun** 49.64 77 P P 03 58 00.6 +0.9
baz=50,SNR=53
SDCO **Great Sand Dun** 49.64 77 *e*P P 03 58 00.3 +0.5
comp=Z,114nm,1.0s
H31A **Wolsey** 49.65 66 P P 03 57 59.4 0.0
baz=50,SNR=30
OGNE **Ogallala** 49.72 72 P P 03 58 00.8 +0.6
baz=50,SNR=29
OGNE **Ogallala** 49.72 72 *e*P P 03 58 00.8 +0.6
comp=Z,851nm,1.6s
G32A **Webster** 49.74 65 P P 03 57 59.6 -0.5
baz=50,SNR=15
J30A **Dallas** 49.76 68 P P 03 58 00.2 -0.1
baz=50,SNR=75
P26A **Davis Ranch, A** 49.80 74 P P 03 58 01.8 +1.0
baz=50,SNR=72
E33A **Westby DABS, E** 49.84 63 P P 03 58 00.3 -0.5
baz=50,SNR=21
HHC **Hu-ho-hao-te** 49.84 288 *e*P P 03 58 02.1 +1.1
HHC pP pP 03 58 12.4 +1.6
HHC S S 04 05 09.0 +0.5
HHC PMZ
comp=Z,260nm,1.2s
HHC PMZ
comp=Z,7µm,7.3s
HHC LN
comp=Z,11µm,17.0s
HHC LE
comp=Z,7µm,17.8s
HHC LZ
comp=Z,13µm,17.8s
M28A **Bar X Bar Ranc** 49.84 71 P P 03 58 01.5 +0.5
baz=50,SNR=18
KBS **Kingsbay** 49.84 358 *e*P P 03 57 60.0 -0.4
KBS **Kingsbay** 49.84 358 *e*P P 03 58 01.3 +0.9
KBS *e* 03 59 20.9
KBS pmax pmax
comp=Z,301nm,0.9s
KBS **Kingsbay** 49.84 358 *e*P P 03 58 01.3 +0.9
comp=Z,300nm,0.9s
KBS *e*PcP PcP 03 59 20.9 +0.4
KBS *e*ScP ScP 04 03 13.0 -0.4
I31A **Royce, Wessing** 49.89 67 P P 03 58 01.1 -0.2
baz=50
TUC **Tucson** 49.92 86 *e*P P 03 58 02.2 +0.5
TUC pmax pmax
comp=Z,63nm,0.9s
TUC **Tucson** 49.92 86 *e*P P 03 58 02.2 +0.5
comp=Z,63nm,0.9s
O27A **Beecher Island** 49.93 73 P P 03 58 02.1 +0.4
baz=50,SNR=29
D34A **Park Rapids** 49.94 62 P P 03 58 01.1 -0.5
baz=50,SNR=78
L29A **Maesberg Ranch** 49.95 70 P P 03 58 01.9 +0.1
baz=50,SNR=28
F33A **5 Mile Ranch,** 50.07 63 P P 03 58 02.0 -0.5
baz=50,SNR=45
K30A **Basset** 50.09 69 P P 03 58 03.3 +0.5
baz=50,SNR=121
Q26A **Hugo** 50.10 75 P P 03 58 03.6 +0.6
baz=50,SNR=16
N28A **Pribbeno Ranch** 50.18 72 P P 03 58 04.0 +0.5
baz=50,SNR=7.1
M29A **Burnside Ranch** 50.21 71 P P 03 58 04.1 +0.3
baz=50,SNR=25
J31A **Geddes** 50.22 67 P P 03 58 03.5 -0.2
baz=50,SNR=46
H32A **Carlson Farm,** 50.23 65 P P 03 58 03.2 -0.6
baz=50,SNR=34
C35A **Jirik Farms, M** 50.24 60 P P 03 58 03.4 -0.4
baz=50,SNR=66
SSE **Sheshan** 50.26 272 ⇑P P 03 58 05.1 +1.0
SSE PMZ
comp=Z,93nm,0.8s
SSE PMZ
comp=Z,16µm,12.0s
P27A **Ficken Ranch,** 50.27 74 P P 03 58 04.8 +0.5
baz=50,SNR=27
E34A **Wadena** 50.29 62 P P 03 58 03.5 -0.7
baz=50,SNR=22
O28A **Krutsinger Ran** 50.39 73 P P 03 58 05.5 +0.3
baz=50,SNR=29
SPB5 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 05.1 0.0
SPB1 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 05.0 -0.2
SPA1 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 05.1 -0.1
L30A **Spencer Herefo** 50.47 69 P P 03 58 05.8 +0.1
baz=50,SNR=25
SPB4 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 05.2 0.0
SPA0 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 04.5 -0.7
SPA0 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 05.2 0.0
SPITS **Spitsbergen Ar** 50.47 357 LR LR 04 19 45.9
comp=Z,11µm,20.3s,baz=355,slow=36
SPA2 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 05.2 0.0
SPA3 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 05.2 0.0
SPB2 **Spitsbergen Ar** 50.47 357 *e*P P 03 58 05.1 -0.1
SPB3 **Spitsbergen Ar** 50.48 357 *e*P P 03 58 05.2 0.0
I32A **Karley and Nic** 50.50 66 P P 03 58 05.3 -0.6
baz=50,SNR=8.9

H33A **Prehn Over Nor** 50.52 65 P P 03 58 05.4 -0.5
baz=50,SNR=36
R26A **Arlington** 50.53 75 P P 03 58 06.7 +0.4
baz=50,SNR=31
D35A **Remer** 50.57 61 P P 03 58 06.0 -0.3
baz=50,SNR=72
KSCO **Kaye Shedlock'** 50.58 74 P P 03 58 07.5 +0.8
baz=50,SNR=39
KSCO **Kaye Shedlock'** 50.58 74 *e*P P 03 58 07.5 +0.8
comp=Z,402nm,1.1s
K31A **O'Neill** 50.62 68 P P 03 58 06.9 +0.1
baz=50,SNR=29
M30A **Dale-Ortello V** 50.64 70 P P 03 58 07.1 +0.1
baz=50,SNR=27
N29A **Votaw Ranch, W** 50.64 71 P P 03 58 07.2 +0.2
baz=50,SNR=16
F34A **Alexandria** 50.67 63 P P 03 58 06.7 -0.5
baz=50
J32A **Parkston** 50.68 67 P P 03 58 06.8 -0.5
baz=50,SNR=66
E35A **Pequot Lakes** 50.69 62 P P 03 58 07.0 -0.3
baz=50,SNR=65
T25A **Trinidad** 50.69 77 P P 03 58 08.7 +1.1
baz=51,SNR=36
KRAR **Krasnoyarsk** 50.71 314 ⇑*i*P P 03 58 07.6 +0.4
KRAR pmax pmax
comp=Z,111nm,1.0s
P28A **Saint Francis** 50.75 73 P P 03 58 08.3 +0.5
baz=51,SNR=36
G34A **Benson** 50.80 64 P P 03 58 07.4 -0.7
baz=51,SNR=34
C36A **Pine Crest Far** 50.82 60 P P 03 58 08.1 -0.1
baz=51,SNR=69
L31A **Butterfield Fa** 50.84 69 P P 03 58 08.9 +0.3
baz=51,SNR=129
ANMO **Albuquerque** 50.86 81 LR LR 04 19 39.0
comp=Z,10µm,18.0s,baz=322,slow=36
ANMO **Albuquerque** 50.86 81 *c i*P P 03 58 09.1 +0.1
ANMO pmax pmax
comp=Z,19nm,1.1s
ANMO **Albuquerque** 50.86 81 *e*P P 03 58 09.1 +0.1
comp=Z,136nm,1.6s
I33A **Coleman** 50.87 66 P P 03 58 08.0 -0.6
baz=51,SNR=12
R27A **Eads** 50.94 75 P P 03 58 10.1 +0.8
baz=51,SNR=40
S26A **Kim** 50.95 76 P P 03 58 09.9 +0.4
baz=51,SNR=45
N30A **Hueftle Ranch,** 50.96 71 P P 03 58 10.0 +0.5
baz=51
O29A **4D Ranch, Culb** 50.97 72 P P 03 58 10.2 +0.7
baz=51,SNR=54
D36A **Goodland** 50.99 60 P P 03 58 09.0 -0.5
baz=51,SNR=48
F35A **Swanville** 51.02 62 P P 03 58 09.3 -0.4
baz=51,SNR=25
Q28A **Sharon Springs** 51.03 74 P P 03 58 10.4 +0.4
baz=51,SNR=13
K32A **Verdigre** 51.05 68 P P 03 58 09.5 -0.5
baz=51,SNR=38
NJ2 **Nanjing** 51.07 274 *e*P P 03 58 11.2 +1.0
NJ2 pP pP 03 58 20.0 0.0
NJ2 sP sP 03 58 24.2 +0.4
NJ2 S S 04 05 27.0 +1.5
NJ2 sS sS 04 05 42.0 +0.5
NJ2 PMZ
comp=Z,400nm,0.8s
NJ2 PMZ
comp=Z,15µm,8.6s
NJ2 LN
comp=Z,38µm,20.2s
NJ2 LE
comp=Z,35µm,21.8s
NJ2 LZ
comp=Z,34µm,23.6s
H34A **Spellman Lake,** 51.07 64 P P 03 58 09.4 -0.7
baz=51,SNR=23
Y22D **IRIS PASSCAL I** 51.15 82 P P 03 58 11.6 +0.6
baz=51
ECSD **EROS Data Cent** 51.17 66 P P 03 58 10.4 -0.5
baz=51,SNR=43
ECSD **EROS Data Cent** 51.17 66 *e*P P 03 58 10.2 -0.7
comp=Z,106nm,0.8s
T26A **Comanche Natio** 51.17 77 P P 03 58 11.3 +0.1
baz=51,SNR=22
C37A **Embarrass** 51.19 59 P P 03 58 10.8 -0.3
baz=51,SNR=81
J33A **Davis** 51.22 66 P P 03 58 11.0 -0.3
baz=51,SNR=13
P29A **Atwood** 51.22 73 P P 03 58 12.1 +0.7
baz=51,SNR=35
M31A **Lambtecht Ranc** 51.28 70 P P 03 58 11.8 -0.1
baz=51,SNR=24
TIY **Taiyuan** 51.30 284 ⇑*i*P P 03 58 13.2 +1.2
TIY PMZ
comp=Z,480nm,1.0s
O30A **MW Ranch, Wils** 51.38 71 P P 03 58 13.2 +0.6
baz=51,SNR=78
D37A **Cotton** 51.41 60 P P 03 58 12.1 -0.5
baz=51,SNR=52
I34A **Hadley** 51.41 65 P P 03 58 12.4 -0.3
baz=51
EYMN **Ely** 51.43 59 P P 03 58 12.5 -0.3
baz=51,SNR=87
EYMN **Ely** 51.43 59 *e*P P 03 58 12.6 -0.3
comp=Z,436nm,1.3s
EYMN *e*ScP ScP 04 03 20.6 -0.1
L32A **Elgin** 51.44 68 P P 03 58 13.2 +0.2
baz=51,SNR=29
G35A **Watkins** 51.46 63 P P 03 58 12.8 -0.2
baz=51,SNR=10
R28A **Tribune** 51.50 74 P P 03 58 14.1 +0.6
baz=51,SNR=36
H35A **Sunnyside Ranc** 51.58 64 P P 03 58 13.8 -0.2
baz=51
F36A **Milaca** 51.60 62 P P 03 58 13.3 -0.8
baz=52,SNR=40
N31A **Bailey Ranch,** 51.62 70 P P 03 58 14.6 +0.2
baz=52,SNR=18
121A **Cookes Peak, D** 51.64 84 P P 03 58 15.6 +0.8
baz=52,SNR=27
K33A **Hardington** 51.64 67 P P 03 58 14.3 -0.1
baz=52,SNR=14
Q29A **Oakley** 51.65 73 P P 03 58 15.1 +0.5
baz=52,SNR=28
HSPB **Hornsund (broa** 51.67 357 *e*P P 03 58 12.9 -1.2
P30A **Selden** 51.67 72 P P 03 58 15.3 +0.6
baz=52,SNR=65
C38A **Sawbill Land.** 51.69 59 P P 03 58 14.2 -0.5
baz=52,SNR=69
BGNE **Belgrade** 51.73 69 P P 03 58 15.2 0.0
baz=52,SNR=48
BGNE **Belgrade** 51.73 69 *e*P P 03 58 15.1 0.0
comp=Z,485nm,1.0s
L33A **Hoskins** 51.76 68 P P 03 58 15.1 -0.3
baz=52,SNR=7.6
T27A **Campo** 51.77 76 P P 03 58 15.7 +0.1
baz=52,SNR=14
J34A **George** 51.82 66 P P 03 58 15.3 -0.4
baz=52,SNR=6.8
O31A **Woolen Ranch,** 51.83 71 P P 03 58 16.3 +0.4
baz=52,SNR=48
R29A **Marienthal** 51.85 74 P P 03 58 16.7 +0.6
baz=52,SNR=22
G36A **St. Michael** 51.86 63 P P 03 58 15.6 -0.4
baz=52,SNR=14
S28A **Manter** 51.93 75 P P 03 58 17.5 +0.7
baz=52,SNR=35
I35A **Creekview Farm** 52.02 65 P P 03 58 16.6 -0.6
baz=52,SNR=5.7
Q30A **Quinter** 52.05 73 P P 03 58 17.9 +0.4
baz=52,SNR=38
N32A **Stulken Farm,** 52.05 70 P P 03 58 17.3 -0.3
baz=52,SNR=10
T28A **Walsh** 52.10 76 P P 03 58 18.5 +0.4
baz=52,SNR=23
K34A **Le Mars** 52.12 67 P P 03 58 17.9 -0.1
baz=52,SNR=35
U27A **Thompson Grove** 52.13 77 P P 03 58 18.6 +0.3
baz=52,SNR=31
H36A **Jessenland, He** 52.16 63 P P 03 58 18.7 +0.4
baz=52
M33A **Taylor Creek F** 52.18 68 P P 03 58 18.2 -0.3
baz=52,SNR=36
J35A **Milford** 52.20 65 P P 03 58 18.3 -0.3
baz=52
P31A **Stockton** 52.20 72 P P 03 58 19.2 +0.5
baz=52,SNR=87

C39A **Grand Marais** 52.24 58 P P 03 58 18.7 -0.1
baz=52
O32A **Brockman Farm,** 52.38 70 P P 03 58 19.8 -0.2
baz=52,SNR=18
S29A **Ulysses** 52.38 75 P P 03 58 20.6 +0.5
baz=52,SNR=16
SPMN **St. Paul** 52.39 62 P P 03 58 19.8 -0.1
baz=52,SNR=13
SPMN **St. Paul** 52.39 62 *e*P P 03 58 19.8 -0.1
comp=Z,230nm,1.3s
L34A **Svendsen Farm,** 52.41 67 P P 03 58 19.9 -0.2
baz=52,SNR=20
CBKS **Cedar Bluff** 52.44 73 *e*P P 03 58 20.9 +0.4
CBKS pmax pmax
comp=Z,280nm,0.8s
CBKS **Cedar Bluff** 52.44 73 P P 03 58 20.8 +0.4
baz=52,SNR=41
CBKS **Cedar Bluff** 52.44 73 *e*P P 03 58 20.9 +0.4
comp=Z,280nm,0.8s
R30A **Dighton** 52.46 73 P P 03 58 21.1 +0.5
baz=52,SNR=51
I36A **Fitzsimmons Fa** 52.46 64 P P 03 58 20.0 -0.5
baz=52,SNR=7.6
U28A **Mallet** 52.52 76 P P 03 58 21.3 +0.1
baz=52,SNR=21
Q31A **Ellis** 52.52 72 P P 03 58 21.4 +0.3
baz=52,SNR=37
V27A **Dan Oppiter Fa** 52.55 77 P P 03 58 21.3 -0.2
baz=52,SNR=19
N33A **J Bar K, Exete** 52.56 69 P P 03 58 21.0 -0.3
baz=52,SNR=14
T29A **Hugoton** 52.58 75 P P 03 58 21.9 +0.4
baz=52,SNR=16
M34A **Aspy Farms, Fr** 52.58 68 P P 03 58 21.1 -0.3
baz=52,SNR=12
K35A **Storm Lake** 52.59 66 P P 03 58 21.1 -0.4
baz=52,SNR=11
P32A **Huiting Farm,** 52.59 71 P P 03 58 21.6 0.0
baz=52,SNR=50
SUMG **Summit** 52.69 15 *e*P P 03 58 22.4 +0.1
SUMG *e* 03 59 31.8
SUMG pmax pmax
comp=Z,178nm,1.1s
SUMG **Summit** 52.69 15 *e*P P 03 58 22.4 +0.1
comp=Z,178nm,1.1s
SUMG *e*PcP PcP 03 59 31.8 +0.2
J36A **Seneca 1, Swea** 52.71 65 P P 03 58 22.2 -0.2
baz=53
H37A **Dierke Farm, C** 52.73 63 P P 03 58 22.6 +0.1
baz=53
S30A **Montezuma** 52.76 74 P P 03 58 23.3 +0.4
baz=53,SNR=26
L35A **Bielow Farm, R** 52.79 67 P P 03 58 22.5 -0.5
baz=53,SNR=6.7
R31A **Burdett** 52.90 73 P P 03 58 24.2 +0.3
baz=53,SNR=62
O33A **Hebron** 52.90 70 P P 03 58 23.6 -0.2
baz=53,SNR=61
ILULI **Ilulissat** 52.91 22 *i* P P 03 58 22.9 -0.5
comp=Z,138nm,1.0s
V28A **Channing** 52.93 77 P P 03 58 24.1 -0.2
baz=53
Q32A **Meitler Ranch,** 53.03 72 P P 03 58 24.9 +0.1
baz=53,SNR=86
N34A **Lincoln** 53.05 69 P P 03 58 24.5 -0.4
baz=53,SNR=20
U29A **Oasis Ranch, S** 53.05 76 P P 03 58 25.5 +0.4
baz=53,SNR=7.9
T30A **Plains** 53.11 75 P P 03 58 25.8 +0.3
baz=53,SNR=12
M35A **Neola** 53.12 67 P P 03 58 25.4 0.0
baz=53,SNR=18
J37A **Redenius Farm,** 53.17 64 P P 03 58 25.6 -0.2
baz=53
P33A **Williams Farm,** 53.25 71 P P 03 58 26.2 -0.2
baz=53,SNR=12
W28A **Vega** 53.27 78 P P 03 58 26.7 0.0
baz=53
V29A **Stinnett** 53.28 76 P P 03 58 26.9 +0.1
baz=53
HVS **Khovu-Aksy** 53.28 308 *c i*P P 03 58 26.4 -0.2
HVS pmax pmax
comp=Z,228nm,0.9s
R32A **Long Quarter,** 53.30 72 P P 03 58 26.8 -0.1
baz=53
O34A **Beatrice** 53.36 69 P P 03 58 26.7 -0.5
baz=53
S31A **Mullinville** 53.37 74 P P 03 58 26.8 -0.5
baz=53
U30A **WK&E Inc. Balk** 53.38 75 P P 03 58 27.6 +0.2
baz=53,SNR=24
Q33A **Connelly Farm,** 53.45 71 P P 03 58 28.0 +0.1
baz=53,SNR=82
N35A **Tabor** 53.53 68 P P 03 58 28.6 +0.1
baz=53,SNR=22
T31A **Randall Ranch,** 53.59 74 P P 03 58 28.8 -0.2
baz=54,SNR=38
S32A **Newby Ranch, P** 53.64 73 P P 03 58 28.9 -0.4
baz=54,SNR=14
P34A **Walnut Farm, R** 53.69 70 P P 03 58 29.2 -0.5
baz=54,SNR=36
W29A **Amraillo** 53.70 77 P P 03 58 29.8 -0.1
baz=54
MNTX **Cornudas Mount** 53.70 83 P P 03 58 30.4 +0.6
baz=54,SNR=55
MNTX **Cornudas Mount** 53.70 83 *e*P P 03 58 29.9 +0.1
comp=Z,102nm,0.9s
CPRX **Cap Rock** 53.74 81 *e*P P 03 58 30.4 +0.2
O35A **Humboldt** 53.76 69 P P 03 58 29.4 -0.7
baz=54,SNR=25
X28A **Dimmitt** 53.77 78 P P 03 58 30.6 +0.2
baz=54,SNR=17
MSTX **Muleshoe** 53.78 79 P P 03 58 30.6 +0.1
baz=54,SNR=53
MSTX **Muleshoe** 53.78 79 *e*P P 03 58 30.3 -0.2
comp=Z,518nm,1.4s
R33A **Olander Ranch,** 53.81 72 P P 03 58 30.2 -0.4
baz=54,SNR=20
AMTX **Amarillo** 53.84 78 P P 03 58 31.1 +0.2
baz=54
AMTX **Amarillo** 53.84 78 *e*P P 03 58 31.0 +0.1
comp=Z,99nm,1.0s
COWI **Conover** 53.84 59 *e*P P 03 58 30.1 -0.5
comp=Z,185nm,1.1s
COWI *e*ScP ScP 04 03 31.0 -0.3
V30A **Spur Ranch, Mi** 53.86 76 P P 03 58 30.9 -0.1
baz=54
U31A **Nine Bar Ranch** 53.97 75 P P 03 58 31.9 +0.2
baz=54,SNR=6.3
T32A **Huddler Ranch,** 53.99 74 P P 03 58 31.5 -0.3
baz=54,SNR=21
Q34A **Chapman** 54.03 71 P P 03 58 32.0 -0.1
baz=54,SNR=109
KSU1 **Kansas State U** 54.11 70 P P 03 58 32.3 -0.4
baz=54,SNR=18
KSU1 **Kansas State U** 54.11 70 *e*P P 03 58 32.1 -0.6
comp=Z,182nm,0.9s
KSU1 *e*ScP ScP 04 03 32.7 +0.1
X29A **Tulia** 54.12 78 P P 03 58 33.0 0.0
baz=54,SNR=11
Y28A **McKinney Farm,** 54.15 79 P P 03 58 32.9 -0.2
baz=54,SNR=39
P35A **Duane Minner,** 54.18 70 P P 03 58 32.8 -0.4
baz=54,SNR=39
R34A **Isabella, Hill** 54.26 71 P P 03 58 33.4 -0.3
baz=54,SNR=59
SCIA **State Center** 54.26 66 *e*P P 03 58 33.8 +0.1
comp=Z,253nm,1.0s
S33A **Kaszmaul Farm,** 54.27 73 P P 03 58 33.7 -0.2
baz=54,SNR=25
W30A **Crocket Farms** 54.31 76 P P 03 58 34.6 +0.3
baz=54,SNR=6.3
V31A **Spring Creek L** 54.37 75 P P 03 58 34.7 0.0
baz=54,SNR=14
O36A **Bolckow** 54.40 68 P P 03 58 34.6 -0.2
baz=54,SNR=45
T33A **Patterson Ranc** 54.46 73 P P 03 58 35.1 -0.2
baz=54
U32A **Winter Ranch,** 54.47 74 P P 03 58 35.2 -0.2
baz=54,SNR=9.9
Z28A **Tucker Farm, M** 54.48 79 P P 03 58 35.4 -0.2
baz=54,SNR=30
P36A **Good Intent, A** 54.59 69 P P 03 58 35.7 -0.5
baz=54,SNR=66
Q35A **Mercer Eighty,** 54.60 70 P P 03 58 35.4 -0.9
baz=54,SNR=20
X30A **Coker Ranch, T** 54.62 77 P P 03 58 36.4 -0.1
baz=54,SNR=24

YHNB **Yeheng** 54.66 266 *e*P P 03 58 37.0 +0.1
comp=Z,47nm,0.8s
W31A **Holland Ranch,** 54.70 76 P P 03 58 37.2 +0.1
baz=55,SNR=19
S34A **Willow Spring** 54.73 72 P P 03 58 36.9 -0.4
baz=55,SNR=33
SFJD **Kangerlussuaq** 54.73 23 LR LR 04 25 24.5
comp=Z,7µm,18.4s,baz=319,slow=40
SFJD **Kangerlussuaq** 54.73 23 *i* P P 03 58 36.4 -0.4
SFJD *i* 03 59 38.8
SFJD pmax pmax
comp=Z,140nm,1.0s
SFJD **Kangerlussuaq** 54.73 23 *i* P P 03 58 36.4 -0.4
comp=Z,141nm,1.0s
SFJD *i* 03 59 38.8
SFJD **Kangerlussuaq** 54.73 23 *e*P P 03 58 36.1 -0.6
comp=Z,197nm,1.1s
R35A **Emporia Munici** 54.86 71 P P 03 58 37.8 -0.4
baz=55,SNR=18
128A **Castleberry Fa** 54.87 80 P P 03 58 38.5 +0.1
baz=55,SNR=73
Q36A **Arnold C. Orve** 54.88 70 P P 03 58 37.8 -0.4
baz=55,SNR=9.7
V32A **Arapaho** 54.88 75 P P 03 58 38.7 +0.3
baz=55,SNR=10
NACB **Ninganchiao** 54.89 265 *e*P P 03 58 37.3 -1.1
comp=Z,139nm,1.1s
WHN **Wuhan** 54.91 276 ⇑*i*P P 03 58 38.1 -0.4
Z29A **Hungry Hill Ra** 54.92 79 P P 03 58 38.7 0.0
baz=55,SNR=34
U33A **Lingo Farm, Me** 54.97 74 P P 03 58 38.7 -0.2
baz=55,SNR=24
Y30A **Stafford Cattl** 54.99 78 P P 03 58 39.4 +0.2
baz=55,SNR=18
X31A **McDonald Ranch** 55.05 77 P P 03 58 39.8 +0.2
baz=55,SNR=20
T34A **McClaskey Farm** 55.13 73 P P 03 58 39.6 -0.5
baz=55,SNR=47
228A **UT Block 9, Go** 55.15 81 P P 03 58 40.5 +0.1
baz=55,SNR=18
W32A **Sentinel** 55.16 76 P P 03 58 40.7 +0.3
baz=55,SNR=38
S35A **Otter Creek Ra** 55.21 71 P P 03 58 40.2 -0.5
baz=55,SNR=63
129A **Stewart Farms,** 55.24 80 P P 03 58 41.1 0.0
baz=55,SNR=9.0
Z30A **Sanderson Ranc** 55.25 79 P P 03 58 41.2 +0.1
baz=55,SNR=33
R36A **Gordon, Harris** 55.27 70 P P 03 58 40.7 -0.4
baz=55,SNR=70
V33A **Lossen Ranch,** 55.27 74 P P 03 58 40.8 -0.4
baz=55,SNR=21
JFWS **Jewell Farm** 55.28 63 *e*P P 03 58 40.3 -0.8
JFWS pmax pmax
comp=Z,221nm,1.0s
JFWS **Jewell Farm** 55.28 63 *e*P P 03 58 40.2 -0.8
comp=Z,221nm,1.0s
JFWS *e*ScP ScP 04 03 36.9 -0.8
U34A **Anderson Ranch** 55.31 73 P P 03 58 41.1 -0.3
baz=55,SNR=45
U34A **Anderson Ranch** 55.31 73 *e*P P 03 58 40.9 -0.6
comp=Z,292nm,0.8s
Y31A **Rekieta Farm,** 55.33 77 P P 03 58 41.4 -0.2
baz=55,SNR=8.7
Q37A **Longview Farm,** 55.52 69 P P 03 58 41.8 -1.1
baz=55,SNR=9.7
SSLB **Suanglung** 55.57 266 *e*P P 03 58 42.6 -0.8
comp=Z,250nm,0.9s
T35A **Sooner Cattle** 55.61 72 P P 03 58 42.9 -0.7
baz=56,SNR=32
X32A **Elmer** 55.61 76 P P 03 58 44.0 +0.4
baz=56,SNR=10
W33A **Caddo, Fort Co** 55.61 75 P P 03 58 44.3 +0.7
baz=56,SNR=34
S36A **Lake Cedric, C** 55.62 71 P P 03 58 42.9 -0.7
baz=56,SNR=7.5
ZALV **Zalesovo Beam** 55.62 315 P P 03 58 43.1 -0.3
comp=Z,6.2nm,0.4s,baz=35,slow=6.7,SNR=24
ZALV PcP PcP 03 59 43.8 +1.1
comp=Z,90nm,0.8s,baz=36,slow=4.2,SNR=25
ZALV LR LR 04 24 23.6
comp=Z,13µm,19.9s,baz=44,slow=38
ZALV **Zalesovo Beam** 55.62 315 P P 03 58 43.1 -0.3
ZALV 03 59 43.8
ZALV pmax pmax
comp=Z,6.0nm,0.4s
ZALV pmax pmax
comp=Z,90nm,0.8s
ZALV MLR MLR
comp=Z,13µm,19.9s
YULB **Yu-li** 55.64 265 *e*P P 03 58 42.3 -1.6
comp=Z,155nm,1.1s
R37A **Teagarden Farm** 55.67 70 P P 03 58 43.0 -1.0
baz=56,SNR=20
WMOK **Wichita Mounta** 55.70 76 *e*P P 03 58 44.0 -0.3
WMOK pmax pmax
comp=Z,193nm,1.1s
WMOK **Wichita Mounta** 55.70 76 *e*P P 03 58 44.0 -0.3
comp=Z,194nm,1.1s
NVS **Novosibirsk** 55.71 317 ⇑*i*P P 03 58 42.7 -1.3
NVS *i* 03 59 43.2
NVS *e*S S 04 06 20.7 -7.2
NVS *i* 04 08 31.4
NVS pmax pmax
comp=N,147nm,2.6s
NVS pmax pmax
comp=E,245nm,2.6s
NVS pmax pmax
comp=Z,368nm,2.6s
NVS smax smax
comp=N,209nm,3.5s
NVS smax smax
comp=E,253nm,3.0s
V34A **Guthrie** 55.73 74 P P 03 58 44.2 -0.2
baz=56,SNR=37
229A **Bryant Ranch,** 55.73 80 P P 03 58 44.3 -0.3
baz=56,SNR=14
Y32A **R-V Farms, Ver** 55.80 77 P P 03 58 44.8 -0.2
baz=56,SNR=54
130A **Snyder** 55.82 79 P P 03 58 45.3 0.0
baz=56,SNR=12
Z31A **Sharp Cattle R** 55.84 78 P P 03 58 45.2 -0.1
baz=56
U35A **Pawnee** 55.84 73 P P 03 58 44.8 -0.4
baz=56,SNR=29
XAN **Xi'an** 55.86 283 P P 03 58 45.3 -0.2
XAN pP pP 03 58 55.8 +0.5
XAN sP sP 03 58 59.6 +0.4
XAN PMZ
comp=E,210nm,1.4s
XAN LN
comp=E,7µm,16.2s
XAN LE
comp=E,8µm,16.6s
XAN LZ
comp=E,8µm,17.1s
T36A **Boggs Farm, Ca** 55.89 72 P P 03 58 45.1 -0.5
baz=56,SNR=10
329A **Wagon Wheel Ra** 55.96 81 P P 03 58 46.2 0.0
baz=56,SNR=36
W34A **Bridge Creek,** 55.98 75 P P 03 58 46.4 +0.2
baz=56,SNR=12
X33A **Lawton** 56.01 76 P P 03 58 46.4 -0.1
baz=56,SNR=25
S37A **Fort Scott** 56.04 70 P P 03 58 45.7 -1.0
baz=56,SNR=56
131A **Roby** 56.12 79 P P 03 58 47.4 0.0
baz=56,SNR=22
TPUB **Ta-pu** 56.12 265 *e*P P 03 58 46.7 -0.7
comp=E,86nm,0.9s
V35A **Meyer Ranch, C** 56.19 73 P P 03 58 47.4 -0.3
baz=56,SNR=25
TWG **Pinlang** 56.20 265 *e*P P 03 58 46.2 -1.7
comp=E,165nm,0.7s
QZH **Quanzhou** 56.21 268 ⇑*i*P P 03 58 49.0 +1.1
QZH S S 04 06 33.5 -1.7
QZH PMZ
comp=E,320nm,1.1s
QZH LN
comp=E,16µm,19.4s
QZH LE
comp=E,11µm,15.2s
QZH LZ
comp=E,12µm,17.2s
230A **Sterling City** 56.22 80 P P 03 58 47.9 -0.1
baz=56,SNR=44
Z32A **Haskell** 56.25 77 P P 03 58 48.3 +0.1
baz=56,SNR=44
Y33A **Hilltop Ranch,** 56.29 76 P P 03 58 48.7 +0.2
baz=56,SNR=24
X34A **Smith Ranch, M** 56.37 75 P P 03 58 49.4 +0.4
baz=56,SNR=28
TXAR **Lajitas Array** 56.41 84 P P 03 58 49.3 -0.2
comp=E,27nm,0.8s,baz=298,slow=4.9,SNR=177
TXAR LR LR 04 21 12.3
comp=E,4µm,20.5s,baz=0.0,slow=34
T37A **Cheneyville 18** 56.42 71 P P 03 58 48.6 -0.7
baz=56,SNR=54
U36A **Oologah** 56.42 72 P P 03 58 48.9 -0.5
baz=56,SNR=21
SLBS **Sierra La Lagu** 56.51 93 *e*P P 03 58 50.8 +0.6
comp=E,65nm,0.9s
330A **Mertzon** 56.51 80 P P 03 58 49.7 -0.4
baz=56,SNR=23
W35A **Tecumseh** 56.58 74 P P 03 58 50.6 +0.1
baz=56,SNR=53
429A **Davenport Ranc** 56.61 81 P P 03 58 50.4 -0.5
baz=56,SNR=30
ABTX **Abilene, Hawle** 56.62 78 P P 03 58 51.2 +0.3
baz=56,SNR=35
ABTX **Abilene, Hawle** 56.62 78 *e*P P 03 58 50.9 0.0
comp=E,252nm,1.1s
231A **Bronte** 56.67 79 P P 03 58 50.9 -0.4
baz=56,SNR=13
Z33A **Whitaker Ranch** 56.70 77 P P 03 58 51.3 -0.1
baz=57,SNR=32
V36A **Jenks** 56.71 73 P P 03 58 51.3 -0.1
baz=57,SNR=42
TUL1 **Tulsa** 56.71 73 P P 03 58 51.3 -0.2
baz=57,SNR=47
TUL1 **Tulsa** 56.71 73 *e*P P 03 58 51.2 -0.3
comp=E,642nm,1.8s
529A **Stev Forest Ra** 56.75 82 P P 03 58 51.7 -0.2
baz=57,SNR=12
U37A **Salina** 56.78 72 P P 03 58 51.4 -0.5
baz=57,SNR=70
Y34A **Reagan Ranch,** 56.85 76 P P 03 58 52.8 +0.3
baz=57,SNR=84
SCO **Scoresbysund** 56.87 10 *i* P P 03 58 51.7 -0.4
SCO pmax pmax
comp=Z,97nm,1.0s
SCO **Scoresbysund** 56.87 10 *i* P P 03 58 51.7 -0.4
comp=Z,97nm,1.0s
430A **Baggett Ranch,** 56.90 81 P P 03 58 52.6 -0.3
baz=57,SNR=59
W36A **Wetumka** 56.97 74 P P 03 58 53.3 0.0
baz=57,SNR=35
X35A **Drake** 57.03 75 P P 03 58 53.7 0.0
baz=57,SNR=78
331A **San Angelo** 57.04 80 P P 03 58 53.4 -0.5
baz=57,SNR=43
133A **Hamilton Ranch** 57.07 78 P P 03 58 54.0 -0.1
baz=57,SNR=48
232A **Coleman** 57.12 79 P P 03 58 54.2 -0.2
baz=57,SNR=42
V37A **Hulbert** 57.12 72 P P 03 58 53.9 -0.4
baz=57,SNR=46
Z34A **Collier Ranch,** 57.16 76 P P 03 58 54.7 0.0
baz=57,SNR=27
U38A **Gravette** 57.19 71 P P 03 58 54.0 -0.9
baz=57,SNR=18
530A **J-C Ranch, Com** 57.28 81 P P 03 58 55.6 0.0
baz=57,SNR=80
X36A **Centrahoma** 57.28 74 P P 03 58 55.7 +0.2
baz=57,SNR=46
Y35A **Marietta** 57.33 75 P P 03 58 56.2 +0.4
baz=57,SNR=64
431A **Sonora** 57.36 80 P P 03 58 55.6 -0.6
baz=57,SNR=54
HDIL **Hopedale** 57.37 64 P P 03 58 55.5 -0.6
baz=57,SNR=45
HDIL **Hopedale** 57.37 64 *e*P P 03 58 55.5 -0.6
comp=Z,236nm,0.8s
332A **Millersview** 57.41 79 P P 03 58 56.3 -0.2
baz=57,SNR=48
W37A **Quinton** 57.45 73 P P 03 58 56.9 +0.2
baz=57,SNR=61
233A **Rising Star** 57.49 78 P P 03 58 56.9 -0.1
baz=57,SNR=46
JMIC **Jan Mayen** 57.52 5 LR LR 04 24 15.9
comp=Z,3µm,20.2s,baz=348,slow=37
LZH **Lanzhou** 57.53 289 ⇑P P 03 58 58.4 +1.0
LZH pP pP 03 59 07.1 -0.2
LZH sP sP 03 59 11.9 +0.8
LZH PMZ
comp=Z,540nm,1.1s
LZH PMZ
comp=Z,5µm,4.5s
LZH LN
comp=Z,9µm,14.1s
LZH LE
comp=Z,6µm,14.8s
LZH LZ
comp=Z,9µm,15.5s
V38A **Canehill** 57.57 72 P P 03 58 56.8 -0.7
baz=57,SNR=58
Z35A **Perchaven, San** 57.59 76 P P 03 58 57.5 -0.1
baz=58,SNR=20
134A **White-Moore Ra** 57.61 77 P P 03 58 58.2 +0.4
baz=58,SNR=52
GTA **Gaotai** 57.63 294 ⇑P P 03 58 57.9 -0.2
GTA pP pP 03 59 08.0 0.0
GTA sP sP 03 59 12.0 +0.2
GTA PP PP 04 01 07.4 +1.7
GTA S S 04 06 53.7 -0.4
GTA sS sS 04 07 09.4 -0.9
GTA SS SS 04 10 45.5 +1.6
GTA PMZ
comp=Z,110nm,1.1s
GTA PMZ
comp=Z,2µm,8.8s
GTA LN
comp=Z,8µm,18.5s
GTA LE
comp=Z,9µm,18.5s
GTA LZ
comp=Z,7µm,18.1s
432A **Menard** 57.73 80 P P 03 58 58.3 -0.4
baz=58,SNR=25
531A **Rocksprings** 57.76 81 P P 03 58 58.5 -0.5
baz=58,SNR=24
Y36A **Durant** 57.78 75 P P 03 58 59.0 0.0
baz=58
X37A **Clayton** 57.86 74 P P 03 58 59.8 +0.2
baz=58,SNR=49
333A **Richland Sprin** 57.92 79 P P 03 58 59.7 -0.3
baz=58,SNR=26
234A **Clairette** 57.96 78 P P 03 59 00.7 +0.3
baz=58,SNR=43
JCT **Junction City** 58.00 80 *e*P P 03 58 59.8 -0.9
JCT pmax pmax
comp=Z,201nm,1.2s
JCT **Junction City** 58.00 80 P P 03 59 00.1 -0.6
baz=58,SNR=25
JCT **Junction City** 58.00 80 *e*P P 03 58 59.8 -0.9
comp=Z,201nm,1.2s
135A **Vickery Place,** 58.03 77 P P 03 59 01.0 +0.2
baz=58
W38A **Poteau** 58.04 73 P P 03 59 01.0 +0.2
baz=58,SNR=27
KEV **Kevo** 58.05 351 *e*P P 03 58 59.5 -0.9
KEV *e* 03 59 51.7
KEV pmax pmax
comp=Z,54nm,0.8s
KEV **Kevo** 58.05 351 *e*P P 03 58 59.5 -0.9
comp=Z,54nm,0.8s
KEV *e*PcP PcP 03 59 51.7 -0.2
ENH **Enshi** 58.11 280 *e*P P 03 59 01.0 -0.4
comp=Z,74nm,0.8s
Z36A **Blue Ridge** 58.13 75 P P 03 59 01.1 -0.3
baz=58,SNR=31
SLM **Saint Louis** 58.13 67 *e*P P 03 59 01.2 -0.2
SLM pmax pmax
comp=Z,167nm,0.9s
SLM **Saint Louis** 58.13 67 *e*P P 03 59 01.2 -0.2
comp=Z,166nm,0.9s
Y37A **Hugo** 58.13 74 P P 03 59 01.5 0.0
baz=58,SNR=16
X38A **Whitesboro** 58.13 73 P P 03 59 01.5 0.0
baz=58,SNR=30
532A **Rocksprings** 58.18 80 P P 03 59 01.1 -0.8
baz=58,SNR=25
433A **Art** 58.25 79 P P 03 59 01.8 -0.5
baz=58,SNR=40
631A **Perdido Creek** 58.27 82 P P 03 59 01.6 -0.9
baz=58,SNR=41
334A **Lometa** 58.37 78 P P 03 59 03.3 +0.1
baz=58,SNR=87
WHTX **Lake Whitney** 58.39 77 P P 03 59 03.3 +0.1
baz=58,SNR=28
ARCES **ARCESS Array B** 58.41 352 P P 03 59 01.9 -1.0
comp=Z,52nm,0.8s,baz=13,slow=7.5,SNR=43
ARCES PcP PcP 03 59 53.7 +0.3
comp=Z,133nm,0.9s,baz=15,slow=5.0,SNR=22
ARCES ScP ScP 04 03 52.6 +1.7
comp=Z,17nm,0.9s,baz=11,slow=5.1,SNR=6.5
ARCES **ARCESS Array B** 58.41 352 P P 03 59 01.9 -1.0
ARCES 03 59 53.7
ARCES pmax pmax
comp=Z,52nm,0.8s
ARCES pmax pmax
comp=Z,133nm,0.9s
ARCES pmax pmax
comp=N,17nm,0.9s
ARE0 **ARCESS Array S** 58.41 352 *e*P P 03 59 02.1 -0.8
SCHQ **Schefferville** 58.54 40 P P 03 59 03.6 -0.4
comp=N,101nm,0.9s,baz=327,slow=7.2,SNR=37
SCHQ **Schefferville** 58.54 40 *e*P P 03 59 03.7 -0.4
comp=N,123nm,0.9s
136A **Ennis** 58.62 76 P P 03 59 04.9 0.0
baz=58,SNR=11
Z37A **Pogue Cattle C** 58.67 75 P P 03 59 05.1 -0.2
baz=58,SNR=8.0
632A **Uvalde** 58.69 81 P P 03 59 05.0 -0.5
baz=59,SNR=17
Y38A **Idabel** 58.70 74 P P 03 59 05.1 -0.3
baz=59,SNR=6.9
434A **Burnet** 58.71 79 P P 03 59 05.4 -0.2
baz=59,SNR=44
SFIN **Scholer Farm** 58.73 63 P P 03 59 05.4 -0.2
baz=59,SNR=31
SFIN **Scholer Farm** 58.73 63 *e*P P 03 59 05.5 0.0
comp=N,228nm,0.8s
533A **Kerrville** 58.76 80 P P 03 59 05.2 -0.7
baz=59,SNR=37
TRO **Tromso** 58.82 354 *e*P P 03 59 05.3 -0.4
335A **Moody** 58.90 78 P P 03 59 07.2 +0.3
baz=59,SNR=8.4
LVZ **Lovozero** 58.92 347 *c i*P P 03 59 05.7 -0.8
LVZ pmax pmax
comp=Z,97nm,0.9s
LVZ **Lovozero** 58.92 347 P P 03 59 06.4 -0.1
comp=Z,643nm,0.9s,SNR=13
LVZ **Lovozero** 58.92 347 *e*P P 03 59 05.5 -1.0
236A **Katherine and** 58.95 77 P P 03 59 07.6 +0.4
baz=59,SNR=29
MIAR **Mount Ida** 58.97 72 *e*P P 03 59 07.1 -0.2
MIAR pmax pmax
comp=Z,614nm,1.5s
MIAR **Mount Ida** 58.97 72 P P 03 59 07.2 -0.1
baz=59,SNR=151
MIAR **Mount Ida** 58.97 72 *e*P P 03 59 07.1 -0.2
comp=Z,614nm,1.5s
137A **Heron Place, G** 59.00 75 P P 03 59 07.9 +0.4
baz=59,SNR=11
Z38A **Mt. Pleasant** 59.02 74 P P 03 59 07.8 +0.1
baz=59,SNR=16
Y39A **Lockesburg** 59.08 73 P P 03 59 08.1 0.0
baz=59,SNR=13
633A **Saathoff Ranch** 59.10 80 P P 03 59 07.8 -0.5
baz=59,SNR=14
KTK1 **Kautokeino** 59.11 352 *e*P P 03 59 06.7 -1.1
732A **Laxson Ranch,** 59.12 82 P P 03 59 08.6 +0.1
baz=59,SNR=28
534A **Blanco** 59.13 80 P P 03 59 08.2 -0.4
baz=59,SNR=30
435B **Jarrell** 59.15 78 P P 03 59 08.5 -0.2
baz=59,SNR=7.2
336A **Riesel** 59.18 77 P P 03 59 08.9 +0.1
baz=59,SNR=27
OLIL **Olney** 59.29 65 *e*P P 03 59 09.0 -0.4
comp=Z,338nm,0.9s
PBMO **Poplar Bluff** 59.29 68 *e*P P 03 59 08.1 -1.3
comp=Z,253nm,1.2s
AAM **Ann Arbor** 59.31 60 *e*P P 03 59 09.7 +0.2
AAM pmax pmax
comp=Z,74nm,0.8s
AAM **Ann Arbor** 59.31 60 *e*P P 03 59 09.7 +0.2
comp=Z,74nm,0.8s
SIUC **Southern Illin** 59.34 67 *e*P P 03 59 08.9 -0.9
comp=Z,188nm,0.8s
138A **Matatall Enter** 59.36 75 P P 03 59 10.4 +0.3
baz=59,SNR=25
237A **Washetta, Mont** 59.39 76 P P 03 59 10.4 +0.2
baz=59,SNR=18
APA **Apatity** 59.40 348 ⇑*i*P P 03 59 09.0 -0.8
APA *i* 03 59 52.0
APA *i* 04 01 29.0
APA *i* S S 04 07 09.0 -7.0
APA *i* 04 08 54.0
APA MLR MLR
comp=Z,10µm,18.0s
832A **Faith Ranch, C** 59.44 82 P P 03 59 10.6 -0.1
baz=59,SNR=65
Z39A **Irene McRaven,** 59.51 74 P P 03 59 11.1 0.0
baz=59,SNR=6.4
UALR **University of** 59.54 71 *e*P P 03 59 11.1 -0.1
comp=Z,131nm,1.1s
733A **Divot King Ran** 59.55 81 P P 03 59 11.5 +0.1
baz=59,SNR=30
436A **Wall Ranch, Ga** 59.64 78 P P 03 59 12.5 +0.5
baz=60,SNR=16
634A **China Grove, S** 59.66 80 P P 03 59 12.2 0.0
baz=60
535A **Dale** 59.69 79 P P 03 59 12.6 +0.3
baz=60,SNR=14
PARMO **Parma** 59.76 68 *e*P P 03 59 12.5 -0.2
833A **Chaparral WMA,** 59.77 82 P P 03 59 12.9 0.0
baz=60,SNR=39
139A **Bunkhouse Ranc** 59.77 74 P P 03 59 13.1 +0.3
baz=60
238A **Jacksonville** 59.80 76 P P 03 59 13.7 +0.6
baz=60,SNR=16
337A **Centerville** 59.82 77 P P 03 59 14.0 +0.8
baz=60,SNR=10
BLO **Bloomington** 59.88 64 *e*P P 03 59 13.2 -0.3
BLO pmax pmax
comp=Z,208nm,0.9s
BLO **Bloomington** 59.88 64 *e*P P 03 59 13.2 -0.3
comp=Z,208nm,0.9s
734A **La Pazita Tree** 59.92 81 P P 03 59 14.2 +0.3
baz=60,SNR=21
536A **Bastrop** 59.97 78 P P 03 59 14.6 +0.3
baz=60,SNR=5.5
SADO **Sadowa** 59.98 55 *e*P P 03 59 14.5 +0.3
comp=Z,380nm,1.0s
437A **Phantom Ranch,** 60.01 77 P P 03 59 15.5 +1.0
baz=60,SNR=7.1
635A **Leesville** 60.02 80 P P 03 59 14.9 +0.3
baz=60,SNR=36
USIN **University of** 60.06 66 *e*P P 03 59 14.6 -0.2
comp=Z,481nm,0.8s
338A **Crockett** 60.14 76 P P 03 59 15.7 +0.3
baz=60,SNR=6.8
239A **Gary** 60.19 75 P P 03 59 15.9 +0.2
baz=60,SNR=6.2
NATX **Nacogdoches** 60.25 75 P P 03 59 16.3 +0.1
baz=60
NATX **Nacogdoches** 60.25 75 *e*P P 03 59 17.0 +0.9
comp=Z,49nm,1.0s
GLAT **Glass** 60.30 68 *e*P P 03 59 16.6 +0.2
933A **Laredo** 60.35 82 P P 03 59 17.2 +0.3
baz=60,SNR=15
735A **Kenedy** 60.37 80 P P 03 59 17.7 +0.7
baz=60,SNR=9.1
636A **Smothers Creek** 60.39 79 P P 03 59 17.9 +0.8
baz=60,SNR=11
537A **Green Hill Far** 60.42 78 P P 03 59 18.1 +0.8
baz=60,SNR=12
834A **Tilden** 60.43 81 P P 03 59 18.0 +0.6
baz=60,SNR=12
438A **Sam Houston St** 60.47 77 P P 03 59 18.7 +1.0
baz=60,SNR=37
UTMT **University of** 60.50 68 *e*P P 03 59 17.7 0.0
comp=Z,616nm,1.0s
LOF **Lofoten** 60.59 356 *e*P P 03 59 17.6 -0.2
KURK **Kurchatov** 60.60 316 *e*P P 03 59 17.5 -0.7
KURK pmax pmax
comp=Z,406nm,0.8s
KURK **Kurchatov** 60.60 316 P P 03 59 18.1 -0.2
comp=Z,1µm,0.6s,SNR=35
KURK **Kurchatov** 60.60 316 *e*P P 03 59 17.5 -0.7

comp=Z,406nm,0.8s
**339A Huntington** 60.61 76 P P 03 59 19.1 +0.5
baz=60
**WCI Wyandotte Cave** 60.66 65 *e*P P 03 59 18.6 -0.3
WCI pmax pmax
comp=Z,871nm,0.8s
**WCI Wyandotte Cave** 60.66 65 *e*P P 03 59 18.6 -0.3
comp=Z,871nm,0.8s
**STEI Steigen** 60.71 356 *e*P P 03 59 17.9 -0.8
**736A Circle Diamond** 60.76 79 P P 03 59 20.5 +0.9
baz=61,SNR=26
**835A Beeville** 60.76 80 P P 03 59 21.0 +1.3
baz=61,SNR=17
**NRS Narsarsuaq** 60.81 25 *i* P P 03 59 18.8 -0.7
NRS pmax pmax
comp=Z,100nm,1.0s
**NRS Narsarsuaq** 60.81 25 *i* P P 03 59 18.8 -0.7
comp=Z,103nm,1.0s
**HKT Hockley** 60.81 78 *e*P P 03 59 19.5 -0.4
**HKT Hockley** 60.81 78 *e*P P 03 59 19.5 -0.4
**934A Benavides** 60.82 82 P P 03 59 21.0 +0.9
baz=61,SNR=25
**538A Harpers Horsep** 60.83 77 P P 03 59 21.3 +1.2
baz=61
**GZH Guangzhou** 60.84 271 *e*P P 03 59 15.6 -4.6
GZH S S 04 07 29.0 -6.6
GZH LN
comp=Z,10µm,17.3s
GZH LE
comp=Z,11µm,17.3s
**439A Center Grove,** 60.87 76 P P 03 59 21.0 +0.7
baz=61,SNR=11
**637A Eagle Lake** 60.87 78 P P 03 59 21.2 +0.8
baz=61,SNR=6.5
**340A Bronson** 60.96 75 P P 03 59 21.3 +0.4
baz=61,SNR=25
**ACSO Alum Creek Sta** 61.11 61 *e*P P 03 59 21.9 0.0
comp=Z,95nm,0.9s
**034A Hebbronville** 61.11 82 P P 03 59 22.8 +0.7
baz=61,SNR=12
**CD2 Chengdu** 61.17 284⇑ *i*P P 03 59 22.6 +0.1
CD2 pP **pP** 03 59 33.5 +1.1
CD2 PP **PP** 04 01 34.9 -2.2
CD2 PcS **PcS** 04 04 06.2 -1.8
CD2 S **S** 04 07 36.7 -3.1
CD2 sS **sS** 04 07 54.7 -1.4
CD2 SS **SS** 04 11 37.7 -1.8
CD2 PMZ
comp=Z,550nm,1.4s
CD2 PMZ
comp=Z,2µm,5.0s
CD2 LN
comp=Z,7µm,15.6s
CD2 LZ
comp=Z,8µm,15.1s
**WMQ Urumqi** 61.19 305 P P 03 59 23.0 +0.5
WMQ pP **pP** 03 59 33.0 +0.5
WMQ sP **sP** 03 59 36.0 -0.3
WMQ PP **PP** 04 01 40.0 +3.0
WMQ S **S** 04 07 38.0 -1.8
WMQ SS **SS** 04 11 40.0 +0.6
WMQ PMZ
comp=Z,230nm,1.0s
WMQ PMZ
comp=Z,600nm,6.0s
WMQ LN
comp=Z,16µm,22.0s
WMQ LE
comp=Z,13µm,20.0s
WMQ LZ
comp=Z,12µm,20.0s
**WVT Waverly** 61.24 67 *e*P P 03 59 22.5 -0.3
WVT pmax pmax
comp=Z,82nm,0.8s
**WVT Waverly** 61.24 67 *e*P P 03 59 22.5 -0.3
comp=Z,82nm,0.8s
**KVTX Kingsville** 61.25 81 *e*P P 03 59 25.2 +2.2
comp=Z,129nm,0.8s
**737A Port Lavaca** 61.28 79 P P 03 59 24.1 +1.0
baz=61
**539A Cross D Ranch,** 61.38 77 P P 03 59 24.8 +1.0
baz=61,SNR=6.4
**440A Kirbyville** 61.39 76 P P 03 59 24.4 +0.5
baz=61,SNR=13
**ERPA Erie** 61.39 58 *e*P P 03 59 24.4 +0.6
**OXF Oxford** 61.46 70 *e*P P 03 59 24.0 -0.3
OXF pmax pmax
comp=Z,817nm,1.1s
**OXF Oxford** 61.46 70 *e*P P 03 59 23.9 -0.3
comp=Z,817nm,1.1s
**035A Encino** 61.56 82 P P 03 59 26.2 +1.1
baz=61,SNR=9.7
**CHKZ Chkalovo** 61.70 322 P P 03 59 25.2 -0.5
**738A Farr-Stevens R** 61.71 78 P P 03 59 27.3 +1.2
baz=62
**MK31 Makanchi Array** 61.75 310 *e*P P 03 59 25.9 -0.3
MK31 pmax pmax
comp=Z,82nm,0.6s
**MKAR Makanchi Array** 61.75 310 P P 03 59 25.1 -1.1
comp=Z,62nm,0.6s,baz=50,slow=5.8,SNR=219
MKAR LR LR 04 28 06.8
comp=Z,10µm,18.5s,baz=28,slow=38
**MKAR Makanchi Array** 61.75 310 P P 03 59 25.1 -1.1
MKAR pmax pmax
comp=Z,62nm,0.6s
MKAR MLR MLR
comp=Z,10µm,18.5s
**TMCR Tamitsa** 61.88 344 *e*P P 03 59 26.1 -0.5
TMCR *e*S **S** 04 07 48.0 +0.4
TMCR pmax pmax
comp=Z,38nm,0.8s
**035Z Hargill** 61.92 82 P P 03 59 27.9 +0.4
baz=62,SNR=10
**MMNY Mt. Morris Dam** 62.05 56 *e*P P 03 59 28.8 +0.6
comp=Z,641nm,1.1s
**GQP Guinayangan** 62.08 257⇑ *e*P P 03 59 29.2 +0.5
**KONS Konsvik** 62.24 356 *e*P P 03 59 28.8 -0.2
**VOSK Vostochnaya** 62.29 321 P P 03 59 28.9 -0.8
**BVA0 Borovoye Array** 62.29 322 *i* P P 03 59 29.2 -0.5
BVA0 pmax pmax
comp=Z,12nm,0.8s
**BVAR Borovoye Array** 62.29 322 P P 03 59 29.4 -0.2
comp=Z,118nm,0.5s,baz=48,slow=5.9,SNR=243
**BVAR Borovoye Array** 62.29 322 P P 03 59 29.4 -0.2
BVAR pmax pmax
comp=Z,118nm,0.5s
**BRVK Borovoye** 62.30 322 *c i*P P 03 59 29.7 -0.1
BRVK pmax pmax
comp=Z,114nm,0.9s
**BRVK Borovoye** 62.30 322 P P 03 59 29.0 -0.7
comp=Z,897nm,0.9s,SNR=31
**BRVK Borovoye** 62.30 322 P P 03 59 29.9 +0.2
SNR=30
**BRVK Borovoye** 62.30 322 *e*P P 03 59 29.6 -0.1
comp=Z,172nm,0.9s
**LONY Lake Ozonia** 62.39 52 *e*P P 03 59 29.7 -0.8
comp=Z,282nm,1.0s
**FLOS Flostrand** 62.39 356 *e*P P 03 59 29.4 -0.7
**BORG Borgarnes** 62.41 12 *i* P P 03 59 31.7 +1.5
**BORG Borgarnes** 62.41 12 P P 03 59 30.4 +0.2
comp=Z,738nm,0.9s,SNR=5.2
**BORG Borgarnes** 62.41 12 *e*P P 03 59 31.0 +0.8
comp=Z,129nm,1.0s
**STOK Stokkvaagen** 62.41 356 *e*P P 03 59 30.1 0.0
**VBMS Vicksburg** 62.42 72 P P 03 59 30.9 +0.1
baz=62,SNR=17
**MOR8 Moi Rana** 62.51 356 *e*P P 03 59 29.0 -1.9
MOR8 IAmb IAmb 03 59 30.1
comp=Z,62nm,0.9s
**GYA Guiyang** 62.56 279⇑ *i*P P 03 59 31.9 -0.1
GYA pP **pP** 03 59 43.8 +1.8
GYA sP **sP** 03 59 50.0 +4.2
GYA PcP **PcP** 04 00 11.2 +0.3
GYA PP **PP** 04 01 52.4 +2.9
GYA ScP **ScP** 04 04 10.0 -0.3
GYA S **S** 04 07 57.6 0.0
GYA SS **SS** 04 12 01.0 -0.6
GYA PMZ
comp=Z,170nm,1.0s
GYA PMZ
comp=Z,1µm,8.4s
GYA LN
comp=Z,4µm,18.3s
GYA LE
comp=Z,8µm,17.7s
GYA LZ
comp=Z,5µm,17.7s
**FRNY Flat Rock** 62.72 52 *e*P P 03 59 31.8 -0.9
comp=Z,141nm,1.3s
**SVE Sverdlovsk** 62.74 329⇑ *e*P P 03 59 32.9 +0.3
SVE *e* 04 00 11.8
SVE pmax pmax
comp=Z,74nm,0.9s
SVE MLR MLR
comp=Z,13µm,18.0s
**SWET Sewanee** 62.98 67 *e*P P 03 59 33.3 -1.3
comp=Z,25nm,0.9s
**BINY Binghamton** 63.42 55 *e*P P 03 59 38.2 +0.8
comp=Z,1µm,1.1s
**MDV Middlebury** 63.53 52 *e*P P 03 59 37.4 -0.6
**SSPA Standing Stone** 63.56 57 *e*P P 03 59 38.1 -0.2
comp=Z,1µm,1.0s
**CPCT Cooper Cave** 63.62 66 *e*P P 03 59 38.0 -0.8
**ARU Arti** 63.73 330 *c i*P P 03 59 38.6 -0.5
ARU 04 00 12.6
ARU S S 04 08 12.2 +1.1
ARU 04 09 24.2
ARU SS SS 04 12 12.2 -5.9
ARU pmax pmax
comp=Z,64nm,0.7s
**ARU Arti** 63.73 330 P P 03 59 38.7 -0.4
comp=Z,591nm,0.5s,SNR=17
**ARU Arti** 63.73 330 *e*P P 03 59 38.2 -0.9
comp=Z,72nm,0.8s
**ACCN Adirondack Com** 63.74 53 *e*P P 03 59 39.3 -0.1
comp=Z,369nm,1.1s
**LBNH Lisbon** 63.97 51 *e*P P 03 59 41.1 +0.2
LBNH pmax pmax
comp=Z,196nm,1.0s
**LBNH Lisbon** 63.97 51 *e*P P 03 59 41.1 +0.2
comp=Z,196nm,1.0s
**KSPA Keystone Colle** 64.00 55 *e*P P 03 59 41.9 +0.7
comp=Z,561nm,1.1s
**TRY Troy** 64.21 53 *e*P P 03 59 42.5 0.0
comp=Z,203nm,1.0s
**NSS Namsos** 64.25 357 *e*P P 03 59 41.5 -0.9
**HNR Honiara** 64.31 207 LR LR 04 26 54.1
comp=Z,5µm,18.0s,baz=354,slow=35
**PKME Peaks-Kenny Pk** 64.47 49 *e*P P 03 59 44.0 -0.2
comp=Z,292nm,1.1s
**BLA Blacksburg** 64.66 62 *e*P P 03 59 46.1 +0.5
BLA pmax pmax
comp=Z,374nm,1.2s
**BLA Blacksburg** 64.66 62 *e*P P 03 59 46.1 +0.5
comp=Z,374nm,1.2s
**KLMR Klimovskoe** 64.66 342 *e*P P 03 59 41.9 -3.3
KLMR pmax pmax
comp=Z,75nm,1.1s
**WVL Waterville** 64.82 50 *e*P P 03 59 46.0 -0.5
comp=Z,307nm,1.0s
**VWCC Virginia Weste** 64.88 61 *e*P P 03 59 46.8 -0.2
**LUPA Lehigh Univers** 64.90 56 *e*P P 03 59 47.6 +0.6
comp=Z,426nm,1.1s
**ODNJ Ogdensburg** 64.94 55 *e*P P 03 59 47.7 +0.4
comp=Z,458nm,1.2s
**SDMD Soldier's Deli** 65.00 58 *e*P P 03 59 47.7 0.0
comp=Z,271nm,1.1s
**AFI Afiamalu** 65.12 176 LR LR 04 28 33.2
comp=Z,4µm,18.0s,baz=338,slow=36
**OTUK Ortayu** 65.17 317 P P 03 59 48.5 -0.2
**BRNJ Basking Ridge** 65.26 55 *e*P P 03 59 49.9 +0.5
comp=Z,679nm,1.2s
**BRAL Brewton** 65.34 71 *e*P P 03 59 49.9 -0.1
comp=Z,354nm,1.1s
**PAL Palisades** 65.36 55 *e*P P 03 59 50.4 +0.4
PAL pmax pmax
comp=Z,624nm,1.1s
**PAL Palisades** 65.36 55 *e*P P 03 59 50.4 +0.4
comp=Z,624nm,1.1s
**HRV Adam Dziewonsk** 65.43 52 *e*P P 03 59 50.4 -0.1
HRV pmax pmax
comp=Z,214nm,1.0s
**HRV Adam Dziewonsk** 65.43 52 *e*P P 03 59 50.4 -0.1
comp=Z,214nm,1.0s
**CPNY Central Park** 65.49 55 *e*P P 03 59 51.6 +0.8
comp=Z,574nm,1.1s
**TBLU Trondheim** 65.59 357 *e*P P 03 59 50.3 -0.8
**DAV Davao City (W)** 65.59 249⇓ *i*P P 03 59 50.2 -1.6
**CBN Corbin** 65.60 59 *e*P P 03 59 52.1 +0.6
comp=Z,226nm,1.1s
**YLE Yale** 65.62 54 *e*P P 03 59 51.7 0.0
comp=Z,114nm,1.0s
**PDGK Podgornoye** 65.65 309 P P 03 59 51.2 -0.6
**KMSC Kings Mountain** 65.65 64 P P 03 59 52.1 +0.1
baz=66,SNR=76
**KMSC Kings Mountain** 65.65 64 *e*P P 03 59 52.0 +0.1
comp=Z,226nm,0.9s
**GOGA Godfrey** 65.69 67 *e*P P 03 59 51.5 -0.8
GOGA pmax pmax
comp=Z,151nm,0.8s
**GOGA Godfrey** 65.69 67 *e*P P 03 59 51.5 -0.8
comp=Z,151nm,0.8s
**EMMW East Machias** 65.75 48 *e*P P 03 59 52.1 -0.3
comp=Z,445nm,1.0s
**GENI Genyem** 65.80 230 P P 03 59 53.6 +0.5
comp=Z,137nm,2.4s
**BRYW Bryant College** 65.88 53 *e*P P 03 59 53.1 -0.3
comp=Z,290nm,1.0s
**KMI Kunming** 65.95 281 P P 03 59 54.6 +0.2
KMI pP **pP** 04 00 08.8 +4.4
KMI PMZ
comp=Z,98nm,2.0s
KMI PMZ
comp=Z,3µm,4.7s
KMI LN
comp=Z,4µm,17.3s
KMI LE
comp=Z,4µm,17.6s
KMI LZ
comp=Z,5µm,16.4s
**QIZ Qiongzhong** 66.03 271 P P 03 59 56.0 +1.4
QIZ pP **pP** 04 00 04.0 -0.6
QIZ sP **sP** 04 00 06.7 -1.7
QIZ S **S** 04 08 44.7 +4.4
QIZ PMZ
comp=Z,99nm,2.2s
QIZ LN
comp=Z,8µm,16.2s
QIZ LZ
comp=Z,11µm,16.7s
**FINES FINESS Array B** 66.21 349 P P 03 59 53.4 -1.7
comp=Z,37nm,0.9s,baz=35,slow=7.0,SNR=53
FINES PcP **PcP** 04 00 25.3 +0.2
comp=Z,57nm,0.8s,baz=35,slow=5.1,SNR=9.1
FINES PKPPKP **P'P'df** 04 28 32.7 -3.1
comp=Z,9.2nm,1.1s,baz=188,slow=1.3,SNR=4.3
**FINES FINESS Array B** 66.21 349 P P 03 59 53.4 -1.7
FINES 04 00 25.3
FINES pmax pmax
comp=Z,37nm,0.9s
FINES pmax pmax
comp=Z,57nm,0.8s
**MOL Molde** 66.33 359 *e*P P 03 59 55.2 -0.7
MOL IAmb IAmb 03 59 56.8
comp=Z,219nm,0.3s
**AKN Aaknes** 66.73 359 *e*P P 03 59 58.6 +0.1
AKN IAmb IAmb 03 59 59.8
comp=Z,239nm,0.9s
**TIGA Tifton** 67.06 68 P P 04 00 00.6 -0.5
baz=67,SNR=9.7
**TIGA Tifton** 67.06 68 *e*P P 03 59 59.9 -1.1
comp=Z,182nm,1.3s
**TAOE Nuku Hiva Isla** 67.21 142 *e*T T 05 12 30.6
comp=Z,328nm,0.3s
**FOO Floro** 67.33 360 *e*P P 04 00 01.6 -0.6
**CNNC Cliffs of the** 67.49 62 *e*P P 04 00 04.6 +0.8
comp=Z,244nm,1.3s
**HYA Hyanger** 67.76 359 *e*P P 04 00 04.3 -0.7
**NB2 NORSAR Subarra** 67.77 357 P P 04 00 04.9 -0.3
comp=Z,136nm,1.0s,baz=3.8,slow=6.5
**NB2 NORSAR Subarra** 67.77 357 P P 04 00 04.9 -0.3
baz=3.8,slow=6.5
**NOA NORSAR Array B** 67.77 357 P P 04 00 04.7 -0.4
comp=Z,74nm,0.9s,baz=3.3,slow=6.3,SNR=154
NOA PKPPKP P'P'df 04 28 21.3 -12
comp=Z,1.0nm,0.8s,baz=178,slow=3.4,SNR=3.7
**NHSC New Hope** 67.79 65 *e*P P 04 00 06.3 +0.6
comp=Z,429nm,1.0s
**TKM2 Tokmak 2** 67.81 311 *e*P P 04 00 06.2 +0.3
TKM2 pmax pmax
comp=Z,143nm,1.1s
**TKM2 Tokmak 2** 67.81 311 P P 04 00 06.3 +0.3
SNR=78
**TKM2 Tokmak 2** 67.81 311 *e*P P 04 00 06.2 +0.3
comp=Z,143nm,1.1s
**SUE Sulen** 67.87 0 *e*P P 04 00 03.4 -2.2
**RGRS Roger Stewart** 67.93 65 *e*P P 04 00 07.1 +0.6
comp=Z,7.8nm,0.6s
**SLVN Son La** 68.02 277 *e*P P 04 00 07.5 +0.2
comp=Z,80nm,0.8s
**ULHL Ulahol** 68.02 311 P P 04 00 07.8 +0.5
SNR=43
**USP Ospenovka** 68.05 312 P P 04 00 08.2 +0.9
SNR=22
**NC602 NORSAR Array S** 68.06 356 *e*P P 04 00 06.5 -0.5
**CHMS Chumysh** 68.14 312 P P 04 00 09.0 +1.2
SNR=39
**KBK Karagaybulak** 68.32 312 P P 04 00 10.2 +1.1
SNR=5.7
**FRU Bishkek** 68.33 312⇑ *i*P P 04 00 08.0 -1.0
FRU *i* 04 00 41.0
FRU pmax pmax
comp=Z,2µm,2.3s
**ASK Askoy** 68.45 360 *e*P P 04 00 08.8 -0.6
ASK IAmb IAmb 04 00 10.3
comp=Z,78nm,1.0s
**BER Bergen** 68.55 360 *e*P P 04 00 09.1 -0.8
**AAK Ala-Archa** 68.55 312 *c i*P P 04 00 11.0 +0.5
AAK pmax pmax
comp=Z,255nm,0.9s
**AAK Ala-Archa** 68.55 312 P P 04 00 10.0 -0.5
comp=Z,795nm,0.7s,SNR=79
**AAK Ala-Archa** 68.55 312 P P 04 00 11.1 +0.6
SNR=59
**AAK Ala-Archa** 68.55 312 P P 04 00 11.5 +1.0
SNR=12
**AAK Ala-Archa** 68.55 312 *e*P P 04 00 10.8 +0.3
**KZA Kyzart** 68.62 311 P P 04 00 11.8 +0.6
SNR=44
**LRW Lerwick** 68.69 3 *e*P P 04 00 10.8 -0.1
LRW AMB AMB 04 00 11.5
comp=Z,188nm,1.0s
**PMG Port Moresby** 68.74 220 LR LR 04 25 12.7
comp=Z,5µm,21.4s,baz=5.0,slow=31
**PMG Port Moresby** 68.74 220 *e*P P 04 00 11.0 -0.7
PMG pmax pmax
comp=Z,135nm,1.0s
**PMG Port Moresby** 68.74 220 *e*P P 04 00 08.1 -3.6
comp=Z,65nm,1.2s
**SAN1 Sandwick** 68.81 3⇑ *e*P P 04 00 11.3 -0.3
**UCH Uchtor** 68.85 312 P P 04 00 13.2 +0.5
SNR=52
**EKS2 Erkin-Say** 68.86 312 *e*P P 04 00 12.8 +0.4
EKS2 pmax pmax
comp=Z,130nm,0.8s
**EKS2 Erkin-Say** 68.86 312 P P 04 00 13.5 +1.1
SNR=38
**EKS2 Erkin-Say** 68.86 312 *e*P P 04 00 12.8 +0.4
comp=Z,130nm,0.8s
**AKTO Aktyubinsk** 68.92 327 P P 04 00 11.8 -0.7
**VSU Vasula** 69.02 348 *c i*P P 04 00 11.9 -1.0
VSU pmax pmax
comp=Z,288nm,0.9s
**MSVF Nonsavu** 69.11 187 *e*P P 04 00 15.0 +1.0
**MSVF Nonsavu** 69.11 187 *e*P P 04 00 15.0 +1.0
**KONO Kongsberg** 69.22 357 *e*P P 04 00 14.2 +0.1
KONO pmax pmax
comp=Z,122nm,1.0s
**KONO Kongsberg** 69.22 357 *e*P P 04 00 14.2 +0.1
comp=Z,122nm,1.0s
**AB31 Akbulak array** 69.24 325 P P 04 00 14.9 +0.5
**ABKAR Akbulak array** 69.24 325 *e*P P 04 00 14.3 -0.1
**AML Almayashu** 69.31 312 P P 04 00 16.2 +0.6
SNR=70
**BLS5 Blasjo** 69.50 359 *e*P P 04 00 15.4 -0.6
**MNAS Manas** 69.58 313 P P 04 00 17.5 +0.6
**TNTI Ternate** 69.68 244 *e*P P 04 00 17.8 +0.2
comp=Z,789nm,1.8s
**KMY Karmoy** 69.72 360 *e*P P 04 00 16.4 -0.8
**MOS Moscow** 69.79 341 *e*P P 04 00 15.9 -1.8
MOS *e* 04 00 37.6
MOS pmax pmax
comp=Z,84nm,1.4s
**KK31 Karatay Array** 69.99 315 P P 04 00 19.1 -0.1
**KKAR Karatay Array** 69.99 315 *e*P P 04 00 18.4 -0.8
**KKAR Karatay Array** 69.99 315 *e*P P 04 00 18.4 -0.8
**FAKI Fak Fak** 70.08 238 *e*P P 04 00 19.2 -0.8
**BIGH Upper Bighouse** 70.21 5 *e*P P 04 00 20.4 +0.2
BIGH AMB AMB 04 00 21.3
comp=Z,456nm,1.0s
**KSH Kashi** 70.26 309⇑ *i*P P 04 00 24.9 +3.8
KSH *e*pP pP 04 00 35.5 +4.3
KSH *e*sP sP 04 00 39.5 +4.6
KSH *e*PP **PP** 04 03 01.2 +4.9
KSH S **S** 04 09 31.5 +0.9
KSH SKS **SKSac** 04 10 19.6 -0.5
KSH SS **SS** 04 14 06.7 +6.4
KSH PMZ
comp=Z,220nm,0.9s
KSH PMZ
comp=Z,3µm,3.6s
KSH LN
comp=Z,9µm,18.7s
KSH LE
comp=Z,8µm,14.8s
KSH LZ
comp=Z,7µm,18.8s
**PMOR Pomariorio Ree** 70.30 152 *e*P P 04 00 17.6 -3.6
comp=Z,524nm,1.6s
**PMOR Pomariorio Ree** 70.30 152 *e*T T 05 16 20.5
comp=Z,22nm,0.2s
**SNART Snartemo** 70.58 359 *e*P P 04 00 22.7 +0.1
**OBN Obninsk** 70.59 341 *c e*P P 04 00 21.9 -0.7
OBN *e* 04 00 43.3
OBN *e* 04 02 55.7
OBN *e*PPP PPP 04 04 45.7
OBN pmax pmax
comp=Z,66nm,1.0s
**OBN Obninsk** 70.59 341 *e*P P 04 00 21.9 -0.7
comp=Z,127nm,1.2s
**VAH Vaihoa** 70.60 152 *e*P P 04 00 19.2 -3.8
comp=Z,383nm,1.4s
**RRH Rhenigidale** 70.61 6⇑ *e*P P 04 00 22.6 -0.1
**HOMB Homborsund** 70.63 358 *e*P P 04 00 22.7 0.0
**RRR Rubha Reidh** 70.73 6⇑ *e*P P 04 00 23.3 -0.2
**MVH1 Achvaich** 70.77 5⇑ *e*P P 04 00 23.6 0.0
**DWPF Disney** 70.78 69 *e*P P 04 00 24.1 -0.1
comp=Z,582nm,1.1s
**CMIG Matias Romero** 70.82 87 LR LR 04 28 44.5
comp=Z,5µm,19.4s,baz=311,slow=34
**NONG Nongkai** 70.94 275 P P 04 00 25.4 +0.1
comp=Z,165nm,0.8s,comp=Z,3µm
**SFK Sufi-Kurgan** 71.06 311 P P 04 00 25.8 -0.3
**KAC Achnashellach** 71.12 6⇑ *e*P P 04 00 25.9 0.0
**MCD Coleburn Disti** 71.16 5⇑ *e*P P 04 00 26.2 +0.2
**SKNT Sakolnakorn** 71.23 274 P P 04 00 28.0 +0.9
comp=Z,233nm,0.9s
**MDO Dochfour** 71.24 5 *e*P P 04 00 26.5 0.0
**KPL Plockton** 71.26 6 *e*P P 04 00 25.7 -0.9
KPL AMB AMB 04 00 27.6
comp=Z,128nm,1.1s
**MYLDM Lahad Datu** 71.31 254 *e*P P 04 00 29.1 +1.6
**KSB Sheil Bridge** 71.40 6⇑ *e*P P 04 00 27.4 -0.1
**MME1 Meikle Cairn** 71.44 4 *e*P P 04 00 27.1 -0.7
**IZAR Zarasai** 71.72 347 *e*P P 04 00 29.1 -0.4
IZAR IAmb IAmb 04 00 29.5
comp=Z,21nm,0.9s
**DRUM Mains of Drumt** 71.86 4 *e*P P 04 00 29.9 -0.4
DRUM AMB AMB 04 00 30.9
comp=Z,200nm,1.1s
**ISAL Salakas** 71.91 347 *e*P P 04 00 30.2 -0.4
ISAL IAmb IAmb 04 00 31.8
comp=Z,34nm,1.1s
**KKM Kota Kinabalu** 72.01 257 *e*P P 04 00 32.1 +0.2
comp=Z,81nm,0.9s
**CMAI Chiengmai2** 72.08 280 P P 04 00 32.4 0.0
comp=Z,111nm,1.0s,comp=Z,3µm
**IIGN Ignalina** 72.11 347 *e*P P 04 00 31.4 -0.5
IIGN IAmb IAmb 04 00 32.8
comp=Z,25nm,0.8s
**SHL Shillong** 72.20 289 *e*P P 04 00 33.1 0.0
SHL AMB AMB 04 01 11.4
comp=Z,8.7nm,5.3s
**EDU Dundee** 72.20 5⇑ *e*P P 04 00 32.1 -0.2
**DLV T Lat** 72.23 267 *e*P P 04 00 33.6 +0.3
comp=Z,817nm,2.2s
**PPT Papeete** 72.26 154 LR LR 04 28 44.2
comp=Z,7µm,18.6s,baz=323,slow=33

PPT2 Papeete2 72.28 154 eP P 04 00 29.8 -3.5
comp=Z,164nm,1.6s
PPT2 Papeete2 72.28 154 eSS SS 04 14 27.5 -5.4
comp=Z,5µm,21.8s
PPT2 eLR LR 04 22 26.5
comp=Z,8µm,21.8s,baz=345
PPT2 Papeete2 72.28 154 eT T 05 18 48.9
comp=Z,29nm,0.3s
TIAR Tiarei 72.31 154 eP P 04 00 30.4 -3.0
comp=Z,39nm,1.1s
TIAR Tiarei 72.31 154 eT T 05 18 51.0
comp=Z,6.5nm,0.3s
PAE Paea 72.35 154 eP P 04 00 29.5 -4.0
comp=Z,28nm,1.4s
PAE Paea 72.35 154 eT T 05 18 53.7
comp=Z,8.6nm,0.3s
PHRA Phrae 72.42 278 P P 04 00 34.2 0.0
comp=Z,1µm,0.9s
MUD Monsted U'grnd 72.43 357 i P P 04 00 34.3 +0.7
MUD pmax pmax
comp=Z,100nm,1.0s
MUD Monsted U'grnd 72.43 357 i P P 04 00 34.3 +0.7
comp=Z,101nm,1.0s
KHON Khomkaen 72.44 274 P P 04 00 34.8 +0.5
comp=Z,149nm,0.9s,comp=Z,3µm
LPSR Galich'ya Gora 72.44 339 eP P 04 00 33.8 0.0
LPSR pmax pmax
comp=Z,130nm,0.8s
LPSR pmax pmax
comp=N,40nm,0.9s
LPSR pmax pmax
comp=E,50nm,1.0s
NACGM Naroch 72.47 347 e P 04 00 32.0 -2.0
EAB Aberfoyle 72.49 5⇑eP P 04 00 34.1 0.0
LOEI Loei 72.53 276 P P 04 00 32.6 -2.3
comp=E,86nm,1.0s,comp=E,2µm
TVO Taravao 72.55 154 eP P 04 00 31.1 -3.8
comp=E,43nm,1.3s
TVO Taravao 72.55 154 eT T 05 19 09.1
comp=E,2.2nm,0.3s
TEIG Tepich 72.56 79 eP P 04 00 35.3 +0.2
comp=E,224nm,1.8s
SANI Sanana 72.77 244 P P 04 00 36.1 -0.2
comp=E,117nm,1.5s,comp=E,3µm
LAMP Lampang 72.78 278 P P 04 00 36.9 +0.6
comp=E,20nm,1.2s,comp=E,183nm
UTTA Uttaradit 72.79 277 P P 04 00 36.3 -0.1
comp=E,79nm,0.7s,comp=E,574nm
EDI Edinburgh 72.81 5 eP P 04 00 35.7 -0.3
EDI AMB AMB 04 00 37.4
comp=Z,104nm,1.1s
ESY Stoneypath 72.85 4⇑eP P 04 00 36.0 -0.2
PGBU Glenifferbraes 72.86 5⇑eP P 04 00 36.1 -0.1
PGBU AMB AMB 04 00 37.2
comp=Z,301nm,1.1s
CHTO Chiang Mai 72.98 279 P P 04 00 37.2 -0.4
comp=Z,336nm,1.4s
CHTO Chiang Mai 72.98 279 eP P 04 00 37.5 -0.1
CHTO Chiang Mai 72.98 279 P P 04 00 37.3 -0.3
SNR=15
CHTO Chiang Mai 72.98 279 eP P 04 00 37.5 -0.1
COP Copenhagen 73.07 355⇑iP P 04 00 37.7 +0.2
COP pmax pmax
comp=Z,72nm,0.9s
COP Copenhagen 73.07 355⇑iP P 04 00 37.7 +0.2
comp=Z,72nm,0.9s
VRH Novokhopyorsk 73.08 337 eP P 04 00 37.2 -0.4
VRH pmax pmax
comp=N,80nm,0.8s
VRH pmax pmax
comp=Z,130nm,0.8s
VRH pmax pmax
comp=E,70nm,1.1s
CMAR Chiang Mai Arr 73.25 279 P P 04 00 39.5 +0.3
comp=E,22nm,0.9s,baz=27,slow=6.9,SNR=62
CMAR LR LR 04 34 56.3
comp=E,4µm,19.8s,baz=30,slow=38
CMAR Chiang Mai Arr 73.25 279 P P 04 00 39.5 +0.3
CMAR pmax pmax
comp=Z,23nm,0.9s
CMAR MLR MLR
comp=Z,4µm,19.8s
TAPN Taplejung 73.29 293 eP P 04 00 40.4 +0.7
comp=Z,2µm,1.1s
PBKT Sadao Pong 73.42 276 P P 04 00 40.1 0.0
comp=Z,120nm,0.8s,comp=Z,3µm
ESK Eskdalemuir 73.42 5 eP P 04 00 39.3 -0.3
ESK AMB AMB 04 00 40.6
comp=Z,164nm,1.1s
ESK Eskdalemuir 73.42 5 i P P 04 00 40.3 +0.7
ESK Eskdalemuir 73.42 5 P P 04 00 39.5 -0.1
comp=Z,938nm,1.0s,SNR=8.9
ESK Eskdalemuir 73.42 5 eP P 04 00 39.5 -0.1
comp=Z,144nm,0.9s
BSD Bornholm Skovb 73.50 354 i P P 04 00 39.6 -0.4
BSD pmax pmax
comp=Z,49nm,0.9s
BSD Bornholm Skovb 73.50 354 i P P 04 00 39.6 -0.4
comp=Z,49nm,0.9s
BWH Wardlaw 73.54 5 eP P 04 00 40.5 +0.2
RAR Rarotonga 73.58 165 LR LR 04 28 40.0
comp=Z,7µm,19.0s,baz=342,slow=32
BHH Howats Hill 73.64 5⇑eP P 04 00 41.1 +0.2
VSR Storozhevoye 73.67 338 eP P 04 00 40.9 -0.2
VSR pmax pmax
comp=E,60nm,0.9s
VSR pmax pmax
comp=Z,170nm,0.9s
VSR pmax pmax
comp=N,160nm,1.0s
LUWI Luwuk 73.77 247 eP P 04 00 40.6 -1.6
comp=N,290nm,0.7s
GAL1 Galloway 73.78 6 eP P 04 00 41.3 -0.4
GAL1 AMB AMB 04 00 43.1
comp=Z,180nm,0.9s
SUW Suwalki 73.82 349 e P 04 00 40.8 -1.1
GCD Castle Douglas 73.83 5⇑eP P 04 00 42.0 0.0
ODAN Odare 73.85 293 eP P 04 00 43.5 +0.6
comp=Z,540nm,1.0s
VORD Divnogorie 73.88 338 eP P 04 00 42.2 -0.1
VORD pmax pmax
comp=N,200nm,0.9s
VORD pmax pmax
comp=Z,150nm,0.9s
VORD pmax pmax
comp=E,140nm,1.0s
GUN Gumba 73.92 295 eP P 04 00 44.2 +0.8
comp=E,2µm,1.0s
KESW Keswick, Cumbr 74.15 5 eP P 04 00 44.0 +0.1
KESW AMB AMB 04 00 45.0
comp=Z,274nm,1.2s
RGN Rugen 74.16 355 eP P 04 00 44.8 +0.9
comp=Z,303nm,1.1s,baz=5.1,slow=5.6
RGN Rugen 74.16 355 eP P 04 00 45.0 +1.1
comp=Z,267nm,1.0s
DZET Dzherino 74.20 313 P P 04 00 44.5 -0.1
RAMN Ramite 74.24 293 eP P 04 00 45.8 +0.6
comp=Z,2µm,0.9s
GMM Mts of Mourne 74.33 7 eP P 04 00 44.6 -0.3
KKN Kakani 74.35 295 eP P 04 00 46.4 +0.6
comp=Z,447nm,0.8s
PKI Pulchoki 74.44 295 eP P 04 00 46.8 +0.3
comp=Z,1µm,1.0s
PKIN Phulchoki 74.45 295 eP P 04 00 46.7 +0.3
comp=Z,750nm,1.0s
COEN Coen 74.49 222 eP P 04 00 45.6 -0.6
comp=Z,25nm,0.8s
GKN Gorkha 74.55 295 eP P 04 00 47.3 +0.4
comp=Z,1µm,1.0s
DMN Daman 74.59 295 eP P 04 00 47.9 +0.7
comp=Z,952nm,1.0s
DANN Dangsing 74.78 296 eP P 04 00 49.0 +0.6
comp=Z,190nm,0.8s
HPK Haverah Park 74.85 4 eP P 04 00 48.1 +0.2
HPK AMB AMB 04 00 49.1
comp=Z,205nm,1.1s
BSEG Bad Segeberg 74.91 357 eP P 04 00 49.0 +0.8
comp=Z,154nm,1.0s,baz=5.1,slow=5.6
DZM Mont Dzumac 74.94 198 eP P 04 00 45.0 -3.8
comp=Z,124nm,1.2s
DZM Mont Dzumac 74.94 198 eP P 04 00 48.4 -0.4
comp=Z,52nm,1.0s
UMPA Umpang Tak 75.00 277 P P 04 00 50.9 +1.5
comp=Z,73nm,0.8s,comp=Z,747nm
UTHA Uthaitani 75.13 276 P P 04 00 50.6 +0.5
comp=Z,56nm,0.9s,comp=Z,379nm
GKP Gorka Klasztor 75.16 352 e P 04 00 49.3 -0.4

DSB Dublin 75.28 7 eP P 04 00 51.2 +0.8
KOLN Koldanda 75.31 296 eP P 04 00 51.8 +0.5
comp=Z,612nm,1.0s
WLF1 Llynfaes 75.37 6 eP P 04 00 50.6 -0.3
LMK Market Rasen 75.40 3 eP P 04 00 51.0 -0.1
LMK AMB AMB 04 00 53.5
comp=Z,284nm,1.1s
WPM1 Penmaenmawr 75.44 5 eP P 04 00 51.7 +0.3
DHRM DHARAMSHALA 75.78 304 eP P 04 00 53.8 -0.1
DHRM AMB AMB 04 01 06.3
comp=Z,15nm,12.9s
FOEL Foel Wylfa 75.84 5 eP P 04 00 54.1 +0.5
FOEL AMB AMB 04 00 54.9
comp=Z,351nm,1.1s
CWF Charnwood Fore 76.08 4⇑eP P 04 00 55.0 -0.1
CWF AMB AMB 04 00 56.0
comp=Z,118nm,1.2s
CWF Charnwood Fore 76.08 4 eP P 04 00 55.7 +0.7
comp=Z,101nm,1.0s
AKASG Malin Array Be 76.16 344 P P 04 00 54.4 -1.1
comp=Z,17nm,0.4s,baz=15,slow=5.7,SNR=58
AKASG Malin Array Be 76.16 344 P P 04 00 54.4 -1.1
AKASG pmax pmax
comp=Z,17nm,0.4s
KIEV Kiev 76.17 344c iP P 04 00 54.5 -1.0
KIEV pmax pmax
comp=Z,47nm,1.0s
KIEV Kiev 76.17 344 eP P 04 00 54.5 -1.0
comp=Z,86nm,1.2s
RUE Ruedersdorf 76.19 354 eP P 04 00 56.0 +0.4
comp=Z,170nm,1.2s,baz=5.1,slow=5.6
SMLA Simla 76.21 303 i P P 04 00 56.3 +0.2
SMLA AMB AMB 04 01 08.1
comp=Z,16nm,12.3s
VAL Valentia 76.23 10 eP P 04 00 56.8 +1.0
HLM1 Long Mynd 76.23 5 eP P 04 00 55.9 0.0
HLM1 AMB AMB 04 00 57.4
comp=Z,109nm,0.9s
BEL Belsk 76.23 350 e P 04 00 55.8 -0.1
KDI Kendari 76.23 245 P P 04 00 57.1 +0.7
comp=Z,113nm,1.7s,comp=Z,4µm
PATY Pattaya 76.25 273 P P 04 00 57.3 +0.8
comp=Z,50nm,0.9s,comp=Z,873nm
NRDL Niedersach Rie 76.36 357 eP P 04 00 57.0 +0.5
comp=Z,97nm,1.0s,baz=5.1,slow=5.6
DDI Dehra Dun 76.37 302 ex P 04 00 54.0 -3.2
DDI eP P 04 00 56.7 -0.5
DDI AMB AMB 04 01 10.7
comp=Z,16nm,13.9s
IBBN Ibbenburen 76.61 358 eP P 04 00 58.9 +0.8
comp=Z,236nm,1.0s,baz=5.1,slow=5.6
ASSE Asse, Remlinge 76.70 356 eP P 04 00 58.9 +0.4
comp=Z,125nm,1.1s,baz=5.1,slow=5.6
ASSE epP PcP 04 01 37.5 +28
BBSR BB Station 76.70 55 eP P 04 01 01.0 +2.1
MCH1 Michaelchurch 76.74 5 eP P 04 00 58.3 -0.5
MCH1 AMB AMB 04 00 59.8
comp=Z,180nm,1.0s
SSW Stow on the Wo 76.83 4⇑eP P 04 00 59.2 -0.1
WTSB Winterswijk 76.97 359 eP P 04 01 00.2 +0.2
comp=Z,108nm,0.9s
CLZ Clausthal 77.00 356 eP P 04 01 01.1 +0.8
comp=Z,173nm,1.0s,baz=5.1,slow=5.6
CLZ epP PcP 04 01 39.5 +28
STRD Stroud 77.01 4⇑eP P 04 01 00.1 -0.1
STRD AMB AMB 04 01 01.5
comp=Z,304nm,1.0s
PHET Kaeng Krachan 77.03 274 P P 04 01 01.9 +0.9
comp=Z,37nm,0.9s,comp=Z,340nm
BOK Bokaro 77.07 292 eP P 04 01 00.7 -0.4
OLDB Oldbury-Upon-S 77.10 5 eP P 04 01 00.9 +0.2
OLDB AMB AMB 04 01 01.7
comp=Z,132nm,1.1s
SBUM Sibu 77.28 258 eP P 04 01 02.1 -0.2
comp=Z,928nm,2.3s
SWN1 Swindon 77.29 4 eP P 04 01 01.9 0.0
SWN1 AMB AMB 04 01 03.8
comp=Z,380nm,1.3s
GTTG Gvttingen 77.31 357 eP P 04 01 02.6 +0.6
comp=Z,149nm,1.0s,baz=5.1,slow=5.6
GTTG epP PcP 04 01 41.0 +29
CLL Collm 77.41 355 eP P 04 01 02.2 -0.4
CLL pmax pmax
comp=Z,90nm,1.0s
CLL Collm 77.41 355 eP P 04 01 02.5 -0.1
comp=Z,85nm,1.0s,baz=5.1,slow=5.6
CLL esP sP 04 01 58.4 +42
CLL Collm 77.41 355⇑iP P 04 01 02.2 -0.4
comp=Z,87nm,1.0s
CLL i 04 01 07.3
CLL esP sP 04 01 15.0 -1.5
CLL LmH 04 39 00.0
comp=N,6µm,19.0s
CLL LmH 04 39 00.0
comp=E,4µm,18.6s
CLL LmV 04 40 00.0
comp=Z,6µm,19.6s
CLL Collm 77.41 355 eP P 04 01 02.1 -0.4
comp=Z,90nm,1.0s
BUG Bochum--Univer 77.49 358 eP P 04 01 03.3 +0.3
comp=Z,118nm,1.1s,baz=5.1,slow=5.6
BUG epP PcP 04 01 41.6 +28
WOL Wolverton 77.51 4 eP P 04 01 02.4 -0.7
WOL AMB AMB 04 01 04.2
comp=Z,202nm,1.1s
NEUB Neuenburg 77.58 356 eP P 04 01 03.9 +0.4
comp=Z,202nm,0.9s,baz=5.1,slow=5.6
HEX Exmoor 77.62 6⇑eP P 04 01 04.1 +0.3
KSP Ksiaz 77.65 353 e P 04 01 03.7 -0.2
HTL Hartland 77.66 6 eP P 04 01 03.3 -0.6
FBE Freiberg 77.78 354 eP P 04 01 04.9 +0.4
comp=Z,144nm,1.1s,baz=5.1,slow=5.6
FBE epP pP 04 01 43.3 +29
BRG Berggiesshubel 77.79 354 i P P 04 01 04.5 -0.2
comp=Z,93nm,1.0s
BRG S S 04 10 54.0 -0.6
BRG Berggiesshubel 77.79 354 i P P 04 01 04.5 -0.2
BRG S S 04 10 54.0 -0.6
BRG pmax pmax
comp=Z,93nm,1.0s
BRG Berggiesshubel 77.79 354 eP P 04 01 04.6 -0.1
comp=Z,93nm,1.0s,baz=5.1,slow=5.6
BRG epP pP 04 01 43.0 +28
TBI Tubuai 77.81 156 eP P 04 01 01.9 -3.0
comp=Z,210nm,1.2s
TBI Tubuai 77.81 156 eLR LR 04 25 04.1
comp=Z,10µm,22.2s,baz=334
TBI Tubuai 77.81 156 eT T 05 25 42.8
comp=Z,19nm,0.3s
LVV L'vov 77.81 347 eP P 04 01 03.9 -0.9
LVV e 04 05 53.9
LVV eS S 04 10 52.9 -2.0
LVV e 04 11 30.4
LVV MLR MLR
comp=N,4µm,18.0s
LVV MLR MLR
comp=E,5µm,18.0s
LVV MLR MLR
comp=Z,7µm,18.0s
TGUH Tegucigalpa,Un 77.86 83 eP P 04 01 07.0 +1.4
comp=Z,250nm,1.0s
OJC Ojcow 77.94 350 eP P 04 01 05.2 -0.3
OJC pmax pmax
comp=Z,30nm,1.0s
OJC Ojcow 77.94 350 eP P 04 01 05.2 -0.3
comp=Z,30nm,1.0s
OJC Ojcow 77.94 350 e P 04 01 05.2 -0.3
UPC Upice 78.00 353⇑iP P 04 01 05.8 -0.1
UPC Upice 78.00 353⇑iP P 04 01 05.8 -0.1
PVCC Panska Ves 78.09 354⇑iP P 04 01 06.4 0.0
PVCC Panska Ves 78.09 354⇑iP P 04 01 06.4 0.0
NDI New Delhi 78.11 301 eP P 04 01 05.5 -1.4
DPC Dobruska-Polom 78.13 352⇑iP P 04 01 06.9 +0.2
DPC e 04 01 17.4
DPC Dobruska-Polom 78.13 352⇑iP P 04 01 06.9 +0.2
DPC epP pP 04 01 17.4 +0.5
MOX Moxa 78.14 356 eP P 04 01 07.0 +0.3
comp=Z,97nm,1.1s,baz=5.1,slow=5.6
MOX epP pP 04 01 45.2 +28
BEBN Eben Emael 78.16 359 P P 04 01 06.9 +0.2
comp=Z,35nm,1.3s
KWP Kalwaria Pacla 78.17 348 e P 04 01 06.8 -0.1
HGN Heimansgroeve 78.19 359 eP P 04 01 07.1 +0.2
comp=Z,170nm,1.0s
PLN Plauen 78.28 355 eP P 04 01 07.7 +0.3

comp=Z,52nm,1.0s,baz=5.1,slow=5.6
WERD Werda 78.31 355 eP P 04 01 07.9 +0.3
comp=Z,65nm,1.2s,baz=5.1,slow=5.6
WERD epP pP 04 01 46.4 +29
TANN Tannenbergstha 78.33 355 eP P 04 01 08.1 +0.3
comp=Z,75nm,1.2s,baz=5.1,slow=5.6
TANN epP pP 04 01 46.5 +29
MEM Membach 78.34 359 P P 04 01 08.0 +0.3
comp=Z,92nm,1.3s
KRLC Kraliky 78.37 352⇑iP P 04 01 08.0 0.0
KRLC Kraliky 78.37 352⇑iP P 04 01 08.0 0.0
GUNZ Gunzen 78.39 355 eP P 04 01 08.4 +0.3
comp=Z,83nm,1.1s,baz=5.1,slow=5.6
GUNZ esP sP 04 02 04.6 +43
CCA1 Carnmenellis 78.41 7 eP P 04 01 08.5 +0.4
CCA1 AMB AMB 04 01 09.2
comp=Z,176nm,1.1s
SNF Seneffe 78.44 0 P P 04 01 08.6 +0.3
SNF AP PcP 04 01 17.4 0.0
SNF XP sP 04 01 22.4 +0.1
WERN Wernitzgruen 78.46 355 eP P 04 01 09.0 +0.5
comp=Z,117nm,1.0s,baz=5.1,slow=5.6
OKC Ostrava-Krasne 78.48 351 eP P 04 01 08.3 -0.2
OKC Ostrava-Krasne 78.48 351⇑eP P 04 01 08.3 -0.2
NKC Novy Kostel 78.51 355⇑iP P 04 01 09.1 +0.4
NKC Novy Kostel 78.51 355⇑iP P 04 01 09.1 +0.4
BCLA Clavier 78.53 360 P P 04 01 09.1 +0.3
comp=Z,56nm,1.1s
PRA Prague 78.55 354⇑iP P 04 01 08.8 -0.1
PRA Prague 78.55 354⇑iP P 04 01 08.8 -0.1
STHS Stebnicka Huta 78.56 349 eP P 04 01 09.7 +0.7
STHS pmax pmax
comp=Z,26nm,0.9s
STHS Stebnicka Huta 78.56 349 eP P 04 01 09.6 +0.6
MORC Moravsky Berou 78.60 352 eP P 04 01 08.6 -0.6
MORC pmax pmax
comp=Z,49nm,0.8s
MORC Moravsky Berou 78.60 352⇑iP P 04 01 09.3 +0.1
MORC Moravsky Berou 78.60 352 eP P 04 01 08.6 -0.6
comp=Z,49nm,0.8s
PRU Pruhonice 78.63 354⇑iP P 04 01 09.3 0.0
PRU e 04 01 21.3
PRU Pruhonice 78.63 354⇑iP P 04 01 09.3 0.0
PRU epP pP 04 01 21.3 +1.8
NIE Niedzica 78.67 350 e P 04 01 09.6 0.0
GOPC GO Pecny, Ondr 78.68 353⇑iP P 04 01 09.6 -0.1
GOPC GO Pecny, Ondr 78.68 353⇑iP P 04 01 09.6 -0.1
TNS Taunus Mts 78.69 358 eP P 04 01 10.1 +0.4
comp=Z,116nm,1.0s,baz=5.1,slow=5.6
KAPI Kappang 78.74 247 P P 04 01 10.3 -0.1
comp=Z,397nm,1.1s,SNR=24
KAPI Kappang 78.74 247 eP P 04 01 10.3 -0.1
comp=Z,262nm,1.4s
MANZ Manzenberg 78.78 355 eP P 04 01 10.4 +0.2
comp=Z,51nm,1.0s,baz=5.1,slow=5.6
SORM Soroca 78.79 344⇑iP P 04 01 09.8 -0.4
CTAO Charters Tower 78.81 217 eP P 04 01 09.6 -1.0
CTAO pmax pmax
comp=Z,54nm,1.0s
CTAO Charters Tower 78.81 217 eP P 04 01 09.6 -1.0
comp=Z,54nm,1.0s
DOU Dourbes 78.86 0 P P 04 01 10.5 -0.1
comp=Z,70nm,1.4s
DOU AP pP 04 01 24.8 +4.0
KOLS Kolonicke sedl 78.91 348 eP P 04 01 11.1 +0.1
KOLS pmax pmax
comp=Z,31nm,1.1s
KOLS Kolonicke sedl 78.91 348 eP P 04 01 11.1 +0.1
MAK Makhachkala 78.95 330 eP P 04 01 10.2 -1.0
MAK e 04 01 19.9
MAK e 04 04 08.3
MAK pmax pmax
comp=Z,2µm,0.5s
ROTZ Rotzenmuhle 78.99 355 eP P 04 01 11.9 +0.5
comp=Z,68nm,1.1s,baz=5.1,slow=5.6
MTN Manton Dam 79.08 233 eP P 04 01 11.4 -0.7
GRF Grafenberg Arr 79.11 356 eP P 04 01 12.9 +0.8
comp=Z,170nm,1.0s,baz=5.1,slow=5.6
GRF epP pP 04 01 51.1 +29
GRFO Grafenberg 79.12 356 eP P 04 01 12.6 +0.6
GRFO pmax pmax
comp=Z,116nm,0.9s
GRFO Grafenberg 79.12 356 eP P 04 01 12.6 +0.6
comp=Z,116nm,0.9s
VRAC Vranov 79.14 352⇑iP P 04 01 12.5 +0.3
UZH Uzhgorod 79.21 348⇓iP P 04 01 12.1 -0.4
UZH e 04 01 23.5
KSM Kuching 79.21 259 eP P 04 01 13.3 +0.2
comp=Z,304nm,1.4s
WLF Walferdange 79.28 359 P P 04 01 13.8 +0.9
WLF AP pP 04 01 23.4 +0.3
WLF XP sP 04 01 27.1 +0.2
WLF Walferdange 79.28 359 eP P 04 01 13.7 +0.7
WLF pmax pmax
comp=Z,91nm,0.9s
WLF Walferdange 79.28 359 eP P 04 01 13.9 +0.9
comp=Z,100nm,1.0s,baz=5.1,slow=5.6
WLF Walferdange 79.28 359 eP P 04 01 13.7 +0.7
comp=Z,91nm,0.9s
KIV Kislovodsk 79.49 333⇓eP P 04 01 14.9 +0.6
KIV e 04 01 23.3
KIV e 04 04 09.1
KIV ePPP PPP 04 06 05.8
KIV pmax pmax
comp=Z,48nm,0.9s
KIV MLR MLR
comp=Z,6µm,18.0s
KIV Kislovodsk 79.49 333⇑iP P 04 01 15.5 +1.2
SNR=7.6
KIV Kislovodsk 79.49 333 P P 04 01 15.4 +1.2
comp=Z,359nm,1.0s,SNR=5.3
KIV Kislovodsk 79.49 333 eP P 04 01 15.6 +1.2
KHC Kasperske Hory 79.55 354⇑iP P 04 01 14.6 +0.2
KHC e 04 01 23.6
KHC Kasperske Hory 79.55 354⇑iP P 04 01 14.6 +0.2
KHC epP pP 04 01 23.6 -1.1
KHC Kasperske Hory 79.55 354 eP P 04 01 14.8 +0.3
ABKT Ailbek 79.55 320 P P 04 01 15.8 +1.1
comp=Z,1µm,1.0s,SNR=28
GEYT Alibeck 79.55 320 P P 04 01 15.2 +0.6
comp=Z,162nm,0.9s,baz=340,slow=3.9,SNR=144
WET Wettzell 79.58 355 eP P 04 01 14.9 +0.3
comp=Z,56nm,1.2s,baz=5.1,slow=5.6
WET epP pP 04 01 53.4 +29
WET esP sP 04 02 10.9 +42
JSA Saint Aubin 79.59 5 eP P 04 01 14.4 -0.2
KBZ Khabaz 79.64 333 P P 04 01 15.3 +0.3
comp=Z,18nm,0.9s,baz=21,slow=1.1,SNR=26
KBZ Khabaz 79.64 333 P P 04 01 15.3 +0.3
KBZ pmax pmax
comp=Z,18nm,0.9s
NCK Nalchik 79.65 332 eP P 04 01 15.4 +0.3
TRPA Tarpa 79.67 348⇑iP P 04 01 15.5 +0.5
TRPA Tarpa 79.67 348⇑eSKKPdf P 04 01 15.2 +0.2
VYHS Vyhne 79.74 351 eP P 04 01 15.2 -0.3
VYHS pmax pmax
comp=Z,20nm,1.1s
VYHS Vyhne 79.74 351 eP P 04 01 15.2 -0.3
BURAR Bucovina Array 79.80 346⇓iP P 04 01 15.6 -0.3
GEC2 GERESS Array S 79.82 354 eP P 04 01 16.1 0.0
comp=Z,60nm,1.1s,baz=5.1,slow=5.6
GEC2 epP pP 04 01 54.4 +28
GERES GERESS Array B 79.82 354 P P 04 01 15.9 -0.1
comp=Z,30nm,0.8s,baz=20,slow=4.3,SNR=125
GERES PKPPKP P'P'df 04 28 03.8 -7.9
comp=Z,1.0nm,0.9s,baz=54,slow=2.3,SNR=3.5
IAS Iasi 79.84 344⇑iP P 04 01 16.4 +0.4
PRAR RASCA 79.89 345⇓iP P 04 01 16.1 -0.2
SURA Surathani 79.90 272 P P 04 01 17.5 +0.7
comp=Z,207nm,1.4s,comp=Z,12µm
BMR Baia Mare 79.99 347⇓iP P 04 01 17.1 +0.3
SOEI Soe 80.08 241 P P 04 01 18.4 +0.6
comp=Z,138nm,1.6s
SOEI Soe 80.08 241 eP P 04 01 17.4 -0.5
comp=Z,537nm,1.6s
ANN Anapa 80.09 337 eP P 04 01 17.3 -0.1
ANN pmax pmax
comp=Z,60nm,0.9s
STU Stuttgart 80.11 357 eP P 04 01 17.6 +0.1
STU pmax pmax
comp=Z,49nm,0.8s
STU Stuttgart 80.11 357 eP P 04 01 17.8 +0.3
comp=Z,77nm,0.9s,baz=5.1,slow=5.6
STU Stuttgart 80.11 357 eP P 04 01 17.6 +0.1

comp=Z,49nm,0.8s
**PSZ Piszkesteto 80.20 350** *e*P **P** **04 01 17.3 -0.7**
PSZ pmax pmax
comp=Z,47nm,1.1s
**PSZ Piszkesteto 80.20 350**⇓ *i*P **P** **04 01 18.9 +0.9**
**PSZ Piszkesteto 80.20 350**⇑ *e*SKKPdf **P** **04 01 18.5 +0.5**
**PSZ Piszkesteto 80.20 350** *e*P **P** **04 01 17.3 -0.7**
comp=Z,47nm,1.1s
**ZEI Tsey 80.21 332** *e*P **P** **04 01 18.0 -0.4**
ZEI pmax pmax
comp=Z,191nm,0.6s
**MMRI Maumere 80.28 243** *e*P **P** **04 01 18.2 -0.6**
comp=Z,210nm,1.2s
**RAO Raoul Island 80.36 182** LR LR 04 33 39.0
comp=Z,8µm,18.8s,baz=18,slow=33
**ARCR ARCALIA 80.44 347**⇓ *i*P **P** **04 01 20.3 +1.0**
**ONI Oni 80.53 332** P **P** **04 01 20.3 +0.4**
**ONI Oni 80.53 332** P **P** **04 01 20.2 +0.4**
**CONA Conrad Observa 80.58 352** *i*P **P** **04 01 20.6 +0.5**
comp=Z,250nm,2.1s,SNR=23
**BFO Black Forest 80.58 358** *i*P **P** **04 01 20.1 +0.1**
**BFO Black Forest 80.58 358** P **P** **04 01 20.3 +0.3**
comp=Z,238nm,0.9s,SNR=15
**BFO Black Forest 80.58 358** *e*P **P** **04 01 20.3 +0.3**
comp=Z,62nm,1.1s,baz=5.1,slow=5.6
BFO *e*pP pP 04 01 58.6 +28
BFO *e*sP sP 04 02 16.1 +42
**BFO Black Forest 80.58 358** *e*P **P** **04 01 20.2 +0.1**
**MTDJ Mount Denham 80.61 73** *e*P **P** **04 01 21.5 +0.7**
comp=Z,631nm,1.6s
**FUR Furstenfeldbru 80.64 356** *e*P **P** **04 01 20.7 +0.3**
comp=Z,102nm,1.1s,baz=5.1,slow=5.6
**SOC Sochi 80.65 335***c i*P **P** **04 01 19.8 -0.6**
SOC *e* 04 01 25.6
SOC *e**SP **sP** **04 01 33.1 -1.3**
SOC *e* 04 04 28.2
SOC *e*S **S** **04 11 25.4 +0.2**
SOC *e*SS **SS** **04 16 34.7 -2.1**
SOC pmax pmax
comp=Z,59nm,1.0s
SOC MLR MLR
comp=Z,6µm,16.0s
**TESR Tescani 80.65 345**⇓ *i*P **P** **04 01 20.3 -0.1**
**SIM Simferopol' 80.72 339** *e*P **P** **04 01 21.3 +0.5**
SIM pmax pmax
comp=Z,27nm,0.8s
SIM MLR MLR
comp=E,6µm,17.1s
**BUD Budapest 80.72 350**⇑ *e*SKKPdf **P** **04 01 21.3 +0.6**
**GTBY Guantanamo Bay 80.73 70** *e*P **P** **04 01 21.2 +0.1**
comp=E,99nm,1.1s
**SOP Sopron 80.76 352**⇑ *e*SKKPdf **P** **04 01 21.6 +0.7**
**MOA Molln 80.78 354** *i*P **P** **04 01 21.1 +0.1**
comp=E,522nm,3.4s,SNR=9.0
**CHVG Ch'k'valeri 80.80 333** P **P** **04 01 23.2 +1.9**
**CHVG Ch'k'valeri 80.80 333**⇑ *i*P **P** **04 01 23.6 +2.3**
**TRTT Trang 80.89 271** P **P** **04 01 22.3 +0.2**
comp=E,225nm,1.1s
**CJR Cluj-Napoca 80.92 347**⇓ *i*P **P** **04 01 22.7 +0.8**
**TBLG Delisi 80.93 331** *e*P **P** **04 01 21.7 -0.3**
**TBLG Delisi 80.93 331** P **P** **04 01 22.3 +0.3**
**TBLG Delisi 80.93 331** P **P** **04 01 22.3 +0.3**
**DRGR 80.96 348**⇑ *i*P **P** **04 01 22.0 -0.1**
**RJOB Jochberg 80.98 355** *e*P **P** **04 01 22.5 +0.3**
comp=E,36nm,0.9s,baz=5.1,slow=5.6
**DGRG David-gareji 80.99 330** P **P** **04 01 22.9 +0.5**
**DGRG David-gareji 80.99 330** P **P** **04 01 22.9 +0.5**
**DGPR DIGLIPUR 80.99 280** *e*P **P** **04 01 21.6 -1.0**
DGPR AMB AMB 04 01 43.1
comp=Z,18nm,7.2s
**PKST T"'s 81.04 351**⇑ *e*SKKPdf **P** **04 01 22.7 +0.2**
**PKS7 Kunszentmiklos 81.14 350**⇑ *e*SKKPdf **P** **04 01 22.9 0.0**
**PKSN Nyarlorinc 81.21 350**⇑ *e*SKKPdf **P** **04 01 24.1 +0.8**
**VRI Vrincioaia 81.26 345** *e*P **P** **04 01 24.5 +0.8**
**VRI Vrincioaia 81.26 345**⇓ *i*P **P** **04 01 24.2 +0.5**
**ARSA Arzberg 81.28 353** *i*P **P** **04 01 24.4 +0.7**
comp=Z,669nm,3.5s,SNR=13
**PLOR Plostina 81.29 345**⇓ *i*P **P** **04 01 24.5 +0.6**
**PETR Petresti 81.32 344**⇓ *i*P **P** **04 01 25.5 +1.6**
**RETA Reutte 81.34 356** *i*P **P** **04 01 24.4 +0.2**
comp=Z,885nm,4.0s,SNR=11
**DOPR Dopca 81.38 346**⇑ *i*P **P** **04 01 25.2 +0.9**
**GIUM Giurgiulesti 81.38 344**⇑ *i*P **P** **04 01 25.9 +1.6**
**WATA Walderalm 81.45 355**⇑ *i*P **P** **04 01 25.1 +0.3**
comp=Z,68nm,1.2s,SNR=16
**MOTA Moosalm 81.46 356** *i*P **P** **04 01 25.0 +0.1**
comp=Z,54nm,1.1s,SNR=22
**WTTA Wattenberg 81.52 355** *i*P **P** **04 01 25.6 +0.3**
comp=Z,895nm,3.0s,SNR=20
**TLCR 81.56 343**⇓ *i*P **P** **04 01 26.0 +0.8**
**DAVA Damuels 81.57 357**⇑ *i*P **P** **04 01 25.7 +0.2**
comp=Z,438nm,3.6s,SNR=8.8
**AKH Akhalkalaki 81.60 332** P **P** **04 01 26.2 +0.4**
**AKH Akhalkalaki 81.60 332** P **P** **04 01 26.1 +0.4**
**AKH Akhalkalaki 81.60 332**⇑ *i*P **P** **04 01 28.5 +2.7**
**KBA Koelnbreinsper 81.61 354** *i*P **P** **04 01 26.5 +0.9**
comp=Z,325nm,1.4s,SNR=44
**CFR Carcaliu 81.69 344**⇑ *i*P **P** **04 01 26.5 +0.6**
**GRER 81.69 344**⇓ *i*P **P** **04 01 27.9 +1.9**
**PKDT Phuket 81.69 272** P **P** **04 01 27.1 +0.7**
comp=Z,127nm,0.8s
**SIBR Sibiu 81.72 346**⇑ *i*P P 04 01 33.2 +7.1
**FETA Feichten 81.80 356** *i*P **P** **04 01 27.1 +0.4**
comp=Z,154nm,1.7s,SNR=30
**SOKA Soboth 81.88 353** *i*P **P** **04 01 27.3 +0.3**
comp=Z,177nm,1.4s,SNR=32
**PERS Pernice 81.92 353** *e*P **P** **04 01 27.4 +0.2**
**BEHE Becsehely 81.94 352**⇑ *e*SKKPdf **P** **04 01 27.7 +0.5**
**VOIR 81.95 346**⇓ *i*P **P** **04 01 27.9 +0.5**
**ABTA Abfaltersbach 81.98 355** *i*P **P** **04 01 27.7 +0.2**
comp=Z,444nm,3.1s,SNR=15
**EIDS Eidsvold 82.02 210** *e*P **P** **04 01 28.1 +0.4**
**ISR Istrita 82.02 345**⇑ *i*P **P** **04 01 29.5 +1.7**
**OBKA Obir 82.09 353**⇑ *i*P **P** **04 01 28.2 +0.1**
comp=Z,639nm,2.8s,SNR=13
**RKT Rikitea 82.20 143** *e*P **P** **04 01 25.8 -2.9**
comp=Z,144nm,1.5s
**RKT Rikitea 82.20 143** *e*SS SS 04 16 57.5 -4.9
comp=Z,3µm,27.5s
**RKT Rikitea 82.20 143** *e*LR LR 04 26 59.4
comp=Z,8µm,25.0s,baz=336
**RKT Rikitea 82.20 143** *e*T T 05 31 13.7
comp=Z,5.4nm,0.2s
**FUORN Ofenpass-Fuorn 82.22 356** *e*P **P** **04 01 29.6 +0.6**
**CHLP Challavanipeta 82.23 290** *e*P **P** **04 01 29.1 -0.1**
CHLP IAmb IAmb 04 01 30.8
comp=Z,222nm,1.2s
CHLP *e*S **S** **04 11 44.2 +1.9**
**KULM Kulim 82.25 269** *e*P **P** **04 01 28.6 -0.7**
**BZS Buzias 82.26 348** *e*P **P** **04 01 28.8 -0.1**
**PBA Port Blair 82.28 279** *e*P P 04 01 29.4 -0.1
PBA AMB AMB 04 01 31.7
comp=Z,11nm,8.2s
**BHPL Bhopal 82.31 298** *e*P **P** **04 01 29.1 -0.5**
BHPL AMB AMB 04 01 42.0
comp=Z,15nm,8.7s
**GZR Gura Zlata 82.32 347**⇑ *i*P **P** **04 01 29.5 +0.2**
**TIRR Tirgusor 82.34 343** *e*P **P** **04 01 29.9 +0.6**
TIRR pmax pmax
comp=Z,148nm,1.0s
**TIRR Tirgusor 82.34 343**⇑ *i*P **P** **04 01 30.1 +0.8**
**TIRR Tirgusor 82.34 343** *e*P **P** **04 01 29.9 +0.6**
comp=Z,148nm,1.0s
**AMRR Amara 82.38 344**⇓ *i*P **P** **04 01 31.3 +1.8**
**TUE Stuetta 82.41 357** *e*P **P** **04 01 30.3 +0.3**
comp=Z,40nm,0.9s
**SULR 82.50 345**⇓ *i*P **P** **04 01 30.6 +0.5**
**SENIN Lac Senin/Sane 82.57 358** *e*P **P** **04 01 31.3 +0.5**
comp=Z,431nm,2.8s
**IPM Ipoh 82.64 268** *e*P **P** **04 01 30.7 -0.7**
**EFOR EFORIE 82.66 343**⇓ *i*P **P** **04 01 33.8 +2.8**
**JAVS Javornik 82.74 354** *e*P **P** **04 01 30.6 -0.9**
**CIOR Ciorogarla 82.78 345**⇓ *i*P **P** **04 01 32.5 +0.9**
**MSAB Monastry St. A 82.80 344**⇑ *i*P **P** **04 01 32.8 +1.1**
**MYKOM Kota Tinggi 82.96 264** *e*P **P** **04 01 33.5 +0.5**
**SRE Strehaia 82.98 347**⇑ *i*P **P** **04 01 32.9 +0.2**
**BOJS Bojanci 83.03 353** *i*P **P** **04 01 32.7 -0.2**
**NGP Nagpur 83.06 295** *e*P **P** **04 01 32.9 -0.6**
NGP AMB AMB 04 01 33.9
comp=Z,282nm,1.1s
NGP *e*S **S** **04 11 50.0 -0.7**
**PSN Preselentsi 83.13 343** *i*P **P** **04 01 32.5 -1.0**
**VIS Vishakhapatnam 83.28 290** *e*P **P** **04 01 34.3 -0.3**
VIS AMB AMB 04 01 57.1
comp=Z,12nm,7.3s
**LGNH LØogne 83.30 69** *e*P **P** **04 01 36.7 +1.9**
**AGRB Hanur-Agry 83.43 331** *e*P **P** **04 01 36.5 +1.1**
**DIKM Dikmen 83.59 338** *e*P **P** **04 01 36.6 +0.7**
**WRAB Tennant Creek 83.64 227** *e*P **P** **04 01 34.3 -2.0**
WRAB pmax pmax
comp=Z,83nm,1.1s
**WRAB Tennant Creek 83.64 227** *e*P **P** **04 01 35.6 -0.7**
comp=Z,61nm,1.2s
**WRA Warramunga Arr 83.66 227** P **P** **04 01 35.0 -1.4**
comp=Z,14nm,0.8s,baz=35,slow=5.8,SNR=21
WRA PKKPbc **PKKPbc** **04 19 53.8 +1.6**
comp=Z,0.5nm,0.3s,baz=222,slow=1.3,SNR=4.6
WRA PKPPKP **P'P'df** **04 27 56.7 +1.1**
comp=Z,0.4nm,0.3s,baz=218,slow=2.5,SNR=5.6
WRA LR LR 04 35 58.4
comp=Z,3µm,20.1s,baz=65,slow=34
**WRA Warramunga Arr 83.66 227** P **P** **04 01 35.0 -1.4**
WRA pmax pmax
comp=Z,15nm,0.8s
**SSB Saint Sauveur 83.68 0** *e*P **P** **04 01 36.6 +0.2**
SSB pmax pmax
comp=Z,118nm,1.2s
**SSB Saint Sauveur 83.68 0** *e*P **P** **04 01 36.6 +0.2**
comp=Z,118nm,1.2s
**SDDR Presa de Saban 83.70 68** *e*P **P** **04 01 37.6 +0.8**
comp=Z,53nm,0.8s
**PRD Provadia 83.74 344** P **P** **04 01 37.0 +0.4**
**BNI Bardonecchia 83.89 359** *e*P **P** **04 01 38.9 +1.4**
**BNI Bardonecchia 83.89 359** *e*P **P** **04 01 38.9 +1.4**
**SZH Strazhica 83.92 345** *i*P **P** **04 01 37.0 -0.6**
**KVT Kavak 83.93 337** *e*P **P** **04 01 38.9 +1.1**
**DIVS Divibare 83.95 349**⇑ *i*P **P** **04 01 37.6 -0.2**
**PVL Pavlikeni 84.07 345** P **P** **04 01 39.0 +0.7**
**TPI Tanjungpandan 84.16 258** P **P** **04 01 39.1 0.0**
comp=Z,216nm,1.4s,comp=Z,4µm
**TOS Tosya 84.46 338** *e*P **P** **04 01 42.0 +1.5**
**SAFT Safranbolu 84.57 339** *e*P **P** **04 01 42.4 +1.5**
**LHMI Lhok Sumawe 84.62 272** P **P** **04 01 43.3 +1.8**
comp=Z,375nm,0.9s
**LHMI Lhok Sumawe 84.62 272** *e*P **P** **04 01 40.6 -0.9**
comp=Z,259nm,0.8s
**PVM Polavaram 84.65 291** *e*P **P** **04 01 41.2 -0.4**
PVM IAmb IAmb 04 01 46.9
comp=Z,150nm,0.8s
PVM *e*SKSac **SKSac** **04 12 04.4 +1.0**
**VLC Villacollemand 84.68 356** *e*P **P** **04 01 41.3 -0.1**
comp=Z,48nm,0.9s
**SMN1 Samana, DR 84.69 66** *e*P **P** **04 01 42.3 +0.5**
**RPR Rampur 84.73 294** *e*P **P** **04 01 41.0 -1.0**
RPR IAmb IAmb 04 01 43.1
comp=Z,321nm,1.3s
RPR *e*SKSac **SKSac** **04 12 03.0 -0.9**
**PLE Pljevlja 84.78 349**⇑ *i*P **P** **04 01 41.9 -0.2**
**SVSK Karacayir 84.79 336** *e*P **P** **04 01 43.1 +1.1**
**UPM Unac-Piva 84.96 350** *e*P **P** **04 01 42.7 -0.4**
**VTS Vitosha 85.01 346** P **P** **04 01 43.0 -0.3**
**PTK Pertek 85.11 334** *e*P **P** **04 01 45.2 +1.3**
**CMBY CAMPBELL BAY 85.13 275** *e*P **P** **04 01 44.1 +0.1**
CMBY AMB AMB 04 02 04.5
comp=Z,9.8nm,6.2s
**CORM Corum 85.13 338** *e*P **P** **04 01 45.2 +1.3**
**IVA Berane 85.17 349**⇑ *i*P **P** **04 01 43.8 -0.2**
**PSI Prapat 85.26 269** *e*P **P** **04 01 44.2 -0.7**
PSI pmax pmax
comp=Z,136nm,0.8s
**PSI Prapat 85.26 269** *e*P **P** **04 01 44.2 -0.7**
comp=Z,136nm,0.8s
**BRY Bratogost 85.30 350**⇑ *i*P **P** **04 01 44.3 -0.4**
**NKY Niksic 85.34 350**⇑ *i*P **P** **04 01 44.8 -0.1**
**CUKT Cukurca 85.38 330** *e*P **P** **04 01 45.5 +0.2**
**NKME Niksic 85.39 350**⇑ *i*P **P** **04 01 44.2 -0.8**
**PVY Plav 85.44 349** *e*P **P** **04 01 45.0 -0.4**
**SIRT Sirnak 85.51 331** *e*P **P** **04 01 46.7 +0.9**
**TTG Podgorica 85.69 349**⇑ *i*P **P** **04 01 46.1 -0.3**
**KKB Krupnik 85.74 346** P **P** **04 01 47.0 +0.3**
**HCY Herceg Novi 85.75 350**⇑ *i*P **P** **04 01 45.7 -1.1**
**JMBI JAMBI 85.76 262** P **P** **04 01 50.3 +3.2**
**BRTR Keskin Array B 85.80 338** P **P** **04 01 47.1 -0.1**
comp=Z,36nm,0.8s,baz=25,slow=1.3,SNR=84
BRTR PKKPbc **PKKPbc** **04 19 47.8 +1.5**
comp=Z,1.2nm,0.9s,baz=165,slow=5.1,SNR=4.4
BRTR PKPPKP P'P'df 04 27 51.5 -9.0
comp=Z,2.7nm,1.1s,baz=205,slow=5.5,SNR=4.9
**GULT Gulveren 85.81 341** *e*P **P** **04 01 48.0 +0.8**
**SMRI Semarang 85.85 253** P **P** **04 01 47.7 +0.1**
**SMRI Semarang 85.85 253** *e*P **P** **04 01 47.1 -0.5**
comp=Z,365nm,1.3s
**BKNI Bangkinang 85.85 265** P **P** **04 01 48.6 +1.0**
**BKNI Bangkinang 85.85 265** *e*P **P** **04 01 48.0 +0.3**
comp=Z,57nm,0.6s
**ANTO Ankara 85.85 339** *e*P **P** **04 01 48.5 +1.0**
**ANTO Ankara 85.85 339**⇑ *i*P **P** **04 01 48.4 +1.0**
**ANTO Ankara 85.85 339** P **P** **04 01 48.1 +0.6**
SNR=13
**ANTO Ankara 85.85 339** *e*P **P** **04 01 48.5 +1.0**
**BUM Brajici-Budva 85.86 350**⇑ *i*P **P** **04 01 46.9 -0.5**
**SKO Skopje 85.86 348** *i*P **P** **04 01 48.3 +1.0**
**MALT Malatya 85.92 334** *e*P **P** **04 01 48.9 +1.1**
**MALT Malatya 85.92 334**⇑ *i*P **P** **04 01 48.9 +1.1**
**DARE Darende-Malaty 85.93 335** *e*P **P** **04 01 49.1 +1.3**
**DRME Dracevica, Mon 85.93 349**⇑ *i*P **P** **04 01 47.2 -0.5**
**BNN Bunyan 86.09 336** *e*P **P** **04 01 48.7 0.0**
**KAMT Kaman 86.12 338** *e*P **P** **04 01 49.1 +0.4**
**NVR Nevrokopi 86.12 346** *e*P **P** **04 01 48.9 +0.2**
**NVR Nevrokopi 86.12 346** *e*P **P** **04 01 48.9 +0.2**
**ULC Ulcinj 86.15 349**⇑ *i*P **P** **04 01 49.2 +0.4**
**AFSR Af˙ar-Bala (A 86.19 338** *e*P **P** **04 01 49.7 +0.6**
**BCIP Isla Barro Col 86.23 80** *e*P **P** **04 01 48.9 -0.6**
comp=Z,162nm,1.6s
**HYB Hyderabad 86.30 293**⇑ *i*P **P** **04 01 48.0 -1.9**
comp=Z,394nm,1.2s
HYB *e*PcP **pP** **04 01 56.5 -3.7**
HYB *e*SKS **SKSac** **04 12 15.0 +1.1**
**HYB Hyderabad 86.30 293** *e*P **P** **04 01 48.9 -1.0**
HYB AMB AMB 04 02 43.0
comp=Z,13nm,18.6s
**HYBB Hyderabad (bro 86.30 293** *e*P **P** **04 01 48.9 -1.0**
HYBB IAmb IAmb 04 01 54.6
comp=Z,152nm,0.8s
HYBB *e*SKSac **SKSac** **04 12 11.6 -2.3**
**FITZ Fitzroy Crossi 86.31 235** LR LR 04 38 09.3
comp=Z,1µm,19.9s,slow=34
**VAY Valandovo 86.35 347** *i*P **P** **04 01 50.7 +1.0**
**SARI SarD1z-Kayseri 86.36 336** *e*P **P** **04 01 50.8 +0.7**
**SRS Serrai 86.39 346** *e*P **P** **04 01 50.1 +0.1**
**SRS Serrai 86.39 346** *e*P **P** **04 01 50.1 +0.1**
**KNT Kendrikon 86.45 346** *e*P **P** **04 01 48.6 -1.7**
**KNT Kendrikon 86.45 346** *e*P **P** **04 01 50.4 +0.1**
**KNT Kendrikon 86.45 346** *e*P **P** **04 01 50.4 +0.1**
**BHJ Bhuj 86.49 303** *e*P **P** **04 01 50.1 -0.6**
BHJ AMB AMB 04 01 53.3
comp=Z,8.7nm,6.3s
**YAYX Yaylak 86.50 338** *e*P **P** **04 01 51.7 +1.0**
**SVRH Sivrihisar-ESK 86.54 340** *e*P **P** **04 01 51.1 +0.3**
**NJS Nagarjunasagar 86.55 292** *e*P **P** **04 01 50.4 -0.7**
NJS IAmb IAmb 04 01 51.8
comp=Z,1µm,2.9s
NJS *e*SKSac **SKSac** **04 12 16.0 +0.7**
**SERE Sereflikochisa 86.56 338** *e*P **P** **04 01 51.4 +0.5**
**ARMA Armidale 86.57 208** *e*P **P** **04 01 51.8 +0.9**
**PCAB Cabril 86.57 10** *e*P **P** **04 01 51.2 +0.3**
comp=Z,68nm,2.1s
**PBRG Braganca 86.61 9** *e*P **P** **04 01 51.1 0.0**
comp=Z,127nm,1.4s
**TIR Tirane 86.68 349** *e*P **P** **04 01 51.2 -0.2**
TIR pmax pmax
comp=Z,178nm,0.8s
**TIR Tirane 86.68 349** *e*P **P** **04 01 51.2 -0.2**
comp=Z,178nm,0.8s
**SOH Sokhos 86.72 346** *e*P **P** **04 01 51.1 -0.5**
**SOH Sokhos 86.72 346** *e*P **P** **04 01 51.1 -0.5**
**ADKI Addanki 86.72 291** *e*P **P** **04 01 51.7 -0.2**
ADKI IAmb IAmb 04 01 53.0
comp=Z,158nm,1.3s
ADKI *e*SKSac **SKSac** **04 12 15.9 -0.5**
**GRG Griva 86.73 347** *e*P **P** **04 01 50.5 -1.2**
**GRG Griva 86.73 347** *e*P **P** **04 01 52.0 +0.3**
**GRG Griva 86.73 347** *e*P **P** **04 01 52.0 +0.3**
**LRS Lares 86.79 65** *e*P **P** **04 01 52.6 +0.3**
**OHR Ohrid 86.80 348** *i*P **P** **04 01 51.9 -0.1**
**OUZ Omahuta 86.84 189** *e*P **P** **04 01 52.3 +0.5**
comp=Z,45nm,1.2s
**PPI Padang Panjang 86.86 265** P **P** **04 01 52.0 -0.6**
comp=Z,89nm,1.4s,comp=Z,2µm
**CRPR Cabo Rojo, PR 86.87 65** *e*P **P** **04 01 53.9 +1.3**
comp=Z,61nm,0.8s
**POLO Lamas de Olo 86.93 9** *e*P **P** **04 01 52.6 -0.1**
comp=Z,34nm,1.9s
**GULA Gulagac 86.97 337** *e*P **P** **04 01 52.5 -0.5**
**HORT Hortiatis 86.98 346** *e*P **P** **04 01 51.8 -1.1**
**HORT Hortiatis 86.98 346** *e*P **P** **04 01 51.8 -1.1**
**KIZT Kizilcal 87.00 339** *e*P **P** **04 01 53.8 +0.6**
**PVRL Vila Real 87.04 9** *e*P **P** **04 01 53.5 +0.3**
comp=Z,100nm,1.1s
**FNA Florina 87.04 347** *e*P **P** **04 01 52.9 -0.3**
**FNA Florina 87.04 347** *e*P **P** **04 01 52.9 -0.3**
**FNA Florina 87.04 347** *e*P **P** **04 01 52.9 -0.3**
**CHBY Cihanbeyli 87.06 338** *e*P **P** **04 01 52.8 -0.6**
**PTO Porto 87.08 10** *e*P **P** **04 01 53.7 +0.4**
comp=Z,110nm,1.0s
**ASAR Alice Springs 87.09 225** P **P** **04 01 52.4 -1.0**
comp=Z,23nm,1.0s,baz=32,slow=4.1,SNR=33
ASAR PKKPbc **PKKPbc** **04 19 48.5 +4.2**
comp=Z,1.3nm,0.9s,baz=191,slow=2.3,SNR=4.9
ASAR PKPPKP **P'P'df** **04 27 52.1 +3.0**
comp=Z,0.7nm,0.9s,baz=187,slow=2.0,SNR=4.2
ASAR LR LR 04 37 29.3
comp=Z,4µm,20.7s,baz=38,slow=33
**NIG Nigde 87.10 337** *e*P **P** **04 01 54.8 +1.0**
**CELP Cerrillos 87.11 65** *e*P **P** **04 01 54.6 +0.8**
**OBIP Obispado Ponce 87.12 65** *e*P **P** **04 01 54.0 +0.1**
comp=Z,185nm,1.2s
**PLG Polygyros 87.14 346** *e*P **P** **04 01 53.2 -0.5**
**PLG Polygyros 87.14 346** *e*P **P** **04 01 53.2 -0.5**
**MVO Moncorvo 87.22 9** *e*P **P** **04 01 54.2 +0.1**
comp=Z,78nm,1.1s
**GSI Gunungsitoli 87.26 269** P **P** **04 01 54.7 +0.2**
comp=Z,181nm,2.1s
**GSI Gunungsitoli 87.26 269** *e*P **P** **04 01 54.5 -0.1**
comp=Z,66nm,0.7s
**SULT Sultanhani-AKS 87.28 338** *e*P **P** **04 01 54.5 0.0**
**SJG San Juan 87.32 64** *e*P **P** **04 01 55.5 +0.7**
SJG pmax pmax
comp=Z,97nm,1.1s
**SJG San Juan 87.32 64** *e*P **P** **04 01 55.5 +0.7**
comp=Z,97nm,1.1s
**LIA Limnos Island 87.33 344** *e*P **P** **04 01 54.5 0.0**
**LIA Limnos Island 87.33 344** *e*P **P** **04 01 54.5 0.0**
**KOZT Kozan 87.39 336** *e*P **P** **04 01 54.9 0.0**
**NEST Nestorio 87.45 348** *e*P **P** **04 01 55.0 -0.2**
**NEST Nestorio 87.45 348** *e*P **P** **04 01 55.0 -0.2**
**PVIS Viseu 87.57 10** *e*P **P** **04 01 56.4 +0.6**
comp=Z,100nm,1.1s
**YESY Yesilyurt 87.62 337** *e*P **P** **04 01 55.5 -0.6**
**KONT Konya--Tatoy 87.79 339** *e*P **P** **04 01 55.7 -1.1**
**KARA Karaisali 87.79 336** *e*P **P** **04 01 57.3 +0.5**
**STVI Saint Thomas 87.80 63** *e*P **P** **04 01 57.0 -0.1**
**MTE Manteigas 87.92 9** *e*P **P** **04 01 57.4 -0.1**
comp=Z,70nm,1.5s
**MTE Manteigas 87.92 9** *e*P **P** **04 01 57.4 -0.1**
**KSI Kapahiang 87.98 262** P **P** **04 01 57.8 -0.2**
**KSRV Kasrt alli 88.05 333** *e*P **P** **04 01 58.9 +0.8**
**POO Poona 88.07 298**⇑ *i*P P 04 01 55.0 -3.4
comp=Z,76nm,1.0s
POO *e*SKS **SKSac** **04 12 22.5 -2.2**
POO *i* S **SKKSac** **04 12 37.0 +2.1**
POO *e*PS **PnS** **04 13 40.5 -4.1**
POO *e*PPS PPS 04 14 07.0
POO *i* SS **SS** **04 18 26.5 -1.3**
POO *i* SSS SSS 04 21 58.5
POO *i* LQ LQ 04 25 53.0
**POO Poona 88.07 298** *e*P **P** **04 01 58.3 -0.1**
POO AMB AMB 04 02 18.4
comp=Z,6.1nm,10.9s
**THL Klokotos Trika 88.15 347** *e*P **P** **04 01 57.9 -0.5**
**THL Klokotos Trika 88.15 347** *e*P **P** **04 01 57.9 -0.5**
**PCAS Casmilo, Conde 88.16 10** *e*P **P** **04 01 58.6 +0.1**
comp=Z,85nm,1.2s
**JAN Janina 88.22 348** *e*P **P** **04 01 58.9 0.0**
**JAN Janina 88.22 348** *e*P **P** **04 01 58.9 0.0**
**NEO Neokhori 88.22 346** *e*P **P** **04 01 56.8 -2.1**
**NEO Neokhori 88.22 346** *e*P **P** **04 01 56.8 -2.1**
**KEK Kerkira 88.30 348** *e*P **P** **04 01 58.5 -0.7**
**KEK Kerkira 88.30 348** *e*P **P** **04 01 58.5 -0.7**
**TAHT Tahtakopru-Hat 88.34 335** *e*P **P** **04 01 57.0 -2.5**
**IGT Igoumenitsa 88.41 348** *e*P **P** **04 01 59.4 -0.3**
**IGT Igoumenitsa 88.41 348** *e*P **P** **04 01 59.4 -0.3**
**CUC Castrocucco 88.45 352** *e*P **P** **04 01 58.8 -1.2**
comp=Z,59nm,1.4s
**PCBR Castelo Branco 88.48 9** *e*P **P** **04 01 59.8 -0.2**
comp=Z,75nm,1.2s
**SKHT Srikalahasti 88.54 290** *e*P **P** **04 02 00.6 -0.1**
SKHT IAmb IAmb 04 02 02.9
comp=Z,74nm,1.1s
SKHT *e*SKSac **SKSac** **04 12 28.1 +0.7**
SKHT IVMs_BB IVMs_BB 04 25 21.0
comp=Z,4µm,18.2s
**SUTC Sutluce-Ispart 88.55 339** *e*P P 04 01 54.9 -5.7
**PTOM Tomar 88.60 10** *e*P **P** **04 02 00.1 -0.5**
comp=Z,172nm,1.2s
**AGG Agios Georgios 88.64 346** *e*P **P** **04 02 00.9 +0.1**
**AGG Agios Georgios 88.64 346** *e*P **P** **04 01 58.5 -2.3**
**AGG Agios Georgios 88.64 346** *e*P **P** **04 01 58.5 -2.3**
**AGG Agios Georgios 88.64 346** *e*P **P** **04 02 00.9 +0.1**
**MAKR Makrakomi, Fth 88.67 347** *e*P **P** **04 01 59.9 -1.1**
**MAKR Makrakomi, Fth 88.67 347** *e*P **P** **04 01 59.9 -1.1**
**HDMB Hadim 88.70 338** *e*P **P** **04 01 59.0 -2.4**
**DSL Palaion Diasel 88.70 347** *e*P **P** **04 02 01.3 +0.2**
**DSL Palaion Diasel 88.70 347** *e*P **P** **04 02 01.3 +0.2**
**MDRS Chennai 88.75 289** *e*P **P** **04 02 01.6 0.0**
MDRS AMB AMB 04 02 33.9
comp=Z,7.0nm,17.4s
**EVR Evrytania 88.81 347** *e*P **P** **04 02 01.5 -0.3**
**EVR Evrytania 88.81 347** *e*P **P** **04 02 01.5 -0.3**
**PMRV Marv??o 88.90 9** *e*P **P** **04 02 02.1 +0.1**
comp=Z,124nm,1.4s
**LKR Lokris 88.90 346** *e*P **P** **04 02 00.5 -1.5**
**LKR Lokris 88.90 346** *e*P **P** **04 02 00.5 -1.5**
**ESDC Sonseca Array 88.96 7** P **P** **04 02 02.0 -0.3**
comp=Z,29nm,1.0s,baz=353,slow=4.4,SNR=62
**EREA Eretria 88.98 345** *e*P **P** **04 02 01.1 -1.3**
**EREA Eretria 88.98 345** *e*P **P** **04 02 01.1 -1.3**
**URV Uravakonda 89.01 293** *e*P **P** **04 02 02.5 -0.4**
URV IAmb IAmb 04 02 07.4
comp=Z,45nm,0.9s
URV *e*SKSac **SKSac** **04 12 30.0 -0.3**
**PAB San Pablo 89.05 7** *e*P **P** **04 02 01.5 -1.4**
PAB pmax pmax
comp=Z,48nm,1.4s
**PAB San Pablo 89.05 7** *e*P **P** **04 02 01.5 -1.4**
comp=Z,48nm,1.4s
**LKD2 Lefkada island 89.10 348** *e*P **P** **04 02 02.2 -0.8**
**LKD2 Lefkada island 89.10 348** *e*P **P** **04 02 02.2 -0.8**
**PMAFR Mafra 89.16 11** *e*P **P** **04 02 03.2 0.0**
comp=Z,179nm,1.6s
**TIP Timpagrande 89.17 351** *e*P **P** **04 02 02.9 -0.5**
comp=Z,68nm,1.4s
**DSF Desfina 89.20 346** *e*P **P** **04 02 02.5 -1.0**
**DSF Desfina 89.20 346** *e*P **P** **04 02 02.5 -1.0**
**PDO Prodromos 89.21 347** *e*P **P** **04 02 03.3 -0.2**
**PDO Prodromos 89.21 347** *e*P **P** **04 02 03.3 -0.2**
**EFP Efpalio 89.28 347** *e*P **P** **04 02 04.1 +0.3**
**EFP Efpalio 89.28 347** *e*P **P** **04 02 04.1 +0.3**
**VIL2 Platees 89.29 346** *e*P **P** **04 02 02.5 -1.4**
**VIL2 Platees 89.29 346** *e*P **P** **04 02 02.5 -1.4**
**LAKA Lakka 89.45 347** *e*P **P** **04 02 04.1 -0.6**
**LAKA Lakka 89.45 347** *e*P **P** **04 02 04.1 -0.6**
**LTK Loutraki 89.52 346** *e*P **P** **04 02 02.6 -2.4**
**LTK Loutraki 89.52 346** *e*P **P** **04 02 02.6 -2.4**
**URZ Urewera 89.56 186** LR LR 04 35 29.3
comp=Z,3µm,20.6s,baz=12,slow=31
**KLV Kalavryta, Ach 89.62 346** *e*P **P** **04 02 04.7 -0.8**
**KLV Kalavryta, Ach 89.62 346** *e*P **P** **04 02 04.7 -0.8**
**GUR Goura 89.70 346** *e*P **P** **04 02 04.9 -1.0**
**GUR Goura 89.70 346** *e*P **P** **04 02 04.9 -1.0**
**RLS Riolos of Patr 89.71 347** *e*P **P** **04 02 06.2 +0.4**
**RLS Riolos of Patr 89.71 347** *e*P **P** **04 02 06.2 +0.4**
**VLS Valsamata 89.71 348** *e*P **P** **04 02 05.1 -0.8**
**VLS Valsamata 89.71 348** *e*P **P** **04 02 05.1 -0.8**
**EVO Evora 89.72 10** *e*P **P** **04 02 05.5 -0.4**
comp=Z,53nm,1.3s
**DRO Drossia 89.78 347** *e*P **P** **04 02 05.7 -0.5**
**DRO Drossia 89.78 347** *e*P **P** **04 02 05.7 -0.5**
**RABH Abou Rabah 89.89 334** *e*P **P** **04 02 06.8 0.0**
**DIDY Didyma 90.02 345** *e*P **P** **04 02 04.9 -2.5**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DIDY | Didyma | 90.02 | 345 | eP | P | 04 02 04.9 | -2.5 |
| PNCL | Nicolau / Gran | 90.08 | 10 | eP | P | 04 02 07.2 | -0.3 |
| | comp=Z,83nm,1.6s | | | | | | |
| ROOS | tl_alroos | 90.12 | 334 | eP | P | 04 02 07.4 | -0.5 |
| PBAR | Barrancos | 90.17 | 9 | eP | P | 04 02 08.0 | 0.0 |
| | comp=Z,239nm,1.5s | | | | | | |
| AMT | Artemida-Makis | 90.19 | 347 | eP | P | 04 02 06.7 | -1.4 |
| AMT | Artemida-Makis | 90.19 | 347 | eP | P | 04 02 06.7 | -1.4 |
| PBEJ | Beja | 90.23 | 10 | eP | P | 04 02 08.2 | -0.1 |
| | comp=Z,57nm,1.3s | | | | | | |
| VLX | Vlachokerasia | 90.25 | 346 | eP | P | 04 02 07.9 | -0.6 |
| VLX | Vlachokerasia | 90.25 | 346 | eP | P | 04 02 07.9 | -0.6 |
| FKH | Fakeheh | 90.29 | 334 | eP | P | 04 02 08.8 | 0.0 |
| HWQ | Hawqa | 90.38 | 335 | eP | P | 04 02 08.4 | -0.8 |
| CSS | Prodhromos | 90.41 | 337 | eP | P | 04 02 09.1 | -0.1 |
| | comp=Z,19nm,0.9s | | | | | | |
| GOA | Goa | 90.53 | 296 | eP | P | 04 02 09.6 | -0.4 |
| GOA | | | | AMB | AMB | 04 02 36.0 | |
| | comp=Z,6.8nm,12.9s | | | | | | |
| PCVE | Castro Verde | 90.61 | 10 | eP | P | 04 02 09.5 | -0.5 |
| | comp=Z,54nm,1.6s | | | | | | |
| BANOM | Banah | 90.69 | 315 | P | P | 04 02 10.4 | -0.3 |
| | SNR=14 | | | | | | |
| BANOM | Banah | 90.69 | 315 | ⇓iP | P | 04 02 09.9 | -0.8 |
| | SNR=19 | | | | | | |
| BHL | Bhannes | 90.81 | 335 | eP | P | 04 02 10.7 | -0.5 |
| PVAQ | Vaqueiros | 90.87 | 10 | eP | P | 04 02 11.5 | +0.3 |
| | comp=Z,65nm,1.5s | | | | | | |
| DQRL | Deir Qamar | 91.02 | 335 | eP | P | 04 02 12.0 | -0.2 |
| BRBR | Barbar | 91.20 | 334 | eP | P | 04 02 13.2 | +0.1 |
| ZALF | Zalf | 91.28 | 333 | eP | P | 04 02 12.9 | -0.3 |
| UOSS | Wadi Hilu | 91.58 | 315 | P | P | 04 02 13.3 | -1.5 |
| | comp=Z,502nm,0.9s,SNR=26 | | | | | | |
| UOSS | Wadi Hilu | 91.58 | 315 | eP | P | 04 02 13.6 | -1.2 |
| SALA | Sala | 91.64 | 334 | eP | P | 04 02 15.1 | -0.1 |
| HATD | Hatta, Dubai | 91.72 | 315 | ⇑iP | P | 04 02 14.5 | -1.0 |
| | SNR=40 | | | | | | |
| NAZ | Nazwa, Dubai | 91.79 | 315 | ⇓iP | P | 04 02 14.8 | -0.9 |
| | SNR=22 | | | | | | |
| ASHO | Ashiyiah | 91.88 | 315 | P | P | 04 02 15.4 | -0.8 |
| | SNR=23 | | | | | | |
| ASHO | Ashiyiah | 91.88 | 315 | ⇑iP | P | 04 02 15.2 | -1.0 |
| | SNR=42 | | | | | | |
| CAN | Canberra | 91.92 | 209 | eP | P | 04 02 16.1 | +0.2 |
| CAN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| CAN | Canberra | 91.92 | 209 | eP | P | 04 02 16.1 | +0.2 |
| | comp=Z,30nm,1.3s | | | | | | |
| MBWA | Marble Bar | 91.92 | 238 | eP | P | 04 02 15.6 | -0.6 |
| FAQ | Al Faqa, Dubai | 92.03 | 315 | ⇑iP | P | 04 02 15.7 | -1.1 |
| | SNR=23 | | | | | | |
| ASUD | Al Ashush, Dub | 92.25 | 315 | ⇑iP | P | 04 02 17.3 | -0.6 |
| | SNR=45 | | | | | | |
| HOQ | Hoqain | 92.27 | 313 | P | P | 04 02 17.3 | -0.6 |
| | SNR=22 | | | | | | |
| WBK | Wadi Bani Khal | 92.33 | 311 | P | P | 04 02 18.9 | +0.6 |
| | SNR=28 | | | | | | |
| SMDO | Samad | 92.38 | 312 | P | P | 04 02 18.5 | -0.1 |
| | SNR=30 | | | | | | |
| ARQ | Araqi | 92.84 | 314 | P | P | 04 02 20.4 | -0.2 |
| | SNR=93 | | | | | | |
| JMDO | Jabal Madar | 92.95 | 312 | P | P | 04 02 21.0 | -0.1 |
| | SNR=43 | | | | | | |
| ROSC | El Rosal | 92.98 | 79 | P | P | 04 02 22.1 | +0.3 |
| | comp=Z,6.4nm,0.7s,baz=106,slow=5.6,SNR=7.7 | | | | | | |
| ROSC | El Rosal | 92.98 | 79 | eP | P | 04 02 23.3 | +1.4 |
| PALK | Pallekele | 93.06 | 286 | eP | P | 04 02 22.1 | +0.3 |
| PALK | | | | pmax | pmax | | |
| | comp=Z,37nm,0.9s | | | | | | |
| PALK | Pallekele | 93.06 | 286 | eP | P | 04 02 22.1 | +0.3 |
| | comp=Z,37nm,0.9s | | | | | | |
| KEST | Kesra | 93.12 | 356 | P | P | 04 02 20.2 | -1.6 |
| | comp=Z,12nm,0.9s,baz=139,slow=2.9,SNR=9.8 | | | | | | |
| OTAV | Otavalo | 94.03 | 85 | eP | P | 04 02 27.5 | +0.8 |
| | comp=Z,30nm,1.1s | | | | | | |
| FUL | Funchal | 94.14 | 18 | eP | P | 04 02 27.0 | +0.6 |
| | comp=Z,252nm,1.7s | | | | | | |
| TRD | Trivandrum | 94.32 | 289 | eP | P | 04 02 27.6 | +0.1 |
| TRD | | | | AMB | AMB | 04 02 58.3 | |
| | comp=Z,5.4nm,10.0s | | | | | | |
| RAYN | Ar Rayn | 97.26 | 323 | P | P | 04 02 40.0 | -0.8 |
| | comp=Z,572nm,0.9s,SNR=85 | | | | | | |
| RAYN | Ar Rayn | 97.26 | 323 | eP | P | 04 02 40.4 | -0.5 |
| | comp=Z,105nm,1.0s | | | | | | |
| ABTO | Aybut | 99.51 | 314 | P | Pdif | 04 02 50.9 | -0.1 |
| | SNR=7.4 | | | | | | |
| TOA0 | Torodi Ar. Sit | 115.64 | 3 | ePKP1 | PKPdf | 04 07 48.3 | -1.9 |
| TORD | Torodi Ar. Bea | 115.64 | 3 | PKP | PKPdf | 04 07 49.5 | -0.7 |
| | comp=Z,8.1nm,0.7s,baz=346,slow=2.3,SNR=118 | | | | | | |
| TORD | | | | PKKPbc | PKKPbc | 04 18 20.6 | 0.0 |
| | comp=Z,3.7nm,1.0s,baz=178,slow=2.2,SNR=9.5 | | | | | | |
| SIV | San Ignacio | 117.36 | 81 | PKP | PKPdf | 04 07 52.9 | -0.4 |
| | comp=Z,2.0nm,0.6s,baz=74,slow=9.1,SNR=3.1 | | | | | | |
| LVC | Limon Verde | 117.40 | 92 | ePKPdf | PKPdf | 04 07 53.9 | +0.3 |
| LCO | Las Campanas | 120.89 | 99 | ePKPdf | PKPdf | 04 07 60.0 | -0.1 |
| DBIC | Dimbokro | 121.54 | 11 | eP | PKPdf | 04 08 01.0 | -0.5 |
| DBIC | Dimbokro | 121.54 | 11 | PKP | PKPdf | 04 08 01.0 | -0.5 |
| | comp=Z,21nm,1.0s,baz=341,slow=3.3,SNR=28 | | | | | | |
| DBIC | Dimbokro | 121.54 | 11 | PKIKP | PKPdf | 04 08 01.0 | -0.5 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| TIC | Toumodi | 121.55 | 11 | ePKP1 | PKPdf | 04 08 00.8 | -0.8 |
| KIC | Kosan Boka | 121.86 | 11 | ePKP1 | PKPdf | 04 08 01.5 | -0.7 |
| | comp=Z,72nm,1.1s | | | | | | |
| LIC | Lamto | 121.96 | 12 | ePKP1 | PKPdf | 04 08 01.7 | -0.6 |
| | comp=Z,41nm,0.8s | | | | | | |
| KMBO | Kilima Mbogo | 122.93 | 320 | PKP | PKPdf | 04 08 04.3 | -0.1 |
| | comp=Z,16nm,0.9s,baz=4.3,slow=2.6,SNR=24 | | | | | | |
| KMBO | Kilima Mbogo | 122.93 | 320 | PKIKP | PKPdf | 04 08 04.4 | -0.1 |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| KMBO | Kilima Mbogo | 122.93 | 320 | PKP | PKPdf | 04 08 04.3 | -0.1 |
| KMBO | | | | ePKPdf | PKiKP | 04 08 04.5 | -0.2 |
| CFAA | Coronel Fontan | 124.22 | 99 | PKP | PKPdf | 04 08 05.3 | -0.8 |
| | comp=Z,0.8nm,0.8s,baz=311,slow=4.3 | | | | | | |
| BDFB | Brasilia | 124.99 | 70 | PKP | PKPdf | 04 08 08.3 | +0.2 |
| | comp=Z,13nm,1.0s,baz=52,slow=1.1,SNR=11 | | | | | | |
| BDFB | Brasilia | 124.99 | 70 | PKIKP | PKPdf | 04 08 08.3 | +0.2 |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| CPUP | Villa Florida | 127.34 | 86 | PKP | PKPdf | 04 08 11.0 | -1.1 |
| | comp=Z,5.8nm,0.5s,baz=317,slow=0.9,SNR=16 | | | | | | |
| CPUP | Villa Florida | 127.34 | 86 | PKIKP | PKPdf | 04 08 11.0 | -1.1 |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| VNDA | Vanda | 129.47 | 186 | PKP | PKPdf | 04 08 14.8 | +0.1 |
| | comp=Z,4.1nm,1.2s,baz=314,slow=4.0,SNR=6.7 | | | | | | |
| VNDA | Vanda | 129.47 | 186 | PKIKP | PKPdf | 04 08 14.8 | +0.1 |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| CASY | Casey | 130.12 | 211 | ePKPdf | PKPdf | 04 08 15.6 | -0.5 |
| TRQA | Tornquist | 132.33 | 101 | ePKPdf | PKPdf | 04 08 21.1 | -0.2 |
| TRQA | Tornquist | 132.33 | 101 | eSKPbc | SKPbc | 04 11 45.4 | +0.1 |
| MSNA | Messina | 145.00 | 317 | eP | PKPbc | 04 08 43.4 | -1.0 |
| MSNA | Messina | 145.00 | 317 | P | PKPbc | 04 08 43.4 | -1.0 |
| MAW | Mawson | 147.90 | 218 | PKPbc | PKPbc | 04 08 51.3 | -0.1 |
| | comp=Z,87nm,0.9s,baz=105,slow=3.2,SNR=67 | | | | | | |
| MAW | Mawson | 147.90 | 218 | PKP2 | PKPbc | 04 08 51.3 | -0.1 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,87nm,0.9s | | | | | | |
| POGA | Pongola | 148.60 | 310 | eP | PKPbc | 04 08 55.5 | +1.0 |
| POGA | Pongola | 148.60 | 310 | P | PKPbc | 04 08 55.5 | +1.0 |
| SLR | Silverton | 148.73 | 316 | eP | PKPbc | 04 08 53.8 | -1.3 |
| SLR | Silverton | 148.73 | 316 | PKP2 | PKPbc | 04 08 53.8 | -1.3 |
| SLR | Silverton | 148.73 | 316 | P | PKPbc | 04 08 53.8 | -1.3 |
| LBTB | Lobatse | 149.20 | 321 | eP | PKPdf | 04 08 52.5 | +0.5 |
| LBTB | Lobatse | 149.20 | 321 | PKIKP | PKPdf | 04 08 52.5 | +0.5 |
| LBTB | Lobatse | 149.20 | 321 | P | PKPdf | 04 08 52.5 | +0.5 |
| KSR | Koster | 149.42 | 318 | eP | PKPbc | 04 08 55.8 | -1.1 |
| KSR | Koster | 149.42 | 318 | P | PKPbc | 04 08 55.8 | -1.1 |
| KLOF | Kloof | 149.56 | 317 | eP | PKPbc | 04 08 55.8 | -1.4 |
| KLOF | Kloof | 149.56 | 317 | P | PKPbc | 04 08 55.8 | -1.4 |
| WDLM | Western Deep L | 149.70 | 317 | eP | PKPdf | 04 08 54.3 | +1.5 |
| PRYS | Parys | 150.17 | 317 | eP | PKPbc | 04 08 56.7 | -2.0 |
| PRYS | Parys | 150.17 | 317 | P | PKPbc | 04 08 56.7 | -2.0 |
| BFSD | Buffelsfontein | 150.36 | 317 | eP | PKPbc | 04 08 58.2 | -0.9 |
| BFSD | Buffelsfontein | 150.36 | 317 | P | PKPbc | 04 08 58.2 | -0.9 |
| SWZ | Schweizer | 151.24 | 320 | eP | PKPbc | 04 08 59.7 | -1.5 |
| SWZ | Schweizer | 151.24 | 320 | P | PKPbc | 04 08 59.7 | -1.5 |
| SEK | Senekal | 151.26 | 315 | eP | PKPbc | 04 09 00.9 | -0.3 |
| KSD | Kokstad | 152.30 | 309 | eP | PKPbc | 04 09 03.0 | -0.5 |
| BOSA | Boshof | 152.54 | 318 | eP | PKPbc | 04 09 04.0 | 0.0 |
| BOSA | Boshof | 152.54 | 318 | PKP | PKPdf | 04 08 57.4 | +0.3 |
| | comp=Z,13nm,0.9s,baz=57,slow=1.7,SNR=14 | | | | | | |
| BOSA | | | | PKPbc | PKPbc | 04 09 03.7 | -0.3 |
| | comp=Z,85nm,0.7s,baz=18,slow=2.4,SNR=40 | | | | | | |
| BOSA | | | | PKPab | PKPab | 04 09 14.7 | +0.2 |
| | comp=Z,210nm,0.9s,baz=20,slow=3.3,SNR=25 | | | | | | |
| BOSA | Boshof | 152.54 | 318 | PKIKP | PKPdf | 04 08 57.4 | +0.3 |
| BOSA | | | | | | 04 09 03.7 | |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,85nm,0.7s | | | | | | |
| UPI | Upington | 153.86 | 326 | eP | PKPdf | 04 08 55.6 | -3.4 |
| UPI | Upington | 153.86 | 326 | P | PKPdf | 04 08 55.6 | -3.4 |
| HVD | Gariep Dam | 154.16 | 316 | eP | PKPbc | 04 09 09.0 | +1.4 |
| SYO | Syowa Base | 155.87 | 210 | ⇑ePKPdf | PKPdf | 04 09 00.6 | +0.4 |
| GRM | Grahamstown | 155.98 | 310 | eP | PKPdf | 04 09 13.6 | +12 |
| KOMG | Komaggas | 156.42 | 332 | eP | PKPdf | 04 09 01.3 | -0.9 |
| KOMG | Komaggas | 156.42 | 332 | P | PKPdf | 04 09 01.3 | -0.9 |
| CVNA | Calvinia | 157.23 | 325 | eP | PKPab | 04 09 22.3 | -12 |
| VNA3 | Neumayer Olymp | 159.05 | 167 | P | PKPdf | 04 09 02.9 | -1.4 |
| SNAA | Sanae | 159.39 | 173 | P | PKPdf | 04 09 02.0 | -2.7 |
| SNAA | Sanae | 159.39 | 173 | ePKIKP | PKPdf | 04 09 01.7 | -3.0 |
| SNAA | | | | e | | 04 09 41.2 | |
| SNAA | Sanae | 159.39 | 173 | ePKPdf | PKPdf | 04 09 01.7 | -3.0 |
| SNAA | | | | ePKPab | PKPab | 04 09 41.2 | -1.5 |
| VNA2 | Neumayer--Watz | 159.65 | 168 | P | PKPdf | 04 09 06.0 | +1.1 |
| | baz=278,slow=1.8 | | | | | | |
| VNA1 | Neumayer--Stat | 159.79 | 167 | P | PKPdf | 04 09 06.2 | +1.2 |

*ISCJB **08** 03:53:48.4±0.5, 6.°61S±0.°04×129.°87E±0.°05, h200$^{km}$, mb4.1/1, Error ellipse: s-maj=6.8km s-min=6.0km az=167.7*

*IDC **08** 03:53:49.2±4.6, 6.°76S×129.°89E, h188$^{km}$±44$^{km}$, mb4.0/1, mb1 4.6/4, mb1mx3.7/27, mbtmp5.0/4, Error ellipse: s-maj=42.5km s-min=20.9km az=59.0*

*DJA **08** 03:53:50.3±0.3, 7°S±2°×13°0E±°, h169$^{km}$±6$^{km}$, M5.2/8, mB5.5/3, mb4.7/8, MLv5.4/4, Mw(mB)4.9/3*

*AUST **08** 03:53:52.4, 6.°98S×129.°54E, h200$^{km}$*

**ISC 08 03:53:49.8**±0.8**, 6.°65S**±0.°06×**129.°89E**±0.°06**, h200**$^{km}$**, n22,** σ**1.$^s$80**/24**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SAUI | Saumlaki | 1.93 | 133 | P | Pn | 03 54 27.0 | -0.6 |
| SAUI | | | | S | Sn | 03 54 53.9 | -3.1 |
| BNDI | Bandanaira | 2.12 | 1 | P | Pn | 03 54 27.8 | -1.8 |
| BNDI | | | | S | Sn | 03 54 57.5 | -3.1 |
| FAKI | Fak Fak | 4.39 | 33 | P | Pn | 03 54 53.0 | -3.6 |
| FAKI | | | | S | Sn | 03 55 39.6 | -10 |
| SANI | Sanana | 6.00 | 319 | P | Pn | 03 55 17.3 | +0.2 |
| MTN | Manton Dam | 6.27 | 169 | P | Pn | 03 55 19.6 | -1.0 |
| | baz=6.1,SNR=23 | | | | | | |
| SOEI | Soe | 6.36 | 241 | P | Pn | 03 55 22.2 | +0.3 |
| | 277nm,0.8s,3µm0.9nm | | | | | | |
| SOEI | | | | S | Sn | 03 56 32.2 | -2.6 |
| | 277nm,0.8s,3µm0.9nm | | | | | | |
| KDU | Kakadu | 6.52 | 157 | P | Pn | 03 55 22.6 | -1.2 |
| | baz=6.4,SNR=49 | | | | | | |
| BATI | Baumata | 7.10 | 240 | P | Pn | 03 55 30.0 | -1.4 |
| | 74nm,0.3s,baz=115,slow=0.9,SNR=40 | | | | | | |
| BATI | | | | S | Sn | 03 56 48.2 | -3.7 |
| | 54nm,0.3s,baz=151,slow=21,SNR=11 | | | | | | |
| MMRI | Maumere | 7.83 | 255 | P | Pn | 03 55 42.6 | +1.7 |
| | 62nm,1.0s,0.5nm | | | | | | |
| KNRA | Kununurra | 9.04 | 187 | P | Pn | 03 55 55.7 | -0.9 |
| | baz=8.7,SNR=8.7 | | | | | | |
| FITZ | Fitzroy Crossi | 12.11 | 200 | P | Pn | 03 56 36.7 | +0.6 |
| | baz=12,SNR=8.3 | | | | | | |
| WRA | Warramunga Arr | 13.90 | 162 | P | Pn | 03 56 57.5 | -1.1 |
| | 2.3nm,0.3s,baz=347,slow=12,SNR=15 | | | | | | |
| WRA | | | | S | S | 03 59 23.0 | -11 |
| | 4.4nm,0.3s,baz=359,slow=19,SNR=8.1 | | | | | | |
| PALU | Palau | 14.64 | 18 | P | P | 03 57 15.1 | +6.3 |
| | baz=15,SNR=5.3 | | | | | | |
| COEN | Coen | 14.95 | 120 | P | P | 03 57 13.3 | +1.1 |
| | baz=15,SNR=13 | | | | | | |
| QIS | Mount Isa | 16.73 | 147 | P | Pn | 03 57 33.6 | +0.6 |
| | baz=17,SNR=25 | | | | | | |
| ASAR | Alice Springs | 17.35 | 168 | P | P | 03 57 39.1 | +0.4 |
| | 7.7nm,0.3s,baz=347,slow=11,SNR=90 | | | | | | |
| ASAR | | | | S | S | 04 00 47.3 | -1.6 |
| | 0.9nm,0.3s,baz=346,slow=24,SNR=8.5 | | | | | | |
| WRKA | Warakurna | 18.34 | 185 | P | Pn | 03 57 51.5 | -0.4 |
| | baz=18,SNR=18 | | | | | | |
| QLP | Quilpie | 24.08 | 147 | P | P | 03 58 48.8 | +1.8 |
| | baz=24,SNR=5.6 | | | | | | |
| BBOO | Buckleboo | 26.65 | 168 | P | P | 03 59 11.5 | +1.3 |
| | baz=26,SNR=7.0 | | | | | | |
| EIDS | Eidsvold | 27.51 | 135 | P | P | 03 59 26.4 | +8.4 |
| | baz=28,SNR=7.2 | | | | | | |
| CMSA | Cobar Meteorol | 28.84 | 151 | P | P | 03 59 31.5 | +2.0 |
| | baz=29,SNR=16 | | | | | | |
| MKAR | Makanchi Array | 67.87 | 327 | P | P | 04 04 28.1 | +1.4 |
| | 2.6nm,0.5s,baz=116,slow=8.1,SNR=6.0 | | | | | | |

*ISCJB **08** 03:56:50.9±0.5, 51.°04N±0.°05×175.°02W±0.°05, h10$^{km}$, mb4.5/16, Error ellipse: s-maj=7.1km s-min=4.1km az=165.7*

*IDC **08** 03:56:51.1±1.4, 51.°52N×175.°16W, h0$^{km}$, mb4.4/10, mb1 4.4/13, mb1mx4.2/50, mbtmp4.3/13, ML3.8/3, Error ellipse: s-maj=42.1km s-min=18.6km az=147.0*

*NEIC **08** 03:56:54.0, 51.°20N×175.°16W, h6$^{km}$, mb4.7/11, After AEIC.*

**ISC 08 03:56:52.9**±0.8**, 51.°20N**±0.°08×**175.°16W**±0.°04**, h10**$^{km}$**, n65,** σ**1.$^s$16**/65**, mb4.7**/16**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 1.01 | 327 | P | Pg | 03 57 13.3 | +0.9 |
| ETKA | Kagalaska Isla | 1.02 | 311 | P | Pg | 03 57 13.4 | +0.9 |
| GSCK | Great Sitkin C | 1.03 | 323 | P | Pg | 03 57 13.5 | +0.9 |
| GSTD | Great Sitkin T | 1.06 | 325 | P | Pg | 03 57 13.9 | +0.7 |
| GSTR | Great Sitkin T | 1.06 | 328 | ePn | Pg | 03 57 13.9 | +0.8 |
| ATKA | Atka Island | 1.17 | 30 | P | Pb | 03 57 14.8 | -0.4 |
| ATKA | | | | S | Sb | 03 57 30.9 | +0.6 |
| ADAG | Mount Adagdak | 1.19 | 312 | P | Pn | 03 57 16.8 | +1.1 |
| KOFP | Korovin Flat P | 1.26 | 31 | P | Pn | 03 57 17.6 | +0.9 |
| KOKL | Mount Kliuchef | 1.27 | 27 | P | Pn | 03 57 17.6 | +0.8 |
| KOWE | Korovin West | 1.30 | 25 | P | Pn | 03 57 18.1 | +1.0 |
| KIRH | Kanaga Island | 1.40 | 301 | P | Pn | 03 57 19.1 | +0.7 |
| KIKV | Kanaga Island | 1.43 | 299 | P | Pn | 03 57 19.2 | +0.4 |
| KIKV | | | | S | Sn | 03 57 38.1 | +0.4 |
| KICM | Kanaga Island | 1.46 | 300 | P | Pn | 03 57 20.1 | +0.9 |
| TAPA | Tanaga Point A | 1.77 | 291 | P | Pn | 03 57 24.5 | +1.0 |
| TAFL | Tanaga Flats | 1.80 | 289 | P | Pn | 03 57 25.1 | +1.2 |
| TAFP | Tanaga Falls P | 1.90 | 293 | P | Pn | 03 57 26.5 | +1.2 |
| TAFP | | | | S | Sn | 03 57 50.4 | +1.1 |
| TANO | Tanaga North | 1.98 | 292 | P | Pn | 03 57 28.3 | +1.8 |
| GAEA | Gareloi East | 2.32 | 286 | P | Pn | 03 57 32.8 | +1.7 |
| GALAA | Gareloi Lava P | 2.33 | 285 | P | Pn | 03 57 32.7 | +1.5 |
| GANE | Gareloi Northe | 2.34 | 287 | P | Pn | 03 57 33.1 | +1.7 |
| CERAA | Semis' Rag'd T | 3.30 | 284 | P | Pn | 03 57 45.7 | +1.2 |
| CEAP | Semis' Anvil P | 3.38 | 286 | P | Pn | 03 57 46.8 | +1.1 |
| AMKA | Amchitka | 3.48 | 275 | P | Pn | 03 57 47.9 | +0.8 |
| AMKA | | | | S | Sn | 03 58 31.2 | +2.9 |
| LSSA | Little Sitkin | 4.02 | 283 | P | Pn | 03 57 56.2 | +1.7 |
| NIKH | Nikolski High | 4.28 | 63 | P | Pn | 03 57 59.9 | +2.0 |
| UNV | Unalaska Valle | 5.91 | 60 | P | Pn | 03 58 22.6 | +2.2 |
| KDAK | Kodiak Island | 14.64 | 54 | Pn | Pn | 04 00 17.0 | -2.7 |
| | 0.8nm,0.3s,baz=251,slow=1.0,SNR=8.4 | | | | | | |
| PETK | Petropavlovsk- | 16.73 | 287 | Pn | Pn | 04 00 44.1 | -3.0 |
| | 0.4nm,0.3s,baz=64,slow=13,SNR=3.0 | | | | | | |
| SEW | Seward | 16.93 | 48 | ePn | P | 04 00 52.7 | +1.2 |
| MCK | McKinley | 18.70 | 38 | eP | P | 04 01 10.7 | -0.4 |
| | 152nm,1.7s | | | | | | |
| BILL | Bilibino | 19.18 | 339 | eP | P | 04 01 16.2 | 0.0 |
| | 42nm,1.2s | | | | | | |
| COLA | College | 19.69 | 36 | eP | P | 04 01 22.9 | +1.1 |
| | 16nm,0.8s | | | | | | |
| PAX | Paxson | 19.76 | 42 | eP | P | 04 01 24.4 | +1.7 |
| | 92nm,1.7s | | | | | | |
| ILAR | Eielson Array | 19.99 | 36 | P | P | 04 01 23.8 | -1.4 |
| | 0.2nm,0.3s,baz=231,slow=7.9,SNR=9.3 | | | | | | |
| COLD | Coldfoot | 20.28 | 28 | eP | P | 04 01 29.0 | +0.7 |
| | 45nm,1.3s | | | | | | |
| MAJO | Matsushiro | 36.03 | 264 | eP | P | 04 03 54.9 | +0.7 |
| | 8.7nm,0.8s | | | | | | |
| MJAR | Matsushiro Arr | 36.03 | 264 | P | P | 04 03 53.8 | -0.3 |
| | 3.5nm,0.8s,baz=54,slow=7.8,SNR=5.7 | | | | | | |
| KSRS | Korea Array | 41.93 | 274 | P | P | 04 04 43.6 | +0.2 |
| | 6.1nm,0.9s,baz=53,slow=7.2,SNR=7.9 | | | | | | |
| KSAR | Wonju Array Be | 41.96 | 274 | P | P | 04 04 43.6 | -0.1 |
| JNU | Nakatsue | 42.83 | 266 | P | P | 04 04 52.2 | +1.3 |
| | 12nm,0.8s,baz=46,slow=13,SNR=5.0 | | | | | | |
| ULN | Ulaanbaatar | 48.38 | 298 | eP | P | 04 05 34.6 | -0.1 |
| | 7.8nm,0.9s | | | | | | |
| SONM | Songino Array | 48.76 | 299 | P | P | 04 05 35.7 | -1.9 |
| | 3.9nm,0.8s,baz=49,slow=9.0,SNR=4.7 | | | | | | |
| SPITS | Spitsbergen Ar | 50.70 | 357 | P | P | 04 05 49.4 | -2.5 |
| | 10nm,0.9s,baz=160,slow=11,SNR=4.1 | | | | | | |
| KURK | Kurchatov | 60.77 | 316 | eP | P | 04 07 04.0 | -0.5 |
| | 4.4nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 61.91 | 311 | P | P | 04 07 09.7 | -2.6 |
| | 5.3nm,0.8s,baz=54,slow=6.2,SNR=6.1 | | | | | | |
| TKM2 | Tokmak 2 | 67.97 | 312 | eP | P | 04 07 52.1 | +0.1 |
| | 2.3nm,0.5s | | | | | | |
| NB2 | NORSAR Subarra | 68.00 | 357 | P | P | 04 07 50.3 | -1.4 |
| | comp=Z,1.4nm,0.9s,baz=5.3,slow=6.2 | | | | | | |
| NOA | NORSAR Array B | 68.00 | 357 | P | P | 04 07 48.6 | -3.1 |
| | comp=Z,3.9nm,1.0s,baz=2.6,slow=6.2,SNR=4.5 | | | | | | |
| AAK | Ala-Archa | 68.71 | 312 | eP | P | 04 07 56.3 | -0.3 |
| | comp=Z,1.7nm,0.4s | | | | | | |
| EKS2 | Erkin-Say | 69.02 | 313 | eP | P | 04 07 58.8 | +0.3 |
| | comp=Z,2.9nm,0.5s | | | | | | |
| TAPN | Taplejung | 73.40 | 293 | eP | P | 04 08 25.9 | +0.5 |
| | comp=Z,86nm,1.0s | | | | | | |
| ODAN | Odare | 73.95 | 293 | eP | P | 04 08 29.0 | +0.4 |
| | comp=Z,21nm,0.8s | | | | | | |
| GUN | Gumba | 74.03 | 295 | eP | P | 04 08 29.7 | +0.5 |
| | comp=Z,99nm,0.9s | | | | | | |
| RAMN | Ramite | 74.34 | 293 | eP | P | 04 08 31.2 | +0.3 |
| | comp=Z,68nm,0.8s | | | | | | |
| KKN | Kakani | 74.46 | 295 | eP | P | 04 08 31.9 | +0.3 |
| | comp=Z,43nm,0.9s | | | | | | |
| PKI | Pulchoki | 74.56 | 295 | eP | P | 04 08 32.4 | +0.2 |
| | comp=Z,58nm,1.0s | | | | | | |
| PKIN | Phulchoki | 74.56 | 295 | eP | P | 04 08 32.5 | +0.3 |
| | comp=Z,35nm,1.1s | | | | | | |
| GKN | Gorkha | 74.67 | 296 | eP | P | 04 08 32.9 | +0.2 |
| | comp=Z,61nm,1.0s | | | | | | |
| DMN | Daman | 74.70 | 295 | eP | P | 04 08 33.5 | +0.5 |
| | comp=Z,23nm,0.7s | | | | | | |
| DANN | Dangsing | 74.90 | 296 | eP | P | 04 08 34.8 | +0.6 |
| | comp=Z,5.5nm,0.6s | | | | | | |
| KOLN | Koldanda | 75.43 | 296 | eP | P | 04 08 37.3 | +0.2 |
| | comp=Z,23nm,0.9s | | | | | | |
| GEYT | Alibeck | 79.73 | 320 | P | P | 04 08 59.5 | -1.3 |
| | comp=Z,6.7nm,0.8s,baz=335,slow=2.1,SNR=4.8 | | | | | | |
| GERES | GERESS Array B | 80.05 | 354 | P | P | 04 09 00.8 | -1.6 |
| | comp=Z,1.5nm,0.8s,baz=347,slow=4.2,SNR=3.9 | | | | | | |
| WRA | Warramunga Arr | 83.52 | 227 | P | P | 04 09 20.4 | -0.4 |
| | comp=Z,0.4nm,0.6s,baz=52,slow=3.3,SNR=2.3 | | | | | | |
| BOSA | Boshof | 152.72 | 318 | PKPbc | PKPbc | 04 16 51.0 | +1.3 |
| | comp=Z,3.8nm,0.7s,baz=185,slow=1.5,SNR=4.5 | | | | | | |

*IDC **08** 03:58:03.0±1.7, 51.°25N×175.°05W, h0$^{km}$, mb4.2/4, mb1 4.3/6, mb1mx3.9/50, mbtmp4.2/6, ML4.3/1, Error ellipse: s-maj=51.0km s-min=23.3km az=178.0*

*ISCJB **08** 03:58:05.5±0.7, 51.°00N±0.°06×174.°99W±0.°07, h33$^{km}$, mb4.4/11, Error ellipse: s-maj=9.7km s-min=5.3km az=156.7*

*NEIC **08** 03:58:08.6, 51.°26N×175.°16W, h22$^{km}$, mb4.5/9, After AEIC.*

**ISC 08 03:58:08.5**±1.0**, 51.°2N**±0.°1×**175.°09W**±0.°06**, h35**$^{km}$**, n30,** σ**0.$^s$78**/34**, mb4.5**/11**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 1.05 | 325 | P | Pn | 03 58 25.9 | -0.8 |
| GSCK | Great Sitkin C | 1.06 | 321 | P | Pn | 03 58 26.3 | -0.6 |
| ETKA | Kagalaska Isla | 1.06 | 310 | P | Pn | 03 58 26.2 | -0.7 |
| GSTD | Great Sitkin T | 1.09 | 323 | P | Pn | 03 58 26.7 | -0.7 |
| ATKA | Atka Island | 1.16 | 28 | P | Pn | 03 58 28.0 | -0.2 |
| ATKA | | | | S | Sn | 03 58 43.2 | +0.5 |
| ADAG | Mount Adagdak | 1.23 | 311 | P | Pn | 03 58 29.1 | -0.2 |
| KOWE | Korovin West | 1.29 | 24 | P | Pn | 03 58 30.6 | +0.5 |
| KOWE | | | | S | Sn | 03 58 47.7 | +1.6 |
| KOSE | Korovin Southe | 1.33 | 29 | P | Pn | 03 58 30.6 | +0.1 |
| KOSE | | | | S | Sn | 03 58 49.4 | +2.4 |
| KIRH | Kanaga Island | 1.44 | 300 | P | Pn | 03 58 32.0 | -0.1 |
| KIKV | Kanaga Island | 1.47 | 299 | P | Pn | 03 58 32.1 | -0.4 |
| TAPA | Tanaga Point A | 1.81 | 291 | P | Pn | 03 58 37.0 | -0.3 |
| TAFP | Tanaga Falls P | 1.94 | 293 | P | Pn | 03 58 39.4 | +0.4 |
| TAFP | | | | S | Sn | 03 59 03.0 | +0.9 |
| TANO | Tanaga North | 2.03 | 292 | P | Pn | 03 58 41.0 | +0.8 |
| GANE | Gareloi Northe | 2.39 | 287 | P | Pn | 03 58 46.5 | +1.3 |
| KDAK | Kodiak Island | 14.61 | 54 | Pn | Pn | 04 01 31.8 | -0.5 |
| | baz=217,slow=5.1,SNR=2.1 | | | | | | |
| MCK | McKinley | 18.68 | 38 | eP | Pn | 04 02 24.1 | +0.3 |
| | 45nm,1.3s | | | | | | |
| PAX | Paxson | 19.74 | 42 | eP | Pn | 04 02 36.7 | +0.1 |
| | 8.1nm,0.9s | | | | | | |
| ILAR | Eielson Array | 19.97 | 36 | P | P | 04 02 36.8 | -0.7 |
| | 0.4nm,0.3s,baz=222,slow=9.7,SNR=4.2 | | | | | | |
| MAJO | Matsushiro | 36.07 | 265 | eP | P | 04 05 07.3 | +0.7 |
| | 5.7nm,0.7s | | | | | | |
| ULN | Ulaanbaatar | 48.42 | 298 | eP | P | 04 06 46.4 | -0.7 |
| | 3.2nm,0.6s | | | | | | |
| SONM | Songino Array | 48.80 | 299 | P | P | 04 06 50.2 | +0.2 |
| | 1.8nm,0.7s,baz=42,slow=9.9,SNR=3.4 | | | | | | |
| SPITS | Spitsbergen Ar | 50.71 | 357 | P | P | 04 07 02.9 | -1.0 |
| | 6.3nm,0.8s,baz=35,slow=7.8,SNR=5.1 | | | | | | |
| TXAR | Lajitas Array | 56.37 | 84 | P | P | 04 07 45.8 | -0.4 |
| | 0.7nm,0.8s,baz=298,slow=6.0,SNR=2.6 | | | | | | |
| KURK | Kurchatov | 60.81 | 316 | eP | P | 04 08 16.2 | -0.4 |
| | 6.8nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 61.95 | 311 | P | P | 04 08 23.8 | -0.8 |
| | 1.4nm,0.3s,baz=47,slow=6.4,SNR=12 | | | | | | |
| TKM2 | Tokmak 2 | 68.01 | 312 | eP | P | 04 09 04.6 | +0.4 |
| | 1.5nm,0.4s | | | | | | |
| AAK | Ala-Archa | 68.75 | 312 | eP | P | 04 09 09.3 | +0.6 |
| | 2.2nm,0.4s | | | | | | |
| EKS2 | Erkin-Say | 69.06 | 313 | eP | P | 04 09 10.4 | -0.2 |
| | 1.9nm,0.5s | | | | | | |
| ABKAR | Akbulak array | 69.46 | 325 | eP | P | 04 09 13.1 | +0.3 |
| | 0.9nm,0.5s | | | | | | |
| BOSA | Boshof | 152.75 | 318 | PKPbc | PKPbc | 04 18 01.6 | +0.1 |
| | 5.5nm,0.9s,baz=19,slow=2.1,SNR=6.5 | | | | | | |

*ISCJB **08** 04:00:47.3±0.5, 51.°26N±0.°06×175.°21W±0.°05, h35$^{km}$, mb4.2/19, Error ellipse: s-maj=8.4km s-min=3.7km az=165.3*

*NEIC **08** 04:00:48.6, 51.°33N×175.°29W, h26$^{km}$, mb4.4/17, ML4.0(AEIC), After AEIC.*

*IDC **08** 04:00:54.3±7.9, 52.°13N×176.°16W, h33$^{km}$±62$^{km}$, mb3.8/10, mb1 4.1/12, mb1mx3.8/51, mbtmp4.0/12, ML4.4/2, Error ellipse: s-maj=33.0km s-min=16.6km az=177.0*

**ISC 08 04:00:49.3**±0.8**, 51.°38N**±0.°10×**175.°29W**±0.°04**, h35**$^{km}$**, n64,** σ**0.$^s$84**/64**, mb4.3**/19**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.82 | 325 | P | Pn | 04 01 04.4 | 0.0 |
| GSCK | Great Sitkin C | 0.84 | 320 | P | Pn | 04 01 04.5 | -0.2 |
| ETKA | Kagalaska Isla | 0.85 | 305 | P | Pn | 04 01 04.5 | -0.3 |
| GSTD | Great Sitkin T | 0.86 | 322 | P | Pn | 04 01 05.1 | +0.1 |
| GSTR | Great Sitkin T | 0.86 | 327 | ePn | Pn | 04 01 05.1 | +0.1 |
| ADAG | Mount Adagdak | 1.02 | 307 | P | Pn | 04 01 07.6 | +0.5 |
| ATKA | Atka Island | 1.07 | 39 | P | Pn | 04 01 07.0 | -0.8 |
| ATKA | | | | S | Sn | 04 01 21.1 | -0.2 |
| KOKL | Mount Kliuchef | 1.16 | 35 | P | Pn | 04 01 09.6 | +0.5 |
| KOFP | Korovin Flat P | 1.17 | 39 | P | Pn | 04 01 09.7 | +0.5 |
| KOWE | Korovin West | 1.18 | 33 | P | Pn | 04 01 10.1 | +0.8 |
| KOSE | Korovin Southe | 1.24 | 38 | P | Pn | 04 01 10.8 | +0.7 |
| KOSE | | | | S | Sn | 04 01 27.4 | +1.8 |
| KIRH | Kanaga Island | 1.24 | 296 | P | Pn | 04 01 10.2 | 0.0 |
| KIRH | | | | S | Sn | 04 01 26.4 | +0.7 |
| KIKV | Kanaga Island | 1.28 | 294 | P | Pn | 04 01 10.4 | -0.3 |
| KICM | Kanaga Island | 1.31 | 295 | P | Pn | 04 01 11.2 | +0.1 |
| TAPA | Tanaga Point A | 1.64 | 287 | P | Pn | 04 01 15.9 | +0.3 |
| TAFL | Tanaga Flats | 1.67 | 284 | P | Pn | 04 01 16.3 | +0.2 |
| TAFP | Tanaga Falls P | 1.76 | 288 | P | Pn | 04 01 17.6 | +0.3 |
| TAFP | | | | S | Sn | 04 01 39.5 | +1.0 |
| GALAA | Gareloi Lava P | 2.21 | 281 | P | Pn | 04 01 24.4 | +0.9 |
| CEAP | Semis' Anvil P | 3.26 | 283 | P | Pn | 04 01 38.5 | +0.7 |
| AMKA | Amchitka | 3.39 | 272 | ePn | Pn | 04 01 39.6 | 0.0 |
| LSPA | Little Sitkin | 3.87 | 281 | P | Pn | 04 01 46.4 | +0.2 |
| LSSE | Little Sitkin | 3.87 | 281 | P | Pn | 04 01 46.6 | +0.4 |
| NIKH | Nikolski High | 4.27 | 66 | P | Pn | 04 01 51.9 | +0.1 |
| UNV | Unalaska Valle | 5.90 | 62 | P | Pn | 04 02 15.0 | +1.0 |
| SPIA | Saint Paul Isl | 6.52 | 25 | P | Pn | 04 02 23.4 | +0.8 |
| KDAK | Kodiak Island | 14.60 | 55 | Pn | P | 04 04 18.5 | -0.5 |
| | 3.5nm,0.3s,baz=244,slow=5.3,SNR=8.2 | | | | | | |
| PETK | Petropavlovsk- | 16.60 | 287 | Pn | P | 04 04 41.1 | -0.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 0.2nm,0.3s,baz=90,slow=19,SNR=3.5 | | | | | | |
| TRF | Thorofare Moun | 17.94 | 38 | ePn | P | 04 04 59.5 | +3.4 |
| | 91nm,1.4s | | | | | | |
| BPAW | Bear Paw Mtn. | 18.03 | 36 | ePn | P | 04 04 58.0 | +1.0 |
| | 8.7nm,1.5s | | | | | | |
| MCK | McKinley | 18.61 | 38 | eP | P | 04 05 02.4 | -0.9 |
| | 301nm,2.0s | | | | | | |
| BILL | Bilibino | 18.98 | 339 | eP | Pn | 04 05 08.3 | +0.1 |
| | 20nm,0.9s | | | | | | |
| COLA | College | 19.59 | 36 | eP | Pn | 04 05 14.9 | -0.6 |
| | 13nm,1.0s | | | | | | |
| PAX | Paxson | 19.68 | 42 | eP | P | 04 05 13.1 | -2.1 |
| | 6.4nm,1.2s | | | | | | |
| ILAR | Eielson Array | 19.90 | 37 | P | Pn | 04 05 18.1 | -1.1 |
| | 0.4nm,0.3s,baz=29,slow=3.3,SNR=4.2 | | | | | | |
| COLD | Coldfoot | 20.16 | 29 | eP | Pn | 04 05 21.8 | -0.5 |
| | 13nm,1.1s | | | | | | |
| SEY | Seymchan | 20.75 | 316 | P | P | 04 05 25.6 | -1.0 |
| | 0.2nm,0.3s,baz=186,slow=18,SNR=2.0 | | | | | | |
| MJAR | Matsushiro Arr | 35.97 | 264 | P | P | 04 07 47.2 | +0.7 |
| | 0.7nm,0.3s,baz=49,slow=7.2,SNR=4.7 | | | | | | |
| MAJO | Matsushiro | 35.97 | 264 | eP | P | 04 07 46.6 | +0.1 |
| | 5.9nm,0.8s | | | | | | |
| NEW | Newport | 36.81 | 71 | P | P | 04 08 02.7 | +9.1 |
| | 2.1nm,0.7s,baz=304,slow=14,SNR=3.0 | | | | | | |
| NEW | Newport | 36.81 | 71 | eP | P | 04 07 54.3 | +0.7 |
| | 8.5nm,1.1s | | | | | | |
| NVAR | Mina Array Bea | 41.36 | 85 | P | P | 04 08 40.9 | +8.9 |
| | 0.8nm,0.9s,baz=344,slow=9.4,SNR=3.3 | | | | | | |
| KSRS | Korea Array | 41.84 | 273 | P | P | 04 08 36.9 | +1.3 |
| | 2.3nm,0.8s,baz=63,slow=7.9,SNR=5.4 | | | | | | |
| KSAR | Wonju Array Be | 41.87 | 273 | P | P | 04 08 36.9 | +1.1 |
| HWUT | Hardware Ranch | 43.65 | 77 | eP | P | 04 08 51.4 | +0.9 |
| | 4.7nm,1.1s | | | | | | |
| BW06 | Boulder Array | 44.20 | 74 | eP | P | 04 08 51.3 | -3.6 |
| | 2.1nm,0.6s | | | | | | |
| RSSD | Black Hills | 46.71 | 70 | eP | P | 04 09 13.7 | -1.1 |
| | 1.7nm,0.5s | | | | | | |
| SONM | Songino Array | 48.60 | 298 | P | P | 04 09 29.6 | +0.3 |
| | 1.3nm,0.9s,baz=56,slow=11,SNR=4.0 | | | | | | |
| SONM | | | | PcP | PcP | 04 10 54.0 | -0.4 |
| | 1.0nm,0.9s,baz=38,slow=5.4,SNR=3.1 | | | | | | |
| SPITS | Spitsbergen Ar | 50.51 | 357 | P | P | 04 09 42.4 | -0.9 |
| | 1.7nm,0.5s,baz=91,slow=7.2,SNR=4.0 | | | | | | |
| ZALV | Zalesovo Beam | 55.61 | 315 | PcP | PcP | 04 11 19.1 | -1.3 |
| | 1.3nm,0.5s,baz=30,slow=6.7,SNR=4.0 | | | | | | |
| TXAR | Lajitas Array | 56.47 | 84 | P | P | 04 10 36.0 | +8.2 |
| | 0.9nm,0.8s,baz=298,slow=4.7,SNR=3.8 | | | | | | |
| ARCES | ARCESS Array B | 58.44 | 352 | P | P | 04 10 41.1 | +0.2 |
| | 7.0nm,1.1s,baz=21,slow=7.9,SNR=2.6 | | | | | | |
| KURK | Kurchatov | 60.59 | 315 | eP | P | 04 10 54.8 | -1.1 |
| | 8.5nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 61.74 | 310 | P | P | 04 11 03.0 | -0.8 |
| | 0.9nm,0.4s,baz=44,slow=7.7,SNR=9.2 | | | | | | |
| BRVK | Borovoye | 62.30 | 322 | eP | P | 04 11 07.7 | +0.2 |
| | 1.7nm,0.3s | | | | | | |
| TKM2 | Tokmak 2 | 67.79 | 311 | eP | P | 04 11 43.6 | 0.0 |
| | 2.0nm,0.7s | | | | | | |
| NOA | NORSAR Array B | 67.81 | 357 | P | P | 04 11 42.9 | -0.3 |
| | 1.2nm,0.9s,baz=16,slow=6.6,SNR=2.3 | | | | | | |
| AAK | Ala-Archa | 68.53 | 312 | eP | P | 04 11 48.6 | +0.4 |
| | 2.0nm,0.5s | | | | | | |
| EKS2 | Erkin-Say | 68.84 | 312 | eP | P | 04 11 50.3 | +0.2 |
| | 2.5nm,0.7s | | | | | | |
| TAPN | Taplejung | 73.25 | 293 | eP | P | 04 12 17.9 | +0.7 |
| | 24nm,1.0s | | | | | | |
| GUN | Gumba | 73.88 | 294 | eP | P | 04 12 21.2 | +0.2 |
| | 14nm,0.4s | | | | | | |
| RAMN | Ramite | 74.20 | 293 | eP | P | 04 12 23.1 | +0.4 |
| | 48nm,0.9s | | | | | | |
| PKI | Pulchoki | 74.41 | 295 | eP | P | 04 12 24.3 | +0.3 |
| PKIN | Phulchoki | 74.41 | 295 | eP | P | 04 12 24.1 | +0.1 |
| KOLN | Koldanda | 75.28 | 296 | eP | P | 04 12 29.2 | +0.3 |
| | 6.6nm,0.7s | | | | | | |

*IDC **08** 04:05:10.5±0.8, 51.°83N×175.°43W, h0km, mb4.1/20, mb1 4.2/22, mb1mx4.0/56, mbtmp4.1/22, ML4.1/2, Error ellipse: s-maj=25.8km s-min=12.6km az=166.0*
*ISCJB **08** 04:05:11.7±0.4, 51.°18N±0.°05×175.°08W±0.°04, h35km, mb4.2/33, Error ellipse: s-maj=7.7km s-min=3.4km az=170.7*
*NEIC **08** 04:05:12.3, 51.°20N×175.°15W, h26km, mb4.3/17, ML4.0(AEIC), After AEIC.*
**ISC 08 04:05:13.3**±0.7, **51.°27N**±0.°09×**175.°15W**±0.°04, **h35km, n88,** σ**1.s07**/82, **mb4.2**/33, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.96 | 324 | P | Pn | 04 05 30.1 | -0.2 |
| GSCK | Great Sitkin C | 0.97 | 320 | P | Pn | 04 05 30.3 | -0.2 |
| ETKA | Kagalaska Isla | 0.98 | 307 | P | Pn | 04 05 30.3 | -0.3 |
| GSTR | Great Sitkin T | 1.00 | 326 | ePn | Pn | 04 05 30.7 | -0.2 |
| GSTD | Great Sitkin T | 1.00 | 322 | P | Pn | 04 05 30.8 | -0.2 |
| ATKA | Atka Island | 1.10 | 32 | P | Pn | 04 05 31.8 | -0.5 |
| ATKA | | | | S | Sn | 04 05 47.4 | +1.2 |
| ADAG | Mount Adagdak | 1.15 | 309 | P | Pn | 04 05 33.6 | +0.7 |
| KOFP | Korovin Flat P | 1.20 | 33 | P | Pn | 04 05 34.4 | +0.8 |
| KOKL | Mount Kliuchef | 1.21 | 29 | P | Pn | 04 05 34.4 | +0.7 |
| KOWE | Korovin West | 1.23 | 27 | P | Pn | 04 05 35.0 | +1.0 |
| KIRH | Kanaga Island | 1.37 | 298 | P | Pn | 04 05 36.1 | +0.2 |
| KIKV | Kanaga Island | 1.40 | 296 | P | Pn | 04 05 36.3 | -0.1 |
| KICM | Kanaga Island | 1.43 | 298 | P | Pn | 04 05 36.9 | +0.1 |
| KICM | | | | S | Sn | 04 05 56.6 | +2.2 |
| TAPA | Tanaga Point A | 1.75 | 289 | P | Pn | 04 05 41.4 | +0.2 |
| TAFL | Tanaga Flats | 1.79 | 287 | P | Pn | 04 05 41.8 | +0.1 |
| TAFP | Tanaga Falls P | 1.88 | 291 | P | Pn | 04 05 43.4 | +0.5 |
| TAFP | | | | S | Sn | 04 06 07.2 | +1.8 |
| GAEA | Gareloi East | 2.31 | 284 | P | Pn | 04 05 49.5 | +0.7 |
| GALAA | Gareloi Lava P | 2.32 | 284 | P | Pn | 04 05 49.7 | +0.7 |
| GANE | Gareloi Northe | 2.33 | 285 | P | Pn | 04 05 49.8 | +0.6 |
| CERAA | Semis' Rag'd T | 3.29 | 283 | P | Pn | 04 06 02.5 | +0.2 |
| CESW | Semis' Southwe | 3.36 | 283 | P | Pn | 04 06 03.3 | +0.1 |
| CEAP | Semis' Anvil P | 3.37 | 285 | P | Pn | 04 06 03.9 | +0.5 |
| AMKA | Amchitka | 3.48 | 274 | P | Pn | 04 06 04.5 | -0.5 |
| AMKA | | | | S | Sn | 04 06 47.8 | +2.8 |
| LSPA | Little Sitkin | 3.97 | 282 | P | Pn | 04 06 12.1 | +0.4 |
| LSNW | Little Sitkin | 4.01 | 283 | P | Pn | 04 06 13.0 | +0.8 |
| NIKH | Nikolski High | 4.24 | 64 | P | Pn | 04 06 16.1 | +0.8 |
| MSW | Makushin Switc | 5.74 | 59 | P | Pn | 04 06 37.3 | +1.3 |
| UNV | Unalaska Valle | 5.87 | 61 | P | Pn | 04 06 39.0 | +1.3 |
| SPIA | Saint Paul Isl | 6.58 | 24 | P | Pn | 04 06 49.9 | +2.5 |
| KDAK | Kodiak Island | 14.59 | 55 | Pn | Pn | 04 08 35.4 | -1.5 |
| | 0.5nm,0.3s,baz=260,slow=12,SNR=6.0 | | | | | | |
| PETK | Petropavlovsk- | 16.72 | 287 | Pn | P | 04 09 05.4 | -1.2 |
| | 1.5nm,0.3s,baz=101,slow=15,SNR=6.7 | | | | | | |
| BPAW | Bear Paw Mtn. | 18.06 | 35 | ePn | P | 04 09 22.1 | +0.8 |
| | 1.4nm,0.8s | | | | | | |
| MCK | McKinley | 18.64 | 38 | eP | Pn | 04 09 27.7 | -0.5 |
| | 9.2nm,0.9s | | | | | | |
| BILL | Bilibino | 19.11 | 339 | eP | Pn | 04 09 33.2 | -0.6 |
| | 11nm,0.7s | | | | | | |
| ILAR | Eielson Array | 19.93 | 37 | P | P | 04 09 39.0 | -2.7 |
| | 0.5nm,0.3s,baz=226,slow=10,SNR=15 | | | | | | |
| COLD | Coldfoot | 20.21 | 28 | eP | Pn | 04 09 45.6 | -1.3 |
| | 6.8nm,0.9s | | | | | | |
| EGAK | Eagle | 22.15 | 39 | eP | P | 04 10 04.5 | -1.1 |
| | 8.8nm,0.8s | | | | | | |
| INK | Inuvik | 26.25 | 34 | P | P | 04 10 44.2 | -0.5 |
| | 2.3nm,0.8s,baz=228,slow=5.2,SNR=5.1 | | | | | | |
| DLBC | Dease Lake | 26.51 | 57 | P | P | 04 10 47.8 | +0.6 |
| | 1.8nm,0.9s,baz=265,slow=7.1,SNR=3.2 | | | | | | |
| ASAJ | Asahikawa | 29.00 | 272 | P | P | 04 11 10.8 | +1.3 |
| | 2.9nm,0.3s,baz=322,slow=18,SNR=3.9 | | | | | | |
| ASAJ | Asahikawa | 29.00 | 272 | eP | P | 04 11 10.4 | +0.9 |
| | 2.8nm,0.7s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.51 | 211 | T | T | 04 48 34.2 | |
| | baz=18,slow=76,SNR=17 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.52 | 211 | T | T | 04 48 35.0 | |
| | baz=18,slow=76,SNR=13 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.53 | 211 | T | T | 04 48 38.3 | |
| | baz=18,slow=76,SNR=16 | | | | | | |
| USRK | Ussuriysk Ar. | 35.58 | 280 | P | P | 04 12 07.0 | 0.0 |
| | 2.0nm,0.6s,baz=60,slow=10,SNR=5.5 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.72 | 210 | T | T | 04 50 54.8 | |
| | baz=17,slow=74,SNR=4.9 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.73 | 210 | T | T | 04 51 07.8 | |
| | baz=17,slow=74,SNR=4.9 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.73 | 210 | T | T | 04 51 17.0 | |
| | baz=17 | | | | | | |
| MJAR | Matsushiro Arr | 36.04 | 264 | P | P | 04 12 11.3 | +0.1 |
| | 1.0nm,0.3s,baz=46,slow=7.5,SNR=4.1 | | | | | | |
| MAJO | Matsushiro | 36.05 | 264 | eP | P | 04 12 11.5 | +0.3 |
| | 4.9nm,0.4s | | | | | | |
| NEW | Newport | 36.76 | 71 | P | P | 04 12 19.7 | +2.5 |
| | 1.0nm,0.4s,baz=302,slow=15,SNR=2.7 | | | | | | |
| WVOR | Wild Horse Val | 38.77 | 80 | eP | P | 04 12 35.2 | +0.9 |
| | 1.5nm,0.6s | | | | | | |
| HLID | Hailey | 40.75 | 76 | eP | P | 04 12 48.0 | -2.8 |
| | 1.0nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 41.28 | 85 | P | P | 04 13 00.1 | +4.7 |
| | 0.5nm,0.9s,baz=295,slow=8.6,SNR=3.0 | | | | | | |
| BOZ | Bozeman (W) | 41.32 | 72 | eP | P | 04 12 56.3 | +0.8 |
| | 1.6nm,0.6s | | | | | | |
| KSRS | Korea Array | 41.93 | 274 | P | P | 04 13 02.4 | +2.0 |
| | 1.9nm,0.8s,baz=68,slow=8.1,SNR=5.3 | | | | | | |
| KSAR | Wonju Array Be | 41.96 | 274 | P | P | 04 13 02.4 | +1.8 |
| JNU | Nakatsue | 42.85 | 266 | P | P | 04 13 07.4 | -0.5 |
| | 12nm,1.0s,baz=61,slow=7.1,SNR=4.1 | | | | | | |
| BW06 | Boulder Array | 44.14 | 74 | eP | P | 04 13 18.6 | +0.1 |
| | 1.8nm,0.6s | | | | | | |
| ULN | Ulaanbaatar | 48.35 | 298 | eP | P | 04 13 50.5 | -0.9 |
| | 2.8nm,0.6s | | | | | | |
| SONM | Songino Array | 48.73 | 299 | P | P | 04 13 54.0 | -0.2 |
| | 1.9nm,0.7s,baz=54,slow=9.6,SNR=7.5 | | | | | | |
| TXAR | Lajitas Array | 56.40 | 84 | P | P | 04 14 53.8 | +2.6 |
| | 0.6nm,0.8s,baz=285,slow=4.8,SNR=3.4 | | | | | | |
| ARCES | ARCESS Array B | 58.56 | 352 | P | P | 04 15 03.7 | -2.0 |
| | 2.9nm,0.8s,baz=3.3,slow=6.3,SNR=3.4 | | | | | | |
| ARCES | | | | PcP | PcP | 04 15 56.0 | +0.3 |
| | 9.0nm,1.0s,baz=33,slow=5.5,SNR=6.6 | | | | | | |
| KURK | Kurchatov | 60.73 | 316 | eP | P | 04 15 20.6 | -0.3 |
| | 8.9nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 61.87 | 310 | P | P | 04 15 28.1 | -0.7 |
| | 1.5nm,0.3s,baz=46,slow=6.5,SNR=22 | | | | | | |
| FINES | FINESS Array B | 66.36 | 349 | P | P | 04 15 56.5 | -1.4 |
| | 1.4nm,0.7s,baz=353,slow=4.3,SNR=2.9 | | | | | | |
| NOA | NORSAR Array B | 67.92 | 357 | P | P | 04 16 06.1 | -1.8 |
| | 0.2nm,0.4s,baz=16,slow=6.5,SNR=4.5 | | | | | | |
| TKM2 | Tokmak 2 | 67.93 | 312 | eP | P | 04 16 08.8 | +0.3 |
| | 2.5nm,0.7s | | | | | | |
| AAK | Ala-Archa | 68.67 | 312 | eP | P | 04 16 13.3 | +0.2 |
| | 2.8nm,0.3s | | | | | | |
| EKS2 | Erkin-Say | 68.98 | 312 | eP | P | 04 16 15.3 | +0.4 |
| | 4.1nm,0.5s | | | | | | |
| LSA | Lhasa | 69.62 | 292 | eP | P | 04 16 20.9 | +1.4 |
| | 12nm,0.9s | | | | | | |
| KKAR | Karatay Array | 70.12 | 315 | eP | P | 04 16 21.4 | -0.4 |
| | 4.1nm,0.5s | | | | | | |
| TAPN | Taplejung | 73.38 | 293 | eP | P | 04 16 42.8 | +0.8 |
| | 32nm,0.8s | | | | | | |
| GUN | Gumba | 74.00 | 295 | eP | P | 04 16 46.6 | +0.9 |
| | 92nm,0.9s | | | | | | |
| RAMN | Ramite | 74.32 | 293 | eP | P | 04 16 48.0 | +0.6 |
| | 45nm,0.7s | | | | | | |
| KKN | Kakani | 74.44 | 295 | eP | P | 04 16 49.0 | +0.9 |
| | 7.2nm,0.2s | | | | | | |
| PKI | Pulchoki | 74.53 | 295 | eP | P | 04 16 49.2 | +0.4 |
| PKIN | Phulchoki | 74.53 | 295 | eP | P | 04 16 49.2 | +0.5 |
| | 17nm,0.9s | | | | | | |
| GKN | Gorkha | 74.64 | 296 | eP | P | 04 16 49.8 | +0.6 |
| | 29nm,0.9s | | | | | | |
| DMN | Daman | 74.67 | 295 | eP | P | 04 16 50.2 | +0.7 |
| | 20nm,0.6s | | | | | | |
| KOLN | Koldanda | 75.41 | 296 | eP | P | 04 16 54.0 | +0.3 |
| | 15nm,0.8s | | | | | | |
| AKASG | Malin Array Be | 76.31 | 344 | P | P | 04 16 57.2 | -1.0 |
| | 0.8nm,0.3s,baz=19,slow=6.5,SNR=2.8 | | | | | | |
| GEYT | Alibeck | 79.68 | 320 | P | P | 04 17 17.9 | +0.8 |
| | 2.6nm,0.4s,baz=359,slow=12,SNR=4.2 | | | | | | |
| GERES | GERESS Array B | 79.97 | 354 | P | P | 04 17 18.7 | +0.1 |
| | 0.8nm,0.7s,baz=30,slow=3.5,SNR=5.0 | | | | | | |
| WRA | Warramunga Arr | 83.57 | 227 | P | P | 04 17 41.3 | +3.6 |
| | 0.4nm,0.8s,baz=28,slow=5.9,SNR=2.6 | | | | | | |
| BRTR | Keskin Array B | 85.95 | 338 | P | P | 04 17 49.8 | 0.0 |
| | 1.0nm,0.8s,baz=7.1,slow=2.4,SNR=4.7 | | | | | | |
| TORD | Torodi Ar. Bea | 115.79 | 3 | PKP | PKPdf | 04 23 51.9 | -0.4 |
| | 1.1nm,1.2s,baz=15,slow=1.9,SNR=3.9 | | | | | | |
| BOSA | Boshof | 152.67 | 318 | PKPbc | PKPbc | 04 25 08.0 | +1.9 |
| | 2.6nm,0.5s,baz=37,slow=3.0,SNR=8.2 | | | | | | |

*ISCJB **08** 04:08:23.3±0.7, 51.°27N±0.°06×175.°25W±0.°05, h35km, mb4.1/11, Error ellipse: s-maj=9.2km s-min=4.1km az=177.5*
*NEIC **08** 04:08:23.8, 51.°29N×175.°28W, h26km, mb4.1/10, ML3.7(AEIC), After AEIC.*
*IDC **08** 04:08:31.4±1.8, 52.°21N×175.°04W, h0km, mb3.9/5, mb1 4.1/7, mb1mx3.7/59, mbtmp3.9/7, ML4.1/2, Error ellipse: s-maj=61.0km s-min=20.4km az=178.0*
**ISC 08 04:08:24.7**±1.0, **51.°3N**±0.°1×**175.°26W**±0.°05, **h35km, n45,** σ**0.s86**/35, **mb4.1**/11, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.86 | 325 | P | Pn | 04 08 39.9 | -0.4 |
| GSCK | Great Sitkin C | 0.88 | 321 | P | Pn | 04 08 40.1 | -0.4 |
| ETKA | Kagalaska Isla | 0.88 | 307 | P | Pn | 04 08 39.9 | -0.7 |
| ETKA | | | | S | Sn | 04 08 51.5 | -0.6 |
| GSTD | Great Sitkin T | 0.90 | 323 | P | Pn | 04 08 41.1 | +0.2 |
| GSTD | | | | S | Sn | 04 08 53.4 | +0.6 |
| GSTR | Great Sitkin T | 0.90 | 327 | ePn | Pn | 04 08 40.6 | -0.2 |
| ADAG | Mount Adagdak | 1.05 | 308 | P | Pn | 04 08 42.7 | -0.2 |
| ATKA | Atka Island | 1.09 | 37 | P | Pn | 04 08 42.9 | -0.5 |
| ATKA | | | | S | Sn | 04 08 58.1 | +1.0 |
| KOKL | Mount Kliuchef | 1.19 | 33 | P | Pn | 04 08 45.3 | +0.5 |
| KOWE | Korovin West | 1.20 | 31 | P | Pn | 04 08 45.8 | +0.8 |
| KIRH | Kanaga Island | 1.27 | 297 | P | Pn | 04 08 46.1 | +0.2 |
| KIRH | | | | S | Sn | 04 09 02.2 | +0.5 |
| KIKV | Kanaga Island | 1.31 | 295 | P | Pn | 04 08 46.2 | -0.2 |
| KICM | Kanaga Island | 1.34 | 296 | P | Pn | 04 08 46.3 | -0.5 |
| TAFP | Tanaga Falls P | 1.79 | 289 | P | Pn | 04 08 52.8 | -0.2 |
| TAFP | | | | S | Sn | 04 09 15.9 | +1.5 |
| GALAA | Gareloi Lava P | 2.23 | 282 | P | Pn | 04 08 58.7 | -0.3 |
| CERAA | Semis' Rag'd T | 3.20 | 282 | P | Pn | 04 09 12.5 | +0.1 |
| CEAP | Semis' Anvil P | 3.28 | 284 | P | Pn | 04 09 14.3 | +0.8 |
| AMKA | Amchitka | 3.41 | 273 | P | Pn | 04 09 14.5 | -0.7 |
| AMKA | | | | S | Sn | 04 09 56.4 | +2.0 |
| KDAK | Kodiak Island | 14.61 | 55 | Pn | P | 04 11 51.9 | -2.6 |
| | 2.0nm,0.3s,baz=287,slow=7.0,SNR=7.8 | | | | | | |
| PETK | Petropavlovsk- | 16.63 | 287 | Pn | P | 04 12 27.7 | +11 |
| | 0.5nm,0.3s,baz=93,slow=16,SNR=3.6 | | | | | | |
| TRF | Thorofare Moun | 17.96 | 38 | ePn | Pn | 04 12 31.0 | -0.5 |
| | 35nm,1.7s | | | | | | |
| BPAW | Bear Paw Mtn. | 18.05 | 36 | ePn | P | 04 12 32.4 | -0.1 |
| | 1.8nm,0.9s | | | | | | |
| MCK | McKinley | 18.63 | 38 | eP | Pn | 04 12 39.1 | -0.3 |
| | 5.6nm,0.7s | | | | | | |
| ILAR | Eielson Array | 19.92 | 37 | P | Pn | 04 12 54.1 | -0.6 |
| | 0.2nm,0.3s,baz=226,slow=9.7,SNR=6.5 | | | | | | |
| COLD | Coldfoot | 20.19 | 29 | eP | Pn | 04 12 56.6 | -1.3 |
| | 11nm,1.0s | | | | | | |
| EGAK | Eagle | 22.14 | 40 | eP | P | 04 13 18.1 | +1.1 |
| DLBC | Dease Lake | 26.53 | 57 | P | P | 04 14 06.0 | +7.3 |
| | 0.7nm,0.4s,baz=284,slow=8.3,SNR=3.8 | | | | | | |
| NEW | Newport | 36.81 | 71 | P | P | 04 15 38.8 | +10 |
| | 1.8nm,0.7s,baz=254,slow=7.4,SNR=3.4 | | | | | | |
| NEW | Newport | 36.81 | 71 | eP | P | 04 15 29.4 | +0.5 |
| | 3.1nm,0.8s | | | | | | |
| WVOR | Wild Horse Val | 38.83 | 80 | eP | P | 04 15 47.2 | +1.1 |
| | 3.5nm,1.0s | | | | | | |
| BOZ | Bozeman (W) | 41.37 | 72 | eP | P | 04 16 08.1 | +0.9 |
| | 1.2nm,0.4s | | | | | | |
| BW06 | Boulder Array | 44.20 | 74 | eP | P | 04 16 30.9 | +0.6 |
| | 2.8nm,1.0s | | | | | | |
| SONM | Songino Array | 48.63 | 298 | P | P | 04 17 15.8 | +11 |
| | 1.6nm,0.9s,baz=47,slow=10,SNR=6.3 | | | | | | |
| TXAR | Lajitas Array | 56.46 | 84 | P | P | 04 18 12.6 | +10 |
| | 0.6nm,0.7s,baz=308,slow=4.5,SNR=4.7 | | | | | | |
| KURK | Kurchatov | 60.63 | 316 | eP | P | 04 18 31.4 | -0.1 |
| | 6.3nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 61.77 | 310 | P | P | 04 18 48.2 | +8.8 |
| | 1.0nm,0.5s,baz=61,slow=5.7,SNR=6.8 | | | | | | |
| KKAR | Karatay Array | 70.02 | 315 | eP | P | 04 19 32.2 | -0.3 |
| | 1.8nm,0.6s | | | | | | |
| TAPN | Taplejung | 73.28 | 293 | eP | P | 04 20 03.9 | +11 |
| | 51nm,1.2s | | | | | | |
| GUN | Gumba | 73.91 | 294 | eP | P | 04 20 08.1 | +12 |
| | 48nm,1.0s | | | | | | |
| RAMN | Ramite | 74.23 | 293 | eP | P | 04 20 09.6 | +11 |
| | 39nm,1.0s | | | | | | |
| PKI | Pulchoki | 74.44 | 295 | eP | P | 04 20 10.4 | +11 |
| | 37nm,1.1s | | | | | | |
| PKIN | Phulchoki | 74.44 | 295 | eP | P | 04 20 10.4 | +11 |
| GKN | Gorkha | 74.54 | 295 | eP | P | 04 20 11.1 | +11 |
| | 38nm,1.1s | | | | | | |
| KOLN | Koldanda | 75.31 | 296 | eP | P | 04 20 15.5 | +11 |
| | 8.4nm,0.7s | | | | | | |
| BRTR | Keskin Array B | 85.86 | 338 | P | P | 04 21 12.3 | +12 |
| | 1.3nm,0.9s,baz=16,slow=3.7,SNR=3.6 | | | | | | |
| TORD | Torodi Ar. Bea | 115.73 | 3 | PKP | PKPdf | 04 27 11.5 | +8.1 |
| | 0.2nm,0.7s,baz=350,slow=2.9,SNR=2.7 | | | | | | |

*IDC **08** 04:10:25.6±1.4, 51.°44N×175.°25W, h0km, mb4.2/9, mb1 4.2/12, mb1mx3.9/63, mbtmp4.2/12, ML3.5/3, MS5.3/1, Ms1 5.3/1, ms1mx4.0/46, Error ellipse: s-maj=43.7km s-min=16.1km az=152.0*
*ISCJB **08** 04:10:28.2±0.5, 51.°16N±0.°06×175.°13W±0.°05, h35km, mb4.3/20, MS5.3/1, Error ellipse: s-maj=8.5km s-min=4.7km az=171.8*
*NEIC **08** 04:10:29.8, 51.°25N×175.°26W, h25km, mb4.4/12, After AEIC.*
**ISC 08 04:10:30.3**±0.8, **51.°3N**±0.°1×**175.°21W**±0.°05, **h35km, n54,** σ**0.s78**/57, **mb4.4**/20, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.92 | 325 | P | Pn | 04 10 46.6 | -0.1 |
| ETKA | Kagalaska Isla | 0.94 | 308 | P | Pn | 04 10 46.6 | -0.4 |
| GSTD | Great Sitkin T | 0.96 | 323 | P | Pn | 04 10 47.2 | -0.1 |
| GSTR | Great Sitkin T | 0.96 | 327 | ePn | Pn | 04 10 47.2 | -0.1 |
| ADAG | Mount Adagdak | 1.10 | 309 | P | Pn | 04 10 49.8 | +0.5 |
| ATKA | Atka Island | 1.11 | 34 | P | Pn | 04 10 49.5 | +0.2 |
| ATKA | | | | S | Sn | 04 11 04.5 | +1.2 |
| KOFP | Korovin Flat P | 1.20 | 35 | P | Pn | 04 10 51.5 | +0.9 |
| KOWE | Korovin West | 1.23 | 29 | P | Pn | 04 10 52.0 | +1.0 |
| KIRH | Kanaga Island | 1.32 | 298 | P | Pn | 04 10 52.2 | -0.1 |
| KIRH | | | | S | Sn | 04 11 10.6 | +2.0 |
| KIKV | Kanaga Island | 1.35 | 296 | P | Pn | 04 10 52.6 | -0.1 |
| KICM | Kanaga Island | 1.39 | 298 | P | Pn | 04 10 53.0 | -0.1 |
| TAPA | Tanaga Point A | 1.71 | 289 | P | Pn | 04 10 57.5 | 0.0 |
| TAFP | Tanaga Falls P | 1.83 | 290 | P | Pn | 04 10 59.5 | +0.2 |
| TAFP | | | | S | Sn | 04 11 22.9 | +1.7 |
| TANO | Tanaga North | 1.92 | 290 | P | Pn | 04 11 01.2 | +0.8 |
| GANE | Gareloi Northe | 2.29 | 285 | P | Pn | 04 11 05.8 | +0.3 |
| AMKA | Amchitka | 3.44 | 274 | P | Pn | 04 11 22.2 | +0.8 |
| KDAK | Kodiak Island | 14.61 | 55 | Pn | Pn | 04 13 52.5 | -1.6 |
| | 0.1nm,0.3s,baz=263,slow=8.1,SNR=2.6 | | | | | | |
| PETK | Petropavlovsk- | 16.67 | 287 | Pn | Pn | 04 14 19.4 | -1.5 |
| | 0.2nm,0.3s,baz=99,slow=18,SNR=2.3 | | | | | | |
| MCK | McKinley | 18.64 | 38 | eP | Pn | 04 14 45.1 | -0.1 |
| | 4.0nm,0.6s | | | | | | |
| ILAR | Eielson Array | 19.93 | 37 | P | P | 04 14 58.1 | -0.6 |
| | 0.4nm,0.3s,baz=212,slow=11,SNR=6.0 | | | | | | |
| INK | Inuvik | 26.25 | 34 | P | P | 04 16 00.5 | -1.2 |
| | 0.7nm,0.4s,baz=290,slow=15,SNR=3.0 | | | | | | |
| MJAR | Matsushiro Arr | 36.01 | 264 | P | P | 04 17 27.4 | -0.4 |
| | 1.3nm,0.4s,baz=61,slow=7.5,SNR=5.6 | | | | | | |
| MAJO | Matsushiro | 36.01 | 264 | eP | P | 04 17 27.9 | +0.1 |
| | 8.6nm,0.9s | | | | | | |
| NEW | Newport | 36.79 | 71 | eP | P | 04 17 34.0 | -0.4 |
| | 2.9nm,0.8s | | | | | | |
| BOZ | Bozeman (W) | 41.35 | 72 | eP | P | 04 18 13.1 | +0.4 |
| | 1.2nm,0.5s | | | | | | |
| ELK | Elko | 41.86 | 80 | eP | P | 04 18 18.0 | +1.0 |
| | 1.5nm,0.9s | | | | | | |
| KSRS | Korea Array | 41.89 | 274 | P | P | 04 18 17.6 | +0.6 |
| | 3.3nm,1.0s,baz=54,slow=7.6,SNR=3.6 | | | | | | |
| KSAR | Wonju Array Be | 41.92 | 274 | P | P | 04 18 17.6 | +0.4 |
| JNU | Nakatsue | 42.81 | 266 | P | P | 04 18 25.2 | +0.6 |
| | 8.2nm,0.8s,baz=143,slow=5.1,SNR=3.5 | | | | | | |
| DUG | Dugway | 43.68 | 79 | eP | P | 04 18 31.9 | +0.2 |
| | 4.2nm,1.2s | | | | | | |
| ULN | Ulaanbaatar | 48.30 | 298 | eP | P | 04 19 07.6 | -0.4 |
| | 4.0nm,0.8s | | | | | | |
| SONM | Songino Array | 48.68 | 299 | P | P | 04 19 10.5 | -0.3 |
| | 2.0nm,0.9s,baz=52,slow=9.9,SNR=7.5 | | | | | | |
| SPITS | Spitsbergen Ar | 50.60 | 357 | P | P | 04 19 24.2 | -0.7 |
| | 4.9nm,0.7s,baz=49,slow=6.7,SNR=4.9 | | | | | | |
| SPITS | | | | LR | LR | 04 39 42.4 | |
| | comp=Z,3μm,20.4s,baz=15,slow=35 | | | | | | |
| SFJD | Kangerlussuaq | 54.86 | 23 | P | P | 04 19 57.6 | +1.2 |
| | 4.1nm,0.5s,baz=286,slow=20,SNR=6.4 | | | | | | |
| KURK | Kurchatov | 60.68 | 316 | eP | P | 04 20 37.0 | -0.6 |
| | 7.0nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 61.82 | 310 | P | P | 04 20 44.8 | -0.6 |
| | 2.3nm,0.8s,baz=54,slow=8.2,SNR=7.6 | | | | | | |
| TKM2 | Tokmak 2 | 67.88 | 312 | eP | P | 04 21 25.2 | +0.1 |
| | 2.7nm,0.7s | | | | | | |
| NOA | NORSAR Array B | 67.90 | 357 | P | P | 04 21 24.1 | -0.6 |
| | 2.1nm,1.1s,baz=3.8,slow=5.3,SNR=3.2 | | | | | | |
| AAK | Ala-Archa | 68.62 | 312 | eP | P | 04 21 30.2 | +0.4 |
| | 3.4nm,0.7s | | | | | | |
| EKS2 | Erkin-Say | 68.93 | 312 | eP | P | 04 21 32.1 | +0.5 |
| | 3.8nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 72.99 | 279 | eP | P | 04 21 54.9 | -1.4 |
| | 2.3nm,0.5s | | | | | | |
| TAPN | Taplejung | 73.33 | 293 | eP | P | 04 21 59.3 | +0.6 |
| | 56nm,1.1s | | | | | | |
| GUN | Gumba | 73.96 | 295 | eP | P | 04 22 03.1 | +0.7 |
| | 73nm,0.9s | | | | | | |
| RAMN | Ramite | 74.27 | 293 | eP | P | 04 22 04.5 | +0.4 |
| | 34nm,0.8s | | | | | | |
| KKN | Kakani | 74.39 | 295 | eP | P | 04 22 05.2 | +0.4 |
| PKI | Pulchoki | 74.48 | 295 | eP | P | 04 22 05.9 | +0.5 |
| | 36nm,1.0s | | | | | | |
| PKIN | Phulchoki | 74.49 | 295 | eP | P | 04 22 05.5 | +0.1 |
| | 6.4nm,0.5s | | | | | | |
| GKN | Gorkha | 74.59 | 295 | eP | P | 04 22 06.3 | +0.4 |
| | 57nm,1.3s | | | | | | |
| DMN | Daman | 74.63 | 295 | eP | P | 04 22 06.5 | +0.3 |
| DANN | Dangsing | 74.82 | 296 | eP | P | 04 22 08.1 | +0.7 |
| KOLN | Koldanda | 75.36 | 296 | eP | P | 04 22 10.6 | +0.3 |
| | 10nm,0.8s | | | | | | |
| TORD | Torodi Ar. Bea | 115.77 | 3 | PKP | PKPdf | 04 29 10.7 | +1.5 |
| | 0.3nm,0.8s,baz=3.5,slow=2.1,SNR=2.8 | | | | | | |
| MAW | Mawson | 147.79 | 218 | PKPbc | PKPbc | 04 30 09.8 | -0.1 |
| | 1.8nm,0.8s,baz=68,slow=5.8,SNR=3.5 | | | | | | |
| BOSA | Boshof | 152.62 | 318 | PKPbc | PKPbc | 04 30 23.8 | +0.9 |
| | 6.1nm,1.1s,baz=31,slow=5.9,SNR=3.0 | | | | | | |

**NEIC 08 04:16:25.6, 51.°30N×175.°13W, h26km, ML3.4**(AEIC), **After AEIC., Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.94 | 323 | P | Pn | 04 16 42.5 | -0.7 |
| GSMY | | | | S | Sb | 04 16 54.2 | -1.3 |
| GSCK | Great Sitkin C | 0.96 | 318 | P | Pn | 04 16 43.1 | -0.4 |
| ETKA | Kagalaska Isla | 0.98 | 306 | P | Pn | 04 16 42.8 | -0.8 |
| GSTR | Great Sitkin T | 0.98 | 324 | ePn | Pn | 04 16 43.1 | -0.7 |
| GSTD | Great Sitkin T | 0.99 | 321 | P | Pn | 04 16 43.1 | -0.8 |
| GSTD | | | | S | Sn | 04 16 57.9 | +0.8 |
| ATKA | Atka Island | 1.08 | 32 | P | Pn | 04 16 43.6 | -1.4 |
| ATKA | | | | S | Sn | 04 16 58.7 | -0.4 |
| ADAG | Mount Adagdak | 1.14 | 307 | P | Pn | 04 16 46.1 | +0.1 |
| KOFP | Korovin Flat P | 1.17 | 33 | P | Pn | 04 16 46.4 | 0.0 |
| KOWE | Korovin West | 1.20 | 27 | P | Pn | 04 16 46.8 | 0.0 |
| KOSE | Korovin Southe | 1.25 | 32 | P | Pn | 04 16 47.5 | +0.1 |
| KOSE | | | | S | Sb | 04 17 05.5 | +1.3 |
| KIRH | Kanaga Island | 1.36 | 297 | P | Pn | 04 16 48.6 | -0.4 |
| KIKV | Kanaga Island | 1.40 | 295 | P | Pn | 04 16 49.1 | -0.4 |
| KICM | Kanaga Island | 1.43 | 297 | P | Pn | 04 16 49.6 | -0.2 |
| TAPA | Tanaga Point A | 1.75 | 288 | P | Pn | 04 16 54.1 | -0.3 |
| TAFP | Tanaga Falls P | 1.88 | 290 | P | Pn | 04 16 56.1 | 0.0 |
| TAFP | | | | S | Sb | 04 17 21.3 | -1.0 |
| TANO | Tanaga North | 1.96 | 290 | P | Pn | 04 16 57.9 | +0.6 |
| GANE | Gareloi Northe | 2.33 | 284 | P | Pn | 04 17 03.1 | +0.8 |
| AMKA | Amchitka | 3.49 | 273 | P | Pn | 04 17 18.1 | -0.1 |
| LSPA | Little Sitkin | 3.98 | 282 | P | Pn | 04 17 26.3 | +1.4 |

*ISCJB **08** 04:17:10.8±0.6, 51.°20N±0.°07×175.°20W±0.°05, h35km, mb3.8/10, Error ellipse: s-maj=9.4km s-min=4.6km az=177.2*
*NEIC **08** 04:17:12.7, 51.°37N×175.°26W, h36km, mb3.9/8, ML3.5(AEIC), After AEIC.*
*IDC **08** 04:17:16.0±2.0, 52.°54N×176.°26W, h0km, mb3.7/4, mb1 3.9/6, mb1mx3.6/62, mbtmp3.7/6, ML4.0/2, Error ellipse: s-maj=65.4km s-min=21.3km az=1.0*
**ISC 08 04:17:12.6**±1.0, **51.°3N**±0.°1×**175.°27W**±0.°05, **h35km, n32,** σ**1.s12**/34, **mb3.9**/10, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.86 | 326 | P | Pn | 04 17 28.3 | 0.0 |
| GSCK | Great Sitkin C | 0.88 | 321 | P | Pn | 04 17 28.2 | -0.3 |
| ETKA | Kagalaska Isla | 0.89 | 307 | P | Pn | 04 17 28.3 | -0.3 |
| ETKA | | | | S | Sn | 04 17 40.5 | +0.3 |
| GSTD | Great Sitkin T | 0.91 | 323 | P | Pn | 04 17 28.9 | 0.0 |
| GSTD | | | | S | Sn | 04 17 41.9 | +1.0 |
| ATKA | Atka Island | 1.09 | 37 | P | Pn | 04 17 31.5 | +0.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ATKA | | | | S | Sn | 04 17 46.7 | +1.4 |
| **KOKL** | **Mount Kliuchef** | **1.19** | **33** | P | **Pn** | **04 17 33.5** | **+0.7** |
| **KOWE** | **Korovin West** | **1.21** | **31** | P | **Pn** | **04 17 34.1** | **+1.0** |
| **KIRH** | **Kanaga Island** | **1.27** | **297** | P | **Pn** | **04 17 34.4** | **+0.5** |
| **KIKV** | **Kanaga Island** | **1.31** | **295** | P | **Pn** | **04 17 34.2** | **-0.1** |
| **TAPA** | **Tanaga Point A** | **1.66** | **288** | P | **Pn** | **04 17 40.3** | **+1.1** |
| **TAFL** | **Tanaga Flats** | **1.70** | **285** | P | **Pn** | **04 17 40.2** | **+0.5** |
| **TAFP** | **Tanaga Falls P** | **1.79** | **290** | P | **Pn** | **04 17 41.5** | **+0.5** |
| TAFP | | | | S | **Sn** | **04 18 05.3** | **+2.9** |
| **GALAA** | **Gareloi Lava P** | **2.23** | **282** | P | **Pn** | **04 17 47.5** | **+0.5** |
| **CERAA** | **Semis' Rag'd T** | **3.20** | **282** | P | **Pn** | **04 18 01.1** | **+0.8** |
| **CEAP** | **Semis' Anvil P** | **3.28** | **284** | P | **Pn** | **04 18 02.2** | **+0.7** |
| **AMKA** | **Amchitka** | **3.41** | **273** | P | **Pn** | **04 18 03.8** | **+0.7** |
| **LSNW** | **Little Sitkin** | **3.92** | **282** | P | **Pn** | **04 18 11.1** | **+0.8** |
| **UNV** | **Unalaska Valle** | **5.90** | **61** | P | **Pn** | **04 18 40.0** | **+2.6** |
| **KDAK** | **Kodiak Island** | **14.61** | **55** | Pn | **P** | **04 20 42.3** | **-0.1** |
| | 1.5nm,0.3s,baz=314,slow=5.3,SNR=13 | | | | | | |
| **RSO** | **Redoubt South** | **15.51** | **45** | *e*Pn | **Pn** | **04 20 48.7** | **+0.1** |
| | 19nm,0.8s | | | | | | |
| **COLA** | **College** | **19.62** | **36** | *e*P | **P** | **04 21 37.2** | **-0.4** |
| | 4.2nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **19.92** | **37** | P | **Pn** | **04 21 42.5** | **-0.2** |
| | 0.1nm,0.3s,baz=226,slow=9.1,SNR=9.5 | | | | | | |
| **INK** | **Inuvik** | **26.24** | **34** | *e*P | **P** | **04 22 43.5** | **-0.4** |
| | 7.1nm,1.4s | | | | | | |
| **NEW** | **Newport** | **36.81** | **71** | P | P | 04 24 26.7 | +10 |
| | 2.0nm,0.8s,baz=292,slow=11,SNR=3.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.35** | **85** | P | P | 04 25 08.0 | +13 |
| | 0.4nm,0.7s,baz=295,slow=11,SNR=4.5 | | | | | | |
| **BOZ** | **Bozeman (W)** | **41.37** | **72** | *e*P | **P** | **04 24 56.5** | **+1.3** |
| | 2.4nm,1.0s | | | | | | |
| **HWUT** | **Hardware Ranch** | **43.65** | **77** | *e*P | **P** | **04 25 13.3** | **-0.5** |
| | 2.3nm,0.9s | | | | | | |
| **DUG** | **Dugway** | **43.71** | **79** | *e*P | **P** | **04 25 12.3** | **-1.9** |
| | 1.6nm,0.8s | | | | | | |
| **BW06** | **Boulder Array** | **44.20** | **74** | *e*P | **P** | **04 25 17.4** | **-0.8** |
| | 1.3nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **48.63** | **298** | P | **P** | **04 25 53.4** | **+0.6** |
| | 0.2nm,0.4s,baz=60,slow=8.8,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.77** | **310** | P | **P** | **04 27 26.9** | **-0.5** |
| | 0.3nm,0.3s,baz=39,slow=6.1,SNR=4.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **67.83** | **311** | *e*P | **P** | **04 28 04.4** | **-2.8** |
| | 1.1nm,0.6s | | | | | | |

*IDC **08** 04:18:15.3±2.2, 51.°31N×175.°21W, h0km, mb3.8/4, mb1 4.0/6, mb1mx3.6/63, mbtmp3.8/6, ML3.8/1, Error ellipse: s-maj=64.5km s-min=22.2km az=178.0*

*NEIC **08** 04:18:19.1, 51.°26N×175.°20W, h20km, mb4.2/10, After AEIC.*

**ISC 08 04:18:17.8**±2.4**, 51.°2N**±0.°1×**175.°13W**±0.°05**, h17**km±13km**, n31,** σ**0.s63**/37**, mb4.0**/13**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.99** | **325** | P | **Pn** | **04 18 36.5** | **-0.3** |
| **GSCK** | **Great Sitkin C** | **1.00** | **321** | P | **Pn** | **04 18 36.7** | **-0.4** |
| **ETKA** | **Kagalaska Isla** | **1.01** | **308** | P | **Pn** | **04 18 36.7** | **-0.4** |
| ETKA | | | | S | **Sn** | **04 18 50.7** | **-0.2** |
| **GSTD** | **Great Sitkin T** | **1.03** | **323** | P | **Pn** | **04 18 37.2** | **-0.3** |
| GSTD | | | | S | **Sn** | **04 18 51.5** | **-0.1** |
| **ATKA** | **Atka Island** | **1.12** | **31** | P | **Pb** | **04 18 38.9** | **+0.1** |
| ATKA | | | | S | **Sg** | **04 18 54.5** | **+0.3** |
| **ADAG** | **Mount Adagdak** | **1.18** | **309** | P | **Pb** | **04 18 39.8** | **+0.2** |
| **KOKL** | **Mount Kliuchef** | **1.23** | **28** | P | **Pg** | **04 18 41.1** | **-0.3** |
| KOKL | | | | S | **Sg** | **04 18 57.7** | **+0.2** |
| **KOWE** | **Korovin West** | **1.25** | **26** | P | **Pg** | **04 18 41.5** | **-0.4** |
| **KOKV** | **Korovin Volcan** | **1.27** | **28** | P | **Pg** | **04 18 42.1** | **-0.2** |
| **KIRH** | **Kanaga Island** | **1.39** | **299** | P | **Pn** | **04 18 42.4** | **0.0** |
| **KIKV** | **Kanaga Island** | **1.42** | **297** | P | **Pn** | **04 18 42.6** | **-0.2** |
| KIKV | | | | S | **Sb** | **04 19 02.1** | **+0.5** |
| **KICM** | **Kanaga Island** | **1.46** | **299** | P | **Pn** | **04 18 43.1** | **-0.2** |
| **TAFP** | **Tanaga Falls P** | **1.90** | **291** | P | **Pn** | **04 18 49.6** | **+0.3** |
| TAFP | | | | S | **Sn** | **04 19 13.2** | **+0.3** |
| **GAEA** | **Gareloi East** | **2.32** | **285** | P | **Pn** | **04 18 55.4** | **+0.2** |
| **KDAK** | **Kodiak Island** | **14.60** | **55** | Pn | **Pn** | **04 21 42.9** | **-0.4** |
| | baz=135,slow=2.9,SNR=1.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.73** | **287** | Pn | **P** | **04 22 13.8** | **+0.4** |
| | 0.3nm,0.3s,baz=96,slow=15,SNR=4.7 | | | | | | |
| **MCK** | **McKinley** | **18.65** | **38** | *e*P | **Pn** | **04 22 36.2** | **+1.4** |
| | 5.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **19.95** | **36** | P | **P** | **04 22 48.9** | **+0.3** |
| | 0.1nm,0.3s,baz=224,slow=9.0,SNR=5.8 | | | | | | |
| **INK** | **Inuvik** | **26.27** | **34** | *e*P | **P** | **04 23 51.5** | **-0.2** |
| | 16nm,1.6s | | | | | | |
| **DLBC** | **Dease Lake** | **26.51** | **57** | P | **P** | **04 23 56.0** | **+1.8** |
| | 3.8nm,1.1s,baz=329,slow=11,SNR=3.6 | | | | | | |
| **NEW** | **Newport** | **36.76** | **71** | *e*P | **P** | **04 25 24.6** | **+0.5** |
| | 2.5nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.28** | **85** | P | **P** | **04 26 02.3** | **+0.1** |
| | 0.2nm,0.5s,baz=292,slow=7.7,SNR=2.5 | | | | | | |
| **BOZ** | **Bozeman (W)** | **41.32** | **72** | *e*P | **P** | **04 26 02.9** | **+0.5** |
| | 0.9nm,0.6s | | | | | | |
| **ELK** | **Elko** | **41.82** | **80** | *e*P | **P** | **04 26 05.2** | **-1.5** |
| | 1.8nm,1.0s | | | | | | |
| **HWUT** | **Hardware Ranch** | **43.59** | **77** | *e*P | **P** | **04 26 20.7** | **-0.3** |
| | 1.9nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **48.75** | **299** | P | **P** | **04 27 00.9** | **-0.5** |
| | 1.1nm,0.9s,baz=48,slow=10.0,SNR=4.9 | | | | | | |
| **KURK** | **Kurchatov** | **60.76** | **316** | *e*P | **P** | **04 28 26.7** | **-1.5** |
| | 2.0nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.90** | **311** | P | **P** | **04 28 35.5** | **-0.6** |
| | 0.6nm,0.4s,baz=43,slow=5.3,SNR=6.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **67.96** | **312** | *e*P | **P** | **04 29 15.4** | **-0.3** |
| | 1.8nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **68.69** | **312** | *e*P | **P** | **04 29 19.9** | **-0.4** |
| | 2.5nm,0.6s | | | | | | |
| **EKS2** | **Erkin-Say** | **69.00** | **313** | *e*P | **P** | **04 29 21.9** | **-0.3** |
| | 4.0nm,0.8s | | | | | | |

*IDC **08** 04:18:36.0±0.9, 51.°20N×174.°80W, h0km, mb4.1/14, mb1 4.2/16, mb1mx4.0/62, mbtmp4.1/16, ML3.7/2, MS5.1/2, Ms1 5.1/2, ms1mx4.5/26, Error ellipse: s-maj=27.4km s-min=18.6km az=157.0*

*NEIC **08** 04:18:37.8±4.5, 51.°15N×174.°73W, h14km±27km, mb4.4/13, Error ellipse: s-maj=14.5km s-min=6.2km az=166.0*

*ISCJB **08** 04:18:38.9±0.6, 51.°2N±0.°1×174.°7W±0.°1, h33km, mb4.3/27, MS5.1/2, Error ellipse: s-maj=17.8km s-min=7.4km az=160.7*

**ISC 08 04:18:41.1**±0.8**, 51.°2N**±0.°2×**174.°72W**±0.°09**, h35**km**, n37,** σ**0.s81**/35**, mb4.3**/27**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPLA** | **Purkeypile** | **16.83** | **37** | *e*Pn | **P** | **04 22 34.9** | **-0.7** |
| **PETK** | **Petropavlovsk-** | **16.99** | **287** | Pn | **Pn** | **04 22 36.0** | **+0.3** |
| | 0.8nm,0.3s,baz=91,slow=15,SNR=12 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **17.95** | **35** | *e*Pn | **Pn** | **04 22 46.9** | **-0.7** |
| **MCK** | **McKinley** | **18.52** | **38** | *e*P | **P** | **04 22 53.9** | **-0.2** |
| | 5.8nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **19.82** | **36** | P | **P** | **04 23 08.1** | **-0.2** |
| | 0.2nm,0.3s,baz=223,slow=11,SNR=4.1 | | | | | | |
| **EGAK** | **Eagle** | **22.02** | **39** | *e*P | **P** | **04 23 30.4** | **-1.6** |
| | 8.9nm,0.8s | | | | | | |
| **DLBC** | **Dease Lake** | **26.31** | **57** | P | P | 04 24 18.4 | +5.2 |
| | 2.5nm,0.8s,baz=269,slow=6.0,SNR=4.8 | | | | | | |
| **ASAJ** | **Asahikawa** | **29.27** | **273** | LR | LR | 04 36 11.1 | |
| | comp=Z,4μm,21.3s,baz=47,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **29.27** | **273** | *e*P | **P** | **04 24 38.5** | **-1.1** |
| | 2.6nm,0.7s | | | | | | |
| **ERM** | **Erimo** | **30.00** | **269** | *e*P | **P** | **04 24 44.8** | **-1.2** |
| | 64nm,1.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.85** | **280** | P | **P** | **04 25 36.2** | **-1.0** |
| | 3.2nm,0.7s,baz=71,slow=7.1,SNR=4.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.30** | **265** | P | **P** | **04 25 41.0** | **-0.1** |
| | 2.0nm,0.5s,baz=58,slow=7.6,SNR=6.6 | | | | | | |
| **MAJO** | **Matsushiro** | **36.31** | **265** | *e*P | **P** | **04 25 40.9** | **-0.3** |
| | 6.8nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **42.20** | **274** | P | **P** | **04 26 30.2** | **-0.1** |
| | 1.9nm,0.6s,baz=51,slow=8.0,SNR=5.7 | | | | | | |
| **KSAR** | **Wonju Array Be** | **42.23** | **274** | P | **P** | **04 26 30.2** | **-0.4** |
| **DUG** | **Dugway** | **43.39** | **80** | *e*P | **P** | **04 26 39.5** | **-0.6** |
| | 2.4nm,0.9s | | | | | | |
| **BW06** | **Boulder Array** | **43.90** | **75** | *e*P | **P** | **04 26 45.1** | **+0.8** |
| | 2.1nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.61** | **299** | *e*P | **P** | **04 27 19.8** | **-1.3** |
| | 2.7nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **48.99** | **299** | P | **P** | **04 27 23.6** | **-0.4** |
| | 2.5nm,0.8s,baz=51,slow=9.2,SNR=10 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **50.69** | **357** | P | **P** | **04 27 36.7** | **+0.3** |
| | 2.9nm,0.6s,baz=48,slow=9.1,SNR=6.2 | | | | | | |
| **WMOK** | **Wichita Mounta** | **55.47** | **76** | *e*P | **P** | **04 28 11.1** | **-1.1** |
| | 3.5nm,1.1s | | | | | | |
| **TXAR** | **Lajitas Array** | **56.13** | **84** | P | **P** | **04 28 17.6** | **+0.5** |
| | 0.2nm,0.5s,baz=309,slow=2.9,SNR=2.8 | | | | | | |
| **KURK** | **Kurchatov** | **60.95** | **316** | *e*P | **P** | **04 28 49.9** | **-0.2** |
| | 11nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **62.11** | **311** | P | **P** | **04 28 57.5** | **-0.6** |
| | 2.3nm,0.6s,baz=52,slow=6.4,SNR=9.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **68.00** | **357** | P | **P** | **04 29 35.9** | **-0.2** |
| | 0.8nm,0.6s,baz=6.3,slow=6.6,SNR=3.4 | | | | | | |
| **TKM2** | **Tokmak 2** | **68.17** | **312** | *e*P | **P** | **04 29 38.2** | **+0.5** |
| | 3.1nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **68.90** | **312** | *e*P | **P** | **04 29 42.4** | **+0.1** |
| | 5.5nm,0.6s | | | | | | |
| **EKS2** | **Erkin-Say** | **69.21** | **313** | *e*P | **P** | **04 29 44.3** | **+0.2** |
| | 6.0nm,0.7s | | | | | | |
| **AKASG** | **Malin Array Be** | **76.44** | **345** | P | **P** | **04 30 26.8** | **+0.2** |
| | 0.6nm,0.5s,baz=19,slow=6.2,SNR=2.2 | | | | | | |
| **GEYT** | **Alibeck** | **79.89** | **320** | P | **P** | **04 30 45.9** | **-0.1** |
| | 3.5nm,0.6s,baz=316,slow=4.1,SNR=4.3 | | | | | | |
| **GERES** | **GERESS Array B** | **80.06** | **354** | P | **P** | **04 30 48.2** | **+1.4** |
| | 0.4nm,0.7s,baz=12,slow=5.1,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **83.73** | **227** | P | **P** | **04 31 06.5** | **+0.3** |
| | 0.7nm,0.7s,baz=30,slow=5.1,SNR=3.5 | | | | | | |
| WRA | | | | LR | LR | 05 05 54.2 | |
| | comp=Z,1μm,20.6s,baz=55,slow=34 | | | | | | |
| **PSI** | **Prapat** | **85.55** | **269** | P | **P** | **04 31 16.2** | **+0.4** |
| | 3.2nm,0.4s,baz=358,slow=5.9,SNR=5.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **86.10** | **338** | P | **P** | **04 31 20.0** | **+1.8** |
| | 1.4nm,0.8s,baz=2.2,slow=3.0,SNR=5.4 | | | | | | |
| **MATP** | **Matopo** | **144.28** | **321** | PKP | **PKPdf** | **04 38 12.8** | **-0.5** |
| | 5.3nm,0.8s,baz=24,slow=1.9,SNR=8.1 | | | | | | |
| **MAW** | **Mawson** | **147.92** | **218** | PKPbc | **PKPbc** | **04 38 20.2** | **-0.8** |
| | 1.5nm,0.7s,baz=67,slow=2.2,SNR=3.6 | | | | | | |
| **BOSA** | **Boshof** | **152.89** | **319** | PKPbc | **PKPbc** | **04 38 35.7** | **+1.4** |
| | 5.2nm,1.0s,baz=337,slow=7.7,SNR=3.9 | | | | | | |

*IDC **08** 04:19:11.7±0.4, 51.°45N×175.°29W, h0km, mb4.9/35, mb1 5.0/37, mb1mx4.9/58, mbtmp4.9/37, ML4.8/2, MS5.7/2, Ms1 5.7/2, ms1mx4.7/28, Error ellipse: s-maj=15.4km s-min=9.3km az=158.0*

*GCMT **08** 04:19:14.9±0.2, 51.°19N×175.°15W, h17km, MW5.7/111, Moment Tensor Solution. s72,c120; s111,c245; Duration: 1.s7 Moment tensor: Scale $10^{17}$Nm; Mrr2.90±.10; Mθθ-2.31±.07; Mφφ-0.58±.06; Mrθ2.67±.20; Mθφ-1.03±.04; Mφr1.96±.20; Best double couple: Mo4.36500×$10^{17}$ NP1:φs57.00000°, δ70.00000°, λ84.00000°. NP2:φs252.00000°, δ21.00000°, λ105.00000°. Principal axes: T 4.4490, Plg65.0000°, Azm317.0000°; N -0.1650, Plg5.0000°, Azm59.0000°; P -4.2820, Plg25.0000°, Azm151.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*NEIC **08** 04:19:14.9, 51.°33N×175.°20W, h6km, mb5.3/167, ML5.1(AEIC), After AEIC.*

*MOS **08** 04:19:15.4±1.3, 51.°51N×175.°26W, h33km, mb5.3/74, MS5.2/4, Error ellipse: s-maj=6.8km s-min=5.0km az=89.5*

*ISCJB **08** 04:19:16.9±0.4, 51.°39N±0.°03×175.°13W±0.°02, h52km±3km, mb5.2/245, MS5.2/3, Error ellipse: s-maj=5.2km s-min=1.9km az=179.1*

*BJI **08** 04:19:17.1, 52.°38N×175.°64W, h23km, mb5.2/58, mB6.0/15, Ms5.7/30, Ms7 5.5/30*

*SZGRF **08** 04:19:24.2, 52.°34N×177.°27W, h33km, mb5.2/12(BGR)*

**ISC 08 04:19:17.1**±0.4**, 51.°44N**±0.°05×**175.°26W**±0.°03**, h33**km±1km**, h33**km**:pP-P, n1031,** σ**1.s32**/1054**, mb5.2**/247**, MS5.4**/3**, 36C-25D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.78** | **321** | P | **Pb** | **04 19 32.4** | **+0.1** |
| **GSTD** | **Great Sitkin T** | **0.82** | **319** | P | **Pb** | **04 19 33.5** | **+0.5** |
| **ETKA** | **Kagalaska Isla** | **0.82** | **301** | P | **Pn** | **04 19 32.5** | **+0.2** |
| **ATKA** | **Atka Island** | **1.01** | **41** | P | **Pn** | **04 19 34.6** | **-0.2** |
| ATKA | | | | S | **Sb** | **04 19 50.9** | **+1.9** |
| **KOKV** | **Korovin Volcan** | **1.14** | **36** | P | **Pn** | **04 19 37.4** | **+0.7** |
| **KIRH** | **Kanaga Island** | **1.23** | **293** | P | **Pn** | **04 19 38.1** | **+0.2** |
| **KICM** | **Kanaga Island** | **1.29** | **292** | P | **Pn** | **04 19 39.8** | **+1.0** |
| **TAFP** | **Tanaga Falls P** | **1.75** | **286** | P | **Pn** | **04 19 46.2** | **+1.1** |
| TAFP | | | | S | **Sb** | **04 20 10.5** | **+0.2** |
| **TANO** | **Tanaga North** | **1.84** | **286** | P | **Pn** | **04 19 48.3** | **+2.0** |
| **CERAA** | **Semis' Rag'd T** | **3.18** | **280** | P | **Pn** | **04 20 05.8** | **+1.1** |
| **CERB** | **Semis' Cerberu** | **3.21** | **281** | P | **Pn** | **04 20 07.2** | **+2.0** |
| **AMKA** | **Amchitka** | **3.40** | **271** | P | **Pn** | **04 20 09.2** | **+1.4** |
| AMKA | | | | S | **Sn** | **04 20 50.4** | **+3.5** |
| **LSPA** | **Little Sitkin** | **3.87** | **280** | P | **Pn** | **04 20 15.9** | **+1.7** |
| **LSSA** | **Little Sitkin** | **3.91** | **280** | P | **Pn** | **04 20 16.2** | **+1.5** |
| **NIKH** | **Nikolski High** | **4.23** | **66** | P | **Pn** | **04 20 20.4** | **+1.3** |
| NIKH | | | | S | Sn | 04 21 13.2 | +5.9 |
| **OKSO** | **Okmok South** | **4.75** | **63** | P | **Pn** | **04 20 28.4** | **+2.1** |
| **OKCE** | **Okmok Cone E** | **4.78** | **63** | P | **Pn** | **04 20 28.4** | **+1.8** |
| **OKFG** | **Magazine Ridge** | **4.91** | **63** | P | **Pn** | **04 20 29.9** | **+1.5** |
| **MSOM** | **Makushin Julie** | **5.59** | **62** | P | **Pn** | **04 20 39.7** | **+1.9** |
| **MSOM** | **Makushin Julie** | **5.59** | **62** | P | **Pn** | **04 20 39.7** | **+1.9** |
| **UNV** | **Unalaska Valle** | **5.85** | **62** | P | **Pn** | **04 20 42.8** | **+1.4** |
| UNV | | | | S | **Sn** | **04 21 52.0** | **+4.9** |
| **AKRB** | **Akutan Reef Bi** | **6.19** | **61** | P | **Pn** | **04 20 48.0** | **+2.0** |
| **ZRO** | **Akutan Zero** | **6.23** | **61** | P | **Pn** | **04 20 49.2** | **+2.7** |
| **AKUT** | **Akutan** | **6.36** | **61** | P | **Pn** | **04 20 51.2** | **+3.0** |
| **SPIA** | **Saint Paul Isl** | **6.45** | **25** | P | Pn | 04 20 53.6 | +4.0 |
| **SMY** | **Shemya** | **6.68** | **285** | *e*P | **Pn** | **04 20 52.5** | **-0.2** |
| SMY | | | | pmax | pmax | | |
| | comp=Z,339nm,1.0s | | | | | | |
| **SMY** | **Shemya** | **6.68** | **285** | *e*Pn | **Pn** | **04 20 52.5** | **-0.2** |
| | comp=Z,339nm,1.0s | | | | | | |
| **WESP** | **Westdahl Peak** | **7.06** | **60** | P | **Pn** | **04 21 00.5** | **+2.4** |
| **SSLS** | **Shishaldin Sou** | **7.53** | **60** | P | Pn | 04 21 07.8 | +3.4 |
| **FALS** | **False Pass** | **7.90** | **60** | *e*Pn | **Pn** | **04 21 11.0** | **+1.6** |
| **DT1** | **Dutton Round H** | **8.60** | **60** | P | **Pn** | **04 21 22.0** | **+2.9** |
| **DTNA** | **Dutton South F** | **8.63** | **59** | P | Pn | 04 21 22.9 | +3.5 |
| **SDPT** | **Sand Point** | **9.66** | **60** | *e*Pn | **Pn** | **04 21 32.9** | **-0.6** |
| **CHGN** | **Chignik** | **11.06** | **57** | *e*Pn | **Pn** | **04 21 51.1** | **-1.6** |
| **GAMB** | **Gambell** | **12.51** | **7** | *e*Pn | Pn | 04 22 07.1 | -5.4 |
| **SII** | **Sitkinak Islan** | **13.39** | **59** | *e*Pn | **Pn** | **04 22 22.8** | **-1.7** |
| **OHAK** | **Old Harbor** | **14.03** | **57** | *e*Pn | **Pn** | **04 22 31.1** | **-2.1** |
| **SVW2** | **Sparrevohn** | **14.53** | **41** | *e*Pn | **P** | **04 22 44.9** | **-1.3** |
| **KDAK** | **Kodiak Island** | **14.55** | **55** | Pn | **Pn** | **04 22 39.6** | **-0.6** |
| | comp=Z,4.6nm,0.3s,baz=274,slow=8.9,SNR=8.7 | | | | | | |
| KDAK | | | | Sn | **Sn** | **04 25 14.3** | **-5.8** |
| | comp=Z,0.3nm,0.3s,baz=175,slow=12,SNR=1.7 | | | | | | |
| KDAK | | | | LR | LR | 04 28 45.1 | |
| | comp=Z,28μm,18.3s,baz=245,slow=39 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.55** | **55** | P | **Pn** | **04 22 39.7** | **-0.6** |
| KDAK | | | | | | 04 25 14.3 | |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| KDAK | | | | MLR | MLR | | |
| | comp=Z,28μm,18.3s | | | | | | |
| **KDAK** | **Kodiak Island** | **14.55** | **55** | *e*Pn | **Pn** | **04 22 39.3** | **-0.9** |
| KDAK | | | | *e*Sn | **Sn** | **04 25 20.9** | **+0.8** |
| **TNA** | **Tin City** | **14.65** | **12** | *e*Pn | **P** | **04 22 46.3** | **-1.2** |
| | comp=Z,159nm,1.2s | | | | | | |
| **RSO** | **Redoubt South** | **15.43** | **45** | *e*Pn | **Pn** | **04 22 54.0** | **+1.8** |
| | comp=Z,209nm,0.9s | | | | | | |
| **CNPM** | **China Poot** | **15.77** | **50** | *e*Pn | **P** | **04 22 58.1** | **-1.8** |
| | comp=Z,149nm,0.9s | | | | | | |
| **BRLK** | **Bradley Lake** | **16.02** | **49** | *e*Pn | **P** | **04 23 01.3** | **-1.4** |
| | comp=Z,86nm,0.9s | | | | | | |
| **PET** | **Petropavlovsk** | **16.03** | **286** | *e*P | **P** | **04 23 05.4** | **+2.6** |
| PET | | | | *e*S | **S** | **04 26 03.7** | **-5.4** |
| PET | | | | pmax | pmax | | |
| | comp=Z,68nm,1.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,18μm,18.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,16μm,17.0s | | | | | | |
| **PET** | **Petropavlovsk** | **16.03** | **286** | *e*Pn | **P** | **04 23 01.8** | **-1.1** |
| | comp=Z,137nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.60** | **286** | Pn | **P** | **04 23 10.2** | **+1.0** |
| | comp=Z,3.4nm,0.3s,baz=91,slow=15,SNR=21 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.60** | **286** | P | **P** | **04 23 10.2** | **+1.0** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| **SEW** | **Seward** | **16.81** | **49** | *e*Pn | **Pn** | **04 23 08.9** | **-0.7** |
| | comp=Z,71nm,0.8s | | | | | | |
| **PPLA** | **Purkeypile** | **16.86** | **38** | *e*Pn | **Pn** | **04 23 09.5** | **-0.8** |
| | comp=Z,369nm,1.4s | | | | | | |
| **RC01** | **Rabbit Creek A** | **17.04** | **46** | *e*Pn | **P** | **04 23 15.0** | **+1.0** |
| | comp=Z,60nm,0.9s | | | | | | |
| **PMR** | **Palmer** | **17.51** | **44** | *e*P | **P** | **04 23 19.4** | **+0.3** |
| PMR | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| **PMR** | **Palmer** | **17.51** | **44** | *e*Pn | **P** | **04 23 19.4** | **+0.3** |
| | comp=Z,28nm,0.9s | | | | | | |
| **TRF** | **Thorofare Moun** | **17.88** | **38** | *e*Pn | **P** | **04 23 25.7** | **+2.3** |
| | comp=Z,989nm,2.1s | | | | | | |
| **SML** | **Sawmill** | **17.94** | **44** | *e*P | **P** | **04 23 23.8** | **-0.2** |
| SML | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| **SML** | **Sawmill** | **17.94** | **44** | *e*Pn | **P** | **04 23 23.8** | **-0.2** |
| | comp=Z,19nm,1.0s | | | | | | |
| **SKR** | **Severo-Kuril's** | **17.96** | **279** | *e*P | **Pn** | **04 23 24.0** | **+0.1** |
| SKR | | | | *e* | | 04 26 39.9 | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,80nm,0.5s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **17.96** | **36** | *e*Pn | **Pn** | **04 23 23.7** | **-0.2** |
| | comp=Z,146nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **18.55** | **38** | *e*P | **P** | **04 23 28.4** | **-2.2** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,116nm,1.0s | | | | | | |
| **MCK** | **McKinley** | **18.55** | **38** | *e*P | **P** | **04 23 28.4** | **-2.2** |
| | comp=Z,116nm,1.0s | | | | | | |
| **BWN** | **Browne** | **18.57** | **37** | *e*Pn | **Pn** | **04 23 33.9** | **+2.7** |
| | comp=Z,509nm,1.3s | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **18.70** | **49** | *e*P | **Pn** | **04 23 33.5** | **+0.7** |
| | comp=Z,78nm,1.2s | | | | | | |
| **DIV** | **Divide** | **18.86** | **48** | *e*P | **P** | **04 23 33.0** | **-1.1** |
| | comp=Z,90nm,1.2s | | | | | | |
| **KLU** | **Klutina** | **18.91** | **47** | *e*P | **Pn** | **04 23 35.4** | **0.0** |
| | comp=Z,105nm,1.3s | | | | | | |
| **BILL** | **Bilibino** | **18.92** | **338**⇑ | *e*P | **Pn** | **04 23 35.9** | **+0.4** |
| BILL | | | | *e*S | Sn | 04 26 58.1 | -7.9 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,329nm,1.2s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,7μm,21.0s | | | | | | |
| **BILL** | **Bilibino** | **18.92** | **338** | *e*P | **Pn** | **04 23 35.5** | **0.0** |
| | comp=Z,329nm,1.2s | | | | | | |
| **BMRM** | **Bremner River** | **19.36** | **49** | *e*P | **P** | **04 23 40.0** | **+0.5** |
| | comp=Z,121nm,1.3s | | | | | | |
| **CCB** | **Clear Creek Bu** | **19.43** | **37** | *e*P | **P** | **04 23 39.9** | **-0.3** |
| | comp=Z,43nm,0.7s | | | | | | |
| **COLA** | **College** | **19.52** | **36**⇑ | *i*P | **P** | **04 23 41.8** | **+0.6** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,59nm,1.0s | | | | | | |
| **COLA** | **College** | **19.52** | **36** | *e*P | **P** | **04 23 41.5** | **+0.2** |
| | comp=Z,113nm,1.0s | | | | | | |
| **HARP** | **HAARP** | **19.55** | **44** | *e*P | **Pn** | **04 23 42.6** | **-0.4** |
| | comp=Z,183nm,1.1s | | | | | | |
| **PAX** | **Paxson** | **19.62** | **43** | *e*P | **P** | **04 23 41.3** | **-1.1** |
| PAX | | | | pmax | pmax | | |
| | comp=Z,47nm,0.9s | | | | | | |
| **PAX** | **Paxson** | **19.62** | **43** | *e*P | **P** | **04 23 41.3** | **-1.1** |
| | comp=Z,47nm,0.9s | | | | | | |
| **HDA** | **Harding Lake** | **19.63** | **38** | *e*P | **P** | **04 23 42.4** | **-0.1** |
| | comp=Z,113nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **19.83** | **37** | P | **P** | **04 23 45.2** | **+0.6** |
| | comp=Z,1.1nm,0.3s,baz=239,slow=11,SNR=5.1 | | | | | | |
| ILAR | | | | ScP | **ScP** | **04 31 36.5** | **+2.2** |
| | baz=266,slow=3.7,SNR=7.7 | | | | | | |
| **COLD** | **Coldfoot** | **20.09** | **29** | *e*P | Pn | 04 23 48.5 | -1.0 |
| | comp=Z,146nm,1.0s | | | | | | |
| **MENT** | **Mentasta** | **20.36** | **43** | *e*P | **P** | **04 23 50.5** | **+0.1** |
| **MA2** | **Magadan** | **20.68** | **306** | *e*P | **P** | **04 23 54.5** | **+0.6** |
| **SEY** | **Seymchan** | **20.70** | **316** | P | **P** | **04 23 55.1** | **+1.0** |
| | comp=Z,22nm,1.1s,baz=108,slow=10,SNR=7.6 | | | | | | |
| **SEY** | **Seymchan** | **20.70** | **316** | *e*P | **P** | **04 23 54.3** | **+0.2** |
| **PCA** | **Pinnacle** | **21.28** | **52** | *e*P | **P** | **04 24 02.4** | **+2.0** |
| | comp=Z,197nm,0.9s | | | | | | |
| **EGAK** | **Eagle** | **22.06** | **40** | *e*P | **P** | **04 24 06.7** | **-1.9** |
| | comp=Z,113nm,0.7s | | | | | | |
| **DAWY** | **Dawson** | **22.56** | **42** | *e*P | **P** | **04 24 13.0** | **-1.0** |
| | comp=Z,86nm,1.0s | | | | | | |
| **KUR** | **Kuril'sk** | **25.09** | **270**⇑ | *i*P | **P** | **04 24 40.0** | **+1.7** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,365nm,1.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,38nm,1.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,260nm,1.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,78nm,1.5s | | | | | | |
| **WRAK** | **Wrangell Islan** | **25.43** | **62** | *e*P | **P** | **04 24 42.8** | **+1.5** |
| | comp=E,162nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **26.15** | **34** | P | **P** | **04 24 47.8** | **+0.1** |
| | comp=E,23nm,0.9s,baz=237,slow=7.4,SNR=15 | | | | | | |
| **INK** | **Inuvik** | **26.15** | **34** | P | **P** | **04 24 47.8** | **+0.1** |
| INK | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **26.15** | **34** | *e*P | **P** | **04 24 46.7** | **-1.0** |
| | comp=Z,30nm,0.9s | | | | | | |
| **DLBC** | **Dease Lake** | **26.47** | **57** | P | **P** | **04 24 52.5** | **+1.6** |
| | comp=Z,42nm,0.9s,baz=274,slow=9.0,SNR=22 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **27.51** | **277** | *e*P | **P** | **04 25 01.9** | **+1.7** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,71nm,1.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **27.51** | **277** | *e*P | **P** | **04 25 01.7** | **+1.5** |
| | comp=Z,155nm,1.4s | | | | | | |
| **BBB** | **Bella Bella** | **28.76** | **70** | P | P | 04 25 15.8 | +4.6 |
| | comp=Z,33nm,1.0s,baz=286,slow=3.9,SNR=3.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **28.92** | **272** | P | **P** | **04 25 13.3** | **+0.6** |
| | comp=Z,27nm,0.7s,baz=345,slow=19 | | | | | | |
| **ASAJ** | **Asahikawa** | **28.92** | **272** | P | **P** | **04 25 13.4** | **+0.6** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,27nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **28.92** | **272** | *e*P | **P** | **04 25 12.2** | **-0.5** |
| | comp=Z,28nm,1.1s | | | | | | |
| **ERM** | **Erimo** | **29.66** | **268** | *e*P | **P** | **04 25 20.8** | **+1.5** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,37nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **31.04** | **311** | *e*P | **P** | **04 25 30.0** | **-1.3** |
| YAK | | | | *e*S | S | 04 30 27.6 | -6.2 |
| YAK | | | | *e*SS | **ScP** | **04 32 11.0** | **+4.8** |
| YAK | | | | *e* | | 04 36 05.2 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,1.0nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,6.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,799nm,14.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,440nm,14.8s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,551nm,15.4s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,347nm,14.2s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,1μm,21.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,914nm,23.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,508nm,18.0s | | | | | | |
| **HABR** | **Khabarovsk** | **31.61** | **285** | *e*P | **P** | **04 25 35.2** | **-1.3** |
| HABR | | | | *e**PP | **pP** | **04 25 44.8** | **-1.3** |
| HABR | | | | *e**SP | **sP** | **04 25 49.1** | **-1.0** |
| HABR | | | | *e* | | 04 26 39.8 | |
| HABR | | | | *e* | | 04 28 26.1 | |
| HABR | | | | *e*S | **S** | **04 30 43.2** | **+0.2** |
| HABR | | | | *e**SS | **sS** | **04 30 59.3** | **+0.4** |
| HABR | | | | *e*SS | **SnSn** | **04 32 32.3** | **+2.3** |
| HABR | | | | *e*SSS | SSS | 04 32 47.9 | |
| HABR | | | | *e* | | 04 36 04.7 | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,89nm,1.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,7μm,19.0s | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.57** | **47** | P | **P** | **04 25 53.4** | **-0.1** |
| | comp=Z,8.0nm,0.9s,baz=276,slow=9.2,SNR=11 | | | | | | |
| YKA | | | | PcP | **PcP** | **04 28 33.1** | **0.0** |
| | comp=Z,6.1nm,1.0s,baz=289,slow=2.5,SNR=4.5 | | | | | | |
| YKA | | | | ScP | **ScP** | **04 32 18.0** | **+3.1** |
| | comp=Z,3.8nm,1.1s,baz=297,slow=4.0,SNR=4.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.57** | **47** | P | **P** | **04 25 53.4** | **-0.1** |
| YKA | | | | | | 04 28 33.1 | |
| YKA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| YKA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| YKA | | | | pmax | pmax | | |
| | comp=N,4.0nm,1.1s | | | | | | |
| **B05A** | **Bryant** | **33.80** | **74** | P | **P** | **04 25 55.7** | **+0.1** |
| | baz=34 | | | | | | |
| **F04D** | **Rainier, OR** | **34.24** | **78** | P | **P** | **04 26 00.0** | **+0.5** |
| | baz=34 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.62** | **211** | T | T | 05 03 21.0 | |
| | baz=18,slow=76,SNR=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.63** | **210** | T | T | 05 02 55.5 | |
| | baz=18,slow=76,SNR=78 | | | | | | |

**H11N1 WAKE ISLAND Hy 34.64 211** T T 05 02 51.8
baz=18,slow=76,SNR=41
**I03D Drain, OR 35.22 82** P **P** **04 26 08.7 +0.7**
baz=35
**USRK Ussuriysk Ar. 35.48 279** P **P** **04 26 09.7 -0.5**
comp=N,23nm,0.8s,baz=59,slow=9.0,SNR=16
**G05D Wamic, OR 35.69 78** P **P** **04 26 11.3 -0.7**
baz=36
**I04A Tendick Farm, 35.75 81** P **P** **04 26 12.3 -0.3**
baz=36
**H11S1 WAKE ISLAND Hy 35.83 210** T T 05 05 30.9
baz=20,slow=76,SNR=72
**H11S2 WAKE ISLAND Hy 35.84 210** T T 05 05 31.4
baz=20,slow=76,SNR=68
**H11S3 WAKE ISLAND Hy 35.84 210** T T 05 05 39.1
baz=20,slow=76,SNR=49
**L02D Cave Junction, 35.88 84** P **P** **04 26 14.3 +0.6**
baz=36
**MJAR Matsushiro Arr 35.99 264** P **P** **04 26 14.5 -0.2**
comp=N,16nm,0.9s,baz=50,slow=8.3,SNR=18
**MJAR Matsushiro Arr 35.99 264** P **P** **04 26 14.5 -0.2**
MJAR pmax pmax
comp=Z,16nm,0.9s
**MAJO Matsushiro 35.99 264** *e*P **P** **04 26 13.9 -0.8**
**MAJO Matsushiro 35.99 264** *e*P **P** **04 26 13.8 -0.8**
comp=Z,76nm,1.1s
**MAT Matsushiro 35.99 264** P **P** **04 26 14.2 -0.5**
**VLA Vladivostok 36.10 278** *e*P **P** **04 26 16.2 +0.7**
VLA pmax pmax
comp=Z,70nm,1.1s
**I05D Terrebonne, OR 36.13 80** P **P** **04 26 17.0 +1.1**
baz=36
**HAWA Hanford 36.21 76** *e*P **P** **04 26 16.3 -0.2**
comp=Z,23nm,0.7s
**J04D Umpqua Nationa 36.23 82** P **P** **04 26 17.3 +0.4**
baz=36
**YBH Yreka Blue Hor 36.67 84** P P 04 26 24.3 +3.8
comp=Z,3.7nm,0.9s,baz=277,slow=4.8,SNR=5.9
YBH ScP **ScP** **04 32 29.9 +3.2**
comp=Z,3.4nm,1.1s,baz=106,slow=5.1,SNR=3.4
**YBH Yreka Blue Hor 36.67 84** P P 04 26 24.3 +3.8
YBH pmax pmax
comp=Z,4.0nm,0.9s
YBH pmax pmax
comp=N,3.0nm,1.1s
**YBH Yreka Blue Hor 36.67 84** *e*P P 04 26 24.0 +3.5
comp=N,19nm,1.0s
YBH ScP **ScP** **04 32 29.9 +3.2**
**MDJ Mudanjiang 36.74 282** P **P** **04 26 20.4 -0.5**
MDJ PMZ
comp=N,21nm,1.2s
**MDJ Mudanjiang 36.74 282** *e*P **P** **04 26 20.2 -0.8**
comp=N,16nm,0.8s
**J05D Fort Rock, OR 36.75 81** P **P** **04 26 21.3 +0.1**
baz=37
**M02C Callahan 36.77 85** P **P** **04 26 22.9 +1.5**
baz=37
**NEW Newport 36.77 71** P **P** **04 26 21.3 0.0**
comp=N,16nm,0.9s,baz=306,slow=6.1,SNR=12
NEW ScP **ScP** **04 32 29.3 +2.5**
comp=N,7.0nm,1.0s,baz=282,slow=2.2,SNR=4.6
**NEW Newport 36.77 71** P **P** **04 26 21.3 0.0**
NEW pmax pmax
comp=Z,16nm,0.9s
NEW pmax pmax
comp=N,7.0nm,1.0s
**NEW Newport 36.77 71** P **P** **04 26 21.3 0.0**
baz=37,SNR=8.2
**NEW Newport 36.77 71** *e*P **P** **04 26 23.6 +2.4**
comp=N,34nm,0.9s
NEW ScP **ScP** **04 32 29.3 +2.5**
**K04D Chiloquin, OR 36.78 82** P **P** **04 26 22.1 +0.6**
baz=37
**EDM Edmonton 36.83 62** *e*P **P** **04 26 21.2 -0.5**
EDM pmax pmax
comp=Z,103nm,0.7s
**EDM Edmonton 36.83 62** *e*P **P** **04 26 21.2 -0.5**
comp=Z,104nm,0.7s
**MSHR Mys Shultsa 36.85 278** *e*P **P** **04 26 21.9 0.0**
**N02D Trinity Center 37.10 85** P **P** **04 26 24.7 +0.5**
baz=37
**G08A Pilot Rock 37.10 77** *e*P **P** **04 26 26.2 +2.0**
comp=Z,76nm,2.0s
**M04C Macdoel 37.19 84** P **P** **04 26 25.3 +0.3**
baz=37
**KIPM Iron Peak 37.29 87** *e*P **P** **04 26 24.0 -1.8**
comp=Z,36nm,1.0s
**O03D Paynes Creek 38.05 86** P **P** **04 26 32.6 +0.4**
baz=38
**BSMT Bassoo Peak 38.35 71** *e*P **P** **04 26 34.5 -0.3**
comp=Z,56nm,1.2s
**J08A Circle Bar Ran 38.41 79** *e*P **P** **04 26 35.6 +0.4**
comp=Z,31nm,1.0s
**BLMT Blacktail Moun 38.52 70** *e*P **P** **04 26 36.0 -0.3**
**JTMT Jette 38.70 71** *e*P **P** **04 26 37.9 +0.2**
**RES Resolute Bay 38.76 25** P **P** **04 26 37.0 -0.7**
comp=Z,4.3nm,0.9s,baz=282,slow=9.3,SNR=4.0
**RES Resolute Bay 38.76 25** P **P** **04 26 37.0 -0.7**
RES pmax pmax
comp=Z,4.0nm,0.9s
**YBMT Yellow Bay 38.80 70** *e*P **P** **04 26 40.1 +1.5**
comp=Z,28nm,1.1s
**WVOR Wild Horse Val 38.81 81** *e*P **P** **04 26 38.6 -0.1**
WVOR pmax pmax
comp=Z,38nm,0.9s
**WVOR Wild Horse Val 38.81 81** *e*P **P** **04 26 38.6 -0.1**
comp=Z,38nm,0.9s
**SWMT Swartz Lake 38.98 71** *e*P **P** **04 26 41.5 +1.5**
comp=Z,12nm,0.9s
**MSO Missoula 39.35 72** P **P** **04 26 42.8 -0.3**
baz=39,SNR=8.8
**MSO Missoula 39.35 72** *e*P **P** **04 26 45.5 +2.4**
comp=Z,60nm,1.3s
**SLMT Seeley Lake 39.41 71** *e*P **P** **04 26 43.0 -0.7**
comp=Z,30nm,0.9s
SLMT *e*ScP **ScP** **04 32 36.6 -0.4**
**BOD Bodaibo 39.70 308** *e*P P 04 26 41.0 -4.7
BOD pmax pmax
comp=Z,13nm,1.4s
**CN2 Changchun 39.70 283** *e*P **P** **04 26 45.1 -0.8**
CN2 *ep*P **pP** **04 26 55.5 -0.2**
CN2 PP **PnPn** **04 28 20.4 -0.1**
CN2 PMZ
comp=Z,50nm,1.1s
CN2 LN
comp=Z,1μm,19.0s
CN2 LE
comp=Z,5μm,19.0s
CN2 LZ
comp=Z,6μm,19.0s
**CHMT Chamberlain Mo 39.72 71** *e*P **P** **04 26 44.9 -1.4**
comp=Z,23nm,1.2s
CHMT *e*ScP **ScP** **04 32 39.7 +1.4**
**MFID Camas Ranch 40.00 77** *e*P **P** **04 26 50.5 +2.0**
comp=Z,26nm,1.1s
**CMB Columbia Colle 40.28 87** *e*P **P** **04 26 52.9 +2.1**
CMB pmax pmax
comp=Z,24nm,1.2s
**CMB Columbia Colle 40.28 87** *e*P **P** **04 26 52.9 +2.1**
comp=Z,24nm,1.2s
**HRY Holter Researc 40.66 71** *e*P **P** **04 26 53.3 -0.7**
comp=Z,26nm,0.8s
**LRM Limekiln Ridge 40.76 72** *e*P **P** **04 26 55.6 +0.7**
comp=Z,107nm,0.9s
**HLID Hailey 40.78 76** P **P** **04 26 54.7 -0.4**
baz=41
**HLID Hailey 40.78 76** *e*P **P** **04 26 54.1 -0.9**
comp=Z,46nm,1.3s
**KSSKC Sokcho 40.96 274** ⇓P P 04 26 59.6 +3.3
**MCMT McKenzie Canyo 41.04 74** *e*P **P** **04 26 57.0 -0.2**
**SEHB SEOHWA 41.14 274** ⇓P **P** **04 27 00.2 +2.3**
SNR=7.3
**SEHB SEOHWA 41.14 274** ⇓P **P** **04 27 00.2 +2.3**
SNR=7.3
**EGMT Eagleton 41.21 68** P **P** **04 26 58.3 -0.1**
baz=41,SNR=9.9
**EGMT Eagleton 41.21 68** *e*P **P** **04 26 58.5 0.0**
comp=Z,57nm,1.1s
**KSDGY Daegwallycong 41.23 273** ⇓P P 04 27 03.1 +4.4
**BOZ Bozeman (W) 41.34 72** *e*P **P** **04 26 59.2 -0.4**
BOZ pmax pmax
comp=Z,29nm,0.9s
**BOZ Bozeman (W) 41.34 72** P **P** **04 26 58.7 -0.9**
baz=41,SNR=8.1
**BOZ Bozeman (W) 41.34 72** *e*P **P** **04 26 59.2 -0.4**
comp=Z,29nm,0.9s
**NVAR Mina Array Bea 41.34 85** P **P** **04 27 00.3 +0.6**
comp=Z,4.2nm,0.8s,baz=302,slow=5.7,SNR=11
NVAR ScP **ScP** **04 32 47.6 +2.8**
comp=Z,6.0nm,1.0s,baz=273,slow=3.4,SNR=9.3
**KSIJA INJE 41.40 274** ⇑P P 04 27 05.9 +5.9
SNR=5.3
**MLAC Mammoth Lakes 41.50 87** P **P** **04 27 00.4 -0.7**
baz=41
**KSCWO Cheorwon 41.72 274** ⇑P P 04 27 06.0 +3.4
SNR=12
**KSCWO Cheorwon 41.72 274** ⇑P P 04 27 06.0 +3.4
SNR=12
**KSCHC Chuncheon 41.72 274** ⇓P **P** **04 27 05.4 +2.8**
**KSRS Korea Array 41.85 273** P **P** **04 27 04.2 +0.6**
comp=Z,16nm,0.9s,baz=43,slow=8.0,SNR=12
**KSRS Korea Array 41.85 273** P **P** **04 27 04.2 +0.6**
KSRS pmax pmax
comp=Z,16nm,0.9s
**KSAR Wonju Array Be 41.88 273** P **P** **04 27 04.2 +0.3**
**KSAR Wonju Array Be 41.88 273** P **P** **04 27 04.2 +0.3**
**QLMT Earthquake Lak 41.89 73** *e*P **P** **04 27 04.2 0.0**
comp=Z,7.0nm,1.4s
**SNY Shenyang 41.94 282** ⇓P **P** **04 27 05.6 +1.3**
SNY PMZ
comp=Z,170nm,1.4s
**RCTC Rector, Farmer 42.07 89** P **P** **04 27 05.9 +0.5**
baz=42
**YNCB YEONCHEON 42.11 275** ⇓P **P** **04 27 08.4 +2.7**
SNR=6.9
**YNCB YEONCHEON 42.11 275** ⇓P **P** **04 27 08.4 +2.7**
SNR=6.9
**ALE Alert 42.17 10** P **P** **04 27 06.1 +0.4**
comp=Z,115nm,1.2s,SNR=5.2
**SMMC Simmler 42.23 90** P **P** **04 27 07.8 +0.9**
baz=42
**FFC Flin Flon 42.29 56** *e*P **P** **04 27 05.7 -1.4**
FFC pmax pmax
comp=Z,39nm,1.1s
**FFC Flin Flon 42.29 56** *e*P **P** **04 27 05.7 -1.4**
comp=Z,39nm,1.1s
**KSMUS Musan 42.31 275** P **P** **04 27 10.0 +2.6**
SNR=10
**YNR Norris Junctio 42.41 73** *e*P **P** **04 27 08.7 +0.3**
comp=Z,80nm,1.2s
**GCMT Greycliff 42.42 71** *e*P **P** **04 27 08.2 -0.3**
comp=Z,12nm,0.9s
**YFT Old Faithful 42.45 73** *e*P **P** **04 27 09.4 +0.6**
comp=Z,144nm,1.5s
**VES Vestal, Richgr 42.46 89** P **P** **04 27 09.9 +1.2**
baz=42
**PKM Peak Mountain 42.61 91** P **P** **04 27 10.8 +0.7**
baz=42
**KSGAH Ganghwa 42.61 275** ⇓P P 04 27 15.5 +5.7
SNR=6.2
**INCN Inchon 42.64 274** P **P** **04 27 12.2 +2.1**
SNR=9.5
INCN mb 04 27 17.5
SNR=5.8
**INCN Inchon 42.64 274** *e*P **P** **04 27 12.2 +2.1**
comp=Z,117nm,1.1s
**H17A Grant Village 42.64 73** P **P** **04 27 09.8 -0.5**
baz=42
**LKWY Lake 42.65 73** *e*P **P** **04 27 09.6 -0.9**
LKWY pmax pmax
comp=Z,29nm,0.8s
**LKWY Lake 42.65 73** *e*P **P** **04 27 09.6 -0.9**
comp=Z,29nm,0.8s
**IMW Indian Meadow 42.70 74** *e*P **P** **04 27 11.2 +0.3**
comp=Z,21nm,1.0s
**CWC Cottonwood Cre 42.71 88** P **P** **04 27 11.1 +0.2**
baz=43
**HVU Hansel Valley 42.78 78** *e*P **P** **04 27 13.6 +2.2**
HVU pmax pmax
comp=Z,23nm,0.7s
**HVU Hansel Valley 42.78 78** *e*P **P** **04 27 13.6 +2.2**
comp=Z,23nm,0.7s
**JNU Nakatsue 42.78 266** P **P** **04 27 11.8 +0.4**
comp=Z,83nm,0.9s,baz=41,slow=7.4,SNR=16
**JNU Nakatsue 42.78 266** *e*P **P** **04 27 11.0 -0.3**
**GRAC Grapevine Rang 42.80 86** P **P** **04 27 11.6 +0.1**
baz=43
**TJN Taejon 42.87 273** *e*P **P** **04 27 13.3 +1.3**
**MOOW Moose Ponds 42.90 74** *e*P **P** **04 27 12.9 +0.5**
comp=Z,3.8nm,1.2s
**ISA Isabella 42.96 89** *e*P **P** **04 27 13.8 +1.0**
ISA pmax pmax
comp=Z,18nm,0.9s
**ISA Isabella 42.96 89** P **P** **04 27 12.4 -0.4**
baz=43
**ISA Isabella 42.96 89** *e*P **P** **04 27 13.8 +1.0**
comp=Z,18nm,0.9s
**SBC Santa Barbara 42.97 91** P **P** **04 27 12.7 -0.1**
baz=43
**RLMT Red Lodge 43.02 71** P **P** **04 27 13.4 0.0**
baz=43,SNR=7.8
**RLMT Red Lodge 43.02 71** *e*P **P** **04 27 12.4 -1.0**
comp=Z,66nm,1.1s
**LOHW Long Hollow 43.06 74** *e*P **P** **04 27 13.7 0.0**
comp=Z,11nm,1.0s
**ARVC Arvin 43.08 90** P **P** **04 27 13.5 -0.2**
baz=43
**R11A Troy Canyon, C 43.08 84** P **P** **04 27 14.2 +0.3**
baz=43,SNR=8.4
**R11A Troy Canyon, C 43.08 84** *e*P **P** **04 27 14.8 +0.9**
comp=Z,18nm,0.9s
**MPMC Manual Prospec 43.32 88** P **P** **04 27 16.0 +0.1**
baz=43
**FURC Furnace Creek, 43.46 87** P **P** **04 27 16.8 +0.2**
baz=43
**KSBAR Backryungdo 43.53 276** ⇓P **P** **04 27 20.0 +2.8**
SNR=8.0
**KSBAR Backryungdo 43.53 276** ⇓P **P** **04 27 20.0 +2.8**
SNR=8.0
**TPNV Topopah Spring 43.54 86** P **P** **04 27 17.2 -0.4**
baz=43,SNR=6.9
**LRMC Laurel Mountai 43.57 88** P **P** **04 27 17.6 -0.2**
baz=43
**BLG Laguna Peak 43.59 91** P **P** **04 27 17.5 -0.4**
baz=43
**HWUT Hardware Ranch 43.62 77** *e*P **P** **04 27 18.4 +0.1**
comp=Z,36nm,1.3s
**DUG Dugway 43.69 79** *e*P **P** **04 27 18.2 -0.6**
DUG pmax pmax
comp=Z,44nm,1.0s
**DUG Dugway 43.69 79** P **P** **04 27 18.2 -0.6**
baz=44,SNR=6.2
**DUG Dugway 43.69 79** *e*P **P** **04 27 18.1 -0.6**
comp=Z,44nm,1.0s
**EDW2 Edwards Air Fo 43.77 89** P **P** **04 27 19.6 +0.3**
baz=44
**SNCC San Nicolas Is 43.88 92** P **P** **04 27 20.5 +0.4**
baz=44
**LAO LASA Array 43.96 68** P **P** **04 27 20.1 -0.7**
baz=44,SNR=8.0
**LAO LASA Array 43.96 68** *e*P **P** **04 27 20.0 -0.7**
comp=Z,34nm,0.8s
**DECC Green Verdugo 43.96 90** P **P** **04 27 21.0 +0.1**
baz=44
**CTU Camp Tracy 44.05 78** *e*P **P** **04 27 22.7 +1.1**
comp=Z,27nm,0.9s
**BW06 Boulder Array 44.17 74** *e*P **P** **04 27 22.0 -0.7**
comp=Z,38nm,0.8s
**DGMT Dagmar 44.17 65** P **P** **04 27 21.5 -0.8**
baz=44,SNR=5.6
**GSC Goldstone 44.23 88** *e*P **P** **04 27 25.0 +1.9**
GSC pmax pmax
comp=Z,26nm,0.9s
**GSC Goldstone 44.23 88** P **P** **04 27 22.2 -0.9**
baz=44
**GSC Goldstone 44.23 88** *e*P **P** **04 27 25.0 +1.9**
comp=Z,26nm,0.9s
**NLU North Lily Min 44.28 79** *e*P **P** **04 27 26.1 +2.5**
comp=Z,26nm,0.9s
**BFSC Mount Baldy Ra 44.39 90** P **P** **04 27 23.9 -0.5**
baz=44
**SHPR Sheep Range 44.49 85** *e*P **P** **04 27 25.1 -0.1**
SHPR *e*ScP **ScP** **04 32 57.0 -0.5**
**MPU Maple Canyon 44.52 79** *e*P **P** **04 27 24.6 -0.8**
comp=Z,52nm,0.8s
**A25A Svangstu Ranch 44.53 64** P **P** **04 27 24.4 -0.8**
baz=44,SNR=19
**TUQ Turquoise Moun 44.70 87** P **P** **04 27 26.3 -0.6**
baz=44
**BBRC Big Bear Solar 44.84 89** P **P** **04 27 27.7 -0.3**
baz=45
**HEC Hector,Ludlow 44.84 88** P **P** **04 27 27.9 0.0**
baz=45
**B25A Knox Farm, Ray 44.86 64** P **P** **04 27 25.5 -2.4**
baz=45
**MURC Murrieta 45.10 90** P **P** **04 27 29.7 -0.2**
baz=45
**C25A Freed Ranch, W 45.11 65** P **P** **04 27 29.3 -0.6**
baz=45
**A26A Wade Farm, Ken 45.15 63** P **P** **04 27 30.1 -0.1**
baz=45,SNR=7.8
**GMRC Granite Mounta 45.29 88** P **P** **04 27 31.4 -0.1**
baz=45
**D25A Fairfield 45.38 66** P **P** **04 27 31.9 -0.1**
baz=45
**P17A Butcher Ranch, 45.40 79** *e*P **P** **04 27 35.0 +2.6**
comp=Z,23nm,0.9s
**LDFC Landfair 45.44 87** *e*P **P** **04 27 34.0 +1.3**
comp=Z,46nm,1.0s
**PFO Pinyon Flat Ob 45.56 89** P **P** **04 27 33.3 -0.4**
baz=45
**A27A Ledoux Ranch, 45.57 63** P **P** **04 27 32.9 -0.5**
baz=45,SNR=8.4
**BELC Belle Mtn. Jos 45.59 89** P **P** **04 27 33.6 -0.3**
baz=45
**P18A Preston Nutter 45.60 78** *e*P **P** **04 27 36.2 +2.0**
comp=Z,58nm,1.1s
**109C Camp Elliot, M 45.63 91** P **P** **04 27 33.7 -0.4**
baz=46
**E25A Miller Ranch, 45.69 67** P **P** **04 27 33.5 -1.0**
baz=46,SNR=6.0
**C26A Wahner Farm, P 45.70 64** P **P** **04 27 33.3 -1.2**
baz=46,SNR=5.6
**B27A Peters Farms, 45.85 63** P **P** **04 27 34.8 -0.9**
baz=46,SNR=15
**D26A Manning 45.95 65** P **P** **04 27 35.7 -0.8**
baz=46
**F25A Bowman 45.98 67** P **P** **04 27 36.3 -0.5**
baz=46
**IRM Iron Mountain 46.01 88** P **P** **04 27 37.3 +0.1**
baz=46
**MONP Monument Peak 46.06 90** P **P** **04 27 37.9 +0.2**
baz=46
**K22A Casper 46.06 73** P **P** **04 27 36.8 -0.8**
baz=46,SNR=6.4
**K22A Casper 46.06 73** *e*P **P** **04 27 39.0 +1.4**
comp=Z,163nm,2.0s
**C27A Sayler Ranch, 46.10 64** P **P** **04 27 37.0 -0.6**
baz=46
**A28A Rude Farm, Bot 46.13 62** P **P** **04 27 37.4 -0.5**
baz=46,SNR=12
**E26A Carlson Angus 46.24 66** P **P** **04 27 38.5 -0.4**
baz=46,SNR=7.5
**B28A Dugan Ranch, T 46.33 63** P **P** **04 27 38.6 -0.9**
baz=46,SNR=22
**G25A Newell 46.42 68** P **P** **04 27 39.1 -1.2**
baz=46,SNR=5.1
**D27A Center 46.42 65** P **P** **04 27 39.1 -1.1**
baz=46
**F26A Lodgepole 46.48 67** P **P** **04 27 40.2 -0.5**
baz=46
**O20A White River Ci 46.52 77** P **P** **04 27 40.7 -0.6**
baz=46,SNR=7.1
**O20A White River Ci 46.52 77** *e*P **P** **04 27 40.1 -1.2**
comp=Z,85nm,0.8s
**PDMCI Parker Dam,Lak 46.55 87** P **P** **04 27 41.2 -0.1**
baz=46
**H25A Fruitdale 46.64 69** P **P** **04 27 41.6 -0.4**
baz=46,SNR=8.1
**Y12C Blythe 46.67 88** P **P** **04 27 42.5 +0.2**
baz=46
**RSSD Black Hills 46.67 70** *e*P **P** **04 27 41.4 -1.1**
RSSD pmax pmax
comp=Z,30nm,1.3s
**RSSD Black Hills 46.67 70** *e*P **P** **04 27 41.4 -1.1**
comp=Z,30nm,1.3s
**A29A Manning Farm, 46.70 62** P **P** **04 27 41.9 -0.4**
baz=46,SNR=19
**C28A Hausauer Farms 46.72 64** P **P** **04 27 42.3 -0.2**
baz=46
**E27A Carson 46.78 66** P **P** **04 27 42.5 -0.6**
baz=47,SNR=7.2
**G26A Maurine 46.83 67** P **P** **04 27 42.7 -0.8**
baz=47,SNR=6.3
**F27A Lemmon 46.84 67** P **P** **04 27 42.8 -0.7**
baz=47,SNR=6.7
**B29A Wagenman Farm, 46.88 62** P **P** **04 27 42.9 -0.9**
baz=47
**I25A Rochford 46.91 70** P **P** **04 27 43.7 -0.6**
baz=47
**D28A Regan 46.91 64** P **P** **04 27 43.4 -0.7**
baz=47,SNR=6.8
**GLA Glamis 46.95 89** P **P** **04 27 44.3 -0.2**
baz=47
**MDND Maddock 47.09 63** P **P** **04 27 44.6 -0.8**
baz=47,SNR=6.4
**MDND Maddock 47.09 63** *e*P P 04 27 41.5 -3.9
comp=Z,139nm,0.9s
**H26A Fairpoint 47.12 68** P **P** **04 27 44.7 -1.1**
baz=47
**G27A Dupree 47.17 67** P **P** **04 27 44.9 -1.2**
baz=47,SNR=7.6
**PV04 Paradox Valley 47.19 79** *e*P **P** **04 27 47.7 +1.2**
**E28A Huff 47.19 65** P **P** **04 27 45.1 -1.2**
baz=47,SNR=7.0
**A30A Hoffart Farm, 47.20 61** P **P** **04 27 45.3 -0.9**
baz=47
**J25A Sunshine Ranch 47.24 70** P **P** **04 27 45.6 -1.2**
baz=47
**I26A New Underwood 47.41 69** P **P** **04 27 47.9 -0.2**
baz=47
**N23A Red Feather La 47.45 74** P **P** **04 27 48.1 -0.6**
baz=47
**B30A Myrvik Farm, E 47.45 62** P **P** **04 27 47.8 -0.5**
baz=47,SNR=18
**WUAZ Wupatki 47.48 84** P **P** **04 27 48.4 -0.4**
baz=47
**WUAZ Wupatki 47.48 84** *e*P **P** **04 27 48.2 -0.6**
comp=Z,20nm,0.8s
**H27A Howes 47.52 68** P **P** **04 27 48.0 -0.8**
baz=47
**BJT Baijiatuau 47.53 284** *e*P **P** **04 27 49.3 +0.4**
BJT pmax pmax
comp=Z,65nm,1.0s
**BJT Baijiatuau 47.53 284** *e*P **P** **04 27 49.3 +0.4**
comp=Z,64nm,1.0s
**F28A McLaughlin 47.55 66** P **P** **04 27 48.0 -1.0**
baz=47,SNR=7.5
**PV01 Paradox Valley 47.55 79** *e*P **P** **04 27 49.4 -0.1**
comp=Z,3μm,0.8s
**J26A Sides Ranch, S 47.71 70** P **P** **04 27 49.7 -0.7**
baz=48
**ULM Lac du Bonnet 47.78 58** P **P** **04 27 51.2 +0.6**
comp=Z,30nm,1.0s,baz=306,slow=9.0,SNR=9.7
**ULM Lac du Bonnet 47.78 58** *e*P **P** **04 27 50.9 +0.2**
ULM pmax pmax
comp=Z,47nm,1.1s
**ULM Lac du Bonnet 47.78 58** *e*P **P** **04 27 50.9 +0.2**
comp=Z,47nm,1.1s
**E29A Napoleon 47.79 64** P **P** **04 27 50.5 -0.4**
baz=48
**C30A Mose, Pekin 47.80 63** P **P** **04 27 50.1 -0.8**
baz=48
**A31A Linda, St. Vin 47.81 61** P **P** **04 27 50.0 -0.9**
baz=48
**B31A Greenbush Farm 47.84 61** P **P** **04 27 50.1 -1.2**
baz=48,SNR=8.0
**I27A Quinn 47.86 69** P **P** **04 27 50.5 -1.0**
baz=48,SNR=7.2
**TLY Talaya 47.88 304** *e*P **P** **04 27 51.8 +0.3**
TLY pmax pmax
comp=Z,45nm,1.3s
**TLY Talaya 47.88 304** P **P** **04 27 51.6 +0.1**
SNR=13
**TLY Talaya 47.88 304** *e*P **P** **04 27 51.0 -0.5**
comp=Z,48nm,1.3s
**G28A Parade 47.93 67** P **P** **04 27 51.0 -1.1**
baz=48,SNR=6.5
**D30A Buchanan 47.98 63** P **P** **04 27 51.4 -0.9**
baz=48,SNR=11
**H28A Mission Ridge 48.10 67** P **P** **04 27 52.6 -0.8**
baz=48,SNR=8.0
**F29A Eureka 48.11 65** P **P** **04 27 52.9 -0.5**
baz=48,SNR=7.0
**C31A Landman Farms, 48.16 62** P **P** **04 27 53.2 -0.5**
baz=48,SNR=6.9
**MVCO Mesa Verde 48.18 80** P **P** **04 27 53.4 -0.8**
baz=48
**MVCO Mesa Verde 48.18 80** *e*P **P** **04 27 55.8 +1.5**
comp=Z,60nm,1.4s
**ULN Ulaanbaatar 48.20 298** *e*P **P** **04 27 53.3 -0.9**
ULN pmax pmax
comp=Z,24nm,0.9s

ULN **Ulaanbaatar** 48.20 298 P P 04 27 54.6 +0.4
SNR=11
ULN **Ulaanbaatar** 48.20 298 *e*P P 04 27 53.8 -0.4
comp=Z,25nm,1.0s
E30A **Jud** 48.24 64 P P 04 27 54.1 -0.3
baz=48
M25A **Palm-Egli Farm** 48.26 73 P P 04 27 53.8 -0.9
baz=48
ISCO **Idaho Springs** 48.32 75 *e*P P 04 27 58.1 +2.7
ISCO pmax pmax
comp=Z,15nm,1.0s
ISCO **Idaho Springs** 48.32 75 P P 04 27 54.2 -1.3
baz=48
ISCO **Idaho Springs** 48.32 75 *e*P P 04 27 58.1 +2.7
comp=Z,15nm,1.0s
J27A **Elkhorn Farm,** 48.38 69 P P 04 27 54.7 -0.8
baz=48,SNR=7.4
I28A **Midland** 48.42 68 P P 04 27 55.0 -0.8
baz=48,SNR=8.8
G29A **Hoven** 48.43 66 P P 04 27 55.2 -0.6
baz=48
B32A **Ashes, Strandq** 48.47 61 P P 04 27 55.2 -0.9
baz=48,SNR=18
SONM **Songino Array** 48.58 298 P P 04 27 56.8 -0.3
comp=Z,20nm,0.9s,baz=50,slow=9.4,SNR=20
SONM PcP PcP 04 29 22.8 +0.5
comp=Z,11nm,1.1s,baz=69,slow=4.9,SNR=6.0
SONM ScP ScP 04 33 16.6 +2.2
comp=Z,2.0nm,1.0s,baz=62,slow=3.4,SNR=3.7
SONM **Songino Array** 48.58 298 P P 04 27 56.8 -0.3
SONM 04 29 22.8
SONM pmax pmax
comp=Z,20nm,0.9s
SONM pmax pmax
comp=Z,11nm,1.1s
SONM pmax pmax
comp=N,2.0nm,1.0s
H29A **Onida** 48.60 67 P P 04 27 56.2 -1.0
baz=48
J28A **Allard Ranch,** 48.72 69 P P 04 27 57.7 -0.4
baz=48,SNR=8.9
E31A **Nome** 48.78 64 P P 04 27 57.2 -1.3
baz=49,SNR=5.3
ZAK **Zakamensk** 48.80 303 *e*P P 04 27 58.1 -0.6
ZAK *e* 04 29 22.8
ZAK pmax pmax
comp=Z,61nm,1.3s
ZAK pmax pmax
comp=Z,26nm,1.3s
S22A **4UR Ranch, Cre** 48.87 78 P P 04 27 57.2 -2.4
baz=49
AGMN **Agassiz Nation** 48.89 61 P P 04 27 58.3 -1.0
baz=49,SNR=12
AGMN **Agassiz Nation** 48.89 61 *e*P P 04 27 58.2 -1.0
comp=Z,69nm,1.2s
I29A **Vivian Onida** 48.91 68 P P 04 27 58.1 -1.4
baz=49
214A **Organ Pipe Nat** 48.94 88 P P 04 28 00.0 +0.1
baz=49
F31A **Hecla** 48.99 64 P P 04 27 59.0 -1.1
baz=49
K28A **Ten Mile Ranch** 49.07 70 P P 04 28 00.2 -0.7
baz=49,SNR=7.2
Q24A **Divide** 49.12 76 P P 04 28 01.3 -0.3
baz=49
N26A **Koester Ranch,** 49.13 73 P P 04 28 01.1 -0.2
baz=49
M27A **Reverse DX Ran** 49.19 71 P P 04 28 00.7 -1.2
baz=49
E32A **Braaten, Kindr** 49.22 63 P P 04 28 01.2 -0.6
baz=49
MOY **Mondy** 49.25 305 *e*P P 04 28 02.1 -0.1
MOY pmax pmax
comp=Z,56nm,1.6s
C33A **Trail** 49.26 61 P P 04 28 01.1 -1.1
baz=49
J29A **Okreek** 49.26 68 P P 04 28 01.4 -0.9
baz=49,SNR=9.4
TIA **Tai'an** 49.34 280 ⇑P P 04 28 03.1 +0.2
TIA PMZ
comp=Z,90nm,0.9s
G31A **Conde** 49.39 65 P P 04 28 02.2 -1.0
baz=49
SUSD **South Dakota S** 49.43 66 P P 04 28 02.6 -0.9
baz=49
O26A **Horse Wrangler** 49.43 73 P P 04 28 02.8 -0.9
baz=49
B34A **Aery, Baudette** 49.44 60 P P 04 28 02.6 -1.0
baz=49,SNR=14
I30A **Oacoma** 49.48 67 P P 04 28 02.5 -1.3
baz=49
N27A **Anderson Farm,** 49.55 72 P P 04 28 03.3 -1.3
baz=49
D33A **AnnSam, Waubun** 49.58 62 P P 04 28 03.2 -1.4
baz=49,SNR=11
K29A **Lazy Trails An** 49.66 69 P P 04 28 04.6 -0.7
baz=50
SDCO **Great Sand Dun** 49.68 77 P P 04 28 05.1 -0.7
baz=50,SNR=5.8
SDCO **Great Sand Dun** 49.68 77 *e*P P 04 28 06.3 +0.4
comp=Z,33nm,1.1s
H31A **Wolsey** 49.68 66 P P 04 28 04.2 -1.2
baz=50
OGNE **Ogallala** 49.76 72 P P 04 28 05.9 -0.3
baz=50
OGNE **Ogallala** 49.76 72 *e*P P 04 28 05.8 -0.3
G32A **Webster** 49.77 65 P P 04 28 05.3 -0.9
baz=50
HHC **Hu-ho-hao-te** 49.79 288 *e*P P 04 28 07.0 +0.6
HHC S S 04 35 12.4 -1.1
HHC PMZ
comp=Z,28nm,1.1s
HHC LN
comp=Z,4μm,20.6s
HHC LE
comp=Z,3μm,15.7s
HHC LZ
comp=Z,4μm,18.4s
J30A **Dallas** 49.80 68 P P 04 28 06.0 -0.4
baz=50
KBS **Kingsbay** 49.82 358 *e*P P 04 28 05.5 -0.5
KBS pmax pmax
comp=Z,70nm,1.0s
KBS **Kingsbay** 49.82 358 *e*P P 04 28 05.5 -0.5
comp=Z,70nm,1.0s
P26A **Davis Ranch, A** 49.84 74 P P 04 28 06.3 -0.6
baz=50,SNR=5.8
E33A **Westby DABS, E** 49.87 63 P P 04 28 06.0 -0.8
baz=50
M28A **Bar X Bar Ranc** 49.88 71 P P 04 28 06.5 -0.5
baz=50
O27A **Beecher Island** 49.97 73 P P 04 28 05.8 -1.9
baz=50
TUC **Tucson** 49.97 86 *e*P P 04 28 07.1 -0.8
TUC pmax pmax
comp=Z,19nm,1.1s
TUC **Tucson** 49.97 86 *e*P P 04 28 07.0 -0.8
comp=Z,19nm,1.1s
D34A **Park Rapids** 49.97 62 P P 04 28 06.6 -0.9
baz=50,SNR=21
L29A **Maesberg Ranch** 49.99 70 P P 04 28 06.8 -1.0
baz=50
K30A **Basset** 50.12 69 P P 04 28 08.1 -0.7
baz=50,SNR=11
N28A **Pribbeno Ranch** 50.22 72 P P 04 28 08.6 -1.0
baz=50
M29A **Burnside Ranch** 50.25 70 P P 04 28 09.3 -0.5
baz=50
J31A **Geddes** 50.25 67 P P 04 28 08.3 -1.4
baz=50,SNR=6.1
H32A **Carlson Farm,** 50.26 65 P P 04 28 08.6 -1.2
baz=50,SNR=5.6
C35A **Jirik Farms, M** 50.27 60 P P 04 28 08.5 -1.3
baz=50
P27A **Ficken Ranch,** 50.30 74 P P 04 28 09.6 -0.8
baz=50
O28A **Krutsinger Ran** 50.43 72 P P 04 28 10.5 -0.7
baz=50
SPB5 **Spitsbergen Ar** 50.44 357 *e*P P 04 28 08.0 -2.7
SPA1 **Spitsbergen Ar** 50.44 357 *e*P P 04 28 08.6 -2.2
SPB1 **Spitsbergen Ar** 50.44 357 *e*P P 04 28 09.6 -1.1
SPA0 **Spitsbergen Ar** 50.45 357 *e*P P 04 28 10.3 -0.5
SPB4 **Spitsbergen Ar** 50.45 357 *e*P P 04 28 10.7 -0.1
SPITS **Spitsbergen Ar** 50.45 357 P P 04 28 10.2 -0.5
comp=Z,53nm,0.9s,baz=68,slow=11,SNR=13
SPITS **Spitsbergen Ar** 50.45 357 P P 04 28 10.3 -0.5
SPITS pmax pmax
comp=Z,53nm,0.9s
SPA3 **Spitsbergen Ar** 50.45 357 *e*P P 04 28 10.7 -0.1
SPA2 **Spitsbergen Ar** 50.45 357 *e*P P 04 28 10.4 -0.4
SPB2 **Spitsbergen Ar** 50.45 357 *e*P P 04 28 10.6 -0.1
SPB3 **Spitsbergen Ar** 50.45 357 *e*P P 04 28 10.7 -0.1
L30A **Spencer Herefo** 50.51 69 P P 04 28 11.1 -0.7
baz=50
I32A **Karley and Nic** 50.54 66 P P 04 28 10.5 -1.4
baz=50
H33A **Prehn Over Nor** 50.55 65 P P 04 28 10.8 -1.3
baz=50,SNR=9.6
R26A **Arlington** 50.58 75 P P 04 28 11.6 -0.8
baz=50
D35A **Remer** 50.60 61 P P 04 28 11.1 -1.2
baz=50,SNR=19
KSCO **Kaye Shedlock'** 50.62 74 P P 04 28 12.4 -0.3
baz=50,SNR=6.2
KSCO **Kaye Shedlock'** 50.62 74 *e*P P 04 28 15.2 +2.5
comp=Z,64nm,0.9s
K31A **O'Neill** 50.65 68 P P 04 28 12.3 -0.5
baz=50
KRAR **Krasnoyarsk** 50.66 313 *e*P P 04 28 13.4 +0.8
KRAR pmax pmax
comp=Z,55nm,1.2s
M30A **Dale-Ortello V** 50.67 70 P P 04 28 12.3 -0.7
baz=50
N29A **Votaw Ranch, W** 50.68 71 P P 04 28 12.1 -1.0
baz=50
F34A **Alexandria** 50.71 63 P P 04 28 12.0 -1.1
baz=50
J32A **Parkston** 50.72 67 P P 04 28 11.5 -1.7
baz=50
E35A **Pequot Lakes** 50.72 62 P P 04 28 12.0 -1.2
baz=50,SNR=8.0
T25A **Trinidad** 50.73 77 P P 04 28 12.7 -1.0
baz=51
P28A **Saint Francis** 50.79 73 P P 04 28 12.7 -1.3
baz=51
G34A **Benson** 50.83 64 P P 04 28 12.6 -1.5
baz=51
LAZ **Ladron** 50.84 82 *e*P P 04 28 14.6 +0.1
comp=Z,12nm,1.1s
C36A **Pine Crest Far** 50.85 60 P P 04 28 12.5 -1.7
baz=51,SNR=15
L31A **Butterfield Fa** 50.88 69 P P 04 28 13.3 -1.3
baz=51,SNR=9.5
ANMO **Albuquerque** 50.91 81 P P 04 28 14.4 -0.6
comp=Z,2.5nm,1.0s,baz=326,slow=7.0,SNR=6.4
ANMO **Albuquerque** 50.91 81 *e*P P 04 28 13.3 -1.7
ANMO pmax pmax
comp=Z,2.0nm,0.9s
ANMO **Albuquerque** 50.91 81 *e*P P 04 28 14.3 -0.7
comp=Z,21nm,1.2s
R27A **Eads** 50.98 75 P P 04 28 14.8 -0.6
baz=51,SNR=5.3
S26A **Kim** 50.99 76 P P 04 28 14.9 -0.7
baz=51
O29A **4D Ranch, Culb** 51.01 72 P P 04 28 15.0 -0.6
baz=51,SNR=5.2
NJ2 **Nanjing** 51.02 274 *e*P P 04 28 15.4 -0.2
NJ2 PMZ
comp=Z,10.0nm,0.9s
D36A **Goodland** 51.03 60 P P 04 28 14.6 -0.9
baz=51,SNR=7.6
F35A **Swanville** 51.05 62 P P 04 28 14.6 -1.2
baz=51
Q28A **Sharon Springs** 51.06 74 P P 04 28 15.1 -0.9
baz=51
K32A **Verdigre** 51.09 68 P P 04 28 15.0 -1.0
baz=51
H34A **Spellman Lake,** 51.10 64 P P 04 28 15.0 -1.1
baz=51
DAG **Danmarks Havn** 51.19 7 *i*P P 04 28 16.0 -0.3
ECSD **EROS Data Cent** 51.20 66 P P 04 28 15.2 -1.7
baz=51,SNR=6.2
ECSD **EROS Data Cent** 51.20 66 *e*P P 04 28 15.2 -1.7
comp=Z,31nm,1.0s
T26A **Comanche Natio** 51.21 77 P P 04 28 16.5 -0.7
baz=51
LPM **Los Pinos Moun** 51.22 81 *e*P P 04 28 18.4 +1.0
comp=Z,8.8nm,0.9s
C37A **Embarrass** 51.22 59 P P 04 28 15.9 -1.1
baz=51,SNR=13
J33A **Davis** 51.26 66 P P 04 28 16.4 -0.9
baz=51
P29A **Atwood** 51.26 72 P P 04 28 16.8 -0.6
baz=51
M31A **Lambtecht Ranc** 51.32 70 P P 04 28 17.2 -0.7
baz=51,SNR=5.1
O30A **MW Ranch, Wils** 51.42 71 P P 04 28 18.0 -0.6
baz=51,SNR=6.5
D37A **Cotton** 51.44 60 P P 04 28 17.6 -1.1
baz=51,SNR=8.9
EYMN **Ely** 51.46 59 P P 04 28 17.9 -0.9
baz=51,SNR=7.1
EYMN **Ely** 51.46 59 *e*P P 04 28 17.5 -1.3
comp=Z,41nm,0.9s
EYMN *e*ScP ScP 04 33 27.5 +1.0
L32A **Elgin** 51.47 68 P P 04 28 17.9 -1.1
baz=51
G35A **Watkins** 51.49 63 P P 04 28 18.1 -0.9
baz=51
R28A **Tribune** 51.54 74 P P 04 28 18.8 -0.8
baz=51,SNR=5.7
H35A **Sunnyside Ranc** 51.62 64 P P 04 28 18.9 -1.1
baz=51
F36A **Milaca** 51.63 62 P P 04 28 18.9 -1.2
baz=51,SNR=6.2
N31A **Bailey Ranch,** 51.66 70 P P 04 28 19.7 -0.7
baz=52
K33A **Hardington** 51.68 67 P P 04 28 19.5 -1.1
baz=52
Q29A **Oakley** 51.69 73 P P 04 28 19.8 -0.8
baz=52
121A **Cookes Peak, D** 51.69 84 P P 04 28 20.6 -0.3
baz=52
P30A **Selden** 51.71 72 P P 04 28 20.2 -0.6
baz=52,SNR=7.0
C38A **Sawbill Land.** 51.72 59 P P 04 28 19.5 -1.3
baz=52
BGNE **Belgrade** 51.76 69 P P 04 28 20.3 -0.9
baz=52
BGNE **Belgrade** 51.76 69 *e*P P 04 28 20.4 -0.7
comp=Z,93nm,0.8s
T27A **Campo** 51.81 76 P P 04 28 20.8 -0.9
baz=52
O31A **Woolen Ranch,** 51.87 71 P P 04 28 21.5 -0.4
baz=52,SNR=6.9
G36A **St. Michael** 51.89 63 P P 04 28 21.1 -0.9
baz=52
R29A **Marienthal** 51.89 74 P P 04 28 22.2 0.0
baz=52
S28A **Manter** 51.97 75 P P 04 28 22.9 +0.1
baz=52
Q30A **Quinter** 52.08 73 P P 04 28 23.2 -0.5
baz=52,SNR=6.5
N32A **Stulken Farm,** 52.09 70 P P 04 28 23.1 -0.5
baz=52
T28A **Walsh** 52.14 76 P P 04 28 23.1 -1.0
baz=52
K34A **Le Mars** 52.15 67 P P 04 28 22.9 -1.1
baz=52
U27A **Thompson Grove** 52.17 77 P P 04 28 24.1 -0.3
baz=52
H36A **Jessenland, He** 52.20 63 P P 04 28 23.6 -0.8
baz=52
M33A **Taylor Creek F** 52.22 68 P P 04 28 23.9 -0.6
baz=52,SNR=5.2
P31A **Stockton** 52.24 72 P P 04 28 23.4 -1.3
baz=52,SNR=7.9
C39A **Grand Marais** 52.27 58 P P 04 28 23.6 -1.1
baz=52
O32A **Brockman Farm,** 52.42 70 P P 04 28 24.3 -1.8
baz=52
S29A **Ulysses** 52.42 75 P P 04 28 24.9 -1.3
baz=52
SPMN **St. Paul** 52.42 62 P P 04 28 24.7 -1.2
baz=52
SPMN **St. Paul** 52.42 62 *e*P P 04 28 25.7 -0.2
comp=Z,21nm,0.8s
L34A **Svendsen Farm,** 52.44 67 P P 04 28 24.9 -1.3
baz=52
CBKS **Cedar Bluff** 52.48 73 *e*P P 04 28 26.5 0.0
CBKS pmax pmax
comp=Z,103nm,1.1s
CBKS **Cedar Bluff** 52.48 73 P P 04 28 25.6 -0.9
baz=52,SNR=6.0
CBKS **Cedar Bluff** 52.48 73 *e*P P 04 28 26.5 0.0
comp=Z,103nm,1.1s
R30A **Dighton** 52.50 73 P P 04 28 25.9 -0.8
baz=52,SNR=6.3
Q31A **Ellis** 52.56 72 P P 04 28 26.8 -0.4
baz=52
U28A **Mallet** 52.56 76 P P 04 28 26.5 -0.8
baz=52
N33A **J Bar K, Exete** 52.60 69 P P 04 28 26.6 -0.8
baz=52
M34A **Aspy Farms, Fr** 52.62 68 P P 04 28 27.1 -0.4
baz=52
T29A **Hugoton** 52.62 75 P P 04 28 26.7 -0.9
baz=52
K35A **Storm Lake** 52.62 66 P P 04 28 26.5 -1.0
baz=52
P32A **Huiting Farm,** 52.63 71 P P 04 28 27.2 -0.5
baz=52,SNR=5.2
SUMG **Summit** 52.68 15 *i*P P 04 28 28.1 +0.1
SUMG pmax pmax
comp=Z,49nm,1.2s
SUMG **Summit** 52.68 15 *i*P P 04 28 28.1 +0.1
comp=Z,49nm,1.2s
SUMG **Summit** 52.68 15 *e*P P 04 28 26.8 -1.2
comp=Z,50nm,1.2s
J36A **Seneca 1, Swea** 52.75 65 P P 04 28 27.1 -1.4
baz=53
H37A **Dierke Farm, C** 52.76 63 P P 04 28 27.8 -0.6
baz=53
S30A **Montezuma** 52.80 74 P P 04 28 28.3 -0.7
baz=53
L35A **Bielow Farm, R** 52.83 67 P P 04 28 28.1 -0.9
baz=53
O33A **Hebron** 52.94 70 P P 04 28 28.9 -1.0
baz=53,SNR=7.6
R31A **Burdett** 52.94 73 P P 04 28 28.9 -1.0
baz=53,SNR=7.5
Q32A **Meitler Ranch,** 53.06 72 P P 04 28 29.6 -1.2
baz=53,SNR=7.1
N34A **Lincoln** 53.09 69 P P 04 28 29.8 -1.1
baz=53
J37A **Redenius Farm,** 53.20 64 P P 04 28 31.0 -0.7
baz=53
HVS **Khovu-Aksy** 53.23 308 *e*P P 04 28 31.2 -0.8
HVS pmax pmax
comp=Z,85nm,1.1s
P33A **Williams Farm,** 53.29 71 P P 04 28 32.4 -0.1
baz=53
R32A **Long Quarter,** 53.34 72 P P 04 28 31.3 -1.6
baz=53
O34A **Beatrice** 53.40 69 P P 04 28 32.4 -0.8
baz=53
S31A **Mullinville** 53.40 73 P P 04 28 32.4 -1.0
baz=53
U30A **WK&E Inc. Balk** 53.42 75 P P 04 28 32.9 -0.6
baz=53
Q33A **Connelly Farm,** 53.49 71 P P 04 28 33.0 -0.9
baz=53,SNR=8.0
N35A **Tabor** 53.57 68 P P 04 28 33.4 -1.1
baz=53,SNR=7.3
T31A **Randall Ranch,** 53.63 74 P P 04 28 34.3 -0.7
baz=54,SNR=5.2
S32A **Newby Ranch, P** 53.68 73 P P 04 28 34.7 -0.7
baz=54
P34A **Walnut Farm, R** 53.73 70 P P 04 28 33.9 -1.8
baz=54
W29A **Amarillo** 53.74 77 P P 04 28 35.5 -0.5
baz=54
MNTX **Cornudas Mount** 53.75 83 P P 04 28 35.6 -0.3
baz=54
MNTX **Cornudas Mount** 53.75 83 *e*P P 04 28 35.5 -0.4
comp=Z,20nm,0.9s
O35A **Humboldt** 53.80 69 P P 04 28 36.0 -0.2
baz=54
X28A **Dimmitt** 53.81 78 P P 04 28 36.3 -0.1
baz=54
MSTX **Muleshoe** 53.82 79 P P 04 28 36.2 -0.4
baz=54
MSTX **Muleshoe** 53.82 79 *e*P P 04 28 38.4 +1.8
comp=Z,65nm,1.3s
R33A **Olander Ranch,** 53.85 72 P P 04 28 35.9 -0.7
baz=54
COWI **Conover** 53.87 59 *e*P P 04 28 35.3 -1.4
comp=Z,30nm,0.9s
AMTX **Amarillo** 53.88 77 P P 04 28 36.5 -0.5
baz=54
AMTX **Amarillo** 53.88 77 *e*P P 04 28 38.7 +1.7
comp=Z,29nm,0.9s
V30A **Spur Ranch, Mi** 53.90 76 P P 04 28 36.2 -0.9
baz=54
U31A **Nine Bar Ranch** 54.01 75 P P 04 28 37.2 -0.6
baz=54
T32A **Huddler Ranch,** 54.03 74 P P 04 28 36.7 -1.3
baz=54
Q34A **Chapman** 54.07 71 P P 04 28 36.5 -1.7
baz=54,SNR=11
KSU1 **Kansas State U** 54.15 70 P P 04 28 37.2 -1.6
baz=54,SNR=5.8
KSU1 **Kansas State U** 54.15 70 *e*P P 04 28 37.6 -1.1
comp=Z,39nm,0.8s
X29A **Tulia** 54.16 78 P P 04 28 38.2 -0.8
baz=54
Y28A **McKinney Farm,** 54.19 79 P P 04 28 37.9 -1.3
baz=54
P35A **Duane Minner,** 54.22 69 P P 04 28 37.5 -1.7
baz=54,SNR=6.2
R34A **Isabella, Hill** 54.29 71 P P 04 28 37.7 -2.1
baz=54
SCIA **State Center** 54.29 66 *e*P P 04 28 40.4 +0.6
comp=Z,43nm,0.8s
S33A **Kaszmaul Farm,** 54.31 73 P P 04 28 38.6 -1.4
baz=54
O36A **Bolckow** 54.44 68 P P 04 28 39.5 -1.4
baz=54,SNR=6.9
T33A **Patterson Ranc** 54.50 73 P P 04 28 41.0 -0.4
baz=54
U32A **Winter Ranch,** 54.51 74 P P 04 28 40.8 -0.6
baz=54
Z28A **Tucker Farm, M** 54.52 79 P P 04 28 40.9 -0.7
baz=54
P36A **Good Intent, A** 54.63 69 P P 04 28 40.6 -1.6
baz=54,SNR=9.2
Q35A **Mercer Eighty,** 54.64 70 P P 04 28 41.2 -1.2
baz=54
X30A **Coker Ranch, T** 54.67 77 P P 04 28 42.0 -0.7
baz=54
SFJD **Kangerlussuaq** 54.73 23 P P 04 28 41.3 -1.2
comp=Z,25nm,0.9s,baz=335,slow=9.8,SNR=8.3
SFJD PcP PcP 04 29 46.0 +1.3
comp=Z,13nm,0.9s,baz=309,slow=2.2,SNR=4.0
SFJD **Kangerlussuaq** 54.73 23 *e*P P 04 28 41.1 -1.5
SFJD 04 29 46.0
SFJD pmax pmax
comp=Z,27nm,0.9s
SFJD **Kangerlussuaq** 54.73 23 *i*P P 04 28 41.7 -0.8
comp=Z,27nm,1.0s
SFJD **Kangerlussuaq** 54.73 23 *e*P P 04 28 41.1 -1.5
comp=Z,27nm,0.9s
SFJD PcP PcP 04 29 46.0 +1.3
W31A **Holland Ranch,** 54.74 76 P P 04 28 43.0 -0.1
baz=55
S34A **Willow Spring** 54.77 72 P P 04 28 42.1 -1.2
baz=55,SNR=5.6
WHN **Wuhan** 54.86 276 ⇑P P 04 28 44.9 +1.0
R35A **Emporia Munici** 54.90 71 P P 04 28 42.7 -1.5
baz=55
128A **Castleberry Fa** 54.91 80 P P 04 28 42.8 -1.7
baz=55
Q36A **Arnold C. Orve** 54.91 70 P P 04 28 42.7 -1.6
baz=55,SNR=6.1
V32A **Arapaho** 54.92 75 P P 04 28 43.6 -0.8
baz=55
Z29A **Hungry Hill Ra** 54.96 79 P P 04 28 43.3 -1.5
baz=55
U33A **Lingo Farm, Me** 55.01 74 P P 04 28 43.7 -1.4
baz=55
Y30A **Stafford Cattl** 55.04 78 P P 04 28 44.4 -0.9
baz=55
X31A **McDonald Ranch** 55.09 77 P P 04 28 45.0 -0.7
baz=55
T34A **McClaskey Farm** 55.17 73 P P 04 28 44.7 -1.4
baz=55,SNR=7.2
228A **UT Block 9, Go** 55.19 81 P P 04 28 45.9 -0.6
baz=55
W32A **Sentinel** 55.20 76 P P 04 28 45.9 -0.6
baz=55
S35A **Otter Creek Ra** 55.25 71 P P 04 28 45.7 -1.0
baz=55,SNR=6.7
129A **Stewart Farms,** 55.29 80 P P 04 28 46.7 -0.5

baz=55
**Z30A Sanderson Ranc** 55.30 79 P P 04 28 46.2 -1.0
baz=55
**R36A Gordon, Harris** 55.31 70 P P 04 28 45.5 -1.6
baz=55,SNR=9.1
**JFWS Jewell Farm** 55.31 63 *e*P P 04 28 44.9 -2.2
JFWS pmax pmax
comp=Z,45nm,1.1s
**JFWS Jewell Farm** 55.31 63 *e*P P 04 28 44.9 -2.2
comp=Z,45nm,1.1s
**V33A Lossen Ranch,** 55.31 74 P P 04 28 46.9 -0.3
baz=55
**U34A Anderson Ranch** 55.35 73 P P 04 28 47.0 -0.5
baz=55,SNR=6.6
**U34A Anderson Ranch** 55.35 73 *e*P P 04 28 45.9 -1.6
comp=Z,79nm,0.9s
**Y31A Rekieta Farm,** 55.37 77 P P 04 28 47.2 -0.5
baz=55
**SSLB Suanglung** 55.52 266 *e*P P 04 28 47.6 -1.3
comp=Z,233nm,1.2s
**Q37A Longview Farm,** 55.56 69 P P 04 28 47.9 -1.1
baz=55
**ZALV Zalesovo Beam** 55.57 315 P P 04 28 48.0 -0.8
comp=Z,1.7nm,0.4s,baz=39,slow=5.7,SNR=13
ZALV PcP **PcP** 04 29 48.0 -0.3
comp=Z,8.2nm,0.8s,baz=30,slow=3.9,SNR=8.3
ZALV LR LR 04 54 21.4
comp=Z,6µm,19.1s,baz=28,slow=38
**ZALV Zalesovo Beam** 55.57 315 *i* P P 04 28 51.7 +2.9
ZALV pmax pmax
comp=Z,2.0nm,0.4s
**YULB Yu-li** 55.60 265 *e*P P 04 28 46.0 -3.3
comp=Z,62nm,1.1s
**T35A Sooner Cattle** 55.65 72 P P 04 28 48.5 -1.1
baz=56
**S36A Lake Cedric, C** 55.65 71 P P 04 28 48.2 -1.4
baz=56
**W33A Caddo, Fort Co** 55.65 75 P P 04 28 49.4 -0.3
baz=56
**NVS Novosibirsk** 55.66 317⇑ *i*P P 04 28 49.2 -0.2
NVS pmax pmax
comp=N,17nm,2.0s
NVS pmax pmax
comp=Z,53nm,2.0s
NVS pmax pmax
comp=E,24nm,1.8s
**R37A Teagarden Farm** 55.71 70 P P 04 28 48.6 -1.4
baz=56,SNR=5.4
**WMOK Wichita Mounta** 55.74 76 *e*P P 04 28 48.4 -2.0
WMOK pmax pmax
comp=Z,46nm,0.9s
**WMOK Wichita Mounta** 55.74 76 *e*P P 04 28 48.4 -2.0
comp=Z,46nm,0.9s
**229A Bryant Ranch,** 55.78 80 P P 04 28 50.7 0.0
baz=56
**XAN Xi'an** 55.81 283 P P 04 28 50.0 -0.9
XAN PMZ
comp=Z,8.0nm,1.3s
**Y32A R-V Farms, Ver** 55.84 77 P P 04 28 50.0 -1.0
baz=56
**130A Snyder** 55.87 79 P P 04 28 50.2 -1.1
baz=56
**Z31A Sharp Cattle R** 55.88 78 P P 04 28 50.8 -0.5
baz=56
**U35A Pawnee** 55.88 73 P P 04 28 49.8 -1.5
baz=56,SNR=5.8
**T36A Boggs Farm, Ca** 55.93 72 P P 04 28 50.8 -0.8
baz=56
**329A Wagon Wheel Ra** 56.00 81 P P 04 28 52.0 -0.3
baz=56
**W34A Bridge Creek,** 56.02 75 P P 04 28 51.6 -0.7
baz=56
**X33A Lawton** 56.05 76 P P 04 28 52.2 -0.3
baz=56
**TPUB Ta-pu** 56.08 265 *e*P P 04 28 52.5 -0.4
comp=Z,78nm,1.2s
**S37A Fort Scott** 56.08 70 P P 04 28 50.7 -2.0
baz=56,SNR=7.4
**131A Roby** 56.17 79 P P 04 28 52.2 -1.2
baz=56
**V35A Meyer Ranch, C** 56.23 73 P P 04 28 52.5 -1.2
baz=56
**230A Sterling City** 56.26 80 P P 04 28 53.1 -1.1
baz=56,SNR=6.2
**Z32A Haskell** 56.29 77 P P 04 28 53.4 -0.9
baz=56
**Y33A Hilltop Ranch,** 56.33 76 P P 04 28 53.3 -1.2
baz=56
**X34A Smith Ranch, M** 56.41 75 P P 04 28 53.8 -1.3
baz=56
**TXAR Lajitas Array** 56.45 84 P P 04 28 55.2 -0.4
comp=Z,6.6nm,1.0s,baz=293,slow=6.7,SNR=10
**TXAR Lajitas Array** 56.45 84 P P 04 28 55.2 -0.4
TXAR pmax pmax
comp=Z,7.0nm,1.0s
**T37A Cheneyville 18** 56.45 71 P P 04 28 53.2 -2.1
baz=56,SNR=7.9
**U36A Oologah** 56.46 72 P P 04 28 53.4 -2.0
baz=56
**330A Mertzon** 56.55 80 P P 04 28 54.2 -2.0
baz=56
**W35A Tecumseh** 56.62 74 P P 04 28 55.2 -1.4
baz=56
**429A Davenport Ranc** 56.65 81 P P 04 28 54.4 -2.5
baz=56
**ABTX Abilene, Hawle** 56.66 78 P P 04 28 55.1 -1.8
baz=56
**231A Bronte** 56.72 79 P P 04 28 55.9 -1.4
baz=56
**Z33A Whitaker Ranch** 56.74 77 P P 04 28 54.6 -2.9
baz=57
**V36A Jenks** 56.74 73 P P 04 28 55.1 -2.3
baz=57,SNR=5.7
**TUL1 Tulsa** 56.75 73 P P 04 28 54.7 -2.8
baz=57,SNR=5.7
**529A Stev Forest Ra** 56.80 82 P P 04 28 54.7 -3.2
baz=57
**U37A Salina** 56.82 72 P P 04 28 54.8 -3.2
baz=57,SNR=6.1
**Y34A Reagan Ranch,** 56.89 76 P P 04 28 57.1 -1.4
baz=57,SNR=6.6
**430A Baggett Ranch,** 56.95 81 P P 04 28 56.3 -2.7
baz=57
**W36A Wetumka** 57.01 74 P P 04 28 57.6 -1.8
baz=57
**X35A Drake** 57.07 75 P P 04 28 57.7 -2.1
baz=57,SNR=7.1
**331A San Angelo** 57.08 80 P P 04 28 58.0 -1.9
baz=57
**133A Hamilton Ranch** 57.11 78 P P 04 28 58.4 -1.7
baz=57
**V37A Hulbert** 57.16 72 P P 04 28 58.9 -1.5
baz=57
**232A Coleman** 57.16 79 P P 04 28 59.0 -1.5
baz=57
**Z34A Collier Ranch,** 57.20 76 P P 04 29 00.1 -0.6
baz=57
**X36A Centrahoma** 57.33 74 P P 04 28 59.5 -2.0
baz=57,SNR=5.7
**530A J-C Ranch, Com** 57.33 81 P P 04 29 01.0 -0.7
baz=57,SNR=6.0
**Y35A Marietta** 57.37 75 P P 04 29 01.1 -0.8
baz=57
**431A Sonora** 57.41 80 P P 04 29 00.5 -1.8
baz=57,SNR=9.2
**HDIL Hopedale** 57.41 64 P P 04 29 00.3 -1.8
baz=57
**HDIL Hopedale** 57.41 64 *e*P P 04 29 01.5 -0.6
comp=Z,175nm,1.5s
**332A Millersview** 57.45 79 P P 04 29 02.1 -0.4
baz=57
**LZH Lanzhou** 57.48 288 *e*P P 04 29 03.5 +0.7
LZH pP **pP** 04 29 14.6 +1.6
LZH sP **sP** 04 29 19.4 +2.5
LZH PMZ
comp=Z,190nm,1.2s
LZH PMZ
comp=Z,360nm,4.0s
LZH LN
comp=Z,3µm,14.5s
LZH LE
comp=Z,5µm,17.6s
LZH LZ
comp=Z,8µm,19.8s
**W37A Quinton** 57.49 73 P P 04 29 01.4 -1.4
baz=57,SNR=7.1
**233A Rising Star** 57.53 78 P P 04 29 02.2 -0.9
baz=57

**GTA Gaotai** 57.58 294⇑ P P 04 29 02.2 -1.3
GTA pP **pP** 04 29 12.3 -1.3
GTA sP **sP** 04 29 16.4 -1.1
GTA PMZ
comp=Z,13nm,1.6s
**V38A Canehill** 57.61 72 P P 04 29 02.1 -1.5
baz=57,SNR=8.7
**Z35A Perchaven, San** 57.63 76 P P 04 29 02.6 -1.1
baz=58
**134A White-Moore Ra** 57.65 77 P P 04 29 02.9 -1.0
baz=58
**432A Menard** 57.77 80 P P 04 29 04.4 -0.4
baz=58
**531A Rocksprings** 57.80 81 P P 04 29 04.6 -0.5
baz=58
**Y36A Durant** 57.83 75 P P 04 29 04.7 -0.4
baz=58
**X37A Clayton** 57.90 73 P P 04 29 04.8 -0.8
baz=58
**333A Richland Sprin** 57.96 79 P P 04 29 05.3 -0.8
baz=58
**234A Clairette** 58.01 78 P P 04 29 06.9 +0.4
baz=58
**JCT Junction City** 58.04 80 *e*P P 04 29 07.8 +1.1
JCT pmax pmax
comp=Z,34nm,1.0s
**JCT Junction City** 58.04 80 P P 04 29 03.7 -3.1
baz=58
**JCT Junction City** 58.04 80 *e*P P 04 29 07.8 +1.1
comp=Z,34nm,1.0s
**ENH Enshi** 58.06 280 *e*P P 04 29 04.8 -2.0
comp=Z,13nm,0.9s
**135A Vickery Place,** 58.07 77 P P 04 29 04.5 -2.3
baz=58
**W38A Poteau** 58.08 73 P P 04 29 04.6 -2.3
baz=58,SNR=6.3
**Z36A Blue Ridge** 58.17 75 P P 04 29 06.8 -0.7
baz=58
**X38A Whitesboro** 58.17 73 P P 04 29 05.4 -2.1
baz=58
**532A Rocksprings** 58.23 80 P P 04 29 05.3 -2.7
baz=58
**433A Art** 58.29 79 P P 04 29 07.3 -1.1
baz=58
**631A Perdido Creek** 58.31 81 P P 04 29 07.3 -1.3
baz=58
**ARCES ARCESS Array B** 58.38 352 P P 04 29 07.7 -0.7
comp=Z,6.4nm,0.8s,baz=18,slow=6.9,SNR=11
ARCES PcP **PcP** 04 29 58.9 -0.1
comp=Z,25nm,1.0s,baz=12,slow=4.6,SNR=7.4
**ARCES ARCESS Array B** 58.38 352 P P 04 29 07.7 -0.7
ARCES 04 29 58.9
ARCES pmax pmax
comp=Z,6.0nm,0.8s
ARCES pmax pmax
comp=Z,25nm,1.0s
**334A Lometa** 58.41 78 P P 04 29 07.7 -1.5
baz=58
**WHTX Lake Whitney** 58.43 77 P P 04 29 08.4 -0.9
baz=58
**SCHQ Schefferville** 58.55 40 P P 04 29 08.6 -1.4
comp=Z,21nm,0.9s,baz=319,slow=8.4,SNR=8.0
**136A Ennis** 58.66 76 P P 04 29 10.0 -1.0
baz=58
**632A Uvalde** 58.73 81 P P 04 29 09.0 -2.6
baz=59
**434A Burnet** 58.75 79 P P 04 29 08.7 -2.9
baz=59
**SFIN Scholer Farm** 58.76 63 P P 04 29 10.0 -1.5
baz=59,SNR=6.7
**SFIN Scholer Farm** 58.76 63 *e*P P 04 29 10.5 -1.0
comp=Z,68nm,1.0s
**533A Kerrville** 58.80 80 P P 04 29 08.9 -3.1
baz=59
**LVZ Lovozero** 58.89 347 *e*P P 04 29 11.2 -0.9
LVZ pmax pmax
comp=Z,28nm,1.0s
**236A Katherine and** 58.99 76 P P 04 29 10.9 -2.3
baz=59
**MIAR Mount Ida** 59.01 72 P P 04 29 09.8 -3.5
baz=59,SNR=11
**137A Heron Place, G** 59.04 75 P P 04 29 12.6 -1.0
baz=59
**Z38A Mt. Pleasant** 59.06 74 P P 04 29 11.9 -1.8
baz=59
**732A Lason Ranch,** 59.17 82 P P 04 29 12.3 -2.2
baz=59
**534A Blanco** 59.18 79 P P 04 29 12.5 -2.1
baz=59
**OLIL Olney** 59.32 65 *e*P P 04 29 14.5 -0.9
comp=Z,59nm,1.0s
**PBMO Poplar Bluff** 59.32 68 *e*P P 04 29 14.8 -0.7
comp=Z,68nm,1.4s
**832A Faith Ranch, C** 59.48 82 P P 04 29 14.8 -1.9
baz=59
**733A Divot King Ran** 59.59 81 P P 04 29 15.5 -2.0
baz=59
**436A Wall Ranch, Ga** 59.69 78 P P 04 29 15.8 -2.3
baz=60
**535A Dale** 59.73 79 P P 04 29 17.0 -1.4
baz=60
**PARMO Parma** 59.80 68 *e*P P 04 29 15.6 -3.1
**833A Chaparral WMA,** 59.81 82 P P 04 29 17.6 -1.4
baz=60
**238A Jacksonville** 59.84 75 P P 04 29 17.8 -1.3
baz=60
**BLO Bloomington** 59.91 64 *e*P P 04 29 17.3 -2.2
BLO pmax pmax
comp=Z,52nm,1.0s
**BLO Bloomington** 59.91 64 *e*P P 04 29 17.3 -2.2
comp=Z,52nm,1.0s
**734A La Parita Cree** 59.96 80 P P 04 29 19.0 -0.9
baz=60
**635A Leesville** 60.06 79 P P 04 29 19.5 -1.1
baz=60
**USIN University of** 60.10 66 *e*P P 04 29 20.0 -0.8
comp=Z,70nm,0.9s
**239A Gary** 60.23 75 P P 04 29 20.5 -1.2
baz=60
**933A Laredo** 60.39 82 P P 04 29 20.7 -2.2
baz=60
**SZP Santa** 60.47 261 *e*P P 04 29 23.4 -0.1
comp=Z,162nm,0.9s
**438A Sam Houston St** 60.51 77 P P 04 29 22.8 -0.9
baz=60
**KURK Kurchatov** 60.55 315 *e*P P 04 29 22.9 -0.8
KURK pmax pmax
comp=Z,147nm,1.3s
**KURK Kurchatov** 60.55 315 P P 04 29 23.6 -0.1
comp=Z,202nm,0.9s,SNR=8.2
**KURK Kurchatov** 60.55 315 *e*P P 04 29 22.9 -0.8
comp=Z,147nm,1.3s
**HALT Halls** 60.56 68 *e*P P 04 29 22.6 -1.4
**WCI Wyandotte Cave** 60.69 65 *e*P P 04 29 22.7 -2.2
WCI pmax pmax
comp=Z,127nm,0.8s
**WCI Wyandotte Cave** 60.69 65 *e*P P 04 29 22.7 -2.2
comp=Z,127nm,0.8s
**736A Circle Diamond** 60.80 79 P P 04 29 24.9 -0.8
baz=61
**835A Beeville** 60.81 80 P P 04 29 24.5 -1.3
baz=61
**HKT Hockley** 60.85 78 *e*P P 04 29 25.5 -0.4
**HKT Hockley** 60.85 78 *e*P P 04 29 25.5 -0.4
**CD2 Chengdu** 61.12 284 *e*P P 04 29 29.3 +1.4
CD2 pP **pP** 04 29 39.9 +1.8
CD2 PP **PP** 04 31 45.5 +3.1
CD2 PcS **PcS** 04 34 13.7 +0.1
CD2 S **S** 04 37 42.8 -2.0
CD2 sS **sS** 04 38 00.4 -1.2
CD2 SS **SS** 04 41 43.4 -1.0
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,140nm,5.0s
**ACSO Alum Creek Sta** 61.14 61 *e*P P 04 29 29.5 +1.7
**WMQ Urumqi** 61.14 305 P P 04 29 28.0 +0.1
WMQ pP **pP** 04 29 38.0 -0.1
WMQ sP **sP** 04 29 42.0 0.0
WMQ PP **PP** 04 31 45.0 +2.7
WMQ S **S** 04 37 43.0 -1.8
WMQ PMZ
comp=Z,62nm,0.9s
WMQ LN
comp=Z,8µm,16.0s
WMQ LE
comp=Z,5µm,18.0s

WMQ LZ
comp=Z,4µm,16.0s
**ERPA Erie** 61.42 58 *e*P P 04 29 29.2 -0.6
**OXF Oxford** 61.49 70 *e*P P 04 29 30.5 +0.2
OXF pmax pmax
comp=Z,112nm,1.0s
**OXF Oxford** 61.49 70 *e*P P 04 29 30.5 +0.2
comp=Z,112nm,1.0s
**MK31 Makanchi Array** 61.70 310 P P 04 29 30.1 -1.5
**MKAR Makanchi Array** 61.70 310 P P 04 29 30.1 -1.5
comp=Z,9.2nm,0.5s,baz=46,slow=6.4,SNR=18
**MKAR Makanchi Array** 61.70 310 P P 04 29 30.1 -1.5
MKAR pmax pmax
comp=Z,9.0nm,0.5s
**MMNY Mt. Morris Dam** 62.08 56 *e*P P 04 29 34.8 +0.7
comp=Z,97nm,1.1s
**VOSK Vostochnaya** 62.24 321 P P 04 29 34.9 -0.2
**BVA0 Borovoye Array** 62.24 322 *i* P P 04 29 34.8 -0.3
BVA0 pmax pmax
comp=Z,1.0nm,0.4s
**BRVK Borovoye** 62.26 322 *e*P P 04 29 34.8 -0.4
BRVK pmax pmax
comp=Z,30nm,1.3s
**BRVK Borovoye** 62.26 322 *e*P P 04 29 34.6 -0.6
comp=Z,32nm,1.0s
**BORG Borgarnes** 62.39 12 *e*P P 04 29 36.2 +0.3
BORG pmax pmax
comp=Z,77nm,1.2s
**BORG Borgarnes** 62.39 12 *e*P P 04 29 36.1 +0.3
comp=Z,77nm,1.2s
**VBMS Vicksburg** 62.46 72 P P 04 29 34.2 -2.6
baz=62
**GYA Guiyang** 62.51 279 P P 04 29 38.2 +0.8
GYA pP **pP** 04 29 49.0 +1.4
GYA sP **sP** 04 29 52.6 +1.1
GYA PcP **PcP** 04 30 17.9 +1.5
GYA PP **PP** 04 31 58.4 +3.5
GYA ScP **ScP** 04 34 15.6 -0.1
GYA S **S** 04 38 00.2 -2.4
GYA SS **SS** 04 42 05.4 -1.1
GYA PMZ
comp=Z,30nm,1.0s
GYA PMZ
comp=Z,160nm,6.4s
GYA LN
comp=Z,490nm,18.5s
GYA LE
comp=Z,450nm,17.9s
GYA LZ
comp=Z,430nm,17.8s
**ZRNK Zerenda** 62.83 322 P P 04 29 37.9 -1.1
**TZTN Tazewell** 63.43 64 *e*P P 04 29 41.8 -1.4
comp=Z,36nm,1.0s
**BINY Binghamton** 63.45 55 *e*P P 04 29 43.4 +0.1
comp=Z,118nm,1.1s
**SSPA Standing Stone** 63.59 57 *e*P P 04 29 43.9 -0.4
comp=Z,151nm,0.8s
**ARU Arti** 63.69 330 *c i*P P 04 29 45.0 +0.4
ARU 04 30 22.4
ARU S **S** 04 38 19.1 +2.9
ARU SS **SS** 04 42 19.1 -4.1
ARU pmax pmax
comp=Z,32nm,2.5s
**ARU Arti** 63.69 330 *e*P P 04 29 44.1 -0.5
comp=Z,31nm,1.3s
**ACCN Adirondack Com** 63.76 53 *e*P P 04 29 44.0 -1.3
comp=Z,51nm,1.0s
**LBNH Lisbon** 63.99 51 *e*P P 04 29 49.2 +2.4
LBNH pmax pmax
comp=Z,279nm,2.1s
**LBNH Lisbon** 63.99 51 *e*P P 04 29 49.2 +2.4
comp=Z,279nm,2.1s
**KSPA Keystone Colle** 64.03 55 *e*P P 04 29 48.3 +1.2
comp=Z,121nm,1.3s
**PKME Peaks-Kenny Pk** 64.50 49 *e*P P 04 29 49.1 -1.0
comp=Z,266nm,2.0s
**BLA Blacksburg** 64.69 62 *e*P P 04 29 51.7 +0.1
BLA pmax pmax
comp=Z,52nm,0.9s
**BLA Blacksburg** 64.69 62 *e*P P 04 29 51.6 +0.1
comp=Z,52nm,0.9s
**VWCC Virginia Weste** 64.91 61 *e*P P 04 29 52.4 -0.6
**LUPA Lehigh Univers** 64.93 56 *e*P P 04 29 54.0 +1.0
comp=Z,70nm,1.0s
**ODNJ Ogdensburg** 64.97 55 *e*P P 04 29 53.8 +0.6
comp=Z,142nm,1.6s
**SDMD Soldier's Deli** 65.03 58 *e*P P 04 29 52.5 -1.2
comp=Z,118nm,0.9s
**OTUK Ortayu** 65.12 317 P P 04 29 53.9 -0.3
**BRNJ Basking Ridge** 65.28 55 *e*P P 04 29 56.9 +1.6
comp=Z,101nm,1.1s
**PDGK Podgornoye** 65.60 309 P P 04 29 56.6 -0.7
**CBN Corbin** 65.63 59 *e*P P 04 29 55.1 -2.4
comp=Z,41nm,0.8s
**KMSC Kings Mountain** 65.68 64 P P 04 29 55.7 -2.3
baz=66
**KMSC Kings Mountain** 65.68 64 *e*P P 04 29 57.7 -0.3
**GOGA Godfrey** 65.73 67 *e*P P 04 29 55.7 -2.6
**GOGA Godfrey** 65.73 67 *e*P P 04 29 55.7 -2.6
**KMI Kunming** 65.90 280 P P 04 30 01.9 +2.1
KMI pP **pP** 04 30 11.6 +1.5
KMI sP **sP** 04 30 18.6 +4.6
KMI PMZ
comp=Z,31nm,1.3s
**QIZ Qiongzhong** 65.98 271 P P 04 30 00.4 +0.3
QIZ pP **pP** 04 30 08.3 -2.0
QIZ sP **sP** 04 30 13.5 -0.7
QIZ S **S** 04 38 51.2 +5.8
QIZ sS **sS** 04 39 02.3 -0.1
QIZ PMZ
comp=Z,30nm,1.4s
QIZ LZ
comp=Z,3µm,14.5s
**FINES FINESS Array B** 66.18 349 P P 04 29 60.0 -0.7
comp=Z,13nm,1.0s,baz=38,slow=13,SNR=7.0
**FINES FINESS Array B** 66.18 349 P P 04 30 00.0 -0.7
FINES pmax pmax
comp=Z,13nm,1.0s
**NB2 NORSAR Subarra** 67.75 357 P P 04 30 09.7 -1.1
comp=Z,32nm,1.0s,baz=2.9,slow=6.2
**NB2 NORSAR Subarra** 67.75 357 P P 04 30 09.7 -1.1
baz=2.9,slow=6.2
**NOA NORSAR Array B** 67.75 357 P P 04 30 10.1 -0.7
comp=Z,19nm,1.0s,baz=2.5,slow=6.2,SNR=13
**NOA NORSAR Array B** 67.75 357 P P 04 30 10.1 -0.7
NOA pmax pmax
comp=Z,19nm,1.0s
**TKM2 Tokmak 2** 67.76 311 *e*P P 04 30 11.3 -0.1
TKM2 pmax pmax
comp=Z,29nm,1.0s
**TKM2 Tokmak 2** 67.76 311 P P 04 30 11.7 +0.3
SNR=18
**TKM2 Tokmak 2** 67.76 311 *e*P P 04 30 11.3 -0.1
comp=Z,30nm,1.0s
**SLVN Son La** 67.97 277 *e*P P 04 30 13.4 +0.6
comp=Z,49nm,1.4s
**ULHL Ulaho l** 67.97 311 P P 04 30 15.9 +3.2
SNR=6
**USP Ospenovka** 68.00 312 P P 04 30 16.0 +3.3
SNR=18
**CHMS Chumysh** 68.09 312 P P 04 30 13.6 +0.3
SNR=7.2
**KBK Karagaybulak** 68.27 312 P P 04 30 15.2 +0.6
SNR=6.5
**AAK Ala-Archa** 68.50 312 *e*P P 04 30 15.7 -0.3
AAK pmax pmax
comp=Z,57nm,0.9s
**AAK Ala-Archa** 68.50 312 P P 04 30 16.0 0.0
comp=Z,198nm,1.0s,SNR=11
**AAK Ala-Archa** 68.50 312 ⇓P P 04 30 14.4 -1.6
SNR=9.4
**AAK Ala-Archa** 68.50 312 P P 04 30 16.6 +0.6
SNR=15
**AAK Ala-Archa** 68.50 312 *e*P P 04 30 16.5 +0.6
**KZA Kyzart** 68.57 311 P P 04 30 20.1 +3.4
SNR=5.5
**PMG Port Moresby** 68.73 220 *e*P P 04 30 18.9 +1.5
PMG pmax pmax
comp=Z,29nm,1.1s
**PMG Port Moresby** 68.73 220 *e*P P 04 30 18.9 +1.5
comp=Z,30nm,1.1s
**UCH Uchtor** 68.80 312 P P 04 30 21.5 +3.3
SNR=6.3
**EKS2 Erkin-Say** 68.81 312 *e*P P 04 30 17.9 +0.1
EKS2 pmax pmax
comp=Z,44nm,0.9s

**EKS2 Erkin-Say 68.81 312** P **P** **04 30 18.6 +0.8**
SNR=19
**EKS2 Erkin-Say 68.81 312** *e*P **P** **04 30 17.9 +0.1**
comp=Z,44nm,0.9s
**SWI Sorong 68.85 239** P **P** **04 30 17.8 -0.4**
comp=Z,58nm,1.2s
**AKTO Aktyubinsk 68.88 327** P **P** **04 30 17.4 -0.6**
**VSU Vasula 68.99 348** *e*P **P** **04 30 17.7 -0.8**
VSU pmax pmax
comp=Z,107nm,1.0s
**AB31 Akbulak array 69.19 325** *i* P **P** **04 30 20.0 +0.1**
AB31 pmax pmax
comp=Z,2.0nm,0.4s
**ABKAR Akbulak array 69.19 325** *e*P **P** **04 30 19.4 -0.6**
**KONO Kongsberg 69.19 357** *e*P **P** **04 30 20.5 +0.8**
**KONO Kongsberg 69.19 357** *e*P **P** **04 30 20.5 +0.8**
**AML Almayashu 69.26 312** P **P** **04 30 22.0 +1.0**
SNR=14
**LSA Lhasa 69.49 292** *e*P **P** **04 30 23.8 +1.2**
LSA pmax pmax
comp=Z,102nm,1.0s
**LSA Lhasa 69.49 292** *e*P **P** **04 30 23.8 +1.2**
comp=Z,102nm,1.0s
**MNAS Manas 69.53 313** P **P** **04 30 22.3 0.0**
**KKAR Karatay Array 69.94 315** *e*P **P** **04 30 24.6 -0.1**
KKAR pmax pmax
comp=Z,13nm,0.6s
**KKAR Karatay Array 69.94 315** *e*P **P** **04 30 24.6 -0.1**
comp=Z,13nm,0.6s
**FAKI Fak Fak 70.05 237** *e*P **P** **04 30 24.4 -1.3**
**KSH Kashi 70.21 309** P P 04 30 30.2 +3.7
KSH esP sP 04 30 44.3 +3.5
KSH S **S** **04 39 38.0 +2.3**
KSH PMZ
comp=Z,130nm,1.3s
KSH LN
comp=Z,3μm,15.3s
KSH LE
comp=Z,4μm,16.1s
KSH LZ
comp=Z,3μm,22.1s
**OBN Obninsk 70.56 341**⇈ *e*P **P** **04 30 27.4 -0.8**
OBN *i* 04 30 51.0
OBN *e* 04 33 09.9
OBN *e*PPP PPP 04 34 49.6
OBN *e*S **SKiKP** **04 40 03.3 -5.4**
OBN pmax pmax
comp=Z,20nm,1.2s
**NONG Nongkai 70.89 275** P **P** **04 30 32.8 +2.1**
comp=Z,32nm,1.3s,comp=Z,8μm
**SFK Sufi-Kurgan 71.01 311** P **P** **04 30 31.6 +0.1**
**SKNT Sakolnakorn 71.18 274** P **P** **04 30 34.8 +2.2**
comp=Z,55nm,1.0s
**UBPT Khong Chiam 71.53 271** P **P** **04 30 37.1 +2.4**
comp=Z,33nm,1.6s
**KKM Kota Kinabalu 71.97 257**⇈P **P** **04 30 37.4 -0.1**
**KKM Kota Kinabalu 71.97 257** *e*P **P** **04 30 35.8 -1.7**
**CMAI Chiengmai2 72.03 279** P **P** **04 30 40.3 +2.5**
comp=Z,58nm,1.3s
**DLV T Lat 72.19 267** *e*P **P** **04 30 38.4 -0.5**
comp=Z,34nm,1.0s
**PHRA Phrae 72.37 278** P **P** **04 30 41.9 +2.2**
comp=Z,648nm,0.7s
**KHON Khomkaen 72.39 274** P **P** **04 30 42.0 +2.2**
comp=Z,26nm,0.9s
**LPSR Galich'ya Gora 72.40 339** *e*P **P** **04 30 39.8 +0.5**
LPSR pmax pmax
comp=Z,8.0nm,0.5s
LPSR pmax pmax
comp=N,5.0nm,0.7s
LPSR pmax pmax
comp=E,10.0nm,1.2s
**MUD Monsted U'grnd 72.40 357** *e*P **P** **04 30 41.8 +2.5**
**MUD Monsted U'grnd 72.40 357** *i* P **P** **04 30 41.8 +2.5**
**LOEI Loei 72.47 276** P **P** **04 30 39.2 -1.1**
comp=E,23nm,1.3s
**UTTA Uttaradit 72.74 277** P **P** **04 30 42.8 +0.9**
comp=E,10nm,1.3s,comp=E,96nm
**CHTO Chiang Mai 72.93 279** P **P** **04 30 45.5 +2.5**
comp=E,75nm,1.4s
**CHTO Chiang Mai 72.93 279** *e*P **P** **04 30 42.5 -0.5**
CHTO pmax pmax
comp=Z,36nm,1.5s
**CHTO Chiang Mai 72.93 279** *e*P **P** **04 30 42.5 -0.5**
comp=Z,36nm,1.5s
**VRH Novokhopyorsk 73.04 337** *e*P **P** **04 30 44.4 +1.3**
VRH pmax pmax
comp=Z,10.0nm,0.7s
VRH pmax pmax
comp=N,10.0nm,0.8s
VRH pmax pmax
comp=E,10.0nm,0.5s
**CMAR Chiang Mai Arr 73.20 279** P **P** **04 30 44.4 -0.2**
comp=E,4.0nm,0.6s,baz=28,slow=6.0,SNR=15
**CMAR Chiang Mai Arr 73.20 279** *i* P **P** **04 30 47.2 +2.6**
CMAR pmax pmax
comp=Z,4.0nm,0.6s
**TAPN Taplejung 73.24 293** *e*P **P** **04 30 45.2 +0.1**
comp=Z,873nm,1.2s
**PBKT Sadao Pong 73.37 276** P **P** **04 30 48.0 +2.4**
comp=Z,54nm,0.7s
**ESK Eskdalemuir 73.40 5** *i* P P 04 30 49.3 +4.1
**ESK Eskdalemuir 73.40 5** *e*P **P** **04 30 44.8 -0.4**
comp=Z,48nm,1.2s
**VSR Storozhevoye 73.64 338** *e*P **P** **04 30 46.6 -0.1**
VSR pmax pmax
comp=Z,20nm,1.2s
VSR pmax pmax
comp=N,10.0nm,0.7s
VSR pmax pmax
comp=E,20nm,1.9s
**LUWI Luwuk 73.74 247** *e*P **P** **04 30 45.1 -2.6**
comp=E,156nm,1.2s
**ODAN Odare 73.80 293** *e*P **P** **04 30 48.8 +0.5**
comp=E,497nm,1.5s
**VORD Divnogorie 73.84 338** *e*P **P** **04 30 47.8 -0.1**
VORD pmax pmax
comp=Z,10.0nm,1.0s
VORD pmax pmax
comp=N,20nm,0.8s
VORD pmax pmax
comp=E,20nm,0.9s
**GUN Gumba 73.86 294** *e*P **P** **04 30 48.8 -0.1**
comp=E,474nm,0.9s
**DZET Dzherino 74.15 313** P **P** **04 30 49.8 -0.3**
**RAMN Ramite 74.18 293** *e*P **P** **04 30 51.0 +0.4**
comp=E,494nm,1.0s
**APSI Ampana 74.28 248** P **P** **04 30 49.6 -1.3**
comp=E,35nm,1.4s,comp=E,1μm
**MPSI Mapaga 74.30 250** P P 04 30 46.8 -4.2
**KKN Kakani 74.30 295** *e*P **P** **04 30 51.1 -0.1**
comp=E,249nm,1.1s
**PKI Pulchoki 74.39 295** *e*P **P** **04 30 52.2 +0.3**
comp=E,518nm,1.3s
**PKIN Phulchoki 74.39 295** *e*P **P** **04 30 51.7 -0.2**
comp=E,296nm,1.2s
**GKN Gorkha 74.50 295** *e*P **P** **04 30 52.0 -0.3**
comp=E,486nm,1.3s
**DMN Daman 74.53 295** *e*P **P** **04 30 52.6 -0.1**
comp=E,522nm,1.4s
**DANN Dangsing 74.73 296** *e*P **P** **04 30 53.9 +0.1**
comp=E,44nm,0.9s
**BSEG Bad Segeberg 74.89 357** *e*P **P** **04 30 54.3 +0.4**
comp=E,40nm,1.2s,baz=5.3,slow=5.6
**UMPA Umpang Tak 74.95 277** P P 04 30 59.8 +4.9
comp=E,14nm,1.0s,comp=E,596nm
**UTHA Uthaitani 75.08 276** P **P** **04 30 58.8 +3.2**
comp=E,11nm,1.1s,comp=E,212nm
**KOLN Koldanda 75.26 296** *e*P **P** **04 30 56.6 -0.2**
comp=E,145nm,0.9s
**BTM Bintulu 76.12 257**⇈P **P** **04 31 01.8 +0.2**
**AKASG Malin Array Be 76.13 344** P **P** **04 31 00.0 -1.1**
comp=E,2.0nm,0.3s,baz=15,slow=5.6,SNR=14
**AKASG Malin Array Be 76.13 344** *i* P **P** **04 31 00.8 -0.3**
AKASG pmax pmax
comp=Z,2.0nm,0.3s
**KIEV Kiev 76.14 344** *e*P **P** **04 31 00.2 -0.9**
KIEV pmax pmax
comp=Z,12nm,1.1s
**KIEV Kiev 76.14 344** *e*P **P** **04 31 00.5 -0.7**
**PATY Pattaya 76.20 273** P **P** **04 31 04.7 +2.7**
comp=Z,14nm,0.9s,comp=Z,1μm
**NRDL Niedersach Rie 76.34 357** *e*P **P** **04 31 02.3 +0.2**
comp=Z,29nm,1.3s,baz=5.3,slow=5.6
**IBBN Ibbenburen 76.59 358** *e*P **P** **04 31 04.1 +0.4**
comp=Z,54nm,1.2s,baz=5.3,slow=5.6

**CLZ Clausthal 76.98 356** *e*P **P** **04 31 06.4 +0.5**
comp=Z,33nm,1.1s,baz=5.3,slow=5.6
**PHET Kaeng Krachan 76.98 274** P P 04 31 09.7 +3.2
comp=Z,8.6nm,0.9s
**SBUM Sibu 77.23 258**⇈P **P** **04 31 07.9 +0.1**
**CLL Collm 77.38 355** *e*P **P** **04 31 07.7 -0.5**
**CLL Collm 77.38 355** *e*P **P** **04 31 07.8 -0.5**
comp=Z,13nm,1.1s,baz=5.3,slow=5.6
**CLL Collm 77.38 355** *e*P **P** **04 31 07.0 -1.2**
comp=Z,8.0nm,0.8s
**CLL Collm 77.38 355** *e*P **P** **04 31 07.7 -0.5**
**BRG Berggiesshubel 77.76 354** *e*P **P** **04 31 09.3 -1.0**
comp=Z,7.6nm,1.0s
BRG *e* 04 31 12.7
comp=Z,22nm,1.2s
**BRG Berggiesshubel 77.76 354** *e*P **P** **04 31 09.3 -1.0**
BRG pmax pmax
comp=Z,22nm,1.3s
**BRG Berggiesshubel 77.76 354** *e*P **P** **04 31 09.9 -0.3**
comp=Z,22nm,1.2s,baz=5.3,slow=5.6
**UPC Upice 77.97 353** *e*P **P** **04 31 11.9 +0.4**
UPC *e* 04 31 20.1
**UPC Upice 77.97 353** *e*P **P** **04 31 11.9 +0.4**
UPC *ex* x 04 31 20.1
**PVCC Panska Ves 78.06 354** *e*P **P** **04 31 14.3 +2.3**
**PVCC Panska Ves 78.06 354** *e*P **P** **04 31 14.3 +2.3**
**DPC Dobruska-Polom 78.10 352** *e*P **P** **04 31 11.0 -1.3**
DPC *e* 04 31 25.3
**DPC Dobruska-Polom 78.10 352** *e*P **P** **04 31 11.0 -1.3**
DPC *ex* x 04 31 25.3
**MOX Moxa 78.12 356** *e*P **P** **04 31 12.2 -0.1**
comp=Z,20nm,1.2s,baz=5.3,slow=5.6
**HGN Heimansgroeve 78.16 359** *e*P **P** **04 31 12.7 +0.2**
comp=Z,24nm,1.1s
**MEM Membach 78.32 359** P **P** **04 31 13.0 -0.4**
comp=Z,14nm,1.2s
**SNF Seneffe 78.42 0** P **P** **04 31 14.8 +0.9**
**OKC Ostrava-Krasne 78.45 351** *e*P **P** **04 31 16.2 +2.1**
**OKC Ostrava-Krasne 78.45 351** *e*P **P** **04 31 16.2 +2.1**
**NKC Novy Kostel 78.49 355** *e*P **P** **04 31 14.1 -0.3**
**NKC Novy Kostel 78.49 355** *e*P **P** **04 31 14.1 -0.3**
**BCLA Clavier 78.51 360** P **P** **04 31 13.6 -0.8**
comp=Z,13nm,1.4s
**STHS Stebnicka Huta 78.53 349** *e*P **P** **04 31 15.4 +0.8**
STHS pmax pmax
comp=Z,3.0nm,1.0s
**STHS Stebnicka Huta 78.53 349** *e*P **P** **04 31 15.4 +0.8**
**MORC Moravsky Berou 78.57 352** *e*P **P** **04 31 12.4 -2.4**
MORC pmax pmax
comp=Z,26nm,1.3s
**MORC Moravsky Berou 78.57 352** *e*P **P** **04 31 12.4 -2.4**
comp=Z,26nm,1.3s
**PRU Pruhonice 78.60 354** *e*P **P** **04 31 14.5 -0.5**
**PRU Pruhonice 78.60 354** *e*P **P** **04 31 14.5 -0.5**
**GOPC GO Pecny, Ondr 78.66 353** *e*P **P** **04 31 16.6 +1.3**
GOPC *e* 04 31 24.2
**GOPC GO Pecny, Ondr 78.66 353** *e*P **P** **04 31 16.6 +1.3**
GOPC *ex* x 04 31 24.2
**KAPI Kappang 78.70 247** P **P** **04 31 16.6 +0.7**
comp=Z,9.2nm,0.8s,baz=79,slow=8.3,SNR=5.3
**KAPI Kappang 78.70 247** *e*P **P** **04 31 15.9 0.0**
comp=Z,23nm,1.1s
**CTA Charters Tower 78.81 217** P **P** **04 31 17.3 +1.0**
comp=Z,6.9nm,0.9s,baz=36,slow=6.6,SNR=4.2
**CTA Charters Tower 78.81 217** P **P** **04 31 17.3 +1.0**
CTA pmax pmax
comp=Z,7.0nm,0.9s
**CTAO Charters Tower 78.81 217** *e*P **P** **04 31 15.2 -1.1**
CTAO pmax pmax
comp=Z,16nm,1.2s
**CTAO Charters Tower 78.81 217** *e*P **P** **04 31 15.2 -1.1**
comp=Z,16nm,1.2s
**DOU Dourbes 78.84 0** P **P** **04 31 16.8 +0.5**
comp=Z,13nm,1.2s
**KOLS Kolonicke sedl 78.88 348** *e*P **P** **04 31 18.6 +2.0**
KOLS pmax pmax
comp=Z,6.0nm,1.1s
**KOLS Kolonicke sedl 78.88 348** *e*P **P** **04 31 18.6 +2.0**
**ROTZ Rotzenmuhle 78.97 355** *e*P **P** **04 31 17.3 +0.4**
comp=Z,19nm,1.6s,baz=5.3,slow=5.6
**MTN Manton Dam 79.05 233** *e*P **P** **04 31 16.5 -1.2**
**GRF Grafenberg Arr 79.09 356** *e*P **P** **04 31 18.1 +0.5**
comp=Z,50nm,1.7s,baz=5.3,slow=5.6
**GRFO Grafenberg 79.09 356** *e*P **P** **04 31 16.6 -1.1**
GRFO pmax pmax
comp=Z,17nm,0.9s
**GRFO Grafenberg 79.09 356** *e*P **P** **04 31 16.6 -1.1**
comp=Z,17nm,0.9s
**VRAC Vranov 79.12 352**⇓ *i*P **P** **04 31 17.4 -0.4**
**KSM Kuching 79.17 259** *e*P **P** **04 31 17.4 -1.2**
comp=Z,60nm,1.3s
**WLF Walferdange 79.26 359** P **P** **04 31 18.3 -0.2**
comp=Z,14nm,1.6s
**WLF Walferdange 79.26 359** *e*P **P** **04 31 17.3 -1.3**
WLF pmax pmax
comp=Z,18nm,1.0s
**WLF Walferdange 79.26 359** *e*P **P** **04 31 17.3 -1.3**
comp=Z,18nm,1.0s
**ABKT Aibek 79.50 320** P **P** **04 31 20.1 -0.1**
comp=Z,335nm,1.2s,SNR=8.8
**GEYT Alibeck 79.50 320** P **P** **04 31 20.6 +0.4**
comp=Z,45nm,1.0s,baz=326,slow=3.8,SNR=19
**KHC Kasperske Hory 79.52 354** *e*P **P** **04 31 18.2 -1.8**
**KHC Kasperske Hory 79.52 354** *e*P **P** **04 31 19.5 -0.6**
KHC *ex* x 04 31 28.9
**KHC Kasperske Hory 79.52 354** *e*P **P** **04 31 18.2 -1.8**
**KBZ Khabaz 79.60 333** P **P** **04 31 21.7 +1.2**
comp=Z,4.5nm,0.9s,baz=342,slow=6.7,SNR=6.7
**NCK Nalchik 79.61 332** *e*P **P** **04 31 20.6 0.0**
**TRPA Tarpa 79.64 348**⇈ *i*P **P** **04 31 21.0 +0.4**
**VYHS Vyhne 79.71 351** *e*P **P** **04 31 19.8 -1.3**
**VYHS Vyhne 79.71 351** *e* **P** **04 31 19.8 -1.3**
**BURAR Bucovina Array 79.77 346**⇈ *i*P **P** **04 31 21.5 0.0**
**GEC2 GERESS Array S 79.80 354** *e*P **P** **04 31 21.4 -0.2**
comp=Z,15nm,1.5s,baz=5.3,slow=5.6
**GERES GERESS Array B 79.80 354** P **P** **04 31 21.2 -0.4**
comp=Z,2.5nm,0.8s,baz=21,slow=4.6,SNR=11
**GERES GERESS Array B 79.80 354** P **P** **04 31 21.3 -0.4**
GERES pmax pmax
comp=Z,3.0nm,0.8s
**SOEI Soe 80.05 241** *e*P **P** **04 31 22.1 -1.4**
comp=Z,42nm,1.1s
**PSZ Piszkesteto 80.17 350** *e*P **P** **04 31 23.5 -0.2**
PSZ pmax pmax
comp=Z,18nm,1.3s
**PSZ Piszkesteto 80.17 350**⇓ *i*P **P** **04 31 23.4 -0.2**
**PSZ Piszkesteto 80.17 350** *e*P **P** **04 31 23.5 -0.2**
comp=Z,18nm,1.3s
**ZEI Tsey 80.17 332** *e*P **P** **04 31 23.9 0.0**
ZEI pmax pmax
comp=Z,92nm,1.0s
**BFO Black Forest 80.56 358** *e*P **P** **04 31 25.6 -0.1**
comp=Z,23nm,1.6s,baz=5.3,slow=5.6
**TESR Tescani 80.61 345**⇈ *i*P **P** **04 31 26.7 +0.7**
**TRTT Trang 80.84 271** P **P** **04 31 29.5 +1.9**
comp=Z,32nm,1.4s
**DRGR 80.93 348**⇈ *i*P **P** **04 31 27.6 -0.1**
**PLOR Plostina 81.26 345**⇓ *i*P **P** **04 31 30.8 +1.3**
**PETR Petresti 81.28 344**⇈ *i*P P 04 31 22.7 -6.8
**DOPR Dopca 81.35 346**⇈ *i*P **P** **04 31 31.0 +1.1**
**MOTA Moosalm 81.44 356**⇈ *i*pP **P** **04 31 32.5 +2.0**
comp=Z,19nm,1.2s
**WTTA Wattenberg 81.49 355**⇈ *i*P **P** **04 31 31.7 +0.8**
comp=Z,22nm,1.5s
**KBA Koelnbreinsper 81.58 354**⇈ *i*P **P** **04 31 31.3 0.0**
comp=Z,30nm,1.1s
**CFR Carcaliu 81.66 344**⇓ *i*P **P** **04 31 32.3 +0.8**
**GRER 81.66 344**⇓ *i*P **P** **04 31 32.5 +1.0**
**MLR Muntele Rosu 81.72 345**⇓ *i*P **P** **04 31 33.4 +1.4**
**SOKA Soboth 81.86 353**⇈ *i*P **P** **04 31 32.3 -0.4**
comp=Z,26nm,1.4s
**PERS Pernice 81.89 353** *e*P **P** **04 31 32.8 0.0**
**ABTA Abfaltersbach 81.96 355**⇑ *i*pP **P** **04 31 36.1 +2.9**
comp=Z,24nm,1.5s
**LOT Lotru 82.10 347**⇓ *i*P P 04 31 26.2 -7.8
**CHLP Challavanipeta 82.18 290** *e*P **P** **04 31 34.6 0.0**
**KULM Kulim 82.20 269** *e*P **P** **04 31 33.2 -1.7**
**BZS Buzias 82.23 348**⇓ *i*P **P** **04 31 34.0 -0.5**
**GZR Gura Zlata 82.29 347**⇈ *i*P **P** **04 31 35.0 +0.1**
**TIRR Tirgusor 82.30 343**⇈ *i*P **P** **04 31 35.3 +0.4**
**TUE Stuetta 82.38 357** *e*P **P** **04 31 35.2 -0.4**
comp=Z,17nm,1.2s
**IPM Ipoh 82.60 268** *e*P **P** **04 31 34.7 -2.2**
**EFOR ÉFORIE 82.63 343**⇈ *i*P P 04 31 29.6 -7.0
**JAVS Javornik 82.71 353** *e*P **P** **04 31 35.2 -1.9**

**MYKOM Kota Tinggi 82.92 264** *e*P **P** **04 31 38.6 +0.1**
**BOJS Bojanci 83.00 353** *e*P **P** **04 31 38.1 -0.4**
**WRAB Tennant Creek 83.62 227** *e*P **P** **04 31 40.8 -1.1**
WRAB pmax pmax
comp=Z,49nm,1.3s
**WRAB Tennant Creek 83.62 227** *e*P **P** **04 31 41.5 -0.4**
comp=Z,25nm,1.3s
**WRA Warramunga Arr 83.64 227** P **P** **04 31 39.9 -2.1**
comp=Z,7.6nm,1.1s,baz=36,slow=6.1,SNR=9.8
**WRA Warramunga Arr 83.64 227** P **P** **04 31 39.9 -2.1**
WRA pmax pmax
comp=Z,8.0nm,1.1s
**BNI Bardonecchia 83.87 359** *e*P **P** **04 31 42.5 -0.7**
**BNI Bardonecchia 83.87 359** *e*P **P** **04 31 42.5 -0.7**
**DIVS Divibare 83.92 349**⇓ *i*P **P** **04 31 43.0 -0.4**
**PVM Polavaram 84.59 291** *e*P **P** **04 31 46.0 -1.0**
**RPR Rampur 84.68 294** *e*P **P** **04 31 47.5 -0.1**
**PSI Prapat 85.21 268** P **P** **04 31 49.5 -0.9**
comp=Z,27nm,0.8s,baz=6.5,slow=2.9,SNR=18
**PSI Prapat 85.21 268** P **P** **04 31 49.5 -0.9**
PSI pmax pmax
comp=Z,27nm,0.8s
**PSI Prapat 85.21 268** *e*P **P** **04 31 49.8 -0.6**
**BRTR Keskin Array B 85.76 338** P **P** **04 31 52.8 0.0**
comp=Z,17nm,1.1s,baz=46,slow=2.6,SNR=18
**BRTR Keskin Array B 85.76 338** P **P** **04 31 52.8 0.0**
BRTR pmax pmax
comp=Z,17nm,1.1s
**ANTO Ankara 85.82 339** *e*P **P** **04 31 52.6 -0.4**
**ANTO Ankara 85.82 339** *e*P **P** **04 31 52.6 -0.4**
**SKO Skopje 85.83 348** *e*P **P** **04 31 55.6 +2.6**
**MALT Malatya 85.88 334**⇈ *i*P **P** **04 31 54.7 +1.3**
**HYBB Hyderabad (bro 86.24 293** *e*P **P** **04 31 56.5 +1.2**
**FITZ Fitzroy Crossi 86.28 235** P **P** **04 31 53.9 -1.4**
comp=Z,13nm,0.9s,baz=92,slow=2.3,SNR=11
**VAY Valandovo 86.31 347** *e*P P 04 31 59.8 +4.4
**NJS Nagarjunasagar 86.49 292** *e*P **P** **04 31 59.5 +3.0**
**ADKI Addanki 86.67 291** *e*P P 04 32 00.7 +3.3
**OHR Ohrid 86.76 348** *e*P **P** **04 31 57.2 -0.4**
**PVRL Vila Real 87.02 9** *e*P **P** **04 31 59.6 +0.7**
comp=Z,62nm,1.5s
**ASAR Alice Springs 87.07 225** P **P** **04 31 58.2 -0.8**
comp=Z,11nm,1.1s,baz=36,slow=4.1,SNR=20
**ASAR Alice Springs 87.07 225** P **P** **04 31 58.3 -0.8**
ASAR pmax pmax
comp=Z,11nm,1.1s
**PDSI Padang 87.13 265** P P **P** **04 31 57.1 -2.6**
**MVO Moncorvo 87.20 9** *e*P P 04 32 03.1 +3.3
comp=Z,48nm,1.3s
**PVIS Viseu 87.56 10** *e*P **P** **04 32 04.1 +2.6**
comp=Z,62nm,1.4s
**MTE Manteigas 87.91 9** *e*P **P** **04 32 05.5 +2.3**
comp=Z,54nm,1.4s
**PCAS Casmilo, Conde 88.15 10** *e*P **P** **04 32 06.8 +2.6**
comp=Z,57nm,1.7s
**PCBR Castelo Branco 88.47 9** *e*P **P** **04 32 08.2 +2.5**
comp=Z,33nm,1.6s
**SKHT Srikalahasti 88.49 290** *e*P **P** **04 32 06.0 -0.2**
**ESDC Sonseca Array 88.94 7** P **P** **04 32 07.4 -0.7**
comp=Z,18nm,1.2s,baz=352,slow=4.3,SNR=20
**TIP Timpagrande 89.14 351** *e*P **P** **04 32 09.0 0.0**
comp=Z,17nm,1.3s
**EVO Evora 89.70 10** *e*P **P** **04 32 12.0 +0.4**
comp=Z,39nm,1.7s
**PBAR Barrancos 90.16 9** *e*P **P** **04 32 15.7 +2.0**
comp=Z,153nm,1.4s
**CSS Prodhromos 90.37 337** *e*P **P** **04 32 15.3 +0.6**
**BANOM Banah 90.64 315**⇓ *i*P **P** **04 32 16.8 +0.6**
SNR=7.1
**UOSS Wadi Hilu 91.53 315** *e*P **P** **04 32 18.9 -1.4**
**HATD Hatta, Dubai 91.67 315**⇈ *i*P **P** **04 32 21.6 +0.6**
SNR=7.2
**ASHO Ashiyiah 91.83 315**⇈P **P** **04 32 19.6 -2.1**
SNR=8.5
**ASHO Ashiyiah 91.83 315**⇈ *i*P **P** **04 32 23.2 +1.4**
SNR=11
**CAN Canberra 91.92 209** *e*P **P** **04 32 19.7 -1.9**
CAN pmax pmax
comp=Z,33nm,1.4s
**CAN Canberra 91.92 209** *e*P **P** **04 32 19.7 -1.9**
comp=Z,33nm,1.4s
**FAQ Al Faqa, Dubai 91.98 315**⇓ *i*P **P** **04 32 23.4 +1.1**
SNR=6.7
**ASUD Al Ashush, Dub 92.20 315**⇈ *i*P **P** **04 32 23.2 -0.2**
SNR=7.7
**HOQ Hoqain 92.22 313**⇓P **P** **04 32 22.4 -1.1**
SNR=6.6
**WBK Wadi Bani Khal 92.28 311**⇈P **P** **04 32 23.0 -0.8**
SNR=8.1
**SMDO Samad 92.33 312**⇈P **P** **04 32 23.1 -1.0**
SNR=9.6
**ARQ Araqi 92.79 314** P **P** **04 32 26.1 -0.1**
SNR=22
**JMDO Jabal Madar 92.90 312** P **P** **04 32 26.4 -0.3**
SNR=11
**PALK Pallekele 93.01 285** *e*P **P** **04 32 26.2 -1.1**
PALK pmax pmax
comp=Z,37nm,1.2s
**PALK Pallekele 93.01 285** *e*P **P** **04 32 26.2 -1.1**
comp=Z,37nm,1.2s
**OTAV Otavalo 94.07 85** *e*P **P** **04 32 31.1 -1.5**
comp=Z,3.8nm,1.0s
**RAYN Ar Rayn 97.21 323** P **P** **04 32 45.0 -1.4**
comp=Z,115nm,1.2s,SNR=14
**TORD Torodi Ar. Bea 115.63 3** PKP **PKPdf** **04 37 54.4 -1.5**
comp=Z,1.5nm,0.8s,baz=335,slow=1.7,SNR=7.1
**DBIC Dimbokro 121.53 11** PKP **PKPdf** **04 38 04.9 -2.4**
comp=Z,5.1nm,1.0s,baz=108,slow=9.6,SNR=4.0
**DBIC Dimbokro 121.53 11** PKIKP **PKPdf** **04 38 04.9 -2.4**
DBIC pmax pmax
comp=Z,5.0nm,1.0s
**KMBO Kilima Mbogo 122.88 320** PKP **PKPdf** **04 38 09.9 -0.2**
comp=Z,4.5nm,0.9s,baz=268,slow=2.0,SNR=7.3
**KMBO Kilima Mbogo 122.88 320** PKIKP **PKPdf** **04 38 09.9 -0.2**
KMBO pmax pmax
comp=Z,5.0nm,0.9s
**KMBO Kilima Mbogo 122.88 320** *e*PKPdf **PKPdf** **04 38 10.6 +0.5**
**BDFB Brasilia 125.03 69** PKP **PKPdf** **04 38 15.1 +1.2**
comp=Z,2.5nm,0.9s,baz=158,slow=5.4,SNR=3.0
**BDFB Brasilia 125.03 69** PKIKP **PKPdf** **04 38 15.1 +1.2**
BDFB pmax pmax
comp=Z,3.0nm,0.9s
**CPUP Villa Florida 127.39 86** PKP **PKPdf** **04 38 19.4 +1.5**
comp=Z,0.8nm,0.6s,baz=158,slow=5.4,SNR=2.8
**CPUP Villa Florida 127.39 86** PKIKP **PKPdf** **04 38 19.5 +1.5**
CPUP pmax pmax
comp=Z,1.0nm,0.6s
**VNDA Vanda 129.48 186** PKP **PKPdf** **04 38 21.1 +0.6**
comp=Z,1.8nm,1.2s,baz=355,slow=5.6,SNR=3.3
**VNDA Vanda 129.48 186** PKIKP **PKPdf** **04 38 21.1 +0.6**
VNDA pmax pmax
comp=Z,2.0nm,1.2s
**QSPA South Pole Qui 141.20 180** PKhKP PKPpre 04 38 36.7
comp=Z,6.4nm,0.9s,baz=44,slow=3.6,SNR=4.9
QSPA PKP **PKPdf** **04 38 42.8 +0.1**
comp=Z,6.4nm,0.9s,baz=86,slow=1.9,SNR=10
**MATP Matopo 143.88 320** PKP PKPbc 04 38 46.4 -0.3
comp=Z,66nm,1.1s,baz=25,slow=4.5,SNR=22
**MAW Mawson 147.89 218** PKPbc **PKPdf** **04 38 54.9 +0.8**
comp=Z,20nm,1.0s,baz=81,slow=3.0,SNR=18
**MAW Mawson 147.89 218** PKIKP **PKPdf** **04 38 54.9 +0.8**
MAW pmax pmax
comp=Z,20nm,1.0s
**BOSA Boshof 152.49 318** PKPbc **PKPbc** **04 39 11.1 +1.4**
comp=Z,11nm,0.5s,baz=18,slow=3.1,SNR=14
**BOSA Boshof 152.49 318** PKIKP **PKPbc** **04 39 11.1 +1.4**
BOSA pmax pmax
comp=Z,11nm,0.5s
**SYO Syowa Base 155.87 210**‖ *e*X PKPab 04 39 41.0 +7.9
**SNAA Sanae 159.42 173** *e*PKP2 **PKPab** **04 39 48.2 -0.3**
**SNAA Sanae 159.42 173** *e*PKPab **PKPab** **04 39 48.2 -0.3**

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*ISCJB **08** 04:22:40.3±0.5, 6.84N±0.07×73.00W±0.06, h166km, mb3.8/6, Error ellipse: s-maj=11.6km s-min=5.9km az=136.9*
*FUNV **08** 04:22:41.9, 6.88N×73.10W, h170km, MW3.8*
*IDC **08** 04:22:41.4±1.3, 6.66N×72.99W, h167km±15km, mb3.6/6, mb1 3.8/8, mb1mx3.4/39, mbtmp4.1/8, Error ellipse: s-maj=23.9km s-min=18.6km az=143.0*
**ISC 08 04:22:41.7±0.8, 6.88N±0.07×73.02W±0.07, h166km, n31, σ1§33/36, mb4.0/6, 4C-3D, Northern Colombia**

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

CAPV Capacho 1.20 36⇑iP Pn 04 23 10.2 +0.2
CAPV eS Sn 04 23 31.1 -0.6
ROSC El Rosal 2.40 213 P Pn 04 23 22.0 -0.8
171nm,0.3s,baz=264,slow=22,SNR=800
ROSC S Sn 04 23 51.3 -3.3
267nm,0.3s,baz=69,slow=19,SNR=17
VIGV El Vigia 2.55 40⇑iP Pn 04 23 24.7 +0.5
VIGV eS Sn 04 23 55.2 -2.0
SOCV Socops 2.56 57 eP Pn 04 23 24.9 +0.6
SOCV eS Sn 04 23 56.7 -0.7
ELOV Elorza 3.51 88 eP Pn 04 23 36.2 0.0
VIRV Villa del Rosa 3.65 10⇑iP Pn 04 23 36.7 -1.2
VIRV eS Sn 04 24 17.8 -4.0
QARV Quebrada Arrib 4.13 37⇑iP Pn 04 23 44.6 +0.6
SANV Sanarito 4.32 53⇓eP Pn 04 23 46.5 -0.1
CURV Curarigua 4.34 44 eP Pn 04 23 46.8 -0.1
DABV Dabajuro 4.66 30 eP Pn 04 23 50.9 0.0
TEPV Terepaima 4.87 51 eP Pn 04 23 53.6 -0.2
SIQV Siquisique 4.91 40 eP Pn 04 23 53.9 -0.3
BAUV El Baul 5.34 67⇓eP Pn 04 23 58.5 -1.4
MAPV Macapo 5.38 57 eP Pn 04 23 60.0 -0.5
MONV Montecano 5.87 31⇓eP Pn 04 24 05.5 -1.4
JACV Jacura 5.88 44 eP Pn 04 24 06.0 -1.1
TURV Turiamo 6.23 55 eP Pn 04 24 11.4 -0.1
MERV Las Mercedes 7.06 70 eP Pn 04 24 21.7 -0.9
BIRV Birongo 7.57 61 eP Pn 04 24 27.3 -2.1
CUPV Cœpira 7.82 66 eP Pn 04 24 31.3 -1.5
PCRV Puerto La Cruz 8.91 68 P Pn 04 24 48.2 +1.0
0.6nm,0.3s,baz=151,slow=1.4,SNR=6.6
PCRV Puerto La Cruz 8.91 68 eP Pn 04 24 46.1 -1.1
JTS JuntasAbangare 12.28 287 P P 04 25 37.1 +0.5
1.7nm,0.3s,baz=84,slow=10,SNR=13
ULM Lac du Bonnet 47.26 340 P P 04 30 58.6 +0.5
2.5nm,0.5s,baz=165,slow=5.5,SNR=4.0
SCHQ Schefferville 48.07 5 P P 04 31 06.0 +1.8
10nm,0.7s,baz=176,slow=10,SNR=3.8
NVAR Mina Array Bea 51.51 315 P P 04 31 32.1 +1.3
0.6nm,0.7s,baz=132,slow=6.5,SNR=3.1
YKA Yellowknife Ar 63.24 340 P P 04 32 52.3 +0.2
0.9nm,0.5s,baz=138,slow=6.0,SNR=3.8
TORD Torodi Ar. Bea 73.63 78 P P 04 33 56.8 -0.8
0.4nm,1.0s,baz=286,slow=6.2,SNR=6.8
ARCES ARCESS Array B 86.58 20 P P 04 35 06.9 +1.1
3.2nm,0.9s,baz=306,slow=3.2,SNR=2.6
ASAR Alice Springs 149.22 234 PKPbc PKPbc 04 42 10.2 -1.3
0.3nm,0.3s,baz=111,slow=3.9,SNR=4.3
WRA Warramunga Arr 150.45 241 PKPbc PKPbc 04 42 13.9 -0.7
0.5nm,0.4s,baz=106,slow=2.8,SNR=7.3

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*JMA **08** 04:28:08.9±0.1, 24°.82N×122°.31E, h16km, M2.1*
*TAP **08** 04:28:08.4, 24°.86N×122°.27E, h4km±1km, ML2.6, D*
**ISC 08 04:28:08.6**±1.1**, 24°.85N**±0°.04×**122°.32E**±0°.03**, h11**km±9km**,**
**n15,** σ**0.s39**/28**, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | | **0.35** | **269** | eP | **Pg** | **04 28 15.3** | **-0.3** |
| | baz=267 | | | | | | |
| EGS | | | | eS | **Sg** | **04 28 20.6** | **+0.2** |
| | baz=267 | | | | | | |
| **TWC** | **Suao** | **0.49** | **241** | eP | **Pg** | **04 28 17.9** | **-0.2** |
| | baz=236 | | | | | | |
| TWC | | | | eS | **Sb** | **04 28 26.4** | **0.0** |
| | baz=236 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.54** | **294** | eP | **Pg** | **04 28 19.5** | **+0.4** |
| | baz=295 | | | | | | |
| NWF | | | | eS | **Sg** | **04 28 26.3** | **+0.1** |
| | baz=295 | | | | | | |
| **TWE** | **Neicheng** | **0.61** | **258** | eP | **Pg** | **04 28 20.3** | **-0.1** |
| | baz=255 | | | | | | |
| TWE | | | | eS | **Sb** | **04 28 29.8** | **0.0** |
| | baz=255 | | | | | | |
| **ENA** | **Nanau** | **0.68** | **232** | eP | **Pg** | **04 28 21.3** | **-0.4** |
| | baz=228 | | | | | | |
| ENA | | | | eS | **Sg** | **04 28 29.8** | **-0.7** |
| | baz=228 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.69** | **125** | P | **Pg** | **04 28 21.9** | **-0.1** |
| JYNG | | | | eS | **Sg** | **04 28 31.6** | **+0.6** |
| **ENTT** | **Nioudou** | **0.72** | **253** | eP | **Pg** | **04 28 22.7** | **+0.2** |
| | baz=251 | | | | | | |
| ENTT | | | | eS | **Sb** | **04 28 32.6** | **-0.4** |
| | baz=251 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.74** | **121** | P | **Pg** | **04 28 22.6** | **-0.2** |
| YOJ | | | | eS | **Sg** | **04 28 32.5** | **+0.1** |
| **PCYT** | **Pengchaiyu** | **0.81** | **344** | eP | **Pb** | **04 28 24.8** | **+0.1** |
| | baz=347 | | | | | | |
| PCYT | | | | eS | **Sn** | **04 28 37.0** | **-1.0** |
| | baz=347 | | | | | | |
| **NSK** | **Sanguang** | **0.89** | **259** | eP | **Pb** | **04 28 25.9** | **-0.2** |
| | baz=257 | | | | | | |
| NSK | | | | eS | **Sb** | **04 28 38.8** | **+0.7** |
| | baz=257 | | | | | | |
| **NNS** | **Nan Shan** | **0.95** | **245** | eP | **Pb** | **04 28 27.5** | **+0.2** |
| | baz=242 | | | | | | |
| NNS | | | | eS | **Sg** | **04 28 39.6** | **+0.1** |
| | baz=242 | | | | | | |
| **TWD** | **Chiawan** | **1.01** | **221** | eS | **Sn** | **04 28 43.0** | **0.0** |
| | baz=218 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.19** | **234** | eP | **Pb** | **04 28 31.3** | **-0.1** |
| | baz=232 | | | | | | |
| WHF | | | | eS | **Sb** | **04 28 46.9** | **-0.1** |
| | baz=232 | | | | | | |
| **TWT** | **Tachien** | **1.20** | **241** | eP | **Pg** | **04 28 32.2** | **+0.5** |
| | baz=239 | | | | | | |
| TWT | | | | eS | **Sn** | **04 28 48.3** | **+0.4** |
| | baz=239 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.38** | **111** | P | **Pn** | **04 28 33.9** | **+0.1** |

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*IDC **08** 04:28:21.1±0.6, 51°.36N×175°.17W, h0km, mb4.4/27, mb1 4.5/30, mb1mx4.4/41, mbtmp4.4/30, ML4.0/3, Error ellipse: s-maj=19.2km s-min=11.4km az=159.0*
*ISCJB **08** 04:28:24.6±0.3, 51°.18N±0°.04×175°.18W±0°.04, h35km, mb4.5/55, Error ellipse: s-maj=6.1km s-min=3.0km az=169.8*
*MOS **08** 04:28:24.4±0.9, 51°.40N×175°.15W, h33km, mb5.0/19, Error ellipse: s-maj=10.7km s-min=8.3km az=108.4*
*BJI **08** 04:28:24.1, 52°.08N×175°.49W, h13km, mb5.1/41, mB5.9/10, Ms5.4/12, Ms7 5.2/9*
*NEIC **08** 04:28:25.0, 51°.20N×175°.19W, h28km, mb4.6/34, ML4.3(AEIC), After AEIC.*
**ISC 08 04:28:26.4**±0.5**, 51°.28N**±0°.07×**175°.20W**±0°.04**, h35**km**,**
**n190,** σ**1.s03**/196**, mb4.6**/55**, 3C-2D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.93** | **326** | P | **Pn** | **04 28 42.8** | **-0.2** |
| **GSCK** | **Great Sitkin C** | **0.95** | **321** | P | **Pn** | **04 28 43.0** | **-0.3** |
| **ETKA** | **Kagalaska Isla** | **0.95** | **308** | P | **Pn** | **04 28 42.8** | **-0.4** |
| **GSTD** | **Great Sitkin T** | **0.98** | **323** | P | **Pn** | **04 28 43.4** | **-0.2** |
| **GSTR** | **Great Sitkin T** | **0.98** | **327** | ePn | **Pn** | **04 28 43.5** | **-0.1** |
| **ATKA** | **Atka Island** | **1.12** | **34** | P | **Pn** | **04 28 44.9** | **-0.7** |
| ATKA | | | | S | **Sn** | **04 29 00.8** | **+1.1** |
| **ADAG** | **Mount Adagdak** | **1.12** | **309** | P | **Pn** | **04 28 46.1** | **+0.5** |
| **KOFP** | **Korovin Flat P** | **1.21** | **34** | P | **Pn** | **04 28 47.5** | **+0.6** |
| **KOKL** | **Mount Kliuchef** | **1.22** | **30** | P | **Pn** | **04 28 47.7** | **+0.8** |
| **KOWE** | **Korovin West** | **1.24** | **28** | P | **Pn** | **04 28 48.1** | **+0.9** |
| **KIRH** | **Kanaga Island** | **1.33** | **299** | P | **Pn** | **04 28 48.4** | **-0.1** |
| KIRH | | | | S | **Sn** | **04 29 07.3** | **+2.3** |
| **KIKV** | **Kanaga Island** | **1.37** | **297** | P | **Pn** | **04 28 48.7** | **-0.3** |
| **KICM** | **Kanaga Island** | **1.40** | **298** | P | **Pn** | **04 28 49.3** | **-0.1** |
| **TAPA** | **Tanaga Point A** | **1.72** | **289** | P | **Pn** | **04 28 53.5** | **-0.3** |
| **TAFL** | **Tanaga Flats** | **1.75** | **287** | P | **Pn** | **04 28 54.1** | **-0.1** |
| **TAFP** | **Tanaga Falls P** | **1.84** | **291** | P | **Pn** | **04 28 55.6** | **+0.1** |
| TAFP | | | | S | **Sn** | **04 29 19.9** | **+2.4** |
| **GAEA** | **Gareloi East** | **2.27** | **284** | P | **Pn** | **04 29 02.1** | **+0.7** |
| **GALAA** | **Gareloi Lava P** | **2.28** | **284** | P | **Pn** | **04 29 02.1** | **+0.6** |
| **GANE** | **Gareloi Northe** | **2.30** | **285** | P | **Pn** | **04 29 02.1** | **+0.4** |
| **CERAA** | **Semis' Rag'd T** | **3.25** | **283** | P | **Pn** | **04 29 14.9** | **+0.1** |
| **CESW** | **Semis' Southwe** | **3.32** | **283** | P | **Pn** | **04 29 15.8** | **0.0** |
| **CEAP** | **Semis' Anvil P** | **3.33** | **285** | P | **Pn** | **04 29 15.8** | **-0.1** |
| **AMKA** | **Amchitka** | **3.45** | **274** | P | **Pn** | **04 29 16.9** | **-0.6** |
| **LSPA** | **Little Sitkin** | **3.94** | **282** | P | **Pn** | **04 29 24.9** | **+0.6** |
| **LSNW** | **Little Sitkin** | **3.98** | **283** | P | **Pn** | **04 29 24.7** | **-0.1** |
| **LSSA** | **Little Sitkin** | **3.98** | **282** | P | **Pn** | **04 29 25.4** | **+0.6** |
| **NIKH** | **Nikolski High** | **4.27** | **64** | P | **Pn** | **04 29 29.5** | **+0.7** |
| **UNV** | **Unalaska Valle** | **5.90** | **61** | ePn | **Pn** | **04 29 53.7** | **+2.6** |
| **SPIA** | **Saint Paul Isl** | **6.59** | **24** | P | **Pn** | **04 30 03.7** | **+3.2** |
| **SMY** | **Shemya** | **6.76** | **287** | P | **Pn** | **04 30 04.7** | **+1.7** |
| **SMY** | **Shemya** | **6.76** | **287** | P | **Pn** | **04 30 04.7** | **+1.7** |
| **KDAK** | **Kodiak Island** | **14.61** | **55** | Pn | **Pn** | **04 31 48.2** | **-2.1** |
| | 0.3nm,0.3s,baz=252,slow=3.2,SNR=4.9 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.61** | **55** | ePn | **P** | **04 31 55.8** | **-0.4** |
| **PET** | **Petropavlovsk** | **16.11** | **286** | eP | **Pn** | **04 32 10.1** | **+0.2** |
| **PETK** | **Petropavlovsk-** | **16.68** | **287** | Pn | **Pn** | **04 32 17.7** | **+0.5** |
| | 1.9nm,0.3s,baz=94,slow=16,SNR=21 | | | | | | |
| **PPLA** | **Purkeypile** | **16.96** | **38** | ePn | **Pn** | **04 32 21.6** | **+0.9** |
| | 46nm,1.4s | | | | | | |
| **CAST** | **Castle Rocks** | **17.29** | **36** | ePn | **P** | **04 32 27.7** | **+1.8** |
| | 19nm,1.1s | | | | | | |
| **KTH** | **Kantishna Hill** | **17.80** | **37** | ePn | **P** | **04 32 32.3** | **+0.7** |
| | 135nm,1.8s | | | | | | |
| **SKR** | **Severo-Kuril's** | **18.02** | **279** | eP | P | 04 32 39.9 | +5.9 |
| **BPAW** | **Bear Paw Mtn.** | **18.08** | **35** | ePn | **P** | **04 32 35.9** | **+1.3** |
| | 14nm,0.9s | | | | | | |
| **BILL** | **Bilibino** | **19.09** | **339** | eP | **Pn** | **04 32 46.5** | **-0.1** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,108nm,1.5s | | | | | | |
| **BILL** | **Bilibino** | **19.09** | **339** | eP | **Pn** | **04 32 46.5** | **-0.1** |
| | comp=Z,108nm,1.5s | | | | | | |
| **CCB** | **Clear Creek Bu** | **19.54** | **36** | eP | **Pn** | **04 32 51.7** | **-0.3** |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **COLA** | **College** | **19.64** | **36** | eP | **P** | **04 32 52.2** | **+0.6** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **COLA** | **College** | **19.64** | **36** | eP | **P** | **04 32 52.0** | **+0.4** |
| | comp=Z,176nm,2.7s | | | | | | |
| **HDA** | **Harding Lake** | **19.74** | **37** | eP | **P** | **04 32 53.4** | **+0.6** |
| | comp=Z,16nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **19.95** | **37** | P | **P** | **04 32 52.7** | **-2.3** |
| | comp=Z,0.4nm,0.3s,baz=223,slow=8.7,SNR=16 | | | | | | |
| **COLD** | **Coldfoot** | **20.23** | **28** | eP | **P** | **04 32 59.2** | **+1.2** |
| | comp=Z,19nm,1.1s | | | | | | |
| **SEY** | **Seymchan** | **20.85** | **316** | P | **P** | **04 33 04.0** | **-0.7** |
| | comp=Z,4.6nm,0.7s,baz=130,slow=10.0,SNR=3.8 | | | | | | |
| **SEY** | **Seymchan** | **20.85** | **316** | eP | **P** | **04 33 03.9** | **-0.9** |
| **EGAK** | **Eagle** | **22.17** | **39** | eP | **P** | **04 33 18.4** | **-0.5** |
| | comp=Z,17nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **26.27** | **34** | P | **P** | **04 33 57.6** | **-0.3** |
| | comp=Z,2.7nm,0.9s,baz=197,slow=9.5,SNR=4.5 | | | | | | |
| **DLBC** | **Dease Lake** | **26.53** | **57** | P | **P** | **04 34 02.0** | **+1.5** |
| | comp=Z,4.9nm,0.9s,baz=262,slow=9.0,SNR=6.0 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **27.57** | **278** | eP | **P** | **04 34 09.9** | **+0.1** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **ASAJ** | **Asahikawa** | **28.96** | **272** | P | **P** | **04 34 23.7** | **+1.5** |
| | comp=Z,12nm,0.7s,baz=143,slow=20 | | | | | | |
| **ASAJ** | **Asahikawa** | **28.96** | **272** | P | **P** | **04 34 23.7** | **+1.5** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| **ASAJ** | **Asahikawa** | **28.96** | **272** | eP | **P** | **04 34 21.8** | **-0.5** |
| | comp=Z,4.8nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **33.37** | **288** | eP | P | 04 34 57.0 | -4.0 |
| KLR | | | | pmax | pmax | | |
| | comp=E,34nm,1.6s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,62nm,1.6s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.49** | **211** | T | T | 05 12 06.2 | |
| | baz=18,slow=75,SNR=53 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.50** | **211** | T | T | 05 11 55.6 | |
| | baz=18,slow=75,SNR=22 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.51** | **211** | T | T | 05 12 03.3 | |
| | baz=18,slow=75,SNR=32 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.54** | **280** | P | **P** | **04 35 19.5** | **-0.3** |
| | comp=Z,5.5nm,0.6s,baz=59,slow=8.9,SNR=11 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.70** | **210** | T | T | 05 13 34.4 | |
| | baz=18,slow=76,SNR=6.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.72** | **210** | T | T | 05 13 37.5 | |
| | baz=18,slow=76,SNR=5.4 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.72** | **210** | T | T | 05 13 23.1 | |
| | baz=18,slow=76,SNR=3.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.01** | **264** | P | **P** | **04 35 24.1** | **+0.2** |
| | comp=Z,5.0nm,0.6s,baz=49,slow=7.5,SNR=16 | | | | | | |
| **MAJO** | **Matsushiro** | **36.01** | **264** | ⇑iP | **P** | **04 35 23.5** | **-0.4** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,110nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **36.01** | **264** | eP | **P** | **04 35 23.2** | **-0.7** |
| | comp=Z,20nm,0.9s | | | | | | |
| **MAT** | **Matsushiro** | **36.01** | **264** | P | **P** | **04 35 24.1** | **+0.2** |
| **VLA** | **Vladivostok** | **36.17** | **278** | eP | **P** | **04 35 25.9** | **+0.8** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **NEW** | **Newport** | **36.79** | **71** | P | **P** | **04 35 30.9** | **+0.4** |
| | comp=Z,1.9nm,0.7s,baz=315,slow=5.7,SNR=4.0 | | | | | | |
| **NEW** | **Newport** | **36.79** | **71** | eP | **P** | **04 35 30.6** | **+0.1** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **NEW** | **Newport** | **36.79** | **71** | eP | **P** | **04 35 30.6** | **+0.1** |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **EDM** | **Edmonton** | **36.88** | **62** | eP | **P** | **04 35 32.3** | **+1.1** |
| EDM | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **EDM** | **Edmonton** | **36.88** | **62** | eP | **P** | **04 35 32.2** | **+1.1** |
| | comp=Z,14nm,0.8s | | | | | | |
| **MSHR** | **Mys Shultsa** | **36.91** | **278** | eP | **P** | **04 35 31.8** | **+0.3** |
| **WVOR** | **Wild Horse Val** | **38.80** | **80** | eP | **P** | **04 35 46.9** | **-0.7** |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **WVOR** | **Wild Horse Val** | **38.80** | **80** | eP | **P** | **04 35 46.9** | **-0.7** |
| | comp=Z,3.6nm,0.9s | | | | | | |
| **CN2** | **Changchun** | **39.78** | **283** | eP | **P** | **04 35 54.6** | **-1.0** |
| CN2 | | | | epP | **pP** | **04 36 03.0** | **-2.8** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,800nm,19.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,2µm,19.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **41.05** | **74** | eP | **P** | **04 36 07.4** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **41.32** | **85** | P | **P** | **04 36 09.5** | **+0.9** |
| | comp=Z,0.4nm,0.7s,baz=282,slow=10,SNR=2.9 | | | | | | |
| **BOZ** | **Bozeman (W)** | **41.35** | **72** | eP | **P** | **04 36 08.6** | **-0.2** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,12nm,1.5s | | | | | | |
| **BOZ** | **Bozeman (W)** | **41.35** | **72** | eP | **P** | **04 36 08.6** | **-0.2** |
| | comp=Z,12nm,1.5s | | | | | | |
| **KSRS** | **Korea Array** | **41.90** | **274** | P | **P** | **04 36 13.6** | **+0.5** |
| | comp=Z,4.9nm,0.7s,baz=56,slow=8.1,SNR=14 | | | | | | |
| **KSRS** | **Korea Array** | **41.90** | **274** | P | **P** | **04 36 13.6** | **+0.5** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **KSAR** | **Wonju Array Be** | **41.93** | **274** | P | **P** | **04 36 13.6** | **+0.2** |
| **KSAR** | **Wonju Array Be** | **41.93** | **274** | P | **P** | **04 36 13.6** | **+0.2** |
| **SNY** | **Shenyang** | **42.01** | **282** | ⇓P | **P** | **04 36 15.4** | **+1.4** |
| SNY | | | | PMZ | | | |
| | comp=Z,41nm,1.2s | | | | | | |
| **JNU** | **Nakatsue** | **42.81** | **266** | P | **P** | **04 36 21.2** | **+0.5** |
| | comp=Z,25nm,0.9s,baz=44,slow=5.5,SNR=10 | | | | | | |
| **JNU** | **Nakatsue** | **42.81** | **266** | eP | **P** | **04 36 20.8** | **+0.1** |
| | comp=Z,11nm,0.9s | | | | | | |
| **MOOW** | **Moose Ponds** | **42.91** | **74** | eP | **P** | **04 36 22.0** | **+0.4** |
| | comp=Z,1.7nm,1.0s | | | | | | |
| **RLMT** | **Red Lodge** | **43.04** | **71** | eP | **P** | **04 36 23.4** | **+0.7** |
| | comp=Z,11nm,1.0s | | | | | | |
| **LOHW** | **Long Hollow** | **43.07** | **74** | eP | **P** | **04 36 24.1** | **+1.2** |
| **DUG** | **Dugway** | **43.68** | **79** | eP | **P** | **04 36 28.9** | **+1.1** |
| | comp=Z,4.8nm,0.9s | | | | | | |
| **BW06** | **Boulder Array** | **44.18** | **74** | eP | **P** | **04 36 32.2** | **+0.4** |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **NLU** | **North Lily Min** | **44.28** | **79** | eP | P | 04 36 41.2 | +8.5 |
| | comp=Z,40nm,2.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.31** | **298** | c iP | **P** | **04 37 03.5** | **-0.7** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.31** | **298** | eP | **P** | **04 37 03.8** | **-0.3** |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **48.69** | **299** | P | **P** | **04 37 07.0** | **-0.1** |
| | comp=Z,4.6nm,0.8s,baz=50,slow=9.0,SNR=14 | | | | | | |
| SONM | | | | PcP | **PcP** | **04 38 31.1** | **-0.7** |
| | comp=Z,2.0nm,1.1s,baz=80,slow=1.4,SNR=3.6 | | | | | | |
| SONM | | | | ScP | **ScP** | **04 42 28.6** | **+4.8** |
| | comp=Z,0.8nm,0.7s,baz=122,slow=1.9,SNR=3.1 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.88** | **288** | eP | **P** | **04 37 16.1** | **0.0** |
| HHC | | | | PMZ | | | |
| | comp=Z,25nm,1.1s | | | | | | |
| **KBS** | **Kingsbay** | **49.99** | **358** | eP | **P** | **04 37 16.4** | **+0.1** |
| KBS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **KBS** | **Kingsbay** | **49.99** | **358** | eP | **P** | **04 37 16.4** | **+0.1** |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **SPB5** | **Spitsbergen Ar** | **50.61** | **357** | eP | **P** | **04 37 20.8** | **-0.3** |
| **SPA1** | **Spitsbergen Ar** | **50.61** | **357** | eP | **P** | **04 37 20.9** | **-0.3** |
| **SPB1** | **Spitsbergen Ar** | **50.61** | **357** | eP | **P** | **04 37 20.8** | **-0.3** |
| **SPITS** | **Spitsbergen Ar** | **50.62** | **357** | P | **P** | **04 37 20.8** | **-0.3** |
| | comp=Z,11nm,0.8s,baz=104,slow=10,SNR=7.4 | | | | | | |
| **NJ2** | **Nanjing** | **51.07** | **275** | eP | **P** | **04 37 27.5** | **+2.4** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.6s | | | | | | |
| **HVS** | **Khovu-Aksy** | **53.37** | **308** | eP | **P** | **04 37 41.0** | **-1.0** |
| HVS | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **WHN** | **Wuhan** | **54.91** | **277** | P | **P** | **04 37 55.1** | **+1.7** |
| **SSLB** | **Suanglung** | **55.55** | **266** | eP | **P** | **04 37 57.2** | **-0.9** |
| | comp=Z,32nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.72** | **315** | P | **P** | **04 37 58.0** | **-0.9** |
| | comp=Z,0.6nm,0.4s,baz=31,slow=8.6,SNR=2.3 | | | | | | |
| ZALV | | | | PcP | **PcP** | **04 38 58.0** | **+0.2** |
| | comp=Z,1.9nm,0.6s,baz=40,slow=4.8,SNR=4.6 | | | | | | |
| **WMOK** | **Wichita Mounta** | **55.75** | **76** | eP | **P** | **04 37 59.7** | **+0.3** |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **WMOK** | **Wichita Mounta** | **55.75** | **76** | eP | **P** | **04 37 59.7** | **+0.3** |
| | comp=Z,3.5nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **56.43** | **84** | P | **P** | **04 38 04.6** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=292,slow=3.9,SNR=4.2 | | | | | | |
| **LZH** | **Lanzhou** | **57.57** | **289** | eP | **P** | **04 38 13.2** | **+0.7** |
| LZH | | | | pP | **pP** | **04 38 19.8** | **-3.3** |
| LZH | | | | sP | sP | 04 38 22.2 | -5.0 |
| LZH | | | | PMZ | | | |
| | comp=Z,40nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,160nm,4.3s | | | | | | |
| **GTA** | **Gaotai** | **57.69** | **294** | eP | **P** | **04 38 12.8** | **-0.5** |
| GTA | | | | pP | **pP** | **04 38 23.0** | **-0.9** |
| GTA | | | | sP | **sP** | **04 38 27.0** | **-1.0** |
| GTA | | | | PMZ | | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.55** | **352** | P | **P** | **04 38 17.6** | **-1.1** |
| | comp=Z,4.3nm,0.8s,baz=356,slow=5.7,SNR=3.4 | | | | | | |
| ARCES | | | | PcP | **PcP** | **04 39 09.0** | **+0.3** |
| | comp=Z,7.7nm,0.8s,baz=15,slow=4.7,SNR=8.3 | | | | | | |
| **SCHQ** | **Schefferville** | **58.66** | **40** | P | **P** | **04 38 18.2** | **-1.5** |
| | comp=Z,5.8nm,0.9s,baz=285,slow=4.8,SNR=3.8 | | | | | | |
| **SZP** | **Santa** | **60.48** | **261** | eP | **P** | **04 38 33.2** | **+0.5** |
| | comp=Z,25nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **60.70** | **316** | eP | **P** | **04 38 33.3** | **-0.5** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **60.70** | **316** | eP | **P** | **04 38 33.3** | **-0.5** |
| | comp=Z,18nm,0.6s | | | | | | |
| **CD2** | **Chengdu** | **61.20** | **284** | eP | **P** | **04 38 37.0** | **-0.5** |
| **WMQ** | **Urumqi** | **61.27** | **305** | eP | **P** | **04 38 38.0** | **+0.1** |
| WMQ | | | | pP | **pP** | **04 38 48.0** | **-0.5** |
| WMQ | | | | sP | **sP** | **04 38 52.0** | **-0.6** |
| WMQ | | | | PMZ | | | |
| | comp=Z,31nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.84** | **310** | P | **P** | **04 38 40.7** | **-0.9** |
| | comp=Z,6.8nm,0.7s,baz=55,slow=6.8,SNR=28 | | | | | | |
| **BRVK** | **Borovoye** | **62.41** | **322** | eP | **P** | **04 38 45.0** | **-0.3** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **62.41** | **322** | eP | **P** | **04 38 45.0** | **-0.3** |
| | comp=Z,5.6nm,0.7s | | | | | | |
| **GYA** | **Guiyang** | **62.57** | **279** | eP | **P** | **04 38 47.8** | **+0.9** |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **ARU** | **Arti** | **63.85** | **330** | d iP | **P** | **04 38 53.5** | **-1.3** |
| ARU | | | | | | 04 41 13.1 | |
| ARU | | | | S | **S** | **04 47 27.3** | **+0.1** |
| ARU | | | | SS | **SS** | **04 51 29.3** | **-5.4** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **ARU** | **Arti** | **63.85** | **330** | eP | **P** | **04 38 54.2** | **-0.6** |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **65.97** | **281** | P | **P** | **04 39 09.5** | **+0.2** |
| KMI | | | | pP | **pP** | **04 39 19.7** | **-0.4** |
| KMI | | | | sP | **sP** | **04 39 25.5** | **+1.4** |
| KMI | | | | PMZ | | | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| **FINES** | **FINESS Array B** | **66.35** | **349** | P | **P** | **04 39 09.7** | **-1.2** |
| | comp=Z,1.9nm,0.8s,baz=41,slow=11,SNR=2.7 | | | | | | |
| **TKM2** | **Tokmak 2** | **67.90** | **312** | eP | **P** | **04 39 21.6** | **+0.3** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **67.90** | **312** | P | **P** | **04 39 21.8** | **+0.5** |
| | SNR=8.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **67.90** | **312** | eP | **P** | **04 39 21.6** | **+0.3** |
| | comp=Z,6.9nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **67.92** | **357** | P | **P** | **04 39 19.9** | **-1.0** |
| | comp=Z,1.1nm,0.6s,baz=5.0,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.92** | **357** | P | **P** | **04 39 20.2** | **-0.7** |
| | comp=Z,3.0nm,0.9s,baz=4.4,slow=6.3,SNR=6.2 | | | | | | |
| **USP** | **Ospenovka** | **68.14** | **312** | P | **P** | **04 39 23.1** | **+0.5** |
| | SNR=8.7 | | | | | | |
| **KBK** | **Karagaybulak** | **68.41** | **312** | P | **P** | **04 39 25.1** | **+0.6** |
| | SNR=5.9 | | | | | | |
| **AAK** | **Ala-Archa** | **68.64** | **312** | eP | **P** | **04 39 25.5** | **-0.4** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **68.64** | **312** | P | **P** | **04 39 26.4** | **+0.5** |
| | SNR=10 | | | | | | |
| **AAK** | **Ala-Archa** | **68.64** | **312** | eP | **P** | **04 39 26.0** | **+0.1** |
| | comp=Z,11nm,0.6s | | | | | | |
| **KZA** | **Kyzart** | **68.71** | **311** | P | **P** | **04 39 27.3** | **+0.6** |
| | SNR=6.7 | | | | | | |
| **EKS2** | **Erkin-Say** | **68.95** | **312** | eP | **P** | **04 39 28.2** | **+0.4** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| **EKS2** | **Erkin-Say** | **68.95** | **312** | P | **P** | **04 39 28.5** | **+0.7** |
| | SNR=18 | | | | | | |
| **EKS2** | **Erkin-Say** | **68.95** | **312** | eP | **P** | **04 39 28.2** | **+0.4** |
| | comp=Z,14nm,0.7s | | | | | | |
| **ABKAR** | **Akbulak array** | **69.35** | **325** | eP | **P** | **04 39 29.9** | **0.0** |
| **AML** | **Almayashu** | **69.40** | **312** | P | **P** | **04 39 32.0** | **+1.1** |
| | SNR=9.1 | | | | | | |
| **LSA** | **Lhasa** | **69.59** | **292** | eP | **P** | **04 39 33.6** | **+1.3** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **69.59** | **292** | eP | **P** | **04 39 33.6** | **+1.3** |
| | comp=Z,24nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **70.09** | **315** | eP | **P** | **04 39 34.6** | **-0.1** |
| **KKAR** | **Karatay Array** | **70.09** | **315** | eP | **P** | **04 39 34.6** | **-0.1** |
| **KSH** | **Kashi** | **70.34** | **309** | P | P | 04 39 40.1 | +3.7 |
| KSH | | | | epP | pP | 04 39 50.3 | +3.0 |
| KSH | | | | esP | sP | 04 39 53.8 | +2.5 |
| KSH | | | | S | **S** | **04 48 47.2** | **+1.0** |
| KSH | | | | PMZ | | | |
| | comp=Z,22nm,0.7s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,600nm,10.4s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,160nm,5.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.26** | **279** | P | **P** | **04 39 54.5** | **+0.4** |
| | comp=Z,1.3nm,0.3s,baz=29,slow=7.8,SNR=4.7 | | | | | | |
| **TAPN** | **Taplejung** | **73.34** | **293** | eP | **P** | **04 39 55.2** | **+0.4** |
| | comp=Z,95nm,1.0s | | | | | | |
| **ODAN** | **Odare** | **73.90** | **293** | eP | **P** | **04 39 58.2** | **+0.2** |
| | comp=Z,93nm,1.4s | | | | | | |
| **GUN** | **Gumba** | **73.97** | **295** | eP | **P** | **04 39 58.8** | **+0.3** |
| | comp=Z,132nm,0.8s | | | | | | |
| **RAMN** | **Ramite** | **74.29** | **293** | eP | **P** | **04 40 00.4** | **+0.1** |
| | comp=Z,118nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **74.40** | **295** | eP | **P** | **04 40 01.3** | **+0.4** |
| | comp=Z,50nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | **74.50** | **295** | eP | **P** | **04 40 01.9** | **+0.3** |
| | comp=Z,68nm,1.0s | | | | | | |
| **PKIN** | **Phulchoki** | **74.50** | **295** | eP | **P** | **04 40 01.7** | **+0.2** |
| | comp=Z,94nm,1.3s | | | | | | |
| **GKN** | **Gorkha** | **74.61** | **295** | eP | **P** | **04 40 02.1** | **+0.1** |
| | comp=Z,84nm,0.9s | | | | | | |
| **DMN** | **Daman** | **74.64** | **295** | eP | **P** | **04 40 02.8** | **+0.5** |
| | comp=Z,220nm,1.6s | | | | | | |
| **DANN** | **Dangsing** | **74.84** | **296** | eP | **P** | **04 40 04.5** | **+1.0** |
| | comp=Z,12nm,0.8s | | | | | | |
| **KOLN** | **Koldanda** | **75.37** | **296** | eP | **P** | **04 40 06.7** | **+0.2** |
| | comp=Z,40nm,0.9s | | | | | | |
| **AKASG** | **Malin Array Be** | **76.30** | **344** | P | **P** | **04 40 10.1** | **-1.0** |
| | comp=Z,0.4nm,0.3s,baz=18,slow=6.3,SNR=3.8 | | | | | | |
| **CLL** | **Collm** | **77.56** | **355** | eP | **P** | **04 40 17.0** | **-1.2** |
| **CLL** | **Collm** | **77.56** | **355** | eP | **P** | **04 40 17.0** | **-1.2** |
| **DPC** | **Dobruska-Polom** | **78.28** | **352** | eP | **P** | **04 40 22.2** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **78.28** | **352** | eP | **P** | **04 40 22.2** | **-0.1** |
| **NKC** | **Novy Kostel** | **78.66** | **355** | eP | **P** | **04 40 24.3** | **-0.1** |
| **STHS** | **Stebnicka Huta** | **78.71** | **349** | eP | P | 04 40 20.7 | -3.9 |
| **STHS** | **Stebnicka Huta** | **78.71** | **349** | e | P | 04 40 20.7 | -3.9 |
| **DOU** | **Dourbes** | **79.00** | **0** | P | **P** | **04 40 25.7** | **-0.5** |
| **KOLS** | **Kolonicke sedl** | **79.06** | **348** | eP | **P** | **04 40 25.7** | **-0.9** |
| **KOLS** | **Kolonicke sedl** | **79.06** | **348** | eP | **P** | **04 40 25.7** | **-0.9** |
| **WLF** | **Walferdange** | **79.43** | **359** | P | **P** | **04 40 30.1** | **+1.5** |
| **GEYT** | **Alibeck** | **79.65** | **320** | P | **P** | **04 40 30.9** | **+0.9** |
| | comp=Z,11nm,0.8s,baz=345,slow=4.6,SNR=11 | | | | | | |
| **KHC** | **Kasperske Hory** | **79.69** | **354** | eP | **P** | **04 40 29.5** | **-0.6** |
| **KHC** | **Kasperske Hory** | **79.69** | **354** | eP | **P** | **04 40 29.5** | **-0.6** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| GERES | GERESS Array B | 79.97 | 354 | P | P | 04 40 31.3 | -0.3 |
| | comp=Z,1.4nm,0.8s,baz=33,slow=5.1,SNR=9.7 | | | | | | |
| KBA | Koelnbreinsper | 81.75 | 354⇑ | iP | P | 04 40 41.4 | +0.2 |
| | comp=Z,6.8nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 83.55 | 227 | P | P | 04 40 49.7 | -1.0 |
| | comp=Z,0.9nm,0.7s,baz=34,slow=5.6,SNR=5.8 | | | | | | |
| PSI | Prapat | 85.24 | 269 | P | P | 04 40 59.5 | 0.0 |
| | comp=Z,12nm,0.7s,baz=359,slow=5.2,SNR=15 | | | | | | |
| BRTR | Keskin Array B | 85.93 | 338 | P | P | 04 41 03.4 | +0.7 |
| | comp=Z,2.8nm,0.8s,baz=64,slow=2.7,SNR=8.9 | | | | | | |
| FITZ | Fitzroy Crossi | 86.22 | 235 | P | P | 04 41 03.8 | -0.2 |
| | comp=Z,4.5nm,0.8s,baz=51,slow=4.1,SNR=6.8 | | | | | | |
| ASAR | Alice Springs | 86.98 | 225 | P | P | 04 41 07.5 | -0.2 |
| | comp=Z,0.9nm,0.7s,baz=35,slow=4.8,SNR=7.7 | | | | | | |
| ESDC | Sonseca Array | 89.10 | 7 | P | P | 04 41 17.8 | -0.1 |
| | comp=Z,1.0nm,0.7s,baz=328,slow=5.4,SNR=4.4 | | | | | | |
| TORD | Torodi Ar. Bea | 115.79 | 3 | PKP | PKPdf | 04 47 04.5 | -0.7 |
| | comp=Z,0.2nm,0.5s,baz=355,slow=1.7,SNR=6.0 | | | | | | |
| MAW | Mawson | 147.78 | 218 | PKPbc | PKPbc | 04 48 06.3 | +0.5 |
| | comp=Z,4.0nm,0.9s,baz=75,slow=6.1,SNR=7.3 | | | | | | |
| BOSA | Boshof | 152.64 | 318 | PKPbc | PKPbc | 04 48 19.6 | +0.5 |
| | comp=Z,3.6nm,0.6s,baz=352,slow=3.2,SNR=9.5 | | | | | | |

*NEIC **08** 04:39:34.0, 51°.23N×175°.24W, h13km, mb4.2/8, ML3.8(AEIC), After AEIC.*
*IDC **08** 04:39:35.3±1.3, 52°.25N×175°.69W, h0km, mb3.7/8, mb1 3.9/10, mb1mx3.7/40, mbtmp3.7/10, ML4.0/2, Error ellipse: s-maj=38.0km s-min=17.5km az=177.0*
**ISC 08 04:39:33.5**±3.0**, 51°.2N**±0°.1×**175°.20W**±0°.04**, h17**km±17km**, n54,** σ**1s.12**/54**, mb4.0**/15**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.98 | 327 | P | Pb | 04 39 51.8 | -0.2 |
| ETKA | Kagalaska Isla | 0.99 | 311 | P | Pb | 04 39 51.9 | -0.2 |
| ETKA | | | | S | Sb | 04 40 05.2 | +0.3 |
| GSCK | Great Sitkin C | 0.99 | 323 | P | Pb | 04 39 52.1 | -0.1 |
| GSTD | Great Sitkin T | 1.02 | 325 | P | Pb | 04 39 52.5 | -0.2 |
| GSTD | | | | S | Sg | 04 40 07.2 | +0.5 |
| GSTR | Great Sitkin T | 1.02 | 329 | P | Pb | 04 39 52.8 | 0.0 |
| ADAG | Mount Adagdak | 1.16 | 311 | P | Pb | 04 39 55.2 | +0.2 |
| ATKA | Atka Island | 1.16 | 32 | P | Pn | 04 39 54.1 | -0.8 |
| ATKA | | | | S | Sb | 04 40 09.6 | -0.2 |
| KOFP | Korovin Flat P | 1.25 | 33 | P | Pn | 04 39 56.8 | +0.6 |
| KOKL | Mount Kliuchef | 1.26 | 29 | P | Pn | 04 39 56.9 | +0.5 |
| KOWE | Korovin West | 1.28 | 27 | P | Pn | 04 39 57.4 | +0.7 |
| KOKV | Korovin Volcan | 1.31 | 29 | P | Pn | 04 39 57.8 | +0.8 |
| KIRH | Kanaga Island | 1.36 | 300 | P | Pn | 04 39 57.4 | -0.3 |
| KIKV | Kanaga Island | 1.40 | 299 | P | Pn | 04 39 58.1 | -0.1 |
| KICM | Kanaga Island | 1.43 | 300 | P | Pn | 04 39 58.5 | -0.1 |
| TAPA | Tanaga Point A | 1.74 | 291 | P | Pn | 04 40 03.1 | +0.2 |
| TAFL | Tanaga Flats | 1.77 | 289 | P | Pn | 04 40 03.3 | 0.0 |
| TAFP | Tanaga Falls P | 1.87 | 292 | P | Pn | 04 40 05.0 | +0.4 |
| TAFP | | | | S | Sn | 04 40 28.5 | +0.7 |
| TASE | Tanaga Southea | 1.88 | 290 | P | Pn | 04 40 05.1 | +0.3 |
| TANO | Tanaga North | 1.95 | 292 | P | Pn | 04 40 06.5 | +0.8 |
| GAEA | Gareloi East | 2.29 | 286 | P | Pn | 04 40 11.1 | +0.7 |
| GALAA | Gareloi Lava P | 2.30 | 285 | P | Pn | 04 40 11.1 | +0.5 |
| GALAA | | | | S | Sb | 04 40 41.8 | -0.7 |
| GANE | Gareloi Northe | 2.31 | 286 | P | Pn | 04 40 11.1 | +0.4 |
| CERAA | Semis' Rag'd T | 3.27 | 284 | P | Pn | 04 40 24.0 | +0.2 |
| CESW | Semis' Southwe | 3.34 | 284 | P | Pn | 04 40 26.4 | +1.5 |
| AMKA | Amchitka | 3.46 | 275 | P | Pn | 04 40 26.0 | -0.4 |
| AMKA | | | | S | Sn | 04 41 10.4 | +3.5 |
| LSPA | Little Sitkin | 3.95 | 283 | P | Pn | 04 40 34.6 | +1.3 |
| LSNW | Little Sitkin | 3.99 | 283 | P | Pn | 04 40 33.9 | +0.1 |
| NIKH | Nikolski High | 4.29 | 63 | P | Pn | 04 40 39.1 | +1.2 |
| UNV | Unalaska Valle | 5.92 | 60 | P | Pn | 04 41 02.5 | +2.2 |
| SPIA | Saint Paul Isl | 6.63 | 24 | P | Pn | 04 41 12.7 | +2.7 |
| KDAK | Kodiak Island | 14.64 | 55 | Pn | Pn | 04 42 58.0 | -1.5 |
| | 0.3nm,0.3s,baz=290,slow=15,SNR=5.7 | | | | | | |
| PETK | Petropavlovsk- | 16.70 | 287 | Pn | Pn | 04 43 26.8 | +0.4 |
| | 0.9nm,0.3s,baz=116,slow=17,SNR=4.7 | | | | | | |
| MCK | McKinley | 18.69 | 38 | eP | P | 04 43 50.1 | -0.5 |
| | 2.0nm,0.4s | | | | | | |
| ILAR | Eielson Array | 19.98 | 36 | P | P | 04 44 02.1 | -2.6 |
| | 0.4nm,0.3s,baz=220,slow=9.3,SNR=17 | | | | | | |
| EGAK | Eagle | 22.21 | 39 | eP | P | 04 44 27.4 | -1.2 |
| | 4.4nm,0.8s | | | | | | |
| INK | Inuvik | 26.31 | 34 | P | P | 04 45 06.3 | -1.4 |
| | 0.4nm,0.4s,baz=254,slow=15,SNR=5.2 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.45 | 211 | T | T | 05 23 19.0 | |
| | baz=18,slow=75,SNR=6.3 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.46 | 211 | T | T | 05 23 10.6 | |
| | baz=18,slow=75,SNR=7.2 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.47 | 211 | T | T | 05 23 11.3 | |
| | baz=18,slow=75,SNR=7.2 | | | | | | |
| WVOR | Wild Horse Val | 38.81 | 80 | eP | P | 04 46 58.2 | +0.9 |
| | 3.0nm,1.1s | | | | | | |
| NVAR | Mina Array Bea | 41.32 | 85 | P | P | 04 47 25.0 | +6.7 |
| | 0.3nm,0.7s,baz=298,slow=7.8,SNR=3.1 | | | | | | |
| KSRS | Korea Array | 41.90 | 274 | P | P | 04 47 24.0 | +1.2 |
| | 0.7nm,0.4s,baz=57,slow=10,SNR=2.8 | | | | | | |
| KSAR | Wonju Array Be | 41.94 | 274 | P | P | 04 47 24.0 | +0.9 |
| BW06 | Boulder Array | 44.19 | 74 | eP | P | 04 47 41.7 | +0.2 |
| | 1.4nm,0.6s | | | | | | |
| SONM | Songino Array | 48.72 | 299 | P | P | 04 48 16.4 | -0.5 |
| | 0.9nm,0.7s,baz=47,slow=6.9,SNR=4.2 | | | | | | |
| TXAR | Lajitas Array | 56.43 | 84 | P | P | 04 49 20.1 | +5.9 |
| | 0.4nm,0.7s,baz=302,slow=5.2,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 61.88 | 310 | P | P | 04 49 49.8 | -1.7 |
| | 0.6nm,0.3s,baz=40,slow=5.9,SNR=13 | | | | | | |
| FINES | FINESS Array B | 66.40 | 349 | P | P | 04 50 18.6 | -2.4 |
| | 1.0nm,0.7s,baz=35,slow=5.1,SNR=3.1 | | | | | | |
| TKM2 | Tokmak 2 | 67.94 | 312 | eP | P | 04 50 31.6 | +0.3 |
| | 1.3nm,0.5s | | | | | | |
| NOA | NORSAR Array B | 67.97 | 357 | P | P | 04 50 29.2 | -1.8 |
| | 0.3nm,0.4s,baz=352,slow=5.4,SNR=3.4 | | | | | | |
| AAK | Ala-Archa | 68.67 | 312 | eP | P | 04 50 35.3 | -0.6 |
| | 2.2nm,0.5s | | | | | | |
| EKS2 | Erkin-Say | 68.99 | 312 | eP | P | 04 50 37.3 | -0.5 |
| | 1.7nm,0.7s | | | | | | |
| KKAR | Karatay Array | 70.13 | 315 | eP | P | 04 50 43.5 | -1.1 |
| | 0.9nm,0.3s | | | | | | |
| BOSA | Boshof | 152.68 | 318 | PKPbc | PKPbc | 04 59 30.5 | +1.5 |
| | 2.7nm,0.8s,baz=78,slow=3.3,SNR=3.6 | | | | | | |

**MEX 08 04:47:15.1**±0.8**, 17°.09N**×**100°.05W, h20**km±16km**, MD3.8, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CAIG | El Cayaco | 0.21 | 259 | eP | Pb | 04 47 19.0 | -1.4 |
| CAIG | | | | i S | Sb | 04 47 23.2 | -0.8 |
| MEIG | Mezcala | 0.93 | 26 | eP | Pb | 04 47 30.1 | -2.6 |
| MEIG | | | | i S | Sb | 04 47 40.8 | -3.9 |
| ARIG | Puente Sto Nin | 1.22 | 347 | eP | Pn | 04 47 33.9 | -3.2 |
| ARIG | | | | eS | Sb | 04 47 47.7 | -5.2 |
| ZIIG | Zihuatanejo | 1.45 | 291 | eP | Pn | 04 47 37.1 | -3.0 |
| ZIIG | | | | eS | Sn | 04 47 55.1 | -3.4 |

*ISCJB **08** 04:47:55.0±0.8, 51°.12N±0°.07×175°.07W±0°.05, h46km±7km, mb4.0/16, Error ellipse: s-maj=12.6km s-min=4.4km az=165.9*
*NEIC **08** 04:47:56.2, 51°.23N×175°.17W, h30km, mb4.1/14, ML3.5(AEIC), After AEIC.*
*IDC **08** 04:48:00.2±2.1, 52°.81N×175°.88W, h0km, mb3.7/4, mb1 3.9/6, mb1mx3.6/47, mbtmp3.7/6, ML4.0/2, Error ellipse: s-maj=58.2km s-min=22.6km az=176.0*
**ISC 08 04:47:57.3**±1.7**, 51°.3N**±0°.1×**175°.14W**±0°.04**, h45**km±16km**, n50,** σ**0s.93**/56**, mb4.1**/16**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.98 | 325 | P | Pn | 04 48 13.7 | -0.9 |
| GSCK | Great Sitkin C | 0.99 | 320 | P | Pn | 04 48 13.9 | -1.0 |
| ETKA | Kagalaska Isla | 1.00 | 308 | P | Pn | 04 48 13.9 | -1.0 |
| ETKA | | | | S | Sn | 04 48 27.9 | +0.1 |
| GSTR | Great Sitkin T | 1.02 | 326 | ePn | Pn | 04 48 14.3 | -0.9 |
| GSTD | Great Sitkin T | 1.02 | 323 | P | Pn | 04 48 14.4 | -0.9 |
| GSTD | | | | S | Sn | 04 48 30.9 | +2.4 |
| ATKA | Atka Island | 1.12 | 31 | P | Pn | 04 48 15.2 | -1.4 |
| ATKA | | | | S | Sn | 04 48 31.2 | +0.4 |
| ADAG | Mount Adagdak | 1.17 | 309 | P | Pn | 04 48 17.2 | -0.1 |
| KOFP | Korovin Flat P | 1.21 | 32 | P | Pn | 04 48 17.8 | -0.1 |
| KOKL | Mount Kliuchef | 1.22 | 28 | P | Pn | 04 48 17.8 | -0.2 |
| KOWE | Korovin West | 1.24 | 26 | P | Pn | 04 48 18.5 | +0.2 |
| KOKV | Korovin Volcan | 1.27 | 28 | P | Pn | 04 48 19.1 | +0.5 |
| KOKV | | | | S | Sn | 04 48 35.5 | +1.1 |
| KOSE | Korovin Southe | 1.29 | 31 | P | Pn | 04 48 19.2 | +0.3 |
| KIRH | Kanaga Island | 1.38 | 299 | P | Pn | 04 48 19.4 | -0.7 |
| KIKV | Kanaga Island | 1.41 | 297 | P | Pn | 04 48 19.9 | -0.7 |
| KICM | Kanaga Island | 1.45 | 298 | P | Pn | 04 48 20.4 | -0.6 |
| TAPA | Tanaga Point A | 1.76 | 290 | P | Pn | 04 48 25.1 | -0.3 |
| TAFL | Tanaga Flats | 1.80 | 287 | P | Pn | 04 48 25.2 | -0.6 |
| TAFP | Tanaga Falls P | 1.89 | 291 | P | Pn | 04 48 26.9 | -0.3 |
| TAFP | | | | S | Sn | 04 48 52.1 | +2.4 |
| TANO | Tanaga North | 1.98 | 291 | P | Pn | 04 48 28.5 | +0.2 |
| GAEA | Gareloi East | 2.31 | 285 | P | Pn | 04 48 33.1 | +0.2 |
| GAEA | | | | S | Sn | 04 49 01.6 | +1.4 |
| GALAA | Gareloi Lava P | 2.33 | 284 | P | Pn | 04 48 33.1 | 0.0 |
| GANE | Gareloi Northe | 2.34 | 285 | P | Pn | 04 48 33.2 | -0.1 |
| CERAA | Semis' Rag'd T | 3.29 | 283 | P | Pn | 04 48 46.0 | -0.4 |
| CESW | Semis' Southwe | 3.37 | 283 | P | Pn | 04 48 46.9 | -0.4 |
| AMKA | Amchitka | 3.49 | 274 | P | Pn | 04 48 47.7 | -1.4 |
| AMKA | | | | S | Sn | 04 49 30.8 | +1.8 |
| LSPA | Little Sitkin | 3.98 | 283 | P | Pn | 04 48 55.7 | -0.1 |
| LSNW | Little Sitkin | 4.02 | 283 | P | Pn | 04 48 56.0 | -0.3 |
| NIKH | Nikolski High | 4.24 | 64 | P | Pn | 04 49 00.7 | +1.4 |
| UNV | Unalaska Valle | 5.88 | 60 | P | Pn | 04 49 22.4 | +0.7 |
| KDAK | Kodiak Island | 14.60 | 55 | Pn | Pn | 04 51 19.3 | -1.4 |
| | 0.6nm,0.3s,baz=260,slow=3.8,SNR=8.4 | | | | | | |
| BPAW | Bear Paw Mtn. | 18.07 | 35 | ePn | P | 04 52 05.5 | +0.7 |
| | 1.6nm,1.3s | | | | | | |
| MCK | McKinley | 18.65 | 38 | eP | P | 04 52 10.1 | -0.9 |
| | 5.3nm,1.0s | | | | | | |
| ILAR | Eielson Array | 19.94 | 37 | P | P | 04 52 24.1 | -1.0 |
| | 0.2nm,0.3s,baz=226,slow=9.4,SNR=22 | | | | | | |
| EGAK | Eagle | 22.16 | 39 | eP | P | 04 52 48.3 | -0.7 |
| | 3.9nm,0.8s | | | | | | |
| INK | Inuvik | 26.27 | 34 | P | P | 04 53 28.0 | +0.2 |
| | 1.4nm,0.9s,baz=278,slow=6.8,SNR=6.0 | | | | | | |
| INK | Inuvik | 26.27 | 34 | eP | P | 04 53 27.6 | -0.2 |
| | 6.2nm,1.1s | | | | | | |
| HLID | Hailey | 40.75 | 76 | eP | P | 04 55 31.8 | -2.1 |
| | 4.9nm,1.6s | | | | | | |
| BOZ | Bozeman (W) | 41.32 | 72 | eP | P | 04 55 39.1 | +0.6 |
| | 0.8nm,0.7s | | | | | | |
| DUG | Dugway | 43.65 | 79 | eP | P | 04 55 57.4 | -0.1 |
| | 2.1nm,0.9s | | | | | | |
| BW06 | Boulder Array | 44.15 | 74 | eP | P | 04 56 02.2 | +0.7 |
| | 0.9nm,0.6s | | | | | | |
| ULN | Ulaanbaatar | 48.36 | 298 | eP | P | 04 56 35.3 | +0.9 |
| | 2.1nm,0.8s | | | | | | |
| SONM | Songino Array | 48.74 | 299 | P | P | 04 56 37.4 | +0.1 |
| | 1.1nm,0.8s,baz=42,slow=8.9,SNR=4.2 | | | | | | |
| WMOK | Wichita Mounta | 55.72 | 76 | eP | P | 04 57 28.0 | -1.1 |
| | 2.3nm,0.9s | | | | | | |
| TXAR | Lajitas Array | 56.39 | 84 | P | P | 04 57 45.6 | +11 |
| | 0.3nm,0.6s,baz=303,slow=5.3,SNR=3.3 | | | | | | |
| KURK | Kurchatov | 60.74 | 316 | eP | P | 04 58 04.1 | +0.2 |
| | 5.7nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 61.89 | 311 | P | P | 04 58 11.6 | -0.2 |
| | 0.6nm,0.3s,baz=44,slow=6.6,SNR=7.7 | | | | | | |
| TKM2 | Tokmak 2 | 67.94 | 312 | eP | P | 04 58 52.2 | +0.8 |
| | 1.2nm,0.5s | | | | | | |
| AAK | Ala-Archa | 68.68 | 312 | eP | P | 04 58 56.6 | +0.6 |
| | 1.9nm,0.5s | | | | | | |
| EKS2 | Erkin-Say | 69.00 | 313 | eP | P | 04 58 58.4 | +0.5 |
| | 1.9nm,0.6s | | | | | | |
| KKAR | Karatay Array | 70.13 | 315 | eP | P | 04 59 05.2 | +0.5 |
| | 1.2nm,0.4s | | | | | | |

*ISCJB **08** 04:52:09.7±0.3, 0°.65N±0°.03×126°.21E±0°.03, h44km, mb4.5/21, Error ellipse: s-maj=5.0km s-min=3.9km az=136.3*
*DJA **08** 04:52:10.7±0.8, 1°N±4°×12°6E±°, h13km±7km, M4.4/19, mb4.5/9, mB5.2/2, MLv4.4/19, Mw(mB)4.6/2*
*IDC **08** 04:52:11.8±2.8, 0°.53N×126°.24E, h52km±27km, mb4.0/11, mb1 4.1/14, mb1mx3.9/40, mbtmp4.2/14, ML3.8/3, Error ellipse: s-maj=25.4km s-min=13.3km az=77.0*
*NEIC **08** 04:52:13.0±0.8, 0°.54N×126°.29E, h66km±8km, mb4.4/10, Error ellipse: s-maj=8.3km s-min=5.2km az=51.0*
*AUST **08** 04:52:14.4, 0°.50N×126°.50E, h60km*
**ISC 08 04:52:11.6**±0.5**, 0°.68N**±0°.06×**126°.23E**±0°.05**, h44**km**, n64,** σ**1s.51**/73**, mb4.3**/21**, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LBMI | Labuha | 1.83 | 136 | P | Pn | 04 52 39.1 | -1.5 |
| LBMI | | | | S | Sn | 04 53 02.8 | +0.3 |
| KMSI | Cibinong | 2.25 | 267 | P | Pn | 04 52 44.2 | -2.1 |
| KMSI | | | | S | Sn | 04 53 14.5 | +1.6 |
| SANI | Sanana | 2.72 | 185 | P | Pn | 04 52 51.0 | -1.9 |
| SANI | | | | S | Sn | 04 53 23.5 | -1.0 |
| GTOI | Gorontalo | 3.21 | 269 | P | Pn | 04 53 01.2 | +1.6 |
| LUWI | Luwuk | 3.85 | 244 | P | Pn | 04 53 11.1 | +2.7 |
| | baz=4.0,SNR=5.9 | | | | | | |
| LUWI | Luwuk | 3.85 | 244 | P | Pn | 04 53 09.3 | +0.9 |
| LUWI | | | | S | Sn | 04 53 53.9 | +1.4 |
| LUWI | Luwuk | 3.85 | 244 | ePn | Pn | 04 53 09.8 | +1.4 |
| NLAI | Namlea | 3.99 | 167 | P | Pn | 04 53 09.3 | -1.0 |
| MRSI | Marisa | 4.29 | 267 | P | Pn | 04 53 13.8 | -0.6 |
| AAI | Ambon | 4.76 | 156 | P | Pn | 04 53 20.5 | -0.4 |
| AAI | | | | S | Sn | 04 54 15.3 | +0.4 |
| MSAI | Masohi | 4.83 | 146 | P | Pn | 04 53 23.2 | +1.4 |
| MSAI | | | | S | Sn | 04 54 19.6 | +3.1 |
| APSI | Ampana | 4.84 | 251 | P | Pn | 04 53 21.5 | -0.5 |
| SWI | Sorong | 5.26 | 107 | P | Pn | 04 53 28.8 | +1.0 |
| | 24nm,1.2s,0.2nm | | | | | | |
| SIJI | Sorong | 5.27 | 107 | P | Pn | 04 53 28.1 | +0.2 |
| | 1.7nm,0.3s,baz=252,slow=20,SNR=2.8 | | | | | | |
| KDI | Kendari | 5.85 | 218 | P | Pn | 04 53 34.9 | -0.9 |
| | 69nm,0.8s,0.2nm | | | | | | |
| MPSI | Mapaga | 6.34 | 267 | P | Pn | 04 53 43.2 | +0.7 |
| | 26nm,1.3s,0.1nm | | | | | | |
| FAKI | Fak Fak | 7.00 | 121 | P | Pn | 04 53 53.3 | +1.6 |
| | baz=6.7,SNR=3.8 | | | | | | |
| FAKI | Fak Fak | 7.00 | 121 | P | Pn | 04 53 52.0 | +0.3 |
| | 24nm,1.0s,0.1nm | | | | | | |
| FAKI | Fak Fak | 7.00 | 121 | ePn | Pn | 04 53 51.3 | -0.4 |
| TTSI | Tana Toraja | 7.39 | 240 | P | Pn | 04 53 56.3 | -0.8 |
| | 58nm,0.8s,0.2nm | | | | | | |
| SPSI | Sidrap Palu | 7.93 | 234 | P | Pn | 04 54 04.0 | -0.4 |
| | 51nm,0.8s,3μm0.2nm | | | | | | |
| BKSI | Bulukumba | 8.53 | 226 | P | Pn | 04 54 12.6 | 0.0 |
| | 34nm,0.8s | | | | | | |
| KAPI | Kappang | 8.59 | 229 | P | Pn | 04 54 13.1 | -0.4 |
| | 1.7nm,0.3s,baz=56,slow=7.3,SNR=9.9 | | | | | | |
| SOEI | Soe | 10.55 | 191 | ePn | Pn | 04 54 40.7 | +0.3 |
| MTN | Manton Dam | 14.29 | 160 | P | Pn | 04 55 34.0 | +2.6 |
| | baz=14,SNR=4.5 | | | | | | |
| KDU | Kakadu | 14.65 | 155 | P | P | 04 55 41.3 | -0.4 |
| | baz=14,SNR=4.1 | | | | | | |
| KSM | Kuching | 15.93 | 273 | P | P | 04 55 56.4 | +0.5 |
| | baz=16,SNR=3.1 | | | | | | |
| KSM | Kuching | 15.93 | 273 | ePn | P | 04 55 55.7 | -0.3 |
| | 46nm,1.3s | | | | | | |
| KNRA | Kununurra | 16.44 | 171 | P | Pn | 04 55 58.5 | -0.9 |
| | baz=16,SNR=7.1 | | | | | | |
| FITZ | Fitzroy Crossi | 18.67 | 182 | P | P | 04 56 23.2 | -2.9 |
| | 0.3nm,0.3s,baz=343,slow=6.0,SNR=15 | | | | | | |
| FITZ | Fitzroy Crossi | 18.67 | 182 | P | P | 04 56 23.6 | -2.5 |
| | baz=19,SNR=6.9 | | | | | | |
| DLV | T Lat | 20.86 | 303 | eP | P | 04 56 51.1 | +0.8 |
| WRAB | Tennant Creek | 21.98 | 159 | eP | P | 04 56 59.5 | -2.5 |
| | 70nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 21.98 | 159 | P | P | 04 56 59.7 | -2.4 |
| | 71nm,0.7s,baz=338,slow=12,SNR=62 | | | | | | |
| COEN | Coen | 22.21 | 132 | P | P | 04 57 05.3 | +0.7 |
| | baz=22,SNR=5.2 | | | | | | |
| QIS | Mount Isa | 24.84 | 149 | P | P | 04 57 29.8 | -0.3 |
| | baz=25,SNR=11 | | | | | | |
| ASAR | Alice Springs | 25.32 | 163 | P | P | 04 57 32.8 | -1.7 |
| | 17nm,0.7s,baz=349,slow=13,SNR=126 | | | | | | |
| ASAR | | | | S | S | 05 02 04.3 | +6.5 |
| | 1.6nm,0.9s,baz=353,slow=22,SNR=8.0 | | | | | | |
| WRKA | Warakurna | 25.64 | 176 | P | P | 04 57 36.1 | -1.3 |
| | baz=26,SNR=19 | | | | | | |
| MEEK | Meekatharra | 28.13 | 195 | P | P | 04 58 01.6 | +1.9 |
| | baz=28,SNR=3.1 | | | | | | |
| CTA | Charters Tower | 28.48 | 138 | P | P | 04 58 00.8 | -2.1 |
| | 4.7nm,0.8s,baz=313,slow=7.6,SNR=5.0 | | | | | | |
| CTAO | Charters Tower | 28.48 | 138 | eP | P | 04 58 01.8 | -1.1 |
| | 6.3nm,0.8s | | | | | | |
| FORT | Forrest | 31.33 | 177 | P | P | 04 58 26.7 | -1.3 |
| | baz=31,SNR=16 | | | | | | |
| FORT | Forrest | 31.33 | 177 | eP | P | 04 58 26.4 | -1.6 |
| | 51nm,0.6s | | | | | | |
| BBOO | Buckleboo | 34.58 | 165 | P | P | 04 58 55.0 | -1.3 |
| | baz=34,SNR=12 | | | | | | |
| HTT | Hallett | 35.97 | 162 | P | P | 04 59 06.4 | -2.0 |
| | baz=36,SNR=3.5 | | | | | | |
| KSAR | Wonju Array Be | 36.61 | 2 | P | P | 04 59 15.2 | +1.5 |
| KSRS | Korea Array | 36.63 | 2 | P | P | 04 59 15.2 | +1.4 |
| | 1.1nm,0.5s,baz=171,slow=10,SNR=4.5 | | | | | | |
| MAJO | Matsushiro | 37.37 | 16 | eP | P | 04 59 20.3 | +0.1 |
| | 5.4nm,0.6s | | | | | | |
| MJAR | Matsushiro Arr | 37.37 | 16 | P | P | 04 59 20.3 | +0.1 |
| | 1.4nm,0.5s,baz=186,slow=9.5,SNR=4.7 | | | | | | |
| ARPS | Mount Arapiles | 39.98 | 160 | P | P | 04 59 42.0 | -0.1 |
| | baz=40,SNR=5.8 | | | | | | |
| USRK | Ussuriysk Ar. | 43.64 | 6 | P | P | 05 00 12.6 | +0.8 |
| | 2.9nm,0.6s,baz=202,slow=9.6,SNR=5.7 | | | | | | |
| SONM | Songino Array | 50.03 | 343 | P | P | 05 01 02.4 | +0.5 |
| | 1.1nm,0.6s,baz=142,slow=7.3,SNR=3.2 | | | | | | |
| SONM | | | | PcP | PcP | 05 02 21.9 | +0.6 |
| | 0.6nm,0.7s,baz=159,slow=5.4,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 59.78 | 327 | P | P | 05 02 12.3 | -0.1 |
| | 3.7nm,0.6s,baz=122,slow=8.6,SNR=20 | | | | | | |
| MKAR | | | | PcP | PcP | 05 02 59.1 | +0.4 |
| | 2.3nm,0.7s,baz=122,slow=5.9,SNR=5.2 | | | | | | |
| TKM2 | Tokmak 2 | 61.71 | 320 | eP | P | 05 02 25.6 | -0.2 |
| | 1.8nm,0.6s | | | | | | |
| AAK | Ala-Archa | 62.29 | 319 | eP | P | 05 02 29.4 | -0.2 |
| | 2.1nm,0.8s | | | | | | |
| EKS2 | Erkin-Say | 62.77 | 319 | eP | P | 05 02 33.3 | +0.5 |
| | 1.9nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 63.08 | 334 | P | P | 05 02 33.4 | -1.0 |
| | 0.8nm,0.5s,baz=128,slow=4.0,SNR=3.4 | | | | | | |
| KURK | Kurchatov | 64.04 | 329 | eP | P | 05 02 40.5 | -0.3 |
| | 12nm,0.6s | | | | | | |
| ABKAR | Akbulak array | 74.19 | 321 | eP | P | 05 03 43.3 | -0.5 |
| | 1.4nm,0.7s | | | | | | |
| VNDA | Vanda | 80.48 | 173 | P | P | 05 04 17.4 | -1.1 |
| | 2.4nm,0.9s,baz=305,slow=6.6,SNR=17 | | | | | | |
| KBZ | Khabaz | 84.70 | 314 | P | P | 05 04 40.9 | -0.2 |
| | 3.4nm,0.9s,baz=83,slow=5.6,SNR=3.7 | | | | | | |
| MCK | McKinley | 87.10 | 26 | eP | P | 05 04 52.1 | -0.5 |
| | 5.6nm,1.0s | | | | | | |
| ILAR | Eielson Array | 88.06 | 25 | P | P | 05 04 56.3 | -0.8 |
| | 0.4nm,0.6s,baz=248,slow=4.9,SNR=3.5 | | | | | | |
| TORD | Torodi Ar. Bea | 123.33 | 286 | PKP | PKPdf | 05 11 04.6 | -0.3 |
| | 1.5nm,0.7s,baz=57,slow=1.3,SNR=10 | | | | | | |

*GUC **08** 04:54:33.6±0.5, 34°.63S×72°.68W, h21km±6km, ML4.1*
*IDC **08** 04:54:35.7±2.5, 34°.42S×71°.95W, h0km, mb3.8/3, mb1 4.1/4, mb1mx3.9/22, mbtmp3.8/4, ML3.5/1, Error ellipse: s-maj=74.1km s-min=48.7km az=24.0*
**ISC 08 04:54:34.7**±1.8**, 34°.69S**±0°.04×**72°.58W**±0°.07**, h9**km±11km**, n29,** σ**1s.30**/37**, mb4.0**/3**, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHPI | Pichilemu | 0.56 | 58 | eP | Pg | 04 54 45.9 | +0.3 |
| CHPI | | | | eS | Sb | 04 54 54.5 | -0.3 |
| TALC | Talca | 1.05 | 133 | eP | Pb | 04 54 54.9 | -0.1 |
| TALC | | | | eS | Sn | 04 55 10.7 | +0.3 |
| TALC | | | | AML | AML | 04 55 17.7 | |
| | comp=E,17μm,0.3s | | | | | | |
| NICH | Los Niches | 1.15 | 106 | eP | Pn | 04 54 56.4 | -0.6 |
| NICH | | | | eS | Sg | 04 55 13.2 | +1.5 |
| NICH | | | | AML | AML | 04 55 16.2 | |
| | comp=N,12μm,0.7s | | | | | | |
| COCH | Cobquecura | 1.45 | 187 | eP | Pn | 04 54 59.9 | -1.2 |
| COCH | | | | eS | Sn | 04 55 20.1 | -0.2 |
| COCH | | | | AML | AML | 04 55 25.9 | |
| | comp=E,3μm,0.4s | | | | | | |
| RCDM | Rinconada Maip | 1.90 | 51 | eP | Pn | 04 55 06.8 | -0.5 |
| RCDM | | | | eS | Sn | 04 55 32.1 | +0.7 |
| RCDM | | | | AML | AML | 04 55 39.6 | |
| | comp=N,1μm,0.5s | | | | | | |
| CCHI | Chillan | 1.95 | 168 | eP | Pn | 04 55 08.4 | +0.4 |
| CCHI | | | | eS | Sb | 04 55 35.4 | +0.5 |
| CCHI | | | | AML | AML | 04 55 44.2 | |
| | comp=N,4μm,0.9s | | | | | | |
| ANTU | Antumapu | 1.96 | 56 | eP | Pn | 04 55 08.3 | +0.1 |
| ANTU | | | | eS | Sb | 04 55 34.5 | -0.7 |
| ANTU | | | | AML | AML | 04 55 46.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| SAN | Santiago | 2.01 | 53 | eP | Pn | 04 55 08.9 | 0.0 |
| ROC1 | El Roble | 2.15 | 38 | eP | Pn | 04 55 10.5 | -0.5 |
| ROC1 | | | | eS | Sg | 04 55 46.8 | +3.1 |
| ROC1 | | | | AML | AML | 04 55 49.4 | |
| AAGR | Agrelo | 3.50 | 64 | eP | Pb | 04 55 35.0 | -2.0 |
| ARCO | CERRO ARCO | 3.55 | 60 | eP | Pb | 04 55 37.1 | -0.8 |
| ARCO | | | | AML | AML | 04 56 04.7 | |
| | comp=Z,106nm,0.6s | | | | | | |
| AUSP | Uspallata | 3.63 | 48 | eP | Pn | 04 55 33.3 | +1.9 |
| AUSP | | | | eS | Sg | 04 56 29.4 | -1.8 |
| ASAL | Salagasta | 3.76 | 57 | eP | Pn | 04 55 36.3 | +3.3 |
| ASAL | | | | eS | Sg | 04 56 35.6 | +0.2 |
| RTLS | Leoncito | 3.98 | 45 | eP | Pn | 04 55 38.3 | +2.0 |
| RTLS | | | | eS | Sg | 04 56 40.2 | -2.5 |
| RTCV | Cerro Valdivia | 4.40 | 51 | eP | Pn | 04 55 43.2 | +1.4 |
| CFAA | Coronel Fontan | 4.77 | 51 | eP | Pn | 04 55 47.8 | +1.0 |
| AMOG | MOGNA | 5.08 | 44 | eP | Pn | 04 55 52.1 | +1.0 |
| ACAN | Cantantal | 5.11 | 63 | eP | Pn | 04 55 53.0 | +1.5 |
| AVFE | Valle Fertil | 5.90 | 48 | eP | Pn | 04 56 02.0 | -0.4 |
| ACHE | Chepes | 6.09 | 56 | eP | Pn | 04 56 05.0 | 0.0 |
| MRA | San Martin | 6.16 | 70 | eP | Pn | 04 56 07.2 | +1.2 |
| AGUA | GUANDACOL | 6.24 | 35 | eP | Pn | 04 56 08.1 | +1.0 |
| VCA | Vinchina | 7.01 | 33 | eP | Pn | 04 56 18.3 | +0.6 |
| TCA | Tanti | 7.49 | 66 | eP | Pn | 04 56 23.7 | -0.5 |
| CYA | Choya | 8.50 | 45 | eP | Pn | 04 56 34.5 | -3.5 |
| LPAZ | La Paz | 18.76 | 13 | P | P | 04 58 52.8 | -2.0 |
| | comp=Z,0.1nm,0.3s,baz=187,slow=9.5,SNR=6.0 | | | | | | |
| TXAR | Lajitas Array | 70.12 | 331 | P | P | 05 05 49.6 | +2.0 |
| | comp=Z,0.4nm,0.7s,baz=153,slow=8.8,SNR=5.2 | | | | | | |
| NVAR | Mina Array Bea | 84.20 | 326 | P | P | 05 07 10.0 | +3.4 |
| | comp=Z,0.6nm,0.7s,baz=163,slow=6.3,SNR=5.7 | | | | | | |
| TORD | Torodi Ar. Bea | 84.86 | 70 | P | P | 05 07 09.7 | -0.5 |
| | comp=Z,1.1nm,0.8s,baz=225,slow=5.9,SNR=6.4 | | | | | | |

*IDC **08** 04:59:13.7±1.9, 51°.04N×174°.94W, h0km, mb3.7/5, mb1 3.9/7, mb1mx3.6/51, mbtmp3.8/7, ML3.9/1, Error ellipse: s-maj=54.8km s-min=20.8km az=156.0*
*ISCJB **08** 04:59:17.6±1.4, 51°.11N±0°.07×175°.20W±0°.05, h21km±9km, mb3.9/11, Error ellipse: s-maj=11.8km s-min=4.9km az=164.0*
*NEIC **08** 04:59:18.3, 51°.20N×175°.24W, h6km, mb4.0/8, ML3.7(AEIC), After AEIC.*
**ISC 08 04:59:17.6**±2.4**, 51°.18N**±0°.10×**175°.20W**±0°.05**, h11**km±14km**, n46,** σ**0s.92**/49**, mb3.9**/11**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 1.02 | 329 | P | Pb | 04 59 37.1 | 0.0 |
| ETKA | Kagalaska Isla | 1.02 | 313 | P | Pb | 04 59 37.1 | -0.1 |
| ETKA | | | | S | Sb | 04 59 50.7 | +0.2 |
| GSCK | Great Sitkin C | 1.03 | 325 | P | Pb | 04 59 37.3 | -0.1 |
| GSTD | Great Sitkin T | 1.06 | 326 | P | Pb | 04 59 37.8 | -0.1 |
| GSTD | | | | S | Sb | 04 59 52.4 | +0.6 |
| GSTR | Great Sitkin T | 1.06 | 330 | ePn | Pb | 04 59 37.9 | 0.0 |
| ADAG | Mount Adagdak | 1.19 | 313 | P | Pn | 04 59 40.4 | +0.3 |
| ATKA | Atka Island | 1.20 | 31 | P | Pb | 04 59 39.6 | -0.6 |
| ATKA | | | | S | Sg | 04 59 55.8 | -0.4 |
| KOFP | Korovin Flat P | 1.29 | 32 | P | Pg | 04 59 42.4 | 0.0 |
| KOKL | Mount Kliuchef | 1.30 | 28 | P | Pb | 04 59 42.0 | 0.0 |
| KOKL | | | | S | Sg | 04 59 59.4 | -0.1 |
| KOWE | Korovin West | 1.33 | 26 | P | Pg | 04 59 42.6 | -0.4 |
| KOKV | Korovin Volcan | 1.35 | 28 | P | Pg | 04 59 43.1 | -0.3 |
| KOKV | | | | S | Sg | 05 00 03.5 | +2.6 |
| KOSE | Korovin Southe | 1.37 | 31 | P | Pg | 04 59 43.4 | -0.4 |
| KIRH | Kanaga Island | 1.39 | 302 | P | Pn | 04 59 42.6 | -0.2 |
| KIKV | Kanaga Island | 1.42 | 300 | P | Pn | 04 59 43.1 | -0.1 |
| KICM | Kanaga Island | 1.45 | 301 | P | Pn | 04 59 43.5 | -0.2 |
| TAPA | Tanaga Point A | 1.75 | 292 | P | Pn | 04 59 48.1 | +0.2 |
| TAFL | Tanaga Flats | 1.78 | 290 | P | Pn | 04 59 48.3 | 0.0 |
| TAFP | Tanaga Falls P | 1.88 | 294 | P | Pn | 04 59 50.1 | +0.5 |
| TAFP | | | | S | Sn | 05 00 14.4 | +1.1 |
| TANO | Tanaga North | 1.97 | 293 | P | Pn | 04 59 51.6 | +0.8 |
| GAEA | Gareloi East | 2.30 | 287 | P | Pn | 04 59 56.1 | +0.8 |
| GALAA | Gareloi Lava P | 2.31 | 286 | P | Pn | 04 59 56.2 | +0.8 |
| GANE | Gareloi Northe | 2.33 | 287 | P | Pn | 04 59 56.4 | +0.7 |
| CERAA | Semis' Rag'd T | 3.28 | 285 | P | Pn | 05 00 09.9 | +1.2 |
| AMKA | Amchitka | 3.46 | 275 | P | Pn | 05 00 10.8 | -0.4 |
| LSPA | Little Sitkin | 3.96 | 284 | P | Pn | 05 00 18.9 | +0.7 |
| LSNW | Little Sitkin | 4.00 | 284 | P | Pn | 05 00 19.0 | +0.3 |
| UNV | Unalaska Valle | 5.94 | 60 | P | Pn | 05 00 47.0 | +1.6 |
| KDAK | Kodiak Island | 14.67 | 54 | Pn | Pn | 05 02 43.0 | -1.7 |
| | 0.5nm,0.3s,baz=248,slow=2.4,SNR=5.5 | | | | | | |
| PETK | Petropavlovsk- | 16.71 | 287 | Pn | P | 05 03 13.5 | -0.2 |
| | baz=94,slow=14,SNR=4.8 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BILL** | **Bilibino** | **19.18** | **339** | *e*P | **Pn** | **05 03 41.5** | **-0.2** |
| | 6.2nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **20.02** | **36** | P | **P** | **05 03 49.3** | **-0.7** |
| | 0.4nm,0.6s,baz=226,slow=9.5,SNR=10 | | | | | | |
| **INK** | **Inuvik** | **26.35** | **34** | P | **P** | **05 04 51.6** | **-1.4** |
| | 0.8nm,0.8s,baz=236,slow=11,SNR=2.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.41** | **211** | T | T | 05 42 43.9 | |
| | baz=18,slow=76,SNR=15 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.42** | **211** | T | T | 05 42 57.5 | |
| | baz=18,slow=76,SNR=11 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.43** | **211** | T | T | 05 42 57.6 | |
| | baz=18,slow=76,SNR=11 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.00** | **264** | P | **P** | **05 06 18.5** | **+0.1** |
| | 0.8nm,0.3s,baz=39,slow=8.1,SNR=4.1 | | | | | | |
| **WVOR** | **Wild Horse Val** | **38.82** | **80** | *e*P | **P** | **05 06 43.8** | **+1.5** |
| | 1.6nm,0.7s | | | | | | |
| **BOZ** | **Bozeman (W)** | **41.38** | **72** | *e*P | **P** | **05 07 05.8** | **+2.2** |
| | 1.8nm,0.8s | | | | | | |
| **ELK** | **Elko** | **41.87** | **80** | *e*P | **P** | **05 07 09.2** | **+1.4** |
| | 1.8nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **48.74** | **299** | P | **P** | **05 08 01.1** | **-0.9** |
| | 1.0nm,0.7s,baz=62,slow=8.7,SNR=5.7 | | | | | | |
| **TUC** | **Tucson** | **49.95** | **86** | *e*P | **P** | **05 08 12.3** | **+0.9** |
| | 0.9nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **61.91** | **311** | P | **P** | **05 09 34.8** | **-2.0** |
| | 0.6nm,0.3s,baz=54,slow=6.3,SNR=4.6 | | | | | | |
| **TKM2** | **Tokmak 2** | **67.97** | **312** | *e*P | **P** | **05 10 15.9** | **-0.6** |
| | 1.7nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **68.70** | **312** | *e*P | **P** | **05 10 20.5** | **-0.5** |
| | 2.3nm,0.8s | | | | | | |
| **EKS2** | **Erkin-Say** | **69.02** | **312** | *e*P | **P** | **05 10 22.3** | **-0.6** |
| | 2.2nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **147.70** | **217** | PKPbc | **PKPdf** | **05 18 57.7** | **-0.1** |
| | 1.3nm,0.8s,baz=98,slow=5.6,SNR=4.1 | | | | | | |

*ISCJB **08** 05:05:58.0±0.2, 24°.04N±0°.01×121°.58E±0°.02, h21km±3km, Error ellipse: s-maj=3.1km s-min=2.0km az=37.8*
*TAP **08** 05:05:57.8, 24°.05N×121°.51E, h18km, ML3.5, B*
*JMA **08** 05:05:57.1±0.1, 24°.04N×121°.57E, h17km±2km, M2.6*
**ISC 08 05:05:57.9**±0.9**, 24°.04N**±0°.02×**121°.56E**±0°.02**, h20**km±2km**, n54, σ0ˢ65**/93**, 7C-4D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWD** | **Chiawan** | **0.05** | **45** | ⇓*i*P | **Pg** | **05 06 01.6** | **+0.2** |
| | baz=70 | | | | | | |
| TWD | | | | *i* S | **Sg** | **05 06 04.1** | **+0.3** |
| | baz=70 | | | | | | |
| **HWA** | **Hwalien** | **0.08** | **145** | ⇑*i*P | **Pg** | **05 06 02.1** | **+0.5** |
| | baz=128 | | | | | | |
| HWA | | | | *e*S | **Sg** | **05 06 05.2** | **+1.1** |
| | baz=128 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.18** | **194** | *e*P | **Pg** | **05 06 03.1** | **+0.4** |
| | baz=181 | | | | | | |
| **ESL** | **Shilin** | **0.25** | **206** | ⇑*i*P | **Pb** | **05 06 03.3** | **-0.4** |
| | baz=200 | | | | | | |
| ESL | | | | *e*S | **Sb** | **05 06 07.3** | **-0.3** |
| | baz=200 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.28** | **291** | ⇓*i*P | **Pb** | **05 06 04.0** | **-0.4** |
| | baz=288 | | | | | | |
| WHF | | | | *i* S | **Sb** | **05 06 08.1** | **-0.7** |
| | baz=288 | | | | | | |
| **EHP** | **Heping Village** | **0.32** | **32** | *e*P | **Pb** | **05 06 05.4** | **+0.5** |
| | baz=40 | | | | | | |
| EHP | | | | S | **Sb** | **05 06 10.6** | **+1.0** |
| | baz=40 | | | | | | |
| **TEGC** | **Jichi Village** | **0.33** | **182** | *e*P | **Pb** | **05 06 06.1** | **+0.9** |
| | baz=174 | | | | | | |
| **TWT** | **Tachien** | **0.41** | **301** | ⇑*i*P | **Pg** | **05 06 06.4** | **-0.1** |
| | baz=309 | | | | | | |
| TWT | | | | *i* S | **Sg** | **05 06 11.8** | **-0.5** |
| | baz=309 | | | | | | |
| **ENA** | **Nanau** | **0.42** | **24** | ⇓P | **Pg** | **05 06 06.3** | **-0.4** |
| | baz=36 | | | | | | |
| ENA | | | | *e*S | **Sg** | **05 06 11.8** | **-0.7** |
| | baz=36 | | | | | | |
| **NNS** | **Nan Shan** | **0.43** | **337** | ⇑*i*P | **Pg** | **05 06 06.5** | **-0.4** |
| | baz=343 | | | | | | |
| NNS | | | | *i* S | **Sg** | **05 06 12.1** | **-0.9** |
| | baz=343 | | | | | | |
| **WDT** | **Danda** | **0.48** | **234** | ⇓*i*P | **Pg** | **05 06 07.3** | **-0.6** |
| | baz=232 | | | | | | |
| **EHY** | **Hungye** | **0.57** | **202** | *e*P | **Pb** | **05 06 08.4** | **-0.9** |
| | baz=189 | | | | | | |
| EHY | | | | *e*S | **Sb** | **05 06 15.9** | **-1.2** |
| | baz=189 | | | | | | |
| **ENTT** | **Nioudou** | **0.59** | **1** | P | **Pb** | **05 06 09.3** | **-0.4** |
| | baz=5.0 | | | | | | |
| ENTT | | | | S | **Sb** | **05 06 17.3** | **-0.3** |
| | baz=5.0 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.62** | **255** | *e*P | **Pb** | **05 06 09.8** | **-0.3** |
| | baz=253 | | | | | | |
| SMLT | | | | S | **Sb** | **05 06 17.3** | **-1.1** |
| | baz=253 | | | | | | |
| **TWC** | **Suao** | **0.62** | **25** | P | **Pb** | **05 06 09.9** | **-0.2** |
| | baz=30 | | | | | | |
| TWC | | | | S | **Sb** | **05 06 18.3** | **-0.1** |
| | baz=30 | | | | | | |
| **TYC** | **Yuchr** | **0.65** | **258** | ⇑*i*P | **Pb** | **05 06 10.1** | **-0.5** |
| | baz=256 | | | | | | |
| TYC | | | | S | **Sb** | **05 06 17.8** | **-1.5** |
| | baz=256 | | | | | | |
| **NSK** | **Sanguang** | **0.66** | **344** | *i* P | **Pb** | **05 06 10.5** | **-0.2** |
| | baz=341 | | | | | | |
| NSK | | | | S | **Sb** | **05 06 18.9** | **-0.6** |
| | baz=341 | | | | | | |
| **TWE** | **Neicheng** | **0.68** | **9** | *e*P | **Pb** | **05 06 10.6** | **-0.6** |
| | baz=13 | | | | | | |
| TWE | | | | *e*S | **Sb** | **05 06 19.4** | **-0.7** |
| | baz=13 | | | | | | |
| **TWF1** | **Yuli** | **0.73** | **199** | *e*P | **Pb** | **05 06 11.6** | **-0.3** |
| | baz=195 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **05 06 21.1** | **-0.3** |
| | baz=195 | | | | | | |
| **NSTT** | **Nanjuang** | **0.77** | **319** | ⇑P | **Pb** | **05 06 12.7** | **0.0** |
| | baz=322 | | | | | | |
| NSTT | | | | *e*S | **Sb** | **05 06 21.7** | **-1.1** |
| | baz=322 | | | | | | |
| **TWQ1** | **Liyutan** | **0.78** | **293** | *e*P | **Pb** | **05 06 13.0** | **+0.2** |
| | baz=294 | | | | | | |
| **YUS** | **Yu-Shan** | **0.78** | **225** | P | **Pb** | **05 06 12.9** | **-0.2** |
| | baz=213 | | | | | | |
| YUS | | | | S | **Sb** | **05 06 23.2** | **-0.3** |
| | baz=213 | | | | | | |
| **TCU** | **Taichung** | **0.81** | **278** | *e*P | **Pb** | **05 06 13.7** | **+0.3** |
| | baz=277 | | | | | | |
| **WNT** | **Mingjian** | **0.81** | **259** | *e*P | **Pg** | **05 06 13.9** | **0.0** |
| | baz=257 | | | | | | |
| WNT | | | | S | **Sn** | **05 06 25.6** | **-0.2** |
| | baz=257 | | | | | | |
| **NSY** | **Sanyi** | **0.81** | **297** | *e*P | **Pn** | **05 06 14.3** | **0.0** |
| | baz=306 | | | | | | |
| NSY | | | | *e*S | **Sg** | **05 06 25.1** | **+0.4** |
| | baz=306 | | | | | | |
| **ALS** | **Alishan** | **0.87** | **233** | P | **Pb** | **05 06 14.5** | **0.0** |
| | baz=230 | | | | | | |
| ALS | | | | *e*S | **Sb** | **05 06 25.4** | **-0.4** |
| | baz=230 | | | | | | |
| **EGS** | | **0.87** | **23** | *e*P | **Pb** | **05 06 14.1** | **-0.2** |
| | baz=31 | | | | | | |
| EGS | | | | *e*S | **Sg** | **05 06 26.8** | **+0.3** |
| | baz=31 | | | | | | |
| **CHN5** | **Tsauling** | **0.92** | **241** | *e*P | **Pb** | **05 06 15.5** | **+0.3** |
| | baz=239 | | | | | | |
| CHN5 | | | | S | **Sg** | **05 06 28.5** | **+0.5** |
| | baz=239 | | | | | | |
| **HSN** | **Hsinchu** | **0.93** | **325** | *e*P | **Pg** | **05 06 17.4** | **+1.4** |
| | baz=315 | | | | | | |
| **TWA** | **Mucha** | **0.93** | **2** | *e*P | **Pb** | **05 06 15.4** | **0.0** |
| | baz=357 | | | | | | |
| TWA | | | | *e*S | **Sb** | **05 06 27.1** | **-0.3** |
| | baz=357 | | | | | | |
| **CHKT** | **Chengkung** | **0.95** | **191** | *e*P | **Pb** | **05 06 14.8** | **-1.0** |
| | baz=187 | | | | | | |
| **WGK** | **Gukeng** | **0.98** | **249** | *e*P | **Pg** | **05 06 17.4** | **+0.5** |
| | baz=247 | | | | | | |
| WGK | | | | *e*S | **Sg** | **05 06 30.1** | **+0.3** |
| | baz=247 | | | | | | |
| **NCU** | **National Centr** | **0.98** | **340** | *e*P | **Pg** | **05 06 17.1** | **+0.1** |
| | baz=342 | | | | | | |
| NCU | | | | *e*S | **Sg** | **05 06 30.9** | **+0.9** |
| | baz=342 | | | | | | |
| **ELDTW** | **Lidau** | **0.98** | **210** | *e*P | **Pb** | **05 06 14.4** | **-1.9** |
| | baz=198 | | | | | | |
| **TAP1** | **Taipei** | **0.99** | **358** | *e*P | **Pb** | **05 06 16.2** | **-0.3** |
| | baz=359 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.04** | **11** | *e*P | **Pb** | **05 06 16.9** | **-0.5** |
| | baz=13 | | | | | | |
| NWF | | | | *e*S | **Sb** | **05 06 30.8** | **+0.1** |
| | baz=13 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.06** | **353** | *e*P | **Pb** | **05 06 17.4** | **-0.2** |
| | baz=1.0 | | | | | | |
| TWS1 | | | | *e*S | **Sg** | **05 06 33.6** | **+1.1** |
| | baz=1.0 | | | | | | |
| **CHN4** | **Tsaushan** | **1.12** | **232** | *e*P | **Pg** | **05 06 19.4** | **-0.2** |
| | baz=230 | | | | | | |
| CHN4 | | | | *e*S | **Sg** | **05 06 35.9** | **+1.6** |
| | baz=230 | | | | | | |
| **CHY** | **Chiayi** | **1.17** | **243** | *e*P | **Pb** | **05 06 20.0** | **+0.5** |
| | baz=239 | | | | | | |
| **WTP** | **Ta-pu** | **1.17** | **228** | *e*P | **Pb** | **05 06 19.9** | **+0.3** |
| | baz=215 | | | | | | |
| WTP | | | | *e*S | **Sn** | **05 06 35.7** | **+1.0** |
| | baz=215 | | | | | | |
| **TWK** | **Hsinying** | **1.25** | **232** | *e*P | **Pg** | **05 06 22.0** | **-0.1** |
| | baz=240 | | | | | | |
| **CHN1** | **Nanshi** | **1.27** | **228** | *e*P | **Pb** | **05 06 21.6** | **+0.4** |
| | baz=218 | | | | | | |
| CHN1 | | | | *e*S | **Sg** | **05 06 39.0** | **-0.2** |
| | baz=218 | | | | | | |
| **TWG** | **Pinlang** | **1.29** | **200** | *e*P | **Pn** | **05 06 20.9** | **0.0** |
| | baz=186 | | | | | | |
| **SGST** | **Jiashian** | **1.31** | **223** | *e*P | **Pg** | **05 06 23.1** | **-0.2** |
| | baz=213 | | | | | | |
| SGST | | | | *e*S | **Sg** | **05 06 40.5** | **+0.1** |
| | baz=213 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.33** | **72** | P | **Pn** | **05 06 21.1** | **-0.3** |
| JYNG | | | | *e*S | **Sn** | **05 06 38.8** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **1.39** | **72** | P | **Pn** | **05 06 21.9** | **-0.3** |
| YOJ | | | | *e*S | **Sn** | **05 06 40.3** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **1.39** | **72** | ⇑*e*P | **Pn** | **05 06 21.8** | **-0.4** |
| | baz=88 | | | | | | |
| YOJ | | | | *e*S | **Sg** | **05 06 42.3** | **-0.7** |
| | baz=88 | | | | | | |
| **SSD** | **Sandimen** | **1.54** | **213** | *e*P | **Pn** | **05 06 25.4** | **+1.0** |
| | baz=211 | | | | | | |
| **SCZT** | **Fangliau** | **1.87** | **208** | *e*P | **Pn** | **05 06 29.4** | **+0.6** |
| | baz=196 | | | | | | |
| **HATJ** | **Hateruma jima** | **2.06** | **89** | P | **Pn** | **05 06 31.8** | **+0.4** |
| HATJ | | | | *e*S | **Sn** | **05 06 56.6** | **+0.1** |
| **JKRS** | **Kuro-shima** | **2.25** | **85** | P | **Pn** | **05 06 34.7** | **+0.7** |
| JKRS | | | | *e*S | **Sn** | **05 07 02.2** | **+1.0** |
| **JIJ** | **Ishigaki jima** | **2.38** | **82** | P | **Pn** | **05 06 35.4** | **-0.5** |
| JIJ | | | | *e*S | **Sn** | **05 07 03.4** | **-1.2** |
| **JISG** | **Ishigakijimahi** | **2.57** | **77** | P | **Pn** | **05 06 38.1** | **-0.4** |
| JISG | | | | *e*S | **Sn** | **05 07 08.7** | **-0.5** |
| **JTJ** | **Tarama** | **2.93** | **78** | *e*S | **Sn** | **05 07 19.3** | **+1.2** |

**PGC 08 05:09:17.9**±5.3**, 50°.62N×130°.42W, h10**km**, ML2.9**/15**, Mw3.5, 211km west of Pt. Hardy, Bc Vancouver Island Region, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.45** | **88** | Pn | Pn | 05 09 41.8 | -2.5 |
| HOLB | | | | Sn | Sn | 05 09 59.1 | -4.3 |
| **BPBC** | **Brooks Peninsu** | **1.75** | **104** | Pn | Pn | 05 09 44.8 | -3.6 |
| **PHC** | **Port Hardy** | **1.90** | **86** | Pn | Pn | 05 09 48.3 | -2.0 |
| PHC | | | | Sn | Sn | 05 10 10.3 | -3.9 |
| **MAYB** | **Maynard** | **2.08** | **95** | Pn | Pn | 05 09 51.0 | -2.0 |
| MAYB | | | | Sn | Sn | 05 10 15.2 | -4.0 |
| **BBB** | **Bella Bella** | **2.13** | **42** | Pn | Pn | 05 09 51.9 | -1.5 |
| **BNB** | **Barry Inlet** | **2.13** | **337** | Pn | Pn | 05 09 51.5 | -2.0 |
| BNB | | | | Sn | Sn | 05 10 18.4 | -1.7 |
| **FHRB** | **Fair Harbour** | **2.19** | **104** | Pn | Pn | 05 09 52.0 | -2.2 |
| **EDB** | **Eliza Dome** | **2.24** | **108** | Pn | Pn | 05 09 53.0 | -2.0 |
| **TLCB** | **Telegraph Cove** | **2.28** | **90** | Pn | Pn | 05 09 54.2 | -1.4 |
| TLCB | | | | Sn | Sn | 05 10 20.2 | -3.5 |
| **WOSB** | **Woss** | **2.50** | **99** | Pn | Pn | 05 09 57.3 | -1.4 |
| **MOBC** | **Moresby Island** | **2.71** | **340** | Pn | Pn | 05 10 00.8 | -0.7 |
| MOBC | | | | Sn | Sn | 05 10 32.8 | -1.5 |
| **NCRB** | **Newcastle Ridg** | **2.79** | **93** | Pn | Pn | 05 10 01.0 | -1.7 |
| NCRB | | | | Sn | Sn | 05 10 33.9 | -2.7 |
| **DIB** | **Dawson Inlet,** | **2.88** | **335** | Pn | Pn | 05 10 03.3 | -0.5 |
| **GDR** | **Gold River** | **2.94** | **105** | Pn | Pn | 05 10 02.9 | -1.7 |
| **VIB** | **Van Inlet** | **2.95** | **334** | Pn | Pn | 05 10 04.4 | -0.4 |
| **SPLB** | **Strathcona Par** | **3.14** | **102** | Pn | Pn | 05 10 06.2 | -1.1 |
| **CBB** | **Campbell River** | **3.29** | **98** | Pn | Pn | 05 10 08.3 | -1.1 |
| **BTB** | **Buttle Lake** | **3.36** | **108** | Pn | Pn | 05 10 09.6 | -1.0 |
| **TXB** | **Texada** | **3.95** | **101** | Pn | Pn | 05 10 18.0 | -0.6 |

**MEX 08 05:12:21.4**±0.4**, 17°.77N×100°.26W, h63**km±8km**, MD3.6, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARIG** | **Puente Sto Nin** | **0.51** | **351** | *i* P | Pn | 05 12 32.4 | -1.3 |
| ARIG | | | | *e*S | Sn | 05 12 40.9 | -1.9 |
| **MEIG** | **Mezcala** | **0.63** | **76** | *e*P | Pn | 05 12 33.8 | -1.4 |
| MEIG | | | | *e*S | Sn | 05 12 43.3 | -1.8 |
| **CAIG** | **El Cayaco** | **0.72** | **180** | *i* P | Pn | 05 12 34.7 | -1.4 |
| CAIG | | | | *i* S | Sn | 05 12 45.0 | -1.8 |
| **ZIIG** | **Zihuatanejo** | **1.16** | **262** | *e*P | Pn | 05 12 39.3 | -2.3 |
| ZIIG | | | | *i* S | Sn | 05 12 54.8 | -1.9 |

**IDC 08 05:30:22.4**±5.4**, 1°.59S×27°.17E, h0**km**, mb3.8**/3**, mb1 3.8**/3**, mb1mx3.4**/45**, mbtmp3.8**/3**, Error ellipse: s-maj=130.8km s-min=38.2km az=174.0, Zaire**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMBO** | **Kilima Mbogo** | **10.09** | **88** | Lg | Lg | 05 35 37.1 | |
| | 0.3nm,0.3s,baz=175,slow=24,SNR=8.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.21** | **301** | P | P | 05 36 26.1 | 0.0 |
| | 1.5nm,0.7s,baz=113,slow=8.5,SNR=14 | | | | | | |
| **BRTR** | **Keskin Array B** | **41.54** | **8** | P | P | 05 38 11.8 | -0.1 |
| | 0.9nm,0.6s,baz=181,slow=10,SNR=6.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.12** | **37** | P | P | 05 41 24.4 | 0.0 |
| | 0.2nm,0.2s,baz=224,slow=6.0,SNR=3.1 | | | | | | |

*MOS **08** 05:40:58.9±0.9, 51°.48N×175°.31W, h33km, mb5.0/40, Error ellipse: s-maj=8.1km s-min=6.2km az=85.1*
*ISCJB **08** 05:40:60.0±0.4, 51°.32N±0°.04×175°.25W±0°.02, h49km±3km, mb4.7/126, MS5.0/1, Error ellipse: s-maj=6.5km s-min=2.3km az=175.7*
*NEIC **08** 05:40:59.5, 51°.25N×175°.24W, h36km, mb4.6/94, ML4.5(AEIC), After AEIC.*
*IDC **08** 05:41:00.3±2.4, 51°.51N×175°.23W, h31km±16km, mb4.4/29, mb1 4.5/32, mb1mx4.4/46, mbtmp4.6/32, ML4.3/3, Error ellipse: s-maj=17.7km s-min=9.1km az=160.0*
*BJI **08** 05:41:01.0, 52°.09N×175°.78W, h30km, mb5.1/28, mB5.3/13, Ms5.4/12, Ms7 5.0/12*
**ISC 08 05:41:00.2**±0.6**, 51°.33N**±0°.07×**175°.26W**±0°.03**, h33**km±2km**, h32**km**:pP-P, n551, σ1ˢ01**/571**, mb4.7**/126**, 7C, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.87** | **326** | P | **Pn** | **05 41 16.4** | **+0.3** |
| **GSCK** | **Great Sitkin C** | **0.88** | **321** | P | **Pn** | **05 41 16.6** | **+0.2** |
| **ETKA** | **Kagalaska Isla** | **0.89** | **307** | P | **Pn** | **05 41 16.4** | **0.0** |
| **GSTD** | **Great Sitkin T** | **0.91** | **323** | P | **Pn** | **05 41 17.1** | **+0.3** |
| **GSTR** | **Great Sitkin T** | **0.91** | **327** | *e*Pn | **Pn** | **05 41 17.1** | **+0.3** |
| GSTR | | | | *e*Sn | **Sb** | **05 41 29.8** | **+0.4** |
| **ADAG** | **Mount Adagdak** | **1.06** | **309** | P | **Pb** | **05 41 19.7** | **-0.3** |
| **ATKA** | **Atka Island** | **1.10** | **37** | P | **Pn** | **05 41 18.8** | **-0.4** |
| ATKA | | | | S | **Sb** | **05 41 34.4** | **-0.3** |
| **KOFP** | **Korovin Flat P** | **1.19** | **37** | P | **Pn** | **05 41 21.4** | **+0.8** |
| **KOKL** | **Mount Kliuchef** | **1.19** | **33** | P | **Pn** | **05 41 21.4** | **+0.8** |
| **KOWE** | **Korovin West** | **1.21** | **31** | P | **Pb** | **05 41 21.9** | **-0.7** |
| **KIRH** | **Kanaga Island** | **1.28** | **297** | P | **Pn** | **05 41 22.0** | **+0.3** |
| **KIKV** | **Kanaga Island** | **1.31** | **296** | P | **Pn** | **05 41 22.3** | **+0.1** |
| **KICM** | **Kanaga Island** | **1.34** | **297** | P | **Pn** | **05 41 23.0** | **+0.5** |
| **TAPA** | **Tanaga Point A** | **1.66** | **288** | P | **Pn** | **05 41 27.2** | **+0.2** |
| **TAFL** | **Tanaga Flats** | **1.70** | **286** | P | **Pn** | **05 41 27.6** | **+0.1** |
| **TAFP** | **Tanaga Falls P** | **1.79** | **290** | P | **Pn** | **05 41 29.2** | **+0.5** |
| TAFP | | | | S | **Sb** | **05 41 53.0** | **-1.3** |
| **GAEA** | **Gareloi East** | **2.22** | **283** | P | **Pn** | **05 41 35.6** | **+0.9** |
| **GALAA** | **Gareloi Lava P** | **2.23** | **283** | P | **Pn** | **05 41 35.6** | **+0.7** |
| **GANE** | **Gareloi Northe** | **2.25** | **284** | P | **Pn** | **05 41 36.0** | **+1.0** |
| **CERAA** | **Semis' Rag'd T** | **3.20** | **282** | P | **Pn** | **05 41 48.5** | **+0.3** |
| **CESW** | **Semis' Southwe** | **3.27** | **282** | P | **Pn** | **05 41 49.4** | **+0.2** |
| **CEAP** | **Semis' Anvil P** | **3.28** | **284** | P | **Pn** | **05 41 49.9** | **+0.7** |
| **AMKA** | **Amchitka** | **3.41** | **273** | P | **Pn** | **05 41 50.5** | **-0.5** |
| AMKA | | | | S | **Sn** | **05 42 34.0** | **+3.8** |
| **LSPA** | **Little Sitkin** | **3.89** | **282** | P | **Pn** | **05 41 58.2** | **+0.6** |
| LSPA | | | | S | **Sn** | **05 42 42.9** | **+0.8** |
| **LSNW** | **Little Sitkin** | **3.93** | **282** | P | **Pn** | **05 41 58.3** | **+0.2** |
| **LSSA** | **Little Sitkin** | **3.93** | **282** | P | **Pn** | **05 41 58.6** | **+0.4** |
| **NIKH** | **Nikolski High** | **4.28** | **65** | P | **Pn** | **05 42 03.4** | **+0.4** |
| NIKH | | | | S | **Sn** | **05 42 52.1** | **+0.5** |
| **OKTU** | **Okmok Mt. Tuli** | **4.88** | **62** | P | **Pn** | **05 42 12.8** | **+1.5** |
| **OKFG** | **Magazine Ridge** | **4.96** | **62** | P | **Pn** | **05 42 13.9** | **+1.6** |
| OKFG | | | | S | **Sn** | **05 43 12.0** | **+3.5** |
| **MSOM** | **Makushin Julie** | **5.65** | **61** | P | **Pn** | **05 42 23.1** | **+1.4** |
| **MSOM** | **Makushin Julie** | **5.65** | **61** | P | **Pn** | **05 42 23.1** | **+1.4** |
| **MSW** | **Makushin Switc** | **5.78** | **60** | P | **Pn** | **05 42 25.1** | **+1.5** |
| **UNV** | **Unalaska Valle** | **5.91** | **61** | P | **Pn** | **05 42 26.3** | **+1.0** |
| UNV | | | | S | **Sn** | **05 43 33.4** | **+1.7** |
| **ZRO** | **Akutan Zero** | **6.28** | **60** | P | **Pn** | **05 42 32.1** | **+1.6** |
| **AKGG** | **Akutan Green G** | **6.32** | **59** | P | **Pn** | **05 42 32.4** | **+1.4** |
| **AKUT** | **Akutan** | **6.41** | **60** | *e*Pn | **Pn** | **05 42 35.2** | **+3.0** |
| **AKSA** | **Akutan Strait** | **6.45** | **60** | P | **Pn** | **05 42 35.0** | **+2.2** |
| **SPIA** | **Saint Paul Isl** | **6.55** | **25** | P | **Pn** | **05 42 36.9** | **+2.8** |
| SPIA | | | | S | Sn | 05 43 53.7 | +6.0 |
| **SMY** | **Shemya** | **6.71** | **286** | P | **Pn** | **05 42 37.9** | **+1.6** |
| **SMY** | **Shemya** | **6.71** | **286** | P | **Pn** | **05 42 37.9** | **+1.6** |
| **ISLZ** | **Isanotski Laza** | **7.75** | **59** | P | **Pn** | **05 42 52.2** | **+1.6** |
| **FALS** | **False Pass** | **7.96** | **59** | *e*Pn | **Pn** | **05 42 55.7** | **+2.3** |
| **DTNA** | **Dutton South F** | **8.69** | **59** | P | **Pn** | **05 43 05.3** | **+1.9** |
| **SDPT** | **Sand Point** | **9.71** | **60** | *e*Pn | **Pn** | **05 43 17.8** | **+0.3** |
| **CHGN** | **Chignik** | **11.12** | **57** | *e*Pn | **Pn** | **05 43 36.9** | **+0.2** |
| **GAMB** | **Gambell** | **12.62** | **7** | *e*Pn | **Pn** | **05 43 59.6** | **+2.5** |
| **OHAK** | **Old Harbor** | **14.09** | **57** | *e*Pn | **Pn** | **05 44 17.3** | **0.0** |
| **KDAK** | **Kodiak Island** | **14.61** | **55** | Pn | **Pn** | **05 44 22.6** | **-1.7** |
| | 0.9nm,0.3s,baz=174,slow=5.0,SNR=14 | | | | | | |
| KDAK | | | | Sn | **Sn** | **05 47 00.9** | **-4.0** |
| | baz=350,slow=19,SNR=2.2 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.61** | **55** | *e*P | **Pn** | **05 44 23.3** | **-1.0** |
| **KDAK** | **Kodiak Island** | **14.61** | **55** | *e*Pn | **Pn** | **05 44 23.3** | **-1.0** |
| KDAK | | | | *e*P | **P** | **05 44 29.9** | **-0.4** |
| **SVW2** | **Sparrevohn** | **14.62** | **40** | *e*Pn | **P** | **05 44 31.7** | **+1.3** |
| **TNA** | **Tin City** | **14.76** | **12** | *e*P | **P** | **05 44 30.7** | **-1.2** |
| **CNPM** | **China Poot** | **15.84** | **49** | *e*Pn | **P** | **05 44 42.6** | **-1.4** |
| | 48nm,1.2s | | | | | | |
| **BRLK** | **Bradley Lake** | **16.09** | **49** | *e*Pn | **P** | **05 44 45.8** | **-1.0** |
| | 42nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.63** | **287** | Pn | **Pn** | **05 44 50.7** | **+0.2** |
| | 1.2nm,0.3s,baz=87,slow=12,SNR=27 | | | | | | |
| **SEW** | **Seward** | **16.89** | **49** | *e*P | **Pn** | **05 44 52.7** | **-1.0** |
| | 14nm,0.5s | | | | | | |
| **PPLA** | **Purkeypile** | **16.95** | **38** | *e*P | **P** | **05 44 57.9** | **+1.6** |
| | 52nm,1.2s | | | | | | |
| **RC01** | **Rabbit Creek A** | **17.12** | **45** | *e*P | **P** | **05 44 59.0** | **+1.0** |
| | 32nm,1.3s | | | | | | |
| **CAST** | **Castle Rocks** | **17.27** | **37** | *e*Pn | **P** | **05 45 00.1** | **+0.3** |
| **PMR** | **Palmer** | **17.59** | **44** | *e*P | **Pn** | **05 45 01.9** | **-0.5** |
| PMR | | | | pmax | pmax | | |
| | comp=Z,23nm,1.4s | | | | | | |
| **PMR** | **Palmer** | **17.59** | **44** | *e*P | **Pn** | **05 45 01.9** | **-0.5** |
| | comp=Z,23nm,1.4s | | | | | | |
| **KTH** | **Kantishna Hill** | **17.78** | **37** | *e*P | **Pn** | **05 45 04.8** | **-0.1** |
| | comp=Z,30nm,0.8s | | | | | | |
| **TRF** | **Thorofare Moun** | **17.97** | **38** | *e*P | **P** | **05 45 07.9** | **+0.3** |
| | comp=Z,30nm,1.0s | | | | | | |
| **SKR** | **Severo-Kuril's** | **17.98** | **279** | *e*P | P | 05 45 13.0 | +5.4 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,80nm,0.6s | | | | | | |
| **SML** | **Sawmill** | **18.02** | **44** | *e*P | **Pn** | **05 45 06.9** | **-0.9** |
| SML | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **SML** | **Sawmill** | **18.02** | **44** | *e*P | **Pn** | **05 45 06.9** | **-0.9** |
| | comp=Z,4.4nm,0.9s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **18.06** | **36** | *e*P | **P** | **05 45 09.6** | **+1.1** |
| **MCK** | **McKinley** | **18.64** | **38** | *e*P | **P** | **05 45 14.3** | **-0.5** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,124nm,1.9s | | | | | | |
| **MCK** | **McKinley** | **18.64** | **38** | *e*P | **P** | **05 45 14.3** | **-0.5** |
| | comp=Z,124nm,1.9s | | | | | | |
| **BWN** | **Browne** | **18.66** | **37** | *e*Pn | **Pn** | **05 45 16.8** | **+1.3** |
| | comp=Z,82nm,1.2s | | | | | | |
| **DIV** | **Divide** | **18.94** | **47** | *e*P | **P** | **05 45 18.2** | **+0.1** |
| | comp=Z,16nm,0.8s | | | | | | |
| **DHY** | **Denali Highway** | **18.96** | **41** | *e*Pn | **P** | **05 45 17.6** | **-0.8** |
| | comp=Z,13nm,0.8s | | | | | | |
| **KLU** | **Klutina** | **18.98** | **46** | *e*Pn | **Pn** | **05 45 19.3** | **-0.3** |
| **BILL** | **Bilibino** | **19.03** | **339** | ⇑*e*P | **P** | **05 45 19.2** | **+0.2** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,72nm,1.1s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,573nm,17.0s | | | | | | |
| **BILL** | **Bilibino** | **19.03** | **339** | *e*P | **Pn** | **05 45 20.5** | **+0.5** |
| | comp=Z,181nm,1.5s | | | | | | |
| **BMRM** | **Bremner River** | **19.43** | **48** | *e*P | **Pn** | **05 45 24.5** | **-0.4** |
| | comp=Z,27nm,1.0s | | | | | | |
| **COLA** | **College** | **19.62** | **36** | *e*P | **P** | **05 45 24.0** | **-1.4** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **COLA** | **College** | **19.62** | **36** | *e*P | **Pn** | **05 45 27.5** | **+0.6** |
| | comp=Z,21nm,0.8s | | | | | | |
| **HARP** | **HAARP** | **19.64** | **44** | *e*Pn | **Pn** | **05 45 27.3** | **+0.1** |
| **PAX** | **Paxson** | **19.71** | **42** | *e*P | **P** | **05 45 27.3** | **+0.7** |
| PAX | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **PAX** | **Paxson** | **19.71** | **42** | *e*P | **P** | **05 45 27.3** | **+0.7** |
| | comp=Z,10nm,0.8s | | | | | | |
| **HDA** | **Harding Lake** | **19.72** | **38** | *e*P | **P** | **05 45 26.0** | **-0.6** |
| **ILAR** | **Eielson Array** | **19.93** | **37** | P | **P** | **05 45 25.9** | **-2.9** |
| | comp=Z,1.3nm,0.3s,baz=230,slow=9.4,SNR=51 | | | | | | |
| ILAR | | | | S | **S** | **05 49 06.7** | **-4.3** |
| | comp=Z,0.0nm,0.3s,baz=227,slow=13,SNR=2.4 | | | | | | |
| ILAR | | | | ScP | **ScP** | **05 53 17.4** | **-0.5** |
| | baz=258,slow=4.2,SNR=5.4 | | | | | | |
| **COLD** | **Coldfoot** | **20.20** | **29** | *e*P | **P** | **05 45 32.6** | **+0.9** |
| | comp=Z,43nm,1.0s | | | | | | |
| **MENT** | **Mentasta** | **20.44** | **43** | *e*P | Pn | 05 45 35.7 | -1.1 |
| **SEY** | **Seymchan** | **20.79** | **316** | P | **P** | **05 45 38.7** | **+0.5** |
| | comp=Z,12nm,1.0s,baz=121,slow=9.1,SNR=6.8 | | | | | | |
| **SEY** | **Seymchan** | **20.79** | **316** | *e*P | **P** | **05 45 36.1** | **-2.1** |
| **EGAK** | **Eagle** | **22.15** | **40** | *e*P | **P** | **05 45 51.8** | **-1.0** |
| | comp=Z,33nm,0.8s | | | | | | |
| **DAWY** | **Dawson** | **22.64** | **42** | *e*P | **P** | **05 45 57.0** | **-1.2** |
| | comp=Z,13nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **26.24** | **34** | P | **P** | **05 46 31.6** | **-0.2** |
| | comp=Z,7.4nm,0.9s,baz=237,slow=7.7,SNR=13 | | | | | | |
| INK | | | | PcP | **PcP** | **05 49 57.6** | **+0.3** |
| | comp=Z,2.5nm,0.7s,baz=306,slow=2.7,SNR=3.9 | | | | | | |
| **DLBC** | **Dease Lake** | **26.54** | **57** | P | **P** | **05 46 36.3** | **+1.7** |
| | comp=Z,8.5nm,0.9s,baz=282,slow=8.2,SNR=16 | | | | | | |
| **DLBC** | **Dease Lake** | **26.54** | **57** | *e*P | **P** | **05 46 36.2** | **+1.5** |
| | comp=Z,16nm,1.1s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **27.53** | **278** | *e*P | **P** | **05 46 43.8** | **+0.3** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| **ASAJ** | **Asahikawa** | **28.92** | **272** | P | **P** | **05 46 56.0** | **0.0** |
| | comp=Z,9.6nm,0.6s,baz=30,slow=8.1 | | | | | | |
| **ASAJ** | **Asahikawa** | **28.92** | **272** | P | **P** | **05 46 56.0** | **0.0** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **ASAJ** | **Asahikawa** | **28.92** | **272** | *e*P | **P** | **05 46 56.9** | **+0.9** |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **33.32** | **288** | *e*P | P | 05 47 29.8 | -4.8 |
| KLR | | | | pmax | pmax | | |
| | comp=E,50nm,1.6s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,74nm,1.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.65** | **47** | P | **P** | **05 47 37.4** | **0.0** |
| | comp=Z,0.7nm,0.5s,baz=278,slow=9.1,SNR=4.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.65** | **47** | P | **P** | **05 47 37.4** | **0.0** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **B05A** | **Bryant** | **33.83** | **74** | P | **P** | **05 47 39.4** | **+0.3** |
| | baz=34 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.52** | **211** | T | T | 06 24 29.4 | |
| | baz=18,slow=76,SNR=71 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.53** | **211** | T | T | 06 24 29.9 | |
| | baz=18,slow=76,SNR=67 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.54** | **211** | T | T | 06 24 36.3 | |
| | baz=18,slow=76,SNR=73 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.49** | **280** | P | **P** | **05 47 52.9** | **-0.6** |
| | comp=Z,4.5nm,0.6s,baz=57,slow=9.6,SNR=11 | | | | | | |
| **G05D** | **Wamic, OR** | **35.71** | **78** | P | **P** | **05 47 57.9** | **+2.5** |
| | baz=36 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.73** | **210** | T | T | 06 27 25.4 | |
| | baz=20,slow=75,SNR=92 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.74** | **210** | T | T | 06 27 21.0 | |
| | baz=20,slow=75,SNR=44 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.74** | **210** | T | T | 06 27 04.1 | |
| | baz=20,slow=75,SNR=30 | | | | | | |
| **I04A** | **Tendick Farm,** | **35.77** | **81** | P | **P** | **05 47 56.2** | **+0.3** |

baz=36
L02D **Cave Junction,** 35.90 84 P P 05 48 00.5 +3.5
baz=36
MJAR **Matsushiro Arr** 35.98 264 P P 05 47 57.8 0.0
comp=Z,6.5nm,0.7s,baz=53,slow=8.0,SNR=15
MAJO **Matsushiro** 35.98 264 eP P
MAJO pmax pmax
comp=Z,155nm,1.1s
MAJO **Matsushiro** 35.98 264 eP P 05 47 57.8 0.0
comp=Z,29nm,1.0s
MAT **Matsushiro** 35.98 264 P P 05 47 57.9 +0.1
VLA **Vladivostok** 36.12 278 eP P 05 47 59.4 +0.5
VLA pmax pmax
comp=Z,27nm,0.9s
I05D **Terrebonne, OR** 36.15 79 P P 05 47 58.9 -0.3
baz=36
HAWA **Hanford** 36.24 75 eP P 05 48 00.6 +0.7
comp=Z,8.3nm,0.7s
J04D **Umpqua Nationa** 36.25 82 P P 05 48 02.1 +1.8
baz=36
MDJ **Mudanjiang** 36.76 282 P P 05 48 04.2 -0.1
MDJ PMZ
comp=Z,8.0nm,0.7s
MDJ PMZ
comp=Z,410nm,11.8s
J05D **Fort Rock, OR** 36.77 81 P P 05 48 05.7 +1.1
baz=37
NEW **Newport** 36.81 71 P P 05 48 05.3 +0.5
baz=290,slow=9.2
NEW **Newport** 36.81 71 eP P 05 48 05.1 +0.3
NEW pmax pmax
comp=Z,14nm,1.0s
NEW **Newport** 36.81 71 P P 05 48 05.4 +0.5
baz=37
NEW **Newport** 36.81 71 eP P 05 48 05.1 +0.3
comp=Z,14nm,1.0s
MSHR **Mys Shultsa** 36.86 278 eP P 05 48 04.3 -0.9
EDM **Edmonton** 36.89 62 eP P 05 48 05.7 +0.3
EDM pmax pmax
comp=Z,44nm,0.8s
EDM **Edmonton** 36.89 62 eP P 05 48 05.7 +0.3
comp=Z,44nm,0.8s
O03D **Paynes Creek** 38.06 85 P P 05 48 18.5 +3.0
baz=38
WALA **Waterton Lakes** 38.34 69 eP P 05 48 20.4 +2.6
comp=Z,7.4nm,0.9s
BSMT **Bassoo Peak** 38.39 71 eP P 05 48 18.8 +0.5
comp=Z,8.3nm,0.7s
BLMT **Blacktail Moun** 38.56 70 eP P 05 48 20.3 +0.5
comp=Z,18nm,0.8s
WVOR **Wild Horse Val** 38.83 80 eP P 05 48 22.4 +0.4
WVOR pmax pmax
comp=Z,7.0nm,0.8s
WVOR **Wild Horse Val** 38.83 80 eP P 05 48 22.4 +0.4
comp=Z,6.9nm,0.8s
YBMT **Yellow Bay** 38.84 70 eP P 05 48 23.6 +1.6
comp=Z,3.5nm,0.6s
RES **Resolute Bay** 38.87 25 PcP PcP 05 50 32.8 +0.8
comp=Z,5.2nm,0.8s,baz=249,slow=3.3,SNR=6.3
SWMT **Swartz Lake** 39.02 71 eP P 05 48 23.5 -0.1
comp=Z,3.7nm,0.9s
MSO **Missoula** 39.39 72 P P 05 48 26.5 -0.1
baz=39
SLMT **Seeley Lake** 39.45 71 eP P 05 48 27.1 -0.1
comp=Z,10nm,1.0s
CN2 **Changchun** 39.73 283 eP P 05 48 28.0 -1.3
CN2 epP pP 05 48 37.4 -1.5
CN2 PP PnPn 05 50 03.8 -0.2
CN2 PMZ
comp=Z,10.0nm,1.0s
CHMT **Chamberlain Mo** 39.76 71 eP P 05 48 29.3 -0.5
comp=Z,3.8nm,0.7s
MFID **Camas Ranch** 40.02 77 eP P 05 48 31.5 -0.5
comp=Z,2.0nm,0.9s
HRY **Holter Researc** 40.70 71 eP P 05 48 37.5 0.0
comp=Z,8.5nm,0.7s
HLID **Hailey** 40.81 76 P P 05 48 38.3 -0.2
baz=41
HLID **Hailey** 40.81 76 eP P 05 48 38.2 -0.3
comp=Z,7.0nm,1.1s
MCMT **McKenzie Canyo** 41.08 74 eP P 05 48 41.0 +0.2
comp=Z,4.2nm,0.6s
EGMT **Eagleton** 41.26 68 P P 05 48 42.2 +0.2
baz=41
EGMT **Eagleton** 41.26 68 eP P 05 48 42.6 +0.6
comp=Z,14nm,0.9s
NVAR **Mina Airway Bea** 41.35 85 P P 05 48 43.0 -0.1
comp=Z,0.3nm,0.6s,baz=293,slow=7.9,SNR=4.2
NVAR ScP ScP 05 54 28.1 -0.1
comp=Z,1.4nm,0.9s,baz=286,slow=3.5,SNR=7.8
BOZ **Bozeman (W)** 41.37 72 eP P 05 48 43.3 +0.2
BOZ pmax pmax
comp=Z,5.0nm,0.6s
BOZ **Bozeman (W)** 41.37 72 P P 05 48 42.9 -0.2
baz=41,SNR=8.6
BOZ **Bozeman (W)** 41.37 72 eP P 05 48 43.3 +0.2
comp=Z,5.2nm,0.6s
KSRS **Korea Array** 41.85 273 P P 05 48 46.9 0.0
comp=Z,8.4nm,0.9s,baz=57,slow=7.8,SNR=14
KSRS **Korea Array** 41.85 273 P P 05 48 46.9 0.0
KSRS pmax pmax
comp=Z,8.0nm,1.0s
KSAR **Wonju Array Be** 41.89 274 P P 05 48 46.9 -0.3
KSAR **Wonju Array Be** 41.89 274 P P 05 48 46.9 -0.3
ELK **Elko** 41.89 80 eP P 05 48 47.7 +0.3
ELK pmax pmax
comp=Z,3.0nm,0.8s
ELK **Elko** 41.89 80 eP P 05 48 47.7 +0.3
comp=Z,2.8nm,0.8s
SNY **Shenyang** 41.96 282 ⇑P P 05 48 48.3 +0.6
SNY PMZ
comp=Z,62nm,1.2s
YMR **Madison River** 42.29 73 eP P 05 48 50.0 -0.7
comp=Z,14nm,0.9s
FFC **Flin Flon** 42.36 56 eP P 05 48 50.2 -0.6
FFC pmax pmax
comp=Z,7.0nm,0.8s
FFC **Flin Flon** 42.36 56 eP P 05 48 50.1 -0.6
comp=Z,7.5nm,0.8s
VES **Vestal, Richgr** 42.47 89 P P 05 48 53.4 +1.5
baz=42
PKM **Peak Mountain** 42.61 90 P P 05 48 55.9 +2.6
baz=42
H17A **Grant Village** 42.67 73 P P 05 48 54.8 +1.0
baz=42
IMW **Indian Meadow** 42.73 74 eP P 05 48 55.2 +0.9
comp=Z,5.9nm,0.9s
JNU **Nakatsue** 42.78 266 eP P 05 48 54.9 +0.4
comp=Z,185nm,1.1s
HVU **Hansel Valley** 42.81 77 eP P 05 48 55.2 +0.3
HVU pmax pmax
comp=Z,7.0nm,0.9s
HVU **Hansel Valley** 42.81 77 eP P 05 48 55.1 +0.3
comp=Z,6.8nm,0.9s
TJN **Taejon** 42.88 273 eP P 05 48 55.8 +0.6
TPAW **Teton Pass** 42.95 74 eP P 05 48 56.7 +0.6
comp=Z,8.2nm,1.4s
ISA **Isabella** 42.96 89 eP P 05 48 58.0 +1.9
ISA **Isabella** 42.96 89 P P 05 48 58.4 +2.3
baz=43
ISA **Isabella** 42.96 89 eP P 05 48 58.0 +1.9
RLMT **Red Lodge** 43.06 71 P P 05 48 57.9 +1.0
baz=43,SNR=6.7
RLMT **Red Lodge** 43.06 71 eP P 05 48 57.3 +0.4
comp=Z,14nm,0.9s
REDW **Red Top Meadow** 43.08 74 eP P 05 48 57.8 +0.7
comp=Z,17nm,1.5s
R11A **Troy Canyon, C** 43.10 83 P P 05 48 57.2 0.0
baz=43
R11A **Troy Canyon, C** 43.10 83 eP P 05 48 57.1 -0.2
comp=Z,4.6nm,0.9s
BGU **Big Grassy Mou** 43.15 79 eP P 05 48 59.3 +1.7
comp=Z,5.8nm,0.9s
MPMC **Manual Prospec** 43.33 87 P P 05 49 01.5 +2.3
baz=43
FURC **Furnace Creek,** 43.46 86 P P 05 49 02.0 +2.1
baz=43
TPNV **Topopah Spring** 43.55 85 P P 05 49 02.5 +1.7
baz=43
DUG **Dugway** 43.71 79 P P 05 49 01.8 -0.3
baz=44
DUG **Dugway** 43.71 79 eP P 05 49 00.9 -1.2
comp=Z,7.7nm,0.9s
LAO **LASA Array** 44.00 68 P P 05 49 04.6 +0.3
baz=44
LAO **LASA Array** 44.00 68 eP P 05 49 04.7 +0.4
comp=Z,8.4nm,0.8s

CTU **Camp Tracy** 44.07 78 eP P 05 49 07.9 +2.8
comp=Z,6.1nm,0.9s
BW06 **Boulder Array** 44.20 74 eP P 05 49 06.1 0.0
comp=Z,9.0nm,0.8s
DGMT **Dagmar** 44.22 65 P P 05 49 03.3 -2.7
baz=44
GSC **Goldstone** 44.24 88 eP P 05 49 08.3 +1.9
GSC pmax pmax
comp=Z,8.0nm,0.9s
GSC **Goldstone** 44.24 88 P P 05 49 07.5 +1.2
baz=44
GSC **Goldstone** 44.24 88 eP P 05 49 08.3 +1.9
comp=Z,8.0nm,0.9s
NLU **North Lily Min** 44.31 79 eP P 05 49 07.0 +0.1
comp=Z,7.8nm,1.0s
MPU **Maple Canyon** 44.54 79 eP P 05 49 09.6 +0.8
comp=Z,12nm,0.7s
A25A **Svangstu Ranch** 44.58 63 P P 05 49 08.0 -0.9
baz=44,SNR=6.0
CCUT **Cedar City** 44.97 83 eP P 05 49 13.8 +1.5
comp=Z,2.3nm,0.8s
A26A **Wade Farm, Ken** 45.21 63 P P 05 49 12.0 -1.8
baz=45
TMUT **Trail Mountain** 45.24 79 eP P 05 49 15.5 +0.9
comp=Z,26nm,0.8s
A27A **Ledoux Ranch,** 45.62 62 P P 05 49 16.6 -0.4
baz=46
E25A **Miller Ranch,** 45.74 66 P P 05 49 18.3 +0.2
baz=46
C26A **Wahner Farm, P** 45.75 64 P P 05 49 17.8 -0.3
baz=46
SRU **San Rafael** 45.77 79 eP P 05 49 19.4 +0.8
SRU pmax pmax
comp=Z,10.0nm,1.0s
SRU **San Rafael** 45.77 79 eP P 05 49 19.4 +0.8
comp=Z,10nm,1.0s
B27A **Peters Farms,** 45.91 63 P P 05 49 19.0 -0.3
baz=46,SNR=8.6
F25A **Bowman** 46.02 67 P P 05 49 20.7 +0.3
baz=46
K22A **Casper** 46.09 73 P P 05 49 20.9 -0.2
baz=46
C27A **Sayler Ranch,** 46.15 64 P P 05 49 21.6 +0.4
baz=46
A28A **Rude Farm, Bot** 46.19 62 P P 05 49 21.2 -0.4
baz=46,SNR=6.6
E26A **Carlson Angus** 46.29 66 P P 05 49 22.0 -0.5
baz=46
B28A **Dugan Ranch, T** 46.38 63 P P 05 49 23.0 -0.1
baz=46,SNR=6.9
G25A **Newell** 46.46 68 P P 05 49 21.2 -2.6
baz=46
F26A **Lodgepole** 46.52 67 P P 05 49 23.9 -0.4
baz=46
O20A **White River Ci** 46.55 76 P P 05 49 25.4 +0.7
baz=46
O20A **White River Ci** 46.55 76 eP P 05 49 24.5 -0.2
comp=Z,7.0nm,0.6s
H25A **Fruitdale** 46.68 69 P P 05 49 25.4 -0.2
baz=46
RSSD **Black Hills** 46.71 70 eP P 05 49 26.0 0.0
RSSD pmax pmax
comp=Z,5.0nm,0.8s
RSSD **Black Hills** 46.71 70 eP P 05 49 26.0 0.0
comp=Z,5.3nm,0.8s
A29A **Manning Farm,** 46.75 61 P P 05 49 25.2 -0.8
baz=47,SNR=6.4
E27A **Carson** 46.83 66 P P 05 49 25.8 -0.8
baz=47
G26A **Maurine** 46.88 67 P P 05 49 26.1 -0.9
baz=47
B29A **Wagenman Farm,** 46.94 62 P P 05 49 27.7 +0.3
baz=47
I25A **Rochford** 46.95 69 P P 05 49 27.3 -0.5
baz=47
D28A **Regan** 46.96 64 P P 05 49 27.8 +0.1
baz=47
PV10 **Paradox Valley** 47.14 79 eP P 05 49 29.9 +0.5
comp=Z,135nm,0.7s
H26A **Fairpoint** 47.17 68 P P 05 49 30.8 +1.5
baz=47
PV04 **Paradox Valley** 47.21 79 eP P 05 49 29.6 -0.3
G27A **Dupree** 47.22 67 P P 05 49 29.0 -0.6
baz=47
E28A **Huff** 47.24 65 P P 05 49 29.7 -0.1
baz=47
A30A **Hoffart Farm,** 47.25 61 P P 05 49 29.1 -0.8
baz=47
N23A **Red Feather La** 47.48 74 P P 05 49 32.4 +0.3
baz=47
B30A **Myrvik Farm, E** 47.51 62 P P 05 49 31.8 -0.1
baz=47,SNR=6.7
H27A **Howes,** 47.56 68 P P 05 49 32.9 +0.5
baz=47
PV01 **Paradox Valley** 47.58 79 eP P 05 49 32.5 -0.3
comp=Z,641nm,0.8s
F28A **McLaughlin** 47.60 66 P P 05 49 32.6 -0.1
baz=47
ULM **Lac du Bonnet** 47.84 58 P P 05 49 33.8 -0.6
comp=Z,7.3nm,0.9s,baz=306,slow=8.2,SNR=7.3
A31A **Linda, St. Vin** 47.87 60 P P 05 49 33.5 -1.1
baz=48
B31A **Greenbush Farm** 47.90 61 P P 05 49 34.7 -0.2
baz=48,SNR=6.2
I27A **Quinn** 47.91 68 P P 05 49 35.6 +0.5
baz=48
SMCO **Snowmass** 47.91 77 eP P 05 49 35.7 +0.2
comp=Z,2.0nm,0.6s
TLY **Talaya** 47.95 304 eP P 05 49 35.0 -0.2
TLY pmax pmax
comp=Z,10.0nm,1.0s
TLY **Talaya** 47.95 304 eP P 05 49 34.8 -0.4
comp=Z,9.0nm,0.8s
G28A **Parade** 47.98 67 P P 05 49 35.6 +0.1
baz=48
D30A **Buchanan** 48.03 63 P P 05 49 35.7 -0.2
baz=48
H28A **Mission Ridge** 48.15 67 P P 05 49 36.4 -0.5
baz=48
C31A **Landman Farms,** 48.21 62 P P 05 49 38.0 +0.7
baz=48
ULN **Ulaanbaatar** 48.25 298 i P P 05 49 36.7 -1.1
ULN pmax pmax
comp=Z,11nm,0.9s
ULN **Ulaanbaatar** 48.25 298 eP P 05 49 37.2 -0.6
comp=Z,11nm,0.9s
ISCO **Idaho Springs** 48.35 75 P P 05 49 39.6 +0.8
baz=48
I28A **Midland** 48.46 68 P P 05 49 39.6 +0.2
baz=48,SNR=10
G29A **Hoven** 48.48 66 P P 05 49 38.5 -1.0
baz=48
B32A **Ashes, Strandq** 48.53 61 P P 05 49 39.1 -0.6
baz=48,SNR=7.8
SONM **Songino Array** 48.63 298 P P 05 49 40.2 -0.5
comp=Z,7.6nm,0.9s,baz=51,slow=9.8,SNR=34
SONM PcP PcP 05 51 03.8 -1.9
comp=Z,2.2nm,0.8s,baz=53,slow=1.9,SNR=4.7
H29A **Onida** 48.65 67 P P 05 49 39.5 -1.2
baz=48
J28A **Allard Ranch,** 48.77 69 P P 05 49 41.3 -0.4
baz=49
E31A **Nome** 48.84 63 P P 05 49 40.3 -1.8
baz=49
ZAK **Zakamensk** 48.86 303 eP P 05 49 41.9 -0.5
ZAK pmax pmax
comp=Z,14nm,1.2s
S22A **4UR Ranch, Cre** 48.89 78 P P 05 49 44.9 +1.9
baz=49
AGMN **Agassiz Nation** 48.95 60 P P 05 49 42.6 -0.4
baz=49
AGMN **Agassiz Nation** 48.95 60 eP P 05 49 43.4 +0.4
comp=Z,12nm,0.8s
I29A **Vivian Onida** 48.95 67 P P 05 49 42.9 -0.1
baz=49
K28A **Ten Mile Ranch** 49.11 69 P P 05 49 44.1 -0.3
baz=49
J29A **Okreek** 49.31 68 P P 05 49 46.3 +0.5
baz=49,SNR=5.3
C33A **Trail** 49.31 61 P P 05 49 45.2 -0.5
baz=49
MOY **Mondy** 49.32 305 eP P 05 49 45.7 -0.2
MOY pmax pmax
comp=Z,22nm,2.2s
TIA **Tai'an** 49.36 280 ⇑P P 05 49 45.9 -0.4
TIA pP pP 05 49 53.9 -2.2
TIA sP sP 05 50 01.1 +1.1
TIA LN
comp=Z,2μm,21.4s
TIA LE
comp=Z,4μm,14.8s
TIA LZ
comp=Z,3μm,13.1s
O26A **Horse Wrangler** 49.47 73 P P 05 49 47.3 +0.1
baz=49
SUSD **South Dakota S** 49.48 66 P P 05 49 46.5 -0.5
baz=49
B34A **Aery, Baudette** 49.50 60 P P 05 49 46.0 -1.2
baz=49,SNR=9.0
N27A **Anderson Farm,** 49.58 72 P P 05 49 47.4 -0.7
baz=49
D33A **AnnSam, Waubun** 49.63 62 P P 05 49 47.3 -0.9
baz=50,SNR=5.5
K29A **Lazy Trails An** 49.70 69 P P 05 49 49.2 +0.4
baz=50
SDCO **Great Sand Dun** 49.70 77 P P 05 49 49.7 +0.5
baz=50
SDCO **Great Sand Dun** 49.70 77 eP P 05 49 48.9 -0.4
comp=Z,7.9nm,1.2s
H31A **Wolsey** 49.73 66 P P 05 49 48.1 -0.9
baz=50
OGNE **Ogallala** 49.80 72 P P 05 49 49.0 -0.7
baz=50
HHC **Hu-ho-hao-te** 49.82 288 eP P 05 49 50.6 +0.7
HHC sP sP 05 50 02.3 -1.2
HHC S S 05 56 55.5 -1.7
HHC sS sS 05 57 14.6 +1.3
HHC PMZ
comp=Z,35nm,1.2s
HHC PMZ
comp=Z,220nm,6.1s
HHC LN
comp=Z,2μm,17.3s
HHC LE
comp=Z,780nm,16.3s
HHC LZ
comp=Z,2μm,18.6s
J30A **Dallas** 49.84 68 P P 05 49 48.5 -1.4
baz=50
P26A **Davis Ranch, A** 49.87 74 P P 05 49 50.2 -0.1
baz=50
M28A **Bar X Bar Ranc** 49.91 71 P P 05 49 50.4 -0.1
baz=50
E33A **Westby DABS, E** 49.92 62 P P 05 49 50.5 +0.1
baz=50
O27A **Beecher Island** 50.00 73 P P 05 49 50.3 -0.9
baz=50
D34A **Park Rapids** 50.02 61 P P 05 49 50.1 -1.1
baz=50,SNR=12
F33A **5 Mile Ranch,** 50.16 63 P P 05 49 50.7 -1.4
baz=50
K30A **Basset** 50.16 69 P P 05 49 52.1 -0.3
baz=50
M29A **Burnside Ranch** 50.29 70 P P 05 49 53.9 +0.5
baz=50
J31A **Geddes** 50.30 67 P P 05 49 53.6 +0.3
baz=50
H32A **Carlson Farm,** 50.31 65 P P 05 49 52.8 -0.6
baz=50
C35A **Jirik Farms, M** 50.33 60 P P 05 49 51.8 -1.7
baz=50,SNR=5.8
O28A **Krutsinger Ran** 50.46 72 P P 05 49 54.2 -0.5
baz=50
SPITS **Spitsbergen Ar** 50.56 357 P P 05 49 54.3 -0.6
comp=Z,16nm,0.8s,baz=40,slow=7.9,SNR=20
H33A **Prehn Over Nor** 50.60 65 P P 05 49 54.6 -1.0
baz=50
R26A **Arlington** 50.60 75 P P 05 49 56.3 +0.5
baz=50
KSCO **Kaye Shedlock'** 50.65 74 P P 05 49 56.1 0.0
baz=50
D35A **Remer** 50.66 61 P P 05 49 55.8 -0.1
baz=50,SNR=8.6
K31A **O'Neill** 50.70 68 P P 05 49 56.4 0.0
baz=50
E35A **Pequot Lakes** 50.78 62 P P 05 49 56.3 -0.6
baz=51,SNR=5.7
P28A **Saint Francis** 50.82 73 P P 05 49 57.6 +0.2
baz=51
LAZ **Ladron** 50.86 82 eP P 05 50 00.7 +2.9
comp=Z,4.3nm,1.1s
C36A **Pine Crest Far** 50.91 60 P P 05 49 57.5 -0.3
baz=51,SNR=5.2
ANMO **Albuquerque** 50.92 81 eP P 05 50 01.0 +2.6
ANMO pmax pmax
comp=Z,3.0nm,1.4s
ANMO **Albuquerque** 50.92 81 eP P 05 50 02.2 +3.9
comp=Z,7.8nm,1.5s
L31A **Butterfield Fa** 50.92 69 P P 05 49 58.2 +0.1
baz=51
R27A **Eads** 51.01 75 P P 05 49 59.3 +0.4
baz=51
S26A **Kim** 51.02 76 P P 05 50 00.2 +1.2
baz=51
O29A **4D Ranch, Culb** 51.05 72 P P 05 49 59.8 +0.8
baz=51
D36A **Goodland** 51.08 60 P P 05 49 58.5 -0.6
baz=51
Q28A **Sharon Springs** 51.10 74 P P 05 49 59.5 -0.1
baz=51
F35A **Swanville** 51.10 62 P P 05 49 58.9 -0.5
baz=51
K32A **Verdigre** 51.13 68 P P 05 49 59.6 0.0
baz=51
T26A **Comanche Natio** 51.24 77 P P 05 49 59.9 -0.8
baz=51
ECSD **EROS Data Cent** 51.25 66 P P 05 49 60.0 -0.5
baz=51
ECSD **EROS Data Cent** 51.25 66 eP P 05 49 59.3 -1.2
comp=Z,4.8nm,0.8s
C37A **Embarrass** 51.28 59 P P 05 49 59.9 -0.8
baz=51,SNR=7.6
P29A **Atwood** 51.30 72 P P 05 50 01.1 +0.2
baz=51
J33A **Davis** 51.30 66 P P 05 50 00.5 -0.4
baz=51
M31A **Lambtecht Ranc** 51.36 69 P P 05 50 01.2 -0.1
baz=51
D37A **Cotton** 51.50 60 P P 05 50 01.3 -1.0
baz=51
EYMN **Ely** 51.52 59 P P 05 50 01.4 -1.1
baz=51
R28A **Tribune** 51.57 74 P P 05 50 03.4 +0.4
baz=51
F36A **Milaca** 51.68 62 P P 05 50 02.9 -0.8
baz=52
121A **Cookes Peak, D** 51.70 84 P P 05 50 06.6 +2.4
baz=52
Q29A **Oakley** 51.72 73 P P 05 50 04.8 +0.6
baz=52
P30A **Selden** 51.74 72 P P 05 50 04.4 +0.2
baz=52
C38A **Sawbill Land.** 51.78 59 P P 05 50 02.0 -2.4
baz=52
BGNE **Belgrade** 51.80 69 P P 05 50 04.5 -0.1
baz=52
T27A **Campo** 51.84 76 P P 05 50 05.4 +0.3
baz=52
G36A **St. Michael** 51.94 63 P P 05 50 04.9 -0.7
baz=52
S28A **Manter** 52.00 75 P P 05 50 07.5 +1.2
baz=52
Q30A **Quinter** 52.12 73 P P 05 50 08.0 +0.9
baz=52
T28A **Walsh** 52.17 76 P P 05 50 07.8 +0.3
baz=52
U27A **Thompson Grove** 52.19 77 P P 05 50 08.8 +1.1
baz=52
K34A **Le Mars** 52.20 66 P P 05 50 06.9 -0.7
baz=52
M33A **Taylor Creek F** 52.26 68 P P 05 50 08.9 +0.8
baz=52
P31A **Stockton** 52.27 72 P P 05 50 08.4 +0.2
baz=52
SPMN **St. Paul** 52.48 62 P P 05 50 09.2 -0.4
baz=52
L34A **Svendsen Farm,** 52.49 67 P P 05 50 09.8 +0.1
baz=52
CBKS **Cedar Bluff** 52.51 72 eP P 05 50 10.2 +0.2
CBKS pmax pmax
comp=Z,16nm,0.7s
CBKS **Cedar Bluff** 52.51 72 P P 05 50 10.6 +0.6
baz=52
CBKS **Cedar Bluff** 52.51 72 eP P 05 50 10.2 +0.2
comp=Z,16nm,0.7s
R30A **Dighton** 52.53 73 P P 05 50 11.2 +1.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=52 | | | | | | |
| Q31A | Ellis | 52.59 | 72 | P | P | 05 50 11.2 | +0.6 |
| | baz=52 | | | | | | |
| P32A | Huiting Farm, | 52.67 | 71 | P | P | 05 50 10.9 | -0.2 |
| | baz=52 | | | | | | |
| SUMG | Summit | 52.79 | 15 | eP | P | 05 50 11.5 | -0.5 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| SUMG | Summit | 52.79 | 15 | eP | P | 05 50 11.5 | -0.5 |
| | comp=Z,14nm,1.0s | | | | | | |
| S30A | Montezuma | 52.83 | 74 | P | P | 05 50 12.2 | -0.2 |
| | baz=53 | | | | | | |
| R31A | Burdett | 52.98 | 73 | P | P | 05 50 13.5 | 0.0 |
| | baz=53 | | | | | | |
| Q32A | Meitler Ranch, | 53.10 | 72 | P | P | 05 50 13.9 | -0.4 |
| | baz=53 | | | | | | |
| HVS | Khovu-Aksy | 53.30 | 308 | eP | P | 05 50 15.0 | -0.7 |
| HVS | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| R32A | Long Quarter, | 53.38 | 72 | P | P | 05 50 15.7 | -0.7 |
| | baz=53 | | | | | | |
| O34A | Beatrice | 53.44 | 69 | P | P | 05 50 17.1 | +0.3 |
| | baz=53 | | | | | | |
| U30A | WK&E Inc. Balk | 53.45 | 75 | P | P | 05 50 17.3 | +0.3 |
| | baz=53 | | | | | | |
| Q33A | Connelly Farm, | 53.53 | 71 | P | P | 05 50 17.0 | -0.4 |
| | baz=53 | | | | | | |
| N35A | Tabor | 53.61 | 68 | P | P | 05 50 17.6 | -0.4 |
| | baz=53 | | | | | | |
| T31A | Randall Ranch, | 53.66 | 74 | P | P | 05 50 18.7 | +0.2 |
| | baz=54 | | | | | | |
| MNTX | Cornudas Mount | 53.76 | 83 | P | P | 05 50 19.8 | +0.5 |
| | baz=54 | | | | | | |
| MNTX | Cornudas Mount | 53.76 | 83 | eP | P | 05 50 19.3 | 0.0 |
| | comp=Z,5.2nm,0.9s | | | | | | |
| P34A | Walnut Farm, R | 53.77 | 70 | P | P | 05 50 18.6 | -0.6 |
| | baz=54 | | | | | | |
| X28A | Dimmitt | 53.83 | 78 | P | P | 05 50 19.9 | 0.0 |
| | baz=54 | | | | | | |
| MSTX | Muleshoe | 53.85 | 79 | P | P | 05 50 19.8 | -0.2 |
| | baz=54 | | | | | | |
| Q34A | Chapman | 54.11 | 71 | P | P | 05 50 21.9 | +0.2 |
| | baz=54 | | | | | | |
| KSU1 | Kansas State U | 54.19 | 70 | P | P | 05 50 19.1 | -3.1 |
| | baz=54 | | | | | | |
| P35A | Duane Minner, | 54.26 | 69 | P | P | 05 50 22.5 | -0.2 |
| | baz=54 | | | | | | |
| R34A | Isabella, Hill | 54.33 | 71 | P | P | 05 50 23.6 | +0.3 |
| | baz=54 | | | | | | |
| O36A | Bolckow | 54.48 | 68 | P | P | 05 50 23.7 | -0.7 |
| | baz=54 | | | | | | |
| Z28A | Tucker Farm, M | 54.54 | 79 | P | P | 05 50 24.0 | -1.1 |
| | baz=54 | | | | | | |
| P36A | Good Intent, A | 54.67 | 69 | P | P | 05 50 25.5 | -0.3 |
| | baz=54 | | | | | | |
| 128A | Castleberry Fa | 54.93 | 80 | P | P | 05 50 28.6 | +0.7 |
| | baz=55 | | | | | | |
| R35A | Emporia Munici | 54.94 | 71 | P | P | 05 50 27.6 | -0.1 |
| | baz=55 | | | | | | |
| Z29A | Hungry Hill Ra | 54.98 | 79 | P | P | 05 50 29.1 | +0.9 |
| | baz=55 | | | | | | |
| U33A | Lingo Farm, Me | 55.04 | 74 | P | P | 05 50 28.8 | +0.3 |
| | baz=55 | | | | | | |
| X31A | McDonald Ranch | 55.12 | 76 | P | P | 05 50 29.0 | 0.0 |
| | baz=55 | | | | | | |
| T34A | McClaskey Farm | 55.21 | 72 | P | P | 05 50 30.2 | +0.5 |
| | baz=55 | | | | | | |
| S35A | Otter Creek Ra | 55.29 | 71 | P | P | 05 50 29.6 | -0.6 |
| | baz=55 | | | | | | |
| Z30A | Sanderson Ranc | 55.32 | 78 | P | P | 05 50 30.5 | -0.1 |
| | baz=55 | | | | | | |
| R36A | Gordon, Harris | 55.35 | 70 | P | P | 05 50 30.2 | -0.4 |
| | baz=55 | | | | | | |
| U34A | Anderson Ranch | 55.39 | 73 | P | P | 05 50 29.9 | -1.0 |
| | baz=55 | | | | | | |
| U34A | Anderson Ranch | 55.39 | 73 | eP | P | 05 50 30.7 | -0.2 |
| | comp=Z,21nm,1.0s | | | | | | |
| Q37A | Longview Farm, | 55.60 | 69 | P | P | 05 50 32.6 | +0.2 |
| | baz=55 | | | | | | |
| ZALV | Zalesovo Beam | 55.65 | 315 | P | P | 05 50 32.4 | -0.2 |
| | comp=Z,0.9nm,0.4s,baz=44,slow=6.6,SNR=4.3 | | | | | | |
| ZALV | | | | PcP | PcP | 05 51 32.0 | +0.3 |
| | comp=Z,4.3nm,0.7s,baz=41,slow=4.1,SNR=8.3 | | | | | | |
| T35A | Sooner Cattle | 55.68 | 72 | P | P | 05 50 32.6 | -0.5 |
| | baz=56 | | | | | | |
| W33A | Caddo, Fort Co | 55.68 | 75 | P | P | 05 50 34.0 | +0.9 |
| | baz=56 | | | | | | |
| S36A | Lake Cedric, C | 55.69 | 71 | P | P | 05 50 31.8 | -1.3 |
| | baz=56 | | | | | | |
| NVS | Novosibirsk | 55.75 | 317 | ⇑iP | P | 05 50 31.7 | -1.5 |
| NVS | | | | i | | 05 51 31.4 | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,38nm,2.6s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,19nm,2.5s | | | | | | |
| WMOK | Wichita Mounta | 55.77 | 76 | eP | P | 05 50 33.6 | -0.2 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| WMOK | Wichita Mounta | 55.77 | 76 | eP | P | 05 50 33.6 | -0.2 |
| | comp=Z,4.2nm,0.8s | | | | | | |
| V34A | Guthrie | 55.80 | 74 | P | P | 05 50 33.6 | -0.3 |
| | baz=56 | | | | | | |
| Z31A | Sharp Cattle R | 55.90 | 78 | P | P | 05 50 34.3 | -0.4 |
| | baz=56 | | | | | | |
| T36A | Boggs Farm, Ca | 55.96 | 72 | P | P | 05 50 33.9 | -1.2 |
| | baz=56 | | | | | | |
| S37A | Fort Scott | 56.12 | 70 | P | P | 05 50 34.2 | -2.0 |
| | baz=56 | | | | | | |
| 131A | Roby | 56.19 | 78 | P | P | 05 50 35.5 | -1.3 |
| | baz=56 | | | | | | |
| 230A | Sterling City | 56.28 | 80 | P | P | 05 50 37.0 | -0.5 |
| | baz=56 | | | | | | |
| Z32A | Haskell | 56.32 | 77 | P | P | 05 50 37.5 | -0.1 |
| | baz=56 | | | | | | |
| TXAR | Lajitas Array | 56.46 | 84 | P | P | 05 50 38.3 | -0.5 |
| | comp=Z,1.2nm,0.6s,baz=298,slow=5.1,SNR=18 | | | | | | |
| TXAR | | | | ScP | ScP | 05 55 32.1 | 0.0 |
| | comp=Z,0.7nm,1.0s,baz=249,slow=3.8,SNR=4.3 | | | | | | |
| T37A | Cheneyville 18 | 56.49 | 71 | P | P | 05 50 37.3 | -1.6 |
| | baz=56 | | | | | | |
| 330A | Mertzon | 56.57 | 80 | P | P | 05 50 38.8 | -0.8 |
| | baz=56 | | | | | | |
| W35A | Tecumseh | 56.65 | 74 | P | P | 05 50 39.1 | -0.9 |
| | baz=56 | | | | | | |
| 429A | Davenport Ranc | 56.67 | 81 | P | P | 05 50 39.3 | -0.9 |
| | baz=56 | | | | | | |
| ABTX | Abilene, Hawle | 56.68 | 78 | P | P | 05 50 43.9 | +3.6 |
| | baz=56 | | | | | | |
| Z33A | Whitaker Ranch | 56.77 | 77 | P | P | 05 50 40.0 | -0.8 |
| | baz=57 | | | | | | |
| V36A | Jenks | 56.78 | 73 | P | P | 05 50 39.6 | -1.3 |
| | baz=57 | | | | | | |
| TUL1 | Tulsa | 56.78 | 73 | P | P | 05 50 40.6 | -0.4 |
| | baz=57 | | | | | | |
| 529A | Stev Forest Ra | 56.81 | 82 | P | P | 05 50 40.8 | -0.5 |
| | baz=57 | | | | | | |
| U37A | Salina | 56.85 | 72 | P | P | 05 50 40.6 | -0.8 |
| | baz=57 | | | | | | |
| Y34A | Reagan Ranch, | 56.92 | 76 | P | P | 05 50 41.3 | -0.6 |
| | baz=57 | | | | | | |
| 430A | Baggett Ranch, | 56.96 | 81 | P | P | 05 50 42.4 | 0.0 |
| | baz=57 | | | | | | |
| W36A | Wetumka | 57.05 | 74 | P | P | 05 50 42.9 | +0.1 |
| | baz=57 | | | | | | |
| X35A | Drake | 57.10 | 75 | P | P | 05 50 42.8 | -0.4 |
| | baz=57 | | | | | | |
| 331A | San Angelo | 57.10 | 80 | P | P | 05 50 42.5 | -0.8 |
| | baz=57 | | | | | | |
| 133A | Hamilton Ranch | 57.14 | 78 | P | P | 05 50 43.8 | +0.3 |
| | baz=57 | | | | | | |
| 232A | Coleman | 57.18 | 79 | P | P | 05 50 43.3 | -0.6 |
| | baz=57 | | | | | | |
| V37A | Hulbert | 57.19 | 72 | P | P | 05 50 43.5 | -0.4 |
| | baz=57 | | | | | | |
| U38A | Gravette | 57.27 | 71 | P | P | 05 50 42.9 | -1.5 |
| | baz=57 | | | | | | |
| 530A | J-C Ranch, Com | 57.34 | 81 | P | P | 05 50 44.8 | -0.2 |
| | baz=57 | | | | | | |
| X36A | Centrahoma | 57.36 | 74 | P | P | 05 50 45.9 | +0.9 |
| | baz=57 | | | | | | |
| 431A | Sonora | 57.42 | 80 | P | P | 05 50 45.3 | -0.3 |
| | baz=57 | | | | | | |
| HDIL | Hopedale | 57.46 | 64 | P | P | 05 50 44.4 | -1.2 |
| | baz=57 | | | | | | |
| 332A | Millersview | 57.47 | 79 | P | P | 05 50 45.4 | -0.5 |
| | baz=57 | | | | | | |
| W37A | Quinton | 57.53 | 73 | P | P | 05 50 45.9 | -0.3 |
| | baz=57 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 233A | Rising Star | 57.55 | 78 | P | P | 05 50 46.8 | +0.4 |
| | baz=57 | | | | | | |
| GTA | Gaotai | 57.63 | 294 | ⇑P | P | 05 50 46.4 | -0.6 |
| GTA | | | | pP | pP | 05 50 56.6 | -0.4 |
| GTA | | | | sP | sP | 05 51 00.6 | -0.2 |
| GTA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| V38A | Canehill | 57.65 | 72 | P | P | 05 50 46.3 | -0.8 |
| | baz=58 | | | | | | |
| 134A | White-Moore Ra | 57.67 | 77 | P | P | 05 50 47.5 | +0.3 |
| | baz=58 | | | | | | |
| 531A | Rocksprings | 57.82 | 81 | P | P | 05 50 47.5 | -0.9 |
| | baz=58 | | | | | | |
| Y36A | Durant | 57.85 | 75 | P | P | 05 50 49.2 | +0.6 |
| | baz=58 | | | | | | |
| X37A | Clayton | 57.94 | 73 | P | P | 05 50 47.6 | -1.5 |
| | baz=58 | | | | | | |
| 333A | Richland Sprin | 57.98 | 79 | P | P | 05 50 50.3 | +0.8 |
| | baz=58 | | | | | | |
| 234A | Clairette | 58.03 | 78 | P | P | 05 50 49.8 | 0.0 |
| | baz=58 | | | | | | |
| JCT | Junction City | 58.06 | 80 | eP | P | 05 50 49.6 | -0.5 |
| JCT | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| JCT | Junction City | 58.06 | 80 | P | P | 05 50 50.4 | +0.3 |
| | baz=58 | | | | | | |
| JCT | Junction City | 58.06 | 80 | eP | P | 05 50 49.5 | -0.5 |
| | comp=Z,3.9nm,0.7s | | | | | | |
| W38A | Poteau | 58.12 | 72 | P | P | 05 50 50.1 | -0.3 |
| | baz=58 | | | | | | |
| Z36A | Blue Ridge | 58.20 | 75 | P | P | 05 50 51.3 | +0.4 |
| | baz=58 | | | | | | |
| X38A | Whitesboro | 58.21 | 73 | P | P | 05 50 51.1 | +0.1 |
| | baz=58 | | | | | | |
| 532A | Rocksprings | 58.25 | 80 | P | P | 05 50 50.7 | -0.6 |
| | baz=58 | | | | | | |
| 433A | Art | 58.31 | 79 | P | P | 05 50 50.7 | -1.1 |
| | baz=58 | | | | | | |
| 631A | Perdido Creek | 58.33 | 81 | P | P | 05 50 51.5 | -0.4 |
| | baz=58 | | | | | | |
| 334A | Lometa | 58.43 | 78 | P | P | 05 50 52.7 | +0.1 |
| | baz=58 | | | | | | |
| WHTX | Lake Whitney | 58.46 | 77 | P | P | 05 50 53.1 | +0.3 |
| | baz=58 | | | | | | |
| ARCES | ARCESS Array B | 58.49 | 352 | P | P | 05 50 50.7 | -1.7 |
| | comp=Z,4.1nm,0.8s,baz=10,slow=7.4,SNR=6.6 | | | | | | |
| ARCES | | | | PcP | PcP | 05 51 42.0 | -0.6 |
| | comp=Z,11nm,0.8s,baz=358,slow=4.1,SNR=10 | | | | | | |
| SCHQ | Schefferville | 58.64 | 40 | P | P | 05 50 53.4 | -0.3 |
| | comp=Z,8.8nm,0.8s,baz=327,slow=6.8,SNR=5.4 | | | | | | |
| 434A | Burnet | 58.78 | 79 | P | P | 05 50 55.2 | +0.2 |
| | baz=59 | | | | | | |
| SFIN | Scholer Farm | 58.81 | 63 | P | P | 05 50 54.9 | -0.2 |
| | baz=59 | | | | | | |
| SFIN | Scholer Farm | 58.81 | 63 | eP | P | 05 50 54.6 | -0.5 |
| | comp=Z,10nm,0.6s | | | | | | |
| 533A | Kerrville | 58.82 | 80 | P | P | 05 50 54.7 | -0.6 |
| | baz=59 | | | | | | |
| MIAR | Mount Ida | 59.04 | 72 | eP | P | 05 50 56.1 | -0.7 |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| MIAR | Mount Ida | 59.04 | 72 | P | P | 05 50 56.5 | -0.2 |
| | baz=59 | | | | | | |
| MIAR | Mount Ida | 59.04 | 72 | eP | P | 05 50 56.1 | -0.7 |
| | comp=Z,17nm,1.0s | | | | | | |
| 137A | Heron Place, G | 59.07 | 75 | P | P | 05 50 56.2 | -0.8 |
| | baz=59 | | | | | | |
| 732A | Laxson Ranch, | 59.19 | 82 | P | P | 05 50 57.9 | 0.0 |
| | baz=59 | | | | | | |
| 534A | Blanco | 59.20 | 79 | P | P | 05 50 58.0 | 0.0 |
| | baz=59 | | | | | | |
| OLIL | Olney | 59.37 | 65 | eP | P | 05 50 58.3 | -0.6 |
| | comp=Z,8.1nm,0.4s | | | | | | |
| 832A | Faith Ranch, C | 59.50 | 82 | P | P | 05 50 59.4 | -0.6 |
| | baz=59 | | | | | | |
| 733A | Divot King Ran | 59.61 | 81 | P | P | 05 51 00.8 | 0.0 |
| | baz=60 | | | | | | |
| 833A | Chaparral WMA, | 59.83 | 81 | P | P | 05 51 02.3 | +0.1 |
| | baz=60 | | | | | | |
| 635A | Leesville | 60.08 | 79 | P | P | 05 51 04.1 | +0.1 |
| | baz=60 | | | | | | |
| USIN | University of | 60.14 | 66 | eP | P | 05 51 05.5 | +1.2 |
| | comp=Z,40nm,1.0s | | | | | | |
| KURK | Kurchatov | 60.63 | 316 | eP | P | 05 51 06.8 | -0.6 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,23nm,0.6s | | | | | | |
| KURK | Kurchatov | 60.63 | 316 | eP | P | 05 51 06.8 | -0.6 |
| | comp=Z,23nm,0.6s | | | | | | |
| WCI | Wyandotte Cave | 60.74 | 64 | eP | P | 05 51 07.3 | -1.1 |
| WCI | | | | pmax | pmax | | |
| | comp=Z,28nm,0.7s | | | | | | |
| WCI | Wyandotte Cave | 60.74 | 64 | eP | P | 05 51 07.3 | -1.1 |
| | comp=Z,28nm,0.7s | | | | | | |
| 340A | Bronson | 61.03 | 75 | P | P | 05 51 11.4 | +0.9 |
| | baz=61 | | | | | | |
| CD2 | Chengdu | 61.15 | 284 | eP | P | 05 51 12.0 | +0.7 |
| WMQ | Urumqi | 61.21 | 305 | P | P | 05 51 12.0 | +0.4 |
| WMQ | | | | pP | pP | 05 51 22.0 | +0.4 |
| WMQ | | | | PMZ | | | |
| | comp=Z,24nm,0.8s | | | | | | |
| WVT | Waverly | 61.32 | 67 | eP | P | 05 51 12.1 | -0.3 |
| WVT | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| WVT | Waverly | 61.32 | 67 | eP | P | 05 51 12.1 | -0.3 |
| | comp=Z,5.9nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 61.78 | 310 | P | P | 05 51 14.5 | -0.8 |
| | comp=Z,8.5nm,0.7s,baz=56,slow=6.3,SNR=54 | | | | | | |
| BVAR | Borovoye Array | 62.33 | 322 | P | P | 05 51 17.9 | -1.0 |
| | comp=Z,10nm,0.6s,baz=53,slow=7.6,SNR=38 | | | | | | |
| BRVK | Borovoye | 62.35 | 322 | eP | P | 05 51 18.1 | -0.9 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| BRVK | Borovoye | 62.35 | 322 | eP | P | 05 51 19.1 | +0.1 |
| | comp=Z,4.6nm,0.6s | | | | | | |
| BORG | Borgarnes | 62.51 | 12 | P | P | 05 51 18.6 | -1.3 |
| | comp=Z,12nm,0.8s,baz=315,slow=11,SNR=3.2 | | | | | | |
| SSPA | Standing Stone | 63.65 | 57 | eP | P | 05 51 27.7 | -0.1 |
| | comp=Z,66nm,0.7s | | | | | | |
| ARU | Arti | 63.78 | 330 | P | P | 05 51 27.8 | -0.6 |
| | comp=Z,1.8nm,0.2s,baz=73,slow=19,SNR=2.1 | | | | | | |
| ARU | Arti | 63.78 | 330 | eP | P | 05 51 27.8 | -0.6 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| ARU | Arti | 63.78 | 330 | eP | P | 05 51 27.9 | -0.6 |
| | comp=Z,5.4nm,0.4s | | | | | | |
| BLA | Blacksburg | 64.75 | 62 | eP | P | 05 51 35.5 | +0.3 |
| BLA | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| BLA | Blacksburg | 64.75 | 62 | eP | P | 05 51 35.5 | +0.3 |
| | comp=Z,16nm,0.9s | | | | | | |
| KMSC | Kings Mountain | 65.73 | 64 | P | P | 05 51 41.3 | -0.3 |
| | baz=66 | | | | | | |
| KMSC | Kings Mountain | 65.73 | 64 | eP | P | 05 51 41.2 | -0.3 |
| | comp=Z,11nm,0.7s | | | | | | |
| GOGA | Godfrey | 65.78 | 66 | eP | P | 05 51 41.2 | -0.6 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| GOGA | Godfrey | 65.78 | 66 | eP | P | 05 51 41.2 | -0.6 |
| | comp=Z,11nm,1.0s | | | | | | |
| KMI | Kunming | 65.92 | 281 | P | P | 05 51 41.7 | -1.4 |
| KMI | | | | PMZ | | | |
| | comp=Z,24nm,1.9s | | | | | | |
| QIZ | Qiongzhong | 65.98 | 271 | P | P | 05 51 36.7 | -6.6 |
| QIZ | | | | S | S | 06 00 29.4 | +0.7 |
| QIZ | | | | pmax | pmax | | |
| | comp=Z,49nm,2.5s | | | | | | |
| FINES | FINESS Array B | 66.29 | 349 | P | P | 05 51 43.1 | -1.6 |
| | comp=Z,2.8nm,0.8s,baz=46,slow=5.5,SNR=4.8 | | | | | | |
| FINES | FINESS Array B | 66.29 | 349 | i P | P | 05 51 45.7 | +1.1 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| TKM2 | Tokmak 2 | 67.83 | 311 | eP | P | 05 51 54.9 | -0.1 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| TKM2 | Tokmak 2 | 67.83 | 311 | P | P | 05 51 55.1 | 0.0 |
| | SNR=14 | | | | | | |
| TKM2 | Tokmak 2 | 67.83 | 311 | eP | P | 05 51 54.9 | -0.1 |
| | comp=Z,12nm,0.9s | | | | | | |
| NB2 | NORSAR Subarra | 67.86 | 357 | P | P | 05 51 53.9 | -0.8 |
| | comp=Z,2.5nm,0.5s,baz=6.2,slow=6.9 | | | | | | |
| NOA | NORSAR Array B | 67.86 | 357 | P | P | 05 51 54.1 | -0.6 |
| | comp=Z,4.5nm,0.9s,baz=4.3,slow=6.4,SNR=11 | | | | | | |
| USP | Ospenovka | 68.08 | 312 | P | P | 05 51 57.2 | +0.8 |
| | SNR=14 | | | | | | |
| KBK | Karagaybulak | 68.34 | 312 | P | P | 05 51 59.0 | +0.8 |
| | SNR=7.7 | | | | | | |
| FRU | Bishkek | 68.36 | 312 | eP | P | 05 51 57.0 | -1.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| AAK | Ala-Archa | 68.57 | 312c | iP | P | 05 51 59.8 | +0.2 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,35nm,0.9s | | | | | | |
| AAK | Ala-Archa | 68.57 | 312 | P | P | 05 52 00.4 | +0.7 |
| | SNR=17 | | | | | | |
| AAK | Ala-Archa | 68.57 | 312 | eP | P | 05 52 00.1 | +0.4 |
| | comp=Z,21nm,0.9s | | | | | | |
| KZA | Kyzart | 68.65 | 311 | P | P | 05 52 01.3 | +0.9 |
| | SNR=7.9 | | | | | | |
| UCH | Uchtor | 68.88 | 312 | P | P | 05 52 02.5 | +0.6 |
| | SNR=5.7 | | | | | | |
| EKS2 | Erkin-Say | 68.89 | 312 | eP | P | 05 52 02.0 | +0.5 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| EKS2 | Erkin-Say | 68.89 | 312 | P | P | 05 52 02.3 | +0.7 |
| | SNR=22 | | | | | | |
| EKS2 | Erkin-Say | 68.89 | 312 | eP | P | 05 52 02.0 | +0.5 |
| | comp=Z,20nm,0.8s | | | | | | |
| AKTO | Aktyubinsk | 68.97 | 327 | P | P | 05 52 01.5 | -0.3 |
| | comp=Z,4.8nm,0.6s,baz=63,slow=7.1,SNR=13 | | | | | | |
| VSU | Vasula | 69.10 | 348 | eP | P | 05 52 01.1 | -1.3 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,44nm,1.0s | | | | | | |
| ABKAR | Akbulak array | 69.29 | 325 | eP | P | 05 52 03.7 | 0.0 |
| | comp=Z,7.5nm,0.8s | | | | | | |
| AML | Almayashu | 69.34 | 312 | P | P | 05 52 05.8 | +1.2 |
| | SNR=7.7 | | | | | | |
| KKAR | Karatay Array | 70.02 | 315 | eP | P | 05 52 08.0 | -0.4 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| KKAR | Karatay Array | 70.02 | 315 | eP | P | 05 52 08.0 | -0.4 |
| | comp=Z,9.8nm,0.5s | | | | | | |
| KSH | Kashi | 70.28 | 309 | P | P | 05 52 13.8 | +3.6 |
| KSH | | | | esP | sP | 05 52 28.1 | +4.0 |
| KSH | | | | ePcP | PcP | 05 52 35.1 | +3.3 |
| KSH | | | | S | S | 06 01 21.3 | +1.5 |
| KSH | | | | SKS | SKSac | 06 02 08.0 | -1.2 |
| KSH | | | | SS | SS | 06 05 55.5 | +5.9 |
| KSH | | | | PMZ | | | |
| | comp=Z,26nm,0.7s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,400nm,7.1s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,960nm,14.9s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,1μm,15.6s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,1μm,16.8s | | | | | | |
| OBN | Obninsk | 70.66 | 341c | eP | P | 05 52 11.6 | -0.4 |
| OBN | | | | e | | 05 52 33.3 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,757nm,18.0s | | | | | | |
| LPSR | Galich'ya Gora | 72.51 | 339 | eP | P | 05 52 23.6 | +0.4 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.5s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.0s | | | | | | |
| VRH | Novokhopyorsk | 73.14 | 337 | eP | P | 05 52 26.0 | -1.0 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,9.0nm,0.9s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.9s | | | | | | |
| EKA | Eskdalemuir Ar | 73.50 | 5 | P | P | 05 52 29.1 | 0.0 |
| | comp=E,8.3nm,0.9s,baz=21,slow=5.4,SNR=8.8 | | | | | | |
| VSR | Storozhevoye | 73.74 | 338 | eP | P | 05 52 30.3 | -0.2 |
| VSR | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| VORD | Divnogorie | 73.95 | 338 | eP | P | 05 52 31.8 | +0.1 |
| VORD | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.2s | | | | | | |
| AKASG | Malin Array Be | 76.24 | 344 | P | P | 05 52 43.4 | -1.5 |
| | comp=E,1.7nm,0.4s,baz=14,slow=5.7,SNR=7.2 | | | | | | |
| AKASG | Malin Array Be | 76.24 | 344 | i P | P | 05 52 44.4 | -0.5 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| KIEV | Kiev | 76.25 | 344 | eP | P | 05 52 44.2 | -0.8 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| CLL | Collm | 77.50 | 355 | eP | P | 05 52 51.0 | -1.0 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| CLL | Collm | 77.50 | 355 | eP | P | 05 52 51.0 | -1.0 |
| | comp=Z,7.0nm,0.7s | | | | | | |
| BRG | Berggiesshubel | 77.87 | 354 | eP | P | 05 52 53.8 | -0.3 |
| | comp=Z,6.0nm,0.7s | | | | | | |
| BRG | Berggiesshubel | 77.87 | 354 | eP | P | 05 52 53.8 | -0.3 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| DPC | Dobruska-Polom | 78.22 | 352 | eP | P | 05 52 55.5 | -0.6 |
| DPC | | | | e | | 05 53 08.4 | |
| DPC | Dobruska-Polom | 78.22 | 352 | eP | P | 05 52 55.5 | -0.6 |
| DPC | | | | epP | pP | 05 53 08.4 | +2.0 |
| MEM | Membach | 78.43 | 359 | P | P | 05 52 58.0 | +0.7 |
| NKC | Novy Kostel | 78.60 | 355 | eP | P | 05 52 58.1 | -0.1 |
| NKC | Novy Kostel | 78.60 | 355 | eP | P | 05 52 58.1 | -0.1 |
| STHS | Stebnicka Huta | 78.65 | 349 | eP | P | 05 52 58.3 | -0.2 |
| STHS | Stebnicka Huta | 78.65 | 349 | eP | P | 05 52 58.2 | -0.2 |
| PRU | Pruhonice | 78.71 | 354 | eP | P | 05 52 59.7 | +0.9 |
| PRU | Pruhonice | 78.71 | 354 | eP | P | 05 52 59.7 | +0.9 |
| LANS | Liptovska Anna | 79.11 | 350 | eP | P | 05 53 01.8 | +0.8 |
| LANS | Liptovska Anna | 79.11 | 350 | eP | P | 05 53 01.8 | +0.8 |
| GEYT | Alibeck | 79.59 | 320 | P | P | 05 53 04.8 | +0.9 |
| | comp=Z,18nm,0.9s,baz=338,slow=3.5,SNR=14 | | | | | | |
| KHC | Kasperske Hory | 79.63 | 354 | eP | P | 05 53 04.1 | +0.2 |
| KHC | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| KHC | Kasperske Hory | 79.63 | 354 | eP | P | 05 53 04.1 | +0.2 |
| KHC | | | | epP | pP | 05 53 16.2 | +2.0 |
| KHC | Kasperske Hory | 79.63 | 354 | eP | P | 05 53 04.0 | +0.2 |
| | comp=Z,1.3nm,0.8s | | | | | | |
| KBZ | Khabaz | 79.70 | 333 | P | P | 05 53 04.9 | +0.6 |
| | comp=Z,1.9nm,0.6s,baz=333,slow=9.0,SNR=3.5 | | | | | | |
| VYHS | Vyhne | 79.82 | 351 | eP | P | 05 53 04.4 | -0.5 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.3s | | | | | | |
| VYHS | Vyhne | 79.82 | 351 | eP | P | 05 53 04.4 | -0.5 |
| GERES | GERESS Array B | 79.91 | 354 | P | P | 05 53 05.3 | -0.1 |
| | comp=Z,2.6nm,0.9s,baz=18,slow=4.6,SNR=12 | | | | | | |
| BNI | Bardonecchia | 83.98 | 359 | eP | P | 05 53 27.9 | +0.9 |
| | comp=Z,16nm,1.1s | | | | | | |
| PSI | Prapat | 85.21 | 268 | P | P | 05 53 32.9 | -0.7 |
| | comp=Z,22nm,0.8s,baz=15,slow=2.9,SNR=3.8 | | | | | | |
| BRTR | Keskin Array B | 85.87 | 338 | P | P | 05 53 36.9 | +0.3 |
| | comp=Z,4.3nm,0.8s,baz=37,slow=2.4,SNR=15 | | | | | | |
| BRTR | Keskin Array B | 85.87 | 338 | i P | P | 05 53 37.2 | +0.6 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| ESDC | Sonseca Array | 89.05 | 7 | P | P | 05 53 51.4 | -0.4 |
| | comp=Z,2.5nm,0.8s,baz=350,slow=4.7,SNR=8.8 | | | | | | |
| TORD | Torodi Ar. Bea | 115.74 | 3 | PKP | PKPdf | 05 59 38.4 | -0.9 |
| | comp=Z,0.6nm,0.5s,baz=346,slow=2.8,SNR=9.7 | | | | | | |
| DBIC | Dimbokro | 121.64 | 11 | PKP | PKPdf | 05 59 52.4 | +1.7 |
| | comp=Z,1.3nm,0.4s,baz=313,slow=1.8,SNR=5.5 | | | | | | |
| MATP | Matopo | 143.97 | 320 | PKP | PKPbc | 06 00 30.4 | +0.2 |
| | comp=Z,22nm,0.8s,baz=21,slow=3.0,SNR=18 | | | | | | |
| MAW | Mawson | 147.80 | 218 | PKPbc | PKPbc | 06 00 38.8 | -1.3 |
| | comp=Z,5.1nm,0.8s,baz=105,slow=6.3,SNR=6.6 | | | | | | |
| LBTB | Lobatse | 149.25 | 321 | PKPbc | PKPbc | 06 00 45.5 | +0.2 |
| | comp=Z,16nm,0.8s,baz=23,slow=1.0,SNR=14 | | | | | | |
| BOSA | Boshof | 152.57 | 318 | PKPbc | PKPbc | 06 00 53.0 | -0.1 |
| | comp=Z,7.3nm,0.6s,baz=18,slow=2.7,SNR=11 | | | | | | |
| BOSA | Boshof | 152.57 | 318 | PKIKP | PKPbc | 06 00 53.0 | -0.1 |

*BJI **08** 05:43:03.6, 2.°33N×128.°63E, h140km, mb6.0/84, mB6.3/66*

*MOS **08** 05:43:07.2±1.0, 2.°90N×128.°08E, h123km, mb5.8/86, MS5.2/15, Error ellipse: s-maj=7.1km s-min=4.4km az=112.6*

*GCMT **08** 05:43:07.6±0.1, 2.°83N×128.°10E, h136km, MW6.2/133, Moment Tensor Solution. s133,c305; s132,c489; Duration: 2s9 Moment tensor: Scale $10^{18}$Nm;*

$M_{rr}$1.34±.01; $M_{\theta\theta}$0.66±.01; $M_{\phi\phi}$-2.00±.01; $M_{r\theta}$0.97±.01; $M_{\theta\phi}$0.65±.01; $M_{\phi r}$0.52±.01; Best double couple: $M_0$2.18100×$10^{18}$ NP1:$\phi_s$19.00000°,δ60.00000°, λ134.00000°. NP2:$\phi_s$135.00000°,δ52.00000°,λ39.00000°. Principal axes: T 2.1860, Plg52.0000°, Azm342.0000°; N -0.0080, Plg37.0000°, Azm173.0000°; P -2.1760, Plg5.0000°, Azm79.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.

*NEIC* ***08*** *05:43:08.1±0.1, 2°.83N×128°.22E, h120km, mb5.9/151, ME5.5, MW6.1, MW6.1, MW6.1 Error ellipse: s-maj=3.4km s-min=2.8km az=83.0, Moment Tensor Solution. s17 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$0.88; $M_{\theta\theta}$-0.20; $M_{\phi\phi}$-0.68; $M_{r\theta}$0.69; $M_{\theta\phi}$0.22; $M_{\phi r}$1.11; Best double couple: $M_0$1.50000×$10^{18}$ NP1:$\phi_s$154.00000°,δ20.00000°, λ45.00000°. NP2:$\phi_s$21.00000°,δ76.00000°,λ105.00000°. Principal axes: T 1.7200, Plg57.0000°, Azm310.0000°; N -0.4500, Plg14.0000°, Azm197.0000°; P -1.2700, Plg29.0000°, Azm99.0000°; Broadband fault plane solution: P waves. NP1:$\phi_s$181.00000°,δ31.00000°, λ73.00000°. NP2:$\phi_s$20.00000°,δ60.00000°,λ100.00000°. Principal axes: T Plg73.0000°, Azm315.0000°; N Plg0.0000°, Azm0.0000°; P Plg14.0000°, Azm103.0000°; Two events about 3 seconds apart. Depth from synthetics of broadband displacement seismograms based on first event. Energy computed from BB mechanism.*

*NEIC Felt [IV] at Galela and Tobelo. Also felt at Manado, Sulawesi and on Pulau Ternate.*

*KLM* ***08*** *05:43:08.2, 2°.88N×128°.39E, h118km, mb6.2, MS6.7*

*ISCJB* ***08*** *05:43:08.9±0.2, 2°.81N±0°.01×128°.22E±0°.01, h143km±2km, mb5.8/232, Error ellipse: s-maj=2.4km s-min=2.0km az=179.0*

*NEIC* ***08*** *05:43:10.0±0.0, 2°.75N×128°.20E, h144km, Moment Tensor Solution. s22 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$1.20; $M_{\theta\theta}$0.66; $M_{\phi\phi}$-1.86; $M_{r\theta}$0.79; $M_{\theta\phi}$0.47; $M_{\phi r}$0.51; Best double couple: $M_0$1.90000×$10^{18}$ NP1:$\phi_s$20.00000°, δ61.00000°,λ132.00000°. NP2:$\phi_s$138.00000°,δ49.00000°, λ38.00000°. Principal axes: T 1.8900, Plg53.0000°, Azm343.0000°; N 0.1000, Plg37.0000°, Azm177.0000°; P -1.9900, Plg7.0000°, Azm82.0000°;*

*DJA* ***08*** *05:43:10.9±0.2, 3°N±2°×12°8E±°, h134km±2km, M5.9/64, mb5.7/64, mB6.2/52, MLv6.2/1, Mw(mB)5.9/52, Mwp6.2/5*

*IDC* ***08*** *05:43:10.1±0.6, 2°.74N×128°.24E, h142km±4km, mb5.3/35, mb1 5.3/40, mb1mx5.3/42, mbtmp5.7/40, MS5.1/14, Ms1 5.2/14, ms1mx5.0/21, Error ellipse: s-maj=8.6km s-min=6.1km az=72.0*

*AUST* ***08*** *05:43:11.2±0.7, 2°.70N×128°.36E, h155km±7km, Error ellipse: s-maj=6.2km s-min=4.5km az=36.0*

*NEIC* ***08*** *05:43:22.3±0.0, 2°.43N×127°.70E, h106km, Moment Tensor Solution. s96 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$1.31; $M_{\theta\theta}$0.62; $M_{\phi\phi}$-1.93; $M_{r\theta}$0.86; $M_{\theta\phi}$0.65; $M_{\phi r}$0.73; Best double couple: $M_0$2.10000×$10^{18}$ NP1:$\phi_s$135.00000°, δ47.00000°,λ38.00000°. NP2:$\phi_s$17.00000°,δ63.00000°, λ131.00000°. Principal axes: T 2.1300, Plg53.0000°, Azm337.0000°; N 0.0400, Plg36.0000°, Azm176.0000°; P -2.1700, Plg9.0000°, Azm80.0000°;*

**ISC 08 05:43:10.0**±0.2**, 2°.76N**±0°.02×**128°.22E**±0°.03**, h141**km±1km**, h141**km**:pP-P, n1635,** σ1s.32/1935**, mb5.9**/242**, 81C-23D, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGSI | Sangihe | 2.84 | 289 | P | Pn | 05 43 53.6 | -1.4 |
| SGSI | | | | S | Sn | 05 44 28.9 | -0.8 |
| LBMI | Labuha | 3.46 | 192 | P | Pn | 05 44 03.6 | +0.6 |
| MATI | Mati | 4.59 | 335 | eP | Pn | 05 44 19.1 | +1.1 |
| MATI | | | | eS | Sn | 05 45 04.2 | -6.5 |
| SWI | Sorong | 4.71 | 140 | P | Pn | 05 44 20.9 | +1.4 |
| | baz=4.6,SNR=219 | | | | | | |
| SWI | Sorong | 4.71 | 140 | P | Pn | 05 44 20.4 | +0.9 |
| SWI | | | | S | Sn | 05 45 13.9 | +0.3 |
| SIJI | Sorong | 4.72 | 140 | P | Pn | 05 44 19.6 | -0.1 |
| | 170nm,0.3s,baz=328,slow=9.2,SNR=217 | | | | | | |
| SIJI | | | | S | Sn | 05 45 10.5 | -3.3 |
| | 614nm,0.3s,baz=236,slow=23,SNR=14 | | | | | | |
| KMSI | Cibinong | 4.76 | 243 | P | Pn | 05 44 19.6 | -0.6 |
| KMSI | | | | S | Sn | 05 45 15.6 | +0.8 |
| DAV | Davao City (W) | 5.02 | 328 | ⇑iP | Pn | 05 44 24.1 | +0.5 |
| DMPH | Davao City--Mi | 5.07 | 328 | ⇑eP | Pn | 05 44 23.5 | -0.8 |
| DMPH | | | | eS | Sn | 05 45 18.8 | -3.3 |
| KCP | Kidapawan | 5.25 | 324 | ⇑eP | Pn | 05 44 26.3 | -0.4 |
| KCP | | | | iS | Sn | 05 45 29.8 | +3.4 |
| SANI | Sanana | 5.28 | 205 | P | Pn | 05 44 25.3 | -1.7 |
| SANI | | | | S | Sn | 05 45 24.6 | -2.5 |
| BIPH | Bislig | 5.69 | 341 | ⇓iP | Pn | 05 44 32.5 | 0.0 |
| BIPH | | | | iS | Sn | 05 45 25.4 | -12 |
| BUKP | Musuan | 5.98 | 328 | eP | Pn | 05 44 35.9 | -0.6 |
| NLAI | Namlea | 6.07 | 191 | P | Pn | 05 44 37.4 | -0.2 |
| | 2µm,0.8s,27µm10nm | | | | | | |
| MSAI | Masohi | 6.11 | 173 | P | Pn | 05 44 41.2 | +3.0 |
| AAI | Ambon | 6.41 | 180 | P | Pn | 05 44 44.1 | +1.9 |
| LUWI | Luwuk | 6.63 | 235 | P | Pn | 05 44 43.9 | -1.2 |
| LUWI | | | | S | Sn | 05 45 59.9 | +0.3 |
| LUWI | Luwuk | 6.63 | 235 | ePn | Pn | 05 44 44.1 | -1.1 |
| MRSI | Marisa | 6.68 | 250 | P | Pn | 05 44 45.8 | +0.1 |
| MRSI | | | | S | Sn | 05 46 00.4 | -0.2 |
| BUTP | Butuan | 6.69 | 337 | eP | Pn | 05 44 46.0 | +0.2 |
| FAKI | Fak Fak | 6.93 | 144 | P | Pn | 05 44 50.0 | +0.8 |
| | baz=6.8,SNR=488 | | | | | | |
| FAKI | Fak Fak | 6.93 | 144 | P | Pn | 05 44 50.6 | +1.4 |
| FAKI | | | | S | Sn | 05 46 06.9 | 0.0 |
| FAKI | Fak Fak | 6.93 | 144 | ePn | Pn | 05 44 50.6 | +1.4 |
| FAKI | | | | eSn | Sn | 05 46 05.6 | -1.3 |
| PAGZ | Pagadian | 6.98 | 317 | eP | Pn | 05 44 48.3 | -1.5 |
| RKPI | Ransiki, Papua | 7.31 | 125 | P | Pn | 05 44 57.9 | +3.6 |
| BNDI | Bandanaira | 7.43 | 167 | P | Pn | 05 44 57.7 | +1.8 |
| SCPH | Surigao | 7.48 | 339 | eP | Pn | 05 44 55.7 | -0.9 |
| SCPH | | | | eS | Px | 05 45 26.8 | |
| APSI | Ampana | 7.52 | 241 | P | Pn | 05 44 55.4 | -1.6 |
| APSI | | | | S | Sn | 05 46 20.8 | -0.1 |
| IPIL | Ipil | 7.52 | 312 | eP | Pn | 05 44 55.2 | -1.9 |
| DCPH | Dipolog City | 7.54 | 320 | ⇑eP | Pn | 05 44 58.0 | +0.6 |
| PALU | Palau | 7.71 | 54 | P | Pn | 05 44 57.9 | -1.8 |
| | baz=7.7,SNR=38 | | | | | | |
| I39PW | PALAU INFRASON | 7.88 | 53 | P | Pn | 05 45 01.7 | -0.3 |
| | baz=199,slow=21 | | | | | | |
| I39PW | | | | S | Sn | 05 46 27.9 | -1.9 |
| | baz=44,slow=388 | | | | | | |
| I39PW | | | | i | | 06 32 20.0 | |
| | baz=229,slow=321,SNR=0.4 | | | | | | |
| MSLP | Maasin | 8.05 | 336 | eP | Pn | 05 45 02.4 | -1.7 |
| MPSI | Mapaga | 8.66 | 254 | P | Pn | 05 45 11.4 | -1.0 |
| KDI | Kendari | 8.71 | 220 | P | Pn | 05 45 11.4 | -1.7 |
| | 6µm,0.7s,57µm79µm | | | | | | |
| PLP | Palo | 8.95 | 339 | ⇓eP | Pn | 05 45 12.1 | -4.1 |
| OCLP | Ormoc | 8.98 | 337 | eP | Pn | 05 45 16.8 | +0.2 |
| PCI | Palu | 9.14 | 247 | P | Pn | 05 45 17.8 | -1.0 |
| | 4µm,1.0s,35µm225µm | | | | | | |
| SRPI | Serui, Papua | 9.24 | 120 | P | Pn | 05 45 22.8 | +2.6 |
| GUIM | Jordan | 9.61 | 325 | eP | Pn | 05 45 24.1 | -0.9 |
| MYLDM | Lahad Datu | 9.99 | 284 | ⇓P | Pn | 05 45 32.7 | +2.6 |
| MYLDM | Lahad Datu | 9.99 | 284 | ePn | Pn | 05 45 32.0 | +1.8 |
| TTSI | Tana Toraja | 10.19 | 236 | P | Pn | 05 45 31.0 | -1.8 |
| RCP | Roxas | 10.29 | 328 | ⇑eP | Pn | 05 45 34.3 | +0.2 |
| TSM | Tawau | 10.44 | 279 | ⇑P | Pn | 05 45 35.6 | -0.5 |
| SPSI | Sidrap Palu | 10.77 | 232 | P | Pn | 05 45 38.3 | -2.2 |
| SPSI | | | | S | Sn | 05 47 36.1 | -3.5 |
| SAUI | Saumlaki | 11.11 | 164 | P | Pn | 05 45 45.5 | +0.5 |
| SAUI | Saumlaki | 11.11 | 164 | ePn | Pn | 05 45 45.2 | +0.2 |
| SDKM | Sandakan | 11.36 | 285 | ⇓P | Pn | 05 45 48.0 | -0.3 |
| BKSI | Bulukumba | 11.40 | 225 | P | Pn | 05 45 47.9 | -0.9 |
| BKSI | | | | S | Sn | 05 47 52.7 | -2.0 |
| KAPI | Kappang | 11.46 | 228 | P | Pn | 05 45 48.9 | -0.6 |
| | 75nm,0.3s,baz=49,slow=5.0,SNR=63 | | | | | | |
| KAPI | | | | S | Sn | 05 47 49.1 | -7.0 |
| | 38nm,0.3s,baz=264,slow=18,SNR=3.3 | | | | | | |
| KAPI | Kappang | 11.46 | 228 | Pn | Pn | 05 45 49.0 | -0.6 |
| | 7µm,0.6s | | | | | | |
| KAPI | Kappang | 11.46 | 228 | P | Pn | 05 45 49.2 | -0.4 |
| | SNR=84 | | | | | | |
| KAPI | Kappang | 11.46 | 228 | ePn | Pn | 05 45 47.9 | -1.7 |
| KAPI | | | | S | Sn | 05 47 49.1 | -7.0 |
| PVCP | Virac | 11.49 | 340 | ⇑iP | Pn | 05 45 50.6 | +0.7 |
| SMPI | Sarmi | 11.50 | 114 | P | Pn | 05 45 52.8 | +2.7 |
| | 440nm,1.2s | | | | | | |
| BSSI | Bau Bau, Buton | 11.74 | 221 | P | Pn | 05 45 52.8 | -0.5 |
| BSSI | | | | S | Sn | 05 48 01.2 | -1.8 |
| BKB | Balikpapan | 12.01 | 251 | P | Pn | 05 45 56.1 | -0.7 |
| KKM | Kota Kinabalu | 12.41 | 286 | P | Pn | 05 46 03.1 | +1.0 |
| | baz=13,SNR=7.3 | | | | | | |
| KKM | Kota Kinabalu | 12.41 | 286 | ⇑P | Pn | 05 46 02.6 | +0.5 |
| KKM | Kota Kinabalu | 12.41 | 286 | ePn | Pn | 05 46 02.4 | +0.3 |
| GQP | Guinayangan | 12.45 | 333 | ⇑eP | Pn | 05 46 02.6 | +0.1 |
| MMRI | Maumere | 12.80 | 208 | P | Pn | 05 46 09.6 | +2.5 |
| MMRI | Maumere | 12.80 | 208 | ePn | Pn | 05 46 07.9 | +0.8 |
| SOEI | Soe | 13.04 | 198 | P | Pn | 05 46 11.5 | +1.1 |
| | baz=13,SNR=24 | | | | | | |
| SOEI | Soe | 13.04 | 198 | P | Pn | 05 46 10.5 | +0.2 |
| SOEI | Soe | 13.04 | 198 | ePn | Pn | 05 46 11.2 | +0.9 |
| LQP | Lukban | 13.06 | 330 | eP | Pn | 05 46 09.6 | -1.1 |
| GENI | Genyem | 13.07 | 114 | P | Pn | 05 46 11.6 | +1.0 |
| EDFI | Ende, Flores | 13.16 | 210 | P | Pn | 05 46 11.8 | 0.0 |
| | 703nm,1.2s,9µm | | | | | | |
| KBKI | Kotabaru | 13.47 | 244 | P | Pn | 05 46 15.1 | -0.6 |
| | 1µm,1.4s,13µm76µm | | | | | | |
| JAY | Jayapura | 13.54 | 113 | P | Pn | 05 46 15.6 | -1.0 |
| | 0.9nm,0.3s,baz=305,slow=7.6,SNR=9.1 | | | | | | |
| JAY | | | | S | Sn | 05 48 45.9 | -0.5 |
| | 1.2nm,0.3s,baz=301,slow=14,SNR=2.2 | | | | | | |
| JAY | | | | LR | LR | 05 50 54.1 | |
| | comp=Z,19µm,20.1s,baz=314,slow=34 | | | | | | |
| JAY | Jayapura | 13.54 | 113 | P | Pn | 05 46 15.6 | -1.0 |
| JAY | | | | S | Sn | 05 48 45.9 | -0.5 |
| JAY | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| JAY | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| JAY | | | | MLR | MLR | | |
| | comp=Z,19µm,20.1s | | | | | | |
| JAY | Jayapura | 13.54 | 113 | P | Pn | 05 46 16.4 | -0.2 |
| | baz=13,SNR=36 | | | | | | |
| JAY | Jayapura | 13.54 | 113 | P | Pn | 05 46 17.6 | +1.0 |
| JAY | Jayapura | 13.54 | 113 | P | Pn | 05 46 15.6 | -1.0 |
| JAY | | | | S | Sn | 05 48 45.9 | -0.5 |
| BATI | Baumata | 13.66 | 199 | P | Pn | 05 46 18.6 | +0.5 |
| | comp=Z,31nm,0.3s,baz=240,slow=1.3,SNR=24 | | | | | | |
| BATI | | | | S | Sn | 05 48 49.7 | +0.4 |
| | comp=Z,5.0nm,0.3s,baz=312,slow=15,SNR=1.4 | | | | | | |
| BATI | Baumata | 13.66 | 199 | P | Pn | 05 46 19.0 | +0.9 |
| BATI | Baumata | 13.66 | 199 | P | Pn | 05 46 18.6 | +0.5 |
| BATI | | | | S | Sn | 05 48 49.7 | +0.4 |
| BALP | Baler | 14.46 | 333 | eP | Pn | 05 46 28.6 | +0.3 |
| PCPH | Palayan | 14.53 | 332 | ⇓eP | Pn | 05 46 27.6 | -1.5 |
| WSI | Waingapu | 14.66 | 212 | P | P | 05 46 33.3 | +0.1 |
| BBKI | Banjar Baru | 14.73 | 245 | P | Pn | 05 46 31.5 | -0.2 |
| BASI | Baing, Sumba | 14.98 | 210 | P | Pn | 05 46 35.4 | +0.7 |
| BTM | Bintulu | 15.12 | 272 | ⇓P | Pn | 05 46 37.2 | +0.6 |
| WBSI | Waikabubak, Su | 15.14 | 215 | P | Pn | 05 46 37.0 | +0.2 |
| SCZP | Santa Cruz | 15.30 | 328 | eP | Pn | 05 46 38.8 | +0.1 |
| SCZP | | | | eS | pP | 05 46 59.7 | -5.0 |
| CAUP | Cauayan | 15.43 | 336 | eP | Pn | 05 46 40.5 | +0.2 |
| MTN | Manton Dam | 15.77 | 170 | P | Pn | 05 46 44.6 | +0.1 |
| | baz=16,SNR=55 | | | | | | |
| MTN | Manton Dam | 15.77 | 170 | ePn | Pn | 05 46 44.7 | +0.1 |
| | comp=Z,369nm,0.5s | | | | | | |
| BOLP | Bolinao | 15.81 | 329 | eP | Pn | 05 46 44.8 | -0.2 |
| KDU | Kakadu | 15.92 | 165 | P | Pn | 05 46 46.5 | +0.1 |
| | baz=16,SNR=124 | | | | | | |
| SBUM | Sibu | 15.99 | 269 | ⇑P | P | 05 46 48.1 | +0.1 |
| SBUM | Sibu | 15.99 | 269 | ePn | Pn | 05 46 46.1 | -1.1 |
| | comp=Z,6µm,2.2s | | | | | | |
| TWSI | Taliwang, Sumb | 16.07 | 225 | P | P | 05 46 49.2 | +0.3 |
| CVP | Callao Caves | 16.12 | 338 | eP | P | 05 46 49.8 | +0.4 |
| SZP | Santa | 16.55 | 333 | eP | Pn | 05 46 53.6 | -0.4 |
| | comp=Z,9µm,1.8s | | | | | | |
| SRBI | Singaraja | 16.87 | 230 | P | Pn | 05 46 58.8 | +0.9 |
| SIPP | Brgy, Tapao | 16.88 | 334 | ⇓eP | Pn | 05 46 58.5 | +0.5 |
| DNP | Denpasar | 17.25 | 229 | P | Pn | 05 47 05.0 | +2.5 |
| KMMI | Kalianget | 17.25 | 236 | P | Pn | 05 47 03.9 | +1.4 |
| IGBI | Denpasar | 17.39 | 228 | P | Pn | 05 47 06.2 | +2.0 |
| PBKI | Pangkalan Bun | 17.41 | 252 | P | P | 05 47 03.8 | +0.1 |
| ABJI | Asem Bagus | 17.46 | 233 | P | Pn | 05 47 06.7 | +1.7 |
| JAGI | Jajag, Banyuwa | 17.93 | 231 | P | Pn | 05 47 11.9 | +1.2 |
| | baz=18,SNR=54 | | | | | | |
| JAGI | Jajag, Banyuwa | 17.93 | 231 | P | Pn | 05 47 11.7 | +1.0 |
| | comp=Z,2µm,1.8s,comp=Z,39µm | | | | | | |
| JAGI | Jajag, Banyuwa | 17.93 | 231 | eP | Pn | 05 47 11.9 | +1.2 |
| | comp=Z,4µm,1.3s | | | | | | |
| JAGI | | | | eS | Sn | 05 50 32.3 | +0.5 |
| BLJI | Banyuglugur | 17.94 | 234 | P | Pn | 05 47 11.5 | +0.7 |
| KSM | Kuching | 17.95 | 266 | P | Pn | 05 47 11.1 | +0.2 |
| | baz=18,SNR=39 | | | | | | |
| KSM | Kuching | 17.95 | 266 | ⇑P | Pn | 05 47 10.8 | -0.1 |
| KSM | Kuching | 17.95 | 266 | eP | Pn | 05 47 10.5 | -0.4 |
| | comp=Z,5µm,2.2s | | | | | | |
| KSM | | | | eS | Sn | 05 50 32.3 | 0.0 |
| KNRA | Kununurra | 18.33 | 178 | P | Pn | 05 47 14.8 | -0.6 |
| | baz=18,SNR=43 | | | | | | |
| GMJI | Gumukmas | 18.37 | 233 | P | Pn | 05 47 17.4 | +1.5 |
| GRJI | Gresik | 18.42 | 238 | P | Pn | 05 47 17.0 | +0.5 |
| TBJI | Tambak Boyo | 18.91 | 240 | P | Pn | 05 47 22.0 | -0.3 |
| UWJI | Ujung Watu | 19.51 | 242 | P | Pn | 05 47 28.2 | -1.1 |
| NGJI | Ngawi | 19.52 | 239 | P | Pn | 05 47 30.1 | +0.8 |
| PWJI | Pagerwojo | 19.57 | 237 | P | P | 05 47 28.4 | +1.2 |
| GUMO | Guam | 19.66 | 56 | P | P | 05 47 27.2 | -0.9 |
| | comp=Z,27nm,0.3s,baz=185,slow=8.3,SNR=11 | | | | | | |
| GUMO | | | | S | S | 05 50 59.5 | -2.9 |
| | comp=Z,3.5nm,0.3s,baz=32,slow=19,SNR=1.7 | | | | | | |
| GUMO | Guam | 19.66 | 56 | eP | P | 05 47 27.1 | -1.0 |
| GUMO | | | | S | S | 05 50 59.5 | -2.9 |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,471nm,0.9s | | | | | | |
| GUMO | Guam | 19.66 | 56 | eP | P | 05 47 27.1 | -1.0 |
| | comp=Z,471nm,0.9s | | | | | | |
| GUMO | | | | S | S | 05 50 59.5 | -2.9 |
| MANU | Manus Island | 19.73 | 104 | P | P | 05 47 29.0 | +0.1 |
| | baz=20,SNR=3.5 | | | | | | |
| PCJI | Pacitan | 20.19 | 237 | P | P | 05 47 35.3 | +1.5 |
| WOJI | Wonogiri, Jawa | 20.22 | 238 | P | Pn | 05 47 36.3 | -1.2 |
| SMRI | Semarang | 20.25 | 241 | P | P | 05 47 33.9 | -0.6 |
| | baz=20,SNR=10 | | | | | | |
| SMRI | Semarang | 20.25 | 241 | P | Pn | 05 47 36.7 | -1.2 |
| SMRI | Semarang | 20.25 | 241 | eP | P | 05 47 34.8 | +0.2 |
| | comp=Z,13µm,2.5s | | | | | | |
| UGM | Wanagama | 20.60 | 239 | P | P | 05 47 37.7 | -0.5 |
| UGM | Wanagama | 20.60 | 239 | eP | P | 05 47 39.9 | +1.6 |
| | comp=Z,1µm,1.1s | | | | | | |
| FITZ | Fitzroy Crossi | 20.89 | 187 | P | P | 05 47 40.5 | -0.8 |
| | comp=Z,38nm,0.5s,baz=14,slow=8.7,SNR=71 | | | | | | |
| FITZ | | | | S | S | 05 51 22.7 | -3.9 |
| | comp=Z,36nm,0.9s,baz=198,slow=13,SNR=1.6 | | | | | | |
| FITZ | Fitzroy Crossi | 20.89 | 187 | P | P | 05 47 40.5 | -0.8 |
| | baz=21,SNR=40 | | | | | | |
| FITZ | Fitzroy Crossi | 20.89 | 187 | eP | P | 05 47 40.5 | -0.8 |
| | comp=Z,347nm,1.2s | | | | | | |
| FITZ | | | | S | S | 05 51 22.7 | -3.9 |
| TWG | Pinlang | 21.11 | 341 | eP | P | 05 47 40.7 | -2.9 |
| | comp=Z,1µm,0.6s | | | | | | |
| TPI | Tanjungpandan | 21.28 | 255 | P | P | 05 47 45.5 | -0.1 |
| | comp=Z,447nm,2.1s,comp=Z,9µm | | | | | | |
| DLV | T Lat | 21.57 | 296 | eP | P | 05 47 48.6 | -0.3 |
| | comp=Z,743nm,1.0s | | | | | | |
| DLV | | | | ePcP | PcP | 05 51 47.3 | +1.7 |
| DLV | | | | eScP | ScP | 05 55 11.5 | +1.7 |
| YULB | Yu-li | 21.57 | 342 | eP | P | 05 47 45.0 | -3.6 |
| | comp=Z,242nm,0.6s | | | | | | |
| YULB | | | | eS | S | 05 51 39.2 | +0.1 |
| YULB | | | | eScP | ScP | 05 55 08.9 | -0.6 |
| TPUB | Ta-pu | 21.70 | 341 | eP | P | 05 47 47.0 | -3.0 |
| | comp=Z,701nm,0.7s | | | | | | |
| TPUB | | | | eS | S | 05 51 41.4 | +0.1 |
| TPUB | | | | eScP | ScP | 05 55 10.7 | +1.0 |
| SSLB | Suanglung | 22.05 | 342 | eP | P | 05 47 52.6 | -1.0 |
| | comp=Z,362nm,0.7s | | | | | | |
| SSLB | | | | e | | 05 51 45.2 | |
| SSLB | | | | eScP | ScP | 05 55 10.1 | -0.6 |
| YOJ | Yonaguni jima | 22.15 | 347 | eP | P | 05 47 53.9 | -0.6 |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,1µm,0.6s | | | | | | |
| YOJ | Yonaguni jima | 22.15 | 347 | eP | P | 05 47 53.9 | -0.6 |
| | comp=Z,1µm,0.6s | | | | | | |
| NACB | Ninganchiao | 22.23 | 344 | eP | P | 05 47 54.2 | -1.1 |
| | comp=Z,424nm,0.8s | | | | | | |
| COEN | Coen | 22.27 | 139 | P | P | 05 47 55.1 | -0.8 |
| | baz=22,SNR=26 | | | | | | |
| COEN | Coen | 22.27 | 139 | eP | P | 05 47 55.0 | -0.8 |
| | comp=Z,201nm,1.1s | | | | | | |
| COEN | | | | e | | 05 51 49.8 | |
| CMJI | Cimerak | 22.34 | 242 | P | P | 05 47 57.7 | +1.2 |
| PMG | Port Moresby | 22.41 | 123 | P | P | 05 47 56.2 | -1.0 |
| | comp=Z,57nm,1.2s,baz=357,slow=11,SNR=5.4 | | | | | | |
| PMG | | | | S | S | 05 51 49.0 | -4.2 |
| | comp=Z,28nm,0.8s,baz=331,slow=10,SNR=2.1 | | | | | | |
| PMG | Port Moresby | 22.41 | 123 | ceP | P | 05 47 56.7 | -0.5 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,358nm,1.7s | | | | | | |
| PMG | Port Moresby | 22.41 | 123 | P | P | 05 47 56.3 | -1.0 |
| | baz=22,SNR=4.4 | | | | | | |
| PMG | Port Moresby | 22.41 | 123 | eP | P | 05 47 56.8 | -0.5 |
| | comp=Z,237nm,1.0s | | | | | | |
| PMG | | | | S | S | 05 51 49.0 | -4.2 |
| PMG | | | | eScP | ScP | 05 55 15.9 | +4.1 |
| PPBI | Pangkal Pinang | 22.61 | 258 | P | P | 05 48 00.7 | +1.5 |
| LEM | Lembang | 22.67 | 245 | P | P | 05 48 01.0 | +1.1 |
| | comp=Z,178nm,0.6s,baz=85,slow=10,SNR=27 | | | | | | |
| LEM | | | | S | S | 05 51 53.4 | -4.3 |
| | comp=Z,72nm,0.8s,baz=319,slow=20,SNR=2.4 | | | | | | |
| LEM | Lembang | 22.67 | 245 | P | P | 05 48 01.0 | +1.1 |
| LEM | | | | S | S | 05 51 53.4 | -4.3 |
| LEM | | | | pmax | pmax | | |
| | comp=Z,189nm,0.7s | | | | | | |
| LEM | | | | smax | smax | | |
| | comp=N,72nm,0.8s | | | | | | |
| LEM | Lembang | 22.67 | 245 | P | P | 05 48 02.3 | +2.4 |
| LEM | Lembang | 22.67 | 245 | P | P | 05 48 01.0 | +1.1 |
| LEM | | | | S | S | 05 51 53.4 | -4.3 |
| YHNB | Yeheng | 22.76 | 344 | eP | P | 05 47 59.4 | -1.2 |
| | comp=N,920nm,0.7s | | | | | | |
| YHNB | | | | e | | 05 52 04.1 | |
| TATO | Taipei | 23.02 | 344 | eP | P | 05 48 02.3 | -0.5 |
| | comp=N,610nm,0.7s | | | | | | |
| CBJI | Citeko | 23.21 | 247 | P | P | 05 48 07.7 | +3.0 |
| CNJI | Cibinong | 23.30 | 244 | P | P | 05 48 06.2 | +0.6 |
| WRAB | Tennant Creek | 23.34 | 165 | ceP | P | 05 48 05.1 | -0.8 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,1µm,1.2s | | | | | | |
| WRAB | Tennant Creek | 23.34 | 165 | P | P | 05 48 05.0 | -0.8 |
| | comp=Z,3µm,0.8s | | | | | | |
| WRAB | Tennant Creek | 23.34 | 165 | eP | P | 05 48 05.2 | -0.8 |
| | comp=Z,10µm,3.0s | | | | | | |
| WRAB | | | | eS | S | 05 52 13.1 | +4.9 |
| WRA | Warramunga Arr | 23.35 | 165 | P | P | 05 48 04.9 | -1.1 |
| | comp=Z,141nm,0.6s,baz=345,slow=9.5,SNR=90 | | | | | | |
| WRA | | | | S | S | 05 52 12.4 | +4.2 |
| | comp=Z,136nm,1.1s,baz=338,slow=17,SNR=4.8 | | | | | | |
| WRA | | | | ScP | ScP | 05 55 13.9 | -0.2 |
| | comp=Z,19nm,0.8s,baz=342,slow=2.8,SNR=5.0 | | | | | | |
| WRA | Warramunga Arr | 23.35 | 165 | ⇓iP | P | 05 48 02.0 | -4.0 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,89nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 23.35 | 165 | P | P | 05 48 04.9 | -1.1 |
| WRA | | | | S | S | 05 52 12.4 | +4.2 |
| WRA | | | | ScP | ScP | 05 55 13.9 | -0.2 |
| SKJI | Sukabumi | 23.70 | 246 | P | P | 05 48 10.7 | +1.4 |
| HKC | Hong Kong Obse | 23.73 | 326 | ⇑iP | P | 05 48 11.0 | +1.6 |
| TPRI | Tanjung Pinang | 23.75 | 266 | P | P | 05 48 12.5 | +2.8 |
| | comp=Z,495nm,1.6s,comp=Z,25µm | | | | | | |
| SBJI | Serang | 23.76 | 248 | P | P | 05 48 11.8 | +2.0 |
| QZH | Quanzhou | 23.93 | 338 | ⇑iP | P | 05 48 12.4 | +1.3 |
| QZH | | | | sP | sP | 05 48 53.4 | -3.4 |
| QZH | | | | S | S | 05 52 16.0 | -1.4 |
| QZH | | | | PMZ | | | |
| | comp=Z,2µm,0.6s | | | | | | |
| QZH | | | | PMZ | | | |
| | comp=Z,18µm,3.5s | | | | | | |
| QZH | | | | LN | | | |
| | comp=Z,4µm,11.1s | | | | | | |
| QZH | | | | LE | | | |
| | comp=Z,3µm,12.0s | | | | | | |
| QZH | | | | LZ | | | |
| | comp=Z,9µm,18.4s | | | | | | |
| JOW | Kunigami | 23.93 | 0 | P | P | 05 48 11.2 | +0.1 |
| | comp=Z,15nm,0.8s,baz=80,slow=17,SNR=39 | | | | | | |
| JOW | Kunigami | 23.93 | 0 | P | P | 05 48 11.2 | +0.1 |
| PMBI | Palembang | 24.11 | 257 | P | P | 05 48 23.8 | +11 |
| QIZ | Qiongzhong | 24.18 | 313 | P | P | 05 48 14.4 | +0.8 |
| QIZ | | | | pP | pP | 05 48 42.3 | +0.1 |
| QIZ | | | | sP | sP | 05 48 54.2 | -5.2 |
| QIZ | | | | S | S | 05 52 25.0 | +3.3 |
| QIZ | | | | sS | sS | 05 53 11.0 | -2.5 |
| QIZ | | | | PMZ | | | |
| | comp=Z,180nm,0.8s | | | | | | |
| QIZ | Qiongzhong | 24.18 | 313 | eP | P | 05 48 14.3 | +0.8 |
| | comp=Z,1µm,1.3s | | | | | | |
| CGJI | Cibinong | 24.34 | 247 | P | P | 05 48 15.3 | +0.2 |
| MYKOM | Kota Tinggi | 24.37 | 268 | ⇓P | P | 05 48 17.1 | +1.8 |
| MYKOM | Kota Tinggi | 24.37 | 268 | eP | P | 05 48 16.4 | +1.0 |
| | comp=Z,3µm,2.3s | | | | | | |
| BTDF | Bukit Timah Da | 24.47 | 267 | P | P | 05 48 18.1 | +1.8 |
| | baz=25,SNR=13 | | | | | | |
| KLI | Kotabumi | 24.54 | 252 | P | P | 05 48 18.7 | +1.8 |
| GZH | Guangzhou | 24.82 | 326 | ⇑iP | P | 05 48 20.7 | +1.4 |
| GZH | | | | pP | pP | 05 48 50.3 | +1.6 |
| GZH | | | | S | S | 05 52 35.4 | +3.7 |
| GZH | | | | sS | sS | 05 53 27.0 | +3.2 |
| GZH | | | | PMZ | | | |
| | comp=Z,13µm,8.4s | | | | | | |
| KGM | Kluang | 24.89 | 269 | ⇑P | P | 05 48 22.0 | +1.9 |
| MDSI | Maura Dua | 25.08 | 253 | P | P | 05 48 23.1 | +1.3 |
| KASI | Kota Agung | 25.09 | 251 | P | P | 05 48 22.6 | +0.8 |
| KTGM | Kuala Trenggan | 25.15 | 277 | ⇓P | P | 05 48 23.3 | +0.9 |
| MBWA | Marble Bar | 25.19 | 199 | P | P | 05 48 23.3 | +0.7 |
| | SNR=14 | | | | | | |
| MBWA | Marble Bar | 25.19 | 199 | eP | P | 05 48 22.3 | -0.3 |
| | comp=Z,660nm,1.5s | | | | | | |
| LWLI | Liwa | 25.35 | 252 | P | P | 05 48 25.8 | +1.5 |
| LHSI | Lahat | 25.54 | 255 | P | P | 05 48 27.9 | +2.0 |
| UBPT | Khong Chiam | 25.64 | 300 | P | P | 05 48 27.1 | +0.3 |
| | comp=Z,513nm,0.9s,comp=Z,8µm | | | | | | |
| QIS | Mount Isa | 25.73 | 155 | P | P | 05 48 27.0 | -0.5 |
| | baz=26,SNR=96 | | | | | | |
| XMI | Christmas Isla | 25.99 | 239 | P | P | 05 48 30.8 | +0.8 |
| | baz=26,SNR=6.3 | | | | | | |
| XMIS | Christmas Isla | 26.04 | 239 | P | P | 05 48 31.1 | +0.7 |
| | baz=26,SNR=9.9 | | | | | | |
| XMIS | Christmas Isla | 26.04 | 239 | eP | P | 05 48 31.1 | +0.7 |
| | comp=Z,571nm,1.0s | | | | | | |
| MNAI | Manna | 26.22 | 254 | P | P | 05 48 31.8 | -0.2 |
| | baz=26,SNR=4.6 | | | | | | |
| MNAI | Manna | 26.22 | 254 | P | P | 05 48 33.7 | +1.6 |
| MNAI | Manna | 26.22 | 254 | eP | P | 05 48 33.5 | +1.5 |
| | comp=Z,7µm,2.7s | | | | | | |
| FRIM | Kepong | 26.56 | 272 | ⇑P | P | 05 48 37.0 | +1.8 |
| ASAR | Alice Springs | 26.85 | 168 | P | P | 05 48 36.5 | -1.1 |
| | comp=Z,38nm,0.7s,baz=355,slow=7.5,SNR=150 | | | | | | |
| ASAR | | | | PcP | PcP | 05 51 56.5 | -0.2 |
| | comp=Z,22nm,0.6s,baz=359,slow=2.2,SNR=4.1 | | | | | | |
| ASAR | | | | S | S | 05 53 02.1 | -1.7 |
| | comp=Z,42nm,0.9s,baz=348,slow=20,SNR=5.7 | | | | | | |
| ASAR | | | | ScP | ScP | 05 55 23.9 | -0.1 |
| | comp=Z,29nm,0.8s,baz=355,slow=2.7,SNR=6.9 | | | | | | |
| ASAR | | | | LR | LR | 06 01 16.7 | |
| | comp=Z,8µm,18.8s,baz=103,slow=40 | | | | | | |
| ASAR | | | | P3KPbc | | 06 21 13.8 | |
| | comp=Z,2.9nm,0.7s,baz=162,slow=4.0,SNR=21 | | | | | | |
| ASAR | Alice Springs | 26.85 | 168 | P | P | 05 48 36.5 | -1.1 |
| ASAR | | | | | | 05 51 56.5 | |
| ASAR | | | | S | S | 05 53 02.1 | -1.7 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,38nm,0.7s | | | | | | |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,22nm,0.6s | | | | | | |
| ASAR | | | | smax | smax | | |
| | comp=N,42nm,0.9s | | | | | | |
| ASAR | | | | MLR | MLR | | |
| | comp=Z,8µm,18.8s | | | | | | |
| ASAR | Alice Springs | 26.85 | 168 | P | P | 05 48 36.5 | -1.1 |
| ASAR | | | | PcP | PcP | 05 51 56.5 | -0.2 |
| ASAR | | | | S | S | 05 53 02.1 | -1.7 |
| ASAR | | | | ScP | ScP | 05 55 23.9 | -0.1 |
| ASAR | | | | e | | 06 21 13.8 | |
| AS01 | Alice Springs | 26.86 | 168 | eP | P | 05 48 37.2 | -0.5 |
| SDSI | Sungai Dareh | 27.04 | 263 | P | P | 05 48 40.9 | +1.5 |
| IPM | Ipoh | 27.19 | 274 | ⇑P | P | 05 48 41.5 | +0.7 |
| IPM | Ipoh | 27.19 | 274 | eP | P | 05 48 41.2 | +0.3 |
| | comp=Z,224nm,1.2s | | | | | | |
| IPM | | | | ePcP | PcP | 05 51 58.6 | +0.9 |
| IPM | | | | eScP | ScP | 05 55 26.4 | +1.2 |
| BKNI | Bangkinang | 27.28 | 265 | P | P | 05 48 43.4 | +1.8 |
| | baz=27,SNR=5.5 | | | | | | |
| BKNI | Bangkinang | 27.28 | 265 | P | P | 05 48 42.2 | +0.6 |
| BKNI | Bangkinang | 27.28 | 265 | eP | P | 05 48 42.4 | +0.8 |
| | comp=Z,319nm,0.9s | | | | | | |
| KULM | Kulim | 27.61 | 276 | ⇓P | P | 05 48 45.8 | +1.2 |

| Code | Station | Dist | Azm | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| **KULM** | **Kulim** | **27.61** | **276** | *e*P | **P** | **05 48 44.8** | **+0.2** |
| | comp=Z,483nm,1.5s | | | | | | |
| **WRKA** | **Warakurna** | **27.64** | **180** | P | **P** | **05 48 44.5** | **-0.1** |
| | baz=28,SNR=307 | | | | | | |
| **CBIJ** | **Chichi jima** | **27.64** | **28** | *e*P | **P** | **05 48 43.6** | **-1.1** |
| | comp=Z,449nm,0.6s | | | | | | |
| **SKNT** | **Sakolnakorn** | **27.69** | **302** | P | **P** | **05 48 45.5** | **+0.3** |
| | comp=Z,649nm,1.2s,comp=Z,7µm | | | | | | |
| **PDSI** | **Padang** | **27.99** | **263** | P | **P** | **05 48 47.3** | **-0.6** |
| **PPI** | **Padang Panjang** | **28.00** | **264** | P | **P** | **05 48 49.9** | **+1.9** |
| | baz=28,SNR=5.6 | | | | | | |
| **PPI** | **Padang Panjang** | **28.00** | **264** | P | **P** | **05 48 48.6** | **+0.6** |
| **KHON** | **Khomkaen** | **28.39** | **300** | P | **P** | **05 48 52.2** | **+0.8** |
| | comp=Z,213nm,1.0s,comp=Z,4µm | | | | | | |
| **MNSI** | **Mandailing Nat** | **28.69** | **267** | P | **P** | **05 48 54.6** | **+0.5** |
| **GIRL** | **Giralia** | **28.71** | **208** | P | **P** | **05 48 55.7** | **+1.6** |
| | baz=29,SNR=22 | | | | | | |
| **PPSI** | **Pulau Pagai** | **28.73** | **259** | P | **P** | **05 48 55.1** | **+0.6** |
| **CTA** | **Charters Tower** | **28.79** | **143** | P | **P** | **05 48 54.7** | **-0.3** |
| | comp=Z,12nm,0.6s,baz=320,slow=12,SNR=14 | | | | | | |
| CTA | | | | S | **S** | **05 53 31.8** | **-2.7** |
| | comp=Z,26nm,1.1s,baz=135,slow=14,SNR=2.5 | | | | | | |
| **CTA** | **Charters Tower** | **28.79** | **143** | P | **P** | **05 48 54.7** | **-0.3** |
| CTA | | | | S | **S** | **05 53 31.8** | **-2.7** |
| CTA | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| CTA | | | | smax | smax | | |
| | comp=N,26nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **28.79** | **143** | P | **P** | **05 48 54.7** | **-0.3** |
| CTA | | | | S | **S** | **05 53 31.8** | **-2.7** |
| **CTAO** | **Charters Tower** | **28.79** | **143** | *e*P | **P** | **05 48 53.7** | **-1.2** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,244nm,1.4s | | | | | | |
| **CTAO** | **Charters Tower** | **28.79** | **143** | *e*P | **P** | **05 48 53.7** | **-1.2** |
| | comp=Z,244nm,1.4s | | | | | | |
| CTAO | | | | *e*ScP | **ScP** | **05 55 30.6** | **+0.6** |
| **TRTT** | **Trang** | **28.84** | **281** | P | **P** | **05 48 56.9** | **+1.5** |
| | comp=Z,259nm,1.2s | | | | | | |
| **PATY** | **Pattaya** | **28.88** | **292** | P | **P** | **05 48 57.3** | **+1.5** |
| | comp=Z,20nm,0.7s | | | | | | |
| **NONG** | **Nongkai** | **28.90** | **303** | P | **P** | **05 48 56.1** | **+0.2** |
| | comp=Z,267nm,1.2s | | | | | | |
| **SSE** | **Sheshan** | **28.95** | **347** | ⇑P | **P** | **05 48 56.2** | **0.0** |
| SSE | | | | pP | **pP** | **05 49 27.8** | **+1.6** |
| SSE | | | | sP | **sP** | **05 49 45.3** | **+2.8** |
| SSE | | | | S | **S** | **05 53 35.5** | **-1.2** |
| SSE | | | | sS | **sS** | **05 54 31.6** | **+2.2** |
| SSE | | | | PMZ | | | |
| | comp=Z,67nm,0.8s | | | | | | |
| SSE | | | | PMZ | | | |
| | comp=Z,2µm,10.3s | | | | | | |
| SSE | | | | LN | | | |
| | comp=Z,3µm,21.1s | | | | | | |
| SSE | | | | LE | | | |
| | comp=Z,2µm,21.0s | | | | | | |
| SSE | | | | LZ | | | |
| | comp=Z,3µm,17.3s | | | | | | |
| **PSI** | **Prapat** | **29.26** | **271** | P | **P** | **05 48 59.3** | **0.0** |
| | comp=Z,90nm,1.1s,baz=88,slow=4.5,SNR=73 | | | | | | |
| PSI | | | | PcP | **PcP** | **05 52 03.0** | **0.0** |
| | comp=Z,44nm,0.9s,baz=206,slow=4.6,SNR=3.2 | | | | | | |
| PSI | | | | S | **S** | **05 53 40.8** | **-1.5** |
| | comp=Z,7.4nm,0.6s,baz=260,slow=13,SNR=3.1 | | | | | | |
| **PSI** | **Prapat** | **29.26** | **271** | P | **P** | **05 48 59.3** | **0.0** |
| PSI | | | | | | 05 52 03.0 | |
| PSI | | | | S | **S** | **05 53 40.8** | **-1.5** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,90nm,1.1s | | | | | | |
| PSI | | | | pmax | pmax | | |
| | comp=Z,44nm,0.9s | | | | | | |
| PSI | | | | smax | smax | | |
| | comp=N,7.0nm,0.6s | | | | | | |
| **PSI** | **Prapat** | **29.26** | **271** | P | **P** | **05 49 00.1** | **+0.8** |
| | baz=29,SNR=26 | | | | | | |
| **PSI** | **Prapat** | **29.26** | **271** | *e*P | **P** | **05 48 59.6** | **+0.2** |
| | comp=N,168nm,1.2s | | | | | | |
| PSI | | | | PcP | **PcP** | **05 52 03.0** | **0.0** |
| PSI | | | | S | **S** | **05 53 40.8** | **-1.5** |
| **SISI** | **Saibi** | **29.41** | **262** | P | **P** | **05 49 00.3** | **-0.1** |
| **SLVN** | **Son La** | **30.01** | **310** | *e*P | **P** | **05 49 06.8** | **+1.1** |
| | comp=N,40nm,0.5s | | | | | | |
| **PHET** | **Kaeng Krachan** | **30.03** | **291** | P | **P** | **05 49 07.1** | **+1.2** |
| | comp=N,47nm,0.7s,comp=N,367nm | | | | | | |
| **PBKT** | **Sadao Pong** | **30.10** | **299** | P | **P** | **05 49 07.3** | **+0.8** |
| | comp=N,175nm,1.5s,comp=N,4µm | | | | | | |
| **LOEI** | **Loei** | **30.24** | **301** | P | **P** | **05 49 05.2** | **-2.6** |
| | comp=N,429nm,1.2s,comp=N,5µm | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **30.41** | **272** | P | **P** | **05 49 09.8** | **+0.4** |
| **NJ2** | **Nanjing** | **30.44** | **344** | *e*P | **P** | **05 49 10.0** | **+0.7** |
| NJ2 | | | | pP | **pP** | **05 49 40.2** | **+0.8** |
| NJ2 | | | | sP | **sP** | **05 49 56.4** | **+0.8** |
| NJ2 | | | | S | **S** | **05 54 01.0** | **+1.1** |
| NJ2 | | | | sS | **sS** | **05 54 54.0** | **+1.2** |
| NJ2 | | | | PMZ | | | |
| | comp=N,100nm,1.2s | | | | | | |
| NJ2 | | | | PMZ | | | |
| | comp=N,1µm,4.8s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=N,4µm,16.8s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=N,8µm,18.1s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=N,8µm,18.2s | | | | | | |
| **WHN** | **Wuhan** | **30.59** | **336** | ⇑*i*P | **P** | **05 49 12.1** | **+1.4** |
| WHN | | | | pP | **pP** | **05 49 44.7** | **+3.9** |
| WHN | | | | S | S | 05 54 10.3 | +7.9 |
| WHN | | | | PMZ | | | |
| | comp=N,480nm,0.6s | | | | | | |
| WHN | | | | PMZ | | | |
| | comp=N,7µm,4.4s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=N,7µm,15.1s | | | | | | |
| **GSI** | **Gunungsitoli** | **30.66** | **268** | P | **P** | **05 49 11.4** | **-0.1** |
| **GSI** | **Gunungsitoli** | **30.66** | **268** | *e*P | **P** | **05 49 10.8** | **-0.8** |
| | comp=N,179nm,0.8s | | | | | | |
| GSI | | | | *e*PcP | **PcP** | **05 52 08.5** | **+2.0** |
| **UTTA** | **Uttaradit** | **30.95** | **301** | P | **P** | **05 49 14.9** | **+0.9** |
| | comp=N,57nm,1.3s,comp=N,564nm | | | | | | |
| **UTHA** | **Uthaitani** | **31.06** | **296** | P | **P** | **05 49 15.6** | **+0.6** |
| | comp=N,33nm,0.9s,comp=N,399nm | | | | | | |
| **LHMI** | **Lhok Sumawe** | **31.29** | **275** | P | **P** | **05 49 19.2** | **+2.1** |
| | baz=31,SNR=4.4 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **31.29** | **275** | P | **P** | **05 49 20.0** | **+2.9** |
| **LHMI** | **Lhok Sumawe** | **31.29** | **275** | *e*P | **P** | **05 49 18.2** | **+1.2** |
| | comp=N,259nm,1.1s | | | | | | |
| **NANT** | **Nan** | **31.30** | **303** | P | **P** | **05 49 18.1** | **+1.0** |
| | comp=N,58nm,0.9s,comp=N,754nm | | | | | | |
| **GYA** | **Guiyang** | **31.35** | **321** | ⇑*i*P | **P** | **05 49 18.3** | **+0.7** |
| GYA | | | | pP | **pP** | **05 49 51.8** | **+4.1** |
| GYA | | | | sP | **sP** | **05 50 06.6** | **+2.6** |
| GYA | | | | PP | **PP** | **05 50 29.4** | **-1.8** |
| GYA | | | | PcP | **PcP** | **05 52 09.0** | **+0.8** |
| GYA | | | | S | **S** | **05 54 17.8** | **+3.2** |
| GYA | | | | sS | **sS** | **05 55 11.0** | **+3.5** |
| GYA | | | | SS | **SnSn** | **05 56 15.0** | **-0.4** |
| GYA | | | | ScS | **ScS** | **05 59 34.8** | **-1.6** |
| GYA | | | | PMZ | | | |
| | comp=N,140nm,1.1s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=N,2µm,10.5s | | | | | | |
| GYA | | | | LN | | | |
| | comp=N,4µm,13.7s | | | | | | |
| GYA | | | | LE | | | |
| | comp=N,5µm,16.5s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=N,5µm,15.5s | | | | | | |
| **KSWAN** | **Wando** | **31.50** | **358** | P | **P** | **05 49 19.2** | **+0.6** |
| | SNR=6.9 | | | | | | |
| **KSWAN** | **Wando** | **31.50** | **358** | P | **P** | **05 49 19.2** | **+0.6** |
| | SNR=6.9 | | | | | | |
| **PHRA** | **Phrae** | **31.56** | **302** | P | **P** | **05 49 20.4** | **+1.0** |
| | comp=N,3µm,1.3s,comp=N,38µm | | | | | | |
| **KSJDO** | **Jindo** | **31.59** | **357** | P | **P** | **05 49 19.7** | **+0.2** |
| | SNR=16 | | | | | | |
| **KSJDO** | **Jindo** | **31.59** | **357** | P | **P** | **05 49 20.2** | **+0.7** |
| | SNR=12 | | | | | | |
| **KSKOH** | **Goheung** | **31.70** | **359** | P | **P** | **05 49 20.2** | **-0.1** |
| | SNR=13 | | | | | | |
| **KSKOH** | **Goheung** | **31.70** | **359** | P | **P** | **05 49 21.0** | **+0.7** |
| | SNR=8.0 | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **31.79** | **274** | P | **P** | **05 49 22.3** | **+0.8** |
| **UMPA** | **Umpang Tak** | **31.82** | **297** | P | **P** | **05 49 23.2** | **+1.5** |
| | comp=N,46nm,1.0s,comp=N,8µm | | | | | | |
| **KSHUK** | **Heuksando** | **31.86** | **356** | P | **P** | **05 49 21.6** | **-0.2** |
| | SNR=39 | | | | | | |
| **KSHUK** | **Heuksando** | **31.86** | **356** | P | **P** | **05 49 22.7** | **+1.0** |
| | SNR=9.0 | | | | | | |
| **SNSI** | **Sinabang, Aceh** | **31.86** | **270** | P | **P** | **05 49 24.8** | **+2.7** |
| **KSNAH** | **Namhae** | **31.89** | **360** | P | **P** | **05 49 21.9** | **-0.1** |
| | SNR=12 | | | | | | |
| **KSNAH** | **Namhae** | **31.89** | **360** | P | **P** | **05 49 21.9** | **-0.1** |
| | SNR=12 | | | | | | |
| **KSTOY** | **TONGYEONG** | **31.92** | **0** | P | **P** | **05 49 22.0** | **-0.3** |
| | SNR=10 | | | | | | |
| **KSTOY** | **TONGYEONG** | **31.92** | **0** | P | **P** | **05 49 22.0** | **-0.3** |
| | SNR=10 | | | | | | |
| **LAMP** | **Lampang** | **32.08** | **301** | P | **P** | **05 49 25.5** | **+1.6** |
| | comp=N,79nm,1.4s,comp=N,757nm | | | | | | |
| **KSJIN** | **Jinju** | **32.24** | **360** | P | **P** | **05 49 25.0** | **0.0** |
| | SNR=11 | | | | | | |
| **KSJIN** | **Jinju** | **32.24** | **360** | P | **P** | **05 49 25.0** | **0.0** |
| | SNR=11 | | | | | | |
| **KSKWJ** | **Gwangju** | **32.25** | **358** | P | **P** | **05 49 25.7** | **+0.5** |
| | SNR=15 | | | | | | |
| **KSGWJ** | **Gwangju-acc** | **32.27** | **358** | P | **P** | **05 49 25.9** | **+0.6** |
| | SNR=9.4 | | | | | | |
| **KSBUS** | **Busan** | **32.33** | **1** | P | **P** | **05 49 25.4** | **-0.5** |
| | SNR=16 | | | | | | |
| **KSBUS** | **Busan** | **32.33** | **1** | P | **P** | **05 49 25.4** | **-0.5** |
| | SNR=16 | | | | | | |
| **KSJEU** | **Jeongeup** | **32.59** | **358** | P | **P** | **05 49 27.6** | **-0.5** |
| | SNR=33 | | | | | | |
| **KSJEU** | **Jeongeup** | **32.59** | **358** | P | **P** | **05 49 28.4** | **+0.3** |
| | SNR=11 | | | | | | |
| **ENH** | **Enshi** | **32.61** | **329** | *e*P | **P** | **05 49 29.6** | **+1.2** |
| | comp=N,206nm,1.1s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **32.61** | **301** | *e*P | **P** | **05 49 29.0** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **32.64** | **301** | P | **P** | **05 49 29.8** | **+0.9** |
| | comp=N,71nm,0.8s,baz=118,slow=7.3,SNR=104 | | | | | | |
| CMAR | | | | PcP | **PcP** | **05 52 13.4** | **+1.7** |
| | comp=N,27nm,1.0s,baz=152,slow=1.1,SNR=5.3 | | | | | | |
| CMAR | | | | S | **S** | **05 54 35.6** | **+0.9** |
| | comp=N,1.2nm,0.3s,baz=139,slow=16,SNR=3.8 | | | | | | |
| CMAR | | | | ScP | **ScP** | **05 55 44.1** | **+1.3** |
| | comp=N,16nm,1.0s,baz=132,slow=2.2,SNR=6.9 | | | | | | |
| CMAR | | | | P3KPbc | | 06 20 51.6 | |
| | comp=N,0.8nm,0.3s,baz=305,slow=5.6,SNR=6.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.64** | **301** | *ce*P | **P** | **05 49 29.7** | **+0.9** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,71nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.64** | **301** | P | **P** | **05 49 29.8** | **+0.9** |
| CMAR | | | | PcP | **PcP** | **05 52 13.4** | **+1.7** |
| CMAR | | | | S | **S** | **05 54 35.6** | **+0.9** |
| CMAR | | | | ScP | **ScP** | **05 55 44.1** | **+1.3** |
| CMAR | | | | *e* | | 06 20 51.6 | |
| **CHTO** | **Chiang Mai** | **32.79** | **301** | P | **P** | **05 49 30.8** | **+0.7** |
| | comp=Z,2µm,1.4s,comp=Z,21µm | | | | | | |
| **CHTO** | **Chiang Mai** | **32.79** | **301** | *e*P | **P** | **05 49 30.9** | **+0.7** |
| CHTO | | | | *e* | | 05 52 12.5 | |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,955nm,1.7s | | | | | | |
| **CHTO** | **Chiang Mai** | **32.79** | **301** | P | **P** | **05 49 31.3** | **+1.1** |
| | SNR=90 | | | | | | |
| **CHTO** | **Chiang Mai** | **32.79** | **301** | *e*P | **P** | **05 49 30.9** | **+0.7** |
| | comp=Z,955nm,1.7s | | | | | | |
| CHTO | | | | *e* | | 05 50 05.2 | |
| CHTO | | | | *e*PcP | **PcP** | **05 52 12.4** | **+0.3** |
| CHTO | | | | *e*ScP | **ScP** | **05 55 48.4** | **+5.0** |
| **KSDAG** | **Daegu** | **32.85** | **1** | P | **P** | **05 49 30.0** | **-0.3** |
| | SNR=22 | | | | | | |
| **KSDAG** | **Daegu** | **32.85** | **1** | P | **P** | **05 49 30.0** | **-0.3** |
| | SNR=22 | | | | | | |
| **KSJEO** | **Jeonju** | **33.02** | **359** | P | **P** | **05 49 31.7** | **-0.2** |
| | SNR=8.6 | | | | | | |
| **KSJEO** | **Jeonju** | **33.02** | **359** | P | **P** | **05 49 31.7** | **-0.2** |
| | SNR=8.6 | | | | | | |
| **QLP** | **Quilpie** | **33.02** | **153** | P | **P** | **05 49 31.1** | **-1.0** |
| | baz=33,SNR=42 | | | | | | |
| **KMI** | **Kunming** | **33.11** | **314** | P | **P** | **05 49 34.5** | **+1.4** |
| KMI | | | | pP | **pP** | **05 50 02.2** | **-1.2** |
| KMI | | | | sP | **sP** | **05 50 16.4** | **-3.2** |
| KMI | | | | PcP | **PcP** | **05 52 15.3** | **+2.0** |
| KMI | | | | S | **S** | **05 54 40.6** | **-1.7** |
| KMI | | | | PMZ | | | |
| | comp=Z,390nm,1.3s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,3µm,4.3s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,7µm,21.4s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,6µm,22.3s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,5µm,30.7s | | | | | | |
| **KSGUS** | **GUNSAN** | **33.14** | **358** | P | **P** | **05 49 32.1** | **-0.7** |
| | SNR=11 | | | | | | |
| **KSGUS** | **GUNSAN** | **33.14** | **358** | P | **P** | **05 49 32.1** | **-0.7** |
| | SNR=14 | | | | | | |
| **CMAI** | **Chiengmai2** | **33.20** | **303** | P | **P** | **05 49 34.8** | **+0.9** |
| | comp=Z,324nm,1.2s,comp=Z,4µm | | | | | | |
| **KSPHA** | **Pohang** | **33.28** | **2** | P | **P** | **05 49 33.7** | **-0.4** |
| | SNR=22 | | | | | | |
| **KSCPR** | **CHUPUNGNYEONG** | **33.29** | **360** | P | **P** | **05 49 34.5** | **+0.2** |
| | SNR=19 | | | | | | |
| **FORT** | **Forrest** | **33.36** | **180** | P | **P** | **05 49 35.0** | **+0.1** |
| | baz=34,SNR=41 | | | | | | |
| **FORT** | **Forrest** | **33.36** | **180** | *e*P | **P** | **05 49 33.1** | **-1.7** |
| | comp=Z,377nm,0.8s | | | | | | |
| FORT | | | | *e* | | 05 50 02.8 | |
| FORT | | | | *e*PcP | **PcP** | **05 52 14.6** | **+1.1** |
| FORT | | | | *e*ScP | **ScP** | **05 55 46.0** | **+1.0** |
| **KSEUS** | **ULSEONG** | **33.43** | **1** | P | **P** | **05 49 35.2** | **-0.2** |
| | SNR=17 | | | | | | |
| **KSTEJ** | **Daejeon** | **33.45** | **359** | P | **P** | **05 49 35.5** | **-0.1** |
| | SNR=10 | | | | | | |
| **TJN** | **Taejon** | **33.46** | **359** | *c i*P | **P** | **05 49 34.9** | **-0.7** |
| **KSSAJ** | **Sangju** | **33.48** | **360** | P | **P** | **05 49 35.6** | **-0.3** |
| | SNR=20 | | | | | | |
| **KSKOJ** | **Gongju** | **33.56** | **358** | P | **P** | **05 49 37.0** | **+0.5** |
| | SNR=12 | | | | | | |
| **KSBON** | **Boeun** | **33.57** | **359** | P | **P** | **05 49 36.9** | **+0.2** |
| | SNR=108 | | | | | | |
| **KSCEJ** | **CHEONGJU** | **33.71** | **359** | P | **P** | **05 49 38.7** | **+0.9** |
| | SNR=6.7 | | | | | | |
| **MORW** | **Morawa** | **33.74** | **199** | P | **P** | **05 49 37.9** | **-0.3** |
| | baz=34,SNR=54 | | | | | | |
| **KSULJ** | **Uljin** | **33.79** | **2** | P | **P** | **05 49 38.3** | **-0.2** |
| | SNR=19 | | | | | | |
| **KSSES** | **Seosan** | **33.90** | **357** | P | **P** | **05 49 39.6** | **+0.2** |
| | SNR=8.3 | | | | | | |
| **KSCEA** | **Cheonan** | **33.91** | **359** | P | **P** | **05 49 39.5** | **-0.1** |
| | SNR=64 | | | | | | |
| **KSCHJ** | **Chungju** | **33.94** | **360** | P | **P** | **05 49 39.7** | **-0.1** |
| | SNR=23 | | | | | | |
| **KSTBA** | **Taebaek** | **34.20** | **1** | P | **P** | **05 49 42.2** | **+0.1** |
| | SNR=36 | | | | | | |
| **KSYOW** | **Yeongwol** | **34.24** | **0** | P | **P** | **05 49 42.5** | **0.0** |
| | SNR=9.9 | | | | | | |
| **KSSWO** | **Suwon** | **34.36** | **358** | P | **P** | **05 49 43.7** | **+0.3** |
| | SNR=32 | | | | | | |
| **KSICN** | **Icheon** | **34.37** | **359** | P | **P** | **05 49 43.8** | **+0.3** |
| | SNR=22 | | | | | | |
| **CMBY** | **CAMPBELL BAY** | **34.42** | **278** | *e*P | **P** | **05 49 42.4** | **-1.9** |
| CMBY | | | | AMB | AMB | 05 50 28.4 | |
| | comp=Z,260nm,1.6s | | | | | | |
| **KSWJU** | **Wonju** | **34.47** | **360** | P | **P** | **05 49 44.4** | **0.0** |
| | SNR=26 | | | | | | |
| **KMBL** | **Kambalda** | **34.47** | **190** | P | **P** | **05 49 43.6** | **-0.9** |
| | baz=35,SNR=67 | | | | | | |
| **KSAR** | **Wonju Array Be** | **34.51** | **360** | P | **P** | **05 49 44.6** | **-0.1** |
| KSAR | | | | | | 05 52 17.8 | |
| **KSAR** | **Wonju Array Be** | **34.51** | **360** | P | **P** | **05 49 44.6** | **-0.1** |
| KSAR | | | | PcP | **PcP** | **05 52 17.8** | **+1.1** |
| KSAR | | | | ScP | **ScP** | **05 55 48.9** | **-0.1** |
| **KSRS** | **Korea Array** | **34.52** | **360** | P | **P** | **05 49 44.6** | **-0.2** |
| | comp=Z,145nm,0.6s,baz=175,slow=9.4,SNR=237 | | | | | | |
| KSRS | | | | PcP | **PcP** | **05 52 17.8** | **+1.1** |
| | comp=Z,27nm,1.0s,baz=185,slow=4.0,SNR=6.0 | | | | | | |
| KSRS | | | | ScP | **ScP** | **05 55 48.9** | **-0.1** |
| | comp=Z,7.4nm,0.9s,baz=184,slow=3.9,SNR=5.5 | | | | | | |
| **KSRS** | **Korea Array** | **34.52** | **360** | P | **P** | **05 49 44.6** | **-0.2** |
| KSRS | | | | | | 05 52 17.8 | |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,145nm,0.6s | | | | | | |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| **COCO** | **West Island** | **34.55** | **244** | *i* P | **P** | **05 49 46.7** | **+1.4** |
| **COCO** | **West Island** | **34.55** | **244** | *e*P | **P** | **05 49 45.5** | **+0.2** |
| | comp=Z,362nm,1.1s | | | | | | |
| **KS01** | **Wonju Array Si** | **34.55** | **360** | *e*P | **P** | **05 49 44.3** | **-0.8** |
| **KSSEO** | **Seoul** | **34.58** | **358** | P | **P** | **05 49 45.7** | **+0.4** |
| | SNR=14 | | | | | | |
| **INCN** | **Inchon** | **34.58** | **358** | *e*P | **P** | **05 49 45.5** | **+0.1** |
| | comp=Z,333nm,1.6s | | | | | | |
| INCN | | | | *e*PcP | **PcP** | **05 52 18.2** | **+1.2** |
| INCN | | | | *e*ScP | **ScP** | **05 55 53.6** | **+4.3** |
| **KSULL** | **Ulleungdo** | **34.63** | **4** | P | **P** | **05 49 45.9** | **+0.1** |
| | SNR=17 | | | | | | |
| **KSDGY** | **Daegwallycong** | **34.76** | **1** | P | **P** | **05 49 47.4** | **+0.4** |
| | SNR=12 | | | | | | |
| **KSGAH** | **Ganghwa** | **34.81** | **358** | P | **P** | **05 49 47.8** | **+0.4** |
| | SNR=11 | | | | | | |
| **KSCHC** | **Chuncheon** | **34.85** | **359** | P | **P** | **05 49 48.0** | **+0.4** |
| | SNR=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.85** | **14** | P | **P** | **05 49 45.9** | **-1.9** |
| | comp=Z,173nm,0.6s,baz=183,slow=10.0,SNR=194 | | | | | | |
| MJAR | | | | PcP | **PcP** | **05 52 18.6** | **+0.9** |
| | comp=Z,17nm,0.7s,baz=199,slow=3.5,SNR=4.2 | | | | | | |
| MJAR | | | | ScP | **ScP** | **05 55 50.4** | **+0.1** |
| | comp=Z,8.4nm,0.9s,baz=187,slow=4.0,SNR=4.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.85** | **14** | P | **P** | **05 49 45.9** | **-1.9** |
| MJAR | | | | | | 05 52 18.6 | |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,140nm,0.6s | | | | | | |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.85** | **14** | P | **P** | **05 49 45.9** | **-1.9** |
| MJAR | | | | PcP | **PcP** | **05 52 18.6** | **+0.9** |
| MJAR | | | | ScP | **ScP** | **05 55 50.4** | **+0.1** |
| **MAJO** | **Matsushiro** | **34.85** | **14** | *c i*P | **P** | **05 49 46.2** | **-1.6** |
| **MAJO** | **Matsushiro** | **34.85** | **14** | *e*P | **P** | **05 49 45.8** | **-1.9** |
| | comp=Z,981nm,1.6s | | | | | | |
| MAJO | | | | *e*PcP | **PcP** | **05 52 18.7** | **+0.9** |
| MAJO | | | | *e*S | **S** | **05 55 12.7** | **+4.3** |
| MAJO | | | | *e*ScP | **ScP** | **05 55 55.4** | **+5.1** |
| **MAT** | **Matsushiro** | **34.85** | **14** | P | **P** | **05 49 45.7** | **-2.1** |
| MAT | | | | S | **S** | **05 55 04.8** | **-3.6** |
| **KSJMJ** | **Jumunjin** | **34.95** | **1** | P | **P** | **05 49 49.0** | **+0.5** |
| | SNR=35 | | | | | | |
| **BLDU** | **Ballidu** | **34.96** | **197** | P | **P** | **05 49 47.5** | **-1.2** |
| | baz=35,SNR=91 | | | | | | |
| **KSMUS** | **Musan** | **34.98** | **358** | P | **P** | **05 49 49.8** | **+1.1** |
| | SNR=14 | | | | | | |
| **KSDDC** | **Dongducheon** | **34.98** | **358** | P | **P** | **05 49 49.3** | **+0.5** |
| | SNR=19 | | | | | | |
| **KSIJA** | **INJE** | **35.05** | **360** | P | **P** | **05 49 49.8** | **+0.4** |
| | SNR=24 | | | | | | |
| **YNCB** | **YEONCHEON** | **35.13** | **358** | P | **P** | **05 49 50.4** | **+0.3** |
| | SNR=31 | | | | | | |
| **KSCWO** | **Cheorwon** | **35.16** | **359** | P | **P** | **05 49 51.0** | **+0.7** |
| | SNR=5.6 | | | | | | |
| **KSBAR** | **Backryungdo** | **35.19** | **355** | P | **P** | **05 49 51.5** | **+1.0** |
| | SNR=22 | | | | | | |
| **RMQ** | **Roma** | **35.21** | **147** | P | **P** | **05 49 50.2** | **-0.7** |
| | baz=35,SNR=10 | | | | | | |
| **SEHB** | **SEOHWA** | **35.34** | **0** | P | **P** | **05 49 52.7** | **+0.8** |
| | SNR=29 | | | | | | |
| **KSSKC** | **Sokcho** | **35.36** | **0** | P | **P** | **05 49 52.5** | **+0.5** |
| | SNR=22 | | | | | | |
| **EIDS** | **Eidsvold** | **35.68** | **143** | P | **P** | **05 49 54.0** | **-1.0** |
| | baz=36,SNR=14 | | | | | | |
| **EIDS** | **Eidsvold** | **35.68** | **143** | *e*P | **P** | **05 49 54.3** | **-0.7** |
| | comp=Z,175nm,1.1s | | | | | | |
| **XAN** | **Xi'an** | **35.95** | **332** | P | **P** | **05 49 57.3** | **+0.1** |
| XAN | | | | pP | **pP** | **05 50 28.5** | **+0.7** |
| XAN | | | | sP | **sP** | **05 50 44.8** | **+0.8** |
| XAN | | | | S | S | 05 55 32.2 | +6.9 |
| XAN | | | | sS | sS | 05 56 26.5 | +7.7 |
| XAN | | | | PMZ | | | |
| | comp=Z,210nm,0.9s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,2µm,4.7s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,2µm,17.5s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,2µm,16.8s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,3µm,18.0s | | | | | | |
| **BBOO** | **Buckleboo** | **36.15** | **169** | P | **P** | **05 49 58.0** | **-0.9** |
| | baz=36,SNR=106 | | | | | | |
| **BBOO** | **Buckleboo** | **36.15** | **169** | *e*P | **P** | **05 49 58.3** | **-0.6** |
| | comp=Z,528nm,1.4s | | | | | | |
| BBOO | | | | *e* | | 05 50 28.9 | |
| BBOO | | | | *e*PcP | **PcP** | **05 52 21.6** | **0.0** |
| BBOO | | | | *e*S | **S** | **05 55 30.0** | **+1.8** |
| **PBA** | **Port Blair** | **36.25** | **286** | *e*P | P | 05 50 00.5 | +0.6 |
| **CD2** | **Chengdu** | **36.30** | **323** | ⇑*i*P | **P** | **05 50 00.5** | **+0.3** |
| CD2 | | | | pP | **pP** | **05 50 31.9** | **+1.0** |
| CD2 | | | | sP | **sP** | **05 50 48.7** | **+1.7** |
| CD2 | | | | S | **S** | **05 55 31.8** | **+1.0** |
| CD2 | | | | PcS | **PcS** | **05 56 09.4** | **-0.8** |
| CD2 | | | | sS | **sS** | **05 56 27.4** | **+3.1** |
| CD2 | | | | PMZ | | | |
| | comp=Z,690nm,0.7s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,5µm,4.5s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,5µm,18.1s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,7µm,19.1s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,5µm,16.6s | | | | | | |
| **DGPR** | **DIGLIPUR** | **36.40** | **288** | *e*P | **P** | **05 50 00.5** | **-0.7** |
| DGPR | | | | AMB | AMB | 05 50 01.2 | |
| | comp=Z,179nm,3.4s | | | | | | |
| **DL2** | **Dalian** | **36.47** | **351** | ⇑P | **P** | **05 50 01.8** | **+0.3** |
| DL2 | | | | S | **S** | **05 55 31.2** | **-1.8** |
| DL2 | | | | PMZ | | | |
| | comp=Z,520nm,0.6s | | | | | | |
| DL2 | | | | PMZ | | | |
| | comp=Z,1µm,10.3s | | | | | | |
| DL2 | | | | LE | | | |
| | comp=Z,3µm,17.6s | | | | | | |
| DL2 | | | | LZ | | | |
| | comp=Z,2µm,12.3s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **36.99** | **195** | P | **P** | **05 50 06.3** | **+0.3** |
| | baz=37,SNR=35 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **36.99** | **195** | P | **P** | **05 50 06.7** | **+0.8** |
| | SNR=7.0 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **36.99** | **195** | *e*P | **P** | **05 50 05.5** | **-0.5** |
| | comp=Z,124nm,0.9s | | | | | | |
| **TIY** | **Taiyuan** | **37.68** | **339** | *e*P | **P** | **05 50 12.1** | **+0.3** |
| TIY | | | | pP | **pP** | **05 50 44.6** | **+2.0** |
| TIY | | | | S | **S** | **05 55 52.2** | **+0.7** |
| TIY | | | | SS | **SS** | **05 58 39.6** | **-3.4** |
| TIY | | | | PMZ | | | |
| | comp=Z,200nm,0.7s | | | | | | |
| TIY | | | | PMZ | | | |
| | comp=Z,2µm,4.7s | | | | | | |
| TIY | | | | LN | | | |
| | comp=Z,800nm,14.1s | | | | | | |
| TIY | | | | LE | | | |
| | comp=Z,2µm,12.5s | | | | | | |
| TIY | | | | LZ | | | |
| | comp=Z,3µm,15.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **37.94** | **155** | P | **P** | **05 50 13.8** | **-0.2** |
| | baz=38,SNR=38 | | | | | | |
| **RKGY** | **Rocky Gully** | **38.65** | **195** | P | **P** | **05 50 21.4** | **+1.5** |
| | baz=39,SNR=35 | | | | | | |
| **BJT** | **Baijiatuau** | **38.66** | **345** | *e*P | **P** | **05 50 19.3** | **-0.6** |
| BJT | | | | *e* | | 05 52 30.1 | |
| BJT | | | | *e* | | 05 56 06.2 | |
| BJT | | | | pmax | pmax | | |
| | comp=Z,287nm,0.6s | | | | | | |
| **BJT** | **Baijiatuau** | **38.66** | **345** | *e*P | **P** | **05 50 19.3** | **-0.6** |
| | comp=Z,287nm,0.6s | | | | | | |
| BJT | | | | *e*PcP | **PcP** | **05 52 30.1** | **+1.0** |
| BJT | | | | *e* | | 05 56 06.2 | |
| **BJI** | **Beijing** | **38.68** | **345** | P | **P** | **05 50 19.6** | **-0.4** |
| BJI | | | | S | **S** | **05 56 10.5** | **+4.2** |
| BJI | | | | PMZ | | | |
| | comp=Z,400nm,0.6s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,3µm,4.0s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,2µm,19.2s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,3µm,18.8s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,3µm,19.2s | | | | | | |
| **SNY** | **Shenyang** | **39.11** | **354** | ⇑P | **P** | **05 50 23.3** | **-0.3** |
| SNY | | | | S | **S** | **05 56 13.5** | **+0.7** |
| SNY | | | | PMZ | | | |
| | comp=Z,220nm,1.2s | | | | | | |
| SNY | | | | PMZ | | | |
| | comp=Z,3µm,10.0s | | | | | | |
| SNY | | | | LN | | | |
| | comp=Z,2µm,20.4s | | | | | | |
| SNY | | | | LE | | | |
| | comp=Z,1µm,15.7s | | | | | | |

SNY LZ
comp=Z,2μm,20.4s
**H01W3 Cape Leeuwin H 39.72 198** P **P** **05 50 28.9 +0.4**
baz=35,slow=74,SNR=12
**H01W1 Cape Leeuwin H 39.72 198** P **P** **05 50 29.9 +1.5**
baz=35,SNR=16
**MSHR Mys Shultsa 39.73 3***c* *i*P **P** **05 50 29.0 +0.3**
**H01W2 Cape Leeuwin H 39.73 198** P **P** **05 50 30.5 +1.9**
baz=35,slow=74,SNR=14
**ARMA Armidale 39.85 148** P **P** **05 50 30.1 0.0**
baz=40,SNR=143
**ARMA Armidale 39.85 148** *e*P **P** **05 50 30.3 +0.2**
comp=Z,222nm,0.9s
ARMA *e* 05 51 02.0
ARMA *e*ScP **ScP** **05 56 11.6 +2.3**
**LZH Lanzhou 40.09 329** ⇑P **P** **05 50 33.5 +1.5**
LZH pP **pP** **05 51 03.4 +0.2**
LZH sP **sP** **05 51 22.4 +3.3**
LZH PP **PnPn** **05 52 11.9 -0.2**
LZH PcP **PcP** **05 52 36.3 +2.3**
LZH S **S** **05 56 25.0 -2.9**
LZH PcS **PcS** **05 56 26.0 +1.3**
LZH PMZ
comp=Z,2μm,1.4s
LZH PMZ
comp=Z,5μm,4.0s
**VLA Vladivostok 40.31 4**α *i*P **P** **05 50 33.7 +0.2**
VLA *i* *PP **pP** **05 51 06.6 +1.9**
VLA *i* 05 52 09.6
VLA *e* 05 52 34.3
VLA S **S** **05 56 30.3 -0.3**
VLA pmax pmax
comp=Z,372nm,1.3s
**H11S3 WAKE ISLAND Hy 40.77 65** T T 06 34 22.5
baz=253,slow=75,SNR=36
**HHC Hu-ho-hao-te 40.79 341** *e*P **P** **05 50 37.8 +0.2**
HHC pP **pP** **05 51 04.8 -4.0**
HHC sP **sP** **05 51 21.5 -3.3**
HHC PP **PP** **05 52 14.4 -0.2**
HHC S **S** **05 56 37.2 -0.8**
HHC sS **sS** **05 57 35.1 +2.8**
HHC SS **SS** **05 59 46.7 +1.9**
HHC PMZ
comp=Z,160nm,1.2s
HHC PMZ
comp=Z,2μm,6.7s
**H11S2 WAKE ISLAND Hy 40.79 65** T T 06 34 23.1
baz=253,slow=75,SNR=32
**H11S1 WAKE ISLAND Hy 40.79 65** T T 06 34 22.7
baz=253,slow=75,SNR=37
**CN2 Changchun 40.94 357** *e*P **P** **05 50 37.2 -1.5**
CN2 *e*sP **sP** **05 51 23.6 -2.2**
CN2 *e*PP **PP** **05 52 17.1 +1.1**
CN2 *e*S **S** **05 56 37.5 -2.4**
CN2 sS **sS** **05 57 32.9 -1.3**
CN2 PMZ
comp=Z,70nm,0.6s
CN2 PMZ
comp=Z,1μm,5.0s
CN2 LN
comp=Z,400nm,19.0s
CN2 LE
comp=Z,1μm,19.0s
CN2 LZ
comp=Z,2μm,19.0s
**BTO Baotou 41.11 339** *e*P **P** **05 50 39.1 -1.1**
**ERM Erimo 41.31 17***c* *i*P **P** **05 50 42.6 +0.9**
ERM pmax pmax
comp=Z,212nm,1.2s
**ERM Erimo 41.31 17** P **P** **05 50 42.6 +0.9**
comp=Z,1μm,0.6s,SNR=27
**ERM Erimo 41.31 17** *e*P **P** **05 50 42.4 +0.6**
comp=Z,116nm,0.7s
**ARPS Mount Arapiles 41.33 163** P **P** **05 50 42.3 +0.4**
baz=41,SNR=159
**H11N1 WAKE ISLAND Hy 41.34 63** T T 06 35 03.6
baz=250,slow=75,SNR=86
**H11N2 WAKE ISLAND Hy 41.35 63** T T 06 35 06.7
baz=250,slow=75,SNR=50
**H11N3 WAKE ISLAND Hy 41.36 63** T T 06 35 04.9
baz=250,slow=75,SNR=87
**USRK Ussuriysk Ar. 41.40 4** P **P** **05 50 42.3 -0.1**
comp=Z,276nm,0.7s,baz=182,slow=7.3,SNR=295
USRK PcP **PcP** **05 52 38.5 +0.7**
comp=Z,29nm,1.0s,baz=263,slow=1.2,SNR=4.6
**YNG Young 41.47 154** P **P** **05 50 43.1 -0.1**
baz=42,SNR=18
**SHL Shillong 41.64 306** *e*P **P** **05 50 45.4 +0.5**
**MDJ Mudanjiang 41.70 1** P **P** **05 50 45.1 +0.3**
MDJ pP **pP** **05 51 17.3 +1.1**
MDJ sP **sP** **05 51 32.9 +0.8**
MDJ PP **PP** **05 52 21.8 -2.4**
MDJ PcP **PcP** **05 52 40.5 +1.7**
MDJ ScP **ScP** **05 56 15.0 -1.1**
MDJ S **S** **05 56 49.8 -1.3**
MDJ sS **sS** **05 57 46.5 +0.9**
MDJ PMZ
comp=Z,210nm,1.0s
MDJ PMZ
comp=Z,2μm,11.7s
**MDJ Mudanjiang 41.70 1** *e*P **P** **05 50 44.9 +0.1**
comp=Z,613nm,1.3s
**MGCD Mangrove Creek 41.81 151** P **P** **05 50 45.6 -0.4**
baz=42,SNR=5.1
**CAN Canberra 42.60 155** *e*P **P** **05 50 53.0 +0.6**
CAN *e* 05 51 25.1
CAN pmax pmax
comp=Z,170nm,1.1s
**CAN Canberra 42.60 155** *e*P **P** **05 50 53.0 +0.6**
comp=Z,170nm,1.1s
CAN *e* 05 51 25.1
CAN *e*ScP **ScP** **05 56 21.1 +1.1**
**CNB Canberra Magne 42.75 154** P **P** **05 50 53.7 +0.1**
baz=43,SNR=15
**ASAJ Asahikawa 43.10 15** P **P** **05 50 56.4 +0.2**
baz=180,slow=20
**ASAJ Asahikawa 43.10 15** P **P** **05 50 56.4 +0.2**
**ASAJ Asahikawa 43.10 15** *e*P **P** **05 50 56.5 +0.3**
comp=Z,944nm,1.6s
**TOO Toolangi 43.21 160** P **P** **05 50 58.2 +0.9**
baz=43,SNR=28
**YUK Yuzh-Kuril'sk 43.97 18***d* *i*P **P** **05 51 01.4 -1.7**
YUK *i* 05 52 48.8
YUK *i* S **S** **05 57 21.4 -2.9**
YUK *i* SS **SS** **06 00 46.8 +0.1**
YUK pmax pmax
comp=Z,1μm,3.6s
YUK pmax pmax
comp=Z,576nm,1.9s
YUK pmax pmax
comp=N,244nm,0.9s
YUK pmax pmax
comp=E,307nm,1.9s
**MILA Mila 44.14 156** P **P** **05 51 04.3 -0.4**
baz=44,SNR=6.1
**LSA Lhasa 44.19 311** *e*P **P** **05 51 07.3 +1.6**
LSA pmax pmax
comp=Z,733nm,1.1s
**LSA Lhasa 44.19 311** *e*P **P** **05 51 07.3 +1.6**
comp=Z,733nm,1.1s
**GTA Gaotai 44.69 328** ⇑P **P** **05 51 09.8 +0.6**
GTA pP **pP** **05 51 42.7 +1.9**
GTA sP **sP** **05 51 58.4 +1.7**
GTA PcP **PcP** **05 52 50.6 +1.3**
GTA PP **PP** **05 52 57.3 +1.0**
GTA ScP **ScP** **05 56 30.0 +1.4**
GTA PcS **PcS** **05 56 41.9 -1.1**
GTA S **S** **05 57 35.5 +0.3**
GTA sS **sS** **05 58 31.5 +1.3**
GTA ScS **ScS** **06 00 51.0 -1.4**
GTA SS SS 06 00 52.3 -7.3
GTA PMZ
comp=Z,140nm,1.5s
GTA PMZ
comp=Z,3μm,6.6s
GTA LN
comp=Z,4μm,19.5s
GTA LE
comp=Z,5μm,20.7s
GTA LZ
comp=Z,5μm,22.8s
**DZM Mont Dzumac 44.77 125** *e*P **P** **05 51 08.9 -1.1**
comp=Z,70nm,1.1s
DZM *e*pP **pP** **05 51 38.9 -2.8**
comp=Z,142nm,1.2s
DZM *e*S **S** **05 57 39.5 +2.8**
comp=Z,8μm,25.4s
**DZM Mont Dzumac 44.77 125** P **P** **05 51 09.1 -0.9**
comp=Z,14nm,0.7s,baz=38,slow=0.2,SNR=13
**DZM Mont Dzumac 44.77 125** *e*P **P** **05 51 08.6 -1.4**
comp=Z,164nm,1.5s
**KUR Kuril'sk 45.69 19***c* *i*P **P** **05 51 16.7 0.0**
KUR *i* *PP **pP** **05 51 46.9 -1.6**
KUR *i* 05 53 05.1
KUR *i* S **S** **05 57 49.7 +0.7**
KUR pmax pmax
comp=Z,817nm,2.3s
KUR pmax pmax
comp=N,152nm,1.2s
KUR pmax pmax
comp=E,64nm,1.2s
KUR pmax pmax
comp=Z,319nm,1.2s
**TAPN Taplejung 45.78 306** *e*P **P** **05 51 19.0 +0.8**
comp=Z,2μm,1.1s
**YSS Yuzh-Sakhalins 45.79 14**α *i*P **P** **05 51 17.0 -0.5**
YSS *e* 05 52 54.4
YSS *e* 05 53 06.0
YSS *e*PPP PPP 05 53 58.0
YSS *e*S **S** **05 57 48.0 -2.5**
YSS *e**SS sS 05 58 36.0 -10
YSS *e*SS **ScS** **06 00 58.0 -0.8**
YSS pmax pmax
comp=Z,200nm,0.8s
YSS pmax pmax
comp=N,1μm,3.0s
YSS pmax pmax
comp=Z,1μm,3.0s
YSS MLR MLR
comp=Z,2μm,18.0s
YSS MLR MLR
comp=N,1μm,20.0s
YSS MLR MLR
comp=E,900nm,16.0s
**YSS Yuzh-Sakhalins 45.79 14** *e*P **P** **05 51 17.2 -0.3**
comp=E,198nm,0.5s
**ODAN Odare 45.84 305** *e*P **P** **05 51 19.3 +0.7**
comp=E,1μm,0.7s
**HABR Khabarovsk 45.91 6***c* *e*P **P** **05 51 16.9 -1.5**
HABR *e**PP **pP** **05 51 49.9 -0.4**
HABR *e* 05 52 50.4
HABR *e* 05 53 06.3
HABR *e*PPP PPP 05 53 52.0
HABR *e*S **S** **05 57 50.4 -1.8**
HABR *e* 06 00 55.8
HABR *e*SS **SS** **06 01 17.4 -1.5**
HABR pmax pmax
comp=N,225nm,1.5s
HABR pmax pmax
comp=Z,594nm,1.5s
HABR pmax pmax
comp=E,84nm,1.1s
HABR MLR MLR
comp=Z,2μm,18.0s
**BOK Bokaro 45.93 301** *e*P **P** **05 51 20.5 +1.5**
BOK AMB AMB 05 51 24.6
comp=Z,353nm,1.7s
**CHLP Challavanipeta 45.97 293** *e*P **P** **05 51 20.1 +0.7**
CHLP IAmb IAmb 05 51 25.2
comp=Z,405nm,1.0s
**KLR Kul'dur 46.39 3**⇓ *i*P P 05 51 17.8 -4.4
KLR *e*S **S** **05 57 54.0 -5.1**
KLR *e* 06 00 59.0
KLR pmax pmax
comp=Z,400nm,1.6s
**VIS Vishakhapatnam 46.45 292** *e*P **P** **05 51 24.2 +1.0**
VIS AMB AMB 05 51 25.8
comp=Z,472nm,1.7s
**RAMN Ramite 46.52 305** *e*P **P** **05 51 25.0 +1.1**
comp=Z,1μm,0.7s
**GUN Gumba 47.49 306** *e*P **P** **05 51 32.3 +0.7**
comp=Z,2μm,0.7s
**PALK Pallekele 47.53 277** *i* P **P** **05 51 32.7 +1.0**
**PALK Pallekele 47.53 277** P **P** **05 51 32.3 +0.6**
comp=Z,1μm,1.0s,SNR=6.4
**PALK Pallekele 47.53 277** P **P** **05 51 33.3 +1.6**
SNR=9.0
**PALK Pallekele 47.53 277**⇓ *i*P **P** **05 51 32.5 +0.8**
SNR=24
**PALK Pallekele 47.53 277** *e*P **P** **05 51 32.3 +0.6**
comp=Z,248nm,1.0s
**PKI Pulchoki 47.74 305** *e*P **P** **05 51 33.7 +0.3**
comp=Z,2μm,1.1s
**PKIN Phulchoki 47.75 305** *e*P **P** **05 51 33.7 +0.2**
comp=Z,823nm,0.7s
**KKN Kakani 47.93 306** *e*P **P** **05 51 35.2 +0.4**
comp=Z,2μm,0.9s
**PVM Polavaram 47.94 291** *e*P **P** **05 51 35.0 +0.4**
PVM IAmb IAmb 05 51 37.8
comp=Z,418nm,0.8s
**DMN Daman 48.00 305** *e*P **P** **05 51 35.8 +0.4**
comp=Z,2μm,0.8s
**MOO Moorlands 48.16 161** P **P** **05 51 37.2 +1.2**
baz=48,SNR=7.2
**ULN Ulaanbaatar 48.50 341***c* *i*P **P** **05 51 38.8 +0.1**
ULN pmax pmax
comp=Z,390nm,1.2s
**ULN Ulaanbaatar 48.50 341** P **P** **05 51 39.0 +0.3**
SNR=82
**ULN Ulaanbaatar 48.50 341** *e*P **P** **05 51 38.8 +0.1**
comp=Z,218nm,0.8s
ULN *e* 05 52 19.4
ULN *e*ScP **ScP** **05 56 46.0 +1.7**
**MDRS Chennai 48.52 285** *e*P **P** **05 51 40.5 +1.3**
MDRS AMB AMB 05 51 41.8
comp=Z,460nm,1.4s
**GKN Gorkha 48.54 306** *e*P **P** **05 51 39.7 +0.3**
comp=Z,2μm,1.1s
**TAU Tasmania Unive 48.63 161** *e*P **P** **05 51 40.3 +0.8**
TAU *e* 05 52 08.7
TAU pmax pmax
comp=Z,117nm,1.1s
**TAU Tasmania Unive 48.63 161** *e*P **P** **05 51 40.3 +0.8**
comp=Z,117nm,1.1s
TAU *e* 05 52 08.7
**SONM Songino Array 48.69 341** P **P** **05 51 40.1 -0.1**
comp=Z,110nm,0.7s,baz=153,slow=7.8,SNR=128
SONM PcP **PcP** **05 53 04.2 +1.0**
comp=Z,35nm,0.8s,baz=163,slow=4.2,SNR=3.9
SONM ScP **ScP** **05 56 45.9 +0.8**
comp=Z,8.1nm,1.1s,baz=152,slow=5.0,SNR=4.0
SONM LR LR 06 14 50.7
comp=Z,2μm,18.8s,baz=165,slow=39
**SONM Songino Array 48.69 341** P **P** **05 51 40.1 -0.1**
SONM 05 53 04.2
SONM pmax pmax
comp=Z,110nm,0.7s
SONM pmax pmax
comp=Z,35nm,0.8s
SONM MLR MLR
comp=Z,2μm,18.8s
**SONM Songino Array 48.69 341** P **P** **05 51 40.1 -0.1**
SONM PcP **PcP** **05 53 04.2 +1.0**
SONM ScP **ScP** **05 56 45.9 +0.8**
**SONA1 Songino Array 48.70 341** *e*P **P** **05 51 39.5 -0.7**
**SKHT Srikalahasti 49.13 286** *e*P **P** **05 51 44.4 +0.5**
SKHT IAmb IAmb 05 51 46.7
comp=Z,390nm,0.7s
**ADKI Addanki 49.22 289** *e*P **P** **05 51 45.1 +0.6**
ADKI IAmb IAmb 05 51 48.1
comp=Z,320nm,0.8s
**KOLN Koldanda 49.29 305** *e*P **P** **05 51 46.1 +0.9**
comp=Z,2μm,0.8s
**DANN Dangsing 49.38 306** *e*P **P** **05 51 46.6 +0.6**
comp=Z,384nm,0.7s
**NJS Nagarjunasagar 49.98 289** *e*P **P** **05 51 50.6 +0.3**
NJS IAmb IAmb 05 51 52.9
comp=Z,391nm,0.7s
**RPR Rampur 50.44 292** *e*P **P** **05 51 54.2 +0.5**
RPR IAmb IAmb 05 51 56.4
comp=Z,381nm,0.7s
**CIT Chita 50.60 348** *e*P **P** **05 51 55.6 +1.2**
CIT *e* 05 53 11.7
CIT pmax pmax
comp=Z,655nm,2.5s
**HYB Hyderabad 50.84 290**⇑ *i*P **P** **05 51 56.0 -0.8**
comp=Z,1μm,1.0s
HYB *e*sP sP 05 52 36.0 -8.9
HYB *e*S **S** **05 59 04.0 +1.5**
**HYB Hyderabad 50.84 290** *e*P **P** **05 51 57.2 +0.4**
**HYBB Hyderabad (bro 50.84 290** *e*P **P** **05 51 56.9 0.0**
HYBB IAmb IAmb 05 52 02.3
comp=Z,742nm,0.9s
**NGP Nagpur 51.19 295** *e*P **P** **05 51 59.7 +0.3**
NGP AMB AMB 05 52 04.8
comp=Z,414nm,0.0s
NGP AMP 05 52 05.0
comp=Z,542nm,1.0s
NGP *ex* **S** **05 59 11.3 +4.2**
**TRD Trivandrum 51.30 279** *e*P **P** **05 52 00.7 +0.5**
TRD AMB AMB 05 52 01.9
comp=Z,407nm,1.2s
**URV Uravakonda 51.66 287** *e*P **P** **05 52 02.0 -0.9**
URV IAmb IAmb 05 52 07.8
comp=Z,170nm,0.8s
**ZAK Zakamensk 51.93 340** *e*P **P** **05 52 04.0 -0.4**
ZAK *e* 05 53 15.2
ZAK pmax pmax
comp=Z,55nm,2.2s
ZAK pmax pmax
comp=Z,109nm,1.2s
**TLY Talaya 52.91 341***c* *i*P **P** **05 52 11.6 0.0**
TLY *i* 05 53 19.7
TLY *i* 05 54 14.0
TLY *e*S **S** **05 59 32.7 +2.9**
TLY pmax pmax
comp=Z,94nm,1.3s
TLY MLR MLR
comp=Z,2μm,20.0s
**TLY Talaya 52.91 341** P **P** **05 52 11.5 0.0**
comp=Z,378nm,1.6s,SNR=34
**TLY Talaya 52.91 341** P **P** **05 52 12.2 +0.6**
SNR=31
**TLY Talaya 52.91 341** *e*P **P** **05 52 11.8 +0.3**
comp=Z,104nm,1.1s
**MSVF Nonsavu 53.16 114** *e*P **P** **05 52 15.5 +1.5**
MSVF pmax pmax
comp=Z,127nm,1.0s
**MSVF Nonsavu 53.16 114** P **P** **05 52 15.4 +1.5**
comp=Z,672nm,1.2s,SNR=8.7
**MSVF Nonsavu 53.16 114** *e*P **P** **05 52 15.5 +1.5**
comp=Z,127nm,1.0s
**BHPL Bhopal 53.16 297** *e*P **P** **05 52 12.6 -1.3**
BHPL AMB AMB 05 52 18.7
comp=Z,511nm,1.9s
**IRK Irkutsk 53.20 342** *e*P **P** **05 52 13.0 -0.6**
IRK pmax pmax
comp=Z,486nm,2.0s
**SKR Severo-Kuril's 53.23 22** *e*P **P** **05 52 11.5 -2.3**
SKR pmax pmax
comp=E,80nm,0.5s
SKR pmax pmax
comp=Z,150nm,0.5s
SKR pmax pmax
comp=Z,2μm,4.0s
SKR pmax pmax
comp=N,2μm,2.0s
SKR pmax pmax
comp=E,2μm,2.0s
**MOY Mondy 53.80 339** *e*P **P** **05 52 18.5 +0.4**
MOY pmax pmax
comp=Z,645nm,3.1s
**CLNS Chul'man 53.98 358** *e*P **P** **05 52 19.4 +0.1**
CLNS *e**PP **sP** **05 53 04.3 -3.3**
CLNS *e* 05 53 19.6
CLNS *e* 05 54 22.5
CLNS *e*PPP PPP 05 55 36.3
CLNS *e*S **S** **05 59 42.0 -2.0**
CLNS *e* 06 01 51.1
CLNS pmax pmax
comp=Z,93nm,0.7s
CLNS pmax pmax
comp=E,35nm,0.7s
CLNS pmax pmax
comp=N,41nm,0.6s
CLNS pmax pmax
comp=Z,26nm,1.0s
CLNS pmax pmax
comp=E,33nm,1.0s
CLNS pmax pmax
comp=N,50nm,1.1s
CLNS smax smax
comp=E,560nm,11.7s
CLNS smax smax
comp=N,471nm,11.3s
**WMQ Urumqi 54.37 325** P **P** **05 52 23.0 +0.6**
WMQ pP **pP** **05 52 55.3 +0.1**
WMQ sP **sP** **05 53 11.2 +0.5**
WMQ PP **PP** **05 54 28.0 +2.1**
WMQ ScP **ScP** **05 57 08.0 -1.7**
WMQ S **S** **05 59 49.0 -0.7**
WMQ ScS **ScS** **06 01 54.0 -3.7**
WMQ SS **SS** **06 03 33.0 -1.1**
WMQ PMZ
comp=N,250nm,1.1s
WMQ PMZ
comp=N,4μm,5.0s
WMQ LN
comp=N,8μm,18.0s
WMQ LE
comp=N,4μm,18.0s
WMQ LZ
comp=N,3μm,18.0s
**DDI Dehra Dun 54.74 306** *ex* **P** **05 52 24.0 -1.3**
DDI *eP* **P** **05 52 25.9 +0.6**
DDI AMB AMB 05 52 30.6
comp=Z,1μm,1.1s
**NDI New Delhi 54.89 303** *e*P **P** **05 52 25.0 -1.3**
NDI *ex* **S** **05 59 55.5 -1.6**
**GOA Goa 55.02 287** *e*P **P** **05 52 27.6 +0.3**
GOA AMB AMB 05 52 28.4
comp=Z,162nm,1.5s
**POO Poona 55.45 291** *e*P **P** **05 52 29.9 -0.6**
POO AMB AMB 05 52 31.0
comp=Z,211nm,1.5s
**SMLA Simla 55.73 306** *i* P **P** **05 52 33.0 +0.7**
SMLA *i* P **P** **05 52 33.0 +0.7**
SMLA AMB AMB 05 52 37.5
comp=Z,708nm,1.7s
**PEA0 Petropavlovsk- 55.77 21** *e*P **P** **05 52 32.5 +0.3**
**PETK Petropavlovsk- 55.77 21** P **P** **05 52 32.5 +0.3**
comp=Z,208nm,0.7s,baz=189,slow=6.8,SNR=188
PETK LR LR 06 15 07.0
comp=Z,652nm,21.6s,baz=212,slow=34
PETK PKPPKP **P'P'df** **06 22 34.6 +2.7**
comp=Z,1.4nm,0.5s,baz=106,slow=11,SNR=3.7
**PETK Petropavlovsk- 55.77 21** P **P** **05 52 32.5 +0.3**
PETK pmax pmax
comp=Z,208nm,0.7s
**PETK Petropavlovsk- 55.77 21** P **P** **05 52 32.5 +0.3**
PETK P'P' **P'P'df** **06 22 34.6 +2.7**
**BOD Bodaibo 56.04 351**⇓ *i*P **P** **05 52 33.9 -0.1**
BOD pmax pmax
comp=Z,179nm,1.5s
**PET Petropavlovsk 56.05 22** *e*P **P** **05 52 34.3 +0.2**
PET *e*S **S** **06 00 08.9 -2.8**
PET 06 06 13.8
PET pmax pmax
comp=Z,442nm,1.4s
PET pmax pmax
comp=Z,2μm,12.3s
**PET Petropavlovsk 56.05 22** *e*P **P** **05 52 34.3 +0.2**
comp=Z,663nm,1.3s
**HVS Khovu-Aksy 56.24 335***c* *i*P **P** **05 52 37.1 +1.4**
HVS pmax pmax
comp=Z,981nm,1.5s
**BHK Bhakra 56.43 306** *ex* **P** **05 52 36.0 -1.3**
**H08S2 Diego Garcia H 56.55 259** P P 05 52 32.1 -6.0
baz=112,slow=76,SNR=23
**DGAR Diego Garcia 56.56 259** *e*P **P** **05 52 38.3 -0.1**
DGAR pmax pmax
comp=Z,729nm,1.2s
**DGAR Diego Garcia 56.56 259** P **P** **05 52 38.4 -0.1**
SNR=5.7
**DGAR Diego Garcia 56.56 259** *e*P **P** **05 52 38.3 -0.1**
comp=Z,728nm,1.2s
**H08S3 Diego Garcia H 56.56 259** P P 05 52 32.3 -5.9
baz=112,slow=76,SNR=20
**H08S1 Diego Carcia H 56.57 259** P P 05 52 32.3 -5.9
baz=112,slow=76,SNR=21
**DHRM DHARAMSHALA 56.81 307** *e*P **P** **05 52 40.2 0.0**
DHRM AMB AMB 05 52 44.8
comp=Z,824nm,0.7s
**OUZ Omahuta 56.84 136** *e*P **P** **05 52 42.2 +2.2**
comp=Z,201nm,1.9s
**MIDW Midway 57.62 58** *e*P **P** **05 52 46.2 +0.5**
comp=Z,450nm,1.5s

H08N1 **Diego Carcia H** 57.83 261 P **P** 05 52 48.6 +1.6
baz=104,slow=3.6,SNR=16
H08N2 **Diego Garcia H** 57.84 261 P **P** 05 52 49.4 +2.3
baz=104,slow=3.6,SNR=12
H08N3 **Diego Garcia H** 57.85 261 P **P** 05 52 47.8 +0.6
baz=104,slow=3.6,SNR=12
PDGK **Podgornoye** 59.10 320 P **P** 05 52 55.4 -0.3
YAK **Yakutsk** 59.14 1 P **P** 05 52 55.1 -0.4
comp=Z,56nm,0.6s,baz=7.4,slow=23,SNR=30
YAK **Yakutsk** 59.14 1*c* *i*P **P** 05 52 55.1 -0.4
YAK *e**PP **pP** 05 53 25.7 -3.2
YAK *e* 05 53 41.4
YAK *e*S **S** 06 00 48.4 -3.2
YAK *e* 06 02 29.0
YAK pmax pmax
comp=Z,83nm,1.0s
YAK pmax pmax
comp=N,42nm,1.3s
YAK pmax pmax
comp=E,6.0nm,1.2s
YAK pmax pmax
comp=Z,59nm,3.6s
YAK pmax pmax
comp=N,61nm,3.3s
YAK pmax pmax
comp=E,6.0nm,1.0s
YAK smax smax
comp=E,52nm,1.9s
YAK smax smax
comp=N,128nm,2.0s
**YAK** **Yakutsk** 59.14 1 *e*P **P** 05 52 55.2 -0.3
comp=N,531nm,0.7s
DCZ **Deep Cove** 59.16 149 *e*P **P** 05 52 56.4 +0.4
comp=N,146nm,1.2s
MK01 **Makanchi Array** 59.18 325 *e*P **P** 05 52 56.2 0.0
MKAR **Makanchi Array** 59.20 325 P **P** 05 52 56.4 +0.1
comp=N,147nm,0.6s,baz=118,slow=8.0,SNR=166
MKAR ScP **ScP** 05 57 29.0 -1.9
comp=N,3.5nm,0.7s,baz=90,slow=4.9,SNR=3.0
MKAR PKPPKP P'P'df 06 22 16.9 -11
comp=N,2.0nm,0.9s,baz=270,slow=4.7,SNR=6.2
**MKAR** **Makanchi Array** 59.20 325 P **P** 05 52 56.4 +0.1
MKAR pmax pmax
comp=Z,147nm,0.6s
**MKAR** **Makanchi Array** 59.20 325 *e*P **P** 05 52 56.5 +0.2
MKAR ScP **ScP** 05 57 29.0 -1.9
MKAR P'P' P'P'df 06 22 16.9 -11
MA2 **Magadan** 59.29 13 *i*P **P** 05 52 57.7 +1.0
MAKZ **Makanchi** 59.38 325 *e*P **P** 05 52 57.6 0.0
KSH **Kashi** 59.77 315 P **P** 05 53 01.8 +1.2
KSH pP **pP** 05 53 34.8 +0.8
KSH sP **sP** 05 53 50.9 +1.6
KSH *e*PP **PP** 05 55 16.8 +2.7
KSH PcS **PcS** 05 57 47.6 -0.7
KSH S **S** 06 00 58.3 -2.7
KSH PMZ
comp=Z,390nm,1.3s
KSH PMZ
comp=Z,2μm,5.3s
KSH LN
comp=Z,2μm,16.9s
KSH LE
comp=Z,1μm,13.3s
KSH LZ
comp=Z,5μm,28.4s
WHZ **Wether Hill Ro** 59.85 149 *e*P **P** 05 53 01.9 +1.1
comp=Z,470nm,2.3s
RPZ **Rata Peaks** 60.12 145 *e*P **P** 05 53 04.2 +1.5
comp=Z,144nm,1.0s
BHJ **Bhuj** 60.14 295 *e*P **P** 05 53 03.5 +0.4
BHJ AMB AMB 05 53 04.8
comp=Z,299nm,1.3s
KRAR **Krasnoyarsk** 60.19 338 *i*P **P** 05 53 03.7 +0.9
KRAR pmax pmax
comp=Z,68nm,0.7s
OXZ **Oxford** 60.45 144 *e*P **P** 05 53 05.8 +0.9
AAA **Alma-Ata** 60.72 319 *e*P **P** 05 53 07.5 +0.7
AAA *e*S **S** 06 01 18.6 +5.9
AAA pmax pmax
comp=Z,2μm,3.4s
AAA smax smax
comp=E,2μm,7.1s
ULHL **Ulahol** 60.73 318 P **P** 05 53 09.5 +2.3
SNR=29
KHZ **Kahutara** 60.80 143 *e*P **P** 05 53 08.6 +1.3
comp=E,935nm,2.8s
URZ **Urewera** 60.82 137 *e*P **P** 05 53 10.3 +2.8
comp=E,60nm,1.1s
BKZ **Black Stump Fm** 60.88 138 *e*P **P** 05 53 08.8 +0.9
comp=E,155nm,1.4s
MQZ **McQueen's Vall** 61.03 145 *e*P **P** 05 53 10.4 +1.6
KZA **Kyzart** 61.33 317 P **P** 05 53 12.4 +1.0
SNR=47
TKM2 **Tokmak 2** 61.45 318 P **P** 05 53 11.6 -0.4
TKM2 **Tokmak 2** 61.45 318 P **P** 05 53 12.3 +0.2
SNR=50
TKM2 **Tokmak 2** 61.45 318 *e*P **P** 05 53 12.2 +0.2
comp=E,402nm,1.6s
SFK **Sufi-Kurgan** 61.72 315 P **P** 05 53 14.1 +0.2
KBK **Karagaybulak** 61.77 318 P **P** 05 53 14.7 +0.6
SNR=26
UCH **Uchtor** 61.89 317 P **P** 05 53 15.9 +0.7
SNR=76
CHMS **Chumysh** 62.05 318 P **P** 05 53 15.6 -0.1
SNR=19
AAK **Ala-Archa** 62.07 318*c* *i*P **P** 05 53 16.4 +0.4
AAK pmax pmax
comp=Z,307nm,1.3s
**AAK** **Ala-Archa** 62.07 318 P **P** 05 53 16.2 +0.1
comp=Z,421nm,1.3s,SNR=26
AAK **Ala-Archa** 62.07 318 P **P** 05 53 16.7 +0.7
SNR=34
AAK **Ala-Archa** 62.07 318 P **P** 05 53 16.4 +0.4
SNR=22
AAK **Ala-Archa** 62.07 318 *e*P **P** 05 53 16.4 +0.4
comp=Z,70nm,0.9s
FRU **Bishkek** 62.07 318⇑ *i*P **P** 05 53 15.0 -0.9
FRU *e* 05 53 40.0
FRU *i* 05 53 50.0
FRU pmax pmax
comp=Z,340nm,2.0s
ZAA0 **Zalesovo Array** 62.12 333 *e*P **P** 05 53 14.7 -1.2
ZALV **Zalesovo Beam** 62.12 333 P **P** 05 53 14.7 -1.2
comp=Z,76nm,0.8s,baz=126,slow=6.3,SNR=75
ZALV LR LR 06 21 02.5
comp=Z,2μm,20.0s,baz=126,slow=37
ZALV PKPPKP P'P'df 06 22 15.9 -6.4
comp=Z,2.0nm,0.9s,baz=117,slow=1.7,SNR=3.8
**ZALV** **Zalesovo Beam** 62.12 333 P **P** 05 53 14.7 -1.2
ZALV pmax pmax
comp=Z,76nm,0.8s
ZALV MLR MLR
comp=Z,2μm,20.0s
**ZALV** **Zalesovo Beam** 62.12 333 P **P** 05 53 14.7 -1.2
ZALV P'P' P'P'df 06 22 15.9 -6.4
USP **Ospenovka** 62.33 318 P **P** 05 53 17.1 -0.5
SNR=65
AML **Almayashu** 62.41 317 P **P** 05 53 19.2 +0.6
SNR=47
SMY **Shemya** 62.55 29 *e*P **P** 05 53 20.1 +1.3
SMY pmax pmax
comp=Z,674nm,1.3s
**SMY** **Shemya** 62.55 29 *e*P **P** 05 53 20.1 +1.3
comp=Z,674nm,1.3s
EKS2 **Erkin-Say** 62.56 317 *e*P **P** 05 53 19.9 +0.6
EKS2 *e* 05 53 58.5
EKS2 pmax pmax
comp=Z,219nm,1.3s
**EKS2** **Erkin-Say** 62.56 317 P **P** 05 53 19.9 +0.6
SNR=54
**EKS2** **Erkin-Say** 62.56 317 *e*P **P** 05 53 19.9 +0.6
comp=Z,219nm,1.3s
EKS2 *e* 05 53 58.5
SEY **Seymchan** 62.65 12 P **P** 05 53 20.2 +1.0
comp=Z,184nm,1.0s,baz=226,slow=2.9,SNR=66
SEY **Seymchan** 62.65 12⇑ *i*P **P** 05 53 21.0 +1.8
SEY **Seymchan** 62.65 12 P **P** 05 53 20.2 +1.0
KBL **Kabul** 63.29 307 *e*P **P** 05 53 24.4 0.0
KBL pmax pmax
comp=Z,117nm,0.8s
**KBL** **Kabul** 63.29 307 *e*P **P** 05 53 24.4 0.0
comp=Z,117nm,0.8s
KURK **Kurchatov** 63.35 327 *e*P **P** 05 53 23.7 -0.5
KURK *e* 05 54 01.8
KURK **Kurchatov** 63.35 327 P **P** 05 53 23.4 -0.7
comp=Z,2μm,0.7s,SNR=79
KURK **Kurchatov** 63.35 327 *e*P **P** 05 53 23.6 -0.5
KURK *e* 05 54 01.8
MNAS **Manas** 63.36 317⇑ P **P** 05 53 24.6 0.0
NVS **Novosibirsk** 63.40 333⇑ *i*P **P** 05 53 23.2 -1.2
NVS *i* *PP **pP** 05 53 57.9 -0.2
NVS *i* 05 55 41.8
NVS pmax pmax
comp=N,213nm,1.6s
NVS pmax pmax
comp=E,237nm,1.6s
NVS pmax pmax
comp=Z,445nm,1.6s
AMKA **Amchitka** 64.49 33 *e*P **P** 05 53 31.9 +0.4
KK31 **Karatay Array** 64.95 317 *i*P **P** 05 53 34.3 -0.5
KK31 pmax pmax
comp=Z,48nm,0.8s
KKAR **Karatay Array** 64.95 317 *e*P **P** 05 53 34.6 -0.2
KKAR *e* 05 54 16.6
KKAR **Karatay Array** 64.95 317 *e*P **P** 05 53 34.6 -0.2
KKAR *e* 05 54 16.6
OTUK **Ortayu** 65.79 323 P **P** 05 53 39.7 -0.4
GSTR **Great Sitkin T** 67.37 34 *e*P **P** 05 53 51.0 +0.9
ATKA **Atka Island** 68.45 34 *e*P **P** 05 53 56.9 +0.2
comp=Z,425nm,0.7s
VOSK **Vostochnaya** 68.48 327 P **P** 05 53 55.9 -1.1
BVAR **Borovoye Array** 68.94 327 P **P** 05 53 59.2 -0.6
comp=Z,76nm,0.6s,baz=130,slow=8.3,SNR=88
BVAR LR LR 06 26 54.4
comp=Z,2μm,19.9s,slow=38
**BVAR** **Borovoye Array** 68.94 327 P **P** 05 53 59.2 -0.6
BVAR pmax pmax
comp=Z,76nm,0.6s
BVAR MLR MLR
comp=Z,2μm,19.9s
**BVAR** **Borovoye Array** 68.94 327 P **P** 05 53 59.2 -0.6
BRVK **Borovoye** 69.01 327 P **P** 05 53 59.6 -0.6
BRVK **Borovoye** 69.01 327 P **P** 05 53 59.7 -0.5
comp=Z,1μm,1.3s,SNR=56
**BRVK** **Borovoye** 69.01 327 P **P** 05 54 00.0 -0.2
SNR=103
**BRVK** **Borovoye** 69.01 327 *e*P **P** 05 53 59.9 -0.4
comp=Z,378nm,1.3s
CHKZ **Chkalovo** 69.09 327 P **P** 05 53 59.8 -0.9
ZRNK **Zerenda** 69.67 326 P **P** 05 54 03.4 -0.9
DRV **Dumont d'Urvil** 69.78 175 S SKiKP 06 03 23.0 -15
DRV L 06 11 00.0
DRV R 06 16 00.0
**WBK** **Wadi Bani Khal** 69.80 293 P **P** 05 54 05.8 0.0
SNR=18
CASY **Casey** 70.05 188 *e*P **P** 05 54 06.0 -0.2
comp=Z,58nm,0.8s
**BILL** **Bilibino** 70.11 14*c* *i*P **P** 05 54 06.0 -0.7
BILL *e* 05 54 28.1
BILL *e* 05 56 45.5
BILL *e*PPP PPP 05 58 25.0
BILL *i*S S 06 02 58.3 -7.8
BILL *i*SS **SS** 06 07 34.8 -3.8
BILL *e*SSS SSS 06 10 48.5
BILL pmax pmax
comp=Z,84nm,1.2s
**BILL** **Bilibino** 70.11 14 *e*P **P** 05 54 07.2 +0.6
comp=Z,32nm,0.5s
IDAH **Dahanechah** 70.35 304 *e*P **P** 05 54 09.7 +0.5
JMDO **Jabal Madar** 70.58 293 P **P** 05 54 10.2 -0.3
SNR=28
IMON **Monand** 70.59 304 *e*P **P** 05 54 10.4 -0.2
SMDO **Samad** 70.69 293 P **P** 05 54 10.5 -0.7
SNR=11
IMYA **Miami** 70.80 308 *e*P **P** 05 54 11.3 -0.5
IKOO **Kooshah** 71.02 303 *e*P **P** 05 54 13.3 +0.1
ITEG **Tejag** 71.30 304 *e*P **P** 05 54 14.5 -0.4
IMOG **Moghan** 71.37 307 *e*P **P** 05 54 15.6 +0.2
HOQ **Hoqain** 71.41 294 P **P** 05 54 15.4 0.0
SNR=25
IPAY **Payeh** 71.70 307 *e*P **P** 05 54 17.5 +0.3
NIKH **Nikolski High** 71.75 35 *e*P **P** 05 54 17.2 +0.4
comp=Z,140nm,0.8s
UOSS **Wadi Hilu** 72.54 295 P **P** 05 54 21.8 -0.4
comp=Z,450nm,0.9s,SNR=14
**UOSS** **Wadi Hilu** 72.54 295 *e*P **P** 05 54 21.4 -0.8
comp=Z,59nm,0.8s
BANOM **Banah** 72.55 296 P **P** 05 54 22.8 +0.6
SNR=14
BANOM **Banah** 72.55 296⇑ *i*P **P** 05 54 21.9 -0.3
SNR=15
HATD **Hatta, Dubai** 72.59 295⇑ *i*P **P** 05 54 22.0 -0.5
SNR=33
SHAO **Shalim** 72.60 288 P **P** 05 54 23.4 +0.7
SNR=9.9
ASHO **Asfyiah** 72.65 295 P **P** 05 54 23.4 +0.6
SNR=20
ASHO **Ashiyiah** 72.65 295 *i*P **P** 05 54 22.6 -0.2
SNR=19
ABKT **Ailbek** 72.65 309 P **P** 05 54 22.2 -0.4
comp=Z,919nm,0.9s,SNR=29
GEYT **Alibeck** 72.66 309 P **P** 05 54 22.7 0.0
comp=Z,60nm,0.7s,baz=145,slow=3.6,SNR=37
GEYT pP **pP** 05 54 58.4 +1.2
comp=Z,75nm,0.8s,baz=127,slow=3.9,SNR=6.0
MRIV **Mauritius Mete** 72.96 248 *e*P **P** 05 54 25.2 +0.5
NAZ **Nazwa, Dubai** 73.03 295⇓ *i*P **P** 05 54 24.2 -0.9
SNR=33
FAQ **Al Faqa, Dubai** 73.08 295⇓ *i*P **P** 05 54 24.4 -0.9
SNR=43
ASUD **Al Ashush, Dub** 73.31 295⇑ *i*P **P** 05 54 26.8 +0.2
SNR=56
UNV **Unalaska Valle** 73.37 34 *e*P **P** 05 54 27.4 +1.0
comp=Z,151nm,0.6s
AB31 **Akbulak array** 73.84 321 *i*P **P** 05 54 28.4 -0.9
AB31 pmax pmax
comp=Z,80nm,0.8s
ABKAR **Akbulak array** 73.84 321 *e*P **P** 05 54 28.5 -0.7
AKUT **Akutan** 73.88 34 *e*P **P** 05 54 29.6 +0.3
comp=Z,465nm,0.7s
KIP **Kipapa** 73.88 69 *e*P **P** 05 54 31.6 +1.5
KIP pmax pmax
comp=Z,1μm,1.1s
**KIP** **Kipapa** 73.88 69 *e*P **P** 05 54 31.6 +1.5
comp=Z,1μm,1.1s
HON **Honolulu** 73.89 69 *e*P **P** 05 54 32.2 +2.1
HON **Honolulu** 73.89 69 *e*P **P** 05 54 32.1 +2.1
OPA **Opana** 73.90 68 *e*P **P** 05 54 33.3 +3.1
OPA **Opana** 73.90 68 *e*P **P** 05 54 33.2 +3.1
RBK **Rabkut** 73.93 287 P **P** 05 54 30.5 0.0
SNR=11
XMAS **Kiritimati** 74.26 89 *e*P **P** 05 54 31.8 -0.6
comp=Z,227nm,1.2s
IMEH **Mehriz** 74.58 302 *e*P **P** 05 54 32.2 -2.1
GAMB **Gambell** 74.68 24 *e*P **P** 05 54 35.1 +1.3
comp=Z,326nm,1.5s
RER **Riviere de l'E** 74.72 247 *e*P **P** 05 54 36.0 +1.0
comp=Z,234nm,1.1s
ABTO **Aybut** 74.79 287 P **P** 05 54 35.5 0.0
SNR=15
ICHK **Chekchek** 74.85 303 *e*P **P** 05 54 34.6 -1.2
AKTO **Aktyubinsk** 75.34 322 LR LR 06 30 26.8
comp=Z,2μm,21.3s,slow=38
**AKTO** **Aktyubinsk** 75.34 322 P **P** 05 54 36.9 -1.0
FALS **False Pass** 75.40 34 *e*P **P** 05 54 37.6 -0.6
comp=Z,368nm,0.6s
ISAD **Sadrabad** 75.42 302 *e*P **P** 05 54 37.4 -1.8
HLK **Haleakala** 75.50 69 *e*P **P** 05 54 42.2 +2.5
SVE **Sverdlovsk** 75.56 328 *e*P **P** 05 54 37.7 -1.3
SVE *e* 05 57 31.4
SVE *e*S **S** 06 04 10.5 +2.3
SVE pmax pmax
comp=Z,288nm,1.2s
ISRV **Sarvestan** 75.67 299 *e*Pn **P** 05 54 39.7 -1.0
IPAR **Pars** 75.77 300 *e*P **P** 05 54 40.9 -0.3
IGLO **Ghaloghah** 75.82 307 *e*P **P** 05 54 40.7 -0.5
IKIA **Kiasar** 75.90 307 *e*P **P** 05 54 41.4 -0.3
POHA **Pohakuloa** 76.13 70 *e*P **P** 05 54 45.0 +1.7
comp=Z,184nm,0.8s
POHA *e* 05 55 29.0
UWE **Uwekahuna** 76.34 71 *e*P **P** 05 54 46.5 +2.1
IRAM **Ramesheh** 76.52 302 *e*P **P** 05 54 43.1 -2.2
ARU **Arti** 76.54 328 LR LR 06 31 34.8
comp=Z,2μm,19.0s,baz=112,slow=38
**ARU** **Arti** 76.54 328*c* *i*P **P** 05 54 43.1 -1.5
ARU 05 54 53.4
ARU *PP **pP** 05 55 16.7 -2.8
ARU 05 57 35.2
ARU S **S** 06 04 16.5 -2.5
ARU 06 04 44.8
ARU *SS sS 06 05 09.9 -9.3
ARU pmax pmax
comp=Z,235nm,1.2s
**ARU** **Arti** 76.54 328 P **P** 05 54 43.1 -1.5
comp=Z,1μm,0.7s,SNR=37
**ARU** **Arti** 76.54 328 *e*P **P** 05 54 43.2 -1.5
comp=Z,122nm,0.6s
ARU *e* 05 55 23.0
IFIR **Firoozkooh** 76.59 306 *e*P **P** 05 54 44.9 -0.7
IALA **Alasht** 76.59 306 *e*P **P** 05 54 45.1 -0.7
IZEF **Zefreh** 76.66 303 *e*P **P** 05 54 44.2 -1.9
IKAZ **Kazeroun** 76.81 300 *e*P **P** 05 54 45.2 -1.9
IGAR **Gharneh** 76.86 302 *e*P **P** 05 54 45.9 -1.3
IPRN **Peran** 76.99 306 *e*P **P** 05 54 46.2 -1.5
SDPT **Sand Point** 77.16 34 *e*P **P** 05 54 48.3 +0.2
comp=Z,385nm,0.7s
IDMV **Damavand** 77.17 306 *e*P **P** 05 54 47.8 -1.2
IKLH **Kolahrood** 77.33 303 *e*P **P** 05 54 49.3 -0.5
IPIR **Pirpir** 77.85 303 *e*P **P** 05 54 50.3 -2.5
IR5 **Iran Long-Peri** 78.31 305 *e*P **P** 05 54 54.2 -0.9
CHGN **Chignik** 78.51 33 *e*P **P** 05 54 55.6 +0.1
IRAZ **Razeghan** 78.86 305 *e*P **P** 05 54 57.4 -0.8
IKOM **Komasi** 80.77 304 *e*P **P** 05 55 06.8 -1.7
ISRB **Sarab** 80.85 308 *e*P **P** 05 55 08.3 -0.6
SII **Sitkinak Islan** 80.87 33 *e*P **P** 05 55 09.6 +1.3
comp=Z,323nm,1.0s
SVW2 **Sparrevohn** 80.93 29 *e*P **P** 05 55 08.4 -0.1
comp=Z,55nm,1.0s
MAK **Makhachkala** 81.33 313 *e*P **P** 05 55 08.3 -2.6
MAK *e* 05 58 23.1
MAK *e*S **S** 06 05 13.2 +3.0
MAK *e**SS **sS** 06 06 08.5 -2.6
MAK *e*SS **SS** 06 10 26.9 -2.3
MAK pmax pmax
comp=Z,685nm,1.9s
IVIS **Veis** 81.33 304 *e*P **P** 05 55 09.4 -1.9
IHRS **Heris** 81.37 308 *e*P **P** 05 55 10.9 -0.8
OHAK **Old Harbor** 81.45 33 *e*P **P** 05 55 11.9 +0.6
comp=Z,237nm,1.1s
OHAK *e* 05 55 48.8
IGHG **Ghaleghazi** 81.55 304 *e*P **P** 05 55 11.1 -1.6
IDHR **Dehrash** 81.72 304 *e*P **P** 05 55 11.4 -2.1
KDAK **Kodiak Island** 81.91 32 P **P** 05 55 14.2 +0.6
comp=Z,145nm,0.8s,baz=233,slow=1.0,SNR=68
KDAK pP **pP** 05 55 51.0 +2.0
comp=Z,84nm,0.7s,baz=350,slow=1.9,SNR=4.6
**KDAK** **Kodiak Island** 81.91 32 *i*P **P** 05 55 13.9 +0.2
**KDAK** **Kodiak Island** 81.91 32 P **P** 05 55 14.9 +1.2
comp=Z,1μm,1.3s,SNR=43
**KDAK** **Kodiak Island** 81.91 32 *e*P **P** 05 55 14.3 +0.6
comp=Z,165nm,0.9s
KDAK *e* 05 55 51.2
IAZR **Azarshahr** 82.17 307 *e*P **P** 05 55 15.6 -0.3
RSO **Redoubt South** 82.19 29 *e*P **P** 05 55 15.2 -0.2
RAYN **Ar Rayn** 82.23 293 P **P** 05 55 15.0 -1.2
comp=Z,795nm,0.9s,SNR=75
**VNDA** **Vanda** 82.29 173 P **P** 05 55 15.1 -0.2
comp=Z,71nm,0.9s,baz=320,slow=5.9,SNR=187
VNDA PKPPbc **PKKPbc** 06 13 41.6 -4.3
comp=Z,1.9nm,0.8s,baz=299,slow=3.4,SNR=8.0
VNDA PKPPKP **P'P'df** 06 21 47.3 +1.2
comp=Z,3.0nm,1.1s,baz=203,slow=2.0,SNR=6.8
VNDA LR LR 06 30 15.3
comp=Z,2μm,20.7s,baz=335,slow=34
**VNDA** **Vanda** 82.29 173 P **P** 05 55 15.1 -0.2
VNDA pmax pmax
comp=Z,71nm,1.0s
**VNDA** **Vanda** 82.29 173 *e*P **P** 05 55 15.1 -0.2
comp=Z,102nm,1.1s
VNDA PKKPbc **PKKPbc** 06 13 41.6 -4.3
VNDA P'P' **P'P'df** 06 21 47.3 +1.2
**ABPO** **Ambohimpanom** 82.39 251 *e*P **P** 05 55 15.9 -1.3
ABPO pmax pmax
comp=Z,283nm,0.9s
**ABPO** **Ambohimpanom** 82.39 251 P **P** 05 55 17.8 +0.6
comp=Z,1μm,0.9s,SNR=13
**ABPO** **Ambohimpanom** 82.39 251 *e*P **P** 05 55 15.9 -1.3
comp=Z,283nm,0.9s
IMRD **Marand** 82.44 309 *e*P **P** 05 55 16.7 -0.4
ISHB **Shabestar** 82.49 308 *e*P **P** 05 55 16.8 -0.7
SPU **Mount Spurr** 82.63 29 *e*P **P** 05 55 18.0 +0.5
PPLA **Purkeypile** 82.81 27 *e*P **P** 05 55 18.9 +0.4
comp=Z,168nm,1.0s
DGRG **David-gareji** 82.81 311 P **P** 05 55 19.5 +0.6
DGRG **David-gareji** 82.81 311 P **P** 05 55 19.4 +0.6
CNPM **China Poot** 82.83 30 *e*P **P** 05 55 18.4 -0.1
comp=Z,326nm,1.6s
CAST **Castle Rocks** 82.93 26 *e*P **P** 05 55 19.2 +0.3
comp=Z,406nm,1.7s
BRLK **Bradley Lake** 83.03 30 *e*P **P** 05 55 18.9 -0.7
comp=Z,76nm,0.8s
SBA **Scott Base** 83.18 172 *e*P **P** 05 55 20.6 +0.7
SBA pmax pmax
comp=Z,52nm,1.0s
**SBA** **Scott Base** 83.18 172 *e*P **P** 05 55 20.6 +0.7
comp=Z,52nm,1.0s
SUA **Susitna One** 83.30 29 *e*P **P** 05 55 21.0 0.0
comp=Z,160nm,0.9s
TBLG **Delisi** 83.30 312 *e*P **P** 05 55 22.6 +1.2
TBLG **Delisi** 83.30 312 P **P** 05 55 21.2 -0.2
TBLG **Delisi** 83.30 312 P **P** 05 55 21.1 -0.2
DAMY **Dhamar** 83.34 284 P **P** 05 55 23.4 +1.0
baz=84,SNR=7.4
**DAMY** **Dhamar** 83.34 284 *e*P **P** 05 55 22.7 +0.3
comp=Z,109nm,1.0s
MAW **Mawson** 83.37 201 P **P** 05 55 21.2 +0.1
comp=Z,92nm,1.0s,baz=74,slow=5.7,SNR=126
MAW PKKPbc **PKKPbc** 06 13 40.0 -3.1
comp=Z,5.1nm,1.0s,baz=294,slow=2.8,SNR=8.6
**MAW** **Mawson** 83.37 201 *e*P **P** 05 55 21.1 +0.1
MAW pmax pmax
comp=Z,39nm,1.3s
**MAW** **Mawson** 83.37 201 P **P** 05 55 21.1 +0.1
baz=83,SNR=108
**MAW** **Mawson** 83.37 201 *e*P **P** 05 55 21.1 +0.1
comp=Z,39nm,1.3s
MAW PKKPbc **PKKPbc** 06 13 40.0 -3.1
**PPT2** **Papeete2** 83.40 108 *e*P **P** 05 55 25.0 +2.7
comp=Z,114nm,1.4s
PPT2 *epP **pP** 05 55 57.4 -0.4
PPT2 comp=Z,94nm,1.2s *eS **S** 06 05 31.7 -0.7
PPT2 comp=Z,5μm,27.2s *eSS **SS** 06 11 07.4 +6.1
PPT2 comp=Z,3μm,28.0s *eLQ LQ 06 18 17.6
PPT2 comp=Z,8μm,33.0s *eLR LR 06 21 55.0
**PAE** **Paea** 83.41 108 *e*P **P** 05 55 24.5 +2.3
comp=Z,4μm,28.0s
PAE comp=Z,18nm,1.1s *epP **pP** 05 55 57.5 -0.2
comp=Z,20nm,1.1s
**BPAW** **Bear Paw Mtn.** 83.50 26 *e*P **P** 05 55 22.5 +0.6
comp=Z,279nm,1.4s
MLY **Manley** 83.72 25 *e*P **P** 05 55 23.3 +0.3
comp=Z,194nm,1.3s
TVO **Taravao** 83.73 108 *e*P **P** 05 55 26.4 +2.4
comp=Z,37nm,1.2s
TRF **Thorofare Moun** 83.73 27 *e*P **P** 05 55 22.9 -0.3
comp=Z,249nm,1.2s
RC01 **Rabbit Creek A** 83.74 29 *e*P **P** 05 55 23.2 +0.1
comp=Z,198nm,1.0s
SEW **Seward** 83.79 30 *e*P **P** 05 55 23.6 +0.3
comp=Z,550nm,1.4s
SEW *e* 05 56 08.3
CLDR **Caldiran** 83.85 309 *e*P **P** 05 55 25.8 +1.3
HKR **Hakkari** 83.95 307 *e*P **P** 05 55 25.9 +1.0
ZEI **Tsey** 83.96 313 *e*P **P** 05 55 24.3 -0.6
ZEI pmax pmax
comp=Z,302nm,0.9s
**TBI** **Tubuai** 84.04 114 *e*S **S** 06 05 39.3 +0.8
comp=Z,3μm,29.8s
TBI *eSS **SS** 06 11 14.2 +3.8
comp=Z,3μm,26.5s
TBI *eLQ LQ 06 18 39.9
comp=Z,3μm,31.8s
TBI *eLR LR 06 22 12.7
comp=Z,4μm,40.8s
**PMR** **Palmer** 84.08 28 *e*P **P** 05 55 24.6 -0.2
PMR pmax pmax
comp=Z,243nm,1.0s
**PMR** **Palmer** 84.08 28 *e*P **P** 05 55 24.6 -0.2
comp=Z,243nm,1.0s
BWN **Browne** 84.17 26 *e*P **P** 05 55 26.2 +0.9
comp=Z,254nm,1.2s
COLD **Coldfoot** 84.20 23 *e*P **P** 05 55 26.2 +0.9

comp=Z,148nm,0.8s
**AKH Akhalkalaki 84.23 311** *e*P **P** 05 55 27.4 +1.2
**AKH Akhalkalaki 84.23 311** P **P** 05 55 26.9 +0.6
**AKH Akhalkalaki 84.23 311** P **P** 05 55 26.8 +0.6
**VANB Van 84.25 308** *e*P **P** 05 55 26.5 +0.1
**ONI Oni 84.29 312** P **P** 05 55 26.8 +0.4
**MCK McKinley 84.36 26** *e*P **P** 05 55 26.1 -0.1
MCK pmax pmax
comp=Z,547nm,1.6s
**MCK McKinley 84.36 26** *e*P **P** 05 55 26.1 -0.1
comp=Z,547nm,1.6s
**RND Reindeer 84.37 27** *e*P **P** 05 55 25.5 -0.8
RND pmax pmax
comp=Z,464nm,1.5s
**RND Reindeer 84.37 27** *e*P **P** 05 55 25.5 -0.8
comp=Z,464nm,1.5s
**SML Sawmill 84.47 28** *e*P **P** 05 55 27.2 +0.3
SML pmax pmax
comp=Z,548nm,1.2s
**SML Sawmill 84.47 28** *e*P **P** 05 55 27.2 +0.3
comp=Z,548nm,1.2s
**KARS Kars 84.52 310** *e*P **P** 05 55 28.9 +1.2
**AGRB Hanur-Agry 84.57 309** *e*P **P** 05 55 28.9 +0.9
**KBZ Khabaz 84.72 313** P **P** 05 55 28.7 +0.3
comp=Z,57nm,1.1s,baz=75,slow=3.2,SNR=28
KBZ pP **pP** 05 56 04.8 +0.9
comp=Z,47nm,1.1s,baz=110,slow=7.3,SNR=3.3
**KBZ Khabaz 84.72 313** P **P** 05 55 28.7 +0.3
KBZ *PP **pP** 05 56 04.8 +0.9
KBZ pmax pmax
comp=Z,57nm,1.1s
KBZ pmax pmax
comp=Z,47nm,1.1s
**KBZ Khabaz 84.72 313** P **P** 05 55 28.7 +0.3
KBZ pP **pP** 05 56 04.8 +0.9
**MDM Murphy Dome 84.77 25** *e*P **P** 05 55 28.3 +0.1
comp=Z,39nm,0.9s
**WRH Wood River Hil 84.79 26** *e*P **P** 05 55 27.9 -0.5
comp=Z,185nm,1.4s
**KIV Kislovodsk 84.88 314***c iP* **P** 05 55 28.3 -1.0
KIV *e**PP **pP** 05 56 09.7 +4.8
KIV *e* 05 58 46.0
KIV *e*PPP PPP 06 00 42.3
KIV *e*S **SPn** 06 06 38.3 -2.2
KIV *i* SS **SS** 06 11 27.4 +5.5
KIV pmax pmax
comp=Z,100nm,1.2s
**KIV Kislovodsk 84.88 314** P **P** 05 55 29.1 -0.3
comp=Z,320nm,0.7s,SNR=12
**KIV Kislovodsk 84.88 314** P **P** 05 55 30.4 +1.1
SNR=6.6
**KIV Kislovodsk 84.88 314**⇑ *iP* **P** 05 55 29.1 -0.3
SNR=14
**KIV Kislovodsk 84.88 314** *e*P **P** 05 55 29.1 -0.3
comp=Z,423nm,2.0s
**COLA College 84.93 25**⇓ *iP* **P** 05 55 28.9 -0.1
**COLA College 84.93 25** *e*P **P** 05 55 28.8 -0.1
comp=Z,35nm,0.9s
**CCB Clear Creek Bu 84.93 25** *e*P **P** 05 55 28.7 -0.3
comp=Z,192nm,1.6s
**SCM Sheep Creek Mo 84.95 28** *e*P **P** 05 55 29.8 +0.5
SCM pmax pmax
comp=Z,310nm,0.9s
**SCM Sheep Creek Mo 84.95 28** *e*P **P** 05 55 29.8 +0.5
comp=Z,310nm,0.9s
**SIRT Sirnak 84.98 307** *e*P **P** 05 55 30.8 +0.7
**DHY Denali Highway 85.01 27** *e*P **P** 05 55 29.6 -0.1
**CHVG Ch'k'valeri 85.30 312** P **P** 05 55 31.4 +0.1
**IL1 Eielson Array 85.33 25** *e*P **P** 05 55 29.4 -1.6
**ILAR Eielson Array 85.33 25** P **P** 05 55 29.6 -1.4
comp=Z,7.7nm,0.7s,baz=244,slow=5.3,SNR=86
ILAR PKKP **PKKPdf** 06 13 29.9 0.0
comp=Z,1.2nm,0.9s,baz=32,slow=1.3,SNR=4.5
ILAR PKPPKP P'P'df 06 21 30.6 -11
comp=Z,1.0nm,1.0s,baz=142,slow=1.4,SNR=5.1
ILAR LR LR 06 29 46.3
comp=Z,704nm,21.9s,baz=267,slow=33
**ILAR Eielson Array 85.33 25** P **P** 05 55 29.6 -1.4
ILAR PKKP **PKKPdf** 06 13 29.9 0.0
ILAR P'P' P'P'df 06 21 30.6 -11
**KLU Klutina 85.61 29** *e*P **P** 05 55 33.2 +0.7
comp=Z,86nm,0.8s
**BCA Borcka 85.63 311** *e*P **P** 05 55 32.6 -0.5
**EYAK Cordova Ski Ar 85.65 30** *e*P **P** 05 55 33.7 +1.1
comp=Z,111nm,1.1s
**DIV Divide 85.66 29** *e*P **P** 05 55 33.8 +0.9
comp=Z,269nm,0.9s
DIV *e* 05 56 07.0
**VRH Novokhopyorsk 85.67 321** *e*P **P** 05 55 32.5 -0.4
VRH pmax pmax
comp=Z,240nm,0.7s
VRH pmax pmax
comp=N,50nm,1.5s
VRH pmax pmax
comp=E,170nm,0.8s
**VRTB Varto-Mus 85.76 309** *e*P **P** 05 55 35.9 +2.0
**EZM Erzurum 85.83 310** *e*P **P** 05 55 35.7 +1.3
**PAX Paxson 85.87 27** *e*P **P** 05 55 34.3 +0.4
PAX pmax pmax
comp=Z,372nm,2.0s
**PAX Paxson 85.87 27** *e*P **P** 05 55 34.3 +0.4
comp=Z,372nm,2.0s
**SVAN Silvan-Diyarba 85.97 308** *e*P **P** 05 55 36.1 +1.3
**HARP HAARP 86.00 28** *e*P **P** 05 55 35.5 +1.1
comp=Z,131nm,1.1s
**FYU Fort Yukon 86.10 24** *e*P **P** 05 55 35.7 +0.9
comp=Z,223nm,1.6s
**RAGM Ragged Mountai 86.18 30** *e*P **P** 05 55 36.2 +0.8
comp=Z,178nm,1.2s
**BMRM Bremner River 86.23 29** *e*P **P** 05 55 35.9 +0.3
comp=Z,204nm,1.2s
**BNGB Bing¶ll 86.37 309** *e*P **P** 05 55 37.5 +0.7
**MAZI Mazidag 86.57 307** *e*P **P** 05 55 38.6 +0.7
**MENT Mentasta 86.67 27** *e*P **P** 05 55 37.8 0.0
**BAYT Ayd¨–ntepe-Bay 86.76 310** *e*P **P** 05 55 39.6 +0.7
**DYBB Diyarbakir 86.80 308** *e*P **P** 05 55 40.1 +1.1
**KLMR Klimovskoe 86.97 331***c iP* **P** 05 55 37.3 -1.8
KLMR *e**PP pP 05 56 06.2 -8.6
KLMR *e* 05 59 04.2
KLMR *e*S **SKSac** 06 05 51.5 -1.4
KLMR pmax pmax
comp=Z,221nm,1.3s
**SOC Sochi 87.03 313***c iP* **P** 05 55 38.6 -1.2
SOC *e* 05 59 10.0
SOC *e*PPP PPP 06 01 04.2
SOC *e*S **SKSac** 06 05 50.9 -3.1
SOC *e*SS SS 06 11 44.9 -8.3
SOC pmax pmax
comp=Z,48nm,0.6s
**VORD Divnogorie 87.20 321** *e*P **P** 05 55 39.2 -1.2
VORD pmax pmax
comp=Z,60nm,0.8s
VORD pmax pmax
comp=N,10.0nm,0.6s
VORD pmax pmax
comp=E,100nm,0.9s
**GUMT Gumushane 87.27 310** *e*P **P** 05 55 41.4 +0.2
**VSR Storozhevoye 87.27 321** *e*P **P** 05 55 39.8 -1.0
VSR pmax pmax
comp=Z,70nm,0.8s
VSR pmax pmax
comp=N,9.0nm,0.5s
VSR pmax pmax
comp=E,80nm,0.9s
**PTK Pertek 87.37 309** *e*P **P** 05 55 42.5 +0.6
**LPSR Galich'ya Gora 87.39 322** *e*P **P** 05 55 40.8 -0.5
LPSR pmax pmax
comp=E,30nm,0.9s
LPSR pmax pmax
comp=Z,130nm,0.9s
LPSR pmax pmax
comp=N,10.0nm,1.0s
**SVRC Sivrice-ELAZID 87.45 308** *e*P **P** 05 55 42.4 +0.2
**MNKR ALMNKUR 87.55 306** *e*P P 05 55 37.0 -5.5
**MNKR ALMNKUR 87.55 306** *e*P P 05 55 37.0 -5.5
**TMCR Tamitsa 87.61 334** *e*P **P** 05 55 40.5 -1.6
TMCR *e*S **SKSac** 06 05 53.6 -3.1
TMCR pmax pmax
comp=Z,99nm,1.1s
**KSRV Kasrt alli 87.77 306** *e*P P 05 55 40.1 -3.4
**KSRV Kasrt alli 87.77 306** *e*P P 05 55 40.1 -3.4
**EGAK Eagle 87.78 25** *e*P **P** 05 55 42.6 -0.4
comp=Z,33nm,0.9s
**URFA Urfa 87.86 307** *e*P **P** 05 55 45.0 +1.0
**MOS Moscow 88.07 326** *e*P **P** 05 55 43.1 -1.4
MOS *e**PP **pP** 05 56 25.0 +4.7
MOS *e* 05 59 18.7
MOS *e*PPP PPP 06 01 07.5
MOS *i* S **SKSac** 06 05 57.9 -1.9
MOS *e* 06 06 12.6
MOS *e*PS PS 06 07 54.3 +17
MOS pmax pmax
comp=Z,300nm,1.3s
MOS pmax pmax
comp=Z,271nm,1.3s
MOS pmax pmax
comp=N,144nm,1.0s
MOS pmax pmax
comp=E,167nm,1.0s
MOS smax smax
comp=E,900nm,4.0s
**PCA Pinnacle 88.39 30** *e*P **P** 05 55 47.5 +1.5
comp=E,138nm,1.4s
**DAWY Dawson 88.58 26** *e*P **P** 05 55 46.8 0.0
comp=E,68nm,1.0s
**ANN Anapa 88.63 315** *e*P **P** 05 55 46.2 -1.2
ANN *e* 06 06 01.7
ANN *e*S **S** 06 06 22.8 +0.6
ANN *e*PS **SP** 06 07 19.8 -6.3
ANN pmax pmax
comp=Z,161nm,1.2s
**OBN Obninsk 88.70 325***c iP* **P** 05 55 45.7 -1.7
OBN *e* 05 59 14.4
OBN *e*PPP PPP 06 01 16.5
OBN pmax pmax
comp=Z,199nm,1.2s
**OBN Obninsk 88.70 325** P **P** 05 55 46.2 -1.2
comp=Z,949nm,1.0s,SNR=7.7
**OBN Obninsk 88.70 325** *e*P **P** 05 55 46.6 -0.8
comp=Z,126nm,0.9s
**LVZ Lovozero 88.81 338**⇓ *e*P **P** 05 55 46.8 -1.0
LVZ pmax pmax
comp=Z,125nm,1.2s
**LVZ Lovozero 88.81 338** P **P** 05 55 47.8 0.0
comp=Z,447nm,1.3s,SNR=5.8
**LVZ Lovozero 88.81 338** *e*P **P** 05 55 46.1 -1.7
comp=Z,146nm,1.3s
**SVSK Karacayir 89.19 310** *e*P **P** 05 55 50.3 +0.2
**RABH Abou Rabah 89.29 304** *e*P P 05 55 44.4 -6.4
**RABH Abou Rabah 89.29 304** *e*P P 05 55 44.4 -6.4
**APA Apatity 89.31 338**⇑ *iP* **P** 05 55 49.0 -1.0
APA *i* *PP **pP** 05 56 21.0 -4.9
APA *i* 05 59 17.0
APA *i* 06 06 08.0
APA *i* S **S** 06 06 24.0 -3.6
APA pmax pmax
comp=Z,89nm,1.2s
APA MLR MLR
comp=Z,2µm,16.0s
**TOKT Tokat 89.51 310** *e*P **P** 05 55 51.4 -0.2
**BTCH Batrach 89.82 306** *e*P **P** 05 55 50.4 -2.9
**BTCH Batrach 89.82 306** *e*P **P** 05 55 50.4 -2.9
**KVT Kavak 89.85 311** *e*P **P** 05 55 53.7 +0.5
**WRDH Warideh 89.89 305** *e*P **P** 05 55 53.2 -0.3
**WRDH Warideh 89.89 305** *e*P **P** 05 55 53.2 -0.3
**HAWK Haweek 89.95 304** *e*P P 05 55 48.7 -5.2
**HAWK Haweek 89.95 304** *e*P P 05 55 48.7 -5.2
**BRBR Barbar 90.39 303** *e*P **P** 05 55 53.7 -2.4
**BRBR Barbar 90.39 303** *e*P **P** 05 55 53.7 -2.4
**TCHB Talchebab 90.42 303** *e*P **P** 05 55 56.4 +0.3
**TCHB Talchebab 90.42 303** *e*P **P** 05 55 56.4 +0.3
**INK Inuvik 90.51 22** P **P** 05 55 54.6 -1.0
comp=Z,35nm,1.0s,baz=296,slow=4.9,SNR=52
**INK Inuvik 90.51 22** P **P** 05 55 54.6 -1.0
INK pmax pmax
comp=Z,35nm,1.0s
**INK Inuvik 90.51 22** *e*P **P** 05 55 55.1 -0.5
comp=Z,36nm,0.9s
**SIM Simferopol' 90.98 315** *e*P **P** 05 55 57.5 -0.8
SIM *e**PP **pP** 05 56 38.0 +3.8
**CORM Corum 90.98 310** *e*P **P** 05 55 58.2 -0.5
**KMBO Kilima Mbogo 91.02 269** P **P** 05 56 00.4 +0.9
comp=Z,33nm,1.0s,baz=48,slow=6.0,SNR=32
KMBO LR LR 06 33 27.2
comp=Z,667nm,22.0s,baz=89,slow=33
**KMBO Kilima Mbogo 91.02 269** *e*P **P** 05 55 58.7 -0.8
KMBO pmax pmax
comp=Z,37nm,1.0s
**KMBO Kilima Mbogo 91.02 269** P **P** 05 56 00.2 +0.7
baz=91,SNR=10
**KMBO Kilima Mbogo 91.02 269** *e*P **P** 05 55 58.7 -0.8
comp=Z,37nm,1.0s
**NIG Nigde 91.16 308** *e*P **P** 05 55 56.6 -3.1
**KEV Kevo 91.30 340** *e*P **P** 05 55 58.2 -1.1
KEV pmax pmax
comp=Z,40nm,1.0s
**KEV Kevo 91.30 340** *e*P **P** 05 55 58.2 -1.1
comp=Z,40nm,1.0s
**EIL Elat 91.49 300** P **P** 05 56 01.0 0.0
baz=92,SNR=19
**SPB1 Spitsbergen Ar 91.70 349** *e*P **P** 05 55 60.0 -1.1
**SPA1 Spitsbergen Ar 91.71 349** *e*P **P** 05 56 00.3 -0.7
**SPB2 Spitsbergen Ar 91.71 349** *e*P **P** 05 56 00.3 -0.7
**SPB5 Spitsbergen Ar 91.71 349** *e*P **P** 05 55 60.0 -1.1
**SPA0 Spitsbergen Ar 91.71 349** *e*P **P** 05 55 59.9 -1.1
SPA0 IAmb IAmb 05 56 01.2
comp=Z,306nm,1.6s
**SPA0 Spitsbergen Ar 91.71 349** *e*P **P** 05 56 00.4 -0.7
**SPA2 Spitsbergen Ar 91.71 349** *e*P **P** 05 56 00.4 -0.7
**SPA3 Spitsbergen Ar 91.71 349** *e*P **P** 05 56 00.4 -0.7
**SPB3 Spitsbergen Ar 91.71 349** *e*P **P** 05 56 00.4 -0.7
**SPB4 Spitsbergen Ar 91.71 349** *e*P **P** 05 56 00.4 -0.7
**BRTR Keskin Array B 91.78 310** P **P** 05 56 01.0 -1.4
comp=Z,12nm,1.0s,baz=130,slow=3.9,SNR=14
BRTR PP **PP** 05 59 47.9 +4.8
comp=Z,25nm,1.1s,baz=111,slow=6.8,SNR=9.5
BRTR PKKP **PKKPdf** 06 13 18.6 +0.3
comp=Z,2.3nm,1.0s,baz=191,slow=6.0,SNR=5.0
**BRTR Keskin Array B 91.78 310***ce*P **P** 05 56 01.2 -1.2
BRTR pmax pmax
comp=Z,12nm,1.0s
**BRTR Keskin Array B 91.78 310** P **P** 05 56 01.0 -1.4
BRTR PP **PP** 05 59 47.9 +4.8
BRTR PKKP **PKKPdf** 06 13 18.6 +0.3
**ARA0 ARCESS Array S 91.86 340** *e*P **P** 05 56 00.4 -1.5
**ARCES ARCESS Array B 91.86 340** P **P** 05 56 00.3 -1.6
comp=Z,64nm,0.7s,baz=81,slow=4.6,SNR=93
ARCES PKiKP **PKiKP** 06 00 52.2 +0.5
comp=Z,3.0nm,0.8s,baz=106,slow=2.0,SNR=4.2
ARCES LR LR 06 40 23.9
comp=Z,642nm,20.6s,baz=92,slow=37
**ARCES ARCESS Array B 91.86 340** P **P** 05 56 00.3 -1.6
ARCES pmax pmax
comp=Z,64nm,0.7s
**ARCES ARCESS Array B 91.86 340** P **P** 05 56 00.3 -1.6
ARCES PKiKP **PKiKP** 06 00 52.2 +0.5
**ARE0 ARCESS Array S 91.86 340** *e*P **P** 05 56 00.3 -1.6
ARE0 IAmb IAmb 05 56 02.3
comp=Z,62nm,0.7s
**SYO Syowa Base 92.07 201**⇓ *iP* **P** 05 56 01.4 -1.4
**HAMF Hammerfest 92.20 341** *e*P **P** 05 56 01.9 -1.5
**KBS Kingsbay 92.21 350** *e*P **P** 05 56 02.5 -0.8
KBS pmax pmax
comp=Z,24nm,0.6s
**KBS Kingsbay 92.21 350** *e*P **P** 05 56 02.5 -0.8
comp=Z,24nm,0.6s
**ANTO Ankara 92.42 310** *e*P **P** 05 56 04.8 -0.4
ANTO pmax pmax
comp=Z,17nm,0.8s
**ANTO Ankara 92.42 310** *e*P **P** 05 56 04.8 -0.4
comp=Z,17nm,0.8s
**BR231 Keskin MP Arra 92.43 310** *e*P P 05 56 01.8 -3.5
**CSS Prodhromos 92.44 305** *e*P **P** 05 56 04.8 -0.6
comp=Z,14nm,1.0s
**QSPA South Pole Qui 92.68 180** P **P** 05 56 05.8 0.0
comp=Z,150nm,1.1s,baz=327,slow=2.1,SNR=130
QSPA PKKP **PKKPdf** 06 13 14.6 -3.4
comp=Z,5.7nm,0.8s,baz=274,slow=2.2,SNR=13
**QSPA South Pole Qui 92.68 180** *e*P **P** 05 56 05.9 0.0
comp=Z,128nm,1.0s
QSPA PKKP **PKKPdf** 06 13 14.6 -3.4
**KTK1 Kautokeino 92.77 340** *e*P **P** 05 56 04.2 -2.0
KTK1 IAmb IAmb 05 56 06.0
comp=Z,50nm,1.0s
**WRAK Wrangell Islan 92.93 33** *e*P **P** 05 56 08.2 +1.1
comp=Z,92nm,1.2s
**H02S1 DAWSON INLET T 93.38 36** P **P** 05 56 10.5 +1.3
SNR=12
**FINES FINES Array B 93.38 332** P **P** 05 56 07.1 -1.9
comp=Z,10.0nm,0.6s,baz=79,slow=5.1,SNR=24
FINES LR LR 06 41 12.8
comp=Z,1µm,20.7s,baz=88,slow=37
**FINES FINES Array B 93.38 332** *i* P **P** 05 56 07.3 -1.7
FINES pmax pmax
comp=Z,10.0nm,0.6s
**FINES FINES Array B 93.38 332** P **P** 05 56 07.1 -1.9
**AKASG Malin Array Be 93.58 321** P **P** 05 56 08.6 -1.5
comp=Z,16nm,0.8s,baz=67,slow=3.9,SNR=52
AKASG PP PP 05 59 46.1 -10
comp=Z,2.1nm,0.7s,baz=69,slow=6.9,SNR=4.1
AKASG PKKP **PKKPdf** 06 13 13.6 -1.5
comp=Z,0.7nm,0.4s,baz=268,slow=2.4,SNR=5.3
AKASG LR LR 06 40 45.5
comp=Z,785nm,21.6s,baz=75,slow=37
**AKASG Malin Array Be 93.58 321***ce*P **P** 05 56 08.8 -1.4
AKASG pmax pmax
comp=Z,16nm,0.8s
**AKASG Malin Array Be 93.58 321** P **P** 05 56 08.6 -1.5
AKASG PP PP 05 59 46.1 -10
AKASG PKKP **PKKPdf** 06 13 13.6 -1.5
**KIEV Kiev 93.59 321***c iP* **P** 05 56 08.8 -1.4
KIEV pmax pmax
comp=Z,53nm,1.4s
**KIEV Kiev 93.59 321** *e*P **P** 05 56 08.8 -1.4
comp=Z,44nm,1.2s
**AK11 Malin Array Si 93.61 321** *e*P **P** 05 56 08.9 -1.4
**VSU Vasula 93.66 329***c iP* **P** 05 56 08.5 -1.8
VSU pmax pmax
comp=Z,108nm,1.0s
**MICGM Minsk 93.76 325** *e*P **P** 05 56 11.0 +0.1
**MNK Minsk 93.79 325** *e*P **P** 05 56 11.0 -0.1
MNK *e**SP **pP** 05 56 46.0 -1.0
MNK *e* 06 00 04.0
MNK *e* 06 06 34.0
MNK *e*S **S** 06 07 05.0 -3.4
**DLBC Dease Lake 93.80 31** P **P** 05 56 11.9 +0.8
comp=Z,28nm,1.0s,baz=272,slow=4.1,SNR=29
DLBC PP **PP** 05 59 55.4 -2.7
comp=Z,10nm,1.1s,baz=311,slow=2.0,SNR=3.5
**DLBC Dease Lake 93.80 31** *e*P **P** 05 56 11.9 +0.8
comp=Z,44nm,1.0s
DLBC PP **PP** 05 59 55.4 -2.7
**TRO Tromso 94.05 341** *e*P **P** 05 56 10.9 -1.1
**NACGM Naroch 94.32 325** *e* **P** 05 56 11.0 -2.5
**ISP Isparta 94.40 308** *e*P **P** 05 56 12.9 -1.5
ISP pmax pmax
comp=Z,152nm,1.8s
**ISP Isparta 94.40 308** *e*P **P** 05 56 12.9 -1.5
comp=Z,152nm,1.8s
**ALE Alert 94.67 1** P **P** 05 56 15.6 +1.0
comp=Z,99nm,0.7s,SNR=5.9
**TIRR Tirgusor 95.07 315**⇑ *iP* **P** 05 56 14.4 -2.8
**TIRR Tirgusor 95.07 315**⇑ *iP* **P** 05 56 14.4 -2.8
**CFR Carcaliu 95.16 316**⇓ *iP* **P** 05 56 17.7 +0.2
**CFR Carcaliu 95.16 316**⇓ *iP* **P** 05 56 17.7 +0.2
**STEI Steigen 95.91 340** *e*P **P** 05 56 18.2 -2.2
**TESR Tescani 95.95 317**⇑ *iP* **P** 05 56 19.9 -1.3
**VRI Vrincioaia 96.02 316**⇑ *iP* **P** 05 56 19.4 -2.1
**VRI Vrincioaia 96.02 316**⇑ *iP* **P** 05 56 19.4 -2.1
**PLOR Plostina 96.07 316**⇑ *iP* **P** 05 56 20.6 -1.2
**PLOR Plostina 96.07 316**⇑ *iP* **P** 05 56 20.6 -1.2
**MLR Muntele Rosu 96.62 316**⇑ *iP* **P** 05 56 23.8 -0.6
**MLR Muntele Rosu 96.62 316**⇑ *iP* **P** 05 56 23.8 -0.6
**BURAR Bucovina Array 96.71 318**⇑ *iP* **P** 05 56 24.3 -0.4
**BURAR Bucovina Array 96.71 318**⇑ *iP* **P** 05 56 24.3 -0.4
**BUR04 Bucovina Ar. S 96.71 318** *e*P **P** 05 56 23.5 -1.2
**DOPR Dopca 96.92 317**⇓ *iP* **P** 05 56 27.7 +2.1
**FLOS Flostrand 97.22 338** *e*P **P** 05 56 24.9 -1.4
**VOIR 97.25 316**⇑ *iP* **P** 05 56 25.9 -1.3
**VOIR 97.25 316**⇑ *iP* **P** 05 56 25.9 -1.3
**RKT Rikitea 97.33 113** *e*SKSac **SKSac** 06 06 53.9 +1.4
comp=Z,2µm,30.8s
RKT *e*SS **SS** 06 14 26.1 +4.1
comp=Z,2µm,31.0s
RKT *e*LQ LQ 06 24 14.2
comp=Z,2µm,39.0s
RKT *e*LR LR 06 28 23.1
comp=Z,3µm,40.0s
**KOLS Kolonicke sedl 98.34 320** *e*P Pdif 05 56 32.2 +0.3
KOLS pmax pmax
comp=Z,16nm,1.2s
**KOLS Kolonicke sedl 98.34 320** PDIF Pdif 05 56 32.2 +0.3
**UZH Uzhgorod 98.40 320** *e*P **P** 05 56 31.3 -0.8
UZH *e* 05 57 01.3
**RES Resolute Bay 98.49 11** P **P** 05 56 31.6 -0.3
comp=Z,48nm,0.7s,baz=288,slow=5.7,SNR=74
**RES Resolute Bay 98.49 11** P **P** 05 56 31.7 -0.3
RES pmax pmax
comp=Z,48nm,0.7s
**RES Resolute Bay 98.49 11** *e*P Pdif 05 56 32.0 0.0
comp=Z,56nm,0.8s
**NSS Namsos 98.50 337** *e*P **P** 05 56 29.9 -2.3
NSS IAmb IAmb 05 56 31.5
comp=Z,20nm,0.7s
**DRGR 98.55 318**⇑ *iP* **P** 05 56 32.4 -0.6
**DRGR 98.55 318**⇑ *iP* **P** 05 56 32.4 -0.6
**STHS Stebnicka Huta 98.87 321** *e*P **P** 05 56 34.1 -0.2
STHS pmax pmax
comp=Z,7.0nm,0.7s
**STHS Stebnicka Huta 98.87 321** PDIF **P** 05 56 34.1 -0.2
**OJC Ojcow 99.56 322** *e*P **Pdif** 05 56 36.9 -0.4
OJC pmax pmax
comp=Z,51nm,1.6s
**OJC Ojcow 99.56 322** *e*Pdif **Pdif** 05 56 36.9 -0.4
comp=Z,51nm,1.6s
**YKA Yellowknife Ar 99.75 25** P **Pdif** 05 56 37.3 -0.5
comp=Z,9.3nm,0.8s,baz=296,slow=4.9,SNR=15
YKA PP **PP** 06 00 43.0 -0.6
comp=Z,4.6nm,1.0s,baz=300,slow=7.5,SNR=4.7
YKA PKiKP **PKiKP** 06 01 05.5 -0.1
comp=Z,1.8nm,0.6s,baz=288,slow=1.9,SNR=11
YKA PKKPbc **PKKPbc** 06 12 57.4 -3.4
comp=Z,3.0nm,0.8s,baz=121,slow=3.6,SNR=6.4
**YKA Yellowknife Ar 99.75 25** P **Pdif** 05 56 37.3 -0.5
YKA 06 00 43.0
YKA pmax pmax
comp=Z,10.0nm,0.8s
YKA pmax pmax
comp=Z,5.0nm,1.0s
**YKA Yellowknife Ar 99.75 25** P **Pdif** 05 56 37.4 -0.5
YKA PP **PP** 06 00 43.0 -0.6
YKA PKiKP **PKiKP** 06 01 05.5 -0.1
YKA PKKPbc **PKKPbc** 06 12 57.4 -3.4
**PGC Sidney 99.93 40** *e*Pdif **Pdif** 05 56 40.3 +1.4
comp=Z,22nm,1.0s
**NLWA Neilton Lookou 100.00 41** *e*Pdif **Pdif** 05 56 40.4 +1.1
**LANS Liptovska Anna 100.06 321** *e*P **Pdif** 05 56 40.3 +0.7
**LANS Liptovska Anna 100.06 321** PDIF **Pdif** 05 56 40.3 +0.7
**MATP Matopo 100.07 250** P **Pdif** 05 56 39.4 -0.9
comp=Z,18nm,1.1s,baz=99,slow=5.5,SNR=4.2
**MATP Matopo 100.07 250** P **Pdif** 05 56 39.4 -0.9
**PSZ Piszkesteto 100.13 320** *e*P **Pdif** 05 56 39.2 -0.8
PSZ pmax pmax
comp=Z,21nm,1.4s
**PSZ Piszkesteto 100.13 320** *e*Pdif **Pdif** 05 56 39.2 -0.8
comp=Z,20nm,1.4s
**NB2 NORSAR Subarra100.31 334** P **Pdif** 05 56 38.1 -2.3
comp=Z,5.8nm,0.8s,baz=65,slow=4.6
**NB2 NORSAR Subarra100.31 334** P **Pdif** 05 56 38.1 -2.3
baz=65,slow=4.6
**NOA NORSAR Array B100.31 334** P **Pdif** 05 56 38.5 -1.9
comp=Z,13nm,0.8s,baz=66,slow=4.6,SNR=22
NOA PP PP 06 00 40.1 -7.8
comp=Z,1.6nm,0.7s,baz=94,slow=9.3,SNR=3.6
NOA PKKPbc **PKKPbc** 06 12 57.6 -1.6
comp=Z,3.4nm,1.0s,baz=246,slow=2.3,SNR=4.7
**NOA NORSAR Array B100.31 334** P **Pdif** 05 56 38.5 -1.9
NOA pmax pmax
comp=Z,13nm,0.9s
**NOA NORSAR Array B100.31 334** P **Pdif** 05 56 38.5 -1.9
NOA PP PP 06 00 40.1 -7.8
NOA PKKPbc **PKKPbc** 06 12 57.6 -1.6
**A04D Lummi Island 100.39 40** Pdiff **Pdif** 05 56 41.4 +0.5
baz=100
**LSZ Lusaka 100.40 255** P **Pdif** 05 56 40.5 -1.4
comp=Z,7.8nm,0.8s,baz=63,slow=9.2
**LSZ Lusaka 100.40 255** P **Pdif** 05 56 40.5 -1.4
LSZ pmax pmax
comp=Z,8.0nm,0.8s
**LSZ Lusaka 100.40 255** P **Pdif** 05 56 40.5 -1.4
**E03A Lebam 100.42 42** *e*Pdif **Pdif** 05 56 41.2 0.0
**NBO02 NORSAR Array S 100.46 334** *e*Pdif **Pdif** 05 56 39.9 -1.2
**AGG Agios Georgios 100.55 310** *e*P **Pdif** 05 56 40.6 -1.4
**AGG Agios Georgios 100.55 310** *e*Pdif **Pdif** 05 56 40.6 -1.4

VYHS **Vyhne** 100.65 320 *e*P **Pdif** 05 56 41.5 -0.7
VYHS pmax pmax
comp=Z,4.0nm,1.4s
**VYHS Vyhne** 100.65 320 PDIF **Pdif** 05 56 41.5 -0.7
**OKC Ostrava-Krasne** 100.69 322 *e*P **Pdif** 05 56 42.4 +0.1
OKC MLR MLR
comp=Z,600nm,19.5s
**OKC Ostrava-Krasne** 100.69 322 *e*PDIFF **Pdif** 05 56 42.4 +0.1
OKC AMS AMS 06 44 10.0
comp=Z,600nm,19.5s
**B05A Bryant** 100.90 40 Pdiff **Pdif** 05 56 43.3 0.0
baz=101
**G03D McMinnville, O** 100.97 43 Pdiff **Pdif** 05 56 43.9 +0.2
baz=101
**MORC Moravsky Berou** 101.08 322 ⇑P **Pdif** 05 56 41.7 -2.4
**MORC Moravsky Berou** 101.08 322 ⇑*i*P **Pdif** 05 56 41.7 -2.4
**MOL Molde** 101.16 336 *e*P **Pdif** 05 56 44.0 -0.1
**I03D Drain, OR** 101.31 45 Pdiff **Pdif** 05 56 45.5 +0.3
baz=101
**KRLC Kraliky** 101.46 322 *e*PP PP 06 00 59.9 +3.0
**DPC Dobruska-Polom** 101.65 323 *e*P **Pdif** 05 56 46.3 -0.3
DPC *e* 06 01 01.1
DPC MLR MLR
comp=Z,1μm,20.9s
**DPC Dobruska-Polom** 101.65 323 *e*PDIFF **Pdif** 05 56 46.3 -0.3
DPC *e*pP pP 05 57 16.8 -6.0
DPC *e*PP **PP** **06 01 01.1 +2.8**
DPC AMS AMS 06 47 30.0
comp=Z,1μm,20.9s
**UPC Upice** 101.78 323 *e*P **Pdif** 05 56 46.9 -0.3
**UPC Upice** 101.78 323 *e*PDIFF **Pdif** 05 56 46.9 -0.3
**HUMO Hull Mountain** 101.86 46 *e*Pdif **Pdif** 05 56 49.1 +1.3
comp=Z,38nm,1.0s
**I04A Tendick Farm,** 101.94 44 Pdiff **Pdif** 05 56 47.9 -0.2
baz=102
**M02C Callahan** 102.25 47 Pdiff **Pdif** 05 56 48.7 -0.9
baz=102
**YBH Yreka Blue Hor** 102.27 46 P **Pdif** 05 56 48.3 -1.4
comp=Z,6.3nm,1.1s,baz=274,slow=19,SNR=2.8
YBH PP **PP** **06 01 01.4 -2.0**
comp=Z,8.4nm,1.1s,baz=270,slow=4.0,SNR=4.8
**YBH Yreka Blue Hor** 102.27 46 P **Pdif** 05 56 48.3 -1.4
YBH 06 01 01.4
YBH pmax pmax
comp=Z,6.0nm,1.1s
YBH pmax pmax
comp=Z,8.0nm,1.1s
**YBH Yreka Blue Hor** 102.27 46 *e*Pdif **Pdif** 05 56 50.5 +0.8
YBH PP **PP** **06 01 01.4 -2.0**
**G05D Wamic, OR** 102.29 43 Pdiff **Pdif** 05 56 49.8 +0.3
baz=102
**J04D Umpqua Nationa** 102.30 45 Pdiff **Pdif** 05 56 49.9 0.0
baz=102
**N02D Trinity Center** 102.47 47 Pdiff **Pdif** 05 56 51.0 +0.4
baz=102
**I05D Terrebonne, OR** 102.53 44 Pdiff **Pdif** 05 56 50.9 +0.2
baz=102
**LBTB Lobatse** 102.60 245 P **Pdif** 05 56 51.1 -0.4
comp=Z,3.8nm,1.0s,baz=90,slow=18,SNR=2.0
LBTB PP PP 06 01 00.4 -6.2
comp=Z,12nm,0.7s,baz=60,slow=2.5,SNR=5.1
**LBTB Lobatse** 102.60 245 P **Pdif** 05 56 51.1 -0.4
LBTB 06 01 00.4
LBTB pmax pmax
comp=Z,4.0nm,1.0s
LBTB pmax pmax
comp=Z,12nm,0.7s
**LBTB Lobatse** 102.60 245 P **Pdif** 05 56 51.1 -0.4
LBTB PP PP 06 01 00.4 -6.2
**BOSA Boshof** 102.70 241 P **Pdif** 05 56 51.7 -0.2
comp=Z,15nm,1.1s,baz=198,slow=2.3,SNR=6.2
BOSA PP **PP** **06 01 04.3 -2.9**
comp=Z,18nm,0.9s,baz=20,slow=3.7,SNR=8.5
**BOSA Boshof** 102.70 241 P **Pdif** 05 56 51.7 -0.2
BOSA 06 01 04.3
BOSA pmax pmax
comp=Z,15nm,1.1s
BOSA pmax pmax
comp=Z,18nm,0.9s
**BOSA Boshof** 102.70 241 *e*Pdif **Pdif** 05 56 52.5 +0.6
BOSA PP **PP** **06 01 04.3 -2.9**
**CONA Conrad Observa** 102.72 320 ⇑*i*PKiKP **PKiKP** **06 01 13.8 +2.2**
comp=Z,51nm,1.3s
**GOPC GO Pecny, Ondr** 102.72 323 *e*P **Pdif** 05 56 51.8 +0.4
GOPC *e* 06 01 08.8
GOPC MLR MLR
comp=Z,1μm,19.3s
**GOPC GO Pecny, Ondr** 102.72 323 *e*PDIFF **Pdif** 05 56 51.8 +0.4
GOPC *e*PP **PP** **06 01 08.8 +2.4**
GOPC AMS AMS 06 49 20.0
comp=Z,1μm,19.3s
**PRU Pruhonice** 102.85 323 *e*P **Pdif** 05 56 52.2 +0.3
PRU *e* 06 01 09.7
PRU MLR MLR
comp=Z,1μm,15.6s
**PRU Pruhonice** 102.85 323 *e*PDIFF **Pdif** 05 56 52.2 +0.3
PRU *e*pP 05 57 22.7
PRU *e*PP **PKiKP** **06 01 09.7 -1.9**
PRU AMS AMS 06 48 00.0
comp=Z,1μm,15.6s
**M04C Macdoel** 102.88 46 Pdiff **Pdif** 05 56 52.0 -0.4
baz=103
**BRG Berggiesshubel** 102.89 324 *e*PDIF **Pdif** 05 56 52.1 0.0
comp=Z,18nm,1.3s
BRG *e* 06 01 12.1
comp=Z,20nm,1.2s
**BRG Berggiesshubel** 102.89 324 *e*P **Pdif** 05 56 52.1 0.0
BRG *e* 06 01 12.1
BRG pmax pmax
comp=Z,18nm,1.3s
BRG pmax pmax
comp=Z,21nm,1.2s
**BRG Berggiesshubel** 102.89 324 *e*Pdiff **Pdif** 05 56 52.6 +0.5
**J05D Fort Rock, OR** 102.90 45 Pdiff **Pdif** 05 56 52.0 -0.5
baz=103
**HAWA Hanford** 103.13 41 *e*Pdif **Pdif** 05 56 54.2 +1.0
**BLS5 Blasjo** 103.16 333 *e*P **Pdif** 05 56 52.7 -0.4
**CLL Collm** 103.29 324 *e*P **Pdif** 05 56 54.0 +0.2
CLL MLR MLR
comp=Z,1μm,19.2s
**CLL Collm** 103.29 324 *e*Pdiff **Pdif** 05 56 54.1 +0.3
**CLL Collm** 103.29 324 *e*Pdif **Pdif** 05 56 54.0 +0.2
CLL *e* 06 01 04.0
CLL *e*PP **PKiKP** **06 01 12.0 -0.4**
CLL *e* 06 01 46.0
CLL *e*PPP PPP 06 03 23.0
CLL *e* 06 21 20.0
CLL LmV 06 47 00.0
comp=Z,1μm,19.2s
**K05A Summer Lake** 103.30 45 *e*Pdif **Pdif** 05 56 56.6 +2.2
**O03D Paynes Creek** 103.31 48 Pdiff **Pdif** 05 56 54.5 +0.2
baz=103
**SOKA Soboth** 103.66 319 ⇑*i*PKiKP **PKiKP** **06 01 14.2 +0.9**
comp=Z,36nm,1.3s
**KHC Kasperske Hory** 103.74 322 *e*P **Pdif** 05 56 56.0 +0.1
KHC *e* 06 01 17.2
**KHC Kasperske Hory** 103.74 322 *e*PDIFF **Pdif** 05 56 56.0 +0.1
KHC *ex* x 05 57 19.7
KHC *ex* x 06 01 02.5
KHC *e*PP **PP** **06 01 17.2 +3.2**
**KHC Kasperske Hory** 103.74 322 *e*Pdif **Pdif** 05 56 56.1 +0.2
**BSEG Bad Segeberg** 103.75 327 *e*Pdiff **Pdif** 05 56 56.5 +0.7
**GEC2 GERESS Array S** 103.76 322 *e*Pdiff **Pdif** 05 56 56.5 +0.4
**GERES GERESS Array B** 103.76 322 Pdiff **Pdif** 05 56 55.1 -1.1
comp=Z,1.9nm,0.8s,baz=58,slow=5.0,SNR=12
GERES PKiKP **PKiKP** **06 01 13.0 -0.5**
comp=Z,1.8nm,0.7s,baz=61,slow=4.6,SNR=2.9
GERES PKKPbc **PKKPbc** **06 12 47.6 -1.2**
comp=Z,0.4nm,0.2s,baz=159,slow=4.0,SNR=3.6
**GERES GERESS Array B** 103.76 322 P **Pdif** 05 56 55.1 -1.1
GERES pmax pmax
comp=Z,2.0nm,0.8s
**GERES GERESS Array B** 103.76 322 Pdif **Pdif** 05 56 55.1 -1.1
GERES PKiKP **PKiKP** **06 01 13.0 -0.5**
GERES PKKPbc **PKKPbc** **06 12 47.6 -1.2**
**I07A Izee** 103.87 43 *e*Pdif **Pdif** 05 56 58.7 +2.0
I07A *e*PKiKP **PP** **06 01 15.8 +0.6**
**TANN Tannenbergstha** 103.94 324 *e*Pdiff **Pdif** 05 56 57.4 +0.5
**MOD Modoc** 103.95 46 *e*Pdif **Pdif** 05 56 58.1 +0.9
**NKC Novy Kostel** 104.02 323 *e*P **Pdif** 05 56 53.0 -4.1
NKC *e* 06 01 19.0
NKC MLR MLR
comp=Z,1μm,17.6s
**NKC Novy Kostel** 104.02 323 *e*PDIFF **Pdif** 05 56 53.0 -4.1
NKC *ex* x 05 57 30.0
NKC *e*PP **PP** **06 01 19.0 +3.0**
NKC AMS AMS 06 46 40.0
comp=Z,1μm,17.6s
**NEW Newport** 104.05 39 Pdiff **Pdif** 05 56 57.5 +0.1
comp=Z,6.7nm,1.1s,baz=348,slow=6.0,SNR=4.5
**NEW Newport** 104.05 39 P **Pdif** 05 56 57.5 +0.1
NEW pmax pmax
comp=Z,7.0nm,1.1s
**NEW Newport** 104.05 39 Pdiff **Pdif** 05 56 57.1 -0.3
baz=104
**NEW Newport** 104.05 39 *e*Pdif **Pdif** 05 56 58.5 +1.1
**WET Wettzell** 104.16 322 *e*Pdiff **Pdif** 05 56 58.6 +0.8
**SUMG Summit** 104.31 356 *e*P **Pdif** 05 57 00.4 +1.9
**SUMG Summit** 104.31 356 *i* P **PKKPbc** **06 12 44.9 -3.4**
comp=Z,18nm,1.1s
**SUMG Summit** 104.31 356 *e*Pdif **Pdif** 05 57 00.4 +1.9
**ROTZ Rotzenmuhle** 104.34 323 *e*Pdiff **Pdif** 05 56 59.7 +1.1
**EDM Edmonton** 104.34 33 *e*P **Pdif** 05 57 00.3 +1.7
**EDM Edmonton** 104.34 33 *e*Pdif **Pdif** 05 57 00.2 +1.7
**MOX Moxa** 104.35 324 *e*Pdiff **Pdif** 05 56 59.1 +0.5
**NRDL Niedersach Rie** 104.47 326 *e*Pdiff **Pdif** 05 57 00.1 +1.1
**CLZ Clausthal** 104.59 325 *e*Pdiff **Pdif** 05 57 00.6 +0.9
**SNAA Sanae** 104.66 194 P **Pdif** 05 57 00.6 +1.0
**SNAA Sanae** 104.66 194 P **PKKPbc** **06 12 43.2 -3.6**
**SNAA Sanae** 104.66 194 Pdiff **Pdif** 05 57 00.6 +1.0
comp=Z,4.0nm,1.1s,baz=192,slow=7.7,SNR=35
SNAA PKiKP **PKiKP** **06 01 12.6 -1.8**
comp=Z,2.3nm,1.1s,baz=96,slow=6.2,SNR=2.5
SNAA PKKPbc **PKKPbc** **06 12 43.6 -3.2**
comp=Z,3.7nm,0.9s,baz=291,slow=2.9,SNR=26
**SNAA Sanae** 104.66 194 *e*P **Pdif** 05 56 59.8 +0.2
**SNAA Sanae** 104.66 194 *e*Pdif **Pdif** 05 56 59.8 +0.2
SNAA PKiKP **PKiKP** **06 01 12.6 -1.8**
SNAA PKKPbc **PKKPbc** **06 12 43.6 -3.2**
**RJOB Jochberg** 104.72 321 *e*Pdiff **Pdif** 05 57 00.8 +0.4
**F10A Beach Ranch, E** 104.78 41 *e*Pdif **Pdif** 05 57 03.3 +2.6
**J08A Circle Bar Ran** 104.80 44 *e*Pdif **Pdif** 05 57 03.0 +2.0
**GTTG Gvttingen** 104.94 325 *e*Pdiff **Pdif** 05 57 02.2 +1.0
**GRF Grafenberg Arr** 104.96 323 *e*Pdiff **Pdif** 05 57 02.2 +0.9
GRF *e*PP **PP** **06 01 24.1 +1.2**
**CMB Columbia Colle** 104.97 50 *e*P **Pdif** 05 57 02.8 +1.1
**CMB Columbia Colle** 104.97 50 *e*Pdif **Pdif** 05 57 02.8 +1.1
**WVOR Wild Horse Val** 104.98 45 *e*P **Pdif** 05 57 02.7 +1.0
**WVOR Wild Horse Val** 104.98 45 *e*Pdif **Pdif** 05 57 02.7 +1.0
**BSMT Bassoo Peak** 105.66 39 *e*Pdif **Pdif** 05 57 06.3 +1.5
**IBBN Ibbenburen** 105.85 327 *e*Pdiff **Pdif** 05 57 05.9 +0.8
**SMMC Simmler** 105.99 52 Pdiff **Pdif** 05 57 08.5 +2.2
baz=106
**PKM Peak Mountain** 106.25 53 Pdiff **Pdif** 05 57 09.5 +1.8
baz=106
PKM PKiKP **PKiKP** **06 01 19.0 +0.4**
baz=106
**VNA2 Neumayer--Watz** 106.25 194 P **Pdif** 05 57 10.1 +3.5
baz=130,slow=4.1
**VNA2 Neumayer--Watz** 106.25 194 P **PKKPbc** **06 12 38.2 -3.6**
baz=318,slow=6.8
**SWMT Swartz Lake** 106.28 39 *e*PKPdf **PKiKP** **06 01 19.4 +1.2**
**NV01 Mina Array Sit** 106.43 49 *e*Pdif **Pdif** 05 57 09.3 +0.9
**NVAR Mina Array Bea** 106.43 49 Pdiff **Pdif** 05 57 09.7 +1.2
comp=Z,3.7nm,0.9s,baz=269,slow=4.8,SNR=13
NVAR PKiKP **PKiKP** **06 01 18.9 0.0**
comp=Z,1.4nm,0.7s,baz=289,slow=5.6,SNR=4.9
NVAR PKKPbc **PKKPbc** **06 12 40.8 +0.3**
comp=Z,3.2nm,1.0s,baz=129,slow=3.9,SNR=7.9
**NVAR Mina Array Bea** 106.43 49 Pdif **Pdif** 05 57 09.7 +1.2
NVAR PKiKP **PKiKP** **06 01 18.9 0.0**
NVAR PKKPbc **PKKPbc** **06 12 40.8 +0.3**
**VES Vestal, Richgr** 106.57 51 Pdiff **Pdif** 05 57 09.0 +0.2
baz=106
VES PKiKP **PKiKP** **06 01 18.5 -0.4**
baz=106
**MSO Missoula** 106.58 39 PKiKP **PKiKP** **06 01 18.2 -0.6**
baz=106
**MSO Missoula** 106.58 39 *e*PKiKP **PKiKP** **06 01 18.7 -0.1**
**MFID Camas Ranch** 106.60 43 *e*Pdif **Pdif** 05 57 10.6 +1.6
MFID *e*PKPdf **PKiKP** **06 01 19.9 +1.0**
**BSC Santa Cruz Isl** 106.63 53 PKiKP **PKiKP** **06 01 19.3 +0.2**
baz=106
**VNA1 Neumayer--Stat** 106.65 194 P **Pdif** 05 57 11.9 +3.5
**VNA1 Neumayer--Stat** 106.65 194 P **PKKPbc** **06 12 38.2 -2.3**
**SLMT Seeley Lake** 106.70 39 *e*PKPdf **PKiKP** **06 01 19.6 +0.5**
**SNCC San Nicolas Is** 106.91 54 PKiKP **PKiKP** **06 01 19.5 -0.2**
baz=107
**ISA Isabella** 107.10 51 *e*P **Pdif** 05 57 12.5 +1.2
**ISA Isabella** 107.10 51 PKiKP **PKiKP** **06 01 18.7 -1.3**
baz=107
**ISA Isabella** 107.10 51 *e*Pdif **Pdif** 05 57 12.5 +1.2
ISA *e*PKPdf **PKiKP** **06 01 22.3 +2.3**
**BFO Black Forest** 107.25 323 *e*Pdiff **Pdif** 05 57 11.8 +0.2
**HLID Hailey** 107.51 43 PKiKP **PKiKP** **06 01 19.6 -1.1**
baz=107
**HLID Hailey** 107.51 43 *e*Pdif **Pdif** 05 57 14.9 +1.9
HLID *e*PKPdf **PKiKP** **06 01 21.8 +1.1**
**GRAC Grapevine Rang** 107.56 50 PKiKP **PKiKP** **06 01 20.4 -0.4**
baz=107
**DAC Darwin (Calif)** 107.61 51 *e*P **Pdif** 05 57 14.1 +0.4
**DAC Darwin (Calif)** 107.61 51 *e*Pdif **Pdif** 05 57 14.1 +0.4
DAC *e*PKPdf **PKiKP** **06 01 22.7 +1.6**
**EDW2 Edwards Air Fo** 107.70 52 PKiKP **PKiKP** **06 01 20.7 -0.5**
baz=108
**MPMC Manual Prospec** 107.75 51 PKiKP **PKiKP** **06 01 20.5 -0.8**
baz=108
**LRMC Laurel Mountai** 107.76 51 PKiKP **PKiKP** **06 01 20.8 -0.5**
baz=108
**LRM Limekiln Ridge** 107.93 40 *e*Pdif **Pdif** 05 57 15.9 +1.0
comp=Z,37nm,1.1s
**ELK Elko** 107.94 46 *e*P **Pdif** 05 57 17.0 +1.9
**ELK Elko** 107.94 46 *e*Pdif **Pdif** 05 57 17.0 +1.9
ELK *e*PKPdf **PKiKP** **06 01 22.5 +0.8**
**MCMT McKenzie Canyo** 108.07 41 *e*PKPdf **PKiKP** **06 01 24.5 +2.7**
**FURC Furnace Creek,** 108.11 50 PKiKP **PKiKP** **06 01 20.3 -1.5**
baz=108
**BFSC Mount Baldy Ra** 108.14 53 PKiKP **PKiKP** **06 01 21.6 -0.4**
baz=108
**TPNV Topopah Spring** 108.43 50 PKiKP **PKiKP** **06 01 21.9 -0.7**
baz=108
**R11A Troy Canyon, C** 108.49 48 PKiKP **PKiKP** **06 01 21.7 -1.0**
baz=108
**R11A Troy Canyon, C** 108.49 48 *e*PKPdf **PKiKP** **06 01 24.6 +1.9**
**GSC Goldstone** 108.50 51 PKiKP **PKiKP** **06 01 21.7 -1.0**
baz=108
**GSC Goldstone** 108.50 51 *e*PKPdf **PKiKP** **06 01 21.7 -1.0**
**BOZ Bozeman (W)** 108.53 40 PKiKP **PKiKP** **06 01 22.2 -0.3**
baz=108
**EGMT Eagleton** 108.67 37 PKiKP **PKiKP** **06 01 22.1 -0.5**
baz=108
**EGMT Eagleton** 108.67 37 *e*PKPdf **PKiKP** **06 01 21.0 -1.6**
**BORG Borgarnes** 109.03 347 *e*PKPdf **PKiKP** **06 01 23.5 +0.9**
**PFO Pinyon Flat Ob** 109.28 53 PKiKP **PKiKP** **06 01 22.9 -1.3**
baz=109
**PFO Pinyon Flat Ob** 109.28 53 *e*PKPdf **PKiKP** **06 01 25.5 +1.2**
**HVU Hansel Valley** 109.30 44 *e*P **Pdif** 05 57 22.9 +1.9
**HVU Hansel Valley** 109.30 44 *e*Pdif **Pdif** 05 57 22.9 +1.9
HVU *e*PKPdf **PKiKP** **06 01 24.3 +0.2**
**MONP Monument Peak** 109.52 54 PKiKP **PKiKP** **06 01 24.1 -0.7**
baz=109
**BELC Belle Mtn. Jos** 109.53 53 PKiKP **PKiKP** **06 01 23.9 -0.8**
baz=109
**GMRC Granite Mounta** 109.56 52 PKiKP **PKiKP** **06 01 23.9 -0.8**
baz=109
**IMW Indian Meadow** 109.70 41 *e*Pdif **Pdif** 05 57 24.9 +2.0
**FXWY Fox Creek** 109.75 42 *e*Pdif **Pdif** 05 57 25.6 +2.5
**DUG Dugway** 109.86 45 *e*P **Pdif** 05 57 25.7 +2.2
**DUG Dugway** 109.86 45 PKiKP **PKiKP** **06 01 24.2 -0.9**
baz=110
**DUG Dugway** 109.86 45 *e*Pdif **Pdif** 05 57 25.7 +2.2
DUG *e*PKPdf **PKiKP** **06 01 25.5 +0.4**
**MOOW Moose Ponds** 109.89 41 *e*Pdif **Pdif** 05 57 27.3 +3.6
**LDFC Landfair** 109.89 51 *e*Pdif **Pdif** 05 57 26.4 +2.6
**REDW Red Top Meadow** 109.98 42 *e*PKPdf **PKiKP** **06 01 25.7 +0.3**
**SNOW Snow King Moun** 110.00 42 *e*PKPdf **PKiKP** **06 01 26.2 +0.8**
**SWSC Sam W. Stewart** 110.00 54 PKiKP **PKiKP** **06 01 24.9 -0.5**
baz=110
**IRM Iron Mountain** 110.15 52 PKiKP **PKiKP** **06 01 25.8 0.0**
baz=110
**HWUT Hardware Ranch** 110.20 44 *e*Pdif **Pdif** 05 57 27.2 +2.2
HWUT *e*PKPdf **PKiKP** **06 01 26.3 +0.5**
**RLMT Red Lodge** 110.26 40 PKiKP **PKiKP** **06 01 25.4 -0.4**
baz=110
**SFJD Kangerlussuaq** 110.39 360 *i* P Pdif 05 57 12.4 -13
SFJD pmax pmax
comp=Z,8.0nm,0.7s
**SFJD Kangerlussuaq** 110.39 360 *i* P Pdif 05 57 12.4 -13
comp=Z,8.3nm,0.7s
**CCUT Cedar City** 110.41 48 *e*PKPdf **PKiKP** **06 01 27.9 +1.5**
**NLU North Lily Min** 110.48 45 *e*PKPdf **PKiKP** **06 01 26.7 +0.3**
**Y12C Blythe** 110.77 52 PKiKP **PKiKP** **06 01 27.0 +0.1**
baz=111
**PDMCI Parker Dam,Lak** 110.90 52 PKiKP **PKiKP** **06 01 27.5 +0.5**
baz=111
**TMUT Trail Mountain** 111.34 46 *e*PKPdf **PKiKP** **06 01 29.1 +0.9**
**LAO LASA Array** 111.41 37 PKiKP **PKiKP** **06 01 28.5 +0.8**
baz=111
**LAO LASA Array** 111.41 37 *e*PKPdf **PKiKP** **06 01 28.8 +1.0**
**DGMT Dagmar** 111.70 35 PKiKP **PKiKP** **06 01 28.1 -0.1**
baz=112
**SRU San Rafael** 111.91 46 *e*PKIKP **PKiKP** **06 01 29.9 +0.8**
**SRU San Rafael** 111.91 46 *e*PKiKP **PKiKP** **06 01 29.9 +0.8**
**WUAZ Wupatki** 112.62 50 PKiKP **PKiKP** **06 01 30.5 -0.1**
baz=112
**WUAZ Wupatki** 112.62 50 *e*PKPdf **PKiKP** **06 01 32.0 +1.4**
**A26A Wade Farm, Ken** 112.67 33 PKiKP **PKiKP** **06 01 30.5 +0.4**
baz=112
**D25A Fairfield** 112.89 35 PKiKP **PKiKP** **06 01 30.4 -0.2**
baz=113
**A27A Ledoux Ranch,** 113.07 33 PKiKP **PKiKP** **06 01 30.4 -0.4**
baz=113
**O20A White River Ci** 113.10 44 PKiKP **PKiKP** **06 01 29.9 -1.5**
baz=113
**O20A White River Ci** 113.10 44 *e*PKPdf **PKiKP** **06 01 32.2 +0.8**
**K22A Casper** 113.14 41 PKiKP **PKiKP** **06 01 30.2 -1.2**
baz=113
**K22A Casper** 113.14 41 *e*PKPdf **PKiKP** **06 01 31.1 -0.3**
**E25A Miller Ranch,** 113.19 36 PKiKP **PKiKP** **06 01 31.5 +0.3**
baz=113
**C26A Wahner Farm, P** 113.23 34 PKiKP **PKiKP** **06 01 31.0 -0.1**
baz=113
**F25A Bowman** 113.45 37 PKiKP **PKiKP** **06 01 31.0 -0.7**
baz=113
**D26A Manning** 113.47 35 PKiKP **PKiKP** **06 01 31.0 -0.7**
baz=113
**C27A Sayler Ranch,** 113.62 34 PKiKP **PKiKP** **06 01 31.3 -0.6**
baz=113
**A28A Rude Farm, Bot** 113.63 33 PKiKP **PKiKP** **06 01 31.3 -0.6**
baz=113
**PV01 Paradox Valley** 113.70 46 *e*PKPdf **PKiKP** **06 01 33.2 +0.6**
**E26A Carlson Angus** 113.75 36 PKiKP **PKiKP** **06 01 31.7 -0.6**
baz=114
**B28A Dugan Ranch, T** 113.84 33 PKiKP **PKiKP** **06 01 31.7 -0.6**
baz=114
**G25A Newell** 113.86 37 PKiKP **PKiKP** **06 01 31.2 -1.3**
baz=114
**F26A Lodgepole** 113.96 36 PKiKP **PKiKP** **06 01 33.0 +0.3**
baz=114
**W18A Petrified Fore** 114.02 50 PKiKP PKPdf 06 01 33.1 -0.1
baz=114
**RSSD Black Hills** 114.02 39 *e*PKIKP **PKiKP** **06 01 32.5 -0.6**
**RSSD Black Hills** 114.02 39 *e*PKPdf PKPdf 06 01 32.5 -0.5
**MVCO Mesa Verde** 114.13 47 PKiKP **PKiKP** **06 01 33.4 -0.1**
baz=114
**MVCO Mesa Verde** 114.13 47 *e*PKPdf PKPdf 06 01 35.2 +1.7
**A29A Manning Farm,** 114.17 32 PKiKP PKPdf 06 01 32.8 -0.1
baz=114
**TUC Tucson** 114.21 53 *e*PKIKP PKPdf 06 01 34.5 +0.9
**TUC Tucson** 114.21 53 *e*PKPdf PKPdf 06 01 34.5 +0.9
**C28A Hausauer Farms** 114.25 34 PKiKP **PKiKP** **06 01 33.5 +0.4**
baz=114
**I25A Rochford** 114.26 39 PKiKP PKPdf 06 01 32.5 -0.9
baz=114
**E27A Carson** 114.30 35 PKiKP PKPdf 06 01 33.1 -0.2
baz=114
**G26A Maurine** 114.30 37 PKiKP PKPdf 06 01 32.1 -1.2
baz=114
**F27A Lemmon** 114.33 36 PKiKP PKPdf 06 01 33.2 -0.2
baz=114
**N23A Red Feather La** 114.33 42 PKiKP PKPdf 06 01 31.7 -2.1
baz=114
**B29A Wagenman Farm,** 114.38 33 PKiKP PKPdf 06 01 32.2 -1.1
baz=114
**SMCO Snowmass** 114.39 44 *e*PKPdf PKPdf 06 01 35.8 +1.7
**D28A Regan** 114.44 34 PKiKP PKPdf 06 01 33.0 -0.5
baz=114
**J25A Sunshine Ranch** 114.54 39 PKiKP **PKiKP** **06 01 33.6 -0.3**
baz=114
**H26A Fairpoint** 114.55 38 PKiKP **PKiKP** **06 01 33.2 -0.6**
baz=114
**MDND Maddock** 114.60 33 PKiKP **PKiKP** **06 01 33.6 -0.1**
baz=114
**MDND Maddock** 114.60 33 *e*PKiKP PKPdf 06 01 34.5 +0.7
**G27A Dupree** 114.65 37 PKiKP **PKiKP** **06 01 33.8 -0.2**
baz=114
**A30A Hoffart Farm,** 114.66 32 PKiKP **PKiKP** **06 01 33.7 -0.1**
baz=114
**E28A Huff** 114.72 35 PKiKP **PKiKP** **06 01 33.8 -0.3**
baz=114
**I26A New Underwood** 114.80 38 PKiKP **PKiKP** **06 01 33.6 -0.8**
baz=115
**B30A Myrvik Farm, E** 114.94 32 PKiKP **PKiKP** **06 01 34.3 -0.1**
baz=115
**H27A Howes** 114.96 37 PKiKP **PKiKP** **06 01 33.9 -0.8**
baz=115
**J26A Sides Ranch, S** 115.03 39 PKiKP **PKiKP** **06 01 34.3 -0.6**
baz=115
**ISCO Idaho Springs** 115.06 43 *e*PKIKP **PKPdf** **06 01 35.7 +0.4**
**ISCO Idaho Springs** 115.06 43 PKiKP **PKiKP** **06 01 35.1 -0.2**
baz=115
**ISCO Idaho Springs** 115.06 43 *e*PKPdf **PKPdf** **06 01 35.7 +0.4**
**F28A McLaughlin** 115.06 36 PKiKP **PKiKP** **06 01 34.5 -0.2**
baz=115
**ULM Lac du Bonnet** 115.08 30 PKP **PKPdf** **06 01 34.1 -0.5**
comp=Z,5.0nm,0.6s,baz=335,slow=8.0,SNR=4.8
ULM PKKPab **PKKPab** **06 12 16.4 -1.3**
comp=Z,9.5nm,1.0s,baz=121,slow=2.8,SNR=5.6
**ULM Lac du Bonnet** 115.08 30 PKIKP **PKPdf** **06 01 34.1 -0.5**
ULM 06 12 16.4
ULM pmax pmax
comp=Z,5.0nm,0.6s
ULM pmax pmax
comp=Z,10.0nm,1.0s
**ULM Lac du Bonnet** 115.08 30 PKP **PKPdf** **06 01 34.1 -0.5**
ULM PKKPab **PKKPab** **06 12 16.4 -1.3**
**S22A 4UR Ranch, Cre** 115.11 46 PKiKP **PKiKP** **06 01 34.9 -0.5**
baz=115
**S22A 4UR Ranch, Cre** 115.11 46 *e*PKiKP **PKPdf** **06 01 37.0 +1.6**
**I27A Quinn** 115.28 38 PKiKP **PKiKP** **06 01 35.0 -0.3**
baz=115
**C30A Mose, Pekin** 115.30 33 PKiKP **PKiKP** **06 01 33.9 -1.2**
baz=115
**B31A Greenbush Farm** 115.31 32 PKiKP **PKiKP** **06 01 34.6 -0.4**
baz=115
**E29A Napoleon** 115.32 34 PKiKP **PKiKP** **06 01 34.8 -0.4**
baz=115
**M25A Palm-Egli Farm** 115.34 41 PKiKP **PKiKP** **06 01 35.0 -0.6**
baz=115
**G28A Parade** 115.42 36 PKiKP **PKiKP** **06 01 34.7 -0.7**
baz=115
**D30A Buchanan** 115.50 34 PKiKP **PKiKP** **06 01 35.4 -0.2**
baz=115
**H28A Mission Ridge** 115.58 37 PKiKP **PKiKP** **06 01 35.0 -0.7**
baz=115
**F29A Eureka** 115.63 35 PKiKP **PKiKP** **06 01 35.3 -0.6**
baz=115
**C31A Landman Farms,** 115.65 33 PKiKP **PKiKP** **06 01 35.1 -0.6**
baz=116
**J27A Elkhorn Farm,** 115.73 39 PKiKP **PKPdf** **06 01 36.4 +0.2**
baz=116
**Q24A Divide** 115.76 44 PKiKP **PKPdf** **06 01 36.4 -0.2**
baz=116
**I28A Midland** 115.85 38 PKiKP **PKPdf** **06 01 35.6 -0.8**
baz=116
**B32A Ashes, Strandq** 115.91 31 PKiKP **PKiKP** **06 01 36.7 +0.4**
baz=116
**G29A Hoven** 115.94 36 PKiKP **PKPdf** **06 01 36.2 -0.2**
baz=116
**SDCO Great Sand Dun** 116.06 45 PKiKP **PKPdf** **06 01 36.9 -0.4**
baz=116
**SDCO Great Sand Dun** 116.06 45 *e*PKPdf **PKPdf** **06 01 38.4 +1.1**
**H29A Onida** 116.08 37 PKiKP **PKiKP** **06 01 37.0 +0.3**
baz=116
**J28A Allard Ranch,** 116.12 38 PKiKP **PKPdf** **06 01 36.2 -0.7**
baz=116
**LAZ Ladron** 116.27 49 *e*PKPdf **PKPdf** **06 01 39.0 +1.3**
**E31A Nome** 116.31 34 PKiKP **PKPdf** **06 01 36.5 -0.5**
baz=116
**AGMN Agassiz Nation** 116.33 31 PKiKP **PKPdf** **06 01 36.9 -0.1**
baz=116
**I29A Vivian Onida** 116.36 37 PKiKP **PKPdf** **06 01 37.0 -0.3**
baz=116
**K28A Ten Mile Ranch** 116.42 39 PKiKP **PKPdf** **06 01 36.6 -0.9**
baz=116

121A Cookes Peak, D 116.49 51 PKiKP PKPdf 06 01 37.7 -0.4
baz=116
ANMO Albuquerque 116.56 49 ePKIKP PKPdf 06 01 39.0 +0.8
ANMO Albuquerque 116.56 49 ePKPdf PKPdf 06 01 39.0 +0.8
Y22D IRIS PASSCAL I 116.56 50 PKiKP PKPdf 06 01 38.0 -0.2
baz=116
N27A Anderson Farm, 116.64 41 PKiKP PKPdf 06 01 37.4 -0.7
baz=116
LPM Los Pinos Moun 116.69 49 ePKPdf PKPdf 06 01 39.2 +0.8
J29A Okreek 116.69 38 PKiKP PKPdf 06 01 37.2 -0.8
baz=116
C33A Trail 116.71 32 PKiKP PKiKP 06 01 37.9 +0.1
baz=116
P26A Davis Ranch, A 116.72 43 PKiKP PKPdf 06 01 37.6 -0.7
baz=117
BNM Barren Site 116.75 49 ePKPdf PKPdf 06 01 39.5 +0.9
B34A Aery, Baudette 116.83 30 PKiKP PKPdf 06 01 37.4 -0.6
baz=117
Q26A Hugo 116.90 43 PKiKP PKPdf 06 01 38.0 -0.7
baz=117
SUSD South Dakota S 116.93 36 PKiKP PKPdf 06 01 37.8 -0.6
baz=117
I30A Oacoma 116.95 37 PKiKP PKPdf 06 01 38.2 -0.3
baz=117
O27A Beecher Island 116.99 42 PKiKP PKPdf 06 01 37.8 -1.0
baz=117
K29A Lazy Trails An 117.04 38 PKiKP PKPdf 06 01 37.3 -1.4
baz=117
D33A AnnSam, Waubun 117.06 32 PKiKP PKPdf 06 01 37.8 -0.7
baz=117
T25A Trinidad 117.11 46 PKiKP PKPdf 06 01 39.0 -0.2
baz=117
T25A Trinidad 117.11 46 ePKPdf PKPdf 06 01 40.2 +1.0
H31A Wolsey 117.19 36 PKiKP PKPdf 06 01 38.1 -0.7
baz=117
P27A Ficken Ranch, 117.24 42 PKiKP PKPdf 06 01 39.3 0.0
baz=117
J30A Dallas 117.24 37 PKiKP PKPdf 06 01 38.2 -0.8
baz=117
R26A Arlington 117.25 44 PKiKP PKPdf 06 01 39.3 0.0
baz=117
L29A Maesberg Ranch 117.32 39 PKiKP PKPdf 06 01 38.4 -0.9
baz=117
N28A Pribbeno Ranch 117.36 41 PKiKP PKPdf 06 01 37.9 -1.4
baz=117
E33A Westby DABS, E 117.37 33 PKiKP PKPdf 06 01 38.4 -0.7
baz=117
I31A Royce, Wessing 117.42 36 PKiKP PKPdf 06 01 38.0 -1.3
baz=117
D34A Park Rapids 117.44 32 PKiKP PKPdf 06 01 38.1 -1.2
baz=117
KSCO Kaye Shedlock' 117.47 43 PKiKP PKPdf 06 01 39.3 -0.4
baz=117
KSCO Kaye Shedlock' 117.47 43 ePKPdf PKPdf 06 01 40.1 +0.4
O28A Krutsinger Ran 117.49 41 PKiKP PKPdf 06 01 39.2 -0.5
baz=117
M29A Burnside Ranch 117.51 40 PKiKP PKPdf 06 01 39.3 -0.4
baz=117
K30A Basset 117.53 38 PKiKP PKPdf 06 01 38.8 -0.8
baz=117
S26A Kim 117.55 45 PKiKP PKPdf 06 01 39.3 -0.6
baz=117
F33A 5 Mile Ranch, 117.62 34 PKiKP PKPdf 06 01 38.4 -1.2
baz=117
T26A Comanche Natio 117.67 45 PKiKP PKiKP 06 01 40.6 +0.3
baz=118
R27A Eads 117.70 44 PKiKP PKPdf 06 01 39.6 -0.5
baz=118
J31A Geddes 117.71 37 PKiKP PKPdf 06 01 39.1 -0.8
baz=118
H32A Carlson Farm, 117.78 35 PKiKP PKPdf 06 01 39.7 -0.3
baz=118
P28A Saint Francis 117.78 42 PKiKP PKPdf 06 01 39.3 -1.0
baz=118
Q28A Sharon Springs 117.99 43 PKiKP PKPdf 06 01 39.6 -1.1
baz=118
D35A Remer 118.04 31 PKiKP PKPdf 06 01 40.3 -0.1
baz=118
I32A Karley and Nic 118.05 36 PKiKP PKPdf 06 01 40.0 -0.5
baz=118
H33A Prehn Over Nor 118.07 35 PKiKP PKPdf 06 01 39.9 -0.6
baz=118
K31A O'Neill 118.08 38 PKiKP PKPdf 06 01 39.3 -1.3
baz=118
O29A 4D Ranch, Culb 118.13 41 PKiKP PKPdf 06 01 40.4 -0.4
baz=118
J32A Parkston 118.20 37 PKiKP PKPdf 06 01 40.0 -0.8
baz=118
C36A Pine Crest Far 118.22 30 PKiKP PKPdf 06 01 39.5 -1.2
baz=118
N30A Hueftle Ranch, 118.23 40 PKiKP PKiKP 06 01 41.1 +0.1
baz=118
L31A Butterfield Fa 118.28 38 PKiKP PKPdf 06 01 40.0 -1.1
baz=118
P29A Atwood 118.31 42 PKiKP PKiKP 06 01 41.3 0.0
baz=118
T27A Campo 118.34 45 PKiKP PKPdf 06 01 40.7 -0.7
baz=118
G34A Benson 118.36 34 PKiKP PKPdf 06 01 40.8 -0.2
baz=118
R28A Tribune 118.36 43 PKiKP PKiKP 06 01 41.5 0.0
baz=118
I33A Coleman 118.42 35 PKiKP PKPdf 06 01 40.5 -0.8
baz=118
D36A Goodland 118.44 31 PKiKP PKPdf 06 01 41.0 -0.2
baz=118
K32A Verdigre 118.53 37 PKiKP PKPdf 06 01 40.6 -0.9
baz=118
F35A Swanville 118.55 33 PKiKP PKPdf 06 01 40.7 -0.7
baz=118
C37A Embarrass 118.56 30 PKiKP PKPdf 06 01 40.7 -0.7
baz=118
U27A Thompson Grove 118.57 46 PKiKP PKPdf 06 01 41.5 -0.4
baz=118
O30A MW Ranch, Wils 118.59 41 PKiKP PKPdf 06 01 41.2 -0.6
baz=118
H34A Spellman Lake, 118.63 34 PKiKP PKiKP 06 01 41.9 +0.2
baz=118
Q29A Oakley 118.65 42 PKiKP PKPdf 06 01 41.5 -0.4
baz=118
M31A Lambtecht Ranc 118.65 39 PKiKP PKPdf 06 01 40.9 -0.9
baz=118
TAM Tamanrasset 118.65 298 ePKIKP PKPdf 06 01 43.8 +1.4
TAM Tamanrasset 118.65 298 ePKPdf PKPdf 06 01 43.8 +1.4
S28A Manter 118.66 44 PKiKP PKPdf 06 01 41.3 -0.7
baz=118
MNTX Cornudas Mount 118.70 51 PKiKP PKPdf 06 01 42.1 0.0
baz=119
MNTX Cornudas Mount 118.70 51 ePKPdf PKPdf 06 01 42.5 +0.4
ECSD EROS Data Cent 118.72 36 PKiKP PKPdf 06 01 41.5 -0.3
baz=119
ECSD EROS Data Cent 118.72 36 ePKPdf PKPdf 06 01 41.5 -0.3
T28A Walsh 118.74 45 PKiKP PKPdf 06 01 42.1 -0.1
baz=119
J33A Davis 118.75 36 PKiKP PKPdf 06 01 40.6 -1.3
baz=119
EYMN Ely 118.76 29 PKiKP PKPdf 06 01 41.1 -0.7
baz=118
EYMN Ely 118.76 29 ePKPdf PKPdf 06 01 42.2 +0.4
R29A Marienthal 118.77 43 PKiKP PKPdf 06 01 41.4 -0.8
baz=119
P30A Selden 118.80 41 PKiKP PKiKP 06 01 42.2 0.0
baz=119
D37A Cotton 118.83 30 PKiKP PKPdf 06 01 41.2 -0.7
baz=119
V27A Dan Oppiter Fa 118.87 46 PKiKP PKPdf 06 01 42.4 -0.1
baz=119
G35A Watkins 119.00 33 PKiKP PKiKP 06 01 42.6 +0.2
baz=119
ES19 SONSECA Array 119.10 319 ePKPdf PKPdf 06 01 43.1 +0.3
Q30A Quinter 119.11 42 PKiKP PKPdf 06 01 42.3 -0.5
baz=119
F36A Milaca 119.11 32 PKiKP PKPdf 06 01 42.3 -0.2
baz=119
BGNE Belgrade 119.13 39 PKiKP PKPdf 06 01 42.3 -0.4
baz=119
BGNE Belgrade 119.13 39 ePKPdf PKPdf 06 01 42.5 -0.2
K33A Hardington 119.15 37 PKiKP PKPdf 06 01 42.4 -0.3
baz=119
ESDC Sonseca Array 119.16 319 PKP PKPdf 06 01 42.6 -0.2
comp=Z,1.1nm,0.5s,baz=24,slow=1.7,SNR=9.4
ESDC PKKPab PKKPab 06 12 00.6 +0.7
comp=Z,3.2nm,0.9s,baz=244,slow=3.9,SNR=9.0
ESDC Sonseca Array 119.16 319 PKP PKPdf 06 01 42.6 -0.2
ESDC PKKPab PKKPab 06 12 00.6 +0.7
S29A Ulysses 119.19 44 PKiKP PKiKP 06 01 43.5 +0.4
baz=119
T29A Hugoton 119.30 44 PKiKP PKPdf 06 01 43.2 0.0
baz=119
V28A Channing 119.31 46 PKiKP PKPdf 06 01 43.2 -0.1
baz=119
J34A George 119.37 36 PKiKP PKPdf 06 01 42.3 -0.8
baz=119
P31A Stockton 119.38 41 PKiKP PKiKP 06 01 43.8 +0.5
baz=119
G36A St. Michael 119.39 33 PKiKP PKPdf 06 01 42.8 -0.2
baz=119
N32A Stulken Farm, 119.40 39 PKiKP PKPdf 06 01 42.8 -0.4
baz=119
R30A Dighton 119.43 43 PKiKP PKPdf 06 01 42.8 -0.6
baz=119
PAB San Pablo 119.48 319 ePKIKP PKPdf 06 01 44.3 +0.8
PAB San Pablo 119.48 319 ePKPdf PKPdf 06 01 44.3 +0.8
CBKS Cedar Bluff 119.52 42 ePKIKP PKPdf 06 01 43.6 +0.1
CBKS Cedar Bluff 119.52 42 PKiKP PKPdf 06 01 43.1 -0.5
baz=119
CBKS Cedar Bluff 119.52 42 ePKPdf PKPdf 06 01 43.6 +0.1
I35A Creekview Farm 119.58 35 PKiKP PKPdf 06 01 43.0 -0.4
baz=119
S30A Montezuma 119.63 43 PKiKP PKPdf 06 01 43.3 -0.5
baz=120
M33A Taylor Creek F 119.63 38 PKiKP PKPdf 06 01 42.3 -1.4
baz=119
K34A Le Mars 119.64 36 PKiKP PKPdf 06 01 42.8 -0.8
baz=120
Q31A Ellis 119.64 41 PKiKP PKiKP 06 01 44.2 +0.3
baz=120
U29A Oasis Ranch, S 119.66 45 PKiKP PKPdf 06 01 43.4 -0.6
baz=120
O32A Brockman Farm, 119.69 40 PKiKP PKiKP 06 01 43.9 0.0
baz=120
MSTX Muleshoe 119.72 48 PKiKP PKPdf 06 01 43.6 -0.5
baz=120
MSTX Muleshoe 119.72 48 ePKPdf PKPdf 06 01 44.4 +0.2
J35A Milford 119.75 35 PKiKP PKiKP 06 01 44.0 +0.1
baz=120
V29A Stinnett 119.76 46 PKiKP PKPdf 06 01 43.6 -0.6
baz=120
P32A Huiting Farm, 119.83 40 PKiKP PKPdf 06 01 43.3 -0.8
baz=120
T30A Plains 119.88 44 PKiKP PKPdf 06 01 44.3 0.0
baz=120
L34A Svendsen Farm, 119.90 37 PKiKP PKPdf 06 01 43.4 -0.7
baz=120
X28A Dimmitt 119.90 47 PKiKP PKPdf 06 01 44.4 -0.1
baz=120
SPMN St. Paul 119.91 32 PKiKP PKPdf 06 01 43.8 -0.3
baz=120
SPMN St. Paul 119.91 32 ePKPdf PKPdf 06 01 44.1 0.0
R31A Burdett 119.93 42 PKiKP PKPdf 06 01 44.2 -0.1
baz=120
N33A J Bar K, Exete 119.95 39 PKiKP PKiKP 06 01 44.4 0.0
baz=120
W29A Amarillo 120.02 46 PKiKP PKPdf 06 01 44.0 -0.7
baz=120
I36A Fitzsimmons Fa 120.02 34 PKiKP PKPdf 06 01 43.9 -0.4
baz=120
M34A Aspy Farms, Fr 120.05 38 PKiKP PKPdf 06 01 44.1 -0.4
baz=120
U30A WK&E Inc. Balk 120.05 45 PKiKP PKPdf 06 01 44.2 -0.4
baz=120
AMTX Amarillo 120.11 47 PKiKP PKPdf 06 01 44.3 -0.6
baz=120
AMTX Amarillo 120.11 47 ePKPdf PKPdf 06 01 45.4 +0.5
Y28A McKinney Farm, 120.14 48 PKiKP PKPdf 06 01 44.2 -0.8
baz=120
Q32A Meitler Ranch, 120.20 41 PKiKP PKPdf 06 01 44.0 -0.8
baz=120
O33A Hebron 120.24 40 PKiKP PKPdf 06 01 44.3 -0.5
baz=120
MVO Moncorvo 120.28 322 ePKPdf PKPdf 06 01 46.0 +1.0
X29A Tulia 120.30 47 PKiKP PKPdf 06 01 44.8 -0.4
baz=120
S31A Mullinville 120.31 43 PKiKP PKPdf 06 01 44.1 -1.0
baz=120
L35A Bielow Farm, R 120.31 37 PKiKP PKPdf 06 01 44.5 -0.5
baz=120
Z28A Tucker Farm, M 120.32 49 PKiKP PKPdf 06 01 44.2 -1.1
baz=120
V30A Spur Ranch, Mi 120.40 45 PKiKP PKPdf 06 01 44.6 -0.8
baz=120
R32A Long Quarter, 120.41 42 PKiKP PKPdf 06 01 44.7 -0.6
baz=120
T31A Randall Ranch, 120.44 43 PKiKP PKPdf 06 01 45.0 -0.4
baz=120
N34A Lincoln 120.48 38 PKiKP PKPdf 06 01 44.4 -0.9
baz=120
P33A Williams Farm, 120.52 40 PKiKP PKPdf 06 01 44.8 -0.7
baz=120
128A Castleberry Fa 120.54 49 PKiKP PKPdf 06 01 45.6 -0.1
baz=120
PGAV Gaviera, Arco 120.56 323 ePKPdf PKPdf 06 01 43.8 -1.7
PCAB Cabril 120.56 323 ePKPdf PKPdf 06 01 46.9 +1.4
POLO Lamas de Olo 120.62 323 ePKPdf PKPdf 06 01 45.8 +0.1
PVRL Vila Real 120.63 322 ePKPdf PKPdf 06 01 46.4 +0.8
S32A Newby Ranch, P 120.64 43 PKiKP PKPdf 06 01 45.6 -0.1
baz=120
Q33A Connelly Farm, 120.67 41 PKiKP PKPdf 06 01 45.3 -0.4
baz=120
228A UT Block 9, Go 120.68 50 PKiKP PKPdf 06 01 45.9 -0.1
baz=120
U31A Nine Bar Ranch 120.69 44 PKiKP PKPdf 06 01 45.5 -0.4
baz=120
O34A Beatrice 120.74 39 PKiKP PKPdf 06 01 44.9 -0.9
baz=121
Z29A Hungry Hill Ra 120.84 48 PKiKP PKPdf 06 01 46.0 -0.3
baz=121
X30A Coker Ranch, T 120.90 47 PKiKP PKPdf 06 01 46.2 -0.1
baz=121
T32A Huddler Ranch, 120.92 43 PKiKP PKiKP 06 01 46.4 0.0
baz=121
R33A Olander Ranch, 120.95 41 PKiKP PKPdf 06 01 46.0 -0.2
baz=121
TX31 Lajitas Ar. Si 120.99 53 ePKPdf PKPdf 06 01 46.8 +0.1
V31A Spring Creek L 120.99 45 PKiKP PKPdf 06 01 45.2 -1.3
baz=121
TXAR Lajitas Array 121.00 53 PKP PKPdf 06 01 47.0 +0.3
comp=Z,6.0nm,0.8s,baz=234,slow=1.2,SNR=41
TXAR pPKP pPKPdf 06 02 23.5 -0.8
comp=Z,4.7nm,0.8s,baz=326,slow=0.7,SNR=4.0
TXAR PKKPab PKKPab 06 11 51.6 -0.3
comp=Z,8.1nm,0.9s,baz=124,slow=5.0,SNR=26
TXAR Lajitas Array 121.00 53 PKiKP PKPdf 06 01 47.0 +0.3
TXAR 06 02 23.5
TXAR pmax pmax
comp=Z,6.0nm,0.8s
TXAR pmax pmax
comp=Z,5.0nm,0.8s
TXAR Lajitas Array 121.00 53 PKP PKPdf 06 01 47.0 +0.3
TXAR pPKP pPKPdf 06 02 23.5 -0.8
TXAR PKKPab PKKPab 06 11 51.6 -0.3
N35A Tabor 121.00 38 PKiKP PKPdf 06 01 45.9 -0.4
baz=121
129A Stewart Farms, 121.00 49 PKiKP PKPdf 06 01 46.4 -0.2
baz=121
P34A Walnut Farm, R 121.02 40 PKiKP PKPdf 06 01 45.8 -0.6
baz=121
MTE Manteigas 121.04 322 ePKPdf PKPdf 06 01 47.0 +0.6
MTE Manteigas 121.04 322 ePKPdf PKPdf 06 01 47.1 +0.6
PVIS Viseu 121.07 322 ePKPdf PKPdf 06 01 46.6 +0.1
Y30A Stafford Cattl 121.15 47 PKiKP PKPdf 06 01 46.6 -0.3
baz=121
O35A Humboldt 121.18 39 PKiKP PKPdf 06 01 45.5 -1.1
baz=121
COWI Conover 121.20 30 ePKPdf PKPdf 06 01 45.9 -0.6
W31A Holland Ranch, 121.21 46 PKiKP PKPdf 06 01 46.1 -0.8
baz=121
Z30A Sanderson Ranc 121.26 48 PKiKP PKPdf 06 01 46.7 -0.4
baz=121
SCHQ Schefferville 121.27 10 PKP PKPdf 06 01 47.0 +0.6
comp=Z,6.8nm,0.5s,baz=26,slow=4.1,SNR=13
SCHQ Schefferville 121.27 10 PKP PKPdf 06 01 47.0 +0.6
U32A Winter Ranch, 121.28 44 PKiKP PKiKP 06 01 47.2 0.0
baz=121
Q34A Chapman 121.29 40 PKiKP PKPdf 06 01 46.6 -0.3
baz=121
PCBR Castelo Branco 121.32 321 ePKPdf PKPdf 06 01 47.8 +0.9
S33A Kaszmaul Farm, 121.32 42 PKiKP PKPdf 06 01 46.9 -0.1
baz=121
229A Bryant Ranch, 121.34 50 PKiKP PKPdf 06 01 47.1 -0.2
baz=121
KSU1 Kansas State U 121.41 40 PKiKP PKPdf 06 01 46.7 -0.4
baz=121
KSU1 Kansas State U 121.41 40 ePKPdf PKPdf 06 01 46.9 -0.3
329A Wagon Wheel Ra 121.42 50 PKiKP PKPdf 06 01 47.0 -0.5
baz=121
T33A Patterson Ranc 121.43 43 PKiKP PKPdf 06 01 47.0 -0.3
baz=121
R34A Isabella, Hill 121.44 41 PKiKP PKPdf 06 01 47.1 -0.1
baz=121
X31A McDonald Ranch 121.46 46 PKiKP PKPdf 06 01 47.1 -0.3
baz=121
PMRV Marv??o 121.50 321 ePKPdf PKPdf 06 01 47.8 +0.5
P35A Duane Minner, 121.54 39 PKiKP PKPdf 06 01 46.6 -0.8
baz=121
Y31A Rekieta Farm, 121.58 47 PKiKP PKPdf 06 01 46.8 -0.8
baz=121
V32A Arapaho 121.58 45 PKiKP PKiKP 06 01 47.8 0.0
baz=121
130A Snyder 121.70 49 PKiKP PKPdf 06 01 47.6 -0.3
baz=122
W32A Sentinel 121.74 45 PKiKP PKPdf 06 01 47.7 -0.2
baz=122
SCIA State Center 121.81 36 ePKPdf PKPdf 06 01 48.0 +0.2
529A Stev Forest Ra 121.82 52 PKiKP PKiKP 06 01 48.4 0.0
baz=122
PCAS Casmilo, Conde 121.83 322 ePKPdf PKPdf 06 01 48.4 +0.5
O36A Bolckow 121.85 38 PKiKP PKPdf 06 01 47.9 -0.1
baz=122
S34A Willow Spring 121.86 42 PKiKP PKPdf 06 01 47.8 -0.3
baz=122
429A Davenport Ranc 121.86 51 PKiKP PKPdf 06 01 48.3 0.0
baz=122
U33A Lingo Farm, Me 121.86 43 PKiKP PKPdf 06 01 48.0 0.0
baz=122
230A Sterling City 121.91 49 PKiKP PKPdf 06 01 47.6 -0.8
baz=122
Q35A Mercer Eighty, 121.91 40 PKiKP PKPdf 06 01 47.6 -0.5
baz=122
Z31A Sharp Cattle R 121.97 48 PKiKP PKPdf 06 01 48.4 0.0
baz=122
PBAR Barrancos 121.98 319 ePKPdf PKPdf 06 01 48.7 +0.5
P36A Good Intent, A 122.00 39 PKiKP PKPdf 06 01 47.4 -0.8
baz=122
PTOM Tomar 122.04 321 ePKPdf PKPdf 06 01 49.3 +1.0
V33A Lossen Ranch, 122.06 44 PKiKP PKPdf 06 01 48.2 -0.3
baz=122
X32A Elmer 122.06 46 PKiKP PKPdf 06 01 48.1 -0.4
baz=122
330A Mertzon 122.07 50 PKiKP PKPdf 06 01 48.0 -0.7
baz=122
131A Roby 122.09 48 PKiKP PKPdf 06 01 47.8 -0.9
baz=122
R35A Emporia Munici 122.11 41 PKiKP PKPdf 06 01 48.4 -0.1
baz=122
Y32A R-V Farms, Ver 122.15 46 PKiKP PKPdf 06 01 48.5 -0.2
baz=122
T34A McClaskey Farm 122.17 42 PKiKP PKPdf 06 01 47.8 -0.9
baz=122
Q36A Arnold C. Orve 122.22 40 PKiKP PKPdf 06 01 48.2 -0.5
baz=122
U34A Anderson Ranch 122.25 43 PKiKP PKPdf 06 01 48.4 -0.4
baz=122
U34A Anderson Ranch 122.25 43 ePKPdf PKPdf 06 01 49.5 +0.7
WMOK Wichita Mounta 122.26 45 ePKIKP PKPdf 06 01 48.9 0.0
WMOK Wichita Mounta 122.26 45 ePKPdf PKPdf 06 01 48.9 0.0
W33A Caddo, Fort Co 122.28 45 PKiKP PKPdf 06 01 48.4 -0.6
baz=122
430A Baggett Ranch, 122.30 51 PKiKP PKPdf 06 01 49.0 -0.1
baz=122
S35A Otter Creek Ra 122.39 41 PKiKP PKPdf 06 01 48.7 -0.4
baz=122
EVO Evora 122.41 320 ePKPdf PKPdf 06 01 49.8 +0.7
Z32A Haskell 122.47 47 PKiKP PKiKP 06 01 49.5 -0.1
baz=122
231A Bronte 122.49 49 PKiKP PKPdf 06 01 49.0 -0.4
baz=122
530A J-C Ranch, Com 122.50 51 PKiKP PKPdf 06 01 49.4 -0.1
baz=122
R36A Gordon, Harris 122.56 40 PKiKP PKPdf 06 01 48.9 -0.5
baz=122
X33A Lawton 122.56 45 PKiKP PKiKP 06 01 49.7 +0.1
baz=122
V34A Guthrie 122.58 44 PKiKP PKPdf 06 01 49.1 -0.4
baz=122
PBEJ Beja 122.61 319 ePKPdf PKPdf 06 01 50.6 +1.1
ABTX Abilene, Hawle 122.67 48 PKiKP PKPdf 06 01 49.5 -0.3
baz=122
ABTX Abilene, Hawle 122.67 48 ePKPdf PKPdf 06 01 50.1 +0.3
T35A Sooner Cattle 122.69 42 PKiKP PKPdf 06 01 49.6 -0.1
baz=122
331A San Angelo 122.69 50 PKiKP PKPdf 06 01 49.3 -0.6
baz=122
W34A Bridge Creek, 122.72 44 PKiKP PKPdf 06 01 49.6 -0.2
baz=123
Y33A Hilltop Ranch, 122.74 46 PKiKP PKPdf 06 01 49.9 0.0
baz=123
JFWS Jewell Farm 122.82 33 ePKIKP PKPdf 06 01 49.0 -0.7
JFWS Jewell Farm 122.82 33 ePKPdf PKPdf 06 01 49.0 -0.7
431A Sonora 122.83 51 PKiKP PKPdf 06 01 49.9 -0.2
baz=123
U35A Pawnee 122.84 43 PKiKP PKiKP 06 01 50.1 0.0
baz=123
S36A Lake Cedric, C 122.84 41 PKiKP PKPdf 06 01 49.9 0.0
baz=123
PVAQ Vaqueiros 122.86 319 ePKPdf PKPdf 06 01 51.1 +1.2
Q37A Longview Farm, 122.91 39 PKiKP PKPdf 06 01 49.1 -0.9
baz=123
MESJ Messejana 122.94 319 eP PKPdf 06 01 50.1 0.0
MESJ Messejana 122.94 319 ePKPdf PKPdf 06 01 50.6 +0.5
PCVE Castro Verde 122.94 319 ePKPdf PKPdf 06 01 50.6 +0.5
PNCL Nicolau / Gran 122.99 320 ePKPdf PKPdf 06 01 49.2 -1.0
Z33A Whitaker Ranch 123.00 47 PKiKP PKPdf 06 01 50.5 +0.1
baz=123
R37A Teagarden Farm 123.00 40 PKiKP PKPdf 06 01 49.4 -0.8
baz=123
X34A Smith Ranch, M 123.01 45 PKiKP PKiKP 06 01 50.7 +0.1
baz=123
232A Coleman 123.01 49 PKiKP PKiKP 06 01 50.6 -0.1
baz=123
T36A Boggs Farm, Ca 123.03 42 PKiKP PKPdf 06 01 50.3 0.0
baz=123
V35A Meyer Ranch, C 123.09 43 PKiKP PKiKP 06 01 50.6 -0.1
baz=123
531A Rocksprings 123.11 51 PKiKP PKiKP 06 01 50.9 0.0
baz=123
332A Millersview 123.17 49 PKiKP PKiKP 06 01 51.2 +0.2
baz=123
133A Hamilton Ranch 123.22 48 PKiKP PKPdf 06 01 50.6 -0.2
baz=123
S37A Fort Scott 123.32 40 PKiKP PKPdf 06 01 50.1 -0.7
baz=123
432A Menard 123.37 50 PKiKP PKPdf 06 01 50.7 -0.5
baz=123
Y34A Reagan Ranch, 123.39 46 PKiKP PKPdf 06 01 51.1 0.0
baz=123
W35A Tecumseh 123.39 44 PKiKP PKPdf 06 01 51.1 0.0
baz=123
631A Perdido Creek 123.41 52 PKiKP PKPdf 06 01 51.2 -0.1
baz=123
U36A Oologah 123.50 42 PKiKP PKPdf 06 01 51.3 +0.1
baz=123
233A Rising Star 123.51 48 PKiKP PKPdf 06 01 51.5 0.0
baz=123
MORF Marmelete 123.53 319 eP PKPdf 06 01 51.4 +0.1
MORF Marmelete 123.53 319 ePKPdf PKPdf 06 01 52.9 +1.6
JCT Junction City 123.54 50 ePKIKP PKPdf 06 01 51.6 +0.1
JCT Junction City 123.54 50 PKiKP PKPdf 06 01 51.5 +0.1
baz=123
JCT Junction City 123.54 50 ePKPdf PKPdf 06 01 51.6 +0.1
Z34A Collier Ranch, 123.57 46 PKiKP PKiKP 06 01 51.9 +0.2
baz=123
532A Rocksprings 123.62 51 PKiKP PKPdf 06 01 51.8 +0.1
baz=124
T37A Cheneyville 18 123.63 41 PKiKP PKPdf 06 01 51.3 -0.2
baz=124
V36A Jenks 123.69 43 PKiKP PKPdf 06 01 51.6 0.0
baz=124
X35A Drake 123.72 45 PKiKP PKPdf 06 01 51.7 0.0
baz=124
TUL1 Tulsa 123.72 43 PKiKP PKiKP 06 01 52.1 +0.1
baz=124
TUL1 Tulsa 123.72 43 ePKPdf PKPdf 06 01 52.6 +0.9
PFVI Vila Bisbo 123.74 319 ePKPdf PKPdf 06 01 54.6 +3.0
333A Richland Sprin 123.78 49 PKiKP PKPdf 06 01 51.8 -0.1
baz=124
W36A Wetumka 123.85 44 PKiKP PKPdf 06 01 51.6 -0.3
baz=124
134A White-Moore Ra 123.85 47 PKiKP PKPdf 06 01 51.9 -0.1
baz=124
U37A Salina 123.90 42 PKiKP PKPdf 06 01 51.9 -0.1
baz=124

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **Y35A** | **Marietta** | **123.93** | **45** | PKiKP | **PKPdf** | **06 01 52.0** | **-0.1** |
| | baz=124 | | | | | | |
| **433A** | **Art** | **123.96** | **50** | PKiKP | **PKPdf** | **06 01 52.0** | **-0.3** |
| | baz=124 | | | | | | |
| **632A** | **Uvalde** | **123.99** | **51** | PKiKP | **PKPdf** | **06 01 52.4** | **0.0** |
| | baz=124 | | | | | | |
| **X36A** | **Centrahoma** | **124.06** | **44** | PKiKP | **PKPdf** | **06 01 52.1** | **-0.2** |
| | baz=124 | | | | | | |
| **Z35A** | **Perchaven, San** | **124.07** | **46** | PKiKP | **PKPdf** | **06 01 52.4** | **0.0** |
| | baz=124 | | | | | | |
| **234A** | **Clairette** | **124.08** | **48** | PKiKP | **PKPdf** | **06 01 52.5** | **+0.1** |
| | baz=124 | | | | | | |
| **V37A** | **Hulbert** | **124.18** | **42** | PKiKP | **PKiKP** | **06 01 52.7** | **-0.1** |
| | baz=124 | | | | | | |
| **732A** | **Laxson Ranch,** | **124.19** | **52** | PKiKP | **PKiKP** | **06 01 53.1** | **+0.1** |
| | baz=124 | | | | | | |
| **533A** | **Kerrville** | **124.32** | **50** | PKiKP | **PKiKP** | **06 01 53.5** | **+0.2** |
| | baz=124 | | | | | | |
| **334A** | **Lometa** | **124.33** | **49** | PKiKP | **PKPdf** | **06 01 53.0** | **0.0** |
| | baz=124 | | | | | | |
| **135A** | **Vickery Place,** | **124.35** | **47** | PKiKP | **PKiKP** | **06 01 53.3** | **0.0** |
| | baz=124 | | | | | | |
| **U38A** | **Gravette** | **124.37** | **41** | PKiKP | **PKPdf** | **06 01 52.9** | **0.0** |
| | baz=124 | | | | | | |
| **832A** | **Faith Ranch, C** | **124.38** | **53** | PKiKP | **PKiKP** | **06 01 53.8** | **+0.4** |
| | baz=124 | | | | | | |
| **W37A** | **Quinton** | **124.40** | **43** | PKiKP | **PKiKP** | **06 01 53.3** | **+0.1** |
| | baz=124 | | | | | | |
| **Y36A** | **Durant** | **124.47** | **45** | PKiKP | **PKiKP** | **06 01 53.6** | **+0.2** |
| | baz=124 | | | | | | |
| **633A** | **Saathoff Ranch** | **124.49** | **51** | PKiKP | **PKPdf** | **06 01 53.2** | **-0.1** |
| | baz=124 | | | | | | |
| **434A** | **Burnet** | **124.56** | **49** | PKiKP | **PKPdf** | **06 01 53.6** | **+0.1** |
| | baz=124 | | | | | | |
| **WHTX** | **Lake Whitney** | **124.59** | **48** | PKiKP | **PKiKP** | **06 01 53.7** | **0.0** |
| | baz=124 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **124.63** | **288** | *e*PKPdf | **PKPdf** | **06 01 53.2** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **124.63** | **288** | PKP | **PKPdf** | **06 01 53.6** | **-0.3** |
| | comp=Z,44nm,1.0s,baz=54,slow=1.2,SNR=66 | | | | | | |
| TORD | | | | pPKP | **pPKPdf** | **06 02 28.8** | **-2.7** |
| | comp=Z,15nm,0.8s,baz=68,slow=1.1,SNR=3.0 | | | | | | |
| TORD | | | | PKKPab | **PKKPab** | **06 11 37.8** | **+1.6** |
| | comp=Z,2.7nm,1.0s,baz=280,slow=3.1,SNR=6.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.63** | **288** | PKP | **PKPdf** | **06 01 53.6** | **-0.3** |
| TORD | | | | pPKP | **pPKPdf** | **06 02 28.8** | **-2.7** |
| TORD | | | | PKKPab | **PKKPab** | **06 11 37.8** | **+1.6** |
| **TOA1** | **Torodi Ar. Sit** | **124.63** | **288** | *e*PKIKP | **PKPdf** | **06 01 53.2** | **-0.7** |
| **V38A** | **Canehill** | **124.68** | **42** | PKiKP | **PKPdf** | **06 01 53.3** | **-0.2** |
| | baz=124 | | | | | | |
| **Z36A** | **Blue Ridge** | **124.69** | **46** | PKiKP | **PKiKP** | **06 01 54.0** | **+0.1** |
| | baz=124 | | | | | | |
| **733A** | **Divot King Ran** | **124.73** | **52** | PKiKP | **PKiKP** | **06 01 54.0** | **-0.1** |
| | baz=125 | | | | | | |
| **X37A** | **Clayton** | **124.73** | **44** | PKiKP | **PKPdf** | **06 01 53.5** | **-0.1** |
| | baz=125 | | | | | | |
| **534A** | **Blanco** | **124.77** | **50** | PKiKP | **PKiKP** | **06 01 54.1** | **-0.1** |
| | baz=125 | | | | | | |
| **833A** | **Chaparral WMA,** | **124.82** | **52** | PKiKP | **PKiKP** | **06 01 54.2** | **-0.1** |
| | baz=125 | | | | | | |
| **Y37A** | **Hugo** | **124.89** | **45** | PKiKP | **PKPdf** | **06 01 54.1** | **+0.1** |
| | baz=125 | | | | | | |
| **HDIL** | **Hopedale** | **124.93** | **34** | PKiKP | **PKPdf** | **06 01 53.6** | **-0.3** |
| | baz=125 | | | | | | |
| **HDIL** | **Hopedale** | **124.93** | **34** | *e*PKPdf | **PKPdf** | **06 01 53.5** | **-0.3** |
| **335A** | **Moody** | **124.97** | **48** | PKiKP | **PKiKP** | **06 01 54.5** | **-0.1** |
| | baz=125 | | | | | | |
| **136A** | **Ennis** | **125.03** | **47** | PKiKP | **PKPdf** | **06 01 54.2** | **0.0** |
| | baz=125 | | | | | | |
| **W38A** | **Poteau** | **125.05** | **43** | PKiKP | **PKiKP** | **06 01 54.7** | **+0.1** |
| | baz=125 | | | | | | |
| **X38A** | **Whitesboro** | **125.06** | **43** | PKiKP | **PKiKP** | **06 01 54.9** | **+0.2** |
| | baz=125 | | | | | | |
| **435B** | **Jarrell** | **125.09** | **49** | PKiKP | **PKiKP** | **06 01 54.8** | **0.0** |
| | baz=125 | | | | | | |
| **634A** | **China Grove, S** | **125.16** | **51** | PKiKP | **PKiKP** | **06 01 55.0** | **0.0** |
| | baz=125 | | | | | | |
| **933A** | **Laredo** | **125.22** | **53** | PKiKP | **PKiKP** | **06 01 55.9** | **+0.8** |
| | baz=125 | | | | | | |
| **734A** | **La Parita Cree** | **125.25** | **52** | PKiKP | **PKiKP** | **06 01 55.4** | **+0.2** |
| | baz=125 | | | | | | |
| **236A** | **Katherine and** | **125.27** | **47** | PKiKP | **PKiKP** | **06 01 55.1** | **+0.1** |
| | baz=125 | | | | | | |
| **Z37A** | **Pogue Cattle C** | **125.31** | **45** | PKiKP | **PKiKP** | **06 01 55.2** | **+0.1** |
| | baz=125 | | | | | | |
| **336A** | **Riesel** | **125.35** | **48** | PKiKP | **PKPdf** | **06 01 54.9** | **+0.1** |
| | baz=125 | | | | | | |
| **535A** | **Dale** | **125.46** | **50** | PKiKP | **PKiKP** | **06 01 55.8** | **+0.2** |
| | baz=125 | | | | | | |
| **137A** | **Heron Place, G** | **125.53** | **46** | PKiKP | **PKiKP** | **06 01 55.9** | **+0.3** |
| | baz=125 | | | | | | |
| **Y38A** | **Idabel** | **125.54** | **44** | PKiKP | **PKiKP** | **06 01 55.4** | **-0.2** |
| | baz=125 | | | | | | |
| **834A** | **Tilden** | **125.57** | **52** | PKiKP | **PKiKP** | **06 01 56.0** | **+0.2** |
| | baz=125 | | | | | | |
| **635A** | **Leesville** | **125.61** | **51** | PKiKP | **PKiKP** | **06 01 56.4** | **+0.6** |
| | baz=126 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **125.69** | **49** | PKiKP | **PKiKP** | **06 01 56.2** | **+0.2** |
| | baz=126 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **125.73** | **45** | PKiKP | **PKiKP** | **06 01 56.0** | **0.0** |
| | baz=126 | | | | | | |
| **237A** | **Washetta, Mont** | **125.80** | **47** | PKiKP | **PKiKP** | **06 01 56.0** | **-0.1** |
| | baz=126 | | | | | | |
| **536A** | **Bastrop** | **125.82** | **49** | PKiKP | **PKiKP** | **06 01 56.5** | **+0.2** |
| | baz=126 | | | | | | |
| **735A** | **Kenedy** | **125.83** | **51** | PKiKP | **PKiKP** | **06 01 56.6** | **+0.3** |
| | baz=126 | | | | | | |
| **934A** | **Benavides** | **125.83** | **53** | PKiKP | **PKiKP** | **06 01 57.0** | **+0.6** |
| | baz=126 | | | | | | |
| **034A** | **Hebbronville** | **125.94** | **54** | PKiKP | **PKiKP** | **06 01 57.2** | **+0.6** |
| | baz=126 | | | | | | |
| **138A** | **Matatall Enter** | **125.97** | **46** | PKiKP | **PKiKP** | **06 01 56.5** | **0.0** |
| | baz=126 | | | | | | |
| **Y39A** | **Lockesburg** | **125.98** | **44** | PKiKP | **PKPdf** | **06 01 56.1** | **+0.1** |
| | baz=126 | | | | | | |
| **MIAR** | **Mount Ida** | **125.99** | **43** | *e*PKIKP | **PKPdf** | **06 01 56.8** | **+0.7** |
| **MIAR** | **Mount Ida** | **125.99** | **43** | PKiKP | **PKiKP** | **06 01 56.5** | **0.0** |
| | baz=126 | | | | | | |
| **MIAR** | **Mount Ida** | **125.99** | **43** | *e*PKPdf | **PKPdf** | **06 01 56.8** | **+0.7** |
| **835A** | **Beeville** | **126.07** | **52** | PKiKP | **PKiKP** | **06 01 57.3** | **+0.5** |
| | baz=126 | | | | | | |
| **337A** | **Centerville** | **126.09** | **47** | PKiKP | **PKiKP** | **06 01 57.2** | **+0.4** |
| | baz=126 | | | | | | |
| **636A** | **Smothers Creek** | **126.11** | **50** | PKiKP | **PKiKP** | **06 01 57.6** | **+0.8** |
| | baz=126 | | | | | | |
| **SFIN** | **Scholer Farm** | **126.28** | **33** | PKiKP | **PKPdf** | **06 01 56.6** | **+0.2** |
| | baz=126 | | | | | | |
| **SFIN** | **Scholer Farm** | **126.28** | **33** | *e*PKPdf | **PKPdf** | **06 01 57.0** | **+0.6** |
| **238A** | **Jacksonville** | **126.29** | **46** | PKiKP | **PKiKP** | **06 01 57.9** | **+0.8** |
| | baz=126 | | | | | | |
| **Z39A** | **Irene McRaven,** | **126.30** | **45** | PKiKP | **PKPdf** | **06 01 56.8** | **+0.2** |
| | baz=126 | | | | | | |
| **USHA** | **Ushuaia** | **126.35** | **168** | PKP | **PKPdf** | **06 01 55.8** | **-0.2** |
| | comp=Z,66nm,1.1s,baz=219,slow=2.0,SNR=11 | | | | | | |
| USHA | | | | pPKP | **pPKPdf** | **06 02 32.1** | **-1.5** |
| | comp=Z,18nm,0.6s,baz=158,slow=3.8,SNR=2.7 | | | | | | |
| **USHA** | **Ushuaia** | **126.35** | **168** | PKP | **PKPdf** | **06 01 55.8** | **-0.2** |
| USHA | | | | pPKP | **pPKPdf** | **06 02 32.1** | **-1.5** |
| **736A** | **Circle Diamond** | **126.36** | **51** | PKiKP | **PKiKP** | **06 01 58.3** | **+1.0** |
| | baz=126 | | | | | | |
| **537A** | **Green Hill Far** | **126.39** | **49** | PKiKP | **PKiKP** | **06 01 58.2** | **+0.9** |
| | baz=126 | | | | | | |
| **139A** | **Bunkhouse Ranc** | **126.45** | **45** | PKiKP | **PKiKP** | **06 01 57.5** | **+0.1** |
| | baz=126 | | | | | | |
| **035A** | **Encino** | **126.46** | **53** | PKiKP | **PKiKP** | **06 01 58.6** | **+1.1** |
| | baz=126 | | | | | | |
| **338A** | **Crockett** | **126.49** | **47** | PKiKP | **PKiKP** | **06 01 58.3** | **+0.8** |
| | baz=126 | | | | | | |
| **AAM** | **Ann Arbor** | **126.67** | **29** | *e*PKIKP | **PKPdf** | **06 01 57.6** | **+0.5** |
| **AAM** | **Ann Arbor** | **126.67** | **29** | *e*PKPdf | **PKPdf** | **06 01 57.6** | **+0.5** |
| **UALR** | **University of** | **126.69** | **42** | *e*PKPdf | **PKPdf** | **06 01 58.4** | **+1.0** |
| **637A** | **Eagle Lake** | **126.69** | **50** | PKiKP | **PKiKP** | **06 01 59.0** | **+1.1** |
| | baz=126 | | | | | | |
| **035Z** | **Hargill** | **126.69** | **54** | PKiKP | **PKiKP** | **06 01 58.7** | **+0.7** |
| | baz=127 | | | | | | |
| **PBMO** | **Poplar Bluff** | **126.71** | **39** | *e*PKPdf | **PKPdf** | **06 01 56.9** | **-0.5** |
| **SADO** | **Sadowa** | **126.75** | **24** | *e*PKPdf | **PKPdf** | **06 01 57.3** | **+0.2** |
| **239A** | **Gary** | **126.75** | **46** | PKiKP | **PKiKP** | **06 01 58.4** | **+0.4** |
| | baz=127 | | | | | | |
| **NATX** | **Nacogdoches** | **126.75** | **46** | PKiKP | **PKiKP** | **06 01 59.0** | **+1.0** |
| | baz=127 | | | | | | |
| **HKT** | **Hockley** | **126.81** | **49** | *e*PKIKP | **PKPdf** | **06 01 58.8** | **+1.2** |
| **HKT** | **Hockley** | **126.81** | **49** | *e*PKPdf | **PKPdf** | **06 01 58.8** | **+1.2** |
| **OLIL** | **Olney** | **126.84** | **35** | *e*PKPdf | **PKPdf** | **06 01 58.2** | **+0.6** |
| **SIUC** | **Southern Illin** | **126.85** | **37** | *e*PKPdf | **PKPdf** | **06 01 58.5** | **+0.9** |
| **737A** | **Port Lavaca** | **126.93** | **51** | PKiKP | **PKiKP** | **06 01 59.6** | **+1.2** |
| | baz=127 | | | | | | |
| **538A** | **Harpers Horsep** | **126.94** | **48** | PKiKP | **PKiKP** | **06 01 59.5** | **+1.1** |
| | baz=127 | | | | | | |
| **339A** | **Huntington** | **127.06** | **47** | PKiKP | **PKiKP** | **06 01 59.0** | **+0.4** |
| | baz=127 | | | | | | |
| **439A** | **Center Grove,** | **127.18** | **47** | PKiKP | **PKiKP** | **06 01 59.8** | **+0.9** |
| | baz=127 | | | | | | |
| **PARMO** | **Parma** | **127.20** | **38** | *e*PKPdf | **PKPdf** | **06 01 59.2** | **+0.9** |
| **BLO** | **Bloomington** | **127.44** | **34** | *e*PKIKP | **PKPdf** | **06 01 59.1** | **+0.5** |
| **BLO** | **Bloomington** | **127.44** | **34** | *e*PKPdf | **PKPdf** | **06 01 59.1** | **+0.5** |
| **GNAR** | **Gosnell** | **127.48** | **39** | *e*PKPdf | **PKPdf** | **06 02 00.6** | **+1.8** |
| **340A** | **Bronson** | **127.49** | **46** | PKiKP | **PKiKP** | **06 01 59.5** | **0.0** |
| | baz=127 | | | | | | |
| **738A** | **Farr-Stevens R** | **127.50** | **50** | PKiKP | **PKiKP** | **06 01 60.0** | **+0.4** |
| | baz=127 | | | | | | |
| **539A** | **Cross D Ranch,** | **127.57** | **48** | PKiKP | **PKPdf** | **06 01 59.4** | **+0.3** |
| | baz=127 | | | | | | |
| **USIN** | **University of** | **127.61** | **36** | *e*PKPdf | **PKPdf** | **06 02 00.4** | **+1.4** |
| **440A** | **Kirbyville** | **127.80** | **47** | PKiKP | **PKiKP** | **06 02 00.4** | **+0.3** |
| | baz=128 | | | | | | |
| **HALT** | **Halls** | **127.94** | **39** | *e*PKPdf | **PKPdf** | **06 02 00.5** | **+0.8** |
| **UTMT** | **University of** | **127.96** | **38** | *e*PKPdf | **PKPdf** | **06 02 00.1** | **+0.4** |
| **540A** | **Vidor** | **128.06** | **48** | PKiKP | **PKiKP** | **06 02 01.0** | **+0.4** |
| | baz=128 | | | | | | |
| **WCI** | **Wyandotte Cave** | **128.22** | **35** | *e*PKIKP | **PKPdf** | **06 02 00.2** | **-0.1** |
| **WCI** | **Wyandotte Cave** | **128.22** | **35** | *e*PKPdf | **PKPdf** | **06 02 00.1** | **-0.1** |
| **ERPA** | **Erie** | **128.53** | **27** | *e*PKPdf | **PKPdf** | **06 02 01.2** | **+0.6** |
| **ACSO** | **Alum Creek Sta** | **128.55** | **30** | *e*PKPdf | **PKPdf** | **06 02 01.1** | **+0.3** |
| **LONY** | **Lake Ozonia** | **128.61** | **21** | *e*PKPdf | **PKPdf** | **06 02 01.5** | **+0.7** |
| **WVT** | **Waverly** | **128.73** | **38** | *e*PKIKP | **PKPdf** | **06 02 01.4** | **+0.2** |
| **WVT** | **Waverly** | **128.73** | **38** | *e*PKPdf | **PKPdf** | **06 02 01.4** | **+0.2** |
| **OXF** | **Oxford** | **128.77** | **40** | *e*PKIKP | **PKPdf** | **06 02 02.5** | **+1.2** |
| **OXF** | **Oxford** | **128.77** | **40** | *e*PKPdf | **PKPdf** | **06 02 02.5** | **+1.2** |
| **MMNY** | **Mt. Morris Dam** | **128.93** | **25** | *e*PKPdf | **PKPdf** | **06 02 02.4** | **+1.0** |
| **VBMS** | **Vicksburg** | **129.42** | **43** | PKiKP | **PKPdf** | **06 02 02.9** | **+0.2** |
| | baz=129 | | | | | | |
| **MDV** | **Middlebury** | **129.64** | **20** | *e*PKPdf | **PKPdf** | **06 02 03.7** | **+1.0** |
| **BINY** | **Binghamton** | **130.16** | **23** | *e*PKPdf | **PKPdf** | **06 02 05.3** | **+1.5** |
| **SWET** | **Sewanee** | **130.49** | **37** | *e*PKPdf | **PKPdf** | **06 02 04.8** | **+0.1** |
| **MCWV** | **Mont Chateau** | **130.54** | **29** | *e*PKPdf | **PKPdf** | **06 02 06.1** | **+1.6** |
| **TRY** | **Troy** | **130.58** | **21** | *e*PKPdf | **PKPdf** | **06 02 06.1** | **+1.6** |
| **SSPA** | **Standing Stone** | **130.66** | **26** | *e*PKPdf | **PKPdf** | **06 02 05.1** | **+0.4** |
| **TZTN** | **Tazewell** | **130.96** | **34** | *e*PKPdf | **PKPdf** | **06 02 07.3** | **+1.8** |
| **CPCT** | **Cooper Cave** | **131.17** | **36** | *e*PKPdf | **PKPdf** | **06 02 06.4** | **+0.6** |
| **TKL** | **Tuckaleechee C** | **131.46** | **35** | *e*PKIKP | **PKPdf** | **06 02 06.8** | **+0.3** |
| **TKL** | **Tuckaleechee C** | **131.46** | **35** | *e*PKPdf | **PKPdf** | **06 02 06.8** | **+0.3** |
| **PMAR** | **Madeira** | **131.69** | **320** | *e*PKPdf | **PKPdf** | **06 02 06.8** | **-0.4** |
| **MVL** | **Millersville** | **131.85** | **25** | *e*PKPdf | **PKPdf** | **06 02 07.2** | **+0.2** |
| **BLA** | **Blacksburg** | **132.15** | **31** | *e*PKIKP | **PKPdf** | **06 02 08.3** | **+0.6** |
| **BLA** | **Blacksburg** | **132.15** | **31** | *e*PKPdf | **PKPdf** | **06 02 08.3** | **+0.6** |
| **KIC** | **Kosan Boka** | **132.17** | **281** | *e*PKIKP | **PKPdf** | **06 02 08.5** | **+0.2** |
| | comp=Z,99nm,1.1s | | | | | | |
| **DBIC** | **Dimbokro** | **132.23** | **282** | PKP | **PKPdf** | **06 02 08.4** | **0.0** |
| | comp=Z,32nm,1.0s,baz=100,slow=0.5,SNR=16 | | | | | | |
| **DBIC** | **Dimbokro** | **132.23** | **282** | *e*PKIKP | **PKPdf** | **06 02 08.4** | **0.0** |
| **DBIC** | **Dimbokro** | **132.23** | **282** | *e*PKPdf | **PKPdf** | **06 02 08.4** | **0.0** |
| **TIC** | **Toumodi** | **132.40** | **282** | *e*PKIKP | **PKPdf** | **06 02 08.6** | **-0.2** |
| **LIC** | **Lamto** | **132.47** | **281** | *e*PKIKP | **PKPdf** | **06 02 08.3** | **-0.6** |
| | comp=Z,140nm,1.9s | | | | | | |
| **CBN** | **Corbin** | **132.86** | **28** | *e*PKPdf | **PKPdf** | **06 02 08.7** | **-0.2** |
| **KMSC** | **Kings Mountain** | **133.21** | **34** | PKiKP | **PKPdf** | **06 02 09.3** | **-0.4** |
| | baz=133 | | | | | | |
| **KMSC** | **Kings Mountain** | **133.21** | **34** | *e*PKPpre | PKPpre | 06 01 59.6 | |
| KMSC | | | | *e*PKPdf | **PKPdf** | **06 02 09.5** | **-0.2** |
| **GOGA** | **Godfrey** | **133.21** | **37** | *e*PKHKP | PKPpre | 06 02 01.1 | |
| GOGA | | | | *e* | | 06 02 10.7 | |
| **GOGA** | **Godfrey** | **133.21** | **37** | *e*PKPpre | PKPpre | 06 02 01.1 | |
| GOGA | | | | *e*PKPdf | **PKiKP** | **06 02 10.7** | **-0.3** |
| **URVA** | **University of** | **133.29** | **28** | *e*PKPdf | **PKPdf** | **06 02 11.0** | **+1.2** |
| **JSC** | **Jenkinsville** | **133.88** | **34** | *e*PKPdf | **PKPdf** | **06 02 12.3** | **+1.3** |
| **TIGA** | **Tifton** | **134.48** | **39** | PKiKP | **PKiKP** | **06 02 13.0** | **-0.6** |
| | baz=134 | | | | | | |
| **TIGA** | **Tifton** | **134.48** | **39** | *e*PKPdf | **PKPdf** | **06 02 13.2** | **+1.0** |
| **TGUH** | **Tegucigalpa,Un** | **141.04** | **64** | *e*PKPdf | **PKPdf** | **06 02 22.4** | **-2.3** |
| **TRQA** | **Tornquist** | **143.65** | **166** | *e*PKPdf | PKPbc | 06 02 26.3 | -0.3 |
| **JTS** | **JuntasAbangare** | **144.52** | **68** | PKP | **PKPdf** | **06 02 30.9** | **0.0** |
| | comp=Z,268nm,1.1s,baz=309,slow=3.2,SNR=104 | | | | | | |
| **JTS** | **JuntasAbangare** | **144.52** | **68** | *e*PKIKP | PKPbc | 06 02 29.9 | +0.1 |
| **JTS** | **JuntasAbangare** | **144.52** | **68** | *e*PKPdf | PKPbc | 06 02 29.9 | +0.1 |
| **MTDJ** | **Mount Denham** | **147.16** | **50** | *e*PKPdf | **PKPbc** | **06 02 38.4** | **+0.6** |
| **CFAA** | **Coronel Fontan** | **147.39** | **153** | PKPbc | **PKPdf** | **06 02 35.8** | **+0.4** |
| | comp=Z,17nm,0.8s,baz=211,slow=2.8,SNR=79 | | | | | | |
| **CFAA** | **Coronel Fontan** | **147.39** | **153** | PKPbc | **PKPdf** | **06 02 35.8** | **+0.4** |
| **GTBY** | **Guantanamo Bay** | **147.85** | **44** | *e*PKPdf | **PKPdf** | **06 02 37.6** | **+1.2** |
| GTBY | | | | *e*PKPbc | **PKPbc** | **06 02 40.3** | **+0.8** |
| **LCO** | **Las Campanas** | **148.29** | **147** | *e*PKPdf | **PKPdf** | **06 02 37.9** | **+0.7** |
| LCO | | | | *e*PKPbc | **PKiKP** | **06 02 41.7** | **-0.6** |
| **GRTK** | **Grand Turk** | **149.33** | **37** | *e*PKPbc | **PKPbc** | **06 02 43.8** | **+0.6** |
| **BCIP** | **Isla Barro Col** | **149.63** | **67** | *e*PKPbc | **PKPbc** | **06 02 44.4** | **+0.2** |
| **SDDR** | **Presa de Saban** | **151.10** | **41** | *e*PKPbc | **PKPbc** | **06 02 47.8** | **+0.2** |
| **SMN1** | **Samana, DR** | **152.22** | **38** | *e*PKPdf | **PKPdf** | **06 02 44.5** | **+1.2** |
| SMN1 | | | | *e*PKPbc | **PKiKP** | **06 02 50.4** | **0.0** |
| **ATAH** | **Atahualpa** | **153.14** | **100** | PKP | **PKPdf** | **06 02 46.6** | **+1.4** |
| | comp=Z,53nm,1.1s,baz=220,slow=1.3,SNR=21 | | | | | | |
| ATAH | | | | PKPbc | **PKiKP** | **06 02 54.9** | **+2.0** |
| | comp=Z,72nm,1.0s,baz=255,slow=3.7,SNR=17 | | | | | | |
| **ATAH** | **Atahualpa** | **153.14** | **100** | PKP | **PKPdf** | **06 02 46.6** | **+1.4** |
| ATAH | | | | PKPbc | **PKiKP** | **06 02 54.9** | **+2.0** |
| **OTAV** | **Otavalo** | **153.17** | **84** | *e*PKPdf | **PKPdf** | **06 02 45.8** | **+0.4** |
| OTAV | | | | *e*PKPbc | **PKiKP** | **06 02 53.5** | **+0.4** |
| **NNA** | **Nana** | **153.53** | **112** | PKPbc | PKPbc | 06 03 01.2 | +8.1 |
| | comp=Z,37nm,1.1s,baz=328,slow=1.8,SNR=6.9 | | | | | | |
| NNA | | | | PKPab | **PKPab** | **06 03 09.3** | **+3.2** |
| | comp=Z,61nm,1.0s,baz=322,slow=2.9,SNR=9.9 | | | | | | |
| **NNA** | **Nana** | **153.53** | **112** | *e*PKIKP | **PKPdf** | **06 02 47.1** | **+1.7** |
| **NNA** | **Nana** | **153.53** | **112** | *e*PKPdf | **PKPdf** | **06 02 47.0** | **+1.7** |
| NNA | | | | *e*PKPbc | **PKiKP** | **06 02 54.2** | **+0.9** |
| NNA | | | | PKPbc | PKPbc | 06 03 01.2 | +8.1 |
| NNA | | | | PKPab | **PKPab** | **06 03 09.3** | **+3.2** |
| **LVC** | **Limon Verde** | **154.20** | **141** | PKP | **PKPdf** | **06 02 47.3** | **+1.0** |
| | comp=Z,40nm,1.0s,baz=318,slow=2.8,SNR=6.6 | | | | | | |
| LVC | | | | PKPbc | **PKiKP** | **06 02 56.3** | **+1.7** |
| | comp=Z,122nm,0.9s,baz=245,slow=2.9,SNR=17 | | | | | | |
| **LVC** | **Limon Verde** | **154.20** | **141** | *e*PKPdf | **PKPdf** | **06 02 48.2** | **+1.9** |
| LVC | | | | *e*PKPbc | **PKiKP** | **06 02 56.0** | **+1.3** |
| LVC | | | | *e*PKPab | **PKPab** | **06 03 11.1** | **+2.2** |
| **LRS** | **Lares** | **154.35** | **35** | *e*PKPdf | **PKPdf** | **06 02 49.0** | **+2.6** |
| LRS | | | | *e*PKPab | **PKPab** | **06 03 09.2** | **-0.1** |
| **AOPR** | **Arecibo Observ** | **154.36** | **35** | *e*PKPab | **PKPab** | **06 03 10.4** | **+1.1** |
| **CELP** | **Cerrillos** | **154.67** | **35** | *e*PKPab | **PKPab** | **06 03 11.2** | **+0.7** |
| **SJG** | **San Juan** | **154.88** | **34** | PKPab | **PKPab** | **06 03 11.1** | **-0.4** |
| | comp=Z,36nm,0.9s,baz=0.0,slow=9.1,SNR=6.6 | | | | | | |
| **SJG** | **San Juan** | **154.88** | **34** | *e*PKIKP | **PKPdf** | **06 02 48.4** | **+1.3** |
| SJG | | | | *e* | | 06 03 11.9 | |
| **SJG** | **San Juan** | **154.88** | **34** | *e*PKPdf | **PKPdf** | **06 02 48.4** | **+1.3** |
| SJG | | | | *e*PKPab | **PKPab** | **06 03 11.9** | **+0.5** |
| **CPD** | **Cerro la Pandu** | **155.07** | **33** | *e*PKIKP | **PKPdf** | **06 02 47.7** | **+0.4** |
| CPD | | | | *e* | | 06 03 12.8 | |
| **CPD** | **Cerro la Pandu** | **155.07** | **33** | *e*PKPdf | **PKPdf** | **06 02 47.7** | **+0.4** |
| CPD | | | | *e*PKPab | **PKPab** | **06 03 12.8** | **+0.5** |
| **CPUP** | **Villa Florida** | **155.97** | **168** | PKP | **PKPdf** | **06 02 49.1** | **+0.8** |
| | comp=Z,22nm,1.0s,baz=64,slow=1.7,SNR=16 | | | | | | |
| CPUP | | | | PKPab | **PKPab** | **06 03 15.1** | **-0.8** |
| | comp=Z,67nm,1.1s,baz=200,slow=2.0,SNR=10 | | | | | | |
| **CPUP** | **Villa Florida** | **155.97** | **168** | *e*PKIKP | **PKPdf** | **06 02 49.4** | **+1.1** |
| CPUP | | | | | | 06 03 15.1 | |
| **CPUP** | **Villa Florida** | **155.97** | **168** | *e*PKPdf | **PKPdf** | **06 02 49.4** | **+1.1** |
| CPUP | | | | PKPab | **PKPab** | **06 03 15.1** | **-0.8** |
| **ROSC** | **El Rosal** | **156.23** | **71** | PKP | **PKPdf** | **06 02 49.8** | **+0.3** |
| | comp=Z,9.3nm,0.9s,baz=87,slow=7.3,SNR=8.8 | | | | | | |
| ROSC | | | | PKPab | **PKPab** | **06 03 16.8** | **-1.3** |
| | comp=Z,35nm,1.0s,baz=309,slow=8.1,SNR=3.5 | | | | | | |
| **ROSC** | **El Rosal** | **156.23** | **71** | *e*PKPdf | **PKPdf** | **06 02 50.7** | **+1.1** |
| ROSC | | | | PKPab | **PKPab** | **06 03 16.8** | **-1.3** |
| **LPAZ** | **La Paz** | **159.04** | **131** | PKP | **PKPdf** | **06 02 54.0** | **+0.9** |
| | comp=Z,21nm,1.1s,baz=2.1,slow=1.5,SNR=32 | | | | | | |
| LPAZ | | | | PKPab | **PKPab** | **06 03 29.1** | **-1.2** |
| | comp=Z,20nm,1.0s,baz=225,slow=1.0,SNR=5.3 | | | | | | |
| **LPAZ** | **La Paz** | **159.04** | **131** | *e*PKIKP | **PKPdf** | **06 02 53.1** | **-0.1** |
| LPAZ | | | | | | 06 03 29.1 | |
| **LPAZ** | **La Paz** | **159.04** | **131** | *e*PKPdf | **PKPdf** | **06 02 53.1** | **-0.1** |
| LPAZ | | | | PKPab | **PKPab** | **06 03 29.1** | **-1.2** |
| **FDF** | **Fort de France** | **160.29** | **28** | *e*PKIKP | **PKPdf** | **06 02 54.9** | **+1.0** |
| FDF | | | | *e* | | 06 03 36.4 | |
| **FDF** | **Fort de France** | **160.29** | **28** | *e*PKPdf | **PKPdf** | **06 02 54.9** | **+1.0** |
| FDF | | | | *e*PKPab | **PKPab** | **06 03 36.4** | **+1.6** |
| **PCRV** | **Puerto La Cruz** | **161.86** | **45** | PKP | **PKPdf** | **06 02 55.3** | **-0.3** |
| | comp=Z,19nm,1.2s,baz=13,slow=6.2,SNR=3.0 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **161.86** | **45** | PKP | **PKPdf** | **06 02 55.3** | **-0.3** |
| **RCBR** | **Riachuelo** | **163.88** | **259** | PKP | **PKPdf** | **06 02 58.3** | **+0.7** |
| | comp=Z,39nm,1.0s,baz=40,slow=2.2,SNR=8.2 | | | | | | |
| RCBR | | | | PKPab | **PKPab** | **06 03 51.3** | **+0.3** |
| | comp=Z,33nm,0.9s,baz=117,slow=5.5,SNR=6.5 | | | | | | |
| **RCBR** | **Riachuelo** | **163.88** | **259** | *e*PKPdf | **PKPdf** | **06 02 58.3** | **+0.7** |
| RCBR | | | | *e*PKPab | **PKPab** | **06 03 52.1** | **+1.1** |
| **SIV** | **San Ignacio** | **163.99** | **146** | PKP | **PKPdf** | **06 02 58.5** | **+0.9** |
| | comp=Z,18nm,1.0s,baz=206,slow=1.3,SNR=19 | | | | | | |
| **SIV** | **San Ignacio** | **163.99** | **146** | PKP | **PKPdf** | **06 02 58.5** | **+0.9** |
| **BDFB** | **Brasilia** | **166.68** | **196** | PKP | **PKPdf** | **06 03 00.1** | **+0.1** |
| | comp=Z,27nm,1.1s,baz=132,slow=0.5,SNR=11 | | | | | | |
| BDFB | | | | PKPab | **PKPab** | **06 04 03.4** | **+0.5** |
| | comp=Z,39nm,1.1s,baz=156,slow=2.9,SNR=7.0 | | | | | | |
| **BDFB** | **Brasilia** | **166.68** | **196** | PKIKP | **PKPdf** | **06 03 00.1** | **+0.1** |
| BDFB | | | | | | 06 04 03.4 | |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,39nm,1.1s | | | | | | |
| **BDFB** | **Brasilia** | **166.68** | **196** | PKP | **PKPdf** | **06 03 00.1** | **+0.1** |
| BDFB | | | | PKPab | **PKPab** | **06 04 03.4** | **+0.5** |
| **SAML** | **Samuel** | **167.10** | **119** | *e*PKPdf | **PKPdf** | **06 02 58.4** | **-1.8** |
| **PTGA** | **Pitinga** | **171.57** | **76** | PKP | **PKPdf** | **06 03 03.0** | **+0.1** |
| | comp=Z,22nm,1.1s,baz=294,slow=0.7,SNR=26 | | | | | | |
| PTGA | | | | PKPab | **PKPab** | **06 04 25.2** | **+0.2** |
| | comp=Z,14nm,1.1s,baz=320,slow=4.1,SNR=4.8 | | | | | | |
| **PTGA** | **Pitinga** | **171.57** | **76** | *e*PKPdf | **PKPdf** | **06 03 02.7** | **-0.3** |
| PTGA | | | | PKPab | **PKPab** | **06 04 25.2** | **+0.2** |

**MEX 08 06:03:57.0**±0.6**, 16°.08N×97°.58W, h17**km±590km**, MD3.9, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.61** | **301** | *i* P | Pg | 06 04 07.1 | -2.0 |
| PNIG | | | | *i* S | Sg | 06 04 14.9 | -2.5 |
| **HUIG** | **Huatulco** | **1.45** | **102** | *e*P | Pn | 06 04 19.8 | -2.7 |
| HUIG | | | | *i* S | Sn | 06 04 35.5 | -5.6 |
| **TLIG** | **Tlapa** | **1.75** | **328** | *e*P | Pn | 06 04 23.7 | -3.1 |
| TLIG | | | | *i* S | Sn | 06 04 43.5 | -5.4 |

*ISCJB **08** 06:18:12.0±0.4, 7°.69S±0°.04×128°.42E±0°.05, h150km, mb3.9/10, Error ellipse: s-maj=7.2km s-min=5.0km az=13.1*

*NEIC **08** 06:18:12.5±0.9, 7°.63S×128°.48E, h137km±10km, mb4.4/4, Error ellipse: s-maj=11.5km s-min=8.7km az=91.0*

*IDC **08** 06:18:12.1±3.3, 7°.59S×128°.40E, h131km±33km, mb3.8/9, mb1 3.9/13, mb1mx3.7/36, mbtmp4.3/13, MS3.7/1, Ms1 3.7/1, ms1mx3.3/38, Error ellipse: s-maj=31.4km s-min=18.2km az=67.0*

*DJA **08** 06:18:13.6±0.4, 8°S±3°×12°8E±°, h118km±19km, M4.5/8, mb4.6/5, mB5.3/1, MLv4.4/8, Mw(mB)4.7/1*

**ISC 08 06:18:13.0**±0.6**, 7°.71S**±0°.06×**128°.48E**±0°.07**, h150**km**, n28, σ1s.70**/34**, mb4.0**/10**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDI** | **Bandanaira** | **3.47** | **24** | P | **Pn** | **06 19 06.4** | **0.0** |
| **AAI** | **Ambon** | **4.01** | **356** | P | **Pn** | **06 19 13.2** | **-0.2** |
| **MSAI** | **Masohi** | **4.36** | **6** | P | **Pn** | **06 19 18.6** | **+0.6** |
| **SOEI** | **Soe** | **4.63** | **244** | P | **Pn** | **06 19 22.3** | **+0.6** |
| SOEI | | | | S | **Sn** | **06 20 13.3** | **-1.9** |
| **SOEI** | **Soe** | **4.63** | **244** | *e*Pn | **Pn** | **06 19 22.3** | **+0.6** |
| SOEI | | | | *e*Sn | **Sn** | **06 20 13.4** | **-1.9** |
| **BATI** | **Baumata** | **5.37** | **242** | P | **Pn** | **06 19 32.0** | **+0.7** |
| | 22nm,0.3s,baz=282,slow=3.5,SNR=8.8 | | | | | | |
| BATI | | | | S | **Sn** | **06 20 30.2** | **-2.3** |
| | 26nm,0.3s,baz=80,slow=22,SNR=14 | | | | | | |
| **BATI** | **Baumata** | **5.37** | **242** | P | **Pn** | **06 19 31.8** | **+0.4** |
| | 74nm,0.7s,0.4nm | | | | | | |
| BATI | | | | S | **Sn** | **06 20 30.0** | **-2.5** |
| | 74nm,0.7s,0.4nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.06** | **38** | P | **Pn** | **06 19 39.9** | **-0.7** |
| | 18nm,0.4s,0.1nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.06** | **38** | *e*Pn | **Pn** | **06 19 39.5** | **-1.1** |
| FAKI | | | | *e*Sn | **Sn** | **06 20 45.2** | **-3.9** |
| **KAPI** | **Kappang** | **9.08** | **287** | LR | LR | 06 24 09.5 | |
| | comp=Z,523nm,19.7s,baz=225,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.69** | **195** | P | **Pn** | **06 20 41.2** | **-1.0** |
| | 4.5nm,0.3s,baz=23,slow=10,SNR=104 | | | | | | |
| FITZ | | | | S | Sn | 06 22 32.8 | -7.8 |
| | 0.7nm,0.3s,baz=106,slow=19,SNR=2.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.69** | **195** | *e*Pn | **Pn** | **06 20 41.1** | **-1.0** |
| | 16nm,0.6s | | | | | | |
| FITZ | | | | *e*Sn | **Sn** | **06 22 39.0** | **-1.6** |
| **WRAB** | **Tennant Creek** | **13.42** | **156** | *e*Pn | **Pn** | **06 21 18.0** | **+0.4** |
| | 8.0nm,0.6s | | | | | | |
| WRAB | | | | *e*Sn | Sn | 06 23 41.1 | -5.1 |
| **WRA** | **Warramunga Arr** | **13.42** | **156** | P | **Pn** | **06 21 17.5** | **-0.1** |
| | 2.5nm,0.3s,baz=337,slow=9.6,SNR=38 | | | | | | |
| WRA | | | | S | Sn | 06 23 40.0 | -6.3 |
| | 3.6nm,0.3s,baz=332,slow=23,SNR=11 | | | | | | |
| **MBWA** | **Marble Bar** | **15.82** | **211** | *e*P | **P** | **06 21 49.0** | **+0.7** |
| | 21nm,1.3s | | | | | | |
| **ASAR** | **Alice Springs** | **16.70** | **162** | P | **Pn** | **06 22 00.2** | **+1.9** |
| | 0.9nm,0.3s,baz=332,slow=9.9,SNR=37 | | | | | | |
| ASAR | | | | S | **S** | **06 24 59.3** | **-4.8** |
| | 0.8nm,0.3s,baz=322,slow=13,SNR=6.2 | | | | | | |
| **PSI** | **Prapat** | **31.28** | **288** | P | **P** | **06 24 18.1** | **-1.1** |
| | 2.7nm,0.4s,baz=81,slow=13,SNR=3.7 | | | | | | |
| **KSAR** | **Wonju Array Be** | **44.92** | **359** | P | **P** | **06 26 13.7** | **+0.9** |
| **KSRS** | **Korea Array** | **44.93** | **359** | P | **P** | **06 26 13.7** | **+0.8** |
| | 0.9nm,0.4s,baz=182,slow=7.7,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **58.65** | **343** | P | **P** | **06 27 54.3** | **-0.3** |
| | 1.2nm,0.8s,baz=177,slow=5.9,SNR=4.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **65.47** | **19** | P | **P** | **06 28 40.3** | **+0.5** |
| | 2.5nm,0.7s,baz=221,slow=8.6,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.00** | **328** | P | **P** | **06 28 56.3** | **+0.3** |
| | 1.1nm,0.5s,baz=123,slow=7.5,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.56** | **335** | P | **P** | **06 29 16.9** | **-0.6** |
| | 1.3nm,0.4s,baz=141,slow=6.7,SNR=3.7 | | | | | | |
| **VNDA** | **Vanda** | **71.93** | **173** | P | **P** | **06 29 22.4** | **+3.0** |
| | 0.3nm,0.4s,baz=315,slow=9.1,SNR=6.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.33** | **329** | P | **P** | **06 29 22.8** | **+0.5** |
| | 1.8nm,0.5s,baz=132,slow=4.9,SNR=18 | | | | | | |
| **KURK** | **Kurchatov** | **72.34** | **329** | P | **P** | **06 29 22.8** | **+0.5** |
| **BVAR** | **Borovoye Array** | **77.87** | **328** | P | **P** | **06 29 54.1** | **+0.2** |
| | 0.9nm,0.4s,baz=107,slow=5.0,SNR=5.0 | | | | | | |
| **QSPA** | **South Pole Qui** | **82.27** | **180** | *e*P | **P** | **06 30 20.3** | **+2.7** |
| | 16nm,2.1s | | | | | | |

*NIED **08** 06:47:00, 25°.90N×124°.30E, h170km, Mw4.4 Best double couple: $M_0$5.18000×10[15] NP1:$\phi_s$158.00000°, δ27.00000°, λ-86.00000°. NP2:$\phi_s$334.00000°, δ63.00000°, λ-92.00000°.*

*BJI **08** 06:47:19.9, 25°.77N×124°.60E, h185km, mb4.7/44, mB4.8/26*

*ISCJB **08** 06:47:21.7±0.2, 25°.83N±0°.03×124°.48E±0°.03, h188km±2km, mb4.4/57, Error ellipse: s-maj=5.6km s-min=2.7km az=146.5*

*NEIC **08** 06:47:22.8±0.4, 25°.94N×124°.40E, h181km±4km, mb4.6/22, Error ellipse: s-maj=7.5km s-min=4.9km az=139.0*

*MOS **08** 06:47:23.1±0.9, 25°.93N×124°.37E, h200km, mb4.4/31, Error ellipse: s-maj=9.0km s-min=6.0km az=95.7*

*JMA **08** 06:47:23.4±0.3, 25°.95N×124°.34E, h165km, M4.5*

*IDC **08** 06:47:23.5±1.4, 26°.02N×124°.44E, h186km±12km, mb4.0/27, mb1 4.0/30, mb1mx4.0/43, mbtmp4.5/30, Error ellipse: s-maj=11.7km s-min=10.9km az=48.0*

**ISC 08 06:47:22.8**±0.4**, 25°.95N**±0°.04×**124°.47E**±0°.03**, h182**km±3km**, n219, σ1s.35**/260**, mb4.4**/57**, 9C-3D, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKM** | **Ikemajima** | **1.24** | **145** | P | **Pn** | **06 47 52.9** | **+0.3** |
| JIKM | | | | *e*S | **Sn** | **06 48 14.5** | **-1.2** |
| **JIRB** | **Irabujima** | **1.29** | **150** | P | **Pn** | **06 47 52.8** | **-0.2** |
| JIRB | | | | *e*S | **Sn** | **06 48 14.8** | **-1.6** |
| **JTJ** | **Tarama** | **1.32** | **171** | P | **Pn** | **06 47 53.2** | **-0.1** |
| JTJ | | | | S | **Sn** | **06 48 15.3** | **-1.7** |
| **JMJ** | **Miyako jima 2** | **1.36** | **147** | P | **Pn** | **06 47 53.9** | **+0.3** |
| JMJ | | | | S | **Sn** | **06 48 16.4** | **-1.0** |
| **JISG** | **Ishigakijimahi** | **1.37** | **186** | P | **Pn** | **06 47 52.9** | **-0.8** |
| JISG | | | | *e*S | **Sn** | **06 48 15.3** | **-2.4** |
| **JOGS** | **Gusukube** | **1.46** | **144** | P | **Pn** | **06 47 55.1** | **+0.5** |
| JOGS | | | | *e*S | **Sn** | **06 48 18.4** | **-0.7** |
| **JIJ** | **Ishigaki jima** | **1.61** | **191** | P | **Pn** | **06 47 54.6** | **-1.4** |
| JIJ | | | | *e*S | **Sn** | **06 48 18.1** | **-3.7** |
| **IRIF** | **Iriomote-Funau** | **1.75** | **203** | P | **Pn** | **06 47 56.0** | **-1.3** |
| IRIF | | | | *e*S | **Sn** | **06 48 21.4** | **-2.7** |
| **JKRS** | **Kuro-shima** | **1.76** | **194** | P | **Pn** | **06 47 56.4** | **-1.1** |
| JKRS | | | | *e*S | **Sn** | **06 48 21.1** | **-3.3** |
| **HATJ** | **Hateruma jima** | **1.98** | **198** | P | **Pn** | **06 47 58.5** | **-1.3** |
| HATJ | | | | *e*S | **Sn** | **06 48 25.4** | **-3.2** |
| **YOJ** | **Yonaguni jima** | **1.99** | **222** | P | **Pn** | **06 47 59.1** | **-0.8** |

YOJ eS Sn 06 48 26.8 -1.8
**YOJ Yonaguni jima 1.99 222** eP Pn 06 47 59.2 -0.7
YOJ e 06 48 30.0
**YOJ Yonaguni jima 1.99 222** ePn Pn 06 47 59.2 -0.7
YOJ eSn Sn 06 48 30.0 +1.4
**JYNG Yonagunijimaku 2.04 223** P Pn 06 47 59.5 -0.9
JYNG eS Sn 06 48 28.1 -1.4
**JKE Kume jima 2 2.12 79** P Pn 06 48 01.8 +0.6
JKE eS Sn 06 48 30.9 -0.2
**JAGN Aguni-jima 2.57 75** P Pn 06 48 06.8 +0.4
JAGN eS Sn 06 48 39.1 -1.2
**TATO Taipei 2.87 251** ePn Pn 06 48 10.4 +0.5
**JJT2 Tamagusuku 2 2.95 86** P Pn 06 48 11.8 +0.8
**YHNB Yeheng 3.08 246** ePn Pn 06 48 12.8 +0.2
**NACB Ninganchiao 3.15 236** ePn Pn 06 48 11.3 -2.0
**JNTH Nagotoyohara 3.24 79** P Pn 06 48 14.6 +0.2
JNTH eS Sn 06 48 52.5 -2.2
**JIH Iheya 3.31 70** P Pn 06 48 14.8 -0.5
JIH S Sn 06 48 54.5 -1.9
**JOW Kunigami 3.52 75** P Pn 06 48 17.8 -0.1
JOW eS Sn 06 48 57.6 -3.5
**JOW Kunigami 3.52 75** P Pn 06 48 17.9 -0.1
3.2nm,0.3s,baz=110,slow=26,SNR=170
JOW S Sn 06 48 57.8 -3.3
49nm,0.3s,baz=121,slow=19,SNR=73
**YULB Yu-li 3.85 229** ePn Pn 06 48 19.5 -2.6
YULB eSn Sn 06 49 04.8 -3.7
**SSLB Suanglung 3.85 237** ePn Pn 06 48 20.6 -1.5
SSLB eSn Sn 06 49 06.4 -2.2
**JOKE Okinoerabujima 3.93 68** P Pn 06 48 22.6 -0.4
**TPUB Ta-pu 4.38 234** ePn Pn 06 48 27.6 -1.3
TPUB eSn Sn 06 49 19.3 -1.4
**TWG Pinlang 4.39 226** ePn Pn 06 48 25.8 -3.2
TWG eSn Sn 06 49 18.9 -2.0
**JTK Tokunoshima 4.40 64** P Pn 06 48 28.2 -0.8
JTK eS Sn 06 49 16.9 -4.1
**JAMN Amaminishikomi 4.77 60** P Pn 06 48 32.7 -1.1
**JAM Amami Oshima 5.19 61** P Pn 06 48 37.8 -1.4
JAM eS Sn 06 49 35.0 -4.3
**JTAJ Takarajima 5.27 52** P Pn 06 48 39.9 -0.4
**QZH Quanzhou 5.41 261**⇑ *i*P Pn 06 48 42.7 +0.6
QZH S Sn 06 49 43.0 -1.4
QZH PMZ
350nm,0.7s
**NJ2 Nanjing 7.82 322** eP Pn 06 49 15.6 +2.0
NJ2 PMZ
60nm,0.6s
**JNU Nakatsue 9.06 36** P Pn 06 49 31.6 +1.6
6.5nm,0.3s,baz=219,slow=2.5,SNR=35
**JNU Nakatsue 9.06 36** ePn Pn 06 49 32.0 +1.9
**SZP Santa 9.15 205** ePn Pn 06 49 32.2 +0.9
59nm,0.6s
**WHN Wuhan 10.03 299** P Pn 06 49 42.9 +0.3
**KSCPR CHUPUNGNYEONG 10.67 15** P Pn 06 49 54.4 +3.5
SNR=8.4
**KSCPR CHUPUNGNYEONG 10.67 15** P Pn 06 49 54.4 +3.5
SNR=8.4
**TJN Taejon 10.68 13***c i*P Pn 06 49 54.0 +2.9
**KSBON Boeun 10.89 14** P P 06 49 57.9 -3.2
SNR=17
**KSBON Boeun 10.89 14** P P 06 49 57.9 -3.2
SNR=17
**KSCEA Cheonan 11.10 12** P Pn 06 49 59.6 +3.1
SNR=12
**KSCEA Cheonan 11.10 12** P Pn 06 49 59.6 +3.1
SNR=12
**KSCHJ Chungju 11.29 15** P Pn 06 50 02.3 +3.4
SNR=34
**KSCHJ Chungju 11.29 15** P Pn 06 50 02.3 +3.4
SNR=34
**KSICN Icheon 11.58 12** P P 06 50 06.2 -2.5
SNR=8.6
**KSICN Icheon 11.58 12** P P 06 50 06.2 -2.5
SNR=8.6
**KSTBA Taebaek 11.77 18** P P 06 50 09.3 -1.7
SNR=8.0
**KSTBA Taebaek 11.77 18** P P 06 50 09.3 -1.7
SNR=8.0
**KSWJU Wonju 11.81 14** P P 06 50 10.2 -1.3
SNR=8.6
**KSWJU Wonju 11.81 14** P P 06 50 10.2 -1.3
SNR=8.6
**KSAR Wonju Array Be 11.82 13** P Pn 06 50 08.5 +2.8
**KSAR Wonju Array Be 11.82 13** P Pn 06 50 08.5 +2.8
**KSRS Korea Array 11.84 14** P Pn 06 50 08.5 +2.6
5.1nm,0.3s,baz=196,slow=13,SNR=78
**KSRS Korea Array 11.84 14** P Pn 06 50 08.5 +2.6
KSRS pmax pmax
comp=Z,5.0nm,0.3s
**KSCHC Chuncheon 12.13 13** P P 06 50 12.7 -2.2
SNR=14
**KSCHC Chuncheon 12.13 13** P P 06 50 12.7 -2.2
SNR=14
**YNCB YEONCHEON 12.23 9** P P 06 50 14.1 -1.8
SNR=22
**KSCWO Cheorwon 12.37 11** P P 06 50 15.9 -1.7
SNR=12
**KSCWO Cheorwon 12.37 11** P P 06 50 15.9 -1.7
SNR=12
**KSSKC Sokcho 12.77 15** P P 06 50 22.3 +0.3
SNR=11
**QIZ Qiongzhong 15.17 246** P P 06 50 48.4 -0.4
QIZ PMZ
comp=Z,21nm,1.7s
**XAN Xi'an 15.69 305** P P 06 50 55.3 +0.9
XAN PMZ
comp=Z,25nm,0.8s
XAN PMZ
comp=Z,100nm,5.1s
**MAJO Matsushiro 15.78 45** *i* P P 06 50 57.3 +1.9
MAJO pmax pmax
comp=Z,49nm,0.6s
**MAJO Matsushiro 15.78 45** *e*P P 06 50 56.5 +1.1
comp=Z,10nm,0.5s
**MAT Matsushiro 15.78 45** P P 06 50 56.7 +1.3
**MJAR Matsushiro Arr 15.78 45** P P 06 50 56.7 +1.3
comp=Z,2.0nm,0.3s,baz=231,slow=9.5,SNR=22
**MJAR Matsushiro Arr 15.78 45** P P 06 50 56.7 +1.3
MJAR pmax pmax
comp=Z,2.0nm,0.3s
**CBIJ Chichi jima 15.90 82** *e*P P 06 50 58.8 +2.0
comp=Z,30nm,0.7s
**GYA Guiyang 15.99 276**⇓ *i*P Pn 06 50 59.3 +1.3
GYA sP **sP** 06 51 48.2 -2.9
GYA S S 06 53 47.0 -8.5
GYA PcP **PcP** 06 55 44.8 +1.6
GYA PMZ
comp=Z,20nm,0.8s
**MSHR Mys Shultsa 17.47 17***ce*P Pn 06 51 15.9 +0.5
**CN2 Changchun 17.83 2** *e*P Pn 06 51 19.8 +0.2
CN2 *es*P **sP** 06 52 12.5 +1.2
CN2 *e*S **S** 06 54 30.3 -2.8
CN2 PMZ
comp=Z,20nm,0.8s
CN2 LN
comp=Z,300nm,15.0s
CN2 LE
comp=Z,400nm,15.0s
CN2 LZ
comp=Z,300nm,17.0s
**VLA Vladivostok 18.17 18** *i* P Pn 06 51 22.8 -0.8
VLA pmax pmax
comp=Z,26nm,0.7s
**HHC Hu-ho-hao-te 18.32 327** *e*P Pn 06 51 25.0 -0.5
HHC sP **sP** 06 52 16.5 -0.4
HHC S **S** 06 54 39.8 -3.4
HHC PMZ
comp=Z,25nm,1.1s
HHC PMZ
comp=Z,360nm,8.8s
**CD2 Chengdu 18.87 290**⇓ *e*P P 06 51 28.7 -0.6
CD2 sP **sP** 06 52 24.2 +1.3
CD2 S **S** 06 54 53.0 -1.1
CD2 PMZ
comp=Z,120nm,5.2s
CD2 LN
comp=Z,720nm,7.4s
CD2 LZ
comp=Z,640nm,6.0s
**MDJ Mudanjiang 19.08 11** P P 06 51 32.9 +1.5
MDJ PMZ
comp=Z,8.0nm,0.8s
**USRK Ussuriysk Ar. 19.20 17** P P 06 51 33.3 +0.6
comp=Z,1.6nm,0.3s,baz=200,slow=9.3,SNR=22
**SLVN Son La 19.39 261** *e*P P 06 51 36.0 +1.0
comp=Z,5.9nm,0.8s
**KMI Kunming 19.63 272** P P 06 51 38.8 +1.1
KMI sP **sP** 06 52 30.8 -0.7
KMI PMZ
comp=Z,27nm,0.8s
KMI PMZ
comp=Z,320nm,11.6s
**LZH Lanzhou 20.32 305** *e*P P 06 51 47.0 +2.0
LZH PMZ
comp=Z,24nm,1.0s
LZH PMZ
comp=Z,85nm,4.3s
**DLV T Lat 20.53 230** *e*P P 06 51 48.5 +1.1
comp=Z,8.0nm,0.6s
**NONG Nongkai 21.25 253** P P 06 51 57.4 +2.5
comp=Z,24nm,1.0s
**ERM Erimo 22.21 39** *e*P P 06 52 03.1 -1.3
ERM pmax pmax
comp=Z,32nm,0.8s
**ERM Erimo 22.21 39** *e*P P 06 52 03.1 -1.3
comp=Z,32nm,0.8s
**KHON Khomkaen 22.31 249** P P 06 52 06.1 +0.5
comp=Z,19nm,0.7s
**LOEI Loei 23.11 253** P P 06 52 10.1 -2.7
comp=Z,7.6nm,0.9s,comp=Z,620nm
**ASAJ Asahikawa 23.33 34** P P 06 52 14.4 -0.2
comp=Z,25nm,0.5s,baz=234,slow=11
**ASAJ Asahikawa 23.33 34** P P 06 52 14.4 -0.2
ASAJ pmax pmax
comp=Z,25nm,0.5s
**ASAJ Asahikawa 23.33 34** *e*P P 06 52 13.4 -1.1
comp=Z,10.0nm,0.5s
**PHRA Phrae 23.61 257** P P 06 52 19.6 +2.2
comp=Z,545nm,0.8s
**KLR Kul'dur 23.92 12** *e*P P 06 52 16.0 -3.9
**LAMP Lampang 24.12 257** P P 06 52 22.7 +0.6
comp=Z,7.5nm,0.7s
**CMAI Chiengmai2 24.15 261** P P 06 52 25.3 +2.9
comp=Z,7.0nm,1.2s
**GTA Gaotai 24.62 309** P P 06 52 25.7 -0.8
GTA pP **pP** 06 53 02.8 +0.2
GTA sP **sP** 06 53 25.6 +1.1
GTA PMZ
comp=Z,14nm,1.4s
**CHTO Chiang Mai 24.62 258** P P 06 52 26.7 +0.1
comp=Z,74nm,1.0s
**CHTO Chiang Mai 24.62 258** *e*P P 06 52 26.9 +0.3
CHTO pmax pmax
comp=Z,11nm,0.7s
**CHTO Chiang Mai 24.62 258** *e*P P 06 52 26.9 +0.3
comp=Z,11nm,0.7s
**CMAR Chiang Mai Arr 24.75 258** P P 06 52 28.1 +0.3
comp=Z,4.7nm,0.7s,baz=58,slow=7.9,SNR=13
**CMAR Chiang Mai Arr 24.75 258** P P 06 52 28.1 +0.3
CMAR pmax pmax
comp=Z,5.0nm,0.7s
**YSS Yuzh-Sakhalins 25.49 30** *e*P P 06 52 35.9 +1.9
YSS pmax pmax
comp=Z,38nm,1.7s
**ULN Ulaanbaatar 25.81 332**⇑ *i*P P 06 52 37.1 -0.1
ULN pmax pmax
comp=Z,15nm,1.7s
**ULN Ulaanbaatar 25.81 332** *e*P P 06 52 37.3 +0.1
comp=Z,6.3nm,0.7s
**SONM Songino Array 26.07 332** P P 06 52 39.4 -0.1
comp=Z,4.0nm,0.3s,baz=152,slow=11,SNR=26
SONM PcP **PcP** 06 56 02.8 +0.5
comp=Z,1.0nm,0.5s,baz=152,slow=5.2,SNR=4.7
SONM ScP **ScP** 06 59 24.2 -0.6
comp=Z,1.7nm,0.8s,baz=159,slow=4.6,SNR=8.4
**SONM Songino Array 26.07 332** P P 06 52 39.4 -0.1
SONM 06 56 02.8
SONM pmax pmax
comp=Z,4.0nm,0.3s
SONM pmax pmax
comp=Z,1.0nm,0.5s
SONM pmax pmax
comp=N,2.0nm,0.8s
**LSA Lhasa 29.64 285** *e*P P 06 53 12.0 +0.1
LSA pmax pmax
comp=Z,14nm,0.7s
**LSA Lhasa 29.64 285** *e*P P 06 53 12.0 +0.1
comp=Z,14nm,0.7s
**TLY Talaya 30.17 334** *e*P P 06 53 16.6 +0.9
TLY pmax pmax
comp=Z,9.0nm,0.8s
**TLY Talaya 30.17 334** *e*P P 06 53 16.6 +0.9
comp=Z,9.4nm,0.8s
**IPM Ipoh 30.99 230** *e*P P 06 53 22.6 -0.6
comp=Z,19nm,0.6s
**TAPN Taplejung 32.81 281** *e*P P 06 53 39.6 +0.2
comp=Z,41nm,0.6s
**ODAN Odare 33.15 280** *e*P P 06 53 42.4 +0.1
comp=Z,61nm,0.7s
**RAMN Ramite 33.84 280** *e*P P 06 53 48.3 0.0
comp=Z,17nm,0.4s
**GUN Gumba 34.37 282** *e*P P 06 53 52.8 -0.2
comp=Z,38nm,0.5s
**MNSI Mandailing Nat 34.65 228** P P 06 53 54.6 -0.5
**WMQ Urumqi 34.69 310** *e*P P 06 53 55.0 -0.1
**PKI Pulchoki 34.82 282** *e*P P 06 53 56.5 -0.3
comp=Z,35nm,0.5s
**PKIN Phulchoki 34.83 282** *e*P P 06 53 56.3 -0.5
comp=Z,28nm,0.4s
**KKN Kakani 34.91 282** *e*P P 06 53 57.2 -0.2
comp=Z,82nm,0.8s
**DMN Daman 35.08 282** *e*P P 06 53 58.6 -0.4
comp=Z,56nm,0.8s
**GKN Gorkha 35.45 282** *e*P P 06 54 01.6 -0.4
comp=Z,55nm,0.8s
**DANN Dangsing 36.19 283** *e*P P 06 54 08.5 +0.1
comp=Z,15nm,0.7s
**KOLN Koldanda 36.39 282** *e*P P 06 54 09.8 -0.2
comp=Z,42nm,0.8s
**PETK Petropavlovsk- 36.75 34** P P 06 54 12.8 +0.3
comp=Z,2.1nm,0.4s,baz=181,slow=5.3,SNR=4.7
**PETK Petropavlovsk- 36.75 34** P P 06 54 12.8 +0.3
PETK pmax pmax
comp=Z,2.0nm,0.4s
**MK31 Makanchi Array 39.23 313** *e*P P 06 54 32.5 -0.9
MK31 pmax pmax
comp=Z,18nm,0.6s
**MKAR Makanchi Array 39.23 313** P P 06 54 32.9 -0.5
comp=Z,16nm,0.5s,baz=97,slow=11,SNR=236
MKAR PcP **PcP** 06 56 38.6 0.0
comp=Z,1.7nm,0.8s,baz=90,slow=3.6,SNR=4.0
MKAR ScP **ScP** 07 00 09.4 -0.5
comp=Z,0.4nm,0.7s,baz=109,slow=5.3,SNR=2.8
**MKAR Makanchi Array 39.23 313** P P 06 54 32.9 -0.5
MKAR 06 56 38.7
MKAR pmax pmax
comp=Z,16nm,0.5s
MKAR pmax pmax
comp=Z,2.0nm,0.8s
**ZALV Zalesovo Beam 40.46 324** P P 06 54 42.2 -1.2
comp=Z,15nm,0.3s,baz=120,slow=8.4,SNR=35
**ZALV Zalesovo Beam 40.46 324** P P 06 54 42.2 -1.2
ZALV pmax pmax
comp=Z,15nm,0.4s
**SEY Seymchan 41.32 19** P P 06 54 51.0 +0.7
comp=Z,3.9nm,0.9s,baz=203,slow=6.2,SNR=5.9
**SEY Seymchan 41.32 19** P P 06 54 51.0 +0.7
SEY pmax pmax
comp=Z,4.0nm,0.9s
**SMLA Simla 41.63 288** *i* P P 06 54 53.4 +0.2
**KSH Kashi 42.49 301** P P 06 55 03.7 +3.4
KSH *ep*P pP 06 55 44.9 +5.2
KSH sP sP 06 56 06.4 +6.2
KSH *e*PP **PcP** **06 56 47.9 -1.7**
KSH S **S** **07 01 10.6 +1.9**
KSH PMZ
comp=Z,150nm,6.3s
KSH LN
comp=Z,240nm,8.6s
KSH LE
comp=Z,110nm,7.8s
KSH LZ
comp=Z,180nm,12.2s
**ULHL Ulahol 42.53 305** P P 06 55 01.4 +0.7
SNR=16
**KURK Kurchatov 42.72 318** P P 06 55 01.2 -0.6
KURK 06 56 44.6
KURK pmax pmax
comp=Z,4.0nm,0.5s
KURK pmax pmax
comp=Z,1.0nm,0.9s
**KURK Kurchatov 42.72 318** P P 06 55 01.1 -0.6
KURK PP **PP** 06 56 44.6 0.0
**KURBB Kurchatov Arra 42.75 318** P P 06 55 01.1 -0.8
comp=Z,4.0nm,0.6s,baz=110,slow=8.5,SNR=44
KURBB PP **PP** 06 56 44.6 -0.3
comp=Z,1.4nm,0.9s,baz=112,slow=10,SNR=5.8
**TKM2 Tokmak 2 43.09 306** *e*P P 06 55 05.5 +0.4
TKM2 pmax pmax
comp=Z,17nm,0.6s
**TKM2 Tokmak 2 43.09 306** P P 06 55 05.7 +0.6
SNR=29
**TKM2 Tokmak 2 43.09 306** *e*P P 06 55 05.5 +0.4
comp=Z,17nm,0.6s
**KZA Kyzart 43.25 305** P P 06 55 07.7 +1.0
SNR=5.4
**KBK Karagaybulak 43.53 305** P P 06 55 09.2 +0.6
SNR=6.9
**FITZ Fitzroy Crossi 43.80 178** *e*P P 06 55 10.7 0.0
comp=Z,3.1nm,0.7s
**UCH Uchtor 43.81 305** P P 06 55 12.2 +1.1
SNR=22
**AAK Ala-Archa 43.86 305** P P 06 55 10.8 -0.4
comp=Z,2.1nm,0.3s,baz=83,slow=6.9,SNR=7.1
**AAK Ala-Archa 43.86 305** P P 06 55 10.8 -0.4
AAK pmax pmax
comp=Z,2.0nm,0.3s
**AAK Ala-Archa 43.86 305** *e*P P 06 55 10.5 -0.8
comp=Z,14nm,1.6s
**AML Almayashu 44.41 305** P P 06 55 16.7 +0.8
SNR=5.4
**MNAS Manas 45.31 305** P P 06 55 23.2 +0.5
MNAS pmax pmax
comp=Z,6.0nm,0.9s
**OTUK Ortayu 46.12 313** P P 06 55 28.6 -0.2
OTUK pmax pmax
comp=Z,18nm,0.9s
**WRAB Tennant Creek 46.61 167** *e*P P 06 55 33.0 +0.2
WRAB pmax pmax
comp=Z,4.0nm,0.8s
**WRAB Tennant Creek 46.61 167** *e*P P 06 55 33.0 +0.2
comp=Z,4.0nm,0.8s
**WRA Warramunga Arr 46.62 167** P P 06 55 33.4 +0.5
comp=Z,2.2nm,0.4s,baz=348,slow=8.5,SNR=4.7
**WRA Warramunga Arr 46.62 167** P P 06 55 33.4 +0.5
WRA pmax pmax
comp=Z,2.0nm,0.4s
**KKAR Karatay Array 46.82 306** *e*P P 06 55 35.1 +0.8
KKAR pmax pmax
comp=Z,2.0nm,0.4s
**KKAR Karatay Array 46.82 306** *e*P P 06 55 35.1 +0.8
comp=Z,1.9nm,0.4s
**BVAR Borovoye Array 48.25 319** P P 06 55 44.4 -0.7
comp=Z,2.2nm,0.4s,baz=103,slow=8.0,SNR=11
BVAR PcP **PcP** 06 57 09.6 +0.4
comp=Z,2.5nm,0.5s,baz=80,slow=3.5,SNR=9.0
**BVAR Borovoye Array 48.25 319** P P 06 55 44.4 -0.7
BVAR 06 57 09.6
BVAR pmax pmax
comp=Z,2.0nm,0.4s
BVAR pmax pmax
comp=Z,3.0nm,0.5s
**BRVK Borovoye 48.32 319***ce*P P 06 55 45.1 -0.5
BRVK pmax pmax
comp=Z,3.0nm,0.5s
**BRVK Borovoye 48.32 319** *e*P P 06 55 45.4 -0.3
comp=Z,5.4nm,0.5s
**BILL Bilibino 49.02 19**⇑ *e*P P 06 55 52.8 +2.0
BILL *e**PP pP 06 56 37.7 +6.5
BILL *e* 06 57 46.1
BILL *e*PPP PPP 06 58 49.3
BILL pmax pmax
comp=Z,11nm,1.1s
**ASAR Alice Springs 50.16 169** P P 06 56 00.9 +1.0
comp=Z,1.1nm,0.6s,baz=355,slow=13,SNR=19
ASAR PcP **PcP** 06 57 16.1 -0.4
comp=Z,0.2nm,0.4s,baz=354,slow=4.3,SNR=4.4
ASAR ScP **ScP** 07 00 54.4 -0.7
comp=Z,0.2nm,0.4s,baz=350,slow=4.7,SNR=4.3
**AB31 Akbulak array 54.37 313** *e*P P 06 56 30.5 -0.1
AB31 pmax pmax
comp=Z,10.0nm,0.4s
**ABKAR Akbulak array 54.37 313** *e*P P 06 56 30.6 0.0
comp=Z,20nm,0.6s
**SVE Sverdlovsk 54.42 323** *e*P P 06 56 30.9 0.0
SVE pmax pmax
comp=Z,15nm,0.8s
**ARU Arti 55.52 322** P P 06 56 38.6 -0.1
comp=Z,0.9nm,0.3s,baz=278,slow=22,SNR=5.6
**ARU Arti 55.52 322** *d i*P P 06 56 38.3 -0.5
ARU 06 57 30.5
ARU 06 58 41.4
ARU S **S** **07 04 08.4 -1.2**
ARU pmax pmax
comp=Z,26nm,1.2s
**ARU Arti 55.52 322** *e*P P 06 56 37.9 -0.9
comp=Z,15nm,0.6s
**AKTO Aktyubinsk 55.62 315** P P 06 56 39.9 +0.3
comp=Z,3.9nm,0.7s,baz=100,slow=4.1,SNR=12
**AKTO Aktyubinsk 55.62 315** P P 06 56 39.9 +0.3
AKTO pmax pmax
comp=Z,4.0nm,0.7s
**IMOG Moghan 55.81 297** *e*P P 06 56 42.9 +1.3
**IEMG Emamgholi 56.15 299** *e*Pn P 06 56 44.5 +0.6
**IAKL Akhelmad 56.19 298** *e*Pn P 06 56 45.0 +0.8
**GEYT Alibeck 56.50 300** P P 06 56 47.0 +0.9
comp=Z,26nm,0.7s,baz=50,slow=2.5,SNR=39
**ISHV Shirvan 56.88 299** *e*Pn P 06 56 48.4 -0.6
**IKIA Kiasar 60.29 298** *e*Pn P 06 57 13.0 +0.4
**IALA Alasht 61.01 298** *e*P P 06 57 18.1 +0.6
**KDAK Kodiak Island 64.74 36** *i* P P 06 57 42.6 +1.3
**ZEI Tsey 66.22 307** *e*P P 06 57 50.4 -1.0
ZEI pmax pmax
comp=Z,45nm,0.6s
**ILAR Eielson Array 66.27 28** P P 06 57 49.6 -1.5
comp=Z,0.3nm,0.5s,baz=257,slow=5.3,SNR=8.8
**KBZ Khabaz 66.70 309** P P 06 57 54.5 +0.3
comp=Z,14nm,0.9s,baz=124,slow=3.4,SNR=19
**KBZ Khabaz 66.70 309** P P 06 57 54.5 +0.3
KBZ pmax pmax
comp=Z,14nm,0.9s
**KIV Kislovodsk 66.80 309**⇑ *e*P P 06 57 55.3 +0.4
KIV *e**PP pP 06 58 44.3 +6.5
KIV *e* 07 00 24.7
KIV pmax pmax
comp=Z,52nm,1.7s
**KIV Kislovodsk 66.80 309** *e*P P 06 57 55.4 +0.5
comp=Z,30nm,0.8s
**MOS Moscow 67.23 322** *e*P P 06 57 56.9 -0.4
**SPITS Spitsbergen Ar 68.39 348** P P 06 58 03.8 -0.4
comp=Z,2.4nm,0.4s,baz=68,slow=9.1,SNR=11
**SPITS Spitsbergen Ar 68.39 348** P P 06 58 03.8 -0.4
SPITS pmax pmax
comp=Z,2.0nm,0.4s
**ARCES ARCESS Array B 69.02 338** P P 06 58 07.5 -0.7
comp=Z,5.4nm,0.9s,baz=80,slow=7.6,SNR=5.8
**ARCES ARCESS Array B 69.02 338** P P 06 58 07.5 -0.7
ARCES pmax pmax
comp=Z,5.0nm,0.9s
**INK Inuvik 70.46 23** P P 06 58 17.1 +0.1
comp=Z,0.7nm,0.5s,baz=329,slow=4.4,SNR=4.5
**INK Inuvik 70.46 23** P P 06 58 17.1 +0.1
INK pmax pmax
comp=Z,1.0nm,0.5s
**FINES FINESS Array B 71.42 330** P P 06 58 22.5 -0.4
comp=Z,4.9nm,0.6s,baz=67,slow=5.3,SNR=30
**FINES FINESS Array B 71.42 330** P P 06 58 22.5 -0.4
FINES pmax pmax
comp=Z,5.0nm,0.6s
**AKASG Malin Array Be 73.53 319** P P 06 58 34.4 -1.1
comp=Z,1.9nm,0.5s,baz=57,slow=6.5,SNR=10
**AKASG Malin Array Be 73.53 319** P P 06 58 34.4 -1.1
AKASG pmax pmax
comp=Z,2.0nm,0.5s
**BRTR Keskin Array B 74.51 307** P P 06 58 41.5 -0.2
comp=Z,7.2nm,0.8s,baz=94,slow=5.3,SNR=30
**BRTR Keskin Array B 74.51 307***ce*P P 06 58 41.5 -0.2
BRTR pmax pmax
comp=Z,7.0nm,0.8s
**NB2 NORSAR Subarra 78.04 333** P P 06 58 59.9 -1.1
comp=Z,2.0nm,0.6s,baz=56,slow=5.6
**NOA NORSAR Array B 78.04 333** P P 06 59 00.2 -0.8
comp=Z,2.9nm,0.6s,baz=55,slow=5.5,SNR=14
**NOA NORSAR Array B 78.04 333** P P 06 59 00.2 -0.8
NOA pmax pmax
comp=Z,3.0nm,0.6s
**YKA Yellowknife Ar 80.17 24** P P 06 59 13.7 +1.3
comp=Z,1.0nm,0.5s,baz=310,slow=5.6,SNR=4.2

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| YKA | Yellowknife Ar | 80.17 | 24 | P | P | 06 59 13.7 | +1.3 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| VYHS | Vyhne | 80.58 | 320 | eP | P | 06 59 15.3 | +0.3 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| VYHS | Vyhne | 80.58 | 320 | eP | P | 06 59 15.3 | +0.3 |
| MORC | Moravsky Berou | 80.71 | 321 | eP | P | 06 59 15.6 | 0.0 |
| MORC | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| MORC | Moravsky Berou | 80.71 | 321 | eP | P | 06 59 15.6 | 0.0 |
| | comp=Z,18nm,1.0s | | | | | | |
| CLL | Collm | 82.41 | 324 | eP | P | 06 59 24.0 | -0.5 |
| CLL | Collm | 82.41 | 324 | eP | P | 06 59 24.0 | -0.5 |
| GERES | GERESS Array B | 83.35 | 322 | P | P | 06 59 29.0 | -0.4 |
| | comp=Z,0.4nm,0.4s,baz=67,slow=1.7,SNR=5.0 | | | | | | |
| KMBO | Kilima Mbogo | 87.98 | 268 | P | P | 06 59 53.3 | +0.3 |
| | comp=Z,0.8nm,0.3s,baz=55,slow=11,SNR=4.6 | | | | | | |
| KMBO | Kilima Mbogo | 87.98 | 268 | ceP | P | 06 59 53.5 | +0.4 |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| QSPA | South Pole Qui | 115.73 | 180 | ePKPdf | PKPdf | 07 05 42.6 | -0.2 |
| DBIC | Dimbokro | 121.10 | 296 | PKP | PKPdf | 07 05 54.3 | -0.3 |
| | comp=Z,1.1nm,0.4s,baz=17,slow=1.2,SNR=4.4 | | | | | | |
| DBIC | Dimbokro | 121.10 | 296 | PKIKP | PKPdf | 07 05 54.3 | -0.3 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| BDFB | Brasilia | 167.57 | 324 | PKPab | PKPab | 07 08 14.2 | -0.5 |
| | comp=Z,0.7nm,0.3s,baz=121,slow=5.9,SNR=3.5 | | | | | | |
| BDFB | Brasilia | 167.57 | 324 | PKP2 | PKPab | 07 08 14.2 | -0.5 |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |

**MEX 08 06:52:49.7**±1.4**, 13°.70N×93°.13W, h16**km±999km**, MD3.9, Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 2.00 | 358 | eP | Pn | 06 53 19.5 | -3.2 |
| PCIG | | | | iS | Sn | 06 53 43.4 | -4.0 |

*NIED **08** 06:53:00, 38°.60N×140°.60E, h5km, Mw4.0 Best double couple: M0 1.03000×10^15 NP1:φs17.00000°, δ37.00000°, λ126.00000°. NP2:φs155.00000°, δ61.00000°, λ66.00000°.*
*ISCJB **08** 06:53:30.6±0.4, 38°.63N±0°.02×140°.61E±0°.03, h21km±3km, mb4.2/27, Error ellipse: s-maj=4.6km s-min=3.9km az=36.3*
*JMA **08** 06:53:30.9, 38°.64N×140°.62E, h10km±1km, M4.2 Broadband fault plane solution: P waves. NP1: φs189.00000°, δ49.00000°, λ81.00000°. NP2:φs23.00000°, δ42.00000°, λ101.00000°. Principal axes: T Plg82.0000°, Azm45.0000°; N Plg7.0000°, Azm196.0000°; P Plg4.0000°, Azm286.0000°;*
*JMA Felt III J1.*
*IDC **08** 06:53:35.1±2.2, 38°.61N×140°.50E, h42km±20km, mb3.9/16, mb1 4.1/20, mb1mx4.0/39, mbtmp4.1/20, ML3.6/4 Error ellipse: s-maj=16.9km s-min=13.7km az=94.0*
*NEIC **08** 06:53:35.1±0.6, 38°.61N×140°.54E, h42km±5km, mb4.4/10, Error ellipse: s-maj=8.1km s-min=4.8km az=125.0*
*NEIC Recorded [3 JMA] in Yamagata, [2 JMA] in Miyagi and [1 JMA] in Fukushima, Iwate and Niigata.*
**ISC 08 06:53:30.7**±1.0**, 38°.62N**±0°.03×**140°.69E**±0°.03**, h12**km±6km**, n57, σ1§28**/62**, mb4.2**/27**, 4C-5D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOU | Okura | 0.26 | 184 | ⇑P | Pg | 06 53 36.5 | +0.4 |
| JOU | | | | S | Sg | 06 53 40.3 | +0.6 |
| JYK | Kaneyama | 0.39 | 319 | ⇓P | Pg | 06 53 38.0 | -0.6 |
| JYK | | | | S | Sg | 06 53 42.8 | -1.0 |
| JMK | Ichinoseki | 0.53 | 51 | ⇓P | Pb | 06 53 41.5 | -0.4 |
| JMK | | | | eS | Sb | 06 53 49.1 | -0.4 |
| JIO | Ouri | 0.54 | 108 | ⇓P | Pn | 06 53 41.9 | -2.3 |
| JIO | | | | S | Sn | 06 53 49.8 | -3.4 |
| JYS | Shirataka | 0.63 | 231 | ⇓P | Pb | 06 53 42.5 | -1.1 |
| JYS | | | | S | Sb | 06 53 50.6 | -1.8 |
| JMM | Marumori | 0.76 | 174 | ⇑P | Pb | 06 53 45.1 | -0.7 |
| JMM | | | | S | Sg | 06 53 55.4 | +0.1 |
| JYA | Atsumi | 0.76 | 268 | ⇓P | Pb | 06 53 44.4 | -1.5 |
| JYA | | | | S | Sb | 06 53 54.1 | -2.1 |
| JRG | Rokugo | 0.78 | 357 | ⇑P | Pb | 06 53 45.6 | -0.5 |
| JOM | Ohasama | 0.97 | 29 | ⇑P | Pb | 06 53 49.0 | -0.5 |
| JOM | | | | S | Sn | 06 54 02.5 | -1.4 |
| MAJO | Matsushiro | 2.86 | 224 | ePn | Pn | 06 54 16.7 | +0.6 |
| MAT | Matsushiro | 2.86 | 224 | P | Pn | 06 54 17.0 | +0.9 |
| MAT | | | | S | Sb | 06 54 57.2 | +0.6 |
| MJAR | Matsushiro Arr | 2.86 | 224 | P | Pn | 06 54 17.1 | +0.9 |
| | 4.7nm,0.3s,baz=32,slow=14,SNR=19 | | | | | | |
| MJAR | | | | S | Sb | 06 54 57.6 | +0.9 |
| | 42nm,0.3s,baz=254,slow=22,SNR=12 | | | | | | |
| ERM | Erimo | 3.88 | 28 | ePn | Pn | 06 54 32.3 | +2.2 |
| ASAJ | Asahikawa | 5.67 | 14 | P | Pn | 06 54 55.9 | +1.1 |
| | 2.3nm,0.3s,baz=242,slow=17,SNR=7.6 | | | | | | |
| ASAJ | Asahikawa | 5.67 | 14 | ePn | Pn | 06 54 56.3 | +1.5 |
| | 7.5nm,0.8s | | | | | | |
| YSS | Yuzh-Sakhalins | 8.47 | 10 | ePn | Pn | 06 55 36.6 | +3.6 |
| USRK | Ussuriysk Ar. | 8.59 | 313 | P | Pn | 06 55 34.5 | -0.2 |
| | 1.3nm,0.3s,baz=124,slow=14,SNR=13 | | | | | | |
| USRK | | | | S | Sn | 06 57 10.3 | -1.2 |
| | 0.2nm,0.3s,baz=130,slow=26,SNR=4.4 | | | | | | |
| KSRS | Korea Array | 10.14 | 267 | P | Pn | 06 55 57.9 | +1.9 |
| | 1.5nm,0.3s,baz=80,slow=14,SNR=21 | | | | | | |
| KSAR | Wonju Array Be | 10.17 | 267 | P | Pn | 06 55 57.9 | +1.5 |
| SEY | Seymchan | 25.36 | 13 | P | P | 06 58 59.7 | +2.5 |
| | 12nm,0.9s,baz=199,slow=7.9,SNR=17 | | | | | | |
| SONM | Songino Array | 26.45 | 302 | P | P | 06 59 11.6 | +4.2 |
| | 0.5nm,0.6s,baz=101,slow=7.5,SNR=3.1 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 29.47 | 122 | T | T | 07 29 57.0 | |
| | baz=316,slow=75,SNR=303 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.47 | 122 | T | T | 07 29 57.6 | |
| | baz=316,slow=75,SNR=269 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.48 | 122 | T | T | 07 29 58.3 | |
| | baz=316,slow=75,SNR=335 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 30.21 | 124 | T | T | 07 30 45.5 | |
| | baz=318,slow=76,SNR=69 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.21 | 124 | T | T | 07 30 51.1 | |
| | baz=318,slow=76,SNR=98 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.23 | 124 | T | T | 07 30 52.2 | |
| | baz=318,slow=76,SNR=56 | | | | | | |
| ZALV | Zalesovo Beam | 40.43 | 311 | P | P | 07 01 07.7 | -0.8 |
| | 0.6nm,0.4s,baz=90,slow=8.6,SNR=3.3 | | | | | | |
| ZALV | | | | PcP | PcP | 07 03 10.9 | -0.4 |
| | 0.8nm,0.4s,baz=194,slow=0.7,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 42.80 | 301 | P | P | 07 01 27.9 | -0.3 |
| | 1.0nm,0.8s,baz=97,slow=8.1,SNR=6.0 | | | | | | |
| KURK | Kurchatov | 44.51 | 307 | P | P | 07 01 41.5 | -0.3 |
| KURBB | Kurchatov Arra | 44.58 | 307 | P | P | 07 01 41.5 | -0.9 |
| | 3.5nm,0.9s,baz=84,slow=8.3,SNR=25 | | | | | | |
| MCK | McKinley | 47.64 | 35 | eP | P | 07 02 07.5 | +1.1 |
| | 2.5nm,0.5s | | | | | | |
| ILAR | Eielson Array | 48.47 | 33 | P | P | 07 02 13.2 | +0.5 |
| | 2.3nm,0.7s,baz=272,slow=6.6,SNR=31 | | | | | | |
| BVAR | Borovoye Array | 49.09 | 311 | PcP | PcP | 07 03 40.1 | -1.0 |
| | 0.6nm,0.5s,baz=49,slow=4.8,SNR=2.9 | | | | | | |
| AAK | Ala-Archa | 49.24 | 297 | eP | P | 07 02 19.0 | -0.2 |
| | 0.8nm,0.4s | | | | | | |
| INK | Inuvik | 53.24 | 28 | P | P | 07 02 49.3 | +0.8 |
| | 2.6nm,0.7s,baz=302,slow=8.3,SNR=9.6 | | | | | | |
| INK | Inuvik | 53.24 | 28 | eP | P | 07 02 49.0 | +0.5 |
| | 2.7nm,0.7s | | | | | | |
| ABKAR | Akbulak array | 56.49 | 309 | eP | P | 07 03 11.8 | -0.5 |
| | 0.8nm,0.5s | | | | | | |
| AKTO | Aktyubinsk | 57.20 | 311 | P | P | 07 03 17.2 | -0.1 |
| | 0.5nm,0.3s,baz=72,slow=13,SNR=2.2 | | | | | | |
| WRAB | Tennant Creek | 58.55 | 187 | eP | P | 07 03 26.5 | -0.6 |
| | 6.6nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 58.56 | 187 | P | P | 07 03 26.7 | -0.4 |
| | 3.0nm,0.6s,baz=4.3,slow=7.1,SNR=21 | | | | | | |
| RES | Resolute Bay | 61.21 | 14 | eP | P | 07 03 44.8 | +0.1 |
| | 4.9nm,0.6s | | | | | | |
| ASAR | Alice Springs | 62.28 | 187 | P | P | 07 03 52.8 | +0.2 |
| | 2.4nm,0.8s,baz=9.7,slow=6.0,SNR=23 | | | | | | |
| FINES | FINESS Array B | 67.15 | 332 | P | P | 07 04 23.4 | -0.4 |
| | 4.2nm,0.7s,baz=54,slow=9.7,SNR=8.9 | | | | | | |
| FORT | Forrest | 70.04 | 192 | eP | P | 07 04 42.6 | +0.4 |
| | 9.9nm,0.7s | | | | | | |
| NB2 | NORSAR Subarra | 72.50 | 337 | P | P | 07 04 56.2 | -0.7 |
| | comp=Z,1.7nm,0.6s,baz=40,slow=6.2 | | | | | | |
| NOA | NORSAR Array B | 72.50 | 337 | P | P | 07 04 56.5 | -0.4 |
| | comp=Z,2.5nm,0.7s,baz=40,slow=6.1,SNR=8.7 | | | | | | |
| AKASG | Malin Array Be | 72.69 | 322 | P | P | 07 04 57.4 | -0.7 |
| | comp=Z,1.5nm,0.6s,baz=42,slow=4.9,SNR=5.4 | | | | | | |
| CMB | Columbia Colle | 73.42 | 54 | eP | P | 07 05 03.6 | +0.9 |
| | comp=Z,2.0nm,1.0s | | | | | | |
| DLMT | Dillon | 73.62 | 45 | eP | P | 07 05 05.2 | +1.3 |
| | comp=Z,5.4nm,1.1s | | | | | | |
| NVAR | Mina Array Bea | 74.50 | 53 | P | P | 07 05 10.8 | +1.4 |
| | comp=Z,1.2nm,0.7s,baz=284,slow=6.3,SNR=11 | | | | | | |
| DUG | Dugway | 76.75 | 49 | eP | P | 07 05 23.6 | +1.5 |
| | comp=Z,2.0nm,0.8s | | | | | | |
| BRTR | Keskin Array B | 77.38 | 311 | P | P | 07 05 25.6 | 0.0 |
| | comp=Z,0.8nm,0.6s,baz=81,slow=3.2,SNR=3.9 | | | | | | |
| PV10 | Paradox Valley | 80.16 | 48 | eP | P | 07 05 42.8 | +1.7 |
| | comp=Z,98nm,0.8s | | | | | | |
| GERES | GERESS Array B | 81.06 | 328 | P | P | 07 05 45.4 | -0.2 |
| | comp=Z,0.7nm,0.5s,baz=9.9,slow=8.5,SNR=4.6 | | | | | | |
| TXAR | Lajitas Array | 89.60 | 52 | P | P | 07 06 28.9 | +0.4 |
| | comp=Z,0.5nm,0.8s,baz=276,slow=3.4,SNR=7.5 | | | | | | |
| LPAZ | La Paz | 146.34 | 57 | PKPbc | PKPab | 07 13 12.2 | -1.1 |
| | comp=Z,2.2nm,0.8s,baz=22,slow=4.7,SNR=7.4 | | | | | | |

**WEL 08 06:54:31.9**±0.1**, 43°.56S×171°.93E, h5**km**, ML3.5**/13**, 4C-3D, Error ellipse: s-maj=1.1km s-min=1.1km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OXZ | Oxford | 0.24 | 19 | ⇓PG | Pg | 06 54 36.6 | -0.1 |
| OXZ | | | | SG | Sg | 06 54 40.1 | +0.1 |
| CRLZ | Canterbury Las | 0.50 | 93 | ⇑PG | Pg | 06 54 42.3 | +0.7 |
| CRLZ | | | | AML | AML | 06 54 53.2 | |
| CRLZ | | | | AML | AML | 06 54 53.4 | |
| MQZ | McQueen's Vall | 0.55 | 106 | ⇑PG | Pg | 06 54 42.9 | +0.5 |
| MQZ | | | | SG | Sb | 06 54 51.0 | -1.1 |
| RPZ | Rata Peaks | 0.65 | 256 | ⇑P* | Pg | 06 54 44.6 | 0.0 |
| RPZ | | | | SG | Sb | 06 54 55.8 | +0.5 |
| RPZ | | | | AML | AML | 06 54 56.2 | |
| LTZ | Lake Taylor | 0.81 | 18 | P* | Pg | 06 54 47.7 | +0.1 |
| LTZ | | | | S* | Sg | 06 54 58.3 | +0.1 |
| LTZ | | | | AML | AML | 06 55 01.0 | |
| WVZ | Waitaha Valley | 0.99 | 299 | ⇓P* | Pg | 06 54 50.6 | -0.3 |
| WVZ | | | | AML | AML | 06 55 07.7 | |
| WVZ | | | | AML | AML | 06 55 07.9 | |
| LBZ | Lake Benmore | 1.51 | 236 | ⇑PN | Pn | 06 54 58.5 | -1.1 |
| LBZ | | | | AML | AML | 06 55 25.1 | |
| LBZ | | | | AML | AML | 06 55 25.1 | |
| LBZ | | | | AML | AML | 06 55 27.4 | |
| LBZ | | | | AML | AML | 06 55 27.5 | |
| FOZ | Fox Glacier | 1.63 | 269 | PN | Pn | 06 54 59.8 | -1.4 |
| FOZ | | | | AML | AML | 06 55 29.2 | |
| FOZ | | | | AML | AML | 06 55 29.2 | |
| FOZ | | | | AML | AML | 06 55 31.7 | |
| FOZ | | | | AML | AML | 06 55 31.7 | |
| KHZ | Kahutara | 1.64 | 47 | PN | Pn | 06 54 59.4 | -2.0 |
| ODZ | Otahua Downs | 1.75 | 211 | ⇓PN | Pn | 06 55 01.3 | -1.6 |
| ODZ | | | | AML | AML | 06 55 32.1 | |
| ODZ | | | | AML | AML | 06 55 32.1 | |
| ODZ | | | | AML | AML | 06 55 35.1 | |
| ODZ | | | | AML | AML | 06 55 35.1 | |
| DSZ | Denniston Nort | 1.81 | 357 | PN | Pn | 06 55 03.7 | -0.1 |
| DSZ | | | | AML | AML | 06 55 31.1 | |
| DSZ | | | | AML | AML | 06 55 32.6 | |
| THZ | Tophouse | 1.93 | 22 | PN | Pn | 06 55 03.7 | -1.8 |
| THZ | | | | AML | AML | 06 55 32.5 | |
| THZ | | | | AML | AML | 06 55 39.5 | |
| BSWZ | Blackbirch Sta | 2.34 | 39 | PN | Pn | 06 55 09.5 | -1.5 |
| WKZ | Wanaka | 2.45 | 238 | PN | Pn | 06 55 14.4 | +1.8 |
| WKZ | | | | AML | AML | 06 55 58.7 | |
| WKZ | | | | AML | AML | 06 56 03.5 | |
| EAZ | Earnscleugh | 2.52 | 227 | PN | Pn | 06 55 12.1 | -1.4 |
| EAZ | | | | AML | AML | 06 55 56.4 | |
| EAZ | | | | AML | AML | 06 55 56.8 | |
| EAZ | | | | AML | AML | 06 56 03.0 | |
| EAZ | | | | AML | AML | 06 56 03.0 | |
| NNZ | Nelson | 2.57 | 25 | PN | Pn | 06 55 13.0 | -1.3 |
| TUWZ | Tuamarina | 2.59 | 36 | PN | Pn | 06 55 13.0 | -1.5 |
| QRZ | Quartz Range | 2.76 | 10 | PN | Pn | 06 55 15.2 | -1.7 |
| QRZ | | | | AML | AML | 06 56 02.3 | |
| TUZ | Tuapeka | 2.90 | 213 | PN | Pn | 06 55 17.2 | -1.5 |
| TUZ | | | | AML | AML | 06 56 10.2 | |
| TUZ | | | | AML | AML | 06 56 11.3 | |
| TCW | Tory Channel | 2.92 | 37 | PN | Pn | 06 55 16.8 | -2.2 |
| PLWZ | Palliser | 3.16 | 52 | PN | Pn | 06 55 19.8 | -2.6 |
| KIW | Kapiti Island | 3.49 | 40 | PN | Pn | 06 55 24.6 | -2.2 |
| SYZ | Scrubby Hill | 3.58 | 213 | PN | Pn | 06 55 26.6 | -1.4 |
| MRZ | Mangatainoka R | 3.97 | 44 | PN | Pn | 06 55 29.9 | -3.5 |

*ISCJB **08** 07:01:21.9±0.5, 29°.11N±0°.04×109°.71E±0°.05, h10km, mb4.0/17, Error ellipse: s-maj=7.5km s-min=5.4km az=38.8*
*IDC **08** 07:01:22.2±0.8, 29°.23N×109°.90E, h0km, mb4.0/13, mb1 4.1/14, mb1mx3.9/39, mbtmp4.0/14, ML3.5/1, MS3.3/1, Ms1 3.3/1, ms1mx3.0/47, Error ellipse: s-maj=37.9km s-min=17.2km az=56.0*
*BJI **08** 07:01:24.3, 29°.07N×109°.83E, h8km, mb4.3/9, mB4.3/1, ML4.2/20, Ms3.7/6, Ms7 3.7/6*
*NEIC **08** 07:01:27.7±1.0, 29°.21N×109°.90E, h40km±8km, mb4.2/6, Error ellipse: s-maj=11.4km s-min=6.6km az=89.0*
**ISC 08 07:01:24.2**±0.6**, 29°.20N**±0°.04×**109°.73E**±0°.06**, h10**km**, n46, σ1§47**/54**, mb4.1**/17**, 1D, Southeastern China**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ENH | Enshi | 1.09 | 349 | ePn | Pn | 07 01 46.5 | +0.9 |
| GYA | Guiyang | 3.85 | 226 | ⇓iPn | Pn | 07 02 27.1 | +3.4 |
| GYA | | | | Pg | Pg | 07 02 35.6 | -2.5 |
| GYA | | | | Sn | Sn | 07 03 12.4 | +3.3 |
| GYA | | | | Sg | Sb | 07 03 20.9 | +1.8 |
| GYA | | | | SMN | | | |
| | 600nm,0.7s | | | | | | |
| GYA | | | | SME | | | |
| | 480nm,0.9s | | | | | | |
| WHN | Wuhan | 4.23 | 70 | Pn | Pn | 07 02 29.6 | +0.9 |
| WHN | | | | SMN | | | |
| | 560nm,0.9s | | | | | | |
| WHN | | | | SME | | | |
| | 540nm,1.0s | | | | | | |
| XAN | Xi'an | 4.88 | 352 | Pn | Pn | 07 02 37.5 | -0.2 |
| XAN | | | | Pg | Pg | 07 02 55.1 | -2.5 |
| XAN | | | | Sn | Sn | 07 03 36.1 | +1.9 |
| XAN | | | | Sg | Sg | 07 04 00.0 | -0.8 |
| XAN | | | | SMN | | | |
| | 150nm,0.8s | | | | | | |
| XAN | | | | SME | | | |
| | 130nm,1.0s | | | | | | |
| CD2 | Chengdu | 5.45 | 290 | Pn | Pn | 07 02 48.0 | +2.4 |
| CD2 | | | | Sn | Sn | 07 03 49.0 | +0.5 |
| CD2 | | | | Sg | Sg | 07 04 16.3 | -3.1 |
| CD2 | | | | SMN | | | |
| | 330nm,1.2s | | | | | | |
| CD2 | | | | SME | | | |
| | 220nm,1.0s | | | | | | |
| CD2 | | | | LN | | | |
| | 640nm,5.7s | | | | | | |
| CD2 | | | | LZ | | | |
| | 640nm,6.8s | | | | | | |
| KMI | Kunming | 7.43 | 239 | Pn | Pn | 07 03 15.2 | +2.2 |
| KMI | | | | Sn | Sn | 07 04 35.6 | -2.0 |
| KMI | | | | LN | | | |
| | 300nm,17.1s | | | | | | |
| KMI | | | | LE | | | |
| | 430nm,17.6s | | | | | | |
| KMI | | | | LZ | | | |
| | 530nm,16.5s | | | | | | |
| KMI | Kunming | 7.43 | 239 | P | Pn | 07 03 15.2 | +2.2 |
| KMI | | | | S | Sn | 07 04 35.6 | -2.0 |
| LZH | Lanzhou | 8.47 | 326 | eP | Pn | 07 03 29.4 | +2.2 |
| LZH | | | | pP | pP | 07 03 31.8 | |
| LZH | | | | PMZ | | | |
| | 30nm,1.0s | | | | | | |
| LZH | Lanzhou | 8.47 | 326 | eP | Pn | 07 03 29.4 | +2.2 |
| SLVN | Son La | 9.44 | 215 | ePn | Pn | 07 03 41.8 | +1.4 |
| GTA | Gaotai | 13.07 | 324 | eP | P | 07 04 43.6 | +3.1 |
| GTA | | | | pP | pP | 07 04 48.4 | |
| GTA | | | | sP | sP | 07 04 50.6 | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| CMAR | Chiang Mai Arr | 14.54 | 225 | Pn | P | 07 04 56.3 | -0.5 |
| | comp=Z,0.4nm,0.3s,baz=26,slow=10,SNR=10 | | | | | | |
| LSA | Lhasa | 16.20 | 276 | eP | P | 07 05 16.9 | +1.2 |
| | comp=Z,16nm,0.9s | | | | | | |
| KSRS | Korea Array | 17.27 | 57 | LR | LR | 07 11 42.5 | |
| | comp=Z,102nm,20.5s,baz=290,slow=36 | | | | | | |
| ULN | Ulaanbaatar | 18.75 | 354 | eP | P | 07 05 43.6 | +0.2 |
| | comp=Z,3.2nm,0.6s | | | | | | |
| SONM | Songino Array | 18.79 | 353 | P | P | 07 05 43.8 | +0.1 |
| | comp=Z,0.1nm,0.3s,baz=172,slow=12,SNR=16 | | | | | | |
| CN2 | Changchun | 19.24 | 37 | eP | Pn | 07 05 50.9 | +1.4 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| TAPN | Taplejung | 19.48 | 270 | eP | P | 07 05 51.5 | -0.3 |
| | comp=Z,41nm,0.9s | | | | | | |
| ODAN | Odare | 19.86 | 269 | eP | P | 07 05 55.1 | -0.7 |
| | comp=Z,22nm,0.7s | | | | | | |
| RAMN | Ramite | 20.53 | 269 | eP | P | 07 06 02.9 | -0.2 |
| | comp=Z,18nm,0.8s | | | | | | |
| GUN | Gumba | 20.99 | 272 | eP | P | 07 06 07.4 | -0.8 |
| | comp=Z,57nm,1.1s | | | | | | |
| PKI | Pulchoki | 21.46 | 272 | eP | P | 07 06 12.8 | -0.4 |
| | comp=Z,25nm,0.9s | | | | | | |
| PKIN | Phulchoki | 21.47 | 272 | eP | P | 07 06 12.1 | -1.1 |
| | comp=Z,19nm,0.7s | | | | | | |
| KKN | Kakani | 21.53 | 272 | eP | P | 07 06 13.5 | -0.4 |
| | comp=Z,40nm,0.9s | | | | | | |
| DMN | Daman | 21.71 | 272 | eP | P | 07 06 15.2 | -0.7 |
| | comp=Z,25nm,0.9s | | | | | | |
| GKN | Gorkha | 22.06 | 273 | eP | P | 07 06 17.8 | -1.7 |
| | comp=Z,15nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 27.66 | 317 | P | P | 07 07 12.7 | +0.5 |
| | comp=Z,0.8nm,0.4s,baz=115,slow=9.8,SNR=10 | | | | | | |
| ZALV | Zalesovo Beam | 30.66 | 331 | P | P | 07 07 38.5 | -0.2 |
| | comp=Z,1.1nm,0.4s,baz=119,slow=8.6,SNR=6.4 | | | | | | |
| KURK | Kurchatov | 31.73 | 321 | P | P | 07 07 49.0 | +0.8 |
| KURBB | Kurchatov Arra | 31.73 | 321 | P | P | 07 07 49.0 | +0.7 |
| | comp=Z,1.0nm,0.3s,baz=133,slow=8.5,SNR=15 | | | | | | |
| KKAR | Karatay Array | 34.26 | 305 | eP | P | 07 08 11.1 | +0.7 |
| | comp=Z,1.3nm,0.5s | | | | | | |
| BVAR | Borovoye Array | 37.33 | 321 | P | P | 07 08 36.7 | +0.1 |
| | comp=Z,0.9nm,0.3s,baz=119,slow=10,SNR=7.2 | | | | | | |
| ABKAR | Akbulak array | 42.57 | 312 | eP | P | 07 09 20.3 | +0.2 |
| | comp=Z,2.8nm,0.6s | | | | | | |
| GEYT | Alibeck | 43.42 | 296 | P | P | 07 09 29.0 | +1.7 |
| | comp=Z,2.4nm,0.5s,baz=165,slow=6.0,SNR=3.5 | | | | | | |
| ARU | Arti | 44.92 | 322 | eP | P | 07 09 38.2 | -0.7 |
| | comp=Z,8.2nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 54.32 | 151 | P | P | 07 10 50.4 | -0.6 |
| | comp=Z,2.2nm,0.8s,baz=340,slow=8.1,SNR=9.0 | | | | | | |
| ASAR | Alice Springs | 57.48 | 154 | P | P | 07 11 12.9 | -0.7 |
| | comp=Z,0.8nm,0.8s,baz=339,slow=8.0,SNR=4.5 | | | | | | |
| ARCES | ARCESS Array B | 60.97 | 336 | P | P | 07 11 37.0 | -0.3 |
| | comp=Z,6.9nm,1.1s,baz=82,slow=7.7,SNR=14 | | | | | | |
| BRTR | Keskin Array B | 61.90 | 302 | P | P | 07 11 44.2 | 0.0 |
| | comp=Z,1.0nm,0.8s,baz=105,slow=9.4,SNR=5.0 | | | | | | |
| AKASG | Malin Array Be | 62.21 | 315 | P | P | 07 11 45.4 | -0.5 |
| | comp=Z,0.2nm,0.3s,baz=65,slow=7.0,SNR=4.1 | | | | | | |
| NB2 | NORSAR Subarra | 68.84 | 329 | P | P | 07 12 27.4 | -1.3 |
| | comp=Z,0.7nm,0.5s,baz=68,slow=6.2 | | | | | | |
| NOA | NORSAR Array B | 68.84 | 329 | P | P | 07 12 27.8 | -0.9 |
| | comp=Z,1.2nm,0.6s,baz=47,slow=7.0,SNR=4.6 | | | | | | |
| ILAR | Eielson Array | 69.40 | 26 | P | P | 07 12 31.3 | -0.8 |
| | comp=Z,0.2nm,0.5s,baz=287,slow=4.9,SNR=4.0 | | | | | | |
| PMR | Palmer | 69.79 | 30 | eP | P | 07 12 33.8 | -0.7 |
| | comp=Z,7.3nm,0.9s | | | | | | |
| GERES | GERESS Array B | 72.32 | 316 | P | P | 07 12 48.9 | -1.3 |
| | comp=Z,0.3nm,0.4s,baz=19,slow=9.3,SNR=4.0 | | | | | | |
| QSPA | South Pole Qui | 118.97 | 180 | ePKPdf | PKPdf | 07 20 10.9 | -1.5 |

*ISCJB **08** 07:20:32.2±0.7, 10°.64N±0°.05×62°.61W±0°.03, h102km±7km, Error ellipse: s-maj=8.6km s-min=4.5km az=164.7*
*FUNV **08** 07:20:33.4, 10°.66N×62°.50W, h96km, MW2.8*
*TRN **08** 07:20:38.1, 11°.00N×62°.29W, h7km, MD3.3*
**ISC 08 07:20:32.8**±1.2**, 10°.65N**±0°.05×**62°.61W**±0°.03**, h104**km±9km**, n17, σ1§90**/30**, 2C-1D, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUIV | Guiria | 0.38 | 90 | ⇑iP | Pn | 07 20 47.4 | -0.8 |
| GUIV | | | | eS | Sn | 07 20 56.7 | -3.1 |
| GUNV | Guanoco | 0.58 | 215 | ⇓eP | Pn | 07 20 50.8 | +1.1 |
| GUNV | | | | eS | Sn | 07 21 02.2 | 0.0 |
| CRUV | Carupano | 0.62 | 273 | ⇑iP | Pn | 07 20 50.5 | +0.6 |
| CRUV | | | | eS | Sn | 07 21 02.1 | -0.6 |
| TCE | Chacachacare | 0.84 | 86 | eP | Pn | 07 20 50.2 | -1.8 |
| TCE | | | | eS | Sn | 07 20 58.8 | -7.5 |
| TPP | Pointe-a-Pierr | 1.18 | 106 | eP | Pn | 07 20 58.8 | +3.3 |
| TPP | | | | eS | Sn | 07 21 13.9 | +1.2 |
| TRN | Trinidad (W) | 1.18 | 90 | eP | Pn | 07 20 55.8 | +0.3 |
| TRN | | | | eS | Sn | 07 21 10.4 | -2.3 |
| TBH | Brigand Hill | 1.52 | 96 | eP | Pn | 07 21 02.8 | +3.2 |
| TBH | | | | eS | Sn | 07 21 21.8 | +1.9 |
| GRW | Mount Saint Ca | 1.77 | 32 | eP | Pn | 07 21 03.2 | +0.5 |
| GRW | | | | eS | Sn | 07 21 20.9 | -4.6 |
| PCRV | Puerto La Cruz | 2.05 | 257 | eP | Pn | 07 21 07.7 | +1.5 |
| PCRV | | | | eS | Sn | 07 21 30.5 | -1.3 |
| TOSP | Speyside | 2.13 | 72 | eP | Pn | 07 21 10.2 | +2.9 |
| TOSP | | | | eS | Sn | 07 21 31.3 | -2.4 |
| GURV | El Guri | 2.91 | 189 | eP | Pn | 07 21 18.4 | +0.9 |
| GURV | | | | eS | Sn | 07 21 49.8 | -2.0 |
| SVB | Belmont | 2.93 | 27 | eP | Pn | 07 21 19.3 | +1.5 |
| SVB | | | | eS | Sn | 07 21 49.9 | -2.5 |
| CUPV | Cœpira | 3.18 | 260 | eP | Pn | 07 21 21.4 | +0.2 |
| CUPV | | | | eS | Sn | 07 21 57.8 | -0.7 |
| BIRV | Birongo | 3.60 | 268 | eP | Pn | 07 21 27.4 | +0.6 |
| BIRV | | | | eS | Sn | 07 22 07.9 | -0.7 |
| MERV | Las Mercedes | 3.89 | 249 | eP | Pn | 07 21 31.4 | +0.8 |
| MERV | | | | eS | Sn | 07 22 15.0 | -0.4 |
| LUEV | Luepa | 4.90 | 167 | eP | Pn | 07 21 43.5 | -1.0 |
| LUEV | | | | eS | Sn | 07 22 34.4 | -5.9 |
| BAUV | El Baul | 5.62 | 253 | eP | Pn | 07 21 53.8 | -0.2 |
| BAUV | | | | eS | Sn | 07 22 53.8 | -3.5 |

**IDC 08 07:20:48.0**±1.3**, 5°.54N×127°.47E, h0**km**, mb4.0**/8**, mb1 4.1**/8**, mb1mx3.7**/42**, mbtmp4.0**/8**, Error ellipse: s-maj=114.1km s-min=16.0km az=72.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FITZ | Fitzroy Crossi | 23.56 | 184 | P | P | 07 25 59.6 | -0.7 |
| | 2.0nm,0.9s,baz=56,slow=3.6,SNR=2.4 | | | | | | |
| WRA | Warramunga Arr | 26.20 | 165 | P | P | 07 26 25.2 | +0.6 |
| | 1.9nm,0.6s,baz=343,slow=10,SNR=12 | | | | | | |
| ASAR | Alice Springs | 29.70 | 168 | P | P | 07 26 56.7 | +0.8 |
| | 0.6nm,0.5s,baz=338,slow=6.4,SNR=12 | | | | | | |
| ASAR | | | | PcP | PcP | 07 29 59.5 | -0.9 |
| | 0.3nm,0.5s,baz=350,slow=2.3,SNR=4.9 | | | | | | |
| MKAR | Makanchi Array | 56.52 | 324 | P | P | 07 30 32.9 | +0.7 |
| | 0.4nm,0.3s,baz=116,slow=8.3,SNR=8.2 | | | | | | |
| ZALV | Zalesovo Beam | 59.34 | 332 | P | P | 07 30 51.7 | -0.1 |
| | 0.4nm,0.3s,baz=116,slow=6.6,SNR=2.6 | | | | | | |
| KURBB | Kurchatov Arra | 60.64 | 327 | P | P | 07 31 00.6 | -0.2 |
| | 1.3nm,0.7s,baz=125,slow=6.2,SNR=12 | | | | | | |
| BVAR | Borovoye Array | 66.23 | 326 | P | P | 07 31 38.6 | +0.9 |
| | 1.3nm,0.5s,baz=119,slow=9.3,SNR=6.7 | | | | | | |
| ARCES | ARCESS Array B | 89.02 | 340 | P | P | 07 33 44.0 | -0.6 |
| | 2.2nm,0.8s,baz=92,slow=6.3,SNR=2.8 | | | | | | |
| TORD | Torodi Ar. Bea | 123.04 | 289 | PKP | PKPdf | 07 39 45.8 | -1.7 |
| | 0.2nm,0.5s,baz=56,slow=2.0,SNR=3.2 | | | | | | |

*NEIC **08** 07:21:01.0, 33°.69S×72°.04W, h16km, mb4.8/66, ML4.6(GUC), After GUC.*
*NEIC Felt [III] at San Antonio and [II] at Santiago and Valparaiso. Also felt at Quilpue and Vina del Mar.*
*GUC **08** 07:21:01.3±0.6, 33°.69S×72°.04W, h16km±11km, ML4.6*
*ISCJB **08** 07:21:01.5±1.2, 33°.66S±0°.03×72°.15W±0°.04, h26km±8km, mb4.7/79, MS4.3/2, Error ellipse: s-maj=5.9km s-min=4.7km az=145.2*
*BJI **08** 07:21:02.5, 32°.76S×70°.93W, h30km, mB5.0/6, Ms5.3/3, Ms7 5.1/3*
*IDC **08** 07:21:02.6±0.8, 33°.60S×71°.92W, h24km±4km, mb4.4/13, mb1 4.5/15, mb1mx4.3/26, mbtmp4.5/15, ML4.2/2, MS4.4/3, Ms1 4.4/3, ms1mx3.9/19, Error ellipse: s-maj=21.2km s-min=13.7km az=101.0*
*MOS **08** 07:21:03.5±1.5, 33°.71S×72°.05W, h37km, mb4.9/23, Error ellipse: s-maj=17.6km s-min=8.1km az=100.9*
**ISC 08 07:21:02.6**±0.6**, 33°.67S**±0°.04×**72°.04W**±0°.05**, h26**km±4km**, h26**km**:pP-P, n502, σ1§10**/519**, mb4.8**/79**, 2D, Off coast of central Chile**

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

TACH Talagante 0.92 89 eP Pn 07 21 19.3 -0.6
RCDM Rinconada Maip 1.04 81 eP Pn 07 21 21.0 -0.5
ROC1 El Roble 1.10 51 eP Pn 07 21 22.7 +0.1
ROC1 eS Sb 07 21 39.2 +2.1
SAN Santiago 1.17 80 eP Pn 07 21 23.5 +0.2
SAN eS Sb 07 21 40.0 +1.0
ANTU Antumapu 1.18 86 eP Pn 07 21 23.7 +0.3
ANTU eS Sb 07 21 40.6 +1.4
ANTU AML AML 07 21 41.5
comp=N,18µm,0.2s
CHCH Chadas Angostu 1.19 103 eP Pn 07 21 23.5 0.0
PEL Peldehue 1.25 66 eP Pb 07 21 25.7 -0.4
PEL eS Sb 07 21 42.7 +1.5
PEL AML AML 07 21 45.5
comp=N,33µm,2.0s
PCH Pirque 1.27 88 eP Pn 07 21 25.0 +0.2
CLCH Cerro Calan 1.28 78 eP Pn 07 21 25.4 +0.5
CLCH eS Sb 07 21 43.5 +1.2
CLCH AML AML 07 21 49.6
comp=E,18µm,0.9s
NICH Los Niches 1.49 154 eP Pn 07 21 27.9 +0.1
NICH eS Sb 07 21 48.8 +0.7
NICH AML AML 07 21 55.5
comp=E,22µm,5.2s
AUSP Uspallata 2.65 58 eP Pb 07 21 47.1 -2.5
ARCO CERRO ARCO 2.73 73 eP Pb 07 21 50.7 -0.1
AAGR Agrelo 2.75 79 eP Pb 07 21 49.0 -2.2
AAGR eS Sb 07 22 32.9 +8.4
ASAL Salagasta 2.90 69 eP Pb 07 21 55.1 +1.5
ASAL eS Sb 07 22 34.4 +5.8
RTLS Leoncito 2.97 52 eP Pn 07 21 51.6 +3.4
RTCV Cerro Valdivia 3.45 60 eP Pn 07 21 57.6 +2.9
RTCV eS Sb 07 22 49.3 +4.7
SJA San Juan 3.63 55 eP Pn 07 22 01.2 +4.0
RTLL Cerro Villicun 3.81 53 eP Pn 07 22 02.1 +2.5
CFAA Coronel Fontan 3.81 58 Pn Pn 07 22 01.6 +2.0
comp=E,1.1nm,0.3s,baz=232,slow=7.4,SNR=193
CFAA Lg Lg 07 22 56.8
comp=E,8.9nm,0.3s,baz=347,slow=12,SNR=4.5
CFAA LR LR 07 22 57.2
comp=E,44nm,21.3s,baz=240,slow=31
CFAA Coronel Fontan 3.81 58 eP Pn 07 22 03.1 +3.4
AMOG MOGNA 4.05 49 eP Pn 07 22 05.5 +2.5
ACAN Cantantal 4.31 73 eP Pn 07 22 08.6 +2.1
LCO Las Campanas 4.78 14 ePn Pn 07 22 12.1 -1.1
AVFE Valle Fertil 4.91 54 eP Pn 07 22 16.4 +1.6
AVFE AML AML 07 23 30.7
comp=Z,543nm,0.7s
AGUA GUANDACOL 5.15 37 eP Pn 07 22 20.2 +2.1
ACHE Chepes 5.18 63 eP Pn 07 22 20.5 +1.9
MRA San Martin 5.45 79 eP Pn 07 22 23.6 +1.3
VCA Vinchina 5.91 35 eP Pn 07 22 30.5 +1.8
VCA eS Sn 07 23 45.0 +9.4
TCA Tanti 6.70 72 eP Pn 07 22 40.0 +0.5
PLCA Paso Flores 7.15 171 eP Pn 07 22 46.1 +0.5
PLCA Paso Flores 7.15 171 ePn Pn 07 22 46.1 +0.5
CYA Choya 7.47 47 eP Pn 07 22 48.0 -1.9
FSA Cafayete 9.18 36 eP Pn 07 23 11.8 -1.8
TRQA Tornquist 9.26 121 ePn Pn 07 23 16.1 +1.6
LVC Limon Verde 11.35 15 Pn Pn 07 23 45.8 +2.4
comp=Z,41nm,0.3s,baz=208,slow=9.3,SNR=8.9
LVC Sn Sn 07 26 01.0 +11
comp=Z,22nm,0.3s,baz=156,slow=20,SNR=2.7
LVC LR LR 07 28 22.0
comp=Z,5µm,18.2s,baz=206,slow=39
LVC Limon Verde 11.35 15 ePn Pn 07 23 39.0 -4.3
CPUP Villa Florida 14.68 64 Pn Pn 07 24 28.7 +0.1
comp=Z,0.1nm,0.3s,baz=255,slow=13,SNR=3.2
CPUP Sn Sn 07 27 09.2 -1.3
comp=Z,0.0nm,0.3s,baz=324,slow=19,SNR=2.1
CPUP Villa Florida 14.68 64 eP P 07 24 33.8 -0.8
CPUP 07 27 09.2
CPUP Villa Florida 14.68 64 eP P 07 24 33.8 -0.8
CPUP Sn Sn 07 27 09.2 -1.3
LPAZ La Paz 17.66 12 P Pn 07 25 07.6 +0.1
comp=Z,0.8nm,0.3s,baz=194,slow=6.5,SNR=62
LPAZ La Paz 17.66 12 eP Pn 07 25 07.5 +0.1
LPAZ pmax pmax
comp=Z,37nm,0.9s
LPAZ La Paz 17.66 12 ePn Pn 07 25 07.5 +0.1
comp=Z,37nm,0.9s
SIV San Ignacio 20.19 32 P P 07 25 34.6 -0.8
comp=Z,7.2nm,0.5s,baz=220,slow=0.8,SNR=26
EFI East Falkland 20.66 155 eP P 07 25 40.0 -0.2
EFI pmax pmax
comp=Z,807nm,2.6s
EFI East Falkland 20.66 155 eP P 07 25 40.0 -0.2
comp=Z,807nm,2.6s
USHA Ushuaia 21.31 174 P P 07 25 48.4 +1.3
comp=Z,10nm,1.0s,baz=311,slow=9.3,SNR=4.3
NNA Nana 22.02 347 eP P 07 25 55.4 +0.2
NNA pmax pmax
comp=Z,57nm,1.3s
NNA Nana 22.02 347 eP P 07 25 55.4 +0.2
comp=Z,57nm,1.3s
SAML Samuel 25.92 20 eP P 07 26 32.4 -0.3
comp=Z,40nm,0.9s
BDFB Brasilia 28.15 56 P P 07 26 51.7 -1.2
comp=Z,10nm,0.6s,baz=228,slow=7.9,SNR=22
BDFB Brasilia 28.15 56 eP P 07 26 52.3 -0.6
BDFB pmax pmax
comp=Z,99nm,1.6s
BDFB Brasilia 28.15 56 eP P 07 26 52.3 -0.6
comp=Z,99nm,1.6s
OTAV Otavalo 34.26 349 eP P 07 27 46.5 -0.6
comp=Z,35nm,1.8s
PTGA Pitinga 34.67 22 P P 07 27 49.7 -0.4
comp=Z,21nm,0.7s,baz=205,slow=9.6,SNR=37
ROSC El Rosal 38.38 356 P P 07 28 25.0 +2.8
comp=Z,1.7nm,0.6s,baz=270,slow=19,SNR=3.1
RCBR Riachuelo 43.47 59 P P 07 29 02.8 -1.0
comp=Z,7.4nm,0.8s,baz=209,slow=8.4,SNR=3.5
VNA3 Neumayer Olymp 49.67 158 P P 07 29 52.8 +1.1
VNA1 Neumayer--Stat 49.98 157 P P 07 29 55.8 +1.9
VNA2 Neumayer--Watz 50.32 157 P P 07 29 57.5 +0.9
baz=278,slow=8.2
CRPR Cabo Rojo, PR 51.60 6 eP P 07 30 05.1 -1.6
comp=Z,35nm,0.9s
SNAA Sanae 51.89 158 P P 07 30 09.2 +0.7
SNAA Sanae 51.89 158 P P 07 30 09.4 +0.9
comp=Z,6.5nm,1.1s,baz=278,slow=7.8,SNR=53
SNAA Sanae 51.89 158 eP P 07 30 08.7 +0.2
SNAA pmax pmax
comp=Z,10.0nm,1.0s
SNAA Sanae 51.89 158 eP P 07 30 08.7 +0.2
comp=Z,10nm,1.0s
QSPA South Pole Qui 56.57 180 eP P 07 30 43.9 +1.2
comp=Z,18nm,1.0s
SBA Scott Base 63.40 192 eP P 07 31 30.2 +1.0
SBA pmax pmax
comp=Z,8.0nm,1.2s
SBA Scott Base 63.40 192 eP P 07 31 30.2 +1.0
comp=Z,7.8nm,1.2s
VNDA Vanda 64.43 191 P P 07 31 38.0 +2.0
comp=Z,1.0nm,1.0s,baz=167,slow=4.3,SNR=4.0
VNDA Vanda 64.43 191 eP P 07 31 38.0 +2.0
034A Hebbronville 65.48 334 P P 07 31 45.0 +1.6
baz=66
933A Laredo 66.20 334 P P 07 31 49.1 +1.1
baz=66
835A Beeville 66.29 335 P P 07 31 50.0 +1.4
baz=67
834A Tilden 66.40 335 P P 07 31 50.5 +1.3
baz=67
736A Circle Diamond 66.64 336 P P 07 31 51.9 +1.1
baz=67
735A Kenedy 66.80 335 P P 07 31 53.0 +1.2
baz=67
833A Chaparral WMA, 66.88 334 P P 07 31 53.3 +0.9
baz=67,SNR=5.8
734A La Parita Cree 67.06 335 P P 07 31 54.8 +1.3
baz=67
832A Faith Ranch, C 67.06 333 P P 07 31 54.0 +0.5
baz=67,SNR=6.1
636A Smothers Creek 67.12 336 P P 07 31 55.7 +1.8
baz=68
733A Divot King Ran 67.21 334 P P 07 31 55.6 +1.2
baz=68
537A Green Hill Far 67.43 337 P P 07 31 56.4 +0.6
baz=68
732A Laxson Ranch, 67.46 334 P P 07 31 56.6 +0.5
baz=68,SNR=12
439A Center Grove, 67.61 339 P P 07 31 57.6 +0.6
baz=68
536A Bastrop 67.67 337 P P 07 31 58.4 +1.1
baz=68
438A Sam Houston St 67.79 338 P P 07 31 59.4 +1.4
baz=68
535A Dale 67.80 336 P P 07 31 59.2 +1.1
baz=68
VBMS Vicksburg 67.81 343 P P 07 31 59.1 +0.9
baz=68
633A Saathoff Ranch 67.83 335 P P 07 31 59.3 +0.9
baz=68
340A Bronson 67.94 340 P P 07 31 60.0 +1.0
baz=68
339A Huntington 68.06 339 P P 07 32 00.5 +0.8
baz=68
632A Uvalde 68.10 334 P P 07 32 00.9 +0.9
baz=68,SNR=8.1
534A Blanco 68.11 335 P P 07 32 00.9 +0.8
baz=68
338A Crockett 68.30 339 P P 07 32 01.9 +0.6
baz=69
631A Perdido Creek 68.31 333 P P 07 32 01.7 +0.4
baz=69
533A Kerrville 68.34 335 P P 07 32 02.1 +0.5
baz=69
435B Jarrell 68.50 336 P P 07 32 03.2 +0.7
baz=69
239A Gary 68.67 340 P P 07 32 04.3 +0.8
baz=69
532A Rocksprings 68.70 334 P P 07 32 04.1 +0.2
baz=69,SNR=12
434A Burnet 68.75 336 P P 07 32 04.7 +0.5
baz=69,SNR=7.4
336A Riesel 68.81 337 P P 07 32 05.1 +0.6
baz=69
531A Rocksprings 68.97 334 P P 07 32 06.4 +0.8
baz=69,SNR=8.8
433A Art 68.98 335 P P 07 32 05.9 +0.3
baz=69,SNR=11
JCT Junction City 68.98 334 eP P 07 32 06.7 +1.1
JCT pmax pmax
comp=Z,12nm,0.9s
JCT Junction City 68.98 334 P P 07 32 06.1 +0.5
baz=69,SNR=7.8
JCT Junction City 68.98 334 eP P 07 32 06.7 +1.1
comp=Z,12nm,0.9s
KMSC Kings Mountain 69.00 352 P P 07 32 05.5 0.0
baz=69
334A Lometa 69.22 336 P P 07 32 07.5 +0.4
baz=70,SNR=6.8
530A J-C Ranch, Com 69.25 333 P P 07 32 07.9 +0.6
baz=70,SNR=8.7
432A Menard 69.34 335 P P 07 32 08.2 +0.4
baz=70
TXAR Lajitas Array 69.44 331 P P 07 32 09.3 +0.8
comp=Z,2nm,0.7s,baz=152,slow=8.4,SNR=23
TX31 Lajitas Ar. Si 69.44 331 eP P 07 32 09.3 +0.7
431A Sonora 69.46 334 P P 07 32 08.4 -0.1
baz=70
333A Richland Sprin 69.47 336 P P 07 32 08.5 -0.1
baz=70,SNR=7.3
WHTX Lake Whitney 69.56 337 P P 07 32 09.4 +0.2
baz=70
529A Stev Forest Ra 69.57 332 P P 07 32 09.7 +0.4
baz=70
CPCT Cooper Cave 69.74 349 eP P 07 32 09.8 -0.3
SWET Sewanee 69.75 348 eP P 07 32 09.7 -0.6
comp=Z,4.7nm,0.9s
OXF Oxford 69.75 345 eP P 07 32 09.7 -0.5
OXF pmax pmax
comp=Z,30nm,0.9s
OXF Oxford 69.75 345 eP P 07 32 09.7 -0.5
comp=Z,30nm,0.9s
332A Millersview 69.78 335 P P 07 32 10.9 +0.4
baz=70,SNR=7.3
430A Baggit Ranch, 69.79 333 P P 07 32 11.1 +0.5
baz=70,SNR=8.0
234A Clairette 69.80 337 P P 07 32 10.8 +0.2
baz=70,SNR=6.0
429A Davenport Ranc 69.89 333 P P 07 32 11.7 +0.4
baz=70,SNR=6.2
331A San Angelo 69.96 334 P P 07 32 12.1 +0.5
baz=70,SNR=8.2
233A Rising Star 70.07 336 P P 07 32 12.0 -0.3
baz=70
232A Coleman 70.21 335 P P 07 32 13.2 0.0
baz=70,SNR=8.7
134A White-Moore Ra 70.30 337 P P 07 32 14.0 +0.4
baz=71
330A Mertzon 70.32 334 P P 07 32 14.8 +1.0
baz=71,SNR=6.6
Y39A Lockesburg 70.37 341 P P 07 32 14.6 +0.6
baz=71
Z36A Blue Ridge 70.43 338 P P 07 32 14.5 +0.2
baz=71,SNR=5.7
231A Bronte 70.49 335 P P 07 32 14.8 -0.1
baz=71,SNR=7.3
133A Hamilton Ranch 70.61 336 P P 07 32 16.0 +0.5
baz=71
329A Wagon Wheel Ra 70.69 333 P P 07 32 16.5 +0.3
baz=71
230A Sterling City 70.73 334 P P 07 32 16.7 +0.4
baz=71
Z35A Perchaven, San 70.74 338 P P 07 32 16.8 +0.5
baz=71
MIAR Mount Ida 70.80 341 eP P 07 32 15.6 -1.0
MIAR pmax pmax
comp=Z,8.0nm,0.9s
MIAR Mount Ida 70.80 341 P P 07 32 16.8 +0.2
baz=71
MIAR Mount Ida 70.80 341 eP P 07 32 15.6 -1.0
comp=Z,8.4nm,0.9s
ABTX Abilene, Hawle 70.88 336 P P 07 32 17.6 +0.5
baz=71
ABTX Abilene, Hawle 70.88 336 eP P 07 32 17.7 +0.5
comp=Z,9.9nm,0.8s
Y36A Durant 70.97 339 P P 07 32 18.4 +0.8
baz=71
Z34A Collier Ranch, 70.98 337 P P 07 32 18.7 +0.9
baz=71
WVT Waverly 70.99 347 eP P 07 32 17.1 -0.6
WVT pmax pmax
comp=Z,26nm,0.9s
WVT Waverly 70.99 347 eP P 07 32 17.1 -0.6
comp=Z,26nm,0.9s
229A Bryant Ranch, 71.06 334 P P 07 32 19.0 +0.6
baz=71
131A Roby 71.18 335 P P 07 32 19.5 +0.4
baz=72
Z33A Whitaker Ranch 71.18 337 P P 07 32 19.5 +0.5
baz=72
Y35A Marietta 71.20 338 P P 07 32 19.4 +0.3
baz=72
130A Snyder 71.32 334 P P 07 32 20.4 +0.5
baz=72
X37A Clayton 71.34 340 P P 07 32 20.1 +0.2
baz=72
UTMT University of 71.40 346 eP P 07 32 22.4 +2.2
comp=Z,65nm,0.7s
Z32A Haskell 71.44 336 P P 07 32 20.8 +0.2
baz=72,SNR=6.2
Y34A Reagan Ranch, 71.47 338 P P 07 32 20.8 0.0
baz=72
228A UT Block 9, Go 71.49 333 P P 07 32 21.1 +0.1
baz=72
W38A Poteau 71.55 341 P P 07 32 21.5 +0.3
baz=72
X36A Centrahoma 71.61 339 P P 07 32 21.6 +0.1
baz=72
Z31A Sharp Cattle R 71.68 335 P P 07 32 22.4 +0.3
baz=72
Y33A Hilltop Ranch, 71.80 337 P P 07 32 23.0 +0.3
baz=72
W37A Quinton 71.87 340 P P 07 32 23.3 +0.2
baz=72
128A Castleberry Fa 71.90 333 P P 07 32 23.8 +0.3
baz=72
Z30A Sanderson Ranc 72.00 335 P P 07 32 24.1 +0.2
baz=72
Y32A R-V Farms, Ver 72.07 336 P P 07 32 24.8 +0.5
baz=72
X34A Smith Ranch, M 72.09 338 P P 07 32 25.1 +0.6
baz=72
W36A Wetumka 72.10 339 P P 07 32 24.4 -0.1
baz=72
PBMO Poplar Bluff 72.16 345 eP P 07 32 24.6 -0.1
Z29A Hungry Hill Ra 72.18 334 P P 07 32 25.2 +0.1
baz=72
MNTX Cornudas Mount 72.22 331 P P 07 32 25.2 -0.1
baz=72
MNTX Cornudas Mount 72.22 331 eP P 07 32 25.3 0.0
comp=Z,66nm,2.3s
X33A Lawton 72.25 337 P P 07 32 25.4 0.0
baz=73
V38A Canehill 72.26 341 P P 07 32 25.3 -0.2
baz=73
W35A Tecumseh 72.31 339 P P 07 32 25.5 -0.2
baz=73
Y31A Rekieta Farm, 72.31 336 P P 07 32 27.3 +1.6
baz=73,SNR=5.3
X32A Elmer 72.39 337 P P 07 32 26.3 0.0
baz=73
Z28A Tucker Farm, M 72.46 334 P P 07 32 26.0 -0.8
baz=73
V37A Hulbert 72.48 340 P P 07 32 26.1 -0.7
baz=73
WMOK Wichita Mounta 72.52 337 eP P 07 32 26.1 -0.9
WMOK pmax pmax
comp=Z,16nm,1.7s
WMOK Wichita Mounta 72.52 337 eP P 07 32 26.1 -0.9
comp=Z,16nm,1.7s
V36A Jenks 72.62 340 P P 07 32 27.5 0.0
baz=73
W34A Bridge Creek, 72.66 338 P P 07 32 27.3 -0.5
baz=73
TUL1 Tulsa 72.69 340 P P 07 32 27.8 -0.2
baz=73
TUL1 Tulsa 72.69 340 eP P 07 32 27.6 -0.4
comp=Z,9.5nm,0.8s
Y29A Porterfield Fa 72.71 334 P P 07 32 28.1 -0.1
baz=73,SNR=7.6
SIUC Southern Illin 72.80 346 eP P 07 32 27.8 -0.7
comp=Z,14nm,0.8s
W33A Caddo, Fort Co 72.80 338 P P 07 32 29.5 +0.9
baz=73,SNR=5.9
U38A Gravette 72.80 341 P P 07 32 28.7 +0.1
baz=73
X31A McDonald Ranch 72.82 336 P P 07 32 29.0 +0.2
baz=73
V35A Meyer Ranch, C 72.86 339 P P 07 32 29.3 +0.3
baz=73
X30A Coker Ranch, T 72.96 335 P P 07 32 29.8 +0.2
baz=73
Y28A McKinney Farm, 72.96 334 P P 07 32 30.0 +0.2
baz=73
U37A Salina 72.97 341 P P 07 32 29.7 +0.1
baz=73
W32A Sentinel 73.03 337 P P 07 32 30.5 +0.5
baz=73,SNR=7.0
MSTX Muleshoe 73.21 334 P P 07 32 31.1 -0.2
baz=74
MSTX Muleshoe 73.21 334 eP P 07 32 31.1 -0.2
comp=Z,11nm,0.8s
X29A Tulia 73.25 335 P P 07 32 31.2 -0.3
baz=74
W31A Holland Ranch, 73.31 336 P P 07 32 31.7 0.0
baz=74
V33A Lossen Ranch, 73.36 338 P P 07 32 32.2 +0.3
baz=74
U35A Pawnee 73.39 339 P P 07 32 32.3 +0.2
baz=74,SNR=6.3
X28A Dimmitt 73.49 334 P P 07 32 32.7 -0.2
baz=74
MAW Mawson 73.50 164 P P 07 32 33.2 +0.8
comp=Z,5.1nm,0.8s,baz=223,slow=9.0,SNR=13
MAW Mawson 73.50 164 eP P 07 32 33.3 +0.9
MAW pmax pmax
comp=Z,2.0nm,0.8s
MAW Mawson 73.50 164 eP P 07 32 33.3 +0.9
comp=Z,1.5nm,0.8s
V32A Arapaho 73.50 337 P P 07 32 32.7 -0.1
baz=74
T37A Cheneyville 18 73.59 341 P P 07 32 33.6 +0.3
baz=74
AMTX Amarillo 73.64 335 P P 07 32 34.0 +0.3
baz=74
AMTX Amarillo 73.64 335 eP P 07 32 34.5 +0.8
comp=Z,13nm,0.9s
U34A Anderson Ranch 73.69 339 P P 07 32 34.3 +0.4
baz=74
T36A Boggs Farm, Ca 73.79 340 P P 07 32 34.9 +0.5
baz=74
W29A Amraillo 73.84 335 P P 07 32 35.8 +0.9
baz=74
T35A Sooner Cattle 73.84 340 P P 07 32 35.4 +0.7
baz=74
U33A Lingo Farm, Me 73.87 338 P P 07 32 35.3 +0.4
baz=74
121A Cookes Peak, D 73.95 329 P P 07 32 35.6 -0.1
baz=74
V30A Spur Ranch, Mi 74.09 336 P P 07 32 36.7 +0.4
baz=74
U32A Winter Ranch, 74.10 338 P P 07 32 36.7 +0.4
baz=74
T34A McClaskey Farm 74.14 339 P P 07 32 36.8 +0.3
baz=74
S37A Fort Scott 74.16 341 P P 07 32 36.8 +0.2
baz=74
ACSO Alum Creek Sta 74.22 351 eP P 07 32 36.9 0.0
comp=Z,14nm,0.8s
S35A Otter Creek Ra 74.50 340 P P 07 32 39.1 +0.6
baz=75
LIC Lamto 74.67 72 eP P 07 32 37.5 -2.6
comp=Z,31nm,1.0s
S34A Willow Spring 74.74 340 P P 07 32 41.3 +1.3
baz=75
V27A Dan Oppiter Fa 74.83 334 P P 07 32 40.7 0.0
baz=75
R36A Gordon, Harris 74.87 341 P P 07 32 40.9 +0.2
baz=75
TIC Toumodi 74.93 71 eP P 07 32 41.5 -0.1
T31A Randall Ranch, 74.97 337 P P 07 32 41.5 +0.1
baz=75
KIC Kosan Boka 74.98 72 eP P 07 32 41.7 -0.2
comp=Z,65nm,1.2s
SFIN Scholer Farm 74.98 348 P P 07 32 41.1 -0.2
baz=75
R35A Emporia Munici 75.06 341 P P 07 32 41.7 -0.2
baz=75
DBIC Dimbokro 75.07 71 P P 07 32 42.6 +0.2
comp=Z,10nm,0.8s,baz=206,slow=6.2,SNR=10
DBIC pP pP 07 32 50.3 -0.6
comp=Z,8.5nm,0.7s,baz=202,slow=6.7,SNR=5.2
TUC Tucson 75.09 327 eP P 07 32 44.0 +1.8
TUC pmax pmax
comp=Z,4.0nm,1.1s
TUC Tucson 75.09 327 eP P 07 32 44.0 +1.8
comp=Z,3.5nm,1.1s
T30A Plains 75.20 337 P P 07 32 43.0 +0.2
baz=76
S32A Newby Ranch, P 75.29 338 P P 07 32 43.4 +0.3
baz=76
LAZ Ladron 75.29 331 eP P 07 32 45.5 +2.0
comp=Z,3.4nm,1.1s
R34A Isabella, Hill 75.34 340 P P 07 32 43.9 +0.4
baz=76
S31A Mullinville 75.39 338 P P 07 32 44.4 +0.6
baz=76
U27A Thompson Grove 75.42 335 P P 07 32 44.9 +0.8
baz=76
Q36A Arnold C. Orve 75.46 341 P P 07 32 45.3 +1.2
baz=76
ANMO Albuquerque 75.49 331 eP P 07 32 46.0 +1.4
ANMO pmax pmax
comp=Z,5.0nm,1.0s
ANMO Albuquerque 75.49 331 eP P 07 32 46.1 +1.4
comp=Z,3.8nm,0.9s
Q35A Mercer Eighty, 75.52 341 P P 07 32 44.5 +0.1
baz=76
HDIL Hopedale 75.55 347 P P 07 32 44.5 -0.1
baz=76
T29A Hugoton 75.55 336 P P 07 32 44.8 +0.1
baz=76
R33A Olander Ranch, 75.56 339 P P 07 32 44.8 +0.1
baz=76
214A Organ Pipe Nat 75.75 325 P P 07 32 46.4 +0.5
baz=76
T28A Walsh 75.80 336 P P 07 32 46.6 +0.4
baz=76
Q34A Chapman 75.83 340 P P 07 32 46.4 +0.2
baz=76
KSU1 Kansas State U 75.90 341 P P 07 32 47.0 +0.3
baz=76
S29A Ulysses 75.92 337 P P 07 32 47.1 +0.3
baz=76
T27A Campo 75.96 335 P P 07 32 47.1 0.0
baz=76
P36A Good Intent, A 76.01 342 P P 07 32 47.1 -0.1

baz=76
R31A **Burdett** 76.01 338 P P 07 32 47.7 +0.4
baz=76
P35A **Duane Minner,** 76.14 341 P P 07 32 48.2 +0.2
baz=76
S28A **Manter** 76.15 336 P P 07 32 49.3 +1.2
baz=76
Q33A **Connelly Farm,** 76.16 340 P P 07 32 49.1 +1.1
baz=76
R30A **Dighton** 76.25 337 P P 07 32 49.4 +0.7
baz=77
Q32A **Meitler Ranch,** 76.36 339 P P 07 32 50.1 +0.8
baz=77
T26A **Comanche Natio** 76.37 335 P P 07 32 50.1 +0.5
baz=77
P34A **Walnut Farm, R** 76.38 341 P P 07 32 50.0 +0.7
baz=77
Q31A **Ellis** 76.63 338 P P 07 32 51.6 +0.8
baz=77
T25A **Trinidad** 76.63 334 P P 07 32 51.6 +0.5
baz=77
T25A **Trinidad** 76.63 334 eP P 07 32 53.3 +2.2
S26A **Kim** 76.72 335 P P 07 32 52.1 +0.6
baz=77
R28A **Tribune** 76.80 336 P P 07 32 52.3 +0.4
baz=77
Q30A **Quinter** 76.86 338 P P 07 32 52.9 +0.7
baz=77
O34A **Beatrice** 76.94 341 P P 07 32 52.8 +0.3
baz=77
W18A **Petrified Fore** 77.00 329 P P 07 32 52.8 -0.3
baz=77
Q29A **Oakley** 77.02 337 P P 07 32 53.2 +0.1
baz=77
O33A **Hebron** 77.08 340 P P 07 32 53.7 +0.5
baz=77
R27A **Eads** 77.08 336 P P 07 32 54.4 +0.9
baz=77
P31A **Stockton** 77.10 339 P P 07 32 53.8 +0.4
baz=78
N35A **Tabor** 77.29 342 P P 07 32 54.5 +0.1
baz=78
R26A **Arlington** 77.32 335 P P 07 32 55.2 +0.4
baz=78
P30A **Selden** 77.39 338 P P 07 32 55.7 +0.6
baz=78
N34A **Lincoln** 77.49 341 P P 07 32 55.6 0.0
baz=78
SDCO **Great Sand Dun** 77.57 333 P P 07 32 57.1 +0.6
baz=78
SDCO **Great Sand Dun** 77.57 333 eP P 07 32 56.8 +0.4
comp=Z,3.7nm,0.9s
P29A **Atwood** 77.66 338 P P 07 32 57.3 +0.7
baz=78
N33A **J Bar K, Exete** 77.66 341 P P 07 32 57.2 +0.7
baz=78
KSCO **Kaye Shedlock'** 77.68 336 P P 07 32 57.3 +0.5
baz=78
P28A **Saint Francis** 77.89 337 P P 07 32 59.0 +1.0
baz=78
Q26A **Hugo** 77.91 335 P P 07 32 59.5 +1.4
baz=78
JFWS **Jewell Farm** 78.02 346 eP P 07 32 59.7 +1.3
JFWS pmax pmax
comp=Z,10.0nm,0.8s
JFWS **Jewell Farm** 78.02 346 eP P 07 32 59.7 +1.3
comp=Z,10nm,0.8s
Y12C **Blythe** 78.04 325 P P 07 32 59.7 +0.9
baz=78
WUAZ **Wupatki** 78.05 328 P P 07 33 00.0 +1.0
baz=78
WUAZ **Wupatki** 78.05 328 eP P 07 33 01.0 +2.0
comp=Z,5.9nm,0.9s
S22A **4UR Ranch, Cre** 78.08 332 P P 07 33 00.1 +0.8
baz=78
S22A **4UR Ranch, Cre** 78.08 332 eP P 07 33 00.7 +1.4
P27A **Ficken Ranch,** 78.15 336 P P 07 33 00.7 +1.3
baz=78
N31A **Bailey Ranch,** 78.17 339 P P 07 33 00.3 +0.9
baz=78
MVCO **Mesa Verde** 78.27 331 P P 07 33 00.8 +0.5
baz=79
MVCO **Mesa Verde** 78.27 331 eP P 07 33 00.9 +0.6
comp=Z,6.2nm,1.1s
P26A **Davis Ranch, A** 78.42 336 P P 07 33 01.7 +0.8
baz=79
BGNE **Belgrade** 78.48 340 P P 07 33 01.9 +0.8
baz=79
Q24A **Divide** 78.52 334 P P 07 33 02.4 +0.7
baz=79
M31A **Lambtecht Ranc** 78.66 340 P P 07 33 02.3 +0.3
baz=79
N29A **Votaw Ranch, W** 78.67 338 P P 07 33 02.6 +0.5
baz=79
IRM **Iron Mountain** 78.67 325 P P 07 33 02.6 +0.3
baz=79
O27A **Beecher Island** 78.69 337 P P 07 33 02.8 +0.4
baz=79
PFO **Pinyon Flat Ob** 78.86 323 eP P 07 33 06.1 +2.6
PFO pmax pmax
comp=Z,6.0nm,1.0s
PFO **Pinyon Flat Ob** 78.86 323 P P 07 33 04.0 +0.5
baz=79
PFO **Pinyon Flat Ob** 78.86 323 eP P 07 33 06.1 +2.6
comp=Z,6.2nm,1.0s
BELC **Belle Mtn. Jos** 78.95 324 P P 07 33 04.8 +0.8
baz=79
PV01 **Paradox Valley** 79.10 331 eP P 07 33 05.8 +1.0
comp=Z,390nm,1.2s
PV05 **Paradox Valley** 79.26 331 eP P 07 33 06.3 +0.6
SMCO **Snowmass** 79.38 333 eP P 07 33 07.6 +1.0
comp=Z,12nm,1.1s
L31A **Butterfield Fa** 79.38 340 P P 07 33 07.1 +1.0
baz=80
LDFC **Landfair** 79.40 325 eP P 07 33 08.3 +2.0
comp=Z,6.7nm,0.8s
GMRC **Granite Mounta** 79.42 325 P P 07 33 06.8 +0.3
baz=80
ISCO **Idaho Springs** 79.43 334 eP P 07 33 07.2 +0.6
ISCO pmax pmax
comp=Z,3.0nm,1.0s
ISCO **Idaho Springs** 79.43 334 P P 07 33 06.9 +0.2
baz=80
ISCO **Idaho Springs** 79.43 334 eP P 07 33 07.2 +0.6
comp=Z,3.2nm,1.0s
SCI **San Clemente I** 79.43 322 P P 07 33 06.7 +0.3
baz=80
L30A **Spencer Herefo** 79.43 339 P P 07 33 07.4 +1.1
baz=80
PV10 **Paradox Valley** 79.49 331 eP P 07 33 07.4 +0.4
comp=Z,84nm,0.7s
L29A **Maesberg Ranch** 79.76 339 P P 07 33 09.0 +0.9
baz=80
K31A **O'Neill** 79.77 340 P P 07 33 09.0 +0.9
baz=80
HEC **Hector,Ludlow** 79.78 324 P P 07 33 09.0 +0.5
baz=80
I36A **Fitzsimmons Fa** 79.87 344 P P 07 33 09.2 +0.6
baz=80
J33A **Davis** 79.94 342 P P 07 33 09.5 +0.6
baz=80
BFSC **Mount Baldy Ra** 79.97 323 P P 07 33 10.1 +0.6
baz=80
K30A **Basset** 80.06 340 P P 07 33 10.2 +0.5
baz=80
TUQ **Turquoise Moun** 80.08 325 P P 07 33 11.0 +1.0
baz=80
BOSA **Boshof** 80.22 118 P P 07 33 11.1 -0.2
comp=Z,2.5nm,0.7s,baz=158,slow=5.4,SNR=3.6
BOSA pP PcP 07 33 19.0 +0.6
comp=Z,6.8nm,0.9s,baz=252,slow=6.0,SNR=4.0
ECSD **EROS Data Cent** 80.23 342 P P 07 33 10.8 +0.2
baz=81
ECSD **EROS Data Cent** 80.23 342 eP P 07 33 10.7 +0.1
comp=Z,11nm,0.9s
CASY **Casey** 80.35 181 eP P 07 33 11.8 +0.8
comp=Z,9.2nm,1.2s
GSC **Goldstone** 80.39 324 eP P 07 33 14.6 +2.9
GSC pmax pmax
comp=Z,4.0nm,0.8s
GSC **Goldstone** 80.39 324 P P 07 33 12.2 +0.5
baz=81
GSC **Goldstone** 80.39 324 eP P 07 33 14.6 +2.9
comp=Z,3.5nm,0.8s
N23A **Red Feather La** 80.51 335 P P 07 33 13.3 +0.9
baz=81
SHPR **Sheep Range** 80.58 326 eP P 07 33 13.5 +0.7
CCUT **Cedar City** 80.62 328 eP P 07 33 14.6 +1.5
comp=Z,6.7nm,1.0s
J30A **Dallas** 80.63 340 P P 07 33 13.4 +0.7
baz=81
O20A **White River Ci** 80.70 333 P P 07 33 13.9 +0.6
baz=81
SRU **San Rafael** 80.72 331 eP P 07 33 14.1 +0.6
SRU pmax pmax
comp=Z,3.0nm,0.6s
SRU **San Rafael** 80.72 331 eP P 07 33 14.1 +0.6
comp=Z,2.7nm,0.6s
H34A **Spellman Lake,** 80.90 343 P P 07 33 14.9 +0.9
baz=81
MSU **Marysvale** 80.91 329 eP P 07 33 15.8 +1.2
MSU pmax pmax
comp=Z,5.0nm,1.1s
MSU **Marysvale** 80.91 329 eP P 07 33 15.8 +1.2
comp=Z,5.3nm,1.1s
J29A **Okreek** 80.94 340 P P 07 33 15.0 +0.6
baz=81
G36A **St. Michael** 80.97 345 P P 07 33 15.0 +0.6
baz=81
LRMC **Laurel Mountai** 80.97 324 P P 07 33 15.4 +0.6
baz=81
P18A **Preston Nutter** 81.05 331 eP P 07 33 16.9 +1.4
G35A **Watkins** 81.12 344 P P 07 33 15.7 +0.5
baz=82
H33A **Prehn Over Nor** 81.15 342 P P 07 33 15.8 +0.3
baz=82
I30A **Oacoma** 81.15 340 P P 07 33 15.8 +0.3
baz=82
TMUT **Trail Mountain** 81.16 330 eP P 07 33 16.5 +0.5
comp=Z,13nm,0.9s
H32A **Carlson Farm,** 81.16 342 P P 07 33 16.2 +0.7
baz=82
J28A **Allard Ranch,** 81.23 339 P P 07 33 17.2 +1.2
baz=82
ARVC **Arvin** 81.26 323 P P 07 33 17.3 +1.1
baz=82
J27A **Elkhorn Farm,** 81.31 338 P P 07 33 17.7 +1.3
baz=82
MPMC **Manual Prospec** 81.33 324 P P 07 33 17.8 +1.0
baz=82
FURC **Furnace Creek,** 81.36 325 P P 07 33 17.6 +0.9
baz=82
TPNV **Topopah Spring** 81.45 326 eP P 07 33 19.5 +2.0
TPNV **Topopah Spring** 81.45 326 P P 07 33 18.4 +0.9
baz=82
TPNV **Topopah Spring** 81.45 326 eP P 07 33 19.4 +2.0
ISA **Isabella** 81.50 323 eP P 07 33 20.0 +2.4
ISA pmax pmax
comp=Z,5.0nm,1.0s
ISA **Isabella** 81.50 323 P P 07 33 18.9 +1.3
baz=82
ISA **Isabella** 81.50 323 eP P 07 33 20.0 +2.4
comp=Z,5.5nm,1.0s
F36A **Milaca** 81.51 345 P P 07 33 17.3 0.0
baz=82
DAC **Darwin (Calif)** 81.56 324 eP P 07 33 19.6 +1.5
DAC **Darwin (Calif)** 81.56 324 eP P 07 33 19.6 +1.5
PKM **Peak Mountain** 81.58 322 P P 07 33 18.5 +0.3
baz=82
J26A **Sides Ranch, S** 81.70 338 P P 07 33 18.6 +0.2
baz=82
I28A **Midland** 81.73 339 P P 07 33 19.7 +1.1
baz=82
F35A **Swanville** 81.74 344 P P 07 33 18.6 +0.1
baz=82
VES **Vestal, Richgr** 81.95 323 P P 07 33 20.9 +1.1
baz=82
I27A **Quinn** 82.06 339 P P 07 33 20.9 +0.6
baz=82
NLU **North Lily Min** 82.08 330 eP P 07 33 20.9 +0.2
comp=Z,5.6nm,1.2s
K22A **Casper** 82.26 335 P P 07 33 22.2 +0.6
baz=83
R11A **Troy Canyon, C** 82.28 327 P P 07 33 22.2 +0.5
baz=83
R11A **Troy Canyon, C** 82.28 327 eP P 07 33 23.6 +1.8
comp=Z,5.5nm,1.0s
H28A **Mission Ridge** 82.31 340 P P 07 33 22.2 +0.6
baz=83
E35A **Pequot Lakes** 82.36 345 P P 07 33 22.1 +0.4
baz=83
G29A **Hoven** 82.47 341 P P 07 33 22.4 0.0
baz=83
I25A **Rochford** 82.54 338 P P 07 33 23.2 +0.2
baz=83
H27A **Howes** 82.58 339 P P 07 33 23.6 +0.6
baz=83
DUG **Dugway** 82.58 330 eP P 07 33 24.6 +1.3
DUG pmax pmax
comp=Z,5.0nm,0.8s
DUG **Dugway** 82.58 330 P P 07 33 23.5 +0.2
baz=83
DUG **Dugway** 82.58 330 eP P 07 33 24.6 +1.3
comp=Z,4.9nm,0.8s
G28A **Parade** 82.64 340 P P 07 33 23.3 0.0
baz=83
RSSD **Black Hills** 82.73 337 eP P 07 33 27.3 +3.3
RSSD pmax pmax
comp=Z,4.0nm,0.8s
RSSD **Black Hills** 82.73 337 eP P 07 33 27.3 +3.3
comp=Z,3.9nm,0.8s
D35A **Remer** 82.79 345 P P 07 33 23.3 -0.6
baz=83
C38A **Sawbill Land.** 82.83 347 P P 07 33 23.1 -1.1
baz=83
F29A **Eureka** 83.03 341 P P 07 33 25.2 -0.1
baz=83
H25A **Fruitdale** 83.04 338 P P 07 33 25.2 -0.2
baz=83
D34A **Park Rapids** 83.04 344 P P 07 33 25.4 +0.1
baz=83
C36A **Pine Crest Far** 83.18 346 P P 07 33 26.1 +0.1
baz=84
E31A **Nome** 83.19 342 P P 07 33 26.0 -0.1
baz=84
G27A **Dupree** 83.21 339 P P 07 33 26.0 -0.3
baz=84
D33A **AnnSam, Waubun** 83.24 344 P P 07 33 27.0 +0.7
baz=84
HWUT **Hardware Ranch** 83.26 331 eP P 07 33 27.0 +0.2
comp=Z,6.5nm,0.8s
F28A **McLaughlin** 83.32 340 P P 07 33 27.0 +0.3
baz=84
G26A **Maurine** 83.34 339 P P 07 33 27.0 +0.1
baz=84
E30A **Jud** 83.40 342 P P 07 33 27.6 +0.4
baz=84
BW06 **Boulder Array** 83.47 333 eP P 07 33 29.3 +1.4
comp=Z,3.4nm,1.0s
G25A **Newell** 83.50 338 P P 07 33 28.2 +0.4
baz=84
NVAR **Mina Array Bea** 83.61 325 P P 07 33 29.6 +0.9
comp=Z,1.5nm,0.8s,baz=153,slow=5.5,SNR=12
F27A **Lemmon** 83.69 339 P P 07 33 29.2 +0.5
baz=84
F26A **Lodgepole** 83.86 339 P P 07 33 30.2 +0.6
baz=84
HVU **Hansel Valley** 83.89 331 eP P 07 33 30.7 +0.7
HVU pmax pmax
comp=Z,12nm,1.1s
HVU **Hansel Valley** 83.89 331 eP P 07 33 30.7 +0.7
comp=Z,12nm,1.1s
D30A **Buchanan** 83.92 342 P P 07 33 30.6 +0.8
baz=84
ELK **Elko** 84.08 328 eP P 07 33 31.2 +0.1
ELK pmax pmax
comp=Z,6.0nm,1.1s
ELK **Elko** 84.08 328 eP P 07 33 31.2 +0.1
comp=Z,6.2nm,1.1s
TOA0 **Torodi Ar. Sit** 84.10 70 eP P 07 33 30.9 -0.6
TORD **Torodi Ar. Bea** 84.10 70 P P 07 33 31.5 +0.1
comp=Z,11nm,0.8s,baz=258,slow=4.5,SNR=60
TORD pP pP 07 33 39.4 -0.6
comp=Z,19nm,0.9s,baz=247,slow=4.6,SNR=27
D29A **Pettibone, Tap** 84.10 341 P P 07 33 31.1 +0.4
baz=84
F25A **Bowman** 84.17 339 P P 07 33 31.3 +0.2
baz=84
B34A **Aery, Baudette** 84.25 345 P P 07 33 31.1 -0.3
baz=85
C31A **Landman Farms,** 84.30 343 P P 07 33 31.5 -0.2
baz=85
CMB **Columbia Colle** 84.31 324 eP P 07 33 33.4 +1.3
CMB pmax pmax
comp=Z,5.0nm,1.1s
CMB **Columbia Colle** 84.31 324 eP P 07 33 33.4 +1.3
comp=Z,5.3nm,1.1s
AGMN **Agassiz Nation** 84.34 344 P P 07 33 32.2 +0.3
baz=85
C30A **Mose, Pekin** 84.41 342 P P 07 33 32.9 +0.7
baz=85
REDW **Red Top Meadow** 84.47 333 eP P 07 33 33.2 +0.3
comp=Z,18nm,1.6s
B32A **Ashes, Strandq** 84.58 344 P P 07 33 32.8 -0.3
baz=85
LOHW **Long Hollow** 84.58 333 eP P 07 33 34.5 +0.9
comp=Z,2.4nm,0.8s
TPAW **Teton Pass** 84.61 333 eP P 07 33 34.5 +0.7
comp=Z,9.0nm,1.2s
E25A **Miller Ranch,** 84.67 339 P P 07 33 34.1 +0.4
baz=85
D27A **Center** 84.67 340 P P 07 33 34.3 +0.6
baz=85
MDND **Maddock** 84.83 342 P P 07 33 34.9 +0.5
baz=85
MDND **Maddock** 84.83 342 eP P 07 33 34.6 +0.2
comp=Z,22nm,0.7s
D26A **Manning** 84.86 340 P P 07 33 34.8 +0.2
baz=85
B31A **Greenbush Farm** 84.87 343 P P 07 33 34.6 +0.1
baz=85
C28A **Hausauer Farms** 84.91 341 P P 07 33 34.9 0.0
baz=85
IMW **Indian Meadow** 84.95 333 eP P 07 33 36.3 +0.8
comp=Z,5.1nm,1.0s
FLWY **Flagg Ranch** 85.02 333 eP P 07 33 36.8 +1.1
comp=Z,14nm,1.3s
B30A **Myrvik Farm, E** 85.06 343 P P 07 33 35.6 0.0
baz=85
C27A **Sayler Ranch,** 85.22 341 P P 07 33 37.0 +0.6
baz=86
D25A **Fairfield** 85.23 339 P P 07 33 37.2 +0.7
baz=86
B29A **Wagenman Farm,** 85.33 342 P P 07 33 37.8 +0.9
baz=86
RLMT **Red Lodge** 85.39 335 P P 07 33 38.2 +0.6
baz=86
B28A **Dugan Ranch, T** 85.58 342 P P 07 33 38.8 +0.6
baz=86
YMR **Madison River** 85.62 333 eP P 07 33 39.6 +0.9
comp=Z,14nm,0.9s
A29A **Manning Farm,** 85.72 342 P P 07 33 39.4 +0.5
baz=86
NSHM **Saint Helena R** 85.80 323 eP P 07 33 41.3 +1.8
HLID **Hailey** 86.05 331 P P 07 33 41.4 +0.6
baz=86
HLID **Hailey** 86.05 331 eP P 07 33 42.2 +1.4
comp=Z,9.1nm,1.4s
MCMT **McKenzie Canyo** 86.47 332 eP P 07 33 43.8 +0.8
DGMT **Dagmar** 86.67 339 P P 07 33 44.1 +0.6
baz=87
DGMT **Dagmar** 86.67 339 eP P 07 33 43.6 +0.1
comp=Z,33nm,1.1s
BOZ **Bozeman (W)** 86.70 333 P P 07 33 44.4 +0.4
baz=87
O03D **Paynes Creek** 86.76 324 P P 07 33 44.6 +0.3
baz=87
DLMT **Dillon** 86.83 333 eP P 07 33 45.1 +0.5
comp=Z,15nm,1.4s
WVOR **Wild Horse Val** 86.95 327 eP P 07 33 46.2 +1.0
WVOR pmax pmax
comp=Z,12nm,1.5s
WVOR **Wild Horse Val** 86.95 327 eP P 07 33 46.2 +1.0
comp=Z,12nm,1.5s
LRM **Limekiln Ridge** 87.16 333 eP P 07 33 47.0 +0.7
comp=Z,24nm,0.8s
MOD **Modoc** 87.29 326 eP P 07 33 47.8 +0.9
comp=Z,2.2nm,0.5s
WDC **Whiskeytown Da** 87.34 324 eP P 07 33 48.3 +1.4
WDC pmax pmax
comp=Z,4.0nm,0.7s
WDC **Whiskeytown Da** 87.34 324 eP P 07 33 48.3 +1.4
comp=Z,4.2nm,0.7s
J08A **Circle Bar Ran** 87.61 328 eP P 07 33 50.0 +1.7
M04C **Macdoel** 87.92 325 P P 07 33 49.5 -0.4
baz=88
AFI **Afiamalu** 90.30 253 LR LR 08 04 53.9
comp=Z,148nm,19.1s,baz=102,slow=29
ESDC **Sonseca Array** 96.35 46 LR LR 08 16 18.2
comp=Z,70nm,19.6s,baz=285,slow=34
ASAR **Alice Springs** 117.86 207 PKP PKPdf 07 39 45.5 -1.7
comp=Z,0.5nm,0.8s,baz=169,slow=2.7,SNR=5.1
WRA **Warramunga Arr** 121.05 209 PKP PKPdf 07 39 52.7 -0.7
comp=Z,1.4nm,0.9s,baz=156,slow=1.9,SNR=5.7
WRA pPKP pPKPdf 07 40 00.8 -1.4
comp=Z,1.6nm,0.9s,baz=164,slow=1.6,SNR=4.9
WRAB **Tennant Creek** 121.06 209 ePKIKP PKPdf 07 39 53.2 -0.2
WRAB **Tennant Creek** 121.06 209 ePKPdf PKPdf 07 39 53.2 -0.2
BRTR **Keskin Array B** 121.67 61 PKP PKPdf 07 39 52.5 -1.6
comp=Z,0.9nm,0.7s,baz=264,slow=2.5,SNR=4.7
AKASG **Malin Array Be** 121.97 47 PKP PKPdf 07 39 53.5 -0.5
comp=Z,0.8nm,0.5s,baz=260,slow=2.6,SNR=3.0
ARCES **ARCESS Array B** 123.71 25 PKP PKPdf 07 39 56.1 -0.8
comp=Z,4.7nm,1.0s,baz=251,slow=2.8,SNR=3.4
H11S2 **WAKE ISLAND Hyl** 125.78 269 T T 09 58 55.9
baz=118,slow=74,SNR=53
H11S1 **WAKE ISLAND Hyl** 125.79 269 T T 09 58 59.8
baz=118,slow=74,SNR=30
H11S3 **WAKE ISLAND Hyl** 125.79 269 T T 09 58 57.3
baz=118,slow=74,SNR=22
H11N3 **WAKE ISLAND Hyl** 126.18 271 T T 09 59 27.5
baz=142,slow=71,SNR=3.8
H11N1 **WAKE ISLAND Hyl** 126.19 271 T T 09 59 28.2
baz=142,slow=71,SNR=2.9
H11N2 **WAKE ISLAND Hyl** 126.20 271 T T 09 59 34.3
baz=142,slow=71,SNR=10
KLMR **Klimovskoe** 129.14 36 ePKIKP PKPdf 07 40 07.0 -0.4
KLMR pmax pmax
comp=Z,13nm,1.3s
ABKAR **Akbulak array** 141.48 51 ePKPdf PKPdf 07 40 31.6 +0.8
BRVK **Borovoye** 146.97 43 ePKP2 PKPbc 07 40 42.6 +0.4
BRVK **Borovoye** 146.97 43 ePKPbc PKPbc 07 40 42.6 +0.4
BVAR **Borovoye Array** 147.04 43 PKPbc PKPbc 07 40 41.9 -0.6
comp=Z,4.4nm,0.6s,baz=267,slow=3.0,SNR=19
PSI **Prapat** 148.15 163 PKPbc PKPdf 07 40 45.1 +1.5
comp=Z,6.9nm,0.8s,baz=208,slow=10,SNR=4.8
KKAR **Karatay Array** 149.39 61 ePKP2 PKPbc 07 40 48.8 -0.2
KKAR **Karatay Array** 149.39 61 ePKPbc PKPbc 07 40 48.8 -0.2
IPM **Ipoh** 150.25 166 ePKPbc PKPbc 07 40 51.5 -0.5
EKS2 **Erkin-Say** 151.82 61 ePKIKP PKPbc 07 40 55.3 +0.4
EKS2 **Erkin-Say** 151.82 61 ePKPbc PKPbc 07 40 55.3 +0.4
AAK **Ala-Archa** 152.35 61 PKPbc PKPbc 07 40 57.1 +1.0
comp=Z,8.2nm,0.8s,baz=201,slow=3.0,SNR=19
AAK **Ala-Archa** 152.35 61 ePKIKP PKPbc 07 40 56.5 +0.3
AAK **Ala-Archa** 152.35 61 ePKPbc PKPbc 07 40 56.5 +0.3
KURBB **Kurchatov Arra** 152.63 43 PKP PKPdf 07 40 50.0 +0.8
comp=Z,0.4nm,0.5s,baz=305,slow=2.2,SNR=6.1
KURBB PKPbc PKPbc 07 40 56.4 +0.1
comp=Z,2.8nm,0.7s,baz=297,slow=2.8,SNR=25
KURK **Kurchatov** 152.64 43 PKIKP PKPdf 07 40 50.0 +0.8
KURK 07 40 56.4
KURK **Kurchatov** 152.64 43 PKP PKPdf 07 40 50.0 +0.8
KURK PKPbc PKPbc 07 40 56.4 +0.1
NVS **Novosibirsk** 152.66 32 ⇓ePKIKP PKPbc 07 40 55.8 -0.4
NVS pmax pmax
comp=Z,16nm,1.2s
NVS pmax pmax
comp=E,5.0nm,1.1s
TKM2 **Tokmak 2** 153.11 60 ePKIKP PKPbc 07 40 57.8 -0.1
TKM2 **Tokmak 2** 153.11 60 ePKPbc PKPbc 07 40 57.8 -0.1
KSH **Kashi** 153.75 68 ePKPbc PKPdf 07 40 48.1 -3.3
KSH epPKP PKPbc 07 40 58.0 -1.3
KSH ePP PP 07 44 43.2 -3.9
KSH SKS SKSdf 07 47 51.1 -5.6
KSH SKKS SKKSac 07 51 24.3 -11
KSH PPMZ
comp=E,170nm,9.7s
KSH LN
comp=E,240nm,8.4s
KSH LE
comp=E,120nm,4.9s
KSH LZ
comp=E,170nm,5.9s
ZALV **Zalesovo Beam** 153.94 32 PKP PKPdf 07 40 51.3 +0.2
comp=E,0.7nm,0.3s,baz=267,slow=3.0,SNR=4.7
ZALV PKPbc PKPbc 07 40 58.9 -0.2
comp=E,6.5nm,0.7s,baz=290,slow=2.6,SNR=17
ZALV PKPab PKPab 07 41 11.0 -1.4
comp=E,9.6nm,0.7s,baz=294,slow=3.9,SNR=7.4
BOD **Bodaibo** 155.50 352 ePKP2 PKPab 07 41 17.8 -1.1
BOD pmax pmax
comp=Z,5.0nm,1.2s
MKAR **Makanchi Array** 156.54 48 PKP PKPdf 07 40 55.4 +0.5

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,1.0nm,0.8s,baz=280,slow=3.6,SNR=7.5 | | | | | | |
| MKAR | | | | PKPbc | PKPbc | 07 41 04.3 | |
| | comp=Z,1.4nm,0.8s,baz=329,slow=1.4,SNR=9.3 | | | | | | |
| MKAR | | | | PKPab | PKPab | 07 41 22.1 | -1.8 |
| | comp=Z,2.2nm,0.6s,baz=300,slow=4.0,SNR=12 | | | | | | |
| MDJ | Mudanjiang | 160.03 | 310 | PKP | PKPdf | 07 41 00.2 | +1.1 |
| CMAR | Chiang Mai Arr | 162.84 | 150 | PKP | PKPdf | 07 41 03.5 | +0.7 |
| | comp=Z,1.7nm,0.3s,baz=258,slow=3.6,SNR=4.5 | | | | | | |
| SONM | Songino Array | 165.80 | 4 | PKPab | PKPab | 07 42 04.0 | -0.2 |
| | comp=Z,0.3nm,0.3s,baz=354,slow=5.8,SNR=4.1 | | | | | | |
| KMI | Kunming | 170.35 | 151 | PKP | PKPdf | 07 41 09.2 | +0.5 |
| GTA | Gaotai | 171.29 | 46 | ePKP | PKPdf | 07 41 10.5 | +1.8 |
| GTA | | | | pPKP | pPKPdf | 07 41 21.1 | +3.6 |
| GTA | | | | sPKP | | 07 41 25.0 | |
| HHC | Hu-ho-hao-te | 172.28 | 339 | ePKP | PKPdf | 07 41 07.0 | -2.1 |
| HHC | | | | pPKP | pPKPdf | 07 41 18.9 | +1.0 |
| HHC | | | | PP | PP | 07 46 27.7 | +3.9 |
| HHC | | | | SKS | SKSdf | 07 48 10.1 | -0.5 |
| HHC | | | | PPMZ | | | |
| | comp=Z,93nm,8.8s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,91nm,18.4s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,170nm,18.6s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,100nm,18.6s | | | | | | |
| GYA | Guiyang | 172.73 | 171 | ePKP | PKPdf | 07 41 10.2 | +0.5 |
| GYA | | | | PKS | PKSdf | 07 44 40.0 | -2.2 |
| GYA | | | | PP | PP | 07 46 27.9 | +2.1 |
| GYA | | | | PPMZ | | | |
| | comp=Z,120nm,8.4s | | | | | | |
| CD2 | Chengdu | 175.50 | 127 | PKP | PKPdf | 07 41 10.6 | +0.2 |
| CD2 | | | | pPKP | pPKPdf | 07 41 16.3 | -3.0 |
| CD2 | | | | sPKP | | 07 41 18.4 | |
| CD2 | | | | PP | PP | 07 46 40.6 | +0.2 |
| CD2 | | | | SKKS | | 07 53 25.8 | |
| CD2 | | | | PPMZ | | | |
| | comp=Z,120nm,5.4s | | | | | | |
| LZH | Lanzhou | 175.84 | 53 | ePKP | PKPdf | 07 41 10.8 | +0.3 |
| LZH | | | | pPKP | pPKPdf | 07 41 13.8 | -5.6 |

*IDC 08 07:40:58.8±1.4, 19.°16N×122.°12E, h0km, mb3.6/4, mb1 3.8/5, mb1mx3.5/39, mbtmp3.6/5, ML3.9/1, MS3.9/3, Ms1 3.9/3, ms1mx3.2/35, Error ellipse: s-maj=40.8km s-min=25.1km az=68.0*

*ISCJB 08 07:41:02.9±1.0, 19.°25N±0.°09×122.°2E±0.°2, h44km, mb3.6/4, MS3.9/3, Error ellipse: s-maj=26.1km s-min=13.3km az=0.3*

**ISC 08 07:41:04.6±1.2, 19.°30N±0.°09×122.°2E±0.°2, h44km, n15, σ1.s80/7, mb3.8/4, MS3.9/3, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CVP | Callao Caves | 1.63 | 193 | eP | Pn | 07 41 29.4 | -1.5 |
| CVP | | | | eS | Sn | 07 41 53.5 | +2.9 |
| KSRS | Korea Array | 18.76 | 14 | P | Pn | 07 45 21.8 | +1.0 |
| | 0.3nm,0.3s,baz=193,slow=11,SNR=3.2 | | | | | | |
| CMAR | Chiang Mai Arr | 22.03 | 272 | P | P | 07 45 54.8 | -0.8 |
| | 1.2nm,0.3s,baz=62,slow=9.5,SNR=3.8 | | | | | | |
| BATI | Baumata | 29.36 | 177 | LR | LR | 08 02 02.7 | |
| | comp=Z,168nm,18.3s,baz=207,slow=43 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.00 | 84 | T | T | 08 33 58.3 | |
| | baz=278,slow=75,SNR=81 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.01 | 84 | T | T | 08 33 54.1 | |
| | baz=278,slow=75,SNR=12 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.02 | 84 | T | T | 08 33 54.3 | |
| | baz=278,slow=75,SNR=55 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 42.02 | 82 | T | T | 08 34 08.5 | |
| | baz=277,slow=75,SNR=82 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 42.02 | 82 | T | T | 08 33 55.0 | |
| | baz=277,slow=75,SNR=11 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 42.04 | 82 | T | T | 08 33 57.8 | |
| | baz=277,slow=75,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 42.58 | 319 | P | P | 07 48 56.4 | +0.2 |
| | 1.8nm,0.8s,baz=113,slow=9.3,SNR=9.3 | | | | | | |
| ASAR | Alice Springs | 44.20 | 165 | P | P | 07 49 08.8 | -0.7 |
| | 0.4nm,0.7s,baz=350,slow=7.7,SNR=3.1 | | | | | | |
| KURBB | Kurchatov Arra | 46.50 | 323 | P | P | 07 49 27.9 | +0.5 |
| | 0.8nm,0.8s,baz=119,slow=7.7,SNR=7.5 | | | | | | |
| ARCES | ARCESS Array B | 74.41 | 339 | LR | LR | 08 29 23.2 | |
| | comp=Z,96nm,19.1s,baz=261,slow=39 | | | | | | |
| NOA | NORSAR Array B | 82.97 | 333 | LR | LR | 08 34 07.5 | |
| | comp=Z,51nm,18.4s,baz=210,slow=38 | | | | | | |

*GUC 08 07:49:41.6±0.8, 34.°99S×72.°25W, h41km±5km, ML3.6*

**ISC 08 07:49:39.7±2.7, 34.°92S±0.°06×72.°34W±0.°10, h7km±15km, n16, σ1.s59/23, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TALC | Talca | 0.75 | 130 | eP | Pg | 07 49 54.7 | +0.5 |
| TALC | | | | eS | Sg | 07 50 04.1 | +0.1 |
| NICH | Los Niches | 0.92 | 96 | eP | Pb | 07 49 57.4 | -0.5 |
| NICH | | | | eS | Sb | 07 50 09.5 | -0.8 |
| NICH | | | | AML | AML | 07 50 13.6 | |
| | comp=N,8μm,0.2s | | | | | | |
| COCH | Cobquecura | 1.27 | 197 | eP | Pn | 07 50 03.0 | -0.7 |
| COCH | | | | eS | Sb | 07 50 19.6 | -0.7 |
| COCH | | | | AML | AML | 07 50 24.6 | |
| | comp=E,926nm,0.5s | | | | | | |
| CCHI | Chillan | 1.70 | 173 | eP | Pn | 07 50 10.5 | +0.9 |
| CCHI | | | | eS | Sn | 07 50 32.0 | +0.4 |
| CCHI | | | | AML | AML | 07 50 38.3 | |
| | comp=E,1μm,0.5s | | | | | | |
| ANTU | Antumapu | 1.95 | 47 | eP | Pn | 07 50 13.2 | 0.0 |
| ANTU | | | | eS | Sn | 07 50 37.3 | -0.6 |
| ANTU | | | | AML | AML | 07 50 44.3 | |
| | comp=E,607nm,0.4s | | | | | | |
| LACH | Col Las Americ | 2.09 | 46 | eP | Pn | 07 50 14.9 | -0.3 |
| LACH | | | | eS | Sn | 07 50 40.8 | -0.7 |
| CLCH | Cerro Calan | 2.13 | 45 | eP | Pn | 07 50 15.7 | +0.1 |
| CLCH | | | | eS | Sn | 07 50 41.8 | -0.6 |
| CLCH | | | | AML | AML | 07 50 49.8 | |
| | comp=N,528nm,2.0s | | | | | | |
| PEL | Peldehue | 2.24 | 38 | eP | Pn | 07 50 17.6 | +0.5 |
| PEL | | | | eS | Sn | 07 50 44.9 | -0.1 |
| PEL | | | | AML | AML | 07 50 51.8 | |
| | comp=N,611nm,0.3s | | | | | | |
| AAGR | Agrelo | 3.44 | 59 | eP | Pn | 07 50 37.3 | +3.5 |
| ARCO | CERRO ARCO | 3.51 | 55 | eP | Pn | 07 50 38.1 | +3.4 |
| AUSP | Uspallata | 3.64 | 43 | eP | Pn | 07 50 38.0 | +1.3 |
| AUSP | | | | eS | Sn | 07 51 25.6 | +5.6 |
| ASAL | Salagasta | 3.73 | 53 | eP | Pn | 07 50 40.8 | +3.1 |
| ASAL | | | | eS | Sb | 07 51 28.6 | -2.7 |
| RTLS | Leoncito | 4.02 | 40 | eP | Pn | 07 50 43.1 | +1.2 |
| CFAA | Coronel Fontan | 4.76 | 47 | eP | Pn | 07 50 53.0 | +1.1 |
| AMOG | MOGNA | 5.12 | 40 | eP | Pn | 07 50 56.1 | -0.7 |
| AVFE | Valle Fertil | 5.91 | 45 | eP | Pn | 07 51 06.8 | -0.8 |
| AVFE | | | | AML | AML | 07 52 29.5 | |
| | comp=Z,8.7nm,0.6s | | | | | | |

**IDC 08 08:01:33.8±2.0, 5.°15N×124.°93E, h0km, mb3.4/4, mb1 3.6/4, mb1mx3.4/32, mbtmp3.4/4, Error ellipse: s-maj=141.6km s-min=24.8km az=68.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FITZ | Fitzroy Crossi | 23.12 | 178 | P | P | 08 06 43.2 | +1.6 |
| | 1.4nm,0.7s,baz=20,slow=10.0,SNR=6.3 | | | | | | |
| WRA | Warramunga Arr | 26.60 | 160 | P | P | 08 07 13.3 | -0.8 |
| | 0.5nm,0.7s,baz=329,slow=11,SNR=3.3 | | | | | | |
| ASAR | Alice Springs | 29.95 | 163 | P | P | 08 07 43.5 | -0.5 |
| | 0.2nm,0.3s,baz=336,slow=7.4,SNR=3.6 | | | | | | |
| MKAR | Makanchi Array | 55.37 | 326 | P | P | 08 11 09.8 | -0.1 |
| | 0.2nm,0.3s,baz=121,slow=7.8,SNR=5.7 | | | | | | |

*NNC 08 08:29:23.9±2.1, 38.°37N×69.°94E, h164km±13km, mb3.3, mpv4.2, Error ellipse: s-maj=23.7km s-min=12.8km az=165.0*

*IDC 08 08:29:25.7±1.1, 39.°02N×70.°31E, h0km, mb3.8/9, mb1 3.9/17, mb1mx3.8/52, mbtmp3.8/17, ML3.7/6, Error ellipse: s-maj=18.5km s-min=10.7km az=152.0*

*KRNET 08 08:29:29.1±0.1, 39.°35N×70.°16E, mb4.2*

*ISCJB 08 08:29:31.4±0.4, 39.°36N±0.°04×69.°97E±0.°04, h35km, mb3.9/11, Error ellipse: s-maj=5.8km s-min=4.0km az=157.0*

*NEIC 08 08:29:31.7±0.8, 39.°24N×70.°12E, h35km, mb4.4/2, Error ellipse: s-maj=14.1km s-min=11.0km az=162.0*

**ISC 08 08:29:32.6±0.7, 39.°34N±0.°06×70.°10E±0.°04, h35km, n55, σ2.s19/58, mb3.9/11, 14C-16D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BTK | Batken | 0.90 | 38 | ⇓iP | Pn | 08 29 45.8 | -3.1 |
| | baz=36 | | | | | | |
| BTK | | | | ⇓iS | Sn | 08 29 58.7 | -2.0 |
| | baz=36 | | | | | | |
| DZET | Dzherino | 1.13 | 242 | P | Pn | 08 29 49.9 | -2.0 |
| | 110nm,0.4s | | | | | | |
| DZET | | | | ⇓S | Sn | 08 30 10.3 | +4.0 |
| | 656nm,0.4s | | | | | | |
| SFK | Sufi-Kurgan | 2.71 | 75 | ⇑P | Pn | 08 30 15.6 | +1.8 |
| | 51nm,0.4s | | | | | | |
| SFK | | | | ⇑S | Sn | 08 30 54.4 | +8.9 |
| | 621nm,1.0s | | | | | | |
| SFK | Sufi-Kurgan | 2.71 | 75 | ⇑iP | Pn | 08 30 15.6 | +1.8 |
| | baz=75 | | | | | | |
| SFK | | | | ⇑iS | Sn | 08 30 50.4 | +4.9 |
| | baz=75 | | | | | | |
| ARK | Arkit | 2.83 | 29 | ⇓iP | Pn | 08 30 18.0 | +2.6 |
| | baz=29 | | | | | | |
| ARK | | | | ⇓iS | Sn | 08 30 53.6 | +5.2 |
| | baz=29 | | | | | | |
| MNAS | Manas | 3.63 | 29 | ⇑P | Pn | 08 30 28.2 | +1.9 |
| | 12nm,0.4s | | | | | | |
| MNAS | | | | ⇑S | Sn | 08 31 18.3 | +10 |
| | 53nm,0.2s | | | | | | |
| MNAS | Manas | 3.63 | 29 | ⇓iP | Pn | 08 30 28.3 | +1.9 |
| | baz=29 | | | | | | |
| MNAS | | | | ⇓iS | Sn | 08 31 14.7 | +6.6 |
| | baz=29 | | | | | | |
| KK31 | Karatay Array | 3.77 | 5 | ⇓P | Pn | 08 30 31.0 | +2.8 |
| | 7.9nm,0.4s,baz=190,slow=14,SNR=138 | | | | | | |
| KK31 | | | | ⇑S | Sn | 08 31 30.9 | +20 |
| | 50nm,0.5s,baz=186,slow=31,SNR=7.3 | | | | | | |
| KKAR | Karatay Array | 3.77 | 5 | ePn | Pn | 08 30 30.8 | +2.6 |
| KKAR | | | | eS | Sn | 08 31 30.9 | +20 |
| AML | Almayashu | 3.90 | 43 | P | Pn | 08 30 32.6 | +2.3 |
| | SNR=13 | | | | | | |
| ARLS | Aral | 4.08 | 51 | ⇓iP | Pn | 08 30 33.6 | +1.0 |
| | baz=50 | | | | | | |
| ARLS | | | | ⇓iS | Sn | 08 31 22.6 | +3.4 |
| | baz=50 | | | | | | |
| EKS2 | Erkin-Say | 4.33 | 39 | P | Pn | 08 30 38.7 | +2.8 |
| | SNR=9.7 | | | | | | |
| EKS2 | Erkin-Say | 4.33 | 39 | ePn | Pn | 08 30 37.4 | +1.5 |
| EKS | Erkin-Say | 4.34 | 39 | ⇓iP | Pn | 08 30 38.1 | +2.0 |
| | baz=39 | | | | | | |
| EKS | | | | ⇓iS | Sn | 08 31 32.8 | +7.4 |
| | baz=39 | | | | | | |
| UCH | Uchtor | 4.42 | 48 | P | Pn | 08 30 38.7 | +1.2 |
| | SNR=14 | | | | | | |
| AAK | Ala-Archa | 4.67 | 44 | ⇑P | Pn | 08 30 42.1 | +1.3 |
| AAK | | | | ⇑S | Sn | 08 31 55.4 | +21 |
| | 84nm,0.8s | | | | | | |
| AAK | Ala-Archa | 4.67 | 44 | Pn | Pn | 08 30 42.1 | +1.3 |
| | 3.8nm,0.3s,baz=196,slow=7.5,SNR=23 | | | | | | |
| AAK | | | | Sn | Sn | 08 31 40.3 | +6.5 |
| | 5.4nm,0.3s,baz=263,slow=22,SNR=4.6 | | | | | | |
| AAK | | | | Lg | Lg | 08 31 56.0 | |
| | 6.4nm,0.3s,baz=343,slow=22,SNR=3.7 | | | | | | |
| AAK | Ala-Archa | 4.67 | 44 | P | Pn | 08 30 42.2 | +1.4 |
| | SNR=19 | | | | | | |
| KZA | Kyzart | 4.77 | 53 | P | Pn | 08 30 46.0 | +3.7 |
| | SNR=20 | | | | | | |
| KBK | Karagaybulak | 4.94 | 46 | P | Pn | 08 30 46.5 | +2.1 |
| | SNR=14 | | | | | | |
| NRN | Naryn | 4.96 | 63 | ⇑iP | Pn | 08 30 46.0 | +1.1 |
| | baz=63 | | | | | | |
| NRN | | | | ⇑eS | Sn | 08 31 43.9 | +2.7 |
| | baz=63 | | | | | | |
| CHMS | Chumysh | 5.06 | 42 | P | Pn | 08 30 47.6 | +1.6 |
| | SNR=7.0 | | | | | | |
| USP | Ospenovka | 5.13 | 39 | P | Pn | 08 30 49.4 | +2.5 |
| | SNR=9.0 | | | | | | |
| TKM2 | Tokmak 2 | 5.48 | 47 | ⇓P | Pn | 08 30 53.0 | +1.2 |
| | 19nm,0.3s | | | | | | |
| TKM2 | | | | ⇓S | Sn | 08 32 19.1 | +25 |
| | 26nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 5.48 | 47 | P | Pn | 08 30 53.2 | +1.3 |
| | SNR=32 | | | | | | |
| TKM2 | Tokmak 2 | 5.48 | 47 | ePn | Pn | 08 30 52.8 | +1.0 |
| | 42nm,0.4s | | | | | | |
| CEP | Cherat | 5.70 | 165 | P | Pn | 08 30 57.5 | +2.7 |
| CHCP | Chirah Chowk | 6.22 | 155 | P | Pn | 08 31 03.0 | +1.1 |
| THW | Thamme Wali | 6.67 | 168 | P | Pn | 08 31 09.9 | +1.8 |
| PDGK | Podgornoye | 8.10 | 58 | ⇓P | Pn | 08 31 29.6 | +2.0 |
| | 6.8nm,1.0s | | | | | | |
| PDGK | | | | ⇓S | Sn | 08 33 43.2 | +45 |
| | 18nm,0.9s | | | | | | |
| OTUK | Ortayu | 9.04 | 10 | ⇑P | Pn | 08 31 43.1 | +2.6 |
| | 3.5nm,0.6s | | | | | | |
| OTUK | | | | ⇑S | Sn | 08 34 17.1 | +56 |
| | 38nm,1.0s | | | | | | |
| GEYT | Alibeck | 9.48 | 265 | Pn | Pn | 08 31 47.5 | +0.9 |
| | 1.0nm,0.3s,baz=102,slow=13,SNR=2.6 | | | | | | |
| GEYT | | | | Sn | Sn | 08 33 33.8 | +1.8 |
| | 1.2nm,0.3s,baz=112,slow=15,SNR=6.6 | | | | | | |
| MKAR | Makanchi Array | 11.61 | 46 | Pn | Pn | 08 32 16.3 | +0.7 |
| | 0.2nm,0.3s,baz=232,slow=13,SNR=7.6 | | | | | | |
| MKAR | | | | Sn | Sn | 08 34 20.7 | -3.2 |
| | baz=235,slow=14,SNR=2.1 | | | | | | |
| MKAR | | | | Lg | Lg | 08 35 34.0 | |
| | 0.0nm,0.3s,baz=246,slow=24,SNR=3.5 | | | | | | |
| AB31 | Akbulak array | 12.28 | 327 | P | Pn | 08 32 23.7 | -1.1 |
| | 3.3nm,0.3s,baz=149,slow=10,SNR=141 | | | | | | |
| AB31 | | | | S | Sn | 08 34 36.1 | -4.3 |
| | 2.4nm,0.4s,baz=155,slow=22,SNR=6.8 | | | | | | |
| ABKAR | Akbulak array | 12.28 | 327 | ePn | Pn | 08 32 23.8 | -1.1 |
| | 8.0nm,0.4s | | | | | | |
| ABKAR | | | | eSn | Sn | 08 34 36.4 | -4.0 |
| KURBB | Kurchatov Arra | 12.75 | 25 | Pn | Pn | 08 32 28.6 | -2.6 |
| | 0.0nm,0.3s,baz=219,slow=12,SNR=2.9 | | | | | | |
| KURBB | | | | Lg | Lg | 08 36 15.1 | |
| | 0.1nm,0.3s,baz=207,slow=28,SNR=6.1 | | | | | | |
| KURK | Kurchatov | 12.86 | 25 | Pn | Pn | 08 32 28.6 | -4.1 |
| KURK | | | | Lg | Lg | 08 36 15.1 | |
| BVAR | Borovoye Array | 13.69 | 1 | Pn | Pn | 08 32 41.7 | -2.2 |
| | 0.3nm,0.3s,baz=165,slow=14,SNR=4.7 | | | | | | |
| BVAR | | | | Lg | Lg | 08 36 49.6 | |
| | 0.2nm,0.3s,baz=198,slow=36,SNR=3.1 | | | | | | |
| BRVK | Borovoye | 13.72 | 0 | ePn | Pn | 08 32 43.7 | -0.7 |
| AKTO | Aktyubinsk | 13.99 | 326 | ⇑P | Pn | 08 32 47.2 | -1.0 |
| | 4.4nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 13.99 | 326 | Pn | Pn | 08 32 47.5 | -0.6 |
| | 0.5nm,0.3s,baz=153,slow=17,SNR=6.5 | | | | | | |
| AKTO | | | | Sn | Sn | 08 35 21.8 | -0.3 |
| | 0.8nm,0.3s,baz=286,slow=23,SNR=6.4 | | | | | | |
| ZALV | Zalesovo Beam | 17.71 | 30 | P | Pn | 08 33 35.5 | -0.6 |
| | 0.7nm,0.3s,baz=220,slow=11,SNR=8.5 | | | | | | |
| ARU | Arti | 18.72 | 340 | P | P | 08 33 48.4 | +0.5 |
| | 0.0nm,0.3s,baz=142,slow=19,SNR=1.6 | | | | | | |
| BRTR | Keskin Array B | 28.00 | 283 | P | P | 08 35 20.9 | +0.6 |
| | 1.0nm,0.7s,baz=89,slow=6.0,SNR=4.7 | | | | | | |
| FINES | FINESS Array B | 34.75 | 324 | P | P | 08 36 20.7 | +1.7 |
| | 1.6nm,0.7s,baz=123,slow=9.4,SNR=4.1 | | | | | | |
| ARCES | ARCESS Array B | 38.25 | 336 | P | P | 08 36 49.1 | +0.3 |
| | 1.6nm,0.8s,baz=95,slow=6.6,SNR=3.7 | | | | | | |
| NB2 | NORSAR Subarra | 41.70 | 321 | P | P | 08 37 23.1 | +5.5 |
| | comp=Z,1.2nm,0.5s,baz=94,slow=8.6 | | | | | | |
| NOA | NORSAR Array B | 41.70 | 321 | P | P | 08 37 18.6 | +0.9 |
| | comp=Z,2.0nm,0.8s,baz=94,slow=8.2,SNR=2.5 | | | | | | |
| ESDC | Sonseca Array | 55.54 | 296 | P | P | 08 39 05.4 | +1.1 |
| | comp=Z,0.6nm,0.5s,baz=69,slow=7.7,SNR=3.7 | | | | | | |
| TORD | Torodi Ar. Bea | 65.12 | 267 | P | P | 08 40 09.4 | -0.6 |
| | comp=Z,0.8nm,0.8s,baz=52,slow=5.5,SNR=4.9 | | | | | | |
| ILAR | Eielson Array | 72.24 | 16 | P | P | 08 40 53.0 | -0.7 |
| | comp=Z,0.3nm,0.8s,baz=322,slow=5.7,SNR=4.2 | | | | | | |
| YKA | Yellowknife Ar | 78.44 | 2 | P | P | 08 41 28.5 | -0.8 |
| | comp=Z,1.6nm,0.8s,baz=352,slow=6.3,SNR=3.4 | | | | | | |
| WRA | Warramunga Arr | 84.09 | 122 | P | P | 08 41 56.9 | -3.0 |
| | comp=Z,0.4nm,0.6s,baz=326,slow=4.8,SNR=4.0 | | | | | | |
| WRAB | Tennant Creek | 84.09 | 122 | eP | P | 08 41 57.4 | -2.5 |
| | comp=Z,3.6nm,1.2s | | | | | | |
| RSSD | Black Hills | 96.75 | 356 | eP | P | 08 42 59.6 | 0.0 |
| | comp=Z,1.7nm,1.0s | | | | | | |

*IDC 08 08:30:26.8±0.7, 62.°64N×125.°26W, h0km, mb3.4/4, mb1 3.8/9, mb1mx3.6/45, mbtmp3.5/9, ML3.6/5, Error ellipse: s-maj=11.2km s-min=7.6km az=168.0*

*PGC 08 08:30:28.0±0.0, 62.°62N×125.°16W, h5km, ML4.1/22, Mw3.9, 224km Wnw of Fort Simpson, Nt Northwest Territories, Canada*

**ISC 08 08:30:25.8±0.6, 62.°66N±0.°03×125.°12W±0.°03, h10km, n72, σ2.s41/116, mb3.3/3, Northwest Territories**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FNBB | Fort Nelson | 3.92 | 164 | Pn | Pn | 08 31 27.3 | +1.3 |
| FNBB | | | | Sn | Sn | 08 32 17.0 | +4.9 |
| FNBB | | | | Sg | Sg | 08 32 28.2 | -3.4 |
| CLVN | Colville Lake | 4.42 | 355 | Pn | Pn | 08 31 34.9 | +2.1 |
| CLVN | | | | Sn | Sn | 08 32 25.5 | +1.3 |
| CLVN | | | | Sg | Sg | 08 32 47.9 | +0.4 |
| YKR1 | Yellowknife Ar | 4.71 | 88 | Pn | Pn | 08 31 38.7 | +1.9 |
| YKR1 | | | | Pg | Pg | 08 31 54.7 | -1.2 |
| YKR1 | | | | Sn | Sn | 08 32 32.4 | +1.0 |
| YKR1 | | | | Sg | Sg | 08 32 54.0 | -2.9 |
| YKR2 | Yellowknife Ar | 4.73 | 87 | Pn | Pn | 08 31 39.3 | +2.2 |
| YKR2 | | | | Pg | Pg | 08 31 55.0 | -1.3 |
| YKR2 | | | | Sg | Sg | 08 32 54.1 | -3.4 |
| YKR3 | Yellowknife Ar | 4.75 | 87 | Pn | Pn | 08 31 38.9 | +1.5 |
| YKR3 | | | | Pg | Pg | 08 31 55.5 | -1.3 |
| YKR3 | | | | Sg | Sg | 08 32 55.8 | -2.5 |
| YKR4 | Yellowknife Ar | 4.78 | 87 | Pn | Pn | 08 31 39.5 | +1.7 |
| YKR4 | | | | Sg | Sg | 08 32 56.6 | -2.4 |
| YKR5 | Yellowknife Ar | 4.80 | 87 | Pn | Pn | 08 31 39.7 | +1.6 |
| YKR5 | | | | Sg | Sg | 08 32 56.9 | -2.8 |
| YKR6 | Yellowknife Ar | 4.82 | 87 | Pn | Pn | 08 31 40.0 | +1.6 |
| YKR6 | | | | Sg | Sg | 08 32 57.2 | -3.2 |
| YKR7 | Yellowknife Ar | 4.84 | 87 | Pn | Pn | 08 31 40.8 | +2.1 |
| YKR7 | | | | Sg | Sg | 08 32 58.9 | -2.3 |
| YKW3 | Yellowknife Ar | 4.85 | 86 | Pn | Pn | 08 31 41.7 | +2.9 |
| YKW3 | | | | Pg | Pg | 08 31 56.4 | -2.3 |
| YKW3 | | | | Sn | Sn | 08 32 35.2 | +0.2 |
| YKW3 | | | | Sg | Sg | 08 32 58.1 | -3.4 |
| YKB0 | Yellowknife Ar | 4.85 | 86 | Pn | Pn | 08 31 40.8 | +2.0 |
| YKB0 | | | | Pg | Pg | 08 31 56.0 | -2.8 |
| YKB0 | | | | Sg | Sg | 08 32 58.2 | -3.3 |
| YKB9 | Yellowknife Ar | 4.86 | 86 | Pn | Pn | 08 31 41.0 | +2.1 |
| YKB9 | | | | Pg | Pg | 08 31 55.8 | -3.0 |
| YKB9 | | | | Sg | Sg | 08 32 58.5 | -3.1 |
| YKB8 | Yellowknife Ar | 4.86 | 86 | Pn | Pn | 08 31 40.6 | +1.7 |
| YKB8 | | | | Pg | Pg | 08 31 56.0 | -2.7 |
| YKB8 | | | | Sg | Sg | 08 32 58.5 | -3.1 |
| YKB7 | Yellowknife Ar | 4.86 | 87 | Pn | Pn | 08 31 40.4 | +1.5 |
| YKB7 | | | | Sg | Sg | 08 32 58.7 | -3.0 |
| YKB6 | Yellowknife Ar | 4.86 | 87 | Pn | Pn | 08 31 40.5 | +1.5 |
| YKB6 | | | | Pg | Pg | 08 31 55.8 | -3.1 |
| YKB6 | | | | Sg | Sg | 08 32 59.4 | -2.4 |
| YKA | Yellowknife Ar | 4.87 | 87 | Pn | Pn | 08 31 41.1 | +2.2 |
| | 1.6nm,0.3s,baz=273,slow=13,SNR=20 | | | | | | |
| YKA | | | | Pg | Pg | 08 31 56.1 | -2.8 |
| | 5.6nm,0.3s,baz=272,slow=17,SNR=24 | | | | | | |
| YKA | | | | Sn | Sn | 08 32 36.6 | +1.3 |
| | 3.6nm,0.3s,baz=275,slow=24,SNR=4.7 | | | | | | |
| YKA | | | | Lg | Lg | 08 32 57.3 | |
| | 8.5nm,0.3s,baz=276,slow=30,SNR=8.2 | | | | | | |
| YKR8 | Yellowknife Ar | 4.87 | 87 | Pn | Pn | 08 31 40.8 | +1.8 |
| YKR8 | | | | Pg | Pg | 08 31 56.1 | -2.8 |
| YKR8 | | | | Sg | Sg | 08 32 59.5 | -2.4 |
| YKB4 | Yellowknife Ar | 4.87 | 88 | Pn | Pn | 08 31 40.5 | +1.4 |
| YKB4 | | | | Pg | Pg | 08 31 56.1 | -2.9 |
| YKB4 | | | | Sg | Sg | 08 32 59.5 | -2.4 |
| YKB3 | Yellowknife Ar | 4.87 | 88 | Pn | Pn | 08 31 41.2 | +2.2 |
| YKB3 | | | | Pg | Pg | 08 31 57.5 | -1.6 |
| YKB3 | | | | Sg | Sg | 08 32 59.3 | -2.8 |
| YKB2 | Yellowknife Ar | 4.87 | 88 | Pn | Pn | 08 31 41.3 | +2.2 |
| YKB2 | | | | Sg | Sg | 08 32 59.4 | -2.8 |
| YKB1 | Yellowknife Ar | 4.88 | 88 | Pn | Pn | 08 31 41.5 | +2.4 |
| YKB1 | | | | Sg | Sg | 08 33 00.2 | -2.0 |
| DLBC | Dease Lake | 4.88 | 212 | Pn | Pn | 08 31 41.2 | +1.9 |
| | 1.2nm,0.3s,baz=34,slow=10,SNR=30 | | | | | | |
| DLBC | | | | Sn | Sn | 08 32 36.9 | +1.1 |
| | 3.5nm,0.3s,baz=100,slow=13,SNR=5.1 | | | | | | |
| DLBC | | | | Lg | Lg | 08 32 59.7 | |
| | 7.7nm,0.3s,baz=130,slow=27,SNR=8.1 | | | | | | |
| DLBC | Dease Lake | 4.88 | 212 | Pn | Pn | 08 31 41.6 | +2.3 |
| DLBC | | | | Sg | Sg | 08 32 58.3 | -4.0 |
| YKR9 | Yellowknife Ar | 4.89 | 87 | Pn | Pn | 08 31 41.0 | +1.7 |
| YKR9 | | | | Sg | Sg | 08 33 00.1 | -2.5 |
| WHY | Whitehorse | 5.07 | 251 | Pn | Pn | 08 31 42.8 | +0.9 |
| WHY | | | | Sg | Sb | 08 33 01.7 | +6.2 |
| SMPN | Simpson Lake | 5.61 | 354 | Pn | Pn | 08 31 51.4 | +2.2 |
| SMPN | | | | Sn | Sn | 08 32 54.9 | +1.3 |
| HYT | Haines Junctio | 6.16 | 258 | Pn | Pn | 08 31 58.5 | +1.5 |
| HYT | | | | Sg | Sg | 08 33 37.1 | -6.4 |
| YUK5 | Granite Creek | 6.21 | 261 | Pn | Pn | 08 31 58.9 | +1.2 |
| YUK5 | | | | Sn | Sn | 08 33 10.9 | +2.1 |
| YUK5 | | | | Sg | Sg | 08 33 39.7 | -5.3 |
| PLBC | Pleasant Camp | 6.33 | 245 | Pn | Pn | 08 32 00.2 | +1.1 |
| PLBC | | | | Sg | Sg | 08 33 41.6 | -7.2 |
| YUK4 | Talbot Arm | 6.50 | 264 | Pn | Pn | 08 32 02.4 | +0.7 |
| YUK4 | | | | Sg | Sb | 08 33 45.0 | +8.1 |
| YUK6 | Outpost Mounta | 6.51 | 261 | Pn | Pn | 08 32 03.1 | +1.3 |
| YUK6 | | | | Sg | Sg | 08 33 47.2 | -7.4 |
| YUK7 | Dusty Glacier | 6.57 | 257 | Pn | Pn | 08 32 04.3 | +1.7 |
| YUK7 | | | | Sg | Sg | 08 33 52.0 | -4.5 |
| DAWY | Dawson | 6.57 | 289 | Pn | Pn | 08 32 03.4 | +1.0 |
| DAWY | | | | Sg | Sg | 08 33 54.4 | -2.1 |
| INK | Inuvik | 6.66 | 332 | Pn | Pn | 08 32 04.5 | +1.0 |
| | 2.0nm,0.3s,baz=152,slow=9.9,SNR=43 | | | | | | |
| INK | | | | Sn | Sn | 08 33 16.1 | -3.1 |
| | 3.1nm,0.3s,baz=162,slow=31,SNR=4.0 | | | | | | |
| INK | | | | Lg | Lg | 08 33 57.0 | |
| | 2.5nm,0.3s,baz=245,slow=28,SNR=5.0 | | | | | | |
| INK | Inuvik | 6.66 | 332 | Pn | Pn | 08 32 04.3 | +0.8 |
| INK | | | | Sn | Sn | 08 33 17.1 | -2.2 |
| KUKN | Kugluktuk,NWT | 6.67 | 35 | Pn | Pn | 08 32 06.2 | +2.4 |
| KUKN | | | | Sn | Sn | 08 33 20.2 | +0.5 |
| KUKN | | | | Sg | Sg | 08 33 58.3 | -1.5 |
| YUK1 | Sand Pete Hill | 7.18 | 273 | Pn | Pn | 08 32 11.4 | +0.6 |
| YUK1 | | | | Sg | Sg | 08 34 09.3 | -6.6 |
| YUK3 | Moose Creek | 7.22 | 270 | Pn | Pn | 08 32 12.2 | +0.7 |
| YUK3 | | | | Sg | Sg | 08 34 09.9 | -7.5 |
| BVCY | Beaver Creek | 7.28 | 275 | Pn | Pn | 08 32 13.4 | +1.2 |
| BVCY | | | | Sg | Sg | 08 34 15.8 | -3.5 |
| YUK2 | White River | 7.40 | 270 | Pn | Pn | 08 32 14.7 | +0.9 |
| YUK2 | | | | Sg | Sg | 08 34 15.0 | -8.0 |
| SNLN | Sandy Lake, NW | 8.04 | 81 | Pn | Pn | 08 32 24.9 | +2.4 |
| SNLN | | | | Sn | Sn | 08 33 49.5 | -3.8 |
| SNLN | | | | Sg | Sg | 08 34 36.3 | -7.1 |
| WAPA | Wapiti River | 8.08 | 155 | Pn | Pn | 08 32 23.6 | +0.4 |
| WAPA | | | | Sg | Sg | 08 34 40.4 | -4.6 |
| UBRB | Upper Baezaeko | 9.81 | 176 | Sg | Sn | 08 35 28.4 | +51 |
| ILAR | Eielson Array | 9.87 | 292 | Pn | Pn | 08 32 47.2 | -0.4 |
| | 0.1nm,0.3s,baz=87,slow=12,SNR=10 | | | | | | |
| ILAR | | | | Lg | Lg | 08 35 34.6 | |
| | 0.1nm,0.3s,baz=77,slow=31,SNR=5.4 | | | | | | |
| MNB | Mounoet Dainar | 11.09 | 158 | Pn | Pn | 08 33 06.1 | +1.6 |
| BLBC | Blue River | 11.10 | 161 | Pn | Pn | 08 33 07.0 | +2.4 |
| EDM | Edmonton | 11.32 | 141 | Pn | Pn | 08 33 09.0 | +1.5 |
| EDM | | | | Sn | Sn | 08 35 10.6 | -3.3 |
| EDM | | | | Sg | | 08 36 26.2 | |
| DOWB | Downie Slide | 11.72 | 159 | Pn | Pn | 08 33 15.9 | +2.9 |
| SLEB | Sale Mountain | 12.13 | 159 | Pn | Pn | 08 33 20.7 | +2.0 |
| PRDA | Priddis | 13.20 | 149 | Pn | Pn | 08 33 33.8 | +0.6 |
| PRDA | | | | Sn | Sn | 08 35 53.3 | -6.7 |
| BULN | Bullion Camp, | 14.16 | 61 | Pn | Pn | 08 33 45.8 | -0.4 |
| BULN | | | | Sn | Sn | 08 36 14.1 | -9.0 |
| BULN | | | | Sg | S | 08 37 43.5 | +59 |
| SMLN | Simpson Lake, | 14.77 | 52 | Pn | Pn | 08 33 55.0 | +0.6 |
| SMLN | | | | Sn | Sn | 08 36 26.0 | -12 |
| SMLN | | | | Sg | | 08 38 01.9 | |
| MCMN | McManaman Lake | 14.84 | 73 | Sg | | 08 38 06.0 | |
| NEW | Newport | 15.10 | 159 | Pn | Pn | 08 33 58.2 | -0.9 |
| | 0.1nm,0.3s,baz=311,slow=19,SNR=2.3 | | | | | | |
| SEDN | First Sedna Si | 15.33 | 73 | Sn | Sn | 08 36 40.4 | -11 |
| SEDN | | | | Sg | | 08 38 25.1 | |
| KUGN | Kugaaruk Camp, | 15.41 | 54 | Sg | | 08 38 19.8 | |
| RES | Resolute Bay | 16.02 | 29 | Pn | Pn | 08 34 09.2 | -1.7 |
| | 1.3nm,0.3s,baz=215,slow=8.8,SNR=28 | | | | | | |
| RES | | | | Sn | Sn | 08 36 58.2 | -10 |
| | 0.7nm,0.3s,baz=226,slow=10,SNR=6.0 | | | | | | |
| RES | | | | Lg | Lg | 08 38 44.9 | |
| | 0.2nm,0.3s,baz=127,slow=20,SNR=2.5 | | | | | | |
| RES | Resolute Bay | 16.02 | 29 | Pn | Pn | 08 34 10.1 | -0.7 |
| EGMT | Eagleton | 17.00 | 143 | P | P | 08 34 25.6 | +0.2 |
| | baz=17 | | | | | | |
| J05D | Fort Rock, OR | 19.54 | 171 | P | Pn | 08 34 58.5 | +3.7 |
| | baz=20 | | | | | | |
| HLID | Hailey | 20.13 | 157 | P | Pn | 08 35 03.5 | +1.8 |
| | baz=20 | | | | | | |
| ULM | Lac du Bonnet | 20.16 | 114 | P | Pn | 08 35 01.3 | -0.6 |
| | 0.8nm,0.5s,baz=281,slow=5.2,SNR=1.0 | | | | | | |
| F25A | Bowman | 20.82 | 134 | P | Pn | 08 35 11.4 | +1.7 |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=21 | | | | | | |
| D30A | Buchanan | 21.50 | 124 | P | P | 08 35 18.6 | +4.2 |
| | baz=21 | | | | | | |
| G26A | Maurine | 21.66 | 133 | P | P | 08 35 20.4 | +4.1 |
| | baz=22 | | | | | | |
| G27A | Dupree | 21.81 | 132 | P | P | 08 35 21.5 | +3.6 |
| | baz=22 | | | | | | |
| G28A | Parade | 22.43 | 130 | P | P | 08 35 29.5 | +5.0 |
| | baz=22 | | | | | | |
| K22A | Casper | 22.83 | 143 | P | P | 08 35 31.4 | +2.5 |
| | baz=23 | | | | | | |
| NVAR | Mina Array Bea | 24.61 | 167 | P | P | 08 35 48.3 | +2.0 |
| | 0.4nm,0.5s,baz=346,slow=6.6,SNR=5.8 | | | | | | |
| N23A | Red Feather La | 24.62 | 143 | P | P | 08 35 50.4 | +4.0 |
| | baz=25 | | | | | | |
| TXAR | Lajitas Array | 36.14 | 147 | P | P | 08 37 31.0 | +2.9 |
| | 0.1nm,0.5s,baz=347,slow=7.4,SNR=2.4 | | | | | | |
| TORD | Torodi Ar. Bea | 93.96 | 51 | P | P | 08 43 48.2 | +4.4 |
| | 0.3nm,0.5s,baz=343,slow=4.2,SNR=2.0 | | | | | | |

**NNC 08 08:45:21.2±1.6, 50°.12N×73°.33E, h0km, mb3.2, mpv2.9, 12C-8D, Error ellipse: s-maj=16.8km s-min=14.1km az=79.0, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OTUK | Ortayu | 1.98 | 199 | ⇑Pn | Pn | 08 45 53.6 | -2.5 |
| | 3.0nm,0.5s | | | | | | |
| OTUK | | | | ⇑Sn | Sb | 08 46 22.9 | -0.6 |
| | 8.4nm,0.8s | | | | | | |
| OTUK | | | | ⇑Rg | Rg | 08 46 50.8 | |
| | 28nm,1.5s | | | | | | |
| VOSK | Vostochnaya | 2.99 | 332 | ⇓Pn | Pn | 08 46 05.3 | -4.6 |
| | 2.1nm,0.9s | | | | | | |
| VOSK | | | | ⇓Sn | Sn | 08 46 43.3 | -3.2 |
| | 12nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 3.37 | 79 | ⇓Pn | Pn | 08 46 14.9 | -0.1 |
| | 3.5nm,0.8s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 08 46 59.4 | +3.7 |
| | 16nm,0.6s | | | | | | |
| BVA0 | Borovoye Array | 3.44 | 329 | ⇓Pn | Pn | 08 46 14.1 | -2.0 |
| | 1.8nm,0.5s,baz=130,slow=18,SNR=4.9 | | | | | | |
| BVA0 | | | | ⇑Sn | Sn | 08 46 57.8 | +0.3 |
| | 7.4nm,0.8s,baz=132,slow=25,SNR=5.1 | | | | | | |
| BVA0 | | | | ⇑Rg | Rg | 08 47 27.6 | |
| | 16nm,1.4s | | | | | | |
| KURK | Kurchatov | 3.44 | 78 | ⇑Pn | Pn | 08 46 14.4 | -1.5 |
| | 19nm,0.6s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 08 46 58.9 | +1.5 |
| | 18nm,0.9s | | | | | | |
| BRVK | Borovoye | 3.50 | 328 | ⇑Pn | Pn | 08 46 15.5 | -1.4 |
| | 2.7nm,0.6s | | | | | | |
| BRVK | | | | ⇑Sn | Sn | 08 46 59.4 | +0.4 |
| | 24nm,0.7s | | | | | | |
| BRVK | | | | ⇓Rg | Rg | 08 47 30.0 | |
| | 12nm,1.0s | | | | | | |
| ZRNK | Zerenda | 3.91 | 318 | ⇓Pn | Pn | 08 46 25.1 | +2.5 |
| | 2.7nm,1.1s | | | | | | |
| ZRNK | | | | ⇓Sn | Sn | 08 47 12.2 | +3.1 |
| | 7.1nm,0.8s | | | | | | |
| CHKZ | Chkalovo | 3.94 | 336 | ⇓Pn | Pn | 08 46 25.1 | +2.3 |
| | 1.3nm,0.7s | | | | | | |
| CHKZ | | | | ⇑Sn | Sb | 08 47 15.8 | -3.8 |
| | 12nm,0.8s | | | | | | |
| MK31 | Makanchi Array | 6.83 | 116 | Pg | Pb | 08 47 18.2 | -2.4 |
| | 0.2nm,0.5s,baz=293,slow=12,SNR=4.0 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 08 48 47.8 | |
| | 3.3nm,0.8s,baz=330,slow=20,SNR=4.9 | | | | | | |

**IDC 08 08:48:39.5±8.1, 5°.17S×151°.54E, h113km±55km, mb3.7/3, mb1 3.8/4, mb1mx3.3/32, mbtmp4.1/4, Error ellipse: s-maj=102.0km s-min=53.2km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 6.05 | 226 | P | Pn | 08 50 07.2 | +0.6 |
| | 2.5nm,0.3s,baz=330,slow=7.0,SNR=3.6 | | | | | | |
| PMG | | | | S | Sn | 08 51 15.3 | +0.7 |
| | 7.0nm,0.3s,baz=20,slow=20,SNR=13 | | | | | | |
| WRA | Warramunga Arr | 22.27 | 227 | P | P | 08 53 27.1 | -0.4 |
| | 4.2nm,0.8s,baz=52,slow=9.8,SNR=20 | | | | | | |
| ASAR | Alice Springs | 25.04 | 221 | P | P | 08 53 53.5 | +0.1 |
| | 2.6nm,0.6s,baz=55,slow=8.6,SNR=35 | | | | | | |
| FITZ | Fitzroy Crossi | 28.39 | 241 | P | P | 08 54 23.4 | 0.0 |
| | 2.4nm,0.9s,baz=62,slow=7.3,SNR=2.4 | | | | | | |
| TORD | Torodi Ar. Bea | 149.22 | 287 | PKPbc | PKPbc | 09 08 15.4 | -0.5 |
| | 0.6nm,0.5s,baz=89,slow=2.7,SNR=6.5 | | | | | | |

*ISCJB **08** 08:51:03.8±0.7, 33°.06N±0°.04×46°.14E±0°.06, h10km, Error ellipse: s-maj=6.8km s-min=5.3km az=9.2*
*CSEM **08** 08:51:04.8±0.3, 33°.04N×46°.18E, h5km, ML3.7, Error ellipse: s-maj=7.8km s-min=5.5km az=171.0*
*TEH **08** 08:51:05.5, 33°.01N×46°.21E, h4km, ML3.7*
*ISN **08** 08:51:09.4±2.5, 33°.06N×45°.53E, h0km±7km, ML3.7*
**ISC 08 08:51:04.7±1.5, 32°.98N±0°.06×46°.16E±0°.06, h10km, n31, σ0s.77/34, Iran-Iraq border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IBDR | Badra | 0.23 | 304 | ePG | x | 08 51 16.7 | |
| IBDR | | | | eSG | x | 08 51 22.1 | |
| IGHG | Ghaleghazi | 1.39 | 14 | ePg | Pn | 08 51 29.7 | -0.6 |
| IGHG | | | | eSg | Sb | 08 51 47.5 | -1.3 |
| IGHG | | | | e | | 08 51 52.9 | |
| | comp=Z,16µm,0.4s | | | | | | |
| IGHG | Ghaleghazi | 1.39 | 14 | ePg | Pn | 08 51 29.7 | -0.6 |
| IGHG | | | | eSg | Sb | 08 51 47.5 | -1.3 |
| IKFM | Kafar-mosalman | 1.51 | 69 | ePn | Pn | 08 51 31.5 | -0.3 |
| IKFM | | | | e | | 08 51 54.0 | |
| | comp=Z,99nm,0.1s | | | | | | |
| IKFM | Kafar-mosalman | 1.51 | 69 | ePn | Pn | 08 51 31.5 | -0.3 |
| BHD | Baghdad | 1.52 | 281 | ePG | x | 08 51 31.9 | |
| BHD | | | | eSg | x | 08 51 45.2 | |
| BHD | Baghdad | 1.52 | 281 | ePg | Pn | 08 51 31.9 | 0.0 |
| | SNR=90 | | | | | | |
| IKOM | Komasi | 1.64 | 43 | ePn | Pn | 08 51 34.5 | +0.8 |
| IKOM | | | | eSg | Sb | 08 51 55.5 | -0.4 |
| IKOM | | | | e | | 08 51 57.8 | |
| | comp=Z,18µm,0.3s | | | | | | |
| IKOM | Komasi | 1.64 | 43 | ePn | Pn | 08 51 34.5 | +0.8 |
| IKOM | | | | eSg | Sb | 08 51 55.5 | -0.4 |
| IVIS | Veis | 1.65 | 20 | ePn | Pn | 08 51 34.4 | +0.6 |
| IVIS | | | | eSg | Sn | 08 51 55.1 | +0.1 |
| IVIS | | | | e | | 08 51 59.5 | |
| | comp=Z,15µm,0.2s | | | | | | |
| IVIS | Veis | 1.65 | 20 | ePn | Pn | 08 51 34.4 | +0.6 |
| IVIS | | | | eSg | Sn | 08 51 55.2 | +0.1 |
| IDHR | Dehrash | 1.73 | 6 | ePn | Pn | 08 51 36.0 | +1.0 |
| IDHR | | | | eSg | Sb | 08 51 58.2 | -0.2 |
| IDHR | | | | e | | 08 52 00.3 | |
| | comp=Z,17µm,0.2s | | | | | | |
| IDHR | Dehrash | 1.73 | 6 | ePn | Pn | 08 51 36.0 | +1.0 |
| IDHR | | | | eSg | Sb | 08 51 58.2 | -0.2 |
| NSR | Nassriya | 1.96 | 181 | ePn | x | 08 51 44.1 | |
| NSR | | | | eSN | x | 08 52 12.9 | |
| ILIN | Lien | 2.04 | 19 | ePn | Pn | 08 51 40.6 | +1.2 |
| ILIN | | | | e | | 08 52 09.2 | |
| | comp=Z,4µm,0.3s | | | | | | |
| ILIN | Lien | 2.04 | 19 | ePn | Pn | 08 51 40.6 | +1.2 |
| IBZA | Bozab | 2.05 | 43 | ePn | Pn | 08 51 40.0 | +0.5 |
| IBZA | | | | e | | 08 51 44.5 | |
| | comp=Z,5µm,0.2s | | | | | | |
| IBZA | Bozab | 2.05 | 43 | ePn | Pn | 08 51 40.0 | +0.5 |
| IKRK | Kirkuk | 2.85 | 328 | ePN | x | 08 51 52.6 | |
| IKRK | | | | eSN | x | 08 52 22.5 | |
| IRAZ | Razeghan | 3.95 | 51 | e | | 08 52 20.3 | |
| | comp=Z,670nm,0.2s | | | | | | |
| IRAZ | | | | ePn | Pn | 08 52 06.3 | +0.7 |
| IPIR | Pirpir | 3.99 | 93 | e | | 08 52 58.9 | |
| | comp=Z,600nm,0.3s | | | | | | |
| IPIR | | | | ePn | Pn | 08 52 06.4 | +0.1 |
| QAM | Ghamsar | 4.49 | 79 | ePn | Pn | 08 52 13.4 | +0.5 |
| QAM | | | | e | | 08 52 16.7 | |
| | comp=Z,868nm,0.1s | | | | | | |
| IKLH | Kolahrood | 4.56 | 84 | ePn | Pn | 08 52 15.0 | +1.0 |
| IKLH | | | | e | | 08 53 08.6 | |
| | comp=N,510nm,0.2s | | | | | | |
| IKLH | Kolahrood | 4.56 | 84 | ePn | Pn | 08 52 15.0 | +1.0 |
| RTB | Rutbah | 4.92 | 272 | ePN | x | 08 52 18.9 | |
| RTB | | | | eSN | x | 08 53 07.2 | |
| RTB | Rutbah | 4.92 | 272 | ePn | Pn | 08 52 18.9 | +0.2 |
| | SNR=39 | | | | | | |
| IGAR | Gharneh | 4.99 | 95 | ePn | Pn | 08 52 18.9 | -1.0 |
| IGAR | | | | e | | 08 53 21.2 | |
| | comp=Z,312nm,0.1s | | | | | | |
| IZEF | Zefreh | 5.19 | 89 | ePn | Pn | 08 52 22.5 | -0.1 |
| IZEF | | | | e | | 08 52 28.3 | |
| | comp=Z,142nm,0.2s | | | | | | |
| IZEF | Zefreh | 5.19 | 89 | ePn | Pn | 08 52 22.5 | -0.1 |
| IKAZ | Kazeroun | 5.81 | 122 | ePn | Pn | 08 52 32.3 | +1.1 |
| IKAZ | | | | e | | 08 53 39.8 | |
| | comp=Z,443nm,0.1s | | | | | | |
| IKAZ | Kazeroun | 5.81 | 122 | ePn | Pn | 08 52 32.3 | +1.1 |

**IDC 08 09:10:46.4±3.1, 4°.12S×152°.16E, h0km, mb3.9/3, mb1 4.1/3, mb1mx3.6/30, mbtmp3.9/3, Error ellipse: s-maj=114.1km s-min=44.9km az=125.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 23.43 | 226 | P | P | 09 15 58.2 | +0.8 |
| | 3.4nm,0.6s,baz=53,slow=10.0,SNR=20 | | | | | | |
| ASAR | Alice Springs | 26.23 | 221 | P | P | 09 16 22.6 | -0.7 |
| | 0.6nm,0.8s,baz=53,slow=9.1,SNR=6.5 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 26.65 | 32 | T | T | 09 44 09.0 | |
| | baz=217,slow=71,SNR=5.6 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 26.65 | 32 | T | T | 09 44 00.4 | |
| | baz=217,slow=71,SNR=4.4 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 26.67 | 32 | T | T | 09 44 03.8 | |
| | baz=217,slow=71,SNR=4.0 | | | | | | |
| FITZ | Fitzroy Crossi | 29.43 | 240 | P | P | 09 16 52.8 | +0.8 |
| | 1.3nm,0.4s,baz=56,slow=11,SNR=5.2 | | | | | | |
| TORD | Torodi Ar. Bea | 149.48 | 289 | PKPbc | PKPbc | 09 30 37.3 | -1.5 |
| | 0.5nm,1.1s,baz=98,slow=2.7,SNR=1.6 | | | | | | |

*IDC **08** 09:18:19.6±2.1, 50°.92N×172°.32W, h0km, mb4.0/5, mb1 4.0/7, mb1mx3.7/39, mbtmp3.9/7, ML3.9/2, Error ellipse: s-maj=56.7km s-min=24.4km az=0.0*
*ISCJB **08** 09:18:23.0±0.6, 50°.71N±0°.06×172°.60W±0°.04, h33km, mb4.0/5, Error ellipse: s-maj=9.1km s-min=3.1km az=174.4*
*NEIC **08** 09:18:26.1, 50°.77N×172°.68W, h33km, ML3.6(AEIC), After AEIC.*
**ISC 08 09:18:24.3±1.1, 50°.7N±0°.1×172°.64W±0°.04, h35km, n49, σ0s.94/54, mb4.0/5, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ATKA | Atka Island | 1.80 | 328 | P | Pn | 09 18 52.3 | -0.5 |
| ATKA | | | | S | Sn | 09 19 13.1 | -1.2 |
| KOFP | Korovin Flat P | 1.83 | 331 | P | Pn | 09 18 53.9 | +0.7 |
| KOKL | Mount Kliuchef | 1.90 | 330 | P | Pn | 09 18 55.0 | +0.7 |
| KOKL | | | | S | Sn | 09 19 17.2 | +0.1 |
| KONE | Korovin Northe | 1.94 | 332 | P | Pn | 09 18 55.6 | +0.9 |
| KOWE | Korovin West | 1.96 | 330 | P | Pn | 09 18 55.9 | +0.9 |
| GSMY | Great Sitkin M | 2.53 | 304 | P | Pn | 09 19 02.1 | -0.8 |
| GSCK | Great Sitkin C | 2.57 | 302 | P | Pn | 09 19 03.9 | +0.4 |
| GSTD | Great Sitkin T | 2.59 | 303 | P | Pn | 09 19 04.0 | +0.3 |
| GSTD | | | | S | Sn | 09 19 32.8 | -1.2 |
| ETKA | Kagalaska Isla | 2.64 | 298 | P | Pn | 09 19 04.5 | +0.1 |
| ETKA | | | | S | Sn | 09 19 34.0 | -1.1 |
| ADAG | Mount Adagdak | 2.80 | 299 | P | Pn | 09 19 08.2 | +1.6 |
| KIRH | Kanaga Island | 3.05 | 295 | P | Pn | 09 19 10.9 | +1.0 |
| KIKV | Kanaga Island | 3.08 | 294 | P | Pn | 09 19 11.4 | +1.0 |
| NIKH | Nikolski High | 3.28 | 44 | P | Pn | 09 19 12.9 | -0.2 |
| NIKH | | | | S | Sn | 09 19 50.5 | -0.3 |
| TAFP | Tanaga Falls P | 3.56 | 292 | P | Pn | 09 19 18.9 | +1.8 |
| TAFP | | | | S | Sn | 09 19 57.9 | 0.0 |
| TASE | Tanaga Southea | 3.58 | 291 | P | Pn | 09 19 18.8 | +1.6 |
| OKSO | Okmok South | 3.85 | 44 | P | Pn | 09 19 21.4 | +0.5 |
| OKCE | Okmok Cone E | 3.89 | 43 | P | Pn | 09 19 22.5 | +0.9 |
| OKAK | Okmok | 3.92 | 41 | P | Pn | 09 19 21.8 | 0.0 |
| OKTU | Okmok Mt. Tuli | 3.92 | 45 | P | Pn | 09 19 23.2 | +1.3 |
| OKFG | Magazine Ridge | 3.99 | 45 | P | Pn | 09 19 23.4 | +0.5 |
| GANE | Gareloi Northe | 4.02 | 289 | P | Pn | 09 19 24.1 | +0.8 |
| MSOM | Makushin Julie | 4.69 | 46 | P | Pn | 09 19 33.0 | +0.5 |
| MGOD | Makushin Gods | 4.71 | 47 | P | Pn | 09 19 33.2 | +0.4 |
| MSW | Makushin Switc | 4.83 | 46 | P | Pn | 09 19 35.0 | +0.5 |
| MSW | | | | S | Sn | 09 20 28.5 | -0.6 |
| UNV | Unalaska Valle | 4.92 | 48 | P | Pn | 09 19 36.1 | +0.5 |
| UNV | | | | S | Sn | 09 20 30.1 | -1.1 |
| CERAA | Semis' Rag'd T | 4.97 | 287 | P | Pn | 09 19 37.0 | +0.7 |
| CESW | Semis' Southwe | 5.04 | 287 | P | Pn | 09 19 37.9 | +0.6 |
| AMKA | Amchitka | 5.13 | 281 | P | Pn | 09 19 39.8 | +1.3 |
| AMKA | | | | S | Sn | 09 20 35.5 | -1.0 |
| ZRO | Akutan Zero | 5.31 | 48 | P | Pn | 09 19 42.4 | +1.3 |
| AHB | Akutan Harbor | 5.41 | 48 | P | Pn | 09 19 43.5 | +1.2 |
| LSPA | Little Sitkin | 5.65 | 286 | P | Pn | 09 19 46.9 | +1.1 |
| WECS | Westdahl Cape | 6.14 | 48 | P | Pn | 09 19 53.8 | +1.3 |
| WESE | West Dahl East | 6.20 | 49 | P | Pn | 09 19 54.1 | +0.8 |
| SSBA | Shishaldin | 6.59 | 48 | P | Pn | 09 19 59.3 | +0.6 |
| ISLZ | Isanotski Laza | 6.76 | 50 | P | Pn | 09 20 01.9 | +1.0 |
| FALS | False Pass | 6.98 | 50 | P | Pn | 09 20 04.8 | +0.9 |
| DT1 | Dutton Round H | 7.67 | 51 | P | Pn | 09 20 14.0 | +0.6 |
| KDAK | Kodiak Island | 13.68 | 51 | Pn | Pn | 09 21 32.2 | -3.2 |
| | 0.8nm,0.3s,baz=189,slow=7.9,SNR=13 | | | | | | |
| PAX | Paxson | 19.10 | 40 | eP | P | 09 22 44.7 | +0.9 |
| | 0.7nm,0.5s | | | | | | |
| ILAR | Eielson Array | 19.49 | 34 | P | P | 09 22 46.2 | -1.7 |
| | 0.1nm,0.3s,baz=233,slow=9.2,SNR=10 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.88 | 215 | T | T | 10 03 40.3 | |
| | baz=19 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.89 | 215 | T | T | 10 03 47.6 | |
| | baz=19 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.90 | 215 | T | T | 10 03 47.5 | |
| | baz=19 | | | | | | |
| TXAR | Lajitas Array | 54.88 | 85 | P | P | 09 27 50.3 | -0.9 |
| | 0.4nm,0.8s,baz=296,slow=6.0,SNR=5.8 | | | | | | |
| KURK | Kurchatov | 62.24 | 317 | P | P | 09 28 43.5 | +1.4 |
| KURBB | Kurchatov Arra | 62.35 | 317 | P | P | 09 28 43.5 | +0.7 |
| | 1.7nm,0.7s,baz=43,slow=6.4,SNR=4.4 | | | | | | |
| MKAR | Makanchi Array | 63.45 | 312 | P | P | 09 28 49.7 | -0.5 |
| | 0.3nm,0.4s,baz=43,slow=4.9,SNR=3.2 | | | | | | |
| HFS | Hagfors | 69.41 | 357 | P | P | 09 29 27.9 | -0.2 |
| | 1.4nm,0.9s,baz=350,slow=7.3,SNR=4.2 | | | | | | |
| AKTO | Aktyubinsk | 70.41 | 328 | P | P | 09 29 35.1 | +0.7 |
| | 2.3nm,0.5s,baz=50,slow=7.9,SNR=7.4 | | | | | | |

*IDC **08** 09:27:04.5±2.0, 51°.26N×175°.35W, h0km, mb3.9/7, mb1 4.0/8, mb1mx3.7/44, mbtmp4.0/8, ML4.4/1, MS3.0/2, Ms1 3.0/2, ms1mx2.4/51, Error ellipse: s-maj=52.5km s-min=23.1km az=178.0*
*NEIC **08** 09:27:10.2, 51°.37N×175°.21W, h27km, mb3.8/4, ML3.6(AEIC), After AEIC.*
**ISC 08 09:27:07.5±1.7, 51°.32N±0°.08×175°.22W±0°.03, h15km±9km, n45, σ1s.15/45, mb4.2/8, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.90 | 325 | P | Pn | 09 27 25.9 | +0.3 |
| GSCK | Great Sitkin C | 0.91 | 320 | P | Pn | 09 27 26.2 | +0.3 |
| ETKA | Kagalaska Isla | 0.92 | 307 | P | Pn | 09 27 26.2 | +0.2 |
| ETKA | | | | S | Sn | 09 27 38.9 | 0.0 |
| GSTR | Great Sitkin T | 0.94 | 326 | P | Pn | 09 27 26.9 | +0.6 |
| GSTD | Great Sitkin T | 0.94 | 322 | P | Pn | 09 27 26.6 | +0.3 |
| GSTD | | | | S | Sn | 09 27 39.8 | +0.3 |
| ADAG | Mount Adagdak | 1.09 | 308 | P | Pg | 09 27 29.6 | +1.1 |
| ATKA | Atka Island | 1.09 | 35 | P | Pb | 09 27 27.6 | -0.5 |
| ATKA | | | | S | Sb | 09 27 42.1 | 0.0 |
| KOFP | Korovin Flat P | 1.19 | 35 | P | Pg | 09 27 30.5 | +0.1 |
| KOFP | | | | S | Sg | 09 27 46.6 | +0.7 |
| KOKL | Mount Kliuchef | 1.19 | 32 | P | Pg | 09 27 30.5 | 0.0 |
| KOWE | Korovin West | 1.21 | 29 | P | Pg | 09 27 30.8 | 0.0 |
| KOSE | Korovin Southe | 1.26 | 35 | P | Pg | 09 27 31.6 | -0.2 |
| KIRH | Kanaga Island | 1.31 | 297 | P | Pg | 09 27 32.1 | -0.7 |
| KIKV | Kanaga Island | 1.34 | 296 | P | Pg | 09 27 32.9 | -0.5 |
| KICM | Kanaga Island | 1.37 | 297 | P | Pb | 09 27 33.1 | +0.2 |
| TAPA | Tanaga Point A | 1.70 | 288 | P | Pb | 09 27 37.9 | -0.5 |
| TAFP | Tanaga Falls P | 1.82 | 290 | P | Pb | 09 27 39.9 | -0.7 |
| TAFP | | | | S | Sb | 09 28 02.1 | -1.1 |
| TASE | Tanaga Southea | 1.83 | 288 | P | Pb | 09 27 40.2 | -0.7 |
| TANO | Tanaga North | 1.91 | 289 | P | Pb | 09 27 41.1 | -0.9 |
| GANE | Gareloi Northe | 2.28 | 284 | P | Pb | 09 27 46.9 | -1.5 |
| CESW | Semis' Southwe | 3.31 | 282 | P | Pn | 09 28 00.2 | +1.5 |
| AMKA | Amchitka | 3.44 | 273 | P | Pn | 09 28 01.8 | +1.3 |
| AMKA | | | | S | Sn | 09 28 42.1 | +1.2 |
| LSPA | Little Sitkin | 3.92 | 282 | P | Pn | 09 28 09.3 | +2.1 |
| LSPA | | | | S | Sn | 09 28 57.0 | +4.1 |
| NIKH | Nikolski High | 4.26 | 65 | P | Pn | 09 28 13.2 | +1.5 |
| KDAK | Kodiak Island | 14.60 | 55 | Pn | P | 09 30 37.2 | -2.4 |
| | 1.5nm,0.3s,baz=261,slow=7.6,SNR=13 | | | | | | |
| BPAW | Bear Paw Mtn. | 18.05 | 36 | eP | P | 09 31 19.1 | +1.2 |
| | 1.0nm,0.6s | | | | | | |
| PAX | Paxson | 19.70 | 42 | eP | Pn | 09 31 38.6 | +1.1 |
| PAX | | | | eS | Sn | 09 35 19.6 | +1.3 |
| ILAR | Eielson Array | 19.92 | 37 | P | P | 09 31 37.6 | -0.7 |
| | 0.2nm,0.3s,baz=225,slow=9.3,SNR=27 | | | | | | |
| ILAR | | | | LR | LR | 09 40 12.6 | |
| | comp=Z,36nm,20.3s,baz=179,slow=39 | | | | | | |
| COLD | Coldfoot | 20.19 | 28 | eP | Pn | 09 31 43.0 | -0.3 |
| | 3.0nm,0.8s | | | | | | |
| EGAK | Eagle | 22.14 | 40 | eP | P | 09 32 01.1 | -1.2 |
| | 4.2nm,0.8s | | | | | | |
| INK | Inuvik | 26.24 | 34 | P | P | 09 32 41.2 | -0.2 |
| | 0.6nm,0.5s,baz=247,slow=9.5,SNR=4.0 | | | | | | |
| YAK | Yakutsk | 31.14 | 312 | LR | LR | 09 45 49.2 | |
| | comp=Z,31nm,18.9s,baz=68,slow=36 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.52 | 211 | T | T | 10 10 43.5 | |
| | baz=18,slow=76,SNR=17 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.53 | 211 | T | T | 10 10 44.1 | |
| | baz=18,slow=76,SNR=21 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.54 | 211 | T | T | 10 10 41.1 | |
| | baz=18,slow=76,SNR=21 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.73 | 210 | T | T | 10 12 15.8 | |
| | baz=19,slow=74 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.75 | 210 | T | T | 10 12 14.8 | |
| | baz=19 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.75 | 210 | T | T | 10 12 15.1 | |
| | baz=19,slow=74 | | | | | | |
| EDM | Edmonton | 36.87 | 62 | eP | P | 09 34 15.8 | +0.8 |
| | 4.5nm,0.5s | | | | | | |
| TXAR | Lajitas Array | 56.43 | 84 | P | P | 09 36 48.3 | -0.3 |
| | 0.5nm,0.9s,baz=317,slow=4.9,SNR=5.6 | | | | | | |
| KURK | Kurchatov | 60.66 | 316 | P | P | 09 37 18.1 | +0.4 |
| KURBB | Kurchatov Arra | 60.77 | 316 | P | P | 09 37 18.1 | -0.3 |
| | 2.1nm,0.6s,baz=45,slow=6.7,SNR=6.9 | | | | | | |
| MKAR | Makanchi Array | 61.81 | 310 | P | P | 09 37 24.4 | -1.1 |
| | 0.6nm,0.4s,baz=38,slow=6.0,SNR=4.0 | | | | | | |
| BVAR | Borovoye Array | 62.36 | 322 | P | P | 09 37 29.1 | 0.0 |
| | 1.8nm,0.4s,baz=52,slow=7.5,SNR=6.7 | | | | | | |
| HFS | Hagfors | 68.67 | 355 | P | P | 09 38 08.4 | -1.3 |
| | 1.0nm,0.4s,baz=11,slow=4.1,SNR=10 | | | | | | |
| TORD | Torodi Ar. Bea | 115.75 | 3 | PKP | PKPdf | 09 45 48.9 | -0.6 |
| | 0.6nm,1.1s,baz=16,slow=0.9,SNR=2.8 | | | | | | |

*ISK **08** 09:27:08.1, 40°.71N×34°.91E, h12km, MD3.0*
*DDA **08** 09:27:08.9, 40°.80N×34°.87E, h19km, Md2.7*
*CSEM **08** 09:27:08.7±0.3, 40°.77N×34°.90E, h19km±5km, MD3.0, Error ellipse: s-maj=9.1km s-min=4.7km az=161.0*
**ISC 08 09:27:08.5±1.4, 40°.78N±0°.04×34°.91E±0°.03, h18km±7km, n18, σ0s.62/27, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BOYT | Boyabat | 0.64 | 360 | iP | Pb | 09 27 20.7 | -0.4 |
| BOYT | | | | iS | Sb | 09 27 29.8 | +0.1 |
| BOYT | Boyabat | 0.64 | 360 | P | Pb | 09 27 20.7 | -0.4 |
| BOYT | | | | S | Sb | 09 27 29.8 | +0.1 |
| HAVZ | Havza | 0.68 | 64 | iP | Pg | 09 27 22.0 | +0.1 |
| HAVZ | | | | iS | Sn | 09 27 33.1 | -0.3 |
| HAVZ | Havza | 0.68 | 64 | P | Pg | 09 27 22.0 | +0.1 |
| HAVZ | | | | S | Sn | 09 27 33.1 | -0.3 |
| TOS | Tosya | 0.72 | 291 | ePG | Pn | 09 27 23.5 | -0.4 |
| TOS | | | | eSG | Sn | 09 27 34.0 | -0.5 |
| TOS | Tosya | 0.72 | 291 | ePg | Pn | 09 27 23.5 | -0.4 |
| TOS | | | | eSg | Sn | 09 27 34.0 | -0.5 |
| DIKM | Dikmen | 0.91 | 17 | ePG | Pg | 09 27 27.0 | +0.9 |
| DIKM | Dikmen | 0.91 | 17 | ePg | Pg | 09 27 27.0 | +0.9 |
| KVT | Kavak | 0.91 | 71 | ePG | Pn | 09 27 26.1 | -0.3 |
| KVT | | | | eSG | Sn | 09 27 40.5 | +1.3 |
| KVT | Kavak | 0.91 | 71 | ePg | Pn | 09 27 26.2 | -0.3 |
| KVT | | | | eSg | Sn | 09 27 40.5 | +1.3 |
| CANT | Cankiri | 1.00 | 260 | ePG | Pb | 09 27 27.4 | +0.1 |
| YOZ | Yozgat | 1.18 | 164 | ePN | Pn | 09 27 29.7 | -0.6 |
| YOZ | Yozgat | 1.18 | 164 | ePn | Pn | 09 27 29.7 | -0.6 |
| CUSAR | Sarkisla-SIVAS | 1.70 | 143 | P | Pb | 09 27 39.4 | 0.0 |
| CUSAR | | | | S | Sg | 09 28 02.4 | -1.0 |
| AFSR | Af¯ar-Bala (A | 1.94 | 227 | ePN | Pn | 09 27 40.9 | +0.2 |
| AFSR | Af¯ar-Bala (A | 1.94 | 227 | ePn | Pn | 09 27 40.9 | +0.2 |
| YAYX | Yaylak | 2.03 | 205 | ePN | Pn | 09 27 42.3 | +0.5 |
| YAYX | Yaylak | 2.03 | 205 | ePn | Pn | 09 27 42.3 | +0.5 |

*IDC **08** 09:41:01.4±2.2, 52°.03N×174°.66W, h0km, mb3.4/3, mb1 3.6/5, mb1mx3.4/52, mbtmp3.4/5, ML3.1/2, MS3.3/1, Ms1 3.2/1, ms1mx2.4/34, Error ellipse: s-maj=63.2km s-min=24.5km az=2.0*
*NEIC **08** 09:41:03.0, 51°.20N×175°.17W, h11km, ML3.1(AEIC), After AEIC.*
**ISC 08 09:41:01.0±2.4, 51°.1N±0°.1×175°.10W±0°.04, h13km±12km, n20, σ0s.40/23, mb3.8/3, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 1.10 | 327 | P | Pb | 09 41 21.8 | -0.1 |
| GSMY | | | | S | Sb | 09 41 35.9 | -0.3 |
| ETKA | Kagalaska Isla | 1.11 | 313 | P | Pb | 09 41 21.9 | 0.0 |
| ETKA | | | | S | Sg | 09 41 36.4 | -0.3 |
| GSCK | Great Sitkin C | 1.11 | 324 | P | Pb | 09 41 22.0 | -0.1 |
| GSTD | Great Sitkin T | 1.14 | 326 | P | Pb | 09 41 22.7 | +0.1 |
| GSTD | | | | S | Sb | 09 41 37.6 | +0.2 |
| GSTR | Great Sitkin T | 1.15 | 329 | P | Pb | 09 41 22.7 | 0.0 |
| ATKA | Atka Island | 1.22 | 27 | P | Pn | 09 41 23.5 | -0.2 |
| ATKA | | | | S | Sb | 09 41 39.9 | +0.3 |
| ADAG | Mount Adagdak | 1.28 | 313 | P | Pg | 09 41 25.2 | -0.2 |
| KOFP | Korovin Flat P | 1.31 | 28 | P | Pg | 09 41 26.0 | -0.2 |
| KOKL | Mount Kliuchef | 1.33 | 24 | P | Pg | 09 41 26.5 | 0.0 |
| KOKL | | | | S | Sg | 09 41 44.2 | +0.4 |
| KOWE | Korovin West | 1.35 | 22 | P | Pb | 09 41 26.6 | +0.3 |
| KIRH | Kanaga Island | 1.47 | 303 | P | Pn | 09 41 27.5 | +0.3 |
| KIKV | Kanaga Island | 1.50 | 301 | P | Pn | 09 41 27.9 | +0.2 |
| TAPA | Tanaga Point A | 1.84 | 293 | P | Pn | 09 41 32.9 | +0.6 |
| TAFP | Tanaga Falls P | 1.97 | 295 | P | Pn | 09 41 34.9 | +0.9 |
| TAFP | | | | S | Sn | 09 41 58.8 | +0.3 |
| KDAK | Kodiak Island | 14.65 | 54 | Pn | Pn | 09 44 20.6 | -7.1 |
| | 0.1nm,0.3s,baz=150,slow=20,SNR=2.2 | | | | | | |
| ILAR | Eielson Array | 20.03 | 36 | P | P | 09 45 26.5 | -6.8 |
| | 0.0nm,0.3s,baz=226,slow=8.9,SNR=2.8 | | | | | | |
| ULM | Lac du Bonnet | 47.86 | 58 | LR | LR | 10 11 49.9 | |
| | comp=Z,33nm,18.1s,baz=1.0,slow=39 | | | | | | |
| TXAR | Lajitas Array | 56.38 | 84 | P | P | 09 50 41.9 | -0.1 |
| | 0.1nm,0.4s,baz=306,slow=7.7,SNR=2.1 | | | | | | |
| KURBB | Kurchatov Arra | 60.97 | 316 | P | P | 09 51 13.5 | 0.0 |
| | 0.3nm,0.3s,baz=46,slow=6.6,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 61.99 | 311 | P | P | 09 51 19.6 | -0.9 |
| | 0.2nm,0.3s,baz=49,slow=6.7,SNR=3.0 | | | | | | |

*IDC **08** 09:41:44.9±2.2, 51°.43N×174°.93W, h0km, mb3.8/6, mb1 3.9/9, mb1mx3.6/53, mbtmp3.8/9, ML3.5/3, Error ellipse: s-maj=60.8km s-min=22.4km az=3.0*
*NEIC **08** 09:41:49.2, 51°.22N×175°.14W, h13km, ML3.3(AEIC), After AEIC.*
**ISC 08 09:41:46.8±1.5, 51°.12N±0°.08×175°.00W±0°.05, h19km±4km, n27, σ0s.93/32, mb4.2/6, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 1.13 | 325 | P | Pb | 09 42 07.8 | 0.0 |
| GSMY | | | | S | Sb | 09 42 21.1 | -1.0 |
| ETKA | Kagalaska Isla | 1.15 | 311 | P | Pb | 09 42 08.0 | -0.1 |
| GSCK | Great Sitkin C | 1.15 | 321 | P | Pb | 09 42 07.9 | -0.1 |
| GSTR | Great Sitkin T | 1.18 | 326 | P | Pg | 09 42 08.9 | -0.8 |
| GSTD | Great Sitkin T | 1.18 | 323 | P | Pb | 09 42 08.3 | -0.2 |
| GSTD | | | | S | Sb | 09 42 23.9 | +0.5 |
| ATKA | Atka Island | 1.20 | 25 | P | Pn | 09 42 09.4 | +0.9 |
| ATKA | | | | S | Sg | 09 42 25.7 | +0.1 |
| KOFP | Korovin Flat P | 1.29 | 26 | P | Pg | 09 42 12.1 | +0.4 |
| KOFP | | | | S | Sg | 09 42 29.9 | +1.4 |
| ADAG | Mount Adagdak | 1.32 | 311 | P | Pg | 09 42 11.3 | -1.0 |
| KOWE | Korovin West | 1.33 | 20 | P | Pg | 09 42 12.3 | -0.2 |
| KIRH | Kanaga Island | 1.52 | 302 | P | Pn | 09 42 13.4 | +0.5 |
| KIKV | Kanaga Island | 1.55 | 300 | P | Pn | 09 42 13.8 | +0.4 |
| TAPA | Tanaga Point A | 1.89 | 293 | P | Pn | 09 42 18.9 | +0.9 |
| TAFP | Tanaga Falls P | 2.02 | 294 | P | Pn | 09 42 20.9 | +1.1 |
| TAFP | | | | S | Sn | 09 42 45.9 | +1.4 |
| TANO | Tanaga North | 2.10 | 293 | P | Pn | 09 42 21.7 | +0.7 |
| GANE | Gareloi Northe | 2.46 | 288 | P | Pn | 09 42 27.2 | +1.4 |
| AMKA | Amchitka | 3.59 | 276 | P | Pn | 09 42 41.6 | +0.3 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LSSA** | **Little Sitkin** | **4.13** | **284** | P | **Pn** | **09 42 50.9** | **+2.0** |
| **KDAK** | **Kodiak Island** | **14.60** | **54** | Pn | **Pn** | **09 45 11.2** | **-0.9** |
| | 0.3nm,0.3s,baz=234,slow=8.7,SNR=2.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.85** | **287** | Pn | **Pn** | **09 45 42.5** | **+1.2** |
| | 0.4nm,0.3s,baz=93,slow=15,SNR=6.5 | | | | | | |
| **ILAR** | **Eielson Array** | **20.00** | **36** | P | **P** | **09 46 16.6** | **-1.3** |
| | 0.1nm,0.3s,baz=227,slow=8.5,SNR=6.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.32** | **84** | P | **P** | **09 51 27.0** | **+0.7** |
| | 0.2nm,0.7s,baz=321,slow=7.0,SNR=2.5 | | | | | | |
| **KURK** | **Kurchatov** | **60.90** | **316** | P | **P** | **09 51 58.5** | **+0.7** |
| **KURBB** | **Kurchatov Arra** | **61.01** | **316** | P | **P** | **09 51 58.4** | **-0.1** |
| | 1.2nm,0.6s,baz=42,slow=6.8,SNR=6.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.04** | **311** | P | **P** | **09 52 05.0** | **-0.7** |
| | 0.4nm,0.3s,baz=51,slow=5.2,SNR=7.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.60** | **322** | P | **P** | **09 52 09.8** | **+0.6** |
| | 0.8nm,0.5s,baz=51,slow=7.8,SNR=3.0 | | | | | | |
| **HFS** | **Hagfors** | **68.88** | **355** | P | **P** | **09 52 48.4** | **-1.2** |
| | 1.6nm,0.8s,baz=26,slow=6.5,SNR=1.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **69.24** | **327** | P | **P** | **09 52 51.6** | **-0.4** |
| | 0.8nm,0.4s,baz=45,slow=5.7,SNR=4.1 | | | | | | |

*ISCJB **08** 09:54:50.1±0.9, 51°.49N±0°.04×16°.16E±0°.04, h0km, Error ellipse: s-maj=6.0km s-min=3.4km az=19.0*
*CSEM **08** 09:54:51.7±0.6, 51°.49N×16°.12E, h2km, ML3.0/7, Error ellipse: s-maj=9.4km s-min=4.8km az=177.0*
*PRU **08** 09:54:53.1, 51°.45N×16°.13E, h0km*
**ISC 08 09:54:52.3**±1.1**, 51°.46N**±0°.05×**16°.11E**±0°.03**, h0**km**, n24, σ0s.52**/46**, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.63** | **170** | *e*Pg | **Pb** | **09 55 05.4** | **-0.8** |
| KSP | | | | *e*Sg | **Sb** | **09 55 14.6** | **-1.0** |
| **KSP** | **Ksiaz** | **0.63** | **170** | *e*Pg | **Pb** | **09 55 05.4** | **-0.8** |
| **UPC** | **Upice** | **0.96** | **184** | *e*PG | **Pb** | **09 55 11.6** | **-0.2** |
| UPC | | | | *e*SG | **Sb** | **09 55 24.3** | **-0.7** |
| | comp=Z,30nm,0.3s | | | | | | |
| **UPC** | **Upice** | **0.96** | **184** | Pg | **Pb** | **09 55 11.6** | **-0.2** |
| UPC | | | | Sg | **Sb** | **09 55 24.3** | **-0.7** |
| | 30nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.12** | **173** | *e*PG | **Pg** | **09 55 14.1** | **+0.3** |
| DPC | | | | *e*SG | **Sg** | **09 55 28.9** | **+0.6** |
| | comp=Z,14nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.12** | **173** | Pg | **Pg** | **09 55 14.1** | **+0.3** |
| DPC | | | | Sg | **Sg** | **09 55 28.9** | **+0.6** |
| | 14nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.35** | **227** | *e*PG | **Pb** | **09 55 18.7** | **+0.2** |
| PVCC | | | | *e*SG | **Sn** | **09 55 37.0** | **0.0** |
| | comp=Z,50nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **1.35** | **227** | Pg | **Pb** | **09 55 18.7** | **+0.2** |
| PVCC | | | | Sg | **Sn** | **09 55 37.0** | **0.0** |
| | 50nm,0.4s | | | | | | |
| **KRLC** | **Kraliky** | **1.45** | **163** | *e*PG | **Pn** | **09 55 19.9** | **0.0** |
| KRLC | | | | *e*SG | **Sg** | **09 55 39.0** | **+0.1** |
| **KRLC** | **Kraliky** | **1.45** | **163** | Pg | **Pn** | **09 55 19.9** | **0.0** |
| KRLC | | | | Sg | **Sg** | **09 55 39.0** | **+0.1** |
| **BRG** | **Berggiesshubel** | **1.49** | **247** | PG | **Pg** | **09 55 21.1** | **+0.3** |
| BRG | | | | SG | **Sn** | **09 55 41.2** | **+0.8** |
| | 21nm,0.4s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.77** | **209** | *e*PG | **Pb** | **09 55 25.7** | **+0.2** |
| GOPC | | | | *e*SG | **Sg** | **09 55 49.1** | **+0.1** |
| | comp=Z,5.3nm,0.3s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.77** | **209** | Pg | **Pb** | **09 55 25.7** | **+0.2** |
| GOPC | | | | Sg | **Sg** | **09 55 49.1** | **+0.1** |
| | 5.3nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.78** | **215** | *e*PG | **Pb** | **09 55 25.4** | **-0.4** |
| PRU | | | | *e*SG | **Sg** | **09 55 49.6** | **+0.1** |
| | comp=Z,11nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.78** | **215** | Pg | **Pb** | **09 55 25.4** | **-0.4** |
| PRU | | | | Sg | **Sg** | **09 55 49.6** | **+0.1** |
| | 11nm,0.3s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.92** | **151** | *e*Sg | **Sb** | **09 55 52.7** | **0.0** |
| **CLL** | **Collm** | **1.96** | **267** | *e*Pn | **Pn** | **09 55 26.0** | **-0.7** |
| CLL | | | | *e*Pg | **Pb** | **09 55 29.0** | **+0.3** |
| CLL | | | | *i* | | 09 55 31.8 | |
| CLL | | | | *i* | | 09 55 32.7 | |
| CLL | | | | *e*Sg | **Sg** | **09 55 55.0** | **-0.1** |
| | comp=Z,18nm,0.7s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.08** | **141** | *e*PG | **Pb** | **09 55 31.6** | **+0.7** |
| OKC | | | | *e*SG | **Sb** | **09 55 57.7** | **+0.4** |
| | comp=Z,8.2nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.08** | **141** | Pg | **Pb** | **09 55 31.6** | **+0.7** |
| OKC | | | | Sg | **Sb** | **09 55 57.7** | **+0.4** |
| | comp=Z,8.2nm,0.4s | | | | | | |
| **VRAC** | **Vranov** | **2.18** | **172** | *e*Sg | **Sg** | **09 56 02.3** | **0.0** |
| **OJC** | **Ojcow** | **2.65** | **117** | *e*Pg | **Pg** | **09 55 42.3** | **-0.7** |
| OJC | | | | *e*Sg | **Sg** | **09 56 17.6** | **+0.3** |
| **OJC** | **Ojcow** | **2.65** | **117** | *e*Pg | **Pg** | **09 55 42.3** | **-0.7** |
| OJC | | | | *e*Sg | **Sg** | **09 56 17.6** | **+0.3** |
| **KHC** | **Kasperske Hory** | **2.84** | **216** | *e*PN | **Pn** | **09 55 39.1** | **+0.1** |
| KHC | | | | *e*PG | **Pb** | **09 55 45.1** | **+1.2** |
| KHC | | | | *e*SG | **Sg** | **09 56 22.3** | **-1.3** |
| | comp=Z,5.9nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.84** | **216** | Pn | **Pn** | **09 55 39.1** | **+0.1** |

*ISCJB **08** 09:58:11.9±0.4, 24°.16S±0°.04×179°.79W±0°.08, h505km, mb3.9/11, Error ellipse: s-maj=9.6km s-min=4.9km az=7.0*
*IDC **08** 09:58:11.5±2.3, 24°.18S×179°.72W, h488km±24km, mb3.6/12, mb1 3.8/15, mb1mx3.7/23, mbtmp4.5/15, Error ellipse: s-maj=18.7km s-min=15.5km az=85.0*
*AUST **08** 09:58:14.7±0.0, 24°.16S×179°.49W, h551km, Error ellipse: s-maj=2.3km s-min=1.3km az=282.0*
**ISC 08 09:58:12.6**±0.5**, 24°.22S**±0°.07×**179°.73W**±0°.09**, h505**km**, n56, σ1s.60**/65**, mb4.0**/11**, 1D, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **12.71** | **38** | P | **P** | **10 00 57.8** | **-1.0** |
| | 7.3nm,0.3s,baz=101,slow=5.7,SNR=10 | | | | | | |
| AFI | | | | S | **S** | **10 03 11.8** | **-4.1** |
| | 1.1nm,0.3s,baz=204,slow=20,SNR=4.3 | | | | | | |
| **DZM** | **Mont Dzumac** | **12.90** | **277** | P | **P** | **10 01 00.4** | **-0.4** |
| | 0.7nm,0.3s,baz=360,slow=18,SNR=7.7 | | | | | | |
| **HAZ** | **Te Kaha** | **13.66** | **188** | *e*PN | P | 10 01 13.2 | +4.8 |
| HAZ | | | | SN | **S** | **10 03 37.4** | **+3.9** |
| **PUZ** | **Puketiti** | **13.91** | **187** | PN | P | 10 01 18.7 | +7.6 |
| **URZ** | **Urewera** | **14.25** | **190** | P | **P** | **10 01 13.1** | **-1.6** |
| | 1.5nm,0.3s,baz=270,slow=2.0,SNR=1.5 | | | | | | |
| URZ | | | | S | **S** | **10 03 41.5** | **-3.3** |
| | 1.4nm,0.3s,baz=84,slow=23,SNR=8.9 | | | | | | |
| **URZ** | **Urewera** | **14.25** | **190** | PN | **P** | **10 01 16.5** | **+1.9** |
| URZ | | | | SN | **S** | **10 03 43.7** | **-1.1** |
| **MWZ** | **Matawai** | **14.26** | **189** | *e*PN | P | 10 01 19.4 | +4.5 |
| MWZ | | | | *e*SN | **S** | **10 03 45.3** | **+0.2** |
| **BHHZ** | **Black Hill Sta** | **15.63** | **192** | PN | **P** | **10 01 29.5** | **+0.3** |
| BHHZ | | | | SN | **S** | **10 04 08.9** | **-2.4** |
| **PXZ** | **Pawanui** | **16.02** | **190** | PN | **P** | **10 01 33.9** | **+0.7** |
| PXZ | | | | SN | **S** | **10 04 14.5** | **-3.9** |
| **TSZ** | **Takapari Road** | **16.20** | **192** | PN | **P** | **10 01 36.2** | **+1.2** |
| TSZ | | | | SN | **S** | **10 04 18.0** | **-3.8** |
| **MRZ** | **Mangatainoka R** | **16.86** | **192** | PN | **P** | **10 01 40.6** | **-1.2** |
| MRZ | | | | SN | **S** | **10 04 29.7** | **-3.5** |
| **THZ** | **Tophouse** | **18.54** | **198** | *e*PN | **P** | **10 01 57.2** | **-0.3** |
| THZ | | | | *e*SN | **S** | **10 04 57.3** | **-3.5** |
| **OXZ** | **Oxford** | **20.23** | **198** | *e*PN | **P** | **10 02 11.8** | **-1.0** |
| **RPZ** | **Rata Peaks** | **20.87** | **199** | P | **P** | **10 02 18.3** | **-0.3** |
| | 31nm,0.6s,baz=310,slow=0.8,SNR=25 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.33** | **249** | P | **P** | **10 03 52.0** | **+0.9** |
| | baz=32,SNR=7.3 | | | | | | |
| **CTA** | **Charters Tower** | **31.72** | **271** | P | **P** | **10 03 55.0** | **+0.4** |
| | 18nm,0.4s,baz=95,slow=13,SNR=27 | | | | | | |
| **QLP** | **Quilpie** | **32.57** | **258** | P | **P** | **10 04 02.6** | **+0.8** |
| | baz=33,SNR=4.9 | | | | | | |
| **COEN** | **Coen** | **36.41** | **279** | P | **P** | **10 04 35.1** | **+1.1** |
| | baz=37,SNR=4.4 | | | | | | |
| **HTT** | **Hallett** | **37.17** | **246** | P | **P** | **10 04 38.0** | **-2.2** |
| | baz=37,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **42.23** | **261** | P | **P** | **10 05 21.2** | **+0.1** |
| | 2.3nm,0.5s,baz=95,slow=7.1,SNR=55 | | | | | | |
| ASAR | | | | S | **S** | **10 11 01.1** | **-3.6** |
| | 0.8nm,0.8s,baz=93,slow=17,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.63** | **266** | P | **P** | **10 05 23.9** | **-0.3** |
| | 8.7nm,0.5s,baz=103,slow=8.2,SNR=45 | | | | | | |
| **KDU** | **Kakadu** | **46.56** | **275** | P | **P** | **10 05 54.3** | **-0.3** |
| | baz=47,SNR=8.1 | | | | | | |
| **WRKA** | **Warakurna** | **47.01** | **258** | P | **P** | **10 05 58.0** | **0.0** |
| | baz=47,SNR=38 | | | | | | |
| **KNRA** | **Kununurra** | **48.93** | **270** | P | **P** | **10 06 12.7** | **+0.4** |
| | baz=49,SNR=8.6 | | | | | | |
| **FAKI** | **Fak Fak** | **50.91** | **287** | P | **P** | **10 06 27.1** | **+0.1** |
| | baz=51,SNR=3.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.05** | **266** | P | **P** | **10 06 28.4** | **+0.5** |
| | baz=51,SNR=13 | | | | | | |
| **VNDA** | **Vanda** | **54.08** | **185** | P | **P** | **10 06 50.2** | **+1.5** |
| | 0.7nm,0.8s,baz=22,slow=5.4,SNR=4.7 | | | | | | |
| **MEEK** | **Meekatharra** | **55.26** | **253** | P | **P** | **10 06 57.4** | **-0.5** |
| | baz=55,SNR=3.5 | | | | | | |
| **MORW** | **Morawa** | **56.99** | **250** | P | **P** | **10 07 10.0** | **+0.1** |
| | baz=57,SNR=5.3 | | | | | | |
| **LEM** | **Lembang** | **71.43** | **271** | P | P | 10 08 36.6 | -5.6 |
| | baz=72,SNR=6.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.30** | **326** | P | **P** | **10 08 46.0** | **-0.5** |
| | 3.5nm,0.7s,baz=163,slow=5.6,SNR=8.4 | | | | | | |
| **KSRS** | **Korea Array** | **78.65** | **320** | P | **P** | **10 09 22.3** | **+0.5** |
| | 2.5nm,0.7s,baz=135,slow=5.9,SNR=7.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.47** | **346** | P | **P** | **10 09 26.3** | **+0.5** |
| | 2.8nm,0.5s,baz=164,slow=7.3,SNR=2.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **81.17** | **327** | P | **P** | **10 09 35.2** | **+0.3** |
| | 2.0nm,0.5s,baz=136,slow=4.0,SNR=7.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.87** | **290** | P | **P** | **10 10 19.2** | **+1.6** |
| | 1.5nm,0.5s,baz=137,slow=3.3,SNR=7.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **90.39** | **58** | P | **P** | **10 10 21.7** | **+1.7** |
| | 0.3nm,0.7s,baz=202,slow=4.7,SNR=3.7 | | | | | | |
| **ILAR** | **Eielson Array** | **92.28** | **13** | P | **P** | **10 10 27.4** | **-0.3** |
| | 0.6nm,0.9s,baz=216,slow=5.1,SNR=5.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **112.35** | **320** | PKiKP | **PKiKP** | **10 15 49.8** | **-0.5** |
| | 0.7nm,0.3s,baz=128,slow=4.4,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **112.55** | **313** | PKiKP | **PKiKP** | **10 15 50.7** | **-0.3** |
| | 0.3nm,0.3s,baz=65,slow=2.1,SNR=2.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **115.65** | **316** | PKP | **PKPdf** | **10 15 56.6** | **-0.2** |
| | 0.9nm,0.5s,baz=117,slow=2.2,SNR=4.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **120.84** | **319** | PKP | **PKPdf** | **10 16 07.0** | **+0.2** |
| | 1.8nm,0.5s,baz=108,slow=4.8,SNR=6.0 | | | | | | |
| **ARU** | **Arti** | **127.29** | **324** | PKP | **PKPdf** | **10 16 19.2** | **+0.3** |
| | 1.8nm,0.2s,baz=113,slow=18,SNR=2.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **132.25** | **348** | PKP | **PKPdf** | **10 16 28.1** | **+0.1** |
| | 3.0nm,0.8s,baz=225,slow=0.3,SNR=6.7 | | | | | | |
| **FINES** | **FINESS Array B** | **138.83** | **341** | PKhKP | PKPpre | 10 16 33.0 | |
| | 1.4nm,0.7s,baz=67,slow=6.4,SNR=5.7 | | | | | | |
| FINES | | | | PKP | **PKPdf** | **10 16 42.2** | **+1.8** |
| | 1.0nm,0.4s,baz=78,slow=3.0,SNR=6.7 | | | | | | |
| FINES | | | | SKPbc | **SKPbc** | **10 19 27.8** | **+0.2** |
| | 4.2nm,1.0s,baz=74,slow=4.9,SNR=6.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **142.44** | **351** | PKhKP | PKPpre | 10 16 42.8 | |
| | 0.9nm,0.7s,baz=17,slow=4.2,SNR=3.2 | | | | | | |
| **HFS** | **Hagfors** | **142.91** | **349** | PKP | **PKPdf** | **10 16 45.5** | **-2.3** |
| | 6.8nm,0.4s,baz=64,slow=3.4,SNR=55 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.37** | **327** | PKPbc | **PKPdf** | **10 16 52.9** | **+0.5** |
| | 2.5nm,0.4s,baz=46,slow=3.9,SNR=19 | | | | | | |
| **ASF** | **Jabal al Asfar** | **146.88** | **292** | PKPbc | **PKPbc** | **10 16 58.9** | **+0.5** |
| | 3.5nm,0.7s,baz=19,slow=3.5,SNR=4.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.97** | **307** | PKPbc | **PKPbc** | **10 17 01.3** | **+0.2** |
| | 2.8nm,0.7s,baz=138,slow=4.6,SNR=13 | | | | | | |
| BRTR | | | | PKPab | **PKPab** | **10 17 06.5** | **+1.0** |
| | 3.5nm,0.6s,baz=104,slow=3.7,SNR=12 | | | | | | |
| **EIL** | **Elat** | **148.69** | **288** | PKPbc | **PKPbc** | **10 17 03.4** | **+0.5** |
| | 3.6nm,0.5s,baz=22,slow=2.3,SNR=5.5 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **148.82** | **4** | PKPbc | **PKPbc** | **10 17 02.3** | **-0.2** |
| | 0.6nm,0.4s,baz=356,slow=2.3,SNR=3.5 | | | | | | |
| **CLL** | **Collm** | **151.23** | **343** | ⇓*i*PKP | **PKPbc** | **10 17 09.0** | **+0.8** |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **BRG** | **Berggiesshubel** | **151.37** | **342** | *i* PKP | **PKPbc** | **10 17 09.7** | **+1.1** |
| | comp=Z,11nm,1.1s | | | | | | |
| **GERES** | **GERESS Array B** | **153.24** | **340** | PKPbc | **PKPbc** | **10 17 12.8** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=45,slow=0.3,SNR=3.5 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **156.21** | **343** | PKPab | **PKPab** | **10 17 41.2** | **+1.1** |
| | comp=Z,2.9nm,0.6s,baz=240,slow=2.1,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **168.90** | **187** | PKP | **PKPdf** | **10 17 21.9** | **-0.1** |
| | comp=Z,0.5nm,0.8s,baz=102,slow=0.4,SNR=2.7 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **10 18 37.0** | **+0.7** |
| | comp=Z,0.4nm,0.6s,baz=175,slow=4.6,SNR=3.9 | | | | | | |

**IDC 08 10:00:17.5**±7.8**, 49°.37N**×**33°.39E, h0**km**, Error ellipse: s-maj=54.3km s-min=51.8km az=126.0, Ukraine - Moldova - Southwestern Russia region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKASG** | **Malin Array Be** | **3.00** | **298** | Pg | Pb | 10 01 10.9 | -0.8 |
| | 1.2nm,0.3s,baz=113,slow=16,SNR=6.0 | | | | | | |
| AKASG | | | | Lg | Lg | 10 01 51.8 | |
| | 1.4nm,0.3s,baz=116,slow=30,SNR=3.7 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **7.72** | **16** | *i* | | 10 47 10.0 | |
| | baz=194,slow=326,SNR=0.3 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **15.90** | **77** | *i* | | 11 38 05.0 | |
| | baz=273,slow=317,SNR=1.8 | | | | | | |

*ISK **08** 10:13:31.8, 40°.66N×27°.23E, h18km, MD2.6*
*ISCJB **08** 10:13:32.6±0.5, 40°.68N±0°.04×27°.23E±0°.04, h18km±4km, Error ellipse: s-maj=6.3km s-min=4.6km az=4.9*
*CSEM **08** 10:13:32.3±0.1, 40°.68N×27°.22E, h19km, MD2.6, Error ellipse: s-maj=3.0km s-min=2.2km az=4.0*
*DDA **08** 10:13:33.4, 40°.60N×27°.30E, h7km, Md2.3*
**ISC 08 10:13:32.2**±0.9**, 40°.68N**±0°.03×**27°.22E**±0°.02**, h19**km±2km**, n40, σ0s.42**/52**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SART** | **Tekirdag** | **0.03** | **282** | *i* P | **Pg** | **10 13 36.1** | **+0.4** |
| SART | | | | *i* S | **Sg** | **10 13 38.8** | **+0.7** |
| **SART** | **Tekirdag** | **0.03** | **282** | P | **Pg** | **10 13 36.1** | **+0.4** |
| SART | | | | S | **Sg** | **10 13 38.9** | **+0.7** |
| **RKY** | **Sarkoy-Tekirda** | **0.03** | **279** | PG | **Pg** | **10 13 35.8** | **+0.1** |
| **RKY** | **Sarkoy-Tekirda** | **0.03** | **279** | *i* Pg | **Pg** | **10 13 35.8** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **0.29** | **169** | PG | **Pb** | **10 13 39.0** | **+0.2** |
| KRBG | | | | *e*SG | **Sg** | **10 13 42.3** | **-0.8** |
| **KRBG** | **Karabiga-Canak** | **0.29** | **169** | *i* Pg | **Pb** | **10 13 39.0** | **+0.2** |
| KRBG | | | | *e*Sg | **Sg** | **10 13 42.3** | **-0.8** |
| **MRMT** | **Marmara Adasi** | **0.29** | **105** | PG | **Pg** | **10 13 39.0** | **+0.2** |
| MRMT | | | | *e*SG | **Sg** | **10 13 42.5** | **-0.8** |
| **MRMT** | **Marmara Adasi** | **0.29** | **105** | *i* Pg | **Pg** | **10 13 39.0** | **+0.2** |
| MRMT | | | | *e*Sg | **Sg** | **10 13 42.5** | **-0.8** |
| **TKR** | **Tekirdag** | **0.39** | **38** | *e*PG | **Pg** | **10 13 40.0** | **-0.4** |
| **TKR** | **Tekirdag** | **0.39** | **38** | *e*Pg | **Pg** | **10 13 40.0** | **-0.4** |
| **LPK** | **Lapseki** | **0.47** | **229** | *e*PG | **Pb** | **10 13 42.0** | **+0.2** |
| **LPK** | **Lapseki** | **0.47** | **229** | *e*Pg | **Pb** | **10 13 42.0** | **+0.2** |
| **ERIK** | **Erikli-Kesan** | **0.54** | **269** | *e*PG | **Pb** | **10 13 42.4** | **-0.5** |
| **ERIK** | **Erikli-Kesan** | **0.54** | **269** | *e*Pg | **Pb** | **10 13 42.4** | **-0.5** |
| **EDC** | **Edincik** | **0.59** | **124** | *e*PG | **Pg** | **10 13 44.3** | **+0.3** |
| EDC | | | | *e*SG | **Sb** | **10 13 51.5** | **-0.2** |
| **EDC** | **Edincik** | **0.59** | **124** | *e*Pg | **Pg** | **10 13 44.3** | **+0.3** |
| EDC | | | | *e*Sg | **Sb** | **10 13 51.5** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.64** | **244** | *e*PG | **Pb** | **10 13 43.9** | **-0.6** |
| **GELI** | **Tayfur-Gelibol** | **0.64** | **244** | *e*Pg | **Pb** | **10 13 43.9** | **-0.6** |
| **ENEZ** | **Enez** | **0.81** | **274** | *e*PG | **Pn** | **10 13 48.5** | **-0.1** |
| **ENEZ** | **Enez** | **0.81** | **274** | *e*Pg | **Pn** | **10 13 48.5** | **-0.1** |
| **KCTX** | **Karacabey (Bur** | **0.96** | **115** | *e*PG | **Pb** | **10 13 50.3** | **+0.1** |
| **KCTX** | **Karacabey (Bur** | **0.96** | **115** | *e*Pg | **Pb** | **10 13 50.3** | **+0.1** |
| **BALY** | **Balya** | **0.99** | **162** | *i* P | **Pn** | **10 13 51.2** | **+0.2** |
| BALY | | | | *i* S | **Sb** | **10 14 03.5** | **+0.2** |
| **BALY** | **Balya** | **0.99** | **162** | P | **Pn** | **10 13 51.2** | **+0.2** |
| BALY | | | | S | **Sb** | **10 14 03.5** | **+0.2** |
| **EZN** | **Ezine** | **1.10** | **219** | *e*PN | **Pn** | **10 13 52.6** | **+0.2** |
| **EZN** | **Ezine** | **1.10** | **219** | *e*Pn | **Pn** | **10 13 52.6** | **+0.2** |
| **GADA** | **Gvkgeada** | **1.12** | **245** | *e*PN | **Pn** | **10 13 53.0** | **+0.2** |
| **GADA** | **Gvkgeada** | **1.12** | **245** | *e*Pn | **Pn** | **10 13 53.0** | **+0.2** |
| **BALB** | **Balikesir** | **1.16** | **154** | *e*PN | **Pn** | **10 13 53.1** | **-0.1** |
| **BALB** | **Balikesir** | **1.16** | **154** | *e*Pn | **Pn** | **10 13 53.2** | **-0.1** |
| **EDRB** | **Edirne** | **1.22** | **343** | *e*PN | **Pb** | **10 13 54.9** | **+0.3** |
| **EDRB** | **Edirne** | **1.22** | **343** | *e*Pn | **Pb** | **10 13 54.9** | **+0.3** |
| **BOZC** | **Bozcaada** | **1.23** | **227** | P | **Pg** | **10 13 55.9** | **0.0** |
| BOZC | | | | S | **Sg** | **10 14 12.1** | **+0.2** |
| **ARMT** | **Armutlu** | **1.25** | **95** | *e*PN | **Pn** | **10 13 55.0** | **+0.3** |
| **ARMT** | **Armutlu** | **1.25** | **95** | *e*Pn | **Pn** | **10 13 55.0** | **+0.3** |
| **BGKT** | **Bogazkoy** | **1.28** | **67** | *e*PN | **Pn** | **10 13 55.0** | **+0.1** |
| **BGKT** | **Bogazkoy** | **1.28** | **67** | *e*Pn | **Pn** | **10 13 55.0** | **+0.1** |
| **IGD** | **Bursa** | **1.57** | **105** | P | **Pg** | **10 14 01.8** | **-0.6** |
| IGD | | | | S | **Sg** | **10 14 22.4** | **-0.4** |
| **IZI** | **Iznik** | **1.75** | **101** | *e*PN | **Pn** | **10 14 02.1** | **+0.6** |
| **IZI** | **Iznik** | **1.75** | **101** | *e*Pn | **Pn** | **10 14 02.1** | **+0.6** |

*NEIC **08** 10:15:38.9±0.4, 58°.88S×25°.71W, h35km, mb4.9/12, Error ellipse: s-maj=12.9km s-min=8.2km az=48.0*
*GCMT **08** 10:15:38.9±0.4, 59°.23S×25°.39W, h73km±3km, MW5.1/63, Moment Tensor Solution. s19,c20; s63,c82; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.47±.26; $M_{\theta\theta}$-4.31±.26; $M_{\phi\phi}$3.84±.25; $M_{r\theta}$1.55±.15; $M_{\theta\phi}$2.89±.20; $M_{\phi r}$0.79±.14; Best double couple: $M_0$5.29500×$10^{16}$ NP1:$\phi_s$63.00000°,δ88.00000°,λ19.00000°. NP2: $\phi_s$332.00000°,δ71.00000°,λ178.00000°. Principal axes: T 5.0960, Plg15.0000°, Azm290.0000°; N 0.3950, Plg70.0000°, Azm70.0000°; P -5.4940, Plg12.0000°, Azm196.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*IDC **08** 10:15:39.5±2.3, 58°.90S×25°.78W, h44km±20km, mb4.5/12, mb1 4.6/13, mb1mx4.5/20, mbtmp4.7/13, ML5.2/1, MS3.7/12, Ms1 3.7/12, ms1mx3.7/17 Error ellipse: s-maj=19.1km s-min=15.0km az=49.0*
*ISCJB **08** 10:15:40.5±0.3, 58°.92S±0°.06×25°.7W±0°.1, h70km, mb4.8/24, Error ellipse: s-maj=10.4km s-min=5.8km az=140.2*
*AWI **08** 10:15:40.3, 58°.93S×25°.82W*
*BJI **08** 10:15:41.9, 58°.90S×25°.80W, h58km, mB5.4/3, Ms5.5/2, Ms7 5.1/2*
**ISC 08 10:15:42.6**±0.3**, 58°.96S**±0°.08×**25°.92W**±0°.08**, h70**km**, n258, σ1s.02**/269**, mb4.9**/23**, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **7.48** | **304** | *e*Pn | **Pn** | **10 17 26.2** | **-2.6** |
| HOPE | | | | *e*Sn | **Sn** | **10 18 53.7** | **+1.7** |
| **VNA1** | **Neumayer--Stat** | **13.85** | **155** | P | **Pn** | **10 18 53.8** | **-1.4** |
| VNA1 | | | | S | Sn | 10 21 14.1 | -13 |
| **VNA3** | **Neumayer Olymp** | **14.02** | **158** | P | **Pn** | **10 18 55.4** | **-2.1** |
| VNA3 | | | | S | Sn | 10 21 12.8 | -19 |
| **VNA2** | **Neumayer--Watz** | **14.24** | **155** | P | **Pn** | **10 18 58.0** | **-2.4** |
| | baz=317,slow=16 | | | | | | |
| **SNAA** | **Sanae** | **15.81** | **153** | P | **Pn** | **10 19 19.6** | **-1.1** |
| **SNAA** | **Sanae** | **15.81** | **153** | P | **Pn** | **10 19 19.2** | **-1.5** |
| | 8.5nm,0.3s,baz=317,slow=14,SNR=476 | | | | | | |
| SNAA | | | | S | Sn | 10 21 57.6 | -17 |
| | 3.4nm,0.3s,baz=335,slow=19,SNR=9.3 | | | | | | |
| **SNAA** | **Sanae** | **15.81** | **153** | *e*Pn | **Pn** | **10 19 19.1** | **-1.5** |
| | 51nm,0.7s | | | | | | |
| SNAA | | | | S | Sn | 10 21 57.6 | -17 |
| **EFI** | **East Falkland** | **19.54** | **278** | *e*P | **P** | **10 20 04.2** | **+0.1** |
| | 188nm,1.1s | | | | | | |
| **USHA** | **Ushuaia** | **23.28** | **262** | P | **P** | **10 20 44.2** | **+0.3** |
| | 20nm,0.9s,baz=108,slow=12,SNR=6.2 | | | | | | |
| **TRQA** | **Tornquist** | **31.16** | **296** | *e*P | **P** | **10 21 55.5** | **+0.9** |
| | 25nm,0.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **31.28** | **180** | *e*P | **P** | **10 21 56.5** | **+0.9** |
| | 58nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **37.42** | **141** | P | **P** | **10 22 46.9** | **-1.4** |
| | 3.4nm,1.0s,baz=240,slow=9.9,SNR=6.8 | | | | | | |
| MAW | | | | LR | LR | 10 36 48.8 | |
| | comp=Z,96nm,19.0s,baz=242,slow=34 | | | | | | |
| **CPUP** | **Villa Florida** | **39.27** | **312** | P | **P** | **10 23 01.9** | **-2.3** |
| | 7.4nm,0.9s,baz=150,slow=8.6,SNR=9.4 | | | | | | |
| CPUP | | | | LR | LR | 10 37 13.2 | |
| | comp=Z,82nm,19.6s,baz=164,slow=33 | | | | | | |
| **LCO** | **Las Campanas** | **42.71** | **295** | *e*P | **P** | **10 23 33.2** | **+0.5** |
| | 33nm,0.7s | | | | | | |
| **SBA** | **Scott Base** | **43.22** | **184** | *e*P | **P** | **10 23 38.4** | **+2.4** |
| | 15nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **43.69** | **182** | P | **P** | **10 23 41.4** | **+1.6** |
| | 14nm,0.7s,baz=191,slow=6.7,SNR=127 | | | | | | |
| VNDA | | | | LR | LR | 10 40 57.5 | |
| | comp=Z,94nm,21.1s,baz=165,slow=35 | | | | | | |
| **BOSA** | **Boshof** | **46.12** | **72** | P | **P** | **10 23 58.3** | **-1.5** |
| | 3.7nm,0.8s,baz=206,slow=9.0,SNR=5.4 | | | | | | |
| **BDFB** | **Brasilia** | **46.23** | **330** | P | **P** | **10 24 00.8** | **+0.1** |
| | 9.6nm,0.5s,baz=147,slow=7.2,SNR=15 | | | | | | |
| BDFB | | | | LR | LR | 10 43 42.2 | |
| | comp=Z,86nm,18.6s,baz=182,slow=36 | | | | | | |
| **BDFB** | **Brasilia** | **46.23** | **330** | *e*P | **P** | **10 24 01.2** | **+0.4** |
| **LVC** | **Limon Verde** | **47.38** | **301** | *e*P | **P** | **10 24 10.2** | **+0.3** |
| | 9.1nm,0.9s | | | | | | |
| **LBTB** | **Lobatse** | **49.29** | **70** | P | **P** | **10 24 22.9** | **-1.5** |
| | 3.2nm,0.7s,baz=212,slow=5.8,SNR=4.3 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **50.62** | **14** | T | T | 11 19 11.2 | |
| | baz=188,slow=75,SNR=205 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **50.63** | **14** | T | T | 11 19 12.7 | |
| | baz=188,slow=75,SNR=195 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **50.64** | **14** | T | T | 11 19 13.7 | |
| | baz=188,slow=75,SNR=165 | | | | | | |
| **CASY** | **Casey** | **50.94** | **159** | *e*P | **P** | **10 24 36.5** | **+0.4** |
| | 12nm,0.9s | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **51.74** | **14** | T | T | 11 20 32.0 | |
| | baz=187,slow=76,SNR=7.8 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **51.74** | **14** | T | T | 11 20 35.9 | |
| | baz=187,slow=76,SNR=15 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **51.76** | **14** | T | T | 11 20 32.3 | |
| | baz=187,slow=76,SNR=32 | | | | | | |
| **LPAZ** | **La Paz** | **52.63** | **306** | P | **P** | **10 24 49.7** | **-0.4** |
| | 6.5nm,0.6s,baz=146,slow=5.7,SNR=29 | | | | | | |
| LPAZ | | | | LR | LR | 10 48 16.2 | |
| | comp=Z,63nm,20.7s,baz=152,slow=37 | | | | | | |
| **RCBR** | **Riachuelo** | **53.56** | **348** | *e*P | **P** | **10 24 56.5** | **+0.3** |
| | 28nm,1.2s | | | | | | |
| **SAML** | **Samuel** | **57.34** | **315** | *e*P | **P** | **10 25 21.9** | **-1.4** |
| | 7.3nm,1.0s | | | | | | |
| **LIC** | **Lamto** | **67.09** | **23** | *e*P | **P** | **10 26 28.3** | **-0.1** |
| | 45nm,0.7s | | | | | | |
| **KIC** | **Kosan Boka** | **67.28** | **23** | *e*P | **P** | **10 26 29.1** | **-0.6** |
| | 54nm,0.8s | | | | | | |
| **TIC** | **Toumodi** | **67.50** | **23** | *e*P | **P** | **10 26 30.8** | **-0.3** |
| **DBIC** | **Dimbokro** | **67.56** | **23** | P | **P** | **10 26 31.2** | **-0.2** |
| | 19nm,0.7s,baz=171,slow=6.3,SNR=20 | | | | | | |
| DBIC | | | | LR | LR | 10 48 50.5 | |
| | comp=Z,63nm,19.5s,baz=165,slow=30 | | | | | | |
| **OTAV** | **Otavalo** | **71.84** | **303** | *e*P | **P** | **10 26 59.1** | **+0.8** |
| | 26nm,1.6s | | | | | | |
| **ROSC** | **El Rosal** | **74.29** | **309** | LR | LR | 11 01 20.1 | |
| | comp=Z,45nm,20.6s,baz=174,slow=37 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **75.29** | **28** | *e*P | **P** | **10 27 16.8** | **-1.0** |
| **TORD** | **Torodi Ar. Bea** | **75.29** | **28** | P | **P** | **10 27 17.9** | **+0.1** |
| | 41nm,0.7s,baz=198,slow=6.4,SNR=299 | | | | | | |
| TORD | | | | LR | LR | 10 55 04.5 | |
| | comp=Z,44nm,19.0s,baz=135,slow=32 | | | | | | |
| **RKT** | **Rikitea** | **79.74** | **242** | *e*LR | LR | 10 52 42.4 | |
| | 167nm,29.2s | | | | | | |
| **TAM** | **Tamanrasset** | **85.49** | **29** | *e*P | **P** | **10 28 14.5** | **+1.9** |
| | 3.9nm,1.1s | | | | | | |
| **PPT2** | **Papeete2** | **90.98** | **233** | *e*LR | LR | 10 57 54.1 | |
| | 124nm,27.0s | | | | | | |
| **PPT** | **Papeete** | **91.00** | **233** | LR | LR | 10 59 40.4 | |
| | comp=Z,35nm,20.0s,baz=150,slow=29 | | | | | | |
| **ASAR** | **Alice Springs** | **96.00** | **161** | P | **P** | **10 29 00.8** | **-1.2** |
| | 1.6nm,0.6s,baz=183,slow=4.2,SNR=40 | | | | | | |
| ASAR | | | | PKKP | **PKKPbc** | **10 45 48.2** | **+1.7** |
| | 1.4nm,0.7s,baz=13,slow=2.1,SNR=25 | | | | | | |
| ASAR | | | | LR | LR | 11 10 24.6 | |
| | comp=Z,54nm,19.9s,baz=170,slow=34 | | | | | | |
| **KEST** | **Kesra** | **98.80** | **28** | LR | LR | 11 12 18.4 | |
| | comp=Z,37nm,18.1s,baz=237,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **99.72** | **161** | P | **Pdif** | **10 29 17.2** | **-1.5** |
| | 0.2nm,0.5s,baz=196,slow=4.5,SNR=3.2 | | | | | | |
| WRA | | | | PKKP | **PKKPdf** | **10 45 37.8** | **-1.5** |
| | 2.1nm,0.9s,baz=356,slow=3.2,SNR=12 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **99.74** | **153** | LR | LR | 11 13 16.7 | |
| | comp=Z,46nm,18.3s,baz=187,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **108.71** | **296** | PKiKP | **PKiKP** | **10 34 03.0** | **-0.1** |
| | 0.2nm,0.6s,baz=133,slow=3.8,SNR=4.3 | | | | | | |
| **121A** | **Cookes Peak, D** | **113.32** | **294** | P | **PKiKP** | **10 34 11.8** | **0.0** |
| | baz=114 | | | | | | |
| **R34A** | **Isabella, Hill** | **113.41** | **306** | P | **PKiKP** | **10 34 11.4** | **-0.2** |
| | baz=114 | | | | | | |
| **R32A** | **Long Quarter,** | **114.14** | **305** | P | PKPdf | 10 34 13.1 | +0.1 |
| | baz=114 | | | | | | |
| **Q33A** | **Connelly Farm,** | **114.25** | **306** | P | PKPdf | 10 34 13.0 | -0.2 |
| | baz=114 | | | | | | |
| **P34A** | **Walnut Farm, R** | **114.29** | **307** | P | PKPdf | 10 34 13.4 | +0.2 |
| | baz=115 | | | | | | |
| **R31A** | **Burdett** | **114.37** | **304** | P | PKPdf | 10 34 13.2 | -0.2 |
| | baz=115 | | | | | | |
| **Q30A** | **Quinter** | **115.25** | **304** | P | **PKPdf** | **10 34 15.2** | **+0.1** |
| | baz=116 | | | | | | |
| **P31A** | **Stockton** | **115.34** | **305** | P | **PKPdf** | **10 34 15.1** | **-0.2** |
| | baz=116 | | | | | | |
| **R28A** | **Tribune** | **115.41** | **302** | P | **PKPdf** | **10 34 15.2** | **-0.3** |
| | baz=116 | | | | | | |
| **S26A** | **Kim** | **115.54** | **301** | P | **PKPdf** | **10 34 15.1** | **-0.7** |
| | baz=116 | | | | | | |
| **T25A** | **Trinidad** | **115.57** | **300** | P | **PKPdf** | **10 34 15.5** | **-0.5** |
| | baz=116 | | | | | | |
| **L35A** | **Bielow Farm, R** | **115.92** | **309** | P | **PKPdf** | **10 34 15.6** | **-0.7** |
| | baz=116 | | | | | | |
| **P29A** | **Atwood** | **116.07** | **304** | P | **PKPdf** | **10 34 14.8** | **-1.9** |
| | baz=116 | | | | | | |
| **R26A** | **Arlington** | **116.09** | **301** | P | **PKPdf** | **10 34 16.8** | **0.0** |
| | baz=116 | | | | | | |
| **P28A** | **Saint Francis** | **116.40** | **303** | P | **PKPdf** | **10 34 15.5** | **-1.9** |
| | baz=117 | | | | | | |
| **P27A** | **Ficken Ranch,** | **116.75** | **303** | P | **PKPdf** | **10 34 18.1** | **0.0** |
| | baz=117 | | | | | | |
| **L31A** | **Butterfield Fa** | **117.32** | **307** | P | **PKPdf** | **10 34 18.6** | **-0.4** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=118 | | | | | | |
| WUAZ | Wupatki | 117.46 | 294 | P | PKPdf | 10 34 19.1 | -0.6 |
| | baz=118 | | | | | | |
| SPMN | St. Paul | 117.47 | 313 | P | PKPdf | 10 34 17.9 | -1.2 |
| | baz=118 | | | | | | |
| MVCO | Mesa Verde | 117.49 | 297 | P | PKPdf | 10 34 18.8 | -0.9 |
| | baz=118 | | | | | | |
| L30A | Spencer Herefo | 117.50 | 306 | P | PKPdf | 10 34 17.6 | -1.8 |
| | baz=118 | | | | | | |
| ECSD | EROS Data Cent | 117.71 | 309 | P | PKPdf | 10 34 18.7 | -1.0 |
| | baz=118 | | | | | | |
| N27A | Anderson Farm, | 117.76 | 303 | P | PKPdf | 10 34 19.1 | -0.9 |
| | baz=118 | | | | | | |
| MONP | Monument Peak | 117.78 | 288 | P | PKPdf | 10 34 19.0 | -1.4 |
| | baz=118 | | | | | | |
| PDMCI | Parker Dam,Lak | 117.80 | 291 | P | PKPdf | 10 34 19.4 | -0.7 |
| | baz=118 | | | | | | |
| G36A | St. Michael | 117.84 | 312 | P | PKPdf | 10 34 19.6 | -0.3 |
| | baz=118 | | | | | | |
| K30A | Basset | 118.06 | 307 | P | PKPdf | 10 34 19.6 | -0.8 |
| | baz=118 | | | | | | |
| SCHQ | Schefferville | 118.10 | 335 | PKP | PKPdf | 10 34 19.5 | -0.6 |
| | 8.2nm,0.8s,baz=135,slow=1.4,SNR=7.8 | | | | | | |
| AKASG | Malin Array Be | 118.14 | 36 | PKP | PKPdf | 10 34 19.0 | -1.2 |
| | 1.4nm,0.7s,baz=240,slow=1.5,SNR=4.6 | | | | | | |
| IRM | Iron Mountain | 118.18 | 290 | P | PKPdf | 10 34 19.8 | -1.1 |
| | baz=118 | | | | | | |
| F36A | Milaca | 118.28 | 313 | P | PKPdf | 10 34 19.8 | -0.9 |
| | baz=119 | | | | | | |
| ISCO | Idaho Springs | 118.29 | 301 | P | PKPdf | 10 34 20.4 | -0.9 |
| | baz=119 | | | | | | |
| PFO | Pinyon Flat Ob | 118.38 | 288 | P | PKPdf | 10 34 20.5 | -0.9 |
| | baz=119 | | | | | | |
| BELC | Belle Mtn. Jos | 118.47 | 289 | P | PKPdf | 10 34 22.3 | +0.7 |
| | baz=119 | | | | | | |
| J30A | Dallas | 118.54 | 307 | P | PKPdf | 10 34 20.6 | -0.7 |
| | baz=119 | | | | | | |
| H33A | Prehn Over Nor | 118.55 | 310 | P | PKPdf | 10 34 21.6 | +0.3 |
| | baz=119 | | | | | | |
| H32A | Carlson Farm, | 118.68 | 309 | P | PKPdf | 10 34 20.8 | -0.7 |
| | baz=119 | | | | | | |
| GMRC | Granite Mounta | 118.93 | 290 | P | PKPdf | 10 34 21.6 | -0.9 |
| | baz=119 | | | | | | |
| J29A | Okreek | 118.95 | 307 | P | PKPdf | 10 34 21.4 | -0.8 |
| | baz=119 | | | | | | |
| D37A | Cotton | 118.96 | 314 | P | PKPdf | 10 34 21.7 | -0.2 |
| | baz=119 | | | | | | |
| N23A | Red Feather La | 119.32 | 301 | P | PKPdf | 10 34 23.0 | -0.2 |
| | baz=120 | | | | | | |
| G32A | Webster | 119.33 | 310 | P | PKPdf | 10 34 22.1 | -0.7 |
| | baz=120 | | | | | | |
| C37A | Embarrass | 119.35 | 315 | P | PKPdf | 10 34 22.1 | -0.5 |
| | baz=120 | | | | | | |
| J28A | Allard Ranch, | 119.35 | 306 | P | PKPdf | 10 34 21.5 | -1.4 |
| | baz=120 | | | | | | |
| BFSC | Mount Baldy Ra | 119.47 | 288 | P | PKPdf | 10 34 23.2 | -0.3 |
| | baz=120 | | | | | | |
| D35A | Remer | 119.50 | 313 | P | PKPdf | 10 34 22.8 | -0.2 |
| | baz=120 | | | | | | |
| O20A | White River Ci | 119.74 | 299 | P | PKPdf | 10 34 23.8 | -0.1 |
| | baz=120 | | | | | | |
| O20A | White River Ci | 119.74 | 299 | ePKPdf | PKPdf | 10 34 23.9 | -0.1 |
| E33A | Westby DABS, E | 119.77 | 312 | P | PKPdf | 10 34 22.6 | -0.9 |
| | baz=120 | | | | | | |
| I28A | Midland | 119.79 | 306 | P | PKPdf | 10 34 23.6 | -0.1 |
| | baz=120 | | | | | | |
| H29A | Onida | 119.91 | 308 | P | PKPdf | 10 34 23.5 | -0.4 |
| | baz=120 | | | | | | |
| GSC | Goldstone | 119.91 | 289 | P | PKPdf | 10 34 24.1 | -0.2 |
| | baz=120 | | | | | | |
| D34A | Park Rapids | 119.94 | 312 | P | PKPdf | 10 34 23.6 | -0.3 |
| | baz=120 | | | | | | |
| SRU | San Rafael | 119.96 | 297 | ePKPdf | PKPdf | 10 34 24.1 | -0.3 |
| SHPR | Sheep Range | 120.07 | 291 | ePKPdf | PKPdf | 10 34 25.6 | +0.9 |
| F31A | Hecla | 120.12 | 310 | P | PKPdf | 10 34 23.9 | -0.3 |
| | baz=120 | | | | | | |
| EDW2 | Edwards Air Fo | 120.15 | 288 | P | PKPdf | 10 34 24.5 | -0.2 |
| | baz=120 | | | | | | |
| D33A | AnnSam, Waubun | 120.24 | 312 | P | PKPdf | 10 34 23.5 | -0.9 |
| | baz=120 | | | | | | |
| P18A | Preston Nutter | 120.25 | 297 | ePKPdf | PKPdf | 10 34 25.5 | +0.4 |
| MSU | Marysvale | 120.25 | 295 | ePKPdf | PKPdf | 10 34 25.8 | +0.8 |
| BSC | Santa Cruz Isl | 120.26 | 286 | P | PKPdf | 10 34 25.7 | +0.8 |
| | baz=120 | | | | | | |
| H28A | Mission Ridge | 120.28 | 307 | P | PKPdf | 10 34 24.5 | -0.1 |
| | baz=121 | | | | | | |
| J25A | Sunshine Ranch | 120.41 | 304 | P | PKPdf | 10 34 24.8 | -0.2 |
| | baz=121 | | | | | | |
| LRMC | Laurel Mountai | 120.48 | 289 | P | PKPdf | 10 34 25.5 | +0.1 |
| | baz=121 | | | | | | |
| I26A | New Underwood | 120.53 | 305 | P | PKPdf | 10 34 24.7 | -0.5 |
| | baz=121 | | | | | | |
| G28A | Parade | 120.56 | 307 | P | PKPdf | 10 34 25.4 | +0.3 |
| | baz=121 | | | | | | |
| H27A | Howes | 120.69 | 306 | P | PKPdf | 10 34 25.0 | -0.4 |
| | baz=121 | | | | | | |
| C33A | Trail | 120.72 | 313 | P | PKPdf | 10 34 25.3 | 0.0 |
| | baz=121 | | | | | | |
| MPMC | Manual Prospec | 120.85 | 289 | P | PKPdf | 10 34 26.9 | +0.6 |
| | baz=121 | | | | | | |
| FURC | Furnace Creek, | 120.87 | 290 | P | PKPdf | 10 34 26.2 | +0.3 |
| | baz=121 | | | | | | |
| I25A | Rochford | 120.89 | 305 | P | PKPdf | 10 34 26.0 | 0.0 |
| | baz=121 | | | | | | |
| B34A | Aery, Baudette | 120.89 | 314 | P | PKPdf | 10 34 25.1 | -0.5 |
| | baz=121 | | | | | | |
| TPNV | Topopah Spring | 120.95 | 291 | P | PKPdf | 10 34 26.1 | -0.3 |
| | baz=121 | | | | | | |
| H26A | Fairpoint | 120.96 | 306 | P | PKPdf | 10 34 26.2 | +0.2 |
| | baz=121 | | | | | | |
| K22A | Casper | 121.00 | 302 | P | PKPdf | 10 34 25.6 | -0.7 |
| | baz=121 | | | | | | |
| ISA | Isabella | 121.01 | 288 | P | PKPdf | 10 34 26.2 | -0.2 |
| | baz=121 | | | | | | |
| ISA | Isabella | 121.01 | 288 | ePKPdf | PKPdf | 10 34 27.3 | +1.0 |
| RSSD | Black Hills | 121.10 | 305 | ePKPdf | PKPdf | 10 34 25.9 | -0.6 |
| F28A | McLaughlin | 121.14 | 308 | P | PKPdf | 10 34 26.2 | 0.0 |
| | baz=121 | | | | | | |
| AGMN | Agassiz Nation | 121.20 | 313 | P | PKPdf | 10 34 25.0 | -1.2 |
| | baz=122 | | | | | | |
| G27A | Dupree | 121.23 | 307 | P | PKPdf | 10 34 25.7 | -0.7 |
| | baz=122 | | | | | | |
| E29A | Napoleon | 121.26 | 309 | P | PKPdf | 10 34 25.8 | -0.7 |
| | baz=122 | | | | | | |
| H25A | Fruitdale | 121.32 | 305 | P | PKPdf | 10 34 26.2 | -0.5 |
| | baz=122 | | | | | | |
| D30A | Buchanan | 121.35 | 310 | P | PKPdf | 10 34 26.3 | -0.3 |
| | baz=122 | | | | | | |
| NLU | North Lily Min | 121.36 | 296 | ePKPdf | PKPdf | 10 34 27.7 | +0.6 |
| CWC | Cottonwood Cre | 121.44 | 289 | P | PKPdf | 10 34 27.0 | -0.3 |
| | baz=122 | | | | | | |
| G26A | Maurine | 121.44 | 306 | P | PKPdf | 10 34 26.4 | -0.4 |
| | baz=122 | | | | | | |
| C31A | Landman Farms, | 121.50 | 311 | P | PKPdf | 10 34 26.3 | -0.5 |
| | baz=122 | | | | | | |
| B32A | Ashes, Strandq | 121.53 | 312 | P | PKPdf | 10 34 26.2 | -0.7 |
| | baz=122 | | | | | | |
| D29A | Pettibone, Tap | 121.64 | 310 | P | PKPdf | 10 34 27.0 | -0.2 |
| | baz=122 | | | | | | |
| F27A | Lemmon | 121.67 | 307 | P | PKPdf | 10 34 27.0 | -0.2 |
| | baz=122 | | | | | | |
| E28A | Huff | 121.69 | 309 | P | PKPdf | 10 34 27.2 | 0.0 |
| | baz=122 | | | | | | |
| G25A | Newell | 121.70 | 306 | P | PKPdf | 10 34 27.3 | -0.1 |
| | baz=122 | | | | | | |
| C30A | Mose, Pekin | 121.72 | 311 | P | PKPdf | 10 34 27.1 | -0.1 |
| | baz=122 | | | | | | |
| R11A | Troy Canyon, C | 121.74 | 292 | P | PKPdf | 10 34 28.2 | +0.4 |
| | baz=122 | | | | | | |
| R11A | Troy Canyon, C | 121.74 | 292 | ePKPdf | PKPdf | 10 34 28.5 | +0.6 |
| DUG | Dugway | 121.89 | 296 | P | PKPdf | 10 34 28.5 | +0.5 |
| | baz=122 | | | | | | |
| DUG | Dugway | 121.89 | 296 | ePKPdf | PKPdf | 10 34 28.6 | +0.5 |
| RCTC | Rector, Farmer | 121.90 | 288 | P | PKPdf | 10 34 27.7 | -0.2 |
| | baz=122 | | | | | | |
| TCUT | Toone Canyon | 121.97 | 297 | ePKPdf | PKPdf | 10 34 28.8 | +0.6 |
| D28A | Regan | 122.14 | 309 | P | PKPdf | 10 34 28.1 | 0.0 |
| | baz=122 | | | | | | |
| B30A | Myrvik Farm, E | 122.27 | 311 | P | PKPdf | 10 34 28.1 | -0.2 |
| | baz=123 | | | | | | |
| F25A | Bowman | 122.30 | 306 | P | PKPdf | 10 34 28.5 | 0.0 |
| | baz=123 | | | | | | |
| E26A | Carlson Angus | 122.33 | 307 | P | PKPdf | 10 34 28.6 | +0.1 |
| | baz=123 | | | | | | |
| HWUT | Hardware Ranch | 122.43 | 298 | ePKPdf | PKPdf | 10 34 29.1 | +0.1 |
| D27A | Center | 122.46 | 308 | P | PKPdf | 10 34 28.9 | +0.2 |
| | baz=123 | | | | | | |
| C28A | Hausauer Farms | 122.49 | 310 | P | PKPdf | 10 34 28.9 | +0.2 |
| | baz=123 | | | | | | |
| A30A | Hoffart Farm, | 122.66 | 312 | P | PKPdf | 10 34 28.7 | -0.3 |
| | baz=123 | | | | | | |
| B29A | Wagenman Farm, | 122.68 | 311 | P | PKPdf | 10 34 28.8 | -0.3 |
| | baz=123 | | | | | | |
| E25A | Miller Ranch, | 122.74 | 307 | P | PKPdf | 10 34 29.4 | +0.1 |
| | baz=123 | | | | | | |
| D26A | Manning | 122.77 | 308 | P | PKPdf | 10 34 29.4 | +0.1 |
| | baz=123 | | | | | | |
| ULM | Lac du Bonnet | 122.80 | 314 | PKP | PKPdf | 10 34 28.1 | -1.1 |
| | 8.8nm,0.5s,baz=140,slow=0.8,SNR=15 | | | | | | |
| ULM | Lac du Bonnet | 122.80 | 314 | PKP | PKPdf | 10 34 28.1 | -1.1 |
| ULM | | | | ePKPdf | PKiKP | 10 34 28.7 | -0.7 |
| C27A | Sayler Ranch, | 122.93 | 309 | P | PKPdf | 10 34 29.8 | +0.2 |
| | baz=123 | | | | | | |
| A29A | Manning Farm, | 123.00 | 311 | P | PKPdf | 10 34 29.1 | -0.5 |
| | baz=123 | | | | | | |
| B28A | Dugan Ranch, T | 123.07 | 310 | P | PKPdf | 10 34 28.9 | -0.9 |
| | baz=123 | | | | | | |
| NB2 | NORSAR Subarra | 123.10 | 21 | PKPdf | PKPdf | 10 34 29.1 | -0.4 |
| | comp=Z,0.7nm,0.6s,baz=195,slow=1.8 | | | | | | |
| NOA | NORSAR Array B | 123.10 | 21 | PKP | PKPdf | 10 34 28.7 | -0.8 |
| | comp=Z,5.1nm,1.1s,baz=198,slow=1.6,SNR=4.4 | | | | | | |
| NVAR | Mina Array Bea | 123.12 | 290 | PKP | PKPdf | 10 34 31.1 | +0.6 |
| | comp=Z,2.5nm,0.7s,baz=134,slow=2.6,SNR=22 | | | | | | |
| HVU | Hansel Valley | 123.12 | 297 | ePKPdf | PKPdf | 10 34 30.6 | +0.3 |
| D25A | Fairfield | 123.23 | 307 | P | PKPdf | 10 34 30.3 | +0.1 |
| | baz=124 | | | | | | |
| C26A | Wahner Farm, P | 123.26 | 309 | P | PKPdf | 10 34 30.4 | +0.2 |
| | baz=124 | | | | | | |
| CMAR | Chiang Mai Arr | 123.39 | 111 | PKP | PKPdf | 10 34 31.4 | 0.0 |
| | comp=Z,2.1nm,0.7s,baz=232,slow=4.1,SNR=9.7 | | | | | | |
| A28A | Rude Farm, Bot | 123.40 | 310 | P | PKPdf | 10 34 30.3 | -0.2 |
| | baz=124 | | | | | | |
| SNOW | Snow King Moun | 123.52 | 300 | ePKPdf | PKPdf | 10 34 31.9 | +0.7 |
| LOHW | Long Hollow | 123.57 | 300 | ePKPdf | PKPdf | 10 34 31.4 | +0.2 |
| TPAW | Teton Pass | 123.63 | 299 | ePKPdf | PKPdf | 10 34 31.4 | 0.0 |
| C25A | Freed Ranch, W | 123.65 | 308 | P | PKPdf | 10 34 31.1 | +0.1 |
| | baz=124 | | | | | | |
| MOOW | Moose Ponds | 123.74 | 300 | ePKPdf | PKPdf | 10 34 31.5 | -0.1 |
| B26A | Jensen Ranch, | 123.76 | 309 | P | PKPdf | 10 34 30.2 | -1.0 |
| | baz=124 | | | | | | |
| CMB | Columbia Colle | 123.82 | 289 | ePKPdf | PKPdf | 10 34 32.5 | +0.9 |
| FLWY | Flagg Ranch | 123.98 | 300 | ePKPdf | PKPdf | 10 34 32.6 | +0.6 |
| B25A | Knox Farm, Ray | 124.05 | 308 | P | PKPdf | 10 34 32.2 | +0.4 |
| | baz=124 | | | | | | |
| LAO | LASA Array | 124.08 | 305 | P | PKPdf | 10 34 32.3 | +0.4 |
| | baz=124 | | | | | | |
| LAO | LASA Array | 124.08 | 305 | ePKPdf | PKPdf | 10 34 31.7 | -0.1 |
| BMN | Battle Mountai | 124.16 | 293 | ePKPdf | PKPdf | 10 34 33.0 | +0.6 |
| RLMT | Red Lodge | 124.16 | 302 | P | PKPdf | 10 34 32.4 | +0.1 |
| | baz=124 | | | | | | |
| H17A | Grant Village | 124.17 | 300 | P | PKPdf | 10 34 33.8 | +1.4 |
| | baz=124 | | | | | | |
| DGMT | Dagmar | 124.63 | 308 | P | PKPdf | 10 34 33.2 | +0.4 |
| | baz=125 | | | | | | |
| DGMT | Dagmar | 124.63 | 308 | ePKPdf | PKPdf | 10 34 33.1 | +0.3 |
| HLID | Hailey | 125.27 | 297 | P | PKPdf | 10 34 34.5 | +0.1 |
| | baz=126 | | | | | | |
| HLID | Hailey | 125.27 | 297 | ePKPdf | PKPdf | 10 34 35.6 | +1.2 |
| BOZ | Bozeman (W) | 125.62 | 301 | P | PKPdf | 10 34 35.2 | +0.2 |
| | baz=126 | | | | | | |
| BOZ | Bozeman (W) | 125.62 | 301 | ePKPdf | PKPdf | 10 34 35.7 | +0.7 |
| MFID | Camas Ranch | 125.81 | 296 | ePKPdf | PKPdf | 10 34 36.5 | +1.1 |
| DLMT | Dillon | 125.83 | 300 | ePKPdf | PKPdf | 10 34 36.2 | +0.8 |
| LRM | Limekiln Ridge | 126.12 | 300 | ePKPdf | PKPdf | 10 34 37.0 | +1.0 |
| O03D | Paynes Creek | 126.27 | 289 | P | PKPdf | 10 34 36.6 | +0.3 |
| | baz=126 | | | | | | |
| WVOR | Wild Horse Val | 126.38 | 293 | ePKPdf | PKPdf | 10 34 37.7 | +1.1 |
| HRY | Holter Researc | 126.53 | 301 | ePKPdf | PKPdf | 10 34 37.3 | +0.7 |
| EGMT | Eagleton | 126.62 | 304 | P | PKPdf | 10 34 37.3 | +0.6 |
| | baz=127 | | | | | | |
| FINES | FINESS Array B | 126.64 | 28 | PKP | PKPdf | 10 34 35.6 | -0.6 |
| | comp=Z,3.4nm,0.6s,baz=211,slow=1.9,SNR=17 | | | | | | |
| WDC | Whiskeytown Da | 126.85 | 289 | ePKPdf | PKPdf | 10 34 38.1 | +0.8 |
| J08A | Circle Bar Ran | 127.01 | 294 | ePKPdf | PKPdf | 10 34 38.7 | +1.0 |
| N02D | Trinity Center | 127.23 | 289 | P | PKPdf | 10 34 38.8 | +0.7 |
| | baz=128 | | | | | | |
| M04C | Macdoel | 127.42 | 290 | P | PKPdf | 10 34 39.0 | +0.4 |
| | baz=128 | | | | | | |
| MSO | Missoula | 127.56 | 300 | P | PKPdf | 10 34 39.4 | +0.8 |
| | baz=128 | | | | | | |
| MSO | Missoula | 127.56 | 300 | ePKPdf | PKPdf | 10 34 39.0 | +0.4 |
| M02C | Callahan | 127.62 | 289 | P | PKPdf | 10 34 39.6 | +0.7 |
| | baz=128 | | | | | | |
| SLMT | Seeley Lake | 127.67 | 301 | ePKPdf | PKPdf | 10 34 39.0 | +0.1 |
| I07A | Izee | 128.05 | 294 | ePKPdf | PKPdf | 10 34 40.7 | +1.1 |
| SWMT | Swartz Lake | 128.09 | 301 | ePKPdf | PKPdf | 10 34 39.5 | -0.2 |
| J05D | Fort Rock, OR | 128.27 | 292 | P | PKPdf | 10 34 41.1 | +1.0 |
| | baz=128 | | | | | | |
| ABKAR | Akbulak array | 128.43 | 57 | ePKPdf | PKPdf | 10 34 39.6 | -0.4 |
| AKTO | Aktyubinsk | 128.50 | 54 | PKP | PKPdf | 10 34 39.5 | -0.6 |
| | comp=Z,6.2nm,0.9s,baz=234,slow=2.9,SNR=12 | | | | | | |
| L02D | Cave Junction, | 128.57 | 290 | P | PKPdf | 10 34 41.6 | +1.1 |
| | baz=129 | | | | | | |
| KSH | Kashi | 128.65 | 76 | ePKP | PKPdf | 10 34 45.2 | +4.2 |
| KSH | | | | ePP | PP | 10 36 52.7 | +4.3 |
| KSH | | | | PKS | PKSdf | 10 38 20.4 | +2.9 |
| KSH | | | | PPMZ | | | |
| | comp=Z,100nm,5.7s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,260nm,6.9s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,170nm,6.8s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,140nm,7.6s | | | | | | |
| G08A | Pilot Rock | 128.70 | 295 | ePKPdf | PKPdf | 10 34 41.7 | +0.8 |
| I05D | Terrebonne, OR | 129.11 | 293 | P | PKPdf | 10 34 42.7 | +1.1 |
| | baz=129 | | | | | | |
| I03D | Drain, OR | 129.60 | 291 | P | PKPdf | 10 34 42.2 | -0.2 |
| | baz=130 | | | | | | |
| NEW | Newport | 130.06 | 299 | P | PKPdf | 10 34 43.1 | -0.2 |
| | baz=130 | | | | | | |
| AAK | Ala-Archa | 130.26 | 72 | PKP | PKPdf | 10 34 43.8 | -0.1 |
| | comp=Z,2.9nm,0.7s,baz=183,slow=5.2,SNR=9.3 | | | | | | |
| EDM | Edmonton | 132.02 | 306 | ePKPdf | PKPdf | 10 34 46.5 | -0.2 |
| B05A | Bryant | 132.34 | 296 | P | PKPdf | 10 34 47.6 | +0.2 |
| | baz=133 | | | | | | |
| A04D | Lummi Island | 132.95 | 296 | P | PKPdf | 10 34 49.0 | +0.4 |
| | baz=133 | | | | | | |
| ARCES | ARCESS Array B | 133.39 | 22 | PKP | PKPdf | 10 34 48.2 | -0.6 |
| | comp=Z,4.0nm,0.7s,baz=199,slow=2.5,SNR=9.9 | | | | | | |
| ARCES | | | | SKPbc | SKPab | 10 38 12.3 | -0.6 |
| | comp=Z,2.5nm,0.7s,baz=204,slow=2.7,SNR=8.4 | | | | | | |
| BVAR | Borovoye Array | 135.72 | 59 | PKP | PKPdf | 10 34 53.3 | -0.4 |
| | comp=Z,3.7nm,0.7s,baz=219,slow=0.9,SNR=13 | | | | | | |
| CD2 | Chengdu | 136.18 | 107 | PKP | PKPdf | 10 34 55.4 | +0.1 |
| CD2 | | | | sPKP | | 10 35 19.0 | |
| CD2 | | | | PP | PP | 10 37 36.5 | +0.1 |
| CD2 | | | | SKS | SKSdf | 10 42 01.1 | +1.3 |
| CD2 | | | | SS | SS | 10 55 34.2 | +2.9 |
| CD2 | | | | PPMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| MKAR | Makanchi Array | 137.11 | 74 | PKhKP | PKPpre | 10 34 47.6 | |
| | comp=Z,0.4nm,0.4s,baz=242,slow=3.1,SNR=4.6 | | | | | | |
| MKAR | | | | PKP | PKPdf | 10 34 54.5 | -2.0 |
| | comp=Z,1.3nm,0.7s,baz=253,slow=1.1,SNR=7.2 | | | | | | |
| WMQ | Urumqi | 137.76 | 81 | ePKP | PKPdf | 10 34 58.0 | +0.1 |
| KURBB | Kurchatov Arra | 137.87 | 67 | PKhKP | PKPpre | 10 34 50.5 | |
| | comp=Z,0.5nm,0.6s,baz=236,slow=3.2,SNR=4.3 | | | | | | |
| KURBB | | | | PKP | PKPdf | 10 34 58.1 | +0.4 |
| | comp=Z,2.1nm,0.7s,baz=234,slow=2.3,SNR=13 | | | | | | |
| KURK | Kurchatov | 137.98 | 67 | PKPpre | PKPpre | 10 34 50.5 | |
| KURK | | | | PKP | PKPdf | 10 34 58.1 | +0.2 |
| YKA | Yellowknife Ar | 138.76 | 315 | PKP | PKPdf | 10 34 58.7 | -0.3 |
| | comp=Z,17nm,0.6s,baz=128,slow=2.3,SNR=38 | | | | | | |
| WHN | Wuhan | 140.92 | 119 | ePKP | PKPdf | 10 35 06.4 | +2.5 |
| ZALV | Zalesovo Beam | 142.97 | 67 | PKP | PKPdf | 10 35 04.8 | -2.0 |
| | comp=Z,1.7nm,0.5s,baz=225,slow=3.4,SNR=4.7 | | | | | | |
| HHC | Hu-ho-hao-te | 147.89 | 105 | ePKPbc | PKPdf | 10 35 11.4 | -4.4 |
| PCA | Pinnacle | 147.91 | 301 | ePKPdf | PKPbc | 10 35 19.2 | +0.9 |
| INK | Inuvik | 148.45 | 317 | PKPbc | PKPbc | 10 35 18.8 | -0.6 |
| | baz=98,slow=2.4 | | | | | | |
| INK | Inuvik | 148.45 | 317 | ePKPbc | PKPbc | 10 35 19.3 | -0.1 |
| SONM | Songino Array | 150.12 | 91 | PKPbc | PKPbc | 10 35 23.3 | -1.0 |
| | comp=Z,8.1nm,0.9s,baz=220,slow=2.3,SNR=12 | | | | | | |
| EGAK | Eagle | 150.16 | 309 | ePKPdf | PKPdf | 10 35 20.2 | +1.6 |
| EGAK | | | | ePKPbc | PKPbc | 10 35 23.7 | 0.0 |
| EGAK | | | | ePKPab | PKPab | 10 35 31.0 | +0.8 |
| BMRM | Bremner River | 150.22 | 301 | ePKPdf | PKPdf | 10 35 19.4 | +0.5 |
| BMRM | | | | ePKPbc | PKiKP | 10 35 25.0 | +0.1 |
| BMRM | | | | ePKPab | PKPab | 10 35 32.0 | +1.5 |
| EYAK | Cordova Ski Ar | 150.56 | 299 | ePKPdf | PKPbc | 10 35 25.7 | +0.9 |
| DIV | Divide | 150.81 | 300 | ePKPdf | PKPdf | 10 35 22.3 | +2.5 |
| DIV | | | | ePKPbc | PKPbc | 10 35 25.7 | +0.3 |
| DIV | | | | ePKPab | PKPab | 10 35 34.0 | +1.0 |
| KLU | Klutina | 151.01 | 301 | ePKPdf | PKPbc | 10 35 26.9 | +0.9 |
| HARP | HAARP | 151.01 | 303 | ePKPab | PKPbc | 10 35 28.7 | +2.8 |
| PAX | Paxson | 151.35 | 304 | ePKPbc | PKPbc | 10 35 26.6 | -0.1 |
| PAX | | | | ePKPab | PKPab | 10 35 35.3 | +0.1 |
| SML | Sawmill | 152.20 | 301 | ePKPbc | PKPbc | 10 35 28.9 | +0.3 |
| SML | | | | ePKPab | PKPab | 10 35 39.4 | +0.6 |
| DHY | Denali Highway | 152.20 | 304 | ePKPdf | PKPbc | 10 35 29.3 | +0.6 |
| HDA | Harding Lake | 152.43 | 306 | ePKPdf | PKPbc | 10 35 29.1 | +0.1 |
| ILAR | Eielson Array | 152.50 | 307 | PKPbc | PKPbc | 10 35 28.9 | -0.3 |
| | comp=Z,23nm,0.9s,baz=140,slow=1.7,SNR=105 | | | | | | |
| CCB | Clear Creek Bu | 152.85 | 307 | ePKPdf | PKPbc | 10 35 29.7 | -0.1 |
| COLA | College | 152.93 | 307 | ePKPdf | PKPdf | 10 35 24.6 | +1.9 |
| COLA | | | | ePKPbc | PKPbc | 10 35 29.9 | -0.2 |
| COLA | | | | ePKPab | PKPab | 10 35 41.2 | -0.5 |
| MCK | McKinley | 153.07 | 305 | ePKPdf | PKPdf | 10 35 25.5 | +2.4 |
| MCK | | | | ePKPbc | PKiKP | 10 35 30.7 | +0.1 |
| MCK | | | | ePKPab | PKPab | 10 35 43.5 | +1.2 |
| BWN | Browne | 153.42 | 305 | ePKPdf | PKPbc | 10 35 31.5 | +0.4 |
| TRF | Thorofare Moun | 153.57 | 304 | ePKPbc | PKPbc | 10 35 32.0 | +0.3 |
| TRF | | | | ePKPab | PKPab | 10 35 46.2 | +1.5 |
| KTH | Kantishna Hill | 153.88 | 304 | ePKPbc | PKPbc | 10 35 32.4 | +0.1 |
| KTH | | | | ePKPab | PKPab | 10 35 48.1 | +2.2 |
| BPAW | Bear Paw Mtn. | 154.04 | 305 | ePKPbc | PKPbc | 10 35 31.9 | -0.6 |
| BPAW | | | | ePKPab | PKPab | 10 35 46.6 | +0.1 |
| CAST | Castle Rocks | 154.34 | 303 | ePKPdf | PKPbc | 10 35 33.1 | -0.2 |
| CAST | | | | ePKPab | PKPab | 10 35 47.1 | -0.7 |
| COLD | Coldfoot | 154.35 | 312 | ePKPbc | PKPbc | 10 35 33.9 | +0.9 |
| COLD | | | | ePKPab | PKPab | 10 35 48.7 | +1.0 |

*NIED **08** 10:21:00, 28°.90N×129°.90E, h20km, Mw4.1 Best double couple: $M_0$1.70000×10[15] NP1:φs175.00000°, δ56.00000°, λ-41.00000°. NP2:φs290.00000°, δ57.00000°, λ-139.00000°.*

*IDC **08** 10:21:23.5±1.0, 28°.79N×130°.16E, h0km, mb3.6/6, mb1 3.8/9, mb1mx3.7/37, mbtmp3.7/9, ML3.4/4, MS3.3/5, Ms1 3.3/5, ms1mx2.9/41, Error ellipse: s-maj=29.5km s-min=15.5km az=96.0*

*ISCJB **08** 10:21:26.4±0.5, 28°.91N±0°.03×129°.97E±0°.07, h34km, mb3.6/6, MS3.6/3, Error ellipse: s-maj=8.7km s-min=4.2km az=20.2*

*JMA **08** 10:21:26.2±0.1, 28°.92N×129°.91E, h36km, M4.0*

**ISC 08 10:21:27.8**±0.7**, 28°.83N**±0°.05×**129°.92E**±0°.07**, h34km, n24, σ2$^s$04**/25**, mb3.8**/6**, MS3.7**/3**, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JAM | Amami Oshima | 0.50 | 214 | P | Pb | 10 21 37.1 | -1.3 |
| JAM | | | | eS | Sn | 10 21 45.7 | -0.2 |
| JZK | Kikaishima | 0.51 | 175 | P | Pn | 10 21 38.6 | -0.1 |
| JTAJ | Takarajima | 0.71 | 298 | P | Pn | 10 21 39.3 | -2.1 |
| JTAJ | | | | eS | Sn | 10 21 48.4 | -2.8 |
| JAMN | Amaminishikomi | 0.88 | 229 | P | Pb | 10 21 43.3 | -1.3 |
| JNN | Nakanoshima | 1.01 | 358 | P | Pn | 10 21 42.5 | -3.2 |
| JNN | | | | eS | Sn | 10 21 55.1 | -3.7 |
| JTK | Tokunoshima | 1.34 | 220 | P | Pb | 10 21 50.5 | -2.0 |
| JTK | | | | eS | Sb | 10 22 09.3 | -0.1 |
| JYAK | Yakushimahirau | 1.50 | 20 | P | Pn | 10 21 49.2 | -3.1 |
| JKC | Kuchinoerabu | 1.65 | 8 | P | Pn | 10 21 51.3 | -3.1 |
| JOKE | Okinoerabujima | 1.88 | 220 | P | Pb | 10 21 58.8 | -2.8 |
| JTN | Tanegashima 3 | 2.04 | 27 | P | Pn | 10 21 58.0 | -1.8 |
| JOW | Kunigami | 2.46 | 217 | P | Pn | 10 22 07.3 | +1.7 |
| JOW | Kunigami | 2.46 | 217 | Pn | Pn | 10 22 07.2 | +1.7 |
| | 5.5nm,0.3s,baz=38,slow=12,SNR=18 | | | | | | |
| JOW | | | | Sn | Sb | 10 22 41.2 | -0.2 |
| | 3.3nm,0.3s,baz=311,slow=20,SNR=5.5 | | | | | | |
| JNU | Nakatsue | 4.36 | 11 | Pn | Pn | 10 22 31.8 | 0.0 |
| | 5.3nm,0.3s,baz=168,slow=9.8,SNR=29 | | | | | | |
| JNU | | | | Sn | Sn | 10 23 25.6 | +4.2 |
| | baz=264,slow=18,SNR=2.0 | | | | | | |
| JNU | | | | LR | LR | 10 24 24.1 | |
| | comp=Z,133nm,18.1s,baz=127,slow=41 | | | | | | |
| KSRS | Korea Array | 8.77 | 350 | Pn | Pn | 10 23 33.7 | +1.6 |
| | 0.2nm,0.3s,baz=168,slow=14,SNR=3.5 | | | | | | |
| KSRS | | | | LR | LR | 10 26 59.6 | |
| | comp=Z,98nm,20.7s,baz=160,slow=38 | | | | | | |
| MJAR | Matsushiro Arr | 10.39 | 40 | Pn | Pn | 10 23 53.4 | -1.0 |
| | 0.9nm,0.3s,baz=254,slow=14,SNR=10 | | | | | | |
| SONM | Songino Array | 26.30 | 323 | P | P | 10 27 03.0 | +2.7 |
| | 2.0nm,0.7s,baz=127,slow=9.6,SNR=5.7 | | | | | | |
| SIJI | Sorong | 29.55 | 177 | LR | LR | 10 39 41.0 | |
| | comp=Z,30nm,19.7s,baz=156,slow=37 | | | | | | |
| KURBB | Kurchatov Arra | 44.07 | 314 | P | P | 10 29 34.1 | +1.8 |
| | 0.2nm,0.4s,baz=100,slow=8.7,SNR=3.4 | | | | | | |
| WRA | Warramunga Arr | 48.67 | 174 | P | P | 10 30 08.8 | 0.0 |
| | 1.0nm,0.9s,baz=353,slow=8.7,SNR=6.2 | | | | | | |
| ASAR | Alice Springs | 52.33 | 175 | P | P | 10 30 37.0 | +0.6 |
| | 0.8nm,0.8s,baz=10,slow=13,SNR=15 | | | | | | |
| ILAR | Eielson Array | 61.45 | 29 | P | P | 10 31 40.8 | +0.2 |
| | 0.2nm,0.8s,baz=284,slow=5.4,SNR=3.0 | | | | | | |
| AKASG | Malin Array Be | 74.54 | 320 | P | P | 10 33 03.7 | +0.7 |
| | 0.4nm,0.3s,baz=57,slow=6.6,SNR=5.3 | | | | | | |
| GERES | GERESS Array B | 84.03 | 323 | LR | LR | 11 17 32.5 | |
| | comp=Z,77nm,18.1s,baz=62,slow=40 | | | | | | |
| SCHQ | Schefferville | 95.44 | 10 | LR | LR | 11 20 26.3 | |
| | comp=Z,28nm,19.9s,baz=30,slow=37 | | | | | | |

*IDC **08** 10:29:45.3±2.0, 33°.55N×90°.94E, h0km, mb3.5/2, mb1 3.5/4, mb1mx3.3/42, mbtmp3.4/4, ML3.3/2, Error ellipse: s-maj=72.8km s-min=27.3km az=70.0*

*ISCJB **08** 10:29:49.0±0.9, 33°.70N±0°.09×91°.2E±0°.2, h33km, mb3.4/1, Error ellipse: s-maj=23.9km s-min=9.2km az=25.0*

**ISC 08 10:29:51.5**±1.2**, 33°.6N**±0°.1×**91°.3E**±0°.2**, h35km, n10, σ1$^s$24**/9**, Qinghai**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ODAN | Odare | 7.52 | 208 | eP | Pn | 10 31 38.0 | -0.9 |
| | 12nm,0.7s | | | | | | |
| RAMN | Ramite | 7.78 | 213 | eP | Pn | 10 31 41.3 | -1.1 |
| | 26nm,0.7s | | | | | | |
| PKI | Pulchoki | 7.88 | 222 | eP | Pn | 10 31 44.3 | +0.4 |
| | 18nm,0.6s | | | | | | |
| PKIN | Phulchoki | 7.88 | 222 | eP | Pn | 10 31 44.0 | +0.2 |
| | 12nm,0.5s | | | | | | |
| GKN | Gorkha | 8.01 | 228 | eP | Pn | 10 31 46.8 | +1.3 |
| | 15nm,0.5s | | | | | | |
| DMN | Daman | 8.02 | 224 | eP | Pn | 10 31 46.6 | +0.8 |
| | 24nm,0.9s | | | | | | |
| SONM | Songino Array | 18.20 | 34 | P | P | 10 34 02.4 | +1.0 |
| | 0.2nm,0.3s,baz=224,slow=12,SNR=2.9 | | | | | | |
| KURBB | Kurchatov Arra | 19.45 | 335 | P | P | 10 34 13.1 | -1.8 |
| | 0.0nm,0.3s,baz=143,slow=12,SNR=4.1 | | | | | | |
| ZALV | Zalesovo Beam | 20.88 | 349 | P | P | 10 34 27.6 | -2.8 |
| | 1.2nm,0.5s,baz=166,slow=12,SNR=5.5 | | | | | | |
| ASAR | Alice Springs | 69.88 | 139 | P | P | 10 40 59.4 | +0.5 |
| | 0.3nm,0.6s,baz=326,slow=6.7,SNR=7.4 | | | | | | |

**IGQ 08 10:46:47**±0.8**, 3°.81S×79°.91W, h23km±28km, Mb4.1, 2C, Error ellipse: s-maj=6.3km s-min=5.3km az=78.2, Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YANT | Yantaza | 1.15 | 93 | ⇑S | Sn | 10 47 23.8 | +0.7 |
| YANT | Yantaza | 1.15 | 93 | ⇑P | Pb | 10 47 08.6 | +0.2 |
| IGUA | Igualata | 2.63 | 29 | S | Sn | 10 47 58.4 | -2.3 |
| IGUA | Igualata | 2.63 | 29 | P | Pn | 10 47 28.8 | -0.1 |
| BMAS | Trigal station | 2.70 | 32 | P | Pn | 10 47 29.8 | +0.2 |
| ARRY | Arrayan | 2.71 | 33 | P | Pn | 10 47 29.6 | -0.1 |
| PAT1 | Patacocha | 2.72 | 33 | S | Sn | 10 48 00.7 | -1.9 |
| PAT1 | Patacocha | 2.72 | 33 | P | Pn | 10 47 29.3 | -0.7 |
| BPAT | Tungurahua Vol | 2.73 | 33 | P | Pn | 10 47 29.2 | -0.9 |
| ULBA | Ulba | 2.79 | 33 | P | Pn | 10 47 29.5 | -1.3 |
| BULB | Ulba Tungurahu | 2.79 | 33 | S | Sn | 10 48 02.2 | -2.1 |
| BULB | Ulba Tungurahu | 2.79 | 33 | P | Pn | 10 47 30.2 | -0.7 |
| CHIS | Cerro-Chispas- | 2.86 | 343 | P | Pn | 10 47 31.0 | -0.3 |
| PECV | Mancha de Ca P | 3.01 | 357 | P | Pn | 10 47 33.7 | +0.2 |
| PISA | Pisayambo | 3.13 | 29 | P | Pn | 10 47 35.0 | -0.7 |
| PAST | Pastocalle | 3.34 | 22 | P | Pn | 10 47 39.3 | +0.8 |
| BMOR | Cotopaxi Volca | 3.39 | 25 | P | Pn | 10 47 40.2 | +0.9 |
| CAMI | Rancho Maria | 3.42 | 24 | P | Pn | 10 47 40.4 | +0.8 |
| BREF | Cotopaxi Volca | 3.45 | 25 | P | Pn | 10 47 42.0 | +1.8 |
| NAS2 | Nasa | 3.46 | 25 | P | Pn | 10 47 41.2 | +1.0 |
| TAMB | Tambo | 3.46 | 27 | P | Pn | 10 47 42.7 | +2.5 |
| BTAM | Cotopaxi Volca | 3.46 | 26 | P | Pn | 10 47 39.0 | -1.3 |
| BVC2 | Cotopaxi Volca | 3.47 | 26 | P | Pn | 10 47 40.2 | -0.2 |
| VC1 | Cotopaxi 1 | 3.49 | 26 | P | Pn | 10 47 41.4 | +0.8 |
| PITA | Cotopaxi Volc | 3.55 | 25 | P | Pn | 10 47 41.3 | -0.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MAG1 | Magdalena | 3.71 | 2 | P | Pn | 10 47 42.7 | -0.4 |
| ANTI | Antisana | 3.77 | 28 | P | Pn | 10 47 44.0 | -0.6 |
| TERV | Terraza Guagua | 3.84 | 20 | P | Pn | 10 47 46.7 | +1.2 |
| GGP | Refugio Guagua | 3.84 | 20 | P | Pn | 10 47 46.6 | +1.0 |
| PINO | Pino | 3.85 | 20 | P | Pn | 10 47 45.1 | -0.6 |
| OTAV | Otavalo | 4.28 | 20 | P | Pn | 10 47 50.6 | -0.8 |
| COTA | Cotacachi | 4.41 | 21 | P | Pn | 10 47 52.5 | -0.8 |

**IDC 08 11:02:00.5±2.8, 6°.98S×129°.51E, h131km±36km, mb3.2/2, mb1 3.3/6, mb1mx3.1/42, mbtmp3.7/6, Error ellipse: s-maj=63.7km s-min=20.7km az=90.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 6.31 | 16 | P | Pn | 11 03 31.5 | +0.2 |
| | 1.3nm,0.3s,baz=173,slow=16,SNR=10 | | | | | | |
| SIJI | | | | S | Sn | 11 04 38.1 | -4.1 |
| | 1.6nm,0.3s,baz=289,slow=23,SNR=6.5 | | | | | | |
| FITZ | Fitzroy Crossi | 11.69 | 198 | P | Pn | 11 04 42.8 | -0.4 |
| | 0.3nm,0.3s,baz=31,slow=12,SNR=15 | | | | | | |
| FITZ | | | | S | Sn | 11 06 46.5 | -5.5 |
| | 0.4nm,0.3s,baz=120,slow=20,SNR=5.9 | | | | | | |
| WRA | Warramunga Arr | 13.71 | 160 | P | Pn | 11 05 08.2 | -1.4 |
| | 0.2nm,0.3s,baz=340,slow=13,SNR=9.4 | | | | | | |
| WRA | | | | S | Sn | 11 07 32.3 | -8.8 |
| | 0.4nm,0.3s,baz=338,slow=22,SNR=8.1 | | | | | | |
| ASAR | Alice Springs | 17.12 | 166 | P | Pn | 11 05 53.4 | +1.4 |
| | 0.2nm,0.3s,baz=346,slow=11,SNR=26 | | | | | | |
| ASAR | | | | S | Sn | 11 08 58.9 | -4.3 |
| | 0.1nm,0.3s,baz=324,slow=22,SNR=4.8 | | | | | | |
| MKAR | Makanchi Array | 67.94 | 327 | P | P | 11 12 45.5 | +0.4 |
| | 0.4nm,0.4s,baz=134,slow=6.2,SNR=4.6 | | | | | | |
| KURBB | Kurchatov Arra | 72.24 | 329 | P | P | 11 13 10.5 | -0.7 |
| | 0.1nm,0.3s,baz=116,slow=6.0,SNR=3.3 | | | | | | |

**GUC 08 11:13:09.9±0.3, 33°.74S×72°.09W, h40km±1km, ML3.6, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHPI | Pichilemu | 0.65 | 174 | eP | Pn | 11 13 22.8 | +0.1 |
| CHPI | | | | eS | Sn | 11 13 32.5 | +0.6 |
| ANTU | Antumapu | 1.22 | 82 | eP | Pn | 11 13 31.7 | +1.1 |
| ANTU | | | | eS | Sn | 11 13 48.0 | +2.0 |
| ANTU | | | | AML | AML | 11 13 51.2 | |
| | comp=E,2μm,1.4s | | | | | | |
| SAN | Santiago | 1.22 | 77 | eP | Pn | 11 13 31.5 | +0.9 |
| SAN | | | | eS | Sn | 11 13 48.1 | +2.1 |
| PEL | Peldehue | 1.31 | 63 | eP | Pn | 11 13 33.0 | +1.2 |
| PEL | | | | eS | Sn | 11 13 50.5 | +2.3 |
| PEL | | | | AML | AML | 11 13 53.0 | |
| | comp=N,3μm,2.2s | | | | | | |
| PCH | Pirque | 1.32 | 85 | eP | Pn | 11 13 32.9 | +1.0 |
| PCH | | | | eS | Sn | 11 13 50.9 | +2.5 |
| CLCH | Cerro Calan | 1.34 | 76 | eP | Pn | 11 13 33.4 | +1.2 |
| CLCH | | | | eS | Sn | 11 13 51.2 | +2.4 |

*ISK 08 11:16:04.8, 37°.13N×27°.93E, h30km, MD2.6*
*ISCJB 08 11:16:05.7±0.7, 37°.11N±0°.05×27°.96E±0°.04, h0km, Error ellipse: s-maj=6.9km s-min=4.8km az=172.4*
*DDA 08 11:16:05.7, 37°.13N×27°.91E, h7km, Md2.4*
*CSEM 08 11:16:05.7±0.4, 37°.09N×27°.95E, h1km, MD2.6, Error ellipse: s-maj=11.0km s-min=7.5km az=4.0, Mining explosion.*
**ISC 08 11:16:05.3±1.1, 37°.11N±0°.04×27°.96E±0°.03, h0km, n16, σ0.74/24, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.26 | 85 | ePG | Pb | 11 16 12.3 | -0.6 |
| YER | | | | eSG | Sb | 11 16 18.2 | +0.3 |
| YER | Yerkesik | 0.26 | 85 | ePg | Pb | 11 16 12.3 | -0.6 |
| YER | | | | eSg | Sb | 11 16 18.3 | +0.3 |
| BDRM | Kayabasi | 0.41 | 264 | iP | Pg | 11 16 13.1 | -0.1 |
| BDRM | Kayabasi | 0.41 | 264 | P | Pg | 11 16 13.1 | -0.1 |
| BODT | Bodrum | 0.52 | 265 | ePG | Pg | 11 16 15.9 | +0.7 |
| BODT | | | | eSG | Sb | 11 16 24.3 | -1.1 |
| BODT | Bodrum | 0.52 | 265 | ePg | Pg | 11 16 15.9 | +0.7 |
| BODT | | | | eSg | Sb | 11 16 24.3 | -1.1 |
| AYDN | Tasoluk | 0.55 | 353 | iP | Pb | 11 16 17.9 | 0.0 |
| AYDN | | | | iS | Sg | 11 16 23.9 | +0.9 |
| AYDN | Tasoluk | 0.55 | 353 | P | Pb | 11 16 17.9 | 0.0 |
| AYDN | | | | S | Sg | 11 16 23.9 | +0.9 |
| TURN | Turunc | 0.57 | 114 | iP | Pg | 11 16 14.9 | -1.2 |
| TURN | Turunc | 0.57 | 114 | P | Pg | 11 16 14.9 | -1.2 |
| DALY | Dalyan (Mu˜la | 0.63 | 118 | ePG | Pg | 11 16 18.2 | +1.0 |
| DALY | Dalyan (Mu˜la | 0.63 | 118 | ePg | Pg | 11 16 18.3 | +1.0 |
| AYDB | Zeytinkoy-Aydi | 0.84 | 356 | ePG | Pg | 11 16 20.6 | -0.7 |
| AYDB | Zeytinkoy-Aydi | 0.84 | 356 | ePg | Pg | 11 16 20.6 | -0.7 |
| DNZL | Cakiroluk | 1.04 | 56 | iP | Pb | 11 16 26.3 | 0.0 |
| DNZL | | | | iS | Sb | 11 16 40.8 | +0.2 |
| DNZL | Cakiroluk | 1.04 | 56 | P | Pb | 11 16 26.3 | 0.0 |
| DNZL | | | | S | Sb | 11 16 40.8 | +0.2 |

**MAN 08 11:16:25, 8°.85N×126°.39E, h29km, mb4.3, ML3.2, MS3.0, 1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BIPH | Bislig | 0.66 | 182 | ⇓iP | Pn | 11 16 38.7 | +0.3 |
| BIPH | | | | iS | Sn | 11 16 47.8 | 0.0 |
| BUTP | Butuan | 0.77 | 279 | eP | Pb | 11 16 39.5 | -0.3 |
| BUTP | | | | eS | Sn | 11 16 51.4 | +1.0 |
| SCPH | Surigao | 1.28 | 316 | eP | Pn | 11 16 46.6 | -0.4 |
| SCPH | | | | eS | Pn | 11 16 46.6 | -0.4 |
| BUKP | Musuan | 1.62 | 234 | eP | Pn | 11 16 52.4 | +0.6 |
| BUKP | | | | eS | Sn | 11 17 12.2 | +0.4 |
| PAGZ | Pagadian | 3.13 | 252 | eP | Pn | 11 17 14.7 | +2.2 |

**MEX 08 11:18:05.7±0.4, 15°.29N×93°.45W, h18km±271km, MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.47 | 28 | iP | Pg | 11 18 13.7 | -1.4 |
| PCIG | | | | iS | Sg | 11 18 19.6 | -1.9 |
| THIG | | 1.21 | 108 | iP | Pn | 11 18 26.8 | -0.9 |

**DJA 08 11:23:42.7±1.2, 2°S±5°×12°3E±°, h11km±10km, M3.7/5, MLv3.7/5, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LUWI | Luwuk | 0.87 | 319 | P | Pg | 11 23 57.4 | -2.0 |
| APSI | Ampana | 1.86 | 295 | P | Pn | 11 24 14.6 | 0.0 |
| APSI | | | | S | Sn | 11 24 39.0 | +0.9 |
| GTOI | Gorontalo | 2.34 | 352 | P | Pn | 11 24 22.3 | +1.1 |
| MRSI | Marisa | 2.58 | 327 | P | Pn | 11 24 24.4 | 0.0 |
| SANI | Sanana | 2.67 | 98 | P | Sn | 11 24 59.2 | +1.2 |
| SPSI | Sidrap Palu | 4.22 | 238 | P | Pn | 11 24 48.7 | +1.7 |
| SPSI | | | | S | Sn | 11 25 36.5 | +0.3 |

**GUC 08 11:34:31.9±0.6, 35°.69S×73°.14W, h27km±7km, ML4.2, 1C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| COCH | Cobquecura | 0.52 | 147 | ⇑iP | Pb | 11 34 42.6 | 0.0 |
| COCH | | | | iS | Sn | 11 34 50.9 | -0.7 |
| COCH | | | | AML | AML | 11 34 51.5 | |
| | comp=N,24μm,0.2s | | | | | | |
| CCHI | Chillan | 1.25 | 137 | eP | Pb | 11 34 54.7 | -0.2 |
| CCHI | | | | eS | Sb | 11 35 12.4 | +1.8 |
| CCHI | | | | AML | AML | 11 35 18.1 | |
| | comp=N,6μm,0.5s | | | | | | |
| TALC | Talca | 1.26 | 77 | eP | Pb | 11 34 55.2 | +0.1 |
| TALC | | | | eS | Sb | 11 35 12.5 | +1.6 |
| CHPI | Pichilemu | 1.60 | 36 | eP | Pb | 11 35 00.4 | -0.4 |
| NICH | Los Niches | 1.71 | 67 | eP | Pb | 11 35 03.0 | +0.4 |
| NICH | | | | eS | Sb | 11 35 24.6 | +0.9 |
| CLCH | Cerro Calan | 3.14 | 44 | eP | Pb | 11 35 27.0 | -0.2 |
| CLCH | | | | AML | AML | 11 36 28.1 | |
| | comp=N,965nm,0.7s | | | | | | |
| PEL | Peldehue | 3.25 | 39 | eP | Pb | 11 35 26.2 | -2.8 |
| PEL | | | | AML | AML | 11 36 25.3 | |
| | comp=N,596nm,0.5s | | | | | | |

*IDC 08 11:41:31.2±1.6, 5°.55N×126°.33E, h0km, mb3.5/4, mb1 3.7/4, mb1mx3.4/42, mbtmp3.5/4, Error ellipse: s-maj=152.4km s-min=22.6km az=69.0*
**ISC 08 11:41:32.9±1.2, 5°.56N±0°.08×126°.3E±0°.4, h10km, n5, σ0.71/6, mb3.5/4, 1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BIPH | Bislig | 2.61 | 1 | ⇓iP | Pg | 11 42 23.4 | +0.5 |
| BIPH | | | | iS | Sg | 11 42 56.1 | -0.7 |
| WRA | Warramunga Arr | 26.54 | 163 | P | P | 11 47 10.4 | -0.7 |
| | 0.4nm,0.6s,baz=343,slow=10.0,SNR=4.3 | | | | | | |
| ASAR | Alice Springs | 29.98 | 166 | P | P | 11 47 42.0 | +0.2 |
| | 0.2nm,0.7s,baz=347,slow=7.3,SNR=4.1 | | | | | | |
| SONM | Songino Array | 45.45 | 341 | P | P | 11 49 52.6 | +0.4 |
| | 0.5nm,0.6s,baz=160,slow=9.0,SNR=3.3 | | | | | | |
| MKAR | Makanchi Array | 55.84 | 325 | P | P | 11 51 10.2 | -0.4 |
| | 1.0nm,0.5s,baz=122,slow=7.9,SNR=13 | | | | | | |

*ISCJB 08 11:45:19.7±0.4, 31°.27N±0°.02×115°.65W±0°.02, h10km±3km, mb4.4/9, MS3.7/6, Error ellipse: s-maj=4.2km s-min=2.2km az=29.2*
*NEIC 08 11:45:20.2, 31°.25N×115°.64W, h5km, mb4.0/13, ML4.5(ECX), After ECX.*
*ECX 08 11:45:20.1±0.5, 31°.24N×115°.64W, h5km, MD4.5, ML4.7, Fault plane solution: NP1:φs120.00000°, δ90.00000°, λ0.00000°.*
*MEX 08 11:45:20.9±1.1, 31°.10N×115°.70W, h12km±12km, MD4.4*
*IDC 08 11:45:21.5±2.8, 31°.40N×115°.39W, h0km, mb4.2/3, mb1 4.3/5, mb1mx3.8/39, mbtmp4.0/5, ML3.4/2, MS3.3/7, Ms1 3.3/7, ms1mx3.1/39, Error ellipse: s-maj=54.2km s-min=12.6km az=37.0*
**ISC 08 11:45:20.1±1.0, 31°.29N±0°.02×115°.65W±0°.02, h2km±7km, n214, σ1.70/256, mb4.2/9, MS3.6/6, 6C-13D, Baja California**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SPIG | San Pedro Mart | 0.29 | 147 | eP | Pg | 11 45 24.9 | -0.9 |
| SPIG | | | | iS | Sg | 11 45 28.9 | -0.8 |
| SPIG | San Pedro Mart | 0.29 | 147 | ⇓iP | Pg | 11 45 25.0 | -0.9 |
| SPIG | | | | eS | Sg | 11 45 28.9 | -0.8 |
| SPIG | San Pedro Mart | 0.29 | 147 | eP | Pg | 11 45 24.9 | -0.9 |
| SPIG | | | | iS | Sg | 11 45 28.9 | -0.8 |
| SPX | San Pedro Mart | 0.29 | 147 | ⇓eP | Pg | 11 45 25.0 | -0.9 |
| SPX | | | | eS | Sg | 11 45 28.9 | -0.9 |
| ECBX | El Chinero | 0.54 | 71 | ⇑eP | Pg | 11 45 29.8 | -0.7 |
| ECBX | | | | eS | Sg | 11 45 37.3 | -0.3 |
| ZAX | El Zacaton | 0.57 | 293 | ⇑eP | Pg | 11 45 30.7 | -0.5 |
| ZAX | | | | eS | Sg | 11 45 39.6 | +0.9 |
| RDX | Rancho Dawling | 0.68 | 339 | ⇓eP | Pg | 11 45 33.5 | +0.3 |
| RDX | | | | eS | Sg | 11 45 43.1 | +1.1 |
| ECNX | Esteban Cantu | 0.89 | 294 | ⇑eP | Pg | 11 45 36.1 | -1.0 |
| ECNX | | | | eS | Sg | 11 45 48.6 | 0.0 |
| PBX | Punta Banda | 1.02 | 296 | ⇑eP | Pg | 11 45 38.3 | -1.4 |
| PBX | | | | eS | Sg | 11 45 52.9 | -0.1 |
| CPBX | Cerro Prieto | 1.16 | 15 | ⇓eP | Pg | 11 45 41.2 | -1.1 |
| CPBX | | | | ⇓eP | Pg | 11 45 41.3 | -1.1 |
| CPBX | | | | eS | Sg | 11 45 57.2 | -0.2 |
| CPBX | Cerro Prieto | 1.16 | 15 | eP | Pg | 11 45 41.3 | -1.1 |
| CPBX | | | | iS | Sn | 11 45 59.5 | -0.3 |
| MBIG | Mexicali | 1.18 | 19 | eP | Pg | 11 45 41.6 | -1.0 |
| MBIG | | | | eS | Sb | 11 45 59.3 | +0.5 |
| MBIG | Mexicali | 1.18 | 19 | ⇓eP | Pg | 11 45 41.6 | -1.0 |
| CBX | Cerro Bola | 1.33 | 320 | eP | Pg | 11 45 43.8 | -1.9 |
| CBX | | | | eS | Sg | 11 46 01.6 | -1.4 |
| CBX | Cerro Bola | 1.33 | 320 | ⇑eP | Pg | 11 45 43.8 | -1.9 |
| CBX | | | | eS | Sg | 11 46 02.0 | -0.9 |
| CBX | | | | IAML | | 11 46 09.2 | |
| | comp=E,16μm,0.9s | | | | | | |
| CBX | | | | ⇓e | | 11 46 09.2 | |
| CBX | | | | IAML | | 11 46 11.2 | |
| | comp=N,8μm,0.9s | | | | | | |
| CBX | | | | ⇑e | | 11 46 11.2 | |
| CBX | Cerro Bola | 1.33 | 320 | eP | Pg | 11 45 43.8 | -1.9 |
| CBX | | | | eS | Sg | 11 46 01.6 | -1.4 |
| SGL | Mount Signal | 1.35 | 357 | ⇓iP | Pn | 11 45 44.0 | -2.0 |
| RMX | La Rumorosa | 1.35 | 345 | ⇓eP | Pn | 11 45 44.7 | -1.5 |
| RMX | | | | eS | Sg | 11 46 02.8 | -0.8 |
| RMX | | | | ⇓e | | 11 46 06.0 | |
| RMX | | | | IAML | | 11 46 06.0 | |
| | comp=N,12μm,0.2s | | | | | | |
| IBP | Imperial Bould | 1.41 | 345 | P | Pn | 11 45 45.5 | -1.4 |
| | baz=1.5 | | | | | | |
| IBP | | | | S | Sg | 11 46 04.7 | -0.9 |
| | baz=1.5 | | | | | | |
| IBP | Imperial Bould | 1.41 | 345 | ⇓eP | Pn | 11 45 45.6 | -1.4 |
| IBP | | | | eS | Sg | 11 46 04.8 | -0.7 |
| WESC | Westside Schoo | 1.46 | 357 | ⇓eP | Pn | 11 45 45.8 | -1.7 |
| BAR | Barrett | 1.63 | 328 | ⇓eP | Pn | 11 45 48.7 | -1.1 |
| BAR | Barrett | 1.63 | 328 | ePn | Pn | 11 45 48.6 | -1.3 |
| BAR | | | | eSn | Sn | 11 46 10.1 | -1.3 |
| SWSC | Sam W. Stewart | 1.65 | 356 | P | Pn | 11 45 48.0 | -2.0 |
| | baz=1.7 | | | | | | |
| SWSC | | | | Sb | Sg | 11 46 13.6 | +0.5 |
| | baz=1.7 | | | | | | |
| MONP | Monument Peak | 1.72 | 338 | P | Pn | 11 45 50.4 | -0.9 |
| | baz=1.8 | | | | | | |
| MONP | | | | S | Sn | 11 46 13.6 | -0.3 |
| | baz=1.8 | | | | | | |
| GLA | Glamis | 1.89 | 22 | P | Pn | 11 45 51.2 | -2.2 |
| | baz=1.9 | | | | | | |
| GLA | | | | Sb | Sb | 11 46 19.5 | +0.2 |
| | baz=1.9 | | | | | | |
| GLA | Glamis | 1.89 | 22 | ePn | Pn | 11 45 51.2 | -2.2 |
| GLA | | | | eSn | Sn | 11 46 18.0 | +0.2 |
| 109C | Camp Elliot, M | 2.01 | 323 | P | Pn | 11 45 53.7 | -1.4 |
| | baz=2.1 | | | | | | |
| 109C | | | | S | Sn | 11 46 20.9 | +0.2 |
| | baz=2.1 | | | | | | |
| PFO | Pinyon Flat Ob | 2.41 | 344 | P | Pn | 11 45 59.0 | -1.6 |
| | baz=2.5 | | | | | | |
| PFO | | | | Sb | Sb | 11 46 34.4 | 0.0 |
| | baz=2.5 | | | | | | |
| PFO | Pinyon Flat Ob | 2.41 | 344 | ePn | Pn | 11 45 59.0 | -1.6 |
| PFO | | | | eSn | Sn | 11 46 29.5 | -1.2 |
| 214A | Organ Pipe Nat | 2.51 | 74 | P | Pn | 11 45 59.3 | -2.7 |
| | baz=2.5 | | | | | | |
| Y12C | Blythe | 2.63 | 21 | P | Pn | 11 46 02.1 | -1.4 |
| | baz=2.7 | | | | | | |
| MURC | Murrieta | 2.65 | 331 | P | Pn | 11 46 02.9 | -0.9 |
| | baz=2.7 | | | | | | |
| BELC | Belle Mtn. Jos | 2.71 | 354 | P | Pn | 11 46 03.8 | -1.0 |
| | baz=2.8 | | | | | | |
| IRM | Iron Mountain | 2.89 | 8 | P | Pn | 11 46 06.1 | -1.0 |
| | baz=2.9 | | | | | | |
| SCI | San Clemente I | 2.98 | 305 | P | Pn | 11 46 07.5 | -0.8 |
| | baz=3.0 | | | | | | |
| BBRC | Big Bear Solar | 3.15 | 340 | P | Pn | 11 46 10.3 | -0.5 |
| | baz=3.2 | | | | | | |
| BBRC | | | | Sb | Sb | 11 46 57.5 | +1.7 |
| | baz=3.2 | | | | | | |
| PDMCI | Parker Dam,Lak | 3.26 | 23 | P | Pn | 11 46 11.2 | -0.9 |
| | baz=3.3 | | | | | | |
| FMP | Fort Macarthur | 3.29 | 318 | Sb | Sb | 11 47 00.2 | +0.6 |
| | baz=3.3 | | | | | | |
| BFSC | Mount Baldy Ra | 3.39 | 331 | P | Pn | 11 46 13.3 | -0.8 |
| | baz=3.4 | | | | | | |
| BFSC | | | | Sb | Sb | 11 47 03.2 | +0.5 |
| | baz=3.4 | | | | | | |
| GMRC | Granite Mounta | 3.48 | 360 | P | Pn | 11 46 14.7 | -0.7 |
| | baz=3.5 | | | | | | |
| MWC | Mount Wilson | 3.56 | 326 | ePn | Pn | 11 46 15.4 | -1.0 |
| MWC | | | | eSn | Sn | 11 46 58.0 | -1.1 |
| HEC | Hector,Ludlow | 3.57 | 351 | P | Pn | 11 46 16.0 | -0.6 |
| | baz=3.6 | | | | | | |
| PASC | Pasadena Art C | 3.58 | 324 | ePn | Pn | 11 46 15.5 | -1.1 |
| PASC | | | | eSn | Sb | 11 47 05.0 | -2.9 |
| DECC | Green Verdugo | 3.71 | 323 | Sb | Sb | 11 47 13.6 | +1.8 |
| | baz=3.8 | | | | | | |
| RRX | Edison Barstow | 3.75 | 343 | Sb | Sb | 11 47 16.7 | +3.7 |
| | baz=3.8 | | | | | | |
| LDFC | Landfair | 3.80 | 7 | ePn | Pn | 11 46 20.1 | +0.3 |
| LDFC | | | | eSn | Sn | 11 47 03.9 | -1.2 |
| SNCC | San Nicolas Is | 3.82 | 302 | ePn | Pn | 11 46 18.6 | -1.3 |
| SNCC | | | | eSn | Sn | 11 47 05.4 | +0.1 |
| SNCC | | | | eSg | Sg | 11 47 22.4 | -0.3 |
| BLG | Laguna Peak | 4.02 | 315 | Sb | Sb | 11 47 23.2 | +2.5 |
| | baz=4.1 | | | | | | |
| EDW2 | Edwards Air Fo | 4.08 | 332 | P | Pn | 11 46 23.0 | -0.5 |
| | baz=4.1 | | | | | | |
| EDW2 | | | | Sb | Sb | 11 47 22.7 | +0.2 |
| | baz=4.1 | | | | | | |
| GSC | Goldstone | 4.11 | 347 | P | Pn | 11 46 23.8 | -0.2 |
| | baz=4.2 | | | | | | |
| GSC | | | | Sb | Sg | 11 47 29.1 | -3.1 |
| | baz=4.2 | | | | | | |
| GSC | Goldstone | 4.11 | 347 | ePn | Pn | 11 46 23.9 | -0.1 |
| GSC | | | | eSn | Sn | 11 47 13.5 | +0.7 |
| TUQ | Turquoise Moun | 4.14 | 357 | P | Pn | 11 46 23.9 | -0.5 |
| | baz=4.2 | | | | | | |
| OSI | Osito Adit | 4.20 | 323 | S | Sn | 11 47 13.3 | -1.6 |
| | baz=4.2 | | | | | | |
| OSI | Osito Adit | 4.20 | 323 | ePn | Pn | 11 46 25.5 | +0.4 |
| OSI | | | | eSn | Sn | 11 47 10.8 | -4.0 |
| TUC | Tucson | 4.26 | 75 | ePn | Pn | 11 46 23.8 | -2.4 |
| TUC | | | | eSn | Sn | 11 47 13.4 | -3.0 |
| BSC | Santa Cruz Isl | 4.30 | 310 | P | Pn | 11 46 26.6 | -0.1 |
| | baz=4.3 | | | | | | |
| LRMC | Laurel Mountai | 4.51 | 338 | P | Pn | 11 46 28.7 | -0.7 |
| | baz=4.6 | | | | | | |
| LRMC | | | | Sb | Sb | 11 47 39.8 | +5.0 |
| | baz=4.6 | | | | | | |
| ARVC | Arvin | 4.66 | 326 | Sb | Sb | 11 47 43.6 | +4.5 |
| | baz=4.7 | | | | | | |
| HSIG | | 4.66 | 118 | eP | Pn | 11 46 29.7 | -1.8 |
| ISA | Isabella | 4.96 | 332 | P | Pn | 11 46 35.5 | -0.1 |
| | baz=5.0 | | | | | | |
| ISA | | | | Sb | Sb | 11 47 50.1 | +2.5 |
| | baz=5.0 | | | | | | |
| ISA | Isabella | 4.96 | 332 | ePn | Pn | 11 46 35.5 | -0.1 |
| ISA | | | | eSn | Sn | 11 47 34.0 | +0.6 |
| MPMC | Manual Prospec | 5.00 | 343 | P | Pn | 11 46 36.0 | -0.3 |
| | baz=5.1 | | | | | | |
| MPMC | | | | Sb | Sg | 11 47 55.8 | -4.8 |
| | baz=5.1 | | | | | | |
| SHPR | Sheep Range | 5.21 | 4 | ePn | Pn | 11 46 39.6 | +0.4 |
| SHPR | | | | eSg | Sg | 11 48 08.1 | +0.4 |
| DAC | Darwin (Calif) | 5.23 | 342 | ePn | Pn | 11 46 39.9 | +0.5 |
| DAC | | | | ePg | Pg | 11 46 57.0 | -3.3 |
| DAC | | | | eSn | Sn | 11 47 41.8 | +1.4 |
| DAC | | | | eSg | Sg | 11 48 10.2 | +2.2 |
| FURC | Furnace Creek, | 5.26 | 349 | Sb | Sg | 11 48 06.0 | -3.0 |
| | baz=5.3 | | | | | | |
| VES | Vestal, Richgr | 5.37 | 329 | P | Pn | 11 46 42.0 | +0.9 |
| | baz=5.4 | | | | | | |
| VES | | | | Sb | Sb | 11 48 05.2 | +5.8 |
| | baz=5.4 | | | | | | |
| SMMC | Simmler | 5.41 | 319 | P | Pn | 11 46 42.5 | +0.7 |
| | baz=5.5 | | | | | | |
| WUAZ | Wupatki | 5.53 | 39 | P | Pn | 11 46 43.4 | -0.1 |
| | baz=5.6 | | | | | | |
| WUAZ | Wupatki | 5.53 | 39 | ePn | Pn | 11 46 43.8 | +0.3 |
| WUAZ | | | | eSn | Sn | 11 47 46.7 | -1.0 |
| WUAZ | | | | eSg | Sg | 11 48 18.5 | +0.9 |
| TPNV | Topopah Spring | 5.66 | 355 | P | Pn | 11 46 46.1 | +0.7 |
| | baz=5.7 | | | | | | |
| GRAC | Grapevine Rang | 5.87 | 346 | P | Pn | 11 46 49.1 | +1.0 |
| | baz=5.9 | | | | | | |
| W18A | Petrified Fore | 6.25 | 51 | P | Pn | 11 46 53.5 | -0.1 |
| | baz=6.3 | | | | | | |
| CCUT | Cedar City | 6.52 | 16 | ePn | Pn | 11 46 58.4 | +1.2 |
| CCUT | | | | eSn | Sn | 11 48 10.1 | -2.2 |
| LRV | Little Rabbit | 6.79 | 320 | ePn | Pn | 11 47 06.1 | +5.4 |
| 121A | Cookes Peak, D | 6.80 | 77 | P | Pn | 11 46 60.0 | -1.1 |
| | baz=6.8 | | | | | | |
| R11A | Troy Canyon, C | 7.04 | 0 | P | Pn | 11 47 05.3 | +1.0 |
| | baz=7.1 | | | | | | |
| R11A | Troy Canyon, C | 7.04 | 0 | ePn | Pn | 11 47 05.7 | +1.4 |
| NVAR | Mina Array Bea | 7.45 | 344 | Pn | Pn | 11 47 12.0 | +2.1 |
| | comp=N,0.2nm,0.3s,baz=166,slow=15,SNR=9.4 | | | | | | |
| NVAR | | | | Lg | Lg | 11 49 17.1 | |
| | comp=N,0.3nm,0.3s,baz=158,slow=25,SNR=2.8 | | | | | | |
| NVAR | | | | LR | LR | 11 49 18.4 | |
| | comp=N,50nm,18.7s,baz=200,slow=32 | | | | | | |
| MSU | Marysvale | 7.75 | 21 | ePn | Pn | 11 47 15.9 | +1.9 |
| CMB | Columbia Colle | 7.77 | 331 | ePn | Pn | 11 47 15.7 | +1.5 |
| CMB | | | | eSn | Sn | 11 48 43.1 | +0.2 |
| LAZ | Ladron | 7.80 | 64 | ePn | Pn | 11 47 16.1 | +1.2 |
| MVCO | Mesa Verde | 8.36 | 43 | P | Pn | 11 47 23.4 | +0.9 |
| | baz=8.4 | | | | | | |
| MVCO | Mesa Verde | 8.36 | 43 | ePn | Pn | 11 47 23.8 | +1.4 |
| MVCO | | | | eSg | Sg | 11 49 46.7 | -1.8 |
| ANMO | Albuquerque | 8.53 | 62 | ePn | Pn | 11 47 24.3 | -0.5 |
| ANMO | | | | eSn | Sn | 11 48 59.4 | -2.2 |
| TMUT | Trail Mountain | 8.77 | 23 | ePn | Pn | 11 47 28.0 | -0.2 |
| TMUT | | | | eSn | Sn | 11 49 04.9 | -2.9 |
| MNTX | Cornudas Mount | 8.78 | 85 | P | Pn | 11 47 27.8 | -0.2 |
| | baz=8.8 | | | | | | |
| MNTX | Cornudas Mount | 8.78 | 85 | ePn | Pn | 11 47 27.9 | -0.2 |
| MNTX | | | | eSn | Sn | 11 49 07.1 | -0.4 |
| SRU | San Rafael | 8.85 | 27 | ePn | Pn | 11 47 30.2 | +1.0 |
| SRU | | | | eSn | Sn | 11 49 08.2 | -1.5 |
| PV01 | Paradox Valley | 8.97 | 39 | ePn | Pn | 11 47 33.0 | +2.1 |
| PV01 | | | | eSn | Sn | 11 49 06.2 | -6.4 |
| PV04 | Paradox Valley | 8.99 | 36 | ePn | Pn | 11 47 34.0 | +2.8 |
| PV04 | | | | eSn | Sn | 11 49 09.6 | -3.5 |
| P17A | Butcher Ranch, | 9.09 | 25 | ePn | Pn | 11 47 36.4 | +3.9 |
| SLBS | Sierra La Lagu | 9.11 | 145 | ePn | Pn | 11 47 34.8 | +2.1 |
| NLU | North Lily Min | 9.12 | 18 | ePn | Pn | 11 47 33.7 | +0.9 |
| NLU | | | | eSn | Sn | 11 49 15.5 | -0.6 |
| DUG | Dugway | 9.18 | 14 | P | Pn | 11 47 36.4 | +2.8 |
| | baz=9.2 | | | | | | |
| DUG | Dugway | 9.18 | 14 | ePn | Pn | 11 47 35.1 | +1.5 |
| DUG | | | | eSn | Sn | 11 49 20.0 | +2.5 |
| P18A | Preston Nutter | 9.41 | 26 | ePn | Pn | 11 47 39.6 | +2.7 |
| ELK | Elko | 9.44 | 2 | ePn | Pn | 11 47 39.0 | +1.8 |
| ELK | | | | eSn | Sn | 11 49 20.1 | -4.0 |
| BGU | Big Grassy Mou | 9.84 | 12 | ePn | Pn | 11 47 45.3 | +2.6 |
| BGU | | | | eSn | Sn | 11 49 35.4 | +1.5 |
| CTU | Camp Tracy | 9.89 | 18 | ePn | Pn | 11 47 47.6 | +4.1 |
| TCUT | Toone Canyon | 10.38 | 18 | ePn | Pn | 11 47 54.7 | +4.5 |
| TCUT | | | | eSn | Sn | 11 49 46.1 | -1.2 |
| TXAR | Lajitas Array | 10.54 | 98 | Pn | Pn | 11 47 53.1 | +0.8 |
| | comp=N,0.2nm,0.3s,baz=282,slow=13,SNR=31 | | | | | | |
| TXAR | | | | Lg | Lg | 11 50 44.5 | |
| | comp=N,0.0nm,0.3s,baz=286,slow=26,SNR=3.1 | | | | | | |
| TXAR | | | | LR | LR | 11 51 43.5 | |
| | comp=N,100nm,21.8s,baz=0.0,slow=37 | | | | | | |
| O20A | White River Ci | 10.68 | 32 | P | Pn | 11 47 58.2 | +4.0 |
| | baz=11 | | | | | | |
| O20A | White River Ci | 10.68 | 32 | ePn | Pn | 11 47 53.9 | -0.3 |
| HVU | Hansel Valley | 10.72 | 12 | ePn | Pn | 11 47 56.0 | +1.3 |
| HVU | | | | eSn | Sn | 11 49 55.3 | 0.0 |
| HWUT | Hardware Ranch | 10.80 | 17 | ePn | Pn | 11 47 58.7 | +2.8 |
| HWUT | | | | eSn | Sn | 11 49 51.1 | -6.4 |
| MSTX | Muleshoe | 11.18 | 73 | ePn | Pn | 11 48 00.8 | -0.3 |
| MSTX | | | | eSn | Sn | 11 50 04.9 | -1.8 |
| MOD | Modoc | 11.23 | 342 | ePn | Pn | 11 48 01.5 | -0.2 |
| MOD | | | | eSn | Sn | 11 49 60.0 | -7.8 |
| 128A | Castleberry Fa | 11.26 | 80 | P | Pn | 11 48 04.1 | +2.0 |
| | baz=11 | | | | | | |
| WVOR | Wild Horse Val | 11.37 | 349 | ePn | Pn | 11 48 08.7 | +5.1 |
| Z28A | Tucker Farm, M | 11.40 | 76 | P | Pn | 11 48 06.6 | +2.6 |
| | baz=11 | | | | | | |
| M04C | Macdoel | 11.59 | 336 | P | Pn | 11 48 10.8 | +4.3 |
| | baz=12 | | | | | | |
| 529A | Stev Forest Ra | 11.62 | 92 | P | Pn | 11 48 09.2 | +2.2 |
| | baz=12 | | | | | | |
| ISCO | Idaho Springs | 11.78 | 41 | P | Pn | 11 48 12.6 | +3.2 |
| | baz=12 | | | | | | |
| ISCO | Idaho Springs | 11.78 | 41 | ePn | Pn | 11 48 15.2 | +5.9 |
| 429A | Davenport Ranc | 11.83 | 90 | P | Pn | 11 48 11.1 | +1.2 |
| | baz=12 | | | | | | |
| YBH | Yreka Blue Hor | 11.86 | 333 | ePn | Pn | 11 48 16.0 | +5.7 |
| MFID | Camas Ranch | 12.10 | 359 | ePn | Pn | 11 48 17.8 | +4.2 |
| MFID | | | | eSn | Sn | 11 50 29.6 | +0.4 |
| K05A | Summer Lake | 12.15 | 341 | ePn | Pn | 11 48 20.9 | +6.5 |
| J08A | Circle Bar Ran | 12.25 | 350 | ePn | Pn | 11 48 21.0 | +5.4 |
| HLID | Hailey | 12.29 | 4 | P | Pn | 11 48 20.4 | +4.2 |
| | baz=12 | | | | | | |
| HLID | Hailey | 12.29 | 4 | ePn | Pn | 11 48 18.4 | +2.2 |
| HLID | | | | eSn | Sn | 11 50 39.2 | +5.5 |
| 530A | J-C Ranch, Com | 12.37 | 92 | P | Pn | 11 48 18.0 | +0.7 |
| | baz=12 | | | | | | |
| 430A | Baggett Ranch, | 12.37 | 89 | P | Pn | 11 48 18.9 | +1.5 |
| | baz=12 | | | | | | |
| REDW | Red Top Meadow | 12.63 | 16 | ePn | Pn | 11 48 24.5 | +3.5 |
| REDW | | | | eSn | Sn | 11 50 42.5 | +0.2 |
| TPAW | Teton Pass | 12.73 | 16 | ePn | Pn | 11 48 23.9 | +1.6 |
| TPAW | | | | eSn | Sn | 11 50 42.5 | -2.3 |
| J05D | Fort Rock, OR | 12.76 | 341 | P | Pn | 11 48 28.2 | +5.6 |
| | baz=13 | | | | | | |
| X30A | Coker Ranch, T | 12.81 | 72 | P | Pn | 11 48 26.7 | +3.4 |
| | baz=13 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **431A** | **Sonora** | **12.92** | **89** | P | **Pn** | **11 48 26.9** | **+2.0** |
| | baz=13 | | | | | | |
| **131A** | **Roby** | **13.03** | **80** | P | **Pn** | **11 48 26.8** | **+0.5** |
| | baz=13 | | | | | | |
| **531A** | **Rocksprings** | **13.04** | **91** | P | **Pn** | **11 48 27.9** | **+1.4** |
| | baz=13 | | | | | | |
| **IMW** | **Indian Meadow** | **13.12** | **15** | *e*Pn | Pn | 11 48 32.5 | +4.8 |
| **631A** | **Perdido Creek** | **13.15** | **94** | P | **Pn** | **11 48 29.2** | **+1.2** |
| | baz=13 | | | | | | |
| **FLWY** | **Flagg Ranch** | **13.35** | **16** | *e*Pn | **Pn** | **11 48 33.5** | **+2.8** |
| | comp=N,9.7nm,1.1s | | | | | | |
| FLWY | | | | *e*Sn | **Sn** | **11 50 59.9** | **0.0** |
| **K22A** | **Casper** | **13.47** | **30** | P | **Pn** | **11 48 32.7** | **+0.4** |
| | baz=14 | | | | | | |
| **K22A** | **Casper** | **13.47** | **30** | *e*Pn | **Pn** | **11 48 33.2** | **+0.8** |
| K22A | | | | *e*Sn | **Sn** | **11 51 00.2** | **-2.5** |
| **X31A** | **McDonald Ranch** | **13.57** | **72** | P | **Pn** | **11 48 34.8** | **+1.1** |
| | baz=14 | | | | | | |
| **432A** | **Menard** | **13.60** | **88** | P | Pn | 11 48 38.2 | +4.1 |
| | baz=14 | | | | | | |
| **532A** | **Rocksprings** | **13.60** | **91** | P | **Pn** | **11 48 36.7** | **+2.7** |
| | baz=14 | | | | | | |
| **JCT** | **Junction City** | **13.64** | **89** | *e*Pn | **Pn** | **11 48 37.2** | **+2.6** |
| **ABTX** | **Abilene, Hawle** | **13.66** | **80** | P | **Pn** | **11 48 35.9** | **+1.1** |
| | baz=14 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **13.66** | **80** | *e*Pn | **Pn** | **11 48 36.7** | **+1.8** |
| ABTX | | | | *e*Sn | **Sn** | **11 51 05.8** | **-1.4** |
| **MCMT** | **McKenzie Canyo** | **13.69** | **8** | *e*Pn | **Pn** | **11 48 35.5** | **+0.1** |
| MCMT | | | | *e*Sn | **Sn** | **11 51 07.8** | **-0.3** |
| **Z32A** | **Haskell** | **13.83** | **77** | P | **Pn** | **11 48 38.5** | **+1.4** |
| | baz=14 | | | | | | |
| **G08A** | **Pilot Rock** | **14.21** | **350** | *e*Pn | **P** | **11 48 48.8** | **-1.3** |
| **433A** | **Art** | **14.21** | **88** | P | **Pn** | **11 48 43.5** | **+1.0** |
| | baz=14 | | | | | | |
| **133A** | **Hamilton Ranch** | **14.27** | **80** | P | **Pn** | **11 48 43.9** | **+0.7** |
| | baz=14 | | | | | | |
| **M26A** | **McRoberts Ranc** | **14.29** | **41** | P | P | 11 48 47.3 | -3.6 |
| | baz=14 | | | | | | |
| **233A** | **Rising Star** | **14.29** | **83** | P | **Pn** | **11 48 44.1** | **+0.6** |
| | baz=14 | | | | | | |
| **O28A** | **Krutsinger Ran** | **14.30** | **48** | P | Pn | 11 48 47.3 | +3.7 |
| | baz=14 | | | | | | |
| **633A** | **Saathoff Ranch** | **14.34** | **93** | P | Pn | 11 48 47.6 | +3.4 |
| | baz=14 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **14.42** | **78** | P | **P** | **11 48 49.3** | **-3.0** |
| | baz=14 | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **14.60** | **75** | P | **P** | **11 48 52.4** | **-1.9** |
| | baz=15 | | | | | | |
| **G05D** | **Wamic, OR** | **14.61** | **344** | P | **P** | **11 48 52.7** | **-1.8** |
| | baz=15 | | | | | | |
| **BOZ** | **Bozeman (W)** | **14.67** | **11** | P | **P** | **11 48 55.0** | **-0.2** |
| | baz=15 | | | | | | |
| **BOZ** | **Bozeman (W)** | **14.67** | **11** | *e*Pn | **P** | **11 48 58.0** | **+2.8** |
| **RLMT** | **Red Lodge** | **14.68** | **18** | P | **P** | **11 48 54.6** | **-0.7** |
| | baz=15 | | | | | | |
| **RLMT** | **Red Lodge** | **14.68** | **18** | *e*Pn | P | 11 48 58.8 | +3.4 |
| **LRM** | **Limekiln Ridge** | **14.72** | **9** | *e*Pn | **Pn** | **11 48 50.2** | **+0.7** |
| | comp=N,166nm,1.9s | | | | | | |
| **434A** | **Burnet** | **14.91** | **87** | P | **P** | **11 48 56.9** | **-0.8** |
| | baz=15 | | | | | | |
| **734A** | **La Parita Cree** | **15.00** | **95** | P | **Pn** | **11 48 55.4** | **+2.3** |
| | baz=15 | | | | | | |
| **V33A** | **Lossen Ranch,** | **15.16** | **68** | P | **P** | **11 48 58.3** | **-2.2** |
| | baz=15 | | | | | | |
| **S32A** | **Newby Ranch, P** | **15.18** | **61** | P | **P** | **11 48 58.6** | **-2.2** |
| | baz=15 | | | | | | |
| **J25A** | **Sunshine Ranch** | **15.29** | **35** | P | **Pn** | **11 48 59.2** | **+2.2** |
| | baz=15 | | | | | | |
| **X34A** | **Smith Ranch, M** | **15.32** | **73** | P | **Pn** | **11 48 59.8** | **+2.4** |
| | baz=15 | | | | | | |
| **HAWA** | **Hanford** | **15.37** | **350** | *e*Pn | **Pn** | **11 49 00.4** | **+2.4** |
| | comp=N,11nm,1.3s | | | | | | |
| **034A** | **Hebbronville** | **15.41** | **102** | P | **P** | **11 49 01.3** | **-1.9** |
| | baz=15 | | | | | | |
| **MSO** | **Missoula** | **15.57** | **4** | P | **P** | **11 49 03.6** | **-1.5** |
| | baz=16 | | | | | | |
| **MSO** | **Missoula** | **15.57** | **4** | *e*Pn | **P** | **11 49 04.2** | **-0.9** |
| | comp=N,8.3nm,1.0s | | | | | | |
| **HRY** | **Holter Researc** | **15.68** | **10** | *e*Pn | **Pn** | **11 49 01.9** | **-0.2** |
| | comp=N,4.2nm,1.1s | | | | | | |
| **CHMT** | **Chamberlain Mo** | **15.71** | **6** | *e*Pn | **P** | **11 49 06.1** | **-0.7** |
| | comp=N,5.6nm,1.0s | | | | | | |
| **RSSD** | **Black Hills** | **15.74** | **32** | *e*Pn | **Pn** | **11 49 03.4** | **+0.4** |
| | comp=N,2.9nm,0.8s | | | | | | |
| **O31A** | **Woolen Ranch,** | **15.91** | **52** | P | **P** | **11 49 09.1** | **+0.2** |
| | baz=16 | | | | | | |
| **I26A** | **New Underwood** | **16.23** | **35** | P | **Pn** | **11 49 10.5** | **+1.3** |
| | baz=16 | | | | | | |
| **H25A** | **Fruitdale** | **16.33** | **32** | P | **P** | **11 49 12.3** | **-1.2** |
| | baz=16 | | | | | | |
| **JTMT** | **Jette** | **16.46** | **3** | *e*Pn | **Pn** | **11 49 12.2** | **0.0** |
| **NEW** | **Newport** | **16.99** | **357** | P | **P** | **11 49 20.8** | **0.0** |
| | baz=17 | | | | | | |
| **NEW** | **Newport** | **16.99** | **357** | *e*Pn | **Pn** | **11 49 18.4** | **-0.4** |
| | comp=N,5.0nm,0.9s | | | | | | |
| **LAO** | **LASA Array** | **17.01** | **23** | P | **P** | **11 49 20.3** | **-0.8** |
| | baz=17 | | | | | | |
| **LAO** | **LASA Array** | **17.01** | **23** | *e*Pn | **P** | **11 49 20.6** | **-0.4** |
| | comp=N,15nm,0.8s | | | | | | |
| **H27A** | **Howes** | **17.05** | **35** | P | **P** | **11 49 20.8** | **-0.7** |
| | baz=17 | | | | | | |
| **HKT** | **Hockley** | **17.11** | **89** | *e*Pn | **P** | **11 49 25.7** | **+3.6** |
| | comp=N,18nm,1.4s | | | | | | |
| **F27A** | **Lemmon** | **18.00** | **32** | P | **Pn** | **11 49 31.7** | **+0.3** |
| | baz=18 | | | | | | |
| **S37A** | **Fort Scott** | **18.31** | **64** | P | **P** | **11 49 39.4** | **+4.0** |
| | baz=18 | | | | | | |
| **U38A** | **Gravette** | **18.38** | **68** | P | **P** | **11 49 39.9** | **+3.7** |
| | baz=18 | | | | | | |
| **G29A** | **Hoven** | **18.53** | **37** | P | Pn | 11 49 42.9 | +5.0 |
| | baz=19 | | | | | | |
| **MIAR** | **Mount Ida** | **18.81** | **74** | P | **Pn** | **11 49 46.0** | **+4.7** |
| | baz=19 | | | | | | |
| **MIAR** | **Mount Ida** | **18.81** | **74** | *e*P | **P** | **11 49 40.4** | **-0.6** |
| | comp=N,124nm,3.0s | | | | | | |
| **A25A** | **Svangstu Ranch** | **20.02** | **25** | P | Pn | 11 49 58.3 | +2.6 |
| | baz=20 | | | | | | |
| **C28A** | **Hausauer Farms** | **20.13** | **31** | P | Pn | 11 49 58.0 | +0.9 |
| | baz=20 | | | | | | |
| **B28A** | **Dugan Ranch, T** | **20.70** | **30** | P | **P** | **11 50 02.3** | **+0.9** |
| | baz=21 | | | | | | |
| **A28A** | **Rude Farm, Bot** | **21.10** | **29** | P | **P** | **11 50 03.8** | **-1.9** |
| | baz=21 | | | | | | |
| **EDM** | **Edmonton** | **21.98** | **4** | *e*P | **P** | **11 50 18.8** | **+3.6** |
| | comp=N,7.8nm,0.8s | | | | | | |
| **F36A** | **Milaca** | **22.50** | **43** | P | **P** | **11 50 20.5** | **-0.3** |
| | baz=22 | | | | | | |
| **D35A** | **Remer** | **22.88** | **40** | P | **P** | **11 50 24.5** | **-0.3** |
| | baz=23 | | | | | | |
| **C35A** | **Jirik Farms, M** | **23.29** | **39** | P | **P** | **11 50 28.3** | **-0.8** |
| | baz=23 | | | | | | |
| **A33A** | **Warroad** | **23.34** | **35** | P | **P** | **11 50 29.0** | **-0.6** |
| | baz=23 | | | | | | |
| **D36A** | **Goodland** | **23.43** | **41** | P | **P** | **11 50 30.4** | **-0.1** |
| | baz=23 | | | | | | |
| **C36A** | **Pine Crest Far** | **23.95** | **40** | P | **P** | **11 50 34.6** | **-1.0** |
| | baz=24 | | | | | | |
| **ULM** | **Lac du Bonnet** | **24.01** | **32** | P | **P** | **11 50 35.5** | **-0.6** |
| | comp=N,8.1nm,0.8s,baz=224,slow=10,SNR=7.2 | | | | | | |
| ULM | | | | LR | LR | 12 00 06.8 | |
| | comp=N,77nm,19.9s,baz=140,slow=37 | | | | | | |
| **C37A** | **Embarrass** | **24.29** | **41** | P | **P** | **11 50 38.0** | **-0.7** |
| | baz=24 | | | | | | |
| **C38A** | **Sawbill Land.** | **24.80** | **42** | P | **P** | **11 50 42.2** | **-1.2** |
| | baz=25 | | | | | | |
| **INK** | **Inuvik** | **38.49** | **349** | P | **P** | **11 52 43.6** | **+0.4** |
| | comp=N,4.4nm,0.9s,baz=164,slow=6.4,SNR=6.5 | | | | | | |
| **ILAR** | **Eielson Array** | **38.67** | **339** | P | **P** | **11 52 46.0** | **+1.1** |
| | comp=N,1.4nm,0.7s,baz=152,slow=7.8,SNR=26 | | | | | | |
| ILAR | | | | LR | LR | 12 09 51.6 | |
| | comp=N,45nm,20.8s,baz=291,slow=38 | | | | | | |
| **KTH** | **Kantishna Hill** | **39.18** | **336** | *e*P | **P** | **11 52 50.1** | **+0.9** |
| | comp=N,6.1nm,0.9s | | | | | | |
| **PPLA** | **Purkeypile** | **39.24** | **334** | *e*P | **P** | **11 52 50.8** | **+1.0** |
| | comp=N,5.4nm,0.7s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **39.55** | **336** | *e*P | **P** | **11 52 52.9** | **+0.7** |
| | comp=N,4.5nm,0.8s | | | | | | |
| **EMMW** | **East Machias** | **39.71** | **56** | *e*P | **P** | **11 52 55.0** | **+1.3** |
| | comp=N,82nm,1.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **78.37** | **23** | LR | LR | 12 31 47.6 | |
| | comp=N,23nm,18.9s,baz=270,slow=36 | | | | | | |
| **HFS** | **Hagfors** | **79.87** | **23** | LR | LR | 12 32 34.2 | |
| | comp=N,30nm,18.7s,baz=308,slow=36 | | | | | | |
| **GERES** | **GERESS Array B** | **88.31** | **31** | LR | LR | 12 37 52.3 | |
| | comp=N,61nm,18.2s,baz=64,slow=36 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **95.99** | **326** | *e*P | **P** | **11 58 47.5** | **-1.5** |
| **HHC** | **Hu-ho-hao-te** | **95.99** | **326** | S | S | 12 10 00.0 | -8.7 |
| **HHC** | **Hu-ho-hao-te** | **95.99** | **326** | sS | **S** | **12 10 06.6** | **-2.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,21nm,1.2s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,120nm,6.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,130nm,17.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,110nm,17.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,130nm,18.0s | | | | | | |

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*ISCJB **08** 11:46:33.3±1.3, 40°.36N±0°.07×36°.60E±0°.04, h1km±8km, Error ellipse: s-maj=12.0km s-min=5.7km az=0.1*
*DDA **08** 11:46:33.9, 40°.29N×36°.53E, h7km, Md2.7*
**ISC 08 11:46:33.4**±1.1**, 40°.31N**±0°.08×**36°.59E**±0°.04**, h5**km±10km**, n8, σ0s.62**/14**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TOKT** | **Tokat** | **0.04** | **294** | *e*PG | **Pg** | **11 46 34.3** | **-0.2** |
| **TOKA** | **Tokat** | **0.09** | **282** | P | **Pg** | **11 46 35.5** | **+0.2** |
| TOKA | | | | S | **Sg** | **11 46 37.3** | **+0.7** |
| **SVSK** | **Karacayir** | **0.50** | **141** | *e*PG | **Pg** | **11 46 42.8** | **-0.2** |
| **CUSAR** | **Sarkisla-SIVAS** | **0.92** | **197** | P | **Pg** | **11 46 51.6** | **+0.4** |
| CUSAR | | | | S | **Sn** | **11 47 06.2** | **-0.8** |
| **CUZAR** | **Zara_SIVAS** | **1.00** | **114** | P | **Pn** | **11 46 54.2** | **-0.1** |
| CUZAR | | | | S | **Sb** | **11 47 07.5** | **+0.7** |
| **CUKAN** | **kangal_SIVAS** | **1.20** | **145** | P | **Pg** | **11 46 56.4** | **0.0** |
| CUKAN | | | | S | **Sn** | **11 47 14.6** | **+0.8** |
| **SUSE** | **Susehri** | **1.24** | **94** | P | **Pn** | **11 46 58.0** | **+0.4** |
| SUSE | | | | S | **Sg** | **11 47 12.4** | **-0.8** |
| **CDAG** | **Cicekdag** | **1.83** | **249** | P | **Pb** | **11 47 07.1** | **-0.4** |
| CDAG | | | | S | **Sb** | **11 47 30.4** | **-0.4** |

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*IDC **08** 11:49:48.6±0.9, 38°.08N×20°.98E, h0km, mb3.8/10, mb1 3.9/14, mb1mx3.7/42, mbtmp3.8/14, ML3.8/3, MS3.2/9, Ms1 3.2/9, ms1mx2.8/55, Error ellipse: s-maj=20.8km s-min=16.8km az=45.0*
*CSEM **08** 11:49:50.4±0.1, 38°.03N×20°.98E, h2km, ML4.1, Error ellipse: s-maj=3.4km s-min=2.4km az=41.0*
*THE **08** 11:49:50.7, 38°.00N×21°.05E, h0km±1km, ML4.1/8, Error ellipse: s-maj=1.6km s-min=0.6km az=273.0*
*ISCJB **08** 11:49:50.5±0.3, 38°.05N±0°.02×20°.91E±0°.02, h15km±3km, mb3.8/10, MS3.2/6, Error ellipse: s-maj=2.9km s-min=2.0km az=36.6*
*PDG **08** 11:49:51.0±0.3, 38°.18N×20°.92E, h5km±1km, ML4.2/9, Error ellipse: s-maj=2.2km s-min=1.0km az=90.0*
*ATH **08** 11:49:51.3, 38°.03N×21°.02E, h15km, MD3.3/48, ML3.9*
*NEIC **08** 11:49:51.3, 38°.03N×21°.02E, h15km, ML3.9(ATH), ML4.0(THE), After ATH.*
**ISC 08 11:49:50.8**±0.6**, 38°.01N**±0°.01×**21°.00E**±0°.01**, h17**km±4km**, n325, σ1s.16**/448**, mb4.0**/11**, MS3.1**/6**, 13C-12D, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VTN** | **Vitineika** | **0.17** | **123** | *e*PB | **Pg** | **11 49 55.3** | **+0.1** |
| VTN | | | | *e*SB | **Sg** | **11 49 57.9** | **-0.3** |
| **VTN** | **Vitineika** | **0.17** | **123** | P | **Pg** | **11 49 53.8** | **-1.4** |
| **VTN** | **Vitineika** | **0.17** | **123** | *e*Pb | **Pg** | **11 49 55.3** | **+0.1** |
| VTN | | | | S | **Sg** | **11 49 57.1** | **-1.1** |
| VTN | | | | *e*Sb | **Sg** | **11 49 57.9** | **-0.3** |
| **KFL** | **Anninata** | **0.20** | **300** | *e*PB | **Pb** | **11 49 56.3** | **+0.3** |
| KFL | | | | *e*SB | **Sb** | **11 50 00.1** | **+0.7** |
| **KFL** | **Anninata** | **0.20** | **300** | P | **Pg** | **11 49 55.8** | **+0.1** |
| KFL | | | | S | **Sb** | **11 49 59.7** | **+0.3** |
| **KFL** | **Anninata** | **0.20** | **300** | P | **Pg** | **11 49 55.8** | **+0.1** |
| **KFL** | **Anninata** | **0.20** | **300** | *e*Pb | **Pb** | **11 49 56.3** | **+0.3** |
| KFL | | | | S | **Sb** | **11 49 59.7** | **+0.3** |
| KFL | | | | *e*Sb | **Sb** | **11 50 00.1** | **+0.7** |
| **AXS** | **Araxos** | **0.35** | **57** | P | **Pg** | **11 49 56.8** | **-1.3** |
| AXS | | | | S | **Sg** | **11 50 02.8** | **-0.3** |
| **AXS** | **Araxos** | **0.35** | **57** | P | **Pg** | **11 49 56.8** | **-1.3** |
| AXS | | | | S | **Sg** | **11 50 02.6** | **-0.5** |
| **ZKS** | **Zakynthos** | **0.36** | **209** | *e*PB | **Pg** | **11 49 58.6** | **+0.3** |
| ZKS | | | | *e*SB | **Sb** | **11 50 04.7** | **+0.7** |
| **ZKS** | **Zakynthos** | **0.36** | **209** | P | **Pg** | **11 49 57.5** | **-0.8** |
| ZKS | | | | S | **Sg** | **11 50 03.3** | **0.0** |
| **ZKS** | **Zakynthos** | **0.36** | **209** | P | **Pg** | **11 49 57.7** | **-0.6** |
| **ZKS** | **Zakynthos** | **0.36** | **209** | *e*Pb | **Pg** | **11 49 58.6** | **+0.3** |
| ZKS | | | | S | **Sg** | **11 50 03.3** | **0.0** |
| ZKS | | | | *e*Sb | **Sb** | **11 50 04.7** | **+0.7** |
| **RLS** | **Riolos of Patr** | **0.37** | **82** | *e*PB | **Pg** | **11 49 57.7** | **-0.8** |
| RLS | | | | *e*SB | **Sg** | **11 50 03.3** | **-0.4** |
| **RLS** | **Riolos of Patr** | **0.37** | **82** | P | **Pg** | **11 49 56.8** | **-1.7** |
| **RLS** | **Riolos of Patr** | **0.37** | **82** | P | **Pg** | **11 49 56.8** | **-1.7** |
| **RLS** | **Riolos of Patr** | **0.37** | **82** | P | **Pg** | **11 49 56.9** | **-1.6** |
| **RLS** | **Riolos of Patr** | **0.37** | **82** | *e*Pb | **Pg** | **11 49 57.7** | **-0.8** |
| RLS | | | | S | **Sg** | **11 50 02.9** | **-0.8** |
| RLS | | | | *e*Sb | **Sg** | **11 50 03.3** | **-0.4** |
| **VLS** | **Valsamata** | **0.37** | **297** | *e*PB | **Pg** | **11 49 58.4** | **-0.1** |
| VLS | | | | *e*SB | **Sb** | **11 50 05.1** | **+0.8** |
| **VLS** | **Valsamata** | **0.37** | **297** | P | **Pg** | **11 49 58.2** | **-0.3** |
| VLS | | | | S | **Sb** | **11 50 04.9** | **+0.6** |
| **VLS** | **Valsamata** | **0.37** | **297** | P | **Pg** | **11 49 58.2** | **-0.3** |
| **VLS** | **Valsamata** | **0.37** | **297** | P | **Pg** | **11 49 58.1** | **-0.4** |
| **VLS** | **Valsamata** | **0.37** | **297** | *e*Pb | **Pg** | **11 49 58.4** | **-0.1** |
| VLS | | | | S | **Sb** | **11 50 04.9** | **+0.6** |
| **DRO** | **Drossia** | **0.56** | **96** | *e*PN | **Pg** | **11 50 01.6** | **-0.4** |
| DRO | | | | *e*SN | **Sg** | **11 50 10.1** | **+0.6** |
| **DRO** | **Drossia** | **0.56** | **96** | P | **Pg** | **11 50 00.8** | **-1.2** |
| DRO | | | | S | **Sg** | **11 50 09.3** | **-0.2** |
| **DRO** | **Drossia** | **0.56** | **96** | P | **Pg** | **11 50 00.8** | **-1.2** |
| **DRO** | **Drossia** | **0.56** | **96** | *e*Pn | **Pg** | **11 50 01.6** | **-0.4** |
| DRO | | | | S | **Sg** | **11 50 09.3** | **-0.2** |
| DRO | | | | *e*Sn | **Sg** | **11 50 10.1** | **+0.6** |
| **PDO** | **Prodromos** | **0.60** | **13** | *e*PN | **Pb** | **11 50 03.2** | **+0.3** |
| PDO | | | | *e*SN | **Sg** | **11 50 11.2** | **+0.3** |
| **PDO** | **Prodromos** | **0.60** | **13** | P | **Pg** | **11 50 02.7** | **-0.1** |
| **PDO** | **Prodromos** | **0.60** | **13** | P | **Pg** | **11 50 02.6** | **-0.2** |
| **PDO** | **Prodromos** | **0.60** | **13** | *e*Pn | **Pb** | **11 50 03.2** | **+0.3** |
| PDO | | | | *e*Sn | **Sg** | **11 50 11.2** | **+0.3** |
| **UPR** | **University Cam** | **0.68** | **66** | *e*PN | **Pb** | **11 50 04.4** | **+0.3** |
| UPR | | | | *e*SN | **Sg** | **11 50 13.5** | **+0.4** |
| **UPR** | **University Cam** | **0.68** | **66** | P | **Pb** | **11 50 03.8** | **-0.3** |
| **UPR** | **University Cam** | **0.68** | **66** | P | **Pb** | **11 50 03.3** | **-0.8** |
| **UPR** | **University Cam** | **0.68** | **66** | *e*Pn | **Pb** | **11 50 04.4** | **+0.3** |
| UPR | | | | *e*Sn | **Sg** | **11 50 13.5** | **+0.4** |
| **PVO** | **Paravola** | **0.73** | **34** | *e*PN | **Pb** | **11 50 05.3** | **+0.2** |
| PVO | | | | *e*SN | **Sg** | **11 50 15.6** | **+0.7** |
| **PVO** | **Paravola** | **0.73** | **34** | P | **Pb** | **11 50 04.8** | **-0.3** |
| **PVO** | **Paravola** | **0.73** | **34** | P | **Pb** | **11 50 04.8** | **-0.3** |
| **PVO** | **Paravola** | **0.73** | **34** | *e*Pn | **Pb** | **11 50 05.3** | **+0.2** |
| PVO | | | | *e*Sn | **Sg** | **11 50 15.6** | **+0.7** |
| **AMT** | **Artemida-Makis** | **0.73** | **130** | *e*PB | **Pb** | **11 50 04.8** | **-0.3** |
| AMT | | | | *e*SN | **Sg** | **11 50 16.1** | **+1.2** |
| **AMT** | **Artemida-Makis** | **0.73** | **130** | P | **Pb** | **11 50 04.3** | **-0.8** |
| AMT | | | | S | **Sb** | **11 50 15.4** | **+0.5** |
| **AMT** | **Artemida-Makis** | **0.73** | **130** | P | **Pb** | **11 50 04.3** | **-0.8** |
| **AMT** | **Artemida-Makis** | **0.73** | **130** | *e*Pb | **Pb** | **11 50 04.8** | **-0.3** |
| AMT | | | | S | **Sb** | **11 50 15.4** | **+0.5** |
| AMT | | | | *e*Sn | **Sg** | **11 50 16.1** | **+1.2** |
| **SFD** | **Strofades** | **0.76** | **179** | *e*PB | **Pb** | **11 50 05.6** | **+0.1** |
| SFD | | | | *e*SN | **Sn** | **11 50 17.5** | **-0.2** |
| **SFD** | **Strofades** | **0.76** | **179** | P | **Pb** | **11 50 05.2** | **-0.3** |
| SFD | | | | S | **Sg** | **11 50 16.6** | **+1.0** |
| **SFD** | **Strofades** | **0.76** | **179** | P | **Pb** | **11 50 05.2** | **-0.3** |
| **SFD** | **Strofades** | **0.76** | **179** | *e*Pb | **Pb** | **11 50 05.6** | **+0.1** |
| SFD | | | | S | **Sg** | **11 50 16.6** | **+1.0** |
| SFD | | | | *e*Sn | **Sn** | **11 50 17.5** | **-0.2** |
| **LAKA** | **Lakka** | **0.80** | **73** | *e*PN | **Pb** | **11 50 05.8** | **-0.5** |
| LAKA | | | | *e*SN | **Sb** | **11 50 16.8** | **-0.1** |
| **LAKA** | **Lakka** | **0.80** | **73** | P | **Pb** | **11 50 05.0** | **-1.3** |
| LAKA | | | | S | **Sb** | **11 50 16.7** | **-0.1** |
| **LAKA** | **Lakka** | **0.80** | **73** | P | **Pb** | **11 50 05.0** | **-1.3** |
| LAKA | | | | S | **Sb** | **11 50 16.7** | **-0.1** |
| **LAKA** | **Lakka** | **0.80** | **73** | P | **Pb** | **11 50 05.0** | **-1.3** |
| **LAKA** | **Lakka** | **0.80** | **73** | *e*Pn | **Pb** | **11 50 05.8** | **-0.5** |
| LAKA | | | | S | **Sb** | **11 50 16.7** | **-0.1** |
| **EFP** | **Efpalio** | **0.82** | **59** | *e*PN | **Pb** | **11 50 06.5** | **-0.1** |
| EFP | | | | *e*SN | **Sg** | **11 50 18.8** | **+1.0** |
| **EFP** | **Efpalio** | **0.82** | **59** | P | **Pb** | **11 50 05.5** | **-1.1** |
| EFP | | | | S | **Sb** | **11 50 17.3** | **-0.1** |
| **EFP** | **Efpalio** | **0.82** | **59** | P | **Pb** | **11 50 05.5** | **-1.1** |
| **EFP** | **Efpalio** | **0.82** | **59** | *e*Pn | **Pb** | **11 50 06.5** | **-0.1** |
| EFP | | | | S | **Sb** | **11 50 17.3** | **-0.1** |
| EFP | | | | *e*Sn | **Sg** | **11 50 18.8** | **+1.0** |
| **LKD2** | **Lefkada island** | **0.82** | **341** | *e*PB | **Pb** | **11 50 06.4** | **-0.3** |
| **LKD2** | **Lefkada island** | **0.82** | **341** | P | **Pb** | **11 50 06.3** | **-0.4** |
| **LKD2** | **Lefkada island** | **0.82** | **341** | P | **Pb** | **11 50 06.3** | **-0.4** |
| **LKD2** | **Lefkada island** | **0.82** | **341** | P | **Pb** | **11 50 06.3** | **-0.4** |
| **KLV** | **Kalavryta, Ach** | **0.91** | **87** | *e*PB | **Pb** | **11 50 07.8** | **-0.3** |
| KLV | | | | *e*SN | **Sg** | **11 50 21.3** | **+0.9** |
| **KLV** | **Kalavryta, Ach** | **0.91** | **87** | P | **Pb** | **11 50 06.8** | **-1.3** |
| KLV | | | | S | **Sb** | **11 50 19.3** | **-0.6** |
| **KLV** | **Kalavryta, Ach** | **0.91** | **87** | P | **Pb** | **11 50 06.8** | **-1.3** |
| KLV | | | | S | **Sb** | **11 50 19.3** | **-0.6** |
| **KLV** | **Kalavryta, Ach** | **0.91** | **87** | P | **Pb** | **11 50 06.8** | **-1.3** |
| **KLV** | **Kalavryta, Ach** | **0.91** | **87** | *e*Pb | **Pb** | **11 50 07.8** | **-0.3** |
| KLV | | | | S | **Sb** | **11 50 19.6** | **-0.3** |
| KLV | | | | *e*Sn | **Sg** | **11 50 21.3** | **+0.9** |
| **SERG** | **Sergoula** | **0.92** | **64** | *e*PN | **Pb** | **11 50 08.2** | **-0.1** |
| SERG | | | | *e*SN | **Sg** | **11 50 21.3** | **+0.4** |
| **SERG** | **Sergoula** | **0.92** | **64** | P | **Pb** | **11 50 07.0** | **-1.3** |
| **SERG** | **Sergoula** | **0.92** | **64** | P | **Pb** | **11 50 07.0** | **-1.3** |
| **SERG** | **Sergoula** | **0.92** | **64** | *e*Pn | **Pb** | **11 50 08.2** | **-0.1** |
| SERG | | | | *e*Sn | **Sg** | **11 50 21.3** | **+0.4** |
| **KALE** | **Kalithea** | **0.97** | **67** | *e*PB | **Pb** | **11 50 08.7** | **-0.5** |
| **KALE** | **Kalithea** | **0.97** | **67** | P | **Pb** | **11 50 08.1** | **-1.1** |
| KALE | | | | S | **Sg** | **11 50 23.1** | **+0.6** |
| **KALE** | **Kalithea** | **0.97** | **67** | P | **Pb** | **11 50 08.1** | **-1.1** |
| KALE | | | | S | **Sg** | **11 50 23.1** | **+0.6** |
| **KALE** | **Kalithea** | **0.97** | **67** | P | **Pb** | **11 50 08.1** | **-1.1** |
| **KALE** | **Kalithea** | **0.97** | **67** | *e*Pb | **Pb** | **11 50 08.7** | **-0.5** |
| KALE | | | | S | **Sg** | **11 50 23.1** | **+0.6** |
| **GUR** | **Goura** | **1.06** | **94** | *e*PB | **Pb** | **11 50 10.4** | **-0.3** |
| GUR | | | | *e*SN | **Sg** | **11 50 26.0** | **+0.7** |
| **GUR** | **Goura** | **1.06** | **94** | P | **Pb** | **11 50 09.4** | **-1.3** |
| GUR | | | | S | **Sb** | **11 50 24.9** | **+0.6** |
| **GUR** | **Goura** | **1.06** | **94** | P | **Pb** | **11 50 09.4** | **-1.3** |
| GUR | | | | S | **Sb** | **11 50 24.9** | **+0.6** |
| **GUR** | **Goura** | **1.06** | **94** | P | **Pb** | **11 50 09.4** | **-1.3** |
| **GUR** | **Goura** | **1.06** | **94** | *e*Pb | **Pb** | **11 50 10.4** | **-0.3** |
| GUR | | | | S | **Sb** | **11 50 24.9** | **+0.6** |
| GUR | | | | *e*Sn | **Sg** | **11 50 26.0** | **+0.7** |
| **EVR** | **Evrytania** | **1.10** | **35** | *e*PN | **Pn** | **11 50 12.1** | **+0.5** |
| **EVR** | **Evrytania** | **1.10** | **35** | P | **Pb** | **11 50 11.7** | **+0.2** |
| **EVR** | **Evrytania** | **1.10** | **35** | P | **Pb** | **11 50 11.7** | **+0.2** |
| **EVR** | **Evrytania** | **1.10** | **35** | P | **Pb** | **11 50 11.7** | **+0.2** |
| **EVR** | **Evrytania** | **1.10** | **35** | *e*Pn | **Pn** | **11 50 12.1** | **+0.5** |
| **ITM** | **Ithomi** | **1.11** | **138** | *e*PB | **Pn** | **11 50 11.7** | **+0.2** |
| **ITM** | **Ithomi** | **1.11** | **138** | P | **Pn** | **11 50 10.3** | **-1.2** |
| ITM | | | | S | **Sn** | **11 50 26.8** | **+0.5** |
| **ITM** | **Ithomi** | **1.11** | **138** | P | **Pn** | **11 50 10.3** | **-1.2** |
| ITM | | | | S | **Sg** | **11 50 28.5** | **+1.8** |
| **ITM** | **Ithomi** | **1.11** | **138** | P | **Pn** | **11 50 10.3** | **-1.2** |
| **ITM** | **Ithomi** | **1.11** | **138** | *e*Pb | **Pn** | **11 50 11.7** | **+0.2** |
| ITM | | | | S | **Sn** | **11 50 26.8** | **+0.5** |
| **DSL** | **Palaion Diasel** | **1.12** | **4** | *e*PN | **Pn** | **11 50 11.7** | **-0.1** |
| DSL | | | | *e*SN | **Sg** | **11 50 27.7** | **+0.4** |
| **DSL** | **Palaion Diasel** | **1.12** | **4** | P | **Pn** | **11 50 11.2** | **-0.6** |
| DSL | | | | S | **Sg** | **11 50 27.8** | **+0.4** |
| **DSL** | **Palaion Diasel** | **1.12** | **4** | P | **Pn** | **11 50 11.2** | **-0.6** |
| DSL | | | | S | **Sg** | **11 50 30.6** | **+3.3** |
| **DSL** | **Palaion Diasel** | **1.12** | **4** | P | **Pn** | **11 50 11.2** | **-0.6** |
| **DSL** | **Palaion Diasel** | **1.12** | **4** | *e*Pn | **Pn** | **11 50 11.7** | **-0.1** |
| DSL | | | | *e*Sn | **Sg** | **11 50 27.7** | **+0.4** |
| **PYL** | **PYLOS** | **1.26** | **152** | P | **Pn** | **11 50 12.2** | **-1.4** |
| PYL | | | | S | **Sg** | **11 50 32.1** | **+0.6** |
| **PYL** | **PYLOS** | **1.26** | **152** | P | **Pn** | **11 50 12.1** | **-1.5** |
| **PYL** | **PYLOS** | **1.26** | **152** | P | **Pn** | **11 50 12.1** | **-1.5** |
| PYL | | | | S | **Sg** | **11 50 32.1** | **+0.6** |
| **VLX** | **Vlachokerasia** | **1.26** | **120** | *e*PN | **Pg** | **11 50 15.6** | **+0.4** |
| **VLX** | **Vlachokerasia** | **1.26** | **120** | P | **Pn** | **11 50 13.1** | **-0.6** |
| **VLX** | **Vlachokerasia** | **1.26** | **120** | P | **Pn** | **11 50 13.9** | **+0.2** |
| **VLX** | **Vlachokerasia** | **1.26** | **120** | P | **Pn** | **11 50 13.9** | **+0.2** |
| **VLX** | **Vlachokerasia** | **1.26** | **120** | *e*Pn | **Pg** | **11 50 15.6** | **+0.4** |
| **DSF** | **Desfina** | **1.27** | **71** | *e*PB | **Pn** | **11 50 14.0** | **+0.3** |
| DSF | | | | *e*SN | **Sg** | **11 50 32.7** | **+0.9** |
| **DSF** | **Desfina** | **1.27** | **71** | P | **Pn** | **11 50 13.0** | **-0.7** |
| DSF | | | | S | **Sg** | **11 50 32.1** | **+0.3** |
| **DSF** | **Desfina** | **1.27** | **71** | P | **Pn** | **11 50 13.0** | **-0.7** |
| DSF | | | | S | **Sg** | **11 50 32.1** | **+0.3** |
| **DSF** | **Desfina** | **1.27** | **71** | P | **Pn** | **11 50 13.0** | **-0.7** |
| **DSF** | **Desfina** | **1.27** | **71** | *e*Pb | **Pn** | **11 50 14.0** | **+0.3** |
| DSF | | | | S | **Sg** | **11 50 32.1** | **+0.3** |
| DSF | | | | *e*Sn | **Sg** | **11 50 32.7** | **+0.9** |
| **DESF** | **Desfina** | **1.27** | **71** | *e*PB | **Pn** | **11 50 14.1** | **+0.3** |
| DESF | | | | *e*SN | **Sg** | **11 50 32.5** | **+0.6** |
| **DESF** | **Desfina** | **1.27** | **71** | *e*Pb | **Pn** | **11 50 14.1** | **+0.3** |
| DESF | | | | *e*Sn | **Sg** | **11 50 32.5** | **+0.6** |
| **THAL** | **Thalero** | **1.31** | **88** | *e*PB | **Pb** | **11 50 15.0** | **+0.1** |
| **THAL** | **Thalero** | **1.31** | **88** | P | **Pn** | **11 50 13.8** | **-0.5** |
| **THAL** | **Thalero** | **1.31** | **88** | P | **Pn** | **11 50 13.8** | **-0.5** |
| **THAL** | **Thalero** | **1.31** | **88** | *e*Pn | **Pb** | **11 50 15.0** | **+0.1** |
| **MAKR** | **Makrakomi, Fth** | **1.34** | **41** | *e*PN | **Pb** | **11 50 15.9** | **+0.5** |
| **MAKR** | **Makrakomi, Fth** | **1.34** | **41** | P | **Pb** | **11 50 15.7** | **+0.3** |
| **MAKR** | **Makrakomi, Fth** | **1.34** | **41** | P | **Pb** | **11 50 15.7** | **+0.3** |
| **MAKR** | **Makrakomi, Fth** | **1.34** | **41** | *e*Pn | **Pb** | **11 50 15.9** | **+0.5** |
| **AGG** | **Agios Georgios** | **1.45** | **45** | *e*PN | **Pg** | **11 50 18.8** | **0.0** |
| **AGG** | **Agios Georgios** | **1.45** | **45** | P | **Pb** | **11 50 17.6** | **+0.2** |
| AGG | | | | S | **Sg** | **11 50 37.6** | **-0.1** |
| **AGG** | **Agios Georgios** | **1.45** | **45** | P | **Pb** | **11 50 17.6** | **+0.2** |
| AGG | | | | S | **Sg** | **11 50 39.1** | **+1.4** |
| **AGG** | **Agios Georgios** | **1.45** | **45** | P | **Pb** | **11 50 17.6** | **+0.2** |
| **AGG** | **Agios Georgios** | **1.45** | **45** | *e*Pn | **Pg** | **11 50 18.8** | **0.0** |
| AGG | | | | S | **Sg** | **11 50 37.6** | **-0.1** |
| **AXAR** | **Agios Charalam** | **1.50** | **59** | *e*PN | **Pg** | **11 50 19.5** | **-0.3** |
| **AXAR** | **Agios Charalam** | **1.50** | **59** | P | **Pn** | **11 50 17.9** | **+0.9** |
| AXAR | | | | S | **Sg** | **11 50 39.2** | **-0.2** |
| **AXAR** | **Agios Charalam** | **1.50** | **59** | P | **Pn** | **11 50 17.9** | **+0.9** |
| AXAR | | | | S | **Sg** | **11 50 39.2** | **-0.2** |
| **AXAR** | **Agios Charalam** | **1.50** | **59** | P | **Pn** | **11 50 17.9** | **+0.9** |
| **AXAR** | **Agios Charalam** | **1.50** | **59** | *e*Pn | **Pg** | **11 50 19.5** | **-0.3** |
| AXAR | | | | S | **Sg** | **11 50 39.2** | **-0.2** |
| **LTK** | **Loutraki** | **1.55** | **89** | *e*PN | **Pb** | **11 50 19.7** | **+0.7** |
| LTK | | | | *e*SN | **Sg** | **11 50 41.0** | **+0.2** |
| **LTK** | **Loutraki** | **1.55** | **89** | P | **Pb** | **11 50 18.8** | **-0.2** |
| **LTK** | **Loutraki** | **1.55** | **89** | P | **Pb** | **11 50 18.8** | **-0.2** |
| **LTK** | **Loutraki** | **1.55** | **89** | P | **Pb** | **11 50 18.8** | **-0.2** |
| **LTK** | **Loutraki** | **1.55** | **89** | *e*Pn | **Pb** | **11 50 19.7** | **+0.7** |
| LTK | | | | *e*Sn | **Sg** | **11 50 41.0** | **+0.2** |
| **LOUT** | **Loutraki** | **1.56** | **90** | *e*PN | **Pg** | **11 50 21.0** | **+0.2** |
| **LOUT** | **Loutraki** | **1.56** | **90** | P | **Pb** | **11 50 19.1** | **0.0** |
| **LOUT** | **Loutraki** | **1.56** | **90** | P | **Pb** | **11 50 19.1** | **0.0** |
| **LOUT** | **Loutraki** | **1.56** | **90** | *e*Pn | **Pg** | **11 50 21.0** | **+0.2** |
| **IGT** | **Igoumenitsa** | **1.61** | **341** | *e*PN | **Pb** | **11 50 20.5** | **+0.5** |
| **IGT** | **Igoumenitsa** | **1.61** | **341** | *e*Pn | **Pb** | **11 50 20.5** | **+0.5** |
| **JAN** | **Janina** | **1.65** | **356** | *e*PN | **Pg** | **11 50 22.4** | **-0.2** |
| **JAN** | **Janina** | **1.65** | **356** | P | **Pb** | **11 50 21.4** | **+0.6** |
| **JAN** | **Janina** | **1.65** | **356** | P | **Pg** | **11 50 22.0** | **-0.6** |
| **JAN** | **Janina** | **1.65** | **356** | P | **Pb** | **11 50 21.4** | **+0.6** |
| **JAN** | **Janina** | **1.65** | **356** | *e*Pn | **Pg** | **11 50 22.4** | **-0.2** |
| **LKR** | **Lokris** | **1.69** | **67** | *e*PN | **Pb** | **11 50 22.7** | **+1.2** |
| LKR | | | | *e*SN | **Sg** | **11 50 45.7** | **+0.3** |
| **LKR** | **Lokris** | **1.69** | **67** | P | **Pn** | **11 50 20.8** | **+1.2** |
| **LKR** | **Lokris** | **1.69** | **67** | P | **Pn** | **11 50 20.8** | **+1.2** |
| **LKR** | **Lokris** | **1.69** | **67** | P | **Pn** | **11 50 20.8** | **+1.2** |
| **LKR** | **Lokris** | **1.69** | **67** | *e*Pn | **Pb** | **11 50 22.7** | **+1.2** |
| **SGD** | **Sagiada** | **1.71** | **340** | *e*PN | **Pb** | **11 50 22.3** | **+0.5** |
| **SGD** | **Sagiada** | **1.71** | **340** | P | **Pb** | **11 50 21.8** | **0.0** |
| **SGD** | **Sagiada** | **1.71** | **340** | P | **Pb** | **11 50 21.8** | **0.0** |
| **SGD** | **Sagiada** | **1.71** | **340** | *e*Pn | **Pb** | **11 50 22.3** | **+0.5** |
| **ATAL** | **Atalanti** | **1.73** | **66** | P | **Pn** | **11 50 20.4** | **+0.4** |
| ATAL | | | | S | **Sb** | **11 50 43.8** | **+0.4** |
| **ATAL** | **Atalanti** | **1.73** | **66** | P | **Pn** | **11 50 20.4** | **+0.4** |
| ATAL | | | | S | **Sg** | **11 50 46.5** | **0.0** |
| **ATAL** | **Atalanti** | **1.73** | **66** | P | **Pn** | **11 50 20.4** | **+0.4** |
| ATAL | | | | S | **Sg** | **11 50 46.5** | **0.0** |
| **THL** | **Klokotos Trika** | **1.74** | **27** | *e*PN | **Pb** | **11 50 23.4** | **+1.1** |
| **THL** | **Klokotos Trika** | **1.74** | **27** | *e*Pn | **Pb** | **11 50 23.4** | **+1.1** |
| **VIL2** | **Platees** | **1.80** | **83** | *e*PN | **Pg** | **11 50 25.1** | **-0.2** |
| **KRND** | **KRANIDI** | **1.81** | **110** | *e*PN | **Pb** | **11 50 24.5** | **+1.0** |
| KRND | | | | *e*SN | **Sg** | **11 50 48.6** | **-0.6** |
| **KRND** | **KRANIDI** | **1.81** | **110** | P | **Pn** | **11 50 22.3** | **+1.1** |
| **KRND** | **KRANIDI** | **1.81** | **110** | P | **Pn** | **11 50 22.3** | **+1.1** |
| **KRND** | **KRANIDI** | **1.81** | **110** | *e*Pn | **Pb** | **11 50 24.5** | **+1.0** |
| **VILL** | **Villia** | **1.83** | **84** | P | **Pn** | **11 50 22.7** | **+1.2** |
| **VILL** | **Villia** | **1.83** | **84** | P | **Pn** | **11 50 22.7** | **+1.2** |
| **VILL** | **Villia** | **1.83** | **84** | *e*Pn | **Pb** | **11 50 25.1** | **+1.3** |
| **DIDY** | **Didyma** | **1.83** | **106** | *e*PN | **Pb** | **11 50 25.2** | **+1.4** |
| DIDY | | | | *e*SN | **Sb** | **11 50 48.6** | **+2.1** |
| **DIDY** | **Didyma** | **1.83** | **106** | P | **Pn** | **11 50 22.7** | **+1.2** |
| DIDY | | | | S | **Sb** | **11 50 46.0** | **-0.5** |
| **DIDY** | **Didyma** | **1.83** | **106** | P | **Pn** | **11 50 22.7** | **+1.2** |
| **DIDY** | **Didyma** | **1.83** | **106** | *e*Pn | **Pb** | **11 50 25.2** | **+1.4** |
| **DID** | **Didima** | **1.84** | **105** | *e*PN | **Pb** | **11 50 25.3** | **+1.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DID | | | | eSN | Sb | 11 50 48.8 | +2.1 |
| **DID** | **Didima** | **1.84** | **105** | P | **Pn** | **11 50 23.0** | **+1.4** |
| DID | | | | S | Sb | 11 50 47.5 | +0.8 |
| **DID** | **Didima** | **1.84** | **105** | P | **Pb** | **11 50 24.4** | **+0.4** |
| DID | | | | S | Sb | 11 50 48.2 | +1.5 |
| **DID** | **Didima** | **1.84** | **105** | P | **Pn** | **11 50 23.0** | **+1.4** |
| **DID** | **Didima** | **1.84** | **105** | ePn | **Pb** | **11 50 25.3** | **+1.3** |
| DID | | | | S | Sb | 11 50 48.2 | +1.5 |
| **SMIA** | **Simia** | **1.94** | **63** | ePN | **Pb** | **11 50 25.8** | **+0.2** |
| **SMIA** | **Simia** | **1.94** | **63** | ePn | **Pb** | **11 50 25.8** | **+0.2** |
| **KEK** | **Kerkira** | **1.94** | **331** | ePN | **Pb** | **11 50 25.2** | **-0.6** |
| **KEK** | **Kerkira** | **1.94** | **331** | P | **Pn** | **11 50 24.1** | **+1.1** |
| **KEK** | **Kerkira** | **1.94** | **331** | P | **Pb** | **11 50 24.8** | **-1.0** |
| **KEK** | **Kerkira** | **1.94** | **331** | P | **Pn** | **11 50 24.1** | **+1.1** |
| **KEK** | **Kerkira** | **1.94** | **331** | ePn | **Pb** | **11 50 25.2** | **-0.6** |
| **NAIG** | **Nisos Aigina** | **1.98** | **96** | ePN | **Pb** | **11 50 26.8** | **+0.4** |
| **NAIG** | **Nisos Aigina** | **1.98** | **96** | ePn | **Pb** | **11 50 26.8** | **+0.4** |
| **VLI** | **Veliai** | **2.01** | **129** | ePN | **Pb** | **11 50 27.2** | **+0.4** |
| **VLI** | **Veliai** | **2.01** | **129** | P | **Pb** | **11 50 27.4** | **+0.6** |
| **VLI** | **Veliai** | **2.01** | **129** | ePn | **Pb** | **11 50 27.2** | **+0.4** |
| **ATH** | **Athens Observa** | **2.14** | **90** | ePN | **Pb** | **11 50 28.4** | **-0.7** |
| ATH | | | | eSN | Sb | 11 50 55.7 | +0.3 |
| **ATH** | **Athens Observa** | **2.14** | **90** | ePn | **Pb** | **11 50 28.4** | **-0.7** |
| ATH | | | | eSn | Sb | 11 50 55.7 | +0.3 |
| **MRKA** | **Markates** | **2.15** | **70** | ePN | **Pb** | **11 50 28.7** | **-0.5** |
| MRKA | | | | eSN | Sb | 11 50 56.5 | +1.0 |
| **MRKA** | **Markates** | **2.15** | **70** | ePn | **Pb** | **11 50 28.7** | **-0.5** |
| MRKA | | | | eSn | Sb | 11 50 56.5 | +1.0 |
| **NEO** | **Neokhori** | **2.17** | **53** | ePN | **Pb** | **11 50 28.8** | **-0.8** |
| NEO | | | | eSN | Sb | 11 50 56.3 | +0.2 |
| **NEO** | **Neokhori** | **2.17** | **53** | P | **Pb** | **11 50 28.6** | **-1.0** |
| **NEO** | **Neokhori** | **2.17** | **53** | P | **Pb** | **11 50 28.6** | **-1.0** |
| NEO | | | | eSn | Sb | 11 50 56.3 | +0.2 |
| **XOR** | **Xorichti** | **2.18** | **51** | ePN | **Pb** | **11 50 29.6** | **-0.2** |
| **XOR** | **Xorichti** | **2.18** | **51** | ePn | **Pb** | **11 50 29.6** | **-0.2** |
| **VLY** | **Voula,Athens** | **2.21** | **93** | ePN | **Pb** | **11 50 29.6** | **-0.7** |
| VLY | | | | eSN | Sb | 11 50 57.6 | +0.2 |
| **VLY** | **Voula,Athens** | **2.21** | **93** | P | **Pb** | **11 50 28.9** | **-1.4** |
| **VLY** | **Voula,Athens** | **2.21** | **93** | P | **Pb** | **11 50 28.9** | **-1.4** |
| **VLY** | **Voula,Athens** | **2.21** | **93** | ePn | **Pb** | **11 50 29.6** | **-0.7** |
| VLY | | | | eSn | Sb | 11 50 57.6 | +0.2 |
| **SKIA** | **Skiathos** | **2.25** | **58** | ePN | **Pb** | **11 50 30.7** | **-0.2** |
| **SKIA** | **Skiathos** | **2.25** | **58** | ePn | **Pb** | **11 50 30.7** | **-0.2** |
| **PTL** | **Penteli** | **2.26** | **88** | ePN | **Pb** | **11 50 30.0** | **-1.1** |
| PTL | | | | eSN | Sb | 11 50 58.2 | -0.6 |
| **PTL** | **Penteli** | **2.26** | **88** | ePn | **Pb** | **11 50 30.0** | **-1.1** |
| PTL | | | | eSn | Sb | 11 50 58.2 | -0.6 |
| **EREA** | **Eretria** | **2.34** | **79** | ePN | **Pb** | **11 50 32.0** | **-0.5** |
| **EREA** | **Eretria** | **2.34** | **79** | ePn | **Pb** | **11 50 32.0** | **-0.5** |
| **KYTH** | **Kithira** | **2.37** | **136** | ePN | **Pb** | **11 50 32.7** | **-0.3** |
| **KYTH** | **Kithira** | **2.37** | **136** | P | **Pb** | **11 50 32.0** | **-1.0** |
| **KYTH** | **Kithira** | **2.37** | **136** | P | **Pb** | **11 50 32.0** | **-1.0** |
| **KYTH** | **Kithira** | **2.37** | **136** | ePn | **Pb** | **11 50 32.7** | **-0.3** |
| **KZN** | **Kozani** | **2.37** | **14** | ePN | **Pb** | **11 50 32.2** | **-0.9** |
| **KZN** | **Kozani** | **2.37** | **14** | ePn | **Pb** | **11 50 32.2** | **-0.9** |
| **LIT** | **Litokhoron** | **2.39** | **29** | ePN | **Pb** | **11 50 32.7** | **-0.6** |
| **LIT** | **Litokhoron** | **2.39** | **29** | ePn | **Pb** | **11 50 32.7** | **-0.6** |
| **NEST** | **Nestorio** | **2.40** | **1** | ePN | **Pb** | **11 50 33.1** | **-0.5** |
| **NEST** | **Nestorio** | **2.40** | **1** | ePn | **Pb** | **11 50 33.1** | **-0.5** |
| **AOS** | **Alonnisos** | **2.53** | **62** | ePB | **Pb** | **11 50 34.1** | **-1.7** |
| **AOS** | **Alonnisos** | **2.53** | **62** | ePn | **Pb** | **11 50 34.1** | **-1.7** |
| **FNA** | **Florina** | **2.79** | **6** | ePN | **Pn** | **11 50 37.3** | **+2.7** |
| **FNA** | **Florina** | **2.79** | **6** | ePn | **Pn** | **11 50 37.3** | **+2.7** |
| **ANKY** | **Antikythira Is** | **2.82** | **139** | ePN | **Pn** | **11 50 38.2** | **+3.1** |
| **ANKY** | **Antikythira Is** | **2.82** | **139** | ePn | **Pn** | **11 50 38.2** | **+3.1** |
| **PAIG** | **Paliouri** | **2.83** | **47** | ePN | **Pn** | **11 50 37.4** | **+2.2** |
| **PAIG** | **Paliouri** | **2.83** | **47** | ePn | **Pn** | **11 50 37.4** | **+2.2** |
| **MHLO** | **Agia Marina, M** | **3.01** | **115** | ePN | **Pn** | **11 50 40.4** | **+2.7** |
| **MHLO** | **Agia Marina, M** | **3.01** | **115** | ePn | **Pn** | **11 50 40.4** | **+2.7** |
| **PLG** | **Polygyros** | **3.03** | **38** | ePN | **Pn** | **11 50 40.7** | **+2.7** |
| **PLG** | **Polygyros** | **3.03** | **38** | ePn | **Pn** | **11 50 40.7** | **+2.7** |
| **HORT** | **Hortiatis** | **3.05** | **32** | ePN | **Pn** | **11 50 41.2** | **+2.9** |
| **HORT** | **Hortiatis** | **3.05** | **32** | ePn | **Pn** | **11 50 41.2** | **+2.9** |
| **OHR** | **Ohrid** | **3.10** | **357** | i Pn | **Pn** | **11 50 41.6** | **+2.6** |
| **OHR** | **Ohrid** | **3.10** | **357** | i Pn | **Pn** | **11 50 41.5** | **+2.6** |
| **GRG** | **Griva** | **3.14** | **20** | ePN | Pn | 11 50 42.7 | +3.3 |
| **GRG** | **Griva** | **3.14** | **20** | ePn | Pn | 11 50 42.7 | +3.3 |
| **SOH** | **Sokhos** | **3.35** | **32** | ePN | Pn | 11 50 45.9 | +3.6 |
| **SOH** | **Sokhos** | **3.35** | **32** | ePn | Pn | 11 50 45.9 | +3.6 |
| **TIR** | **Tirane** | **3.45** | **346** | ePn | **Pn** | **11 50 45.5** | **+1.8** |
| TIR | | | | eSn | Sn | 11 51 26.1 | +2.0 |
| **TIR** | **Tirane** | **3.45** | **346** | ePn | **Pn** | **11 50 45.5** | **+1.8** |
| TIR | | | | eSn | Sn | 11 51 26.1 | +2.0 |
| **KNT** | **Kendrikon** | **3.47** | **24** | ePN | **Pn** | **11 50 47.2** | **+3.2** |
| **KNT** | **Kendrikon** | **3.47** | **24** | ePn | **Pn** | **11 50 47.2** | **+3.2** |
| **IMMV** | **Iera Moni Meta** | **3.49** | **136** | ePN | **Pn** | **11 50 47.2** | **+2.9** |
| **IMMV** | **Iera Moni Meta** | **3.49** | **136** | ePn | **Pn** | **11 50 47.2** | **+2.9** |
| **VAY** | **Valandovo** | **3.52** | **20** | ePn | **Pn** | **11 50 43.8** | **-0.9** |
| **VAY** | **Valandovo** | **3.52** | **20** | ePn | **Pn** | **11 50 43.8** | **-0.9** |
| **TIP** | **Timpagrande** | **3.53** | **291** | P | **Pn** | **11 50 46.2** | **+1.4** |
| **TIP** | **Timpagrande** | **3.53** | **291** | ePn | **Pn** | **11 50 46.3** | **+1.5** |
| TIP | | | | eSn | Sn | 11 51 21.7 | -4.4 |
| **TIP** | **Timpagrande** | **3.53** | **291** | P | **Pn** | **11 50 46.2** | **+1.4** |
| **SRS** | **Serrai** | **3.69** | **32** | ePN | Pn | 11 50 50.4 | +3.3 |
| **SRS** | **Serrai** | **3.69** | **32** | ePn | Pn | 11 50 50.4 | +3.3 |
| **APE** | **Apeiranthos** | **3.72** | **103** | ePN | **Pn** | **11 50 50.5** | **+3.1** |
| **APE** | **Apeiranthos** | **3.72** | **103** | ePn | **Pn** | **11 50 50.5** | **+3.1** |
| **LIA** | **Limnos Island** | **3.76** | **59** | ePN | **Pn** | **11 50 50.4** | **+2.4** |
| **LIA** | **Limnos Island** | **3.76** | **59** | ePn | **Pn** | **11 50 50.4** | **+2.4** |
| **PE1** | **Pezze di Greco** | **3.94** | **316** | ePn | **Pn** | **11 50 52.4** | **+2.0** |
| **SKO** | **Skopje** | **3.97** | **5** | ePn | **Pn** | **11 50 52.2** | **+1.2** |
| **SKO** | **Skopje** | **3.97** | **5** | ePn | **Pn** | **11 50 52.1** | **+1.2** |
| **CHOS** | **Chios island** | **4.00** | **83** | ePN | **Pn** | **11 50 54.2** | **+2.9** |
| **CHOS** | **Chios island** | **4.00** | **83** | ePn | **Pn** | **11 50 54.2** | **+2.9** |
| **IDI** | **Anoyia** | **4.14** | **130** | Pn | **Pn** | **11 50 55.6** | **+2.3** |
| | 2.7nm,0.3s,baz=318,slow=16,SNR=10 | | | | | | |
| IDI | | | | Sn | **Sn** | **11 51 39.0** | **-2.3** |
| | 3.5nm,0.3s,baz=346,slow=12,SNR=5.7 | | | | | | |
| IDI | | | | LR | LR | 11 52 28.9 | |
| | comp=Z,98nm,21.0s,baz=272,slow=38 | | | | | | |
| **ULC** | **Ulcinj** | **4.17** | **342** | ⇓iPn | **Pn** | **11 50 54.2** | **+0.5** |
| ULC | | | | eSn | **Sn** | **11 51 41.9** | **-0.2** |
| **ULC** | **Ulcinj** | **4.17** | **342** | ⇓iPn | **Pn** | **11 50 54.2** | **+0.5** |
| ULC | | | | eSn | **Sn** | **11 51 41.9** | **-0.2** |
| **SG1** | **Sgolgore (BA)** | **4.38** | **312** | ePn | **Pn** | **11 50 58.5** | **+1.9** |
| **DRME** | **Dracevica, Mon** | **4.40** | **342** | ⇑iPn | **Pn** | **11 50 57.7** | **+0.9** |
| DRME | | | | eSn | **Sn** | **11 51 47.4** | **-0.2** |
| **DRME** | **Dracevica, Mon** | **4.40** | **342** | ⇑iPn | **Pn** | **11 50 57.7** | **+0.9** |
| **CUC** | **Castrocucco** | **4.50** | **298** | ePn | **Pn** | **11 50 57.0** | **-1.2** |
| CUC | | | | eSn | **Sn** | **11 51 50.3** | **+0.1** |
| **CUC** | **Castrocucco** | **4.50** | **298** | ePn | **Pn** | **11 50 57.0** | **-1.2** |
| CUC | | | | eSn | **Sn** | **11 51 50.3** | **+0.1** |
| **BUM** | **Brajici-Budva** | **4.58** | **340** | ⇑iPn | **Pn** | **11 50 59.5** | **+0.2** |
| BUM | | | | eSn | **Sn** | **11 51 52.4** | **+0.3** |
| **BUM** | **Brajici-Budva** | **4.58** | **340** | ⇑iPn | **Pn** | **11 50 59.5** | **+0.2** |
| **PDG** | **Podgorica** | **4.61** | **344** | ⇓iPn | **Pn** | **11 51 00.0** | **+0.3** |
| PDG | | | | eSn | **Sn** | **11 51 52.8** | **0.0** |
| **TTG** | **Podgorica** | **4.61** | **344** | ⇓iPn | **Pn** | **11 51 00.0** | **+0.3** |
| TTG | | | | eSn | **Sn** | **11 51 52.8** | **0.0** |
| **SMG** | **Samos** | **4.63** | **92** | ePN | **Pn** | **11 51 02.8** | **+2.9** |
| **SMG** | **Samos** | **4.63** | **92** | ePn | **Pn** | **11 51 02.8** | **+2.9** |
| **CDT** | **Castel del Mon** | **4.77** | **311** | ePn | **Pn** | **11 51 03.5** | **+1.6** |
| **HCY** | **Herceg Novi** | **4.83** | **337** | ⇓iPn | **Pn** | **11 51 02.8** | **+0.1** |
| HCY | | | | eSn | **Sn** | **11 51 57.7** | **-0.5** |
| **HCY** | **Herceg Novi** | **4.83** | **337** | ⇓iPn | **Pn** | **11 51 02.8** | **+0.1** |
| **BARS** | **Barje** | **4.84** | **7** | ePn | **Pn** | **11 51 04.5** | **+1.7** |
| **BEY** | **Berane** | **4.93** | **350** | ⇑iPn | **Pn** | **11 51 04.4** | **+0.3** |
| BEY | | | | eSn | **Sn** | **11 52 00.9** | **+0.1** |
| **IVA** | **Berane** | **4.93** | **350** | ⇑iPn | **Pn** | **11 51 04.4** | **+0.3** |
| IVA | | | | eSn | **Sn** | **11 52 00.9** | **+0.1** |
| **NKME** | **Niksic** | **5.00** | **342** | ⇓iPn | **Pn** | **11 51 05.3** | **+0.2** |
| NKME | | | | eSn | **Sn** | **11 52 02.2** | **-0.3** |
| **NKME** | **Niksic** | **5.00** | **342** | ⇓iPn | **Pn** | **11 51 05.3** | **+0.2** |
| NKME | | | | eSn | **Sn** | **11 52 02.2** | **-0.3** |
| **NKY** | **Niksic** | **5.04** | **343** | ⇓iPn | **Pn** | **11 51 06.2** | **+0.6** |
| NKY | | | | eSn | **Sn** | **11 52 03.4** | **-0.1** |
| **NKY** | **Niksic** | **5.04** | **343** | ⇓iPn | **Pn** | **11 51 06.2** | **+0.6** |
| NKY | | | | eSn | **Sn** | **11 52 03.4** | **-0.1** |
| **BRY** | **Bratogost** | **5.24** | **340** | ⇑iPn | **Pn** | **11 51 08.3** | **-0.1** |
| BRY | | | | eSn | **Sn** | **11 52 07.2** | **-1.2** |
| **BRY** | **Bratogost** | **5.24** | **340** | ⇑iPn | **Pn** | **11 51 08.3** | **-0.1** |
| BRY | | | | eSn | **Sn** | **11 52 07.2** | **-1.2** |
| **UPM** | **Unac-Piva** | **5.43** | **344** | ⇑iPn | **Pn** | **11 51 11.4** | **+0.3** |
| UPM | | | | eSn | **Sn** | **11 52 12.0** | **-1.2** |
| **UPM** | **Unac-Piva** | **5.43** | **344** | ⇑iPn | **Pn** | **11 51 11.4** | **+0.3** |
| UPM | | | | eSn | **Sn** | **11 52 12.0** | **-1.2** |
| **IVAS** | **Ivanjica** | **5.60** | **354** | ePn | **Pn** | **11 51 14.7** | **+1.4** |
| **GRUS** | **Gruza** | **5.88** | **358** | ePn | **Pn** | **11 51 17.7** | **+0.6** |
| **BBLS** | **Lazići** | **5.97** | **349** | ePn | **Pn** | **11 51 18.0** | **-0.5** |
| **DIVS** | **Divibare** | **6.13** | **353** | ePn | **Pn** | **11 51 20.7** | **+0.1** |
| **TEKS** | **Tekeris** | **6.63** | **351** | ePn | **Pn** | **11 51 27.8** | **+0.4** |
| **BOJS** | **Bojanci** | **8.63** | **332** | i Pn | **Pn** | **11 51 55.2** | **+0.4** |
| BOJS | | | | i Sn | **Sn** | **11 53 28.9** | **-2.8** |
| **BOJS** | **Bojanci** | **8.63** | **332** | i Pn | **Pn** | **11 51 55.2** | **+0.4** |
| BOJS | | | | i Sn | **Sn** | **11 53 28.9** | **-2.8** |
| **JAVS** | **Javornik** | **9.42** | **329** | i Pn | **Pn** | **11 52 06.2** | **+0.5** |
| JAVS | | | | i Sn | **Sn** | **11 53 47.2** | **-4.0** |
| **JAVS** | **Javornik** | **9.42** | **329** | i Pn | **Pn** | **11 52 06.2** | **+0.5** |
| JAVS | | | | i Sn | **Sn** | **11 53 47.2** | **-4.0** |
| **PERS** | **Pernice** | **9.66** | **335** | i Pn | **Pn** | **11 52 08.7** | **-0.2** |
| PERS | | | | i Sn | **Sn** | **11 53 52.2** | **-4.8** |
| **PERS** | **Pernice** | **9.66** | **335** | i Pn | **Pn** | **11 52 08.7** | **-0.2** |
| PERS | | | | i Sn | **Sn** | **11 53 52.2** | **-4.8** |
| **BRTR** | **Keskin Array B** | **10.00** | **76** | Pn | Pn | 11 52 19.5 | +5.7 |
| | 0.2nm,0.3s,baz=262,slow=12,SNR=5.7 | | | | | | |
| **VYHS** | **Vyhne** | **10.60** | **352** | ePN | **Pn** | **11 52 24.0** | **+2.2** |
| VYHS | | | | e | | 11 53 13.2 | |
| **VYHS** | **Vyhne** | **10.60** | **352** | ePn | **Pn** | **11 52 24.0** | **+2.2** |
| **MOA** | **Molln** | **11.00** | **336** | ⇑iPn | **Pn** | **11 52 26.0** | **-1.3** |
| **MOA** | **Molln** | **11.00** | **336** | Pn | **Pn** | **11 52 26.0** | **-1.3** |
| **VRAC** | **Vranov** | **11.73** | **346** | LR | LR | 11 57 26.2 | |
| | comp=Z,78nm,20.1s,baz=203,slow=39 | | | | | | |
| **GERES** | **GERESS Array B** | **12.05** | **336** | Pn | **Pn** | **11 52 41.9** | **+0.2** |
| | 0.5nm,0.3s,baz=158,slow=13,SNR=8.1 | | | | | | |
| GERES | | | | LR | LR | 11 58 10.8 | |
| | comp=Z,61nm,19.8s,baz=83,slow=42 | | | | | | |
| **ESDC** | **Sonseca Array** | **19.51** | **283** | P | **Pn** | **11 54 18.7** | **+0.3** |
| | baz=77,slow=9.4,SNR=3.0 | | | | | | |
| **OBN** | **Obninsk** | **20.10** | **27** | LR | LR | 12 02 46.0 | |
| | comp=Z,77nm,18.1s,baz=218,slow=39 | | | | | | |
| **HFS** | **Hagfors** | **22.63** | **350** | P | **P** | **11 54 49.8** | **-0.8** |
| | 2.4nm,0.4s,baz=156,slow=11,SNR=13 | | | | | | |
| HFS | | | | LR | LR | 12 05 41.4 | |
| | comp=Z,48nm,19.9s,baz=192,slow=42 | | | | | | |
| **FINES** | **FINESS Array B** | **23.67** | **6** | P | **P** | **11 55 01.4** | **+0.3** |
| | 0.9nm,0.3s,baz=157,slow=10,SNR=6.7 | | | | | | |
| FINES | | | | LR | LR | 12 04 40.6 | |
| | comp=Z,62nm,19.4s,baz=57,slow=38 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **23.79** | **325** | P | **P** | **11 55 03.3** | **+1.0** |
| | 2.2nm,0.5s,baz=129,slow=10.0,SNR=7.9 | | | | | | |
| **NB2** | **NORSAR Subarra** | **23.86** | **348** | P | **P** | **11 55 02.8** | **-0.2** |
| | comp=Z,0.9nm,0.6s,baz=153,slow=10 | | | | | | |
| **NB2** | **NORSAR Subarra** | **23.86** | **348** | P | **P** | **11 55 02.8** | **-0.2** |
| | comp=Z,0.9nm,0.6s,SNR=4.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **23.86** | **348** | P | **P** | **11 55 02.9** | **-0.2** |
| | comp=Z,0.7nm,0.7s,baz=145,slow=10,SNR=6.3 | | | | | | |
| NOA | | | | LR | LR | 12 06 13.9 | |
| | comp=Z,27nm,18.1s,baz=175,slow=41 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.14** | **220** | P | **P** | **11 56 00.2** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=29,slow=9.6,SNR=5.4 | | | | | | |
| **ARU** | **Arti** | **30.93** | **41** | LR | LR | 12 09 33.4 | |
| | comp=Z,51nm,18.3s,baz=46,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **31.68** | **3** | P | **P** | **11 56 11.6** | **-1.3** |
| | comp=Z,1.0nm,0.5s,baz=186,slow=8.5,SNR=7.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.02** | **53** | ⇑Sn | **P** | **11 57 41.6** | **+0.6** |
| | comp=Z,2.8nm,1.1s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 11 58 34.9 | |
| | comp=Z,3.8nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.02** | **53** | P | **P** | **11 57 41.5** | **+0.5** |
| | comp=Z,0.9nm,0.4s,baz=279,slow=8.5,SNR=2.7 | | | | | | |
| **KURK** | **Kurchatov** | **42.07** | **53** | ⇑Sn | **P** | **11 57 39.6** | **-1.8** |
| | comp=Z,4.5nm,1.3s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 11 58 34.1 | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **42.07** | **53** | P | **P** | **11 57 41.5** | **+0.1** |
| **KURK** | **Kurchatov** | **42.07** | **53** | P | **P** | **11 57 41.5** | **+0.1** |
| **MKAR** | **Makanchi Array** | **45.06** | **58** | P | **P** | **11 58 05.7** | **0.0** |
| | comp=Z,1.3nm,0.5s,baz=270,slow=8.0,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.52** | **48** | P | **P** | **11 58 08.9** | **-0.2** |
| | comp=Z,1.1nm,0.4s,baz=275,slow=7.1,SNR=4.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.53** | **82** | P | **P** | **12 00 59.4** | **+0.6** |
| | comp=Z,0.6nm,0.5s,baz=304,slow=7.2,SNR=4.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **95.36** | **314** | LR | LR | 12 47 47.4 | |
| | comp=Z,58nm,18.1s,baz=0.0,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **120.15** | **93** | PKP | **PKPdf** | **12 08 41.1** | **0.0** |
| | comp=Z,0.1nm,0.4s,baz=324,slow=1.8,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **121.78** | **97** | PKP | **PKPdf** | **12 08 44.2** | **+0.1** |
| | comp=Z,0.1nm,0.4s,baz=301,slow=1.4,SNR=5.1 | | | | | | |

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*HEL **08** 11:57:40.2±0.5, 67.58N×33.97E, h0km, ML2.1, Explosion*
*NAO **08** 11:57:40.5±1.5, 67.53N×33.90E, ML2.6*
*CSEM **08** 11:57:42.1±0.8, 67.54N×33.43E, h2km, ML2.6, Error ellipse: s-maj=14.0km s-min=7.3km az=96.0, Mining explosion.*
**ISC 08 11:57:38.5**±1.9**, 67.58N**±0.04×**34.04E**±0.10**, h0km, n31, σ1.38**/60**, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APA0** | **Apatity Array** | **0.40** | **274** | Pg | **Pg** | **11 57 44.8** | **-1.3** |
| APA0 | | | | Pg | **Pb** | **11 57 47.4** | **-1.1** |
| | baz=102,slow=16 | | | | | | |
| APA0 | | | | Lg | Lg | 11 57 47.5 | |
| APA0 | | | | Lg | Lg | 11 57 52.0 | |
| | baz=100,slow=28 | | | | | | |
| APA0 | | | | Rg | Rg | 11 57 53.7 | |
| | baz=83,slow=56 | | | | | | |
| **APA0** | **Apatity Array** | **0.40** | **274** | Pg | **Pg** | **11 57 44.8** | **-1.3** |
| APA0 | | | | Pg | **Pb** | **11 57 47.4** | **-1.1** |
| | baz=102,slow=16 | | | | | | |
| APA0 | | | | Lg | Lg | 11 57 47.5 | |
| APA0 | | | | Lg | Lg | 11 57 52.0 | |
| | baz=100,slow=28 | | | | | | |
| APA0 | | | | Rg | Rg | 11 57 53.7 | |
| | baz=83,slow=56 | | | | | | |
| **APA0** | **Apatity Array** | **0.40** | **274** | Pg | **Pg** | **11 57 44.8** | **-1.3** |
| | SNR=90 | | | | | | |
| APA0 | | | | Lg | Lg | 11 57 47.5 | |
| **VRF** | **Varrio** | **1.70** | **278** | PG | **Pb** | **11 58 10.2** | **-0.4** |
| | baz=89 | | | | | | |
| VRF | | | | MSG | | 11 58 30.2 | |
| | comp=Z,19nm,0.2s | | | | | | |
| VRF | | | | SN | **Sn** | **11 58 31.4** | **-0.4** |
| **VRF** | **Varrio** | **1.70** | **278** | Pg | **Pb** | **11 58 10.2** | **-0.4** |
| VRF | | | | Sn | **Sn** | **11 58 31.4** | **-0.4** |
| **KU6** | **Riekki** | **2.27** | **228** | PG | **Pb** | **11 58 20.2** | **-0.1** |
| | baz=48 | | | | | | |
| KU6 | | | | MSG | | 11 58 46.8 | |
| | comp=Z,9.9nm,0.2s | | | | | | |
| KU6 | | | | SG | **Sg** | **11 58 50.3** | **-0.9** |
| **KU6** | **Riekki** | **2.27** | **228** | Pg | **Pb** | **11 58 20.1** | **-0.1** |
| KU6 | | | | Sg | **Sg** | **11 58 50.3** | **-0.9** |
| **MSF** | **Maaselka** | **2.60** | **232** | PG | **Pb** | **11 58 26.7** | **+0.9** |
| MSF | | | | SG | **Sb** | **11 58 59.6** | **+1.4** |
| **MSF** | **Maaselka** | **2.60** | **232** | Pg | **Pb** | **11 58 26.7** | **+0.9** |
| MSF | | | | Sg | **Sb** | **11 58 59.6** | **+1.4** |
| **SGF** | **Sodankyl** | **2.89** | **271** | PN | **Pn** | **11 58 27.6** | **+1.9** |
| SGF | | | | SG | **Sb** | **11 59 07.1** | **+0.4** |
| **SGF** | **Sodankyl** | **2.89** | **271** | Pn | **Pn** | **11 58 27.6** | **+1.9** |
| SGF | | | | Sg | **Sb** | **11 59 07.1** | **+0.4** |
| **RNF** | **Rovaniemi** | **3.29** | **256** | PN | **Pn** | **11 58 32.9** | **+1.7** |
| RNF | | | | SN | **Sn** | **11 59 12.6** | **+1.7** |
| **RNF** | **Rovaniemi** | **3.29** | **256** | Pn | **Pn** | **11 58 32.8** | **+1.7** |
| RNF | | | | Sn | **Sn** | **11 59 12.6** | **+1.7** |
| **KEV** | **Kevo** | **3.37** | **314** | PN | **Pn** | **11 58 33.8** | **+1.5** |
| KEV | | | | SN | **Sn** | **11 59 12.6** | **-0.3** |
| **KEV** | **Kevo** | **3.37** | **314** | Pn | **Pn** | **11 58 33.8** | **+1.5** |
| KEV | | | | Sn | **Sn** | **11 59 12.6** | **-0.3** |
| **ARA0** | **ARCESS Array S** | **3.70** | **306** | Pn | **Pn** | **11 58 38.1** | **+1.3** |
| | baz=123,slow=16 | | | | | | |
| ARA0 | | | | Pg | **Pb** | **11 58 46.0** | **+1.5** |
| | baz=117,slow=18 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **11 59 19.1** | **-1.9** |
| | baz=123,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 11 59 31.0 | |
| | baz=114,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.70** | **306** | Pn | **Pn** | **11 58 38.1** | **+1.3** |
| | baz=123,slow=16 | | | | | | |
| ARA0 | | | | Pg | **Pb** | **11 58 46.0** | **+1.5** |
| | baz=117,slow=18 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **11 59 19.1** | **-1.9** |
| | baz=123,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 11 59 31.0 | |
| | baz=114,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.70** | **306** | Pn | **Pn** | **11 58 38.1** | **+1.3** |
| | SNR=50 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.70** | **306** | Pg | **Pb** | **11 58 46.0** | **+1.5** |
| | SNR=5.4 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **11 59 19.1** | **-1.9** |
| | SNR=50 | | | | | | |
| ARA0 | | | | Lg | Lg | 11 59 31.0 | |
| | SNR=5.1 | | | | | | |
| **ARE0** | **ARCESS Array S** | **3.70** | **306** | PN | **Pn** | **11 58 37.5** | **+0.7** |
| | baz=122 | | | | | | |
| ARE0 | | | | SN | **Sn** | **11 59 19.4** | **-1.6** |
| **ARE0** | **ARCESS Array S** | **3.70** | **306** | Pn | **Pn** | **11 58 37.5** | **+0.7** |
| ARE0 | | | | Sn | **Sn** | **11 59 19.4** | **-1.6** |
| **HEF** | **Hetta** | **3.99** | **287** | PN | **Pn** | **11 58 42.1** | **+1.3** |
| HEF | | | | SN | **Sn** | **11 59 28.4** | **+0.1** |
| **HEF** | **Hetta** | **3.99** | **287** | Pn | **Pn** | **11 58 42.1** | **+1.3** |
| HEF | | | | Sn | **Sn** | **11 59 28.4** | **+0.1** |
| **OUL** | **Oulu** | **4.13** | **236** | PB | **Pb** | **11 58 51.2** | **-0.7** |
| OUL | | | | SG | **Sg** | **11 59 49.4** | **-1.5** |
| **OUL** | **Oulu** | **4.13** | **236** | Pb | **Pb** | **11 58 51.2** | **-0.7** |
| OUL | | | | Sg | **Sg** | **11 59 49.4** | **-1.5** |
| **LANU** | **Lannavaara** | **4.59** | **281** | PN | **Pn** | **11 58 49.2** | **+0.1** |
| LANU | | | | SG | **Sb** | **11 59 59.2** | **+3.5** |
| **LANU** | **Lannavaara** | **4.59** | **281** | Pn | **Pn** | **11 58 49.2** | **+0.1** |
| LANU | | | | Sg | **Sb** | **11 59 59.2** | **+3.5** |
| **ERTU** | **Ertsjaerv** | **4.75** | **263** | PN | **Pn** | **11 58 52.1** | **+0.9** |
| ERTU | | | | SN | **Sn** | **11 59 46.2** | **-0.8** |
| **ERTU** | **Ertsjaerv** | **4.75** | **263** | Pn | **Pn** | **11 58 52.1** | **+0.9** |
| ERTU | | | | Sn | **Sn** | **11 59 46.1** | **-0.8** |
| **SPA0** | **Spitsbergen Ar** | **11.76** | **342** | Pn | **Pn** | **12 00 25.8** | **-1.3** |
| | baz=147,slow=14 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **11.76** | **342** | Pn | **Pn** | **12 00 25.8** | **-1.3** |
| | baz=147,slow=14 | | | | | | |

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*CSEM **08** 11:58:41.8, 45.92N×14.29E, h0km, ML0.6, Mining explosion. After LJU*
**LJU 08 11:58:41.8, 45.92N×14.29E, h0km, ML0.6 Artificial, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRNS** | **Crni Vrh** | **0.16** | **353** | i Pg | Pg | 11 58 44.7 | -0.3 |
| **JAVS** | **Javornik** | **0.16** | **259** | i Pg | Pg | 11 58 45.5 | +0.4 |
| | comp=Z,11nm,0.2s | | | | | | |
| **JAVS** | **Javornik** | **0.16** | **259** | i Pg | Pg | 11 58 45.5 | +0.5 |
| | comp=Z,11nm,0.2s | | | | | | |
| **CEY** | **Cerknica** | **0.21** | **152** | i Pg | Pg | 11 58 45.6 | -0.3 |
| **CEY** | **Cerknica** | **0.21** | **152** | i Pg | Pg | 11 58 45.6 | -0.3 |
| **VOJS** | **Vojsko** | **0.30** | **291** | i Pg | Pg | 11 58 47.8 | 0.0 |
| **VOJS** | **Vojsko** | **0.30** | **291** | i Pg | Pg | 11 58 47.8 | 0.0 |
| **VNDS** | **Vrh nad Dolski** | **0.34** | **58** | i Pg | Pg | 11 58 48.7 | +0.3 |
| **VISS** | **Visnje** | **0.40** | **107** | i Pg | Pg | 11 58 49.9 | +0.3 |
| | comp=Z,3.0nm,0.1s | | | | | | |
| **VISS** | **Visnje** | **0.40** | **107** | i Pg | Pg | 11 58 49.9 | +0.3 |
| | comp=Z,3.0nm,0.1s | | | | | | |

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*UPP **08** 11:58:45.8, 59.00N×11.49E, h0km, ML1.0, Mining explosion.*
*CSEM **08** 11:58:45.6±0.1, 58.99N×11.50E, h1km, ML1.0, Error ellipse: s-maj=2.1km s-min=1.7km az=81.0, Mining explosion.*
**HEL 08 11:58:46.4**±0.0**, 59.00N×11.48E, h0km, ML1.0**(UPP)**, Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STRU** | **Stroemstad** | **0.16** | **284** | i P | Pg | 11 58 49.1 | -0.3 |
| STRU | | | | i S | Sg | 11 58 51.3 | -0.1 |
| **STRU** | **Stroemstad** | **0.16** | **284** | P | Pg | 11 58 49.1 | -0.3 |
| STRU | | | | S | Sg | 11 58 51.2 | -0.2 |
| **VANU** | **Vaenersborg** | **0.60** | **148** | i P | Pg | 11 58 57.0 | -0.8 |
| **VANU** | **Vaenersborg** | **0.60** | **148** | P | Pg | 11 58 57.0 | -0.8 |
| **FINU** | **Finntorp** | **0.66** | **51** | i P | Pg | 11 58 58.1 | -0.9 |
| **FINU** | **Finntorp** | **0.66** | **51** | P | Pg | 11 58 58.1 | -0.9 |
| **TJOU** | **Tjoern** | **0.97** | **175** | eP | Pg | 11 59 04.0 | -1.0 |
| **TJOU** | **Tjoern** | **0.97** | **175** | P | Pg | 11 59 04.0 | -1.0 |
| **FKPU** | **Falk** | **1.45** | **125** | eP | Pn | 11 59 12.3 | -1.6 |
| **FKPU** | **Falk** | **1.45** | **125** | P | Pn | 11 59 12.2 | -1.6 |
| **BORU** | **Boraas** | **1.53** | **153** | eP | Pn | 11 59 13.7 | -1.3 |
| **BORU** | **Boraas** | **1.53** | **153** | P | Pn | 11 59 13.6 | -1.3 |
| **UDD** | **Uddeholm** | **1.54** | **44** | eP | Pn | 11 59 14.3 | -0.9 |
| **UDD** | **Uddeholm** | **1.54** | **44** | P | Pn | 11 59 14.3 | -0.8 |

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**IDC 08 12:05:22.4**±1.5**, 0.39N×125.28E, h0km, mb3.8**/4**, mb1 3.9**/4**, mb1mx3.6**/31**, mbtmp3.8**/4**, Error ellipse: s-maj=177.3km s-min=21.0km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.07** | **157** | P | P | 12 10 18.1 | -1.0 |
| | 1.1nm,0.5s,baz=335,slow=11,SNR=19 | | | | | | |
| **ASAR** | **Alice Springs** | **25.34** | **161** | P | P | 12 10 51.9 | +0.7 |
| | 0.7nm,0.6s,baz=343,slow=10,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.50** | **327** | P | P | 12 15 27.5 | 0.0 |
| | 0.8nm,0.7s,baz=119,slow=8.6,SNR=5.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **63.79** | **329** | P | P | 12 15 56.1 | -0.1 |
| | 0.9nm,0.2s,baz=127,slow=6.0,SNR=7.1 | | | | | | |

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*ISCJB **08** 12:10:28.4±1.6, 34.04S±0.05×72.46W±0.07, h16km±12km, mb4.1/6, MS3.5/5, Error ellipse: s-maj=10.4km s-min=7.2km az=32.9*
*IDC **08** 12:10:28.0±0.8, 34.05S×72.15W, h0km, mb4.1/7, mb1 4.3/8, mb1mx4.1/24, mbtmp4.1/8, ML3.4/2, MS3.7/7, Ms1 3.7/7, ms1mx3.3/27, Error ellipse: s-maj=28.8km s-min=15.8km az=114.0*
*NEIC **08** 12:10:30.0, 34.09S×72.25W, h27km, mb4.2/1, ML4.1(GUC), After GUC.*
*GUC **08** 12:10:30.5±0.7, 34.09S×72.25W, h27km±4km, ML4.1*
**ISC 08 12:10:30.2**±1.6**, 34.03S**±0.04×**72.29W**±0.07**, h17km**±9km**, n29, σ0.79**/34**, mb4.3**/6**, MS3.5**/5**, 2C-5D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.43** | **147** | ⇓iP | **Pg** | **12 10 39.1** | **0.0** |
| CHPI | | | | i S | **Sg** | **12 10 44.9** | **-0.1** |
| **NICH** | **Los Niches** | **1.31** | **138** | ⇓iP | **Pn** | **12 10 53.7** | **-0.1** |
| NICH | | | | i S | **Sb** | **12 11 10.9** | **-0.1** |
| **ANTU** | **Antumapu** | **1.45** | **72** | ⇓iP | **Pb** | **12 10 56.7** | **-0.1** |
| ANTU | | | | i S | **Sb** | **12 11 16.3** | **+1.3** |
| ANTU | | | | AML | AML | 12 11 22.3 | |
| | comp=E,4μm,0.4s | | | | | | |
| **SAN** | **Santiago** | **1.47** | **68** | ⇑iP | **Pb** | **12 10 57.0** | **-0.2** |
| SAN | | | | i S | **Sb** | **12 11 16.6** | **+1.0** |
| **TALC** | **Talca** | **1.47** | **159** | ⇓iP | **Pn** | **12 10 55.7** | **-0.3** |
| TALC | | | | i S | **Sn** | **12 11 14.8** | **-0.1** |
| **CLCH** | **Cerro Calan** | **1.59** | **67** | ⇑iP | **Pb** | **12 10 58.7** | **-0.5** |
| CLCH | | | | i S | **Sb** | **12 11 20.6** | **+1.6** |
| CLCH | | | | AML | AML | 12 11 29.2 | |
| | comp=E,4μm,0.7s | | | | | | |
| **PEL** | **Peldehue** | **1.60** | **57** | ⇓iP | **Pb** | **12 10 59.1** | **-0.3** |
| PEL | | | | i S | **Sb** | **12 11 20.8** | **+1.5** |
| PEL | | | | AML | AML | 12 11 26.5 | |
| | comp=N,4μm,0.3s | | | | | | |
| **CFAA** | **Coronel Fontan** | **4.18** | **56** | Pn | **Pn** | **12 11 33.6** | **+0.3** |
| | comp=N,0.6nm,0.3s,baz=240,slow=6.1,SNR=17 | | | | | | |
| CFAA | | | | Lg | Lg | 12 12 37.4 | |
| | comp=N,2.0nm,0.3s,baz=91,slow=17,SNR=5.2 | | | | | | |
| CFAA | | | | LR | LR | 12 12 43.5 | |
| | comp=N,28nm,19.2s,baz=251,slow=33 | | | | | | |
| **LCO** | **Las Campanas** | **5.18** | **16** | ePn | **Pn** | **12 11 46.9** | **-0.3** |
| | comp=N,40nm,0.6s | | | | | | |
| LCO | | | | eSn | **Sn** | **12 12 45.0** | **-1.8** |
| **TRQA** | **Tornquist** | **9.27** | **119** | ePn | **Pn** | **12 12 42.6** | **-0.5** |
| | comp=N,21nm,1.3s | | | | | | |
| TRQA | | | | eSn | **Sn** | **12 14 26.1** | **-0.9** |
| **LVC** | **Limon Verde** | **11.75** | **16** | LR | LR | 12 18 11.4 | |
| | comp=N,1μm,19.2s,baz=212,slow=40 | | | | | | |
| **CPUP** | **Villa Florida** | **15.03** | **63** | LR | LR | 12 20 37.3 | |
| | comp=N,277nm,18.2s,baz=238,slow=41 | | | | | | |
| **LPAZ** | **La Paz** | **18.05** | **13** | P | **P** | **12 14 42.5** | **+1.1** |
| | comp=N,0.1nm,0.3s,baz=182,slow=8.6,SNR=15 | | | | | | |
| **SIV** | **San Ignacio** | **20.60** | **32** | P | **P** | **12 15 08.2** | **-0.5** |
| | comp=N,2.7nm,0.6s,baz=226,slow=14,SNR=11 | | | | | | |
| SIV | | | | LR | LR | 12 24 39.8 | |
| | comp=N,291nm,18.3s,baz=195,slow=41 | | | | | | |
| **USHA** | **Ushuaia** | **20.98** | **174** | LR | LR | 12 23 50.4 | |
| | comp=N,225nm,20.8s,baz=324,slow=38 | | | | | | |
| **ATAH** | **Atahualpa** | **27.35** | **347** | LR | LR | 12 24 38.7 | |
| | comp=N,55nm,21.2s,baz=204,slow=31 | | | | | | |
| **BDFB** | **Brasilia** | **28.52** | **56** | P | **P** | **12 16 23.9** | **-1.2** |
| | comp=N,1.7nm,0.4s,baz=180,slow=6.7,SNR=4.0 | | | | | | |
| **ROSC** | **El Rosal** | **38.72** | **357** | LR | LR | 12 34 15.5 | |
| | comp=N,44nm,18.3s,baz=8.0,slow=37 | | | | | | |
| **SNAA** | **Sanae** | **51.64** | **158** | P | **P** | **12 19 35.8** | **+0.2** |
| | comp=N,1.3nm,0.8s,baz=286,slow=6.1,SNR=14 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SNAA | Sanae | 51.64 | 158 | eP | P | 12 19 35.8 | +0.2 |
| | comp=N,3.4nm,1.1s | | | | | | |
| SNAA | | | | P | P | 12 19 35.8 | +0.2 |
| QSPA | South Pole Qui | 56.21 | 180 | P | P | 12 20 09.9 | +0.7 |
| | comp=N,3.9nm,0.9s,baz=151,slow=3.5,SNR=11 | | | | | | |
| TXAR | Lajitas Array | 69.66 | 331 | P | P | 12 21 39.9 | +1.0 |
| | comp=N,0.4nm,0.6s,baz=148,slow=7.6,SNR=5.8 | | | | | | |
| MAW | Mawson | 73.22 | 164 | P | P | 12 22 00.1 | +0.3 |
| | comp=N,2.7nm,0.7s,baz=214,slow=7.7,SNR=12 | | | | | | |
| DBIC | Dimbokro | 75.38 | 71 | LR | LR | 12 54 00.3 | |
| | comp=N,30nm,19.5s,baz=211,slow=35 | | | | | | |
| TORD | Torodi Ar. Bea | 84.41 | 70 | P | P | 12 23 01.7 | -0.5 |
| | comp=N,2.8nm,0.8s,baz=260,slow=4.6,SNR=13 | | | | | | |
| WRA | Warramunga Arr | 120.64 | 209 | PKP | PKPdf | 12 29 20.9 | -0.8 |
| | comp=N,0.2nm,0.4s,baz=153,slow=1.9,SNR=8.2 | | | | | | |
| BVAR | Borovoye Array | 147.44 | 43 | PKPbc | PKPbc | 12 30 13.5 | +0.8 |
| | comp=N,2.9nm,0.7s,baz=305,slow=5.2,SNR=11 | | | | | | |
| ZALV | Zalesovo Beam | 154.36 | 32 | PKPbc | PKPbc | 12 30 29.4 | +0.3 |
| | comp=N,3.4nm,0.7s,baz=299,slow=3.4,SNR=14 | | | | | | |
| ZALV | | | | PKPab | PKPab | 12 30 43.7 | +0.5 |
| | comp=N,2.6nm,0.8s,baz=290,slow=6.3,SNR=5.8 | | | | | | |
| MKAR | Makanchi Array | 156.94 | 49 | PKPab | PKPab | 12 30 54.7 | 0.0 |
| | comp=N,0.8nm,0.6s,baz=343,slow=3.8,SNR=4.9 | | | | | | |

**JMA 08 12:15:18.0±0.1, 24°.07N×123°.54E, h45km±1km, M1.6, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HATJ | Hateruma jima | 0.24 | 93 | P | Pn | 12 15 26.0 | -0.1 |
| HATJ | | | | S | Sn | 12 15 32.0 | +0.1 |
| IRIF | Iriomote-Funau | 0.32 | 33 | P | Pn | 12 15 26.7 | -0.1 |
| IRIF | | | | eS | Sn | 12 15 33.1 | 0.0 |
| JKRS | Kuro-shima | 0.46 | 69 | P | Pn | 12 15 28.7 | +0.2 |
| JKRS | | | | eS | Sn | 12 15 35.9 | 0.0 |
| YOJ | Yonaguni jima | 0.62 | 309 | P | Pn | 12 15 30.7 | +0.2 |
| YOJ | | | | eS | Sn | 12 15 39.9 | +0.4 |
| JIJ | Ishigaki jima | 0.62 | 62 | P | Pn | 12 15 30.4 | -0.2 |
| JIJ | | | | eS | Sn | 12 15 39.9 | +0.3 |
| JYNG | Yonagunijimaku | 0.66 | 305 | P | Pn | 12 15 31.2 | +0.1 |
| JYNG | | | | eS | Sn | 12 15 40.7 | +0.2 |
| JISG | Ishigakijimahi | 0.87 | 54 | P | Pn | 12 15 33.9 | 0.0 |
| JISG | | | | eS | Sn | 12 15 45.9 | +0.4 |

*ISCJB 08 12:15:26.3±1.3, 5°.03S±0°.08×133°.6E±0°.1, h25km, Error ellipse: s-maj=17.8km s-min=9.3km az=155.0*
*DJA 08 12:15:36.8±1.2, 5°S±8°×13°3E±°, h66km±27km, M3.6/5, mb3.8/1, MLv3.6/5*
*AUST 08 12:16:34.4±2.6, 9°.96S×132°.66E, h179km, Error ellipse: s-maj=3.5km s-min=1.2km az=238.0*
**ISC 08 12:15:27.3±1.9, 4°.87S±0°.09×133°.7E±0°.2, h25km, n7, σ1s.85/9, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.42 | 323 | P | Pn | 12 16 06.9 | +1.6 |
| FAKI | | | | S | Sn | 12 16 31.2 | -2.9 |
| BNDI | Bandanaira | 3.79 | 275 | P | Pn | 12 16 26.5 | +2.3 |
| BNDI | | | | S | Sn | 12 17 07.5 | -0.6 |
| SWI | Sorong | 4.67 | 328 | P | Pn | 12 16 37.6 | +1.4 |
| KDU | Kakadu | 7.86 | 189 | P | Pn | 12 17 20.1 | 0.0 |
| | baz=2.7,SNR=19 | | | | | | |
| MTN | Manton Dam | 8.32 | 198 | P | Pn | 12 17 25.9 | -0.4 |
| | baz=3.2,SNR=8.5 | | | | | | |
| KNRA | Kununurra | 11.78 | 204 | P | Pn | 12 18 12.6 | -1.3 |
| | baz=6.9,SNR=17 | | | | | | |
| WRKA | Warakurna | 20.71 | 194 | P | P | 12 20 06.4 | +0.4 |
| | baz=16,SNR=6.5 | | | | | | |

**JMA 08 12:15:35.9±0.1, 27°.26N×142°.51E, h48km, M3.8, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CBIJ | Chichi jima | 0.33 | 241 | P | Pn | 12 15 45.1 | -0.1 |
| CBIJ | | | | eS | Sn | 12 15 52.0 | +0.2 |
| JHHJ | Haha-jima-NKT | 0.69 | 205 | P | Pn | 12 15 49.5 | 0.0 |
| JHHJ | | | | eS | Sn | 12 15 59.7 | +0.4 |

**TAP 08 12:15:53.4, 23°.51N×121°.51E, h33km, ML2.7, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EHY | Hungye | 0.17 | 268 | eP | Pb | 12 16 00.3 | +0.5 |
| | baz=266 | | | | | | |
| EHY | | | | eS | Sb | 12 16 04.7 | +0.5 |
| | baz=266 | | | | | | |
| TWF1 | Yuli | 0.25 | 231 | eP | Pb | 12 16 00.6 | 0.0 |
| | baz=229 | | | | | | |
| TWF1 | | | | eS | Sb | 12 16 05.9 | +0.4 |
| | baz=229 | | | | | | |
| ESL | Shilin | 0.31 | 346 | eP | Pn | 12 16 01.8 | +0.2 |
| | baz=347 | | | | | | |
| ESL | | | | eS | Sb | 12 16 07.7 | +1.0 |
| | baz=347 | | | | | | |
| WDT | Danda | 0.42 | 305 | eP | Pn | 12 16 03.7 | +0.1 |
| | baz=305 | | | | | | |
| WDT | | | | eS | Sn | 12 16 10.3 | -0.2 |
| | baz=305 | | | | | | |
| CHKT | Chengkung | 0.43 | 198 | eP | Pb | 12 16 02.9 | -0.1 |
| | baz=197 | | | | | | |
| CHKT | | | | eS | Sn | 12 16 10.1 | +0.1 |
| | baz=197 | | | | | | |
| YUS | Yu-Shan | 0.52 | 267 | eP | Pb | 12 16 05.0 | +0.1 |
| | baz=267 | | | | | | |
| YUS | | | | eS | Sb | 12 16 12.8 | 0.0 |
| | baz=267 | | | | | | |
| ELDTW | Lidau | 0.56 | 235 | eP | Pb | 12 16 04.0 | -1.2 |
| | baz=234 | | | | | | |
| ELDTW | | | | eS | Sb | 12 16 11.1 | -2.0 |
| | baz=234 | | | | | | |
| TWD | Chiawan | 0.57 | 8 | eP | Pb | 12 16 05.2 | 0.0 |
| | baz=8.0 | | | | | | |
| TWD | | | | eS | Sn | 12 16 13.4 | 0.0 |
| | baz=8.0 | | | | | | |
| ALS | Alishan | 0.65 | 270 | eP | Pn | 12 16 06.6 | -0.1 |
| | baz=269 | | | | | | |
| ALS | | | | eS | Sb | 12 16 15.9 | -0.1 |
| | baz=269 | | | | | | |
| WHF | Hehuan Shan | 0.67 | 340 | eP | Pn | 12 16 07.0 | -0.1 |
| | baz=340 | | | | | | |
| WHF | | | | eS | Sb | 12 16 16.4 | -0.5 |
| | baz=340 | | | | | | |
| SMLT | Sun Moon Lake | 0.67 | 303 | eP | Pb | 12 16 07.2 | +0.2 |
| | baz=303 | | | | | | |
| SMLT | | | | eS | Sn | 12 16 16.2 | 0.0 |
| | baz=303 | | | | | | |
| TYC | Yuchr | 0.71 | 303 | eP | Pb | 12 16 07.8 | +0.3 |
| | baz=303 | | | | | | |
| TYC | | | | eS | Sb | 12 16 17.3 | +0.2 |
| | baz=303 | | | | | | |
| CHN5 | Tsauling | 0.77 | 276 | eP | Pb | 12 16 08.4 | -0.2 |
| | baz=276 | | | | | | |
| CHN5 | | | | eS | Sb | 12 16 18.9 | 0.0 |
| | baz=276 | | | | | | |
| STYT | Tauyuan | 0.78 | 243 | eP | Pn | 12 16 07.8 | -0.3 |
| | baz=242 | | | | | | |
| STYT | | | | eS | Sn | 12 16 18.2 | -0.5 |
| | baz=242 | | | | | | |
| TWG | Pinlang | 0.80 | 211 | eP | Pn | 12 16 06.3 | -2.1 |
| | baz=209 | | | | | | |
| TWG | | | | eS | Sn | 12 16 15.9 | -3.3 |
| | baz=209 | | | | | | |
| TWT | Tachien | 0.80 | 337 | eP | Pn | 12 16 08.9 | +0.3 |
| | baz=336 | | | | | | |
| TWT | | | | eS | Sn | 12 16 19.4 | -0.2 |
| | baz=336 | | | | | | |
| CHN4 | Tsaushan | 0.86 | 259 | eP | Pn | 12 16 09.0 | -0.2 |
| | baz=259 | | | | | | |
| CHN4 | | | | eS | Sb | 12 16 21.4 | +0.2 |
| | baz=259 | | | | | | |
| WTP | Ta-pu | 0.87 | 252 | eP | Pn | 12 16 09.7 | +0.3 |
| | baz=251 | | | | | | |
| WTP | | | | eS | Sb | 12 16 21.4 | -0.1 |
| | baz=251 | | | | | | |
| NNS | Nan Shan | 0.93 | 352 | eP | Pn | 12 16 10.7 | +0.3 |
| | baz=352 | | | | | | |
| NNS | | | | eS | Sn | 12 16 22.3 | -0.4 |
| | baz=352 | | | | | | |
| ENA | Nanau | 0.94 | 13 | eP | Pn | 12 16 10.1 | -0.2 |
| | baz=13 | | | | | | |
| ENA | | | | eS | Sn | 12 16 22.3 | -0.2 |
| | baz=13 | | | | | | |
| SGST | Jiashian | 0.96 | 244 | eS | Sn | 12 16 23.5 | +0.4 |
| | baz=243 | | | | | | |
| CHN1 | Nanshi | 0.96 | 250 | eP | Pn | 12 16 11.0 | +0.3 |
| | baz=250 | | | | | | |
| CHN1 | | | | eS | Sn | 12 16 23.6 | +0.4 |
| | baz=250 | | | | | | |
| TWK | Hsinying | 0.97 | 256 | eS | Sn | 12 16 23.7 | +0.1 |
| | baz=255 | | | | | | |
| ECL | Taimali | 1.05 | 210 | eP | Pb | 12 16 13.0 | -0.1 |
| | baz=209 | | | | | | |
| TWQ1 | Liyutan | 1.07 | 321 | eP | Pn | 12 16 12.8 | +0.7 |
| | baz=321 | | | | | | |
| TWQ1 | | | | eS | Sb | 12 16 27.9 | +0.6 |
| | baz=321 | | | | | | |
| SSD | Sandimen | 1.11 | 227 | eP | Pn | 12 16 13.0 | +0.3 |
| | baz=226 | | | | | | |
| SSD | | | | eS | Sn | 12 16 27.0 | +0.1 |
| | baz=226 | | | | | | |
| ENTT | Nioudou | 1.12 | 3 | eP | Pn | 12 16 13.1 | +0.2 |
| | baz=2.0 | | | | | | |
| ENTT | | | | eS | Sn | 12 16 27.4 | +0.2 |
| | baz=2.0 | | | | | | |
| NSY | Sanyi | 1.13 | 323 | eP | Pn | 12 16 13.5 | +0.5 |
| | baz=322 | | | | | | |
| NSY | | | | eS | Sn | 12 16 27.6 | +0.2 |
| | baz=322 | | | | | | |
| NSK | Sanguang | 1.17 | 353 | eP | Pn | 12 16 14.3 | +0.8 |
| | baz=353 | | | | | | |
| NSK | | | | eS | Sn | 12 16 28.6 | +0.2 |
| | baz=353 | | | | | | |
| NSTT | Nanjuang | 1.21 | 337 | eS | Sn | 12 16 29.8 | +0.5 |
| | baz=337 | | | | | | |
| TWE | Neicheng | 1.21 | 7 | eP | Pn | 12 16 14.4 | +0.4 |
| | baz=7.0 | | | | | | |
| TWE | | | | eS | Sn | 12 16 28.6 | -0.7 |
| | baz=7.0 | | | | | | |
| EAST | Anshuo | 1.28 | 209 | eP | Pn | 12 16 15.3 | +0.2 |
| | baz=208 | | | | | | |
| EAST | | | | eS | Sb | 12 16 32.3 | -0.9 |
| | baz=208 | | | | | | |
| SCZT | Fangliau | 1.40 | 216 | eP | Pn | 12 16 17.2 | +0.5 |
| | baz=215 | | | | | | |
| SCZT | | | | eS | Sn | 12 16 34.1 | 0.0 |
| | baz=215 | | | | | | |

*NIED 08 12:16:00, 39°.00N×140°.90E, h5km, Mw4.3 Best double couple: M0 3.70000×10^15 NP1: φs143.00000°, δ30.00000°, λ87.00000°. NP2: φs326.00000°, δ60.00000°, λ92.00000°.*
*JMA 08 12:16:29.6, 39°.05N×140°.84E, h6km±1km, M4.4 Broadband fault plane solution: P waves. NP1: φs324.00000°, δ67.00000°, λ87.00000°. NP2: φs151.00000°, δ23.00000°, λ97.00000°. Principal axes: T Plg68.0000°, Azm228.0000°; N Plg3.0000°, Azm325.0000°; P Plg22.0000°, Azm56.0000°;*
*JMA Felt II J1.*
*ISCJB 08 12:16:29.6±0.2, 39°.07N±0°.02×140°.90E±0°.03, h16km, mb4.4/39, MS3.3/7 Error ellipse: s-maj=3.3km s-min=2.9km az=29.1*
*MOS 08 12:16:32.5±1.1, 39°.08N×140°.78E, h37km, mb4.5/20, Error ellipse: s-maj=9.1km s-min=6.0km az=85.3*
*NEIC 08 12:16:35.3±0.7, 39°.01N×140°.75E, h47km±6km, mb4.8/12, MW4.3(NIED), Error ellipse: s-maj=9.2km s-min=5.9km az=133.0*
*NEIC Recorded [2 JMA] in Akita, Iwate and Miyagi; [1 JMA] in Fukushima and Yamagata.*
*IDC 08 12:16:35.7±1.3, 39°.03N×140°.68E, h50km±12km, mb4.0/23, mb1 4.1/30, mb1mx4.0/60, mbtmp4.2/30, ML3.5/6, MS3.3/11, Ms1 3.3/11, ms1mx3.0/54, Error ellipse: s-maj=13.3km s-min=9.0km az=101.0*
*BJI 08 12:16:37.6, 38°.45N×139°.95E, h31km, mb4.4/9, mB4.6/5, Ms3.9/2, Ms7 3.6/2*
**ISC 08 12:16:31.0±0.3, 39°.03N±0°.03×140°.91E±0°.03, h16km, n160, σ1s.63/157, mb4.4/39, MS3.5/7, 5C-8D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JMK | Ichinoseki | 0.26 | 109 | ⇓P | Pg | 12 16 35.4 | -1.3 |
| JMK | | | | S | Sg | 12 16 39.9 | -0.6 |
| JRG | Rokugo | 0.42 | 330 | P | Pg | 12 16 37.2 | -2.3 |
| JRG | | | | eS | Sg | 12 16 43.3 | -2.0 |
| JYK | Kaneyama | 0.44 | 255 | ⇓P | Pg | 12 16 37.5 | -2.4 |
| JOM | Ohasama | 0.53 | 34 | ⇓P | Pg | 12 16 40.0 | -1.6 |
| JIO | Ouri | 0.67 | 149 | ⇑P | Pg | 12 16 43.0 | -1.2 |
| JIO | | | | S | Sg | 12 16 52.7 | -0.5 |
| JOU | Okura | 0.69 | 196 | ⇓P | Pg | 12 16 42.9 | -1.7 |
| JOU | | | | S | Sg | 12 16 52.2 | -1.6 |
| JYA | Atsumi | 1.03 | 245 | ⇓P | Pb | 12 16 48.3 | -2.2 |
| MAJO | Matsushiro | 3.28 | 222 | c iP | Pn | 12 17 22.7 | +0.9 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,425nm,0.7s | | | | | | |
| MAJO | Matsushiro | 3.28 | 222 | ePn | Pn | 12 17 22.7 | +0.9 |
| MAJO | | | | eSn | Sn | 12 17 59.2 | -1.3 |
| MAT | Matsushiro | 3.28 | 222 | P | Pn | 12 17 22.6 | +0.8 |
| MAT | | | | eS | Sn | 12 18 03.8 | +3.3 |
| MJAR | Matsushiro Arr | 3.28 | 221 | P | Pn | 12 17 22.8 | +1.0 |
| | comp=Z,4.8nm,0.3s,baz=28,slow=14,SNR=70 | | | | | | |
| MJAR | | | | S | Sb | 12 18 06.5 | -2.0 |
| | comp=Z,3.5nm,0.3s,baz=118,slow=13,SNR=4.5 | | | | | | |
| MJAR | Matsushiro Arr | 3.28 | 221 | P | Pn | 12 17 22.8 | +1.0 |
| MJAR | | | | S | Sb | 12 18 06.6 | -2.0 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| MJAR | | | | smax | smax | | |
| | comp=N,4.0nm,0.3s | | | | | | |
| ERM | Erimo | 3.44 | 29 | i P | Pn | 12 17 26.8 | +3.0 |
| ERM | Erimo | 3.44 | 29 | ePn | Pn | 12 17 26.9 | +3.0 |
| ERM | | | | eSn | Sn | 12 18 06.8 | +2.5 |
| ASAJ | Asahikawa | 5.23 | 13 | P | Pn | 12 17 50.5 | +2.0 |
| | baz=206,slow=8.5 | | | | | | |
| ASAJ | | | | S | Sn | 12 18 53.4 | +4.8 |
| | comp=N,1.6nm,0.3s,baz=198,slow=19,SNR=3.1 | | | | | | |
| ASAJ | | | | LR | LR | 12 20 55.2 | |
| | comp=N,98nm,19.0s,baz=142,slow=49 | | | | | | |
| ASAJ | Asahikawa | 5.23 | 13 | P | Pn | 12 17 50.6 | +2.0 |
| ASAJ | | | | S | Sn | 12 18 53.4 | +4.8 |
| ASAJ | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,98nm,19.0s | | | | | | |
| ASAJ | Asahikawa | 5.23 | 13 | ePn | Pn | 12 17 50.6 | +2.0 |
| | comp=Z,17nm,1.0s | | | | | | |
| ASAJ | | | | eSn | Sn | 12 18 51.3 | +2.7 |
| ASAJ | | | | S | Sn | 12 18 53.4 | +4.8 |
| JHJ | Hachijo jima 2 | 5.97 | 189 | P | Pn | 12 17 59.4 | +0.6 |
| | comp=Z,10nm,0.3s,baz=78,slow=19,SNR=2.9 | | | | | | |
| JHJ | | | | S | Sn | 12 19 09.1 | +2.2 |
| | comp=Z,9.3nm,0.3s,baz=74,slow=20,SNR=2.6 | | | | | | |
| YUK | Yuzh-Kuril'sk | 6.23 | 35 | ⇑iP | Pn | 12 18 02.1 | -0.1 |
| YUK | | | | i S | Sn | 12 19 10.4 | -2.6 |
| YUK | | | | pmax | pmax | | |
| | comp=N,22nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,29nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,42nm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,42nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,87nm,0.6s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,469nm,14.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 8.03 | 9 | eP | Pn | 12 18 29.9 | +2.9 |
| YSS | | | | MLR | MLR | | |
| | comp=N,300nm,11.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,300nm,11.0s | | | | | | |
| KUR | Kuril'sk | 8.07 | 38 | ⇓iP | Pn | 12 18 28.7 | +1.3 |
| KUR | | | | i S | Sn | 12 19 57.6 | -0.7 |
| KUR | | | | pmax | pmax | | |
| | comp=E,11nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,21nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,12nm,0.1s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,207nm,16.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,200nm,16.0s | | | | | | |
| USRK | Ussuriysk Ar. | 8.44 | 311 | P | Pn | 12 18 31.5 | -1.0 |
| | comp=Z,0.9nm,0.3s,baz=119,slow=14,SNR=16 | | | | | | |
| USRK | | | | S | Sn | 12 20 07.1 | -0.3 |
| | comp=Z,0.3nm,0.3s,baz=120,slow=21,SNR=3.3 | | | | | | |
| USRK | | | | LR | LR | 12 21 24.1 | |
| | comp=Z,121nm,21.5s,baz=108,slow=35 | | | | | | |
| KSULJ | Uljin | 9.39 | 259 | P | Pn | 12 18 47.9 | +2.4 |
| | SNR=6.0 | | | | | | |
| KSULJ | Uljin | 9.39 | 259 | P | Pn | 12 18 47.9 | +2.4 |
| | SNR=6.0 | | | | | | |
| KSTBA | Taebaek | 9.62 | 262 | P | Pn | 12 18 51.6 | +2.8 |
| | SNR=9.1 | | | | | | |
| KSTBA | Taebaek | 9.62 | 262 | P | Pn | 12 18 51.6 | +2.8 |
| | SNR=9.1 | | | | | | |
| KSSKC | Sokcho | 9.72 | 269 | P | Pn | 12 18 52.9 | +2.8 |
| | SNR=7.9 | | | | | | |
| KSSKC | Sokcho | 9.72 | 269 | P | Pn | 12 18 52.9 | +2.8 |
| | SNR=7.9 | | | | | | |
| SEHB | SEOHWA | 9.93 | 270 | P | Pn | 12 18 56.6 | +3.6 |
| | SNR=20 | | | | | | |
| SEHB | SEOHWA | 9.93 | 270 | P | Pn | 12 18 56.6 | +3.6 |
| | SNR=20 | | | | | | |
| JNU | Nakatsue | 10.03 | 237 | P | Pn | 12 18 56.0 | +1.5 |
| | comp=Z,0.5nm,0.3s,baz=60,slow=5.3,SNR=9.7 | | | | | | |
| JNU | | | | LR | LR | 12 22 46.6 | |
| | comp=Z,330nm,19.9s,baz=110,slow=38 | | | | | | |
| JNU | Nakatsue | 10.03 | 237 | ePn | Pn | 12 18 59.4 | +4.9 |
| KSEUS | ULSEONG | 10.05 | 258 | P | Pn | 12 18 57.7 | +3.0 |
| | SNR=6.4 | | | | | | |
| KSEUS | ULSEONG | 10.05 | 258 | P | Pn | 12 18 57.7 | +3.0 |
| | SNR=6.4 | | | | | | |
| KSIJA | INJE | 10.09 | 268 | P | Pn | 12 18 57.9 | +2.7 |
| | SNR=13 | | | | | | |
| KSIJA | INJE | 10.09 | 268 | P | Pn | 12 18 57.9 | +2.7 |
| | SNR=13 | | | | | | |
| KSWJU | Wonju | 10.25 | 265 | P | Pn | 12 19 00.5 | +3.1 |
| | SNR=9.6 | | | | | | |
| KSWJU | Wonju | 10.25 | 265 | P | Pn | 12 19 00.5 | +3.1 |
| | SNR=9.6 | | | | | | |
| KSRS | Korea Array | 10.34 | 265 | P | Pn | 12 19 00.8 | +2.3 |
| | comp=Z,1.5nm,0.3s,baz=74,slow=14,SNR=29 | | | | | | |
| KSRS | | | | S | Sn | 12 20 57.1 | +3.1 |
| | comp=Z,2.0nm,0.3s,baz=71,slow=24,SNR=15 | | | | | | |
| KSRS | | | | LR | LR | 12 22 32.5 | |
| | comp=Z,152nm,19.0s,baz=73,slow=35 | | | | | | |
| KSRS | Korea Array | 10.34 | 265 | P | Pn | 12 19 00.9 | +2.3 |
| KSRS | | | | S | Sn | 12 20 57.1 | +3.1 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| KSRS | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,152nm,19.0s | | | | | | |
| HABR | Khabarovsk | 10.34 | 338 | eP | Pn | 12 18 58.0 | -0.6 |
| HABR | | | | eS | Sn | 12 20 52.1 | -1.9 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,28nm,2.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,74nm,16.0s | | | | | | |
| KSAR | Wonju Array Be | 10.37 | 265 | P | Pn | 12 19 00.9 | +1.8 |
| KSAR | | | | S | Sn | 12 20 57.1 | +2.2 |
| KSAR | Wonju Array Be | 10.37 | 265 | P | Pn | 12 19 00.8 | +1.8 |
| KSAR | | | | S | Sn | 12 20 57.1 | +2.2 |
| KSCWO | Cheorwon | 10.53 | 269 | P | Pn | 12 19 04.6 | +3.3 |
| | SNR=15 | | | | | | |
| KSCWO | Cheorwon | 10.53 | 269 | P | Pn | 12 19 04.6 | +3.3 |
| | SNR=15 | | | | | | |
| KSCPR | CHUPUNGNYEONG | 10.64 | 259 | P | Pn | 12 19 06.4 | +3.6 |
| | SNR=11 | | | | | | |
| KSCPR | CHUPUNGNYEONG | 10.64 | 259 | P | Pn | 12 19 06.4 | +3.6 |
| | SNR=11 | | | | | | |
| KSBON | Boeun | 10.68 | 260 | P | Pn | 12 19 06.2 | +2.9 |
| | SNR=18 | | | | | | |
| KSBON | Boeun | 10.68 | 260 | P | Pn | 12 19 06.2 | +2.9 |
| | SNR=18 | | | | | | |
| YNCB | YEONCHEON | 11.00 | 269 | P | Pn | 12 19 11.0 | +3.3 |
| | SNR=10 | | | | | | |
| YNCB | YEONCHEON | 11.00 | 269 | P | Pn | 12 19 11.0 | +3.3 |
| | SNR=10 | | | | | | |
| KSCEA | Cheonan | 11.01 | 263 | P | Pn | 12 19 10.8 | +3.1 |
| | SNR=9.7 | | | | | | |
| KSCEA | Cheonan | 11.01 | 263 | P | Pn | 12 19 10.8 | +3.1 |
| | SNR=9.7 | | | | | | |
| TJN | Taejon | 11.05 | 260 | ceP | Pn | 12 19 11.2 | +2.8 |
| KSMUS | Musan | 11.15 | 269 | P | Pn | 12 19 13.9 | +4.1 |
| | SNR=11 | | | | | | |
| KLR | Kul'dur | 12.12 | 330 | eP | Pn | 12 19 22.8 | -0.2 |
| KLR | | | | MLR | MLR | | |
| | comp=Z,700nm,10.0s | | | | | | |
| PETK | Petropavlovsk- | 18.20 | 34 | P | P | 12 20 46.2 | +3.1 |
| | comp=Z,0.1nm,0.3s,baz=268,slow=8.7,SNR=2.6 | | | | | | |
| PETK | | | | LR | LR | 12 27 15.1 | |
| | comp=Z,84nm,20.4s,baz=232,slow=35 | | | | | | |
| YAK | Yakutsk | 24.03 | 347 | eP | P | 12 21 42.8 | -2.2 |
| YAK | | | | e | | 12 21 57.1 | |
| YAK | | | | ePPP | PPP | 12 22 21.4 | |
| YAK | | | | eS | S | 12 25 53.3 | -7.9 |
| YAK | | | | eSSS | SSS | 12 26 49.6 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,17nm,3.6s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,16nm,3.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,5.0nm,2.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,32nm,4.0s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,13nm,2.9s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,14nm,17.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,8.0nm,16.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,10.0nm,17.0s | | | | | | |
| SEY | Seymchan | 24.92 | 12 | P | P | 12 21 54.3 | +1.3 |
| | comp=N,2.3nm,0.4s,baz=191,slow=11,SNR=8.8 | | | | | | |
| SEY | Seymchan | 24.92 | 12 | P | P | 12 21 54.3 | +1.3 |
| SEY | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| GUMO | Guam | 25.59 | 171 | LR | LR | 12 31 48.6 | |
| | comp=Z,32nm,21.1s,baz=98,slow=36 | | | | | | |
| ULN | Ulaanbaatar | 25.94 | 301 | ceP | P | 12 22 03.7 | +1.0 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,2.5s | | | | | | |
| SONM | Songino Array | 26.38 | 301 | P | P | 12 22 06.8 | +0.2 |
| | comp=Z,0.9nm,0.8s,baz=109,slow=8.0,SNR=5.7 | | | | | | |
| SONM | Songino Array | 26.38 | 301 | P | P | 12 22 06.8 | +0.2 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ENH | Enshi | 27.18 | 261 | eP | P | 12 22 12.7 | -1.1 |
| H11N2 | WAKE ISLAND Hy | 29.55 | 123 | T | T | 12 53 13.1 | |
| | baz=318,slow=75,SNR=592 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 29.55 | 123 | T | T | 12 53 09.3 | |
| | baz=318,slow=75,SNR=728 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 29.56 | 123 | T | T | 12 53 09.9 | |
| | baz=318,slow=75,SNR=720 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 30.31 | 125 | T | T | 12 53 53.4 | |
| | baz=318,slow=76,SNR=137 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.31 | 125 | T | T | 12 53 53.5 | |
| | baz=318,slow=76,SNR=169 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.32 | 125 | T | T | 12 53 54.6 | |
| | baz=318,slow=76,SNR=124 | | | | | | |
| KMI | Kunming | 34.92 | 258 | P | P | 12 23 22.2 | -0.2 |
| KMI | | | | PMZ | | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 40.29 | 311 | P | P | 12 24 05.9 | -1.3 |
| | comp=Z,3.3nm,0.7s,baz=89,slow=7.6,SNR=13 | | | | | | |
| ZALV | | | | PcP | PcP | 12 26 10.1 | -0.5 |
| | comp=Z,0.8nm,0.5s,baz=106,slow=3.2,SNR=3.6 | | | | | | |
| ZALV | Zalesovo Beam | 40.29 | 311 | P | P | 12 24 05.9 | -1.3 |
| ZALV | | | | | | 12 26 10.1 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| CMAR | Chiang Mai Arr | 41.66 | 253 | P | P | 12 24 18.8 | -0.1 |
| | comp=Z,0.6nm,0.6s,baz=45,slow=5.8,SNR=4.3 | | | | | | |
| CMAR | | | | PcP | PcP | 12 26 15.9 | +0.3 |
| | comp=Z,0.7nm,0.4s,baz=8.6,slow=0.8,SNR=4.8 | | | | | | |
| CMAR | | | | LR | LR | 12 43 21.8 | |
| | comp=Z,87nm,18.0s,baz=87,slow=39 | | | | | | |
| CMAR | Chiang Mai Arr | 41.66 | 253 | P | P | 12 24 18.8 | -0.1 |
| CMAR | | | | | | 12 26 15.9 | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| CMAR | | | | MLR | MLR | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,87nm,18.0s | | | | | | |
| MKAR | Makanchi Array | 42.74 | 300 | P | P | 12 24 26.6 | -0.8 |
| | comp=Z,4.1nm,0.7s,baz=87,slow=9.7,SNR=23 | | | | | | |
| MKAR | Makanchi Array | 42.74 | 300 | eP | P | 12 24 27.0 | -0.4 |
| MKAR | Makanchi Array | 42.74 | 300 | eP | P | 12 24 27.0 | -0.4 |
| KURK | Kurchatov | 44.40 | 306 | eP | P | 12 24 39.2 | -1.5 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| KURK | Kurchatov | 44.40 | 306 | eP | P | 12 24 39.2 | -1.5 |
| | comp=Z,24nm,0.8s | | | | | | |
| KDAK | Kodiak Island | 45.90 | 43 | iP | P | 12 24 54.4 | +2.0 |
| ODAN | Odare | 45.93 | 271 | eP | P | 12 24 52.9 | -0.5 |
| | comp=Z,14nm,0.8s | | | | | | |
| RAMN | Ramite | 46.50 | 272 | eP | P | 12 24 57.2 | -0.7 |
| | comp=Z,32nm,1.1s | | | | | | |
| GUN | Gumba | 46.60 | 274 | eP | P | 12 24 58.2 | -0.6 |
| | comp=Z,36nm,0.8s | | | | | | |
| KKN | Kakani | 47.12 | 274 | eP | P | 12 25 02.3 | -0.4 |
| | comp=Z,34nm,0.7s | | | | | | |
| PKI | Pulchoki | 47.12 | 273 | eP | P | 12 25 02.2 | -0.7 |
| PKIN | Phulchoki | 47.13 | 273 | eP | P | 12 25 02.1 | -0.8 |
| GKN | Gorkha | 47.52 | 274 | eP | P | 12 25 05.7 | -0.1 |
| | comp=Z,27nm,0.8s | | | | | | |
| ILAR | Eielson Array | 48.03 | 33 | P | P | 12 25 09.8 | +0.8 |
| | comp=Z,1.3nm,0.8s,baz=267,slow=5.8,SNR=18 | | | | | | |
| ILAR | Eielson Array | 48.03 | 33 | P | P | 12 25 09.9 | +0.8 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| DANN | Dangsing | 48.03 | 275 | eP | P | 12 25 10.3 | +0.4 |
| | comp=Z,18nm,0.7s | | | | | | |
| KOLN | Koldanda | 48.44 | 275 | eP | P | 12 25 13.1 | +0.2 |
| | comp=Z,9.3nm,0.5s | | | | | | |
| BVAR | Borovoye Array | 48.95 | 311 | P | P | 12 25 15.0 | -1.3 |
| | comp=Z,2.2nm,0.7s,baz=72,slow=8.7,SNR=6.5 | | | | | | |
| BVAR | | | | PcP | PcP | 12 26 40.1 | -0.2 |
| | comp=Z,2.0nm,0.7s,baz=64,slow=3.4,SNR=4.7 | | | | | | |
| BVAR | Borovoye Array | 48.95 | 311 | P | P | 12 25 15.0 | -1.3 |
| BVAR | | | | | | 12 26 40.1 | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| KKAR | Karatay Array | 51.80 | 299 | eP | P | 12 25 38.3 | +0.3 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KKAR | Karatay Array | 51.80 | 299 | eP | P | 12 25 38.3 | +0.3 |
| | comp=Z,0.6nm,0.3s | | | | | | |
| INK | Inuvik | 52.80 | 28 | P | P | 12 25 46.4 | +1.4 |
| | comp=Z,1.7nm,0.4s,baz=295,slow=6.5,SNR=18 | | | | | | |
| INK | Inuvik | 52.80 | 28 | P | P | 12 25 46.4 | +1.4 |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| SVE | Sverdlovsk | 53.39 | 318 | eP | P | 12 25 49.0 | -0.6 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| ARU | Arti | 54.61 | 318 | P | P | 12 25 58.0 | -0.4 |
| | comp=Z,0.3nm,0.2s,baz=308,slow=20,SNR=3.3 | | | | | | |
| ARU | Arti | 54.61 | 318 d | iP | P | 12 25 58.5 | +0.1 |
| ARU | | | | S | S | 12 33 36.9 | -0.3 |
| ARU | | | | SS | SS | 12 37 13.6 | -5.8 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| ARU | Arti | 54.61 | 318 | eP | P | 12 25 58.0 | -0.4 |
| | comp=Z,6.8nm,0.6s | | | | | | |
| ABKAR | Akbulak array | 56.36 | 309 | eP | P | 12 26 10.7 | -0.5 |
| | comp=Z,5.4nm,0.5s | | | | | | |
| AKTO | Aktyubinsk | 57.05 | 311 | P | P | 12 26 15.4 | -0.7 |
| | comp=Z,2.6nm,0.7s,baz=75,slow=5.3,SNR=7.2 | | | | | | |
| AKTO | Aktyubinsk | 57.05 | 311 | P | P | 12 26 15.4 | -0.7 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 58.98 | 187 | eP | P | 12 26 28.9 | -0.9 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| WRAB | Tennant Creek | 58.98 | 187 | eP | P | 12 26 28.9 | -0.9 |
| | comp=Z,1.9nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 58.99 | 187 | P | P | 12 26 29.3 | -0.6 |
| | comp=Z,3.1nm,0.6s,baz=4.7,slow=7.3,SNR=20 | | | | | | |
| WRA | Warramunga Arr | 58.99 | 187 | P | P | 12 26 29.3 | -0.6 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| RES | Resolute Bay | 60.77 | 15 | LR | LR | 12 56 01.5 | |
| | comp=Z,37nm,19.7s,baz=106,slow=39 | | | | | | |
| BBB | Bella Bella | 60.92 | 45 | LR | LR | 12 49 58.9 | |
| | comp=Z,12nm,20.0s,baz=246,slow=33 | | | | | | |
| ARCES | ARCESS Array B | 61.99 | 339 | P | P | 12 26 49.6 | -0.2 |
| | comp=Z,5.3nm,0.9s,baz=60,slow=7.3,SNR=5.7 | | | | | | |
| ARCES | | | | LR | LR | 12 58 23.6 | |
| | comp=Z,46nm,18.3s,baz=234,slow=40 | | | | | | |
| ARCES | ARCESS Array B | 61.99 | 339 | P | P | 12 26 49.6 | -0.2 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| ARCES | | | | MLR | MLR | | |
| | comp=Z,47nm,18.3s | | | | | | |
| GEYT | Alibeck | 62.53 | 298 | P | P | 12 26 53.6 | -0.4 |
| | comp=Z,5.0nm,0.7s,baz=36,slow=2.8,SNR=7.1 | | | | | | |
| ASAR | Alice Springs | 62.72 | 187 | P | P | 12 26 55.0 | -0.2 |
| | comp=Z,1.9nm,0.7s,baz=1.8,slow=4.2,SNR=24 | | | | | | |
| ASAR | Alice Springs | 62.72 | 187 | P | P | 12 26 55.0 | -0.2 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| FINES | FINESS Array B | 66.86 | 332 | P | P | 12 27 20.6 | -1.3 |
| | comp=Z,5.1nm,0.6s,baz=62,slow=6.3,SNR=14 | | | | | | |
| FINES | FINESS Array B | 66.86 | 332 | iP | P | 12 27 21.2 | -0.6 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| KIV | Kislovodsk | 69.30 | 310 d | eP | P | 12 27 38.8 | +1.2 |
| KIV | | | | eS | PnS | 12 37 10.0 | +1.1 |
| KIV | | | | eSS | SS | 12 41 05.6 | -4.0 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| KIV | Kislovodsk | 69.30 | 310 | eP | P | 12 27 39.5 | +1.9 |
| | comp=Z,21nm,0.9s | | | | | | |
| KBZ | Khabaz | 69.31 | 310 | P | P | 12 27 37.2 | -0.2 |
| | comp=Z,4.8nm,0.8s,baz=40,slow=5.4,SNR=7.1 | | | | | | |
| KBZ | Khabaz | 69.31 | 310 | P | P | 12 27 37.3 | -0.2 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| HFS | Hagfors | 72.11 | 335 | P | P | 12 27 54.4 | +0.2 |
| | comp=Z,3.2nm,0.6s,baz=42,slow=4.6,SNR=15 | | | | | | |
| HFS | Hagfors | 72.11 | 335 | P | P | 12 27 54.4 | +0.2 |
| HFS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| NB2 | NORSAR Subarra | 72.19 | 337 | P | P | 12 27 54.1 | -0.7 |
| | comp=Z,2.0nm,0.6s,baz=41,slow=6.2 | | | | | | |
| NOA | NORSAR Array B | 72.19 | 337 | P | P | 12 27 54.4 | -0.4 |
| | comp=Z,2.7nm,0.7s,baz=39,slow=6.0,SNR=9.8 | | | | | | |
| NOA | | | | LR | LR | 13 02 12.8 | |
| | comp=Z,32nm,20.3s,baz=45,slow=38 | | | | | | |
| NOA | NORSAR Array B | 72.19 | 337 | P | P | 12 27 54.4 | -0.4 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,32nm,20.3s | | | | | | |
| AKASG | Malin Array Be | 72.48 | 322 | P | P | 12 27 55.2 | -1.4 |
| | comp=Z,2.1nm,0.5s,baz=46,slow=5.9,SNR=10 | | | | | | |
| AKASG | Malin Array Be | 72.48 | 322 | iP | P | 12 27 56.0 | -0.6 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| KIEV | Kiev | 72.49 | 322 | iP | P | 12 27 56.0 | -0.7 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| DLMT | Dillon | 73.21 | 45 | eP | P | 12 28 02.5 | +1.3 |
| | comp=Z,1.1nm,0.5s | | | | | | |
| BOZ | Bozeman (W) | 73.56 | 44 | eP | P | 12 28 04.7 | +1.4 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,31nm,2.5s | | | | | | |
| BOZ | Bozeman (W) | 73.56 | 44 | eP | P | 12 28 04.7 | +1.4 |
| | comp=Z,31nm,2.5s | | | | | | |
| NVAR | Mina Array Bea | 74.11 | 53 | P | P | 12 28 08.3 | +1.5 |
| | comp=Z,1.2nm,0.9s,baz=301,slow=7.0,SNR=5.2 | | | | | | |
| R11A | Troy Canyon, C | 75.85 | 52 | eP | P | 12 28 18.3 | +1.6 |
| | comp=Z,32nm,2.8s | | | | | | |
| KOLS | Kolonicke sedl | 76.97 | 324 | eP | P | 12 28 22.2 | -0.5 |
| KOLS | Kolonicke sedl | 76.97 | 324 | eP | P | 12 28 22.1 | -0.6 |
| STHS | Stebnicka Huta | 77.10 | 324 | eP | P | 12 28 23.1 | -0.3 |
| STHS | Stebnicka Huta | 77.10 | 324 | eP | P | 12 28 23.1 | -0.3 |
| BRTR | Keskin Array B | 77.23 | 311 | P | P | 12 28 24.6 | +0.1 |
| | comp=Z,0.9nm,0.5s,baz=95,slow=3.3,SNR=5.0 | | | | | | |
| BRTR | Keskin Array B | 77.23 | 311 | P | P | 12 28 24.6 | +0.1 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| DPC | Dobruska-Polom | 78.56 | 327 | eP | P | 12 28 32.5 | +0.9 |
| DPC | Dobruska-Polom | 78.56 | 327 | eP | P | 12 28 32.5 | +0.9 |
| VYHS | Vyhne | 78.86 | 325 | eP | P | 12 28 32.7 | -0.5 |
| VYHS | Vyhne | 78.86 | 325 | eP | P | 12 28 32.7 | -0.5 |
| CLL | Collm | 79.17 | 330 | eP | P | 12 28 34.0 | -0.8 |
| CLL | Collm | 79.17 | 330 | eP | P | 12 28 34.0 | -0.8 |
| RAYN | Ar Rayn | 79.54 | 292 | eP | P | 12 28 37.2 | -0.3 |
| | comp=Z,4.6nm,0.7s | | | | | | |
| KHC | Kasperske Hory | 80.63 | 328 | eP | P | 12 28 43.2 | +0.3 |
| KHC | Kasperske Hory | 80.63 | 328 | eP | P | 12 28 43.2 | +0.3 |
| GERES | GERESS Array B | 80.81 | 328 | P | P | 12 28 43.4 | -0.5 |
| | comp=Z,0.8nm,0.4s,baz=23,slow=5.3,SNR=2.6 | | | | | | |
| GERES | GERESS Array B | 80.81 | 328 | P | P | 12 28 43.4 | -0.5 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| KSCO | Kaye Shedlock' | 82.95 | 45 | eP | P | 12 28 59.1 | +3.7 |
| | comp=Z,12nm,0.3s | | | | | | |
| FUORN | Ofenpass-Fuorn | 83.99 | 328 | eP | P | 12 29 01.1 | +0.3 |
| | comp=Z,11nm,0.6s | | | | | | |
| TXAR | Lajitas Array | 89.21 | 52 | P | P | 12 29 27.3 | +0.8 |
| | comp=Z,0.4nm,0.7s,baz=303,slow=4.5,SNR=5.5 | | | | | | |
| CBN | Corbin | 95.47 | 29 | eP | P | 12 29 52.7 | -2.3 |
| | comp=Z,63nm,0.6s | | | | | | |
| TORD | Torodi Ar. Bea | 115.64 | 315 | PKP | PKPdf | 12 35 11.2 | -1.7 |
| | comp=Z,1.3nm,1.2s,baz=70,slow=4.7,SNR=3.0 | | | | | | |
| LPAZ | La Paz | 145.97 | 56 | PKPbc | PKPab | 12 36 11.4 | -0.2 |
| | comp=Z,2.1nm,0.7s,baz=349,slow=3.0,SNR=8.4 | | | | | | |
| LPAZ | La Paz | 145.97 | 56 | PKP2 | PKPab | 12 36 11.4 | -0.2 |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |

**JMA 08 12:17:26.5, 39°.04N×140°.84E, $h5^{km}\pm1^{km}$, M3.4, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JMK | Ichinoseki | 0.31 | 106 | P | Pg | 12 17 32.3 | -0.2 |
| JMK | | | | S | Sg | 12 17 36.5 | -0.1 |
| JRG | Rokugo | 0.39 | 336 | P | Pg | 12 17 34.3 | +0.2 |
| JRG | | | | S | Sg | 12 17 40.0 | +0.8 |
| JYK | Kaneyama | 0.39 | 252 | P | Pg | 12 17 34.4 | +0.3 |
| JYK | | | | S | Sg | 12 17 39.5 | +0.2 |
| JOM | Ohasama | 0.56 | 39 | S | Sg | 12 17 44.8 | +0.3 |
| JOU | Okura | 0.69 | 192 | P | Pg | 12 17 39.8 | 0.0 |
| JOU | | | | S | Sg | 12 17 48.9 | +0.2 |

*ISCJB **08** 12:44:09.7±0.5, 51°.10N±0°.05×175°.00W±0°.04, $h10^{km}$, mb4.1/20, MS3.1/6, Error ellipse: s-maj=6.9km s-min=3.4km az=168.6*
*IDC **08** 12:44:10.5±1.1, 51°.59N×175°.10W, $h0^{km}$, mb4.0/16, mb1 4.1/19, mb1mx3.9/60, mbtmp4.0/19, ML4.2/2, MS3.2/8, Ms1 3.2/8, ms1mx2.9/48, Error ellipse: s-maj=32.2km s-min=14.0km az=177.0*
*NEIC **08** 12:44:13.0, 51°.29N×175°.13W, $h6^{km}$, mb4.2/7, ML4.0(AEIC), After AEIC.*
**ISC 08 12:44:11.3**±0.6, **51°.23N**±0°.07×**175°.12W**±0°.04, **$h10^{km}$, n74, $\sigma$1$^{s}$.34**/69, **mb4.0**/20, **MS3.1**/5, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 1.00 | 325 | P | Pg | 12 44 31.3 | +0.7 |
| GSCK | Great Sitkin C | 1.02 | 321 | P | Pg | 12 44 31.5 | +0.6 |
| ETKA | Kagalaska Isla | 1.02 | 309 | P | Pg | 12 44 31.7 | +0.7 |
| GSTD | Great Sitkin T | 1.05 | 323 | P | Pg | 12 44 32.0 | +0.5 |
| GSTR | Great Sitkin T | 1.05 | 326 | ePg | Pb | 12 44 32.2 | +0.7 |
| GSTR | | | | eSg | Sg | 12 44 44.9 | -0.1 |
| ATKA | Atka Island | 1.13 | 30 | P | Pb | 12 44 32.6 | -0.4 |
| ATKA | | | | S | Sg | 12 44 47.4 | -0.4 |
| ADAG | Mount Adagdak | 1.19 | 310 | P | Pg | 12 44 35.0 | +0.8 |
| KOFP | Korovin Flat P | 1.23 | 31 | P | Pb | 12 44 35.2 | +0.6 |
| KOKL | Mount Kliuchef | 1.23 | 27 | P | Pb | 12 44 35.2 | +0.4 |
| KOWE | Korovin West | 1.26 | 25 | P | Pn | 12 44 35.6 | +0.6 |
| KIRH | Kanaga Island | 1.40 | 299 | P | Pn | 12 44 37.5 | +0.5 |
| KIKV | Kanaga Island | 1.44 | 298 | P | Pn | 12 44 37.8 | +0.4 |
| KICM | Kanaga Island | 1.47 | 299 | P | Pn | 12 44 38.4 | +0.5 |
| TAPA | Tanaga Point A | 1.78 | 290 | P | Pn | 12 44 43.1 | +0.9 |
| TAFL | Tanaga Flats | 1.82 | 288 | P | Pn | 12 44 43.4 | +0.8 |
| TAFP | Tanaga Falls P | 1.91 | 292 | P | Pn | 12 44 45.0 | +1.0 |
| TAFP | | | | S | Sn | 12 45 09.2 | +1.2 |
| TASE | Tanaga Southea | 1.92 | 290 | P | Pn | 12 44 45.3 | +1.2 |
| GAEA | Gareloi East | 2.33 | 285 | P | Pn | 12 44 51.5 | +1.7 |
| GAEA | | | | S | Sn | 12 45 20.5 | +2.0 |
| GALAA | Gareloi Lava P | 2.34 | 285 | P | Pn | 12 44 51.5 | +1.6 |
| GANE | Gareloi Northe | 2.36 | 286 | P | Pn | 12 44 52.1 | +2.0 |
| CESW | Semis' Southwe | 3.39 | 284 | P | Pn | 12 45 05.7 | +1.5 |
| AMKA | Amchitka | 3.50 | 275 | P | Pn | 12 45 07.1 | +1.3 |
| AMKA | | | | S | Sn | 12 45 51.5 | +4.3 |
| LSPA | Little Sitkin | 4.00 | 283 | P | Pn | 12 45 14.2 | +1.6 |
| LSNW | Little Sitkin | 4.04 | 283 | P | Pn | 12 45 14.9 | +1.7 |
| NIKH | Nikolski High | 4.24 | 63 | P | Pn | 12 45 18.4 | +2.5 |
| UNV | Unalaska Valle | 5.88 | 60 | P | Pn | 12 45 41.4 | +3.0 |
| SPIA | Saint Paul Isl | 6.61 | 24 | P | Pn | 12 45 51.5 | +3.1 |
| KDAK | Kodiak Island | 14.60 | 55 | Pn | Pn | 12 47 35.1 | -2.5 |
| | 0.6nm,0.3s,baz=280,slow=6.4,SNR=9.1 | | | | | | |
| KDAK | | | | Sn | Sn | 12 50 21.1 | +1.7 |
| | 0.2nm,0.3s,baz=163,slow=14,SNR=3.0 | | | | | | |
| KDAK | | | | LR | LR | 12 53 32.6 | |
| | comp=Z,130nm,18.4s,baz=248,slow=39 | | | | | | |
| PETK | Petropavlovsk- | 16.75 | 287 | Pn | Pn | 12 48 05.3 | -0.4 |
| | 0.1nm,0.3s,baz=92,slow=14,SNR=2.6 | | | | | | |
| PETK | | | | LR | LR | 12 54 15.7 | |
| | comp=Z,53nm,21.2s,baz=93,slow=36 | | | | | | |
| PPLA | Purkeypile | 16.97 | 38 | ePn | P | 12 48 12.4 | +1.9 |
| | 5.7nm,0.9s | | | | | | |
| PPLA | | | | eSn | Sn | 12 51 16.4 | -0.7 |
| MCK | McKinley | 18.66 | 38 | eP | P | 12 48 29.0 | -0.1 |
| | 9.7nm,1.0s | | | | | | |
| BILL | Bilibino | 19.16 | 339 | eP | P | 12 48 34.1 | -0.4 |
| | 38nm,1.4s | | | | | | |
| ILAR | Eielson Array | 19.95 | 36 | P | P | 12 48 40.4 | -2.8 |
| | 0.5nm,0.3s,baz=226,slow=9.4,SNR=44 | | | | | | |
| ILAR | | | | LR | LR | 12 57 01.9 | |
| | comp=Z,57nm,19.0s,baz=272,slow=39 | | | | | | |
| COLD | Coldfoot | 20.24 | 28 | eP | P | 12 48 47.4 | +1.1 |
| | 10nm,1.0s | | | | | | |
| INK | Inuvik | 26.28 | 34 | P | P | 12 49 45.6 | -0.8 |
| | 1.0nm,0.5s,baz=237,slow=8.0,SNR=6.6 | | | | | | |
| INK | | | | LR | LR | 13 00 38.2 | |
| | comp=Z,50nm,20.0s,baz=322,slow=38 | | | | | | |
| DLBC | Dease Lake | 26.51 | 57 | P | P | 12 49 47.0 | -1.8 |
| | 2.8nm,0.9s,baz=330,slow=7.6,SNR=4.4 | | | | | | |
| BBB | Bella Bella | 28.75 | 69 | LR | LR | 12 59 34.4 | |
| | comp=Z,44nm,18.4s,baz=64,slow=32 | | | | | | |
| YAK | Yakutsk | 31.25 | 312 | LR | LR | 13 03 15.0 | |
| | comp=Z,58nm,18.9s,baz=126,slow=37 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.48 | 211 | T | T | 13 27 45.0 | |
| | baz=20,slow=75 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.49 | 211 | T | T | 13 28 23.8 | |
| | baz=20 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.50 | 211 | T | T | 13 27 40.1 | |
| | baz=20,slow=75 | | | | | | |
| USRK | Ussuriysk Ar. | 35.60 | 280 | P | P | 12 51 08.6 | -0.2 |
| | 1.6nm,0.6s,baz=46,slow=8.4,SNR=4.7 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.69 | 210 | T | T | 13 30 39.6 | |
| | baz=20,slow=74 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.70 | 210 | T | T | 13 30 23.2 | |
| | baz=20,slow=74 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.70 | 211 | T | T | 13 29 59.8 | |
| | baz=20 | | | | | | |
| NEW | Newport | 36.76 | 71 | P | P | 12 51 19.4 | +0.7 |
| | 1.2nm,0.4s,baz=291,slow=8.6,SNR=3.5 | | | | | | |
| EDM | Edmonton | 36.85 | 62 | eP | P | 12 51 20.2 | +0.7 |
| | 7.6nm,0.6s | | | | | | |
| MCMT | McKenzie Canyo | 41.02 | 74 | eP | P | 12 51 55.4 | +0.7 |
| | 1.8nm,0.5s | | | | | | |
| NVAR | Mina Array Bea | 41.27 | 85 | P | P | 12 51 57.1 | +0.3 |
| | 0.1nm,0.3s,baz=293,slow=7.8,SNR=2.5 | | | | | | |
| KSRS | Korea Array | 41.95 | 274 | P | P | 12 52 02.5 | +0.4 |
| | 1.0nm,0.6s,baz=54,slow=7.5,SNR=5.8 | | | | | | |
| KSRS | | | | LR | LR | 13 09 56.3 | |
| | comp=Z,16nm,19.9s,baz=345,slow=37 | | | | | | |
| KSAR | Wonju Array Be | 41.98 | 274 | P | P | 12 52 02.5 | +0.1 |
| BW06 | Boulder Array | 44.14 | 74 | eP | P | 12 52 20.8 | +0.7 |
| | 3.2nm,0.6s | | | | | | |
| PV01 | Paradox Valley | 47.51 | 79 | eP | P | 12 52 52.3 | +5.6 |
| SONM | Songino Array | 48.76 | 299 | P | P | 12 52 55.4 | -0.7 |
| | 0.8nm,0.6s,baz=60,slow=7.7,SNR=4.4 | | | | | | |
| SPITS | Spitsbergen Ar | 50.67 | 357 | P | P | 12 53 08.4 | -1.7 |
| | 8.0nm,0.8s,baz=24,slow=6.4,SNR=4.9 | | | | | | |
| ZALV | Zalesovo Beam | 55.79 | 315 | PcP | PcP | 12 54 47.0 | 0.0 |
| | 1.4nm,0.8s,baz=19,slow=3.9,SNR=5.8 | | | | | | |
| TXAR | Lajitas Array | 56.38 | 84 | P | P | 12 53 52.1 | -0.7 |
| | 0.4nm,0.8s,baz=307,slow=4.6,SNR=5.9 | | | | | | |
| JMIC | Jan Mayen | 57.71 | 5 | LR | LR | 13 19 22.1 | |
| | comp=Z,31nm,19.2s,baz=31,slow=37 | | | | | | |
| ARCES | ARCESS Array B | 58.60 | 352 | P | P | 12 54 05.6 | -2.2 |
| | 5.1nm,0.9s,baz=9.9,slow=7.3,SNR=3.4 | | | | | | |
| MKAR | Makanchi Array | 61.91 | 311 | P | P | 12 54 29.7 | -1.1 |
| | 1.3nm,0.4s,baz=46,slow=6.1,SNR=23 | | | | | | |
| FINES | FINESS Array B | 66.41 | 349 | P | P | 12 54 58.1 | -1.8 |
| | 0.8nm,0.7s,baz=42,slow=4.6,SNR=2.6 | | | | | | |
| NOA | NORSAR Array B | 67.97 | 357 | P | P | 12 55 08.6 | -1.3 |
| | 1.3nm,0.8s,baz=4.3,slow=6.5,SNR=3.6 | | | | | | |
| TAPN | Taplejung | 73.41 | 293 | eP | P | 12 55 44.4 | +0.4 |
| | 28nm,1.0s | | | | | | |
| GUN | Gumba | 74.04 | 295 | eP | P | 12 55 48.2 | +0.5 |
| | 22nm,0.5s | | | | | | |
| RAMN | Ramite | 74.35 | 293 | eP | P | 12 55 49.8 | +0.4 |
| | 34nm,0.8s | | | | | | |
| PKI | Pulchoki | 74.56 | 295 | eP | P | 12 55 50.6 | -0.2 |
| GKN | Gorkha | 74.67 | 296 | eP | P | 12 55 51.3 | +0.1 |
| KOLN | Koldanda | 75.44 | 296 | eP | P | 12 55 55.9 | +0.2 |
| | 10nm,0.7s | | | | | | |
| AKASG | Malin Array Be | 76.36 | 344 | P | P | 12 55 58.6 | -1.6 |
| | 0.7nm,0.5s,baz=16,slow=5.5,SNR=2.7 | | | | | | |
| GEYT | Alibeck | 79.72 | 320 | P | P | 12 56 19.4 | +0.1 |
| | 3.4nm,0.4s,baz=353,slow=4.6,SNR=4.0 | | | | | | |
| BRTR | Keskin Array B | 85.99 | 338 | P | P | 12 56 51.8 | -0.1 |
| | 0.7nm,0.7s,baz=14,slow=3.0,SNR=3.8 | | | | | | |
| KEST | Kesra | 93.32 | 356 | P | P | 12 57 24.9 | -1.5 |
| | 3.7nm,0.5s,baz=70,slow=3.0,SNR=4.4 | | | | | | |
| MATP | Matopo | 144.10 | 320 | PKP | PKPab | 13 03 45.2 | +0.3 |
| | 2.6nm,0.8s,baz=32,slow=0.9,SNR=5.5 | | | | | | |
| BOSA | Boshof | 152.71 | 318 | PKPbc | PKPbc | 13 04 10.2 | +2.0 |
| | 1.6nm,0.4s,baz=0.5,slow=1.3,SNR=6.3 | | | | | | |

*ISCJB **08** 12:46:48.3±0.8, 4°.63S±0°.05×133°.97E±0°.07, $h21^{km}$, mb3.6/1, MS3.2/2, Error ellipse: s-maj=11.7km s-min=5.5km az=149.4*
*IDC **08** 12:46:48.8±1.6, 4°.78S×133°.60E, $h0^{km}$, mb3.7/1, mb1 4.0/5, mb1mx3.6/42, mbtmp3.8/5, ML3.6/4, MS3.2/4, Ms1 3.2/4, ms1mx2.8/32, Error ellipse: s-maj=42.3km s-min=26.7km az=72.0*
*AUST **08** 12:46:53.6, 4°.96S×133°.53E, $h10^{km}$*
*DJA **08** 12:46:54.5±1.1, 5°S±5°×13°4E±°, $h58^{km}\pm25^{km}$, M4.3/7, mb4.6/3, mB4.8/1, MLv4.2/7, Mw(mB)4.0/1*
**ISC 08 12:46:50.8**±0.9, **4°.57S**±0°.08×**133°.96E**±0°.10, **$h21^{km}$, n23, $\sigma$1$^{s}$.56**/22, **Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.37 | 314 | P | Pn | 12 47 28.0 | -0.4 |
| | baz=2.4,SNR=35 | | | | | | |
| FAKI | Fak Fak | 2.37 | 314 | P | Pn | 12 47 28.4 | 0.0 |
| FAKI | | | | S | Sn | 12 47 56.7 | -0.2 |
| BNDI | Bandanaira | 4.05 | 270 | P | Pn | 12 47 51.4 | -0.1 |
| BNDI | | | | S | Sn | 12 48 38.6 | +0.3 |
| SIJI | Sorong | 4.55 | 324 | Pn | Pn | 12 47 57.9 | -0.7 |
| | 1.3nm,0.3s,baz=219,slow=23,SNR=12 | | | | | | |
| SIJI | | | | Sn | Sn | 12 48 48.3 | -2.6 |
| | 1.6nm,0.3s,baz=102,slow=13,SNR=4.0 | | | | | | |
| SIJI | | | | LR | LR | 12 50 17.3 | |
| | comp=Z,198nm,18.2s,baz=241,slow=46 | | | | | | |
| SWI | Sorong | 4.56 | 324 | P | Pb | 12 48 07.4 | -2.8 |
| | baz=4.7,SNR=3.4 | | | | | | |
| SWI | Sorong | 4.56 | 324 | P | Pn | 12 47 59.3 | +0.7 |
| SWI | | | | S | Sn | 12 48 51.4 | +0.3 |
| AAI | Ambon | 5.82 | 278 | P | Pn | 12 48 15.8 | -0.1 |
| | 89nm,0.7s,0.4nm | | | | | | |
| NLAI | Namlea | 6.97 | 281 | P | Pn | 12 48 32.3 | +0.5 |
| JAY | Jayapura | 7.03 | 73 | Pn | Pn | 12 48 38.8 | +6.2 |
| | 0.4nm,0.3s,baz=18,slow=20,SNR=2.1 | | | | | | |
| KDU | Kakadu | 8.20 | 190 | P | Pn | 12 48 48.0 | -0.7 |
| | baz=7.8,SNR=36 | | | | | | |
| MTN | Manton Dam | 8.69 | 199 | P | Pn | 12 48 55.6 | +0.3 |
| | baz=8.2,SNR=6.9 | | | | | | |
| SOEI | Soe | 10.91 | 241 | P | Pn | 12 49 27.0 | +1.0 |
| | baz=10,SNR=3.7 | | | | | | |
| KNRA | Kununurra | 12.17 | 204 | P | Pn | 12 49 40.6 | -2.4 |
| | baz=12,SNR=38 | | | | | | |
| COEN | Coen | 13.02 | 136 | P | Pn | 12 49 54.8 | +0.1 |
| | baz=13,SNR=6.1 | | | | | | |
| KAPI | Kappang | 14.17 | 268 | LR | LR | 12 56 04.0 | |
| | comp=Z,105nm,19.3s,baz=79,slow=40 | | | | | | |
| WRA | Warramunga Arr | 15.29 | 179 | Pn | Pn | 12 50 21.5 | -4.1 |
| | 0.4nm,0.3s,baz=360,slow=13,SNR=18 | | | | | | |
| WRA | | | | Sn | Sn | 12 53 03.0 | -11 |
| | 0.6nm,0.3s,baz=356,slow=23,SNR=6.7 | | | | | | |
| QIS | Mount Isa | 16.82 | 161 | P | P | 12 50 47.9 | +0.8 |
| | baz=17,SNR=4.4 | | | | | | |
| ASAR | Alice Springs | 18.99 | 180 | P | P | 12 51 10.2 | -0.9 |
| | 0.4nm,0.3s,baz=1.8,slow=11,SNR=30 | | | | | | |
| ASAR | | | | S | Sn | 12 54 30.8 | -13 |
| | 0.2nm,0.3s,baz=358,slow=28,SNR=4.2 | | | | | | |
| GUMO | Guam | 21.04 | 31 | LR | LR | 13 00 06.0 | |
| | comp=Z,30nm,18.6s,baz=171,slow=37 | | | | | | |
| WRKA | Warakurna | 21.07 | 194 | P | P | 12 51 34.1 | +0.3 |
| | baz=21,SNR=17 | | | | | | |
| QLP | Quilpie | 24.00 | 157 | P | P | 12 52 07.3 | +3.2 |
| | baz=24,SNR=3.2 | | | | | | |
| RPZ | Rata Peaks | 50.87 | 146 | LR | LR | 13 16 32.6 | |
| | comp=Z,77nm,18.3s,baz=132,slow=35 | | | | | | |
| MKAR | Makanchi Array | 68.45 | 325 | P | P | 12 57 52.9 | +1.5 |
| | 0.3nm,0.4s,baz=113,slow=7.8,SNR=5.3 | | | | | | |

*AUST **08** 12:49:54.2, 7°.00N×125°.51E, $h200^{km}$*
*ISCJB **08** 12:50:05.9±0.3, 5°.78N±0°.04×125°.61E±0°.07, $h221^{km}\pm4^{km}$, mb3.7/10, Error ellipse: s-maj=11.4km s-min=5.9km az=172.4*
*IDC **08** 12:50:06.4±1.8, 5°.76N×125°.51E, $h212^{km}\pm16^{km}$, mb3.5/9, mb1 3.7/12, mb1mx3.4/52, mbtmp4.1/12, Error ellipse: s-maj=27.2km s-min=10.8km az=73.0*
*MAN **08** 12:50:09, 5°.86N×125°.59E, $h191^{km}$, mb4.9, ML3.9, MS4.0*
*DJA **08** 12:50:18.0±1.0, 5°N±7°×12°6E±°, $h164^{km}\pm6^{km}$, M4.7/5, mb4.4/5, mB4.6/2, MLv4.8/5, Mw(mB)3.8/2*
**ISC 08 12:50:06.9**±0.6, **5°.76N**±0°.06×**125°.58E**±0°.09, **$h214^{km}\pm6^{km}$, n48, $\sigma$1$^{s}$.07**/57, **mb3.9**/10, **4C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DMPH | Davao City--Mi | 1.31 | 357⇑ | eP | Pn | 12 50 41.1 | +0.8 |
| DMPH | | | | eS | S | 12 51 07.5 | +1.1 |
| KCP | Kidapawan | 1.33 | 338⇑ | eP | Pn | 12 50 40.4 | -0.1 |
| KCP | | | | iS | S | 12 51 04.5 | -2.3 |
| MATI | Mati | 1.35 | 30 | eP | Pn | 12 50 40.2 | -0.4 |
| MATI | | | | eS | S | 12 50 58.9 | -7.9 |
| CTBH | Cotabato--PC H | 1.97 | 318⇑ | iP | Pn | 12 50 46.7 | +0.5 |
| CTBH | | | | iS | S | 12 51 16.3 | -0.2 |
| SGSI | Sangihe | 2.06 | 182 | P | Pn | 12 50 46.0 | -1.1 |
| SGSI | | | | S | S | 12 51 08.0 | -10 |
| BUKP | Musuan | 2.17 | 346 | eP | Pn | 12 50 48.6 | +0.4 |
| BUKP | | | | eS | S | 12 51 17.9 | -2.3 |
| BIPH | Bislig | 2.53 | 18⇑ | iP | Pn | 12 50 53.1 | +1.2 |
| BIPH | | | | iS | S | 12 51 27.0 | 0.0 |
| PAGZ | Pagadian | 3.01 | 314 | eP | Pn | 12 50 58.9 | +1.5 |
| BUTP | Butuan | 3.19 | 1 | eP | Pn | 12 51 00.1 | +0.7 |
| LBMI | Labuha | 6.64 | 163 | P | Pn | 12 51 41.1 | -1.5 |
| | 36nm,0.7s,622nm0.9nm | | | | | | |
| LBMI | | | | S | S | 12 52 48.3 | -10 |
| | 36nm,0.7s,622nm0.9nm | | | | | | |
| LUWI | Luwuk | 7.32 | 203 | P | Pn | 12 51 53.7 | +2.3 |
| | baz=8.5,SNR=4.2 | | | | | | |
| APSI | Ampana | 7.71 | 211 | P | Pn | 12 51 57.7 | +1.3 |
| | 61nm,1.1s,0.2nm | | | | | | |
| SANI | Sanana | 7.77 | 177 | P | Pn | 12 51 54.6 | -2.6 |
| | 58nm,0.8s,965nm0.6nm | | | | | | |
| SANI | | | | S | S | 12 53 14.6 | -11 |
| | 58nm,0.8s,965nm0.6nm | | | | | | |
| SIJI | Sorong | 8.69 | 139 | P | Pn | 12 52 09.5 | +0.3 |
| | 2.0nm,0.3s,baz=318,slow=18,SNR=5.1 | | | | | | |
| NLAI | Namlea | 9.07 | 170 | P | Pn | 12 52 12.6 | -1.4 |
| | 19nm,0.6s | | | | | | |
| FAKI | Fak Fak | 10.89 | 142 | P | Pn | 12 52 38.0 | +0.6 |
| | baz=12,SNR=4.1 | | | | | | |
| KAPI | Kappang | 12.19 | 209 | P | Pn | 12 52 54.5 | +0.7 |
| | 0.7nm,0.3s,baz=337,slow=5.0,SNR=4.5 | | | | | | |
| SOEI | Soe | 15.47 | 185 | P | Pn | 12 53 36.2 | +1.8 |
| | baz=17,SNR=8.8 | | | | | | |
| BATI | Baumata | 15.98 | 187 | P | Pn | 12 53 40.9 | +0.4 |
| | 20nm,0.3s,baz=324,slow=3.5,SNR=9.4 | | | | | | |
| JAY | Jayapura | 17.20 | 118 | P | P | 12 53 53.8 | +0.6 |
| | 0.7nm,0.3s,baz=317,slow=7.8,SNR=4.2 | | | | | | |
| MTN | Manton Dam | 19.29 | 163 | P | P | 12 54 16.3 | +0.5 |
| | baz=21,SNR=5.1 | | | | | | |
| KDU | Kakadu | 19.57 | 160 | P | P | 12 54 19.1 | +0.3 |
| | baz=21,SNR=9.0 | | | | | | |
| KNRA | Kununurra | 21.53 | 172 | P | P | 12 54 39.3 | -0.1 |
| | baz=23,SNR=14 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **26.96** | **162** | P | **P** | **12 55 27.9** | **-1.0** |
| | 3.0nm,0.8s,baz=340,slow=9.6,SNR=6.4 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 58 44.7** | **-0.4** |
| | 0.5nm,0.6s,baz=338,slow=2.6,SNR=2.7 | | | | | | |
| WRA | | | | ScP | **ScP** | **13 02 05.7** | **+0.7** |
| | 0.2nm,0.7s,baz=340,slow=3.2,SNR=2.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.89** | **298** | ScP | **ScP** | **13 02 10.8** | **-0.3** |
| | 0.7nm,0.6s,baz=149,slow=1.6,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **30.36** | **165** | P | **P** | **12 55 58.6** | **-0.3** |
| | 2.6nm,0.5s,baz=341,slow=6.9,SNR=22 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 58 53.4** | **-0.2** |
| | 0.9nm,0.4s,baz=344,slow=2.4,SNR=8.9 | | | | | | |
| ASAR | | | | ScP | **ScP** | **13 02 15.0** | **-0.7** |
| | 0.5nm,0.8s,baz=345,slow=2.4,SNR=6.1 | | | | | | |
| **KSRS** | **Korea Array** | **31.62** | **4** | P | **P** | **12 56 10.0** | **+0.2** |
| | 1.1nm,0.8s,baz=183,slow=7.5,SNR=4.0 | | | | | | |
| **XAN** | **Xi'an** | **32.10** | **333** | P | **P** | **12 56 14.4** | **+0.3** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,45nm,4.7s | | | | | | |
| **MEEK** | **Meekatharra** | **32.91** | **192** | P | **P** | **12 56 20.7** | **-0.5** |
| | baz=34,SNR=5.0 | | | | | | |
| **MORW** | **Morawa** | **35.83** | **194** | P | **P** | **12 56 45.9** | **-0.2** |
| | baz=37,SNR=7.9 | | | | | | |
| **FORT** | **Forrest** | **36.41** | **176** | P | **P** | **12 56 51.2** | **+0.2** |
| | baz=38,SNR=9.5 | | | | | | |
| **QLP** | **Quilpie** | **36.88** | **152** | P | **P** | **12 56 54.7** | **-0.5** |
| | baz=38,SNR=6.0 | | | | | | |
| **KMBL** | **Kambalda** | **37.09** | **185** | P | **P** | **12 56 57.0** | **+0.2** |
| | baz=38,SNR=15 | | | | | | |
| **BLDU** | **Ballidu** | **37.16** | **193** | P | **P** | **12 56 57.0** | **-0.4** |
| | baz=38,SNR=8.0 | | | | | | |
| **KLBR** | **Kellerberrin** | **37.89** | **191** | P | **P** | **12 57 03.4** | **-0.1** |
| | baz=39,SNR=8.5 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **39.28** | **191** | P | **P** | **12 57 15.5** | **+0.5** |
| | baz=41,SNR=10 | | | | | | |
| **BBOO** | **Buckleboo** | **39.63** | **166** | P | **P** | **12 57 18.4** | **+0.5** |
| | baz=41,SNR=44 | | | | | | |
| **RKGY** | **Rocky Gully** | **40.97** | **191** | P | **P** | **12 57 30.2** | **+1.4** |
| | baz=42,SNR=12 | | | | | | |
| **HTT** | **Hallett** | **40.98** | **163** | P | **P** | **12 57 27.3** | **-1.7** |
| | baz=42,SNR=15 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **41.76** | **154** | P | **P** | **12 57 36.0** | **+0.7** |
| | baz=43,SNR=7.2 | | | | | | |
| **ARPS** | **Mount Arapiles** | **44.96** | **161** | P | **P** | **12 58 01.9** | **+1.1** |
| | baz=46,SNR=6.7 | | | | | | |
| **SONM** | **Songino Array** | **45.02** | **342** | P | **P** | **12 58 00.5** | **-0.8** |
| | comp=Z,0.8nm,0.6s,baz=157,slow=8.8,SNR=3.5 | | | | | | |
| **TOO** | **Toolangi** | **46.94** | **158** | P | **P** | **12 58 18.0** | **+1.8** |
| | baz=48,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.25** | **325** | P | **P** | **12 59 17.6** | **-0.3** |
| | comp=Z,2.1nm,0.5s,baz=119,slow=7.1,SNR=23 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.27** | **333** | P | **P** | **12 59 36.7** | **-2.3** |
| | comp=Z,0.9nm,0.4s,baz=115,slow=7.9,SNR=3.8 | | | | | | |
| **ILAR** | **Eielson Array** | **83.77** | **26** | P | **P** | **13 02 12.0** | **+0.2** |
| | comp=Z,0.3nm,0.8s,baz=244,slow=5.0,SNR=4.0 | | | | | | |
| **MAW** | **Mawson** | **85.26** | **200** | P | **P** | **13 02 18.4** | **-0.6** |
| | comp=Z,1.5nm,0.7s,baz=89,slow=5.7,SNR=7.7 | | | | | | |
| **VNDA** | **Vanda** | **85.57** | **173** | P | **P** | **13 02 20.2** | **-0.3** |
| | comp=Z,0.5nm,0.6s,baz=316,slow=6.7,SNR=6.9 | | | | | | |

*BUL* ***08*** *12:52:32.1±22.0, 27°.14S×31°.41E, h108km±999km, MD4.1*
*ISCJB* ***08*** *12:53:10.2±0.5, 26°.41S±0°.03×27°.63E±0°.04, h5km±4km, Error ellipse: s-maj=6.4km s-min=4.5km az=141.1*
*PRE* ***08*** *12:53:10.1±1.9, 26°.40S×27°.62E, h2km, ML2.6*
**ISC 08 12:53:09.9**±0.9, **26°.38S**±0°.04×**27°.64E**±0°.03, **h8**km±6km, **n12**, σ1s.01/23, **South Africa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KLOF** | **Kloof** | **0.04** | **323** | *e*P | **Pg** | **12 53 11.6** | **-0.1** |
| KLOF | | | | *e*S | **Sg** | **12 53 12.4** | **-0.6** |
| KLOF | | | | AML | AML | 12 53 17.2 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **WDLM** | **Western Deep L** | **0.20** | **258** | *e*P | **Pg** | **12 53 14.9** | **+0.8** |
| WDLM | | | | *e*S | **Sg** | **12 53 16.7** | **-0.2** |
| WDLM | | | | AML | AML | 12 53 19.2 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **OBSV** | **Observatory** | **0.44** | **63** | *e*P | **Pg** | **12 53 17.2** | **-1.3** |
| OBSV | | | | *e*S | **Sg** | **12 53 26.4** | **+2.1** |
| OBSV | | | | AML | AML | 12 53 33.1 | |
| | comp=Z,161nm,0.8s | | | | | | |
| **PRYS** | **Parys** | **0.59** | **205** | *e*P | **Pb** | **12 53 22.4** | **-0.3** |
| PRYS | | | | *e*S | **Sg** | **12 53 29.4** | **+0.1** |
| PRYS | | | | AML | AML | 12 53 34.8 | |
| | comp=Z,135nm,0.5s | | | | | | |
| **BNON** | **Benoni** | **0.65** | **70** | *e*S | **Sb** | **12 53 33.0** | **0.0** |
| BNON | | | | AML | AML | 12 53 42.5 | |
| | comp=Z,147nm,0.7s | | | | | | |
| **KSR** | **Koster** | **0.85** | **308** | *e*P | **Pb** | **12 53 27.3** | **+0.2** |
| KSR | | | | *e*S | **Sg** | **12 53 37.6** | **+0.2** |
| KSR | | | | AML | AML | 12 53 45.0 | |
| | comp=Z,68nm,1.1s | | | | | | |
| **BFSD** | **Buffelsfontein** | **0.90** | **238** | *e*P | **Pg** | **12 53 26.2** | **-1.1** |
| BFSD | | | | *e*S | **Sg** | **12 53 39.7** | **+0.7** |
| BFSD | | | | AML | AML | 12 53 45.1 | |
| | comp=Z,93nm,0.3s | | | | | | |
| **TLEK** | **Tau Lekoa** | **1.04** | **236** | *e*P | **Pg** | **12 53 29.0** | **-1.0** |
| TLEK | | | | *e*S | **Sg** | **12 53 43.6** | **+0.1** |
| TLEK | | | | AML | AML | 12 53 47.8 | |
| | comp=Z,102nm,0.1s | | | | | | |
| **SWZ** | **Schweizer** | **2.21** | **248** | *e*P | **Pn** | **12 53 48.2** | **+1.1** |
| SWZ | | | | *e*S | **Sn** | **12 54 15.0** | **+0.3** |
| SWZ | | | | AML | AML | 12 54 17.7 | |
| | comp=Z,96nm,0.2s | | | | | | |
| **LBTB** | **Lobatse** | **2.29** | **306** | *i* P | **Pb** | **12 53 50.9** | **-0.7** |
| LBTB | | | | *i* S | **Sb** | **12 54 20.0** | **-0.2** |
| **BOSA** | **Boshof** | **3.07** | **223** | *i* P | **Pn** | **12 53 59.5** | **+0.6** |
| BOSA | | | | *i* S | **Sb** | **12 54 43.3** | **+0.8** |
| **UPI** | **Upington** | **6.01** | **249** | *e*P | **Pn** | **12 54 40.4** | **+1.1** |
| UPI | | | | *e*S | **Sn** | **12 55 46.0** | **-2.3** |
| UPI | | | | AML | AML | 12 56 16.9 | |
| | comp=Z,7.4nm,0.4s | | | | | | |

*SJA* ***08*** *13:03:20.5±1.0, 34°.36S×73°.45W, h10km, ML4.1, MW4.3*
*IDC* ***08*** *13:03:32.5±0.9, 34°.02S×72°.15W, h0km, mb3.8/6, mb1 3.9/7, mb1mx3.8/30, mbtmp3.8/7, ML3.3/2, MS3.0/3, Ms1 3.0/3, ms1mx2.7/22, Error ellipse: s-maj=29.6km s-min=17.2km az=110.0*
*ISCJB* ***08*** *13:03:34.1±1.2, 34°.09S±0°.04×72°.46W±0°.06, h22km±8km, mb3.8/5, MS2.9/1, Error ellipse: s-maj=9.1km s-min=6.2km az=31.5*
*GUC* ***08*** *13:03:34.8±0.6, 34°.05S×72°.26W, h16km±5km, ML3.9*
**ISC 08 13:03:32.7**±3.2, **34°.05S**±0°.04×**72°.4W**±0°.1, **h3**km±19km, **n32**, σ1s.07/38, **mb4.2**/5, **6C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.45** | **139** | ⇓*i*P | **Pb** | **13 03 43.6** | **+0.4** |
| CHPI | | | | *i* S | **Sb** | **13 03 49.9** | **-0.5** |
| **NICH** | **Los Niches** | **1.33** | **136** | ⇑*i*P | **Pb** | **13 03 58.2** | **0.0** |
| NICH | | | | *i* S | **Sg** | **13 04 16.6** | **+1.1** |
| **RCDM** | **Rinconada Maip** | **1.41** | **67** | *e*P | **Pb** | **13 03 59.4** | **-0.3** |
| RCDM | | | | *i* S | **Sg** | **13 04 18.0** | **-0.1** |
| **ANTU** | **Antumapu** | **1.52** | **72** | ⇑*i*P | **Pb** | **13 04 01.6** | **+0.1** |
| ANTU | | | | *i* S | **Sg** | **13 04 21.6** | **+0.2** |
| ANTU | | | | AML | AML | 13 04 31.0 | |
| | comp=E,3μm,0.5s | | | | | | |
| **SAN** | **Santiago** | **1.54** | **68** | ⇑*i*P | **Pb** | **13 04 01.6** | **-0.2** |
| SAN | | | | *i* S | **Sg** | **13 04 21.7** | **-0.4** |
| **ROC1** | **El Roble** | **1.55** | **47** | *e*P | **Pb** | **13 04 02.0** | **-0.2** |
| ROC1 | | | | *e*S | **Sg** | **13 04 23.9** | **+1.2** |
| **PCH** | **Pirque** | **1.60** | **75** | ⇑*i*P | **Pb** | **13 04 02.4** | **-0.4** |
| **CLCH** | **Cerro Calan** | **1.66** | **67** | ⇑*i*P | **Pb** | **13 04 03.4** | **-0.4** |
| CLCH | | | | *i* S | **Sg** | **13 04 25.4** | **-0.5** |
| CLCH | | | | AML | AML | 13 04 34.5 | |
| | comp=N,3μm,0.7s | | | | | | |
| **PEL** | **Peldehue** | **1.67** | **58** | ⇓*i*P | **Pb** | **13 04 03.9** | **-0.2** |
| PEL | | | | *i* S | **Sg** | **13 04 25.6** | **-0.6** |
| PEL | | | | AML | AML | 13 04 34.0 | |
| | comp=E,3μm,0.5s | | | | | | |
| **COCH** | **Cobquecura** | **2.10** | **189** | ⇑*i*P | **Pn** | **13 04 08.1** | **-0.6** |
| **AUSP** | **Uspallata** | **3.09** | **55** | *e*P | **Pb** | **13 04 26.6** | **-1.8** |
| **AAGR** | **Agrelo** | **3.10** | **73** | *e*P | **Pb** | **13 04 27.3** | **-1.3** |
| **ARCO** | **CERRO ARCO** | **3.11** | **68** | *e*P | **Pb** | **13 04 26.7** | **-2.1** |
| ARCO | | | | AML | AML | 13 05 19.8 | |
| | comp=Z,250nm,0.8s | | | | | | |
| **ASAL** | **Salagasta** | **3.29** | **65** | *e*P | **Pb** | **13 04 30.6** | **-1.2** |
| **RTLS** | **Leoncito** | **3.42** | **50** | *e*P | Pn | 13 04 30.0 | +2.9 |
| RTLS | | | | *e*S | **Sg** | **13 05 22.0** | **-0.6** |
| **RTCV** | **Cerro Valdivia** | **3.88** | **57** | *e*P | Pn | 13 04 36.0 | +2.7 |
| **CFAA** | **Coronel Fontan** | **4.24** | **56** | Pn | **Pn** | **13 04 37.9** | **-0.3** |
| | comp=Z,0.4nm,0.3s,baz=226,slow=11,SNR=12 | | | | | | |
| CFAA | | | | Lg | Lg | 13 05 40.3 | |
| | comp=Z,1.1nm,0.3s,baz=94,slow=11,SNR=3.7 | | | | | | |
| CFAA | | | | LR | LR | 13 06 20.1 | |
| | comp=Z,26nm,21.1s,baz=226,slow=41 | | | | | | |
| **CFAA** | **Coronel Fontan** | **4.24** | **56** | *e*P | **Pn** | **13 04 40.8** | **+2.6** |
| **AMOG** | **MOGNA** | **4.51** | **48** | *e*P | **Pn** | **13 04 44.2** | **+2.3** |
| **ACAN** | **Cantantal** | **4.69** | **69** | *e*P | Pn | 13 04 47.0 | +2.6 |
| **AGUA** | **GUANDACOL** | **5.62** | **37** | *e*P | **Pn** | **13 04 59.2** | **+1.9** |
| **VCA** | **Vinchina** | **6.38** | **35** | *e*P | **Pn** | **13 05 09.4** | **+1.7** |
| **LVC** | **Limon Verde** | **11.79** | **16** | LR | LR | 13 10 55.0 | |
| | comp=Z,530nm,18.9s,baz=198,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **18.09** | **13** | P | **P** | **13 07 46.6** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=181,slow=8.9,SNR=8.3 | | | | | | |
| **SIV** | **San Ignacio** | **20.66** | **32** | P | **P** | **13 08 12.5** | **-1.1** |
| | comp=Z,1.1nm,0.5s,baz=233,slow=18,SNR=5.8 | | | | | | |
| SIV | | | | LR | LR | 13 17 20.3 | |
| | comp=Z,49nm,21.3s,baz=237,slow=40 | | | | | | |
| **SNAA** | **Sanae** | **51.64** | **158** | P | **P** | **13 12 40.0** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=278,slow=8.2,SNR=9.3 | | | | | | |
| **QSPA** | **South Pole Qui** | **56.18** | **180** | P | **P** | **13 13 14.4** | **+0.8** |
| | comp=Z,2.6nm,1.0s,baz=154,slow=1.1,SNR=7.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.65** | **331** | P | **P** | **13 14 44.0** | **+0.5** |
| | comp=Z,0.2nm,0.6s,baz=162,slow=9.5,SNR=3.1 | | | | | | |
| **MAW** | **Mawson** | **73.20** | **164** | P | **P** | **13 15 04.8** | **+0.4** |
| | comp=Z,1.3nm,0.6s,baz=220,slow=5.0,SNR=7.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.48** | **70** | P | **P** | **13 16 06.2** | **-1.0** |
| | comp=Z,1.2nm,0.7s,baz=275,slow=4.0,SNR=6.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **154.41** | **32** | PKPbc | **PKPbc** | **13 23 33.0** | **-0.9** |
| | comp=Z,1.7nm,0.6s,baz=298,slow=3.9,SNR=7.6 | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **13 23 47.9** | **-0.3** |
| | comp=Z,1.4nm,0.7s,baz=284,slow=5.2,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **157.00** | **49** | PKPab | **PKPab** | **13 23 59.5** | **-0.1** |
| | comp=Z,0.3nm,0.6s,baz=298,slow=3.1,SNR=3.1 | | | | | | |

*ISCJB* ***08*** *13:12:26.7±1.7, 43°.22N±0°.10×79°.6E±0°.1, h14km±6km, Error ellipse: s-maj=20.3km s-min=6.8km az=141.7*
*KRNET* ***08*** *13:12:26.0±0.1, 43°.11N×79°.44E, mb2.7*
**ISC 08 13:12:25.0**±2.2, **43°.1N**±0°.1×**79°.5E**±0°.1, **h14**km±10km, **n8**, σ1s.19/16, **12C-5D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDGK** | **Podgornoye** | **0.24** | **353** | ⇓P | **Pg** | **13 12 30.8** | **+0.5** |
| | 34nm,0.3s | | | | | | |
| PDGK | | | | ⇑S | **Sg** | **13 12 33.3** | **-0.5** |
| | 102nm,0.3s | | | | | | |
| **PDGK** | **Podgornoye** | **0.24** | **353** | ⇑*i*P | **Pg** | **13 12 30.5** | **+0.2** |
| | baz=8.0 | | | | | | |
| PDGK | | | | ⇑*i*S | **Sg** | **13 12 33.4** | **-0.4** |
| | baz=8.0 | | | | | | |
| **ANVS** | **Anan'yevo** | **1.40** | **258** | ⇓*i*P | **Pg** | **13 12 52.1** | **+0.2** |
| | baz=256 | | | | | | |
| ANVS | | | | ⇓*i*S | **Sg** | **13 13 11.6** | **+1.5** |
| | baz=256 | | | | | | |
| **ULHL** | **Ulahol** | **2.56** | **252** | ⇑*i*P | **Pb** | **13 13 10.7** | **-0.2** |
| | baz=251 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sb** | **13 13 43.9** | **+1.5** |
| | baz=251 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.71** | **259** | ⇑*i*P | **Pb** | **13 13 12.8** | **-0.5** |
| | baz=258 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sb** | **13 13 46.8** | **+0.4** |
| | baz=258 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.89** | **268** | ⇑*i*P | **Pb** | **13 13 15.0** | **-1.4** |
| | baz=267 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sb** | **13 13 50.6** | **-1.1** |
| | baz=267 | | | | | | |
| **NRN** | **Naryn** | **3.10** | **239** | ⇑*i*P | **Pb** | **13 13 18.1** | **-1.9** |
| | baz=238 | | | | | | |
| NRN | | | | ⇑*i*S | **Sb** | **13 13 56.7** | **-1.1** |
| | baz=238 | | | | | | |
| **MK31** | **Makanchi Array** | **4.20** | **27** | ⇑Pn | **Pn** | **13 13 30.1** | **+1.6** |
| | 0.1nm,0.2s,baz=213,slow=16,SNR=11 | | | | | | |
| MK31 | | | | ⇓Sn | **Sn** | **13 14 16.4** | **-1.0** |
| | 0.6nm,0.3s | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 13 14 28.7 | |
| | 0.3nm,0.2s,baz=213,slow=27,SNR=7.2 | | | | | | |

*IDC* ***08*** *13:13:58.0±0.7, 22°.22S×175°.19W, h0km, mb4.4/13, mb1 4.6/13, mb1mx4.5/23, mbtmp4.3/13, MS3.4/12, Ms1 3.4/12, ms1mx3.3/26, Error ellipse: s-maj=27.2km s-min=20.5km az=131.0*
*ISCJB* ***08*** *13:14:01.5±0.7, 22°.3S±0°.1×175°.3W±0°.1, h33km, mb4.3/14, MS3.5/10, Error ellipse: s-maj=17.6km s-min=16.5km az=175.1*
*NEIC* ***08*** *13:14:01.5±0.6, 22°.12S×175°.11W, h25km, mb4.4/1, Error ellipse: s-maj=18.7km s-min=13.5km az=141.0*
**ISC 08 13:14:03.0**±0.7, **22°.2S**±0°.1×**175°.2W**±0°.1, **h33**km, **n41**, σ0s.75/26, **mb4.4**/14, **MS3.5**/10, **1C-1D, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **7.79** | **304** | *e*Pn | **Pn** | **13 15 54.8** | **+0.6** |
| | 52nm,1.0s | | | | | | |
| **AFI** | **Afiamalu** | **8.90** | **22** | Pn | Pn | 13 16 03.2 | -6.2 |
| | 6.0nm,0.3s,baz=163,slow=1.8,SNR=12 | | | | | | |
| AFI | | | | Sn | Sn | 13 17 33.4 | -15 |
| | 9.1nm,0.3s,baz=120,slow=20,SNR=3.5 | | | | | | |
| AFI | | | | LR | LR | 13 18 11.8 | |
| | comp=Z,35nm,20.2s,baz=191,slow=29 | | | | | | |
| **AFI** | **Afiamalu** | **8.90** | **22** | *e*Pn | Pn | 13 16 03.4 | -6.1 |
| | 52nm,0.8s | | | | | | |
| AFI | | | | Sn | Sn | 13 17 33.4 | -15 |
| **RAR** | **Rarotonga** | **14.36** | **89** | Pn | Pn | 13 17 13.3 | -11 |
| | 4.5nm,0.3s,baz=259,slow=10,SNR=9.7 | | | | | | |
| RAR | | | | Sn | Sn | 13 19 34.9 | -27 |
| | 2.7nm,0.3s,baz=354,slow=18,SNR=3.8 | | | | | | |
| RAR | | | | LR | LR | 13 23 27.4 | |
| | comp=Z,136nm,18.1s,baz=284,slow=40 | | | | | | |
| **DZM** | **Mont Dzumac** | **17.02** | **267** | *e*LR | LR | 13 22 08.9 | |
| | 526nm,23.1s | | | | | | |
| **TBI** | **Tubuai** | **23.73** | **98** | *e*LQ | LQ | 13 23 39.8 | |
| | 406nm,27.8s | | | | | | |
| TBI | | | | *e*LR | LR | 13 24 36.6 | |
| | 452nm,29.0s | | | | | | |
| **TBI** | **Tubuai** | **23.73** | **98** | *e*T | T | 13 43 32.1 | |
| | 7.9nm,0.3s | | | | | | |
| **RPZ** | **Rata Peaks** | **24.26** | **205** | LR | LR | 13 28 06.1 | |
| | comp=Z,287nm,19.0s,baz=30,slow=35 | | | | | | |
| **PAE** | **Paea** | **24.48** | **84** | *e*T | T | 13 44 29.0 | |
| | 24nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **24.50** | **84** | *e*LR | LR | 13 25 09.4 | |
| | 489nm,26.0s,baz=252 | | | | | | |
| **PPT2** | **Papeete2** | **24.50** | **84** | *e*T | T | 13 44 31.5 | |
| | 14nm,0.3s | | | | | | |
| **TIAR** | **Tiarei** | **24.72** | **84** | *e*T | T | 13 44 47.1 | |
| | 2.9nm,0.2s | | | | | | |
| **TVO** | **Taravao** | **24.75** | **84** | *e*T | T | 13 44 49.3 | |
| | 2.9nm,0.3s | | | | | | |
| **HNR** | **Honiara** | **27.05** | **294** | LR | LR | 13 29 06.0 | |
| | comp=Z,69nm,19.6s,baz=112,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **35.96** | **266** | P | **P** | **13 21 00.7** | **-0.3** |
| | 4.7nm,0.6s,baz=112,slow=9.6,SNR=9.2 | | | | | | |
| **CTAO** | **Charters Tower** | **35.96** | **266** | *e*P | **P** | **13 21 00.9** | **-0.1** |
| **RKT** | **Rikitea** | **37.03** | **99** | *e*LR | LR | 13 30 43.4 | |
| | 272nm,29.8s | | | | | | |
| **RKT** | **Rikitea** | **37.03** | **99** | *e*T | T | 14 00 08.2 | |
| | 3.2nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **46.70** | **258** | P | **P** | **13 22 28.4** | **-0.7** |
| | 6.6nm,0.8s,baz=92,slow=8.4,SNR=56 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 24 02.5** | **0.0** |
| | 1.6nm,1.0s,baz=115,slow=4.3,SNR=5.1 | | | | | | |
| ASAR | | | | LR | LR | 13 40 42.3 | |
| | comp=Z,163nm,19.8s,baz=112,slow=34 | | | | | | |
| **WRAB** | **Tennant Creek** | **46.97** | **263** | *e*P | **P** | **13 22 29.6** | **-1.7** |
| | 3.8nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.98** | **263** | P | **P** | **13 22 29.9** | **-1.4** |
| | 5.2nm,0.7s,baz=100,slow=8.1,SNR=67 | | | | | | |
| WRA | | | | PcP | **PcP** | **13 24 03.9** | **+0.4** |
| | 1.4nm,0.8s,baz=96,slow=3.7,SNR=5.5 | | | | | | |
| **VNDA** | **Vanda** | **56.43** | **186** | P | **P** | **13 23 41.2** | **+0.3** |
| | 1.2nm,0.9s,baz=14,slow=6.6,SNR=6.3 | | | | | | |
| VNDA | | | | LR | LR | 13 46 42.1 | |
| | comp=Z,22nm,18.8s,baz=348,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **73.18** | **322** | P | **P** | **13 25 29.9** | **-0.7** |
| | 3.5nm,0.8s,baz=159,slow=6.1,SNR=10 | | | | | | |
| **PETK** | **Petropavlovsk-** | **78.65** | **344** | P | **P** | **13 26 01.1** | **-0.3** |
| | 9.2nm,0.8s,baz=129,slow=8.8,SNR=8.1 | | | | | | |
| PETK | | | | LR | LR | 13 53 45.7 | |
| | comp=Z,15nm,21.7s,baz=132,slow=30 | | | | | | |
| **KSRS** | **Korea Array** | **79.94** | **317** | P | **P** | **13 26 09.4** | **+0.7** |
| | 1.0nm,0.6s,baz=143,slow=7.1,SNR=4.8 | | | | | | |
| KSRS | | | | LR | LR | 13 55 55.0 | |
| | comp=Z,45nm,19.7s,baz=174,slow=32 | | | | | | |
| **KSAR** | **Wonju Array Be** | **79.95** | **317** | P | **P** | **13 26 09.4** | **+0.6** |
| **NVAR** | **Mina Array Bea** | **80.53** | **42** | P | **P** | **13 26 12.8** | **+0.5** |
| | 0.8nm,0.9s,baz=218,slow=8.2,SNR=3.8 | | | | | | |
| **MAW** | **Mawson** | **80.80** | **199** | P | **P** | **13 26 13.5** | **+0.5** |
| | 2.4nm,0.7s,baz=133,slow=8.9,SNR=4.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **81.89** | **325** | P | **P** | **13 26 19.6** | **+0.6** |
| | 11nm,0.9s,baz=135,slow=2.8,SNR=25 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.81** | **56** | P | **P** | **13 26 38.8** | **-0.8** |
| | 0.4nm,0.9s,baz=213,slow=4.3,SNR=4.1 | | | | | | |
| TXAR | | | | LR | LR | 13 56 12.0 | |
| | comp=Z,19nm,20.9s,baz=0.0,slow=30 | | | | | | |
| **DLBC** | **Dease Lake** | **88.65** | **22** | LR | LR | 13 59 33.9 | |
| | comp=Z,22nm,20.9s,baz=288,slow=31 | | | | | | |
| **ILAR** | **Eielson Array** | **89.45** | **12** | P | **P** | **13 26 56.0** | **-0.2** |
| | 1.4nm,1.0s,baz=220,slow=4.9,SNR=8.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.16** | **289** | P | **P** | **13 27 15.9** | **+1.5** |
| | 4.9nm,0.8s,baz=126,slow=2.9,SNR=28 | | | | | | |
| CMAR | | | | LR | LR | 14 06 07.6 | |
| | comp=Z,14nm,21.0s,baz=10.0,slow=34 | | | | | | |
| **INK** | **Inuvik** | **95.28** | **14** | LR | LR | 14 09 44.2 | |
| | comp=Z,19nm,18.2s,baz=244,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **114.30** | **313** | PKiKP | PKPdf | 13 32 38.3 | -0.9 |
| | 0.7nm,0.7s,baz=63,slow=0.3,SNR=5.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **131.09** | **351** | PKP | **PKPdf** | **13 33 10.5** | **-0.2** |
| | 2.0nm,0.8s,baz=10,slow=1.0,SNR=4.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.79** | **332** | PKPbc | **PKPab** | **13 33 38.0** | **-1.0** |
| | 4.0nm,0.6s,baz=40,slow=4.0,SNR=23 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.95** | **312** | PKPbc | **PKPbc** | **13 33 50.3** | **-0.1** |
| | 3.8nm,0.9s,baz=132,slow=3.7,SNR=13 | | | | | | |
| **CLL** | **Collm** | **150.30** | **350** | ⇓*i*PKPbc | **PKPbc** | **13 33 51.1** | **+0.5** |
| | comp=Z,16nm,1.0s | | | | | | |
| CLL | | | | ⇑*i*PKPab | **PKPab** | **13 33 57.0** | **+0.1** |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **BRG** | **Berggiesshubel** | **150.55** | **348** | *e*PKP | **PKPbc** | **13 33 51.8** | **+0.6** |
| | comp=Z,8.4nm,1.0s | | | | | | |
| **GERES** | **GERESS Array B** | **152.53** | **347** | PKPbc | **PKPbc** | **13 33 56.0** | **0.0** |
| | comp=Z,1.8nm,0.8s,baz=46,slow=5.8,SNR=7.3 | | | | | | |

**MEX 08 13:17:40.7**±0.8, **17°.28N**×**91°.87W**, **h117**km±38km, **MD3.9**, **Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TGIG** | | **1.29** | **248** | *e*P | Pn | 13 18 03.9 | -1.8 |
| TGIG | | | | *e*S | Sn | 13 18 23.3 | -1.4 |
| **PCIG** | | **2.03** | **220** | *e*P | Pn | 13 18 13.2 | -1.2 |
| PCIG | | | | *i* S | Sn | 13 18 38.1 | -2.0 |

*ISCJB* ***08*** *13:41:39.8±0.5, 39°.47N±0°.03×31°.38E±0°.04, h3km±7km, Error ellipse: s-maj=5.4km s-min=5.3km az=17.0*
*CSEM* ***08*** *13:41:39.9±0.2, 39°.46N×31°.38E, h5km, MD2.7, Error ellipse: s-maj=5.2km s-min=4.0km az=23.0*
*ISK* ***08*** *13:41:39.3, 39°.49N×31°.40E, h5km, MD2.7*
*DDA* ***08*** *13:41:39.4, 39°.46N×31°.41E, h7km, Md2.7*
**ISC 08 13:41:39.9**±1.1, **39°.44N**±0°.03×**31°.39E**±0°.02, **h3**km±11km, **n27**, σ0s.87/38, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVRH** | **Sivrihisar-ESK** | **0.10** | **87** | *e*PG | **Pg** | **13 41 41.5** | **-0.5** |
| SVRH | | | | *e*SG | **Sg** | **13 41 43.9** | **+0.5** |
| **SVRH** | **Sivrihisar-ESK** | **0.10** | **87** | *e*Pg | **Pg** | **13 41 41.5** | **-0.5** |
| SVRH | | | | *e*Sg | **Sg** | **13 41 43.9** | **+0.5** |
| **ESKT** | **Eskisehir** | **0.43** | **281** | *e*PG | **Pg** | **13 41 48.1** | **-0.1** |
| ESKT | | | | *e*SG | **Sg** | **13 41 54.7** | **+1.1** |
| **ESKT** | **Eskisehir** | **0.43** | **281** | *e*Pg | **Pg** | **13 41 48.1** | **-0.1** |
| ESKT | | | | *e*Sg | **Sg** | **13 41 54.7** | **+1.1** |
| **ESKT** | **Eskisehir** | **0.43** | **281** | P | **Pg** | **13 41 47.8** | **-0.3** |
| ESKT | | | | S | **Sg** | **13 41 54.8** | **+1.1** |
| **SEYT** | **Eskypehyr** | **0.43** | **281** | *i* P | **Pg** | **13 41 47.8** | **-0.3** |
| SEYT | | | | *i* S | **Sg** | **13 41 54.8** | **+1.1** |
| **AUMIH** | **MIHALICIK** | **0.43** | **9** | P | **Pg** | **13 41 47.6** | **-0.7** |
| AUMIH | | | | S | **Sg** | **13 41 53.8** | **-0.1** |
| **KIZT** | **Kizilcal** | **0.68** | **146** | *e*PG | **Pb** | **13 41 53.7** | **-0.8** |
| **KIZT** | **Kizilcal** | **0.68** | **146** | *e*Pg | **Pb** | **13 41 53.7** | **-0.8** |
| **BOLV** | **Bolvadin** | **0.80** | **206** | *i* P | **Pg** | **13 41 55.5** | **+0.2** |
| BOLV | | | | *i* S | **Sb** | **13 42 07.7** | **-0.1** |
| **BOLV** | **Bolvadin** | **0.80** | **206** | P | **Pg** | **13 41 55.5** | **+0.2** |
| BOLV | | | | S | **Sb** | **13 42 07.7** | **-0.1** |
| **BORA** | **Eskisehir** | **0.85** | **302** | *i* P | **Pg** | **13 41 55.8** | **-0.4** |
| **BORA** | **Eskisehir** | **0.85** | **302** | P | **Pg** | **13 41 55.8** | **-0.4** |
| BORA | | | | S | **Sn** | **13 42 13.2** | **+1.3** |
| **MDUB** | **Mudurnu** | **1.04** | **352** | *e*PG | **Pg** | **13 41 59.3** | **-0.6** |
| **MDUB** | **Mudurnu** | **1.04** | **352** | *e*Pg | **Pg** | **13 41 59.3** | **-0.6** |
| **SHUT** | **Suhut-Afyon** | **1.10** | **217** | *e*PN | **Pn** | **13 42 01.7** | **-0.7** |
| **SHUT** | **Suhut-Afyon** | **1.10** | **217** | *e*Pn | **Pn** | **13 42 01.7** | **-0.7** |
| **GULT** | **Gulveren** | **1.20** | **326** | *e*PN | **Pg** | **13 42 01.7** | **-1.2** |
| **GULT** | **Gulveren** | **1.20** | **326** | *e*Pn | **Pg** | **13 42 01.7** | **-1.2** |
| **AFSR** | **Af¯ar-Bala (A** | **1.30** | **89** | *e*PN | **Pg** | **13 42 05.1** | **+0.3** |
| **AFSR** | **Af¯ar-Bala (A** | **1.30** | **89** | *e*Pn | **Pg** | **13 42 05.1** | **+0.3** |
| **CAVI** | **Cavuskoy** | **1.41** | **303** | *e*PN | **Pn** | **13 42 06.3** | **-0.3** |
| **CAVI** | **Cavuskoy** | **1.41** | **303** | *e*Pn | **Pn** | **13 42 06.3** | **-0.3** |
| **CHBY** | **Cihanbeyli** | **1.45** | **126** | *e*PN | **Pg** | **13 42 07.5** | **-0.2** |
| **CHBY** | **Cihanbeyli** | **1.45** | **126** | *e*Pn | **Pg** | **13 42 07.5** | **-0.2** |
| **BCAM** | **Yenicaga** | **1.47** | **20** | *i* P | **Pg** | **13 42 08.3** | **+0.2** |
| **BCAM** | **Yenicaga** | **1.47** | **20** | P | **Pg** | **13 42 08.3** | **+0.2** |
| BCAM | | | | S | **Sg** | **13 42 30.4** | **+3.3** |

*NEIC* ***08*** *13:54:23.3, 51°.26N×175°.10W, h12km, ML2.5(AEIC), After AEIC.*
*IDC* ***08*** *13:54:24.7±1.4, 52°.34N×175°.46W, h0km, mb3.5/4, mb1 3.7/6, mb1mx3.5/39, mbtmp3.5/6, ML3.5/2, MS3.0/4, Ms1 3.0/4, ms1mx2.7/32, Error ellipse: s-maj=52.5km s-min=20.7km az=177.0*
**ISC 08 13:54:19.8**±2.5, **51°.2N**±0°.1×**175°.07W**±0°.05, **h7**km±19km, **n36**, σ1s.30/31, **mb3.5**/4, **MS3.1**/3, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **1.07** | **325** | P | **Pn** | **13 54 41.7** | **+0.6** |
| **GSCK** | **Great Sitkin C** | **1.08** | **321** | P | **Pn** | **13 54 41.9** | **+0.6** |
| **ETKA** | **Kagalaska Isla** | **1.08** | **310** | P | **Pn** | **13 54 42.0** | **+0.7** |
| ETKA | | | | S | **Sn** | **13 54 56.1** | **-0.5** |
| **GSTD** | **Great Sitkin T** | **1.11** | **323** | P | **Pn** | **13 54 42.4** | **+0.7** |
| GSTD | | | | S | **Sn** | **13 54 58.0** | **+0.6** |
| **GSTR** | **Great Sitkin T** | **1.11** | **327** | P | **Pn** | **13 54 42.6** | **+0.8** |
| **ATKA** | **Atka Island** | **1.17** | **27** | P | **Pb** | **13 54 42.5** | **+0.3** |
| ATKA | | | | S | **Sn** | **13 54 58.1** | **-0.6** |
| **ADAG** | **Mount Adagdak** | **1.25** | **311** | P | **Pn** | **13 54 45.3** | **+1.7** |
| **KOFP** | **Korovin Flat P** | **1.26** | **28** | P | **Pn** | **13 54 45.2** | **+1.3** |
| KOFP | | | | S | **Sn** | **13 55 03.4** | **+2.4** |
| **KOKL** | **Mount Kliuchef** | **1.27** | **25** | P | **Pn** | **13 54 45.8** | **+1.7** |
| **KOWE** | **Korovin West** | **1.30** | **23** | P | **Pn** | **13 54 45.8** | **+1.5** |
| **KOSE** | **Korovin Southe** | **1.33** | **28** | P | **Pn** | **13 54 46.6** | **+1.8** |
| **KIRH** | **Kanaga Island** | **1.46** | **301** | P | **Pb** | **13 54 47.9** | **+0.7** |
| KIRH | | | | S | **Sn** | **13 55 07.0** | **+1.2** |
| **KIKV** | **Kanaga Island** | **1.49** | **299** | P | **Pb** | **13 54 48.1** | **+0.4** |
| **KICM** | **Kanaga Island** | **1.52** | **300** | P | **Pb** | **13 54 48.9** | **+0.6** |
| **TAPA** | **Tanaga Point A** | **1.83** | **292** | P | **Pn** | **13 54 53.3** | **+1.7** |
| **TAFP** | **Tanaga Falls P** | **1.96** | **293** | P | **Pb** | **13 54 55.3** | **-0.5** |
| TAFP | | | | S | **Sb** | **13 55 20.1** | **-0.3** |
| **TASE** | **Tanaga Southea** | **1.97** | **291** | P | **Pb** | **13 54 55.6** | **-0.3** |
| **TANO** | **Tanaga North** | **2.04** | **293** | P | **Pb** | **13 54 56.9** | **-0.3** |
| **GAEA** | **Gareloi East** | **2.38** | **286** | P | **Pn** | **13 55 01.7** | **+2.5** |
| **GANE** | **Gareloi Northe** | **2.41** | **287** | P | **Pn** | **13 55 01.9** | **+2.4** |
| GANE | | | | S | **Sb** | **13 55 32.0** | **-1.1** |
| **AMKA** | **Amchitka** | **3.54** | **276** | P | **Pn** | **13 55 16.2** | **+1.2** |
| **KDAK** | **Kodiak Island** | **14.61** | **54** | Pn | **Pn** | **13 57 45.2** | **-1.4** |
| | 0.2nm,0.3s,baz=285,slow=16,SNR=3.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.79** | **287** | LR | LR | 14 04 27.8 | |
| | comp=Z,35nm,19.4s,baz=128,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **19.98** | **36** | P | **P** | **13 58 51.4** | **-0.9** |
| | 0.1nm,0.3s,baz=230,slow=8.6,SNR=11 | | | | | | |
| **BBB** | **Bella Bella** | **28.74** | **69** | LR | LR | 14 10 03.9 | |
| | comp=Z,42nm,18.5s,baz=220,slow=33 | | | | | | |
| **YAK** | **Yakutsk** | **31.31** | **312** | LR | LR | 14 13 44.5 | |
| | comp=Z,39nm,19.2s,baz=175,slow=38 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.45** | **211** | T | T | 14 37 58.0 | |
| | baz=18,slow=76,SNR=11 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.45** | **211** | T | T | 14 38 02.2 | |
| | baz=18,slow=76,SNR=9.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.47** | **211** | T | T | 14 38 04.0 | |
| | baz=18,slow=76,SNR=8.9 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.65** | **211** | T | T | 14 39 41.7 | |
| | baz=19 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.67** | **211** | T | T | 14 40 33.3 | |
| | baz=19 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.67** | **211** | T | T | 14 39 50.9 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=19 | | | | | | |
| NVAR | Mina Array Bea | 41.24 | 85 | P | P | 14 02 14.6 | +9.1 |
| | 0.3nm,0.7s,baz=296,slow=8.9,SNR=2.5 | | | | | | |
| KSRS | Korea Array | 41.99 | 274 | P | P | 14 02 15.4 | +4.2 |
| | 1.4nm,0.9s,baz=56,slow=9.1,SNR=4.6 | | | | | | |
| KSRS | | | | LR | LR | 14 18 21.6 | |
| | comp=Z,16nm,19.3s,baz=168,slow=34 | | | | | | |
| TXAR | Lajitas Array | 56.36 | 84 | P | P | 14 04 06.5 | +5.0 |
| | 0.3nm,0.8s,baz=311,slow=5.8,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 61.97 | 311 | P | P | 14 04 39.4 | -0.7 |
| | 0.4nm,0.5s,baz=45,slow=6.6,SNR=6.8 | | | | | | |

*AUST 08 14:00:13.9±0.0, 5°.35S×130°.95E, h88km, Error ellipse: s-maj=1.7km s-min=1.1km az=247.0*
*ISCJB 08 14:00:30.4±0.7, 6°.82S±0°.05×130°.4E±0°.1, h100km, mb3.4/1, Error ellipse: s-maj=14.9km s-min=7.2km az=178.4*
*IDC 08 14:00:32.4±2.4, 6°.88S×130°.26E, h108km±29km, mb3.2/1, mb1 3.5/5, mb1mx3.2/29, mbtmp3.8/5, Error ellipse: s-maj=40.7km s-min=23.5km az=92.0*

**ISC 08 14:00:30.8±1.1, 6°.90S±0°.06×130°.3E±0°.1, h100km, n10, σ2.92/11, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MTN | Manton Dam | 5.96 | 173 | P | Pn | 14 02 00.8 | +4.2 |
| | baz=7.5,SNR=25 | | | | | | |
| SIJI | Sorong | 6.06 | 9 | P | Pn | 14 01 59.3 | +1.4 |
| | 1.0nm,0.3s,baz=204,slow=20,SNR=21 | | | | | | |
| SIJI | | | | S | Sn | 14 03 03.6 | -2.3 |
| | 2.2nm,0.3s,baz=296,slow=23,SNR=8.0 | | | | | | |
| KDU | Kakadu | 6.13 | 160 | P | Pn | 14 02 03.2 | +4.4 |
| | baz=7.5,SNR=63 | | | | | | |
| SOEI | Soe | 6.65 | 244 | P | Pn | 14 02 08.8 | +2.7 |
| | baz=8.0,SNR=4.1 | | | | | | |
| BATI | Baumata | 7.38 | 243 | P | Pn | 14 02 17.5 | +1.6 |
| | 2.7nm,0.3s,baz=66,slow=10.0,SNR=4.4 | | | | | | |
| BATI | | | | S | Sn | 14 03 33.8 | -4.3 |
| | 3.9nm,0.3s,baz=128,slow=19,SNR=3.7 | | | | | | |
| KNRA | Kununurra | 8.86 | 190 | P | Pn | 14 02 37.7 | +1.6 |
| | baz=11,SNR=48 | | | | | | |
| WRA | Warramunga Arr | 13.54 | 164 | P | Pn | 14 03 39.5 | +0.7 |
| | 0.4nm,0.3s,baz=342,slow=13,SNR=29 | | | | | | |
| WRA | | | | S | Sn | 14 06 03.2 | -4.6 |
| | 0.7nm,0.3s,baz=341,slow=21,SNR=7.5 | | | | | | |
| ASAR | Alice Springs | 17.02 | 169 | P | Pn | 14 04 24.3 | +1.6 |
| | 0.4nm,0.3s,baz=341,slow=9.7,SNR=40 | | | | | | |
| ASAR | | | | S | Sn | 14 07 27.5 | -4.5 |
| | 0.1nm,0.3s,baz=356,slow=25,SNR=4.9 | | | | | | |
| WRKA | Warakurna | 18.15 | 186 | P | Pn | 14 04 38.7 | +2.4 |
| | baz=20,SNR=7.0 | | | | | | |
| MKAR | Makanchi Array | 68.32 | 327 | P | P | 14 11 21.8 | +0.5 |
| | 0.3nm,0.4s,baz=119,slow=7.6,SNR=5.0 | | | | | | |

*MOS 08 14:36:51.0±0.7, 52°.06N×153°.22E, h555km, mb4.5/1, Error ellipse: s-maj=28.8km s-min=15.0km az=56.3*
*KRSC 08 14:36:52.0±1.6, 51°.80N×154°.08E, h565km±25km, ML4.5*
*ISCJB 08 14:36:52.0±0.4, 52°.35N±0°.09×152°.40E±0°.09, h500km, mb3.2/7, Error ellipse: s-maj=12.7km s-min=6.7km az=161.1*
*IDC 08 14:36:53.3±1.2, 52°.37N×152°.42E, h505km±16km, mb2.8/7, mb1 3.1/11, mb1mx2.9/35, mbtmp3.8/11, Error ellipse: s-maj=19.7km s-min=13.3km az=129.0*

**ISC 08 14:36:52.9±0.6, 52°.3N±0°.1×152°.60E±0°.09, h500km, n47, σ1.25/49, mb3.0/7, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 2.73 | 125 | eP | P | 14 38 02.4 | +0.4 |
| PAU | Pauzhetka | 2.74 | 106 | eP | P | 14 38 03.1 | +1.1 |
| PAU | Pauzhetka | 2.74 | 106 | P | P | 14 38 03.1 | +1.1 |
| APC | Apacha | 2.85 | 75 | P | P | 14 38 03.7 | +1.0 |
| APC | Apacha | 2.85 | 75 | P | P | 14 38 03.7 | +1.0 |
| PETK | Petropavlovsk- | 3.21 | 73 | P | P | 14 38 05.9 | +0.8 |
| | 3.2nm,0.3s,baz=234,slow=4.6,SNR=74 | | | | | | |
| PETK | Petropavlovsk- | 3.21 | 73 | P | P | 14 38 05.9 | +0.8 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| GNL | Ganaly | 3.52 | 64 | eP | P | 14 38 09.2 | +1.7 |
| GNL | Ganaly | 3.52 | 64 | P | P | 14 38 09.2 | +1.7 |
| RUS | Russkaya | 3.63 | 85 | eP | P | 14 38 08.6 | +0.4 |
| RUS | | | | eS | S | 14 39 08.8 | -0.9 |
| RUS | Russkaya | 3.63 | 85 | P | P | 14 38 08.6 | +0.4 |
| RUS | | | | S | S | 14 39 08.8 | -0.9 |
| PET | Petropavlovsk | 3.76 | 76 | eP | P | 14 38 09.7 | +0.5 |
| PET | Petropavlovsk | 3.76 | 76 | eP | P | 14 38 09.6 | +0.4 |
| PET | | | | pmax | pmax | | |
| | comp=Z,62nm,0.9s | | | | | | |
| KRX | Arik | 3.82 | 71 | eP | P | 14 38 11.3 | +1.4 |
| AVH | Avacha | 3.85 | 73 | eP | P | 14 38 11.6 | +1.6 |
| AVH | Avacha | 3.85 | 73 | P | P | 14 38 11.6 | +1.6 |
| NLC | Nalytchevo | 4.19 | 75 | eP | P | 14 38 13.5 | +0.8 |
| NLC | Nalytchevo | 4.19 | 75 | P | P | 14 38 13.5 | +0.8 |
| SPN | Mys Shipunski | 4.59 | 77 | eP | P | 14 38 15.1 | -0.9 |
| SPN | | | | eS | S | 14 39 19.1 | -4.9 |
| SPN | Mys Shipunski | 4.59 | 77 | P | P | 14 38 15.1 | -0.9 |
| SPN | | | | S | S | 14 39 19.1 | -4.9 |
| ESO | Esso | 5.11 | 42 | eP | P | 14 38 22.9 | +2.3 |
| ESO | Esso | 5.11 | 42 | P | P | 14 38 22.9 | +2.3 |
| KZV | Kizimen | 5.37 | 55 | eP | P | 14 38 24.5 | +1.3 |
| TUMR | Tumrok | 5.38 | 53 | eP | P | 14 38 26.0 | +2.7 |
| TUMR | Tumrok | 5.38 | 53 | P | P | 14 38 26.0 | +2.7 |
| MKZ | Mys Kozlova | 5.91 | 64 | eP | P | 14 38 27.8 | -0.3 |
| MKZ | | | | eS | S | 14 39 40.8 | -5.3 |
| MKZ | Mys Kozlova | 5.91 | 64 | P | P | 14 38 27.8 | -0.3 |
| MKZ | | | | S | S | 14 39 40.8 | -5.3 |
| KBTR | Krutoberegovo | 7.16 | 53 | P | P | 14 38 38.2 | -2.2 |
| KBTR | | | | eS | S | 14 40 03.6 | -5.0 |
| KBTR | Krutoberegovo | 7.16 | 53 | P | P | 14 38 38.2 | -2.2 |
| KBTR | | | | S | S | 14 40 03.6 | -5.0 |
| ASAJ | Asahikawa | 10.55 | 223 | P | P | 14 39 16.6 | +0.6 |
| | baz=38,slow=18 | | | | | | |
| SEY | Seymchan | 10.67 | 359 | P | P | 14 39 18.1 | +1.1 |
| | comp=Z,0.4nm,0.3s,baz=172,slow=11,SNR=10 | | | | | | |
| MJAR | Matsushiro Arr | 18.75 | 219 | P | P | 14 40 40.3 | +0.2 |
| | comp=Z,1.1nm,0.3s,baz=20,slow=11,SNR=16 | | | | | | |
| MJAR | Matsushiro Arr | 18.75 | 219 | P | P | 14 40 40.3 | +0.2 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ILAR | Eielson Array | 32.59 | 44 | P | P | 14 42 42.0 | +0.2 |
| | comp=Z,0.7nm,0.6s,baz=282,slow=12,SNR=22 | | | | | | |
| MKAR | Makanchi Array | 44.31 | 292 | P | P | 14 44 16.7 | -0.8 |
| | comp=Z,0.6nm,0.4s,baz=65,slow=8.0,SNR=8.9 | | | | | | |
| RAMN | Ramite | 54.64 | 269 | eP | P | 14 45 33.2 | -1.0 |
| | comp=Z,14nm,0.4s | | | | | | |
| KKN | Kakani | 54.84 | 271 | eP | P | 14 45 34.8 | -0.8 |
| | comp=Z,12nm,0.5s | | | | | | |
| PKI | Pulchoki | 54.92 | 271 | eP | P | 14 45 35.2 | -1.1 |
| | comp=Z,17nm,1.0s | | | | | | |
| DMN | Daman | 55.08 | 271 | eP | P | 14 45 36.1 | -1.3 |
| | comp=Z,11nm,0.5s | | | | | | |
| KOLN | Koldanda | 55.89 | 272 | eP | P | 14 45 42.3 | -0.6 |
| | comp=Z,6.1nm,0.4s | | | | | | |
| FINES | FINESS Array B | 58.91 | 333 | P | P | 14 46 01.4 | -1.4 |
| | comp=Z,0.7nm,0.5s,baz=46,slow=6.0,SNR=3.7 | | | | | | |
| NVAR | Mina Array Bea | 60.26 | 65 | P | P | 14 46 13.2 | +0.8 |
| | comp=Z,0.4nm,0.6s,baz=293,slow=7.5,SNR=4.2 | | | | | | |
| WRA | Warramunga Arr | 73.67 | 198 | P | P | 14 47 35.0 | 0.0 |
| | comp=Z,0.4nm,0.7s,baz=2.5,slow=6.2,SNR=3.0 | | | | | | |
| WRA | Warramunga Arr | 73.67 | 198 | P | P | 14 47 35.0 | 0.0 |
| TXAR | Lajitas Array | 75.09 | 61 | P | P | 14 47 44.0 | +0.8 |
| | comp=Z,0.3nm,0.5s,baz=307,slow=4.9,SNR=5.3 | | | | | | |
| TXAR | Lajitas Array | 75.09 | 61 | P | P | 14 47 44.0 | +0.8 |
| ASAR | Alice Springs | 77.38 | 198 | P | P | 14 47 56.2 | +0.6 |
| | comp=Z,0.3nm,0.4s,baz=8.8,slow=5.8,SNR=2.8 | | | | | | |

**JMA 08 15:07:42.3±0.2, 28°.91N×129°.91E, h34km, M2.2, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JAM | Amami Oshima | 0.56 | 208 | P | Pn | 15 07 53.0 | -0.8 |
| JAM | | | | S | Sb | 15 08 01.3 | -0.7 |
| JZK | Kikaishima | 0.60 | 175 | P | Pb | 15 07 54.5 | 0.0 |
| JTAJ | Takarajima | 0.67 | 292 | P | Pn | 15 07 55.4 | +0.1 |
| JTAJ | | | | eS | Sb | 15 08 05.1 | +0.4 |
| JAMN | Amaminishikomi | 0.93 | 224 | P | Pn | 15 07 59.2 | +0.3 |
| JNN | Nakanoshima | 0.93 | 358 | P | Pn | 15 07 58.6 | -0.4 |
| JNN | | | | eS | Sn | 15 08 11.1 | 0.0 |
| JTK | Tokunoshima | 1.40 | 217 | P | Pn | 15 08 06.6 | +1.1 |
| JYAK | Yakushimahirau | 1.42 | 21 | P | Pn | 15 08 05.3 | -0.5 |

*NIED 08 15:08:00, 28°.90N×129°.90E, h8km, Mw4.3 Best double couple: Mo2.79000×10^15 NP1:φs169.00000°, δ17.00000°, λ-78.00000°. NP2:φs337.00000°, δ73.00000°, λ-94.00000°.*
*IDC 08 15:08:19.7±1.0, 28°.77N×130°.07E, h0km, mb3.7/7, mb1 3.9/10, mb1mx3.7/29, mbtmp3.7/10, ML3.4/4, MS3.1/2, Ms1 3.1/2, ms1mx2.7/37, Error ellipse: s-maj=31.5km s-min=15.4km az=84.0*
*ISCJB 08 15:08:20.6±0.8, 28°.90N±0°.03×130°.07E±0°.06, h20km±7km, mb3.6/8, MS2.9/1, Error ellipse: s-maj=10.0km s-min=3.9km az=21.0*
*JMA 08 15:08:21.9±0.1, 28°.92N×129°.92E, h38km, M3.9*

**ISC 08 15:08:19.3±1.6, 28°.88N±0°.04×130°.02E±0°.07, h3km±11km, n36, σ1.27/34, mb3.7/8, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JZK | Kikaishima | 0.57 | 185 | P | Pn | 15 08 34.4 | +0.1 |
| JAM | Amami Oshima | 0.60 | 218 | P | Pb | 15 08 32.9 | +0.5 |
| JAM | | | | S | Sb | 15 08 41.2 | 0.0 |
| JTAJ | Takarajima | 0.77 | 291 | P | Pb | 15 08 35.0 | -0.3 |
| JTAJ | | | | S | Sb | 15 08 45.3 | -0.9 |
| JNN | Nakanoshima | 0.96 | 352 | P | Pg | 15 08 38.2 | +0.3 |
| JNN | | | | eS | Sg | 15 08 50.7 | +0.3 |
| JAMN | Amaminishikomi | 0.98 | 230 | P | Pb | 15 08 39.0 | 0.0 |
| JYAK | Yakushimahirau | 1.42 | 17 | P | Pn | 15 08 45.0 | -1.0 |
| JYAK | | | | eS | Sg | 15 09 03.8 | -1.1 |
| JTK | Tokunoshima | 1.45 | 221 | P | Pn | 15 08 46.3 | -0.1 |
| JTK | | | | eS | Sg | 15 09 05.0 | -0.8 |
| JKC | Kuchinoerabu | 1.58 | 5 | P | Pn | 15 08 47.1 | -1.2 |
| JKC | | | | eS | Sn | 15 09 06.3 | -2.9 |
| JTN | Tanegashima 3 | 1.95 | 25 | P | Pn | 15 08 53.4 | 0.0 |
| JOKE | Okinoerabujima | 1.99 | 221 | P | Pn | 15 08 54.4 | +0.5 |
| JOW | Kunigami | 2.56 | 218 | P | Pn | 15 09 02.5 | +0.7 |
| JOW | Kunigami | 2.56 | 218 | Pn | Pn | 15 09 02.2 | +0.4 |
| | 4.2nm,0.3s,baz=57,slow=14,SNR=42 | | | | | | |
| JOW | | | | Sn | Sb | 15 09 36.6 | -1.3 |
| | 3.6nm,0.3s,baz=111,slow=26,SNR=3.5 | | | | | | |
| JIH | Iheya | 2.59 | 225 | P | Pn | 15 09 02.6 | +0.5 |
| JNTH | Nagotoyohara | 2.95 | 217 | P | Pn | 15 09 08.6 | +1.5 |
| JAGN | Aguni-jima | 3.36 | 228 | P | Pn | 15 09 13.6 | +0.8 |
| JKE | Kume jima 2 | 3.84 | 229 | P | Pn | 15 09 20.0 | +0.7 |
| JNU | Nakatsue | 4.29 | 10 | Pn | Pn | 15 09 27.7 | +2.2 |
| | 7.1nm,0.3s,baz=195,slow=8.2,SNR=53 | | | | | | |
| JNU | | | | Sn | Sn | 15 10 19.3 | +3.1 |
| | baz=218,slow=19,SNR=1.7 | | | | | | |
| JNU | | | | LR | LR | 15 11 28.2 | |
| | comp=Z,255nm,18.0s,baz=167,slow=43 | | | | | | |
| KSRS | Korea Array | 8.73 | 349 | Pn | Pn | 15 10 28.6 | +2.2 |
| | 0.1nm,0.3s,baz=166,slow=13,SNR=3.4 | | | | | | |
| MAT | Matsushiro | 10.28 | 40 | P | Pn | 15 10 48.9 | +1.1 |
| MJAR | Matsushiro Arr | 10.28 | 40 | Pn | Pn | 15 10 49.3 | +1.4 |
| | 1.4nm,0.3s,baz=248,slow=14,SNR=20 | | | | | | |
| ASAJ | Asahikawa | 18.22 | 30 | P | Pn | 15 12 31.3 | -2.0 |
| | 0.2nm,0.3s,baz=333,slow=4.5,SNR=4.2 | | | | | | |
| GUMO | Guam | 20.53 | 135 | LR | LR | 15 18 33.8 | |
| | comp=Z,45nm,19.4s,baz=344,slow=30 | | | | | | |
| SONM | Songino Array | 26.31 | 322 | P | P | 15 13 56.5 | +0.2 |
| | 1.4nm,0.7s,baz=139,slow=9.4,SNR=5.6 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.70 | 97 | T | T | 15 52 21.8 | |
| | baz=297,slow=75,SNR=7.2 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.70 | 97 | T | T | 15 52 21.8 | |
| | baz=297,slow=75,SNR=6.9 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.72 | 97 | T | T | 15 52 24.3 | |
| | baz=297,slow=75,SNR=6.2 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.01 | 99 | T | T | 15 52 36.7 | |
| | baz=288,slow=74 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.01 | 99 | T | T | 15 52 25.2 | |
| | baz=288,slow=74 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.02 | 99 | T | T | 15 52 33.4 | |
| | baz=288 | | | | | | |
| MKAR | Makanchi Array | 41.03 | 309 | P | P | 15 16 04.8 | +0.9 |
| | 0.2nm,0.4s,baz=126,slow=9.5,SNR=3.4 | | | | | | |
| ZALV | Zalesovo Beam | 41.16 | 320 | P | P | 15 16 08.1 | +3.3 |
| | 0.5nm,0.3s,baz=140,slow=9.1,SNR=2.8 | | | | | | |
| KURBB | Kurchatov Arra | 44.09 | 314 | P | P | 15 16 28.9 | +0.2 |
| | 0.3nm,0.3s,baz=108,slow=8.9,SNR=2.6 | | | | | | |
| WRA | Warramunga Arr | 48.72 | 175 | P | P | 15 17 04.5 | -0.8 |
| | 0.9nm,0.7s,baz=354,slow=8.1,SNR=10 | | | | | | |
| ASAR | Alice Springs | 52.38 | 176 | P | P | 15 17 32.8 | -0.1 |
| | 0.5nm,0.6s,baz=9.5,slow=13,SNR=25 | | | | | | |
| ILAR | Eielson Array | 61.35 | 29 | P | P | 15 18 40.7 | +4.5 |
| | 0.3nm,0.7s,baz=299,slow=8.3,SNR=5.0 | | | | | | |
| FINES | FINESS Array B | 71.34 | 331 | P | P | 15 19 43.7 | +3.5 |
| | 0.5nm,0.4s,baz=90,slow=4.6,SNR=5.8 | | | | | | |

**GUC 08 15:21:51.2±0.5, 35°.66S×73°.16W, h14km±5km, ML3.8, 4C-2D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| COCH | Cobquecura | 0.56 | 147 | ⇑iP | Pb | 15 22 02.7 | -0.1 |
| COCH | | | | iS | Sb | 15 22 11.0 | +0.4 |
| COCH | | | | AML | AML | 15 22 12.6 | |
| | comp=N,7μm,0.2s | | | | | | |
| TALC | Talca | 1.27 | 79 | ⇑iP | Pb | 15 22 15.1 | +0.2 |
| TALC | | | | iS | Sg | 15 22 32.7 | +0.4 |
| LNCH | Linares | 1.28 | 99 | ⇓iP | Pn | 15 22 14.9 | +0.2 |
| LNCH | | | | iS | Sg | 15 22 33.3 | +0.6 |
| CCHI | Chillan | 1.29 | 137 | ⇑iP | Pn | 15 22 14.2 | -0.6 |
| CCHI | | | | iS | Sg | 15 22 33.3 | +0.5 |
| ROCH | El Roble | 3.22 | 34 | ⇑iP | Pn | 15 22 40.8 | -0.8 |
| ROCH | | | | iS | Sg | 15 23 36.3 | +1.2 |
| PEL | Peldehue | 3.24 | 40 | ⇓iP | Pn | 15 22 44.2 | +2.5 |
| PEL | | | | eS | Sb | 15 23 30.0 | +2.1 |
| PEL | | | | AML | AML | 15 23 41.3 | |
| | comp=N,262nm,0.6s | | | | | | |

**DJA 08 15:33:06.9±0.4, 2°S±2°×12°9E±°, h97km±13km, M3.4/9, MLv3.4/9, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSAI | Masohi | 1.59 | 169 | P | Pn | 15 33 33.7 | -0.4 |
| MSAI | | | | S | Sn | 15 33 55.1 | +0.4 |
| LBMI | Labuha | 1.59 | 315 | P | Pn | 15 33 34.2 | 0.0 |
| LBMI | | | | S | Sn | 15 33 55.9 | +1.0 |
| AAI | Ambon | 1.94 | 193 | P | Pn | 15 33 38.2 | -0.4 |
| AAI | | | | S | Sn | 15 34 04.0 | +1.2 |
| NLAI | Namlea | 2.10 | 226 | P | Pn | 15 33 40.3 | -0.4 |
| SANI | Sanana | 2.64 | 264 | P | Pn | 15 33 47.4 | -0.4 |
| SANI | | | | S | Sn | 15 34 20.0 | +0.7 |
| SWI | Sorong | 2.79 | 71 | P | Pn | 15 33 50.1 | +0.3 |
| SWI | | | | S | Sn | 15 34 23.7 | +0.9 |
| FAKI | Fak Fak | 3.80 | 107 | P | Pn | 15 34 03.8 | +0.4 |
| FAKI | | | | S | Sn | 15 34 48.0 | +0.9 |

**IDC 08 15:51:51.8±8.2, 2°.68N×128°.51E, h198km±80km, mb3.3/6, mb1 3.5/6, mb1mx3.1/36, mbtmp3.8/6, MS3.2/1, Ms1 3.2/1, ms1mx2.4/24, Error ellipse: s-maj=62.2km s-min=14.6km az=64.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | Guam | 19.46 | 55 | LR | LR | 16 03 32.6 | |
| | comp=Z,74nm,18.7s,baz=352,slow=36 | | | | | | |
| WRA | Warramunga Arr | 23.20 | 166 | P | P | 15 56 41.0 | -0.4 |
| | 2.8nm,0.4s,baz=344,slow=10,SNR=57 | | | | | | |
| ASAR | Alice Springs | 26.71 | 169 | P | P | 15 57 13.2 | +0.2 |
| | 1.0nm,0.6s,baz=354,slow=7.6,SNR=54 | | | | | | |
| ASAR | | | | PcP | PcP | 16 00 31.1 | -0.2 |
| | 0.2nm,0.7s,baz=345,slow=2.1,SNR=3.5 | | | | | | |
| CMAR | Chiang Mai Arr | 32.93 | 301 | P | P | 15 58 08.4 | +0.5 |
| | 0.8nm,0.7s,baz=118,slow=7.4,SNR=7.9 | | | | | | |
| SONM | Songino Array | 48.86 | 340 | P | P | 16 00 17.0 | -0.5 |
| | 0.4nm,0.5s,baz=134,slow=8.3,SNR=2.8 | | | | | | |
| MKAR | Makanchi Array | 59.43 | 325 | P | P | 16 01 33.5 | -0.2 |
| | 0.6nm,0.4s,baz=108,slow=7.7,SNR=6.5 | | | | | | |
| BVAR | Borovoye Array | 69.16 | 327 | P | P | 16 02 36.8 | 0.0 |
| | 0.6nm,0.5s,baz=101,slow=4.6,SNR=2.6 | | | | | | |

**TAP 08 15:52:52.7, 23°.29N×120°.53E, h4km, ML3.7, 10C-14D, B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWK | Hsinying | 0.04 | 244 | ⇓iP | Pg | 15 52 54.0 | 0.0 |
| | baz=229 | | | | | | |
| CHN4 | Tsaushan | 0.09 | 42 | ⇑iP | Pg | 15 52 55.4 | +0.8 |
| | baz=43 | | | | | | |
| CHN4 | | | | S | Sg | 15 52 57.4 | +1.5 |
| | baz=43 | | | | | | |
| WTP | Ta-pu | 0.09 | 117 | ⇑iP | Pg | 15 52 55.4 | +0.8 |
| | baz=116 | | | | | | |
| CHN1 | Nanshi | 0.10 | 181 | ⇓iP | Pg | 15 52 55.4 | +0.6 |
| | baz=179 | | | | | | |
| CHN1 | | | | iS | Sg | 15 52 57.5 | +1.3 |
| | baz=179 | | | | | | |
| SGST | Jiashian | 0.21 | 166 | ⇑iP | Pg | 15 52 58.1 | +1.2 |
| | baz=163 | | | | | | |
| SGST | | | | eS | Sg | 15 53 02.5 | +2.9 |
| | baz=163 | | | | | | |
| CHY | Chiayi | 0.23 | 335 | ⇓P | Pg | 15 52 58.8 | +1.6 |
| | baz=338 | | | | | | |
| CHY | | | | iS | Sg | 15 53 04.0 | +3.7 |
| | baz=338 | | | | | | |
| STYT | Tauyuan | 0.24 | 120 | ⇑iP | Pg | 15 52 58.9 | +1.4 |
| | baz=118 | | | | | | |
| STYT | | | | iS | Sg | 15 53 03.7 | +2.9 |
| | baz=118 | | | | | | |
| CHN2 | Minshiung | 0.25 | 348 | ⇓iP | Pb | 15 52 59.3 | -0.4 |
| | baz=349 | | | | | | |
| CHN2 | | | | S | Sb | 15 53 04.6 | +0.1 |
| | baz=349 | | | | | | |
| CHN3 | Shinhua | 0.26 | 216 | P | Pb | 15 52 59.8 | -0.1 |
| | baz=226 | | | | | | |
| CHN3 | | | | eS | Sb | 15 53 06.4 | +1.7 |
| | baz=226 | | | | | | |
| CHN8 | Yiju | 0.30 | 282 | ⇑iP | Pb | 15 53 00.0 | -0.6 |
| | baz=283 | | | | | | |
| CHN8 | | | | eS | Sb | 15 53 05.6 | -0.3 |
| | baz=283 | | | | | | |
| SCLT | Jiali | 0.33 | 250 | ⇓iP | Pb | 15 53 01.2 | +0.1 |
| | baz=241 | | | | | | |
| SCLT | | | | S | Sb | 15 53 08.2 | +1.5 |
| | baz=241 | | | | | | |
| ALS | Alishan | 0.34 | 48 | iP | Pb | 15 53 00.9 | -0.7 |
| | baz=61 | | | | | | |
| ALS | | | | S | Sb | 15 53 07.0 | -0.6 |
| | baz=61 | | | | | | |
| CHN5 | Tsauling | 0.34 | 24 | ⇓iP | Pb | 15 53 00.8 | -0.6 |
| | baz=24 | | | | | | |
| CHN5 | | | | S | Sb | 15 53 07.1 | -0.1 |
| | baz=24 | | | | | | |
| TAI1 | Yung-k'ang | 0.37 | 229 | P | Pb | 15 53 02.8 | +1.0 |
| | baz=235 | | | | | | |
| TAI1 | | | | eS | Sb | 15 53 10.1 | +2.2 |
| | baz=235 | | | | | | |
| WGK | Gukeng | 0.40 | 4 | ⇓iP | Pb | 15 53 02.4 | +0.1 |
| | baz=6.0 | | | | | | |
| WGK | | | | iS | Sb | 15 53 09.7 | +0.9 |
| | baz=6.0 | | | | | | |
| YUS | Yu-Shan | 0.44 | 62 | ⇑iP | Pb | 15 53 03.0 | -0.6 |
| | baz=63 | | | | | | |
| YUS | | | | iS | Sb | 15 53 10.1 | -0.9 |
| | baz=63 | | | | | | |
| WSF | Szhu | 0.45 | 321 | P | Pb | 15 53 03.0 | -0.1 |
| | baz=323 | | | | | | |
| WSF | | | | S | Sb | 15 53 11.0 | +0.8 |
| | baz=323 | | | | | | |
| ELDTW | Lidau | 0.46 | 102 | ⇑iP | Pb | 15 53 03.0 | -0.5 |
| | baz=90 | | | | | | |
| ELDTW | | | | S | Sb | 15 53 10.2 | -0.5 |
| | baz=90 | | | | | | |
| TWM1 | Shoushan | 0.47 | 192 | eP | Pn | 15 53 05.1 | -1.1 |
| | baz=175 | | | | | | |
| SSD | Sandimen | 0.55 | 170 | iP | Pb | 15 53 05.1 | +0.3 |
| | baz=169 | | | | | | |
| SSD | | | | S | Sb | 15 53 14.0 | +1.0 |
| | baz=169 | | | | | | |
| SGLT | Jiouru | 0.56 | 184 | eP | Pb | 15 53 05.7 | +0.7 |
| | baz=184 | | | | | | |
| WNT | Mingjian | 0.61 | 13 | P | Pb | 15 53 06.1 | +0.2 |
| | baz=15 | | | | | | |
| WNT | | | | S | Sn | 15 53 16.6 | -1.7 |
| | baz=15 | | | | | | |
| WTCT | Ta-ch'eng | 0.62 | 338 | ⇓P | Pb | 15 53 05.8 | -0.3 |
| | baz=340 | | | | | | |
| WTCT | | | | eS | Sb | 15 53 16.0 | +0.9 |
| | baz=340 | | | | | | |
| TWG | Pinlang | 0.68 | 133 | ⇑iP | Pb | 15 53 07.4 | +0.2 |
| | baz=117 | | | | | | |
| TWG | | | | iS | Sb | 15 53 17.6 | +0.7 |
| | baz=117 | | | | | | |
| SMLT | Sun Moon Lake | 0.68 | 30 | ⇓iP | Pb | 15 53 07.4 | +0.1 |
| | baz=30 | | | | | | |
| SMLT | | | | S | Sb | 15 53 18.7 | +1.5 |
| | baz=30 | | | | | | |
| TYC | Yuchr | 0.68 | 26 | ⇓iP | Pb | 15 53 07.4 | +0.3 |
| | baz=27 | | | | | | |
| TYC | | | | S | Sb | 15 53 18.6 | +1.6 |
| | baz=27 | | | | | | |
| TWF1 | Yuli | 0.71 | 85 | P | Pb | 15 53 07.3 | -0.3 |
| | baz=84 | | | | | | |
| TWF1 | | | | eS | Sn | 15 53 19.4 | -1.5 |
| | baz=84 | | | | | | |
| WDT | Danda | 0.72 | 50 | P | Pb | 15 53 08.0 | -0.3 |
| | baz=59 | | | | | | |
| WDT | | | | eS | Sb | 15 53 18.6 | -0.3 |
| | baz=59 | | | | | | |
| EHY | Hungye | 0.76 | 73 | P | Pb | 15 53 08.5 | 0.0 |
| | baz=85 | | | | | | |
| EHY | | | | S | Sb | 15 53 19.6 | +0.4 |
| | baz=85 | | | | | | |
| TTN | Taitung | 0.78 | 133 | P | Pn | 15 53 09.8 | -0.6 |
| | baz=132 | | | | | | |
| TTN | | | | eS | Sn | 15 53 22.7 | +0.2 |
| | baz=132 | | | | | | |
| ECL | Taimali | 0.79 | 150 | P | Pb | 15 53 09.2 | +0.2 |
| | baz=134 | | | | | | |
| ECL | | | | eS | Sb | 15 53 21.3 | +1.4 |
| | baz=134 | | | | | | |
| CHKT | Chengkung | 0.79 | 103 | iP | Pb | 15 53 09.8 | +0.8 |
| | baz=103 | | | | | | |
| CHKT | | | | iS | Sn | 15 53 22.9 | +0.1 |
| | baz=103 | | | | | | |
| WDGT | Dungji | 0.80 | 268 | ⇑iP | Pb | 15 53 08.7 | -0.5 |
| | baz=284 | | | | | | |
| WDGT | | | | S | Sb | 15 53 20.6 | +0.3 |
| | baz=284 | | | | | | |
| TCU | Taichung | 0.87 | 9 | eP | Pb | 15 53 10.2 | -0.2 |
| | baz=8.0 | | | | | | |
| SCZT | Fangliau | 0.91 | 175 | eP | Pn | 15 53 11.9 | -0.4 |
| | baz=160 | | | | | | |
| SCZT | | | | eS | Sn | 15 53 26.9 | +1.1 |
| | baz=160 | | | | | | |
| PNG | Penghu | 0.94 | 288 | ⇑iP | Pg | 15 53 10.8 | +0.1 |
| | baz=288 | | | | | | |
| PNG | | | | eS | Sb | 15 53 24.1 | -0.1 |
| | baz=288 | | | | | | |
| EAST | Anshuo | 0.94 | 162 | iP | Pn | 15 53 12.3 | -0.5 |
| | baz=161 | | | | | | |
| EAST | | | | S | Sn | 15 53 27.9 | +1.1 |
| | baz=161 | | | | | | |
| TWP | Hsiaoliuchiu | 0.95 | 189 | eP | Pn | 15 53 12.7 | -0.1 |
| | baz=189 | | | | | | |
| ESL | Shilin | 0.98 | 57 | iP | Pn | 15 53 12.8 | -0.4 |
| | baz=67 | | | | | | |
| ESL | | | | S | Sb | 15 53 26.5 | +1.0 |
| | baz=67 | | | | | | |
| TAW | Tawu | 0.98 | 160 | eP | Pb | 15 53 12.6 | +0.3 |
| | baz=159 | | | | | | |
| TAW | | | | eS | Sn | 15 53 27.2 | -0.4 |
| | baz=159 | | | | | | |
| TWQ1 | Liyutan | 1.08 | 12 | ⇓iP | Pn | 15 53 14.4 | -0.3 |
| | baz=13 | | | | | | |
| TWQ1 | | | | S | Sn | 15 53 30.3 | +0.3 |
| | baz=13 | | | | | | |
| WHF | Hehuan Shan | 1.09 | 38 | ⇓iP | Pb | 15 53 14.4 | -0.2 |
| | baz=39 | | | | | | |
| WHF | | | | iS | Sb | 15 53 29.8 | +0.2 |
| | baz=39 | | | | | | |
| TWT | Tachien | 1.13 | 31 | P | Pg | 15 53 14.4 | -0.2 |
| | baz=31 | | | | | | |
| TWT | | | | S | Sn | 15 53 31.0 | -0.6 |
| | baz=31 | | | | | | |
| NSY | Sanyi | 1.15 | 11 | P | Pn | 15 53 15.6 | +0.1 |
| | baz=11 | | | | | | |
| NSY | | | | eS | Sn | 15 53 32.2 | +0.6 |
| | baz=11 | | | | | | |
| HWA | Hwalien | 1.20 | 55 | eP | Pn | 15 53 17.4 | +1.2 |
| | baz=55 | | | | | | |
| HWA | | | | eS | Sn | 15 53 33.6 | +0.7 |
| | baz=55 | | | | | | |
| TWD | Chiawan | 1.26 | 51 | P | Pn | 15 53 17.5 | +0.5 |
| | baz=63 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWD | | | | iS | Sn | 15 53 35.1 | +0.8 |
| | baz=63 | | | | | | |
| TWK1 | Hengchun | 1.36 | 169 | eP | Pg | 15 53 19.7 | +0.8 |
| | baz=170 | | | | | | |
| NNS | Nan Shan | 1.38 | 34 | P | Pn | 15 53 18.8 | -0.1 |
| | baz=34 | | | | | | |
| NNS | | | | eS | Sn | 15 53 40.0 | +2.2 |
| | baz=34 | | | | | | |
| NSTT | Nanjuang | 1.41 | 18 | ⇓iP | Pn | 15 53 19.2 | +0.1 |
| | baz=18 | | | | | | |
| NSTT | | | | S | Sn | 15 53 38.7 | +0.6 |
| | baz=18 | | | | | | |
| NSK | Sanguang | 1.58 | 29 | ⇓P | Pb | 15 53 22.1 | -0.5 |
| | baz=29 | | | | | | |
| NSK | | | | eS | Sg | 15 53 44.5 | +0.9 |
| | baz=29 | | | | | | |
| ENA | Nanau | 1.59 | 44 | P | Pb | 15 53 22.8 | +0.2 |
| | baz=61 | | | | | | |
| ENTT | Nioudou | 1.65 | 35 | eP | Pb | 15 53 23.2 | -0.4 |
| | baz=35 | | | | | | |
| TWE | Neicheng | 1.77 | 36 | eP | Pb | 15 53 25.4 | -0.2 |
| | baz=37 | | | | | | |
| TWE | | | | eS | Sg | 15 53 50.9 | +1.3 |
| | baz=37 | | | | | | |
| TWC | Suao | 1.79 | 42 | P | Pb | 15 53 26.3 | +0.3 |
| | baz=43 | | | | | | |
| TWC | | | | eS | Sg | 15 53 51.5 | +1.4 |
| | baz=43 | | | | | | |
| TWA | Mucha | 1.94 | 30 | eP | Pn | 15 53 27.0 | +0.6 |
| | baz=15 | | | | | | |
| TWS1 | Kuangyinshan | 1.98 | 24 | eP | Pn | 15 53 26.2 | -0.7 |
| | baz=7.0 | | | | | | |
| EGS | | 2.01 | 39 | eP | Pb | 15 53 30.3 | +0.5 |
| | baz=40 | | | | | | |
| EGS | | | | eS | Sg | 15 53 60.0 | +2.6 |
| | baz=40 | | | | | | |
| NWF | Wu-fen Shan | 2.11 | 32 | eP | Pn | 15 53 28.4 | -0.5 |
| | baz=34 | | | | | | |
| KNM | Kinmen | 2.23 | 301 | eP | Pn | 15 53 31.7 | +1.4 |
| | baz=300 | | | | | | |
| YOJ | Yonaguni jima | 2.56 | 62 | eP | Pn | 15 53 35.1 | +0.2 |
| | baz=62 | | | | | | |

*NEIC **08** 15:53:35.4, 51.29N×175.08W, h5km, mb3.8/3, ML4.0(AEIC), After AEIC.*
*IDC **08** 15:53:38.7±0.9, 52.49N×175.96W, h0km, mb4.0/15, mb1 4.1/17, mb1mx3.9/40, mbtmp4.0/17, ML4.2/2, MS3.3/6, Ms1 3.3/6, ms1mx2.9/45, Error ellipse: s-maj=30.0km s-min=15.1km az=157.0*
**ISC 08 15:53:34.6**±2.3**, 51.26N**±0.10×**175.08W**±0.04**, h8**km±12km**, n68,** σ**0ˢ95**/58**, mb4.0**/15**, MS3.3**/6**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.99 | 322 | P | Pg | 15 53 54.2 | +0.5 |
| GSCK | Great Sitkin C | 1.01 | 318 | P | Pg | 15 53 54.6 | +0.6 |
| ETKA | Kagalaska Isla | 1.03 | 307 | P | Pg | 15 53 54.6 | +0.4 |
| ETKA | | | | S | Sb | 15 54 08.9 | +0.8 |
| GSTR | Great Sitkin T | 1.04 | 324 | ePg | Pg | 15 53 55.0 | +0.6 |
| GSTR | | | | eSg | Sg | 15 54 06.1 | -1.8 |
| GSTD | Great Sitkin T | 1.04 | 321 | P | Pg | 15 53 54.9 | +0.4 |
| GSTD | | | | S | Sb | 15 54 10.1 | +1.5 |
| ATKA | Atka Island | 1.09 | 30 | P | Pg | 15 53 55.1 | -0.4 |
| ATKA | | | | S | Sb | 15 54 10.5 | +0.5 |
| KOFP | Korovin Flat P | 1.19 | 30 | P | Pg | 15 53 57.8 | +0.5 |
| ADAG | Mount Adagdak | 1.19 | 308 | P | Pg | 15 53 58.0 | +0.5 |
| KOKL | Mount Kliuchef | 1.20 | 27 | P | Pg | 15 53 57.7 | +0.2 |
| KOWE | Korovin West | 1.22 | 24 | P | Pg | 15 53 58.3 | +0.3 |
| KIRH | Kanaga Island | 1.41 | 298 | P | Pn | 15 54 00.6 | +0.1 |
| KIRH | | | | S | Sb | 15 54 19.6 | +0.4 |
| KIKV | Kanaga Island | 1.45 | 296 | P | Pn | 15 54 00.9 | -0.1 |
| KIKV | | | | S | Sb | 15 54 21.1 | +0.8 |
| KICM | Kanaga Island | 1.48 | 297 | P | Pn | 15 54 01.6 | +0.2 |
| TAPA | Tanaga Point A | 1.80 | 289 | P | Pn | 15 54 05.9 | 0.0 |
| TAFL | Tanaga Flats | 1.83 | 287 | P | Pn | 15 54 06.6 | +0.3 |
| TAFP | Tanaga Falls P | 1.92 | 291 | P | Pn | 15 54 08.1 | +0.5 |
| TAFP | | | | S | Sn | 15 54 33.0 | +1.1 |
| TASE | Tanaga Southea | 1.94 | 288 | P | Pn | 15 54 08.3 | +0.5 |
| GAEA | Gareloi East | 2.35 | 284 | P | Pn | 15 54 14.3 | +0.8 |
| GALAA | Gareloi Lava P | 2.36 | 284 | P | Pn | 15 54 14.5 | +0.9 |
| GANE | Gareloi Northe | 2.38 | 285 | P | Pn | 15 54 14.6 | +0.8 |
| CERAA | Semis' Rag'd T | 3.33 | 283 | P | Pn | 15 54 27.6 | +0.7 |
| AMKA | Amchitka | 3.53 | 274 | P | Pn | 15 54 29.5 | -0.1 |
| LSPA | Little Sitkin | 4.02 | 282 | P | Pn | 15 54 36.9 | +0.5 |
| UNV | Unalaska Valle | 5.84 | 60 | ePn | Pn | 15 55 02.9 | +1.7 |
| UNV | | | | eSn | Sn | 15 56 09.2 | +1.0 |
| KDAK | Kodiak Island | 14.56 | 55 | Pn | Pn | 15 57 03.0 | +2.4 |
| | 1.5nm,0.3s,baz=250,slow=3.1,SNR=11 | | | | | | |
| PETK | Petropavlovsk- | 16.76 | 287 | Pn | Pn | 15 57 28.1 | -1.3 |
| | 0.2nm,0.3s,baz=90,slow=14,SNR=3.9 | | | | | | |
| KTH | Kantishna Hill | 17.77 | 37 | ePn | Pn | 15 57 43.0 | +1.0 |
| | 9.7nm,1.0s | | | | | | |
| BPAW | Bear Paw Mtn. | 18.05 | 35 | ePn | Pn | 15 57 46.0 | +0.6 |
| | 1.5nm,1.0s | | | | | | |
| ILAR | Eielson Array | 19.91 | 36 | P | P | 15 58 04.4 | -1.8 |
| | 0.2nm,0.3s,baz=225,slow=9.3,SNR=22 | | | | | | |
| COLD | Coldfoot | 20.20 | 28 | eP | P | 15 58 09.3 | 0.0 |
| | 7.3nm,1.1s | | | | | | |
| EGAK | Eagle | 22.13 | 39 | eP | P | 15 58 28.1 | -2.1 |
| INK | Inuvik | 26.24 | 34 | P | P | 15 59 08.1 | -1.5 |
| | 2.5nm,0.9s,baz=75,slow=0.0 | | | | | | |
| ASAJ | Asahikawa | 29.04 | 273 | P | P | 15 59 35.6 | +0.7 |
| | 4.8nm,0.8s,baz=0.0,slow=0.0 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.52 | 211 | T | T | 16 37 10.5 | |
| | baz=18,slow=76,SNR=34 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.53 | 211 | T | T | 16 37 16.6 | |
| | baz=18,slow=76,SNR=27 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.54 | 211 | T | T | 16 37 07.1 | |
| | baz=18,slow=76,SNR=26 | | | | | | |
| USRK | Ussuriysk Ar. | 35.62 | 280 | P | P | 16 00 31.1 | -1.4 |
| | 1.0nm,0.5s,baz=149,slow=43,SNR=3.6 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.73 | 211 | T | T | 16 38 46.8 | |
| | baz=17 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.74 | 211 | T | T | 16 39 29.8 | |
| | baz=17,slow=74 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.74 | 211 | T | T | 16 38 57.7 | |
| | baz=17,slow=74 | | | | | | |
| MJAR | Matsushiro Arr | 36.09 | 264 | P | P | 16 00 36.8 | +0.2 |
| | 1.9nm,0.8s,baz=34,slow=7.5,SNR=4.5 | | | | | | |
| MJAR | | | | LR | LR | 16 13 35.6 | |
| | comp=Z,30nm,21.3s,baz=230,slow=34 | | | | | | |
| KSRS | Korea Array | 41.98 | 274 | P | P | 16 01 25.9 | +0.1 |
| | 2.8nm,0.8s,baz=56,slow=7.8,SNR=8.3 | | | | | | |
| KSRS | | | | LR | LR | 16 20 33.5 | |
| | comp=Z,12nm,18.1s,baz=98,slow=39 | | | | | | |
| KSAR | Wonju Array Be | 42.01 | 274 | P | P | 16 01 25.9 | -0.2 |
| SONM | Songino Array | 48.77 | 299 | P | P | 16 02 17.0 | -2.8 |
| | 1.8nm,0.8s,baz=56,slow=11,SNR=6.5 | | | | | | |
| ZALV | Zalesovo Beam | 55.78 | 315 | PcP | PcP | 16 04 09.8 | -0.7 |
| | 0.6nm,0.5s,baz=64,slow=3.4,SNR=3.7 | | | | | | |
| TXAR | Lajitas Array | 56.35 | 84 | P | P | 16 03 24.0 | +7.9 |
| | 0.6nm,0.7s,baz=280,slow=3.7,SNR=4.2 | | | | | | |
| JMIC | Jan Mayen | 57.68 | 5 | LR | LR | 16 30 50.8 | |
| | comp=Z,19nm,19.2s,baz=319,slow=40 | | | | | | |
| MKAR | Makanchi Array | 61.91 | 311 | P | P | 16 03 51.9 | -2.4 |
| | 1.6nm,0.7s,baz=49,slow=5.5,SNR=10 | | | | | | |
| BVAR | Borovoye Array | 62.46 | 322 | P | P | 16 03 55.0 | -2.8 |
| | 1.5nm,0.5s,baz=51,slow=5.0,SNR=6.3 | | | | | | |
| AFI | Afiamalu | 64.95 | 176 | LR | LR | 16 32 43.3 | |
| | comp=Z,20nm,18.9s,baz=202,slow=35 | | | | | | |
| FINES | FINESS Array B | 66.38 | 349 | LR | LR | 16 37 31.4 | |
| | comp=Z,75nm,18.6s,baz=62,slow=40 | | | | | | |
| NOA | NORSAR Array B | 67.94 | 357 | P | P | 16 04 30.8 | -2.5 |
| | 1.0nm,0.8s,baz=3.9,slow=6.4,SNR=3.4 | | | | | | |
| CMAR | Chiang Mai Arr | 73.34 | 279 | P | P | 16 05 08.2 | +1.4 |
| | 0.5nm,0.7s,baz=28,slow=6.8,SNR=5.1 | | | | | | |
| RAR | Rarotonga | 73.40 | 165 | LR | LR | 16 30 31.2 | |
| | comp=Z,28nm,21.9s,baz=262,slow=30 | | | | | | |
| TAPN | Taplejung | 73.42 | 293 | eP | P | 16 05 07.0 | -0.6 |
| | 28nm,0.9s | | | | | | |
| ODAN | Odare | 73.98 | 293 | eP | P | 16 05 09.9 | -0.8 |
| GUN | Gumba | 74.05 | 295 | eP | P | 16 05 10.7 | -0.6 |
| | 39nm,0.9s | | | | | | |
| RAMN | Ramite | 74.37 | 293 | eP | P | 16 05 12.2 | -0.8 |
| | 38nm,0.8s | | | | | | |
| KKN | Kakani | 74.48 | 295 | eP | P | 16 05 13.0 | -0.7 |
| | 9.7nm,0.7s | | | | | | |
| PKI | Pulchoki | 74.58 | 295 | eP | P | 16 05 13.5 | -0.8 |
| | 20nm,1.0s | | | | | | |
| PKIN | Phulchoki | 74.58 | 295 | eP | P | 16 05 13.3 | -1.0 |
| | 17nm,1.1s | | | | | | |
| GKN | Gorkha | 74.69 | 296 | eP | P | 16 05 13.9 | -0.9 |
| | 27nm,1.1s | | | | | | |
| DMN | Daman | 74.72 | 295 | eP | P | 16 05 14.2 | -0.9 |
| KOLN | Koldanda | 75.45 | 296 | eP | P | 16 05 18.2 | -1.0 |
| | 11nm,0.9s | | | | | | |
| GEYT | Alibeck | 79.72 | 320 | P | P | 16 05 41.8 | -0.9 |
| | 4.0nm,0.8s,baz=297,slow=6.5,SNR=8.3 | | | | | | |
| WRA | Warramunga Arr | 83.59 | 227 | P | P | 16 06 11.0 | +7.8 |
| | 0.4nm,1.0s,baz=31,slow=4.8,SNR=3.5 | | | | | | |
| BRTR | Keskin Array B | 85.97 | 338 | P | P | 16 06 13.4 | -1.9 |
| | 0.9nm,0.8s,baz=17,slow=6.0,SNR=3.6 | | | | | | |
| ASAR | Alice Springs | 87.03 | 226 | P | P | 16 06 29.6 | +9.4 |
| | 0.5nm,0.9s,baz=23,slow=3.5,SNR=4.1 | | | | | | |

**GUC 08 15:57:13.5**±0.6**, 34.09S**×**72.30W, h24**km±5km**, ML3.6, 3C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHPI | Pichilemu | 0.39 | 141 | eP | Pb | 15 57 22.0 | +0.1 |
| CHPI | | | | iS | Sb | 15 57 28.6 | +1.0 |
| NICH | Los Niches | 1.27 | 136 | eP | Pb | 15 57 36.5 | -0.3 |
| NICH | | | | iS | Sb | 15 57 53.9 | +1.2 |
| RCDM | Rinconada Maip | 1.38 | 65 | ⇑iP | Pn | 15 57 36.9 | -0.5 |
| RCDM | | | | eS | Sn | 15 57 55.0 | +0.1 |
| TALC | Talca | 1.42 | 157 | ⇑iP | Pb | 15 57 39.0 | -0.3 |
| TALC | | | | eS | Sb | 15 57 57.4 | +0.4 |
| ANTU | Antumapu | 1.48 | 70 | ⇑iP | Pb | 15 57 40.0 | -0.5 |
| ANTU | | | | eS | Sb | 15 57 59.6 | +0.7 |
| ANTU | | | | AML | AML | 15 58 15.0 | |
| | comp=N,892nm,0.6s | | | | | | |
| PCH | Pirque | 1.56 | 73 | eP | Pb | 15 57 40.9 | -0.9 |
| CLCH | Cerro Calan | 1.62 | 65 | eP | Pb | 15 57 42.1 | -0.8 |
| CLCH | | | | iS | Sb | 15 58 04.0 | +1.0 |
| CLCH | | | | AML | AML | 15 58 12.2 | |
| | comp=E,938nm,0.6s | | | | | | |
| PEL | Peldehue | 1.64 | 56 | ⇓iP | Pb | 15 57 42.2 | -1.0 |
| PEL | | | | iS | Sb | 15 58 04.3 | +0.8 |
| PEL | | | | AML | AML | 15 58 17.9 | |
| | comp=N,2μm,0.5s | | | | | | |

**ROM 08 16:10:59.4**±0.6**, 39.83N**×**15.96E, h8**km±2km**, Md1.7**/2**, Ml1.3**/2**, Error ellipse: s-maj=8.2km s-min=1.8km az=25.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CUC | Castrocucco | 0.20 | 325 | Pg | Pg | 16 11 04.4 | +0.9 |
| CUC | | | | Sg | Sg | 16 11 07.3 | +1.0 |
| | 70nm,0.5s | | | | | | |
| SALB | San Lorenzo Be | 0.30 | 82 | Pg | Pg | 16 11 06.0 | +0.5 |
| SALB | | | | Sg | Sb | 16 11 11.4 | -1.0 |
| | 29nm,0.3s | | | | | | |
| SIRI | Monte Sirino - | 0.35 | 348 | Pg | Pg | 16 11 07.1 | +0.5 |
| SIRI | | | | Sg | Sb | 16 11 13.2 | -0.9 |

**DJA 08 16:16:41.2**±0.6**, 0°S**±6°×**13°2E**±°**, h52**km±7km**, M4.2**/9**, MLv4.2**/9**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SWI | Sorong | 0.74 | 212 | P | Pn | 16 16 56.4 | +0.8 |
| SWI | | | | S | Sn | 16 17 08.3 | +2.2 |
| FAKI | Fak Fak | 2.73 | 168 | P | Pn | 16 17 21.4 | -1.3 |
| FAKI | | | | S | Sn | 16 17 56.4 | +1.8 |
| RKPI | Ransiki, Papua | 2.82 | 117 | P | Pn | 16 17 24.2 | +0.4 |
| RKPI | | | | S | Sn | 16 17 57.9 | +1.3 |
| MSAI | Masohi | 4.13 | 221 | P | Pn | 16 17 41.9 | +0.1 |
| LBMI | Labuha | 4.18 | 264 | P | Pn | 16 17 42.2 | -0.3 |
| BNDI | Bandanaira | 4.61 | 202 | P | Pn | 16 17 48.4 | 0.0 |

*ISCJB **08** 16:17:42.9±1.3, 12.83N±0.08×125.26E±0.09, h44km, mb3.6/4, MS2.7/1, Error ellipse: s-maj=13.9km s-min=9.9km az=153.5*
*IDC **08** 16:17:43.5±2.4, 11.98N×125.07E, h0km, mb3.5/4, mb1 3.7/4, mb1mx3.4/51, mbtmp3.5/4, MS2.9/1, Ms1 3.1/1, ms1mx2.4/25, Error ellipse: s-maj=232.6km s-min=21.8km az=67.0*
*MAN **08** 16:17:44, 12.73N×125.09E, h27km, mb5.1, ML4.0, MS4.1*
**ISC 08 16:17:45.6**±1.5**, 12.70N**±0.07×**125.2E**±0.1**, h44**km**, n19,** σ**2ˢ35**/15**, mb3.7**/4**, 1C-1D, Samar**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNP | Catarman | 0.55 | 250 | eP | Pn | 16 17 55.4 | -1.7 |
| CNP | | | | eS | Sn | 16 18 04.1 | -1.3 |
| PVCP | Virac | 1.34 | 312 | ⇑iP | Pn | 16 18 07.4 | -0.6 |
| PVCP | | | | iS | Sn | 16 18 30.1 | +5.5 |
| PLP | Palo | 1.54 | 188 | ⇓eP | Pn | 16 18 09.5 | -1.2 |
| PLP | | | | eS | Sn | 16 18 31.1 | +1.6 |
| OCLP | Ormoc | 1.74 | 199 | eP | Pn | 16 18 14.7 | +1.4 |
| OCLP | | | | eS | Sn | 16 18 37.8 | +3.5 |
| MSLP | Maasin | 2.57 | 187 | eP | Pn | 16 18 26.5 | +1.6 |
| SCPH | Surigao | 2.92 | 174 | eP | Pn | 16 18 29.5 | -0.1 |
| SCPH | | | | eS | Pn | 16 18 29.5 | -0.1 |
| GUIM | Jordan | 3.28 | 231 | eP | Pn | 16 18 34.1 | -0.4 |
| PAGZ | Pagadian | 5.14 | 200 | eP | Pn | 16 19 01.3 | +1.1 |
| CMAR | Chiang Mai Arr | 25.91 | 286 | LR | LR | 16 34 20.7 | |
| | comp=Z,21nm,18.0s,baz=175,slow=38 | | | | | | |
| WRA | Warramunga Arr | 33.67 | 164 | P | P | 16 24 20.0 | -2.5 |
| | 0.3nm,0.5s,baz=342,slow=8.5,SNR=5.0 | | | | | | |
| ASAR | Alice Springs | 37.14 | 167 | P | P | 16 24 50.8 | -1.5 |
| | 0.5nm,0.3s,baz=346,slow=7.5,SNR=7.3 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 40.32 | 76 | T | T | 17 08 29.9 | |
| | baz=280,slow=73,SNR=2.9 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 40.33 | 76 | T | T | 17 08 19.1 | |
| | baz=280,slow=73,SNR=4.0 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 40.33 | 76 | T | T | 17 08 22.0 | |
| | baz=280,slow=73,SNR=4.9 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.57 | 75 | T | T | 17 08 39.9 | |
| | baz=266,slow=74,SNR=12 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 40.57 | 74 | T | T | 17 08 43.5 | |
| | baz=266,slow=74,SNR=12 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 40.58 | 75 | T | T | 17 08 41.2 | |
| | baz=266,slow=74,SNR=12 | | | | | | |
| MKAR | Makanchi Array | 49.47 | 322 | P | P | 16 26 40.3 | +8.8 |
| | 0.2nm,0.3s,baz=128,slow=8.1,SNR=2.3 | | | | | | |
| ZALV | Zalesovo Beam | 52.00 | 331 | P | P | 16 26 57.8 | +7.3 |
| | 0.4nm,0.5s,baz=140,slow=7.0,SNR=2.3 | | | | | | |

*ISCJB **08** 16:20:17.5±0.4, 50.28N±0.03×18.66E±0.03, h0km, Error ellipse: s-maj=4.9km s-min=2.3km az=11.8*
*CSEM **08** 16:20:18.3±0.3, 50.28N×18.66E, h2km, ML2.9/6, Error ellipse: s-maj=8.4km s-min=3.6km az=12.0*
*PRU **08** 16:20:19.0, 50.31N×18.66E, h0km*
**ISC 08 16:20:18.6**±0.8**, 50.26N**±0.03×**18.71E**±0.02**, h0**km**, n36,** σ**0ˢ96**/65**, Poland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHZP | Chorzow | 0.18 | 81 | ePg | Pg | 16 20 22.5 | +0.4 |
| CHZP | | | | eSg | Sg | 16 20 25.7 | +1.2 |
| OKC | Ostrava-Krasne | 0.56 | 220 | ePG | Pg | 16 20 30.1 | +0.8 |
| OKC | | | | eSG | Sg | 16 20 38.2 | +1.7 |
| | comp=Z,54nm,0.7s | | | | | | |
| OKC | Ostrava-Krasne | 0.56 | 220 | Pg | Pg | 16 20 30.1 | +0.8 |
| OKC | | | | Sg | Sg | 16 20 38.2 | +1.7 |
| | 54nm,0.7s | | | | | | |
| OJC | Ojcow | 0.70 | 93 | ePg | Pg | 16 20 31.9 | -0.1 |
| OJC | | | | eSg | Sg | 16 20 41.1 | 0.0 |
| OJC | Ojcow | 0.70 | 93 | ePg | Pg | 16 20 31.9 | -0.1 |
| OJC | | | | eSg | Sg | 16 20 41.1 | 0.0 |
| MORC | Moravsky Berou | 0.90 | 238 | ePg | Pg | 16 20 35.7 | 0.0 |
| MORC | | | | eSg | Sg | 16 20 47.3 | 0.0 |
| LANS | Liptovska Anna | 1.22 | 156 | ePG | Pg | 16 20 42.0 | +0.1 |
| LANS | | | | eSG | Sg | 16 20 58.1 | +0.4 |
| LANS | Liptovska Anna | 1.22 | 156 | ePg | Pg | 16 20 42.0 | +0.1 |
| LANS | | | | eSg | Sg | 16 20 58.1 | +0.4 |
| KRLC | Kraliky | 1.25 | 262 | ePG | Pg | 16 20 42.0 | -0.6 |
| KRLC | | | | eSG | Sg | 16 20 57.9 | -0.9 |
| KRLC | Kraliky | 1.25 | 262 | Pg | Pg | 16 20 42.0 | -0.6 |
| KRLC | | | | Sg | Sg | 16 20 57.9 | -0.9 |
| NIE | Niedzica | 1.33 | 129 | ePg | Pg | 16 20 43.9 | -0.2 |
| NIE | | | | eSg | Sb | 16 21 02.1 | 0.0 |
| NIE | Niedzica | 1.33 | 129 | ePg | Pg | 16 20 43.9 | -0.2 |
| NIE | | | | eSg | Sb | 16 21 02.1 | 0.0 |
| DPC | Dobruska-Polom | 1.53 | 274 | ePG | Pn | 16 20 46.9 | -0.3 |
| DPC | | | | eSG | Sn | 16 21 07.1 | -0.8 |
| | comp=Z,32nm,0.5s | | | | | | |
| DPC | Dobruska-Polom | 1.53 | 274 | Pg | Pn | 16 20 46.9 | -0.3 |
| DPC | | | | Sg | Sn | 16 21 07.1 | -0.8 |
| | 32nm,0.5s | | | | | | |
| KSP | Ksiaz | 1.65 | 292 | ePg | Pg | 16 20 50.3 | +0.2 |
| KSP | | | | eSg | Sg | 16 21 12.4 | +1.0 |
| KSP | Ksiaz | 1.65 | 292 | ePg | Pg | 16 20 50.3 | +0.2 |
| KSP | | | | eSg | Sg | 16 21 12.4 | +1.0 |
| VRAC | Vranov | 1.67 | 236 | ePn | Pn | 16 20 49.5 | +0.4 |
| VRAC | | | | eSg | Sg | 16 21 12.4 | +0.2 |
| UPC | Upice | 1.74 | 279 | eSG | Sb | 16 21 14.3 | +0.4 |
| UPC | Upice | 1.74 | 279 | Sg | Sb | 16 21 14.3 | +0.4 |
| VYHS | Vyhne | 1.77 | 177 | ePN | Pn | 16 20 50.2 | -0.3 |
| VYHS | | | | eSN | Sn | 16 21 13.2 | -0.6 |
| VYHS | Vyhne | 1.77 | 177 | ePn | Pn | 16 20 50.2 | -0.3 |
| VYHS | | | | eSn | Sn | 16 21 13.2 | -0.6 |
| STHS | Stebnicka Huta | 1.85 | 116 | ePN | Pb | 16 20 53.7 | +0.4 |
| STHS | | | | eSN | Sb | 16 21 17.2 | +0.3 |
| STHS | Stebnicka Huta | 1.85 | 116 | ePn | Pb | 16 20 53.7 | +0.4 |
| STHS | | | | eSn | Sb | 16 21 17.2 | +0.3 |
| GOPC | GO Pecny, Ondr | 2.55 | 264 | ePG | Pb | 16 21 04.6 | -0.6 |
| GOPC | | | | eSG | Sb | 16 21 37.4 | +0.3 |
| | comp=Z,16nm,0.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 2.55 | 264 | Pg | Pb | 16 21 04.6 | -0.6 |
| GOPC | | | | Sg | Sb | 16 21 37.4 | +0.3 |
| | 16nm,0.5s | | | | | | |
| KOLS | Kolonicke sedl | 2.67 | 118 | e | Pb | 16 21 08.8 | +1.5 |
| KOLS | Kolonicke sedl | 2.67 | 118 | eSN | Sn | 16 21 34.0 | -2.0 |
| KOLS | Kolonicke sedl | 2.67 | 118 | eSn | Sn | 16 21 34.0 | -2.0 |
| PRU | Pruhonice | 2.69 | 266 | ePG | Pb | 16 21 08.3 | +0.6 |
| PRU | | | | eSG | Sb | 16 21 42.3 | +1.1 |
| | comp=Z,7.3nm,0.6s | | | | | | |
| PRU | Pruhonice | 2.69 | 266 | Pg | Pb | 16 21 08.3 | +0.6 |
| PRU | | | | Sg | Sb | 16 21 42.3 | +1.1 |
| | 7.3nm,0.6s | | | | | | |
| PRA | Prague | 2.75 | 268 | eSG | Sb | 16 21 44.2 | +1.2 |
| | comp=Z,16nm,0.5s | | | | | | |
| PRA | Prague | 2.75 | 268 | Sg | Sb | 16 21 44.2 | +1.2 |
| | 16nm,0.5s | | | | | | |
| BRG | Berggiesshubel | 3.10 | 283 | PG | Pg | 16 21 18.2 | +0.3 |
| BRG | | | | SG | Sg | 16 21 57.1 | -1.0 |
| | 10nm,0.4s | | | | | | |
| KHC | Kasperske Hory | 3.52 | 253 | ePN | Pn | 16 21 14.2 | -0.3 |
| KHC | | | | ePG | Pb | 16 21 22.4 | +0.7 |
| KHC | | | | eSG | Sg | 16 22 08.7 | -2.8 |
| | comp=Z,12nm,0.7s | | | | | | |
| KHC | Kasperske Hory | 3.52 | 253 | Pn | Pn | 16 21 14.2 | -0.3 |
| KHC | | | | Sg | Sg | 16 22 08.7 | -2.8 |
| | 12nm,0.7s | | | | | | |
| CLL | Collm | 3.77 | 288 | ePg | Pg | 16 21 35.0 | +4.2 |
| CLL | | | | eSg | Sg | 16 22 22.0 | +2.4 |
| | comp=Z,9.0nm,0.7s | | | | | | |

**WEL 08 16:22:41.5**±0.4**, 35.32S**×**178.88E, h198**km±8km**, ML4.2**/5**, Error ellipse: s-maj=7.9km s-min=7.8km az=0.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 2.29 | 192 | PN | Pn | 16 23 22.8 | 0.0 |
| MXZ | | | | SN | Sn | 16 23 52.5 | -2.7 |
| WMGZ | Waiomatatini S | 2.52 | 188 | PN | Pn | 16 23 25.6 | +0.1 |
| WMGZ | | | | SN | Sn | 16 23 59.8 | -0.1 |
| HAZ | Te Kaha | 2.58 | 200 | PN | Pn | 16 23 26.6 | +0.5 |
| HAZ | | | | SN | Sn | 16 24 02.4 | +1.2 |
| PUZ | Puketiti | 2.79 | 190 | PN | Pn | 16 23 28.1 | -0.5 |
| PUZ | | | | AML | AML | 16 24 20.4 | |
| PUZ | | | | AML | AML | 16 24 22.8 | |
| TWGZ | Tauwhareparae | 2.94 | 194 | PN | Pn | 16 23 30.5 | +0.2 |
| TWGZ | | | | SN | Sn | 16 24 09.8 | +1.1 |
| MWZ | Matawai | 3.20 | 199 | PN | Pn | 16 23 33.9 | +0.5 |
| MWZ | | | | AML | AML | 16 24 30.5 | |
| MWZ | | | | AML | AML | 16 24 30.8 | |
| CNGZ | Carnagh Statio | 3.20 | 190 | PN | Pn | 16 23 33.4 | +0.1 |
| TKGZ | Te Karaka | 3.22 | 195 | PN | Pn | 16 23 33.5 | 0.0 |
| URZ | Urewera | 3.26 | 205 | PN | Pn | 16 23 34.7 | +0.7 |
| URZ | | | | SN | Sn | 16 24 15.0 | -0.3 |
| URZ | | | | AML | AML | 16 24 23.7 | |
| RIGZ | Rimuhau | 3.49 | 195 | PN | Pn | 16 23 36.8 | -0.2 |
| SNGZ | Shannon Statio | 3.67 | 199 | PN | Pn | 16 23 39.9 | +0.8 |
| KNZ | Kokohu | 3.82 | 194 | PN | Pn | 16 23 40.0 | -0.8 |
| RAHZ | Arahi | 3.87 | 201 | PN | Pn | 16 23 42.1 | +0.6 |
| WHHZ | Waihua | 3.97 | 199 | PN | Pn | 16 23 42.9 | +0.1 |
| ARHZ | Aropaoanui | 4.21 | 200 | PN | Pn | 16 23 46.3 | +0.5 |
| BKZ | Black Stump Fm | 4.29 | 206 | PN | Pn | 16 23 47.0 | +0.2 |
| BKZ | | | | AML | AML | 16 24 57.6 | |
| MCHZ | McNeill Hill | 4.47 | 202 | PN | Pn | 16 23 49.4 | +0.4 |
| BHHZ | Black Hill Sta | 4.73 | 207 | PN | Pn | 16 23 50.4 | -2.0 |
| KAHZ | Kahuranaki | 4.74 | 199 | PN | Pn | 16 23 50.9 | -1.6 |
| PXZ | Pawanui | 4.97 | 198 | PN | Pn | 16 23 53.5 | -1.9 |
| MRZ | Mangatainoka R | 5.93 | 205 | PN | Pn | 16 24 06.0 | -1.8 |
| OGWZ | Otaki Gorge | 6.22 | 207 | PN | Pn | 16 24 10.4 | -1.0 |

**GCMT 08 16:39:12.0**±0.3**, 23.54N**×**123.66E, h23**km±1km**, MW4.9**/57**, Moment Tensor Solution. s31,c43; s57,c88; Duration: 0 Moment tensor: Scale** $10^{16}$**Nm;** $M_{rr}$1.99±.16; $M_{\theta\theta}$-1.61±.10; $M_{\phi\phi}$-0.37±.10; $M_{r\theta}$1.06±.14; $M_{\theta\phi}$-1.13±.07; $M_{\phi r}$2.02±.19; **Best double couple:** $M_0$3.13400×$10^{16}$ **NP1:**$\phi_s$37.00000°, δ69.00000°, λ72.00000°. **NP2:**$\phi_s$260.00000°, δ27.00000°, λ130.00000°. **Principal axes:** T 3.1780, Plg61.0000°, Azm280.0000°; N -0.0830, Plg17.0000°, Azm44.0000°; P -3.0900, Plg22.0000°, Azm141.0000°; **nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Southwestern Ryukyu Islands**

*SKO **08** 16:41:57.2, 42.54N×21.56E, h15km, M2.1, ML2.8*
*CSEM **08** 16:41:58.9±0.2, 42.43N×21.55E, h0km±1km, ML2.8, Error ellipse: s-maj=2.8km s-min=2.3km az=25.0*
*THE **08** 16:41:59.3, 42.41N×21.48E, h2km±2km, ML2.5/2, Error ellipse: s-maj=3.1km s-min=1.2km az=236.0*
*PDG **08** 16:41:59.2±0.4, 42.44N×21.56E, h13km, ML2.8/10, Error ellipse: s-maj=1.0km s-min=1.0km az=90.0*
*BEO **08** 16:42:00.5±0.6, 42.48N×21.52E, h10km±2km, ML2.8/1*
*SOF **08** 16:42:01.9, 42.29N×21.79E, h2km, MD3.0*
*TIR **08** 16:42:06.5, 42.26N×21.52E, h21km, ML2.5*
**ISC 08 16:41:59.3**±0.9**, 42.44N**±0.01×**21.54E**±0.01**, h8**km±6km**, n138,** σ**1ˢ02**/199**, 23C-10D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GJIK | Gjilan | 0.08 | 289 | P | Pg | 16 42 01.4 | 0.0 |
| GJIK | | | | S | Sg | 16 42 03.0 | +0.1 |
| BARS | Barje | 0.43 | 28 | ⇑iPg | Pg | 16 42 07.6 | -0.1 |
| BARS | | | | eSg | Sg | 16 42 14.0 | +0.7 |
| BARS | Barje | 0.43 | 28 | ⇑iPg | Pg | 16 42 07.6 | -0.1 |
| BARS | | | | eSg | Sg | 16 42 14.0 | +0.7 |
| SKO | Skopje | 0.47 | 189 | iPg | Pg | 16 42 08.8 | +0.4 |
| SKO | | | | iSg | Sg | 16 42 15.2 | +0.7 |
| SKO | | | | eLg | Lg | 16 42 15.3 | |
| | comp=E,86nm,0.3s | | | | | | |
| SKO | | | | eLg | Lg | 16 42 15.5 | |
| | comp=N,71nm,0.4s | | | | | | |
| SKO | Skopje | 0.47 | 189 | iPg | Pg | 16 42 08.7 | +0.4 |
| SKO | | | | iSg | Sg | 16 42 15.2 | +0.7 |
| SKO | | | | eLg | Lg | 16 42 15.3 | |
| | comp=N,86nm,0.3s | | | | | | |
| SMRK | Smrekonice | 0.62 | 315 | P | Pg | 16 42 11.3 | 0.0 |
| SELS | Selova | 0.84 | 339 | ⇑iPg | Pg | 16 42 14.5 | -1.0 |
| SELS | | | | eSg | Sg | 16 42 26.9 | +0.4 |
| PEJK | Peje | 0.96 | 283 | P | Pg | 16 42 17.1 | -0.5 |
| BCI | Bajram Curri | 1.09 | 267 | iPG | Pn | 16 42 21.4 | +0.4 |
| BCI | | | | iSG | Sn | 16 42 38.5 | +2.2 |
| BCI | Bajram Curri | 1.09 | 267 | iPg | Pn | 16 42 21.4 | +0.4 |
| BCI | | | | iSg | Sn | 16 42 38.5 | +2.2 |
| PHP | Peshkopia | 1.11 | 228 | iPG | Pg | 16 42 17.8 | -2.8 |
| PHP | | | | iSG | Sg | 16 42 34.5 | -0.5 |
| PHP | Peshkopia | 1.11 | 228 | P | Pg | 16 42 18.9 | -1.7 |
| PHP | | | | S | Sg | 16 42 33.8 | -1.2 |
| PHP | Peshkopia | 1.11 | 228 | iPg | Pg | 16 42 17.8 | -2.8 |
| PHP | Peshkopia | 1.11 | 228 | P | Pg | 16 42 18.9 | -1.7 |
| PHP | | | | S | Sg | 16 42 33.8 | -1.2 |
| PHP | | | | iSg | Sg | 16 42 34.5 | -0.5 |
| ZAPS | Zavoj | 1.16 | 43 | ePg | Pn | 16 42 21.9 | 0.0 |
| ZAPS | | | | eSg | Sn | 16 42 37.7 | -0.3 |
| ZAPS | Zavoj | 1.16 | 43 | ePg | Pn | 16 42 21.9 | 0.0 |
| ZAPS | | | | eSg | Sn | 16 42 37.7 | -0.3 |
| PVY | Plav | 1.18 | 278 | ⇑iPg | Pg | 16 42 21.4 | -0.5 |

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PVY | | | | eSg | Sn | 16 42 39.0 | +0.4 |
| PVY | Plav | 1.18 | 278 | ⇑iPg | Pg | 16 42 21.4 | -0.5 |
| PVY | | | | eSg | Sn | 16 42 39.0 | +0.4 |
| VTS | Vitosha | 1.24 | 82 | P | Pn | 16 42 23.1 | 0.0 |
| VTS | Vitosha | 1.24 | 82 | P | Pn | 16 42 23.1 | 0.0 |
| KKB | Krupnik | 1.28 | 116 | P | Pg | 16 42 23.8 | 0.0 |
| KKB | Krupnik | 1.28 | 116 | P | Pg | 16 42 23.8 | 0.0 |
| PUK | Puka | 1.29 | 253 | i PG | Pn | 16 42 23.5 | -0.1 |
| PUK | | | | i SG | Sn | 16 42 42.5 | +1.4 |
| PUK | Puka | 1.29 | 253 | i Pg | Pn | 16 42 23.5 | -0.1 |
| PUK | | | | i Sg | Sn | 16 42 42.5 | +1.4 |
| BEY | Berane | 1.29 | 290 | ⇓iPg | Pn | 16 42 23.4 | -0.3 |
| BEY | Berane | 1.29 | 290 | P | Pg | 16 42 25.0 | +0.9 |
| BEY | | | | eSg | Sn | 16 42 43.0 | +1.7 |
| IVA | Berane | 1.29 | 290 | ⇓iPg | Pn | 16 42 23.4 | -0.3 |
| IVA | | | | eSg | Sn | 16 42 43.0 | +1.7 |
| VAY | Valandovo | 1.35 | 145 | i Pg | Pn | 16 42 24.1 | -0.4 |
| VAY | | | | eSg | Sn | 16 42 42.6 | 0.0 |
| VAY | | | | eLg | Lg | 16 42 43.7 | |
| | comp=E,101nm,1.0s | | | | | | |
| VAY | | | | eLg | Lg | 16 42 44.1 | |
| | comp=N,73nm,0.6s | | | | | | |
| VAY | Valandovo | 1.35 | 145 | i Pg | Pn | 16 42 24.1 | -0.4 |
| VAY | | | | eSg | Sn | 16 42 42.6 | 0.0 |
| VAY | | | | eLg | Lg | 16 42 43.7 | |
| | comp=N,101nm,1.0s | | | | | | |
| SJES | Sjenica | 1.42 | 306 | ePg | Pn | 16 42 25.8 | +0.3 |
| SJES | | | | eSg | Sg | 16 42 45.2 | +0.3 |
| BOLS | Boljevac | 1.43 | 12 | ePg | Pn | 16 42 24.0 | -1.5 |
| OHR | Ohrid | 1.44 | 203 | i Pg | Pn | 16 42 25.8 | +0.1 |
| OHR | | | | i Sg | Sg | 16 42 45.8 | +0.3 |
| OHR | | | | eLg | Lg | 16 42 48.2 | |
| | comp=E,228nm,0.6s | | | | | | |
| OHR | | | | eLg | Lg | 16 42 48.4 | |
| | comp=N,123nm,0.7s | | | | | | |
| OHR | Ohrid | 1.44 | 203 | i Pg | Pn | 16 42 25.8 | +0.1 |
| OHR | | | | i Sg | Sg | 16 42 45.7 | +0.3 |
| OHR | | | | eLg | Lg | 16 42 48.2 | |
| | comp=N,228nm,0.6s | | | | | | |
| IVAS | Ivanjica | 1.53 | 319 | eSg | Sb | 16 42 47.6 | +0.1 |
| IVAS | Ivanjica | 1.53 | 319 | eSg | Sb | 16 42 47.6 | +0.1 |
| GRUS | Gruza | 1.57 | 338 | i Pg | Pb | 16 42 28.8 | +0.2 |
| GRUS | | | | eSg | Sg | 16 42 49.6 | -0.2 |
| GRUS | Gruza | 1.57 | 338 | i Pg | Pb | 16 42 28.8 | +0.2 |
| GRUS | | | | eSg | Sg | 16 42 49.6 | -0.2 |
| GRG | Griva | 1.61 | 156 | eP | Pn | 16 42 28.7 | +0.6 |
| GRG | Griva | 1.61 | 156 | eP | Pn | 16 42 28.7 | +0.6 |
| GRG | Griva | 1.61 | 156 | S | Pn | 16 42 26.5 | -1.6 |
| GRG | Griva | 1.61 | 156 | P | Pn | 16 42 28.4 | +0.3 |
| GRG | Griva | 1.61 | 156 | P | Pn | 16 42 28.4 | +0.3 |
| KNT | Kendrikon | 1.63 | 141 | eP | Pn | 16 42 28.5 | +0.2 |
| KNT | Kendrikon | 1.63 | 141 | eP | Pn | 16 42 28.5 | +0.2 |
| KNT | Kendrikon | 1.63 | 141 | P | Pn | 16 42 28.0 | -0.3 |
| KNT | Kendrikon | 1.63 | 141 | P | Pn | 16 42 28.0 | -0.3 |
| FNA | Florina | 1.66 | 184 | eP | Pb | 16 42 29.7 | -0.4 |
| FNA | Florina | 1.66 | 184 | eP | Pb | 16 42 29.7 | -0.4 |
| FNA | Florina | 1.66 | 184 | P | Pn | 16 42 28.9 | +0.2 |
| FNA | Florina | 1.66 | 184 | P | Pn | 16 42 28.9 | +0.2 |
| PDG | Podgorica | 1.69 | 271 | ⇑iPn | Pb | 16 42 30.3 | -0.4 |
| PDG | | | | eSg | Sg | 16 42 53.8 | +0.1 |
| PDG | Podgorica | 1.69 | 271 | ⇑iPn | Pn | 16 42 29.6 | +0.5 |
| PDG | | | | eSn | Sg | 16 42 53.1 | -0.6 |
| PDG | | | | eSg | Sg | 16 42 53.8 | +0.1 |
| TTG | Podgorica | 1.69 | 271 | ⇑iPn | Pn | 16 42 29.6 | +0.5 |
| TTG | | | | eSn | Sg | 16 42 53.1 | -0.6 |
| DRME | Dracevica, Mon | 1.77 | 263 | ⇑iPn | Pb | 16 42 31.7 | -0.2 |
| DRME | | | | eSn | Sg | 16 42 55.7 | -0.3 |
| DRME | Dracevica, Mon | 1.77 | 263 | ⇑iPn | Pb | 16 42 31.7 | -0.2 |
| DRME | | | | eSn | Sg | 16 42 55.7 | -0.3 |
| ULC | Ulcinj | 1.77 | 255 | ⇑iPn | Pb | 16 42 31.3 | -0.7 |
| ULC | | | | eSn | Sg | 16 42 56.3 | +0.1 |
| ULC | Ulcinj | 1.77 | 255 | ⇑iPn | Pb | 16 42 31.3 | -0.7 |
| ULC | | | | eSn | Sg | 16 42 56.3 | +0.1 |
| PLE | Pljevlja | 1.82 | 300 | ⇑iPn | Pn | 16 42 31.0 | 0.0 |
| PLE | | | | eSn | Sb | 16 42 56.6 | +0.7 |
| PLE | Pljevlja | 1.82 | 300 | ⇑iPn | Pn | 16 42 31.0 | 0.0 |
| PLE | | | | eSn | Sb | 16 42 56.6 | +0.7 |
| MMB | Musomiste | 1.83 | 117 | P | Pn | 16 42 32.1 | +0.9 |
| MMB | | | | Pg | Pg | 16 42 34.3 | -0.1 |
| MMB | Musomiste | 1.83 | 117 | P | Pn | 16 42 32.1 | +0.9 |
| MPEP | Malo Peshtene | 1.86 | 60 | P | Pg | 16 42 34.7 | -0.2 |
| NKY | Niksic | 1.92 | 282 | ⇑iPn | Pn | 16 42 32.8 | +0.4 |
| NKY | | | | eSn | Sb | 16 42 59.8 | +1.1 |
| NKY | Niksic | 1.92 | 282 | ⇑iPn | Pn | 16 42 32.8 | +0.4 |
| NKY | | | | eSn | Sb | 16 42 59.8 | +1.1 |
| NKME | Niksic | 1.94 | 281 | ePn | Pn | 16 42 33.5 | +0.9 |
| NKME | | | | eSn | Sb | 16 42 59.7 | +0.4 |
| NKME | Niksic | 1.94 | 281 | ePn | Pn | 16 42 33.5 | +0.9 |
| NKME | | | | eSn | Sb | 16 42 59.7 | +0.4 |
| PGB | Panagyurishte | 1.94 | 86 | P | Pb | 16 42 34.1 | -0.9 |
| PGB | Panagyurishte | 1.94 | 86 | P | Pb | 16 42 34.1 | -0.9 |
| BUM | Brajici-Budva | 1.97 | 267 | ⇓iPn | Pn | 16 42 34.0 | +1.0 |
| BUM | | | | eSn | Sb | 16 43 00.5 | +0.4 |
| BUM | Brajici-Budva | 1.97 | 267 | ⇓iPn | Pn | 16 42 34.0 | +1.0 |
| BUM | | | | eSn | Sb | 16 43 00.5 | +0.4 |
| KUBS | Kucevo | 1.98 | 3 | ePn | Pn | 16 42 31.6 | -1.5 |
| KUBS | Kucevo | 1.98 | 3 | ePn | Pn | 16 42 31.6 | -1.5 |
| DIVS | Divibare | 2.01 | 326 | ePn | Pn | 16 42 32.4 | -1.2 |
| DIVS | Divibare | 2.01 | 326 | ⇑iP | Pn | 16 42 34.6 | +1.0 |
| DIVS | Divibare | 2.01 | 326 | S | Sg | 16 43 05.7 | +1.8 |
| DIVS | Divibare | 2.01 | 326 | P | Pn | 16 42 33.2 | -0.4 |
| DIVS | | | | S | Sn | 16 43 00.3 | +1.3 |
| DIVS | Divibare | 2.01 | 326 | ePn | Pn | 16 42 32.4 | -1.2 |
| DIVS | Divibare | 2.01 | 326 | P | Pn | 16 42 33.2 | -0.4 |
| DIVS | | | | S | Sn | 16 43 00.3 | +1.3 |
| SRS | Serrai | 2.02 | 130 | eP | Pn | 16 42 33.9 | +0.2 |
| SRS | Serrai | 2.02 | 130 | eP | Pn | 16 42 33.9 | +0.2 |
| SRS | Serrai | 2.02 | 130 | P | Pn | 16 42 33.7 | 0.0 |
| SRS | Serrai | 2.02 | 130 | P | Pn | 16 42 33.7 | 0.0 |
| NVR | Nevrokopi | 2.04 | 121 | eP | Pn | 16 42 34.5 | +0.4 |
| NVR | Nevrokopi | 2.04 | 121 | eP | Pn | 16 42 34.5 | +0.4 |
| NVR | Nevrokopi | 2.04 | 121 | P | Pn | 16 42 34.4 | +0.4 |
| NVR | | | | S | Sb | 16 43 01.3 | -1.0 |
| NVR | Nevrokopi | 2.04 | 121 | P | Pn | 16 42 34.4 | +0.4 |
| NVR | | | | S | Sb | 16 43 01.3 | -1.0 |
| NEST | Nestorio | 2.05 | 191 | eP | Pn | 16 42 35.4 | +1.2 |
| NEST | Nestorio | 2.05 | 191 | eP | Pn | 16 42 35.4 | +1.2 |
| NEST | Nestorio | 2.05 | 191 | P | Pn | 16 42 34.3 | +0.1 |
| NEST | | | | S | Sn | 16 43 00.9 | +0.8 |
| NEST | Nestorio | 2.05 | 191 | P | Pn | 16 42 34.3 | +0.1 |
| NEST | | | | S | Sn | 16 43 00.9 | +0.8 |
| UPM | Unac-Piva | 2.09 | 292 | ⇑iPn | Pn | 16 42 35.2 | +0.4 |
| UPM | | | | eSn | Sb | 16 43 03.2 | -0.5 |
| UPM | Unac-Piva | 2.09 | 292 | ⇑iPn | Pn | 16 42 35.2 | +0.4 |
| UPM | | | | eSn | Sb | 16 43 03.2 | -0.5 |
| SOH | Sokhos | 2.11 | 139 | eP | Pn | 16 42 35.4 | +0.5 |
| SOH | Sokhos | 2.11 | 139 | eP | Pn | 16 42 35.4 | +0.5 |
| BBLS | Lazići | 2.12 | 313 | ePn | Pn | 16 42 35.8 | +0.7 |
| BBLS | Lazići | 2.12 | 313 | ePn | Pn | 16 42 35.8 | +0.7 |
| KZN | Kozani | 2.13 | 175 | eP | Pn | 16 42 36.5 | +1.2 |
| KZN | Kozani | 2.13 | 175 | eP | Pn | 16 42 36.5 | +1.2 |
| HORT | Hortiatis | 2.18 | 147 | eP | Pn | 16 42 36.5 | +0.6 |
| HORT | Hortiatis | 2.18 | 147 | eP | Pn | 16 42 36.5 | +0.6 |
| HCY | Herceg Novi | 2.26 | 271 | ePn | Pn | 16 42 37.9 | +1.0 |
| HCY | | | | eSn | Sb | 16 43 07.3 | -1.1 |
| HCY | Herceg Novi | 2.26 | 271 | ePn | Pn | 16 42 37.9 | +1.0 |
| HCY | | | | eSn | Sb | 16 43 07.3 | -1.1 |
| BRY | Bratogost | 2.26 | 283 | ⇓iPn | Pn | 16 42 37.9 | +0.8 |
| BRY | | | | eSn | Sb | 16 43 07.6 | -1.1 |
| BRY | Bratogost | 2.26 | 283 | ⇓iPn | Pn | 16 42 37.9 | +0.8 |
| BRY | | | | eSn | Sb | 16 43 07.6 | -1.1 |
| TREB | Trebinje | 2.37 | 278 | ⇑iPn | Pb | 16 42 41.0 | -1.3 |
| TREB | | | | eSg | Sg | 16 43 13.8 | -1.7 |
| TREB | Trebinje | 2.37 | 278 | ⇑iPn | Pb | 16 42 41.0 | -1.3 |
| TREB | | | | eSg | Sg | 16 43 13.8 | -1.7 |
| RZN | Rozhen | 2.48 | 106 | P | Pn | 16 42 41.3 | +1.2 |
| RZN | | | | Pg | Pg | 16 42 47.4 | +0.6 |
| RZN | Rozhen | 2.48 | 106 | P | Pn | 16 42 41.3 | +1.2 |
| PLG | Polygyros | 2.51 | 145 | eP | Pn | 16 42 38.4 | -2.0 |
| PLG | Polygyros | 2.51 | 145 | eP | Pn | 16 42 38.4 | -2.0 |
| TEKS | Tekeris | 2.57 | 326 | i Pn | Pn | 16 42 41.4 | +0.1 |
| TEKS | Tekeris | 2.57 | 326 | i Pn | Pn | 16 42 41.4 | +0.1 |
| OUR | Ouranopolis | 2.79 | 138 | eP | Pn | 16 42 44.2 | 0.0 |
| OUR | Ouranopolis | 2.79 | 138 | eP | Pn | 16 42 44.2 | 0.0 |
| THL | Klokotos Trika | 2.89 | 173 | eP | Pn | 16 42 47.1 | +1.5 |
| THL | Klokotos Trika | 2.89 | 173 | eP | Pn | 16 42 47.1 | +1.5 |
| KDZ | Kurdzhali | 2.99 | 104 | P | Pb | 16 42 53.3 | +0.5 |
| FGSL | Fruska Gora | 3.00 | 336 | ePn | Pn | 16 42 47.1 | 0.0 |
| FGSL | | | | eSn | Sn | 16 43 22.4 | -0.8 |
| FRGS | Fruska Gora | 3.00 | 336 | ePn | Pn | 16 42 47.1 | 0.0 |
| FRGS | | | | eSn | Sn | 16 43 22.4 | -0.8 |
| IGT | Igoumenitsa | 3.04 | 198 | eP | Pn | 16 42 50.4 | +2.7 |
| IGT | Igoumenitsa | 3.04 | 198 | eP | Pn | 16 42 50.4 | +2.7 |
| GZR | Gura Zlata | 3.09 | 16 | ⇑iP | Pn | 16 42 50.3 | +1.9 |
| GZR | Gura Zlata | 3.09 | 16 | S | Sg | 16 43 39.2 | +0.7 |
| GZR | Gura Zlata | 3.09 | 16 | ⇑iP | Pn | 16 42 50.3 | +1.9 |
| BZS | Buzias | 3.18 | 1 | ePn | Pn | 16 42 50.3 | +0.7 |
| BZS | Buzias | 3.18 | 1 | ⇓iP | Pn | 16 42 51.8 | +2.2 |
| BZS | Buzias | 3.18 | 1 | S | Sg | 16 43 40.0 | -1.4 |
| BZS | Buzias | 3.18 | 1 | ePn | Pn | 16 42 50.3 | +0.7 |
| BZS | Buzias | 3.18 | 1 | ⇓iP | Pn | 16 42 51.8 | +2.2 |
| LOT | Lotru | 3.42 | 27 | ⇓iP | Pn | 16 42 54.4 | +1.4 |
| LOT | Lotru | 3.42 | 27 | S | Sg | 16 43 45.7 | -3.2 |
| LOT | Lotru | 3.42 | 27 | ⇓iP | Pn | 16 42 54.4 | +1.4 |
| AGG | Agios Georgios | 3.46 | 170 | eP | Pn | 16 42 54.4 | +0.9 |
| AGG | Agios Georgios | 3.46 | 170 | eP | Pn | 16 42 54.4 | +0.9 |
| LKD2 | Lefkada island | 3.70 | 191 | eP | Pn | 16 42 59.4 | +2.6 |
| LKD2 | Lefkada island | 3.70 | 191 | eP | Pn | 16 42 59.4 | +2.6 |
| VYHS | Vyhne | 6.35 | 344 | ePN | Pn | 16 43 31.7 | -1.5 |
| VYHS | Vyhne | 6.35 | 344 | ePn | Pn | 16 43 31.7 | -1.5 |

**GUC 08 16:53:48.6±0.4, 35.66S×72.96W, h20km, ML4.0, 2C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| COCH | Cobquecura | 0.49 | 164 | ⇓iP | Pb | 16 53 57.7 | -0.8 |
| COCH | | | | i S | Sb | 16 54 06.4 | +1.1 |
| COCH | | | | AML | AML | 16 54 09.0 | |
| | comp=N,11μm,0.6s | | | | | | |
| TALC | Talca | 1.11 | 77 | ⇑iP | Pn | 16 54 08.7 | -0.3 |
| TALC | | | | eS | Sn | 16 54 24.3 | +0.7 |
| CCHI | Chillan | 1.18 | 143 | ⇓iP | Pn | 16 54 09.9 | 0.0 |
| CCHI | | | | i S | Sn | 16 54 26.4 | +1.0 |
| CHPI | Pichilemu | 1.49 | 32 | i S | Sb | 16 54 36.9 | +2.8 |
| CLCH | Cerro Calan | 3.02 | 42 | ⇑iP | Pn | 16 54 38.2 | +2.9 |
| CLCH | | | | eS | Sb | 16 55 24.5 | +6.3 |
| CLCH | | | | AML | AML | 16 55 34.5 | |
| | comp=E,901nm,0.7s | | | | | | |

*MOS **08** 17:00:27.9±0.9, 58.87N×153.03W, h62km, mb5.3/38, Error ellipse: s-maj=9.2km s-min=4.1km az=88.8*

*BJI **08** 17:00:28.5, 59.50N×153.20W, h52km, mb4.9/38, mB5.0/29, Ms4.8/16, Ms7 4.5/16*

*IDC **08** 17:00:29.0±0.4, 58.75N×153.00W, h60km±4km, mb4.5/29, mb1 4.6/34, mb1mx4.5/43, mbtmp4.8/34, MS3.5/15, Ms1 3.5/15, ms1mx3.4/38, Error ellipse: s-maj=9.0km s-min=6.3km az=78.0*

*ISCJB **08** 17:00:29.1±0.2, 58.87N±0.01×152.84W±0.02, h69km±1km, mb4.8/170, Error ellipse: s-maj=2.3km s-min=1.9km az=0.4*

*NEIC **08** 17:00:30.5, 58.75N×152.64W, h56km, mb4.8/79, MW4.7, ML4.6(AEIC) Best double couple: NP1:φs17.00000°, δ75.00000°, λ137.00000°. NP2:φs120.00000°, δ48.00000°, λ20.00000°. Principal axes: T 1.6300, Plg40.0000°, Azm330.0000°; N -0.3200, Plg45.0000°, Azm182.0000°; P -1.3000, Plg17.0000°, Azm75.0000°; After AEIC.*

*NEIC Felt [II] at Kodiak. Also felt at Anchorage, Anchor Point, Homer and Iliamna.*

*SZGRF **08** 17:00:33.0, 59.79N×154.49W, h33km, mb5.4/21(BGR)*

**ISC 08 17:00:29.3±0.3, 58.81N±0.03×152.82W±0.03, h62km±2km, h61km:pP-P, n804, σ1.29/863, mb5.0/173, 54C-13D, Kodiak Island region**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FOPK | Fourpeaked Vol | 0.34 | 262 | P | Pn | 17 00 40.8 | +0.9 |
| CDD | Cape Douglas | 0.44 | 287 | P | Pn | 17 00 42.2 | +1.4 |
| FOSS | Fourpeaked Sta | 0.45 | 270 | P | Pn | 17 00 42.2 | +1.2 |
| AUI | Augustine Isla | 0.62 | 330 | P | Pn | 17 00 44.1 | +1.5 |
| AUE | Augustine Isla | 0.62 | 333 | P | Pn | 17 00 44.4 | +1.7 |
| AUP | Augustine Pinn | 0.64 | 331 | P | Pn | 17 00 44.7 | +1.7 |
| AUP | Augustine Pinn | 0.64 | 331 | P | Pn | 17 00 44.7 | +1.7 |
| AUL | Augustine Lava | 0.66 | 332 | P | Pn | 17 00 45.0 | +1.9 |
| AUL | | | | S | Sn | 17 00 56.1 | +2.8 |
| KAPH | Katmai Pasha | 0.82 | 256 | P | Pn | 17 00 46.6 | +1.5 |
| MCNL | McNeil River | 0.87 | 297 | P | Pn | 17 00 47.3 | +1.6 |
| OPT | Oil Point | 0.88 | 346 | P | Pn | 17 00 47.4 | +1.6 |
| KAHG | Katmai Hook Gl | 0.95 | 252 | P | Pn | 17 00 48.3 | +1.5 |
| KDAK | Kodiak Island | 1.03 | 173 | P | Pn | 17 00 47.9 | +0.2 |
| | 1μm,0.3s,baz=23,slow=11 | | | | | | |
| KDAK | | | | S | Sn | 17 00 60.0 | -1.5 |
| | 3μm,0.3s,baz=32,slow=19,SNR=32 | | | | | | |
| KDAK | Kodiak Island | 1.03 | 173 | i P | Pn | 17 00 47.5 | -0.2 |
| KDAK | Kodiak Island | 1.03 | 173 | ePn | Pn | 17 00 47.8 | +0.1 |
| KDAK | | | | eSn | Sn | 17 01 00.9 | -0.5 |
| HOM | Homer | 1.05 | 35 | P | Pn | 17 00 49.0 | +1.0 |
| HOM | | | | S | Sn | 17 01 03.6 | +1.8 |
| CNPM | China Poot | 1.09 | 48 | P | Pn | 17 00 49.1 | +0.5 |
| CNPM | | | | S | Sn | 17 01 03.2 | +0.3 |
| KAHC | Katmai Hardscr | 1.15 | 263 | P | Pn | 17 00 50.7 | +1.3 |
| PDB | Pedro Bay | 1.21 | 325 | P | Pn | 17 00 51.3 | +1.2 |
| PDB | Pedro Bay | 1.21 | 325 | P | Pn | 17 00 51.3 | +1.2 |
| IVE | Iliamna Volcan | 1.22 | 355 | P | Pn | 17 00 51.4 | +1.0 |
| IVE | | | | S | Sn | 17 01 07.6 | +1.5 |
| INE | Iliamna NE | 1.27 | 355 | P | Pn | 17 00 52.3 | +1.3 |
| ILW | Iliamna West | 1.27 | 353 | P | Pn | 17 00 52.0 | +1.0 |
| KAKN | Katmai Knife C | 1.28 | 247 | P | Pn | 17 00 52.4 | +1.3 |
| KAKN | | | | S | Sn | 17 01 10.1 | +2.6 |
| KABR | Katmai Barrier | 1.31 | 240 | P | Pn | 17 00 52.6 | +1.1 |
| BRLK | Bradley Lake | 1.38 | 45 | P | Pn | 17 00 52.5 | +0.1 |
| BRLK | | | | S | Sn | 17 01 09.0 | -0.9 |
| KABU | Katmai Buttres | 1.40 | 248 | P | Pn | 17 00 54.4 | +1.7 |
| KELA | Mount Kelaz | 1.57 | 258 | P | Pn | 17 00 56.3 | +1.3 |
| OHAK | Old Harbor | 1.61 | 189 | P | Pn | 17 00 55.4 | 0.0 |
| OHAK | | | | S | Sn | 17 01 13.7 | -1.4 |
| RSO | Redoubt South | 1.66 | 1 | ePn | Pn | 17 00 57.4 | +1.0 |
| RDWB | Redoubt West | 1.69 | 360 | P | Pn | 17 00 57.6 | +1.0 |
| RDWB | | | | S | Sn | 17 01 18.7 | +1.4 |
| REF | Redoubt East F | 1.69 | 2 | P | Pn | 17 00 57.9 | +1.2 |
| REF | | | | S | Sn | 17 01 19.8 | +2.3 |
| RDN | Redoubt North | 1.71 | 1 | P | Pn | 17 00 58.3 | +1.3 |
| NCT | North Crescent | 1.76 | 358 | P | Pn | 17 00 58.9 | +1.3 |
| RDJH | Redoubt Jeurge | 1.79 | 0 | P | Pn | 17 00 59.3 | +1.3 |
| RDJH | | | | S | Sn | 17 01 20.8 | +1.0 |
| BGRM | Barrier Glacie | 1.97 | 6 | P | Pn | 17 01 01.6 | +1.2 |
| NKA | Nikishka | 2.10 | 22 | P | Pn | 17 01 04.8 | +2.8 |
| PLK3 | Peulik 3 | 2.14 | 240 | P | Pn | 17 01 04.2 | +1.6 |
| SLKM | Skilak Lake | 2.16 | 37 | P | Pn | 17 01 02.9 | 0.0 |
| SLKM | Skilak Lake | 2.16 | 37 | P | Pn | 17 01 02.9 | 0.0 |
| SEW | Seward | 2.16 | 51 | P | Pn | 17 01 02.3 | -0.5 |
| PLK1 | Peulik 1 | 2.24 | 245 | P | Pn | 17 01 05.8 | +2.0 |
| PLK5 | Peulik 5 | 2.28 | 251 | P | Pn | 17 01 06.6 | +2.1 |
| SII | Sitkinak Islan | 2.37 | 199 | P | Pn | 17 01 05.9 | +0.2 |
| CKL | Chakachamna La | 2.41 | 6 | P | Pn | 17 01 08.0 | +1.6 |
| SPU | Mount Spurr | 2.42 | 9 | ePn | Pn | 17 01 07.9 | +1.5 |
| SPU | | | | eSn | Sn | 17 01 36.8 | +1.9 |
| SPCR | Spurr Chakacha | 2.42 | 7 | P | Pn | 17 01 08.0 | +1.5 |
| SPCR | | | | S | Sn | 17 01 36.9 | +1.9 |
| CKN | Chakachatna No | 2.45 | 7 | P | Pn | 17 01 08.6 | +1.8 |
| SPBG | Spurr Blockage | 2.47 | 5 | P | Pn | 17 01 08.8 | +1.6 |
| BGL | Barrier Glacie | 2.48 | 5 | P | Pn | 17 01 08.9 | +1.6 |
| VOGL | Vogel Lake | 2.51 | 28 | P | Pn | 17 01 09.5 | +2.0 |
| SVW2 | Sparrevohn | 2.69 | 330 | P | Pn | 17 01 11.3 | +1.2 |
| FIB | Fire Island | 2.72 | 28 | P | Pn | 17 01 12.1 | +1.7 |
| FIB | Fire Island | 2.72 | 28 | P | Pn | 17 01 12.1 | +1.7 |
| STLK | Strandline Lak | 2.75 | 10 | P | Pn | 17 01 12.5 | +1.6 |
| RC01 | Rabbit Creek A | 2.77 | 33 | P | Pn | 17 01 11.6 | +0.4 |
| PTE | Portage | 2.82 | 41 | P | Pn | 17 01 11.7 | -0.1 |
| SUA | Susitna One | 2.86 | 20 | P | Pn | 17 01 13.6 | +1.0 |
| PWL | Port Wells | 3.06 | 46 | P | Pn | 17 01 14.9 | -0.3 |
| SKT | Skwentna | 3.25 | 11 | P | Pn | 17 01 18.8 | +1.1 |
| SKT | | | | S | Sn | 17 01 57.4 | +2.2 |
| PMR | Palmer | 3.35 | 32 | P | Pn | 17 01 19.0 | 0.0 |
| PMR | Palmer | 3.35 | 32 | P | Pn | 17 01 19.0 | 0.0 |
| CHIR | Chirikof Islan | 3.35 | 208 | P | Pn | 17 01 18.8 | -0.4 |
| ANNW | Aniakchak Nort | 3.42 | 240 | P | Pn | 17 01 21.9 | +1.8 |
| ANPK | Aniakchak Peak | 3.45 | 238 | P | Pn | 17 01 22.8 | +2.2 |
| ANPB | Aniakchak Plen | 3.54 | 238 | P | Pn | 17 01 23.7 | +1.9 |
| GLI | Glacier Island | 3.56 | 52 | P | Pn | 17 01 20.9 | -1.1 |
| HIN | Hinchinbrook I | 3.59 | 61 | P | Pn | 17 01 21.8 | -0.5 |
| SML | Sawmill | 3.75 | 35 | P | Pn | 17 01 24.5 | -0.1 |
| SML | Sawmill | 3.75 | 35 | P | Pn | 17 01 24.5 | -0.1 |
| FID | Port Fidalgo | 3.75 | 56 | P | Pn | 17 01 23.1 | -1.5 |
| JPK | Jack Peak | 3.86 | 52 | P | Pn | 17 01 25.2 | -0.9 |
| CHGN | Chignik | 3.92 | 233 | P | Pn | 17 01 27.9 | +1.0 |
| VMT | TAPS TI Valdez | 3.97 | 52 | P | Pn | 17 01 27.0 | -0.5 |
| EYAK | Cordova Ski Ar | 3.99 | 61 | P | Pn | 17 01 27.1 | -0.7 |
| VLZ | Valdez | 4.01 | 52 | P | Pn | 17 01 27.4 | -0.6 |
| SCM | Sheep Creek Mo | 4.08 | 40 | P | Pn | 17 01 29.1 | -0.1 |
| SCM | Sheep Creek Mo | 4.08 | 40 | P | Pn | 17 01 29.1 | -0.1 |
| PPLA | Purkeypile | 4.12 | 4 | P | Pn | 17 01 31.3 | +1.6 |
| SGAM | Sherman Glacie | 4.22 | 63 | P | Pn | 17 01 30.5 | -0.5 |
| DIV | Divide | 4.24 | 54 | P | Pn | 17 01 30.7 | -0.6 |
| VNHG | Veniaminof 1 | 4.29 | 236 | P | Pn | 17 01 34.2 | +2.2 |
| KLU | Klutina | 4.38 | 49 | P | Pn | 17 01 32.7 | -0.5 |
| TT01 | Tatalina | 4.40 | 341 | P | Pn | 17 01 34.6 | +1.2 |
| VNSS | Veniaminof 8 | 4.41 | 237 | P | Pn | 17 01 35.6 | +1.8 |
| RAGM | Ragged Mountai | 4.43 | 66 | ePn | Pn | 17 01 33.5 | -0.4 |
| RAGM | | | | eSn | Sn | 17 02 10.9 | -13 |
| HUR | Hurricane | 4.47 | 19 | P | Pn | 17 01 35.8 | +1.4 |
| VNWF | Veniaminof 8 | 4.51 | 237 | P | Pn | 17 01 36.8 | +1.8 |
| CAST | Castle Rocks | 4.64 | 4 | ePn | Pn | 17 01 37.4 | +0.6 |
| BMRM | Bremner River | 4.67 | 59 | P | Pn | 17 01 36.3 | -0.9 |
| NICHA | Nichawak Mount | 4.73 | 69 | P | Pn | 17 01 37.7 | -0.3 |
| SUCK | Suckling Hills | 4.79 | 71 | P | Pn | 17 01 38.7 | -0.1 |
| TRF | Thorofare Moun | 4.82 | 14 | P | Pn | 17 01 39.6 | +0.2 |
| KTH | Kantishna Hill | 4.85 | 10 | ePn | Pn | 17 01 40.6 | +0.9 |
| BERG | Berg Lake | 4.90 | 67 | P | Pn | 17 01 39.5 | -0.8 |
| PS11 | TAPS Pump St11 | 4.90 | 45 | P | Pn | 17 01 40.8 | +0.5 |
| RND | Reindeer | 5.00 | 21 | P | Pn | 17 01 42.5 | +0.8 |
| RND | Reindeer | 5.00 | 21 | P | Pn | 17 01 42.5 | +0.8 |
| BGLC | Bering Glacier | 5.04 | 71 | P | Pn | 17 01 41.9 | -0.3 |
| GRIN | Grindle Hills | 5.06 | 69 | P | Pn | 17 01 42.1 | -0.3 |
| CHUM | Lake Minchumin | 5.10 | 3 | P | Pn | 17 01 44.3 | +1.3 |
| KHIT | Khitrov Hills | 5.13 | 67 | P | Pn | 17 01 42.6 | -0.9 |
| HARP | HAARP | 5.23 | 43 | P | Pn | 17 01 45.1 | +0.4 |
| MCK | McKinley | 5.29 | 19 | P | Pn | 17 01 46.6 | +1.0 |
| MCK | McKinley | 5.29 | 19 | P | Pn | 17 01 46.5 | +1.0 |
| VRDI | Verde Repeater | 5.29 | 59 | P | Pn | 17 01 45.0 | -0.8 |
| KULT | Kultieth River | 5.34 | 70 | P | Pn | 17 01 45.9 | -0.5 |
| BPAW | Bear Paw Mtn. | 5.39 | 9 | P | Pn | 17 01 47.5 | +0.6 |
| SDPT | Sand Point | 5.42 | 234 | P | Pn | 17 01 48.3 | +0.9 |
| BARK | Barkley Ridge | 5.49 | 69 | P | Pn | 17 01 47.9 | -0.4 |
| PAX | Paxson | 5.51 | 38 | P | Pn | 17 01 48.5 | -0.1 |
| PAX | Paxson | 5.51 | 38 | P | Pn | 17 01 48.5 | -0.1 |
| MCARA | McCarthy VSAT | 5.54 | 58 | P | Pn | 17 01 48.3 | -0.7 |
| ISLE | Juniper Island | 5.61 | 67 | P | Pn | 17 01 49.8 | -0.2 |
| BWN | Browne | 5.62 | 15 | P | Pn | 17 01 51.3 | +1.2 |
| KIAG | Kiagna River | 5.68 | 64 | P | Pn | 17 01 50.5 | -0.7 |
| BAGL | Bagley Icefiel | 5.70 | 68 | P | Pn | 17 01 50.9 | -0.2 |
| MESA | MESA | 5.71 | 71 | P | Pn | 17 01 51.5 | -0.1 |
| PTPK | Patty Peak | 5.72 | 61 | P | Pn | 17 01 51.0 | -0.7 |
| BALM | Baldy | 5.72 | 63 | P | Pn | 17 01 50.5 | -1.1 |
| BALM | Baldy | 5.72 | 63 | P | Pn | 17 01 50.5 | -1.1 |
| PS10 | TAPS Pump St10 | 5.76 | 33 | P | Pn | 17 01 52.6 | +0.6 |
| PS4A | Pavlof South-4 | 6.02 | 239 | P | Pn | 17 01 56.2 | +0.6 |
| BARN | Barnard Glacie | 6.05 | 63 | P | Pn | 17 01 55.6 | -0.5 |
| NEA | Nenana | 6.06 | 15 | P | Pn | 17 01 56.4 | +0.3 |
| MENT | Mentasta | 6.08 | 43 | ePn | Pn | 17 01 55.9 | -0.5 |
| WRH | Wood River Hil | 6.12 | 20 | P | Pn | 17 01 57.1 | +0.3 |
| CTGM | Chitina Glacie | 6.18 | 65 | P | Pn | 17 01 57.5 | -0.4 |
| GCSA | Galena City Sc | 6.26 | 344 | P | Pn | 17 02 00.0 | +1.2 |
| LOGN | Logan Glacier | 6.30 | 66 | P | Pn | 17 01 59.0 | -0.5 |
| MLY | Manley | 6.33 | 8 | P | Pn | 17 02 00.0 | +0.2 |
| CCB | Clear Creek Bu | 6.33 | 20 | P | Pn | 17 01 59.5 | -0.2 |
| DT1 | Dutton Round H | 6.36 | 238 | P | Pn | 17 02 01.1 | +0.9 |
| PS08 | TAPS Pump Stn8 | 6.42 | 24 | P | Pn | 17 02 01.6 | +0.5 |
| COLA | College | 6.53 | 19 | P | Pn | 17 02 02.8 | +0.4 |
| COLA | College | 6.53 | 19 | P | Pn | 17 02 02.8 | +0.4 |
| PCA | Pinnacle | 6.54 | 73 | P | Pn | 17 02 02.2 | -0.6 |
| MDM | Murphy Dome | 6.54 | 17 | P | Pn | 17 02 02.8 | +0.1 |
| ILAR | Eielson Array | 6.61 | 23 | P | Pn | 17 02 03.4 | -0.3 |
| | 13nm,0.3s,baz=214,slow=13,SNR=229 | | | | | | |
| ILAR | | | | S | Sn | 17 03 12.0 | -5.5 |
| | 16nm,0.3s,baz=209,slow=14,SNR=5.4 | | | | | | |
| FALS | False Pass | 7.03 | 240 | P | Pn | 17 02 10.2 | +0.9 |
| PS06 | TAPS Pump Stn6 | 7.22 | 10 | P | Pn | 17 02 12.4 | +0.5 |
| ISLZ | Isanotski Laza | 7.24 | 240 | P | Pn | 17 02 13.9 | +1.5 |
| SSLS | Shishaldin Sou | 7.38 | 241 | P | Pn | 17 02 16.3 | +2.0 |
| SSBA | Shishaldin | 7.40 | 242 | P | Pn | 17 02 15.6 | +1.0 |
| DHAK | Deception Hill | 7.56 | 82 | P | Pn | 17 02 15.8 | -0.9 |
| WESN | West Dahl Nort | 7.74 | 242 | P | Pn | 17 02 20.5 | +1.4 |
| PS05 | TAPS Pump Stn5 | 8.10 | 6 | P | Pn | 17 02 24.5 | +0.6 |
| EGAK | Eagle | 8.14 | 38 | ePn | Pn | 17 02 24.1 | -0.4 |
| | 60nm,0.6s | | | | | | |
| DAWY | Dawson | 8.31 | 45 | P | Pn | 17 02 26.6 | -0.4 |
| PLBC | Pleasant Camp | 8.49 | 79 | P | Pn | 17 02 28.5 | -0.8 |
| FYU | Fort Yukon | 8.53 | 21 | ePn | Pn | 17 02 29.6 | -0.2 |
| COLD | Coldfoot | 8.54 | 7 | P | Pn | 17 02 30.2 | +0.3 |
| AKUT | Akutan | 8.55 | 242 | ePn | Pn | 17 02 31.5 | +1.3 |
| | 99nm,0.6s | | | | | | |
| ZRO | Akutan Zero | 8.68 | 243 | P | Pn | 17 02 32.8 | +0.8 |
| UNV | Unalaska Valle | 9.07 | 243 | P | Pn | 17 02 38.0 | +0.7 |
| MSW | Makushin Switc | 9.16 | 244 | P | Pn | 17 02 39.2 | +0.7 |
| MGOD | Makushin Gods | 9.28 | 243 | P | Pn | 17 02 40.0 | -0.2 |
| MSOM | Makushin Julie | 9.30 | 244 | P | Pn | 17 02 40.6 | +0.2 |
| MSOM | Makushin Julie | 9.30 | 244 | P | Pn | 17 02 40.5 | +0.2 |
| TNA | Tin City | 9.76 | 320 | ePn | Pn | 17 02 49.6 | +3.0 |
| GAMB | Gambell | 10.34 | 307 | ePn | Pn | 17 02 57.0 | +2.5 |
| WRAK | Wrangell Islan | 11.23 | 93 | ePn | Pn | 17 03 05.1 | -1.7 |
| WRAK | | | | eSn | Sn | 17 05 03.7 | -6.7 |
| DLBC | Dease Lake | 11.88 | 82 | P | Pn | 17 03 15.4 | -0.2 |
| | 18nm,0.3s,baz=278,slow=11,SNR=86 | | | | | | |
| DLBC | | | | S | Sn | 17 05 20.4 | -5.9 |
| | 2.9nm,0.3s,baz=120,slow=20,SNR=4.7 | | | | | | |
| DLBC | | | | LR | LR | 17 07 45.6 | |
| | comp=Z,202nm,20.2s,baz=286,slow=36 | | | | | | |
| DLBC | Dease Lake | 11.88 | 82 | ePn | Pn | 17 03 15.0 | -0.6 |
| | 37nm,0.4s | | | | | | |
| DLBC | | | | eSn | Sn | 17 05 21.1 | -5.2 |
| INK | Inuvik | 12.76 | 34 | P | Pn | 17 03 27.4 | -0.2 |
| | 1.8nm,0.3s,baz=225,slow=15,SNR=52 | | | | | | |
| INK | | | | S | Sn | 17 05 41.5 | -6.2 |
| | baz=207,slow=14,SNR=1.8 | | | | | | |
| INK | | | | LR | LR | 17 09 04.3 | |
| | comp=Z,99nm,18.0s,baz=256,slow=40 | | | | | | |
| GSTR | Great Sitkin T | 14.74 | 253 | ePn | Pn | 17 03 54.0 | 0.0 |
| BBB | Bella Bella | 15.43 | 105 | P | Pn | 17 04 01.9 | -0.9 |
| | 0.3nm,0.3s,baz=318,slow=16,SNR=3.4 | | | | | | |
| BBB | | | | S | Sn | 17 06 44.4 | -8.1 |
| | 0.4nm,0.3s,baz=133,slow=19,SNR=5.4 | | | | | | |
| BBB | | | | LR | LR | 17 09 02.7 | |
| | comp=Z,218nm,20.8s,baz=276,slow=33 | | | | | | |
| AMKA | Amchitka | 17.50 | 257 | ePn | Pn | 17 04 28.6 | -0.1 |
| | 54nm,0.5s | | | | | | |
| AMKA | | | | e | | 17 04 37.7 | |
| YKA | Yellowknife Ar | 18.89 | 63 | P | Pn | 17 04 45.1 | -0.3 |
| | 3.8nm,0.3s,baz=274,slow=10.0,SNR=66 | | | | | | |
| BILL | Bilibino | 20.09 | 314c | iP | P | 17 04 57.7 | +0.4 |
| BILL | | | | eS | S | 17 08 33.9 | -5.4 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,62nm,0.7s | | | | | | |
| BILL | Bilibino | 20.09 | 314 | eP | P | 17 04 57.4 | 0.0 |
| | comp=Z,55nm,0.6s | | | | | | |
| B05A | Bryant | 20.90 | 107 | P | Pn | 17 05 08.5 | -0.7 |
| | baz=21,SNR=7.1 | | | | | | |
| LON | Longmire | 22.07 | 109 | eP | P | 17 05 20.8 | +2.0 |
| LON | | | | pmax | pmax | | |
| | comp=Z,24nm,1.6s | | | | | | |
| LON | Longmire | 22.07 | 109 | eP | P | 17 05 20.8 | +2.0 |
| | comp=Z,24nm,1.6s | | | | | | |
| G03D | McMinnville, O | 22.48 | 114 | P | P | 17 05 24.4 | +1.2 |
| | baz=22 | | | | | | |
| EDM | Edmonton | 22.50 | 87 | eP | P | 17 05 23.8 | +0.4 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,37nm,0.7s | | | | | | |
| EDM | Edmonton | 22.50 | 87 | eP | P | 17 05 23.8 | +0.4 |
| | comp=Z,37nm,0.7s | | | | | | |
| G05D | Wamic, OR | 23.39 | 112 | P | P | 17 05 34.7 | +2.4 |
| | baz=23 | | | | | | |
| NEW | Newport | 23.41 | 101 | P | P | 17 05 33.9 | +1.4 |
| | comp=Z,13nm,0.7s,baz=310,slow=9.0,SNR=18 | | | | | | |
| NEW | | | | pP | pP | 17 05 48.1 | +1.5 |
| | comp=Z,12nm,0.8s,baz=310,slow=9.0,SNR=5.8 | | | | | | |
| NEW | | | | LR | LR | 17 14 05.0 | |
| | comp=Z,176nm,19.3s,baz=296,slow=35 | | | | | | |
| NEW | Newport | 23.41 | 101 | eP | P | 17 05 34.2 | +1.7 |
| NEW | | | | e | | 17 05 50.1 | |
| NEW | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| NEW | Newport | 23.41 | 101 | P | P | 17 05 34.3 | +1.8 |
| | baz=23,SNR=8.4 | | | | | | |
| NEW | Newport | 23.41 | 101 | eP | P | 17 05 34.2 | +1.7 |
| | comp=Z,15nm,0.9s | | | | | | |
| NEW | | | | e | | 17 05 50.1 | |
| HAWA | Hanford | 23.45 | 107 | eP | P | 17 05 33.3 | +0.5 |
| | comp=Z,37nm,1.6s | | | | | | |
| HAWA | | | | e | | 17 05 50.9 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| I03D | Drain, OR | 23.58 | 117 | P | P | 17 05 35.0 +0.9 |
| | baz=23 | | | | | |
| I04A | Tendick Farm, | 23.95 | 115 | P | P | 17 05 39.8 +2.4 |
| | baz=24 | | | | | |
| I05D | Terrebonne, OR | 24.05 | 113 | P | P | 17 05 39.9 +1.6 |
| | baz=24 | | | | | |
| J04D | Umpqua Nationa | 24.51 | 116 | P | P | 17 05 45.7 +3.0 |
| | baz=24 | | | | | |
| WALA | Waterton Lakes | 24.56 | 96 | eP | P | 17 05 44.1 +1.0 |
| | comp=Z,17nm,1.0s | | | | | |
| L02D | Cave Junction, | 24.67 | 120 | P | P | 17 05 44.9 +1.0 |
| | baz=24 | | | | | |
| BSMT | Bassoo Peak | 24.87 | 99 | eP | P | 17 05 47.1 +1.1 |
| | comp=Z,10nm,0.9s | | | | | |
| J05D | Fort Rock, OR | 24.89 | 115 | P | P | 17 05 48.7 +2.5 |
| | baz=25,SNR=5.7 | | | | | |
| JTMT | Jette | 25.20 | 99 | eP | P | 17 05 50.3 +1.4 |
| | comp=Z,14nm,1.1s | | | | | |
| JTMT | | | | e | | 17 06 05.1 |
| YBH | Yreka Blue Hor | 25.41 | 119 | P | P | 17 05 52.6 +1.8 |
| | comp=Z,5.1nm,0.9s,baz=350,slow=6.1,SNR=9.2 | | | | | |
| YBH | | | | pP | pP | 17 06 06.9 +1.1 |
| | comp=Z,13nm,0.8s,baz=333,slow=4.9,SNR=14 | | | | | |
| YBH | | | | LR | LR | 17 13 54.3 |
| | comp=Z,71nm,21.6s,baz=320,slow=32 | | | | | |
| YBH | Yreka Blue Hor | 25.41 | 119 | eP | P | 17 05 53.7 +2.9 |
| YBH | | | | e | | 17 06 09.2 |
| YBH | | | | pmax | pmax | |
| | comp=Z,14nm,0.8s | | | | | |
| YBH | Yreka Blue Hor | 25.41 | 119 | eP | P | 17 05 53.7 +2.9 |
| | comp=Z,14nm,0.8s | | | | | |
| YBH | | | | e | | 17 06 09.2 |
| SWMT | Swartz Lake | 25.50 | 99 | eP | P | 17 05 52.9 +1.3 |
| | comp=Z,21nm,1.2s | | | | | |
| M02C | Callahan | 25.62 | 120 | P | P | 17 05 56.6 +3.9 |
| | baz=25 | | | | | |
| KHMM | Horse Mountain | 25.64 | 122 | P | P | 17 05 52.7 -0.3 |
| | comp=Z,7.8nm,0.8s | | | | | |
| M04C | Macdoel | 25.77 | 118 | P | P | 17 05 57.2 +3.1 |
| | baz=26 | | | | | |
| SLMT | Seeley Lake | 25.93 | 99 | eP | P | 17 05 56.6 +1.0 |
| | comp=Z,11nm,1.0s | | | | | |
| SLMT | | | | e | | 17 06 12.8 |
| MSO | Missoula | 25.98 | 100 | P | P | 17 05 58.9 +3.0 |
| | baz=26 | | | | | |
| N02D | Trinity Center | 26.02 | 120 | P | P | 17 05 59.5 +3.2 |
| | baz=26 | | | | | |
| CHMT | Chamberlain Mo | 26.27 | 99 | eP | P | 17 05 59.6 +0.9 |
| | comp=Z,4.2nm,0.6s | | | | | |
| CHMT | | | | e | | 17 06 15.5 |
| RES | Resolute Bay | 26.28 | 31 | P | P | 17 05 57.7 -0.5 |
| | comp=Z,2.6nm,0.5s,baz=262,slow=9.2,SNR=7.3 | | | | | |
| RES | | | | PcP | PcP | 17 09 23.1 +0.5 |
| | comp=Z,2.9nm,0.6s,baz=297,slow=6.8,SNR=3.2 | | | | | |
| SEY | Seymchan | 26.29 | 302 | P | P | 17 05 58.2 -0.2 |
| | comp=Z,22nm,0.6s,baz=86,slow=6.9,SNR=80 | | | | | |
| SEY | Seymchan | 26.29 | 302⇓ | iP | P | 17 05 57.5 -0.9 |
| MOD | Modoc | 26.39 | 115 | P | P | 17 06 01.9 +2.2 |
| | comp=Z,3.3nm,0.6s | | | | | |
| WDC | Whiskeytown Da | 26.41 | 120 | P | P | 17 06 02.6 +2.9 |
| WDC | | | | e | | 17 06 17.7 |
| WDC | | | | pmax | pmax | |
| | comp=Z,18nm,1.2s | | | | | |
| WDC | Whiskeytown Da | 26.41 | 120 | P | P | 17 06 02.6 +2.9 |
| | comp=Z,18nm,1.2s | | | | | |
| WDC | | | | e | | 17 06 17.6 |
| KIPM | Iron Peak | 26.62 | 123 | eP | P | 17 06 04.6 +2.8 |
| | comp=Z,30nm,1.2s | | | | | |
| KIPM | | | | e | | 17 06 19.2 |
| WVOR | Wild Horse Val | 26.78 | 113 | P | P | 17 06 04.8 +1.6 |
| WVOR | | | | pmax | pmax | |
| | comp=Z,9.0nm,1.1s | | | | | |
| WVOR | Wild Horse Val | 26.78 | 113 | P | P | 17 06 04.8 +1.6 |
| | comp=Z,9.3nm,1.1s | | | | | |
| O03D | Paynes Creek | 26.97 | 120 | P | P | 17 06 05.8 +0.9 |
| | baz=27 | | | | | |
| HRY | Holter Researc | 27.14 | 98 | eP | P | 17 06 07.8 +1.4 |
| | comp=Z,18nm,0.6s | | | | | |
| HRY | | | | e | | 17 06 23.8 |
| EGMT | Eagleton | 27.36 | 94 | P | P | 17 06 09.0 +0.7 |
| | baz=27 | | | | | |
| EGMT | Eagleton | 27.36 | 94 | eP | P | 17 06 09.1 +0.7 |
| | comp=Z,17nm,1.0s | | | | | |
| PETK | Petropavlovsk- | 27.73 | 280 | P | P | 17 06 11.0 -0.5 |
| | comp=Z,5.8nm,0.7s,baz=74,slow=12,SNR=16 | | | | | |
| PETK | | | | LR | LR | 17 16 53.1 |
| | comp=Z,69nm,19.4s,baz=62,slow=36 | | | | | |
| MCMT | McKenzie Canyo | 27.90 | 102 | eP | P | 17 06 14.7 +1.4 |
| | comp=Z,1.7nm,0.7s | | | | | |
| BOZ | Bozeman (W) | 27.96 | 100 | P | P | 17 06 15.1 +1.4 |
| | baz=28 | | | | | |
| HLID | Hailey | 28.01 | 106 | P | P | 17 06 17.2 +2.9 |
| | baz=28 | | | | | |
| HLID | Hailey | 28.01 | 106 | eP | P | 17 06 14.6 +0.3 |
| | comp=Z,8.1nm,1.1s | | | | | |
| HLID | | | | e | | 17 06 31.7 |
| MA2 | Magadan | 28.17 | 296 | iP | P | 17 06 15.5 +0.2 |
| QLMT | Earthquake Lak | 28.62 | 101 | eP | P | 17 06 21.2 +1.5 |
| | comp=Z,1.1nm,0.9s | | | | | |
| QLMT | | | | e | | 17 06 35.7 |
| GCMT | Greycliff | 28.87 | 98 | eP | P | 17 06 24.4 +2.6 |
| | comp=Z,41nm,1.2s | | | | | |
| GCMT | | | | e | | 17 06 40.1 |
| FLWY | Flagg Ranch | 29.52 | 101 | eP | P | 17 06 30.6 +2.9 |
| | comp=Z,31nm,0.7s | | | | | |
| FLWY | | | | e | | 17 06 46.1 |
| IMW | Indian Meadow | 29.53 | 102 | eP | P | 17 06 30.2 +2.3 |
| | comp=Z,19nm,0.7s | | | | | |
| IMW | | | | e | | 17 06 46.1 |
| RLMT | Red Lodge | 29.53 | 98 | P | P | 17 06 30.2 +2.4 |
| | baz=29,SNR=5.3 | | | | | |
| RLMT | Red Lodge | 29.53 | 98 | eP | P | 17 06 30.2 +2.4 |
| | comp=Z,16nm,0.9s | | | | | |
| MOOW | Moose Ponds | 29.73 | 102 | eP | P | 17 06 31.3 +1.7 |
| | comp=Z,8.1nm,1.1s | | | | | |
| MOOW | | | | e | | 17 06 42.3 |
| MOOW | | | | e | | 17 06 47.3 |
| TPAW | Teton Pass | 29.81 | 102 | eP | P | 17 06 32.6 +2.2 |
| | comp=Z,12nm,0.7s | | | | | |
| LOHW | Long Hollow | 29.90 | 102 | eP | P | 17 06 33.1 +2.0 |
| | comp=Z,18nm,0.9s | | | | | |
| LOHW | | | | e | | 17 06 49.6 |
| SNOW | Snow King Moun | 29.93 | 102 | eP | P | 17 06 34.1 +2.7 |
| | comp=Z,9.8nm,0.6s | | | | | |
| SNOW | | | | e | | 17 06 49.6 |
| REDW | Red Top Meadow | 29.95 | 102 | eP | P | 17 06 33.9 +2.4 |
| | comp=Z,22nm,1.2s | | | | | |
| REDW | | | | e | | 17 06 49.5 |
| LAO | LASA Array | 30.06 | 93 | P | P | 17 06 32.1 -0.1 |
| | baz=30 | | | | | |
| NVAR | Mina Array Bea | 30.08 | 117 | P | P | 17 06 33.2 +0.5 |
| | comp=Z,3.1nm,0.9s,baz=310,slow=9.1,SNR=17 | | | | | |
| NVAR | | | | pP | pP | 17 06 48.4 +0.6 |
| | comp=Z,4.9nm,0.7s,baz=302,slow=10,SNR=18 | | | | | |
| NVAR | | | | PcP | PcP | 17 09 34.4 +1.5 |
| | comp=Z,1.1nm,0.7s,baz=308,slow=1.7,SNR=5.3 | | | | | |
| NVAR | | | | ScP | ScP | 17 13 10.7 +1.3 |
| | comp=Z,0.5nm,0.7s,baz=322,slow=2.1,SNR=4.3 | | | | | |
| NVAR | | | | LR | LR | 17 17 23.7 |
| | comp=Z,75nm,18.7s,baz=326,slow=34 | | | | | |
| HWUT | Hardware Ranch | 30.88 | 105 | eP | P | 17 06 42.1 +2.4 |
| | comp=Z,22nm,0.9s | | | | | |
| HWUT | | | | e | | 17 06 57.6 |
| BW06 | Boulder Array | 31.04 | 102 | eP | P | 17 06 42.5 +1.4 |
| | comp=Z,9.5nm,0.8s | | | | | |
| BW06 | | | | e | | 17 06 58.5 |
| TCUT | Toone Canyon | 31.32 | 106 | eP | P | 17 06 46.3 +2.6 |
| | comp=Z,25nm,0.8s | | | | | |
| R11A | Troy Canyon, C | 31.42 | 114 | P | P | 17 06 46.5 +2.1 |
| | baz=31,SNR=9.6 | | | | | |
| R11A | Troy Canyon, C | 31.42 | 114 | eP | P | 17 06 46.0 +1.5 |
| | comp=Z,7.0nm,1.0s | | | | | |
| R11A | | | | e | | 17 07 01.9 |
| E25A | Miller Ranch, | 31.65 | 91 | P | P | 17 06 47.6 +1.4 |
| | baz=31 | | | | | |
| GRAC | Grapevine Rang | 31.67 | 118 | P | P | 17 06 49.7 +3.2 |
| | baz=32 | | | | | |
| TPNV | Topopah Spring | 32.23 | 116 | P | P | 17 06 53.7 +2.2 |
| | baz=32,SNR=9.8 | | | | | |
| A29A | Manning Farm, | 32.27 | 84 | P | P | 17 06 51.5 -0.1 |
| | baz=32 | | | | | |
| ISA | Isabella | 32.27 | 121 | eP | P | 17 06 53.0 +1.2 |
| ISA | | | | e | | 17 07 08.9 |
| ISA | | | | pmax | pmax | |
| | comp=Z,4.0nm,0.9s | | | | | |
| ISA | Isabella | 32.27 | 121 | P | P | 17 06 54.3 +2.5 |
| | baz=32 | | | | | |
| ISA | Isabella | 32.27 | 121 | eP | P | 17 06 53.0 +1.2 |
| | comp=Z,3.7nm,0.9s | | | | | |
| ISA | | | | e | | 17 07 08.8 |
| PKM | Peak Mountain | 32.32 | 123 | P | P | 17 06 55.6 +3.2 |
| | baz=32 | | | | | |
| MPMC | Manual Prospec | 32.38 | 119 | P | P | 17 06 55.3 +2.3 |
| | baz=32,SNR=5.3 | | | | | |
| G25A | Newell | 32.51 | 93 | P | P | 17 06 51.4 -2.4 |
| | baz=32 | | | | | |
| K22A | Casper | 32.68 | 99 | P | P | 17 06 56.0 +0.5 |
| | baz=32 | | | | | |
| K22A | Casper | 32.68 | 99 | ePn | P | 17 06 56.7 +1.3 |
| | comp=Z,12nm,0.9s | | | | | |
| K22A | | | | e | | 17 07 12.0 |
| LRMC | Laurel Mountai | 32.78 | 120 | P | P | 17 06 58.7 +2.4 |
| | baz=33 | | | | | |
| F27A | Lemmon | 32.78 | 90 | P | P | 17 06 56.0 -0.1 |
| | baz=33 | | | | | |
| TMUT | Trail Mountain | 32.80 | 108 | P | P | 17 06 56.2 -0.5 |
| | comp=Z,46nm,0.6s | | | | | |
| TMUT | | | | e | | 17 07 14.5 |
| H25A | Fruitdale | 32.81 | 94 | P | P | 17 06 58.6 +2.1 |
| | baz=33 | | | | | |
| G26A | Maurine | 32.87 | 92 | P | P | 17 06 58.3 +1.4 |
| | baz=33 | | | | | |
| RSSD | Black Hills | 32.93 | 95 | eP | P | 17 06 59.5 +1.8 |
| RSSD | | | | pmax | pmax | |
| | comp=Z,28nm,0.6s | | | | | |
| RSSD | Black Hills | 32.93 | 95 | eP | P | 17 06 59.5 +1.8 |
| | comp=Z,28nm,0.6s | | | | | |
| MSU | Marysvale | 32.93 | 110 | eP | P | 17 07 00.0 +2.2 |
| MSU | | | | e | | 17 07 15.9 |
| MSU | | | | e | | 17 09 42.0 |
| MSU | | | | pmax | pmax | |
| | comp=Z,4.0nm,0.8s | | | | | |
| MSU | Marysvale | 32.93 | 110 | eP | P | 17 06 60.0 +2.2 |
| | comp=Z,3.9nm,0.8s | | | | | |
| MSU | | | | e | | 17 07 15.9 |
| MSU | | | | ePcP | PcP | 17 09 42.0 +1.4 |
| E28A | Huff | 33.01 | 88 | P | P | 17 06 58.7 +0.6 |
| | baz=33 | | | | | |
| I25A | Rochford | 33.16 | 95 | P | P | 17 07 01.1 +1.5 |
| | baz=33,SNR=7.1 | | | | | |
| G27A | Dupree | 33.16 | 91 | P | P | 17 07 00.1 +0.6 |
| | baz=33 | | | | | |
| ULM | Lac du Bonnet | 33.18 | 79 | P | P | 17 06 60.0 +0.4 |
| | comp=Z,5.6nm,0.8s,baz=315,slow=8.7,SNR=4.4 | | | | | |
| ULM | | | | LR | LR | 17 20 35.1 |
| | comp=Z,80nm,21.7s,baz=320,slow=36 | | | | | |
| ULM | Lac du Bonnet | 33.18 | 79 | P | P | 17 07 00.0 +0.4 |
| H26A | Fairpoint | 33.24 | 93 | P | P | 17 07 01.8 +1.6 |
| | baz=33,SNR=5.7 | | | | | |
| SRU | San Rafael | 33.28 | 107 | eP | P | 17 07 02.6 +1.8 |
| SRU | | | | e | | 17 07 19.0 |
| SRU | | | | pmax | pmax | |
| | comp=Z,29nm,1.0s | | | | | |
| SRU | San Rafael | 33.28 | 107 | eP | P | 17 07 02.6 +1.8 |
| | comp=Z,30nm,1.0s | | | | | |
| SRU | | | | e | | 17 07 19.0 |
| GSC | Goldstone | 33.32 | 119 | eP | P | 17 07 03.0 +2.0 |
| GSC | | | | e | | 17 07 17.4 |
| GSC | | | | pmax | pmax | |
| | comp=Z,2.0nm,0.6s | | | | | |
| GSC | Goldstone | 33.32 | 119 | P | P | 17 07 03.4 +2.4 |
| | baz=33 | | | | | |
| GSC | Goldstone | 33.32 | 119 | eP | P | 17 07 03.0 +2.0 |
| | comp=Z,1.7nm,0.6s | | | | | |
| GSC | | | | e | | 17 07 17.4 |
| J25A | Sunshine Ranch | 33.56 | 95 | P | P | 17 07 02.8 -0.2 |
| | baz=33 | | | | | |
| H27A | Howes | 33.59 | 92 | P | P | 17 07 03.8 +0.6 |
| | baz=33 | | | | | |
| O20A | White River Ci | 33.65 | 104 | P | P | 17 07 06.0 +2.0 |
| | baz=33 | | | | | |
| O20A | White River Ci | 33.65 | 104 | eP | P | 17 07 04.9 +0.9 |
| | comp=Z,32nm,0.8s | | | | | |
| O20A | | | | e | | 17 07 21.5 |
| D30A | Buchanan | 33.67 | 86 | P | P | 17 07 05.2 +1.4 |
| | baz=33 | | | | | |
| BFSC | Mount Baldy Ra | 33.83 | 121 | P | P | 17 07 07.1 +1.6 |
| | baz=34 | | | | | |
| HEC | Hector,Ludlow | 33.93 | 119 | P | P | 17 07 13.3 +7.0 |
| | baz=34 | | | | | |
| J26A | Sides Ranch, S | 33.99 | 95 | P | P | 17 07 05.0 -1.7 |
| | baz=34 | | | | | |
| N23A | Red Feather La | 34.25 | 101 | P | P | 17 07 10.4 +1.2 |
| | baz=34 | | | | | |
| GMRC | Granite Mounta | 34.28 | 118 | P | P | 17 07 10.9 +1.5 |
| | baz=34 | | | | | |
| LDFC | Landfair | 34.29 | 117 | eP | P | 17 07 10.7 +1.3 |
| | comp=Z,14nm,0.8s | | | | | |
| LDFC | | | | e | | 17 07 26.8 |
| I28A | Midland | 34.50 | 92 | P | P | 17 07 11.7 +0.6 |
| | baz=34 | | | | | |
| PV04 | Paradox Valley | 34.64 | 106 | eP | P | 17 07 13.4 +0.9 |
| PV04 | | | | e | | 17 07 30.3 |
| BELC | Belle Mtn. Jos | 34.77 | 119 | P | P | 17 07 16.0 +2.3 |
| | baz=35 | | | | | |
| M25A | Palm-Egli Farm | 34.83 | 98 | P | P | 17 07 16.0 +1.9 |
| | baz=35,SNR=5.1 | | | | | |
| J28A | Allard Ranch, | 34.87 | 93 | P | P | 17 07 15.6 +1.3 |
| | baz=35 | | | | | |
| B34A | Aery, Baudette | 34.91 | 81 | P | P | 17 07 15.1 +0.6 |
| | baz=35 | | | | | |
| I29A | Vivian Onida | 34.94 | 91 | P | P | 17 07 14.7 -0.2 |
| | baz=35 | | | | | |
| PV01 | Paradox Valley | 35.01 | 106 | eP | P | 17 07 17.1 +1.4 |
| | comp=Z,750nm,1.0s | | | | | |
| PV01 | | | | e | | 17 07 32.6 |
| IRM | Iron Mountain | 35.03 | 118 | P | P | 17 07 18.2 +2.5 |
| | baz=35,SNR=6.4 | | | | | |
| ISCO | Idaho Springs | 35.23 | 101 | eP | P | 17 07 19.9 +2.1 |
| ISCO | | | | e | | 17 07 36.1 |
| ISCO | | | | pmax | pmax | |
| | comp=Z,4.0nm,0.8s | | | | | |
| ISCO | Idaho Springs | 35.23 | 101 | P | P | 17 07 18.1 +0.3 |
| | baz=35 | | | | | |
| ISCO | Idaho Springs | 35.23 | 101 | eP | P | 17 07 19.9 +2.1 |
| | comp=Z,4.1nm,0.8s | | | | | |
| ISCO | | | | e | | 17 07 36.1 |
| PDMCI | Parker Dam,Lak | 35.38 | 117 | P | P | 17 07 18.8 +0.2 |
| | baz=35 | | | | | |
| Y12C | Blythe | 35.66 | 118 | P | P | 17 07 22.8 +1.7 |
| | baz=36 | | | | | |
| WUAZ | Wupatki | 35.70 | 112 | P | P | 17 07 23.7 +2.1 |
| | baz=36,SNR=9.4 | | | | | |
| WUAZ | Wupatki | 35.70 | 112 | eP | P | 17 07 23.9 +2.2 |
| | comp=Z,12nm,0.7s | | | | | |
| WUAZ | | | | e | | 17 07 40.0 |
| MVCO | Mesa Verde | 35.76 | 107 | ePn | P | 17 07 22.9 +0.6 |
| | comp=Z,3.4nm,0.8s | | | | | |
| MVCO | | | | e | | 17 07 38.3 |
| N27A | Anderson Farm, | 36.07 | 97 | P | P | 17 07 26.0 +1.3 |
| | baz=36 | | | | | |
| Q24A | Divide | 36.10 | 102 | P | P | 17 07 27.2 +2.0 |
| | baz=36,SNR=5.2 | | | | | |
| YAK | Yakutsk | 36.28 | 309 | P | P | 17 07 25.4 -0.6 |
| | comp=Z,10nm,0.7s,baz=78,slow=12,SNR=11 | | | | | |
| YAK | Yakutsk | 36.28 | 309 | eP | P | 17 07 25.1 -1.0 |
| YAK | | | | e*PP | pP | 17 07 43.3 +1.8 |
| YAK | | | | e | | 17 08 43.6 |
| YAK | | | | eS | S | 17 13 08.1 +6.3 |
| YAK | | | | e*SS | ScP | 17 13 34.2 +4.0 |
| YAK | | | | eSS | SS | 17 15 52.3 +11 |
| YAK | | | | pmax | pmax | |
| | comp=Z,9.0nm,0.9s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=E,1.0nm,0.9s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=N,1.0nm,1.0s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=Z,10.0nm,3.3s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=E,13nm,3.3s | | | | | |
| YAK | | | | pmax | pmax | |
| | comp=N,14nm,3.9s | | | | | |
| YAK | | | | smax | smax | |
| | comp=E,3.0nm,4.4s | | | | | |
| YAK | | | | smax | smax | |
| | comp=N,1.0nm,3.8s | | | | | |
| YAK | Yakutsk | 36.28 | 309 | eP | P | 17 07 25.1 -1.0 |
| | comp=N,62nm,0.7s | | | | | |
| YAK | | | | e | | 17 07 43.0 |
| C36A | Pine Crest Far | 36.30 | 81 | P | P | 17 07 24.8 -1.7 |
| | baz=36 | | | | | |
| D36A | Goodland | 36.52 | 82 | P | P | 17 07 26.6 -1.7 |
| | baz=36 | | | | | |
| C37A | Embarrass | 36.66 | 80 | P | P | 17 07 27.0 -2.5 |
| | baz=36 | | | | | |
| SDCO | Great Sand Dun | 36.85 | 104 | P | P | 17 07 33.5 +1.9 |
| | baz=37,SNR=7.7 | | | | | |
| SDCO | Great Sand Dun | 36.85 | 104 | eP | P | 17 07 33.2 +1.7 |
| | comp=N,9.8nm,1.3s | | | | | |
| SDCO | | | | e | | 17 07 49.6 |
| EYMN | Ely | 36.87 | 79 | P | P | 17 07 31.9 +0.6 |
| | baz=37,SNR=6.0 | | | | | |
| EYMN | Ely | 36.87 | 79 | eP | P | 17 07 31.3 0.0 |
| | comp=N,28nm,1.1s | | | | | |
| D37A | Cotton | 36.91 | 81 | P | P | 17 07 32.2 +0.6 |
| | baz=37 | | | | | |
| Q26A | Hugo | 36.96 | 100 | P | P | 17 07 34.5 +2.2 |
| | baz=37,SNR=7.8 | | | | | |
| N29A | Votaw Ranch, W | 37.05 | 96 | P | P | 17 07 32.0 -1.0 |
| | baz=37 | | | | | |
| ECSD | EROS Data Cent | 37.06 | 89 | P | P | 17 07 32.7 -0.2 |
| | baz=37 | | | | | |
| C38A | Sawbill Land. | 37.13 | 80 | P | P | 17 07 31.1 -2.5 |
| | baz=37 | | | | | |
| N30A | Hueftle Ranch, | 37.34 | 95 | P | P | 17 07 36.7 +1.3 |
| | baz=37 | | | | | |
| KSCO | Kaye Shedlock' | 37.35 | 99 | P | P | 17 07 37.7 +2.1 |
| | baz=37 | | | | | |
| R26A | Arlington | 37.47 | 101 | P | P | 17 07 38.2 +1.6 |
| | baz=37,SNR=5.9 | | | | | |
| KUR | Kuril'sk | 37.63 | 276c | iP | P | 17 07 36.3 -1.4 |
| KUR | | | | iS | S | 17 13 22.2 -0.5 |
| KUR | | | | iSS | SnSn | 17 16 00.4 -6.2 |
| KUR | | | | iSSS | SSS | 17 16 27.9 |
| KUR | | | | MLR | MLR | |
| | comp=N,154nm,18.0s | | | | | |
| KUR | | | | MLR | MLR | |
| | comp=Z,111nm,18.0s | | | | | |
| R27A | Eads | 37.81 | 100 | P | P | 17 07 41.4 +1.9 |
| | baz=38,SNR=6.3 | | | | | |
| T25A | Trinidad | 37.87 | 103 | P | P | 17 07 42.1 +2.0 |
| | baz=38,SNR=7.1 | | | | | |
| BGNE | Belgrade | 37.91 | 93 | P | P | 17 07 41.5 +1.4 |
| | baz=38 | | | | | |
| 214A | Organ Pipe Nat | 37.94 | 117 | P | P | 17 07 43.0 +2.5 |
| | baz=38 | | | | | |
| S26A | Kim | 37.98 | 102 | P | P | 17 07 42.9 +2.0 |
| | baz=38,SNR=8.7 | | | | | |
| SPMN | St. Paul | 38.01 | 84 | P | P | 17 07 41.5 +0.6 |
| | baz=38 | | | | | |
| S27A | Las Animas | 38.22 | 101 | P | P | 17 07 44.9 +2.0 |
| | baz=38,SNR=7.7 | | | | | |
| T26A | Comanche Natio | 38.26 | 102 | P | P | 17 07 44.9 +1.5 |
| | baz=38,SNR=8.5 | | | | | |
| Q29A | Oakley | 38.29 | 98 | P | P | 17 07 43.3 -0.2 |
| | baz=38 | | | | | |
| ANMO | Albuquerque | 38.56 | 107 | P | P | 17 07 47.1 +1.2 |
| | comp=Z,1.7nm,0.6s,baz=336,slow=8.7,SNR=6.2 | | | | | |
| ANMO | | | | pP | pP | 17 08 02.0 +0.6 |
| | comp=Z,2.0nm,0.7s,baz=328,slow=7.7,SNR=3.5 | | | | | |
| ANMO | Albuquerque | 38.56 | 107⇑ | iP | P | 17 07 47.5 +1.6 |
| ANMO | | | | pmax | pmax | |
| | comp=Z,4.0nm,1.2s | | | | | |
| T27A | Campo | 38.79 | 102 | P | P | 17 07 49.6 +1.9 |
| | baz=39,SNR=5.6 | | | | | |
| S28A | Manter | 38.80 | 100 | P | P | 17 07 50.7 +2.9 |
| | baz=39 | | | | | |
| P32A | Huiting Farm, | 38.98 | 95 | P | P | 17 07 51.3 +2.1 |
| | baz=39 | | | | | |
| Q31A | Ellis | 39.03 | 96 | P | P | 17 07 53.2 +3.7 |
| | baz=39 | | | | | |
| T28A | Walsh | 39.05 | 101 | P | P | 17 07 51.7 +1.8 |
| | baz=39,SNR=6.0 | | | | | |
| YSS | Yuzh-Sakhalins | 39.10 | 282 | eP | P | 17 07 50.6 +0.5 |
| R30A | Dighton | 39.11 | 98 | P | P | 17 07 52.5 +2.1 |
| | baz=39 | | | | | |
| O33A | Hebron | 39.17 | 94 | P | P | 17 07 52.1 +1.4 |
| | baz=39 | | | | | |
| S29A | Ulysses | 39.18 | 99 | P | P | 17 07 53.1 +2.1 |
| | baz=39 | | | | | |
| U27A | Thompson Grove | 39.23 | 102 | P | P | 17 07 52.9 +1.5 |
| | baz=39,SNR=7.5 | | | | | |
| Q32A | Meitler Ranch, | 39.47 | 96 | P | P | 17 07 53.9 +0.6 |
| | baz=39 | | | | | |
| R31A | Burdett | 39.49 | 97 | P | P | 17 07 55.6 +2.2 |
| | baz=39 | | | | | |
| YUK | Yuzh-Kuril'sk | 39.50 | 276d | iP | P | 17 07 46.2 -7.2 |
| YUK | | | | iS | S | 17 13 40.3 -11 |
| YUK | | | | pmax | pmax | |
| | comp=Z,372nm,1.6s | | | | | |
| YUK | | | | pmax | pmax | |
| | comp=N,174nm,1.6s | | | | | |
| YUK | | | | pmax | pmax | |
| | comp=E,203nm,1.6s | | | | | |
| YUK | | | | pmax | pmax | |
| | comp=Z,243nm,1.6s | | | | | |
| YUK | | | | MLR | MLR | |
| | comp=Z,241nm,20.0s | | | | | |
| O34A | Beatrice | 39.55 | 93 | P | P | 17 07 54.6 +0.6 |
| | baz=39 | | | | | |
| P33A | Williams Farm, | 39.59 | 94 | P | P | 17 07 55.4 +1.2 |
| | baz=39,SNR=5.1 | | | | | |
| Q33A | Connelly Farm, | 39.84 | 95 | P | P | 17 07 57.3 +0.9 |
| | baz=40,SNR=6.9 | | | | | |
| 121A | Cookes Peak, D | 39.85 | 111 | P | P | 17 07 58.8 +2.1 |
| | baz=40,SNR=6.2 | | | | | |
| P34A | Walnut Farm, R | 39.95 | 93 | P | P | 17 07 57.6 +0.3 |
| | baz=40,SNR=5.8 | | | | | |
| S31A | Mullinville | 40.02 | 98 | P | P | 17 08 00.0 +2.2 |
| | baz=40 | | | | | |
| V28A | Channing | 40.06 | 102 | P | P | 17 08 00.4 +2.1 |
| | baz=40 | | | | | |
| R33A | Olander Ranch, | 40.28 | 96 | P | P | 17 08 01.4 +1.4 |
| | baz=40 | | | | | |
| T31A | Randall Ranch, | 40.32 | 99 | P | P | 17 08 01.2 +0.8 |
| | baz=40,SNR=6.3 | | | | | |
| Q34A | Chapman | 40.36 | 94 | P | P | 17 08 01.3 +0.6 |
| | baz=40 | | | | | |
| P35A | Duane Minner, | 40.39 | 93 | P | P | 17 08 01.5 +0.7 |
| | baz=40,SNR=10.0 | | | | | |
| KSU1 | Kansas State U | 40.40 | 94 | P | P | 17 08 01.6 +0.6 |
| | baz=40 | | | | | |
| T32A | Huddler Ranch, | 40.65 | 98 | P | P | 17 08 04.4 +1.4 |
| | baz=40 | | | | | |
| R34A | Isabella, Hill | 40.66 | 95 | P | P | 17 08 04.0 +0.8 |
| | baz=40,SNR=6.2 | | | | | |
| P36A | Good Intent, A | 40.74 | 92 | P | P | 17 08 05.1 +1.4 |
| | baz=40 | | | | | |
| Q35A | Mercer Eighty, | 40.88 | 93 | P | P | 17 08 05.5 +0.6 |
| | baz=41 | | | | | |
| AMTX | Amarillo | 41.01 | 103 | P | P | 17 08 09.1 +3.0 |
| | baz=41 | | | | | |
| AMTX | Amarillo | 41.01 | 103 | eP | P | 17 08 07.0 +0.9 |
| | comp=Z,24nm,1.4s | | | | | |
| AMTX | | | | e | | 17 08 23.9 |
| Q36A | Arnold C. Orve | 41.10 | 93 | P | P | 17 08 06.6 -0.1 |
| | baz=41 | | | | | |
| MSTX | Muleshoe | 41.18 | 105 | P | P | 17 08 08.6 +1.1 |
| | baz=41,SNR=9.3 | | | | | |
| MSTX | Muleshoe | 41.18 | 105 | eP | P | 17 08 08.5 +0.9 |
| | comp=Z,36nm,0.9s | | | | | |
| MSTX | | | | e | | 17 08 25.2 |
| X29A | Tulia | 41.34 | 103 | P | P | 17 08 08.0 -0.9 |
| | baz=41 | | | | | |
| SUMG | Summit | 41.45 | 24 | eP | P | 17 08 10.0 +0.4 |
| SUMG | | | | pmax | pmax | |
| | comp=Z,14nm,0.6s | | | | | |
| SUMG | Summit | 41.45 | 24 | iP | P | 17 08 10.1 +0.4 |
| | comp=Z,11nm,0.7s | | | | | |
| SUMG | Summit | 41.45 | 24 | eP | P | 17 08 10.0 +0.4 |
| | comp=Z,14nm,0.6s | | | | | |
| R36A | Gordon, Harris | 41.55 | 94 | P | P | 17 08 10.9 +0.5 |
| | baz=41,SNR=7.6 | | | | | |
| S35A | Otter Creek Ra | 41.61 | 95 | P | P | 17 08 11.5 +0.6 |
| | baz=41,SNR=14 | | | | | |
| DAG | Danmarks Havn | 41.63 | 14 | iP | P | 17 08 10.4 -0.2 |
| DAG | | | | pmax | pmax | |
| | comp=Z,40nm,0.8s | | | | | |
| DAG | Danmarks Havn | 41.63 | 14 | iP | P | 17 08 10.4 -0.2 |
| | comp=Z,54nm,0.8s | | | | | |
| W31A | Holland Ranch, | 41.66 | 101 | P | P | 17 08 12.9 +1.5 |
| | baz=41,SNR=5.5 | | | | | |
| T34A | McClaskey Farm | 41.66 | 96 | P | P | 17 08 12.1 +0.7 |
| | baz=41,SNR=6.4 | | | | | |
| V32A | Arapaho | 41.71 | 99 | P | P | 17 08 13.9 +2.2 |
| | baz=42 | | | | | |
| MNTX | Cornudas Mount | 41.71 | 109 | P | P | 17 08 13.3 +1.6 |
| | baz=42,SNR=9.1 | | | | | |
| MNTX | Cornudas Mount | 41.71 | 109 | eP | P | 17 08 13.6 +1.8 |
| | comp=Z,9.9nm,0.8s | | | | | |
| MNTX | | | | e | | 17 08 29.3 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| X30A | Coker Ranch, T | 41.76 | 102 | P | P | 17 08 13.6 | +1.4 |
| | baz=42,SNR=7.7 | | | | | | |
| Y29A | Porterfield Fa | 41.82 | 104 | P | P | 17 08 14.0 | +1.2 |
| | baz=42,SNR=7.6 | | | | | | |
| R37A | Teagarden Farm | 41.91 | 93 | P | P | 17 08 13.5 | +0.2 |
| | baz=42,SNR=5.3 | | | | | | |
| U34A | Anderson Ranch | 41.93 | 97 | P | P | 17 08 13.5 | -0.1 |
| | baz=42 | | | | | | |
| U34A | Anderson Ranch | 41.93 | 97 | eP | P | 17 08 14.4 | +0.9 |
| | comp=Z,21nm,0.6s | | | | | | |
| U34A | | | | e | | 17 08 30.2 | |
| HABR | Khabarovsk | 41.96 | 289 | eP | P | 17 08 11.4 | -2.1 |
| HABR | | | | e*PP | pP | 17 08 27.8 | -1.4 |
| HABR | | | | e*SP | sP | 17 08 35.4 | -1.0 |
| HABR | | | | | | 17 09 49.7 | |
| HABR | | | | e | | 17 10 06.2 | |
| HABR | | | | eS | S | 17 14 24.9 | -2.3 |
| HABR | | | | e*SS | sS | 17 14 53.8 | 0.0 |
| HABR | | | | eSS | SS | 17 17 34.9 | -0.6 |
| HABR | | | | e | | 17 18 07.5 | |
| HABR | | | | pmax | pmax | | |
| | comp=N,5.0nm,0.8s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,12nm,0.8s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,69nm,17.0s | | | | | | |
| S36A | Lake Cedric, C | 41.96 | 94 | P | P | 17 08 14.4 | +0.7 |
| | baz=42 | | | | | | |
| W32A | Sentinel | 42.06 | 100 | P | P | 17 08 16.1 | +1.5 |
| | baz=42 | | | | | | |
| T35A | Sooner Cattle | 42.09 | 96 | P | P | 17 08 15.5 | +0.7 |
| | baz=42 | | | | | | |
| SFJD | Kangerlussuaq | 42.10 | 35 | i P | P | 17 08 15.3 | +0.8 |
| SFJD | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| SFJD | Kangerlussuaq | 42.10 | 35 | i P | P | 17 08 15.3 | +0.8 |
| | comp=Z,13nm,0.6s | | | | | | |
| T36A | Boggs Farm, Ca | 42.31 | 95 | P | P | 17 08 17.2 | +0.6 |
| | baz=42,SNR=12 | | | | | | |
| S37A | Fort Scott | 42.33 | 94 | P | P | 17 08 16.6 | -0.1 |
| | baz=42,SNR=5.4 | | | | | | |
| 128A | Castleberry Fa | 42.40 | 106 | P | P | 17 08 18.1 | +0.7 |
| | baz=42,SNR=5.1 | | | | | | |
| V34A | Guthrie | 42.40 | 98 | P | P | 17 08 18.8 | +1.5 |
| | baz=42 | | | | | | |
| W33A | Caddo, Fort Co | 42.44 | 99 | P | P | 17 08 20.0 | +2.3 |
| | baz=42 | | | | | | |
| Z30A | Sanderson Ranc | 42.55 | 104 | P | P | 17 08 19.6 | +0.9 |
| | baz=42,SNR=10.0 | | | | | | |
| X32A | Elmer | 42.59 | 101 | P | P | 17 08 19.9 | +0.9 |
| | baz=42,SNR=6.5 | | | | | | |
| WMOK | Wichita Mounta | 42.60 | 100 | eP | P | 17 08 20.3 | +1.3 |
| WMOK | | | | e | | 17 08 36.5 | |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,33nm,0.9s | | | | | | |
| WMOK | Wichita Mounta | 42.60 | 100 | eP | P | 17 08 20.3 | +1.3 |
| | comp=Z,33nm,0.9s | | | | | | |
| WMOK | | | | e | | 17 08 36.5 | |
| 228A | UT Block 9, Go | 42.75 | 106 | P | P | 17 08 21.8 | +1.5 |
| | baz=43 | | | | | | |
| T37A | Cheneyville 18 | 42.76 | 94 | P | P | 17 08 20.5 | +0.2 |
| | baz=42,SNR=21 | | | | | | |
| V35A | Meyer Ranch, C | 42.81 | 97 | P | P | 17 08 20.6 | 0.0 |
| | baz=43 | | | | | | |
| Y32A | R-V Farms, Ver | 42.84 | 101 | P | P | 17 08 22.5 | +1.5 |
| | baz=43 | | | | | | |
| U36A | Oologah | 42.90 | 96 | P | P | 17 08 22.8 | +1.5 |
| | baz=43 | | | | | | |
| Z31A | Sharp Cattle R | 43.03 | 103 | P | P | 17 08 23.0 | +0.6 |
| | baz=43,SNR=5.3 | | | | | | |
| KLR | Kul'dur | 43.06 | 292 | eP | P | 17 08 18.7 | -3.8 |
| KLR | | | | pmax | pmax | | |
| | comp=Z,36nm,1.0s | | | | | | |
| X34A | Smith Ranch, M | 43.20 | 99 | P | P | 17 08 26.8 | +3.0 |
| | baz=43 | | | | | | |
| U37A | Salina | 43.21 | 95 | P | P | 17 08 23.9 | 0.0 |
| | baz=43,SNR=7.8 | | | | | | |
| TUL1 | Tulsa | 43.24 | 96 | P | P | 17 08 24.8 | +0.7 |
| | baz=43 | | | | | | |
| V36A | Jenks | 43.25 | 96 | P | P | 17 08 24.2 | 0.0 |
| | baz=43 | | | | | | |
| W35A | Tecumseh | 43.26 | 98 | P | P | 17 08 25.0 | +0.7 |
| | baz=43,SNR=5.8 | | | | | | |
| Z32A | Haskell | 43.37 | 102 | P | P | 17 08 26.2 | +1.0 |
| | baz=43,SNR=6.0 | | | | | | |
| U38A | Gravette | 43.56 | 94 | P | P | 17 08 26.8 | +0.1 |
| | baz=43,SNR=20 | | | | | | |
| V37A | Hulbert | 43.59 | 96 | P | P | 17 08 27.0 | 0.0 |
| | baz=43,SNR=7.8 | | | | | | |
| W36A | Wetumka | 43.61 | 97 | P | P | 17 08 27.8 | +0.7 |
| | baz=43 | | | | | | |
| 230A | Sterling City | 43.68 | 105 | P | P | 17 08 29.3 | +1.5 |
| | baz=44 | | | | | | |
| Y34A | Reagan Ranch, | 43.74 | 100 | P | P | 17 08 29.7 | +1.5 |
| | baz=44 | | | | | | |
| ABTX | Abilene, Hawle | 43.83 | 103 | eP | P | 17 08 30.0 | +1.0 |
| | comp=Z,42nm,1.1s | | | | | | |
| ABTX | | | | e | | 17 08 46.2 | |
| X36A | Centrahoma | 43.98 | 98 | P | P | 17 08 31.6 | +1.5 |
| | baz=44 | | | | | | |
| V38A | Canehill | 43.99 | 95 | P | P | 17 08 30.3 | +0.1 |
| | baz=44,SNR=10 | | | | | | |
| W37A | Quinton | 44.02 | 97 | P | P | 17 08 31.3 | +0.9 |
| | baz=44,SNR=8.2 | | | | | | |
| 330A | Mertzon | 44.03 | 105 | P | P | 17 08 32.0 | +1.3 |
| | baz=44,SNR=7.1 | | | | | | |
| 231A | Bronte | 44.04 | 104 | P | P | 17 08 31.5 | +0.9 |
| | baz=44,SNR=7.0 | | | | | | |
| Z34A | Collier Ranch, | 44.12 | 100 | P | P | 17 08 31.2 | 0.0 |
| | baz=44 | | | | | | |
| Y35A | Marietta | 44.15 | 99 | P | P | 17 08 32.2 | +0.8 |
| | baz=44 | | | | | | |
| SCHQ | Schefferville | 44.15 | 56 | P | P | 17 08 30.6 | -0.6 |
| | comp=Z,8.5nm,0.9s,baz=321,slow=11,SNR=3.4 | | | | | | |
| 429A | Davenport Ranc | 44.31 | 107 | P | P | 17 08 33.8 | +1.0 |
| | baz=44,SNR=6.4 | | | | | | |
| 232A | Coleman | 44.42 | 103 | P | P | 17 08 34.5 | +0.8 |
| | baz=44,SNR=6.3 | | | | | | |
| TXAR | Lajitas Array | 44.49 | 110 | P | P | 17 08 35.8 | +1.5 |
| | comp=Z,1.5nm,0.9s,baz=324,slow=5.8,SNR=14 | | | | | | |
| TXAR | | | | pP | pP | 17 08 49.8 | -0.3 |
| | comp=Z,4.4nm,1.0s,baz=325,slow=6.3,SNR=13 | | | | | | |
| TXAR | | | | LR | LR | 17 26 05.0 | |
| | comp=Z,51nm,18.4s,baz=0.0,slow=34 | | | | | | |
| 430A | Baggett Ranch, | 44.51 | 106 | P | P | 17 08 35.2 | +0.8 |
| | baz=44 | | | | | | |
| Y36A | Durant | 44.54 | 98 | P | P | 17 08 36.1 | +1.5 |
| | baz=44 | | | | | | |
| W38A | Poteau | 44.54 | 96 | P | P | 17 08 33.8 | -0.8 |
| | baz=44 | | | | | | |
| 529A | Stev Forest Ra | 44.55 | 107 | P | P | 17 08 37.2 | +2.4 |
| | baz=44 | | | | | | |
| 134A | White-Moore Ra | 44.67 | 101 | P | P | 17 08 37.2 | +1.6 |
| | baz=44 | | | | | | |
| 233A | Rising Star | 44.69 | 103 | P | P | 17 08 38.9 | +3.1 |
| | baz=44 | | | | | | |
| X38A | Whitesboro | 44.69 | 96 | P | P | 17 08 35.8 | 0.0 |
| | baz=44 | | | | | | |
| Y37A | Hugo | 44.82 | 98 | P | P | 17 08 36.0 | -0.7 |
| | baz=45 | | | | | | |
| 431A | Sonora | 44.91 | 105 | P | P | 17 08 39.2 | +1.6 |
| | baz=45 | | | | | | |
| 530A | J-C Ranch, Com | 44.97 | 106 | P | P | 17 08 40.5 | +2.4 |
| | baz=45 | | | | | | |
| 234A | Clairette | 45.09 | 102 | P | P | 17 08 41.3 | +2.4 |
| | baz=45 | | | | | | |
| BOD | Bodaibo | 45.10 | 311 | eP | P | 17 08 37.0 | -1.7 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| 432A | Menard | 45.16 | 104 | P | P | 17 08 41.9 | +2.4 |
| | baz=45 | | | | | | |
| 333A | Richland Sprin | 45.20 | 103 | P | P | 17 08 40.0 | +0.1 |
| | baz=45 | | | | | | |
| MIAR | Mount Ida | 45.44 | 95 | eP | P | 17 08 40.8 | -0.9 |
| MIAR | | | | e | | 17 08 58.4 | |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| MIAR | Mount Ida | 45.44 | 95 | P | P | 17 08 41.9 | +0.2 |
| | baz=45,SNR=5.5 | | | | | | |
| MIAR | Mount Ida | 45.44 | 95 | eP | P | 17 08 40.8 | -0.9 |
| | comp=Z,8.7nm,0.7s | | | | | | |
| MIAR | | | | e | | 17 08 58.4 | |
| WHTX | Lake Whitney | 45.45 | 101 | P | P | 17 08 42.9 | +1.1 |
| | baz=45,SNR=6.1 | | | | | | |
| JCT | Junction City | 45.47 | 105 | eP | P | 17 08 43.3 | +1.3 |
| JCT | | | | e | | 17 08 59.7 | |
| JCT | | | | pmax | pmax | | |
| | comp=Z,107nm,0.8s | | | | | | |
| JCT | Junction City | 45.47 | 105 | P | P | 17 08 43.1 | +1.0 |
| | baz=45,SNR=7.4 | | | | | | |
| JCT | Junction City | 45.47 | 105 | eP | P | 17 08 43.3 | +1.3 |
| | comp=Z,107nm,0.8s | | | | | | |
| JCT | | | | e | | 17 08 59.7 | |
| 136A | Ennis | 45.54 | 100 | P | P | 17 08 42.6 | +0.1 |
| | baz=45 | | | | | | |
| 334A | Lometa | 45.58 | 102 | P | P | 17 08 43.9 | +1.0 |
| | baz=45,SNR=9.8 | | | | | | |
| 433A | Art | 45.61 | 104 | P | P | 17 08 46.3 | +3.1 |
| | baz=45 | | | | | | |
| Y39A | Lockesburg | 45.64 | 96 | P | P | 17 08 44.8 | +1.6 |
| | baz=45 | | | | | | |
| 631A | Perdido Creek | 45.95 | 106 | P | P | 17 08 46.3 | +0.5 |
| | baz=46,SNR=6.2 | | | | | | |
| 632A | Uvalde | 46.27 | 105 | P | P | 17 08 49.2 | +0.9 |
| | baz=46 | | | | | | |
| USRK | Ussuriysk Ar. | 46.45 | 286 | P | P | 17 08 48.6 | -1.0 |
| | comp=Z,1.8nm,0.4s,baz=48,slow=10,SNR=12 | | | | | | |
| USRK | | | | PcP | PcP | 17 10 23.6 | +0.4 |
| | comp=Z,2.0nm,0.6s,baz=35,slow=5.3,SNR=4.9 | | | | | | |
| 832A | Faith Ranch, C | 47.18 | 107 | P | P | 17 08 57.9 | +2.5 |
| | baz=47 | | | | | | |
| MDJ | Mudanjiang | 47.34 | 288 | P | P | 17 08 56.0 | -0.5 |
| MDJ | | | | PMZ | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,68nm,5.4s | | | | | | |
| OXF | Oxford | 47.63 | 92 | eP | P | 17 08 59.6 | +0.8 |
| OXF | | | | pmax | pmax | | |
| | comp=Z,34nm,0.8s | | | | | | |
| OXF | Oxford | 47.63 | 92 | eP | P | 17 08 59.5 | +0.8 |
| | comp=Z,34nm,0.8s | | | | | | |
| 636A | Smothers Creek | 47.67 | 103 | P | P | 17 09 01.6 | +2.5 |
| | baz=48 | | | | | | |
| HKT | Hockley | 47.91 | 101 | eP | P | 17 09 03.1 | +2.1 |
| HKT | | | | e | | 17 09 19.1 | |
| HKT | | | | pmax | pmax | | |
| | comp=Z,40nm,1.8s | | | | | | |
| HKT | Hockley | 47.91 | 101 | eP | P | 17 09 03.1 | +2.1 |
| | comp=Z,40nm,1.8s | | | | | | |
| HKT | | | | e | | 17 09 19.1 | |
| MSHR | Mys Shultsa | 48.05 | 285 | ceP | P | 17 08 59.1 | -2.8 |
| SSPA | Standing Stone | 48.94 | 77 | eP | P | 17 09 09.1 | +0.3 |
| | comp=Z,183nm,1.6s | | | | | | |
| MAJO | Matsushiro | 48.96 | 275 | eP | P | 17 09 08.8 | -0.3 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| MAJO | Matsushiro | 48.96 | 275 | eP | P | 17 09 08.8 | -0.3 |
| | comp=Z,14nm,1.1s | | | | | | |
| MAT | Matsushiro | 48.96 | 275 | P | P | 17 09 08.9 | -0.1 |
| MJAR | Matsushiro Arr | 48.96 | 275 | P | P | 17 09 08.7 | -0.3 |
| | comp=Z,5.7nm,1.1s,baz=46,slow=6.0,SNR=12 | | | | | | |
| MJAR | | | | PcP | PcP | 17 10 32.4 | +0.1 |
| | comp=Z,1.8nm,0.7s,baz=59,slow=1.8,SNR=5.7 | | | | | | |
| CN2 | Changchun | 49.97 | 291 | eP | P | 17 09 16.5 | -0.1 |
| CN2 | | | | epP | pP | 17 09 31.8 | -0.9 |
| CN2 | | | | esP | sP | 17 09 38.1 | -1.7 |
| CN2 | | | | PP | PP | 17 11 13.0 | +1.3 |
| CN2 | | | | eSS | SS | 17 19 49.8 | -5.5 |
| CN2 | | | | PMZ | | | |
| | comp=Z,30nm,0.7s | | | | | | |
| TRO | Tromso | 51.72 | 4 | eP | P | 17 09 29.0 | -0.4 |
| ARCES | ARCESS Array B | 51.95 | 1 | P | P | 17 09 30.5 | -0.7 |
| | comp=Z,7.9nm,0.5s,baz=6.9,slow=7.1,SNR=66 | | | | | | |
| ARCES | | | | PcP | PcP | 17 10 43.1 | +0.4 |
| | comp=Z,4.6nm,0.8s,baz=352,slow=5.5,SNR=5.2 | | | | | | |
| ARE0 | ARCESS Array S | 51.95 | 1 | eP | P | 17 09 30.7 | -0.4 |
| KTK1 | Kautokeino | 52.45 | 2 | eP | P | 17 09 34.1 | -0.7 |
| LOF | Lofoten | 52.98 | 6 | eP | P | 17 09 38.9 | +0.2 |
| STEI | Steigen | 53.27 | 6 | eP | P | 17 09 40.6 | -0.3 |
| STEI | | | | IAmb | IAmb | 17 09 41.1 | |
| | comp=Z,17nm,0.7s | | | | | | |
| LVZ | Lovozero | 53.48 | 356 | ceP | P | 17 09 41.3 | -1.2 |
| LVZ | | | | pmax | pmax | | |
| | comp=Z,36nm,1.7s | | | | | | |
| KSRS | Korea Array | 53.54 | 284 | P | P | 17 09 44.0 | +0.7 |
| | comp=Z,13nm,0.5s,baz=39,slow=7.2,SNR=70 | | | | | | |
| KSRS | | | | PcP | PcP | 17 10 49.2 | 0.0 |
| | comp=Z,2.5nm,0.7s,baz=41,slow=3.5,SNR=4.2 | | | | | | |
| KSAR | Wonju Array Be | 53.57 | 284 | P | P | 17 09 44.0 | +0.5 |
| KSAR | | | | | | 17 10 49.2 | |
| KSAR | Wonju Array Be | 53.57 | 284 | P | P | 17 09 44.0 | +0.5 |
| KSAR | | | | PcP | PcP | 17 10 49.2 | -0.2 |
| INCN | Inchon | 54.17 | 285 | eP | P | 17 09 48.0 | +0.1 |
| | comp=Z,20nm,0.8s | | | | | | |
| TJN | Taejon | 54.65 | 283⇑ | iP | P | 17 09 51.9 | +0.5 |
| ZAK | Zakamensk | 54.84 | 311 | eP | P | 17 09 51.9 | -0.8 |
| ZAK | | | | e | | 17 10 52.4 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| MOR8 | Moi Rana | 54.97 | 6 | eP | P | 17 09 52.0 | -1.3 |
| ULN | Ulaanbaatar | 55.27 | 306⇑ | iP | P | 17 09 56.5 | +0.6 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| ULN | Ulaanbaatar | 55.27 | 306 | eP | P | 17 09 55.9 | 0.0 |
| | comp=Z,3.8nm,0.5s | | | | | | |
| SONM | Songino Array | 55.57 | 307 | P | P | 17 09 58.0 | 0.0 |
| | comp=Z,8.0nm,0.8s,baz=44,slow=6.2,SNR=28 | | | | | | |
| SONM | | | | PcP | PcP | 17 10 56.5 | -0.6 |
| | comp=Z,10nm,0.7s,baz=63,slow=1.9,SNR=12 | | | | | | |
| SONM | | | | LR | LR | 17 36 46.9 | |
| | comp=Z,84nm,19.7s,baz=52,slow=39 | | | | | | |
| NSS | Namsos | 56.45 | 8 | eP | P | 17 10 03.5 | -0.3 |
| NSS | | | | IAmb | IAmb | 17 10 03.9 | |
| | comp=Z,33nm,1.0s | | | | | | |
| NVS | Novosibirsk | 58.10 | 326 | eP | P | 17 10 13.7 | -1.9 |
| NVS | | | | e | | 17 11 04.8 | |
| NVS | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.7s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=N,5.0nm,0.8s | | | | | | |
| AKN | Aaknes | 58.34 | 11 | eP | P | 17 10 17.7 | +0.4 |
| AKN | | | | IAmb | IAmb | 17 10 18.1 | |
| | comp=Z,51nm,1.0s | | | | | | |
| ZALV | Zalesovo Beam | 58.40 | 324 | P | P | 17 10 17.0 | -0.7 |
| | comp=Z,9.7nm,0.6s,baz=29,slow=6.6,SNR=51 | | | | | | |
| ZALV | | | | PcP | PcP | 17 11 06.5 | -1.3 |
| | comp=Z,5.9nm,0.8s,baz=19,slow=4.8,SNR=5.5 | | | | | | |
| ZALV | | | | LR | LR | 17 39 15.3 | |
| | comp=Z,82nm,18.9s,baz=63,slow=40 | | | | | | |
| HHC | Hu-ho-hao-te | 58.82 | 298 | eP | P | 17 10 23.6 | +2.6 |
| HHC | | | | PP | PP | 17 12 32.1 | +0.9 |
| HHC | | | | PMZ | | | |
| | comp=Z,27nm,1.4s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,80nm,6.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,130nm,17.6s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,87nm,17.8s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,60nm,15.0s | | | | | | |
| SUE | Sulen | 59.20 | 12 | eP | P | 17 10 22.8 | -0.3 |
| ASK | Askoy | 59.81 | 12 | eP | P | 17 10 27.4 | +0.1 |
| NB2 | NORSAR Subarra | 59.84 | 9 | P | P | 17 10 27.2 | -0.5 |
| | comp=Z,1.4nm,0.6s,baz=354,slow=6.9 | | | | | | |
| NB2 | NORSAR Subarra | 59.84 | 9 | P | P | 17 10 27.2 | -0.5 |
| | baz=354,slow=6.9 | | | | | | |
| NOA | NORSAR Array B | 59.84 | 9 | P | P | 17 10 27.2 | -0.5 |
| | comp=Z,15nm,0.8s,baz=351,slow=6.8,SNR=48 | | | | | | |
| RUND | Rundenannen | 59.90 | 12 | eP | P | 17 10 28.1 | +0.1 |
| FINES | FINESS Array B | 60.08 | 1 | P | P | 17 10 28.8 | -0.5 |
| | comp=Z,12nm,0.6s,baz=9.7,slow=7.2,SNR=53 | | | | | | |
| FINES | FINESS Array B | 60.08 | 1 | i P | P | 17 10 28.7 | -0.5 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| NC602 | NORSAR Array S | 60.17 | 9 | eP | P | 17 10 29.8 | -0.1 |
| KLMR | Klimovskoe | 60.29 | 353 | c iP | P | 17 10 30.3 | -0.3 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,31nm,0.8s | | | | | | |
| BLS5 | Blasjo | 60.99 | 12 | eP | P | 17 10 35.7 | +0.2 |
| NJ2 | Nanjing | 62.36 | 287 | eP | P | 17 10 48.0 | +2.9 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| ARU | Arti | 62.41 | 341 | c iP | P | 17 10 43.9 | -1.1 |
| ARU | | | | *PP | pP | 17 11 02.5 | +0.9 |
| ARU | | | | | | 17 11 23.2 | |
| ARU | | | | | | 17 12 58.6 | |
| ARU | | | | S | S | 17 19 06.3 | -0.4 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | |
| ARU | Arti | 62.41 | 341 | eP | P | 17 10 43.2 | -1.8 |
| | comp=Z,7.6nm,0.6s | | | | | | |
| ARU | | | | ePcP | PcP | 17 11 23.8 | -0.2 |
| KURK | Kurchatov | 63.07 | 326 | eP | P | 17 10 48.6 | -0.9 |
| KURK | | | | e | | 17 11 26.5 | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | |
| KURK | Kurchatov | 63.07 | 326 | eP | P | 17 10 48.6 | -0.9 |
| | comp=Z,18nm,0.8s | | | | | | |
| KURK | | | | ePcP | PcP | 17 11 26.5 | -0.2 |
| VSU | Vasula | 63.08 | 0 | c iP | P | 17 10 49.2 | -0.2 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,167nm,1.2s | | | | | | |
| BRVK | Borovoye | 63.16 | 332 | ceP | P | 17 10 48.8 | -1.3 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| BRVK | Borovoye | 63.16 | 332 | eP | P | 17 10 48.9 | -1.3 |
| | comp=Z,16nm,0.9s | | | | | | |
| BRVK | | | | e | | 17 11 26.2 | |
| BVA0 | Borovoye Array | 63.17 | 332 | i P | P | 17 10 49.4 | -0.8 |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| MUD | Monsted U'grnd | 64.19 | 11 | i P | P | 17 10 56.9 | +0.1 |
| MUD | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| MUD | Monsted U'grnd | 64.19 | 11 | i P | P | 17 10 56.9 | +0.1 |
| | comp=Z,22nm,0.9s | | | | | | |
| GTA | Gaotai | 65.19 | 305 | eP | P | 17 11 03.3 | -0.5 |
| GTA | | | | pP | pP | 17 11 19.6 | -0.8 |
| GTA | | | | sP | sP | 17 11 26.6 | -0.8 |
| GTA | | | | S | S | 17 19 38.9 | -3.1 |
| GTA | | | | sS | sS | 17 20 07.0 | -3.1 |
| GTA | | | | SS | SS | 17 23 54.3 | -0.2 |
| GTA | | | | PMZ | | | |
| | comp=Z,7.0nm,1.4s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,120nm,5.7s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,74nm,16.6s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,99nm,14.7s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,140nm,15.2s | | | | | | |
| MK31 | Makanchi Array | 65.43 | 322 | i P | P | 17 11 03.9 | -1.1 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| MKAR | Makanchi Array | 65.43 | 322 | P | P | 17 11 04.0 | -1.1 |
| | comp=Z,3.8nm,0.5s,baz=35,slow=6.4,SNR=30 | | | | | | |
| MKAR | | | | PP | PP | 17 13 24.9 | -4.1 |
| | comp=Z,1.4nm,0.8s,baz=42,slow=7.0,SNR=3.9 | | | | | | |
| MKAR | | | | LR | LR | 17 43 21.9 | |
| | comp=Z,42nm,18.1s,baz=49,slow=39 | | | | | | |
| MKAR | Makanchi Array | 65.43 | 322 | P | P | 17 11 04.0 | -1.1 |
| XAN | Xi'an | 65.56 | 295 | P | P | 17 11 05.3 | -0.8 |
| BSD | Bornholm Skovb | 66.00 | 8 | i P | P | 17 11 08.6 | +0.1 |
| BSD | | | | pmax | pmax | | |
| | comp=Z,38nm,0.8s | | | | | | |
| BSD | Bornholm Skovb | 66.00 | 8 | i P | P | 17 11 08.6 | +0.1 |
| | comp=Z,38nm,0.8s | | | | | | |
| OBN | Obninsk | 66.18 | 354 | c iP | P | 17 11 08.8 | -0.9 |
| OBN | | | | e | | 17 11 37.8 | |
| OBN | | | | e | | 17 13 32.7 | |
| OBN | | | | ePPP | PPP | 17 15 10.5 | |
| OBN | | | | eS | S | 17 19 42.0 | -11 |
| OBN | | | | eSS | SS | 17 24 09.0 | +0.3 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,72nm,2.5s | | | | | | |
| WMQ | Urumqi | 66.19 | 316 | P | P | 17 11 13.0 | +3.0 |
| WMQ | | | | PMZ | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| LZH | Lanzhou | 66.20 | 301 | eP | P | 17 11 10.9 | +0.5 |
| LZH | | | | pP | pP | 17 11 28.2 | +1.1 |
| LZH | | | | PMZ | | | |
| | comp=Z,30nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,120nm,4.0s | | | | | | |
| BSEG | Bad Segeberg | 66.79 | 11 | eP | P | 17 11 14.4 | +0.9 |
| | comp=Z,29nm,0.9s,baz=352,slow=6.2 | | | | | | |
| SUW | Suwalki | 67.49 | 3 | eP | P | 17 11 17.4 | -0.6 |
| SUW | Suwalki | 67.49 | 3 | eP | P | 17 11 17.5 | -0.6 |
| GKP | Gorka Klasztor | 67.99 | 6 | eP | P | 17 11 21.5 | +0.4 |
| GKP | Gorka Klasztor | 67.99 | 6 | eP | P | 17 11 21.6 | +0.4 |
| IBBN | Ibbenburen | 68.13 | 13 | eP | P | 17 11 22.8 | +0.8 |
| | comp=Z,30nm,1.2s,baz=352,slow=6.2 | | | | | | |
| NRDL | Niedersach Rie | 68.19 | 11 | eP | P | 17 11 23.0 | +0.6 |
| | comp=Z,40nm,1.2s,baz=352,slow=6.2 | | | | | | |
| LPSR | Galich'ya Gora | 68.54 | 352 | eP | P | 17 11 23.9 | -0.7 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.9s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,8.0nm,1.1s | | | | | | |
| CLZ | Clausthal | 68.87 | 11 | eP | P | 17 11 27.7 | +1.0 |
| | comp=E,45nm,0.9s,baz=352,slow=6.2 | | | | | | |
| BUG | Bochum--Univer | 68.92 | 13 | eP | P | 17 11 27.5 | +0.5 |
| | comp=E,45nm,1.3s,baz=352,slow=6.2 | | | | | | |
| AB31 | Akbulak array | 69.00 | 338 | i P | P | 17 11 26.5 | -1.1 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| ABKAR | Akbulak array | 69.00 | 338 | eP | P | 17 11 26.6 | -1.0 |
| | comp=Z,12nm,0.6s | | | | | | |
| GTTG | Gvttingen | 69.12 | 11 | eP | P | 17 11 29.2 | +1.0 |
| | comp=Z,51nm,1.0s,baz=352,slow=6.2 | | | | | | |
| MEM | Membach | 69.58 | 14 | P | P | 17 11 31.6 | +0.5 |
| CLL | Collm | 69.64 | 9⇑ | iP | P | 17 11 31.6 | +0.2 |
| CLL | | | | e*SP | sP | 17 11 55.0 | -0.2 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| CLL | | | | MLR | MLR | | |
| | comp=Z,300nm,20.7s | | | | | | |
| CLL | Collm | 69.64 | 9 | eP | P | 17 11 31.7 | +0.2 |
| | comp=Z,22nm,0.9s,baz=352,slow=6.2 | | | | | | |
| CLL | Collm | 69.64 | 9⇑ | iP | P | 17 11 31.6 | +0.2 |
| | comp=Z,22nm,0.9s | | | | | | |
| CLL | | | | esP | sP | 17 11 55.0 | -0.2 |
| CLL | | | | Lm | MLR | 17 33 00.0 | |
| | comp=Z,300nm,20.7s | | | | | | |
| BCLA | Clavier | 69.68 | 15 | P | P | 17 11 31.9 | +0.2 |
| VRH | Novokhopyorsk | 69.71 | 350 | eP | P | 17 11 30.6 | -1.3 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,20nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.4s | | | | | | |
| DOU | Dourbes | 69.90 | 15 | P | P | 17 11 34.0 | +0.9 |
| VSR | Storozhevoye | 69.90 | 352 | eP | P | 17 11 32.1 | -1.0 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.9s | | | | | | |
| VORD | Divnogorie | 70.14 | 352 | eP | P | 17 11 33.5 | -1.0 |
| VORD | | | | pmax | pmax | | |
| | comp=Z,30nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,40nm,1.0s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.9s | | | | | | |
| BRG | Berggiesshubel | 70.15 | 9 | i P | P | 17 11 35.0 | +0.4 |
| | comp=E,34nm,0.9s | | | | | | |
| BRG | Berggiesshubel | 70.15 | 9 | i P | P | 17 11 35.0 | +0.4 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | |
| BRG | Berggiesshubel | 70.15 | 9 | eP | P | 17 11 35.1 | +0.4 |
| | comp=Z,34nm,0.9s,baz=352,slow=6.2 | | | | | | |
| MOX | Moxa | 70.17 | 10 | eP | P | 17 11 35.5 | +0.7 |
| | comp=Z,35nm,0.8s,baz=352,slow=6.2 | | | | | | |
| TNS | Taunus Mts | 70.26 | 13 | eP | P | 17 11 36.0 | +0.6 |
| | comp=Z,28nm,1.3s,baz=352,slow=6.2 | | | | | | |
| KSP | Ksiaz | 70.35 | 7 | eP | P | 17 11 36.2 | +0.4 |
| KSP | Ksiaz | 70.35 | 7 | eP | P | 17 11 36.2 | +0.4 |
| TANN | Tannenbergstha | 70.48 | 10 | eP | P | 17 11 37.3 | +0.6 |
| | comp=Z,20nm,1.1s,baz=352,slow=6.2 | | | | | | |
| WLF | Walferdange | 70.53 | 14 | P | P | 17 11 38.8 | +1.9 |
| | comp=Z,22nm,1.7s | | | | | | |
| WLF | Walferdange | 70.53 | 14 | eP | P | 17 11 38.8 | +1.9 |
| | comp=Z,41nm,1.4s,baz=352,slow=6.2 | | | | | | |
| PVCC | Panska Ves | 70.54 | 8⇑ | iP | P | 17 11 37.6 | +0.6 |
| PVCC | Panska Ves | 70.54 | 8⇑ | iP | P | 17 11 37.6 | +0.6 |
| CD2 | Chengdu | 70.57 | 298 | eP | P | 17 11 37.4 | -0.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CD2 | | | | pP | pP | 17 11 55.5 | +1.1 |
| CD2 | | | | PP | PP | 17 14 14.2 | +0.2 |
| CD2 | | | | S | S | 17 20 46.4 | +0.2 |
| CD2 | | | | SKS | SKSac | 17 21 33.0 | -0.9 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| UPC | Upice | 70.67 | 8 | ⇑iP | P | 17 11 38.3 | +0.5 |
| UPC | Upice | 70.67 | 8 | ⇑iP | P | 17 11 38.3 | +0.5 |
| AKASG | Malin Array Be | 70.84 | 359 | P | P | 17 11 38.0 | -0.8 |
| | comp=Z,24nm,0.6s,baz=4.4,slow=6.2,SNR=92 | | | | | | |
| DPC | Dobruska-Polom | 70.84 | 7 | ⇑iP | P | 17 11 39.9 | +1.0 |
| DPC | Dobruska-Polom | 70.84 | 7 | ⇑iP | P | 17 11 39.9 | +1.0 |
| DPC | | | | ex | x | 17 11 47.7 | |
| KIEV | Kiev | 70.85 | 359 | ⇑iP | P | 17 11 38.2 | -0.6 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,34nm,0.7s | | | | | | |
| KIEV | Kiev | 70.85 | 359 | eP | P | 17 11 37.8 | -1.1 |
| | comp=Z,34nm,0.6s | | | | | | |
| PRA | Prague | 70.98 | 9 | eP | P | 17 11 40.5 | +0.8 |
| PRA | Prague | 70.98 | 9 | ⇑eP | P | 17 11 40.5 | +0.8 |
| PRU | Pruhonice | 71.08 | 9 | ⇑iP | P | 17 11 40.9 | +0.7 |
| PRU | Pruhonice | 71.08 | 9 | ⇑iP | P | 17 11 40.9 | +0.7 |
| GRF | Grafenberg Arr | 71.08 | 11 | eP | P | 17 11 41.2 | +0.9 |
| | comp=Z,18nm,0.9s,baz=352,slow=6.2 | | | | | | |
| ROTZ | Rotzenmuhle | 71.10 | 10 | eP | P | 17 11 41.3 | +0.9 |
| | comp=Z,24nm,0.9s,baz=352,slow=6.2 | | | | | | |
| KRLC | Kraliky | 71.15 | 7 | ⇑iP | P | 17 11 41.4 | +0.6 |
| KRLC | Kraliky | 71.15 | 7 | ⇑iP | P | 17 11 41.4 | +0.6 |
| GOPC | GO Pecny, Ondr | 71.17 | 8 | eP | P | 17 11 41.5 | +0.7 |
| GOPC | GO Pecny, Ondr | 71.17 | 8 | ⇑eP | P | 17 11 41.5 | +0.7 |
| GOPC | | | | ex | x | 17 11 51.1 | |
| OJC | Ojcow | 71.17 | 5 | eP | P | 17 11 41.0 | +0.2 |
| OJC | Ojcow | 71.17 | 5 | eP | P | 17 11 41.0 | +0.2 |
| OKC | Ostrava-Krasne | 71.47 | 6 | ⇑iP | P | 17 11 43.0 | +0.4 |
| OKC | Ostrava-Krasne | 71.47 | 6 | ⇑iP | P | 17 11 43.0 | +0.4 |
| MORC | Moravsky Berou | 71.49 | 7 | eP | P | 17 11 43.0 | +0.2 |
| MORC | | | | pmax | pmax | | |
| | comp=Z,30nm,0.5s | | | | | | |
| MORC | Moravsky Berou | 71.49 | 7 | ⇑iP | P | 17 11 43.1 | +0.2 |
| MORC | Moravsky Berou | 71.49 | 7 | eP | P | 17 11 43.0 | +0.2 |
| | comp=Z,30nm,0.5s | | | | | | |
| AAK | Ala-Archa | 71.59 | 325 | iP | P | 17 11 44.2 | +0.5 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,47nm,1.8s | | | | | | |
| AAK | Ala-Archa | 71.59 | 325 | eP | P | 17 11 43.0 | -0.7 |
| | comp=Z,5.8nm,0.6s | | | | | | |
| LVV | L'vov | 71.71 | 2 | eP | P | 17 11 43.4 | -0.7 |
| STU | Stuttgart | 71.77 | 12 | eP | P | 17 11 45.1 | +0.6 |
| | comp=Z,15nm,0.6s,baz=352,slow=6.2 | | | | | | |
| WET | Wettzell | 71.78 | 10 | eP | P | 17 11 45.3 | +0.7 |
| | comp=Z,20nm,1.2s,baz=352,slow=6.2 | | | | | | |
| KHC | Kasperske Hory | 71.85 | 9 | ⇑iP | P | 17 11 45.9 | +0.9 |
| KHC | Kasperske Hory | 71.85 | 9 | ⇑iP | P | 17 11 45.9 | +0.9 |
| KHC | | | | ex | x | 17 11 54.7 | |
| KHC | Kasperske Hory | 71.85 | 9 | eP | P | 17 11 45.8 | +0.8 |
| | comp=Z,10nm,0.8s | | | | | | |
| KWP | Kalwaria Pacla | 71.86 | 3 | eP | P | 17 11 45.5 | +0.5 |
| KWP | Kalwaria Pacla | 71.86 | 3 | eP | P | 17 11 45.5 | +0.5 |
| VRAC | Vranov | 71.90 | 7 | ⇑iP | P | 17 11 45.7 | +0.5 |
| NIE | Niedzica | 71.99 | 5 | eP | P | 17 11 46.4 | +0.6 |
| NIE | Niedzica | 71.99 | 5 | eP | P | 17 11 46.4 | +0.6 |
| STHS | Stebnicka Huta | 72.03 | 4 | eP | P | 17 11 47.0 | +1.0 |
| STHS | | | | pmax | pmax | | |
| | comp=Z,42nm,0.6s | | | | | | |
| STHS | Stebnicka Huta | 72.03 | 4 | eP | P | 17 11 47.0 | +1.0 |
| BFO | Black Forest | 72.11 | 13 | iP | P | 17 11 47.7 | +1.2 |
| BFO | Black Forest | 72.11 | 13 | eP | P | 17 11 47.0 | +0.4 |
| | comp=Z,15nm,1.0s,baz=352,slow=6.2 | | | | | | |
| BFO | Black Forest | 72.11 | 13 | eP | P | 17 11 45.7 | -0.9 |
| | comp=Z,42nm,1.5s | | | | | | |
| GEC2 | GERESS Array S | 72.14 | 9 | eP | P | 17 11 47.4 | +0.5 |
| | comp=Z,57nm,1.9s,baz=352,slow=6.2 | | | | | | |
| GERES | GERESS Array B | 72.14 | 9 | P | P | 17 11 47.3 | +0.5 |
| | comp=Z,11nm,0.7s,baz=355,slow=4.7,SNR=64 | | | | | | |
| LANS | Liptovska Anna | 72.22 | 5 | eP | P | 17 11 48.3 | +1.1 |
| LANS | Liptovska Anna | 72.22 | 5 | eP | P | 17 11 48.3 | +1.1 |
| KKAR | Karatay Array | 72.30 | 328 | eP | P | 17 11 47.2 | -0.6 |
| KKAR | | | | e | | 17 12 03.7 | |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| KKAR | Karatay Array | 72.30 | 328 | eP | P | 17 11 47.2 | -0.6 |
| | comp=Z,5.6nm,0.6s | | | | | | |
| KKAR | | | | e | | 17 12 03.7 | |
| KOLS | Kolonicke sedl | 72.55 | 3 | eP | P | 17 11 49.6 | +0.5 |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,21nm,1.3s | | | | | | |
| KOLS | Kolonicke sedl | 72.55 | 3 | eP | P | 17 11 49.6 | +0.5 |
| FUR | Furstenfeldbru | 72.59 | 11 | eP | P | 17 11 50.2 | +0.7 |
| | comp=Z,46nm,1.1s,baz=352,slow=6.2 | | | | | | |
| SMOL | Smolenice | 72.74 | 7 | eP | P | 17 11 51.6 | +1.3 |
| SMOL | Smolenice | 72.74 | 7 | eP | P | 17 11 51.6 | +1.3 |
| VYHS | Vyhne | 72.84 | 6 | eP | P | 17 11 51.3 | +0.4 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| VYHS | Vyhne | 72.84 | 6 | eP | P | 17 11 51.3 | +0.4 |
| UZH | Uzhgorod | 72.85 | 3 | ⇓iP | P | 17 11 50.3 | -0.6 |
| UZH | | | | e | | 17 12 07.7 | |
| SJG | San Juan | 72.99 | 83 | LR | LR | 17 43 54.7 | |
| | comp=Z,24nm,21.5s,baz=300,slow=36 | | | | | | |
| RJOB | Jochberg | 73.16 | 10 | eP | P | 17 11 53.5 | +0.6 |
| | comp=Z,29nm,0.8s,baz=352,slow=6.2 | | | | | | |
| MOA | Molln | 73.18 | 9 | ⇑iP | P | 17 11 53.2 | +0.3 |
| | comp=Z,16nm,1.1s | | | | | | |
| CONA | Conrad Observa | 73.22 | 8 | iP | P | 17 11 54.0 | +0.8 |
| | comp=Z,30nm,0.7s,SNR=8.6 | | | | | | |
| TRPA | Tarpa | 73.36 | 3 | ⇓iP | P | 17 11 53.8 | -0.1 |
| TRPA | Tarpa | 73.36 | 3 | ⇓eP | P | 17 11 54.6 | +0.7 |
| MOTA | Moosalm | 73.39 | 11 | ⇑iP | P | 17 11 54.5 | +0.3 |
| | comp=Z,27nm,1.2s,SNR=8.1 | | | | | | |
| WATA | Walderalm | 73.44 | 11 | ⇑iP | P | 17 11 55.1 | +0.5 |
| | comp=Z,45nm,1.2s,SNR=7.9 | | | | | | |
| PSZ | Piszkesteto | 73.47 | 5 | eP | P | 17 11 55.2 | +0.5 |
| PSZ | | | | pmax | pmax | | |
| | comp=Z,35nm,1.0s | | | | | | |
| PSZ | Piszkesteto | 73.47 | 5 | ⇑iP | P | 17 11 55.4 | +0.8 |
| PSZ | Piszkesteto | 73.47 | 5 | ⇑eP | P | 17 11 55.5 | +0.8 |
| PSZ | Piszkesteto | 73.47 | 5 | eP | P | 17 11 55.2 | +0.5 |
| | comp=Z,35nm,1.0s | | | | | | |
| SOP | Sopron | 73.51 | 7 | ⇑eP | P | 17 11 55.7 | +0.9 |
| WTTA | Wattenberg | 73.52 | 11 | ⇑iP | P | 17 11 55.9 | +0.8 |
| | comp=Z,36nm,1.0s,SNR=10 | | | | | | |
| PMOR | Pomariorio Ree | 73.65 | 175 | eT | T | 18 30 10.1 | |
| | comp=Z,12nm,0.3s | | | | | | |
| FETA | Feichten | 73.67 | 12 | ⇑iP | P | 17 11 56.8 | +0.8 |
| | comp=Z,20nm,1.0s,SNR=5.2 | | | | | | |
| KBA | Koelnbreinsper | 73.86 | 10 | iP | P | 17 11 58.2 | +1.1 |
| | comp=Z,57nm,0.8s,SNR=19 | | | | | | |
| ARSA | Arzberg | 73.87 | 8 | iP | P | 17 11 57.9 | +0.9 |
| | comp=Z,15nm,0.7s,SNR=7.2 | | | | | | |
| BURAR | Bucovina Array | 73.93 | 1 | ⇓iP | P | 17 11 57.2 | -0.2 |
| KSH | Kashi | 73.98 | 323 | P | P | 17 12 00.8 | +2.9 |
| KSH | | | | esP | sP | 17 12 23.7 | +2.0 |
| KSH | | | | ePP | PP | 17 14 50.6 | +7.7 |
| KSH | | | | S | S | 17 21 25.0 | -0.2 |
| KSH | | | | SKS | SKSac | 17 21 58.8 | -0.8 |
| KSH | | | | LN | | | |
| | comp=Z,130nm,6.8s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,110nm,5.5s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,150nm,5.7s | | | | | | |
| ABTA | Abfaltersbach | 74.12 | 10 | ⇑iP | P | 17 11 58.7 | +0.2 |
| | comp=Z,12nm,1.1s | | | | | | |
| SOKA | Soboth | 74.40 | 9 | ⇑iP | P | 17 12 00.6 | +0.5 |
| | comp=Z,21nm,0.9s,SNR=7.5 | | | | | | |
| ARCR | ARCALIA | 74.45 | 2 | ⇓iP | P | 17 12 01.3 | +1.0 |
| PERS | Pernice | 74.45 | 9 | iP | P | 17 12 00.8 | +0.5 |
| OBKA | Obir | 74.53 | 9 | iP | P | 17 12 01.6 | +0.7 |
| | comp=Z,66nm,0.6s,SNR=22 | | | | | | |
| DRGR | | 74.70 | 3 | ⇓iP | P | 17 12 02.1 | +0.2 |
| JAVS | Javornik | 75.10 | 9 | iP | P | 17 12 03.6 | -0.6 |
| DOPR | Dopca | 75.58 | 1 | ⇓iP | P | 17 12 07.6 | +0.7 |
| BOJS | Bojanci | 75.59 | 9 | eP | P | 17 12 06.2 | -0.6 |
| VRI | Vrincioaia | 75.69 | 0 | ⇑iP | P | 17 12 07.7 | +0.2 |
| PLOR | Plostina | 75.71 | 0 | ⇑iP | P | 17 12 08.3 | +0.7 |
| BZS | Buzias | 75.84 | 4 | ⇑iP | P | 17 12 08.3 | 0.0 |
| KMI | Kunming | 75.94 | 295 | P | P | 17 12 08.7 | -0.8 |
| KMI | | | | pP | PcP | 17 12 23.9 | +2.2 |
| KMI | | | | sP | sP | 17 12 31.8 | -1.6 |
| KMI | | | | PMZ | | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,130nm,3.7s | | | | | | |
| MLR | Muntele Rosu | 76.06 | 1 | ⇑iP | P | 17 12 10.2 | +0.5 |
| LOT | Lotru | 76.07 | 2 | ⇑iP | P | 17 12 09.4 | -0.4 |
| GZR | Gura Zlata | 76.10 | 3 | ⇑iP | P | 17 12 10.1 | +0.2 |
| VOIR | | 76.11 | 2 | ⇑iP | P | 17 12 10.1 | +0.2 |
| PPT2 | Papeete2 | 76.16 | 177 | eLR | LR | 17 34 25.1 | |
| | comp=Z,99nm,24.0s | | | | | | |
| TLCR | | 76.36 | 359 | ⇑iP | P | 17 12 11.5 | +0.3 |
| CFR | Carcaliu | 76.38 | 359 | ⇓iP | P | 17 12 11.4 | +0.1 |
| KIV | Kislovodsk | 76.80 | 349 | c iP | P | 17 12 13.8 | -0.1 |
| KIV | | | | e | | 17 12 24.7 | |
| KIV | | | | e | | 17 15 08.5 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,50nm,18.0s | | | | | | |
| KIV | Kislovodsk | 76.80 | 349 | eP | P | 17 12 13.6 | -0.3 |
| | comp=Z,40nm,0.7s | | | | | | |
| TLB | Topalu | 76.97 | 359 | ⇓iP | P | 17 12 14.8 | +0.1 |
| KBZ | Khabaz | 77.00 | 348 | P | P | 17 12 15.2 | +0.3 |
| | comp=Z,23nm,0.7s,baz=354,slow=7.9,SNR=48 | | | | | | |
| NCK | Nalchik | 77.16 | 348 | ⇓iP | P | 17 12 16.6 | +0.8 |
| LSA | Lhasa | 77.16 | 307 | eP | P | 17 12 17.2 | +0.6 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,17nm,0.6s | | | | | | |
| LSA | Lhasa | 77.16 | 307 | eP | P | 17 12 17.2 | +0.6 |
| | comp=Z,17nm,0.6s | | | | | | |
| QIZ | Qiongzhong | 77.65 | 286 | P | P | 17 12 20.2 | +1.3 |
| QIZ | | | | pP | pP | 17 12 33.6 | -2.4 |
| QIZ | | | | sP | sP | 17 12 41.9 | -0.9 |
| QIZ | | | | S | S | 17 22 09.7 | +3.9 |
| ZEI | Tsey | 77.82 | 347 | eP | P | 17 12 17.1 | -2.7 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,114nm,1.4s | | | | | | |
| ONI | Oni | 78.07 | 348 | P | P | 17 12 21.9 | +1.0 |
| ONI | Oni | 78.07 | 348 | P | P | 17 12 21.9 | +1.0 |
| CHVG | Ch'k'valeri | 78.08 | 349 | ⇓iP | P | 17 12 21.9 | +0.9 |
| ESDC | Sonseca Array | 78.51 | 24 | P | P | 17 12 24.2 | +0.8 |
| | comp=Z,2.6nm,0.6s,baz=339,slow=5.6,SNR=10.0 | | | | | | |
| ESDC | | | | pP | pP | 17 12 41.4 | +0.8 |
| | comp=Z,1.1nm,0.5s,baz=341,slow=5.1,SNR=3.0 | | | | | | |
| TBLG | Delisi | 78.77 | 347 | eP | P | 17 12 25.9 | +1.1 |
| TBLG | Delisi | 78.77 | 347 | P | P | 17 12 25.2 | +0.5 |
| DGRG | David-gareji | 78.97 | 346 | P | P | 17 12 26.8 | +0.9 |
| AKH | Akhalkalaki | 79.23 | 348 | ⇑iP | P | 17 12 27.9 | +0.4 |
| BCA | Borcka | 79.39 | 349 | eP | P | 17 12 26.4 | -1.8 |
| SKO | Skopje | 79.47 | 4 | iP | P | 17 12 29.5 | +0.9 |
| DIKM | Dikmen | 79.68 | 354 | eP | P | 17 12 30.1 | +0.4 |
| KVT | Kavak | 80.20 | 353 | eP | P | 17 12 32.9 | +0.3 |
| GEYT | Alibeck | 80.23 | 336 | P | P | 17 12 32.9 | +0.1 |
| | comp=Z,6.0nm,0.6s,baz=335,slow=5.7,SNR=14 | | | | | | |
| OHR | Ohrid | 80.30 | 5 | iP | P | 17 12 33.2 | +0.1 |
| KNT | Kendrikon | 80.33 | 3 | eP | P | 17 12 33.5 | +0.2 |
| KNT | Kendrikon | 80.33 | 3 | eP | P | 17 12 34.0 | +0.7 |
| KNT | Kendrikon | 80.33 | 3 | eP | P | 17 12 34.0 | +0.7 |
| TOS | Tosya | 80.36 | 355 | eP | P | 17 12 34.4 | +0.9 |
| ISK | Istanbul-Kandi | 80.48 | 359 | eP | P | 17 12 40.9 | +6.9 |
| GRG | Griva | 80.52 | 4 | eP | P | 17 12 35.4 | +1.1 |
| GRG | Griva | 80.52 | 4 | eP | P | 17 12 35.1 | +0.8 |
| GRG | Griva | 80.52 | 4 | eP | P | 17 12 35.1 | +0.8 |
| BAYT | Ayd˜–ntepe-Bay | 80.57 | 350 | eP | P | 17 12 35.0 | +0.3 |
| TAPN | Taplejung | 80.65 | 308 | eP | P | 17 12 35.7 | +0.2 |
| | comp=Z,50nm,0.7s | | | | | | |
| FNA | Florina | 80.66 | 4 | eP | P | 17 12 34.5 | -0.5 |
| GUN | Gumba | 80.89 | 310 | eP | P | 17 12 37.3 | +0.4 |
| | comp=Z,90nm,1.0s | | | | | | |
| EZM | Erzurum | 80.94 | 349 | eP | P | 17 12 38.0 | +1.1 |
| NEST | Nestorio | 81.01 | 5 | eP | P | 17 12 37.2 | +0.2 |
| NEST | Nestorio | 81.01 | 5 | eP | P | 17 12 37.2 | +0.2 |
| AGRB | Hanur-Agry | 81.10 | 348 | eP | P | 17 12 38.0 | +0.4 |
| MDNY | Mudanya-Bursa | 81.18 | 359 | eP | P | 17 12 50.5 | +13 |
| CORM | Corum | 81.18 | 354 | eP | P | 17 12 38.4 | +0.5 |
| OUR | Ouranopolis | 81.19 | 2 | eP | P | 17 12 37.8 | 0.0 |
| OUR | Ouranopolis | 81.19 | 2 | eP | P | 17 12 37.8 | 0.0 |
| ODAN | Odare | 81.21 | 308 | eP | P | 17 12 38.9 | +0.4 |
| | comp=Z,40nm,0.9s | | | | | | |
| KKN | Kakani | 81.24 | 310 | eP | P | 17 12 38.8 | +0.2 |
| | comp=Z,23nm,0.5s | | | | | | |
| CRAI | Chiangrai | 81.25 | 295 | P | P | 17 12 32.0 | -6.4 |
| | comp=Z,17nm,1.1s | | | | | | |
| GKN | Gorkha | 81.30 | 311 | eP | P | 17 12 39.3 | +0.5 |
| DANN | Dangsing | 81.33 | 312 | eP | P | 17 12 39.7 | +0.5 |
| | comp=Z,14nm,0.7s | | | | | | |
| PKIN | Phulchoki | 81.38 | 310 | eP | P | 17 12 39.2 | -0.2 |
| | comp=Z,25nm,0.8s | | | | | | |
| PKI | Pulchoki | 81.38 | 310 | eP | P | 17 12 39.3 | -0.2 |
| | comp=Z,31nm,0.8s | | | | | | |
| RAMN | Ramite | 81.46 | 309 | eP | P | 17 12 39.7 | -0.1 |
| | comp=Z,109nm,1.0s | | | | | | |
| DMN | Daman | 81.47 | 311 | eP | P | 17 12 40.1 | +0.3 |
| | comp=Z,36nm,0.7s | | | | | | |
| ANTO | Ankara | 81.58 | 356 | eP | P | 17 12 40.0 | 0.0 |
| ANTO | | | | pmax | pmax | | |
| | comp=Z,116nm,0.8s | | | | | | |
| ANTO | Ankara | 81.58 | 356 | eP | P | 17 12 40.0 | 0.0 |
| | comp=Z,116nm,0.8s | | | | | | |
| ILIC | ilic-Erzincan | 81.64 | 351 | eP | P | 17 12 41.0 | +0.6 |
| BRTR | Keskin Array B | 81.68 | 355 | P | P | 17 12 40.5 | -0.1 |
| | comp=Z,12nm,0.8s,baz=22,slow=3.0,SNR=45 | | | | | | |
| BRTR | | | | LR | LR | 17 53 49.1 | |
| | comp=Z,33nm,19.4s,baz=301,slow=39 | | | | | | |
| NONG | Nongkai | 81.77 | 291 | P | P | 17 12 40.8 | -0.4 |
| | comp=Z,30nm,1.1s | | | | | | |
| IGT | Igoumenitsa | 81.86 | 5 | eP | P | 17 12 41.6 | +0.2 |
| IGT | Igoumenitsa | 81.86 | 5 | eP | P | 17 12 41.6 | +0.2 |
| TBI | Tubuai | 81.89 | 177 | eT | T | 18 40 23.9 | |
| | comp=Z,13nm,0.2s | | | | | | |
| THL | Klokotos Trika | 81.89 | 4 | eP | P | 17 12 41.2 | -0.3 |
| THL | Klokotos Trika | 81.89 | 4 | eP | P | 17 12 41.2 | -0.3 |
| KOLN | Koldanda | 81.91 | 312 | eP | P | 17 12 42.1 | 0.0 |
| | comp=Z,19nm,0.6s | | | | | | |
| AFSR | Af¯ar-Bala (A | 81.98 | 355 | eP | P | 17 12 41.8 | -0.4 |
| SVRH | Sivrihisar-ESK | 82.04 | 357 | eP | P | 17 12 42.0 | -0.4 |
| CMAI | Chiengmai2 | 82.13 | 295 | P | P | 17 12 43.1 | -0.2 |
| | comp=Z,53nm,0.8s | | | | | | |
| PTK | Pertek | 82.13 | 350 | eP | P | 17 12 43.5 | +0.5 |
| DSL | Palaion Diasel | 82.29 | 5 | eP | P | 17 12 44.0 | +0.3 |
| DSL | Palaion Diasel | 82.29 | 5 | eP | P | 17 12 44.0 | +0.3 |
| SKNT | Sakolnakorn | 82.30 | 290 | P | P | 17 12 43.9 | -0.1 |
| | comp=Z,21nm,0.7s | | | | | | |
| BNN | Bunyan | 82.43 | 353 | eP | P | 17 12 44.6 | +0.1 |
| AGG | Agios Georgios | 82.45 | 4 | eP | P | 17 12 44.5 | 0.0 |
| AGG | Agios Georgios | 82.45 | 4 | eP | P | 17 12 44.1 | -0.4 |
| AGG | Agios Georgios | 82.45 | 4 | eP | P | 17 12 44.1 | -0.4 |
| MAKR | Makrakomi, Fth | 82.45 | 4 | eP | P | 17 12 45.0 | +0.5 |
| MAKR | Makrakomi, Fth | 82.45 | 4 | eP | P | 17 12 45.0 | +0.5 |
| YAYX | Yaylak | 82.46 | 355 | eP | P | 17 12 45.4 | +0.8 |
| EVR | Evrytania | 82.53 | 4 | eP | P | 17 12 45.7 | +0.6 |
| EVR | Evrytania | 82.53 | 4 | eP | P | 17 12 45.7 | +0.6 |
| LKD2 | Lefkada island | 82.61 | 5 | eP | P | 17 12 45.3 | -0.1 |
| LKD2 | Lefkada island | 82.61 | 5 | eP | P | 17 12 45.3 | -0.1 |
| SVRC | Sivrice-ELAZID | 82.65 | 350 | eP | P | 17 12 42.2 | -3.6 |
| MALT | Malatya | 82.78 | 351 | eP | P | 17 12 47.8 | +1.4 |
| MALT | Malatya | 82.78 | 351 | ⇑iP | P | 17 12 47.1 | +0.7 |
| PHRA | Phrae | 82.80 | 294 | P | P | 17 12 46.5 | -0.1 |
| | comp=Z,184nm,1.5s | | | | | | |
| PDO | Prodromos | 82.83 | 5 | eP | P | 17 12 46.6 | +0.2 |
| PDO | Prodromos | 82.83 | 5 | eP | P | 17 12 46.6 | +0.2 |
| SARI | SarD1z-Kayseri | 82.84 | 353 | eP | P | 17 12 46.9 | +0.1 |
| EFP | Efpalio | 83.03 | 4 | eP | P | 17 12 48.4 | +0.9 |
| EFP | Efpalio | 83.03 | 4 | eP | P | 17 12 48.4 | +0.9 |
| GULA | Gulagac | 83.03 | 354 | eP | P | 17 12 47.4 | -0.2 |
| DESF | Desfina | 83.06 | 4 | eP | P | 17 12 46.8 | -1.0 |
| DESF | Desfina | 83.06 | 4 | eP | P | 17 12 46.8 | -1.0 |
| DSF | Desfina | 83.06 | 4 | eP | P | 17 12 47.1 | -0.7 |
| DSF | Desfina | 83.06 | 4 | eP | P | 17 12 47.1 | -0.7 |
| LAMP | Lampang | 83.06 | 294 | P | P | 17 12 48.6 | +0.6 |
| | comp=Z,5.6nm,0.8s | | | | | | |
| KALE | Kalithea | 83.07 | 4 | eP | P | 17 12 47.5 | -0.3 |
| KALE | Kalithea | 83.07 | 4 | eP | P | 17 12 47.5 | -0.3 |
| CHTO | Chiang Mai | 83.14 | 295 | P | P | 17 12 47.5 | -0.8 |
| | comp=Z,48nm,1.1s | | | | | | |
| CHTO | Chiang Mai | 83.14 | 295 | eP | P | 17 12 46.9 | -1.4 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| CHTO | Chiang Mai | 83.14 | 295 | eP | P | 17 12 46.9 | -1.4 |
| | comp=Z,10nm,1.0s | | | | | | |
| LOEI | Loei | 83.16 | 292 | P | P | 17 12 46.3 | -2.1 |
| | comp=Z,80nm,1.1s | | | | | | |
| SIRT | Sirnak | 83.21 | 348 | eP | P | 17 12 48.8 | +0.2 |
| LAKA | Lakka | 83.22 | 4 | eP | P | 17 12 50.0 | +1.5 |
| LAKA | Lakka | 83.22 | 4 | eP | P | 17 12 50.0 | +1.5 |
| VLS | Valsamata | 83.22 | 5 | eP | P | 17 12 48.9 | +0.4 |
| VLS | Valsamata | 83.22 | 5 | eP | P | 17 12 48.9 | +0.4 |
| UTTA | Uttaradit | 83.30 | 293 | P | P | 17 12 48.6 | -0.5 |
| | comp=Z,8.1nm,0.9s | | | | | | |
| KFL | Anninata | 83.30 | 5 | eP | P | 17 12 49.3 | +0.4 |
| KFL | Anninata | 83.30 | 5 | eP | P | 17 12 49.3 | +0.4 |
| CUKT | Cukurca | 83.33 | 347 | eP | P | 17 12 49.3 | +0.1 |
| RLS | Riolos of Patr | 83.38 | 5 | eP | P | 17 12 50.0 | +0.7 |
| RLS | Riolos of Patr | 83.38 | 5 | eP | P | 17 12 50.0 | +0.7 |
| KHON | Khomkaen | 83.41 | 291 | P | P | 17 12 49.8 | +0.1 |
| KLV | Kalavryta, Ach | 83.42 | 4 | eP | P | 17 12 49.8 | +0.2 |
| KLV | Kalavryta, Ach | 83.42 | 4 | eP | P | 17 12 49.8 | +0.2 |
| CMAR | Chiang Mai Arr | 83.45 | 295 | P | P | 17 12 49.5 | -0.4 |
| | comp=Z,13nm,1.0s,baz=16,slow=5.5,SNR=67 | | | | | | |
| CMAR | | | | pP | pP | 17 13 07.4 | +0.2 |
| | comp=Z,1.7nm,0.6s,baz=22,slow=5.5,SNR=2.7 | | | | | | |
| CMAR | | | | LR | LR | 17 52 22.3 | |
| | comp=Z,28nm,18.4s,baz=175,slow=37 | | | | | | |
| CMAR | Chiang Mai Arr | 83.45 | 295 | iP | P | 17 12 49.5 | -0.4 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| SIJI | Sorong | 83.46 | 257 | P | P | 17 12 49.6 | -0.4 |
| | comp=Z,12nm,0.7s,baz=17,slow=11,SNR=7.0 | | | | | | |
| DRO | Drossia | 83.49 | 4 | eP | P | 17 12 50.7 | +0.8 |
| DRO | Drossia | 83.49 | 4 | eP | P | 17 12 50.7 | +0.8 |
| KONT | Konya--Tatoy | 83.51 | 356 | eP | P | 17 12 46.0 | -4.1 |
| GUR | Goura | 83.53 | 4 | eP | P | 17 12 50.5 | +0.3 |
| GUR | Goura | 83.53 | 4 | eP | P | 17 12 50.5 | +0.3 |
| YESY | Yesilyurt | 83.61 | 355 | eP | P | 17 12 50.1 | -0.5 |
| KOZT | Kozan | 83.80 | 353 | eP | P | 17 12 51.4 | -0.1 |
| DID | Didima | 83.99 | 3 | eP | P | 17 12 51.3 | -1.2 |
| DID | Didima | 83.99 | 3 | eP | P | 17 12 51.3 | -1.2 |
| DIDY | Didyma | 84.02 | 3 | eP | P | 17 12 51.4 | -1.3 |
| DIDY | Didyma | 84.02 | 3 | eP | P | 17 12 51.4 | -1.3 |
| TNTI | Ternate | 84.06 | 262 | eP | P | 17 12 52.8 | -0.2 |
| | comp=Z,12nm,0.8s | | | | | | |
| ITM | Ithomi | 84.27 | 4 | eP | P | 17 12 53.5 | -0.4 |
| ITM | Ithomi | 84.27 | 4 | eP | P | 17 12 53.5 | -0.4 |
| HDMB | Hadim | 84.48 | 356 | eP | P | 17 12 54.6 | -0.6 |
| KEST | Kesra | 84.65 | 14 | P | P | 17 12 57.0 | +1.1 |
| | comp=Z,16nm,0.8s,baz=336,slow=4.3,SNR=15 | | | | | | |
| VLI | Veliai | 84.77 | 3 | eP | P | 17 12 55.2 | -1.2 |
| VLI | Veliai | 84.77 | 3 | eP | P | 17 12 55.2 | -1.2 |
| BTCH | Batrach | 85.19 | 352 | eP | P | 17 12 59.1 | +0.5 |
| RABH | Abou Rabah | 86.73 | 352 | eP | P | 17 13 06.9 | +0.7 |
| ZALF | Zalf | 88.23 | 351 | eP | P | 17 13 14.3 | +0.9 |
| SALA | Sala | 88.48 | 352 | eP | P | 17 13 15.2 | +0.5 |
| TCHB | Talchebab | 88.58 | 353 | eP | P | 17 13 14.5 | -0.5 |
| RAYN | Ar Rayn | 96.58 | 343 | eP | P | 17 13 52.2 | 0.0 |
| | comp=Z,18nm,0.8s | | | | | | |
| KMBO | Kilima Mbogo | 121.94 | 348 | PKP | PKPdf | 17 19 16.9 | +0.1 |
| | comp=Z,2.0nm,0.5s,baz=357,slow=7.4,SNR=6.4 | | | | | | |
| KMBO | Kilima Mbogo | 121.94 | 348 | i PKIKP | PKPdf | 17 19 16.2 | -0.5 |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| VNDA | Vanda | 138.92 | 194 | PKP | PKPdf | 17 19 48.0 | +1.5 |
| | comp=Z,0.4nm,0.6s,baz=27,slow=2.3,SNR=2.9 | | | | | | |
| BOSA | Boshof | 149.79 | 3 | PKPbc | PKPbc | 17 20 11.5 | -0.3 |
| | comp=Z,8.8nm,0.5s,baz=16,slow=2.9,SNR=20 | | | | | | |
| BOSA | | | | pPKPbc | pPKPbc | 17 20 29.7 | -0.1 |
| | comp=Z,7.5nm,0.7s,baz=291,slow=1.9,SNR=3.8 | | | | | | |
| MAW | Mawson | 161.93 | 226 | PKPab | PKPab | 17 21 06.8 | -1.3 |
| | comp=Z,2.3nm,0.7s,baz=90,slow=9.5,SNR=6.7 | | | | | | |

*NEIC **08** 17:04:01.2, 41°.35S×173°.72E, h72km, ML3.9(WEL), After WEL.*

*NEIC Felt [IV] at Blenheim and Picton. Also felt in the Wellington area.*

**WEL 08 17:04:01.1**±0.1**, 41°.34S×173°.72E, h74km**±1km**, ML4.0**/18**, 2C-17D, Error ellipse: s-maj=1.3km s-min=1.2km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TUWZ | Tuamarina | 0.19 | 120 | ⇑PN | Pn | 17 04 11.6 | -0.4 |
| TUWZ | | | | SN | Sn | 17 04 18.8 | -1.3 |
| TUWZ | | | | AML | AML | 17 04 19.2 | |
| NNZ | Nelson | 0.28 | 294 | PN | Pn | 17 04 11.5 | -1.0 |
| NNZ | | | | SN | Sn | 17 04 19.1 | -1.8 |
| BSWZ | Blackbirch Sta | 0.40 | 163 | ⇑PN | Pn | 17 04 13.2 | -0.2 |
| BSWZ | | | | AML | AML | 17 04 23.7 | |
| BSWZ | | | | AML | AML | 17 04 28.3 | |
| BSWZ | Blackbirch Sta | 0.40 | 163 | Pn | Pn | 17 04 13.2 | -0.2 |
| TCW | Tory Channel | 0.43 | 74 | ⇓PN | Pn | 17 04 13.8 | +0.3 |
| TCW | | | | SN | Sn | 17 04 22.2 | -0.7 |
| TCW | | | | AML | AML | 17 04 23.3 | |
| TCW | Tory Channel | 0.43 | 74 | Pn | Pn | 17 04 13.8 | +0.3 |
| DUWZ | D'Urville Isla | 0.55 | 16 | ⇓PN | Pn | 17 04 14.7 | -0.1 |
| DUWZ | D'Urville Isla | 0.55 | 16 | Pn | Pn | 17 04 14.7 | -0.1 |
| CMWZ | Cape Campbell | 0.55 | 138 | PN | Pn | 17 04 14.9 | +0.2 |
| CMWZ | | | | SN | Sn | 17 04 25.8 | +1.0 |
| CMWZ | | | | AML | AML | 17 04 39.9 | |
| CMWZ | Cape Campbell | 0.55 | 138 | Pn | Pn | 17 04 15.1 | +0.4 |
| SNZO | South Karori | 0.74 | 88 | ePn | Pn | 17 04 16.2 | -0.4 |
| SNZO | | | | eSn | Sn | 17 04 27.4 | -0.8 |
| THZ | Tophouse | 0.75 | 235 | PN | Pn | 17 04 16.3 | -0.6 |
| THZ | Tophouse | 0.75 | 235 | ePn | Pn | 17 04 16.2 | -0.7 |
| THZ | | | | e | | 17 04 26.4 | |
| THZ | | | | eSn | Sn | 17 04 27.3 | -1.2 |
| WEL | Wellington | 0.79 | 87 | PN | Pn | 17 04 17.3 | +0.1 |
| WEL | | | | AML | AML | 17 04 33.9 | |
| WEL | | | | AML | AML | 17 04 33.9 | |
| WEL | Wellington | 0.79 | 87 | Pn | Pn | 17 04 17.3 | +0.1 |
| BHW | Baring Head | 0.87 | 95 | ⇓PN | Pn | 17 04 18.0 | -0.1 |
| BHW | | | | AML | AML | 17 04 35.1 | |
| BHW | | | | AML | AML | 17 04 35.2 | |
| BHW | Baring Head | 0.87 | 95 | Pn | Pn | 17 04 18.0 | -0.1 |
| KIW | Kapiti Island | 1.01 | 63 | ⇓PN | Pn | 17 04 20.3 | +0.4 |
| KIW | | | | AML | AML | 17 04 37.6 | |
| KIW | | | | AML | AML | 17 04 41.1 | |
| KIW | Kapiti Island | 1.01 | 63 | Pn | Pn | 17 04 20.3 | +0.4 |
| QRZ | Quartz Range | 1.03 | 299 | ⇓PN | Pn | 17 04 19.9 | -0.2 |
| QRZ | | | | SN | Sn | 17 04 33.1 | -1.3 |
| QRZ | Quartz Range | 1.03 | 299 | Pn | Pn | 17 04 19.9 | -0.2 |
| CAW | Cannon Point | 1.04 | 78 | ⇓PN | Pn | 17 04 20.2 | 0.0 |
| CAW | | | | AML | AML | 17 04 40.1 | |
| CAW | | | | AML | AML | 17 04 40.4 | |
| CAW | Cannon Point | 1.04 | 78 | Pn | Pn | 17 04 20.2 | 0.0 |
| KHZ | Kahutara | 1.09 | 187 | ⇓PN | Pn | 17 04 20.7 | -0.1 |
| KHZ | | | | AML | AML | 17 04 39.2 | |
| KHZ | | | | AML | AML | 17 04 39.3 | |
| KHZ | Kahutara | 1.09 | 187 | ePn | Pn | 17 04 20.7 | -0.1 |
| KHZ | | | | eSn | Sn | 17 04 32.6 | -2.9 |
| MSWZ | Moikau Station | 1.15 | 94 | ⇓PN | Pn | 17 04 21.2 | -0.4 |
| MSWZ | | | | AML | AML | 17 04 36.8 | |
| MSWZ | | | | AML | AML | 17 04 42.6 | |
| MSWZ | Moikau Station | 1.15 | 94 | Pn | Pn | 17 04 21.2 | -0.4 |
| PLWZ | Palliser | 1.18 | 102 | PN | Pn | 17 04 21.5 | -0.5 |
| PLWZ | Palliser | 1.18 | 102 | Pn | Pn | 17 04 21.5 | -0.5 |
| OGWZ | Otaki Gorge | 1.21 | 65 | ⇓PN | Pn | 17 04 22.5 | +0.1 |
| OGWZ | Otaki Gorge | 1.21 | 65 | Pn | Pn | 17 04 22.5 | +0.1 |
| PAWZ | Paruwai Farm | 1.28 | 93 | PN | Pn | 17 04 22.7 | -0.6 |
| PAWZ | | | | AML | AML | 17 04 39.4 | |
| PAWZ | | | | AML | AML | 17 04 51.6 | |
| PAWZ | Paruwai Farm | 1.28 | 93 | Pn | Pn | 17 04 22.7 | -0.6 |
| MTW | Mount Morrison | 1.35 | 83 | ⇓PN | Pn | 17 04 23.6 | -0.6 |
| MTW | | | | AML | AML | 17 04 48.9 | |
| MTW | | | | AML | AML | 17 04 50.6 | |
| MTW | Mount Morrison | 1.35 | 83 | Pn | Pn | 17 04 23.6 | -0.6 |
| HOWZ | Holdsworth Sta | 1.42 | 73 | ⇓PN | Pn | 17 04 24.6 | -0.5 |
| HOWZ | Holdsworth Sta | 1.42 | 73 | Pn | Pn | 17 04 24.6 | -0.5 |
| TRWZ | Traveller | 1.48 | 93 | PN | Pn | 17 04 25.1 | -0.8 |
| TRWZ | | | | AML | AML | 17 04 44.3 | |
| TRWZ | | | | AML | AML | 17 04 44.6 | |
| TRWZ | Traveller | 1.48 | 93 | Pn | Pn | 17 04 25.1 | -0.7 |
| DSZ | Denniston Nort | 1.50 | 253 | PN | Pn | 17 04 26.0 | -0.2 |
| DSZ | Denniston Nort | 1.50 | 253 | Pn | Pn | 17 04 26.5 | +0.3 |
| MRZ | Mangatainoka R | 1.56 | 65 | ⇓PN | Pn | 17 04 26.4 | -0.5 |
| MRZ | | | | AML | AML | 17 04 55.9 | |
| MRZ | | | | AML | AML | 17 04 58.6 | |
| MRZ | Mangatainoka R | 1.56 | 65 | Pn | Pn | 17 04 26.4 | -0.5 |
| TMWZ | Te Maipa | 1.65 | 83 | PN | Pn | 17 04 27.3 | -0.9 |
| TMWZ | Te Maipa | 1.65 | 83 | Pn | Pn | 17 04 27.3 | -0.9 |
| TIWZ | Tintock | 1.73 | 72 | PN | Pn | 17 04 28.3 | -0.8 |
| TIWZ | | | | AML | AML | 17 05 01.3 | |
| TIWZ | | | | AML | AML | 17 05 01.9 | |
| TIWZ | Tintock | 1.73 | 72 | Pn | Pn | 17 04 28.4 | -0.8 |
| LTZ | Lake Taylor | 1.81 | 216 | PN | Pn | 17 04 29.8 | -0.5 |
| LTZ | Lake Taylor | 1.81 | 216 | Pn | Pn | 17 04 29.8 | -0.5 |
| WAZ | Wanganui | 1.85 | 32 | PN | Pn | 17 04 32.3 | +1.5 |
| WAZ | Wanganui | 1.85 | 32 | Pn | Pn | 17 04 32.3 | +1.5 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PRWZ | Pori Road | 1.87 | 66 | ⇓PN | Pn | 17 04 30.4 | -0.7 |
| PRWZ | Pori Road | 1.87 | 66 | Pn | Pn | 17 04 30.4 | -0.7 |
| CPWZ | Castlepoint | 1.92 | 78 | PN | Pn | 17 04 31.4 | -0.3 |
| CPWZ | Castlepoint | 1.92 | 78 | Pn | Pn | 17 04 31.4 | -0.3 |
| NMEZ | Namu Road | 1.92 | 4 | PN | Pn | 17 04 33.1 | +1.4 |
| NMEZ | Namu Road | 1.92 | 4 | Pn | Pn | 17 04 33.1 | +1.4 |
| LREZ | Lake Rotokare | 1.94 | 16 | PN | Pn | 17 04 34.1 | +2.1 |
| BFZ | Birch Farm | 2.02 | 72 | PN | Pn | 17 04 31.8 | -1.2 |
| BFZ | | | | AML | AML | 17 05 12.9 | |
| BFZ | | | | AML | AML | 17 05 12.9 | |
| BFZ | | | | AML | AML | 17 05 19.6 | |
| BFZ | | | | AML | AML | 17 05 19.6 | |
| BFZ | Birch Farm | 2.02 | 72 | ePn | Pn | 17 04 32.0 | -1.1 |
| BFZ | | | | eSn | Sn | 17 04 52.5 | -4.9 |
| PREZ | Palmer Road | 2.02 | 10 | PN | Pn | 17 04 35.0 | +1.9 |
| PREZ | Palmer Road | 2.02 | 10 | Pn | Pn | 17 04 35.0 | +1.9 |
| KHEZ | Kahui Hut | 2.05 | 6 | PN | Pn | 17 04 35.3 | +1.7 |
| KHEZ | Kahui Hut | 2.05 | 6 | Pn | Pn | 17 04 35.3 | +1.7 |
| NWEZ | Newall Road | 2.06 | 3 | PN | Pn | 17 04 35.2 | +1.6 |
| NWEZ | Newall Road | 2.06 | 3 | Pn | Pn | 17 04 35.2 | +1.6 |
| NEZ | North Egmont | 2.08 | 8 | PN | Pn | 17 04 35.3 | +1.3 |
| NEZ | North Egmont | 2.08 | 8 | Pn | Pn | 17 04 35.3 | +1.3 |
| DVHZ | Dannevirke | 2.12 | 62 | ⇓PN | Pn | 17 04 33.2 | -1.3 |
| DVHZ | Dannevirke | 2.12 | 62 | Pn | Pn | 17 04 33.2 | -1.3 |
| TSZ | Takapari Road | 2.13 | 54 | PN | Pn | 17 04 33.8 | -0.8 |
| TSZ | | | | AML | AML | 17 05 13.2 | |
| TSZ | | | | AML | AML | 17 05 24.9 | |
| TSZ | Takapari Road | 2.13 | 54 | Pn | Pn | 17 04 33.8 | -0.8 |
| PKE | Pukeiti | 2.15 | 5 | PN | Pn | 17 04 36.2 | +1.4 |
| PKE | Pukeiti | 2.15 | 5 | Pn | Pn | 17 04 36.2 | +1.4 |
| DREZ | Durham Road | 2.17 | 10 | PN | Pn | 17 04 36.6 | +1.5 |
| ANWZ | Angora Road | 2.26 | 68 | PN | Pn | 17 04 35.3 | -0.9 |
| MHEZ | Mangahewa | 2.30 | 12 | PN | Pn | 17 04 38.6 | +1.8 |
| MHEZ | Mangahewa | 2.30 | 12 | Pn | Pn | 17 04 38.6 | +1.8 |
| OXZ | Oxford | 2.35 | 212 | PN | Pn | 17 04 35.9 | -1.6 |
| OXZ | Oxford | 2.35 | 212 | ePn | Pn | 17 04 35.9 | -1.6 |
| OXZ | | | | eSn | Sn | 17 05 01.0 | -4.4 |
| PNHZ | Pukenui | 2.36 | 54 | PN | Pn | 17 04 36.6 | -1.1 |
| PNHZ | Pukenui | 2.36 | 54 | Pn | Pn | 17 04 36.6 | -1.1 |
| CRLZ | Canterbury Las | 2.38 | 200 | PN | Pn | 17 04 36.0 | -1.9 |
| CRLZ | Canterbury Las | 2.38 | 200 | Pn | Pn | 17 04 36.0 | -1.9 |
| WPHZ | Waipukurau | 2.42 | 59 | PN | Pn | 17 04 37.1 | -1.4 |
| WPHZ | Waipukurau | 2.42 | 59 | Pn | Pn | 17 04 37.1 | -1.4 |
| PRHZ | Porangahau | 2.46 | 65 | PN | Pn | 17 04 37.5 | -1.4 |
| PRHZ | Porangahau | 2.46 | 65 | Pn | Pn | 17 04 37.5 | -1.4 |
| MQZ | McQueen's Vall | 2.50 | 198 | ⇓PN | Pn | 17 04 37.1 | -2.4 |
| MQZ | McQueen's Vall | 2.50 | 198 | Pn | Pn | 17 04 37.1 | -2.4 |
| MQZ | | | | eSn | Sn | 17 05 03.5 | -5.4 |
| WVZ | Waitaha Valley | 2.82 | 231 | PN | Pn | 17 04 43.1 | -0.7 |
| WVZ | Waitaha Valley | 2.82 | 231 | Pn | Pn | 17 04 43.5 | -0.3 |
| RPZ | Rata Peaks | 3.09 | 219 | PN | Pn | 17 04 47.7 | +0.2 |
| RPZ | Rata Peaks | 3.09 | 219 | ePn | Pn | 17 04 47.5 | 0.0 |
| TOZ | Tahuroa Road | 3.85 | 21 | PN | Pn | 17 04 59.1 | +1.3 |
| KBAZ | Karaka Road Bo | 4.33 | 12 | Pn | Pn | 17 05 06.2 | +1.8 |
| ODZ | Otahua Downs | 4.34 | 210 | ePn | Pn | 17 05 02.7 | -1.7 |
| ODZ | | | | eSn | Sn | 17 05 48.6 | -5.2 |
| MKAZ | Moumakai | 4.37 | 15 | ⇓PN | Pn | 17 05 06.1 | +1.3 |
| MKAZ | Moumakai | 4.37 | 15 | Pn | Pn | 17 05 06.1 | +1.3 |
| ETAZ | East Tamaki Re | 4.47 | 12 | PN | Pn | 17 05 07.5 | +1.1 |
| ETAZ | East Tamaki Re | 4.47 | 12 | Pn | Pn | 17 05 07.5 | +1.1 |
| JCZ | Jackson Bay | 4.57 | 232 | PN | Pn | 17 05 05.8 | -1.9 |
| JCZ | Jackson Bay | 4.57 | 232 | Pn | Pn | 17 05 05.8 | -1.9 |
| RVAZ | Riverhead Bore | 4.61 | 9 | PN | Pn | 17 05 09.3 | +1.1 |
| RVAZ | Riverhead Bore | 4.61 | 9 | Pn | Pn | 17 05 09.3 | +1.1 |
| KUZ | Kuaotunu | 4.84 | 19 | PN | Pn | 17 05 12.2 | +0.9 |
| KUZ | Kuaotunu | 4.84 | 19 | Pn | Pn | 17 05 12.2 | +0.9 |
| WKZ | Wanaka | 4.91 | 223 | PN | Pn | 17 05 09.7 | -2.6 |
| WKZ | Wanaka | 4.91 | 223 | Pn | Pn | 17 05 09.7 | -2.6 |
| EAZ | Earnscleugh | 5.05 | 218 | PN | Pn | 17 05 12.3 | -2.0 |
| EAZ | Earnscleugh | 5.05 | 218 | Pn | Pn | 17 05 12.3 | -2.0 |
| WCZ | Waipu Caves | 5.41 | 5 | ⇓PN | Pn | 17 05 20.8 | +1.7 |
| WCZ | Waipu Caves | 5.41 | 5 | Pn | Pn | 17 05 20.8 | +1.7 |
| TUZ | Tuapeka | 5.49 | 211 | PN | Pn | 17 05 19.7 | -0.4 |
| TUZ | Tuapeka | 5.49 | 211 | Pn | Pn | 17 05 19.7 | -0.4 |

**WEL 08 17:04:23.4±0.1, 38°.86S×176°.51E, h49km±1km, ML3.1/4, 1C-6D, Error ellipse: s-maj=0.8km s-min=0.7km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MRHZ | Matea Rd | 0.07 | 290 | P* | Pn | 17 04 30.8 | -0.3 |
| MRHZ | | | | S* | Sn | 17 04 36.4 | -0.1 |
| BKZ | Black Stump Fm | 0.31 | 182 | ⇑P* | Pn | 17 04 31.9 | -0.7 |
| BKZ | | | | S* | Sn | 17 04 39.1 | -0.1 |
| BKZ | | | | AML | AML | 17 04 39.6 | |
| ALRZ | Allen Road | 0.32 | 336 | ⇓P* | Pn | 17 04 32.6 | -0.1 |
| NMHZ | Naumai | 0.33 | 136 | PN | Pn | 17 04 32.7 | -0.2 |
| PRRZ | Plateau Road | 0.37 | 346 | P* | Pn | 17 04 32.9 | -0.2 |
| RAHZ | Arahi | 0.46 | 98 | PN | Pn | 17 04 33.8 | -0.3 |
| RAHZ | | | | SN | Sn | 17 04 42.3 | +0.5 |
| HRRZ | Handcock Road | 0.50 | 339 | P* | Pn | 17 04 34.5 | -0.2 |
| RRRZ | Republican Roa | 0.52 | 1 | P* | Pn | 17 04 34.3 | -0.6 |
| RITZ | Rihia Road | 0.52 | 257 | P* | Pn | 17 04 34.9 | 0.0 |
| ARHZ | Aropaoanui | 0.55 | 137 | PN | Pn | 17 04 35.4 | +0.1 |
| ARHZ | | | | SN | Sn | 17 04 45.8 | +2.0 |
| KWHZ | Kaweka Forest | 0.57 | 187 | P* | Pn | 17 04 35.0 | -0.6 |
| HSRZ | Hossack Road | 0.58 | 339 | P* | Pn | 17 04 35.4 | -0.3 |
| MCHZ | McNeill Hill | 0.60 | 166 | PN | Pn | 17 04 36.3 | +0.4 |
| WHHZ | Waihua | 0.61 | 111 | PN | Pn | 17 04 35.8 | -0.2 |
| TARZ | Mount Tarawera | 0.62 | 360 | P* | Pn | 17 04 36.0 | -0.3 |
| WATZ | Wairara | 0.62 | 284 | P* | Pn | 17 04 35.6 | -0.6 |
| SNGZ | Shannon Statio | 0.65 | 83 | PN | Pn | 17 04 36.5 | -0.1 |
| KRVZ | Karewarewa | 0.72 | 250 | P* | Pn | 17 04 37.1 | -0.4 |
| KRVZ | Karewarewa | 0.72 | 250 | Pn | Pn | 17 04 37.2 | -0.3 |
| BHHZ | Black Hill Sta | 0.72 | 209 | PN | Pn | 17 04 36.6 | -0.9 |
| BHHZ | Black Hill Sta | 0.72 | 209 | P* | Pn | 17 04 36.5 | -1.0 |
| BHHZ | Black Hill Sta | 0.72 | 209 | Pn | Pn | 17 04 36.6 | -0.9 |
| OTVZ | Oturere | 0.72 | 245 | Pn | Pn | 17 04 36.6 | -1.0 |
| WTVZ | West Tongariro | 0.76 | 250 | PN | Pn | 17 04 37.8 | -0.3 |
| WTVZ | West Tongariro | 0.76 | 250 | P* | Pn | 17 04 37.8 | -0.3 |
| WTVZ | West Tongariro | 0.76 | 250 | Pn | Pn | 17 04 37.8 | -0.3 |
| URZ | Urewera | 0.76 | 38 | P* | Pn | 17 04 36.7 | -1.2 |
| URZ | | | | AML | AML | 17 04 48.1 | |
| URZ | | | | AML | AML | 17 04 48.6 | |
| EDRZ | Edgecumbe | 0.77 | 14 | P* | Pn | 17 04 37.4 | -0.8 |
| NGZ | Ngauruhoe | 0.78 | 246 | PN | Pn | 17 04 38.0 | -0.3 |
| NGZ | Ngauruhoe | 0.78 | 246 | Pn | Pn | 17 04 38.0 | -0.3 |
| KRHZ | Kereru | 0.79 | 188 | PN | Pn | 17 04 38.3 | -0.1 |
| KRHZ | Kereru | 0.79 | 188 | PN | Pn | 17 04 38.2 | -0.2 |
| MOVZ | Moawhango | 0.80 | 227 | PN | Pn | 17 04 37.9 | -0.7 |
| MOVZ | Moawhango | 0.80 | 227 | P* | Pn | 17 04 37.9 | -0.7 |
| MOVZ | Moawhango | 0.80 | 227 | Pn | Pn | 17 04 37.9 | -0.7 |
| COVZ | Chateau Observ | 0.83 | 245 | ⇓PN | Pn | 17 04 38.6 | -0.4 |
| COVZ | Chateau Observ | 0.83 | 245 | ⇓P* | Pn | 17 04 38.6 | -0.4 |
| COVZ | Chateau Observ | 0.83 | 245 | Pn | Pn | 17 04 38.6 | -0.4 |
| WPVZ | Whakapapa | 0.83 | 245 | PN | Pn | 17 04 38.7 | -0.3 |
| WPVZ | Whakapapa | 0.83 | 245 | P* | Pn | 17 04 38.6 | -0.3 |
| WPVZ | Whakapapa | 0.83 | 245 | Pn | Pn | 17 04 38.7 | -0.3 |
| WHVZ | Whangaehu Hut | 0.83 | 239 | ⇓PN | Pn | 17 04 38.6 | -0.6 |
| WHVZ | Whangaehu Hut | 0.83 | 239 | P* | Pn | 17 04 38.5 | -0.6 |
| WHVZ | Whangaehu Hut | 0.83 | 239 | Pn | Pn | 17 04 38.6 | -0.6 |
| FWVZ | Far West T-bar | 0.84 | 242 | ⇓PN | Pn | 17 04 38.8 | -0.6 |
| FWVZ | Far West T-bar | 0.84 | 242 | ⇓P* | Pn | 17 04 38.7 | -0.6 |
| FWVZ | Far West T-bar | 0.84 | 242 | Pn | Pn | 17 04 38.8 | -0.6 |
| WNVZ | Wahianoa | 0.85 | 236 | PN | Pn | 17 04 38.8 | -0.5 |
| WNVZ | Wahianoa | 0.85 | 236 | P* | Pn | 17 04 38.8 | -0.6 |
| WNVZ | Wahianoa | 0.85 | 236 | Pn | Pn | 17 04 38.8 | -0.5 |
| TWVZ | Taurewa | 0.86 | 255 | PN | Pn | 17 04 38.7 | -0.6 |
| TWVZ | Taurewa | 0.86 | 255 | Pn | Pn | 17 04 38.8 | -0.6 |
| TRVZ | Turoa | 0.87 | 239 | PN | Pn | 17 04 39.1 | -0.6 |
| TRVZ | Turoa | 0.87 | 239 | Pn | Pn | 17 04 39.1 | -0.6 |
| CKHZ | Cape Kidnapper | 0.91 | 151 | PN | Pn | 17 04 40.1 | +0.1 |
| KNZ | Kokohu | 0.92 | 100 | PN | Pn | 17 04 39.1 | -0.9 |
| MWZ | Matawai | 0.95 | 57 | P* | Pn | 17 04 40.0 | -0.5 |
| MWZ | | | | AML | AML | 17 04 56.9 | |
| KAHZ | Kahuranaki | 0.98 | 163 | PN | Pn | 17 04 40.3 | -0.6 |
| KAHZ | Kahuranaki | 0.98 | 163 | Pn | Pn | 17 04 40.4 | -0.5 |
| RIGZ | Rimuhau | 0.99 | 82 | PN | Pn | 17 04 41.1 | 0.0 |
| PNHZ | Pukenui | 1.08 | 193 | PN | Pn | 17 04 41.0 | -1.3 |
| PXZ | Pawanui | 1.20 | 167 | PN | Pn | 17 04 40.7 | -3.1 |
| PXZ | | | | AML | AML | 17 04 59.3 | |
| PXZ | | | | AML | AML | 17 04 59.4 | |
| PXZ | | | | AML | AML | 17 05 40.7 | |
| PXZ | | | | AML | AML | 17 05 40.7 | |
| PXZ | Pawanui | 1.20 | 167 | AML | AML | 17 04 55.9 | |
| PXZ | | | | AML | AML | 17 04 59.3 | |
| PXZ | | | | AML | AML | 17 04 59.4 | |
| PXZ | | | | AML | AML | 17 05 40.7 | |
| HIZ | Hauiti | 1.34 | 284 | PN | Pn | 17 04 45.8 | +0.1 |
| HIZ | Hauiti | 1.34 | 284 | PN | Pn | 17 04 45.8 | +0.1 |
| HIZ | Hauiti | 1.34 | 284 | Pn | Pn | 17 04 45.9 | +0.1 |
| TOZ | Tahuroa Road | 1.38 | 325 | P* | Pn | 17 04 45.9 | -0.3 |
| HAZ | Te Kaha | 1.49 | 43 | P* | Pn | 17 04 47.2 | -0.5 |
| ANWZ | Angora Road | 1.60 | 181 | PN | Pn | 17 04 47.3 | -2.0 |

*AWI 08 17:06:04.6, 54°.00S×3°.51E*

*ISCJB 08 17:06:08.2±0.8, 54°.9S±0°.1×4°.2E±0°.3, h10km, mb4.3/10, MS3.5/4, Error ellipse: s-maj=25.1km s-min=14.0km az=154.9*

*IDC 08 17:06:08.4±1.1, 54°.96S×4°.29E, h0km, mb4.1/7, mb1 4.3/8, mb1mx4.0/25, mbtmp4.1/8, ML3.4/1, MS3.4/5, Ms1 3.4/5, ms1mx3.1/22, Error ellipse: s-maj=37.9km s-min=20.8km az=67.0*

*NEIC 08 17:06:09.9±0.6, 54°.95S×4°.21E, h10km, mb4.6/4, Error ellipse: s-maj=19.2km s-min=10.7km az=64.0*

**ISC 08 17:06:10.3±0.9, 55°.10S±0°.09×4°.1E±0°.2, h10km, n27, σ1s.85/19, mb4.3/10, MS3.5/4, Bouvet Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VNA1 | Neumayer--Stat | 16.52 | 195 | P | P | 17 10 08.4 | +4.1 |
| VNA2 | Neumayer--Watz | 16.65 | 193 | P | P | 17 10 09.3 | +3.5 |
| | baz=20,slow=16 | | | | | | |
| SNAA | Sanae | 16.89 | 188 | P | P | 17 10 11.1 | +2.5 |
| SNAA | Sanae | 16.89 | 188 | P | P | 17 10 09.0 | +0.4 |
| | 0.1nm,0.3s,baz=6.3,slow=13,SNR=23 | | | | | | |
| SNAA | | | | S | Sn | 17 13 11.5 | -2.5 |
| | 0.0nm,0.3s,baz=29,slow=19,SNR=2.4 | | | | | | |
| SNAA | | | | LR | LR | 17 15 51.2 | |
| | comp=Z,59nm,19.5s,baz=356,slow=34 | | | | | | |
| SNAA | Sanae | 16.89 | 188 | P | P | 17 10 09.0 | +0.4 |
| SNAA | | | | ePn | pP | 17 10 09.5 | -1.8 |
| SNAA | | | | S | Sn | 17 13 11.5 | -2.5 |
| VNA3 | Neumayer Olymp | 17.26 | 195 | P | P | 17 10 17.6 | +5.0 |
| MAW | Mawson | 29.54 | 138 | LR | LR | 17 21 22.4 | |
| | comp=Z,64nm,21.8s,baz=241,slow=31 | | | | | | |
| BOSA | Boshof | 30.57 | 39 | LR | LR | 17 21 39.4 | |
| | comp=Z,75nm,20.1s,baz=180,slow=31 | | | | | | |
| QSPA | South Pole Qui | 35.13 | 180 | P | P | 17 13 04.4 | +0.7 |
| | 3.4nm,0.8s,baz=224,slow=3.0,SNR=13 | | | | | | |
| QSPA | South Pole Qui | 35.13 | 180 | eP | P | 17 13 04.2 | +0.5 |
| | 8.8nm,1.4s | | | | | | |
| SBA | Scott Base | 46.87 | 175 | eP | P | 17 14 40.4 | +0.6 |
| | 4.1nm,1.0s | | | | | | |
| VNDA | Vanda | 46.92 | 174 | P | P | 17 14 40.3 | 0.0 |
| | 1.9nm,0.8s,baz=216,slow=7.2,SNR=12 | | | | | | |
| H10S2 | ASCENSION HYDR | 48.37 | 335 | T | T | 18 06 26.3 | |
| | baz=164,slow=75,SNR=11 | | | | | | |
| H10S3 | ASCENSION HYDR | 48.38 | 335 | T | T | 18 06 26.3 | |
| | baz=164,slow=75,SNR=12 | | | | | | |
| H10S1 | ASCENSION HYDR | 48.39 | 335 | T | T | 18 06 26.0 | |
| | baz=164,slow=75,SNR=13 | | | | | | |
| CPUP | Villa Florida | 52.57 | 277 | P | P | 17 15 23.6 | -0.2 |
| | 2.6nm,0.8s,baz=108,slow=6.4,SNR=3.5 | | | | | | |
| BDFB | Brasilia | 55.98 | 293 | P | P | 17 15 48.5 | -0.4 |
| | 0.8nm,0.3s,baz=216,slow=7.7,SNR=4.4 | | | | | | |
| MBAR | Mbarara | 58.53 | 32 | LR | LR | 17 39 13.4 | |
| | comp=Z,66nm,20.1s,baz=164,slow=34 | | | | | | |
| DBIC | Dimbokro | 62.00 | 350 | LR | LR | 17 37 53.9 | |
| | comp=Z,42nm,19.8s,baz=52,slow=31 | | | | | | |
| LPAZ | La Paz | 66.63 | 275 | P | P | 17 17 02.6 | +1.0 |
| | 2.6nm,0.8s,baz=137,slow=3.8,SNR=8.4 | | | | | | |
| TORD | Torodi Ar. Bea | 68.02 | 357 | P | P | 17 17 08.4 | -1.1 |
| | 0.6nm,0.8s,baz=182,slow=4.3,SNR=3.0 | | | | | | |
| SAML | Samuel | 69.76 | 284 | eP | P | 17 17 19.9 | -0.7 |
| | 4.6nm,0.8s | | | | | | |
| H01W2 | Cape Leeuwin H | 72.30 | 126 | T | T | 18 37 07.1 | |
| | baz=218,slow=75 | | | | | | |
| H01W3 | Cape Leeuwin H | 72.31 | 126 | T | T | 18 37 10.1 | |
| | baz=218,slow=75 | | | | | | |
| H01W1 | Cape Leeuwin H | 72.31 | 126 | T | T | 18 37 07.7 | |
| | baz=218,slow=75 | | | | | | |
| MBWA | Marble Bar | 86.48 | 123 | eP | P | 17 18 53.2 | 0.0 |
| | 12nm,1.1s | | | | | | |
| ASAR | Alice Springs | 90.62 | 135 | P | P | 17 19 13.0 | +0.1 |
| | 0.7nm,0.9s,baz=203,slow=5.9,SNR=4.5 | | | | | | |

**GUC 08 17:13:41.1±0.5, 35°.66S×73°.11W, h15km±10km, ML3.7, 5C-2D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| COCH | Cobquecura | 0.54 | 151 | ⇓iP | Pb | 17 13 52.2 | -0.1 |
| COCH | | | | iS | Sb | 17 14 01.1 | +1.2 |
| COCH | | | | AML | AML | 17 14 03.1 | |
| | comp=N,4μm,0.6s | | | | | | |
| TALC | Talca | 1.23 | 78 | ⇑iP | Pn | 17 14 03.8 | 0.0 |
| TALC | | | | ⇑iP | Pb | 17 14 03.8 | -0.3 |
| TALC | | | | iS | Sg | 17 14 21.1 | +0.2 |
| CHPI | Pichilemu | 1.56 | 36 | ⇑iP | Pb | 17 14 09.3 | -0.3 |
| CHPI | | | | iS | Sg | 17 14 30.2 | -1.1 |
| NICH | Los Niches | 1.67 | 68 | ⇓iP | Pn | 17 14 06.2 | -3.6 |
| CLCH | Cerro Calan | 3.10 | 44 | ⇑eP | Pn | 17 14 32.1 | +2.5 |
| CLCH | | | | eS | Sg | 17 15 19.2 | -1.7 |
| CLCH | | | | AML | AML | 17 15 26.6 | |
| | comp=E,402nm,0.7s | | | | | | |
| ROCH | El Roble | 3.19 | 34 | ⇑iP | Pn | 17 14 30.3 | -0.7 |
| ROCH | | | | iS | Sg | 17 15 24.1 | -0.1 |

*IDC 08 17:26:53.8±2.3, 37°.03N×16°.42E, h0km, mb3.8/3, mb1 3.8/9, mb1mx3.5/46, mbtmp3.8/9, ML3.5/6, MS2.9/2, Ms1 2.9/2, ms1mx2.5/45, Error ellipse: s-maj=35.1km s-min=26.4km az=11.0*

*ISCJB 08 17:26:55.9±0.3, 36°.85N±0°.03×16°.51E±0°.02, h59km±8km, mb3.8/3, Error ellipse: s-maj=4.2km s-min=3.3km az=1.7*

*CSEM 08 17:26:57.2±0.1, 36°.84N×16°.51E, h40km, ML4.8/7, Mw3.7, Error ellipse: s-maj=4.0km s-min=2.6km az=178.0*

*ROM 08 17:26:58.4±0.1, 36°.91N×16°.33E, h38km, Ml3.6/35, Error ellipse: s-maj=0.8km s-min=0.4km az=52.0*

*PDG 08 17:26:58.9±0.9, 39°.32N×17°.29E, h40km±11km, ML4.2/11, Error ellipse: s-maj=1.7km s-min=3.7km az=0.0*

*THE 08 17:27:02.8, 37°.16N×17°.01E, h29km±7km, ML3.6/5, Error ellipse: s-maj=9.4km s-min=1.5km az=223.0*

**ISC 08 17:26:57.0±1.1, 36°.89N±0°.05×16°.53E±0°.04, h42km±21km, n274, σ1s.49/280, mb3.8/3, 6C-16D, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AGST | Augusta-Monte | 1.10 | 290 | Pg | Pn | 17 27 14.5 | -1.4 |
| AGST | | | | Sg | Sn | 17 27 27.0 | -2.9 |
| | 906nm,0.2s | | | | | | |
| AGST | Augusta-Monte | 1.10 | 290 | Pg | Pn | 17 27 14.5 | -1.4 |
| HAVL | Avola | 1.12 | 274 | Pg | Pn | 17 27 15.3 | -1.0 |
| HAVL | | | | Sg | Sn | 17 27 29.1 | -1.4 |
| | 5μm,0.4s | | | | | | |
| HAVL | Avola | 1.12 | 274 | Pg | Pn | 17 27 15.3 | -1.0 |
| HAVL | | | | Sg | Sn | 17 27 29.1 | -1.4 |
| | 5μm,0.4s | | | | | | |
| MPAZ | Palizzi | 1.14 | 339 | Pg | Pn | 17 27 17.1 | +0.7 |
| MPAZ | | | | Sg | Sn | 17 27 31.9 | +1.1 |
| | 426nm,0.3s | | | | | | |
| MPAZ | Palizzi | 1.14 | 339 | Pg | Pn | 17 27 17.1 | +0.7 |
| MPAZ | | | | Sg | Sn | 17 27 31.9 | +1.1 |
| | 426nm,0.3s | | | | | | |
| SSY | Sortino | 1.19 | 283 | Pg | Pn | 17 27 16.0 | -1.2 |
| SSY | | | | Sg | Sn | 17 27 30.5 | -1.7 |
| | 2μm,0.3s | | | | | | |
| SSY | Sortino | 1.19 | 283 | Pg | Pn | 17 27 16.0 | -1.2 |
| SSY | | | | Sg | Sn | 17 27 30.5 | -1.7 |
| | 2μm,0.3s | | | | | | |
| SOI | Samo | 1.23 | 343 | Pg | Pn | 17 27 18.7 | +0.9 |
| SOI | | | | Sg | Sn | 17 27 33.9 | +0.7 |
| | 209nm,0.3s | | | | | | |
| SOI | Samo | 1.23 | 343 | Pg | Pn | 17 27 18.7 | +0.9 |
| SOI | | | | Sg | Sn | 17 27 33.9 | +0.7 |
| | 209nm,0.3s | | | | | | |
| HCRL | Carlentini | 1.25 | 288 | Pg | Pn | 17 27 16.9 | -1.1 |
| HCRL | | | | Sg | Sn | 17 27 31.8 | -1.9 |
| | 5μm,0.2s | | | | | | |
| HCRL | Carlentini | 1.25 | 288 | Pg | Pn | 17 27 16.9 | -1.1 |
| MTTG | Motta San Giov | 1.29 | 329 | Pg | Pn | 17 27 19.1 | +0.6 |
| | 257nm,0.5s | | | | | | |
| MTTG | Motta San Giov | 1.29 | 329 | Pg | Pn | 17 27 19.1 | +0.6 |
| | 257nm,0.5s | | | | | | |
| HLNI | Lentini | 1.40 | 289 | Pg | Pn | 17 27 18.8 | -1.2 |
| HLNI | | | | Sg | Sn | 17 27 35.0 | -2.2 |
| | 2μm,0.2s | | | | | | |
| HLNI | Lentini | 1.40 | 289 | Pg | Pn | 17 27 18.8 | -1.2 |
| HMDC | Modica | 1.40 | 273 | Pg | Pn | 17 27 19.4 | -0.6 |
| HMDC | | | | Sg | Sn | 17 27 36.1 | -1.2 |
| | 4μm,0.5s | | | | | | |
| HMDC | Modica | 1.40 | 273 | Pg | Pn | 17 27 19.4 | -0.6 |
| HMDC | | | | Sg | Sn | 17 27 36.1 | -1.2 |
| | 4μm,0.5s | | | | | | |
| MMME | Mongiuffi-Meli | 1.45 | 316 | Pg | Pn | 17 27 20.9 | +0.1 |
| MMME | | | | Sg | Sn | 17 27 38.5 | -0.1 |
| | 481nm,0.5s | | | | | | |
| MMME | Mongiuffi-Meli | 1.45 | 316 | Pg | Pn | 17 27 20.9 | +0.1 |
| MMME | | | | Sg | Sn | 17 27 38.5 | -0.1 |
| | 481nm,0.5s | | | | | | |
| MSCL | Scilla | 1.46 | 337 | Pg | Pn | 17 27 21.8 | +0.9 |
| | 590nm,0.5s | | | | | | |
| MSCL | Scilla | 1.46 | 337 | Pg | Pn | 17 27 21.8 | +0.9 |
| | 590nm,0.5s | | | | | | |
| ESLN | Serra La Nave | 1.47 | 303 | Pg | Pn | 17 27 20.9 | -0.3 |
| ESLN | Serra La Nave | 1.47 | 303 | Pg | Pn | 17 27 20.9 | -0.3 |
| HVZN | Vizzini | 1.48 | 282 | Pg | Pn | 17 27 20.4 | -0.7 |
| HVZN | | | | Sg | Sn | 17 27 38.6 | -0.6 |
| | 7μm,0.6s | | | | | | |
| HVZN | Vizzini | 1.48 | 282 | Pg | Pn | 17 27 20.4 | -0.7 |
| HVZN | | | | Sg | Sn | 17 27 38.6 | -0.6 |
| | 7μm,0.6s | | | | | | |
| PLAC | Placanica | 1.55 | 357 | Pg | Pn | 17 27 23.8 | +1.6 |
| | 284nm,0.5s | | | | | | |
| PLAC | Placanica | 1.55 | 357 | Pg | Pn | 17 27 23.8 | +1.6 |
| | 284nm,0.5s | | | | | | |
| MSRU | Castanea | 1.59 | 330 | Pg | Pn | 17 27 23.5 | +0.9 |
| | 479nm,0.6s | | | | | | |
| MSRU | Castanea | 1.59 | 330 | Pg | Pn | 17 27 23.5 | +0.9 |
| | 479nm,0.6s | | | | | | |
| ECNV | Catenanuova | 1.61 | 296 | Pg | Pn | 17 27 23.3 | +0.4 |
| | 907nm,0.6s | | | | | | |
| ECNV | Catenanuova | 1.61 | 296 | Pg | Pn | 17 27 23.3 | +0.4 |
| | 907nm,0.6s | | | | | | |
| MILZ | Milazzo | 1.72 | 324 | Pg | Pn | 17 27 25.2 | +0.9 |
| | 913nm,0.8s | | | | | | |
| MILZ | Milazzo | 1.72 | 324 | Pg | Pn | 17 27 25.2 | +0.9 |
| | 913nm,0.8s | | | | | | |
| RAFF | Raffo Rosso | 1.76 | 281 | Pg | Pn | 17 27 25.0 | 0.0 |
| RAFF | Raffo Rosso | 1.76 | 281 | Pg | Pn | 17 27 25.0 | 0.0 |
| CAGR | Agira | 1.77 | 295 | Pg | Pn | 17 27 26.1 | +0.9 |
| | 787nm,0.5s | | | | | | |
| CAGR | Agira | 1.77 | 295 | Pg | Pn | 17 27 26.1 | +0.9 |
| | 787nm,0.5s | | | | | | |
| JOPP | Joppolo | 1.78 | 344 | Pg | Pn | 17 27 27.3 | +2.0 |
| | 131nm,0.7s | | | | | | |
| JOPP | Joppolo | 1.78 | 344 | Pg | Pn | 17 27 27.3 | +2.0 |
| | 131nm,0.7s | | | | | | |
| MNO | Monte Soro | 1.79 | 306 | Pg | Pn | 17 27 26.5 | +1.0 |
| | 432nm,0.5s | | | | | | |
| MNO | Monte Soro | 1.79 | 306 | Pg | Pn | 17 27 26.5 | +1.0 |
| | 432nm,0.5s | | | | | | |
| WDD | Wield Dalam | 1.91 | 238 | Pg | Pn | 17 27 27.0 | 0.0 |
| | 1μm,0.5s | | | | | | |
| WDD | Wield Dalam | 1.91 | 238 | Pg | Pn | 17 27 27.0 | 0.0 |
| | 1μm,0.5s | | | | | | |
| GRI | Girifalco | 1.93 | 358 | Pg | Pn | 17 27 30.8 | +3.5 |
| GRI | Girifalco | 1.93 | 358 | Pg | Pn | 17 27 30.8 | +3.5 |
| LLI | Lipari | 1.99 | 322 | Pg | Pn | 17 27 29.4 | +1.3 |
| | 1μm,0.6s | | | | | | |
| LLI | Lipari | 1.99 | 322 | Pg | Pn | 17 27 29.4 | +1.3 |
| | 1μm,0.6s | | | | | | |
| RESU | Resuttano | 2.11 | 292 | Pg | Pn | 17 27 31.4 | +1.6 |
| RESU | Resuttano | 2.11 | 292 | Pg | Pn | 17 27 31.4 | +1.6 |
| SERS | Sersale | 2.14 | 3 | Pg | Pn | 17 27 32.0 | +1.7 |
| | 141nm,0.4s | | | | | | |
| SERS | Sersale | 2.14 | 3 | Pg | Pn | 17 27 32.0 | +1.7 |
| | 141nm,0.4s | | | | | | |
| PLLN | Pollina | 2.19 | 301 | Pg | Pn | 17 27 32.0 | +1.1 |
| | 1μm,1.1s | | | | | | |
| PLLN | Pollina | 2.19 | 301 | Pg | Pn | 17 27 32.0 | +1.1 |
| | 1μm,1.1s | | | | | | |
| GIB | Gibilmanna | 2.27 | 300 | Pg | Pn | 17 27 33.1 | +1.1 |
| | 505nm,0.5s | | | | | | |
| GIB | Gibilmanna | 2.27 | 300 | Pg | Pn | 17 27 33.1 | +1.1 |
| | 505nm,0.5s | | | | | | |
| IFIL | Filicudi I Eol | 2.28 | 318 | Pg | Pn | 17 27 32.9 | +0.8 |
| | 428nm,0.5s | | | | | | |
| IFIL | Filicudi I Eol | 2.28 | 318 | Pg | Pn | 17 27 32.9 | +0.8 |
| | 428nm,0.5s | | | | | | |
| TIP | Timpagrande | 2.29 | 5 | Pg | Pn | 17 27 33.8 | +1.5 |
| | 103nm,0.5s | | | | | | |
| TIP | Timpagrande | 2.29 | 5 | P | Pn | 17 27 33.8 | +1.5 |
| TIP | | | | S | Sn | 17 28 00.1 | +0.8 |
| TIP | Timpagrande | 2.29 | 5 | P | Pn | 17 27 33.8 | +1.5 |
| TIP | | | | S | Sn | 17 28 00.1 | +0.8 |
| FAVR | Favara | 2.32 | 280 | Pg | Pn | 17 27 34.0 | +1.4 |
| | 538nm,0.7s | | | | | | |
| FAVR | Favara | 2.32 | 280 | Pg | Pn | 17 27 34.0 | +1.4 |
| | 538nm,0.7s | | | | | | |
| ALJA | Alia | 2.37 | 292 | Pg | Pn | 17 27 35.1 | +1.7 |
| | 246nm,0.7s | | | | | | |
| ALJA | Alia | 2.37 | 292 | Pg | Pn | 17 27 35.1 | +1.7 |
| | 246nm,0.7s | | | | | | |
| CAR1 | CAROLEI | 2.37 | 354 | Pg | Pn | 17 27 35.6 | +2.2 |
| | 474nm,0.6s | | | | | | |
| CAR1 | CAROLEI | 2.37 | 354 | Pg | Pn | 17 27 35.6 | +2.2 |
| | 474nm,0.6s | | | | | | |
| IACL | Alicudi | 2.37 | 314 | Pg | Pn | 17 27 34.1 | +0.7 |
| | 192nm,0.4s | | | | | | |
| IACL | Alicudi | 2.37 | 314 | Pg | Pn | 17 27 34.1 | +0.7 |
| | 192nm,0.4s | | | | | | |
| CORL | Corleone | 2.75 | 292 | Pg | Pn | 17 27 40.0 | +1.4 |
| CORL | Corleone | 2.75 | 292 | Pg | Pn | 17 27 40.0 | +1.4 |
| CRJA | Costa Raja | 2.95 | 289 | Pg | Pn | 17 27 43.0 | +1.7 |
| CRJA | Costa Raja | 2.95 | 289 | Pg | Pn | 17 27 43.0 | +1.7 |
| SALB | San Lorenzo Be | 2.98 | 357 | Pg | Pn | 17 27 44.7 | +2.8 |
| | 84nm,0.5s | | | | | | |
| SALB | San Lorenzo Be | 2.98 | 357 | Pg | Pn | 17 27 44.7 | +2.8 |
| | 84nm,0.5s | | | | | | |
| CUC | Castrocucco | 3.14 | 350 | Pg | Pn | 17 27 45.2 | +1.2 |
| | 85nm,0.6s | | | | | | |
| CUC | Castrocucco | 3.14 | 350 | Pg | Pn | 17 27 45.2 | +1.2 |
| | 85nm,0.6s | | | | | | |
| BULG | Bulgheria - Ca | 3.30 | 345 | Pg | Pn | 17 27 47.9 | +1.7 |
| BULG | Bulgheria - Ca | 3.30 | 345 | Pg | Pn | 17 27 47.9 | +1.7 |
| SCHR | S. Chirico Rap | 3.32 | 354 | Pg | Pn | 17 27 49.1 | +2.6 |
| | 49nm,0.7s | | | | | | |
| SIRI | Monte Sirino - | 3.32 | 351 | Pg | Pn | 17 27 48.1 | +1.6 |
| SIRI | Monte Sirino - | 3.32 | 351 | Pg | Pn | 17 27 48.1 | +1.6 |
| MTSN | Montesano sull | 3.42 | 350 | Pg | Pn | 17 27 49.4 | +1.5 |
| MTSN | Montesano sull | 3.42 | 350 | Pg | Pn | 17 27 49.4 | +1.5 |
| CRAC | Craco | 3.47 | 359 | Pg | Pn | 17 27 51.2 | +2.8 |
| | 239nm,0.4s | | | | | | |
| CRAC | Craco | 3.47 | 359 | Pg | Pn | 17 27 51.2 | +2.8 |
| | 239nm,0.4s | | | | | | |
| MCEL | Monticello | 3.47 | 351 | Pg | Pn | 17 27 50.4 | +1.8 |
| | 56nm,0.6s | | | | | | |
| MCEL | Monticello | 3.47 | 351 | Pg | Pn | 17 27 50.4 | +1.8 |
| | 56nm,0.6s | | | | | | |
| VLS | Valsamata | 3.48 | 67 | ePN | Pn | 17 27 49.0 | +0.5 |
| VLS | Valsamata | 3.48 | 67 | ePN | Pn | 17 27 49.0 | +0.5 |
| VLS | Valsamata | 3.48 | 67 | P | Pn | 17 27 48.7 | +0.2 |
| VLS | | | | S | Sn | 17 28 24.6 | -3.8 |
| VLS | Valsamata | 3.48 | 67 | P | Pn | 17 27 48.7 | +0.2 |
| VLS | | | | S | Sn | 17 28 24.6 | -3.8 |
| ZKS | Zakynthos | 3.49 | 75 | ePN | Pn | 17 27 49.0 | +0.3 |
| ZKS | Zakynthos | 3.49 | 75 | ePN | Pn | 17 27 49.0 | +0.3 |
| ZKS | Zakynthos | 3.49 | 75 | P | Pn | 17 27 48.5 | -0.2 |
| ZKS | | | | S | Sn | 17 28 25.6 | -3.2 |
| ZKS | Zakynthos | 3.49 | 75 | P | Pn | 17 27 48.5 | -0.2 |
| ZKS | | | | S | Sn | 17 28 25.6 | -3.2 |
| CMPR | Campora | 3.55 | 345 | Pg | Pn | 17 27 51.2 | +1.6 |
| | 71nm,0.5s | | | | | | |
| CMPR | Campora | 3.55 | 345 | Pg | Pn | 17 27 51.2 | +1.6 |
| | 71nm,0.5s | | | | | | |
| SLCN | Sala Consilina | 3.56 | 349 | Pg | Pn | 17 27 51.4 | +1.6 |
| | 93nm,0.5s | | | | | | |
| SLCN | Sala Consilina | 3.56 | 349 | Pg | Pn | 17 27 51.4 | +1.6 |
| | 93nm,0.5s | | | | | | |
| KFL | Anninata | 3.60 | 69 | ePN | Pn | 17 27 50.6 | +0.4 |
| KFL | Anninata | 3.60 | 69 | ePN | Pn | 17 27 50.6 | +0.4 |
| KFL | Anninata | 3.60 | 69 | P | Pn | 17 27 50.4 | +0.2 |
| KFL | Anninata | 3.60 | 69 | P | Pn | 17 27 50.4 | +0.2 |
| TAR1 | Taranto | 3.67 | 9 | ePn | Pn | 17 27 52.2 | +1.0 |
| CDRU | Civita di Ruta | 3.71 | 345 | Pg | Pn | 17 27 53.7 | +1.8 |
| CDRU | Civita di Ruta | 3.71 | 345 | Pg | Pn | 17 27 53.7 | +1.8 |
| LKD2 | Lefkada island | 3.78 | 59 | P | Pn | 17 27 53.2 | +0.5 |
| LKD2 | | | | S | Sn | 17 28 31.1 | -4.8 |
| LKD2 | Lefkada island | 3.78 | 59 | P | Pn | 17 27 53.2 | +0.5 |
| KEK | Kerkira | 3.81 | 41 | ePN | Pn | 17 27 53.2 | 0.0 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KEK | Kerkira | 3.81 | 41 | ePN | Pn | 17 27 53.2 | 0.0 |
| KEK | Kerkira | 3.81 | 41 | P | Pn | 17 27 52.9 | -0.3 |
| KEK | | | | S | Sn | 17 28 32.5 | -4.3 |
| KEK | Kerkira | 3.81 | 41 | P | Pn | 17 27 52.9 | -0.3 |
| SG1 | Sgolgore (BA) | 3.94 | 2 | i Pn | Pn | 17 27 55.8 | +0.8 |
| SG1 | | | | Sn | Sn | 17 28 36.9 | -3.0 |
| PE1 | Pezze di Greco | 3.97 | 10 | ePn | Pn | 17 27 55.8 | +0.5 |
| PE1 | | | | Sn | Sn | 17 28 38.5 | -2.0 |
| IGT | Igoumenitsa | 3.99 | 48 | ePN | Pn | 17 27 54.7 | -0.9 |
| IGT | Igoumenitsa | 3.99 | 48 | eSN | Sn | 17 28 34.9 | -6.2 |
| IGT | Igoumenitsa | 3.99 | 48 | ePn | Pn | 17 27 54.7 | -0.9 |
| PDO | Prodromos | 4.07 | 64 | ePN | Pn | 17 27 58.2 | +1.6 |
| PDO | Prodromos | 4.07 | 64 | ePN | Pn | 17 27 58.2 | +1.6 |
| PDO | Prodromos | 4.07 | 64 | P | Pn | 17 27 57.3 | +0.7 |
| PDO | Prodromos | 4.07 | 64 | P | Pn | 17 27 57.3 | +0.7 |
| RLS | Riolos of Patr | 4.10 | 72 | ePN | Pn | 17 27 58.4 | +1.3 |
| RLS | Riolos of Patr | 4.10 | 72 | ePN | Pn | 17 27 58.4 | +1.3 |
| PYL | PYLOS | 4.18 | 88 | ePN | Pn | 17 27 58.6 | +0.4 |
| PYL | PYLOS | 4.18 | 88 | ePN | Pn | 17 27 58.6 | +0.4 |
| PYL | PYLOS | 4.18 | 88 | P | Pn | 17 27 58.6 | +0.4 |
| PYL | | | | S | Sn | 17 28 43.8 | -2.0 |
| PYL | PYLOS | 4.18 | 88 | P | Pn | 17 27 58.6 | +0.4 |
| PYL | | | | S | Sn | 17 28 43.8 | -2.0 |
| CDT | Castel del Mon | 4.19 | 357 | i Pn | Pn | 17 27 59.3 | +1.0 |
| AMT | Artemida-Makis | 4.19 | 80 | ePN | Pn | 17 27 59.8 | +1.5 |
| AMT | Artemida-Makis | 4.19 | 80 | ePN | Pn | 17 27 59.8 | +1.5 |
| AMT | Artemida-Makis | 4.19 | 80 | P | Pn | 17 27 59.2 | +0.9 |
| AMT | Artemida-Makis | 4.19 | 80 | P | Pn | 17 27 59.2 | +0.9 |
| BAI | Bari | 4.22 | 4 | i Pn | Pn | 17 27 59.3 | +0.6 |
| BAI | | | | Sn | Sn | 17 28 43.6 | -3.0 |
| DSL | Palaion Diasel | 4.25 | 57 | ePN | Pn | 17 28 00.7 | +1.6 |
| DSL | Palaion Diasel | 4.25 | 57 | ePN | Pn | 17 28 00.7 | +1.6 |
| DSL | Palaion Diasel | 4.25 | 57 | P | Pn | 17 27 59.8 | +0.7 |
| DSL | | | | S | Sn | 17 28 43.0 | -4.5 |
| DSL | Palaion Diasel | 4.25 | 57 | P | Pn | 17 27 59.8 | +0.7 |
| DRO | Drossia | 4.26 | 74 | ePN | Pn | 17 28 01.2 | +1.9 |
| DRO | Drossia | 4.26 | 74 | ePN | Pn | 17 28 01.2 | +1.9 |
| DRO | Drossia | 4.26 | 74 | P | Pn | 17 28 00.6 | +1.3 |
| DRO | | | | S | Sn | 17 28 44.1 | -3.7 |
| DRO | Drossia | 4.26 | 74 | P | Pn | 17 28 00.6 | +1.3 |
| DRO | | | | S | Sn | 17 28 44.1 | -3.7 |
| PVO | Paravola | 4.32 | 65 | ePN | Pn | 17 28 02.2 | +2.1 |
| PVO | Paravola | 4.32 | 65 | ePN | Pn | 17 28 02.2 | +2.1 |
| ITM | Ithomi | 4.33 | 85 | ePN | Pn | 17 28 01.2 | +0.9 |
| ITM | Ithomi | 4.33 | 85 | ePN | Pn | 17 28 01.2 | +0.9 |
| ITM | Ithomi | 4.33 | 85 | P | Pn | 17 28 01.2 | +0.9 |
| ITM | Ithomi | 4.33 | 85 | P | Pn | 17 28 01.2 | +0.9 |
| EFP | Efpalio | 4.54 | 69 | ePN | Pn | 17 28 04.7 | +1.6 |
| EFP | Efpalio | 4.54 | 69 | ePN | Pn | 17 28 04.7 | +1.6 |
| LAKA | Lakka | 4.54 | 71 | ePN | Pn | 17 28 04.7 | +1.6 |
| LAKA | Lakka | 4.54 | 71 | ePN | Pn | 17 28 04.7 | +1.6 |
| KLV | Kalavryta, Ach | 4.62 | 74 | ePN | Pn | 17 28 06.1 | +1.8 |
| KLV | Kalavryta, Ach | 4.62 | 74 | ePN | Pn | 17 28 06.1 | +1.8 |
| EVR | Evrytania | 4.64 | 63 | ePN | Pn | 17 28 07.6 | +3.0 |
| EVR | Evrytania | 4.64 | 63 | ePN | Pn | 17 28 07.6 | +3.0 |
| KALE | Kalithea | 4.70 | 70 | ePN | Pn | 17 28 06.6 | +1.2 |
| KALE | Kalithea | 4.70 | 70 | ePN | Pn | 17 28 06.6 | +1.2 |
| VLX | Vlachokerasia | 4.70 | 82 | ePN | Pn | 17 28 07.8 | +2.3 |
| VLX | Vlachokerasia | 4.70 | 82 | ePN | Pn | 17 28 07.8 | +2.3 |
| LMSR | Misrath | 4.74 | 196 | i P | Pn | 17 28 05.2 | -0.7 |
| | SNR=23 | | | | | | |
| GUR | Goura | 4.75 | 76 | ePN | Pn | 17 28 08.2 | +2.1 |
| GUR | Goura | 4.75 | 76 | ePN | Pn | 17 28 08.2 | +2.1 |
| GUR | Goura | 4.75 | 76 | P | Pn | 17 28 07.5 | +1.4 |
| GUR | Goura | 4.75 | 76 | P | Pn | 17 28 07.5 | +1.4 |
| DSF | Desfina | 5.00 | 71 | ePN | Pn | 17 28 10.5 | +1.0 |
| DSF | Desfina | 5.00 | 71 | ePN | Pn | 17 28 10.5 | +1.0 |
| AGG | Agios Georgios | 5.05 | 63 | ePN | Pn | 17 28 13.2 | +2.9 |
| AGG | Agios Georgios | 5.05 | 63 | ePn | Pn | 17 28 13.2 | +2.9 |
| THL | Klokotos Trika | 5.08 | 57 | ePN | Pn | 17 28 12.4 | +1.9 |
| THL | Klokotos Trika | 5.08 | 57 | ePN | Pn | 17 28 12.4 | +1.9 |
| VLI | Veliai | 5.15 | 90 | ePN | Pn | 17 28 14.4 | +2.9 |
| VLI | Veliai | 5.15 | 90 | ePN | Pn | 17 28 14.4 | +2.9 |
| LTK | Loutraki | 5.25 | 76 | ePN | Pn | 17 28 15.3 | +2.4 |
| LTK | Loutraki | 5.25 | 76 | ePN | Pn | 17 28 15.3 | +2.4 |
| DID | Didima | 5.39 | 81 | ePN | Pn | 17 28 16.9 | +2.0 |
| DID | Didima | 5.39 | 81 | ePN | Pn | 17 28 16.9 | +2.0 |
| LKR | Lokris | 5.42 | 69 | ePN | Pn | 17 28 18.0 | +2.8 |
| LKR | Lokris | 5.42 | 69 | ePN | Pn | 17 28 18.0 | +2.8 |
| FNA | Florina | 5.42 | 43 | ePN | Pn | 17 28 15.4 | +0.1 |
| FNA | Florina | 5.42 | 43 | ePn | Pn | 17 28 15.4 | +0.1 |
| ULC | Ulcinj | 5.48 | 22 | ⇑iPn | Pn | 17 28 17.0 | +0.9 |
| ULC | | | | eSn | Sn | 17 29 15.0 | -2.9 |
| ULC | Ulcinj | 5.48 | 22 | ⇑iPn | Pn | 17 28 17.0 | +0.9 |
| ULC | | | | eSn | Sn | 17 29 15.0 | -2.9 |
| GHAR | Gharyan | 5.54 | 212 | i P | Pn | 17 28 15.8 | -1.2 |
| | SNR=23 | | | | | | |
| DRME | Dracevica, Mon | 5.67 | 20 | ⇑iPn | Pn | 17 28 19.1 | +0.4 |
| DRME | | | | eSn | Sn | 17 29 19.4 | -3.1 |
| DRME | Dracevica, Mon | 5.67 | 20 | ⇑iPn | Pn | 17 28 19.1 | +0.4 |
| DRME | | | | eSn | Sn | 17 29 19.4 | -3.1 |
| BUM | Brajici-Budva | 5.70 | 18 | ⇓iPn | Pn | 17 28 20.8 | +1.7 |
| BUM | | | | eSn | Sn | 17 29 20.6 | -2.7 |
| BUM | Brajici-Budva | 5.70 | 18 | ⇓iPn | Pn | 17 28 20.8 | +1.7 |
| BUM | | | | eSn | Sn | 17 29 20.6 | -2.7 |
| HCY | Herceg Novi | 5.75 | 15 | ⇓iPn | Pn | 17 28 20.6 | +0.9 |
| HCY | | | | eSn | Sn | 17 29 21.7 | -2.7 |
| HCY | Herceg Novi | 5.75 | 15 | ⇓iPn | Pn | 17 28 20.6 | +0.9 |
| HCY | | | | eSn | Sn | 17 29 21.7 | -2.7 |
| LSRT | Sirt | 5.80 | 179 | i P | Pn | 17 28 20.4 | -0.1 |
| | SNR=23 | | | | | | |
| LSRT | | | | eS | Sn | 17 29 19.3 | -6.4 |
| | SNR=23 | | | | | | |
| NEO | Neokhori | 5.81 | 63 | ePN | Pn | 17 28 22.5 | +2.0 |
| NEO | Neokhori | 5.81 | 63 | ePN | Pn | 17 28 22.5 | +2.0 |
| KEST | Kesra | 5.91 | 261 | Pn | Pn | 17 28 22.4 | +0.3 |
| | 1.1nm,0.3s,baz=114,slow=3.8,SNR=32 | | | | | | |
| KEST | | | | Sn | Sn | 17 29 24.0 | -4.6 |
| | 0.3nm,0.3s,baz=48,slow=12,SNR=2.1 | | | | | | |
| KEST | | | | LR | LR | 17 31 01.4 | |
| | comp=Z,39nm,19.0s,baz=200,slow=42 | | | | | | |
| PDG | Podgorica | 5.92 | 20 | ⇓iPn | Pn | 17 28 23.1 | +1.1 |
| PDG | | | | eSn | Sn | 17 29 26.1 | -2.4 |
| TTG | Podgorica | 5.92 | 20 | ⇓iPn | Pn | 17 28 23.1 | +1.1 |
| TTG | | | | eSn | Sn | 17 29 26.1 | -2.4 |
| GRG | Griva | 6.12 | 47 | ePN | Pn | 17 28 25.1 | +0.3 |
| GRG | Griva | 6.12 | 47 | ePn | Pn | 17 28 25.1 | +0.3 |
| NKME | Niksic | 6.16 | 17 | ⇓iPn | Pn | 17 28 26.1 | +0.7 |
| NKME | | | | eSn | Sn | 17 29 31.4 | -3.1 |
| NKME | Niksic | 6.16 | 17 | ⇓iPn | Pn | 17 28 26.1 | +0.7 |
| NKME | | | | eSn | Sn | 17 29 31.4 | -3.1 |
| BRY | Bratogost | 6.20 | 14 | ⇑iPn | Pn | 17 28 27.5 | +1.5 |
| BRY | | | | eSn | Sn | 17 29 32.6 | -3.0 |
| BRY | Bratogost | 6.20 | 14 | ⇑iPn | Pn | 17 28 27.5 | +1.5 |
| BRY | | | | eSn | Sn | 17 29 32.6 | -3.0 |
| NKY | Niksic | 6.21 | 17 | ⇓iPn | Pn | 17 28 27.7 | +1.6 |
| NKY | | | | eSn | Sn | 17 29 33.8 | -2.1 |
| NKY | Niksic | 6.21 | 17 | ⇓iPn | Pn | 17 28 27.7 | +1.6 |
| NKY | | | | eSn | Sn | 17 29 33.8 | -2.1 |
| AOS | Alonnisos | 6.23 | 66 | ePN | Pn | 17 28 27.2 | +0.8 |
| AOS | Alonnisos | 6.23 | 66 | ePn | Pn | 17 28 27.2 | +0.8 |
| PVY | Plav | 6.28 | 24 | ⇓iPn | Pn | 17 28 28.8 | +1.7 |
| PVY | | | | eSn | Sn | 17 29 33.8 | -3.8 |
| PVY | Plav | 6.28 | 24 | ⇓iPn | Pn | 17 28 28.8 | +1.7 |
| PVY | | | | eSn | Sn | 17 29 33.8 | -3.8 |
| MHLO | Agia Marina, M | 6.32 | 89 | ePN | Pn | 17 28 28.7 | +1.1 |
| MHLO | Agia Marina, M | 6.32 | 89 | ePN | Pn | 17 28 28.7 | +1.1 |
| HORT | Hortiatis | 6.33 | 52 | ePN | Pn | 17 28 27.0 | -0.8 |
| HORT | Hortiatis | 6.33 | 52 | ePn | Pn | 17 28 27.0 | -0.8 |
| PLG | Polygyros | 6.43 | 55 | ePN | Pn | 17 28 29.8 | +0.6 |
| PLG | Polygyros | 6.43 | 55 | ePN | Pn | 17 28 29.8 | +0.6 |
| BEY | Berane | 6.51 | 22 | ePn | Pn | 17 28 31.2 | +1.0 |
| BEY | | | | eSn | Sn | 17 29 39.9 | -3.3 |
| IVA | Berane | 6.51 | 22 | ePn | Pn | 17 28 31.2 | +1.0 |
| IVA | | | | eSn | Sn | 17 29 39.9 | -3.3 |
| KNT | Kendrikon | 6.54 | 47 | ePN | Pn | 17 28 31.9 | +1.3 |
| KNT | Kendrikon | 6.54 | 47 | ePn | Pn | 17 28 31.9 | +1.3 |
| UPM | Unac-Piva | 6.56 | 15 | ⇓iPn | Pn | 17 28 32.7 | +1.7 |
| UPM | | | | eSn | Sn | 17 29 41.6 | -3.0 |
| UPM | Unac-Piva | 6.56 | 15 | ⇓iPn | Pn | 17 28 32.7 | +1.7 |
| UPM | | | | eSn | Sn | 17 29 41.6 | -3.0 |
| OUR | Ouranopolis | 6.77 | 57 | ePN | Pn | 17 28 33.9 | +0.2 |
| OUR | Ouranopolis | 6.77 | 57 | ePn | Pn | 17 28 33.9 | +0.2 |
| PLE | Pljevlja | 6.79 | 18 | ⇓iPn | Pn | 17 28 35.7 | +1.6 |
| PLE | | | | eSn | Sn | 17 29 47.2 | -3.0 |
| PLE | Pljevlja | 6.79 | 18 | ⇓iPn | Pn | 17 28 35.7 | +1.6 |
| PLE | | | | eSn | Sn | 17 29 47.2 | -3.0 |
| IDI | Anoyia | 6.96 | 101 | Pn | Pn | 17 28 38.2 | +1.8 |
| | 1.9nm,0.3s,baz=337,slow=13,SNR=12 | | | | | | |
| IDI | | | | Sn | Sn | 17 29 49.6 | -4.7 |
| | 4.8nm,0.3s,baz=61,slow=21,SNR=15 | | | | | | |
| IDI | Anoyia | 6.96 | 101 | ePN | Pn | 17 28 38.8 | +2.4 |
| IDI | Anoyia | 6.96 | 101 | ePN | Pn | 17 28 38.8 | +2.4 |
| BARS | Barje | 7.18 | 33 | ePn | Pn | 17 28 39.0 | -0.3 |
| APE | Apeiranthos | 7.21 | 86 | ePN | Pn | 17 28 42.0 | +2.2 |
| APE | Apeiranthos | 7.21 | 86 | ePN | Pn | 17 28 41.1 | +1.2 |
| APE | Apeiranthos | 7.21 | 86 | ePN | Pn | 17 28 41.1 | +1.2 |
| APE | Apeiranthos | 7.21 | 86 | ePn | Pn | 17 28 42.0 | +2.2 |
| IVAS | Ivanjica | 7.23 | 21 | ePn | Pn | 17 28 39.6 | -0.5 |
| NVR | Nevrokopi | 7.23 | 50 | ePN | Pn | 17 28 40.7 | +0.6 |
| NVR | Nevrokopi | 7.23 | 50 | ePN | Pn | 17 28 40.7 | +0.6 |
| BBLS | Lazići | 7.30 | 17 | ePn | Pn | 17 28 41.3 | +0.2 |
| LAST | Lasithi | 7.46 | 101 | ePN | Pn | 17 28 45.7 | +2.4 |
| LAST | Lasithi | 7.46 | 101 | ePN | Pn | 17 28 45.7 | +2.4 |
| NPS | Neapolis | 7.54 | 100 | ePN | Pn | 17 28 46.1 | +1.8 |
| NPS | Neapolis | 7.54 | 100 | ePN | Pn | 17 28 46.1 | +1.8 |
| DIVS | Divibare | 7.67 | 19 | ePn | Pn | 17 28 46.1 | 0.0 |
| GRUS | Gruza | 7.68 | 23 | ePn | Pn | 17 28 45.7 | -0.5 |
| CHOS | Chios island | 7.71 | 76 | ePN | Pn | 17 28 49.9 | +3.2 |
| CHOS | Chios island | 7.71 | 76 | ePn | Pn | 17 28 49.9 | +3.2 |
| SIGR | SIGRI | 7.72 | 70 | ePN | Pn | 17 28 48.2 | +1.5 |
| SIGR | SIGRI | 7.72 | 70 | ePn | Pn | 17 28 48.2 | +1.5 |
| LJFR | Jufra | 7.79 | 185 | i P | Pn | 17 28 47.5 | -0.4 |
| | SNR=22 | | | | | | |
| ZAPS | Zavoj | 7.91 | 34 | ePn | Pn | 17 28 49.3 | 0.0 |
| GADA | Gvkgeada | 8.05 | 63 | eP | Pn | 17 28 52.3 | +1.0 |
| GADA | Gvkgeada | 8.05 | 63 | eP | Pn | 17 28 52.3 | +1.0 |
| EZN | Ezine | 8.24 | 66 | eP | Pn | 17 28 55.0 | +1.2 |
| EZN | Ezine | 8.24 | 66 | eP | Pn | 17 28 55.0 | +1.2 |
| ENEZ | Enez | 8.44 | 60 | eP | Pn | 17 28 57.3 | +0.7 |
| ENEZ | Enez | 8.44 | 60 | eP | Pn | 17 28 57.3 | +0.7 |
| BODT | Bodrum | 8.63 | 86 | eP | Pn | 17 29 01.1 | +1.8 |
| BODT | Bodrum | 8.63 | 86 | eP | Pn | 17 29 01.1 | +1.8 |
| ERIK | Erikli-Kesan | 8.66 | 61 | eP | Pn | 17 28 59.9 | +0.2 |
| ERIK | Erikli-Kesan | 8.66 | 61 | eP | Pn | 17 28 59.9 | +0.2 |
| BALB | Balikesir | 9.34 | 69 | eP | Pn | 17 29 10.7 | +1.7 |
| BALB | Balikesir | 9.34 | 69 | eP | Pn | 17 29 10.7 | +1.7 |
| MRMT | Marmara Adasi | 9.41 | 63 | eP | Pn | 17 29 11.1 | +1.2 |
| MRMT | Marmara Adasi | 9.41 | 63 | eP | Pn | 17 29 11.1 | +1.2 |
| CTKS | Kestanelik-??a | 10.27 | 61 | eP | Pn | 17 29 21.6 | -0.1 |
| CTKS | Kestanelik-??a | 10.27 | 61 | eP | Pn | 17 29 21.6 | -0.1 |
| DAVOX | Davos/Dischmat | 11.05 | 335 | Pn | Pn | 17 29 31.2 | -1.3 |
| | 0.2nm,0.3s,baz=158,slow=19,SNR=2.7 | | | | | | |
| GULT | Gulveren | 11.49 | 68 | eP | Pn | 17 29 39.1 | +0.6 |
| GULT | Gulveren | 11.49 | 68 | eP | Pn | 17 29 39.1 | +0.6 |
| GERES | GERESS Array B | 12.12 | 351 | Pn | Pn | 17 29 47.0 | 0.0 |
| | 0.1nm,0.3s,baz=169,slow=12,SNR=5.4 | | | | | | |
| BRTR | Keskin Array B | 13.73 | 73 | Pn | P | 17 30 13.3 | -3.6 |
| | 0.2nm,0.3s,baz=259,slow=13,SNR=7.1 | | | | | | |
| AKASG | Malin Array Be | 16.53 | 29 | Pn | Pn | 17 30 46.4 | +0.7 |
| | 0.3nm,0.3s,baz=221,slow=11,SNR=8.2 | | | | | | |
| MDT | Midelt | 17.81 | 263 | LR | LR | 17 38 56.1 | |
| | comp=Z,90nm,20.1s,baz=198,slow=41 | | | | | | |
| HFS | Hagfors | 23.33 | 356 | P | P | 17 32 01.2 | +0.1 |
| | 1.8nm,0.7s,baz=169,slow=16,SNR=4.5 | | | | | | |
| FINES | FINESS Array B | 25.30 | 11 | P | P | 17 32 21.2 | +1.9 |
| | 1.7nm,0.6s,baz=184,slow=7.6,SNR=9.8 | | | | | | |
| ARCES | ARCESS Array B | 33.06 | 6 | P | P | 17 33 28.8 | +0.6 |
| | 1.9nm,0.9s,baz=191,slow=9.2,SNR=4.3 | | | | | | |

*ISCJB* ***08*** *17:28:36.6±0.7, 13.°72N±0.°07×93.°13W±0.°05, h10km, mb3.9/6, MS3.3/2, Error ellipse: s-maj=10.7km s-min=4.9km az=24.7*

*IDC* ***08*** *17:28:37.9±3.2, 13.°77N×92.°75W, h0km, mb3.8/4, mb1 4.1/6, mb1mx3.8/36, mbtmp3.8/6, ML3.9/2, MS3.4/2, Ms1 3.4/2, ms1mx2.7/32, Error ellipse: s-maj=63.0km s-min=50.6km az=15.0*

*NEIC* ***08*** *17:28:41.4±2.1, 13.°97N×92.°96W, h10km, mb4.1/3, MD4.0(MEX), Error ellipse: s-maj=39.7km s-min=23.8km az=216.0*

*MEX* ***08*** *17:28:41.5±0.9, 13.°76N×93.°01W, h7km±232km, MD4.0*

**ISC 08 17:28:38.5**±1.1**, 13.°7N**±0.°1×**93.°05W**±0.°07**, h10km, n106, σ1.s74**/107**, mb3.9**/6**, 1C, Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JAT | Jato | 1.50 | 66 | ⇑iP | Pn | 17 29 06.2 | +0.6 |
| PCIG | | 1.99 | 355 | eP | Pn | 17 29 11.0 | -1.3 |
| PCIG | | | | eS | Sn | 17 29 34.6 | -2.8 |
| PCIG | | 1.99 | 355 | eP | Pn | 17 29 11.2 | -1.2 |
| PCIG | | | | eS | Sn | 17 29 34.5 | -2.8 |
| FUG | Fuego 3 | 2.27 | 71 | eP | Pn | 17 29 15.4 | -0.9 |
| PCG | Pacaya | 2.47 | 74 | eP | Pn | 17 29 18.8 | -0.4 |
| PCG | | | | eS | Sn | 17 29 49.4 | -0.2 |
| IXG | Ixpaco | 2.57 | 79 | eP | Pn | 17 29 18.4 | -2.0 |
| TGIG | | 3.06 | 359 | eP | Pn | 17 29 27.8 | +0.8 |
| TGIG | | | | i S | Sn | 17 30 02.5 | -1.2 |
| TGIG | | 3.06 | 359 | eP | Pn | 17 29 27.8 | +0.8 |
| TGIG | | | | i S | Sn | 17 30 02.5 | -1.2 |
| RBDL | Robledal | 3.29 | 83 | eP | Pn | 17 29 29.3 | -1.1 |
| RBDL | | | | eS | Sn | 17 30 04.6 | -5.2 |
| SBLS | San Blas | 3.34 | 87 | eP | Pn | 17 29 30.0 | -1.1 |
| SBLS | | | | eS | Sn | 17 30 05.2 | -5.7 |
| SNJE | San Jose | 3.35 | 87 | eP | Pn | 17 29 29.8 | -1.5 |
| SNJE | | | | eS | Sn | 17 30 05.1 | -6.2 |
| MRL | Marmol | 3.53 | 67 | eP | Pn | 17 29 34.1 | +0.5 |
| CMIG | Matias Romero | 3.80 | 333 | Pn | Pn | 17 29 37.1 | -0.1 |
| | 9.3nm,0.3s,baz=154,slow=13,SNR=77 | | | | | | |
| CMIG | | | | Sn | Sn | 17 30 17.0 | -5.0 |
| | 21nm,0.3s,baz=10,slow=20,SNR=12 | | | | | | |
| 034A | Hebbronville | 14.30 | 339 | P | Pn | 17 32 01.8 | +0.6 |
| | baz=14 | | | | | | |
| 735A | Kenedy | 15.71 | 344 | P | Pn | 17 32 20.9 | +0.9 |
| | baz=16 | | | | | | |
| 832A | Faith Ranch, C | 15.87 | 337 | P | Pn | 17 32 21.6 | -0.5 |
| | baz=16,SNR=5.1 | | | | | | |
| 732A | Laxson Ranch, | 16.27 | 338 | P | Pn | 17 32 26.5 | -0.8 |
| | baz=16 | | | | | | |
| 632A | Uvalde | 16.92 | 339 | P | Pn | 17 32 33.6 | -1.9 |
| | baz=17 | | | | | | |
| 631A | Perdido Creek | 17.11 | 337 | P | Pn | 17 32 34.6 | -3.4 |
| | baz=17 | | | | | | |
| 532A | Rocksprings | 17.53 | 340 | P | Pn | 17 32 40.7 | -2.5 |
| | baz=17 | | | | | | |
| 433A | Art | 17.86 | 343 | P | Pn | 17 32 46.9 | -0.3 |
| | baz=18 | | | | | | |
| 334A | Lometa | 18.18 | 346 | P | Pn | 17 32 50.9 | -0.3 |
| | baz=18 | | | | | | |
| 432A | Menard | 18.18 | 341 | P | Pn | 17 32 49.8 | -1.4 |
| | baz=18 | | | | | | |
| 239A | Gary | 18.27 | 356 | P | P | 17 32 52.5 | 0.0 |
| | baz=18 | | | | | | |
| 431A | Sonora | 18.27 | 339 | P | Pn | 17 32 49.7 | -2.7 |
| | baz=18 | | | | | | |
| TXAR | Lajitas Array | 18.40 | 329 | P | P | 17 32 56.5 | +2.5 |
| | 0.1nm,0.3s,baz=149,slow=14,SNR=7.5 | | | | | | |
| 529A | Stev Forest Ra | 18.40 | 334 | P | Pn | 17 32 50.5 | -3.5 |
| | baz=18 | | | | | | |
| 430A | Baggett Ranch, | 18.60 | 337 | P | Pn | 17 32 53.6 | -2.7 |
| | baz=18 | | | | | | |
| 429A | Davenport Ranc | 18.71 | 336 | P | P | 17 32 54.5 | -2.8 |
| | baz=19,SNR=5.4 | | | | | | |
| 136A | Ennis | 18.95 | 351 | P | P | 17 32 59.5 | -0.4 |
| | baz=19 | | | | | | |
| 233A | Rising Star | 19.00 | 345 | P | P | 17 32 58.7 | -1.8 |
| | baz=19 | | | | | | |
| 232A | Coleman | 19.08 | 343 | P | P | 17 32 59.2 | -2.2 |
| | baz=19 | | | | | | |
| 330A | Mertzon | 19.13 | 338 | P | P | 17 32 59.3 | -2.7 |
| | baz=19 | | | | | | |
| 231A | Bronte | 19.33 | 341 | P | P | 17 33 02.3 | -1.8 |
| | baz=19 | | | | | | |
| Z37A | Pogue Cattle C | 19.55 | 354 | P | Pn | 17 33 07.6 | -0.1 |
| | baz=19 | | | | | | |
| 230A | Sterling City | 19.55 | 339 | P | P | 17 33 03.9 | -2.7 |
| | baz=19,SNR=8.2 | | | | | | |
| 133A | Hamilton Ranch | 19.57 | 345 | P | Pn | 17 33 08.1 | +0.1 |
| | baz=19 | | | | | | |
| Z36A | Blue Ridge | 19.72 | 352 | P | P | 17 33 08.9 | +0.6 |
| | baz=20 | | | | | | |
| ABTX | Abilene, Hawle | 19.77 | 343 | P | P | 17 33 06.3 | -2.6 |
| | 5.6nm,0.6s | | | | | | |
| Z32A | Haskell | 20.37 | 344 | P | P | 17 33 15.9 | +0.4 |
| | baz=20,SNR=8.7 | | | | | | |
| Y35A | Marietta | 20.43 | 350 | P | P | 17 33 16.4 | +0.3 |
| | baz=20 | | | | | | |
| Z31A | Sharp Cattle R | 20.57 | 343 | P | Pn | 17 33 19.5 | -0.4 |
| | baz=20 | | | | | | |
| Y34A | Reagan Ranch, | 20.61 | 349 | P | P | 17 33 17.9 | -0.1 |
| | baz=20 | | | | | | |
| 128A | Castleberry Fa | 20.71 | 337 | P | P | 17 33 17.8 | -1.3 |
| | baz=21,SNR=7.1 | | | | | | |
| MIAR | Mount Ida | 20.75 | 359 | P | P | 17 33 20.0 | +0.5 |
| | baz=21 | | | | | | |
| Z30A | Sanderson Ranc | 20.83 | 341 | P | P | 17 33 19.0 | -1.5 |
| | baz=21,SNR=7.0 | | | | | | |
| X37A | Clayton | 20.90 | 355 | P | Pn | 17 33 23.2 | -0.4 |
| | baz=21 | | | | | | |
| X38A | Whitesboro | 20.93 | 356 | P | P | 17 33 22.3 | +0.8 |
| | baz=21 | | | | | | |
| X36A | Centrahoma | 20.99 | 352 | P | P | 17 33 23.0 | +0.9 |
| | baz=21 | | | | | | |
| Z29A | Hungry Hill Ra | 21.00 | 339 | P | P | 17 33 21.9 | -0.4 |
| | baz=21 | | | | | | |
| Y32A | R-V Farms, Ver | 21.02 | 345 | P | P | 17 33 23.5 | +1.0 |
| | baz=21,SNR=5.3 | | | | | | |
| Y31A | Rekieta Farm, | 21.20 | 343 | P | P | 17 33 25.8 | +1.3 |
| | baz=21,SNR=14 | | | | | | |
| X34A | Smith Ranch, M | 21.25 | 349 | P | P | 17 33 26.2 | +1.3 |
| | baz=21 | | | | | | |
| Z28A | Tucker Farm, M | 21.27 | 338 | P | P | 17 33 24.0 | -1.2 |
| | baz=21 | | | | | | |
| Y30A | Stafford Cattl | 21.31 | 342 | P | P | 17 33 26.3 | +0.7 |
| | baz=21 | | | | | | |
| W38A | Poteau | 21.31 | 357 | P | P | 17 33 26.8 | +1.2 |
| | baz=21 | | | | | | |
| X32A | Elmer | 21.38 | 346 | P | P | 17 33 27.3 | +0.9 |
| | baz=21 | | | | | | |
| W36A | Wetumka | 21.53 | 353 | P | P | 17 33 28.2 | +0.2 |
| | baz=21 | | | | | | |
| WMOK | Wichita Mounta | 21.57 | 347 | P | P | 17 33 27.7 | -0.7 |
| | 2.5nm,0.5s | | | | | | |
| W35A | Tecumseh | 21.63 | 351 | P | P | 17 33 30.8 | +1.8 |
| | baz=22 | | | | | | |
| X31A | McDonald Ranch | 21.76 | 344 | P | P | 17 33 31.5 | +1.1 |
| | baz=22,SNR=6.5 | | | | | | |
| Y28A | McKinney Farm, | 21.78 | 339 | P | P | 17 33 32.2 | +1.5 |
| | baz=22,SNR=6.3 | | | | | | |
| X30A | Coker Ranch, T | 21.83 | 342 | P | P | 17 33 32.8 | +1.6 |
| | baz=22,SNR=8.1 | | | | | | |
| W34A | Bridge Creek, | 21.86 | 350 | P | P | 17 33 31.4 | 0.0 |
| | baz=22 | | | | | | |
| W33A | Caddo, Fort Co | 21.91 | 348 | P | P | 17 33 31.6 | -0.4 |
| | baz=22 | | | | | | |
| W32A | Sentinel | 22.05 | 346 | P | P | 17 33 33.4 | -0.1 |
| | baz=22 | | | | | | |
| W31A | Holland Ranch, | 22.27 | 345 | P | P | 17 33 35.3 | -0.6 |
| | baz=22 | | | | | | |
| AMTX | Amarillo | 22.48 | 341 | P | P | 17 33 38.9 | +0.6 |
| | baz=22 | | | | | | |
| AMTX | Amarillo | 22.48 | 341 | eP | P | 17 33 39.1 | +0.8 |
| | 14nm,0.5s | | | | | | |
| V33A | Lossen Ranch, | 22.52 | 349 | P | P | 17 33 37.8 | -0.7 |
| | baz=22 | | | | | | |
| U34A | Anderson Ranch | 22.99 | 351 | P | P | 17 33 44.2 | +0.7 |
| | baz=23 | | | | | | |
| U33A | Lingo Farm, Me | 23.08 | 350 | P | P | 17 33 45.0 | +0.6 |
| | baz=23 | | | | | | |
| T35A | Sooner Cattle | 23.32 | 353 | P | P | 17 33 45.5 | -1.4 |
| | baz=23 | | | | | | |
| T37A | Cheneyville 18 | 23.38 | 356 | P | P | 17 33 46.6 | -0.8 |
| | baz=23 | | | | | | |
| T36A | Boggs Farm, Ca | 23.39 | 354 | P | P | 17 33 45.8 | -1.8 |
| | baz=23 | | | | | | |
| TKL | Tuckaleechee C | 23.40 | 19 | P | P | 17 33 46.1 | -1.5 |
| | 4.8nm,0.9s,baz=208,slow=14,SNR=4.0 | | | | | | |
| TKL | | | | LR | LR | 17 43 36.1 | |
| | comp=Z,54nm,19.4s,baz=338,slow=39 | | | | | | |
| T34A | McClaskey Farm | 23.51 | 352 | P | P | 17 33 47.6 | -1.2 |
| | baz=23 | | | | | | |
| S36A | Lake Cedric, C | 24.03 | 355 | P | P | 17 33 52.9 | -0.8 |
| | baz=24 | | | | | | |
| S35A | Otter Creek Ra | 24.06 | 354 | P | P | 17 33 53.0 | -1.0 |
| | baz=24 | | | | | | |
| U27A | Thompson Grove | 24.26 | 341 | P | P | 17 33 53.6 | -2.5 |
| | baz=24 | | | | | | |
| R36A | Gordon, Harris | 24.62 | 355 | P | P | 17 33 58.2 | -1.0 |
| | baz=24 | | | | | | |
| R35A | Emporia Munici | 24.68 | 354 | P | P | 17 33 59.1 | -0.6 |
| | baz=24 | | | | | | |
| T28A | Walsh | 24.68 | 342 | P | P | 17 33 57.9 | -2.0 |
| | baz=24 | | | | | | |
| R34A | Isabella, Hill | 24.78 | 352 | P | P | 17 34 00.5 | -0.1 |
| | baz=25 | | | | | | |
| T27A | Campo | 24.81 | 341 | P | P | 17 33 58.3 | -2.8 |
| | baz=25 | | | | | | |
| R31A | Burdett | 25.15 | 348 | P | P | 17 34 02.4 | -1.6 |
| | baz=25 | | | | | | |
| Q35A | Mercer Eighty, | 25.19 | 355 | P | P | 17 34 04.3 | 0.0 |
| | baz=25 | | | | | | |
| T26A | Comanche Natio | 25.20 | 340 | P | P | 17 34 01.6 | -3.1 |
| | baz=25 | | | | | | |
| AGPR | Aguadilla, PR | 25.36 | 76 | P | P | 17 34 09.2 | +3.1 |
| T25A | Trinidad | 25.45 | 339 | P | P | 17 34 04.5 | -2.4 |
| | baz=25 | | | | | | |
| S26A | Kim | 25.56 | 341 | P | P | 17 34 05.0 | -2.9 |
| | baz=25 | | | | | | |
| Q32A | Meitler Ranch, | 25.65 | 350 | P | P | 17 34 07.0 | -1.6 |
| | baz=26 | | | | | | |
| R28A | Tribune | 25.74 | 344 | P | P | 17 34 07.4 | -2.0 |
| | baz=26 | | | | | | |
| P35A | Duane Minner, | 25.86 | 355 | P | P | 17 34 09.7 | -0.7 |
| | baz=26 | | | | | | |
| P34A | Walnut Farm, R | 25.95 | 353 | P | P | 17 34 10.7 | -0.6 |
| | baz=26 | | | | | | |
| R27A | Eads | 25.96 | 342 | P | P | 17 34 09.8 | -1.7 |
| | baz=26 | | | | | | |
| SDCO | Great Sand Dun | 26.38 | 337 | P | P | 17 34 19.1 | +3.6 |
| O34A | Beatrice | 26.57 | 354 | P | P | 17 34 16.7 | -0.2 |
| | baz=26 | | | | | | |
| EDW2 | Edwards Air Fo | 30.84 | 317 | P | P | 17 34 51.6 | -3.5 |
| | baz=31,SNR=24 | | | | | | |
| ARVC | Arvin | 31.54 | 317 | P | P | 17 34 53.1 | -8.0 |
| | baz=31,SNR=7.2 | | | | | | |
| ISA | Isabella | 31.63 | 318 | P | P | 17 34 57.1 | -4.9 |
| | baz=32,SNR=8.2 | | | | | | |
| NVAR | Mina Array Bea | 33.27 | 322 | P | P | 17 35 18.1 | +1.6 |
| | 0.3nm,0.6s,baz=138,slow=8.3,SNR=3.2 | | | | | | |
| YKA | Yellowknife Ar | 51.08 | 347 | P | P | 17 37 42.3 | +1.4 |
| | 0.8nm,0.5s,baz=152,slow=7.3,SNR=5.0 | | | | | | |
| CPUP | Villa Florida | 52.83 | 139 | LR | LR | 17 58 59.6 | |
| | comp=Z,51nm,18.0s,baz=330,slow=35 | | | | | | |
| ILAR | Eielson Array | 62.71 | 337 | P | P | 17 39 05.9 | +2.5 |
| | 0.3nm,0.5s,baz=115,slow=6.1,SNR=4.1 | | | | | | |
| CMAR | Chiang Mai Arr | 145.92 | 339 | PKPbc | PKPdf | 17 48 18.7 | 0.0 |
| | 0.7nm,0.8s,baz=332,slow=2.7,SNR=5.5 | | | | | | |

**SKHL 08 17:31:21.1**±1.6**, 47.°21N×130.°26E, h10km, mb3.7**/4**,**
**Priamurye-Northeastern China border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KLR | Kul'dur | 2.25 | 26 | ePg | Pb | 17 32 00.9 | -1.0 |
| KLR | | | | eSg | Sb | 17 32 29.9 | +0.1 |
| TEY | Ternei | 4.92 | 114 | eSg | Sg | 17 33 56.5 | -2.4 |
| GRNR | Gornyy | 5.40 | 46 | eSg | Sg | 17 34 08.5 | -5.9 |
| GRNR | | | | A | A | 17 34 21.9 | |
| | 27nm,0.9s | | | | | | |
| EKMR | Ekimchan | 6.12 | 15 | ePn | Pn | 17 32 54.1 | +2.6 |
| EKMR | | | | AMB | AMB | 17 32 55.5 | |
| | 3.0nm,0.5s | | | | | | |
| EKMR | | | | eSg | Sg | 17 34 33.0 | -4.4 |
| EKMR | | | | A | A | 17 34 38.7 | |
| | 6.0nm,0.8s | | | | | | |
| ZEA | Zeya | 6.81 | 345 | ePn | Pn | 17 33 03.1 | +2.1 |
| KROS | Kirovskiy | 7.53 | 345 | ePn | Pn | 17 33 12.5 | +1.7 |
| KROS | | | | AMB | AMB | 17 33 13.5 | |
| | 3.0nm,0.5s | | | | | | |
| KROS | | | | eSg | Sg | 17 35 16.5 | -6.0 |
| KROS | | | | A | A | 17 35 24.1 | |
| | 4.0nm,0.5s | | | | | | |
| BMKR | Bomnak | 7.56 | 354 | ePn | Pn | 17 33 13.0 | +1.7 |
| BMKR | | | | AMB | AMB | 17 33 14.7 | |
| | 4.0nm,0.5s | | | | | | |
| BMKR | | | | eSg | Sg | 17 35 19.8 | -4.0 |
| BMKR | | | | A | A | 17 35 26.3 | |
| | 4.0nm,0.5s | | | | | | |

*ISK* ***08*** *17:43:37.7, 40.°10N×29.°02E, h5km, MD2.9*

*DDA* ***08*** *17:43:37.7, 40.°10N×29.°01E, h8km, Md2.6*

*ISCJB* ***08*** *17:43:38.0±0.4, 40.°11N±0.°03×28.°99E±0.°03, h6km±4km, Error ellipse: s-maj=5.5km s-min=3.7km az=151.9*

*CSEM* ***08*** *17:43:38.1±0.1, 40.°10N×29.°02E, h5km, MD2.6, Error ellipse: s-maj=2.6km s-min=2.1km az=154.0*

**ISC 08 17:43:38.3**±0.9**, 40.°09N**±0.°02×**29.°02E**±0.°02**, h7km**±6km**, n53, σ0.s46**/64**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ORLT | Orhaneli | 0.10 | 244 | PG | Pg | 17 43 40.6 | 0.0 |
| ORLT | | | | eSG | Sg | 17 43 42.5 | +0.2 |
| ORLT | Orhaneli | 0.10 | 244 | i Pg | Pg | 17 43 40.6 | 0.0 |
| ORLT | | | | eSg | Sg | 17 43 42.5 | +0.2 |
| ULDT | Uludag | 0.11 | 61 | i P | Pg | 17 43 40.7 | -0.2 |
| ULDT | | | | i S | Sg | 17 43 42.4 | -0.3 |
| ULDT | Uludag | 0.11 | 61 | P | Pg | 17 43 40.7 | -0.2 |
| ULDT | | | | S | Sg | 17 43 42.4 | -0.3 |
| IGD | Bursa | 0.23 | 39 | P | Pg | 17 43 42.7 | -0.1 |
| IGD | | | | S | Sg | 17 43 45.8 | 0.0 |
| MDNY | Mudanya-Bursa | 0.30 | 340 | ePG | Pg | 17 43 44.0 | -0.1 |
| MDNY | Mudanya-Bursa | 0.30 | 340 | ePg | Pg | 17 43 44.0 | -0.1 |
| IZI | Iznik | 0.43 | 55 | ePG | Pg | 17 43 46.6 | 0.0 |
| IZI | Iznik | 0.43 | 55 | ePg | Pg | 17 43 46.6 | 0.0 |
| ARMT | Armutlu | 0.49 | 346 | ePG | Pg | 17 43 47.8 | 0.0 |
| ARMT | Armutlu | 0.49 | 346 | ePg | Pg | 17 43 47.8 | 0.0 |
| KCTX | Karacabey (Bur | 0.53 | 289 | ePG | Pg | 17 43 48.6 | 0.0 |
| KCTX | Karacabey (Bur | 0.53 | 289 | ePg | Pg | 17 43 48.6 | 0.0 |
| DST | Dursunbey | 0.57 | 212 | ePG | Pg | 17 43 49.3 | -0.1 |
| DST | Dursunbey | 0.57 | 212 | ePg | Pg | 17 43 49.3 | -0.1 |
| CAVI | Cavuskoy | 0.64 | 80 | ePG | Pg | 17 43 50.2 | -0.5 |
| CAVI | Cavuskoy | 0.64 | 80 | ePg | Pg | 17 43 50.2 | -0.5 |
| ADVT | Abdulvahap | 0.65 | 58 | ePG | Pg | 17 43 50.8 | 0.0 |
| ADVT | Abdulvahap | 0.65 | 58 | ePg | Pg | 17 43 50.8 | 0.0 |
| HRT | Hereke | 0.89 | 34 | ePG | Pg | 17 43 55.0 | -0.3 |
| HRT | Hereke | 0.89 | 34 | ePg | Pg | 17 43 55.0 | -0.3 |
| EDC | Edincik | 0.92 | 287 | ePG | Pg | 17 43 54.9 | -1.0 |
| EDC | Edincik | 0.92 | 287 | ePg | Pg | 17 43 54.9 | -1.0 |
| ISK | Istanbul-Kandi | 0.97 | 2 | ePG | Pg | 17 43 56.9 | -0.1 |
| ISK | Istanbul-Kandi | 0.97 | 2 | ePg | Pg | 17 43 56.9 | -0.1 |
| BALB | Balikesir | 0.98 | 243 | ePG | Pg | 17 43 56.9 | -0.2 |
| BALB | Balikesir | 0.98 | 243 | ePg | Pg | 17 43 56.9 | -0.2 |
| DEMI | Demirci | 1.07 | 193 | i P | Pg | 17 43 58.5 | -0.3 |
| DEMI | | | | i S | Sg | 17 44 12.3 | -0.5 |
| DEMI | Demirci | 1.07 | 193 | P | Pg | 17 43 58.5 | -0.3 |
| DEMI | | | | S | Sg | 17 44 12.3 | -0.5 |
| BGKT | Bogazkoy | 1.10 | 351 | ePN | Pb | 17 43 59.3 | -0.4 |
| BGKT | Bogazkoy | 1.10 | 351 | ePn | Pb | 17 43 59.3 | -0.4 |
| BORA | Eskisehir | 1.12 | 100 | i P | Pg | 17 43 59.0 | -0.8 |
| BORA | | | | i S | Sb | 17 44 15.0 | +0.1 |
| BORA | Eskisehir | 1.12 | 100 | P | Pg | 17 43 59.0 | -0.8 |
| BORA | | | | S | Sb | 17 44 15.0 | +0.1 |
| SPNC | Sapanca-Adapaz | 1.15 | 59 | ePN | Pg | 17 44 00.1 | -0.3 |
| SPNC | Sapanca-Adapaz | 1.15 | 59 | ePn | Pg | 17 44 00.1 | -0.3 |
| GULT | Gulveren | 1.20 | 73 | ePN | Pg | 17 44 00.6 | -0.7 |
| GULT | Gulveren | 1.20 | 73 | ePn | Pg | 17 44 00.6 | -0.7 |
| MRMT | Marmara Adasi | 1.20 | 296 | ePN | Pn | 17 44 01.7 | +0.2 |
| MRMT | Marmara Adasi | 1.20 | 296 | ePn | Pn | 17 44 01.7 | +0.2 |
| KRBG | Karabiga-Canak | 1.35 | 284 | ePN | Pb | 17 44 03.6 | -0.2 |
| KRBG | Karabiga-Canak | 1.35 | 284 | ePn | Pb | 17 44 03.6 | -0.2 |
| ESKT | Eskisehir | 1.52 | 111 | ePN | Pb | 17 44 06.5 | -0.4 |
| ESKT | Eskisehir | 1.52 | 111 | ePn | Pb | 17 44 06.5 | -0.4 |
| ESKT | Eskisehir | 1.52 | 111 | P | Pb | 17 44 06.8 | -0.1 |
| ESKT | | | | S | Sg | 17 44 28.0 | +0.7 |
| SEYT | Eskypehyr | 1.52 | 111 | i P | Pb | 17 44 06.8 | -0.1 |
| SEYT | | | | i S | Sg | 17 44 28.0 | +0.7 |
| AKS | Akhisar | 1.53 | 218 | ePN | Pb | 17 44 06.5 | -0.4 |
| AKS | Akhisar | 1.53 | 218 | ePn | Pb | 17 44 06.5 | -0.4 |
| KULA | Kula-Manisa | 1.60 | 190 | ePN | Pn | 17 44 07.1 | +0.2 |
| KULA | Kula-Manisa | 1.60 | 190 | ePn | Pn | 17 44 07.1 | +0.2 |
| SVRH | Sivrihisar-ESK | 2.04 | 108 | ePN | Pn | 17 44 13.7 | +0.7 |
| SVRH | Sivrihisar-ESK | 2.04 | 108 | ePn | Pn | 17 44 13.7 | +0.7 |
| AYDB | Zeytinkoy-Aydi | 2.31 | 203 | ePN | Pn | 17 44 18.1 | +1.2 |
| AYDB | Zeytinkoy-Aydi | 2.31 | 203 | ePn | Pn | 17 44 18.1 | +1.2 |

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*IDC **08** 17:44:23.7±0.6, 51°.42N×175°.04W, h0km, mb4.0/26, mb1 4.2/28, mb1mx4.1/50, mbtmp4.1/28, ML4.4/2, MS3.9/20, Ms1 3.9/20, ms1mx3.7/40, Error ellipse: s-maj=19.7km s-min=11.2km az=167.0*

*BJI **08** 17:44:26.9, 51°.57N×175°.83W, h10km, mb4.6/23, mB4.9/18, Ms4.5/12, Ms7 4.3/11*

*NEIC **08** 17:44:27.3, 51°.30N×175°.09W, h5km, mb4.4/34, ML4.2(AEIC), After AEIC.*

**ISC 08 17:44:27.5**±0.7**, 51°.31N**±0°.07×**175°.10W**±0°.03**, h22**km±4km**, n159, σ1s.46**/161**, mb4.3**/39**, MS4.0**/19**, 1C, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.95 | 322 | P | Pn | 17 44 45.9 | +0.4 |
| GSCK | Great Sitkin C | 0.97 | 317 | P | Pn | 17 44 46.2 | +0.4 |
| ETKA | Kagalaska Isla | 0.98 | 305 | P | Pn | 17 44 46.4 | +0.4 |
| GSTR | Great Sitkin T | 0.99 | 323 | ePn | Pn | 17 44 46.8 | +0.7 |
| GSTR | | | | eSn | Sn | 17 45 01.1 | +1.7 |
| GSTD | Great Sitkin T | 0.99 | 320 | P | Pn | 17 44 46.6 | +0.4 |
| ATKA | Atka Island | 1.06 | 32 | P | Pb | 17 44 46.8 | -0.3 |
| ATKA | | | | S | Sn | 17 45 02.2 | +1.1 |
| ADAG | Mount Adagdak | 1.15 | 306 | P | Pb | 17 44 49.8 | +1.1 |
| KOFP | Korovin Flat P | 1.15 | 32 | P | Pb | 17 44 49.4 | +0.6 |
| KOKL | Mount Kliuchef | 1.16 | 28 | P | Pb | 17 44 49.4 | +0.5 |
| KOWE | Korovin West | 1.19 | 26 | P | Pb | 17 44 49.9 | +0.6 |
| KIRH | Kanaga Island | 1.38 | 296 | P | Pb | 17 44 52.2 | -0.3 |
| KIKV | Kanaga Island | 1.41 | 295 | P | Pn | 17 44 52.5 | +0.6 |
| KICM | Kanaga Island | 1.44 | 296 | P | Pb | 17 44 53.5 | -0.1 |
| TAPA | Tanaga Point A | 1.77 | 288 | P | Pn | 17 44 57.7 | +0.9 |
| TAFL | Tanaga Flats | 1.80 | 286 | P | Pn | 17 44 58.7 | +1.5 |
| TAFP | Tanaga Falls P | 1.89 | 289 | P | Pn | 17 44 59.7 | +1.2 |
| TAFP | | | | S | Sb | 17 45 25.0 | +0.5 |
| GAEA | Gareloi East | 2.33 | 283 | P | Pn | 17 45 06.7 | +2.3 |
| GALAA | Gareloi Lava P | 2.34 | 283 | P | Pb | 17 45 07.0 | -1.9 |
| GANE | Gareloi Northe | 2.35 | 284 | P | Pn | 17 45 06.6 | +1.8 |
| CERAA | Semis' Rag'd T | 3.31 | 283 | P | Pn | 17 45 20.0 | +2.1 |
| CESW | Semis' Southwe | 3.38 | 282 | P | Pn | 17 45 20.9 | +2.0 |
| AMKA | Amchitka | 3.51 | 273 | P | Pn | 17 45 22.2 | +1.5 |
| AMKA | | | | S | Sb | 17 46 09.3 | -1.7 |
| LSPA | Little Sitkin | 3.99 | 282 | P | Pn | 17 45 29.4 | +2.1 |
| LSPA | | | | S | Sn | 17 46 17.8 | +4.4 |
| LSNW | Little Sitkin | 4.03 | 282 | P | Pn | 17 45 29.4 | +1.6 |
| NIKH | Nikolski High | 4.20 | 64 | ePg | Pb | 17 45 36.9 | -3.7 |
| NIKH | | | | S | Sn | 17 46 22.3 | +3.9 |
| UNV | Unalaska Valle | 5.83 | 61 | P | Pn | 17 45 54.9 | +2.4 |
| UNV | | | | S | Sn | 17 47 02.9 | +4.3 |
| AKUT | Akutan | 6.34 | 60 | Pn | Pn | 17 46 03.4 | +4.0 |
| SPIA | Saint Paul Isl | 6.54 | 24 | P | Pn | 17 46 05.1 | +3.0 |
| SPIA | | | | S | Sn | 17 47 21.3 | +5.4 |
| SMY | Shemya | 6.82 | 286 | P | Pn | 17 46 09.4 | +3.4 |
| FALS | False Pass | 7.88 | 59 | ePn | Pn | 17 46 23.9 | +3.2 |
| SDPT | Sand Point | 9.64 | 59 | ePn | Pn | 17 46 46.2 | +1.4 |
| CHGN | Chignik | 11.05 | 57 | ePn | Pn | 17 47 03.2 | -0.9 |
| GAMB | Gambell | 12.63 | 7 | ePn | Pn | 17 47 24.7 | -1.0 |
| SII | Sitkinak Islan | 13.38 | 59 | ePn | Pn | 17 47 34.4 | -1.5 |
| OHAK | Old Harbor | 14.02 | 57 | ePn | Pn | 17 47 43.1 | -1.5 |
| KDAK | Kodiak Island | 14.54 | 55 | Pn | Pn | 17 47 49.3 | -2.4 |
| | 1.1nm,0.3s,baz=257,slow=4.5,SNR=11 | | | | | | |
| KDAK | | | | Sn | S | 17 50 42.1 | -9.1 |
| | 0.4nm,0.3s,baz=63,slow=23,SNR=5.8 | | | | | | |
| KDAK | Kodiak Island | 14.54 | 55 | ePn | Pn | 17 47 50.5 | -1.2 |
| KDAK | | | | Sn | S | 17 50 42.1 | -9.1 |
| CNPM | China Poot | 15.78 | 49 | ePn | Pn | 17 48 08.7 | +0.6 |
| | 32nm,1.2s | | | | | | |
| BRLK | Bradley Lake | 16.03 | 49 | ePn | Pn | 17 48 10.9 | -0.4 |
| | 39nm,1.3s | | | | | | |
| PET | Petropavlovsk | 16.16 | 286 | ePn | P | 17 48 18.1 | +2.0 |
| PEA0 | Petropavlovsk- | 16.73 | 287 | ePn | P | 17 48 23.4 | +1.0 |
| PETK | Petropavlovsk- | 16.73 | 287 | Pn | P | 17 48 22.9 | +0.4 |
| | 0.9nm,0.3s,baz=100,slow=9.3,SNR=15 | | | | | | |
| PETK | | | | LR | LR | 17 54 21.3 | |
| | comp=Z,409nm,21.5s,baz=101,slow=36 | | | | | | |
| PPLA | Purkeypile | 16.90 | 38 | ePn | P | 17 48 24.6 | +0.2 |
| | 19nm,1.1s | | | | | | |
| RC01 | Rabbit Creek A | 17.07 | 45 | ePn | Pn | 17 48 25.0 | +0.6 |
| CAST | Castle Rocks | 17.23 | 36 | ePn | P | 17 48 29.9 | +2.0 |
| | 8.4nm,0.6s | | | | | | |
| KTH | Kantishna Hill | 17.74 | 37 | ePn | P | 17 48 33.8 | +0.2 |
| TRF | Thorofare Moun | 17.93 | 38 | ePn | P | 17 48 35.7 | 0.0 |
| | 120nm,2.5s | | | | | | |
| SML | Sawmill | 17.97 | 44 | Pn | Pn | 17 48 33.8 | -1.9 |
| BPAW | Bear Paw Mtn. | 18.02 | 35 | ePn | P | 17 48 37.5 | +0.9 |
| | 10nm,0.9s | | | | | | |
| RND | Reindeer | 18.46 | 39 | ePn | P | 17 48 39.9 | -1.7 |
| | 9.3nm,0.6s | | | | | | |
| MCK | McKinley | 18.59 | 38 | eP | P | 17 48 42.7 | -0.2 |
| | 13nm,1.1s | | | | | | |
| BWN | Browne | 18.62 | 36 | eP | Pn | 17 48 43.8 | +0.3 |
| | 47nm,1.4s | | | | | | |
| MLY | Manley | 18.64 | 33 | eP | Pn | 17 48 44.1 | +0.3 |
| | 7.4nm,0.9s | | | | | | |
| BILL | Bilibino | 19.09 | 338 | eP | P | 17 48 47.3 | -0.9 |
| | 81nm,1.7s | | | | | | |
| WRH | Wood River Hil | 19.29 | 37 | eP | P | 17 48 49.9 | -0.5 |
| | 7.2nm,0.8s | | | | | | |
| CCB | Clear Creek Bu | 19.48 | 36 | eP | P | 17 48 51.7 | -0.8 |
| | 6.3nm,0.6s | | | | | | |
| MDM | Murphy Dome | 19.48 | 35 | eP | P | 17 48 51.7 | -1.0 |
| | 9.8nm,0.9s | | | | | | |
| COLA | College | 19.58 | 36 | eP | Pn | 17 48 55.5 | +0.5 |
| HARP | HAARP | 19.58 | 44 | eP | P | 17 48 53.5 | -0.3 |
| | 214nm,2.6s | | | | | | |
| PAX | Paxson | 19.66 | 42 | eP | P | 17 48 50.8 | -3.8 |
| HDA | Harding Lake | 19.68 | 37 | eP | P | 17 48 55.3 | +0.5 |
| | 13nm,0.5s | | | | | | |
| ILAR | Eielson Array | 19.88 | 37 | P | P | 17 48 54.5 | -2.5 |
| | 0.8nm,0.3s,baz=244,slow=9.9,SNR=30 | | | | | | |
| ILAR | | | | S | S | 17 52 34.6 | -4.8 |
| | 0.1nm,0.3s,baz=229,slow=14,SNR=3.1 | | | | | | |
| IL1 | Eielson Array | 19.89 | 37 | eP | Pn | 17 48 58.0 | -0.7 |
| COLD | Coldfoot | 20.17 | 28 | eP | P | 17 49 00.9 | +0.9 |
| | 11nm,1.0s | | | | | | |
| MENT | Mentasta | 20.39 | 43 | eP | P | 17 49 01.9 | -0.6 |
| SEY | Seymchan | 20.88 | 316 | P | P | 17 49 06.7 | -1.0 |
| | 1.5nm,0.3s,baz=197,slow=19,SNR=2.7 | | | | | | |
| EGAK | Eagle | 22.11 | 39 | eP | P | 17 49 19.6 | -1.4 |
| | 16nm,0.8s | | | | | | |
| INK | Inuvik | 26.21 | 34 | P | P | 17 49 59.2 | -1.0 |
| | 2.6nm,0.5s,baz=272,slow=10,SNR=5.5 | | | | | | |
| INK | | | | PcP | PcP | 17 53 26.0 | -0.2 |
| | 2.5nm,1.1s,baz=289,slow=2.5,SNR=2.9 | | | | | | |
| INK | Inuvik | 26.21 | 34 | eP | P | 17 49 53.3 | -6.8 |
| | 6.7nm,1.0s | | | | | | |
| INK | | | | P | P | 17 49 59.2 | -1.0 |
| INK | | | | PcP | PcP | 17 53 26.0 | -0.2 |
| DLBC | Dease Lake | 26.46 | 57 | P | P | 17 50 02.1 | -0.6 |
| | 5.8nm,0.8s,baz=262,slow=11,SNR=11 | | | | | | |
| DLBC | Dease Lake | 26.46 | 57 | eP | P | 17 50 04.2 | +1.5 |
| | 8.3nm,0.9s | | | | | | |
| YSS | Yuzh-Sakhalins | 27.63 | 278 | P | P | 17 50 14.2 | +1.0 |
| ASAJ | Asahikawa | 29.02 | 272 | eP | P | 17 50 27.8 | +2.2 |
| | 20nm,1.3s | | | | | | |
| YAK | Yakutsk | 31.20 | 312 | LR | LR | 18 03 40.1 | |
| | comp=Z,350nm,19.0s,baz=96,slow=37 | | | | | | |
| YKA | Yellowknife Ar | 33.59 | 47 | P | P | 17 51 03.0 | -2.6 |
| | 1.3nm,0.8s,baz=274,slow=7.4,SNR=3.1 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.55 | 211 | T | T | 18 28 06.1 | |
| | baz=18,slow=76,SNR=168 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.56 | 211 | T | T | 18 28 06.1 | |
| | baz=18,slow=76,SNR=184 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.57 | 211 | T | T | 18 28 05.5 | |
| | baz=18,slow=76,SNR=150 | | | | | | |
| USRK | Ussuriysk Ar. | 35.60 | 280 | P | P | 17 51 22.9 | -0.2 |
| | 1.7nm,0.6s,baz=42,slow=8.6,SNR=5.7 | | | | | | |
| USRK | | | | LR | LR | 18 05 51.8 | |
| | comp=Z,143nm,21.2s,baz=51,slow=36 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.76 | 210 | T | T | 18 29 33.4 | |
| | baz=18,slow=75,SNR=142 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.77 | 210 | T | T | 18 29 34.0 | |
| | baz=18,slow=75,SNR=86 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.77 | 210 | T | T | 18 29 34.5 | |
| | baz=18,slow=75,SNR=49 | | | | | | |
| MJAR | Matsushiro Arr | 36.07 | 264 | P | P | 17 51 27.5 | +0.2 |
| | 1.9nm,0.7s,baz=289,slow=13,SNR=6.1 | | | | | | |
| MJAR | | | | LR | LR | 18 04 27.8 | |
| | comp=Z,171nm,21.8s,baz=75,slow=33 | | | | | | |
| MAJO | Matsushiro | 36.08 | 264 | eP | P | 17 51 27.1 | -0.3 |
| | 6.8nm,0.8s | | | | | | |
| NEW | Newport | 36.72 | 71 | P | P | 17 51 33.0 | +0.2 |
| | 1.6nm,0.6s,baz=276,slow=9.2,SNR=3.4 | | | | | | |
| NEW | Newport | 36.72 | 71 | eP | P | 17 51 32.7 | -0.1 |
| | 8.3nm,1.1s | | | | | | |
| EDM | Edmonton | 36.81 | 62 | eP | P | 17 51 34.9 | +1.4 |
| | 15nm,0.6s | | | | | | |
| CN2 | Changchun | 39.83 | 283 | eP | P | 17 51 58.6 | -0.3 |
| CN2 | | | | epP | pP | 17 52 03.2 | -2.5 |
| CN2 | | | | PP | PnPn | 17 53 34.2 | +0.5 |
| CN2 | | | | eS | S | 17 58 00.2 | -1.7 |
| CN2 | | | | PMZ | | | |
| | 10.0nm,1.1s | | | | | | |
| CN2 | | | | LN | | | |
| | 200nm,18.0s | | | | | | |
| CN2 | | | | LE | | | |
| | 200nm,18.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | 300nm,19.0s | | | | | | |
| MCMT | McKenzie Canyo | 40.98 | 74 | eP | P | 17 52 09.3 | +0.5 |
| NVAR | Mina Array Bea | 41.25 | 85 | P | P | 17 52 09.8 | -1.2 |
| | 0.4nm,0.7s,baz=297,slow=5.9,SNR=2.8 | | | | | | |
| BOZ | Bozeman (W) | 41.28 | 72 | eP | P | 17 52 12.2 | +1.1 |
| | 65nm,2.8s | | | | | | |
| KSRS | Korea Array | 41.96 | 274 | P | P | 17 52 16.8 | +0.4 |
| | 4.4nm,1.0s,baz=49,slow=7.6,SNR=11 | | | | | | |
| KSRS | | | | LR | LR | 18 09 12.3 | |
| | comp=Z,77nm,20.7s,baz=112,slow=35 | | | | | | |
| KS01 | Wonju Array Si | 41.96 | 274 | eP | P | 17 52 20.1 | +3.5 |
| KSAR | Wonju Array Be | 41.99 | 274 | P | P | 17 52 16.8 | +0.1 |
| IMW | Indian Meadow | 42.64 | 74 | P | P | 17 52 23.0 | +0.6 |
| JNU | Nakatsue | 42.88 | 266 | P | P | 17 52 24.0 | -0.1 |
| | 5.8nm,0.8s,baz=346,slow=4.2,SNR=3.4 | | | | | | |
| RLMT | Red Lodge | 42.97 | 71 | eP | P | 17 52 26.9 | +2.0 |
| R11A | Troy Canyon, C | 43.00 | 83 | eP | P | 17 52 28.6 | +3.4 |
| | 29nm,2.3s | | | | | | |
| EPU | East Promontor | 43.16 | 78 | eP | P | 17 52 29.0 | +2.5 |
| DUG | Dugway | 43.61 | 79 | P | P | 17 52 31.7 | +1.6 |
| | 5.5nm,1.0s | | | | | | |
| BW06 | Boulder Array | 44.11 | 74 | eP | P | 17 52 34.3 | +0.1 |
| | 6.7nm,1.1s | | | | | | |
| SRU | San Rafael | 45.68 | 79 | eP | P | 17 52 48.4 | +1.8 |
| | 3.0nm,0.7s | | | | | | |
| ULM | Lac du Bonnet | 47.77 | 58 | LR | LR | 18 14 06.4 | |
| | comp=Z,179nm,19.7s,baz=314,slow=37 | | | | | | |
| ULN | Ulaanbaatar | 48.35 | 298 | eP | P | 17 53 06.8 | -0.6 |
| | 6.9nm,1.4s | | | | | | |
| SONA1 | Songino Array | 48.72 | 299 | eP | P | 17 53 10.2 | 0.0 |
| SONM | Songino Array | 48.73 | 299 | P | P | 17 53 09.3 | -1.0 |
| | 1.5nm,0.7s,baz=60,slow=8.3,SNR=6.4 | | | | | | |
| SONM | | | | PcP | PcP | 17 54 34.4 | -0.6 |
| | 0.9nm,0.6s,baz=330,slow=2.0,SNR=2.8 | | | | | | |
| SONM | | | | LR | LR | 18 15 23.2 | |
| | comp=Z,270nm,19.8s,baz=54,slow=38 | | | | | | |
| HHC | Hu-ho-hao-te | 49.93 | 288 | eP | P | 17 53 20.3 | +0.9 |
| HHC | | | | sP | sP | 17 53 30.3 | +1.3 |
| HHC | | | | S | S | 18 00 30.0 | +1.6 |
| HHC | | | | PMZ | | | |
| | 28nm,1.2s | | | | | | |
| HHC | | | | PMZ | | | |
| | 100nm,5.0s | | | | | | |
| HHC | | | | LN | | | |
| | 180nm,19.4s | | | | | | |
| HHC | | | | LE | | | |
| | 160nm,15.3s | | | | | | |
| HHC | | | | LZ | | | |
| | 170nm,18.8s | | | | | | |
| WHN | Wuhan | 54.97 | 277 | ⇑P | P | 17 53 56.0 | -0.8 |
| ZALV | Zalesovo Beam | 55.74 | 315 | P | P | 17 53 59.8 | -2.2 |
| | 0.4nm,0.5s,baz=49,slow=6.6,SNR=2.7 | | | | | | |
| ZALV | | | | PcP | PcP | 17 55 01.8 | +0.8 |
| | 0.6nm,0.5s,baz=60,slow=3.6,SNR=4.2 | | | | | | |
| ZALV | | | | LR | LR | 18 19 52.1 | |
| | comp=Z,228nm,19.2s,baz=70,slow=38 | | | | | | |
| XAN | Xi'an | 55.94 | 283 | P | P | 17 54 04.9 | +1.1 |
| XAN | | | | PMZ | | | |
| | 6.0nm,1.3s | | | | | | |
| XAN | | | | PMZ | | | |
| | 100nm,4.0s | | | | | | |
| TX31 | Lajitas Ar. Si | 56.36 | 84 | eP | P | 17 54 07.5 | +0.6 |
| TXAR | Lajitas Array | 56.36 | 84 | P | P | 17 54 07.0 | +0.1 |
| | 0.5nm,0.7s,baz=289,slow=4.3,SNR=7.8 | | | | | | |
| TXAR | | | | PcP | PcP | 17 55 02.3 | -1.7 |
| | 0.7nm,0.7s,baz=306,slow=3.0,SNR=2.2 | | | | | | |
| TXAR | | | | LR | LR | 18 16 07.7 | |
| | comp=Z,68nm,19.9s,baz=0.0,slow=34 | | | | | | |
| ARCES | ARCESS Array B | 58.53 | 352 | P | P | 17 54 20.2 | -1.3 |
| | 4.2nm,0.8s,baz=27,slow=6.1,SNR=3.2 | | | | | | |
| ARCES | | | | PcP | PcP | 17 55 11.5 | -0.2 |
| | 3.8nm,0.7s,baz=48,slow=4.0,SNR=6.1 | | | | | | |
| SCHQ | Schefferville | 58.60 | 40 | LR | LR | 18 20 54.5 | |
| | comp=Z,178nm,18.8s,baz=290,slow=38 | | | | | | |
| MIAR | Mount Ida | 58.95 | 72 | eP | P | 17 54 25.6 | +0.6 |
| | 68nm,2.5s | | | | | | |
| WMQ | Urumqi | 61.30 | 305 | eP | P | 17 54 44.0 | +2.9 |
| MKAR | Makanchi Array | 61.87 | 311 | P | P | 17 54 44.0 | -0.8 |
| | 1.9nm,0.5s,baz=48,slow=6.1,SNR=18 | | | | | | |
| MKAR | | | | LR | LR | 18 23 56.3 | |
| | comp=Z,121nm,18.7s,baz=32,slow=38 | | | | | | |
| MKAR | Makanchi Array | 61.87 | 311 | eP | P | 17 54 44.3 | -0.5 |
| MK01 | Makanchi Array | 61.88 | 310 | eP | P | 17 54 43.7 | -1.2 |
| BRVK | Borovoye | 62.43 | 322 | eP | P | 17 54 47.6 | -0.7 |
| BRVK | | | | ePcP | PcP | 17 55 27.4 | -0.2 |
| SSPA | Standing Stone | 63.58 | 57 | eP | P | 17 54 56.6 | +0.4 |
| | 27nm,0.8s | | | | | | |
| ARU | Arti | 63.85 | 330 | eP | P | 17 54 58.2 | +0.4 |
| | 4.4nm,0.6s | | | | | | |
| KMI | Kunming | 66.03 | 281 | P | P | 17 55 13.7 | +1.1 |
| KMI | | | | PMZ | | | |
| | 4.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | 90nm,4.6s | | | | | | |
| FINES | FINESS Array B | 66.33 | 349 | P | P | 17 55 12.3 | -1.4 |
| | 1.3nm,0.8s,baz=357,slow=5.6,SNR=3.1 | | | | | | |
| FINES | | | | LR | LR | 18 27 41.6 | |
| | comp=Z,94nm,18.4s,baz=36,slow=39 | | | | | | |
| NB2 | NORSAR Subarra | 67.89 | 357 | P | P | 17 55 22.4 | -1.3 |
| | comp=Z,1.0nm,0.7s,baz=1.8,slow=6.2 | | | | | | |
| NOA | NORSAR Array B | 67.89 | 357 | P | P | 17 55 22.2 | -1.5 |
| | comp=Z,1.8nm,0.8s,baz=1.8,slow=6.2,SNR=5.2 | | | | | | |
| NOA | | | | LR | LR | 18 25 13.1 | |
| | comp=Z,34nm,20.1s,baz=350,slow=36 | | | | | | |
| AAK | Ala-Archa | 68.66 | 312 | P | P | 17 55 29.1 | 0.0 |
| | comp=Z,4.0nm,0.7s,baz=117,slow=6.8,SNR=5.0 | | | | | | |
| AAK | Ala-Archa | 68.66 | 312 | eP | P | 17 55 28.9 | -0.1 |
| | comp=Z,5.7nm,0.8s | | | | | | |
| ABKAR | Akbulak array | 69.36 | 325 | eP | P | 17 55 33.8 | +0.7 |
| LSA | Lhasa | 69.63 | 292 | eP | P | 17 55 36.7 | +1.1 |
| | comp=Z,8.0nm,0.8s | | | | | | |
| KKAR | Karatay Array | 70.11 | 315 | eP | P | 17 55 38.0 | +0.2 |
| PMOR | Pomariorio Ree | 70.17 | 152 | eT | T | 19 12 54.9 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| KSH | Kashi | 70.38 | 309 | P | P | 17 55 44.1 | +4.5 |
| KSH | | | | esP | sP | 17 55 51.2 | +1.9 |
| KSH | | | | S | S | 18 04 53.1 | +2.3 |
| KSH | | | | SKS | ScS | 18 05 41.3 | +0.1 |
| KSH | | | | PMZ | | | |
| | comp=Z,120nm,3.9s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,150nm,4.6s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,69nm,4.0s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,140nm,7.5s | | | | | | |
| PPT | Papeete | 72.13 | 154 | LR | LR | 18 22 07.5 | |
| | comp=Z,196nm,21.2s,baz=360,slow=31 | | | | | | |
| PPT2 | Papeete2 | 72.15 | 154 | eS | S | 18 05 18.3 | +7.0 |
| | comp=Z,53nm,25.0s | | | | | | |
| PPT2 | Papeete2 | 72.15 | 154 | eLR | LR | 18 18 04.9 | |
| | comp=Z,144nm,21.0s | | | | | | |
| CMAR | Chiang Mai Arr | 73.32 | 279 | P | P | 17 55 58.1 | +0.7 |
| | comp=Z,0.8nm,0.6s,baz=33,slow=5.9,SNR=4.0 | | | | | | |
| CMAR | | | | LR | LR | 18 30 57.0 | |
| | comp=Z,39nm,19.8s,baz=45,slow=38 | | | | | | |
| TAPN | Taplejung | 73.39 | 293 | eP | P | 17 55 58.7 | +0.6 |
| | comp=Z,36nm,0.8s | | | | | | |
| ODAN | Odare | 73.94 | 293 | eP | P | 17 56 02.3 | +1.0 |
| | comp=Z,26nm,1.0s | | | | | | |
| GUN | Gumba | 74.01 | 295 | eP | P | 17 56 02.3 | +0.5 |
| | comp=Z,71nm,1.1s | | | | | | |
| RAMN | Ramite | 74.33 | 293 | eP | P | 17 56 03.9 | +0.3 |
| | comp=Z,38nm,0.6s | | | | | | |
| KKN | Kakani | 74.45 | 295 | eP | P | 17 56 04.5 | +0.3 |
| | comp=Z,20nm,0.9s | | | | | | |
| PKI | Pulchoki | 74.54 | 295 | eP | P | 17 56 05.1 | +0.2 |
| | comp=Z,41nm,1.3s | | | | | | |
| PKIN | Phulchoki | 74.54 | 295 | eP | P | 17 56 05.0 | +0.2 |
| | comp=Z,40nm,1.4s | | | | | | |
| GKN | Gorkha | 74.65 | 296 | eP | P | 17 56 05.6 | +0.3 |
| | comp=Z,46nm,1.3s | | | | | | |
| DMN | Daman | 74.69 | 295 | eP | P | 17 56 06.2 | +0.6 |
| | comp=Z,20nm,0.8s | | | | | | |
| KOLN | Koldanda | 75.41 | 296 | eP | P | 17 56 10.0 | +0.2 |
| | comp=Z,9.0nm,0.7s | | | | | | |
| AKASG | Malin Array Be | 76.29 | 344 | P | P | 17 56 12.4 | -1.6 |
| | comp=Z,1.2nm,0.5s,baz=17,slow=5.8,SNR=6.8 | | | | | | |
| AKASG | | | | LR | LR | 18 33 16.9 | |
| | comp=Z,70nm,19.9s,baz=55,slow=38 | | | | | | |
| KIV | Kislovodsk | 79.62 | 333 | P | P | 17 56 34.4 | +1.6 |
| GEYT | Alibeck | 79.67 | 320 | P | P | 17 56 33.9 | +0.7 |
| | comp=Z,3.9nm,0.7s,baz=330,slow=5.1,SNR=9.8 | | | | | | |
| GEYT | | | | LR | LR | 18 35 51.7 | |
| | comp=Z,96nm,18.3s,baz=350,slow=39 | | | | | | |
| KBZ | Khabaz | 79.77 | 333 | LR | LR | 18 38 08.2 | |
| | comp=Z,78nm,18.8s,baz=14,slow=40 | | | | | | |
| GERES | GERESS Array B | 79.94 | 354 | P | P | 17 56 34.4 | -0.1 |
| | comp=Z,0.5nm,0.6s,baz=17,slow=7.0,SNR=3.9 | | | | | | |
| GERES | | | | LR | LR | 18 32 22.2 | |
| | comp=Z,42nm,20.4s,baz=22,slow=36 | | | | | | |
| WRA | Warramunga Arr | 83.61 | 227 | P | P | 17 56 52.6 | -1.4 |
| | comp=Z,0.3nm,0.6s,baz=33,slow=5.7,SNR=4.2 | | | | | | |
| BRTR | Keskin Array B | 85.92 | 338 | P | P | 17 57 05.8 | 0.0 |
| | comp=Z,1.1nm,0.5s,baz=22,slow=2.4,SNR=6.1 | | | | | | |
| BRTR | | | | LR | LR | 18 39 13.1 | |
| | comp=Z,18nm,20.1s,baz=16,slow=38 | | | | | | |
| ASAR | Alice Springs | 87.05 | 226 | P | P | 17 57 10.6 | -0.5 |
| | comp=Z,0.3nm,0.6s,baz=24,slow=4.5,SNR=9.0 | | | | | | |
| ESDC | Sonseca Array | 89.07 | 7 | P | P | 17 57 19.4 | -1.3 |
| | comp=Z,0.4nm,0.4s,baz=337,slow=5.1,SNR=3.2 | | | | | | |
| TORD | Torodi Ar. Bea | 115.76 | 3 | PKP | PKPdf | 18 03 07.3 | -1.0 |
| | comp=Z,0.5nm,0.8s,baz=332,slow=2.0,SNR=3.0 | | | | | | |
| MAW | Mawson | 147.84 | 218 | PKPbc | PKPbc | 18 04 09.0 | -0.1 |
| | comp=Z,0.7nm,0.5s,baz=109,slow=2.6,SNR=7.7 | | | | | | |
| BOSA | Boshof | 152.66 | 318 | PKPbc | PKPbc | 18 04 22.6 | +0.3 |
| | comp=Z,3.9nm,0.5s,baz=34,slow=3.3,SNR=13 | | | | | | |

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*ISCJB **08** 17:48:13.2±1.3, 36°.56S±0°.07×73°.69W±0°.08, h10km, mb3.4/1, Error ellipse: s-maj=10.9km s-min=7.5km az=44.4*

*IDC **08** 17:48:14.4±3.5, 36°.48S×73°.61W, h0km, mb3.3/2, mb1 3.7/3, mb1mx3.5/20, mbtmp3.3/3, ML3.0/1, MS3.5/1, Ms1 3.5/1, ms1mx3.1/6, Error ellipse: s-maj=89.6km s-min=48.4km az=144.0*

*GUC **08** 17:48:15.4±0.7, 36°.59S×73°.53W, h18km±9km, ML4.1*

**ISC 08 17:48:15.4**±1.4**, 36°.55S**±0°.07×**73°.56W**±0°.09**, h10**km**, n10, σ0s.69**/13**, 5C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CCSP | San Pedro de C | 0.47 | 129 | ⇑iP | Pg | 17 48 24.9 | +0.3 |
| CCSP | | | | i S | Sg | 17 48 31.3 | +0.6 |
| CCSP | | | | AML | AML | 17 48 32.3 | |
| | comp=N,48μm,0.2s | | | | | | |
| COCH | Cobquecura | 0.75 | 56 | ⇑iP | Pg | 17 48 30.2 | +0.3 |
| COCH | | | | i S | Sb | 17 48 41.3 | +0.4 |
| COCH | | | | AML | AML | 17 48 42.6 | |
| | comp=N,11μm,0.3s | | | | | | |
| CCHI | Chillan | 1.20 | 93 | ⇑iP | Pb | 17 48 37.0 | -1.2 |
| CCHI | | | | i S | Sn | 17 48 54.0 | -0.5 |
| CCHI | | | | AML | AML | 17 49 01.6 | |
| | comp=E,7μm,0.6s | | | | | | |
| TALC | Talca | 1.94 | 54 | ⇑eP | Pn | 17 48 49.1 | +0.7 |
| TALC | | | | i S | Sn | 17 49 13.4 | +0.5 |
| PEL | Peldehue | 4.14 | 36 | ⇑iP | Pn | 17 49 18.4 | -0.4 |
| PEL | | | | ⇓iS | Sg | 17 50 36.2 | +7.8 |
| CFAA | Coronel Fontan | 6.62 | 43 | Pn | Pn | 17 49 51.9 | -1.0 |
| | comp=E,0.3nm,0.3s,baz=213,slow=13,SNR=8.2 | | | | | | |
| CFAA | | | | Sn | Sn | 17 51 02.2 | -6.2 |
| | comp=E,0.1nm,0.3s,baz=180,slow=10,SNR=2.3 | | | | | | |
| LVC | Limon Verde | 14.46 | 17 | LR | LR | 17 56 52.7 | |
| | comp=E,180nm,18.6s,baz=229,slow=36 | | | | | | |
| LPAZ | La Paz | 20.75 | 15 | P | P | 17 52 57.5 | +0.5 |
| | comp=E,0.5nm,0.5s,baz=221,slow=9.3,SNR=2.6 | | | | | | |
| TXAR | Lajitas Array | 71.38 | 332 | P | P | 17 59 35.4 | -0.2 |
| | comp=E,0.3nm,0.6s,baz=158,slow=7.8,SNR=5.0 | | | | | | |
| ZALV | Zalesovo Beam | 157.04 | 34 | PKP | PKPdf | 18 08 11.1 | +0.6 |
| | comp=E,0.5nm,0.6s,baz=292,slow=4.2,SNR=2.9 | | | | | | |

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*ISCJB **08** 17:50:32.2±2.3, 24°.1S±0°.2×66°.7W±0°.1, h195km, mb3.2/1, Error ellipse: s-maj=35.1km s-min=14.5km az=9.9*

*IDC **08** 17:50:32.3±4.9, 24°.07S×66°.68W, h176km±44km, mb3.2/1, mb1 3.2/4, mb1mx3.0/20, mbtmp3.7/4, MS2.8/1, Ms1 2.9/1, ms1mx2.6/7, Error ellipse: s-maj=74.5km s-min=27.8km az=155.0*

**ISC 08 17:50:33.4**±1.5**, 24°.0S**±0°.2×**66°.7W**±0°.1**, h195**km**, n6, σ1s.00**/7**, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LVC | Limon Verde | 2.42 | 304 | P | Pn | 17 51 16.9 | +0.5 |
| | 502nm,0.3s,baz=142,slow=5.5,SNR=158 | | | | | | |
| LVC | | | | S | Sn | 17 51 48.5 | -1.3 |
| | 881nm,0.3s,baz=250,slow=21,SNR=62 | | | | | | |
| LPAZ | La Paz | 7.76 | 350 | P | Pn | 17 52 25.4 | +1.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0.1nm,0.3s,baz=149,slow=12,SNR=2.2 | | | | | | |
| LPAZ | | | | LR | LR | 17 56 18.8 | |
| | comp=Z,60nm,18.6s,baz=272,slow=44 | | | | | | |
| SIV | San Ignacio | 9.57 | 35 | P | Pn | 17 52 46.6 | -0.7 |
| | 0.5nm,0.3s,baz=224,slow=15,SNR=8.5 | | | | | | |
| TORD | Torodi Ar. Bea | 76.34 | 69 | P | P | 18 02 01.6 | +0.2 |
| | 0.3nm,0.5s,baz=254,slow=5.9,SNR=5.1 | | | | | | |
| ASAR | Alice Springs | 128.57 | 204 | PKP | PKPdf | 18 09 18.3 | +0.4 |
| | 0.8nm,1.1s,baz=144,slow=3.3,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 146.36 | 40 | PKPbc | PKPab | 18 09 52.8 | +0.4 |
| | 0.3nm,0.5s,baz=304,slow=2.8,SNR=2.7 | | | | | | |

**IDC 08 17:56:36.8**±6.2**, 4°.83S×133°.74E, h0**km**, mb3.6**/1**, mb1 3.5**/3**, mb1mx3.3**/26**, mbtmp3.3**/3**, ML3.1**/2**, Error ellipse: s-maj=354.4km s-min=33.6km az=77.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 15.03 | 178 | Pn | Pn | 18 00 08.7 | -2.0 |
| | 0.1nm,0.3s,baz=357,slow=13,SNR=3.0 | | | | | | |
| WRA | | | | Sn | Sn | 18 02 45.8 | -12 |
| | 0.1nm,0.3s,baz=357,slow=24,SNR=4.8 | | | | | | |
| ASAR | Alice Springs | 18.73 | 180 | P | Pn | 18 00 57.9 | +0.3 |
| | 0.1nm,0.3s,baz=1.0,slow=10,SNR=10 | | | | | | |
| ASAR | | | | S | Sn | 18 04 15.2 | -13 |
| | 0.0nm,0.3s,baz=2.0,slow=28,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 68.54 | 325 | P | P | 18 07 41.4 | 0.0 |
| | 0.3nm,0.5s,baz=106,slow=7.8,SNR=2.8 | | | | | | |

**DJA 08 17:57:47.1**±0.2**, 1°S**±2°**×12°0E**±°**, h10**km**, M3.9**/13**, mb4.0**/1**, MLv3.9**/13**, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCI | Palu | 0.42 | 339 | P | Pg | 17 57 54.8 | -0.6 |
| MPSI | Mapaga | 1.63 | 357 | P | Pn | 17 58 14.3 | -1.6 |
| MPSI | | | | S | Sb | 17 58 37.8 | -0.1 |
| APSI | Ampana | 1.70 | 77 | P | Pn | 17 58 16.0 | -0.9 |
| APSI | | | | S | Sn | 17 58 38.3 | -0.4 |
| TTSI | Tana Toraja | 1.74 | 186 | P | Pn | 17 58 15.6 | -1.8 |
| TTSI | | | | S | Sb | 17 58 40.8 | -0.3 |
| MRSI | Marisa | 2.63 | 48 | P | Pn | 17 58 29.4 | -0.3 |
| SPSI | Sidrap Palu | 2.66 | 185 | P | Pn | 17 58 29.9 | -0.1 |
| SPSI | | | | S | Sn | 17 59 03.2 | +0.9 |
| GTOI | Gorontalo | 3.58 | 58 | P | Pn | 17 58 42.0 | -0.7 |
| BKSI | Bulukumba | 4.00 | 178 | P | Pn | 17 58 48.5 | 0.0 |
| KBKI | Kotabaru | 4.30 | 242 | P | Pn | 17 58 52.3 | -0.4 |
| KMSI | Cibinong | 4.40 | 65 | P | Pn | 17 58 54.1 | 0.0 |
| BSSI | Bau Bau, Buton | 4.84 | 174 | P | Pn | 17 59 00.0 | 0.0 |
| BBKI | Banjar Baru | 5.58 | 247 | P | Pn | 17 59 10.0 | -0.2 |

*IDC **08** 18:05:36.6±5.6, 5°.13S×133°.30E, h0km, mb3.4/1, mb1 3.7/4, mb1mx3.4/28, mbtmp3.5/4, ML3.7/3, MS3.3/1, Ms1 3.3/1, ms1mx2.6/16, Error ellipse: s-maj=325.8km s-min=26.7km az=76.0*

*AUST **08** 18:05:37.5±99.0, 4°.88S×133°.53E, h8km±55km, Error ellipse: s-maj=17.2km s-min=4.3km az=258.0*

**ISC 08 18:05:38.0**±2.6**, 5°.2S**±0°.3**×13°3E**±°**, h10**km**, n8, σ2s.21**/7**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.30 | 345 | P | Pn | 18 06 16.0 | 0.0 |
| | baz=2.3,SNR=11 | | | | | | |
| SIJI | Sorong | 4.54 | 340 | Pn | Pn | 18 06 47.8 | +0.9 |
| | 1.9nm,0.3s,baz=180,slow=11,SNR=22 | | | | | | |
| SIJI | | | | Sn | Sn | 18 07 36.5 | -3.2 |
| | 1.1nm,0.3s,baz=53,slow=20,SNR=4.1 | | | | | | |
| SWI | Sorong | 4.55 | 339 | P | Pn | 18 06 47.9 | +0.9 |
| | baz=4.6,SNR=7.4 | | | | | | |
| KDU | Kakadu | 7.50 | 183 | P | Pn | 18 07 32.1 | +4.7 |
| | baz=7.9,SNR=13 | | | | | | |
| MTN | Manton Dam | 7.83 | 192 | P | Pn | 18 07 38.3 | +6.3 |
| | baz=8.3,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 14.77 | 175 | Pn | Pn | 18 09 05.5 | -1.6 |
| | 0.3nm,0.3s,baz=355,slow=13,SNR=13 | | | | | | |
| WRA | | | | Sn | Sn | 18 11 42.9 | -8.1 |
| | 0.3nm,0.3s,baz=5.6,slow=22,SNR=5.1 | | | | | | |
| ASAR | Alice Springs | 18.43 | 177 | P | Pn | 18 09 53.8 | -0.1 |
| | 0.3nm,0.3s,baz=0.9,slow=10,SNR=34 | | | | | | |
| ASAR | | | | S | Sn | 18 13 10.3 | -10 |
| | 0.1nm,0.3s,baz=1.9,slow=28,SNR=4.8 | | | | | | |
| ASAR | | | | LR | LR | 18 17 43.5 | |
| | comp=Z,90nm,19.1s,baz=16,slow=39 | | | | | | |
| MKAR | Makanchi Array | 68.29 | 325 | P | P | 18 16 41.5 | +2.2 |
| | 0.2nm,0.4s,baz=123,slow=7.1,SNR=3.4 | | | | | | |

*ISCJB **08** 18:27:28.0±0.3, 6°.82S±0°.03×127°.94E±0°.05, h309km, mb3.5/5, Error ellipse: s-maj=6.7km s-min=4.7km az=172.0*

*DJA **08** 18:27:29.8±0.3, 7°S±3°×12°8E±°, h10km, M4.5/13, mb4.6/13, mB5.1/6, MLv4.5/13, Mw(mB)4.4/6*

*IDC **08** 18:27:29.1±1.3, 6°.79S×127°.86E, h308km±17km, mb3.3/5, mb1 3.6/10, mb1mx3.3/34, mbtmp4.3/10, Error ellipse: s-maj=16.9km s-min=14.3km az=7.0*

*AUST **08** 18:27:29.8±0.0, 6°.89S×128°.04E, h302km, Error ellipse: s-maj=1.5km s-min=1.1km az=259.0*

**ISC 08 18:27:28.5**±0.6**, 6°.80S**±0°.05**×127°.93E**±0°.06**, h309**km**, n36, σ1s.60**/36**, mb3.6**/5**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAI | Ambon | 3.10 | 5 | P | Pn | 18 28 28.6 | +2.6 |
| AAI | | | | S | S | 18 29 07.2 | -4.7 |
| MSAI | Masohi | 3.57 | 16 | P | Pn | 18 28 30.0 | -0.7 |
| MSAI | | | | S | S | 18 29 20.0 | -0.5 |
| NLAI | Namlea | 3.63 | 347 | P | Pn | 18 28 29.9 | -1.4 |
| SOEI | Soe | 4.66 | 231 | P | Pn | 18 28 43.8 | +1.1 |
| | baz=4.7,SNR=99 | | | | | | |
| SOEI | Soe | 4.66 | 231 | P | Pn | 18 28 34.8 | -7.9 |
| SOEI | | | | S | S | 18 29 26.2 | -16 |
| SANI | Sanana | 5.10 | 338 | P | Pn | 18 28 48.5 | +0.9 |
| | 60nm,0.6s,777nm0.2nm | | | | | | |
| BATI | Baumata | 5.41 | 231 | P | Pn | 18 28 52.5 | +1.3 |
| | 158nm,0.3s,baz=74,slow=3.2,SNR=222 | | | | | | |
| BATI | | | | S | S | 18 29 57.0 | -0.8 |
| | 32nm,0.3s,baz=219,slow=24,SNR=12 | | | | | | |
| BATI | Baumata | 5.41 | 231 | P | Pn | 18 28 45.7 | -5.5 |
| BATI | | | | S | S | 18 29 43.7 | -14 |
| FAKI | Fak Fak | 5.78 | 48 | P | Pn | 18 28 54.4 | -1.1 |
| MMRI | Maumere | 5.93 | 252 | P | Pn | 18 28 52.4 | -4.9 |
| | 49nm,0.9s,0.2nm | | | | | | |
| LBMI | Labuha | 6.13 | 356 | P | Pn | 18 29 02.2 | +2.5 |
| | 34nm,1.2s,572nm0.2nm | | | | | | |
| SIJI | Sorong | 6.76 | 30 | P | Pn | 18 29 07.3 | 0.0 |
| | 2.6nm,0.3s,baz=238,slow=22,SNR=20 | | | | | | |
| SIJI | | | | S | S | 18 30 21.6 | -5.7 |
| | 3.6nm,0.3s,baz=253,slow=23,SNR=10 | | | | | | |
| SWI | Sorong | 6.77 | 30 | P | Pn | 18 29 07.8 | +0.5 |
| | baz=6.8,SNR=8.2 | | | | | | |
| SWI | Sorong | 6.77 | 30 | P | Pn | 18 29 14.8 | +7.5 |
| | 13nm,0.6s,844nm0.2nm | | | | | | |
| MTN | Manton Dam | 6.79 | 153 | P | Pn | 18 29 07.7 | +0.1 |
| | baz=6.7,SNR=100 | | | | | | |
| KDU | Kakadu | 7.37 | 143 | P | Pn | 18 29 14.3 | -0.2 |
| | baz=7.3,SNR=34 | | | | | | |
| LUWI | Luwuk | 7.69 | 318 | P | Pn | 18 29 22.0 | +3.5 |
| | baz=7.9,SNR=3.5 | | | | | | |
| LUWI | Luwuk | 7.69 | 318 | P | Pn | 18 29 21.1 | +2.6 |
| | 35nm,1.1s,0.2nm | | | | | | |
| WSI | Waingapu | 8.07 | 249 | P | Pn | 18 29 23.5 | +0.4 |
| APSI | Ampana | 8.57 | 313 | P | P | 18 29 31.8 | -2.1 |
| | 37nm,0.9s | | | | | | |
| KNRA | Kununurra | 8.86 | 175 | P | Pn | 18 29 33.0 | +0.2 |
| | baz=8.8,SNR=23 | | | | | | |
| WBSI | Waikabubak, Su | 8.91 | 251 | P | Pn | 18 29 31.5 | -1.9 |
| | 72nm,0.6s | | | | | | |
| MRSI | Marisa | 9.37 | 320 | P | P | 18 29 42.0 | -0.9 |
| TWSI | Taliwang, Sumb | 11.11 | 259 | P | Pn | 18 29 58.7 | -1.5 |
| JAY | Jayapura | 13.43 | 72 | P | Pn | 18 30 29.4 | +1.1 |
| | 1.1nm,0.3s,baz=234,slow=10,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 14.47 | 155 | P | P | 18 30 39.5 | 0.0 |
| | 6.0nm,0.3s,baz=331,slow=12,SNR=133 | | | | | | |
| WRA | | | | S | S | 18 33 14.9 | -3.1 |
| | 0.2nm,0.3s,baz=334,slow=21,SNR=5.3 | | | | | | |
| COEN | Coen | 16.59 | 117 | P | P | 18 31 03.7 | +1.0 |
| | baz=16,SNR=5.8 | | | | | | |
| ASAR | Alice Springs | 17.73 | 162 | P | P | 18 31 15.8 | +0.9 |
| | 3.8nm,0.3s,baz=344,slow=12,SNR=472 | | | | | | |
| ASAR | | | | S | S | 18 34 20.9 | -1.9 |
| | 0.1nm,0.3s,baz=340,slow=18,SNR=6.4 | | | | | | |
| QIS | Mount Isa | 17.76 | 142 | P | P | 18 31 15.9 | +0.8 |
| | baz=18,SNR=10.0 | | | | | | |
| WRKA | Warakurna | 18.14 | 179 | P | P | 18 31 20.0 | +0.8 |
| | baz=18,SNR=23 | | | | | | |
| PMG | Port Moresby | 19.22 | 99 | P | P | 18 31 32.5 | +1.6 |
| | 0.7nm,0.3s,baz=315,slow=11,SNR=3.5 | | | | | | |
| CMAR | Chiang Mai Arr | 38.04 | 312 | P | P | 18 34 18.6 | +0.3 |
| | 0.5nm,0.7s,baz=148,slow=6.7,SNR=5.1 | | | | | | |
| KSRS | Korea Array | 44.02 | 360 | P | P | 18 35 07.4 | +1.2 |
| | 0.7nm,0.5s,baz=180,slow=9.9,SNR=4.5 | | | | | | |
| PETK | Petropavlovsk- | 64.79 | 19 | P | P | 18 37 34.8 | +0.3 |
| | 4.2nm,0.9s,baz=195,slow=6.4,SNR=4.3 | | | | | | |
| MKAR | Makanchi Array | 66.94 | 328 | P | P | 18 37 48.5 | +0.2 |
| | 0.6nm,0.4s,baz=122,slow=7.8,SNR=15 | | | | | | |
| SEY | Seymchan | 72.00 | 11 | P | P | 18 38 19.1 | +0.4 |
| | 1.5nm,0.6s,baz=283,slow=14,SNR=3.0 | | | | | | |

*IDC **08** 18:27:57.0±0.4, 51°.40N×175°.12W, h0km, mb4.5/34, mb1 4.7/36, mb1mx4.6/50, mbtmp4.5/36, ML4.7/2, MS3.6/13, Ms1 3.6/13, ms1mx3.4/34, Error ellipse: s-maj=15.8km s-min=9.3km az=165.0*

*MOS **08** 18:28:00.5±1.0, 51°.47N×175°.08W, h33km, mb4.9/29, Error ellipse: s-maj=7.8km s-min=6.5km az=86.2*

*NEIC **08** 18:28:01.4, 51°.28N×175°.08W, h27km, mb4.7/91, ML4.5(AEIC), After AEIC.*

*ISCJB **08** 18:28:02.4±0.4, 51°.44N±0°.04×175°.06W±0°.02, h52km±3km, mb4.7/121, MS3.6/15, Error ellipse: s-maj=6.4km s-min=2.1km az=175.8*

*BJI **08** 18:28:05.4, 52°.28N×176°.00W, h35km, mb5.0/48, mB5.0/35, Ms4.6/21, Ms7 4.3/23*

**ISC 08 18:28:02.1**±0.5**, 51°.42N**±0°.06**×175°.10W**±0°.03**, h33**km±1km**, h33**km**:pP-P, n653, σ0s.94**/690**, mb4.8**/121**, MS3.5**/15**, 7C-5D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.86 | 317 | P | Pb | 18 28 18.7 | 0.0 |
| GSCK | Great Sitkin C | 0.89 | 313 | P | Pb | 18 28 19.0 | -0.1 |
| GSTR | Great Sitkin T | 0.90 | 319 | ePn | Pb | 18 28 19.5 | +0.1 |
| GSTD | Great Sitkin T | 0.91 | 315 | P | Pb | 18 28 19.5 | -0.1 |
| ETKA | Kagalaska Isla | 0.93 | 299 | P | Pn | 18 28 19.2 | +0.4 |
| ATKA | Atka Island | 0.97 | 35 | P | Pn | 18 28 19.5 | +0.1 |
| ATKA | | | | S | Sb | 18 28 34.5 | +1.7 |
| KOFP | Korovin Flat P | 1.06 | 35 | P | Pb | 18 28 22.2 | +0.2 |
| KOKL | Mount Kliuchef | 1.07 | 31 | P | Pb | 18 28 22.0 | -0.1 |
| KOWE | Korovin West | 1.09 | 29 | P | Pb | 18 28 22.7 | +0.3 |
| ADAG | Mount Adagdak | 1.09 | 302 | P | Pb | 18 28 22.5 | 0.0 |
| KIRH | Kanaga Island | 1.33 | 292 | P | Pn | 18 28 25.0 | +0.6 |
| KIKV | Kanaga Island | 1.37 | 291 | P | Pn | 18 28 25.5 | +0.5 |
| KICM | Kanaga Island | 1.40 | 292 | P | Pn | 18 28 26.0 | +0.7 |
| TAPA | Tanaga Point A | 1.74 | 284 | P | Pn | 18 28 30.6 | +0.6 |
| TAFL | Tanaga Flats | 1.78 | 282 | P | Pn | 18 28 31.2 | +0.7 |
| TAFP | Tanaga Falls P | 1.86 | 286 | P | Pn | 18 28 32.7 | +1.0 |
| TAFP | | | | S | Sb | 18 28 58.4 | 0.0 |
| GAEA | Gareloi East | 2.30 | 281 | P | Pn | 18 28 39.3 | +1.5 |
| GALAA | Gareloi Lava P | 2.32 | 280 | P | Pn | 18 28 39.5 | +1.6 |
| GANE | Gareloi Northe | 2.33 | 281 | P | Pn | 18 28 39.5 | +1.4 |
| CERAA | Semis' Rag'd T | 3.28 | 281 | P | Pn | 18 28 52.2 | +1.0 |
| CESW | Semis' Southwe | 3.36 | 280 | P | Pn | 18 28 52.9 | +0.7 |
| CEAP | Semis' Anvil P | 3.36 | 282 | P | Pn | 18 28 53.4 | +1.2 |
| AMKA | Amchitka | 3.51 | 272 | P | Pn | 18 28 54.2 | -0.1 |
| AMKA | | | | S | Sn | 18 29 38.6 | +4.0 |
| LSPA | Little Sitkin | 3.97 | 280 | P | Pn | 18 29 01.8 | +1.1 |
| LSPA | | | | S | Sn | 18 29 48.1 | +2.0 |
| LSNW | Little Sitkin | 4.01 | 280 | P | Pn | 18 29 02.0 | +0.8 |
| NIKH | Nikolski High | 4.15 | 65 | P | Pn | 18 29 04.3 | +1.2 |
| NIKH | | | | S | Sn | 18 29 52.1 | +1.7 |
| OKAK | Okmok | 4.66 | 60 | P | Pn | 18 29 11.1 | +1.1 |
| OKSO | Okmok South | 4.67 | 63 | P | Pn | 18 29 11.8 | +1.5 |
| OKSO | | | | S | Sn | 18 30 06.8 | +3.4 |
| OKCE | Okmok Cone E | 4.70 | 62 | P | Pn | 18 29 12.6 | +1.9 |
| OKTU | Okmok Mt. Tuli | 4.75 | 63 | P | Pn | 18 29 13.6 | +2.2 |
| MSOM | Makushin Julie | 5.52 | 61 | P | Pn | 18 29 23.4 | +1.5 |
| MSOM | Makushin Julie | 5.52 | 61 | P | Pn | 18 29 23.4 | +1.5 |
| MSW | Makushin Switc | 5.65 | 60 | P | Pn | 18 29 25.3 | +1.7 |
| UNV | Unalaska Valle | 5.77 | 62 | P | Pn | 18 29 26.6 | +1.3 |
| UNV | | | | S | Sn | 18 30 33.0 | +2.6 |
| ZRO | Akutan Zero | 6.15 | 61 | P | Pn | 18 29 32.7 | +2.0 |
| AKGG | Akutan Green G | 6.19 | 60 | P | Pn | 18 29 32.8 | +1.7 |
| AKUT | Akutan | 6.28 | 61 | ePn | Pn | 18 29 34.9 | +2.5 |
| SPIA | Saint Paul Isl | 6.43 | 24 | P | Pn | 18 29 38.2 | +3.8 |
| SMY | Shemya | 6.79 | 285 | P | Pn | 18 29 41.0 | +1.7 |
| SMY | Shemya | 6.79 | 285 | P | Pn | 18 29 41.0 | +1.7 |
| WECS | Westdahl Cape | 6.97 | 59 | P | Pn | 18 29 43.9 | +2.0 |
| ISLZ | Isanotski Laza | 7.62 | 60 | P | Pn | 18 29 52.8 | +2.1 |
| FALS | False Pass | 7.83 | 59 | ePn | Pn | 18 29 54.0 | +0.5 |
| | 136nm,0.5s | | | | | | |
| SDPT | Sand Point | 9.58 | 60 | P | Pn | 18 30 18.6 | +1.0 |
| CHGN | Chignik | 10.99 | 57 | ePn | Pn | 18 30 35.8 | -1.1 |
| GAMB | Gambell | 12.53 | 7 | ePn | Pn | 18 30 59.2 | +1.4 |
| SII | Sitkinak Islan | 13.32 | 59 | ePn | Pn | 18 31 05.7 | -3.0 |
| KDAK | Kodiak Island | 14.48 | 55 | Pn | Pn | 18 31 20.0 | -4.5 |
| | 1.6nm,0.3s,baz=246,slow=6.9,SNR=25 | | | | | | |
| KDAK | | | | Sn | S | 18 34 15.6 | -6.9 |
| | 0.8nm,0.3s,baz=141,slow=22,SNR=4.1 | | | | | | |
| KDAK | Kodiak Island | 14.48 | 55 | i P | Pn | 18 31 20.7 | -3.8 |
| KDAK | Kodiak Island | 14.48 | 55 | ePn | Pn | 18 31 21.8 | -2.7 |
| KDAK | | | | Sn | S | 18 34 15.6 | -6.9 |
| SVW2 | Sparrevohn | 14.49 | 40 | ePn | Pn | 18 31 26.4 | +1.8 |
| SVW2 | | | | esP | | 18 31 31.5 | |
| TNA | Tin City | 14.66 | 12 | ePn | P | 18 31 30.5 | -2.2 |
| RSO | Redoubt South | 15.38 | 45 | ePn | P | 18 31 39.0 | -2.0 |
| CNPM | China Poot | 15.71 | 50 | ePn | Pn | 18 31 38.2 | -2.5 |
| CNPM | | | | epP | P | 18 31 43.5 | -0.9 |
| BRLK | Bradley Lake | 15.96 | 49 | ePn | Pn | 18 31 41.8 | -2.2 |
| | 38nm,0.9s | | | | | | |
| SPU | Mount Spurr | 16.01 | 43 | ePn | Pn | 18 31 46.0 | +1.4 |
| SPU | | | | epP | pP | 18 31 52.8 | -3.5 |
| PET | Petropavlovsk | 16.14 | 286 | eP | P | 18 31 49.7 | +0.5 |
| PET | Petropavlovsk | 16.14 | 286 | ePn | P | 18 31 49.7 | +0.5 |
| PEA0 | Petropavlovsk- | 16.70 | 286 | ePn | P | 18 31 57.8 | +2.4 |
| PETK | Petropavlovsk- | 16.70 | 286 | Pn | Pn | 18 31 53.9 | +0.5 |
| | 2.4nm,0.3s,baz=97,slow=12,SNR=29 | | | | | | |
| PETK | | | | LR | LR | 18 37 53.0 | |
| | comp=Z,155nm,21.5s,baz=101,slow=36 | | | | | | |
| SEW | Seward | 16.75 | 49 | ePn | Pn | 18 31 50.5 | -3.4 |
| | 141nm,1.9s | | | | | | |
| PPLA | Purkeypile | 16.81 | 38 | ePn | P | 18 31 56.9 | +0.1 |
| | 29nm,0.9s | | | | | | |
| RC01 | Rabbit Creek A | 16.99 | 45 | ePn | Pn | 18 31 56.8 | -0.1 |
| CAST | Castle Rocks | 17.14 | 37 | ePn | P | 18 32 00.8 | +0.6 |
| | 19nm,0.8s | | | | | | |
| TRF | Thorofare Moun | 17.84 | 38 | ePn | P | 18 32 08.3 | +0.2 |
| | 24nm,0.9s | | | | | | |
| SML | Sawmill | 17.89 | 44 | eP | Pn | 18 32 06.8 | -1.4 |
| SML | | | | pmax | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | |
| SML | Sawmill | 17.89 | 44 | ePn | Pn | 18 32 06.8 | -1.4 |
| | comp=Z,21nm,1.0s | | | | | | |
| BPAW | Bear Paw Mtn. | 17.93 | 36 | ePn | P | 18 32 10.2 | +1.2 |
| | comp=Z,24nm,0.7s | | | | | | |
| RND | Reindeer | 18.38 | 39 | eP | P | 18 32 13.5 | -0.4 |
| RND | | | | pmax | pmax | | |
| | comp=Z,85nm,1.7s | | | | | | |
| RND | Reindeer | 18.38 | 39 | eP | P | 18 32 13.5 | -0.4 |
| | comp=Z,85nm,1.7s | | | | | | |
| MCK | McKinley | 18.50 | 38 | eP | P | 18 32 14.5 | -0.8 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | |
| MCK | McKinley | 18.50 | 38 | eP | P | 18 32 14.5 | -0.8 |
| | comp=Z,26nm,0.9s | | | | | | |
| BWN | Browne | 18.53 | 37 | eP | P | 18 32 13.3 | -2.1 |
| | comp=Z,85nm,1.2s | | | | | | |
| MLY | Manley | 18.55 | 33 | eP | P | 18 32 11.7 | -4.0 |
| MLY | | | | ePn | Pn | 18 32 17.0 | +0.9 |
| DIV | Divide | 18.80 | 48 | eP | P | 18 32 18.3 | -0.3 |
| | comp=Z,15nm,0.9s | | | | | | |
| KLU | Klutina | 18.85 | 46 | eP | P | 18 32 17.6 | -1.5 |
| | comp=Z,22nm,1.2s | | | | | | |
| BILL | Bilibino | 18.99 | 338⇓ | eP | Pn | 18 32 21.5 | +0.1 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,44nm,1.2s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,528nm,21.0s | | | | | | |
| BILL | Bilibino | 18.99 | 338 | eP | P | 18 32 18.7 | -1.8 |
| | comp=Z,30nm,0.8s | | | | | | |
| WRH | Wood River Hil | 19.20 | 37 | eP | P | 18 32 21.7 | -1.1 |
| | comp=Z,13nm,0.7s | | | | | | |
| BMRM | Bremner River | 19.30 | 49 | eP | P | 18 32 23.0 | -1.0 |
| | comp=Z,24nm,1.0s | | | | | | |
| MDM | Murphy Dome | 19.39 | 35 | eP | P | 18 32 24.7 | -0.3 |
| | comp=Z,20nm,0.6s | | | | | | |
| COLA | College | 19.49 | 36 | i P | P | 18 32 23.2 | -2.8 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| COLA | College | 19.49 | 36 | eP | P | 18 32 25.0 | -0.9 |
| | comp=Z,19nm,0.4s | | | | | | |
| HARP | HAARP | 19.50 | 44 | eP | Pn | 18 32 27.6 | -0.1 |
| | comp=Z,166nm,1.9s | | | | | | |
| PAX | Paxson | 19.57 | 42 | eP | P | 18 32 26.8 | -0.3 |
| PAX | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| PAX | Paxson | 19.57 | 42 | eP | P | 18 32 26.8 | -0.3 |
| | comp=Z,6.5nm,0.5s | | | | | | |
| ILAR | Eielson Array | 19.80 | 37 | P | P | 18 32 27.6 | -1.8 |
| | comp=Z,3.2nm,0.3s,baz=230,slow=9.1,SNR=68 | | | | | | |
| COLD | Coldfoot | 20.07 | 29 | eP | Pn | 18 32 33.8 | -0.5 |
| | comp=Z,38nm,1.2s | | | | | | |
| MENT | Mentasta | 20.31 | 43 | eP | P | 18 32 34.5 | -0.5 |
| SEY | Seymchan | 20.80 | 316 | P | P | 18 32 40.3 | +0.1 |
| | comp=Z,5.1nm,0.8s,baz=116,slow=9.9,SNR=8.0 | | | | | | |
| SEY | | | | PcP | PcP | 18 36 48.1 | +0.2 |
| | comp=Z,2.1nm,0.6s,baz=178,slow=3.7,SNR=4.4 | | | | | | |
| SEY | Seymchan | 20.80 | 316c | eP | P | 18 32 40.8 | +0.6 |
| PCA | Pinnacle | 21.21 | 52 | eP | P | 18 32 44.0 | -0.8 |
| | comp=Z,100nm,1.4s | | | | | | |
| FYU | Fort Yukon | 21.29 | 33 | eP | P | 18 32 44.9 | -0.5 |
| | comp=Z,54nm,1.4s | | | | | | |
| EGAK | Eagle | 22.02 | 40 | eP | P | 18 32 52.5 | -0.8 |
| | comp=Z,32nm,0.6s | | | | | | |
| KUR | Kuril'sk | 25.19 | 270 | P | P | 18 33 21.5 | -2.8 |
| KUR | | | | i S | S | 18 37 53.3 | +6.1 |
| KUR | | | | pmax | pmax | | |
| | comp=N,33nm,1.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,28nm,1.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,61nm,1.4s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,168nm,22.0s | | | | | | |
| WRAK | Wrangell Islan | 25.35 | 62 | eP | P | 18 33 26.7 | +1.0 |
| | comp=Z,46nm,0.8s | | | | | | |
| INK | Inuvik | 26.11 | 34 | P | P | 18 33 32.5 | -0.1 |
| | comp=Z,3.2nm,0.4s,baz=222,slow=7.8,SNR=24 | | | | | | |
| INK | | | | PcP | PcP | 18 36 59.1 | +0.2 |
| | comp=Z,3.0nm,0.5s,baz=225,slow=3.5,SNR=7.3 | | | | | | |
| INK | Inuvik | 26.11 | 34 | eP | P | 18 33 32.3 | -0.2 |
| INK | | | | e | | 18 36 59.0 | |
| INK | | | | pmax | pmax | | |
| | comp=Z,37nm,1.8s | | | | | | |
| INK | Inuvik | 26.11 | 34 | eP | P | 18 33 32.2 | -0.2 |
| | comp=Z,37nm,1.8s | | | | | | |
| INK | | | | ePcP | PcP | 18 36 59.0 | +0.1 |
| DLBC | Dease Lake | 26.40 | 57 | P | P | 18 33 36.6 | +1.3 |
| | comp=Z,12nm,0.9s,baz=278,slow=8.4,SNR=15 | | | | | | |
| DLBC | | | | LR | LR | 18 44 59.2 | |
| | comp=Z,83nm,18.1s,baz=274,slow=39 | | | | | | |
| DLBC | Dease Lake | 26.40 | 57 | eP | P | 18 33 37.0 | +1.7 |
| | comp=Z,22nm,1.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 27.62 | 277 | eP | P | 18 33 47.9 | +1.6 |
| YSS | Yuzh-Sakhalins | 27.62 | 277 | eP | P | 18 33 46.9 | +0.7 |
| | comp=Z,21nm,0.8s | | | | | | |
| BBB | Bella Bella | 28.67 | 70 | LR | LR | 18 45 03.6 | |
| | comp=Z,135nm,18.0s,baz=263,slow=36 | | | | | | |
| ASAJ | Asahikawa | 29.02 | 272 | P | P | 18 33 59.5 | +0.7 |
| | comp=Z,11nm,0.7s,baz=58,slow=2.9 | | | | | | |
| ASAJ | | | | LR | LR | 18 45 24.4 | |
| | comp=Z,471nm,20.0s,baz=174,slow=36 | | | | | | |
| ASAJ | Asahikawa | 29.02 | 272 | P | P | 18 33 59.5 | +0.7 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,471nm,20.0s | | | | | | |
| ASAJ | Asahikawa | 29.02 | 272 | eP | P | 18 33 59.9 | +1.1 |
| ERM | Erimo | 29.76 | 268 | i P | P | 18 34 05.9 | +0.6 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,50nm,1.7s | | | | | | |
| ERM | Erimo | 29.76 | 268 | eP | P | 18 34 04.7 | -0.6 |
| | comp=Z,37nm,1.2s | | | | | | |
| YAK | Yakutsk | 31.13 | 312 | P | P | 18 34 16.6 | -0.6 |
| | comp=Z,3.2nm,0.3s,baz=53,slow=1.5,SNR=4.5 | | | | | | |
| YAK | | | | PcP | PcP | 18 37 11.2 | -0.4 |
| | comp=Z,3.3nm,0.4s,baz=72,slow=1.6,SNR=2.4 | | | | | | |
| YAK | Yakutsk | 31.13 | 312 | i P | P | 18 34 15.9 | -1.3 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| YAK | Yakutsk | 31.13 | 312 | eP | P | 18 34 15.6 | -1.6 |
| | comp=Z,9.1nm,0.7s | | | | | | |
| YAK | | | | PcP | PcP | 18 37 11.2 | -0.4 |
| HABR | Khabarovsk | 31.72 | 285c | eP | P | 18 34 22.1 | -0.4 |
| HABR | | | | e*PP | pP | 18 34 31.7 | -0.3 |
| HABR | | | | e*SP | sP | 18 34 36.0 | 0.0 |
| HABR | | | | e | | 18 35 27.0 | |
| HABR | | | | ePPP | PPP | 18 35 36.9 | |
| HABR | | | | e | | 18 37 12.6 | |
| HABR | | | | eS | S | 18 39 30.7 | +0.9 |
| HABR | | | | e*SS | sS | 18 39 46.8 | +1.3 |
| HABR | | | | eSS | SnSn | 18 41 20.3 | +2.6 |
| HABR | | | | eSSS | SSS | 18 41 36.5 | |
| HABR | | | | e | | 18 44 51.7 | |
| HABR | | | | pmax | pmax | | |
| | comp=E,16nm,0.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,51nm,1.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.9s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,107nm,20.0s | | | | | | |
| KLR | Kul'dur | 33.39 | 288 | eP | P | 18 34 34.3 | -2.9 |
| YKA | Yellowknife Ar | 33.52 | 47 | P | P | 18 34 37.7 | -0.5 |
| | comp=Z,2.3nm,0.8s,baz=272,slow=8.6,SNR=6.7 | | | | | | |
| YKA | | | | PcP | PcP | 18 37 18.9 | +0.8 |
| | comp=Z,2.3nm,0.6s,baz=287,slow=3.7,SNR=4.5 | | | | | | |
| B05A | Bryant | 33.71 | 74 | P | P | 18 34 40.7 | +0.7 |
| | baz=34 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.65 | 211 | T | T | 19 11 38.3 | |
| | baz=18,slow=76,SNR=164 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.66 | 211 | T | T | 19 11 37.0 | |
| | baz=18,slow=76,SNR=141 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.66 | 211 | T | T | 19 11 36.6 | |
| | baz=18,slow=76,SNR=135 | | | | | | |
| USRK | Ussuriysk Ar. | 35.58 | 280 | P | P | 18 34 56.0 | -0.1 |
| | comp=Z,4.3nm,0.5s,baz=55,slow=10,SNR=19 | | | | | | |
| G05D | Wamic, OR | 35.59 | 78 | P | P | 18 34 56.6 | +0.2 |
| | baz=36 | | | | | | |
| I04A | Tendick Farm, | 35.66 | 81 | P | P | 18 34 56.7 | -0.2 |
| | baz=36 | | | | | | |
| L02D | Cave Junction, | 35.78 | 84 | P | P | 18 34 59.0 | +1.0 |
| | baz=36 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.85 | 210 | T | T | 19 13 59.0 | |
| | baz=15,slow=75 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.87 | 210 | T | T | 19 14 00.1 | |
| | baz=15,slow=75 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.87 | 210 | T | T | 19 14 03.1 | |
| | baz=15,slow=75 | | | | | | |
| I05D | Terrebonne, OR | 36.04 | 80 | P | P | 18 35 00.6 | +0.5 |
| | baz=36 | | | | | | |
| MAJO | Matsushiro | 36.09 | 264c | i P | P | 18 35 01.1 | +0.5 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,100nm,0.7s | | | | | | |
| MAJO | Matsushiro | 36.09 | 264 | eP | P | 18 35 01.3 | +0.6 |
| | comp=Z,16nm,0.6s | | | | | | |
| MAT | Matsushiro | 36.09 | 264 | P | P | 18 35 01.1 | +0.5 |
| MJAR | Matsushiro Arr | 36.09 | 264 | P | P | 18 35 01.1 | +0.5 |
| | comp=Z,8.2nm,0.6s,baz=48,slow=7.6,SNR=26 | | | | | | |
| MJAR | | | | PcP | PcP | 18 37 26.1 | 0.0 |
| | comp=Z,1.6nm,0.8s,baz=64,slow=2.9,SNR=4.0 | | | | | | |
| MJAR | | | | LR | LR | 18 48 09.4 | |
| | comp=Z,92nm,21.6s,baz=75,slow=34 | | | | | | |
| HAWA | Hanford | 36.12 | 76 | eP | P | 18 35 01.6 | +0.8 |
| | comp=Z,10nm,0.6s | | | | | | |
| HAWA | | | | e | | 18 36 42.5 | |
| J04D | Umpqua Nationa | 36.13 | 82 | P | P | 18 35 01.8 | +0.6 |
| | baz=36 | | | | | | |
| D08A | Wollman Farm, | 36.17 | 74 | eP | P | 18 35 02.1 | +0.9 |
| | comp=Z,54nm,1.9s | | | | | | |
| C09A | Chrisman Ranch | 36.21 | 73 | eP | P | 18 35 02.3 | +0.7 |
| | comp=Z,9.6nm,0.8s | | | | | | |
| YBH | Yreka Blue Hor | 36.58 | 84 | P | P | 18 35 04.9 | +0.1 |
| | comp=Z,1.5nm,0.5s,baz=293,slow=13,SNR=3.3 | | | | | | |
| YBH | | | | LR | LR | 18 46 56.1 | |
| | comp=Z,46nm,18.5s,baz=308,slow=31 | | | | | | |
| J05D | Fort Rock, OR | 36.65 | 81 | P | P | 18 35 06.3 | +0.8 |
| | baz=36,SNR=5.4 | | | | | | |
| M02C | Callahan | 36.67 | 85 | P | P | 18 35 06.8 | +1.1 |
| | baz=36 | | | | | | |

NEW **Newport** 36.69 71 P P 18 35 06.3 +0.7
comp=Z,8.6nm,0.6s,baz=307,slow=6.3,SNR=13
NEW **Newport** 36.69 71 eP P 18 35 06.1 +0.4
NEW pmax pmax
comp=Z,13nm,0.9s
NEW **Newport** 36.69 71 P P 18 35 06.0 +0.3
baz=37,SNR=8.7
NEW **Newport** 36.69 71 eP P 18 35 06.1 +0.4
comp=Z,13nm,0.9s
EDM **Edmonton** 36.76 62 eP P 18 35 06.3 +0.1
EDM **Edmonton** 36.76 62 eP P 18 35 06.3 +0.1
MDJ **Mudanjiang** 36.84 282 P P 18 35 06.3 -0.7
MDJ PMZ
comp=Z,9.0nm,0.9s
MDJ PMZ
comp=Z,63nm,4.4s
MDJ **Mudanjiang** 36.84 282 eP P 18 35 04.7 -2.2
comp=Z,7.8nm,0.8s
MSHR **Mys Shultsa** 36.95 278 ceP P 18 35 08.2 +0.3
N02D **Trinity Center** 37.00 85 P P 18 35 09.3 +0.8
baz=37
M04C **Macdoel** 37.09 84 P P 18 35 09.7 +0.4
baz=37
K05A **Summer Lake** 37.16 82 eP P 18 35 11.8 +1.8
comp=Z,13nm,0.9s
I07A **Izee** 37.30 79 eP P 18 35 12.0 +1.0
comp=Z,5.9nm,0.7s
F10A **Beach Ranch, E** 37.72 75 eP P 18 35 15.2 +0.7
comp=Z,101nm,2.8s
O03D **Paynes Creek** 37.95 86 P P 18 35 16.8 +0.3
baz=38
WALA **Waterton Lakes** 38.21 69 eP P 18 35 19.2 +0.5
comp=Z,195nm,2.9s
BSMT **Bassoo Peak** 38.26 71 eP P 18 35 19.8 +0.6
J08A **Circle Bar Ran** 38.31 79 eP P 18 35 20.8 +1.2
comp=Z,8.0nm,0.7s
BLMT **Blacktail Moun** 38.44 70 eP P 18 35 21.1 +0.4
JTMT **Jette** 38.61 71 eP P 18 35 22.9 +0.8
WVOR **Wild Horse Val** 38.72 81 eP P 18 35 23.6 +0.6
WVOR pmax pmax
comp=Z,8.0nm,0.8s
WVOR **Wild Horse Val** 38.72 81 eP P 18 35 23.6 +0.6
comp=Z,7.7nm,0.8s
RES **Resolute Bay** 38.75 25 P P 18 35 22.0 -0.7
comp=Z,2.5nm,0.7s,baz=276,slow=7.4,SNR=5.8
RES PcP PcP 18 37 34.5 +1.0
comp=Z,5.4nm,0.8s,baz=250,slow=4.9,SNR=8.4
MSO **Missoula** 39.27 72 P P 18 35 27.3 -0.2
baz=39,SNR=5.7
MSO **Missoula** 39.27 72 eP P 18 35 28.1 +0.6
comp=Z,38nm,1.7s
SLMT **Seeley Lake** 39.33 71 eP P 18 35 28.4 +0.4
CHMT **Chamberlain Mo** 39.63 71 eP P 18 35 30.4 -0.3
CN2 **Changchun** 39.81 283 eP P 18 35 30.9 -1.0
CN2 esP sP 18 35 44.5 -0.9
CN2 PP PnPn 18 37 06.5 -0.3
CN2 eS S 18 41 32.7 -1.1
CN2 PMZ
comp=Z,20nm,0.8s
CN2 PMZ
comp=Z,300nm,5.0s
CN2 LN
comp=Z,200nm,19.0s
CN2 LE
comp=Z,200nm,19.0s
CN2 LZ
comp=Z,200nm,19.0s
MFID **Camas Ranch** 39.91 78 eP P 18 35 33.0 +0.1
comp=Z,68nm,2.6s
HIA **Hailar** 40.41 294 eP P 18 35 35.8 -1.1
HIA **Hailar** 40.41 294 eP P 18 35 35.8 -1.1
HRY **Holter Researc** 40.58 71 eP P 18 35 39.1 +0.7
HLID **Hailey** 40.69 76 P P 18 35 39.5 +0.1
baz=41,SNR=7.3
HLID **Hailey** 40.69 76 eP P 18 35 39.9 +0.4
comp=Z,7.2nm,1.0s
BMN **Battle Mountai** 40.73 82 eP P 18 35 40.6 +0.9
BMN pmax pmax
comp=Z,5.0nm,1.0s
BMN **Battle Mountai** 40.73 82 eP P 18 35 40.6 +0.9
comp=Z,4.9nm,1.0s
MCMT **McKenzie Canyo** 40.95 74 eP P 18 35 41.9 +0.2
EGMT **Eagleton** 41.13 68 P P 18 35 42.8 -0.1
baz=41
EGMT **Eagleton** 41.13 68 eP P 18 35 42.9 0.0
comp=Z,15nm,0.8s
NV01 **Mina Array Sit** 41.24 85 eP P 18 35 44.4 +0.3
NVAR **Mina Array Bea** 41.24 85 P P 18 35 44.5 +0.4
comp=Z,2.2nm,0.8s,baz=287,slow=8.9,SNR=15
NVAR PcP PcP 18 37 43.2 +0.8
comp=Z,0.8nm,0.6s,baz=276,slow=2.6,SNR=4.0
BOZ **Bozeman (W)** 41.25 72 eP P 18 35 44.0 0.0
BOZ e 18 35 58.5
BOZ pmax pmax
comp=Z,12nm,0.6s
BOZ **Bozeman (W)** 41.25 72 P P 18 35 44.0 0.0
baz=41,SNR=16
BOZ **Bozeman (W)** 41.25 72 eP P 18 35 44.0 0.0
comp=Z,12nm,0.6s
BOZ e 18 35 58.5
MTUM **Tungsten Hills** 41.74 87 eP P 18 35 49.5 +1.4
QLMT **Earthquake Lak** 41.80 73 eP P 18 35 48.1 -0.5
comp=Z,0.6nm,0.6s
KSRS **Korea Array** 41.95 274 P P 18 35 50.5 +0.9
comp=Z,6.9nm,0.7s,baz=54,slow=8.2,SNR=23
KSRS PcP PcP 18 37 41.6 -2.8
comp=Z,2.0nm,0.8s,baz=54,slow=3.8,SNR=6.9
KSRS LR LR 18 52 33.6
comp=Z,42nm,21.2s,baz=78,slow=35
KSRS **Korea Array** 41.95 274 P P 18 35 50.5 +0.9
KSRS 18 37 41.6
KSRS pmax pmax
comp=Z,7.0nm,0.7s
KSRS pmax pmax
comp=Z,2.0nm,0.8s
KSRS MLR MLR
comp=Z,42nm,21.2s
KS01 **Wonju Array Si** 41.96 274 eP P 18 35 52.1 +2.4
KSAR **Wonju Array Be** 41.98 274 P P 18 35 50.5 +0.6
KSAR 18 37 41.7
KSAR **Wonju Array Be** 41.98 274 P P 18 35 50.5 +0.6
KSAR PcP PcP 18 37 41.6 -2.9
SMMC **Simmler** 42.13 90 P P 18 35 52.1 +1.0
baz=42
FFC **Flin Flon** 42.22 56 eP P 18 35 51.6 -0.1
FFC pmax pmax
comp=Z,8.0nm,0.5s
FFC **Flin Flon** 42.22 56 eP P 18 35 51.5 -0.1
comp=Z,8.1nm,0.5s
YNR **Norris Junctio** 42.32 73 eP P 18 35 53.6 +0.7
comp=Z,21nm,0.9s
VES **Vestal, Richgr** 42.36 89 P P 18 35 54.0 +1.0
baz=42
H17A **Grant Village** 42.55 73 P P 18 35 54.8 0.0
baz=42
IMW **Indian Meadow** 42.61 74 eP P 18 35 55.7 +0.4
FLWY **Flagg Ranch** 42.65 74 eP P 18 35 55.9 +0.4
HVU **Hansel Valley** 42.69 78 eP P 18 35 56.0 +0.2
HVU pmax pmax
comp=Z,8.0nm,0.7s
HVU **Hansel Valley** 42.69 78 eP P 18 35 56.0 +0.2
comp=Z,7.9nm,0.7s
GRAC **Grapevine Rang** 42.70 86 P P 18 35 56.5 +0.7
baz=43
INCN **Inchon** 42.74 274 P P 18 35 55.8 -0.2
TPAW **Teton Pass** 42.83 74 eP P 18 35 56.8 -0.2
comp=Z,14nm,1.4s
ISA **Isabella** 42.86 89 P P 18 35 56.9 -0.3
baz=43
JNU **Nakatsue** 42.88 266 P P 18 35 58.0 +0.6
comp=Z,25nm,0.9s,baz=91,slow=3.3,SNR=14
JNU **Nakatsue** 42.88 266 eP P 18 35 57.7 +0.4
comp=Z,11nm,0.9s
RLMT **Red Lodge** 42.94 71 P P 18 35 58.2 +0.3
baz=43,SNR=13
RLMT **Red Lodge** 42.94 71 eP P 18 35 58.2 +0.3
comp=Z,19nm,0.9s
REDW **Red Top Meadow** 42.96 75 eP P 18 35 58.4 +0.4
comp=Z,55nm,2.3s
TJN **Taejon** 42.97 273 ceP P 18 36 00.2 +2.3
R11A **Troy Canyon, C** 42.99 84 P P 18 35 58.5 +0.2
baz=43,SNR=5.1
R11A **Troy Canyon, C** 42.99 84 eP P 18 35 57.7 -0.6
comp=Z,12nm,1.4s
DAC **Darwin (Calif)** 43.02 87 eP P 18 35 59.3 +0.7
DAC **Darwin (Calif)** 43.02 87 eP P 18 35 59.3 +0.7

BGU **Big Grassy Mou** 43.03 79 eP P 18 35 58.7 +0.1
comp=Z,3.1nm,1.0s
AHID **Auburn Hatcher** 43.15 75 P P 18 35 59.8 +0.2
comp=Z,21nm,0.7s
MPMC **Manual Prospec** 43.22 88 P P 18 36 00.4 +0.2
baz=43
TPNV **Topopah Spring** 43.44 86 eP P 18 36 02.6 +0.7
TPNV pmax pmax
comp=Z,9.0nm,0.9s
TPNV **Topopah Spring** 43.44 86 P P 18 36 02.6 +0.7
baz=43,SNR=6.9
TPNV **Topopah Spring** 43.44 86 eP P 18 36 02.6 +0.7
comp=Z,9.0nm,0.9s
BLG **Laguna Peak** 43.49 91 P P 18 36 02.4 +0.2
baz=43
HWUT **Hardware Ranch** 43.53 77 eP P 18 36 03.8 +1.2
comp=Z,5.9nm,0.9s
DUG **Dugway** 43.59 80 eP P 18 36 03.5 +0.4
DUG pmax pmax
comp=Z,8.0nm,0.9s
DUG **Dugway** 43.59 80 P P 18 36 03.0 -0.1
baz=44,SNR=8.8
DUG **Dugway** 43.59 80 eP P 18 36 03.5 +0.4
comp=Z,8.2nm,0.9s
EDW2 **Edwards Air Fo** 43.66 89 P P 18 36 04.0 +0.4
baz=44
SNCC **San Nicolas Is** 43.77 92 P P 18 36 04.9 +0.5
baz=44
LAO **LASA Array** 43.88 68 P P 18 36 04.8 -0.4
baz=44
LAO **LASA Array** 43.88 68 eP P 18 36 06.3 +1.1
comp=Z,13nm,1.0s
BW06 **Boulder Array** 44.08 74 eP P 18 36 07.2 +0.1
DGMT **Dagmar** 44.09 65 P P 18 36 07.0 +0.2
baz=44
GSC **Goldstone** 44.13 88 eP P 18 36 07.7 +0.3
GSC **Goldstone** 44.13 88 P P 18 36 08.1 +0.7
baz=44
GSC **Goldstone** 44.13 88 eP P 18 36 07.7 +0.3
NLU **North Lily Min** 44.19 79 eP P 18 36 08.0 0.0
comp=Z,5.7nm,0.9s
BFSC **Mount Baldy Ra** 44.29 90 P P 18 36 08.7 0.0
baz=44
O16A **Springville** 44.39 79 eP P 18 36 18.9 +9.3
comp=Z,7.8nm,0.8s
A25A **Svangstu Ranch** 44.45 64 P P 18 36 09.8 0.0
baz=44,SNR=7.0
TUQ **Turquoise Moun** 44.60 87 P P 18 36 11.9 +0.7
baz=44
B25A **Knox Farm, Ray** 44.78 64 P P 18 36 11.9 -0.4
baz=45
CCUT **Cedar City** 44.86 83 eP P 18 36 13.6 +0.2
comp=Z,2.1nm,0.8s
MURC **Murrieta** 44.99 90 P P 18 36 15.4 +1.1
baz=45
MSU **Marysvale** 45.00 81 eP P 18 36 14.9 +0.4
MSU pmax pmax
comp=Z,3.0nm,0.6s
MSU **Marysvale** 45.00 81 eP P 18 36 14.9 +0.4
comp=Z,2.9nm,0.6s
A26A **Wade Farm, Ken** 45.08 63 P P 18 36 14.3 -0.3
baz=45
TMUT **Trail Mountain** 45.12 80 eP P 18 36 15.7 +0.2
comp=Z,28nm,0.9s
GMRC **Granite Mounta** 45.19 88 P P 18 36 16.2 +0.3
baz=45
B26A **Jensen Ranch,** 45.25 64 P P 18 36 16.0 -0.1
baz=45
PFO **Pinyon Flat Ob** 45.45 89 P P 18 36 18.2 +0.2
baz=45
BELC **Belle Mtn. Jos** 45.48 89 P P 18 36 18.5 +0.3
baz=45
A27A **Ledoux Ranch,** 45.49 63 P P 18 36 17.4 -0.6
baz=45
P18A **Preston Nutter** 45.51 79 eP P 18 36 19.6 +1.0
comp=Z,8.6nm,0.9s
E25A **Miller Ranch,** 45.61 67 P P 18 36 18.9 0.0
baz=46
C26A **Wahner Farm, P** 45.62 64 P P 18 36 19.0 -0.1
baz=46
SRU **San Rafael** 45.66 79 eP P 18 36 20.2 +0.6
SRU pmax pmax
comp=Z,8.0nm,0.8s
SRU **San Rafael** 45.66 79 eP P 18 36 20.2 +0.6
comp=Z,8.2nm,0.8s
B27A **Peters Farms,** 45.78 63 P P 18 36 19.8 -0.5
baz=46
D26A **Manning** 45.87 65 P P 18 36 20.7 -0.3
baz=46
F25A **Bowman** 45.90 67 P P 18 36 21.4 +0.1
baz=46
IRM **Iron Mountain** 45.91 88 P P 18 36 21.6 +0.2
baz=46
K22A **Casper** 45.97 73 P P 18 36 21.8 -0.2
baz=46
K22A **Casper** 45.97 73 eP P 18 36 21.6 -0.4
comp=Z,8.5nm,0.8s
C27A **Sayler Ranch,** 46.02 64 P P 18 36 22.5 +0.3
baz=46
A28A **Rude Farm, Bot** 46.05 62 P P 18 36 22.4 0.0
baz=46
E26A **Carlson Angus** 46.16 66 P P 18 36 23.3 0.0
baz=46
B28A **Dugan Ranch, T** 46.25 63 P P 18 36 23.5 -0.5
baz=46
G25A **Newell** 46.33 68 P P 18 36 24.5 -0.2
baz=46
F26A **Lodgepole** 46.39 67 P P 18 36 24.9 -0.3
baz=46
O20A **White River Ci** 46.43 77 P P 18 36 25.5 -0.2
baz=46,SNR=6.8
O20A **White River Ci** 46.43 77 eP P 18 36 25.6 -0.2
comp=Z,14nm,0.7s
PDMCI **Parker Dam,Lak** 46.45 87 P P 18 36 26.4 +0.7
baz=46
H25A **Fruitdale** 46.56 69 P P 18 36 26.4 -0.1
baz=46
Y12C **Blythe** 46.57 88 P P 18 36 27.4 +0.8
baz=46
RSSD **Black Hills** 46.59 70 eP P 18 36 26.3 -0.6
RSSD pmax pmax
comp=Z,30nm,1.8s
RSSD **Black Hills** 46.59 70 eP P 18 36 26.3 -0.6
comp=Z,30nm,1.8s
A29A **Manning Farm,** 46.62 62 P P 18 36 26.1 -0.8
baz=46
G26A **Maurine** 46.75 68 P P 18 36 27.9 -0.1
baz=47,SNR=7.9
F27A **Lemmon** 46.75 67 P P 18 36 27.8 -0.2
baz=47
I25A **Rochford** 46.83 70 P P 18 36 28.3 -0.5
baz=47
D28A **Regan** 46.84 64 P P 18 36 28.5 -0.1
baz=47,SNR=8.3
PV09 **Paradox Valley** 46.89 79 eP P 18 36 29.7 +0.3
MDND **Maddock** 47.01 63 P P 18 36 29.4 -0.5
baz=47
PV10 **Paradox Valley** 47.02 79 eP P 18 36 31.3 +0.9
G27A **Dupree** 47.09 67 P P 18 36 30.2 -0.4
baz=47,SNR=5.5
E28A **Huff** 47.11 65 P P 18 36 30.0 -0.8
baz=47
J25A **Sunshine Ranch** 47.15 70 P P 18 36 30.5 -0.7
baz=47
I26A **New Underwood** 47.33 69 P P 18 36 32.2 -0.3
baz=47
N23A **Red Feather La** 47.36 74 P P 18 36 32.9 -0.1
baz=47
N23A **Red Feather La** 47.36 74 eP P 18 36 33.9 +0.8
comp=Z,10nm,1.0s
B30A **Myrtle Farm, E** 47.38 62 P P 18 36 32.6 -0.1
baz=47
WUAZ **Wupatki** 47.39 84 P P 18 36 33.6 +0.4
baz=47
WUAZ **Wupatki** 47.39 84 eP P 18 36 33.4 +0.2
comp=Z,6.7nm,0.8s
H27A **Howes** 47.44 68 P P 18 36 32.8 -0.5
baz=47
PV01 **Paradox Valley** 47.46 79 eP P 18 36 33.9 +0.1
F28A **McLaughlin** 47.47 66 P P 18 36 33.7 +0.2
baz=47
J26A **Sides Ranch, S** 47.63 70 P P 18 36 34.5 -0.3
baz=48
BJT **Baijiatuau** 47.64 284 eP P 18 36 35.6 +0.7
BJT e 18 36 49.4
BJT pmax pmax
comp=Z,20nm,0.8s
BJT **Baijiatuau** 47.64 284 eP P 18 36 35.6 +0.7
comp=Z,20nm,0.8s
BJT e 18 36 49.4
ULM **Lac du Bonnet** 47.71 58 P P 18 36 35.1 -0.1
comp=Z,5.3nm,0.4s,baz=308,slow=7.8,SNR=12
ULM **Lac du Bonnet** 47.71 58 eP P 18 36 35.4 +0.1
ULM **Lac du Bonnet** 47.71 58 eP P 18 36 35.4 +0.1
B31A **Greenbush Farm** 47.77 61 P P 18 36 35.4 -0.4
baz=48
I27A **Quinn** 47.78 69 P P 18 36 35.9 -0.1
baz=48,SNR=5.4
G28A **Parade** 47.85 67 P P 18 36 36.6 +0.1
baz=48
D30A **Buchanan** 47.90 63 P P 18 36 36.9 0.0
baz=48
TLY **Talaya** 47.98 304 eP P 18 36 38.4 +1.0
TLY pmax pmax
comp=Z,6.0nm,0.9s
TLY MLR MLR
comp=Z,105nm,15.0s
TLY **Talaya** 47.98 304 eP P 18 36 38.0 +0.5
comp=Z,5.0nm,1.0s
H28A **Mission Ridge** 48.02 67 P P 18 36 37.6 -0.2
baz=48
F29A **Eureka** 48.03 65 P P 18 36 37.2 -0.7
baz=48
MVCO **Mesa Verde** 48.09 80 P P 18 36 38.6 -0.1
baz=48
M25A **Palm-Egli Farm** 48.17 73 P P 18 36 38.7 -0.4
baz=48
ISCO **Idaho Springs** 48.23 75 P P 18 36 39.7 -0.1
baz=48
J27A **Elkhorn Farm,** 48.29 69 P P 18 36 39.9 -0.1
baz=48
ULN **Ulaanbaatar** 48.30 298 iP P 18 36 39.5 -0.6
ULN pmax pmax
comp=Z,7.0nm,1.0s
ULN **Ulaanbaatar** 48.30 298 eP P 18 36 39.9 -0.2
comp=Z,8.2nm,1.1s
I28A **Midland** 48.33 68 P P 18 36 40.1 -0.2
baz=48,SNR=5.6
G29A **Hoven** 48.35 66 P P 18 36 39.8 -0.5
baz=48
B32A **Ashes, Strandq** 48.40 61 P P 18 36 40.1 -0.5
baz=48
F30A **Leola** 48.49 65 P P 18 36 40.7 -0.7
baz=48
J28A **Allard Ranch,** 48.64 69 P P 18 36 42.4 -0.2
baz=48
SONA1 **Songino Array** 48.67 298 eP P 18 36 42.9 -0.1
SONA1 ePcP PcP 18 38 08.3 +0.5
SONM **Songino Array** 48.68 298 P P 18 36 43.3 +0.3
comp=Z,4.1nm,0.7s,baz=48,slow=9.2,SNR=16
SONM PcP PcP 18 38 07.4 -0.5
comp=Z,7.7nm,1.2s,baz=53,slow=3.7,SNR=5.5
E31A **Nome** 48.71 64 P P 18 36 42.6 -0.5
baz=49
S22A **4UR Ranch, Cre** 48.77 78 P P 18 36 43.7 -0.4
baz=49
AGMN **Agassiz Nation** 48.82 61 P P 18 36 43.5 -0.4
baz=49
AGMN **Agassiz Nation** 48.82 61 eP P 18 36 42.8 -1.1
comp=Z,18nm,0.3s
I29A **Vivian Onida** 48.82 68 P P 18 36 43.7 -0.3
baz=49
ZAK **Zakamensk** 48.90 303 eP P 18 36 44.2 -0.4
ZAK e 18 38 07.7
ZAK pmax pmax
comp=Z,9.0nm,1.2s
ZAK pmax pmax
comp=Z,7.0nm,1.1s
K28A **Ten Mile Ranch** 48.99 70 P P 18 36 44.9 -0.5
baz=49
Q24A **Divide** 49.03 76 P P 18 36 45.8 -0.3
baz=49
N26A **Koester Ranch,** 49.04 73 P P 18 36 45.9 +0.1
baz=49
M27A **Reverse DX Ran** 49.11 72 P P 18 36 46.4 +0.1
baz=49
J29A **Okreek** 49.18 68 P P 18 36 46.8 0.0
baz=49
O26A **Horse Wrangler** 49.34 73 P P 18 36 48.2 0.0
baz=49
SUSD **South Dakota S** 49.35 66 P P 18 36 47.8 -0.3
baz=49
B34A **Aery, Baudette** 49.37 60 P P 18 36 47.8 -0.3
baz=49,SNR=19
I30A **Oacoma** 49.40 67 P P 18 36 48.0 -0.4
baz=49
TIA **Tai'an** 49.45 280 iP P 18 36 49.1 +0.2
TIA PMZ
comp=Z,20nm,0.8s
N27A **Anderson Farm,** 49.46 72 P P 18 36 49.4 +0.3
baz=49
D33A **AnnSam, Waubun** 49.50 62 P P 18 36 48.6 -0.5
baz=49
K29A **Lazy Trails An** 49.57 69 P P 18 36 49.6 -0.2
baz=49
SDCO **Great Sand Dun** 49.59 77 P P 18 36 50.1 -0.2
baz=49
SDCO **Great Sand Dun** 49.59 77 eP P 18 36 51.0 +0.7
comp=Z,14nm,1.4s
H31A **Wolsey** 49.60 66 P P 18 36 49.3 -0.6
baz=50
OGNE **Ogallala** 49.67 72 P P 18 36 50.6 0.0
baz=50
J30A **Dallas** 49.71 68 P P 18 36 50.6 -0.2
baz=50
P26A **Davis Ranch, A** 49.75 74 P P 18 36 51.8 +0.5
baz=50
M28A **Bar X Bar Ranc** 49.79 71 P P 18 36 51.2 -0.3
baz=50
I31A **Royce, Wessing** 49.84 67 P P 18 36 51.5 -0.2
baz=50
HHC **Hu-ho-hao-te** 49.89 288 eP P 18 36 53.1 +0.8
HHC pP pP 18 37 02.1 0.0
HHC S S 18 43 59.2 -0.9
HHC PMZ
comp=Z,31nm,1.0s
HHC PMZ
comp=Z,120nm,5.6s
HHC LN
comp=Z,120nm,15.9s
HHC LE
comp=Z,160nm,16.7s
HHC LZ
comp=Z,130nm,19.6s
D34A **Park Rapids** 49.89 62 P P 18 36 51.5 -0.7
baz=50,SNR=9.2
F33A **5 Mile Ranch,** 50.02 63 P P 18 36 52.4 -0.7
baz=50
K30A **Basset** 50.04 69 P P 18 36 53.1 -0.2
baz=50
J31A **Geddes** 50.17 68 P P 18 36 54.2 -0.1
baz=50
H32A **Carlson Farm,** 50.18 66 P P 18 36 53.8 -0.5
baz=50
O28A **Krutsinger Ran** 50.34 73 P P 18 36 55.8 +0.1
baz=50
L30A **Spencer Herefo** 50.42 69 P P 18 36 55.8 -0.4
baz=50
I32A **Karley and Nic** 50.45 66 P P 18 36 56.3 -0.1
baz=50
H33A **Prehn Over Nor** 50.47 65 P P 18 36 55.6 -0.9
baz=50
R26A **Arlington** 50.48 75 P P 18 36 56.7 -0.2
baz=50
D35A **Remer** 50.52 61 P P 18 36 56.7 -0.2
baz=50,SNR=8.5
N29A **Votaw Ranch, W** 50.59 71 P P 18 36 57.3 -0.3
baz=50
T25A **Trinidad** 50.64 77 P P 18 36 58.2 +0.1
baz=50,SNR=5.9
T25A **Trinidad** 50.64 77 eP P 18 36 59.1 +0.9
E35A **Pequot Lakes** 50.65 62 P P 18 36 57.5 -0.3
baz=50
LAZ **Ladron** 50.74 82 eP P 18 36 59.4 +0.5
C36A **Pine Crest Far** 50.78 60 P P 18 36 58.1 -0.7
baz=51,SNR=5.7
R27A **Eads** 50.89 75 P P 18 37 00.1 +0.2
baz=51
S26A **Kim** 50.90 76 P P 18 36 59.8 -0.3
baz=51,SNR=5.0
O29A **4D Ranch, Culb** 50.92 72 P P 18 37 00.2 +0.2
baz=51
D36A **Goodland** 50.95 60 P P 18 36 59.8 -0.3
baz=51
F35A **Swanville** 50.97 63 P P 18 36 59.8 -0.5
baz=51,SNR=5.5

**Q28A Sharon Springs** 50.98 74 P P 18 37 00.3 -0.2
baz=51
**K32A Verdigre** 51.00 68 P P 18 37 00.1 -0.5
baz=51
**T26A Comanche Natio** 51.12 77 P P 18 37 01.4 -0.3
baz=51
**ECSD EROS Data Cent** 51.12 66 P P 18 37 00.7 -0.8
baz=51,SNR=5.3
**ECSD EROS Data Cent** 51.12 66 *e*P P 18 37 00.1 -1.4
comp=Z,6.8nm,0.8s
**NJ2 Nanjing** 51.12 275 *e*P P 18 37 04.7 +3.2
NJ2 PMZ
comp=Z,20nm,0.7s
**C37A Embarrass** 51.15 59 P P 18 37 01.1 -0.5
baz=51
**P29A Atwood** 51.17 73 P P 18 37 01.9 -0.1
baz=51
**J33A Davis** 51.17 66 P P 18 37 01.5 -0.4
baz=51
**DAG Danmarks Havn** 51.21 7 *i* P P 18 37 00.0 -1.6
DAG pmax pmax
comp=Z,3.0nm,0.9s
**DAG Danmarks Havn** 51.21 7 *i* P P 18 37 00.0 -1.6
comp=Z,3.3nm,0.9s
**M31A Lambtecht Ranc** 51.23 70 P P 18 37 01.9 -0.4
baz=51
**D37A Cotton** 51.36 60 P P 18 37 02.5 -0.7
baz=51
**EYMN Ely** 51.39 59 P P 18 37 02.9 -0.5
baz=51
**EYMN Ely** 51.39 59 *e*P P 18 37 02.6 -0.7
comp=Z,23nm,1.3s
**R28A Tribune** 51.45 74 P P 18 37 04.1 +0.1
baz=51
**F36A Milaca** 51.55 62 P P 18 37 04.2 -0.4
baz=51
**121A Cookes Peak, D** 51.59 84 P P 18 37 05.5 +0.2
baz=52
**Q29A Oakley** 51.60 73 P P 18 37 04.6 -0.5
baz=51
**P30A Selden** 51.62 72 P P 18 37 05.3 0.0
baz=52
**C38A Sawbill Land.** 51.65 59 P P 18 37 04.6 -0.7
baz=52
**BGNE Belgrade** 51.68 69 P P 18 37 05.4 -0.3
baz=52
**O31A Woolen Ranch,** 51.78 71 P P 18 37 06.2 -0.2
baz=52
**S28A Manter** 51.88 75 P P 18 37 07.2 -0.1
baz=52
**T28A Walsh** 52.05 76 P P 18 37 08.9 +0.3
baz=52
**K34A Le Mars** 52.07 67 P P 18 37 08.0 -0.5
baz=52
**U27A Thompson Grove** 52.07 77 P P 18 37 09.1 +0.3
baz=52
**P31A Stockton** 52.15 72 P P 18 37 08.9 -0.3
baz=52
**O32A Brockman Farm,** 52.33 70 P P 18 37 10.4 -0.1
baz=52
**SPMN St. Paul** 52.34 62 P P 18 37 09.9 -0.6
baz=52
**L34A Svendsen Farm,** 52.36 67 P P 18 37 10.1 -0.6
baz=52
**CBKS Cedar Bluff** 52.39 73 P P 18 37 11.0 0.0
baz=52
**R30A Dighton** 52.41 73 P P 18 37 11.0 -0.1
baz=52
**U28A Mallet** 52.47 77 P P 18 37 11.2 -0.5
baz=52
**Q31A Ellis** 52.47 72 P P 18 37 11.2 -0.4
baz=52
**SUMG Summit** 52.68 15 *e*P P 18 37 13.4 +0.3
**SUMG Summit** 52.68 15 *i* P P 18 37 13.1 0.0
comp=Z,5.4nm,0.6s
**SUMG Summit** 52.68 15 *e*P P 18 37 13.4 +0.3
**S30A Montezuma** 52.71 74 P P 18 37 13.2 -0.3
baz=53
**R31A Burdett** 52.85 73 P P 18 37 14.2 -0.3
baz=53
**O33A Hebron** 52.86 70 P P 18 37 13.9 -0.5
baz=53
**Q32A Meitler Ranch,** 52.98 72 P P 18 37 15.0 -0.3
baz=53,SNR=9.7
**U29A Oasis Ranch, S** 53.00 76 P P 18 37 15.9 +0.3
baz=53
**M35A Neola** 53.07 68 P P 18 37 16.0 +0.1
baz=53
**P33A Williams Farm,** 53.20 71 P P 18 37 16.8 -0.2
baz=53
**R32A Long Quarter,** 53.25 72 P P 18 37 17.1 -0.3
baz=53
**O34A Beatrice** 53.31 69 P P 18 37 17.6 -0.1
baz=53
**U30A WK&E Inc. Balk** 53.32 75 P P 18 37 17.8 -0.2
baz=53
**Q33A Connelly Farm,** 53.40 71 P P 18 37 18.3 -0.2
baz=53,SNR=8.5
**N35A Tabor** 53.49 68 P P 18 37 19.1 +0.1
baz=53
**T31A Randall Ranch,** 53.54 74 P P 18 37 19.3 -0.2
baz=53
**P34A Walnut Farm, R** 53.64 70 P P 18 37 19.6 -0.6
baz=54
**W29A Amraillo** 53.65 77 P P 18 37 20.1 -0.3
baz=54
**MNTX Cornudas Mount** 53.65 83 P P 18 37 20.6 +0.2
baz=54,SNR=5.5
**MNTX Cornudas Mount** 53.65 83 *e*P P 18 37 20.3 -0.1
**MSTX Muleshoe** 53.73 79 P P 18 37 21.1 0.0
baz=54
**MSTX Muleshoe** 53.73 79 *e*P P 18 37 20.3 -0.7
comp=Z,7.9nm,0.8s
**R33A Olander Ranch,** 53.76 72 P P 18 37 21.1 0.0
baz=54
**AMTX Amarillo** 53.79 78 P P 18 37 20.9 -0.5
baz=54
**COWI Conover** 53.80 59 *e*P P 18 37 20.5 -0.8
comp=Z,6.7nm,0.5s
**V30A Spur Ranch, Mi** 53.81 76 P P 18 37 21.7 +0.2
baz=54
**T32A Huddler Ranch,** 53.94 74 P P 18 37 21.9 -0.5
baz=54
**Q34A Chapman** 53.98 71 P P 18 37 22.2 -0.4
baz=54
**KSU1 Kansas State U** 54.06 70 P P 18 37 22.7 -0.6
baz=54
**X29A Tulia** 54.07 78 P P 18 37 23.5 0.0
baz=54
**Y28A McKinney Farm,** 54.09 79 P P 18 37 23.2 -0.5
baz=54
**P35A Duane Minner,** 54.13 70 P P 18 37 23.3 -0.5
baz=54
**R34A Isabella, Hill** 54.20 71 P P 18 37 23.9 -0.4
baz=54
**S33A Kaszmaul Farm,** 54.22 73 P P 18 37 23.9 -0.5
baz=54
**O36A Bolckow** 54.35 68 P P 18 37 24.8 -0.5
baz=54
**U32A Winter Ranch,** 54.42 74 P P 18 37 25.9 -0.1
baz=54
**Z28A Tucker Farm, M** 54.43 80 P P 18 37 26.0 0.0
baz=54
**Y29A Porterfield Fa** 54.48 78 P P 18 37 26.5 0.0
baz=54
**P36A Good Intent, A** 54.55 69 P P 18 37 26.1 -0.6
baz=54
**X30A Coker Ranch, T** 54.57 77 P P 18 37 26.5 -0.6
baz=54
**W31A Holland Ranch,** 54.65 76 P P 18 37 27.2 -0.4
baz=54
**S34A Willow Spring** 54.68 72 P P 18 37 26.9 -0.9
baz=54
**R35A Emporia Munici** 54.81 71 P P 18 37 27.9 -0.8
baz=55
**128A Castleberry Fa** 54.82 80 P P 18 37 28.7 -0.2
baz=55
**Z29A Hungry Hill Ra** 54.86 79 P P 18 37 29.2 0.0
baz=55
**Y30A Stafford Cattl** 54.94 78 P P 18 37 29.8 +0.1
baz=55
**WHN Wuhan** 54.96 276 P P 18 37 31.1 +1.3
**X31A McDonald Ranch** 55.00 77 P P 18 37 29.9 -0.2
baz=55
**T34A McClaskey Farm** 55.08 73 P P 18 37 30.3 -0.3
baz=55,SNR=5.8
**228A UT Block 9, Go** 55.09 81 P P 18 37 31.1 +0.2
baz=55

**W32A Sentinel** 55.11 76 P P 18 37 31.1 +0.1
baz=55
**S35A Otter Creek Ra** 55.16 71 P P 18 37 30.6 -0.6
baz=55,SNR=5.8
**Z30A Sanderson Ranc** 55.20 79 P P 18 37 31.4 -0.3
baz=55
**R36A Gordon, Harris** 55.22 70 P P 18 37 31.2 -0.4
baz=55,SNR=11
**V33A Lossen Ranch,** 55.22 74 P P 18 37 31.6 -0.2
baz=55
**U34A Anderson Ranch** 55.27 73 P P 18 37 31.4 -0.6
baz=55
**T35A Sooner Cattle** 55.56 72 P P 18 37 33.6 -0.5
baz=55
**X32A Elmer** 55.56 76 P P 18 37 33.5 -0.7
baz=55
**W33A Caddo, Fort Co** 55.56 75 P P 18 37 33.6 -0.6
baz=55
**S36A Lake Cedric, C** 55.57 71 P P 18 37 33.5 -0.6
baz=55
**SSLB Suanglung** 55.62 266 *e*P P 18 37 35.0 +0.3
**WMOK Wichita Mounta** 55.65 76 *e*P P 18 37 34.4 -0.4
**WMOK Wichita Mounta** 55.65 76 *e*P P 18 37 34.4 -0.4
**ZALV Zalesovo Beam** 55.66 315 P P 18 37 33.9 -0.7
comp=Z,1.5nm,0.5s,baz=42,slow=7.3,SNR=5.4
ZALV PcP PcP 18 38 34.2 +0.5
comp=Z,5.7nm,0.8s,baz=34,slow=3.7,SNR=12
ZALV LR LR 19 03 13.1
comp=Z,95nm,19.5s,baz=78,slow=38
**ZALV Zalesovo Beam** 55.66 315 *i* P P 18 37 34.5 -0.1
ZALV pmax pmax
comp=Z,1.0nm,0.5s
**V34A Guthrie** 55.68 74 P P 18 37 34.7 -0.3
baz=56
**229A Bryant Ranch,** 55.68 80 P P 18 37 35.0 -0.1
baz=56
**Y32A R-V Farms, Ver** 55.75 77 P P 18 37 35.3 -0.2
baz=56
**NVS Novosibirsk** 55.76 317 *e*P P 18 37 34.7 -0.5
**130A Snyder** 55.77 79 P P 18 37 35.6 -0.1
baz=56
**Z31A Sharp Cattle R** 55.78 78 P P 18 37 35.2 -0.6
baz=56
**U35A Pawnee** 55.79 73 P P 18 37 35.7 -0.1
baz=56
**T36A Boggs Farm, Ca** 55.84 72 P P 18 37 35.2 -0.9
baz=56
**XAN Xi'an** 55.92 283 P P 18 37 36.4 -0.4
XAN PMZ
comp=Z,9.0nm,1.0s
XAN PMZ
comp=Z,68nm,7.4s
**W34A Bridge Creek,** 55.93 75 P P 18 37 36.4 -0.4
baz=56
**S37A Fort Scott** 55.99 70 P P 18 37 36.6 -0.7
baz=56,SNR=6.7
**131A Roby** 56.07 79 P P 18 37 37.8 -0.1
baz=56
**230A Sterling City** 56.16 80 P P 18 37 38.5 -0.1
baz=56,SNR=5.6
**Z32A Haskell** 56.20 77 P P 18 37 38.6 -0.1
baz=56,SNR=5.4
**Y33A Hilltop Ranch,** 56.24 76 P P 18 37 39.0 -0.1
baz=56
**X34A Smith Ranch, M** 56.32 75 P P 18 37 39.6 0.0
baz=56
**TXAR Lajitas Array** 56.35 84 P P 18 37 39.7 -0.3
comp=Z,4.2nm,0.8s,baz=295,slow=4.9,SNR=42
TXAR PcP PcP 18 38 37.4 +0.4
comp=Z,2.7nm,0.9s,baz=284,slow=3.6,SNR=2.7
**T37A Cheneyville 18** 56.37 71 P P 18 37 39.1 -0.8
baz=56,SNR=6.9
**W35A Tecumseh** 56.52 74 P P 18 37 41.3 +0.2
baz=56
**429A Davenport Ranc** 56.55 82 P P 18 37 40.7 -0.6
baz=56
**ABTX Abilene, Hawle** 56.56 78 P P 18 37 41.4 0.0
baz=56
**Z33A Whitaker Ranch** 56.65 77 P P 18 37 41.3 -0.6
baz=56
**V36A Jenks** 56.66 73 P P 18 37 41.8 -0.2
baz=56
**TUL1 Tulsa** 56.66 73 P P 18 37 41.2 -0.8
baz=56
**529A Stev Forest Ra** 56.70 82 P P 18 37 41.7 -0.7
baz=57
**U37A Salina** 56.73 72 P P 18 37 42.0 -0.5
baz=57,SNR=9.5
**Y34A Reagan Ranch,** 56.80 76 P P 18 37 43.1 +0.1
baz=57,SNR=8.1
**430A Baggett Ranch,** 56.85 81 P P 18 37 43.2 -0.3
baz=57,SNR=6.9
**W36A Wetumka** 56.92 74 P P 18 37 43.6 -0.3
baz=57
**X35A Drake** 56.98 75 P P 18 37 44.1 -0.1
baz=57,SNR=5.3
**331A San Angelo** 56.99 80 P P 18 37 44.0 -0.4
baz=57
**133A Hamilton Ranch** 57.02 78 P P 18 37 44.3 -0.2
baz=57
**232A Coleman** 57.07 79 P P 18 37 44.5 -0.5
baz=57,SNR=6.0
**V37A Hulbert** 57.07 72 P P 18 37 44.3 -0.6
baz=57,SNR=6.4
**Z34A Collier Ranch,** 57.11 76 P P 18 37 44.9 -0.3
baz=57
**U38A Gravette** 57.14 71 P P 18 37 44.5 -0.9
baz=57
**530A J-C Ranch, Com** 57.23 82 P P 18 37 46.0 -0.1
baz=57,SNR=10
**X36A Centrahoma** 57.23 74 P P 18 37 45.9 -0.1
baz=57
**Y35A Marietta** 57.27 75 P P 18 37 46.7 +0.3
baz=57
**431A Sonora** 57.31 81 P P 18 37 46.2 -0.5
baz=57,SNR=6.2
**HDIL Hopedale** 57.33 65 P P 18 37 46.0 -0.6
baz=57
**332A Millersview** 57.36 79 P P 18 37 46.5 -0.6
baz=57,SNR=5.8
**W37A Quinton** 57.41 73 P P 18 37 47.5 +0.2
baz=57,SNR=9.0
**233A Rising Star** 57.44 78 P P 18 37 47.8 +0.3
baz=57
**V38A Canehill** 57.52 72 P P 18 37 47.6 -0.5
baz=57
**134A White-Moore Ra** 57.55 77 P P 18 37 48.1 -0.2
baz=57
**LZH Lanzhou** 57.58 289 *e*P P 18 37 50.3 +1.6
LZH pP **pP** 18 37 58.1 -0.6
LZH sP **sP** 18 38 02.2 -0.3
LZH PMZ
comp=Z,47nm,1.0s
LZH PMZ
comp=Z,130nm,4.0s
**432A Menard** 57.68 80 P P 18 37 48.7 -0.6
baz=58
**GTA Gaotai** 57.69 294 *e*P P 18 37 49.2 -0.1
GTA pP **pP** 18 37 59.3 0.0
GTA sP **sP** 18 38 03.4 +0.2
GTA S **S** 18 45 41.7 -3.9
GTA sS **sS** 18 45 58.8 -3.2
GTA SS **SS** 18 49 32.5 -3.1
GTA PMZ
comp=Z,8.0nm,1.2s
GTA PMZ
comp=Z,68nm,5.0s
GTA LN
comp=Z,140nm,17.3s
GTA LE
comp=Z,150nm,16.6s
GTA LZ
comp=Z,210nm,17.6s
**531A Rocksprings** 57.71 81 P P 18 37 49.0 -0.5
baz=58
**Y36A Durant** 57.73 75 P P 18 37 49.4 -0.2
baz=58
**X37A Clayton** 57.81 74 P P 18 37 49.5 -0.6
baz=58
**333A Richland Sprin** 57.86 79 P P 18 37 50.1 -0.4
baz=58,SNR=5.3
**234A Clairette** 57.91 78 P P 18 37 50.7 -0.2
baz=58
**JCT Junction City** 57.95 80 P P 18 37 50.5 -0.6
baz=58
**W38A Poteau** 57.99 73 P P 18 37 51.0 -0.4
baz=58
**Z36A Blue Ridge** 58.08 75 P P 18 37 51.9 0.0
baz=58
**X38A Whitesboro** 58.08 73 P P 18 37 51.6 -0.4
baz=58
**532A Rocksprings** 58.13 81 P P 18 37 51.3 -1.1
baz=58
**433A Art** 58.20 79 P P 18 37 52.4 -0.5
baz=58
**631A Perdido Creek** 58.22 82 P P 18 37 52.3 -0.8
baz=58
**334A Lometa** 58.32 78 P P 18 37 53.8 +0.1
baz=58,SNR=11
**WHTX Lake Whitney** 58.34 77 P P 18 37 54.1 +0.3
baz=58
**ARCES ARCESS Array B** 58.42 352 P P 18 37 52.9 -1.0
comp=Z,3.2nm,0.6s,baz=25,slow=6.7,SNR=9.8
ARCES PcP PcP 18 38 44.5 +0.2
comp=Z,7.0nm,0.7s,baz=30,slow=4.6,SNR=10
**SCHQ Schefferville** 58.51 40 P P 18 37 54.7 0.0
comp=Z,6.8nm,0.7s,baz=358,slow=6.0,SNR=3.9
**632A Uvalde** 58.64 81 P P 18 37 55.4 -0.6
baz=58
**434A Burnet** 58.66 79 P P 18 37 55.9 -0.2
baz=58,SNR=5.2
**SFIN Scholer Farm** 58.68 63 P P 18 37 55.6 -0.5
baz=58,SNR=6.0
**SFIN Scholer Farm** 58.68 63 *e*P P 18 37 55.8 -0.3
**MIAR Mount Ida** 58.92 72 *e*P P 18 37 57.7 -0.1
**MIAR Mount Ida** 58.92 72 P P 18 37 57.8 -0.1
baz=59,SNR=7.9
**MIAR Mount Ida** 58.92 72 *e*P P 18 37 57.7 -0.1
**732A Laxson Ranch,** 59.07 82 P P 18 37 58.5 -0.5
baz=59,SNR=5.3
**336A Riesel** 59.13 77 P P 18 37 59.4 +0.1
baz=59
**OLIL Olney** 59.24 65 *e*P P 18 37 59.9 -0.1
**832A Faith Ranch, C** 59.38 82 P P 18 38 00.7 -0.5
baz=59
**436A Wall Ranch, Ga** 59.59 78 P P 18 38 02.9 +0.3
baz=59
**BLO Bloomington** 59.83 64 P P 18 38 03.6 -0.5
**BLO Bloomington** 59.83 64 P P 18 38 03.6 -0.5
**635A Leesville** 59.97 80 P P 18 38 05.0 -0.1
baz=60
**933A Laredo** 60.30 82 P P 18 38 07.5 0.0
baz=60
**SZP Santa** 60.57 261 *e*P P 18 38 09.8 +0.5
comp=Z,57nm,0.6s
**KURK Kurchatov** 60.64 316 *e*P P 18 38 09.6 +0.1
KURK *e* 18 38 53.5
KURK pmax pmax
comp=Z,39nm,0.5s
**KURK Kurchatov** 60.64 316 *e*P P 18 38 09.6 +0.1
comp=Z,39nm,0.5s
KURK *e*PcP PcP 18 38 53.5 +0.1
**934A Benavides** 60.77 82 P P 18 38 10.9 +0.3
baz=61
**034A Hebbronville** 61.05 82 P P 18 38 13.0 +0.4
baz=61
**CD2 Chengdu** 61.22 284 *e*P P 18 38 13.0 -0.8
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**WMQ Urumqi** 61.24 305 P P 18 38 14.5 +0.8
WMQ pP **pP** 18 38 25.0 +1.2
WMQ S **S** 18 46 29.0 -2.3
WMQ PMZ
comp=Z,18nm,1.0s
WMQ PMZ
comp=Z,150nm,5.0s
WMQ LN
comp=Z,100nm,22.0s
WMQ LE
comp=Z,68nm,20.0s
WMQ LZ
comp=Z,74nm,20.0s
**OXF Oxford** 61.41 70 *e*P P 18 38 13.9 -1.0
OXF pmax pmax
comp=Z,53nm,1.0s
**OXF Oxford** 61.41 70 *e*P P 18 38 13.8 -1.0
comp=Z,53nm,1.0s
**035A Encino** 61.51 82 P P 18 38 16.3 +0.7
baz=61
**MK31 Makanchi Array** 61.80 310 *e*P P 18 38 16.9 -0.5
MK31 pmax pmax
comp=Z,5.0nm,0.3s
**MKAR Makanchi Array** 61.80 310 P P 18 38 16.9 -0.5
comp=Z,7.4nm,0.4s,baz=47,slow=6.1,SNR=145
MKAR LR LR 19 07 36.3
comp=Z,78nm,18.1s,baz=37,slow=38
**MKAR Makanchi Array** 61.80 310 *i* P P 18 38 16.6 -0.8
MKAR pmax pmax
comp=Z,8.0nm,0.4s
**MKAR Makanchi Array** 61.80 310 *e*P P 18 38 17.1 -0.3
**MAKZ Makanchi** 61.94 311 *e*P P 18 38 18.0 -0.3
**BVA0 Borovoye Array** 62.33 322 *i* P P 18 38 21.4 +0.6
BVA0 pmax pmax
comp=Z,8.0nm,0.4s
**BRVK Borovoye** 62.34 322 ⇑ *i* P P 18 38 21.5 +0.6
BRVK pmax pmax
comp=Z,3.0nm,0.5s
**BRVK Borovoye** 62.34 322 *e*P P 18 38 20.9 0.0
**LONY Lake Ozonia** 62.35 52 *e*P P 18 38 18.6 -2.4
comp=Z,21nm,1.0s
**GYA Guiyang** 62.62 279 *e*P P 18 38 25.0 +1.7
GYA PMZ
comp=Z,10.0nm,1.0s
**MCWV Mont Chateau** 63.17 59 *e*P P 18 38 27.2 +0.6
**BINY Binghamton** 63.38 55 *e*P P 18 38 29.0 +1.0
**SSPA Standing Stone** 63.52 58 *e*P P 18 38 29.2 +0.3
comp=Z,88nm,0.9s
**ARU Arti** 63.76 330 *d i* P P 18 38 30.6 +0.4
ARU 18 39 01.3
ARU 18 40 47.5
ARU S **S** 18 47 03.4 +1.0
ARU SS **SS** 18 51 09.9 +0.4
ARU pmax pmax
comp=Z,8.0nm,0.6s
**ARU Arti** 63.76 330 *e*P P 18 38 30.3 +0.1
**BLA Blacksburg** 64.62 62 *e*P P 18 38 35.7 -0.5
**BLA Blacksburg** 64.62 62 *e*P P 18 38 35.7 -0.5
**LUPA Lehigh Univers** 64.86 56 *e*P P 18 38 38.9 +1.2
**OTUK Ortayu** 65.21 317 P P 18 38 40.2 +0.3
OTUK pmax pmax
comp=Z,6.0nm,0.5s
**KMSC Kings Mountain** 65.61 64 P P 18 38 42.5 -0.1
baz=65
**KMSC Kings Mountain** 65.61 64 *e*P P 18 38 42.2 -0.4
comp=Z,8.8nm,0.3s
**GOGA Godfrey** 65.65 67 *e*P P 18 38 41.5 -1.4
**GOGA Godfrey** 65.65 67 *e*P P 18 38 41.5 -1.4
**KMI Kunming** 66.01 281 P P 18 38 45.9 +0.3
KMI pP **pP** 18 38 58.1 +2.4
KMI sP **sP** 18 39 02.1 +2.6
KMI PMZ
comp=Z,6.0nm,1.2s
KMI PMZ
comp=Z,86nm,4.4s
**QIZ Qiongzhong** 66.08 271 P P 18 38 50.9 +5.0
QIZ pP pP 18 38 56.8 +0.8
QIZ sP sP 18 39 00.5 +0.7
QIZ S S 18 47 24.4 -7.5
QIZ PMZ
comp=Z,26nm,2.2s
**FINES FINESS Array B** 66.22 349 P P 18 38 45.3 -0.9
comp=Z,1.3nm,0.4s,baz=13,slow=6.3,SNR=17
**FINES FINESS Array B** 66.22 349 *i* P P 18 38 45.2 -0.9
FINES pmax pmax
comp=Z,1.0nm,0.4s
**NB2 NORSAR Subarra** 67.78 357 P P 18 38 55.7 -0.4
comp=Z,7.3nm,1.0s,baz=5.2,slow=6.5
**NOA NORSAR Array B** 67.78 357 P P 18 38 55.9 -0.2
comp=Z,0.4nm,0.4s,baz=327,slow=19,SNR=18
NOA LR LR 19 07 15.4
comp=Z,22nm,21.9s,baz=280,slow=35
**AAK Ala-Archa** 68.59 312 ⇓ *i* P P 18 39 02.2 +0.5
AAK pmax pmax
comp=Z,21nm,0.6s
**AAK Ala-Archa** 68.59 312 *e*P P 18 39 01.7 0.0
**SIJI Sorong** 68.93 240 P P 18 39 03.4 -0.5
comp=Z,18nm,0.8s,baz=51,slow=7.2,SNR=10
**AKTO Aktyubinsk** 68.96 327 P P 18 39 04.0 +0.4
AKTO pmax pmax
comp=Z,7.0nm,0.5s
**AB31 Akbulak array** 69.27 325 *e*P P 18 39 06.2 +0.6
AB31 pmax pmax

comp=Z,4.0nm,0.3s
**ABKAR Akbulak array 69.27 325** *e*P **P 18 39 06.0 +0.4**
comp=Z,6.3nm,0.4s
ABKAR *e*PcP **PcP 18 39 29.3 +0.2**
**LSA Lhasa 69.59 292** *e*P **P 18 39 09.8 +1.3**
LSA pmax pmax
comp=Z,31nm,0.9s
**LSA Lhasa 69.59 292** *e*P **P 18 39 09.8 +1.3**
comp=Z,31nm,0.9s
**MNAS Manas 69.62 313** P P **18 39 08.8 +0.8**
MNAS pmax pmax
comp=Z,10.0nm,0.5s
**KK31 Karatay Array 70.03 315** *e*P **P 18 39 10.7 +0.3**
KK31 pmax pmax
comp=Z,12nm,0.4s
**KKAR Karatay Array 70.03 315** *e*P **P 18 39 10.4 0.0**
KKAR pmax pmax
comp=Z,15nm,0.4s
**KKAR Karatay Array 70.03 315** *e*P **P 18 39 10.4 0.0**
comp=Z,15nm,0.4s
**PMOR Pomariorio Ree 70.27 152** *e*T T 19 56 21.6
comp=Z,3.5nm,0.2s
**KSH Kashi 70.31 309** P P 18 39 16.4 +4.1
KSH *e*pP pP 18 39 26.4 +4.0
KSH PP PP 18 41 54.8 +7.2
KSH S **S 18 48 24.2 +2.2**
KSH PMZ
comp=Z,16nm,0.7s
KSH LN
comp=Z,110nm,5.0s
KSH LE
comp=Z,120nm,5.2s
KSH LZ
comp=Z,130nm,6.1s
**PPT2 Papeete2 72.25 154** *e*LR LR 19 01 20.1
comp=Z,83nm,23.8s
**CMAR Chiang Mai Arr 73.31 279** P **P 18 39 30.6 +0.2**
comp=Z,2.6nm,0.6s,baz=28,slow=5.7,SNR=20
CMAR LR LR 19 15 18.4
comp=Z,21nm,19.3s,baz=10.0,slow=39
**CMAR Chiang Mai Arr 73.31 279** *i* P **P 18 39 30.3 -0.1**
CMAR pmax pmax
comp=Z,3.0nm,0.6s
**TAPN Taplejung 73.35 293** *e*P **P 18 39 31.9 +1.0**
comp=Z,84nm,0.7s
**ODAN Odare 73.90 293** *e*P **P 18 39 34.7 +0.6**
comp=Z,38nm,0.8s
**GUN Gumba 73.97 295** *e*P **P 18 39 35.6 +1.0**
comp=Z,57nm,0.4s
**DZET Dzherino 74.24 313** P P **18 39 36.4 +0.6**
DZET pmax pmax
comp=Z,14nm,0.5s
**RAMN Ramite 74.29 293** *e*P **P 18 39 37.1 +0.7**
comp=Z,150nm,0.7s
**KKN Kakani 74.40 295** *e*P **P 18 39 37.8 +0.8**
comp=Z,17nm,0.4s
**PKI Pulchoki 74.50 295** *e*P **P 18 39 38.3 +0.6**
comp=Z,83nm,1.0s
**PKIN Phulchoki 74.50 295** *e*P **P 18 39 38.1 +0.5**
comp=Z,57nm,1.0s
**GKN Gorkha 74.60 296** *e*P **P 18 39 38.7 +0.6**
**DMN Daman 74.64 295** *e*P **P 18 39 39.2 +0.8**
comp=Z,63nm,0.9s
**DANN Dangsing 74.83 296** *e*P **P 18 39 40.5 +0.9**
comp=Z,11nm,0.6s
**KOLN Koldanda 75.37 296** *e*P **P 18 39 43.1 +0.6**
comp=Z,21nm,0.5s
**AKASG Malin Array Be 76.18 344** P **P 18 39 45.5 -1.0**
comp=Z,2.2nm,0.3s,baz=17,slow=5.7,SNR=6.5
AKASG LR LR 19 18 05.5
comp=Z,32nm,18.2s,baz=10.0,slow=40
**AKASG Malin Array Be 76.18 344** *i* P **P 18 39 45.7 -0.8**
AKASG pmax pmax
comp=Z,2.0nm,0.3s
**CLL Collm 77.42 355** *i* P **P 18 39 53.5 0.0**
**CLL Collm 77.42 355** *i* P **P 18 39 53.5 0.0**
**BRG Berggiesshubel 77.80 354** *e*P **P 18 39 55.5 -0.1**
comp=Z,4.1nm,0.8s
**BRG Berggiesshubel 77.80 354** *e*P **P 18 39 55.5 -0.1**
BRG pmax pmax
comp=Z,4.0nm,0.8s
**DPC Dobruska-Polom 78.15 353** *e*P **P 18 39 58.1 +0.5**
**DPC Dobruska-Polom 78.15 353** *e*P **P 18 39 58.1 +0.5**
**STHS Stebnicka Huta 78.58 349** *e*P **P 18 40 00.9 +0.9**
**STHS Stebnicka Huta 78.58 349** *e*P **P 18 40 00.8 +0.8**
**PRU Pruhonice 78.64 354** *e*P **P 18 40 00.3 0.0**
**PRU Pruhonice 78.64 354** *e*P **P 18 40 00.3 0.0**
**CTA Charters Tower 78.84 217** P **P 18 40 00.8 -0.9**
comp=Z,3.3nm,0.5s,baz=8.4,slow=9.4,SNR=7.0
**KOLS Kolonicke sedl 78.93 348** *e*P **P 18 39 59.7 -2.3**
**KOLS Kolonicke sedl 78.93 348** *e*P **P 18 39 59.7 -2.3**
**KHC Kasperske Hory 79.56 354** *e*P **P 18 40 05.8 +0.4**
KHC pmax pmax
comp=Z,1.0nm,1.0s
**KHC Kasperske Hory 79.56 354** *e*P **P 18 40 05.8 +0.4**
**KHC Kasperske Hory 79.56 354** *e*P **P 18 40 05.8 +0.4**
comp=Z,1.3nm,1.0s
**GEYT Alibeck 79.59 320** P **P 18 40 06.4 +0.6**
comp=Z,12nm,0.8s,baz=349,slow=4.7,SNR=28
GEYT LR LR 19 21 40.9
comp=Z,68nm,18.3s,baz=80,slow=40
**KBZ Khabaz 79.67 333** P **P 18 40 06.8 +0.8**
comp=Z,2.1nm,0.7s,baz=259,slow=8.1,SNR=5.0
**GERES GERESS Array B 79.83 354** P **P 18 40 06.9 -0.1**
comp=Z,1.5nm,0.7s,baz=0.0,slow=5.3,SNR=7.5
**BFO Black Forest 80.59 358** *i* P **P 18 40 12.3 +1.3**
**WRAB Tennant Creek 83.68 227** *i* P **P 18 40 25.5 -1.8**
WRAB pmax pmax
comp=Z,36nm,1.5s
**WRA Warramunga Arr 83.69 227** P **P 18 40 25.4 -2.0**
comp=Z,2.9nm,0.8s,baz=35,slow=6.7,SNR=5.3
**BRTR Keskin Array B 85.82 338** P **P 18 40 37.7 -0.6**
comp=Z,2.8nm,0.5s,baz=14,slow=2.1,SNR=17
**BRTR Keskin Array B 85.82 338** *i* P **P 18 40 39.2 +0.9**
BRTR pmax pmax
comp=Z,3.0nm,0.5s
**ASAR Alice Springs 87.12 226** P **P 18 40 43.4 -1.1**
comp=Z,2.4nm,0.7s,baz=27,slow=5.6,SNR=8.0
**GSI Gunungsitoli 87.31 269** *e*P **P 18 40 45.5 -0.2**
comp=Z,7.5nm,0.6s
**ESDC Sonseca Array 88.96 7** P **P 18 40 52.3 -0.9**
comp=Z,0.8nm,0.5s,baz=344,slow=3.6,SNR=5.3
**RAYN Ar Rayn 97.30 323** *e*P **P 18 41 31.0 -0.9**
comp=Z,4.3nm,0.9s
**TORD Torodi Ar. Bea 115.65 3** PKP **PKPdf 18 46 40.3 -0.8**
comp=Z,1.2nm,0.5s,baz=343,slow=2.4,SNR=24
**MAW Mawson 147.93 218** PKPbc **PKPbc 18 47 41.9 -0.5**
comp=Z,7.4nm,0.6s,baz=105,slow=3.6,SNR=23
**BOSA Boshof 152.58 318** PKPbc **PKPbc 18 47 55.0 0.0**
comp=Z,10nm,0.5s,baz=20,slow=2.6,SNR=35

*ISCJB **08** 18:34:51.0±0.8,5.°31S±0.°07×143.°10E±0.°08, h33km, mb3.6/2, Error ellipse: s-maj=13.1km s-min=7.6km az=142.7*
*AUST **08** 18:34:52.9±3.5,5.°45S×142.°85E, h0km, Error ellipse: s-maj=1.4km s-min=1.2km az=231.0*
*IDC **08** 18:34:56.6±2.5,5.°30S×143.°08E, h68km±26km, mb3.4/3, mb1 3.8/6, mb1mx3.5/24, mbtmp3.9/6, Error ellipse: s-maj=35.2km s-min=23.0km az=74.0*
**ISC 08 18:34:55.1±1.0,5.°42S±0.°10×142.°9E±0.°1, h35km, n14, σ1°64/14, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **3.65** | **322** | P | | **Pn** | **18 35 50.5** | **+1.4** |
| | 3.0nm,0.3s,baz=165,slow=9.3,SNR=24 | | | | | | | |
| JAY | | | | S | | **Sn** | **18 36 29.2** | **-1.8** |
| | 1.8nm,0.3s,baz=208,slow=17,SNR=4.4 | | | | | | | |
| **JAY** | **Jayapura** | **3.65** | **322** | P | | **Pn** | **18 35 51.1** | **+1.9** |
| | baz=3.6,SNR=4.7 | | | | | | | |
| **MMPI** | **Merauke** | **3.95** | **220** | P | | Pn | 18 35 56.5 | +3.2 |
| | baz=3.9,SNR=4.4 | | | | | | | |
| **PMG** | **Port Moresby** | **5.76** | **134** | P | | **Pn** | **18 36 19.8** | **+1.6** |
| | 7.7nm,0.3s,baz=349,slow=4.8,SNR=35 | | | | | | | |
| PMG | | | | S | | **Sn** | **18 37 20.5** | **-2.6** |
| | 5.1nm,0.3s,baz=240,slow=22,SNR=6.4 | | | | | | | |
| **PMG** | **Port Moresby** | **5.76** | **134** | P | | **Pn** | **18 36 20.0** | **+1.8** |
| | baz=5.8,SNR=20 | | | | | | | |
| **KDU** | **Kakadu** | **12.60** | **234** | P | | **Pn** | **18 37 51.9** | **-0.2** |
| | baz=12,SNR=23 | | | | | | | |
| **MTN** | **Manton Dam** | **13.79** | **237** | P | | **Pn** | **18 38 07.8** | **-0.4** |
| | baz=14,SNR=4.9 | | | | | | | |
| **QIS** | **Mount Isa** | **15.39** | **192** | P | | **P** | **18 38 32.8** | **-1.3** |
| | baz=15,SNR=3.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **16.68** | **209** | P | | **Pn** | **18 38 46.5** | **+0.1** |
| | 0.6nm,0.3s,baz=27,slow=12,SNR=14 | | | | | | | |
| WRA | | | | S | | Sn | 18 41 41.5 | -9.2 |
| | 0.4nm,0.3s,baz=18,slow=20,SNR=5.5 | | | | | | | |
| **KNRA** | **Kununurra** | **17.25** | **233** | P | | **Pn** | **18 38 53.0** | **-0.4** |
| | baz=17,SNR=4.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **20.12** | **205** | P | | **P** | **18 39 27.2** | **+1.0** |
| | 2.9nm,0.5s,baz=32,slow=10,SNR=37 | | | | | | | |
| ASAR | | | | S | | S | 18 42 57.3 | -13 |
| | 0.7nm,1.1s,baz=21,slow=25,SNR=2.9 | | | | | | | |
| **WRKA** | **Warakurna** | **24.04** | **214** | P | | **P** | **18 40 08.6** | **+1.5** |
| | baz=24,SNR=4.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **74.51** | **322** | P | | **P** | **18 46 28.5** | **-1.7** |
| | 0.2nm,0.5s,baz=106,slow=6.8,SNR=4.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **86.56** | **24** | P | | P | 18 47 30.5 | -4.0 |
| | 0.4nm,0.5s,baz=248,slow=4.8,SNR=4.5 | | | | | | | |

*TAP **08** 18:35:11.0,23.°76N×122.°35E, h5km±1km, ML3.0, D*
*JMA **08** 18:35:10.0±0.1,23.°75N×122.°48E, h19km, M2.5*
**ISC 08 18:35:08.4±1.2,23.°68N±0.°03×122.°50E±0.°02, h8km±10km, n43, σ0°59/77, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **JYNG** | **Yonagunijimaku** | **0.87** | **28** | P | | **Pg** | **18 35 25.3** | **+0.2** |
| JYNG | | | | *e*S | | **Sg** | **18 35 35.8** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **0.90** | **31** | P | | **Pg** | **18 35 26.2** | **+0.4** |
| YOJ | | | | *e*S | | **Sg** | **18 35 36.3** | **-1.3** |
| **TWD** | **Chiawan** | **0.92** | **296** | P | | **Pb** | **18 35 26.8** | **+0.2** |
| | baz=295 | | | | | | | |
| TWD | | | | *e*S | | **Sb** | **18 35 38.4** | **-0.6** |
| | baz=295 | | | | | | | |
| **ESL** | **Shilin** | **0.99** | **278** | *e*P | | **Pb** | **18 35 27.9** | **+0.1** |
| | baz=273 | | | | | | | |
| ESL | | | | *e*S | | **Sg** | **18 35 40.1** | **-0.1** |
| | baz=273 | | | | | | | |
| **ENA** | **Nanau** | **1.02** | **317** | *e*P | | **Pn** | **18 35 28.7** | **-0.3** |
| | baz=320 | | | | | | | |
| ENA | | | | *e*S | | **Sn** | **18 35 42.8** | **-0.7** |
| | baz=320 | | | | | | | |
| **EHY** | **Hungye** | **1.10** | **261** | *e*P | | **Pn** | **18 35 30.7** | **+0.6** |
| | baz=255 | | | | | | | |
| EHY | | | | *e*S | | **Sn** | **18 35 45.0** | **-0.5** |
| | baz=255 | | | | | | | |
| **TWC** | **Suao** | **1.10** | **327** | *e*P | | **Pb** | **18 35 29.8** | **+0.1** |
| | baz=332 | | | | | | | |
| TWC | | | | *e*S | | **Sb** | **18 35 44.4** | **+0.2** |
| | baz=332 | | | | | | | |
| **TWF1** | **Yuli** | **1.15** | **254** | *e*P | | **Pn** | **18 35 31.5** | **+0.6** |
| | baz=247 | | | | | | | |
| TWF1 | | | | *e*S | | **Sn** | **18 35 46.7** | **-0.2** |
| | baz=247 | | | | | | | |
| **CHKT** | **Chengkung** | **1.19** | **241** | *e*P | | **Pb** | **18 35 30.3** | **-1.1** |
| | baz=233 | | | | | | | |
| CHKT | | | | *e*S | | **Sg** | **18 35 46.4** | **-0.5** |
| | baz=233 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.22** | **292** | *e*P | | **Pb** | **18 35 32.0** | **0.0** |
| | baz=291 | | | | | | | |
| WHF | | | | *e*S | | **Sb** | **18 35 47.5** | **-0.7** |
| | baz=291 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.25** | **72** | P | | **Pn** | **18 35 32.7** | **+0.5** |
| HATJ | | | | *e*S | | **Sb** | **18 35 48.4** | **-0.2** |
| **EGS** | | **1.27** | **336** | *e*P | | **Pg** | **18 35 34.0** | **+1.2** |
| | baz=341 | | | | | | | |
| EGS | | | | *e*S | | **Sn** | **18 35 50.0** | **+0.3** |
| | baz=341 | | | | | | | |
| **NNS** | **Nan Shan** | **1.28** | **306** | *e*P | | **Pb** | **18 35 32.8** | **0.0** |
| | baz=307 | | | | | | | |
| NNS | | | | *e*S | | **Sb** | **18 35 48.7** | **-0.8** |
| | baz=307 | | | | | | | |
| **ENTT** | **Nioudou** | **1.28** | **318** | *e*P | | **Pn** | **18 35 32.8** | **+0.1** |
| | baz=321 | | | | | | | |
| ENTT | | | | *e*S | | **Sn** | **18 35 51.0** | **+1.0** |
| | baz=321 | | | | | | | |
| **TWE** | **Neicheng** | **1.28** | **324** | *e*P | | **Pg** | **18 35 33.1** | **0.0** |
| | baz=327 | | | | | | | |
| TWE | | | | *e*S | | **Sn** | **18 35 50.4** | **+0.3** |
| | baz=327 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.30** | **60** | P | | **Pn** | **18 35 33.2** | **+0.3** |
| IRIF | | | | *e*S | | **Sb** | **18 35 49.6** | **-0.3** |
| **TWT** | **Tachien** | **1.34** | **295** | *e*P | | **Pg** | **18 35 34.2** | **+0.1** |
| | baz=294 | | | | | | | |
| TWT | | | | *e*S | | **Sb** | **18 35 50.2** | **-1.0** |
| | baz=294 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.43** | **263** | *e*P | | **Pg** | **18 35 36.3** | **+0.3** |
| | baz=258 | | | | | | | |
| YUS | | | | *e*S | | **Sn** | **18 35 54.0** | **-0.5** |
| | baz=258 | | | | | | | |
| **NSK** | **Sanguang** | **1.44** | **314** | *e*P | | **Pn** | **18 35 35.2** | **+0.3** |
| | baz=315 | | | | | | | |
| **ELDTW** | **Lidau** | **1.45** | **250** | *e*P | | **Pn** | **18 35 35.5** | **+0.4** |
| | baz=245 | | | | | | | |
| ELDTW | | | | *e*S | | **Sn** | **18 35 53.4** | **-1.0** |
| | baz=245 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.48** | **278** | *e*P | | **Pb** | **18 35 36.5** | **+0.2** |
| | baz=275 | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | **18 35 54.7** | **-0.4** |
| | baz=275 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.49** | **68** | P | | **Pb** | **18 35 36.5** | **+0.2** |
| JKRS | | | | *e*S | | **Sn** | **18 35 54.8** | **-0.3** |
| **TYC** | **Yuchr** | **1.52** | **279** | *e*P | | **Pb** | **18 35 37.2** | **+0.3** |
| | baz=276 | | | | | | | |
| TYC | | | | *e*S | | **Sn** | **18 35 55.4** | **-0.5** |
| | baz=276 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.53** | **335** | *e*P | | **Pn** | **18 35 36.1** | **0.0** |
| | baz=338 | | | | | | | |
| NWF | | | | *e*S | | **Sg** | **18 35 57.1** | **-0.6** |
| | baz=338 | | | | | | | |
| **TWA** | **Mucha** | **1.54** | **327** | *e*P | | **Pb** | **18 35 36.9** | **-0.3** |
| | baz=330 | | | | | | | |
| TWA | | | | *e*S | | **Sg** | **18 35 58.2** | **+0.3** |
| | baz=330 | | | | | | | |
| **ALS** | **Alishan** | **1.56** | **264** | *e*P | | **Pg** | **18 35 38.5** | **0.0** |
| | baz=260 | | | | | | | |
| ALS | | | | *e*S | | **Sb** | **18 35 58.0** | **0.0** |
| | baz=260 | | | | | | | |
| **TWG** | **Pinlang** | **1.57** | **237** | *e*P | | **Pn** | **18 35 37.4** | **+0.7** |
| | baz=231 | | | | | | | |
| TWG | | | | *e*S | | **Sn** | **18 35 56.7** | **-0.5** |
| | baz=231 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.65** | **65** | P | | **Pn** | **18 35 38.7** | **+1.0** |
| **NSTT** | **Nanjuang** | **1.66** | **305** | *e*P | | **Pb** | **18 35 39.6** | **+0.3** |
| | baz=305 | | | | | | | |
| NSTT | | | | *e*S | | **Sb** | **18 36 00.8** | **+0.3** |
| | baz=305 | | | | | | | |
| **CHN5** | **Tsauling** | **1.67** | **267** | *e*P | | **Pg** | **18 35 40.4** | **-0.2** |
| | baz=264 | | | | | | | |
| CHN5 | | | | *e*S | | **Sg** | **18 36 01.7** | **-0.6** |
| | baz=264 | | | | | | | |
| **WNT** | **Mingjian** | **1.68** | **277** | *e*S | | **Sg** | **18 36 01.8** | **-0.5** |
| | baz=274 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.71** | **293** | *e*P | | **Pb** | **18 35 40.8** | **+0.6** |
| | baz=292 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sg** | **18 36 02.9** | **-0.7** |
| | baz=292 | | | | | | | |
| **WGK** | **Gukeng** | **1.78** | **270** | *e*P | | **Pg** | **18 35 43.4** | **+0.9** |
| | baz=267 | | | | | | | |
| WGK | | | | *e*S | | **Sb** | **18 36 04.4** | **+0.7** |
| | baz=267 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.78** | **260** | *e*P | | **Pg** | **18 35 42.7** | **0.0** |
| | baz=256 | | | | | | | |
| CHN4 | | | | *e*S | | **Sg** | **18 36 05.3** | **-0.5** |
| | baz=256 | | | | | | | |
| **WTP** | **Ta-pu** | **1.79** | **256** | *e*P | | **Pg** | **18 35 42.7** | **0.0** |
| | baz=252 | | | | | | | |
| WTP | | | | *e*S | | **Sg** | **18 36 05.3** | **-0.6** |
| | baz=252 | | | | | | | |
| **ECL** | **Taimali** | **1.79** | **233** | *e*S | | **Sn** | **18 36 01.1** | **-1.4** |
| | baz=227 | | | | | | | |
| **SGST** | **Jiashian** | **1.86** | **252** | *e*S | | **Sb** | **18 36 06.7** | **+0.5** |
| | baz=247 | | | | | | | |
| **CHN1** | **Nanshi** | **1.88** | **255** | *e*P | | **Pg** | **18 35 44.5** | **+0.1** |
| | baz=251 | | | | | | | |
| CHN1 | | | | *e*S | | **Sg** | **18 36 08.7** | **-0.2** |
| | baz=251 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.88** | **61** | P | | **Pn** | **18 35 40.8** | **-0.1** |
| **TWK** | **Hsinying** | **1.89** | **258** | *e*S | | **Sb** | **18 36 07.8** | **+0.7** |
| | baz=253 | | | | | | | |
| **SSD** | **Sandimen** | **1.96** | **242** | *e*P | | **Pb** | **18 35 45.3** | **+1.0** |
| | baz=237 | | | | | | | |
| **EAST** | **Anshuo** | **2.00** | **230** | *e*P | | **Pb** | **18 35 45.0** | **-0.1** |
| | baz=225 | | | | | | | |
| EAST | | | | *e*S | | **Sn** | **18 36 07.0** | **-0.8** |
| | baz=225 | | | | | | | |
| **TWM1** | **Shoushan** | **2.09** | **246** | *e*S | | **Sb** | **18 36 14.4** | **+1.5** |
| | baz=242 | | | | | | | |

**MEX 08 18:36:03.9±0.4,16.°76N×97.°57W, h16km±8km, MD3.9, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PNIG** | **Pinotepa** | **0.65** | **235** | *e*P | | Pg | 18 36 14.3 | -2.5 |
| PNIG | | | | *e*S | | Sg | 18 36 22.6 | -2.8 |
| **TLIG** | **Tlapa** | **1.24** | **310** | *i* P | | Pn | 18 36 23.5 | -3.3 |
| TLIG | | | | *e*S | | Sb | 18 36 37.8 | -5.3 |

**SJA 08 18:54:23.4±0.8,31.°26S×68.°18W, h99km±3km, ML3.6, MW4.1, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **RTLL** | **Cerro Villicun** | **0.26** | **255** | *e*P | | Pn | 18 54 38.3 | +0.5 |
| RTLL | | | | *e*S | | Sn | 18 54 49.5 | +1.0 |
| **CFAA** | **Coronel Fontan** | **0.35** | **188** | *e*P | | Pn | 18 54 38.9 | +0.7 |
| CFAA | | | | *e*S | | Sn | 18 54 50.4 | +1.1 |
| **AMOG** | **MOGNA** | **0.42** | **320** | *e*P | | Pn | 18 54 39.1 | +0.5 |
| AMOG | | | | *e*S | | Sn | 18 54 50.3 | +0.3 |
| **SJA** | **San Juan** | **0.42** | **230** | *e*P | | Pn | 18 54 39.5 | +0.9 |
| SJA | | | | *e*S | | Sn | 18 54 51.0 | +1.0 |
| **RTCV** | **Cerro Valdivia** | **0.67** | **207** | *e*P | | Pn | 18 54 41.3 | +0.7 |
| RTCV | | | | *e*S | | Sn | 18 54 55.2 | +1.7 |
| **RTLS** | **Leoncito** | **1.09** | **240** | *e*P | | Pn | 18 54 46.5 | +1.4 |
| RTLS | | | | *e*S | | Sn | 18 55 03.7 | +2.2 |
| **AUSP** | **Uspallata** | **1.41** | **227** | *e*P | | Pn | 18 54 50.1 | +1.2 |
| AUSP | | | | *e*S | | Sn | 18 55 10.2 | +2.0 |
| **ASAL** | **Salagasta** | **1.44** | **203** | *e*P | | Pn | 18 54 50.3 | +1.3 |
| ASAL | | | | *e*S | | Sn | 18 55 09.4 | +1.0 |
| **ARCO** | **CERRO ARCO** | **1.70** | **202** | *e*P | | Pn | 18 54 53.5 | +1.1 |
| ARCO | | | | *i* | | | 18 54 58.1 | |
| ARCO | | | | *e*S | | Sn | 18 55 16.9 | +2.5 |
| ARCO | | | | AML | | AML | 18 55 18.8 | |
| | comp=Z,515nm,0.9s | | | | | | | |
| **AGUA** | **GUANDACOL** | **1.79** | **351** | *e*P | | Pn | 18 54 53.6 | +0.2 |
| AGUA | | | | *e*S | | Sn | 18 55 17.8 | +1.5 |
| **AAGR** | **Agrelo** | **1.90** | **197** | *e*P | | Pn | 18 54 56.0 | +1.2 |
| AAGR | | | | *e*S | | Sn | 18 55 19.9 | +1.1 |
| **CYA** | **Choya** | **3.49** | **37** | *e*P | | Pn | 18 55 14.6 | -1.2 |

*ISCJB **08** 18:57:21.6±0.4,24.°79N±0.°02×122.°00E±0.°02, h9km±2km, Error ellipse: s-maj=3.7km s-min=3.0km az=166.2*
*TAP **08** 18:57:21.5,24.°79N×121.°94E, h8km, ML3.1, D*
*JMA **08** 18:57:21.8±0.1,24.°80N×121.°93E, h35km*
**ISC 08 18:57:20.9±0.9,24.°81N±0.°02×121.°99E±0.°02, h13km±5km, n46, σ0°67/84, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **EGS** | | **0.07** | **304** | P | | **Pg** | **18 57 23.7** | **+0.2** |
| | baz=5.0 | | | | | | | |
| EGS | | | | *e*S | | **Sg** | **18 57 25.0** | **-0.4** |
| | baz=5.0 | | | | | | | |
| **ILA** | **Ilan** | **0.23** | **259** | *e*P | | **Pg** | **18 57 25.6** | **-0.1** |
| | baz=259 | | | | | | | |
| ILA | | | | *e*S | | **Sg** | **18 57 29.2** | **+0.1** |
| | baz=259 | | | | | | | |
| **TWC** | **Suao** | **0.24** | **213** | P | | **Pg** | **18 57 26.6** | **+0.7** |
| | baz=201 | | | | | | | |
| TWC | | | | *e*S | | **Sg** | **18 57 29.5** | **+0.2** |
| | baz=201 | | | | | | | |
| **TWE** | **Neicheng** | **0.31** | **254** | *e*P | | **Pb** | **18 57 27.9** | **-0.3** |
| | baz=251 | | | | | | | |
| TWE | | | | *e*S | | **Sg** | **18 57 31.9** | **+0.5** |
| | baz=251 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.32** | **324** | P | | **Pb** | **18 57 28.8** | **+0.2** |
| | baz=332 | | | | | | | |
| NWF | | | | *e*S | | **Sb** | **18 57 33.5** | **-0.2** |
| | baz=332 | | | | | | | |
| **TWA** | **Mucha** | **0.41** | **295** | *e*P | | **Pb** | **18 57 29.9** | **0.0** |
| | baz=300 | | | | | | | |
| TWA | | | | *e*S | | **Sb** | **18 57 35.6** | **-0.5** |
| | baz=300 | | | | | | | |
| **ENTT** | **Nioudou** | **0.42** | **247** | *e*P | | **Pb** | **18 57 29.9** | **-0.3** |
| | baz=244 | | | | | | | |
| ENTT | | | | *e*S | | **Sb** | **18 57 36.0** | **-0.4** |
| | baz=244 | | | | | | | |
| **ENA** | **Nanau** | **0.44** | **211** | *e*P | | **Pb** | **18 57 30.2** | **-0.3** |
| | baz=205 | | | | | | | |
| ENA | | | | *e*S | | **Sg** | **18 57 36.0** | **+0.4** |
| | baz=205 | | | | | | | |
| **TAP1** | **Taipei** | **0.48** | **299** | *e*P | | **Pb** | **18 57 31.6** | **+0.4** |
| | baz=302 | | | | | | | |
| TAP1 | | | | *e*S | | **Sb** | **18 57 38.4** | **+0.2** |
| | baz=302 | | | | | | | |
| **NSK** | **Sanguang** | **0.59** | **257** | *e*P | | **Pb** | **18 57 32.9** | **-0.2** |
| | baz=257 | | | | | | | |
| NSK | | | | *e*S | | **Sb** | **18 57 40.7** | **-0.6** |
| | baz=257 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.60** | **299** | *e*P | | **Pn** | **18 57 33.9** | **-1.1** |
| | baz=303 | | | | | | | |
| TWS1 | | | | *e*S | | **Sb** | **18 57 42.3** | **+0.9** |
| | baz=303 | | | | | | | |
| **NNS** | **Nan Shan** | **0.67** | **237** | *e*P | | **Pb** | **18 57 34.6** | **+0.1** |
| | baz=235 | | | | | | | |
| NNS | | | | *e*S | | **Sb** | **18 57 43.8** | **0.0** |
| | baz=235 | | | | | | | |
| **NCU** | **National Centr** | **0.75** | **283** | *e*P | | **Pn** | **18 57 36.6** | **-0.5** |
| | baz=284 | | | | | | | |
| NCU | | | | *e*S | | **Sn** | **18 57 46.6** | **-1.7** |
| | baz=284 | | | | | | | |
| **TWD** | **Chiawan** | **0.81** | **206** | *e*P | | **Pn** | **18 57 37.3** | **-0.7** |
| | baz=203 | | | | | | | |
| TWD | | | | *e*S | | **Sg** | **18 57 47.6** | **+0.5** |
| | baz=203 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.82** | **5** | *e*P | | **Pn** | **18 57 37.9** | **-0.2** |
| | baz=8.0 | | | | | | | |
| **NSTT** | **Nanjuang** | **0.92** | **259** | *e*P | | **Pn** | **18 57 39.5** | **0.0** |
| | baz=259 | | | | | | | |
| NSTT | | | | *e*S | | **Sn** | **18 57 52.3** | **-0.2** |
| | baz=259 | | | | | | | |
| **TWT** | **Tachien** | **0.93** | **233** | *e*P | | **Pn** | **18 57 39.7** | **0.0** |
| | baz=232 | | | | | | | |
| TWT | | | | *e*S | | **Sg** | **18 57 51.6** | **+0.6** |
| | baz=232 | | | | | | | |
| **HSN** | **Hsinchu** | **0.93** | **270** | *e*P | | **Pb** | **18 57 38.7** | **-0.1** |
| | baz=272 | | | | | | | |
| HSN | | | | *e*S | | **Sg** | **18 57 51.0** | **0.0** |
| | baz=272 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.93** | **225** | *e*P | | **Pg** | **18 57 39.6** | **+0.6** |
| | baz=223 | | | | | | | |
| WHF | | | | *e*S | | **Sg** | **18 57 52.2** | **+0.9** |
| | baz=223 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.94** | **112** | P | | **Pg** | **18 57 39.4** | **+0.4** |
| JYNG | | | | *e*S | | **Sn** | **18 57 52.4** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **0.99** | **110** | P | | **Pn** | **18 57 40.2** | **-0.2** |
| YOJ | | | | *e*S | | **Sg** | **18 57 53.8** | **+0.9** |
| **ESL** | **Shilin** | **1.11** | **207** | *e*P | | **Pg** | **18 57 42.5** | **+0.2** |
| | baz=204 | | | | | | | |
| ESL | | | | *e*S | | **Sg** | **18 57 57.2** | **+0.3** |
| | baz=204 | | | | | | | |
| **NSY** | **Sanyi** | **1.19** | **251** | *e*P | | **Pg** | **18 57 45.5** | **+1.8** |
| | baz=250 | | | | | | | |
| NSY | | | | *e*S | | **Sg** | **18 58 00.2** | **+1.1** |
| | baz=250 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.20** | **248** | *e*P | | **Pg** | **18 57 44.5** | **+0.5** |
| | baz=247 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sg** | **18 58 00.7** | **+1.1** |
| | baz=247 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.36** | **227** | *e*P | | **Pb** | **18 57 46.6** | **+0.4** |
| | baz=225 | | | | | | | |
| SMLT | | | | *e*S | | **Sb** | **18 58 03.1** | **-0.4** |
| | baz=225 | | | | | | | |
| **TYC** | **Yuchr** | **1.37** | **229** | *e*P | | **Pg** | **18 57 47.0** | **-0.2** |
| | baz=227 | | | | | | | |
| TYC | | | | *e*S | | **Sg** | **18 58 05.8** | **+0.7** |
| | baz=227 | | | | | | | |
| **EHY** | **Hungye** | **1.43** | **205** | *e*P | | **Pb** | **18 57 47.7** | **+0.3** |
| | baz=203 | | | | | | | |
| EHY | | | | *e*S | | **Sg** | **18 58 06.8** | **-0.3** |
| | baz=203 | | | | | | | |
| **WNT** | **Mingjian** | **1.51** | **232** | *e*P | | **Pn** | **18 57 47.8** | **+0.2** |
| | baz=231 | | | | | | | |
| **TWF1** | **Yuli** | **1.58** | **204** | *e*P | | **Pb** | **18 57 49.5** | **-0.5** |
| | baz=201 | | | | | | | |
| TWF1 | | | | *e*S | | **Sb** | **18 58 09.8** | **-0.1** |
| | baz=201 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.62** | **216** | *e*P | | **Pg** | **18 57 52.2** | **+0.2** |
| | baz=214 | | | | | | | |
| YUS | | | | *e*S | | **Sn** | **18 58 10.1** | **-0.5** |
| | baz=214 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.65** | **106** | P | | **Pn** | **18 57 49.2** | **-0.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ALS** | **Alishan** | **1.69** | **220** | *e*P | **Pb** | **18 57 52.4** | **+0.4** |
| | baz=218 | | | | | | |
| ALS | | | | *e*S | **Sb** | **18 58 12.4** | **-0.8** |
| | baz=218 | | | | | | |
| **CHN5** | **Tsauling** | **1.70** | **225** | *e*P | **Pg** | **18 57 54.4** | **+0.9** |
| | baz=224 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **18 58 12.1** | **+0.1** |
| | baz=224 | | | | | | |
| **WGK** | **Gukeng** | **1.72** | **230** | *e*P | **Pg** | **18 57 53.2** | **-0.6** |
| | baz=228 | | | | | | |
| WGK | | | | *e*S | **Sb** | **18 58 13.0** | **-0.8** |
| | baz=228 | | | | | | |
| **ELDTW** | **Lidau** | **1.84** | **209** | *e*P | **Pb** | **18 57 53.5** | **-1.0** |
| | baz=207 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **18 58 15.4** | **0.0** |
| | baz=207 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.92** | **107** | P | **Pn** | **18 57 53.8** | **+0.5** |
| JKRS | | | | S | Sn | 18 58 07.8 | -10 |
| **CHN4** | **Tsaushan** | **1.93** | **222** | *e*P | **Pb** | **18 57 54.9** | **-1.0** |
| | baz=220 | | | | | | |
| CHN4 | | | | *e*S | **Sn** | **18 58 17.4** | **-0.1** |
| | baz=220 | | | | | | |
| **STYT** | **Tauyuan** | **1.99** | **215** | *e*P | **Pb** | **18 57 56.0** | **-1.0** |
| | baz=213 | | | | | | |
| STYT | | | | *e*S | **Sb** | **18 58 21.3** | **-0.4** |
| | baz=213 | | | | | | |
| **WTP** | **Ta-pu** | **2.00** | **219** | *e*P | **Pb** | **18 57 55.9** | **-1.2** |
| | baz=217 | | | | | | |
| WTP | | | | *e*S | **Sb** | **18 58 21.3** | **-0.7** |
| | baz=217 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.01** | **102** | P | **Pn** | **18 57 54.9** | **+0.4** |
| **CHN1** | **Nanshi** | **2.10** | **220** | *e*P | **Pn** | **18 57 55.7** | **0.0** |
| | baz=218 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **18 58 21.7** | **0.0** |
| | baz=218 | | | | | | |
| **SGST** | **Jiashian** | **2.15** | **217** | *e*S | **Sn** | **18 58 23.3** | **+0.4** |
| | baz=215 | | | | | | |
| **TWG** | **Pinlang** | **2.15** | **203** | *e*P | **Pb** | **18 57 58.2** | **-1.5** |
| | baz=201 | | | | | | |
| TWG | | | | *e*S | **Sb** | **18 58 26.0** | **-0.3** |
| | baz=201 | | | | | | |
| **ECL** | **Taimali** | **2.40** | **204** | *e*P | **Pn** | **18 58 01.2** | **+1.4** |
| | baz=202 | | | | | | |
| **SSD** | **Sandimen** | **2.40** | **212** | *e*P | **Pb** | **18 58 02.3** | **-1.7** |
| | baz=210 | | | | | | |
| SSD | | | | *e*S | **Sn** | **18 58 29.9** | **+0.8** |
| | baz=210 | | | | | | |
| **EAST** | **Anshuo** | **2.63** | **204** | *e*P | **Pn** | **18 58 04.1** | **+1.0** |
| | baz=202 | | | | | | |

*IDC **08** 19:14:22.8±0.9, 51°.28N×174°.90W, h0km, mb3.9/16, mb1 4.0/18, mb1mx3.9/63, mbtmp3.9/18, ML3.9/2, Error ellipse: s-maj=26.2km s-min=16.7km az=162.0*
*ISCJB **08** 19:14:24.7±1.5, 51°.07N±0°.06×174°.95W±0°.05, h22km±9km, mb3.9/17, Error ellipse: s-maj=11.0km s-min=4.5km az=160.7*
*NEIC **08** 19:14:25.4, 51°.26N×175°.05W, h2km, mb3.6/2, ML3.7(AEIC), After AEIC.*
**ISC 08 19:14:24.3**±2.2**, 51°.14N**±0°.09×**175°.00W**±0°.04**, h10**km±12km**, n66,** σ1s14/67**, mb3.9**/17**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **1.12** | **324** | P | **Pb** | **19 14 45.6** | **-0.1** |
| **GSCK** | **Great Sitkin C** | **1.14** | **321** | P | **Pb** | **19 14 45.9** | **-0.1** |
| **ETKA** | **Kagalaska Isla** | **1.14** | **310** | P | **Pb** | **19 14 46.2** | **+0.1** |
| ETKA | | | | S | **Sb** | **19 15 00.9** | **0.0** |
| **GSTR** | **Great Sitkin T** | **1.16** | **326** | *e*Pg | **Pb** | **19 14 46.5** | **0.0** |
| **GSTD** | **Great Sitkin T** | **1.16** | **323** | P | **Pb** | **19 14 46.5** | **-0.1** |
| **ATKA** | **Atka Island** | **1.18** | **25** | P | **Pb** | **19 14 46.1** | **-0.6** |
| ATKA | | | | S | **Sb** | **19 15 01.6** | **-0.4** |
| **KOFP** | **Korovin Flat P** | **1.27** | **26** | P | **Pg** | **19 14 48.7** | **+0.1** |
| **KOKL** | **Mount Kliuchef** | **1.29** | **22** | P | **Pg** | **19 14 48.8** | **-0.2** |
| KOKL | | | | S | **Sg** | **19 15 06.5** | **+0.8** |
| **ADAG** | **Mount Adagdak** | **1.31** | **311** | P | **Pb** | **19 14 49.5** | **+0.5** |
| **KOWE** | **Korovin West** | **1.31** | **20** | P | **Pg** | **19 14 49.3** | **-0.3** |
| **KOSE** | **Korovin Southe** | **1.34** | **26** | P | **Pg** | **19 14 50.3** | **+0.2** |
| KOSE | | | | S | **Sg** | **19 15 08.7** | **+1.1** |
| **KIRH** | **Kanaga Island** | **1.51** | **301** | P | **Pn** | **19 14 51.9** | **+0.5** |
| **KIKV** | **Kanaga Island** | **1.54** | **300** | P | **Pn** | **19 14 52.5** | **+0.6** |
| **KICM** | **Kanaga Island** | **1.58** | **301** | P | **Pn** | **19 14 53.1** | **+0.8** |
| **TAPA** | **Tanaga Point A** | **1.88** | **292** | P | **Pn** | **19 14 57.6** | **+1.0** |
| **TAFL** | **Tanaga Flats** | **1.92** | **290** | P | **Pn** | **19 14 58.1** | **+1.1** |
| **TAFP** | **Tanaga Falls P** | **2.01** | **293** | P | **Pn** | **19 14 59.5** | **+1.2** |
| TAFP | | | | S | **Sn** | **19 15 24.5** | **+1.0** |
| **GAEA** | **Gareloi East** | **2.43** | **287** | P | **Pn** | **19 15 05.5** | **+1.4** |
| **GALAA** | **Gareloi Lava P** | **2.44** | **286** | P | **Pn** | **19 15 06.0** | **+1.8** |
| **GANE** | **Gareloi Northe** | **2.46** | **288** | P | **Pn** | **19 15 06.1** | **+1.7** |
| **CESW** | **Semis' Southwe** | **3.48** | **285** | P | **Pn** | **19 15 19.7** | **+1.3** |
| **AMKA** | **Amchitka** | **3.59** | **276** | P | **Pn** | **19 15 20.8** | **+0.9** |
| **LSNW** | **Little Sitkin** | **4.13** | **284** | P | **Pn** | **19 15 28.4** | **+1.1** |
| **NIKH** | **Nikolski High** | **4.22** | **62** | P | **Pn** | **19 15 29.9** | **+1.4** |
| **OKCE** | **Okmok Cone E** | **4.78** | **59** | P | **Pn** | **19 15 38.5** | **+2.1** |
| **UNV** | **Unalaska Valle** | **5.86** | **59** | P | **Pn** | **19 15 53.1** | **+2.1** |
| **KDAK** | **Kodiak Island** | **14.59** | **54** | Pn | **Pn** | **19 17 47.5** | **-3.0** |
| | 1.2nm,0.3s,baz=220,slow=3.4,SNR=7.3 | | | | | | |
| KDAK | | | | Sn | **Sn** | **19 20 35.9** | **+3.8** |
| | 0.2nm,0.3s,baz=200,slow=4.4,SNR=2.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.84** | **287** | Pn | **P** | **19 18 21.6** | **-0.5** |
| | 0.3nm,0.3s,baz=97,slow=21,SNR=3.6 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **18.12** | **35** | *e*P | **P** | **19 18 36.4** | **+0.3** |
| | 1.0nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **19.98** | **36** | P | **P** | **19 18 54.6** | **-1.9** |
| | 0.6nm,0.3s,baz=230,slow=9.2,SNR=18 | | | | | | |
| **SEY** | **Seymchan** | **21.04** | **317** | P | **P** | **19 19 08.4** | **+0.5** |
| | 1.2nm,0.8s,baz=90,slow=20,SNR=2.8 | | | | | | |
| **EGAK** | **Eagle** | **22.20** | **39** | *e*P | **P** | **19 19 18.7** | **-1.6** |
| | 7.6nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **26.31** | **34** | P | **P** | **19 19 58.9** | **-0.7** |
| | 0.5nm,0.3s,baz=218,slow=9.2,SNR=3.4 | | | | | | |
| **DLBC** | **Dease Lake** | **26.50** | **56** | P | **P** | **19 20 01.5** | **-0.1** |
| | 2.0nm,0.8s,baz=246,slow=10.0,SNR=4.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.44** | **211** | T | T | 19 58 03.4 | |
| | baz=18,slow=76,SNR=17 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.45** | **211** | T | T | 19 58 03.8 | |
| | baz=18,slow=76,SNR=19 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.46** | **211** | T | T | 19 58 03.8 | |
| | baz=18,slow=76,SNR=16 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.65** | **211** | T | T | 20 00 34.8 | |
| | baz=21,slow=75 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.66** | **211** | T | T | 20 00 35.1 | |
| | baz=21,slow=75 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.66** | **211** | T | T | 20 00 33.2 | |
| | baz=21,slow=75 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.69** | **280** | P | **P** | **19 21 22.3** | **-0.2** |
| | 0.7nm,0.4s,baz=190,slow=28,SNR=3.9 | | | | | | |
| **KSRS** | **Korea Array** | **42.03** | **274** | P | **P** | **19 22 17.4** | **+1.6** |
| | 2.3nm,0.9s,baz=58,slow=9.0,SNR=5.6 | | | | | | |
| **KSAR** | **Wonju Array Be** | **42.06** | **274** | P | **P** | **19 22 17.4** | **+1.4** |
| **SONM** | **Songino Array** | **48.87** | **299** | P | **P** | **19 23 09.9** | **-0.1** |
| | 0.8nm,0.7s,baz=46,slow=7.4,SNR=5.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.32** | **84** | P | **P** | **19 24 04.8** | **-0.6** |
| | 0.4nm,0.9s,baz=305,slow=4.4,SNR=3.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.70** | **352** | P | **P** | **19 24 20.0** | **-1.5** |
| | 1.9nm,0.7s,baz=14,slow=7.9,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.03** | **311** | P | **P** | **19 24 43.5** | **-1.0** |
| | 1.1nm,0.3s,baz=44,slow=6.8,SNR=27 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.59** | **322** | P | **P** | **19 24 48.0** | **-0.1** |
| | 3.0nm,0.4s,baz=58,slow=6.2,SNR=24 | | | | | | |
| BVAR | | | | PcP | **PcP** | **19 25 27.8** | **+0.7** |
| | 2.8nm,0.8s,baz=15,slow=4.4,SNR=5.4 | | | | | | |
| **FINES** | **FINESS Array B** | **66.51** | **349** | P | **P** | **19 25 11.6** | **-2.0** |
| | 1.4nm,0.9s,baz=20,slow=6.1,SNR=3.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.41** | **279** | P | **P** | **19 25 57.8** | **+1.1** |
| | 0.6nm,0.8s,baz=17,slow=5.8,SNR=4.3 | | | | | | |
| **TAPN** | **Taplejung** | **73.51** | **293** | *e*P | **P** | **19 25 58.4** | **+0.9** |
| | 22nm,0.9s | | | | | | |
| **ODAN** | **Odare** | **74.07** | **293** | *e*P | **P** | **19 26 01.3** | **+0.6** |
| **GUN** | **Gumba** | **74.14** | **295** | *e*P | **P** | **19 26 01.9** | **+0.6** |
| | 16nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **74.46** | **294** | *e*P | **P** | **19 26 03.5** | **+0.5** |
| | 27nm,0.7s | | | | | | |
| **KKN** | **Kakani** | **74.58** | **295** | *e*P | **P** | **19 26 04.1** | **+0.4** |
| **PKI** | **Pulchoki** | **74.67** | **295** | *e*P | **P** | **19 26 04.7** | **+0.4** |
| **PKIN** | **Phulchoki** | **74.67** | **295** | *e*P | **P** | **19 26 04.6** | **+0.3** |
| | 15nm,1.1s | | | | | | |
| **GKN** | **Gorkha** | **74.78** | **296** | *e*P | **P** | **19 26 05.2** | **+0.4** |
| | 9.9nm,0.7s | | | | | | |
| **DMN** | **Daman** | **74.81** | **295** | *e*P | **P** | **19 26 05.7** | **+0.6** |
| | 8.1nm,0.8s | | | | | | |
| **KOLN** | **Koldanda** | **75.55** | **296** | *e*P | **P** | **19 26 09.5** | **+0.3** |
| **AKASG** | **Malin Array Be** | **76.47** | **344** | P | **P** | **19 26 12.1** | **-1.8** |
| | 0.3nm,0.3s,baz=314,slow=50,SNR=2.5 | | | | | | |
| **GEYT** | **Alibeck** | **79.84** | **320** | P | **P** | **19 26 33.1** | **+0.2** |
| | 1.9nm,0.7s,baz=310,slow=7.6,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **83.55** | **227** | P | **P** | **19 26 52.3** | **-0.1** |
| | 0.2nm,0.6s,baz=31,slow=5.3,SNR=3.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **86.11** | **338** | P | **P** | **19 27 05.6** | **+0.2** |
| | 0.6nm,0.6s,baz=35,slow=3.4,SNR=3.1 | | | | | | |
| **MAW** | **Mawson** | **147.75** | **217** | PKPbc | **PKPbc** | **19 34 07.8** | **+0.1** |
| | 0.8nm,0.5s,baz=207,slow=2.3,SNR=3.2 | | | | | | |
| **BOSA** | **Boshof** | **152.83** | **318** | PKPbc | **PKPbc** | **19 34 21.8** | **+0.4** |
| | 2.5nm,0.6s,baz=28,slow=3.9,SNR=8.0 | | | | | | |

*SKO **08** 19:17:03.8, 42°.53N×21°.58E, h15km, M2.1, ML2.8*
*THE **08** 19:17:05.9, 42°.42N×21°.56E, h1km±3km, ML2.8/3, Error ellipse: s-maj=3.2km s-min=1.1km az=307.0*
*SOF **08** 19:17:05.3, 42°.43N×21°.61E, h2km, MD3.1*
*CSEM **08** 19:17:05.4±0.1, 42°.47N×21°.60E, h2km, ML2.5, Error ellipse: s-maj=2.6km s-min=2.2km az=41.0*
*TIR **08** 19:17:05.0±1.8, 42°.32N×21°.65E, h10km±999km, ML2.8*
*PDG **08** 19:17:05.8±0.4, 42°.45N×21°.62E, h14km, ML2.9/10, Error ellipse: s-maj=0.6km s-min=0.7km az=0.0*
*BEO **08** 19:17:06.0±0.3, 42°.45N×21°.58E, h8km±3km, ML2.9/1*
**ISC 08 19:17:05.3**±1.0**, 42°.45N**±0°.01×**21°.61E**±0°.01**, h5**km±8km**, n154,** σ0s98/219**, 24C-20D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GJIK** | **Gjilan** | **0.13** | **273** | P | **Pg** | **19 17 08.5** | **+0.6** |
| GJIK | | | | S | **Sg** | **19 17 10.4** | **+0.7** |
| **BARS** | **Barje** | **0.39** | **23** | ⇑*i*Pg | **Pb** | **19 17 14.0** | **-0.8** |
| **BARS** | **Barje** | **0.39** | **23** | ⇑*i*Pg | **Pb** | **19 17 14.0** | **-0.8** |
| **SKO** | **Skopje** | **0.50** | **195** | *i* Pg | **Pg** | **19 17 15.2** | **+0.3** |
| SKO | | | | *i* Sg | **Sg** | **19 17 21.6** | **+0.2** |
| SKO | | | | *e*Lg | Lg | 19 17 21.7 | |
| | comp=E,61nm,0.4s | | | | | | |
| SKO | | | | *e*Lg | Lg | 19 17 22.3 | |
| | comp=N,77nm,0.4s | | | | | | |
| **SKO** | **Skopje** | **0.50** | **195** | P | **Pg** | **19 17 14.7** | **-0.2** |
| SKO | | | | S | **Sg** | **19 17 21.1** | **-0.3** |
| **SKO** | **Skopje** | **0.50** | **195** | P | **Pg** | **19 17 14.7** | **-0.2** |
| **SKO** | **Skopje** | **0.50** | **195** | *i* Pg | **Pg** | **19 17 15.2** | **+0.3** |
| SKO | | | | S | **Sg** | **19 17 21.1** | **-0.3** |
| SKO | | | | *i* Sg | **Sg** | **19 17 21.5** | **+0.2** |
| SKO | | | | *e*Lg | Lg | 19 17 21.6 | |
| | comp=N,61nm,0.4s | | | | | | |
| **SMRK** | **Smrekonice** | **0.65** | **311** | P | **Pg** | **19 17 18.1** | **+0.3** |
| SMRK | | | | S | **Sg** | **19 17 26.7** | **+0.5** |
| **SELS** | **Selova** | **0.84** | **335** | ⇑*i*Pg | **Pg** | **19 17 21.2** | **-0.3** |
| SELS | | | | *e*Sg | **Sg** | **19 17 32.2** | **-0.3** |
| **PEJK** | **Peje** | **1.00** | **281** | P | **Pg** | **19 17 24.2** | **-0.3** |
| PEJK | | | | S | **Sb** | **19 17 38.6** | **-0.1** |
| **ZAPS** | **Zavoj** | **1.11** | **42** | *i* Pg | **Pn** | **19 17 27.7** | **+0.1** |
| ZAPS | | | | *e*Sg | **Sn** | **19 17 43.3** | **-0.1** |
| **BCI** | **Bajram Curri** | **1.14** | **266** | *i* PG | **Pn** | **19 17 28.1** | **+0.1** |
| BCI | | | | *i* SG | **Sn** | **19 17 44.9** | **+0.8** |
| **BCI** | **Bajram Curri** | **1.14** | **266** | *i* Pg | **Pn** | **19 17 28.1** | **+0.1** |
| | SNR=90 | | | | | | |
| BCI | | | | *i* Sg | **Sn** | **19 17 44.9** | **+0.8** |
| | SNR=90 | | | | | | |
| **PHP** | **Peshkopia** | **1.16** | **229** | *i* PG | **Pg** | **19 17 26.3** | **-1.3** |
| PHP | | | | *i* SG | **Sb** | **19 17 43.0** | **-0.3** |
| **PHP** | **Peshkopia** | **1.16** | **229** | P | **Pg** | **19 17 26.0** | **-1.6** |
| PHP | | | | S | **Sg** | **19 17 42.2** | **-0.4** |
| **PHP** | **Peshkopia** | **1.16** | **229** | P | **Pg** | **19 17 26.0** | **-1.6** |
| **PHP** | **Peshkopia** | **1.16** | **229** | *i* Pg | **Pg** | **19 17 26.3** | **-1.3** |
| | SNR=91 | | | | | | |
| PHP | | | | S | **Sg** | **19 17 42.2** | **-0.4** |
| PHP | | | | *i* Sg | **Sb** | **19 17 43.0** | **-0.3** |
| | SNR=91 | | | | | | |
| **VTS** | **Vitosha** | **1.19** | **83** | P | **Pn** | **19 17 29.4** | **+0.6** |
| **VTS** | **Vitosha** | **1.19** | **83** | P | **Pn** | **19 17 29.4** | **+0.6** |
| **PVY** | **Plav** | **1.23** | **277** | ⇓*i*Pg | **Pg** | **19 17 28.7** | **-0.1** |
| PVY | | | | *e*Sg | **Sn** | **19 17 47.8** | **+1.5** |
| **KKB** | **Krupnik** | **1.25** | **118** | P | **Pn** | **19 17 29.9** | **+0.5** |
| **KKB** | **Krupnik** | **1.25** | **118** | P | **Pn** | **19 17 29.9** | **+0.5** |
| **BEY** | **Berane** | **1.33** | **289** | ⇓*i*Pg | **Pn** | **19 17 30.7** | **0.0** |
| **BEY** | **Berane** | **1.33** | **289** | P | **Pg** | **19 17 32.2** | **+1.4** |
| BEY | | | | *e*Sg | **Sn** | **19 17 51.0** | **+2.2** |
| **IVA** | **Berane** | **1.33** | **289** | ⇓*i*Pg | **Pn** | **19 17 30.7** | **0.0** |
| IVA | | | | *e*Sg | **Sn** | **19 17 51.0** | **+2.2** |
| **PUK** | **Puka** | **1.34** | **253** | *i* PG | **Pn** | **19 17 30.6** | **-0.1** |
| PUK | | | | *i* SG | **Sn** | **19 17 49.8** | **+0.8** |
| **PUK** | **Puka** | **1.34** | **253** | *i* Pg | **Pn** | **19 17 30.6** | **-0.1** |
| | SNR=90 | | | | | | |
| PUK | | | | *i* Sg | **Sn** | **19 17 49.8** | **+0.8** |
| | SNR=90 | | | | | | |
| **VAY** | **Valandovo** | **1.34** | **147** | *i* Pg | **Pb** | **19 17 30.9** | **-0.1** |
| VAY | | | | *i* Sg | **Sb** | **19 17 48.3** | **-0.2** |
| VAY | | | | *e*Lg | Lg | 19 17 53.4 | |
| | comp=E,111nm,0.7s | | | | | | |
| VAY | | | | *e*Lg | Lg | 19 17 55.1 | |
| | comp=N,233nm,1.2s | | | | | | |
| **VAY** | **Valandovo** | **1.34** | **147** | ⇑*i*Pg | **Pn** | **19 17 30.2** | **-0.5** |
| VAY | | | | *e*Sg | **Sb** | **19 17 48.2** | **-0.2** |
| **VAY** | **Valandovo** | **1.34** | **147** | P | **Pn** | **19 17 30.5** | **-0.2** |
| VAY | | | | S | **Sn** | **19 17 49.3** | **+0.4** |
| **VAY** | **Valandovo** | **1.34** | **147** | P | **Pn** | **19 17 30.5** | **-0.2** |
| **VAY** | **Valandovo** | **1.34** | **147** | *i* Pg | **Pb** | **19 17 30.8** | **-0.1** |
| VAY | | | | *e*Sg | **Sb** | **19 17 48.2** | **-0.2** |
| VAY | | | | S | **Sn** | **19 17 49.3** | **+0.4** |
| VAY | | | | *e*Lg | Lg | 19 17 53.3 | |
| | comp=N,111nm,0.7s | | | | | | |
| **BOLS** | **Boljevac** | **1.40** | **10** | ⇓*i*Pg | **Pn** | **19 17 30.2** | **-1.3** |
| BOLS | | | | *e*Sg | **Sb** | **19 17 49.6** | **-0.5** |
| **BOLS** | **Boljevac** | **1.40** | **10** | ⇓*i*Pg | **Pn** | **19 17 30.2** | **-1.3** |
| BOLS | | | | *e*Sg | **Sb** | **19 17 49.6** | **-0.5** |
| **SJES** | **Sjenica** | **1.45** | **304** | ⇓*i*Pg | **Pn** | **19 17 32.3** | **0.0** |
| SJES | | | | *e*Sg | **Sb** | **19 17 51.5** | **-0.1** |
| **OHR** | **Ohrid** | **1.47** | **205** | *i* Pg | **Pn** | **19 17 32.5** | **-0.1** |
| OHR | | | | *i* Sg | **Sn** | **19 17 51.9** | **-0.4** |
| OHR | | | | *e*Lg | Lg | 19 17 55.4 | |
| | comp=E,254nm,0.8s | | | | | | |
| OHR | | | | *e*Lg | Lg | 19 17 57.1 | |
| | comp=N,194nm,0.7s | | | | | | |
| **OHR** | **Ohrid** | **1.47** | **205** | *i* Pg | **Pn** | **19 17 32.4** | **-0.1** |
| OHR | | | | *i* Sg | **Sn** | **19 17 51.8** | **-0.4** |
| OHR | | | | *e*Lg | Lg | 19 17 55.3 | |
| | comp=N,254nm,0.8s | | | | | | |
| **IVAS** | **Ivanjica** | **1.55** | **317** | *i* Pg | **Pn** | **19 17 33.6** | **0.0** |
| IVAS | | | | *e*Sg | **Sn** | **19 17 53.8** | **-0.3** |
| **IVAS** | **Ivanjica** | **1.55** | **317** | *i* Pg | **Pn** | **19 17 33.6** | **0.0** |
| IVAS | | | | *e*Sg | **Sn** | **19 17 53.8** | **-0.3** |
| **GRUS** | **Gruza** | **1.57** | **336** | *e*Pg | **Pn** | **19 17 34.1** | **+0.2** |
| GRUS | | | | *e*Sg | **Sg** | **19 17 57.3** | **+1.4** |
| **GRUS** | **Gruza** | **1.57** | **336** | *e*Pg | **Pn** | **19 17 34.1** | **+0.2** |
| GRUS | | | | *e*Sg | **Sg** | **19 17 57.3** | **+1.4** |
| **GRG** | **Griva** | **1.61** | **158** | *e*PN | **Pn** | **19 17 34.7** | **+0.2** |
| **GRG** | **Griva** | **1.61** | **158** | *e*PN | **Pn** | **19 17 34.7** | **+0.2** |
| **GRG** | **Griva** | **1.61** | **158** | P | **Pn** | **19 17 34.6** | **+0.1** |
| **GRG** | **Griva** | **1.61** | **158** | P | **Pn** | **19 17 34.6** | **+0.1** |
| **KNT** | **Kendrikon** | **1.61** | **143** | *e*PN | **Pn** | **19 17 34.4** | **-0.1** |
| **KNT** | **Kendrikon** | **1.61** | **143** | *e*PN | **Pn** | **19 17 34.4** | **-0.1** |
| **KNT** | **Kendrikon** | **1.61** | **143** | P | **Pn** | **19 17 34.3** | **-0.2** |
| KNT | | | | S | **Sb** | **19 17 56.1** | **-0.1** |
| **KNT** | **Kendrikon** | **1.61** | **143** | P | **Pn** | **19 17 34.3** | **-0.2** |
| KNT | | | | S | **Sb** | **19 17 56.1** | **-0.1** |
| **FNA** | **Florina** | **1.68** | **186** | *e*PN | **Pn** | **19 17 35.7** | **+0.3** |
| **FNA** | **Florina** | **1.68** | **186** | *e*PN | **Pn** | **19 17 35.7** | **+0.3** |
| **FNA** | **Florina** | **1.68** | **186** | P | **Pn** | **19 17 35.6** | **+0.2** |
| **FNA** | **Florina** | **1.68** | **186** | P | **Pn** | **19 17 35.6** | **+0.2** |
| **PDG** | **Podgorica** | **1.74** | **270** | ⇑*i*Pn | **Pn** | **19 17 36.8** | **+0.6** |
| PDG | | | | *e*Sg | **Sb** | **19 17 59.9** | **0.0** |
| **PDG** | **Podgorica** | **1.74** | **270** | P | **Pn** | **19 17 36.5** | **+0.3** |
| **PDG** | **Podgorica** | **1.74** | **270** | P | **Pn** | **19 17 36.5** | **+0.3** |
| **PDG** | **Podgorica** | **1.74** | **270** | ⇑*i*Pn | **Pn** | **19 17 36.8** | **+0.6** |
| PDG | | | | *e*Sg | **Sb** | **19 17 59.9** | **0.0** |
| PDG | | | | *e*Sn | **Sg** | **19 18 00.7** | **-0.5** |
| **TTG** | **Podgorica** | **1.74** | **270** | ⇑*i*Pn | **Pn** | **19 17 36.6** | **+0.3** |
| TTG | | | | *e*Sn | **Sg** | **19 18 00.7** | **-0.5** |
| **MMB** | **Musomiste** | **1.80** | **118** | P | **Pb** | **19 17 38.1** | **-0.7** |
| MMB | | | | Pg | **Pg** | **19 17 40.2** | **+0.4** |
| **MMB** | **Musomiste** | **1.80** | **118** | P | **Pb** | **19 17 38.1** | **-0.7** |
| **MPEP** | **Malo Peshtene** | **1.81** | **59** | P | **Pb** | **19 17 38.4** | **-0.5** |
| MPEP | | | | Pg | **Pg** | **19 17 40.9** | **+0.9** |
| **DRME** | **Dracevica, Mon** | **1.82** | **262** | *e*Pn | **Pb** | **19 17 38.6** | **-0.5** |
| DRME | | | | *e*Sn | **Sg** | **19 18 02.9** | **-0.8** |
| **DRME** | **Dracevica, Mon** | **1.82** | **262** | *e*Pn | **Pb** | **19 17 38.6** | **-0.5** |
| DRME | | | | *e*Sn | **Sg** | **19 18 02.9** | **-0.8** |
| **ULC** | **Ulcinj** | **1.82** | **255** | ⇓*i*Pn | **Pb** | **19 17 38.4** | **-0.8** |
| ULC | | | | *e*Sn | **Sb** | **19 18 02.6** | **+0.3** |
| **ULC** | **Ulcinj** | **1.82** | **255** | ⇓*i*Pn | **Pb** | **19 17 38.4** | **-0.8** |
| ULC | | | | *e*Sn | **Sb** | **19 18 02.6** | **+0.3** |
| **SVIS** | **Svilajnac** | **1.83** | **351** | *e*Pn | **Pn** | **19 17 38.4** | **+0.9** |
| **PLE** | **Pljevlja** | **1.85** | **299** | ⇓*i*Pn | **Pb** | **19 17 39.1** | **-0.6** |
| PLE | | | | *e*Sn | **Sb** | **19 18 03.3** | **+0.1** |
| **PLE** | **Pljevlja** | **1.85** | **299** | ⇓*i*Pn | **Pb** | **19 17 39.1** | **-0.6** |
| PLE | | | | *e*Sn | **Sb** | **19 18 03.3** | **+0.1** |
| **PGB** | **Panagyurishte** | **1.90** | **86** | P | **Pb** | **19 17 40.1** | **-0.3** |
| **PGB** | **Panagyurishte** | **1.90** | **86** | P | **Pb** | **19 17 40.1** | **-0.3** |
| **KUBS** | **Kucevo** | **1.96** | **1** | *i* Pn | **Pn** | **19 17 37.8** | **-1.4** |
| KUBS | | | | *e*Sg | **Sb** | **19 18 07.1** | **+0.9** |
| **KUBS** | **Kucevo** | **1.96** | **1** | *i* Pn | **Pn** | **19 17 37.8** | **-1.4** |
| KUBS | | | | *e*Sg | **Sb** | **19 18 07.1** | **+0.9** |
| **NKY** | **Niksic** | **1.96** | **281** | ⇓*i*Pn | **Pn** | **19 17 39.8** | **+0.4** |
| NKY | | | | *e*Sn | **Sb** | **19 18 06.2** | **-0.2** |
| **NKY** | **Niksic** | **1.96** | **281** | ⇓*i*Pn | **Pn** | **19 17 39.8** | **+0.4** |
| NKY | | | | *e*Sn | **Sb** | **19 18 06.2** | **-0.2** |
| **NKME** | **Niksic** | **1.98** | **280** | *e*Pn | **Pn** | **19 17 39.9** | **+0.3** |
| NKME | | | | *e*Sn | **Sb** | **19 18 06.7** | **-0.3** |
| **NKME** | **Niksic** | **1.98** | **280** | *e*Pn | **Pn** | **19 17 39.9** | **+0.3** |
| NKME | | | | *e*Sn | **Sb** | **19 18 06.7** | **-0.3** |
| **SRS** | **Serrai** | **2.00** | **131** | *e*PN | **Pn** | **19 17 39.7** | **-0.1** |
| **SRS** | **Serrai** | **2.00** | **131** | *e*PN | **Pn** | **19 17 39.7** | **-0.1** |
| **SRS** | **Serrai** | **2.00** | **131** | P | **Pn** | **19 17 39.6** | **-0.2** |
| SRS | | | | S | **Sb** | **19 18 07.0** | **-0.3** |
| **SRS** | **Serrai** | **2.00** | **131** | P | **Pn** | **19 17 39.6** | **-0.2** |
| SRS | | | | S | **Sb** | **19 18 07.0** | **-0.3** |
| **NVR** | **Nevrokopi** | **2.01** | **122** | *e*PN | **Pn** | **19 17 40.5** | **+0.5** |
| **NVR** | **Nevrokopi** | **2.01** | **122** | *e*PN | **Pn** | **19 17 40.5** | **+0.5** |
| **NVR** | **Nevrokopi** | **2.01** | **122** | P | **Pn** | **19 17 40.4** | **+0.5** |
| NVR | | | | S | **Sb** | **19 18 08.2** | **+0.4** |
| **NVR** | **Nevrokopi** | **2.01** | **122** | P | **Pn** | **19 17 40.4** | **+0.5** |
| NVR | | | | S | **Sb** | **19 18 08.2** | **+0.4** |
| **BUM** | **Brajici-Budva** | **2.02** | **267** | ⇓*i*Pn | **Pn** | **19 17 41.1** | **+1.0** |
| BUM | | | | *e*Sn | **Sb** | **19 18 07.8** | **-0.1** |
| **BUM** | **Brajici-Budva** | **2.02** | **267** | ⇓*i*Pn | **Pn** | **19 17 41.1** | **+1.0** |
| BUM | | | | *e*Sn | **Sb** | **19 18 07.8** | **-0.1** |
| **DIVS** | **Divibare** | **2.02** | **325** | *i* Pg | **Pb** | **19 17 42.2** | **-0.4** |
| DIVS | | | | *e*Sg | **Sg** | **19 18 11.1** | **+0.8** |
| **DIVS** | **Divibare** | **2.02** | **325** | ⇑*i*P | **Pb** | **19 17 41.7** | **-0.9** |
| **DIVS** | **Divibare** | **2.02** | **325** | S | **Sg** | **19 18 13.8** | **+3.5** |
| **DIVS** | **Divibare** | **2.02** | **325** | P | **Pn** | **19 17 40.1** | **-0.1** |
| **DIVS** | **Divibare** | **2.02** | **325** | P | **Pn** | **19 17 40.1** | **-0.1** |
| **DIVS** | **Divibare** | **2.02** | **325** | *i* Pg | **Pb** | **19 17 42.2** | **-0.4** |
| DIVS | | | | *e*Sg | **Sg** | **19 18 11.1** | **+0.8** |
| **NEST** | **Nestorio** | **2.08** | **192** | *e*PN | **Pn** | **19 17 41.6** | **+0.6** |
| **NEST** | **Nestorio** | **2.08** | **192** | *e*PN | **Pn** | **19 17 41.6** | **+0.6** |
| **NEST** | **Nestorio** | **2.08** | **192** | P | **Pn** | **19 17 41.4** | **+0.4** |
| **NEST** | **Nestorio** | **2.08** | **192** | P | **Pn** | **19 17 41.4** | **+0.4** |
| **SOH** | **Sokhos** | **2.09** | **141** | *e*PN | **Pn** | **19 17 41.2** | **+0.1** |
| **SOH** | **Sokhos** | **2.09** | **141** | *e*PN | **Pn** | **19 17 41.2** | **+0.1** |
| **UPM** | **Unac-Piva** | **2.12** | **292** | ⇑*i*Pn | **Pn** | **19 17 42.6** | **+0.9** |
| UPM | | | | *e*Sn | **Sb** | **19 18 09.8** | **-1.3** |
| **UPM** | **Unac-Piva** | **2.12** | **292** | ⇑*i*Pn | **Pn** | **19 17 42.6** | **+0.9** |
| UPM | | | | *e*Sn | **Sb** | **19 18 09.8** | **-1.3** |
| **BBLS** | **Lazići** | **2.14** | **312** | ⇑*i*Pg | **Pb** | **19 17 43.5** | **-1.1** |
| **BBLS** | **Lazići** | **2.14** | **312** | ⇑*i*Pg | **Pb** | **19 17 43.5** | **-1.1** |
| **KZN** | **Kozani** | **2.15** | **177** | *e*PN | **Pn** | **19 17 42.5** | **+0.6** |
| **KZN** | **Kozani** | **2.15** | **177** | *e*PN | **Pn** | **19 17 42.5** | **+0.6** |
| **HORT** | **Hortiatis** | **2.17** | **148** | *e*PN | **Pn** | **19 17 42.3** | **+0.1** |
| **HORT** | **Hortiatis** | **2.17** | **148** | *e*PN | **Pn** | **19 17 42.3** | **+0.1** |
| **HCY** | **Herceg Novi** | **2.30** | **271** | *e*Pn | **Pn** | **19 17 45.1** | **+1.1** |
| HCY | | | | *e*Sn | **Sn** | **19 18 14.2** | **+1.5** |
| **HCY** | **Herceg Novi** | **2.30** | **271** | *e*Pn | **Pn** | **19 17 45.1** | **+1.1** |
| HCY | | | | *e*Sn | **Sn** | **19 18 14.2** | **+1.5** |
| **BRY** | **Bratogost** | **2.31** | **282** | ⇑*i*Pn | **Pn** | **19 17 45.1** | **+1.0** |
| BRY | | | | *e*Sn | **Sb** | **19 18 14.8** | **-1.5** |
| **BRY** | **Bratogost** | **2.31** | **282** | ⇑*i*Pn | **Pn** | **19 17 45.1** | **+1.0** |
| BRY | | | | *e*Sn | **Sb** | **19 18 14.8** | **-1.5** |
| **TREB** | **Trebinje** | **2.42** | **277** | ⇑*i*Pn | **Pn** | **19 17 47.3** | **+1.8** |
| **TREB** | **Trebinje** | **2.42** | **277** | ⇑*i*Pn | **Pn** | **19 17 47.3** | **+1.8** |
| **RZN** | **Rozhen** | **2.44** | **107** | P | **Pn** | **19 17 47.4** | **+1.4** |
| **RZN** | **Rozhen** | **2.44** | **107** | P | **Pn** | **19 17 47.4** | **+1.4** |
| **SRE** | **Strehaia** | **2.49** | **27** | ⇑*i*P | **Pg** | **19 17 52.3** | **-0.8** |
| **SRE** | **Strehaia** | **2.49** | **27** | S | Sg | 19 18 34.8 | +9.4 |
| **SRE** | **Strehaia** | **2.49** | **27** | ⇑*i*P | **Pg** | **19 17 52.3** | **-0.8** |
| **TEKS** | **Tekeris** | **2.58** | **325** | *i* Pn | **Pn** | **19 17 47.9** | **+0.1** |
| TEKS | | | | *e*Sg | **Sg** | **19 18 28.2** | **-0.1** |
| **TEKS** | **Tekeris** | **2.58** | **325** | *i* Pn | **Pn** | **19 17 47.9** | **+0.1** |
| TEKS | | | | *e*Sg | **Sg** | **19 18 28.2** | **-0.1** |
| **THL** | **Klokotos Trika** | **2.90** | **174** | *e*PN | **Pn** | **19 17 52.8** | **+0.6** |
| **THL** | **Klokotos Trika** | **2.90** | **174** | *e*PN | **Pn** | **19 17 52.8** | **+0.6** |
| **KDZ** | **Kurdzhali** | **2.95** | **105** | P | **Pn** | **19 17 53.3** | **+0.5** |
| **KDZ** | **Kurdzhali** | **2.95** | **105** | P | **Pn** | **19 17 53.3** | **+0.5** |
| **SGD** | **Sagiada** | **3.02** | **201** | *e*PN | **Pn** | **19 17 55.6** | **+1.8** |
| **SGD** | **Sagiada** | **3.02** | **201** | *e*PN | **Pn** | **19 17 55.6** | **+1.8** |
| **GZR** | **Gura Zlata** | **3.06** | **16** | ⇑*i*P | **Pn** | **19 17 55.2** | **+0.8** |
| **GZR** | **Gura Zlata** | **3.06** | **16** | S | **Sg** | **19 18 48.0** | **+4.5** |
| **GZR** | **Gura Zlata** | **3.06** | **16** | ⇑*i*P | **Pn** | **19 17 55.2** | **+0.8** |
| **IGT** | **Igoumenitsa** | **3.07** | **199** | *e*PN | **Pn** | **19 17 56.3** | **+1.7** |
| **IGT** | **Igoumenitsa** | **3.07** | **199** | *e*PN | **Pn** | **19 17 56.3** | **+1.7** |
| **BZS** | **Buzias** | **3.16** | **0** | ⇓*i*Pn | **Pn** | **19 17 55.9** | **+0.2** |
| **BZS** | **Buzias** | **3.16** | **0** | ⇓*i*P | **Pb** | **19 17 59.8** | **-2.2** |
| **BZS** | **Buzias** | **3.16** | **0** | S | **Sg** | **19 18 50.5** | **+3.7** |
| **BZS** | **Buzias** | **3.16** | **0** | ⇓*i*Pn | **Pn** | **19 17 55.9** | **+0.2** |
| **BZS** | **Buzias** | **3.16** | **0** | ⇓*i*P | **Pb** | **19 17 59.8** | **-2.2** |
| **LOT** | **Lotru** | **3.38** | **27** | ⇓*i*P | **Pb** | **19 18 04.2** | **-1.5** |
| **LOT** | **Lotru** | **3.38** | **27** | S | **Sg** | **19 18 55.5** | **+1.8** |
| **LOT** | **Lotru** | **3.38** | **27** | ⇓*i*P | **Pb** | **19 18 04.2** | **-1.5** |
| **MAKR** | **Makrakomi, Fth** | **3.46** | **173** | *e*PN | **Pn** | **19 18 00.9** | **+1.0** |
| **MAKR** | **Makrakomi, Fth** | **3.46** | **173** | *e*PN | **Pn** | **19 18 00.9** | **+1.0** |
| **AGG** | **Agios Georgios** | **3.47** | **171** | *e*PN | **Pn** | **19 18 00.5** | **+0.4** |
| **AGG** | **Agios Georgios** | **3.47** | **171** | *e*PN | **Pn** | **19 18 00.5** | **+0.4** |
| **EVR** | **Evrytania** | **3.54** | **177** | *e*PN | **Pn** | **19 18 01.6** | **+0.6** |
| **EVR** | **Evrytania** | **3.54** | **177** | *e*PN | **Pn** | **19 18 01.6** | **+0.6** |
| **VOIR** | | **3.88** | **39** | ⇑*i*P | Pb | 19 18 10.5 | -3.8 |
| **VOIR** | | **3.88** | **39** | S | **Sg** | **19 19 08.6** | **-1.4** |
| **VOIR** | | **3.88** | **39** | ⇑*i*P | Pb | 19 18 10.5 | -3.8 |
| **DRGR** | | **4.41** | **10** | ⇑*i*P | Pb | 19 18 18.4 | -4.9 |
| **DRGR** | | **4.41** | **10** | S | **Sg** | **19 19 22.0** | **-4.8** |
| **DRGR** | | **4.41** | **10** | ⇑*i*P | Pb | 19 18 18.4 | -4.9 |
| **VYHS** | **Vyhne** | **6.35** | **343** | *e*PN | **Pn** | **19 18 39.0** | **-0.5** |
| VYHS | | | | *e*SN | Sn | 19 19 43.3 | -9.0 |
| **VYHS** | **Vyhne** | **6.35** | **343** | *e*Pn | **Pn** | **19 18 39.0** | **-0.5** |
| **KOLS** | **Kolonicke sedl** | **6.50** | **4** | *e*SG | **Sg** | **19 20 32.5** | **-1.3** |
| **KOLS** | **Kolonicke sedl** | **6.50** | **4** | *e*Sg | **Sg** | **19 20 32.5** | **-1.3** |

*NEIC **08** 19:30:01.8, 63°.24N×130°.37W, h10km, ML4.1(OTT), After OTT.*
**PGC 08 19:30:01.8**±0.0**, 63°.24N**×**130°.37W, h10**km**, ML4.1**/5**, 290km Wsw of Norman Wells, Nt Southern Yukon Territory, Canada, Southern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WHY** | **Whitehorse** | **3.35** | **221** | Pn | Pn | 19 30 54.5 | +0.1 |
| WHY | | | | Pg | Pb | 19 31 03.4 | +1.9 |
| WHY | | | | Sg | Sb | 19 31 43.1 | +0.7 |
| **WHY** | **Whitehorse** | **3.35** | **221** | P | Pn | 19 30 53.1 | -1.2 |
| WHY | | | | S | Sb | 19 31 39.0 | -3.4 |
| **YUK5** | **Granite Creek** | **4.10** | **242** | Pn | Pn | 19 31 04.0 | -0.7 |
| YUK5 | | | | Pg | Pb | 19 31 16.0 | +1.7 |
| YUK5 | | | | Sg | Sb | 19 32 06.2 | +2.3 |
| **YUK5** | **Granite Creek** | **4.10** | **242** | Pn | Pn | 19 31 04.0 | -0.7 |
| YUK5 | | | | Pg | Pb | 19 31 16.0 | +1.7 |
| YUK5 | | | | Sg | Sb | 19 32 06.2 | +2.3 |
| **DAWY** | **Dawson** | **4.11** | **286** | Pn | Pn | 19 31 04.3 | -0.3 |
| DAWY | | | | Pg | Pb | 19 31 15.9 | +1.6 |
| DAWY | | | | Sg | Sb | 19 32 05.3 | +1.3 |
| **DAWY** | **Dawson** | **4.11** | **286** | P | Pn | 19 31 05.3 | +0.6 |
| DAWY | | | | S | Sb | 19 32 03.2 | -0.8 |
| **HYT** | **Haines Junctio** | **4.14** | **237** | Pn | Pn | 19 31 04.7 | -0.6 |
| HYT | | | | Pg | Pb | 19 31 16.2 | +1.2 |
| HYT | | | | Sn | Sn | 19 31 50.1 | -3.7 |
| HYT | | | | Sg | Sb | 19 32 08.7 | +3.6 |
| **HYT** | **Haines Junctio** | **4.14** | **237** | Pn | Pn | 19 31 04.7 | -0.6 |
| HYT | | | | Pg | Pb | 19 31 16.2 | +1.2 |
| HYT | | | | Sn | Sn | 19 31 50.1 | -3.7 |
| HYT | | | | Sg | Sb | 19 32 08.7 | +3.6 |
| **CLVN** | **Colville Lake** | **4.22** | **23** | Pn | Pn | 19 31 05.4 | -0.8 |
| CLVN | | | | Sn | Sn | 19 31 53.4 | -2.1 |
| **CLVN** | **Colville Lake** | **4.22** | **23** | Pn | Pn | 19 31 05.4 | -0.8 |
| CLVN | | | | Sn | Sn | 19 31 53.4 | -2.1 |
| **YUK4** | **Talbot Arm** | **4.31** | **248** | Pn | Pn | 19 31 05.8 | -1.9 |
| YUK4 | | | | Sg | Sb | 19 32 10.1 | +0.1 |
| **YUK4** | **Talbot Arm** | **4.31** | **248** | Pn | Pn | 19 31 05.8 | -1.9 |
| YUK4 | | | | Sg | Sb | 19 32 10.1 | +0.1 |
| **YUK6** | **Outpost Mounta** | **4.41** | **242** | Pg | Pb | 19 31 21.0 | +1.4 |
| YUK6 | | | | Sg | Sb | 19 32 17.0 | +4.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| YUK6 | Outpost Mounta | 4.41 | 242 | Pg | Pb | 19 31 21.0 | +1.4 |
| YUK6 | | | | Sg | Sb | 19 32 17.0 | +4.1 |
| YUK7 | Dusty Glacier | 4.57 | 237 | Pn | Pn | 19 31 08.1 | -3.1 |
| YUK7 | | | | Sg | Sb | 19 32 21.9 | +4.2 |
| YUK7 | Dusty Glacier | 4.57 | 237 | Pn | Pn | 19 31 08.1 | -3.1 |
| YUK7 | | | | Sg | Sb | 19 32 21.9 | +4.2 |
| PLBC | Pleasant Camp | 4.77 | 220 | Pg | Pb | 19 31 27.4 | +2.0 |
| PLBC | | | | Sg | Sb | 19 32 27.4 | +4.6 |
| PLBC | Pleasant Camp | 4.77 | 220 | Pg | Pb | 19 31 27.4 | +2.0 |
| PLBC | | | | Sg | Sb | 19 32 27.4 | +4.6 |
| YUK1 | Sand Pete Hill | 4.80 | 261 | Pg | Pb | 19 31 29.2 | +2.9 |
| YUK1 | | | | Sg | Sb | 19 32 29.0 | +4.8 |
| YUK1 | Sand Pete Hill | 4.80 | 261 | Pg | Pb | 19 31 29.2 | +2.9 |
| YUK1 | | | | Sg | Sb | 19 32 29.0 | +4.8 |
| DLBC | Dease Lake | 4.82 | 178 | Pn | Pn | 19 31 13.4 | -1.1 |
| DLBC | | | | Sn | Sn | 19 32 08.5 | -1.9 |
| DLBC | | | | Sg | Sb | 19 32 29.1 | +4.5 |
| DLBC | Dease Lake | 4.82 | 178 | *e*Pn | Pn | 19 31 13.3 | -1.2 |
| DLBC | | | | *e*Sn | Sn | 19 32 09.8 | -0.7 |
| DLBC | | | | *e*Sg | Sb | 19 32 28.7 | +4.2 |
| BVCY | Beaver Creek | 4.88 | 265 | Pn | Pn | 19 31 15.4 | +0.1 |
| BVCY | | | | Sg | Sb | 19 32 32.2 | +6.0 |
| BVCY | Beaver Creek | 4.88 | 265 | Pn | Pn | 19 31 15.4 | +0.1 |
| BVCY | | | | Sg | Sb | 19 32 32.2 | +6.0 |
| YUK3 | Moose Creek | 4.90 | 257 | Pn | Pn | 19 31 14.6 | -1.2 |
| YUK3 | | | | Pg | Pb | 19 31 29.8 | +1.8 |
| YUK3 | | | | Sg | Sb | 19 32 30.8 | +3.7 |
| YUK3 | Moose Creek | 4.90 | 257 | Pn | Pn | 19 31 14.6 | -1.2 |
| YUK3 | | | | Pg | Pb | 19 31 29.8 | +1.8 |
| YUK3 | | | | Sg | Sb | 19 32 30.8 | +3.7 |
| EGAK | Eagle | 4.99 | 293 | *e*Pn | Pn | 19 31 16.2 | -0.5 |
| EGAK | | | | S | Sb | 19 32 22.4 | -6.8 |
| EGAK | | | | *e*Sg | Sg | 19 32 41.1 | -0.9 |
| YUK2 | White River | 5.07 | 258 | Pn | Pn | 19 31 17.5 | -0.4 |
| YUK2 | | | | Pg | Pb | 19 31 32.4 | +1.8 |
| YUK2 | | | | Sg | Sb | 19 32 36.5 | +4.8 |
| YUK2 | White River | 5.07 | 258 | Pn | Pn | 19 31 17.5 | -0.4 |
| YUK2 | | | | Pg | Pb | 19 31 32.4 | +1.8 |
| YUK2 | | | | Sg | Sb | 19 32 36.5 | +4.8 |
| BCA3 | Beaver Creek A | 5.18 | 273 | P | Pn | 19 31 19.5 | +0.1 |
| SMPN | Simpson Lake | 5.22 | 15 | Pn | Pn | 19 31 20.6 | +0.7 |
| SMPN | | | | Sn | Sn | 19 32 18.4 | -1.7 |
| INK | Inuvik | 5.25 | 347 | Pn | Pn | 19 31 19.6 | -0.6 |
| INK | | | | Sn | Sn | 19 32 15.8 | -5.0 |
| INK | Inuvik | 5.25 | 347 | P | Pn | 19 31 16.8 | -3.5 |
| INK | | | | *e*Sn | Sn | 19 32 18.5 | -2.3 |
| FNBB | Fort Nelson | 5.64 | 137 | Pn | Pn | 19 31 24.2 | -1.5 |
| FNBB | | | | Sg | Sb | 19 32 54.8 | +6.9 |
| FNBB | Fort Nelson | 5.64 | 137 | Pn | Pn | 19 31 24.2 | -1.5 |
| FNBB | | | | Sg | Sb | 19 32 54.8 | +6.9 |
| PCA | Pinnacle | 5.67 | 241 | P | Pn | 19 31 25.4 | -0.7 |
| MENT | Mentasta | 6.07 | 273 | *e*Pn | Pn | 19 31 31.6 | 0.0 |
| MENT | | | | *e*S | Sb | 19 33 05.4 | +5.1 |
| YKR1 | Yellowknife Ar | 7.09 | 89 | Pn | Pn | 19 31 43.1 | -2.4 |
| YKR1 | | | | Sn | Sn | 19 32 57.6 | -8.5 |
| YKR1 | Yellowknife Ar | 7.09 | 89 | Pn | Pn | 19 31 43.1 | -2.4 |
| YKR1 | | | | Sn | Sn | 19 32 57.6 | -8.5 |
| YKR2 | Yellowknife Ar | 7.12 | 89 | Pn | Pn | 19 31 43.4 | -2.5 |
| YKR2 | | | | Sn | Sn | 19 32 59.1 | -7.6 |
| YKR2 | Yellowknife Ar | 7.12 | 89 | Pn | Pn | 19 31 43.4 | -2.5 |
| YKR2 | | | | Sn | Sn | 19 32 59.1 | -7.6 |
| YKR3 | Yellowknife Ar | 7.14 | 89 | Pn | Pn | 19 31 43.9 | -2.2 |
| YKR3 | | | | Sn | Sn | 19 33 00.2 | -7.0 |
| YKR4 | Yellowknife Ar | 7.16 | 89 | Pn | Pn | 19 31 44.5 | -2.0 |
| YKR4 | | | | Sn | Sn | 19 32 59.1 | -8.7 |
| YKR6 | Yellowknife Ar | 7.20 | 89 | Pn | Pn | 19 31 45.1 | -2.0 |
| YKR6 | | | | Sn | Sn | 19 33 00.2 | -8.6 |
| YKB0 | Yellowknife Ar | 7.22 | 88 | Pn | Pn | 19 31 45.5 | -1.9 |
| YKR7 | Yellowknife Ar | 7.23 | 89 | Pn | Pn | 19 31 45.0 | -2.3 |
| YKR7 | | | | Sn | Sn | 19 33 01.0 | -8.4 |
| YKW3 | Yellowknife Ar | 7.23 | 88 | Pn | Pn | 19 31 45.5 | -1.8 |
| YKW3 | | | | Sn | Sn | 19 33 03.2 | -6.2 |
| YKB9 | Yellowknife Ar | 7.23 | 88 | Pn | Pn | 19 31 45.4 | -2.0 |
| YKB9 | | | | Sn | Sn | 19 33 03.3 | -6.1 |
| YKB8 | Yellowknife Ar | 7.23 | 88 | Pn | Pn | 19 31 45.4 | -2.1 |
| YKB8 | | | | Sn | Sn | 19 33 04.0 | -5.6 |
| YKB7 | Yellowknife Ar | 7.24 | 89 | Pn | Pn | 19 31 45.6 | -2.0 |
| YKB7 | | | | Sn | Sn | 19 33 04.9 | -4.7 |
| YKB6 | Yellowknife Ar | 7.24 | 89 | Pn | Pn | 19 31 45.9 | -1.7 |
| YKR8 | Yellowknife Ar | 7.25 | 89 | Pn | Pn | 19 31 45.8 | -1.9 |
| YKR8 | | | | Sn | Sn | 19 33 05.3 | -4.6 |
| YKB4 | Yellowknife Ar | 7.25 | 89 | Pn | Pn | 19 31 46.0 | -1.7 |
| YKB4 | | | | Sn | Sn | 19 33 05.3 | -4.7 |
| YKB3 | Yellowknife Ar | 7.26 | 89 | Pn | Pn | 19 31 46.1 | -1.7 |
| YKB3 | | | | Sn | Sn | 19 33 05.0 | -5.2 |
| YKB2 | Yellowknife Ar | 7.26 | 89 | Pn | Pn | 19 31 45.8 | -2.1 |
| YKB2 | | | | Sn | Sn | 19 33 05.0 | -5.3 |
| YKB1 | Yellowknife Ar | 7.27 | 90 | Pn | Pn | 19 31 46.4 | -1.5 |
| YKB1 | | | | Sn | Sn | 19 33 03.8 | -6.6 |
| YKR9 | Yellowknife Ar | 7.27 | 89 | Pn | Pn | 19 31 46.1 | -1.8 |
| YKR9 | | | | Sn | Sn | 19 33 04.0 | -6.5 |
| YKR9 | Yellowknife Ar | 7.27 | 89 | Pn | Pn | 19 31 46.1 | -1.8 |
| YKR9 | | | | Sn | Sn | 19 33 04.0 | -6.5 |
| BM3 | Burnt Mountain | 7.28 | 311 | P | Pn | 19 31 46.4 | -1.8 |
| KUKN | Kugluktuk,NWT | 7.82 | 47 | Pn | Pn | 19 31 56.1 | +0.6 |
| KUKN | | | | Sn | Sn | 19 33 17.6 | -6.4 |
| COLD | Coldfoot | 9.21 | 304 | *e*Pn | Pn | 19 32 14.7 | +0.1 |
| | 3.2nm,0.5s | | | | | | |
| KTH | Kantishna Hill | 9.22 | 281 | *e*Pn | Pn | 19 32 15.3 | +0.5 |
| SNLN | Sandy Lake, NW | 10.33 | 82 | Pn | Pn | 19 32 28.2 | -1.6 |
| SNLN | | | | Sn | Sn | 19 34 18.8 | -6.6 |
| SNLN | Sandy Lake, NW | 10.33 | 82 | Pn | Pn | 19 32 28.2 | -1.6 |
| SNLN | | | | Sn | Sn | 19 34 18.8 | -6.6 |
| UBRB | Upper Baezaeko | 10.89 | 159 | Sg | | 19 35 45.8 | |
| RES | Resolute Bay | 16.75 | 32 | Pn | Pn | 19 33 51.5 | -4.5 |
| RES | | | | Sn | Sn | 19 36 49.2 | -13 |

*DDA **08** 20:05:44.1, 38.°13N×39.°02E, h5$^{km}$, Md2.7*
*ISK **08** 20:05:45.7, 38.°27N×39.°00E, h5$^{km}$, MD2.8*
*ISCJB **08** 20:05:46.9±0.8, 38.°20N±0.°04×39.°00E±0.°05, h5$^{km}$±8$^{km}$, Error ellipse: s-maj=7.4km s-min=6.0km az=163.7*
*CSEM **08** 20:05:47.0±0.4, 38.°26N×38.°98E, h8$^{km}$, MD2.8, Error ellipse: s-maj=8.6km s-min=6.9km az=166.0*
**ISC 08 20:05:47.3**±1.1, **38.°25N**±0.°04×**38.°99E**±0.°03, **h13**$^{km}$±9$^{km}$, **n16,** σ1$^s$**20**/26, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ELZG | Elazig | 0.24 | 359 | *i* P | Pg | 20 05 52.4 | -0.2 |
| ELZG | | | | *i* S | Sg | 20 05 58.4 | +2.2 |
| ELZG | Elazig | 0.24 | 359 | P | Pg | 20 05 52.5 | -0.2 |
| ELZG | | | | S | Sg | 20 05 58.4 | +2.2 |
| SVRC | Sivrice-ELAZID | 0.28 | 63 | *e*PG | Pg | 20 05 51.7 | -1.5 |
| SVRC | | | | *e*SG | Sg | 20 05 57.2 | 0.0 |
| SVRC | Sivrice-ELAZID | 0.28 | 63 | *e*Pg | Pg | 20 05 51.7 | -1.5 |
| SVRC | | | | *e*Sg | Sg | 20 05 57.2 | 0.0 |
| MALT | Malatya | 0.45 | 278 | *e*PG | Pg | 20 05 55.5 | -0.7 |
| MALT | | | | *e*SG | Sg | 20 06 03.1 | +0.9 |
| MALT | Malatya | 0.45 | 278 | *e*Pg | Pg | 20 05 55.5 | -0.7 |
| MALT | | | | *e*Sg | Sg | 20 06 03.1 | +0.9 |
| PTK | Pertek | 0.71 | 26 | *e*PG | Pb | 20 06 01.2 | -0.5 |
| PTK | Pertek | 0.71 | 26 | *e*Pg | Pb | 20 06 01.2 | -0.5 |
| URFA | Urfa | 0.82 | 189 | *e*PG | Pg | 20 06 03.4 | +0.1 |
| URFA | Urfa | 0.82 | 189 | *e*Pg | Pg | 20 06 03.4 | +0.1 |
| AKCD | Akcadag | 0.84 | 273 | *i* P | Pg | 20 06 01.6 | -2.0 |
| AKCD | | | | *i* S | Sg | 20 06 15.2 | +0.5 |
| AKCD | Akcadag | 0.84 | 273 | P | Pg | 20 06 01.6 | -2.0 |
| AKCD | | | | S | Sg | 20 06 15.2 | +0.5 |
| KEMA | Kemaliye | 1.08 | 339 | *i* P | Pb | 20 06 07.2 | -0.9 |
| KEMA | | | | *i* S | Sn | 20 06 24.7 | +1.4 |
| KEMA | Kemaliye | 1.08 | 339 | P | Pb | 20 06 07.2 | -0.9 |
| KEMA | | | | S | Sn | 20 06 24.7 | +1.4 |
| MAZI | Mazidag | 1.40 | 124 | *e*PN | Pg | 20 06 14.0 | -0.3 |
| MAZI | Mazidag | 1.40 | 124 | *e*Pn | Pg | 20 06 14.0 | -0.3 |

*ISCJB **08** 20:16:53.9±0.2, 13.°89S±0.°03×49.°27W±0.°03, h10$^{km}$, mb4.8/81, MS3.8/12, Error ellipse: s-maj=5.0km s-min=4.0km az=34.9*
*IDC **08** 20:16:54.1±0.5, 13.°82S×49.°18W, h0$^{km}$, mb4.6/13, mb1 4.7/15, mb1mx4.5/27, mbtmp4.6/15, ML5.7/2, MS3.7/15, Ms1 3.7/15, ms1mx3.4/37, Error ellipse: s-maj=14.2km s-min=9.4km az=55.0*
*NEIC **08** 20:16:55.4±0.2, 13.°89S×49.°22W, h10$^{km}$, mb5.0/56, ML4.8(BDF), Error ellipse: s-maj=5.5km s-min=4.3km az=64.0*
*NEIC Items knocked from shelves at Porangatu. Felt [III] at Brasilia. Also felt at Campinacu, Ceilandia, Goiania, Guara, Mara Rosa, Samambaia and Taguatinga. Felt widely in northern Goias.*
*BJI **08** 20:16:57.0, 13.°90S×49.°20W, h10$^{km}$, mB5.2/10, Ms5.5/7, Ms7 5.2/7*
**ISC 08 20:16:54.9**±0.3, **14.°02S**±0.°04×**49.°27W**±0.°05, **h10**$^{km}$, **n448,** σ1$^s$**13**/462, **mb5.0**/82, **MS3.9**/12, **18C-7D, Brazil**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I09BR | BRASILIA INFRA | 2.02 | 143 | Pg | Pg | 20 17 34.0 | +0.4 |
| | baz=325,slow=24,SNR=1.9 | | | | | | |
| I09BR | | | | Lg | Lg | 20 18 01.5 | |
| | baz=324,slow=25 | | | | | | |
| BDFB | Brasilia | 2.02 | 143 | Pn | Pb | 20 17 31.7 | -0.1 |
| | 3μm,0.3s,baz=304,slow=11,SNR=2912 | | | | | | |
| BDFB | | | | Pg | Pg | 20 17 34.2 | +0.6 |
| | 3μm,0.3s,baz=312,slow=16,SNR=3631 | | | | | | |
| BDFB | | | | Lg | Lg | 20 18 01.1 | |
| | 2μm,0.3s,baz=209,slow=18,SNR=27 | | | | | | |
| BDFB | | | | LR | LR | 20 18 33.8 | |
| | comp=Z,2μm,19.4s,baz=329,slow=47 | | | | | | |
| BDFB | Brasilia | 2.02 | 143 | P | Pb | 20 17 30.7 | -1.1 |
| BDFB | | | | Pg | Pg | 20 17 34.2 | +0.6 |
| BDFB | | | | Lg | Lg | 20 18 01.1 | |
| RCLB | Rio Claro- Sao | 8.52 | 169 | *ce*P | Pn | 20 19 00.8 | +2.4 |
| RCLB | | | | *e*S | Sn | 20 20 31.9 | -2.8 |
| RCLB | Rio Claro- Sao | 8.52 | 169 | ⇑*e*P | Pn | 20 19 00.8 | +2.4 |
| RCLB | | | | *e*S | Sn | 20 20 31.9 | -2.8 |
| VAO | Valinhos | 9.20 | 167 | *ce*P | Pn | 20 19 09.8 | +2.0 |
| VAO | | | | *e*S | Sn | 20 20 49.2 | -2.3 |
| VAO | Valinhos | 9.20 | 167 | ⇑*e*P | Pn | 20 19 09.8 | +2.0 |
| VAO | | | | *e*S | Sn | 20 20 49.2 | -2.3 |
| ESAR | Angra dos Reis | 10.06 | 154 | *e*P | Pn | 20 19 19.7 | +0.2 |
| ESAR | Angra dos Reis | 10.06 | 154 | *e*P | Pn | 20 19 19.7 | +0.2 |
| SIV | San Ignacio | 11.57 | 259 | Pn | Pn | 20 19 40.8 | +0.5 |
| | 9.6nm,0.3s,baz=100,slow=15,SNR=81 | | | | | | |
| SIV | | | | Sn | Sn | 20 21 47.3 | -2.5 |
| | 14nm,0.3s,baz=127,slow=20,SNR=5.3 | | | | | | |
| SIV | | | | Lg | Lg | 20 23 03.7 | |
| | 3.0nm,0.3s,baz=7.3,slow=23,SNR=4.3 | | | | | | |
| SIV | San Ignacio | 11.57 | 259 | Pn | Pn | 20 19 40.8 | +0.5 |
| SIV | | | | Sn | Sn | 20 21 47.3 | -2.5 |
| SIV | | | | Lg | Lg | 20 23 03.6 | |
| CPUP | Villa Florida | 14.39 | 210 | Pn | Pn | 20 20 19.5 | +0.7 |
| | 2.3nm,0.3s,baz=38,slow=8.8,SNR=25 | | | | | | |
| CPUP | | | | Sn | Sn | 20 22 54.4 | -4.2 |
| | 4.9nm,0.3s,baz=41,slow=20,SNR=5.6 | | | | | | |
| CPUP | | | | Lg | Lg | 20 24 38.8 | |
| | 3.6nm,0.3s,baz=38,slow=15,SNR=2.9 | | | | | | |
| CPUP | | | | LR | LR | 20 26 29.1 | |
| | comp=Z,166nm,21.7s,baz=34,slow=39 | | | | | | |
| CPUP | Villa Florida | 14.39 | 210 | *e*Pn | Pn | 20 20 19.0 | +0.2 |
| CPUP | | | | Sn | Sn | 20 22 54.4 | -4.2 |
| CPUP | | | | Lg | Lg | 20 24 38.8 | |
| SAML | Samuel | 14.54 | 289 | *e*Pn | Pn | 20 20 16.6 | -4.2 |
| SAML | | | | *e*Sn | Sn | 20 22 49.8 | -12 |
| SAML | | | | *e*Lg | Lg | 20 24 32.4 | |
| RCBR | Riachuelo | 15.47 | 60 | Pn | Pn | 20 20 26.6 | -6.7 |
| | 1.1nm,0.3s,baz=233,slow=16,SNR=9.3 | | | | | | |
| RCBR | | | | Sn | Sn | 20 23 22.0 | -2.9 |
| | 1.0nm,0.3s,baz=317,slow=18,SNR=3.1 | | | | | | |
| RCBR | | | | Lg | Lg | 20 24 45.8 | |
| | 6.5nm,0.3s,baz=313,slow=18,SNR=7.7 | | | | | | |
| RCBR | | | | LR | LR | 20 26 34.7 | |
| | comp=Z,72nm,21.5s,baz=242,slow=38 | | | | | | |
| RCBR | Riachuelo | 15.47 | 60 | *e*Pn | Pn | 20 20 26.0 | -7.3 |
| | 106nm,1.8s | | | | | | |
| RCBR | | | | *e*Sn | Sn | 20 22 56.2 | -29 |
| RCBR | | | | Lg | Lg | 20 24 45.8 | |
| PTGA | Pitinga | 16.92 | 320 | ⇓*e*P | Pn | 20 20 44.9 | -7.0 |
| PTGA | | | | *e*S | Sn | 20 23 41.3 | -19 |
| PTGA | Pitinga | 16.92 | 320 | Pn | Pn | 20 20 45.7 | -6.2 |
| | 12nm,0.3s,baz=151,slow=15,SNR=55 | | | | | | |
| PTGA | | | | Sn | Sn | 20 23 42.2 | -18 |
| | 3.9nm,0.3s,baz=24,slow=20,SNR=4.7 | | | | | | |
| PTGA | Pitinga | 16.92 | 320 | Pn | Pn | 20 20 45.7 | -6.2 |
| PTGA | | | | Sn | Sn | 20 23 42.2 | -18 |
| LPAZ | La Paz | 18.35 | 261 | P | P | 20 21 10.3 | -0.1 |
| | 0.1nm,0.3s,baz=85,slow=12,SNR=7.7 | | | | | | |
| LPAZ | | | | LR | LR | 20 28 47.7 | |
| | comp=Z,63nm,22.0s,baz=80,slow=39 | | | | | | |
| LPAZ | La Paz | 18.35 | 261 | P | P | 20 21 10.3 | -0.1 |
| LVC | Limon Verde | 20.50 | 243 | P | Pn | 20 21 35.4 | -0.3 |
| | 8.6nm,0.6s,baz=64,slow=14,SNR=4.1 | | | | | | |
| LVC | Limon Verde | 20.50 | 243 | P | Pn | 20 21 35.5 | -0.3 |
| LVC | | | | *e*S | S | 20 25 19.2 | -4.0 |
| CFAA | Coronel Fontan | 24.68 | 222 | P | P | 20 22 17.3 | +1.2 |
| | 0.7nm,0.8s,baz=35,slow=9.7,SNR=6.5 | | | | | | |
| CFAA | | | | LR | LR | 20 32 28.5 | |
| | comp=Z,10nm,21.1s,baz=176,slow=38 | | | | | | |
| CFAA | Coronel Fontan | 24.68 | 222 | P | P | 20 22 17.3 | +1.2 |
| LCO | Las Campanas | 24.84 | 230 | *e*P | P | 20 22 18.9 | +1.0 |
| | 79nm,1.9s | | | | | | |
| TRQA | Tornquist | 26.47 | 203 | *e*P | P | 20 22 34.0 | +1.7 |
| | 130nm,2.8s | | | | | | |
| NNA | Nana | 26.94 | 271 | LR | LR | 20 34 32.4 | |
| | comp=Z,172nm,20.6s,baz=83,slow=39 | | | | | | |
| PCRV | Puerto La Cruz | 28.46 | 327 | LR | LR | 20 34 34.9 | |
| | comp=Z,581nm,19.4s,baz=112,slow=38 | | | | | | |
| ATAH | Atahualpa | 29.41 | 280 | P | P | 20 23 01.2 | +1.9 |
| | 7.1nm,0.8s,baz=109,slow=16,SNR=3.8 | | | | | | |
| ATAH | | | | LR | LR | 20 35 50.0 | |
| | comp=Z,334nm,19.5s,baz=106,slow=39 | | | | | | |
| ATAH | Atahualpa | 29.41 | 280 | P | P | 20 23 01.2 | +1.9 |
| SDV | Santo Domingo | 31.10 | 316 | P | P | 20 23 12.8 | -1.1 |
| ROSC | El Rosal | 31.14 | 305 | P | P | 20 23 15.8 | +1.3 |
| | 10nm,0.6s,baz=68,slow=21,SNR=4.1 | | | | | | |
| ROSC | | | | LR | LR | 20 36 30.6 | |
| | comp=Z,524nm,18.6s,baz=146,slow=38 | | | | | | |
| ROSC | El Rosal | 31.14 | 305 | P | P | 20 23 15.8 | +1.3 |
| OTAV | Otavalo | 32.18 | 294 | *e*P | P | 20 23 23.7 | 0.0 |
| | 6.9nm,0.9s | | | | | | |
| LRS | Lares | 36.48 | 331 | *e*P | P | 20 23 58.9 | -1.6 |
| BANI | BANI | 38.33 | 327 | *e*P | P | 20 24 14.2 | -2.1 |
| SDDR | Presa de Saban | 39.32 | 326 | *e*P | P | 20 24 23.5 | -1.0 |
| | 72nm,1.8s | | | | | | |
| LIC | Lamto | 48.29 | 68 | *e*P | P | 20 25 35.1 | -1.6 |
| | 39nm,0.9s | | | | | | |
| TIC | Toumodi | 48.47 | 68 | *e*P | P | 20 25 36.6 | -1.5 |
| KIC | Kosan Boka | 48.60 | 68 | *e*P | P | 20 25 37.6 | -1.6 |
| | 25nm,1.0s | | | | | | |
| DBIC | Dimbokro | 48.63 | 68 | P | P | 20 25 38.2 | -1.1 |
| | 12nm,0.7s,baz=226,slow=8.1,SNR=16 | | | | | | |
| DBIC | Dimbokro | 48.63 | 68 | *e*P | P | 20 25 38.3 | -1.0 |
| | 15nm,0.8s | | | | | | |
| TOA0 | Torodi Ar. Sit | 57.24 | 64 | *e*P | P | 20 26 41.8 | -1.2 |
| TORD | Torodi Ar. Bea | 57.24 | 64 | P | P | 20 26 41.8 | -1.1 |
| | 29nm,0.8s,baz=247,slow=7.5,SNR=158 | | | | | | |
| TORD | Torodi Ar. Bea | 57.24 | 64 | P | P | 20 26 41.8 | -1.1 |
| KMSC | Kings Mountain | 57.58 | 329 | P | P | 20 26 45.4 | +0.4 |
| | baz=58 | | | | | | |
| KMSC | Kings Mountain | 57.58 | 329 | *e*P | P | 20 26 44.5 | -0.5 |
| | 16nm,0.8s | | | | | | |
| TKL | Tuckaleechee C | 59.22 | 328 | *e*P | P | 20 26 56.1 | -0.4 |
| PAL | Palisades | 59.31 | 338 | *e*P | P | 20 26 56.3 | -0.6 |
| | 34nm,0.8s | | | | | | |
| CPCT | Cooper Cave | 59.46 | 327 | *e*P | P | 20 26 58.3 | +0.3 |
| ODNJ | Ogdensburg | 59.63 | 338 | *e*P | P | 20 26 58.0 | -1.1 |
| | 22nm,0.8s | | | | | | |
| BINY | Binghamton | 61.11 | 338 | *e*P | P | 20 27 09.5 | +0.2 |
| | 18nm,0.9s | | | | | | |
| WVT | Waverly | 61.76 | 325 | *e*P | P | 20 27 11.6 | -2.1 |
| | 14nm,0.8s | | | | | | |
| VNA1 | Neumayer--Stat | 61.90 | 166 | P | P | 20 27 17.2 | +3.0 |
| VNA3 | Neumayer Olymp | 61.99 | 166 | P | P | 20 27 17.1 | +2.3 |
| VNA2 | Neumayer--Watz | 62.30 | 166 | P | P | 20 27 19.1 | +2.2 |
| | baz=312,slow=7.8 | | | | | | |
| ACSO | Alum Creek Sta | 62.40 | 331 | *e*P | P | 20 27 17.4 | -0.6 |
| | 28nm,0.8s | | | | | | |
| 035A | Encino | 62.49 | 311 | P | P | 20 27 19.5 | +0.7 |
| | baz=63 | | | | | | |
| 438A | Sam Houston St | 62.88 | 316 | P | P | 20 27 21.9 | +0.5 |
| | baz=63 | | | | | | |
| 736A | Circle Diamond | 62.91 | 313 | P | P | 20 27 22.3 | +0.8 |
| | baz=63 | | | | | | |
| 034A | Hebbronville | 62.99 | 311 | P | P | 20 27 22.2 | 0.0 |
| | baz=63,SNR=6.3 | | | | | | |
| 239A | Gary | 63.00 | 317 | P | P | 20 27 22.5 | +0.4 |
| | baz=63 | | | | | | |
| USIN | University of | 63.01 | 327 | P | P | 20 27 21.1 | -1.0 |
| | 163nm,0.8s | | | | | | |
| 338A | Crockett | 63.14 | 316 | P | P | 20 27 23.3 | +0.2 |
| | baz=63 | | | | | | |
| 934A | Benavides | 63.17 | 311 | P | P | 20 27 23.9 | +0.6 |
| | baz=63 | | | | | | |
| 636A | Smothers Creek | 63.21 | 314 | P | P | 20 27 24.2 | +0.6 |
| | baz=63 | | | | | | |
| BLO | Bloomington | 63.31 | 328 | *e*P | P | 20 27 24.8 | +0.8 |
| | 33nm,0.8s | | | | | | |
| 834A | Tilden | 63.49 | 312 | P | P | 20 27 26.1 | +0.6 |
| | baz=64 | | | | | | |
| SIUC | Southern Illin | 63.67 | 325 | P | P | 20 27 25.1 | -1.4 |
| | 33nm,0.8s | | | | | | |
| 933A | Laredo | 63.73 | 311 | P | P | 20 27 27.1 | 0.0 |
| | baz=64 | | | | | | |
| SNAA | Sanae | 63.90 | 165 | P | P | 20 27 29.6 | +2.0 |
| SNAA | Sanae | 63.90 | 165 | *e*P | P | 20 27 29.4 | +1.8 |
| | 4.3nm,1.0s | | | | | | |
| MIAR | Mount Ida | 64.06 | 320 | P | P | 20 27 28.7 | -0.4 |
| | baz=64 | | | | | | |
| MIAR | Mount Ida | 64.06 | 320 | *e*P | P | 20 27 28.0 | -1.1 |
| | 132nm,2.8s | | | | | | |
| Z38A | Mt. Pleasant | 64.12 | 318 | P | P | 20 27 30.1 | +0.6 |
| | baz=64 | | | | | | |
| 833A | Chaparral WMA, | 64.22 | 311 | P | P | 20 27 31.2 | +0.9 |
| | baz=64 | | | | | | |
| 733A | Divot King Ran | 64.36 | 312 | P | P | 20 27 31.2 | 0.0 |
| | baz=64 | | | | | | |
| 534A | Blanco | 64.53 | 313 | P | P | 20 27 32.5 | +0.2 |
| | baz=65 | | | | | | |
| 335A | Moody | 64.53 | 315 | P | P | 20 27 32.9 | +0.6 |
| | baz=65 | | | | | | |
| 633A | Saathoff Ranch | 64.70 | 312 | P | P | 20 27 34.1 | +0.7 |
| | baz=65 | | | | | | |
| 434A | Burnet | 64.84 | 314 | P | P | 20 27 34.7 | +0.3 |
| | baz=65 | | | | | | |
| 732A | Laxson Ranch, | 64.86 | 311 | P | P | 20 27 34.7 | +0.2 |
| | baz=65 | | | | | | |
| X38A | Whitesboro | 64.92 | 319 | P | P | 20 27 34.5 | -0.3 |
| | baz=65 | | | | | | |
| TAM | Tamanrasset | 64.93 | 56 | *e*P | P | 20 27 34.8 | -0.4 |
| | 4.8nm,0.8s | | | | | | |
| 533A | Kerrville | 64.95 | 313 | P | P | 20 27 35.5 | +0.4 |
| | baz=65 | | | | | | |
| WHTX | Lake Whitney | 64.98 | 316 | P | P | 20 27 35.3 | +0.1 |
| | baz=65 | | | | | | |
| W38A | Poteau | 64.99 | 320 | P | P | 20 27 34.9 | -0.3 |
| | baz=65 | | | | | | |
| Y37A | Hugo | 64.99 | 318 | P | P | 20 27 35.4 | +0.2 |
| | baz=65 | | | | | | |
| Z36A | Blue Ridge | 65.08 | 317 | P | P | 20 27 36.1 | +0.3 |
| | baz=65 | | | | | | |
| 334A | Lometa | 65.12 | 315 | P | P | 20 27 35.6 | -0.5 |
| | baz=65,SNR=5.7 | | | | | | |
| 632A | Uvalde | 65.16 | 312 | P | P | 20 27 37.4 | +0.9 |
| | baz=65 | | | | | | |
| X37A | Clayton | 65.21 | 319 | P | P | 20 27 36.5 | -0.2 |
| | baz=65 | | | | | | |
| 433A | Art | 65.38 | 314 | P | P | 20 27 37.4 | -0.4 |
| | baz=66,SNR=7.8 | | | | | | |
| V38A | Canehill | 65.43 | 321 | P | P | 20 27 37.1 | -1.0 |
| | baz=66 | | | | | | |
| 234A | Clairette | 65.45 | 315 | P | P | 20 27 39.0 | +0.7 |
| | baz=66 | | | | | | |
| 532A | Rocksprings | 65.60 | 313 | P | P | 20 27 39.5 | +0.1 |
| | baz=66,SNR=7.5 | | | | | | |
| W37A | Quinton | 65.60 | 320 | P | P | 20 27 38.5 | -0.7 |
| | baz=66 | | | | | | |
| 333A | Richland Sprin | 65.64 | 314 | P | P | 20 27 39.6 | +0.1 |
| | baz=66,SNR=8.9 | | | | | | |
| Z35A | Perchaven, San | 65.65 | 317 | P | P | 20 27 40.0 | +0.4 |
| | baz=66 | | | | | | |
| 631A | Perdido Creek | 65.68 | 312 | P | P | 20 27 40.1 | +0.3 |
| | baz=66 | | | | | | |
| JCT | Junction City | 65.72 | 313 | P | P | 20 27 40.9 | +0.8 |
| | baz=66 | | | | | | |
| JCT | Junction City | 65.72 | 313 | *e*P | P | 20 27 39.9 | -0.2 |
| | 11nm,0.9s | | | | | | |
| 134A | White-Moore Ra | 65.75 | 316 | P | P | 20 27 40.6 | +0.4 |
| | baz=66 | | | | | | |
| X36A | Centrahoma | 65.83 | 319 | P | P | 20 27 40.5 | -0.2 |
| | baz=66 | | | | | | |
| Y35A | Marietta | 65.86 | 318 | P | P | 20 27 40.8 | -0.1 |
| | baz=66 | | | | | | |
| V37A | Hulbert | 65.90 | 320 | P | P | 20 27 40.6 | -0.5 |
| | baz=66 | | | | | | |
| 432A | Menard | 65.94 | 313 | P | P | 20 27 41.3 | -0.2 |
| | baz=66,SNR=7.2 | | | | | | |
| 233A | Rising Star | 65.98 | 315 | P | P | 20 27 42.2 | +0.4 |
| | baz=66 | | | | | | |
| 531A | Rocksprings | 66.08 | 312 | P | P | 20 27 42.2 | -0.3 |
| | baz=66,SNR=7.0 | | | | | | |
| W36A | Wetumka | 66.11 | 319 | P | P | 20 27 41.6 | -0.8 |
| | baz=66 | | | | | | |
| X35A | Drake | 66.12 | 318 | P | P | 20 27 41.8 | -0.8 |
| | baz=66 | | | | | | |
| 332A | Millersview | 66.20 | 314 | P | P | 20 27 43.2 | +0.1 |
| | baz=66 | | | | | | |
| U37A | Salina | 66.22 | 321 | P | P | 20 27 42.4 | -0.7 |
| | baz=66 | | | | | | |
| TUL1 | Tulsa | 66.32 | 320 | P | P | 20 27 43.0 | -0.8 |
| | baz=66 | | | | | | |
| TUL1 | Tulsa | 66.32 | 320 | *e*P | P | 20 27 42.5 | -1.3 |
| | 17nm,0.9s | | | | | | |
| V36A | Jenks | 66.34 | 320 | P | P | 20 27 43.4 | -0.5 |
| | baz=66 | | | | | | |
| 133A | Hamilton Ranch | 66.34 | 315 | P | P | 20 27 44.2 | +0.2 |
| | baz=66 | | | | | | |
| Y34A | Reagan Ranch, | 66.37 | 317 | P | P | 20 27 43.8 | -0.3 |
| | baz=66 | | | | | | |
| 431A | Sonora | 66.41 | 313 | P | P | 20 27 45.1 | +0.5 |
| | baz=66 | | | | | | |
| 232A | Coleman | 66.42 | 314 | P | P | 20 27 44.9 | +0.3 |
| | baz=66 | | | | | | |
| W35A | Tecumseh | 66.53 | 319 | P | P | 20 27 45.2 | +0.1 |
| | baz=67 | | | | | | |
| T37A | Cheneyville 18 | 66.57 | 321 | P | P | 20 27 44.4 | -1.0 |
| | baz=67 | | | | | | |
| 331A | San Angelo | 66.64 | 313 | P | P | 20 27 46.2 | +0.3 |
| | baz=67 | | | | | | |
| Z33A | Whitaker Ranch | 66.64 | 316 | P | P | 20 27 46.4 | +0.5 |
| | baz=67 | | | | | | |
| 530A | J-C Ranch, Com | 66.64 | 312 | P | P | 20 27 46.1 | +0.1 |
| | baz=67,SNR=11 | | | | | | |
| X34A | Smith Ranch, M | 66.81 | 318 | P | P | 20 27 46.9 | -0.1 |
| | baz=67 | | | | | | |
| ABTX | Abilene, Hawle | 66.84 | 315 | P | P | 20 27 47.6 | +0.3 |
| | baz=67 | | | | | | |
| ABTX | Abilene, Hawle | 66.84 | 315 | *e*P | P | 20 27 47.2 | 0.0 |
| | 12nm,0.9s | | | | | | |
| 231A | Bronte | 66.91 | 314 | P | P | 20 27 47.6 | -0.1 |
| | baz=67 | | | | | | |
| 430A | Baggett Ranch, | 66.92 | 313 | P | P | 20 27 47.5 | -0.3 |
| | baz=67,SNR=9.7 | | | | | | |
| Y33A | Hilltop Ranch, | 66.97 | 317 | P | P | 20 27 48.4 | +0.4 |
| | baz=67 | | | | | | |
| T36A | Boggs Farm, Ca | 67.11 | 321 | P | P | 20 27 49.2 | +0.4 |
| | baz=67 | | | | | | |
| Z32A | Haskell | 67.13 | 316 | P | P | 20 27 49.0 | 0.0 |
| | baz=67,SNR=10.0 | | | | | | |
| W34A | Bridge Creek, | 67.16 | 318 | P | P | 20 27 49.0 | -0.2 |
| | baz=67 | | | | | | |
| U35A | Pawnee | 67.20 | 320 | P | P | 20 27 49.4 | 0.0 |
| | baz=67 | | | | | | |
| X33A | Lawton | 67.21 | 317 | P | P | 20 27 49.2 | -0.3 |
| | baz=67 | | | | | | |
| 330A | Mertzon | 67.22 | 313 | P | P | 20 27 50.0 | +0.3 |
| | baz=67,SNR=8.0 | | | | | | |
| 529A | Stev Forest Ra | 67.27 | 311 | P | P | 20 27 50.1 | +0.1 |
| | baz=67 | | | | | | |
| R37A | Teagarden Farm | 67.29 | 322 | P | P | 20 27 49.0 | -1.0 |
| | baz=67 | | | | | | |
| 429A | Davenport Ranc | 67.30 | 312 | P | P | 20 27 50.1 | -0.2 |
| | baz=67,SNR=9.2 | | | | | | |
| 131A | Roby | 67.39 | 315 | P | P | 20 27 51.3 | +0.6 |
| | baz=68 | | | | | | |
| T35A | Sooner Cattle | 67.41 | 320 | P | P | 20 27 50.3 | -0.4 |
| | baz=68 | | | | | | |
| 230A | Sterling City | 67.44 | 314 | P | P | 20 27 51.6 | +0.5 |
| | baz=68 | | | | | | |
| Q37A | Longview Farm, | 67.45 | 323 | P | P | 20 27 51.6 | +0.7 |
| | baz=68 | | | | | | |
| WMOK | Wichita Mounta | 67.51 | 317 | *e*P | P | 20 27 50.4 | -1.1 |
| | 6.7nm,0.7s | | | | | | |
| Y32A | R-V Farms, Ver | 67.52 | 316 | P | P | 20 27 51.5 | 0.0 |
| | baz=68 | | | | | | |
| Z31A | Sharp Cattle R | 67.59 | 315 | P | P | 20 27 52.2 | +0.2 |
| | baz=68,SNR=7.9 | | | | | | |
| X32A | Elmer | 67.66 | 317 | P | P | 20 27 52.7 | +0.4 |
| | baz=68 | | | | | | |
| R36A | Gordon, Harris | 67.70 | 322 | P | P | 20 27 51.3 | -1.2 |
| | baz=68 | | | | | | |
| 130A | Snyder | 67.74 | 314 | P | P | 20 27 53.3 | +0.3 |

S35A **Otter Creek Ra** 67.78 321 P P 20 27 52.3 -0.7
baz=68
V33A **Lossen Ranch,** 67.85 319 P P 20 27 53.3 -0.2
baz=68
T34A **McClaskey Farm** 67.89 320 P P 20 27 53.8 0.0
baz=68
TX31 **Lajitas Ar. Si** 67.91 310 eP P 20 27 54.1 -0.1
TXAR **Lajitas Array** 67.91 310 P P 20 27 54.4 +0.2
0.9nm,0.5s,baz=114,slow=6.1,SNR=20
TXAR **Lajitas Array** 67.91 310 P P 20 27 54.4 +0.2
229A **Bryant Ranch,** 67.98 313 P P 20 27 55.0 +0.5
baz=68
Y31A **Rekieta Farm,** 68.04 316 P P 20 27 55.3 +0.5
baz=68,SNR=5.8
ESDC **Sonseca Array** 68.05 36 P P 20 27 54.4 -0.3
3.9nm,0.9s,baz=230,slow=6.2,SNR=15
ESDC **Sonseca Array** 68.05 36 P P 20 27 54.4 -0.3
W32A **Sentinel** 68.05 317 P P 20 27 54.8 0.0
baz=68
ES19 **SONSECA Array** 68.10 36 eP P 20 27 54.9 -0.2
R35A **Emporia Munici** 68.12 322 P P 20 27 54.4 -0.7
baz=68
X31A **McDonald Ranch** 68.24 317 P P 20 27 56.1 0.0
baz=68
Z30A **Sanderson Ranc** 68.25 315 P P 20 27 56.1 -0.1
baz=68,SNR=12
S34A **Willow Spring** 68.27 321 P P 20 27 55.6 -0.5
baz=68
V32A **Arapaho** 68.27 318 P P 20 27 56.1 -0.1
baz=68
Q35A **Mercer Eighty,** 68.37 322 P P 20 27 56.1 -0.6
baz=68
P36A **Good Intent, A** 68.38 323 P P 20 27 56.4 -0.3
baz=68
Y30A **Stafford Cattl** 68.42 315 P P 20 27 58.1 +0.8
baz=68
W31A **Holland Ranch,** 68.55 317 P P 20 27 58.2 +0.2
baz=69
T33A **Patterson Ranc** 68.59 320 P P 20 27 58.1 0.0
baz=69
228A **UT Block 9, Go** 68.62 313 P P 20 27 58.7 +0.2
baz=69
Z29A **Hungry Hill Ra** 68.63 315 P P 20 27 58.6 +0.1
baz=69
X30A **Coker Ranch, T** 68.74 316 P P 20 27 59.6 +0.5
baz=69
R34A **Isabella, Hill** 68.74 321 P P 20 27 58.9 -0.1
baz=69
S33A **Kaszmaul Farm,** 68.76 320 P P 20 27 58.8 -0.4
baz=69
P35A **Duane Minner,** 68.79 323 P P 20 27 58.4 -1.0
baz=69
SCIA **State Center** 68.81 326 eP P 20 27 58.9 -0.5
31nm,1.0s
128A **Castleberry Fa** 68.82 314 P P 20 27 59.8 0.0
baz=69
Y29A **Porterfield Fa** 68.94 315 P P 20 28 01.3 +0.8
baz=69
Q34A **Chapman** 68.95 322 P P 20 28 00.2 -0.1
baz=69
T32A **Huddler Ranch,** 69.08 319 P P 20 28 01.0 -0.2
baz=69
Z28A **Tucker Farm, M** 69.12 314 P P 20 28 01.4 -0.3
baz=69
R33A **Olander Ranch,** 69.19 321 P P 20 28 01.5 -0.4
baz=69
P34A **Walnut Farm, R** 69.28 322 P P 20 28 02.3 -0.1
baz=69
X29A **Tulia** 69.30 316 P P 20 28 03.3 +0.6
baz=69
N35A **Tabor** 69.45 324 P P 20 28 03.6 +0.2
baz=70
T31A **Randall Ranch,** 69.51 319 P P 20 28 04.1 +0.2
baz=70
AMTX **Amarillo** 69.53 316 P P 20 28 04.7 +0.5
baz=70
AMTX **Amarillo** 69.53 316 eP P 20 28 04.0 -0.2
8.5nm,0.8s
Q33A **Connelly Farm,** 69.53 321 P P 20 28 03.8 -0.1
baz=70
MSTX **Muleshoe** 69.76 315 P P 20 28 05.7 +0.1
baz=70,SNR=8.2
MSTX **Muleshoe** 69.76 315 eP P 20 28 05.5 -0.1
17nm,1.0s
N34A **Lincoln** 69.92 324 P P 20 28 05.8 -0.6
baz=70
Q32A **Meitler Ranch,** 69.97 321 P P 20 28 06.2 -0.5
baz=70
BOSA **Boshof** 69.98 116 LR LR 20 54 16.3
comp=Z,76nm,19.5s,baz=280,slow=32
T30A **Plains** 70.03 318 P P 20 28 07.4 +0.2
baz=70
O33A **Hebron** 70.06 322 P P 20 28 07.0 -0.2
baz=70
SCHQ **Schefferville** 70.18 349 P P 20 28 07.1 -0.5
9.5nm,0.8s,baz=195,slow=6.9,SNR=6.4
SCHQ LR LR 20 58 46.9
comp=Z,23nm,19.1s,baz=95,slow=36
SCHQ **Schefferville** 70.18 349 P P 20 28 07.1 -0.5
MNTX **Cornudas Mount** 70.40 311 P P 20 28 10.1 +0.6
baz=70
MNTX **Cornudas Mount** 70.40 311 eP P 20 28 09.2 -0.2
14nm,1.2s
T29A **Hugoton** 70.59 318 P P 20 28 10.9 +0.3
baz=71
O32A **Brockman Farm,** 70.59 322 P P 20 28 10.0 -0.5
baz=71
R30A **Dighton** 70.60 320 P P 20 28 10.8 +0.1
baz=71
P31A **Stockton** 70.80 321 P P 20 28 11.7 -0.1
baz=71
SPMN **St. Paul** 70.91 329 P P 20 28 11.6 -0.7
baz=71
SPMN **St. Paul** 70.91 329 eP P 20 28 11.2 -1.1
16nm,0.9s
T28A **Walsh** 71.10 318 P P 20 28 14.0 +0.3
baz=71
U27A **Thompson Grove** 71.17 317 P P 20 28 15.1 +0.9
baz=71
R29A **Marienthal** 71.23 319 P P 20 28 15.1 +0.6
baz=71
T27A **Campo** 71.46 317 P P 20 28 16.0 0.0
baz=72
R28A **Tribune** 71.61 319 P P 20 28 17.1 +0.3
baz=72
F36A **Milaca** 71.72 329 P P 20 28 16.4 -0.7
baz=72
ECSD **EROS Data Cent** 71.89 326 P P 20 28 17.5 -0.7
baz=72
Q28A **Sharon Springs** 72.04 319 P P 20 28 20.3 +0.9
baz=72
D37A **Cotton** 72.11 331 P P 20 28 18.9 -0.6
baz=72
R27A **Eads** 72.21 318 P P 20 28 21.6 +1.2
baz=72
S26A **Kim** 72.27 317 P P 20 28 21.2 +0.4
baz=72
K31A **O'Neill** 72.36 324 P P 20 28 21.0 -0.1
baz=72
D36A **Goodland** 72.47 330 P P 20 28 21.3 -0.3
baz=73
H33A **Prehn Over Nor** 72.58 327 P P 20 28 22.1 -0.3
baz=73
T25A **Trinidad** 72.62 317 P P 20 28 23.5 +0.5
baz=73
T25A **Trinidad** 72.62 317 eP P 20 28 22.8 -0.2
32nm,1.8s
R26A **Arlington** 72.64 318 P P 20 28 22.9 -0.1
baz=73,SNR=7.3
LPM **Los Pinos Moun** 72.65 313 eP P 20 28 23.3 +0.1
C36A **Pine Crest Far** 72.73 331 P P 20 28 22.2 -1.0
baz=73
H32A **Carlson Farm,** 72.84 326 P P 20 28 23.9 +0.1
baz=73
ANMO **Albuquerque** 72.85 314 eP P 20 28 25.0 +0.6
3.3nm,1.0s
L29A **Maesberg Ranch** 73.01 323 P P 20 28 24.9 -0.2
baz=73
Q26A **Hugo** 73.04 319 P P 20 28 26.1 +0.7
baz=73
P26A **Davis Ranch, A** 73.29 319 P P 20 28 27.4 +0.5
baz=73
K29A **Lazy Trails An** 73.35 323 P P 20 28 27.6 +0.6
baz=74
D34A **Park Rapids** 73.40 329 P P 20 28 27.0 -0.1
baz=74
N27A **Anderson Farm,** 73.50 321 P P 20 28 28.5 +0.5
baz=68
Q24A **Divide** 74.11 318 P P 20 28 33.1 +1.1
baz=74
F30A **Leola** 74.56 326 P P 20 28 34.4 +0.4
baz=75
AGMN **Agassiz Nation** 74.56 330 P P 20 28 33.4 -0.5
baz=75
AGMN **Agassiz Nation** 74.56 330 eP P 20 28 32.3 -1.6
13nm,0.9s
I28A **Midland** 74.60 324 P P 20 28 34.6 +0.4
baz=75
TUC **Tucson** 74.70 309 eP P 20 28 35.3 +0.1
4.4nm,0.9s
ISCO **Idaho Springs** 74.87 318 P P 20 28 36.7 +0.4
baz=75
H28A **Mission Ridge** 74.93 325 P P 20 28 36.3 +0.1
baz=75
B32A **Ashes, Strandq** 74.96 330 P P 20 28 36.2 0.0
baz=75
F29A **Eureka** 74.99 326 P P 20 28 36.4 -0.1
baz=75
G28A **Parade** 75.11 325 P P 20 28 37.5 +0.2
baz=75
I27A **Quinn** 75.15 324 P P 20 28 37.5 +0.1
baz=75
W18A **Petrified Fore** 75.26 312 P P 20 28 38.9 +0.4
baz=75
MVCO **Mesa Verde** 75.43 315 P P 20 28 40.4 +0.9
baz=76
MVCO **Mesa Verde** 75.43 315 eP P 20 28 39.5 0.0
9.4nm,1.0s
C30A **Mose, Pekin** 75.47 328 P P 20 28 39.8 +0.6
baz=76
H27A **Howes** 75.50 324 P P 20 28 39.7 +0.2
baz=76
D29A **Pettibone, Tap** 75.64 327 P P 20 28 40.9 +0.7
baz=76
N23A **Red Feather La** 75.68 319 P P 20 28 41.7 +0.8
baz=76
N23A **Red Feather La** 75.68 319 eP P 20 28 40.7 -0.2
7.1nm,0.9s
J25A **Sunshine Ranch** 75.77 322 P P 20 28 42.2 +1.1
baz=76
G27A **Dupree** 75.87 325 P P 20 28 42.2 +0.6
baz=76,SNR=7.9
ULM **Lac du Bonnet** 75.90 331 LR LR 21 03 20.5
comp=Z,56nm,19.3s,baz=124,slow=37
ULM **Lac du Bonnet** 75.90 331 eP P 20 28 40.6 -1.0
E28A **Huff** 75.92 326 P P 20 28 42.7 +0.9
baz=76
I25A **Rochford** 76.09 323 P P 20 28 44.2 +1.1
baz=76
QSPA **South Pole Qui** 76.15 180 eP P 20 28 45.6 +2.6
9.5nm,0.7s
MDND **Maddock** 76.15 328 P P 20 28 43.4 +0.3
baz=76
G26A **Maurine** 76.19 324 P P 20 28 44.3 +0.8
baz=76
F27A **Lemmon** 76.22 325 P P 20 28 44.4 +0.9
baz=76
D28A **Regan** 76.24 327 P P 20 28 44.7 +1.0
baz=76
SSB **Saint Sauveur** 76.45 36 eP P 20 28 45.1 +0.2
149nm,2.7s
PV09 **Paradox Valley** 76.52 316 eP P 20 28 47.1 +1.4
F26A **Lodgepole** 76.56 325 P P 20 28 45.9 +0.3
baz=77
G25A **Newell** 76.60 324 P P 20 28 46.8 +1.1
baz=77
SYO **Syowa Base** 76.62 158⇑ eP P 20 28 45.0 -0.4
WUAZ **Wupatki** 76.63 312 P P 20 28 47.0 +0.7
baz=77
A29A **Manning Farm,** 76.65 329 P P 20 28 45.6 -0.3
baz=77,SNR=6.0
E26A **Carlson Angus** 76.82 325 P P 20 28 47.9 +1.0
baz=77
F25A **Bowman** 77.05 324 P P 20 28 49.6 +1.3
baz=77
C27A **Sayler Ranch,** 77.06 327 P P 20 28 49.0 +0.8
baz=77,SNR=6.9
D26A **Manning** 77.14 326 P P 20 28 50.0 +1.2
baz=77
A28A **Rude Farm, Bot** 77.16 328 P P 20 28 49.2 +0.4
baz=77
C26A **Wahner Farm, P** 77.44 327 P P 20 28 51.3 +0.9
baz=78
A27A **Ledoux Ranch,** 77.69 328 P P 20 28 52.8 +1.1
baz=78
SRU **San Rafael** 77.76 316 eP P 20 28 53.2 +0.6
3.6nm,0.9s
P18A **Preston Nutter** 77.83 316 eP P 20 28 53.0 -0.2
75nm,2.7s
B25A **Knox Farm, Ray** 78.28 327 P P 20 28 56.6 +1.5
baz=78
MSU **Marysvale** 78.61 315 eP P 20 28 58.7 +1.4
5.1nm,1.3s
A25A **Svangstu Ranch** 78.66 327 P P 20 28 58.4 +1.3
baz=79
IRM **Iron Mountain** 78.79 310 P P 20 28 59.7 +1.5
baz=79
DGMT **Dagmar** 78.96 326 P P 20 29 00.1 +1.4
baz=79
BW06 **Boulder Array** 78.97 319 eP P 20 28 59.1 -0.1
CCUT **Cedar City** 78.99 313 eP P 20 29 02.1 +2.6
65nm,2.9s
ESK **Eskdalemuir** 79.19 25 P P 20 28 58.7 -1.1
MONP **Monument Peak** 79.22 308 P P 20 29 02.6 +1.8
baz=79
BELC **Belle Mtn. Jos** 79.36 309 P P 20 29 03.4 +1.9
baz=80
GMRC **Gramite Mounta** 79.44 310 P P 20 29 03.7 +1.8
baz=80
PFO **Pinyon Flat Ob** 79.55 309 P P 20 29 04.0 +1.5
baz=80
DNR **Dunn Ranch,Anz** 79.66 308 eP P 20 29 04.2 +1.1
HWUT **Hardware Ranch** 79.68 318 eP P 20 29 03.1 0.0
6.1nm,0.9s
DUG **Dugway** 79.83 316 P P 20 29 05.3 +1.4
baz=80
DUG **Dugway** 79.83 316 eP P 20 29 04.4 +0.5
8.5nm,1.2s
WLF **Walferdange** 79.92 33 P P 20 29 03.9 0.0
HEC **Hector,Ludlow** 79.96 310 P P 20 29 06.7 +2.1
baz=80
RLMT **Red Lodge** 80.00 321 P P 20 29 05.9 +1.1
baz=80
RLMT **Red Lodge** 80.00 321 eP P 20 29 05.2 +0.4
7.8nm,0.8s
LOHW **Long Hollow** 80.05 320 eP P 20 29 05.6 +0.4
SNOW **Snow King Moun** 80.07 319 eP P 20 29 06.4 +1.2
18nm,0.9s
REDW **Red Top Meadow** 80.08 319 eP P 20 29 05.3 0.0
8.5nm,1.0s
MOOW **Moose Ponds** 80.21 320 eP P 20 29 06.3 +0.4
TPAW **Teton Pass** 80.21 319 eP P 20 29 06.6 +0.5
12nm,1.0s
FXWY **Fox Creek** 80.33 320 eP P 20 29 07.2 +0.6
FLWY **Flagg Ranch** 80.35 320 eP P 20 29 07.0 +0.3
18nm,0.9s
IMW **Indian Meadow** 80.41 320 eP P 20 29 07.7 +0.6
FUORN **Ofenpass-Fuorn** 80.51 37 eP P 20 29 07.5 0.0
GSC **Goldstone** 80.51 310 P P 20 29 09.2 +1.6
baz=81
GSC **Goldstone** 80.51 310 eP P 20 29 09.4 +1.8
TPNV **Topopah Spring** 80.79 312 P P 20 29 11.2 +2.0
baz=81
TPNV **Topopah Spring** 80.79 312 eP P 20 29 11.2 +2.0
4.4nm,0.9s
R11A **Troy Canyon, C** 80.92 313 P P 20 29 11.6 +1.8
baz=81
R11A **Troy Canyon, C** 80.92 313 eP P 20 29 11.1 +1.2
7.0nm,1.0s
FMP **Fort Macarthur** 80.99 308 P P 20 29 12.5 +2.4
baz=81
FETA **Feichten** 80.99 37⇑ iP P 20 29 09.5 -0.5
8.9nm,0.8s
FURC **Furnace Creek,** 81.04 311 P P 20 29 12.6 +2.4
baz=81
EDW2 **Edwards Air Fo** 81.22 309 P P 20 29 12.4 +1.0
baz=81
LRMC **Laurel Mountai** 81.24 310 P P 20 29 13.3 +1.7
baz=81
RETA **Reutte** 81.26 36⇑ iP P 20 29 10.8 -0.5
5.5nm,0.8s
MPMC **Manual Prospec** 81.33 310 P P 20 29 13.6 +1.5
baz=81
BORG **Borgarnes** 81.35 12 eP P 20 29 12.4 +1.2
97nm,1.4s
MOTA **Moosalm** 81.38 37⇓ iP P 20 29 11.6 -0.5
13nm,1.0s,SNR=4.7
DAC **Darwin (Calif)** 81.50 311 eP P 20 29 14.4 +1.4
3.7nm,0.8s
GRAC **Grapevine Rang** 81.63 311 P P 20 29 15.3 +1.9
baz=82
WTTA **Wattenberg** 81.65 37⇓ iP P 20 29 13.2 -0.3
25nm,0.8s
WATA **Walderalm** 81.65 37⇑ iP P 20 29 13.0 -0.4
14nm,0.9s
ELK **Elko** 81.73 315 eP P 20 29 15.6 +1.4
EGMT **Eagleton** 81.80 324 P P 20 29 15.2 +1.1
baz=82
ISA **Isabella** 81.90 310 P P 20 29 16.8 +1.8
baz=82
ISA **Isabella** 81.90 310 eP P 20 29 16.3 +1.3
4.3nm,1.0s
BSC **Santa Cruz Isl** 82.12 308 P P 20 29 17.8 +1.7
baz=82
HRY **Holter Researc** 82.35 322 eP P 20 29 18.2 +1.1
HLID **Hailey** 82.46 318 P P 20 29 18.9 +1.1
baz=82
HLID **Hailey** 82.46 318 eP P 20 29 18.8 +1.0
7.9nm,0.8s
KBA **Koelnbreinsper** 82.56 38⇑ iP P 20 29 17.8 -0.5
6.5nm,0.8s
PKM **Peak Mountain** 82.61 309 P P 20 29 20.3 +1.5
baz=83
NV01 **Mina Array Sit** 82.89 312 eP P 20 29 21.3 +1.0
NVAR **Mina Array Bea** 82.89 312 P P 20 29 21.7 +1.4
4.1nm,0.8s,baz=127,slow=5.7,SNR=30
NVAR LR LR 21 10 26.2
comp=Z,89nm,18.1s,baz=84,slow=39
NVAR **Mina Array Bea** 82.89 312 P P 20 29 21.7 +1.4
OBKA **Obir** 83.00 39⇑ iP P 20 29 20.3 -0.2
12nm,0.8s,SNR=5.4
MFID **Camas Ranch** 83.31 318 eP P 20 29 22.4 +0.2
9.0nm,1.0s
SOKA **Soboth** 83.38 39⇑ iP P 20 29 22.4 0.0
11nm,1.0s,SNR=5.2
MOA **Molln** 83.48 37⇑ iP P 20 29 22.3 -0.6
11nm,1.2s
GEC2 **GERESS Array S** 83.64 36 eP P 20 29 24.1 +0.3
GERES **GERESS Array B** 83.64 36 P P 20 29 22.6 -1.2
1.8nm,0.8s,baz=260,slow=3.5,SNR=8.1
GERES **GERESS Array B** 83.64 36 P P 20 29 22.6 -1.2
MSO **Missoula** 83.68 321 P P 20 29 24.9 +1.0
baz=84
KHC **Kasperske Hory** 83.71 36 eP P 20 29 23.9 -0.1
KHC ex x 20 29 38.2
KHC **Kasperske Hory** 83.71 36 eP P 20 29 23.6 -0.4
ARSA **Arzberg** 83.94 38 iP P 20 29 24.1 -1.1
8.7nm,0.8s,SNR=6.9
SWMT **Swartz Lake** 84.03 322 eP P 20 29 26.3 +0.5
JTMT **Jette** 84.31 322 eP P 20 29 27.5 +0.3
CONA **Conrad Observa** 84.47 38⇑ iP P 20 29 28.1 +0.2
6.8nm,0.8s,SNR=7.4
CLL **Colm** 84.48 34⇑ iP P 20 29 28.3 +0.5
comp=Z,9.0nm,0.9s
CLL **Colm** 84.48 34 eP P 20 29 28.6 +0.7
PRU **Pruhonice** 84.68 36 eP P 20 29 29.4 +0.5
WALA **Waterton Lakes** 84.71 323 eP P 20 29 29.9 +0.7
GOPC **GO Pecny, Ondr** 84.78 36 eP P 20 29 30.2 +0.8
PVCC **Panska Ves** 84.96 35 eP P 20 29 30.9 +0.7
J08A **Circle Bar Ran** 85.03 317 eP P 20 29 32.6 +1.6
MAW **Mawson** 85.29 159 P P 20 29 33.3 +1.6
comp=Z,2.8nm,0.7s,baz=215,slow=4.8,SNR=7.2
MAW LR LR 21 05 41.4
comp=Z,34nm,19.0s,baz=241,slow=34
MAW **Mawson** 85.29 159 P P 20 29 33.3 +1.6
DIVS **Divibare** 85.37 43⇓ iP P 20 29 34.0 +1.4
VRAC **Vranov** 85.53 37⇑ iP P 20 29 33.8 +0.6
UPC **Upice** 85.76 36 eP P 20 29 34.9 +0.6
DPC **Dobruska-Polom** 85.86 36 eP P 20 29 35.4 +0.6
DPC ex x 20 29 45.2
KRLC **Kraliky** 86.00 36 eP P 20 29 36.2 +0.7
O03D **Paynes Creek** 86.11 313 P P 20 29 37.2 +0.8
baz=86
G08A **Pilot Rock** 86.14 318 eP P 20 29 37.2 +0.8
comp=Z,46nm,2.5s
NEW **Newport** 86.25 322 P P 20 29 37.3 +0.5
baz=86
NEW **Newport** 86.25 322 eP P 20 29 37.2 +0.5
comp=Z,63nm,2.4s
MORC **Moravsky Berou** 86.30 37⇑ iP P 20 29 38.0 +1.0
MORC **Moravsky Berou** 86.30 37 eP P 20 29 37.2 +0.2
VYHS **Vyhne** 86.50 38 eP P 20 29 37.8 -0.2
OKC **Ostrava-Krasne** 86.68 37 eP P 20 29 38.9 +0.1
SUMG **Summit** 86.69 3 eP P 20 29 38.5 -0.4
comp=Z,14nm,1.0s
D08A **Wollman Farm,** 86.84 320 eP P 20 29 40.6 +0.9
comp=Z,144nm,3.0s
J05D **Fort Rock, OR** 86.85 316 P P 20 29 41.2 +1.2
baz=87
VNDA **Vanda** 86.90 186 P P 20 29 42.6 +3.1
comp=Z,1.5nm,0.8s,baz=140,slow=3.5,SNR=10
VNDA **Vanda** 86.90 186 P P 20 29 42.6 +3.1
N02D **Trinity Center** 87.00 313 P P 20 29 40.5 -0.2
baz=87
BZS **Buzias** 87.04 42⇓ iP P 20 29 41.8 +1.1
LANS **Liptovska Anna** 87.16 38 eP P 20 29 42.6 +1.4
I05D **Terrebonne, OR** 87.32 317 P P 20 29 43.2 +1.1
baz=87
J04D **Umpqua Nationa** 87.42 316 P P 20 29 44.1 +1.3
baz=88
GZR **Gura Zlata** 87.70 42⇓ iP P 20 29 45.0 +1.0
L02D **Cave Junction,** 88.06 314 P P 20 29 46.4 +0.8
baz=88
STHS **Stebnicka Huta** 88.32 38 eP P 20 29 47.9 +1.1
I03D **Drain, OR** 88.43 316 P P 20 29 48.6 +1.3
baz=88
NBO02 **NORSAR Array S** 88.57 25 eP P 20 29 48.1 +0.4
TRPA **Tarpa** 88.60 40⇑ iP P 20 29 48.5 +0.4
NB2 **NORSAR Subarra** 88.71 25 P P 20 29 49.1 +0.8
comp=Z,6.0nm,1.0s,baz=230,slow=5.1
NOA **NORSAR Array B** 88.71 25 P P 20 29 48.1 -0.2
comp=Z,3.3nm,1.0s,baz=232,slow=5.1,SNR=5.6
NOA **NORSAR Array B** 88.71 25 P P 20 29 48.1 -0.2
KOLS **Kolonicke sedl** 88.75 39 eP P 20 29 49.5 +0.7
VOIR 89.21 43⇑ iP P 20 29 53.7 +2.6
HFS **Hagfors** 89.28 26 LR LR 21 07 31.6
comp=Z,37nm,19.2s,baz=316,slow=34
B05A **Bryant** 89.29 320 P P 20 29 51.2 0.0
baz=89
A04D **Lummi Island** 89.83 321 P P 20 29 55.6 +1.8
baz=90
BUR04 **Bucovina Ar. S** 90.09 41 eP P 20 29 56.9 +1.7
BURAR **Bucovina Array** 90.09 41 iP P 20 29 56.5 +1.3
SPITS **Spitsbergen Ar** 98.80 11 LR LR 21 11 34.1
comp=Z,23nm,18.3s,baz=25,slow=33
AAK **Ala-Archa** 124.09 48 ePKPdf PKPdf 20 35 54.6 +0.5
KSH **Kashi** 125.85 51 ePKP PKPdf 20 35 58.3 +0.8
KSH SKS SKSdf 20 43 05.8 -4.0
KSH SS SS 20 54 49.8 -1.9
KSH PPMZ
comp=Z,80nm,4.6s
KSH LN
comp=Z,110nm,6.4s
KSH LE
comp=Z,120nm,5.0s
KSH LZ
comp=Z,140nm,5.2s
ZAA0 **Zalesovo Array** 126.39 32 ePKPdf PKPdf 20 35 57.6 -0.2
ZALV **Zalesovo Beam** 126.39 32 PKP PKPdf 20 35 57.7 -0.2
comp=Z,4.2nm,0.8s,baz=303,slow=2.8,SNR=16
ZALV **Zalesovo Beam** 126.39 32 PKP PKPdf 20 35 57.7 -0.2
MAKZ **Makanchi** 127.91 41 ePKPdf PKPdf 20 36 00.8 -0.3
MKAR **Makanchi Array** 128.12 41 PKP PKPdf 20 36 01.4 0.0
comp=Z,2.6nm,0.8s,baz=293,slow=2.0,SNR=18
MKAR **Makanchi Array** 128.12 41 ePKPdf PKPdf 20 36 00.7 -0.8
MKAR PKP PKPdf 20 36 01.4 0.0
MK01 **Makanchi Array** 128.13 41 ePKPdf PKPdf 20 36 01.4 -0.1
WMQ **Urumqi** 132.81 42 ePKP PKPdf 20 36 12.0 +1.5
SONA1 **Songino Array** 140.68 26 ePKPpre PKPpre 20 36 17.8
SONA1 ePKPdf PKPdf 20 36 26.0 +0.9
SONM **Songino Array** 140.68 26 PKhKP PKPpre 20 36 14.3
comp=Z,0.6nm,0.7s,baz=292,slow=2.6,SNR=5.0
SONM PKP PKPdf 20 36 26.1 +1.0
comp=Z,1.1nm,0.9s,baz=347,slow=1.1,SNR=6.4
SONM **Songino Array** 140.68 26 PKPpre PKPpre 20 36 14.3
SONM PKP PKPdf 20 36 26.1 +1.0
AS01 **Alice Springs** 142.42 185 ePKPpre PKPpre 20 36 24.4
AS01 ePKPdf PKPdf 20 36 29.7 +0.8
ASAR **Alice Springs** 142.42 185 PKhKP PKPpre 20 36 24.5
comp=Z,1.5nm,0.6s,baz=176,slow=3.9,SNR=16

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ASAR | | | | PKP | **PKPdf** | **20 36 29.8** | **+1.0** |
| | comp=Z,2.5nm,0.8s,baz=164,slow=1.8,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **142.42** | **185** | PKPpre | PKPpre | 20 36 24.5 | |
| ASAR | | | | PKP | **PKPdf** | **20 36 29.9** | **+1.0** |
| **GTA** | **Gaotai** | **142.87** | **41** | *e*PKP | **PKPdf** | **20 36 29.8** | **+0.5** |
| GTA | | | | pPKP | **pPKPdf** | **20 36 34.8** | **+2.1** |
| **YSS** | **Yuzh-Sakhalins** | **145.65** | **345** | *e*PKPdf | **PKPdf** | **20 36 33.8** | **+0.1** |
| **WRA** | **Warramunga Arr** | **146.07** | **186** | PKPbc | **PKPab** | **20 36 36.6** | **+0.1** |
| | comp=Z,11nm,0.7s,baz=183,slow=2.6,SNR=54 | | | | | | |
| **WRA** | **Warramunga Arr** | **146.07** | **186** | PKPbc | **PKPab** | **20 36 36.6** | **+0.1** |
| **WRAB** | **Tennant Creek** | **146.08** | **186** | *e*PKPdf | **PKPab** | **20 36 36.6** | **0.0** |
| **LZH** | **Lanzhou** | **147.39** | **43** | *e*PKPbc | **PKPdf** | **20 36 32.6** | **-4.6** |
| LZH | | | | pPKP | **PKPbc** | **20 36 36.1** | **-3.5** |
| LZH | | | | sPKP | | 20 36 37.8 | |
| LZH | | | | PP | **PP** | **20 40 07.0** | **+2.1** |
| LZH | | | | PPMZ | | | |
| | comp=Z,120nm,4.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **148.46** | **28** | *e*PKPbc | **PKPbc** | **20 36 40.6** | **-1.7** |
| HHC | | | | PP | PP | 20 40 17.2 | +6.6 |
| HHC | | | | SKKS | | 20 47 01.3 | |
| HHC | | | | PPMZ | | | |
| | comp=Z,47nm,8.0s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,170nm,17.5s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,96nm,17.9s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,110nm,18.3s | | | | | | |
| **LEM** | **Lembang** | **149.10** | **131** | PKPbc | **PKPbc** | **20 36 46.2** | **+1.4** |
| | comp=Z,37nm,0.9s,baz=3.8,slow=0.4,SNR=7.8 | | | | | | |
| **LEM** | **Lembang** | **149.10** | **131** | PKPbc | **PKPbc** | **20 36 46.2** | **+1.4** |
| **KULM** | **Kulim** | **149.13** | **103** | *e*PKPbc | **PKPbc** | **20 36 44.6** | **0.0** |
| **CHTO** | **Chiang Mai** | **149.16** | **77** | *e*PKPbc | **PKPbc** | **20 36 44.5** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** | **149.18** | **77** | PKPbc | **PKPbc** | **20 36 45.2** | **+0.6** |
| | comp=Z,18nm,0.7s,baz=268,slow=4.5,SNR=20 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.18** | **77** | PKPbc | **PKPbc** | **20 36 45.2** | **+0.6** |
| **CM01** | **Chiang Mai Arr** | **149.20** | **78** | *e*PKPdf | **PKPdf** | **20 36 40.6** | **+0.2** |
| CM01 | | | | *e*PKPbc | **PKiKP** | **20 36 45.5** | **-0.4** |
| **USRK** | **Ussuriysk Ar.** | **149.90** | **358** | PKPbc | **PKPbc** | **20 36 45.4** | **-0.2** |
| | comp=Z,5.6nm,0.7s,baz=312,slow=1.9,SNR=16 | | | | | | |
| **CN2** | **Changchun** | **149.97** | **8** | *e*PKPbc | **PKPdf** | **20 36 38.8** | **-2.1** |
| CN2 | | | | SKS | **SKSdf** | **20 43 44.9** | **-4.2** |
| CN2 | | | | LN | | | |
| | comp=Z,300nm,23.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,500nm,23.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,700nm,23.0s | | | | | | |
| **CD2** | **Chengdu** | **150.05** | **51** | PKPbc | **PKPdf** | **20 36 40.4** | **-1.1** |
| CD2 | | | | pPKP | **pPKPdf** | **20 36 43.8** | **-1.1** |
| CD2 | | | | sPKP | | 20 36 45.1 | |
| CD2 | | | | PP | **PP** | **20 40 19.8** | **-0.9** |
| CD2 | | | | SKS | **SKSdf** | **20 43 48.5** | **-1.4** |
| CD2 | | | | SS | **SS** | **20 59 37.5** | **-0.6** |
| CD2 | | | | PPMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| **ERM** | **Erimo** | **150.09** | **341** | *e*PKPdf | **PKPdf** | **20 36 43.4** | **+2.2** |
| **MYKOM** | **Kota Tinggi** | **150.78** | **112** | *e*PKPdf | **PKPdf** | **20 36 42.3** | **-0.7** |
| MYKOM | | | | *e*PKPbc | **PKiKP** | **20 36 49.3** | **0.0** |
| **KMI** | **Kunming** | **151.46** | **63** | PKPbc | **PKPdf** | **20 36 44.6** | **+0.5** |
| **XAN** | **Xi'an** | **151.93** | **41** | PKPbc | **PKPbc** | **20 36 50.3** | **-0.5** |
| **GYA** | **Guiyang** | **154.30** | **57** | *e*PKPbc | **PKPdf** | **20 36 46.2** | **-1.9** |
| GYA | | | | PKPab | **PKPab** | **20 37 11.0** | **+0.7** |
| GYA | | | | PKS | **PKSdf** | **20 40 19.6** | **-2.9** |
| GYA | | | | PP | **PP** | **20 40 47.8** | **+2.6** |
| GYA | | | | PPMZ | | | |
| | comp=Z,120nm,7.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **156.59** | **345** | PKPab | **PKPab** | **20 37 19.9** | **+0.4** |
| | comp=Z,0.5nm,0.5s,baz=33,slow=4.8,SNR=4.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **156.59** | **345** | PKPab | **PKPab** | **20 37 19.9** | **+0.4** |

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*ISCJB **08** 20:25:15.6±0.8, 13°.73S±0°.08×49°.45W±0°.07, h10km, mb4.3/5, Error ellipse: s-maj=12.1km s-min=10.0km az=9.4*
*IDC **08** 20:25:16.7±0.7, 13°.78S×49°.13W, h0km, mb4.0/3, mb1 4.5/6, mb1mx4.0/31, mbtmp4.3/6, ML5.0/2, MS2.9/2, Ms1 2.9/2, ms1mx2.6/37, Error ellipse: s-maj=24.4km s-min=13.6km az=61.0*
*NEIC **08** 20:25:17.6±0.7, 13°.76S×49°.37W, h10km, mb4.4/1, Error ellipse: s-maj=16.3km s-min=13.5km az=218.0*
**ISC 08 20:25:17.6**±0.6**, 13°.85S**±0°.07×**49°.42W**±0°.07**, h10km, n19, σ2s.11**/22**, mb4.7**/5**, Brazil**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BDFB** | **Brasilia** | **2.24** | **143** | Pn | **Pn** | **20 25 55.0** | **+0.1** |
| | 531nm,0.3s,baz=311,slow=17,SNR=95 | | | | | | |
| BDFB | | | | Pg | **Pb** | **20 25 56.8** | **-1.4** |
| | 531nm,0.3s,baz=318,slow=15,SNR=130 | | | | | | |
| BDFB | | | | Lg | Lg | 20 26 24.1 | |
| | 244nm,0.3s,baz=214,slow=18,SNR=18 | | | | | | |
| BDFB | | | | LR | LR | 20 26 56.3 | |
| | comp=Z,399nm,19.6s,baz=320,slow=46 | | | | | | |
| **SIV** | **San Ignacio** | **11.46** | **258** | Pn | **Pn** | **20 28 04.2** | **+2.7** |
| | 1.7nm,0.3s,baz=93,slow=15,SNR=4.8 | | | | | | |
| SIV | | | | Sn | **Sn** | **20 30 11.0** | **+1.4** |
| | 1.6nm,0.3s,baz=68,slow=19,SNR=2.9 | | | | | | |
| SIV | | | | Lg | Lg | 20 31 27.1 | |
| | 2.1nm,0.3s,baz=22,slow=19,SNR=2.9 | | | | | | |
| **SAML** | **Samuel** | **14.34** | **288** | *e*Pn | **Pn** | **20 28 38.5** | **-2.3** |
| SAML | | | | *e*Sn | **Sn** | **20 31 15.1** | **-5.0** |
| **CPUP** | **Villa Florida** | **14.46** | **210** | Pn | **Pn** | **20 28 44.1** | **+1.8** |
| | baz=77,slow=18,SNR=2.2 | | | | | | |
| CPUP | | | | Sn | **Sn** | **20 31 18.9** | **-3.9** |
| | 0.6nm,0.3s,baz=295,slow=19,SNR=3.6 | | | | | | |
| CPUP | | | | Lg | Lg | 20 33 03.9 | |
| | 0.6nm,0.3s,baz=139,slow=19,SNR=2.7 | | | | | | |
| **PTGA** | **Pitinga** | **16.70** | **320** | Pn | **Pn** | **20 29 09.4** | **-2.5** |
| | 2.4nm,0.3s,baz=343,slow=19,SNR=3.3 | | | | | | |
| PTGA | | | | Sn | Sn | 20 32 07.4 | -10 |
| | 1.4nm,0.3s,baz=36,slow=19,SNR=4.1 | | | | | | |
| **LPAZ** | **La Paz** | **18.23** | **260** | LR | LR | 20 37 25.7 | |
| | comp=Z,25nm,20.2s,baz=56,slow=39 | | | | | | |
| **LVC** | **Limon Verde** | **20.44** | **242** | P | **P** | **20 29 55.1** | **-0.5** |
| | 29nm,1.6s | | | | | | |
| **NNA** | **Nana** | **26.79** | **271** | P | **P** | **20 30 58.2** | **+0.1** |
| | 36nm,1.2s | | | | | | |
| **SDV** | **Santo Domingo** | **30.88** | **316** | P | **P** | **20 31 34.1** | **-0.6** |
| | 17nm,0.9s | | | | | | |
| **AGPR** | **Aguadilla, PR** | **36.55** | **331** | P | **P** | **20 32 24.9** | **+1.3** |
| **TORD** | **Torodi Ar. Bea** | **57.31** | **64** | P | **P** | **20 35 04.2** | **-1.9** |
| | 6.0nm,0.8s,baz=258,slow=7.7,SNR=45 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.69** | **310** | P | **P** | **20 36 17.9** | **+2.4** |
| | 0.2nm,0.5s,baz=123,slow=8.2,SNR=6.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.67** | **312** | P | **P** | **20 37 44.2** | **+2.3** |
| | 0.9nm,0.8s,baz=115,slow=5.2,SNR=4.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **126.33** | **32** | PKP | **PKPdf** | **20 44 20.1** | **-0.5** |
| | 0.7nm,0.6s,baz=259,slow=1.5,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **128.09** | **41** | PKP | **PKPdf** | **20 44 23.9** | **-0.3** |
| | 0.2nm,0.2s,baz=321,slow=1.8,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **142.57** | **185** | PKhKP | PKPpre | 20 44 47.5 | |
| | 0.9nm,1.0s,baz=180,slow=2.6,SNR=3.9 | | | | | | |
| ASAR | | | | PKP | **PKPdf** | **20 44 52.7** | **+0.8** |
| | 0.7nm,0.9s,baz=157,slow=2.7,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **146.21** | **186** | PKPbc | **PKPbc** | **20 44 59.1** | **-0.1** |
| | 2.2nm,0.7s,baz=183,slow=2.6,SNR=13 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **149.30** | **77** | PKPbc | **PKPbc** | **20 45 07.7** | **+0.1** |
| | 3.6nm,0.7s,baz=270,slow=4.4,SNR=20 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **149.73** | **358** | PKPbc | **PKPbc** | **20 45 08.1** | **+0.2** |
| | 1.2nm,0.7s,baz=243,slow=4.7,SNR=3.3 | | | | | | |

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*ISCJB **08** 20:42:36.8±0.4, 24°.76N±0°.03×121°.85E±0°.02, h64km±3km, Error ellipse: s-maj=4.7km s-min=2.7km az=160.1*
*TAP **08** 20:42:36.9, 24°.70N×121°.80E, h62km, ML3.9, B*
*JMA **08** 20:42:36.2±0.1, 24°.69N×121°.79E, h64km±2km, M3.1*
**ISC 08 20:42:37.7**±1.2**, 24°.73N**±0°.03×**121°.85E**±0°.02**, h59km**±6km**, n67, σ1s.00**/113**, 14D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILA** | **Ilan** | **0.10** | **289** | *i* P | **Pn** | **20 42 46.8** | **+0.1** |
| | baz=341 | | | | | | |
| ILA | | | | *i* S | **Sn** | **20 42 54.2** | **+1.1** |
| | baz=341 | | | | | | |
| **TWC** | **Suao** | **0.12** | **181** | ⇓*i*P | **Pn** | **20 42 46.8** | **+0.1** |
| | baz=147 | | | | | | |
| TWC | | | | *i* S | **Sn** | **20 42 53.9** | **+0.6** |
| | baz=147 | | | | | | |
| **EGS** | | **0.13** | **33** | ⇓*i*P | **Pn** | **20 42 47.1** | **+0.3** |
| | baz=44 | | | | | | |
| EGS | | | | S | **Sn** | **20 42 54.4** | **+1.0** |
| | baz=44 | | | | | | |
| **TWE** | **Neicheng** | **0.17** | **266** | ⇓*i*P | **Pn** | **20 42 46.8** | **-0.1** |
| | baz=281 | | | | | | |
| TWE | | | | *i* S | **Sn** | **20 42 53.8** | **+0.2** |
| | baz=281 | | | | | | |
| **ENTT** | **Nioudou** | **0.28** | **250** | ⇓*i*P | **Pn** | **20 42 47.4** | **-0.2** |
| | baz=263 | | | | | | |
| ENTT | | | | S | **Sn** | **20 42 54.8** | **0.0** |
| | baz=263 | | | | | | |
| **ENA** | **Nanau** | **0.32** | **198** | ⇓*i*P | **Pn** | **20 42 47.6** | **-0.3** |
| | baz=194 | | | | | | |
| ENA | | | | S | **Sn** | **20 42 55.7** | **+0.4** |
| | baz=194 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.34** | **349** | *i* P | **Pn** | **20 42 48.2** | **-0.1** |
| | baz=354 | | | | | | |
| NWF | | | | *i* S | **Sn** | **20 42 56.1** | **+0.2** |
| | baz=354 | | | | | | |
| **TWA** | **Mucha** | **0.35** | **316** | *i* P | **Pn** | **20 42 47.9** | **-0.3** |
| | baz=330 | | | | | | |
| TWA | | | | *i* S | **Sn** | **20 42 55.5** | **-0.3** |
| | baz=330 | | | | | | |
| **TAP1** | **Taipei** | **0.43** | **316** | ⇓*i*P | **Pn** | **20 42 48.4** | **-0.5** |
| | baz=316 | | | | | | |
| TAP1 | | | | S | **Sn** | **20 42 56.7** | **-0.3** |
| | baz=316 | | | | | | |
| **EHP** | **Heping Village** | **0.43** | **193** | *e*P | **Pn** | **20 42 49.1** | **+0.1** |
| | baz=193 | | | | | | |
| **TAP** | **Taipei** | **0.44** | **314** | *e*P | **Pn** | **20 42 48.4** | **-0.6** |
| | baz=316 | | | | | | |
| TAP | | | | *e*S | **Sn** | **20 42 57.0** | **-0.2** |
| | baz=316 | | | | | | |
| **NSK** | **Sanguang** | **0.45** | **263** | ⇓*i*P | **Pn** | **20 42 48.5** | **-0.7** |
| | baz=266 | | | | | | |
| NSK | | | | S | **Sn** | **20 42 56.3** | **-1.2** |
| | baz=266 | | | | | | |
| **NNS** | **Nan Shan** | **0.52** | **236** | ⇓*i*P | **Pn** | **20 42 49.6** | **-0.4** |
| | baz=241 | | | | | | |
| NNS | | | | *e*S | **Sn** | **20 42 58.4** | **-0.6** |
| | baz=241 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.54** | **313** | ⇓*e*P | **Pn** | **20 42 49.9** | **-0.2** |
| | baz=320 | | | | | | |
| TWS1 | | | | *i* S | **Sn** | **20 42 59.3** | **+0.3** |
| | baz=320 | | | | | | |
| **TWY** | **Chenhua** | **0.59** | **337** | *e*P | **Pn** | **20 42 51.5** | **+0.9** |
| | baz=335 | | | | | | |
| TWY | | | | *e*S | **Sn** | **20 43 00.8** | **+0.8** |
| | baz=335 | | | | | | |
| **NCU** | **National Centr** | **0.65** | **292** | ⇓*i*P | **Pn** | **20 42 50.8** | **-0.6** |
| | baz=288 | | | | | | |
| NCU | | | | *i* S | **Sn** | **20 43 01.0** | **-0.2** |
| | baz=288 | | | | | | |
| **TWD** | **Chiawan** | **0.69** | **200** | ⇓*i*P | **Pn** | **20 42 50.5** | **-1.3** |
| | baz=205 | | | | | | |
| TWD | | | | *e*S | **Sn** | **20 43 01.2** | **-0.9** |
| | baz=205 | | | | | | |
| **TWT** | **Tachien** | **0.78** | **232** | ⇓*i*P | **Pn** | **20 42 53.1** | **0.0** |
| | baz=232 | | | | | | |
| TWT | | | | S | **Sn** | **20 43 04.6** | **+0.2** |
| | baz=232 | | | | | | |
| **NSTT** | **Nanjuang** | **0.78** | **263** | ⇓*i*P | **Pn** | **20 42 52.2** | **-0.7** |
| | baz=264 | | | | | | |
| NSTT | | | | S | **Sn** | **20 43 03.2** | **-0.9** |
| | baz=264 | | | | | | |
| **HWA** | **Hwalien** | **0.79** | **197** | *e*P | **Pn** | **20 42 52.2** | **-0.8** |
| | baz=203 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.79** | **223** | *e*P | **Pn** | **20 42 52.2** | **-1.3** |
| | baz=215 | | | | | | |
| WHF | | | | S | **Sn** | **20 43 04.2** | **-0.9** |
| | baz=215 | | | | | | |
| **HSN** | **Hsinchu** | **0.80** | **275** | P | **Pn** | **20 42 52.0** | **-1.2** |
| | baz=280 | | | | | | |
| HSN | | | | *e*S | **Sn** | **20 43 03.4** | **-1.2** |
| | baz=280 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.92** | **13** | *e*P | **Pn** | **20 42 54.2** | **-0.4** |
| | baz=16 | | | | | | |
| **ESL** | **Shilin** | **0.99** | **203** | *e*P | **Pn** | **20 42 53.8** | **-1.8** |
| | baz=200 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.03** | **105** | P | **Pn** | **20 42 55.7** | **-0.5** |
| JYNG | | | | *e*S | **Sn** | **20 43 09.6** | **-0.3** |
| **NSY** | **Sanyi** | **1.04** | **253** | *i* P | **Pn** | **20 42 56.0** | **-0.3** |
| | baz=263 | | | | | | |
| NSY | | | | *e*S | **Sn** | **20 43 09.8** | **-0.3** |
| | baz=263 | | | | | | |
| **TWQ1** | **Liyutan** | **1.05** | **249** | ⇓*i*P | **Pn** | **20 42 56.0** | **-0.5** |
| | baz=260 | | | | | | |
| TWQ1 | | | | S | **Sn** | **20 43 09.9** | **-0.5** |
| | baz=260 | | | | | | |
| **TEGC** | **Jichi Village** | **1.06** | **196** | *e*P | **Pn** | **20 42 57.4** | **+0.8** |
| | baz=202 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.09** | **104** | P | **Pn** | **20 42 56.4** | **-0.5** |
| YOJ | | | | *e*S | **Sn** | **20 43 10.6** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **1.09** | **104** | *e*P | **Pn** | **20 42 55.3** | **-1.6** |
| | baz=100 | | | | | | |
| YOJ | | | | *e*S | **Sn** | **20 43 10.4** | **-0.8** |
| | baz=100 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.21** | **226** | *e*P | **Pn** | **20 42 59.1** | **+0.4** |
| | baz=234 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **20 43 14.6** | **+0.4** |
| | baz=234 | | | | | | |
| **TCU** | **Taichung** | **1.22** | **242** | *e*P | **Pn** | **20 42 58.3** | **-0.3** |
| | baz=241 | | | | | | |
| **TYC** | **Yuchr** | **1.23** | **228** | *e*P | **Pn** | **20 42 58.8** | **0.0** |
| | baz=235 | | | | | | |
| TYC | | | | *e*S | **Sn** | **20 43 15.4** | **+1.1** |
| | baz=235 | | | | | | |
| **EHY** | **Hungye** | **1.31** | **202** | *e*P | **Pn** | **20 42 58.1** | **-1.8** |
| | baz=200 | | | | | | |
| EHY | | | | *e*S | **Sn** | **20 43 14.1** | **-2.4** |
| | baz=200 | | | | | | |
| **TWF1** | **Yuli** | **1.46** | **200** | *e*P | **Pn** | **20 43 00.0** | **-1.9** |
| | baz=199 | | | | | | |
| **YUS** | **Yu-Shan** | **1.48** | **214** | *e*P | **Pn** | **20 43 02.4** | **-0.3** |
| | baz=204 | | | | | | |
| YUS | | | | S | **Sn** | **20 43 22.2** | **+0.9** |
| | baz=204 | | | | | | |
| **ALS** | **Alishan** | **1.55** | **218** | *e*P | **Pn** | **20 43 03.8** | **+0.5** |
| | baz=229 | | | | | | |
| ALS | | | | *e*S | **Sn** | **20 43 24.2** | **+1.6** |
| | baz=229 | | | | | | |
| **CHN5** | **Tsauling** | **1.56** | **224** | *e*P | **Pn** | **20 43 03.4** | **+0.1** |
| | baz=223 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **20 43 23.0** | **+0.5** |
| | baz=223 | | | | | | |
| **WGK** | **Gukeng** | **1.57** | **229** | *e*P | **Pn** | **20 43 03.3** | **-0.1** |
| | baz=238 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.67** | **239** | *e*P | **Pn** | **20 43 04.0** | **-0.8** |
| | baz=247 | | | | | | |
| WTCT | | | | *e*S | **Sn** | **20 43 23.8** | **-1.3** |
| | baz=247 | | | | | | |
| **CHKT** | **Chengkung** | **1.69** | **195** | *e*P | **Pn** | **20 43 02.5** | **-2.4** |
| | baz=200 | | | | | | |
| **ELDTW** | **Lidau** | **1.71** | **207** | *e*P | **Pn** | **20 43 04.4** | **-1.0** |
| | baz=198 | | | | | | |
| **CHN2** | **Minshiung** | **1.73** | **227** | *e*P | **Pn** | **20 43 05.6** | **0.0** |
| | baz=236 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.76** | **103** | P | **Pn** | **20 43 05.4** | **-0.5** |
| IRIF | | | | S | **Sn** | **20 43 27.0** | **-0.2** |
| **CHY** | **Chiayi** | **1.79** | **227** | *e*P | **Pn** | **20 43 06.4** | **+0.1** |
| | baz=238 | | | | | | |
| CHY | | | | *e*S | **Sn** | **20 43 28.4** | **+0.4** |
| | baz=238 | | | | | | |
| **CHN4** | **Tsaushan** | **1.79** | **220** | *e*P | **Pn** | **20 43 06.4** | **0.0** |
| | baz=219 | | | | | | |
| CHN4 | | | | *e*S | **Sn** | **20 43 30.4** | **+2.3** |
| | baz=219 | | | | | | |
| **WSF** | **Szhu** | **1.84** | **234** | *e*P | **Pn** | **20 43 07.0** | **0.0** |
| | baz=234 | | | | | | |
| WSF | | | | *e*S | **Sn** | **20 43 28.5** | **-0.8** |
| | baz=234 | | | | | | |
| **STYT** | **Tauyuan** | **1.85** | **213** | *e*P | **Pn** | **20 43 07.5** | **+0.2** |
| | baz=224 | | | | | | |
| STYT | | | | *e*S | **Sn** | **20 43 31.4** | **+1.6** |
| | baz=224 | | | | | | |
| **WTP** | **Ta-pu** | **1.86** | **218** | *e*P | **Pn** | **20 43 07.6** | **+0.2** |
| | baz=217 | | | | | | |
| WTP | | | | *e*S | **Sn** | **20 43 32.6** | **+2.8** |
| | baz=217 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.91** | **110** | P | **Pn** | **20 43 08.1** | **+0.2** |
| **TWK** | **Hsinying** | **1.92** | **221** | *e*P | **Pn** | **20 43 08.9** | **+0.7** |
| | baz=220 | | | | | | |
| **CHN1** | **Nanshi** | **1.96** | **218** | *e*P | **Pn** | **20 43 08.3** | **-0.3** |
| | baz=218 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **20 43 32.3** | **+0.1** |
| | baz=218 | | | | | | |
| **SGST** | **Jiashian** | **2.01** | **215** | *e*P | **Pn** | **20 43 10.0** | **+0.7** |
| | baz=227 | | | | | | |
| SGST | | | | *e*S | **Sn** | **20 43 35.7** | **+2.3** |
| | baz=227 | | | | | | |
| **JKRS** | **Kuro-shima** | **2.03** | **104** | P | **Pn** | **20 43 09.4** | **-0.1** |
| JKRS | | | | *e*S | **Sn** | **20 43 33.8** | **0.0** |
| **TWG** | **Pinlang** | **2.03** | **201** | *e*P | **Pn** | **20 43 07.4** | **-2.2** |
| | baz=191 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.12** | **100** | P | **Pn** | **20 43 10.3** | **-0.5** |
| JIJ | | | | *e*S | **Sn** | **20 43 35.2** | **-0.8** |
| **CHN3** | **Shinhua** | **2.14** | **220** | *e*P | **Pn** | **20 43 12.1** | **+1.1** |
| | baz=219 | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.24** | **93** | P | **Pn** | **20 43 12.4** | **-0.1** |
| JISG | | | | *e*S | **Sn** | **20 43 39.4** | **+0.4** |
| **SSD** | **Sandimen** | **2.27** | **210** | *e*P | **Pn** | **20 43 13.8** | **+0.9** |
| | baz=221 | | | | | | |
| SSD | | | | *e*S | **Sn** | **20 43 42.1** | **+2.4** |
| | baz=221 | | | | | | |
| **ECL** | **Taimali** | **2.28** | **201** | *e*P | **Pn** | **20 43 11.6** | **-1.4** |
| | baz=193 | | | | | | |
| **TWM1** | **Shoushan** | **2.31** | **215** | *e*P | **Pn** | **20 43 15.5** | **+2.1** |
| | baz=225 | | | | | | |
| **PNG** | **Penghu** | **2.40** | **242** | *e*P | **Pn** | **20 43 13.1** | **-1.5** |
| | baz=241 | | | | | | |
| **WDGT** | **Dungji** | **2.48** | **234** | *e*P | **Pn** | **20 43 15.5** | **-0.3** |
| | baz=234 | | | | | | |
| **EAST** | **Anshuo** | **2.51** | **202** | *e*P | **Pn** | **20 43 15.5** | **-0.7** |
| | baz=193 | | | | | | |
| **JTJ** | **Tarama** | **2.59** | **91** | P | **Pn** | **20 43 18.1** | **+0.8** |
| JTJ | | | | *e*S | **Sn** | **20 43 48.4** | **+0.7** |
| **SCZT** | **Fangliau** | **2.61** | **206** | *e*P | **Pn** | **20 43 18.3** | **+0.8** |
| | baz=205 | | | | | | |
| SCZT | | | | *e*S | **Sn** | **20 43 50.5** | **+2.5** |
| | baz=205 | | | | | | |
| **KNM** | **Kinmen** | **3.13** | **265** | *e*P | **Pn** | **20 43 24.2** | **-0.3** |
| | baz=264 | | | | | | |

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**WEL 08 20:50:32.2**±0.7**, 46°.04S×166°.14E, h12km, ML3.5**/10**, 1D, Error ellipse: s-maj=6.4km s-min=2.6km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **0.40** | **108** | ⇓P* | Pg | 20 50 40.3 | +0.2 |
| PYZ | | | | S* | Sg | 20 50 46.0 | +0.6 |
| **DCZ** | **Deep Cove** | **0.91** | **52** | P* | Pg | 20 50 49.3 | -0.4 |
| DCZ | | | | S* | Sg | 20 51 00.8 | -0.7 |
| DCZ | | | | AML | AML | 20 51 03.1 | |
| DCZ | | | | AML | AML | 20 51 03.4 | |
| DCZ | | | | AML | AML | 20 51 03.4 | |
| **WHZ** | **Wether Hill Ro** | **1.27** | **84** | PN | Pn | 20 50 54.5 | -1.2 |
| WHZ | | | | S* | Sb | 20 51 11.9 | -0.5 |
| WHZ | | | | AML | AML | 20 51 15.1 | |
| **APZ** | **The Paps** | **1.50** | **122** | PN | Pn | 20 50 55.2 | -3.8 |
| APZ | | | | AML | AML | 20 51 14.1 | |
| APZ | | | | AML | AML | 20 51 14.5 | |
| **MLZ** | **Mavora Lakes** | **1.59** | **65** | PN | Pn | 20 51 00.7 | +0.5 |
| MLZ | | | | AML | AML | 20 51 26.5 | |
| MLZ | | | | AML | AML | 20 51 27.1 | |
| **SYZ** | **Scrubby Hill** | **2.14** | **104** | PN | Pn | 20 51 05.5 | -2.1 |
| SYZ | | | | AML | AML | 20 51 34.9 | |
| SYZ | | | | AML | AML | 20 51 34.9 | |
| SYZ | | | | AML | AML | 20 51 35.7 | |
| **WKZ** | **Wanaka** | **2.36** | **60** | PN | Pb | 20 51 13.7 | -1.0 |
| WKZ | | | | AML | AML | 20 51 48.5 | |
| WKZ | | | | AML | AML | 20 52 03.9 | |
| **EAZ** | **Earnscleugh** | **2.37** | **71** | PN | Pn | 20 51 11.7 | +0.9 |
| EAZ | | | | AML | AML | 20 51 46.0 | |
| EAZ | | | | AML | AML | 20 51 46.5 | |
| **TUZ** | **Tuapeka** | **2.44** | **89** | PN | Pn | 20 51 11.1 | -0.7 |
| TUZ | | | | AML | AML | 20 51 47.2 | |
| TUZ | | | | AML | AML | 20 51 54.6 | |
| **JCZ** | **Jackson Bay** | **2.71** | **44** | PN | Pb | 20 51 18.7 | -2.0 |
| JCZ | | | | AML | AML | 20 52 13.1 | |
| JCZ | | | | AML | AML | 20 52 14.7 | |
| **LBZ** | **Lake Benmore** | **3.31** | **61** | PN | Pn | 20 51 24.6 | +0.9 |
| LBZ | | | | AML | AML | 20 52 02.7 | |
| **ODZ** | **Otahua Downs** | **3.32** | **74** | PN | Pn | 20 51 22.6 | -1.3 |

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**IDC 08 20:50:59.9**±1.6**, 4°.38N×127°.44E, h0km, mb3.4**/4**, mb1 3.6**/4**, mb1mx3.3**/41**, mbtmp3.4**/4**, Error ellipse: s-maj=161.3km s-min=21.7km az=70.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **25.10** | **165** | P | P | 20 56 26.0 | -0.6 |
| | 0.3nm,0.4s,baz=344,slow=9.9,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **28.58** | **168** | P | P | 20 56 58.5 | +0.6 |
| | 0.4nm,0.4s,baz=353,slow=7.6,SNR=5.8 | | | | | | |
| **SONM** | **Songino Array** | **46.92** | **341** | P | P | 20 59 32.6 | +0.2 |
| | 0.1nm,0.4s,baz=142,slow=7.2,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.44** | **325** | P | P | 21 00 50.2 | -0.4 |
| | 0.3nm,0.5s,baz=105,slow=8.3,SNR=5.1 | | | | | | |

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*IDC **08** 20:58:10.8±2.3, 38°.77N×48°.52E, h0km, mb3.8/6, mb1 3.7/10, mb1mx3.5/37, mbtmp3.7/10, ML3.2/4, Error ellipse: s-maj=41.4km s-min=19.8km az=7.0*
*AZER **08** 20:58:13.8±0.1, 38°.90N×48°.52E, h9km, Error ellipse: s-maj=1.8km s-min=0.6km az=235.0*
*TEH **08** 20:58:14.9, 38°.92N×48°.52E, h12km, ML3.8*
*ISCJB **08** 20:58:15.3±0.4, 38°.84N±0°.02×48°.61E±0°.04, h29km±3km, mb3.5/4, Error ellipse: s-maj=4.9km s-min=4.1km az=176.7*
*CSEM **08** 20:58:15.2±0.2, 38°.85N×48°.49E, h15km, ML3.2, Error ellipse: s-maj=5.0km s-min=3.6km az=101.0*
**ISC 08 20:58:14.3**±1.5**, 38°.90N**±0°.02×**48°.54E**±0°.02**, h14km**±11km**, n70, σ1s.30**/103**, mb3.5**/4**, 21C-16D, Iran-Armenia-Azerbaijan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LKRN** | **Lenkeran, Azer** | **0.26** | **136** | ⇑P | **Pb** | **20 58 22.0** | **+1.2** |
| | SNR=112 | | | | | | |
| LKRN | | | | ⇓S | **Sb** | **20 58 27.3** | **+2.1** |
| **LKRN** | **Lenkeran, Azer** | **0.26** | **136** | P | **Pb** | **20 58 22.0** | **+1.2** |
| | SNR=112 | | | | | | |
| LKRN | | | | S | **Sb** | **20 58 27.3** | **+2.1** |
| **LRK** | **Lerik** | **0.30** | **212** | ⇓P | **Pb** | **20 58 22.4** | **+0.8** |
| | SNR=5168 | | | | | | |
| LRK | | | | ⇓S | **Sb** | **20 58 27.9** | **+1.4** |
| **LRK** | **Lerik** | **0.30** | **212** | P | **Pb** | **20 58 22.4** | **+0.8** |
| | SNR=1000 | | | | | | |
| LRK | | | | S | **Sb** | **20 58 27.9** | **+1.4** |
| **GLBA** | **Clilabad** | **0.36** | **341** | ⇓P | **Pb** | **20 58 23.3** | **+0.8** |
| GLBA | | | | ⇑S | **Sb** | **20 58 30.0** | **+1.9** |
| **GLBA** | **Clilabad** | **0.36** | **341** | P | **Pb** | **20 58 23.3** | **+0.8** |
| GLBA | | | | S | **Sb** | **20 58 30.0** | **+1.9** |
| **GRMI** | **Germi** | **0.52** | **260** | *e*Pg | **Pb** | **20 58 25.1** | **-0.1** |
| **SAAT** | **Saatly** | **0.96** | **354** | ⇓Pg | **Pb** | **20 58 33.2** | **+0.4** |
| | SNR=13 | | | | | | |
| SAAT | | | | ⇑Sg | **Sn** | **20 58 47.9** | **+1.0** |
| **SAAT** | **Saatly** | **0.96** | **354** | Pg | **Pb** | **20 58 33.2** | **+0.4** |
| | SNR=13 | | | | | | |
| SAAT | | | | Sg | **Sn** | **20 58 47.9** | **+1.0** |
| **ALIB** | **Äli-Bayra** | **1.12** | **19** | ⇓Pn | **Pn** | **20 58 36.4** | **+0.9** |
| | SNR=13 | | | | | | |
| **ALIB** | **Äli-Bayra** | **1.12** | **19** | Pn | **Pn** | **20 58 36.4** | **+0.9** |
| | SNR=13 | | | | | | |
| **ISRB** | **Sarab** | **1.28** | **213** | *e*Pg | **Pn** | **20 58 38.2** | **+0.3** |
| ISRB | | | | *e* | | 20 58 56.8 | |
| | comp=Z,15μm,0.1s | | | | | | |
| **ISRB** | **Sarab** | **1.28** | **213** | *e*Pg | **Pn** | **20 58 38.2** | **+0.3** |
| **IHRS** | **Heris** | **1.31** | **244** | *e*Pg | **Pn** | **20 58 38.3** | **-0.1** |
| IHRS | | | | *e*Sg | **Sb** | **20 58 55.5** | **-0.1** |
| IHRS | | | | *e* | | 20 58 57.3 | |
| | comp=Z,94μm,0.1s | | | | | | |
| **IHRS** | **Heris** | **1.31** | **244** | *e*Pg | **Pn** | **20 58 38.3** | **-0.1** |
| IHRS | | | | *e*Sg | **Sb** | **20 58 55.5** | **-0.1** |
| **KDMR** | **Kurdemir** | **1.50** | **349** | ⇓Pn | **Pn** | **20 58 40.8** | **0.0** |
| | SNR=33 | | | | | | |
| KDMR | | | | ⇑Sn | **Sb** | **20 59 02.0** | **+1.2** |
| **KDMR** | **Kurdemir** | **1.50** | **349** | Pn | **Pn** | **20 58 40.8** | **0.0** |
| | SNR=33 | | | | | | |
| KDMR | | | | Sn | **Sb** | **20 59 02.0** | **+1.2** |
| **BRDA** | **Brd** | **1.72** | **323** | ⇑Pn | **Pn** | **20 58 44.6** | **+0.8** |
| | SNR=31 | | | | | | |
| BRDA | | | | ⇑Sn | **Sg** | **20 59 09.4** | **-0.4** |
| **BRDA** | **Brd** | **1.72** | **323** | Pn | **Pn** | **20 58 44.6** | **+0.8** |
| | SNR=31 | | | | | | |
| BRDA | | | | Sn | **Sg** | **20 59 09.4** | **-0.4** |
| **GOBA** | **Gobu** | **1.76** | **31** | ⇑Pn | **Pb** | **20 58 46.5** | **+0.2** |
| GOBA | | | | ⇑Sn | **Sg** | **20 59 11.8** | **+0.9** |
| **GOBA** | **Gobu** | **1.76** | **31** | Pn | **Pb** | **20 58 46.5** | **+0.2** |
| GOBA | | | | Sn | **Sg** | **20 59 11.8** | **+0.9** |
| **IBST** | **Bostanabad** | **1.77** | **228** | ⇑*e*Pn | **Pn** | **20 58 45.1** | **+0.4** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| IBST | | | | eSg | Sb | 20 59 10.5 | +1.8 |
| IBST | | | | e | | 20 59 15.7 | |
| | comp=Z,6μm,0.1s | | | | | | |
| IBST | Bostanabad | 1.77 | 228 | ⇑ePn | Pn | 20 58 45.1 | +0.4 |
| IBST | | | | eSg | Sb | 20 59 10.5 | +1.8 |
| PQL | Pirkuli | 1.89 | 1 | ⇑Pn | Pn | 20 58 47.5 | +1.2 |
| | SNR=9.5 | | | | | | |
| PQL | | | | ⇑Sn | Sg | 20 59 14.3 | -0.8 |
| PQL | Pirkuli | 1.89 | 1 | Pn | Pn | 20 58 47.5 | +1.2 |
| | SNR=9.5 | | | | | | |
| PQL | | | | Sn | Sg | 20 59 14.3 | -0.8 |
| IML | Ismayilli | 1.91 | 352 | ⇑Pn | Pn | 20 58 46.8 | +0.3 |
| | SNR=21 | | | | | | |
| IML | | | | ⇑Sn | Sb | 20 59 13.8 | +1.1 |
| IML | Ismayilli | 1.91 | 352 | Pn | Pn | 20 58 46.8 | +0.3 |
| | SNR=21 | | | | | | |
| IML | | | | Sn | Sb | 20 59 13.8 | +1.1 |
| ATGJ | Altiaghaj | 1.98 | 9 | ⇓Pn | Pb | 20 58 50.2 | 0.0 |
| | SNR=10 | | | | | | |
| ATGJ | Altiaghaj | 1.98 | 9 | Pn | Pb | 20 58 50.2 | 0.0 |
| | SNR=10 | | | | | | |
| ITBZ | Tabriz | 1.99 | 251 | ePn | Pn | 20 58 48.2 | +0.5 |
| ITBZ | | | | e | | 20 59 18.2 | |
| | comp=Z,7μm,0.2s | | | | | | |
| ITBZ | Tabriz | 1.99 | 251 | ePn | Pn | 20 58 48.2 | +0.5 |
| NDR | Nardaran | 2.01 | 33 | ⇑Sn | Sb | 20 59 16.7 | +1.1 |
| NDR | Nardaran | 2.01 | 33 | Sn | Sb | 20 59 16.7 | +1.1 |
| MNGR | Mingechevir, A | 2.18 | 329 | ⇑Pn | Pn | 20 58 51.2 | +1.0 |
| | SNR=4.3 | | | | | | |
| MNGR | | | | ⇑Sn | Sb | 20 59 21.5 | +1.1 |
| MNGR | Mingechevir, A | 2.18 | 329 | Pn | Pn | 20 58 51.2 | +1.0 |
| | SNR=4.3 | | | | | | |
| SIZA | Siyzn | 2.19 | 7 | ⇓Pn | Pb | 20 58 53.0 | -0.8 |
| | SNR=13 | | | | | | |
| SIZA | | | | ⇓Sn | Sb | 20 59 22.3 | +1.5 |
| SIZA | Siyzn | 2.19 | 7 | Pn | Pb | 20 58 53.0 | -0.8 |
| | SNR=13 | | | | | | |
| SIZA | | | | Sn | Sb | 20 59 22.3 | +1.5 |
| IMRD | Marand | 2.23 | 266 | ePn | Pn | 20 58 52.1 | +1.2 |
| IMRD | | | | e | | 20 59 23.9 | |
| | comp=Z,13μm,0.1s | | | | | | |
| IMRD | Marand | 2.23 | 266 | ePn | Pn | 20 58 52.2 | +1.2 |
| ZNJK | Zanjan | 2.23 | 177 | ePn | Pn | 20 58 51.9 | +0.9 |
| IAZR | Azarshahr | 2.36 | 240 | ePn | Pn | 20 58 53.6 | +0.8 |
| IAZR | | | | e | | 20 59 32.5 | |
| | comp=Z,7μm,0.3s | | | | | | |
| IAZR | Azarshahr | 2.36 | 240 | ePn | Pn | 20 58 53.6 | +0.8 |
| ISHB | Shabestar | 2.38 | 256 | ePn | Pn | 20 58 53.3 | +0.3 |
| ISHB | | | | e | | 20 59 35.6 | |
| | comp=Z,4μm,0.2s | | | | | | |
| NAX | Nakhchivan | 2.39 | 278 | ⇓Pn | Pn | 20 58 54.1 | +1.0 |
| | SNR=10 | | | | | | |
| NAX | | | | ⇓Sn | Sb | 20 59 26.4 | -0.1 |
| NAX | Nakhchivan | 2.39 | 278 | Pn | Pn | 20 58 54.1 | +1.0 |
| | SNR=10 | | | | | | |
| GANJ | Ganja | 2.44 | 316 | ⇑Pn | Pn | 20 58 53.1 | -0.7 |
| | SNR=13 | | | | | | |
| GANJ | | | | ⇑Sn | Sn | 20 59 26.5 | +3.0 |
| GANJ | Ganja | 2.44 | 316 | Pn | Pn | 20 58 53.1 | -0.7 |
| | SNR=13 | | | | | | |
| GANJ | | | | Sn | Sn | 20 59 26.5 | +3.0 |
| QUBA | Quba, Azerbaij | 2.45 | 359 | ⇓Pn | Pn | 20 58 56.1 | +2.1 |
| | SNR=9.6 | | | | | | |
| QUBA | Quba, Azerbaij | 2.45 | 359 | Pn | Pn | 20 58 56.1 | +2.1 |
| | SNR=9.6 | | | | | | |
| SEKA | Sheki | 2.53 | 336 | ⇑Pn | Pn | 20 58 54.8 | -0.2 |
| | SNR=27 | | | | | | |
| SEKA | | | | ⇑Sn | Sn | 20 59 28.0 | +2.4 |
| SEKA | Sheki | 2.53 | 336 | Pn | Pn | 20 58 54.8 | -0.2 |
| | SNR=27 | | | | | | |
| SEKA | | | | Sn | Sn | 20 59 28.0 | +2.4 |
| MAKU | Maku | 3.04 | 280 | ePn | Pn | 20 59 02.0 | -0.1 |
| ZKTA | Zakatala | 3.10 | 332 | ⇓Pn | Pn | 20 59 03.2 | +0.4 |
| | SNR=8.9 | | | | | | |
| QZX | Qazax, Azerbai | 3.25 | 312 | ⇓Pn | Pn | 20 59 05.1 | +0.2 |
| | SNR=25 | | | | | | |
| QZX | | | | ⇓Sn | Sn | 20 59 46.5 | +3.0 |
| QZX | Qazax, Azerbai | 3.25 | 312 | Pn | Pn | 20 59 05.1 | +0.2 |
| | SNR=25 | | | | | | |
| QZX | | | | Sn | Sn | 20 59 46.5 | +3.0 |
| DGRG | David-gareji | 3.52 | 317 | P | Pn | 20 59 09.4 | +0.8 |
| DGRG | David-gareji | 3.52 | 317 | P | Pn | 20 59 09.4 | +0.8 |
| CHTH | Charan | 3.62 | 145 | ePn | Pn | 20 59 10.6 | +0.4 |
| DAMV | Damavand | 4.26 | 139 | ePn | Pn | 20 59 19.5 | +0.6 |
| SHRO | Shahrood | 6.61 | 114 | ePn | Pn | 20 59 51.0 | -0.2 |
| GEYT | Alibeck | 7.58 | 94 | Pn | Pn | 21 00 01.9 | -2.4 |
| | comp=Z,3.1nm,0.3s,baz=279,slow=14,SNR=56 | | | | | | |
| GEYT | | | | Sn | Sn | 21 01 25.5 | -4.6 |
| | comp=Z,0.7nm,0.3s,baz=260,slow=29,SNR=2.9 | | | | | | |
| AKTO | Aktyubinsk | 13.34 | 27 | Pn | Pn | 21 01 21.0 | -2.1 |
| | comp=Z,0.3nm,0.3s,baz=206,slow=6.4,SNR=6.2 | | | | | | |
| AKASG | Malin Array Be | 18.02 | 317 | P | Pn | 21 02 23.9 | -0.3 |
| | comp=Z,0.5nm,0.3s,baz=121,slow=12,SNR=2.9 | | | | | | |
| ARU | Arti | 18.76 | 17 | P | P | 21 02 30.6 | -2.0 |
| | comp=Z,0.0nm,0.3s,baz=143,slow=20,SNR=2.3 | | | | | | |
| AAK | Ala-Archa | 19.98 | 71 | P | P | 21 02 46.9 | +0.6 |
| | comp=Z,6.1nm,0.8s,baz=231,slow=10,SNR=13 | | | | | | |
| BVAR | Borovoye Array | 20.62 | 40 | P | P | 21 02 53.4 | +0.3 |
| | comp=Z,1.8nm,0.6s,baz=239,slow=12,SNR=5.6 | | | | | | |
| KURBB | Kurchatov Arra | 24.13 | 51 | P | P | 21 03 28.3 | -1.3 |
| | comp=Z,1.0nm,0.5s,baz=259,slow=8.9,SNR=6.4 | | | | | | |
| MKAR | Makanchi Array | 25.82 | 61 | P | P | 21 03 44.3 | -0.7 |
| | comp=Z,2.6nm,0.7s,baz=258,slow=9.3,SNR=20 | | | | | | |
| FINES | FINESS Array B | 26.50 | 336 | P | P | 21 03 50.9 | 0.0 |
| | comp=Z,0.8nm,0.8s,baz=137,slow=11,SNR=2.7 | | | | | | |
| GERES | GERESS Array B | 26.80 | 303 | P | P | 21 03 52.8 | -1.1 |
| | comp=Z,0.4nm,0.5s,baz=90,slow=5.9,SNR=1.8 | | | | | | |

**MEX 08 21:22:27.5±0.6, 18°.20N×94°.53W, h20km, MD4.0, Bay of Campeche**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TGIG | | 1.95 | 136 | eP | Pn | 21 22 57.2 | -2.4 |
| TGIG | | | | eS | Sn | 21 23 19.0 | -4.5 |
| LVIG | Laguna Verde | 2.34 | 311 | eP | Pn | 21 23 02.1 | -2.8 |
| LVIG | | | | eS | Sn | 21 23 29.5 | -3.6 |

*IDC **08** 21:22:41.5±0.5, 51°.49N×175°.26W, h0km, mb4.9/29, mb1 5.0/32, mb1mx5.0/43, mbtmp4.9/32, ML4.6/3, MS4.3/29, Ms1 4.3/29, ms1mx4.2/43, Error ellipse: s-maj=16.3km s-min=9.8km az=165.0*

*NEIC **08** 21:22:45.7, 51°.30N×175°.19W, h28km, mb5.2/230, ML5.0(AEIC), After AEIC.*

*NEIC Felt on Adak.*

*MOS **08** 21:22:45.2±0.9, 51°.53N×175°.24W, h33km, mb5.3/90, MS4.2/20, Error ellipse: s-maj=6.2km s-min=4.8km az=81.7*

*GCMT **08** 21:22:45.7±0.2, 51°.30N×175°.30W, h21km, MW5.1/87, Moment Tensor Solution. s57,c90; s87,c140; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$4.28±.15; $M_{\theta\theta}$-3.52±.11; $M_{\phi\phi}$-0.75±.10; $M_{r\theta}$2.76±.19; $M_{\theta\phi}$-1.44±.07; $M_{\phi r}$0.85±.19; Best double couple: $M_0$5.10200×$10^{16}$ NP1:$\phi_s$70.00000°, δ62.00000°, λ93.00000°. NP2: $\phi_s$244.00000°, δ28.00000°, λ84.00000°. Principal axes: T 5.1820, Plg73.0000°, Azm347.0000°; N -0.1560, Plg3.0000°, Azm249.0000°; P -5.0220, Plg17.0000°, Azm158.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*ISCJB **08** 21:22:46.7±0.3, 51°.43N±0°.03×175°.18W±0°.02, h48km±2km, mb5.2/317, MS4.3/34 Error ellipse: s-maj=4.4km s-min=1.6km az=177.9*

*BJI **08** 21:22:47.7, 51°.85N×175°.51W, h50km, mb5.5/72, mB5.0/49, Ms4.8/59, Ms7 4.5/60*

*SZGRF **08** 21:22:52.4, 52°.08N×177°.23W, h33km, mb5.2/21(BGR)*

**ISC 08 21:22:48.6±0.3, 51°.55N±0°.05×175°.32W±0°.03, h46km±1km, h46km:pP-P, n1242, σ1$^s$13/1328, mb5.2/332, MS4.4/34, 50C-25D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.68 | 318 | P | Pn | 21 23 02.4 | +0.4 |
| GSCK | Great Sitkin C | 0.70 | 312 | P | Pn | 21 23 02.5 | +0.3 |
| GSTR | Great Sitkin T | 0.71 | 320 | ePn | Pn | 21 23 02.8 | +0.3 |
| GSTD | Great Sitkin T | 0.72 | 315 | P | Pn | 21 23 03.0 | +0.4 |
| ETKA | Kagalaska Isla | 0.75 | 295 | P | Pn | 21 23 02.6 | -0.2 |
| ADAG | Mount Adagdak | 0.91 | 299 | P | Pn | 21 23 06.0 | +1.0 |
| ATKA | Atka Island | 0.96 | 46 | P | Pn | 21 23 04.1 | -1.5 |
| ATKA | | | | S | Sn | 21 23 18.4 | +0.3 |
| KOKL | Mount Kliuchef | 1.04 | 41 | P | Pn | 21 23 06.7 | -0.1 |
| KOFP | Korovin Flat P | 1.05 | 46 | P | Pn | 21 23 06.7 | -0.2 |
| KIRH | Kanaga Island | 1.16 | 288 | P | Pn | 21 23 08.4 | 0.0 |
| KIKV | Kanaga Island | 1.20 | 287 | P | Pn | 21 23 08.7 | -0.3 |
| KICM | Kanaga Island | 1.23 | 288 | P | Pn | 21 23 09.3 | 0.0 |
| TAPA | Tanaga Point A | 1.58 | 281 | P | Pn | 21 23 13.8 | -0.3 |
| TAFL | Tanaga Flats | 1.62 | 278 | P | Pn | 21 23 14.3 | -0.3 |
| TAFP | Tanaga Falls P | 1.69 | 283 | P | Pn | 21 23 15.8 | +0.1 |
| GAEA | Gareloi East | 2.15 | 278 | P | Pn | 21 23 22.7 | +0.7 |
| GALAA | Gareloi Lava P | 2.16 | 277 | P | Pn | 21 23 22.7 | +0.6 |
| GANE | Gareloi Northe | 2.17 | 279 | P | Pn | 21 23 22.7 | +0.5 |
| CERAA | Semis' Rag'd T | 3.13 | 279 | P | Pn | 21 23 35.4 | +0.1 |
| CEAP | Semis' Anvil P | 3.20 | 280 | P | Pn | 21 23 36.8 | +0.4 |
| CESW | Semis' Southwe | 3.20 | 278 | P | Pn | 21 23 36.3 | -0.1 |
| AMKA | Amchitka | 3.37 | 269 | P | Pn | 21 23 37.8 | -0.9 |
| AMKA | | | | S | Sn | 21 24 19.2 | +1.9 |
| LSPA | Little Sitkin | 3.82 | 279 | P | Pn | 21 23 45.1 | +0.3 |
| LSNW | Little Sitkin | 3.85 | 279 | P | Pn | 21 23 45.4 | +0.1 |
| LSSA | Little Sitkin | 3.85 | 278 | P | Pn | 21 23 45.8 | +0.4 |
| NIKH | Nikolski High | 4.22 | 68 | P | Pn | 21 23 49.9 | -0.4 |
| NIKH | | | | S | Sn | 21 24 39.5 | +1.2 |
| OKAK | Okmok | 4.71 | 62 | P | Pn | 21 23 56.6 | -0.4 |
| OKSO | Okmok South | 4.74 | 65 | P | Pn | 21 23 57.3 | -0.2 |
| OKSO | | | | S | Sn | 21 24 52.8 | +1.7 |
| OKCE | Okmok Cone E | 4.76 | 64 | P | Pn | 21 23 58.0 | +0.3 |
| OKTU | Okmok Mt. Tuli | 4.81 | 65 | P | Pn | 21 23 58.6 | 0.0 |
| OKFG | Magazine Ridge | 4.90 | 65 | P | Pn | 21 23 59.8 | +0.2 |
| MSOM | Makushin Julie | 5.57 | 63 | P | Pn | 21 24 09.7 | +0.8 |
| MSOM | Makushin Julie | 5.57 | 63 | P | Pn | 21 24 09.7 | +0.8 |
| MGOD | Makushin Gods | 5.61 | 63 | P | Pn | 21 24 09.2 | -0.2 |
| MSW | Makushin Switc | 5.70 | 62 | P | Pn | 21 24 10.8 | +0.1 |
| UNV | Unalaska Valle | 5.83 | 63 | P | Pn | 21 24 12.5 | +0.1 |
| UNV | | | | S | Sn | 21 25 21.7 | +3.8 |
| ZRO | Akutan Zero | 6.21 | 62 | P | Pn | 21 24 18.1 | +0.5 |
| AKGG | Akutan Green G | 6.24 | 61 | P | Pn | 21 24 18.1 | +0.1 |
| AKUT | Akutan | 6.34 | 62 | ePn | Pn | 21 24 21.1 | +1.8 |
| AKUT | | | | eSn | Sn | 21 25 31.8 | +1.5 |
| SPIA | Saint Paul Isl | 6.37 | 26 | P | Pn | 21 24 22.1 | +2.3 |
| SPIA | | | | S | Sn | 21 25 38.1 | +7.0 |
| SMY | Shemya | 6.62 | 284 | P | Pn | 21 24 25.1 | +1.9 |
| SMY | Shemya | 6.62 | 284 | P | Pn | 21 24 25.1 | +1.9 |
| SSBA | Shishaldin | 7.46 | 60 | P | Pn | 21 24 35.4 | +0.6 |
| ISLZ | Isanotski Laza | 7.67 | 61 | P | Pn | 21 24 38.2 | +0.6 |
| FALS | False Pass | 7.88 | 60 | P | Pn | 21 24 41.6 | +1.1 |
| DTNA | Dutton South F | 8.61 | 60 | P | Pn | 21 24 50.7 | +0.3 |
| SDPT | Sand Point | 9.63 | 61 | P | Pn | 21 25 04.1 | -0.4 |
| CHGN | Chignik | 11.04 | 58 | ePn | Pn | 21 25 22.4 | -1.2 |
| GAMB | Gambell | 12.41 | 7 | ePn | Pn | 21 25 44.4 | +2.0 |
| SII | Sitkinak Islan | 13.37 | 60 | ePn | Pn | 21 25 46.6 | -8.9 |
| OHAK | Old Harbor | 14.00 | 57 | ePn | Pn | 21 26 04.3 | +0.3 |
| SVW2 | Sparrevohn | 14.48 | 41 | ePn | Pn | 21 26 11.3 | +0.8 |
| KDAK | Kodiak Island | 14.52 | 56 | Pn | Pn | 21 26 08.4 | -2.5 |
| | 0.7nm,0.3s,baz=217,slow=5.3,SNR=17 | | | | | | |
| KDAK | | | | Sn | Sn | 21 28 59.0 | +8.7 |
| | 2.4nm,0.3s,baz=39,slow=23,SNR=7.3 | | | | | | |
| KDAK | Kodiak Island | 14.52 | 56 | iP | Pn | 21 26 08.0 | -2.9 |
| KDAK | Kodiak Island | 14.52 | 56 | Pn | Pn | 21 26 10.0 | -0.9 |
| | 2μm,0.5s,SNR=6.5 | | | | | | |
| KDAK | Kodiak Island | 14.52 | 56 | ePn | Pn | 21 26 12.4 | +1.5 |
| KDAK | | | | Sn | Sn | 21 28 59.0 | +8.7 |
| TNA | Tin City | 14.55 | 12 | ePn | P | 21 26 14.3 | -2.6 |
| RSO | Redoubt South | 15.38 | 46 | ePn | Pn | 21 26 24.3 | +1.8 |
| CNPM | China Poot | 15.72 | 50 | ePn | P | 21 26 28.4 | -1.6 |
| | 80nm,1.0s | | | | | | |
| PET | Petropavlovsk | 15.97 | 286 | eP | Pn | 21 26 31.1 | +1.3 |
| PET | | | | eS | Sn | 21 29 24.4 | -1.2 |
| PET | | | | pmax | pmax | | |
| | comp=Z,104nm,1.2s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,200nm,17.9s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,400nm,13.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,400nm,15.0s | | | | | | |
| PET | Petropavlovsk | 15.97 | 286 | ePn | Pn | 21 26 29.3 | -0.5 |
| | comp=Z,136nm,1.2s | | | | | | |
| BRLK | Bradley Lake | 15.97 | 50 | ePn | Pn | 21 26 30.5 | +0.6 |
| | comp=Z,59nm,0.8s | | | | | | |
| SPU | Mount Spurr | 16.01 | 44 | ePn | P | 21 26 32.5 | -0.7 |
| PEA0 | Petropavlovsk- | 16.53 | 286 | ePn | P | 21 26 39.6 | +0.6 |
| PETK | Petropavlovsk- | 16.53 | 286 | Pn | Pn | 21 26 36.6 | -0.4 |
| | comp=Z,5.2nm,0.3s,baz=95,slow=13,SNR=63 | | | | | | |
| PETK | | | | LR | LR | 21 32 35.9 | |
| | comp=Z,1μm,21.6s,baz=100,slow=36 | | | | | | |
| PETK | Petropavlovsk- | 16.53 | 286 | P | Pn | 21 26 36.6 | -0.4 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,1μm,21.6s | | | | | | |
| SEW | Seward | 16.77 | 49 | ePn | Pn | 21 26 38.5 | -1.4 |
| | comp=Z,57nm,0.6s | | | | | | |
| PPLA | Purkeypile | 16.79 | 39 | ePn | Pn | 21 26 40.5 | +0.1 |
| | comp=Z,108nm,0.8s | | | | | | |
| RC01 | Rabbit Creek A | 16.99 | 46 | ePn | Pn | 21 26 42.7 | +0.1 |
| | comp=Z,31nm,0.8s | | | | | | |
| CAST | Castle Rocks | 17.12 | 37 | ePn | Pn | 21 26 38.0 | -6.2 |
| | comp=Z,78nm,1.0s | | | | | | |
| PMR | Palmer | 17.46 | 45 | eP | Pn | 21 26 48.2 | -0.2 |
| PMR | Palmer | 17.46 | 45 | ePn | Pn | 21 26 48.2 | -0.2 |
| KTH | Kantishna Hill | 17.63 | 38 | ePn | Pn | 21 26 50.8 | +0.2 |
| | comp=Z,317nm,1.0s | | | | | | |
| TRF | Thorofare Moun | 17.82 | 38 | ePn | Pn | 21 26 52.4 | -0.6 |
| | comp=Z,133nm,0.9s | | | | | | |
| SML | Sawmill | 17.89 | 45 | eP | Pn | 21 26 52.7 | -1.1 |
| SML | | | | pmax | pmax | | |
| | comp=Z,32nm,0.7s | | | | | | |
| SML | Sawmill | 17.89 | 45 | ePn | Pn | 21 26 52.7 | -1.1 |
| | comp=Z,32nm,0.7s | | | | | | |
| BPAW | Bear Paw Mtn. | 17.90 | 36 | ePn | P | 21 26 55.2 | +1.2 |
| | comp=Z,190nm,1.0s | | | | | | |
| SKR | Severo-Kuril's | 17.91 | 278 | eP | P | 21 27 01.2 | +7.0 |
| SKR | | | | pmax | pmax | | |
| | comp=N,160nm,0.9s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,430nm,0.9s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,3μm,14.0s | | | | | | |
| RND | Reindeer | 18.36 | 40 | eP | P | 21 26 57.9 | -1.2 |
| RND | | | | pmax | pmax | | |
| | comp=Z,79nm,0.6s | | | | | | |
| RND | Reindeer | 18.36 | 40 | eP | P | 21 26 57.9 | -1.2 |
| | comp=Z,79nm,0.6s | | | | | | |
| MCK | McKinley | 18.48 | 39 | eP | P | 21 27 00.3 | -0.1 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,129nm,0.9s | | | | | | |
| MCK | McKinley | 18.48 | 39 | eP | P | 21 27 00.3 | -0.1 |
| | comp=Z,130nm,0.9s | | | | | | |
| BWN | Browne | 18.50 | 37 | eP | Pn | 21 27 01.3 | +0.1 |
| | comp=Z,166nm,0.9s | | | | | | |
| MLY | Manley | 18.51 | 34 | eP | Pn | 21 27 01.9 | +0.6 |
| | comp=Z,91nm,0.7s | | | | | | |
| MLY | | | | eScP | ScP | 21 35 02.3 | +2.3 |
| BILL | Bilibino | 18.81 | 338c | iP | Pn | 21 27 06.3 | +1.5 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,250nm,1.2s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,1μm,21.0s | | | | | | |
| BILL | Bilibino | 18.81 | 338 | eP | Pn | 21 27 06.4 | +1.5 |
| | comp=Z,296nm,1.2s | | | | | | |
| DIV | Divide | 18.81 | 48 | eP | P | 21 27 03.6 | -0.5 |
| | comp=Z,28nm,0.7s | | | | | | |
| KLU | Klutina | 18.86 | 47 | eP | P | 21 27 03.3 | -1.4 |
| | comp=Z,30nm,0.8s | | | | | | |
| WRH | Wood River Hil | 19.17 | 37 | eP | P | 21 27 06.3 | -1.6 |
| | comp=Z,76nm,1.0s | | | | | | |
| BMRM | Bremner River | 19.31 | 49 | eP | P | 21 27 08.3 | -1.3 |
| | comp=Z,38nm,0.8s | | | | | | |
| MDM | Murphy Dome | 19.36 | 36 | eP | P | 21 27 09.2 | -0.9 |
| | comp=Z,144nm,0.8s | | | | | | |
| COLA | College | 19.46 | 36d | iP | P | 21 27 11.7 | +0.7 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,39nm,0.9s | | | | | | |
| COLA | College | 19.46 | 36 | eP | P | 21 27 10.9 | -0.1 |
| | comp=Z,105nm,1.0s | | | | | | |
| HARP | HAARP | 19.50 | 44 | eP | P | 21 27 11.5 | -0.1 |
| | comp=Z,90nm,0.8s | | | | | | |
| PAX | Paxson | 19.57 | 43 | eP | P | 21 27 12.4 | 0.0 |
| PAX | | | | pmax | pmax | | |
| | comp=Z,32nm,0.6s | | | | | | |
| PAX | Paxson | 19.57 | 43 | eP | P | 21 27 12.4 | 0.0 |
| | comp=Z,32nm,0.6s | | | | | | |
| HDA | Harding Lake | 19.57 | 38 | eP | P | 21 27 10.8 | -1.5 |
| | comp=Z,101nm,0.6s | | | | | | |
| ILAR | Eielson Array | 19.77 | 37 | P | P | 21 27 12.4 | -2.1 |
| | comp=Z,3.8nm,0.3s,baz=231,slow=9.3,SNR=40 | | | | | | |
| ILAR | | | | S | S | 21 30 52.9 | -1.6 |
| | comp=Z,0.3nm,0.3s,baz=238,slow=17,SNR=4.2 | | | | | | |
| ILAR | | | | ScP | ScP | 21 35 04.0 | +1.3 |
| | comp=Z,0.4nm,0.3s,baz=253,slow=2.2,SNR=7.8 | | | | | | |
| ILAR | | | | LR | LR | 21 35 31.8 | |
| | comp=Z,864nm,18.5s,baz=238,slow=39 | | | | | | |
| IL1 | Eielson Array | 19.77 | 37 | eP | P | 21 27 11.6 | -2.8 |
| IL1 | | | | eScP | ScP | 21 35 03.7 | +0.9 |
| COLD | Coldfoot | 20.02 | 29 | eP | Pn | 21 27 18.6 | -0.6 |
| | comp=Z,150nm,1.0s | | | | | | |
| MENT | Mentasta | 20.30 | 44 | eP | P | 21 27 21.3 | +1.0 |
| MA2 | Magadan | 20.59 | 306 | iP | P | 21 27 24.2 | +0.8 |
| SEY | Seymchan | 20.61 | 316 | P | P | 21 27 22.6 | -0.9 |
| | comp=Z,18nm,0.8s,baz=110,slow=10,SNR=22 | | | | | | |
| SEY | | | | PcP | PcP | 21 31 32.7 | +0.4 |
| | comp=Z,7.8nm,0.8s,baz=112,slow=5.4,SNR=4.5 | | | | | | |
| SEY | | | | ScP | ScP | 21 35 10.2 | +5.4 |
| | comp=Z,2.4nm,0.3s,baz=171,slow=7.7,SNR=4.7 | | | | | | |
| SEY | Seymchan | 20.61 | 316 | ⇓iP | P | 21 27 24.3 | +0.8 |
| PCA | Pinnacle | 21.24 | 53 | eP | P | 21 27 31.2 | +0.8 |
| | comp=Z,74nm,0.9s | | | | | | |
| FYU | Fort Yukon | 21.25 | 34 | eP | P | 21 27 30.4 | 0.0 |
| | comp=Z,184nm,1.2s | | | | | | |
| EGAK | Eagle | 22.00 | 40 | eP | P | 21 27 36.7 | -1.8 |
| | comp=Z,148nm,0.9s | | | | | | |
| DAWY | Dawson | 22.50 | 42 | eP | P | 21 27 42.9 | -1.0 |
| | comp=Z,71nm,1.0s | | | | | | |
| KUR | Kuril'sk | 25.05 | 270 | P | P | 21 28 10.4 | +2.1 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,167nm,1.5s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,320nm,19.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,280nm,19.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=E,264nm,18.0s | | | | | | |
| WRAK | Wrangell Islan | 25.41 | 62 | eP | P | 21 28 13.6 | +2.2 |
| | comp=E,128nm,0.9s | | | | | | |
| INK | Inuvik | 26.08 | 34 | P | P | 21 28 16.8 | -0.6 |
| | comp=E,19nm,0.7s,baz=248,slow=9.1,SNR=38 | | | | | | |
| INK | | | | PcP | PcP | 21 31 43.9 | +0.3 |
| | comp=E,10nm,0.7s,baz=287,slow=3.5,SNR=6.8 | | | | | | |
| INK | Inuvik | 26.08 | 34 | eP | P | 21 28 16.9 | -0.5 |
| INK | | | | e | | 21 31 44.2 | |
| INK | Inuvik | 26.08 | 34 | eP | P | 21 28 16.9 | -0.5 |
| INK | | | | ePcP | PcP | 21 31 44.2 | +0.6 |
| DLBC | Dease Lake | 26.44 | 57 | P | P | 21 28 21.6 | +0.7 |
| | comp=E,21nm,0.9s,baz=282,slow=10,SNR=29 | | | | | | |
| DLBC | | | | LR | LR | 21 39 10.6 | |
| | comp=E,459nm,18.7s,baz=282,slow=37 | | | | | | |
| DLBC | Dease Lake | 26.44 | 57 | eP | P | 21 28 22.1 | +1.2 |
| | comp=E,28nm,1.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 27.47 | 277α | eP | P | 21 28 30.4 | +0.4 |
| YSS | | | | e*PP | pP | 21 28 43.9 | +1.7 |
| YSS | | | | eS | S | 21 33 12.0 | +4.7 |
| YSS | | | | eSS | SS | 21 34 52.0 | -12 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,50nm,0.9s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,500nm,20.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,600nm,20.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,500nm,17.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 27.47 | 277 | eP | P | 21 28 31.1 | +1.1 |
| | comp=N,54nm,0.7s | | | | | | |
| BBB | Bella Bella | 28.76 | 70 | P | P | 21 28 42.2 | +0.7 |
| | comp=N,40nm,1.0s,baz=149,slow=1.3,SNR=4.1 | | | | | | |
| BBB | | | | LR | LR | 21 38 18.7 | |
| | comp=N,402nm,19.8s,baz=286,slow=33 | | | | | | |
| ASAJ | Asahikawa | 28.88 | 272 | P | P | 21 28 43.5 | +0.9 |
| | comp=N,25nm,0.6s,baz=74,slow=8.9 | | | | | | |
| ASAJ | Asahikawa | 28.88 | 272 | P | P | 21 28 43.6 | +0.9 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,25nm,0.6s | | | | | | |
| ASAJ | Asahikawa | 28.88 | 272 | eP | P | 21 28 43.3 | +0.6 |
| | comp=Z,34nm,0.7s | | | | | | |
| ERM | Erimo | 29.63 | 268 | ⇑eP | P | 21 28 50.6 | +1.3 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,19nm,0.7s | | | | | | |
| ERM | Erimo | 29.63 | 268 | P | P | 21 28 50.6 | +1.3 |
| | comp=Z,246nm,0.6s,SNR=8.2 | | | | | | |
| ERM | Erimo | 29.63 | 268 | eP | P | 21 28 50.0 | +0.7 |
| | comp=Z,28nm,0.8s | | | | | | |
| YAK | Yakutsk | 30.94 | 311 | eP | P | 21 28 59.7 | -1.0 |
| YAK | | | | e | | 21 29 57.7 | |
| YAK | | | | e | | 21 31 53.6 | |
| YAK | | | | eS | S | 21 33 55.9 | -5.6 |
| YAK | | | | e | | 21 39 30.0 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,3.0nm,1.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,7.0nm,2.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,5.0nm,2.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,1.0nm,2.2s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,2.0nm,3.3s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,141nm,20.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,103nm,19.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,66nm,18.0s | | | | | | |
| YAK | Yakutsk | 30.94 | 311 | eP | P | 21 28 59.7 | -1.0 |
| | comp=N,41nm,0.6s | | | | | | |
| YAK | | | | ePcP | PcP | 21 31 56.0 | +0.2 |
| HABR | Khabarovsk | 31.55 | 284c | eP | P | 21 29 05.3 | -0.9 |
| HABR | | | | e*PP | pP | 21 29 14.9 | -3.5 |
| HABR | | | | e*SP | sP | 21 29 19.1 | -4.8 |
| HABR | | | | e | | 21 31 56.4 | |
| HABR | | | | eS | S | 21 34 13.4 | +2.1 |
| HABR | | | | e*SS | sS | 21 34 29.5 | -2.3 |
| HABR | | | | eSS | SnSn | 21 36 02.1 | +2.6 |
| HABR | | | | e | | 21 39 36.4 | |
| HABR | | | | pmax | pmax | | |
| | comp=E,52nm,1.0s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,96nm,1.0s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,15nm,1.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,759nm,19.0s | | | | | | |
| KLR | Kul'dur | 33.22 | 287 | eP | P | 21 29 17.0 | -3.8 |
| KLR | | | | pmax | pmax | | |
| | comp=E,70nm,1.8s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,160nm,1.8s | | | | | | |
| YKA | Yellowknife Ar | 33.53 | 47 | P | P | 21 29 22.7 | -0.6 |
| | comp=Z,2.8nm,0.6s,baz=278,slow=9.0,SNR=10 | | | | | | |
| YKA | | | | PcP | PcP | 21 32 03.3 | +0.4 |
| | comp=Z,5.4nm,0.7s,baz=284,slow=3.2,SNR=11 | | | | | | |
| B05A | Bryant | 33.81 | 74 | P | P | 21 29 25.8 | -0.1 |
| | baz=34 | | | | | | |
| JCW | Jim Creek | 33.94 | 74 | P | P | 21 29 29.7 | +2.6 |
| TDL | Tradedollar La | 34.61 | 77 | P | P | 21 29 33.6 | +0.6 |
| FMW | Mount Fremont | 34.66 | 76 | P | P | 21 29 34.1 | +0.4 |
| LON | Longmire | 34.67 | 76 | eP | P | 21 29 34.3 | +0.8 |
| LON | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| LON | Longmire | 34.67 | 76 | eP | P | 21 29 34.3 | +0.8 |
| | comp=Z,10nm,0.8s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.69 | 210 | T | T | 22 06 18.0 | |
| | baz=18,slow=76,SNR=2004 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.70 | 210 | T | T | 22 06 18.6 | |
| | baz=18,slow=76,SNR=1699 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.71 | 210 | T | T | 22 06 19.5 | |
| | baz=18,slow=76,SNR=1713 | | | | | | |
| NLW | Nelson Butte | 34.94 | 74 | P | P | 21 29 36.4 | +0.4 |
| I03D | Drain, OR | 35.24 | 82 | P | P | 21 29 38.2 | -0.2 |
| | baz=35 | | | | | | |
| EBG | Ellensburg | 35.34 | 75 | P | P | 21 29 39.9 | +0.6 |
| WTV | Waterville | 35.35 | 74 | P | P | 21 29 39.4 | 0.0 |
| USRK | Ussuriysk Ar. | 35.43 | 279 | P | P | 21 29 39.5 | -0.5 |
| | comp=Z,31nm,0.7s,baz=51,slow=7.4,SNR=67 | | | | | | |
| USRK | | | | PcP | PcP | 21 32 09.3 | +0.5 |
| | comp=Z,7.8nm,0.8s,baz=111,slow=1.3,SNR=4.6 | | | | | | |
| USRK | | | | LR | LR | 21 43 15.6 | |
| | comp=Z,356nm,21.9s,baz=45,slow=35 | | | | | | |
| H04A | Detroit Lake | 35.45 | 80 | eP | P | 21 29 41.0 | +0.8 |

comp=Z,25nm,0.8s
**G05D Wamic, OR** 35.70 78 P P 21 29 42.1 -0.3
baz=36
**I04A Tendick Farm,** 35.77 81 P P 21 29 42.9 0.0
baz=36
**H11S1 WAKE ISLAND Hy** 35.90 210 T T 22 07 54.3
baz=12,slow=74
**L02D Cave Junction,** 35.91 84 P P 21 29 42.6 -1.6
baz=36
**H11S2 WAKE ISLAND Hy** 35.92 210 T T 22 08 02.3
baz=12
**H11S3 WAKE ISLAND Hy** 35.92 210 T T 22 07 55.2
baz=12,slow=74
**MAJO Matsushiro** 35.97 264 *c iP* P 21 29 45.1 +0.4
**MAJO Matsushiro** 35.97 264 *eP* P 21 29 45.0 +0.3
comp=Z,76nm,1.0s
**MAT Matsushiro** 35.97 264 P P 21 29 44.9 +0.2
MAT S S 21 35 19.2 -0.7
**MJAR Matsushiro Arr** 35.97 264 P P 21 29 44.9 +0.2
comp=Z,28nm,0.8s,baz=53,slow=7.8,SNR=70
MJAR PcP PcP 21 32 10.1 -0.5
comp=Z,6.5nm,1.0s,baz=81,slow=2.8,SNR=6.1
MJAR LR LR 21 42 42.5
comp=Z,369nm,21.5s,baz=70,slow=33
**MJAR Matsushiro Arr** 35.97 264 P P 21 29 44.9 +0.2
MJAR 21 32 10.1
MJAR pmax pmax
comp=Z,28nm,0.8s
MJAR pmax pmax
comp=Z,7.0nm,1.0s
MJAR MLR MLR
comp=Z,369nm,21.5s
**VLA Vladivostok** 36.06 278 *eP* P 21 29 45.5 +0.1
VLA pmax pmax
comp=Z,123nm,1.3s
**G06A Carlson Farm,** 36.12 78 *eP* P 21 29 48.4 +2.4
comp=Z,80nm,1.9s
**I05D Terrebonne, OR** 36.15 80 P P 21 29 46.4 +0.2
baz=36
**HAWA Hanford** 36.22 76 *eP* P 21 29 47.2 +0.5
comp=Z,30nm,0.8s
HAWA *eScP* **ScP** 21 35 53.4 0.0
**OD2 Odessa Site #2** 36.23 74 P P 21 29 46.8 -0.1
**J04D Umpqua Nationa** 36.25 82 P P 21 29 45.7 -1.5
baz=36
**D08A Wollman Farm,** 36.27 74 *eP* P 21 29 46.9 -0.2
comp=Z,22nm,0.9s
**C09A Chrisman Ranch** 36.30 73 *eP* P 21 29 47.7 +0.2
comp=Z,27nm,0.8s
C09A *eScP* **ScP** 21 35 55.2 +1.5
**MDJ Mudanjiang** 36.68 281 P P 21 29 49.9 -0.8
MDJ pP **pP** 21 30 03.7 +0.6
MDJ sP **sP** 21 30 07.5 -1.0
MDJ PP **PP** 21 31 12.7 -2.0
MDJ S **S** 21 35 30.8 +0.2
MDJ PMZ
comp=Z,36nm,0.9s
MDJ PMZ
comp=Z,64nm,7.6s
MDJ LN
comp=Z,270nm,19.1s
MDJ LE
comp=Z,460nm,19.1s
MDJ LZ
comp=Z,680nm,18.6s
**MDJ Mudanjiang** 36.68 281 *eP* P 21 29 49.7 -1.0
comp=Z,32nm,0.8s
**YBH Yreka Blue Hor** 36.70 84 *eP* P 21 29 52.0 +1.0
YBH pmax pmax
comp=Z,9.0nm,0.8s
**YBH Yreka Blue Hor** 36.70 84 *eP* P 21 29 52.0 +1.0
comp=Z,8.9nm,0.8s
**J05D Fort Rock, OR** 36.76 81 P P 21 29 51.4 -0.2
baz=37
**NEW Newport** 36.77 72 *eP* P 21 29 51.5 0.0
NEW pmax pmax
comp=Z,51nm,1.0s
**NEW Newport** 36.77 72 *eP* P 21 29 51.5 0.0
comp=Z,51nm,1.0s
**M02C Callahan** 36.80 85 P P 21 29 52.0 +0.2
baz=37
**MSHR Mys Shultsa** 36.80 277 *iP* P 21 29 52.4 +0.7
**EDM Edmonton** 36.82 62 *eP* P 21 29 52.2 +0.4
EDM pmax pmax
comp=Z,134nm,0.8s
**EDM Edmonton** 36.82 62 *eP* P 21 29 52.2 +0.4
comp=Z,134nm,0.8s
**G08A Pilot Rock** 37.11 77 *eP* P 21 29 54.0 -0.5
comp=Z,17nm,1.3s
**N02D Trinity Center** 37.13 85 P P 21 29 54.3 -0.4
baz=37
**M04C Macdoel** 37.21 84 P P 21 29 55.7 +0.3
baz=37
**K05A Summer Lake** 37.28 82 *eP* P 21 29 57.0 +1.0
comp=Z,27nm,0.9s
K05A *eScP* **ScP** 21 35 59.2 +1.5
**KCPM Cahto Peak** 37.33 88 *eP* P 21 29 52.7 -3.7
**I07A Izee** 37.41 79 *eP* P 21 29 57.1 +0.1
comp=Z,17nm,0.9s
**WDC Whiskeytown Da** 37.45 86 *eP* P 21 29 56.7 -0.6
WDC pmax pmax
comp=Z,8.0nm,0.9s
**WDC Whiskeytown Da** 37.45 86 *eP* P 21 29 56.7 -0.6
comp=Z,8.4nm,0.9s
**F10A Beach Ranch, E** 37.82 75 *eP* P 21 30 00.4 -0.1
comp=Z,23nm,1.0s
**O03D Paynes Creek** 38.08 86 P P 21 30 02.6 -0.1
baz=38
**MOD Modoc** 38.10 82 *eP* P 21 30 02.0 -0.9
comp=Z,10nm,0.7s
**WALA Waterton Lakes** 38.29 69 *eP* P 21 30 04.5 +0.1
comp=Z,24nm,0.8s
**BSMT Bassoo Peak** 38.35 71 *eP* P 21 30 05.0 0.0
**J08A Circle Bar Ran** 38.42 79 *eP* P 21 30 06.0 +0.4
comp=Z,21nm,0.9s
J08A *eS* S 21 36 03.5 +6.2
**BLMT Blacktail Moun** 38.52 70 *eP* P 21 30 06.4 -0.1
**RES Resolute Bay** 38.68 25 *eP* P 21 30 06.7 -0.5
RES *e* 21 32 19.0
RES pmax pmax
comp=Z,5.0nm,0.6s
**RES Resolute Bay** 38.68 25 *eP* P 21 30 06.7 -0.5
comp=Z,5.1nm,0.6s
RES *ePcP* **PcP** 21 32 19.0 +0.9
**JTMT Jette** 38.70 71 *eP* P 21 30 08.0 +0.1
**YBMT Yellow Bay** 38.80 71 *eP* P 21 30 08.8 0.0
**WVOR Wild Horse Val** 38.83 81 *eP* P 21 30 09.3 +0.3
WVOR pmax pmax
comp=Z,19nm,0.7s
**WVOR Wild Horse Val** 38.83 81 *eP* P 21 30 09.3 +0.3
comp=Z,19nm,0.7s
**SWMT Swartz Lake** 38.98 71 *eP* P 21 30 10.2 0.0
**MSO Missoula** 39.35 72 *eP* P 21 30 13.2 -0.1
comp=Z,42nm,1.0s
**SLMT Seeley Lake** 39.41 71 *eP* P 21 30 13.3 -0.6
SLMT *eScP* **ScP** 21 36 05.8 +0.1
**BOD Bodaibo** 39.61 308 *eP* P 21 30 13.4 -1.8
BOD pmax pmax
comp=Z,9.0nm,1.2s
**CN2 Changchun** 39.64 283 *eP* P 21 30 14.3 -1.3
CN2 *epP* **pP** 21 30 26.5 -1.6
CN2 *eS* **S** 21 36 12.5 -2.9
CN2 *eSS* **SS** 21 39 03.4 -8.2
CN2 PMZ
comp=Z,50nm,0.8s
CN2 LN
comp=Z,300nm,21.0s
CN2 LE
comp=Z,500nm,21.0s
CN2 LZ
comp=Z,700nm,21.0s
**CHMT Chamberlain Mo** 39.72 71 *eP* P 21 30 15.7 -0.8
CHMT *eScP* **ScP** 21 36 07.4 +0.5
**MFID Camas Ranch** 40.01 78 *eP* P 21 30 18.7 -0.1
comp=Z,16nm,0.9s
**HIA Hailar** 40.23 293 *eP* P 21 30 19.8 -0.7
HIA pmax pmax
comp=Z,21nm,0.6s
**HIA Hailar** 40.23 293 *eP* P 21 30 19.8 -0.7
comp=Z,21nm,0.6s
**CMB Columbia Colle** 40.31 87 *eP* P 21 30 21.9 +0.6
CMB pmax pmax
comp=Z,8.0nm,0.9s
**CMB Columbia Colle** 40.31 87 *eP* P 21 30 21.9 +0.6
comp=Z,7.9nm,0.9s
**HRY Holter Researc** 40.66 71 *eP* P 21 30 23.4 -0.8

**LRM Limekiln Ridge** 40.76 72 *eP* P 21 30 24.7 -0.5
**HLID Hailey** 40.79 76 *eP* P 21 30 25.2 -0.2
comp=Z,18nm,0.9s
HLID *eScP* **ScP** 21 36 13.0 +1.9
**BMN Battle Mountai** 40.84 82 *eP* P 21 30 25.1 -0.7
BMN pmax pmax
comp=Z,10.0nm,0.8s
**BMN Battle Mountai** 40.84 82 *eP* P 21 30 25.1 -0.7
comp=Z,10.0nm,0.8s
**DLMT Dillon** 40.91 73 *eP* P 21 30 25.1 -1.1
comp=Z,10nm,1.0s
DLMT *ePcP* **PcP** 21 32 26.8 +0.8
DLMT *eScP* **ScP** 21 36 13.2 +1.6
**KSSKC Sokcho** 40.92 274 P P 21 30 28.7 +2.5
SNR=9.2
**KSSKC Sokcho** 40.92 274 P P 21 30 28.7 +2.5
SNR=9.2
**KSJMJ Jumunjin** 41.02 273 P P 21 30 29.7 +2.6
SNR=8.3
**KSJMJ Jumunjin** 41.02 273 P P 21 30 29.7 +2.6
SNR=8.3
**MCMT McKenzie Canyo** 41.05 74 *eP* P 21 30 27.1 -0.4
MCMT *eS* **S** 21 36 40.5 +3.7
**SEHB SEOHWA** 41.10 274 P P 21 30 30.5 +2.7
SNR=8.2
**SEHB SEOHWA** 41.10 274 P P 21 30 30.5 +2.7
SNR=8.2
**EGMT Eagleton** 41.21 68 *eP* P 21 30 28.5 -0.1
comp=Z,27nm,0.9s
**BOZ Bozeman (W)** 41.34 72 *eP* P 21 30 29.5 -0.3
BOZ pmax pmax
comp=Z,25nm,0.8s
**BOZ Bozeman (W)** 41.34 72 *eP* P 21 30 29.5 -0.3
comp=Z,26nm,0.8s
BOZ *eScP* **ScP** 21 36 14.2 +0.9
**KSIJA INJE** 41.36 274 P P 21 30 32.5 +2.6
SNR=5.3
**KSIJA INJE** 41.36 274 P P 21 30 32.5 +2.6
SNR=5.3
**NV01 Mina Array Sit** 41.37 85 *eP* P 21 30 29.8 -0.4
NV01 *eScP* **ScP** 21 36 14.4 +0.9
**NVAR Mina Array Bea** 41.37 85 P P 21 30 30.0 -0.2
comp=Z,3.0nm,0.8s,baz=294,slow=8.4,SNR=14
NVAR PcP **PcP** 21 32 27.1 -0.5
comp=Z,3.8nm,0.9s,baz=299,slow=0.9,SNR=3.6
NVAR ScP **ScP** 21 36 14.8 +1.2
comp=Z,5.5nm,1.0s,baz=286,slow=3.6,SNR=4.9
NVAR LR LR 21 44 53.1
comp=Z,302nm,19.8s,baz=288,slow=32
**KSCWO Cheorwon** 41.67 274 P P 21 30 35.2 +2.8
SNR=6.9
**KSCWO Cheorwon** 41.67 274 P P 21 30 35.2 +2.8
SNR=6.9
**KSCHC Chuncheon** 41.68 274 P P 21 30 35.2 +2.8
SNR=15
**KSCHC Chuncheon** 41.68 274 P P 21 30 35.2 +2.8
SNR=15
**KSRS Korea Array** 41.81 273 P P 21 30 34.1 +0.6
comp=Z,35nm,0.9s,baz=57,slow=7.6,SNR=63
KSRS PcP **PcP** 21 32 29.6 +0.8
comp=Z,4.4nm,0.8s,baz=55,slow=4.0,SNR=5.0
KSRS LR LR 21 47 27.1
comp=Z,179nm,20.8s,baz=54,slow=36
**KSRS Korea Array** 41.81 273 P P 21 30 34.1 +0.6
KSRS 21 32 29.6
KSRS pmax pmax
comp=Z,35nm,0.9s
KSRS pmax pmax
comp=Z,4.0nm,0.9s
KSRS MLR MLR
comp=Z,179nm,20.8s
**KS01 Wonju Array Si** 41.81 273 *eP* P 21 30 33.3 -0.3
**KSAR Wonju Array Be** 41.84 273 P P 21 30 34.1 +0.3
KSAR 21 32 29.6
**KSAR Wonju Array Be** 41.84 273 P P 21 30 34.1 +0.3
KSAR PcP **PcP** 21 32 29.6 +0.7
**MTUM Tungsten Hills** 41.87 87 *eP* P 21 30 34.7 +0.4
**ELK Elko** 41.88 81 *eP* P 21 30 34.5 +0.1
ELK pmax pmax
comp=Z,11nm,0.7s
**ELK Elko** 41.88 81 *eP* P 21 30 34.5 +0.1
comp=Z,11nm,0.7s
**QLMT Earthquake Lak** 41.90 73 *eP* P 21 30 34.3 -0.1
QLMT *eScP* **ScP** 21 36 16.7 +1.2
**YNCB YEONCHEON** 42.07 275 P P 21 30 38.0 +2.4
SNR=9.1
**YNCB YEONCHEON** 42.07 275 P P 21 30 38.0 +2.4
SNR=9.1
**FFC Flin Flon** 42.26 56 *eP* P 21 30 36.9 -0.1
FFC pmax pmax
comp=Z,18nm,0.9s
**FFC Flin Flon** 42.26 56 *eP* P 21 30 36.9 -0.1
comp=Z,18nm,0.9s
**YMR Madison River** 42.26 73 *eP* P 21 30 37.0 -0.5
comp=Z,36nm,0.9s
**KSMUS Musan** 42.27 275 P P 21 30 39.4 +2.2
SNR=6.9
**KSMUS Musan** 42.27 275 P P 21 30 39.4 +2.2
SNR=6.9
**YNR Norris Junctio** 42.41 73 *eP* P 21 30 39.0 +0.4
comp=Z,73nm,1.0s
**KSSEO Seoul** 42.41 274 P P 21 30 41.0 +2.5
SNR=7.2
**KSSEO Seoul** 42.41 274 P P 21 30 41.0 +2.5
SNR=7.2
**GCMT Greycliff** 42.42 71 *eP* P 21 30 38.8 +0.2
**YFT Old Faithful** 42.46 73 *eP* P 21 30 39.5 +0.4
comp=Z,33nm,1.0s
**KSSWO Suwon** 42.52 274 P P 21 30 42.0 +2.6
SNR=6.0
**KSSWO Suwon** 42.52 274 P P 21 30 41.9 +2.6
SNR=5.4
**KSCPR CHUPUNGNYEONG** 42.55 272 P P 21 30 42.6 +3.0
SNR=7.0
**KSCPR CHUPUNGNYEONG** 42.55 272 P P 21 30 42.6 +3.0
SNR=7.0
**KSGAH Ganghwa** 42.57 275 P P 21 30 41.9 +2.2
SNR=7.4
**KSGAH Ganghwa** 42.57 275 P P 21 30 41.9 +2.2
SNR=7.4
**INCN Incheon** 42.59 274 *eP* P 21 30 40.3 +0.4
comp=Z,92nm,1.0s
**H17A Grant Village** 42.64 73 P P 21 30 41.4 +0.8
baz=42,SNR=6.5
**H17A Grant Village** 42.64 73 *eP* P 21 30 42.0 +1.4
comp=Z,43nm,0.9s
**LKWY Lake** 42.66 73 *eP* P 21 30 39.8 -0.9
LKWY pmax pmax
comp=Z,39nm,0.8s
**LKWY Lake** 42.66 73 *eP* P 21 30 39.8 -0.9
comp=Z,39nm,0.8s
**IMW Indian Meadow** 42.70 74 *eP* P 21 30 41.4 +0.3
comp=Z,23nm,0.9s
**FLWY Flagg Ranch** 42.74 74 *eP* P 21 30 41.9 +0.5
comp=Z,27nm,1.0s
**JNU Nakatsue** 42.76 266 *eP* P 21 30 41.5 +0.1
comp=Z,23nm,0.9s
**HVU Hansel Valley** 42.79 78 *eP* P 21 30 41.4 -0.3
HVU pmax pmax
comp=Z,25nm,0.9s
**HVU Hansel Valley** 42.79 78 *eP* P 21 30 41.4 -0.3
comp=Z,25nm,0.9s
**FXWY Fox Creek** 42.80 74 *eP* P 21 30 41.7 -0.1
comp=Z,4.9nm,0.8s
**TJN Taejon** 42.83 272 *iP* P 21 30 42.0 +0.2
**MOOW Moose Ponds** 42.90 74 *eP* P 21 30 41.9 -0.8
comp=Z,7.2nm,0.9s
**TPAW Teton Pass** 42.92 74 *eP* P 21 30 42.6 -0.3
comp=Z,12nm,1.0s
**ISA Isabella** 42.99 89 *eP* P 21 30 42.6 -0.7
ISA pmax pmax
comp=Z,8.0nm,0.9s
**ISA Isabella** 42.99 89 *eP* P 21 30 42.6 -0.7
comp=Z,8.4nm,0.9s
**RLMT Red Lodge** 43.02 71 *eP* P 21 30 43.5 -0.1
comp=Z,53nm,1.0s
**REDW Red Top Meadow** 43.05 75 *eP* P 21 30 44.2 +0.4
comp=Z,13nm,0.9s
**SNOW Snow King Moun** 43.06 74 *eP* P 21 30 44.0 +0.1
comp=Z,25nm,1.1s
**LOHW Long Hollow** 43.06 74 *eP* P 21 30 44.1 +0.1
comp=Z,9.1nm,0.9s
**R11A Troy Canyon, C** 43.11 84 P P 21 30 43.7 -0.6
baz=43,SNR=16
**R11A Troy Canyon, C** 43.11 84 *eP* P 21 30 43.5 -0.8
**BGU Big Grassy Mou** 43.14 79 *eP* P 21 30 44.1 -0.3
comp=Z,24nm,0.9s

**DAC Darwin (Calif)** 43.15 87 *eP* P 21 30 43.8 -0.9
DAC pmax pmax
comp=Z,7.0nm,1.0s
**DAC Darwin (Calif)** 43.15 87 *eP* P 21 30 43.8 -0.9
comp=Z,7.1nm,1.0s
**SPUT South Promonto** 43.27 78 *eP* P 21 30 45.2 -0.4
comp=Z,13nm,1.0s
**KSBAR Backryungdo** 43.48 276 P P 21 30 48.9 +1.8
SNR=11
**TPNV Topopah Spring** 43.56 86 *eP* P 21 30 47.9 -0.1
TPNV pmax pmax
comp=Z,25nm,0.8s
**TPNV Topopah Spring** 43.56 86 *eP* P 21 30 47.9 -0.1
comp=Z,25nm,0.8s
**HWUT Hardware Ranch** 43.63 77 *eP* P 21 30 48.6 +0.1
comp=Z,16nm,1.1s
**KSJEU Jeongeup** 43.67 272 P P 21 30 51.7 +3.1
SNR=7.8
**DUG Dugway** 43.70 80 *eP* P 21 30 48.7 -0.3
DUG pmax pmax
comp=Z,30nm,1.0s
**DUG Dugway** 43.70 80 *eP* P 21 30 48.7 -0.3
comp=Z,30nm,1.0s
**LAO LASA Array** 43.95 68 *eP* P 21 30 51.3 +0.4
comp=Z,35nm,0.6s
LAO *ePcP* **PcP** 21 32 36.1 +0.2
**TCUT Toone Canyon** 44.01 78 *eP* P 21 30 51.5 -0.1
comp=Z,27nm,0.9s
**CTU Camp Tracy** 44.06 78 *eP* P 21 30 51.6 -0.3
**DGMT Dagmar** 44.16 65 *eP* P 21 30 51.6 -0.8
comp=Z,23nm,0.8s
**BW06 Boulder Array** 44.17 74 *eP* P 21 30 52.4 -0.5
comp=Z,38nm,0.8s
BW06 *eScP* **ScP** 21 36 25.0 +0.2
**MWC Mount Wilson** 44.18 90 *eP* P 21 30 52.8 -0.2
MWC pmax pmax
comp=Z,32nm,1.2s
**MWC Mount Wilson** 44.18 90 *eP* P 21 30 52.8 -0.2
comp=Z,32nm,1.2s
**FCC Fort Churchill** 44.26 48 *eP* P 21 30 52.4 -0.6
**FCC Fort Churchill** 44.26 48 *eP* P 21 30 52.4 -0.6
**GSC Goldstone** 44.26 88 *eP* P 21 30 52.7 -0.8
GSC pmax pmax
comp=Z,24nm,0.9s
**GSC Goldstone** 44.26 88 *eP* P 21 30 52.7 -0.8
comp=Z,24nm,0.9s
GSC *eScP* **ScP** 21 36 26.4 +1.2
**NLU North Lily Min** 44.30 79 *eP* P 21 30 53.1 -0.8
comp=Z,16nm,0.8s
**A25A Svangstu Ranch** 44.52 64 P P 21 30 55.1 -0.2
baz=44,SNR=9.3
**SHPR Sheep Range** 44.52 85 *eP* P 21 30 55.5 -0.1
**KSWAN Wando** 44.52 271 P P 21 30 57.4 +1.9
SNR=11
**MPU Maple Canyon** 44.53 79 *eP* P 21 30 55.5 -0.2
comp=Z,45nm,0.8s
**DL2 Dalian** 44.82 279 P P 21 30 58.0 +0.2
DL2 PMZ
comp=Z,190nm,0.9s
DL2 PMZ
comp=Z,130nm,4.4s
DL2 LE
comp=Z,210nm,18.6s
DL2 LZ
comp=Z,160nm,17.7s
**B25A Knox Farm, Ray** 44.84 64 P P 21 30 57.3 -0.7
baz=45
**CCUT Cedar City** 44.98 83 *eP* P 21 30 59.3 -0.1
comp=Z,7.8nm,0.8s
**MSU Marysvale** 45.12 81 *eP* P 21 31 00.6 +0.1
**MSU Marysvale** 45.12 81 *eP* P 21 31 00.6 +0.1
MSU *eScP* **ScP** 21 36 28.6 -0.1
**A26A Wade Farm, Ken** 45.14 63 P P 21 30 59.7 -0.5
baz=45,SNR=6.8
**TMUT Trail Mountain** 45.23 80 *eP* P 21 31 01.5 +0.1
comp=Z,86nm,0.9s
**D25A Fairfield** 45.37 66 P P 21 31 01.9 -0.2
baz=45
**P17A Butcher Ranch,** 45.41 79 *eP* P 21 31 02.8 +0.1
comp=Z,17nm,0.9s
**LDFC Landfair** 45.47 87 *eP* P 21 31 02.5 -0.6
comp=Z,21nm,0.8s
**A27A Ledoux Ranch,** 45.55 63 P P 21 31 03.1 -0.4
baz=45,SNR=7.5
**PFO Pinyon Flat Ob** 45.59 89 *eP* P 21 31 02.4 -1.7
PFO pmax pmax
comp=Z,11nm,1.1s
**PFO Pinyon Flat Ob** 45.59 89 *eP* P 21 31 02.4 -1.7
comp=Z,11nm,1.1s
**P18A Preston Nutter** 45.62 79 *eP* P 21 31 04.6 +0.1
comp=Z,28nm,0.9s
**E25A Miller Ranch,** 45.68 67 P P 21 31 04.4 -0.2
baz=46
**C26A Wahner Farm, P** 45.69 64 P P 21 31 02.6 -2.0
baz=46
**SRU San Rafael** 45.76 79 *eP* P 21 31 06.0 +0.5
SRU pmax pmax
comp=Z,19nm,0.8s
**SRU San Rafael** 45.76 79 *eP* P 21 31 06.0 +0.5
comp=Z,19nm,0.8s
**B27A Peters Farms,** 45.84 63 P P 21 31 05.3 -0.4
baz=46,SNR=5.9
**D26A Manning** 45.94 65 P P 21 31 05.9 -0.7
baz=46
**F25A Bowman** 45.97 67 P P 21 31 06.2 -0.7
baz=46
**K22A Casper** 46.06 73 P P 21 31 06.9 -0.9
baz=46,SNR=8.2
**K22A Casper** 46.06 73 *eP* P 21 31 06.4 -1.4
comp=Z,19nm,0.9s
**C27A Sayler Ranch,** 46.08 64 P P 21 31 07.3 -0.4
baz=46
**A28A Rude Farm, Bot** 46.11 62 P P 21 31 07.3 -0.7
baz=46
**E26A Carlson Angus** 46.23 66 P P 21 31 08.4 -0.5
baz=46,SNR=6.4
**B28A Dugan Ranch, T** 46.31 63 P P 21 31 09.3 -0.2
baz=46,SNR=12
**D27A Center** 46.41 65 P P 21 31 10.1 -0.2
baz=46
**G25A Newell** 46.41 68 P P 21 31 09.4 -1.0
baz=46
**SWSC Sam W. Stewart** 46.45 90 P P 21 31 09.9 -0.8
baz=46
**F26A Lodgepole** 46.47 67 P P 21 31 09.9 -0.9
baz=46
**O20A White River Ci** 46.53 77 P P 21 31 10.7 -0.9
baz=46,SNR=9.1
**O20A White River Ci** 46.53 77 *eP* P 21 31 10.9 -0.6
comp=Z,44nm,0.8s
**H25A Fruitdale** 46.63 69 P P 21 31 11.7 -0.5
baz=46
**RSSD Black Hills** 46.67 70 *eP* P 21 31 12.1 -0.5
RSSD pmax pmax
comp=Z,14nm,0.6s
**RSSD Black Hills** 46.67 70 *eP* P 21 31 12.1 -0.5
comp=Z,14nm,0.6s
**A29A Manning Farm,** 46.67 62 P P 21 31 11.6 -0.8
baz=46,SNR=18
**Y12C Blythe** 46.70 88 P P 21 31 12.4 -0.3
baz=46
**C28A Hausauer Farms** 46.71 64 P P 21 31 12.0 -0.6
baz=47
**E27A Carson** 46.77 66 P P 21 31 12.2 -1.0
baz=47
**F27A Lemmon** 46.83 67 P P 21 31 13.0 -0.6
baz=47,SNR=5.6
**G26A Maurine** 46.83 68 P P 21 31 13.0 -0.7
baz=47,SNR=13
**B29A Wagenman Farm,** 46.86 62 P P 21 31 12.9 -0.9
baz=47
**D28A Regan** 46.90 64 P P 21 31 13.8 -0.4
baz=47,SNR=8.0
**I25A Rochford** 46.91 70 P P 21 31 13.5 -0.9
baz=47
**GLA Glamis** 46.98 89 *eP* P 21 31 14.3 -0.6
GLA pmax pmax
comp=Z,11nm,0.8s
**GLA Glamis** 46.98 89 *eP* P 21 31 14.3 -0.6
comp=Z,11nm,0.8s
**PV09 Paradox Valley** 46.99 79 *eP* P 21 31 14.9 -0.4
**MDND Maddock** 47.07 63 P P 21 31 14.2 -1.2
baz=47
**MDND Maddock** 47.07 63 *eP* P 21 31 15.1 -0.3
comp=Z,145nm,1.1s
**H26A Fairpoint** 47.12 68 P P 21 31 15.2 -0.7
baz=47

PV10 **Paradox Valley** 47.13 79 *e*P P 21 31 16.9 +0.6
G27A **Dupree** 47.16 67 P P 21 31 15.4 -0.8
baz=47,SNR=8.7
A30A **Hoffart Farm,** 47.18 61 P P 21 31 15.6 -0.7
baz=47
E28A **Huff** 47.18 65 P P 21 31 15.4 -1.0
baz=47
PV04 **Paradox Valley** 47.20 79 *e*P P 21 31 16.1 -0.7
J25A **Sunshine Ranch** 47.23 70 P P 21 31 15.6 -1.3
baz=47
PV05 **Paradox Valley** 47.28 79 *e*P P 21 31 18.4 +0.9
I26A **New Underwood** 47.41 69 P P 21 31 17.7 -0.5
baz=47
B30A **Myrvik Farm, E** 47.44 62 P P 21 31 17.7 -0.5
baz=47,SNR=7.8
BJI **Beijing** 47.46 284 P P 21 31 18.8 +0.3
BJI S S 21 38 10.0 +0.5
BJI PMZ
comp=Z,160nm,0.9s
BJI PMZ
comp=Z,320nm,3.6s
BJI LN
comp=Z,580nm,21.0s
BJI LE
comp=Z,370nm,21.4s
BJI LZ
comp=Z,560nm,25.8s
N23A **Red Feather La** 47.46 74 P P 21 31 18.2 -0.6
baz=47,SNR=7.7
N23A **Red Feather La** 47.46 74 *e*P P 21 31 18.7 -0.1
comp=Z,33nm,1.1s
BJT **Baijiatuau** 47.47 284 *e*P P 21 31 19.2 +0.6
BJT pmax pmax
comp=Z,112nm,0.8s
BJT **Baijiatuau** 47.47 284 *e*P P 21 31 19.2 +0.6
comp=Z,112nm,0.8s
WUAZ **Wupatki** 47.51 84 *e*P P 21 31 19.1 -0.1
comp=Z,16nm,0.9s
H27A **Howes** 47.51 68 P P 21 31 18.2 -0.7
baz=47
D29A **Pettibone, Tap** 47.52 64 P P 21 31 18.3 -0.7
baz=47
F28A **McLaughlin** 47.54 66 P P 21 31 18.6 -0.5
baz=47,SNR=7.0
PV01 **Paradox Valley** 47.57 79 *e*P P 21 31 19.1 -0.6
KULLO **Kullorsuaq** 47.63 19 *i* P P 21 31 20.3 +0.9
comp=Z,24nm,0.9s
J26A **Sides Ranch, S** 47.71 70 P P 21 31 19.8 -0.8
baz=48
ULM **Lac du Bonnet** 47.75 58 P P 21 31 19.9 -0.8
comp=Z,29nm,1.0s,baz=302,slow=9.4,SNR=17
ULM LR LR 21 52 13.4
comp=Z,325nm,18.8s,baz=304,slow=37
ULM **Lac du Bonnet** 47.75 58 *e*P P 21 31 20.2 -0.5
ULM pmax pmax
comp=Z,44nm,1.1s
ULM **Lac du Bonnet** 47.75 58 *e*P P 21 31 20.2 -0.5
comp=Z,44nm,1.1s
C30A **Mose, Pekin** 47.78 63 P P 21 31 20.5 -0.4
baz=48
E29A **Napoleon** 47.78 65 P P 21 31 20.1 -0.8
baz=48
TLY **Talaya** 47.79 304 LR LR 21 52 58.7
comp=Z,380nm,19.3s,baz=47,slow=38
TLY **Talaya** 47.79 304 *c i*P P 21 31 20.2 -0.8
TLY *e* 21 32 48.6
TLY *e*PPP PPP 21 34 06.5
TLY *e*S S 21 38 31.5 +17
TLY pmax pmax
comp=Z,27nm,1.2s
TLY MLR MLR
comp=Z,434nm,16.0s
TLY **Talaya** 47.79 304 *e*P P 21 31 21.4 +0.4
comp=Z,28nm,1.2s
B31A **Greenbush Farm** 47.82 61 P P 21 31 20.9 -0.4
baz=48
I27A **Quinn** 47.86 69 P P 21 31 20.8 -0.9
baz=48,SNR=6.3
SMCO **Snowmass** 47.89 77 *e*P P 21 31 23.0 +0.6
comp=Z,16nm,1.2s
G28A **Parade** 47.92 67 P P 21 31 21.1 -1.0
baz=48
D30A **Buchanan** 47.96 63 P P 21 31 21.4 -0.9
baz=48
H28A **Mission Ridge** 48.10 67 P P 21 31 22.9 -0.6
baz=48,SNR=7.7
F29A **Eureka** 48.10 65 P P 21 31 22.9 -0.6
baz=48
ULN **Ulaanbaatar** 48.12 298 *c i*P P 21 31 23.3 -0.5
ULN pmax pmax
comp=Z,30nm,1.0s
ULN **Ulaanbaatar** 48.12 298 P P 21 31 24.2 +0.4
SNR=10
ULN **Ulaanbaatar** 48.12 298 *e*P P 21 31 23.5 -0.2
comp=Z,25nm,0.9s
C31A **Landman Farms,** 48.14 62 P P 21 31 22.8 -0.9
baz=48
MVCO **Mesa Verde** 48.20 80 *e*P P 21 31 24.2 -0.4
comp=Z,23nm,1.3s
M25A **Palm-Egli Farm** 48.26 73 P P 21 31 24.5 -0.4
baz=48
ISCO **Idaho Springs** 48.33 75 *e*P P 21 31 25.5 -0.2
ISCO pmax pmax
comp=Z,12nm,1.2s
ISCO **Idaho Springs** 48.33 75 *e*P P 21 31 25.5 -0.2
comp=Z,12nm,1.2s
J27A **Elkhorn Farm,** 48.37 69 P P 21 31 25.1 -0.5
baz=48
I28A **Midland** 48.41 68 P P 21 31 25.2 -0.7
baz=48,SNR=12
G29A **Hoven** 48.42 66 P P 21 31 25.2 -0.7
baz=48
B32A **Ashes, Strandq** 48.45 61 P P 21 31 25.1 -1.0
baz=48,SNR=10
SONA1 **Songino Array** 48.49 298 *e*P P 21 31 26.4 -0.2
SONA1 *e*ScP ScP 21 36 43.9 +1.3
SONM **Songino Array** 48.50 298 P P 21 31 27.0 +0.3
comp=Z,18nm,0.8s,baz=51,slow=9.1,SNR=154
SONM PcP PcP 21 32 51.3 -0.7
comp=Z,10nm,0.9s,baz=59,slow=1.4,SNR=8.2
SONM ScP ScP 21 36 43.3 +0.6
comp=Z,2.7nm,0.9s,baz=59,slow=3.3,SNR=5.5
SONM LR LR 21 53 37.3
comp=Z,614nm,19.6s,baz=60,slow=38
SONM **Songino Array** 48.50 298 P P 21 31 27.0 +0.3
SONM 21 32 51.3
SONM pmax pmax
comp=Z,18nm,0.8s
SONM pmax pmax
comp=Z,10.0nm,0.9s
SONM pmax pmax
comp=N,3.0nm,0.9s
SONM MLR MLR
comp=Z,614nm,19.6s
F30A **Leola** 48.55 65 P P 21 31 25.2 -1.7
baz=48
D31A **Mcclaflin, Tow** 48.58 63 P P 21 31 26.1 -0.9
baz=48
H29A **Onida** 48.59 67 P P 21 31 26.4 -0.8
baz=48,SNR=6.6
ZAK **Zakamensk** 48.72 303 *e*P P 21 31 28.2 0.0
ZAK *e* 21 32 53.3
ZAK pmax pmax
comp=Z,39nm,1.2s
ZAK pmax pmax
comp=Z,13nm,1.0s
J28A **Allard Ranch,** 48.72 69 P P 21 31 27.6 -0.7
baz=48,SNR=9.5
E31A **Nome** 48.77 64 P P 21 31 27.9 -0.7
baz=49
W18A **Petrified Fore** 48.78 83 P P 21 31 27.7 -1.3
baz=49
AGMN **Agassiz Nation** 48.87 61 *e*P P 21 31 28.7 -0.6
comp=Z,59nm,1.0s
S22A **4UR Ranch, Cre** 48.88 78 P P 21 31 29.0 -0.9
baz=49
I29A **Vivian Onida** 48.90 68 P P 21 31 29.2 -0.4
baz=49
K28A **Ten Mile Ranch** 49.07 70 P P 21 31 30.5 -0.5
baz=49
N26A **Koester Ranch,** 49.13 73 P P 21 31 31.0 -0.5
baz=49
Q24A **Divide** 49.13 76 P P 21 31 31.7 -0.2
baz=49
MOY **Mondy** 49.17 305 *e*P P 21 31 32.1 +0.4
MOY pmax pmax
comp=Z,37nm,1.2s

M27A **Reverse DX Ran** 49.19 71 P P 21 31 31.2 -0.8
baz=49
C33A **Trail** 49.24 61 P P 21 31 31.9 -0.2
baz=49
J29A **Okreek** 49.26 68 P P 21 31 31.5 -0.9
baz=49,SNR=7.4
TIA **Tai'an** 49.29 280 ⇑P P 21 31 32.7 0.0
TIA PMZ
comp=Z,140nm,0.8s
TIA LN
comp=Z,170nm,21.4s
TIA LE
comp=Z,350nm,21.4s
TIA LZ
comp=Z,490nm,22.0s
B34A **Aery, Baudette** 49.42 60 P P 21 31 32.6 -0.9
baz=49,SNR=18
SUSD **South Dakota S** 49.42 66 P P 21 31 32.6 -1.0
baz=49,SNR=5.6
O26A **Horse Wrangler** 49.44 73 P P 21 31 33.5 -0.5
baz=49
N27A **Anderson Farm,** 49.55 72 P P 21 31 34.4 -0.4
baz=49,SNR=5.0
D33A **AnnSam, Waubun** 49.56 62 P P 21 31 33.5 -1.1
baz=49,SNR=7.8
K29A **Lazy Trails An** 49.65 69 P P 21 31 34.9 -0.5
baz=50
H31A **Wolsey** 49.67 66 P P 21 31 34.8 -0.7
baz=50
SDCO **Great Sand Dun** 49.69 77 *e*P P 21 31 36.1 0.0
comp=Z,20nm,1.1s
SDCO *e*ScP ScP 21 36 45.2 -2.9
KBS **Kingsbay** 49.71 358 *e*P P 21 31 36.4 +1.0
KBS IAmb IAmb 21 31 37.0
comp=Z,58nm,0.8s
KBS **Kingsbay** 49.71 358 *e*P P 21 31 36.2 +0.9
KBS pmax pmax
comp=Z,57nm,0.8s
KBS **Kingsbay** 49.71 358 *e*P P 21 31 36.2 +0.9
comp=Z,57nm,0.8s
HHC **Hu-ho-hao-te** 49.72 288 *e*P P 21 31 36.6 +0.5
HHC sP sP 21 31 55.9 +1.7
HHC S S 21 38 43.4 +1.8
HHC PMZ
comp=Z,56nm,1.2s
HHC PMZ
comp=Z,120nm,6.1s
HHC LN
comp=Z,360nm,18.0s
HHC LE
comp=Z,330nm,18.2s
HHC LZ
comp=Z,400nm,20.6s
J30A **Dallas** 49.79 68 P P 21 31 35.5 -1.0
baz=50
P26A **Davis Ranch, A** 49.84 74 P P 21 31 36.4 -0.6
baz=50,SNR=6.8
E33A **Westby DABS, E** 49.85 63 P P 21 31 35.6 -1.2
baz=50
I31A **Royce, Wessing** 49.91 67 P P 21 31 36.6 -0.7
baz=50
D34A **Park Rapids** 49.95 62 P P 21 31 36.5 -1.1
baz=50,SNR=24
O27A **Beecher Island** 49.97 73 P P 21 31 37.1 -0.8
baz=50
L29A **Maesberg Ranch** 49.99 70 P P 21 31 37.2 -0.8
baz=50
TUC **Tucson** 50.00 86 *e*P P 21 31 37.9 -0.3
TUC pmax pmax
comp=Z,15nm,0.9s
TUC **Tucson** 50.00 86 *e*P P 21 31 37.9 -0.3
comp=Z,15nm,0.9s
F33A **5 Mile Ranch,** 50.09 63 P P 21 31 37.9 -0.7
baz=50
K30A **Basset** 50.12 69 P P 21 31 38.3 -0.7
baz=50,SNR=6.0
Q26A **Hugo** 50.14 75 P P 21 31 38.5 -0.8
baz=50
SSE **Sheshan** 50.17 272 *e*P P 21 31 37.3 -2.1
SSE sP sP 21 31 56.4 -1.2
SSE S S 21 38 48.9 +1.0
SSE sS sS 21 39 13.2 +4.0
SSE PMZ
comp=Z,45nm,0.7s
SSE PMZ
comp=Z,79nm,5.4s
SSE LN
comp=Z,97nm,21.7s
SSE LZ
comp=Z,120nm,20.2s
J31A **Geddes** 50.24 67 P P 21 31 38.7 -1.2
baz=50
M29A **Burnside Ranch** 50.25 71 P P 21 31 39.2 -0.8
baz=50
C35A **Jirik Farms, M** 50.25 60 P P 21 31 38.8 -1.0
baz=50,SNR=12
H32A **Carlson Farm,** 50.25 65 P P 21 31 38.4 -1.5
baz=50
E34A **Wadena** 50.31 62 P P 21 31 39.2 -1.1
baz=50
SPB5 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.4 +0.3
SPA1 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.4 +0.2
SPB1 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.3 +0.2
SPA0 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.2 +0.1
SPA0 IAmb IAmb 21 31 40.8
comp=Z,103nm,1.0s
SPA0 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.4 +0.2
SPB4 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.4 +0.3
SPA3 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.4 +0.3
SPA2 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.4 +0.3
SPB2 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.4 +0.2
SPB3 **Spitsbergen Ar** 50.34 357 *e*P P 21 31 40.4 +0.2
O28A **Krutsinger Ran** 50.43 73 P P 21 31 40.6 -0.8
baz=50
L30A **Spencer Herefo** 50.50 69 P P 21 31 40.8 -1.1
baz=50
I32A **Karley and Nic** 50.52 66 P P 21 31 40.5 -1.5
baz=50
H33A **Prehn Over Nor** 50.53 65 P P 21 31 41.1 -1.0
baz=50
KRAR **Krasnoyarsk** 50.56 313 ⇓*i*P P 21 31 42.3 +0.3
KRAR pmax pmax
comp=Z,35nm,1.0s
D35A **Remer** 50.58 61 P P 21 31 41.3 -1.0
baz=50,SNR=14
R26A **Arlington** 50.58 75 P P 21 31 41.8 -0.8
baz=50
KSCO **Kaye Shedlock'** 50.62 74 P P 21 31 42.1 -0.8
baz=50
KSCO **Kaye Shedlock'** 50.62 74 *e*P P 21 31 41.8 -1.1
comp=Z,35nm,0.7s
K31A **O'Neill** 50.65 68 P P 21 31 41.7 -1.2
baz=50
N29A **Votaw Ranch, W** 50.67 71 P P 21 31 42.6 -0.6
baz=50
E35A **Pequot Lakes** 50.70 62 P P 21 31 42.3 -0.9
baz=50
J32A **Parkston** 50.71 67 P P 21 31 42.1 -1.2
baz=50
T25A **Trinidad** 50.74 77 P P 21 31 43.4 -0.6
baz=51,SNR=8.0
T25A **Trinidad** 50.74 77 *e*P P 21 31 44.0 +0.1
comp=Z,63nm,1.0s
BTO **Baotou** 50.79 289 *e*P P 21 31 44.3 +0.2
G34A **Benson** 50.81 64 P P 21 31 43.1 -1.1
baz=51
C36A **Pine Crest Far** 50.83 60 P P 21 31 43.1 -1.0
baz=51,SNR=12
LAZ **Ladron** 50.86 82 *e*P P 21 31 45.1 +0.2
L31A **Butterfield Fa** 50.88 69 P P 21 31 44.1 -0.6
baz=51
I33A **Coleman** 50.89 66 P P 21 31 44.6 -0.2
baz=51
ANMO **Albuquerque** 50.92 81 *c e*P P 21 31 44.9 -0.4
ANMO pmax pmax
comp=Z,5.0nm,1.2s
ANMO **Albuquerque** 50.92 81 *e*P P 21 31 45.1 -0.2
comp=Z,7.7nm,1.1s
NJ2 **Nanjing** 50.98 274 *e*P P 21 31 47.3 +1.8
NJ2 PMZ
comp=Z,60nm,0.9s
R27A **Eads** 50.98 75 P P 21 31 44.8 -0.8
baz=51
N30A **Hueftle Ranch,** 51.00 71 P P 21 31 45.7 0.0
baz=51
S26A **Kim** 51.00 76 P P 21 31 44.7 -1.1
baz=51,SNR=8.3

D36A **Goodland** 51.00 60 P P 21 31 44.5 -1.0
baz=51,SNR=7.5
O29A **4D Ranch, Culb** 51.01 72 P P 21 31 45.3 -0.5
baz=51
F35A **Swanville** 51.03 63 P P 21 31 44.5 -1.2
baz=51,SNR=6.2
Q28A **Sharon Springs** 51.07 74 P P 21 31 45.5 -0.8
baz=51
K32A **Verdigre** 51.08 68 P P 21 31 44.9 -1.2
baz=51
H34A **Spellman Lake,** 51.09 64 P P 21 31 45.0 -1.2
baz=51
TIY **Taiyuan** 51.19 284 ⇓*i*P P 21 31 48.6 +1.5
TIY PMZ
comp=Z,140nm,0.8s
TIY PMZ
comp=Z,200nm,5.1s
TIY LZ
comp=Z,440nm,20.7s
ECSD **EROS Data Cent** 51.19 66 *e*P P 21 31 45.5 -1.5
comp=Z,16nm,0.6s
T26A **Comanche Natio** 51.22 77 P P 21 31 46.4 -1.1
baz=51
LPM **Los Pinos Moun** 51.23 81 *e*P P 21 31 47.0 -0.6
comp=Z,5.7nm,0.6s
LPM *e*pP pP 21 31 56.0 -4.5
P29A **Atwood** 51.26 73 P P 21 31 47.1 -0.5
baz=51
M31A **Lambtecht Ranc** 51.31 70 P P 21 31 47.8 -0.2
baz=51
BNM **Barren Site** 51.34 82 *e*P P 21 31 48.6 +0.1
O30A **MW Ranch, Wils** 51.41 71 P P 21 31 47.9 -0.9
baz=51
D37A **Cotton** 51.41 60 P P 21 31 48.0 -0.6
baz=51,SNR=5.5
EYMN **Ely** 51.44 59 *e*P P 21 31 47.7 -1.0
comp=Z,55nm,1.0s
R28A **Tribune** 51.54 74 P P 21 31 48.8 -1.0
baz=51
F36A **Milaca** 51.61 62 P P 21 31 49.1 -1.0
baz=51,SNR=7.0
N31A **Bailey Ranch,** 51.66 70 P P 21 31 50.1 -0.5
baz=52
Q29A **Oakley** 51.69 73 P P 21 31 49.8 -1.0
baz=52
C38A **Sawbill Land.** 51.69 59 P P 21 31 49.6 -1.1
baz=52,SNR=12
P30A **Selden** 51.71 72 P P 21 31 50.0 -1.0
baz=52
121A **Cookes Peak, D** 51.71 84 P P 21 31 51.2 0.0
baz=52
121A **Cookes Peak, D** 51.71 84 *e*P P 21 31 50.6 -0.6
comp=Z,14nm,0.8s
BGNE **Belgrade** 51.76 69 P P 21 31 50.4 -0.8
baz=52
BGNE **Belgrade** 51.76 69 *e*P P 21 31 50.5 -0.8
comp=Z,60nm,0.6s
L33A **Hoskins** 51.79 68 P P 21 31 50.5 -1.0
baz=52
T27A **Campo** 51.82 76 P P 21 31 51.0 -0.9
baz=52
O31A **Woolen Ranch,** 51.86 71 P P 21 31 51.4 -0.7
baz=52
G36A **St. Michael** 51.87 63 P P 21 31 51.3 -0.7
baz=52
R29A **Marienthal** 51.89 74 P P 21 31 51.9 -0.5
baz=52
S28A **Manter** 51.98 75 P P 21 31 52.5 -0.5
baz=52
I35A **Creekview Farm** 52.04 65 P P 21 31 52.9 -0.4
baz=52
N32A **Stulken Farm,** 52.08 70 P P 21 31 53.2 -0.4
baz=52
Q30A **Quinter** 52.09 73 P P 21 31 53.3 -0.5
baz=52
T28A **Walsh** 52.15 76 P P 21 31 53.2 -1.1
baz=52
U27A **Thompson Grove** 52.18 77 P P 21 31 53.5 -1.0
baz=52
M33A **Taylor Creek F** 52.21 68 P P 21 31 53.8 -0.8
baz=52
P31A **Stockton** 52.24 72 P P 21 31 53.9 -1.0
baz=52
SPMN **St. Paul** 52.40 62 P P 21 31 55.0 -0.9
baz=52
SPMN **St. Paul** 52.40 62 *e*P P 21 31 55.3 -0.6
comp=Z,16nm,0.8s
O32A **Brockman Farm,** 52.41 70 P P 21 31 55.2 -1.0
baz=52
L34A **Svendsen Farm,** 52.43 67 P P 21 31 54.8 -1.5
baz=52
CBKS **Cedar Bluff** 52.48 73 *e*P P 21 31 56.6 -0.1
CBKS pmax pmax
comp=Z,68nm,0.8s
CBKS **Cedar Bluff** 52.48 73 *e*P P 21 31 56.6 -0.1
comp=Z,68nm,0.8s
Q31A **Ellis** 52.56 72 P P 21 31 56.7 -0.6
baz=52
U28A **Mallet** 52.57 76 P P 21 31 56.4 -1.0
baz=52
SUMG **Summit** 52.59 15 *e*P P 21 31 57.4 0.0
SUMG *e* 21 33 07.4
SUMG pmax pmax
comp=Z,34nm,1.2s
SUMG **Summit** 52.59 15 *e*P P 21 31 57.4 0.0
comp=Z,34nm,1.2s
SUMG *e*PcP PcP 21 33 07.4 +0.4
K35A **Storm Lake** 52.61 66 P P 21 31 56.2 -1.3
baz=52
P32A **Huiting Farm,** 52.63 71 P P 21 31 56.8 -0.9
baz=52
S30A **Montezuma** 52.81 74 P P 21 31 58.5 -0.6
baz=53
L35A **Bielow Farm, R** 52.82 67 P P 21 31 58.9 -0.2
baz=53
ILULI **Ilulissat** 52.82 22 *i* P P 21 31 57.4 -1.3
comp=Z,29nm,1.0s
O33A **Hebron** 52.94 70 P P 21 31 59.1 -0.9
baz=53
R31A **Burdett** 52.94 73 P P 21 31 59.2 -1.0
baz=53
Q32A **Meitler Ranch,** 53.06 72 P P 21 31 59.9 -1.1
baz=53,SNR=8.9
U29A **Oasis Ranch, S** 53.10 76 P P 21 32 00.9 -0.5
baz=53
HVS **Khovu-Aksy** 53.14 308 *d i*P P 21 32 02.1 +0.7
HVS pmax pmax
comp=Z,59nm,0.7s
M35A **Neola** 53.15 68 P P 21 32 00.6 -0.9
baz=53
W28A **Vega** 53.32 78 P P 21 32 02.3 -0.7
baz=53
R32A **Long Quarter,** 53.34 72 P P 21 32 01.5 -1.6
baz=53
O34A **Beatrice** 53.39 69 P P 21 32 01.8 -1.5
baz=53,SNR=5.1
S31A **Mullinville** 53.41 74 P P 21 32 02.3 -1.2
baz=53
U30A **WK&E Inc. Balk** 53.42 75 P P 21 32 02.7 -1.0
baz=53
Q33A **Connelly Farm,** 53.49 71 P P 21 32 03.3 -0.8
baz=53,SNR=7.5
N35A **Tabor** 53.56 68 P P 21 32 03.9 -0.7
baz=53
T31A **Randall Ranch,** 53.63 74 P P 21 32 04.5 -0.7
baz=54
P34A **Walnut Farm, R** 53.72 70 P P 21 32 04.9 -0.9
baz=54
MNTX **Cornudas Mount** 53.77 83 *e*P P 21 32 05.7 -0.6
comp=Z,20nm,0.8s
O35A **Humboldt** 53.79 69 P P 21 32 06.1 -0.1
baz=54
X28A **Dimmitt** 53.82 78 P P 21 32 05.8 -0.9
baz=54
MSTX **Muleshoe** 53.84 79 P P 21 32 05.6 -1.2
baz=54
MSTX **Muleshoe** 53.84 79 *e*P P 21 32 05.8 -1.0
comp=Z,43nm,1.2s
COWI **Conover** 53.85 59 *e*P P 21 32 05.0 -1.6
comp=Z,16nm,0.7s
R33A **Olander Ranch,** 53.85 72 P P 21 32 05.6 -1.2
baz=54
AMTX **Amarillo** 53.89 78 *e*P P 21 32 06.0 -1.2
V30A **Spur Ranch, Mi** 53.91 76 P P 21 32 06.3 -1.0
baz=54
U31A **Nine Bar Ranch** 54.01 75 P P 21 32 06.7 -1.3
baz=54
T32A **Huddler Ranch,** 54.03 74 P P 21 32 07.2 -0.9

baz=54
**Q34A Chapman** 54.06 71 P P 21 32 07.2 -1.1
baz=54,SNR=7.1
**KSU1 Kansas State U** 54.14 70 P P 21 32 07.9 -0.9
baz=54
**KSU1 Kansas State U** 54.14 70 eP P 21 32 07.6 -1.2
comp=Z,50nm,0.9s
**X29A Tulia** 54.17 78 P P 21 32 07.7 -1.6
baz=54
**Y28A McKinney Farm,** 54.20 79 P P 21 32 08.0 -1.5
baz=54
**P35A Duane Minner,** 54.21 70 P P 21 32 07.7 -1.7
baz=54
**SCIA State Center** 54.28 66 eP P 21 32 09.5 -0.3
comp=Z,37nm,0.6s
**R34A Isabella, Hill** 54.29 71 P P 21 32 08.8 -1.2
baz=54
**S33A Kaszmaul Farm,** 54.31 73 P P 21 32 08.9 -1.2
baz=54
**O36A Bolckow** 54.43 68 P P 21 32 09.7 -1.2
baz=54
**T33A Patterson Ranc** 54.50 73 P P 21 32 10.1 -1.4
baz=54
**U32A Winter Ranch,** 54.52 74 P P 21 32 10.8 -0.8
baz=54
**Y29A Porterfield Fa** 54.59 78 P P 21 32 11.5 -0.7
baz=54
**P36A Good Intent, A** 54.62 69 P P 21 32 11.4 -0.9
baz=54
**Q35A Mercer Eighty,** 54.64 70 P P 21 32 11.5 -0.9
baz=54
**X30A Coker Ranch, T** 54.68 77 P P 21 32 12.1 -0.8
baz=54
**W31A Holland Ranch,** 54.74 76 P P 21 32 12.4 -0.9
baz=55
**S34A Willow Spring** 54.77 72 P P 21 32 12.2 -1.2
baz=55
**WHN Wuhan** 54.81 276 ⇓P P 21 32 15.2 +1.5
WHN pP **pP** 21 32 28.1 +1.4
WHN S **S** 21 39 48.9 -2.3
WHN LZ
comp=Z,520nm,17.4s
**NACB Ninganchiao** 54.81 265 eP P 21 32 12.1 -1.8
comp=Z,38nm,1.0s
**R35A Emporia Munici** 54.90 71 P P 21 32 13.1 -1.2
baz=55
**Q36A Arnold C. Orve** 54.91 70 P P 21 32 13.4 -1.0
baz=55
**128A Castleberry Fa** 54.93 80 P P 21 32 13.6 -1.1
baz=55,SNR=9.3
**V32A Arapaho** 54.93 75 P P 21 32 13.7 -0.9
baz=55
**Z29A Hungry Hill Ra** 54.97 79 P P 21 32 14.2 -0.8
baz=55
**U33A Lingo Farm, Me** 55.01 74 P P 21 32 14.8 -0.4
baz=55
**Y30A Stafford Cattl** 55.05 78 P P 21 32 14.6 -0.9
baz=55,SNR=6.9
**X31A McDonald Ranch** 55.10 77 P P 21 32 15.2 -0.6
baz=55
**T34A McClaskey Farm** 55.17 73 P P 21 32 14.9 -1.4
baz=55,SNR=8.9
**228A UT Block 9, Go** 55.21 81 P P 21 32 16.0 -0.8
baz=55
**W32A Sentinel** 55.21 76 P P 21 32 16.5 -0.1
baz=55
**S35A Otter Creek Ra** 55.25 71 P P 21 32 15.6 -1.3
baz=55,SNR=6.8
**JFWS Jewell Farm** 55.30 63 eP P 21 32 14.8 -2.3
JFWS pmax pmax
comp=Z,26nm,0.8s
**JFWS Jewell Farm** 55.30 63 eP P 21 32 14.8 -2.3
comp=Z,26nm,0.8s
**R36A Gordon, Harris** 55.30 70 P P 21 32 15.8 -1.4
baz=55,SNR=12
**Z30A Sanderson Ranc** 55.31 79 P P 21 32 16.1 -1.3
baz=55,SNR=5.7
**V33A Lossen Ranch,** 55.32 74 P P 21 32 16.5 -0.9
baz=55
**U34A Anderson Ranch** 55.36 73 P P 21 32 16.5 -1.1
baz=55
**U34A Anderson Ranch** 55.36 73 eP P 21 32 16.9 -0.8
comp=Z,48nm,0.8s
**ZAA0 Zalesovo Array** 55.47 315 eP P 21 32 17.4 -0.7
**ZALV Zalesovo Beam** 55.47 315 P P 21 32 17.0 -1.2
comp=Z,3.3nm,0.4s,baz=45,slow=6.3,SNR=18
ZALV PcP **PcP** 21 33 18.7 +0.9
comp=Z,29nm,0.8s,baz=38,slow=3.8,SNR=30
ZALV LR LR 21 57 56.3
comp=Z,579nm,19.5s,baz=68,slow=38
**ZALV Zalesovo Beam** 55.47 315 i P P 21 32 18.0 -0.2
ZALV pmax pmax
comp=Z,3.0nm,0.4s
**SSLB Suanglung** 55.50 265 eP P 21 32 18.4 -0.5
comp=Z,80nm,0.8s
**Q37A Longview Farm,** 55.55 69 P P 21 32 17.9 -1.2
baz=55
**NVS Novosibirsk** 55.56 317 eP P 21 32 17.7 -1.1
NVS e 21 33 17.9
NVS e 21 42 00.2
NVS pmax pmax
comp=Z,11nm,0.8s
NVS pmax pmax
comp=N,4.0nm,0.7s
NVS pmax pmax
comp=E,5.0nm,0.7s
**YULB Yu-li** 55.57 265 eP P 21 32 18.7 -0.6
comp=E,24nm,0.9s
**T35A Sooner Cattle** 55.65 72 P P 21 32 18.3 -1.4
baz=56,SNR=6.2
**S36A Lake Cedric, C** 55.65 71 P P 21 32 18.3 -1.4
baz=56
**W33A Caddo, Fort Co** 55.66 75 P P 21 32 19.5 -0.4
baz=56
**X32A Elmer** 55.66 76 P P 21 32 19.8 -0.1
baz=56
**WMOK Wichita Mounta** 55.75 76 eP P 21 32 19.8 -0.8
WMOK pmax pmax
comp=Z,23nm,1.1s
**WMOK Wichita Mounta** 55.75 76 eP P 21 32 19.8 -0.8
comp=Z,23nm,1.1s
**XAN Xi'an** 55.75 283 P P 21 32 20.5 -0.1
XAN pP **pP** 21 32 33.2 -0.3
XAN sP **sP** 21 32 38.5 -0.4
XAN PP **PP** 21 34 25.8 +0.7
XAN S **S** 21 39 59.4 -4.5
XAN sS **sS** 21 40 20.5 -5.0
XAN SS **SS** 21 43 43.4 -6.0
XAN PMZ
comp=Z,65nm,1.2s
XAN LN
comp=Z,190nm,17.2s
XAN LE
comp=Z,240nm,18.2s
XAN LZ
comp=Z,250nm,17.2s
**V34A Guthrie** 55.77 74 P P 21 32 20.3 -0.3
baz=56
**229A Bryant Ranch,** 55.79 80 P P 21 32 20.3 -0.6
baz=56
**Y32A R-V Farms, Ver** 55.85 77 P P 21 32 20.4 -0.9
baz=56
**130A Snyder** 55.88 79 P P 21 32 20.1 -1.4
baz=56
**Z31A Sharp Cattle R** 55.89 78 P P 21 32 20.2 -1.4
baz=56
**T36A Boggs Farm, Ca** 55.93 72 P P 21 32 20.6 -1.1
baz=56
**329A Wagon Wheel Ra** 56.02 81 P P 21 32 21.9 -0.6
baz=56
**W34A Bridge Creek,** 56.02 75 P P 21 32 22.1 -0.4
baz=56
**TPUB Ta-pu** 56.05 265 eP P 21 32 21.9 -1.0
comp=Z,486nm,2.5s
**X33A Lawton** 56.05 76 P P 21 32 21.8 -0.9
baz=56
**S37A Fort Scott** 56.08 70 P P 21 32 21.1 -1.7
baz=56,SNR=12
**131A Roby** 56.18 79 P P 21 32 22.8 -0.9
baz=56
**V35A Meyer Ranch, C** 56.23 73 P P 21 32 22.5 -1.4
baz=56
**230A Sterling City** 56.28 80 P P 21 32 22.8 -1.6
baz=56,SNR=9.5
**Z32A Haskell** 56.30 77 P P 21 32 23.4 -1.1
baz=56
**Y33A Hilltop Ranch,** 56.34 76 P P 21 32 24.2 -0.6
baz=56
**X34A Smith Ranch, M** 56.42 75 P P 21 32 24.4 -0.9
baz=56
**T37A Cheneyville 18** 56.45 71 P P 21 32 23.8 -1.7
baz=56,SNR=12
**U36A Oologah** 56.46 72 P P 21 32 24.2 -1.4
baz=56
**TX31 Lajitas Ar. Si** 56.47 84 eP P 21 32 24.6 -1.2
TX31 eScP **ScP** 21 37 18.5 +1.0
**TXAR Lajitas Array** 56.47 84 P P 21 32 24.7 -1.1
comp=Z,4.7nm,0.8s,baz=296,slow=5.0,SNR=49
TXAR ScP **ScP** 21 37 18.1 +0.6
comp=Z,1.5nm,1.0s,baz=263,slow=2.0,SNR=4.5
TXAR LR LR 21 54 37.0
comp=Z,129nm,19.9s,baz=0.0,slow=34
**TXAR Lajitas Array** 56.47 84 P P 21 32 24.7 -1.1
TXAR pmax pmax
comp=Z,5.0nm,0.8s
TXAR pmax pmax
comp=N,2.0nm,1.0s
TXAR MLR MLR
comp=Z,129nm,19.9s
**330A Mertzon** 56.57 80 P P 21 32 25.1 -1.4
baz=56
**W35A Tecumseh** 56.62 74 P P 21 32 25.6 -1.1
baz=56,SNR=5.2
**429A Davenport Ranc** 56.67 81 P P 21 32 25.6 -1.5
baz=56,SNR=6.3
**ABTX Abilene, Hawle** 56.67 78 P P 21 32 26.3 -0.8
baz=56
**ABTX Abilene, Hawle** 56.67 78 eP P 21 32 26.6 -0.5
comp=Z,32nm,1.1s
**231A Bronte** 56.73 79 P P 21 32 27.0 -0.6
baz=56
**V36A Jenks** 56.75 73 P P 21 32 26.4 -1.2
baz=57,SNR=6.0
**Z33A Whitaker Ranch** 56.75 77 P P 21 32 26.6 -1.1
baz=57
**TUL1 Tulsa** 56.75 73 P P 21 32 26.5 -1.1
baz=57
**TUL1 Tulsa** 56.75 73 eP P 21 32 26.5 -1.1
comp=Z,26nm,0.8s
**529A Stev Forest Ra** 56.82 82 P P 21 32 27.0 -1.2
baz=57,SNR=5.6
**U37A Salina** 56.82 72 P P 21 32 26.8 -1.3
baz=57,SNR=14
**Y34A Reagan Ranch,** 56.90 76 P P 21 32 27.8 -0.9
baz=57,SNR=12
**430A Baggett Ranch,** 56.96 81 P P 21 32 27.8 -1.4
baz=57,SNR=11
**W36A Wetumka** 57.02 74 P P 21 32 28.9 -0.6
baz=57
**X35A Drake** 57.07 75 P P 21 32 28.9 -1.1
baz=57,SNR=7.5
**331A San Angelo** 57.10 80 P P 21 32 29.1 -1.1
baz=57
**133A Hamilton Ranch** 57.12 78 P P 21 32 29.5 -0.9
baz=57,SNR=5.3
**V37A Hulbert** 57.16 72 P P 21 32 29.1 -1.4
baz=57,SNR=6.1
**232A Coleman** 57.17 79 P P 21 32 29.3 -1.4
baz=57
**Z34A Collier Ranch,** 57.21 76 P P 21 32 30.6 -0.3
baz=57
**U38A Gravette** 57.23 71 P P 21 32 30.1 -0.9
baz=57,SNR=6.6
**X36A Centrahoma** 57.33 74 P P 21 32 30.9 -0.8
baz=57,SNR=6.3
**530A J-C Ranch, Com** 57.34 81 P P 21 32 30.8 -1.1
baz=57,SNR=20
**Y35A Marietta** 57.37 75 P P 21 32 31.4 -0.6
baz=57,SNR=7.1
**LZH Lanzhou** 57.41 288 eP P 21 32 33.4 +0.9
LZH pP **pP** 21 32 47.5 +2.0
LZH sP **sP** 21 32 52.0 +1.2
LZH eS **S** 21 40 25.5 -0.5
LZH sS **sS** 21 40 48.0 +0.3
LZH SS **SS** 21 44 13.0 -2.6
LZH PMZ
comp=Z,110nm,1.0s
LZH PMZ
comp=Z,290nm,4.1s
LZH LN
comp=Z,730nm,16.2s
LZH LE
comp=Z,650nm,18.6s
LZH LZ
comp=Z,880nm,18.4s
**431A Sonora** 57.42 80 P P 21 32 30.8 -1.7
baz=57,SNR=12
**332A Millersview** 57.47 79 P P 21 32 31.6 -1.2
baz=57
**W37A Quinton** 57.50 73 P P 21 32 32.2 -0.7
baz=57,SNR=12
**GTA Gaotai** 57.51 294 ⇑P P 21 32 32.8 -0.3
GTA pP **pP** 21 32 45.6 -0.5
GTA sP **sP** 21 32 50.8 -0.6
GTA S **S** 21 40 24.2 -2.9
GTA sS **sS** 21 40 46.5 -2.3
GTA SS **SS** 21 44 16.2 -0.7
GTA PMZ
comp=Z,30nm,1.2s
GTA PMZ
comp=Z,88nm,5.7s
GTA LN
comp=Z,410nm,19.0s
GTA LE
comp=Z,610nm,19.9s
GTA LZ
comp=Z,620nm,19.5s
**233A Rising Star** 57.54 78 P P 21 32 32.2 -1.1
baz=57
**V38A Canehill** 57.61 72 P P 21 32 33.1 -0.6
baz=57
**Z35A Perchaven, San** 57.64 76 P P 21 32 33.6 -0.3
baz=58
**134A White-Moore Ra** 57.66 77 P P 21 32 33.2 -0.8
baz=58,SNR=6.1
**432A Menard** 57.79 80 P P 21 32 33.7 -1.4
baz=58
**531A Rocksprings** 57.82 81 P P 21 32 34.5 -0.8
baz=58
**Y36A Durant** 57.83 75 P P 21 32 34.5 -0.7
baz=58
**X37A Clayton** 57.91 74 P P 21 32 35.0 -0.7
baz=58,SNR=6.8
**CCM Cathedral Cave** 57.97 68 eP P 21 32 34.3 -1.9
CCM pmax pmax
comp=Z,14nm,0.9s
**CCM Cathedral Cave** 57.97 68 eP P 21 32 34.3 -1.9
comp=Z,14nm,0.9s
**333A Richland Sprin** 57.97 79 P P 21 32 35.0 -1.3
baz=58,SNR=7.3
**234A Clairette** 58.02 78 P P 21 32 36.1 -0.5
baz=58
**JCT Junction City** 58.06 80 eP P 21 32 35.5 -1.4
JCT pmax pmax
comp=Z,13nm,0.6s
**JCT Junction City** 58.06 80 eP P 21 32 35.5 -1.4
comp=Z,13nm,0.6s
**135A Vickery Place,** 58.08 77 P P 21 32 36.3 -0.7
baz=58
**W38A Poteau** 58.08 73 P P 21 32 36.1 -0.9
baz=58,SNR=9.7
**X38A Whitesboro** 58.17 73 P P 21 32 37.1 -0.6
baz=58
**Z36A Blue Ridge** 58.17 75 P P 21 32 36.6 -1.1
baz=58
**Y37A Hugo** 58.17 74 P P 21 32 37.1 -0.6
baz=58
**532A Rocksprings** 58.24 80 P P 21 32 37.2 -1.1
baz=58
**ARA0 ARCESS Array S** 58.27 352 eP P 21 32 37.4 -0.4
ARA0 ePcP **PcP** 21 33 28.6 +0.1
**ARCES ARCESS Array B** 58.27 352 P P 21 32 36.8 -1.0
comp=Z,11nm,0.7s,baz=16,slow=5.5,SNR=18
ARCES PcP **PcP** 21 33 28.5 0.0
comp=Z,26nm,0.9s,baz=2.9,slow=4.9,SNR=14
ARCES LR LR 22 02 31.7
comp=Z,127nm,18.0s,baz=16,slow=41
**ARCES ARCESS Array B** 58.27 352 P P 21 32 36.8 -1.0
ARCES 21 33 28.5
ARCES pmax pmax
comp=Z,11nm,0.7s
ARCES pmax pmax
comp=Z,26nm,0.9s
ARCES MLR MLR
comp=Z,127nm,18.0s
**ARE0 ARCESS Array S** 58.27 352 eP P 21 32 37.4 -0.4
**433A Art** 58.30 79 P P 21 32 37.6 -1.1
baz=58
**631A Perdido Creek** 58.33 82 P P 21 32 37.7 -1.1
baz=58,SNR=5.0
**334A Lometa** 58.42 78 P P 21 32 38.5 -1.0
baz=58,SNR=14
**WHTX Lake Whitney** 58.44 77 P P 21 32 39.3 -0.3
baz=58
**SCHQ Schefferville** 58.50 40 P P 21 32 39.0 -0.6
comp=Z,25nm,0.8s,baz=328,slow=5.7,SNR=12
SCHQ LR LR 21 59 10.9
comp=Z,631nm,18.1s,baz=292,slow=37
**SCHQ Schefferville** 58.50 40 eP P 21 32 39.7 +0.1
comp=Z,284nm,2.3s
**TRO Tromso** 58.68 354 eP P 21 32 40.6 0.0
**SFIN Scholer Farm** 58.74 63 P P 21 32 40.7 -0.8
baz=59,SNR=11
**SFIN Scholer Farm** 58.74 63 eP P 21 32 41.1 -0.4
comp=Z,40nm,0.7s
**Y38A Idabel** 58.74 74 P P 21 32 41.3 -0.3
baz=59
**632A Uvalde** 58.75 81 P P 21 32 40.8 -1.0
baz=59,SNR=5.3
**434A Burnet** 58.77 79 P P 21 32 40.6 -1.2
baz=59,SNR=12
**LVZ Lovozero** 58.78 347 ceP P 21 32 40.7 -0.7
LVZ pmax pmax
comp=Z,36nm,0.9s
**LVZ Lovozero** 58.78 347 eP P 21 32 41.2 -0.2
comp=Z,34nm,0.9s
**533A Kerrville** 58.82 80 P P 21 32 41.2 -1.1
baz=59
**335A Moody** 58.95 78 P P 21 32 42.3 -0.8
baz=59
**KTK1 Kautokeino** 58.98 352 eP P 21 32 42.2 -0.5
**236A Katherine and** 59.00 76 P P 21 32 42.6 -0.8
baz=59
**MIAR Mount Ida** 59.01 72 eP P 21 32 42.6 -0.8
MIAR pmax pmax
comp=Z,40nm,0.9s
**MIAR Mount Ida** 59.01 72 eP P 21 32 42.6 -0.8
comp=Z,40nm,0.9s
**137A Heron Place, G** 59.05 75 P P 21 32 43.2 -0.5
baz=59
**Z38A Mt. Pleasant** 59.06 74 P P 21 32 43.0 -0.8
baz=59
**Y39A Lockesburg** 59.12 73 P P 21 32 43.9 -0.3
baz=59
**633A Saathoff Ranch** 59.16 80 P P 21 32 43.8 -0.7
baz=59
**732A Laxson Ranch,** 59.19 82 P P 21 32 44.6 -0.2
baz=59
**534A Blanco** 59.19 79 P P 21 32 43.0 -1.8
baz=59
**435B Jarrell** 59.21 78 P P 21 32 45.2 +0.3
baz=59
**336A Riesel** 59.23 77 P P 21 32 45.1 0.0
baz=59
**APA Apatity** 59.26 348 eP P 21 32 56.6 +12
APA MLR MLR
comp=Z,700nm,20.0s
**OLIL Olney** 59.31 65 eP P 21 32 44.8 -0.7
comp=Z,56nm,0.6s
**PBMO Poplar Bluff** 59.31 68 eP P 21 32 44.0 -1.6
comp=Z,37nm,0.9s
**SIUC Southern Illin** 59.37 67 eP P 21 32 46.3 +0.4
comp=Z,36nm,0.8s
**138A Matatall Enter** 59.41 75 P P 21 32 45.7 -0.5
baz=59
**832A Faith Ranch, C** 59.50 82 P P 21 32 45.6 -1.3
baz=59,SNR=6.5
**Z39A Irene McRaven,** 59.55 74 P P 21 32 45.3 -1.8
baz=59
**436A Wall Ranch, Ga** 59.70 78 P P 21 32 48.0 -0.2
baz=60
**139A Bunkhouse Ranc** 59.81 74 P P 21 32 48.4 -0.6
baz=60
**BLO Bloomington** 59.90 64 eP P 21 32 48.5 -1.0
BLO pmax pmax
comp=Z,42nm,0.8s
**BLO Bloomington** 59.90 64 eP P 21 32 48.5 -1.0
comp=Z,42nm,0.8s
**SADO Sadowa** 59.98 55 eP P 21 32 50.0 +0.1
comp=Z,70nm,0.8s
**635A Leesville** 60.07 80 P P 21 32 50.3 -0.6
baz=60
**USIN University of** 60.08 66 eP P 21 32 50.1 -0.7
comp=Z,68nm,0.6s
**338A Crockett** 60.19 76 P P 21 32 51.4 -0.2
baz=60
**239A Gary** 60.23 75 P P 21 32 51.4 -0.5
baz=60
**933A Laredo** 60.41 82 P P 21 32 52.2 -0.9
baz=60
**735A Kenedy** 60.43 80 P P 21 32 52.6 -0.7
baz=60
**636A Smothers Creek** 60.45 79 P P 21 32 52.7 -0.7
baz=60
**SZP Santa** 60.45 261 eP P 21 32 53.8 +0.3
comp=Z,297nm,0.8s
**KURK Kurchatov** 60.45 315 P P 21 32 52.7 -0.4
comp=Z,810nm,0.5s,SNR=24
**834A Tilden** 60.49 81 P P 21 32 53.3 -0.4
baz=60
**438A Sam Houston St** 60.52 77 P P 21 32 53.6 -0.2
baz=60
**WCI Wyandotte Cave** 60.68 65 eP P 21 32 53.8 -1.1
WCI pmax pmax
comp=Z,107nm,0.8s
**WCI Wyandotte Cave** 60.68 65 eP P 21 32 53.8 -1.1
comp=Z,107nm,0.8s
**736A Circle Diamond** 60.81 79 P P 21 32 55.2 -0.7
baz=61
**HKT Hockley** 60.86 78 eP P 21 32 53.5 -2.6
HKT pmax pmax
comp=Z,11nm,1.1s
**HKT Hockley** 60.86 78 eP P 21 32 53.5 -2.6
comp=Z,11nm,1.1s
**934A Benavides** 60.89 81 P P 21 32 56.3 -0.1
baz=61
**340A Bronson** 61.01 75 P P 21 32 55.1 -2.0
baz=61
**WMQ Urumqi** 61.05 305 P P 21 32 58.0 +0.6
WMQ pP **pP** 21 33 10.0 -0.5
WMQ sP **sP** 21 33 16.0 +0.2
WMQ PP **PP** 21 35 15.0 +3.2
WMQ S **S** 21 41 12.0 -0.7
WMQ SS **SS** 21 45 13.0 +0.9
WMQ PMZ
comp=Z,72nm,1.0s
WMQ PMZ
comp=Z,46nm,6.0s
WMQ LN
comp=Z,580nm,20.0s
WMQ LE
comp=Z,420nm,20.0s
WMQ LZ
comp=Z,380nm,20.0s
**CD2 Chengdu** 61.06 284 P P 21 32 57.5 -0.1
CD2 pP **pP** 21 33 10.9 +0.2
CD2 PP **PP** 21 35 12.2 0.0
CD2 PcS **PcS** 21 37 43.2 -0.1
CD2 S **S** 21 41 12.8 -0.2
CD2 sS **sS** 21 41 35.7 +0.8
CD2 SS **SS** 21 45 14.0 +1.3
CD2 PMZ
comp=Z,90nm,0.9s
CD2 PMZ
comp=Z,160nm,5.2s
**ACSO Alum Creek Sta** 61.12 61 eP P 21 32 57.4 -0.4
comp=Z,36nm,1.3s
**WVT Waverly** 61.27 67 eP P 21 32 57.9 -1.0
WVT pmax pmax
comp=Z,15nm,0.9s
**WVT Waverly** 61.27 67 eP P 21 32 57.9 -1.0
comp=Z,15nm,0.9s
**ERPA Erie** 61.40 58 eP P 21 33 00.7 +1.1
comp=Z,73nm,0.9s
**OXF Oxford** 61.49 70 eP P 21 32 59.6 -0.8
OXF pmax pmax
comp=Z,92nm,1.0s
**OXF Oxford** 61.49 70 eP P 21 32 59.6 -0.8
comp=Z,92nm,1.0s
**MKAR Makanchi Array** 61.61 310 P P 21 33 00.2 -0.9
comp=Z,23nm,0.5s,baz=47,slow=6.3,SNR=315
MKAR LR LR 22 02 10.1

comp=Z,369nm,18.5s,baz=36,slow=38
**MKAR Makanchi Array 61.61 310** *i* P **P** **21 33 00.0 -1.1**
MKAR pmax pmax
comp=Z,23nm,0.5s
**MKAR Makanchi Array 61.61 310** *e*P **P** **21 33 00.3 -0.8**
**035A Encino 61.62 82** P **P** **21 33 00.5 -0.9**
baz=61
**MK01 Makanchi Array 61.62 310** *e*P **P** **21 32 59.2 -1.9**
**MAKZ Makanchi Array 61.75 310** *e*P **P** **21 33 01.3 -0.7**
**MMNY Mt. Morris Dam 62.05 56** *e*P **P** **21 33 04.3 +0.3**
comp=Z,113nm,1.0s
**BVAR Borovoye Array 62.14 321** LR LR 22 02 46.8
comp=Z,916nm,19.1s,slow=39
**BRVK Borovoye 62.16 322**⇑ *i*P **P** **21 33 04.7 +0.1**
BRVK pmax pmax
comp=Z,43nm,0.8s
**BRVK Borovoye 62.16 322** P **P** **21 33 04.5 -0.1**
comp=Z,381nm,0.5s,SNR=15
**BRVK Borovoye 62.16 322** P **P** **21 33 05.3 +0.7**
SNR=7.5
**BRVK Borovoye 62.16 322** *e*P **P** **21 33 04.5 -0.1**
comp=Z,44nm,0.6s
**FLOS Flostrand 62.26 356** *e*P **P** **21 33 04.9 -0.1**
**BORG Borgarnes 62.30 12** *e*P **P** **21 33 05.5 +0.2**
BORG pmax pmax
comp=Z,17nm,0.8s
**BORG Borgarnes 62.30 12** *e*P **P** **21 33 05.5 +0.2**
comp=Z,17nm,0.8s
**LONY Lake Ozonia 62.37 52** *e*P **P** **21 33 05.1 -1.1**
comp=Z,56nm,1.1s
**MOR8 Moi Rana 62.37 356** *e*P **P** **21 33 04.3 -1.5**
**GYA Guiyang 62.46 279**⇑ *i*P **P** **21 33 06.2 -1.0**
GYA pP **pP** **21 33 22.0 +1.7**
GYA sP **sP** **21 33 27.6 +2.0**
GYA PP **PP** **21 35 27.9 +3.2**
GYA S **S** **21 41 30.2 -0.8**
GYA sS **sS** **21 41 53.7 +0.7**
GYA SS **SS** **21 45 36.0 +1.0**
GYA PMZ
comp=Z,40nm,0.9s
GYA PMZ
comp=Z,130nm,5.6s
GYA LN
comp=Z,540nm,18.7s
GYA LE
comp=Z,490nm,17.5s
GYA LZ
comp=Z,500nm,17.8s
**SVE Sverdlovsk 62.59 329** *e*P **P** **21 33 07.9 +0.5**
SVE pmax pmax
comp=Z,17nm,0.7s
SVE MLR MLR
comp=Z,531nm,18.0s
**FRNY Flat Rock 62.71 52** *e*P **P** **21 33 06.7 -1.7**
comp=Z,4.4nm,0.4s
**SWET Sewanee 63.01 67** *e*P **P** **21 33 09.9 -0.7**
comp=Z,27nm,1.1s
**MCWV Mont Chateau 63.22 59** *e*P **P** **21 33 12.1 +0.2**
comp=Z,28nm,0.9s
**TZTN Tazewell 63.41 64** *e*P **P** **21 33 12.0 -1.3**
comp=Z,18nm,0.8s
**BINY Binghamton 63.42 55** *e*P **P** **21 33 13.4 +0.2**
comp=Z,153nm,0.9s
**MDV Middlebury 63.52 52** *e*P **P** **21 33 12.6 -1.1**
**SSPA Standing Stone 63.56 57** *e*P **P** **21 33 13.6 -0.5**
comp=Z,126nm,0.6s
**ARU Arti 63.58 330** LR LR 22 04 22.8
comp=Z,299nm,18.6s,baz=42,slow=39
**ARU Arti 63.58 330** *d i*P **P** **21 33 14.0 +0.1**
ARU *PP **pP** **21 33 27.4 +0.3**
ARU 21 33 49.2
ARU 21 35 39.6
ARU S **S** **21 41 48.1 +4.2**
ARU SS **SS** **21 45 51.0 +0.3**
ARU pmax pmax
comp=Z,22nm,0.7s
ARU MLR MLR
comp=Z,297nm,19.0s
**ARU Arti 63.58 330** P **P** **21 33 14.1 +0.1**
comp=Z,218nm,0.6s,SNR=9.7
**ARU Arti 63.58 330** *e*P **P** **21 33 13.8 -0.2**
comp=Z,22nm,0.6s
**CPCT Cooper Cave 63.65 66** *e*P **P** **21 33 14.4 -0.4**
**ACCN Adirondack Com 63.72 53** *e*P **P** **21 33 14.8 -0.4**
comp=Z,27nm,0.9s
**TKL Tuckaleechee C 63.92 65** LR LR 21 59 50.5
comp=Z,330nm,21.4s,baz=338,slow=35
**TKL Tuckaleechee C 63.92 65** *e*P **P** **21 33 15.9 -0.7**
**TKL Tuckaleechee C 63.92 65** *e*P **P** **21 33 15.9 -0.7**
**LBNH Lisbon 63.95 51** *e*P **P** **21 33 16.1 -0.6**
LBNH pmax pmax
comp=Z,50nm,0.9s
**LBNH Lisbon 63.95 51** *e*P **P** **21 33 16.1 -0.6**
comp=Z,50nm,0.9s
**NSS Namsos 64.12 357** *e*P **P** **21 33 17.8 +0.4**
**TRY Troy 64.20 53** *e*P **P** **21 33 18.4 +0.1**
comp=Z,34nm,0.8s
**PKME Peaks-Kenny Pk 64.45 49** *e*P **P** **21 33 19.6 -0.3**
comp=Z,38nm,0.9s
**KLMR Klimovskoe 64.52 342** *e*P **P** **21 33 18.1 -2.0**
KLMR *e* 21 33 50.8
KLMR pmax pmax
comp=Z,29nm,1.7s
**BLA Blacksburg 64.67 62** *e*P **P** **21 33 21.5 0.0**
BLA pmax pmax
comp=Z,45nm,0.9s
**BLA Blacksburg 64.67 62** *e*P **P** **21 33 21.5 0.0**
comp=Z,45nm,0.9s
**WVL Waterville 64.80 50** *e*P **P** **21 33 21.3 -0.9**
comp=Z,54nm,1.0s
**MVL Millersville 64.83 57** *e*P **P** **21 33 22.5 +0.1**
comp=Z,13nm,0.9s
**VWCC Virginia Weste 64.89 61** *e*P **P** **21 33 22.8 -0.1**
**LUPA Lehigh Univers 64.90 56** *e*P **P** **21 33 23.3 +0.4**
comp=Z,62nm,0.8s
**ODNJ Ogdensburg 64.94 55** *e*P **P** **21 33 23.4 +0.2**
comp=Z,66nm,0.9s
**SDMD Soldier's Deli 65.00 58** *e*P **P** **21 33 23.5 -0.1**
comp=Z,15nm,0.9s
**BRNJ Basking Ridge 65.25 55** *e*P **P** **21 33 25.3 +0.2**
comp=Z,80nm,0.9s
**PAL Palisades 65.35 55** *e*P **P** **21 33 25.3 -0.5**
PAL pmax pmax
comp=Z,85nm,0.8s
**PAL Palisades 65.35 55** *e*P **P** **21 33 25.3 -0.5**
comp=Z,85nm,0.8s
**HRV Adam Dziewonsk 65.42 52** *e*P **P** **21 33 26.2 0.0**
HRV pmax pmax
comp=Z,62nm,1.0s
**HRV Adam Dziewonsk 65.42 52** *e*P **P** **21 33 26.2 0.0**
comp=Z,62nm,1.0s
**TBLU Trondheim 65.46 357** *e*P **P** **21 33 25.1 -1.0**
TBLU IAmb IAmb 21 33 25.7
comp=Z,32nm,0.6s
**CPNY Central Park 65.48 55** *e*P **P** **21 33 26.8 +0.2**
comp=Z,96nm,0.8s
**KMSC Kings Mountain 65.67 64** P **P** **21 33 27.3 -0.7**
baz=66,SNR=12
**KMSC Kings Mountain 65.67 64** *e*P **P** **21 33 27.4 -0.5**
comp=Z,38nm,0.9s
**GOGA Godfrey 65.72 67** *e*P **P** **21 33 27.1 -1.2**
GOGA pmax pmax
comp=Z,31nm,1.0s
**GOGA Godfrey 65.72 67** *e*P **P** **21 33 27.1 -1.2**
comp=Z,31nm,1.0s
**EMMW East Machias 65.73 48** *e*P **P** **21 33 27.9 -0.3**
comp=Z,91nm,0.9s
**KMI Kunming 65.85 280** P **P** **21 33 29.6 +0.1**
KMI pP **pP** **21 33 43.9 +1.1**
KMI sP **sP** **21 33 50.1 +2.1**
KMI PP PP 21 36 00.0 +5.4
KMI S **S** **21 42 10.6 -2.6**
KMI sS **sS** **21 42 38.4 +3.1**
KMI PMZ
comp=Z,33nm,0.7s
KMI PMZ
comp=Z,150nm,3.6s
KMI LN
comp=Z,200nm,19.4s
KMI LE
comp=Z,190nm,19.4s
KMI LZ
comp=Z,190nm,15.5s
**BRYW Bryant College 65.86 53** *e*P **P** **21 33 28.9 -0.2**
comp=Z,59nm,0.9s
**QIZ Qiongzhong 65.94 271** P P 21 33 37.3 +7.4
QIZ pP pP 21 33 42.6 -0.6
QIZ sP sP 21 33 47.4 -1.0
QIZ S **S** **21 42 12.0 -2.0**
QIZ pmax pmax
comp=Z,29nm,1.6s
**URVA University of 65.98 60** *e*P **P** **21 33 29.9 0.0**
**FINES FINESS Array B 66.07 349** P **P** **21 33 29.2 -0.9**
comp=Z,6.0nm,0.7s,baz=17,slow=6.2,SNR=27
FINES LR LR 22 07 38.1
comp=Z,188nm,18.1s,baz=14,slow=41
**FINES FINESS Array B 66.07 349** P **P** **21 33 29.2 -0.9**
FINES pmax pmax
comp=Z,6.0nm,0.7s
FINES MLR MLR
comp=Z,188nm,18.1s
**MOL Molde 66.20 359** *e*P **P** **21 33 30.7 -0.2**
MOL IAmb IAmb 21 33 31.5
comp=Z,34nm,0.7s
**AKN Aaknes 66.61 359** *e*P **P** **21 33 33.6 +0.1**
AKN IAmb IAmb 21 33 34.5
comp=Z,41nm,0.8s
**TAOE Nuku Hiva Isla 67.36 142** *e*T T 22 47 14.5
comp=Z,100nm,0.3s
**NB2 NORSAR Subarra 67.64 357** P **P** **21 33 39.8 -0.4**
comp=Z,49nm,1.2s,baz=7.7,slow=6.5
**NB2 NORSAR Subarra 67.64 357** P **P** **21 33 39.8 -0.4**
baz=7.7,slow=6.5
**NOA NORSAR Array B 67.64 357** P **P** **21 33 39.8 -0.4**
comp=Z,14nm,0.8s,baz=5.5,slow=6.4,SNR=52
NOA LR LR 22 01 38.9
comp=Z,92nm,21.6s,baz=355,slow=34
**NOA NORSAR Array B 67.64 357** P **P** **21 33 39.8 -0.4**
NOA pmax pmax
comp=Z,14nm,0.8s
NOA MLR MLR
comp=Z,92nm,21.6s
**NBO02 NORSAR Array S 67.64 357** *e*P **P** **21 33 39.5 -0.7**
**NHSC New Hope 67.81 65** *e*P **P** **21 33 41.6 0.0**
comp=Z,82nm,0.8s
**SLVN Son La 67.92 277** *e*P **P** **21 33 42.8 +0.2**
comp=Z,19nm,0.7s
**NC602 NORSAR Array S 67.93 356** *e*P **P** **21 33 41.6 -0.4**
**AAK Ala-Archa 68.40 312** *c i*P **P** **21 33 46.0 +0.6**
AAK pmax pmax
comp=Z,82nm,0.7s
**AAK Ala-Archa 68.40 312** P **P** **21 33 45.8 +0.4**
comp=Z,357nm,0.6s,SNR=15
**AAK Ala-Archa 68.40 312** P **P** **21 33 46.9 +1.5**
SNR=6.5
**AAK Ala-Archa 68.40 312** *e*P **P** **21 33 45.8 +0.4**
comp=Z,35nm,0.7s
**OSL Oslo 68.76 357** *e*P **P** **21 33 47.9 +0.8**
**SWI Sorong 68.88 239** P **P** **21 33 48.6 +0.2**
**VSU Vasula 68.88 348**⇓ *i*P **P** **21 33 46.7 -1.2**
VSU pmax pmax
comp=Z,95nm,1.2s
**ODD1 Odda 68.88 359** *e*P **P** **21 33 48.1 +0.1**
ODD1 IAmb IAmb 21 33 48.6
comp=Z,30nm,0.8s
**KONO Kongsberg 69.09 357** *e*P **P** **21 33 49.4 +0.3**
**KONO Kongsberg 69.09 357** *e*P **P** **21 33 49.6 +0.4**
KONO pmax pmax
comp=Z,20nm,0.9s
**KONO Kongsberg 69.09 357** *e*P **P** **21 33 49.6 +0.4**
comp=Z,20nm,0.9s
**ABKAR Akbulak array 69.09 325** *e*P **P** **21 33 49.5 +0.1**
**BLS5 Blasjo 69.38 359** *e*P **P** **21 33 51.1 +0.1**
BLS5 IAmb IAmb 21 33 51.6
comp=Z,12nm,0.8s
**KMY Karmoy 69.59 360** *e*P **P** **21 33 52.1 -0.1**
KMY IAmb IAmb 21 33 52.9
comp=Z,27nm,0.7s
**KKAR Karatay Array 69.84 315** *e*P **P** **21 33 53.9 -0.2**
KKAR pmax pmax
comp=Z,39nm,0.5s
**KKAR Karatay Array 69.84 315** *e*P **P** **21 33 53.9 -0.2**
comp=Z,39nm,0.5s
**KSH Kashi 70.12 309** P P 21 33 59.7 +3.7
KSH *e*pP pP 21 34 12.7 +3.3
KSH *e*PP PP 21 36 37.6 +6.6
KSH S **S** **21 43 06.7 +3.1**
KSH SKS **SKSac** **21 43 50.3 -3.1**
KSH PMZ
comp=Z,54nm,0.9s
KSH LN
comp=Z,130nm,7.9s
KSH LE
comp=Z,100nm,6.0s
KSH LZ
comp=Z,400nm,27.1s
**OBN Obninsk 70.44 341**⇓ *e*P **P** **21 33 56.8 -0.7**
OBN *e* 21 34 19.0
OBN *e* 21 36 32.9
OBN *e*PPP PPP 21 38 19.1
OBN *e*S **SKSac** **21 43 57.9 +2.9**
OBN pmax pmax
comp=Z,19nm,0.8s
OBN MLR MLR
comp=Z,230nm,22.0s
**OBN Obninsk 70.44 341** *e*P **P** **21 33 57.1 -0.5**
comp=Z,17nm,0.8s
**PMOR Pomariorio Ree 70.45 152** *e*T T 22 51 03.4
comp=Z,7.5nm,0.2s
**NONG Nongkai 70.84 275** P **P** **21 34 00.6 +0.1**
comp=Z,93nm,0.9s
**CMIG Matias Romero 70.89 86** LR LR 22 00 27.9
comp=Z,202nm,21.9s,baz=316,slow=32
**CRAI Chiangrai 70.94 279** P P 21 33 55.4 -5.7
comp=Z,115nm,0.7s,comp=Z,10µm
**SKNT Sakolnakorn 71.14 274** P **P** **21 34 02.5 +0.1**
comp=Z,76nm,0.7s
**MYLDM Lahad Datu 71.27 254** *e*P **P** **21 34 04.4 +1.3**
**UBPT Khong Chiam 71.50 271** P **P** **21 34 04.9 +0.4**
comp=Z,42nm,1.1s
**CMAI Chiengmai2 71.98 279** P **P** **21 34 10.0 +2.4**
comp=Z,71nm,1.1s
**DLV T Lat 72.16 267** *e*P **P** **21 34 08.9 +0.2**
comp=Z,28nm,1.0s
**LPSR Galich'ya Gora 72.29 339** *e*P **P** **21 34 09.5 +0.8**
LPSR pmax pmax
comp=Z,30nm,0.7s
LPSR pmax pmax
comp=N,5.0nm,0.6s
LPSR pmax pmax
comp=E,5.0nm,0.5s
**MUD Monsted U'grnd 72.30 357**⇑ *i*P **P** **21 34 09.0 +0.3**
MUD pmax pmax
comp=Z,13nm,0.6s
**MUD Monsted U'grnd 72.30 357**⇑ *i*P **P** **21 34 09.0 +0.3**
comp=Z,13nm,0.6s
**PHRA Phrae 72.33 278** P **P** **21 34 09.9 +0.4**
comp=Z,202nm,0.7s,comp=Z,34µm
**KHON Khomkaen 72.35 274** P **P** **21 34 10.0 +0.4**
comp=Z,46nm,0.8s
**PPT Papeete 72.41 154** LR LR 22 02 19.9
comp=Z,311nm,18.6s,baz=340,slow=33
**LOEI Loei 72.43 276** P **P** **21 34 08.1 -2.0**
comp=Z,29nm,1.2s
**PPT2 Papeete2 72.43 154** *e*S **S** **21 43 34.7 +4.4**
comp=Z,495nm,28.5s
**PPT2 Papeete2 72.43 154** *e*LR LR 21 56 15.7
comp=Z,409nm,21.8s,baz=346
**LAMP Lampang 72.68 278** P P 21 34 16.2 +4.6
comp=Z,6.4nm,0.8s,comp=Z,66nm
**UTTA Uttaradit 72.69 277** P **P** **21 34 11.6 0.0**
comp=Z,28nm,0.7s,comp=Z,259nm
**SANI Sanana 72.75 243** P **P** **21 34 11.7 -0.3**
**CHTO Chiang Mai 72.88 279** P **P** **21 34 13.2 +0.4**
comp=Z,94nm,1.0s
**CHTO Chiang Mai 72.88 279** *e*P **P** **21 34 13.0 +0.2**
CHTO pmax pmax
comp=Z,16nm,0.7s
**CHTO Chiang Mai 72.88 279** *e*P **P** **21 34 13.0 +0.2**
comp=Z,16nm,0.7s
**VRH Novokhopyorsk 72.93 337** *e*P **P** **21 34 12.5 0.0**
VRH pmax pmax
comp=Z,40nm,0.6s
VRH pmax pmax
comp=N,30nm,0.8s
VRH pmax pmax
comp=E,30nm,0.8s
**MRSI Marisa 73.00 248** P **P** **21 34 13.1 -0.3**
**CMAR Chiang Mai Arr 73.15 278** P **P** **21 34 14.5 +0.1**
comp=E,7.4nm,0.5s,baz=26,slow=6.0,SNR=51
CMAR LR LR 22 09 01.5
comp=E,142nm,19.8s,baz=54,slow=38
**CMAR Chiang Mai Arr 73.15 278** P **P** **21 34 14.5 +0.1**
CMAR pmax pmax
comp=Z,7.0nm,0.5s
CMAR MLR MLR
comp=Z,142nm,19.8s
**CM01 Chiang Mai Arr 73.17 278** *e*P **P** **21 34 13.7 -0.8**
**ESK Eskdalemuir 73.30 5** *i*P **P** **21 34 16.0 +1.3**
**PBKT Sadao Pong 73.32 276** P **P** **21 34 15.6 +0.2**
comp=Z,46nm,0.7s,comp=Z,954nm
**BSD Bornholm Skovb 73.36 354** *i*P **P** **21 34 14.7 -0.3**
BSD pmax pmax
comp=Z,13nm,0.6s
**BSD Bornholm Skovb 73.36 354** *i*P **P** **21 34 14.7 -0.3**
comp=Z,13nm,0.6s
**VSR Storozhevoye 73.53 338** *e*P **P** **21 34 16.4 +0.3**
VSR pmax pmax
comp=Z,40nm,1.0s
VSR pmax pmax
comp=N,20nm,1.1s
VSR pmax pmax
comp=E,7.0nm,0.8s
**SUW Suwalki 73.68 349** *e*P **P** **21 34 15.8 -1.1**
**SUW Suwalki 73.68 349** *e*P **P** **21 34 15.8 -1.1**
**LUWI Luwuk 73.75 247** P **P** **21 34 17.5 -0.4**
comp=E,152nm,0.7s,comp=E,2µm
**LUWI Luwuk 73.75 247** *e*P **P** **21 34 16.3 -1.5**
comp=E,112nm,0.7s
**APSI Ampana 74.29 248** P **P** **21 34 21.6 +0.6**
**BSEG Bad Segeberg 74.78 357** *e*P **P** **21 34 24.0 +0.7**
comp=E,40nm,1.1s,baz=5.3,slow=5.5
**UMPA Umpang Tak 74.91 277** P **P** **21 34 26.5 +1.8**
comp=E,22nm,0.7s
**DZM Mont Dzumac 75.03 197** *e*LR LR 21 57 32.8
comp=E,294nm,22.1s
**UTHA Uthaitani 75.04 276** P **P** **21 34 26.1 +0.7**
comp=E,17nm,0.7s,comp=E,142nm
**CWF Charnwood Fore 75.96 4** *e*P **P** **21 34 30.6 +0.5**
comp=E,167nm,2.1s
**AKASG Malin Array Be 76.02 344** P **P** **21 34 29.8 -0.7**
comp=E,8.6nm,0.4s,baz=18,slow=6.0,SNR=25
AKASG LR LR 22 14 06.2
comp=E,337nm,18.1s,baz=40,slow=40
**KIEV Kiev 76.03 344** *c i*P **P** **21 34 29.6 -1.0**
KIEV pmax pmax
comp=Z,11nm,0.5s
**KIEV Kiev 76.03 344** *e*P **P** **21 34 29.5 -1.0**
comp=Z,16nm,0.5s
**AK11 Malin Array Si 76.05 344** *e*P **P** **21 34 29.6 -1.1**
**PATY Pattaya 76.16 273** P **P** **21 34 32.9 +1.1**
comp=Z,28nm,0.6s,comp=Z,582nm
**NRDL Niedersach Rie 76.23 357** *e*P **P** **21 34 32.0 +0.4**
comp=Z,24nm,1.3s,baz=5.3,slow=5.5
**IBBN Ibbenburen 76.49 358** *e*P **P** **21 34 33.8 +0.7**
comp=Z,59nm,1.2s,baz=5.3,slow=5.5
**WTSB Winterswijk 76.84 359** *e*P **P** **21 34 35.0 -0.1**
comp=Z,17nm,0.7s
**CLZ Clausthal 76.87 356** *e*P **P** **21 34 36.0 +0.6**
comp=Z,48nm,1.3s,baz=5.3,slow=5.5
**PHET Kaeng Krachan 76.94 274** P **P** **21 34 39.1 +2.9**
comp=Z,17nm,0.7s,comp=Z,194nm
**TTSI Tana Toraja 77.08 248** P **P** **21 34 37.1 +0.2**
comp=Z,44nm,1.0s,comp=Z,618nm
**GTTG Gyttingen 77.18 357** *e*P **P** **21 34 37.6 +0.5**
comp=Z,43nm,1.1s,baz=5.3,slow=5.5
**SBUM Sibu 77.22 258** *e*P **P** **21 34 38.3 +0.5**
comp=Z,19nm,0.7s
**CLL Collm 77.28 355** *e*P **P** **21 34 37.3 -0.3**
**CLL Collm 77.28 355** *e*P **P** **21 34 37.3 -0.3**
comp=Z,29nm,1.4s,baz=5.3,slow=5.5
**CLL Collm 77.28 355**⇑ *i*P **P** **21 34 37.3 -0.3**
comp=Z,15nm,0.6s
CLL *i* pP **pP** **21 34 50.0 -1.1**
CLL *e*PPS PPS 21 45 21.0
CLL *e*(SS) 21 49 17.0
CLL *e* 21 54 00.0
**CLL Collm 77.28 355** *e*P **P** **21 34 37.2 -0.3**
**BUG Bochum--Univer 77.36 358** *e*P **P** **21 34 38.2 +0.2**
comp=Z,41nm,1.2s,baz=5.3,slow=5.5
**KBL Kabul 77.42 310** *e*P **P** **21 34 38.1 -0.9**
KBL pmax pmax
comp=Z,80nm,1.1s
**KBL Kabul 77.42 310** *e*P **P** **21 34 38.1 -0.9**
comp=Z,80nm,1.1s
**BRG Berggiesshubel 77.65 354** *e*P **P** **21 34 39.4 -0.3**
comp=Z,12nm,0.7s
BRG PP **PP** **21 37 36.0 +1.6**
**BRG Berggiesshubel 77.65 354** *e*P **P** **21 34 39.4 -0.3**
BRG 21 37 36.0
BRG pmax pmax
comp=Z,13nm,0.7s
**BRG Berggiesshubel 77.65 354** *e*P **P** **21 34 39.6 -0.1**
comp=Z,30nm,1.3s,baz=5.3,slow=5.5
**LVV L'vov 77.67 347** *e*P **P** **21 34 38.6 -1.2**
**SPSI Sidrap Palu 77.85 248** P **P** **21 34 41.8 +0.5**
**UPC Upice 77.87 353** *e*P **P** **21 34 40.6 -0.3**
**UPC Upice 77.87 353** *e*P **P** **21 34 40.6 -0.3**
**PVCC Panska Ves 77.95 354** *e*P **P** **21 34 41.4 0.0**
**PVCC Panska Ves 77.95 354** *e*P **P** **21 34 41.4 0.0**
**TBI Tubuai 77.96 156** *e*S **S** **21 44 36.5 +5.2**
comp=Z,332nm,36.2s
**TBI Tubuai 77.96 156** *e*LR LR 21 58 53.7
comp=Z,363nm,23.0s,baz=342
**TBI Tubuai 77.96 156** *e*T T 23 00 24.6
comp=Z,5.3nm,0.3s
**NDI New Delhi 77.98 301** *e*P **P** **21 34 40.5 -1.4**
**DPC Dobruska-Polom 78.00 352** *e*P **P** **21 34 41.8 +0.1**
DPC *e* 21 34 52.2
**DPC Dobruska-Polom 78.00 352** *e*P **P** **21 34 41.8 +0.1**
DPC *e*pP **PcP** **21 34 52.2 +0.9**
**MOX Moxa 78.01 355** *e*P **P** **21 34 42.0 +0.2**
comp=Z,22nm,1.1s,baz=5.3,slow=5.5
**BEBN Eben Emael 78.03 359** P **P** **21 34 42.3 +0.6**
**KWP Kalwaria Pacla 78.03 348** *e*P **P** **21 34 41.5 -0.3**
**KWP Kalwaria Pacla 78.03 348** *e*P **P** **21 34 41.6 -0.3**
**HGN Heimansgroeve 78.06 359** *e*P **P** **21 34 41.9 -0.1**
comp=Z,28nm,0.9s
**TANN Tannenbergstha 78.20 355** *e*P **P** **21 34 42.9 +0.1**
comp=Z,14nm,1.3s,baz=5.3,slow=5.5
**MEM Membach 78.21 359** P **P** **21 34 42.9 +0.1**
comp=Z,21nm,1.3s
MEM AP **pP** **21 34 55.7 -0.6**
**KRLC Kraliky 78.23 352** *e*P **P** **21 34 42.6 -0.4**
**KRLC Kraliky 78.23 352** *e*P **P** **21 34 42.6 -0.4**
**SNF Seneffe 78.32 0** P **P** **21 34 43.9 +0.5**
**OKC Ostrava-Krasne 78.34 351** *e*pP pP 21 34 53.3 -3.8
**BCLA Clavier 78.41 360** P **P** **21 34 44.1 +0.2**
BCLA AP **pP** **21 34 57.3 -0.1**
**PRA Prague 78.42 354** *e*P **P** **21 34 43.6 -0.4**
**PRA Prague 78.42 354** *e*P **P** **21 34 43.6 -0.4**
**STHS Stebnicka Huta 78.42 349** *e*P **P** **21 34 44.4 +0.3**
STHS pmax pmax
comp=Z,11nm,1.4s
**STHS Stebnicka Huta 78.42 349** *e*P **P** **21 34 44.4 +0.3**
**MORC Moravsky Berou 78.46 352** *e*P **P** **21 34 43.7 -0.6**
MORC pmax pmax
comp=Z,53nm,1.4s
**MORC Moravsky Berou 78.46 352**⇓ *i*P **P** **21 34 44.7 +0.4**
**MORC Moravsky Berou 78.46 352** *e*P **P** **21 34 43.7 -0.6**
comp=Z,52nm,1.4s
**PRU Pruhonice 78.49 354** *e*P **P** **21 34 44.1 -0.3**
**PRU Pruhonice 78.49 354** *e*P **P** **21 34 44.1 -0.3**
**NIE Niedzica 78.53 350** *e*P **P** **21 34 45.1 +0.4**
**NIE Niedzica 78.53 350** *e*P **P** **21 34 45.1 +0.4**
**GOPC GO Pecny, Ondr 78.55 353** *e*P **P** **21 34 44.5 -0.2**
**GOPC GO Pecny, Ondr 78.55 353** *e*P **P** **21 34 44.5 -0.2**
**TNS Taunus Mts 78.56 358** *e*P **P** **21 34 45.2 +0.4**
comp=Z,34nm,1.2s,baz=5.3,slow=5.5
**DOU Dourbes 78.73 0** P **P** **21 34 45.7 0.0**
comp=Z,11nm,1.0s
**BKSI Bulukumba 78.75 246** P **P** **21 34 46.4 +0.2**
**KOLS Kolonicke sedl 78.77 348** *e*P **P** **21 34 45.9 -0.1**
KOLS pmax pmax
comp=Z,7.0nm,1.2s
**KOLS Kolonicke sedl 78.77 348** *e*P **P** **21 34 45.9 -0.1**
**ROTZ Rotzenmuhle 78.86 355** *e*P **P** **21 34 46.8 +0.4**
comp=Z,14nm,1.2s,baz=5.3,slow=5.5
**CTA Charters Tower 78.87 217** P **P** **21 34 45.4 -1.3**
comp=Z,7.2nm,1.0s,baz=350,slow=8.6,SNR=3.9
**CTA Charters Tower 78.87 217** P **P** **21 34 45.4 -1.3**
CTA pmax pmax
comp=Z,7.0nm,1.0s
**LANS Liptovska Anna 78.89 350** *e*P **P** **21 34 47.4 +0.8**
**LANS Liptovska Anna 78.89 350** *e*P **P** **21 34 47.4 +0.8**
**GRF Grafenberg Arr 78.98 356** *e*P **P** **21 34 47.8 +0.7**
comp=Z,54nm,1.2s,baz=5.3,slow=5.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GRFO** | **Grafenberg** | **78.98** | **356** | *e*P | **P** | **21 34 47.4** | **+0.3** |
| GRFO | | | | pmax | pmax | | |
| | comp=Z,31nm,1.0s | | | | | | |
| **GRFO** | **Grafenberg** | **78.98** | **356** | *e*P | **P** | **21 34 47.4** | **+0.3** |
| | comp=Z,31nm,1.0s | | | | | | |
| **VRAC** | **Vranov** | **79.01** | **352** | ⇑*i*P | **P** | **21 34 47.2** | **-0.1** |
| **MTN** | **Manton Dam** | **79.09** | **233** | *e*P | **P** | **21 34 47.1** | **-0.9** |
| | comp=Z,25nm,0.8s | | | | | | |
| **WLF** | **Walferdange** | **79.16** | **359** | P | **P** | **21 34 48.9** | **+0.9** |
| | comp=Z,24nm,2.4s | | | | | | |
| **WLF** | **Walferdange** | **79.16** | **359** | *e*P | **P** | **21 34 46.9** | **-1.1** |
| WLF | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **WLF** | **Walferdange** | **79.16** | **359** | *e*P | **P** | **21 34 48.7** | **+0.7** |
| | comp=Z,16nm,0.8s,baz=5.3,slow=5.5 | | | | | | |
| **WLF** | **Walferdange** | **79.16** | **359** | *e*P | **P** | **21 34 46.9** | **-1.1** |
| | comp=Z,15nm,0.8s | | | | | | |
| **KSM** | **Kuching** | **79.16** | **259** | ⇑P | **P** | **21 34 48.8** | **+0.3** |
| **KSM** | **Kuching** | **79.16** | **259** | *e*P | **P** | **21 34 48.9** | **+0.3** |
| | comp=Z,51nm,1.1s | | | | | | |
| **KIV** | **Kislovodsk** | **79.34** | **333** | ⇓*e*P | **P** | **21 34 49.6** | **+0.3** |
| KIV | | | | *e* | | 21 34 56.1 | |
| KIV | | | | *e* | | 21 37 51.3 | |
| KIV | | | | *e*S | SKSac | 21 45 12.7 | +11 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **ABKT** | **Ailbek** | **79.40** | **320** | P | **P** | **21 34 50.3** | **+0.7** |
| | comp=Z,280nm,1.0s,SNR=13 | | | | | | |
| **GEYT** | **Alibeck** | **79.40** | **320** | P | **P** | **21 34 50.4** | **+0.8** |
| | comp=Z,33nm,0.8s,baz=343,slow=4.6,SNR=71 | | | | | | |
| GEYT | | | | PP | **PP** | **21 37 50.9** | **+1.4** |
| | comp=Z,4.0nm,1.0s,baz=12,slow=7.8,SNR=3.5 | | | | | | |
| GEYT | | | | LR | LR | 22 14 13.9 | |
| | comp=Z,270nm,19.5s,baz=10.0,slow=39 | | | | | | |
| **KHC** | **Kasperske Hory** | **79.41** | **354** | *e*P | **P** | **21 34 49.5** | **0.0** |
| KHC | | | | *e* | | 21 34 59.5 | |
| **KHC** | **Kasperske Hory** | **79.41** | **354** | *e*P | **P** | **21 34 49.5** | **0.0** |
| KHC | | | | *e*pP | **PcP** | **21 34 59.5** | **+2.0** |
| **KHC** | **Kasperske Hory** | **79.41** | **354** | *e*P | **P** | **21 34 49.8** | **+0.3** |
| | comp=Z,6.9nm,1.1s | | | | | | |
| **KBKI** | **Kotabaru** | **79.42** | **251** | P | **P** | **21 34 49.3** | **-0.6** |
| | comp=Z,28nm,1.0s | | | | | | |
| **WET** | **Wettzell** | **79.44** | **355** | *e*P | **P** | **21 34 49.8** | **+0.2** |
| | comp=Z,6.8nm,0.9s,baz=5.3,slow=5.5 | | | | | | |
| **KBZ** | **Khabaz** | **79.49** | **333** | P | **P** | **21 34 50.7** | **+0.8** |
| | comp=Z,8.0nm,0.7s,baz=126,slow=3.3,SNR=16 | | | | | | |
| KBZ | | | | LR | LR | 22 13 53.4 | |
| | comp=Z,223nm,21.8s,baz=14,slow=39 | | | | | | |
| **KBZ** | **Khabaz** | **79.49** | **333** | P | **P** | **21 34 50.7** | **+0.8** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,223nm,21.8s | | | | | | |
| **NCK** | **Nalchik** | **79.50** | **332** | ⇓*i*P | **P** | **21 34 51.4** | **+1.3** |
| **TRPA** | **Tarpa** | **79.53** | **348** | ⇑*i*P | **P** | **21 34 50.4** | **+0.3** |
| **VYHS** | **Vyhne** | **79.60** | **350** | *e*P | **P** | **21 34 50.3** | **-0.2** |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **VYHS** | **Vyhne** | **79.60** | **350** | *e*P | **P** | **21 34 50.3** | **-0.2** |
| **BUR04** | **Bucovina Ar. S** | **79.65** | **346** | *e*P | **P** | **21 34 50.6** | **-0.3** |
| **BURAR** | **Bucovina Array** | **79.66** | **346** | ⇑*i*P | **P** | **21 34 50.8** | **-0.1** |
| **GEC2** | **GERESS Array S** | **79.69** | **354** | *e*P | **P** | **21 34 51.3** | **+0.2** |
| **GEC2** | **GERESS Array S** | **79.69** | **354** | *e*P | **P** | **21 34 50.9** | **-0.1** |
| | comp=Z,13nm,1.1s,baz=5.3,slow=5.5 | | | | | | |
| **GEC2** | **GERESS Array S** | **79.69** | **354** | *e*P | **P** | **21 34 51.3** | **+0.2** |
| **GERES** | **GERESS Array B** | **79.69** | **354** | P | **P** | **21 34 51.0** | **-0.1** |
| | comp=Z,7.3nm,0.9s,baz=19,slow=4.5,SNR=25 | | | | | | |
| **GERES** | **GERESS Array B** | **79.69** | **354** | P | **P** | **21 34 51.0** | **-0.1** |
| GERES | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **SMOL** | **Smolenice** | **79.72** | **351** | *e*P | **P** | **21 34 51.8** | **+0.7** |
| **SMOL** | **Smolenice** | **79.72** | **351** | *e*P | **P** | **21 34 51.8** | **+0.7** |
| **STU** | **Stuttgart** | **79.98** | **357** | *e*P | **P** | **21 34 52.4** | **-0.1** |
| STU | | | | pmax | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | |
| **STU** | **Stuttgart** | **79.98** | **357** | *e*P | **P** | **21 34 52.9** | **+0.3** |
| | comp=Z,22nm,1.1s,baz=5.3,slow=5.5 | | | | | | |
| **STU** | **Stuttgart** | **79.98** | **357** | *e*P | **P** | **21 34 52.4** | **-0.1** |
| | comp=Z,27nm,1.1s | | | | | | |
| **PSZ** | **Piszkesteto** | **80.06** | **350** | *e*P | **P** | **21 34 53.4** | **+0.3** |
| PSZ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **PSZ** | **Piszkesteto** | **80.06** | **350** | ⇓*i*P | **P** | **21 34 53.7** | **+0.6** |
| **PSZ** | **Piszkesteto** | **80.06** | **350** | *e*P | **P** | **21 34 53.4** | **+0.3** |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **ZEI** | **Tsey** | **80.06** | **332** | *e*P | **P** | **21 34 53.9** | **+0.5** |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,61nm,0.6s | | | | | | |
| **MMRI** | **Maumere** | **80.26** | **243** | *e*P | **P** | **21 34 53.2** | **-1.3** |
| **ONI** | **Oni** | **80.38** | **332** | P | P | 21 34 59.4 | +4.5 |
| **ONI** | **Oni** | **80.38** | **332** | P | P | 21 34 59.4 | +4.5 |
| **CONA** | **Conrad Observa** | **80.44** | **352** | ⇑*i*P | **P** | **21 34 55.4** | **+0.3** |
| | comp=Z,6.6nm,0.5s | | | | | | |
| **BFO** | **Black Forest** | **80.45** | **358** | *i* P | **P** | **21 34 55.9** | **+0.8** |
| **BFO** | **Black Forest** | **80.45** | **358** | *e*P | **P** | **21 34 55.2** | **+0.1** |
| | comp=Z,7.8nm,0.8s,baz=5.3,slow=5.5 | | | | | | |
| **BFO** | **Black Forest** | **80.45** | **358** | *e*P | **P** | **21 34 55.1** | **+0.1** |
| | comp=Z,23nm,1.3s | | | | | | |
| **FUR** | **Furstenfeldbru** | **80.50** | **356** | *e*P | **P** | **21 34 55.6** | **+0.2** |
| | comp=Z,39nm,1.2s,baz=5.3,slow=5.5 | | | | | | |
| **TESR** | **Tescani** | **80.50** | **345** | ⇑*i*P | **P** | **21 34 55.7** | **+0.3** |
| **KTGM** | **Kuala Trenggan** | **80.59** | **267** | ⇓P | **P** | **21 34 55.2** | **-1.1** |
| **EDFI** | **Ende, Flores** | **80.66** | **243** | P | **P** | **21 34 57.2** | **+0.5** |
| **BATI** | **Baumata** | **80.78** | **241** | P | **P** | **21 34 57.2** | **0.0** |
| **TBLG** | **Delisi** | **80.78** | **331** | *e*P | **P** | **21 34 59.1** | **+2.1** |
| **TBLG** | **Delisi** | **80.78** | **331** | P | **P** | **21 34 58.0** | **+1.0** |
| **TBLG** | **Delisi** | **80.78** | **331** | P | **P** | **21 34 57.9** | **+1.0** |
| **TRTT** | **Trang** | **80.80** | **271** | P | **P** | **21 34 58.1** | **+0.7** |
| | comp=Z,54nm,0.8s,comp=Z,662nm | | | | | | |
| **DRGR** | | **80.82** | **348** | ⇓*i*P | **P** | **21 34 57.2** | **0.0** |
| **DGRG** | **David-gareji** | **80.84** | **330** | P | **P** | **21 34 58.2** | **+0.9** |
| **DGRG** | **David-gareji** | **80.84** | **330** | P | **P** | **21 34 58.2** | **+0.9** |
| **RJOB** | **Jochberg** | **80.85** | **354** | *e*P | **P** | **21 34 57.5** | **+0.2** |
| | comp=Z,7.2nm,0.9s,baz=5.3,slow=5.5 | | | | | | |
| **VRI** | **Vrincioaia** | **81.12** | **345** | *e*P | **P** | **21 34 59.7** | **+1.0** |
| **VRI** | **Vrincioaia** | **81.12** | **345** | ⇓*i*P | **P** | **21 34 59.5** | **+0.8** |
| **ARSA** | **Arzberg** | **81.14** | **353** | ⇑*i*P | **P** | **21 34 59.3** | **+0.5** |
| | comp=Z,6.3nm,0.6s | | | | | | |
| **PLOR** | **Plostina** | **81.15** | **345** | ⇑*i*P | **P** | **21 34 57.4** | **-1.5** |
| **WATA** | **Walderalm** | **81.32** | **355** | ⇑*i*P | **P** | **21 34 60.0** | **+0.1** |
| | comp=Z,6.5nm,0.6s,SNR=7.8 | | | | | | |
| **MOTA** | **Moosalm** | **81.33** | **356** | ⇑*i*P | **P** | **21 34 60.0** | **0.0** |
| | comp=Z,13nm,0.9s,SNR=7.4 | | | | | | |
| **WTTA** | **Wattenberg** | **81.39** | **355** | ⇓*i*P | **P** | **21 35 00.5** | **+0.2** |
| | comp=Z,13nm,0.8s | | | | | | |
| **TLCR** | | **81.42** | **343** | ⇓*i*P | **P** | **21 35 01.2** | **+1.0** |
| **AKH** | **Akhalkalaki** | **81.45** | **332** | ⇑*i*P | **P** | **21 35 02.5** | **+1.8** |
| **KBA** | **Koelnbreinsper** | **81.47** | **354** | *i* P | **P** | **21 35 01.5** | **+0.8** |
| | comp=Z,50nm,1.2s,SNR=15 | | | | | | |
| **CFR** | **Carcaliu** | **81.55** | **343** | ⇑*i*P | **P** | **21 35 01.9** | **+1.0** |
| **MLR** | **Muntele Rosu** | **81.61** | **345** | ⇑*i*P | **P** | **21 35 03.3** | **+1.8** |
| **PBKI** | **Pangkalan Bun** | **81.63** | **255** | P | **P** | **21 35 02.2** | **+0.4** |
| **FETA** | **Feichten** | **81.67** | **356** | ⇑*i*P | **P** | **21 35 02.1** | **+0.3** |
| | comp=Z,16nm,0.9s,SNR=7.2 | | | | | | |
| **SOKA** | **Soboth** | **81.75** | **353** | *i* P | **P** | **21 35 02.4** | **+0.3** |
| | comp=Z,22nm,1.0s,SNR=6.8 | | | | | | |
| **PERS** | **Pernice** | **81.78** | **353** | *i* P | **P** | **21 35 02.3** | **0.0** |
| **VOIR** | | **81.81** | **346** | ⇓*i*P | **P** | **21 35 04.0** | **+1.6** |
| **ABTA** | **Abfaltersbach** | **81.85** | **355** | ⇑*i*P | **P** | **21 35 02.4** | **-0.2** |
| | comp=Z,15nm,1.2s | | | | | | |
| **OBKA** | **Obir** | **81.95** | **353** | ⇑*i*P | **P** | **21 35 03.2** | **0.0** |
| | comp=Z,13nm,0.8s | | | | | | |
| **HARR** | **Harsova** | **82.05** | **343** | ⇑*i*P | **P** | **21 35 02.7** | **-0.9** |
| **FUORN** | **Ofenpass-Fuorn** | **82.09** | **356** | *e*P | **P** | **21 35 05.0** | **+0.9** |
| **CHLP** | **Challavanipeta** | **82.11** | **290** | *e*P | **P** | **21 35 04.3** | **0.0** |
| CHLP | | | | IAmb | IAmb | 21 35 05.6 | |
| | comp=Z,61nm,1.1s | | | | | | |
| **BZS** | **Buzias** | **82.12** | **348** | *e*P | **P** | **21 35 03.3** | **-0.7** |
| **BZS** | **Buzias** | **82.12** | **348** | ⇓*i*P | **P** | **21 35 03.8** | **-0.1** |
| **TLB** | **Topalu** | **82.14** | **343** | ⇓*i*P | **P** | **21 35 04.7** | **+0.7** |
| **KULM** | **Kulim** | **82.17** | **269** | ⇑P | **P** | **21 35 05.2** | **+0.5** |
| **KULM** | **Kulim** | **82.17** | **269** | *e*P | **P** | **21 35 04.7** | **0.0** |
| | comp=Z,21nm,0.7s | | | | | | |
| **GZR** | **Gura Zlata** | **82.18** | **347** | ⇑*i*P | **P** | **21 35 04.6** | **+0.2** |
| **TUE** | **Stuetta** | **82.28** | **357** | *e*P | **P** | **21 35 05.1** | **+0.1** |
| | comp=Z,10nm,0.9s | | | | | | |
| **RKT** | **Rikitea** | **82.35** | **143** | *e*LR | LR | 22 00 51.1 | |
| | comp=Z,382nm,29.0s,baz=335 | | | | | | |
| **RKT** | **Rikitea** | **82.35** | **143** | *e*T | T | 23 05 57.8 | |
| | comp=Z,1.9nm,0.2s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **82.44** | **358** | *e*P | **P** | **21 35 06.9** | **+1.0** |
| **IPM** | **Ipoh** | **82.57** | **268** | ⇑P | **P** | **21 35 06.2** | **-0.5** |
| **IPM** | **Ipoh** | **82.57** | **268** | *e*P | **P** | **21 35 06.0** | **-0.7** |
| | comp=Z,32nm,0.9s | | | | | | |
| **JAVS** | **Javornik** | **82.60** | **353** | *e*P | **P** | **21 35 06.0** | **-0.6** |
| **MYKOM** | **Kota Tinggi** | **82.90** | **264** | ⇑P | **P** | **21 35 07.8** | **-0.6** |
| **MYKOM** | **Kota Tinggi** | **82.90** | **264** | *e*P | **P** | **21 35 08.9** | **+0.4** |
| **BOJS** | **Bojanci** | **82.90** | **353** | *i* P | **P** | **21 35 07.6** | **-0.4** |
| **AGRB** | **Hanur-Agry** | **83.28** | **331** | *e*P | **P** | **21 35 11.8** | **+1.4** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **83.35** | **334** | *e*P | **P** | **21 35 11.7** | **+1.0** |
| **CLDR** | **Caldiran** | **83.40** | **330** | *e*P | **P** | **21 35 11.8** | **+0.8** |
| **SSB** | **Saint Sauveur** | **83.55** | **0** | *e*P | **P** | **21 35 11.7** | **+0.2** |
| SSB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **SSB** | **Saint Sauveur** | **83.55** | **0** | *e*P | **P** | **21 35 11.7** | **+0.2** |
| | comp=Z,6.3nm,0.7s | | | | | | |
| **WRAB** | **Tennant Creek** | **83.67** | **227** | *ce*P | **P** | **21 35 10.4** | **-1.8** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,50nm,2.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **83.67** | **227** | *e*P | **P** | **21 35 09.8** | **-2.4** |
| | comp=Z,23nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **83.68** | **227** | P | **P** | **21 35 10.3** | **-2.0** |
| | comp=Z,3.3nm,0.8s,baz=35,slow=6.0,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **83.68** | **227** | P | **P** | **21 35 10.3** | **-2.0** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BNI** | **Bardonecchia** | **83.76** | **359** | *e*P | **P** | **21 35 14.0** | **+1.3** |
| BNI | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| **BNI** | **Bardonecchia** | **83.76** | **359** | *e*P | **P** | **21 35 14.0** | **+1.3** |
| | comp=Z,20nm,1.0s | | | | | | |
| **DIVS** | **Divibare** | **83.81** | **349** | ⇓*i*P | **P** | **21 35 13.8** | **+0.9** |
| **TPI** | **Tanjungpandan** | **84.11** | **258** | P | **P** | **21 35 14.9** | **+0.3** |
| | comp=Z,62nm,1.0s | | | | | | |
| **BNGB** | **Bingˆ¶l** | **84.50** | **333** | *e*P | **P** | **21 35 17.7** | **+1.2** |
| **PVM** | **Polavaram** | **84.53** | **291** | *e*P | **P** | **21 35 16.6** | **-0.2** |
| PVM | | | | IAmb | IAmb | 21 35 17.2 | |
| | comp=Z,49nm,0.6s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **84.53** | **271** | *e*P | **P** | **21 35 18.1** | **+1.3** |
| LHMI | | | | *e*pP | **pP** | **21 35 33.4** | **+2.9** |
| **PPBI** | **Pangkal Pinang** | **84.57** | **260** | P | **P** | **21 35 17.3** | **+0.3** |
| | comp=Z,43nm,1.1s,comp=Z,4µm | | | | | | |
| **RPR** | **Rampur** | **84.60** | **293** | *e*P | **P** | **21 35 16.6** | **-0.6** |
| RPR | | | | IAmb | IAmb | 21 35 17.9 | |
| | comp=Z,76nm,1.1s | | | | | | |
| **SVSK** | **Karacayir** | **84.64** | **336** | *e*P | **P** | **21 35 18.7** | **+1.7** |
| **HKR** | **Hakkari** | **84.89** | **330** | *e*P | **P** | **21 35 19.4** | **+0.8** |
| **PTK** | **Pertek** | **84.96** | **334** | *e*P | **P** | **21 35 20.3** | **+1.4** |
| **PSI** | **Prapat** | **85.18** | **268** | *e*P | **P** | **21 35 20.1** | **-0.1** |
| **PSI** | **Prapat** | **85.18** | **268** | *e*P | **P** | **21 35 20.1** | **-0.1** |
| **SVRC** | **Sivrice-ELAZID** | **85.46** | **333** | *e*P | **P** | **21 35 23.2** | **+1.8** |
| **BRTR** | **Keskin Array B** | **85.65** | **338** | P | **P** | **21 35 22.4** | **+0.1** |
| | comp=Z,8.7nm,0.7s,baz=34,slow=2.3,SNR=28 | | | | | | |
| BRTR | | | | LR | LR | 22 19 41.7 | |
| | comp=Z,56nm,18.1s,baz=24,slow=40 | | | | | | |
| **JMBI** | **JAMBI** | **85.69** | **262** | P | **P** | **21 35 24.7** | **+2.1** |
| | comp=Z,196nm,0.8s | | | | | | |
| **ANTO** | **Ankara** | **85.71** | **339** | ⇑*i*P | **P** | **21 35 22.9** | **+0.4** |
| **SKO** | **Skopje** | **85.72** | **348** | *e*P | **P** | **21 35 23.4** | **+1.0** |
| **BR231** | **Keskin MP Arra** | **85.74** | **339** | *e*P | **P** | **21 35 22.9** | **+0.2** |
| **MALT** | **Malatya** | **85.77** | **334** | ⇑*i*P | **P** | **21 35 24.7** | **+1.9** |
| **BNN** | **Bunyan** | **85.94** | **336** | *e*P | **P** | **21 35 25.6** | **+1.9** |
| **KAMT** | **Kaman** | **85.97** | **338** | *e*P | **P** | **21 35 24.7** | **+0.9** |
| **NVR** | **Nevrokopi** | **85.98** | **346** | *e*P | **P** | **21 35 25.1** | **+1.4** |
| **NVR** | **Nevrokopi** | **85.98** | **346** | *e*P | **P** | **21 35 25.1** | **+1.4** |
| **HYBB** | **Hyderabad (bro** | **86.17** | **293** | *e*P | **P** | **21 35 24.3** | **-0.7** |
| HYBB | | | | IAmb | IAmb | 21 35 25.4 | |
| | comp=Z,75nm,1.1s | | | | | | |
| **HYB** | **Hyderabad** | **86.17** | **293** | *i* P | **P** | **21 35 24.0** | **-1.0** |
| HYB | | | | *e*sP | sP | 21 35 38.0 | -5.9 |
| **SARI** | **SarD1z-Kayseri** | **86.21** | **336** | *e*P | **P** | **21 35 26.2** | **+1.1** |
| **SRS** | **Serrai** | **86.25** | **346** | *e*P | **P** | **21 35 25.5** | **+0.5** |
| **SRS** | **Serrai** | **86.25** | **346** | *e*P | **P** | **21 35 25.5** | **+0.5** |
| **KNT** | **Kendrikon** | **86.31** | **346** | *e*P | **P** | **21 35 25.9** | **+0.5** |
| **KNT** | **Kendrikon** | **86.31** | **346** | *e*P | **P** | **21 35 25.6** | **+0.3** |
| **KNT** | **Kendrikon** | **86.31** | **346** | *e*P | **P** | **21 35 25.6** | **+0.3** |
| **MNSI** | **Mandailing Nat** | **86.33** | **267** | P | **P** | **21 35 27.8** | **+2.1** |
| **YAYX** | **Yaylak** | **86.36** | **338** | *e*P | **P** | **21 35 27.5** | **+1.8** |
| **NJS** | **Nagarjunasagar** | **86.42** | **292** | *e*P | **P** | **21 35 25.1** | **-1.1** |
| NJS | | | | IAmb | IAmb | 21 35 26.6 | |
| | comp=Z,57nm,1.4s | | | | | | |
| **PBRG** | **Braganca** | **86.50** | **9** | *e*P | **P** | **21 35 26.5** | **+0.2** |
| **SDSI** | **Sungai Dareh** | **86.52** | **264** | P | **P** | **21 35 27.0** | **+0.3** |
| | comp=Z,49nm,0.7s,comp=Z,37µm | | | | | | |
| **TIR** | **Tirane** | **86.54** | **349** | *e*P | **P** | **21 35 26.8** | **+0.4** |
| TIR | | | | pmax | pmax | | |
| | comp=Z,58nm,0.9s | | | | | | |
| **TIR** | **Tirane** | **86.54** | **349** | *e*P | **P** | **21 35 26.8** | **+0.4** |
| | comp=Z,58nm,0.9s | | | | | | |
| **GRG** | **Griva** | **86.59** | **347** | *e*P | **P** | **21 35 27.0** | **+0.3** |
| **ADKI** | **Addanki** | **86.60** | **291** | *e*P | **P** | **21 35 26.2** | **-0.9** |
| ADKI | | | | IAmb | IAmb | 21 35 29.1 | |
| | comp=Z,22nm,1.0s | | | | | | |
| **LRS** | **Lares** | **86.81** | **64** | *e*P | **P** | **21 35 28.5** | **+0.3** |
| **GULA** | **Gulagac** | **86.82** | **337** | *e*P | **P** | **21 35 28.8** | **+0.8** |
| **HORT** | **Hortiatis** | **86.83** | **346** | *e*P | **P** | **21 35 26.5** | **-1.5** |
| **HORT** | **Hortiatis** | **86.83** | **346** | *e*P | **P** | **21 35 26.5** | **-1.5** |
| **FNA** | **Florina** | **86.90** | **347** | *e*P | **P** | **21 35 28.1** | **-0.2** |
| **FNA** | **Florina** | **86.90** | **347** | *e*P | **P** | **21 35 27.1** | **-1.2** |
| **FNA** | **Florina** | **86.90** | **347** | *e*P | **P** | **21 35 27.1** | **-1.2** |
| **OUR** | **Ouranopolis** | **86.96** | **345** | *e*P | **P** | **21 35 26.2** | **-2.3** |
| **OUR** | **Ouranopolis** | **86.96** | **345** | *e*P | **P** | **21 35 26.2** | **-2.3** |
| **PLG** | **Polygyros** | **87.00** | **346** | *e*P | **P** | **21 35 28.6** | **-0.2** |
| **PLG** | **Polygyros** | **87.00** | **346** | *e*P | **P** | **21 35 28.6** | **-0.2** |
| **AS01** | **Alice Springs** | **87.10** | **225** | *e*P | **P** | **21 35 27.8** | **-1.4** |
| **MVO** | **Moncorvo** | **87.10** | **9** | *e*P | **P** | **21 35 28.8** | **-0.5** |
| | comp=Z,39nm,2.2s | | | | | | |
| **ASAR** | **Alice Springs** | **87.12** | **225** | P | **P** | **21 35 28.1** | **-1.2** |
| | comp=Z,3.8nm,0.9s,baz=30,slow=4.7,SNR=29 | | | | | | |
| **ASAR** | **Alice Springs** | **87.12** | **225** | P | **P** | **21 35 28.2** | **-1.2** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **GSI** | **Gunungsitoli** | **87.18** | **269** | *e*P | **P** | **21 35 29.6** | **-0.3** |
| **KOZT** | **Kozan** | **87.24** | **336** | *e*P | **P** | **21 35 30.1** | **+0.2** |
| **NEST** | **Nestorio** | **87.31** | **348** | *e*P | **P** | **21 35 30.3** | **0.0** |
| **NEST** | **Nestorio** | **87.31** | **348** | *e*P | **P** | **21 35 30.3** | **0.0** |
| **PVIS** | **Viseu** | **87.46** | **10** | *e*P | **P** | **21 35 31.9** | **+0.9** |
| | comp=Z,61nm,1.8s | | | | | | |
| **YESY** | **Yesilyurt** | **87.47** | **337** | *e*P | **P** | **21 35 30.8** | **-0.4** |
| **KARA** | **Karaisali** | **87.64** | **336** | *e*P | **P** | **21 35 32.3** | **+0.4** |
| **MTE** | **Manteigas** | **87.81** | **9** | *e*P | **P** | **21 35 33.8** | **+1.1** |
| | comp=Z,7.2nm,0.5s | | | | | | |
| **POO** | **Poona** | **87.94** | **297** | ⇑*i*P | P | 21 35 30.0 | -3.6 |
| | comp=Z,30nm,1.0s | | | | | | |
| **THL** | **Klokotos Trika** | **88.01** | **347** | *e*P | **P** | **21 35 32.9** | **-0.6** |
| **THL** | **Klokotos Trika** | **88.01** | **347** | *e*P | **P** | **21 35 32.9** | **-0.6** |
| **XOR** | **Xorichti** | **88.03** | **346** | *e*P | **P** | **21 35 33.4** | **-0.3** |
| **XOR** | **Xorichti** | **88.03** | **346** | *e*P | **P** | **21 35 33.4** | **-0.3** |
| **PCAS** | **Casmilo, Conde** | **88.05** | **10** | *e*P | **P** | **21 35 34.3** | **+0.5** |
| **SGD** | **Sagiada** | **88.20** | **348** | *e*P | **P** | **21 35 34.5** | **0.0** |
| **SGD** | **Sagiada** | **88.20** | **348** | *e*P | **P** | **21 35 34.5** | **0.0** |
| **IGT** | **Igoumenitsa** | **88.27** | **348** | *e*P | **P** | **21 35 34.1** | **-0.6** |
| **IGT** | **Igoumenitsa** | **88.27** | **348** | *e*P | **P** | **21 35 34.2** | **-0.6** |
| **IGT** | **Igoumenitsa** | **88.27** | **348** | *e*P | **P** | **21 35 34.2** | **-0.6** |
| **PCBR** | **Castelo Branco** | **88.37** | **9** | *e*P | **P** | **21 35 35.8** | **+0.6** |
| | comp=Z,58nm,1.8s | | | | | | |
| **SKHT** | **Srikalahasti** | **88.42** | **290** | *e*P | **P** | **21 35 35.4** | **-0.5** |
| SKHT | | | | IAmb | IAmb | 21 35 36.0 | |
| | comp=Z,11nm,0.9s | | | | | | |
| **AGG** | **Agios Georgios** | **88.49** | **346** | *e*P | **P** | **21 35 34.2** | **-1.7** |
| **AGG** | **Agios Georgios** | **88.49** | **346** | *e*P | P | 21 35 31.0 | -4.9 |
| **AGG** | **Agios Georgios** | **88.49** | **346** | *e*P | P | 21 35 31.0 | -4.9 |
| **MAKR** | **Makrakomi, Fth** | **88.53** | **346** | *e*P | **P** | **21 35 35.4** | **-0.7** |
| **MAKR** | **Makrakomi, Fth** | **88.53** | **346** | *e*P | **P** | **21 35 35.4** | **-0.7** |
| **DSL** | **Palaion Diasel** | **88.56** | **347** | *e*P | **P** | **21 35 36.1** | **-0.1** |
| **DSL** | **Palaion Diasel** | **88.56** | **347** | *e*P | **P** | **21 35 36.1** | **-0.1** |
| **EVR** | **Evrytania** | **88.67** | **347** | *e*P | **P** | **21 35 36.9** | **+0.1** |
| **EVR** | **Evrytania** | **88.67** | **347** | *e*P | **P** | **21 35 36.9** | **+0.1** |
| **ES19** | **SONSECA Array** | **88.82** | **7** | *e*P | **P** | **21 35 37.2** | **-0.2** |
| **ESDC** | **Sonseca Array** | **88.84** | **7** | P | **P** | **21 35 37.0** | **-0.6** |
| | comp=Z,4.6nm,0.8s,baz=346,slow=4.1,SNR=13 | | | | | | |
| **URV** | **Uravakonda** | **88.88** | **293** | *e*P | **P** | **21 35 37.0** | **-1.1** |
| URV | | | | IAmb | IAmb | 21 35 38.1 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **LKD2** | **Lefkada island** | **88.96** | **348** | *e*P | **P** | **21 35 37.6** | **-0.5** |
| **LKD2** | **Lefkada island** | **88.96** | **348** | *e*P | **P** | **21 35 37.6** | **-0.5** |
| **TIP** | **Timpagrande** | **89.03** | **351** | *e*P | **P** | **21 35 38.9** | **+0.5** |
| | comp=Z,12nm,1.1s | | | | | | |
| **EFP** | **Efpalio** | **89.14** | **347** | *e*P | **P** | **21 35 39.5** | **+0.6** |
| **EFP** | **Efpalio** | **89.14** | **347** | *e*P | **P** | **21 35 39.5** | **+0.6** |
| **KALE** | **Kalithea** | **89.14** | **346** | *e*P | **P** | **21 35 38.4** | **-0.6** |
| **KALE** | **Kalithea** | **89.14** | **346** | *e*P | **P** | **21 35 38.4** | **-0.6** |
| **LAKA** | **Lakka** | **89.31** | **346** | *e*P | **P** | **21 35 40.2** | **+0.4** |
| **LAKA** | **Lakka** | **89.31** | **346** | *e*P | **P** | **21 35 40.2** | **+0.4** |
| **KLV** | **Kalavryta, Ach** | **89.48** | **346** | *e*P | **P** | **21 35 40.2** | **-0.4** |
| **KLV** | **Kalavryta, Ach** | **89.48** | **346** | *e*P | **P** | **21 35 40.2** | **-0.4** |
| **GUR** | **Goura** | **89.56** | **346** | *e*P | **P** | **21 35 40.2** | **-0.8** |
| **GUR** | **Goura** | **89.56** | **346** | *e*P | **P** | **21 35 40.2** | **-0.8** |
| **RLS** | **Riolos of Patr** | **89.56** | **347** | *e*P | **P** | **21 35 41.6** | **+0.7** |
| **RLS** | **Riolos of Patr** | **89.56** | **347** | *e*P | **P** | **21 35 41.6** | **+0.7** |
| **DRO** | **Drossia** | **89.63** | **347** | *e*P | **P** | **21 35 41.2** | **-0.1** |
| **DRO** | **Drossia** | **89.63** | **347** | *e*P | **P** | **21 35 41.2** | **-0.1** |
| **SERI** | **Serifos** | **89.97** | **344** | *e*P | P | 21 35 33.8 | -9.1 |
| **SERI** | **Serifos** | **89.97** | **344** | *e*P | P | 21 35 33.8 | -9.1 |
| **AMT** | **Artemida-Makis** | **90.05** | **347** | *e*P | P | 21 35 46.4 | +3.2 |
| **AMT** | **Artemida-Makis** | **90.05** | **347** | *e*P | P | 21 35 46.4 | +3.2 |
| **PBAR** | **Barrancos** | **90.06** | **9** | *e*P | **P** | **21 35 43.9** | **+0.7** |
| | comp=Z,103nm,1.4s | | | | | | |
| **CSS** | **Prodhromos** | **90.26** | **337** | *e*P | **P** | **21 35 44.1** | **-0.2** |
| | comp=Z,3.1nm,0.8s | | | | | | |
| **ITM** | **Ithomi** | **90.36** | **346** | *e*P | **P** | **21 35 43.9** | **-0.8** |
| **ITM** | **Ithomi** | **90.36** | **346** | *e*P | **P** | **21 35 43.9** | **-0.8** |
| **BANOM** | **Banah** | **90.55** | **315** | ⇑*i*P | **P** | **21 35 44.9** | **-0.8** |
| | SNR=5.9 | | | | | | |
| **PVAQ** | **Vaqueiros** | **90.76** | **10** | *e*P | **P** | **21 35 46.9** | **+0.4** |
| | comp=Z,132nm,2.1s | | | | | | |
| **UOSS** | **Wadi Hilu** | **91.44** | **315** | P | **P** | **21 35 48.0** | **-1.8** |
| | comp=Z,116nm,0.5s,SNR=8.8 | | | | | | |
| **UOSS** | **Wadi Hilu** | **91.44** | **315** | *e*P | **P** | **21 35 48.8** | **-1.1** |
| | comp=Z,16nm,0.8s | | | | | | |
| **HATD** | **Hatta, Dubai** | **91.57** | **315** | ⇓*i*P | **P** | **21 35 49.7** | **-0.7** |
| | SNR=12 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **91.64** | **315** | ⇑*i*P | **P** | **21 35 49.8** | **-1.0** |
| | SNR=8.0 | | | | | | |
| **ASHO** | **Ashiyiah** | **91.73** | **315** | ⇑*i*P | **P** | **21 35 50.2** | **-1.0** |
| | SNR=12 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **91.88** | **315** | ⇓*i*P | **P** | **21 35 50.8** | **-1.1** |
| | SNR=7.4 | | | | | | |
| **MBWA** | **Marble Bar** | **91.92** | **238** | *e*P | **P** | **21 35 50.4** | **-1.5** |
| | comp=Z,8.9nm,0.8s | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **92.10** | **315** | ⇑*i*P | **P** | **21 35 52.5** | **-0.4** |
| | SNR=8.0 | | | | | | |
| **WBK** | **Wadi Bani Khal** | **92.19** | **311** | P | **P** | **21 35 54.3** | **+0.9** |
| | SNR=5.4 | | | | | | |
| **SMDO** | **Samad** | **92.23** | **312** | P | **P** | **21 35 53.8** | **+0.2** |
| | SNR=6.9 | | | | | | |
| **ARQ** | **Araqi** | **92.69** | **314** | P | **P** | **21 35 55.4** | **-0.3** |
| | SNR=28 | | | | | | |
| **JMDO** | **Jabal Madar** | **92.80** | **312** | P | **P** | **21 35 56.4** | **+0.2** |
| | SNR=9.4 | | | | | | |
| **PALK** | **Pallekele** | **92.95** | **285** | *e*P | **P** | **21 35 57.2** | **+0.2** |
| **PALK** | **Pallekele** | **92.95** | **285** | *e*P | **P** | **21 35 57.2** | **+0.2** |
| **PCRV** | **Puerto La Cruz** | **94.59** | **68** | LR | LR | 22 17 06.8 | |
| | comp=Z,202nm,21.9s,baz=320,slow=34 | | | | | | |
| **RAYN** | **Ar Rayn** | **97.11** | **323** | P | **P** | **21 36 15.3** | **-0.6** |
| | comp=Z,142nm,0.9s,SNR=18 | | | | | | |
| **TOA1** | **Torodi Ar. Sit** | **115.52** | **3** | *e*PKP1 | **PKPdf** | **21 41 24.3** | **-1.3** |
| **TORD** | **Torodi Ar. Bea** | **115.52** | **3** | PKP | **PKPdf** | **21 41 24.8** | **-0.8** |
| | comp=Z,3.5nm,0.6s,baz=344,slow=2.4,SNR=50 | | | | | | |
| TORD | | | | SKP | | 21 45 01.7 | |
| | comp=Z,0.8nm,0.8s,baz=343,slow=2.4,SNR=5.4 | | | | | | |
| **LVC** | **Limon Verde** | **117.49** | **92** | *e*PKPdf | **PKPdf** | **21 41 28.9** | **-0.5** |
| **DBIC** | **Dimbokro** | **121.44** | **11** | PKP | **PKPdf** | **21 41 36.3** | **-0.7** |
| | comp=Z,3.3nm,0.6s,baz=340,slow=1.7,SNR=10 | | | | | | |
| **DBIC** | **Dimbokro** | **121.44** | **11** | PKIKP | **PKPdf** | **21 41 36.3** | **-0.7** |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **TIC** | **Toumodi** | **121.44** | **11** | *e*PKP1 | **PKPdf** | **21 41 36.1** | **-0.9** |
| **KIC** | **Kosan Boka** | **121.75** | **11** | *e*PKP1 | **PKPdf** | **21 41 35.3** | **-2.3** |
| | comp=Z,17nm,1.0s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **122.78** | **320** | PKP | **PKPdf** | **21 41 40.3** | **+0.4** |
| | comp=Z,4.0nm,0.8s,baz=270,slow=0.6,SNR=11 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **122.78** | **320** | PKIKP | **PKPdf** | **21 41 40.3** | **+0.4** |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **CFAA** | **Coronel Fontan** | **124.32** | **99** | PKP | **PKPdf** | **21 41 40.5** | **-1.5** |
| | comp=Z,0.3nm,0.5s,baz=321,slow=3.5,SNR=6.5 | | | | | | |
| **CPUP** | **Villa Florida** | **127.41** | **86** | PKP | **PKPdf** | **21 41 46.8** | **-1.2** |
| | comp=Z,2.1nm,0.6s,baz=332,slow=1.3,SNR=5.6 | | | | | | |
| **CPUP** | **Villa Florida** | **127.41** | **86** | PKIKP | **PKPdf** | **21 41 46.8** | **-1.2** |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **TRQA** | **Tornquist** | **132.44** | **101** | *e*PKPdf | **PKPdf** | **21 41 56.4** | **-0.8** |
| **MAW** | **Mawson** | **147.95** | **218** | PKPbc | **PKPbc** | **21 42 26.5** | **-0.7** |
| | comp=Z,22nm,0.9s,baz=94,slow=3.0,SNR=41 | | | | | | |
| **MAW** | **Mawson** | **147.95** | **218** | PKP2 | **PKPbc** | **21 42 26.5** | **-0.7** |
| MAW | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| **BOSA** | **Boshof** | **152.39** | **318** | PKPbc | **PKPbc** | **21 42 39.2** | **-0.1** |
| | comp=Z,25nm,0.6s,baz=17,slow=1.5,SNR=22 | | | | | | |
| BOSA | | | | PKPab | **PKPab** | **21 42 49.9** | **+0.3** |
| | comp=Z,52nm,0.8s,baz=28,slow=2.9,SNR=18 | | | | | | |
| **BOSA** | **Boshof** | **152.39** | **318** | PKIKP | **PKPbc** | **21 42 39.2** | **-0.1** |
| BOSA | | | | | | 21 42 49.9 | |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,25nm,0.6s | | | | | | |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,52nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **159.19** | **167** | P | **PKPdf** | **21 42 38.1** | **-2.0** |
| **SNAA** | **Sanae** | **159.53** | **173** | P | **PKPdf** | **21 42 37.4** | **-3.1** |
| **SNAA** | **Sanae** | **159.53** | **173** | *e*PKP2 | **PKPab** | **21 43 16.7** | **-2.3** |
| **SNAA** | **Sanae** | **159.53** | **173** | *e*PKPab | **PKPab** | **21 43 16.7** | **-2.3** |
| **VNA2** | **Neumayer--Watz** | **159.79** | **169** | P | **PKPdf** | **21 42 39.2** | **-1.5** |
| | baz=276,slow=1.2 | | | | | | |

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*NEIC* ***08*** *21:40:45.2, 59.°83N×153.°34W, h126km, MG3.5(AEIC), After AEIC.*

*IDC* ***08*** *21:40:45.8±8.2, 60.°17N×153.°33W, h120km±69km, mb3.4/2, mb1 3.7/4, mb1mx3.1/53, mbtmp3.9/4, Error ellipse: s-maj=66.0km s-min=36.1km az=19.0*

**ISC 08 21:40:44.1**±0.9**, 59.°83N**±0.°04×**153.°32W**±0.°04**, h132**km±5km**, n100,** σ0.s**88**/113**, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILS** | **Iliamna Low So** | **0.18** | **45** | P | **Pn** | **21 41 02.0** | **-0.3** |
| ILS | | | | S | **Sn** | **21 41 15.5** | **-0.5** |
| **OPT** | **Oil Point** | **0.18** | **166** | P | **Pn** | **21 41 02.0** | **-0.1** |
| **IVE** | **Iliamna Volcan** | **0.24** | **39** | P | **Pn** | **21 41 02.0** | **-0.4** |
| IVE | | | | S | **Sn** | **21 41 15.7** | **-0.6** |
| **ILW** | **Iliamna West** | **0.25** | **22** | P | **Pn** | **21 41 02.0** | **-0.5** |
| **PDB** | **Pedro Bay** | **0.44** | **265** | P | **Pn** | **21 41 02.5** | **-0.5** |
| **AUL** | **Augustine Lava** | **0.45** | **188** | P | **Pn** | **21 41 03.1** | **0.0** |
| AUL | | | | S | **Sn** | **21 41 17.4** | **0.0** |
| **AUP** | **Augustine Pinn** | **0.47** | **186** | P | **Pn** | **21 41 03.3** | **-0.1** |
| **AUE** | **Augustine Isla** | **0.47** | **183** | P | **Pn** | **21 41 03.1** | **-0.1** |
| **AUI** | **Augustine Isla** | **0.50** | **186** | P | **Pn** | **21 41 03.2** | **-0.1** |
| AUI | | | | S | **Sn** | **21 41 17.0** | **-0.9** |
| **RSO** | **Redoubt South** | **0.69** | **24** | *e*Pn | **Pn** | **21 41 04.6** | **-0.2** |
| **RDWB** | **Redoubt West** | **0.70** | **20** | P | **Pn** | **21 41 04.5** | **-0.4** |
| RDWB | | | | S | **Sn** | **21 41 19.8** | **-0.8** |
| **RDN** | **Redoubt North** | **0.74** | **22** | P | **Pn** | **21 41 05.0** | **-0.1** |
| **NCT** | **North Crescent** | **0.76** | **15** | P | **Pn** | **21 41 05.0** | **-0.2** |
| **RDJH** | **Redoubt Jeurge** | **0.81** | **18** | P | **Pn** | **21 41 05.4** | **-0.2** |
| RDJH | | | | S | **Sn** | **21 41 21.7** | **-0.3** |
| **MCNL** | **McNeil River** | **0.83** | **219** | P | **Pn** | **21 41 05.3** | **-0.4** |
| **CDD** | **Cape Douglas** | **0.92** | **191** | P | **Pn** | **21 41 06.2** | **-0.2** |
| **BGRM** | **Barrier Glacie** | **1.03** | **25** | P | **Pn** | **21 41 07.4** | **-0.1** |
| **FOPK** | **Fourpeaked Vol** | **1.08** | **184** | P | **Pn** | **21 41 07.5** | **-0.4** |
| **CNPM** | **China Poot** | **1.10** | **105** | P | **Pn** | **21 41 07.8** | **-0.3** |
| CNPM | | | | S | **Sn** | **21 41 25.5** | **-0.8** |
| **BRLK** | **Bradley Lake** | **1.23** | **92** | P | **Pn** | **21 41 09.3** | **-0.1** |
| **KAPH** | **Katmai Pasha** | **1.34** | **204** | P | **Pn** | **21 41 10.6** | **0.0** |
| **NKA** | **Nikishka** | **1.38** | **48** | P | **Pn** | **21 41 12.7** | **+1.7** |
| **CKL** | **Chakachamna La** | **1.45** | **19** | P | **Pn** | **21 41 12.1** | **+0.3** |
| **KAHC** | **Katmai Hardscr** | **1.47** | **217** | P | **Pn** | **21 41 11.7** | **-0.4** |
| **SPCR** | **Spurr Chakacha** | **1.48** | **21** | P | **Pn** | **21 41 12.2** | **+0.1** |
| **KAHG** | **Katmai Hook Gl** | **1.48** | **206** | P | **Pn** | **21 41 12.1** | **-0.1** |
| **CKN** | **Chakachatna No** | **1.51** | **21** | P | **Pn** | **21 41 12.8** | **+0.4** |
| **SPBG** | **Spurr Blockage** | **1.51** | **18** | P | **Pn** | **21 41 12.8** | **+0.4** |
| **BGL** | **Barrier Glacie** | **1.51** | **17** | P | **Pn** | **21 41 12.9** | **+0.4** |
| **SLKM** | **Skilak Lake** | **1.69** | **65** | P | **Pn** | **21 41 14.4** | **-0.1** |
| **SVW2** | **Sparrevohn** | **1.69** | **320** | P | **Pn** | **21 41 13.9** | **-0.6** |
| **KAKN** | **Katmai Knife C** | **1.78** | **211** | P | **Pn** | **21 41 15.5** | **-0.1** |
| KAKN | | | | S | **Sn** | **21 41 38.3** | **-1.4** |
| **STLK** | **Strandline Lak** | **1.83** | **23** | P | **Pn** | **21 41 16.5** | **+0.4** |
| **VOGL** | **Vogel Lake** | **1.85** | **50** | P | **Pn** | **21 41 17.6** | **+1.4** |
| VOGL | | | | S | **Sn** | **21 41 42.8** | **+1.9** |
| **KELA** | **Mount Kelaz** | **1.87** | **223** | P | **Pn** | **21 41 16.3** | **-0.4** |
| **KABR** | **Katmai Barrier** | **1.91** | **207** | P | **Pn** | **21 41 16.6** | **-0.4** |
| **SEW** | **Seward** | **1.97** | **80** | P | **Pn** | **21 41 17.5** | **-0.2** |
| SEW | | | | S | **Sn** | **21 41 42.5** | **-0.9** |
| **ANCK** | **Angle Creek** | **1.99** | **215** | P | **Pn** | **21 41 18.1** | **+0.1** |
| **FIB** | **Fire Island** | **2.05** | **48** | P | **Pn** | **21 41 19.9** | **+1.2** |
| **CNTC** | **Contact Creek** | **2.06** | **221** | P | **Pn** | **21 41 18.7** | **-0.1** |
| **SUA** | **Susitna One** | **2.07** | **37** | P | **Pn** | **21 41 19.5** | **+0.4** |
| **KDAK** | **Kodiak Island** | **2.09** | **169** | *e*Pn | **Pn** | **21 41 17.9** | **-1.3** |
| KDAK | | | | *e*Sn | **Sn** | **21 41 44.6** | **-1.4** |
| **RC01** | **Rabbit Creek A** | **2.18** | **53** | P | **Pn** | **21 41 20.2** | **-0.1** |
| **SKT** | **Skwentna** | **2.33** | **21** | P | **Pn** | **21 41 22.2** | **0.0** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| PTE | Portage | 2.37 | 62 | P | Pn | 21 41 22.5 | -0.1 |
| OHAK | Old Harbor | 2.62 | 180 | P | Pn | 21 41 24.3 | -1.5 |
| PLK1 | Peulik 1 | 2.66 | 221 | P | Pn | 21 41 26.7 | +0.5 |
| PWL | Port Wells | 2.68 | 65 | P | Pn | 21 41 25.6 | -1.0 |
| PMR | Palmer | 2.71 | 48 | P | Pn | 21 41 26.5 | -0.5 |
| PPLA | Purkeypile | 3.13 | 10 | P | Pn | 21 41 33.3 | +0.8 |
| SML | Sawmill | 3.15 | 49 | P | Pn | 21 41 32.5 | -0.1 |
| GLI | Glacier Island | 3.27 | 69 | P | Pn | 21 41 34.1 | -0.1 |
| SII | Sitkinak Islan | 3.31 | 188 | P | Pn | 21 41 33.3 | -1.5 |
| TT01 | Tatalina | 3.35 | 338 | P | Pn | 21 41 34.6 | -0.6 |
| FID | Port Fidalgo | 3.53 | 72 | P | Pn | 21 41 36.7 | -0.8 |
| JPK | Jack Peak | 3.55 | 67 | P | Pn | 21 41 38.5 | +0.6 |
| SCM | Sheep Creek Mo | 3.56 | 53 | P | Pn | 21 41 37.5 | -0.5 |
| VLZ | Valdez | 3.70 | 66 | P | Pn | 21 41 38.9 | -0.8 |
| EYAK | Cordova Ski Ar | 3.85 | 76 | P | Pn | 21 41 41.6 | -0.1 |
| KTH | Kantishna Hill | 3.91 | 16 | ePn | Pn | 21 41 42.3 | -0.3 |
| KTH | | | | eSn | Sn | 21 42 27.3 | -0.7 |
| TRF | Thorofare Moun | 3.91 | 20 | P | Pn | 21 41 42.3 | -0.5 |
| DIV | Divide | 3.96 | 68 | P | Pn | 21 41 43.0 | -0.3 |
| KLU | Klutina | 4.00 | 62 | P | Pn | 21 41 43.1 | -0.8 |
| SGAM | Sherman Glacie | 4.11 | 77 | P | Pn | 21 41 45.5 | +0.3 |
| RND | Reindeer | 4.17 | 29 | P | Pn | 21 41 45.5 | -0.6 |
| BPAW | Bear Paw Mtn. | 4.42 | 13 | P | Pn | 21 41 48.5 | -0.9 |
| MCK | McKinley | 4.43 | 26 | P | Pn | 21 41 49.5 | 0.0 |
| BMRM | Bremner River | 4.47 | 71 | P | Pn | 21 41 50.2 | +0.1 |
| HARP | HAARP | 4.73 | 53 | P | Pn | 21 41 53.2 | -0.2 |
| PAX | Paxson | 4.91 | 47 | P | Pn | 21 41 55.9 | -0.1 |
| VRDI | Verde Repeater | 5.07 | 70 | P | Pn | 21 41 58.6 | +0.4 |
| KHIT | Khitrov Hills | 5.07 | 79 | P | Pn | 21 41 58.7 | +0.5 |
| WRH | Wood River Hil | 5.26 | 26 | P | Pn | 21 41 59.5 | -1.0 |
| MCARA | McCarthy VSAT | 5.31 | 68 | P | Pn | 21 42 01.4 | +0.2 |
| KULT | Kultieth River | 5.33 | 81 | P | Pn | 21 42 01.9 | +0.4 |
| MLY | Manley | 5.36 | 12 | P | Pn | 21 42 00.9 | -1.0 |
| BARK | Barkley Ridge | 5.45 | 79 | P | Pn | 21 42 03.1 | 0.0 |
| CCB | Clear Creek Bu | 5.48 | 26 | P | Pn | 21 42 02.3 | -1.1 |
| PTPK | Patty Peak | 5.53 | 71 | P | Pn | 21 42 04.7 | +0.3 |
| KIAG | Kiagna River | 5.55 | 74 | P | Pn | 21 42 04.7 | +0.2 |
| BALM | Baldy | 5.57 | 73 | P | Pn | 21 42 04.9 | +0.1 |
| BAGL | Bagley Icefiel | 5.65 | 78 | P | Pn | 21 42 06.3 | +0.6 |
| COLA | College | 5.66 | 24 | P | Pn | 21 42 05.4 | -0.5 |
| MDM | Murphy Dome | 5.66 | 22 | P | Pn | 21 42 05.0 | -0.9 |
| MESA | MESA | 5.72 | 82 | P | Pn | 21 42 07.0 | +0.2 |
| ILAR | Eielson Array | 5.79 | 28 | P | Pn | 21 42 06.5 | -1.2 |
| | 5.3nm,0.3s,baz=217,slow=13,SNR=149 | | | | | | |
| ILAR | | | | S | Sn | 21 43 07.0 | -5.9 |
| | 5.7nm,0.3s,baz=215,slow=20,SNR=12 | | | | | | |
| ILB | Eielson Array | 5.79 | 28 | P | Pn | 21 42 06.5 | -1.2 |
| BARN | Barnard Glacie | 5.90 | 73 | P | Pn | 21 42 09.6 | +0.2 |
| RKAV | Rock Avalanche | 6.01 | 80 | P | Pn | 21 42 11.6 | +0.8 |
| CTGM | Chitina Glacie | 6.05 | 74 | P | Pn | 21 42 12.0 | +0.7 |
| TABL | Table Mountain | 6.12 | 79 | P | Pn | 21 42 12.3 | +0.1 |
| IM3 | Indian Mountai | 6.18 | 358 | P | Pn | 21 42 12.9 | +0.1 |
| PCA | Pinnacle | 6.57 | 82 | P | Pn | 21 42 18.6 | +0.5 |
| COLD | Coldfoot | 7.55 | 9 | P | Pn | 21 42 30.9 | -0.4 |
| BM3 | Burnt Mountain | 8.54 | 23 | P | Pn | 21 42 43.9 | -0.7 |
| DLBC | Dease Lake | 12.03 | 87 | ePn | Pn | 21 43 31.9 | +0.8 |
| | 3.5nm,0.3s | | | | | | |
| YKA | Yellowknife Ar | 18.67 | 65 | P | Pn | 21 44 52.9 | -0.5 |
| | 0.3nm,0.3s,baz=274,slow=10,SNR=6.8 | | | | | | |
| SONM | Songino Array | 54.76 | 306 | P | P | 21 50 01.0 | +1.3 |
| | 0.4nm,0.4s,baz=33,slow=8.6,SNR=4.5 | | | | | | |
| SONM | Songino Array | 54.76 | 306 | P | P | 21 50 01.0 | +1.3 |
| ZALV | Zalesovo Beam | 57.41 | 323 | P | P | 21 50 19.1 | +0.9 |
| | 0.9nm,0.5s,baz=32,slow=6.5,SNR=4.4 | | | | | | |

**WEL 08 21:43:32.8±0.4, 39°.05S×175°.06E, h212km±3km, ML3.5/5, 4C-1D, Error ellipse: s-maj=3.1km s-min=2.6km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FWVZ | Far West T-bar | 0.43 | 118 | PN | Pn | 21 44 01.0 | -0.4 |
| FWVZ | | | | SN | S | 21 44 23.3 | -0.4 |
| WNVZ | Wahianoa | 0.50 | 124 | PN | Pn | 21 44 01.4 | -0.2 |
| MOVZ | Moawhango | 0.64 | 124 | PN | Pn | 21 44 01.4 | -0.6 |
| MOVZ | | | | SN | S | 21 44 23.6 | -1.2 |
| LREZ | Lake Rotokare | 0.65 | 231 | PN | Pn | 21 44 02.0 | +0.1 |
| WAZ | Wanganui | 0.70 | 185 | PN | Pn | 21 44 02.7 | +0.5 |
| WAZ | | | | SN | S | 21 44 26.6 | +1.3 |
| BHHZ | Black Hill Sta | 0.89 | 120 | PN | Pn | 21 44 02.7 | -0.6 |
| BHHZ | | | | SN | S | 21 44 25.8 | -1.1 |
| BKZ | Black Stump Fm | 1.12 | 96 | PN | Pn | 21 44 03.6 | -1.1 |
| KRHZ | Kereru | 1.18 | 121 | ⇑PN | Pn | 21 44 04.9 | -0.2 |
| KRHZ | | | | SN | S | 21 44 30.8 | +0.7 |
| TSZ | Takapari Road | 1.22 | 146 | PN | Pn | 21 44 05.6 | +0.2 |
| TSZ | | | | AML | AML | 21 44 32.1 | |
| TSZ | | | | AML | AML | 21 44 33.0 | |
| PNHZ | Pukenui | 1.23 | 135 | PN | Pn | 21 44 05.5 | 0.0 |
| POWZ | Post Office Ro | 1.45 | 158 | PN | Pn | 21 44 07.2 | 0.0 |
| WPHZ | Waipukurau | 1.47 | 134 | PN | Pn | 21 44 07.4 | +0.1 |
| KAHZ | Kahuranaki | 1.59 | 118 | ⇑PN | Pn | 21 44 08.4 | -0.1 |
| KAHZ | | | | SN | S | 21 44 36.7 | +0.7 |
| MRZ | Mangatainoka R | 1.66 | 166 | PN | Pn | 21 44 08.9 | -0.1 |
| MRZ | | | | AML | AML | 21 44 38.6 | |
| MRZ | | | | AML | AML | 21 44 40.7 | |
| PRWZ | Pori Road | 1.66 | 155 | PN | Pn | 21 44 09.0 | 0.0 |
| PRHZ | Porangahau | 1.72 | 135 | PN | Pn | 21 44 09.4 | -0.1 |
| OGWZ | Otaki Gorge | 1.77 | 177 | PN | Pn | 21 44 10.2 | +0.2 |
| ANWZ | Angora Road | 1.78 | 143 | PN | Pn | 21 44 10.0 | -0.1 |
| URZ | Urewera | 1.79 | 64 | PN | Pn | 21 44 06.9 | -3.3 |
| KIW | Kapiti Island | 1.81 | 184 | PN | Pn | 21 44 10.3 | -0.1 |
| HOWZ | Holdsworth Sta | 1.88 | 169 | PN | Pn | 21 44 10.7 | -0.3 |
| DUWZ | D'Urville Isla | 1.96 | 206 | PN | Pn | 21 44 11.5 | -0.3 |
| CAW | Cannon Point | 2.05 | 180 | ⇑PN | Pn | 21 44 12.5 | -0.2 |
| CAW | | | | AML | AML | 21 44 46.2 | |
| CAW | | | | AML | AML | 21 44 46.3 | |
| TCW | Tory Channel | 2.24 | 195 | PN | Pn | 21 44 14.5 | -0.2 |
| TCW | | | | AML | AML | 21 44 16.0 | |
| TCW | | | | AML | AML | 21 44 53.1 | |
| BHW | Baring Head | 2.36 | 183 | PN | Pn | 21 44 15.3 | -0.5 |
| MSWZ | Moikau Station | 2.37 | 177 | PN | Pn | 21 44 15.4 | -0.6 |
| NNZ | Nelson | 2.52 | 210 | ⇑PN | Pn | 21 44 16.7 | -0.9 |
| PLWZ | Palliser | 2.52 | 177 | PN | Pn | 21 44 16.9 | -0.8 |
| TUWZ | Tuamarina | 2.52 | 199 | PN | Pn | 21 44 17.3 | -0.4 |
| TUWZ | | | | AML | AML | 21 44 17.8 | |
| TUWZ | | | | AML | AML | 21 44 17.8 | |
| QRZ | Quartz Range | 2.63 | 227 | PN | Pn | 21 44 17.0 | -1.9 |
| BSWZ | Blackbirch Sta | 2.81 | 198 | PN | Pn | 21 44 20.5 | -0.3 |
| THZ | Tophouse | 3.17 | 211 | ⇓PN | Pn | 21 44 23.6 | -1.5 |
| KHZ | Kahutara | 3.56 | 198 | PN | Pn | 21 44 28.5 | -1.1 |
| OXZ | Oxford | 4.84 | 207 | PN | Pn | 21 44 42.3 | -3.1 |

*IDC **08** 21:43:35.4±1.0, 7°.69N×91°.88E, h0km, mb3.9/12, mb1 4.1/15, mb1mx3.8/57, mbtmp3.9/15, ML3.9/3, MS3.0/1, Ms1 3.2/1, ms1mx2.9/28, Error ellipse: s-maj=29.7km s-min=17.8km az=50.0*

*ISCJB **08** 21:43:36.6±0.5, 7°.62N±0°.05×91°.92E±0°.06, h24km, mb3.9/14, Error ellipse: s-maj=9.2km s-min=6.3km az=135.1*

*NEIC **08** 21:43:39.4±2.0, 7°.66N×91°.86E, h28km±15km, mb4.3/2, Error ellipse: s-maj=9.2km s-min=6.4km az=52.0*

**ISC 08 21:43:38.6±0.7, 7°.55N±0°.07×91°.92E±0°.07, h24km, n36, σ1§65/31, mb3.9/14, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSI | Gunungsitoli | 8.38 | 137 | ePn | Pn | 21 45 40.0 | +1.4 |
| | 11nm,0.3s | | | | | | |
| GSI | | | | eSn | Sn | 21 47 09.9 | -2.7 |
| PSI | Prapat | 8.42 | 124 | Pn | Pn | 21 45 41.8 | +2.5 |
| | 0.8nm,0.3s,baz=333,slow=16,SNR=4.5 | | | | | | |
| PSI | | | | Sn | Sn | 21 47 12.8 | -1.0 |
| | 2.7nm,0.3s,baz=198,slow=17,SNR=6.8 | | | | | | |
| KULM | Kulim | 8.96 | 104 | ePn | Pn | 21 45 48.8 | +2.2 |
| KULM | | | | eSn | Sn | 21 47 24.9 | -2.0 |
| IPM | Ipoh | 9.55 | 108 | ePn | Pn | 21 45 56.2 | +1.4 |
| | 5.4nm,0.4s | | | | | | |
| IPM | | | | eSn | Sn | 21 47 39.8 | -1.7 |
| PALK | Pallekele | 11.13 | 269 | Pn | Pn | 21 46 16.5 | +0.1 |
| | 3.5nm,0.3s,baz=116,slow=13,SNR=29 | | | | | | |
| PALK | | | | Sn | Sn | 21 48 10.8 | -9.4 |
| | 12nm,0.3s,baz=116,slow=5.4,SNR=13 | | | | | | |
| CMAR | Chiang Mai Arr | 12.82 | 32 | Pn | Pn | 21 46 37.2 | -2.3 |
| | 0.1nm,0.3s,baz=233,slow=15,SNR=3.8 | | | | | | |
| CMAR | | | | Sn | Sn | 21 49 01.5 | 0.0 |
| | 0.1nm,0.3s,baz=229,slow=26,SNR=3.2 | | | | | | |
| CMAR | | | | LR | LR | 21 52 07.3 | |
| | comp=Z,70nm,18.9s,baz=239,slow=40 | | | | | | |
| CHTO | Chiang Mai | 13.12 | 31 | ePn | Pn | 21 46 44.7 | +1.2 |
| VIS | Vishakhapatnam | 13.13 | 321 | iP | Pn | 21 46 43.3 | -0.5 |
| VIS | | | | iS | Sn | 21 48 55.2 | -14 |
| VIS | | | | iS | Sn | 21 48 55.8 | -13 |
| SLVN | Son La | 17.94 | 39 | ePn | Pn | 21 47 45.9 | -0.8 |
| ODAN | Odare | 19.68 | 348 | eP | Pn | 21 48 11.4 | +3.5 |
| | 100nm,0.4s | | | | | | |
| RAMN | Ramite | 19.95 | 346 | eP | Pn | 21 48 15.0 | +3.9 |
| | 148nm,0.4s | | | | | | |
| TAPN | Taplejung | 20.10 | 349 | eP | Pn | 21 48 16.3 | +3.3 |
| | 41nm,0.3s | | | | | | |
| PKI | Pulchoki | 20.85 | 344 | eP | Pn | 21 48 27.4 | +5.6 |
| | 84nm,0.4s | | | | | | |
| PKIN | Phulchoki | 20.86 | 344 | eP | Pn | 21 48 27.4 | +5.5 |
| | 68nm,0.5s | | | | | | |
| DMN | Daman | 20.97 | 343 | eP | Pn | 21 48 28.9 | +5.7 |
| | 84nm,0.6s | | | | | | |
| GUN | Gumba | 21.05 | 345 | eP | P | 21 48 30.1 | +8.8 |
| | 45nm,0.5s | | | | | | |
| KKN | Kakani | 21.09 | 343 | eP | P | 21 48 30.3 | +8.6 |
| | 21nm,0.4s | | | | | | |
| GKN | Gorkha | 21.48 | 342 | eP | P | 21 48 35.8 | +10 |
| | 80nm,0.3s | | | | | | |
| H08S3 | Diego Garcia H | 24.55 | 233 | T | T | 22 15 10.5 | |
| | baz=51,slow=75,SNR=156 | | | | | | |
| H08S2 | Diego Garcia H | 24.56 | 232 | T | T | 22 15 10.5 | |
| | baz=51,slow=75,SNR=89 | | | | | | |
| H08S1 | Diego Carcia H | 24.57 | 233 | T | T | 22 15 10.5 | |
| | baz=51,slow=75,SNR=96 | | | | | | |
| MKAR | Makanchi Array | 39.97 | 350 | P | P | 21 51 10.8 | -0.5 |
| | 0.3nm,0.4s,baz=153,slow=8.2,SNR=5.2 | | | | | | |
| KKAR | Karatay Array | 40.10 | 335 | eP | P | 21 51 11.2 | -1.2 |
| | 1.6nm,0.8s | | | | | | |
| SONM | Songino Array | 41.99 | 15 | P | P | 21 51 27.9 | -0.2 |
| | 2.4nm,0.8s,baz=195,slow=8.6,SNR=21 | | | | | | |
| GEYT | Alibeck | 43.00 | 320 | P | P | 21 51 36.5 | +0.2 |
| | 0.5nm,0.4s,baz=145,slow=8.8,SNR=2.7 | | | | | | |
| KURBB | Kurchatov Arra | 44.36 | 348 | P | P | 21 51 46.3 | -0.7 |
| | 0.4nm,0.3s,baz=174,slow=7.5,SNR=7.7 | | | | | | |
| KURK | Kurchatov | 44.43 | 348 | P | P | 21 51 46.3 | -1.2 |
| ZALV | Zalesovo Beam | 46.62 | 354 | P | P | 21 52 03.9 | -0.9 |
| | 0.4nm,0.4s,baz=164,slow=5.7,SNR=3.7 | | | | | | |
| BVAR | Borovoye Array | 48.62 | 343 | P | P | 21 52 20.2 | -0.2 |
| | 0.6nm,0.8s,baz=126,slow=7.3,SNR=3.0 | | | | | | |
| WRA | Warramunga Arr | 49.88 | 124 | P | P | 21 52 32.0 | +1.4 |
| | 1.9nm,0.4s,baz=310,slow=7.9,SNR=6.0 | | | | | | |
| WRAB | Tennant Creek | 49.89 | 124 | eP | P | 21 52 31.6 | +1.0 |
| | 6.4nm,0.8s | | | | | | |
| ASAR | Alice Springs | 51.42 | 128 | P | P | 21 52 43.3 | +1.3 |
| | 1.9nm,0.9s,baz=303,slow=8.1,SNR=4.3 | | | | | | |
| FINES | FINESS Array B | 71.98 | 333 | P | P | 21 54 59.0 | -1.0 |
| | 0.8nm,0.6s,baz=124,slow=7.2,SNR=8.2 | | | | | | |
| ARCES | ARCESS Array B | 74.83 | 340 | P | P | 21 55 16.1 | -0.7 |
| | 1.8nm,0.9s,baz=97,slow=7.4,SNR=3.2 | | | | | | |
| GERES | GERESS Array B | 76.61 | 318 | P | P | 21 55 26.5 | -1.0 |
| | 0.6nm,0.8s,baz=104,slow=4.1,SNR=2.6 | | | | | | |
| ILAR | Eielson Array | 95.86 | 22 | P | P | 21 57 02.7 | -0.3 |
| | 0.6nm,0.4s,baz=334,slow=6.0,SNR=5.2 | | | | | | |

*IDC **08** 21:44:51.7±0.4, 1°.57N×126°.47E, h0km, mb4.5/27, mb1 4.5/27, mb1mx4.4/45, mbtmp4.5/27, MS3.5/3, Ms1 3.5/3, ms1mx3.0/31, Error ellipse: s-maj=22.8km s-min=9.0km az=74.0*

*MOS **08** 21:44:55.2±1.1, 1°.69N×126°.55E, h33km, mb4.9/22, Error ellipse: s-maj=15.7km s-min=6.9km az=112.2*

*ISCJB **08** 21:44:57.8±0.2, 1°.88N±0°.03×126°.65E±0°.03, h47km, mb4.7/59, MS3.8/5, Error ellipse: s-maj=5.0km s-min=3.6km az=157.3*

*BJI **08** 21:44:58.0, 1°.42N×126°.53E, h75km, mb4.7/36, mB4.8/26, Ms4.4/13, Ms7 4.2/13*

*NEIC **08** 21:45:00.1±0.9, 1°.67N×126°.62E, h64km±9km, mb4.5/22, Error ellipse: s-maj=8.1km s-min=5.1km az=58.0*

*DJA **08** 21:45:01.5±0.4, 2°N±3°×12°7E±°, h62km±14km, M4.6/15, mb4.5/7, mB5.1/3, MLv4.6/15, Mw(mB)4.4/3*

*AUST **08** 21:45:04.2±1.1, 1°.56N×126°.64E, h105km, Error ellipse: s-maj=2.2km s-min=1.1km az=29.0*

**ISC 08 21:44:59.0±0.3, 1°.82N±0°.04×126°.64E±0°.04, h47km, n156, σ1§71/163, mb4.6/59, MS3.7/5, 10C-3D, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | Ternate | 1.27 | 145 | ePn | Pn | 21 45 20.8 | +0.4 |
| SGSI | Sangihe | 2.16 | 329 | P | Pn | 21 45 34.7 | +2.1 |
| SGSI | | | | S | Sn | 21 46 01.3 | +3.1 |
| LBMI | Labuha | 2.59 | 160 | P | Pn | 21 45 40.3 | +1.9 |
| LBMI | | | | S | Sn | 21 46 14.1 | +5.4 |
| KMSI | Cibinong | 2.93 | 245 | P | Pn | 21 45 45.0 | +1.9 |
| KMSI | | | | S | Sn | 21 46 19.5 | +2.5 |
| GTOI | Gorontalo | 3.81 | 252 | P | Pn | 21 45 58.1 | +2.9 |
| SANI | Sanana | 3.89 | 190 | P | Pn | 21 45 58.8 | +2.4 |
| LUWI | Luwuk | 4.79 | 234 | P | Pn | 21 46 11.9 | +3.2 |
| | baz=4.7,SNR=6.8 | | | | | | |
| LUWI | Luwuk | 4.79 | 234 | P | Pn | 21 46 10.8 | +2.1 |
| LUWI | Luwuk | 4.79 | 234 | ePn | Pn | 21 46 12.0 | +3.2 |
| MRSI | Marisa | 4.88 | 254 | P | Pn | 21 46 12.0 | +2.1 |
| NLAI | Namlea | 5.04 | 175 | P | Pn | 21 46 13.6 | +1.4 |
| | 46nm,1.0s,1μm0.3nm | | | | | | |
| SWI | Sorong | 5.34 | 120 | P | Pn | 21 46 19.0 | +2.8 |
| | 52nm,1.2s,0.2nm | | | | | | |
| SIJI | Sorong | 5.34 | 120 | Pn | Pn | 21 46 18.6 | +2.3 |
| | 1.5nm,0.3s,baz=335,slow=17,SNR=13 | | | | | | |
| SIJI | | | | Sn | Sn | 21 47 21.9 | +5.3 |
| | 0.5nm,0.3s,baz=288,slow=19,SNR=1.8 | | | | | | |
| MSAI | Masohi | 5.62 | 156 | P | Pn | 21 46 23.5 | +3.4 |
| | 36nm,0.7s,2μm0.3nm | | | | | | |
| APSI | Ampana | 5.67 | 242 | P | Pn | 21 46 22.6 | +1.8 |
| | 209nm,1.0s,2μm1.0nm | | | | | | |
| AAI | Ambon | 5.69 | 164 | P | Pn | 21 46 24.3 | +3.3 |
| FAKI | Fak Fak | 7.32 | 130 | P | Pn | 21 46 46.7 | +3.2 |
| | baz=7.2,SNR=5.7 | | | | | | |
| FAKI | Fak Fak | 7.32 | 130 | ePn | Pn | 21 46 49.1 | +5.6 |
| MYLDM | Lahad Datu | 8.78 | 293 | ePn | Pn | 21 47 08.9 | +5.5 |
| KAPI | Kappang | 9.66 | 225 | LR | LR | 21 50 54.1 | |
| | comp=Z,155nm,21.9s,baz=69,slow=39 | | | | | | |
| KKM | Kota Kinabalu | 11.21 | 292 | ePn | Pn | 21 47 42.2 | +5.4 |
| SBUM | Sibu | 14.42 | 273 | ePn | Pn | 21 48 22.1 | +1.6 |
| MTN | Manton Dam | 15.23 | 163 | P | Pn | 21 48 31.3 | +0.1 |
| | baz=15,SNR=8.6 | | | | | | |
| KDU | Kakadu | 15.53 | 158 | P | P | 21 48 37.2 | -1.4 |
| | baz=15,SNR=7.7 | | | | | | |
| KSM | Kuching | 16.32 | 269 | P | P | 21 48 48.6 | +1.1 |
| | baz=16,SNR=5.6 | | | | | | |
| KSM | Kuching | 16.32 | 269 | ePn | P | 21 48 47.4 | 0.0 |
| | 13nm,0.7s | | | | | | |
| KNRA | Kununurra | 17.51 | 173 | P | Pn | 21 48 57.6 | -2.3 |
| | baz=17,SNR=5.6 | | | | | | |
| DLV | T Lat | 20.62 | 300 | eP | P | 21 49 35.9 | +1.1 |
| | 26nm,1.1s | | | | | | |
| TPUB | Ta-pu | 22.14 | 345 | eP | P | 21 49 49.2 | -1.6 |
| | 711nm,2.9s | | | | | | |
| SSLB | Suanglung | 22.52 | 346 | eP | P | 21 49 54.2 | -0.9 |
| | 19nm,0.9s | | | | | | |
| COEN | Coen | 22.68 | 134 | eP | P | 21 49 56.5 | -0.2 |
| MYKOM | Kota Tinggi | 22.77 | 270 | eP | P | 21 49 57.5 | -0.3 |
| | 20nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 22.90 | 161 | ⇑iP | P | 21 49 55.8 | -3.2 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,83nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 22.90 | 161 | eP | P | 21 49 55.5 | -3.5 |
| | comp=Z,31nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 22.91 | 161 | P | P | 21 49 56.0 | -3.1 |
| | comp=Z,28nm,0.9s,baz=339,slow=11,SNR=48 | | | | | | |
| WRA | | | | PcP | PcP | 21 53 47.2 | -1.3 |
| | comp=Z,0.6nm,0.8s,baz=315,slow=2.8,SNR=2.6 | | | | | | |
| WRA | | | | S | S | 21 54 04.8 | -1.0 |
| | comp=Z,1.5nm,0.9s,baz=346,slow=18,SNR=4.6 | | | | | | |
| PMG | Port Moresby | 23.29 | 119 | eP | P | 21 50 03.1 | +0.2 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| PMG | Port Moresby | 23.29 | 119 | eP | P | 21 50 03.1 | +0.2 |
| | comp=Z,21nm,0.9s | | | | | | |
| QIZ | Qiongzhong | 23.73 | 317 | P | P | 21 50 07.3 | +0.2 |
| QIZ | | | | S | S | 21 54 21.7 | +2.5 |
| QIZ | | | | PMZ | | | |
| | comp=Z,55nm,2.1s | | | | | | |
| MBWA | Marble Bar | 23.81 | 196 | eP | P | 21 50 04.9 | -2.9 |
| | comp=Z,7.4nm,0.9s | | | | | | |
| QIS | Mount Isa | 25.61 | 151 | P | P | 21 50 23.5 | -0.8 |
| | baz=26,SNR=11 | | | | | | |
| IPM | Ipoh | 25.70 | 277 | eP | P | 21 50 24.0 | -1.2 |
| | comp=Z,12nm,1.1s | | | | | | |
| KULM | Kulim | 26.16 | 278 | eP | P | 21 50 27.9 | -1.4 |
| | comp=Z,18nm,1.4s | | | | | | |
| ASAR | Alice Springs | 26.30 | 165 | P | P | 21 50 28.1 | -2.4 |
| | comp=Z,7.4nm,0.8s,baz=346,slow=12,SNR=41 | | | | | | |
| ASAR | | | | PcP | PcP | 21 53 55.6 | -0.4 |
| | comp=Z,0.6nm,0.5s,baz=313,slow=2.2,SNR=3.8 | | | | | | |
| ASAR | | | | S | S | 21 55 01.8 | +1.7 |
| | comp=Z,4.4nm,1.2s,baz=345,slow=18,SNR=3.2 | | | | | | |
| AS01 | Alice Springs | 26.31 | 165 | eP | P | 21 50 27.8 | -2.7 |
| WRKA | Warakurna | 26.74 | 177 | P | P | 21 50 32.9 | -1.5 |
| | baz=27,SNR=7.3 | | | | | | |
| PSI | Prapat | 27.70 | 273 | LR | LR | 22 01 47.8 | |
| | comp=Z,129nm,19.2s,baz=79,slow=37 | | | | | | |
| NONG | Nongkai | 28.14 | 306 | P | P | 21 50 48.1 | +1.1 |
| | comp=Z,28nm,0.7s | | | | | | |
| CTAO | Charters Tower | 29.06 | 139 | eP | P | 21 50 53.8 | -1.3 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| CTAO | Charters Tower | 29.06 | 139 | eP | P | 21 50 53.8 | -1.3 |
| | comp=Z,14nm,1.2s | | | | | | |
| MEEK | Meekatharra | 29.33 | 195 | P | P | 21 50 56.0 | -1.5 |
| | baz=29,SNR=4.2 | | | | | | |
| LOEI | Loei | 29.40 | 304 | P | P | 21 50 54.8 | -3.4 |
| | comp=Z,99nm,0.8s | | | | | | |
| SLVN | Son La | 29.44 | 313 | eP | P | 21 50 58.9 | +0.3 |
| NANT | Nan | 30.51 | 305 | P | P | 21 51 09.3 | +1.3 |
| | comp=Z,3.3nm,0.8s | | | | | | |
| PHRA | Phrae | 30.74 | 304 | P | P | 21 51 11.9 | +1.8 |
| WHN | Wuhan | 30.85 | 339 | eP | P | 21 51 11.8 | +0.9 |
| NJ2 | Nanjing | 30.96 | 347 | eP | P | 21 51 13.2 | +1.4 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,20nm,0.6s | | | | | | |
| JNU | Nakatsue | 31.39 | 7 | P | P | 21 51 16.4 | +0.7 |
| | comp=Z,14nm,0.9s,baz=167,slow=4.8,SNR=4.8 | | | | | | |
| CM01 | Chiang Mai Arr | 31.76 | 303 | eP | P | 21 51 18.9 | -0.2 |
| CMAR | Chiang Mai Arr | 31.79 | 303 | P | P | 21 51 18.5 | -0.8 |
| | comp=Z,2.1nm,0.9s,baz=119,slow=7.3,SNR=11 | | | | | | |
| CMAR | Chiang Mai Arr | 31.79 | 303 | ceP | P | 21 51 21.6 | +2.3 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| CHTO | Chiang Mai | 31.96 | 304 | eP | P | 21 51 20.4 | -0.4 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| CHTO | Chiang Mai | 31.96 | 304 | eP | P | 21 51 20.4 | -0.4 |
| | comp=Z,6.5nm,1.1s | | | | | | |
| FORT | Forrest | 32.44 | 178 | eP | P | 21 51 23.4 | -1.4 |
| | comp=Z,22nm,0.7s | | | | | | |
| ENH | Enshi | 32.64 | 332 | eP | P | 21 51 27.0 | +0.3 |
| | comp=Z,5.4nm,0.7s | | | | | | |
| KMI | Kunming | 32.68 | 317 | P | P | 21 51 28.0 | +0.7 |
| KMI | | | | pP | pP | 21 51 47.5 | +7.8 |
| KMI | | | | sP | sP | 21 51 56.8 | +11 |
| KMI | | | | PMZ | | | |
| | comp=Z,11nm,1.3s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,75nm,5.1s | | | | | | |
| QLP | Quilpie | 32.95 | 150 | P | P | 21 51 29.7 | +0.4 |
| | baz=33,SNR=3.9 | | | | | | |
| KSAR | Wonju Array Be | 35.47 | 2 | P | P | 21 51 53.3 | +2.2 |
| KSAR | Wonju Array Be | 35.47 | 2 | P | P | 21 51 53.2 | +2.2 |
| KSRS | Korea Array | 35.48 | 2 | P | P | 21 51 53.2 | +2.1 |
| | comp=Z,3.8nm,0.8s,baz=175,slow=9.6,SNR=10 | | | | | | |
| CD2 | Chengdu | 36.14 | 325 | eP | P | 21 51 58.2 | +1.2 |
| MAJO | Matsushiro | 36.17 | 16 | eP | P | 21 51 56.7 | -0.4 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| MAJO | Matsushiro | 36.17 | 16 | eP | P | 21 51 56.7 | -0.4 |
| | comp=Z,11nm,1.0s | | | | | | |
| MAT | Matsushiro | 36.17 | 16 | P | P | 21 51 57.5 | +0.4 |
| MJAR | Matsushiro Arr | 36.17 | 16 | P | P | 21 51 57.5 | +0.4 |
| | comp=Z,5.6nm,0.9s,baz=185,slow=9.9,SNR=16 | | | | | | |
| BJT | Baijiatuau | 39.20 | 347 | eP | P | 21 52 23.6 | +1.0 |
| BJT | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| BJT | Baijiatuau | 39.20 | 347 | eP | P | 21 52 23.6 | +1.0 |
| | comp=Z,16nm,1.0s | | | | | | |
| LZH | Lanzhou | 40.11 | 331 | eP | P | 21 52 32.6 | +2.2 |
| LZH | | | | pP | pP | 21 52 51.0 | +7.9 |
| LZH | | | | sP | sP | 21 53 00.5 | +12 |
| LZH | | | | PMZ | | | |
| | comp=Z,34nm,1.2s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,130nm,4.0s | | | | | | |
| HHC | Hu-ho-hao-te | 41.18 | 343 | eP | P | 21 52 42.0 | +2.9 |
| HHC | | | | S | S | 21 58 50.9 | +1.5 |
| HHC | | | | PMZ | | | |
| | comp=Z,19nm,1.0s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,160nm,13.2s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,130nm,13.2s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,120nm,15.2s | | | | | | |
| USRK | Ussuriysk Ar. | 42.47 | 6 | P | P | 21 52 51.2 | +1.7 |
| | comp=Z,11nm,0.9s,baz=191,slow=7.2,SNR=21 | | | | | | |
| MDJ | Mudanjiang | 42.70 | 3 | P | P | 21 52 53.2 | +1.9 |
| MDJ | | | | PMZ | | | |
| | comp=Z,14nm,0.8s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,130nm,9.7s | | | | | | |
| LSA | Lhasa | 43.65 | 313 | eP | P | 21 52 59.8 | 0.0 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| LSA | Lhasa | 43.65 | 313 | eP | P | 21 52 59.8 | 0.0 |
| | comp=Z,6.4nm,0.8s | | | | | | |
| GTA | Gaotai | 44.69 | 330 | ⇓P | P | 21 53 08.0 | +0.4 |
| GTA | | | | S | S | 21 59 40.0 | -1.1 |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,110nm,5.0s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,220nm,15.4s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,200nm,16.2s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,350nm,16.4s | | | | | | |
| HABR | Khabarovsk | 47.04 | 8 | eP | P | 21 53 24.7 | -1.1 |
| HABR | | | | e*PP | pP | 21 53 34.2 | -4.5 |
| HABR | | | | e*SP | sP | 21 53 38.4 | -5.8 |
| HABR | | | | e | | 21 54 55.5 | |
| HABR | | | | e | | 21 55 15.4 | |
| HABR | | | | ePPP | PPP | 21 56 00.4 | |
| HABR | | | | eS | S | 22 00 15.9 | +1.7 |
| HABR | | | | e*SS | sS | 22 00 32.7 | -3.1 |
| HABR | | | | e | | 22 03 15.8 | |
| HABR | | | | eSSS | SSS | 22 04 47.6 | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,47nm,1.6s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,91nm,21.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 47.10 | 15 | iP | P | 21 53 28.0 | +1.7 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| KLR | Kul'dur | 47.44 | 5 | eP | P | 21 53 26.2 | -2.7 |
| ULN | Ulaanbaatar | 48.90 | 343 | ⇓iP | P | 21 53 41.2 | +0.8 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| ULN | Ulaanbaatar | 48.90 | 343 | eP | P | 21 53 41.4 | +1.0 |
| | comp=Z,7.1nm,0.9s | | | | | | |
| SONM | Songino Array | 49.07 | 342 | P | P | 21 53 42.6 | +0.9 |
| | comp=Z,5.2nm,0.9s,baz=150,slow=8.1,SNR=21 | | | | | | |
| SONA1 | Songino Array | 49.08 | 342 | eP | P | 21 53 42.4 | +0.6 |
| HYB | Hyderabad | 49.69 | 291 | iP | P | 21 53 46.0 | -0.8 |
| TLY | Talaya | 53.31 | 342 | P | P | 21 54 14.2 | +0.9 |
| | comp=Z,1.6nm,0.3s,baz=196,slow=14,SNR=4.5 | | | | | | |
| TLY | Talaya | 53.31 | 342 | eP | P | 21 54 14.1 | +0.9 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,16nm,1.6s | | | | | | |
| WMQ | Urumqi | 54.24 | 326 | eP | P | 21 54 22.6 | +2.3 |
| WMQ | | | | PMZ | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| BOD | Bodaibo | 56.73 | 352 | eP | P | 21 54 37.7 | -0.1 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| PETK | Petropavlovsk- | 57.23 | 22 | P | P | 21 54 43.3 | +1.9 |
| | comp=Z,5.1nm,1.0s,baz=249,slow=6.1,SNR=3.1 | | | | | | |
| MK01 | Makanchi Array | 59.05 | 326 | eP | P | 21 54 54.1 | -0.2 |
| MKAR | Makanchi Array | 59.07 | 326 | P | P | 21 54 54.3 | -0.2 |
| | comp=Z,2.9nm,0.5s,baz=123,slow=8.3,SNR=20 | | | | | | |
| MKAR | Makanchi Array | 59.07 | 326 | ceP | P | 21 54 54.2 | -0.3 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| MAKZ | Makanchi | 59.25 | 326 | eP | P | 21 54 55.8 | 0.0 |
| KSH | Kashi | 59.33 | 316 | P | P | 21 54 58.0 | +1.4 |
| KSH | | | | epP | pP | 21 55 17.7 | +7.9 |
| KSH | | | | S | S | 22 02 57.3 | -4.7 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSH | | | | sS | sS | 22 03 32.6 | +8.4 |
| KSH | | | | ScS | ScS | 22 04 35.3 | -7.9 |
| KSH | | | | SS | **SS** | **22 06 56.5** | **-1.0** |
| KSH | | | | PMZ | | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,56nm,5.0s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,140nm,8.8s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,100nm,4.8s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,160nm,6.0s | | | | | | |
| **YAK** | **Yakutsk** | **60.11** | **2** | P | **P** | **21 55 01.6** | **+0.4** |
| | comp=Z,2.7nm,0.4s,baz=180,slow=7.1,SNR=3.0 | | | | | | |
| **YAK** | **Yakutsk** | **60.11** | **2** | *e*P | **P** | **21 55 01.7** | **+0.4** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,2.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,1.0nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **60.11** | **2** | *e*P | **P** | **21 55 02.1** | **+0.8** |
| | comp=E,21nm,0.7s | | | | | | |
| **MA2** | **Magadan** | **60.57** | **14** | *e*P | **P** | **21 55 05.9** | **+1.4** |
| **AAK** | **Ala-Archa** | **61.71** | **319** | P | **P** | **21 55 12.2** | **-0.6** |
| | comp=E,2.2nm,0.8s,baz=162,slow=9.6,SNR=4.5 | | | | | | |
| **AAK** | **Ala-Archa** | **61.71** | **319** | *e*P | **P** | **21 55 12.8** | **0.0** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **61.71** | **319** | *e*P | **P** | **21 55 12.8** | **0.0** |
| | comp=Z,3.1nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.24** | **334** | P | **P** | **21 55 15.4** | **-0.5** |
| | comp=Z,1.2nm,0.5s,baz=134,slow=6.4,SNR=6.6 | | | | | | |
| **KBL** | **Kabul** | **62.61** | **308** | *e*P | **P** | **21 55 18.1** | **-1.0** |
| **KBL** | **Kabul** | **62.61** | **308** | *e*P | **P** | **21 55 18.1** | **-1.0** |
| **KURBB** | **Kurchatov Arra** | **63.29** | **328** | P | **P** | **21 55 22.7** | **-0.3** |
| | comp=Z,6.8nm,0.2s,baz=129,slow=5.7,SNR=14 | | | | | | |
| **KURK** | **Kurchatov** | **63.30** | **328** | P | **P** | **21 55 22.7** | **-0.3** |
| **KURK** | **Kurchatov** | **63.30** | **328** | P | **P** | **21 55 22.7** | **-0.3** |
| **NVS** | **Novosibirsk** | **63.53** | **334** | *e*P | **P** | **21 55 23.0** | **-1.4** |
| NVS | | | | pmax | pmax | | |
| | comp=Z,24nm,1.8s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.5s | | | | | | |
| **SEY** | **Seymchan** | **63.91** | **13** | P | **P** | **21 55 28.0** | **+1.2** |
| | comp=E,1.8nm,0.4s,baz=202,slow=8.7,SNR=8.1 | | | | | | |
| **KKAR** | **Karatay Array** | **64.56** | **318** | *e*P | **P** | **21 55 30.9** | **-0.7** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **64.56** | **318** | *e*P | **P** | **21 55 30.9** | **-0.7** |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **68.87** | **327** | P | **P** | **21 55 58.7** | **0.0** |
| | comp=Z,2.8nm,0.7s,baz=146,slow=9.0,SNR=11 | | | | | | |
| **BRVK** | **Borovoye** | **68.94** | **327** c | *e*P | **P** | **21 55 59.0** | **-0.2** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.7s | | | | | | |
| **BRVK** | **Borovoye** | **68.94** | **327** | *e*P | **P** | **21 55 59.4** | **+0.2** |
| | comp=Z,4.6nm,0.5s | | | | | | |
| **IKOO** | **Kooshah** | **70.21** | **304** | *e*P | **P** | **21 56 07.1** | **-0.7** |
| **IPAY** | **Payeh** | **71.02** | **308** | *e*P | **P** | **21 56 11.4** | **-1.2** |
| **BILL** | **Bilibino** | **71.42** | **15** ⇑ | *e*P | **P** | **21 56 14.3** | **+0.3** |
| BILL | | | | *e* | | 21 56 34.1 | |
| BILL | | | | *e* | | 21 58 55.1 | |
| BILL | | | | *e*PPP | PPP | 22 00 37.2 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **IKRD** | **Kardeh** | **71.47** | **308** | *e*P | P | 21 56 09.4 | -5.9 |
| **ISFR** | **Sfrayin** | **71.93** | **308** | *e*P | **P** | **21 56 17.8** | **-0.3** |
| **GEYT** | **Alibeck** | **72.02** | **309** | P | **P** | **21 56 17.7** | **-0.6** |
| | comp=Z,1.3nm,0.2s,baz=345,slow=17,SNR=9.2 | | | | | | |
| **ABKAR** | **Akbulak array** | **73.57** | **321** | *e*P | **P** | **21 56 26.6** | **-0.6** |
| **AKTO** | **Aktyubinsk** | **75.09** | **322** | P | **P** | **21 56 36.1** | **0.0** |
| | comp=Z,9.3nm,1.0s,baz=94,slow=6.9,SNR=15 | | | | | | |
| **SVE** | **Sverdlovsk** | **75.53** | **329** ⇓ | *e*P | **P** | **21 56 38.6** | **+0.1** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,48nm,1.0s | | | | | | |
| **ARU** | **Arti** | **76.50** | **328** | P | **P** | **21 56 43.5** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=127,slow=20,SNR=4.6 | | | | | | |
| **ARU** | **Arti** | **76.50** | **328** c | *i*P | **P** | **21 56 43.4** | **-0.5** |
| ARU | | | | S | **S** | **22 06 29.4** | **+3.3** |
| ARU | | | | SS | SS | 22 11 29.7 | +8.0 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,47nm,1.7s | | | | | | |
| **ARU** | **Arti** | **76.50** | **328** | *e*P | **P** | **21 56 43.2** | **-0.8** |
| | comp=Z,32nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **81.55** | **173** | P | **P** | **21 57 10.2** | **-1.0** |
| | comp=Z,2.1nm,0.6s,baz=317,slow=6.6,SNR=32 | | | | | | |
| **MAW** | **Mawson** | **81.94** | **200** | P | **P** | **21 57 11.9** | **-1.5** |
| | comp=Z,1.1nm,0.6s,baz=61,slow=10,SNR=3.2 | | | | | | |
| **ZEI** | **Tsey** | **83.43** | **313** | *e*P | **P** | **21 57 21.7** | **-0.3** |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,44nm,0.7s | | | | | | |
| **ATD** | **Arta Tunnel** | **83.55** | **281** | P | **P** | **21 57 22.2** | **-0.8** |
| | comp=Z,9.7nm,1.0s,baz=202,slow=7.8,SNR=4.0 | | | | | | |
| **KIV** | **Kislovodsk** | **84.38** | **314** ⇑ | *e*P | **P** | **21 57 27.1** | **+0.4** |
| KIV | | | | *e* | | 22 00 45.5 | |
| KIV | | | | *e*SS | SS | 22 13 22.5 | +2.2 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,61nm,18.0s | | | | | | |
| **KLMR** | **Klimovskoe** | **87.02** | **331** | *e*P | **P** | **21 57 37.4** | **-1.8** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **OBN** | **Obninsk** | **88.56** | **325** ⇑ | *e*P | **P** | **21 57 45.5** | **-1.2** |
| OBN | | | | *e* | | 22 01 18.7 | |
| OBN | | | | *e*S | **SKSac** | **22 08 07.8** | **-4.2** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,20nm,1.3s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,48nm,12.0s | | | | | | |
| **ASF** | **Jabal al Asfar** | **88.82** | **302** | P | **P** | **21 57 49.5** | **+0.8** |
| | comp=Z,3.2nm,0.9s,baz=90,slow=1.0,SNR=3.5 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **89.42** | **269** | P | **P** | **21 57 51.7** | **-0.3** |
| | comp=Z,4.2nm,1.1s,baz=53,slow=6.1,SNR=4.8 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **89.42** | **269** c | *e*P | **P** | **21 57 54.2** | **+2.2** |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **BRTR** | **Keskin Array B** | **91.16** | **310** | P | **P** | **21 57 57.5** | **-1.9** |
| | comp=Z,1.3nm,0.9s,baz=120,slow=7.5,SNR=5.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **91.16** | **310** c | *e*P | **P** | **21 57 57.7** | **-1.8** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **92.20** | **340** | LR | LR | 22 44 45.6 | |
| | comp=Z,24nm,19.6s,baz=69,slow=39 | | | | | | |
| **AKASG** | **Malin Array Be** | **93.31** | **321** | P | **P** | **21 58 10.2** | **+1.3** |
| | comp=Z,0.3nm,0.4s,baz=71,slow=4.0,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **93.46** | **332** | P | **P** | **21 58 10.2** | **+0.8** |
| | comp=Z,1.8nm,0.9s,baz=64,slow=9.4,SNR=3.3 | | | | | | |
| **FINES** | **FINESS Array B** | **93.46** | **332** | *i* P | P | 21 58 14.8 | +5.4 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **98.04** | **320** | *e*P | **P** | **21 58 29.0** | **-1.5** |
| **KOLS** | **Kolonicke sedl** | **98.04** | **320** | *e*P | **P** | **21 58 29.0** | **-1.5** |
| **VYHS** | **Vyhne** | **100.35** | **320** | *e*P | **Pdif** | **21 58 40.2** | **-0.7** |
| **VYHS** | **Vyhne** | **100.35** | **320** | PDIF | **Pdif** | **21 58 40.2** | **-0.7** |
| **TXAR** | **Lajitas Array** | **122.83** | **53** | PKP | **PKPdf** | **22 03 50.9** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=302,slow=1.7,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **123.40** | **287** | PKP | **PKPdf** | **22 03 51.0** | **-1.2** |
| | comp=Z,0.8nm,0.8s,baz=49,slow=1.7,SNR=4.8 | | | | | | |
| **CFAA** | **Coronel Fontan** | **147.21** | **156** | PKPbc | **PKPdf** | **22 04 37.0** | **+1.3** |
| | comp=Z,0.4nm,0.5s,baz=208,slow=4.9,SNR=3.7 | | | | | | |

**GUC 08 21:55:03.2**±0.6**,34.°07S**×**72.°35W,h20**km±2km**,ML3.7,3D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.43** | **138** ⇓ | *i*P | Pb | 21 55 12.4 | +0.3 |
| CHPI | | | | *i* S | Sb | 21 55 19.1 | +0.9 |
| **NICH** | **Los Niches** | **1.31** | **136** | *e*P | Pb | 21 55 27.2 | 0.0 |
| NICH | | | | *i* S | Sg | 21 55 44.9 | -0.9 |
| **TALC** | **Talca** | **1.45** | **156** | *e*P | Pn | 21 55 28.6 | +0.3 |
| TALC | | | | *i* S | Sb | 21 55 48.7 | +1.1 |
| **ANTU** | **Antumapu** | **1.51** | **71** ⇓ | *i*P | Pb | 21 55 30.4 | -0.2 |
| ANTU | | | | *i* S | Sb | 21 55 50.4 | +0.9 |
| ANTU | | | | AML | AML | 21 55 53.4 | |
| | comp=E,1μm,0.4s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.65** | **67** | *e*P | Pb | 21 55 32.3 | -0.8 |
| CLCH | | | | *i* S | Sb | 21 55 54.7 | +1.1 |
| CLCH | | | | AML | AML | 21 56 06.7 | |
| | comp=E,1μm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **1.67** | **57** ⇓ | *i*P | Pb | 21 55 32.6 | -0.7 |
| PEL | | | | *i* S | Sb | 21 55 55.0 | +1.0 |
| PEL | | | | AML | AML | 21 56 04.0 | |
| | comp=E,2μm,0.6s | | | | | | |

**IDC 08 22:07:29.0**±5.3**,19.°76S**×**177.°25W,h0**km**,mb3.9**/2**, mb1 4.1**/2**,mb1mx3.6**/22**,mbtmp3.9**/2**,Error ellipse: s-maj=286.7km s-min=44.0km az=149.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **45.38** | **256** | P | P | 22 15 49.4 | -0.2 |
| | 1.4nm,0.6s,baz=97,slow=7.9,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.41** | **261** | P | P | 22 15 49.9 | +0.1 |
| | 0.4nm,0.3s,baz=97,slow=7.4,SNR=5.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.70** | **332** | PKP | PKPdf | 22 27 01.3 | -2.8 |
| | 1.0nm,0.6s,baz=40,slow=4.5,SNR=8.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.86** | **314** | PKPbc | PKPdf | 22 27 12.6 | +0.7 |
| | 1.5nm,1.0s,baz=56,slow=1.5,SNR=3.3 | | | | | | |
| **GERES** | **GERESS Array B** | **149.67** | **346** | PKPbc | PKPbc | 22 27 20.8 | 0.0 |
| | 0.7nm,0.8s,baz=19,slow=3.3,SNR=3.5 | | | | | | |

*ISCJB **08** 22:25:57.8±1.4,51.°03N±0.°05×175.°16W±0.°05,h12km±9km, mb3.9/9,Error ellipse: s-maj=8.0km s-min=5.1km az=178.9*

*IDC **08** 22:25:57.2±2.0,51.°41N×175.°06W,h0km,mb3.8/5, mb1 4.0/7,mb1mx3.7/35,mbtmp3.9/7,ML4.0/2,Error ellipse: s-maj=62.8km s-min=23.5km az=178.0*

*NEIC **08** 22:26:00.3,51.°19N×175.°23W,h9km,mb3.7/3, ML3.4(AEIC),After AEIC.*

**ISC 08 22:25:59.7**±2.1**,51.°16N**±0.°09×**175.°20W**±0.°04**, h14**km±12km**,n35,**σ**0.s85**/38**,mb4.1**/9**,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ETKA** | **Kagalaska Isla** | **1.03** | **313** | P | **Pg** | **22 26 19.1** | **-0.5** |
| ETKA | | | | S | **Sb** | **22 26 33.5** | **+0.8** |
| **GSMY** | **Great Sitkin M** | **1.03** | **329** | P | **Pg** | **22 26 19.1** | **-0.5** |
| **GSCK** | **Great Sitkin C** | **1.04** | **325** | P | **Pg** | **22 26 19.3** | **-0.5** |
| **GSTD** | **Great Sitkin T** | **1.07** | **327** | P | **Pg** | **22 26 19.8** | **-0.6** |
| GSTD | | | | S | **Sb** | **22 26 35.2** | **+1.2** |
| **GSTR** | **Great Sitkin T** | **1.08** | **330** | *e*Pg | **Pg** | **22 26 20.0** | **-0.5** |
| **ADAG** | **Mount Adagdak** | **1.20** | **314** | P | **Pb** | **22 26 22.3** | **+0.1** |
| **ATKA** | **Atka Island** | **1.21** | **30** | P | **Pb** | **22 26 21.5** | **-0.9** |
| ATKA | | | | S | **Sb** | **22 26 38.2** | **+0.2** |
| **KOFP** | **Korovin Flat P** | **1.31** | **31** | P | **Pn** | **22 26 24.0** | **+0.4** |
| **KOKL** | **Mount Kliuchef** | **1.32** | **28** | P | **Pn** | **22 26 23.9** | **+0.2** |
| KOKL | | | | S | **Sg** | **22 26 42.8** | **+0.6** |
| **KOWE** | **Korovin West** | **1.34** | **26** | P | **Pn** | **22 26 24.7** | **+0.6** |
| **KIRH** | **Kanaga Island** | **1.40** | **303** | P | **Pn** | **22 26 24.5** | **-0.2** |
| KIRH | | | | S | **Sb** | **22 26 43.9** | **+0.7** |
| **KIKV** | **Kanaga Island** | **1.43** | **301** | P | **Pn** | **22 26 24.9** | **-0.3** |
| **KICM** | **Kanaga Island** | **1.46** | **302** | P | **Pn** | **22 26 25.4** | **-0.2** |
| **TAPA** | **Tanaga Point A** | **1.76** | **293** | P | **Pn** | **22 26 30.3** | **+0.5** |
| **TAFL** | **Tanaga Flats** | **1.79** | **290** | P | **Pn** | **22 26 30.3** | **+0.1** |
| **TAFP** | **Tanaga Falls P** | **1.89** | **294** | P | **Pn** | **22 26 31.6** | **0.0** |
| TAFP | | | | S | **Sn** | **22 26 56.1** | **+0.9** |
| **GAEA** | **Gareloi East** | **2.31** | **287** | P | **Pn** | **22 26 38.3** | **+1.0** |
| **GANE** | **Gareloi Northe** | **2.33** | **288** | P | **Pn** | **22 26 38.3** | **+0.6** |
| **AMKA** | **Amchitka** | **3.46** | **276** | P | **Pn** | **22 26 53.9** | **+0.8** |
| **LSPA** | **Little Sitkin** | **3.97** | **284** | P | **Pn** | **22 27 00.8** | **+0.7** |
| **NIKH** | **Nikolski High** | **4.31** | **63** | P | **Pn** | **22 27 06.2** | **+1.3** |
| **OKCE** | **Okmok Cone E** | **4.88** | **60** | P | **Pn** | **22 27 14.0** | **+1.4** |
| **KDAK** | **Kodiak Island** | **14.68** | **54** | Pn | Pn | 22 29 24.7 | -2.0 |
| | 0.3nm,0.3s,baz=270,slow=9.1,SNR=4.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.72** | **287** | Pn | **Pn** | **22 29 55.4** | **+2.0** |
| | 0.8nm,0.3s,baz=90,slow=16,SNR=3.8 | | | | | | |
| **ILAR** | **Eielson Array** | **20.03** | **36** | P | P | 22 30 28.4 | -3.5 |
| | 0.3nm,0.3s,baz=227,slow=10.0,SNR=7.7 | | | | | | |
| **BOZ** | **Bozeman (W)** | **41.38** | **72** | *e*P | **P** | **22 33 45.6** | **+0.2** |
| | 1.2nm,0.8s | | | | | | |
| **ELK** | **Elko** | **41.87** | **80** | *e*P | **P** | **22 33 51.1** | **+1.6** |
| | 0.7nm,0.5s | | | | | | |
| **RSSD** | **Black Hills** | **46.73** | **69** | *e*P | **P** | **22 34 28.6** | **+0.3** |
| | 1.4nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **48.75** | **299** | P | **P** | **22 34 42.9** | **-1.0** |
| | 0.5nm,0.7s,baz=66,slow=9.3,SNR=6.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.44** | **84** | P | **P** | **22 35 40.0** | **-0.9** |
| | 0.2nm,0.7s,baz=297,slow=6.0,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.92** | **311** | P | P | 22 36 16.9 | -1.7 |
| | 0.6nm,0.4s,baz=47,slow=6.9,SNR=10 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.49** | **322** | P | **P** | **22 36 21.5** | **-0.8** |
| | 0.9nm,0.4s,baz=60,slow=6.0,SNR=8.5 | | | | | | |
| **AAK** | **Ala-Archa** | **68.72** | **312** | *e*P | **P** | **22 37 02.5** | **-0.3** |
| | 1.5nm,0.5s | | | | | | |
| **GEYT** | **Alibeck** | **79.74** | **320** | P | **P** | **22 38 07.1** | **0.0** |
| | 1.6nm,0.7s,baz=28,slow=3.5,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.91** | **3** | PKP | **PKPdf** | **22 44 40.7** | **-1.5** |
| | 0.2nm,0.7s,baz=3.5,slow=2.0,SNR=3.8 | | | | | | |

*IDC **08** 22:51:48.5±1.4,32.°54N×85.°48E,h0km,mb3.3/4, mb1 3.5/7,mb1mx3.3/42,mbtmp3.4/7,ML3.1/1,Error ellipse: s-maj=37.8km s-min=24.5km az=69.0*

*ISCJB **08** 22:51:51.7±0.6,32.°73N±0.°05×85.°7E±0.°2,h33km,mb3.3/4, Error ellipse: s-maj=20.7km s-min=7.3km az=176.0*

**ISC 08 22:51:54.0**±0.8**,32.°68N**±0.°08×**85.°6E**±0.°2**,h35**km**,n15,** σ**1.s03**/15**,mb3.3**/4**,Xizang**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GKN** | **Gorkha** | **4.74** | **190** | *e*P | **Pn** | **22 53 03.6** | **+0.6** |
| | 10nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **4.76** | **177** | *e*P | **Pn** | **22 53 05.0** | **+1.4** |
| **KKN** | **Kakani** | **4.88** | **183** | *e*P | **Pn** | **22 53 06.7** | **+1.6** |
| **PKIN** | **Phulchoki** | **5.09** | **182** | *e*P | **Pn** | **22 53 08.7** | **+0.7** |
| | 11nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **5.10** | **182** | *e*P | **Pn** | **22 53 08.8** | **+0.7** |
| | 8.0nm,0.5s | | | | | | |
| **KOLN** | **Koldanda** | **5.19** | **200** | *e*P | **Pn** | **22 53 09.2** | **-0.1** |
| **RAMN** | **Ramite** | **5.78** | **171** | *e*P | **Pn** | **22 53 17.1** | **-0.3** |
| **ODAN** | **Odare** | **6.01** | **164** | *e*P | **Pn** | **22 53 20.6** | **0.0** |
| **MKAR** | **Makanchi Array** | **14.32** | **351** | Pn | **Pn** | **22 55 13.8** | **-0.3** |
| | baz=168,slow=12,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.56** | **137** | P | **P** | **22 56 06.6** | **-1.3** |
| | baz=320,slow=13,SNR=4.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **18.67** | **346** | P | **P** | **22 56 07.9** | **-0.9** |
| | 0.1nm,0.3s,baz=160,slow=10,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **21.27** | **359** | P | **P** | **22 56 37.2** | **+0.2** |
| | 0.5nm,0.4s,baz=186,slow=10,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **21.83** | **40** | P | **P** | **22 56 45.2** | **+1.9** |
| | 0.7nm,0.8s,baz=211,slow=10,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **70.06** | **131** | P | **P** | **23 03 01.9** | **-0.7** |
| | 0.4nm,0.3s,baz=326,slow=6.5,SNR=2.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.95** | **278** | P | **P** | **23 03 49.1** | **+0.2** |
| | 0.3nm,1.0s,baz=65,slow=5.0,SNR=3.8 | | | | | | |

*NEIC **08** 22:55:37.5,15.°51N×95.°36W,h22km,MD4.2(MEX),After MEX.*

**MEX 08 22:55:37.5**±0.6**,15.°51N**×**95.°36W,h22**km±30km**,MD4.2, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HUIG** | **Huatulco** | **0.77** | **290** | *e*P | Pb | 22 55 50.1 | -2.1 |
| HUIG | | | | *e*S | Sb | 22 55 59.4 | -2.9 |
| **HUIG** | **Huatulco** | **0.77** | **290** | *e*P | Pb | 22 55 50.1 | -2.1 |
| HUIG | | | | *e*S | Sb | 22 55 59.4 | -2.9 |
| **PCIG** | | **2.07** | **84** | *i* P | Pn | 22 56 07.8 | -3.1 |
| PCIG | | | | *e*S | Sn | 22 56 33.0 | -3.1 |
| **PCIG** | | **2.07** | **84** | *i* P | Pn | 22 56 07.8 | -3.1 |
| PCIG | | | | *e*S | Sn | 22 56 33.0 | -3.1 |
| **TGIG** | | **2.49** | **59** | *e*P | Pn | 22 56 15.1 | -1.7 |
| TGIG | | | | *e*S | Sn | 22 56 44.0 | -2.6 |
| **TGIG** | | **2.49** | **59** | *e*P | Pn | 22 56 15.1 | -1.7 |
| TGIG | | | | *e*S | Sn | 22 56 44.0 | -2.6 |
| **PNIG** | **Pinotepa** | **2.81** | **289** | *e*P | Pn | 22 56 19.4 | -1.8 |
| PNIG | | | | *e*S | Sn | 22 56 51.3 | -3.0 |
| **PNIG** | **Pinotepa** | **2.81** | **289** | *e*P | Pn | 22 56 19.4 | -1.8 |
| PNIG | | | | *e*S | Sn | 22 56 51.3 | -3.0 |

*IDC **08** 22:57:10.9±1.4,34.°29S×72.°32W,h0km,mb3.6/2, mb1 3.9/3,mb1mx3.7/21,mbtmp3.6/3,ML3.8/1,MS3.3/1, Ms1 3.4/1,ms1mx2.9/14,Error ellipse: s-maj=52.1km s-min=44.5km az=70.0*

*ISCJB **08** 22:57:13.1±1.8,34.°07S±0.°04×72.°45W±0.°08,h15km±13km, mb3.6/2,Error ellipse: s-maj=10.5km s-min=6.4km az=179.4*

*GUC **08** 22:57:14.3±0.6,34.°08S×72.°31W,h18km±2km,ML3.9*

**ISC 08 22:57:12.4**±2.3**,34.°06S**±0.°05×**72.°34W**±0.°09**,h5**km±13km**, n17,**σ**0.s51**/26**,4C-3D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.43** | **140** ⇓ | *i*P | **Pb** | **22 57 23.1** | **+0.6** |
| CHPI | | | | *i* S | **Sb** | **22 57 29.3** | **0.0** |
| **TACH** | **Talagante** | **1.23** | **71** ⇑ | *i*P | **Pn** | **22 57 36.4** | **+0.1** |
| **NICH** | **Los Niches** | **1.31** | **136** ⇑ | *i*P | **Pn** | **22 57 37.8** | **+0.3** |
| NICH | | | | *i* S | **Sn** | **22 57 55.4** | **0.0** |
| **RCDM** | **Rinconada Maip** | **1.40** | **66** | *e*P | **Pb** | **22 57 39.1** | **0.0** |
| RCDM | | | | *e*S | **Sg** | **22 57 57.3** | **0.0** |
| RCDM | | | | AML | AML | 22 58 01.6 | |
| | comp=N,2μm,0.4s | | | | | | |
| **TALC** | **Talca** | **1.46** | **157** ⇓ | *i*P | **Pg** | **22 57 39.8** | **-0.5** |
| TALC | | | | *i* S | **Sn** | **22 57 58.7** | **-0.1** |
| **ANTU** | **Antumapu** | **1.50** | **71** ⇓ | *i*P | **Pb** | **22 57 40.9** | **+0.1** |
| ANTU | | | | *i* S | **Sg** | **22 58 01.0** | **+0.3** |
| ANTU | | | | AML | AML | 22 58 08.4 | |
| | comp=E,3μm,0.5s | | | | | | |
| **SAN** | **Santiago** | **1.52** | **67** | *e*P | **Pb** | **22 57 41.2** | **0.0** |
| SAN | | | | *e*S | **Sg** | **22 58 01.4** | **0.0** |
| **PCH** | **Pirque** | **1.58** | **74** | *e*P | **Pg** | **22 57 42.5** | **-0.2** |
| **LACH** | **Col Las Americ** | **1.62** | **69** | *e*P | **Pb** | **22 57 42.6** | **-0.3** |
| LACH | | | | *i* S | **Sg** | **22 58 04.9** | **+0.3** |
| **CLCH** | **Cerro Calan** | **1.64** | **67** ⇑ | *i*P | **Pb** | **22 57 43.0** | **-0.2** |
| CLCH | | | | *i* S | **Sg** | **22 58 05.6** | **+0.4** |
| CLCH | | | | AML | AML | 22 58 17.0 | |
| | comp=E,3μm,0.9s | | | | | | |
| **PEL** | **Peldehue** | **1.66** | **57** ⇑ | *i*P | **Pb** | **22 57 43.4** | **0.0** |
| PEL | | | | *i* S | **Sg** | **22 58 05.5** | **-0.1** |
| PEL | | | | AML | AML | 22 58 18.1 | |
| | comp=N,4μm,0.4s | | | | | | |
| **CPUP** | **Villa Florida** | **15.08** | **63** | LR | LR | 23 07 32.1 | |
| | comp=N,122nm,19.1s,baz=192,slow=41 | | | | | | |
| **LPAZ** | **La Paz** | **18.10** | **13** | P | **P** | **23 01 27.3** | **+1.5** |
| | comp=N,0.1nm,0.3s,baz=201,slow=8.8,SNR=8.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.67** | **331** | P | **P** | **23 08 23.4** | **+0.3** |
| | comp=N,0.2nm,0.7s,baz=158,slow=7.8,SNR=1.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.47** | **70** | P | **P** | **23 09 45.8** | **-0.8** |
| | comp=N,1.0nm,0.9s,baz=263,slow=4.7,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **120.59** | **209** | PKP | **PKPdf** | **23 16 04.8** | **-1.1** |
| | comp=N,0.5nm,0.3s,baz=151,slow=1.9,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **154.41** | **32** | PKPbc | **PKPbc** | **23 17 13.4** | **0.0** |
| | comp=N,1.3nm,0.7s,baz=285,slow=2.8,SNR=6.8 | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **23 17 27.8** | **+0.1** |
| | comp=N,0.3nm,0.3s,baz=306,slow=5.9,SNR=3.8 | | | | | | |

**GUC 08 23:09:04.9**±0.6**,34.°72S**×**71.°85W,h35**km±4km**,ML3.5, 2C-2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.35** | **338** ⇓ | *i*P | Pn | 23 09 14.1 | +0.7 |
| CHPI | | | | *i* S | Sn | 23 09 20.1 | +0.5 |
| **ANTU** | **Antumapu** | **1.53** | **42** ⇓ | *i*P | Pn | 23 09 31.8 | +2.1 |
| ANTU | | | | *i* S | Sn | 23 09 52.5 | +4.1 |
| ANTU | | | | AML | AML | 23 09 54.6 | |
| | comp=E,1μm,0.4s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.71** | **40** ⇑ | *i*P | Pn | 23 09 34.4 | +2.1 |
| CLCH | | | | *i* S | Sn | 23 09 58.2 | +5.2 |
| **PEL** | **Peldehue** | **1.84** | **32** ⇑ | *i*P | Pn | 23 09 35.0 | +0.8 |
| PEL | | | | *i* S | Sn | 23 10 01.2 | +4.9 |
| PEL | | | | AML | AML | 23 10 06.0 | |
| | comp=N,699nm,0.4s | | | | | | |

*GCMT **08** 23:32:22.7±0.2,51.°29N×175.°05W,h18km,MW5.2/91, Moment Tensor Solution. s76,c127; s91,c157; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$5.47±.15; $M_{\theta\theta}$-4.83±.11; $M_{\phi\phi}$-0.64±.10; $M_{r\theta}$3.74±.25; $M_{\theta\phi}$-1.72±.07; $M_{\phi r}$2.35±.25; Best double couple: $M_0$7.02100×$10^{16}$ NP1:$\phi_s$63.00000°,δ65.00000°,λ83.00000°. NP2: $\phi_s$258.00000°,δ26.00000°,λ104.00000°. Principal axes: T 7.0820, Plg70.0000°, Azm319.0000°; N -0.1270, Plg6.0000°, Azm65.0000°; P -6.9590, Plg19.0000°, Azm158.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **08** 23:32:22.7,51.°15N×174.°99W,h25km,mb5.0/193, ML4.8(AEIC),After AEIC.*

*MOS **08** 23:32:23.4±1.0,51.°47N×175.°14W,h34km,mb5.2/81, MS4.4/18,Error ellipse: s-maj=6.7km s-min=5.0km az=86.0*

*IDC **08** 23:32:23.1±2.5,51.°44N×175.°08W,h20km±14km,mb4.6/38, mb1 4.8/40,mb1mx4.7/51,mbtmp4.8/40,ML4.6/2,MS4.5/13, Ms1 4.5/13,ms1mx4.3/28,Error ellipse: s-maj=16.6km s-min=8.9km az=173.0*

*ISCJB **08** 23:32:24.4±0.4,51.°39N±0.°03×175.°02W±0.°02,h44km±3km, mb5.0/265,MS4.5/22,Error ellipse: s-maj=5.1km s-min=1.9km az=1.0*

*BJI **08** 23:32:24.8,51.°79N×175.°31W,h42km,mb5.2/64, mB5.2/47,Ms5.0/55,Ms7 4.7/57*

*SZGRF **08** 23:32:29.9,51.°79N×177.°50W,h33km,mb5.0/16(BGR)*

**ISC 08 23:32:26.3**±0.4**,51.°46N**±0.°06×**175.°05W**±0.°03**,h43**km±2km**, h42**km**:pP-P,n998,**σ**1.s09**/1054**,mb5.0**/269**,MS4.5**/23**, 27C-29D,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATKA** | **Atka Island** | **0.92** | **35** | *e*Pn | **Pn** | **23 32 42.2** | **-0.6** |
| **KOFP** | **Korovin Flat P** | **1.01** | **36** | P | **Pn** | **23 32 44.8** | **+0.6** |
| **KOKL** | **Mount Kliuchef** | **1.02** | **31** | P | **Pn** | **23 32 44.7** | **+0.5** |
| **KOWE** | **Korovin West** | **1.04** | **28** | P | **Pn** | **23 32 45.2** | **+0.7** |
| **KONE** | **Korovin Northe** | **1.10** | **31** | P | **Pn** | **23 32 46.2** | **+0.9** |
| **CERAA** | **Semis' Rag'd T** | **3.31** | **280** | P | **Pn** | **23 33 15.4** | **-0.1** |
| **CESW** | **Semis' Southwe** | **3.38** | **280** | P | **Pn** | **23 33 15.8** | **-0.7** |
| **AMKA** | **Amchitka** | **3.53** | **271** | P | **Pn** | **23 33 16.9** | **-1.7** |
| AMKA | | | | S | **Sn** | **23 34 00.0** | **+0.9** |
| **LSPA** | **Little Sitkin** | **4.00** | **280** | P | **Pn** | **23 33 24.7** | **-0.3** |
| LSPA | | | | S | **Sn** | **23 34 11.6** | **+1.1** |
| **LSNW** | **Little Sitkin** | **4.03** | **280** | P | **Pn** | **23 33 24.9** | **-0.6** |
| **LSSA** | **Little Sitkin** | **4.03** | **280** | P | **Pn** | **23 33 24.8** | **-0.7** |
| **NIKH** | **Nikolski High** | **4.10** | **66** | P | **Pn** | **23 33 26.6** | **+0.1** |
| **OKAK** | **Okmok** | **4.61** | **60** | P | **Pn** | **23 33 33.3** | **-0.1** |
| **OKSO** | **Okmok South** | **4.63** | **63** | P | **Pn** | **23 33 34.0** | **+0.3** |
| **OKCE** | **Okmok Cone E** | **4.65** | **62** | P | **Pn** | **23 33 35.1** | **+1.0** |
| **OKTU** | **Okmok Mt. Tuli** | **4.71** | **63** | P | **Pn** | **23 33 35.4** | **+0.6** |
| **MSOM** | **Makushin Julie** | **5.47** | **61** | P | **Pn** | **23 33 46.0** | **+0.8** |
| **MSOM** | **Makushin Julie** | **5.47** | **61** | P | **Pn** | **23 33 46.0** | **+0.8** |
| **MSW** | **Makushin Switc** | **5.60** | **61** | P | **Pn** | **23 33 47.0** | **0.0** |
| **UNV** | **Unalaska Valle** | **5.73** | **62** | P | **Pn** | **23 33 49.7** | **+0.9** |
| **ZRO** | **Akutan Zero** | **6.11** | **61** | P | **Pn** | **23 33 55.5** | **+1.5** |
| **AKGG** | **Akutan Green G** | **6.14** | **60** | P | **Pn** | **23 33 55.0** | **+0.6** |
| **AKUT** | **Akutan** | **6.24** | **61** | *e*Pn | **Pn** | **23 33 57.4** | **+1.7** |
| AKUT | | | | *e*Sn | **Sn** | **23 35 05.3** | **-0.3** |
| **SPIA** | **Saint Paul Isl** | **6.38** | **24** | *e*Pn | Pn | 23 34 01.9 | +4.2 |
| **SMY** | **Shemya** | **6.80** | **285** | *e*P | Pn | 23 33 59.8 | -3.7 |
| **SMY** | **Shemya** | **6.80** | **285** | *e*Pn | Pn | 23 33 59.8 | -3.7 |
| **SSBA** | **Shishaldin** | **7.37** | **59** | P | **Pn** | **23 34 12.2** | **+0.9** |
| **ISLZ** | **Isanotski Laza** | **7.57** | **60** | P | **Pn** | **23 34 16.1** | **+2.0** |
| **FALS** | **False Pass** | **7.78** | **60** | P | **Pn** | **23 34 18.3** | **+1.4** |
| **DT1** | **Dutton Round H** | **8.48** | **59** | P | **Pn** | **23 34 27.1** | **+0.6** |
| **DTNA** | **Dutton South F** | **8.51** | **59** | P | **Pn** | **23 34 27.3** | **+0.4** |
| **SDPT** | **Sand Point** | **9.54** | **60** | P | **Pn** | **23 34 41.0** | **+0.1** |
| **CHGN** | **Chignik** | **10.95** | **57** | *e*Pn | **Pn** | **23 34 59.1** | **-1.0** |
| **GAMB** | **Gambell** | **12.48** | **7** | *e*Pn | **Pn** | **23 35 22.9** | **+1.9** |
| **SII** | **Sitkinak Islan** | **13.27** | **59** | *e*Pn | Pn | 23 35 27.2 | -4.7 |
| **OHAK** | **Old Harbor** | **13.91** | **57** | *e*Pn | **Pn** | **23 35 37.6** | **-3.0** |
| **KDAK** | **Kodiak Island** | **14.43** | **55** | Pn | **Pn** | **23 35 44.8** | **-2.9** |
| | 4.7nm,0.3s,baz=239,slow=5.0,SNR=21 | | | | | | |
| KDAK | | | | Sn | **S** | **23 38 38.9** | **-5.4** |
| | 1.7nm,0.3s,baz=66,slow=23,SNR=6.3 | | | | | | |
| KDAK | | | | LR | LR | 23 42 28.4 | |
| | comp=Z,4μm,18.1s,baz=243,slow=42 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.43** | **55** | *i* P | Pn | 23 35 44.2 | -3.4 |
| **KDAK** | **Kodiak Island** | **14.43** | **55** | Pn | **Pn** | **23 35 44.6** | **-3.0** |
| | 353nm,0.6s,SNR=13 | | | | | | |
| **KDAK** | **Kodiak Island** | **14.43** | **55** | *e*Pn | Pn | 23 35 44.2 | -3.4 |
| KDAK | | | | Sn | **S** | **23 38 38.9** | **-5.4** |
| **SVW2** | **Sparrevohn** | **14.44** | **41** | *e*Pn | **Pn** | **23 35 50.5** | **+2.8** |
| **TNA** | **Tin City** | **14.61** | **12** | *e*Pn | **Pn** | **23 35 48.7** | **-1.3** |
| **RSO** | **Redoubt South** | **15.33** | **45** | *e*Pn | **Pn** | **23 35 58.4** | **-1.2** |
| **BRLK** | **Bradley Lake** | **15.91** | **49** | *e*Pn | **P** | **23 36 08.7** | **-1.3** |
| | 45nm,0.8s | | | | | | |
| **SPU** | **Mount Spurr** | **15.96** | **44** | *e*Pn | **P** | **23 36 10.6** | **0.0** |
| **PET** | **Petropavlovsk** | **16.15** | **286** ⇓ | *i*P | **P** | **23 36 13.4** | **+0.7** |
| PET | | | | *e*S | **Sn** | **23 39 10.1** | **+2.2** |
| PET | | | | pmax | pmax | | |
| | comp=Z,104nm,1.1s | | | | | | |

PET pmax pmax
comp=Z,300nm,16.6s
PET MLR MLR
comp=Z,1μm,19.0s
PET MLR MLR
comp=Z,1μm,17.0s
**PET Petropavlovsk 16.15 286** *e*Pn **Pn 23 36 07.5 -2.5**
comp=Z,128nm,1.2s
**PEA0 Petropavlovsk- 16.72 286** *e*Pn **P 23 36 20.6 +1.6**
**PETK Petropavlovsk- 16.72 286** Pn **Pn 23 36 15.9 -1.3**
comp=Z,2.8nm,0.3s,baz=94,slow=13,SNR=53
PETK LR LR 23 42 17.8
comp=Z,2μm,21.6s,baz=100,slow=36
**PETK Petropavlovsk- 16.72 286** P **Pn 23 36 15.9 -1.3**
PETK pmax pmax
comp=Z,3.0nm,0.3s
PETK MLR MLR
comp=Z,2μm,21.7s
**PPLA Purkeypile 16.76 38** *e*Pn **P 23 36 20.1 +0.6**
comp=Z,178nm,1.4s
**RC01 Rabbit Creek A 16.94 46** *e*Pn **Pn 23 36 20.4 +0.5**
comp=Z,47nm,1.0s
**CAST Castle Rocks 17.09 37** *e*Pn **P 23 36 24.3 +1.3**
comp=Z,51nm,1.0s
**KTH Kantishna Hill 17.60 37** *e*Pn **P 23 36 29.3 +0.6**
comp=Z,150nm,1.1s
**TRF Thorofare Moun 17.79 38** *e*Pn **Pn 23 36 30.6 +0.1**
comp=Z,57nm,0.9s
**SML Sawmill 17.84 44** *e*P **Pn 23 36 30.7 -0.4**
SML pmax pmax
comp=Z,56nm,1.2s
**SML Sawmill 17.84 44** *e*Pn **Pn 23 36 30.6 -0.4**
comp=Z,56nm,1.2s
**BPAW Bear Paw Mtn. 17.88 36** *e*Pn **P 23 36 32.6 +0.9**
comp=Z,71nm,1.0s
BPAW *e*ScP **ScP 23 44 37.8 +0.8**
**RND Reindeer 18.33 39** *e*P **P 23 36 35.8 -0.9**
RND pmax pmax
comp=Z,38nm,0.8s
**RND Reindeer 18.33 39** *e*P **P 23 36 35.8 -0.9**
comp=Z,38nm,0.8s
**MCK McKinley 18.45 38** *e*P **P 23 36 37.1 -0.9**
MCK pmax pmax
comp=Z,46nm,0.9s
**MCK McKinley 18.45 38** *e*P **P 23 36 37.1 -0.9**
comp=Z,46nm,0.9s
**BWN Browne 18.48 37** *e*P **Pn 23 36 40.6 +1.9**
comp=Z,84nm,0.8s
**MLY Manley 18.50 33** *e*P **Pn 23 36 39.7 +0.7**
comp=Z,299nm,2.2s
MLY *e*ScP **ScP 23 44 40.6 +2.2**
**DIV Divide 18.75 48** *e*P **P 23 36 41.5 +0.1**
comp=Z,26nm,0.8s
**KLU Klutina 18.80 46** *e*P **P 23 36 40.8 -1.1**
comp=Z,28nm,1.0s
**BILL Bilibino 18.96 338** *c i*P **Pn 23 36 44.9 +0.4**
BILL *e*S Sn 23 40 03.3 -12
BILL pmax pmax
comp=Z,168nm,1.3s
BILL MLR MLR
comp=Z,2μm,22.0s
**BILL Bilibino 18.96 338** *e*P **Pn 23 36 45.5 +1.0**
comp=Z,143nm,1.1s
**WRH Wood River Hil 19.14 37** *e*P **P 23 36 44.7 -0.8**
comp=Z,61nm,1.1s
**BMRM Bremner River 19.25 49** *e*P **P 23 36 45.8 -1.1**
comp=Z,40nm,0.9s
**MDM Murphy Dome 19.34 35** *e*P **P 23 36 47.3 -0.5**
comp=Z,47nm,0.9s
**COLA College 19.44 36** ⇓ *i*P **Pn 23 36 50.3 +0.1**
COLA pmax pmax
comp=Z,23nm,0.8s
**COLA College 19.44 36** *e*P **Pn 23 36 50.1 -0.1**
comp=Z,47nm,0.8s
**HARP HAARP 19.45 44** *e*P **P 23 36 49.0 0.0**
comp=Z,45nm,0.7s
**PAX Paxson 19.52 42** *e*P **P 23 36 49.5 -0.3**
PAX pmax pmax
comp=Z,28nm,0.9s
**PAX Paxson 19.52 42** *e*P **P 23 36 49.5 -0.3**
comp=Z,28nm,0.9s
**HDA Harding Lake 19.54 38** *e*P **P 23 36 48.4 -1.5**
comp=Z,85nm,0.6s
**IL1 Eielson Array 19.74 37** *e*P **P 23 36 48.9 -3.2**
IL1 *e*ScP **ScP 23 44 42.0 +0.8**
**ILAR Eielson Array 19.74 37** P **P 23 36 50.7 -1.4**
comp=Z,1.9nm,0.3s,baz=243,slow=10,SNR=50
ILAR S **S 23 40 30.0 -2.1**
baz=227,slow=14,SNR=3.9
ILAR ScP **ScP 23 44 42.8 +1.7**
comp=Z,0.0nm,0.3s,baz=246,slow=3.9,SNR=7.1
**COLD Coldfoot 20.02 29** *e*P Pn 23 36 56.7 -0.5
comp=Z,79nm,1.1s
**MA2 Magadan 20.78 306** *i* P **P 23 37 03.2 -0.2**
**SEY Seymchan 20.79 316** P **P 23 37 02.5 -1.0**
comp=Z,15nm,0.9s,baz=104,slow=10,SNR=13
**SEY Seymchan 20.79 316** ⇓ *i*P **P 23 37 03.6 +0.2**
**FYU Fort Yukon 21.24 33** *e*P **P 23 37 08.5 +0.3**
comp=Z,95nm,1.2s
**EGAK Eagle 21.97 40** *e*P **P 23 37 14.8 -1.3**
comp=Z,24nm,0.9s
**DAWY Dawson 22.46 42** *e*P **P 23 37 21.1 -0.3**
comp=Z,24nm,0.8s
DAWY *e*ScP **ScP 23 44 51.0 +3.1**
**KUR Kuril'sk 25.22 270** *e*P **P 23 37 51.1 +3.3**
KUR pmax pmax
comp=Z,91nm,1.6s
KUR pmax pmax
comp=Z,228nm,3.8s
KUR MLR MLR
comp=N,724nm,17.0s
KUR MLR MLR
comp=E,204nm,17.0s
KUR MLR MLR
comp=Z,412nm,17.0s
**WRAK Wrangell Islan 25.30 62** *e*P **P 23 37 51.0 +2.5**
comp=Z,94nm,0.9s
**INK Inuvik 26.06 34** P **P 23 37 55.1 -0.2**
comp=Z,7.8nm,0.6s,baz=256,slow=7.8,SNR=22
INK PcP **PcP 23 41 21.9 +0.2**
comp=Z,2.6nm,0.7s,baz=273,slow=3.6,SNR=5.0
**INK Inuvik 26.06 34** *e*P **P 23 37 55.4 +0.2**
INK 23 41 21.9
INK pmax pmax
comp=Z,18nm,1.0s
**INK Inuvik 26.06 34** *e*P **P 23 37 55.4 +0.2**
comp=Z,18nm,1.0s
INK PcP **PcP 23 41 21.9 +0.2**
**DLBC Dease Lake 26.36 57** P **P 23 37 57.9 -0.2**
comp=Z,28nm,0.9s,baz=279,slow=10,SNR=16
**DLBC Dease Lake 26.36 57** *e*P **P 23 38 00.7 +2.6**
comp=Z,29nm,0.9s
**YUK Yuzh-Kuril'sk 27.05 270** *c i*P **P 23 38 02.8 -1.5**
YUK *i* *PP **pP 23 38 15.2 -0.6**
YUK *i* 23 38 54.7
YUK *i* S **S 23 42 42.8 +3.8**
YUK *i* *SS **sS 23 43 02.5 +4.2**
YUK *i* SS **SnSn 23 43 51.9 +4.1**
YUK pmax pmax
comp=N,196nm,1.6s
YUK pmax pmax
comp=E,118nm,1.6s
YUK pmax pmax
comp=Z,253nm,1.6s
YUK MLR MLR
comp=N,418nm,20.0s
YUK MLR MLR
comp=Z,548nm,20.0s
**YSS Yuzh-Sakhalins 27.64 277** *e*P **P 23 38 10.0 +0.4**
YSS *e**PP **pP 23 38 23.6 +2.4**
YSS *e*S **S 23 42 44.0 -4.3**
YSS pmax pmax
comp=Z,30nm,0.9s
YSS MLR MLR
comp=E,1μm,20.0s
YSS MLR MLR
comp=Z,1μm,20.0s
**YSS Yuzh-Sakhalins 27.64 277** *e*P **P 23 38 10.4 +0.8**
comp=Z,34nm,0.8s
**BBB Bella Bella 28.63 70** P **P 23 38 18.3 -0.1**
comp=Z,12nm,0.8s,baz=285,slow=12,SNR=2.1
BBB LR LR 23 47 55.1
comp=Z,854nm,20.2s,baz=284,slow=32
**ASAJ Asahikawa 29.05 272** LR LR 23 51 12.4
comp=Z,536nm,19.5s,baz=64,slow=39
**ASAJ Asahikawa 29.05 272** *e*P **P 23 38 24.2 +2.0**
comp=Z,54nm,1.1s

**YAK Yakutsk 31.13 311** LR LR 23 51 36.5
comp=Z,2μm,19.1s,baz=96,slow=37
**YAK Yakutsk 31.13 311** *e*P **P 23 38 38.2 -2.1**
YAK *e**PP **pP 23 38 47.1 -4.8**
YAK *e*PPP PPP 23 39 47.1
YAK *e* 23 41 35.0
YAK *e*S S 23 43 35.8 -6.9
YAK *e*SS **SnSn 23 45 31.2 +4.5**
YAK *e* 23 49 06.3
YAK pmax pmax
comp=Z,5.0nm,1.1s
YAK pmax pmax
comp=E,4.0nm,1.1s
YAK pmax pmax
comp=Z,2.0nm,0.3s
YAK smax smax
comp=E,52nm,18.6s
YAK MLR MLR
comp=N,223nm,20.0s
YAK MLR MLR
comp=Z,243nm,19.0s
YAK MLR MLR
comp=E,167nm,18.0s
**HABR Khabarovsk 31.73 285** *e*P **P 23 38 44.5 -1.3**
HABR *e**PP **pP 23 38 57.3 -0.1**
HABR *e* 23 41 34.6
HABR *e*S **S 23 43 51.8 -0.6**
HABR *e* 23 49 11.4
HABR pmax pmax
comp=Z,68nm,1.1s
HABR pmax pmax
comp=E,33nm,1.0s
HABR pmax pmax
comp=N,17nm,1.0s
HABR MLR MLR
comp=Z,868nm,17.0s
**KLR Kul'dur 33.40 288** *e*P P 23 38 55.0 -5.5
KLR *e*S S 23 44 10.5 -7.9
KLR pmax pmax
comp=E,70nm,1.8s
KLR pmax pmax
comp=Z,120nm,1.8s
KLR MLR MLR
comp=Z,800nm,13.0s
**YKA Yellowknife Ar 33.47 47** P **P 23 39 01.3 +0.4**
comp=Z,6.4nm,1.0s,baz=282,slow=9.3,SNR=7.3
YKA PcP **PcP 23 41 41.3 +0.4**
comp=Z,1.3nm,0.6s,baz=281,slow=3.4,SNR=4.4
**YKA Yellowknife Ar 33.47 47** P **P 23 39 01.3 +0.4**
YKA 23 41 41.3
YKA pmax pmax
comp=Z,6.0nm,1.0s
YKA pmax pmax
comp=Z,1.0nm,0.6s
**B05A Bryant 33.67 74** P **P 23 39 02.6 -0.2**
baz=34
**G03D McMinnville, O 34.38 80** P **P 23 39 08.2 -0.8**
baz=34
**LON Longmire 34.53 76** *e*P **P 23 39 11.5 +1.2**
**LON Longmire 34.53 76** *e*P **P 23 39 11.5 +1.2**
**H11N2 WAKE ISLAND Hy 34.70 211** T T 00 15 57.2
baz=18,slow=75,SNR=451
**H11N3 WAKE ISLAND Hy 34.71 211** T T 00 15 57.3
baz=18,slow=75,SNR=516
**H11N1 WAKE ISLAND Hy 34.72 211** T T 00 15 58.1
baz=18,slow=75,SNR=418
**LTY Liberty 34.98 75** *e*P P 23 39 17.7 +3.5
comp=Z,56nm,2.0s
**H04A Detroit Lake 35.30 80** *e*P P 23 39 22.2 +5.2
comp=Z,24nm,1.0s
**G05D Wamic, OR 35.56 78** P **P 23 39 18.0 -1.1**
baz=35
**USRK Ussuriysk Ar. 35.60 280** P **P 23 39 18.9 -0.7**
comp=Z,17nm,0.9s,baz=64,slow=8.7,SNR=16
USRK LR LR 23 54 52.5
comp=Z,544nm,20.5s,baz=33,slow=38
**I04A Tendick Farm, 35.62 81** P **P 23 39 19.7 0.0**
baz=36
**L02D Cave Junction, 35.75 84** P **P 23 39 20.6 -0.3**
baz=36
**H11S1 WAKE ISLAND Hy 35.91 210** T T 00 17 42.4
baz=12
**H11S2 WAKE ISLAND Hy 35.92 210** T T 00 17 35.0
baz=12
**H11S3 WAKE ISLAND Hy 35.92 210** T T 00 17 30.0
baz=12
**HAWA Hanford 36.08 76** *e*P **P 23 39 24.8 +1.2**
comp=Z,21nm,0.7s
**MJAR Matsushiro Arr 36.12 264** P **P 23 39 23.7 -0.4**
comp=Z,12nm,0.8s,baz=53,slow=7.4,SNR=34
MJAR LR LR 23 52 24.5
comp=Z,770nm,21.9s,baz=70,slow=33
**MJAR Matsushiro Arr 36.12 264** P **P 23 39 23.7 -0.4**
MJAR pmax pmax
comp=Z,13nm,0.8s
MJAR MLR MLR
comp=Z,770nm,21.9s
**MAJO Matsushiro 36.12 264** *c i*P **P 23 39 23.7 -0.4**
**MAJO Matsushiro 36.12 264** *e*P **P 23 39 23.6 -0.5**
comp=Z,53nm,1.0s
**MAT Matsushiro 36.12 264** P **P 23 39 23.5 -0.6**
MAT S **S 23 44 59.4 -1.1**
**D08A Wollman Farm, 36.13 74** *e*P **P 23 39 25.4 +1.3**
comp=Z,12nm,0.9s
**VLA Vladivostok 36.23 278** *c i*P **P 23 39 24.8 -0.1**
VLA pmax pmax
comp=Z,99nm,1.4s
**YBH Yreka Blue Hor 36.54 84** P **P 23 39 28.3 +0.6**
comp=Z,4.0nm,1.1s,baz=314,slow=7.7,SNR=5.5
**YBH Yreka Blue Hor 36.54 84** P **P 23 39 28.3 +0.6**
YBH pmax pmax
comp=Z,4.0nm,1.1s
**YBH Yreka Blue Hor 36.54 84** *e*P **P 23 39 29.8 +2.1**
comp=Z,12nm,1.1s
**J05D Fort Rock, OR 36.62 81** P **P 23 39 27.9 -0.5**
baz=36
**M02C Callahan 36.64 85** P **P 23 39 28.2 -0.4**
baz=36
**NEW Newport 36.65 72** P **P 23 39 28.7 +0.2**
comp=Z,7.9nm,0.8s,baz=302,slow=8.3,SNR=13
NEW LR LR 23 52 49.2
comp=Z,460nm,19.3s,baz=302,slow=33
**NEW Newport 36.65 72** P **P 23 39 28.7 +0.2**
NEW pmax pmax
comp=Z,8.0nm,0.8s
NEW MLR MLR
comp=Z,460nm,19.3s
**NEW Newport 36.65 72** P **P 23 39 28.1 -0.4**
baz=37,SNR=8.8
**NEW Newport 36.65 72** *e*P **P 23 39 29.0 +0.6**
comp=Z,21nm,0.9s
**K04D Chiloquin, OR 36.65 82** P **P 23 39 28.0 -0.6**
baz=36
**EDM Edmonton 36.71 62** *e*P **P 23 39 30.0 +1.1**
**EDM Edmonton 36.71 62** *e*P **P 23 39 30.0 +1.1**
comp=Z,89nm,0.6s
**MDJ Mudanjiang 36.86 282** P **P 23 39 29.3 -1.0**
MDJ pP **pP 23 39 37.7 -4.3**
MDJ sP **sP 23 39 44.0 -3.1**
MDJ PP **PnPn 23 40 55.8 +0.8**
MDJ S **S 23 45 12.4 +0.8**
MDJ PMZ
comp=Z,18nm,1.2s
MDJ PMZ
comp=Z,50nm,6.8s
MDJ LN
comp=Z,560nm,18.0s
MDJ LE
comp=Z,960nm,18.0s
MDJ LZ
comp=Z,1μm,19.4s
**N02D Trinity Center 36.97 85** P **P 23 39 31.6 +0.3**
baz=37
**G08A Pilot Rock 36.97 77** *e*P **P 23 39 32.9 +1.5**
comp=Z,6.3nm,0.8s
**MSHR Mys Shultsa 36.98 278** ⇓ *i*P **P 23 39 31.5 +0.3**
**M04C Macdoel 37.06 84** P **P 23 39 32.0 -0.1**
baz=37
**K05A Summer Lake 37.13 82** *e*P **P 23 39 34.4 +1.6**
comp=Z,30nm,0.9s
**I07A Izee 37.26 79** *e*P **P 23 39 34.3 +0.5**
comp=Z,12nm,0.8s
**WDC Whiskeytown Da 37.30 86** *e*P **P 23 39 35.5 +1.5**
WDC pmax pmax
comp=Z,7.0nm,0.9s
**WDC Whiskeytown Da 37.30 86** *e*P **P 23 39 35.5 +1.5**
comp=Z,6.6nm,0.9s

**F10A Beach Ranch, E 37.68 75** *e*pP pP 23 39 56.6 +7.6
F10A *e*S **S 23 45 23.1 -1.2**
**O03D Paynes Creek 37.92 86** P **P 23 39 39.6 +0.2**
baz=38
**MOD Modoc 37.94 83** *e*P **P 23 39 40.6 +1.0**
comp=Z,13nm,0.9s
**WALA Waterton Lakes 38.17 69** *e*P **P 23 39 42.5 +1.0**
comp=Z,21nm,1.0s
**BSMT Bassoo Peak 38.22 71** *e*P **P 23 39 42.6 +0.6**
**J08A Circle Bar Ran 38.28 79** *e*P **P 23 39 43.5 +1.1**
comp=Z,19nm,1.0s
**BLMT Blacktail Moun 38.40 71** *e*P **P 23 39 44.0 +0.6**
**JTMT Jette 38.57 71** *e*P **P 23 39 45.4 +0.6**
**YBMT Yellow Bay 38.67 71** *e*P **P 23 39 46.2 +0.5**
**WVOR Wild Horse Val 38.68 81** *e*P **P 23 39 46.8 +1.0**
WVOR pmax pmax
comp=Z,23nm,0.9s
**WVOR Wild Horse Val 38.68 81** *e*P **P 23 39 46.8 +1.0**
comp=Z,23nm,0.9s
**RES Resolute Bay 38.70 25** PcP **PcP 23 41 57.1 +0.8**
comp=Z,5.1nm,0.7s,baz=228,slow=2.5,SNR=7.3
**SWMT Swartz Lake 38.85 71** *e*P **P 23 39 47.8 +0.6**
**MSO Missoula 39.22 72** P **P 23 39 50.2 -0.1**
baz=39,SNR=9.2
**MSO Missoula 39.22 72** *e*P **P 23 39 50.8 +0.5**
comp=Z,19nm,0.8s
**SLMT Seeley Lake 39.28 71** *e*P **P 23 39 50.7 -0.2**
**CHMT Chamberlain Mo 39.59 71** *e*P **P 23 39 53.4 -0.1**
**BOD Bodaibo 39.80 308** *e*P **P 23 39 51.9 -2.8**
BOD pmax pmax
comp=Z,7.0nm,1.5s
**CN2 Changchun 39.83 283** *e*P **P 23 39 53.7 -1.5**
CN2 *e*S S 23 45 47.8 -8.6
CN2 PMZ
comp=Z,40nm,1.0s
CN2 LN
comp=Z,400nm,17.0s
CN2 LE
comp=Z,900nm,17.0s
CN2 LZ
comp=Z,1μm,19.0s
**MFID Camas Ranch 39.87 78** *e*P **P 23 39 57.6 +1.9**
**CMB Columbia Colle 40.15 88** *e*P **P 23 39 55.7 -2.3**
CMB pmax pmax
comp=Z,6.0nm,0.9s
**CMB Columbia Colle 40.15 88** *e*P **P 23 39 55.7 -2.3**
comp=Z,6.5nm,0.9s
**HRY Holter Researc 40.54 71** *e*P **P 23 40 01.8 +0.7**
**LRM Limekiln Ridge 40.63 72** *e*P **P 23 40 02.2 +0.1**
**HLID Hailey 40.65 77** P **P 23 40 02.4 +0.1**
baz=40,SNR=13
**HLID Hailey 40.65 77** *e*P **P 23 40 03.0 +0.8**
comp=Z,12nm,0.9s
HLID *e*ScP **ScP 23 45 51.5 +2.5**
**BMN Battle Mountai 40.69 82** *e*P **P 23 40 03.3 +0.7**
BMN pmax pmax
comp=Z,9.0nm,0.9s
**BMN Battle Mountai 40.69 82** *e*P **P 23 40 03.3 +0.7**
comp=Z,9.3nm,0.9s
**DLMT Dillon 40.78 73** *e*P **P 23 40 03.8 +0.5**
comp=Z,7.8nm,0.9s
DLMT *e*ScP **ScP 23 45 51.6 +2.2**
**MCMT McKenzie Canyo 40.91 74** *e*P **P 23 40 03.9 -0.5**
comp=Z,10nm,0.7s
**EGMT Eagleton 41.09 68** P **P 23 40 05.4 -0.2**
baz=41,SNR=9.0
**EGMT Eagleton 41.09 68** *e*P **P 23 40 05.8 +0.2**
comp=Z,25nm,0.9s
**KSSKC Sokcho 41.09 274** P **P 23 40 08.1 +2.4**
SNR=7.5
**KSJMJ Jumunjin 41.20 273** P **P 23 40 09.5 +3.0**
SNR=6.4
**BOZ Bozeman (W) 41.21 72** *e*P **P 23 40 06.8 0.0**
BOZ pmax pmax
comp=Z,14nm,0.8s
**BOZ Bozeman (W) 41.21 72** P **P 23 40 06.6 -0.2**
baz=41,SNR=13
**BOZ Bozeman (W) 41.21 72** *e*P **P 23 40 06.8 0.0**
comp=Z,14nm,0.8s
**NV01 Mina Array Sit 41.21 86** *e*P **P 23 40 06.6 -0.4**
NV01 *e*ScP **ScP 23 45 52.8 +1.4**
**NVAR Mina Array Bea 41.21 86** P **P 23 40 07.0 +0.1**
comp=Z,2.7nm,0.8s,baz=291,slow=7.7,SNR=14
NVAR ScP **ScP 23 45 52.9 +1.5**
comp=Z,3.2nm,1.1s,baz=290,slow=3.7,SNR=7.4
**SEHB SEOHWA 41.27 274** P **P 23 40 10.1 +2.9**
SNR=7.1
**KSIJA INJE 41.53 274** P **P 23 40 11.8 +2.4**
SNR=8.4
**KSTBA Taebaek 41.54 272** P **P 23 40 12.6 +3.1**
SNR=7.8
**MTUM Tungsten Hills 41.71 87** *e*P **P 23 40 13.1 +2.1**
**ELK Elko 41.74 81** *e*P **P 23 40 11.7 +0.5**
ELK pmax pmax
comp=Z,8.0nm,0.9s
**ELK Elko 41.74 81** *e*P **P 23 40 11.7 +0.5**
comp=Z,8.1nm,0.9s
**QLMT Earthquake Lak 41.76 73** *e*P **P 23 40 11.2 -0.2**
**KSCWO Cheorwon 41.84 275** P **P 23 40 14.8 +2.9**
SNR=18
**KSCHC Chuncheon 41.85 274** P **P 23 40 14.5 +2.6**
SNR=11
**KSRS Korea Array 41.98 274** P **P 23 40 12.9 0.0**
comp=Z,32nm,1.0s,baz=57,slow=7.7,SNR=50
KSRS LR LR 23 57 09.1
comp=Z,291nm,21.0s,baz=58,slow=35
**KSRS Korea Array 41.98 274** P **P 23 40 12.9 0.0**
KSRS pmax pmax
comp=Z,32nm,1.0s
KSRS MLR MLR
comp=Z,291nm,21.0s
**KS01 Wonju Array Si 41.98 274** *e*P **P 23 40 12.6 -0.3**
**KSAR Wonju Array Be 42.01 274** P **P 23 40 12.9 -0.3**
**KSAR Wonju Array Be 42.01 274** P **P 23 40 12.8 -0.3**
**SNY Shenyang 42.07 282** ⇑ P **P 23 40 13.8 +0.2**
SNY S S 23 46 23.1 -6.6
SNY PMZ
comp=Z,130nm,1.1s
SNY PMZ
comp=Z,490nm,3.5s
SNY LN
comp=Z,650nm,18.4s
SNY LE
comp=Z,350nm,19.6s
SNY LZ
comp=Z,500nm,21.6s
**YMR Madison River 42.13 73** *e*P **P 23 40 14.9 +0.5**
comp=Z,36nm,0.9s
**FFC Flin Flon 42.18 56** *e*P **P 23 40 14.7 +0.3**
FFC pmax pmax
comp=Z,15nm,0.8s
**FFC Flin Flon 42.18 56** *e*P **P 23 40 14.7 +0.3**
comp=Z,15nm,0.8s
**YNR Norris Junctio 42.27 73** *e*P **P 23 40 16.2 +0.6**
comp=Z,44nm,0.9s
**GCMT Greycliff 42.30 71** *e*P **P 23 40 16.0 +0.3**
**YFT Old Faithful 42.33 73** *e*P **P 23 40 17.1 +1.1**
comp=Z,32nm,1.0s
**KSICN Icheon 42.40 274** P **P 23 40 19.1 +2.7**
SNR=5.6
**PKM Peak Mountain 42.48 91** P **P 23 40 17.7 +0.4**
baz=42
**H17A Grant Village 42.51 73** P **P 23 40 17.1 -0.4**
baz=42
**H17A Grant Village 42.51 73** *e*P **P 23 40 17.7 +0.1**
comp=Z,22nm,1.0s
**LKWY Lake 42.52 73** *e*P **P 23 40 16.4 -1.3**
LKWY pmax pmax
comp=Z,33nm,0.9s
**LKWY Lake 42.52 73** *e*P **P 23 40 16.4 -1.3**
comp=Z,33nm,0.9s
**IMW Indian Meadow 42.57 74** *e*P **P 23 40 19.0 +1.0**
comp=Z,20nm,1.0s
**CWC Cottonwood Cre 42.58 88** P **P 23 40 17.6 -0.5**
baz=42
**FLWY Flagg Ranch 42.61 74** *e*P **P 23 40 20.2 +1.9**
comp=Z,34nm,1.0s
**HVU Hansel Valley 42.65 78** *e*P **P 23 40 19.4 +0.8**
HVU pmax pmax
comp=Z,12nm,0.8s
**HVU Hansel Valley 42.65 78** *e*P **P 23 40 19.4 +0.8**
comp=Z,12nm,0.8s
**FXWY Fox Creek 42.66 74** *e*P P 23 40 22.0 +3.2
comp=Z,6.1nm,1.0s
**GRAC Grapevine Rang 42.67 87** P **P 23 40 18.1 -0.6**
baz=42

KSGAH **Ganghwa** 42.74 275 P P 23 40 21.5 +2.4
SNR=8.1
INCN **Inchon** 42.77 274 eP P 23 40 20.9 +1.5
comp=Z,124nm,1.3s
MOOW **Moose Ponds** 42.77 74 eP P 23 40 20.4 +0.8
comp=Z,8.3nm,1.3s
TPAW **Teton Pass** 42.79 75 eP P 23 40 20.5 +0.7
ISA **Isabella** 42.83 89 eP P 23 40 21.0 +1.0
ISA pmax pmax
comp=Z,10.0nm,1.1s
ISA **Isabella** 42.83 89 P P 23 40 19.9 -0.1
baz=43
ISA **Isabella** 42.83 89 eP P 23 40 21.0 +1.0
comp=Z,10.0nm,1.1s
RLMT **Red Lodge** 42.90 72 P P 23 40 20.6 0.0
baz=43,SNR=12
RLMT **Red Lodge** 42.90 72 eP P 23 40 20.9 +0.3
comp=Z,32nm,0.9s
JNU **Nakatsue** 42.91 266 P P 23 40 20.7 0.0
baz=80,slow=11
JNU **Nakatsue** 42.91 266 eP P 23 40 20.6 -0.1
comp=Z,23nm,0.9s
REDW **Red Top Meadow** 42.92 75 eP P 23 40 20.9 0.0
comp=Z,15nm,1.0s
SNOW **Snow King Moun** 42.92 74 eP P 23 40 21.3 +0.4
LOHW **Long Hollow** 42.93 74 eP P 23 40 21.5 +0.6
comp=Z,8.1nm,0.9s
R11A **Troy Canyon, C** 42.95 84 P P 23 40 21.0 -0.1
baz=43,SNR=10
R11A **Troy Canyon, C** 42.95 84 eP P 23 40 21.0 -0.1
comp=Z,14nm,1.0s
DAC **Darwin (Calif)** 42.99 88 eP P 23 40 26.6 +5.2
DAC pmax pmax
comp=Z,6.0nm,0.8s
DAC **Darwin (Calif)** 42.99 88 eP P 23 40 26.6 +5.2
comp=Z,6.1nm,0.8s
BGU **Big Grassy Mou** 42.99 79 eP P 23 40 21.7 +0.4
comp=Z,9.9nm,1.0s
TJN **Taejon** 43.00 273 ceP P 23 40 23.7 +2.4
AHID **Auburn Hatcher** 43.11 76 eP P 23 40 22.2 -0.1
comp=Z,22nm,1.2s
SPUT **South Promonto** 43.12 78 eP P 23 40 21.5 -0.9
comp=Z,10nm,0.9s
MPMC **Manual Prospec** 43.19 88 P P 23 40 22.7 -0.4
baz=43
FURC **Furnace Creek,** 43.33 87 P P 23 40 23.4 -0.4
baz=43
TPNV **Topopah Spring** 43.41 86 eP P 23 40 24.7 0.0
TPNV pmax pmax
comp=Z,20nm,0.9s
TPNV **Topopah Spring** 43.41 86 P P 23 40 24.2 -0.6
baz=43,SNR=9.2
TPNV **Topopah Spring** 43.41 86 eP P 23 40 24.7 0.0
comp=Z,20nm,0.9s
LRMC **Laurel Mountai** 43.44 88 P P 23 40 24.4 -0.5
baz=43
HWUT **Hardware Ranch** 43.49 77 eP P 23 40 27.3 +1.9
comp=Z,12nm,1.1s
DUG **Dugway** 43.56 80 eP P 23 40 26.0 +0.1
DUG pmax pmax
comp=Z,34nm,1.0s
DUG **Dugway** 43.56 80 P P 23 40 25.5 -0.4
baz=43,SNR=13
DUG **Dugway** 43.56 80 eP P 23 40 25.9 +0.1
comp=Z,34nm,1.0s
FOXC **Fox Airport** 43.57 90 eP P 23 40 28.5 +2.6
KSBAR **Backryungdo** 43.66 276 P P 23 40 28.1 +1.6
SNR=14
LAO **LASA Array** 43.83 68 eP P 23 40 24.7 -3.3
comp=Z,19nm,0.8s
CTU **Camp Tracy** 43.91 78 eP P 23 40 29.9 +1.1
comp=Z,17nm,0.9s
BW06 **Boulder Array** 44.04 75 eP P 23 40 29.3 -0.6
comp=Z,34nm,1.0s
DGMT **Dagmar** 44.05 65 P P 23 40 28.9 -0.7
baz=44
DGMT **Dagmar** 44.05 65 eP P 23 40 31.6 +2.0
comp=Z,22nm,0.6s
GSC **Goldstone** 44.10 88 eP P 23 40 30.5 +0.2
GSC pmax pmax
comp=Z,15nm,1.0s
GSC **Goldstone** 44.10 88 P P 23 40 30.5 +0.2
baz=44
GSC **Goldstone** 44.10 88 eP P 23 40 30.5 +0.2
comp=Z,15nm,1.0s
NLU **North Lily Min** 44.15 79 eP P 23 40 31.4 +0.6
comp=Z,21nm,1.1s
BFSC **Mount Baldy Ra** 44.26 90 P P 23 40 30.9 -0.7
baz=44
O16A **Springville** 44.35 79 eP P 23 40 41.7 +9.3
SHPR **Sheep Range** 44.36 85 eP P 23 40 31.3 -1.1
comp=Z,5.7nm,1.1s
MPU **Maple Canyon** 44.39 79 eP P 23 40 32.4 -0.2
comp=Z,34nm,0.8s
A25A **Svangstu Ranch** 44.41 64 P P 23 40 31.8 -0.7
baz=44,SNR=13
TUQ **Turquoise Moun** 44.57 87 P P 23 40 33.7 -0.4
baz=44
HEC **Hector,Ludlow** 44.70 88 P P 23 40 34.7 -0.4
baz=44
CCUT **Cedar City** 44.83 83 eP P 23 40 37.8 +1.5
comp=Z,9.4nm,1.2s
MSU **Marysvale** 44.97 81 eP P 23 40 39.0 +1.7
MSU **Marysvale** 44.97 81 eP P 23 40 39.0 +1.7
A26A **Wade Farm, Ken** 45.03 63 P P 23 40 36.7 -0.7
baz=45
TMUT **Trail Mountain** 45.08 80 eP P 23 40 38.6 +0.3
comp=Z,44nm,0.8s
GMRC **Granite Mounta** 45.16 88 P P 23 40 38.1 -0.6
baz=45
B26A **Jensen Ranch,** 45.20 64 P P 23 40 37.5 -1.3
baz=45
P17A **Butcher Ranch,** 45.26 79 eP P 23 40 41.6 +2.0
comp=Z,13nm,0.9s
LDFC **Landfair** 45.31 87 eP P 23 40 40.6 +0.7
comp=Z,18nm,1.0s
SNDA **J Saunders Pla** 45.36 90 eP P 23 40 46.1 +5.7
PFO **Pinyon Flat Ob** 45.42 90 P P 23 40 40.5 -0.3
baz=45
A27A **Ledoux Ranch,** 45.45 63 P P 23 40 40.1 -0.6
baz=45
BELC **Belle Mtn. Jos** 45.45 89 P P 23 40 41.1 0.0
baz=45
P18A **Preston Nutter** 45.47 79 eP P 23 40 41.7 +0.3
comp=Z,27nm,1.0s
SRU **San Rafael** 45.62 79 eP P 23 40 43.5 +1.1
SRU pmax pmax
comp=Z,19nm,0.8s
SRU **San Rafael** 45.62 79 eP P 23 40 43.5 +1.1
comp=Z,19nm,0.8s
B27A **Peters Farms,** 45.73 63 P P 23 40 42.0 -0.9
baz=46
F25A **Bowman** 45.85 67 P P 23 40 43.6 -0.4
baz=46
IRM **Iron Mountain** 45.88 88 P P 23 40 44.1 -0.2
baz=46
K22A **Casper** 45.93 73 P P 23 40 43.9 -0.9
baz=46
K22A **Casper** 45.93 73 eP P 23 40 44.2 -0.5
comp=Z,10nm,0.9s
C27A **Sayler Ranch,** 45.97 64 P P 23 40 44.2 -0.7
baz=46
A28A **Rude Farm, Bot** 46.01 62 P P 23 40 45.2 0.0
baz=46,SNR=7.7
E26A **Carlson Angus** 46.12 66 P P 23 40 45.5 -0.6
baz=46
B28A **Dugan Ranch, T** 46.21 63 P P 23 40 46.3 -0.4
baz=46
CRR **Carrizo Plain** 46.21 90 eP P 23 40 51.5 +4.7
SWSC **Sam W. Stewart** 46.28 90 P P 23 40 47.9 +0.5
baz=46
IBP **Imperial Bould** 46.28 90 P P 23 40 48.0 +0.4
baz=46
G25A **Newell** 46.29 68 P P 23 40 47.0 -0.4
baz=46
D27A **Center** 46.30 65 P P 23 40 47.0 -0.5
baz=46
F26A **Lodgepole** 46.35 67 P P 23 40 47.5 -0.5
baz=46
O20A **White River Ci** 46.39 77 P P 23 40 48.7 +0.2
baz=46,SNR=12
O20A **White River Ci** 46.39 77 eP P 23 40 48.1 -0.4
comp=Z,29nm,0.8s
YUH **Yuha Desert** 46.40 90 eP P 23 40 49.7 +1.3
PDMCI **Parker Dam,Lak** 46.42 87 P P 23 40 48.8 +0.3
baz=46
H25A **Fruitdale** 46.51 69 P P 23 40 48.7 -0.6
baz=46

Y12C **Blythe** 46.54 88 P P 23 40 49.7 +0.2
baz=46
RSSD **Black Hills** 46.55 70 eP P 23 40 49.8 +0.1
RSSD pmax pmax
comp=Z,8.0nm,0.6s
RSSD **Black Hills** 46.55 70 eP P 23 40 49.8 +0.1
comp=Z,7.9nm,0.6s
A29A **Manning Farm,** 46.57 62 P P 23 40 49.7 +0.1
baz=46,SNR=7.8
E27A **Carson** 46.66 66 P P 23 40 50.1 -0.2
baz=47
G26A **Maurine** 46.71 68 P P 23 40 50.3 -0.4
baz=47,SNR=10
I25A **Rochford** 46.78 70 P P 23 40 51.6 +0.1
baz=47
D28A **Regan** 46.79 64 P P 23 40 50.9 -0.5
baz=47,SNR=8.4
GLA **Glamis** 46.81 89 eP P 23 40 52.4 +0.7
GLA **Glamis** 46.81 89 P P 23 40 52.0 +0.3
baz=47
GLA **Glamis** 46.81 89 eP P 23 40 52.4 +0.7
PV09 **Paradox Valley** 46.85 79 eP P 23 40 53.7 +1.4
MDND **Maddock** 46.96 63 P P 23 40 52.4 -0.2
baz=47
MDND **Maddock** 46.96 63 eP P 23 40 52.9 +0.3
comp=Z,75nm,0.9s
PV10 **Paradox Valley** 46.98 79 eP P 23 40 54.1 +0.9
G27A **Dupree** 47.05 67 P P 23 40 53.3 -0.1
baz=47,SNR=9.1
PV04 **Paradox Valley** 47.06 79 eP P 23 40 53.7 0.0
A30A **Hoffart Farm,** 47.08 61 P P 23 40 53.4 -0.1
baz=47
J25A **Sunshine Ranch** 47.11 70 P P 23 40 53.4 -0.6
baz=47
PV05 **Paradox Valley** 47.13 80 eP P 23 40 54.2 -0.2
I26A **New Underwood** 47.29 69 P P 23 40 55.1 -0.2
baz=47
N23A **Red Feather La** 47.32 74 P P 23 40 55.6 -0.2
baz=47
N23A **Red Feather La** 47.32 74 eP P 23 40 57.1 +1.3
comp=Z,19nm,1.0s
B30A **Myrvik Farm, E** 47.33 62 P P 23 40 55.4 -0.1
baz=47
WUAZ **Wupatki** 47.35 84 P P 23 40 56.4 +0.4
baz=47
WUAZ **Wupatki** 47.35 84 eP P 23 40 56.2 +0.2
comp=Z,15nm,1.1s
H27A **Howes** 47.39 68 P P 23 40 55.8 -0.3
baz=47
D29A **Pettibone, Tap** 47.41 64 P P 23 40 56.1 -0.1
baz=47
PV01 **Paradox Valley** 47.42 79 eP P 23 40 56.2 -0.4
F28A **McLaughlin** 47.42 66 P P 23 40 56.2 -0.1
baz=47
J26A **Sides Ranch, S** 47.58 70 P P 23 40 57.7 +0.1
baz=48
BJI **Beijing** 47.64 284 P P 23 40 58.4 +0.5
BJI S S 23 47 50.4 0.0
BJI PMZ
comp=Z,61nm,0.8s
BJI PMZ
comp=Z,230nm,3.6s
BJI LN
comp=Z,700nm,25.5s
BJI LE
comp=Z,470nm,27.0s
BJI LZ
comp=Z,730nm,24.5s
BJT **Baijiatuau** 47.66 284 eP P 23 40 58.4 +0.3
BJT pmax pmax
comp=Z,50nm,0.8s
BJT **Baijiatuau** 47.66 284 eP P 23 40 58.4 +0.3
comp=Z,50nm,0.8s
ULM **Lac du Bonnet** 47.66 59 P P 23 40 57.6 -0.4
comp=Z,13nm,0.7s,baz=301,slow=7.6,SNR=12
ULM LR LR 00 02 11.1
comp=Z,696nm,20.3s,baz=316,slow=38
ULM **Lac du Bonnet** 47.66 59 eP P 23 40 57.8 -0.2
ULM pmax pmax
comp=Z,51nm,1.4s
ULM **Lac du Bonnet** 47.66 59 eP P 23 40 57.8 -0.2
comp=Z,51nm,1.4s
E29A **Napoleon** 47.67 65 P P 23 40 57.9 -0.2
baz=48
C30A **Mose, Pekin** 47.67 63 P P 23 40 58.2 0.0
baz=48
I27A **Quinn** 47.74 69 P P 23 40 58.8 +0.1
baz=48
G28A **Parade** 47.80 67 P P 23 40 58.9 -0.3
baz=48
D30A **Buchanan** 47.86 64 P P 23 40 59.5 -0.1
baz=48,SNR=5.4
H28A **Mission Ridge** 47.98 67 P P 23 41 00.2 -0.4
baz=48,SNR=6.7
TLY **Talaya** 47.98 304 ciP P 23 40 59.0 -1.5
TLY eS S 23 48 13.1 +18
TLY pmax pmax
comp=Z,18nm,1.0s
TLY MLR MLR
comp=Z,908nm,17.0s
TLY **Talaya** 47.98 304 P P 23 41 00.9 +0.4
SNR=5.9
TLY **Talaya** 47.98 304 eP P 23 41 00.4 -0.1
comp=Z,21nm,1.1s
C31A **Landman Farms,** 48.03 62 P P 23 41 00.8 -0.1
baz=48
MVCO **Mesa Verde** 48.05 80 P P 23 41 01.6 +0.1
baz=48
MVCO **Mesa Verde** 48.05 80 eP P 23 41 01.6 +0.1
comp=Z,19nm,1.3s
M25A **Palm-Egli Farm** 48.13 73 P P 23 41 01.7 -0.2
baz=48
ISCO **Idaho Springs** 48.19 75 eP P 23 41 04.0 +1.4
ISCO pmax pmax
comp=Z,14nm,1.3s
ISCO **Idaho Springs** 48.19 75 P P 23 41 02.3 -0.4
baz=48
ISCO **Idaho Springs** 48.19 75 eP P 23 41 04.0 +1.4
comp=Z,14nm,1.3s
J27A **Elkhorn Farm,** 48.25 70 P P 23 41 02.8 0.0
baz=48
I28A **Midland** 48.29 68 P P 23 41 03.0 0.0
baz=48,SNR=7.6
G29A **Hoven** 48.31 66 P P 23 41 02.9 -0.2
baz=48
ULN **Ulaanbaatar** 48.31 298 ciP P 23 41 02.4 -0.9
ULN pmax pmax
comp=Z,22nm,1.0s
ULN **Ulaanbaatar** 48.31 298 P P 23 41 03.0 -0.3
SNR=9.5
ULN **Ulaanbaatar** 48.31 298 eP P 23 41 02.4 -0.9
comp=Z,20nm,1.0s
B32A **Ashes, Strandq** 48.35 61 P P 23 41 03.1 -0.2
baz=48
H29A **Onida** 48.47 67 P P 23 41 04.2 -0.2
baz=48
J28A **Allard Ranch,** 48.60 69 P P 23 41 05.2 -0.2
baz=48
SONA1 **Songino Array** 48.68 298 eP P 23 41 04.9 -1.2
SONA1 eScP ScP 23 46 25.8 +3.9
SONM **Songino Array** 48.69 298 P P 23 41 05.7 -0.4
comp=Z,14nm,0.9s,baz=53,slow=8.8,SNR=66
SONM PcP PcP 23 42 30.7 -0.1
comp=Z,7.3nm,1.0s,baz=52,slow=3.1,SNR=7.1
SONM ScP ScP 23 46 26.4 +4.5
comp=Z,2.3nm,0.9s,baz=58,slow=3.2,SNR=4.8
SONM **Songino Array** 48.69 298 P P 23 41 05.7 -0.4
SONM 23 42 30.7
SONM pmax pmax
comp=Z,14nm,0.9s
SONM pmax pmax
comp=Z,7.0nm,1.0s
SONM pmax pmax
comp=N,2.0nm,0.9s
S22A **4UR Ranch, Cre** 48.74 78 P P 23 41 06.8 0.0
baz=49
AGMN **Agassiz Nation** 48.77 61 P P 23 41 06.6 0.0
baz=49,SNR=12
AGMN **Agassiz Nation** 48.77 61 eP P 23 41 06.3 -0.3
comp=N,32nm,0.9s
I29A **Vivian Onida** 48.78 68 P P 23 41 06.7 -0.1
baz=49
D32A **Dogwood Acres,** 48.81 63 P P 23 41 07.1 +0.2
baz=49
ZAK **Zakamensk** 48.90 303 eP P 23 41 07.1 -0.6
ZAK e 23 42 31.1
ZAK pmax pmax
comp=Z,35nm,1.2s
ZAK pmax pmax
comp=Z,13nm,1.2s
N26A **Koester Ranch,** 49.00 73 P P 23 41 08.6 +0.1
baz=49
M27A **Reverse DX Ran** 49.06 72 P P 23 41 09.6 +0.6
baz=49
E32A **Braaten, Kindr** 49.10 63 P P 23 41 09.3 +0.2
baz=49
J29A **Okreek** 49.14 68 P P 23 41 09.6 +0.1
baz=49
SUSD **South Dakota S** 49.31 66 P P 23 41 10.6 -0.2
baz=49
B34A **Aery, Baudette** 49.32 60 P P 23 41 10.1 -0.8
baz=49,SNR=19
MOY **Mondy** 49.35 305 eP P 23 41 11.0 -0.2
MOY pmax pmax
comp=Z,28nm,1.5s
D33A **AnnSam, Waubun** 49.46 62 P P 23 41 11.8 -0.1
baz=49
TIA **Tai'an** 49.47 280 ⇑P P 23 41 11.5 -0.6
TIA pP pP 23 41 19.8 -4.4
TIA PMZ
comp=Z,40nm,0.9s
TIA LN
comp=Z,510nm,17.8s
TIA LE
comp=Z,250nm,16.7s
TIA LZ
comp=Z,720nm,20.8s
SDCO **Great Sand Dun** 49.55 77 P P 23 41 12.5 -0.5
baz=49,SNR=6.4
SDCO **Great Sand Dun** 49.55 77 eP P 23 41 15.4 +2.3
comp=Z,11nm,1.1s
J30A **Dallas** 49.67 68 P P 23 41 13.4 -0.2
baz=50
E33A **Westby DABS, E** 49.74 63 P P 23 41 13.7 -0.4
baz=50
M28A **Bar X Bar Ranc** 49.75 71 P P 23 41 14.1 -0.2
baz=50
KBS **Kingsbay** 49.81 358 eP P 23 41 13.9 -0.2
KBS pmax pmax
comp=Z,31nm,0.8s
KBS **Kingsbay** 49.81 358 eP P 23 41 13.9 -0.2
comp=Z,31nm,0.8s
O27A **Beecher Island** 49.84 73 P P 23 41 14.4 -0.6
baz=50
TUC **Tucson** 49.84 87 eP P 23 41 15.5 +0.4
TUC pmax pmax
comp=Z,8.0nm,1.0s
TUC **Tucson** 49.84 87 eP P 23 41 15.5 +0.4
comp=Z,8.2nm,1.0s
D34A **Park Rapids** 49.85 62 P P 23 41 14.3 -0.5
baz=50,SNR=15
HHC **Hu-ho-hao-te** 49.91 288 eP P 23 41 16.1 +0.6
HHC sP sP 23 41 35.5 +2.8
HHC PP PP 23 43 14.1 +3.8
HHC S S 23 48 23.4 +0.9
HHC sS sS 23 48 40.7 -2.0
HHC PMZ
comp=Z,47nm,1.3s
HHC PMZ
comp=Z,190nm,5.2s
HHC LN
comp=Z,530nm,20.4s
HHC LE
comp=Z,490nm,19.0s
HHC LZ
comp=Z,680nm,19.6s
F33A **5 Mile Ranch,** 49.98 64 P P 23 41 15.5 -0.3
baz=50
K30A **Basset** 50.00 69 P P 23 41 16.0 -0.1
baz=50
Q26A **Hugo** 50.01 75 P P 23 41 16.4 +0.1
baz=50
M29A **Burnside Ranch** 50.12 71 P P 23 41 16.8 -0.3
baz=50
J31A **Geddes** 50.13 68 P P 23 41 16.5 -0.5
baz=50,SNR=7.9
H32A **Carlson Farm,** 50.14 66 P P 23 41 16.6 -0.5
baz=50
C35A **Jirik Farms, M** 50.15 60 P P 23 41 16.7 -0.4
baz=50,SNR=7.0
L30A **Spencer Herefo** 50.38 70 P P 23 41 18.7 -0.3
baz=50
H33A **Prehn Over Nor** 50.42 65 P P 23 41 18.9 -0.4
baz=50
SPB5 **Spitsbergen Ar** 50.44 357 eP P 23 41 19.2 +0.3
SPA1 **Spitsbergen Ar** 50.44 357 eP P 23 41 19.2 +0.3
SPB1 **Spitsbergen Ar** 50.44 357 eP P 23 41 19.2 +0.3
SPA0 **Spitsbergen Ar** 50.44 357 eP P 23 41 18.8 -0.2
SPB4 **Spitsbergen Ar** 50.44 357 eP P 23 41 19.2 +0.2
SPA3 **Spitsbergen Ar** 50.44 357 eP P 23 41 18.9 0.0
SPA2 **Spitsbergen Ar** 50.44 357 eP P 23 41 19.0 +0.1
SPB2 **Spitsbergen Ar** 50.44 357 eP P 23 41 19.2 +0.3
R26A **Arlington** 50.45 76 P P 23 41 19.4 -0.3
baz=50
SPB3 **Spitsbergen Ar** 50.45 357 eP P 23 41 19.2 +0.3
D35A **Remer** 50.48 61 P P 23 41 19.1 -0.5
baz=50,SNR=9.2
K31A **O'Neill** 50.53 68 P P 23 41 20.0 -0.1
baz=50
N29A **Votaw Ranch, W** 50.55 71 P P 23 41 20.3 0.0
baz=50
J32A **Parkston** 50.59 67 P P 23 41 20.2 -0.3
baz=50
E35A **Pequot Lakes** 50.60 62 P P 23 41 20.5 0.0
baz=50
T25A **Trinidad** 50.60 77 P P 23 41 20.9 -0.1
baz=50,SNR=9.1
T25A **Trinidad** 50.60 77 eP P 23 41 21.3 +0.3
comp=Z,45nm,1.0s
LAZ **Ladron** 50.71 82 eP P 23 41 22.1 +0.3
C36A **Pine Crest Far** 50.73 60 P P 23 41 21.0 -0.5
baz=51,SNR=8.7
L31A **Butterfield Fa** 50.75 69 P P 23 41 21.9 +0.1
baz=51
ANMO **Albuquerque** 50.77 81 ceP P 23 41 22.0 -0.2
ANMO pmax pmax
comp=Z,3.0nm,1.0s
ANMO **Albuquerque** 50.77 81 eP P 23 41 21.7 -0.5
comp=Z,9.4nm,1.3s
R27A **Eads** 50.85 75 P P 23 41 22.9 +0.2
baz=51
S26A **Kim** 50.87 76 P P 23 41 22.7 -0.1
baz=51
N30A **Hueftle Ranch,** 50.87 71 P P 23 41 22.6 -0.2
baz=51
D36A **Goodland** 50.91 60 P P 23 41 23.2 +0.3
baz=51,SNR=9.7
F35A **Swanville** 50.93 63 P P 23 41 22.8 -0.2
baz=51
Q28A **Sharon Springs** 50.94 74 P P 23 41 23.4 +0.1
baz=51
K32A **Verdigre** 50.96 68 P P 23 41 23.3 -0.1
baz=51
BTO **Baotou** 50.98 289 eP P 23 41 24.2 +0.6
H34A **Spellman Lake,** 50.98 64 P P 23 41 22.8 -0.6
baz=51
Y22D **IRIS PASSCAL I** 51.06 82 P P 23 41 24.2 -0.1
baz=51
ECSD **EROS Data Cent** 51.08 66 P P 23 41 23.7 -0.5
baz=51,SNR=7.4
ECSD **EROS Data Cent** 51.08 66 eP P 23 41 23.2 -0.9
comp=Z,11nm,0.8s
T26A **Comanche Natio** 51.08 77 P P 23 41 23.7 -0.8
baz=51
LPM **Los Pinos Moun** 51.08 82 eP P 23 41 25.9 +1.3
comp=Z,7.2nm,1.2s
C37A **Embarrass** 51.10 59 P P 23 41 23.8 -0.5
baz=51,SNR=11
NJ2 **Nanjing** 51.15 275 eP P 23 41 23.4 -1.4
NJ2 PMZ
comp=Z,20nm,0.8s
DAG **Danmarks Havn** 51.16 7 iP P 23 41 23.2 -1.1
DAG pmax pmax
comp=Z,33nm,1.2s
DAG **Danmarks Havn** 51.16 7 iP P 23 41 23.2 -1.1
comp=Z,21nm,1.2s
M31A **Lambtecht Ranc** 51.19 70 P P 23 41 25.1 0.0
baz=51
BNM **Barren Site** 51.19 82 eP P 23 41 29.8 +4.4
O30A **MW Ranch, Wils** 51.29 72 P P 23 41 25.8 0.0
baz=51
D37A **Cotton** 51.32 60 P P 23 41 25.8 -0.2
baz=51,SNR=6.2
EYMN **Ely** 51.34 59 P P 23 41 25.9 -0.2

baz=51,SNR=10
**EYMN Ely** 51.34 59 *e*P P 23 41 26.1 0.0
comp=Z,26nm,0.9s
**TIY Taiyuan** 51.37 284 *e*P P 23 41 27.8 +1.3
TIY PMZ
comp=Z,62nm,0.6s
TIY PMZ
comp=Z,160nm,8.1s
TIY LN
comp=Z,410nm,13.1s
TIY LE
comp=Z,210nm,10.3s
TIY LZ
comp=Z,670nm,21.1s
**R28A Tribune** 51.41 74 P P 23 41 26.8 0.0
baz=51
**F36A Milaca** 51.51 62 P P 23 41 26.7 -0.6
baz=51,SNR=5.1
**N31A Bailey Ranch,** 51.53 70 P P 23 41 27.0 -0.7
baz=51
**K33A Hardington** 51.55 67 P P 23 41 27.0 -0.8
baz=51
**Q29A Oakley** 51.56 73 P P 23 41 27.8 -0.1
baz=51
**121A Cookes Peak, D** 51.56 84 P P 23 41 28.0 -0.1
baz=51
**121A Cookes Peak, D** 51.56 84 *e*P P 23 41 28.2 +0.1
comp=Z,8.3nm,0.8s
**P30A Selden** 51.58 72 P P 23 41 27.9 -0.1
baz=52
**C38A Sawbill Land.** 51.60 59 P P 23 41 27.3 -0.7
baz=52,SNR=7.8
**BGNE Belgrade** 51.64 69 P P 23 41 28.0 -0.4
baz=52
**BGNE Belgrade** 51.64 69 *e*P P 23 41 28.0 -0.4
comp=Z,64nm,0.8s
**T27A Campo** 51.68 76 P P 23 41 28.8 -0.1
baz=52
**FRB Frobisher Bay** 51.71 33 P P 23 41 28.1 -0.5
comp=Z,15nm,0.6s,baz=315,slow=8.8,SNR=9.2
**FRB Frobisher Bay** 51.71 33 P P 23 41 28.1 -0.5
FRB pmax pmax
comp=Z,15nm,0.6s
**O31A Woolen Ranch,** 51.74 71 P P 23 41 29.3 +0.1
baz=52
**G36A St. Michael** 51.77 63 P P 23 41 29.1 -0.2
baz=52
**S28A Manter** 51.84 75 P P 23 41 30.2 +0.1
baz=52
**Q30A Quinter** 51.95 73 P P 23 41 30.7 -0.1
baz=52
**N32A Stulken Farm,** 51.96 70 P P 23 41 31.0 +0.2
baz=52
**T28A Walsh** 52.01 76 P P 23 41 31.4 0.0
baz=52
**P31A Stockton** 52.11 72 P P 23 41 31.7 -0.2
baz=52
**SPMN St. Paul** 52.30 62 P P 23 41 33.0 -0.3
baz=52
**SPMN St. Paul** 52.30 62 *e*P P 23 41 32.9 -0.3
comp=Z,13nm,0.8s
**L34A Svendsen Farm,** 52.31 68 P P 23 41 33.3 -0.2
baz=52
**CBKS Cedar Bluff** 52.35 73 *e*P P 23 41 34.1 +0.3
CBKS pmax pmax
comp=Z,48nm,0.8s
**CBKS Cedar Bluff** 52.35 73 P P 23 41 33.7 -0.1
baz=52
**CBKS Cedar Bluff** 52.35 73 *e*P P 23 41 34.1 +0.3
comp=Z,48nm,0.8s
**R30A Dighton** 52.37 74 P P 23 41 33.9 0.0
baz=52
**Q31A Ellis** 52.43 72 P P 23 41 34.5 +0.1
baz=52
**U28A Mallet** 52.43 77 P P 23 41 34.6 +0.2
baz=52
**K35A Storm Lake** 52.50 66 P P 23 41 34.7 -0.1
baz=52
**SUMG Summit** 52.63 15 *e*P P 23 41 36.1 +0.2
SUMG pmax pmax
comp=Z,43nm,1.4s
**SUMG Summit** 52.63 15 *i* P P 23 41 36.0 +0.2
comp=Z,10.0nm,0.7s
**SUMG Summit** 52.63 15 *e*P P 23 41 36.1 +0.2
comp=Z,43nm,1.4s
**O33A Hebron** 52.81 70 P P 23 41 36.9 -0.3
baz=53
**V28A Channing** 52.84 77 P P 23 41 37.8 +0.3
baz=53
**Q32A Meitler Ranch,** 52.94 72 P P 23 41 37.8 -0.2
baz=53,SNR=7.6
**N34A Lincoln** 52.96 69 P P 23 41 38.1 -0.1
baz=53
**U29A Oasis Ranch, S** 52.96 76 P P 23 41 38.4 0.0
baz=53
**T30A Plains** 53.02 75 P P 23 41 38.9 +0.2
baz=53
**M35A Neola** 53.03 68 P P 23 41 38.5 -0.2
baz=53
**V29A Stinnett** 53.19 77 P P 23 41 40.1 +0.1
baz=53
**O34A Beatrice** 53.27 69 P P 23 41 40.1 -0.4
baz=53,SNR=5.9
**S31A Mullinville** 53.27 74 P P 23 41 40.5 -0.1
baz=53
**U30A WK&E Inc. Balk** 53.28 75 P P 23 41 41.2 +0.4
baz=53
**HVS Khovu-Aksy** 53.33 308 ⇓ *i* P P 23 41 40.5 -0.4
HVS pmax pmax
comp=Z,45nm,0.8s
**Q33A Connelly Farm,** 53.36 71 P P 23 41 40.2 -1.0
baz=53,SNR=7.7
**N35A Tabor** 53.45 68 P P 23 41 41.5 -0.3
baz=53
**T31A Randall Ranch,** 53.50 74 P P 23 41 41.8 -0.4
baz=53
**S32A Newby Ranch, P** 53.55 73 P P 23 41 42.2 -0.5
baz=53
**P34A Walnut Farm, R** 53.60 70 P P 23 41 42.4 -0.5
baz=54
**MNTX Cornudas Mount** 53.62 83 P P 23 41 42.6 -0.6
baz=54,SNR=12
**MNTX Cornudas Mount** 53.62 83 *e*P P 23 41 43.5 +0.4
comp=Z,11nm,0.9s
**MSTX Muleshoe** 53.69 79 P P 23 41 43.6 -0.2
baz=54
**MSTX Muleshoe** 53.69 79 *e*P P 23 41 43.5 -0.3
comp=Z,30nm,1.1s
**R33A Olander Ranch,** 53.72 72 P P 23 41 43.5 -0.3
baz=54
**AMTX Amarillo** 53.75 78 P P 23 41 43.9 -0.3
baz=54
**AMTX Amarillo** 53.75 78 *e*P P 23 41 45.6 +1.4
comp=Z,25nm,1.3s
**COWI Conover** 53.75 59 *e*P P 23 41 43.1 -0.8
comp=Z,7.8nm,0.5s
**V30A Spur Ranch, Mi** 53.77 76 P P 23 41 44.1 -0.2
baz=54
**T32A Huddler Ranch,** 53.90 74 P P 23 41 45.2 +0.1
baz=54
**Q34A Chapman** 53.94 71 P P 23 41 44.6 -0.8
baz=54,SNR=5.4
**KSU1 Kansas State U** 54.02 70 P P 23 41 45.8 -0.3
baz=54
**KSU1 Kansas State U** 54.02 70 *e*P P 23 41 45.7 -0.3
comp=Z,25nm,0.9s
**X29A Tulia** 54.03 78 P P 23 41 46.0 -0.3
baz=54
**Y28A McKinney Farm,** 54.06 79 P P 23 41 45.8 -0.6
baz=54
**P35A Duane Minner,** 54.09 70 P P 23 41 46.0 -0.5
baz=54
**R34A Isabella, Hill** 54.16 72 P P 23 41 47.2 +0.2
baz=54
**S33A Kaszmaul Farm,** 54.18 73 P P 23 41 47.6 +0.4
baz=54
**O36A Bolckow** 54.31 68 P P 23 41 47.3 -0.8
baz=54
**U32A Winter Ranch,** 54.38 74 P P 23 41 48.5 -0.2
baz=54
**P36A Good Intent, A** 54.50 69 P P 23 41 49.4 -0.1
baz=54
**Q35A Mercer Eighty,** 54.51 70 P P 23 41 49.4 -0.2
baz=54
**X30A Coker Ranch, T** 54.54 77 P P 23 41 49.7 -0.1
baz=54
**W31A Holland Ranch,** 54.61 76 P P 23 41 50.0 -0.4
baz=54
**S34A Willow Spring** 54.64 72 P P 23 41 50.0 -0.6
baz=54
**SFJD Kangerlussuaq** 54.67 23 P P 23 41 49.5 -0.8
comp=Z,21nm,1.0s,baz=335,slow=2.5,SNR=3.9
**SFJD Kangerlussuaq** 54.67 23 *i* P P 23 41 49.7 -0.6
SFJD pmax pmax
comp=Z,33nm,1.1s
**SFJD Kangerlussuaq** 54.67 23 *i* P P 23 41 49.7 -0.6
comp=Z,33nm,1.1s
**R35A Emporia Munici** 54.77 71 P P 23 41 51.0 -0.5
baz=55
**128A Castleberry Fa** 54.78 80 P P 23 41 51.4 -0.3
baz=55
**Q36A Arnold C. Orve** 54.78 70 P P 23 41 51.1 -0.5
baz=55
**Z29A Hungry Hill Ra** 54.83 79 P P 23 41 51.8 -0.2
baz=55
**Y30A Stafford Cattl** 54.91 78 P P 23 41 52.1 -0.5
baz=55
**X31A McDonald Ranch** 54.96 77 P P 23 41 52.4 -0.5
baz=55
**WHN Wuhan** 54.98 277 ⇓ P P 23 41 52.7 -0.4
WHN pP pP 23 42 06.0 +0.7
WHN S S 23 49 33.8 +1.9
WHN LZ
comp=Z,710nm,19.2s
**T34A McClaskey Farm** 55.04 73 P P 23 41 52.3 -1.2
baz=55,SNR=7.8
**228A UT Block 9, Go** 55.06 81 P P 23 41 52.7 -1.1
baz=55
**W32A Sentinel** 55.07 76 P P 23 41 53.1 -0.6
baz=55
**S35A Otter Creek Ra** 55.12 72 P P 23 41 53.2 -0.8
baz=55,SNR=6.4
**129A Stewart Farms,** 55.16 80 P P 23 41 53.9 -0.5
baz=55
**Z30A Sanderson Ranc** 55.16 79 P P 23 41 54.0 -0.5
baz=55
**R36A Gordon, Harris** 55.18 70 P P 23 41 52.9 -1.5
baz=55,SNR=6.6
**V33A Lossen Ranch,** 55.19 74 P P 23 41 54.0 -0.5
baz=55
**JFWS Jewell Farm** 55.19 63 *e*P P 23 41 53.8 -0.6
JFWS pmax pmax
comp=Z,17nm,0.8s
**JFWS Jewell Farm** 55.19 63 *e*P P 23 41 53.8 -0.6
comp=Z,17nm,0.8s
**U34A Anderson Ranch** 55.23 73 P P 23 41 54.6 -0.1
baz=55
**U34A Anderson Ranch** 55.23 73 *e*P P 23 41 54.7 -0.1
comp=Z,30nm,0.8s
**Q37A Longview Farm,** 55.43 69 P P 23 41 55.5 -0.7
baz=55
**T35A Sooner Cattle** 55.52 72 P P 23 41 56.2 -0.7
baz=55
**X32A Elmer** 55.52 76 P P 23 41 56.5 -0.5
baz=55
**W33A Caddo, Fort Co** 55.52 75 P P 23 41 55.7 -1.2
baz=55
**S36A Lake Cedric, C** 55.52 71 P P 23 41 56.2 -0.7
baz=55
**WMOK Wichita Mounta** 55.61 76 *e*P P 23 41 57.3 -0.3
WMOK pmax pmax
comp=Z,15nm,0.9s
**WMOK Wichita Mounta** 55.61 76 *e*P P 23 41 57.3 -0.3
comp=Z,15nm,0.9s
**V34A Guthrie** 55.64 74 P P 23 41 57.1 -0.6
baz=56
**V34A Guthrie** 55.64 74 *e*P P 23 41 57.0 -0.8
comp=Z,22nm,0.8s
**229A Bryant Ranch,** 55.64 80 P P 23 41 57.9 -0.1
baz=56
**SSLB Suanglung** 55.65 266 *e*P P 23 41 56.2 -1.8
comp=Z,73nm,0.9s
**ZAA0 Zalesovo Array** 55.65 315 *e*P P 23 41 56.3 -1.3
**ZALV Zalesovo Beam** 55.65 315 P P 23 41 56.4 -1.1
comp=Z,1.6nm,0.5s,baz=37,slow=6.7,SNR=11
ZALV PcP PcP 23 42 56.8 +0.3
comp=Z,6.1nm,0.9s,baz=46,slow=4.3,SNR=10
**ZALV Zalesovo Beam** 55.65 315 P P 23 41 56.4 -1.1
ZALV 23 42 56.8
ZALV pmax pmax
comp=Z,2.0nm,0.5s
ZALV pmax pmax
comp=Z,6.0nm,0.9s
**Y32A R-V Farms, Ver** 55.71 77 P P 23 41 58.3 0.0
baz=56
**130A Snyder** 55.73 79 P P 23 41 58.2 -0.3
baz=56
**NVS Novosibirsk** 55.74 317 *e*P P 23 41 56.4 -1.8
**Z31A Sharp Cattle R** 55.74 78 P P 23 41 58.3 -0.3
baz=56
**U35A Pawnee** 55.75 73 P P 23 41 58.2 -0.3
baz=56
**T36A Boggs Farm, Ca** 55.80 72 P P 23 41 57.9 -0.9
baz=56
**329A Wagon Wheel Ra** 55.87 81 P P 23 41 59.1 -0.4
baz=56
**W34A Bridge Creek,** 55.89 75 P P 23 41 59.0 -0.5
baz=56
**X33A Lawton** 55.92 76 P P 23 41 58.8 -1.0
baz=56
**XAN Xi'an** 55.94 283 P P 23 41 59.3 -0.6
XAN PP PP 23 44 05.3 +0.6
XAN S S 23 49 39.2 -5.4
XAN sS sS 23 49 59.8 -5.3
XAN PMZ
comp=Z,32nm,1.3s
XAN PMZ
comp=Z,110nm,6.0s
XAN LN
comp=Z,260nm,19.1s
XAN LE
comp=Z,330nm,18.3s
XAN LZ
comp=Z,410nm,18.3s
**S37A Fort Scott** 55.95 71 P P 23 41 59.4 -0.6
baz=56,SNR=7.6
**131A Roby** 56.03 79 P P 23 42 00.2 -0.4
baz=56
**V35A Meyer Ranch, C** 56.09 74 P P 23 42 00.4 -0.6
baz=56
**230A Sterling City** 56.13 80 P P 23 42 00.9 -0.4
baz=56,SNR=8.6
**Z32A Haskell** 56.16 78 P P 23 42 01.3 -0.2
baz=56
**Y33A Hilltop Ranch,** 56.20 76 P P 23 42 01.6 -0.2
baz=56
**X34A Smith Ranch, M** 56.28 75 P P 23 42 01.7 -0.6
baz=56
**TX31 Lajitas Ar. Si** 56.32 84 *e*P P 23 42 02.1 -0.7
**TXAR Lajitas Array** 56.32 84 P P 23 42 02.5 -0.3
comp=Z,3.7nm,0.8s,baz=299,slow=4.9,SNR=16
TXAR ScP ScP 23 46 56.1 +0.9
comp=Z,1.3nm,1.1s,baz=305,slow=4.4,SNR=3.4
**TXAR Lajitas Array** 56.32 84 P P 23 42 02.5 -0.3
TXAR pmax pmax
comp=Z,4.0nm,0.8s
TXAR pmax pmax
comp=N,1.0nm,1.1s
**T37A Cheneyville 18** 56.33 71 P P 23 42 01.8 -0.8
baz=56,SNR=9.4
**U36A Oologah** 56.33 72 P P 23 42 02.5 -0.2
baz=56
**330A Mertzon** 56.42 80 P P 23 42 03.6 +0.1
baz=56
**W35A Tecumseh** 56.48 74 P P 23 42 03.7 -0.1
baz=56
**429A Davenport Ranc** 56.52 82 P P 23 42 03.7 -0.5
baz=56
**ABTX Abilene, Hawle** 56.53 78 P P 23 42 03.6 -0.6
baz=56
**ABTX Abilene, Hawle** 56.53 78 *e*P P 23 42 04.3 +0.1
comp=N,22nm,0.9s
**231A Bronte** 56.59 79 P P 23 42 04.2 -0.4
baz=56
**Z33A Whitaker Ranch** 56.61 77 P P 23 42 04.3 -0.4
baz=56
**V36A Jenks** 56.62 73 P P 23 42 04.2 -0.5
baz=56
**TUL1 Tulsa** 56.62 73 P P 23 42 04.2 -0.5
baz=56
**TUL1 Tulsa** 56.62 73 *e*P P 23 42 04.1 -0.7
comp=N,14nm,0.8s
**529A Stev Forest Ra** 56.66 82 P P 23 42 04.7 -0.5
baz=56
**U37A Salina** 56.69 72 P P 23 42 04.2 -1.0
baz=57,SNR=7.0
**Y34A Reagan Ranch,** 56.76 76 P P 23 42 05.2 -0.6
baz=57,SNR=7.3
**430A Baggett Ranch,** 56.81 81 P P 23 42 05.7 -0.5
baz=57
**W36A Wetumka** 56.88 74 P P 23 42 05.9 -0.7
baz=57
**X35A Drake** 56.94 75 P P 23 42 06.4 -0.6
baz=57
**331A San Angelo** 56.95 80 P P 23 42 06.7 -0.5
baz=57
**133A Hamilton Ranch** 56.98 78 P P 23 42 07.3 -0.1
baz=57
**V37A Hulbert** 57.03 72 P P 23 42 07.2 -0.4
baz=57,SNR=5.0
**232A Coleman** 57.03 79 P P 23 42 07.1 -0.7
baz=57
**Z34A Collier Ranch,** 57.07 76 P P 23 42 07.3 -0.7
baz=57
**U38A Gravette** 57.10 71 P P 23 42 07.2 -0.9
baz=57
**530A J-C Ranch, Com** 57.19 82 P P 23 42 08.2 -0.7
baz=57,SNR=5.9
**X36A Centrahoma** 57.20 74 P P 23 42 08.1 -0.7
baz=57
**Y35A Marietta** 57.23 75 P P 23 42 08.9 -0.2
baz=57
**431A Sonora** 57.27 81 P P 23 42 09.5 0.0
baz=57,SNR=6.6
**HDIL Hopedale** 57.28 65 P P 23 42 08.9 -0.4
baz=57
**HDIL Hopedale** 57.28 65 *e*P P 23 42 08.7 -0.6
comp=N,22nm,0.7s
**W37A Quinton** 57.36 73 P P 23 42 10.2 +0.2
baz=57,SNR=8.9
**233A Rising Star** 57.40 78 P P 23 42 09.9 -0.4
baz=57
**V38A Canehill** 57.48 72 P P 23 42 09.9 -0.9
baz=57,SNR=7.1
**Z35A Perchaven, San** 57.50 76 P P 23 42 10.0 -0.9
baz=57
**134A White-Moore Ra** 57.52 77 P P 23 42 10.7 -0.4
baz=57,SNR=5.6
**LZH Lanzhou** 57.60 289 ⇑ P P 23 42 12.4 +0.5
LZH pP pP 23 42 25.9 +1.7
LZH sP sP 23 42 31.3 +2.1
LZH PP PP 23 44 21.5 +1.9
LZH eS S 23 50 03.2 -3.6
LZH sS sS 23 50 27.2 -0.1
LZH SS SS 23 53 56.6 -0.2
LZH PMZ
comp=N,72nm,1.0s
LZH PMZ
comp=N,260nm,6.3s
LZH LN
comp=N,1μm,15.0s
LZH LE
comp=N,860nm,16.4s
LZH LZ
comp=N,2μm,16.9s
**432A Menard** 57.64 80 P P 23 42 11.7 -0.4
baz=58
**531A Rocksprings** 57.67 81 P P 23 42 11.3 -1.0
baz=58
**Y36A Durant** 57.70 75 P P 23 42 12.0 -0.3
baz=58
**GTA Gaotai** 57.70 294 ⇑ P P 23 42 11.9 -0.6
GTA pP pP 23 42 24.6 -0.2
GTA sP sP 23 42 29.9 +0.1
GTA S S 23 50 03.8 -4.1
GTA sS sS 23 50 25.1 -3.3
GTA SS SS 23 53 55.4 -2.7
GTA PMZ
comp=N,18nm,1.3s
GTA PMZ
comp=N,110nm,5.5s
GTA LN
comp=N,840nm,20.4s
GTA LE
comp=N,990nm,19.5s
GTA LZ
comp=N,1μm,20.4s
**X37A Clayton** 57.77 74 P P 23 42 12.5 -0.4
baz=58,SNR=9.4
**333A Richland Sprin** 57.83 79 P P 23 42 12.8 -0.5
baz=58
**CCM Cathedral Cave** 57.85 68 *e*P P 23 42 11.8 -1.6
CCM pmax pmax
comp=Z,16nm,1.1s
**CCM Cathedral Cave** 57.85 68 *e*P P 23 42 11.8 -1.6
comp=Z,16nm,1.1s
**234A Clairette** 57.88 78 P P 23 42 13.3 -0.4
baz=58
**JCT Junction City** 57.91 80 *e*P P 23 42 14.5 +0.5
JCT pmax pmax
comp=Z,12nm,0.8s
**JCT Junction City** 57.91 80 P P 23 42 13.7 -0.3
baz=58
**JCT Junction City** 57.91 80 *e*P P 23 42 14.5 +0.5
comp=Z,12nm,0.8s
**135A Vickery Place,** 57.94 77 P P 23 42 13.8 -0.3
baz=58
**W38A Poteau** 57.95 73 P P 23 42 13.8 -0.4
baz=58,SNR=9.9
**Z36A Blue Ridge** 58.04 75 P P 23 42 14.3 -0.4
baz=58
**Y37A Hugo** 58.04 74 P P 23 42 14.1 -0.7
baz=58
**X38A Whitesboro** 58.04 73 P P 23 42 14.4 -0.4
baz=58
**532A Rocksprings** 58.09 81 P P 23 42 14.6 -0.6
baz=58
**433A Art** 58.16 79 P P 23 42 15.1 -0.6
baz=58
**631A Perdido Creek** 58.18 82 P P 23 42 15.3 -0.5
baz=58
**334A Lometa** 58.28 78 P P 23 42 15.7 -0.8
baz=58,SNR=14
**WHTX Lake Whitney** 58.30 77 P P 23 42 16.5 -0.1
baz=58
**WHTX Lake Whitney** 58.30 77 *e*P P 23 42 16.0 -0.6
comp=Z,23nm,0.8s
**ARCES ARCESS Array B** 58.38 352 P P 23 42 16.2 -0.4
comp=Z,6.8nm,0.8s,baz=10,slow=8.6,SNR=11
ARCES PcP PcP 23 43 07.3 +0.3
comp=Z,14nm,0.8s,baz=12,slow=6.6,SNR=9.8
**ARCES ARCESS Array B** 58.38 352 P P 23 42 16.2 -0.4
ARCES 23 43 07.3
ARCES pmax pmax
comp=Z,7.0nm,0.8s
ARCES pmax pmax
comp=Z,14nm,0.8s
**SCHQ Schefferville** 58.46 40 P P 23 42 17.1 -0.3
comp=Z,7.3nm,0.8s,baz=312,slow=7.1,SNR=3.5
**632A Uvalde** 58.60 81 P P 23 42 18.3 -0.4
baz=58
**434A Burnet** 58.62 79 P P 23 42 18.3 -0.6
baz=58
**SFIN Scholer Farm** 58.64 63 P P 23 42 18.1 -0.7
baz=58
**SFIN Scholer Farm** 58.64 63 *e*P P 23 42 19.0 +0.2
comp=Z,32nm,1.0s
**533A Kerrville** 58.67 80 P P 23 42 18.7 -0.6
baz=58
**236A Katherine and** 58.86 77 P P 23 42 20.1 -0.4
baz=59
**MIAR Mount Ida** 58.88 72 *e*P P 23 42 19.7 -0.9
MIAR pmax pmax
comp=Z,31nm,0.9s
**MIAR Mount Ida** 58.88 72 P P 23 42 20.1 -0.5
baz=59,SNR=18
**MIAR Mount Ida** 58.88 72 *e*P P 23 42 19.7 -0.9
comp=Z,30nm,0.9s
**LVZ Lovozero** 58.91 347 ⇓ *i* P P 23 42 18.6 -1.8
LVZ pmax pmax
comp=Z,25nm,1.7s
**137A Heron Place, G** 58.91 76 P P 23 42 20.1 -0.8
baz=59
**Z38A Mt. Pleasant** 58.93 75 P P 23 42 20.2 -0.7
baz=59
**Y39A Lockesburg** 58.99 73 P P 23 42 21.0 -0.3
baz=59
**534A Blanco** 59.05 80 P P 23 42 21.6 -0.2
baz=59
**OLIL Olney** 59.20 65 *e*P P 23 42 22.4 -0.4
comp=Z,42nm,0.8s
**PBMO Poplar Bluff** 59.20 69 *e*P P 23 42 21.4 -1.4
comp=Z,14nm,0.8s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 138A | Matatall Enter | 59.27 | 75 | P | P | 23 42 22.8 | -0.6 |
| | baz=59 | | | | | | |
| 237A | Washetta, Mont | 59.30 | 76 | P | P | 23 42 23.1 | -0.4 |
| | baz=59 | | | | | | |
| 832A | Faith Ranch, C | 59.35 | 82 | P | P | 23 42 24.1 | +0.1 |
| | baz=59 | | | | | | |
| APA | Apatity | 59.38 | 348 | eP | P | 23 42 30.0 | +6.4 |
| APA | | | | MLR | MLR | | |
| | comp=Z,800nm,16.0s | | | | | | |
| Z39A | Irene McRaven, | 59.42 | 74 | P | P | 23 42 24.7 | +0.4 |
| | baz=59 | | | | | | |
| UALR | University of | 59.45 | 71 | eP | P | 23 42 24.8 | +0.3 |
| | comp=Z,10nm,0.6s | | | | | | |
| 733A | Divot King Ran | 59.46 | 81 | P | P | 23 42 25.3 | +0.6 |
| | baz=59 | | | | | | |
| 535A | Dale | 59.60 | 79 | P | P | 23 42 25.4 | -0.2 |
| | baz=60 | | | | | | |
| 833A | Chaparral WMA, | 59.68 | 82 | P | P | 23 42 26.6 | +0.4 |
| | baz=60 | | | | | | |
| BLO | Bloomington | 59.79 | 64 | eP | P | 23 42 26.7 | -0.1 |
| BLO | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| BLO | Bloomington | 59.79 | 64 | eP | P | 23 42 26.7 | -0.1 |
| | comp=Z,27nm,1.0s | | | | | | |
| SADO | Sadowa | 59.89 | 55 | eP | P | 23 42 28.0 | +0.5 |
| | comp=Z,42nm,1.3s | | | | | | |
| 635A | Leesville | 59.93 | 80 | P | P | 23 42 28.6 | +0.7 |
| | baz=60 | | | | | | |
| USIN | University of | 59.97 | 66 | eP | P | 23 42 28.0 | -0.1 |
| | comp=Z,51nm,0.8s | | | | | | |
| 438A | Sam Houston St | 60.38 | 77 | P | P | 23 42 31.7 | +0.8 |
| | baz=60 | | | | | | |
| WCI | Wyandotte Cave | 60.57 | 65 | eP | P | 23 42 31.7 | -0.5 |
| WCI | | | | pmax | pmax | | |
| | comp=Z,65nm,0.8s | | | | | | |
| WCI | Wyandotte Cave | 60.57 | 65 | eP | P | 23 42 31.7 | -0.5 |
| | comp=Z,65nm,0.8s | | | | | | |
| SZP | Santa | 60.60 | 261 | eP | P | 23 42 32.7 | +0.1 |
| | comp=Z,66nm,0.6s | | | | | | |
| KURK | Kurchatov | 60.63 | 316 | P | P | 23 42 33.2 | +0.8 |
| KURK | | | | | | 23 43 16.8 | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| KURK | Kurchatov | 60.63 | 316 | P | P | 23 42 32.3 | -0.1 |
| | comp=Z,293nm,0.6s,SNR=12 | | | | | | |
| KURK | Kurchatov | 60.63 | 316 | P | P | 23 42 33.2 | +0.8 |
| KURK | | | | PcP | PcP | 23 43 16.8 | +0.5 |
| HKT | Hockley | 60.72 | 78 | eP | P | 23 42 34.1 | +0.9 |
| HKT | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| HKT | Hockley | 60.72 | 78 | eP | P | 23 42 34.1 | +0.9 |
| | comp=Z,8.4nm,1.2s | | | | | | |
| KURBB | Kurchatov Arra | 60.74 | 316 | P | P | 23 42 33.2 | 0.0 |
| | baz=44,slow=6.7 | | | | | | |
| KURBB | | | | PcP | PcP | 23 43 16.8 | +0.1 |
| | comp=Z,13nm,1.0s,baz=43,slow=5.4,SNR=6.5 | | | | | | |
| 340A | Bronson | 60.87 | 75 | P | P | 23 42 34.5 | +0.2 |
| | baz=61 | | | | | | |
| WVT | Waverly | 61.15 | 67 | eP | P | 23 42 35.6 | -0.6 |
| WVT | | | | pmax | pmax | | |
| | comp=Z,25nm,1.4s | | | | | | |
| WVT | Waverly | 61.15 | 67 | eP | P | 23 42 35.6 | -0.6 |
| | comp=Z,25nm,1.4s | | | | | | |
| CD2 | Chengdu | 61.24 | 284 | P | P | 23 42 36.4 | -0.5 |
| CD2 | | | | pP | pP | 23 42 50.2 | +0.9 |
| CD2 | | | | PP | PP | 23 44 51.3 | -0.5 |
| CD2 | | | | PcS | PcS | 23 47 21.9 | -0.3 |
| CD2 | | | | S | S | 23 50 52.1 | -1.6 |
| CD2 | | | | sS | sS | 23 51 15.7 | +1.3 |
| CD2 | | | | SS | SS | 23 54 53.6 | -0.3 |
| CD2 | | | | PMZ | | | |
| | comp=Z,40nm,0.7s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,180nm,6.2s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,410nm,14.2s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,640nm,18.1s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,380nm,14.7s | | | | | | |
| WMQ | Urumqi | 61.24 | 305 | P | P | 23 42 37.0 | +0.2 |
| WMQ | | | | pP | pP | 23 42 50.0 | +0.8 |
| WMQ | | | | sP | sP | 23 42 54.8 | +0.7 |
| WMQ | | | | PP | PP | 23 44 54.0 | +2.5 |
| WMQ | | | | S | S | 23 50 52.0 | -1.4 |
| WMQ | | | | ScS | SKKSac | 23 52 20.0 | -4.2 |
| WMQ | | | | SS | SS | 23 54 55.0 | +1.7 |
| WMQ | | | | PMZ | | | |
| | comp=Z,45nm,0.9s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,200nm,5.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,870nm,20.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,800nm,20.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,710nm,20.0s | | | | | | |
| OXF | Oxford | 61.37 | 70 | eP | P | 23 42 37.4 | -0.2 |
| OXF | | | | pmax | pmax | | |
| | comp=Z,81nm,0.9s | | | | | | |
| OXF | Oxford | 61.37 | 70 | eP | P | 23 42 37.4 | -0.2 |
| | comp=Z,80nm,0.9s | | | | | | |
| 035A | Encino | 61.47 | 82 | P | P | 23 42 38.6 | +0.2 |
| | baz=61 | | | | | | |
| MKAR | Makanchi Array | 61.79 | 310 | P | P | 23 42 39.6 | -0.8 |
| | comp=Z,10nm,0.5s,baz=51,slow=6.2,SNR=91 | | | | | | |
| MKAR | Makanchi Array | 61.79 | 310 | eP | P | 23 42 39.8 | -0.6 |
| MKAR | Makanchi Array | 61.79 | 310 | eP | P | 23 42 39.8 | -0.6 |
| MK01 | Makanchi Array | 61.81 | 310 | eP | P | 23 42 39.0 | -1.5 |
| MAKZ | Makanchi | 61.93 | 311 | eP | P | 23 42 40.7 | -0.6 |
| MMNY | Mt. Morris Dam | 61.96 | 56 | eP | P | 23 42 42.5 | +1.0 |
| | comp=Z,46nm,1.0s | | | | | | |
| LONY | Lake Ozonia | 62.30 | 52 | eP | P | 23 42 43.7 | -0.1 |
| | comp=Z,37nm,1.3s | | | | | | |
| BVAR | Borovoye Array | 62.31 | 322 | P | P | 23 42 43.7 | -0.1 |
| | comp=Z,9.9nm,0.5s,baz=52,slow=6.1,SNR=7.1 | | | | | | |
| BVAR | | | | PcP | PcP | 23 43 23.9 | +0.8 |
| | comp=Z,20nm,0.8s,baz=45,slow=3.1,SNR=7.8 | | | | | | |
| BVAR | Borovoye Array | 62.31 | 322 | P | P | 23 42 43.7 | -0.1 |
| BVAR | | | | | | 23 43 23.9 | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| BRVK | Borovoye | 62.33 | 322c | iP | P | 23 42 43.9 | +0.1 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | |
| BRVK | Borovoye | 62.33 | 322 | P | P | 23 42 43.0 | -0.8 |
| | comp=Z,98nm,0.5s,SNR=11 | | | | | | |
| BRVK | Borovoye | 62.33 | 322 | P | P | 23 42 44.9 | +1.1 |
| | SNR=5.1 | | | | | | |
| BRVK | Borovoye | 62.33 | 322 | eP | P | 23 42 43.6 | -0.3 |
| | comp=Z,19nm,0.7s | | | | | | |
| BORG | Borgarnes | 62.35 | 12 | P | P | 23 42 43.9 | +0.2 |
| | comp=Z,15nm,1.0s,baz=2.2,slow=3.7,SNR=3.5 | | | | | | |
| BORG | Borgarnes | 62.35 | 12 | P | P | 23 42 43.9 | +0.2 |
| BORG | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| GYA | Guiyang | 62.64 | 279⇑ | iP | P | 23 42 45.5 | -0.9 |
| GYA | | | | pP | pP | 23 43 01.8 | +2.9 |
| GYA | | | | PP | PP | 23 45 07.4 | +3.1 |
| GYA | | | | sS | sS | 23 51 33.0 | +0.7 |
| GYA | | | | SS | SS | 23 55 15.5 | -0.5 |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,130nm,5.6s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,510nm,18.2s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,460nm,17.8s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,480nm,17.6s | | | | | | |
| SVE | Sverdlovsk | 62.76 | 329 | eP | P | 23 42 46.7 | +0.1 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=Z,886nm,17.0s | | | | | | |
| SWET | Sewanee | 62.89 | 67 | eP | P | 23 42 45.6 | -2.3 |
| | comp=Z,42nm,1.6s | | | | | | |
| MCWV | Mont Chateau | 63.13 | 60 | eP | P | 23 42 50.0 | +0.7 |
| | comp=Z,17nm,0.9s | | | | | | |
| TZTN | Tazewell | 63.30 | 64 | eP | P | 23 42 50.4 | -0.2 |
| | comp=Z,18nm,0.9s | | | | | | |
| BINY | Binghamton | 63.33 | 55 | eP | P | 23 42 51.5 | +0.8 |
| | comp=Z,123nm,1.3s | | | | | | |
| SSPA | Standing Stone | 63.47 | 58 | eP | P | 23 42 51.7 | +0.1 |
| | comp=Z,125nm,0.9s | | | | | | |
| CPCT | Cooper Cave | 63.53 | 66 | eP | P | 23 42 51.0 | -1.1 |
| ACCN | Adirondack Com | 63.65 | 53 | eP | P | 23 42 52.9 | +0.2 |
| | comp=Z,18nm,1.2s | | | | | | |
| ARU | Arti | 63.74 | 330 | P | P | 23 42 53.4 | +0.3 |
| | comp=Z,0.3nm,0.3s,baz=18,slow=19 | | | | | | |
| ARU | Arti | 63.74 | 330d | iP | P | 23 42 53.5 | +0.3 |
| ARU | | | | | | 23 43 28.3 | |
| ARU | | | | PPP | PPP | 23 46 42.2 | |
| ARU | | | | S | S | 23 51 26.1 | +1.9 |
| ARU | | | | SS | SS | 23 55 32.6 | +1.1 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| ARU | | | | MLR | MLR | | |
| | comp=Z,688nm,19.0s | | | | | | |
| ARU | Arti | 63.74 | 330 | P | P | 23 42 53.7 | +0.6 |
| | comp=Z,113nm,0.6s,SNR=8.5 | | | | | | |
| ARU | Arti | 63.74 | 330 | eP | P | 23 42 52.8 | -0.3 |
| | comp=Z,12nm,0.6s | | | | | | |
| TKL | Tuckaleechee C | 63.81 | 65 | P | P | 23 42 53.9 | 0.0 |
| | comp=Z,17nm,1.2s,baz=307,slow=1.5,SNR=6.8 | | | | | | |
| TKL | Tuckaleechee C | 63.81 | 65 | P | P | 23 42 53.9 | 0.0 |
| TKL | | | | pmax | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | |
| TKL | Tuckaleechee C | 63.81 | 65 | eP | P | 23 42 53.8 | -0.1 |
| LBNH | Lisbon | 63.88 | 51 | eP | P | 23 42 54.6 | +0.3 |
| LBNH | | | | pmax | pmax | | |
| | comp=Z,456nm,2.8s | | | | | | |
| LBNH | Lisbon | 63.88 | 51 | eP | P | 23 42 54.5 | +0.3 |
| | comp=Z,456nm,2.8s | | | | | | |
| PKME | Peaks-Kenny Pk | 64.39 | 49 | eP | P | 23 42 56.8 | -0.7 |
| | comp=Z,31nm,1.1s | | | | | | |
| BLA | Blacksburg | 64.57 | 62 | eP | P | 23 42 58.7 | -0.2 |
| BLA | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | |
| BLA | Blacksburg | 64.57 | 62 | eP | P | 23 42 58.7 | -0.2 |
| | comp=Z,24nm,0.9s | | | | | | |
| KLMR | Klimovskoe | 64.66 | 342 | eP | P | 23 42 56.6 | -2.4 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| MVL | Millersville | 64.74 | 57 | eP | P | 23 43 01.0 | +1.1 |
| | comp=Z,9.3nm,1.0s | | | | | | |
| LUPA | Lehigh Univers | 64.81 | 56 | eP | P | 23 43 01.4 | +1.0 |
| | comp=Z,27nm,0.8s | | | | | | |
| ODNJ | Ogdensburg | 64.86 | 55 | eP | P | 23 43 01.4 | +0.8 |
| | comp=Z,26nm,1.0s | | | | | | |
| SDMD | Soldier's Deli | 64.91 | 58 | eP | P | 23 43 01.6 | +0.5 |
| | comp=Z,14nm,0.9s | | | | | | |
| BRNJ | Basking Ridge | 65.17 | 55 | eP | P | 23 43 03.4 | +0.7 |
| | comp=Z,49nm,0.9s | | | | | | |
| CPNY | Central Park | 65.40 | 55 | eP | P | 23 43 05.0 | +0.8 |
| | comp=Z,33nm,0.9s | | | | | | |
| KMSC | Kings Mountain | 65.56 | 64 | P | P | 23 43 05.2 | -0.2 |
| | baz=65,SNR=9.4 | | | | | | |
| KMSC | Kings Mountain | 65.56 | 64 | eP | P | 23 43 05.1 | -0.2 |
| | comp=Z,28nm,1.0s | | | | | | |
| GOGA | Godfrey | 65.60 | 67 | eP | P | 23 43 05.0 | -0.6 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,17nm,0.9s | | | | | | |
| GOGA | Godfrey | 65.60 | 67 | eP | P | 23 43 05.0 | -0.6 |
| | comp=Z,17nm,0.9s | | | | | | |
| URVA | University of | 65.88 | 60 | eP | P | 23 43 08.1 | +0.7 |
| KMI | Kunming | 66.03 | 281 | P | P | 23 43 08.6 | -0.2 |
| KMI | | | | pP | pP | 23 43 23.6 | +2.3 |
| KMI | | | | sP | sP | 23 43 28.5 | +2.3 |
| KMI | | | | PP | PP | 23 45 34.4 | +0.3 |
| KMI | | | | S | S | 23 51 51.5 | -2.2 |
| KMI | | | | PMZ | | | |
| | comp=Z,11nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,190nm,6.8s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,320nm,17.7s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,290nm,17.7s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,250nm,17.7s | | | | | | |
| QIZ | Qiongzhong | 66.11 | 271 | P | P | 23 43 08.7 | -0.4 |
| QIZ | | | | S | S | 23 51 55.8 | +1.5 |
| QIZ | | | | SS | SS | 23 56 10.1 | -0.1 |
| QIZ | | | | LZ | | | |
| | comp=Z,180nm,21.8s | | | | | | |
| FINES | FINESS Array B | 66.19 | 349 | P | P | 23 43 08.2 | -0.7 |
| | comp=Z,3.7nm,0.6s,baz=18,slow=7.1,SNR=16 | | | | | | |
| FINES | FINESS Array B | 66.19 | 349 | P | P | 23 43 08.2 | -0.7 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| JSC | Jenkinsville | 66.23 | 65 | eP | P | 23 43 10.0 | +0.4 |
| JSC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | |
| JSC | Jenkinsville | 66.23 | 65 | eP | P | 23 43 10.0 | +0.4 |
| | comp=Z,12nm,0.7s | | | | | | |
| NHSC | New Hope | 67.70 | 65 | eP | P | 23 43 19.8 | +0.8 |
| | comp=Z,103nm,1.3s | | | | | | |
| NB2 | NORSAR Subarra | 67.74 | 357 | P | P | 23 43 18.0 | -0.9 |
| | comp=Z,25nm,1.2s,baz=5.0,slow=6.5 | | | | | | |
| NB2 | NORSAR Subarra | 67.74 | 357 | P | P | 23 43 18.0 | -0.9 |
| | baz=5.0,slow=6.5 | | | | | | |
| NOA | NORSAR Array B | 67.74 | 357 | P | P | 23 43 18.6 | -0.3 |
| | comp=Z,12nm,0.9s,baz=3.0,slow=6.3,SNR=21 | | | | | | |
| NOA | | | | LR | LR | 00 13 09.2 | |
| | comp=Z,156nm,20.3s,baz=355,slow=36 | | | | | | |
| NOA | NORSAR Array B | 67.74 | 357 | P | P | 23 43 18.6 | -0.3 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,156nm,20.3s | | | | | | |
| NBO02 | NORSAR Array S | 67.74 | 357 | eP | P | 23 43 19.2 | +0.3 |
| AAK | Ala-Archa | 68.59 | 312 | P | P | 23 43 25.3 | +0.7 |
| | comp=Z,23nm,0.7s,baz=112,slow=3.5,SNR=58 | | | | | | |
| AAK | Ala-Archa | 68.59 | 312c | iP | P | 23 43 24.8 | +0.2 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,62nm,0.7s | | | | | | |
| AAK | Ala-Archa | 68.59 | 312 | P | P | 23 43 25.9 | +1.3 |
| | comp=Z,209nm,0.6s,SNR=10 | | | | | | |
| AAK | Ala-Archa | 68.59 | 312 | P | P | 23 43 25.6 | +1.0 |
| | SNR=6.1 | | | | | | |
| AAK | Ala-Archa | 68.59 | 312 | eP | P | 23 43 25.6 | +1.0 |
| | comp=Z,25nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 68.94 | 327 | P | P | 23 43 27.1 | +0.6 |
| | comp=Z,11nm,0.5s,baz=55,slow=6.5,SNR=57 | | | | | | |
| AKTO | Aktyubinsk | 68.94 | 327 | P | P | 23 43 27.1 | +0.6 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,11nm,0.5s | | | | | | |
| SWI | Sorong | 68.97 | 240 | P | P | 23 43 25.0 | -2.1 |
| | comp=Z,51nm,1.1s,comp=Z,1µm | | | | | | |
| VSU | Vasula | 69.00 | 348⇑ | iP | P | 23 43 26.1 | -0.6 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,70nm,1.0s | | | | | | |
| KONO | Kongsberg | 69.19 | 357 | eP | P | 23 43 28.5 | +0.7 |
| KONO | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| KONO | Kongsberg | 69.19 | 357 | eP | P | 23 43 28.5 | +0.7 |
| | comp=Z,19nm,1.0s | | | | | | |
| ABKAR | Akbulak array | 69.26 | 325 | eP | P | 23 43 28.7 | +0.2 |
| LSA | Lhasa | 69.60 | 292 | P | P | 23 43 32.2 | +0.7 |
| LSA | | | | PMZ | | | |
| | comp=Z,92nm,1.1s | | | | | | |
| LSA | Lhasa | 69.60 | 292 | eP | P | 23 43 32.4 | +0.9 |
| LSA | Lhasa | 69.60 | 292 | eP | P | 23 43 32.4 | +0.9 |
| | comp=Z,129nm,1.1s | | | | | | |
| KKAR | Karatay Array | 70.03 | 315 | eP | P | 23 43 32.8 | -0.5 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| KKAR | Karatay Array | 70.03 | 315 | eP | P | 23 43 32.8 | -0.5 |
| | comp=Z,18nm,0.6s | | | | | | |
| PMOR | Pomariorio Ree | 70.29 | 152 | eT | T | 01 00 44.2 | |
| | comp=Z,4.8nm,0.2s | | | | | | |
| KSH | Kashi | 70.30 | 309 | P | P | 23 43 38.8 | +3.6 |
| KSH | | | | epP | pP | 23 43 51.8 | +3.9 |
| KSH | | | | esP | sP | 23 43 56.9 | +4.1 |
| KSH | | | | S | S | 23 52 46.3 | +2.2 |
| KSH | | | | SS | SS | 23 57 21.9 | +7.8 |
| KSH | | | | PMZ | | | |
| | comp=Z,38nm,0.7s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,280nm,4.7s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,180nm,6.3s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,530nm,15.5s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,570nm,21.1s | | | | | | |
| OBN | Obninsk | 70.58 | 341⇓ | eP | P | 23 43 35.9 | -0.6 |
| OBN | | | | e | | 23 46 12.4 | |
| OBN | | | | eS | SKiKP | 23 53 25.0 | +9.2 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,270nm,17.0s | | | | | | |
| OBN | Obninsk | 70.58 | 341 | eP | P | 23 43 36.2 | -0.3 |
| | comp=Z,8.2nm,0.6s | | | | | | |
| NONG | Nongkai | 71.02 | 275 | P | P | 23 43 39.7 | 0.0 |
| | comp=Z,53nm,0.8s,comp=Z,10µm | | | | | | |
| CRAI | Chiangrai | 71.11 | 279 | P | P | 23 43 34.3 | -6.0 |
| | comp=Z,127nm,1.5s | | | | | | |
| MYLDM | Lahad Datu | 71.40 | 254 | eP | P | 23 43 43.4 | +1.4 |
| MYLDM | | | | epP | pP | 23 43 55.2 | +0.6 |
| UBPT | Khong Chiam | 71.66 | 272 | P | P | 23 43 43.7 | +0.1 |
| | comp=Z,23nm,1.2s | | | | | | |
| CMAI | Chiengmai2 | 72.16 | 280 | P | P | 23 43 50.5 | +3.8 |
| | comp=Z,249nm,0.7s,comp=Z,15µm | | | | | | |
| PPT2 | Papeete2 | 72.28 | 154 | eS | S | 23 53 09.6 | +2.7 |
| | comp=Z,756nm,26.5s | | | | | | |
| PPT2 | Papeete2 | 72.28 | 154 | eLR | LR | 00 05 59.2 | |
| | comp=Z,686nm,21.5s,baz=348 | | | | | | |
| DLV | T Lat | 72.32 | 267 | eP | P | 23 43 47.3 | -0.4 |
| | comp=Z,16nm,1.0s | | | | | | |
| LPSR | Galich'ya Gora | 72.44 | 339 | eP | P | 23 43 47.2 | -0.5 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,4.0nm,1.2s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.7s | | | | | | |
| PHRA | Phrae | 72.50 | 278 | P | P | 23 43 49.0 | +0.4 |
| | comp=E,115nm,0.7s,comp=E,20µm | | | | | | |
| KHON | Khomkaen | 72.52 | 274 | P | P | 23 43 49.7 | +1.0 |
| | comp=E,17nm,1.0s | | | | | | |
| LOEI | Loei | 72.60 | 276 | P | P | 23 43 47.2 | -2.0 |
| | comp=E,26nm,0.8s | | | | | | |
| UTTA | Uttaradit | 72.87 | 277 | P | P | 23 43 50.7 | -0.1 |
| | comp=E,12nm,0.9s,comp=E,76nm | | | | | | |
| CHTO | Chiang Mai | 73.06 | 279 | P | P | 23 43 52.6 | +0.7 |
| | comp=E,57nm,1.1s | | | | | | |
| CHTO | Chiang Mai | 73.06 | 279 | eP | P | 23 43 52.2 | +0.3 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 73.06 | 279 | eP | P | 23 43 52.2 | +0.3 |
| | comp=Z,10nm,0.8s | | | | | | |
| VRH | Novokhopyorsk | 73.08 | 337 | eP | P | 23 43 51.5 | 0.0 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 73.33 | 279 | P | P | 23 43 53.9 | +0.4 |
| | comp=E,3.7nm,0.7s,baz=28,slow=6.7,SNR=21 | | | | | | |
| CMAR | | | | LR | LR | 00 18 53.3 | |
| | comp=E,250nm,19.8s,baz=40,slow=38 | | | | | | |
| CMAR | Chiang Mai Arr | 73.33 | 279 | P | P | 23 43 53.9 | +0.4 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| CMAR | | | | MLR | MLR | | |
| | comp=Z,250nm,19.8s | | | | | | |
| CM01 | Chiang Mai Arr | 73.35 | 279 | eP | P | 23 43 53.3 | -0.3 |
| TAPN | Taplejung | 73.36 | 293 | eP | P | 23 43 54.4 | +0.4 |
| | comp=Z,442nm,1.2s | | | | | | |
| ESK | Eskdalemuir | 73.38 | 5 | iP | P | 23 43 54.9 | +1.7 |
| PBKT | Sadao Pong | 73.50 | 276 | P | P | 23 43 54.7 | +0.2 |
| | comp=Z,22nm,0.8s,comp=Z,2µm | | | | | | |
| RAR | Rarotonga | 73.59 | 165 | LR | LR | 00 09 55.1 | |
| | comp=Z,563nm,19.8s,baz=0.5,slow=31 | | | | | | |
| VSR | Storozhevoye | 73.67 | 338 | eP | P | 23 43 54.9 | -0.1 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.1s | | | | | | |
| VORD | Divnogorie | 73.88 | 338 | eP | P | 23 43 56.4 | +0.2 |
| VORD | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,30nm,0.7s | | | | | | |
| ODAN | Odare | 73.91 | 293 | eP | P | 23 43 57.5 | +0.4 |
| | comp=N,142nm,1.1s | | | | | | |
| GUN | Gumba | 73.98 | 295 | eP | P | 23 43 58.1 | +0.4 |
| | comp=N,388nm,1.0s | | | | | | |
| RAMN | Ramite | 74.30 | 293 | eP | P | 23 43 59.5 | +0.1 |
| | comp=N,345nm,0.9s | | | | | | |
| KKN | Kakani | 74.41 | 295 | eP | P | 23 44 00.4 | +0.4 |
| PKI | Pulchoki | 74.51 | 295 | eP | P | 23 44 00.8 | +0.1 |
| | comp=N,255nm,1.2s | | | | | | |
| PKIN | Phulchoki | 74.51 | 295 | eP | P | 23 44 00.7 | +0.1 |
| | comp=N,176nm,1.2s | | | | | | |
| GKN | Gorkha | 74.61 | 296 | eP | P | 23 44 01.2 | +0.1 |
| DMN | Daman | 74.65 | 295 | eP | P | 23 44 01.8 | +0.4 |
| DANN | Dangsing | 74.84 | 296 | eP | P | 23 44 02.9 | +0.3 |
| | comp=N,35nm,0.9s | | | | | | |
| BSEG | Bad Segeberg | 74.88 | 357 | eP | P | 23 44 02.9 | +0.9 |
| | comp=N,26nm,1.0s,baz=5.5,slow=5.5 | | | | | | |
| DZM | Mont Dzumac | 74.99 | 198 | eLR | LR | 00 07 17.5 | |
| | comp=N,458nm,22.1s | | | | | | |
| UMPA | Umpang Tak | 75.08 | 277 | P | P | 23 44 06.7 | +2.9 |
| | comp=N,15nm,0.9s,comp=N,273nm | | | | | | |
| KOLN | Koldanda | 75.38 | 296 | eP | P | 23 44 05.6 | 0.0 |
| | comp=N,100nm,1.0s | | | | | | |
| AKASG | Malin Array Be | 76.15 | 344 | P | P | 23 44 08.5 | -0.8 |
| | comp=N,4.0nm,0.5s,baz=16,slow=5.6,SNR=12 | | | | | | |
| AKASG | Malin Array Be | 76.15 | 344 | P | P | 23 44 08.5 | -0.8 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| KIEV | Kiev | 76.16 | 344⇓ | eP | P | 23 44 08.4 | -1.0 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | |
| KIEV | Kiev | 76.16 | 344 | eP | P | 23 44 08.1 | -1.3 |
| | comp=Z,11nm,1.0s | | | | | | |
| IBBN | Ibbenburen | 76.58 | 358 | eP | P | 23 44 12.7 | +1.0 |
| | comp=Z,39nm,1.2s,baz=5.5,slow=5.5 | | | | | | |
| CLZ | Clausthal | 76.97 | 357 | eP | P | 23 44 15.0 | +0.9 |
| | comp=Z,22nm,1.0s,baz=5.5,slow=5.5 | | | | | | |
| TTSI | Tana Toraja | 77.20 | 248 | P | P | 23 44 16.8 | +1.1 |
| | comp=Z,28nm,1.1s,comp=Z,2µm | | | | | | |
| GTTG | Gvttingen | 77.28 | 357 | eP | P | 23 44 16.5 | +0.8 |
| | comp=Z,28nm,1.1s,baz=5.5,slow=5.5 | | | | | | |
| CLL | Collm | 77.38 | 355⇓ | iP | P | 23 44 16.1 | -0.2 |
| CLL | | | | i *PP | pP | 23 44 28.9 | -0.1 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| CLL | Collm | 77.38 | 355 | eP | P | 23 44 16.3 | 0.0 |
| | comp=Z,11nm,1.0s,baz=5.5,slow=5.5 | | | | | | |
| CLL | Collm | 77.38 | 355⇓ | iP | P | 23 44 16.1 | -0.2 |
| | comp=Z,11nm,1.0s | | | | | | |
| CLL | | | | i pP | pP | 23 44 28.9 | -0.1 |
| CLL | | | | ePS | PnS | 23 54 50.0 | +3.7 |
| CLL | | | | eSS | SS | 23 59 24.0 | +23 |
| CLL | | | | e | | 00 04 00.0 | |
| CLL | | | | Lm | MLR | 00 22 00.0 | |
| | comp=N,200nm,20.3s | | | | | | |
| CLL | | | | Lm | MLR | 00 22 00.0 | |
| | comp=E,200nm,21.6s | | | | | | |
| CLL | | | | Lm | MLR | 00 22 00.0 | |
| | comp=Z,200nm,19.4s | | | | | | |
| CLL | Collm | 77.38 | 355 | eP | P | 23 44 15.3 | -0.9 |
| KBL | Kabul | 77.60 | 311 | eP | P | 23 44 17.5 | -0.6 |
| KBL | | | | pmax | pmax | | |
| | comp=Z,74nm,1.1s | | | | | | |
| KBL | Kabul | 77.60 | 311 | eP | P | 23 44 17.5 | -0.6 |
| | comp=Z,74nm,1.1s | | | | | | |
| BRG | Berggiesshubel | 77.76 | 354 | eP | P | 23 44 17.8 | -0.6 |
| | comp=Z,13nm,1.1s | | | | | | |
| | comp=N,353nm,12.2s | | | | | | |
| | comp=E,245nm,17.9s | | | | | | |
| | comp=Z,346nm,16.0s | | | | | | |
| BRG | Berggiesshubel | 77.76 | 354 | eP | P | 23 44 17.8 | -0.6 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=N,353nm,12.2s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=E,245nm,17.9s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=Z,346nm,16.0s | | | | | | |
| BRG | Berggiesshubel | 77.76 | 354 | eP | P | 23 44 18.5 | +0.2 |
| | comp=Z,13nm,1.1s,baz=5.5,slow=5.5 | | | | | | |
| LVV | L'vov | 77.80 | 347 | eP | P | 23 44 17.8 | -0.8 |
| TBI | Tubuai | 77.81 | 156 | eS | S | 23 54 12.3 | +4.3 |
| | comp=Z,356nm,32.2s | | | | | | |
| TBI | Tubuai | 77.81 | 156 | eLR | LR | 00 08 25.4 | |
| | comp=Z,571nm,22.2s,baz=343 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TBI | Tubuai | 77.81 | 156 | eT | T | 01 10 06.2 | |
| | comp=Z,4.4nm,0.3s | | | | | | |
| UPC | Upice | 77.98 | 353 | eP | P | 23 44 19.5 | -0.1 |
| UPC | Upice | 77.98 | 353 | eP | P | 23 44 19.5 | -0.1 |
| PVCC | Panska Ves | 78.06 | 354 | eP | P | 23 44 20.2 | +0.1 |
| PVCC | Panska Ves | 78.06 | 354 | eP | P | 23 44 20.2 | +0.1 |
| DPC | Dobruska-Polom | 78.11 | 353 | eP | P | 23 44 19.9 | -0.5 |
| DPC | | | | e | | 23 44 29.9 | |
| DPC | Dobruska-Polom | 78.11 | 353 | eP | P | 23 44 19.9 | -0.5 |
| DPC | | | | epP | PcP | 23 44 29.9 | 0.0 |
| MOX | Moxa | 78.12 | 356 | eP | P | 23 44 20.9 | +0.5 |
| | comp=Z,13nm,1.1s,baz=5.5,slow=5.5 | | | | | | |
| HGN | Heimansgroeve | 78.15 | 359 | eP | P | 23 44 21.4 | +0.9 |
| | comp=Z,36nm,1.4s | | | | | | |
| TANN | Tannenbergstha | 78.30 | 355 | eP | P | 23 44 22.0 | +0.5 |
| | comp=Z,21nm,1.7s,baz=5.5,slow=5.5 | | | | | | |
| MEM | Membach | 78.31 | 359 | P | P | 23 44 21.9 | +0.5 |
| | comp=Z,16nm,1.5s | | | | | | |
| KRLC | Kraliky | 78.34 | 352 | eP | P | 23 44 21.2 | -0.5 |
| KRLC | | | | e | | 23 44 35.3 | |
| KRLC | Kraliky | 78.34 | 352 | eP | P | 23 44 21.2 | -0.5 |
| KRLC | | | | ex | x | 23 44 35.3 | |
| SNF | Seneffe | 78.41 | 0 | P | P | 23 44 22.1 | +0.1 |
| OKC | Ostrava-Krasne | 78.46 | 351 | eP | P | 23 44 22.2 | -0.1 |
| OKC | Ostrava-Krasne | 78.46 | 351 | eP | P | 23 44 22.2 | -0.1 |
| BCLA | Clavier | 78.50 | 360 | P | P | 23 44 22.9 | +0.4 |
| | comp=Z,12nm,1.5s | | | | | | |
| PRA | Prague | 78.53 | 354 | eP | P | 23 44 21.2 | -1.4 |
| PRA | Prague | 78.53 | 354 | eP | P | 23 44 21.2 | -1.4 |
| STHS | Stebnicka Huta | 78.55 | 349 | eP | P | 23 44 23.0 | +0.2 |
| STHS | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.3s | | | | | | |
| STHS | Stebnicka Huta | 78.55 | 349 | eP | P | 23 44 23.0 | +0.2 |
| MORC | Moravsky Berou | 78.57 | 352 | eP | P | 23 44 22.5 | -0.5 |
| MORC | Moravsky Berou | 78.57 | 352 | ⇑iP | P | 23 44 22.3 | -0.7 |
| MORC | Moravsky Berou | 78.57 | 352 | eP | P | 23 44 22.5 | -0.5 |
| PRU | Pruhonice | 78.60 | 354 | eP | P | 23 44 22.9 | -0.2 |
| PRU | | | | e | | 23 44 38.5 | |
| PRU | Pruhonice | 78.60 | 354 | eP | P | 23 44 22.9 | -0.2 |
| PRU | | | | ex | x | 23 44 38.5 | |
| TNS | Taunus Mts | 78.65 | 358 | eP | P | 23 44 24.0 | +0.5 |
| | comp=Z,21nm,1.2s,baz=5.5,slow=5.5 | | | | | | |
| GOPC | GO Pecny, Ondr | 78.66 | 354 | eP | P | 23 44 23.3 | -0.1 |
| GOPC | GO Pecny, Ondr | 78.66 | 354 | eP | P | 23 44 23.3 | -0.1 |
| DOU | Dourbes | 78.82 | 0 | P | P | 23 44 24.7 | +0.4 |
| BKSI | Bulukumba | 78.86 | 247 | P | P | 23 44 25.0 | +0.1 |
| | comp=Z,20nm,1.2s | | | | | | |
| KOLS | Kolonicke sedl | 78.90 | 348 | eP | P | 23 44 24.8 | +0.1 |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| KOLS | Kolonicke sedl | 78.90 | 348 | eP | P | 23 44 24.8 | +0.1 |
| ROTZ | Rotzenmuhle | 78.96 | 355 | eP | P | 23 44 25.8 | +0.7 |
| | comp=Z,27nm,1.9s,baz=5.5,slow=5.5 | | | | | | |
| MAK | Makhachkala | 78.96 | 330 | P | P | 23 44 23.5 | -1.6 |
| MAK | | | | e | | 23 47 23.1 | |
| LANS | Liptovska Anna | 79.00 | 350 | eP | P | 23 44 25.7 | +0.3 |
| LANS | Liptovska Anna | 79.00 | 350 | eP | P | 23 44 25.7 | +0.3 |
| GRF | Grafenberg Arr | 79.09 | 356 | eP | P | 23 44 26.7 | +1.0 |
| | comp=Z,14nm,0.8s,baz=5.5,slow=5.5 | | | | | | |
| GRFO | Grafenberg | 79.09 | 356 | eP | P | 23 44 25.5 | -0.3 |
| GRFO | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| GRFO | Grafenberg | 79.09 | 356 | eP | P | 23 44 25.5 | -0.3 |
| | comp=Z,7.9nm,0.8s | | | | | | |
| VRAC | Vranov | 79.12 | 352 | ⇓iP | P | 23 44 26.4 | +0.4 |
| WLF | Walferdange | 79.25 | 359 | P | P | 23 44 27.5 | +0.9 |
| WLF | Walferdange | 79.25 | 359 | eP | P | 23 44 27.2 | +0.6 |
| WLF | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| WLF | Walferdange | 79.25 | 359 | eP | P | 23 44 27.7 | +1.1 |
| | comp=Z,15nm,1.0s,baz=5.5,slow=5.5 | | | | | | |
| WLF | Walferdange | 79.25 | 359 | eP | P | 23 44 27.2 | +0.6 |
| | comp=Z,13nm,0.9s | | | | | | |
| KSM | Kuching | 79.30 | 259 | eP | P | 23 44 27.1 | -0.3 |
| | comp=Z,67nm,1.4s | | | | | | |
| KHC | Kasperske Hory | 79.52 | 354 | eP | P | 23 44 27.8 | -0.4 |
| KHC | | | | e | | 23 44 35.4 | |
| KHC | Kasperske Hory | 79.52 | 354 | eP | P | 23 44 27.8 | -0.4 |
| KHC | | | | epP | PcP | 23 44 35.4 | -0.6 |
| KHC | Kasperske Hory | 79.52 | 354 | eP | P | 23 44 28.0 | -0.2 |
| | comp=Z,3.2nm,0.9s | | | | | | |
| ABKT | Ailbek | 79.57 | 320 | P | P | 23 44 29.0 | +0.3 |
| | comp=Z,254nm,1.0s,SNR=18 | | | | | | |
| GEYT | Alibeck | 79.58 | 320 | P | P | 23 44 29.0 | +0.3 |
| | comp=Z,34nm,0.9s,baz=343,slow=4.6,SNR=50 | | | | | | |
| TRPA | Tarpa | 79.65 | 348 | ⇓iP | P | 23 44 29.1 | +0.3 |
| NCK | Nalchik | 79.66 | 332 | ⇓iP | P | 23 44 31.2 | +2.2 |
| VYHS | Vyhne | 79.72 | 351 | eP | P | 23 44 28.7 | -0.5 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| VYHS | Vyhne | 79.72 | 351 | eP | P | 23 44 28.7 | -0.5 |
| BUR04 | Bucovina Ar. S | 79.78 | 346 | eP | P | 23 44 29.8 | +0.1 |
| BURAR | Bucovina Array | 79.78 | 346 | ⇓iP | P | 23 44 28.8 | -0.9 |
| GEC2 | GERESS Array S | 79.80 | 354 | eP | P | 23 44 30.2 | +0.5 |
| GEC2 | GERESS Array S | 79.80 | 354 | eP | P | 23 44 29.9 | +0.2 |
| | comp=Z,7.3nm,1.1s,baz=5.5,slow=5.5 | | | | | | |
| GEC2 | GERESS Array S | 79.80 | 354 | eP | P | 23 44 30.2 | +0.5 |
| GERES | GERESS Array B | 79.80 | 354 | P | P | 23 44 29.6 | -0.1 |
| | comp=Z,3.6nm,0.9s,baz=25,slow=4.4,SNR=13 | | | | | | |
| GERES | GERESS Array B | 79.80 | 354 | P | P | 23 44 29.7 | -0.1 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| SMOL | Smolenice | 79.83 | 352 | eP | P | 23 44 30.0 | +0.2 |
| SMOL | Smolenice | 79.83 | 352 | eP | P | 23 44 30.0 | +0.2 |
| STU | Stuttgart | 80.08 | 357 | eP | P | 23 44 31.6 | +0.4 |
| | comp=Z,21nm,1.5s,baz=5.5,slow=5.5 | | | | | | |
| PSZ | Piszkesteto | 80.18 | 350 | eP | P | 23 44 32.9 | +1.1 |
| PSZ | | | | pmax | pmax | | |
| | comp=Z,63nm,2.5s | | | | | | |
| PSZ | Piszkesteto | 80.18 | 350 | ⇑iP | P | 23 44 31.4 | -0.4 |
| PSZ | Piszkesteto | 80.18 | 350 | eP | P | 23 44 32.9 | +1.1 |
| | comp=Z,63nm,2.5s | | | | | | |
| ZEI | Tsey | 80.22 | 332 | eP | P | 23 44 32.6 | +0.3 |
| ZEI | | | | pmax | pmax | | |
| | comp=Z,33nm,0.7s | | | | | | |
| ARCR | ARCALIA | 80.43 | 347 | ⇑iP | P | 23 44 33.9 | +0.8 |
| BFO | Black Forest | 80.55 | 358 | iP | P | 23 44 34.9 | +1.2 |
| BFO | Black Forest | 80.55 | 358 | eP | P | 23 44 34.2 | +0.5 |
| | comp=Z,11nm,1.4s,baz=5.5,slow=5.5 | | | | | | |
| BFO | Black Forest | 80.55 | 358 | eP | P | 23 44 33.6 | -0.1 |
| | comp=Z,4.4nm,0.7s | | | | | | |
| CONA | Conrad Observa | 80.55 | 353 | ⇓iP | P | 23 44 34.2 | +0.4 |
| | comp=Z,6.0nm,0.9s | | | | | | |
| TESR | Tescani | 80.64 | 345 | ⇑iP | P | 23 44 35.1 | +0.9 |
| SOC | Sochi | 80.65 | 335 | eP | P | 23 44 34.3 | 0.0 |
| SOC | | | | ePPP | PPP | 23 49 31.1 | |
| SOC | | | | eS | S | 23 54 41.2 | +3.1 |
| DRGR | | 80.94 | 348 | ⇓iP | P | 23 44 35.5 | -0.4 |
| VRI | Vrincioaia | 81.25 | 345 | eP | P | 23 44 31.7 | -5.8 |
| DOPR | Dopca | 81.37 | 346 | ⇓iP | P | 23 44 39.1 | +1.0 |
| KBA | Koelnbreinsper | 81.58 | 354 | ⇓iP | P | 23 44 39.9 | +0.5 |
| | comp=Z,21nm,1.1s | | | | | | |
| CFR | Carcaliu | 81.68 | 344 | ⇓iP | P | 23 44 39.7 | 0.0 |
| MLR | Muntele Rosu | 81.74 | 345 | ⇓iP | P | 23 44 41.3 | +1.1 |
| FETA | Feichten | 81.78 | 356 | ⇓iP | P | 23 44 41.0 | +0.6 |
| | comp=Z,9.2nm,1.0s | | | | | | |
| SOKA | Soboth | 81.86 | 353 | ⇑iP | P | 23 44 40.8 | +0.1 |
| | comp=Z,12nm,1.1s | | | | | | |
| PERS | Pernice | 81.89 | 353 | iP | P | 23 44 40.7 | -0.2 |
| VOIR | | 81.94 | 346 | ⇑iP | P | 23 44 42.0 | +0.8 |
| DAVOX | Davos/Dischmat | 82.05 | 357 | P | P | 23 44 41.9 | 0.0 |
| | comp=Z,3.6nm,0.8s,baz=358,slow=17,SNR=4.1 | | | | | | |
| DAVOX | Davos/Dischmat | 82.05 | 357 | P | P | 23 44 41.9 | 0.0 |
| DAVOX | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| RKT | Rikitea | 82.17 | 143 | eLR | LR | 00 10 25.0 | |
| | comp=Z,549nm,23.5s,baz=333 | | | | | | |
| BZS | Buzias | 82.24 | 348 | eP | P | 23 44 41.1 | -1.6 |
| BZS | Buzias | 82.24 | 348 | ⇓iP | P | 23 44 42.4 | -0.3 |
| CHLP | Challavanipeta | 82.30 | 290 | eP | P | 23 44 43.2 | -0.2 |
| CHLP | | | | IAmb | IAmb | 23 44 43.8 | |
| | comp=Z,21nm,1.0s | | | | | | |
| GZR | Gura Zlata | 82.31 | 347 | ⇓iP | P | 23 44 43.1 | 0.0 |
| TIRR | Tirgusor | 82.33 | 343 | ⇑iP | P | 23 44 43.7 | +0.6 |
| KULM | Kulim | 82.34 | 269 | eP | P | 23 44 43.6 | 0.0 |
| TUE | Stuetta | 82.38 | 357 | eP | P | 23 44 43.6 | -0.1 |
| | comp=Z,6.2nm,0.9s | | | | | | |
| JAVS | Javornik | 82.71 | 354 | eP | P | 23 44 44.0 | -1.3 |
| IPM | Ipoh | 82.73 | 268 | eP | P | 23 44 44.6 | -1.0 |
| | comp=Z,40nm,1.4s | | | | | | |
| BOJS | Bojanci | 83.01 | 353 | eP | P | 23 44 46.8 | +0.1 |
| SSB | Saint Sauveur | 83.64 | 0 | eP | P | 23 44 51.4 | +1.4 |
| SSB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| SSB | Saint Sauveur | 83.64 | 0 | eP | P | 23 44 51.4 | +1.4 |
| | comp=Z,3.6nm,0.6s | | | | | | |
| WRAB | Tennant Creek | 83.73 | 227 | ⇓eP | P | 23 44 47.8 | -2.8 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,28nm,1.7s | | | | | | |
| WRA | Warramunga Arr | 83.74 | 227 | P | P | 23 44 48.7 | -1.9 |
| | comp=Z,1.9nm,0.8s,baz=40,slow=6.0,SNR=8.1 | | | | | | |
| WRA | Warramunga Arr | 83.74 | 227 | P | P | 23 44 48.7 | -1.9 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| TPI | Tanjungpandan | 84.25 | 258 | P | P | 23 44 54.1 | +0.7 |
| | comp=Z,33nm,1.3s | | | | | | |
| PVM | Polavaram | 84.71 | 291 | eP | P | 23 44 54.7 | -1.0 |
| PVM | | | | IAmb | IAmb | 23 44 56.3 | |
| | comp=Z,19nm,0.7s | | | | | | |
| PTK | Pertek | 85.11 | 334 | eP | P | 23 44 58.3 | +0.5 |
| PSI | Prapat | 85.34 | 269 | eP | P | 23 44 58.9 | -0.2 |
| PSI | | | | pmax | pmax | | |
| | comp=Z,26nm,0.8s | | | | | | |
| PSI | Prapat | 85.34 | 269 | eP | P | 23 44 58.9 | -0.2 |
| | comp=Z,26nm,0.8s | | | | | | |
| CUKT | Cukurca | 85.39 | 330 | eP | P | 23 44 58.8 | -0.3 |
| BRTR | Keskin Array B | 85.80 | 338 | P | P | 23 45 00.8 | -0.3 |
| | comp=Z,13nm,1.1s,baz=33,slow=2.3,SNR=18 | | | | | | |
| BRTR | Keskin Array B | 85.80 | 338 | P | P | 23 45 00.8 | -0.3 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| BR231 | Keskin MP Arra | 85.88 | 339 | eP | P | 23 45 01.6 | +0.2 |
| MALT | Malatya | 85.92 | 334 | ⇑iP | P | 23 45 02.8 | +1.1 |
| HYB | Hyderabad | 86.36 | 293 | iP | P | 23 45 03.0 | -1.0 |
| HYBB | Hyderabad (bro | 86.36 | 293 | eP | P | 23 45 03.4 | -0.6 |
| HYBB | | | | IAmb | IAmb | 23 45 04.0 | |
| | comp=Z,15nm,0.8s | | | | | | |
| SARI | SarD1z-Kayseri | 86.36 | 336 | eP | P | 23 45 03.4 | -0.6 |
| KNT | Kendrikon | 86.44 | 347 | eP | P | 23 45 05.5 | +1.4 |
| TIR | Tirane | 86.66 | 349 | eP | P | 23 45 04.7 | -0.4 |
| TIR | | | | pmax | pmax | | |
| | comp=Z,63nm,1.1s | | | | | | |
| TIR | Tirane | 86.66 | 349 | eP | P | 23 45 04.7 | -0.4 |
| | comp=Z,63nm,1.1s | | | | | | |
| LRS | Lares | 86.70 | 65 | eP | P | 23 45 05.8 | +0.1 |
| ADKI | Addanki | 86.79 | 291 | IAmb | IAmb | 23 45 06.0 | |
| | comp=Z,9.9nm,1.0s | | | | | | |
| ADKI | | | | eP | P | 23 45 06.3 | +0.2 |
| PVRL | Vila Real | 86.99 | 10 | eP | P | 23 45 08.3 | +1.5 |
| | comp=Z,47nm,1.7s | | | | | | |
| AS01 | Alice Springs | 87.15 | 226 | eP | P | 23 45 05.6 | -2.0 |
| MVO | Moncorvo | 87.17 | 9 | eP | P | 23 45 08.7 | +1.0 |
| ASAR | Alice Springs | 87.17 | 226 | P | P | 23 45 06.8 | -0.8 |
| | comp=Z,2.3nm,0.8s,baz=34,slow=4.1,SNR=13 | | | | | | |
| ASAR | Alice Springs | 87.17 | 226 | P | P | 23 45 06.9 | -0.8 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| GSI | Gunungsitoli | 87.34 | 269 | P | P | 23 45 09.6 | +0.8 |
| | comp=Z,37nm,2.6s | | | | | | |
| GSI | Gunungsitoli | 87.34 | 269 | eP | P | 23 45 08.3 | -0.5 |
| PVIS | Viseu | 87.52 | 10 | eP | P | 23 45 10.0 | +0.6 |
| | comp=Z,47nm,1.6s | | | | | | |
| POO | Poona | 88.12 | 298 | eP | P | 23 45 09.0 | -3.6 |
| IGT | Igoumenitsa | 88.39 | 348 | eP | P | 23 45 12.3 | -1.1 |
| ES19 | SONSECA Array | 88.89 | 7 | eP | P | 23 45 15.6 | -0.3 |
| ESDC | Sonseca Array | 88.91 | 7 | P | P | 23 45 15.9 | -0.1 |
| | comp=Z,6.4nm,1.0s,baz=353,slow=4.2,SNR=16 | | | | | | |
| BANOM | Banah | 90.73 | 315 | ⇑P | P | 23 45 23.5 | -1.2 |
| UOSS | Wadi Hilu | 91.62 | 315 | P | P | 23 45 27.3 | -1.5 |
| | comp=Z,94nm,1.1s,SNR=5.9 | | | | | | |
| UOSS | Wadi Hilu | 91.62 | 315 | eP | P | 23 45 27.6 | -1.2 |
| | comp=Z,18nm,1.0s | | | | | | |
| MMAI | Mount Meron Ar | 91.72 | 335 | P | P | 23 45 29.8 | +0.6 |
| | comp=Z,13nm,1.0s,baz=23,slow=11,SNR=4.0 | | | | | | |
| HATD | Hatta, Dubai | 91.75 | 315 | ⇓iP | P | 23 45 28.2 | -1.2 |
| | SNR=8.7 | | | | | | |
| NAZ | Nazwa, Dubai | 91.82 | 315 | ⇑P | P | 23 45 29.1 | -0.6 |
| ASHO | Ashiyiah | 91.91 | 315 | P | P | 23 45 29.7 | -0.5 |
| | SNR=5.1 | | | | | | |
| ASHO | Ashiyiah | 91.91 | 315 | ⇑iP | P | 23 45 29.0 | -1.1 |
| | SNR=8.8 | | | | | | |
| FAQ | Al Faqa, Dubai | 92.06 | 315 | ⇓P | P | 23 45 29.3 | -1.5 |
| ASF | Jabal al Asfar | 92.11 | 333 | P | P | 23 45 31.0 | -0.1 |
| | comp=Z,6.6nm,0.9s,baz=274,slow=2.7,SNR=6.8 | | | | | | |
| ASF | Jabal al Asfar | 92.11 | 333 | P | P | 23 45 31.0 | -0.1 |
| ASF | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| ASUD | Al Ashush, Dub | 92.28 | 315 | ⇓iP | P | 23 45 31.1 | -0.7 |
| | SNR=6.3 | | | | | | |
| WBK | Wadi Bani Khal | 92.37 | 312 | P | P | 23 45 33.0 | +0.6 |
| | SNR=6.3 | | | | | | |
| SMDO | Samad | 92.42 | 313 | P | P | 23 45 33.0 | +0.4 |
| | SNR=5.4 | | | | | | |
| ARQ | Araqi | 92.87 | 314 | P | P | 23 45 34.5 | -0.1 |
| | SNR=16 | | | | | | |
| JMDO | Jabal Madar | 92.98 | 312 | P | P | 23 45 35.2 | +0.1 |
| | SNR=7.7 | | | | | | |
| RAYN | Ar Rayn | 97.28 | 323 | P | P | 23 45 54.6 | -0.2 |
| | comp=Z,85nm,1.0s,SNR=12 | | | | | | |
| TORD | Torodi Ar. Bea | 115.61 | 4 | PKP | PKPdf | 23 51 03.5 | -0.4 |
| | comp=Z,1.1nm,0.7s,baz=347,slow=2.1,SNR=4.5 | | | | | | |
| MATP | Matopo | 143.96 | 320 | PKP | PKPbc | 23 51 55.3 | +0.3 |
| | comp=Z,35nm,0.9s,baz=51,slow=5.1,SNR=18 | | | | | | |
| MAW | Mawson | 147.98 | 218 | PKPbc | PKPbc | 23 52 04.4 | -1.0 |
| | comp=Z,7.7nm,0.9s,baz=108,slow=4.9,SNR=16 | | | | | | |
| MAW | Mawson | 147.98 | 218 | PKP2 | PKPbc | 23 52 04.4 | -1.0 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| BOSA | Boshof | 152.57 | 319 | PKPbc | PKPbc | 23 52 17.8 | -0.1 |
| | comp=Z,18nm,0.7s,baz=8.7,slow=2.3,SNR=38 | | | | | | |
| BOSA | Boshof | 152.57 | 319 | PKIKP | PKPbc | 23 52 17.8 | -0.1 |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | |
| SNAA | Sanae | 159.41 | 173 | ePKIKP | PKPdf | 23 52 14.6 | -3.9 |
| SNAA | Sanae | 159.41 | 173 | ePKPdf | PKPdf | 23 52 14.6 | -3.9 |

*IDC **08** 23:33:48.1±1.7, 51°.13N×174°.64W, h0km, mb4.3/17, mb1 4.4/20, mb1mx4.2/58, mbtmp4.3/20, ML3.3/1, MS4.0/3, Ms1 4.0/3, ms1mx3.8/25, Error ellipse: s-maj=44.7km s-min=19.6km az=152.0*

*ISCJB **08** 23:33:51.5±0.6, 50°.99N±0°.06×174°.7W±0°.1, h35km, mb4.4/22, MS4.1/3, Error ellipse: s-maj=12.7km s-min=6.0km az=36.4*

*NEIC **08** 23:33:54.5, 51°.16N×174°.72W, h25km, mb4.6/5, After AEIC.*

**ISC 08 23:33:53.7**±0.8, **51°.1N**±0°.1×**174°.75W**±0°.09, **h35**km, **n39**, σ**0s.90**/38, **mb4.5**/22, **MS4.2**/3, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ATKA | Atka Island | 1.18 | 17 | P | Pn | 23 34 12.8 | -0.8 |
| ATKA | | | | S | Sn | 23 34 27.8 | -0.6 |
| KOFP | Korovin Flat P | 1.26 | 19 | P | Pn | 23 34 15.4 | +0.5 |
| KOWE | Korovin West | 1.32 | 13 | P | Pn | 23 34 16.0 | +0.3 |
| KOKV | Korovin Volcan | 1.33 | 16 | P | Pn | 23 34 16.4 | +0.6 |
| KOKV | | | | S | Sn | 23 34 33.3 | +0.9 |
| KOSE | Korovin Southe | 1.34 | 19 | P | Pn | 23 34 16.8 | +0.8 |
| KOSE | | | | S | Sn | 23 34 34.1 | +1.6 |
| KONE | Korovin Northe | 1.37 | 16 | P | Pn | 23 34 16.7 | +0.4 |
| KDAK | Kodiak Island | 14.50 | 54 | Pn | Pn | 23 37 15.4 | -0.6 |
| | baz=279,slow=13,SNR=2.6 | | | | | | |
| KDAK | | | | Sn | S | 23 40 04.2 | -10 |
| | 0.2nm,0.3s,baz=252,slow=20,SNR=3.8 | | | | | | |
| PETK | Petropavlovsk- | 17.01 | 288 | Pn | Pn | 23 37 49.6 | +1.0 |
| | 0.6nm,0.3s,baz=103,slow=14,SNR=2.5 | | | | | | |
| ILAR | Eielson Array | 19.94 | 36 | P | P | 23 38 21.6 | -0.6 |
| | baz=229,slow=9.6,SNR=1.9 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.68 | 211 | T | T | 00 18 35.6 | |
| | baz=20,slow=76,SNR=723 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.69 | 211 | T | T | 00 18 33.7 | |
| | baz=20,slow=76 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.70 | 211 | T | T | 00 18 24.1 | |
| | baz=20,slow=76,SNR=216 | | | | | | |
| MJAR | Matsushiro Arr | 36.27 | 265 | P | P | 23 40 53.6 | +0.1 |
| | 1.5nm,0.6s,baz=59,slow=5.7,SNR=2.7 | | | | | | |
| MAJO | Matsushiro | 36.27 | 265 | eP | P | 23 40 57.2 | +3.8 |
| | 7.9nm,0.7s | | | | | | |
| WVOR | Wild Horse Val | 38.56 | 80 | eP | P | 23 41 12.8 | -0.1 |
| | 4.9nm,0.8s | | | | | | |
| KSRS | Korea Array | 42.19 | 274 | P | P | 23 41 43.8 | +0.9 |
| | 4.4nm,0.9s,baz=56,slow=7.6,SNR=2.3 | | | | | | |
| KSAR | Wonju Array Be | 42.22 | 274 | P | P | 23 41 43.8 | +0.7 |
| ULN | Ulaanbaatar | 48.66 | 299 | eP | P | 23 42 29.6 | -4.5 |
| | 6.6nm,0.8s | | | | | | |
| SONM | Songino Array | 49.04 | 299 | P | P | 23 42 37.3 | +0.3 |
| | 1.9nm,0.7s,baz=44,slow=6.5,SNR=3.3 | | | | | | |
| GUMO | Guam | 49.58 | 236 | LR | LR | 23 59 00.0 | |
| | comp=Z,97nm,21.8s,baz=81,slow=30 | | | | | | |
| ANMO | Albuquerque | 50.65 | 81 | eP | P | 23 42 51.1 | +1.7 |
| | 4.1nm,1.0s | | | | | | |
| FRB | Frobisher Bay | 51.92 | 33 | P | P | 23 42 58.1 | -0.2 |
| | 21nm,1.0s,baz=303,slow=10,SNR=3.4 | | | | | | |
| LPIG | La Paz | 55.68 | 93 | LR | LR | 00 03 22.1 | |
| | comp=Z,175nm,18.2s,baz=294,slow=32 | | | | | | |
| ARCES | ARCESS Array B | 58.78 | 352 | P | P | 23 43 46.1 | -1.5 |
| | 4.9nm,0.8s,baz=349,slow=8.3,SNR=2.7 | | | | | | |
| ARCES | | | | PcP | PcP | 23 44 36.2 | -0.7 |
| | 2.7nm,0.8s,baz=34,slow=6.6,SNR=2.8 | | | | | | |
| KURK | Kurchatov | 61.04 | 316 | eP | P | 23 44 02.0 | -1.3 |
| | 13nm,0.5s | | | | | | |
| KURK | | | | PcP | PcP | 23 44 47.4 | +1.2 |
| KURBB | Kurchatov Arra | 61.14 | 316 | P | P | 23 44 03.2 | -0.9 |
| | 5.3nm,0.6s,baz=44,slow=6.6,SNR=4.6 | | | | | | |
| KURBB | | | | PcP | PcP | 23 44 47.4 | +0.7 |
| | 2.0nm,0.7s,baz=39,slow=3.2,SNR=2.5 | | | | | | |
| MKAR | Makanchi Array | 62.18 | 311 | P | P | 23 44 09.8 | -1.5 |
| | 2.6nm,0.6s,baz=50,slow=5.5,SNR=4.3 | | | | | | |
| BVAR | Borovoye Array | 62.73 | 322 | P | P | 23 44 14.4 | -0.3 |
| | 3.3nm,0.5s,baz=59,slow=5.8,SNR=4.9 | | | | | | |
| BVAR | | | | PcP | PcP | 23 44 53.8 | +0.7 |
| | 4.2nm,0.7s,baz=37,slow=4.6,SNR=3.3 | | | | | | |
| FINES | FINESS Array B | 66.59 | 349 | P | P | 23 44 40.7 | +0.9 |
| | 1.7nm,0.9s,baz=28,slow=6.3,SNR=1.9 | | | | | | |
| NOA | NORSAR Array B | 68.13 | 357 | P | P | 23 44 48.5 | -1.1 |
| | 1.9nm,0.8s,baz=5.5,slow=6.5,SNR=3.0 | | | | | | |
| AAK | Ala-Archa | 68.98 | 312 | P | P | 23 44 55.3 | 0.0 |
| | 4.4nm,0.7s,baz=120,slow=5.5,SNR=2.9 | | | | | | |
| AAK | Ala-Archa | 68.98 | 312 | eP | P | 23 44 55.1 | -0.2 |
| | 3.9nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 69.36 | 327 | P | P | 23 44 57.3 | 0.0 |
| | 3.5nm,0.5s,baz=33,slow=9.5,SNR=3.6 | | | | | | |
| AKASG | Malin Array Be | 76.56 | 345 | P | P | 23 45 38.1 | -1.8 |
| | 0.5nm,0.3s,baz=20,slow=6.0,SNR=2.3 | | | | | | |
| GEYT | Alibeck | 79.99 | 320 | P | P | 23 45 59.3 | +0.1 |
| | 5.7nm,0.8s,baz=20,slow=4.6,SNR=3.7 | | | | | | |
| GERES | GERESS Array B | 80.19 | 354 | P | P | 23 45 59.9 | -0.3 |
| | 0.6nm,0.8s,baz=53,slow=5.0,SNR=2.2 | | | | | | |
| WRA | Warramunga Arr | 83.62 | 227 | P | P | 23 46 18.0 | -0.3 |
| | 1.1nm,0.9s,baz=31,slow=5.8,SNR=2.8 | | | | | | |
| BRTR | Keskin Array B | 86.22 | 338 | P | P | 23 46 32.2 | +0.8 |
| | 1.0nm,0.8s,baz=55,slow=3.7,SNR=3.3 | | | | | | |
| KEST | Kesra | 93.48 | 357 | LR | LR | 00 33 38.8 | |
| | comp=Z,104nm,18.6s,baz=246,slow=38 | | | | | | |

*ISCJB **08** 23:40:52.9±0.4, 1°.30N±0°.04×30°.55E±0°.08, h10km, mb4.2/24, MS3.6/6, Error ellipse: s-maj=12.3km s-min=6.0km az=173.0*

*IDC **08** 23:40:53.3±0.7, 1°.28N×30°.55E, h0km, mb3.9/16, mb1 4.0/18, mb1mx3.9/48, mbtmp4.0/18, ML4.2/2, MS3.7/7, Ms1 3.7/7, ms1mx3.3/40, Error ellipse: s-maj=19.9km s-min=16.6km az=91.0*

*NEIC **08** 23:40:57.0±3.1, 1°.24N×30°.56E, h26km±23km, mb4.6/8, Error ellipse: s-maj=8.2km s-min=7.9km az=131.0*

**ISC 08 23:40:54.5**±0.5, **1°.22N**±0°.06×**30°.66E**±0°.06, **h10**km, **n37**, σ**1s.05**/35, **mb4.1**/23, **MS3.5**/6, **Uganda**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MBAR | Mbarara | 1.81 | 178 | Pn | Pn | 23 41 27.2 | +1.2 |
| | 628nm,0.3s,baz=316,slow=5.2,SNR=440 | | | | | | |
| MBAR | | | | Sn | Sn | 23 41 49.7 | +0.5 |
| | 2µm,0.3s,baz=63,slow=22,SNR=21 | | | | | | |
| KMBO | Kilima Mbogo | 6.99 | 109 | Pn | Pn | 23 42 39.8 | +2.5 |
| | 2.2nm,0.3s,baz=269,slow=17,SNR=19 | | | | | | |
| KMBO | | | | Sn | Sn | 23 43 54.0 | -3.0 |
| | 5.5nm,0.3s,baz=255,slow=19,SNR=3.1 | | | | | | |
| KMBO | | | | Lg | Lg | 23 44 36.5 | |
| | 21nm,0.3s,baz=187,slow=8.5,SNR=13 | | | | | | |
| KMBO | Kilima Mbogo | 6.99 | 109 | ePn | Pn | 23 42 39.5 | +2.2 |
| KMBO | | | | Lg | Lg | 23 44 36.5 | |
| KMBO | | | | eSg | Sg | 23 44 37.6 | -1.4 |
| DODT | Dodoma, Tanzan | 8.94 | 145 | iS | Pn | 23 43 04.0 | 0.0 |
| ATD | Arta Tunnel | 15.85 | 49 | LR | LR | 23 50 59.9 | |
| | comp=Z,234nm,19.7s,baz=219,slow=38 | | | | | | |
| LSZ | Lusaka | 16.57 | 188 | Pn | Pn | 23 44 46.8 | -0.5 |
| | 0.3nm,0.3s,baz=352,slow=12,SNR=8.1 | | | | | | |
| LSZ | Lusaka | 16.57 | 188 | ePn | Pn | 23 44 47.8 | +0.4 |
| ZOMB | Zomba | 17.14 | 164 | iP | P | 23 44 55.7 | -0.4 |
| ZOMB | | | | iS | S | 23 48 15.2 | +0.4 |
| MATP | Matopo | 21.62 | 186 | P | P | 23 45 45.5 | +0.4 |
| | 2.8nm,0.9s,baz=10,slow=9.0,SNR=3.7 | | | | | | |
| MATP | | | | LR | LR | 23 54 28.4 | |
| | comp=Z,228nm,18.1s,baz=358,slow=38 | | | | | | |
| EIL | Elat | 28.58 | 8 | LR | LR | 23 58 11.9 | |
| | comp=Z,69nm,18.2s,baz=222,slow=36 | | | | | | |
| BOSA | Boshof | 30.11 | 190 | LR | LR | 23 59 12.6 | |
| | comp=Z,152nm,19.9s,baz=348,slow=36 | | | | | | |
| TORD | Torodi Ar. Bea | 31.04 | 294 | P | P | 23 47 11.8 | -1.1 |
| | 1.8nm,0.9s,baz=108,slow=8.0,SNR=11 | | | | | | |
| MMAI | Mount Meron Ar | 31.94 | 8 | LR | LR | 00 00 00.6 | |
| | comp=Z,73nm,19.6s,baz=330,slow=36 | | | | | | |
| TAM | Tamanrasset | 32.50 | 313 | eP | P | 23 47 24.7 | -1.2 |
| | 2.1nm,1.1s | | | | | | |
| DBIC | Dimbokro | 35.83 | 280 | P | P | 23 47 54.2 | -0.5 |
| | 1.3nm,0.4s,baz=101,slow=7.8,SNR=9.2 | | | | | | |
| DBIC | | | | LR | LR | 00 02 51.1 | |
| | comp=Z,67nm,18.1s,baz=93,slow=37 | | | | | | |
| BRTR | Keskin Array B | 38.42 | 4 | P | P | 23 48 18.0 | +1.5 |
| | 0.7nm,0.7s,baz=184,slow=10,SNR=3.8 | | | | | | |
| PSZ | Piszkesteto | 47.44 | 350 | eP | P | 23 49 28.9 | -0.5 |
| | 6.0nm,0.9s | | | | | | |
| AKASG | Malin Array Be | 49.31 | 359 | P | P | 23 49 43.4 | -0.3 |
| | 0.6nm,0.4s,baz=189,slow=8.2,SNR=3.4 | | | | | | |
| ESDC | Sonseca Array | 49.58 | 325 | P | P | 23 49 46.1 | 0.0 |
| | 1.9nm,0.8s,baz=135,slow=6.2,SNR=8.4 | | | | | | |
| GERES | GERESS Array B | 49.64 | 345 | P | P | 23 49 46.0 | -0.4 |
| | 0.6nm,0.6s,baz=165,slow=8.1,SNR=3.8 | | | | | | |
| MORC | Moravsky Berou | 49.66 | 349 | eP | P | 23 49 46.3 | -0.1 |
| | 15nm,0.9s | | | | | | |
| WLF | Walferdange | 52.61 | 340 | eP | P | 23 50 08.1 | -0.5 |
| | 24nm,1.3s | | | | | | |
| ARU | Arti | 59.44 | 18 | eP | P | 23 50 57.6 | +0.3 |
| | 3.8nm,1.0s | | | | | | |
| FINES | FINESS Array B | 60.17 | 357 | P | P | 23 51 01.9 | -0.3 |
| | 1.2nm,0.7s,baz=143,slow=6.7,SNR=4.8 | | | | | | |
| BRVK | Borovoye | 61.20 | 26 | eP | P | 23 51 09.0 | -0.4 |
| | 2.5nm,1.0s | | | | | | |
| BVAR | Borovoye Array | 61.23 | 26 | P | P | 23 51 09.6 | -0.1 |
| | 1.0nm,0.7s,baz=217,slow=7.0,SNR=5.7 | | | | | | |
| NOA | NORSAR Array B | 61.49 | 349 | P | P | 23 51 11.2 | -0.1 |
| | 0.7nm,0.8s,baz=163,slow=6.1,SNR=2.5 | | | | | | |
| KURBB | Kurchatov Arra | 63.67 | 32 | P | P | 23 51 26.4 | +0.4 |
| | 1.7nm,0.8s,baz=239,slow=6.6,SNR=8.4 | | | | | | |
| KURK | Kurchatov | 63.77 | 32 | P | P | 23 51 26.4 | -0.3 |
| MKAR | Makanchi Array | 63.78 | 37 | P | P | 23 51 27.2 | +0.3 |
| | 1.0nm,0.6s,baz=241,slow=6.7,SNR=7.1 | | | | | | |
| ARCES | ARCESS Array B | 68.28 | 358 | P | P | 23 51 54.4 | -1.0 |
| | 1.9nm,0.8s,baz=170,slow=7.0,SNR=6.2 | | | | | | |
| ZALV | Zalesovo Beam | 68.71 | 31 | P | P | 23 51 58.0 | -0.4 |
| | 1.9nm,0.8s,baz=255,slow=5.7,SNR=7.4 | | | | | | |
| SNAA | Sanae | 75.90 | 190 | eP | P | 23 52 41.1 | +0.1 |
| | 1.1nm,1.0s | | | | | | |
| SONM | Songino Array | 79.53 | 42 | P | P | 23 53 03.5 | +1.6 |
| | 0.8nm,0.8s,baz=238,slow=7.7,SNR=5.7 | | | | | | |
| KKM | Kota Kinabalu | 85.45 | 84 | eP | P | 23 53 33.8 | +0.3 |
| | 29nm,0.9s | | | | | | |
| USRK | Ussuriysk Ar. | 97.27 | 45 | P | Pdif | 23 54 29.7 | +1.7 |
| | 0.8nm,0.5s,baz=258,slow=5.0,SNR=2.8 | | | | | | |
| VNDA | Vanda | 99.43 | 170 | LR | LR | 00 40 55.8 | |
| | comp=Z,81nm,18.6s,baz=342,slow=36 | | | | | | |

*ISCJB **08** 23:47:31.7±0.5, 50°.97N±0°.05×174°.66W±0°.08, h38km, mb4.0/17, Error ellipse: s-maj=8.0km s-min=5.7km az=135.5*

*IDC **08** 23:47:31.4±1.3, 51°.73N×174°.89W, h0km, mb3.8/7, mb1 4.0/10, mb1mx3.7/48, mbtmp3.9/10, ML4.0/2, Error ellipse: s-maj=47.6km s-min=18.1km az=179.0*

*NEIC **08** 23:47:33.1, 51°.05N×174°.57W, h30km, mb4.1/14, ML3.8(AEIC), After AEIC.*

**ISC 08 23:47:34.1**±0.8, **51°.09N**±0°.09×**174°.65W**±0°.07, **h38**km, **n45**, σ**1s.14**/39, **mb4.1**/17, **Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ATKA | Atka Island | 1.15 | 14 | P | Pn | 23 47 52.8 | -0.9 |
| ATKA | | | | S | Sn | 23 48 08.3 | +0.2 |
| KOFP | Korovin Flat P | 1.24 | 16 | P | Pn | 23 47 55.1 | +0.2 |
| KOKL | Mount Kliuchef | 1.27 | 13 | P | Pn | 23 47 55.4 | +0.1 |
| KOKL | | | | S | Sn | 23 48 12.2 | +1.0 |
| KOWE | Korovin West | 1.30 | 11 | P | Pn | 23 47 56.0 | +0.2 |
| KOKV | Korovin Volcan | 1.31 | 13 | P | Pn | 23 47 56.2 | +0.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KOKV | | | | S | Sn | 23 48 13.9 | +1.7 |
| KOSE | Korovin Southe | 1.31 | 16 | P | Pn | 23 47 56.9 | +0.9 |
| KOSE | | | | S | Sn | 23 48 13.9 | +1.7 |
| KONE | Korovin Northe | 1.35 | 14 | P | Pn | 23 47 57.0 | +0.6 |
| AMKA | Amchitka | 3.81 | 277 | P | Pn | 23 48 31.1 | +0.9 |
| NIKH | Nikolski High | 4.05 | 60 | P | Pn | 23 48 34.2 | +0.7 |
| LSNW | Little Sitkin | 4.36 | 284 | P | Pn | 23 48 38.3 | +0.6 |
| UNV | Unalaska Valle | 5.69 | 58 | P | Pn | 23 48 56.9 | +0.9 |
| SPIA | Saint Paul Isl | 6.63 | 21 | P | Pn | 23 49 09.7 | +0.9 |
| KDAK | Kodiak Island | 14.44 | 54 | Pn | Pn | 23 50 54.8 | -0.9 |
| | 0.4nm,0.3s,baz=321,slow=3.2,SNR=6.1 | | | | | | |
| KDAK | | | | Sn | S | 23 53 44.0 | -8.9 |
| | 0.2nm,0.3s,baz=294,slow=20,SNR=1.8 | | | | | | |
| PETK | Petropavlovsk- | 17.07 | 288 | Pn | Pn | 23 51 27.5 | -2.1 |
| | baz=101,slow=14,SNR=2.4 | | | | | | |
| BPAW | Bear Paw Mtn. | 18.03 | 35 | *e*Pn | P | 23 51 42.2 | +0.6 |
| | 2.9nm,1.4s | | | | | | |
| MCK | McKinley | 18.59 | 37 | *e*P | P | 23 51 47.4 | -0.3 |
| | 4.5nm,0.5s | | | | | | |
| BILL | Bilibino | 19.39 | 338 | *e*P | P | 23 51 56.0 | -0.5 |
| | 6.7nm,0.5s | | | | | | |
| ILAR | Eielson Array | 19.89 | 36 | P | P | 23 52 00.6 | -1.3 |
| | 0.3nm,0.3s,baz=228,slow=8.6,SNR=16 | | | | | | |
| COLD | Coldfoot | 20.23 | 28 | *e*P | Pn | 23 52 06.8 | -0.9 |
| | 5.3nm,0.9s | | | | | | |
| EGAK | Eagle | 22.09 | 39 | *e*P | P | 23 52 25.8 | +0.2 |
| | 9.4nm,0.8s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.51 | 212 | T | T | 00 31 12.0 | |
| | baz=15 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.52 | 212 | T | T | 00 31 12.5 | |
| | baz=15 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.53 | 212 | T | T | 00 31 17.0 | |
| | baz=15 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.72 | 211 | T | T | 00 33 03.5 | |
| | baz=19 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.73 | 211 | T | T | 00 33 13.1 | |
| | baz=19 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.73 | 211 | T | T | 00 33 05.9 | |
| | baz=19 | | | | | | |
| NEW | Newport | 36.52 | 71 | *e*P | P | 23 54 35.0 | -0.6 |
| | 2.2nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 40.99 | 85 | P | P | 23 55 17.7 | +4.3 |
| | 0.1nm,0.4s,baz=305,slow=9.8,SNR=2.6 | | | | | | |
| BOZ | Bozeman (W) | 41.08 | 72 | *e*P | P | 23 55 13.5 | -0.5 |
| | 1.6nm,0.8s | | | | | | |
| KSRS | Korea Array | 42.26 | 274 | P | P | 23 55 25.9 | +2.4 |
| | 1.9nm,0.8s,baz=62,slow=8.9,SNR=5.4 | | | | | | |
| KSAR | Wonju Array Be | 42.29 | 274 | P | P | 23 55 25.9 | +2.1 |
| DUG | Dugway | 43.37 | 80 | *e*P | P | 23 55 31.1 | -1.6 |
| | 3.1nm,1.1s | | | | | | |
| BW06 | Boulder Array | 43.89 | 74 | *e*P | P | 23 55 36.5 | -0.5 |
| | 1.7nm,0.8s | | | | | | |
| ULN | Ulaanbaatar | 48.71 | 299 | *e*P | P | 23 56 13.4 | -1.2 |
| | 2.0nm,0.8s | | | | | | |
| SONM | Songino Array | 49.09 | 299 | P | P | 23 56 16.4 | -1.1 |
| | 0.7nm,0.9s,baz=54,slow=8.4,SNR=4.2 | | | | | | |
| SDCO | Great Sand Dun | 49.38 | 77 | *e*P | P | 23 56 20.4 | +0.3 |
| | 1.5nm,0.9s | | | | | | |
| TXAR | Lajitas Array | 56.10 | 84 | P | P | 23 57 12.4 | +2.8 |
| | 0.5nm,0.7s,baz=293,slow=6.5,SNR=5.2 | | | | | | |
| KURK | Kurchatov | 61.08 | 316 | *e*P | P | 23 57 42.6 | -1.1 |
| | 4.5nm,0.3s | | | | | | |
| MKAR | Makanchi Array | 62.23 | 311 | P | P | 23 57 49.8 | -1.9 |
| | 0.6nm,0.3s,baz=44,slow=6.6,SNR=16 | | | | | | |
| BRVK | Borovoye | 62.78 | 322 | *e*P | P | 23 57 49.9 | -5.3 |
| | 1.1nm,0.6s | | | | | | |
| AAK | Ala-Archa | 69.02 | 312 | *e*P | P | 23 58 35.3 | -0.4 |
| | 2.3nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 69.39 | 327 | P | P | 23 58 37.7 | +0.1 |
| | 1.5nm,0.8s,baz=45,slow=4.5,SNR=5.1 | | | | | | |
| GEYT | Alibeck | 80.02 | 320 | P | P | 23 59 39.9 | +0.4 |
| | 2.7nm,0.8s,baz=12,slow=7.7,SNR=6.9 | | | | | | |
| TORD | Torodi Ar. Bea | 115.96 | 4 | PKP | PKPdf | 00 06 13.4 | +0.5 |
| | 0.2nm,0.8s,baz=352,slow=3.4,SNR=2.8 | | | | | | |
| BOSA | Boshof | 153.01 | 319 | PKPbc | PKPbc | 00 07 29.6 | +2.3 |
| | 4.6nm,1.1s,baz=54,slow=2.6,SNR=4.3 | | | | | | |

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*AUST **09** 00:01:14.7,20°.34S×176°.15W,h100km*
*ISCJB **09** 00:01:59.9±0.7,20°.1S±0°.1×177°.8W±0°.1,h500km, mb3.9/11,Error ellipse: s-maj=17.9km s-min=13.6km az=31.7*
*IDC **09** 00:02:01.7±4.5,20°.05S×177°.73W,h511km±45km, mb3.6/10,mb1 3.7/12,mb1mx3.4/35,mbtmp4.5/12,Error ellipse: s-maj=30.2km s-min=16.1km az=57.0*
**ISC 09 00:02:00.3**±0.7**,20°.0S**±0°.1×**177°.6W**±0°.1**,h500**km**,n35, σ0s.68**/35**,mb4.1**/11**,1D,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 8.28 | 44 | S | S | 00 05 29.6 | -8.1 |
| | 29nm,0.3s,baz=31,slow=23,SNR=10 | | | | | | |
| DZM | Mont Dzumac | 15.00 | 259 | P | P | 00 05 11.8 | +1.1 |
| | 0.4nm,0.3s,baz=0.0,slow=20,SNR=6.5 | | | | | | |
| URZ | Urewera | 18.72 | 193 | P | P | 00 05 46.4 | -0.7 |
| | 2.7nm,0.3s,baz=338,slow=11,SNR=13 | | | | | | |
| CTA | Charters Tower | 33.88 | 264 | P | P | 00 08 00.9 | -0.1 |
| | 7.7nm,0.5s,baz=92,slow=12 | | | | | | |
| CMSA | Cobar Meteorol | 34.80 | 243 | P | P | 00 08 08.6 | +0.1 |
| | baz=36,SNR=6.4 | | | | | | |
| HTT | Hallett | 40.74 | 242 | P | P | 00 08 53.7 | -3.6 |
| | baz=42,SNR=4.1 | | | | | | |
| BBOO | Buckleboo | 43.06 | 243 | P | P | 00 09 15.4 | -0.2 |
| | baz=44,SNR=12 | | | | | | |
| JAY | Jayapura | 44.23 | 288 | P | P | 00 09 25.4 | +0.5 |
| | 13nm,0.5s,baz=144,slow=5.3,SNR=10.0 | | | | | | |
| ASAR | Alice Springs | 44.96 | 256 | P | P | 00 09 30.1 | -0.3 |
| | 11nm,0.8s,baz=87,slow=8.5,SNR=87 | | | | | | |
| ASAR | | | | PcP | PcP | 00 11 01.3 | 0.0 |
| | 2.5nm,0.7s,baz=106,slow=3.8,SNR=8.5 | | | | | | |
| WRA | Warramunga Arr | 45.01 | 262 | P | P | 00 09 30.2 | -0.7 |
| | 2.3nm,0.3s,baz=96,slow=8.4,SNR=22 | | | | | | |
| WRA | | | | PcP | PcP | 00 11 01.6 | +0.1 |
| | 0.9nm,0.7s,baz=93,slow=3.7,SNR=5.7 | | | | | | |
| KDU | Kakadu | 48.28 | 271 | P | P | 00 09 55.3 | -0.4 |
| | baz=50,SNR=3.9 | | | | | | |
| FORT | Forrest | 49.79 | 246 | P | P | 00 10 06.2 | -0.6 |
| | baz=51,SNR=8.4 | | | | | | |
| WRKA | Warakurna | 49.92 | 254 | P | P | 00 10 07.4 | -0.4 |
| | baz=51,SNR=28 | | | | | | |
| SIJI | Sorong | 53.45 | 284 | P | P | 00 10 33.4 | -0.1 |
| | 20nm,0.8s,baz=53,slow=3.7,SNR=11 | | | | | | |
| MEEK | Meekatharra | 58.39 | 250 | P | P | 00 11 07.0 | -0.7 |
| | baz=60,SNR=4.4 | | | | | | |
| VNDA | Vanda | 58.40 | 185 | P | P | 00 11 08.0 | +1.2 |
| | 1.1nm,0.8s,baz=35,slow=7.1,SNR=8.8 | | | | | | |
| MJAR | Matsushiro Arr | 70.04 | 323 | P | P | 00 12 21.1 | -0.3 |
| | 1.3nm,0.6s,baz=142,slow=5.7,SNR=3.4 | | | | | | |
| NVAR | Mina Array Bea | 80.45 | 43 | P | P | 00 13 24.2 | +4.3 |
| | 0.1nm,0.3s,baz=226,slow=8.4,SNR=2.6 | | | | | | |
| MAW | Mawson | 82.11 | 200 | P | P | 00 13 27.9 | +0.2 |
| | 1.4nm,0.5s,baz=158,slow=7.0,SNR=7.1 | | | | | | |
| TXAR | Lajitas Array | 86.52 | 57 | P | P | 00 13 51.5 | +1.3 |
| | 0.4nm,0.7s,baz=226,slow=8.4,SNR=4.3 | | | | | | |
| SNAA | Sanae | 88.46 | 178 | P | P | 00 13 57.6 | -1.0 |
| VNA3 | Neumayer Olymp | 88.58 | 176 | P | P | 00 13 58.5 | -0.6 |
| VNA2 | Neumayer--Watz | 89.03 | 177 | P | P | 00 14 01.1 | 0.0 |
| | baz=188,slow=3.3 | | | | | | |
| VNA1 | Neumayer--Stat | 89.25 | 176 | P | P | 00 14 02.0 | 0.0 |
| CMAR | Chiang Mai Arr | 90.28 | 289 | P | P | 00 14 09.2 | +1.3 |
| | 1.5nm,0.7s,baz=112,slow=2.6,SNR=8.6 | | | | | | |
| MKAR | Makanchi Array | 111.13 | 314 | PKiKP | PKiKP | 00 19 35.4 | -1.3 |
| | 0.4nm,0.5s,baz=219,slow=2.2,SNR=6.0 | | | | | | |
| BVAR | Borovoye Array | 118.94 | 320 | PKP | PKPdf | 00 19 50.7 | -0.7 |
| | 1.2nm,0.4s,baz=90,slow=1.4,SNR=9.5 | | | | | | |
| ARCES | ARCESS Array B | 128.53 | 350 | PKP | PKPdf | 00 20 09.1 | -0.2 |
| | 2.5nm,0.8s,baz=90,slow=3.0,SNR=4.3 | | | | | | |
| FINES | FINESS Array B | 135.43 | 344 | PKP | PKPdf | 00 20 22.6 | +0.1 |
| | 0.8nm,0.7s,baz=85,slow=4.6,SNR=5.9 | | | | | | |
| AKASG | Malin Array Be | 142.77 | 332 | PKhKP | PKPpre | 00 20 32.3 | |
| | 1.1nm,0.4s,baz=38,slow=3.6,SNR=6.7 | | | | | | |
| BRTR | Keskin Array B | 146.78 | 313 | PKPbc | PKPbc | 00 20 45.8 | -0.5 |
| | 2.6nm,0.6s,baz=90,slow=2.9,SNR=13 | | | | | | |
| CLL | Collm | 147.69 | 347⇓ | *i*PKPbc | PKPbc | 00 20 48.2 | +0.1 |
| | comp=Z,8.0nm,0.7s | | | | | | |
| CLL | | | | *e*PKPab | PKPab | 00 20 52.0 | -0.1 |
| | comp=Z,2.0nm,0.7s | | | | | | |
| KHC | Kasperske Hory | 149.61 | 345 | *e*P | PKPbc | 00 20 53.0 | 0.0 |
| GERES | GERESS Array B | 149.85 | 345 | PKPbc | PKPbc | 00 20 53.5 | -0.2 |
| | comp=Z,2.9nm,0.8s,baz=35,slow=2.4,SNR=18 | | | | | | |
| TORD | Torodi Ar. Bea | 173.12 | 175 | PKP | PKPdf | 00 21 11.1 | -1.5 |
| | comp=Z,1.3nm,1.0s,baz=9.9,slow=0.4,SNR=5.4 | | | | | | |
| TORD | | | | PKPab | PKPab | 00 22 43.5 | +0.3 |
| | comp=Z,0.4nm,0.7s,baz=171,slow=4.0,SNR=6.4 | | | | | | |

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*IDC **09** 00:19:23.8±11.0,7°.11N×126°.73E,h158km±109km, mb3.5/8,mb1 3.7/9,mb1mx3.5/36,mbtmp4.0/9,MS3.4/1, Ms1 3.4/1,ms1mx2.5/29,Error ellipse: s-maj=75.7km s-min=18.4km az=62.0*
*ISCJB **09** 00:19:24.4±0.5,7°.08N±0°.04×126°.71E±0°.08,h179km±4km, mb3.7/8,Error ellipse: s-maj=13.8km s-min=6.1km az=170.3*
*MAN **09** 00:19:26,7°.00N×126°.60E,h159km,mb4.7,ML3.6,MS3.6*
*DJA **09** 00:20:01.5±4.1,4°N±36°×12°6E±1°0,h110km±21km, M4.5/7,mb4.8/7,mB5.0/7,MLv4.6/3,Mw(mB)4.4/7*
**ISC 09 00:19:25.0**±0.8**,7°.10N**±0°.06×**126°.7E**±0°.1**,h172**km±7km**, n28,σ1s.58**/33**,mb3.9**/8**,1C-1D,Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MATI | Mati | 0.48 | 252 | *e*P | Pn | 00 19 49.3 | +0.5 |
| MATI | | | | *e*S | Sn | 00 20 06.9 | -0.2 |
| BIPH | Bislig | 1.14 | 342⇑ | *i*P | Pn | 00 19 53.9 | +0.9 |
| BIPH | | | | *i* S | Sn | 00 20 16.6 | +1.8 |
| DMPH | Davao City--Mi | 1.20 | 269⇓ | *i*P | Pn | 00 19 54.2 | +0.7 |
| DMPH | | | | *e*S | Sn | 00 20 15.4 | -0.1 |
| BUKP | Musuan | 1.81 | 296 | *e*P | Pn | 00 19 59.8 | +0.2 |
| BUKP | | | | *e*S | Sn | 00 20 11.3 | -15 |
| BUTP | Butuan | 2.15 | 330 | *e*P | Pn | 00 20 06.0 | +2.7 |
| BUTP | | | | *e*S | Sn | 00 20 28.2 | -4.8 |
| SCPH | Surigao | 2.93 | 336 | *e*P | Pn | 00 20 14.4 | +1.9 |
| SCPH | | | | *e*S | Sn | 00 20 48.0 | -1.4 |
| PAGZ | Pagadian | 3.39 | 283 | *e*P | Pn | 00 20 18.3 | +0.2 |
| SGSI | Sangihe | 3.59 | 199 | P | Pn | 00 20 21.2 | +0.5 |
| KMSI | Cibinong | 7.03 | 203 | P | Pn | 00 21 05.5 | 0.0 |
| GTOI | Gorontalo | 7.40 | 210 | P | Pn | 00 21 09.9 | -0.6 |
| MRSI | Marisa | 8.12 | 216 | P | Pn | 00 21 21.5 | +1.6 |
| | 65nm,0.7s,3μm | | | | | | |
| SANI | Sanana | 9.11 | 185 | P | Pn | 00 21 30.9 | -2.2 |
| | 92nm,0.7s,1μm | | | | | | |
| SIJI | Sorong | 9.12 | 150 | P | Pn | 00 21 35.9 | +2.6 |
| | 4.5nm,0.3s,baz=226,slow=22,SNR=6.4 | | | | | | |
| SIJI | | | | S | Sn | 00 23 13.1 | -1.9 |
| | 2.6nm,0.3s,baz=198,slow=20,SNR=3.5 | | | | | | |
| APSI | Ampana | 9.42 | 213 | P | Pn | 00 21 39.1 | +1.9 |
| | 94nm,1.1s,976nm | | | | | | |
| NLAI | Namlea | 10.27 | 178 | P | Pn | 00 21 47.3 | -1.0 |
| | 140nm,0.6s,1μm | | | | | | |
| AAI | Ambon | 10.81 | 172 | P | P | 00 22 02.4 | -0.7 |
| | 58nm,0.8s,2μm0.2nm | | | | | | |
| TTSI | Tana Toraja | 12.20 | 215 | P | Pn | 00 22 14.6 | +1.3 |
| KAPI | Kappang | 13.89 | 210 | P | Pn | 00 22 32.9 | -1.9 |
| | 1.4nm,0.3s,baz=39,slow=18,SNR=5.3 | | | | | | |
| BATI | Baumata | 17.45 | 190 | P | Pn | 00 23 19.1 | +0.9 |
| | 8.1nm,0.3s,baz=160,slow=4.8,SNR=6.1 | | | | | | |
| WRA | Warramunga Arr | 27.90 | 165 | P | P | 00 24 59.4 | +0.4 |
| | 0.5nm,0.4s,baz=344,slow=9.3,SNR=2.4 | | | | | | |
| ASAR | Alice Springs | 31.37 | 167 | P | P | 00 25 30.2 | +0.5 |
| | 0.7nm,0.4s,baz=342,slow=7.4,SNR=13 | | | | | | |
| USRK | Ussuriysk Ar. | 37.25 | 6 | LR | LR | 00 42 57.2 | |
| | comp=Z,51nm,19.3s,baz=0.9,slow=38 | | | | | | |
| SONM | Songino Array | 44.13 | 340 | P | P | 00 27 17.1 | +0.7 |
| | 0.4nm,0.4s,baz=158,slow=8.4,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 54.82 | 324 | P | P | 00 28 37.9 | +0.7 |
| | 1.3nm,0.4s,baz=114,slow=7.3,SNR=25 | | | | | | |
| ZALV | Zalesovo Beam | 57.61 | 332 | P | P | 00 28 56.8 | 0.0 |
| | 1.0nm,0.3s,baz=121,slow=6.2,SNR=6.4 | | | | | | |
| BVAR | Borovoye Array | 64.52 | 326 | P | P | 00 29 43.6 | +0.3 |
| | 1.3nm,0.4s,baz=125,slow=7.4,SNR=10 | | | | | | |
| ILAR | Eielson Array | 82.09 | 26 | P | P | 00 31 25.8 | -0.1 |
| | 0.2nm,0.7s,baz=284,slow=4.5,SNR=2.9 | | | | | | |
| ARCES | ARCESS Array B | 87.30 | 340 | P | P | 00 31 51.6 | -0.4 |
| | 1.9nm,0.8s,baz=82,slow=6.5,SNR=2.5 | | | | | | |

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**IDC 09 00:23:30.2**±6.1**,61°.18S**×**152°.23E,h0**km**,mb3.7**/2**, mb1 4.0**/3**,mb1mx3.8**/25**,mbtmp3.8**/3**,ML3.9**/1**,MS3.4**/4**, Ms1 3.5**/4**,ms1mx3.2**/16**,Error ellipse: s-maj=510.7km s-min=37.8km az=75.0,Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VNDA | Vanda | 16.72 | 173 | Pn | Pn | 00 27 25.4 | +0.1 |
| | 0.4nm,0.3s,baz=346,slow=14,SNR=19 | | | | | | |
| RPZ | Rata Peaks | 20.77 | 41 | LR | LR | 00 34 51.0 | |
| | comp=Z,197nm,20.4s,baz=185,slow=33 | | | | | | |
| URZ | Urewera | 27.68 | 45 | LR | LR | 00 40 36.3 | |
| | comp=Z,99nm,18.1s,baz=249,slow=37 | | | | | | |
| QSPA | South Pole Qui | 28.91 | 180 | LR | LR | 00 40 34.7 | |
| | comp=Z,103nm,21.7s,baz=33,slow=35 | | | | | | |
| H01W1 | Cape Leeuwin H | 35.74 | 300 | T | T | 01 09 05.2 | |
| | baz=148,slow=76,SNR=36 | | | | | | |
| H01W2 | Cape Leeuwin H | 35.74 | 300 | T | T | 01 09 04.1 | |
| | baz=148,slow=76,SNR=30 | | | | | | |
| H01W3 | Cape Leeuwin H | 35.76 | 300 | T | T | 01 09 06.4 | |
| | baz=148,slow=76,SNR=32 | | | | | | |
| ASAR | Alice Springs | 39.56 | 333 | P | P | 00 31 03.4 | +0.5 |
| | 0.7nm,0.9s,baz=167,slow=8.8,SNR=4.8 | | | | | | |
| WRA | Warramunga Arr | 43.08 | 335 | P | P | 00 31 31.0 | -0.8 |
| | 1.8nm,1.0s,baz=165,slow=7.4,SNR=5.2 | | | | | | |
| H08S2 | Diego Garcia H | 78.39 | 275 | T | T | 02 02 48.4 | |
| | baz=149,slow=76,SNR=12 | | | | | | |
| H08S1 | Diego Carcia H | 78.41 | 275 | T | T | 02 02 43.4 | |
| | baz=149,slow=76,SNR=6.8 | | | | | | |
| H08S3 | Diego Garcia H | 78.42 | 275 | T | T | 02 02 49.7 | |
| | baz=149,slow=76,SNR=15 | | | | | | |
| CMAR | Chiang Mai Arr | 90.02 | 310 | LR | LR | 01 14 12.0 | |
| | comp=Z,9.2nm,21.7s,baz=255,slow=34 | | | | | | |

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*IDC **09** 00:24:02.3±3.0,5°.04S×101°.48E,h0km,mb3.8/5, mb1 3.9/6,mb1mx3.6/38,mbtmp3.8/6,ML3.9/1,Error ellipse: s-maj=115.4km s-min=21.2km az=50.0*
*ISCJB **09** 00:24:06.8±0.7,4°.88S±0°.07×101°.81E±0°.06,h36km, mb3.9/6,Error ellipse: s-maj=12.2km s-min=5.9km az=36.7*
*DJA **09** 00:24:08.2±0.9,5°S±3°×10°2E±°,h17km±9km,M4.5/14, mb4.8/4,MLv4.4/14*
*NEIC **09** 00:24:09.6±3.1,4°.78S×101°.85E,h43km±21km,mb4.2/1, Error ellipse: s-maj=44.0km s-min=11.4km az=51.0*
*NEIC Felt [III] at Bengkulu.*
**ISC 09 00:24:09.2**±1.1**,4°.8S**±0°.1×**101°.89E**±0°.09**,h36**km**,n34, σ1s.09**/27**,mb3.8**/6**,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MNAI | Manna | 1.15 | 67 | P | Pn | 00 24 28.4 | -0.4 |
| MNAI | | | | S | Sn | 00 24 42.6 | -0.7 |
| MNAI | Manna | 1.15 | 67 | *e*Pn | Pn | 00 24 28.2 | -0.5 |
| MNAI | | | | *e*Sn | Sn | 00 24 41.5 | -1.7 |
| KSI | Kapahiang | 1.35 | 31 | P | Pn | 00 24 32.1 | +0.6 |
| LHSI | Lahat | 1.90 | 59 | P | Pn | 00 24 39.4 | +0.4 |
| LWLI | Liwa | 2.17 | 95 | P | Pn | 00 24 44.8 | +2.0 |
| MDSI | Maura Dua | 2.30 | 82 | P | Pn | 00 24 44.9 | +0.3 |
| KASI | Kota Agung | 2.69 | 105 | P | Pn | 00 24 50.6 | +0.7 |
| PPSI | Pulau Pagai | 2.77 | 317 | P | Pn | 00 24 52.2 | +1.2 |
| PDSI | Padang | 4.13 | 340 | P | Pn | 00 25 10.4 | +0.6 |
| CGJI | Cibinong | 4.18 | 115 | P | Pn | 00 25 09.3 | -1.2 |
| SISI | Saibi | 4.45 | 321 | P | Pn | 00 25 14.9 | +0.7 |
| LEM | Lembang | 6.04 | 110 | Pn | Pn | 00 25 38.9 | +2.8 |
| | 2.8nm,0.3s,baz=150,slow=19,SNR=3.8 | | | | | | |
| LEM | | | | Sn | Sn | 00 26 58.8 | +15 |
| | 2.5nm,0.3s,baz=319,slow=20,SNR=2.7 | | | | | | |
| CMJI | Cimerak | 7.15 | 115 | P | Pn | 00 25 51.7 | +0.4 |
| | 73nm,1.1s,0.3nm | | | | | | |
| GSI | Gunungsitoli | 7.45 | 325 | P | Pn | 00 25 54.5 | -0.9 |
| | 33nm,0.6s,0.2nm | | | | | | |
| UGM | Wanagama | 9.11 | 110 | P | Pn | 00 26 19.7 | +1.4 |
| | 118nm,1.5s | | | | | | |
| PCJI | Pacitan | 9.82 | 110 | P | Pn | 00 26 28.5 | +0.6 |
| KULM | Kulim | 10.11 | 353 | *e*Pn | Pn | 00 26 31.9 | -0.1 |
| LUWI | Luwuk | 21.18 | 80 | *e*P | P | 00 28 53.3 | +1.7 |
| H08S2 | Diego Garcia H | 29.36 | 263 | T | T | 01 00 29.7 | |
| | baz=86,slow=75,SNR=105 | | | | | | |
| H08S3 | Diego Garcia H | 29.36 | 263 | T | T | 01 00 31.9 | |
| | baz=86,slow=75,SNR=172 | | | | | | |
| H08S1 | Diego Carcia H | 29.38 | 263 | T | T | 01 00 30.5 | |
| | baz=86,slow=75,SNR=106 | | | | | | |
| H08N1 | Diego Carcia H | 30.77 | 266 | T | T | 01 02 53.7 | |
| | baz=154,slow=72,SNR=5.3 | | | | | | |
| H08N2 | Diego Garcia H | 30.78 | 266 | T | T | 01 02 52.5 | |
| | baz=154,slow=72,SNR=5.1 | | | | | | |
| H08N3 | Diego Garcia H | 30.79 | 266 | T | T | 01 02 56.8 | |
| | baz=154,slow=72,SNR=6.2 | | | | | | |
| H01W3 | Cape Leeuwin H | 32.00 | 161 | T | T | 01 04 28.9 | |
| | baz=337,slow=76,SNR=7.4 | | | | | | |
| H01W2 | Cape Leeuwin H | 32.01 | 161 | T | T | 01 04 22.3 | |
| | baz=337,slow=76,SNR=5.7 | | | | | | |
| H01W1 | Cape Leeuwin H | 32.01 | 161 | T | T | 01 04 22.8 | |
| | baz=337,slow=76,SNR=5.2 | | | | | | |
| WRA | Warramunga Arr | 34.97 | 118 | P | P | 00 30 57.7 | -0.6 |
| | 0.5nm,0.5s,baz=299,slow=8.9,SNR=3.6 | | | | | | |
| WRAB | Tennant Creek | 34.98 | 118 | *e*P | P | 00 30 57.3 | -1.0 |
| | 1.5nm,0.5s | | | | | | |
| ASAR | Alice Springs | 36.10 | 124 | P | P | 00 31 08.1 | +0.2 |
| | 0.4nm,0.5s,baz=297,slow=8.2,SNR=6.3 | | | | | | |
| SONM | Songino Array | 52.57 | 4 | P | P | 00 33 19.0 | -0.3 |
| | 0.5nm,0.5s,baz=189,slow=8.6,SNR=5.3 | | | | | | |
| MKAR | Makanchi Array | 54.24 | 343 | P | P | 00 33 30.9 | -0.5 |
| | 0.4nm,0.4s,baz=148,slow=8.5,SNR=9.4 | | | | | | |
| ZALV | Zalesovo Beam | 60.27 | 348 | P | P | 00 34 13.2 | -0.7 |
| | 0.9nm,0.4s,baz=168,slow=5.2,SNR=4.8 | | | | | | |
| TXAR | Lajitas Array | 145.65 | 42 | PKPbc | PKPbc | 00 43 45.2 | +0.3 |
| | 0.2nm,0.4s,baz=282,slow=1.7,SNR=8.8 | | | | | | |

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*IDC **09** 00:57:13.7±2.8,4°.19S×132°.01E,h0km,mb3.7/2, mb1 3.8/4,mb1mx3.6/19,mbtmp3.6/4,ML3.6/2,MS3.2/1, Ms1 3.2/1,ms1mx2.6/19,Error ellipse: s-maj=212.7km s-min=26.8km az=76.0*
*AUST **09** 00:58:21.7,8°.97S×130°.06E,h100km*
**ISC 09 00:57:14.0**±1.1**,4°.28S**±0°.08×**132°.2E**±0°.3**,h10**km**,n9, σ1s.44**/7**,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDU | Kakadu | 8.35 | 178 | P | Pn | 00 59 21.4 | +6.2 |
| | baz=4.4,SNR=10 | | | | | | |
| MTN | Manton Dam | 8.57 | 187 | P | Pn | 00 59 23.0 | +4.8 |
| | baz=4.0,SNR=6.8 | | | | | | |
| PALU | Palau | 11.77 | 11 | P | Sn | 01 02 12.9 | -0.8 |
| | baz=17,SNR=3.1 | | | | | | |
| FITZ | Fitzroy Crossi | 15.16 | 205 | P | Pn | 01 00 47.4 | -1.0 |
| | baz=10,SNR=3.8 | | | | | | |
| WRA | Warramunga Arr | 15.70 | 173 | Pn | Pn | 01 00 56.3 | +0.8 |
| | 0.2nm,0.3s,baz=356,slow=13,SNR=5.1 | | | | | | |
| WRA | | | | Sn | Sn | 01 03 48.1 | -1.6 |
| | 0.2nm,0.3s,baz=0.2,slow=23,SNR=2.7 | | | | | | |
| WRA | | | | LR | LR | 01 06 33.6 | |
| | comp=Z,75nm,19.1s,baz=265,slow=35 | | | | | | |
| ASAR | Alice Springs | 19.34 | 175 | P | Pn | 01 01 42.6 | +1.8 |
| | 0.2nm,0.3s,baz=357,slow=9.0,SNR=19 | | | | | | |
| WRKA | Warakurna | 20.97 | 190 | P | Pn | 01 02 01.5 | +1.4 |
| | baz=16,SNR=8.0 | | | | | | |
| SONM | Songino Array | 56.63 | 339 | P | P | 01 06 57.7 | +0.3 |
| | 0.2nm,0.3s,baz=168,slow=7.4,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 67.21 | 325 | P | P | 01 08 08.7 | +0.1 |
| | 0.6nm,0.6s,baz=107,slow=7.1,SNR=7.2 | | | | | | |

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*IDC **09** 01:24:31.3±0.7,22°.05N×145°.32E,h0km,mb4.1/14, mb1 4.3/15,mb1mx4.1/33,mbtmp4.1/15,ML3.9/1,MS3.1/4, Ms1 3.1/4,ms1mx2.8/30,Error ellipse: s-maj=24.1km s-min=17.8km az=78.0*
*ISCJB **09** 01:24:34.8±0.5,22°.05N±0°.07×145°.3E±0°.1,h36km, mb4.3/23,MS3.0/3,Error ellipse: s-maj=16.7km s-min=9.3km az=174.0*
*NEIC **09** 01:24:36.7±0.3,22°.09N×145°.27E,h35km,mb4.6/9,Error ellipse: s-maj=13.2km s-min=7.7km az=85.0*
**ISC 09 01:24:36.8**±0.6**,22°.07N**±0°.09×**145°.3E**±0°.1**,h36**km**,n37, σ0s.94**/28**,mb4.4**/23**,MS3.0**/3**,North Pacific Ocean**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MJAR | Matsushiro Arr | 15.67 | 338 | Pn | Pn | 01 28 14.1 | -0.8 |
| | 0.5nm,0.3s,baz=161,slow=11,SNR=4.1 | | | | | | |
| JNU | Nakatsue | 16.83 | 314 | LR | LR | 01 34 38.2 | |
| | comp=Z,38nm,18.7s,baz=117,slow=36 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 20.33 | 93 | T | T | 01 50 26.0 | |
| | baz=281 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 20.33 | 93 | T | T | 01 50 17.9 | |
| | baz=281 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 20.34 | 93 | T | T | 01 50 23.9 | |
| | baz=281 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 20.39 | 96 | T | T | 01 50 14.6 | |
| | baz=282 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 20.40 | 96 | T | T | 01 50 25.6 | |
| | baz=282 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 20.41 | 96 | T | T | 01 50 17.4 | |
| | baz=282 | | | | | | |
| KSRS | Korea Array | 21.44 | 319 | P | P | 01 29 22.9 | +1.2 |
| | 5.0nm,0.8s,baz=129,slow=13,SNR=12 | | | | | | |
| KSRS | | | | LR | LR | 01 37 12.7 | |
| | comp=Z,83nm,20.7s,baz=132,slow=35 | | | | | | |
| KSAR | Wonju Array Be | 21.45 | 319 | P | P | 01 29 22.9 | +1.0 |
| ASAJ | Asahikawa | 22.10 | 355 | LR | LR | 01 36 43.3 | |
| | comp=Z,42nm,20.7s,baz=22,slow=33 | | | | | | |
| USRK | Ussuriysk Ar. | 24.65 | 337 | P | P | 01 29 55.8 | +1.9 |
| | 9.6nm,0.8s,baz=148,slow=9.1,SNR=30 | | | | | | |
| PETK | Petropavlovsk- | 32.41 | 14 | LR | LR | 01 43 26.8 | |
| | comp=Z,32nm,20.1s,baz=88,slow=35 | | | | | | |
| COEN | Coen | 35.87 | 183 | *e*P | P | 01 31 32.4 | -0.9 |
| SONM | Songino Array | 40.31 | 319 | P | P | 01 32 10.7 | 0.0 |
| | 0.9nm,0.6s,baz=133,slow=8.5,SNR=9.1 | | | | | | |
| WRAB | Tennant Creek | 43.09 | 195 | *e*P | P | 01 32 34.0 | +0.5 |
| | 2.5nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 43.11 | 195 | P | P | 01 32 33.3 | -0.4 |
| | 1.1nm,0.3s,baz=18,slow=8.9,SNR=7.6 | | | | | | |
| ASAR | Alice Springs | 46.79 | 194 | P | P | 01 33 02.5 | -0.4 |
| | 0.8nm,0.7s,baz=14,slow=8.5,SNR=11 | | | | | | |
| MBWA | Marble Bar | 49.68 | 212 | *e*P | P | 01 33 26.6 | +1.4 |
| | 16nm,1.1s | | | | | | |
| FORT | Forrest | 55.09 | 198 | *e*P | P | 01 34 04.7 | -0.6 |
| | 9.5nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 55.13 | 321 | P | P | 01 34 04.4 | -0.9 |
| | 2.2nm,0.5s,baz=104,slow=8.3,SNR=9.2 | | | | | | |
| MKAR | Makanchi Array | 55.88 | 312 | P | P | 01 34 10.8 | -0.1 |
| | 0.9nm,0.6s,baz=92,slow=8.6,SNR=6.1 | | | | | | |
| KURK | Kurchatov | 58.53 | 317 | *e*P | P | 01 34 28.8 | -0.7 |
| | 10nm,1.0s | | | | | | |
| MCK | McKinley | 59.74 | 28 | *e*P | P | 01 34 37.8 | +0.1 |
| | 3.5nm,0.6s | | | | | | |
| ILAR | Eielson Array | 60.82 | 27 | P | P | 01 34 44.1 | -0.9 |
| | 2.1nm,0.7s,baz=258,slow=5.5,SNR=22 | | | | | | |
| BRVK | Borovoye | 63.72 | 319 | *e*P | P | 01 35 04.4 | -0.2 |
| | 3.7nm,0.6s | | | | | | |
| KKAR | Karatay Array | 64.35 | 308 | *e*P | P | 01 35 08.2 | -0.8 |
| | 0.8nm,0.5s | | | | | | |
| INK | Inuvik | 66.45 | 24 | P | P | 01 35 22.1 | +0.1 |
| | 4.4nm,1.1s,baz=291,slow=5.3,SNR=4.4 | | | | | | |
| ABKAR | Akbulak array | 70.63 | 316 | *e*P | P | 01 35 48.0 | -0.6 |
| | 2.0nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 81.38 | 52 | P | P | 01 36 51.1 | +0.8 |
| | 1.2nm,0.7s,baz=277,slow=6.2,SNR=11 | | | | | | |
| KBZ | Khabaz | 83.50 | 315 | P | P | 01 37 03.2 | +2.2 |
| | 3.1nm,0.9s,baz=164,slow=3.4,SNR=4.1 | | | | | | |
| FINES | FINESS Array B | 83.67 | 335 | P | P | 01 37 00.8 | -0.6 |
| | 2.2nm,0.7s,baz=80,slow=5.0,SNR=12 | | | | | | |
| FFC | Flin Flon | 84.47 | 33 | *e*P | P | 01 37 05.5 | -0.2 |
| | 2.4nm,0.5s | | | | | | |
| AKASG | Malin Array Be | 88.32 | 325 | P | P | 01 37 23.2 | -1.4 |
| | 0.2nm,0.3s,baz=51,slow=5.4,SNR=3.7 | | | | | | |
| TXAR | Lajitas Array | 96.25 | 55 | P | P | 01 38 01.8 | -0.1 |
| | 0.1nm,0.4s,baz=273,slow=3.5,SNR=2.5 | | | | | | |
| TORD | Torodi Ar. Bea | 129.99 | 311 | PKP | PKPdf | 01 43 43.4 | -0.2 |
| | 0.2nm,0.7s,baz=16,slow=0.2,SNR=2.4 | | | | | | |
| LPAZ | La Paz | 147.97 | 86 | PKPbc | PKPbc | 01 44 20.8 | +0.9 |
| | 1.2nm,0.7s,baz=288,slow=3.2,SNR=6.5 | | | | | | |

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*ISCJB **09** 01:48:43.1±0.4,50°.40N±0°.03×18°.77E±0°.02,h0km,Error ellipse: s-maj=4.9km s-min=1.9km az=15.4*
*IPEC **09** 01:48:43.7±0.2,50°.41N×18°.92E,h2km±1km,ML2.0/3, Error ellipse: s-maj=2.5km s-min=1.2km az=172.0*
*CSEM **09** 01:48:43.9±0.3,50°.40N×18°.85E,h2km,ML3.0/10,Error ellipse: s-maj=6.1km s-min=2.9km az=14.0*
*SIGU **09** 01:48:43.7±0.4,50°.29N±0°.02×18°.89E±0°.02,h5km, mb2.5/10*
*PRU **09** 01:48:44.6,50°.36N×18°.85E,h0km*
**ISC 09 01:48:43.4**±0.8**,50°.36N**±0°.04×**18°.87E**±0°.02**,h0**km**,n44, σ1s.08**/83**,Poland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHZP | Chorzow | 0.10 | 132 | *e*Pg | Pg | 01 48 46.5 | +1.2 |
| CHZP | | | | *e*Sg | Sg | 01 48 48.2 | +1.6 |
| RAC | Raciborz | 0.52 | 238 | *e*Sg | Sb | 01 49 03.5 | +0.1 |
| OJC | Ojcow | 0.61 | 103 | *e*Pg | Pg | 01 48 55.5 | +0.4 |
| OJC | | | | *e*Sg | Sg | 01 49 04.0 | +1.1 |
| OJC | Ojcow | 0.61 | 103 | *e*Pg | Pg | 01 48 55.5 | +0.4 |
| OJC | | | | *e*Sg | Sg | 01 49 04.0 | +1.1 |
| OKC | Ostrava-Krasne | 0.70 | 222 | *e*PG | Pb | 01 48 58.3 | -0.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OKC | | | | eSG | Sg | 01 49 06.5 | +0.6 |
| | comp=Z,38nm,0.4s | | | | | | |
| OKC | Ostrava-Krasne | 0.70 | 222 | Pg | Pb | 01 48 58.3 | -0.2 |
| OKC | | | | Sg | Sg | 01 49 06.5 | +0.6 |
| | 38nm,0.4s | | | | | | |
| MORC | Moravsky Berou | 1.04 | 236 | ePg | Pb | 01 49 04.2 | -0.1 |
| MORC | | | | eSg | Sb | 01 49 18.2 | -0.2 |
| | 26nm,0.2s | | | | | | |
| LANS | Liptovska Anna | 1.27 | 162 | ePG | Pb | 01 49 08.5 | +0.3 |
| LANS | | | | eSG | Sb | 01 49 25.6 | +0.5 |
| NIE | Niedzica | 1.32 | 135 | ePg | Pn | 01 49 09.3 | +0.2 |
| NIE | | | | eSg | Sn | 01 49 27.4 | 0.0 |
| NIE | Niedzica | 1.32 | 135 | ePg | Pn | 01 49 09.3 | +0.2 |
| NIE | | | | eSg | Sn | 01 49 27.4 | 0.0 |
| KRLC | Kraliky | 1.37 | 259 | ePG | Pg | 01 49 09.3 | -0.4 |
| KRLC | | | | eSG | Sg | 01 49 28.1 | +0.6 |
| KRLC | Kraliky | 1.37 | 259 | Pg | Pg | 01 49 09.3 | -0.4 |
| KRLC | | | | Sg | Sg | 01 49 28.1 | +0.6 |
| DPC | Dobruska-Polom | 1.64 | 271 | ePG | Pn | 01 49 14.0 | +0.5 |
| DPC | | | | eSG | Sn | 01 49 35.7 | +0.5 |
| | comp=Z,16nm,0.5s | | | | | | |
| DPC | Dobruska-Polom | 1.64 | 271 | Pg | Pn | 01 49 14.0 | +0.5 |
| DPC | | | | Sg | Sn | 01 49 35.7 | +0.5 |
| | 16nm,0.5s | | | | | | |
| KSP | Ksiaz | 1.71 | 287 | ePn | Pn | 01 49 14.4 | -0.1 |
| KSP | | | | ePg | Pg | 01 49 17.0 | +0.8 |
| KSP | | | | eSg | Sg | 01 49 39.7 | +1.2 |
| KSP | Ksiaz | 1.71 | 287 | ePn | Pn | 01 49 14.4 | -0.1 |
| STHS | Stebnicka Huta | 1.80 | 121 | ePN | Pb | 01 49 17.5 | +0.3 |
| STHS | | | | eSN | Sg | 01 49 42.6 | +1.4 |
| STHS | Stebnicka Huta | 1.80 | 121 | ePn | Pb | 01 49 17.5 | +0.3 |
| STHS | | | | eSn | Sg | 01 49 42.6 | +1.4 |
| VRAC | Vranov | 1.81 | 235 | ePn | Pn | 01 49 16.4 | +0.5 |
| VRAC | | | | eSg | Sg | 01 49 41.9 | +0.3 |
| | 14nm,0.3s | | | | | | |
| UPC | Upice | 1.84 | 276 | eSG | Sb | 01 49 41.7 | +0.3 |
| | comp=Z,13nm,0.5s | | | | | | |
| UPC | Upice | 1.84 | 276 | Sg | Sb | 01 49 41.7 | +0.3 |
| | 13nm,0.5s | | | | | | |
| VYHS | Vyhne | 1.87 | 181 | ePN | Pn | 01 49 17.0 | +0.4 |
| VYHS | | | | eSN | Sn | 01 49 40.5 | -0.4 |
| VYHS | Vyhne | 1.87 | 181 | ePn | Pn | 01 49 17.0 | +0.4 |
| VYHS | | | | eSn | Sn | 01 49 40.5 | -0.4 |
| KRUC | Moravsky | 2.07 | 232 | ePn | Pn | 01 49 19.5 | +0.1 |
| KRUC | | | | eSn | Sb | 01 49 48.5 | +0.5 |
| | 6.4nm,0.2s | | | | | | |
| SMOL | Smolenice | 2.07 | 208 | ePN | Pn | 01 49 20.1 | +0.6 |
| SMOL | | | | eSN | Sb | 01 49 48.5 | +0.3 |
| SMOL | Smolenice | 2.07 | 208 | ePn | Pn | 01 49 20.1 | +0.6 |
| SMOL | | | | eSn | Sb | 01 49 48.5 | +0.3 |
| KOLS | Kolonicke sedl | 2.63 | 122 | e | Pn | 01 49 25.9 | -1.2 |
| KOLS | Kolonicke sedl | 2.63 | 122 | eSN | Sn | 01 49 59.4 | -0.3 |
| KOLS | Kolonicke sedl | 2.63 | 122 | eSn | Sn | 01 49 59.4 | -0.3 |
| GOPC | GO Pecny, Ondr | 2.67 | 262 | ePN | Pn | 01 49 28.5 | +0.9 |
| GOPC | | | | ePG | Pb | 01 49 32.1 | +0.1 |
| GOPC | | | | eSN | Sn | 01 50 00.5 | -0.2 |
| GOPC | | | | eSG | Sg | 01 50 08.4 | -0.6 |
| | comp=Z,7.5nm,0.4s | | | | | | |
| GOPC | GO Pecny, Ondr | 2.67 | 262 | Pn | Pn | 01 49 28.5 | +0.9 |
| GOPC | | | | Sn | Sn | 01 50 00.5 | -0.2 |
| GOPC | | | | Sg | Sg | 01 50 08.4 | -0.6 |
| | 7.5nm,0.4s | | | | | | |
| PVCC | Panska Ves | 2.76 | 275 | ePN | Pn | 01 49 30.2 | +1.4 |
| PVCC | | | | ePG | Pb | 01 49 35.2 | +1.7 |
| PVCC | | | | eSG | Sg | 01 50 12.4 | +0.5 |
| | comp=Z,20nm,0.5s | | | | | | |
| PVCC | Panska Ves | 2.76 | 275 | Pn | Pn | 01 49 30.2 | +1.4 |
| PRU | Pruhonice | 2.81 | 264 | ePG | Pb | 01 49 35.0 | +0.6 |
| PRU | | | | eSG | Sg | 01 50 12.7 | -0.9 |
| | comp=Z,3.1nm,0.5s | | | | | | |
| ONO | Onokovtsy | 2.82 | 126 | ePn | Pn | 01 49 32.3 | +2.6 |
| ONO | | | | eSn | Sb | 01 50 08.2 | -1.5 |
| UZH | Uzhgorod | 2.82 | 127 | ePn | Pn | 01 49 32.4 | +2.7 |
| UZH | | | | Pnm | | 01 49 44.4 | |
| UZH | | | | eSn | Sb | 01 50 08.4 | -1.3 |
| UZH | | | | Snm | | 01 50 15.4 | |
| MUKU | Mukachevo | 3.14 | 126 | ePn | Pb | 01 49 37.4 | -2.6 |
| MUKU | | | | eSn | Sb | 01 50 17.2 | -1.5 |
| BRG | Berggiesshubel | 3.18 | 281 | PG | Pg | 01 49 43.5 | -0.9 |
| BRG | | | | SG | Sg | 01 50 25.4 | -0.2 |
| | 4.9nm,0.5s | | | | | | |
| KORU | Korolevo | 3.56 | 127 | ePn | Pb | 01 49 43.8 | -3.3 |
| KORU | | | | i Sn | Sb | 01 50 28.4 | -2.4 |
| KHC | Kasperske Hory | 3.65 | 252 | ePN | Pn | 01 49 41.3 | +0.2 |
| KHC | | | | ePG | Pb | 01 49 49.3 | +0.6 |
| KHC | | | | eSN | Sn | 01 50 22.0 | -2.9 |
| KHC | | | | eSG | Sg | 01 50 38.8 | -1.7 |
| | comp=Z,8.5nm,0.5s | | | | | | |
| KHC | Kasperske Hory | 3.65 | 252 | Pn | Pn | 01 49 41.3 | +0.2 |
| KHC | | | | Sg | Sg | 01 50 38.8 | -1.7 |
| | 8.5nm,0.5s | | | | | | |
| CLL | Collm | 3.84 | 287 | eSg | Sg | 01 50 47.0 | +0.3 |
| | comp=Z,8.0nm,0.7s | | | | | | |
| HORU | Horodok | 5.03 | 100 | ePn | Pb | 01 50 07.4 | -4.8 |
| HORU | | | | i Sn | Sb | 01 51 10.8 | -2.3 |
| NDNU | Novodnistrovsk | 5.81 | 104 | ePn | Pb | 01 50 19.7 | -5.8 |
| NDNU | | | | Pnm | | 01 50 21.9 | |
| NDNU | | | | i Sn | Sb | 01 51 32.5 | -3.2 |
| NDNU | | | | Snm | | 01 51 34.9 | |
| NDNU | | | | Snm | | 01 51 34.9 | |

*IDC* ***09*** *01:54:03.6±0.3, 10°.39N×84°.33W, h85km±3km, mb5.1/27, mb1 5.2/32, mb1mx5.1/36, mbtmp5.4/32, MS4.7/21, Ms1 4.7/21, ms1mx4.6/28, Error ellipse: s-maj=7.7km s-min=7.1km az=43.0*

*SZGRF* ***09*** *01:54:03.8, 10°.96N×83°.12W, h33km, mb5.9/21(BGR)*

*MOS* ***09*** *01:54:03.3±1.0, 10°.42N×84°.19W, h88km, mb5.5/69, MS5.0/20, Error ellipse: s-maj=6.8km s-min=4.2km az=97.7*

*GCMT* ***09*** *01:54:04.6±0.1, 10°.21N×84°.28W, h96km, MW5.8/119, Moment Tensor Solution. s113,c246; s119,c354; Duration: 2s.0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$0.44±.06; $M_{\theta\theta}$1.22±.07; $M_{\phi\phi}$-1.65±.08; $M_{r\theta}$6.31±.04; $M_{\theta\phi}$1.10±.06; $M_{\phi r}$-1.34±.05; Best double couple: $M_0$6.65500×$10^{17}$ NP1:$\phi_s$105.00000°, δ90.00000°, λ75.00000°. NP2:$\phi_s$15.00000°, δ15.00000°, λ179.00000°. Principal axes: T 7.1520, Plg43.0000°, Azm1.0000°; N -0.9880, Plg15.0000°, Azm105.0000°; P -6.1580, Plg43.0000°, Azm209.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*ISCJB* ***09*** *01:54:04.2±0.2, 10°.37N±0°.02×84°.26W±0°.02, h99km±1km, mb5.5/344 Error ellipse: s-maj=3.7km s-min=2.1km az=39.7*

*BJI* ***09*** *01:54:04.7, 10°.20N×84°.30W, h92km, mB5.4/30*

*CASC* ***09*** *01:54:04.0±2.5, 10°.25N×84°.21W, h83km±7km, MD4.8, ML4.9, mb5.6(NEIC)*

*NEIC* ***09*** *01:54:04.6±0.2, 10°.21N×84°.29W, mb5.5/251, MW5.8, MW5.8, MW5.9(UCR), Error ellipse: s-maj=4.6km s-min=3.1km az=212.0, Moment Tensor Solution. s32 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-1.23; $M_{\theta\theta}$1.22; $M_{\phi\phi}$0.01; $M_{r\theta}$5.61; $M_{\theta\phi}$0.97; $M_{\phi r}$-1.35; Best double couple: $M_0$6.00000×$10^{17}$ NP1:$\phi_s$281.00000°, δ85.00000°, λ-79.00000°. NP2:$\phi_s$35.00000°, δ12.00000°, λ-155.00000°. Principal axes: T 5.7400, Plg39.0000°, Azm1.0000°; N 0.4600, Plg11.0000°, Azm100.0000°; P -6.1900, Plg49.0000°, Azm203.0000°;*

*NEIC Felt [V] at El Tejar, Parrita, San Ramon and Santiago and [IV] in the Puntarenas-San Jose-San Isidro area. Felt in much of Costa Rica and in parts of western Panama.*

*NEIC* ***09*** *01:54:06.0±0.0, 10°.31N×84°.23W, h98km, Moment Tensor Solution. s39 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$0.08; $M_{\theta\theta}$1.47; $M_{\phi\phi}$-1.55; $M_{r\theta}$5.50; $M_{\theta\phi}$0.56; $M_{\phi r}$-1.68; Best double couple: $M_0$5.90000×$10^{17}$ NP1:$\phi_s$289.00000°, δ88.00000°, λ-76.00000°. NP2:$\phi_s$26.00000°, δ13.00000°, λ-173.00000°. Principal axes: T 6.3800, Plg42.0000°, Azm7.0000°; N -0.9300, Plg13.0000°, Azm109.0000°; P -5.4600, Plg45.0000°, Azm213.0000°;*

**ISC 09 01:54:04.8**±0.3**, 10°.29N**±0°.03×**84°.24W**±0°.03**, h94**km±1km**, h94**km**:pP-P, n1469, σ1s.35**/1765**, mb5.5**/352**, 66C-63D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CGA2 | Cerro Gallo 2 | 0.35 | 219 | ⇑iP | Pn | 01 54 16.7 | -2.5 |
| FORC | Fortuna | 0.46 | 292 | ⇓iP | Pn | 01 54 18.3 | -1.4 |
| FORC | | | | i S | Sn | 01 54 29.8 | -1.0 |
| CEDE | Laguna Cedeˆ–o | 0.49 | 293 | ⇓iP | Pn | 01 54 18.8 | -1.3 |
| CEDE | | | | i S | Sn | 01 54 30.5 | -0.9 |
| CASO | Castillo | 0.51 | 286 | ⇓iP | Pn | 01 54 18.7 | -1.4 |
| BANL | Banca Lucia | 0.62 | 291 | ⇓iP | Pn | 01 54 19.8 | -1.4 |
| CHPA | Chiripa | 0.67 | 283 | ⇓iP | Pn | 01 54 20.3 | -1.2 |
| CHPA | | | | eS | Sn | 01 54 33.4 | -0.7 |
| JTS | JuntasAbangare | 0.70 | 270 | P | Pn | 01 54 19.8 | -1.9 |
| | 12µm,0.3s,baz=79,slow=12,SNR=9812 | | | | | | |
| JTS | | | | S | Sn | 01 54 31.6 | -2.7 |
| | 26µm,0.3s,baz=196,slow=20,SNR=69 | | | | | | |
| JTS | JuntasAbangare | 0.70 | 270 | Pn | Pn | 01 54 19.6 | -2.1 |
| | 617µm,0.6s | | | | | | |
| AMAS | Alto Masis | 0.81 | 293 | ⇓iP | Pn | 01 54 21.3 | -1.5 |
| AMAS | | | | i S | Sn | 01 54 35.9 | -0.5 |
| PTEN | Parque Tenorio | 0.84 | 300 | ⇓iP | Pn | 01 54 22.0 | -1.2 |
| PTEN | | | | i S | Sn | 01 54 37.3 | +0.3 |
| BUS | Buena Vista | 0.88 | 147 | ⇑iP | Pn | 01 54 21.8 | -2.2 |
| JCR | Jicaral | 0.96 | 243 | ⇑iP | Pn | 01 54 22.3 | -2.2 |
| CUI | Cuipilapa | 0.98 | 292 | ⇓iP | Pn | 01 54 23.6 | -1.0 |
| CUI | | | | eS | Sn | 01 54 38.4 | -1.1 |
| HORNC | Hornillas | 1.01 | 294 | ⇓iP | Pn | 01 54 23.8 | -1.2 |
| HORNC | | | | i S | Sn | 01 54 39.8 | -0.4 |
| APGM | Casa Mˆ¡quinas | 1.02 | 293 | ⇓iP | Pn | 01 54 24.9 | -0.2 |
| APGM | | | | ⇑eP | Pn | 01 54 24.9 | -0.2 |
| APGM | | | | eS | Sn | 01 54 41.4 | +1.0 |
| MESS | Mesas | 1.04 | 295 | ⇓iP | Pn | 01 54 24.3 | -1.1 |
| MESS | | | | eS | Sn | 01 54 40.4 | -0.3 |
| LIM1 | Limonal | 1.07 | 292 | ⇓iP | Pn | 01 54 24.5 | -1.2 |
| LIM1 | | | | i S | Sn | 01 54 41.0 | -0.5 |
| GPS2 | Hotel Rincˆ‡n | 1.18 | 293 | ⇓iP | Pn | 01 54 25.9 | -1.1 |
| GPS2 | | | | eS | Sn | 01 54 44.1 | +0.4 |
| GPS1 | Guardaparques | 1.19 | 294 | ⇓iP | Pn | 01 54 26.1 | -1.0 |
| GPS1 | | | | ⇓iP | Pn | 01 54 26.4 | -0.7 |
| GPS1 | | | | eS | Sn | 01 54 44.1 | +0.2 |
| GPS1 | | | | i S | Sn | 01 54 44.2 | +0.2 |
| APPA | Casa Mˆ¡quinas | 1.19 | 293 | ⇓eP | Pn | 01 54 26.4 | -0.7 |
| APPA | | | | ⇓iP | Pn | 01 54 26.4 | -0.7 |
| APPA | | | | eS | Sn | 01 54 44.4 | +0.5 |
| GPS3 | Bodega del ICE | 1.20 | 293 | ⇓iP | Pn | 01 54 26.0 | -1.1 |
| GPS3 | | | | i S | Sn | 01 54 43.6 | -0.4 |
| BUEV | Buena Vista | 1.25 | 294 | ⇓eP | Pn | 01 54 26.8 | -1.0 |
| BUEV | | | | eS | Sn | 01 54 45.3 | +0.1 |
| GB1A | Borinquen Arri | 1.25 | 295 | ⇓iP | Pn | 01 54 27.3 | -0.6 |
| GB1A | | | | eS | Sn | 01 54 45.9 | +0.7 |
| LAPC | Finca la Perla | 1.26 | 292 | ⇓iP | Pn | 01 54 26.5 | -1.4 |
| LAPC | | | | i S | Sn | 01 54 44.4 | -0.9 |
| GBS3 | Finca Las Imˆ¡ | 1.29 | 292 | ⇓iP | Pn | 01 54 26.9 | -1.3 |
| GBS3 | | | | i S | Sn | 01 54 45.7 | -0.2 |
| GBS2 | Las Lilas | 1.31 | 294 | ⇓iP | Pn | 01 54 27.5 | -1.0 |
| GBS2 | | | | i S | Sn | 01 54 46.0 | -0.3 |
| NY14 | Universidad de | 1.32 | 286 | ⇓iP | Pn | 01 54 27.4 | -1.1 |
| VCR | Vista de Mar | 1.38 | 263 | ⇑iP | Pn | 01 54 27.4 | -2.0 |
| CONN | Concepcion | 1.86 | 313 | eP | Pn | 01 54 34.7 | -0.6 |
| ACR | Cerro Adams | 1.94 | 147 | ⇑iP | Pn | 01 54 34.4 | -2.2 |
| ACR | | | | eS | Sn | 01 54 59.5 | -1.2 |
| MGAN | Managua | 2.70 | 313 | eP | Pn | 01 54 46.2 | -0.2 |
| TISN | Laguna Tiscapa | 2.71 | 313 | eP | Pn | 01 54 46.6 | 0.0 |
| XAVN | Gruta Xavier | 2.75 | 312 | eP | Pn | 01 54 47.0 | -0.1 |
| APYN | Apoyeque | 2.83 | 313 | eP | Pn | 01 54 48.5 | +0.3 |
| APYN | | | | eS | Sn | 01 55 23.7 | +2.1 |
| COPN | Copaltepe | 2.97 | 309 | eP | Pn | 01 54 50.1 | 0.0 |
| COPN | | | | eP | Pn | 01 54 50.2 | +0.1 |
| COPN | | | | eS | Sn | 01 55 22.6 | -2.3 |
| COPN | | | | eS | Sn | 01 55 27.1 | +2.2 |
| COPN | | | | AML | AML | 01 55 32.1 | |
| | comp=Z,3µm,0.3s | | | | | | |
| MOMN | Momotombo | 3.08 | 313 | eP | Pn | 01 54 51.4 | -0.2 |
| BCIP | Isla Barro Col | 4.48 | 104 | eP | Pn | 01 55 10.3 | -0.2 |
| BCIP | Isla Barro Col | 4.48 | 104 | ePn | Pn | 01 55 10.5 | -0.1 |
| CNCH | Conchagua | 4.60 | 310 | eP | Pn | 01 55 13.1 | +0.9 |
| TGUH | Tegucigalpa,Un | 4.77 | 322 | eP | Pn | 01 55 14.9 | +0.5 |
| TGUH | | | | eP | Pn | 01 55 15.6 | +1.2 |
| TGUH | Tegucigalpa,Un | 4.77 | 322 | ePn | Pn | 01 55 15.7 | +1.2 |
| VSM | San Miguel | 5.03 | 309 | eP | Pn | 01 55 18.9 | +0.7 |
| CAHU | Cacacuatique | 5.20 | 312 | eP | Pn | 01 55 22.0 | +1.6 |
| CAHU | | | | eS | Sn | 01 56 19.0 | -0.2 |
| SNVI | San Vicente | 5.58 | 307 | eP | Pn | 01 55 27.6 | +2.0 |
| SNVI | | | | eS | Sn | 01 56 27.5 | -0.9 |
| LFRS | El Faro | 5.76 | 306 | eP | Pn | 01 55 29.6 | +1.6 |
| LBRS | Las Brisas | 5.81 | 307 | eP | Pn | 01 55 30.5 | +1.8 |
| LFU | La Fuente | 5.88 | 306 | eP | Pn | 01 55 30.4 | +0.9 |
| SNET | Serv Nac Est T | 5.93 | 305 | eP | Pn | 01 55 31.6 | +1.2 |
| SNET | | | | AML | AML | 01 55 35.7 | |
| | comp=Z,5µm,0.3s | | | | | | |
| SNET | Serv Nac Est T | 5.93 | 305 | ePn | Pn | 01 55 32.2 | +1.9 |
| BOQS | Boqueron | 6.00 | 305 | eP | Pn | 01 55 33.4 | +2.0 |
| BOQS | | | | eS | Sn | 01 56 37.2 | -1.6 |
| SBLS | San Blas | 6.33 | 304 | eP | Pn | 01 55 38.1 | +2.2 |
| SNJE | San Jose | 6.34 | 305 | eP | Pn | 01 55 36.8 | +0.8 |
| SNJE | | | | eS | Sn | 01 56 45.1 | -1.8 |
| RTR | El Retiro | 6.38 | 305 | eP | Pn | 01 55 38.2 | +1.6 |
| RBDL | Robledal | 6.54 | 306 | eP | Pn | 01 55 40.0 | +1.3 |
| MRL | Marmol | 7.12 | 312 | eP | Pn | 01 55 49.8 | +3.1 |
| NBG | Las Nubes | 7.33 | 306 | eP | Pn | 01 55 53.4 | +3.8 |
| PCG | Pacaya | 7.44 | 304 | eP | Pn | 01 55 54.1 | +3.2 |
| FUG | Fuego 3 | 7.66 | 303 | eP | Pn | 01 55 57.9 | +4.0 |
| JAT | Jato | 8.26 | 300 | eP | Pn | 01 56 05.6 | +3.6 |
| MCJ | Malvern | 9.89 | 39 | i P | Pn | 01 56 28.3 | +4.0 |
| MBJ | Montego Bay | 10.15 | 37 | i P | Pn | 01 56 32.5 | +4.7 |
| CVJ | Coleyville | 10.22 | 39 | i P | Pn | 01 56 32.4 | +3.7 |
| MTDJ | Mount Denham | 10.22 | 39 | ePn | Pn | 01 56 32.9 | +4.2 |
| HOJ | Hope | 10.56 | 43 | i P | Pn | 01 56 37.9 | +4.7 |
| STH | Stony Hill | 10.57 | 42 | i P | Pn | 01 56 37.9 | +4.5 |
| TEIG | Tepich | 10.61 | 339 | P | Pn | 01 56 33.5 | -0.5 |
| | comp=Z,6.4nm,0.3s,baz=164,slow=0.2,SNR=4.4 | | | | | | |
| GWJ | Greenwich | 10.62 | 42 | i P | Pn | 01 56 38.7 | +4.5 |
| ROSC | El Rosal | 11.21 | 118 | P | Pn | 01 56 44.7 | +2.3 |
| | comp=Z,2.6nm,0.3s,baz=297,slow=14,SNR=44 | | | | | | |
| ROSC | | | | LR | LR | 02 00 57.8 | |
| | comp=Z,3µm,19.4s,baz=336,slow=36 | | | | | | |
| ROSC | El Rosal | 11.21 | 118 | ePn | Pn | 01 56 46.5 | +4.1 |
| OTAV | Otavalo | 11.53 | 150 | ePn | Pn | 01 56 48.1 | +1.2 |
| OTAV | | | | ePcP | PcP | 02 02 32.1 | +1.0 |
| OTAV | | | | eScP | ScP | 02 05 58.1 | +2.5 |
| OTAV | | | | eScS | ScS | 02 09 37.4 | +5.6 |
| CMIG | Matias Romero | 12.35 | 304 | P | Pn | 01 56 56.5 | -0.9 |
| | comp=Z,19nm,0.3s,baz=134,slow=13,SNR=112 | | | | | | |
| CMIG | | | | S | Sn | 01 59 08.8 | -4.4 |
| | comp=Z,1.6nm,0.3s,baz=87,slow=17,SNR=3.2 | | | | | | |
| PAYG | Puerto Ayora | 12.45 | 209 | ePn | Pn | 01 57 00.8 | +2.1 |
| GTBY | Guantanamo Bay | 13.01 | 42 | ePn | P | 01 57 09.6 | -3.4 |
| SDV | Santo Domingo | 13.49 | 95 | ePn | Pn | 01 57 14.0 | +1.3 |
| SDV | | | | ePcP | PcP | 02 02 33.3 | +0.2 |
| SDV | | | | eScP | ScP | 02 05 59.5 | +1.3 |
| SDV | | | | eScS | ScS | 02 09 39.5 | +4.0 |
| LGNH | LØogne | 13.91 | 53 | ePn | Pn | 01 57 17.1 | -0.8 |
| PAPH | Port-au-Prince | 14.16 | 53 | ePn | Pn | 01 57 19.1 | -2.0 |
| SDDR | Presa de Saban | 15.21 | 54 | ePn | P | 01 57 38.0 | +0.5 |
| | comp=Z,476nm,1.0s | | | | | | |
| SDDR | | | | eScP | ScP | 02 06 03.5 | +2.6 |
| BANI | BANI | 15.67 | 58 | ePn | Pn | 01 57 40.6 | +0.1 |
| GRTK | Grand Turk | 16.82 | 47 | ePn | P | 01 57 58.0 | +2.8 |
| | comp=Z,455nm,0.7s | | | | | | |
| SMN1 | Samana, DR | 16.95 | 57 | ePn | P | 01 57 59.9 | +3.1 |
| DWPF | Disney | 17.92 | 8 | ePn | Pn | 01 58 09.4 | +1.5 |
| | comp=Z,9µm,1.9s | | | | | | |
| ATAH | Atahualpa | 18.27 | 161 | P | Pn | 01 58 13.2 | +0.5 |
| | comp=Z,3.0nm,0.3s,baz=351,slow=9.6,SNR=46 | | | | | | |
| ATAH | | | | S | Sn | 02 01 37.5 | +0.6 |
| | comp=Z,0.6nm,0.3s,baz=107,slow=19,SNR=1.9 | | | | | | |
| ATAH | | | | LR | LR | 02 04 56.2 | |
| | comp=Z,1µm,18.7s,baz=355,slow=36 | | | | | | |
| ATAH | | | | ScP | ScP | 02 06 10.7 | +3.1 |
| | comp=Z,0.5nm,0.3s,baz=13,slow=2.0,SNR=25 | | | | | | |
| CRPR | Cabo Rojo, PR | 18.28 | 63 | eP | Pn | 01 58 13.9 | +1.4 |
| | comp=Z,163nm,0.8s | | | | | | |
| LSP | Las Mesas | 18.37 | 63 | eP | Pn | 01 58 14.5 | +1.0 |
| AGP | Aguadilla | 18.41 | 62 | eP | Pn | 01 58 16.0 | +2.0 |
| | comp=Z,1µm,0.8s | | | | | | |
| AGPR | Aguadilla, PR | 18.46 | 62 | eP | Pn | 01 58 15.7 | +1.1 |
| | comp=Z,1µm,0.8s | | | | | | |
| LRS | Lares | 18.63 | 63 | eP | Pn | 01 58 17.1 | +0.6 |
| LRS | | | | ePcP | PcP | 02 02 40.9 | +0.4 |
| LRS | | | | eScP | ScP | 02 06 08.6 | +0.8 |
| AOPR | Arecibo Observ | 18.73 | 63 | eP | Pn | 01 58 18.3 | +0.5 |
| | comp=Z,492nm,0.6s | | | | | | |
| OBIP | Obispado Ponce | 18.74 | 64 | eP | Pn | 01 58 18.5 | +0.6 |
| | comp=Z,386nm,0.8s | | | | | | |
| OBIP | | | | ePcP | PcP | 02 02 40.9 | +0.3 |
| OBIP | | | | eScP | ScP | 02 06 08.4 | +0.4 |
| ICMP | Isla Caja de M | 18.75 | 64 | eP | Pn | 01 58 17.4 | -0.7 |
| CELP | Cerrillos | 18.78 | 64 | eP | Pn | 01 58 19.4 | +1.1 |
| SJG | San Juan | 19.17 | 64 | P | P | 01 58 21.4 | +0.3 |
| | comp=Z,19nm,0.3s,baz=253,slow=8.1,SNR=59 | | | | | | |
| SJG | | | | S | S | 02 01 53.7 | +0.2 |
| | comp=Z,4.1nm,0.3s,baz=22,slow=19,SNR=8.6 | | | | | | |
| SJG | | | | LR | LR | 02 04 19.5 | |
| | comp=Z,3µm,21.9s,baz=232,slow=32 | | | | | | |
| SJG | San Juan | 19.17 | 64 | P | P | 01 58 21.4 | +0.3 |
| SJG | | | | S | S | 02 01 53.7 | +0.2 |
| SJG | | | | pmax | pmax | | |
| | comp=Z,19nm,0.3s | | | | | | |
| SJG | | | | smax | smax | | |
| | comp=N,4.0nm,0.3s | | | | | | |
| SJG | | | | MLR | MLR | | |
| | comp=Z,3µm,21.9s | | | | | | |
| SJG | San Juan | 19.17 | 64 | eP | Pn | 01 58 22.8 | -0.1 |
| | comp=Z,3µm,2.3s | | | | | | |
| SJG | | | | S | S | 02 01 53.7 | +0.2 |
| SJG | | | | eScP | ScP | 02 06 09.7 | +0.8 |
| PCRV | Puerto La Cruz | 19.29 | 89 | P | Pn | 01 58 25.4 | +0.9 |
| | comp=Z,7.6nm,0.3s,baz=268,slow=5.1,SNR=26 | | | | | | |
| PCRV | | | | S | S | 02 01 55.7 | -0.5 |
| | comp=Z,0.4nm,0.3s,baz=120,slow=20,SNR=1.6 | | | | | | |
| HUMP | Col San Antoni | 19.45 | 64 | eP | P | 01 58 24.8 | +0.6 |
| | comp=Z,3µm,2.8s | | | | | | |
| HUMP | | | | ePcP | PcP | 02 02 42.5 | +0.6 |
| HUMP | | | | eScP | ScP | 02 06 10.6 | +1.0 |
| STVI | Saint Thomas | 20.32 | 65 | eP | P | 01 58 34.7 | +1.2 |
| | comp=Z,439nm,1.4s | | | | | | |
| 035Z | Hargill | 20.72 | 323 | P | P | 01 58 38.1 | +0.2 |
| | baz=21,SNR=14 | | | | | | |
| BRAL | Brewton | 20.78 | 353 | eP | Pn | 01 58 43.1 | +1.4 |
| | comp=Z,2µm,2.0s | | | | | | |
| 936A | North Padre Is | 21.02 | 326 | P | P | 01 58 41.2 | +0.2 |
| | baz=21 | | | | | | |
| TIGA | Tifton | 21.05 | 2 | P | P | 01 58 42.9 | +1.6 |
| | baz=21,SNR=35 | | | | | | |
| TIGA | Tifton | 21.05 | 2 | eP | P | 01 58 43.3 | +2.0 |
| | comp=Z,4µm,2.3s | | | | | | |
| 035A | Encino | 21.10 | 324 | P | P | 01 58 42.3 | +0.4 |
| | baz=21,SNR=34 | | | | | | |
| 738A | Farr-Stevens R | 21.32 | 331 | P | P | 01 58 45.0 | +0.8 |
| | baz=22 | | | | | | |
| KVTX | Kingsville | 21.44 | 325 | eP | P | 01 58 48.2 | +2.7 |
| | comp=Z,499nm,1.0s | | | | | | |
| KVTX | | | | eScP | ScP | 02 06 11.8 | -2.3 |
| 034A | Hebbronville | 21.54 | 323 | P | P | 01 58 46.5 | 0.0 |
| | baz=22,SNR=104 | | | | | | |
| 737A | Port Lavaca | 21.64 | 330 | P | P | 01 58 48.4 | +0.7 |
| | baz=22,SNR=7.7 | | | | | | |
| 540A | Vidor | 21.80 | 337 | P | P | 01 58 50.2 | +0.9 |
| | baz=22 | | | | | | |
| 934A | Benavides | 21.84 | 324 | P | P | 01 58 50.3 | +0.5 |
| | baz=22,SNR=104 | | | | | | |
| 835A | Beeville | 21.98 | 326 | P | P | 01 58 51.9 | +0.6 |
| | baz=22,SNR=13 | | | | | | |
| 539A | Cross D Ranch, | 22.00 | 335 | P | P | 01 58 52.5 | +1.0 |
| | baz=22 | | | | | | |
| 736A | Circle Diamond | 22.11 | 329 | P | P | 01 58 53.2 | +0.5 |
| | baz=22,SNR=41 | | | | | | |
| 637A | Eagle Lake | 22.15 | 331 | P | P | 01 58 53.6 | +0.5 |
| | baz=22,SNR=39 | | | | | | |
| GRGR | Grenville | 22.23 | 83 | eP | P | 01 58 56.2 | +2.1 |
| GRGR | Grenville | 22.23 | 83 | eP | P | 01 58 56.7 | +2.7 |
| | comp=Z,702nm,1.1s | | | | | | |
| 834A | Tilden | 22.26 | 325 | P | P | 01 58 54.6 | +0.4 |
| | baz=22,SNR=20 | | | | | | |
| 440A | Kirbyville | 22.27 | 337 | P | P | 01 58 54.7 | +0.4 |
| | baz=22 | | | | | | |
| 933A | Laredo | 22.30 | 323 | P | P | 01 58 55.4 | +0.8 |
| | baz=22,SNR=20 | | | | | | |
| HKT | Hockley | 22.35 | 333 | eP | P | 01 58 53.8 | -1.3 |
| HKT | Hockley | 22.35 | 333 | eP | P | 01 58 53.8 | -1.3 |
| HKT | | | | eScP | ScP | 02 06 16.7 | +0.4 |
| 735A | Kenedy | 22.42 | 327 | P | P | 01 58 55.5 | -0.4 |
| | baz=22,SNR=13 | | | | | | |
| 538A | Harpers Horsep | 22.43 | 334 | P | P | 01 58 56.4 | +0.4 |
| | baz=23 | | | | | | |
| 636A | Smothers Creek | 22.54 | 330 | P | P | 01 58 57.8 | +0.7 |
| | baz=23,SNR=17 | | | | | | |
| VBMS | Vicksburg | 22.58 | 346 | P | P | 01 58 58.6 | +1.1 |
| | baz=23,SNR=17 | | | | | | |
| 439A | Center Grove, | 22.62 | 336 | P | P | 01 58 58.2 | +0.2 |
| | baz=23,SNR=5.2 | | | | | | |
| HMG | Houelmont | 22.66 | 73 | eP | P | 01 58 59.4 | +0.9 |
| 537A | Green Hill Far | 22.68 | 332 | P | P | 01 58 58.9 | +0.3 |
| | baz=23,SNR=29 | | | | | | |
| SVB | Belmont | 22.70 | 80 | eP | P | 01 59 00.3 | +1.4 |
| SSG | Sans Toucher | 22.70 | 73 | eP | P | 01 58 59.7 | +0.6 |
| BBL | Barber's Block | 22.79 | 74 | eP | P | 01 59 00.6 | +0.7 |
| RGRS | Roger Stewart | 22.81 | 9 | eP | P | 01 59 01.9 | +2.0 |
| RGRS | | | | epP | pP | 01 59 22.4 | +3.8 |
| 734A | La Parita Cree | 22.82 | 326 | P | P | 01 58 59.7 | -0.3 |
| | baz=23,SNR=20 | | | | | | |
| 635A | Leesville | 22.82 | 328 | P | P | 01 58 59.9 | -0.1 |
| | baz=23,SNR=7.1 | | | | | | |
| 340A | Bronson | 22.84 | 338 | P | P | 01 59 00.3 | +0.1 |
| | baz=23,SNR=26 | | | | | | |
| 438A | Sam Houston St | 22.88 | 334 | P | P | 01 59 00.4 | -0.1 |
| | baz=23,SNR=25 | | | | | | |
| 833A | Chaparral WMA, | 22.89 | 324 | P | P | 01 59 00.6 | -0.2 |
| | baz=23,SNR=83 | | | | | | |
| CSU | Charleston Sou | 22.91 | 9 | eP | P | 01 59 02.7 | +1.9 |
| PCM | Pelee Case Pet | 22.92 | 76 | eP | P | 01 59 03.7 | +2.6 |
| PCM | Pelee Case Pet | 22.92 | 76 | eP | P | 01 59 04.0 | +2.9 |
| PML | Morne Lenard | 22.94 | 76 | eP | P | 01 59 03.7 | +2.4 |
| CXM | Morne La Croix | 22.96 | 76 | eP | P | 01 59 03.1 | +1.5 |
| GBMF | Grand Be | 22.96 | 76 | eP | P | 01 59 07.6 | +6.0 |
| FDF | Fort de France | 22.96 | 77 | eP | P | 01 59 02.4 | +0.8 |
| FDF | | | | pmax | pmax | | |
| | comp=Z,492nm,1.6s | | | | | | |
| FDF | Fort de France | 22.96 | 77 | eP | P | 01 59 01.8 | +0.2 |
| FDF | Fort de France | 22.96 | 77 | eP | P | 01 59 03.9 | +2.3 |
| FDF | Fort de France | 22.96 | 77 | eP | P | 01 59 02.4 | +0.8 |
| | comp=Z,492nm,1.6s | | | | | | |
| FDF | | | | eScP | ScP | 02 06 21.4 | +3.1 |
| ANWB | Willy Bob | 22.97 | 69 | eP | P | 01 59 00.2 | -1.4 |
| ANWB | Willy Bob | 22.97 | 69 | eP | P | 01 59 00.5 | -1.1 |
| ANWB | | | | epP | pP | 01 59 21.8 | +1.3 |
| BAMF | Morne Balai | 22.98 | 76 | eP | P | 01 59 05.3 | +3.5 |
| BIM | Bigot | 23.01 | 77 | eP | P | 01 59 04.7 | +2.7 |
| NHSC | New Hope | 23.01 | 9 | eP | P | 01 59 04.3 | +2.5 |
| | comp=Z,6µm,2.6s | | | | | | |
| GOGA | Godfrey | 23.02 | 2 | eP | P | 01 59 03.1 | +1.2 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,1µm,1.9s | | | | | | |
| GOGA | Godfrey | 23.02 | 2 | eP | P | 01 59 03.1 | +1.2 |
| | comp=Z,1µm,1.9s | | | | | | |
| 339A | Huntington | 23.02 | 337 | P | P | 01 59 02.0 | +0.1 |
| | baz=23,SNR=6.9 | | | | | | |
| 536A | Bastrop | 23.03 | 331 | P | P | 01 59 02.2 | +0.1 |
| | baz=23,SNR=23 | | | | | | |
| MCLT | Moule a Chique | 23.04 | 79 | eP | P | 01 59 02.4 | +0.1 |
| BVM | Bellevue | 23.05 | 77 | eP | P | 01 59 05.2 | +2.8 |
| ZAM | Aeronautique | 23.06 | 77 | eP | P | 01 59 05.6 | +3.2 |
| LPMF | Morne Lapointe | 23.12 | 77 | eP | P | 01 59 05.9 | +2.8 |
| 634A | China Grove, S | 23.12 | 327 | P | P | 01 59 02.9 | -0.1 |
| | baz=23 | | | | | | |
| 733A | Divot King Ran | 23.13 | 325 | P | P | 01 59 03.0 | -0.1 |
| | baz=23,SNR=46 | | | | | | |
| MVM | Montagne Vaucl | 23.18 | 77 | eP | P | 01 59 06.1 | +2.4 |
| 832A | Faith Ranch, C | 23.21 | 323 | P | P | 01 59 02.8 | -0.9 |
| | baz=23,SNR=119 | | | | | | |
| 437A | Phantom Ranch, | 23.23 | 333 | P | P | 01 59 03.9 | -0.1 |
| | baz=23 | | | | | | |
| 535A | Dale | 23.24 | 330 | P | P | 01 59 04.0 | 0.0 |
| | baz=23,SNR=12 | | | | | | |
| TOSP | Speyside | 23.31 | 85 | eP | P | 01 59 03.3 | -1.5 |
| NNA | Nana | 23.32 | 161 | P | pP | 01 59 20.6 | -3.7 |
| | comp=Z,52nm,0.7s,baz=331,slow=9.0,SNR=28 | | | | | | |
| NNA | Nana | 23.32 | 161 | eP | P | 01 59 06.0 | +1.0 |
| NNA | Nana | 23.32 | 161 | P | P | 01 59 05.5 | +0.5 |
| | comp=Z,662nm,2.2s,SNR=11 | | | | | | |
| NNA | Nana | 23.32 | 161 | eP | P | 01 59 06.0 | +1.0 |
| | comp=Z,947nm,2.1s | | | | | | |
| 338A | Crockett | 23.34 | 336 | P | P | 01 59 05.1 | +0.2 |
| | baz=24,SNR=32 | | | | | | |
| NATX | Nacogdoches | 23.44 | 337 | P | P | 01 59 05.6 | -0.2 |
| | baz=24 | | | | | | |
| NATX | Nacogdoches | 23.44 | 337 | eP | P | 01 59 06.3 | +0.4 |
| NATX | | | | epP | pP | 01 59 28.2 | +2.8 |
| 436A | Wall Ranch, Ga | 23.48 | 332 | P | P | 01 59 06.5 | +0.3 |
| | baz=24,SNR=9.1 | | | | | | |
| 732A | Laxson Ranch, | 23.53 | 323 | P | P | 01 59 05.7 | -1.0 |
| | baz=24,SNR=101 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **239A** | **Gary** | **23.60** | **338** | P | **P** | **01 59 08.1** | **+0.8** |
| | baz=24,SNR=12 | | | | | | |
| **633A** | **Saathoff Ranch** | **23.63** | **326** | P | **P** | **01 59 06.9** | **-0.7** |
| | baz=24,SNR=27 | | | | | | |
| **534A** | **Blanco** | **23.70** | **328** | P | **P** | **01 59 07.1** | **-1.2** |
| | baz=24,SNR=80 | | | | | | |
| **238A** | **Jacksonville** | **23.83** | **337** | P | **P** | **01 59 09.9** | **+0.5** |
| | baz=24,SNR=16 | | | | | | |
| **435B** | **Jarrell** | **23.87** | **331** | P | **P** | **01 59 09.3** | **-0.4** |
| | baz=24,SNR=37 | | | | | | |
| **632A** | **Uvalde** | **24.01** | **325** | P | **P** | **01 59 10.3** | **-0.8** |
| | baz=24,SNR=58 | | | | | | |
| **336A** | **Riesel** | **24.02** | **333** | P | **P** | **01 59 11.4** | **+0.3** |
| | baz=24,SNR=24 | | | | | | |
| **JSC** | **Jenkinsville** | **24.03** | **6** | *e*P | **P** | **01 59 12.7** | **+1.6** |
| JSC | | | | *e* | | 02 02 51.3 | |
| **JSC** | **Jenkinsville** | **24.03** | **6** | *e*P | **P** | **01 59 12.7** | **+1.6** |
| JSC | | | | *e*PcP | **PcP** | **02 02 51.3** | **+0.6** |
| JSC | | | | *e*ScP | **ScP** | **02 06 21.6** | **+0.8** |
| **533A** | **Kerrville** | **24.03** | **327** | P | **P** | **01 59 10.2** | **-1.1** |
| | baz=24,SNR=28 | | | | | | |
| **237A** | **Washetta, Mont** | **24.11** | **335** | P | **P** | **01 59 12.6** | **+0.7** |
| | baz=24,SNR=13 | | | | | | |
| **139A** | **Bunkhouse Ranc** | **24.17** | **339** | P | **P** | **01 59 12.8** | **+0.4** |
| | baz=24 | | | | | | |
| **335A** | **Moody** | **24.20** | **332** | P | **P** | **01 59 13.0** | **+0.2** |
| | baz=24,SNR=32 | | | | | | |
| **434A** | **Burnet** | **24.23** | **329** | P | **P** | **01 59 11.8** | **-1.2** |
| | baz=24,SNR=28 | | | | | | |
| **BBGH** | **Gun Hill** | **24.33** | **81** | *e*P | **P** | **01 59 15.8** | **+1.8** |
| | comp=Z,421nm,1.1s | | | | | | |
| **631A** | **Perdido Creek** | **24.39** | **324** | P | **P** | **01 59 13.3** | **-1.1** |
| | baz=24,SNR=272 | | | | | | |
| **138A** | **Matatall Enter** | **24.41** | **337** | P | **P** | **01 59 15.1** | **+0.6** |
| | baz=25,SNR=15 | | | | | | |
| **236A** | **Katherine and** | **24.41** | **334** | P | **P** | **01 59 13.4** | **-1.1** |
| | baz=25,SNR=8.1 | | | | | | |
| **532A** | **Rocksprings** | **24.55** | **326** | P | **P** | **01 59 15.1** | **-0.9** |
| | baz=25,SNR=66 | | | | | | |
| **OXF** | **Oxford** | **24.57** | **350** | *e*P | **P** | **01 59 16.4** | **+0.4** |
| OXF | | | | pmax | pmax | | |
| | comp=Z,175nm,0.9s | | | | | | |
| **OXF** | **Oxford** | **24.57** | **350** | *e*P | **P** | **01 59 16.4** | **+0.4** |
| | comp=Z,175nm,0.9s | | | | | | |
| **433A** | **Art** | **24.60** | **328** | P | **P** | **01 59 15.6** | **-0.8** |
| | baz=25,SNR=83 | | | | | | |
| **Z39A** | **Irene McRaven,** | **24.60** | **340** | P | **P** | **01 59 16.8** | **+0.5** |
| | baz=25,SNR=6.8 | | | | | | |
| **137A** | **Heron Place, G** | **24.61** | **336** | P | **P** | **01 59 16.5** | **+0.1** |
| | baz=25,SNR=15 | | | | | | |
| **334A** | **Lometa** | **24.64** | **330** | P | **P** | **01 59 15.6** | **-1.1** |
| | baz=25,SNR=62 | | | | | | |
| **JCT** | **Junction City** | **24.76** | **326** | *e*P | **P** | **01 59 17.0** | **-0.9** |
| JCT | | | | *e* | | 02 02 52.9 | |
| JCT | | | | pmax | pmax | | |
| | comp=Z,1µm,2.0s | | | | | | |
| **JCT** | **Junction City** | **24.76** | **326** | P | **P** | **01 59 16.4** | **-1.5** |
| | baz=25,SNR=44 | | | | | | |
| **JCT** | **Junction City** | **24.76** | **326** | *e*P | **P** | **01 59 17.0** | **-0.9** |
| | comp=Z,1µm,2.0s | | | | | | |
| JCT | | | | *e*PcP | **PcP** | **02 02 52.9** | **+0.4** |
| JCT | | | | *e*ScP | **ScP** | **02 06 25.7** | **+2.7** |
| **WHTX** | **Lake Whitney** | **24.81** | **332** | P | **P** | **01 59 16.9** | **-1.4** |
| | baz=25 | | | | | | |
| **136A** | **Ennis** | **24.82** | **335** | P | **P** | **01 59 16.8** | **-1.5** |
| | baz=25,SNR=18 | | | | | | |
| **SWET** | **Sewanee** | **24.86** | **357** | *e*P | **P** | **01 59 19.9** | **+1.2** |
| | comp=Z,336nm,0.9s | | | | | | |
| SWET | | | | *e*ScP | **ScP** | **02 06 26.1** | **+2.9** |
| **KMSC** | **Kings Mountain** | **24.88** | **6** | P | **P** | **01 59 20.0** | **+1.1** |
| | baz=25,SNR=66 | | | | | | |
| **KMSC** | **Kings Mountain** | **24.88** | **6** | *e*P | **P** | **01 59 20.3** | **+1.5** |
| | comp=Z,162nm,0.9s | | | | | | |
| KMSC | | | | *e*ScP | **ScP** | **02 06 22.8** | **-0.4** |
| **Z38A** | **Mt. Pleasant** | **24.89** | **338** | P | **P** | **01 59 16.2** | **-2.8** |
| | baz=25,SNR=9.7 | | | | | | |
| **531A** | **Rocksprings** | **24.94** | **325** | P | **P** | **01 59 16.7** | **-2.8** |
| | baz=25,SNR=34 | | | | | | |
| **333A** | **Richland Sprin** | **25.00** | **329** | P | **P** | **01 59 18.2** | **-1.9** |
| | baz=25,SNR=84 | | | | | | |
| **CPCT** | **Cooper Cave** | **25.04** | **359** | *e*P | **P** | **01 59 21.8** | **+1.4** |
| **432A** | **Menard** | **25.07** | **327** | P | **P** | **01 59 18.8** | **-1.9** |
| | baz=25,SNR=43 | | | | | | |
| **Z37A** | **Pogue Cattle C** | **25.09** | **337** | P | **P** | **01 59 20.1** | **-0.7** |
| | baz=25 | | | | | | |
| **234A** | **Clairette** | **25.14** | **331** | P | **P** | **01 59 19.4** | **-1.9** |
| | baz=25,SNR=27 | | | | | | |
| **Y39A** | **Lockesburg** | **25.21** | **340** | P | **P** | **01 59 21.4** | **-0.4** |
| | baz=25,SNR=42 | | | | | | |
| **TKL** | **Tuckaleechee C** | **25.25** | **1** | P | **P** | **01 59 23.6** | **+1.4** |
| | comp=Z,69nm,0.9s,baz=171,slow=9.6,SNR=51 | | | | | | |
| **TKL** | **Tuckaleechee C** | **25.25** | **1** | *e*P | **P** | **01 59 23.4** | **+1.2** |
| **TKL** | **Tuckaleechee C** | **25.25** | **1** | *e*P | **P** | **01 59 23.4** | **+1.2** |
| **135A** | **Vickery Place,** | **25.27** | **333** | P | **P** | **01 59 21.7** | **-0.8** |
| | baz=25,SNR=6.5 | | | | | | |
| **431A** | **Sonora** | **25.36** | **325** | P | **P** | **01 59 21.3** | **-2.1** |
| | baz=26,SNR=59 | | | | | | |
| **530A** | **J-C Ranch, Com** | **25.38** | **324** | P | **P** | **01 59 20.8** | **-2.7** |
| | baz=26,SNR=45 | | | | | | |
| **Y38A** | **Idabel** | **25.41** | **339** | P | **P** | **01 59 22.3** | **-1.4** |
| | baz=26,SNR=19 | | | | | | |
| **332A** | **Millersview** | **25.44** | **328** | P | **P** | **01 59 22.3** | **-1.7** |
| | baz=26 | | | | | | |
| **UALR** | **University of** | **25.47** | **344** | *e*P | **P** | **01 59 24.3** | **+0.1** |
| | comp=Z,99nm,0.8s | | | | | | |
| **Z36A** | **Blue Ridge** | **25.47** | **336** | P | **P** | **01 59 22.7** | **-1.6** |
| | baz=26,SNR=15 | | | | | | |
| **CNNC** | **Cliffs of the** | **25.50** | **12** | *e*P | **P** | **01 59 26.4** | **+2.0** |
| | comp=Z,261nm,1.0s | | | | | | |
| **233A** | **Rising Star** | **25.52** | **330** | P | **P** | **01 59 22.9** | **-1.9** |
| | baz=26,SNR=27 | | | | | | |
| **134A** | **White-Moore Ra** | **25.59** | **332** | P | **P** | **01 59 23.5** | **-1.8** |
| | baz=26,SNR=45 | | | | | | |
| **MIAR** | **Mount Ida** | **25.60** | **342** | *e*P | **P** | **01 59 24.8** | **-0.6** |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,149nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **25.60** | **342** | P | **P** | **01 59 24.0** | **-1.5** |
| | baz=26,SNR=70 | | | | | | |
| **MIAR** | **Mount Ida** | **25.60** | **342** | *e*P | **P** | **01 59 24.8** | **-0.6** |
| | comp=Z,149nm,0.9s | | | | | | |
| **331A** | **San Angelo** | **25.74** | **327** | P | **P** | **01 59 25.4** | **-1.4** |
| | baz=26,SNR=247 | | | | | | |
| **Y37A** | **Hugo** | **25.78** | **338** | P | **P** | **01 59 26.0** | **-1.0** |
| | baz=26,SNR=28 | | | | | | |
| **232A** | **Coleman** | **25.79** | **329** | P | **P** | **01 59 25.4** | **-1.8** |
| | baz=26,SNR=59 | | | | | | |
| **430A** | **Baggett Ranch,** | **25.80** | **325** | P | **P** | **01 59 25.5** | **-1.8** |
| | baz=26,SNR=51 | | | | | | |
| **HBAR** | **Harrisburg** | **25.82** | **348** | *e*P | **P** | **01 59 28.1** | **+0.8** |
| **Z35A** | **Perchaven, San** | **25.86** | **334** | P | **P** | **01 59 26.2** | **-1.6** |
| | baz=26 | | | | | | |
| **529A** | **Stev Forest Ra** | **25.89** | **322** | P | **P** | **01 59 26.5** | **-1.7** |
| | baz=26,SNR=59 | | | | | | |
| **HALT** | **Halls** | **25.92** | **350** | *e*P | **P** | **01 59 28.1** | **-0.1** |
| **WVT** | **Waverly** | **25.93** | **353** | *e*P | **P** | **01 59 27.9** | **-0.4** |
| WVT | | | | *e* | | 02 02 53.9 | |
| WVT | | | | *e*S | **S** | **02 03 51.0** | **-0.7** |
| WVT | | | | pmax | pmax | | |
| | comp=Z,308nm,1.7s | | | | | | |
| **WVT** | **Waverly** | **25.93** | **353** | *e*P | **P** | **01 59 27.9** | **-0.4** |
| | comp=Z,308nm,1.7s | | | | | | |
| WVT | | | | *e*PcP | **PcP** | **02 02 53.9** | **-1.0** |
| WVT | | | | *e*S | **S** | **02 03 51.0** | **-0.7** |
| **Y36A** | **Durant** | **25.96** | **337** | P | **P** | **01 59 27.5** | **-1.2** |
| | baz=26 | | | | | | |
| **133A** | **Hamilton Ranch** | **26.01** | **331** | P | **P** | **01 59 27.8** | **-1.4** |
| | baz=26,SNR=34 | | | | | | |
| **429A** | **Davenport Ranc** | **26.06** | **323** | P | **P** | **01 59 28.3** | **-1.3** |
| | baz=26,SNR=80 | | | | | | |
| **GNAR** | **Gosnell** | **26.09** | **349** | *e*P | **P** | **01 59 30.7** | **+0.9** |
| **X38A** | **Whitesboro** | **26.12** | **340** | P | **P** | **01 59 29.6** | **-0.5** |
| | baz=26,SNR=13 | | | | | | |
| **TZTN** | **Tazewell** | **26.14** | **1** | *e*P | **P** | **01 59 31.4** | **+1.2** |
| | comp=Z,720nm,1.9s | | | | | | |
| **231A** | **Bronte** | **26.17** | **328** | P | **P** | **01 59 31.2** | **+0.5** |
| | baz=26,SNR=52 | | | | | | |
| **Z34A** | **Collier Ranch,** | **26.18** | **333** | P | **P** | **01 59 29.5** | **-1.2** |
| | baz=26,SNR=7.7 | | | | | | |
| **330A** | **Mertzon** | **26.23** | **326** | P | **P** | **01 59 29.1** | **-2.1** |
| | baz=26,SNR=24 | | | | | | |
| **X37A** | **Clayton** | **26.24** | **339** | P | **P** | **01 59 30.8** | **-0.4** |
| | baz=26,SNR=17 | | | | | | |
| **TXAR** | **Lajitas Array** | **26.24** | **319** | P | **P** | **01 59 31.6** | **+0.2** |
| | comp=Z,33nm,0.7s,baz=149,slow=9.2,SNR=55 | | | | | | |
| TXAR | | | | PcP | **PcP** | **02 02 56.4** | **+0.5** |
| | comp=Z,5.0nm,0.7s,baz=147,slow=5.4,SNR=3.8 | | | | | | |
| TXAR | | | | ScP | **ScP** | **02 06 27.9** | **+0.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,18nm,1.1s,baz=138,slow=5.8,SNR=17 | | | | | | |
| TXAR | | | | P3KPbc | | 02 32 18.9 | |
| | comp=Z,0.5nm,0.8s,baz=270,slow=0.9,SNR=4.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **26.24** | **319** | P | **P** | **01 59 31.6** | **+0.2** |
| TXAR | | | | | | 02 02 56.4 | |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,33nm,0.7s | | | | | | |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| TXAR | | | | pmax | pmax | | |
| | comp=N,18nm,1.1s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **26.25** | **319** | *e*P | **P** | **01 59 30.2** | **-1.2** |
| TX31 | | | | *e*ScP | **ScP** | **02 06 28.3** | **+1.0** |
| **GLAT** | **Glass** | **26.26** | **351** | *e*P | **P** | **01 59 32.2** | **+0.9** |
| **UTMT** | **University of** | **26.27** | **352** | *e*P | **P** | **01 59 32.2** | **+0.8** |
| | comp=N,347nm,0.9s | | | | | | |
| **Y35A** | **Marietta** | **26.27** | **335** | P | **P** | **01 59 30.8** | **-0.7** |
| | baz=26,SNR=23 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **26.38** | **330** | P | **P** | **01 59 30.3** | **-2.2** |
| | baz=26,SNR=21 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **26.38** | **330** | *e*P | **P** | **01 59 33.8** | **+1.3** |
| | comp=N,342nm,1.2s | | | | | | |
| ABTX | | | | *e*PcP | **PcP** | **02 02 56.2** | **+0.1** |
| ABTX | | | | *e*ScP | **ScP** | **02 06 28.4** | **+0.8** |
| **W38A** | **Poteau** | **26.39** | **341** | P | **P** | **01 59 31.3** | **-1.2** |
| | baz=26,SNR=17 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **26.50** | **332** | P | **P** | **01 59 32.5** | **-1.1** |
| | baz=27,SNR=25 | | | | | | |
| **PTGA** | **Pitinga** | **26.52** | **113** | P | **P** | **01 59 35.8** | **+1.8** |
| | comp=N,47nm,0.8s,baz=299,slow=11,SNR=81 | | | | | | |
| PTGA | | | | PcP | **PcP** | **02 02 57.7** | **+1.0** |
| | comp=N,9.9nm,0.6s,baz=225,slow=11,SNR=4.0 | | | | | | |
| PTGA | | | | LR | LR | 02 10 28.2 | |
| | comp=N,1µm,20.1s,baz=290,slow=37 | | | | | | |
| **PTGA** | **Pitinga** | **26.52** | **113** | *e*P | **P** | **01 59 35.5** | **+1.6** |
| | comp=N,154nm,1.3s | | | | | | |
| PTGA | | | | PcP | **PcP** | **02 02 57.7** | **+1.0** |
| PTGA | | | | *e*ScP | **ScP** | **02 06 29.6** | **+1.2** |
| **230A** | **Sterling City** | **26.56** | **326** | P | **P** | **01 59 33.1** | **-1.1** |
| | baz=27,SNR=21 | | | | | | |
| **X36A** | **Centrahoma** | **26.58** | **337** | P | **P** | **01 59 33.4** | **-0.9** |
| | baz=27,SNR=19 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **26.61** | **334** | P | **P** | **01 59 33.3** | **-1.2** |
| | baz=27,SNR=20 | | | | | | |
| **X35A** | **Drake** | **26.67** | **336** | P | **P** | **01 59 33.8** | **-1.3** |
| | baz=27,SNR=12 | | | | | | |
| **PARMO** | **Parma** | **26.72** | **350** | *e*P | **P** | **01 59 36.9** | **+1.4** |
| PARMO | | | | *e*pP | **pP** | **01 59 57.0** | **+0.5** |
| **329A** | **Wagon Wheel Ra** | **26.74** | **325** | P | **P** | **01 59 34.2** | **-1.6** |
| | baz=27,SNR=20 | | | | | | |
| **W37A** | **Quinton** | **26.75** | **339** | P | **P** | **01 59 34.5** | **-1.3** |
| | baz=27,SNR=14 | | | | | | |
| **131A** | **Roby** | **26.79** | **329** | P | **P** | **01 59 34.9** | **-1.4** |
| | baz=27,SNR=7.1 | | | | | | |
| **Z32A** | **Haskell** | **26.85** | **331** | P | **P** | **01 59 35.3** | **-1.5** |
| | baz=27,SNR=50 | | | | | | |
| **PBMO** | **Poplar Bluff** | **26.95** | **349** | *e*P | **P** | **01 59 37.9** | **+0.4** |
| | comp=N,68nm,0.9s | | | | | | |
| **229A** | **Bryant Ranch,** | **27.01** | **326** | P | **P** | **01 59 36.6** | **-1.6** |
| | baz=27 | | | | | | |
| **BLA** | **Blacksburg** | **27.02** | **7** | *e*P | **P** | **01 59 39.7** | **+1.5** |
| BLA | | | | pmax | pmax | | |
| | comp=Z,437nm,1.8s | | | | | | |
| **BLA** | **Blacksburg** | **27.02** | **7** | *e*P | **P** | **01 59 39.7** | **+1.5** |
| | comp=Z,436nm,1.8s | | | | | | |
| BLA | | | | *e*ScP | **ScP** | **02 06 31.3** | **+1.9** |
| **130A** | **Snyder** | **27.03** | **328** | P | **P** | **01 59 36.1** | **-2.3** |
| | baz=27,SNR=12 | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **27.04** | **333** | P | **P** | **01 59 36.8** | **-1.5** |
| | baz=27,SNR=20 | | | | | | |
| **W36A** | **Wetumka** | **27.04** | **338** | P | **P** | **01 59 36.1** | **-2.3** |
| | baz=27,SNR=13 | | | | | | |
| **V38A** | **Canehill** | **27.08** | **342** | P | **P** | **01 59 37.2** | **-1.6** |
| | baz=27,SNR=19 | | | | | | |
| **VWCC** | **Virginia Weste** | **27.11** | **7** | *e*P | **P** | **01 59 40.6** | **+1.6** |
| **Z31A** | **Sharp Cattle R** | **27.18** | **330** | P | **P** | **01 59 37.9** | **-1.8** |
| | baz=27,SNR=18 | | | | | | |
| **X34A** | **Smith Ranch, M** | **27.20** | **335** | P | **P** | **01 59 38.3** | **-1.5** |
| | baz=27,SNR=19 | | | | | | |
| **W35A** | **Tecumseh** | **27.30** | **337** | P | **P** | **01 59 39.7** | **-0.9** |
| | baz=27,SNR=8.8 | | | | | | |
| **V37A** | **Hulbert** | **27.33** | **340** | P | **P** | **01 59 39.9** | **-1.1** |
| | baz=28,SNR=18 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **27.41** | **332** | P | **P** | **01 59 40.3** | **-1.3** |
| | baz=28,SNR=14 | | | | | | |
| **X33A** | **Lawton** | **27.43** | **334** | P | **P** | **01 59 40.2** | **-1.7** |
| | baz=28,SNR=55 | | | | | | |
| **V36A** | **Jenks** | **27.52** | **339** | P | **P** | **01 59 40.8** | **-1.8** |
| | baz=28,SNR=15 | | | | | | |
| **129A** | **Stewart Farms,** | **27.54** | **326** | P | **P** | **01 59 40.7** | **-2.3** |
| | baz=28,SNR=18 | | | | | | |
| **228A** | **UT Block 9, Go** | **27.56** | **325** | P | **P** | **01 59 41.3** | **-1.8** |
| | baz=28,SNR=9.7 | | | | | | |
| **TUL1** | **Tulsa** | **27.58** | **339** | P | **P** | **01 59 41.1** | **-2.0** |
| | baz=28,SNR=14 | | | | | | |
| **TUL1** | **Tulsa** | **27.58** | **339** | *e*P | **P** | **01 59 42.6** | **-0.6** |
| | comp=Z,247nm,1.1s | | | | | | |
| TUL1 | | | | *e*pP | **pP** | **02 00 03.9** | **-0.3** |
| **U38A** | **Gravette** | **27.61** | **342** | P | **P** | **01 59 42.2** | **-1.2** |
| | baz=28,SNR=15 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **27.66** | **328** | P | **P** | **01 59 42.5** | **-1.5** |
| | baz=28,SNR=14 | | | | | | |
| **SIUC** | **Southern Illin** | **27.67** | **351** | *e*P | **P** | **01 59 44.5** | **+0.6** |
| | comp=Z,160nm,1.0s | | | | | | |
| **X32A** | **Elmer** | **27.68** | **332** | P | **P** | **01 59 42.9** | **-1.2** |
| | baz=28,SNR=12 | | | | | | |
| **WMOK** | **Wichita Mounta** | **27.72** | **334** | *e*P | **P** | **01 59 43.6** | **-0.9** |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,166nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **27.72** | **334** | *e*P | **P** | **01 59 43.6** | **-0.9** |
| | comp=Z,166nm,1.0s | | | | | | |
| **W34A** | **Bridge Creek,** | **27.72** | **336** | P | **P** | **01 59 43.7** | **-0.8** |
| | baz=28,SNR=23 | | | | | | |
| **W34A** | **Bridge Creek,** | **27.72** | **336** | *e*P | **P** | **01 59 44.0** | **-0.5** |
| | comp=Z,549nm,0.9s | | | | | | |
| W34A | | | | *e*PcP | **PcP** | **02 02 59.6** | **+0.5** |
| W34A | | | | *e*ScP | **ScP** | **02 06 31.0** | **-0.6** |
| **USIN** | **University of** | **27.72** | **354** | *e*P | **P** | **01 59 45.1** | **+0.7** |
| USIN | | | | *e*pP | **pP** | **02 00 07.0** | **+1.4** |
| **Y31A** | **Rekieta Farm,** | **27.76** | **330** | P | **P** | **01 59 44.0** | **-0.8** |
| | baz=28,SNR=22 | | | | | | |
| **U37A** | **Salina** | **27.80** | **341** | P | **P** | **01 59 43.8** | **-1.3** |
| | baz=28,SNR=8.6 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **27.82** | **338** | P | **P** | **01 59 44.1** | **-1.2** |
| | baz=28,SNR=12 | | | | | | |
| **URVA** | **University of** | **27.82** | **11** | *e*P | **P** | **01 59 47.1** | **+1.8** |
| **128A** | **Castleberry Fa** | **27.87** | **326** | P | **P** | **01 59 45.1** | **-0.8** |
| | baz=28,SNR=24 | | | | | | |
| **WCI** | **Wyandotte Cave** | **27.88** | **357** | *e*P | **P** | **01 59 45.4** | **-0.4** |
| WCI | | | | *e*S | **S** | **02 04 22.9** | **+0.4** |
| WCI | | | | pmax | pmax | | |
| | comp=Z,594nm,1.0s | | | | | | |
| **WCI** | **Wyandotte Cave** | **27.88** | **357** | *e*P | **P** | **01 59 45.4** | **-0.4** |
| | comp=Z,594nm,1.0s | | | | | | |
| WCI | | | | *e*S | **S** | **02 04 22.9** | **+0.4** |
| WCI | | | | *e*ScP | **ScP** | **02 06 32.0** | **+0.1** |
| **SLBS** | **Sierra La Lagu** | **27.89** | **302** | *e*P | **P** | **01 59 48.7** | **+2.5** |
| | comp=Z,71nm,0.9s | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **27.94** | **328** | P | **P** | **01 59 45.6** | **-0.9** |
| | baz=28,SNR=30 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **27.94** | **335** | P | **P** | **01 59 45.1** | **-1.4** |
| | baz=28,SNR=8.9 | | | | | | |
| **U36A** | **Oologah** | **27.99** | **340** | P | **P** | **01 59 46.2** | **-0.7** |
| | baz=28,SNR=11 | | | | | | |
| **Y30A** | **Stafford Cattl** | **28.01** | **329** | P | **P** | **01 59 46.5** | **-0.6** |
| | baz=28,SNR=6.6 | | | | | | |
| **V34A** | **Guthrie** | **28.14** | **337** | P | **P** | **01 59 47.0** | **-1.2** |
| | baz=28,SNR=12 | | | | | | |
| **V34A** | **Guthrie** | **28.14** | **337** | *e*P | **P** | **01 59 47.1** | **-1.1** |
| | comp=Z,304nm,1.0s | | | | | | |
| V34A | | | | *e*PcP | **PcP** | **02 03 00.6** | **+0.4** |
| V34A | | | | *e*ScP | **ScP** | **02 06 32.9** | **0.0** |
| **X31A** | **McDonald Ranch** | **28.17** | **332** | P | **P** | **01 59 47.3** | **-1.2** |
| | baz=28,SNR=7.3 | | | | | | |
| **W32A** | **Sentinel** | **28.25** | **333** | P | **P** | **01 59 47.8** | **-1.4** |
| | baz=28,SNR=34 | | | | | | |
| **U35A** | **Pawnee** | **28.32** | **338** | P | **P** | **01 59 48.5** | **-1.3** |
| | baz=28,SNR=8.4 | | | | | | |
| **Z28A** | **Tucker Farm, M** | **28.32** | **327** | P | **P** | **01 59 49.7** | **-0.3** |
| | baz=28,SNR=15 | | | | | | |
| **CCM** | **Cathedral Cave** | **28.35** | **348** | *e*P | **P** | **01 59 48.3** | **-1.7** |
| CCM | | | | *e* | | 02 03 00.4 | |
| CCM | | | | pmax | pmax | | |
| | comp=Z,395nm,1.6s | | | | | | |
| **CCM** | **Cathedral Cave** | **28.35** | **348** | *e*P | **P** | **01 59 48.3** | **-1.7** |
| | comp=Z,395nm,1.6s | | | | | | |
| CCM | | | | *e*PcP | **PcP** | **02 03 00.4** | **-0.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CCM | | | | *e*SS | SS | 02 06 37.0 | +3.4 |
| **LPIG** | **La Paz** | **28.37** | **302** | P | **P** | **01 59 49.8** | **-0.5** |
| | comp=Z,28nm,0.3s,baz=158,slow=5.4,SNR=4.8 | | | | | | |
| **SAML** | **Samuel** | **28.37** | **132** | *e*P | **P** | **01 59 49.7** | **-0.7** |
| | comp=Z,74nm,1.1s | | | | | | |
| SAML | | | | *e*ScP | **ScP** | **02 06 34.3** | **+0.4** |
| **Y29A** | **Porterfield Fa** | **28.39** | **328** | P | **P** | **01 59 48.1** | **-2.4** |
| | baz=28,SNR=7.6 | | | | | | |
| **T37A** | **Cheneyville 18** | **28.40** | **342** | P | **P** | **01 59 49.4** | **-1.1** |
| | baz=29,SNR=33 | | | | | | |
| **BBSR** | **BB Station** | **28.43** | **36** | *e*P | **P** | **01 59 53.4** | **+2.7** |
| | comp=Z,217nm,1.2s | | | | | | |
| BBSR | | | | *e*pP | **pP** | **02 00 13.9** | **+1.9** |
| **V33A** | **Lossen Ranch,** | **28.44** | **336** | P | **P** | **01 59 49.4** | **-1.5** |
| | baz=29,SNR=9.5 | | | | | | |
| **X30A** | **Coker Ranch, T** | **28.45** | **330** | P | **P** | **01 59 49.8** | **-1.2** |
| | baz=29,SNR=9.1 | | | | | | |
| **CBN** | **Corbin** | **28.47** | **11** | *e*P | **P** | **01 59 53.4** | **+2.4** |
| | comp=Z,190nm,0.6s | | | | | | |
| **OLIL** | **Olney** | **28.53** | **354** | *e*P | **P** | **01 59 52.3** | **+0.7** |
| | comp=Z,233nm,1.1s | | | | | | |
| OLIL | | | | *e*PcP | **PcP** | **02 03 01.1** | **0.0** |
| OLIL | | | | *e*S | **S** | **02 04 38.1** | **+5.4** |
| OLIL | | | | *e*ScP | **SS** | **02 06 38.8** | **+1.6** |
| **W31A** | **Holland Ranch,** | **28.62** | **332** | P | **P** | **01 59 51.0** | **-1.5** |
| | baz=29 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **28.65** | **340** | P | **P** | **01 59 52.0** | **-0.6** |
| | baz=29,SNR=37 | | | | | | |
| **V32A** | **Arapaho** | **28.67** | **334** | P | **P** | **01 59 52.5** | **-0.4** |
| | baz=29,SNR=9.5 | | | | | | |
| **U34A** | **Anderson Ranch** | **28.68** | **337** | P | **P** | **01 59 50.3** | **-2.7** |
| | baz=29,SNR=6.2 | | | | | | |
| **U34A** | **Anderson Ranch** | **28.68** | **337** | *e*P | **P** | **01 59 52.0** | **-1.0** |
| | comp=Z,437nm,1.5s | | | | | | |
| U34A | | | | *e*pP | **pP** | **02 00 13.6** | **-0.6** |
| U34A | | | | *e*PcP | **PcP** | **02 03 02.2** | **+0.7** |
| **Y28A** | **McKinney Farm,** | **28.72** | **328** | P | **P** | **01 59 51.9** | **-1.6** |
| | baz=29 | | | | | | |
| **SLM** | **Saint Louis** | **28.73** | **350** | *e*P | **P** | **01 59 53.4** | **+0.1** |
| SLM | | | | *e* | | 02 03 01.8 | |
| SLM | | | | pmax | pmax | | |
| | comp=Z,199nm,1.3s | | | | | | |
| **SLM** | **Saint Louis** | **28.73** | **350** | *e*P | **P** | **01 59 53.4** | **+0.1** |
| | comp=Z,199nm,1.3s | | | | | | |
| SLM | | | | *e*PcP | **PcP** | **02 03 01.8** | **+0.3** |
| **T35A** | **Sooner Cattle** | **28.73** | **339** | P | **P** | **01 59 52.2** | **-1.2** |
| | baz=29,SNR=16 | | | | | | |
| **BLO** | **Bloomington** | **28.83** | **356** | *e*P | **P** | **01 59 54.9** | **+0.6** |
| BLO | | | | pmax | pmax | | |
| | comp=Z,387nm,1.8s | | | | | | |
| **BLO** | **Bloomington** | **28.83** | **356** | *e*P | **P** | **01 59 54.9** | **+0.6** |
| | comp=Z,387nm,1.8s | | | | | | |
| **X29A** | **Tulia** | **28.86** | **329** | P | **P** | **01 59 53.2** | **-1.5** |
| | baz=29,SNR=5.3 | | | | | | |
| **U33A** | **Lingo Farm, Me** | **28.90** | **336** | P | **P** | **01 59 54.6** | **-0.3** |
| | baz=29,SNR=5.7 | | | | | | |
| **W30A** | **Crocket Farms** | **28.91** | **332** | P | **P** | **01 59 54.2** | **-0.9** |
| | baz=29 | | | | | | |
| **MNTX** | **Cornudas Mount** | **28.93** | **321** | P | **P** | **01 59 54.7** | **-0.6** |
| | baz=29,SNR=19 | | | | | | |
| **MNTX** | **Cornudas Mount** | **28.93** | **321** | *e*P | **P** | **01 59 55.1** | **-0.1** |
| | comp=Z,30nm,1.0s | | | | | | |
| MNTX | | | | *e*PcP | **PcP** | **02 03 02.4** | **+0.1** |
| MNTX | | | | *e*ScP | **ScP** | **02 06 37.0** | **+1.6** |
| **S37A** | **Fort Scott** | **28.96** | **342** | P | **P** | **01 59 54.9** | **-0.6** |
| | baz=29,SNR=40 | | | | | | |
| **MSTX** | **Muleshoe** | **29.05** | **327** | P | **P** | **01 59 55.2** | **-1.2** |
| | baz=29,SNR=9.9 | | | | | | |
| **MSTX** | **Muleshoe** | **29.05** | **327** | *e*P | **P** | **01 59 54.6** | **-1.8** |
| MSTX | | | | *e*PcP | **PcP** | **02 03 03.1** | **+0.5** |
| MSTX | | | | *e*ScP | **ScP** | **02 06 36.2** | **+0.3** |
| **T34A** | **McClaskey Farm** | **29.07** | **338** | P | **P** | **01 59 55.3** | **-1.1** |
| | baz=29,SNR=11 | | | | | | |
| **S36A** | **Lake Cedric, C** | **29.16** | **341** | P | **P** | **01 59 56.8** | **-0.4** |
| | baz=29,SNR=45 | | | | | | |
| **X28A** | **Dimmitt** | **29.17** | **329** | P | **P** | **01 59 56.0** | **-1.5** |
| | baz=29 | | | | | | |
| **AMTX** | **Amarillo** | **29.20** | **330** | P | **P** | **01 59 56.8** | **-0.9** |
| | baz=29 | | | | | | |
| **AMTX** | **Amarillo** | **29.20** | **330** | *e*P | **P** | **01 59 58.4** | **+0.7** |
| | comp=Z,99nm,1.1s | | | | | | |
| AMTX | | | | *e*ScP | **ScP** | **02 06 38.2** | **+1.9** |
| **U32A** | **Winter Ranch,** | **29.21** | **335** | P | **P** | **01 59 56.4** | **-1.3** |
| | baz=29,SNR=15 | | | | | | |
| **S35A** | **Otter Creek Ra** | **29.36** | **340** | P | **P** | **01 59 58.4** | **-0.6** |
| | baz=30,SNR=19 | | | | | | |
| **W29A** | **Amraillo** | **29.37** | **330** | P | **P** | **01 59 58.3** | **-0.9** |
| | baz=30 | | | | | | |
| **MCWV** | **Mont Chateau** | **29.50** | **7** | *e*P | **P** | **02 00 02.2** | **+2.0** |
| | comp=Z,65nm,0.8s | | | | | | |
| **T33A** | **Patterson Ranc** | **29.52** | **337** | P | **P** | **01 59 59.5** | **-0.9** |
| | baz=30,SNR=6.8 | | | | | | |
| **U31A** | **Nine Bar Ranch** | **29.56** | **334** | P | **P** | **02 00 00.6** | **-0.3** |
| | baz=30,SNR=7.6 | | | | | | |
| **S34A** | **Willow Spring** | **29.65** | **339** | P | **P** | **02 00 01.2** | **-0.3** |
| | baz=30 | | | | | | |
| **R36A** | **Gordon, Harris** | **29.68** | **342** | P | **P** | **02 00 01.4** | **-0.4** |
| | baz=30,SNR=14 | | | | | | |
| **SDMD** | **Soldier's Deli** | **29.74** | **12** | *e*P | **P** | **02 00 04.4** | **+2.1** |
| | comp=Z,40nm,0.7s | | | | | | |
| SDMD | | | | *e*PcP | **PcP** | **02 03 04.3** | **+0.3** |
| **ACSO** | **Alum Creek Sta** | **29.84** | **2** | *e*P | **P** | **02 00 03.8** | **+0.6** |
| | comp=Z,363nm,1.4s | | | | | | |
| **T32A** | **Huddler Ranch,** | **29.87** | **336** | P | **P** | **02 00 03.0** | **-0.5** |
| | baz=30,SNR=6.2 | | | | | | |
| **S33A** | **Kaszmaul Farm,** | **29.87** | **338** | P | **P** | **02 00 02.9** | **-0.7** |
| | baz=30 | | | | | | |
| **Q37A** | **Longview Farm,** | **29.89** | **344** | P | **P** | **02 00 03.4** | **-0.2** |
| | baz=30 | | | | | | |
| **R35A** | **Emporia Munici** | **29.90** | **341** | P | **P** | **02 00 03.6** | **-0.2** |
| | baz=30 | | | | | | |
| **V29A** | **Stinnett** | **29.91** | **331** | P | **P** | **02 00 03.2** | **-0.8** |
| | baz=30 | | | | | | |
| **U30A** | **WK&E Inc. Balk** | **30.05** | **333** | P | **P** | **02 00 04.7** | **-0.5** |
| | baz=30,SNR=27 | | | | | | |
| **SFIN** | **Scholer Farm** | **30.07** | **356** | P | **P** | **02 00 05.6** | **+0.4** |
| | baz=30,SNR=31 | | | | | | |
| **SFIN** | **Scholer Farm** | **30.07** | **356** | *e*P | **P** | **02 00 05.2** | **+0.1** |
| | comp=Z,226nm,1.4s | | | | | | |
| **T31A** | **Randall Ranch,** | **30.11** | **335** | P | **P** | **02 00 05.2** | **-0.5** |
| | baz=30,SNR=18 | | | | | | |
| **V28A** | **Channing** | **30.16** | **330** | P | **P** | **02 00 05.4** | **-0.8** |
| | baz=30 | | | | | | |
| **R34A** | **Isabella, Hill** | **30.23** | **339** | P | **P** | **02 00 06.5** | **-0.2** |
| | baz=30,SNR=15 | | | | | | |
| **Q36A** | **Arnold C. Orve** | **30.26** | **342** | P | **P** | **02 00 06.1** | **-0.8** |
| | baz=30,SNR=23 | | | | | | |
| **U29A** | **Oasis Ranch, S** | **30.27** | **332** | P | **P** | **02 00 06.6** | **-0.5** |
| | baz=30 | | | | | | |
| **S32A** | **Newby Ranch, P** | **30.32** | **337** | P | **P** | **02 00 06.9** | **-0.6** |
| | baz=30 | | | | | | |
| **Q35A** | **Mercer Eighty,** | **30.34** | **342** | P | **P** | **02 00 07.4** | **-0.2** |
| | baz=30,SNR=21 | | | | | | |
| **MVL** | **Millersville** | **30.40** | **12** | *e*P | **P** | **02 00 10.0** | **+1.8** |
| | comp=Z,226nm,1.8s | | | | | | |
| **T30A** | **Plains** | **30.43** | **334** | P | **P** | **02 00 08.7** | **+0.1** |
| | baz=31,SNR=8.7 | | | | | | |
| **V27A** | **Dan Oppiter Fa** | **30.46** | **329** | P | **P** | **02 00 08.5** | **-0.4** |
| | baz=31 | | | | | | |
| **HDIL** | **Hopedale** | **30.47** | **352** | P | **P** | **02 00 09.3** | **+0.5** |
| | baz=31,SNR=25 | | | | | | |
| **HDIL** | **Hopedale** | **30.47** | **352** | *e*P | **P** | **02 00 08.9** | **+0.1** |
| | comp=Z,328nm,1.1s | | | | | | |
| HDIL | | | | *e*PcP | **PcP** | **02 03 06.2** | **+0.2** |
| HDIL | | | | *e*S | **S** | **02 05 05.4** | **+2.3** |
| **S31A** | **Mullinville** | **30.47** | **336** | P | **P** | **02 00 08.7** | **-0.2** |
| | baz=31,SNR=19 | | | | | | |
| **R33A** | **Olander Ranch,** | **30.50** | **338** | P | **P** | **02 00 08.9** | **-0.1** |
| | baz=31,SNR=15 | | | | | | |
| **U28A** | **Mallet** | **30.66** | **331** | P | **P** | **02 00 10.1** | **-0.5** |
| | baz=31 | | | | | | |
| **Q34A** | **Chapman** | **30.69** | **340** | P | **P** | **02 00 09.1** | **-1.6** |
| | baz=31,SNR=11 | | | | | | |
| **SSPA** | **Standing Stone** | **30.74** | **9** | *e*P | **P** | **02 00 12.4** | **+1.3** |
| | comp=Z,338nm,0.7s | | | | | | |
| SSPA | | | | *e*PcP | **PcP** | **02 03 06.6** | **0.0** |
| **KSU1** | **Kansas State U** | **30.74** | **341** | P | **P** | **02 00 11.0** | **-0.1** |
| | baz=31,SNR=21 | | | | | | |
| **KSU1** | **Kansas State U** | **30.74** | **341** | *e*P | **P** | **02 00 10.4** | **-0.7** |
| | comp=Z,212nm,1.2s | | | | | | |
| **P36A** | **Good Intent, A** | **30.80** | **343** | P | **P** | **02 00 11.4** | **-0.2** |
| | baz=31,SNR=21 | | | | | | |
| **LPAZ** | **La Paz** | **30.85** | **149** | P | **P** | **02 00 13.3** | **+0.3** |
| | comp=Z,12nm,0.7s,baz=333,slow=9.0,SNR=18 | | | | | | |
| LPAZ | | | | PcP | **PcP** | **02 03 08.9** | **+0.8** |
| | comp=Z,10nm,0.8s,baz=348,slow=4.4,SNR=4.6 | | | | | | |
| LPAZ | | | | ScP | **ScP** | **02 06 43.0** | **+0.4** |

comp=Z,111nm,1.2s,baz=349,slow=4.0,SNR=6.9
**LPAZ La Paz 30.85 149** *e*P **P 02 00 13.9 +0.9**
LPAZ 02 03 09.0
LPAZ pmax pmax
comp=Z,24nm,1.0s
**LPAZ La Paz 30.85 149** *e*P **P 02 00 13.9 +0.9**
comp=Z,24nm,1.0s
LPAZ PcP **PcP 02 03 08.9 +0.8**
LPAZ *e*ScP **ScP 02 06 44.5 +1.9**
**T29A Hugoton 30.86 333** P **P 02 00 12.0 -0.3**
baz=31,SNR=7.0
**R32A Long Quarter, 30.87 338** P **P 02 00 12.2 -0.2**
baz=31,SNR=9.6
**S30A Montezuma 30.90 334** P **P 02 00 12.7 0.0**
baz=31,SNR=7.4
**P35A Duane Minner, 30.95 342** P **P 02 00 13.0 +0.1**
baz=31,SNR=6.4
**U27A Thompson Grove 30.98 330** P **P 02 00 13.4 -0.1**
baz=31,SNR=9.1
**121A Cookes Peak, D 31.01 319** P **P 02 00 13.8 0.0**
baz=31,SNR=32
**121A Cookes Peak, D 31.01 319** *e*P **P 02 00 13.9 +0.1**
comp=Z,42nm,0.8s
121A *e*ScP **ScP 02 06 42.2 -0.1**
**Q33A Connelly Farm, 31.06 339** P **P 02 00 13.8 -0.2**
baz=31,SNR=33
**R31A Burdett 31.07 336** P **P 02 00 14.0 -0.1**
baz=31,SNR=18
**S29A Ulysses 31.16 334** P **P 02 00 14.8 -0.2**
baz=31,SNR=6.3
**LUPA Lehigh Univers 31.19 13** *e*P **P 02 00 17.6 +2.5**
comp=Z,416nm,1.7s
LUPA *e*PcP **PcP 02 03 08.2 +0.3**
**O36A Bolckow 31.20 344** P **P 02 00 14.9 -0.3**
baz=31,SNR=20
**P34A Walnut Farm, R 31.22 341** P **P 02 00 15.5 +0.1**
baz=31,SNR=35
**Q32A Meitler Ranch, 31.31 338** P **P 02 00 15.7 -0.5**
baz=32,SNR=18
**R30A Dighton 31.36 335** P **P 02 00 16.7 0.0**
baz=32,SNR=18
**BNM Barren Site 31.37 323** *e*P **P 02 00 18.0 +1.0**
BNM *e*ScP **ScP 02 06 46.7 +3.1**
**P33A Williams Farm, 31.40 340** P **P 02 00 17.2 +0.2**
baz=32,SNR=6.2
**T27A Campo 31.44 331** P **P 02 00 17.5 0.0**
baz=32,SNR=5.9
**BRNJ Basking Ridge 31.45 14** *e*P **P 02 00 19.6 +2.2**
comp=Z,718nm,1.7s
**LPM Los Pinos Moun 31.48 323** *e*P **P 02 00 19.9 +1.9**
**S28A Manter 31.49 333** P **P 02 00 17.6 -0.2**
baz=32,SNR=11
**O35A Humboldt 31.60 343** P **P 02 00 17.8 -0.9**
baz=32,SNR=9.0
**CBKS Cedar Bluff 31.60 337** *e*P **P 02 00 19.7 +0.9**
CBKS *e**PP **pP 02 00 43.0 +0.2**
**CBKS Cedar Bluff 31.60 337** P **P 02 00 18.7 -0.1**
baz=32,SNR=5.6
**CBKS Cedar Bluff 31.60 337** *e*P **P 02 00 19.7 +0.9**
CBKS *e*pP **pP 02 00 40.3 +0.2**
**Q31A Ellis 31.64 337** P **P 02 00 19.1 0.0**
baz=32,SNR=7.2
**CPNY Central Park 31.71 15** *e*P **P 02 00 20.6 +1.0**
comp=Z,659nm,1.9s
**O34A Beatrice 31.75 342** P **P 02 00 20.0 -0.1**
baz=32,SNR=54
**ANMO Albuquerque 31.82 324**⇑ *e*P **P 02 00 21.7 +0.7**
ANMO pmax pmax
comp=Z,9.0nm,0.6s
**ANMO Albuquerque 31.82 324** *e*P **P 02 00 20.7 -0.3**
comp=Z,37nm,1.0s
**ODNJ Ogdensburg 31.82 14** *e*P **P 02 00 22.3 +1.6**
comp=Z,342nm,1.8s
ODNJ *e*PcP **PcP 02 03 10.1 +0.6**
ODNJ *e*ScP **ScP 02 06 44.9 +0.2**
**R29A Marienthal 31.84 334** P **P 02 00 20.6 -0.4**
baz=32
**LAZ Ladron 31.85 322** *e*P **P 02 00 23.3 +2.1**
LAZ *e*ScP **ScP 02 06 48.2 +3.0**
**P32A Huiting Farm, 31.88 339** P **P 02 00 21.3 0.0**
baz=32,SNR=24
**AAM Ann Arbor 31.89 1** *e*P **P 02 00 21.9 +0.7**
AAM *e**PP **pP 02 00 43.7 +1.2**
**AAM Ann Arbor 31.89 1** *e*P **P 02 00 21.9 +0.7**
AAM *e*pP **pP 02 00 43.7 +1.2**
**ERPA Erie 31.92 6** *e*P **P 02 00 22.6 +1.1**
comp=Z,320nm,1.7s
ERPA *e*pP **pP 02 00 42.9 +0.1**
**PAL Palisades 31.92 15** *e*P **P 02 00 23.6 +2.1**
PAL pmax pmax
comp=Z,202nm,1.1s
**PAL Palisades 31.92 15** *e*P **P 02 00 23.6 +2.1**
comp=Z,202nm,1.1s
**Q30A Quinter 31.93 336** P **P 02 00 22.0 +0.2**
baz=32,SNR=10
**O33A Hebron 31.94 340** P **P 02 00 21.8 +0.1**
baz=32,SNR=28
**T26A Comanche Natio 31.95 330** P **P 02 00 22.0 -0.1**
baz=32
**S27A Las Animas 32.02 331** P **P 02 00 22.4 -0.3**
baz=32,SNR=5.2
**R28A Tribune 32.07 333** P **P 02 00 23.0 0.0**
baz=32,SNR=8.7
**N35A Tabor 32.07 344** P **P 02 00 22.9 +0.1**
baz=32,SNR=47
**P31A Stockton 32.08 338** P **P 02 00 23.1 +0.1**
baz=32,SNR=11
**Q29A Oakley 32.17 335** P **P 02 00 24.0 +0.1**
baz=32,SNR=20
**S26A Kim 32.25 331** P **P 02 00 24.7 +0.1**
baz=32,SNR=11
**N34A Lincoln 32.30 342** P **P 02 00 24.1 -0.7**
baz=32,SNR=10
**T25A Trinidad 32.34 329** P **P 02 00 24.9 -0.5**
baz=32
**T25A Trinidad 32.34 329** *e*P **P 02 00 26.9 +1.4**
comp=Z,488nm,2.5s
**O32A Brockman Farm, 32.34 340** P **P 02 00 25.0 -0.2**
baz=32,SNR=12
**P30A Selden 32.43 337** P **P 02 00 26.4 +0.3**
baz=33,SNR=8.3
**SCIA State Center 32.46 347** *e*P **P 02 00 26.0 -0.2**
comp=Z,222nm,0.9s
**R27A Eads 32.46 332** P **P 02 00 26.5 +0.1**
baz=33,SNR=5.6
**YLE Yale 32.47 16** *e*P **P 02 00 28.5 +2.3**
comp=Z,162nm,0.8s
**N33A J Bar K, Exete 32.50 341** P **P 02 00 26.0 -0.6**
baz=33
**BINY Binghamton 32.60 11** *e*P **P 02 00 29.4 +1.9**
comp=Z,907nm,1.9s
BINY *e*ScP **ScP 02 06 47.8 +0.5**
**O31A Woolen Ranch, 32.61 338** P **P 02 00 27.0 -0.6**
baz=33,SNR=7.6
**M35A Neola 32.65 344** P **P 02 00 27.5 -0.3**
baz=33,SNR=62
**Q28A Sharon Springs 32.67 334** P **P 02 00 27.8 -0.5**
baz=33,SNR=7.9
**P29A Atwood 32.75 336** P **P 02 00 28.3 -0.6**
baz=33,SNR=7.0
**R26A Arlington 32.78 331** P **P 02 00 27.7 -1.5**
baz=33,SNR=7.9
**MMNY Mt. Morris Dam 32.78 9** *e*P **P 02 00 30.4 +1.4**
comp=Z,134nm,0.7s
MMNY *e*ScP **ScP 02 06 48.3 +0.4**
**N32A Stulken Farm, 32.80 340** P **P 02 00 28.7 -0.5**
baz=33
**TUC Tucson 32.87 316** *e*P **P 02 00 29.5 -0.5**
TUC *e* 02 03 13.3
TUC pmax pmax
comp=Z,15nm,0.8s
**TUC Tucson 32.87 316** *e*P **P 02 00 29.5 -0.5**
comp=Z,15nm,0.8s
TUC *e*PcP **PcP 02 03 13.3 +0.5**
TUC *e*ScP **ScP 02 06 51.3 +2.7**
**O30A MW Ranch, Wils 32.91 337** P **P 02 00 29.9 -0.3**
baz=33,SNR=9.7
**JFWS Jewell Farm 32.92 352** *e*P **P 02 00 29.8 -0.4**
JFWS *e*S **S 02 05 39.6 -1.6**
JFWS *e*S S 02 05 44.2 +3.0
JFWS pmax pmax
comp=Z,148nm,1.0s
**JFWS Jewell Farm 32.92 352** *e*P **P 02 00 29.8 -0.4**
comp=Z,148nm,1.0s
JFWS *e*S **S 02 05 39.6 -1.6**
JFWS *e*S S 02 05 44.2 +2.9

**M34A Aspy Farms, Fr 32.93 343** P **P 02 00 29.7 -0.6**
baz=33,SNR=8.5
**KSCO Kaye Shedlock' 32.98 333** P **P 02 00 30.1 -0.9**
baz=33,SNR=8.8
**KSCO Kaye Shedlock' 32.98 333** *e*P **P 02 00 31.2 +0.2**
comp=Z,335nm,1.2s
**P28A Saint Francis 33.07 335** P **P 02 00 31.8 +0.1**
baz=33,SNR=11
**O29A 4D Ranch, Culb 33.15 336** P **P 02 00 32.4 0.0**
baz=33,SNR=8.3
**M33A Taylor Creek F 33.18 342** P **P 02 00 32.0 -0.5**
baz=33
**L35A Bielow Farm, R 33.21 345** P **P 02 00 31.8 -1.0**
baz=33,SNR=18
**L34A Svendsen Farm, 33.30 343** P **P 02 00 32.8 -0.7**
baz=34,SNR=12
**Q26A Hugo 33.31 332** P **P 02 00 33.7 -0.2**
baz=34,SNR=9.4
**BGNE Belgrade 33.33 341** P **P 02 00 33.1 -0.8**
baz=34,SNR=14
**BGNE Belgrade 33.33 341** *e*P **P 02 00 33.3 -0.5**
comp=Z,125nm,0.6s
**SDCO Great Sand Dun 33.36 328** P **P 02 00 34.6 +0.2**
baz=34,SNR=15
**SDCO Great Sand Dun 33.36 328** *e*P **P 02 00 34.2 -0.2**
comp=Z,53nm,1.0s
SDCO *e*PcP **PcP 02 03 15.0 +0.7**
SDCO *e*ScP **ScP 02 06 53.6 +3.2**
**P27A Ficken Ranch, 33.41 334** P **P 02 00 34.4 -0.3**
baz=34,SNR=11
**BRYW Bryant College 33.42 17** *e*P **P 02 00 36.5 +2.0**
comp=Z,47nm,0.8s
**N30A Hueftle Ranch, 33.46 338** P **P 02 00 35.4 +0.3**
baz=34
**O28A Krutsinger Ran 33.54 335** P **P 02 00 35.8 0.0**
baz=34,SNR=7.9
**M31A Lambstett Ranc 33.55 340** P **P 02 00 35.6 -0.1**
baz=34,SNR=12
**TRY Troy 33.61 14** *e*P **P 02 00 37.9 +1.7**
comp=Z,197nm,1.2s
**N29A Votaw Ranch, W 33.68 337** P **P 02 00 36.9 -0.1**
baz=34
**K35A Storm Lake 33.70 345** P **P 02 00 36.3 -0.7**
baz=34,SNR=14
**L33A Hoskins 33.74 342** P **P 02 00 36.8 -0.6**
baz=34,SNR=9.3
**P26A Davis Ranch, A 33.75 333** P **P 02 00 37.3 -0.3**
baz=34,SNR=7.2
**J37A Redenius Farm, 33.88 348** P **P 02 00 37.4 -1.2**
baz=34
**O27A Beecher Island 33.89 335** P **P 02 00 38.6 -0.2**
baz=34,SNR=5.3
**K34A Le Mars 33.89 344** P **P 02 00 38.4 -0.3**
baz=34
**W18A Petrified Fore 33.91 321** P **P 02 00 39.0 -0.2**
baz=34,SNR=8.3
**W18A Petrified Fore 33.91 321** *e*P **P 02 00 38.7 -0.5**
comp=Z,34nm,0.8s
**N28A Pribbeno Ranch 33.92 336** P **P 02 00 38.8 -0.3**
baz=34,SNR=12
**HRV Adam Dziewonsk 33.95 17** *e*P **P 02 00 41.1 +1.9**
HRV pmax pmax
comp=Z,204nm,1.6s
**HRV Adam Dziewonsk 33.95 17** *e*P **P 02 00 41.1 +1.9**
comp=Z,204nm,1.6s
**S22A 4UR Ranch, Cre 34.05 327** P **P 02 00 40.2 -0.3**
baz=34,SNR=22
**J36A Seneca 1, Swea 34.07 347** P **P 02 00 39.1 -1.1**
baz=34
**K33A Hardington 34.07 343** P **P 02 00 39.3 -0.9**
baz=34,SNR=6.9
**Q24A Divide 34.12 330** P **P 02 00 40.2 -0.9**
baz=34
**ACCN Adirondack Com 34.23 14** *e*P **P 02 00 43.5 +1.9**
comp=Z,203nm,1.8s
**L31A Butterfield Fa 34.24 341** P **P 02 00 41.2 -0.6**
baz=34,SNR=9.3
**M29A Burnside Ranch 34.24 338** P **P 02 00 41.3 -0.6**
baz=34
**O26A Horse Wrangler 34.29 334** P **P 02 00 41.9 -0.4**
baz=34,SNR=6.7
**J35A Milford 34.30 346** P **P 02 00 41.2 -1.0**
baz=34
**L30A Spencer Herefo 34.34 339** P **P 02 00 42.0 -0.6**
baz=34,SNR=5.7
**OGNE Ogallala 34.34 336** P **P 02 00 42.2 -0.5**
baz=34,SNR=14
**OGNE Ogallala 34.34 336** *e*P **P 02 00 43.8 +1.1**
comp=Z,1µm,1.4s
OGNE *e*pP **pP 02 01 04.1 0.0**
**I38A Scanlan Farm, 34.34 350** P **P 02 00 40.3 -2.3**
baz=34
**K32A Venigre 34.41 342** P **P 02 00 42.7 -0.4**
baz=35,SNR=26
**J34A George 34.41 345** P **P 02 00 41.7 -1.5**
baz=35,SNR=13
**N27A Anderson Farm, 34.43 335** P **P 02 00 42.9 -0.5**
baz=35,SNR=13
**M28A Bar X Bar Ranc 34.46 337** P **P 02 00 44.0 +0.3**
baz=35
**MVCO Mesa Verde 34.59 325** P **P 02 00 43.4 -1.7**
baz=35,SNR=14
**MVCO Mesa Verde 34.59 325** *e*P **P 02 00 45.2 +0.1**
comp=Z,77nm,1.3s
MVCO *e*ScP **ScP 02 06 55.0 +0.3**
**K31A O'Neill 34.62 341** P **P 02 00 44.1 -0.9**
baz=35,SNR=13
**SADO Sadowa 34.63 6** *e*P **P 02 00 45.5 +0.5**
comp=Z,113nm,0.8s
**I36A Fitzsimmons Fa 34.65 348** P **P 02 00 44.1 -1.2**
baz=35
**L29A Maesberg Ranch 34.71 339** P **P 02 00 45.1 -0.7**
baz=35
**I35A Creekview Farm 34.71 346** P **P 02 00 44.8 -0.9**
baz=35,SNR=14
**J33A Davis 34.72 344** P **P 02 00 44.4 -1.4**
baz=35,SNR=40
**N26A Koester Ranch, 34.73 334** P **P 02 00 44.6 -1.5**
baz=35
**SIV San Ignacio 34.76 138** P **P 02 00 45.8 -0.7**
comp=Z,9.2nm,0.6s,baz=320,slow=10,SNR=19
SIV PcP **PcP 02 03 19.4 +1.1**
comp=Z,21nm,0.7s,baz=332,slow=2.5,SNR=10
SIV ScP **ScP 02 06 56.5 +1.2**
comp=Z,8.3nm,0.9s,baz=18,slow=3.2,SNR=5.1
**MDV Middlebury 34.92 14** *e*P **P 02 00 48.5 +1.0**
**K30A Basset 34.94 340** P **P 02 00 46.9 -0.9**
baz=35,SNR=21
**M27A Reverse DX Ran 34.97 336** P **P 02 00 47.9 -0.3**
baz=35,SNR=6.9
**H37A Dierke Farm, C 34.98 349** P **P 02 00 47.0 -1.0**
baz=35
**ISCO Idaho Springs 34.99 331** *e*P **P 02 00 49.7 +1.1**
ISCO *e* 02 03 19.9
ISCO pmax pmax
comp=Z,95nm,1.3s
**ISCO Idaho Springs 34.99 331** P **P 02 00 47.6 -1.0**
baz=35,SNR=14
**ISCO Idaho Springs 34.99 331** *e*P **P 02 00 49.7 +1.1**
comp=Z,95nm,1.3s
ISCO *e*PcP **PcP 02 03 19.9 +0.9**
ISCO *e*ScP **ScP 02 06 56.9 +0.6**
**ECSD EROS Data Cent 35.01 344** P **P 02 00 46.6 -1.7**
baz=35,SNR=32
**ECSD EROS Data Cent 35.01 344** *e*P **P 02 00 46.3 -2.0**
comp=Z,1µm,2.5s
**J32A Parkston 35.02 343** P **P 02 00 47.2 -1.2**
baz=35,SNR=10
**L28A Connealy Angus 35.04 337** P **P 02 00 48.9 +0.2**
baz=35,SNR=8.1
**I34A Hadley 35.10 345** P **P 02 00 48.1 -1.0**
baz=35,SNR=15
**H36A Jessenland, He 35.17 348** P **P 02 00 48.8 -0.9**
baz=35
**SMCO Snowmass 35.20 329** *e*P **P 02 00 52.6 +2.1**
comp=Z,50nm,1.2s
SMCO *e*ScP **ScP 02 06 56.4 -0.6**
SMCO *e*ScP **ScP 02 07 00.6 +3.5**
**WUAZ Wupatki 35.20 320** P **P 02 00 50.0 -0.2**
baz=35,SNR=17
**WUAZ Wupatki 35.20 320** *e*P **P 02 00 50.8 +0.5**
comp=Z,29nm,0.9s
WUAZ *e*PP **PP 02 02 14.5 +2.6**
WUAZ *e*ScP **ScP 02 06 59.9 +3.0**
**LONY Lake Ozonia 35.20 12** *e*P **P 02 00 51.1 +1.2**
comp=Z,657nm,2.1s
**K29A Lazy Trails An 35.26 339** P **P 02 00 50.0 -0.6**
baz=35,SNR=12

**PV01 Paradox Valley 35.28 326** *e*P **P 02 00 52.8 +1.7**
**I33A Coleman 35.35 344** P **P 02 00 49.7 -1.5**
baz=36
**LBNH Lisbon 35.46 15** *e*P **P 02 00 54.3 +2.1**
LBNH pmax pmax
comp=Z,498nm,1.6s
**LBNH Lisbon 35.46 15** *e*P **P 02 00 54.3 +2.1**
comp=Z,498nm,1.6s
**H35A Sunnyside Ranc 35.48 347** P **P 02 00 51.2 -1.1**
baz=36
**J30A Dallas 35.48 341** P **P 02 00 52.0 -0.4**
baz=36,SNR=18
**I32A Karley and Nic 35.51 343** P **P 02 00 51.3 -1.3**
baz=36,SNR=18
**PV05 Paradox Valley 35.54 325** *e*P **P 02 00 53.0 -0.2**
**SPMN St. Paul 35.58 350** P **P 02 00 51.5 -1.6**
baz=36,SNR=59
**SPMN St. Paul 35.58 350** *e*P **P 02 00 51.8 -1.4**
comp=Z,65nm,0.6s
**M25A Palm-Egli Farm 35.59 334** P **P 02 00 53.3 -0.2**
baz=36
**K28A Ten Mile Ranch 35.59 338** P **P 02 00 53.2 -0.3**
baz=36,SNR=17
**FRNY Flat Rock 35.62 13** *e*P **P 02 00 53.6 +0.1**
comp=Z,122nm,1.4s
FRNY *e*PcP **PcP 02 03 20.4 +0.2**
**PV04 Paradox Valley 35.65 326** *e*P **P 02 00 55.3 +1.2**
**H34A Spellman Lake, 35.67 346** P **P 02 00 52.7 -1.3**
baz=36,SNR=14
**PV10 Paradox Valley 35.72 326** *e*P **P 02 00 54.1 -0.7**
PV10 *e*PcP **PcP 02 03 22.7 +1.7**
PV10 *e*ScP **ScP 02 07 01.4 +2.6**
**G36A St. Michael 35.76 348** P **P 02 00 53.3 -1.4**
baz=36,SNR=9.1
**J29A Okreek 35.83 340** P **P 02 00 54.2 -1.2**
baz=36,SNR=47
**G35A Watkins 35.90 348** P **P 02 00 54.6 -1.3**
baz=36
**H33A Prehn Over Nor 35.92 345** P **P 02 00 54.8 -1.4**
baz=36,SNR=21
**COWI Conover 35.93 354** *e*P **P 02 00 54.3 -1.8**
comp=Z,50nm,0.8s
COWI *e*PcP **PcP 02 03 21.2 0.0**
COWI *e*S **S 02 06 26.4 -1.1**
COWI *e*ScP **ScP 02 06 58.2 -0.9**
**H32A Carlson Farm, 35.94 344** P **P 02 00 55.2 -1.2**
baz=36,SNR=15
**LVC Limon Verde 35.99 155** P **P 02 00 59.0 +1.8**
comp=Z,128nm,0.8s,baz=328,slow=7.4,SNR=24
LVC PcP **PcP 02 03 22.9 +0.8**
comp=Z,32nm,0.7s,baz=274,slow=5.2,SNR=5.1
LVC ScP **ScP 02 07 01.8 +1.8**
comp=Z,83nm,1.2s,baz=332,slow=3.4,SNR=7.2
LVC LR LR 02 16 40.1
comp=Z,3µm,19.9s,baz=332,slow=38
**LVC Limon Verde 35.99 155** *e*P **P 02 00 59.5 +2.3**
comp=Z,585nm,2.0s
LVC *e*PcP **PcP 02 03 22.4 +0.4**
LVC PcP PcP 02 03 22.9 +0.9
LVC *e*ScP **ScP 02 07 03.5 +3.5**
**I30A Oacoma 35.99 341** P **P 02 00 55.6 -1.1**
baz=36
**N23A Red Feather La 36.01 332** P **P 02 00 57.0 -0.2**
baz=36
**N23A Red Feather La 36.01 332** *e*P **P 02 00 58.2 +1.0**
comp=Z,72nm,1.2s
**PHWY Pilot Hill 36.10 332** *e*P **P 02 00 59.5 +1.4**
PHWY *e*pP **pP 02 01 19.6 0.0**
PHWY *e*PcP **PcP 02 03 21.9 -0.3**
PHWY *e*ScP **ScP 02 07 02.2 +2.0**
**GLA Glamis 36.11 314** *e*P **P 02 01 00.4 +2.4**
GLA pmax pmax
comp=Z,36nm,0.8s
**GLA Glamis 36.11 314** P **P 02 00 58.3 +0.3**
baz=36,SNR=9.0
**GLA Glamis 36.11 314** *e*P **P 02 01 00.4 +2.4**
comp=Z,36nm,0.8s
**J28A Allard Ranch, 36.17 339** P **P 02 00 57.8 -0.5**
baz=36,SNR=19
**G34A Benson 36.18 346** P **P 02 00 56.8 -1.5**
baz=36,SNR=10
**H31A Wolsey 36.21 343** P **P 02 00 57.4 -1.2**
baz=36,SNR=21
**Y12C Blythe 36.27 315** P **P 02 00 59.5 +0.2**
baz=36
**J27A Elkhorn Farm, 36.30 338** P **P 02 00 59.8 +0.3**
baz=36,SNR=34
**PDMCI Parker Dam,Lak 36.31 316** P **P 02 00 59.4 -0.2**
baz=36,SNR=23
**F36A Milaca 36.32 349** P **P 02 00 58.3 -1.2**
baz=36,SNR=71
**SUSD South Dakota S 36.32 342** P **P 02 00 58.5 -1.1**
baz=36,SNR=8.6
**I29A Vivian Onida 36.37 340** P **P 02 00 59.4 -0.6**
baz=36,SNR=12
**WVL Waterville 36.39 18** *e*P **P 02 01 02.8 +2.7**
comp=Z,666nm,1.5s
WVL *e*pP **pP 02 01 24.4 +2.6**
WVL *e*PcP **PcP 02 03 22.1 -0.5**
**F35A Swanville 36.53 348** P **P 02 01 00.2 -1.0**
baz=37,SNR=49
**O20A White River Ci 36.56 328** P **P 02 01 01.5 -0.3**
baz=37,SNR=12
**O20A White River Ci 36.56 328** *e*P **P 02 01 02.6 +0.7**
comp=Z,844nm,2.5s
**F34A Alexandria 36.61 347** P **P 02 01 00.2 -1.8**
baz=37
**I28A Midland 36.65 339** P **P 02 01 01.2 -1.2**
baz=37,SNR=22
**G32A Webster 36.65 344** P **P 02 01 01.7 -0.7**
baz=37,SNR=7.5
**SWSC Sam W. Stewart 36.75 313** P **P 02 01 04.5 +1.2**
baz=37
**J26A Sides Ranch, S 36.75 337** P **P 02 01 03.6 +0.3**
baz=37,SNR=11
**G31A Conde 36.82 343** P **P 02 01 02.6 -1.2**
baz=37,SNR=24
**IBP Imperial Bould 36.83 312** P **P 02 01 04.7 +0.6**
baz=37,SNR=11
**H29A Onida 36.88 341** P **P 02 01 03.4 -0.9**
baz=37
**IRM Iron Mountain 36.93 315** P **P 02 01 05.1 +0.2**
baz=37
**I27A Quinn 37.02 339** P **P 02 01 06.0 +0.5**
baz=37,SNR=17
**SRU San Rafael 37.06 325** *e*P **P 02 01 05.7 -0.4**
SRU *e* 02 03 25.0
SRU pmax pmax
comp=Z,63nm,1.1s
**SRU San Rafael 37.06 325** *e*P **P 02 01 05.7 -0.4**
comp=Z,63nm,1.1s
SRU *e*PcP **PcP 02 03 25.0 0.0**
SRU *e*ScP **ScP 02 07 05.7 +2.0**
**J25A Sunshine Ranch 37.10 336** P **P 02 01 06.3 0.0**
baz=37,SNR=6.5
**YJA Yavi 37.13 150** *e*P **P 02 01 08.4 +1.3**
**PKME Peaks-Kenny Pk 37.14 18** *e*P **P 02 01 08.7 +2.3**
comp=Z,884nm,1.9s
**E35A Pequot Lakes 37.16 348** P **P 02 01 05.8 -0.8**
baz=37,SNR=22
**MONP Monument Peak 37.18 312** P **P 02 01 07.9 +0.7**
baz=37,SNR=8.0
**H28A Mission Ridge 37.19 340** P **P 02 01 06.2 -0.7**
baz=37
**EMMW East Machias 37.22 20** *e*P **P 02 01 09.3 +2.2**
comp=Z,418nm,1.8s
**BAR Barrett 37.26 312** *e*P **P 02 01 07.2 -0.5**
comp=Z,12nm,0.8s
**P18A Preston Nutter 37.26 326** *e*P **P 02 01 09.1 +1.1**
comp=Z,29nm,1.0s
P18A *e*ScP **ScP 02 07 06.0 +1.4**
**E34A Wadena 37.28 348** P **P 02 01 06.5 -1.1**
baz=38,SNR=13
**I26A New Underwood 37.28 338** P **P 02 01 08.3 +0.5**
baz=37,SNR=19
**G29A Hoven 37.30 342** P **P 02 01 06.8 -1.0**
baz=38,SNR=9.8
**D37A Cotton 37.39 351** P **P 02 01 07.5 -1.0**
baz=38,SNR=41
**LDFC Landfair 37.40 316** *e*P **P 02 01 11.6 +2.6**
comp=Z,36nm,0.9s
LDFC *e*ScP **ScP 02 07 07.4 +2.4**
**F31A Hecla 37.41 344** P **P 02 01 07.2 -1.6**
baz=38
**P17A Butcher Ranch, 37.43 325** *e*P **P 02 01 11.6 +2.4**
comp=Z,58nm,1.2s
**BELC Belle Mtn. Jos 37.44 314** P **P 02 01 09.5 +0.2**

baz=38,SNR=22
**E33A Westby DABS, E** 37.45 347 P **P** 02 01 07.4 -1.7
baz=38,SNR=22
**G28A Parade** 37.51 340 P **P** 02 01 08.8 -0.8
baz=38,SNR=13
**H27A Howes** 37.52 339 P **P** 02 01 09.4 -0.3
baz=38,SNR=55
**D36A Goodland** 37.53 350 P **P** 02 01 08.9 -0.8
baz=38,SNR=54
**PFO Pinyon Flat Ob** 37.56 313 *e*P **P** 02 01 11.5 +1.1
PFO pmax pmax
comp=Z,24nm,0.7s
**PFO Pinyon Flat Ob** 37.56 313 P **P** 02 01 12.3 +1.9
comp=Z,198nm,0.6s,SNR=8.4
**PFO Pinyon Flat Ob** 37.56 313 P **P** 02 01 11.6 +1.2
baz=38,SNR=18
**PFO Pinyon Flat Ob** 37.56 313 *e*P **P** 02 01 11.5 +1.1
comp=Z,24nm,0.7s
PFO *e*ScP **ScP** 02 07 07.9 +2.3
**TMUT Trail Mountain** 37.57 325 *e*P **P** 02 01 12.9 +2.3
comp=Z,148nm,1.4s
TMUT *e*PcP **PcP** 02 03 27.2 +0.5
TMUT *e*ScP **ScP** 02 07 07.7 +1.9
**D35A Remer** 37.60 349 P **P** 02 01 08.8 -1.5
baz=38,SNR=43
**I25A Rochford** 37.61 337 P **P** 02 01 10.5 -0.1
baz=38,SNR=32
**F30A Leola** 37.61 343 P **P** 02 01 09.2 -1.3
baz=38,SNR=22
**MSU Marysvale** 37.61 323 *e*P **P** 02 01 11.4 +0.6
MSU pmax pmax
comp=Z,11nm,0.9s
**MSU Marysvale** 37.61 323 *e*P **P** 02 01 11.4 +0.6
comp=Z,11nm,0.9s
**GMRC Granite Mounta** 37.62 315 P **P** 02 01 11.4 +0.6
baz=38,SNR=16
**K22A Casper** 37.66 333 P **P** 02 01 10.9 -0.2
baz=38,SNR=10
**K22A Casper** 37.66 333 *e*P **P** 02 01 11.6 +0.5
comp=Z,195nm,1.3s
**109C Camp Elliot, M** 37.68 312 P **P** 02 01 12.4 +1.2
baz=38
**CCUT Cedar City** 37.72 321 *e*P **P** 02 01 12.3 +0.6
comp=Z,12nm,1.0s
CCUT *e*ScP **ScP** 02 07 08.3 +2.0
**C39A Grand Marais** 37.73 354 P **P** 02 01 10.0 -1.3
baz=38
**H26A Fairpoint** 37.75 338 P **P** 02 01 11.7 0.0
baz=38,SNR=6.8
**C38A Sawbill Land.** 37.77 352 P **P** 02 01 10.3 -1.4
baz=38,SNR=15
**RSSD Black Hills** 37.81 337 *e*P **P** 02 01 13.0 +0.6
RSSD *e* 02 03 27.1
RSSD pmax pmax
comp=Z,461nm,1.8s
**RSSD Black Hills** 37.81 337 *e*P **P** 02 01 13.0 +0.6
comp=Z,461nm,1.8s
RSSD *e*PcP **PcP** 02 03 27.1 -0.1
**D34A Park Rapids** 37.83 348 P **P** 02 01 10.6 -1.6
baz=38,SNR=21
**F29A Eureka** 37.84 342 P **P** 02 01 10.9 -1.5
baz=38,SNR=16
**C37A Embarrass** 37.91 351 P **P** 02 01 12.5 -0.4
baz=38,SNR=35
**E31A Nome** 37.96 345 P **P** 02 01 11.9 -1.5
baz=38,SNR=46
**D33A AnnSam, Waubun** 38.02 347 P **P** 02 01 12.3 -1.6
baz=38,SNR=33
**EYMN Ely** 38.02 352 P **P** 02 01 12.5 -1.5
baz=38,SNR=16
**EYMN Ely** 38.02 352 *e*P **P** 02 01 12.4 -1.5
comp=Z,162nm,1.6s
**C36A Pine Crest Far** 38.04 351 P **P** 02 01 13.3 -0.7
baz=38,SNR=19
**HJA Humahuaca** 38.06 151‖ *e*P **P** 02 01 16.4 +1.5
**H25A Fruitdale** 38.06 337 P **P** 02 01 14.0 -0.3
baz=38,SNR=17
**MURC Murrieta** 38.10 313 P **P** 02 01 16.1 +1.4
baz=38,SNR=16
**HEC Hector,Ludlow** 38.11 315 P **P** 02 01 15.0 +0.1
baz=38,SNR=18
**G27A Dupree** 38.12 340 P **P** 02 01 13.3 -1.4
baz=38,SNR=24
**TUQ Turquoise Moun** 38.16 316 P **P** 02 01 17.0 +1.7
baz=38,SNR=13
**F28A McLaughlin** 38.16 341 P **P** 02 01 14.3 -0.8
baz=38,SNR=13
**C35A Jirik Farms, M** 38.18 349 P **P** 02 01 13.5 -1.6
baz=38,SNR=67
**E30A Jud** 38.19 344 P **P** 02 01 14.3 -1.0
baz=38,SNR=14
**SHPR Sheep Range** 38.24 318 *e*P **P** 02 01 16.6 +0.5
SHPR *e*S S 02 07 10.5 +7.2
**G26A Maurine** 38.27 339 P **P** 02 01 15.8 -0.3
baz=38,SNR=9.9
**D32A Dogwood Acres,** 38.28 346 P **P** 02 01 14.9 -1.1
baz=38
**MPU Maple Canyon** 38.30 325 *e*P **P** 02 01 16.3 -0.3
comp=Z,47nm,1.2s
MPU *e*S **S** 02 07 09.6 +5.4
**O16A Springville** 38.36 326 *e*P P 02 01 09.7 -7.4
comp=Z,46nm,1.4s
**D31A Mcclaflin, Tow** 38.38 345 P **P** 02 01 15.6 -1.2
baz=39,SNR=18
**E29A Napoleon** 38.45 343 P **P** 02 01 16.7 -0.8
baz=39,SNR=12
**G25A Newell** 38.48 338 P **P** 02 01 17.7 -0.2
baz=39,SNR=5.8
**NLU North Lily Min** 38.51 325 *e*P **P** 02 01 20.8 +2.4
comp=Z,29nm,1.5s
NLU *e*S **S** 02 07 11.6 +4.2
**F27A Lemmon** 38.58 340 P **P** 02 01 17.9 -0.7
baz=39
**C33A Trail** 38.59 348 P **P** 02 01 18.3 -0.4
baz=39,SNR=11
**RRX Edison Barstow** 38.60 315 P **P** 02 01 20.5 +1.5
baz=39
**GSC Goldstone** 38.69 315 *e*P **P** 02 01 20.8 +1.0
GSC pmax pmax
comp=Z,20nm,0.6s
**GSC Goldstone** 38.69 315 P **P** 02 01 20.1 +0.3
baz=39,SNR=19
**GSC Goldstone** 38.69 315 *e*P **P** 02 01 20.8 +1.0
comp=Z,20nm,0.6s
**D30A Buchanan** 38.70 344 P **P** 02 01 18.9 -0.7
baz=39,SNR=39
**BFSC Mount Baldy Ra** 38.74 313 P **P** 02 01 21.1 +0.8
baz=39,SNR=7.9
**E28A Huff** 38.77 342 P **P** 02 01 20.2 -0.1
baz=39
**F26A Lodgepole** 38.78 339 P **P** 02 01 19.9 -0.5
baz=39,SNR=11
**CTU Camp Tracy** 38.83 326 *e*P **P** 02 01 23.3 +2.3
comp=Z,43nm,1.2s
**D29A Pettibone, Tap** 38.89 343 P **P** 02 01 20.4 -0.8
baz=39,SNR=11
**E27A Carson** 38.92 341 P **P** 02 01 21.2 -0.2
baz=39,SNR=27
**TCUT Toone Canyon** 38.94 327 *e*P **P** 02 01 24.1 +2.1
comp=Z,153nm,1.6s
TCUT *e*PcP **PcP** 02 03 31.7 +0.8
TCUT *e*S **S** 02 07 13.0 -0.9
**MWC Mount Wilson** 39.02 313 *e*P **P** 02 01 23.5 +0.8
MWC pmax pmax
comp=Z,15nm,0.8s
**MWC Mount Wilson** 39.02 313 *e*P **P** 02 01 23.4 +0.8
comp=Z,15nm,0.8s
**B34A Aery, Baudette** 39.06 349 P **P** 02 01 21.2 -1.3
baz=39,SNR=55
**C31A Landman Farms,** 39.07 346 P **P** 02 01 21.3 -1.3
baz=39,SNR=12
**AZAP Zapla** 39.09 152 *e*P **P** 02 01 24.1 +0.8
**DUG Dugway** 39.09 324 *e*P **P** 02 01 25.7 +2.6
DUG *e*S **S** 02 07 13.5 -2.4
DUG pmax pmax
comp=Z,65nm,2.0s
**DUG Dugway** 39.09 324 P **P** 02 01 23.3 +0.2
baz=39,SNR=9.1
**DUG Dugway** 39.09 324 *e*P **P** 02 01 25.7 +2.6
comp=Z,65nm,2.0s
DUG *e*S **S** 02 07 13.5 -2.4
**PASC Pasadena Art C** 39.09 313 *e*P P 02 01 26.3 +3.3
comp=Z,194nm,2.0s
**AGMN Agassiz Nation** 39.12 348 P **P** 02 01 21.4 -1.6
baz=39,SNR=31
**AGMN Agassiz Nation** 39.12 348 *e*P **P** 02 01 21.0 -2.0
comp=Z,1µm,2.8s
**F25A Bowman** 39.12 339 P **P** 02 01 23.1 -0.1
baz=39,SNR=6.5
**ASTB Santa Barbara** 39.13 151 *e*P **P** 02 01 25.3 +1.7
**C30A Mose, Pekin** 39.17 345 P **P** 02 01 22.6 -0.9
baz=39,SNR=12
**BW06 Boulder Array** 39.18 330 *e*P **P** 02 01 24.5 +0.6
comp=Z,118nm,1.7s
BW06 *e*ScP **ScP** 02 07 11.2 -0.5
BW06 *e*S **S** 02 07 13.2 -4.2
**TPNV Topopah Spring** 39.21 318 *e*P **P** 02 01 24.9 +0.7
TPNV *e*S **S** 02 07 14.3 -3.6
TPNV pmax pmax
comp=Z,23nm,0.8s
**TPNV Topopah Spring** 39.21 318 P **P** 02 01 23.8 -0.4
baz=39,SNR=10
**TPNV Topopah Spring** 39.21 318 *e*P **P** 02 01 24.9 +0.7
comp=Z,23nm,0.8s
TPNV *e*S **S** 02 07 14.3 -3.6
**DECC Green Verdugo** 39.23 313 P **P** 02 01 25.8 +1.5
baz=39
**E26A Carlson Angus** 39.25 340 P **P** 02 01 23.9 -0.4
baz=39,SNR=9.4
**D28A Regan** 39.29 342 P **P** 02 01 24.2 -0.3
baz=40,SNR=11
**EDW2 Edwards Air Fo** 39.30 314 P **P** 02 01 25.9 +1.1
baz=39,SNR=30
**SLA San Lorenzo** 39.31 153 *e*P **P** 02 01 25.3 +0.2
**FURC Furnace Creek,** 39.36 317 P **P** 02 01 26.2 +1.0
baz=39,SNR=11
**B32A Ashes, Strandq** 39.36 347 P **P** 02 01 23.3 -1.7
baz=40,SNR=19
**HWUT Hardware Ranch** 39.37 327 *e*P **P** 02 01 24.6 -0.9
comp=Z,50nm,1.0s
HWUT *e*PcP **PcP** 02 03 32.5 +0.3
HWUT *e*ScP **ScP** 02 07 13.0 +0.6
**LRMC Laurel Mountai** 39.40 315 P **P** 02 01 25.4 -0.3
baz=40,SNR=13
**D27A Center** 39.51 341 P **P** 02 01 25.8 -0.6
baz=40,SNR=6.9
**MPMC Manual Prospec** 39.56 316 P **P** 02 01 27.1 -0.1
baz=40,SNR=14
**R11A Troy Canyon, C** 39.60 320 P **P** 02 01 27.1 -0.2
baz=40,SNR=17
**R11A Troy Canyon, C** 39.60 320 *e*P **P** 02 01 27.2 -0.2
comp=Z,8.7nm,0.8s
R11A *e*ScP **ScP** 02 07 14.9 +1.5
**E25A Miller Ranch,** 39.60 339 P **P** 02 01 26.5 -0.6
baz=40,SNR=9.1
**MDND Maddock** 39.61 344 P **P** 02 01 25.9 -1.3
baz=40,SNR=21
**MDND Maddock** 39.61 344 *e*P **P** 02 01 26.3 -0.8
comp=Z,595nm,1.1s
**A33A Warroad** 39.63 348 P **P** 02 01 25.5 -1.8
baz=40
**SPUT South Promonto** 39.64 326 *e*P **P** 02 01 29.1 +1.4
comp=Z,138nm,2.1s
**B31A Greenbush Farm** 39.64 346 P **P** 02 01 25.6 -1.7
baz=40,SNR=50
**SNCC San Nicolas Is** 39.64 311 P **P** 02 01 27.9 +0.3
baz=40
**BLG Laguna Peak** 39.70 312 P **P** 02 01 28.7 +0.6
baz=40
**BGU Big Grassy Mou** 39.70 325 *e*P **P** 02 01 30.5 +2.3
comp=Z,99nm,1.8s
BGU *e*ScP **ScP** 02 07 15.7 +2.0
**C28A Hausauer Farms** 39.71 343 P **P** 02 01 26.6 -1.4
baz=40
**D26A Manning** 39.73 340 P **P** 02 01 27.0 -1.2
baz=40
**DAC Darwin (Calif)** 39.75 316 *e*P **P** 02 01 30.0 +1.3
DAC pmax pmax
comp=Z,9.0nm,0.9s
**DAC Darwin (Calif)** 39.75 316 *e*P **P** 02 01 30.0 +1.3
comp=Z,9.4nm,0.9s
DAC *e*ScP **ScP** 02 07 14.8 +0.8
**B30A Myrvik Farm, E** 39.83 345 P **P** 02 01 27.9 -1.1
baz=40,SNR=13
**AHID Auburn Hatcher** 39.95 329 *e*P **P** 02 01 32.0 +1.7
AHID *e*pP **pP** 02 01 53.1 +1.0
**GRAC Grapevine Rang** 39.99 317 P **P** 02 01 31.0 +0.5
baz=40,SNR=22
**ARVC Arvin** 40.02 314 P **P** 02 01 31.6 +0.9
baz=40,SNR=18
**C27A Sayler Ranch,** 40.04 342 P **P** 02 01 30.3 -0.5
baz=40,SNR=9.1
**ISA Isabella** 40.04 315 *e*P **P** 02 01 33.9 +2.9
ISA pmax pmax
comp=Z,15nm,0.8s
**ISA Isabella** 40.04 315 P **P** 02 01 31.6 +0.6
baz=40,SNR=15
**ISA Isabella** 40.04 315 *e*P **P** 02 01 33.9 +2.9
comp=Z,15nm,0.8s
ISA *e*ScP **ScP** 02 07 18.8 +3.8
**BSC Santa Cruz Isl** 40.06 312 P **P** 02 01 32.3 +1.1
baz=40
**B29A Wagenman Farm,** 40.11 344 P **P** 02 01 30.9 -0.3
baz=40,SNR=30
**D25A Fairfield** 40.13 340 P **P** 02 01 31.6 +0.1
baz=40,SNR=6.8
**HVU Hansel Valley** 40.14 326 *e*P **P** 02 01 32.7 +0.9
HVU pmax pmax
comp=Z,16nm,0.9s
**HVU Hansel Valley** 40.14 326 *e*P **P** 02 01 32.7 +0.9
comp=Z,16nm,0.9s
HVU *e*ScP **ScP** 02 07 16.9 +1.5
**CWC Cottonwood Cre** 40.17 316 P **P** 02 01 32.4 +0.3
baz=40,SNR=6.3
**REDW Red Top Meadow** 40.26 330 *e*P **P** 02 01 32.0 -0.8
comp=Z,74nm,1.1s
**A30A Hoffart Farm,** 40.28 346 P **P** 02 01 31.3 -1.3
baz=40,SNR=18
**FSA Cafayete** 40.28 154 *e*P **P** 02 01 35.3 +2.1
**SNOW Snow King Moun** 40.28 330 *e*P **P** 02 01 33.3 +0.2
comp=Z,54nm,1.1s
**LOHW Long Hollow** 40.32 330 *e*P **P** 02 01 33.8 +0.5
comp=Z,163nm,1.9s
**C26A Wahner Farm, P** 40.32 341 P **P** 02 01 32.0 -1.1
baz=40,SNR=20
**SBC Santa Barbara** 40.33 312 P **P** 02 01 33.6 +0.3
baz=40
**B28A Dugan Ranch, T** 40.37 343 P **P** 02 01 32.4 -1.0
baz=40,SNR=26
**TPAW Teton Pass** 40.40 330 *e*P **P** 02 01 34.4 +0.3
comp=Z,181nm,2.0s
**MOOW Moose Ponds** 40.49 330 *e*P **P** 02 01 33.8 -1.0
comp=Z,173nm,2.3s
MOOW *e*ScP **ScP** 02 07 16.2 -0.6
**A29A Manning Farm,** 40.49 345 P **P** 02 01 34.1 -0.4
baz=41,SNR=22
**FXWY Fox Creek** 40.54 330 *e*P **P** 02 01 36.6 +1.4
comp=Z,12nm,0.8s
**VES Vestal, Richgr** 40.56 314 P **P** 02 01 35.6 +0.4
baz=41,SNR=25
**B27A Peters Farms,** 40.59 343 P **P** 02 01 34.8 -0.4
baz=41,SNR=10
**C25A Freed Ranch, W** 40.60 340 P **P** 02 01 35.3 0.0
baz=41,SNR=9.8
**PKM Peak Mountain** 40.62 313 P **P** 02 01 36.3 +0.4
baz=41,SNR=19
**IMW Indian Meadow** 40.69 330 *e*P **P** 02 01 38.1 +1.7
comp=Z,13nm,0.8s
IMW *e*PcP **PcP** 02 03 36.9 +0.5
IMW *e*ScP **ScP** 02 07 18.2 +0.5
**FLWY Flagg Ranch** 40.71 331 *e*P **P** 02 01 36.9 +0.4
comp=Z,32nm,0.9s
**A28A Rude Farm, Bot** 40.76 344 P **P** 02 01 36.7 +0.1
baz=41,SNR=12
**LAO LASA Array** 40.80 337 P **P** 02 01 36.9 -0.1
baz=41,SNR=6.4
**LAO LASA Array** 40.80 337 *e*P **P** 02 01 38.1 +1.1
LAO *e*pP **pP** 02 01 58.8 -0.3
**RLMT Red Lodge** 40.83 333 P **P** 02 01 37.0 -0.5
baz=41,SNR=15
**RLMT Red Lodge** 40.83 333 *e*P **P** 02 01 37.3 -0.1
comp=Z,154nm,1.6s
RLMT *e*PcP **PcP** 02 03 36.9 +0.1
**B26A Jensen Ranch,** 40.85 342 P **P** 02 01 38.0 +0.5
baz=41,SNR=5.6
**ELK Elko** 40.85 323 *e*P **P** 02 01 38.7 +0.9
ELK *e* 02 03 38.1
ELK pmax pmax
comp=Z,16nm,0.9s
**ELK Elko** 40.85 323 *e*P **P** 02 01 38.7 +0.9
comp=Z,16nm,0.9s
ELK *e*PcP **PcP** 02 03 38.1 +1.1
ELK *e*ScP **ScP** 02 07 20.6 +2.3
**H17A Grant Village** 40.88 331 *e*P P 02 01 42.4 +4.3
H17A *e*pP pP 02 02 04.3 +4.3
**RCTC Rector, Farmer** 40.90 315 P **P** 02 01 39.4 +1.5
baz=41,SNR=9.6
**SMMC Simmler** 40.95 313 P **P** 02 01 39.9 +1.4
baz=41,SNR=22
**ULM Lac du Bonnet** 40.98 349 P **P** 02 01 36.1 -2.2
comp=Z,60nm,0.8s,baz=163,slow=8.7,SNR=67
ULM PcP **PcP** 02 03 36.3 -0.6
comp=Z,19nm,0.6s,baz=176,slow=6.0,SNR=3.8
ULM LR LR 02 19 34.0
comp=Z,1µm,21.5s,baz=166,slow=37
**ULM Lac du Bonnet** 40.98 349 *e*P **P** 02 01 36.2 -2.2
ULM 02 03 36.3
ULM pmax pmax
comp=Z,178nm,1.4s
**ULM Lac du Bonnet** 40.98 349 *e*P **P** 02 01 36.1 -2.2
comp=Z,178nm,1.4s
ULM PcP **PcP** 02 03 36.3 -0.6
**MTUM Tungsten Hills** 40.98 317 *e*P **P** 02 01 41.0 +2.1
**MCID Moose Creek** 41.02 330 *e*P **P** 02 01 38.9 -0.3
**YFT Old Faithful** 41.05 331 *e*P **P** 02 01 41.5 +2.1
comp=Z,170nm,1.6s
**B25A Knox Farm, Ray** 41.06 341 P **P** 02 01 39.5 +0.4
baz=41,SNR=5.5
**A27A Ledoux Ranch,** 41.07 343 P **P** 02 01 38.8 -0.4
baz=41,SNR=14
**AHML Horco Molle** 41.18 154‖ *e*P **P** 02 01 41.6 +1.3
**LCO Las Campanas** 41.20 162 *e*P **P** 02 01 41.7 +0.9
comp=Z,1µm,2.6s
LCO *e*PcP **PcP** 02 03 38.7 +0.4
**A26A Wade Farm, Ken** 41.26 342 P **P** 02 01 40.4 -0.3
baz=41,SNR=7.1
**NV01 Mina Array Sit** 41.39 318 *e*P **P** 02 01 42.1 -0.1
NV01 *e*ScP **ScP** 02 07 21.3 +0.8
**NVAR Mina Array Bea** 41.39 318 P **P** 02 01 42.1 -0.1
comp=Z,13nm,0.6s,baz=128,slow=7.0,SNR=46
NVAR pP **pP** 02 02 02.6 -1.7
comp=Z,20nm,0.7s,baz=128,slow=7.3,SNR=6.8
NVAR PcP **PcP** 02 03 39.1 +0.3
comp=Z,3.6nm,0.6s,baz=139,slow=4.3,SNR=4.2
NVAR ScP **ScP** 02 07 20.5 0.0
comp=Z,4.5nm,0.9s,baz=135,slow=5.3,SNR=6.8
NVAR LR LR 02 22 32.7
comp=Z,1µm,18.5s,baz=132,slow=42
**GCMT Greycliff** 41.52 333 *e*P **P** 02 01 43.4 +0.3
**DGMT Dagmar** 41.57 340 P **P** 02 01 43.6 +0.3
baz=42,SNR=37
**DGMT Dagmar** 41.57 340 *e*P **P** 02 01 43.3 0.0
comp=Z,294nm,0.8s
DGMT *e*pP **pP** 02 02 05.2 -0.1
**QLMT Earthquake Lak** 41.62 331 *e*P **P** 02 01 45.5 +1.5
QLMT *e*pP **pP** 02 02 07.9 +1.9
**BMN Battle Mountai** 41.85 321 *e*P **P** 02 01 45.7 -0.2
BMN pmax pmax
comp=Z,29nm,0.8s
**BMN Battle Mountai** 41.85 321 *e*P **P** 02 01 45.7 -0.2
comp=Z,28nm,0.8s
**LRV Little Rabbit** 42.21 314 *e*P **P** 02 01 51.0 +2.3
**HLID Hailey** 42.24 327 P **P** 02 01 49.3 +0.3
baz=42,SNR=21
**HLID Hailey** 42.24 327 *e*P **P** 02 01 48.1 -0.9
comp=Z,12nm,0.8s
HLID *e*PcP **PcP** 02 03 43.0 +1.6
HLID *e*ScP **ScP** 02 07 25.4 +1.7
**MCMT McKenzie Canyo** 42.31 330 *e*P **P** 02 01 49.7 +0.1
**BOZ Bozeman (W)** 42.31 331 *e*P **P** 02 01 48.6 -0.9
BOZ pmax pmax
comp=Z,30nm,0.9s
**BOZ Bozeman (W)** 42.31 331 P **P** 02 01 49.6 0.0
baz=42,SNR=22
**BOZ Bozeman (W)** 42.31 331 *e*P **P** 02 01 48.6 -0.9
comp=Z,30nm,0.9s
**AGUA GUANDACOL** 42.36 159 *e*P **P** 02 01 51.4 +1.3
**CYA Choya** 42.44 156‖ *e*P **P** 02 01 52.4 +1.8
**DLMT Dillon** 42.57 330 *e*P **P** 02 01 52.6 +1.0
comp=Z,57nm,1.4s
DLMT *e*ScP **ScP** 02 07 28.5 +3.6
**CMB Columbia Colle** 42.57 316 *e*P **P** 02 01 51.4 -0.2
CMB pmax pmax
comp=Z,12nm,0.9s
**CMB Columbia Colle** 42.57 316 *e*P **P** 02 01 51.4 -0.2
comp=Z,12nm,0.9s
CMB *e*ScP **ScP** 02 07 27.2 +2.3
**SAO San Andreas Ge** 42.67 314 *e*P **P** 02 01 54.8 +2.4
SAO pmax pmax
comp=Z,29nm,0.9s
**SAO San Andreas Ge** 42.67 314 *e*P **P** 02 01 54.8 +2.4
comp=Z,29nm,0.9s
**LRM Limekiln Ridge** 42.83 331 *e*P **P** 02 01 54.1 +0.2
**MFID Camas Ranch** 42.91 326 *e*P **P** 02 01 55.2 +0.8
comp=Z,23nm,1.0s
**HRY Holter Researc** 43.20 332 *e*P **P** 02 01 57.3 +0.6
**EGMT Eagleton** 43.30 335 P **P** 02 01 57.3 -0.1
baz=43,SNR=8.7
**EGMT Eagleton** 43.30 335 *e*P **P** 02 01 57.7 +0.3
comp=Z,755nm,2.7s
**AMOG MOGNA** 43.70 160 *e*P **P** 02 02 02.2 +1.4
**WVOR Wild Horse Val** 43.90 323 *e*P **P** 02 02 01.6 -0.8
WVOR pmax pmax
comp=Z,40nm,0.8s
**WVOR Wild Horse Val** 43.90 323 *e*P **P** 02 02 01.6 -0.8
comp=Z,40nm,0.8s
**OHCM Honcut** 43.97 317 *e*P **P** 02 02 04.7 +1.9
OHCM *e*ScP **ScP** 02 07 32.6 +2.1
**CHMT Chamberlain Mo** 44.01 331 *e*P **P** 02 02 04.0 +0.7
**RTLL Cerro Villicun** 44.06 160 *e*P **P** 02 02 04.3 +0.7
**BDFB Brasilia** 44.17 125 P **P** 02 02 05.3 +0.5
comp=Z,86nm,0.8s,baz=287,slow=8.9,SNR=80
BDFB PcP **PP** 02 03 49.5 -0.1
comp=Z,7.9nm,0.6s,baz=233,slow=4.8,SNR=3.1
BDFB LR LR 02 21 13.4
comp=Z,2µm,21.3s,baz=302,slow=37
**BDFB Brasilia** 44.17 125 P **P** 02 02 05.3 +0.5
BDFB 02 03 49.5
BDFB pmax pmax
comp=Z,86nm,0.8s
BDFB pmax pmax
comp=Z,8.0nm,0.6s
BDFB MLR MLR
comp=Z,2µm,21.3s
**SJA San Juan** 44.22 161‖ *e*P **P** 02 02 07.1 +2.2
**RTLS Leoncito** 44.23 162 *e*P **P** 02 02 07.0 +1.7
**MSO Missoula** 44.27 331 P **P** 02 02 06.1 +0.9
baz=44,SNR=13
**MSO Missoula** 44.27 331 *e*P **P** 02 02 05.3 0.0
comp=Z,15nm,0.9s
**NSHM Saint Helena R** 44.33 316 *e*P **P** 02 02 08.0 +2.3
**SLMT Seeley Lake** 44.36 332 *e*P **P** 02 02 06.4 +0.4
**J08A Circle Bar Ran** 44.37 324 *e*P **P** 02 02 07.2 +1.1
comp=Z,17nm,0.8s
**CFAA Coronel Fontan** 44.39 160 P **P** 02 02 07.0 +0.7
comp=Z,5.4nm,0.6s,baz=336,slow=7.9,SNR=33
CFAA PcP **PcP** 02 03 49.6 +0.9
comp=Z,1.6nm,0.8s,baz=251,slow=4.1,SNR=2.8
CFAA ScP **ScP** 02 07 33.8 +1.4
comp=Z,0.7nm,1.1s,baz=20,slow=2.6,SNR=4.8
**CFAA Coronel Fontan** 44.39 160‖ *e*P **P** 02 02 07.8 +1.5
**RPN Rapa Nui** 44.46 213 P **P** 02 02 08.4 +1.6
comp=Z,171nm,0.8s,baz=14,slow=5.6,SNR=9.1
**RPN Rapa Nui** 44.46 213 P **P** 02 02 08.4 +1.6
RPN pmax pmax
comp=Z,171nm,0.8s
**RTCV Cerro Valdivia** 44.53 161 *e*P **P** 02 02 08.5 +1.2
**AUSP Uspallata** 44.60 162 *e*P **P** 02 02 10.6 +2.4
**MOD Modoc** 44.60 321 *e*P **P** 02 02 09.0 +1.0
comp=Z,15nm,1.1s
**O03D Paynes Creek** 44.68 318 P **P** 02 02 08.9 +0.3
baz=45,SNR=7.1
**DRLN Deer Lake** 44.77 25 *e*P **P** 02 02 10.0 +1.0
comp=Z,120nm,0.7s
**SWMT Swartz Lake** 44.79 331 *e*P **P** 02 02 11.8 +2.5
SWMT *e*PcP **PcP** 02 03 51.1 +1.2
**CPUP Villa Florida** 44.83 145 P **P** 02 02 09.2 -0.5
comp=Z,34nm,1.0s,baz=323,slow=6.8,SNR=19
CPUP LR LR 02 23 43.3
comp=Z,614nm,18.4s,baz=318,slow=40
**CPUP Villa Florida** 44.83 145 P **P** 02 02 09.2 -0.5
CPUP pmax pmax
comp=Z,34nm,1.0s
CPUP MLR MLR
comp=Z,614nm,18.4s
**CPUP Villa Florida** 44.83 145 *e*P **P** 02 02 09.7 -0.1
CPUP *e*ScP **ScP** 02 07 37.8 +3.6
**ROC1 El Roble** 44.84 164 *e*P **P** 02 02 10.6 +0.5
**YBMT Yellow Bay** 45.05 332 *e*P P 02 02 14.7 +3.2

**JTMT Jette** 45.09 332 *e*P **P** 02 02 12.7 +0.9
JTMT *e*PcP **PcP** 02 03 51.8 +0.9
**LASM Arnica Sink** 45.23 320 P **P** 02 02 12.8 -0.2
**WDC Whiskeytown Da** 45.31 318 *e*P **P** 02 02 13.4 -0.1
WDC pmax pmax
comp=Z,7.0nm,0.8s
**WDC Whiskeytown Da** 45.31 318 *e*P **P** 02 02 13.4 -0.1
comp=Z,6.6nm,0.8s
**BLMT Blacktail Moun** 45.32 332 *e*P **P** 02 02 14.8 +1.1
**F10A Beach Ranch, E** 45.34 328 *e*P **P** 02 02 13.3 -0.4
comp=Z,20nm,0.7s
**ACAN Cantantal** 45.36 160 *e*P **P** 02 02 14.5 +0.5
**BSMT Bassoo Peak** 45.41 331 *e*P **P** 02 02 15.2 +0.8
**K05A Summer Lake** 45.43 322 *e*P P 02 02 19.1 +4.5
comp=Z,31nm,1.4s
K05A *e*ScP **ScP** 02 07 38.8 +2.1
**TCA Tanti** 45.48 156 *e*P **P** 02 02 14.7 -0.3
**M04C Macdoel** 45.49 320 P **P** 02 02 14.8 -0.3
baz=46,SNR=9.2
**KIPM Iron Peak** 45.55 317 *e*P **P** 02 02 17.8 +2.3
**KCPM Cahto Peak** 45.55 317 *e*P **P** 02 02 18.6 +3.1
comp=Z,15nm,0.7s
**G08A Pilot Rock** 45.83 326 *e*P **P** 02 02 18.4 +0.8
comp=Z,19nm,1.4s
**WALA Waterton Lakes** 45.88 333 *e*P **P** 02 02 18.3 +0.3
comp=Z,196nm,2.3s
**K04D Chiloquin, OR** 45.90 321 P **P** 02 02 18.1 -0.1
baz=46
**KMRM Mail Ridge** 45.90 317 *e*P **P** 02 02 21.0 +2.7
comp=Z,45nm,1.0s
**MRA San Martin** 46.01 158 *e*P **P** 02 02 19.9 +0.8
**YBH Yreka Blue Hor** 46.02 320 *e*P **P** 02 02 18.1 -1.0
YBH pmax pmax
comp=Z,7.0nm,0.8s
**YBH Yreka Blue Hor** 46.02 320 *e*P **P** 02 02 18.1 -1.0
comp=Z,6.6nm,0.8s
**KHMM Horse Mountain** 46.24 318 *e*P **P** 02 02 23.4 +2.4
comp=Z,44nm,0.8s
**J04D Umpqua Nationa** 46.46 322 P **P** 02 02 22.3 -0.3
baz=46,SNR=13
**FFC Flin Flon** 46.50 346 *e*P **P** 02 02 22.0 -0.5
FFC pmax pmax
comp=Z,113nm,1.1s
**FFC Flin Flon** 46.50 346 P **P** 02 02 22.0 -0.5
comp=Z,285nm,0.7s,SNR=11
**FFC Flin Flon** 46.50 346 *e*P **P** 02 02 22.0 -0.5
comp=Z,113nm,1.1s
**SCHQ Schefferville** 46.52 14 P **P** 02 02 22.0 -0.7
comp=Z,93nm,0.6s,baz=221,slow=6.7,SNR=94
SCHQ PcP **PcP** 02 03 55.0 -0.6
comp=Z,32nm,0.6s,baz=226,slow=2.8,SNR=6.1
SCHQ LR LR 02 22 01.4
comp=Z,4µm,21.1s,baz=219,slow=36
**SCHQ Schefferville** 46.52 14 *e*P **P** 02 02 22.5 -0.2
comp=Z,110nm,0.6s
SCHQ PcP **PcP** 02 03 55.0 -0.6
**I05D Terrebonne, OR** 46.62 323 P **P** 02 02 24.9 +1.1
baz=47
**G06A Carlson Farm,** 46.74 325 *e*P **P** 02 02 26.8 +2.1
comp=Z,195nm,2.3s
**L02D Cave Junction,** 46.81 320 P **P** 02 02 25.5 +0.3
baz=47
**NEW Newport** 46.82 330 *e*P **P** 02 02 25.0 -0.2
NEW pmax pmax
comp=Z,46nm,1.6s
**NEW Newport** 46.82 330 P **P** 02 02 25.6 +0.4
baz=47,SNR=7.0
**NEW Newport** 46.82 330 *e*P **P** 02 02 25.0 -0.2
comp=Z,46nm,1.6s
**HAWA Hanford** 46.84 327 *e*P **P** 02 02 26.2 +0.9
HAWA *e*pP **pP** 02 02 47.2 -0.5
**RSW Rattlesnake Hi** 46.87 327 P **P** 02 02 26.7 +1.0
**D08A Wollman Farm,** 46.93 328 *e*P **P** 02 02 27.2 +1.2
comp=Z,78nm,1.9s
D08A *e*PcP **PcP** 02 03 58.4 +1.2
**I04A Tendick Farm,** 46.95 322 P **P** 02 02 26.7 +0.4
baz=47
**GBB Gable Butte** 47.02 327 P **P** 02 02 27.8 +1.1
**C09A Chrisman Ranch** 47.08 329 *e*P **P** 02 02 27.1 -0.1
C09A *e*PcP **PcP** 02 03 58.5 +0.7
**E07A Sunnyside** 47.11 327 *e*P **P** 02 02 27.6 +0.1
comp=Z,30nm,0.7s
**G05D Wamic, OR** 47.13 324 P **P** 02 02 28.6 +0.9
baz=47,SNR=10
**KBO Bosley Butte** 47.23 319 *e*P **P** 02 02 31.6 +3.0
comp=Z,68nm,0.8s
**H04A Detroit Lake** 47.31 323 *e*P **P** 02 02 29.2 +0.1
comp=Z,33nm,0.6s
**I03D Drain, OR** 47.46 322 P **P** 02 02 31.1 +0.9
baz=48
**SAW Saint Andrews** 47.59 328 P **P** 02 02 32.6 +1.4
**KEBM Edson Butte** 47.64 320 *e*P P 02 02 37.1 +5.4
comp=Z,142nm,1.3s
**WTV Waterville** 47.88 328 P **P** 02 02 33.2 -0.2
**LTY Liberty** 47.98 327 *e*P **P** 02 02 35.3 +1.0
comp=Z,113nm,2.2s
**ETW Entiat** 48.02 328 P **P** 02 02 35.8 +1.1
**G03D McMinnville, O** 48.24 323 P **P** 02 02 37.2 +1.0
baz=48
**LON Longmire** 48.30 326 *e*P **P** 02 02 37.6 +0.9
LON pmax pmax
comp=Z,11nm,0.9s
**LON Longmire** 48.30 326 *e*P **P** 02 02 37.6 +0.9
comp=Z,11nm,0.9s
**C06D Leavenworth** 48.52 328 P **P** 02 02 39.5 +1.2
baz=49
**D05A Enumclaw** 48.66 326 *e*P **P** 02 02 40.7 +1.3
comp=Z,28nm,0.8s
**EDM Edmonton** 48.79 337 *e*P **P** 02 02 41.1 +0.8
EDM *e* 02 04 07.8
EDM pmax pmax
comp=Z,77nm,0.8s
**EDM Edmonton** 48.79 337 *e*P **P** 02 02 41.1 +0.8
comp=Z,76nm,0.8s
EDM *e*PcP **PcP** 02 04 07.8 +4.0
**FCC Fort Churchill** 48.94 353 *e*P **P** 02 02 40.2 -1.1
FCC *e**PP **pP** 02 03 03.3 -0.6
**FCC Fort Churchill** 48.94 353 *e*P **P** 02 02 40.2 -1.1
FCC *e*pP **pP** 02 03 03.3 -0.6
**B05A Bryant** 49.36 327 P **P** 02 02 45.0 +0.2
baz=50
**CANA Caviahue** 49.49 166 ǁ *e*P **P** 02 02 46.9 +0.9
**NLWA Neilton Lookou** 49.81 325 *e*P **P** 02 02 49.1 +0.8
comp=Z,23nm,0.9s
NLWA *e*pP **pP** 02 03 11.8 +0.8
**RCBR Riachuelo** 50.73 106 P **P** 02 02 56.8 +1.1
comp=Z,24nm,0.8s,baz=278,slow=8.1,SNR=12
**RCBR Riachuelo** 50.73 106 *e*P **P** 02 02 56.8 +1.1
comp=Z,37nm,0.9s
**TRQA Tornquist** 52.41 158 *e*P **P** 02 03 08.0 +0.3
comp=Z,258nm,1.9s
**YKA Yellowknife Ar** 56.53 344 P **P** 02 03 35.5 -1.6
comp=Z,36nm,0.6s,baz=141,slow=6.9,SNR=48
YKA pP **pP** 02 03 58.9 -1.4
comp=Z,38nm,0.8s,baz=140,slow=7.1,SNR=7.3
**TAOE Nuku Hiva Isla** 58.80 253 *e*T T 03 06 04.9
comp=Z,313nm,0.3s
**DLBC Dease Lake** 59.20 334 *e*P **P** 02 03 56.0 -0.1
comp=Z,53nm,0.9s
**RKT Rikitea** 59.73 236 *e*P **P** 02 04 01.2 +1.1
comp=Z,128nm,0.9s
RKT *e*S **S** 02 12 03.0 -1.1
comp=Z,1µm,28.2s
RKT *e*LR LR 02 21 46.6
comp=Z,2µm,36.2s,baz=68
**RKT Rikitea** 59.73 236 *e*T T 03 07 22.9
comp=Z,4.8nm,0.3s
**SFJD Kangerlussuaq** 60.97 14 *e*P **P** 02 04 06.4 -1.4
SFJD pmax pmax
comp=Z,48nm,0.8s
**SFJD Kangerlussuaq** 60.97 14 *i*P **P** 02 04 06.0 -1.8
comp=Z,47nm,0.8s
**SFJD Kangerlussuaq** 60.97 14 *e*P **P** 02 04 06.4 -1.4
comp=Z,48nm,0.8s
**ILULI Ilulissat** 62.61 13 *i*P **P** 02 04 17.2 -1.6
comp=Z,62nm,1.1s
**RES Resolute Bay** 64.65 357 *e*P **P** 02 04 31.1 -1.0
RES pmax pmax
comp=Z,45nm,0.6s
**RES Resolute Bay** 64.65 357 *e*P **P** 02 04 31.1 -1.0
comp=Z,45nm,0.6s
**DAWY Dawson** 66.00 337 *e*P **P** 02 04 40.6 -0.5
comp=Z,102nm,2.0s
**KULLO Kullorsuaq** 66.07 8 ⇑ *i*P **P** 02 04 39.9 -1.4
comp=Z,178nm,1.4s
**INK Inuvik** 66.20 342 *e*P **P** 02 04 41.8 -0.5
INK pmax pmax
comp=Z,74nm,1.0s
**INK Inuvik** 66.20 342 *e*P **P** 02 04 41.8 -0.5
comp=Z,74nm,1.0s
**USHA Ushuaia** 66.23 170 P **P** 02 04 42.9 +0.3
comp=Z,15nm,0.7s,baz=344,slow=10.0,SNR=6.7
USHA LR LR 02 27 36.3
comp=Z,499nm,21.3s,baz=314,slow=30
**BMRM Bremner River** 66.90 333 *e*P **P** 02 04 46.7 -0.2
comp=Z,78nm,1.3s
**EGAK Eagle** 67.01 337 *e*P **P** 02 04 47.1 -0.4
comp=Z,20nm,0.9s
**MENT Mentasta** 67.26 335 *e*P **P** 02 04 48.8 -0.4
**DIV Divide** 67.49 332 *e*P **P** 02 04 51.5 +0.8
comp=Z,29nm,1.0s
**KLU Klutina** 67.68 333 *e*P **P** 02 04 52.3 +0.4
comp=Z,24nm,0.9s
**VAH Vaihoa** 67.72 249 *e*P **P** 02 04 54.3 +1.5
comp=Z,95nm,0.9s
**PMOR Pomariorio Ree** 67.89 249 *e*P **P** 02 04 55.4 +1.5
comp=Z,72nm,0.9s
**PMOR Pomariorio Ree** 67.89 249 *e*T T 03 17 36.0
comp=Z,4.2nm,0.2s
**SUMG Summit** 67.91 13 ⇑ *i*P **P** 02 04 52.4 -1.1
SUMG pmax pmax
comp=Z,130nm,0.9s
**SUMG Summit** 67.91 13 ⇑ *i*P **P** 02 04 52.4 -1.1
comp=Z,133nm,0.9s
**SUMG Summit** 67.91 13 *e*P **P** 02 04 52.2 -1.3
comp=Z,143nm,0.9s
SUMG *e*pP **pP** 02 05 16.1 -1.3
**PAX Paxson** 68.02 334 *e*P **P** 02 04 52.4 -1.6
PAX pmax pmax
comp=Z,27nm,0.9s
**PAX Paxson** 68.02 334 *e*P **P** 02 04 52.4 -1.6
comp=Z,27nm,0.9s
**SML Sawmill** 68.87 333 *e*P **P** 02 04 59.7 +0.4
SML pmax pmax
comp=Z,36nm,1.0s
**SML Sawmill** 68.87 333 *e*P **P** 02 04 59.7 +0.4
comp=Z,36nm,1.0s
**SEW Seward** 68.88 331 *e*P **P** 02 04 59.8 +0.6
comp=Z,28nm,1.0s
**MEH Mehetia** 68.95 246 *e*P **P** 02 05 01.9 +1.4
comp=Z,18nm,0.9s
**HDA Harding Lake** 69.15 336 *e*P **P** 02 04 59.7 -1.3
comp=Z,292nm,2.0s
**PMR Palmer** 69.17 332 *e*P **P** 02 05 02.4 +1.4
PMR pmax pmax
comp=Z,23nm,1.0s
**PMR Palmer** 69.17 332 *e*P **P** 02 05 02.4 +1.4
comp=Z,23nm,1.0s
**ILAR Eielson Array** 69.25 336 P **P** 02 05 00.2 -1.3
comp=Z,12nm,0.6s,baz=120,slow=4.2,SNR=72
ILAR *e*pP **PcP** 02 05 23.9 -0.6
comp=Z,13nm,0.8s,baz=125,slow=4.5,SNR=5.1
ILAR PKP2bc **P'P'bc** 02 33 11.4 0.0
comp=Z,0.6nm,0.9s,baz=286,slow=3.4,SNR=4.3
ILAR LR LR 02 40 32.9
comp=Z,672nm,18.2s,baz=115,slow=40
**ILAR Eielson Array** 69.25 336 P **P** 02 05 00.2 -1.3
ILAR *PP **PcP** 02 05 24.0 -0.6
ILAR pmax pmax
comp=Z,13nm,0.6s
ILAR pmax pmax
comp=Z,13nm,0.8s
ILAR MLR MLR
comp=Z,673nm,18.2s
**FYU Fort Yukon** 69.29 338 *e*P **P** 02 05 01.3 -0.4
comp=Z,254nm,2.1s
**RC01 Rabbit Creek A** 69.30 332 *e*P **P** 02 05 01.9 +0.1
comp=Z,59nm,1.2s
**BORG Borgarnes** 69.35 24 *e*P **P** 02 05 02.7 +0.6
BORG pmax pmax
comp=Z,14nm,0.5s
**BORG Borgarnes** 69.35 24 *e*P **P** 02 05 02.6 +0.6
comp=Z,14nm,0.5s
**BRLK Bradley Lake** 69.48 330 *e*P **P** 02 05 03.1 +0.1
comp=Z,47nm,1.0s
**RND Reindeer** 69.61 334 *e*P **P** 02 05 03.3 -0.5
RND pmax pmax
comp=Z,93nm,1.0s
**RND Reindeer** 69.61 334 *e*P **P** 02 05 03.3 -0.5
comp=Z,93nm,1.0s
**WRH Wood River Hil** 69.64 335 *e*P **P** 02 05 03.1 -0.8
comp=Z,13nm,0.9s
**COLA College** 69.68 336 ǁ *i*P **P** 02 05 03.2 -0.9
COLA pmax pmax
comp=Z,73nm,1.9s
**COLA College** 69.68 336 *e*P **P** 02 05 04.0 -0.1
comp=Z,46nm,1.1s
**MCK McKinley** 69.75 335 *e*P **P** 02 05 04.7 +0.1
MCK *e**PP **pP** 02 05 28.4 -0.1
MCK pmax pmax
comp=Z,29nm,0.9s
**MCK McKinley** 69.75 335 *e*P **P** 02 05 04.7 +0.1
comp=Z,29nm,0.9s
MCK *e*pP **pP** 02 05 28.4 -0.1
**KDAK Kodiak Island** 69.85 328 *i*P **P** 02 05 07.1 +1.8
**MDM Murphy Dome** 69.86 336 *e*P **P** 02 05 05.1 -0.2
comp=Z,122nm,1.9s
**TVO Taravao** 69.99 247 *e*P **P** 02 05 07.2 +0.3
comp=Z,17nm,1.1s
**TIAR Tiarei** 70.00 247 *e*P **P** 02 05 08.3 +1.3
comp=Z,33nm,0.9s
**OHAK Old Harbor** 70.10 327 *e*P **P** 02 05 07.1 +0.3
comp=Z,134nm,1.7s
**BWN Browne** 70.11 335 *e*P **P** 02 05 07.4 +0.6
comp=Z,498nm,1.8s
**PPT Papeete** 70.22 247 LR LR 02 28 16.9
comp=Z,550nm,18.9s,baz=62,slow=29
**PPT2 Papeete2** 70.22 247 *e*P **P** 02 05 09.2 +0.8
comp=Z,56nm,1.2s
PPT2 *e*S **S** 02 14 13.2 +0.1
comp=Z,2µm,26.2s
**PPT2 Papeete2** 70.22 247 *e*LR LR 02 26 30.3
comp=Z,3µm,32.8s,baz=67
**TRF Thorofare Moun** 70.24 334 *e*P **P** 02 05 06.8 -1.0
comp=Z,376nm,2.2s
**PAE Paea** 70.25 247 *e*P **P** 02 05 09.8 +1.4
comp=Z,21nm,0.9s
**SPU Mount Spurr** 70.41 332 *e*P **P** 02 05 08.8 0.0
**RSO Redoubt South** 70.56 331 *e*P **P** 02 05 10.4 +0.6
**BPAW Bear Paw Mtn.** 70.72 335 *e*P **P** 02 05 09.3 -1.2
comp=Z,50nm,1.0s
**MLY Manley** 70.89 336 *e*P **P** 02 05 10.6 -1.0
comp=Z,33nm,0.9s
**PPLA Purkeypile** 70.91 333 *e*P **P** 02 05 11.0 -0.9
comp=Z,234nm,1.8s
**CAST Castle Rocks** 71.00 334 *e*P **P** 02 05 10.8 -1.5
comp=Z,252nm,2.3s
**SCO Scoresbysund** 71.28 18 ⇑ *i*P **P** 02 05 12.4 -1.3
SCO pmax pmax
comp=Z,42nm,0.8s
**SCO Scoresbysund** 71.28 18 ⇑ *i*P **P** 02 05 12.4 -1.3
comp=Z,42nm,0.8s
**COLD Coldfoot** 71.36 338 *e*P **P** 02 05 13.8 -0.5
comp=Z,48nm,1.3s
**TBI Tubuai** 71.99 241 *e*S **S** 02 14 32.7 -0.6
comp=Z,2µm,27.8s
**TBI Tubuai** 71.99 241 *e*LR LR 02 27 25.9
comp=Z,1µm,33.2s,baz=60
**TBI Tubuai** 71.99 241 *e*T T 03 22 41.0
comp=Z,6.8nm,0.3s
**SVW2 Sparrevohn** 72.05 331 *e*P **P** 02 05 16.9 -1.7
comp=Z,13nm,0.9s
**VAL Valentia** 72.10 39 ǁ *i*P **P** 02 05 20.2 +1.2
**PTEO Sao Teotonio** 72.34 54 *e*P **P** 02 05 22.1 +1.3
comp=Z,188nm,2.2s
**MORF Marmelete** 72.40 54 *e*P **P** 02 05 21.6 +0.4
MORF AMS AMS 02 31 48.2
comp=Z,914nm,21.8s
**MORF Marmelete** 72.40 54 *e*P **P** 02 05 22.6 +1.4
comp=Z,160nm,2.1s
**MORF Marmelete** 72.40 54 *e*P **P** 02 05 21.5 +0.4
**PNCL Nicolau / Gran** 72.50 53 *e*P **P** 02 05 22.6 +0.9
comp=Z,103nm,1.9s
**PCAS Casmilo, Conde** 72.55 51 *e*P **P** 02 05 22.9 +0.9
comp=Z,186nm,1.4s
**PTOM Tomar** 72.61 52 *e*P **P** 02 05 23.0 +0.7
comp=Z,100nm,1.6s
**CHGN Chignik** 72.72 326 *e*P **P** 02 05 22.3 -0.3
**MESJ Messejana** 72.74 54 *e*P **P** 02 05 23.9 +0.7
MESJ AMS AMS 02 30 54.2
comp=Z,654nm,25.2s
**MESJ Messejana** 72.74 54 *e*P **P** 02 05 24.3 +1.2
comp=Z,89nm,1.9s
**MESJ Messejana** 72.74 54 *e*P **P** 02 05 23.8 +0.7
**ALE Alert** 72.79 3 P **P** 02 05 21.0 -1.6
comp=Z,300nm,0.7s,SNR=24
**PCVE Castro Verde** 72.88 54 *e*P **P** 02 05 24.9 +0.9
comp=Z,133nm,1.9s
**PBDV Barranco-do-Ve** 72.97 54 *e*P **P** 02 05 26.1 +1.5
comp=Z,202nm,1.9s
**PBEJ Beja** 73.02 53 *e*P **P** 02 05 25.7 +0.9
comp=Z,72nm,2.2s
**PVIS Viseu** 73.03 51 *e*P **P** 02 05 25.4 +0.6
comp=Z,121nm,1.9s
**POLO Lamas de Olo** 73.11 50 *e*P **P** 02 05 25.9 +0.5
comp=Z,53nm,1.6s
**PVAQ Vaqueiros** 73.14 54 *e*P **P** 02 05 26.4 +0.9
comp=Z,103nm,1.9s
**PVRL Vila Real** 73.17 50 *e*P **P** 02 05 26.3 +0.6
comp=Z,112nm,1.4s
**MTE Manteigas** 73.29 51 *e*P **P** 02 05 27.0 +0.6
comp=Z,102nm,1.7s
**MTE Manteigas** 73.29 51 *e*P **P** 02 05 26.9 +0.4
comp=Z,289nm,2.0s
**PCBR Castelo Branco** 73.33 51 *e*P **P** 02 05 27.3 +0.7
comp=Z,96nm,1.8s
**PMRV Marv??o** 73.40 52 *e*P **P** 02 05 27.5 +0.5
comp=Z,68nm,2.1s
**PBAR Barrancos** 73.67 53 *e*P **P** 02 05 29.4 +0.8
comp=Z,196nm,1.3s
**MVO Moncorvo** 73.69 50 *e*P **P** 02 05 29.4 +0.7
comp=Z,134nm,1.1s
**PBRG Braganca** 73.91 49 *e*P **P** 02 05 30.4 +0.4
comp=Z,121nm,1.7s
**DAG Danmarks Havn** 74.55 13 ⇑ *i*P **P** 02 05 31.0 -2.0
DAG pmax pmax
comp=Z,71nm,0.7s
**DAG Danmarks Havn** 74.55 13 ⇑ *i*P **P** 02 05 31.0 -2.0
comp=Z,103nm,0.7s
**RRH Rhenigidale** 74.73 33 ǁ *e*P **P** 02 05 33.3 -1.0
**CCA1 Carmenellis** 75.13 41 *e*P **P** 02 05 36.1 -0.7
**RRR Rubha Reidh** 75.19 33 ǁ *e*P **P** 02 05 36.2 -0.7
**KPL Plockton** 75.24 33 *e*P **P** 02 05 35.9 -1.3
KPL AMB AMB 02 05 37.4
comp=Z,182nm,1.9s
**FALS False Pass** 75.42 324 *e*P **P** 02 05 39.4 +1.1
comp=Z,115nm,0.6s
**KAC Achnashellach** 75.44 33 *e*P **P** 02 05 37.3 -1.1
**RSC Scourie** 75.57 32 ǁ *e*P **P** 02 05 38.5 -0.7
**GAL1 Galloway** 75.62 36 *e*P **P** 02 05 38.7 -0.8
**HTL Hartland** 75.63 40 *e*P **P** 02 05 39.9 +0.2
**PAB San Pablo** 75.75 52 *e*P **P** 02 05 41.2 +0.5
PAB pmax pmax
comp=Z,229nm,1.8s
**PAB San Pablo** 75.75 52 *e*P **P** 02 05 41.2 +0.5
comp=Z,229nm,1.8s
**PGBU Glenifferbraes** 75.80 35 ǁ *e*P **P** 02 05 39.4 -1.1
PGBU AMB AMB 02 05 40.9
comp=Z,165nm,1.8s
**HOPE Hope Point** 75.87 153 P **P** 02 05 41.6 +0.8
comp=Z,817nm,0.8s,SNR=9.8
**HOPE Hope Point** 75.87 153 *e*P **P** 02 05 40.6 -0.1
comp=Z,124nm,0.9s
**EAB Aberfoyle** 75.90 35 ǁ *e*P **P** 02 05 40.1 -1.0
**LPW Lampeter** 75.92 39 *e*P **P** 02 05 40.3 -1.0
LPW AMB AMB 02 05 41.3
comp=Z,149nm,1.6s
**MDO Dochfour** 75.94 33 *e*P **P** 02 05 40.1 -1.2
**ESDC Sonseca Array** 76.04 52 P **P** 02 05 42.4 0.0
comp=Z,31nm,0.8s,baz=280,slow=5.2,SNR=74
ESDC pP **pP** 02 06 05.2 -1.4
comp=Z,16nm,0.9s,baz=277,slow=4.7,SNR=3.6
ESDC LR LR 02 33 49.1
comp=Z,744nm,21.9s,baz=280,slow=31
**MVH1 Achvaich** 76.06 33 *e*P **P** 02 05 39.6 -2.4
**ES19 SONSECA Array** 76.09 52 *e*P **P** 02 05 40.8 -1.9
**BIGH Upper Bighouse** 76.24 32 *e*P **P** 02 05 42.2 -0.7
**BWH Wardlaw** 76.25 36 ǁ *e*P **P** 02 05 42.4 -0.7
**FOEL Foel Wylfa** 76.46 38 *e*P **P** 02 05 43.3 -1.1
FOEL AMB AMB 02 05 43.9
comp=Z,113nm,1.7s
**BHH Howats Hill** 76.49 36 ǁ *e*P **P** 02 05 43.7 -0.8
**ESK Eskdalemuir** 76.51 35 *e*P **P** 02 05 43.6 -1.0
ESK AMB AMB 02 05 44.0
comp=Z,157nm,1.9s
**ESK Eskdalemuir** 76.51 35 *i*P **P** 02 05 44.4 -0.1
**ESK Eskdalemuir** 76.51 35 P **P** 02 05 44.0 -0.5
comp=Z,750nm,0.6s,SNR=24
**ESK Eskdalemuir** 76.51 35 *e*P **P** 02 05 43.6 -1.0
**KESW Keswick, Cumbr** 76.55 36 *e*P **P** 02 05 44.6 -0.2
**ECK Cauldkaine Hil** 76.55 36 ǁ *e*P **P** 02 05 43.9 -0.9
**MCH1 Michaelchurch** 76.57 39 *e*P **P** 02 05 44.9 -0.1
**EDU Dundee** 76.65 34 ǁ *e*P **P** 02 05 44.6 -0.7
**HLM1 Long Mynd** 76.65 38 *e*P **P** 02 05 44.6 -0.9
HLM1 AMB AMB 02 05 46.0
comp=Z,102nm,1.6s
**MME1 Meikle Cairn** 76.69 33 *e*P **P** 02 05 44.2 -1.4
**AKUT Akutan** 76.77 323 *e*P **P** 02 05 45.3 -0.8
**STRD Stroud** 77.09 39 *e*P **P** 02 05 46.9 -1.0
STRD AMB AMB 02 05 47.9
comp=Z,209nm,1.7s
**JSA Saint Aubin** 77.11 42 *e*P **P** 02 05 48.2 +0.2
**UNV Unalaska Valle** 77.20 323 *e*P **P** 02 05 48.7 +0.2
comp=Z,59nm,0.8s
**SSW Stow on the Wo** 77.28 39 *e*P **P** 02 05 48.4 -0.6
**HPK Haverah Park** 77.41 37 *e*P **P** 02 05 49.5 -0.1
**WAL1 Walls** 77.47 30 *e*P **P** 02 05 48.7 -1.1
**CWF Charnwood Fore** 77.61 38 *e*P **P** 02 05 49.8 -0.9
CWF AMB AMB 02 05 50.5
comp=Z,91nm,1.7s
**CWF Charnwood Fore** 77.61 38 *e*P **P** 02 05 50.3 -0.5
comp=Z,53nm,0.8s
**SAN1 Sandwick** 77.66 31 *e*P **P** 02 05 48.9 -2.0
**LMK Market Rasen** 78.19 37 *e*P **P** 02 05 52.9 -1.0
LMK AMB AMB 02 05 53.9
comp=Z,279nm,1.7s
**TIC Toumodi** 78.27 85 *e*P **P** 02 05 55.3 +0.1
**LIC Lamto** 78.33 86 *e*P **P** 02 05 55.8 +0.3
comp=Z,727nm,0.7s
**DBIC Dimbokro** 78.43 85 P **P** 02 05 56.2 +0.2
comp=Z,202nm,0.7s,baz=268,slow=5.0,SNR=212
DBIC LR LR 02 40 20.2
comp=Z,75nm,20.1s,baz=260,slow=35
**DBIC Dimbokro** 78.43 85 P **P** 02 05 56.3 +0.2
DBIC pmax pmax
comp=Z,202nm,0.7s
DBIC MLR MLR
comp=Z,75nm,20.1s
**DBIC Dimbokro** 78.43 85 *e*P **P** 02 05 56.4 +0.3
comp=Z,209nm,0.8s
**KIC Kosan Boka** 78.59 86 *e*P **P** 02 05 57.3 +0.3
comp=Z,177nm,0.7s
**OTSS Djebel Tessala** 78.81 56 P **P** 02 06 00.0 +2.0
**OJGS Djebel Guires** 80.05 56 P **P** 02 06 06.9 +2.3
**SUE Sulen** 80.59 30 *e*P **P** 02 06 06.8 0.0
SUE IAmb IAmb 02 06 07.3
comp=Z,62nm,0.9s
**FOO Floro** 80.69 29 *e*P **P** 02 06 06.7 -0.6
FOO IAmb IAmb 02 06 08.7
comp=Z,28nm,0.5s
**ASK Askoy** 80.85 30 *e*P **P** 02 06 08.4 +0.2
**BER Bergen** 80.92 30 *e*P **P** 02 06 08.1 -0.5
BER *e*S **S** 02 16 09.1 -0.6
**RUND Rundenannen** 80.94 30 *e*P **P** 02 06 08.4 -0.3
**KMY Karmoy** 80.98 31 *e*P **P** 02 06 08.1 -0.9
KMY IAmb IAmb 02 06 08.8
comp=Z,52nm,0.6s
**KBS Kingsbay** 81.16 11 *e*P **P** 02 06 10.7 +1.1
KBS *e*S **S** 02 16 09.8 -1.7
**KBS Kingsbay** 81.16 11 *e*P **P** 02 06 10.3 +0.7
KBS *e**PP **pP** 02 06 33.3 -0.8
KBS pmax pmax
comp=Z,83nm,0.8s
**KBS Kingsbay** 81.16 11 *e*P **P** 02 06 10.3 +0.7
comp=Z,83nm,0.8s
KBS *e*pP **pP** 02 06 33.3 -0.8
**SNF Seneffe** 81.21 40 P **P** 02 06 09.8 -0.5
**UCC Uccle** 81.23 40 P **P** 02 06 08.4 -2.0
**DOU Dourbes** 81.45 41 P **P** 02 06 11.1 -0.6
comp=Z,19nm,0.9s
**AKN Aaknes** 81.56 28 *e*P **P** 02 06 11.1 -0.9
AKN IAmb IAmb 02 06 12.2
comp=Z,49nm,1.1s
AKN *e*S **S** 02 16 15.7 -0.6
**BLS5 Blasjo** 81.58 31 *e*P **P** 02 06 11.9 -0.3
**ODD1 Odda** 81.61 31 *e*P **P** 02 06 11.6 -0.8
ODD1 IAmb IAmb 02 06 14.5
comp=Z,83nm,0.7s

BCLA Clavier 81.87 40 P P 02 06 13.6 -0.3
comp=Z,68nm,2.0s
SSB Saint Sauveur 81.92 45 eP P 02 06 14.3 0.0
SSB pmax pmax
comp=Z,27nm,0.9s
SSB Saint Sauveur 81.92 45 eP P 02 06 14.3 0.0
comp=Z,27nm,0.9s
BEBN Eben Emael 82.06 40 P P 02 06 13.7 -1.2
SNART Snartemo 82.08 32 eP P 02 06 14.7 -0.1
SNART IAmb IAmb 02 06 15.2
comp=Z,28nm,0.5s
SPB4 Spitsbergen Ar 82.16 12 eP P 02 06 15.2 +0.3
SPA3 Spitsbergen Ar 82.16 12 eP P 02 06 15.2 +0.3
SPB3 Spitsbergen Ar 82.16 12 eP P 02 06 15.2 +0.3
SPB5 Spitsbergen Ar 82.16 12 eP P 02 06 15.3 +0.4
SPA0 Spitsbergen Ar 82.16 12 eP P 02 06 14.7 -0.2
SPA0 IAMs_20 IAMs_20 02 43 03.7
comp=Z,3μm,18.9s
SPA0 Spitsbergen Ar 82.16 12 eP P 02 06 15.2 +0.3
SPA1 Spitsbergen Ar 82.16 12 eP P 02 06 15.3 +0.3
SPA2 Spitsbergen Ar 82.16 12 eP P 02 06 15.3 +0.4
SPB1 Spitsbergen Ar 82.17 12 eP P 02 06 15.3 +0.4
SPB2 Spitsbergen Ar 82.17 12 eP P 02 06 15.3 +0.3
HGN Heimansgroeve 82.23 40 eP P 02 06 14.8 -0.9
comp=Z,45nm,0.7s
HSPB Hornsund (broa 82.23 13 eP P 02 06 14.4 -0.9
MEM Membach 82.29 40 P P 02 06 15.4 -0.7
WLF Walferdange 82.50 41 P P 02 06 17.2 0.0
comp=Z,80nm,2.0s
WLF Walferdange 82.50 41 eP P 02 06 16.4 -0.8
WLF pmax pmax
comp=Z,76nm,0.9s
WLF Walferdange 82.50 41 eP P 02 06 16.8 -0.4
comp=Z,100nm,0.9s,baz=280,slow=5.0
WLF Walferdange 82.50 41 eP P 02 06 16.4 -0.8
comp=Z,76nm,0.9s
WTSB Winterswijk 82.62 39 eP P 02 06 16.6 -1.1
comp=Z,148nm,0.6s
BUG Bochum--Univer 82.98 39 eP P 02 06 19.0 -0.6
comp=Z,65nm,0.8s,baz=280,slow=5.0
KONO Kongsberg 83.14 31 eP P 02 06 21.6 +1.4
KONO eSKSac S 02 16 30.3 -2.1
KONO Kongsberg 83.14 31 eP P 02 06 20.0 -0.2
KONO pmax pmax
comp=Z,48nm,1.4s
KONO Kongsberg 83.14 31 eP P 02 06 20.0 -0.2
comp=Z,48nm,1.4s
IBBN Ibbenburen 83.16 38 eP P 02 06 20.1 -0.4
comp=Z,210nm,1.6s,baz=280,slow=5.0
MUD Monsted U'grnd 83.39 34⇑iP P 02 06 21.4 -0.2
MUD pmax pmax
comp=Z,28nm,0.7s
MUD Monsted U'grnd 83.39 34⇑iP P 02 06 21.4 -0.2
comp=Z,28nm,0.7s
LOF Lofoten 83.41 22 eP P 02 06 21.2 -0.3
NSS Namsos 83.45 26 eP P 02 06 21.3 -0.4
BNI Bardonecchia 83.45 46 eP P 02 06 22.7 +0.3
BNI pmax pmax
comp=Z,77nm,1.7s
BNI Bardonecchia 83.45 46 eP P 02 06 22.7 +0.3
comp=Z,77nm,1.7s
NBO02 NORSAR Array S 83.54 29 eP P 02 06 21.1 -1.2
OSL Oslo 83.65 30 eP P 02 06 23.9 +1.0
FLOS Flostrand 83.69 24 eP P 02 06 23.4 +0.4
SENIN Lac Senin/Sane 83.70 44 eP P 02 06 23.9 +0.2
comp=Z,46nm,1.1s
NB2 NORSAR Subarra 83.71 29 P P 02 06 22.6 -0.6
comp=Z,39nm,0.6s,baz=281,slow=5.1
NB2 NORSAR Subarra 83.71 29 P P 02 06 22.6 -0.6
baz=281,slow=5.1
NOA NORSAR Array B 83.71 29 P P 02 06 22.4 -0.8
comp=Z,38nm,0.7s,baz=278,slow=4.9,SNR=206
NOA pP pP 02 06 45.7 -2.2
comp=Z,12nm,0.9s,baz=282,slow=5.2,SNR=2.8
NOA NORSAR Array B 83.71 29 P P 02 06 22.4 -0.8
NOA *PP pP 02 06 45.7 -2.2
NOA pmax pmax
comp=Z,38nm,0.7s
NOA pmax pmax
comp=Z,12nm,0.9s
SET Setif 83.72 54 P P 02 06 25.0 +1.1
TOA0 Torodi Ar. Sit 83.80 78 eP P 02 06 22.9 -1.6
TOA0 Torodi Ar. Sit 83.80 78 eP P 02 06 23.7 -0.8
TOA0 ePKKPbc PKKPbc 02 24 42.1 +2.1
TORD Torodi Ar. Bea 83.80 78 P P 02 06 23.7 -0.8
comp=Z,26nm,0.6s,baz=290,slow=5.4,SNR=232
TORD PKKPbc PKKPbc 02 24 42.0 +2.0
comp=Z,1.8nm,0.6s,baz=76,slow=1.5,SNR=23
TORD PKPPKP P'P'df 02 32 40.8 -7.0
comp=Z,0.6nm,0.9s,baz=98,slow=2.5,SNR=3.8
TORD LR LR 02 40 24.6
comp=Z,282nm,21.6s,baz=270,slow=33
CKHR Kef el Ahmar 83.83 55 P P 02 06 25.0 +0.5
TNS Taunus Mts 83.89 40 eP P 02 06 23.8 -0.6
comp=Z,67nm,0.8s,baz=280,slow=5.0
NC602 NORSAR Array S 83.92 29 eP P 02 06 23.6 -0.7
DFRA Djebel Bou Aff 84.05 54 P P 02 06 26.2 +0.6
STEI Steigen 84.08 22 eP P 02 06 25.2 +0.3
BFO Black Forest 84.10 42 i P P 02 06 25.0 -0.5
BFO Black Forest 84.10 42 P P 02 06 25.6 +0.1
comp=Z,177nm,0.8s,SNR=7.1
BFO Black Forest 84.10 42 eP P 02 06 24.3 -1.2
comp=Z,44nm,1.1s,baz=280,slow=5.0
BFO Black Forest 84.10 42 eP P 02 06 24.7 -0.8
comp=Z,30nm,0.9s
BSEG Bad Segeberg 84.44 36 eP P 02 06 26.5 -0.5
comp=Z,131nm,1.6s,baz=280,slow=5.0
CTEI Djebel Teioual 84.55 54 P P 02 06 28.1 0.0
NRDL Niedersach Rie 84.56 38 eP P 02 06 27.4 -0.2
comp=Z,173nm,1.7s,baz=280,slow=5.0
CASM Ain Smara 84.58 54 P P 02 06 27.0 -1.2
STU Stuttgart 84.60 42 eP P 02 06 27.7 -0.3
STU pmax pmax
comp=Z,58nm,0.7s
STU Stuttgart 84.60 42 eP P 02 06 27.4 -0.6
comp=Z,88nm,1.1s,baz=280,slow=5.0
STU Stuttgart 84.60 42 eP P 02 06 27.7 -0.3
comp=Z,58nm,0.7s
GTTG Gvttingen 84.63 39 eP P 02 06 27.4 -0.6
comp=Z,53nm,0.8s,baz=280,slow=5.0
CKFL Kef-Lekhel 84.75 54 P P 02 06 29.2 +0.1
CAEH 'Ain El Ouahch 84.79 54 P P 02 06 29.6 +0.4
CLZ Clausthal 84.83 38 eP P 02 06 28.8 -0.3
comp=Z,84nm,0.8s,baz=280,slow=5.0
TRO Tromso 84.96 20 eP P 02 06 29.1 -0.2
TRO eSKSac SKSac 02 16 41.5 -3.5
TUE Stuetta 85.08 44 eP P 02 06 30.9 +0.2
comp=Z,52nm,0.8s
CMAH Djebel Manchou 85.27 54 P P 02 06 31.4 -0.2
DAVA Damuels 85.30 43⇑iP P 02 06 31.2 -0.5
comp=Z,285nm,1.6s,SNR=32
COP Copenhagen 85.32 34 eP P 02 06 31.0 -0.4
COP pmax pmax
comp=Z,40nm,0.8s
COP MLR MLR
comp=Z,380nm,21.0s
COP Copenhagen 85.32 34 i P P 02 06 31.0 -0.4
comp=Z,40nm,0.8s
comp=Z,370nm,21.0s
FUORN Ofenpass-Fuorn 85.68 44 eP P 02 06 33.8 +0.1
comp=Z,60nm,0.8s
GRFO Grafenberg 85.75 40 eP P 02 06 33.8 +0.1
GRFO pmax pmax
comp=Z,48nm,0.8s
GRFO Grafenberg 85.75 40 eP P 02 06 33.8 +0.1
comp=Z,48nm,0.8s
GRF Grafenberg Arr 85.75 40 eP P 02 06 33.5 -0.2
comp=Z,70nm,0.9s,baz=280,slow=5.0
MOX Moxa 85.81 39 eP P 02 06 33.4 -0.6
comp=Z,110nm,1.6s,baz=280,slow=5.0
RETA Reutte 85.86 43⇑iP P 02 06 33.7 -0.6
comp=Z,302nm,2.0s,SNR=17
TAM Tamanrasset 85.86 68 eP P 02 06 35.4 +0.4
TAM pmax pmax
comp=Z,85nm,1.5s
TAM Tamanrasset 85.86 68 eP P 02 06 35.4 +0.4
comp=Z,85nm,1.5s
FETA Feichten 85.92 43⇑iP P 02 06 34.2 -0.6
comp=Z,332nm,2.9s,SNR=18
AMKA Amchitka 86.05 321 eP P 02 06 35.7 +0.7
RGN Rugen 86.05 35 eP P 02 06 36.0 +1.1
comp=Z,146nm,0.7s
FUR Furstenfeldbru 86.07 42 eP P 02 06 34.8 -0.5
comp=Z,198nm,1.8s,baz=280,slow=5.0
MOTA Moosalm 86.11 43⇓iP P 02 06 35.0 -0.7
comp=Z,91nm,1.7s,SNR=27

HAMF Hammerfest 86.19 19 eP P 02 06 35.4 0.0
VLC Villacollemand 86.21 46 eP P 02 06 34.7 -1.4
comp=Z,84nm,1.3s
VSL Villasalto 86.31 51 eP P 02 06 37.0 +0.4
comp=Z,112nm,1.0s
ROTZ Rotzenmuhle 86.36 40 eP P 02 06 36.6 -0.1
comp=Z,240nm,2.1s,baz=280,slow=5.0
TANN Tannenbergstha 86.39 40 eP P 02 06 36.7 -0.2
comp=Z,84nm,0.9s,baz=280,slow=5.0
WATA Walderalm 86.43 43⇑iP P 02 06 36.6 -0.7
comp=Z,291nm,2.3s,SNR=10
WTTA Wattenberg 86.48 43⇑iP P 02 06 36.7 -0.9
comp=Z,347nm,2.8s,SNR=14
CLL Collm 86.54 39⇑iP P 02 06 36.8 -0.7
CLL e*PP pP 02 07 01.0 -1.3
CLL eS SKKSac 02 17 03.0 -1.0
CLL pmax pmax
comp=Z,69nm,0.8s
CLL Collm 86.54 39 eP P 02 06 37.0 -0.5
comp=Z,69nm,0.8s,baz=280,slow=5.0
CLL Collm 86.54 39⇑iP P 02 06 36.8 -0.7
comp=Z,69nm,0.8s
CLL epP pP 02 07 01.0 -1.3
CLL esP sP 02 07 12.0 -0.4
CLL epPP 02 10 18.0
CLL esPP 02 10 30.0
CLL e(PPP) 02 11 42.0
CLL eSKSac SKSac 02 16 52.0 -3.6
CLL eS SKKSac 02 17 03.0 -1.0
CLL eSP SPn 02 18 00.0 -3.8
CLL ePPS PPS 02 18 35.0
CLL eSS SS 02 22 50.0 +1.5
CLL eSSSS 02 29 42.0
CLL e 02 30 42.0
CLL Collm 86.54 39 eP P 02 06 36.7 -0.7
comp=Z,68nm,0.8s
KTK1 Kautokeino 86.61 20 eP P 02 06 36.6 -0.9
KTK1 IAmb IAmb 02 06 37.4
comp=Z,60nm,0.8s
BSD Bornholm Skovb 86.83 35 i P P 02 06 37.9 -0.9
BSD pmax pmax
comp=Z,50nm,0.8s
BSD Bornholm Skovb 86.83 35 i P P 02 06 37.9 -0.9
comp=Z,50nm,0.8s
comp=Z,560nm,28.0s
WET Wettzell 86.92 41 eP P 02 06 39.1 -0.3
comp=Z,262nm,1.7s,baz=280,slow=5.0
KEST Kesra 86.95 54 P P 02 06 40.0 0.0
comp=Z,38nm,0.8s,baz=280,slow=4.3,SNR=34
KEST LR LR 02 40 42.0
comp=Z,229nm,18.7s,baz=212,slow=32
KEST Kesra 86.95 54 eP P 02 06 40.5 +0.6
RJOB Jochberg 87.16 42 eP P 02 06 40.2 -0.5
comp=Z,91nm,1.4s,baz=280,slow=5.0
ABTA Abfaltersbach 87.17 43⇑iP P 02 06 39.9 -1.0
comp=Z,228nm,2.3s,SNR=28
ARA0 ARCESS Array S 87.18 19 eP P 02 06 39.1 -1.2
ARCES ARCESS Array B 87.18 19 P P 02 06 38.9 -1.4
comp=Z,36nm,0.7s,baz=286,slow=3.4,SNR=56
ARCES pP pP 02 07 02.5 -2.6
comp=Z,18nm,0.8s,baz=286,slow=3.3,SNR=3.6
ARCES PKKP PKKPbc 02 24 30.5 -3.5
comp=Z,6.6nm,1.1s,baz=157,slow=2.5,SNR=9.9
ARCES ARCESS Array B 87.18 19 P P 02 06 38.9 -1.4
ARCES *PP pP 02 07 02.5 -2.6
ARCES pmax pmax
comp=Z,36nm,0.7s
ARCES pmax pmax
comp=Z,19nm,0.9s
ARE0 ARCESS Array S 87.18 19 eP P 02 06 38.7 -1.6
BRG Berggiesshubel 87.21 39 i P P 02 06 40.1 -0.7
comp=Z,105nm,1.6s
BRG epP pP 02 07 04.8 -0.8
comp=Z,62nm,1.9s
BRG ePP PP 02 10 10.8 +5.2
comp=Z,20nm,1.6s
BRG SKS SKSac 02 17 01.0 +1.2
BRG S ScS 02 17 19.0 -0.9
BRG SS SS 02 23 13.0 +15
BRG ePKPPKP P'P'df 02 32 35.2 -4.7
comp=Z,13nm,1.6s
comp=N,568nm,25.1s
comp=E,493nm,18.7s
comp=Z,977nm,22.2s
BRG Berggiesshubel 87.21 39 i P P 02 06 40.1 -0.7
BRG e*PP pP 02 07 04.8 -0.8
BRG e 02 10 10.8
BRG 02 17 01.0
BRG S ScS 02 17 19.0 -0.9
BRG pmax pmax
comp=Z,105nm,1.6s
BRG MLR MLR
comp=N,568nm,25.1s
BRG MLR MLR
comp=E,493nm,18.7s
BRG MLR MLR
comp=Z,977nm,22.2s
BRG Berggiesshubel 87.21 39 eP P 02 06 40.5 -0.3
comp=Z,105nm,1.6s,baz=280,slow=5.0
KHC Kasperske Hory 87.37 41⇑iP P 02 06 40.9 -0.7
KHC e 02 07 05.5
KHC e 02 17 00.8
KHC e 02 17 16.8
KHC Kasperske Hory 87.37 41⇑iP P 02 06 40.9 -0.7
KHC epP pP 02 07 05.5 -1.0
KHC eSKS SKSac 02 17 00.8 -0.1
KHC eS S 02 17 16.8 +2.2
KHC AMS AMS 02 39 10.0
KHC Kasperske Hory 87.37 41 eP P 02 06 40.7 -0.9
comp=Z,78nm,1.9s
GEC2 GERESS Array S 87.51 41 eP P 02 06 41.9 -0.5
GEC2 GERESS Array S 87.51 41 eP P 02 06 41.7 -0.7
comp=Z,163nm,1.7s,baz=280,slow=5.0
GEC2 GERESS Array S 87.51 41 eP P 02 06 41.9 -0.5
GERES GERESS Array B 87.51 41 P P 02 06 41.1 -1.2
comp=Z,14nm,0.6s,baz=288,slow=3.7,SNR=103
GERES PKKPbc PKKPbc 02 24 31.0 -1.5
comp=Z,0.4nm,0.7s,baz=211,slow=3.1,SNR=3.6
GERES LR LR 02 41 05.2
comp=Z,1μm,21.0s,baz=268,slow=32
KEV Kevo 87.58 19 eP P 02 06 41.5 -0.6
KEV pmax pmax
comp=Z,31nm,0.8s
KEV Kevo 87.58 19 eP P 02 06 41.5 -0.6
comp=Z,31nm,0.8s
BILL Bilibino 87.65 339 ceP P 02 06 41.9 -0.6
BILL i 02 10 06.3
BILL eS S 02 17 19.0 +2.6
BILL pmax pmax
comp=Z,40nm,1.7s
BILL MLR MLR
comp=Z,850nm,19.0s
BILL Bilibino 87.65 339 eP P 02 06 42.9 +0.4
comp=Z,25nm,1.0s
KBA Koelnbreinsper 87.66 43⇑iP P 02 06 42.4 -0.9
comp=Z,314nm,2.0s,SNR=24
PVCC Panska Ves 87.68 39 eP P 02 06 43.0 0.0
PVCC e 02 07 07.0
PVCC MLR MLR
comp=Z,800nm,18.9s
PVCC Panska Ves 87.68 39⇑eP P 02 06 43.0 0.0
PVCC epP pP 02 07 07.0 -0.9
PVCC AMS AMS 02 39 20.0
comp=Z,800nm,18.9s
PRA Prague 87.70 40 eP P 02 06 42.8 -0.3
PRA e 02 17 19.1
PRA MLR MLR
comp=Z,1μm,22.1s
PRA Prague 87.70 40⇑eP P 02 06 42.8 -0.3
PRA eS S 02 17 19.1 +1.5
PRA AMS AMS 02 39 50.0
comp=Z,1μm,22.1s
PRU Pruhonice 87.79 40 eP P 02 06 43.2 -0.4
PRU e 02 07 09.2
PRU e 02 17 01.8
PRU MLR MLR
comp=Z,400nm,18.3s
PRU Pruhonice 87.79 40⇑eP P 02 06 43.2 -0.4
PRU epP pP 02 07 09.2 +0.8
PRU eSKS SKSac 02 17 01.8 -1.5
PRU AMS AMS 02 40 10.0
comp=Z,400nm,18.3s
GOPC GO Pecny, Ondr 87.96 40 eP P 02 06 43.6 -0.8
GOPC e 02 17 20.2
GOPC MLR MLR

comp=Z,1μm,22.4s
GOPC GO Pecny, Ondr 87.96 40⇑eP P 02 06 43.6 -0.8
GOPC eS S 02 17 20.2 +0.1
GOPC AMS AMS 02 40 10.0
comp=Z,1μm,22.4s
MOA Molln 88.10 42⇑iP P 02 06 44.1 -1.1
comp=Z,382nm,3.6s,SNR=14
CADS Cadrg 88.11 43 eP P 02 06 44.5 -0.8
JAVS Javornik 88.41 44 eP P 02 06 46.0 -0.7
UPC Upice 88.58 39 eP P 02 06 47.1 -0.2
UPC e 02 07 12.2
UPC e 02 17 02.7
UPC MLR MLR
comp=Z,600nm,19.8s
UPC Upice 88.58 39⇑eP P 02 06 47.1 -0.2
UPC epP pP 02 07 12.2 0.0
UPC eSKS SKSac 02 17 02.7 -5.4
UPC AMS AMS 02 39 40.0
comp=Z,600nm,19.8s
OBKA Obir 88.59 43⇑iP P 02 06 46.0 -1.6
comp=Z,382nm,2.7s,SNR=6.9
GKP Gorka Klasztor 88.61 36 eP P 02 06 46.7 -0.6
GKP Gorka Klasztor 88.61 36 eP P 02 06 46.8 -0.6
KSP Ksiaz 88.67 39 eP P 02 06 47.6 -0.1
KSP Ksiaz 88.67 39 eP P 02 06 47.7 0.0
LJU Ljubljana 88.69 44 i P P 02 06 47.5 -0.5
LJU eSKSac SKSac 02 17 07.1 -1.8
LJU eS S 02 17 27.4 +0.2
DPC Dobruska-Polom 88.81 39⇑iP P 02 06 48.1 -0.4
DPC e 02 17 07.5
DPC e 02 17 25.0
DPC MLR MLR
comp=Z,700nm,19.9s
DPC Dobruska-Polom 88.81 39⇑iP P 02 06 48.1 -0.4
DPC eSKS SKSac 02 17 07.5 -2.1
DPC eS S 02 17 25.0 -3.2
DPC AMS AMS 02 40 10.0
comp=Z,700nm,19.9s
SOKA Soboth 88.88 43⇑iP P 02 06 47.3 -1.6
comp=Z,194nm,2.1s,SNR=15
PERS Pernice 88.94 43 eP P 02 06 47.9 -1.3
ARSA Arzberg 89.07 42⇑iP P 02 06 48.3 -1.4
comp=Z,195nm,2.4s,SNR=6.6
CONA Conrad Observa 89.12 41⇑iP P 02 06 49.3 -0.8
comp=Z,248nm,2.0s,SNR=24
VRAC Vranov 89.25 40 ⇑P P 02 06 50.9 +0.4
VRAC Vranov 89.25 40⇑iP P 02 06 50.9 +0.4
BOJS Bojanci 89.31 44 i P P 02 06 49.9 -1.0
MORC Moravsky Berou 89.72 39 ⇓P P 02 06 53.4 +0.7
MORC Moravsky Berou 89.72 39⇓iP P 02 06 53.4 +0.7
MORC Moravsky Berou 89.72 39 eP P 02 06 52.7 0.0
comp=Z,225nm,1.6s
ZST Bratislava 89.86 41 eP P 02 06 52.7 -0.6
ZST Bratislava 89.86 41 eP P 02 06 52.7 -0.6
SMOL Smolenice 89.98 41 eP P 02 06 55.2 +1.3
SMOL Smolenice 89.98 41 eP P 02 06 55.2 +1.3
OKC Ostrava-Krasne 90.08 39 eP P 02 06 54.3 0.0
OKC e 02 17 14.8
OKC e 02 17 40.9
OKC MLR MLR
comp=Z,700nm,21.2s
OKC Ostrava-Krasne 90.08 39⇑eP P 02 06 54.3 0.0
OKC eSKS SKSac 02 17 14.8 -2.1
OKC eS S 02 17 40.9 +1.0
OKC AMS AMS 02 41 20.0
comp=Z,700nm,21.2s
FINES FINESS Array B 90.49 27 P P 02 06 54.4 -1.6
comp=Z,21nm,0.7s,baz=278,slow=4.1,SNR=81
FINES LR LR 02 42 27.9
comp=Z,843nm,21.6s,baz=288,slow=32
APA Apatity 90.65 20⇓iP P 02 06 55.8 -0.8
APA i S SKKSac 02 17 34.0 -0.1
APA pmax pmax
comp=Z,22nm,0.8s
APA MLR MLR
comp=Z,700nm,11.0s
VYHS Vyhne 90.89 40 eP P 02 06 57.9 -0.3
VYHS pmax pmax
comp=Z,78nm,2.4s
VYHS Vyhne 90.89 40 eP P 02 06 57.9 -0.3
LVZ Lovozero 90.89 19ceP P 02 06 56.6 -1.2
LVZ pmax pmax
comp=Z,43nm,0.8s
LVZ Lovozero 90.89 19 eP P 02 06 56.6 -1.2
comp=Z,39nm,0.8s
OJC Ojcow 90.99 39 eP P 02 06 58.0 -0.6
OJC Ojcow 90.99 39 eP P 02 06 58.0 -0.6
OJC Ojcow 90.99 39 eP P 02 06 58.1 -0.4
comp=Z,104nm,1.9s
CUC Castrocucco 91.05 49 eP P 02 06 59.0 -0.1
comp=Z,15nm,0.9s
BEL Belsk 91.09 37 eP P 02 06 58.5 -0.4
BEL Belsk 91.09 37 eP P 02 06 58.6 -0.4
LANS Liptovska Anna 91.10 40 eP P 02 07 00.6 +1.4
LANS Liptovska Anna 91.10 40 eP P 02 07 00.6 +1.4
NIE Niedzica 91.54 39 eP P 02 07 01.6 +0.4
NIE Niedzica 91.54 39 eP P 02 07 01.6 +0.4
PSZ Piszkesteto 91.73 41 ⇑P P 02 07 03.0 +0.8
PSZ Piszkesteto 91.73 41⇑iP P 02 07 03.0 +0.8
PSZ Piszkesteto 91.73 41 eP P 02 07 02.4 +0.3
comp=Z,82nm,1.4s
SUW Suwalki 91.75 34 eP P 02 07 00.0 -1.9
SUW Suwalki 91.75 34 eP P 02 07 00.1 -1.9
VSU Vasula 91.95 29ceP P 02 07 01.4 -1.4
VSU pmax pmax
comp=Z,233nm,2.5s
TIP Timpagrande 91.96 50 eP P 02 07 02.0 -1.4
comp=Z,4.3nm,0.6s
STHS Stebnicka Huta 92.13 39 eP P 02 07 04.8 +0.9
STHS pmax pmax
comp=Z,7.0nm,0.9s
STHS Stebnicka Huta 92.13 39 eP P 02 07 04.8 +0.9
KOLS Kolonicke sedl 92.92 39 eP P 02 07 07.7 +0.1
KOLS pmax pmax
comp=Z,29nm,1.6s
KOLS Kolonicke sedl 92.92 39 eP P 02 07 07.7 +0.1
DIVS Divibare 92.93 44⇑iP P 02 07 08.5 +0.7
DIVS Divibare 92.93 44 P P 02 07 07.5 -0.3
KWP Kalwaria Pacla 92.96 39 eP P 02 07 08.2 +0.5
KWP Kalwaria Pacla 92.96 39 eP P 02 07 08.3 +0.5
UZH Uzhgorod 93.03 40⇓iP P 02 07 07.4 -0.6
UZH e 02 07 34.0
UZH e 02 07 45.2
UZH e 02 10 47.8
UZH e 02 17 35.0
UZH eS S 02 18 03.4 -3.2
UZH eSS SS 02 24 17.4 -5.0
TRPA Tarpa 93.35 40⇑iP P 02 07 09.4 -0.1
NACGM Naroch 93.38 33 e P 02 07 08.0 -1.5
BZS Buzias 93.57 43 ⇑P P 02 07 10.6 0.0
BZS Buzias 93.57 43⇑iP P 02 07 10.6 0.0
LVV L'vov 93.70 38 eP P 02 07 09.3 -1.8
LVV e 02 17 31.5
LVV e 02 18 15.9
LVV e 02 20 05.3
LVV MLR MLR
comp=N,100nm,17.0s
LVV MLR MLR
comp=E,200nm,17.0s
LVV MLR MLR
comp=Z,200nm,17.0s
DRGR 93.91 41 ⇓P P 02 07 12.0 -0.2
DRGR 93.91 41⇓iP P 02 07 12.0 -0.2
PHP Peshkopia 93.97 47 P P 02 07 12.1 -0.5
PHP Peshkopia 93.97 47 P P 02 07 12.1 -0.5
PHP Peshkopia 93.97 47 P P 02 07 12.1 -0.5
TMCR Tamitsa 94.05 22 eP P 02 07 11.0 -1.3
TMCR pmax pmax
comp=Z,21nm,0.7s
OHR Ohrid 94.40 47 eP P 02 07 15.2 +0.6
CJR Cluj-Napoca 94.51 41 ⇓P P 02 07 10.0 -4.9
CJR Cluj-Napoca 94.51 41⇓iP P 02 07 10.0 -4.9
SKO Skopje 94.59 46 eP P 02 07 15.9 +0.6
SKO Skopje 94.59 46 P P 02 07 14.7 -0.7
SKO Skopje 94.59 46 P P 02 07 14.7 -0.7
SKO Skopje 94.59 46 P P 02 07 14.7 -0.7
VNA3 Neumayer Olymp 94.78 162 P P 02 07 15.2 -0.3
VNA3 Neumayer Olymp 94.78 162 P PKKPdf 02 24 10.9 -3.8
VNA1 Neumayer--Stat 95.04 161 P P 02 07 17.6 +1.0
VNA1 Neumayer--Stat 95.04 161 P PKKPdf 02 24 10.7 -3.4
BUR04 Bucovina Ar. S 95.22 40 eP P 02 07 17.6 -0.7
BURAR Bucovina Array 95.22 40 ⇑P P 02 07 17.2 -1.1
BURAR Bucovina Array 95.22 40⇑iP P 02 07 17.2 -1.1

**VNA2 Neumayer--Watz 95.40 161** P **P** **02 07 18.1 -0.2**
baz=312,slow=5.2
**VNA2 Neumayer--Watz 95.40 161** P **PKKPdf** **02 24 09.9 -3.6**
baz=78,slow=2.4
**GRG Griva 95.60 47** P **P** **02 07 19.8 -0.2**
**GRG Griva 95.60 47** P **P** **02 07 19.8 -0.2**
**GRG Griva 95.60 47** P **P** **02 07 19.8 -0.2**
**AXS Araxos 95.70 50** P P 02 07 12.3 -8.2
**THL Klokotos Trika 95.76 48** P **P** **02 07 19.8 -0.9**
**VOIR 95.90 42** ⇑*i*P **P** **02 07 20.4 -1.0**
**VOIR 95.90 42** ⇑*i*P **P** **02 07 20.4 -1.0**
**AK11 Malin Array Si 96.42 36** *e*P **P** **02 07 22.6 -0.9**
**KIEV Kiev 96.43 36** ⇓*i*P **P** **02 07 22.2 -1.3**
KIEV pmax pmax
comp=Z,26nm,2.0s
**KIEV Kiev 96.43 36** *e*P **P** **02 07 21.8 -1.7**
comp=Z,6.1nm,0.7s
**AKASG Malin Array Be 96.44 36** P **P** **02 07 21.5 -2.1**
comp=Z,3.9nm,0.7s,baz=289,slow=4.3,SNR=11
AKASG PP **PP** **02 11 16.9 -1.2**
comp=Z,0.5nm,0.4s,baz=286,slow=7.2,SNR=4.2
AKASG LR LR 02 47 13.5
comp=Z,641nm,21.4s,baz=275,slow=33
**AKASG Malin Array Be 96.44 36***c**e*P **P** **02 07 21.7 -1.9**
AKASG pmax pmax
comp=Z,3.0nm,0.6s
**MLR Muntele Rosu 96.47 42** ⇓P **P** **02 07 24.1 +0.1**
**MLR Muntele Rosu 96.47 42** ⇓*i*P **P** **02 07 24.1 +0.1**
**KLMR Klimovskoe 96.48 24** *e*P P 02 07 19.0 -4.5
KLMR *e**PP pP 02 07 46.0 -2.5
KLMR *e* 02 11 15.0
KLMR pmax pmax
comp=Z,56nm,0.9s
**SNAA Sanae 97.00 162** P **P** **02 07 25.4 -0.3**
**SNAA Sanae 97.00 162** P **P** **02 07 25.1 -0.6**
comp=Z,0.9nm,0.7s,baz=281,slow=5.2,SNR=13
SNAA PP **PP** **02 11 22.0 -0.5**
comp=Z,1.0nm,1.0s,baz=296,slow=8.3,SNR=5.1
**SNAA Sanae 97.00 162** ⇓*i*P **P** **02 07 24.1 -1.6**
**SNAA Sanae 97.00 162** *e*P **P** **02 07 25.1 -0.6**
comp=Z,11nm,1.5s
SNAA PP **PP** **02 11 22.0 -0.5**
**PET Petropavlovsk 97.43 327** *e*P Pdif 02 07 28.2 +0.2
PET *e**PP pP 02 07 53.9 +0.9
PET *e* 02 11 30.8
PET *e* 02 17 57.4
PET *e*S **S** **02 18 40.5 -4.0**
PET *e*SP **SP** **02 20 07.9 +1.4**
PET pmax pmax
comp=Z,43nm,1.2s
PET pmax pmax
comp=Z,100nm,13.2s
PET pmax pmax
comp=Z,200nm,17.8s
**PETK Petropavlovsk- 97.90 328** LR LR 02 56 31.8
comp=Z,104nm,18.4s,baz=48,slow=38
**OBN Obninsk 98.30 30**⇑*e*P **P** **02 07 30.0 -1.8**
OBN *i* 02 11 33.1
OBN *i*S **SKSac** **02 18 07.3 +6.2**
OBN *i*PS **PS** **02 20 29.3 +1.4**
OBN *i*SS SS 02 25 48.1 +12
OBN pmax pmax
comp=Z,15nm,1.7s
OBN MLR MLR
comp=Z,609nm,21.0s
**QSPA South Pole Qui 100.27 180** *e*Pdif **Pdif** **02 07 41.6 +1.1**
**LPSR Galich'ya Gora 100.82 31** *e*P **Pdif** **02 07 41.4 -1.7**
LPSR pmax pmax
comp=N,4.0nm,0.9s
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=E,3.0nm,0.8s
LPSR MLR MLR
comp=N,440nm,20.0s
LPSR MLR MLR
comp=Z,760nm,20.0s
LPSR MLR MLR
comp=E,2μm,19.0s
**VSR Storozhevoye 101.70 32** *e*P **Pdif** **02 07 45.4 -1.7**
VSR pmax pmax
comp=N,6.0nm,0.8s
VSR pmax pmax
comp=E,3.0nm,0.8s
VSR pmax pmax
comp=Z,4.0nm,0.8s
VSR MLR MLR
comp=N,510nm,21.0s
VSR MLR MLR
comp=E,280nm,21.0s
VSR MLR MLR
comp=Z,1μm,21.0s
**VORD Divnogorie 101.90 33** *e*P **Pdif** **02 07 44.5 -3.5**
VORD pmax pmax
comp=N,6.0nm,0.7s
VORD pmax pmax
comp=E,10.0nm,0.7s
VORD pmax pmax
comp=Z,4.0nm,0.7s
**VRH Novokhopyorsk 103.04 32** *e*P **Pdif** **02 07 51.4 -1.6**
VRH pmax pmax
comp=N,4.0nm,0.6s
VRH pmax pmax
comp=E,5.0nm,0.6s
VRH pmax pmax
comp=Z,8.0nm,0.6s
**BRTR Keskin Array B 104.00 45** Pdiff **Pdif** **02 07 57.4 -0.4**
comp=Z,0.8nm,0.7s,baz=311,slow=2.0,SNR=2.9
BRTR PKiKP **PKiKP** **02 12 14.2 -0.6**
comp=Z,1.2nm,0.7s,baz=274,slow=1.9,SNR=3.8
BRTR PKKPbc **PKKPbc** **02 23 47.3 -0.7**
comp=Z,1.2nm,0.8s,baz=132,slow=2.1,SNR=5.2
**ANN Anapa 104.08 39** *e*P **Pdif** **02 07 49.5 -8.3**
ANN *i* 02 12 12.4
ANN *e* 02 19 18.3
ANN *e*SS SS 02 26 53.5 -3.5
ANN pmax pmax
comp=Z,126nm,1.4s
**VNDA Vanda 105.07 192** PKiKP **PKiKP** **02 12 16.0 +0.5**
comp=Z,0.4nm,0.8s,baz=72,slow=1.9,SNR=3.0
**VNDA Vanda 105.07 192** PKiKP **PKiKP** **02 12 16.0 +0.5**
VNDA *e*PKKPbc **PKKPbc** **02 23 46.1 +0.2**
**CSS Prodhromos 105.83 49** *e*PKP **PKiKP** **02 12 18.4 +0.2**
**KIV Kislovodsk 107.71 37** *e*PKP **PKiKP** **02 12 21.6 +0.1**
**KBZ Khabaz 107.96 37** PKiKP **PKiKP** **02 12 20.5 -1.3**
comp=Z,3.9nm,0.7s,baz=180,slow=1.0,SNR=8.8
**BOD Bodaibo 110.50 350** *e*PKIKP PKiKP 02 12 36.5 +10
**AKTO Aktyubinsk 111.17 25** PKKPab PKKPab 02 23 32.5 -3.6
comp=Z,2.0nm,0.7s,baz=190,slow=6.8,SNR=6.3
**SYO Syowa Base 111.29 161**⇓*e*PP PP 02 13 06.0 -2.3
**DZM Mont Dzumac 111.61 250** *e*SP SP 02 22 32.9 -2.1
comp=Z,404nm,31.6s
**DZM Mont Dzumac 111.61 250** *e*LQ LQ 02 41 10.3
comp=Z,2μm,42.0s
DZM *e*LR LR 02 45 51.9
comp=Z,420nm,24.0s
**BOSA Boshof 111.92 117** PKiKP **PKiKP** **02 12 29.1 -0.7**
comp=Z,7.8nm,0.6s,baz=258,slow=2.9,SNR=24
BOSA PKKPbc **PKKPbc** **02 23 23.5 +0.7**
comp=Z,3.5nm,0.7s,baz=141,slow=1.9,SNR=8.4
**BOSA Boshof 111.92 117** *e*PKiKP **PKiKP** **02 12 30.4 +0.6**
BOSA PKKPbc **PKKPbc** **02 23 23.5 +0.7**
**LBTB Lobatse 112.19 113** PKKPbc PKKPbc 02 23 23.3 +1.5
comp=Z,2.1nm,0.6s,baz=140,slow=7.0,SNR=4.5
**ABKAR Akbulak array 112.88 25** *e*PKiKP **PKiKP** **02 12 31.2 +0.2**
**BRVK Borovoye 113.25 16***c i*PKiKP **PKiKP** **02 12 31.8 +0.3**
BRVK pmax pmax
comp=Z,12nm,2.5s
**BRVK Borovoye 113.25 16** *e*PKP **PKiKP** **02 12 31.3 -0.2**
**ZAA0 Zalesovo Array 115.34 7** *e*PKPdf **PKPdf** **02 12 34.0 -1.6**
ZAA0 *e*PP **PP** **02 12 32.5 -4.0**
**ZALV Zalesovo Beam 115.34 7** PKP **PKPdf** **02 12 33.6 -1.8**
comp=Z,2.2nm,0.5s,baz=332,slow=2.6,SNR=13
ZALV PP **PP** **02 13 31.7 -4.8**
comp=Z,6.6nm,0.8s,baz=337,slow=8.3,SNR=10
ZALV PKKPbc **PKKPbc** **02 23 07.4 -4.7**
comp=Z,0.7nm,0.4s,baz=157,slow=2.9,SNR=3.5
**ZALV Zalesovo Beam 115.34 7** PKiKP **PKPdf** **02 12 33.7 -1.8**
ZALV 02 23 07.4
ZALV pmax pmax
comp=Z,2.0nm,0.5s
ZALV pmax pmax
comp=Z,1.0nm,0.4s
**DRV Dumont d'Urvil 116.34 198** PP PP 02 13 38.0 -6.0
DRV SP SP 02 23 01.0 -14
DRV R 02 48 00.0
**USRK Ussuriysk Ar. 116.59 332** PKP **PKPdf** **02 12 37.1 -1.2**
comp=Z,2.1nm,0.7s,baz=248,slow=1.6,SNR=5.8
**KURK Kurchatov 117.44 12** PKKPbc PKKPbc 02 23 01.9 -2.7
**KURBB Kurchatov Arra 117.51 12** PKKPbc PKKPbc 02 23 01.9 -2.4
comp=Z,3.9nm,0.7s,baz=162,slow=3.0,SNR=24
**TLY Talaya 117.90 354** *i* PKIKP PKPpre 02 12 28.7
TLY *e* 02 13 52.9
TLY *e* 02 23 36.3
TLY *e*SS SS 02 30 00.1 +0.1
TLY pmax pmax
comp=Z,8.0nm,1.3s
TLY MLR MLR
comp=Z,610nm,20.0s
**MJAR Matsushiro Arr 118.66 322** PKP **PKPdf** **02 12 41.3 -1.2**
comp=Z,1.6nm,0.6s,baz=76,slow=2.1,SNR=4.8
**MJAR Matsushiro Arr 118.66 322** PKIKP **PKPdf** **02 12 41.3 -1.2**
MJAR pmax pmax
comp=Z,2.0nm,0.6s
**MAJO Matsushiro 118.66 322** *e*PKIKP **PKPdf** **02 12 41.7 -0.8**
**MAJO Matsushiro 118.66 322** *e*PKPdf **PKPdf** **02 12 41.7 -0.8**
**MAW Mawson 118.73 166** PKP **PKPdf** **02 12 41.3 -0.2**
comp=Z,5.6nm,0.7s,baz=188,slow=2.1,SNR=14
MAW SKP **SKPdf** **02 16 10.2 +1.5**
comp=Z,4.0nm,0.9s,baz=242,slow=4.2,SNR=6.6
**MAW Mawson 118.73 166** PKIKP **PKPdf** **02 12 41.3 -0.2**
MAW pmax pmax
comp=Z,6.0nm,0.7s
MAW pmax pmax
comp=N,4.0nm,0.9s
**QAM Ghamsar 119.23 42** *e*P **PKPdf** **02 12 43.1 -0.8**
**IPIR Pirpir 119.52 43** *e*P **PKPdf** **02 12 42.2 -2.4**
**IZEF Zefreh 120.35 42** *e*Pn **PKPdf** **02 12 43.6 -2.5**
IZEF *e*P **PKiKP** **02 12 44.8 -1.5**
**GEYT Alibeck 120.50 34** PKP **PKPdf** **02 12 45.0 -1.0**
comp=N,16nm,0.6s,baz=270,slow=4.7,SNR=34
**IRAM Ramesheh 121.06 43** *e*P **PKPdf** **02 12 46.3 -1.2**
**ISFR Sfrayin 121.06 35** *e*P **PKPdf** **02 12 47.1 -0.3**
**KMBO Kilima Mbogo 121.16 85** PKP **PKPdf** **02 12 48.8 +0.6**
comp=N,1.3nm,0.8s,baz=19,slow=12,SNR=3.5
**KMBO Kilima Mbogo 121.16 85** PKIKP **PKPdf** **02 12 48.8 +0.6**
KMBO pmax pmax
comp=Z,1.0nm,0.8s
**ULN Ulaanbaatar 121.24 351***c i*PKIKP **PKPdf** **02 12 46.4 -0.9**
ULN pmax pmax
comp=Z,4.0nm,0.7s
**ULN Ulaanbaatar 121.24 351** *e*PKPdf **PKPdf** **02 12 46.9 -0.4**
ULN *e*PKKPbc **PKKPbc** **02 22 48.1 -2.8**
**SONA1 Songino Array 121.35 352** *e*PKPdf **PKPdf** **02 12 46.6 -0.9**
SONA1 *e*PP PP 02 14 09.7 -8.7
SONA1 *e*PKKPbc **PKKPbc** **02 22 48.5 -1.9**
**SONM Songino Array 121.36 352** PKP **PKPdf** **02 12 46.0 -1.5**
comp=Z,3.0nm,0.8s,baz=345,slow=1.0,SNR=20
SONM PP PP 02 14 08.5 -10
comp=Z,1.4nm,0.9s,baz=10,slow=2.5,SNR=3.9
SONM PKKPbc **PKKPbc** **02 22 48.0 -2.4**
comp=Z,2.2nm,0.9s,baz=195,slow=4.0,SNR=8.4
**IKRD Kardeh 121.55 35** *e*P **PKPdf** **02 12 50.2 +1.9**
**IAKL Akhelmad 121.81 35** *e*P **PKPdf** **02 12 49.6 +0.7**
**MAKZ Makanchi 121.83 11** *e*PKPdf **PKPdf** **02 12 47.2 -1.1**
**ISAD Sadrabad 121.86 42** *e*P **PKPdf** **02 12 47.3 -1.8**
**MKAR Makanchi Array 121.91 11** PKP **PKPdf** **02 12 46.6 -1.9**
comp=Z,5.8nm,0.7s,baz=360,slow=2.2,SNR=37
MKAR PKKPbc **PKKPbc** **02 22 45.3 -2.9**
comp=Z,0.6nm,0.7s,baz=132,slow=5.1,SNR=4.2
**MKAR Makanchi Array 121.91 11***c i*PKIKP **PKPdf** **02 12 47.4 -1.1**
MKAR pmax pmax
comp=Z,6.0nm,0.7s
**MKAR Makanchi Array 121.91 11** *e*PKPdf **PKPdf** **02 12 47.4 -1.1**
MKAR PKKPbc **PKKPbc** **02 22 45.3 -2.9**
**MK01 Makanchi Array 121.93 11** *e*PKPdf **PKPdf** **02 12 46.9 -1.6**
MK01 *e*PKKPbc **PKKPbc** **02 22 46.0 -2.1**
**KKAR Karatay Array 122.08 22** *e*PKIKP **PKPdf** **02 12 47.6 -1.3**
**KKAR Karatay Array 122.08 22** *e*PKPdf **PKPdf** **02 12 47.6 -1.3**
**IMOG Moghan 122.49 35** *e*P **PKPdf** **02 12 49.2 -1.1**
**IPAR Pars 122.71 44** *e*P **PKPdf** **02 12 49.3 -1.5**
**IMEH Mehriz 122.80 42** *e*P **PKPdf** **02 12 49.0 -1.9**
**ISRV Sarvestan 123.03 45** *e*P **PKPdf** **02 12 50.1 -1.4**
**ATD Arta Tunnel 123.12 69** PKP **PKPdf** **02 12 52.9 +1.3**
baz=243,slow=6.8
**CASY Casey 123.18 187** *e*PKPdf **PKPdf** **02 12 51.5 +1.4**
CASY *e*SKPdf **SKiKP** **02 16 17.9 0.0**
**KS01 Wonju Array Si 123.74 329** *e*PKPdf **PKPdf** **02 12 51.1 -1.1**
**KSRS Korea Array 123.74 329** PKP **PKPdf** **02 12 51.5 -0.6**
comp=Z,18nm,0.7s,baz=16,slow=2.1,SNR=59
**KSRS Korea Array 123.74 329** PKIKP **PKPdf** **02 12 51.6 -0.6**
KSRS pmax pmax
comp=Z,18nm,0.7s
**KSAR Wonju Array Be 123.77 329** PKIKP **PKPdf** **02 12 51.6 -0.7**
**KSAR Wonju Array Be 123.77 329** PKP **PKPdf** **02 12 51.5 -0.7**
**AAK Ala-Archa 123.85 19** PKP **PKPdf** **02 12 52.4 -0.1**
comp=Z,11nm,0.7s,baz=158,slow=1.0
AAK PKKPbc **PKKPbc** **02 22 39.1 -1.6**
comp=Z,4.4nm,0.8s,baz=151,slow=4.4,SNR=9.5
**AAK Ala-Archa 123.85 19** *e*PKPdf **PKPdf** **02 12 52.7 +0.2**
AAK *e*PKKPbc **PKKPbc** **02 22 38.9 -1.8**
**IKOO Kooshah 124.90 38** *e*P **PKPdf** **02 12 53.8 -1.1**
**WMQ Urumqi 125.65 7** PKP **PKPdf** **02 12 55.0 -0.8**
WMQ PP **PP** **02 14 51.0 +3.9**
WMQ PKS **PKSdf** **02 16 33.0 +0.6**
WMQ SKS **SKSdf** **02 19 56.0 -3.4**
WMQ SKKS SKKSac 02 21 30.0 -7.8
WMQ SS **SS** **02 31 40.0 +1.3**
WMQ PPMZ
comp=Z,150nm,10.0s
WMQ LN
comp=Z,1μm,28.0s
WMQ LE
comp=Z,760nm,29.0s
WMQ LZ
comp=Z,1μm,28.0s
**CAN Canberra 125.72 234** *e*PKIKP **PKPdf** **02 12 57.7 +1.6**
**CAN Canberra 125.72 234** *e*PKPdf **PKPdf** **02 12 57.6 +1.6**
**BJI Beijing 126.46 341** PKP **PKPdf** **02 12 57.7 +0.4**
BJI SS SS 02 31 50.1 +1.0
BJI LN
comp=Z,440nm,23.9s
BJI LE
comp=Z,290nm,25.2s
BJI LZ
comp=Z,1μm,24.2s
**HHC Hu-ho-hao-te 127.06 345** *e*PKP **PKPdf** **02 12 58.4 -0.2**
HHC PP **PP** **02 14 57.0 +0.3**
HHC SKS **SKSdf** **02 20 01.6 -0.6**
HHC SS **SS** **02 32 00.1 +3.4**
HHC PPMZ
comp=Z,240nm,9.7s
HHC LN
comp=Z,900nm,21.4s
HHC LE
comp=Z,180nm,17.5s
HHC LZ
comp=Z,1μm,21.2s
**KSH Kashi 127.14 19** PKP **PKPdf** **02 12 59.1 +0.3**
KSH *e*SKP 02 13 35.8
KSH *e*PP **PP** **02 14 59.8 +2.5**
KSH PKS **PKSdf** **02 16 38.6 +3.1**
KSH SKS **SKSdf** **02 19 57.8 -4.7**
KSH SKKS **SKKSac** **02 21 40.5 -7.1**
KSH PPMZ
comp=Z,320nm,6.8s
KSH LN
comp=Z,260nm,9.0s
KSH LE
comp=Z,280nm,15.7s
KSH LZ
comp=Z,2μm,28.3s
**BANOM Banah 127.38 46**⇓*i*PKPdf **PKPdf** **02 12 58.8 -0.8**
SNR=8.8
**ASUD Al Ashush, Dub 127.46 48**⇓*i*PKiKP **PKPdf** **02 12 59.6 0.0**
SNR=12
**NAZ Nazwa, Dubai 127.48 47**⇑*i*PKPdf **PKPdf** **02 12 58.3 -1.4**
SNR=7.4
**FAQ Al Faqa, Dubai 127.58 48**⇓*i*PKPdf **PKPdf** **02 12 58.5 -1.4**
SNR=9.3
**UOSS Wadi Hilu 127.90 47** *e*PKPdf **PKPdf** **02 12 59.3 -1.2**
**HATD Hatta, Dubai 127.92 47**⇑*i*PKPdf **PKPdf** **02 12 59.0 -1.6**
SNR=22
**ASHO Ashiyiah 127.95 47**⇓*i*PKPdf **PKPdf** **02 12 58.9 -1.8**
SNR=8.3
**KBL Kabul 128.72 28** *e*PKIKP **PKPdf** **02 13 01.5 -0.6**
**KBL Kabul 128.72 28** *e*PKPdf **PKPdf** **02 13 01.5 -0.6**
**TIA Tai'an 129.55 338** PKP **PKPdf** **02 13 02.9 -0.5**
TIA PP PP 02 15 20.2 +7.1
TIA SS SS 02 32 29.5 +1.9
TIA PPMZ
comp=Z,310nm,7.8s
TIA LN
comp=Z,350nm,25.4s
TIA LE
comp=Z,530nm,26.6s
**ABTO Aybut 129.85 57** P SKPbc 02 16 19.0 +0.4
SNR=9.1
**SMDO Samad 130.39 48** P **SKPbc** **02 16 20.2 -0.3**
SNR=12
**GTA Gaotai 130.41 356** ⇓PKP **PKPdf** **02 13 04.6 -0.5**
GTA sPKP 02 13 42.0
GTA PP **PP** **02 15 22.5 +4.1**
GTA SKS **SKSdf** **02 20 04.9 -3.6**
GTA SKKS **SKKSac** **02 22 03.4 -4.5**
GTA SS **SS** **02 32 36.4 -1.4**
GTA PPMZ
comp=Z,260nm,7.8s
GTA LN
comp=Z,500nm,24.7s
GTA LE
comp=Z,470nm,23.3s
GTA LZ
comp=Z,650nm,23.3s
**CTAO Charters Tower 130.47 252** *e*PKIKP **PKPdf** **02 13 06.5 +1.0**
**CTAO Charters Tower 130.47 252** *e*PKPdf **PKPdf** **02 13 06.5 +1.0**
CTAO *e*SKP 02 16 21.5
**RBK Rabkut 130.52 56** ⇑P **SKPbc** **02 16 19.8 -1.2**
SNR=6.5
**JMDO Jabal Madar 130.84 48** ⇓P **SKPbc** **02 16 20.1 -2.0**
SNR=10.0
**WBK Wadi Bani Khal 131.33 47** ⇓P **SKPbc** **02 16 23.2 -0.7**
SNR=7.4
**NJ2 Nanjing 132.45 333** *e*PKP **PKPdf** **02 13 08.9 0.0**
NJ2 PP **PP** **02 15 34.2 +2.3**
NJ2 PPMZ
comp=Z,30nm,5.6s
NJ2 LN
comp=Z,1μm,25.5s
NJ2 LE
comp=Z,4μm,26.2s
NJ2 LZ
comp=Z,2μm,23.5s
**LZH Lanzhou 133.24 351** *e*PKP **PKPdf** **02 13 10.8 +0.2**
LZH sPKP 02 13 47.3
LZH PP **PP** **02 15 41.0 +4.2**
LZH PKS **PKSdf** **02 16 45.1 -2.1**
LZH SKKS 02 22 25.1
LZH PPMZ
comp=Z,180nm,4.1s
**COEN Coen 133.56 261** *e*PKPdf **PKPdf** **02 13 13.6 +2.2**
**XAN Xi'an 134.17 345** PKP **PKPdf** **02 13 10.0 -2.2**
XAN sPKP 02 13 47.4
XAN PKS **PKSdf** **02 16 44.9 -3.8**
XAN SKS **SKSdf** **02 20 09.6 -5.7**
XAN PPMZ
comp=Z,160nm,11.0s
XAN LN
comp=Z,390nm,27.6s
XAN LE
comp=Z,450nm,23.2s
XAN LZ
comp=Z,570nm,29.8s
**WHN Wuhan 135.64 337** PKP **PKPdf** **02 13 13.9 -1.0**
WHN PP **PP** **02 15 52.1 +0.1**
WHN SS SS 02 33 43.7 +2.2
WHN LZ
comp=Z,1μm,27.2s
**BBOO Buckleboo 136.70 233** *e*PKPdf **PKPdf** **02 13 18.0 +1.1**
**NDI New Delhi 137.31 24** *e*P **PKPdf** **02 13 18.0 -0.1**
**ENH Enshi 137.56 342** *e*PKPdf **PKPdf** **02 13 18.4 -0.1**
**CD2 Chengdu 138.32 350** PKP **PKPdf** **02 13 19.0 -1.0**
CD2 sPKP 02 13 56.5
CD2 SKS **SKSdf** **02 20 20.4 -2.1**
CD2 SKKS **SKKSac** **02 22 52.4 -3.4**
CD2 SS **SS** **02 34 13.4 +0.5**
CD2 PPMZ
comp=Z,280nm,5.4s
CD2 LN
comp=Z,460nm,25.0s
CD2 LE
comp=Z,570nm,21.0s
CD2 LZ
comp=Z,510nm,20.1s
**DANN Dangsing 139.87 17** *e*P PKPpre 02 13 16.2
**LSA Lhasa 139.99 6** *e*PKIKP **PKPdf** **02 13 24.4 +0.8**
**LSA Lhasa 139.99 6** *e*PKPdf **PKPdf** **02 13 24.4 +0.8**
**KOLN Koldanda 140.37 17** *e*P PKPpre 02 13 15.9
**GKN Gorkha 140.44 16** *e*P PKPpre 02 13 17.4
**KKN Kakani 140.80 15** *e*P PKPpre 02 13 17.4
comp=Z,67nm,0.7s
**GUN Gumba 140.83 14** *e*P PKPpre 02 13 18.2
comp=Z,64nm,0.7s
**DMN Daman 140.93 15** *e*P PKPpre 02 13 17.7
**PKIN Phulchoki 141.04 15** *e*P PKPpre 02 13 17.4
comp=Z,20nm,0.6s
**PKI Pulchoki 141.04 15** *e*P PKPpre 02 13 17.6
comp=Z,55nm,0.7s
**AS01 Alice Springs 141.26 245** *e*PKPpre PKPpre 02 13 18.4
**ASAR Alice Springs 141.31 245** PKhKP PKPpre 02 13 19.9
comp=Z,17nm,0.7s,baz=107,slow=3.0,SNR=45
ASAR PKP **PKPdf** **02 13 26.1 +0.6**
comp=Z,25nm,0.6s,baz=106,slow=1.9,SNR=56
ASAR SKPbc **SKPbc** **02 16 54.6 +0.4**
comp=Z,8.6nm,0.9s,baz=114,slow=2.9,SNR=10
**ASAR Alice Springs 141.31 245** PKHKP PKPpre 02 13 19.9
ASAR 02 13 26.2
ASAR pmax pmax
comp=Z,17nm,0.7s
ASAR pmax pmax
comp=Z,25nm,0.6s
ASAR pmax pmax
comp=N,9.0nm,0.9s
**WRAB Tennant Creek 141.62 251***c i*PKHKP PKPpre 02 13 20.2
WRAB pmax pmax
comp=Z,71nm,1.2s
**WRAB Tennant Creek 141.62 251** *e*PKPpre PKPpre 02 13 20.6
WRAB *e*PKPdf **PKPdf** **02 13 26.1 -0.1**
WRAB *e*SKPdf **SKPdf** **02 16 53.3 +0.8**
**WRA Warramunga Arr 141.62 251** PKhKP PKPpre 02 13 21.3
comp=Z,13nm,0.6s,baz=95,slow=2.7,SNR=45
WRA PKP **PKPdf** **02 13 26.0 -0.2**
comp=Z,29nm,0.7s,baz=90,slow=2.5,SNR=44
WRA SKPbc **SKPbc** **02 16 54.0 -1.1**
comp=Z,6.3nm,0.9s,baz=101,slow=2.6,SNR=5.9
**WRA Warramunga Arr 141.62 251** PKHKP PKPpre 02 13 21.3
WRA 02 13 26.0
WRA pmax pmax
comp=Z,13nm,0.6s
WRA pmax pmax
comp=Z,29nm,0.7s
WRA pmax pmax
comp=N,6.0nm,0.9s
**TAPN Taplejung 141.77 12** *e*P PKPpre 02 13 20.4
comp=N,45nm,0.7s
**RAMN Ramite 141.93 13** *e*P PKPpre 02 13 20.6
comp=N,118nm,0.7s
**GYA Guiyang 141.96 344**⇑*i*PKP **PKPdf** **02 13 22.5 -4.3**
GYA sPKP 02 14 02.8
GYA PP **PP** **02 16 34.0 +2.9**
GYA PKS **PKSdf** **02 17 00.5 -2.4**
GYA SKKS 02 23 13.0
GYA SS **SS** **02 34 54.6 -1.3**
GYA PPMZ
comp=N,190nm,8.2s
GYA LN
comp=N,320nm,21.2s
GYA LE
comp=N,280nm,22.0s
GYA LZ
comp=N,260nm,20.6s
**ODAN Odare 142.18 12** *e*P PKPpre 02 13 20.9
**FAKI Fak Fak 143.05 279** *e*PKPpre PKPpre 02 13 23.2
FAKI *e*PKPdf **PKPdf** **02 13 28.7 -0.2**
**FORT Forrest 143.74 231** *e*PKPpre PKPpre 02 13 26.9
**POO Poona 144.12 37**⇓*i*P PKPab 02 13 23.0 -5.4
comp=N,12nm,1.0s
**KMI Kunming 144.15 349** PKP **PKPab** **02 13 27.3 -1.3**
KMI pPKP **pPKPdf** **02 13 58.3 +1.5**
KMI sPKP 02 14 08.0
KMI PP **PP** **02 16 46.3 +2.0**
KMI SKKS 02 23 27.7
KMI LN
comp=N,340nm,24.7s

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| KMI | | | | LE | | | |
| | comp=N,250nm,25.5s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=N,610nm,25.2s | | | | | | |
| **RPR** | **Rampur** | **146.79** | **29** | ePKPbc | **PKPdf** | **02 13 35.6** | **+0.4** |
| **SLVN** | **Son La** | **147.57** | **346** | ePKPbc | **PKPbc** | **02 13 39.0** | **-0.2** |
| **HYBB** | **Hyderabad (bro** | **147.64** | **32** | ePKPdf | **PKPdf** | **02 13 36.1** | **-0.6** |
| HYBB | | | | ePKPbc | **PKPbc** | **02 13 37.8** | **-1.7** |
| **HYB** | **Hyderabad** | **147.64** | **32** | i PKP | **PKPdf** | **02 13 35.0** | **-1.7** |
| **QIZ** | **Qiongzhong** | **147.72** | **334** | PKPbc | **PKPdf** | **02 13 36.6** | **-0.1** |
| QIZ | | | | pPKP | **pPKPdf** | **02 14 02.4** | **-0.4** |
| QIZ | | | | PP | **PP** | **02 17 07.0** | **+1.5** |
| QIZ | | | | SS | SS | 02 36 04.4 | +2.4 |
| QIZ | | | | PPMZ | | | |
| | comp=N,480nm,11.4s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=N,590nm,34.1s | | | | | | |
| **QIZ** | **Qiongzhong** | **147.72** | **334** | ePKPbc | **PKPbc** | **02 13 40.1** | **+0.5** |
| **NJS** | **Nagarjunasagar** | **148.75** | **32** | ePKPdf | **PKPdf** | **02 13 38.2** | **-0.3** |
| NJS | | | | ePKPbc | **PKPbc** | **02 13 41.5** | **-0.8** |
| NJS | | | | ePKPab | **PKiKP** | **02 13 44.9** | **+1.1** |
| **URV** | **Uravakonda** | **148.93** | **36** | ePKPdf | **PKPdf** | **02 13 38.2** | **-0.6** |
| URV | | | | ePKPbc | **PKPbc** | **02 13 41.6** | **-1.3** |
| **CHLP** | **Challavanipeta** | **149.14** | **22** | ePKPdf | **PKPdf** | **02 13 38.9** | **-0.2** |
| CHLP | | | | ePKPbc | **PKPbc** | **02 13 42.1** | **-1.2** |
| **PVM** | **Polavaram** | **149.27** | **27** | ePKPdf | **PKPdf** | **02 13 39.0** | **-0.3** |
| PVM | | | | ePKPbc | **PKPbc** | **02 13 42.8** | **-0.8** |
| **NWAO** | **Narrogin (SRO)** | **150.03** | **218** | ePKIKP | **PKPdf** | **02 13 40.9** | **+0.8** |
| **NWAO** | **Narrogin (SRO)** | **150.03** | **218** | ePKPdf | **PKPdf** | **02 13 40.9** | **+0.8** |
| NWAO | | | | ePKPbc | **PKiKP** | **02 13 45.9** | **-0.1** |
| **FITZ** | **Fitzroy Crossi** | **150.04** | **252** | ePKPdf | **PKPdf** | **02 13 41.5** | **+1.0** |
| FITZ | | | | ePKPbc | **PKiKP** | **02 13 46.9** | **+0.6** |
| **CHTO** | **Chiang Mai** | **150.91** | **354** | ePKIKP | **PKPdf** | **02 13 41.9** | **0.0** |
| CHTO | | | | e | | 02 13 54.3 | |
| **CHTO** | **Chiang Mai** | **150.91** | **354** | ⇑P | **PKPbc** | **02 13 45.8** | **-1.7** |
| | SNR=6.6 | | | | | | |
| **CHTO** | **Chiang Mai** | **150.91** | **354** | ePKPdf | **PKPdf** | **02 13 41.9** | **0.0** |
| CHTO | | | | ePKPbc | **PKPbc** | **02 13 46.5** | **-1.1** |
| CHTO | | | | ePKPab | **PKPab** | **02 13 54.3** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **151.26** | **354** | PKP | **PKPdf** | **02 13 41.9** | **-0.5** |
| | comp=N,9.1nm,0.8s,baz=304,slow=2.1,SNR=25 | | | | | | |
| CMAR | | | | PKPbc | **PKPbc** | **02 13 46.9** | **-1.5** |
| | comp=N,19nm,0.8s,baz=333,slow=2.6,SNR=29 | | | | | | |
| **CM01** | **Chiang Mai Arr** | **151.29** | **354** | ePKPdf | **PKPdf** | **02 13 41.6** | **-0.8** |
| **SKHT** | **Srikalahasti** | **151.30** | **34** | ePKPdf | **PKPdf** | **02 13 42.6** | **+0.1** |
| SKHT | | | | ePKPbc | **PKPbc** | **02 13 47.7** | **-0.8** |
| SKHT | | | | ePKiKP | **PKiKP** | **02 13 48.2** | **-0.8** |
| **LUWI** | **Luwuk** | **151.62** | **287** | ePKPdf | **PKPdf** | **02 13 42.8** | **-0.2** |
| LUWI | | | | ePKPbc | **PKiKP** | **02 13 49.8** | **0.0** |
| LUWI | | | | ePKPab | **PKPab** | **02 13 57.9** | **-0.4** |
| **SOEI** | **Soe** | **151.93** | **269** | ePKPdf | **PKPdf** | **02 13 45.0** | **+1.3** |
| SOEI | | | | ePKPbc | **PKiKP** | **02 13 51.5** | **+0.9** |
| **MYLDM** | **Lahad Datu** | **152.63** | **303** | ePKPbc | **PKPbc** | **02 13 53.6** | **+1.9** |
| **KKM** | **Kota Kinabalu** | **153.95** | **308** | ePKPbc | **PKPbc** | **02 13 54.3** | **-0.4** |
| **MBWA** | **Marble Bar** | **154.56** | **242** | ePKPdf | **PKPdf** | **02 13 46.4** | **-0.7** |
| MBWA | | | | ePKPbc | **PKPbc** | **02 13 55.4** | **-0.2** |
| **KAPI** | **Kappang** | **155.66** | **281** | ePKPdf | **PKPdf** | **02 13 48.5** | **-0.4** |
| KAPI | | | | ePKPab | **PKPab** | **02 14 17.1** | **+1.7** |
| **KSM** | **Kuching** | **161.39** | **308** | ePKPab | **PKPab** | **02 14 40.5** | **+0.3** |
| **KULM** | **Kulim** | **163.77** | **342** | ePKPdf | **PKPdf** | **02 13 57.5** | **-0.5** |
| KULM | | | | ePKPab | **PKPab** | **02 14 49.4** | **-0.9** |
| **IPM** | **Ipoh** | **164.41** | **340** | ePKPdf | **PKPdf** | **02 13 58.2** | **-0.5** |
| IPM | | | | ePKPab | **PKPab** | **02 14 52.1** | **-1.1** |

*IDC **09** 01:55:02.1±2.0, 34°.05S×72°.50W, h0km, mb4.0/4, mb1 4.1/6, mb1mx3.9/29, mbtmp4.0/6, ML3.5/2, MS2.4/1, Ms1 2.4/1, ms1mx2.4/22, Error ellipse: s-maj=65.7km s-min=22.3km az=105.0*
*ISCJB **09** 01:55:03.0±0.9, 34°.04S±0°.05×72°.54W±0°.09, h17km, mb4.0/3, Error ellipse: s-maj=10.3km s-min=6.3km az=168.5*
*GUC **09** 01:55:04.1±0.5, 34°.06S×72°.37W, h19km±3km, ML3.9*
**ISC 09 01:55:05.3**±1.1**, 34°.07S**±0°.04×**72°.30W**±0°.09**, h17km, n16, σ0s.66**/20**, mb4.2**/3**, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.40** | **143** | i P | **Pb** | **01 55 13.9** | **-0.1** |
| CHPI | | | | i S | **Sb** | **01 55 20.6** | **+0.7** |
| CHPI | | | | AML | AML | 01 55 22.6 | |
| | comp=E,3µm,0.8s | | | | | | |
| **TACH** | **Talagante** | **1.21** | **70** | i P | **Pn** | **01 55 27.4** | **-0.1** |
| **NICH** | **Los Niches** | **1.28** | **137** | i P | **Pn** | **01 55 28.7** | **+0.2** |
| NICH | | | | i S | **Sg** | **01 55 47.3** | **+0.4** |
| NICH | | | | AML | AML | 01 55 50.3 | |
| | comp=E,17µm,0.7s | | | | | | |
| **TALC** | **Talca** | **1.44** | **158** | i P | **Pn** | **01 55 30.9** | **+0.4** |
| TALC | | | | i S | **Sg** | **01 55 50.8** | **-0.9** |
| **SAN** | **Santiago** | **1.50** | **66** | i P | **Pb** | **01 55 32.1** | **-0.5** |
| SAN | | | | i S | **Sg** | **01 55 53.7** | **+0.1** |
| **CLCH** | **Cerro Calan** | **1.61** | **66** | i P | **Pb** | **01 55 34.0** | **-0.7** |
| CLCH | | | | AML | AML | 01 56 05.9 | |
| | comp=N,4µm,0.6s | | | | | | |
| **CFAA** | **Coronel Fontan** | **4.21** | **55** | Pn | **Pn** | **01 56 10.7** | **+1.9** |
| | comp=N,0.6nm,0.3s,baz=232,slow=14,SNR=36 | | | | | | |
| CFAA | | | | Sn | **Sb** | **01 57 09.0** | **-0.5** |
| | comp=N,0.7nm,0.3s,baz=164,slow=15,SNR=3.0 | | | | | | |
| CFAA | | | | LR | LR | 01 58 07.3 | |
| | comp=N,43nm,18.0s,baz=233,slow=43 | | | | | | |
| **LPAZ** | **La Paz** | **18.10** | **13** | P | **P** | **01 59 17.4** | **+0.5** |
| | comp=N,0.2nm,0.3s,baz=201,slow=11,SNR=14 | | | | | | |
| **SIV** | **San Ignacio** | **20.65** | **32** | P | **P** | **01 59 44.1** | **-0.1** |
| | comp=N,2.9nm,0.6s,baz=215,slow=11,SNR=11 | | | | | | |
| **BDFB** | **Brasilia** | **28.55** | **56** | P | **P** | **02 00 60.0** | **-0.5** |
| | comp=N,3.4nm,0.8s,baz=202,slow=10.0,SNR=3.5 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **49.38** | **158** | P | P | 02 04 08.6 | +15 |
| **VNA2** | **Neumayer--Watz** | **50.03** | **157** | P | **P** | **02 03 58.7** | **+0.3** |
| | baz=286,slow=8.8 | | | | | | |
| **SNAA** | **Sanae** | **51.60** | **158** | P | **P** | **02 04 10.2** | **-0.1** |
| **SNAA** | **Sanae** | **51.60** | **158** | P | **P** | **02 04 10.9** | **+0.5** |
| | comp=N,0.7nm,0.7s,baz=269,slow=7.1,SNR=13 | | | | | | |
| **MAW** | **Mawson** | **73.17** | **164** | P | **P** | **02 06 34.5** | **-0.1** |
| | comp=N,1.6nm,0.6s,baz=208,slow=6.7,SNR=4.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **154.40** | **32** | PKPbc | **PKPbc** | **02 15 03.6** | **-0.5** |
| | comp=N,2.5nm,0.7s,baz=316,slow=4.0,SNR=4.2 | | | | | | |

**NNC 09 02:05:45.9**±5.2**, 36°.89N**×**70°.57E, h190km**±52km**, mb2.4, mpv3.5, 4C-4D, Error ellipse: s-maj=50.8km s-min=27.4km az=160.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.35** | **325** | ⇓P | Pn | 02 06 27.6 | 0.0 |
| | 3.2nm,0.3s | | | | | | |
| DZET | | | | ⇑S | Sn | 02 07 00.7 | +0.5 |
| | 56nm,0.8s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.87** | **36** | ⇑P | Pn | 02 06 45.5 | -0.4 |
| | 7.8nm,0.4s | | | | | | |
| SFK | | | | ⇓S | Sn | 02 07 32.8 | -0.3 |
| | 11nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **5.78** | **14** | ⇓P | Pn | 02 07 10.8 | +0.5 |
| | 2.9nm,0.4s | | | | | | |
| MNAS | | | | ⇑S | Sn | 02 08 17.6 | +0.7 |
| | 10.0nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **6.20** | **360** | ⇑P | Pn | 02 07 15.9 | +0.4 |
| | 4.0nm,0.6s,baz=178,slow=12,SNR=17 | | | | | | |
| KK31 | | | | ⇓S | Sn | 02 08 27.0 | +0.5 |
| | 2.6nm,0.4s,baz=188,slow=22 | | | | | | |

*JMA **09** 02:07:15.6±0.1, 24°.36N×121°.80E, h1km±1km*
*ISCJB **09** 02:07:16.7±0.5, 24°.35N±0°.02×121°.77E±0°.03, h16km±5km, Error ellipse: s-maj=4.6km s-min=3.7km az=29.7*
*TAP **09** 02:07:16.2, 24°.36N×121°.78E, h17km, ML2.9, C*
**ISC 09 02:07:16.3**±1.0**, 24°.35N**±0°.03×**121°.79E**±0°.04**, h19km**±2km**, n20, σ0s.34**/34**, 2C-4D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.06** | **223** | P | **Pg** | **02 07 20.3** | **+0.5** |
| | baz=205 | | | | | | |
| EHP | | | | S | **Sg** | **02 07 22.5** | **+0.5** |
| | baz=205 | | | | | | |
| **ENA** | **Nanau** | **0.08** | **331** | ⇓iP | **Pg** | **02 07 19.7** | **-0.2** |
| | baz=337 | | | | | | |
| ENA | | | | i S | **Sg** | **02 07 21.8** | **-0.5** |
| | baz=337 | | | | | | |
| **TWC** | **Suao** | **0.26** | **13** | ⇑iP | **Pg** | **02 07 22.1** | **-0.1** |
| | baz=11 | | | | | | |
| TWC | | | | i S | **Sg** | **02 07 26.1** | **-0.2** |
| | baz=11 | | | | | | |
| **TWD** | **Chiawan** | **0.32** | **213** | P | **Pg** | **02 07 23.0** | **-0.2** |
| | baz=214 | | | | | | |
| TWD | | | | eS | **Sg** | **02 07 27.9** | **-0.2** |
| | baz=214 | | | | | | |
| **ENTT** | **Nioudou** | **0.35** | **325** | ⇓iP | **Pg** | **02 07 23.7** | **0.0** |
| | baz=326 | | | | | | |
| ENTT | | | | i S | **Sg** | **02 07 28.7** | **-0.1** |
| | baz=326 | | | | | | |
| **TWE** | **Neicheng** | **0.38** | **343** | P | **Pb** | **02 07 24.4** | **-0.2** |
| | baz=346 | | | | | | |
| TWE | | | | S | **Sg** | **02 07 29.4** | **-0.3** |
| | baz=346 | | | | | | |
| **NNS** | **Nan Shan** | **0.39** | **283** | ⇓iP | **Pg** | **02 07 24.4** | **-0.1** |
| | baz=282 | | | | | | |
| NNS | | | | S | **Sg** | **02 07 29.3** | **-0.6** |
| | baz=282 | | | | | | |
| **HWA** | **Hwalien** | **0.41** | **204** | eP | **Pb** | **02 07 25.3** | **+0.2** |
| | baz=208 | | | | | | |
| **ILA** | **Ilan** | **0.41** | **355** | eP | **Pg** | **02 07 24.6** | **-0.2** |
| | baz=357 | | | | | | |
| ILA | | | | S | **Sb** | **02 07 31.5** | **+0.5** |
| | baz=357 | | | | | | |
| **NSK** | **Sanguang** | **0.51** | **309** | P | **Pg** | **02 07 26.4** | **-0.1** |
| | baz=310 | | | | | | |
| NSK | | | | i S | **Sg** | **02 07 32.9** | **-0.5** |
| | baz=310 | | | | | | |
| **EGS** | | **0.51** | **15** | eP | **Pb** | **02 07 26.6** | **0.0** |
| | baz=23 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.52** | **246** | ⇑iP | **Pg** | **02 07 26.8** | **-0.1** |
| | baz=254 | | | | | | |
| WHF | | | | S | **Sg** | **02 07 33.6** | **-0.5** |
| | baz=254 | | | | | | |
| **TWT** | **Tachien** | **0.57** | **260** | ⇓iP | **Pb** | **02 07 28.0** | **+0.4** |
| | baz=254 | | | | | | |
| TWT | | | | i S | **Sg** | **02 07 35.3** | **-0.1** |
| | baz=254 | | | | | | |
| **ESL** | **Shilin** | **0.63** | **211** | eP | **Pg** | **02 07 28.2** | **-0.5** |
| | baz=210 | | | | | | |
| **TWA** | **Mucha** | **0.65** | **344** | eP | **Pb** | **02 07 29.2** | **+0.1** |
| | baz=344 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.71** | **360** | eP | **Pg** | **02 07 30.7** | **+0.3** |
| | baz=360 | | | | | | |
| NWF | | | | S | **Sb** | **02 07 39.4** | **-0.3** |
| | baz=360 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.82** | **336** | eP | **Pn** | **02 07 33.5** | **+0.7** |
| | baz=336 | | | | | | |
| TWS1 | | | | eS | **Sn** | **02 07 44.3** | **-0.1** |
| | baz=336 | | | | | | |
| **WDT** | **Danda** | **0.84** | **225** | eP | **Pb** | **02 07 32.6** | **0.0** |
| | baz=224 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.06** | **85** | eS | **Sn** | **02 07 50.4** | **-0.1** |
| **YOJ** | **Yonaguni jima** | **1.12** | **84** | P | **Pn** | **02 07 37.0** | **0.0** |
| YOJ | | | | eS | **Sn** | **02 07 52.0** | **0.0** |

*IDC **09** 02:15:14.3±0.7, 55°.65S×26°.91W, h0km, mb4.2/7, mb1 4.3/8, mb1mx4.0/25, mbtmp4.1/8, ML3.4/1, Error ellipse: s-maj=32.5km s-min=17.2km az=68.0*
*ISCJB **09** 02:15:16.4±0.7, 55°.6S±0°.1×27°.0W±0°.2, h25km, mb4.2/10, Error ellipse: s-maj=23.0km s-min=8.5km az=142.0*
*NEIC **09** 02:15:17.3±4.0, 55°.68S×26°.89W, h20km±27km, mb4.3/4, Error ellipse: s-maj=19.2km s-min=6.9km az=51.0*
*AWI **09** 02:15:38.5, 57°.52S×28°.37W*
**ISC 09 02:15:18.1**±0.6**, 55°.7S**±0°.1×**26°.9W**±0°.1**, h25km, n34, σ0s.56**/28**, mb4.3**/9**, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **5.69** | **280** | ePn | **Pn** | **02 16 41.1** | **+0.3** |
| | 62nm,1.0s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **17.10** | **159** | P | **P** | **02 19 17.4** | **+0.9** |
| **VNA3** | **Neumayer Olymp** | **17.31** | **161** | P | **P** | **02 19 18.7** | **-0.2** |
| **VNA2** | **Neumayer--Watz** | **17.50** | **159** | P | **P** | **02 19 21.1** | **+0.2** |
| | baz=318,slow=13 | | | | | | |
| **SNAA** | **Sanae** | **19.04** | **157** | P | **P** | **02 19 37.0** | **-0.9** |
| **SNAA** | **Sanae** | **19.04** | **157** | P | **P** | **02 19 37.5** | **-0.5** |
| | 0.1nm,0.3s,baz=306,slow=12,SNR=18 | | | | | | |
| **SNAA** | **Sanae** | **19.04** | **157** | eP | **P** | **02 19 36.5** | **-1.4** |
| | 1.0nm,0.6s | | | | | | |
| **TRQA** | **Tornquist** | **29.32** | **292** | eP | **P** | **02 21 18.2** | **-0.2** |
| | 3.4nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.59** | **180** | P | **P** | **02 22 04.3** | **-0.2** |
| | 1.6nm,0.5s,baz=196,slow=2.1,SNR=16 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.59** | **180** | eP | **P** | **02 22 04.3** | **-0.2** |
| | 2.6nm,0.6s | | | | | | |
| **CPUP** | **Villa Florida** | **36.67** | **310** | P | **P** | **02 22 21.9** | **-0.8** |
| | 4.7nm,1.0s,baz=152,slow=10,SNR=5.8 | | | | | | |
| **MAW** | **Mawson** | **40.37** | **144** | P | **P** | **02 22 53.3** | **+0.2** |
| | 1.9nm,0.6s,baz=246,slow=10.0,SNR=3.7 | | | | | | |
| **LVC** | **Limon Verde** | **45.24** | **299** | eP | **P** | **02 23 33.9** | **+0.4** |
| | 5.6nm,0.6s | | | | | | |
| **VNDA** | **Vanda** | **46.97** | **183** | P | **P** | **02 23 46.7** | **+0.5** |
| | 3.0nm,0.6s,baz=187,slow=7.1,SNR=30 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **47.58** | **17** | T | T | 03 15 17.8 | |
| | baz=190,slow=74,SNR=71 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **47.59** | **16** | T | T | 03 15 18.0 | |
| | baz=190,slow=74,SNR=53 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **47.60** | **17** | T | T | 03 15 19.1 | |
| | baz=190,slow=74,SNR=47 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **48.70** | **16** | T | T | 03 16 42.0 | |
| | baz=197,slow=78,SNR=11 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **48.70** | **16** | T | T | 03 16 41.9 | |
| | baz=197,slow=78,SNR=32 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **48.72** | **16** | T | T | 03 16 41.4 | |
| | baz=197,slow=78,SNR=25 | | | | | | |
| **LPAZ** | **La Paz** | **50.28** | **305** | P | **P** | **02 24 13.6** | **+0.5** |
| | 3.3nm,0.8s,baz=155,slow=7.3,SNR=14 | | | | | | |
| **SAML** | **Samuel** | **54.64** | **314** | eP | **P** | **02 24 44.3** | **-0.3** |
| | 2.0nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.64** | **29** | P | **P** | **02 26 43.7** | **+0.4** |
| | 0.6nm,0.7s,baz=200,slow=6.5,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **99.31** | **162** | P | **Pdif** | **02 28 57.8** | **-0.2** |
| | 0.3nm,0.3s,baz=181,slow=4.2,SNR=3.6 | | | | | | |
| **SNOW** | **Snow King Moun** | **121.37** | **302** | ePKPdf | **PKPdf** | **02 34 07.7** | **-0.8** |
| **MOOW** | **Moose Ponds** | **121.58** | **302** | ePKPdf | **PKPdf** | **02 34 09.2** | **+0.4** |
| **FINES** | **FINESS Array B** | **123.97** | **28** | PKP | **PKPdf** | **02 34 12.9** | **+0.4** |
| | 2.0nm,0.9s,baz=104,slow=0.6,SNR=3.3 | | | | | | |
| **ABKAR** | **Akbulak array** | **127.02** | **55** | ePKPdf | **PKPdf** | **02 34 18.5** | **-0.2** |
| **AAK** | **Ala-Archa** | **129.70** | **70** | ePKPdf | **PKPdf** | **02 34 24.7** | **+0.4** |
| **BVAR** | **Borovoye Array** | **134.44** | **57** | PKP | **PKPdf** | **02 34 33.1** | **+0.4** |
| | 0.4nm,0.5s,baz=211,slow=2.5,SNR=3.5 | | | | | | |
| **ILAR** | **Eielson Array** | **149.97** | **312** | PKPbc | **PKPbc** | **02 35 04.4** | **-0.3** |
| | 2.5nm,0.7s,baz=126,slow=2.1,SNR=26 | | | | | | |
| **SONM** | **Songino Array** | **150.54** | **86** | PKPbc | **PKPbc** | **02 35 06.3** | **-0.4** |
| | 1.7nm,0.6s,baz=229,slow=2.9,SNR=11 | | | | | | |
| **MCK** | **McKinley** | **150.64** | **310** | ePKPbc | **PKPbc** | **02 35 06.4** | **+0.1** |
| **BPAW** | **Bear Paw Mtn.** | **151.60** | **310** | ePKPbc | **PKPbc** | **02 35 08.0** | **-0.5** |

**IDC 09 02:24:17.1**±13.0**, 19°.54S**×**176°.72W, h0km, mb4.1**/4**, mb1 4.4**/4**, mb1mx3.9**/30**, mbtmp4.1**/4**, MS4.0**/1**, Ms1 4.0**/1**, ms1mx3.0**/31**, Error ellipse: s-maj=324.7km s-min=40.5km az=39.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAR** | **Rarotonga** | **15.98** | **99** | LR | LR | 02 34 30.8 | |
| | comp=Z,444nm,18.0s,baz=86,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **45.91** | **256** | P | P | 02 32 41.9 | 0.0 |
| | 5.2nm,0.8s,baz=92,slow=7.7,SNR=45 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.93** | **261** | P | P | 02 32 42.0 | 0.0 |
| | 2.0nm,0.3s,baz=98,slow=8.4,SNR=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **54.35** | **261** | P | P | 02 33 45.6 | -0.3 |
| | 2.8nm,0.9s,baz=86,slow=5.6,SNR=6.7 | | | | | | |
| **VNDA** | **Vanda** | **58.97** | **185** | P | P | 02 34 17.8 | -0.1 |
| | 0.5nm,0.8s,baz=7.6,slow=7.3,SNR=4.7 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **89.01** | **176** | P | P | 02 37 09.9 | -3.6 |
| **VNA2** | **Neumayer--Watz** | **89.47** | **177** | P | P | 02 37 12.3 | -3.4 |
| | baz=242,slow=2.0 | | | | | | |

*AUST **09** 02:28:18.0±15.0, 1°.52N×120°.51E, h2km, Error ellipse: s-maj=3.0km s-min=1.6km az=323.0*
*ISCJB **09** 02:28:43.3±0.3, 0°.61S±0°.03×121°.76E±0°.03, h10km, mb4.3/12, Error ellipse: s-maj=4.0km s-min=3.7km az=3.2*
*IDC **09** 02:28:43.1±0.8, 0°.61S×121°.77E, h0km, mb4.1/6, mb1 4.3/10, mb1mx4.0/37, mbtmp4.3/10, ML4.4/4, MS3.6/2, Ms1 3.6/2, ms1mx3.1/33, Error ellipse: s-maj=27.4km s-min=14.8km az=62.0*
*BJI **09** 02:28:45.0, 0°.60S×121°.80E, h5km, mb4.5/7, mB4.8/4, Ms4.3/3, Ms7 4.3/3*
*DJA **09** 02:28:45.4±0.2, 1°S±2°×12°2E±°, h10km, M4.7/23, mb4.7/11, mB5.1/6, MLv4.8/23, Mw(mB)4.5/6*
*NEIC **09** 02:28:46.3±2.5, 0°.66S×121°.79E, h21km±20km, mb4.5/6, Error ellipse: s-maj=10.7km s-min=7.0km az=51.0*
**ISC 09 02:28:45.5**±0.5**, 0°.68S**±0°.04×**121°.73E**±0°.04**, h10km, n60, σ1s.30**/65**, mb4.3**/12**, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APSI** | **Ampana** | **0.24** | **200** | P | **Pg** | **02 28 51.0** | **+0.6** |
| APSI | | | | S | **Sg** | **02 28 55.6** | **+1.8** |
| **LUWI** | **Luwuk** | **1.10** | **109** | P | **Pb** | **02 29 06.8** | **+0.2** |
| | baz=3.4,SNR=956 | | | | | | |
| **LUWI** | **Luwuk** | **1.10** | **109** | P | **Pb** | **02 29 06.8** | **+0.2** |
| LUWI | | | | S | **Sn** | **02 29 23.5** | **+1.3** |
| **LUWI** | **Luwuk** | **1.10** | **109** | ePn | **Pb** | **02 29 06.7** | **0.0** |
| LUWI | | | | eSn | **Sg** | **02 29 21.1** | **+0.1** |
| **MRSI** | **Marisa** | **1.17** | **10** | P | Pb | 02 29 03.1 | -4.7 |
| **GTOI** | **Gorontalo** | **1.83** | **44** | P | **Pn** | **02 29 15.3** | **-1.7** |
| **PCI** | **Palu** | **1.91** | **263** | P | **Pn** | **02 29 17.5** | **-0.6** |
| PCI | | | | S | **Sb** | **02 29 43.9** | **-0.4** |
| **MPSI** | **Mapaga** | **2.09** | **299** | P | Pn | 02 29 17.2 | -3.4 |
| MPSI | | | | S | **Sn** | **02 29 45.3** | **-1.5** |
| **KMSI** | **Cibinong** | **2.57** | **61** | P | **Pn** | **02 29 28.3** | **+1.1** |
| **TTSI** | **Tana Toraja** | **3.03** | **219** | P | **Pn** | **02 29 34.5** | **+1.0** |
| TTSI | | | | S | **Sn** | **02 30 11.7** | **+1.9** |
| **SPSI** | **Sidrap Palu** | **3.80** | **211** | P | **Pn** | **02 29 44.9** | **+0.7** |
| **SANI** | **Sanana** | **4.47** | **108** | P | **Pn** | **02 29 53.3** | **0.0** |
| **KAPI** | **Kappang** | **4.74** | **205** | Pn | **Pn** | **02 29 57.4** | **+0.4** |
| | 19nm,0.3s,baz=26,slow=10,SNR=69 | | | | | | |
| KAPI | | | | Sn | **Sn** | **02 30 49.7** | **-2.3** |
| | 1.7nm,0.3s,baz=23,slow=15,SNR=2.0 | | | | | | |
| KAPI | | | | LR | LR | 02 32 10.0 | |
| | comp=Z,944nm,19.1s,baz=30,slow=43 | | | | | | |
| **KAPI** | **Kappang** | **4.74** | **205** | ePn | **Pn** | **02 29 57.1** | **+0.1** |
| KAPI | | | | Sn | **Sn** | **02 30 49.7** | **-2.3** |
| **BKB** | **Balikpapan** | **4.87** | **263** | P | **Pn** | **02 29 57.7** | **-1.1** |
| **BKSI** | **Bulukumba** | **4.88** | **199** | P | **Pn** | **02 29 59.4** | **+0.4** |
| **BSSI** | **Bau Bau, Buton** | **5.56** | **193** | P | **Pn** | **02 30 08.6** | **+0.2** |
| | 106nm,0.7s,1µm0.4nm | | | | | | |
| **LBMI** | **Labuha** | **5.77** | **90** | P | **Pn** | **02 30 09.7** | **-1.6** |
| | 136nm,0.8s,1µm1.4nm | | | | | | |
| **NLAI** | **Namlea** | **5.94** | **115** | P | **Pn** | **02 30 13.9** | **+0.4** |
| | 80nm,0.6s,1µm0.6nm | | | | | | |
| **KBKI** | **Kotabaru** | **6.14** | **245** | P | **Pn** | **02 30 16.1** | **-0.2** |
| | 51nm,0.9s,0.4nm | | | | | | |
| **BBKI** | **Banjar Baru** | **7.42** | **248** | P | **Pn** | **02 30 34.0** | **+0.1** |
| | 43nm,0.7s,3µm0.5nm | | | | | | |
| **MSAI** | **Masohi** | **7.67** | **110** | P | Pn | 02 30 42.4 | +5.1 |
| | 16nm,0.8s,881nm0.1nm | | | | | | |
| **MMRI** | **Maumere** | **7.92** | **176** | P | **Pn** | **02 30 41.6** | **+0.8** |
| | 114nm,1.3s,0.5nm | | | | | | |
| **MMRI** | **Maumere** | **7.92** | **176** | ePn | **Pn** | **02 30 41.0** | **+0.2** |
| | 27nm,0.4s | | | | | | |
| **EDFI** | **Ende, Flores** | **8.02** | **180** | P | **Pn** | **02 30 43.5** | **+1.3** |
| | 30nm,0.8s,2µm0.1nm | | | | | | |
| **KKM** | **Kota Kinabalu** | **8.66** | **321** | ePn | **Pn** | **02 30 50.4** | **-0.6** |
| **SOEI** | **Soe** | **9.36** | **164** | P | Pn | 02 31 05.0 | +4.3 |
| | baz=12,SNR=3.0 | | | | | | |
| **SOEI** | **Soe** | **9.36** | **164** | ePn | **Pn** | **02 30 59.5** | **-1.2** |
| | 34nm,0.9s | | | | | | |
| **SIJI** | **Sorong** | **9.54** | **91** | Pn | **Pn** | **02 31 01.6** | **-1.4** |
| | 13nm,0.3s,baz=252,slow=20,SNR=14 | | | | | | |
| SIJI | | | | Sn | **Sn** | **02 32 51.2** | **+0.9** |
| | 0.8nm,0.3s,baz=210,slow=20,SNR=2.0 | | | | | | |
| **BATI** | **Baumata** | **9.66** | **169** | Pn | **Pn** | **02 31 05.2** | **+0.6** |
| | 2.9nm,0.3s,baz=315,slow=8.6,SNR=2.0 | | | | | | |
| BATI | | | | LR | LR | 02 34 52.1 | |
| | comp=Z,274nm,21.2s,baz=354,slow=38 | | | | | | |
| **SRBI** | **Singaraja** | **9.81** | **221** | P | **Pn** | **02 31 07.5** | **+0.8** |
| **FAKI** | **Fak Fak** | **10.74** | **102** | P | **Pn** | **02 31 18.3** | **-1.2** |
| | baz=12,SNR=7.5 | | | | | | |
| **FAKI** | **Fak Fak** | **10.74** | **102** | ePn | **Pn** | **02 31 17.8** | **-1.7** |
| | 14nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **15.26** | **143** | P | **P** | **02 32 26.7** | **+0.6** |
| | baz=18,SNR=3.5 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.73** | **168** | P | **Pn** | **02 32 52.3** | **-0.3** |
| | 0.3nm,0.3s,baz=351,slow=11,SNR=8.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.73** | **168** | P | **Pn** | **02 32 53.4** | **+0.7** |
| | baz=20,SNR=4.4 | | | | | | |
| **KASI** | **Kota Agung** | **17.86** | **254** | P | P | 02 33 03.5 | +8.5 |
| **MDSI** | **Maura Dua** | **17.93** | **258** | P | P | 02 33 05.3 | +10 |
| **JAY** | **Jayapura** | **19.05** | **96** | P | P | 02 33 01.9 | -6.3 |
| | baz=21,SNR=3.2 | | | | | | |
| **SDSI** | **Sungai Dareh** | **20.30** | **269** | P | Pn | 02 33 28.4 | +4.6 |
| **PDSI** | **Padang** | **21.27** | **269** | P | **P** | **02 33 34.6** | **+2.3** |
| **IPM** | **Ipoh** | **21.31** | **284** | eP | **P** | **02 33 33.1** | **+0.3** |
| | 15nm,0.7s | | | | | | |
| **PPI** | **Padang Panjang** | **21.33** | **270** | P | P | 02 33 40.3 | +7.4 |
| **WRAB** | **Tennant Creek** | **22.77** | **148** | eP | **P** | **02 33 47.7** | **-0.6** |
| | 8.1nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.78** | **148** | P | **P** | **02 33 47.1** | **-1.2** |
| | 2.8nm,0.8s,baz=327,slow=11,SNR=10 | | | | | | |
| **PSI** | **Prapat** | **23.06** | **279** | P | **P** | **02 33 50.9** | **-0.7** |
| | 2.3nm,0.4s,baz=152,slow=4.8,SNR=4.2 | | | | | | |
| **WRKA** | **Warakurna** | **25.03** | **166** | P | **P** | **02 34 10.4** | **+0.4** |
| | baz=28,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **25.72** | **154** | P | **P** | **02 34 15.7** | **-0.6** |
| | 1.8nm,0.9s,baz=339,slow=9.9,SNR=9.4 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 37 47.0** | **+0.4** |
| | 0.4nm,0.7s,baz=315,slow=1.8,SNR=2.8 | | | | | | |
| **MEEK** | **Meekatharra** | **25.98** | **186** | P | **P** | **02 34 16.6** | **-2.0** |
| | baz=28,SNR=3.9 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **42.36** | **349** | eP | **P** | **02 36 40.8** | **+0.8** |
| HHC | | | | PP | **PP** | **02 38 22.3** | **+4.0** |
| HHC | | | | S | **S** | **02 43 01.0** | **-0.4** |
| HHC | | | | SS | SS | 02 45 59.8 | -11 |
| HHC | | | | PMZ | | | |
| | 21nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | 100nm,5.7s | | | | | | |
| HHC | | | | LN | | | |
| | 170nm,18.5s | | | | | | |
| HHC | | | | LE | | | |
| | 190nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | 240nm,17.3s | | | | | | |
| **GTA** | **Gaotai** | **44.67** | **336** | eP | **P** | **02 36 59.1** | **+0.4** |
| GTA | | | | pP | **pP** | **02 37 03.4** | **+1.5** |
| GTA | | | | sP | **sP** | **02 37 06.1** | **+3.0** |
| GTA | | | | PMZ | | | |
| | 7.0nm,1.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.01** | **347** | eP | **P** | **02 37 39.2** | **-1.0** |
| | 4.8nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **50.13** | **347** | P | **P** | **02 37 39.8** | **-1.3** |
| | 2.4nm,0.8s,baz=163,slow=8.5,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.53** | **329** | P | **P** | **02 38 41.6** | **-0.7** |
| | 2.5nm,0.8s,baz=136,slow=7.9,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.41** | **336** | P | **P** | **02 39 06.7** | **-1.9** |
| | 1.8nm,0.3s,baz=123,slow=5.3,SNR=6.4 | | | | | | |
| **KURK** | **Kurchatov** | **62.94** | **331** | eP | **P** | **02 39 10.7** | **-1.4** |
| | 35nm,1.0s | | | | | | |
| **BVAR** | **Borovoye Array** | **68.42** | **330** | P | **P** | **02 39 46.8** | **-0.6** |
| | baz=148,slow=6.8 | | | | | | |
| **BRVK** | **Borovoye** | **68.49** | **330** | eP | **P** | **02 39 48.7** | **+0.8** |
| | 8.7nm,1.0s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.50** | **323** | eP | **P** | **02 40 13.6** | **+1.1** |
| | 1.6nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.36** | **285** | PKP | **PKPdf** | **02 47 33.5** | **-2.8** |
| | 0.3nm,0.8s,baz=111,slow=1.6,SNR=3.4 | | | | | | |

**GUC 09 03:01:03.6**±0.7**, 23°.31S**×**67°.13W, h229km**±25km**, ML3.6, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **2.33** | **284** | i P | Pn | 03 01 48.7 | +0.8 |
| PB06 | | | | i S | S | 03 02 22.9 | +0.5 |
| PB06 | | | | AML | AML | 03 02 23.4 | |
| | comp=N,118nm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **2.95** | **289** | i P | Pn | 03 01 55.9 | +1.4 |
| PB04 | | | | i S | S | 03 02 35.5 | +1.1 |
| **PB07** | **IPOC Station P** | **3.00** | **301** | i P | Pn | 03 01 56.1 | +1.1 |
| PB07 | | | | i S | S | 03 02 35.9 | +0.5 |
| PB07 | | | | AML | AML | 03 02 36.9 | |
| | comp=N,81nm,0.2s | | | | | | |
| **PB01** | **IPOC Station P** | **3.14** | **315** | i P | Pn | 03 01 57.8 | +1.2 |
| PB01 | | | | i S | S | 03 02 39.4 | +1.2 |
| PB01 | | | | AML | AML | 03 02 41.3 | |
| | comp=E,62nm,0.2s | | | | | | |
| **MNMC** | **Minimini** | **4.75** | **331** | i P | Pn | 03 02 17.8 | +1.7 |
| MNMC | | | | i S | S | 03 03 14.2 | +0.7 |

**IDC 09 03:08:24.6**±2.0**, 1°.85N**×**126°.83E, h0km, mb3.4**/3**, mb1 3.7**/4**, mb1mx3.4**/28**, mbtmp3.5**/4**, ML3.2**/1**, MS3.7**/1**, Ms1 3.7**/1**, ms1mx2.8**/26**, Error ellipse: s-maj=118.0km**

**s-min=25.5km az=69.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **12.38** | **195** | LR | LR | 03 16 05.8 | |
| | comp=Z,333nm,21.1s,baz=120,slow=37 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.86** | **183** | P | Pn | 03 12 59.3 | +0.4 |
| | 0.1nm,0.3s,baz=9.7,slow=14,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.88** | **162** | P | P | 03 13 28.9 | -1.0 |
| | 0.8nm,0.6s,baz=338,slow=11,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **26.28** | **165** | P | P | 03 14 01.5 | -0.4 |
| | 0.2nm,0.3s,baz=345,slow=11,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.15** | **326** | P | P | 03 18 27.2 | -0.1 |
| | 0.3nm,0.4s,baz=129,slow=6.8,SNR=4.7 | | | | | | |

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*ISCJB **09** 03:21:26.2±0.6, 40°.15N±0°.03×31°.68E±0°.05, h0km±7km, Error ellipse: s-maj=6.6km s-min=4.7km az=39.0*
*DDA **09** 03:21:26.0, 40°.15N×31°.65E, h7km, Md2.6*
*CSEM **09** 03:21:26.3±0.1, 40°.11N×31°.65E, h2km, MD2.9, Error ellipse: s-maj=3.9km s-min=3.3km az=29.0*
*ISK **09** 03:21:26.3, 40°.10N×31°.64E, h8km, MD2.9*
**ISC 09 03:21:26.5**±1.2**, 40°.12N**±0°.03×**31°.65E**±0°.03**, h3**km±11km**, n29, σ0ˢ.61**/40**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUMIH** | **MIHALICIK** | **0.28** | **207** | P | **Pg** | **03 21 32.0** | **0.0** |
| AUMIH | | | | S | **Sg** | **03 21 37.1** | **+1.4** |
| **MDUB** | **Mudurnu** | **0.49** | **315** | *e*PG | **Pg** | **03 21 36.4** | **+0.5** |
| **MDUB** | **Mudurnu** | **0.49** | **315** | *e*Pg | **Pg** | **03 21 36.4** | **+0.5** |
| **BTAS** | **Taskesti** | **0.67** | **312** | *i* P | **Pg** | **03 21 39.9** | **+0.5** |
| **BTAS** | **Taskesti** | **0.67** | **312** | P | **Pg** | **03 21 39.9** | **+0.5** |
| **SVRH** | **Sivrihisar-ESK** | **0.68** | **188** | *e*PG | **Pg** | **03 21 39.7** | **+0.1** |
| **SVRH** | **Sivrihisar-ESK** | **0.68** | **188** | *e*Pg | **Pg** | **03 21 39.7** | **+0.1** |
| **BCAM** | **Yenicaga** | **0.76** | **25** | *i* P | **Pg** | **03 21 41.1** | **0.0** |
| BCAM | | | | *i* S | **Sg** | **03 21 50.0** | **-1.0** |
| **BCAM** | **Yenicaga** | **0.76** | **25** | P | **Pg** | **03 21 41.1** | **0.0** |
| BCAM | | | | S | **Sg** | **03 21 50.0** | **-1.0** |
| **ESKT** | **Eskisehir** | **0.86** | **226** | P | **Pg** | **03 21 43.4** | **+0.4** |
| ESKT | | | | S | **Sn** | **03 21 58.4** | **-0.4** |
| **SEYT** | **Eskypehyr** | **0.86** | **226** | *i* P | **Pg** | **03 21 43.4** | **+0.4** |
| SEYT | | | | *i* S | **Sn** | **03 21 58.4** | **-0.3** |
| **GULT** | **Gulveren** | **0.92** | **290** | *e*PG | **Pg** | **03 21 44.4** | **+0.2** |
| **GULT** | **Gulveren** | **0.92** | **290** | *e*Pg | **Pg** | **03 21 44.4** | **+0.2** |
| **BORA** | **Eskisehir** | **0.95** | **256** | *i* P | **Pg** | **03 21 43.5** | **-1.2** |
| BORA | | | | *i* S | **Sn** | **03 22 00.6** | **-0.3** |
| **BORA** | **Eskisehir** | **0.95** | **256** | P | **Pg** | **03 21 43.5** | **-1.2** |
| BORA | | | | S | **Sn** | **03 22 00.6** | **-0.3** |
| **KIZT** | **Kizilcal** | **1.25** | **172** | *e*PN | **Pg** | **03 21 49.8** | **-0.7** |
| **KIZT** | **Kizilcal** | **1.25** | **172** | *e*Pn | **Pg** | **03 21 49.8** | **-0.7** |
| **BBAL** | **Bala** | **1.27** | **117** | *i* P | **Pg** | **03 21 50.8** | **-0.1** |
| BBAL | | | | *i* S | **Sn** | **03 22 10.2** | **+1.2** |
| **BBAL** | **Bala** | **1.27** | **117** | P | **Pg** | **03 21 50.8** | **-0.1** |
| BBAL | | | | S | **Sn** | **03 22 10.2** | **+1.2** |
| **AFSR** | **Af¯ar-Bala (A** | **1.29** | **121** | *e*PN | **Pn** | **03 21 51.4** | **0.0** |
| AFSR | | | | *e*SN | **Sn** | **03 22 09.0** | **-0.2** |
| **AFSR** | **Af¯ar-Bala (A** | **1.29** | **121** | *e*Pn | **Pn** | **03 21 51.4** | **0.0** |
| AFSR | | | | *e*Sn | **Sn** | **03 22 09.0** | **-0.2** |
| **SAFT** | **Safranbolu** | **1.37** | **35** | *e*PN | **Pn** | **03 21 52.5** | **0.0** |
| **SAFT** | **Safranbolu** | **1.37** | **35** | *e*Pn | **Pn** | **03 21 52.5** | **0.0** |
| **KAMT** | **Kaman** | **1.76** | **115** | *e*PN | **Pn** | **03 21 58.2** | **+0.2** |
| **KAMT** | **Kaman** | **1.76** | **115** | *e*Pn | **Pn** | **03 21 58.2** | **+0.2** |
| **YAYX** | **Yaylak** | **2.05** | **125** | *e*PN | **Pn** | **03 22 02.1** | **+0.2** |
| **YAYX** | **Yaylak** | **2.05** | **125** | *e*Pn | **Pn** | **03 22 02.1** | **+0.2** |
| **CORM** | **Corum** | **2.29** | **88** | *e*PN | **Pn** | **03 22 05.5** | **+0.3** |
| **CORM** | **Corum** | **2.29** | **88** | *e*Pn | **Pn** | **03 22 05.5** | **+0.3** |

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*BJI **09** 03:24:57.0, 18°.06N×147°.12E, h52km, mb4.8/45, mB5.0/34, Ms4.6/41, Ms7 4.4/41*
*ISCJB **09** 03:24:59.8±0.1, 18°.30N±0°.02×146°.53E±0°.03, h50km, mb5.0/146, MS4.2/27, Error ellipse: s-maj=3.9km s-min=3.1km az=43.4*
*MOS **09** 03:24:59.2±1.1, 18°.29N×146°.46E, h49km, mb5.1/41, Error ellipse: s-maj=10.5km s-min=5.5km az=102.5*
*IDC **09** 03:25:02.2±1.8, 18°.28N×146°.63E, h65km±15km, mb4.5/31, mb1 4.6/32, mb1mx4.5/40, mbtmp4.7/32, MS4.3/21, Ms1 4.3/21, ms1mx4.2/29, Error ellipse: s-maj=15.5km s-min=8.5km az=92.0*
*GCMT **09** 03:25:03.5±0.3, 18°.24N×146°.96E, h35km±1km, MW5.2/68, Moment Tensor Solution. s50,c62; s68,c95; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$6.89±.34; $M_{\theta\theta}$-0.55±.21; $M_{\phi\phi}$-6.34±.22; $M_{r\theta}$0.75±.29; $M_{\theta\phi}$0.72±.16; $M_{\phi r}$3.03±.26; Best double couple: $M_0$7.34800×$10^{16}$ NP1:$\phi_s$1.00000°, δ57.00000°, λ98.00000°. NP2: $\phi_s$166.00000°, δ34.00000°, λ77.00000°. Principal axes: T 7.6480, Plg76.0000°, Azm297.0000°; N -0.6000, Plg7.0000°, Azm177.0000°; P -7.0470, Plg12.0000°, Azm85.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC **09** 03:25:03.5±1.0, 18°.25N×146°.49E, h72km±9km, mb5.0/62 Error ellipse: s-maj=4.4km s-min=3.4km az=105.0*
**ISC 09 03:25:01.5**±0.4**, 18°.30N**±0°.03×**146°.70E**±0°.05**, h58**km±2km**, h58**km**:pP-P, n389, σ1ˢ.32**/426**, mb5.1**/148**, MS4.2**/27**, 11C-6D, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.00** | **201** | P | **Pn** | **03 26 13.7** | **-0.3** |
| | 83nm,0.3s,baz=96,slow=2.6,SNR=24 | | | | | | |
| GUMO | | | | S | **Sn** | **03 27 11.4** | **+0.9** |
| | 105nm,0.3s,baz=323,slow=22,SNR=5.1 | | | | | | |
| **GUMO** | **Guam** | **5.00** | **201** | *e*P | **Pn** | **03 26 15.2** | **+1.1** |
| GUMO | | | | *e* | | 03 27 07.8 | |
| **GUMO** | **Guam** | **5.00** | **201** | *e*Pn | **Pn** | **03 26 15.2** | **+1.1** |
| GUMO | | | | *e*Sn | **Sn** | **03 27 07.8** | **-2.7** |
| **H11S3** | **WAKE ISLAND Hy** | **18.97** | **86** | T | T | 03 48 47.7 | |
| | baz=275,slow=74,SNR=7.1 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **18.98** | **86** | T | T | 03 48 45.3 | |
| | baz=275,slow=74,SNR=17 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **18.99** | **86** | T | T | 03 48 46.5 | |
| | baz=275,slow=74,SNR=26 | | | | | | |
| **JOW** | **Kunigami** | **19.00** | **300** | P | **P** | **03 29 18.0** | **-0.6** |
| | 0.1nm,0.3s,baz=103,slow=19,SNR=1.7 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.15** | **83** | T | T | 03 49 06.5 | |
| | baz=267,slow=74 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.15** | **82** | T | T | 03 49 06.5 | |
| | baz=267,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.16** | **83** | T | T | 03 49 05.4 | |
| | baz=267,slow=74 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.66** | **339** | P | **P** | **03 29 25.5** | **-0.2** |
| | 1.8nm,0.3s,baz=166,slow=10,SNR=23 | | | | | | |
| **MAJO** | **Matsushiro** | **19.66** | **339**⇓ | *i*P | **P** | **03 29 26.4** | **+0.7** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,354nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **19.66** | **339** | *e*P | **P** | **03 29 26.5** | **+0.8** |
| MAJO | | | | *e*S | **S** | **03 33 03.6** | **-0.8** |
| **MAT** | **Matsushiro** | **19.66** | **339** | P | **P** | **03 29 24.6** | **-1.1** |
| MAT | | | | S | **S** | **03 33 05.0** | **+0.6** |
| **JNU** | **Nakatsue** | **20.48** | **319** | P | **P** | **03 29 33.9** | **-0.8** |
| | comp=Z,28nm,1.1s,baz=150,slow=2.9,SNR=4.8 | | | | | | |
| JNU | | | | LR | LR | 03 36 36.3 | |
| | comp=Z,683nm,21.3s,baz=136,slow=34 | | | | | | |
| **JAY** | **Jayapura** | **21.50** | **197** | P | **P** | **03 29 45.0** | **-0.7** |
| | comp=Z,40nm,1.0s,baz=339,slow=8.4,SNR=8.4 | | | | | | |
| JAY | | | | LR | LR | 03 37 44.0 | |
| | comp=Z,741nm,21.9s,baz=354,slow=36 | | | | | | |
| **JAY** | **Jayapura** | **21.50** | **197** | P | **P** | **03 29 46.4** | **+0.6** |
| | comp=Z,502nm,1.0s,comp=Z,5µm | | | | | | |
| **SMPI** | **Sarmi** | **21.64** | **202** | P | **P** | **03 29 47.6** | **+0.5** |
| | comp=Z,31nm,1.1s | | | | | | |
| **GENI** | **Genyem** | **21.73** | **198** | P | **P** | **03 29 48.9** | **+0.8** |
| | comp=Z,111nm,0.9s | | | | | | |
| **NACB** | **Ninganchiao** | **24.10** | **288** | *e*P | **P** | **03 30 10.0** | **-1.9** |
| | comp=Z,42nm,0.9s | | | | | | |
| **YULB** | **Yu-li** | **24.26** | **286** | *e*P | **P** | **03 30 11.9** | **-1.5** |
| | comp=Z,20nm,0.8s | | | | | | |
| **SWI** | **Sorong** | **24.35** | **220** | P | **P** | **03 30 14.4** | **+0.2** |
| | comp=Z,192nm,1.0s,comp=Z,2µm | | | | | | |
| **SIJI** | **Sorong** | **24.35** | **220** | P | **P** | **03 30 14.1** | **-0.1** |
| | comp=Z,137nm,0.9s,baz=27,slow=9.6,SNR=80 | | | | | | |
| SIJI | | | | LR | LR | 03 38 01.4 | |
| | comp=Z,714nm,20.7s,baz=19,slow=32 | | | | | | |
| **YHNB** | **Yeheng** | **24.38** | **289** | *e*P | **P** | **03 30 13.7** | **-0.8** |
| | comp=Z,36nm,0.7s | | | | | | |
| **TWG** | **Pinlang** | **24.40** | **285** | *e*P | **P** | **03 30 13.6** | **-1.1** |
| | comp=Z,188nm,0.9s | | | | | | |
| **SSLB** | **Suanglung** | **24.62** | **287** | *e*P | **P** | **03 30 15.7** | **-1.0** |
| | comp=Z,42nm,0.9s | | | | | | |
| **TJN** | **Taejon** | **24.80** | **320***c* | *e*P | **P** | **03 30 17.5** | **-0.7** |
| **TPUB** | **Ta-pu** | **24.86** | **286** | *e*P | **P** | **03 30 14.3** | **-4.5** |
| | comp=Z,37nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **25.21** | **323** | P | **P** | **03 30 21.0** | **-0.8** |
| | comp=Z,7.3nm,0.7s,baz=143,slow=9.5,SNR=22 | | | | | | |
| KSRS | | | | PcP | **PcP** | **03 33 54.6** | **+0.4** |
| | comp=Z,1.1nm,0.4s,baz=135,slow=0.5,SNR=5.3 | | | | | | |
| KSRS | | | | LR | LR | 03 39 43.7 | |
| | comp=Z,1µm,21.4s,baz=136,slow=35 | | | | | | |
| **KSAR** | **Wonju Array Be** | **25.22** | **323** | P | **P** | **03 30 21.0** | **-0.9** |
| KSAR | | | | | | 03 33 54.6 | |
| **KSAR** | **Wonju Array Be** | **25.22** | **323** | P | **P** | **03 30 21.0** | **-0.9** |
| KSAR | | | | PcP | **PcP** | **03 33 54.6** | **+0.4** |
| **KS01** | **Wonju Array Si** | **25.24** | **323** | *e*P | **P** | **03 30 20.8** | **-1.3** |
| KS01 | | | | *e*PcP | **PcP** | **03 33 54.8** | **+0.5** |
| **FAKI** | **Fak Fak** | **25.44** | **215** | P | **P** | **03 30 23.6** | **-0.5** |
| **FAKI** | **Fak Fak** | **25.44** | **215** | *e*P | **P** | **03 30 23.3** | **-0.8** |
| | comp=Z,38nm,1.0s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **25.67** | **359***d* | *i*P | P | 03 30 17.4 | -8.5 |
| YUK | | | | *i* | | 03 31 10.5 | |
| YUK | | | | *i* S | S | 03 34 40.7 | -10 |
| YUK | | | | *i* SS | **SnSn** | **03 35 51.4** | **+1.6** |
| YUK | | | | pmax | pmax | | |
| | comp=N,249nm,1.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,146nm,1.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,243nm,1.4s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=N,893nm,20.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=E,295nm,20.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,392nm,20.0s | | | | | | |
| **ASAJ** | **Asahikawa** | **25.97** | **353** | LR | LR | 03 41 02.2 | |
| | comp=Z,250nm,20.0s,baz=194,slow=37 | | | | | | |
| **ASAJ** | **Asahikawa** | **25.97** | **353** | *e*P | **P** | **03 30 30.3** | **+1.6** |
| | comp=Z,30nm,1.0s | | | | | | |
| **LBMI** | **Labuha** | **26.65** | **227** | P | **P** | **03 30 36.1** | **+1.0** |
| | comp=Z,45nm,0.9s,comp=Z,1µm | | | | | | |
| **KUR** | **Kuril'sk** | **26.88** | **2***d* | *i*P | **P** | **03 30 35.8** | **-1.0** |
| KUR | | | | *i* | | 03 31 17.9 | |
| KUR | | | | *i* S | **S** | **03 35 03.3** | **-6.0** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,137nm,1.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,40nm,1.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,56nm,1.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,85nm,1.4s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,275nm,19.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,266nm,19.0s | | | | | | |
| **PMG** | **Port Moresby** | **27.53** | **179** | P | **P** | **03 30 42.5** | **-0.4** |
| | comp=Z,48nm,1.1s,baz=338,slow=9.3,SNR=6.1 | | | | | | |
| **PMG** | **Port Moresby** | **27.53** | **179**⇓ | *i*P | **P** | **03 30 41.9** | **-1.0** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,225nm,1.1s | | | | | | |
| **PMG** | **Port Moresby** | **27.53** | **179** | *e*P | **P** | **03 30 42.8** | **-0.1** |
| | comp=Z,91nm,1.3s | | | | | | |
| **MSAI** | **Masohi** | **27.73** | **221** | P | **P** | **03 30 48.0** | **+3.2** |
| | comp=Z,17nm,0.7s,comp=Z,1µm | | | | | | |
| **VLA** | **Vladivostok** | **27.74** | **336**⇓ | *e*P | **P** | **03 30 46.2** | **+1.6** |
| VLA | | | | *e*S | **S** | **03 35 25.3** | **+2.3** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,66nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **28.58** | **304** | *e*P | **P** | **03 30 51.7** | **-0.5** |
| NJ2 | | | | pP | **pP** | **03 31 06.2** | **-0.4** |
| NJ2 | | | | sP | **sP** | **03 31 13.4** | **-0.1** |
| NJ2 | | | | S | **S** | **03 35 38.0** | **+1.5** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,40nm,0.6s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=Z,1µm,25.5s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=Z,770nm,16.2s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=Z,510nm,17.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **28.63** | **338** | P | **P** | **03 30 52.3** | **-0.1** |
| | comp=Z,16nm,0.8s,baz=134,slow=9.8,SNR=30 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **28.77** | **354** | P | P | 03 31 03.0 | +9.4 |
| **NLAI** | **Namlea** | **28.82** | **224** | P | **P** | **03 30 54.3** | **-0.2** |
| | comp=Z,30nm,1.0s,comp=Z,833nm | | | | | | |
| **MDJ** | **Mudanjiang** | **29.90** | **335** | P | **P** | **03 31 04.7** | **+1.0** |
| MDJ | | | | pP | **pP** | **03 31 16.5** | **-1.7** |
| MDJ | | | | sP | **sP** | **03 31 23.6** | **-1.4** |
| MDJ | | | | S | **S** | **03 35 56.2** | **-0.7** |
| MDJ | | | | PMZ | | | |
| | comp=Z,12nm,0.6s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,91nm,8.4s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,400nm,23.9s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,220nm,21.9s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,590nm,22.9s | | | | | | |
| **LUWI** | **Luwuk** | **30.39** | **233** | P | **P** | **03 31 06.5** | **-1.8** |
| | comp=Z,82nm,0.8s,comp=Z,7µm | | | | | | |
| **LUWI** | **Luwuk** | **30.39** | **233** | *e*P | **P** | **03 31 07.5** | **-0.8** |
| | comp=Z,108nm,1.2s | | | | | | |
| **CN2** | **Changchun** | **31.09** | **329** | *e*P | **P** | **03 31 16.6** | **+2.3** |
| CN2 | | | | *e*sP | **sP** | **03 31 36.6** | **+1.0** |
| CN2 | | | | *e*S | **S** | **03 36 17.2** | **+1.6** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,100nm,3.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,300nm,14.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,400nm,14.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,600nm,16.0s | | | | | | |
| **HABR** | **Khabarovsk** | **31.56** | **345** | *e*P | **P** | **03 31 16.8** | **-1.5** |
| HABR | | | | *e**PP | **pP** | **03 31 31.7** | **-1.0** |
| HABR | | | | *e**SP | **sP** | **03 31 39.1** | **-0.5** |
| HABR | | | | *e* | | 03 32 22.5 | |
| HABR | | | | | | 03 34 07.7 | |
| HABR | | | | *e*S | **S** | **03 36 21.8** | **-0.9** |
| HABR | | | | *e**SS | **sS** | **03 36 48.1** | **+0.8** |
| HABR | | | | *e*SS | **SnSn** | **03 38 13.4** | **+0.5** |
| HABR | | | | *e* | | 03 41 43.9 | |
| HABR | | | | pmax | pmax | | |
| | comp=E,15nm,0.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,28nm,1.8s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,55nm,1.8s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,307nm,18.0s | | | | | | |
| **WHN** | **Wuhan** | **31.76** | **299** | P | **P** | **03 31 21.2** | **+0.9** |
| WHN | | | | LN | | | |
| | comp=Z,830nm,17.2s | | | | | | |
| WHN | | | | LE | | | |
| | comp=Z,490nm,10.6s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,2µm,22.6s | | | | | | |
| **MPSI** | **Mapaga** | **31.81** | **239** | P | P | 03 31 27.6 | +6.7 |
| **KKM** | **Kota Kinabalu** | **32.12** | **252** | *e*P | **P** | **03 31 24.3** | **+0.5** |
| | comp=Z,59nm,0.8s | | | | | | |
| **COEN** | **Coen** | **32.24** | **186** | *e*P | **P** | **03 31 23.9** | **-0.6** |
| **KLR** | **Kul'dur** | **33.14** | **342** | *e*P | P | 03 31 28.8 | -3.3 |
| KLR | | | | *e* | | 03 34 11.3 | |
| KLR | | | | pmax | pmax | | |
| | comp=E,57nm,1.6s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,160nm,1.6s | | | | | | |
| **TTSI** | **Tana Toraja** | **33.92** | **234** | P | **P** | **03 31 40.4** | **+1.0** |
| | comp=Z,89nm,1.0s,comp=Z,668nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **34.55** | **233** | P | **P** | **03 31 44.5** | **-0.3** |
| | comp=Z,59nm,1.0s,comp=Z,644nm | | | | | | |
| **QIZ** | **Qiongzhong** | **34.89** | **277** | P | **P** | **03 31 47.6** | **-0.1** |
| QIZ | | | | pP | **pP** | **03 32 01.2** | **-1.1** |
| QIZ | | | | S | **S** | **03 37 14.8** | **-0.3** |
| QIZ | | | | PMZ | | | |
| | comp=Z,25nm,1.9s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,840nm,18.1s | | | | | | |
| **BKSI** | **Bulukumba** | **35.18** | **231** | P | **P** | **03 31 51.0** | **+0.8** |
| | comp=Z,49nm,1.1s,comp=Z,529nm | | | | | | |
| **KAPI** | **Kappang** | **35.25** | **231** | P | **P** | **03 31 51.0** | **+0.2** |
| | comp=Z,34nm,0.9s,baz=51,slow=5.1,SNR=14 | | | | | | |
| **KAPI** | **Kappang** | **35.25** | **231** | P | **P** | **03 31 51.2** | **+0.4** |
| | comp=Z,234nm,0.7s,SNR=6.1 | | | | | | |
| **KAPI** | **Kappang** | **35.25** | **231** | *e*P | **P** | **03 31 51.3** | **+0.5** |
| | comp=Z,57nm,1.0s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **35.47** | **229** | P | **P** | **03 31 53.1** | **+0.4** |
| | comp=Z,93nm,1.1s,comp=Z,944nm | | | | | | |
| **SOEI** | **Soe** | **35.60** | **220** | P | P | 03 31 50.5 | -3.4 |
| | comp=Z,71nm,1.1s | | | | | | |
| **SOEI** | **Soe** | **35.60** | **220** | *e*P | **P** | **03 31 52.4** | **-1.5** |
| | comp=Z,54nm,0.9s | | | | | | |
| **PETK** | **Petropavlovsk-** | **35.79** | **11** | P | **P** | **03 31 56.3** | **+1.3** |
| | comp=Z,2.4nm,0.5s,baz=188,slow=8.7,SNR=4.6 | | | | | | |
| PETK | | | | LR | LR | 03 47 50.7 | |
| | comp=Z,155nm,18.5s,baz=193,slow=38 | | | | | | |
| **MMRI** | **Maumere** | **36.04** | **224** | P | P | 03 32 01.9 | +4.3 |
| | comp=Z,76nm,1.1s | | | | | | |
| **MMRI** | **Maumere** | **36.04** | **224** | *e*P | **P** | **03 31 56.7** | **-0.9** |
| | comp=Z,85nm,1.1s | | | | | | |
| **BATI** | **Baumata** | **36.32** | **221** | P | **P** | **03 31 59.3** | **-0.7** |
| | comp=Z,26nm,0.4s,baz=10,slow=6.5,SNR=4.2 | | | | | | |
| **KBKI** | **Kotabaru** | **36.95** | **238** | P | P | 03 32 10.8 | +5.5 |
| | comp=Z,26nm,1.0s | | | | | | |
| **SBUM** | **Sibu** | **37.28** | **249** | *e*P | **P** | **03 32 08.8** | **+0.6** |
| | comp=Z,28nm,0.9s | | | | | | |
| **DLV** | **T Lat** | **37.37** | **266** | *e*P | **P** | **03 32 10.4** | **+1.2** |
| **HHC** | **Hu-ho-hao-te** | **37.56** | **314** | *e*P | **P** | **03 32 12.5** | **+2.1** |
| HHC | | | | S | **S** | **03 37 57.2** | **+1.5** |
| HHC | | | | SS | **SnSn** | **03 40 33.8** | **-4.8** |
| HHC | | | | PMZ | | | |
| | comp=Z,15nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,150nm,7.6s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,440nm,16.9s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,430nm,17.1s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,550nm,17.2s | | | | | | |
| **HIA** | **Hailar** | **37.77** | **331** | *e*P | **P** | **03 32 12.1** | **+0.1** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **HIA** | **Hailar** | **37.77** | **331** | *e*P | **P** | **03 32 12.1** | **+0.1** |
| | comp=Z,13nm,0.6s | | | | | | |
| **GYA** | **Guiyang** | **37.78** | **290** | *e*P | **P** | **03 32 12.8** | **+0.3** |
| GYA | | | | pP | **pP** | **03 32 26.9** | **-0.3** |
| GYA | | | | PP | **PnPn** | **03 33 42.0** | **+0.7** |
| GYA | | | | S | **S** | **03 37 58.7** | **-0.7** |
| GYA | | | | ScP | **ScP** | **03 38 11.9** | **+0.8** |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,130nm,5.0s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,560nm,17.8s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,540nm,17.4s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,510nm,17.0s | | | | | | |
| **BBKI** | **Banjar Baru** | **38.11** | **239** | P | P | 03 32 20.1 | +4.9 |
| | comp=Z,46nm,0.6s,comp=Z,4µm | | | | | | |
| **CTA** | **Charters Tower** | **38.15** | **181** | P | **P** | **03 32 15.3** | **-0.1** |
| | comp=Z,8.1nm,0.9s,baz=358,slow=8.9,SNR=4.1 | | | | | | |
| **CTAO** | **Charters Tower** | **38.15** | **181** | *e*P | **P** | **03 32 15.1** | **-0.2** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| **CTAO** | **Charters Tower** | **38.15** | **181** | *e*P | **P** | **03 32 15.1** | **-0.2** |
| | comp=Z,30nm,1.3s | | | | | | |
| **WBSI** | **Waikabubak, Su** | **38.69** | **226** | P | **P** | **03 32 20.2** | **+0.1** |
| | comp=Z,77nm,0.7s | | | | | | |
| **KSM** | **Kuching** | **39.42** | **249** | *e*P | **P** | **03 32 25.9** | **-0.3** |
| | comp=Z,53nm,0.9s | | | | | | |
| **UBPT** | **Khong Chiam** | **39.53** | **272** | P | P | 03 32 33.5 | +6.4 |
| | comp=Z,20nm,1.1s | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **39.85** | **230** | P | **P** | **03 32 28.9** | **-0.8** |
| | comp=Z,130nm,0.9s,comp=Z,1µm | | | | | | |
| **WRAB** | **Tennant Creek** | **39.88** | **198***c* | *i*P | **P** | **03 32 27.8** | **-2.0** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,92nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **39.88** | **198** | P | **P** | **03 32 28.0** | **-1.8** |
| | comp=Z,212nm,1.1s,SNR=45 | | | | | | |
| **WRAB** | **Tennant Creek** | **39.88** | **198** | *e*P | **P** | **03 32 28.5** | **-1.3** |
| | comp=Z,35nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **39.89** | **198** | P | **P** | **03 32 28.7** | **-1.3** |
| | comp=Z,30nm,1.0s,baz=20,slow=9.3,SNR=60 | | | | | | |
| WRA | | | | LR | LR | 03 49 25.1 | |
| | comp=Z,409nm,21.2s,baz=20,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.89** | **198** | *i* P | **P** | **03 32 28.5** | **-1.4** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | |
| **SLVN** | **Son La** | **40.29** | **282** | *e*P | **P** | **03 32 31.9** | **-1.5** |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **SRBI** | **Singaraja** | **40.66** | **233** | P | **P** | **03 32 37.0** | **+0.7** |
| | comp=Z,62nm,0.9s | | | | | | |
| **CD2** | **Chengdu** | **40.78** | **296** | P | **P** | **03 32 37.4** | **+0.1** |
| CD2 | | | | pP | **pP** | **03 32 51.8** | **-0.4** |
| CD2 | | | | PP | **PP** | **03 34 12.2** | **0.0** |
| CD2 | | | | PcS | **PcS** | **03 38 28.9** | **+0.2** |
| CD2 | | | | S | **S** | **03 38 44.4** | **+0.3** |
| CD2 | | | | sS | **sS** | **03 39 09.2** | **0.0** |
| CD2 | | | | SS | **SS** | **03 41 47.9** | **+1.0** |
| CD2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,220nm,5.2s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,390nm,20.1s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,410nm,19.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,540nm,17.6s | | | | | | |
| **KMMI** | **Kalianget** | **40.96** | **235** | P | **P** | **03 32 40.6** | **+1.8** |
| **ABJI** | **Asem Bagus** | **41.22** | **234** | P | **P** | **03 32 43.6** | **+2.6** |
| | comp=Z,53nm,1.1s | | | | | | |
| **KMI** | **Kunming** | **41.26** | **287** | P | **P** | **03 32 44.0** | **+2.4** |
| KMI | | | | sP | **sP** | **03 33 00.7** | **-2.5** |
| KMI | | | | PP | **PnPn** | **03 34 21.9** | **-0.8** |
| KMI | | | | S | **S** | **03 38 56.3** | **+4.4** |
| KMI | | | | sS | **sS** | **03 39 17.6** | **+0.6** |
| KMI | | | | PMZ | | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,110nm,6.9s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,220nm,21.0s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,210nm,22.3s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,240nm,29.3s | | | | | | |
| **NONG** | **Nongkai** | **41.31** | **277** | P | P | 03 32 46.8 | +5.1 |
| | comp=Z,27nm,1.2s | | | | | | |
| **LZH** | **Lanzhou** | **41.66** | **304** | *e*P | **P** | **03 32 47.0** | **+2.4** |
| LZH | | | | pP | **pP** | **03 33 00.6** | **+1.1** |
| LZH | | | | sP | **sP** | **03 33 07.1** | **+0.9** |
| LZH | | | | PMZ | | | |
| | comp=Z,16nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,170nm,4.7s | | | | | | |
| **BLJI** | **Banyuglugur** | **41.68** | **234** | P | **P** | **03 32 45.7** | **+1.0** |
| | comp=Z,76nm,1.0s,comp=Z,7µm | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.68** | **211** | *e*P | **P** | **03 32 44.0** | **-0.6** |
| | comp=Z,21nm,1.1s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **41.70** | **233** | P | **P** | **03 32 44.9** | **-0.1** |
| | comp=Z,62nm,1.0s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **41.70** | **233** | *e*P | **P** | **03 32 44.0** | **-1.0** |
| | comp=Z,50nm,0.9s | | | | | | |
| **CLNS** | **Chul'man** | **41.80** | **342** | *e*P | **P** | **03 32 42.4** | **-2.9** |
| CLNS | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.7s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=N,11nm,1.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=Z,199nm,16.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=N,165nm,15.0s | | | | | | |
| **NGJI** | **Ngawi** | **43.12** | **237** | P | P | 03 33 03.4 | +6.9 |
| **LOEI** | **Loei** | **43.16** | **276** | P | **P** | **03 32 58.2** | **+1.4** |
| | comp=N,7.0nm,1.3s,comp=N,542nm | | | | | | |
| **PWJI** | **Pagerwojo** | **43.24** | **236** | P | **P** | **03 32 57.3** | **-0.2** |
| | comp=N,115nm,0.9s | | | | | | |
| **AS01** | **Alice Springs** | **43.52** | **197** | *e*P | **P** | **03 32 58.2** | **-1.4** |
| AS01 | | | | *e*PP | **PP** | **03 34 44.3** | **+2.4** |
| **ASAR** | **Alice Springs** | **43.54** | **197** | P | **P** | **03 32 58.9** | **-0.9** |
| | comp=N,5.4nm,0.5s,baz=19,slow=6.7,SNR=53 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 34 45.0** | **-1.8** |
| | comp=N,4.9nm,1.0s,baz=28,slow=4.2,SNR=6.2 | | | | | | |
| **PBKT** | **Sadao Pong** | **43.58** | **275** | P | **P** | **03 33 02.4** | **+2.2** |
| | comp=N,13nm,1.4s | | | | | | |

**CRAI Chiangrai 43.67 280** P **P** **03 33 01.6 +0.7**
comp=N,7.4nm,0.8s,comp=N,502nm
**ULN Ulaanbaatar 43.67 322** *ce*P **P** **03 33 00.5 -0.3**
ULN pmax pmax
comp=Z,17nm,1.5s
**ULN Ulaanbaatar 43.67 322** *e*P **P** **03 33 00.6 -0.2**
comp=Z,25nm,1.5s
**TPI Tanjungpandan 43.77 245** P **P** **03 33 02.7 +0.9**
comp=Z,58nm,1.1s
**UTTA Uttaradit 43.79 277** P P 03 33 06.0 +4.1
comp=Z,3.6nm,0.8s
**SONM Songino Array 44.05 321** P **P** **03 33 03.7 0.0**
comp=Z,4.9nm,0.6s,baz=136,slow=8.8,SNR=31
SONM PcP **PcP** **03 34 48.1 -0.2**
comp=Z,4.8nm,1.0s,baz=132,slow=4.2,SNR=5.2
SONM LR LR 03 52 43.5
comp=Z,726nm,18.2s,baz=120,slow=38
**SONA1 Songino Array 44.05 321** *e*P **P** **03 33 03.7 -0.1**
SONA1 *e*PP **PcP** **03 34 48.2 -0.1**
**UGM Wanagama 44.19 237** P P 03 33 09.9 +4.8
comp=Z,178nm,2.0s
**DZM Mont Dzumac 44.53 153** *e*P **P** **03 33 08.1 +0.3**
comp=Z,68nm,1.3s
**DZM Mont Dzumac 44.53 153** *e*LR LR 03 45 41.5
comp=Z,2µm,23.6s
**DZM Mont Dzumac 44.53 153** P **P** **03 33 08.5 +0.7**
comp=Z,13nm,0.9s,baz=7.7,slow=9.2,SNR=4.2
**SEY Seymchan 44.77 4** P **P** **03 33 09.7 +0.6**
comp=Z,1.2nm,0.3s,baz=188,slow=5.1,SNR=5.8
**CMAI Chiengmai2 44.94 280** P P 03 33 16.4 +5.1
comp=Z,9.3nm,1.3s
**MYKOM Kota Tinggi 45.10 254** *e*P **P** **03 33 12.9 +0.5**
comp=Z,22nm,0.9s
**CM01 Chiang Mai Arr 45.20 278** *e*P **P** **03 33 13.1 -0.1**
**CMAR Chiang Mai Arr 45.21 278** P **P** **03 33 13.6 +0.3**
comp=Z,4.0nm,0.5s,baz=68,slow=6.9,SNR=11
CMAR PcP **PcP** **03 34 52.3 -0.4**
comp=Z,2.0nm,0.5s,baz=68,slow=1.6,SNR=5.0
CMAR LR LR 03 50 14.1
comp=Z,181nm,21.3s,baz=100,slow=34
**CMAR Chiang Mai Arr 45.21 278** *i*P **P** **03 33 14.1 +0.8**
CMAR pmax pmax
comp=Z,4.0nm,0.5s
**YAK Yakutsk 45.29 349** P **P** **03 33 13.4 +0.2**
comp=Z,5.5nm,0.4s,baz=163,slow=19,SNR=5.6
**YAK Yakutsk 45.29 349** *e*P **P** **03 33 12.6 -0.6**
YAK *e* 03 34 50.8
YAK *e* 03 34 57.9
YAK eS **S** **03 33 47.6 -1.7**
YAK *e*SS **SS** **03 43 10.1 -3.3**
YAK pmax pmax
comp=Z,8.0nm,0.9s
YAK pmax pmax
comp=N,3.0nm,1.1s
YAK pmax pmax
comp=E,1.0nm,1.0s
YAK pmax pmax
comp=Z,1.0nm,0.5s
YAK smax smax
comp=N,17nm,18.0s
YAK smax smax
comp=E,13nm,21.1s
YAK MLR MLR
comp=N,27nm,17.0s
YAK MLR MLR
comp=Z,35nm,19.0s
**YAK Yakutsk 45.29 349** *e*P **P** **03 33 14.4 +1.2**
comp=Z,50nm,0.7s
**GTA Gaotai 45.55 308** *e*P **P** **03 33 17.2 +1.4**
GTA pP **pP** **03 33 35.1 +4.3**
GTA PcP **PcP** **03 34 53.8 +0.1**
GTA S **S** **03 39 54.0 +0.1**
GTA sS sS 03 40 25.5 +6.2
GTA SS **ScS** **03 43 09.9 +2.7**
GTA PMZ
comp=Z,5.0nm,1.7s
GTA PMZ
comp=Z,84nm,5.9s
GTA LN
comp=Z,280nm,19.5s
GTA LE
comp=Z,510nm,21.4s
GTA LZ
comp=Z,540nm,19.0s
**BOD Bodaibo 46.25 336** *e*P **P** **03 33 19.8 -1.1**
BOD pmax pmax
comp=Z,12nm,1.3s
**IPM Ipoh 46.68 259** *e*P **P** **03 33 23.4 -1.5**
comp=Z,15nm,0.9s
**KULM Kulim 46.75 260** *e*P **P** **03 33 24.8 -0.6**
comp=Z,36nm,1.2s
**ZAK Zakamensk 47.04 323** *e*P **P** **03 33 26.3 -1.0**
ZAK pmax pmax
comp=Z,6.0nm,1.6s
**MBWA Marble Bar 47.28 215** *e*P **P** **03 33 28.8 -0.6**
comp=Z,28nm,1.0s
**IRK Irkutsk 47.37 326** *e*P **P** **03 33 29.2 -0.5**
IRK pmax pmax
comp=Z,40nm,2.0s
**CGJI Cibinong 47.42 242** P **P** **03 33 28.8 -1.8**
comp=Z,112nm,1.0s
**TLY Talaya 47.44 325** *e*P **P** **03 33 29.0 -1.3**
TLY pmax pmax
comp=Z,8.0nm,1.0s
TLY MLR MLR
comp=Z,397nm,17.0s
**MDSI Maura Dua 47.63 246** P **P** **03 33 33.6 +1.3**
comp=Z,20nm,0.9s
**KASI Kota Agung 47.88 244** P **P** **03 33 33.8 -0.3**
comp=Z,92nm,1.2s
**MNAI Manna 48.63 247** *e*P **P** **03 33 38.2 -1.8**
**MOY Mondy 48.90 324** *e*P **P** **03 33 42.7 +1.0**
**MNSI Mandailing Nat 49.40 255** P **P** **03 33 46.7 +0.8**
comp=Z,34nm,0.9s
**XMIS Christmas Isla 49.58 238** *e*P **P** **03 33 46.1 -1.2**
comp=Z,125nm,0.6s
**SISI Saibi 50.72 253** P **P** **03 33 56.4 +0.6**
comp=Z,104nm,0.7s
**GSI Gunungsitoli 51.05 256** P **P** **03 33 58.9 +0.5**
comp=Z,62nm,0.9s
**GSI Gunungsitoli 51.05 256** *e*P **P** **03 33 58.5 +0.1**
comp=Z,34nm,0.6s
GSI *e*PcP **PcP** **03 35 14.1 +0.4**
**BILL Bilibino 51.26 9**↑ *e*P **P** **03 34 00.2 +1.1**
BILL pmax pmax
comp=Z,18nm,1.0s
**BBOO Buckleboo 51.83 191** *e*P **P** **03 34 03.7 -0.1**
comp=Z,60nm,0.6s
**FORT Forrest 51.98 200** *e*P **P** **03 34 03.9 -1.1**
**CAN Canberra 53.37 178** *e*P **P** **03 34 14.9 -0.2**
CAN pmax pmax
comp=Z,66nm,1.7s
**CAN Canberra 53.37 178** *e*P **P** **03 34 14.9 -0.2**
comp=Z,66nm,1.7s
**TAPN Taplejung 54.69 291** *e*P **P** **03 34 26.1 +0.6**
**ODAN Odare 55.01 290** *e*P **P** **03 34 28.1 +0.4**
comp=Z,18nm,0.7s
**WMQ Urumqi 55.29 311** P **P** **03 34 31.0 +1.8**
WMQ S **S** **03 42 09.0 0.0**
WMQ SS **SS** **03 45 55.0 +1.1**
WMQ PMZ
comp=Z,10.0nm,0.9s
WMQ LN
comp=Z,250nm,16.0s
WMQ LE
comp=Z,220nm,20.0s
WMQ LZ
comp=Z,230nm,20.0s
**RAMN Ramite 55.71 291** *e*P **P** **03 34 33.5 +0.8**
**GUN Gumba 56.27 292** *e*P **P** **03 34 37.5 +0.6**
**PKI Pulchoki 56.72 291** *e*P **P** **03 34 40.1 +0.1**
comp=Z,12nm,0.8s
**PKIN Phulchoki 56.73 291** *e*P **P** **03 34 40.4 +0.4**
**GKN Gorkha 57.36 292** *e*P **P** **03 34 44.4 0.0**
**DANN Dangsing 58.11 292** *e*P **P** **03 34 50.0 +0.3**
**KOLN Koldanda 58.30 292** *e*P **P** **03 34 51.2 +0.2**
comp=Z,8.1nm,0.7s
**ZAA0 Zalesovo Array 58.91 322** *e*P **P** **03 34 53.5 -1.1**
**ZALV Zalesovo Beam 58.91 322** P **P** **03 34 54.2 -0.3**
comp=Z,19nm,0.7s,baz=107,slow=7.4,SNR=76
ZALV LR LR 04 00 52.0
comp=Z,274nm,19.9s,baz=68,slow=36
**ZALV Zalesovo Beam 58.91 322** *i*P **P** **03 34 53.9 -0.6**
ZALV pmax pmax
comp=Z,19nm,0.7s
**MK01 Makanchi Array 59.42 314** *e*P **P** **03 34 57.5 -0.8**
**MK31 Makanchi Array 59.42 314** *i*P **P** **03 34 58.7 +0.4**
MK31 pmax pmax
comp=Z,11nm,0.8s
**MKAR Makanchi Array 59.42 314** P **P** **03 34 58.1 -0.1**
comp=Z,9.5nm,0.6s,baz=91,slow=9.3,SNR=68
**MKAR Makanchi Array 59.42 314** *i*P **P** **03 34 58.5 +0.2**
MKAR pmax pmax
comp=Z,10.0nm,0.6s
**MAKZ Makanchi 59.64 314** *e*P **P** **03 35 00.3 +0.6**
**NVS Novosibirsk 60.00 323** *e*P **P** **03 35 01.2 -0.8**
NVS pmax pmax
comp=E,6.0nm,0.7s
NVS pmax pmax
comp=Z,14nm,0.7s
NVS pmax pmax
comp=N,5.0nm,0.8s
**CAST Castle Rocks 61.02 27** *e*P **P** **03 35 10.4 +1.5**
comp=N,7.6nm,0.8s
**PDGK Podgornoye 61.19 310** P **P** **03 35 10.8 +0.5**
PDGK pmax pmax
comp=Z,14nm,0.8s
**BPAW Bear Paw Mtn. 61.70 26** *e*P **P** **03 35 14.7 +1.3**
comp=Z,15nm,1.2s
**TRF Thorofare Moun 61.80 27** *e*P **P** **03 35 15.3 +1.0**
comp=Z,21nm,1.3s
**MLY Manley 62.07 25** *e*P **P** **03 35 17.3 +1.4**
comp=Z,8.8nm,0.9s
**COLD Coldfoot 62.95 23** *e*P **P** **03 35 22.3 +0.6**
comp=Z,38nm,2.1s
**WRH Wod River Hil 63.01 26** *e*P **P** **03 35 22.5 +0.4**
comp=Z,10nm,1.0s
**MDM Murphy Dome 63.08 26** *e*P **P** **03 35 24.5 +1.9**
comp=Z,11nm,1.3s
**COLA College 63.21 26** *e*P **P** **03 35 24.7 +1.2**
COLA pmax pmax
comp=Z,5.0nm,0.6s
**COLA College 63.21 26** *e*P **P** **03 35 24.6 +1.2**
comp=Z,4.6nm,0.6s
**IL1 Eielson Array 63.59 26** *e*P **P** **03 35 25.1 -0.8**
**ILAR Eielson Array 63.59 26** P **P** **03 35 25.2 -0.7**
comp=Z,2.8nm,0.9s,baz=260,slow=5.3,SNR=25
ILAR LR LR 04 01 33.1
comp=Z,181nm,20.1s,baz=270,slow=34
**PAX Paxson 63.81 28** *e*P **P** **03 35 28.2 +0.6**
PAX pmax pmax
comp=Z,4.0nm,0.7s
**PAX Paxson 63.81 28** *e*P **P** **03 35 28.1 +0.6**
comp=Z,3.8nm,0.7s
**KSH Kashi 63.88 306** *e*P **P** **03 35 31.4 +2.9**
KSH *ep*P **pP** **03 35 47.0 +2.7**
KSH *e*ScP 03 40 02.1
KSH S **S** **03 44 00.7 +0.8**
KSH sS **sS** **03 44 28.5 +2.0**
KSH ScS **SKSac** **03 45 15.1 -2.4**
KSH PMZ
comp=Z,5.0nm,0.6s
KSH PMZ
comp=Z,130nm,7.0s
KSH LN
comp=Z,470nm,14.8s
KSH LE
comp=Z,100nm,9.5s
KSH LZ
comp=Z,190nm,5.9s
**FYU Fort Yukon 64.67 24** *e*P **P** **03 35 34.8 +1.8**
comp=Z,72nm,1.6s
**AAK Ala-Archa 64.86 309**↑ *e*P **P** **03 35 33.5 -1.4**
AAK pmax pmax
comp=Z,25nm,1.6s
**AAK Ala-Archa 64.86 309** *e*P **P** **03 35 34.0 -0.9**
comp=Z,39nm,0.3s
**SFK Sufi-Kurgan 65.75 306** P **P** **03 35 40.4 -0.4**
SFK pmax pmax
comp=Z,5.0nm,0.9s
**OTUK Ortayu 66.22 315** P **P** **03 35 43.8 +0.4**
OTUK pmax pmax
comp=Z,30nm,1.0s
**DAWY Dawson 66.67 27** *e*P **P** **03 35 47.6 +1.5**
**CHKZ Chkalovo 67.25 321** P **P** **03 35 48.8 -1.0**
**BVA0 Borovoye Array 67.39 321** P **P** **03 35 49.9 -0.8**
BVA0 pmax pmax
comp=Z,31nm,0.8s
**BRVK Borovoye 67.45 321** *ce*P **P** **03 35 50.7 -0.4**
BRVK pmax pmax
comp=Z,31nm,1.0s
**BRVK Borovoye 67.45 321** P **P** **03 35 51.7 +0.6**
comp=Z,196nm,0.7s,SNR=7.9
**BRVK Borovoye 67.45 321** *e*P **P** **03 35 50.7 -0.4**
comp=Z,22nm,0.7s
**KK31 Karatay Array 67.75 310** *i*P **P** **03 35 53.2 -0.1**
KK31 pmax pmax
comp=Z,15nm,0.9s
**KKAR Karatay Array 67.75 310** *e*P **P** **03 35 52.9 -0.3**
KKAR pmax pmax
comp=Z,13nm,0.8s
**KKAR Karatay Array 67.75 310** *e*P **P** **03 35 52.9 -0.3**
comp=Z,13nm,0.8s
**INK Inuvik 69.37 23** P **P** **03 36 02.9 +0.1**
comp=Z,4.7nm,0.9s,baz=266,slow=7.9,SNR=9.3
**INK Inuvik 69.37 23** *e*P **P** **03 36 02.9 +0.1**
INK pmax pmax
comp=Z,11nm,1.1s
**INK Inuvik 69.37 23** *e*P **P** **03 36 02.9 +0.1**
comp=Z,11nm,1.1s
**PPT Papeete 72.08 116** LR LR 04 00 51.4
comp=Z,470nm,19.9s,baz=307,slow=30
**PPT2 Papeete2 72.09 116** *e*LR LR 03 58 18.7
comp=Z,700nm,24.0s
**SVE Sverdlovsk 72.75 325**↑ *i*P **P** **03 36 23.6 +0.1**
SVE pmax pmax
comp=Z,37nm,1.1s
**ARU Arti 73.94 325** *c i*P **P** **03 36 29.9 -0.6**
ARU S **S** **03 45 57.5 -0.6**
ARU pmax pmax
comp=Z,37nm,1.2s
**ARU Arti 73.94 325** P **P** **03 36 30.2 -0.3**
comp=Z,144nm,0.9s,SNR=8.1
**ARU Arti 73.94 325** *e*P **P** **03 36 30.0 -0.5**
comp=Z,28nm,1.0s
**AB31 Akbulak array 74.28 317** P **P** **03 36 31.5 -1.1**
AB31 pmax pmax
comp=Z,4.0nm,0.5s
**ABKAR Akbulak array 74.28 317** *e*P **P** **03 36 31.2 -1.4**
**AKTO Aktyubinsk 75.30 319** P **P** **03 36 37.3 -1.2**
AKTO pmax pmax
comp=Z,4.0nm,0.7s
**YKA Yellowknife Ar 77.90 28** P **P** **03 36 53.3 +0.4**
comp=Z,3.7nm,0.8s,baz=288,slow=5.5,SNR=5.4
**GEYT Alibeck 77.90 306** P **P** **03 36 53.0 -0.5**
comp=Z,2.5nm,0.4s,baz=341,slow=8.6,SNR=4.1
GEYT LR LR 04 14 08.8
comp=Z,157nm,20.1s,baz=35,slow=38
**I04A Tendick Farm, 78.20 48** P **P** **03 36 56.4 +1.3**
baz=78
**KCPM Cahto Peak 78.34 52** *e*P **P** **03 36 58.3 +2.2**
**ALE Alert 78.45 4** P **P** **03 36 57.6 +1.9**
comp=Z,79nm,0.9s,SNR=5.4
**M02C Callahan 78.47 50** P **P** **03 36 57.5 +0.8**
baz=78
**N02D Trinity Center 78.68 51** P **P** **03 36 59.4 +1.7**
baz=79
**J05D Fort Rock, OR 79.16 48** P **P** **03 37 01.9 +1.5**
baz=79
**NSHM Saint Helena R 79.37 53** *e*P **P** **03 37 03.7 +2.2**
**O03D Paynes Creek 79.51 51** P **P** **03 37 03.4 +1.0**
baz=80
**D08A Wollman Farm, 79.74 44** *e*P **P** **03 37 05.0 +1.6**
comp=Z,158nm,3.0s
**C09A Chrisman Ranch 79.96 43** *e*P **P** **03 37 06.1 +1.5**
comp=Z,157nm,2.8s
**MOD Modoc 80.18 49** *e*P **P** **03 37 07.2 +1.2**
comp=Z,5.0nm,1.0s
**NEW Newport 80.57 42** *e*P **P** **03 37 09.2 +1.3**
NEW pmax pmax
comp=Z,129nm,2.8s
**NEW Newport 80.57 42** P **P** **03 37 09.0 +1.2**
baz=81
**NEW Newport 80.57 42** *e*P **P** **03 37 09.2 +1.3**
comp=Z,129nm,2.8s
**J08A Circle Bar Ran 81.08 47** *e*P **P** **03 37 12.4 +1.7**
comp=Z,12nm,1.1s
**LVZ Lovozero 81.15 339** *ce*P **P** **03 37 09.8 -0.7**
LVZ pmax pmax
comp=Z,50nm,1.2s
**LVZ Lovozero 81.15 339** *e*P **P** **03 37 10.2 -0.3**
**CMB Columbia Colle 81.18 53** *e*P **P** **03 37 12.7 +1.4**
**CMB Columbia Colle 81.18 53** *e*P **P** **03 37 12.7 +1.4**
**WVOR Wild Horse Val 81.22 48** *e*P **P** **03 37 12.3 +0.7**
WVOR pmax pmax
comp=Z,4.0nm,0.8s
**WVOR Wild Horse Val 81.22 48** *e*P **P** **03 37 12.3 +0.7**
comp=Z,4.3nm,0.8s
**TMCR Tamitsa 81.53 335** *e*P **P** **03 37 11.9 -0.6**
TMCR pmax pmax
comp=Z,36nm,0.7s
**APA Apatity 81.72 339**↑ *i*P **P** **03 37 15.0 +1.5**
**BSMT Bassoo Peak 82.19 42** *e*P **P** **03 37 17.9 +1.2**
**KLMR Klimovskoe 82.26 332** *e*P **P** **03 37 15.7 -0.7**
KLMR pmax pmax
comp=Z,52nm,1.3s
**PKM Peak Mountain 82.52 56** P **P** **03 37 20.0 +1.4**
baz=83
**KEV Kevo 82.61 342** *e*P **P** **03 37 18.1 0.0**
**KEV Kevo 82.61 342** *e*P **P** **03 37 18.1 0.0**
**NV01 Mina Array Sit 82.64 52** *e*P **P** **03 37 20.3 +1.1**
**NVAR Mina Array Bea 82.64 52** P **P** **03 37 20.3 +1.1**
comp=Z,3.9nm,0.9s,baz=263,slow=6.9,SNR=19
NVAR LR LR 04 07 18.2
comp=Z,292nm,20.6s,baz=258,slow=31
**VES Vestal, Richgr 82.81 55** P **P** **03 37 20.3 +0.4**
baz=83
**MFID Camas Ranch 82.90 47** *e*P **P** **03 37 21.3 +0.9**
comp=Z,6.6nm,1.0s
**UOSS Wadi Hilu 82.91 294** *e*P **P** **03 37 20.6 0.0**
comp=Z,17nm,1.0s
**HAMF Hammerfest 83.02 344** *e*P **P** **03 37 20.9 +0.7**
**ARA0 ARCESS Array S 83.17 342** *e*P **P** **03 37 21.1 +0.1**
**ARCES ARCESS Array B 83.17 342** P **P** **03 37 21.6 +0.6**
comp=Z,35nm,0.8s,baz=62,slow=5.5,SNR=67
ARCES LR LR 04 17 47.7
comp=Z,238nm,21.8s,baz=70,slow=38
**ARE0 ARCESS Array S 83.17 342** *e*P **P** **03 37 21.2 +0.2**
ARE0 IAmb IAmb 03 37 22.2
comp=Z,53nm,0.9s
**ISA Isabella 83.34 55** P **P** **03 37 23.4 +0.7**
baz=83
**HLID Hailey 83.83 46** P **P** **03 37 25.7 +0.6**
baz=84
**EDW2 Edwards Air Fo 83.95 55** P **P** **03 37 26.3 +0.4**
baz=84
**MPMC Manual Prospec 83.98 54** P **P** **03 37 27.0 +0.9**
baz=84
**LRMC Laurel Mountai 84.00 55** P **P** **03 37 27.1 +1.0**
baz=84
**KTK1 Kautokeino 84.13 342** *e*P **P** **03 37 26.2 +0.2**
**ELK Elko 84.17 49** *e*P **P** **03 37 28.7 +1.7**
ELK pmax pmax
comp=Z,4.0nm,0.9s
**ELK Elko 84.17 49** *e*P **P** **03 37 28.7 +1.7**
comp=Z,3.9nm,0.9s
**HRY Holter Researc 84.47 43** *e*P **P** **03 37 29.8 +1.5**
**TPNV Topopah Spring 84.65 53** *e*P **P** **03 37 30.8 +1.3**
TPNV pmax pmax
comp=Z,15nm,1.5s
**TPNV Topopah Spring 84.65 53** P **P** **03 37 30.5 +1.0**
baz=85
**TPNV Topopah Spring 84.65 53** *e*P **P** **03 37 30.8 +1.3**
comp=Z,15nm,1.5s
**R11A Troy Canyon, C 84.69 51** P **P** **03 37 30.7 +1.1**
baz=85
**GSC Goldstone 84.74 55** P **P** **03 37 30.2 +0.4**
baz=85
**TRO Tromso 84.92 344** *e*P **P** **03 37 30.2 +0.3**
TRO IAmb IAmb 03 37 31.4
comp=Z,44nm,0.9s
**MURC Murrieta 84.97 56** P **P** **03 37 32.3 +1.3**
baz=85
**BOZ Bozeman (W) 84.98 44** *e*P **P** **03 37 32.4 +1.5**
BOZ pmax pmax
comp=Z,3.0nm,0.7s
**BOZ Bozeman (W) 84.98 44** P **P** **03 37 32.0 +1.1**
baz=85
**BOZ Bozeman (W) 84.98 44** *e*P **P** **03 37 32.4 +1.5**
comp=Z,3.1nm,0.7s
**EGMT Eagleton 85.30 41** P **P** **03 37 33.4 +1.0**
baz=85
**EGMT Eagleton 85.30 41** *e*P P 03 37 35.7 +3.3
**QLMT Earthquake Lak 85.40 44** *e*P **P** **03 37 34.4 +1.2**
comp=Z,1.5nm,1.0s
**HVU Hansel Valley 85.57 48** *e*P **P** **03 37 35.8 +1.8**
**HVU Hansel Valley 85.57 48** *e*P **P** **03 37 35.8 +1.8**
**BGU Big Grassy Mou 85.68 48** *e*P **P** **03 37 36.0 +1.4**
**YMR Madison River 85.77 44** *e*P **P** **03 37 36.6 +1.6**
comp=Z,12nm,0.8s
**BELC Belle Mtn. Jos 85.79 56** P **P** **03 37 35.8 +0.6**
baz=86
**MONP Monument Peak 85.82 57** P **P** **03 37 36.3 +0.8**
baz=86
**IMW Indian Meadow 86.07 45** *e*P **P** **03 37 38.6 +2.0**
**DUG Dugway 86.09 49** *e*P **P** **03 37 38.0 +1.4**
**DUG Dugway 86.09 49** P **P** **03 37 37.3 +0.8**
baz=86
**DUG Dugway 86.09 49** *e*P **P** **03 37 38.0 +1.4**
**FXWY Fox Creek 86.11 45** *e*P **P** **03 37 38.5 +1.8**
**LDFC Landfair 86.13 54** *e*P **P** **03 37 37.8 +1.0**
comp=Z,7.2nm,0.9s
**FLWY Flagg Ranch 86.16 45** *e*P **P** **03 37 39.7 +2.8**
**TPAW Teton Pass 86.21 45** *e*P **P** **03 37 39.2 +1.9**
**MOOW Moose Ponds 86.25 45** *e*P **P** **03 37 39.1 +1.7**
MOOW *ep*P **pP** **03 37 49.0 -4.8**
**REDW Red Top Meadow 86.33 46** *e*P **P** **03 37 40.0 +2.3**
REDW *ep*P **pP** **03 37 52.5 -1.7**
**IRM Iron Mountain 86.41 55** P **P** **03 37 39.4 +1.3**
baz=86
**HWUT Hardware Ranch 86.47 47** *e*P **P** **03 37 39.9 +1.4**
**CCUT Cedar City 86.61 52** *e*P **P** **03 37 41.5 +2.2**
**NLU North Lily Min 86.71 49** *e*P **P** **03 37 41.5 +1.9**
**RLMT Red Lodge 86.72 43** P **P** **03 37 40.7 +1.1**
baz=87
**RLMT Red Lodge 86.72 43** *e*P **P** **03 37 41.9 +2.3**
**FFC Flin Flon 86.92 33** *e*P **P** **03 37 39.8 -0.3**
FFC pmax pmax
comp=Z,17nm,1.2s
**FFC Flin Flon 86.92 33** *e*P **P** **03 37 39.8 -0.3**
comp=Z,17nm,1.2s
**STEI Steigen 87.07 344** *e*P **P** **03 37 40.9 +0.4**
**KBZ Khabaz 87.10 315** P **P** **03 37 41.1 -0.1**
comp=Z,2.7nm,0.8s,baz=117,slow=2.3,SNR=5.0
KBZ LR LR 04 19 28.0
comp=Z,258nm,20.8s,baz=63,slow=38
**MSU Marysvale 87.15 50** *e*P **P** **03 37 42.9 +1.0**
MSU pmax pmax
comp=Z,3.0nm,1.1s
**MSU Marysvale 87.15 50** *e*P **P** **03 37 42.9 +1.0**
comp=Z,3.1nm,1.1s
**FINES FINESS Array B 87.64 336** P **P** **03 37 42.2 -1.3**
comp=Z,13nm,0.7s,baz=76,slow=4.6,SNR=85
FINES LR LR 04 20 27.8
comp=Z,137nm,19.6s,baz=62,slow=38
**WUAZ Wupatki 88.84 53** P **P** **03 37 51.5 +1.6**
baz=89
**WUAZ Wupatki 88.84 53** *e*P **P** **03 37 51.9 +2.0**
**VSU Vasula 89.08 333**↓ *i*P **P** **03 37 48.6 -1.7**
VSU pmax pmax
comp=Z,49nm,1.6s
**O20A White River Ci 89.36 48** P **P** **03 37 53.0 +0.7**
baz=89
**O20A White River Ci 89.36 48** *e*P **P** **03 37 54.0 +1.7**
**PV10 Paradox Valley 89.49 50** *e*P **P** **03 37 54.9 +1.9**
**K22A Casper 89.52 45** P **P** **03 37 55.1 +2.1**
baz=90
**MVCO Mesa Verde 90.34 51** P **P** **03 37 58.1 +1.1**
baz=90
**MVCO Mesa Verde 90.34 51** *e*P **P** **03 37 59.2 +2.3**
**NSS Namsos 90.45 342** *e*P **P** **03 37 56.5 0.0**
**TUC Tucson 90.48 56** *e*P **P** **03 38 00.1 +2.6**
**TUC Tucson 90.48 56** *e*P **P** **03 38 00.1 +2.6**
**RSSD Black Hills 90.53 43** *e*P **P** **03 37 58.6 +0.9**
**RSSD Black Hills 90.53 43** *e*P **P** **03 37 58.6 +0.9**
**H25A Fruitdale 90.59 42** P **P** **03 37 58.4 +0.6**
baz=91
**N23A Red Feather La 90.65 46** P **P** **03 37 59.9 +1.5**
baz=91
**N23A Red Feather La 90.65 46** *e*P **P** **03 37 60.0 +1.5**
**I25A Rochford 90.77 43** P **P** **03 37 59.5 +0.7**
baz=91
**B28A Dugan Ranch, T 90.79 38** P **P** **03 37 59.8 +1.3**
baz=91
**G26A Maurine 90.92 41** P **P** **03 38 00.1 +0.8**
baz=91
**J25A Sunshine Ranch 91.01 43** P **P** **03 38 00.5 +0.8**
baz=91

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| F27A | Lemmon | 91.01 | 41 | P | P | 03 38 00.5 | +0.8 |
| | baz=91 | | | | | | |
| E27A | Carson | 91.03 | 40 | P | P | 03 38 01.1 | +1.4 |
| | baz=91 | | | | | | |
| NACGM | Naroch | 91.08 | 330 | e | P | 03 37 58.0 | -1.7 |
| C28A | Hausauer Farms | 91.13 | 38 | P | P | 03 38 00.2 | +0.1 |
| | baz=91 | | | | | | |
| A29A | Manning Farm, | 91.21 | 37 | P | P | 03 38 01.2 | +0.8 |
| | baz=91 | | | | | | |
| G27A | Dupree | 91.30 | 41 | P | P | 03 38 02.0 | +1.0 |
| | baz=91 | | | | | | |
| S22A | 4UR Ranch, Cre | 91.34 | 49 | P | P | 03 38 03.2 | +1.5 |
| | baz=91 | | | | | | |
| ISCO | Idaho Springs | 91.34 | 47 | eP | P | 03 38 03.6 | +1.9 |
| ISCO | Idaho Springs | 91.34 | 47 | P | P | 03 38 03.3 | +1.6 |
| | baz=91 | | | | | | |
| ISCO | Idaho Springs | 91.34 | 47 | eP | P | 03 38 03.6 | +1.9 |
| I27A | Quinn | 91.83 | 42 | P | P | 03 38 03.7 | +0.2 |
| | baz=92 | | | | | | |
| D29A | Pettibone, Tap | 91.92 | 39 | P | P | 03 38 04.7 | +0.9 |
| | baz=92 | | | | | | |
| B30A | Myrvik Farm, E | 91.96 | 37 | P | P | 03 38 04.9 | +0.9 |
| | baz=92 | | | | | | |
| AKASG | Malin Array Be | 92.17 | 326 | LR | LR | 04 23 24.0 | |
| | comp=Z,164nm,19.4s,baz=30,slow=38 | | | | | | |
| C30A | Mose, Pekin | 92.25 | 38 | P | P | 03 38 06.1 | +0.8 |
| | baz=92 | | | | | | |
| SDCO | Great Sand Dun | 92.29 | 49 | P | P | 03 38 06.7 | +0.6 |
| | baz=92 | | | | | | |
| SDCO | Great Sand Dun | 92.29 | 49 | eP | P | 03 38 07.6 | +1.5 |
| B31A | Greenbush Farm | 92.36 | 37 | P | P | 03 38 05.8 | 0.0 |
| | baz=92 | | | | | | |
| I28A | Midland | 92.42 | 42 | P | P | 03 38 06.8 | +0.6 |
| | baz=92 | | | | | | |
| J28A | Allard Ranch, | 92.66 | 43 | P | P | 03 38 08.0 | +0.7 |
| | baz=93 | | | | | | |
| ANMO | Albuquerque | 92.77 | 52 | ceP | P | 03 38 10.4 | +2.2 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,2.5s | | | | | | |
| ANMO | Albuquerque | 92.77 | 52 | eP | P | 03 38 09.9 | +1.7 |
| B32A | Ashes, Strandq | 93.01 | 37 | P | P | 03 38 09.5 | +0.7 |
| | baz=93 | | | | | | |
| Q26A | Hugo | 93.19 | 47 | P | P | 03 38 11.4 | +1.4 |
| | baz=93 | | | | | | |
| NB2 | NORSAR Subarra | 93.28 | 340 | P | P | 03 38 08.4 | -1.4 |
| | comp=Z,27nm,1.7s,baz=55,slow=5.1 | | | | | | |
| NB2 | NORSAR Subarra | 93.28 | 340 | P | P | 03 38 08.4 | -1.4 |
| | baz=55,slow=5.1 | | | | | | |
| NOA | NORSAR Array B | 93.28 | 340 | P | P | 03 38 08.7 | -1.1 |
| | comp=Z,2.4nm,0.8s,baz=46,slow=4.5,SNR=8.8 | | | | | | |
| NOA | | | | PP | PP | 03 41 52.3 | -1.1 |
| | comp=Z,0.7nm,0.8s,baz=39,slow=7.5,SNR=3.7 | | | | | | |
| NOA | | | | LR | LR | 04 24 19.6 | |
| | comp=Z,118nm,20.2s,baz=45,slow=38 | | | | | | |
| T25A | Trinidad | 93.34 | 49 | P | P | 03 38 12.3 | +1.5 |
| | baz=93 | | | | | | |
| R26A | Arlington | 93.51 | 48 | P | P | 03 38 12.5 | +1.0 |
| | baz=94 | | | | | | |
| S26A | Kim | 93.80 | 48 | P | P | 03 38 13.8 | +0.9 |
| | baz=94 | | | | | | |
| O28A | Krutsinger Ran | 93.84 | 46 | P | P | 03 38 13.7 | +0.8 |
| | baz=94 | | | | | | |
| T26A | Comanche Natio | 93.91 | 49 | P | P | 03 38 14.2 | +0.8 |
| | baz=94 | | | | | | |
| D34A | Park Rapids | 94.48 | 37 | P | P | 03 38 15.9 | +0.4 |
| | baz=94 | | | | | | |
| H32A | Carlson Farm, | 94.51 | 40 | P | P | 03 38 16.5 | +0.7 |
| | baz=94 | | | | | | |
| MNTX | Cornudas Mount | 94.93 | 54 | P | P | 03 38 19.4 | +1.4 |
| | baz=95 | | | | | | |
| MNTX | Cornudas Mount | 94.93 | 54 | eP | P | 03 38 20.2 | +2.2 |
| BRTR | Keskin Array B | 95.07 | 315 | P | P | 03 38 17.3 | -1.4 |
| | comp=Z,1.5nm,0.8s,baz=52,slow=3.1,SNR=5.3 | | | | | | |
| BRTR | | | | LR | LR | 04 25 09.4 | |
| | comp=Z,56nm,21.4s,baz=51,slow=38 | | | | | | |
| BRTR | Keskin Array B | 95.07 | 315 | i P | P | 03 38 16.7 | -1.9 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| R30A | Dighton | 95.73 | 47 | P | P | 03 38 22.4 | +0.8 |
| | baz=96 | | | | | | |
| VNDA | Vanda | 96.03 | 177 | P | P | 03 38 21.4 | -0.4 |
| | comp=Z,0.7nm,0.9s,baz=341,slow=4.2,SNR=4.3 | | | | | | |
| TXAR | Lajitas Array | 97.28 | 56 | P | Pdif | 03 38 29.0 | +0.1 |
| | comp=Z,0.5nm,1.0s,baz=290,slow=5.2,SNR=4.5 | | | | | | |
| TXAR | | | | PKKPbc | PKKPbc | 03 55 07.4 | 0.0 |
| | comp=Z,0.4nm,0.8s,baz=138,slow=6.3,SNR=5.5 | | | | | | |
| TXAR | | | | LR | LR | 04 17 27.2 | |
| | comp=Z,131nm,19.7s,baz=0.0,slow=32 | | | | | | |
| CSS | Prodhromos | 97.56 | 310 | eP | P | 03 38 29.5 | -0.3 |
| | comp=Z,9.0nm,1.4s | | | | | | |
| VYHS | Vyhne | 98.91 | 328 | eP | Pdif | 03 38 36.0 | +0.4 |
| VYHS | Vyhne | 98.91 | 328 | PDIF | Pdif | 03 38 36.0 | +0.4 |
| BRG | Berggiesshubel | 99.63 | 332 | ePKP | PP | 03 42 41.9 | -0.6 |
| | comp=Z,32nm,2.0s | | | | | | |
| CLL | Collm | 99.73 | 333 | eP | Pdif | 03 38 37.0 | -2.2 |
| CLL | | | | e | | 03 42 42.0 | |
| KHC | Kasperske Hory | 101.03 | 331 | ePP | PP | 03 42 54.0 | +0.8 |
| ESDC | Sonseca Array | 116.16 | 335 | PP | PP | 03 44 29.7 | -13 |
| | comp=Z,0.1nm,0.4s,baz=16,slow=5.2,SNR=3.0 | | | | | | |
| SNAA | Sanae | 123.72 | 191 | P | PKPdf | 03 43 51.8 | -0.3 |
| SNAA | Sanae | 123.72 | 191 | ePKIKP | PKPdf | 03 43 51.5 | -0.6 |
| SNAA | Sanae | 123.72 | 191 | ePKPdf | PKPdf | 03 43 51.5 | -0.6 |
| TAM | Tamanrasset | 124.26 | 316 | ePKIKP | PKPdf | 03 43 55.5 | +0.7 |
| TAM | Tamanrasset | 124.26 | 316 | ePKPdf | PKPdf | 03 43 55.5 | +0.7 |
| VNA2 | Neumayer--Watz | 125.14 | 190 | P | PKPdf | 03 43 55.1 | +0.3 |
| | baz=5.5,slow=0.1 | | | | | | |
| VNA3 | Neumayer Olymp | 125.23 | 189 | P | PKPdf | 03 43 55.2 | +0.2 |
| VNA1 | Neumayer--Stat | 125.53 | 190 | P | PKPdf | 03 43 54.1 | -1.3 |
| OTAV | Otavalo | 131.97 | 72 | ePKPdf | PKPdf | 03 44 10.3 | +0.2 |
| TORD | Torodi Ar. Bea | 133.44 | 310 | PKP | PKPdf | 03 44 12.4 | +0.2 |
| | comp=Z,0.6nm,0.5s,baz=81,slow=0.6,SNR=20 | | | | | | |
| TORD | | | | PP | PP | 03 46 36.0 | -3.7 |
| | comp=Z,1.0nm,0.9s,baz=41,slow=5.4,SNR=4.6 | | | | | | |
| TORD | | | | SKPbc | SKPbc | 03 47 33.8 | -2.0 |
| | comp=Z,1.1nm,0.8s,baz=42,slow=2.6,SNR=9.9 | | | | | | |
| DBIC | Dimbokro | 142.54 | 309 | PKhKP | PKPpre | 03 44 23.5 | |
| | comp=Z,3.4nm,0.6s,baz=32,slow=2.0,SNR=5.3 | | | | | | |
| LCO | Las Campanas | 144.26 | 114 | ePKPdf | PKPdf | 03 44 31.1 | -0.8 |
| LVC | Limon Verde | 146.41 | 103 | ePKPbc | PKPab | 03 44 37.9 | -0.2 |
| LPAZ | La Paz | 146.71 | 92 | PKPbc | PKPbc | 03 44 38.0 | -0.6 |
| | comp=Z,9.1nm,1.1s,baz=33,slow=0.8,SNR=18 | | | | | | |
| LPAZ | La Paz | 146.71 | 92 | PKP2 | PKPbc | 03 44 38.0 | -0.6 |
| SAML | Samuel | 149.55 | 76 | ePKPdf | PKPdf | 03 44 40.7 | -0.1 |
| SAML | | | | ePKPbc | PKPbc | 03 44 45.7 | +0.3 |

*ISCJB **09** 03:28:35.8±0.8, 18°.26N±0°.05×146°.9E±0°.2, h50km, mb4.3/15, Error ellipse: s-maj=25.9km s-min=7.2km az=5.8*
*NEIC **09** 03:28:39.6±1.7, 18°.22N×146°.75E, h65km±14km, mb4.4/5, Error ellipse: s-maj=23.9km s-min=7.1km az=84.0*
*IDC **09** 03:28:40.0±3.9, 18°.21N×146°.85E, h70km±34km, mb4.0/10, mb1 4.1/12, mb1mx3.8/41, mbtmp4.3/12, ML3.9/2, Error ellipse: s-maj=44.6km s-min=15.8km az=91.0*
**ISC 09 03:28:37.8**±1.0, **18°.27N**±0°.07×**146°.9E**±0°.2, **h50**km, **n19**, σ**0s.76**/20, **mb4.3**/15, **Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | Guam | 5.04 | 203 | P | Pn | 03 29 51.1 | +0.2 |
| | 4.8nm,0.3s,baz=180,slow=20,SNR=1.5 | | | | | | |
| GUMO | | | | S | Sn | 03 30 49.3 | +1.4 |
| | 21nm,0.3s,baz=180,slow=20,SNR=2.4 | | | | | | |
| MJAR | Matsushiro Arr | 19.74 | 339 | P | Pn | 03 33 04.6 | -0.7 |
| | 0.4nm,0.3s,baz=157,slow=11,SNR=3.9 | | | | | | |
| SIJI | Sorong | 24.44 | 221 | P | P | 03 33 51.9 | -0.2 |
| | 16nm,0.6s,baz=30,slow=8.0,SNR=6.3 | | | | | | |
| PMG | Port Moresby | 27.50 | 179 | eP | P | 03 34 20.1 | +0.3 |
| | 4.9nm,0.6s | | | | | | |
| USRK | Ussuriysk Ar. | 28.71 | 337 | P | P | 03 34 31.6 | +1.4 |
| | 2.5nm,0.6s,baz=134,slow=9.1,SNR=4.6 | | | | | | |
| COEN | Coen | 32.23 | 187 | eP | P | 03 35 01.3 | -0.3 |
| WRAB | Tennant Creek | 39.91 | 199 | eP | P | 03 36 06.8 | -0.3 |
| | 9.1nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 39.92 | 199 | P | P | 03 36 06.6 | -0.7 |
| | 2.1nm,0.6s,baz=26,slow=8.7,SNR=6.4 | | | | | | |
| ASAR | Alice Springs | 43.56 | 197 | P | P | 03 36 36.7 | -0.4 |
| | 1.2nm,0.5s,baz=19,slow=7.2,SNR=6.9 | | | | | | |
| ULN | Ulaanbaatar | 43.79 | 321 | eP | P | 03 36 38.9 | +0.1 |
| | 2.2nm,0.6s | | | | | | |
| SONM | Songino Array | 44.17 | 321 | P | P | 03 36 41.7 | -0.2 |
| | 0.8nm,0.4s,baz=138,slow=9.1,SNR=4.7 | | | | | | |
| MBWA | Marble Bar | 47.36 | 215 | eP | P | 03 37 06.2 | -0.9 |
| | 2.0nm,0.3s | | | | | | |
| ZALV | Zalesovo Beam | 59.03 | 322 | P | P | 03 38 32.4 | -0.1 |
| | 3.6nm,0.6s,baz=107,slow=7.6,SNR=10.0 | | | | | | |
| MKAR | Makanchi Array | 59.56 | 314 | P | P | 03 38 36.9 | +0.5 |
| | 1.9nm,0.7s,baz=90,slow=7.5,SNR=6.8 | | | | | | |
| ILAR | Eielson Array | 63.54 | 26 | P | P | 03 39 03.3 | +0.5 |
| | 0.5nm,0.8s,baz=250,slow=5.3,SNR=3.5 | | | | | | |
| BRVK | Borovoye | 67.57 | 321 | eP | P | 03 39 29.4 | +0.4 |
| | 1.7nm,0.4s | | | | | | |
| ABKAR | Akbulak array | 74.41 | 317 | eP | P | 03 40 09.6 | -1.0 |
| ARCES | ARCESS Array B | 83.23 | 342 | P | P | 03 40 59.5 | +0.9 |
| | 6.7nm,0.7s,baz=68,slow=6.0,SNR=16 | | | | | | |
| FINES | FINESS Array B | 87.73 | 336 | P | P | 03 41 20.0 | -1.1 |
| | 3.9nm,0.7s,baz=71,slow=4.9,SNR=14 | | | | | | |

*ISCJB **09** 03:29:57.7±1.6, 8°.2N±0°.2×82°.8W±0°.2, h5km±8km, mb3.6/2, Error ellipse: s-maj=45.8km s-min=10.4km az=137.7*
*IDC **09** 03:29:57.2±3.0, 8°.13N×82°.74W, h0km, mb3.7/2, mb1 4.0/3, mb1mx3.7/23, mbtmp3.8/3, ML3.6/1, Error ellipse: s-maj=131.3km s-min=43.1km az=28.0*
*CASC **09** 03:29:59.2±4.8, 8°.28N×82°.86W, h0km±24km, MD4.2*
**ISC 09 03:29:59.2**±2.4, **8°.2N**±0°.2×**82°.8W**±0°.2, **h10**km±12km, **n17**, σ**1s.15**/22, **2C, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ACR | Cerro Adams | 0.57 | 323 | eP | Pg | 03 30 10.2 | 0.0 |
| ACR | | | | eS | Sg | 03 30 17.0 | -0.7 |
| BUS | Buena Vista | 1.64 | 326 | ⇑eP | Pn | 03 30 27.9 | -0.5 |
| BUS | | | | eS | Sn | 03 30 49.9 | 0.0 |
| LCR2 | La Lucha 2 | 1.93 | 323 | ⇑iP | Pn | 03 30 32.6 | +0.3 |
| LCR2 | | | | eS | Sn | 03 30 56.4 | -0.3 |
| CGA2 | Cerro Gallo 2 | 2.43 | 318 | eP | Pn | 03 30 39.0 | -0.1 |
| CGA2 | | | | eS | Sn | 03 31 09.6 | +0.6 |
| JCR | Jicaral | 2.79 | 306 | eP | Pn | 03 30 43.0 | -1.0 |
| FORC | Fortuna | 2.90 | 321 | i P | Pn | 03 30 47.3 | +1.8 |
| FORC | | | | i S | Sb | 03 31 24.9 | -1.8 |
| CEDE | Laguna Cedeˆ–o | 2.94 | 321 | i P | Pn | 03 30 47.4 | +1.4 |
| CHPA | Chiripa | 3.04 | 318 | i P | Pn | 03 30 49.6 | +2.2 |
| AMAS | Alto Masis | 3.21 | 318 | i P | Pn | 03 30 51.6 | +1.7 |
| CUI | Cuipilapa | 3.36 | 317 | i P | Pn | 03 30 52.2 | +0.3 |
| NY14 | Universidad de | 3.62 | 313 | i P | Pn | 03 30 56.4 | +1.1 |
| LAPC | Finca la Perla | 3.63 | 315 | i P | Pn | 03 30 56.2 | +0.7 |
| CMIG | Matias Romero | 14.71 | 308 | Pn | Pn | 03 33 28.9 | +1.4 |
| | 0.3nm,0.3s,baz=132,slow=14,SNR=3.5 | | | | | | |
| ILAR | Eielson Array | 71.73 | 336 | P | P | 03 41 21.4 | +0.1 |
| | 0.6nm,0.9s,baz=114,slow=4.1,SNR=5.4 | | | | | | |
| TORD | Torodi Ar. Bea | 82.87 | 78 | P | P | 03 42 24.3 | -0.5 |
| | 0.9nm,1.0s,baz=268,slow=4.8,SNR=4.4 | | | | | | |
| ASAR | Alice Springs | 141.62 | 242 | PKP | PKPdf | 03 49 30.8 | -1.0 |
| | 0.8nm,0.8s,baz=96,slow=1.9,SNR=6.3 | | | | | | |
| WRA | Warramunga Arr | 142.20 | 248 | PKP | PKPdf | 03 49 32.3 | -0.6 |
| | 0.5nm,0.8s,baz=96,slow=3.4,SNR=3.5 | | | | | | |

*ISCJB **09** 04:01:44.1±0.4, 32°.23N±0°.02×115°.23W±0°.02, h8km±3km, Error ellipse: s-maj=3.1km s-min=2.7km az=19.6*
*NEIC **09** 04:01:46.4, 32°.22N×115°.25W, h9km, MD4.0(MEX), ML3.8(PAS), ML3.9(ECX), After ECX.*
*NEIC Felt at San Diego, California.*
*ECX **09** 04:01:46.4±0.5, 32°.22N×115°.26W, h9km, MD3.9, ML4.1*
*MEX **09** 04:01:47.3±0.6, 32°.29N×115°.19W, h21km±11km, MD4.0*
**ISC 09 04:01:45.2**±0.9, **32°.22N**±0°.02×**115°.25W**±0°.02, **h16**km±6km, **n65**, σ**1s.46**/98, **14C-4D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MBIG | Mexicali | 0.19 | 13 | eP | Pg | 04 01 50.3 | +0.5 |
| MBIG | | | | eS | Sg | 04 01 53.0 | +0.1 |
| MBIG | Mexicali | 0.19 | 13 | ⇑iP | Pb | 04 01 50.6 | +0.2 |
| CPBX | Cerro Prieto | 0.20 | 347 | ⇓eP | Pg | 04 01 50.3 | +0.2 |
| CPBX | | | | ⇑e | | 04 01 54.6 | |
| CPBX | | | | IAML | | 04 01 54.6 | |
| | comp=N,106µm,0.4s | | | | | | |
| CPBX | Cerro Prieto | 0.20 | 347 | eP | Pg | 04 01 50.2 | +0.2 |
| CPBX | | | | eS | Sg | 04 01 53.2 | -0.1 |
| EMSC | East Mesa | 0.56 | 23 | ⇑iP | Pg | 04 01 56.8 | +0.4 |
| SGL | Mount Signal | 0.59 | 317 | ⇓iP | Pg | 04 01 56.8 | -0.1 |
| COA | Coachella | 0.65 | 9 | ⇑iP | Pg | 04 01 57.9 | -0.1 |
| RDX | Rancho Dawling | 0.66 | 244 | ⇑iP | Pg | 04 01 58.4 | +0.3 |
| RDX | | | | eS | Sg | 04 02 06.8 | -0.1 |
| RDX | | | | IAML | | 04 02 08.8 | |
| | comp=N,7µm,0.2s | | | | | | |
| RDX | Rancho Dawling | 0.66 | 244 | eP | Pg | 04 01 58.4 | +0.3 |
| RDX | | | | eS | Sg | 04 02 06.8 | -0.1 |
| YMD | Yuma Desert | 0.68 | 61 | ⇑iP | Pg | 04 01 58.5 | -0.1 |
| YUH | Yuha Desert | 0.71 | 307 | ⇑iP | Pg | 04 01 58.6 | -0.5 |
| ECBX | El Chinero | 0.77 | 167 | ⇓eP | Pb | 04 01 59.6 | -0.5 |
| ECBX | | | | eS | Sb | 04 02 10.4 | +0.1 |
| RMX | La Rumorosa | 0.80 | 299 | ⇑eP | Pb | 04 02 00.4 | -0.5 |
| RMX | | | | eS | Sb | 04 02 10.6 | -0.9 |
| RMX | | | | IAML | | 04 02 11.9 | |
| | comp=N,7µm,0.4s | | | | | | |
| RMX | | | | e | | 04 02 11.9 | |
| RMX | La Rumorosa | 0.80 | 299 | eP | Pb | 04 02 00.3 | -0.5 |
| IBP | Imperial Bould | 0.84 | 302 | P | Pb | 04 02 00.8 | -0.6 |
| | baz=0.8 | | | | | | |
| IBP | | | | S | Sb | 04 02 12.0 | -0.6 |
| | baz=0.8 | | | | | | |
| IBP | Imperial Bould | 0.84 | 302 | ⇑eP | Pb | 04 02 00.9 | -0.6 |
| SWSC | Sam W. Stewart | 0.85 | 327 | P | Pb | 04 02 00.5 | -1.2 |
| | baz=0.9 | | | | | | |
| CRR | Carrizo Plain | 0.90 | 318 | i P | Pb | 04 02 01.4 | -1.1 |
| GLA | Glamis | 0.90 | 23 | P | Pb | 04 02 01.5 | -1.1 |
| | baz=0.9 | | | | | | |
| GLA | Glamis | 0.90 | 23 | ePg | Pb | 04 02 01.2 | -1.4 |
| GLA | | | | eSg | Sb | 04 02 13.0 | -1.4 |
| ZAX | El Zacaton | 1.12 | 231 | ⇑eP | Pb | 04 02 06.0 | -0.2 |
| SPIG | San Pedro Mart | 1.19 | 189 | eP | Pn | 04 02 07.0 | -0.4 |
| SPIG | | | | eS | Sb | 04 02 22.0 | -0.8 |
| SPIG | San Pedro Mart | 1.19 | 189 | eP | Pn | 04 02 07.0 | -0.4 |
| SPIG | | | | eS | Sb | 04 02 22.0 | -0.8 |
| SPX | San Pedro Mart | 1.19 | 189 | ⇓eP | Pn | 04 02 07.1 | -0.4 |
| SPX | | | | IAML | | 04 02 25.3 | |
| | comp=N,3µm,0.3s | | | | | | |
| SPX | | | | ⇑e | | 04 02 25.3 | |
| SPX | San Pedro Mart | 1.19 | 189 | eP | Pn | 04 02 07.1 | -0.4 |
| SPX | | | | eS | Sb | 04 02 22.0 | -0.7 |
| MONP | Monument Peak | 1.19 | 304 | P | Pn | 04 02 06.2 | -1.3 |
| | baz=1.2 | | | | | | |
| MONP | | | | S | Sb | 04 02 22.6 | -0.3 |
| | baz=1.2 | | | | | | |
| CBX | Cerro Bola | 1.20 | 275 | eP | Pn | 04 02 06.9 | -0.6 |
| CBX | | | | eS | Sb | 04 02 20.6 | -2.4 |
| CBX | Cerro Bola | 1.20 | 275 | ⇑eP | Pn | 04 02 06.9 | -0.6 |
| CBX | | | | IAML | | 04 02 25.4 | |
| | comp=N,5µm,0.5s | | | | | | |
| CBX | | | | IAML | | 04 02 25.5 | |
| | comp=E,5µm,0.5s | | | | | | |
| CBX | | | | ⇑e | | 04 02 25.5 | |
| CBX | Cerro Bola | 1.20 | 275 | eP | Pn | 04 02 06.9 | -0.6 |
| CBX | | | | eS | Sb | 04 02 20.6 | -2.4 |
| ECNX | Esteban Cantu | 1.28 | 244 | eP | Pn | 04 02 08.5 | 0.0 |
| BAR | Barrett | 1.29 | 291 | eP | Pn | 04 02 08.0 | -0.5 |
| BAR | Barrett | 1.29 | 291 | ePg | Pn | 04 02 07.9 | -0.7 |
| BAR | | | | eSg | Sb | 04 02 24.7 | -0.7 |
| PBX | Punta Banda | 1.34 | 250 | ⇑eP | Pn | 04 02 09.3 | 0.0 |
| PBX | Punta Banda | 1.34 | 250 | eP | Pn | 04 02 09.3 | 0.0 |
| Y12C | Blythe | 1.64 | 22 | P | Pn | 04 02 12.4 | -1.1 |
| | baz=1.7 | | | | | | |
| 109C | Camp Elliot, M | 1.70 | 294 | Sb | Sb | 04 02 37.1 | -0.2 |
| | baz=1.7 | | | | | | |
| PFO | Pinyon Flat Ob | 1.72 | 324 | P | Pn | 04 02 13.2 | -1.4 |
| | baz=1.7 | | | | | | |
| PFO | Pinyon Flat Ob | 1.72 | 324 | ePn | Pn | 04 02 13.1 | -1.4 |
| PFO | | | | eSg | Sb | 04 02 39.2 | +1.3 |
| IRM | Iron Mountain | 1.94 | 2 | P | Pn | 04 02 16.5 | -1.0 |
| | baz=1.9 | | | | | | |
| MURC | Murrieta | 2.14 | 310 | Sb | Sb | 04 02 50.8 | +0.8 |
| | baz=2.1 | | | | | | |
| BFSC | Mount Baldy Ra | 2.85 | 316 | Sb | Sb | 04 03 12.8 | +2.3 |
| | baz=2.9 | | | | | | |
| LDFC | Landfair | 2.85 | 2 | ePn | Pn | 04 02 30.8 | +0.6 |
| LDFC | | | | ePg | Pg | 04 02 40.7 | +0.7 |
| FMP | Fort Macarthur | 2.96 | 301 | Sb | Sb | 04 03 14.7 | +1.2 |
| | baz=3.0 | | | | | | |
| MWC | Mount Wilson | 3.09 | 311 | ePg | Pb | 04 02 39.8 | -0.1 |
| MWC | | | | eSg | Sb | 04 03 20.2 | +2.8 |
| PASC | Pasadena Art C | 3.14 | 309 | ePn | Pn | 04 02 34.9 | +0.9 |
| PASC | | | | ePg | Pb | 04 02 42.0 | +1.4 |
| PASC | | | | eSn | Sn | 04 03 12.5 | +1.3 |
| PASC | | | | eSg | Sb | 04 03 20.8 | +2.1 |
| DECC | Green Verdugo | 3.28 | 309 | Sb | Sb | 04 03 25.1 | +2.3 |
| | baz=3.3 | | | | | | |
| GSC | Goldstone | 3.34 | 338 | ePn | Pn | 04 02 38.4 | +1.6 |
| GSC | | | | ePg | Pg | 04 02 47.8 | -1.4 |
| EDW2 | Edwards Air Fo | 3.50 | 320 | Sb | Sb | 04 03 32.4 | +3.1 |
| | baz=3.5 | | | | | | |
| TUC | Tucson | 3.78 | 87 | ePn | Pn | 04 02 44.1 | +1.1 |
| TUC | | | | ePb | Pb | 04 02 52.3 | +0.7 |
| TUC | | | | ePg | Pg | 04 02 58.8 | +1.1 |
| TUC | | | | eSn | Sn | 04 03 29.4 | +2.2 |
| TUC | | | | eSg | Sg | 04 03 44.1 | -2.6 |
| SHPR | Sheep Range | 4.28 | 1 | ePn | Pn | 04 02 50.7 | +0.9 |
| SHPR | | | | eSg | Sg | 04 04 00.8 | -1.7 |
| ISA | Isabella | 4.36 | 323 | ePn | Pn | 04 02 53.3 | +2.5 |
| ISA | | | | ePg | Pb | 04 03 04.8 | +3.4 |
| ISA | | | | eSg | Sg | 04 04 03.4 | -1.7 |
| DAC | Darwin (Calif) | 4.49 | 335 | ePn | Pb | 04 02 59.2 | -4.5 |
| WUAZ | Wupatki | 4.60 | 43 | ePn | Pn | 04 02 56.1 | +1.7 |
| W18A | Petrified Fore | 5.43 | 56 | ePn | Pn | 04 03 06.8 | +1.1 |
| | comp=E,30nm,0.5s | | | | | | |
| CCUT | Cedar City | 5.54 | 16 | ePn | Pn | 04 03 08.7 | +1.5 |
| | comp=E,20nm,0.8s | | | | | | |
| CCUT | | | | ePg | Pg | 04 03 29.5 | -1.8 |
| CCUT | | | | eSg | Sg | 04 04 40.4 | -2.6 |
| R11A | Troy Canyon, C | 6.12 | 358 | ePn | Pn | 04 03 16.3 | +1.2 |
| | comp=E,4.6nm,0.4s | | | | | | |
| R11A | | | | ePg | Pg | 04 03 42.1 | -0.3 |
| R11A | | | | eSg | Sg | 04 04 57.3 | -4.3 |
| 121A | Cookes Peak, D | 6.32 | 85 | ePn | Pn | 04 03 18.7 | +0.8 |
| | comp=E,15nm,0.3s | | | | | | |
| 121A | | | | eSg | Sg | 04 05 04.6 | -3.5 |
| MSU | Marysvale | 6.76 | 21 | ePn | Pn | 04 03 28.8 | +4.8 |
| | comp=E,0.3nm,0.6s | | | | | | |
| MSU | | | | ePg | Pg | 04 03 50.5 | -4.1 |
| LAZ | Ladron | 7.13 | 70 | ePn | Pn | 04 03 30.4 | +1.4 |
| | comp=E,1.9nm,0.6s | | | | | | |
| LAZ | | | | ePg | Pg | 04 04 00.2 | -1.5 |
| LAZ | | | | eSg | Sg | 04 05 29.7 | -4.3 |
| MVCO | Mesa Verde | 7.46 | 46 | ePn | Pn | 04 03 36.5 | +2.9 |
| | comp=E,13nm,0.5s | | | | | | |
| LPM | Los Pinos Moun | 7.51 | 72 | ePn | Pn | 04 03 35.3 | +1.0 |
| | comp=E,2.3nm,0.4s | | | | | | |
| SRU | San Rafael | 7.88 | 28 | ePn | Pn | 04 03 40.2 | +1.0 |
| | comp=E,9.6nm,0.6s | | | | | | |
| PV01 | Paradox Valley | 8.04 | 41 | ePn | Pn | 04 03 43.6 | +2.0 |
| | comp=E,639nm,0.6s | | | | | | |
| PV04 | Paradox Valley | 8.05 | 38 | ePn | Pn | 04 03 46.2 | +4.5 |
| MNTX | Cornudas Mount | 8.40 | 91 | ePn | Pn | 04 03 47.3 | +1.0 |
| | comp=E,1.5nm,0.4s | | | | | | |
| MNTX | | | | eSn | Sn | 04 05 22.6 | +1.7 |

*IDC **09** 04:03:02.3±2.1, 2°.22N×128°.05E, h0km, mb3.8/4, mb1 4.0/4, mb1mx3.6/36, mbtmp3.8/4, Error ellipse: s-maj=111.9km s-min=24.0km az=71.0*
*DJA **09** 04:03:37.3±0.9, 1°N±4°×12°7E±°, h27km±12km, M4.7/20, mb4.8/9, mB5.3/6, MLv4.6/20, Mw(mB)4.7/6*
**ISC 09 04:03:04.5**±1.3, **2°.26N**±0°.09×**127°.90E**±0°.07, **h10**km, **n17**, σ**2s.48**/15, **mb3.9**/3, **Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LBMI | Labuha | 2.90 | 188 | P | Pg | 04 04 07.4 | +7.2 |
| LBMI | | | | S | Sb | 04 04 31.3 | -0.7 |
| KMSI | Cibinong | 4.26 | 247 | P | Pg | 04 04 26.4 | +0.1 |
| KMSI | | | | S | Sn | 04 05 05.4 | +6.0 |
| SANI | Sanana | 4.69 | 204 | P | Pb | 04 04 29.1 | +2.2 |
| SANI | | | | S | Sn | 04 05 08.9 | -1.0 |
| NLAI | Namlea | 5.52 | 188 | P | Pb | 04 04 40.7 | -0.3 |
| MSAI | Masohi | 5.66 | 170 | P | Pb | 04 04 45.4 | +2.0 |
| AAI | Ambon | 5.91 | 177 | P | Pb | 04 04 50.1 | +2.4 |
| LUWI | Luwuk | 6.09 | 237 | P | Pb | 04 04 48.6 | -2.2 |
| MRSI | Marisa | 6.22 | 254 | P | Pb | 04 04 52.9 | -0.1 |
| | 103nm,0.7s,0.4nm | | | | | | |
| APSI | Ampana | 7.00 | 243 | P | Pb | 04 05 03.4 | -2.9 |
| | 102nm,0.4s,2µm0.7nm | | | | | | |
| BNDI | Bandanaira | 7.02 | 163 | P | Pb | 04 05 08.3 | +1.6 |
| | 106nm,0.7s,0.6nm | | | | | | |
| RKPI | Ransiki, Papua | 7.30 | 121 | P | Pg | 04 05 25.2 | +0.7 |
| | 136nm,1.1s,8µm0.7nm | | | | | | |
| KDI | Kendari | 8.12 | 221 | P | Pb | 04 05 15.8 | -10 |
| | 36nm,0.8s,6µm0.2nm | | | | | | |
| MPSI | Mapaga | 8.23 | 257 | P | Pb | 04 05 21.8 | -5.4 |
| | 23nm,0.7s,675nm0.1nm | | | | | | |
| FITZ | Fitzroy Crossi | 20.35 | 186 | P | P | 04 07 39.5 | -1.8 |
| | 2.1nm,0.5s,baz=15,slow=9.6,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 22.95 | 164 | P | P | 04 08 07.5 | -1.7 |
| | 2.5nm,0.6s,baz=344,slow=9.7,SNR=10 | | | | | | |
| ASAR | Alice Springs | 26.42 | 168 | P | P | 04 08 39.1 | -2.5 |
| | 0.4nm,0.5s,baz=344,slow=7.2,SNR=8.0 | | | | | | |
| MKAR | Makanchi Array | 59.43 | 325 | P | P | 04 13 09.0 | +1.5 |
| | 0.4nm,0.3s,baz=120,slow=7.3,SNR=5.7 | | | | | | |

*ISCJB **09** 04:23:58.8±0.9, 42°.55N±0°.06×144°.27E±0°.05, h59km±10km, Error ellipse: s-maj=10.8km s-min=5.7km az=158.0*
*JMA **09** 04:23:59.4±0.1, 42°.60N×144°.22E, h62km±2km, M3.1*
*JMA Felt I J1.*
*SKHL **09** 04:24:00.0±0.0, 42°.35N×144°.50E, h51km±6km, mb4.5/2*
**ISC 09 04:23:59.2**±1.7, **42°.52N**±0°.08×**144°.25E**±0°.04, **h55**km±14km, **n16**, σ**0s.66**/27, **Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOB | Onbets | 0.49 | 322 | P | Pn | 04 24 11.0 | +0.3 |
| JOB | | | | eS | Sn | 04 24 19.3 | +0.3 |
| JAK | Akkeshi | 0.58 | 34 | P | Pn | 04 24 11.9 | +0.2 |
| JAK | | | | eS | Sn | 04 24 20.9 | +0.1 |
| JCH | Churui | 0.66 | 279 | P | Pn | 04 24 13.2 | +0.5 |
| JCH | | | | eS | Sn | 04 24 22.5 | 0.0 |
| JAR | Ashorobuto | 0.86 | 336 | P | Pn | 04 24 14.9 | -0.3 |
| JAR | | | | eS | Sn | 04 24 25.9 | -1.0 |
| JNK | Nakash | 1.12 | 18 | P | Pn | 04 24 18.3 | -0.4 |
| JNK | | | | eS | Sn | 04 24 32.1 | -1.1 |
| JNBK | Urakawa-nobuka | 1.13 | 259 | P | Pn | 04 24 18.9 | +0.1 |
| JFR | Furan | 1.38 | 299 | P | Pn | 04 24 22.3 | +0.1 |
| NEM2 | Nemuro 2 | 1.39 | 52 | P | Pn | 04 24 21.7 | -0.5 |
| NEM2 | | | | eS | Sn | 04 24 38.4 | -1.1 |
| JBT2 | Biratori 2 | 1.42 | 281 | P | Pn | 04 24 22.2 | -0.4 |
| JTKR | Abashiri--Toko | 1.48 | 350 | P | Pn | 04 24 23.9 | +0.5 |
| JTKR | | | | eS | Sn | 04 24 42.1 | +0.5 |
| JRA | Rausu | 1.56 | 24 | P | Pn | 04 24 24.9 | +0.3 |
| JRA | | | | eS | Sn | 04 24 43.7 | +0.1 |
| JMP | Maruseppu | 1.63 | 337 | P | Pn | 04 24 25.6 | +0.1 |
| JMP | | | | eS | Sn | 04 24 44.9 | -0.5 |
| YUK | Yuzh-Kuril'sk | 1.92 | 37 | eP | Pn | 04 24 30.1 | +0.6 |
| YUK | | | | AMB | AMB | 04 24 30.8 | |
| | 18nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 04 24 30.8 | |
| | 33nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 04 24 30.8 | |
| | 89nm,0.2s | | | | | | |
| YUK | | | | eS | Sn | 04 24 52.7 | +0.2 |
| YUK | | | | A | A | 04 24 53.3 | |
| | 280nm,0.5s | | | | | | |
| YUK | | | | A | A | 04 24 53.3 | |
| | 580nm,0.5s | | | | | | |
| SHO | Shikotan | 2.32 | 53 | eP | Pn | 04 24 35.0 | 0.0 |
| SHO | | | | AMB | AMB | 04 24 36.4 | |
| | 30nm,0.2s | | | | | | |
| SHO | | | | eS | Sn | 04 25 01.2 | -1.1 |
| SHO | | | | A | A | 04 25 07.5 | |
| | 300nm,0.3s | | | | | | |
| KUR | Kuril'sk | 3.77 | 43 | eP | Pn | 04 24 56.5 | +1.7 |
| KUR | | | | eS | Sn | 04 25 37.9 | 0.0 |
| KUR | | | | A | A | 04 25 46.3 | |
| | 22nm,0.4s | | | | | | |
| KUR | | | | A | A | 04 25 46.3 | |
| | 33nm,0.4s | | | | | | |
| YSS | Yuzh-Sakhalins | 4.56 | 347 | eP | Pn | 04 25 10.6 | +5.0 |

*ISCJB **09** 04:36:27.1±0.4, 51°.08N±0°.04×174°.98W±0°.04, h10km, mb4.0/20, MS3.6/2, Error ellipse: s-maj=5.9km s-min=3.8km az=173.1*
*IDC **09** 04:36:29.4±1.5, 51°.94N×175°.16W, h0km, mb3.9/9, mb1 4.0/12, mb1mx3.8/47, mbtmp3.9/12, ML4.1/2, MS3.3/3, Ms1 3.3/3, ms1mx2.8/36, Error ellipse: s-maj=44.9km s-min=18.4km az=170.0*
*NEIC **09** 04:36:31.1, 51°.26N×175°.10W, h15km, mb4.1/13, ML3.7(AEIC), After AEIC.*

**ISC 09 04:36:28.8**±0.7**, 51.°19N**±0.°07×**175.°02W**±0.°03**, h10**km**, n68, σ1.s13**/61**, mb4.0**/20**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **1.07** | **323** | P | **Pg** | **04 36 49.2** | **-0.2** |
| **GSCK** | **Great Sitkin C** | **1.09** | **320** | P | **Pg** | **04 36 49.5** | **-0.2** |
| **ETKA** | **Kagalaska Isla** | **1.09** | **309** | P | **Pg** | **04 36 49.6** | **-0.3** |
| **GSTR** | **Great Sitkin T** | **1.11** | **325** | *e*Pn | **Pg** | **04 36 49.9** | **-0.3** |
| **GSTD** | **Great Sitkin T** | **1.11** | **322** | P | **Pg** | **04 36 49.1** | **-1.2** |
| GSTD | | | | S | **Sb** | **04 37 05.2** | **+0.3** |
| **ATKA** | **Atka Island** | **1.14** | **27** | P | **Pb** | **04 36 49.9** | **-0.7** |
| ATKA | | | | S | **Sg** | **04 37 05.4** | **-0.1** |
| **KOFP** | **Korovin Flat P** | **1.23** | **28** | P | **Pb** | **04 36 52.5** | **+0.3** |
| **KOKL** | **Mount Kliuchef** | **1.25** | **24** | P | **Pb** | **04 36 52.6** | **+0.1** |
| KOKL | | | | S | **Sg** | **04 37 09.7** | **+0.8** |
| **ADAG** | **Mount Adagdak** | **1.26** | **309** | P | **Pb** | **04 36 52.9** | **+0.2** |
| **KOWE** | **Korovin West** | **1.27** | **22** | P | **Pn** | **04 36 53.2** | **+0.4** |
| **KIRH** | **Kanaga Island** | **1.48** | **300** | P | **Pn** | **04 36 55.3** | **-0.1** |
| **KIKV** | **Kanaga Island** | **1.51** | **298** | P | **Pn** | **04 36 55.8** | **-0.1** |
| **KICM** | **Kanaga Island** | **1.54** | **299** | P | **Pn** | **04 36 56.6** | **+0.3** |
| **TAPA** | **Tanaga Point A** | **1.85** | **291** | P | **Pn** | **04 37 00.9** | **+0.2** |
| **TAFP** | **Tanaga Falls P** | **1.98** | **292** | P | **Pn** | **04 37 02.9** | **+0.5** |
| TAFP | | | | S | **Sn** | **04 37 28.3** | **+1.0** |
| **GAEA** | **Gareloi East** | **2.40** | **286** | P | **Pn** | **04 37 09.3** | **+1.1** |
| **GANE** | **Gareloi Northe** | **2.43** | **287** | P | **Pn** | **04 37 09.6** | **+1.1** |
| **CESW** | **Semis' Southwe** | **3.45** | **284** | P | **Pn** | **04 37 23.0** | **+0.3** |
| **AMKA** | **Amchitka** | **3.57** | **275** | *e*Pn | Pn | 04 37 29.0 | +4.8 |
| **LSNW** | **Little Sitkin** | **4.10** | **284** | P | **Pn** | **04 37 31.6** | **0.0** |
| **NIKH** | **Nikolski High** | **4.21** | **62** | P | **Pn** | **04 37 33.0** | **+0.1** |
| NIKH | | | | S | **Sn** | **04 38 19.7** | **-2.4** |
| **MSOM** | **Makushin Julie** | **5.59** | **59** | P | **Pn** | **04 37 52.4** | **+0.4** |
| **UNV** | **Unalaska Valle** | **5.84** | **60** | P | **Pn** | **04 37 56.8** | **+1.4** |
| **SPIA** | **Saint Paul Isl** | **6.62** | **23** | P | **Pn** | **04 38 09.1** | **+3.0** |
| **KDAK** | **Kodiak Island** | **14.57** | **54** | Pn | **Pn** | **04 39 53.9** | **-1.0** |
| | 0.8nm,0.3s,baz=281,slow=10,SNR=8.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.81** | **287** | Pn | **Pn** | **04 40 22.3** | **-1.9** |
| | baz=76,slow=12,SNR=2.8 | | | | | | |
| PETK | | | | LR | LR | 04 46 23.7 | |
| | comp=Z,41nm,21.4s,baz=98,slow=36 | | | | | | |
| **MCK** | **McKinley** | **18.66** | **38** | *e*P | **P** | **04 40 47.4** | **+0.8** |
| | 3.6nm,0.6s | | | | | | |
| **BILL** | **Bilibino** | **19.22** | **338** | *e*P | **P** | **04 40 52.9** | **+0.3** |
| | 4.8nm,0.4s | | | | | | |
| **BMRM** | **Bremner River** | **19.42** | **48** | *e*P | **P** | **04 40 55.6** | **+0.6** |
| **ILAR** | **Eielson Array** | **19.95** | **36** | P | **P** | **04 40 58.0** | **-2.7** |
| | 0.3nm,0.3s,baz=230,slow=9.4,SNR=30 | | | | | | |
| **EGAK** | **Eagle** | **22.17** | **39** | *e*P | **P** | **04 41 22.8** | **-1.8** |
| | 6.5nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **26.28** | **34** | P | **P** | **04 42 01.9** | **-2.0** |
| | 0.9nm,0.5s,baz=214,slow=7.8,SNR=7.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.48** | **211** | T | T | 05 20 59.5 | |
| | baz=20,slow=76,SNR=4.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.48** | **211** | T | T | 05 20 59.6 | |
| | baz=20,slow=76,SNR=6.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.49** | **211** | T | T | 05 20 59.0 | |
| | baz=20,slow=76,SNR=4.1 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.68** | **211** | T | T | 05 22 34.2 | |
| | baz=20,slow=75,SNR=16 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.70** | **211** | T | T | 05 22 34.3 | |
| | baz=20,slow=75,SNR=13 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.70** | **211** | T | T | 05 22 35.5 | |
| | baz=20,slow=75,SNR=5.3 | | | | | | |
| **MAJO** | **Matsushiro** | **36.11** | **265** | *e*P | **P** | **04 43 30.6** | **-0.2** |
| | 4.9nm,0.8s | | | | | | |
| **NEW** | **Newport** | **36.71** | **71** | *e*P | **P** | **04 43 36.2** | **+0.3** |
| | 1.5nm,0.7s | | | | | | |
| **BOZ** | **Bozeman (W)** | **41.27** | **72** | *e*P | **P** | **04 44 15.1** | **+0.9** |
| | 2.7nm,0.9s | | | | | | |
| **ELK** | **Elko** | **41.76** | **80** | *e*P | **P** | **04 44 19.5** | **+1.1** |
| | 2.2nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **42.01** | **274** | P | **P** | **04 44 23.1** | **+3.0** |
| | 1.2nm,0.6s,baz=53,slow=8.1,SNR=4.6 | | | | | | |
| **KSAR** | **Wonju Array Be** | **42.05** | **274** | P | **P** | **04 44 23.1** | **+2.7** |
| **FFC** | **Flin Flon** | **42.31** | **56** | *e*P | **P** | **04 44 23.5** | **+1.1** |
| | 4.0nm,0.7s | | | | | | |
| **DUG** | **Dugway** | **43.59** | **79** | *e*P | **P** | **04 44 33.0** | **-0.1** |
| | 0.8nm,0.5s | | | | | | |
| **BW06** | **Boulder Array** | **44.09** | **74** | *e*P | **P** | **04 44 37.8** | **+0.6** |
| | 1.3nm,0.6s | | | | | | |
| **PV01** | **Paradox Valley** | **47.46** | **79** | *e*P | **P** | **04 45 04.7** | **+0.8** |
| **ULN** | **Ulaanbaatar** | **48.45** | **298** | *e*P | **P** | **04 45 11.3** | **-0.1** |
| | 1.8nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **48.84** | **299** | P | **P** | **04 45 13.6** | **-0.6** |
| | 1.0nm,0.7s,baz=44,slow=8.8,SNR=5.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.33** | **84** | P | **P** | **04 46 11.9** | **+2.0** |
| | 0.2nm,0.6s,baz=282,slow=4.4,SNR=3.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.98** | **311** | P | P | 04 46 46.9 | -1.8 |
| | 1.0nm,0.3s,baz=48,slow=6.0,SNR=12 | | | | | | |
| MKAR | | | | LR | LR | 05 15 41.4 | |
| | comp=Z,19nm,18.0s,baz=348,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **66.46** | **349** | P | P | 04 47 13.3 | -4.5 |
| | 1.3nm,0.9s,baz=23,slow=7.5,SNR=2.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **68.01** | **357** | P | P | 04 47 24.5 | -3.3 |
| | 1.0nm,0.8s,baz=5.5,slow=6.3,SNR=3.5 | | | | | | |
| **AAK** | **Ala-Archa** | **68.78** | **312** | *e*P | **P** | **04 47 31.7** | **-1.3** |
| | 2.0nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **70.23** | **315** | *e*P | **P** | **04 47 40.6** | **-1.2** |
| | 2.1nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **73.48** | **293** | *e*P | **P** | **04 48 01.8** | **-0.1** |
| | 19nm,0.9s | | | | | | |
| **GUN** | **Gumba** | **74.11** | **295** | *e*P | **P** | **04 48 05.6** | **0.0** |
| **RAMN** | **Ramite** | **74.42** | **294** | *e*P | **P** | **04 48 07.1** | **-0.3** |
| | 24nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **74.64** | **295** | *e*P | **P** | **04 48 08.5** | **-0.2** |
| **PKIN** | **Phulchoki** | **74.64** | **295** | *e*P | **P** | **04 48 07.9** | **-0.7** |
| **GKN** | **Gorkha** | **74.75** | **296** | *e*P | **P** | **04 48 08.8** | **-0.3** |
| **DMN** | **Daman** | **74.78** | **295** | *e*P | **P** | **04 48 09.2** | **-0.2** |
| **KOLN** | **Koldanda** | **75.51** | **296** | *e*P | **P** | **04 48 13.4** | **-0.2** |
| **AKASG** | **Malin Array Be** | **76.42** | **344** | P | P | 04 48 15.7 | -2.3 |
| | 0.4nm,0.3s,baz=17,slow=6.2,SNR=2.9 | | | | | | |
| **GEYT** | **Alibeck** | **79.79** | **320** | P | **P** | **04 48 36.6** | **-0.5** |
| | 1.8nm,0.3s,baz=190,slow=0.9,SNR=2.9 | | | | | | |
| **ROSC** | **El Rosal** | **92.92** | **79** | LR | LR | 05 33 39.2 | |
| | comp=Z,45nm,19.0s,baz=80,slow=37 | | | | | | |
| **BOSA** | **Boshof** | **152.78** | **318** | PKPbc | **PKPbc** | **04 56 25.1** | **-0.8** |
| | 1.5nm,0.5s,baz=339,slow=3.0,SNR=5.1 | | | | | | |

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**IDC 09 04:39:41.0**±13.0**, 6.°05S**×**155.°30E, h305**km±127km**, mb2.9**/3**, mb1 3.2**/3**, mb1mx2.8**/26**, mbtmp3.5**/3**, Error ellipse: s-maj=172.8km s-min=45.9km az=132.0, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.61** | **234** | P | P | 04 44 35.2 | +0.8 |
| | 0.5nm,0.4s,baz=59,slow=9.5,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **27.03** | **227** | P | P | 04 44 55.0 | -1.0 |
| | 0.3nm,0.3s,baz=58,slow=9.6,SNR=3.5 | | | | | | |
| **ILAR** | **Eielson Array** | **82.39** | **21** | P | P | 04 51 28.9 | 0.0 |
| | 0.4nm,1.0s,baz=246,slow=4.8,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.06** | **287** | PKPbc | PKPbc | 04 59 03.4 | -0.1 |
| | 0.3nm,0.9s,baz=80,slow=2.7,SNR=3.4 | | | | | | |

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*ISCJB **09** 05:01:43.4±0.7, 28.°92N±0.°07×140.°1E±0.°2, h500km, mb3.2/5, Error ellipse: s-maj=23.7km s-min=8.5km az=173.7*

*JMA **09** 05:01:43.7±0.2, 28.°90N×139.°61E, h476km, M3.8*

*IDC **09** 05:01:46.9±6.0, 28.°78N×139.°16E, h500km±75km, mb2.8/5, mb1 2.9/6, mb1mx2.7/32, mbtmp3.7/6, Error ellipse: s-maj=37.6km s-min=14.8km az=85.0*

**ISC 09 05:01:44.5**±0.9**, 28.°94N**±0.°09×**140.°2E**±0.°2**, h500**km**, n11, σ0.s97**/13**, mb3.4**/5**, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **2.57** | **135** | P | **P** | **05 02 52.5** | **-0.3** |
| CBIJ | | | | S | **S** | **05 03 47.0** | **-1.2** |
| **BSO1** | **Boso 1** | **5.74** | **7** | P | **P** | **05 03 18.9** | **+1.4** |
| BSO1 | | | | S | **S** | **05 04 33.4** | **-0.4** |
| **BSO3** | **Boso 3** | **5.85** | **3** | P | **P** | **05 03 19.2** | **+0.3** |
| BSO3 | | | | S | **S** | **05 04 35.5** | **-0.8** |
| **JRY** | **Ryogami san** | **7.13** | **352** | P | **P** | **05 03 31.7** | **-0.2** |
| **JAG** | **Ashikaga** | **7.48** | **356** | P | **P** | **05 03 34.9** | **-0.6** |
| **USRK** | **Ussuriysk Ar.** | **16.56** | **339** | P | **P** | **05 05 11.7** | **+0.8** |
| | 0.2nm,0.3s,baz=186,slow=12,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.92** | **187** | P | **P** | **05 09 45.2** | **+0.7** |
| | 0.6nm,0.3s,baz=1.6,slow=7.8,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.47** | **313** | P | **P** | **05 09 54.0** | **-1.5** |
| | 0.6nm,0.4s,baz=91,slow=7.5,SNR=8.2 | | | | | | |
| **ASAR** | **Alice Springs** | **52.65** | **187** | P | **P** | **05 10 11.6** | **0.0** |
| | 0.2nm,0.5s,baz=9.3,slow=14,SNR=3.3 | | | | | | |
| **INK** | **Inuvik** | **62.10** | **25** | P | P | 05 11 21.1 | +5.5 |
| | 0.6nm,0.8s,baz=290,slow=4.6,SNR=2.6 | | | | | | |
| **FINES** | **FINESS Array B** | **75.50** | **333** | P | **P** | **05 12 37.8** | **+1.1** |
| | 1.2nm,0.9s,baz=73,slow=4.7,SNR=6.0 | | | | | | |

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**MEX 09 05:02:39.8**±0.5**, 18.°58N**×**102.°82W, h7**km±8km**, MD3.9, Michoacan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMIG** | **Aquila** | **0.58** | **240** | *i* P | Pg | 05 02 50.2 | -0.8 |
| MMIG | | | | *e*S | Sg | 05 02 59.0 | +0.4 |
| **EZ5V** | | **1.16** | **320** | *e*P | Pg | 05 02 58.8 | -3.7 |
| EZ5V | | | | *e*S | Sg | 05 03 13.8 | -4.0 |
| **R15V** | | **1.25** | **298** | *e*P | Pn | 05 02 60.0 | -3.8 |
| R15V | | | | *e*S | Sb | 05 03 15.5 | -4.7 |
| **ZIIG** | **Zihuatanejo** | **1.61** | **127** | *e*P | Pn | 05 03 05.0 | -3.7 |
| ZIIG | | | | *e*S | Sn | 05 03 24.2 | -5.5 |
| **MOIG** | **Morelia** | **1.88** | **54** | *e*P | Pn | 05 03 09.7 | -3.1 |
| MOIG | | | | *e*S | Sn | 05 03 31.9 | -5.1 |
| **CJM** | **Chamela** | **2.29** | **294** | *e*P | Pn | 05 03 16.5 | -1.6 |
| CJM | | | | *e*S | Sn | 05 03 43.6 | -3.1 |

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**GUC 09 05:09:12.3**±0.4**, 21.°53S**×**68.°60W, h132**km±7km**, ML3.5, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **0.96** | **300** | *i* P | Pn | 05 09 35.6 | +0.5 |
| PB01 | | | | *i* S | Sn | 05 09 53.2 | +0.8 |
| PB01 | | | | AML | AML | 05 09 54.6 | |
| | comp=E,860nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.21** | **261** | *i* P | Pn | 05 09 38.4 | +0.8 |
| PB07 | | | | *i* S | Sn | 05 09 58.0 | +1.0 |
| PB07 | | | | AML | AML | 05 09 58.9 | |
| | comp=N,911nm,0.4s | | | | | | |
| **PB06** | **IPOC Station P** | **1.48** | **218** | *i* P | Pn | 05 09 41.2 | +0.8 |
| PB06 | | | | *i* S | Sn | 05 10 03.0 | +1.0 |
| PB06 | | | | AML | AML | 05 10 03.8 | |
| | comp=E,360nm,0.2s | | | | | | |
| **MNMC** | **Minimini** | **2.56** | **338** | *i* P | Pn | 05 09 54.7 | +0.9 |
| MNMC | | | | *i* S | Sn | 05 10 27.4 | +1.7 |
| MNMC | | | | AML | AML | 05 10 30.8 | |
| | comp=E,336nm,0.2s | | | | | | |

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*ISCJB **09** 05:13:39.0±0.8, 56.°5N±0.°2×34.°2W±0.°2, h10km, mb3.8/11, MS3.4/14, Error ellipse: s-maj=23.2km s-min=14.1km az=7.6*

*IDC **09** 05:13:39.4±0.9, 56.°57N×34.°18W, h0km, mb3.8/11, mb1 4.0/11, mb1mx3.7/56, mbtmp3.8/11, MS3.5/16, Ms1 3.5/16, ms1mx3.3/42, Error ellipse: s-maj=28.6km s-min=18.2km az=11.0*

**ISC 09 05:13:41.0**±0.9**, 56.°6N**±0.°2×**34.°2W**±0.°1**, h10**km**, n23, σ0.s30**/12**, mb4.0**/11**, MS3.5**/14**, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BORG** | **Borgarnes** | **10.33** | **32** | LR | LR | 05 19 08.4 | |
| | comp=Z,612nm,18.7s,baz=166,slow=32 | | | | | | |
| **SCHQ** | **Schefferville** | **18.39** | **278** | LR | LR | 05 23 41.8 | |
| | comp=Z,235nm,18.2s,baz=78,slow=33 | | | | | | |
| **NOA** | **NORSAR Array B** | **23.55** | **60** | P | **P** | **05 18 51.4** | **+0.2** |
| | 1.9nm,1.0s,baz=280,slow=10,SNR=2.8 | | | | | | |
| NOA | | | | LR | LR | 05 26 43.8 | |
| | comp=Z,73nm,18.6s,baz=275,slow=33 | | | | | | |
| **HFS** | **Hagfors** | **24.93** | **62** | LR | LR | 05 28 20.3 | |
| | comp=Z,30nm,20.2s,baz=296,slow=35 | | | | | | |
| **ESDC** | **Sonseca Array** | **26.00** | **118** | P | **P** | **05 19 13.7** | **-0.1** |
| | 0.1nm,0.3s,baz=338,slow=10.0,SNR=4.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **28.62** | **39** | LR | LR | 05 28 42.8 | |
| | comp=Z,88nm,18.3s,baz=257,slow=32 | | | | | | |
| **GERES** | **GERESS Array B** | **29.49** | **85** | LR | LR | 05 30 46.4 | |
| | comp=Z,101nm,18.9s,baz=0.0,slow=35 | | | | | | |
| **FINES** | **FINESS Array B** | **30.42** | **55** | LR | LR | 05 30 36.1 | |
| | comp=Z,61nm,18.4s,baz=301,slow=33 | | | | | | |
| **MDT** | **Midelt** | **31.28** | **127** | LR | LR | 05 30 41.1 | |
| | comp=Z,89nm,19.0s,baz=294,slow=33 | | | | | | |
| **ULM** | **Lac du Bonnet** | **36.19** | **287** | LR | LR | 05 33 48.7 | |
| | comp=Z,95nm,21.2s,baz=64,slow=33 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.84** | **72** | P | **P** | **05 20 48.7** | **-0.2** |
| | 1.0nm,0.7s,baz=299,slow=8.6,SNR=4.5 | | | | | | |
| AKASG | | | | LR | LR | 05 36 05.5 | |
| | comp=Z,75nm,18.1s,baz=140,slow=36 | | | | | | |
| **BRTR** | **Keskin Array B** | **46.27** | **81** | P | **P** | **05 22 07.1** | **+0.6** |
| | 2.0nm,1.0s,baz=308,slow=7.1,SNR=3.7 | | | | | | |
| BRTR | | | | LR | LR | 05 41 20.3 | |
| | comp=Z,24nm,20.5s,baz=298,slow=36 | | | | | | |
| **ARU** | **Arti** | **47.33** | **49** | P | **P** | **05 22 14.3** | **-0.1** |
| | 0.4nm,0.3s,baz=142,slow=19,SNR=2.5 | | | | | | |
| **KBZ** | **Khabaz** | **48.44** | **71** | LR | LR | 05 44 24.8 | |
| | comp=Z,35nm,18.3s,baz=316,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **48.64** | **328** | P | **P** | **05 22 24.2** | **-0.1** |
| | 2.5nm,0.9s,baz=37,slow=6.5,SNR=23 | | | | | | |
| **AKTO** | **Aktyubinsk** | **51.20** | **55** | P | **P** | **05 22 43.8** | **-0.2** |
| | 5.9nm,1.2s,baz=318,slow=8.9,SNR=7.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.30** | **133** | P | **P** | **05 22 44.9** | **-0.2** |
| | 3.5nm,1.0s,baz=335,slow=7.1,SNR=14 | | | | | | |
| TORD | | | | LR | LR | 05 43 35.1 | |
| | comp=Z,42nm,18.2s,baz=245,slow=35 | | | | | | |
| **DBIC** | **Dimbokro** | **54.86** | **143** | LR | LR | 05 44 07.4 | |
| | comp=Z,54nm,18.3s,baz=332,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **54.88** | **271** | P | **P** | **05 23 11.9** | **+0.4** |
| | 0.8nm,1.0s,baz=70,slow=5.3,SNR=5.3 | | | | | | |
| TXAR | | | | LR | LR | 05 46 16.6 | |
| | comp=Z,49nm,18.4s,baz=0.0,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **55.94** | **289** | P | **P** | **05 23 19.1** | **-0.2** |
| | 0.3nm,0.6s,baz=62,slow=6.2,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.18** | **43** | P | **P** | **05 24 15.3** | **-0.1** |
| | 1.9nm,0.9s,baz=337,slow=6.9,SNR=9.8 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **80.80** | **106** | LR | LR | 06 02 26.6 | |
| | comp=Z,27nm,18.6s,baz=163,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **146.00** | **20** | PKPbc | **PKPdf** | **05 33 19.8** | **-0.1** |
| | 3.1nm,1.1s,baz=350,slow=3.4,SNR=13 | | | | | | |

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*ISCJB **09** 05:15:41.8±0.8, 10.°7N±0.°1×83.°85W±0.°08, h33km, mb3.9/12, Error ellipse: s-maj=21.8km s-min=8.5km az=159.9*

*IDC **09** 05:15:45.4±1.8, 10.°32N×84.°08W, h70km±30km, mb3.7/12, mb1 3.8/13, mb1mx3.6/37, mbtmp4.0/13, ML3.9/1, Error ellipse: s-maj=62.9km s-min=24.6km az=31.0*

**ISC 09 05:15:42.6**±0.9**, 10.°5N**±0.°2×**83.°83W**±0.°08**, h35**km**, n17, σ1.s20**/17**, mb4.0**/12**, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTS** | **JuntasAbangare** | **1.12** | **261** | P | **Pn** | **05 16 03.3** | **+1.5** |
| | 135nm,0.3s,baz=91,slow=7.8,SNR=697 | | | | | | |
| JTS | | | | S | **Sn** | **05 16 15.6** | **-0.6** |
| | 942nm,0.3s,baz=342,slow=19,SNR=117 | | | | | | |
| JTS | | | | LR | LR | 05 16 31.5 | |
| | comp=Z,319nm,19.2s,baz=57,slow=53 | | | | | | |
| **CMIG** | **Matias Romero** | **12.59** | **303** | P | **Pn** | **05 18 39.5** | **+0.1** |
| | 0.7nm,0.3s,baz=116,slow=12,SNR=10 | | | | | | |
| **TXAR** | **Lajitas Array** | **26.38** | **318** | P | **P** | **05 21 16.6** | **+0.7** |
| | 0.4nm,0.5s,baz=137,slow=11,SNR=8.2 | | | | | | |
| **SCHQ** | **Schefferville** | **46.25** | **14** | P | **P** | **05 24 05.4** | **+1.0** |
| | 3.1nm,0.8s,baz=223,slow=12,SNR=3.5 | | | | | | |
| **INK** | **Inuvik** | **66.16** | **342** | P | **P** | **05 26 25.5** | **-0.7** |
| | 2.5nm,1.1s,baz=124,slow=11,SNR=3.1 | | | | | | |
| **ILAR** | **Eielson Array** | **69.26** | **336** | P | **P** | **05 26 44.9** | **-1.1** |
| | 0.3nm,0.6s,baz=92,slow=5.7,SNR=5.4 | | | | | | |
| **ESDC** | **Sonseca Array** | **75.62** | **52** | P | **P** | **05 27 25.7** | **+1.3** |
| | 0.4nm,0.6s,baz=278,slow=6.4,SNR=4.4 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **76.15** | **36** | P | **P** | **05 27 27.1** | **+0.1** |
| | 1.3nm,0.7s,baz=261,slow=5.0,SNR=5.9 | | | | | | |
| **DBIC** | **Dimbokro** | **78.01** | **85** | P | **P** | **05 27 39.3** | **+1.1** |
| | 2.8nm,0.8s,baz=278,slow=8.2,SNR=3.0 | | | | | | |
| **NB2** | **NORSAR Subarra** | **83.36** | **29** | P | **P** | **05 28 06.0** | **0.0** |
| | comp=Z,0.7nm,0.6s,baz=280,slow=5.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **83.36** | **29** | P | **P** | **05 28 06.1** | **0.0** |
| | comp=Z,0.8nm,0.7s,baz=280,slow=3.5,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.36** | **78** | P | **P** | **05 28 07.0** | **+0.2** |
| | comp=Z,0.5nm,0.5s,baz=290,slow=5.5,SNR=8.6 | | | | | | |
| **HFS** | **Hagfors** | **84.73** | **30** | P | **P** | **05 28 12.2** | **-0.7** |
| | comp=Z,2.3nm,0.6s,baz=260,slow=4.1,SNR=12 | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.88** | **19** | P | **P** | **05 28 22.2** | **-1.2** |
| | comp=Z,3.2nm,0.8s,baz=289,slow=4.9,SNR=3.9 | | | | | | |
| **GERES** | **GERESS Array B** | **87.11** | **41** | P | **P** | **05 28 24.6** | **-0.6** |
| | comp=Z,0.3nm,0.6s,baz=280,slow=5.9,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **141.75** | **245** | PKhKP | PKPpre | 05 35 03.6 | |
| | comp=Z,0.5nm,0.6s,baz=100,slow=3.2,SNR=5.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **142.07** | **251** | PKP | **PKPdf** | **05 35 08.9** | **-3.1** |
| | comp=Z,0.7nm,0.6s,baz=91,slow=2.4,SNR=6.5 | | | | | | |

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*NIED **09** 05:17:00, 26.°70N×144.°40E, h5km, Mw4.4 Best double couple: $M_0$4.00000×10^15 NP1:$\phi_s$130.00000°, δ14.00000°, λ-60.00000°. NP2:$\phi_s$279.00000°, δ78.00000°, λ-97.00000°.*

*IDC **09** 05:17:29.1±0.6, 26.°27N×144.°57E, h0km, mb4.1/18, mb1 4.3/22, mb1mx4.2/43, mbtmp4.2/22, ML4.2/4, MS3.0/4, Ms1 3.1/4, ms1mx2.6/27, Error ellipse: s-maj=20.3km s-min=15.6km az=82.0*

*NEIC **09** 05:17:30.6±0.3, 26.°34N×144.°57E, h10km, mb4.6/13, MW4.3(NIED), Error ellipse: s-maj=9.7km s-min=7.0km az=80.0*

*JMA **09** 05:17:32.5±0.1, 26.°74N×144.°44E, h13km±5km, M4.6*

*ISCJB **09** 05:17:35.1±0.5, 26.°82N±0.°04×144.°47E±0.°06, h33km, mb4.3/26, MS3.0/3, Error ellipse: s-maj=7.2km s-min=5.1km az=164.3*

**ISC 09 05:17:35.6**±0.6**, 26.°64N**±0.°08×**144.°57E**±0.°08**, h35**km**, n69, σ1.s35**/66**, mb4.3**/26**, MS2.9**/3**, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHHJ** | **Haha-jima-NKT** | **2.14** | **270** | P | **Pn** | **05 18 07.1** | **-1.7** |
| **CBIJ** | **Chichi jima** | **2.17** | **282** | P | **Pn** | **05 18 07.4** | **-1.9** |
| CBIJ | | | | S | **Sn** | **05 18 32.8** | **-2.2** |
| **CBIJ** | **Chichi jima** | **2.17** | **282** | *e*Pn | **Pn** | **05 18 07.5** | **-1.9** |
| CBIJ | | | | *e*Sn | **Sn** | **05 18 36.3** | **+1.3** |
| **JHJ** | **Hachijo jima 2** | **7.67** | **328** | Pn | **Pn** | **05 19 24.9** | **0.0** |
| | 9.9nm,0.3s,baz=79,slow=19,SNR=3.2 | | | | | | |
| JHJ | | | | Sn | **Sn** | **05 20 49.2** | **-1.4** |
| | 26nm,0.3s,baz=242,slow=22,SNR=6.2 | | | | | | |
| **BSO1** | **Boso 1** | **8.56** | **340** | P | **Pn** | **05 19 37.5** | **+1.0** |
| BSO1 | | | | S | **Sn** | **05 21 12.4** | **+0.8** |
| **JOD2** | **Odawara 2** | **9.79** | **333** | P | **Pn** | **05 19 54.5** | **+0.6** |
| **JHU** | **Hanno** | **10.23** | **335** | P | **Pn** | **05 19 59.1** | **-0.8** |
| JHU | | | | S | **Sn** | **05 21 50.4** | **-3.0** |
| **JYT** | **Yasato** | **10.26** | **340** | S | **Sn** | **05 21 52.0** | **-2.0** |
| **JRY** | **Ryogami san** | **10.52** | **334** | P | **Pn** | **05 20 04.0** | **+0.1** |
| JRY | | | | S | **Sn** | **05 22 00.8** | **+0.2** |
| **JAG** | **Ashikaga** | **10.68** | **337** | P | **Pn** | **05 20 06.2** | **+0.1** |
| JAG | | | | S | **Sn** | **05 22 02.0** | **-2.4** |
| **JFK** | **Kawauchi** | **11.14** | **345** | P | **Pn** | **05 20 11.2** | **-1.2** |
| JFK | | | | S | Sn | 05 22 09.1 | -6.6 |
| **MJAR** | **Matsushiro Arr** | **11.25** | **333** | Pn | **Pn** | **05 20 13.6** | **-0.3** |
| | 3.4nm,0.3s,baz=158,slow=12,SNR=28 | | | | | | |
| MJAR | | | | Sn | **Sn** | **05 22 19.4** | **+0.9** |
| | 1.2nm,0.3s,baz=146,slow=12,SNR=6.4 | | | | | | |
| **MAJO** | **Matsushiro** | **11.26** | **333** | *e*Pn | **Pn** | **05 20 13.8** | **-0.2** |
| | 15nm,0.6s | | | | | | |
| MAJO | | | | *e*Sn | **Sn** | **05 22 19.3** | **+0.8** |
| **MAT** | **Matsushiro** | **11.26** | **333** | P | **Pn** | **05 20 13.7** | **-0.3** |
| MAT | | | | S | **Sn** | **05 22 16.5** | **-2.0** |
| **JMK** | **Ichinoseki** | **12.59** | **348** | P | **Pn** | **05 20 29.5** | **-2.7** |
| JMK | | | | S | **Sn** | **05 22 47.0** | **-4.1** |
| **GUMO** | **Guam** | **12.99** | **179** | LR | LR | 05 24 02.5 | |
| | comp=Z,45nm,20.5s,baz=348,slow=31 | | | | | | |
| **ERM** | **Erimo** | **15.38** | **356** | *e*P | **Pn** | **05 21 09.7** | **-0.2** |
| | 45nm,1.2s | | | | | | |
| **ASAJ** | **Asahikawa** | **17.51** | **355** | P | **P** | **05 21 38.4** | **+0.7** |
| | 1.2nm,0.3s,baz=169,slow=16,SNR=4.5 | | | | | | |
| **ASAJ** | **Asahikawa** | **17.51** | **355** | *e*P | **P** | **05 21 37.9** | **+0.2** |
| | 3.3nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **17.73** | **312** | P | **P** | **05 21 40.7** | **+0.5** |
| | 0.5nm,0.3s,baz=120,slow=12,SNR=12 | | | | | | |
| **KSAR** | **Wonju Array Be** | **17.75** | **311** | P | **P** | **05 21 40.8** | **+0.3** |
| **USRK** | **Ussuriysk Ar.** | **20.25** | **333** | P | Pn | 05 22 09.6 | -0.4 |
| | 1.5nm,0.6s,baz=152,slow=9.4,SNR=3.2 | | | | | | |
| **YULB** | **Yu-li** | **21.33** | **266** | *e*P | **P** | **05 22 19.6** | **-0.1** |
| | 30nm,1.4s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.63** | **104** | T | T | 05 44 36.6 | |
| | baz=295,SNR=12 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.63** | **104** | T | T | 05 44 36.2 | |
| | baz=295,slow=74,SNR=9.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.65** | **104** | T | T | 05 44 37.1 | |
| | baz=295,slow=74,SNR=10 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **21.95** | **107** | T | T | 05 45 16.1 | |
| | baz=294,slow=75,SNR=5.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.96** | **107** | T | T | 05 45 13.8 | |
| | baz=294,slow=75,SNR=3.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.97** | **107** | T | T | 05 45 14.5 | |
| | baz=294,slow=75,SNR=3.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **28.20** | **17** | LR | LR | 05 33 20.5 | |
| | comp=Z,26nm,21.5s,baz=180,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **36.52** | **316** | P | **P** | **05 24 39.4** | **+1.6** |
| | 1.4nm,0.7s,baz=127,slow=9.1,SNR=8.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.73** | **269** | P | **P** | **05 25 28.6** | **-1.1** |
| | 1.1nm,0.3s,baz=56,slow=8.3,SNR=7.4 | | | | | | |
| CMAR | | | | LR | LR | 05 42 24.8 | |
| | comp=Z,15nm,18.7s,baz=265,slow=35 | | | | | | |
| **WRAB** | **Tennant Creek** | **47.35** | **193** | *e*P | P | 05 26 01.7 | -4.6 |
| | 10nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.36** | **193** | P | P | 05 26 01.7 | -4.7 |
| | 5.8nm,0.7s,baz=12,slow=8.5,SNR=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **48.13** | **204** | *e*P | P | 05 26 08.2 | -4.1 |
| | 6.6nm,0.9s | | | | | | |
| **TAPN** | **Taplejung** | **50.28** | **284** | *e*P | **P** | **05 26 30.7** | **+1.5** |
| **ASAR** | **Alice Springs** | **51.07** | **193** | P | P | 05 26 29.9 | -4.8 |
| | 1.1nm,0.7s,baz=4.8,slow=6.3,SNR=19 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 27 48.2** | **-2.0** |
| | 0.6nm,0.8s,baz=4.0,slow=4.0,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.22** | **319** | P | **P** | **05 26 36.0** | **+0.5** |
| | 1.4nm,0.6s,baz=94,slow=7.7,SNR=6.5 | | | | | | |
| **RAMN** | **Ramite** | **51.33** | **284** | *e*P | **P** | **05 26 37.3** | **+0.2** |
| | 6.6nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **51.73** | **286** | *e*P | **P** | **05 26 41.3** | **+1.1** |
| **MKAR** | **Makanchi Array** | **52.40** | **310** | P | **P** | **05 26 45.4** | **+0.9** |
| | 0.4nm,0.5s,baz=85,slow=8.4,SNR=3.0 | | | | | | |
| **GKN** | **Gorkha** | **52.78** | **286** | *e*P | **P** | **05 26 48.1** | **+0.4** |
| | 15nm,0.8s | | | | | | |
| **KOLN** | **Koldanda** | **53.73** | **286** | *e*P | **P** | **05 26 55.1** | **+0.3** |
| **ILAR** | **Eielson Array** | **57.09** | **28** | P | **P** | **05 27 18.7** | **+0.6** |
| | 0.9nm,0.6s,baz=252,slow=6.2,SNR=20 | | | | | | |
| ILAR | | | | LR | LR | 05 49 32.6 | |
| | comp=Z,21nm,20.8s,baz=93,slow=34 | | | | | | |
| **FORT** | **Forrest** | **59.24** | **197** | *e*P | P | 05 27 29.5 | -3.9 |
| | 11nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **59.87** | **318** | *e*P | **P** | **05 27 38.8** | **+1.1** |
| | 8.0nm,1.1s | | | | | | |
| **KKAR** | **Karatay Array** | **61.07** | **306** | *e*P | **P** | **05 27 47.0** | **+0.9** |
| | 2.1nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **62.56** | **25** | P | **P** | **05 27 56.6** | **+1.1** |
| | 1.4nm,0.6s,baz=277,slow=7.2,SNR=13 | | | | | | |
| **INK** | **Inuvik** | **62.56** | **25** | *e*P | **P** | **05 27 57.1** | **+1.6** |
| | 1.8nm,0.6s | | | | | | |
| **ARU** | **Arti** | **66.08** | **323** | P | **P** | **05 28 19.6** | **+0.7** |
| | 0.4nm,0.2s,baz=307,slow=20,SNR=2.6 | | | | | | |
| **ARU** | **Arti** | **66.08** | **323** | *e*P | **P** | **05 28 19.1** | **+0.2** |
| | 10nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **66.93** | **315** | *e*P | **P** | **05 28 24.6** | **+0.2** |
| | 3.9nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **67.83** | **316** | P | **P** | **05 28 30.3** | **+0.2** |
| | 1.8nm,0.8s,baz=87,slow=7.1,SNR=4.2 | | | | | | |
| **CMB** | **Columbia Colle** | **77.79** | **54** | *e*P | **P** | **05 29 30.3** | **+0.8** |
| | 5.0nm,1.3s | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.11** | **53** | P | **P** | **05 29 37.6** | **+0.5** |
| | 1.6nm,0.8s,baz=289,slow=8.1,SNR=10 | | | | | | |
| **FINES** | **FINESS Array B** | **79.28** | **335** | P | **P** | **05 29 38.0** | **+0.9** |
| | 3.0nm,0.8s,baz=67,slow=6.4,SNR=7.8 | | | | | | |
| **KBZ** | **Khabaz** | **79.86** | **314** | P | **P** | **05 29 41.7** | **+1.0** |
| | 3.7nm,0.9s,baz=27,slow=2.3,SNR=4.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **84.22** | **325** | P | **P** | **05 30 03.2** | **-0.2** |
| | 1.1nm,0.6s,baz=51,slow=4.9,SNR=6.3 | | | | | | |
| **HFS** | **Hagfors** | **84.66** | **338** | P | **P** | **05 30 06.1** | **+0.6** |
| | 1.5nm,0.6s,baz=72,slow=6.2,SNR=4.9 | | | | | | |
| **NB2** | **NORSAR Subarra** | **84.80** | **339** | P | P | 05 30 09.2 | +3.0 |
| | comp=Z,1.9nm,0.8s,baz=40,slow=4.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **84.80** | **339** | P | **P** | **05 30 07.0** | **+0.8** |
| | comp=Z,1.9nm,0.8s,baz=40,slow=4.9,SNR=4.4 | | | | | | |
| **RAYN** | **Ar Rayn** | **87.27** | **295** | *e*P | **P** | **05 30 18.8** | **-0.4** |
| | comp=Z,3.3nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **94.15** | **54** | P | **P** | **05 30 52.0** | **+0.8** |
| | comp=Z,0.2nm,0.6s,baz=308,slow=4.4,SNR=4.3 | | | | | | |
| **QSPA** | **South Pole Qui** | **116.42** | **180** | *e*PKPdf | **PKPdf** | **05 36 13.1** | **-1.9** |
| **TORD** | **Torodi Ar. Bea** | **126.46** | **313** | PKP | **PKPdf** | **05 36 35.5** | **-0.2** |
| | comp=Z,0.4nm,1.0s,baz=43,slow=2.7,SNR=2.2 | | | | | | |
| **SNAA** | **Sanae** | **131.43** | **193** | P | **PKPdf** | **05 36 41.5** | **-2.1** |
| **VNA2** | **Neumayer--Watz** | **132.92** | **192** | P | **PKPdf** | **05 36 46.3** | **0.0** |
| | baz=102,slow=1.6 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **133.06** | **191** | P | **PKPdf** | **05 36 43.6** | **-2.9** |
| **LPAZ** | **La Paz** | **147.96** | **78** | PKPbc | **PKPbc** | **05 37 17.2** | **-1.5** |
| | comp=Z,1.5nm,1.1s,baz=196,slow=3.7,SNR=3.1 | | | | | | |

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**JMA 09 05:37:41.8**±0.1**, 38.°51N**×**138.°38E, h6**km±2km**, M3.5, 2D, Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSD** | **Sado** | **0.48** | **191** | ⇓P | Pg | 05 37 51.5 | +0.4 |
| JSD | | | | S | Sg | 05 37 57.5 | +0.1 |
| **JAW** | **Awa shima** | **0.68** | **94** | ⇓P | Pg | 05 37 55.1 | +0.1 |
| JAW | | | | S | Sg | 05 38 04.7 | +0.9 |
| **JIZZ** | **Izumozaki** | **1.01** | **165** | P | Pg | 05 38 01.0 | -0.2 |
| JIZZ | | | | S | Sb | 05 38 15.7 | +0.5 |
| **JNS** | **Sasagawa** | **1.01** | **133** | P | Pg | 05 38 00.3 | -0.9 |
| JNS | | | | S | Sg | 05 38 14.0 | -0.3 |
| **JYA** | **Atsumi** | **1.05** | **85** | P | Pg | 05 38 01.5 | -0.5 |
| JYA | | | | S | Sg | 05 38 15.4 | -0.2 |
| **JTB** | **Tobi-shima** | **1.15** | **53** | P | Pg | 05 38 02.8 | -1.0 |
| **MAT** | **Matsushiro** | **1.97** | **184** | P | Pn | 05 38 14.5 | -1.2 |
| MAT | | | | S | Sn | 05 38 39.1 | -1.7 |

*ISCJB **09** 05:45:12.5±0.8, 42.°40N±0.°05×128.°27E±0.°06, h10km, mb3.4/2, Error ellipse: s-maj=8.0km s-min=5.4km az=150.9*
*IDC **09** 05:45:13.6±1.5, 42.°31N×128.°45E, h0km, mb3.5/2, mb1 3.7/4, mb1mx3.4/28, mbtmp3.6/4, ML3.2/2, MS2.7/1, Ms1 2.7/1, ms1mx2.4/21, Error ellipse: s-maj=26.8km s-min=14.8km az=121.0*
*BJI **09** 05:45:15.1, 42.°38N×128.°39E, h8km, ML4.4/14*
**ISC 09 05:45:14.7±0.9, 42.°35N±0.°05×128.°39E±0.°05, h10km, n8, σ1§33/13, 1C, Northeastern China**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MDJ** | **Mudanjiang** | **2.43** | **21** | Pg | **Pb** | **05 45 59.4** | **+1.0** |
| MDJ | | | | Sg | **Sg** | **05 46 32.0** | **-0.7** |
| MDJ | | | | SMN | | | |
| | 2μm,0.5s | | | | | | |
| MDJ | | | | SME | | | |
| | 2μm,0.5s | | | | | | |
| **CN2** | **Changchun** | **2.60** | **305** | Pg | **Pg** | **05 46 03.4** | **-1.0** |
| CN2 | | | | Sg | **Sg** | **05 46 36.6** | **-1.4** |
| CN2 | | | | SMN | | | |
| | 1μm,0.5s | | | | | | |
| CN2 | | | | SME | | | |
| | 800nm,0.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **3.21** | **54** | Pn | **Pn** | **05 46 05.4** | **+0.2** |
| | 13nm,0.3s,baz=233,slow=15,SNR=97 | | | | | | |
| USRK | | | | Pg | **Pb** | **05 46 11.9** | **+0.1** |
| | 64nm,0.3s,baz=237,slow=15,SNR=75 | | | | | | |
| USRK | | | | Lg | Lg | 05 46 54.5 | |
| | 99nm,0.3s,baz=234,slow=26,SNR=6.8 | | | | | | |
| **SNY** | **Shenyang** | **3.62** | **263** | ⇑Pg | **Pb** | **05 46 21.1** | **+2.4** |
| SNY | | | | Sg | **Sg** | **05 47 09.3** | **-1.5** |
| SNY | | | | SMN | | | |
| | 530nm,1.1s | | | | | | |
| SNY | | | | SME | | | |
| | 640nm,0.4s | | | | | | |
| **KSRS** | **Korea Array** | **4.91** | **184** | Pn | **Pn** | **05 46 28.7** | **+0.3** |
| | 2.0nm,0.3s,baz=5.8,slow=13,SNR=9.0 | | | | | | |
| KSRS | | | | Pg | **Pb** | **05 46 40.8** | **+0.2** |
| | 3.9nm,0.3s,baz=6.8,slow=18,SNR=19 | | | | | | |
| KSRS | | | | Lg | Lg | 05 47 49.4 | |
| | 51nm,0.3s,baz=5.1,slow=29,SNR=32 | | | | | | |
| KSRS | | | | LR | LR | 05 48 29.0 | |
| | comp=Z,82nm,19.3s,baz=268,slow=40 | | | | | | |
| **CD2** | **Chengdu** | **22.74** | **248** | *e*P | **P** | **05 50 15.2** | **-1.8** |
| **ZALV** | **Zalesovo Beam** | **30.81** | **307** | P | **P** | **05 51 30.9** | **+0.5** |
| | 0.6nm,0.5s,baz=80,slow=7.9,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **50.53** | **34** | P | **P** | **05 54 13.9** | **+1.2** |
| | 0.2nm,0.8s,baz=294,slow=7.6,SNR=2.9 | | | | | | |

*BUL **09** 06:00:48.0±13.0, 25.°44S×28.°83E, h15km, n999km, MD3.9*
*PRE **09** 06:01:10.6±1.7, 26.°44S×27.°66E, h2km, ML2.4*
**ISC 09 06:01:06.0±1.2, 26.°54S±0.°04×27.°87E±0.°03, h5km±11km, n13, σ1§77/22, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KLOF** | **Kloof** | **0.30** | **309** | *e*P | **Pb** | **06 01 12.8** | **-1.1** |
| KLOF | | | | *e*S | **Sg** | **06 01 14.0** | **-1.8** |
| KLOF | | | | AML | AML | 06 01 14.4 | |
| | comp=Z,9μm,0.3s | | | | | | |
| **OBSV** | **Observatory** | **0.40** | **28** | *e*P | **Pn** | **06 01 19.8** | **+1.3** |
| OBSV | | | | *e*S | **Sb** | **06 01 25.1** | **+3.0** |
| OBSV | | | | AML | AML | 06 01 26.7 | |
| | comp=Z,223nm,0.2s | | | | | | |
| **WDLM** | **Western Deep L** | **0.42** | **286** | *e*P | **Pb** | **06 01 15.7** | **-0.2** |
| WDLM | | | | *e*S | **Sg** | **06 01 17.5** | **-2.1** |
| WDLM | | | | AML | AML | 06 01 18.9 | |
| | comp=Z,654nm,0.2s | | | | | | |
| **BNON** | **Benoni** | **0.55** | **47** | *e*P | Pn | 06 01 23.3 | +2.7 |
| BNON | | | | *e*S | **Sn** | **06 01 30.9** | **+0.6** |
| BNON | | | | AML | AML | 06 01 34.4 | |
| | comp=Z,54nm,0.1s | | | | | | |
| **PRYS** | **Parys** | **0.60** | **230** | *e*P | **Pn** | **06 01 20.4** | **-0.8** |
| PRYS | | | | *e*S | **Sb** | **06 01 28.0** | **+0.2** |
| PRYS | | | | AML | AML | 06 01 30.4 | |
| | comp=Z,69nm,0.3s | | | | | | |
| **BFSD** | **Buffelsfontein** | **1.02** | **251** | *e*P | **Pn** | **06 01 28.0** | **+0.9** |
| BFSD | | | | *e*S | **Sg** | **06 01 39.3** | **+0.4** |
| BFSD | | | | AML | AML | 06 01 45.2 | |
| | comp=Z,70nm,0.3s | | | | | | |
| **KSR** | **Koster** | **1.11** | **308** | *e*P | **Pn** | **06 01 28.0** | **-0.3** |
| KSR | | | | *e*S | **Sg** | **06 01 40.3** | **-1.4** |
| KSR | | | | AML | AML | 06 01 46.3 | |
| | comp=Z,14nm,0.2s | | | | | | |
| **TLEK** | **Tau Lekoa** | **1.15** | **248** | *e*P | **Pg** | **06 01 30.3** | **+2.2** |
| TLEK | | | | *e*S | **Sn** | **06 01 44.9** | **-0.2** |
| TLEK | | | | AML | AML | 06 01 48.3 | |
| | comp=Z,90nm,0.3s | | | | | | |
| **LBTB** | **Lobatse** | **2.55** | **306** | *i* P | **Pg** | **06 01 56.7** | **+1.8** |
| LBTB | | | | *i* S | **Sn** | **06 02 15.3** | **-4.2** |
| **BOSA** | **Boshof** | **3.11** | **228** | *i* P | **Pn** | **06 01 57.5** | **+1.8** |
| BOSA | | | | *i* S | **Sb** | **06 02 40.2** | **+0.2** |
| **POGA** | **Pongola** | **3.44** | **105** | *e*P | **Pg** | **06 02 11.1** | **-0.8** |
| POGA | | | | *e*S | **Sg** | **06 02 55.0** | **-1.6** |
| POGA | | | | AML | AML | 06 02 59.9 | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **MATP** | **Matopo** | **6.11** | **6** | *i* S | **Pg** | **06 03 03.7** | **+0.6** |
| **BLWY** | **Bulawayo** | **6.41** | **6** | *i* S | Pb | 06 02 53.4 | -4.6 |

**BJI 09 06:07:09.2, 42.°37N×128.°42E, h5km, ML3.6/13, 1C, Northeastern China**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MDJ** | **Mudanjiang** | **2.40** | **20** | Pg | Pb | 06 07 52.6 | -0.3 |
| MDJ | | | | Sg | Sb | 06 08 24.6 | +1.7 |
| MDJ | | | | SMN | | | |
| | 390nm,0.7s | | | | | | |
| MDJ | | | | SME | | | |
| | 400nm,0.5s | | | | | | |
| **CN2** | **Changchun** | **2.60** | **304** | Pg | Pb | 06 07 56.3 | -0.1 |
| CN2 | | | | Sg | Sb | 06 08 30.3 | +1.6 |
| CN2 | | | | SMN | | | |
| | 200nm,0.5s | | | | | | |
| CN2 | | | | SME | | | |
| | 200nm,0.5s | | | | | | |
| **SNY** | **Shenyang** | **3.64** | **263** | ⇑Pg | Pb | 06 08 13.8 | -0.3 |
| SNY | | | | Sg | Sb | 06 09 02.1 | +3.6 |
| SNY | | | | SMN | | | |
| | 120nm,1.1s | | | | | | |
| SNY | | | | SME | | | |
| | 170nm,0.4s | | | | | | |

*NIED **09** 06:12:00, 35.°90N×140.°60E, h35km, Mw4.5 Best double couple: M0 5.48000×10^15 NP1:φs285.00000°, δ28.00000°, λ162.00000°. NP2:φs32.00000°, δ82.00000°, λ64.00000°.*
*BJI **09** 06:12:19.4, 35.°77N×140.°80E, h33km, mb4.5/40, mB4.8/33, Ms4.2/26, Ms7 4.0/21*
*ISCJB **09** 06:12:21.8±0.5, 35.°81N±0.°02×140.°46E±0.°03, h30km±3km, mb4.6/77, MS3.7/20, Error ellipse: s-maj=4.2km s-min=3.7km az=25.6*
*JMA **09** 06:12:22.4, 35.°86N×140.°52E, h34km±1km, M4.4 Broadband fault plane solution: P waves. NP1: φs50.00000°, δ55.00000°, λ96.00000°. NP2:φs220.00000°, δ35.00000°, λ82.00000°. Principal axes: T Plg79.0000°, Azm343.0000°; N Plg5.0000°, Azm227.0000°; P Plg10.0000°, Azm136.0000°;*
*JMA Felt III J1.*
*MOS **09** 06:12:22.0±1.2, 35.°82N×140.°40E, h33km, mb4.7/44 Error ellipse: s-maj=8.8km s-min=6.0km az=113.3*
*NEIC **09** 06:12:23.2±1.4, 35.°81N×140.°44E, h29km±10km, mb4.8/37, MW4.4(NIED), Error ellipse: s-maj=5.3km s-min=4.3km az=129.0*
*NEIC Felt at Chiba, Narita and Tsukuba. Recorded [3 JMA] in Chiba and Ibaraki; [1 JMA] in Gumma, Saitama, Tochigi and Tokyo.*
*IDC **09** 06:12:23.3±3.6, 35.°81N×140.°44E, h33km±26km, mb4.1/19, mb1 4.2/24, mb1mx4.1/34, mbtmp4.2/24, ML3.0/3, MS3.7/21, Ms1 3.7/21, ms1mx3.5/37, Error ellipse: s-maj=16.5km s-min=13.4km az=100.0*
**ISC 09 06:12:24.9±0.4, 35.°86N±0.°04×140.°51E±0.°04, h43km±3km, n221, σ1§53/236, mb4.6/77, MS3.7/20, 7C-6D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHOJ** | **Chosi** | **0.32** | **118** | ⇑P | Pn | 06 12 30.1 | -3.5 |
| CHOJ | | | | S | **Sn** | **06 12 35.6** | **-4.1** |
| **JYT** | **Yasato** | **0.45** | **325** | ⇓P | **Pn** | **06 12 32.3** | **-2.8** |
| JYT | | | | S | **Sn** | **06 12 39.0** | **-3.4** |
| **I30JP** | **ISUMI INFRASON** | **0.57** | **196** | Pg | **Pn** | **06 12 35.3** | **-1.4** |
| | baz=15,slow=15 | | | | | | |
| I30JP | | | | Lg | Lg | 06 12 45.5 | |
| | baz=126,slow=228 | | | | | | |
| **JHO** | **Hitachi** | **0.76** | **4** | ⇓P | **Pn** | **06 12 36.2** | **-3.0** |
| JHO | | | | *e*S | **Sn** | **06 12 45.6** | **-3.9** |
| **BSO4** | **Boso 4** | **0.88** | **189** | P | **Pn** | **06 12 39.1** | **-1.6** |
| **JAG** | **Ashikaga** | **1.03** | **304** | ⇓P | **Pn** | **06 12 40.1** | **-2.8** |
| JAG | | | | S | **Sn** | **06 12 53.7** | **-2.4** |
| **BSO3** | **Boso 3** | **1.05** | **180** | P | **Pn** | **06 12 40.8** | **-2.1** |
| **MJAR** | **Matsushiro Arr** | **1.98** | **291** | Pn | **Pn** | **06 12 54.2** | **-1.7** |
| | 65nm,0.3s,baz=106,slow=12,SNR=621 | | | | | | |
| MJAR | | | | Sn | **Sn** | **06 13 19.8** | **+0.2** |
| | 54nm,0.3s,baz=98,slow=7.9,SNR=9.9 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **1.98** | **291** | P | **Pn** | **06 12 54.3** | **-1.7** |
| MJAR | | | | | | 06 13 19.8 | |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,65nm,0.3s | | | | | | |
| MJAR | | | | smax | smax | | |
| | comp=N,54nm,0.3s | | | | | | |
| **MAJO** | **Matsushiro** | **1.99** | **291** | *d* iP | **Pn** | **06 12 54.9** | **-1.1** |
| **MAJO** | **Matsushiro** | **1.99** | **291** | *e*Pn | **Pn** | **06 12 55.1** | **-0.9** |
| **MAT** | **Matsushiro** | **1.99** | **291** | P | **Pn** | **06 12 54.8** | **-1.2** |
| MAT | | | | S | **Sn** | **06 13 19.6** | **-0.1** |
| **JHJ** | **Hachijo jima 2** | **2.79** | **193** | Pn | **Pn** | **06 13 05.0** | **-2.2** |
| | comp=N,203nm,0.3s,baz=66,slow=20,SNR=12 | | | | | | |
| JHJ | | | | Sn | **Sn** | **06 13 35.0** | **-4.6** |
| | comp=N,87nm,0.3s,baz=342,slow=20,SNR=8.2 | | | | | | |
| JHJ | | | | LR | LR | 06 14 08.4 | |
| | comp=N,576nm,19.1s,baz=90,slow=38 | | | | | | |
| **JHJ2** | **Mitsune** | **2.80** | **192** | *e*Pn | **Pn** | **06 13 06.5** | **-0.6** |
| **ERM** | **Erimo** | **6.49** | **18** | *e*P | **Pn** | **06 13 56.9** | **-0.8** |
| **ERM** | **Erimo** | **6.49** | **18** | Pn | **Pn** | **06 13 57.9** | **+0.2** |
| | comp=N,318nm,0.6s,SNR=9.0 | | | | | | |
| **ERM** | **Erimo** | **6.49** | **18** | *e*Pn | **Pn** | **06 13 57.1** | **-0.6** |
| ERM | | | | *e*Sn | **Sn** | **06 15 14.6** | **+4.2** |
| **ASAJ** | **Asahikawa** | **8.40** | **10** | Pn | **Pn** | **06 14 21.8** | **-2.2** |
| | baz=213,slow=8.1 | | | | | | |
| **ASAJ** | **Asahikawa** | **8.40** | **10** | *e*Pn | **Pn** | **06 14 22.0** | **-2.0** |
| **JNU** | **Nakatsue** | **8.41** | **254** | Pn | **Pn** | **06 14 23.0** | **-1.2** |
| | comp=N,0.2nm,0.3s,baz=53,slow=10,SNR=1.8 | | | | | | |
| **JNU** | **Nakatsue** | **8.41** | **254** | *e*Pn | **Pn** | **06 14 24.8** | **+0.6** |
| **CBIJ** | **Chichi jima** | **8.85** | **170** | *e*Pn | Pn | 06 14 26.4 | -3.8 |
| **YUK** | **Yuzh-Kuril'sk** | **9.14** | **25** | *c* iP | Pn | 06 14 44.0 | +10 |
| YUK | | | | *i* S | Sn | 06 16 28.7 | +13 |
| YUK | | | | pmax | pmax | | |
| | comp=N,43nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,127nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,91nm,0.1s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,321nm,16.0s | | | | | | |
| **VLA** | **Vladivostok** | **9.85** | **320** | ⇑*e*P | Pn | 06 14 47.4 | +3.6 |
| VLA | | | | S | **Sn** | **06 16 37.9** | **+5.0** |
| **KSRS** | **Korea Array** | **10.24** | **283** | Pn | **Pn** | **06 14 48.6** | **-0.6** |
| | comp=Z,0.3nm,0.3s,baz=98,slow=14,SNR=2.8 | | | | | | |
| KSRS | | | | LR | LR | 06 18 39.2 | |
| | comp=Z,346nm,20.1s,baz=94,slow=37 | | | | | | |
| **KS01** | **Wonju Array Si** | **10.27** | **283** | *e*Pn | **Pn** | **06 14 48.8** | **-0.8** |
| **KSAR** | **Wonju Array Be** | **10.27** | **283** | P | **Pn** | **06 14 48.6** | **-1.0** |
| **KSAR** | **Wonju Array Be** | **10.27** | **283** | Pn | **Pn** | **06 14 48.6** | **-1.0** |
| **USRK** | **Ussuriysk Ar.** | **10.58** | **325** | Pn | **Pn** | **06 14 52.1** | **-1.8** |
| | comp=Z,0.1nm,0.3s,baz=140,slow=12,SNR=2.1 | | | | | | |
| USRK | | | | LR | LR | 06 18 42.8 | |
| | comp=Z,370nm,19.9s,baz=164,slow=36 | | | | | | |
| **KUR** | **Kuril'sk** | **10.91** | **29** | *d* iP | Pn | 06 15 08.0 | +10 |
| KUR | | | | *i* S | Sn | 06 17 11.3 | +12 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,12nm,0.1s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,16nm,0.1s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,157nm,2.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,185nm,2.8s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,185nm,2.8s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,338nm,15.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=E,149nm,15.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,217nm,15.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **11.22** | **8** | *e*P | **Pn** | **06 15 04.7** | **+2.2** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **11.22** | **8** | *e*Pn | **Pn** | **06 15 00.6** | **-1.9** |
| **MDJ** | **Mudanjiang** | **12.08** | **320** | *e*Pn | **Pn** | **06 15 13.6** | **-0.8** |
| **HABR** | **Khabarovsk** | **13.24** | **344** | *e*P | **Pn** | **06 15 27.9** | **-2.2** |
| HABR | | | | *e*S | **Sn** | **06 17 53.7** | **-2.1** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,29nm,2.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,40nm,2.1s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,176nm,13.0s | | | | | | |
| **CN2** | **Changchun** | **14.02** | **309** | *e*P | **Pn** | **06 15 41.5** | **+0.7** |
| CN2 | | | | *e*P | | 06 15 55.5 | |
| CN2 | | | | *e*S | **Sn** | **06 18 15.2** | **+0.3** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,200nm,4.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,1μm,14.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,1μm,14.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,2μm,16.0s | | | | | | |
| **KLR** | **Kul'dur** | **14.83** | **337** | *e*P | **P** | **06 15 55.0** | **-1.7** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,50nm,1.6s | | | | | | |
| **NJ2** | **Nanjing** | **18.36** | **264** | *e*P | **P** | **06 16 33.3** | **-2.5** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,50nm,0.6s | | | | | | |
| **BJI** | **Beijing** | **19.62** | **290** | P | **P** | **06 16 49.1** | **-0.5** |
| BJI | | | | S | **S** | **06 20 26.9** | **-1.8** |
| BJI | | | | PMZ | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,120nm,3.6s | | | | | | |
| **PEA0** | **Petropavlovsk-** | **21.07** | **30** | *e*P | **P** | **06 17 06.1** | **+0.8** |
| **PETK** | **Petropavlovsk-** | **21.07** | **30** | P | **P** | **06 17 04.3** | **-0.9** |
| | comp=Z,5.2nm,0.8s,baz=199,slow=8.8,SNR=3.6 | | | | | | |
| PETK | | | | LR | LR | 06 26 12.9 | |
| | comp=Z,46nm,18.3s,baz=218,slow=39 | | | | | | |
| **PETK** | **Petropavlovsk-** | **21.07** | **30** | P | **P** | **06 17 04.3** | **-0.9** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,46nm,18.3s | | | | | | |
| **PET** | **Petropavlovsk** | **21.40** | **31** | *e*P | **P** | **06 17 10.5** | **+1.8** |
| PET | | | | pmax | pmax | | |
| | comp=Z,90nm,1.3s | | | | | | |
| **PET** | **Petropavlovsk** | **21.40** | **31** | *e*P | **P** | **06 17 09.7** | **+1.0** |
| | comp=Z,93nm,1.1s | | | | | | |
| **WHN** | **Wuhan** | **22.49** | **264** | P | **P** | **06 17 20.1** | **-0.6** |
| WHN | | | | LZ | | | |
| | comp=Z,450nm,16.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **23.19** | **291** | *e*P | **P** | **06 17 27.6** | **-0.3** |
| HHC | | | | S | **S** | **06 21 31.5** | **-5.1** |
| HHC | | | | PMZ | | | |
| | comp=Z,13nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,81nm,7.1s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,70nm,11.1s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,120nm,12.3s | | | | | | |
| **MA2** | **Magadan** | **24.66** | **13** | *e*P | **P** | **06 17 41.3** | **0.0** |
| **XAN** | **Xi'an** | **25.90** | **275** | P | **P** | **06 17 49.0** | **-3.9** |
| XAN | | | | PMZ | | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,32nm,4.5s | | | | | | |
| **ENH** | **Enshi** | **26.52** | **267** | *e*P | **P** | **06 17 56.9** | **-1.7** |
| | comp=Z,9.8nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **27.07** | **349** | *e*P | **P** | **06 18 01.7** | **-1.3** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.44** | **306** | *e*P | **P** | **06 18 08.0** | **+1.3** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.44** | **306** | *e*P | **P** | **06 18 08.3** | **+1.6** |
| | comp=Z,5.1nm,0.9s | | | | | | |
| **SONA1** | **Songino Array** | **27.86** | **306** | *e*P | **P** | **06 18 09.7** | **-0.8** |
| **SONM** | **Songino Array** | **27.86** | **306** | P | **P** | **06 18 09.4** | **-1.1** |
| | comp=Z,2.3nm,0.5s,baz=100,slow=8.7,SNR=11 | | | | | | |
| SONM | | | | LR | LR | 06 29 13.6 | |
| | comp=Z,167nm,20.4s,baz=90,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **27.86** | **306** | P | **P** | **06 18 09.4** | **-1.1** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,167nm,20.4s | | | | | | |
| **SEY** | **Seymchan** | **28.09** | **12** | P | **P** | **06 18 11.9** | **-0.1** |
| | comp=Z,1.6nm,0.5s,baz=183,slow=7.6,SNR=6.0 | | | | | | |
| **SEY** | **Seymchan** | **28.09** | **12** | P | **P** | **06 18 12.0** | **-0.1** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **BOD** | **Bodaibo** | **28.16** | **330** | *e*P | **P** | **06 18 11.6** | **-1.2** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.21** | **118** | T | T | 06 47 28.9 | |
| | baz=311,slow=75,SNR=77 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.22** | **118** | T | T | 06 47 28.9 | |
| | baz=311,slow=75,SNR=90 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.23** | **118** | T | T | 06 47 29.5 | |
| | baz=311,slow=75,SNR=58 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.87** | **120** | T | T | 06 48 15.0 | |
| | baz=312,slow=75,SNR=134 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.87** | **120** | T | T | 06 48 15.6 | |
| | baz=312,slow=75,SNR=108 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.88** | **120** | T | T | 06 48 16.1 | |
| | baz=312,slow=75,SNR=90 | | | | | | |
| **LZH** | **Lanzhou** | **29.57** | **281** | *e*P | **P** | **06 18 26.0** | **+0.2** |
| LZH | | | | pP | **pP** | **06 18 39.8** | **+2.4** |
| LZH | | | | sP | **sP** | **06 18 44.8** | **+2.3** |
| LZH | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,120nm,4.0s | | | | | | |
| **GYA** | **Guiyang** | **30.32** | **262** | *e*P | **P** | **06 18 33.2** | **+0.7** |
| GYA | | | | pP | **pP** | **06 18 44.8** | **+0.7** |
| GYA | | | | PP | **PnPn** | **06 19 33.0** | **+1.4** |
| GYA | | | | S | **S** | **06 23 28.9** | **-0.9** |
| GYA | | | | SS | **ScP** | **06 25 09.5** | **-1.3** |
| GYA | | | | ScP | SS | 06 25 11.2 | -29 |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,0.8s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,130nm,5.2s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,580nm,17.6s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,520nm,17.9s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,550nm,17.5s | | | | | | |
| **ZAK** | **Zakamensk** | **30.45** | **310** | *e*P | **P** | **06 18 31.8** | **-1.6** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.4s | | | | | | |
| **TLY** | **Talaya** | **30.57** | **313** | *e*P | P | 06 18 39.6 | +5.2 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,110nm,14.0s | | | | | | |
| **CD2** | **Chengdu** | **30.96** | **272** | *e*P | **P** | **06 18 38.0** | **0.0** |
| CD2 | | | | pP | **pP** | **06 18 49.6** | **0.0** |
| CD2 | | | | S | **S** | **06 23 39.8** | **+0.1** |
| CD2 | | | | sS | **sS** | **06 23 59.7** | **+0.6** |
| CD2 | | | | PMZ | | | |
| | comp=Z,20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,180nm,5.0s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,190nm,10.3s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,320nm,12.2s | | | | | | |
| **GTA** | **Gaotai** | **32.23** | **289** | *e*P | **P** | **06 18 50.9** | **+1.7** |
| GTA | | | | pP | **pP** | **06 19 02.7** | **+1.8** |
| GTA | | | | sP | **sP** | **06 19 08.3** | **+2.3** |
| GTA | | | | S | **S** | **06 24 01.1** | **+1.5** |
| GTA | | | | SS | **SnSn** | **06 25 58.4** | **+5.1** |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,130nm,5.5s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,110nm,17.1s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,150nm,17.1s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,130nm,17.3s | | | | | | |
| **KMI** | **Kunming** | **34.07** | **262** | P | **P** | **06 19 06.6** | **+1.1** |
| KMI | | | | pP | **pP** | **06 19 15.5** | **-1.7** |
| KMI | | | | sP | **sP** | **06 19 21.0** | **-1.3** |
| KMI | | | | PMZ | | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,63nm,3.8s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,96nm,13.9s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,150nm,17.3s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,130nm,12.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.50** | **256** | P | **P** | **06 19 58.5** | **-1.3** |
| | comp=Z,1.1nm,0.5s,baz=54,slow=8.1,SNR=4.1 | | | | | | |
| CMAR | | | | LR | LR | 06 36 47.7 | |
| | comp=Z,60nm,19.4s,baz=48,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.50** | **256** | P | **P** | **06 19 58.5** | **-1.3** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| CMAR | | | | MLR | MLR | | |
| | comp=Z,60nm,19.4s | | | | | | |
| **WMQ** | **Urumqi** | **40.73** | **298** | P | **P** | **06 20 02.0** | **+0.5** |
| WMQ | | | | pP | **pP** | **06 20 14.2** | **+0.8** |
| WMQ | | | | sP | **sP** | **06 20 20.0** | **+1.5** |
| WMQ | | | | S | **S** | **06 26 06.0** | **-3.0** |
| WMQ | | | | SS | **SS** | **06 29 08.0** | **-2.6** |
| WMQ | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,15nm,4.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,110nm,16.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,120nm,20.0s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **42.18** | **313** | *e*P | **P** | **06 20 12.6** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **42.18** | **313** | P | **P** | **06 20 13.1** | **0.0** |
| | comp=Z,5.5nm,0.7s,baz=94,slow=5.9,SNR=27 | | | | | | |
| ZALV | | | | PcP | **PcP** | **06 22 06.1** | **-0.6** |
| | comp=Z,1.0nm,0.6s,baz=64,slow=3.4,SNR=3.5 | | | | | | |
| ZALV | | | | LR | LR | 06 37 34.9 | |
| | comp=Z,57nm,18.4s,baz=74,slow=36 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.18** | **313** | P | **P** | **06 20 13.1** | **0.0** |
| ZALV | | | | | | 06 22 06.1 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| ZALV | | | | MLR | MLR | | |
| | comp=Z,57nm,18.4s | | | | | | |
| **NVS** | **Novosibirsk** | **43.14** | **315** | ⇓*e*P | **P** | **06 20 20.3** | **-0.6** |
| NVS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.3s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MK01 | Makanchi Array | 44.13 | 303 | *e*P | P | 06 20 28.4 | -0.7 |
| MK31 | Makanchi Array | 44.14 | 303 | *i* P | P | 06 20 28.7 | -0.4 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 44.14 | 303 | P | P | 06 20 28.7 | -0.4 |
| | comp=Z,11nm,1.1s,baz=87,slow=10,SNR=40 | | | | | | |
| MKAR | | | | LR | LR | 06 39 38.3 | |
| | comp=Z,120nm,18.0s,baz=82,slow=37 | | | | | | |
| MKAR | Makanchi Array | 44.14 | 303 | *e*P | P | 06 20 29.1 | -0.1 |
| MAKZ | Makanchi | 44.35 | 303 | *e*P | P | 06 20 30.8 | 0.0 |
| TAPN | Taplejung | 45.30 | 275 | *e*P | P | 06 20 39.0 | +0.1 |
| | comp=Z,7.3nm,0.4s | | | | | | |
| KURK | Kurchatov | 46.09 | 309 | P | P | 06 20 43.1 | -1.4 |
| | comp=Z,183nm,0.9s,SNR=11 | | | | | | |
| RAMN | Ramite | 46.37 | 275 | *e*P | P | 06 20 47.4 | +0.1 |
| GUN | Gumba | 46.55 | 276 | *e*P | P | 06 20 49.4 | +0.5 |
| PDGK | Podgornoye | 46.70 | 299 | P | P | 06 20 48.7 | -0.6 |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | |
| PKIN | Phulchoki | 47.08 | 276 | *e*P | P | 06 20 52.7 | -0.2 |
| DMN | Daman | 47.30 | 276 | *e*P | P | 06 20 54.5 | -0.1 |
| GKN | Gorkha | 47.52 | 277 | *e*P | P | 06 20 56.7 | +0.5 |
| DANN | Dangsing | 48.08 | 278 | *e*P | P | 06 21 01.6 | +0.9 |
| KDAK | Kodiak Island | 48.46 | 41 | P | P | 06 21 05.3 | +2.5 |
| | comp=Z,15nm,1.1s,baz=310,slow=18,SNR=2.4 | | | | | | |
| KDAK | Kodiak Island | 48.46 | 41 | P | P | 06 21 05.3 | +2.5 |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| CAST | Castle Rocks | 48.61 | 34 | *e*P | P | 06 21 02.3 | -1.6 |
| | comp=Z,6.7nm,0.6s | | | | | | |
| MTN | Manton Dam | 49.24 | 192 | *e*P | P | 06 21 08.3 | -0.9 |
| | comp=Z,21nm,1.3s | | | | | | |
| KSH | Kashi | 50.23 | 295 | *e*P | P | 06 21 21.4 | +4.6 |
| KSH | | | | *e*sP | sP | 06 21 39.3 | +5.4 |
| KSH | | | | *e*PP | PP | 06 23 18.7 | +6.5 |
| KSH | | | | *e*ScP | ScP | 06 26 28.1 | +0.4 |
| KSH | | | | S | S | 06 28 30.8 | +4.8 |
| KSH | | | | sS | sS | 06 28 52.4 | +6.2 |
| KSH | | | | SS | SS | 06 32 03.3 | +3.8 |
| KSH | | | | PMZ | | | |
| | comp=Z,110nm,5.6s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,220nm,7.2s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,200nm,9.2s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,190nm,5.3s | | | | | | |
| MDM | Murphy Dome | 50.30 | 32 | *e*P | P | 06 21 17.3 | +0.5 |
| | comp=Z,9.9nm,1.1s | | | | | | |
| AAK | Ala-Archa | 50.42 | 299 | *e*P | P | 06 21 17.5 | -0.7 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| AAK | Ala-Archa | 50.42 | 299 | *e*P | P | 06 21 17.5 | -0.7 |
| | comp=Z,3.9nm,0.8s | | | | | | |
| OTUK | Ortayu | 50.53 | 307 | P | P | 06 21 17.9 | -0.9 |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| BVA0 | Borovoye Array | 50.83 | 313 | P | P | 06 21 20.2 | -0.8 |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| ILAR | Eielson Array | 50.88 | 32 | P | P | 06 21 21.1 | 0.0 |
| | comp=Z,1.3nm,0.7s,baz=268,slow=5.7,SNR=23 | | | | | | |
| ILAR | Eielson Array | 50.88 | 32 | P | P | 06 21 21.1 | 0.0 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| IL1 | Eielson Array | 50.88 | 32 | *e*P | P | 06 21 20.7 | -0.4 |
| BRVK | Borovoye | 50.89 | 313*c* | *e*P | P | 06 21 21.9 | +0.5 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| BRVK | Borovoye | 50.89 | 313 | *e*P | P | 06 21 21.3 | -0.1 |
| | comp=Z,6.6nm,0.9s | | | | | | |
| EYAK | Cordova Ski Ar | 51.73 | 37 | *e*P | P | 06 21 28.2 | +0.7 |
| | comp=Z,168nm,1.9s | | | | | | |
| MNAS | Manas | 51.87 | 299 | P | P | 06 21 31.1 | +2.0 |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| SFK | Sufi-Kurgan | 51.89 | 296 | P | P | 06 21 29.1 | -0.3 |
| SFK | | | | pmax | pmax | | |
| | comp=Z,15nm,1.6s | | | | | | |
| KK31 | Karatay Array | 53.09 | 301 | *i* P | P | 06 21 46.0 | +8.1 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| KKAR | Karatay Array | 53.09 | 301 | *e*P | P | 06 21 37.8 | -0.2 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| KKAR | Karatay Array | 53.09 | 301 | *e*P | P | 06 21 37.8 | -0.2 |
| | comp=Z,7.1nm,0.8s | | | | | | |
| EGAK | Eagle | 53.32 | 32 | *e*P | P | 06 21 41.9 | +2.6 |
| | comp=Z,1.8nm,0.6s | | | | | | |
| FITZ | Fitzroy Crossi | 55.48 | 197 | *e*P | P | 06 21 54.9 | -0.5 |
| | comp=Z,2.9nm,0.7s | | | | | | |
| SVE | Sverdlovsk | 55.55 | 319 | *e*P | P | 06 21 55.8 | +0.2 |
| DZET | Dzherino | 55.71 | 296 | P | P | 06 21 56.7 | -0.4 |
| DZET | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| INK | Inuvik | 55.77 | 27 | P | P | 06 21 57.5 | +0.6 |
| | comp=Z,1.4nm,0.6s,baz=311,slow=5.5,SNR=6.9 | | | | | | |
| INK | | | | LR | LR | 06 49 00.4 | |
| | comp=Z,40nm,18.6s,baz=214,slow=39 | | | | | | |
| INK | Inuvik | 55.77 | 27 | P | P | 06 21 57.5 | +0.6 |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| INK | | | | MLR | MLR | | |
| | comp=Z,40nm,18.6s | | | | | | |
| WRAB | Tennant Creek | 55.79 | 187 | *e*P | P | 06 21 56.3 | -1.3 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 55.79 | 187 | P | P | 06 21 57.0 | -0.6 |
| | comp=Z,38nm,0.5s,SNR=9.1 | | | | | | |
| WRAB | Tennant Creek | 55.79 | 187 | *e*P | P | 06 21 56.3 | -1.3 |
| | comp=Z,4.2nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 55.80 | 187 | P | P | 06 21 56.1 | -1.6 |
| | comp=Z,2.5nm,0.5s,baz=3.3,slow=7.4,SNR=17 | | | | | | |
| WRA | Warramunga Arr | 55.80 | 187 | P | P | 06 21 56.1 | -1.6 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| ARU | Arti | 56.76 | 319*c* | *i*P | P | 06 22 03.6 | -0.6 |
| ARU | | | | S | S | 06 29 55.2 | +1.3 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,22nm,1.7s | | | | | | |
| ARU | Arti | 56.76 | 319 | *e*P | P | 06 22 03.0 | -1.2 |
| | comp=Z,8.9nm,0.6s | | | | | | |
| AB31 | Akbulak array | 58.15 | 310 | P | P | 06 22 13.3 | -0.8 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| AKTO | Aktyubinsk | 58.92 | 312 | LR | LR | 06 48 54.3 | |
| | comp=Z,62nm,18.9s,slow=37 | | | | | | |
| AS01 | Alice Springs | 59.52 | 187 | *e*P | P | 06 22 22.9 | -0.9 |
| ASAR | Alice Springs | 59.53 | 187 | P | P | 06 22 22.9 | -1.0 |
| | comp=Z,2.4nm,0.8s,baz=12,slow=8.7,SNR=20 | | | | | | |
| ASAR | | | | LR | LR | 06 45 39.9 | |
| | comp=Z,40nm,21.8s,baz=356,slow=34 | | | | | | |
| MBWA | Marble Bar | 60.02 | 202 | *e*P | P | 06 22 28.4 | +1.1 |
| | comp=Z,38nm,1.3s | | | | | | |
| APA | Apatity | 63.46 | 336⇑ | *i*P | pP | 06 23 03.0 | +0.6 |
| APA | | | | MLR | MLR | | |
| | comp=Z,300nm,23.0s | | | | | | |
| GEYT | Alibeck | 63.77 | 299 | LR | LR | 06 52 29.2 | |
| | comp=Z,69nm,19.1s,baz=235,slow=38 | | | | | | |
| RES | Resolute Bay | 63.92 | 14 | LR | LR | 06 55 14.5 | |
| | comp=Z,50nm,18.8s,baz=286,slow=40 | | | | | | |
| RES | Resolute Bay | 63.92 | 14 | *e*P | P | 06 22 52.8 | 0.0 |
| RES | | | | pmax | pmax | | |
| | comp=Z,186nm,2.5s | | | | | | |
| RES | Resolute Bay | 63.92 | 14 | *e*P | P | 06 22 52.8 | 0.0 |
| | comp=Z,186nm,2.5s | | | | | | |
| KLMR | Klimovskoe | 64.36 | 328 | *e*P | P | 06 22 54.0 | -1.9 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,24nm,1.5s | | | | | | |
| ARCES | ARCESS Array B | 64.84 | 339 | P | P | 06 22 58.2 | -0.7 |
| | comp=Z,2.7nm,0.8s,baz=68,slow=8.0,SNR=4.5 | | | | | | |
| ARCES | | | | LR | LR | 06 56 33.2 | |
| | comp=Z,79nm,18.1s,baz=60,slow=41 | | | | | | |
| ARCES | ARCESS Array B | 64.84 | 339 | P | P | 06 22 58.2 | -0.7 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| ARCES | | | | MLR | MLR | | |
| | comp=Z,79nm,18.1s | | | | | | |
| FORT | Forrest | 67.31 | 192 | *e*P | P | 06 23 14.1 | -1.0 |
| | comp=Z,14nm,0.8s | | | | | | |
| OBN | Obninsk | 68.60 | 323 | *e*P | P | 06 23 24.7 | +1.6 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| FINES | FINESS Array B | 69.52 | 332 | P | P | 06 23 28.1 | -0.6 |
| | comp=Z,1.8nm,0.4s,baz=67,slow=4.3,SNR=16 | | | | | | |
| FINES | | | | LR | LR | 06 55 08.0 | |
| | comp=Z,40nm,19.9s,baz=26,slow=37 | | | | | | |
| FINES | FINESS Array B | 69.52 | 332 | P | P | 06 23 28.1 | -0.6 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,40nm,19.9s | | | | | | |
| LTY | Liberty | 69.99 | 46 | *e*P | P | 06 23 32.5 | +0.5 |
| | comp=Z,72nm,2.2s | | | | | | |
| KBZ | Khabaz | 71.11 | 311 | P | P | 06 23 38.9 | +0.2 |
| | comp=Z,5.1nm,0.8s,baz=55,slow=18,SNR=4.6 | | | | | | |
| KBZ | | | | LR | LR | 06 57 11.3 | |
| | comp=Z,39nm,19.0s,baz=34,slow=38 | | | | | | |
| KBZ | Khabaz | 71.11 | 311 | P | P | 06 23 38.9 | +0.2 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,39nm,19.0s | | | | | | |
| KIV | Kislovodsk | 71.13 | 311 | *e*P | P | 06 23 39.3 | +0.3 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| K05A | Summer Lake | 72.26 | 50 | *e*P | P | 06 23 47.1 | +1.2 |
| | comp=Z,173nm,2.8s | | | | | | |
| JTMT | Jette | 73.35 | 43 | *e*P | P | 06 23 54.2 | +1.9 |
| OHCM | Honcut | 73.72 | 53 | *e*P | P | 06 23 55.1 | +0.8 |
| ANN | Anapa | 73.82 | 314 | *e*P | P | 06 23 59.6 | +4.8 |
| ANN | | | | *e* | | 06 26 34.2 | |
| ANN | | | | pmax | pmax | | |
| | comp=Z,100nm,1.3s | | | | | | |
| SLMT | Seeley Lake | 74.08 | 43 | *e*P | P | 06 23 56.9 | +0.3 |
| AKASG | Malin Array Be | 74.78 | 322 | P | P | 06 23 59.5 | -0.8 |
| | comp=Z,2.3nm,0.5s,baz=47,slow=6.0,SNR=13 | | | | | | |
| AKASG | | | | LR | LR | 06 59 21.7 | |
| | comp=Z,125nm,19.2s,baz=30,slow=38 | | | | | | |
| AKASG | Malin Array Be | 74.78 | 322*c* | *e*P | P | 06 23 59.7 | -0.6 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| KIEV | Kiev | 74.79 | 322 | *e*P | P | 06 24 00.5 | +0.1 |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| KIEV | Kiev | 74.79 | 322 | *e*P | P | 06 23 59.4 | -1.0 |
| | comp=Z,126nm,3.0s | | | | | | |
| NB2 | NORSAR Subarra | 74.99 | 337 | P | P | 06 24 00.6 | -0.8 |
| | comp=Z,2.9nm,0.6s,baz=41,slow=5.9 | | | | | | |
| NOA | NORSAR Array B | 74.99 | 337 | P | P | 06 24 00.9 | -0.5 |
| | comp=Z,4.6nm,0.8s,baz=40,slow=5.8,SNR=14 | | | | | | |
| NOA | | | | LR | LR | 06 59 31.4 | |
| | comp=Z,57nm,20.5s,baz=5.0,slow=38 | | | | | | |
| NOA | NORSAR Array B | 74.99 | 337 | P | P | 06 24 00.9 | -0.5 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,57nm,20.5s | | | | | | |
| NBO02 | NORSAR Array S | 75.09 | 337 | *e*P | P | 06 24 01.9 | -0.1 |
| CMB | Columbia Colle | 75.15 | 54 | *e*P | P | 06 24 03.3 | +0.5 |
| CMB | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| CMB | Columbia Colle | 75.15 | 54 | *e*P | P | 06 24 03.3 | +0.5 |
| | comp=Z,1.1nm,0.5s | | | | | | |
| SAO | San Andreas Ge | 75.15 | 55 | *e*P | P | 06 24 02.8 | +0.1 |
| SAO | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| SAO | San Andreas Ge | 75.15 | 55 | *e*P | P | 06 24 02.8 | +0.1 |
| | comp=Z,12nm,1.1s | | | | | | |
| LRM | Limekiln Ridge | 75.50 | 44 | *e*P | P | 06 24 05.6 | +0.7 |
| | comp=Z,32nm,0.8s | | | | | | |
| DLMT | Dillon | 75.69 | 44 | *e*P | P | 06 24 06.6 | +0.7 |
| | comp=Z,1.9nm,0.8s | | | | | | |
| BOZ | Bozeman (W) | 76.06 | 43 | *e*P | P | 06 24 09.4 | +1.4 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| BOZ | Bozeman (W) | 76.06 | 43 | *e*P | P | 06 24 09.4 | +1.4 |
| | comp=Z,5.0nm,1.2s | | | | | | |
| NV01 | Mina Array Sit | 76.28 | 52 | *e*P | P | 06 24 10.6 | +1.2 |
| NVAR | Mina Array Bea | 76.28 | 52 | P | P | 06 24 10.0 | +0.6 |
| | comp=Z,1.3nm,0.8s,baz=288,slow=5.4,SNR=9.6 | | | | | | |
| ELK | Elko | 76.87 | 49 | *e*P | P | 06 24 13.2 | +0.5 |
| ELK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| ELK | Elko | 76.87 | 49 | *e*P | P | 06 24 13.2 | +0.5 |
| | comp=Z,1.6nm,0.8s | | | | | | |
| HVU | Hansel Valley | 77.74 | 47 | *e*P | P | 06 24 18.7 | +1.2 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,55nm,2.8s | | | | | | |
| HVU | Hansel Valley | 77.74 | 47 | *e*P | P | 06 24 18.7 | +1.2 |
| | comp=Z,55nm,2.8s | | | | | | |
| TPNV | Topopah Spring | 78.46 | 53 | *e*P | P | 06 24 22.6 | +1.0 |
| TPNV | | | | pmax | pmax | | |
| | comp=Z,53nm,2.5s | | | | | | |
| TPNV | Topopah Spring | 78.46 | 53 | *e*P | P | 06 24 22.6 | +1.0 |
| | comp=Z,53nm,2.5s | | | | | | |
| DUG | Dugway | 78.68 | 48 | *e*P | P | 06 24 23.4 | +0.7 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| DUG | Dugway | 78.68 | 48 | *e*P | P | 06 24 23.4 | +0.7 |
| | comp=Z,1.9nm,0.8s | | | | | | |
| BW06 | Boulder Array | 79.01 | 45 | *e*P | P | 06 24 24.8 | +0.2 |
| | comp=Z,1.2nm,0.6s | | | | | | |
| BRTR | Keskin Array B | 79.08 | 311 | P | P | 06 24 24.6 | -0.3 |
| | comp=Z,0.9nm,0.5s,baz=55,slow=5.5,SNR=4.1 | | | | | | |
| BRTR | Keskin Array B | 79.08 | 311 | *i* P | P | 06 24 28.8 | +3.9 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| KOLS | Kolonicke sedl | 79.34 | 324 | *e*P | P | 06 24 28.3 | +2.3 |
| KOLS | Kolonicke sedl | 79.34 | 324 | *e*P | P | 06 24 28.3 | +2.3 |
| UZH | Uzhgorod | 79.54 | 324 | *e*P | P | 06 24 28.8 | +1.8 |
| UZH | | | | *e* | | 06 24 37.4 | |
| UZH | | | | *i* | | 06 24 42.0 | |
| MSU | Marysvale | 80.10 | 49 | *e*P | P | 06 24 31.6 | +1.0 |
| MSU | Marysvale | 80.10 | 49 | *e*P | P | 06 24 31.6 | +1.0 |
| BORC | Borrego Spring | 80.53 | 56 | *e*P | P | 06 24 32.4 | -0.3 |
| SRU | San Rafael | 80.74 | 48 | *e*P | P | 06 24 35.0 | +1.1 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,23nm,2.0s | | | | | | |
| SRU | San Rafael | 80.74 | 48 | *e*P | P | 06 24 35.0 | +1.1 |
| | comp=Z,23nm,2.0s | | | | | | |
| CRR | Carrizo Plain | 81.06 | 56 | *e*P | P | 06 24 36.1 | +0.5 |
| DPC | Dobruska-Polom | 81.06 | 328 | *e*P | P | 06 24 37.3 | +2.0 |
| DPC | Dobruska-Polom | 81.06 | 328 | *e*P | P | 06 24 37.3 | +2.0 |
| KRLC | Kraliky | 81.06 | 327 | *e*P | P | 06 24 31.4 | -3.9 |
| VYHS | Vyhne | 81.28 | 325 | *e*P | P | 06 24 37.2 | +0.8 |
| VYHS | Vyhne | 81.28 | 325 | *e*P | P | 06 24 37.2 | +0.8 |
| PV10 | Paradox Valley | 82.10 | 48 | *e*P | P | 06 24 42.6 | +1.3 |
| | comp=Z,100nm,0.8s | | | | | | |
| PV05 | Paradox Valley | 82.25 | 48 | *e*P | P | 06 24 43.4 | +1.4 |
| PV15 | Paradox Valley | 82.46 | 48 | *e*P | P | 06 24 43.9 | +0.7 |
| PV01 | Paradox Valley | 82.54 | 48 | *e*P | P | 06 24 44.0 | +0.5 |
| KHC | Kasperske Hory | 83.16 | 328 | *e*P | P | 06 24 49.3 | +3.0 |
| KHC | Kasperske Hory | 83.16 | 328 | *e*P | P | 06 24 49.3 | +3.0 |
| GERES | GERESS Array B | 83.32 | 328 | P | P | 06 24 46.6 | -0.6 |
| | comp=Z,0.3nm,0.3s,baz=47,slow=7.2,SNR=3.9 | | | | | | |
| GERES | | | | LR | LR | 07 07 27.4 | |
| | comp=Z,60nm,21.8s,baz=42,slow=40 | | | | | | |
| SDCO | Great Sand Dun | 84.62 | 47 | *e*P | P | 06 24 55.6 | +1.2 |
| | comp=Z,1.0nm,0.8s | | | | | | |
| PPT | Papeete | 84.77 | 116 | LR | LR | 07 01 42.8 | |
| | comp=Z,33nm,18.8s,baz=328,slow=35 | | | | | | |
| ECSD | EROS Data Cent | 85.29 | 38 | *e*P | P | 06 24 57.2 | 0.0 |
| | comp=Z,2.3nm,0.8s | | | | | | |
| T25A | Trinidad | 85.67 | 47 | *e*P | P | 06 25 00.7 | +1.2 |
| | comp=Z,65nm,2.5s | | | | | | |
| ANMO | Albuquerque | 85.90 | 49 | *e*P | P | 06 25 02.0 | +1.4 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.7s | | | | | | |
| ANMO | Albuquerque | 85.90 | 49 | *e*P | P | 06 25 02.2 | +1.5 |
| | comp=Z,9.4nm,1.8s | | | | | | |
| BFO | Black Forest | 85.97 | 330 | *i* P | P | 06 25 01.0 | +0.5 |
| FUORN | Ofenpass-Fuorn | 86.52 | 328 | *e*P | P | 06 25 03.8 | +0.3 |
| | comp=Z,60nm,2.2s | | | | | | |
| WMOK | Wichita Mounta | 90.62 | 45 | *e*P | P | 06 25 24.0 | +1.1 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| WMOK | Wichita Mounta | 90.62 | 45 | *e*P | P | 06 25 23.9 | +1.1 |
| | comp=Z,1.7nm,0.8s | | | | | | |
| TX31 | Lajitas Ar. Si | 91.42 | 52 | *e*P | P | 06 25 27.3 | +0.5 |
| TXAR | Lajitas Array | 91.42 | 52 | P | P | 06 25 27.3 | +0.5 |
| | comp=Z,1.2nm,0.8s,baz=308,slow=2.9,SNR=13 | | | | | | |
| TXAR | Lajitas Array | 91.42 | 52 | P | P | 06 25 27.3 | +0.5 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| KEST | Kesra | 95.51 | 322 | LR | LR | 07 12 28.2 | |
| | comp=Z,61nm,19.0s,baz=284,slow=38 | | | | | | |
| TORD | Torodi Ar. Bea | 117.63 | 314 | PKP | PKPdf | 06 31 05.8 | -1.0 |
| | comp=Z,0.3nm,0.6s,baz=71,slow=1.6,SNR=2.8 | | | | | | |
| QSPA | South Pole Qui | 125.60 | 180 | *e*PKPdf | PKPdf | 06 31 20.5 | -0.1 |
| SAML | Samuel | 145.59 | 45 | *e*PKPdf | PKPdf | 06 31 59.0 | -0.1 |
| LPAZ | La Paz | 147.91 | 60 | PKPbc | PKPbc | 06 32 06.9 | +0.3 |
| | comp=Z,2.8nm,0.8s,baz=254,slow=2.7,SNR=15 | | | | | | |
| LPAZ | La Paz | 147.91 | 60 | PKP2 | PKPbc | 06 32 06.9 | +0.3 |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| LPAZ | La Paz | 147.91 | 60 | *e*PKPbc | PKPbc | 06 32 07.2 | +0.6 |

*PRE* ***09*** *06:18:36.6±1.7, 27.°15S×29.°17E, h0km, ML2.4, Suspected explosion*
*ISCJB* ***09*** *06:18:37.2±0.9, 27.°16S±0.°08×29.°12E±0.°05, h0km, Error ellipse: s-maj=12.5km s-min=5.9km az=12.7*
**ISC 09 06:18:36.9**±1.0**, 27.°07S**±0.°09×**29.°20E**±0.°05**, h0km, n7, σ1.s49**/11**, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNON | Benoni | 1.20 | 319 | *e*P | Pn | 06 19 01.6 | +0.4 |
| BNON | | | | *e*S | Sg | 06 19 17.6 | +2.1 |
| BNON | | | | AML | AML | 06 19 18.2 | |
| | comp=Z,45nm,0.7s | | | | | | |
| PRYS | Parys | 1.65 | 275 | *e*P | Pn | 06 19 06.2 | -1.1 |
| PRYS | | | | *e*S | Sg | 06 19 29.3 | -0.6 |
| PRYS | | | | AML | AML | 06 19 36.0 | |
| | comp=Z,20nm,0.4s | | | | | | |
| POGA | Pongola | 2.17 | 99 | *e*P | Pb | 06 19 17.2 | +0.2 |
| POGA | | | | *e*S | Sb | 06 19 44.0 | -0.5 |
| POGA | | | | AML | AML | 06 19 52.6 | |
| | comp=Z,24nm,0.4s | | | | | | |
| POGA | Pongola | 2.17 | 99 | *i* P | Pg | 06 19 26.5 | +8.0 |
| POGA | | | | *i* S | Sg | 06 20 18.8 | +32 |
| SWZ | Schweizer | 3.45 | 267 | *e*P | Pn | 06 19 32.7 | +0.7 |
| SWZ | | | | *e*S | Sn | 06 20 12.9 | -0.8 |
| SWZ | | | | AML | AML | 06 20 29.0 | |
| | comp=Z,18nm,0.4s | | | | | | |
| BOSA | Boshof | 3.82 | 245 | *i* P | Pg | 06 19 51.4 | +1.3 |
| BOSA | | | | *i* S | Sg | 06 20 50.4 | +11 |
| LBTB | Lobatse | 3.83 | 301 | *i* P | Pn | 06 19 34.5 | -2.8 |
| LBTB | | | | *i* S | Sn | 06 20 22.0 | -1.0 |

*ISCJB* ***09*** *06:48:50.2±0.3, 32.°78N±0.°03×106.°16E±0.°04, h10km, mb3.9/18, MS4.2/1, Error ellipse: s-maj=5.5km s-min=4.5km az=22.6*
*IDC* ***09*** *06:48:50.3±0.7, 32.°80N×106.°21E, h0km, mb3.8/16, mb1 3.9/19, mb1mx3.8/56, mbtmp3.8/19, ML3.7/3, MS3.3/4, Ms1 3.4/4, ms1mx2.8/49, Error ellipse: s-maj=25.0km s-min=13.6km az=54.0*
*BJI* ***09*** *06:48:52.3, 32.°94N×106.°18E, h8km, mb4.0/4, mB4.4/3, ML4.0/23, Ms3.8/8, Ms7 3.4/8*
*NEIC* ***09*** *06:48:54.4±2.6, 32.°84N×106.°24E, h26km±20km, mb4.2/3, Error ellipse: s-maj=12.6km s-min=6.7km az=59.0*
**ISC 09 06:48:52.3**±0.5**, 32.°89N**±0.°03×**106.°25E**±0.°04**, h10km, n36, σ1.s38**/47**, mb3.9**/18**, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| XAN | Xi'an | 2.51 | 62 | Pn | Pn | 06 49 33.3 | 0.0 |
| XAN | | | | Pg | Pb | 06 49 36.0 | -1.6 |
| XAN | | | | Sn | Sn | 06 50 05.7 | +1.7 |
| XAN | | | | Sg | Sb | 06 50 09.0 | +0.4 |
| XAN | | | | SMN | | | |
| | 2μm,0.7s | | | | | | |
| XAN | | | | SME | | | |
| | 2μm,0.7s | | | | | | |
| CD2 | Chengdu | 2.89 | 228 | Pn | Pn | 06 49 37.8 | -0.7 |
| CD2 | | | | Pg | Pb | 06 49 44.4 | +0.3 |
| CD2 | | | | Sn | Sn | 06 50 14.1 | +0.7 |
| CD2 | | | | Sg | Sb | 06 50 21.6 | +2.0 |
| CD2 | | | | SMN | | | |
| | 1μm,0.8s | | | | | | |
| CD2 | | | | SME | | | |
| | 1μm,0.7s | | | | | | |
| LZH | Lanzhou | 3.75 | 329 | *e*Pn | Pn | 06 49 51.5 | +1.0 |
| LZH | | | | Pg | Pb | 06 49 59.2 | +0.4 |
| LZH | | | | Sn | Sn | 06 50 36.9 | +2.1 |
| LZH | | | | Sg | Sb | 06 50 46.3 | +1.8 |
| LZH | | | | SMN | | | |
| | 750nm,0.5s | | | | | | |
| LZH | | | | SME | | | |
| | 550nm,0.5s | | | | | | |
| LZH | | | | LN | | | |
| | 1μm,5.0s | | | | | | |
| LZH | | | | LE | | | |
| | 1μm,4.4s | | | | | | |
| LZH | | | | LZ | | | |
| | 1μm,5.7s | | | | | | |
| LZH | Lanzhou | 3.75 | 329 | *e*Pn | Pn | 06 49 51.5 | +1.0 |
| LZH | | | | Pg | Pb | 06 49 59.2 | +0.4 |
| LZH | | | | Sn | Sn | 06 50 36.9 | +2.1 |
| LZH | | | | Sg | Sb | 06 50 46.3 | +1.8 |
| ENH | Enshi | 3.80 | 132 | *e*Pn | Pn | 06 49 51.8 | +0.8 |
| ENH | | | | *e*Sg | Sb | 06 50 50.5 | +4.8 |
| GYA | Guiyang | 6.42 | 177 | Pn | Pn | 06 50 28.1 | +1.0 |
| GYA | | | | Sn | Sn | 06 51 38.5 | -2.0 |
| GYA | | | | Sg | Sb | 06 52 08.0 | +6.9 |
| GYA | | | | SMN | | | |
| | 210nm,0.7s | | | | | | |
| GYA | | | | SME | | | |
| | 280nm,0.8s | | | | | | |
| BTO | Baotou | 8.27 | 20 | *e*P | Pn | 06 50 58.1 | +5.6 |
| KMI | Kunming | 8.32 | 203 | P | Pn | 06 50 58.1 | +4.8 |
| KMI | | | | S | Sn | 06 52 22.1 | -5.5 |
| KMI | | | | PMZ | | | |
| | 6.0nm,0.8s | | | | | | |
| KMI | | | | PMZ | | | |
| | 99nm,5.3s | | | | | | |
| KMI | | | | LN | | | |
| | 330nm,7.1s | | | | | | |
| KMI | | | | LE | | | |
| | 260nm,6.6s | | | | | | |
| KMI | | | | LZ | | | |
| | 250nm,9.6s | | | | | | |
| GTA | Gaotai | 8.33 | 323 | *e*P | Pn | 06 50 51.9 | -1.4 |
| GTA | | | | pP | pP | 06 50 55.3 | |
| GTA | | | | sP | sP | 06 50 57.9 | |
| GTA | | | | S | Sn | 06 52 25.4 | -2.0 |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.3s | | | | | | |
| GTA | | | | PMZ | | | |
| | 98nm,4.5s | | | | | | |
| GTA | | | | LN | | | |
| | 320nm,10.5s | | | | | | |
| GTA | | | | LE | | | |
| | 230nm,10.0s | | | | | | |
| GTA | | | | LZ | | | |
| | 340nm,9.7s | | | | | | |
| SONM | Songino Array | 14.93 | 0 | Pn | Pn | 06 52 22.5 | -1.0 |
| | 0.1nm,0.3s,baz=195,slow=16,SNR=4.0 | | | | | | |
| SONM | | | | Lg | Lg | 06 56 41.9 | |
| | 0.2nm,0.3s,baz=182,slow=39,SNR=2.7 | | | | | | |
| CMAR | Chiang Mai Arr | 15.80 | 206 | Pn | Pn | 06 52 33.8 | -1.2 |
| | 0.4nm,0.3s,baz=12,slow=11,SNR=4.7 | | | | | | |
| CMAR | | | | LR | LR | 06 59 15.7 | |
| | comp=Z,89nm,21.0s,baz=12,slow=40 | | | | | | |
| KSAR | Wonju Array Be | 18.26 | 70 | P | P | 06 53 06.8 | +0.9 |
| KSRS | Korea Array | 18.29 | 70 | P | P | 06 53 06.8 | +0.5 |
| | 0.1nm,0.3s,baz=255,slow=12,SNR=6.4 | | | | | | |
| KSRS | | | | LR | LR | 06 59 42.6 | |
| | comp=Z,51nm,22.0s,baz=221,slow=36 | | | | | | |
| TLY | Talaya | 18.87 | 355 | LR | LR | 07 00 55.4 | |
| | comp=Z,52nm,18.2s,baz=180,slow=38 | | | | | | |
| MKAR | Makanchi Array | 22.93 | 314 | P | P | 06 53 57.6 | +1.0 |
| | 1.7nm,0.5s,baz=114,slow=10,SNR=22 | | | | | | |
| USRK | Ussuriysk Ar. | 22.99 | 53 | P | P | 06 53 58.3 | +1.2 |
| | 1.4nm,0.5s,baz=264,slow=13,SNR=3.8 | | | | | | |
| ZALV | Zalesovo Beam | 25.99 | 330 | P | P | 06 54 26.2 | +1.1 |
| | 0.8nm,0.5s,baz=128,slow=9.6,SNR=4.0 | | | | | | |
| KURK | Kurchatov | 26.99 | 319 | P | P | 06 54 34.0 | -0.2 |
| KURBB | Kurchatov Arra | 26.99 | 319 | P | P | 06 54 34.0 | -0.2 |
| | 0.6nm,0.6s,baz=123,slow=11,SNR=7.3 | | | | | | |
| BVAR | Borovoye Array | 32.58 | 319 | P | P | 06 55 24.8 | +1.1 |
| | 0.6nm,0.4s,baz=114,slow=7.1,SNR=3.1 | | | | | | |
| BRVK | Borovoye | 32.65 | 319 | *e*P | P | 06 55 24.3 | 0.0 |
| | 1.8nm,0.6s | | | | | | |
| ARU | Arti | 40.18 | 320 | P | P | 06 56 28.3 | -0.2 |
| | 0.2nm,0.2s,baz=107,slow=19,SNR=2.2 | | | | | | |
| ARU | Arti | 40.18 | 320 | *e*P | P | 06 56 28.8 | +0.3 |
| | 4.1nm,1.0s | | | | | | |
| FITZ | Fitzroy Crossi | 53.99 | 157 | P | P | 06 58 14.9 | -1.7 |
| | 1.3nm,0.7s,baz=351,slow=13,SNR=3.0 | | | | | | |
| ARCES | ARCESS Array B | 56.39 | 335 | P | P | 06 58 32.4 | -1.0 |
| | 3.2nm,0.9s,baz=83,slow=8.2,SNR=8.5 | | | | | | |
| FINES | FINESS Array B | 57.11 | 326 | P | P | 06 58 36.8 | -1.8 |
| | 1.0nm,0.8s,baz=92,slow=10.0,SNR=5.4 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **BRTR** | **Keskin Array B** | **57.45** | **299** | P | **P** | **06 58 41.0** | **-0.6** |
| | 0.7nm,0.6s,baz=46,slow=6.2,SNR=3.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **57.50** | **313** | P | **P** | **06 58 41.1** | **-0.5** |
| | 1.2nm,0.5s,baz=65,slow=6.9,SNR=4.1 | | | | | | |
| **WRAB** | **Tennant Creek** | **59.00** | **149** | *e*P | **P** | **06 58 51.2** | **-1.2** |
| | 4.5nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **59.00** | **149** | P | **P** | **06 58 51.4** | **-1.0** |
| | 1.8nm,0.7s,baz=342,slow=7.3,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **62.12** | **151** | P | **P** | **06 59 13.0** | **-0.7** |
| | 1.3nm,0.7s,baz=339,slow=6.8,SNR=23 | | | | | | |
| **NB2** | **NORSAR Subarra** | **64.14** | **327** | P | **P** | **06 59 27.0** | **+0.4** |
| | comp=Z,0.8nm,0.8s,baz=68,slow=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **64.14** | **327** | P | **P** | **06 59 26.9** | **+0.2** |
| | comp=Z,0.8nm,0.7s,baz=71,slow=6.9,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **67.44** | **26** | P | **P** | **06 59 47.5** | **-0.4** |
| | comp=Z,0.1nm,0.5s,baz=287,slow=4.9,SNR=4.4 | | | | | | |
| **GERES** | **GERESS Array B** | **67.60** | **314** | P | **P** | **06 59 50.4** | **+1.2** |
| | comp=Z,0.3nm,0.6s,baz=66,slow=4.7,SNR=3.9 | | | | | | |
| **URZ** | **Urewera** | **96.67** | **132** | LR | LR | 07 49 41.7 | |
| | comp=Z,64nm,18.1s,baz=351,slow=38 | | | | | | |

**WEL 09 07:04:48.8**±0.6**, 36°.51S×177°.67E, h138**km±10km**, ML3.5**/4**, 1C, Error ellipse: s-maj=8.2km s-min=6.9km az=0.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **1.25** | **176** | PN | Pn | 07 05 14.9 | +0.1 |
| HAZ | | | | SN | Sn | 07 05 34.5 | -0.2 |
| **WMGZ** | **Waiomatatini S** | **1.44** | **156** | PN | Pn | 07 05 16.8 | +0.1 |
| WMGZ | | | | SN | Sn | 07 05 37.8 | -0.4 |
| **PUZ** | **Puketiti** | **1.63** | **163** | PN | Pn | 07 05 18.4 | -0.6 |
| PUZ | | | | SN | Sn | 07 05 41.1 | -1.0 |
| **TWGZ** | **Tauwhareparae** | **1.69** | **172** | PN | Pn | 07 05 19.9 | +0.4 |
| TWGZ | | | | SN | Sn | 07 05 42.9 | -0.4 |
| **URZ** | **Urewera** | **1.81** | **194** | ⇑PN | Pn | 07 05 20.9 | 0.0 |
| **MWZ** | **Matawai** | **1.83** | **183** | PN | Pn | 07 05 21.6 | +0.3 |
| **RAGZ** | **Rawiri** | **2.00** | **186** | PN | Pn | 07 05 23.4 | +0.2 |
| **CNGZ** | **Carnagh Statio** | **2.02** | **168** | PN | Pn | 07 05 23.3 | -0.1 |
| **RIGZ** | **Rimuhau** | **2.20** | **178** | PN | Pn | 07 05 25.0 | -0.6 |
| RIGZ | | | | SN | Sn | 07 05 52.7 | -1.3 |
| **SNGZ** | **Shannon Statio** | **2.29** | **186** | PN | Pn | 07 05 26.8 | +0.1 |
| **KNZ** | **Kokohu** | **2.51** | **180** | PN | Pn | 07 05 28.2 | -1.2 |
| KNZ | | | | AML | AML | 07 05 56.4 | |
| **ARHZ** | **Aropaoanui** | **2.80** | **191** | PN | Pn | 07 05 32.4 | -0.7 |

**CASC 09 07:04:55.8**±3.0**, 11°.45N×87°.31W, h10**km±12km**, MD3.8, ML3.1, Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **COPN** | **Copaltepe** | **1.01** | **44** | *e*P | Pn | 07 05 16.3 | +0.3 |
| COPN | | | | *e*P | Pb | 07 05 16.4 | +1.0 |
| COPN | | | | *e*S | Sn | 07 05 30.7 | +0.4 |
| COPN | | | | *e*S | Sb | 07 05 30.8 | +2.0 |
| COPN | | | | AML | AML | 07 05 33.8 | |
| | comp=Z,314nm,0.3s | | | | | | |
| **XAVN** | **Gruta Xavier** | **1.19** | **54** | *e*P | Pb | 07 05 17.2 | -1.3 |
| **MOMN** | **Momotombo** | **1.21** | **38** | *e*P | Pn | 07 05 16.7 | -2.2 |
| **APYN** | **Apoyeque** | **1.22** | **50** | *e*P | Pn | 07 05 17.2 | -1.7 |
| APYN | | | | *e*S | Sb | 07 05 34.0 | -0.8 |
| APYN | | | | AML | AML | 07 05 35.3 | |
| | comp=Z,253nm,0.2s | | | | | | |
| **TISN** | **Laguna Tiscapa** | **1.23** | **56** | *e*P | Pn | 07 05 17.2 | -1.8 |
| **MGAN** | **Managua** | **1.25** | **56** | *e*P | Pn | 07 05 17.3 | -2.0 |
| MGAN | | | | *e*S | Sb | 07 05 32.8 | -2.8 |
| **CONN** | **Concepcion** | **1.66** | **86** | *e*P | Pn | 07 05 23.3 | -1.6 |
| **CNCH** | **Conchagua** | **1.88** | **344** | *e*P | Pn | 07 05 27.1 | -1.1 |
| CNCH | | | | *e*S | Sn | 07 05 52.3 | +0.2 |
| **LAPC** | **Finca la Perla** | **1.96** | **110** | *i* S | Sb | 07 05 55.4 | -0.9 |
| **GPS1** | **Guardaparques** | **2.04** | **109** | *i* S | Sn | 07 05 56.9 | +0.9 |
| **LIM1** | **Limonal** | **2.15** | **110** | *i* S | Sn | 07 05 59.1 | +0.4 |
| **MESS** | **Mesas** | **2.19** | **109** | *i* S | Sn | 07 05 59.3 | -0.4 |
| **CUI** | **Cuipilapa** | **2.25** | **110** | *i* P | Pn | 07 05 33.9 | +0.7 |
| CUI | | | | *i* S | Sn | 07 06 01.7 | +0.6 |
| **PTEN** | **Parque Tenorio** | **2.40** | **108** | *i* P | Pn | 07 05 34.7 | -0.5 |
| **AMAS** | **Alto Masis** | **2.42** | **110** | *i* S | Sn | 07 06 06.1 | +0.6 |
| **SNVI** | **San Vicente** | **2.62** | **325** | *e*S | Sn | 07 06 12.0 | +1.7 |
| **SNET** | **Serv Nac Est T** | **2.91** | **320** | *e*P | Pn | 07 05 40.6 | -1.7 |
| SNET | | | | *e*S | Sn | 07 06 17.8 | +0.5 |
| SNET | | | | AML | AML | 07 06 20.9 | |
| | comp=Z,154nm,0.3s | | | | | | |

*ISCJB **09** 07:21:57.6±0.5, 32°.39N±0°.04×115°.52W±0°.04, h12km±6km, Error ellipse: s-maj=6.2km s-min=5.3km az=3.5*
*MEX **09** 07:21:58.0±0.7, 32°.51N×115°.41W, h9km±999km, MD3.6*
*ECX **09** 07:21:58.6±0.5, 32°.38N×115°.51W, h4km, MD2.2, ML2.4*
**ISC 09 07:21:57.3**±0.9**, 32°.39N**±0°.05×**115°.52W**±0°.03**, h17**km±8km**, n13, σ0s.17**/19**, 3C-2D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPBX** | **Cerro Prieto** | **0.18** | **80** | *e*P | **Pg** | **07 22 01.9** | **0.0** |
| CPBX | | | | *e*P | **Pg** | **07 22 02.1** | **+0.2** |
| CPBX | | | | *e*S | **Sg** | **07 22 04.8** | **-0.2** |
| CPBX | | | | ⇑*e* | | 07 22 07.0 | |
| CPBX | | | | IAML | | 07 22 07.0 | |
| | comp=E,3μm,0.1s | | | | | | |
| **SGL** | **Mount Signal** | **0.32** | **326** | *e*P | **Pg** | **07 22 04.1** | **+0.1** |
| **ERPC** | **Ernies Place** | **0.38** | **341** | *e*P | **Pb** | **07 22 05.7** | **+0.1** |
| **YUH** | **Yuha Desert** | **0.43** | **307** | ⇓*i*P | **Pg** | **07 22 06.1** | **0.0** |
| **COK** | **Cook Ranch** | **0.49** | **339** | ⇓*i*P | **Pb** | **07 22 07.8** | **+0.2** |
| **RMX** | **La Rumorosa** | **0.52** | **295** | *e*P | **Pg** | **07 22 08.1** | **+0.3** |
| RMX | | | | *e*S | **Sg** | **07 22 14.5** | **-0.3** |
| RMX | | | | *e* | | 07 22 15.2 | |
| RMX | | | | IAML | | 07 22 15.2 | |
| | comp=N,223nm,0.1s | | | | | | |
| **IBP** | **Imperial Bould** | **0.56** | **300** | *e*P | **Pg** | **07 22 08.6** | **+0.2** |
| **EMSC** | **East Mesa** | **0.57** | **52** | *e*P | **Pb** | **07 22 09.1** | **+0.2** |
| **COA** | **Coachella** | **0.58** | **35** | ⇑*i*P | **Pb** | **07 22 09.1** | **0.0** |
| **RDX** | **Rancho Dawling** | **0.58** | **218** | ⇑*e*P | **Pb** | **07 22 09.4** | **+0.2** |
| RDX | | | | *i* S | **Sb** | **07 22 17.4** | **+0.1** |
| RDX | | | | *e* | | 07 22 17.8 | |
| RDX | | | | AML | AML | 07 22 17.8 | |
| | comp=E,183nm,0.2s | | | | | | |
| **CBX** | **Cerro Bola** | **0.97** | **266** | *e*P | **Pg** | **07 22 16.3** | **0.0** |
| CBX | | | | *e*S | **Sb** | **07 22 28.5** | **0.0** |
| **CBX** | **Cerro Bola** | **0.97** | **266** | *e*P | **Pg** | **07 22 16.3** | **0.0** |
| CBX | | | | IAML | | 07 22 29.5 | |
| | comp=E,90nm,0.2s | | | | | | |
| **SPIG** | **San Pedro Mart** | **1.34** | **178** | *e*P | **Pn** | **07 22 21.4** | **-0.2** |
| SPIG | | | | *e*S | **Sn** | **07 22 39.2** | **0.0** |

**NNC 09 07:22:31.6**±0.6**, 50°.02N×78°.74E, h0**km**, mb3.6, mpv3.3, 24C-13D, Error ellipse: s-maj=7.5km s-min=2.8km az=83.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR07** | **Kurchatov Arra** | **0.58** | **346** | ⇓P | Pg | 07 22 43.2 | +0.4 |
| KUR07 | | | | ⇓S | Sb | 07 22 52.0 | -1.5 |
| **KUR06** | **Kurchatov Arra** | **0.60** | **347** | ⇑S | Sg | 07 22 52.0 | +1.0 |
| **KUR14** | **Kurchatov Arra** | **0.60** | **351** | ⇑P | Pg | 07 22 43.5 | +0.3 |
| KUR14 | | | | ⇑S | Sg | 07 22 52.4 | +1.3 |
| **KUR15** | **Kurchatov Arra** | **0.61** | **349** | ⇑P | Pg | 07 22 43.6 | +0.3 |
| KUR15 | | | | ⇑S | Sg | 07 22 52.5 | +1.2 |
| **KURBB** | **Kurchatov Arra** | **0.62** | **348** | ⇑P | Pg | 07 22 43.8 | +0.3 |
| | 57nm,0.3s | | | | | | |
| KURBB | | | | ⇑S | Sg | 07 22 52.8 | +1.3 |
| | 366nm,0.7s | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.63** | **346** | ⇓P | Pg | 07 22 44.0 | +0.3 |
| KUR16 | | | | ⇑S | Sg | 07 22 52.7 | +0.9 |
| **KUR05** | **Kurchatov Arra** | **0.64** | **348** | ⇑P | Pg | 07 22 44.2 | +0.3 |
| KUR05 | | | | ⇑S | Sg | 07 22 52.9 | +0.7 |
| **KUR17** | **Kurchatov Arra** | **0.64** | **344** | ⇑P | Pg | 07 22 44.2 | +0.4 |
| KUR17 | | | | ⇑S | Sg | 07 22 53.2 | +1.1 |
| **KUR04** | **Kurchatov Arra** | **0.66** | **349** | ⇑P | Pg | 07 22 44.4 | +0.2 |
| KUR04 | | | | ⇑S | Sg | 07 22 53.8 | +1.1 |
| **KURK** | **Kurchatov** | **0.70** | **354** | ⇑P | Pg | 07 22 45.1 | +0.1 |
| | 56nm,0.4s | | | | | | |
| KURK | | | | ⇑S | Sg | 07 22 54.5 | +0.3 |
| | 106nm,0.6s | | | | | | |
| **MK31** | **Makanchi Array** | **4.00** | **142** | ⇓Pn | Pn | 07 23 35.9 | +1.7 |
| | 0.9nm,0.3s,baz=321,slow=9.9,SNR=105 | | | | | | |
| MK31 | | | | ⇓Pg | Pb | 07 23 43.5 | +0.5 |
| | 3.2nm,0.4s,baz=52,slow=15,SNR=38 | | | | | | |
| MK31 | | | | Lg | Lg | 07 24 37.1 | |
| | 15nm,0.6s,baz=331,slow=26,SNR=11 | | | | | | |
| **OTUK** | **Ortayu** | **4.56** | **250** | ⇑Pn | Pn | 07 23 42.7 | +0.8 |
| | 3.8nm,0.3s | | | | | | |
| OTUK | | | | ⇓Pg | Pb | 07 23 52.4 | -0.2 |
| | 1.5nm,0.3s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 07 24 55.9 | |
| | 12nm,0.5s | | | | | | |
| **VOSK** | **Vostochnaya** | **5.56** | **302** | ⇑Pn | Pn | 07 23 56.4 | +0.8 |
| | 0.7nm,0.3s | | | | | | |
| VOSK | | | | ⇓Sn | Sn | 07 24 59.8 | -0.4 |
| | 4.1nm,0.5s | | | | | | |
| VOSK | | | | ⇑Lg | Lg | 07 25 22.0 | |
| | 5.6nm,0.6s | | | | | | |
| **BVA0** | **Borovoye Array** | **6.02** | **303** | ⇓Pn | Pn | 07 24 02.6 | +0.7 |
| | 2.0nm,1.0s,baz=117,slow=14,SNR=6.7 | | | | | | |
| BVA0 | | | | ⇑Pg | Pb | 07 24 11.5 | -5.8 |
| | 0.8nm,0.3s,baz=113,slow=16,SNR=6.1 | | | | | | |
| BVA0 | | | | ⇓Sn | Sn | 07 25 08.5 | -2.9 |
| | 6.5nm,0.5s | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 07 25 37.7 | |
| | 5.1nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **6.09** | **303** | ⇑Pn | Pn | 07 24 04.2 | +1.3 |
| | 4.7nm,1.0s | | | | | | |
| BRVK | | | | ⇑Sn | Sn | 07 25 12.1 | -1.0 |
| | 9.3nm,0.6s | | | | | | |
| BRVK | | | | ⇓Lg | Lg | 07 25 39.1 | |
| | 7.1nm,0.6s | | | | | | |
| **ZRNK** | **Zerenda** | **6.75** | **299** | ⇑Pn | Pn | 07 24 12.0 | +0.1 |
| | 1.0nm,0.3s | | | | | | |
| ZRNK | | | | ⇓Sn | Sn | 07 25 25.3 | -4.2 |
| | 2.1nm,0.5s | | | | | | |
| ZRNK | | | | ⇓Lg | Lg | 07 26 05.6 | |
| | 3.5nm,0.6s | | | | | | |

*IDC **09** 07:39:11.2±1.3, 21°.37S×175°.00W, h0km, mb3.8/5, mb1 4.2/5, mb1mx3.9/27, mbtmp3.8/5, MS3.2/1, Ms1 3.2/1, ms1mx2.7/27, Error ellipse: s-maj=42.8km s-min=31.0km az=139.0*
**ISC 09 07:39:18.6**±1.2**, 21°.4S**±0°.2×**175°.1W**±0°.3**, h53**km**, n10, σ0s.65**/7**, mb4.0**/5**, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **8.07** | **23** | Pn | Pn | 07 41 01.8 | -11 |
| | 1.7nm,0.3s,baz=210,slow=18,SNR=2.7 | | | | | | |
| AFI | | | | Sn | Sn | 07 42 23.6 | -20 |
| | 2.3nm,0.3s,baz=217,slow=20,SNR=2.5 | | | | | | |
| **TBI** | **Tubuai** | **23.75** | **100** | *e*LR | LR | 07 49 22.0 | |
| | 219nm,35.8s | | | | | | |
| **PPT2** | **Papeete2** | **24.31** | **86** | *e*LR | LR | 07 49 52.0 | |
| | 79nm,22.5s | | | | | | |
| **PPT** | **Papeete** | **24.32** | **85** | LR | LR | 07 51 42.6 | |
| | comp=Z,57nm,19.5s,baz=104,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **46.99** | **257** | P | **P** | **07 47 45.2** | **+0.4** |
| | 1.7nm,0.8s,baz=97,slow=8.2,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 49 16.9** | **+0.3** |
| | 0.3nm,0.8s,baz=85,slow=4.0,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.20** | **262** | P | **P** | **07 47 46.4** | **-0.1** |
| | 1.7nm,0.7s,baz=100,slow=8.4,SNR=6.7 | | | | | | |
| **VNDA** | **Vanda** | **57.29** | **186** | P | **P** | **07 49 00.3** | **-0.1** |
| | 0.6nm,0.9s,baz=26,slow=5.0,SNR=2.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.57** | **322** | P | **P** | **07 50 40.3** | **+0.1** |
| | 1.4nm,0.7s,baz=142,slow=6.2,SNR=4.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.81** | **42** | P | **P** | **07 51 22.0** | **+0.4** |
| | 0.3nm,0.6s,baz=218,slow=5.5,SNR=4.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.08** | **333** | PKPbc | **PKPbc** | **07 58 48.3** | **-1.1** |
| | 0.5nm,0.4s,baz=44,slow=3.3,SNR=4.2 | | | | | | |

*ISCJB **09** 07:40:25.6±0.3, 42°.44N±0°.01×21°.61E±0°.02, h2km±2km, mb3.8/4, Error ellipse: s-maj=2.2km s-min=1.6km az=43.1*
*CSEM **09** 07:40:26.7±0.1, 42°.42N×21°.58E, h2km, ML3.5, Error ellipse: s-maj=1.9km s-min=1.4km az=43.0*
*IDC **09** 07:40:26.3±1.1, 42°.45N×21°.59E, h0km, mb3.8/5, mb1 3.8/10, mb1mx3.6/48, mbtmp3.7/10, ML3.6/5, MS2.8/3, Ms1 2.8/3, ms1mx2.4/38, Error ellipse: s-maj=21.5km s-min=13.7km az=49.0*
*TIR **09** 07:40:26.7±4.1, 42°.29N×21°.56E, h4km±50km, ML3.7*
*PDG **09** 07:40:26.7±0.4, 42°.44N×21°.58E, h11km, MD3.5/2, ML3.5/10, Error ellipse: s-maj=0.4km s-min=0.4km az=0.0*
*BEO **09** 07:40:27.9±0.6, 42°.47N×21°.55E, h6km±3km, ML3.5/1*
*SKO **09** 07:40:27.2, 42°.42N×21°.58E, h1km, M3.0, ML3.5*
*THE **09** 07:40:27.6, 42°.41N×21°.59E, h6km±2km, ML3.8/3, Error ellipse: s-maj=2.3km s-min=1.3km az=262.0*
*SOF **09** 07:40:27.6, 42°.41N×21°.74E, h2km, MD3.6*
*PRU **09** 07:40:30.8, 42°.31N×21°.26E, h13km*
**ISC 09 07:40:27.1**±0.9**, 42°.42N**±0°.01×**21°.58E**±0°.02**, h7**km±6km**, n250, σ0s.95**/331**, mb3.8**/4**, 34C-27D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GJIK** | **Gjilan** | **0.11** | **290** | P | **Pg** | **07 40 29.4** | **-0.2** |
| GJIK | | | | S | **Sg** | **07 40 31.2** | **-0.1** |
| **BARS** | **Barje** | **0.43** | **24** | ⇑*i*Pg | **Pg** | **07 40 35.0** | **-0.5** |
| BARS | | | | *e*Sg | **Sg** | **07 40 40.8** | **-0.3** |
| **BARS** | **Barje** | **0.43** | **24** | ⇑*i*Pg | **Pg** | **07 40 35.0** | **-0.5** |
| BARS | | | | *e*Sg | **Sg** | **07 40 40.8** | **-0.3** |
| **SKO** | **Skopje** | **0.46** | **193** | ⇑*i*Pg | **Pg** | **07 40 36.4** | **+0.3** |
| SKO | | | | *i* Sg | **Sg** | **07 40 42.7** | **+0.6** |
| SKO | | | | *e*Lg | Lg | 07 40 42.8 | |
| | comp=E,738nm,0.4s | | | | | | |
| SKO | | | | *e*Lg | Lg | 07 40 42.9 | |
| | comp=N,1μm,0.4s | | | | | | |
| **SKO** | **Skopje** | **0.46** | **193** | P | **Pg** | **07 40 35.8** | **-0.3** |
| SKO | | | | S | **Sg** | **07 40 42.1** | **0.0** |
| **SKO** | **Skopje** | **0.46** | **193** | P | **Pg** | **07 40 35.8** | **-0.3** |
| **SKO** | **Skopje** | **0.46** | **193** | ⇑*i*Pg | **Pg** | **07 40 36.3** | **+0.3** |
| SKO | | | | S | **Sg** | **07 40 42.1** | **0.0** |
| SKO | | | | *i* Sg | **Sg** | **07 40 42.7** | **+0.6** |
| SKO | | | | *e*Lg | Lg | 07 40 42.9 | |
| | comp=N,1μm,0.4s | | | | | | |
| **SMRK** | **Smrekonice** | **0.65** | **314** | P | **Pg** | **07 40 39.1** | **-0.5** |
| SMRK | | | | S | **Sg** | **07 40 49.0** | **+0.9** |
| **SELS** | **Selova** | **0.86** | **337** | ⇑*i*Pg | **Pg** | **07 40 42.2** | **-1.5** |
| SELS | | | | *e*Sg | **Sg** | **07 40 54.3** | **-0.6** |
| **PEJK** | **Peje** | **0.98** | **283** | P | **Pg** | **07 40 44.7** | **-1.3** |
| **BCI** | **Bajram Curri** | **1.12** | **268** | *i* PG | **Pg** | **07 40 48.3** | **-0.3** |
| BCI | | | | *i* SG | **Sg** | **07 41 00.2** | **-2.9** |
| **BCI** | **Bajram Curri** | **1.12** | **268** | *i* Pg | **Pg** | **07 40 48.3** | **-0.3** |
| | SNR=98 | | | | | | |
| BCI | | | | *i* Sg | **Sg** | **07 41 00.2** | **-2.9** |
| | SNR=98 | | | | | | |
| **PHP** | **Peshkopia** | **1.12** | **229** | *i* PG | **Pg** | **07 40 47.4** | **-1.3** |
| PHP | | | | *i* SG | **Sg** | **07 41 02.5** | **-0.7** |
| **PHP** | **Peshkopia** | **1.12** | **229** | P | **Pg** | **07 40 47.2** | **-1.4** |
| **PHP** | **Peshkopia** | **1.12** | **229** | *i* Pg | **Pg** | **07 40 47.3** | **-1.3** |
| | SNR=98 | | | | | | |
| PHP | | | | *i* Sg | **Sg** | **07 41 02.5** | **-0.7** |
| | SNR=98 | | | | | | |
| **ZAPS** | **Zavoj** | **1.15** | **42** | *e*Pg | **Pg** | **07 40 48.8** | **-0.4** |
| ZAPS | | | | *e*Sg | **Sn** | **07 41 05.7** | **-0.1** |
| **ZAPS** | **Zavoj** | **1.15** | **42** | *e*Pg | **Pg** | **07 40 48.8** | **-0.4** |
| ZAPS | | | | *e*Sg | **Sn** | **07 41 05.7** | **-0.1** |
| **PVY** | **Plav** | **1.21** | **279** | ⇓*i*Pg | **Pg** | **07 40 49.0** | **-1.3** |
| PVY | | | | *e*Sg | **Sn** | **07 41 07.8** | **+0.5** |
| **VTS** | **Vitosha** | **1.22** | **82** | Pg | **Pg** | **07 40 50.3** | **-0.2** |
| **VTS** | **Vitosha** | **1.22** | **82** | Pg | **Pg** | **07 40 50.3** | **-0.2** |
| **KKB** | **Krupnik** | **1.25** | **116** | Pg | **Pn** | **07 40 50.9** | **-0.2** |
| **KKB** | **Krupnik** | **1.25** | **116** | Pg | **Pn** | **07 40 50.9** | **-0.2** |
| **PUK** | **Puka** | **1.31** | **254** | *i* PG | **Pn** | **07 40 51.1** | **-0.7** |
| PUK | | | | *i* SG | **Sn** | **07 41 11.2** | **+1.6** |
| **PUK** | **Puka** | **1.31** | **254** | *i* Pg | **Pn** | **07 40 51.1** | **-0.7** |
| | SNR=97 | | | | | | |
| PUK | | | | *i* Sg | **Sn** | **07 41 11.2** | **+1.6** |
| | SNR=97 | | | | | | |
| **BEY** | **Berane** | **1.32** | **290** | P | **Pn** | **07 40 50.9** | **-1.2** |
| BEY | | | | *e*Sg | **Sn** | **07 41 11.4** | **+1.4** |
| **IVA** | **Berane** | **1.32** | **290** | ⇓*i*Pg | **Pn** | **07 40 50.9** | **-1.2** |
| IVA | | | | *e*Sg | **Sn** | **07 41 11.4** | **+1.4** |
| **VAY** | **Valandovo** | **1.33** | **146** | *i* Pg | **Pn** | **07 40 51.8** | **-0.3** |
| VAY | | | | *e*Sg | **Sb** | **07 41 09.8** | **+0.1** |
| VAY | | | | *e*Lg | Lg | 07 41 10.6 | |
| | comp=N,1μm,0.8s | | | | | | |
| VAY | | | | *e*Lg | Lg | 07 41 10.6 | |
| | comp=E,759nm,0.7s | | | | | | |
| **VAY** | **Valandovo** | **1.33** | **146** | P | **Pn** | **07 40 51.3** | **-0.8** |
| VAY | | | | S | **Sb** | **07 41 08.7** | **-0.9** |
| **VAY** | **Valandovo** | **1.33** | **146** | P | **Pn** | **07 40 51.3** | **-0.8** |
| **VAY** | **Valandovo** | **1.33** | **146** | *i* Pg | **Pn** | **07 40 51.8** | **-0.3** |
| VAY | | | | S | **Sb** | **07 41 08.7** | **-0.9** |
| VAY | | | | *e*Sg | **Sb** | **07 41 09.7** | **+0.1** |
| VAY | | | | *e*Lg | Lg | 07 41 10.5 | |
| | comp=E,759nm,0.7s | | | | | | |
| **BOLS** | **Boljevac** | **1.43** | **11** | *e*Pg | **Pn** | **07 40 51.5** | **-2.0** |
| BOLS | | | | *e*Sg | **Sb** | **07 41 10.7** | **-1.9** |
| **BOLS** | **Boljevac** | **1.43** | **11** | *e*Pg | **Pn** | **07 40 51.5** | **-2.0** |
| BOLS | | | | *e*Sg | **Sb** | **07 41 10.7** | **-1.9** |
| **OHR** | **Ohrid** | **1.43** | **204** | *i* Pg | **Pn** | **07 40 53.0** | **-0.7** |
| OHR | | | | *e*Sg | **Sn** | **07 41 13.2** | **+0.4** |
| OHR | | | | *e*Lg | Lg | 07 41 13.6 | |
| | comp=E,710nm,0.6s | | | | | | |
| OHR | | | | *e*Lg | Lg | 07 41 13.8 | |
| | comp=N,736nm,0.6s | | | | | | |
| **OHR** | **Ohrid** | **1.43** | **204** | *i* Pg | **Pn** | **07 40 52.9** | **-0.7** |
| OHR | | | | *e*Sg | **Sn** | **07 41 13.1** | **+0.4** |
| OHR | | | | *e*Lg | Lg | 07 41 13.7 | |
| | comp=N,736nm,0.6s | | | | | | |
| **SJES** | **Sjenica** | **1.45** | **306** | ⇑*i*Pg | **Pn** | **07 40 53.0** | **-0.8** |
| SJES | | | | *e*Sg | **Sg** | **07 41 14.3** | **+0.7** |
| **IVAS** | **Ivanjica** | **1.55** | **318** | *i* Pg | **Pn** | **07 40 54.9** | **-0.4** |
| IVAS | | | | *e*Sg | **Sn** | **07 41 15.4** | **-0.3** |
| **IVAS** | **Ivanjica** | **1.55** | **318** | *i* Pg | **Pn** | **07 40 54.9** | **-0.4** |
| IVAS | | | | *e*Sg | **Sn** | **07 41 15.4** | **-0.3** |
| **GRG** | **Griva** | **1.59** | **157** | P | **Pn** | **07 40 55.7** | **0.0** |
| **GRG** | **Griva** | **1.59** | **157** | *e*Pn | **Pn** | **07 40 55.8** | **0.0** |
| GRG | | | | *e*Sn | **Sn** | **07 41 13.9** | **-2.7** |
| **GRUS** | **Gruza** | **1.59** | **337** | ⇑*i*Pg | **Pn** | **07 40 55.9** | **+0.1** |
| GRUS | | | | *e*Sg | **Sn** | **07 41 16.9** | **+0.3** |
| **GRUS** | **Gruza** | **1.59** | **337** | ⇑*i*Pg | **Pn** | **07 40 55.9** | **+0.1** |
| GRUS | | | | *e*Sg | **Sn** | **07 41 16.9** | **+0.3** |
| **KNT** | **Kendrikon** | **1.60** | **141** | P | **Pn** | **07 40 55.4** | **-0.5** |
| **KNT** | **Kendrikon** | **1.60** | **141** | P | **Pn** | **07 40 55.4** | **-0.5** |
| KNT | | | | *e*Sn | **Sn** | **07 41 14.3** | **-2.5** |
| **FNA** | **Florina** | **1.65** | **185** | P | **Pn** | **07 40 56.7** | **+0.2** |
| FNA | | | | S | **Sn** | **07 41 18.0** | **0.0** |
| **FNA** | **Florina** | **1.65** | **185** | P | **Pn** | **07 40 56.7** | **+0.2** |
| FNA | | | | *e*Sn | **Sn** | **07 41 16.9** | **-1.1** |
| FNA | | | | S | **Sn** | **07 41 18.0** | **0.0** |
| **TIR** | **Tirane** | **1.67** | **230** | *i* PG | **Pg** | **07 40 59.2** | **+0.1** |
| **TIR** | **Tirane** | **1.67** | **230** | *i* Pg | **Pg** | **07 40 59.2** | **+0.1** |
| | SNR=94 | | | | | | |
| **PDG** | **Podgorica** | **1.72** | **271** | *e*Pg | **Pn** | **07 40 57.9** | **+0.5** |
| PDG | | | | *e*Sg | **Sb** | **07 41 21.5** | **+0.7** |
| **PDG** | **Podgorica** | **1.72** | **271** | P | **Pn** | **07 40 57.9** | **+0.5** |
| **PDG** | **Podgorica** | **1.72** | **271** | P | **Pn** | **07 40 57.9** | **+0.5** |
| PDG | | | | *e*Sg | **Sb** | **07 41 21.5** | **+0.7** |
| PDG | | | | *e*Sn | **Sg** | **07 41 21.8** | **-0.5** |
| **TTG** | **Podgorica** | **1.72** | **271** | ⇓*i*Pn | **Pn** | **07 40 57.9** | **+0.5** |
| TTG | | | | *e*Sn | **Sg** | **07 41 21.8** | **-0.5** |
| **DRME** | **Dracevica, Mon** | **1.79** | **263** | ⇑*i*Pn | **Pn** | **07 40 59.1** | **+0.7** |
| DRME | | | | *e*Sn | **Sb** | **07 41 23.8** | **+0.9** |
| **DRME** | **Dracevica, Mon** | **1.79** | **263** | ⇑*i*Pn | **Pn** | **07 40 59.1** | **+0.7** |
| DRME | | | | *e*Sn | **Sb** | **07 41 23.8** | **+0.9** |
| **ULC** | **Ulcinj** | **1.79** | **256** | ⇓*i*Pn | **Pn** | **07 40 59.0** | **+0.5** |
| ULC | | | | *e*Sn | **Sb** | **07 41 23.5** | **+0.5** |
| **ULC** | **Ulcinj** | **1.79** | **256** | ⇓*i*Pn | **Pn** | **07 40 59.0** | **+0.5** |
| **ULC** | **Ulcinj** | **1.79** | **256** | P | **Pg** | **07 41 01.2** | **-0.2** |
| ULC | | | | *e*Sn | **Sb** | **07 41 23.5** | **+0.5** |
| **MMB** | **Musomiste** | **1.81** | **117** | P | **Pn** | **07 40 59.7** | **+1.0** |
| MMB | | | | Pg | **Pb** | **07 41 01.2** | **+0.6** |
| **MMB** | **Musomiste** | **1.81** | **117** | P | **Pn** | **07 40 59.7** | **+1.0** |
| **MPEP** | **Malo Peshtene** | **1.84** | **59** | P | **Pn** | **07 40 59.4** | **+0.2** |
| MPEP | | | | Pg | **Pb** | **07 41 01.8** | **+0.6** |
| **PLE** | **Pljevlja** | **1.84** | **300** | ⇑*i*Pn | **Pn** | **07 40 59.9** | **+0.6** |
| PLE | | | | *e*Sn | **Sb** | **07 41 24.4** | **-0.2** |
| **PLE** | **Pljevlja** | **1.84** | **300** | ⇑*i*Pn | **Pn** | **07 40 59.9** | **+0.6** |
| PLE | | | | *e*Sn | **Sb** | **07 41 24.4** | **-0.2** |
| **KBN** | **Korca** | **1.89** | **198** | P | **Pn** | **07 40 59.9** | **0.0** |
| **KBN** | **Korca** | **1.89** | **198** | P | **Pn** | **07 40 59.9** | **0.0** |
| **PGB** | **Panagyurishte** | **1.92** | **85** | P | **Pn** | **07 41 00.9** | **+0.6** |
| **PGB** | **Panagyurishte** | **1.92** | **85** | P | **Pn** | **07 41 00.9** | **+0.6** |
| **NKY** | **Niksic** | **1.94** | **282** | ⇓*i*Pn | **Pn** | **07 41 01.1** | **+0.4** |
| NKY | | | | *e*Sn | **Sb** | **07 41 26.9** | **-0.6** |
| **NKY** | **Niksic** | **1.94** | **282** | ⇓*i*Pn | **Pn** | **07 41 01.1** | **+0.4** |
| NKY | | | | *e*Sn | **Sb** | **07 41 26.9** | **-0.6** |
| **NKME** | **Niksic** | **1.97** | **281** | ⇑*i*Pn | **Pn** | **07 41 01.0** | **+0.1** |
| NKME | | | | *e*Sn | **Sb** | **07 41 27.2** | **-0.8** |
| **NKME** | **Niksic** | **1.97** | **281** | ⇑*i*Pn | **Pn** | **07 41 01.0** | **+0.1** |
| NKME | | | | *e*Sn | **Sb** | **07 41 27.2** | **-0.8** |
| **KUBS** | **Kucevo** | **1.99** | **2** | *e*Pn | **Pn** | **07 41 01.3** | **+0.1** |
| **KUBS** | **Kucevo** | **1.99** | **2** | *e*Pn | **Pn** | **07 41 01.3** | **+0.1** |
| **BUM** | **Brajici-Budva** | **1.99** | **267** | *e*Pn | **Pn** | **07 41 02.0** | **+0.7** |
| BUM | | | | *e*Sn | **Sb** | **07 41 28.5** | **-0.2** |
| **BUM** | **Brajici-Budva** | **1.99** | **267** | *e*Pn | **Pn** | **07 41 02.0** | **+0.7** |
| BUM | | | | *e*Sn | **Sb** | **07 41 28.5** | **-0.2** |
| **SRS** | **Serrai** | **2.00** | **130** | P | **Pn** | **07 41 00.9** | **-0.4** |
| **SRS** | **Serrai** | **2.00** | **130** | P | **Pn** | **07 41 00.9** | **-0.4** |
| SRS | | | | *e*Sn | **Sn** | **07 41 24.6** | **-1.9** |
| **NVR** | **Nevrokopi** | **2.02** | **121** | P | **Pn** | **07 41 01.5** | **-0.1** |
| NVR | | | | S | **Sn** | **07 41 27.3** | **+0.2** |
| **NVR** | **Nevrokopi** | **2.02** | **121** | *e*Pn | **Pn** | **07 41 01.6** | **-0.1** |
| NVR | | | | S | **Sn** | **07 41 27.3** | **+0.2** |
| **DIVS** | **Divibare** | **2.03** | **326** | ⇑*i*P | **Pb** | **07 41 04.5** | **0.0** |
| **DIVS** | **Divibare** | **2.03** | **326** | S | **Sn** | **07 41 28.3** | **+0.7** |
| **DIVS** | **Divibare** | **2.03** | **326** | P | **Pn** | **07 41 01.1** | **-0.8** |
| **DIVS** | **Divibare** | **2.03** | **326** | P | **Pn** | **07 41 01.1** | **-0.8** |
| DIVS | | | | S | **Sn** | **07 41 28.3** | **+0.7** |
| **NEST** | **Nestorio** | **2.05** | **191** | P | **Pn** | **07 41 02.5** | **+0.4** |
| NEST | | | | S | **Sn** | **07 41 28.2** | **+0.3** |
| **NEST** | **Nestorio** | **2.05** | **191** | P | **Pn** | **07 41 02.5** | **+0.4** |
| NEST | | | | *e*Sn | **Sn** | **07 41 25.8** | **-2.1** |
| NEST | | | | S | **Sn** | **07 41 28.2** | **+0.3** |
| **THE** | **Thessaloniki** | **2.07** | **149** | *e*Pn | **Pn** | **07 41 01.8** | **-0.5** |
| THE | | | | *e*Sn | **Sn** | **07 41 25.4** | **-3.0** |
| **SOH** | **Sokhos** | **2.08** | **140** | P | **Pn** | **07 41 02.1** | **-0.4** |
| **SOH** | **Sokhos** | **2.08** | **140** | P | **Pn** | **07 41 02.1** | **-0.4** |
| SOH | | | | *e*Sn | **Sn** | **07 41 26.4** | **-2.4** |
| **UPM** | **Unac-Piva** | **2.11** | **293** | ⇑*i*Pn | **Pn** | **07 41 03.4** | **+0.3** |
| UPM | | | | *e*Sn | **Sn** | **07 41 31.1** | **+1.4** |
| **UPM** | **Unac-Piva** | **2.11** | **293** | ⇑*i*Pn | **Pn** | **07 41 03.4** | **+0.3** |
| **UPM** | **Unac-Piva** | **2.11** | **293** | P | **Pn** | **07 41 04.0** | **+0.9** |
| UPM | | | | *e*Sn | **Sn** | **07 41 31.1** | **+1.4** |
| **KZN** | **Kozani** | **2.12** | **176** | P | **Pn** | **07 41 03.3** | **+0.2** |
| **KZN** | **Kozani** | **2.12** | **176** | *e*Pn | **Pn** | **07 41 02.7** | **-0.4** |
| **KZN** | **Kozani** | **2.12** | **176** | P | **Pn** | **07 41 03.3** | **+0.2** |
| KZN | | | | *e*Sn | **Sn** | **07 41 27.0** | **-2.7** |
| **BBLS** | **Lazići** | **2.14** | **313** | *e*Pn | **Pn** | **07 41 03.0** | **-0.4** |
| **BBLS** | **Lazići** | **2.14** | **313** | *e*Pn | **Pn** | **07 41 03.0** | **-0.4** |
| **HORT** | **Hortiatis** | **2.15** | **147** | P | **Pn** | **07 41 03.3** | **-0.2** |
| **HORT** | **Hortiatis** | **2.15** | **147** | *e*Pn | **Pn** | **07 41 03.0** | **-0.5** |
| **HORT** | **Hortiatis** | **2.15** | **147** | P | **Pn** | **07 41 03.3** | **-0.2** |
| **HCY** | **Herceg Novi** | **2.28** | **272** | ⇓*i*Pn | **Pn** | **07 41 06.0** | **+0.8** |
| HCY | | | | *e*Sn | **Sn** | **07 41 35.1** | **+1.5** |
| **HCY** | **Herceg Novi** | **2.28** | **272** | ⇓*i*Pn | **Pn** | **07 41 06.0** | **+0.8** |
| HCY | | | | *e*Sn | **Sn** | **07 41 35.1** | **+1.5** |
| **BRY** | **Bratogost** | **2.29** | **283** | ⇓*i*Pn | **Pn** | **07 41 05.6** | **+0.1** |
| BRY | | | | *e*Sn | **Sn** | **07 41 35.0** | **+1.0** |
| **BRY** | **Bratogost** | **2.29** | **283** | ⇓*i*Pn | **Pn** | **07 41 05.6** | **+0.1** |
| BRY | | | | *e*Sn | **Sn** | **07 41 35.0** | **+1.0** |
| **DJES** | **Djerdap** | **2.34** | **17** | *e*Pn | **Pn** | **07 41 06.5** | **+0.4** |
| **PLD** | **Plovdiv** | **2.34** | **97** | P | **Pn** | **07 41 06.8** | **+0.7** |
| **PLD** | **Plovdiv** | **2.34** | **97** | P | **Pn** | **07 41 06.8** | **+0.7** |
| **TREB** | **Trebinje** | **2.40** | **278** | *e*Pn | **Pn** | **07 41 08.5** | **+1.7** |
| **TREB** | **Trebinje** | **2.40** | **278** | *e*Pn | **Pn** | **07 41 08.5** | **+1.7** |
| **LIT** | **Litokhoron** | **2.42** | **163** | P | **Pn** | **07 41 07.4** | **+0.2** |
| **LIT** | **Litokhoron** | **2.42** | **163** | *e*Pn | **Pn** | **07 41 07.3** | **+0.1** |
| **RZN** | **Rozhen** | **2.45** | **106** | P | **Pn** | **07 41 08.3** | **+0.6** |
| **RZN** | **Rozhen** | **2.45** | **106** | P | **Pn** | **07 41 08.3** | **+0.6** |
| **PLG** | **Polygyros** | **2.48** | **145** | P | **Pn** | **07 41 08.0** | **0.0** |
| **PLG** | **Polygyros** | **2.48** | **145** | *e*Pn | **Pn** | **07 41 08.1** | **0.0** |
| **BEO** | **Beograd** | **2.52** | **342** | *e*Pn | **Pn** | **07 41 08.9** | **+0.5** |
| **SRE** | **Strehaia** | **2.53** | **27** | ⇑*i*P | **Pg** | **07 41 18.6** | **+3.0** |
| **TEKS** | **Tekeris** | **2.59** | **326** | *i* Pn | **Pn** | **07 41 09.2** | **-0.3** |
| TEKS | | | | *e*Sg | **Sg** | **07 41 48.9** | **-1.5** |
| **TEKS** | **Tekeris** | **2.59** | **326** | *i* Pn | **Pn** | **07 41 09.2** | **-0.3** |
| TEKS | | | | *e*Sg | **Sg** | **07 41 48.9** | **-1.5** |
| **KAVA** | **Kavala** | **2.62** | **122** | P | **Pn** | **07 41 09.8** | **-0.1** |
| **KAVA** | **Kavala** | **2.62** | **122** | P | **Pn** | **07 41 09.8** | **-0.1** |
| **OUR** | **Ouranopolis** | **2.76** | **138** | *e*PN | **Pn** | **07 41 12.2** | **+0.4** |
| **OUR** | **Ouranopolis** | **2.76** | **138** | *e*SN | **Sg** | **07 41 53.5** | **-2.3** |
| **OUR** | **Ouranopolis** | **2.76** | **138** | P | **Pn** | **07 41 11.7** | **-0.1** |
| **OUR** | **Ouranopolis** | **2.76** | **138** | P | **Pn** | **07 41 11.7** | **-0.1** |
| **JAN** | **Janina** | **2.82** | **191** | *e*Pn | **Pn** | **07 41 13.3** | **+0.7** |
| **THL** | **Klokotos Trika** | **2.88** | **173** | P | **Pn** | **07 41 13.7** | **+0.3** |
| **THL** | **Klokotos Trika** | **2.88** | **173** | P | **Pn** | **07 41 13.7** | **+0.3** |
| **PAIG** | **Paliouri** | **2.96** | **147** | P | **Pn** | **07 41 14.3** | **-0.2** |
| **PAIG** | **Paliouri** | **2.96** | **147** | P | **Pn** | **07 41 14.3** | **-0.2** |
| **KDZ** | **Kurdzhali** | **2.96** | **104** | P | **Pn** | **07 41 14.4** | **-0.2** |
| **KDZ** | **Kurdzhali** | **2.96** | **104** | P | **Pn** | **07 41 14.4** | **-0.2** |
| **FGSL** | **Fruska Gora** | **3.02** | **336** | ⇓*i*Pn | **Pn** | **07 41 14.8** | **-0.5** |
| **FRGS** | **Fruska Gora** | **3.02** | **336** | ⇓*i*Pn | **Pn** | **07 41 14.8** | **-0.5** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KEK | Kerkira | 3.02 | 207 | ePn | Pn | 07 41 16.3 | +0.9 |
| BZS | Buzias | 3.19 | 1 | ⇓iP | Pn | 07 41 16.9 | -0.8 |
| BZS | Buzias | 3.19 | 1 | ⇓iP | Pn | 07 41 16.9 | -0.8 |
| HUMR | Humele | 3.25 | 49 | S | Sg | 07 42 11.8 | +0.3 |
| XOR | Xorichti | 3.29 | 158 | P | Pn | 07 41 19.1 | 0.0 |
| XOR | Xorichti | 3.29 | 158 | P | Pn | 07 41 19.1 | 0.0 |
| SZH | Strazhica | 3.31 | 74 | P | Pn | 07 41 20.8 | +1.4 |
| SZH | Strazhica | 3.31 | 74 | P | Pn | 07 41 20.8 | +1.4 |
| NEO | Neokhori | 3.36 | 158 | ePn | Pn | 07 41 20.1 | +0.1 |
| LOT | Lotru | 3.41 | 27 | ⇑iP | Pg | 07 41 33.5 | +1.0 |
| MAKR | Makrakomi, Fth | 3.43 | 173 | ePn | Pn | 07 41 21.1 | 0.0 |
| AGG | Agios Georgios | 3.45 | 170 | P | Pn | 07 41 20.6 | -0.7 |
| AGG | Agios Georgios | 3.45 | 170 | P | Pn | 07 41 20.6 | -0.7 |
| AGG | Agios Georgios | 3.45 | 170 | ePn | Pn | 07 41 21.6 | +0.3 |
| EVR | Evrytania | 3.51 | 177 | ePn | Pn | 07 41 21.7 | -0.5 |
| SMTH | Samothraki Isl | 3.56 | 122 | ePn | Pn | 07 41 23.2 | +0.5 |
| DEV | Deva | 3.59 | 15 | ⇓iP | Pn | 07 41 24.1 | +0.9 |
| DEV | Deva | 3.59 | 15 | ⇓iP | Pn | 07 41 24.1 | +0.9 |
| ALN | Alexandroupoli | 3.68 | 113 | P | Pn | 07 41 24.8 | +0.4 |
| ALN | Alexandroupoli | 3.68 | 113 | P | Pn | 07 41 24.8 | +0.4 |
| AOS | Alonnisos | 3.69 | 151 | ePn | Pn | 07 41 24.4 | -0.2 |
| LIA | Limnos Island | 3.71 | 132 | P | Pn | 07 41 24.8 | -0.1 |
| LIA | Limnos Island | 3.71 | 132 | ePn | Pn | 07 41 24.9 | 0.0 |
| AXAR | Agios Charalam | 3.75 | 167 | ePn | Pn | 07 41 26.1 | +0.7 |
| ENEZ | Enez | 3.83 | 115 | ePN | Pn | 07 41 27.3 | +0.9 |
| ENEZ | Enez | 3.83 | 115 | ePn | Pn | 07 41 27.3 | +0.9 |
| EDRB | Edirne | 3.89 | 97 | ePN | Pn | 07 41 26.0 | -1.3 |
| EDRB | Edirne | 3.89 | 97 | ePn | Pn | 07 41 26.0 | -1.3 |
| VOIR | | 3.92 | 39 | ⇑iP | Pn | 07 41 28.2 | +0.4 |
| VOIR | | 3.92 | 39 | ⇑iP | Pn | 07 41 28.2 | +0.4 |
| LKR | Lokris | 3.92 | 163 | ePn | Pn | 07 41 28.4 | +0.6 |
| GADA | Gvkgeada | 3.95 | 123 | ePN | Pn | 07 41 29.2 | +1.1 |
| GADA | Gvkgeada | 3.95 | 123 | ePn | Pn | 07 41 29.2 | +1.1 |
| ERIK | Erikli-Kesan | 4.10 | 114 | ePN | Pn | 07 41 31.1 | +0.9 |
| ERIK | Erikli-Kesan | 4.10 | 114 | ePn | Pn | 07 41 31.1 | +0.9 |
| GELI | Tayfur-Gelibol | 4.20 | 117 | ePN | Pn | 07 41 31.8 | +0.2 |
| GELI | Tayfur-Gelibol | 4.20 | 117 | ePn | Pn | 07 41 31.8 | +0.2 |
| MLR | Muntele Rosu | 4.40 | 44 | ⇑iP | Pn | 07 41 33.7 | -0.7 |
| MLR | Muntele Rosu | 4.40 | 44 | ⇑iP | Pn | 07 41 33.7 | -0.7 |
| LPK | Lapseki | 4.41 | 116 | eP | Pn | 07 41 35.0 | +0.6 |
| LPK | Lapseki | 4.41 | 116 | eP | Pn | 07 41 35.0 | +0.6 |
| DRGR | | 4.44 | 10 | ⇓iP | Pn | 07 41 35.3 | +0.3 |
| DRGR | | 4.44 | 10 | S | Pg | 07 41 53.3 | +1.1 |
| DRGR | | 4.44 | 10 | ⇓iP | Pn | 07 41 35.3 | +0.3 |
| RKY | Sarkoy-Tekirda | 4.55 | 111 | eP | Pn | 07 41 37.2 | +0.8 |
| RKY | Sarkoy-Tekirda | 4.55 | 111 | eP | Pn | 07 41 37.2 | +0.8 |
| KRBG | Karabiga-Canak | 4.76 | 113 | eP | Pn | 07 41 40.7 | +1.5 |
| KRBG | Karabiga-Canak | 4.76 | 113 | eP | Pn | 07 41 40.7 | +1.5 |
| MRMT | Marmara Adasi | 4.87 | 110 | eP | Pn | 07 41 40.7 | -0.2 |
| MRMT | Marmara Adasi | 4.87 | 110 | eP | Pn | 07 41 40.7 | -0.2 |
| VRI | Vrincioaia | 5.06 | 45 | ⇑iP | Pn | 07 41 44.8 | +1.4 |
| VRI | Vrincioaia | 5.06 | 45 | ⇑iP | Pn | 07 41 44.8 | +1.4 |
| EDC | Edincik | 5.17 | 112 | eP | Pn | 07 41 45.3 | +0.4 |
| EDC | Edincik | 5.17 | 112 | eP | Pn | 07 41 45.3 | +0.4 |
| TLB | Topalu | 5.18 | 63 | ⇓iP | Pn | 07 41 45.2 | +0.2 |
| TLB | Topalu | 5.18 | 63 | ⇓iP | Pn | 07 41 45.2 | +0.2 |
| BEHE | Becsehely | 5.31 | 321 | e | Pn | 07 41 47.2 | +0.4 |
| BEHE | | | | e | | 07 42 49.6 | |
| BEHE | Becsehely | 5.31 | 321 | ePn | Pn | 07 41 47.2 | +0.4 |
| BEHE | | | | eSn | Sn | 07 42 49.6 | +1.4 |
| CTKS | Kestanelik-??a | 5.31 | 101 | eP | Pn | 07 41 46.1 | -0.8 |
| CTKS | Kestanelik-??a | 5.31 | 101 | eP | Pn | 07 41 46.1 | -0.8 |
| PKST | T˜'s | 5.45 | 334 | ⇑epn | Pn | 07 41 49.3 | +0.5 |
| PKST | | | | esn | Sn | 07 42 53.1 | +1.4 |
| PKST | T˜'s | 5.45 | 334 | ⇑ePn | Pn | 07 41 49.3 | +0.5 |
| PKST | | | | eSn | Sn | 07 42 53.1 | +1.4 |
| BOJS | Bojanci | 5.50 | 306 | i Pn | Pn | 07 41 50.4 | +0.9 |
| BOJS | Bojanci | 5.50 | 306 | Pn | Pn | 07 41 50.4 | +0.9 |
| BALB | Balikesir | 5.52 | 118 | eP | Pn | 07 41 51.0 | +1.3 |
| BALB | Balikesir | 5.52 | 118 | eP | Pn | 07 41 51.0 | +1.3 |
| BGKT | Bogazkoy | 5.52 | 101 | eP | Pn | 07 41 49.2 | -0.5 |
| BGKT | Bogazkoy | 5.52 | 101 | eP | Pn | 07 41 49.2 | -0.5 |
| CRES | Cresnjev | 5.56 | 310 | i Pn | Pn | 07 41 50.7 | +0.4 |
| CRES | Cresnjev | 5.56 | 310 | i Pn | Pn | 07 41 50.7 | +0.4 |
| PSZ | Piszkesteto | 5.62 | 348 | ⇓iP | Pn | 07 41 50.8 | -0.4 |
| PSZ | Piszkesteto | 5.62 | 348 | ⇓ePn | Pn | 07 41 51.0 | -0.2 |
| PSZ | | | | eSn | Sn | 07 42 56.3 | +0.3 |
| DOBS | Dobrina | 5.75 | 312 | i Pn | Pn | 07 41 52.8 | -0.1 |
| DOBS | Dobrina | 5.75 | 312 | i Pn | Pn | 07 41 52.8 | -0.1 |
| BURAR | Bucovina Array | 5.80 | 25 | ⇓iP | Pn | 07 41 54.1 | +0.5 |
| BURAR | Bucovina Array | 5.80 | 25 | ⇓iP | Pn | 07 41 54.1 | +0.5 |
| VISS | Visnje | 5.91 | 307 | i Pn | Pn | 07 41 55.6 | +0.6 |
| VISS | Visnje | 5.91 | 307 | i Pn | Pn | 07 41 55.6 | +0.6 |
| TLCR | | 5.92 | 60 | ⇑iP | Pn | 07 41 56.0 | +0.8 |
| TLCR | | 5.92 | 60 | ⇑iP | Pn | 07 41 56.0 | +0.8 |
| IZI | Iznik | 6.30 | 107 | eP | Pn | 07 41 59.8 | -0.6 |
| IZI | Iznik | 6.30 | 107 | eP | Pn | 07 41 59.8 | -0.6 |
| SOKA | Soboth | 6.32 | 315 | i Pn | Pn | 07 42 00.8 | 0.0 |
| | SNR=8.2 | | | | | | |
| SOKA | Soboth | 6.32 | 315 | Pn | Pn | 07 42 00.8 | 0.0 |
| | SNR=8.2 | | | | | | |
| VYHS | Vyhne | 6.37 | 343 | ePN | Pn | 07 42 02.1 | +0.7 |
| VYHS | | | | e | | 07 43 14.9 | |
| VYHS | Vyhne | 6.37 | 343 | ePn | Pn | 07 42 02.1 | +0.7 |
| ARSA | Arzberg | 6.46 | 320 | ⇑iPn | Pn | 07 42 03.0 | +0.3 |
| | SNR=12 | | | | | | |
| ARSA | Arzberg | 6.46 | 320 | Pn | Pn | 07 42 03.0 | +0.3 |
| | SNR=12 | | | | | | |
| OBKA | Obir | 6.47 | 311 | ⇑iPn | Pn | 07 42 03.2 | +0.3 |
| | SNR=10.0 | | | | | | |
| OBKA | Obir | 6.47 | 311 | Pn | Pn | 07 42 03.2 | +0.3 |
| | SNR=10.0 | | | | | | |
| KOLS | Kolonicke sedl | 6.53 | 4 | ePN | Pn | 07 42 05.4 | +1.8 |
| KOLS | | | | ePG | Pg | 07 42 38.0 | +5.9 |
| KOLS | | | | eSG | Sg | 07 43 56.6 | 0.0 |
| KOLS | Kolonicke sedl | 6.53 | 4 | ePn | Pn | 07 42 05.4 | +1.8 |
| KOLS | | | | eSg | Sg | 07 43 56.6 | 0.0 |
| KBA | Koelnbreinsper | 7.48 | 311 | ⇓iPn | Pn | 07 42 17.9 | +1.1 |
| | SNR=7.8 | | | | | | |
| KBA | Koelnbreinsper | 7.48 | 311 | Pn | Pn | 07 42 17.9 | +1.1 |
| | SNR=7.8 | | | | | | |
| MOA | Molln | 7.49 | 319 | ⇓iPn | Pn | 07 42 18.5 | +1.7 |
| MOA | Molln | 7.49 | 319 | Pn | Pn | 07 42 18.5 | +1.7 |
| VRAC | Vranov | 7.71 | 335 | Pn | Pn | 07 42 20.8 | +1.0 |
| | comp=N,0.6nm,0.3s,baz=199,slow=6.8,SNR=4.0 | | | | | | |
| VRAC | | | | Sn | Sn | 07 43 45.3 | -2.1 |
| | comp=N,1.0nm,0.3s,baz=110,slow=12,SNR=3.1 | | | | | | |
| VRAC | | | | LR | LR | 07 45 25.4 | |
| | comp=N,46nm,21.8s,baz=166,slow=39 | | | | | | |
| ABTA | Abfaltersbach | 7.78 | 307 | ⇑iPn | Pn | 07 42 22.2 | +1.4 |
| ABTA | Abfaltersbach | 7.78 | 307 | Pn | Pn | 07 42 22.2 | +1.4 |
| KRLC | Kraliky | 8.34 | 338 | eSN | Sn | 07 44 00.3 | -2.6 |
| GERES | GERESS Array B | 8.46 | 322 | Pn | Pn | 07 42 31.5 | +1.3 |
| | comp=N,1.1nm,0.3s,baz=142,slow=14,SNR=8.6 | | | | | | |
| GERES | | | | LR | LR | 07 45 21.1 | |
| | comp=N,78nm,20.1s,baz=340,slow=35 | | | | | | |
| WTTA | Wattenberg | 8.56 | 308 | ⇑iPn | Pn | 07 42 33.8 | +2.2 |
| | SNR=9.3 | | | | | | |
| WTTA | Wattenberg | 8.56 | 308 | Pn | Pn | 07 42 33.8 | +2.2 |
| | SNR=9.3 | | | | | | |
| WATA | Walderalm | 8.63 | 308 | ⇑iPn | Pn | 07 42 34.2 | +1.7 |
| WATA | Walderalm | 8.63 | 308 | Pn | Pn | 07 42 34.2 | +1.7 |
| DPC | Dobruska-Polom | 8.72 | 337 | ePN | Pn | 07 42 36.1 | +2.5 |
| DPC | | | | eSN | Sn | 07 44 10.5 | -1.6 |
| DPC | Dobruska-Polom | 8.72 | 337 | Pn | Pn | 07 42 36.1 | +2.5 |
| KHC | Kasperske Hory | 8.73 | 323 | ePN | Pn | 07 42 34.3 | +0.6 |
| KHC | Kasperske Hory | 8.73 | 323 | Pn | Pn | 07 42 34.3 | +0.6 |
| DAVOX | Davos/Dischmat | 9.41 | 302 | Pn | Pn | 07 42 43.6 | +0.3 |
| | comp=N,0.3nm,0.3s,baz=148,slow=19,SNR=3.6 | | | | | | |
| HFS | Hagfors | 18.38 | 347 | LR | LR | 07 53 01.2 | |
| | comp=N,58nm,20.9s,baz=230,slow=41 | | | | | | |
| FINES | FINESS Array B | 19.24 | 7 | P | P | 07 44 50.9 | -0.8 |
| | comp=N,0.1nm,0.3s,baz=180,slow=6.3,SNR=3.4 | | | | | | |
| NOA | NORSAR Array B | 19.67 | 345 | P | Pn | 07 44 57.5 | -0.4 |
| | comp=N,0.1nm,0.3s,baz=157,slow=12,SNR=2.7 | | | | | | |
| EKA | Eskdalemuir Ar | 20.63 | 317 | P | P | 07 45 07.5 | +0.6 |
| | comp=N,0.6nm,0.5s,baz=113,slow=10,SNR=3.6 | | | | | | |
| TORD | Torodi Ar. Bea | 33.88 | 216 | P | P | 07 47 10.8 | +0.3 |
| | comp=N,1.6nm,0.7s,baz=26,slow=8.6,SNR=12 | | | | | | |
| ZALV | Zalesovo Beam | 42.34 | 52 | P | P | 07 48 21.4 | 0.0 |
| | comp=N,2.2nm,0.4s,baz=284,slow=9.4,SNR=9.6 | | | | | | |
| MKAR | Makanchi Array | 42.51 | 62 | P | P | 07 48 23.3 | +0.3 |
| | comp=N,0.5nm,0.5s,baz=280,slow=8.0,SNR=5.5 | | | | | | |
| SONM | Songino Array | 57.20 | 53 | P | P | 07 50 15.2 | +0.4 |
| | comp=N,0.3nm,0.5s,baz=298,slow=6.2,SNR=2.5 | | | | | | |
| ASAR | Alice Springs | 121.75 | 94 | PKP | PKPdf | 07 59 20.7 | -1.3 |
| | comp=N,0.3nm,0.6s,baz=309,slow=1.8,SNR=3.7 | | | | | | |

*ISCJB **09** 08:07:52.3±0.6, 31°.92N±0°.03×116°.19W±0°.03, h13km±5km, Error ellipse: s-maj=4.7km s-min=4.1km az=28.5*
*MEX **09** 08:07:53.3±0.6, 31°.90N×116°.23W, h10km, MD3.5*
*ECX **09** 08:07:53.2±0.5, 31°.92N×116°.16W, h5km, MD2.2, ML2.4*
**ISC 09 08:07:51.8±0.9, 31°.91N±0°.03×116°.17W±0°.03, h17km±7km, n16, σ0.s62/27, 4C, Baja California**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RDX | Rancho Dawling | 0.19 | 85 | ⇑iP | Pg | 08 07 57.0 | +0.3 |
| RDX | | | | eS | Sg | 08 08 00.2 | +0.1 |
| RDX | | | | IAML | | 08 08 00.4 | |
| | comp=E,749nm,0.2s | | | | | | |
| RDX | | | | ⇑e | | 08 08 00.4 | |
| ECNX | Esteban Cantu | 0.45 | 235 | eP | Pb | 08 08 01.6 | +0.3 |
| ECNX | | | | eS | Sb | 08 08 07.8 | +0.1 |
| PBX | Punta Banda | 0.50 | 250 | eP | Pb | 08 08 02.6 | +0.4 |
| PBX | | | | eS | Sb | 08 08 09.6 | +0.4 |
| CBX | Cerro Bola | 0.58 | 314 | eP | Pb | 08 08 03.3 | -0.3 |
| CBX | | | | eS | Sg | 08 08 10.2 | -1.0 |
| CBX | Cerro Bola | 0.58 | 314 | eP | Pg | 08 08 03.5 | +0.1 |
| CBX | | | | eS | Sg | 08 08 11.3 | +0.1 |
| CBX | | | | IAML | | 08 08 11.7 | |
| | comp=N,177nm,0.2s | | | | | | |
| CBX | | | | ⇑e | | 08 08 11.7 | |
| RMX | La Rumorosa | 0.69 | 6 | eP | Pg | 08 08 05.8 | +0.3 |
| RMX | | | | eS | Sb | 08 08 14.3 | -0.6 |
| IBP | Imperial Bould | 0.75 | 5 | eP | Pb | 08 08 06.5 | 0.0 |
| YUH | Yuha Desert | 0.76 | 16 | eP | Pg | 08 08 06.6 | -0.1 |
| BAR | Barrett | 0.88 | 331 | eP | Pb | 08 08 08.2 | -0.4 |
| CPBX | Cerro Prieto | 0.89 | 55 | eP | Pn | 08 08 11.0 | +1.4 |
| CPBX | | | | eS | Sn | 08 08 22.7 | +0.7 |
| ECBX | El Chinero | 1.05 | 114 | eP | Pg | 08 08 11.9 | -0.2 |
| ECBX | | | | eS | Sg | 08 08 26.0 | +0.1 |
| SDRC | San Diego Road | 1.05 | 322 | eP | Pb | 08 08 11.0 | -0.6 |
| SPIG | San Pedro Mart | 1.05 | 145 | eP | Pb | 08 08 10.4 | -1.4 |
| SPIG | | | | eS | Sb | 08 08 24.3 | -1.1 |
| SPIG | San Pedro Mart | 1.05 | 145 | eP | Pn | 08 08 12.2 | +0.1 |
| SPIG | | | | eS | Sb | 08 08 25.8 | +0.4 |
| SPX | San Pedro Mart | 1.05 | 145 | eP | Pn | 08 08 12.0 | -0.1 |
| SPX | | | | eS | Sb | 08 08 25.9 | +0.5 |
| EML | El Monte Cty P | 1.13 | 330 | ⇑iP | Pn | 08 08 12.3 | -0.6 |

**BJI 09 08:26:08.6, 24°.93N×98°.32E, h5km, ML3.5/8, Ms3.3/1, Ms7 3.2/1, Myanmar-China border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KMI | Kunming | 4.01 | 86 | Pg | Pb | 08 27 22.3 | +2.1 |
| KMI | | | | Sg | Sb | 08 28 11.9 | +2.7 |
| KMI | | | | SMN | | | |
| | 160nm,1.1s | | | | | | |
| KMI | | | | SME | | | |
| | 190nm,0.8s | | | | | | |
| KMI | | | | LE | | | |
| | 320nm,6.0s | | | | | | |
| KMI | | | | LZ | | | |
| | 270nm,9.3s | | | | | | |

**IDC 09 08:37:59.1±3.0, 5°.07S×133°.51E, h0km, mb3.9/1, mb1 4.0/5, mb1mx3.7/31, mbtmp3.9/5, ML3.6/4, MS3.0/1, Ms1 3.0/1, ms1mx2.3/33, Error ellipse: s-maj=124.2km s-min=25.2km az=80.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.73 | 332 | Pn | Pn | 08 39 10.4 | -1.4 |
| | 2.5nm,0.3s,baz=211,slow=23,SNR=11 | | | | | | |
| SIJI | | | | Sn | Sn | 08 39 58.2 | -9.2 |
| | 2.2nm,0.3s,baz=142,slow=19,SNR=3.0 | | | | | | |
| PMG | Port Moresby | 14.21 | 108 | LR | LR | 08 47 54.5 | |
| | comp=Z,61nm,20.4s,baz=342,slow=42 | | | | | | |
| WRA | Warramunga Arr | 14.81 | 177 | Pn | Pn | 08 41 28.3 | -1.8 |
| | 0.2nm,0.3s,baz=358,slow=13,SNR=8.8 | | | | | | |
| WRA | | | | Sn | Sn | 08 44 04.8 | -10 |
| | 0.1nm,0.3s,baz=358,slow=24,SNR=3.2 | | | | | | |
| FITZ | Fitzroy Crossi | 15.07 | 210 | Pn | Pn | 08 41 33.4 | -0.1 |
| | 0.4nm,0.3s,baz=34,slow=9.3,SNR=7.5 | | | | | | |
| FITZ | | | | Sn | Sn | 08 44 12.6 | -8.7 |
| | 0.1nm,0.3s,baz=350,slow=12,SNR=2.2 | | | | | | |
| ASAR | Alice Springs | 18.50 | 179 | P | Pn | 08 42 17.2 | +0.1 |
| | 0.2nm,0.3s,baz=2.1,slow=12,SNR=26 | | | | | | |
| MKAR | Makanchi Array | 68.59 | 325 | P | P | 08 49 04.4 | +0.4 |
| | 0.9nm,0.7s,baz=120,slow=5.2,SNR=3.5 | | | | | | |

*AUST **09** 08:54:53.0±99.0, 50°.98S×161°.42E, h0km±36km, Error ellipse: s-maj=14.3km s-min=1.1km az=355.0*
**ISC 09 08:55:02.9±2.9, 50°.1S±0°.3×161°.4E±0°.1, h35km, n8, σ1.s68/15, North of Macquarie Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| APZ | The Paps | 5.47 | 55 | PN | Pn | 08 56 23.2 | +1.2 |
| APZ | | | | SN | Sn | 08 57 22.9 | -0.8 |
| WHZ | Wether Hill Ro | 6.09 | 48 | PN | Pn | 08 56 31.7 | +1.2 |
| WHZ | | | | SN | Sn | 08 57 38.8 | -0.1 |
| SYZ | Scrubby Hill | 6.28 | 58 | PN | Pn | 08 56 34.1 | +1.2 |
| SYZ | | | | SN | Sn | 08 57 41.5 | -1.9 |
| MLZ | Mavora Lakes | 6.61 | 46 | PN | Pn | 08 56 39.7 | +2.2 |
| MLZ | | | | SN | Sn | 08 57 52.4 | +0.9 |
| TUZ | Tuapeka | 6.91 | 56 | PN | Pn | 08 56 43.0 | +1.4 |
| ODZ | Otahua Downs | 8.05 | 54 | PN | Pn | 08 56 57.3 | +0.1 |
| MOO | Moorlands | 12.48 | 303 | P | Pn | 08 57 56.7 | -1.2 |
| | baz=13,SNR=15 | | | | | | |
| TOO | Toolangi | 16.98 | 312 | P | P | 08 59 01.7 | +2.5 |
| | baz=18,SNR=8.6 | | | | | | |

*ISCJB **09** 09:02:41.9±0.3, 24°.37N±0°.02×121°.83E±0°.02, h13km±2km, Error ellipse: s-maj=3.4km s-min=2.7km az=39.5*
*JMA **09** 09:02:41.2, 24°.32N×121°.75E, h24km±2km, M2.4*
*TAP **09** 09:02:41.5, 24°.37N×121°.80E, h18km, ML3.1, B*
**ISC 09 09:02:41.7±0.9, 24°.37N±0°.02×121°.81E±0°.02, h18km±2km, n40, σ0.s45/63, 4C-6D, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ENA | Nanau | 0.08 | 314 | ⇓iP | Pg | 09 02 45.1 | -0.2 |
| | baz=318 | | | | | | |
| ENA | | | | S | Sg | 09 02 47.2 | -0.5 |
| | baz=318 | | | | | | |
| EHP | Heping Village | 0.09 | 225 | P | Pg | 09 02 45.6 | +0.4 |
| | baz=219 | | | | | | |
| EHP | | | | S | Sg | 09 02 48.1 | +0.4 |
| | baz=219 | | | | | | |
| TWC | Suao | 0.24 | 9 | ⇑iP | Pg | 09 02 47.4 | +0.1 |
| | baz=18 | | | | | | |
| TWC | | | | i S | Sg | 09 02 50.8 | -0.3 |
| | baz=18 | | | | | | |
| ENTT | Nioudou | 0.35 | 321 | ⇓iP | Pb | 09 02 49.3 | -0.1 |
| | baz=322 | | | | | | |
| ENTT | | | | i S | Sb | 09 02 54.5 | -0.1 |
| | baz=322 | | | | | | |
| TWD | Chiawan | 0.35 | 214 | ⇓P | Pg | 09 02 48.7 | -0.3 |
| | baz=218 | | | | | | |
| TWD | | | | eS | Sg | 09 02 53.7 | -0.4 |
| | baz=218 | | | | | | |
| TWE | Neicheng | 0.37 | 340 | ⇓P | Pb | 09 02 49.7 | -0.2 |
| | baz=342 | | | | | | |
| TWE | | | | S | Sb | 09 02 54.9 | -0.4 |
| | baz=342 | | | | | | |
| ILA | Ilan | 0.40 | 352 | eP | Pb | 09 02 50.8 | +0.6 |
| | baz=346 | | | | | | |
| NNS | Nan Shan | 0.40 | 280 | ⇓iP | Pg | 09 02 50.0 | -0.1 |
| | baz=281 | | | | | | |
| NNS | | | | i S | Sg | 09 02 55.1 | -0.7 |
| | baz=281 | | | | | | |
| HWA | Hwalien | 0.43 | 205 | eP | Pg | 09 02 50.7 | +0.1 |
| | baz=211 | | | | | | |
| EGS | | 0.49 | 13 | ⇑P | Pb | 09 02 51.9 | +0.2 |
| | baz=18 | | | | | | |
| EGS | | | | S | Sg | 09 02 57.9 | -0.2 |
| | baz=18 | | | | | | |
| NSK | Sanguang | 0.51 | 307 | ⇓iP | Pb | 09 02 52.0 | -0.1 |
| | baz=308 | | | | | | |
| NSK | | | | i S | Sg | 09 02 58.6 | -0.3 |
| | baz=308 | | | | | | |
| WHF | Hehuan Shan | 0.54 | 246 | ⇑iP | Pb | 09 02 52.4 | -0.4 |
| | baz=254 | | | | | | |
| WHF | | | | eS | Sb | 09 02 59.5 | -0.9 |
| | baz=254 | | | | | | |
| TWT | Tachien | 0.59 | 259 | P | Pg | 09 02 53.8 | +0.3 |
| | baz=259 | | | | | | |
| TWT | | | | i S | Sb | 09 03 01.3 | -0.2 |
| | baz=259 | | | | | | |
| TWA | Mucha | 0.64 | 342 | eP | Pg | 09 02 54.9 | +0.5 |
| | baz=342 | | | | | | |
| TWA | | | | eS | Sg | 09 03 02.7 | -0.3 |
| | baz=342 | | | | | | |
| ESL | Shilin | 0.65 | 212 | P | Pb | 09 02 53.8 | -0.6 |
| | baz=218 | | | | | | |
| NWF | Wu-fen Shan | 0.70 | 358 | ⇑P | Pg | 09 02 55.9 | +0.4 |
| | baz=352 | | | | | | |
| NWF | | | | S | Sg | 09 03 04.7 | -0.1 |
| | baz=352 | | | | | | |
| TAP1 | Taipei | 0.71 | 339 | eP | Pn | 09 02 56.4 | -0.4 |
| | baz=338 | | | | | | |
| NSTT | Nanjuang | 0.78 | 290 | eP | Pg | 09 02 56.9 | -0.1 |
| | baz=281 | | | | | | |
| NSTT | | | | S | Sb | 09 03 06.6 | -0.3 |
| | baz=281 | | | | | | |
| TWS1 | Kuangyinshan | 0.81 | 334 | P | Pn | 09 02 58.3 | +0.1 |
| | baz=335 | | | | | | |
| TWS1 | | | | eS | Sn | 09 03 09.9 | +0.2 |
| | baz=335 | | | | | | |
| WDT | Danda | 0.87 | 225 | eP | Pb | 09 02 58.0 | -0.4 |
| | baz=225 | | | | | | |
| TWQ1 | Liyutan | 0.94 | 269 | eP | Pg | 09 03 00.6 | +0.5 |
| | baz=269 | | | | | | |
| SMLT | Sun Moon Lake | 0.96 | 240 | P | Pb | 09 02 59.9 | +0.1 |
| | baz=240 | | | | | | |
| EHY | Hungye | 0.97 | 207 | eP | Pb | 09 02 59.3 | -0.6 |
| | baz=219 | | | | | | |
| TYC | Yuchr | 0.98 | 242 | eP | Pb | 09 03 00.4 | +0.2 |
| | baz=248 | | | | | | |
| TYC | | | | S | Sb | 09 03 13.5 | +0.7 |
| | baz=248 | | | | | | |
| JYNG | Yonagunijimaku | 1.04 | 85 | P | Pb | 09 03 01.1 | 0.0 |
| JYNG | | | | S | Sn | 09 03 15.1 | -0.3 |
| YOJ | Yonaguni jima | 1.10 | 85 | P | Pn | 09 03 02.0 | -0.2 |
| YOJ | | | | eS | Sg | 09 03 17.2 | -0.3 |
| YOJ | Yonaguni jima | 1.10 | 85 | eP | Pn | 09 03 01.9 | -0.2 |
| | baz=75 | | | | | | |
| TWF1 | Yuli | 1.12 | 205 | eP | Pn | 09 03 02.0 | -0.4 |
| | baz=215 | | | | | | |
| YUS | Yu-Shan | 1.18 | 222 | eP | Pb | 09 03 04.0 | +0.2 |
| | baz=212 | | | | | | |
| ALS | Alishan | 1.25 | 227 | eP | Pb | 09 03 05.3 | +0.3 |
| | baz=214 | | | | | | |
| ALS | | | | eS | Sg | 09 03 23.1 | +0.6 |
| | baz=214 | | | | | | |
| CHN5 | Tsauling | 1.29 | 234 | eP | Pb | 09 03 06.1 | +0.7 |
| | baz=235 | | | | | | |
| CHN4 | Tsaushan | 1.50 | 228 | eP | Pb | 09 03 10.0 | +1.0 |
| | baz=217 | | | | | | |
| CHN4 | | | | eS | Sg | 09 03 30.9 | +0.6 |
| | baz=217 | | | | | | |
| STYT | Tauyuan | 1.54 | 219 | eP | Pb | 09 03 09.8 | +0.1 |
| | baz=220 | | | | | | |
| WTP | Ta-pu | 1.56 | 225 | eP | Pb | 09 03 10.9 | +0.8 |
| | baz=215 | | | | | | |
| WTP | | | | eS | Sg | 09 03 31.7 | -0.6 |
| | baz=215 | | | | | | |
| CHN1 | Nanshi | 1.66 | 225 | eP | Pb | 09 03 12.4 | +0.6 |
| | baz=227 | | | | | | |
| TWG | Pinlang | 1.68 | 204 | eP | Pb | 09 03 11.7 | -0.4 |
| | baz=192 | | | | | | |
| IRIF | Iriomote-Funau | 1.75 | 91 | P | Pn | 09 03 11.4 | +0.3 |
| JKRS | Kuro-shima | 2.01 | 93 | P | Pn | 09 03 15.5 | +0.8 |
| JKRS | | | | eS | Sn | 09 03 40.2 | +0.8 |
| JIJ | Ishigaki jima | 2.13 | 90 | P | Pn | 09 03 16.4 | +0.1 |
| JIJ | | | | eS | Sn | 09 03 41.6 | -0.7 |
| EAST | Anshuo | 2.17 | 204 | eP | Pn | 09 03 17.4 | +0.5 |
| | baz=196 | | | | | | |

**PGC 09 09:10:39.3±2.9, 63°.20N×130°.39W, h0km, ML3.4/11, 294km Wsw of Norman Wells, Nt Southern Yukon Territory, Canada, Southern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WHY | Whitehorse | 3.32 | 222 | Pn | Pn | 09 11 31.9 | -0.8 |
| WHY | | | | Pg | Pb | 09 11 39.6 | +0.4 |
| WHY | | | | Sg | Sb | 09 12 21.5 | +1.3 |
| DAWY | Dawson | 4.11 | 286 | Pn | Pn | 09 11 42.8 | -0.6 |
| DAWY | | | | Pg | Pb | 09 11 53.5 | +1.0 |
| DAWY | | | | Sg | Sb | 09 12 44.5 | +1.8 |
| HYT | Haines Junctio | 4.11 | 238 | Pn | Pn | 09 11 43.2 | -0.4 |
| HYT | | | | Sn | Sn | 09 12 28.6 | -3.8 |
| HYT | | | | Sg | Sb | 09 12 47.1 | +4.0 |
| CLVN | Colville Lake | 4.26 | 23 | Pn | Pn | 09 11 44.2 | -1.2 |
| CLVN | | | | Sn | Sn | 09 12 31.4 | -4.4 |
| YUK4 | Talbot Arm | 4.28 | 248 | Pn | Pn | 09 11 45.0 | -1.0 |
| YUK4 | | | | Pg | Pb | 09 11 56.6 | +0.9 |
| YUK4 | | | | Sn | Sn | 09 12 32.3 | -4.5 |
| YUK4 | | | | Sg | Sb | 09 12 47.6 | -0.6 |
| YUK7 | Dusty Glacier | 4.54 | 237 | Pn | Pn | 09 11 48.8 | -0.8 |
| YUK7 | | | | Sn | Sn | 09 12 39.9 | -3.3 |
| YUK7 | | | | Sg | Sb | 09 13 00.1 | +4.5 |
| PLBC | Pleasant Camp | 4.73 | 220 | Pn | Pn | 09 11 51.6 | -0.2 |
| PLBC | | | | Pg | Pb | 09 12 04.7 | +1.6 |
| PLBC | | | | Sn | Sn | 09 12 44.1 | -3.3 |
| DLBC | Dease Lake | 4.79 | 178 | Pn | Pn | 09 11 52.2 | -0.5 |
| DLBC | | | | Sn | Sn | 09 12 45.6 | -3.3 |
| DLBC | | | | Sg | Sb | 09 13 05.5 | +3.2 |
| YUK1 | Sand Pete Hill | 4.79 | 262 | Pg | Pb | 09 12 05.5 | +1.3 |
| YUK1 | | | | Sg | Sb | 09 13 05.8 | +3.3 |
| BVCY | Beaver Creek | 4.87 | 265 | Pn | Pn | 09 11 53.4 | -0.5 |
| BVCY | | | | Sn | Sn | 09 12 47.2 | -3.6 |
| YUK3 | Moose Creek | 4.88 | 257 | Pn | Pn | 09 11 53.8 | -0.5 |
| YUK3 | | | | Pg | Pb | 09 12 06.2 | +0.2 |
| YUK3 | | | | Sg | Sb | 09 13 09.2 | +3.8 |
| YUK2 | White River | 5.05 | 258 | Sg | Sb | 09 13 15.0 | +5.1 |
| INK | Inuvik | 5.29 | 347 | Pn | Pn | 09 11 58.4 | -1.0 |
| INK | | | | Sn | Sn | 09 12 55.5 | -5.4 |
| FNBB | Fort Nelson | 5.62 | 137 | Sg | Sg | 09 13 33.8 | -6.0 |

*NIED **09** 09:15:00, 42°.50N×144°.70E, h38km, Mw3.5 Best double couple: $M_0$1.83000×$10^{14}$ NP1:$\phi_s$145.00000°, δ51.00000°, λ-12.00000°. NP2:$\phi_s$243.00000°, δ81.00000°, λ-140.00000°.*
**JMA 09 09:15:59.7, 42°.47N×144°.67E, h53km±1km, M3.5, 4C-2D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JAK | Akkeshi | 0.53 | 2 | ⇑P | Pn | 09 16 11.3 | -0.1 |
| JAK | | | | eS | Sn | 09 16 20.0 | +0.1 |
| JOB | Onbets | 0.75 | 305 | ⇓P | Pn | 09 16 14.4 | +0.2 |
| JOB | | | | eS | Sn | 09 16 25.0 | +0.2 |
| JCH | Churui | 0.98 | 279 | ⇓P | Pn | 09 16 17.3 | +0.1 |
| JAR | Ashorobuto | 1.06 | 322 | ⇑P | Pn | 09 16 18.2 | -0.1 |
| JAR | | | | eS | Sn | 09 16 31.6 | -0.5 |
| JNK | Nakash | 1.11 | 2 | ⇑P | Pn | 09 16 18.9 | -0.2 |
| JNK | | | | eS | Sn | 09 16 32.9 | -0.5 |
| NEM2 | Nemuro 2 | 1.19 | 41 | P | Pn | 09 16 20.2 | +0.2 |
| NEM2 | | | | eS | Sn | 09 16 35.1 | -0.1 |
| JNBK | Urakawa-nobuka | 1.43 | 263 | P | Pn | 09 16 23.4 | +0.1 |
| JRA | Rausu | 1.50 | 13 | ⇑P | Pn | 09 16 24.8 | +0.5 |
| JRA | | | | eS | Sn | 09 16 43.3 | +0.6 |
| JTKR | Abashiri--Toko | 1.60 | 340 | P | Pn | 09 16 26.8 | +1.2 |
| JTKR | | | | eS | Sn | 09 16 46.7 | +1.6 |
| JFR | Furan | 1.68 | 295 | P | Pn | 09 16 27.2 | +0.5 |
| JBT2 | Biratori 2 | 1.73 | 281 | P | Pn | 09 16 27.1 | -0.3 |

*ISCJB **09** 09:17:19.9±1.1, 6°.2S±0°.2×150°.8E±0°.1, h43km, mb3.6/5, Error ellipse: s-maj=30.2km s-min=12.9km az=143.2*
*IDC **09** 09:17:25.2±6.2, 6°.17S×150°.62E, h78km±48km, mb3.5/5, mb1 3.7/6, mb1mx3.3/45, mbtmp3.8/6, ML1.2/1, Error ellipse: s-maj=52.1km s-min=38.7km az=140.0*
*AUST **09** 09:18:12.4±1.1, 9°.75S×148°.22E, h174km, Error ellipse: s-maj=2.4km s-min=1.3km az=264.0*
**ISC 09 09:17:20.9±1.2, 6°.0S±0°.2×150°.8E±0°.2, h43km, n13, σ1.s14/14, mb3.6/5, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.93 | 227 | P | Pn | 09 18 34.7 | +2.1 |
| | 0.8nm,0.3s,baz=45,slow=16,SNR=2.5 | | | | | | |
| PMG | | | | S | Sn | 09 19 27.2 | -1.2 |
| | 1.1nm,0.3s,baz=45,slow=20,SNR=3.1 | | | | | | |
| PMG | Port Moresby | 4.93 | 227 | P | Pn | 09 18 40.1 | +7.5 |
| | baz=1.1,SNR=3.5 | | | | | | |
| RMQ | Roma | 20.44 | 185 | P | P | 09 21 55.7 | +0.9 |
| | baz=17,SNR=4.9 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.15** | **228** | P | **P** | **09 22 02.0** | **-0.5** |
| | 1.4nm,0.4s,baz=52,slow=10,SNR=25 | | | | | | |
| WRA | | | | PcP | **PcP** | **09 26 07.4** | **0.0** |
| | 0.9nm,1.1s,baz=45,slow=1.6,SNR=3.4 | | | | | | |
| **QLP** | **Quilpie** | **21.38** | **196** | P | **P** | **09 22 04.9** | **0.0** |
| | baz=17,SNR=3.3 | | | | | | |
| **KNRA** | **Kununurra** | **23.66** | **244** | P | **P** | **09 22 29.1** | **+0.5** |
| | baz=20,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **23.92** | **221** | P | **P** | **09 22 30.6** | **-0.5** |
| | 2.6nm,0.6s,baz=56,slow=8.2,SNR=48 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.34** | **242** | P | **P** | **09 23 00.2** | **-1.8** |
| | 0.8nm,0.5s,baz=53,slow=10,SNR=5.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.34** | **242** | P | **P** | **09 23 02.1** | **+0.1** |
| | baz=23,SNR=4.7 | | | | | | |
| **WRKA** | **Warakurna** | **28.68** | **226** | P | **P** | **09 23 13.0** | **-1.0** |
| | baz=24,SNR=3.4 | | | | | | |
| **VNDA** | **Vanda** | **71.69** | **177** | P | **P** | **09 28 36.8** | **-1.1** |
| | 0.4nm,0.7s,baz=359,slow=5.9,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.40** | **52** | P | **P** | **09 30 37.5** | **+0.7** |
| | 0.2nm,0.6s,baz=264,slow=3.6,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.76** | **285** | PKPbc | **PKPbc** | **09 37 04.0** | **-0.8** |
| | 1.2nm,0.6s,baz=65,slow=3.2,SNR=9.0 | | | | | | |

*AUST **09** 09:26:33.5, 19°.00S×177°.86W, h450km*
*ISCJB **09** 09:26:38.5±0.5, 19°.1S±0°.1×177°.64W±0°.10, h570km, mb3.7/10, Error ellipse: s-maj=18.0km s-min=8.2km az=144.6*
*IDC **09** 09:26:39.1±1.4, 19°.08S×177°.58W, h561km±17km, mb3.3/10, mb1 3.5/13, mb1mx3.3/33, mbtmp4.2/13, Error ellipse: s-maj=21.4km s-min=12.8km az=146.0*
**ISC 09 09:26:39.6**±0.7**, 19°.0S**±0°.1×**177°.6W**±0°.1**, h570km, n31, σ1s.34**/33**, mb4.0**/10**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.59** | **49** | P | **P** | **09 28 34.8** | **+0.7** |
| | 14nm,0.3s,baz=158,slow=1.8,SNR=22 | | | | | | |
| AFI | | | | S | **S** | **09 30 04.2** | **-3.7** |
| | 7.5nm,0.3s,baz=288,slow=20,SNR=5.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.21** | **256** | P | **P** | **09 29 52.4** | **+1.5** |
| | 0.3nm,0.3s,baz=139,slow=20,SNR=3.2 | | | | | | |
| **URZ** | **Urewera** | **19.69** | **192** | P | **P** | **09 30 30.0** | **-1.7** |
| | 0.5nm,0.3s,baz=0.0,slow=11,SNR=3.3 | | | | | | |
| URZ | | | | S | S | 09 33 30.4 | -9.4 |
| | 0.3nm,0.3s,baz=53,slow=20,SNR=4.1 | | | | | | |
| **CTA** | **Charters Tower** | **34.01** | **262** | P | **P** | **09 32 37.0** | **-0.1** |
| | 2.3nm,0.5s,baz=53,slow=5.7,SNR=3.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.25** | **242** | P | **P** | **09 32 47.8** | **+0.5** |
| | baz=35,SNR=17 | | | | | | |
| **QLP** | **Quilpie** | **35.84** | **251** | P | **P** | **09 32 52.8** | **+0.6** |
| | baz=36,SNR=4.1 | | | | | | |
| **TOO** | **Toolangi** | **37.05** | **232** | P | **P** | **09 33 02.5** | **+0.5** |
| | baz=37,SNR=7.8 | | | | | | |
| **ARPS** | **Mount Arapiles** | **39.59** | **235** | P | **P** | **09 33 22.7** | **+0.1** |
| | baz=39,SNR=6.0 | | | | | | |
| **HTT** | **Hallett** | **41.22** | **241** | P | **P** | **09 33 33.2** | **-2.5** |
| | baz=41,SNR=10.0 | | | | | | |
| **BBOO** | **Buckleboo** | **43.52** | **242** | P | **P** | **09 33 53.8** | **+0.2** |
| | baz=43,SNR=31 | | | | | | |
| **JAY** | **Jayapura** | **43.93** | **287** | P | **P** | **09 33 57.9** | **+0.8** |
| | 23nm,0.9s,baz=150,slow=3.1,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.16** | **261** | P | **P** | **09 34 06.5** | **0.0** |
| | 2.7nm,0.4s,baz=98,slow=7.5,SNR=100 | | | | | | |
| WRA | | | | S | **S** | **09 40 02.2** | **-3.2** |
| | 0.4nm,0.7s,baz=96,slow=13,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **45.20** | **255** | P | **P** | **09 34 07.0** | **+0.2** |
| | 8.0nm,0.8s,baz=88,slow=7.9,SNR=86 | | | | | | |
| ASAR | | | | S | **S** | **09 40 03.5** | **-2.5** |
| | 1.0nm,0.6s,baz=91,slow=16,SNR=11 | | | | | | |
| **KDU** | **Kakadu** | **48.28** | **270** | P | **P** | **09 34 30.5** | **+0.5** |
| | baz=48,SNR=4.4 | | | | | | |
| **MTN** | **Manton Dam** | **49.51** | **269** | P | **P** | **09 34 39.0** | **-0.1** |
| | baz=49,SNR=3.5 | | | | | | |
| **WRKA** | **Warakurna** | **50.21** | **253** | P | **P** | **09 34 44.2** | **+0.1** |
| | baz=50,SNR=28 | | | | | | |
| **KNRA** | **Kununurra** | **51.12** | **265** | P | **P** | **09 34 51.0** | **+0.2** |
| | baz=51,SNR=9.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.58** | **261** | P | **P** | **09 35 08.7** | **+0.3** |
| | 3.6nm,0.5s,baz=134,slow=3.7,SNR=23 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.58** | **261** | P | **P** | **09 35 08.8** | **+0.5** |
| | baz=53,SNR=12 | | | | | | |
| **MEEK** | **Meekatharra** | **58.73** | **250** | P | **P** | **09 35 43.1** | **-0.7** |
| | baz=58,SNR=7.3 | | | | | | |
| **VNDA** | **Vanda** | **59.38** | **185** | P | **P** | **09 35 47.8** | **+0.7** |
| | 0.3nm,0.6s,baz=345,slow=7.7,SNR=4.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.25** | **323** | P | **P** | **09 36 50.0** | **-0.2** |
| | 0.4nm,0.4s,baz=155,slow=6.2,SNR=3.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.98** | **57** | P | **P** | **09 38 22.6** | **+2.0** |
| | 0.2nm,0.6s,baz=219,slow=5.8,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **86.83** | **13** | P | **P** | **09 38 23.3** | **-0.3** |
| | 0.3nm,0.5s,baz=227,slow=5.3,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.96** | **289** | P | **P** | **09 38 41.0** | **+1.8** |
| | 0.9nm,0.3s,baz=114,slow=2.2,SNR=5.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **110.45** | **314** | PKiKP | **PKiKP** | **09 44 06.7** | **-0.9** |
| | 0.2nm,0.3s,baz=64,slow=0.5,SNR=4.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.56** | **350** | PKP | **PKPdf** | **09 44 39.5** | **-0.3** |
| | 1.8nm,0.8s,baz=20,slow=1.4,SNR=6.1 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **143.53** | **5** | PKP | PKPab | 09 45 07.8 | -0.5 |
| | 1.5nm,0.6s,baz=328,slow=2.6,SNR=3.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.10** | **314** | PKPbc | **PKPbc** | **09 45 16.6** | **-0.2** |
| | 1.1nm,0.5s,baz=103,slow=3.7,SNR=5.4 | | | | | | |
| **GERES** | **GERESS Array B** | **148.89** | **345** | PKPbc | **PKPbc** | **09 45 24.2** | **+0.5** |
| | 1.5nm,0.8s,baz=302,slow=3.0,SNR=3.7 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **151.66** | **349** | PKPbc | **PKPbc** | **09 45 30.5** | **+0.2** |
| | 2.7nm,0.4s,baz=6.3,slow=9.2,SNR=6.1 | | | | | | |

*CSEM **09** 09:34:20.0, 37°.21N×4°.18W, h19km, ML1.5, After MDD*
**MDD 09 09:34:20.0**±0.4**, 37°.21N×4°.18W, h19km**±7km**, mbLg1.5**/15**, Error ellipse: s-maj=4.9km s-min=3.3km az=2.0, PRXIMO, Spain**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SELV** | **Sierra Elvira** | **0.36** | **86** | Pg | Pg | 09 34 27.1 | -0.7 |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| SELV | | | | Lg | Lg | 09 34 32.2 | |
| | 7.1nm,0.4s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **0.36** | **86** | Pg | Pg | 09 34 27.1 | -0.6 |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| SELV | | | | Lg | Lg | 09 34 32.2 | |
| | 7.1nm,0.4s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **0.59** | **91** | Pg | Pb | 09 34 30.9 | -0.9 |
| | 0.8nm,0.3s,SNR=5.4 | | | | | | |
| EQUE | | | | Lg | Lg | 09 34 39.8 | |
| | 7.9nm,0.3s,SNR=5.0 | | | | | | |
| **EQUE** | **Quentar** | **0.59** | **91** | Pg | Pb | 09 34 30.9 | -0.9 |
| | 0.8nm,0.3s,SNR=5.4 | | | | | | |
| EQUE | | | | Lg | Lg | 09 34 39.8 | |
| | 7.9nm,0.3s,SNR=5.0 | | | | | | |
| **EGUA** | **Guajares** | **0.62** | **128** | Pg | Pb | 09 34 30.5 | -1.7 |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | |
| EGUA | | | | Lg | Lg | 09 34 40.9 | |
| | 6.8nm,0.2s,SNR=7.9 | | | | | | |
| **EGUA** | **Guajares** | **0.62** | **128** | Pg | Pb | 09 34 30.5 | -1.7 |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | |
| EGUA | | | | Lg | Lg | 09 34 40.9 | |
| | 6.8nm,0.2s,SNR=7.9 | | | | | | |
| **EMIJ** | **Mijas** | **0.81** | **217** | Pg | Pb | 09 34 35.2 | -0.2 |
| | 0.3nm,0.1s,SNR=6.7 | | | | | | |
| EMIJ | | | | Lg | Lg | 09 34 45.1 | |
| | 4.7nm,0.4s,SNR=5.0 | | | | | | |
| **EMIJ** | **Mijas** | **0.81** | **217** | Pg | Pb | 09 34 35.2 | -0.3 |
| | 0.3nm,0.1s,SNR=6.7 | | | | | | |
| EMIJ | | | | Lg | Lg | 09 34 45.1 | |
| | 4.7nm,0.4s,SNR=5.0 | | | | | | |
| **EADA** | **Adamuz** | **1.00** | **342** | Pg | Pb | 09 34 37.9 | -1.0 |
| | 3.1nm,0.1s,SNR=185 | | | | | | |
| EADA | | | | Lg | Lg | 09 34 51.5 | |
| | 6.7nm,0.1s,SNR=5.0 | | | | | | |
| **EADA** | **Adamuz** | **1.00** | **342** | Pg | Pb | 09 34 37.9 | -1.0 |
| | 3.1nm,0.1s,SNR=185 | | | | | | |
| EADA | | | | Lg | Lg | 09 34 51.5 | |
| | 6.7nm,0.1s,SNR=5.0 | | | | | | |
| **EQES** | **Quesada** | **1.06** | **56** | Pg | Pb | 09 34 39.6 | -0.3 |
| | 1.6nm,0.2s,SNR=7.9 | | | | | | |
| EQES | | | | Lg | Lg | 09 34 54.1 | |
| | 1.3nm,0.1s,SNR=9.5 | | | | | | |
| **EQES** | **Quesada** | **1.06** | **56** | Pg | Pb | 09 34 39.6 | -0.3 |
| | 1.6nm,0.2s,SNR=7.9 | | | | | | |
| EQES | | | | Lg | Lg | 09 34 54.1 | |
| | 1.3nm,0.1s,SNR=9.5 | | | | | | |
| **EBER** | **Berja** | **1.07** | **107** | Pg | Pb | 09 34 39.7 | -0.6 |
| | 0.8nm,0.2s,SNR=4.0 | | | | | | |
| EBER | | | | Lg | Lg | 09 34 53.9 | |
| | 4.5nm,0.3s,SNR=4.0 | | | | | | |
| **EBER** | **Berja** | **1.07** | **107** | Pg | Pb | 09 34 39.7 | -0.6 |
| | 0.8nm,0.2s,SNR=4.0 | | | | | | |
| EBER | | | | Lg | Lg | 09 34 53.9 | |
| | 4.5nm,0.3s,SNR=4.0 | | | | | | |
| **ECAB** | **El Cabril** | **1.31** | **311** | Pn | Pn | 09 34 41.7 | -1.7 |
| | 0.1nm,0.2s,SNR=6.0 | | | | | | |
| ECAB | | | | Pg | Pb | 09 34 42.8 | -1.3 |
| | 0.6nm,0.1s,SNR=16 | | | | | | |
| ECAB | | | | Sn | Sn | 09 34 59.3 | -1.1 |
| | 0.4nm,0.1s,SNR=7.9 | | | | | | |
| ECAB | | | | Lg | Lg | 09 35 01.6 | |
| | 1.7nm,0.3s,SNR=5.0 | | | | | | |
| **ECAB** | **El Cabril** | **1.31** | **311** | Pn | Pn | 09 34 41.7 | -1.7 |
| | 0.1nm,0.2s,SNR=6.0 | | | | | | |
| **ESPR** | **Espera** | **1.39** | **256** | Pg | Pb | 09 34 45.3 | -0.1 |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | |
| ESPR | | | | Lg | Lg | 09 35 03.8 | |
| | 8.0nm,0.3s,SNR=7.9 | | | | | | |
| **ESPR** | **Espera** | **1.39** | **256** | Pg | Pb | 09 34 45.3 | -0.1 |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | |
| ESPR | | | | Lg | Lg | 09 35 03.8 | |
| | 8.0nm,0.3s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **1.39** | **64** | Pg | Pb | 09 34 45.6 | 0.0 |
| | 1.1nm,0.2s,SNR=7.9 | | | | | | |
| EHUE | | | | Lg | Lg | 09 35 03.4 | |
| | 3.2nm,0.2s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **1.39** | **64** | Pg | Pb | 09 34 45.6 | 0.0 |
| | 1.1nm,0.2s,SNR=7.9 | | | | | | |
| EHUE | | | | Lg | Lg | 09 35 03.4 | |
| | 3.2nm,0.2s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **1.58** | **55** | Pg | Pb | 09 34 48.4 | -0.4 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| SESP | | | | Lg | Lg | 09 35 09.0 | |
| | 6.4nm,0.2s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **1.58** | **55** | Pg | Pb | 09 34 48.4 | -0.5 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| SESP | | | | Lg | Lg | 09 35 09.0 | |
| | 6.4nm,0.2s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.06** | **286** | Pn | Pn | 09 34 52.4 | -1.3 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| EMIN | | | | Pg | Pb | 09 34 56.1 | -0.8 |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| EMIN | | | | Lg | Lg | 09 35 23.7 | |
| | 1.2nm,0.1s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.06** | **286** | Pn | Pn | 09 34 52.4 | -1.3 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| **PBAR** | **Barrancos** | **2.47** | **294** | *e*Pn | Pn | 09 34 58.7 | -0.5 |
| PBAR | | | | *e*Sg | Sg | 09 35 37.8 | -1.6 |
| PBAR | | | | A | A | 09 35 43.3 | |
| | 4.5nm,0.6s | | | | | | |
| **PBAR** | **Barrancos** | **2.47** | **294** | Pn | Pn | 09 34 58.7 | -0.5 |
| PBAR | | | | Lg | Lg | 09 35 37.8 | |
| | 4.5nm,0.6s | | | | | | |
| **PBAR** | **Barrancos** | **2.47** | **294** | Pn | Pn | 09 34 58.7 | -0.5 |
| PBAR | | | | Lg | Lg | 09 35 37.8 | |
| | 4.5nm,0.6s | | | | | | |
| **EGRO** | **El Granado** | **2.66** | **278** | Pn | Pn | 09 35 00.8 | -1.0 |
| | 1.7nm,3.5s,SNR=7.9 | | | | | | |
| EGRO | | | | Lg | Lg | 09 35 42.1 | |
| | 9.7nm,7.7s,SNR=7.9 | | | | | | |
| **EGRO** | **El Granado** | **2.66** | **278** | Pn | Pn | 09 35 00.8 | -1.0 |
| | 1.7nm,3.5s,SNR=7.9 | | | | | | |
| EGRO | | | | Lg | Lg | 09 35 42.1 | |
| | 9.7nm,7.7s,SNR=7.9 | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.83** | **275** | *e*Sg | Sg | 09 35 48.8 | -2.3 |
| PVAQ | | | | A | A | 09 35 56.8 | |
| | 3.5nm,0.9s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.83** | **275** | Lg | Lg | 09 35 48.8 | |
| | 3.5nm,0.9s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.83** | **275** | Lg | Lg | 09 35 48.8 | |
| | 3.5nm,0.9s | | | | | | |

**NNC 09 09:43:38.7**±0.8**, 50°.89N×73°.71E, h0km, mb3.5, mpv3.2, 9C-7D, Error ellipse: s-maj=9.9km s-min=7.3km az=60.0, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VOSK** | **Vostochnaya** | **2.50** | **318** | ⇑Pn | Pn | 09 44 19.7 | -1.0 |
| | 5.5nm,0.8s | | | | | | |
| VOSK | | | | ⇓Sn | Sn | 09 44 52.6 | +0.8 |
| | 75nm,1.1s | | | | | | |
| **OTUK** | **Ortayu** | **2.79** | **199** | ⇑Pn | Pn | 09 44 23.4 | -1.2 |
| | 10nm,1.0s | | | | | | |
| OTUK | | | | ⇓Sn | Sn | 09 45 00.4 | +1.4 |
| | 53nm,1.1s | | | | | | |
| **BVA0** | **Borovoye Array** | **2.97** | **318** | ⇓Pn | Pn | 09 44 29.4 | +2.3 |
| | 11nm,1.4s,baz=136,slow=16,SNR=12 | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 09 45 08.8 | |
| | 114nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **3.04** | **317** | ⇑Pn | Pb | 09 44 31.4 | -2.2 |
| | 13nm,1.1s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 09 45 10.0 | |
| | 143nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **3.07** | **93** | ⇑Pn | Pn | 09 44 28.1 | -0.3 |
| | 7.3nm,1.1s,baz=278,slow=12 | | | | | | |
| KURBB | | | | ⇑Pg | Pb | 09 44 35.5 | +1.3 |
| | 14nm,1.1s,baz=279,slow=14 | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 09 45 15.0 | |
| | 146nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **3.12** | **91** | ⇑Pn | Pn | 09 44 29.4 | +0.3 |
| | 16nm,1.1s | | | | | | |
| KURK | | | | ⇓Pg | Pg | 09 44 43.4 | +4.9 |
| | 23nm,1.1s | | | | | | |
| KURK | | | | ⇓Lg | Lg | 09 45 14.9 | |
| | 213nm,1.1s | | | | | | |
| **CHKZ** | **Chkalovo** | **3.38** | **327** | ⇑Pn | Pn | 09 44 32.1 | -0.5 |
| | 1.9nm,0.4s | | | | | | |
| CHKZ | | | | ⇓Lg | Lg | 09 45 13.6 | |
| | 49nm,0.8s | | | | | | |

**IDC 09 10:01:57.3**±6.5**, 4°.09S×129°.94E, h0km, mb3.6**/2**, mb1 3.6**/4**, mb1mx3.3**/43**, mbtmp3.4**/4**, ML3.0**/2**, MS3.7**/1**, Ms1 3.7**/1**, ms1mx2.5**/31**, Error ellipse: s-maj=633.4km s-min=26.7km az=71.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **16.33** | **165** | Pn | Pn | 10 05 46.4 | -1.7 |
| | 0.0nm,0.3s,baz=334,slow=12,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **19.84** | **169** | P | P | 10 06 30.6 | +0.7 |
| | 0.2nm,0.3s,baz=345,slow=11,SNR=20 | | | | | | |
| **AFI** | **Afiamalu** | **58.25** | **104** | LR | LR | 10 38 23.5 | |
| | comp=Z,62nm,18.3s,baz=223,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.78** | **326** | P | P | 10 12 44.2 | -0.1 |
| | 0.3nm,0.6s,baz=120,slow=8.0,SNR=3.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.02** | **328** | P | P | 10 13 10.9 | +0.1 |
| | 0.3nm,0.4s,baz=128,slow=6.1,SNR=3.7 | | | | | | |

*BJI **09** 10:15:10.3, 39°.35N×69°.79E, h10km, mb4.7/41, mB4.8/33, ML4.7/3, Ms4.2/24, Ms7 4.1/17*
*IDC **09** 10:15:12.4±0.5, 39°.08N×70°.28E, h0km, mb4.6/29, mb1 4.7/36, mb1mx4.6/58, mbtmp4.6/36, ML3.9/7, MS3.6/14, Ms1 3.6/14, ms1mx3.4/39, Error ellipse: s-maj=10.3km s-min=7.7km az=146.0*
*ISCJB **09** 10:15:12.8±0.8, 39°.10N±0°.02×70°.24E±0°.02, h9km±5km, mb4.6/74, MS3.6/13, Error ellipse: s-maj=3.5km s-min=2.7km az=159.3*
*KRNET **09** 10:15:15.5±0.1, 39°.48N×70°.00E, mb4.7*
*NNC **09** 10:15:15.9±0.7, 39°.36N×69°.95E, h0km, mb5.0, mpv4.9, Error ellipse: s-maj=14.9km s-min=4.3km az=147.0*
*TEH **09** 10:15:15.4, 39°.30N×69°.99E, h2km, ML5.1*
*MOS **09** 10:15:16.6±1.2, 39°.26N×70°.24E, h33km, mb4.8/38, Error ellipse: s-maj=6.3km s-min=4.3km az=96.3*
*NEIC **09** 10:15:17.8±1.6, 39°.23N×70°.27E, h31km±11km, mb4.9/15, Error ellipse: s-maj=6.4km s-min=4.9km az=163.0*
*SZGRF **09** 10:15:27.3, 40°.44N×69°.94E, h33km, mb4.6/1(BGR)*
**ISC 09 10:15:15.6**±0.4**, 39°.21N**±0°.03×**70°.23E**±0°.03**, h17km**±2km**, h16km:pP-P, n323, σ1s.73**/353**, mb4.7**/75**, MS3.5**/13**, 30C-36D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BTK** | **Batken** | **0.96** | **28** | ⇓*e*P | **Pb** | **10 15 32.1** | **-1.8** |
| | baz=47 | | | | | | |
| BTK | | | | ⇓*e*S | **Sb** | **10 15 44.6** | **-1.8** |
| | baz=47 | | | | | | |
| **DZET** | **Dzherino** | **1.16** | **250** | ⇓P | **Pn** | **10 15 36.2** | **-1.1** |
| | 595nm,0.4s | | | | | | |
| DZET | | | | ⇑S | **Sb** | **10 15 49.9** | **-2.3** |
| | 6μm,0.6s | | | | | | |
| **DZET** | **Dzherino** | **1.16** | **250** | PG | **Pn** | **10 15 36.1** | **-1.1** |
| DZET | | | | S | **Sb** | **10 15 51.7** | **-0.5** |
| DZET | | | | pmax | pmax | | |
| | comp=Z,595nm,0.4s | | | | | | |
| DZET | | | | smax | smax | | |
| | comp=N,5μm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.66** | **71** | ⇓Pn | **Pb** | **10 16 01.8** | **-1.1** |
| | comp=N,688nm,0.9s | | | | | | |
| SFK | | | | ⇓Sn | **Sg** | **10 16 39.2** | **-1.8** |
| | comp=N,5μm,0.7s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.66** | **71** | PN | **Pb** | **10 16 01.8** | **-1.1** |
| SFK | | | | | | 10 16 39.1 | |
| SFK | | | | pmax | pmax | | |
| | comp=Z,688nm,0.9s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,5μm,0.7s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.66** | **71** | ⇓*e*P | **Pb** | **10 16 02.8** | **-0.1** |
| | baz=78 | | | | | | |
| SFK | | | | ⇓*i*S | **Sg** | **10 16 39.1** | **-1.9** |
| | baz=78 | | | | | | |
| **ARK** | **Arkit** | **2.90** | **27** | ⇑*e*P | **Pn** | **10 16 04.2** | **+3.0** |
| | baz=33 | | | | | | |
| ARK | | | | ⇑*i*S | **Sn** | **10 16 38.5** | **+2.7** |
| | baz=33 | | | | | | |
| **ARSB** | **Arslanbob** | **2.98** | **44** | ⇑*e*P | **Pn** | **10 16 05.4** | **+3.1** |
| | baz=50 | | | | | | |
| ARSB | | | | ⇑*i*S | **Sb** | **10 16 43.3** | **-1.3** |
| | baz=50 | | | | | | |
| **MNAS** | **Manas** | **3.70** | **27** | ⇑Pn | **Pn** | **10 16 13.8** | **+1.7** |
| | comp=N,397nm,0.8s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 10 17 02.1 | |
| | comp=N,1μm,1.2s | | | | | | |
| **MNAS** | **Manas** | **3.70** | **27** | PN | **Pn** | **10 16 14.5** | **+2.3** |
| MNAS | | | | | | 10 17 03.3 | |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,397nm,0.8s | | | | | | |
| MNAS | | | | pmax | pmax | | |
| | comp=N,555nm,0.8s | | | | | | |
| **MNAS** | **Manas** | **3.70** | **27** | ⇑*i*P | **Pn** | **10 16 14.4** | **+2.3** |
| | baz=31 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sn** | **10 16 56.8** | **+1.3** |
| | baz=31 | | | | | | |
| **KK31** | **Karatay Array** | **3.89** | **3** | ⇓Pn | **Pn** | **10 16 16.9** | **+2.2** |
| | comp=N,203nm,0.8s,baz=187,slow=13,SNR=848 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 10 17 15.2 | |
| | comp=N,2μm,0.9s,baz=180,slow=29 | | | | | | |
| **KK31** | **Karatay Array** | **3.89** | **3** | *e*PN | **Pn** | **10 16 16.9** | **+2.2** |
| KK31 | | | | | | 10 17 16.3 | |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,35nm,0.2s | | | | | | |
| KK31 | | | | pmax | pmax | | |
| | comp=N,155nm,0.2s | | | | | | |
| **KKAR** | **Karatay Array** | **3.89** | **3** | *e*PN | **Pn** | **10 16 16.4** | **+1.7** |
| **KKAR** | **Karatay Array** | **3.89** | **3** | *e*Pn | **Pn** | **10 16 16.4** | **+1.7** |
| **AML** | **Almayashu** | **3.93** | **41** | P | **Pn** | **10 16 17.3** | **+1.7** |
| | SNR=193 | | | | | | |
| **ARLS** | **Aral** | **4.09** | **48** | ⇑*e*P | Pn | 10 16 22.0 | +4.4 |
| | baz=53 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sn** | **10 17 10.1** | **+4.9** |
| | baz=53 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.37** | **37** | P | **Pn** | **10 16 23.6** | **+2.3** |
| | SNR=68 | | | | | | |
| **EKS** | **Erkin-Say** | **4.38** | **37** | ⇓*e*P | **Pn** | **10 16 24.4** | **+2.9** |
| | baz=41 | | | | | | |
| EKS | | | | ⇓*e*S | **Sn** | **10 17 12.3** | **+0.1** |
| | baz=41 | | | | | | |
| **UCH** | **Uchtor** | **4.44** | **46** | P | **Pn** | **10 16 24.8** | **+2.2** |
| | SNR=20 | | | | | | |
| **KSH** | **Kashi** | **4.46** | **84** | Pn | **Pn** | **10 16 20.3** | **-2.4** |
| KSH | | | | Sn | **Sn** | **10 17 08.7** | **-5.6** |
| KSH | | | | SMN | | | |
| | comp=N,1μm,0.8s | | | | | | |
| KSH | | | | SME | | | |
| | comp=N,930nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **4.71** | **42** | Pn | **Pn** | **10 16 28.5** | **+2.5** |
| | comp=N,9.0nm,0.3s,baz=221,slow=9.7,SNR=81 | | | | | | |
| AAK | | | | Sn | Sb | 10 17 28.0 | -6.2 |
| | comp=N,22nm,0.3s,baz=62,slow=17,SNR=4.0 | | | | | | |
| AAK | | | | LR | LR | 10 18 33.9 | |
| | comp=N,990nm,18.6s,baz=192,slow=42 | | | | | | |
| **AAK** | **Ala-Archa** | **4.71** | **42** | *e*PN | **Pn** | **10 16 28.1** | **+2.1** |
| **AAK** | **Ala-Archa** | **4.71** | **42** | P | **Pn** | **10 16 28.4** | **+2.5** |
| | SNR=66 | | | | | | |
| **KBL** | **Kabul** | **4.76** | **192** | *e*PN | **Pn** | **10 16 29.3** | **+2.5** |
| **KBL** | **Kabul** | **4.76** | **192** | *e*Pn | **Pn** | **10 16 29.3** | **+2.5** |
| **KZA** | **Kyzart** | **4.78** | **52** | P | **Pn** | **10 16 29.7** | **+2.5** |
| | SNR=586 | | | | | | |
| **FRU** | **Bishkek** | **4.91** | **41** | *e*PN | Pn | 10 16 32.0 | +3.3 |
| FRU | | | | *i* | | 10 16 42.0 | |
| FRU | | | | *e* | | 10 17 32.0 | |
| FRU | | | | *i* S | **Sg** | **10 17 49.0** | **-4.2** |
| FRU | | | | pmax | pmax | | |
| | comp=Z,740nm,1.7s | | | | | | |
| FRU | | | | smax | smax | | |
| | comp=E,3μm,2.0s | | | | | | |
| FRU | | | | smax | smax | | |
| | comp=E,2μm,2.0s | | | | | | |
| FRU | | | | MLR | MLR | | |
| | comp=E,4μm,10.0s | | | | | | |
| **KBK** | **Karagaybulak** | **4.96** | **45** | P | **Pn** | **10 16 32.3** | **+2.7** |
| | SNR=154 | | | | | | |
| **CHMS** | **Chumysh** | **5.10** | **41** | P | **Pn** | **10 16 33.8** | **+2.6** |
| | SNR=48 | | | | | | |
| **USP** | **Ospenovka** | **5.18** | **37** | P | **Pn** | **10 16 34.4** | **+2.0** |
| | SNR=20 | | | | | | |
| **ULHL** | **Ulahol** | **5.48** | **55** | P | **Pn** | **10 16 39.6** | **+2.9** |
| | SNR=20 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.50** | **46** | P | **Pn** | **10 16 38.7** | **+1.8** |
| | SNR=145 | | | | | | |
| **CEP** | **Cherat** | **5.55** | **165** | P | **Pn** | **10 16 39.6** | **+2.1** |
| **THW** | **Thamme Wali** | **6.52** | **169** | P | **Pn** | **10 16 52.2** | **+1.4** |
| **PDGK** | **Podgornoye** | **8.09** | **57** | ⇑Pn | **Pn** | **10 17 15.0** | **+2.7** |
| | comp=E,39nm,0.9s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 10 19 25.6 | |
| | comp=E,196nm,1.0s | | | | | | |
| **IMYA** | **Miami** | **8.51** | **253** | *e*P | **Pn** | **10 17 17.1** | **-1.2** |
| **DHRM** | **DHARAMSHALA** | **8.52** | **143** | *e*P | **Pn** | **10 17 18.2** | **-0.2** |
| DHRM | | | | *e*S | **Sn** | **10 18 49.9** | **-4.4** |
| DHRM | | | | AML | AML | 10 19 05.9 | |
| | comp=E,476nm,0.6s | | | | | | |
| DHRM | | | | AML | AML | 10 19 06.2 | |
| | comp=N,422nm,0.5s | | | | | | |
| **ISRO** | **Mashad** | **9.00** | **255** | *e*P | **Pn** | **10 17 23.0** | **-1.9** |
| **OTUK** | **Ortayu** | **9.16** | **9** | ⇓Pn | **Pn** | **10 17 29.2** | **+2.2** |
| | comp=N,15nm,0.6s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 10 19 56.9 | |
| | comp=N,462nm,1.5s | | | | | | |
| **IMOG** | **Moghan** | **9.17** | **254** | *e*P | **Pn** | **10 17 26.0** | **-1.4** |
| **IEMG** | **Emamgholi** | **9.27** | **262** | *e*P | **Pn** | **10 17 27.2** | **-1.6** |
| **IPAY** | **Payeh** | **9.30** | **256** | *e*P | **Pn** | **10 17 27.8** | **-1.4** |
| **IAKL** | **Akhelmad** | **9.43** | **258** | *e*P | **Pn** | **10 17 29.9** | **-1.1** |
| **GEYT** | **Alibeck** | **9.57** | **266** | Pn | **Pn** | **10 17 32.3** | **-0.4** |
| | comp=N,2.3nm,0.3s,baz=93,slow=9.4,SNR=16 | | | | | | |
| GEYT | | | | Sn | **Sn** | **10 19 16.5** | **-3.3** |
| | comp=N,3.3nm,0.3s,baz=102,slow=13,SNR=5.4 | | | | | | |
| GEYT | | | | LR | LR | 10 21 35.4 | |
| | comp=N,172nm,21.4s,baz=80,slow=40 | | | | | | |
| **SMLA** | **Simla** | **9.86** | **143** | *i* P | **Pn** | **10 17 35.5** | **-1.1** |
| SMLA | | | | *i* S | Sn | 10 19 17.8 | -9.1 |
| SMLA | | | | *i* S | Sn | 10 19 17.8 | -9.1 |
| SMLA | | | | AML | AML | 10 19 22.1 | |
| | comp=N,703nm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 10 19 22.3 | |
| | comp=E,1μm,0.3s | | | | | | |
| **IDAH** | **Dahanechah** | **10.59** | **236** | *e*P | **Pn** | **10 17 46.5** | **-0.3** |
| **DDI** | **Dehra Dun** | **10.95** | **142** | *e*P | **Pn** | **10 17 50.9** | **-0.8** |
| **IKOO** | **Kooshah** | **11.35** | **237** | *e*P | **Pn** | **10 17 57.4** | **+0.3** |
| **MAKZ** | **Makanchi** | **11.46** | **45** | *e*Pn | **Pn** | **10 18 00.8** | **+2.3** |
| **MK01** | **Makanchi Array** | **11.62** | **46** | *e*Pn | **Pn** | **10 18 01.6** | **+1.0** |
| **MK31** | **Makanchi Array** | **11.63** | **45** | ⇑P | **Pn** | **10 18 02.4** | **+1.5** |
| | comp=E,11nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **11.63** | **45** | P | **Pn** | **10 18 02.3** | **+1.5** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **11.63** | **45** | Pn | **Pn** | **10 18 02.1** | **+1.3** |
| | comp=Z,0.3nm,0.3s,baz=233,slow=12,SNR=29 | | | | | | |
| MKAR | | | | Lg | Lg | 10 21 09.3 | |
| | comp=Z,0.5nm,0.3s,baz=223,slow=29,SNR=3.6 | | | | | | |
| MKAR | | | | LR | LR | 10 22 49.0 | |
| | comp=Z,377nm,18.1s,baz=222,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **11.63** | **45** | *i* P | **Pn** | **10 18 02.0** | **+1.3** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **11.63** | **45** | *e*Pn | **Pn** | **10 18 02.6** | **+1.8** |
| MKAR | | | | Lg | Lg | 10 21 09.3 | |
| **NDI** | **New Delhi** | **11.99** | **149** | *e*x | **Pn** | **10 18 08.5** | **+2.7** |
| NDI | | | | *e*S | Sn | 10 20 10.0 | -9.2 |

**AB31 Akbulak array 12.44 327** ⇑P **Pn 10 18 09.9 -2.0**
comp=Z,26nm,0.5s,baz=142,slow=12
AB31 ⇓S Sn 10 20 23.6 -6.5
comp=Z,53nm,0.6s,baz=141,slow=22
**AB31 Akbulak array 12.44 327** P **Pn 10 18 09.9 -2.0**
AB31 pmax pmax
comp=Z,44nm,0.5s
**ABKAR Akbulak array 12.44 327** *e*Pn **Pn 10 18 09.8 -2.1**
**KURBB Kurchatov Arra 12.83 24** ⇑P **Pn 10 18 14.3 -2.8**
comp=Z,19nm,0.7s
**KURBB Kurchatov Arra 12.83 24** Pn **Pn 10 18 14.6 -2.5**
comp=Z,0.1nm,0.3s,baz=213,slow=11,SNR=22
KURBB Lg Lg 10 21 45.2
comp=Z,0.2nm,0.3s,baz=129,slow=30,SNR=4.6
**KURK Kurchatov 12.94 24** ⇓P **Pn 10 18 15.9 -2.7**
comp=Z,58nm,1.1s
**KURK Kurchatov 12.94 24** P Pn 10 18 14.6 -4.0
**KURK Kurchatov 12.94 24** Pn Pn 10 18 14.6 -4.0
KURK Lg Lg 10 21 45.2
**KUA Kiasar 13.44 262** *e*P **Pn 10 18 25.4 -0.3**
**VOSK Vostochnaya 13.52 2** ⇓P **Pn 10 18 25.0 -1.7**
comp=Z,16nm,0.9s
**VOSK Vostochnaya 13.52 2** P **Pn 10 18 24.9 -1.7**
VOSK pmax pmax
comp=Z,16nm,0.9s
**ZRNK Zerenda 13.77 357** ⇓P **Pn 10 18 27.5 -2.4**
comp=Z,13nm,0.7s
**ZRNK Zerenda 13.77 357** P **Pn 10 18 27.5 -2.4**
ZRNK pmax pmax
comp=Z,10.0nm,0.6s
**BVA0 Borovoye Array 13.82 0** P **Pn 10 18 29.1 -1.5**
comp=Z,9.7nm,0.6s,baz=173,slow=13,SNR=59
**BVAR Borovoye Array 13.82 0** Pn **Pn 10 18 29.2 -1.4**
comp=Z,0.9nm,0.3s,baz=172,slow=12,SNR=26
BVAR LR LR 10 24 02.1
comp=Z,428nm,18.1s,baz=200,slow=38
**BVAR Borovoye Array 13.82 0** P **Pn 10 18 29.2 -1.4**
BVAR pmax pmax
comp=Z,1.0nm,0.3s
BVAR MLR MLR
comp=Z,428nm,18.1s
**BRVK Borovoye 13.85 0** ⇑P **Pn 10 18 29.4 -1.6**
comp=Z,24nm,0.7s
**BRVK Borovoye 13.85 0***c i*P **Pn 10 18 29.3 -1.7**
BRVK pmax pmax
comp=Z,16nm,0.8s
**BRVK Borovoye 13.85 0** *e*Pn **Pn 10 18 29.5 -1.6**
**WMQ Urumqi 13.87 65** P P 10 18 36.0 -3.7
WMQ sP 10 18 43.0
WMQ PP PnPn 10 18 46.8 +7.5
WMQ S **Sn 10 21 10.0 +4.9**
WMQ SS **S 10 21 29.0 +1.9**
WMQ PMZ
comp=Z,25nm,0.8s
WMQ PMZ
comp=Z,12nm,3.5s
**AKTO Aktyubinsk 14.15 326** ⇓P **Pn 10 18 33.1 -2.2**
comp=Z,29nm,0.7s
AKTO ⇓S **Sn 10 21 08.9 -2.9**
comp=Z,70nm,0.8s
**AKTO Aktyubinsk 14.15 326** Pn **Pn 10 18 33.5 -1.7**
comp=Z,1.2nm,0.3s,baz=134,slow=16,SNR=20
AKTO Sn **Sn 10 21 05.9 -5.8**
comp=Z,1.3nm,0.3s,baz=323,slow=22,SNR=4.5
AKTO Lg Lg 10 22 54.5
baz=29,slow=12,SNR=3.8
**AKTO Aktyubinsk 14.15 326** P **Pn 10 18 33.5 -1.7**
AKTO 10 21 05.9
AKTO pmax pmax
comp=Z,1.0nm,0.3s
AKTO smax smax
comp=N,1.0nm,0.3s
**CHKZ Chkalovo 14.47 1** ⇓P **Pn 10 18 37.4 -2.1**
comp=N,8.9nm,0.8s
**CHKZ Chkalovo 14.47 1** P **Pn 10 18 37.4 -2.1**
CHKZ pmax pmax
comp=Z,9.0nm,0.8s
**DANN Dangsing 15.60 130** *e*P **Pn 10 18 54.7 -0.3**
**BHJ Bhuj 15.92 182** *e*P **Pn 10 18 59.0 +0.2**
BHJ AMB AMB 10 19 01.4
comp=Z,50nm,1.7s
**KOLN Koldanda 15.94 132** *e*P **Pn 10 18 56.1 -3.2**
**GKN Gorkha 16.38 129** *e*P **Pn 10 19 03.2 -1.7**
comp=Z,51nm,0.5s
**KKN Kakani 16.93 128** *e*P **Pn 10 19 10.2 -1.7**
**DMN Daman 16.95 129** *e*P **Pn 10 19 08.4 -3.9**
**BHPL Bhopal 17.06 157** *e*P **Pn 10 19 11.3 -2.1**
BHPL AMB AMB 10 19 18.8
comp=Z,20nm,0.5s
BHPL *ex* x 10 22 07.7
**PKIN Phulchoki 17.15 128** *e*P **Pn 10 19 12.3 -2.5**
**PKI Pulchoki 17.16 128** *e*P **Pn 10 19 12.8 -2.2**
**GUN Gumba 17.21 126** *e*P **Pn 10 19 14.3 -1.3**
comp=Z,78nm,0.8s
**BANOM Banah 17.67 226** ⇑*i*Pn **Pn 10 19 21.1 0.0**
SNR=6.5
**ZAA0 Zalesovo Array 17.77 29** *e*Pn **Pn 10 19 22.0 0.0**
**ZALV Zalesovo Beam 17.77 29** P **Pn 10 19 21.9 -0.2**
comp=Z,2.8nm,0.3s,baz=224,slow=10,SNR=112
ZALV S **Sn 10 22 41.2 +1.6**
comp=Z,0.2nm,0.3s,baz=210,slow=17,SNR=1.8
ZALV Lg Lg 10 24 41.0
comp=Z,0.2nm,0.3s,baz=215,slow=25,SNR=2.1
ZALV LR LR 10 26 32.2
comp=Z,215nm,20.3s,baz=256,slow=38
**ZALV Zalesovo Beam 17.77 29** *i*P **Pn 10 19 21.8 -0.3**
ZALV pmax pmax
comp=Z,43nm,0.7s
**NVS Novosibirsk 17.93 25** *e*P **Pn 10 19 23.1 -0.8**
NVS *e*S **S 10 22 49.2 -0.3**
NVS pmax pmax
comp=N,21nm,0.8s
NVS pmax pmax
comp=E,16nm,0.8s
NVS pmax pmax
comp=Z,40nm,0.8s
NVS smax smax
comp=N,10.0nm,2.0s
NVS smax smax
comp=E,16nm,2.0s
**RAMN Ramite 18.34 127** *e*P Pn 10 19 23.3 -6.2
**UOSS Wadi Hilu 18.50 224** *e*P **Pn 10 19 32.4 +1.2**
comp=E,21nm,1.1s
**SVE Sverdlovsk 18.72 343** *e*P **P 10 19 31.5 -1.7**
SVE *e*S Sn 10 22 51.8 -11
SVE pmax pmax
comp=Z,24nm,0.8s
SVE MLR MLR
comp=Z,773nm,10.0s
**NAZ Nazwa, Dubai 18.76 225** ⇑*i*P **Pn 10 19 34.6 +0.3**
SNR=8.2
**TAPN Taplejung 18.77 124** *e*P **P 10 19 31.3 -2.9**
**ASHO Ashiyiah 18.79 224** ⇓P **P 10 19 33.8 -0.4**
**ARU Arti 18.88 340** P **P 10 19 34.3 -0.5**
comp=Z,0.0nm,0.3s,baz=287,slow=19,SNR=5.2
ARU S Sn 10 22 56.4 -10
comp=Z,0.0nm,0.3s,baz=332,slow=24,SNR=6.5
**ARU Arti 18.88 340***d i*P **P 10 19 33.2 -1.7**
ARU S **Sn 10 23 04.0 -2.2**
ARU pmax pmax
comp=Z,14nm,0.8s
ARU MLR MLR
comp=Z,363nm,11.0s
**ARU Arti 18.88 340** *e*P **P 10 19 34.2 -0.7**
comp=Z,22nm,0.7s
ARU S Sn 10 22 56.5 -10
**ODAN Odare 18.90 126** *e*P P 10 19 30.1 -5.6
comp=Z,43nm,0.6s
**FAQ Al Faqa, Dubai 18.99 225** *i*P **Pn 10 19 37.2 0.0**
SNR=7.3
**DGRG David-gareji 19.06 285** P **Pn 10 19 39.5 +1.5**
**ASUD Al Ashush, Dub 19.23 225** ⇓*i*P **Pn 10 19 40.4 +0.4**
SNR=12
**TBLG Delisi 19.53 286** P **Pn 10 19 45.7 +2.1**
**GNI Garni 19.62 281** *e*P **Pn 10 19 46.7 +1.9**
GNI pmax pmax
comp=Z,2μm,2.0s
**GNI Garni 19.62 281** *e*P **Pn 10 19 46.7 +1.9**
comp=Z,2μm,2.0s
**HVS Khovu-Aksy 20.30 46** *e*P **P 10 19 50.5 -0.1**
HVS pmax pmax
comp=Z,24nm,1.0s
**BOK Bokaro 20.31 135** *e*P **P 10 19 49.4 -1.4**
BOK AMB AMB 10 19 54.4
comp=Z,35nm,0.2s
**NCK Nalchik 20.41 291** *e*P **P 10 19 52.6 +0.8**

**ONI Oni 20.48 288** P Pn 10 19 55.3 +0.4
**ONI Oni 20.48 288** P Pn 10 19 55.2 +0.3
**POO Poona 20.85 170** *e*P **P 10 19 56.2 -0.5**
**KBZ Khabat 20.93 291** P **P 10 19 57.3 0.0**
comp=Z,12nm,0.8s,baz=126,slow=8.0,SNR=12
KBZ LR LR 10 29 32.8
comp=Z,120nm,18.4s,baz=93,slow=41
**KBZ Khabat 20.93 291** P **P 10 19 57.3 0.0**
KBZ pmax pmax
comp=Z,12nm,0.9s
KBZ MLR MLR
comp=Z,120nm,18.4s
**KIV Kislovodsk 21.09 292***d i*P **P 10 19 59.5 +0.3**
KIV *e*S **S 10 23 54.2 +0.9**
KIV *e*SS **SnSn 10 24 18.4 +3.7**
KIV pmax pmax
comp=Z,21nm,0.6s
KIV MLR MLR
comp=Z,142nm,15.0s
**KIV Kislovodsk 21.09 292** *e*P **P 10 19 59.4 +0.1**
comp=Z,33nm,0.7s
**CHVG Ch'k'valeri 21.50 288** P **P 10 20 06.5 +3.0**
**CHVG Ch'k'valeri 21.50 288** ⇑*i*P **P 10 20 07.3 +3.8**
**KRAR Krasnoyarsk 22.54 34** *e*P **P 10 20 15.6 +1.1**
KRAR pmax pmax
comp=Z,16nm,0.8s
**SHL Shillong 22.72 120** *e*P **P 10 20 12.9 -4.0**
SHL AMB AMB 10 20 22.5
comp=Z,28nm,0.7s
**GTA Gaotai 22.85 80** *e*P **P 10 20 17.8 -0.4**
GTA pP **pP 10 20 22.2 -0.8**
GTA sP **sP 10 20 24.8 -0.4**
GTA S **S 10 24 25.3 -1.7**
GTA sS **sS 10 24 31.9 -3.5**
GTA SS SnSn 10 25 09.9 +12
GTA PMZ
comp=Z,96nm,6.4s
GTA LN
comp=Z,280nm,13.5s
GTA LE
comp=Z,280nm,15.9s
**HYB Hyderabad 22.90 159** *e*P **P 10 20 18.1 -0.6**
**VRH Novokhopyorsk 23.23 310** *e*P **P 10 20 22.2 +0.5**
VRH pmax pmax
comp=Z,20nm,0.8s
VRH pmax pmax
comp=N,7.0nm,0.5s
VRH pmax pmax
comp=E,10.0nm,0.7s
**VORD Divnogorie 24.61 309** *e*P **P 10 20 34.5 -0.3**
VORD pmax pmax
comp=Z,10.0nm,0.7s
VORD pmax pmax
comp=N,20nm,0.9s
VORD pmax pmax
comp=E,40nm,1.0s
**MOY Mondy 24.72 50** *e*P **P 10 20 37.0 +1.0**
**MALT Malatya 24.75 278** ⇑*i*P **P 10 20 39.5 +3.1**
**VSR Storozhevoye 24.76 309** *e*P **P 10 20 35.7 -0.5**
VSR pmax pmax
comp=Z,20nm,0.8s
VSR pmax pmax
comp=N,9.0nm,1.2s
VSR pmax pmax
comp=E,40nm,0.9s
**ANN Anapa 24.89 294** *e*P **P 10 20 38.6 +1.2**
ANN *e*S **S 10 25 04.5 +4.8**
ANN pmax pmax
comp=Z,105nm,1.3s
**LPSR Galich'ya Gora 25.33 312** *e*P **P 10 20 39.6 -1.7**
LPSR pmax pmax
comp=N,5.0nm,0.7s
LPSR pmax pmax
comp=E,6.0nm,0.7s
LPSR pmax pmax
comp=E,6.0nm,0.9s
**ZAK Zakamensk 25.77 53** *e*P **P 10 20 45.3 -0.2**
ZAK pmax pmax
comp=Z,27nm,1.3s
**RAYN Ar Rayn 26.15 241** *e*P **P 10 20 50.0 +0.8**
comp=Z,21nm,1.1s
**TLY Talaya 26.31 51** *e*P **P 10 20 51.1 +0.9**
TLY pmax pmax
comp=Z,6.0nm,0.9s
TLY MLR MLR
comp=Z,99nm,13.0s
**LZH Lanzhou 26.71 86** *e*P **P 10 20 55.3 +1.1**
LZH pP **pP 10 20 59.3 -0.1**
LZH sP **sP 10 21 01.2 -0.3**
LZH PP **PnPn 10 21 40.0 +4.7**
LZH *e*S **S 10 25 27.0 -2.2**
LZH PMZ
comp=Z,30nm,1.0s
LZH PMZ
comp=Z,90nm,4.0s
LZH LN
comp=Z,920nm,12.7s
LZH LE
comp=Z,190nm,11.3s
LZH LZ
comp=Z,580nm,15.0s
**MOS Moscow 27.20 318** *e*P **P 10 20 58.2 0.0**
MOS *e* 10 21 11.6
MOS *e* 10 21 42.4
**SONM Songino Array 27.40 60** P **P 10 21 00.5 +0.2**
comp=Z,3.0nm,0.8s,baz=266,slow=10,SNR=16
**SONM Songino Array 27.40 60** P **P 10 21 00.5 +0.2**
SONM pmax pmax
comp=Z,3.0nm,0.8s
**SONA1 Songino Array 27.41 60** *e*P **P 10 21 00.1 -0.2**
**OBN Obninsk 27.52 316** P **P 10 21 01.6 +0.5**
comp=Z,34nm,0.6s,baz=28,slow=17,SNR=4.9
**OBN Obninsk 27.52 316** *e*P **P 10 21 01.7 +0.7**
OBN *e* 10 21 14.3
OBN *e*S **S 10 25 43.9 +2.9**
OBN pmax pmax
comp=Z,16nm,0.7s
OBN MLR MLR
comp=Z,78nm,13.0s
**ULN Ulaanbaatar 27.84 60***d i*P **P 10 21 04.5 +0.2**
ULN pmax pmax
comp=Z,11nm,1.0s
**ULN Ulaanbaatar 27.84 60** *e*P **P 10 21 04.4 +0.1**
comp=Z,8.3nm,0.8s
**BRTR Keskin Array B 28.13 283** P **P 10 21 08.1 +1.2**
comp=Z,14nm,0.8s,baz=84,slow=7.5,SNR=52
BRTR LR LR 10 33 49.9
comp=Z,50nm,20.5s,baz=158,slow=40
**BRTR Keskin Array B 28.13 283***c e*P **P 10 21 08.3 +1.4**
BRTR pmax pmax
comp=Z,14nm,0.8s
**CD2 Chengdu 28.55 96** *e*P **P 10 21 11.0 +0.4**
CD2 pP **pP 10 21 15.6 -0.1**
CD2 S **S 10 25 59.1 +1.2**
CD2 sS **sS 10 26 07.0 +0.6**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,140nm,5.0s
**BR231 Keskin MP Arra 28.76 283** *e*P P 10 21 09.1 -3.4
**KLMR Klimovskoe 28.83 329** *e*P **P 10 21 12.7 0.0**
KLMR *e* 10 22 01.1
KLMR pmax pmax
comp=Z,22nm,0.8s
**KMI Kunming 30.72 107** P **P 10 21 32.5 +2.5**
KMI pP **pP 10 21 38.2 +3.0**
KMI sP **sP 10 21 41.8 +4.5**
KMI S **S 10 26 36.8 +4.4**
KMI SS **SnSn 10 28 17.8 +7.3**
KMI PMZ
comp=Z,5.0nm,0.8s
KMI PMZ
comp=Z,60nm,3.1s
KMI LN
comp=Z,110nm,17.1s
KMI LE
comp=Z,150nm,17.1s
**AKASG Malin Array Be 30.82 305** P **P 10 21 30.4 -0.1**
comp=Z,1.1nm,0.5s,baz=80,slow=7.8,SNR=13
**AKASG Malin Array Be 30.82 305** *i* P **P 10 21 30.3 -0.1**
AKASG pmax pmax
comp=Z,2.0nm,0.5s
**KIEV Kiev 30.83 305** *e*P **P 10 21 30.6 +0.1**
**KIEV Kiev 30.83 305** *e*P **P 10 21 30.6 +0.1**
comp=Z,17nm,1.4s

**AK11 Malin Array Si 30.85 305** *e*P **P 10 21 31.2 +0.5**
**TMCR Tamitsa 31.34 333** *e*P P 10 21 30.8 -4.1
TMCR pmax pmax
comp=Z,13nm,0.8s
**HHC Hu-ho-hao-te 31.49 74** *e*P **P 10 21 38.7 +2.1**
HHC S **S 10 26 44.6 +0.6**
HHC PMZ
comp=Z,30nm,0.9s
HHC PMZ
comp=Z,44nm,7.4s
HHC LN
comp=Z,100nm,13.6s
HHC LE
comp=Z,130nm,11.1s
**HARR Harsova 31.66 294** ⇓*i*P **P 10 21 39.5 +1.6**
**CRAI Chiangrai 32.08 117** P **P 10 21 42.6 +0.8**
comp=Z,8.2nm,0.8s
**CMAR Chiang Mai Arr 32.34 122** P **P 10 21 43.0 -1.1**
comp=Z,0.7nm,0.4s,baz=300,slow=10,SNR=3.2
CMAR PcP **PcP 10 24 31.9 +0.1**
comp=Z,3.3nm,0.7s,baz=295,slow=4.0,SNR=9.0
**CMAR Chiang Mai Arr 32.34 122** P **P 10 21 43.0 -1.1**
CMAR 10 24 32.0
CMAR pmax pmax
comp=Z,1.0nm,0.4s
CMAR pmax pmax
comp=Z,3.0nm,0.7s
**VRI Vrincioaia 32.41 296** ⇓*i*P **P 10 21 45.6 +1.1**
**PLOR Plostina 32.47 296** ⇓*i*P **P 10 21 47.6 +2.6**
**GYA Guiyang 32.93 102** *e*P **P 10 21 50.9 +1.5**
GYA PMZ
comp=Z,10.0nm,0.8s
**MLR Muntele Rosu 32.99 296** ⇓*i*P **P 10 21 52.7 +3.0**
**NANT Nan 33.28 119** P **P 10 21 50.0 -2.4**
comp=Z,6.3nm,0.6s,comp=Z,2μm
**BUR04 Bucovina Ar. S 33.36 300** *e*P **P 10 21 54.0 +1.1**
**VOIR 33.62 296** ⇑*i*P **P 10 21 56.8 +1.6**
**BOD Bodaibo 33.69 42** ⇓*i*P **P 10 21 54.8 -0.7**
BOD pmax pmax
comp=Z,21nm,0.9s
**VSU Vasula 33.71 319***ce*P **P 10 21 56.5 +0.9**
VSU pmax pmax
comp=Z,38nm,0.8s
**LVV L'vov 34.10 304** *e*P **P 10 21 59.5 +0.3**
**LOT Lotru 34.52 296** ⇓*i*P **P 10 22 05.2 +2.2**
**LOEI Loei 34.57 120** P P 10 22 10.3 +6.8
comp=Z,8.4nm,1.1s
**UTHA Uthaitani 34.78 124** P P 10 22 09.9 +4.5
comp=Z,8.7nm,0.8s,comp=Z,76nm
**APA Apatity 34.91 336** ⇓*i*P **P 10 22 07.0 +1.1**
APA MLR MLR
comp=Z,800nm,11.0s
**FINES FINESS Array B 34.91 324** P **P 10 22 06.6 +0.6**
comp=Z,14nm,0.7s,baz=110,slow=11,SNR=53
FINES LR LR 10 38 36.6
comp=Z,70nm,19.0s,baz=133,slow=40
**FINES FINESS Array B 34.91 324** *i* P **P 10 22 06.5 +0.5**
FINES pmax pmax
comp=Z,14nm,0.7s
**PBKT Sadao Pong 35.04 121** P P 10 22 13.0 +5.5
comp=Z,19nm,0.7s,comp=Z,1μm
**DRGR 35.11 298** ⇑*i*P **P 10 22 09.6 +1.5**
**GZR Gura Zlata 35.22 296** ⇓*i*P **P 10 22 10.2 +1.2**
**KOLS Kolonicke sedl 35.27 302** *e*P **P 10 22 10.8 +1.5**
KOLS pmax pmax
comp=Z,7.0nm,1.1s
**KOLS Kolonicke sedl 35.27 302** *e*P **P 10 22 10.8 +1.5**
**UZH Uzhgorod 35.27 301** *e*P P 10 22 15.0 +5.7
**NONG Nongkai 35.47 117** P P 10 22 16.3 +5.0
comp=Z,11nm,1.3s,comp=Z,3μm
**STHS Stebnicka Huta 35.92 303** *e*P **P 10 22 14.0 -0.9**
**STHS Stebnicka Huta 35.92 303** *e*P **P 10 22 14.0 -0.9**
**ATD Arta Tunnel 36.76 229** P **P 10 22 23.9 +1.5**
comp=Z,3.1nm,0.3s,baz=229,slow=19,SNR=1.4
**SKNT Sakolnakorn 36.79 117** P **P 10 22 22.3 -0.3**
comp=Z,23nm,1.1s
**OJC Ojcow 36.82 304** *e*P **P 10 22 23.5 +0.9**
OJC pmax pmax
comp=Z,11nm,1.0s
**OJC Ojcow 36.82 304** *e*P **P 10 22 23.4 +0.9**
comp=Z,11nm,1.0s
**TIA Tai'an 36.90 80** ⇓P **P 10 22 23.9 +0.5**
TIA PMZ
comp=Z,10.0nm,0.6s
**PSZ Piszkesteto 36.92 300** *e*P **P 10 22 23.8 +0.3**
PSZ pmax pmax
comp=Z,5.0nm,0.8s
**PSZ Piszkesteto 36.92 300** ⇓*i*P **P 10 22 24.9 +1.4**
**PSZ Piszkesteto 36.92 300** *e*P **P 10 22 23.8 +0.3**
comp=Z,5.3nm,0.8s
**LANS Liptovska Anna 37.10 303** *e*P **P 10 22 26.3 +1.3**
**LANS Liptovska Anna 37.10 303** *e*P **P 10 22 26.3 +1.3**
**DIVS Divibare 37.38 294** ⇑*i*P **P 10 22 29.1 +1.6**
**VYHS Vyhne 37.57 302** *e*P **P 10 22 29.9 +0.9**
**VYHS Vyhne 37.57 302** *e*P **P 10 22 29.9 +0.9**
**MORC Moravsky Berou 38.30 304** *e*P **P 10 22 36.0 +0.8**
**MORC Moravsky Berou 38.30 304** *e*P **P 10 22 36.0 +0.8**
comp=Z,255nm,2.5s
**ARA0 ARCESS Array S 38.41 337** *e*P **P 10 22 36.5 +0.7**
**ARCES ARCESS Array B 38.41 337** P **P 10 22 36.1 +0.3**
comp=Z,6.7nm,0.7s,baz=104,slow=8.1,SNR=20
ARCES LR LR 10 39 40.0
comp=Z,188nm,21.7s,baz=140,slow=38
**ARCES ARCESS Array B 38.41 337** P **P 10 22 36.1 +0.3**
ARCES pmax pmax
comp=Z,7.0nm,0.7s
ARCES MLR MLR
comp=Z,188nm,21.7s
**KRLC Kraliky 38.77 304** *e*P **P 10 22 39.7 +0.6**
**KRLC Kraliky 38.77 304** *e*P **P 10 22 39.7 +0.6**
**VRAC Vranov 38.96 303** ⇓*i*P **P 10 22 42.4 +1.7**
**DPC Dobruska-Polom 39.04 305** *e*P **P 10 22 42.6 +1.2**
**DPC Dobruska-Polom 39.04 305** *e*P **P 10 22 42.6 +1.2**
DPC *ep*P **pP 10 22 46.1 -0.5**
**UPC Upice 39.23 305** *e*P **P 10 22 44.3 +1.4**
**UPC Upice 39.23 305** *e*P **P 10 22 44.3 +1.4**
UPC *ep*P **pP 10 22 48.0 -0.1**
**NJ2 Nanjing 39.78 85** *e*P **P 10 22 48.0 +0.4**
NJ2 PMZ
comp=Z,60nm,0.8s
**GOPC GO Pecny, Ondr 40.07 304** *e*P **P 10 22 51.2 +1.3**
**GOPC GO Pecny, Ondr 40.07 304** *e*P **P 10 22 51.2 +1.3**
**PRU Pruhonice 40.22 304** *e*P **P 10 22 52.7 +1.6**
**PRU Pruhonice 40.22 304** *e*P **P 10 22 52.7 +1.6**
PRU *ep*P **pP 10 22 56.7 +0.3**
**SOKA Soboth 40.36 299** ⇓*i*P **P 10 22 53.6 +1.1**
comp=Z,8.1nm,0.9s
**BRG Berggiesshubel 40.50 306** *e*P **P 10 22 54.5 +1.0**
comp=Z,5.7nm,0.8s
BRG *e* 10 22 58.5
comp=Z,8.5nm,0.8s
**BRG Berggiesshubel 40.50 306** *e*P **P 10 22 54.5 +1.0**
BRG pmax pmax
comp=Z,6.0nm,0.8s
**GERES GERESS Array B 40.91 303** P **P 10 22 58.5 +1.6**
comp=Z,1.9nm,0.6s,baz=70,slow=12,SNR=6.9
**GERES GERESS Array B 40.91 303** P **P 10 22 58.5 +1.6**
GERES pmax pmax
comp=Z,2.0nm,0.6s
**KHC Kasperske Hory 40.95 303** *e*P **P 10 22 58.0 +0.8**
KHC *e* 10 23 07.4
**KHC Kasperske Hory 40.95 303** *e*P **P 10 22 58.0 +0.8**
KHC *ep*P **pP 10 23 01.8 -0.7**
KHC *ex* x 10 23 07.4
**KHC Kasperske Hory 40.95 303** *e*P **P 10 22 58.2 +1.1**
comp=Z,2.1nm,0.8s
**CN2 Changchun 40.96 65** *e*P **P 10 22 57.7 +0.4**
CN2 PMZ
comp=Z,10.0nm,0.6s
**CLL Collm 41.05 307** *i* P **P 10 22 58.5 +0.6**
CLL pmax pmax
comp=Z,6.0nm,1.0s
**CLL Collm 41.05 307** *i* P **P 10 22 58.5 +0.6**
comp=Z,6.0nm,1.0s
CLL *i* 10 23 02.3
CLL *ep*P **pP 10 23 06.0 +2.8**
CLL *e*PP **PP 10 24 31.0 -1.5**
CLL *i* 10 24 34.8
**CUC Castrocucco 41.37 289** *e*P **P 10 23 03.1 +2.2**
comp=Z,9.6nm,0.8s
**NB2 NORSAR Subarra 41.87 321** P **P 10 23 04.3 -0.3**
comp=Z,13nm,0.8s,baz=94,slow=8.6
**NOA NORSAR Array B 41.87 321** P **P 10 23 04.2 -0.3**
comp=Z,13nm,0.9s,baz=94,slow=8.2,SNR=32
NOA LR LR 10 41 12.2

comp=Z,69nm,18.7s,baz=100,slow=37
**NOA NORSAR Array B 41.87 321** P **P** **10 23 04.2 -0.3**
NOA pmax pmax
comp=Z,13nm,0.9s
NOA MLR MLR
comp=Z,69nm,18.7s
**NBO02 NORSAR Array S 42.04 321** *e*P **P** **10 23 05.7 -0.3**
**YAK Yakutsk 42.15 37** *e*P **P** **10 23 05.9 -0.9**
YAK *e**PP pP 10 23 17.9 +5.8
YAK *e* 10 24 43.7
YAK *e* 10 24 57.0
YAK *e*PPP PPP 10 25 18.5
YAK *e*S **S** **10 29 21.9 -3.6**
YAK *e*SS **SS** **10 32 29.8 -3.3**
YAK *e*SSS SSS 10 33 13.7
YAK pmax pmax
comp=E,2.0nm,1.1s
YAK pmax pmax
comp=Z,7.0nm,0.9s
YAK pmax pmax
comp=N,1.0nm,0.9s
YAK pmax pmax
comp=Z,1.0nm,0.4s
YAK smax smax
comp=N,3.0nm,1.6s
**YAK Yakutsk 42.15 37** *e*P **P** **10 23 06.6 -0.1**
comp=N,66nm,0.7s
**GRF Grafenberg Arr 42.39 304** *e*P **P** **10 23 10.6 +1.7**
comp=N,13nm,1.1s,baz=89,slow=6.9
**DAVA Damuels 43.71 301** *i*P **P** **10 23 20.3 +0.5**
comp=N,11nm,1.0s
**DAVOX Davos/Dischmat 43.82 300** P **P** **10 23 20.5 -0.3**
comp=N,3.9nm,0.7s,baz=53,slow=8.9,SNR=7.1
**DAVOX Davos/Dischmat 43.82 300** P **P** **10 23 20.5 -0.3**
DAVOX pmax pmax
comp=Z,4.0nm,0.7s
**KLR Kul'dur 44.09 56** *e*P P 10 23 18.7 -3.9
**BFO Black Forest 44.51 303** *i*P **P** **10 23 27.3 +1.2**
**BFO Black Forest 44.51 303** *e*P **P** **10 23 26.8 +0.8**
comp=Z,11nm,1.1s
**KS01 Wonju Array Si 44.60 73** *e*P **P** **10 23 26.0 -0.9**
**KSAR Wonju Array Be 44.60 73** P **P** **10 23 27.0 0.0**
**KSAR Wonju Array Be 44.60 73** P **P** **10 23 26.9 0.0**
**KSRS Korea Array 44.63 73** P **P** **10 23 26.9 -0.1**
comp=Z,4.7nm,1.0s,baz=286,slow=6.0,SNR=11
KSRS LR LR 10 44 58.3
comp=Z,78nm,18.4s,baz=311,slow=40
**KSRS Korea Array 44.63 73** P **P** **10 23 27.0 -0.1**
KSRS pmax pmax
comp=Z,5.0nm,1.0s
KSRS MLR MLR
comp=Z,78nm,18.4s
**SPITS Spitsbergen Ar 44.72 346** P **P** **10 23 28.5 +1.2**
comp=Z,8.5nm,0.7s,baz=111,slow=14,SNR=5.2
**SPITS Spitsbergen Ar 44.72 346** P **P** **10 23 28.5 +1.2**
SPITS pmax pmax
comp=Z,9.0nm,0.7s
**USRK Ussuriysk Ar. 45.43 63** LR LR 10 44 13.4
comp=Z,146nm,19.4s,baz=265,slow=38
**SENIN Lac Senin/Sane 45.65 300** *e*P **P** **10 23 36.2 +0.8**
comp=Z,269nm,3.0s
**KBS Kingsbay 45.84 347** *e*P **P** **10 23 37.3 +1.1**
KBS pmax pmax
comp=Z,148nm,1.8s
**KBS Kingsbay 45.84 347** *e*P **P** **10 23 37.3 +1.1**
comp=Z,148nm,1.8s
**ESK Eskdalemuir 49.96 314** *i*P P 10 24 13.1 +4.7
**KMBO Kilima Mbogo 50.26 225** P **P** **10 24 12.0 +0.6**
comp=Z,2.4nm,0.7s,baz=28,slow=11,SNR=5.5
**KMBO Kilima Mbogo 50.26 225** P **P** **10 24 12.0 +0.6**
KMBO pmax pmax
comp=Z,2.0nm,0.7s
**YSS Yuzh-Sakhalins 51.80 56** *e*P **P** **10 24 22.0 -0.3**
**SEY Seymchan 52.53 35** P **P** **10 24 27.5 0.0**
comp=Z,2.3nm,0.8s,baz=85,slow=23,SNR=6.6
**SEY Seymchan 52.53 35** *e*P **P** **10 24 27.7 +0.2**
**MJAR Matsushiro Arr 52.57 70** P **P** **10 24 27.0 -1.3**
comp=Z,4.1nm,0.8s,baz=291,slow=9.7,SNR=11
MJAR LR LR 10 50 22.3
comp=Z,37nm,18.7s,baz=225,slow=40
**MJAR Matsushiro Arr 52.57 70** P **P** **10 24 27.0 -1.3**
MJAR pmax pmax
comp=Z,4.0nm,0.8s
MJAR MLR MLR
comp=Z,37nm,18.7s
**ES19 SONSECA Array 55.63 296** *e*P **P** **10 24 51.4 +0.8**
**ESDC Sonseca Array 55.69 296** P **P** **10 24 51.5 +0.4**
comp=Z,12nm,0.8s,baz=60,slow=7.5,SNR=49
**BILL Bilibino 56.45 27** *e*P **P** **10 24 56.7 +0.7**
BILL pmax pmax
comp=Z,6.0nm,0.9s
**SUMG Summit 58.30 340** *e*P **P** **10 25 10.3 +0.8**
SUMG pmax pmax
comp=Z,22nm,1.0s
**SUMG Summit 58.30 340** *e*P **P** **10 25 10.3 +0.8**
comp=Z,22nm,1.0s
**PBAR Barrancos 58.50 296** *e*P **P** **10 25 12.1 +1.2**
comp=Z,7.4nm,0.7s
**PVAQ Vaqueiros 59.33 295** *e*P **P** **10 25 17.9 +1.2**
comp=Z,6.8nm,0.8s
**TOA0 Torodi Ar. Sit 65.21 267** *e*P **P** **10 25 55.5 -0.8**
**TORD Torodi Ar. Bea 65.21 267** P **P** **10 25 55.6 -0.7**
comp=Z,4.1nm,0.6s,baz=54,slow=5.5,SNR=60
**COLD Coldfoot 69.53 16** *e*P **P** **10 26 23.0 +0.1**
**INK Inuvik 71.33 9** P **P** **10 26 34.2 +0.3**
comp=Z,9.4nm,0.8s,baz=6.5,slow=7.3,SNR=30
**INK Inuvik 71.33 9** P **P** **10 26 34.2 +0.3**
INK pmax pmax
comp=Z,9.0nm,0.8s
**COLA College 72.05 16** *e*P **P** **10 26 38.6 +0.4**
COLA pmax pmax
comp=Z,17nm,1.0s
**COLA College 72.05 16** *e*P **P** **10 26 38.6 +0.4**
comp=Z,17nm,1.0s
**CAST Castle Rocks 72.31 19** *e*P **P** **10 26 40.7 +0.8**
**IL1 Eielson Array 72.34 16** *e*P **P** **10 26 38.9 -1.1**
**ILAR Eielson Array 72.34 16** P **P** **10 26 39.2 -0.8**
comp=Z,3.1nm,0.8s,baz=325,slow=5.1,SNR=34
**ILAR Eielson Array 72.34 16** P **P** **10 26 39.3 -0.8**
ILAR pmax pmax
comp=Z,3.0nm,0.9s
**DBIC Dimbokro 74.26 266** P **P** **10 26 51.4 -0.7**
comp=Z,3.3nm,0.9s,baz=37,slow=16,SNR=3.4
**DBIC Dimbokro 74.26 266** P **P** **10 26 51.4 -0.7**
DBIC pmax pmax
comp=Z,3.0nm,1.0s
**DAWY Dawson 74.42 13** *e*P **P** **10 26 52.5 +0.2**
**HARP HAARP 74.79 16** *e*P **P** **10 26 54.7 +0.2**
comp=Z,127nm,1.6s
**JAY Jayapura 76.59 105** LR LR 11 01 35.6
comp=Z,33nm,21.3s,slow=36
**YKA Yellowknife Ar 78.57 2** P **P** **10 27 15.6 -0.2**
comp=Z,8.5nm,0.7s,baz=350,slow=5.7,SNR=18
**YKA Yellowknife Ar 78.57 2** P **P** **10 27 15.6 -0.2**
YKA pmax pmax
comp=Z,9.0nm,0.7s
**SCHQ Schefferville 79.37 336** P **P** **10 27 20.1 -0.3**
comp=Z,11nm,0.7s,baz=39,slow=5.9,SNR=8.8
**BOSA Boshof 79.44 219** P **P** **10 27 20.6 -0.5**
comp=Z,7.1nm,0.9s,baz=19,slow=5.5,SNR=7.9
**BOSA Boshof 79.44 219** P **P** **10 27 20.6 -0.5**
BOSA pmax pmax
comp=Z,7.0nm,0.9s
**DLBC Dease Lake 81.25 11** P **P** **10 27 29.9 -0.6**
comp=Z,3.9nm,0.8s,baz=341,slow=8.1,SNR=4.7
**WRA Warramunga Arr 83.94 122** P **P** **10 27 43.3 -1.6**
comp=Z,3.5nm,0.8s,baz=324,slow=4.9,SNR=31
**WRA Warramunga Arr 83.94 122** *i*P **P** **10 27 43.2 -1.7**
WRA pmax pmax
comp=Z,4.0nm,0.7s
**WRAB Tennant Creek 83.94 122** *ce*P **P** **10 27 44.6 -0.3**
WRAB pmax pmax
comp=Z,35nm,1.7s
**FFC Flin Flon 86.19 355** *e*P **P** **10 27 56.2 +0.4**
**FFC Flin Flon 86.19 355** *e*P **P** **10 27 56.2 +0.4**
**ASAR Alice Springs 86.30 125** P **P** **10 27 55.4 -1.3**
comp=Z,2.3nm,0.8s,baz=313,slow=5.0,SNR=28
**ASAR Alice Springs 86.30 125** P **P** **10 27 55.4 -1.3**
ASAR pmax pmax
comp=Z,2.0nm,0.8s
**AS01 Alice Springs 86.33 125** *e*P **P** **10 27 54.5 -2.4**
**EDM Edmonton 87.89 2** *e*P **P** **10 28 04.3 +0.2**
**EDM Edmonton 87.89 2** *e*P **P** **10 28 04.3 +0.2**
**ULM Lac du Bonnet 90.08 351** P **P** **10 28 13.8 -0.6**
comp=Z,7.7nm,0.8s,baz=15,slow=4.5,SNR=8.1
**ULM Lac du Bonnet 90.08 351** P **P** **10 28 13.8 -0.6**
ULM pmax pmax
comp=Z,8.0nm,0.8s
**CTA Charters Tower 92.22 114** P **P** **10 28 24.1 -0.6**
comp=Z,6.1nm,0.9s,baz=303,slow=13,SNR=4.0
**CTA Charters Tower 92.22 114** P **P** **10 28 24.1 -0.6**
CTA pmax pmax
comp=Z,6.0nm,0.9s
**NEW Newport 92.66 5** *e*P **P** **10 28 27.2 +0.7**
**NEW Newport 92.66 5** *e*P **P** **10 28 27.2 +0.7**
**C09A Chrisman Ranch 93.04 6** *e*P **P** **10 28 29.1 +0.9**
**LON Longmire 93.74 8** *e*P **P** **10 28 32.5 +1.0**
**LON Longmire 93.74 8** *e*P **P** **10 28 32.5 +1.0**
**SLMT Seeley Lake 93.86 3** *e*P **P** **10 28 32.6 +0.4**
**CHMT Chamberlain Mo 94.20 2** *e*P **P** **10 28 34.0 +0.2**
**HRY Holter Researc 94.44 1** *e*P **P** **10 28 35.6 +0.8**
**BOZ Bozeman (W) 95.50 1** *e*P **P** **10 28 40.8 +1.1**
**BOZ Bozeman (W) 95.50 1** *e*P **P** **10 28 40.8 +1.1**
**JFWS Jewell Farm 96.36 346** *e*P **P** **10 28 43.7 +0.2**
**JFWS Jewell Farm 96.36 346** *e*P **P** **10 28 43.7 +0.2**
**ECSD EROS Data Cent 96.58 350** *e*P **P** **10 28 44.8 +0.3**
**HWUT Hardware Ranch 99.54 1** *e*P **Pdif** **10 28 60.0 +1.9**
**VNDA Vanda 128.27 164** PKP **PKPdf** **10 34 18.1 -1.7**
comp=Z,0.5nm,0.8s,baz=273,slow=4.2,SNR=3.9
**VNDA Vanda 128.27 164** PKIKP **PKPdf** **10 34 18.1 -1.7**
VNDA pmax pmax
comp=Z,1.0nm,0.8s
**FAKI Fak Fak 5.85 103** P **Pn** **10 26 51.1 -1.3**
baz=5.8,SNR=8.4
**FAKI Fak Fak 5.85 103** P **Pn** **10 26 51.1 -1.3**
**FAKI Fak Fak 5.85 103** *e*Pn **Pn** **10 26 51.0 -1.3**
40nm,0.8s
FAKI *e*Sn **Sn** **10 27 52.9 -5.6**
**PCI Palu 6.74 276** P **Pn** **10 27 06.2 +1.5**
173nm,0.8s,2µm0.6nm
**TTSI Tana Toraja 6.88 258** P **Pn** **10 27 09.1 +2.6**
55nm,0.9s,981nm0.2nm
**MPSI Mapaga 6.92 286** P **Pn** **10 27 08.0 +1.0**
34nm,1.1s,807nm0.2nm
**SPSI Sidrap Palu 7.17 251** P **Pn** **10 27 12.2 +1.6**
114nm,0.4s,2µm0.6nm
**BKSI Bulukumba 7.41 240** P Pn 10 27 17.6 +3.7
39nm,0.6s,414nm0.1nm
**BSSI Bau Bau, Buton 7.55 233** P **Pn** **10 27 18.1 +2.3**
**KAPI Kappang 7.59 243** P **Pn** **10 27 19.0 +2.7**
2.9nm,0.3s,baz=76,slow=7.4,SNR=6.2
KAPI S **Sn** **10 28 45.3 +3.7**
1.5nm,0.3s,baz=55,slow=23,SNR=1.2
KAPI LR LR 10 30 32.1
comp=Z,144nm,18.5s,baz=66,slow=40
**MTN Manton Dam 12.08 158** P **Pn** **10 28 18.3 +0.5**
baz=12,SNR=7.5
**KDU Kakadu 12.50 152** P **Pn** **10 28 23.8 +0.2**
baz=12,SNR=4.5
**KNRA Kununurra 14.18 171** P Pn 10 28 50.2 +3.7
baz=14,SNR=5.3
**FITZ Fitzroy Crossi 16.44 183** P **P** **10 29 18.1 -0.7**
0.3nm,0.3s,baz=16,slow=6.1,SNR=7.9
FITZ LR LR 10 35 52.3
comp=Z,47nm,18.2s,baz=5.5,slow=38
**FITZ Fitzroy Crossi 16.44 183** P **P** **10 29 18.7 -0.2**
baz=17,SNR=4.8
**KSM Kuching 16.52 280** P **P** **10 29 21.4 +1.7**
baz=17,SNR=3.9
**KSM Kuching 16.52 280** *e*P **P** **10 29 21.1 +1.4**
13nm,0.9s
**LEM Lembang 19.58 254** LR LR 10 39 11.1
comp=Z,86nm,18.3s,baz=57,slow=42
**WRAB Tennant Creek 19.77 158** *e*P **P** **10 29 53.5 -2.0**
15nm,1.1s
**WRA Warramunga Arr 19.78 158** P **P** **10 29 53.7 -1.9**
1.0nm,0.3s,baz=339,slow=12,SNR=50
**COEN Coen 20.53 128** P **P** **10 30 03.1 -0.7**
baz=20,SNR=6.8
**COEN Coen 20.53 128** *e*P **P** **10 30 02.6 -1.2**
3.9nm,0.5s
**QIS Mount Isa 22.77 147** P **P** **10 30 26.7 -1.1**
baz=23,SNR=6.7
**ASAR Alice Springs 23.09 163** P **P** **10 30 29.1 -1.9**
11nm,0.8s,baz=341,slow=10,SNR=74
**WRKA Warakurna 23.38 176** P **P** **10 30 32.8 -1.2**
baz=24,SNR=15
**MEEK Meekatharra 26.06 196** P **P** **10 30 59.4 +0.8**
baz=26,SNR=8.1
**CTA Charters Tower 26.64 135** P **P** **10 31 05.0 +1.1**
3.3nm,0.6s,baz=326,slow=10,SNR=3.9
**KSAR Wonju Array Be 38.84 2** P **P** **10 32 50.5 +0.3**
**KSRS Korea Array 38.86 2** P **P** **10 32 50.5 +0.2**
2.0nm,0.7s,baz=179,slow=10.0,SNR=7.6
**MJAR Matsushiro Arr 39.45 15** P **P** **10 32 53.0 -2.3**
1.0nm,0.5s,baz=188,slow=9.5,SNR=7.4
**USRK Ussuriysk Ar. 45.84 5** P **P** **10 33 46.6 -0.4**
6.6nm,0.7s,baz=185,slow=7.2,SNR=12
**SONM Songino Array 52.26 343** P **P** **10 34 36.7 +0.3**
2.4nm,0.8s,baz=150,slow=7.7,SNR=12
**MKAR Makanchi Array 61.84 327** P **P** **10 35 44.5 +0.4**
3.5nm,0.7s,baz=129,slow=8.0,SNR=24
**AAK Ala-Archa 64.21 320** P **P** **10 35 59.9 -0.2**
3.2nm,1.0s
**ZALV Zalesovo Beam 65.24 334** P **P** **10 36 05.3 -1.0**
0.5nm,0.3s,baz=130,slow=6.0,SNR=5.6
**VNDA Vanda 78.22 173** P **P** **10 37 23.9 0.0**
1.3nm,0.9s,baz=314,slow=8.0,SNR=5.5
**ILAR Eielson Array 89.95 25** P **P** **10 38 21.2 -2.6**
0.3nm,0.5s,baz=252,slow=5.2,SNR=7.2
**CPUP Villa Florida 152.00 173** PKPbc **PKPbc** **10 45 20.3 -0.5**
2.1nm,0.8s,baz=75,slow=7.8,SNR=3.5

*MOS **09** 10:16:35.8±1.9, 50.14N×159.04E, h88km, mb4.4/1, Error ellipse: s-maj=28.9km s-min=6.4km az=92.5*
**KRSC 09 10:16:35.8±1.9, 50.14N×159.04E, h88km±38km, ML4.1, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAU** | **Pauzhetka** | **1.94** | **314** | *e*P | Pn | 10 17 08.8 | +1.6 |
| PAU | | | | *e*S | Sn | 10 17 32.2 | +1.2 |
| **PAU** | **Pauzhetka** | **1.94** | **314** | PN | Pn | 10 17 08.8 | +1.6 |
| PAU | | | | S | Sn | 10 17 32.2 | +1.2 |
| **SKR** | **Severo-Kuril's** | **1.95** | **287** | *e*Pn | Pn | 10 17 07.4 | +0.2 |
| SKR | | | | *e*S | Sn | 10 17 30.1 | -1.1 |
| **SKR** | **Severo-Kuril's** | **1.95** | **287** | *e*PN | Pn | 10 17 04.0 | -3.2 |
| SKR | | | | *i* S | Sn | 10 17 26.7 | -4.5 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,80nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,950nm,0.2s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,730nm,0.5s | | | | | | |
| **RUS** | **Russkaya** | **2.32** | **352** | *e*P | Pn | 10 17 14.0 | +1.8 |
| RUS | | | | *e*S | Sn | 10 17 41.6 | +1.6 |
| **RUS** | **Russkaya** | **2.32** | **352** | PN | Pn | 10 17 14.0 | +1.8 |
| RUS | | | | S | Sn | 10 17 41.6 | +1.6 |
| **ASAK** | **Asacha** | **2.36** | **343** | *e*P | Pn | 10 17 15.1 | +2.3 |
| ASAK | | | | *e*S | Sn | 10 17 44.2 | +3.0 |
| **MTVR** | **Mutnovka** | **2.41** | **347** | *e*P | Pn | 10 17 15.7 | +2.1 |
| MTVR | | | | *e*S | Sn | 10 17 44.8 | +2.3 |
| **GRL** | **Gorelyy** | **2.49** | **346** | *e*P | Pn | 10 17 17.4 | +2.8 |
| **GRL** | **Gorelyy** | **2.49** | **346** | PN | Pn | 10 17 17.4 | +2.8 |
| **PET** | **Petropavlovsk** | **2.90** | **355** | *e*P | Pn | 10 17 22.4 | +2.5 |
| PET | | | | *e*S | Sn | 10 17 56.8 | +3.0 |
| **PET** | **Petropavlovsk** | **2.90** | **355** | *e*PN | Pn | 10 17 22.3 | +2.4 |
| PET | | | | *e*S | Sn | 10 17 55.9 | +2.0 |
| PET | | | | smax | smax | | |
| | comp=N,125nm,0.4s | | | | | | |
| **SPN** | **Mys Shipunski** | **3.03** | **11** | *e*P | Pn | 10 17 24.1 | +2.5 |
| SPN | | | | *e*S | Sn | 10 17 58.6 | +1.7 |
| **SPN** | **Mys Shipunski** | **3.03** | **11** | PN | Pn | 10 17 24.1 | +2.5 |
| SPN | | | | S | Sn | 10 17 58.6 | +1.7 |
| **APC** | **Apacha** | **3.03** | **338** | *e*P | Pn | 10 17 24.5 | +2.9 |
| APC | | | | *e*S | Sn | 10 18 00.3 | +3.4 |
| **APC** | **Apacha** | **3.03** | **338** | PN | Pn | 10 17 24.5 | +2.9 |
| APC | | | | S | Sn | 10 18 00.3 | +3.4 |
| **NLC** | **Nalytchevo** | **3.04** | **3** | *e*P | Pn | 10 17 24.0 | +2.2 |
| NLC | | | | *e*S | Sn | 10 17 58.5 | +1.2 |
| **NLC** | **Nalytchevo** | **3.04** | **3** | PN | Pn | 10 17 24.0 | +2.2 |
| NLC | | | | S | Sn | 10 17 58.5 | +1.2 |
| **UGLR** | **Uglovaya** | **3.08** | **358** | P | Pn | 10 17 25.6 | +3.1 |
| **SMAR** | **Somma** | **3.13** | **357** | *e*P | Pn | 10 17 26.7 | +3.3 |
| SMAR | | | | *e*S | Sn | 10 18 02.2 | +2.2 |
| **SMAR** | **Somma** | **3.13** | **357** | PN | Pn | 10 17 26.7 | +3.3 |
| SMAR | | | | S | Sn | 10 18 02.2 | +2.2 |
| **AVH** | **Avacha** | **3.14** | **357** | *e*P | Pn | 10 17 26.0 | +2.8 |
| AVH | | | | *e*S | Sn | 10 18 02.6 | +2.8 |
| **AVH** | **Avacha** | **3.14** | **357** | PN | Pn | 10 17 26.0 | +2.8 |
| AVH | | | | S | Sn | 10 18 02.6 | +2.8 |
| **SDLR** | **Sedlovina** | **3.15** | **358** | *e*P | Pn | 10 17 25.3 | +1.9 |
| SDLR | | | | *e*S | Sn | 10 18 01.1 | +1.0 |
| **SDLR** | **Sedlovina** | **3.15** | **358** | PN | Pn | 10 17 25.3 | +1.9 |
| SDLR | | | | S | Sn | 10 18 01.1 | +1.0 |
| **KOK** | **Koryaka** | **3.17** | **356** | *e*P | Pn | 10 17 26.6 | +2.9 |
| KOK | | | | *e*S | Sn | 10 18 04.6 | +4.0 |
| **KOK** | **Koryaka** | **3.17** | **356** | PN | Pn | 10 17 26.6 | +2.9 |
| KOK | | | | S | Sn | 10 18 04.6 | +4.0 |
| **KRX** | **Arik** | **3.24** | **356** | *e*P | Pn | 10 17 27.2 | +2.6 |
| KRX | | | | *e*S | Sn | 10 18 03.8 | +1.5 |
| **GNL** | **Ganaly** | **3.63** | **350** | *e*P | Pn | 10 17 33.2 | +3.3 |
| GNL | | | | *e*S | Sn | 10 18 14.3 | +2.6 |
| **GNL** | **Ganaly** | **3.63** | **350** | PN | Pn | 10 17 33.2 | +3.3 |
| GNL | | | | S | Sn | 10 18 14.3 | +2.6 |
| **KII** | **Karymskiy** | **3.91** | **4** | *e*P | Pn | 10 17 37.5 | +3.8 |
| KII | | | | *e*S | Sn | 10 18 21.0 | +2.4 |
| **KII** | **Karymskiy** | **3.91** | **4** | PN | Pn | 10 17 37.5 | +3.8 |
| KII | | | | S | Sn | 10 18 21.0 | +2.4 |
| **MKZ** | **Mys Kozlova** | **4.72** | **19** | *e*P | Pn | 10 17 46.2 | +1.7 |
| MKZ | | | | *e*S | Sn | 10 18 37.4 | -0.6 |
| **MKZ** | **Mys Kozlova** | **4.72** | **19** | PN | Pn | 10 17 46.2 | +1.7 |
| MKZ | | | | S | Sn | 10 18 37.4 | -0.6 |
| **KZV** | **Kizimen** | **5.04** | **8** | *e*P | Pn | 10 17 52.7 | +3.6 |
| KZV | | | | *e*S | Sn | 10 18 49.2 | +3.0 |
| **KBTR** | **Krutoberegovo** | **6.49** | **19** | *e*P | Pn | 10 18 11.2 | +2.6 |
| KBTR | | | | *e*S | Sn | 10 19 22.3 | +1.2 |
| **KBTR** | **Krutoberegovo** | **6.49** | **19** | PN | Pn | 10 18 11.2 | +2.6 |
| KBTR | | | | S | Sn | 10 19 22.3 | +1.2 |

*ISCJB **09** 10:25:26.2±0.3, 1.54S±0.03×126.54E±0.02, h29km, mb4.2/11, Error ellipse: s-maj=4.8km s-min=3.2km az=9.0*
*NEIC **09** 10:25:27.8±0.5, 1.55S×126.72E, h35km, mb4.1/4, Error ellipse: s-maj=12.6km s-min=9.3km az=48.0*
*DJA **09** 10:25:27.4±0.6, 2.2S×12.7E±, h14km±5km, M4.6/20, mb4.9/7, mB5.1/6, MLv4.6/20, Mw(mB)4.4/6*
*AUST **09** 10:25:28.4±0.0, 1.57S×126.63E, h45km, Error ellipse: s-maj=1.4km s-min=0.9km az=18.0*
*IDC **09** 10:25:30.3±2.0, 1.60S×126.61E, h59km±21km, mb3.9/10, mb1 4.1/14, mb1mx3.9/38, mbtmp4.2/14, ML4.1/4, MS3.2/3, Ms1 3.2/3, ms1mx2.7/33, Error ellipse: s-maj=14.6km s-min=13.2km az=120.0*
**ISC 09 10:25:27.5±0.5, 1.58S±0.04×126.55E±0.04, h29km, n53, σ1§67/60, mb4.1/11, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SANI** | **Sanani** | **0.73** | **230** | P | **Pb** | **10 25 41.0** | **-0.8** |
| SANI | | | | S | **Sb** | **10 25 49.9** | **-1.5** |
| **LBMI** | **Labuha** | **1.33** | **46** | P | **Pn** | **10 25 51.0** | **+0.8** |
| LBMI | | | | S | **Sb** | **10 26 09.7** | **+1.0** |
| **NLAI** | **Namlea** | **1.74** | **162** | P | **Pn** | **10 25 55.1** | **-0.7** |
| **AAI** | **Ambon** | **2.66** | **142** | P | **Pn** | **10 26 09.3** | **+0.8** |
| AAI | | | | S | **Sn** | **10 26 42.2** | **+2.4** |
| **MSAI** | **Masohi** | **2.96** | **126** | P | **Pn** | **10 26 14.0** | **+1.5** |
| MSAI | | | | S | **Sn** | **10 26 49.5** | **+2.4** |
| **KMSI** | **Cibinong** | **3.34** | **310** | P | **Pn** | **10 26 19.0** | **+1.1** |
| **LUWI** | **Luwuk** | **3.81** | **278** | P | **Pn** | **10 26 23.8** | **-0.5** |
| | baz=3.9,SNR=25 | | | | | | |
| **LUWI** | **Luwuk** | **3.81** | **278** | P | **Pn** | **10 26 24.5** | **+0.1** |
| **LUWI** | **Luwuk** | **3.81** | **278** | *e*Pn | **Pn** | **10 26 23.6** | **-0.7** |
| LUWI | | | | *e*Sn | **Sn** | **10 27 09.4** | **+1.1** |
| **BNDI** | **Bandanaira** | **4.45** | **131** | P | **Pn** | **10 26 33.7** | **+0.6** |
| BNDI | | | | S | **Sn** | **10 27 25.4** | **+1.5** |
| **SWI** | **Sorong** | **4.76** | **81** | P | **Pn** | **10 26 39.1** | **+1.7** |
| | baz=4.7,SNR=9.0 | | | | | | |
| **SWI** | **Sorong** | **4.76** | **81** | P | **Pn** | **10 26 38.8** | **+1.4** |
| SWI | | | | S | **Sn** | **10 27 34.8** | **+3.1** |
| **SIJI** | **Sorong** | **4.77** | **82** | P | **Pn** | **10 26 38.8** | **+1.3** |
| | 14nm,0.3s,baz=66,slow=24,SNR=42 | | | | | | |
| SIJI | | | | S | **Sn** | **10 27 34.0** | **+2.1** |
| | 4.7nm,0.3s,baz=131,slow=23,SNR=1.3 | | | | | | |
| **APSI** | **Ampana** | **4.94** | **278** | P | **Pn** | **10 26 40.4** | **+0.5** |
| **MRSI** | **Marisa** | **5.04** | **294** | P | **Pn** | **10 26 41.4** | **+0.2** |

*BUL **09** 10:34:33.0±6.9, 26.49S×32.04E, h0km±999km, MD4.0*
*PRE **09** 10:35:04.1±0.8, 26.28S×29.00E, h0km, ML2.3, Explosion*
**ISC 09 10:35:03.8±1.0, 26.35S±0.09×28.98E±0.04, h0km, n11, σ1§65/16, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNON** | **Benoni** | **0.62** | **287** | *e*P | **Pg** | **10 35 16.2** | **+0.5** |
| BNON | | | | *e*S | **Sg** | **10 35 24.8** | **+1.0** |
| BNON | | | | AML | AML | 10 35 32.2 | |
| | comp=Z,85nm,0.5s | | | | | | |
| **OBSV** | **Observatory** | **0.83** | **281** | *e*P | **Pg** | **10 35 19.7** | **+0.1** |
| OBSV | | | | *e*S | **Sg** | **10 35 32.3** | **+1.9** |
| OBSV | | | | AML | AML | 10 35 33.5 | |
| | comp=Z,24nm,0.4s | | | | | | |
| **WDLM** | **Western Deep L** | **1.40** | **266** | *e*P | **Pn** | **10 35 31.3** | **+0.5** |
| WDLM | | | | *e*S | **Sn** | **10 35 51.1** | **+1.0** |
| WDLM | | | | AML | AML | 10 35 54.7 | |
| | comp=Z,63nm,0.3s | | | | | | |
| **PRYS** | **Parys** | **1.56** | **248** | *e*P | **Pn** | **10 35 33.7** | **+0.8** |
| PRYS | | | | *e*S | **Sn** | **10 35 52.8** | **-1.1** |
| PRYS | | | | AML | AML | 10 35 59.9 | |
| | comp=Z,29nm,0.4s | | | | | | |
| **POGA** | **Pongola** | **2.56** | **114** | *e*P | **Pb** | **10 35 49.2** | **-1.6** |
| POGA | | | | *e*S | **Sn** | **10 36 20.9** | **+2.3** |
| POGA | | | | AML | AML | 10 36 32.5 | |
| | comp=Z,11nm,0.4s | | | | | | |
| **POGA** | **Pongola** | **2.56** | **114** | *i*P | **Pg** | **10 35 52.9** | **-0.2** |
| POGA | | | | *i*S | Sg | 10 36 40.2 | +14 |
| **LBTB** | **Lobatse** | **3.33** | **293** | *i*P | **Pb** | **10 36 02.5** | **-1.3** |
| LBTB | | | | *i*S | **Sb** | **10 36 41.5** | **-3.4** |
| **SWZ** | **Schweizer** | **3.36** | **255** | *e*P | **Pn** | **10 35 59.9** | **+2.1** |
| SWZ | | | | *e*S | **Sn** | **10 36 40.0** | **+1.4** |
| SWZ | | | | AML | AML | 10 36 53.3 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **4.00** | **235** | *i*P | Pn | 10 36 10.4 | +3.9 |
| BOSA | | | | *i*S | **Sg** | **10 37 12.0** | **-0.5** |
| **MATP** | **Matopo** | **6.86** | **331** | *i*P | Pn | 10 36 09.1 | -6.0 |
| MATP | | | | *i*S | Sn | 10 37 25.7 | -8.3 |
| **BLWY** | **Bulawayo** | **7.07** | **333** | *i*P | Pn | 10 36 13.2 | -4.8 |
| BLWY | | | | *i*S | Sn | 10 37 32.6 | -6.6 |

*IDC **09** 10:35:18.7±1.2, 18.10S×167.76E, h0km, mb4.1/7, mb1 4.4/8, mb1mx4.1/23, mbtmp4.1/8, ML3.8/1, MS3.7/7, Ms1 3.7/7, ms1mx3.4/21, Error ellipse: s-maj=43.0km s-min=23.5km az=144.0*
*ISCJB **09** 10:35:19.8±0.6, 18.09S±0.07×167.75E±0.08, h23km, mb4.4/11, MS3.8/5, Error ellipse: s-maj=11.7km s-min=10.1km az=36.4*
*NEIC **09** 10:35:23.4±0.5, 18.08S×167.74E, h35km, mb4.5/5, Error ellipse: s-maj=12.8km s-min=9.6km az=168.0*
**ISC 09 10:35:21.9±0.7, 18.18S±0.08×167.75E±0.09, h23km, n24, σ1§63/21, mb4.3/11, MS3.8/5, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **4.07** | **197** | *e*Pn | **Pn** | **10 36 24.3** | **+1.4** |
| | 28nm,0.3s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **10 37 04.9** | **-4.9** |
| | 42nm,0.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **4.07** | **197** | Pn | **Pn** | **10 36 24.8** | **+1.9** |
| | 5.3nm,0.3s,baz=345,slow=1.1,SNR=40 | | | | | | |
| DZM | | | | Sn | **Sn** | **10 37 10.2** | **+0.4** |
| | 11nm,0.3s,baz=180,slow=23,SNR=4.4 | | | | | | |
| DZM | | | | LR | LR | 10 37 27.4 | |
| | comp=Z,210nm,21.2s,baz=330,slow=31 | | | | | | |
| **MSVF** | **Nonsavu** | **9.81** | **89** | Pn | **Pn** | **10 37 41.2** | **-0.6** |
| | 87nm,1.3s | | | | | | |
| **HNR** | **Honiara** | **11.53** | **318** | LR | LR | 10 41 45.6 | |
| | comp=Z,291nm,18.9s,baz=182,slow=34 | | | | | | |
| **HNR** | **Honiara** | **11.53** | **318** | *e*Pn | **Pn** | **10 38 04.6** | **-0.6** |
| **EIDS** | **Eidsvold** | **17.05** | **242** | *e*P | **Pn** | **10 39 18.6** | **-0.3** |
| | 0.8nm,0.5s | | | | | | |
| **CTA** | **Charters Tower** | **20.40** | **261** | P | Pn | 10 39 58.5 | -1.1 |
| | 7.6nm,0.9s,baz=92,slow=12,SNR=5.8 | | | | | | |
| **CTAO** | **Charters Tower** | **20.40** | **261** | *e*P | **P** | **10 39 57.5** | **0.0** |
| | 28nm,1.1s | | | | | | |
| **COEN** | **Coen** | **23.98** | **276** | *e*P | **P** | **10 40 34.8** | **-0.1** |
| | 16nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **31.59** | **261** | *e*P | **P** | **10 41 42.0** | **-1.2** |
| | 4.9nm,1.1s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **31.60** | **261** | P | **P** | **10 41 42.1** | **-1.1** |
| | 2.2nm,0.9s,baz=80,slow=6.1,SNR=9.3 | | | | | | |
| WRA | | | | LR | LR | 10 53 38.0 | |
| | comp=Z,261nm,19.6s,baz=100,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **32.03** | **254** | P | **P** | **10 41 46.5** | **-0.6** |
| | 2.6nm,0.6s,baz=82,slow=8.1,SNR=37 | | | | | | |
| ASAR | | | | LR | LR | 10 54 10.5 | |
| | comp=Z,395nm,19.4s,baz=99,slow=35 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **39.95** | **263** | eP | **P** | **10 42 54.9** | **0.0** |
| | 11nm,0.8s | | | | | | |
| **PPT2** | **Papeete2** | **40.55** | **96** | eLR | LR | 10 54 46.9 | |
| | 194nm,26.0s | | | | | | |
| **JNU** | **Nakatsue** | **61.99** | **325** | LR | LR | 11 07 44.9 | |
| | comp=Z,41nm,20.3s,slow=31 | | | | | | |
| **KSRS** | **Korea Array** | **66.84** | **326** | LR | LR | 11 15 00.1 | |
| | comp=Z,43nm,18.6s,baz=265,slow=36 | | | | | | |
| **QSPA** | **South Pole Qui** | **71.87** | **180** | P | **P** | **10 46 44.0** | **+1.0** |
| | 8.9nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.78** | **295** | P | **P** | **10 47 13.6** | **+1.4** |
| | 1.5nm,0.4s,baz=122,slow=4.6,SNR=10 | | | | | | |
| **MAW** | **Mawson** | **78.88** | **202** | LR | LR | 11 16 32.7 | |
| | comp=Z,49nm,21.6s,baz=248,slow=31 | | | | | | |
| **YAK** | **Yakutsk** | **85.44** | **343** | eP | **P** | **10 47 55.4** | **-1.9** |
| | 11nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **85.53** | **324** | P | **P** | **10 48 00.2** | **+2.0** |
| | 1.5nm,0.9s,baz=137,slow=4.8,SNR=7.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.17** | **49** | P | **P** | **10 48 16.4** | **+0.2** |
| | 0.9nm,0.8s,baz=220,slow=7.3,SNR=6.5 | | | | | | |
| **ILAR** | **Eielson Array** | **89.65** | **18** | P | **P** | **10 48 15.9** | **-1.5** |
| | 0.6nm,0.8s,baz=236,slow=4.8,SNR=8.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.67** | **252** | PKP | **PKPdf** | **10 55 26.8** | **+1.0** |
| | 0.8nm,0.9s,baz=188,slow=3.3,SNR=3.7 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **10 56 24.9** | **+0.2** |
| | 0.9nm,0.9s,baz=92,slow=2.4,SNR=4.4 | | | | | | |

*ISCJB **09** 10:40:45.8±0.4, 38°.28N±0°.03×21°.53E±0°.03, h28km±3km, Error ellipse: s-maj=5.6km s-min=4.2km az=172.8*
*CSEM **09** 10:40:45.4±0.1, 38°.28N×21°.53E, h26km±1km, ML2.0, Error ellipse: s-maj=3.4km s-min=2.3km az=169.0*
*ATH **09** 10:40:45.3, 38°.28N×21°.54E, h29km±2km, MD2.7/11*
*THE **09** 10:40:46.1, 38°.31N×21°.53E, h21km±2km, ML2.0/4, Error ellipse: s-maj=2.0km s-min=0.5km az=202.0*
**ISC 09 10:40:45.6**±0.9**, 38°.28N**±0°.03×**21°.53E**±0°.02**, h26**km±6km**,**
**n39, σ0.51s/**74**, Greece**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AXS** | **Araxos** | **0.14** | **237** | P | **Pb** | **10 40 50.4** | **-0.4** |
| AXS | | | | S | **Sb** | **10 40 54.1** | **-0.2** |
| **AXS** | **Araxos** | **0.14** | **237** | P | **Pb** | **10 40 50.4** | **-0.4** |
| AXS | | | | S | **Sb** | **10 40 54.1** | **-0.2** |
| **RLS** | **Riolos of Patr** | **0.22** | **193** | ePB | **Pb** | **10 40 51.9** | **+0.2** |
| RLS | | | | eSB | **Sb** | **10 40 56.8** | **+1.0** |
| **RLS** | **Riolos of Patr** | **0.22** | **193** | ePb | **Pb** | **10 40 51.9** | **+0.2** |
| RLS | | | | eSb | **Sb** | **10 40 56.8** | **+1.0** |
| **EFP** | **Efpalio** | **0.33** | **63** | ePB | **Pb** | **10 40 52.9** | **-0.3** |
| EFP | | | | eSB | **Sb** | **10 40 58.2** | **-0.2** |
| **EFP** | **Efpalio** | **0.33** | **63** | P | **Pb** | **10 40 53.0** | **-0.3** |
| EFP | | | | S | **Sb** | **10 40 58.7** | **+0.3** |
| **EFP** | **Efpalio** | **0.33** | **63** | ePb | **Pb** | **10 40 52.9** | **-0.3** |
| EFP | | | | eSb | **Sb** | **10 40 58.2** | **-0.2** |
| EFP | | | | S | **Sb** | **10 40 58.7** | **+0.3** |
| **DRO** | **Drossia** | **0.35** | **156** | P | **Pb** | **10 40 53.8** | **+0.3** |
| DRO | | | | S | **Sn** | **10 41 00.6** | **-0.6** |
| **DRO** | **Drossia** | **0.35** | **156** | P | **Pb** | **10 40 53.8** | **+0.3** |
| DRO | | | | S | **Sn** | **10 41 00.6** | **-0.6** |
| **LAKA** | **Lakka** | **0.35** | **96** | ePB | **Pb** | **10 40 53.3** | **-0.3** |
| LAKA | | | | eSB | **Sb** | **10 40 59.2** | **+0.2** |
| **LAKA** | **Lakka** | **0.35** | **96** | P | **Pb** | **10 40 53.6** | **0.0** |
| LAKA | | | | S | **Sb** | **10 40 59.6** | **+0.6** |
| **LAKA** | **Lakka** | **0.35** | **96** | ePb | **Pb** | **10 40 53.3** | **-0.3** |
| **LAKA** | **Lakka** | **0.35** | **96** | P | **Pb** | **10 40 53.6** | **0.0** |
| LAKA | | | | eSb | **Sb** | **10 40 59.2** | **+0.2** |
| LAKA | | | | S | **Sn** | **10 40 59.6** | **-1.7** |
| **SERG** | **Sergoula** | **0.43** | **71** | P | **Pb** | **10 40 54.6** | **-0.3** |
| SERG | | | | S | **Sb** | **10 41 01.6** | **+0.5** |
| **SERG** | **Sergoula** | **0.43** | **71** | P | **Pb** | **10 40 54.6** | **-0.3** |
| SERG | | | | S | **Sb** | **10 41 01.6** | **+0.5** |
| **KALE** | **Kalithea** | **0.49** | **76** | ePB | **Pb** | **10 40 55.4** | **-0.4** |
| KALE | | | | eSB | **Sb** | **10 41 02.7** | **0.0** |
| **KALE** | **Kalithea** | **0.49** | **76** | P | **Pb** | **10 40 55.5** | **-0.4** |
| KALE | | | | S | **Sb** | **10 41 03.1** | **+0.4** |
| **KALE** | **Kalithea** | **0.49** | **76** | P | **Pb** | **10 40 55.5** | **-0.4** |
| KALE | | | | eSb | **Sb** | **10 41 02.7** | **0.0** |
| KALE | | | | S | **Sb** | **10 41 03.1** | **+0.4** |
| **KLV** | **Kalavryta, Ach** | **0.54** | **115** | ePN | **Pb** | **10 40 56.6** | **0.0** |
| KLV | | | | eSN | **Sb** | **10 41 04.7** | **+0.6** |
| **KLV** | **Kalavryta, Ach** | **0.54** | **115** | P | **Pb** | **10 40 56.6** | **0.0** |
| KLV | | | | S | **Sb** | **10 41 04.9** | **+0.8** |
| **KLV** | **Kalavryta, Ach** | **0.54** | **115** | P | **Pb** | **10 40 56.6** | **0.0** |
| KLV | | | | eSn | **Sb** | **10 41 04.7** | **+0.6** |
| **KFL** | **Anninata** | **0.61** | **254** | ePN | **Pn** | **10 40 58.3** | **-0.3** |
| **KFL** | **Anninata** | **0.61** | **254** | ePn | **Pn** | **10 40 58.3** | **-0.3** |
| **EVR** | **Evrytania** | **0.68** | **19** | ePN | **Pn** | **10 40 59.3** | **-0.3** |
| EVR | | | | eSN | **Sn** | **10 41 09.2** | **-0.2** |
| **EVR** | **Evrytania** | **0.68** | **19** | ePn | **Pn** | **10 40 59.3** | **-0.3** |
| EVR | | | | eSn | **Sn** | **10 41 09.2** | **-0.2** |
| **GUR** | **Goura** | **0.72** | **118** | ePN | **Pb** | **10 40 59.4** | **-0.3** |
| GUR | | | | eSN | **Sn** | **10 41 10.3** | **-0.2** |
| **GUR** | **Goura** | **0.72** | **118** | P | **Pb** | **10 40 59.9** | **+0.2** |
| **GUR** | **Goura** | **0.72** | **118** | ePn | **Pb** | **10 40 59.4** | **-0.3** |
| **GUR** | **Goura** | **0.72** | **118** | P | **Pb** | **10 40 59.9** | **+0.2** |
| GUR | | | | eSn | **Sn** | **10 41 10.3** | **-0.2** |
| **VLS** | **Valsamata** | **0.75** | **263** | P | **Pb** | **10 40 59.6** | **-0.5** |
| VLS | | | | S | **Sn** | **10 41 11.9** | **+0.9** |
| **VLS** | **Valsamata** | **0.75** | **263** | P | **Pb** | **10 40 59.6** | **-0.5** |
| VLS | | | | S | **Sn** | **10 41 11.9** | **+0.9** |
| **DSF** | **Desfina** | **0.80** | **80** | ePN | **Pb** | **10 41 00.4** | **-0.5** |
| DSF | | | | eSN | **Sn** | **10 41 12.2** | **0.0** |
| **DSF** | **Desfina** | **0.80** | **80** | ePn | **Pb** | **10 41 00.4** | **-0.5** |
| DSF | | | | eSn | **Sn** | **10 41 12.2** | **0.0** |
| **LKD2** | **Lefkada island** | **0.86** | **307** | ePB | **Pb** | **10 41 01.4** | **-0.5** |
| **LKD2** | **Lefkada island** | **0.86** | **307** | ePb | **Pb** | **10 41 01.4** | **-0.5** |
| **MAKR** | **Makrakomi, Fth** | **0.87** | **32** | ePN | **Pb** | **10 41 02.8** | **+0.6** |
| MAKR | | | | eSN | **Sn** | **10 41 14.9** | **+0.7** |
| **MAKR** | **Makrakomi, Fth** | **0.87** | **32** | ePn | **Pb** | **10 41 02.8** | **+0.6** |
| MAKR | | | | eSn | **Sn** | **10 41 14.9** | **+0.7** |
| **AGG** | **Agios Georgios** | **0.97** | **40** | ePN | **Pb** | **10 41 03.9** | **0.0** |
| AGG | | | | eSN | **Sn** | **10 41 17.7** | **+1.1** |
| **AGG** | **Agios Georgios** | **0.97** | **40** | ePn | **Pb** | **10 41 03.9** | **0.0** |
| AGG | | | | eSn | **Sn** | **10 41 17.7** | **+1.1** |

*ISCJB **09** 10:51:25.5±0.4, 43°.08N±0°.02×18°.89E±0°.03, h8km±6km, Error ellipse: s-maj=4.4km s-min=2.5km az=18.8*
*CSEM **09** 10:51:25.9±0.2, 43°.07N×18°.90E, h2km, ML2.5, Error ellipse: s-maj=3.8km s-min=2.2km az=112.0*
*BEO **09** 10:51:26.8±0.3, 43°.03N×18°.92E, h8km±3km, ML2.3/9*
*PDG **09** 10:51:26.4±0.4, 43°.05N×18°.90E, h2km±1km, MD2.6/4, ML2.5/11, Error ellipse: s-maj=0.4km s-min=0.9km az=0.0*
**ISC 09 10:51:26.4**±0.9**, 43°.06N**±0°.02×**18°.90E**±0°.02**, h7**km±8km**,**
**n47, σ0.76s/**81**, 22C-8D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UPM** | **Unac-Piva** | **0.14** | **3** | ⇑iPg | **Pg** | **10 51 29.0** | **-0.5** |
| UPM | | | | eSg | **Sg** | **10 51 31.4** | **-0.3** |
| **UPM** | **Unac-Piva** | **0.14** | **3** | ⇑iPg | **Pg** | **10 51 29.0** | **-0.5** |
| UPM | | | | eSg | **Sg** | **10 51 31.4** | **-0.3** |
| **NKY** | **Niksic** | **0.26** | **164** | ⇑iPg | **Pg** | **10 51 31.4** | **-0.2** |
| NKY | | | | eSg | **Sg** | **10 51 35.6** | **+0.6** |
| **NKY** | **Niksic** | **0.26** | **164** | ⇑iPg | **Pg** | **10 51 31.4** | **-0.2** |
| NKY | | | | eSg | **Sg** | **10 51 35.6** | **+0.6** |
| **NKME** | **Niksic** | **0.30** | **172** | ⇑iPg | **Pg** | **10 51 31.9** | **-0.4** |
| NKME | | | | eSg | **Sg** | **10 51 36.6** | **+0.4** |
| **NKME** | **Niksic** | **0.30** | **172** | ⇑iPg | **Pg** | **10 51 31.9** | **-0.4** |
| NKME | | | | eSg | **Sg** | **10 51 36.6** | **+0.4** |
| **BRY** | **Bratogost** | **0.31** | **239** | ⇓iPg | **Pg** | **10 51 31.9** | **-0.6** |
| BRY | | | | eSg | **Sg** | **10 51 36.9** | **+0.3** |
| **BRY** | **Bratogost** | **0.31** | **239** | ⇓iPg | **Pg** | **10 51 31.9** | **-0.6** |
| BRY | | | | eSg | **Sg** | **10 51 36.9** | **+0.3** |
| **PLE** | **Pljevlja** | **0.45** | **53** | ⇓iPg | **Pg** | **10 51 35.4** | **+0.2** |
| PLE | | | | eSg | **Sg** | **10 51 42.4** | **+1.3** |
| **PLE** | **Pljevlja** | **0.45** | **53** | ⇓iPg | **Pg** | **10 51 35.4** | **+0.2** |
| PLE | | | | eSg | **Sg** | **10 51 42.4** | **+1.3** |
| **TREB** | **Trebinje** | **0.53** | **230** | ePg | **Pg** | **10 51 35.7** | **-0.9** |
| TREB | | | | eSg | **Sg** | **10 51 44.5** | **+0.9** |
| **TREB** | **Trebinje** | **0.53** | **230** | ePg | **Pg** | **10 51 35.7** | **-0.9** |
| TREB | | | | eSg | **Sg** | **10 51 44.5** | **+0.9** |
| **HCY** | **Herceg Novi** | **0.68** | **206** | ⇑iPg | **Pg** | **10 51 39.1** | **-0.5** |
| HCY | | | | eSg | **Sg** | **10 51 49.4** | **+1.0** |
| **HCY** | **Herceg Novi** | **0.68** | **206** | ⇑iPg | **Pg** | **10 51 39.1** | **-0.5** |
| HCY | | | | eSg | **Sg** | **10 51 49.4** | **+1.0** |
| **PDG** | **Podgorica** | **0.68** | **157** | iPg | **Pg** | **10 51 38.0** | **-1.6** |
| PDG | | | | eSg | **Sg** | **10 51 48.8** | **+0.3** |
| **PDG** | **Podgorica** | **0.68** | **157** | ⇑iPg | **Pg** | **10 51 38.2** | **-1.4** |
| PDG | | | | eSg | **Sg** | **10 51 48.7** | **+0.3** |
| **TTG** | **Podgorica** | **0.68** | **157** | ⇑iPg | **Pg** | **10 51 38.2** | **-1.4** |
| TTG | | | | eSg | **Sg** | **10 51 48.7** | **+0.3** |
| **BEY** | **Berane** | **0.76** | **104** | ⇑iPg | **Pg** | **10 51 40.2** | **-0.8** |
| BEY | | | | eSg | **Sb** | **10 51 51.9** | **-0.6** |
| **IVA** | **Berane** | **0.76** | **104** | ⇑iPg | **Pg** | **10 51 40.2** | **-0.8** |
| IVA | | | | eSg | **Sb** | **10 51 51.9** | **-0.6** |
| **BUM** | **Brajici-Budva** | **0.76** | **180** | ⇓iPg | **Pg** | **10 51 40.0** | **-1.1** |
| BUM | | | | eSg | **Sg** | **10 51 51.4** | **+0.5** |
| **BUM** | **Brajici-Budva** | **0.76** | **180** | ⇓iPg | **Pg** | **10 51 40.0** | **-1.1** |
| BUM | | | | eSg | **Sg** | **10 51 51.4** | **+0.5** |
| **SJES** | **Sjenica** | **0.81** | **75** | ePg | **Pg** | **10 51 42.0** | **-0.1** |
| SJES | | | | eSg | **Sg** | **10 51 52.9** | **+0.2** |
| **BBLS** | **Lazići** | **0.89** | **25** | ⇑iPg | **Pg** | **10 51 42.9** | **-0.6** |
| BBLS | | | | eSg | **Sb** | **10 51 55.9** | **-0.4** |
| **BBLS** | **Lazići** | **0.89** | **25** | ⇑iPg | **Pg** | **10 51 42.9** | **-0.6** |
| BBLS | | | | eSg | **Sb** | **10 51 55.9** | **-0.4** |
| **DRME** | **Dracevica, Mon** | **0.90** | **166** | ⇑iPg | **Pg** | **10 51 43.0** | **-0.7** |
| DRME | | | | eSg | **Sb** | **10 51 56.9** | **+0.3** |
| **DRME** | **Dracevica, Mon** | **0.90** | **166** | ⇑iPg | **Pg** | **10 51 43.0** | **-0.7** |
| DRME | | | | eSg | **Sb** | **10 51 56.9** | **+0.3** |
| **PVY** | **Plav** | **0.91** | **120** | ⇑iPg | **Pg** | **10 51 42.9** | **-1.0** |
| PVY | | | | eSg | **Sb** | **10 51 57.5** | **+0.5** |
| **PVY** | **Plav** | **0.91** | **120** | ⇑iPg | **Pg** | **10 51 42.9** | **-1.0** |
| PVY | | | | eSg | **Sb** | **10 51 57.5** | **+0.5** |
| **IVAS** | **Ivanjica** | **1.05** | **60** | iPg | **Pg** | **10 51 45.5** | **-1.1** |
| **IVAS** | **Ivanjica** | **1.05** | **60** | iPg | **Pg** | **10 51 45.5** | **-1.1** |
| **ULC** | **Ulcinj** | **1.13** | **167** | ⇑iPg | **Pg** | **10 51 47.2** | **-0.9** |
| ULC | | | | eSg | **Sn** | **10 52 04.4** | **0.0** |
| **ULC** | **Ulcinj** | **1.13** | **167** | ⇑iPg | **Pg** | **10 51 47.2** | **-0.9** |
| ULC | | | | eSg | **Sn** | **10 52 04.4** | **0.0** |
| **DIVS** | **Divibare** | **1.31** | **37** | ⇑iPg | **Pn** | **10 51 50.1** | **-1.1** |
| DIVS | | | | eSg | **Sb** | **10 52 07.1** | **-1.3** |
| **DIVS** | **Divibare** | **1.31** | **37** | ⇑iPg | **Pn** | **10 51 50.1** | **-1.1** |
| DIVS | | | | eSg | **Sb** | **10 52 07.1** | **-1.3** |
| **TEKS** | **Tekeris** | **1.56** | **17** | ePn | **Pn** | **10 51 54.3** | **-0.3** |
| TEKS | | | | eSg | **Sg** | **10 52 17.5** | **+1.0** |
| **TEKS** | **Tekeris** | **1.56** | **17** | ePn | **Pn** | **10 51 54.3** | **-0.3** |
| TEKS | | | | eSg | **Sg** | **10 52 17.5** | **+1.0** |
| **GRUS** | **Gruza** | **1.56** | **57** | ePg | **Pb** | **10 51 55.7** | **0.0** |
| **GRUS** | **Gruza** | **1.56** | **57** | ePg | **Pb** | **10 51 55.7** | **0.0** |
| **SELS** | **Selova** | **1.63** | **84** | ⇓iPg | **Pn** | **10 51 55.2** | **-0.5** |
| **SELS** | **Selova** | **1.63** | **84** | ⇓iPg | **Pn** | **10 51 55.2** | **-0.5** |
| **BARS** | **Barje** | **2.16** | **96** | ePn | **Pn** | **10 52 03.2** | **+0.4** |
| **BARS** | **Barje** | **2.16** | **96** | ePn | **Pn** | **10 52 03.2** | **+0.4** |
| **FGSL** | **Fruska Gora** | **2.20** | **17** | ePg | **Pb** | **10 52 07.7** | **+1.2** |
| **FRGS** | **Fruska Gora** | **2.20** | **17** | ePg | **Pb** | **10 52 07.7** | **+1.2** |
| **KUBS** | **Kucevo** | **2.42** | **55** | ePn | **Pn** | **10 52 07.1** | **+0.6** |
| **KUBS** | **Kucevo** | **2.42** | **55** | ePn | **Pn** | **10 52 07.1** | **+0.6** |
| **ZAPS** | **Zavoj** | **2.74** | **84** | ePn | **Pn** | **10 52 11.2** | **+0.3** |

*CSEM **09** 10:56:15.1±0.2, 43°.06N×18°.93E, h2km, ML2.6, Error ellipse: s-maj=4.4km s-min=2.5km az=118.0*
*BEO **09** 10:56:15.9±0.3, 43°.03N×18°.95E, h0km, ML2.3/1*
*PDG **09** 10:56:15.5±0.3, 43°.06N×18°.89E, h2km±1km, MD2.7/5, ML2.6/9, Error ellipse: s-maj=0.3km s-min=0.6km az=0.0*
**ISC 09 10:56:15.6**±1.0**, 43°.06N**±0°.02×**18°.92E**±0°.02**, h5**km±9km**,**
**n50, σ0.85s/**89**, 14C-11D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UPM** | **Unac-Piva** | **0.14** | **355** | ⇑iPg | **Pg** | **10 56 18.1** | **-0.5** |
| UPM | | | | eSg | **Sg** | **10 56 20.6** | **0.0** |
| **UPM** | **Unac-Piva** | **0.14** | **355** | ⇑iPg | **Pg** | **10 56 18.1** | **-0.5** |
| UPM | | | | eSg | **Sg** | **10 56 20.6** | **0.0** |
| **NKY** | **Niksic** | **0.25** | **168** | ⇑iPg | **Pg** | **10 56 20.6** | **0.0** |
| NKY | | | | eSg | **Sg** | **10 56 24.8** | **+0.9** |
| **NKY** | **Niksic** | **0.25** | **168** | ⇑iPg | **Pg** | **10 56 20.6** | **0.0** |
| NKY | | | | eSg | **Sg** | **10 56 24.8** | **+0.9** |
| **NKME** | **Niksic** | **0.29** | **176** | ⇓iPg | **Pg** | **10 56 21.0** | **-0.3** |
| NKME | | | | eSg | **Sg** | **10 56 26.0** | **+0.8** |
| **NKME** | **Niksic** | **0.29** | **176** | ⇓iPg | **Pg** | **10 56 21.0** | **-0.3** |
| NKME | | | | eSg | **Sg** | **10 56 26.0** | **+0.8** |
| **BRY** | **Bratogost** | **0.32** | **241** | ⇓iPg | **Pg** | **10 56 21.2** | **-0.7** |
| BRY | | | | eSg | **Sg** | **10 56 26.1** | **-0.1** |
| **BRY** | **Bratogost** | **0.32** | **241** | ⇓iPg | **Pg** | **10 56 21.2** | **-0.7** |
| BRY | | | | eSg | **Sg** | **10 56 26.1** | **-0.1** |
| **PLE** | **Pljevlja** | **0.43** | **51** | ⇓iPg | **Pg** | **10 56 24.6** | **+0.6** |
| PLE | | | | eSg | **Sb** | **10 56 31.6** | **-1.2** |
| **PLE** | **Pljevlja** | **0.43** | **51** | ⇓iPg | **Pg** | **10 56 24.6** | **+0.6** |
| PLE | | | | eSg | **Sb** | **10 56 31.6** | **-1.2** |
| **TREB** | **Trebinje** | **0.54** | **231** | ePg | **Pg** | **10 56 25.2** | **-0.9** |
| TREB | | | | eSg | **Sg** | **10 56 32.3** | **-0.8** |
| **TREB** | **Trebinje** | **0.54** | **231** | ePg | **Pg** | **10 56 25.2** | **-0.9** |
| TREB | | | | eSg | **Sg** | **10 56 32.3** | **-0.8** |
| **PDG** | **Podgorica** | **0.68** | **159** | ⇑iPg | **Pg** | **10 56 27.3** | **-1.3** |
| PDG | | | | eSg | **Sg** | **10 56 36.7** | **-0.6** |
| **PDG** | **Podgorica** | **0.68** | **159** | ⇑iPg | **Pg** | **10 56 27.4** | **-1.2** |
| PDG | | | | eSg | **Sg** | **10 56 36.7** | **-0.6** |
| **TTG** | **Podgorica** | **0.68** | **159** | ⇑iPg | **Pg** | **10 56 27.4** | **-1.2** |
| TTG | | | | eSg | **Sg** | **10 56 38.1** | **+0.8** |
| **HCY** | **Herceg Novi** | **0.69** | **207** | ⇑iPg | **Pg** | **10 56 28.1** | **-0.7** |
| HCY | | | | eSg | **Sg** | **10 56 38.8** | **+1.0** |
| **HCY** | **Herceg Novi** | **0.69** | **207** | ⇑iPg | **Pg** | **10 56 28.1** | **-0.7** |
| HCY | | | | eSg | **Sg** | **10 56 38.8** | **+1.0** |
| **BEY** | **Berane** | **0.74** | **104** | ⇑iPg | **Pg** | **10 56 29.5** | **-0.3** |
| BEY | | | | eSg | **Sb** | **10 56 41.4** | **0.0** |
| **IVA** | **Berane** | **0.74** | **104** | ⇑iPg | **Pg** | **10 56 29.5** | **-0.3** |
| IVA | | | | eSg | **Sb** | **10 56 41.4** | **0.0** |
| **BUM** | **Brajici-Budva** | **0.76** | **182** | ⇓iPg | **Pg** | **10 56 29.6** | **-0.6** |
| BUM | | | | eSg | **Sb** | **10 56 41.2** | **-0.8** |
| **BUM** | **Brajici-Budva** | **0.76** | **182** | ⇓iPg | **Pg** | **10 56 29.6** | **-0.6** |
| BUM | | | | eSg | **Sb** | **10 56 41.2** | **-0.8** |
| **SJES** | **Sjenica** | **0.79** | **75** | iPg | **Pg** | **10 56 31.0** | **+0.1** |
| SJES | | | | eSg | **Sg** | **10 56 40.3** | **-0.9** |
| **BBLS** | **Lazići** | **0.88** | **23** | iPg | **Pg** | **10 56 31.9** | **-0.6** |
| BBLS | | | | eSg | **Sg** | **10 56 44.1** | **+0.2** |
| **BBLS** | **Lazići** | **0.88** | **23** | iPg | **Pg** | **10 56 31.9** | **-0.6** |
| BBLS | | | | eSg | **Sg** | **10 56 44.1** | **+0.2** |
| **PVY** | **Plav** | **0.89** | **121** | ⇑iPg | **Pg** | **10 56 32.0** | **-0.8** |
| PVY | | | | eSg | **Sb** | **10 56 47.0** | **+1.1** |
| **DRME** | **Dracevica, Mon** | **0.89** | **167** | ⇑iPg | **Pg** | **10 56 32.2** | **-0.6** |
| DRME | | | | eSg | **Sb** | **10 56 46.2** | **+0.4** |
| **DRME** | **Dracevica, Mon** | **0.89** | **167** | ⇑iPg | **Pg** | **10 56 32.2** | **-0.6** |
| DRME | | | | eSg | **Sb** | **10 56 46.2** | **+0.4** |
| **IVAS** | **Ivanjica** | **1.03** | **60** | ⇓iPg | **Pg** | **10 56 34.8** | **-0.7** |
| IVAS | | | | eSg | **Sg** | **10 56 48.3** | **-0.6** |
| **IVAS** | **Ivanjica** | **1.03** | **60** | ⇓iPg | **Pg** | **10 56 34.8** | **-0.7** |
| IVAS | | | | eSg | **Sg** | **10 56 48.3** | **-0.6** |
| **ULC** | **Ulcinj** | **1.12** | **168** | ePg | **Pg** | **10 56 36.2** | **-0.9** |
| ULC | | | | eSg | **Sn** | **10 56 54.0** | **+0.2** |
| **ULC** | **Ulcinj** | **1.12** | **168** | ePg | **Pg** | **10 56 36.2** | **-0.9** |
| **DIVS** | **Divibare** | **1.30** | **36** | iPg | **Pg** | **10 56 39.1** | **-1.4** |
| DIVS | | | | eSg | **Sg** | **10 56 56.2** | **-1.1** |
| **DIVS** | **Divibare** | **1.30** | **36** | ⇓iP | **Pg** | **10 56 39.2** | **-1.3** |
| DIVS | | | | S | **Sg** | **10 56 55.8** | **-1.5** |
| **DIVS** | **Divibare** | **1.30** | **36** | iPg | **Pg** | **10 56 39.1** | **-1.4** |
| DIVS | | | | eSg | **Sg** | **10 56 56.2** | **-1.1** |
| **GRUS** | **Gruza** | **1.54** | **57** | ePg | **Pn** | **10 56 43.0** | **-0.8** |
| GRUS | | | | eSg | **Sg** | **10 57 05.3** | **0.0** |
| **GRUS** | **Gruza** | **1.54** | **57** | ePg | **Pn** | **10 56 43.0** | **-0.8** |
| GRUS | | | | eSg | **Sg** | **10 57 05.3** | **0.0** |
| **TEKS** | **Tekeris** | **1.55** | **16** | eSg | **Sg** | **10 57 06.7** | **+1.2** |
| **TEKS** | **Tekeris** | **1.55** | **16** | eSg | **Sg** | **10 57 06.7** | **+1.2** |
| **SELS** | **Selova** | **1.61** | **84** | ePg | **Pn** | **10 56 44.2** | **-0.6** |
| **SELS** | **Selova** | **1.61** | **84** | ePg | **Pn** | **10 56 44.2** | **-0.6** |
| **BARS** | **Barje** | **2.14** | **96** | iPn | **Pn** | **10 56 51.9** | **-0.1** |
| BARS | | | | eSg | **Sg** | **10 57 23.1** | **-1.2** |
| **BARS** | **Barje** | **2.14** | **96** | iPn | **Pn** | **10 56 51.9** | **-0.1** |
| BARS | | | | eSg | **Sg** | **10 57 23.1** | **-1.2** |
| **FGSL** | **Fruska Gora** | **2.19** | **17** | ePn | **Pn** | **10 56 54.4** | **+1.6** |
| **FRGS** | **Fruska Gora** | **2.19** | **17** | ePn | **Pn** | **10 56 54.4** | **+1.6** |
| **BOLS** | **Boljevac** | **2.34** | **70** | ePn | **Pn** | **10 56 55.9** | **+1.2** |
| BOLS | | | | eSg | **Sb** | **10 57 29.0** | **+1.6** |
| **BOLS** | **Boljevac** | **2.34** | **70** | ePn | **Pn** | **10 56 55.9** | **+1.2** |
| BOLS | | | | eSg | **Sb** | **10 57 29.0** | **+1.6** |
| **KUBS** | **Kucevo** | **2.41** | **55** | ePg | **Pb** | **10 56 59.9** | **+0.4** |
| **KUBS** | **Kucevo** | **2.41** | **55** | ePg | **Pb** | **10 56 59.9** | **+0.4** |
| **ZAPS** | **Zavoj** | **2.72** | **84** | ePn | **Pn** | **10 57 00.3** | **+0.2** |
| **ZAPS** | **Zavoj** | **2.72** | **84** | ePn | **Pn** | **10 57 00.3** | **+0.2** |

*BJI **09** 10:58:10.6, 39°.01N×72°.73E, h14km, mb4.7/42, mB4.6/32, ML4.7/6, Ms4.3/29, Ms7 4.2/17*
*IDC **09** 10:58:11.2±0.6, 38°.94N×72°.90E, h0km, mb4.4/23, mb1 4.5/30, mb1mx4.4/52, mbtmp4.4/30, ML3.9/6, MS3.6/19, Ms1 3.7/19, ms1mx3.6/34, Error ellipse: s-maj=11.1km s-min=10.0km az=170.0*
*NEIC **09** 10:58:12.7±0.4, 38°.90N×72°.82E, h10km, mb4.9/21, Error ellipse: s-maj=8.8km s-min=6.8km az=190.0*
*NNC **09** 10:58:13.1±2.1, 39°.09N×73°.03E, h0km, mb5.2, mpv5.0, Error ellipse: s-maj=23.0km s-min=6.4km az=138.0*
*ISCJB **09** 10:58:13.1±0.9, 38°.86N±0°.02×72°.86E±0°.03, h22km±7km, mb4.6/59, MS3.7/17, Error ellipse: s-maj=3.9km s-min=3.4km az=39.1*
*MOS **09** 10:58:15.1±1.3, 39°.00N×72°.93E, h33km, mb4.8/39, Error ellipse: s-maj=6.7km s-min=4.5km az=101.4*
**ISC 09 10:58:13.7**±0.5**, 39°.10N**±0°.03×**73°.00E**±0°.03**, h11**km±2km**,**
**n253, σ1.79s/**249**, mb4.7/**59**, MS3.6/**17**, 34C-26D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.99** | **23** | ⇑P | **Pg** | **10 58 31.5** | **-1.2** |
| | 813nm,0.5s | | | | | | |
| SFK | | | | ⇓S | **Sb** | **10 58 46.7** | **+0.7** |
| | 4μm,0.7s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.99** | **23** | PG | **Pg** | **10 58 31.6** | **-1.2** |
| SFK | | | | S | **Sn** | **10 58 47.3** | **-0.5** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,813nm,0.5s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,2μm,0.3s | | | | | | |
| **KSH** | **Kashi** | **2.34** | **79** | ⇑iPg | **Pn** | **10 58 49.4** | **-2.8** |
| KSH | | | | Sg | **Sn** | **10 59 15.4** | **-5.6** |
| KSH | | | | SMN | | | |
| | comp=N,7μm,0.8s | | | | | | |
| KSH | | | | SME | | | |
| | comp=N,4μm,0.8s | | | | | | |
| **AML** | **Almayashu** | **3.07** | **10** | P | **Pb** | **10 59 07.1** | **-1.4** |
| | SNR=292 | | | | | | |
| **DZET** | **Dzherino** | **3.27** | **266** | ⇑Pn | **Pn** | **10 59 04.9** | **0.0** |
| | comp=N,347nm,0.7s | | | | | | |
| DZET | | | | ⇑Pg | **Pb** | **10 59 12.9** | **+1.3** |
| | comp=N,744nm,0.8s | | | | | | |
| DZET | | | | ⇓Sn | **Sn** | **10 59 47.9** | **+4.2** |
| | comp=N,1μm,0.5s | | | | | | |
| **DZET** | **Dzherino** | **3.27** | **266** | PN | **Pn** | **10 59 05.0** | **+0.2** |
| DZET | | | | | | 10 59 48.8 | |
| DZET | | | | pmax | pmax | | |
| | comp=Z,744nm,0.8s | | | | | | |
| DZET | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| **UCH** | **Uchtor** | **3.33** | **20** | P | **Pb** | **10 59 10.6** | **-2.3** |
| | SNR=1162 | | | | | | |
| **MNAS** | **Manas** | **3.40** | **354** | ⇑P | **Pb** | **10 59 11.0** | **-3.0** |
| | comp=N,739nm,1.2s | | | | | | |
| MNAS | | | | ⇑S | **Sb** | **10 59 54.8** | **-0.6** |
| | comp=N,901nm,0.6s | | | | | | |
| **MNAS** | **Manas** | **3.40** | **354** | PN | **Pb** | **10 59 11.0** | **-3.0** |
| MNAS | | | | | | 10 59 54.7 | |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,247nm,0.3s | | | | | | |
| MNAS | | | | smax | smax | | |
| | comp=N,708nm,0.4s | | | | | | |
| **KZA** | **Kyzart** | **3.43** | **29** | P | **Pb** | **10 59 11.9** | **-2.8** |
| | SNR=74 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.60** | **9** | P | **Pb** | **10 59 14.2** | **-3.2** |
| | SNR=178 | | | | | | |
| **AAK** | **Ala-Archa** | **3.70** | **17** | Pn | **Pb** | **10 59 16.1** | **-3.1** |
| | comp=N,66nm,0.3s,baz=192,slow=12,SNR=462 | | | | | | |
| AAK | | | | Sn | **Sb** | **11 00 04.7** | **+0.6** |
| | comp=N,46nm,0.3s,baz=343,slow=20,SNR=12 | | | | | | |
| AAK | | | | LR | LR | 11 00 51.5 | |
| | comp=N,594nm,18.2s,baz=198,slow=41 | | | | | | |
| **AAK** | **Ala-Archa** | **3.70** | **17c** | iPN | Pb | 10 59 15.8 | -3.4 |
| **AAK** | **Ala-Archa** | **3.70** | **17** | Pn | **Pb** | **10 59 16.0** | **-3.1** |
| | comp=N,5μm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **3.70** | **17** | P | **Pb** | **10 59 16.1** | **-3.1** |
| | SNR=283 | | | | | | |
| **KBK** | **Karagaybulak** | **3.84** | **22** | P | Pb | 10 59 18.0 | -3.6 |
| | SNR=218 | | | | | | |
| **FRU** | **Bishkek** | **3.92** | **18** | ⇑iPN | Pn | 10 59 18.0 | +4.2 |
| FRU | | | | eS | **Sb** | **11 00 10.0** | **-0.3** |
| FRU | | | | i | | 11 00 16.0 | |
| FRU | | | | pmax | pmax | | |
| | comp=Z,920nm,2.0s | | | | | | |
| FRU | | | | pmax | pmax | | |
| | comp=E,3μm,2.0s | | | | | | |
| FRU | | | | pmax | pmax | | |
| | comp=E,2μm,1.8s | | | | | | |
| FRU | | | | MLR | MLR | | |
| | comp=E,9μm,8.0s | | | | | | |
| **ULHL** | **Ulahol** | **3.99** | **37** | P | Pb | 10 59 20.0 | -4.1 |
| | SNR=28 | | | | | | |
| **CHMS** | **Chumysh** | **4.11** | **18** | P | Pb | 10 59 21.3 | -4.7 |
| | SNR=284 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.29** | **26** | P | Pn | 10 59 23.7 | +4.7 |
| | SNR=400 | | | | | | |
| **USP** | **Ospenovka** | **4.31** | **15** | P | Pn | 10 59 23.9 | +4.8 |
| | SNR=21 | | | | | | |
| **KK31** | **Karatay Array** | **4.42** | **336** | P | Pn | 10 59 23.7 | +3.1 |
| | comp=E,119nm,0.5s,baz=152,slow=13,SNR=1889 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **11 00 14.6** | **+2.6** |
| | comp=E,338nm,0.5s,baz=150,slow=22 | | | | | | |
| **KK31** | **Karatay Array** | **4.42** | **336** | ePN | Pn | 10 59 23.6 | +3.1 |
| KK31 | | | | e | | 11 00 18.2 | |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,131nm,0.4s | | | | | | |
| KK31 | | | | smax | smax | | |
| | comp=N,337nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **4.42** | **336** | ePN | **Pn** | **10 59 23.5** | **+3.0** |
| **KKAR** | **Karatay Array** | **4.42** | **336** | ePn | **Pn** | **10 59 23.5** | **+3.0** |
| **AAA** | **Alma-Ata** | **5.12** | **34** | ePN | Pb | 10 59 46.9 | +3.7 |
| AAA | | | | pmax | pmax | | |
| | comp=Z,410nm,0.8s | | | | | | |
| **CEP** | **Cherat** | **5.34** | **190** | P | **Pn** | **10 59 33.2** | **-0.2** |
| **CHCP** | **Chirah Chowk** | **5.44** | **178** | ⇓P | **Pn** | **10 59 36.7** | **+2.0** |
| **PDGK** | **Podgornoye** | **6.46** | **47** | ⇑P | Pn | 10 59 52.1 | +3.6 |
| | comp=Z,40nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 11 01 38.4 | |
| | comp=Z,187nm,0.8s | | | | | | |
| **PDGK** | **Podgornoye** | **6.46** | **47** | PN | Pn | 10 59 52.1 | +3.6 |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,128nm,0.9s | | | | | | |
| **DHRM** | **DHARAMSHALA** | **7.35** | **158** | eP | **Pn** | **11 00 00.5** | **-0.5** |
| DHRM | | | | eS | **Sn** | **11 01 20.2** | **-4.3** |
| **BHK** | **Bhakra** | **8.16** | **159** | ex | **Sn** | **11 01 45.5** | **+1.2** |
| **SMLA** | **Simla** | **8.66** | **156** | ⇓iP | **Pn** | **11 00 18.7** | **-0.1** |
| SMLA | | | | eS | **Sn** | **11 01 52.2** | **-4.2** |
| SMLA | | | | AML | AML | 11 01 57.2 | |
| | comp=N,882nm,0.5s | | | | | | |
| SMLA | | | | AML | AML | 11 01 57.8 | |
| | comp=E,978nm,0.4s | | | | | | |
| **OTUK** | **Ortayu** | **9.15** | **357** | ⇓P | **Pn** | **11 00 27.5** | **+1.9** |
| | comp=E,57nm,1.6s | | | | | | |
| **OTUK** | **Ortayu** | **9.15** | **357** | P | **Pn** | **11 00 27.8** | **+2.3** |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,26nm,0.8s | | | | | | |
| **DDI** | **Dehra Dun** | **9.70** | **153** | eP | **Pn** | **11 00 30.5** | **-2.6** |
| DDI | | | | ex | x | 11 02 03.6 | |
| DDI | | | | AML | AML | 11 02 30.7 | |
| | comp=N,183nm,0.5s | | | | | | |
| DDI | | | | AML | AML | 11 02 34.7 | |
| | comp=E,213nm,0.1s | | | | | | |
| **MAKZ** | **Makanchi** | **10.12** | **38** | ePn | Pn | 11 00 43.7 | +4.9 |
| **MK31** | **Makanchi Array** | **10.26** | **39** | ⇑P | Pn | 11 00 45.3 | +4.5 |
| | comp=E,12nm,0.8s,baz=226,slow=12,SNR=55 | | | | | | |
| **MK31** | **Makanchi Array** | **10.26** | **39** | iP | Pn | 11 00 45.3 | +4.5 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **10.26** | **39** | Pn | Pn | 11 00 44.1 | +3.3 |
| | comp=Z,0.5nm,0.3s,baz=217,slow=14,SNR=42 | | | | | | |
| MKAR | | | | Lg | Lg | 11 03 34.5 | |
| | comp=Z,0.4nm,0.3s,baz=216,slow=26,SNR=2.5 | | | | | | |
| MKAR | | | | LR | LR | 11 04 23.3 | |
| | comp=Z,149nm,18.6s,baz=228,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.26** | **39** | iP | Pn | 11 00 44.0 | +3.2 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **10.26** | **39** | ePn | Pn | 11 00 45.9 | +5.1 |
| MKAR | | | | Lg | Lg | 11 03 34.5 | |
| **NDI** | **New Delhi** | **10.97** | **160** | eP | Pn | 11 00 47.0 | -3.5 |
| NDI | | | | ex | x | 11 02 40.0 | |
| **IEMG** | **Emamgholi** | **11.41** | **266** | eP | Pn | 11 00 53.0 | -3.7 |
| **IAKL** | **Akhelmad** | **11.53** | **262** | eP | Pn | 11 00 55.0 | -3.5 |

| Sta | Name | Dist | Az | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| GEYT | Alibeck | 11.72 | 269 | Pn | Pn | 11 00 57.5 | -3.2 |
| | comp=Z,3.3nm,0.3s,baz=110,slow=6.9,SNR=7.1 | | | | | | |
| GEYT | | | | Sn | Sn | 11 03 10.7 | -0.8 |
| | comp=Z,1.6nm,0.3s,baz=92,slow=18,SNR=5.3 | | | | | | |
| GEYT | | | | LR | LR | 11 06 11.2 | |
| | comp=Z,134nm,18.6s,baz=115,slow=41 | | | | | | |
| WMQ | Urumqi | 11.99 | 62 | P | Pn | 11 01 08.0 | +3.6 |
| WMQ | | | | S | Sn | 11 03 25.0 | +6.9 |
| WMQ | | | | SS | SnSn | 11 03 40.0 | +10 |
| WMQ | | | | PMZ | | | |
| | comp=Z,14nm,0.8s | | | | | | |
| ISFR | Sfrayin | 12.00 | 265 | eP | Pn | 11 01 02.6 | -2.1 |
| KURBB | Kurchatov Arra | 12.16 | 17 | ⇓P | Pn | 11 01 06.6 | -0.1 |
| | comp=Z,27nm,1.4s,baz=200,slow=11 | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 11 04 39.2 | |
| | comp=Z,86nm,1.1s | | | | | | |
| KURBB | Kurchatov Arra | 12.16 | 17 | Pn | Pn | 11 01 06.5 | -0.3 |
| | comp=Z,0.2nm,0.3s,baz=209,slow=12,SNR=35 | | | | | | |
| KURBB | | | | Lg | Lg | 11 04 29.2 | |
| | comp=Z,0.2nm,0.3s,baz=344,slow=20,SNR=4.5 | | | | | | |
| KURK | Kurchatov | 12.27 | 17 | P | Pn | 11 01 06.5 | -1.7 |
| KURK | Kurchatov | 12.27 | 17 | Pn | Pn | 11 01 08.5 | +0.3 |
| | comp=Z,89nm,1.0s,SNR=6.1 | | | | | | |
| KURK | Kurchatov | 12.27 | 17 | Pn | Pn | 11 01 06.5 | -1.7 |
| KURK | | | | Lg | Lg | 11 04 29.1 | |
| VOSK | Vostochnaya | 13.69 | 355 | ⇓P | Pn | 11 01 27.0 | -0.6 |
| | comp=Z,18nm,0.8s | | | | | | |
| AB31 | Akbulak array | 13.79 | 322 | ⇓P | Pn | 11 01 27.1 | -1.8 |
| | comp=Z,14nm,0.6s,baz=131,slow=14,SNR=183 | | | | | | |
| AB31 | | | | ⇑S | Sn | 11 03 53.7 | -8.3 |
| | comp=Z,22nm,0.6s,baz=133,slow=24 | | | | | | |
| AB31 | Akbulak array | 13.79 | 322 | eP | Pn | 11 01 27.1 | -1.8 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.4s | | | | | | |
| ABKAR | Akbulak array | 13.79 | 322 | ePn | Pn | 11 01 27.0 | -2.0 |
| BVA0 | Borovoye Array | 14.04 | 353 | P | Pn | 11 01 31.4 | -0.9 |
| | comp=Z,28nm,1.2s,baz=171,slow=11,SNR=105 | | | | | | |
| BVA0 | | | | Pg | P | 11 01 42.2 | +2.0 |
| | comp=Z,49nm,0.9s,baz=163,slow=9.5,SNR=13 | | | | | | |
| BVAR | Borovoye Array | 14.04 | 353 | Pn | Pn | 11 01 32.2 | -0.1 |
| | comp=Z,1.2nm,0.3s,baz=156,slow=11,SNR=37 | | | | | | |
| BVAR | | | | Sn | Sn | 11 04 07.4 | -0.6 |
| | comp=Z,0.3nm,0.3s,baz=167,slow=19,SNR=4.4 | | | | | | |
| BVAR | | | | Lg | Lg | 11 05 31.5 | |
| | comp=Z,0.2nm,0.3s,baz=179,slow=27,SNR=2.6 | | | | | | |
| BRVK | Borovoye | 14.08 | 353 | ⇑P | Pn | 11 01 32.7 | -0.2 |
| | comp=Z,90nm,0.9s | | | | | | |
| BRVK | Borovoye | 14.08 | 353 | eP | Pn | 11 01 33.3 | +0.4 |
| BRVK | Borovoye | 14.08 | 353 | Pn | Pn | 11 01 32.6 | -0.3 |
| | comp=Z,425nm,0.9s,SNR=10 | | | | | | |
| BRVK | Borovoye | 14.08 | 353 | ePn | Pn | 11 01 32.0 | -0.9 |
| ZRNK | Zerenda | 14.12 | 350 | ⇓P | Pn | 11 01 32.5 | -0.9 |
| | comp=Z,44nm,1.5s | | | | | | |
| CHKZ | Chkalovo | 14.67 | 354 | ⇑P | Pn | 11 01 40.0 | -0.9 |
| | comp=Z,16nm,0.8s | | | | | | |
| AKTO | Aktyubinsk | 15.51 | 322 | ⇑P | Pn | 11 01 51.0 | -1.2 |
| | comp=Z,81nm,0.8s | | | | | | |
| AKTO | | | | ⇓S | Sn | 11 04 37.1 | -6.7 |
| | comp=Z,55nm,1.4s | | | | | | |
| AKTO | Aktyubinsk | 15.51 | 322 | Pn | Pn | 11 01 50.9 | -1.2 |
| | comp=Z,0.8nm,0.3s,baz=132,slow=13,SNR=32 | | | | | | |
| AKTO | | | | Sn | Sn | 11 04 36.2 | -7.6 |
| | comp=Z,0.3nm,0.3s,baz=117,slow=14,SNR=4.0 | | | | | | |
| AKTO | | | | LR | LR | 11 08 16.9 | |
| | comp=Z,531nm,18.5s,baz=139,slow=39 | | | | | | |
| AKTO | Aktyubinsk | 15.51 | 322 | P | Pn | 11 01 50.9 | -1.2 |
| AKTO | | | | | | 11 04 36.2 | |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| AKTO | | | | MLR | MLR | | |
| | comp=Z,531nm,18.5s | | | | | | |
| IKIA | Kiasar | 15.57 | 265 | eP | Pn | 11 01 49.5 | -3.8 |
| BHPL | Bhopal | 16.26 | 165 | eP | Pn | 11 01 58.1 | -3.9 |
| ZALV | Zalesovo Beam | 16.89 | 25 | P | P | 11 02 11.2 | -0.6 |
| | comp=Z,1.5nm,0.3s,baz=213,slow=12,SNR=30 | | | | | | |
| ZALV | | | | Lg | Lg | 11 07 09.7 | |
| | comp=Z,0.1nm,0.3s,baz=220,slow=22,SNR=2.7 | | | | | | |
| ZALV | | | | LR | LR | 11 08 53.7 | |
| | comp=Z,109nm,19.7s,baz=241,slow=38 | | | | | | |
| ZALV | Zalesovo Beam | 16.89 | 25 | i P | P | 11 02 11.1 | -0.7 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,21nm,0.5s | | | | | | |
| NVS | Novosibirsk | 17.19 | 20 | ⇓iP | Pn | 11 02 13.7 | +0.1 |
| NVS | | | | eS | S | 11 05 32.7 | -1.1 |
| NVS | | | | pmax | pmax | | |
| | comp=N,42nm,1.3s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,23nm,1.3s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,56nm,1.3s | | | | | | |
| NVS | | | | smax | smax | | |
| | comp=N,31nm,1.9s | | | | | | |
| NVS | | | | smax | smax | | |
| | comp=E,20nm,1.9s | | | | | | |
| NGP | Nagpur | 18.63 | 162 | eP | P | 11 02 26.9 | -4.4 |
| NGP | | | | AMB | AMB | 11 03 00.3 | |
| | comp=Z,15nm,5.1s | | | | | | |
| BOK | Bokaro | 18.78 | 141 | eP | P | 11 02 32.0 | -0.9 |
| HVS | Khovu-Aksy | 18.85 | 44 | eP | Pn | 11 02 36.4 | +2.3 |
| SVE | Sverdlovsk | 19.51 | 339 | eP | Pn | 11 02 43.6 | +1.7 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,29nm,0.9s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=Z,684nm,11.0s | | | | | | |
| ARU | Arti | 19.79 | 336 | P | Pn | 11 02 45.1 | -0.2 |
| | comp=Z,0.0nm,0.3s,baz=321,slow=24,SNR=8.4 | | | | | | |
| ARU | Arti | 19.79 | 336 | d iP | P | 11 02 44.0 | +0.3 |
| ARU | | | | S | S | 11 06 26.5 | +0.1 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,22nm,1.7s | | | | | | |
| ARU | | | | MLR | MLR | | |
| | comp=Z,500nm,16.0s | | | | | | |
| ARU | Arti | 19.79 | 336 | Pn | Pn | 11 02 46.6 | +1.3 |
| | comp=Z,132nm,0.6s,SNR=5.3 | | | | | | |
| ARU | Arti | 19.79 | 336 | eP | P | 11 02 44.4 | +0.7 |
| | comp=Z,19nm,0.9s | | | | | | |
| POO | Poona | 20.52 | 178 | eP | P | 11 02 46.2 | -5.7 |
| GTA | Gaotai | 20.75 | 81 | ⇑P | Pn | 11 02 56.1 | -0.7 |
| GTA | | | | pP | pP | 11 03 00.2 | +2.6 |
| GTA | | | | sP | sP | 11 03 03.2 | +4.1 |
| GTA | | | | S | S | 11 06 44.9 | -1.0 |
| GTA | | | | sS | Sn | 11 06 51.8 | +0.9 |
| GTA | | | | SS | SnSn | 11 07 16.7 | +11 |
| GTA | | | | PMZ | | | |
| | comp=Z,35nm,1.1s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,120nm,5.5s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,300nm,16.6s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,320nm,14.2s | | | | | | |
| SHL | Shillong | 20.84 | 125 | eP | P | 11 02 51.9 | -3.7 |
| DGRG | David-gareji | 21.17 | 285 | P | P | 11 02 59.9 | +0.9 |
| DGRG | David-gareji | 21.17 | 285 | P | P | 11 02 59.8 | +0.9 |
| KRAR | Krasnoyarsk | 21.46 | 31 | eP | P | 11 03 03.3 | +1.6 |
| KRAR | | | | pmax | pmax | | |
| | comp=Z,31nm,1.0s | | | | | | |
| GNI | Garni | 21.76 | 282 | eP | P | 11 03 09.6 | +4.3 |
| GNI | Garni | 21.76 | 282 | eP | P | 11 03 09.6 | +4.3 |
| | comp=Z,356nm,1.1s | | | | | | |
| HYBB | Hyderabad (bro | 22.14 | 166 | eP | P | 11 03 08.5 | -0.9 |
| HYB | Hyderabad | 22.14 | 166 | i P | P | 11 03 08.0 | -1.4 |
| ONI | Oni | 22.57 | 288 | P | P | 11 03 14.2 | +0.4 |
| ONI | Oni | 22.57 | 288 | P | P | 11 03 14.2 | +0.4 |
| CHLP | Challavanipeta | 22.66 | 152 | eP | P | 11 03 14.6 | -0.3 |
| KBZ | Khabaz | 22.97 | 291 | P | P | 11 03 16.8 | -1.2 |
| | comp=Z,3.1nm,0.7s,baz=118,slow=11,SNR=4.3 | | | | | | |
| KBZ | | | | LR | LR | 11 14 01.1 | |
| | comp=Z,138nm,18.5s,baz=94,slow=41 | | | | | | |
| KBZ | Khabaz | 22.97 | 291 | P | P | 11 03 16.8 | -1.2 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,138nm,18.5s | | | | | | |
| KIV | Kislovodsk | 23.13 | 292 | eP | P | 11 03 18.9 | -0.9 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,128nm,17.0s | | | | | | |
| KIV | Kislovodsk | 23.13 | 292 | eP | P | 11 03 20.3 | +0.5 |
| | comp=Z,31nm,0.8s | | | | | | |
| MOY | Mondy | 23.17 | 48 | eP | P | 11 03 23.2 | +3.1 |
| MOY | | | | pmax | pmax | | |
| | comp=Z,35nm,2.5s | | | | | | |
| GOA | Goa | 23.53 | 178 | eP | P | 11 03 16.4 | -7.4 |
| ADKI | Addanki | 23.96 | 163 | eP | P | 11 03 26.7 | -1.2 |
| ZAK | Zakamensk | 24.12 | 52 | eP | P | 11 03 30.3 | +1.0 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| URV | Uravakonda | 24.35 | 170 | eP | P | 11 03 30.1 | -1.5 |
| LZH | Lanzhou | 24.57 | 87 | eP | P | 11 03 35.8 | +2.1 |
| LZH | | | | pP | pP | 11 03 38.2 | +1.1 |
| LZH | | | | sP | sP | 11 03 40.0 | +1.4 |
| LZH | | | | PP | PnPn | 11 04 12.0 | +7.3 |
| LZH | | | | eS | S | 11 07 54.1 | -0.4 |
| LZH | | | | sS | sS | 11 08 02.1 | +1.9 |
| LZH | | | | SS | SnSn | 11 08 48.0 | +8.8 |
| LZH | | | | PMZ | | | |
| | comp=Z,31nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,90nm,4.0s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,350nm,13.9s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,570nm,14.3s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,440nm,14.8s | | | | | | |
| TLY | Talaya | 24.72 | 49 | P | P | 11 03 36.5 | +1.7 |
| | comp=Z,6.0nm,0.7s,baz=239,slow=8.1,SNR=5.8 | | | | | | |
| TLY | | | | LR | LR | 11 14 16.4 | |
| | comp=Z,96nm,18.8s,baz=254,slow=39 | | | | | | |
| TLY | Talaya | 24.72 | 49 | eP | P | 11 03 37.0 | +2.2 |
| TLY | | | | eS | S | 11 07 56.7 | +0.3 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,76nm,11.0s | | | | | | |
| TLY | Talaya | 24.72 | 49 | eP | P | 11 03 37.2 | +2.4 |
| | comp=Z,7.6nm,0.6s | | | | | | |
| VRH | Novokhopyorsk | 24.95 | 309 | eP | P | 11 03 38.0 | +1.2 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | |
| IRK | Irkutsk | 25.27 | 48 | eP | P | 11 03 30.3 | -9.4 |
| IRK | | | | pmax | pmax | | |
| | comp=Z,38nm,1.7s | | | | | | |
| SONM | Songino Array | 25.60 | 59 | P | P | 11 03 44.3 | +1.5 |
| | comp=Z,8.5nm,0.9s,baz=262,slow=9.9,SNR=23 | | | | | | |
| SONM | | | | LR | LR | 11 14 36.2 | |
| | comp=Z,322nm,20.4s,baz=260,slow=38 | | | | | | |
| SONM | Songino Array | 25.60 | 59 | P | P | 11 03 44.3 | +1.5 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,323nm,20.4s | | | | | | |
| SKHT | Srikalahasti | 25.95 | 165 | eP | P | 11 03 45.8 | -0.2 |
| ULN | Ulaanbaatar | 26.04 | 59 | ceP | P | 11 03 48.4 | +1.5 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,18nm,1.7s | | | | | | |
| ULN | Ulaanbaatar | 26.04 | 59 | eP | P | 11 03 48.1 | +1.2 |
| | comp=Z,17nm,1.3s | | | | | | |
| VORD | Divnogorie | 26.37 | 308 | eP | P | 11 03 52.3 | +2.7 |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,20nm,0.8s | | | | | | |
| CD2 | Chengdu | 26.39 | 99 | eP | P | 11 03 49.0 | -1.1 |
| CD2 | | | | PcP | PcP | 11 07 14.2 | -1.4 |
| CD2 | | | | S | S | 11 08 23.4 | 0.0 |
| CD2 | | | | SS | SnSn | 11 09 31.1 | +7.3 |
| CD2 | | | | PMZ | | | |
| | comp=E,20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=E,160nm,5.2s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=E,300nm,14.7s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=E,290nm,11.7s | | | | | | |
| VSR | Storozhevoye | 26.51 | 308 | eP | P | 11 03 52.3 | +1.4 |
| VSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.4s | | | | | | |
| LPSR | Galich'ya Gora | 27.01 | 311 | eP | P | 11 03 56.6 | +1.2 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.7s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,7.0nm,0.6s | | | | | | |
| KMI | Kunming | 28.64 | 110 | P | P | 11 04 11.2 | +0.7 |
| KMI | | | | pP | pP | 11 04 20.5 | +6.5 |
| KMI | | | | sP | sP | 11 04 24.1 | +8.7 |
| KMI | | | | S | S | 11 09 01.3 | +2.1 |
| KMI | | | | PMZ | | | |
| | comp=E,6.0nm,1.4s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=E,57nm,4.0s | | | | | | |
| KMI | | | | LN | | | |
| | comp=E,140nm,16.2s | | | | | | |
| OBN | Obninsk | 29.09 | 315 | LR | LR | 11 16 50.1 | |
| | comp=E,211nm,18.2s,baz=90,slow=38 | | | | | | |
| OBN | Obninsk | 29.09 | 315 | eP | P | 11 04 14.5 | +0.6 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,188nm,17.0s | | | | | | |
| XAN | Xi'an | 29.16 | 89 | P | P | 11 04 15.4 | +0.5 |
| XAN | | | | PMZ | | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,60nm,6.1s | | | | | | |
| HHC | Hu-ho-hao-te | 29.45 | 74 | eP | P | 11 04 17.8 | +0.4 |
| HHC | | | | S | S | 11 09 10.6 | -0.9 |
| HHC | | | | PMZ | | | |
| | comp=Z,14nm,0.6s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,77nm,7.4s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,250nm,12.4s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,200nm,12.3s | | | | | | |
| KLMR | Klimovskoe | 30.07 | 327 | eP | P | 11 04 22.0 | -0.5 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| BRTR | Keskin Array B | 30.25 | 284 | P | P | 11 04 25.4 | +0.8 |
| | comp=Z,2.1nm,0.7s,baz=88,slow=11,SNR=6.0 | | | | | | |
| BRTR | | | | LR | LR | 11 18 16.2 | |
| | comp=Z,68nm,18.4s,baz=74,slow=40 | | | | | | |
| BRTR | Keskin Array B | 30.25 | 284 | ceP | P | 11 04 27.8 | +3.2 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 30.48 | 125 | P | P | 11 04 27.2 | +0.6 |
| | comp=Z,0.6nm,0.3s,baz=328,slow=12,SNR=4.2 | | | | | | |
| CMAR | | | | PcP | PcP | 11 07 25.6 | -0.2 |
| | comp=Z,0.8nm,0.4s,baz=327,slow=3.8,SNR=4.1 | | | | | | |
| CMAR | | | | LR | LR | 11 19 05.4 | |
| | comp=Z,99nm,21.2s,baz=80,slow=41 | | | | | | |
| CMAR | Chiang Mai Arr | 30.48 | 125 | P | P | 11 04 27.2 | +0.6 |
| CMAR | | | | | | 11 07 25.6 | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| CMAR | | | | MLR | MLR | | |
| | comp=Z,99nm,21.2s | | | | | | |
| GYA | Guiyang | 30.81 | 104 | eP | P | 11 04 29.5 | -0.1 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| SLVN | Son La | 31.83 | 115 | eP | P | 11 04 37.4 | -1.2 |
| BOD | Bodaibo | 32.34 | 41 | eP | P | 11 04 42.7 | +0.1 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,19nm,1.0s | | | | | | |
| AKASG | Malin Array Be | 32.64 | 305 | P | P | 11 04 44.4 | -0.9 |
| | comp=Z,1.6nm,0.4s,baz=78,slow=7.4,SNR=5.9 | | | | | | |
| AKASG | | | | LR | LR | 11 20 57.1 | |
| | comp=Z,118nm,18.4s,baz=215,slow=42 | | | | | | |
| AKASG | Malin Array Be | 32.64 | 305 | ceP | P | 11 04 48.5 | +3.2 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| CFR | Carcaliu | 33.47 | 295 | ⇓P | P | 11 04 57.2 | +4.6 |
| CFR | Carcaliu | 33.47 | 295 | ⇓iP | P | 11 04 57.2 | +4.6 |
| VRI | Vrincioaia | 34.39 | 297 | ⇑P | P | 11 05 02.5 | +1.9 |
| VRI | Vrincioaia | 34.39 | 297 | ⇑iP | P | 11 05 02.5 | +1.9 |
| PLOR | Plostina | 34.45 | 297 | ⇑P | P | 11 05 02.6 | +1.4 |
| PLOR | Plostina | 34.45 | 297 | ⇑iP | P | 11 05 02.6 | +1.4 |
| NACGM | Naroch | 34.54 | 313 | e | P | 11 05 01.0 | -0.7 |
| WHN | Wuhan | 34.76 | 91 | P | P | 11 05 05.2 | +1.2 |
| WHN | | | | S | S | 11 10 26.5 | -7.6 |
| WHN | | | | LZ | | | |
| | comp=Z,480nm,16.7s | | | | | | |
| MLR | Muntele Rosu | 34.98 | 296 | ⇑P | P | 11 05 03.6 | -2.2 |
| MLR | Muntele Rosu | 34.98 | 296 | ⇑iP | P | 11 05 03.6 | -2.2 |
| VSU | Vasula | 35.20 | 319 | ceP | P | 11 05 10.4 | +3.0 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,89nm,2.5s | | | | | | |
| BURAR | Bucovina Array | 35.28 | 300 | ⇓P | P | 11 05 12.9 | +4.5 |
| BURAR | Bucovina Array | 35.28 | 300 | ⇓iP | P | 11 05 12.9 | +4.5 |
| DOPR | Dopca | 35.31 | 297 | ⇑iP | P | 11 05 09.7 | +1.1 |
| VOIR | | 35.61 | 296 | ⇑P | P | 11 05 11.8 | +0.6 |
| VOIR | | 35.61 | 296 | ⇑iP | P | 11 05 11.8 | +0.6 |
| APA | Apatity | 35.89 | 335 | ⇓iP | P | 11 05 06.0 | -7.2 |
| APA | | | | i S | S | 11 10 40.0 | -11 |
| APA | | | | i SS | SnSn | 11 13 08.0 | -5.7 |
| APA | | | | MLR | MLR | | |
| | comp=Z,800nm,12.0s | | | | | | |
| ARCR | ARCALIA | 35.91 | 299 | ⇓iP | P | 11 05 14.8 | +1.1 |
| FINES | FINESS Array B | 36.27 | 324 | P | P | 11 05 16.4 | -0.1 |
| | comp=Z,4.3nm,0.4s,baz=120,slow=9.9,SNR=34 | | | | | | |
| FINES | FINESS Array B | 36.27 | 324 | i P | P | 11 05 16.3 | -0.2 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| LOT | Lotru | 36.50 | 296 | ⇓iP | P | 11 05 17.6 | -1.3 |
| KWP | Kalwaria Pacla | 36.82 | 303 | eP | P | 11 05 22.1 | +0.6 |
| KWP | Kalwaria Pacla | 36.82 | 303 | eP | P | 11 05 22.2 | +0.7 |
| TRPA | Tarpa | 37.04 | 301 | ⇑iP | P | 11 05 24.5 | +1.2 |
| DRGR | | 37.06 | 299 | ⇓P | P | 11 05 23.8 | +0.2 |
| DRGR | | 37.06 | 299 | ⇓iP | P | 11 05 23.8 | +0.2 |
| KOLS | Kolonicke sedl | 37.15 | 302 | eP | P | 11 05 24.9 | +0.6 |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| KOLS | Kolonicke sedl | 37.15 | 302 | eP | P | 11 05 24.9 | +0.6 |
| UZH | Uzhgorod | 37.16 | 302 | eP | P | 11 05 21.4 | -2.9 |
| UZH | | | | i | | 11 05 29.0 | |
| GZR | Gura Zlata | 37.20 | 296 | ⇓P | P | 11 05 24.5 | -0.3 |
| GZR | Gura Zlata | 37.20 | 296 | ⇓iP | P | 11 05 24.5 | -0.3 |
| QIZ | Qiongzhong | 37.57 | 111 | P | P | 11 05 27.7 | -0.4 |
| QIZ | | | | S | S | 11 11 19.2 | +1.9 |
| QIZ | | | | PMZ | | | |
| | comp=Z,18nm,2.4s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,380nm,3.4s | | | | | | |
| NJ2 | Nanjing | 37.63 | 86 | eP | P | 11 05 29.5 | +1.0 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,50nm,0.9s | | | | | | |
| STHS | Stebnicka Huta | 37.79 | 303 | eP | P | 11 05 29.4 | -0.3 |
| STHS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| STHS | Stebnicka Huta | 37.79 | 303 | eP | P | 11 05 29.4 | -0.3 |
| BZS | Buzias | 37.97 | 297 | ⇓P | P | 11 05 31.1 | -0.2 |
| BZS | Buzias | 37.97 | 297 | ⇓iP | P | 11 05 31.1 | -0.2 |
| ATD | Arta Tunnel | 38.36 | 232 | LR | LR | 11 22 14.8 | |
| | comp=Z,87nm,18.8s,baz=10,slow=38 | | | | | | |
| NIE | Niedzica | 38.40 | 303 | eP | P | 11 05 35.7 | +0.9 |
| NIE | Niedzica | 38.40 | 303 | eP | P | 11 05 35.8 | +0.9 |
| OJC | Ojcow | 38.66 | 305 | eP | P | 11 05 37.0 | 0.0 |
| OJC | Ojcow | 38.66 | 305 | eP | P | 11 05 36.7 | -0.3 |
| OJC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| OJC | Ojcow | 38.66 | 305 | eP | P | 11 05 36.7 | -0.3 |
| | comp=Z,14nm,0.8s | | | | | | |
| CN2 | Changchun | 39.05 | 66 | eP | P | 11 05 43.2 | +2.9 |
| CN2 | | | | esP | sP | 11 05 50.0 | +4.8 |
| CN2 | | | | eS | S | 11 11 44.1 | +4.8 |
| CN2 | | | | PMZ | | | |
| | comp=Z,20nm,0.7s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,200nm,3.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,800nm,15.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,1μm,15.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,1μm,16.0s | | | | | | |
| ARCES | ARCESS Array B | 39.38 | 336 | P | P | 11 05 42.6 | -0.1 |
| | comp=Z,5.8nm,0.6s,baz=112,slow=7.9,SNR=29 | | | | | | |
| ARCES | ARCESS Array B | 39.38 | 336 | P | P | 11 05 42.7 | -0.1 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| DIVS | Divibare | 39.38 | 295 | ⇑iP | P | 11 05 43.2 | 0.0 |
| VYHS | Vyhne | 39.46 | 302 | eP | P | 11 05 44.1 | +0.4 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.5s | | | | | | |
| VYHS | Vyhne | 39.46 | 302 | eP | P | 11 05 44.1 | +0.4 |
| MORC | Moravsky Berou | 40.15 | 304 | ⇑P | P | 11 05 48.7 | -0.8 |
| MORC | Moravsky Berou | 40.15 | 304 | ⇑iP | P | 11 05 48.7 | -0.8 |
| MORC | Moravsky Berou | 40.15 | 304 | eP | P | 11 05 53.5 | +4.0 |
| | comp=Z,25nm,0.9s | | | | | | |
| KRLC | Kraliky | 40.61 | 305 | eP | P | 11 05 53.5 | +0.2 |
| KRLC | Kraliky | 40.61 | 305 | eP | P | 11 05 53.5 | +0.2 |
| DPC | Dobruska-Polom | 40.87 | 305 | eP | P | 11 05 54.9 | -0.5 |
| DPC | Dobruska-Polom | 40.87 | 305 | eP | P | 11 05 54.9 | -0.5 |
| DPC | | | | epP | pP | 11 05 59.2 | +0.2 |
| YAK | Yakutsk | 40.93 | 37 | P | P | 11 05 55.3 | -0.3 |
| | comp=Z,1.9nm,0.3s,baz=267,slow=23,SNR=5.5 | | | | | | |
| YAK | Yakutsk | 40.93 | 37 | eP | P | 11 05 56.0 | +0.3 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,45nm,1.7s | | | | | | |
| YAK | Yakutsk | 40.93 | 37 | eP | P | 11 05 56.0 | +0.3 |
| | comp=Z,25nm,0.8s | | | | | | |
| UPC | Upice | 41.05 | 305 | eP | P | 11 05 57.2 | +0.3 |
| UPC | Upice | 41.05 | 305 | eP | P | 11 05 57.2 | +0.3 |
| UPC | | | | epP | pP | 11 06 00.5 | +0.1 |
| PRU | Pruhonice | 42.05 | 305 | eP | P | 11 06 05.2 | +0.1 |
| PRU | Pruhonice | 42.05 | 305 | eP | P | 11 06 05.2 | +0.1 |
| PRU | | | | epP | pP | 11 06 08.9 | +0.3 |
| BRG | Berggiesshubel | 42.31 | 306 | eP | P | 11 06 07.1 | -0.1 |
| | comp=Z,2.6nm,0.7s | | | | | | |
| BRG | Berggiesshubel | 42.31 | 306 | eP | P | 11 06 07.1 | -0.1 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KSRS | Korea Array | 42.59 | 74 | LR | LR | 11 26 20.1 | |
| | comp=Z,127nm,19.6s,baz=294,slow=40 | | | | | | |
| GERES | GERESS Array B | 42.77 | 303 | P | P | 11 06 11.6 | +0.5 |
| | comp=Z,6.7nm,1.0s,baz=73,slow=9.9,SNR=12 | | | | | | |
| GERES | | | | LR | LR | 11 25 35.4 | |
| | comp=Z,55nm,20.8s,baz=92,slow=38 | | | | | | |
| GERES | GERESS Array B | 42.77 | 303 | P | P | 11 06 11.6 | +0.5 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| GERES | | | | MLR | MLR | | |
| | comp=Z,55nm,20.8s | | | | | | |
| KHC | Kasperske Hory | 42.81 | 304 | eP | P | 11 06 10.7 | -0.6 |
| KHC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| KHC | Kasperske Hory | 42.81 | 304 | eP | P | 11 06 11.3 | 0.0 |
| KHC | Kasperske Hory | 42.81 | 304 | eP | P | 11 06 10.7 | -0.6 |
| | comp=Z,3.3nm,0.9s | | | | | | |
| CLL | Collm | 42.84 | 307 | eP | P | 11 06 11.0 | -0.5 |
| CLL | Collm | 42.84 | 307 | eP | P | 11 06 11.0 | -0.5 |
| CLL | | | | e(sP) | sP | 11 06 15.0 | -1.4 |
| | comp=Z,9.0nm,1.0s | | | | | | |
| CLL | | | | e | | 11 06 16.0 | |
| NB2 | NORSAR Subarra | 43.30 | 321 | P | P | 11 06 14.0 | -1.0 |
| | comp=Z,5.0nm,0.7s,baz=91,slow=8.6 | | | | | | |
| NOA | NORSAR Array B | 43.30 | 321 | P | P | 11 06 14.1 | -1.0 |
| | comp=Z,4.1nm,0.6s,baz=92,slow=8.0,SNR=16 | | | | | | |
| NOA | | | | LR | LR | 11 25 07.0 | |
| | comp=Z,231nm,18.2s,baz=90,slow=37 | | | | | | |
| NOA | NORSAR Array B | 43.30 | 321 | P | P | 11 06 14.1 | -1.0 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,231nm,18.2s | | | | | | |
| USRK | Ussuriysk Ar. | 43.55 | 63 | LR | LR | 11 26 45.3 | |
| | comp=Z,108nm,19.1s,baz=296,slow=39 | | | | | | |
| GRF | Grafenberg Arr | 44.22 | 305 | eP | P | 11 06 27.1 | +4.4 |
| | comp=Z,19nm,1.2s,baz=80,slow=6.7 | | | | | | |
| DAVOX | Davos/Dischmat | 45.73 | 301 | P | P | 11 06 34.0 | -0.9 |
| | comp=Z,5.7nm,0.5s,baz=136,slow=5.1,SNR=12 | | | | | | |
| DAVOX | Davos/Dischmat | 45.73 | 301 | P | P | 11 06 34.0 | -0.9 |
| DAVOX | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| JNU | Nakatsue | 46.47 | 79 | P | P | 11 06 40.4 | -0.3 |
| | comp=Z,19nm,1.1s,baz=330,slow=4.9,SNR=3.7 | | | | | | |
| SENIN | Lac Senin/Sane | 47.55 | 301 | eP | P | 11 06 48.8 | -0.4 |
| | comp=Z,155nm,2.7s | | | | | | |
| BNI | Bardonecchia | 48.35 | 300 | eP | P | 11 06 55.1 | -0.2 |
| BNI | | | | pmax | pmax | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,26nm,1.2s | | | | | | |
| **BNI** | **Bardonecchia** | **48.35** | **300** | *e*P | **P** | **11 06 55.1** | **-0.2** |
| | comp=Z,26nm,1.2s | | | | | | |
| **MAJO** | **Matsushiro** | **50.57** | **71** | *e*P | **P** | **11 07 12.1** | **-0.1** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **50.57** | **71** | *e*P | **P** | **11 07 12.1** | **-0.1** |
| | comp=Z,6.2nm,0.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **50.57** | **71** | P | **P** | **11 07 12.4** | **+0.2** |
| | comp=Z,3.4nm,0.8s,baz=287,slow=10.0,SNR=9.1 | | | | | | |
| MJAR | | | | LR | LR | 11 30 47.5 | |
| | comp=Z,50nm,19.3s,baz=195,slow=39 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **50.57** | **71** | P | **P** | **11 07 12.4** | **+0.2** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,50nm,19.3s | | | | | | |
| **BILL** | **Bilibino** | **55.58** | **27** | *e*P | **P** | **11 07 49.1** | **+0.5** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,160nm,19.0s | | | | | | |
| **ESDC** | **Sonseca Array** | **57.66** | **297** | P | **P** | **11 08 03.4** | **-0.6** |
| | comp=Z,0.7nm,0.5s,baz=59,slow=8.3,SNR=6.4 | | | | | | |
| **SUMG** | **Summit** | **59.12** | **341** | *e*P | **P** | **11 08 14.9** | **+0.8** |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,196nm,2.9s | | | | | | |
| **SUMG** | **Summit** | **59.12** | **341** | *e*P | **P** | **11 08 14.9** | **+0.8** |
| | comp=Z,196nm,2.9s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **67.36** | **269** | *e*P | **P** | **11 09 06.8** | **-2.3** |
| **TORD** | **Torodi Ar. Bea** | **67.36** | **269** | P | **P** | **11 09 07.0** | **-2.0** |
| | comp=Z,4.8nm,0.8s,baz=46,slow=5.5,SNR=32 | | | | | | |
| **COLD** | **Coldfoot** | **69.03** | **17** | *e*P | **P** | **11 09 18.9** | **+0.2** |
| | comp=Z,9.6nm,1.0s | | | | | | |
| **INK** | **Inuvik** | **71.08** | **10** | P | **P** | **11 09 31.6** | **+0.4** |
| | comp=Z,12nm,0.9s,baz=353,slow=7.9,SNR=38 | | | | | | |
| **INK** | **Inuvik** | **71.08** | **10** | P | **P** | **11 09 31.7** | **+0.4** |
| INK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **71.08** | **10** | *e*P | **P** | **11 09 31.9** | **+0.7** |
| | comp=Z,8.2nm,0.8s | | | | | | |
| **MDM** | **Murphy Dome** | **71.38** | **17** | *e*P | **P** | **11 09 33.8** | **+0.7** |
| | comp=Z,17nm,1.5s | | | | | | |
| **COLA** | **College** | **71.53** | **17** | *e*P | **P** | **11 09 34.5** | **+0.4** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| **COLA** | **College** | **71.53** | **17** | *e*P | **P** | **11 09 34.5** | **+0.4** |
| | comp=Z,16nm,1.0s | | | | | | |
| **CAST** | **Castle Rocks** | **71.71** | **20** | *e*P | **P** | **11 09 36.3** | **+1.0** |
| | comp=Z,18nm,1.5s | | | | | | |
| **ILAR** | **Eielson Array** | **71.84** | **17** | P | **P** | **11 09 35.2** | **-0.8** |
| | comp=Z,3.7nm,0.9s,baz=319,slow=4.8,SNR=40 | | | | | | |
| **ILAR** | **Eielson Array** | **71.84** | **17** | P | **P** | **11 09 35.2** | **-0.8** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **DAWY** | **Dawson** | **74.02** | **14** | *e*P | **P** | **11 09 49.1** | **+0.2** |
| | comp=Z,97nm,2.6s | | | | | | |
| **HARP** | **HAARP** | **74.28** | **17** | *e*P | **P** | **11 09 51.5** | **+1.1** |
| | comp=Z,25nm,0.8s | | | | | | |
| **KDAK** | **Kodiak Island** | **76.19** | **23** | *i* P | **P** | **11 10 03.4** | **+2.0** |
| **DBIC** | **Dimbokro** | **76.40** | **268** | P | **P** | **11 10 03.2** | **-0.2** |
| | comp=Z,2.8nm,0.9s,baz=57,slow=7.7,SNR=3.7 | | | | | | |
| DBIC | | | | LR | LR | 11 47 37.7 | |
| | comp=Z,69nm,18.9s,baz=52,slow=39 | | | | | | |
| **DBIC** | **Dimbokro** | **76.40** | **268** | P | **P** | **11 10 03.2** | **-0.2** |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| DBIC | | | | MLR | MLR | | |
| | comp=Z,69nm,18.9s | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.56** | **4** | P | **P** | **11 10 14.7** | **0.0** |
| | comp=Z,4.6nm,0.8s,baz=350,slow=5.3,SNR=6.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.56** | **4** | P | **P** | **11 10 14.7** | **0.0** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **BOSA** | **Boshof** | **80.75** | **221** | P | **P** | **11 10 25.0** | **-2.1** |
| | comp=Z,3.7nm,0.9s,baz=268,slow=3.4,SNR=3.9 | | | | | | |
| **BOSA** | **Boshof** | **80.75** | **221** | P | **P** | **11 10 25.0** | **-2.1** |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **82.06** | **124** | P | **P** | **11 10 33.2** | **-0.9** |
| | comp=Z,4.2nm,0.8s,baz=326,slow=5.1,SNR=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.06** | **124** | P | **P** | **11 10 33.2** | **-0.9** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **82.06** | **124** | P | **P** | **11 10 33.3** | **-0.8** |
| | comp=Z,50nm,0.6s,SNR=8.5 | | | | | | |
| **ASAR** | **Alice Springs** | **84.48** | **126** | P | **P** | **11 10 45.5** | **-1.1** |
| | comp=Z,1.2nm,0.8s,baz=317,slow=5.0,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **84.48** | **126** | P | **P** | **11 10 45.5** | **-1.1** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **AS01** | **Alice Springs** | **84.51** | **126** | *e*P | **P** | **11 10 44.9** | **-1.8** |
| **A05A** | **Maple Falls** | **91.27** | **10** | *e*P | **P** | **11 11 18.1** | **-0.8** |
| | comp=Z,3.2nm,1.1s | | | | | | |

**IDC 09 11:01:06.3**±2.8**, 7°.35S**×**156°.64E, h424**km±29km**, mb2.9**/4**, mb1 3.2**/6**, mb1mx3.0**/30**, mbtmp3.9**/6**, Error ellipse: s-maj=46.6km s-min=17.4km az=132.0, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **16.18** | **217** | P | P | 11 04 31.5 | +0.8 |
| | 0.8nm,0.3s,baz=37,slow=13,SNR=6.4 | | | | | | |
| **JAY** | **Jayapura** | **16.58** | **286** | P | P | 11 04 35.5 | +0.3 |
| | 1.3nm,0.3s,baz=134,slow=6.0,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.98** | **238** | P | P | 11 05 54.4 | 0.0 |
| | 0.5nm,0.3s,baz=63,slow=8.8,SNR=18 | | | | | | |
| WRA | | | | PcP | PcP | 11 09 16.9 | +0.6 |
| | 0.4nm,0.6s,baz=64,slow=2.4,SNR=5.6 | | | | | | |
| WRA | | | | S | S | 11 09 47.4 | +0.4 |
| | 0.3nm,0.7s,baz=69,slow=17,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **27.19** | **231** | P | P | 11 06 13.3 | -0.6 |
| | 0.2nm,0.4s,baz=59,slow=9.5,SNR=8.7 | | | | | | |
| **ILAR** | **Eielson Array** | **83.11** | **21** | P | P | 11 12 44.8 | -1.1 |
| | 0.4nm,0.4s,baz=255,slow=4.8,SNR=9.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **84.75** | **318** | P | P | 11 12 55.6 | +1.1 |
| | 0.5nm,0.5s,baz=100,slow=6.0,SNR=4.6 | | | | | | |

*IDC **09** 11:17:33.3±1.1, 1°.90N×96°.59E, h0km, mb4.3/11, mb1 4.4/12, mb1mx4.0/41, mbtmp4.3/12, ML3.7/2, MS3.5/7, Ms1 3.6/7, ms1mx3.3/28, Error ellipse: s-maj=30.1km s-min=15.9km az=46.0*

*NEIC **09** 11:17:36.1±1.7, 1°.94N×96°.67E, h18km±10km, mb4.2/3, Error ellipse: s-maj=11.9km s-min=7.7km az=57.0*

*DJA **09** 11:17:39.1±0.4, 2°N±3°×9°7E±°, h17km±7km, M4.3/16, mb4.2/2, MLv4.4/4, MLv4.3/16*

**ISC 09 11:17:38.0**±1.6**, 2°.03N**±0°.05×**96°.69E**±0°.05**, h25**km±11km**, n49,** σ**1s.30**/46**, mb4.2**/14**, MS3.5**/5**, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNSI** | **Sinabang, Aceh** | **0.52** | **316** | P | **Pn** | **11 17 50.5** | **+0.7** |
| SNSI | | | | S | **Sn** | **11 17 57.9** | **0.0** |
| **GSI** | **Gunungsitoli** | **1.14** | **129** | P | **Pb** | **11 17 58.6** | **-0.5** |
| GSI | | | | S | **Sb** | **11 18 15.8** | **+2.3** |
| **GSI** | **Gunungsitoli** | **1.14** | **129** | *e*Pg | **Pn** | **11 17 57.7** | **-0.7** |
| GSI | | | | *e*Sg | **Sn** | **11 18 09.3** | **-3.9** |
| **KCSI** | **Kotacane, Aceh** | **1.84** | **36** | P | **Pn** | **11 18 08.6** | **+0.7** |
| KCSI | | | | S | **Sb** | **11 18 32.9** | **-0.6** |
| **MLSI** | **Meulaboh, Aceh** | **2.24** | **353** | P | **Pn** | **11 18 13.8** | **+0.3** |
| MLSI | | | | S | **Sb** | **11 18 43.6** | **-1.5** |
| **PSI** | **Prapat** | **2.36** | **71** | Pn | **Pn** | **11 18 14.3** | **-1.0** |
| | 1.7nm,0.3s,baz=242,slow=9.4,SNR=8.2 | | | | | | |
| PSI | | | | Sn | **Sb** | **11 18 48.6** | **-0.1** |
| | 6.0nm,0.3s,baz=314,slow=13,SNR=7.2 | | | | | | |
| **TSI** | **Tuntungan** | **2.38** | **52** | P | **Pn** | **11 18 16.4** | **+1.0** |
| TSI | | | | S | **Sn** | **11 18 45.8** | **+2.1** |
| **MNSI** | **Mandailing Nat** | **3.14** | **113** | P | **Pn** | **11 18 26.9** | **+1.0** |
| MNSI | | | | S | **Sn** | **11 19 04.8** | **+2.2** |
| **LHMI** | **Lhok Sumawe** | **3.19** | **5** | P | **Pn** | **11 18 28.2** | **+1.7** |
| **PPI** | **Padang Panjang** | **4.46** | **124** | P | **Pn** | **11 18 46.0** | **+2.0** |
| **BKNI** | **Bangkinang** | **4.67** | **111** | P | **Pn** | **11 18 49.5** | **+2.6** |
| **BKNI** | **Bangkinang** | **4.67** | **111** | Pn | **Pn** | **11 18 45.1** | **-1.8** |
| **IPM** | **Ipoh** | **4.97** | **61** | *e*Pn | **Pn** | **11 18 51.5** | **+0.5** |
| | 24nm,0.6s | | | | | | |
| **KULM** | **Kulim** | **5.11** | **51** | *e*Pn | **Pn** | **11 18 52.9** | **-0.1** |
| | 33nm,0.6s | | | | | | |
| **SDSI** | **Sungai Dareh** | **5.58** | **122** | P | **Pn** | **11 19 01.4** | **+2.0** |
| | 22nm,0.7s,1.1nm1.1nm | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **16.48** | **8** | Pn | **Pn** | **11 21 26.5** | **-1.1** |
| | 0.4nm,0.3s,baz=198,slow=11,SNR=31 | | | | | | |
| CMAR | | | | LR | LR | 11 28 02.5 | |
| | comp=Z,166nm,20.3s,baz=202,slow=38 | | | | | | |
| **PALK** | **Pallekele** | **16.76** | **289** | LR | LR | 11 27 29.7 | |
| | comp=Z,134nm,19.0s,baz=116,slow=36 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.98** | **248** | T | T | 11 49 51.2 | |
| | baz=69,slow=75,SNR=5497 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.98** | **248** | T | T | 11 49 51.4 | |
| | baz=69,slow=75,SNR=5734 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.00** | **248** | T | T | 11 49 51.3 | |
| | baz=69,slow=75,SNR=4029 | | | | | | |
| **RAMN** | **Ramite** | **26.60** | **340** | *e*P | **P** | **11 23 16.1** | **+1.4** |
| | 22nm,1.0s | | | | | | |
| **TAPN** | **Taplejung** | **26.61** | **342** | *e*P | **P** | **11 23 15.0** | **+0.2** |
| | 34nm,1.1s | | | | | | |
| **PKI** | **Pulchoki** | **27.60** | **338** | *e*P | **P** | **11 23 24.5** | **+0.7** |
| **GUN** | **Gumba** | **27.73** | **339** | *e*P | **P** | **11 23 25.4** | **+0.4** |
| | 19nm,0.7s | | | | | | |
| **GKN** | **Gorkha** | **28.28** | **337** | *e*P | **P** | **11 23 30.6** | **+0.9** |
| **KOLN** | **Koldanda** | **28.50** | **335** | *e*P | **P** | **11 23 33.7** | **+2.0** |
| | 8.8nm,0.4s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.20** | **158** | T | T | 12 07 57.8 | |
| | baz=333,slow=76,SNR=28 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.21** | **158** | T | T | 12 07 51.8 | |
| | baz=333,slow=76,SNR=35 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.22** | **158** | T | T | 12 07 54.7 | |
| | baz=333,slow=76,SNR=28 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.91** | **122** | P | **P** | **11 25 34.2** | **-0.8** |
| | 2.1nm,0.7s,baz=301,slow=9.2,SNR=32 | | | | | | |
| WRA | | | | LR | LR | 11 43 20.6 | |
| | comp=Z,52nm,21.5s,baz=320,slow=36 | | | | | | |
| **WRAB** | **Tennant Creek** | **42.91** | **122** | *e*P | **P** | **11 25 34.0** | **-0.9** |
| | 17nm,1.4s | | | | | | |
| **ASAR** | **Alice Springs** | **44.30** | **127** | P | **P** | **11 25 45.5** | **-0.7** |
| | 0.9nm,0.5s,baz=300,slow=8.0,SNR=26 | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.44** | **35** | P | **P** | **11 25 55.1** | **+0.2** |
| **KSRS** | **Korea Array** | **45.47** | **35** | P | **P** | **11 25 55.1** | **0.0** |
| | 2.3nm,0.7s,baz=230,slow=8.3,SNR=9.1 | | | | | | |
| KSRS | | | | LR | LR | 11 46 44.6 | |
| | comp=Z,87nm,18.1s,baz=208,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.32** | **346** | P | **P** | **11 26 02.0** | **+0.2** |
| | 5.4nm,0.7s,baz=161,slow=7.4,SNR=39 | | | | | | |
| MKAR | | | | LR | LR | 11 49 22.2 | |
| | comp=Z,60nm,19.8s,baz=168,slow=41 | | | | | | |
| **SONM** | **Songino Array** | **46.40** | **9** | P | **P** | **11 26 02.8** | **+0.4** |
| | 2.4nm,0.7s,baz=194,slow=8.8,SNR=15 | | | | | | |
| **KKAR** | **Karatay Array** | **47.09** | **334** | *e*P | **P** | **11 26 07.9** | **0.0** |
| | 1.9nm,0.8s | | | | | | |
| **GEYT** | **Alibeck** | **50.25** | **320** | LR | LR | 11 50 11.6 | |
| | comp=Z,74nm,18.4s,baz=5.0,slow=39 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.80** | **345** | P | **P** | **11 26 36.5** | **+0.4** |
| | 2.4nm,0.6s,baz=166,slow=6.8,SNR=29 | | | | | | |
| **KURK** | **Kurchatov** | **50.87** | **345** | P | **P** | **11 26 36.5** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **51.43** | **43** | P | **P** | **11 26 40.9** | **-0.3** |
| | 0.9nm,0.6s,baz=209,slow=6.5,SNR=4.2 | | | | | | |
| **PMG** | **Port Moresby** | **51.54** | **104** | P | **P** | **11 26 41.7** | **-0.6** |
| | 12nm,0.6s,baz=289,slow=11,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.66** | **351** | P | **P** | **11 26 50.1** | **+0.1** |
| | 6.3nm,0.7s,baz=178,slow=5.9,SNR=31 | | | | | | |
| **ABKAR** | **Akbulak array** | **56.55** | **332** | *e*P | **P** | **11 27 18.1** | **-0.1** |
| | 0.2nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **79.03** | **333** | P | **P** | **11 29 39.1** | **-0.6** |
| | 1.0nm,0.6s,baz=112,slow=5.1,SNR=8.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.59** | **340** | P | **P** | **11 29 53.0** | **-0.3** |
| | 1.5nm,0.5s,baz=77,slow=5.4,SNR=10 | | | | | | |
| **NOA** | **NORSAR Array B** | **86.04** | **331** | LR | LR | 12 12 40.3 | |
| | comp=Z,13nm,19.2s,baz=70,slow=38 | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **106.34** | **232** | T | T | 13 30 56.6 | |
| | SNR=5.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.23** | **30** | PKP | PKPbc | 11 37 07.9 | +0.1 |
| | 0.2nm,0.6s,baz=132,slow=1.9,SNR=4.5 | | | | | | |

*IDC **09** 11:20:30.2±0.8, 37°.86S×74°.85W, h0km, mb4.2/11, mb1 4.3/14, mb1mx4.2/28, mbtmp4.2/14, ML4.5/3, MS3.8/7, Ms1 3.8/7, ms1mx3.6/18, Error ellipse: s-maj=29.6km s-min=16.7km az=93.0*

*GUC **09** 11:20:32.6±0.6, 37°.81S×74°.73W, h27km±9km, ML4.5*

*ISCJB **09** 11:20:33.6±0.4, 37°.77S±0°.03×74°.69W±0°.06, h33km, mb4.2/17, MS4.0/4, Error ellipse: s-maj=7.1km s-min=4.1km az=13.9*

*NEIC **09** 11:20:35.0±0.5, 37°.78S×74°.77W, h30km, mb4.3/7, ML4.5(GUC), Error ellipse: s-maj=12.0km s-min=8.9km az=92.0*

**ISC 09 11:20:35.7**±0.7**, 37°.80S**±0°.05×**74°.75W**±0°.09**, h35**km**, n52,** σ**1s.35**/55**, mb4.2**/17**, MS4.0**/4**, 1D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSCH** | **Puerto Saavedr** | **1.46** | **133** | *e*P | **Pn** | **11 20 57.6** | **-2.0** |
| PSCH | | | | *i* S | **Sn** | **11 21 16.1** | **-1.4** |
| **CCSP** | **San Pedro de C** | **1.62** | **54** | *e*S | **Sn** | **11 21 20.4** | **-0.9** |
| **COCH** | **Cobquecura** | **2.29** | **44** | *e*P | **Pn** | **11 21 09.8** | **-1.1** |
| COCH | | | | *e*S | **Sn** | **11 21 37.2** | **-0.7** |
| COCH | | | | AML | AML | 11 21 40.8 | |
| | comp=N,2μm,0.4s | | | | | | |
| **VLCH** | **Valdivia** | **2.32** | **150** | ⇓*i*P | **Pn** | **11 21 09.7** | **-1.7** |
| VLCH | | | | *i* S | **Sn** | **11 21 35.9** | **-2.8** |
| **CCHI** | **Chillan** | **2.45** | **62** | *i* S | **Sn** | **11 21 44.8** | **+3.0** |
| CCHI | | | | AML | AML | 11 21 48.4 | |
| | comp=N,5μm,0.9s | | | | | | |
| **NICH** | **Los Niches** | **3.98** | **47** | *e*P | **Pn** | **11 21 33.4** | **-0.8** |
| NICH | | | | *e*S | **Sn** | **11 22 21.0** | **+1.3** |
| **ANTU** | **Antumapu** | **5.39** | **40** | *e*P | **Pn** | **11 21 52.4** | **-1.2** |
| **ROC1** | **El Roble** | **5.70** | **33** | *e*P | **Pn** | **11 21 56.3** | **-1.8** |
| ROC1 | | | | *e*S | **Sn** | **11 23 02.7** | **+0.4** |
| **ROCH** | **El Roble** | **5.70** | **33** | *i* P | **Pn** | **11 21 56.5** | **-1.6** |
| **AUSP** | **Uspallata** | **7.09** | **40** | *e*P | **Pn** | **11 22 16.8** | **-0.4** |
| **RTLS** | **Leoncito** | **7.48** | **38** | *e*P | **Pn** | **11 22 22.4** | **-0.1** |
| RTLS | | | | *e*S | **Sn** | **11 23 50.6** | **+4.4** |
| **RTCV** | **Cerro Valdivia** | **7.82** | **43** | *e*P | **Pn** | **11 22 26.5** | **-0.5** |
| **CFAA** | **Coronel Fontan** | **8.18** | **43** | Pn | **Pn** | **11 22 30.4** | **-1.6** |
| | comp=N,0.9nm,0.3s,baz=24,slow=2.1,SNR=101 | | | | | | |
| CFAA | | | | Sn | **Sn** | **11 24 02.4** | **-0.8** |
| | comp=N,0.5nm,0.3s,baz=108,slow=20,SNR=3.5 | | | | | | |
| CFAA | | | | LR | LR | 11 25 25.6 | |
| | comp=N,45nm,18.7s,baz=211,slow=36 | | | | | | |
| **CFAA** | **Coronel Fontan** | **8.18** | **43** | *e*P | **Pn** | **11 22 30.5** | **-1.5** |
| CFAA | | | | *e*S | **Sn** | **11 24 03.1** | **0.0** |
| **RTLL** | **Cerro Villicun** | **8.27** | **41** | *e*P | **Pn** | **11 22 31.9** | **-1.4** |
| **ACAN** | **Cantantal** | **8.30** | **51** | *e*P | **Pn** | **11 22 32.5** | **-1.1** |
| **AMOG** | **MOGNA** | **8.58** | **39** | *e*P | **Pn** | **11 22 35.9** | **-1.5** |
| **LCO** | **Las Campanas** | **9.39** | **22** | *e*Pn | Pn | 11 22 45.2 | -3.6 |
| | comp=N,24nm,0.3s | | | | | | |
| LCO | | | | *e*Sn | **Sn** | **11 24 31.3** | **-2.0** |
| **AGUA** | **GUANDACOL** | **9.79** | **34** | *e*P | **Pn** | **11 22 52.9** | **-1.2** |
| **TRQA** | **Tornquist** | **10.10** | **95** | *e*Pn | **Pn** | **11 22 58.5** | **+0.4** |
| | comp=N,7.2nm,0.6s | | | | | | |
| **TCA** | **Tanti** | **10.56** | **55** | *e*P | **Pn** | **11 23 01.5** | **-3.1** |
| **VCA** | **Vinchina** | **10.57** | **33** | *e*P | **Pn** | **11 23 03.2** | **-1.5** |
| VCA | | | | IAML | | 11 23 05.8 | |
| | comp=Z,44nm,0.2s | | | | | | |
| **CYA** | **Choya** | **11.97** | **41** | IAML | | 11 24 15.2 | |
| | comp=N,3.6nm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **15.95** | **20** | Pn | **Pn** | **11 24 18.1** | **+0.4** |
| | comp=N,16nm,0.3s,baz=224,slow=8.0,SNR=5.9 | | | | | | |
| LVC | | | | LR | LR | 11 29 52.8 | |
| | comp=N,243nm,19.5s,baz=206,slow=35 | | | | | | |
| **USHA** | **Ushuaia** | **17.57** | **168** | LR | LR | 11 31 57.7 | |
| | comp=N,409nm,19.8s,baz=344,slow=39 | | | | | | |
| **CPUP** | **Villa Florida** | **18.64** | **57** | P | **Pn** | **11 24 51.9** | **+1.0** |
| | comp=N,0.3nm,0.3s,baz=235,slow=4.8,SNR=4.9 | | | | | | |
| CPUP | | | | LR | LR | 11 32 23.5 | |
| | comp=N,189nm,21.8s,baz=232,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **22.21** | **17** | P | **P** | **11 25 30.8** | **+1.0** |
| | comp=N,12nm,1.2s,baz=182,slow=8.1,SNR=18 | | | | | | |
| **SIV** | **San Ignacio** | **24.86** | **33** | P | **P** | **11 25 54.9** | **-0.1** |
| | comp=N,5.1nm,0.8s,baz=234,slow=11,SNR=12 | | | | | | |
| **SAML** | **Samuel** | **30.57** | **23** | *e*P | **P** | **11 26 46.1** | **0.0** |
| | comp=N,9.6nm,1.2s | | | | | | |
| **BDFB** | **Brasilia** | **32.32** | **54** | LR | LR | 11 40 10.5 | |
| | comp=N,156nm,20.0s,baz=222,slow=36 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **46.73** | **156** | P | P | 11 28 57.1 | -3.8 |
| **VNA1** | **Neumayer--Stat** | **47.10** | **155** | P | **P** | **11 29 05.6** | **+2.0** |
| **VNA2** | **Neumayer--Watz** | **47.42** | **156** | P | **P** | **11 29 06.6** | **+0.4** |
| | baz=304,slow=14 | | | | | | |
| **SNAA** | **Sanae** | **48.94** | **156** | P | **P** | **11 29 17.8** | **-0.2** |
| **SNAA** | **Sanae** | **48.94** | **156** | P | **P** | **11 29 18.2** | **+0.1** |
| | comp=N,2.3nm,1.0s,baz=287,slow=6.7,SNR=8.6 | | | | | | |
| **SNAA** | **Sanae** | **48.94** | **156** | *e*P | **P** | **11 29 18.1** | **+0.1** |
| | comp=N,4.3nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **52.44** | **180** | P | **P** | **11 29 43.9** | **-0.7** |
| | comp=N,4.0nm,1.0s,baz=136,slow=1.5,SNR=7.6 | | | | | | |
| **PPT** | **Papeete** | **67.61** | **265** | LR | LR | 11 52 21.9 | |
| | comp=N,132nm,18.4s,baz=48,slow=28 | | | | | | |
| **MAW** | **Mawson** | **70.15** | **164** | P | **P** | **11 31 44.0** | **-0.1** |
| | comp=N,1.6nm,0.6s,baz=239,slow=6.3,SNR=4.3 | | | | | | |
| MAW | | | | LR | LR | 12 02 00.1 | |
| | comp=N,92nm,19.3s,baz=242,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **72.06** | **334** | P | **P** | **11 31 56.0** | **-0.3** |
| | comp=N,0.7nm,0.8s,baz=155,slow=8.1,SNR=9.8 | | | | | | |
| **SWET** | **Sewanee** | **73.39** | **350** | *e*P | **P** | **11 32 03.7** | **-0.1** |
| | comp=N,1.7nm,0.7s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **73.81** | **338** | *e*P | **P** | **11 32 05.9** | **-0.5** |
| | comp=N,2.6nm,0.6s | | | | | | |
| **AMTX** | **Amarillo** | **76.52** | **337** | *e*P | **P** | **11 32 22.2** | **+0.2** |
| | comp=N,1.8nm,0.5s | | | | | | |
| **CCM** | **Cathedral Cave** | **77.00** | **347** | *e*P | **P** | **11 32 23.9** | **-0.6** |
| | comp=N,5.2nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **78.46** | **72** | P | **P** | **11 32 34.0** | **+0.7** |
| | comp=N,4.1nm,0.7s,baz=220,slow=2.2,SNR=6.2 | | | | | | |
| DBIC | | | | LR | LR | 12 06 10.6 | |
| | comp=N,50nm,18.5s,baz=174,slow=35 | | | | | | |
| **BOSA** | **Boshof** | **80.23** | **119** | P | **P** | **11 32 42.6** | **-0.4** |
| | comp=N,2.2nm,0.8s,baz=263,slow=5.7,SNR=4.3 | | | | | | |
| **SDCO** | **Great Sand Dun** | **80.35** | **336** | *e*P | **P** | **11 32 43.8** | **+0.4** |
| | comp=N,1.0nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **82.67** | **116** | P | **P** | **11 32 56.0** | **0.0** |
| | comp=N,2.8nm,0.6s,baz=242,slow=7.1,SNR=4.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.81** | **327** | P | **P** | **11 33 11.9** | **+0.4** |
| | comp=N,0.5nm,0.7s,baz=152,slow=6.3,SNR=5.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **87.54** | **71** | P | **P** | **11 33 20.3** | **+0.1** |
| | comp=N,1.7nm,0.9s,baz=230,slow=4.3,SNR=8.2 | | | | | | |
| **ABKAR** | **Akbulak array** | **145.70** | **56** | *e*PKPdf | **PKPbc** | **11 40 10.1** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **158.60** | **34** | PKPab | **PKPab** | **11 41 04.7** | **+0.6** |
| | comp=N,0.7nm,0.4s,baz=299,slow=6.6,SNR=5.4 | | | | | | |

*ISCJB **09** 11:20:33.9±0.8, 51°.52N±0°.04×16°.15E±0°.04, h0km, Error ellipse: s-maj=5.5km s-min=3.4km az=4.4*

*CSEM **09** 11:20:35.4±0.5, 51°.52N×16°.13E, h2km, ML3.4/7, Error ellipse: s-maj=7.5km s-min=4.0km az=169.0*

*PRU **09** 11:20:37.1, 51°.48N×16°.09E, h0km*

**ISC 09 11:20:35.6**±1.2**, 51°.53N**±0°.05×**16°.11E**±0°.03**, h0**km**, n31,** σ**1s.01**/58**, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.70** | **171** | *e*Pg | **Pg** | **11 20 49.6** | **+0.6** |
| KSP | | | | *e*Sg | **Sg** | **11 20 58.7** | **+0.7** |
| **KSP** | **Ksiaz** | **0.70** | **171** | *e*Pg | **Pg** | **11 20 49.6** | **+0.6** |
| KSP | | | | *e*Sg | **Sg** | **11 20 58.7** | **+0.7** |
| **UPC** | **Upice** | **1.03** | **184** | *e*PG | **Pg** | **11 20 55.6** | **+0.3** |
| UPC | | | | *e*SG | **Sg** | **11 21 08.9** | **+0.3** |
| | comp=Z,103nm,0.2s | | | | | | |
| **UPC** | **Upice** | **1.03** | **184** | Pg | **Pg** | **11 20 55.6** | **+0.3** |
| UPC | | | | Sg | **Sg** | **11 21 08.9** | **+0.3** |
| | 103nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.19** | **173** | *e*PG | **Pg** | **11 20 58.4** | **0.0** |
| DPC | | | | *e*SG | **Sg** | **11 21 14.0** | **+0.2** |
| | comp=Z,33nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.19** | **173** | Pg | **Pg** | **11 20 58.4** | **0.0** |
| DPC | | | | Sg | **Sg** | **11 21 14.0** | **+0.2** |
| | 33nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **1.40** | **225** | *e*PG | **Pb** | **11 21 02.9** | **+0.3** |
| PVCC | | | | *e*SG | **Sn** | **11 21 21.8** | **+0.3** |
| | comp=Z,124nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.40** | **225** | Pg | **Pb** | **11 21 02.9** | **+0.3** |
| PVCC | | | | Sg | **Sn** | **11 21 21.8** | **+0.3** |
| | 124nm,0.2s | | | | | | |
| **KRLC** | **Kraliky** | **1.52** | **163** | *e*PG | **Pn** | **11 21 03.9** | **-0.1** |
| KRLC | | | | *e*SG | **Sg** | **11 21 23.8** | **-0.6** |
| **KRLC** | **Kraliky** | **1.52** | **163** | Pg | **Pn** | **11 21 03.9** | **-0.1** |
| KRLC | | | | Sg | **Sg** | **11 21 23.8** | **-0.6** |
| **PRA** | **Prague** | **1.81** | **217** | *e*SG | **Sg** | **11 21 33.3** | **-0.4** |
| **PRA** | **Prague** | **1.81** | **217** | Sg | **Sg** | **11 21 33.3** | **-0.4** |
| **GOPC** | **GO Pecny, Ondr** | **1.83** | **208** | *e*PG | **Pb** | **11 21 10.2** | **+0.4** |
| GOPC | | | | *e*SG | **Sg** | **11 21 33.9** | **-0.3** |
| | comp=Z,15nm,0.2s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.83** | **208** | Pg | **Pb** | **11 21 10.2** | **+0.4** |
| GOPC | | | | Sg | **Sg** | **11 21 33.9** | **-0.3** |
| | 15nm,0.2s | | | | | | |
| **PRU** | **Pruhonice** | **1.84** | **213** | *e*PG | **Pb** | **11 21 10.1** | **0.0** |
| PRU | | | | *e*SG | **Sg** | **11 21 34.4** | **-0.2** |
| | comp=Z,13nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.84** | **213** | Pg | **Pb** | **11 21 10.1** | **0.0** |
| PRU | | | | Sg | **Sg** | **11 21 34.4** | **-0.2** |
| | 13nm,0.3s | | | | | | |
| **CLL** | **Collm** | **1.96** | **265** | *e*Pg | **Pg** | **11 21 13.0** | **-0.1** |
| CLL | | | | *i* | | 11 21 16.7 | |
| CLL | | | | *e*Sg | **Sg** | **11 21 39.0** | **+0.6** |
| | comp=Z,17nm,0.5s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.98** | **152** | *e*Pn | **Pn** | **11 21 09.9** | **-0.5** |
| MORC | | | | *e*Sg | **Sb** | **11 21 37.9** | **+0.2** |
| **OKC** | **Ostrava-Krasne** | **2.14** | **142** | *e*SG | **Sb** | **11 21 42.6** | **+0.5** |
| | comp=Z,14nm,0.3s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.14** | **142** | Sg | **Sb** | **11 21 42.6** | **+0.5** |
| | comp=Z,14nm,0.3s | | | | | | |
| **VRAC** | **Vranov** | **2.25** | **172** | *e*Pn | **Pn** | **11 21 14.8** | **+0.8** |
| VRAC | | | | *e*Sg | **Sb** | **11 21 45.5** | **+0.1** |
| **OJC** | **Ojcow** | **2.68** | **118** | *e*Pg | **Pg** | **11 21 26.1** | **-0.8** |
| OJC | | | | *e*Sg | **Sg** | **11 22 01.5** | **-0.1** |
| **OJC** | **Ojcow** | **2.68** | **118** | *e*Pg | **Pg** | **11 21 26.1** | **-0.8** |
| OJC | | | | *e*Sg | **Sg** | **11 22 01.5** | **-0.1** |
| **KHC** | **Kasperske Hory** | **2.90** | **215** | *e*PN | **Pn** | **11 21 22.3** | **-0.7** |
| KHC | | | | *e*PG | **Pb** | **11 21 29.0** | **+0.8** |
| KHC | | | | *e*SN | **Sn** | **11 21 58.1** | **-0.5** |
| KHC | | | | *e*SG | **Sg** | **11 22 07.6** | **-1.1** |
| | comp=Z,9.5nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.90** | **215** | Pn | **Pn** | **11 21 22.3** | **-0.7** |
| **VYHS** | **Vyhne** | **3.51** | **149** | *e*PN | **Pn** | **11 21 31.0** | **-0.4** |
| VYHS | | | | *e*SG | **Sg** | **11 22 26.3** | **-2.1** |
| **VYHS** | **Vyhne** | **3.51** | **149** | *e*Pn | **Pn** | **11 21 31.0** | **-0.4** |
| VYHS | | | | *e*Sg | **Sg** | **11 22 26.3** | **-2.1** |
| **STHS** | **Stebnicka Huta** | **3.90** | **121** | *e*PG | **Pg** | **11 21 48.7** | **-1.6** |
| STHS | | | | *e*SG | **Sg** | **11 22 46.5** | **+5.6** |
| **STHS** | **Stebnicka Huta** | **3.90** | **121** | *e*Pg | **Pg** | **11 21 48.7** | **-1.6** |
| **KOLS** | **Kolonicke sedl** | **4.74** | **121** | *e*PN | **Pn** | **11 21 48.5** | **+0.3** |
| KOLS | | | | *e*SG | **Sg** | **11 23 07.3** | **-0.3** |
| **KOLS** | **Kolonicke sedl** | **4.74** | **121** | *e*Pn | **Pn** | **11 21 48.5** | **+0.3** |
| KOLS | | | | *e*Sg | **Sg** | **11 23 07.3** | **-0.3** |

*ISCJB **09** 11:26:15.4±1.0, 59°.0S±0°.1×25°.4W±0°.4, h10km, mb3.9/5, Error ellipse: s-maj=35.2km s-min=17.4km az=156.1*

*IDC **09** 11:26:15.2±0.8, 58°.99S×25°.26W, h0km, mb4.1/5, mb1 4.1/6, mb1mx3.9/22, mbtmp4.0/6, ML3.9/1, Error ellipse: s-maj=38.1km s-min=22.0km az=85.0*

**ISC 09 11:26:16.5**±0.9**, 59°.0S**±0°.2×**25°.1W**±0°.3**, h10**km**, n14,** σ**1s.23**/9**, mb4.0**/5**, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **15.54** | **153** | Pn | **P** | **11 29 58.1** | **-1.7** |
| | 0.5nm,0.3s,baz=315,slow=15,SNR=21 | | | | | | |
| **QSPA** | **South Pole Qui** | **31.20** | **180** | P | **P** | **11 32 36.6** | **+1.0** |
| | 1.7nm,0.5s,baz=202,slow=0.5,SNR=21 | | | | | | |
| QSPA | | | | PcP | **PcP** | **11 35 29.2** | **-0.6** |
| | 0.7nm,0.9s,baz=118,slow=5.1,SNR=3.2 | | | | | | |
| **CFAA** | **Coronel Fontan** | **39.82** | **294** | P | **P** | **11 33 49.0** | **-0.6** |
| | 0.3nm,0.4s,baz=142,slow=7.9,SNR=6.5 | | | | | | |
| **VNDA** | **Vanda** | **43.63** | **182** | P | **P** | **11 34 21.6** | **+1.3** |
| | 1.3nm,0.6s,baz=187,slow=6.9,SNR=14 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **50.60** | **13** | T | T | 12 29 50.3 | |
| | baz=188,slow=75,SNR=13 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **50.60** | **13** | T | T | 12 29 52.2 | |
| | baz=188,slow=75,SNR=15 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **50.61** | **13** | T | T | 12 29 53.2 | |
| | baz=188,slow=75,SNR=13 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **51.72** | **13** | T | T | 12 31 13.1 | |
| | baz=190,slow=72,SNR=5.6 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **51.72** | **13** | T | T | 12 31 14.6 | |
| | baz=190,slow=72,SNR=8.4 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **51.73** | **13** | T | T | 12 31 15.7 | |
| | baz=190,slow=72,SNR=7.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.16** | **27** | P | **P** | **11 37 59.9** | **+1.2** |
| | 2.0nm,0.5s,baz=199,slow=6.6,SNR=27 | | | | | | |
| **ASAR** | **Alice Springs** | **95.78** | **161** | P | **P** | **11 39 42.0** | **-0.8** |
| | 0.3nm,0.6s,baz=182,slow=4.2,SNR=7.8 | | | | | | |
| **FINES** | **FINESS Array B** | **126.50** | **28** | PKP | **PKPdf** | **11 45 17.4** | **-0.7** |
| | 0.5nm,0.6s,baz=116,slow=3.2,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **149.67** | **90** | PKPbc | **PKPbc** | **11 46 05.4** | **0.0** |
| | 0.7nm,0.6s,baz=207,slow=1.3,SNR=4.2 | | | | | | |

**SKHL 09 11:51:22.7**±0.6**, 52°.50N**×**142°.60E, h10**km**, mb3.9**/5**, Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKH** | **Okha** | **1.07** | **11** | *e*Pg | Pn | 11 51 47.0 | +3.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKH | | | | AMB | AMB | 11 51 48.0 | |
| | 160nm,0.5s | | | | | | |
| OKH | | | | eSg | Sn | 11 52 03.6 | +4.9 |
| OKH | | | | A | A | 11 52 06.0 | |
| | 1μm,0.3s | | | | | | |
| NKL | Nikolayevsk | 1.33 | 300 | ePg | Pg | 11 51 49.5 | +1.2 |
| NKL | | | | AMB | AMB | 11 51 51.2 | |
| | 40nm,0.2s | | | | | | |
| NKL | | | | i Sg | Sg | 11 52 08.2 | +2.6 |
| NKL | | | | A | A | 11 52 10.0 | |
| | 120nm,0.4s | | | | | | |
| NKL | | | | A | A | 11 52 10.0 | |
| | 370nm,0.4s | | | | | | |
| TYV | Tymovskoe | 1.64 | 179 | ePg | Pg | 11 51 55.0 | +0.9 |
| TYV | | | | AMB | AMB | 11 51 56.5 | |
| | 19nm,0.6s | | | | | | |
| TYV | | | | eSg | Sg | 11 52 18.0 | +2.6 |
| TYV | | | | A | A | 11 52 22.0 | |
| | 125nm,0.8s | | | | | | |
| GRNR | Gornyy | 4.22 | 248 | ePg | Pg | 11 52 46.2 | +2.6 |
| GRNR | | | | AMB | AMB | 11 52 49.5 | |
| | 19nm,0.5s | | | | | | |
| GRNR | | | | eSg | Sg | 11 53 44.1 | +5.8 |
| GRNR | | | | A | A | 11 53 45.0 | |
| | 42nm,0.8s | | | | | | |
| EKMR | Ekimchan | 5.88 | 279 | ePg | Pg | 11 53 19.1 | +3.7 |
| EKMR | | | | AMB | AMB | 11 53 32.7 | |
| | 4.0nm,0.5s | | | | | | |
| EKMR | | | | eSg | Sg | 11 54 39.1 | +7.5 |
| EKMR | | | | A | A | 11 54 39.6 | |
| | 14nm,0.5s | | | | | | |
| YASR | Yasnyy | 8.88 | 281 | eSg | Sg | 11 55 56.5 | -11 |
| YASR | | | | A | A | 11 55 58.3 | |
| | 3.0nm,0.6s | | | | | | |

*ISCJB **09** 11:57:10.2±1.1, 37.°19N±0.°04×27.°70E±0.°05, h23km±17km, Error ellipse: s-maj=6.5km s-min=5.7km az=44.2*
*CSEM **09** 11:57:10.7±0.2, 37.°22N×27.°68E, h10km, MD2.7, Error ellipse: s-maj=4.2km s-min=3.6km az=128.0*
*DDA **09** 11:57:10.7, 37.°24N×27.°66E, h7km, Md2.7*
*ISK **09** 11:57:10.0, 37.°23N×27.°69E, h4km, MD2.5*
**ISC 09 11:57:10.2**±1.3, **37.°18N**±0.°03×**27.°70E**±0.°03, **h20**km±4km, **n17**, σ**0.°82**/30, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BDRM | Kayabasi | 0.23 | 240 | i P | Pb | 11 57 15.4 | -0.6 |
| BDRM | | | | i S | Sb | 11 57 20.1 | 0.0 |
| BDRM | Kayabasi | 0.23 | 240 | P | Pb | 11 57 15.4 | -0.6 |
| BDRM | | | | S | Sb | 11 57 20.1 | 0.0 |
| BODT | Bodrum | 0.33 | 249 | PG | Pb | 11 57 17.3 | 0.0 |
| BODT | | | | eSG | Sb | 11 57 22.9 | +0.7 |
| BODT | Bodrum | 0.33 | 249 | i Pg | Pb | 11 57 17.3 | 0.0 |
| BODT | | | | eSg | Sb | 11 57 22.9 | +0.7 |
| YER | Yerkesik | 0.47 | 96 | ePG | Pb | 11 57 20.5 | +0.7 |
| YER | | | | eSG | Sb | 11 57 27.1 | +0.8 |
| YER | Yerkesik | 0.47 | 96 | ePg | Pb | 11 57 20.5 | +0.7 |
| YER | | | | eSg | Sb | 11 57 27.1 | +0.8 |
| AYDN | Tasoluk | 0.50 | 17 | i P | Pb | 11 57 20.7 | +0.4 |
| AYDN | | | | i S | Sb | 11 57 27.0 | -0.2 |
| AYDN | Tasoluk | 0.50 | 17 | P | Pb | 11 57 20.7 | +0.4 |
| AYDN | | | | S | Sb | 11 57 27.0 | -0.2 |
| GCAM | G?zelcaml? | 0.63 | 325 | i P | Pb | 11 57 21.8 | -0.8 |
| GCAM | | | | i S | Sb | 11 57 30.5 | -0.6 |
| GCAM | G?zelcaml? | 0.63 | 325 | P | Pb | 11 57 21.8 | -0.8 |
| GCAM | | | | S | Sb | 11 57 30.5 | -0.6 |
| NIS1 | Nisyros Isl. | 0.71 | 216 | ePG | Pn | 11 57 25.7 | +0.6 |
| NIS1 | Nisyros Isl. | 0.71 | 216 | ePg | Pn | 11 57 25.7 | +0.6 |
| AYDB | Zeytinkoy-Aydi | 0.78 | 11 | ePG | Pb | 11 57 24.4 | -0.7 |
| AYDB | | | | eSG | Sb | 11 57 35.7 | +0.4 |
| AYDB | Zeytinkoy-Aydi | 0.78 | 11 | ePg | Pb | 11 57 24.4 | -0.7 |
| AYDB | | | | eSg | Sb | 11 57 35.7 | +0.4 |
| TURN | Turunc | 0.79 | 113 | P | Pb | 11 57 22.9 | -2.3 |
| TURN | | | | S | Sb | 11 57 33.5 | -1.9 |
| DALY | Dalyan (Mu˜la | 0.85 | 115 | ePG | Pn | 11 57 27.3 | +0.3 |
| DALY | Dalyan (Mu˜la | 0.85 | 115 | ePg | Pn | 11 57 27.3 | +0.3 |

*ISCJB **09** 12:01:26.0±1.0, 19.°52N±0.°07×145.°5E±0.°3, h147km, mb3.5/7, Error ellipse: s-maj=42.1km s-min=9.7km az=0.7*
*IDC **09** 12:01:31.5±2.7, 19.°29N×145.°46E, h190km±28km, mb3.2/7, mb1 3.4/8, mb1mx3.2/32, mbtmp3.8/8, Error ellipse: s-maj=42.5km s-min=17.7km az=95.0*
**ISC 09 12:01:28.1**±1.0, **19.°49N**±0.°08×**145.°4E**±0.°3, **h147**km, **n8**, σ**1.°80**/9, **mb3.5**/7, **Mariana Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GUMO | Guam | 5.88 | 185 | P | Pn | 12 02 54.9 | +1.7 |
| | 4.4nm,0.3s,baz=68,slow=1.2,SNR=2.1 | | | | | | |
| GUMO | | | | S | Sn | 12 04 00.4 | +0.6 |
| | 3.1nm,0.3s,baz=215,slow=13,SNR=1.5 | | | | | | |
| WRA | Warramunga Arr | 40.65 | 196 | P | P | 12 08 52.0 | -1.9 |
| | 1.4nm,0.7s,baz=18,slow=9.0,SNR=9.4 | | | | | | |
| SONM | Songino Array | 42.33 | 321 | P | P | 12 09 07.9 | +0.4 |
| | 0.4nm,0.4s,baz=140,slow=8.8,SNR=2.9 | | | | | | |
| SEY | Seymchan | 43.68 | 5 | P | P | 12 09 20.0 | +2.0 |
| | 1.0nm,0.6s,baz=190,slow=11,SNR=1.8 | | | | | | |
| ASAR | Alice Springs | 44.32 | 195 | P | P | 12 09 21.6 | -2.0 |
| | 0.3nm,0.4s,baz=18,slow=6.4,SNR=4.1 | | | | | | |
| MKAR | Makanchi Array | 57.69 | 314 | P | P | 12 11 04.0 | +0.8 |
| | 0.1nm,0.2s,baz=81,slow=10,SNR=1.1 | | | | | | |
| ILAR | Eielson Array | 63.09 | 26 | P | P | 12 11 38.8 | -0.8 |
| | 0.3nm,0.5s,baz=258,slow=5.8,SNR=4.8 | | | | | | |
| FINES | FINESS Array B | 86.04 | 335 | P | P | 12 13 50.0 | -1.8 |
| | 0.7nm,0.5s,baz=87,slow=4.4,SNR=1.8 | | | | | | |

*DDA **09** 12:04:10.1, 38.°87N×26.°04E, h18km, Ml3.4*
*ATH **09** 12:04:10.3, 38.°87N×26.°02E, h24km, MD3.4/14, ML3.0*
*ISK **09** 12:04:10.5, 38.°89N×26.°06E, h2km, ML3.2*
*CSEM **09** 12:04:10.0±0.1, 38.°83N×25.°93E, h2km, MD3.4, Error ellipse: s-maj=2.8km s-min=2.6km az=170.0*
*THE **09** 12:04:11.2, 38.°86N×26.°00E, h8km±1km, ML3.3/2, Error ellipse: s-maj=2.3km s-min=0.7km az=255.0*
**ISC 09 12:04:10.4**±1.1, **38.°86N**±0.°02×**26.°00E**±0.°02, **h7**km±9km, **n152**, σ**0.°82**/188, **5C-2D**, **Aegean Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIGR | SIGRI | 0.37 | 343 | ePG | Pb | 12 04 18.7 | -0.6 |
| SIGR | | | | eSG | Sb | 12 04 24.3 | -1.1 |
| SIGR | SIGRI | 0.37 | 343 | ePB | Pb | 12 04 18.6 | -0.8 |
| SIGR | | | | eSB | Sg | 12 04 23.5 | +1.0 |
| SIGR | SIGRI | 0.37 | 343 | P | Pb | 12 04 18.5 | -0.8 |
| SIGR | | | | S | Sg | 12 04 23.6 | +1.0 |
| SIGR | SIGRI | 0.37 | 343 | P | Pb | 12 04 18.5 | -0.8 |
| SIGR | | | | S | Sg | 12 04 23.6 | +1.0 |
| SIGR | | | | eSg | Sb | 12 04 24.3 | -1.1 |
| CHOS | Chios island | 0.47 | 175 | ePB | Pb | 12 04 20.8 | -0.3 |
| CHOS | | | | eSB | Sb | 12 04 28.1 | -0.1 |
| CHOS | Chios island | 0.47 | 175 | P | Pb | 12 04 20.7 | -0.3 |
| CHOS | Chios island | 0.47 | 175 | P | Pb | 12 04 20.7 | -0.3 |
| CHOS | | | | eSb | Sb | 12 04 28.1 | -0.1 |
| URLA | Izmir | 0.68 | 136 | i P | Pg | 12 04 23.1 | -0.4 |
| URLA | | | | i S | Sb | 12 04 33.6 | -0.6 |
| URLA | Izmir | 0.68 | 136 | P | Pg | 12 04 23.1 | -0.4 |
| URLA | | | | S | Sb | 12 04 33.6 | -0.6 |
| AYVA | Ayvalik | 0.70 | 50 | i P | Pg | 12 04 23.5 | -0.4 |
| AYVA | | | | i S | Sg | 12 04 32.3 | -0.8 |
| AYVA | Ayvalik | 0.70 | 50 | P | Pg | 12 04 23.5 | -0.4 |
| AYVA | | | | S | Sg | 12 04 32.3 | -0.8 |
| ZEY | ˜zmir | 0.73 | 147 | P | Pg | 12 04 24.2 | -0.3 |
| ZEY | | | | S | Sb | 12 04 35.0 | -0.7 |
| DKL | Dikili | 0.74 | 73 | ePG | Pg | 12 04 24.8 | +0.2 |
| DKL | | | | eSG | Sg | 12 04 34.8 | +0.5 |
| DKL | Dikili | 0.74 | 73 | ePg | Pg | 12 04 24.8 | +0.2 |
| DKL | | | | eSg | Sg | 12 04 34.8 | +0.5 |
| BOZC | Bozcaada | 0.99 | 2 | P | Pg | 12 04 28.9 | -0.5 |
| BOZC | | | | S | Sb | 12 04 42.6 | -0.4 |
| EZN | Ezine | 1.00 | 15 | ePG | Pg | 12 04 29.8 | +0.1 |
| EZN | | | | eSG | Sb | 12 04 43.5 | 0.0 |
| EZN | Ezine | 1.00 | 15 | ePg | Pg | 12 04 29.8 | +0.1 |
| EZN | | | | eSg | Sb | 12 04 43.5 | 0.0 |
| IZM | Izmir | 1.09 | 114 | ePG | Pg | 12 04 30.7 | -0.6 |
| IZM | Izmir | 1.09 | 114 | ePg | Pg | 12 04 30.7 | -0.6 |
| LIA | Limnos Island | 1.22 | 329 | ePN | Pb | 12 04 33.8 | 0.0 |
| LIA | | | | eSN | Sn | 12 04 50.5 | -0.1 |
| LIA | Limnos Island | 1.22 | 329 | P | Pb | 12 04 33.8 | 0.0 |
| LIA | | | | S | Sn | 12 04 50.8 | +0.2 |
| LIA | Limnos Island | 1.22 | 329 | P | Pb | 12 04 33.8 | 0.0 |
| LIA | | | | eSn | Sn | 12 04 50.5 | -0.1 |
| LIA | | | | S | Sn | 12 04 50.8 | +0.2 |
| SMG | Samos | 1.32 | 150 | ePN | Pg | 12 04 36.0 | +0.2 |
| SMG | | | | eSN | Sn | 12 04 53.2 | 0.0 |
| SMG | Samos | 1.32 | 150 | P | Pb | 12 04 35.5 | -0.1 |
| SMG | | | | S | Sg | 12 04 52.9 | 0.0 |
| SMG | Samos | 1.32 | 150 | P | Pb | 12 04 35.5 | -0.1 |
| SMG | Samos | 1.32 | 150 | ePn | Pg | 12 04 36.0 | +0.2 |
| SMG | | | | S | Sg | 12 04 52.9 | 0.0 |
| SMG | | | | eSn | Sn | 12 04 53.2 | 0.0 |
| GADA | Gvkgeada | 1.34 | 357 | ePN | Pb | 12 04 35.7 | -0.1 |
| GADA | Gvkgeada | 1.34 | 357 | ePn | Pb | 12 04 35.7 | -0.1 |
| AKHS | Akhisar | 1.42 | 89 | i P | Pn | 12 04 36.7 | +0.1 |
| AKHS | | | | i S | Sn | 12 04 55.6 | +0.1 |
| AKHS | Akhisar | 1.42 | 89 | P | Pn | 12 04 36.7 | +0.1 |
| AKHS | | | | S | Sn | 12 04 55.6 | +0.1 |
| AKS | Akhisar | 1.42 | 88 | ePN | Pg | 12 04 37.7 | +0.1 |
| AKS | Akhisar | 1.42 | 88 | ePn | Pg | 12 04 37.7 | +0.1 |
| KARY | Karystos | 1.48 | 237 | P | Pn | 12 04 37.1 | -0.3 |
| BALY | Balya | 1.54 | 54 | i P | Pn | 12 04 37.8 | -0.5 |
| BALY | | | | i S | Sg | 12 05 00.0 | +0.1 |
| BALY | Balya | 1.54 | 54 | P | Pn | 12 04 37.8 | -0.5 |
| BALY | | | | S | Sg | 12 04 60.0 | +0.1 |
| GELI | Tayfur-Gelibol | 1.58 | 13 | ePN | Pb | 12 04 40.0 | 0.0 |
| GELI | Tayfur-Gelibol | 1.58 | 13 | ePn | Pb | 12 04 40.0 | 0.0 |
| LPK | Lapseki | 1.62 | 21 | ePN | Pb | 12 04 40.6 | -0.1 |
| LPK | Lapseki | 1.62 | 21 | ePn | Pb | 12 04 40.6 | -0.1 |
| SMTH | Samothraki Isl | 1.65 | 348 | ePN | Pn | 12 04 39.4 | -0.5 |
| SMTH | | | | eSN | Sn | 12 05 01.5 | +0.1 |
| SMTH | Samothraki Isl | 1.65 | 348 | P | Pn | 12 04 39.2 | -0.7 |
| SMTH | Samothraki Isl | 1.65 | 348 | ePn | Pn | 12 04 39.4 | -0.5 |
| SMTH | | | | eSn | Sn | 12 05 01.5 | +0.1 |
| BALB | Balikesir | 1.66 | 61 | ePN | Pn | 12 04 39.7 | -0.2 |
| BALB | Balikesir | 1.66 | 61 | ePn | Pn | 12 04 39.7 | -0.2 |
| EREA | Eretria | 1.68 | 256 | ePN | Pn | 12 04 40.4 | +0.2 |
| EREA | Eretria | 1.68 | 256 | ePn | Pn | 12 04 40.4 | +0.2 |
| AOS | Alonnisos | 1.68 | 281 | ePN | Pb | 12 04 41.2 | -0.5 |
| AOS | Alonnisos | 1.68 | 281 | ePn | Pb | 12 04 41.2 | -0.5 |
| AYDB | Zeytinkoy-Aydi | 1.74 | 121 | ePN | Pb | 12 04 42.4 | -0.4 |
| AYDB | Zeytinkoy-Aydi | 1.74 | 121 | ePn | Pb | 12 04 42.4 | -0.4 |
| APE | Apeiranthos | 1.82 | 192 | ⇑iP | Pn | 12 04 41.6 | -0.6 |
| APE | Apeiranthos | 1.82 | 192 | ePB | Pn | 12 04 41.8 | -0.4 |
| APE | Apeiranthos | 1.82 | 192 | P | Pn | 12 04 41.4 | -0.8 |
| APE | Apeiranthos | 1.82 | 192 | P | Pn | 12 04 41.4 | -0.8 |
| APE | Apeiranthos | 1.82 | 192 | ePb | Pn | 12 04 41.8 | -0.4 |
| KRBG | Karabiga-Canak | 1.83 | 33 | ePN | Pn | 12 04 42.9 | +0.6 |
| KRBG | Karabiga-Canak | 1.83 | 33 | ePn | Pn | 12 04 42.9 | +0.6 |
| ERIK | Erikli-Kesan | 1.86 | 12 | ePN | Pn | 12 04 43.4 | +0.8 |
| ERIK | Erikli-Kesan | 1.86 | 12 | ePn | Pn | 12 04 43.4 | +0.8 |
| PTL | Penteli | 1.86 | 245 | ePB | Pn | 12 04 42.6 | -0.1 |
| PTL | Penteli | 1.86 | 245 | ePb | Pn | 12 04 42.6 | -0.1 |
| ENEZ | Enez | 1.88 | 4 | ePN | Pb | 12 04 44.2 | -0.9 |
| ENEZ | Enez | 1.88 | 4 | ePn | Pb | 12 04 44.2 | -0.9 |
| MRKA | Markates | 1.89 | 266 | ePN | Pn | 12 04 44.0 | +0.9 |
| MRKA | Markates | 1.89 | 266 | ePn | Pn | 12 04 44.0 | +0.9 |
| AYDN | Tasoluk | 1.90 | 128 | i P | Pn | 12 04 44.1 | +0.8 |
| AYDN | Tasoluk | 1.90 | 128 | P | Pn | 12 04 44.1 | +0.8 |
| AYDN | | | | S | Sg | 12 05 13.2 | +1.7 |
| SKIA | Skiathos | 2.00 | 280 | ePN | Pn | 12 04 45.2 | +0.6 |
| SKIA | Skiathos | 2.00 | 280 | ePn | Pn | 12 04 45.2 | +0.6 |
| ATH | Athens Observa | 2.00 | 245 | ePB | Pn | 12 04 44.8 | +0.2 |
| ATH | Athens Observa | 2.00 | 245 | ePb | Pn | 12 04 44.8 | +0.2 |
| MANT | Manisa | 2.04 | 100 | i P | Pb | 12 04 47.1 | -0.8 |
| MANT | | | | i S | Sb | 12 05 14.0 | +0.5 |
| MANT | Manisa | 2.04 | 100 | P | Pb | 12 04 47.1 | -0.8 |
| MANT | | | | S | Sb | 12 05 14.0 | +0.5 |
| ALN | Alexandroupoli | 2.04 | 1 | P | Pn | 12 04 44.8 | -0.3 |
| ALN | Alexandroupoli | 2.04 | 1 | P | Pn | 12 04 44.8 | -0.3 |
| RKY | Sarkoy-Tekirda | 2.04 | 26 | ePN | Pb | 12 04 46.5 | -1.4 |
| RKY | Sarkoy-Tekirda | 2.04 | 26 | ePn | Pb | 12 04 46.5 | -1.4 |
| SART | Tekirdag | 2.04 | 26 | i P | Pn | 12 04 46.0 | +0.7 |
| SART | | | | i S | Sb | 12 05 12.8 | -0.8 |
| SART | Tekirdag | 2.04 | 26 | P | Pn | 12 04 46.0 | +0.7 |
| SART | | | | S | Sb | 12 05 12.8 | -0.8 |
| EDC | Edincik | 2.07 | 43 | ePN | Pn | 12 04 46.7 | +1.1 |
| EDC | Edincik | 2.07 | 43 | ePn | Pn | 12 04 46.7 | +1.1 |
| SERI | Serifos | 2.07 | 216 | ePN | Pn | 12 04 46.1 | +0.5 |
| SERI | Serifos | 2.07 | 216 | ePn | Pn | 12 04 46.1 | +0.5 |
| PAIG | Paliouri | 2.09 | 302 | ePB | Pn | 12 04 46.5 | +0.6 |
| PAIG | Paliouri | 2.09 | 302 | ePb | Pn | 12 04 46.5 | +0.6 |
| BNT | Bandirma | 2.11 | 44 | ePN | Pn | 12 04 47.2 | +1.0 |
| BNT | Bandirma | 2.11 | 44 | ePn | Pn | 12 04 47.2 | +1.0 |
| KULA | Kula-Manisa | 2.11 | 98 | ePN | Pb | 12 04 47.7 | -1.4 |
| KULA | Kula-Manisa | 2.11 | 98 | ePn | Pb | 12 04 47.7 | -1.4 |
| MRMT | Marmara Adasi | 2.14 | 35 | ePN | Pn | 12 04 47.9 | +1.3 |
| MRMT | Marmara Adasi | 2.14 | 35 | ePn | Pn | 12 04 47.9 | +1.3 |
| OUR | Ouranopolis | 2.15 | 314 | ePB | Pn | 12 04 47.2 | +0.6 |
| OUR | Ouranopolis | 2.15 | 314 | ePb | Pn | 12 04 47.2 | +0.6 |
| DST | Dursunbey | 2.17 | 69 | ePN | Pn | 12 04 48.1 | +1.2 |
| DST | Dursunbey | 2.17 | 69 | ePn | Pn | 12 04 48.2 | +1.2 |
| SMIA | Simia | 2.18 | 271 | ePB | Pn | 12 04 48.2 | +1.1 |
| SMIA | Simia | 2.18 | 271 | ePb | Pn | 12 04 48.2 | +1.1 |
| VILL | Villia | 2.22 | 253 | ePb | Pn | 12 04 48.5 | +0.8 |
| VIL2 | Platees | 2.24 | 254 | ePB | Pn | 12 04 48.5 | +0.6 |
| XOR | Xorichti | 2.24 | 284 | ePN | Pn | 12 04 47.8 | -0.2 |
| XOR | Xorichti | 2.24 | 284 | ePn | Pn | 12 04 47.8 | -0.2 |
| KCTX | Karacabey (Bur | 2.30 | 52 | ePN | Pn | 12 04 49.4 | +0.6 |
| KCTX | Karacabey (Bur | 2.30 | 52 | ePn | Pn | 12 04 49.4 | +0.6 |
| TKR | Tekirdag | 2.44 | 29 | ePN | Pn | 12 04 51.5 | +0.9 |
| TKR | Tekirdag | 2.44 | 29 | ePn | Pn | 12 04 51.5 | +0.9 |
| PLG | Polygyros | 2.49 | 308 | ePN | Pn | 12 04 51.5 | +0.1 |
| PLG | Polygyros | 2.49 | 308 | ePn | Pn | 12 04 51.5 | +0.1 |
| MHLO | Agia Marina, M | 2.50 | 211 | P | Pn | 12 04 50.9 | -0.7 |
| MHLO | Agia Marina, M | 2.50 | 211 | P | Pn | 12 04 50.9 | -0.7 |
| ORLT | Orhaneli | 2.54 | 61 | ePN | Pn | 12 04 53.1 | +1.0 |
| ORLT | Orhaneli | 2.54 | 61 | ePn | Pn | 12 04 53.1 | +1.0 |
| DID | Didima | 2.56 | 239 | ePN | Pn | 12 04 52.3 | 0.0 |
| DID | Didima | 2.56 | 239 | ePn | Pn | 12 04 52.3 | 0.0 |
| AXAR | Agios Charalam | 2.61 | 269 | ePN | Pn | 12 04 53.0 | 0.0 |
| AXAR | Agios Charalam | 2.61 | 269 | ePn | Pn | 12 04 53.0 | 0.0 |
| DSF | Desfina | 2.75 | 262 | ePB | Pn | 12 04 56.8 | +1.8 |
| DSF | Desfina | 2.75 | 262 | ePb | Pn | 12 04 56.8 | +1.8 |
| ARMT | Armutlu | 2.79 | 51 | ePN | Pn | 12 04 56.2 | +0.7 |
| ARMT | Armutlu | 2.79 | 51 | ePn | Pn | 12 04 56.2 | +0.7 |
| SOH | Sokhos | 2.83 | 315 | ePN | Pn | 12 04 56.6 | +0.5 |
| SOH | Sokhos | 2.83 | 315 | ePn | Pn | 12 04 56.6 | +0.5 |
| HORT | Hortiatis | 2.83 | 309 | ePN | Pn | 12 04 57.1 | +0.9 |
| HORT | Hortiatis | 2.83 | 309 | ePn | Pn | 12 04 57.1 | +0.9 |
| AGG | Agios Georgios | 2.87 | 274 | ePN | Pn | 12 04 57.4 | +0.8 |
| AGG | Agios Georgios | 2.87 | 274 | ePn | Pn | 12 04 57.4 | +0.8 |
| SRS | Serrai | 2.92 | 321 | ePN | Pn | 12 04 57.7 | +0.4 |
| SRS | Serrai | 2.92 | 321 | ePn | Pn | 12 04 57.7 | +0.4 |
| CTKS | Kestanelik-??a | 3.06 | 38 | ePN | Pn | 12 05 00.3 | +1.1 |
| CTKS | Kestanelik-??a | 3.06 | 38 | ePn | Pn | 12 05 00.3 | +1.1 |
| IZI | Iznik | 3.06 | 60 | ePN | Pn | 12 05 01.5 | +2.2 |
| IZI | Iznik | 3.06 | 60 | ePn | Pn | 12 05 01.5 | +2.2 |
| BGKT | Bogazkoy | 3.15 | 42 | ePN | Pn | 12 05 02.2 | +1.7 |
| BGKT | Bogazkoy | 3.15 | 42 | ePn | Pn | 12 05 02.2 | +1.7 |
| ISK | Istanbul-Kandi | 3.23 | 46 | ePN | Pn | 12 05 03.8 | +2.3 |
| ISK | Istanbul-Kandi | 3.23 | 46 | ePn | Pn | 12 05 03.8 | +2.3 |
| VLI | Veliai | 3.23 | 230 | ePN | Pn | 12 05 01.8 | +0.3 |
| VLI | Veliai | 3.23 | 230 | ePn | Pn | 12 05 01.8 | +0.3 |
| CAVI | Cavuskoy | 3.26 | 64 | ePN | Pn | 12 05 02.8 | +0.8 |
| CAVI | Cavuskoy | 3.26 | 64 | ePn | Pn | 12 05 02.8 | +0.8 |
| ADVT | Abdulvahap | 3.29 | 60 | ePN | Pn | 12 05 04.4 | +2.1 |
| ADVT | Abdulvahap | 3.29 | 60 | ePn | Pn | 12 05 04.4 | +2.1 |
| KNT | Kendrikon | 3.31 | 315 | ePN | Pn | 12 05 04.0 | +1.3 |
| KNT | Kendrikon | 3.31 | 315 | ePn | Pn | 12 05 04.0 | +1.3 |
| BARS | Barje | 5.07 | 323 | i Pn | Pn | 12 05 28.2 | +1.4 |
| MSAB | Monastry St. A | 5.41 | 14 | ⇑iP | Pn | 12 05 31.4 | 0.0 |
| MSAB | Monastry St. A | 5.41 | 14 | ⇑iP | Pn | 12 05 31.4 | 0.0 |
| BOLS | Boljevac | 5.83 | 330 | i Pn | Pn | 12 05 36.6 | -0.6 |
| KUBS | Kucevo | 6.43 | 331 | i Pn | Pn | 12 05 45.7 | +0.2 |
| GZR | Gura Zlata | 6.96 | 341 | ⇓iP | Pn | 12 05 52.7 | -0.1 |
| GZR | Gura Zlata | 6.96 | 341 | ⇓iP | Pn | 12 05 52.7 | -0.1 |
| PLOR | Plostina | 7.01 | 4 | ⇑iP | Pn | 12 05 55.1 | +1.6 |
| PLOR | Plostina | 7.01 | 4 | ⇑iP | Pn | 12 05 55.1 | +1.6 |

*DDA **09** 12:10:36.9, 40.°65N×36.°76E, h7km, Md3.2*
*CSEM **09** 12:10:37.8±0.3, 40.°62N×36.°80E, h2km, MD3.0, Error ellipse: s-maj=6.2km s-min=4.4km az=43.0*
*ISK **09** 12:10:37.4, 40.°61N×36.°78E, h2km, MD3.0, ML3.0*
**ISC 09 12:10:37.8**±1.1, **40.°62N**±0.°03×**36.°78E**±0.°03, **h9**km±10km, **n24**, σ**0.°72**/38, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TOKT | Tokat | 0.35 | 211 | PG | Pg | 12 10 45.0 | +0.3 |
| TOKT | | | | eSG | Sb | 12 10 50.8 | -1.0 |
| TOKT | Tokat | 0.35 | 211 | i Pg | Pg | 12 10 45.0 | +0.3 |
| TOKT | | | | eSg | Sb | 12 10 50.8 | -1.0 |
| TOKA | Tokat | 0.37 | 218 | i P | Pg | 12 10 44.0 | -1.2 |
| TOKA | | | | i S | Sg | 12 10 51.1 | +1.0 |
| TOKA | Tokat | 0.37 | 218 | P | Pg | 12 10 44.0 | -1.2 |
| TOKA | | | | S | Sg | 12 10 51.1 | +1.0 |
| SVSK | Karacayir | 0.72 | 167 | ePG | Pg | 12 10 51.7 | +0.1 |
| SVSK | Karacayir | 0.72 | 167 | ePg | Pg | 12 10 51.7 | +0.1 |
| KVT | Kavak | 0.72 | 310 | ePG | Pb | 12 10 52.5 | -0.1 |
| KVT | | | | eSG | Sb | 12 11 03.2 | +0.6 |
| KVT | Kavak | 0.72 | 310 | ePg | Pb | 12 10 52.5 | -0.1 |
| KVT | | | | eSg | Sb | 12 11 03.2 | +0.6 |
| SCER | sogukcermik | 0.80 | 161 | i P | Pg | 12 10 52.3 | -0.9 |
| SCER | | | | i S | Sg | 12 11 04.2 | +0.5 |
| SCER | sogukcermik | 0.80 | 161 | P | Pg | 12 10 52.3 | -0.9 |
| SCER | | | | S | Sg | 12 11 04.2 | +0.5 |
| HAVZ | Havza | 0.93 | 300 | i P | Pg | 12 10 54.2 | -1.4 |
| HAVZ | | | | i S | Sb | 12 11 08.8 | +0.4 |
| HAVZ | Havza | 0.93 | 300 | P | Pg | 12 10 54.2 | -1.4 |
| HAVZ | | | | S | Sb | 12 11 08.8 | +0.4 |
| CUZAR | Zara_SIVAS | 1.05 | 134 | P | Pg | 12 10 58.0 | +0.1 |
| CUZAR | | | | S | Sb | 12 11 12.1 | 0.0 |
| SUSE | Susehri | 1.16 | 110 | i P | Pb | 12 10 59.7 | -0.4 |
| SUSE | | | | i S | Sb | 12 11 14.6 | -0.6 |
| SUSE | Susehri | 1.16 | 110 | P | Pb | 12 10 59.7 | -0.4 |
| SUSE | | | | S | Sb | 12 11 14.6 | -0.6 |
| CUSAR | Sarkisla-SIVAS | 1.27 | 199 | P | Pn | 12 11 01.5 | -0.2 |
| CUSAR | | | | S | Sn | 12 11 19.9 | +1.0 |
| YOZ | Yozgat | 1.49 | 229 | ePN | Pb | 12 11 06.0 | +0.4 |
| YOZ | Yozgat | 1.49 | 229 | ePn | Pb | 12 11 06.0 | +0.4 |
| ESPY | Espiye-Giresun | 1.51 | 78 | ePN | Pb | 12 11 06.3 | +0.4 |
| ESPY | Espiye-Giresun | 1.51 | 78 | ePn | Pb | 12 11 06.3 | +0.4 |
| DIKM | Dikmen | 1.54 | 312 | ePN | Pb | 12 11 06.8 | +0.3 |
| DIKM | Dikmen | 1.54 | 312 | ePn | Pb | 12 11 06.8 | +0.3 |
| BNN | Bunyan | 1.91 | 203 | ePN | Pb | 12 11 12.2 | -0.6 |
| BNN | Bunyan | 1.91 | 203 | ePn | Pb | 12 11 12.2 | -0.6 |

*BUL **09** 12:11:06.8±15.0, 27.°66S×33.°96E, h15km, MD4.0*
*PRE **09** 12:12:03.2±1.1, 26.°33S×29.°18E, h0km, ML2.6, Explosion*
**ISC 09 12:12:02.6**±1.1, **26.°27S**±0.°07×**29.°19E**±0.°05, **h0**km, **n11**, σ**1.°55**/16, **South Africa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNON | Benoni | 0.79 | 278 | eP | Pg | 12 12 18.6 | +0.7 |
| BNON | | | | eS | Sg | 12 12 29.4 | +1.2 |
| BNON | | | | AML | AML | 12 12 32.4 | |
| | comp=Z,91nm,0.4s | | | | | | |
| OBSV | Observatory | 1.01 | 275 | eP | Pg | 12 12 22.6 | +0.6 |
| OBSV | | | | eS | Sg | 12 12 36.6 | +1.4 |
| OBSV | | | | AML | AML | 12 12 42.5 | |
| | comp=Z,38nm,0.3s | | | | | | |
| KLOF | Kloof | 1.42 | 266 | eP | Pg | 12 12 30.5 | +0.5 |
| KLOF | | | | eS | Sn | 12 12 50.0 | +0.5 |
| KLOF | | | | AML | AML | 12 13 07.1 | |
| | comp=Z,418nm,0.1s | | | | | | |
| WDLM | Western Deep L | 1.60 | 264 | eP | Pb | 12 12 33.2 | +0.1 |
| WDLM | | | | eS | Sb | 12 12 54.2 | +0.2 |
| WDLM | | | | AML | AML | 12 12 57.0 | |
| | comp=Z,54nm,0.5s | | | | | | |
| PRYS | Parys | 1.77 | 248 | eP | Pb | 12 12 35.6 | -0.5 |
| PRYS | | | | eS | Sg | 12 12 59.4 | -0.1 |
| PRYS | | | | AML | AML | 12 13 04.9 | |
| | comp=Z,31nm,0.5s | | | | | | |
| POGA | Pongola | 2.42 | 117 | eP | Pn | 12 12 44.8 | +1.3 |
| POGA | | | | eS | Sb | 12 13 17.1 | -0.5 |
| POGA | | | | AML | AML | 12 13 27.2 | |
| | comp=Z,29nm,0.7s | | | | | | |
| SWZ | Schweizer | 3.57 | 254 | eP | Pn | 12 12 59.9 | +0.5 |
| SWZ | | | | eS | Sn | 12 13 41.7 | -0.8 |
| SWZ | | | | AML | AML | 12 13 56.1 | |
| | comp=Z,25nm,0.6s | | | | | | |
| BOSA | Boshof | 4.21 | 235 | i P | Pn | 12 12 59.6 | -8.5 |
| BOSA | | | | i S | Sg | 12 14 14.1 | -3.7 |
| MATP | Matopo | 5.85 | 354 | i S | Sb | 12 14 53.3 | -3.1 |
| MATP | Matopo | 8.76 | 324 | i P | Pn | 12 13 06.2 | -7.0 |
| BLWY | Bulawayo | 8.94 | 326 | i P | Pn | 12 13 11.4 | -4.3 |
| BLWY | | | | i S | Sn | 12 14 32.4 | -24 |

**GUC 09 12:14:45.4**±0.5, **22.°36S**×**68.°76W**, **h124**km±5km, **ML3.5**, **Northern Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB09 | IPOC Station P | 0.71 | 321 | i P | Pn | 12 15 05.7 | +0.1 |
| PB09 | | | | i S | Sn | 12 15 21.6 | +0.8 |
| PB09 | | | | AML | AML | 12 15 22.4 | |
| | comp=N,2μm,0.5s | | | | | | |
| PB07 | IPOC Station P | 1.22 | 301 | i P | Pn | 12 15 10.8 | +0.6 |
| PB07 | | | | i S | Sn | 12 15 29.7 | +0.6 |
| PB07 | | | | AML | AML | 12 15 30.7 | |
| | comp=N,1μm,0.3s | | | | | | |
| PB01 | IPOC Station P | 1.47 | 332 | i P | Pn | 12 15 13.1 | +0.2 |
| PB01 | | | | i S | Sn | 12 15 34.1 | +0.3 |
| PB01 | | | | AML | AML | 12 15 36.4 | |
| | comp=E,389nm,0.2s | | | | | | |
| MNMC | Minimini | 3.30 | 346 | i P | Pn | 12 15 35.5 | -0.7 |
| MNMC | | | | i S | Sn | 12 16 16.0 | +0.6 |

**KRSC 09 12:23:14.9**±1.5, **50.°87N**×**157.°46E**, **h86**km±22km, **ML3.9**, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PAU | Pauzhetka | 0.73 | 326 | eP | Pn | 12 23 32.4 | +1.1 |
| PAU | | | | eS | Sn | 12 23 44.7 | +1.1 |
| SKR | Severo-Kuril's | 0.87 | 258 | eP | Pn | 12 23 34.3 | +1.5 |
| SKR | | | | eS | Sn | 12 23 47.4 | +1.2 |
| MTVR | Mutnovka | 1.68 | 15 | eP | Pn | 12 23 46.3 | +3.3 |
| MTVR | | | | eS | Sn | 12 24 06.6 | +2.3 |
| RUS | Russkaya | 1.70 | 22 | eP | Pn | 12 23 44.9 | +1.9 |
| RUS | | | | eS | Sn | 12 24 05.8 | +1.4 |
| APC | Apacha | 2.07 | 355 | eP | Pn | 12 23 48.5 | +0.7 |
| PET | Petropavlovsk | 2.29 | 18 | P | Pn | 12 23 53.6 | +2.9 |
| PET | | | | S | Sn | 12 24 20.9 | +2.8 |
| AVH | Avacha | 2.53 | 18 | P | Pn | 12 23 57.3 | +3.2 |
| AVH | | | | S | Sn | 12 24 27.2 | +3.0 |
| SMAR | Somma | 2.54 | 19 | P | Pn | 12 23 57.1 | +2.7 |
| SDLR | Sedlovina | 2.57 | 19 | eP | Pn | 12 23 57.3 | +2.6 |
| NLC | Nalytchevo | 2.59 | 26 | eP | Pn | 12 23 56.8 | +2.1 |
| NLC | | | | S | Sn | 12 24 26.0 | +0.7 |
| KRX | Arik | 2.60 | 16 | eP | Pn | 12 23 58.3 | +3.1 |
| SPN | Mys Shipunski | 2.74 | 34 | eP | Pn | 12 23 59.5 | +2.7 |
| SPN | | | | eS | Sn | 12 24 30.6 | +1.6 |
| GNL | Ganaly | 2.85 | 6 | eP | Pn | 12 24 00.3 | +1.9 |
| MKZ | Mys Kozlova | 4.52 | 33 | eP | Pn | 12 24 22.1 | +1.3 |
| MKZ | | | | S | Sn | 12 25 12.8 | +0.8 |
| KBTR | Krutoberegovo | 6.23 | 29 | eP | Pn | 12 24 46.1 | +2.0 |

**WEL 09 12:25:01.5**±0.2, **37.°47S**×**176.°22E**, **h184**km±2km, **ML3.5**/17, **1C-1D**, **Error ellipse: s-maj=3.3km s-min=2.7km az=90.0**, **North Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URZ | Urewera | 1.06 | 138 | ⇓PN | Pn | 12 25 30.1 | +0.1 |
| URZ | | | | SN | Sn | 12 25 52.3 | +0.2 |
| HAZ | Te Kaha | 1.27 | 103 | PN | Pn | 12 25 31.7 | 0.0 |
| HAZ | | | | SN | Sn | 12 25 54.7 | -0.4 |
| MWZ | Matawai | 1.35 | 130 | PN | Pn | 12 25 32.7 | +0.3 |
| MRHZ | Matea Rd | 1.37 | 173 | PN | Pn | 12 25 32.7 | +0.1 |
| MRHZ | | | | SN | Sn | 12 25 56.6 | -0.3 |
| RAGZ | Rawiri | 1.39 | 138 | PN | Pn | 12 25 33.0 | +0.1 |
| RAGZ | | | | SN | Sn | 12 25 57.2 | -0.1 |
| SNGZ | Shannon Statio | 1.58 | 146 | PN | Pn | 12 25 34.9 | +0.4 |
| SNGZ | | | | SN | Sn | 12 25 59.6 | -0.7 |
| NMHZ | Naumai | 1.69 | 164 | PN | Pn | 12 25 36.2 | +0.5 |
| BKZ | Black Stump Fm | 1.71 | 173 | PN | Pn | 12 25 35.3 | -0.6 |
| BKZ | | | | AML | AML | 12 26 03.9 | |
| PUZ | Puketiti | 1.72 | 111 | PN | Pn | 12 25 35.0 | -1.0 |
| RIGZ | Rimuhau | 1.73 | 136 | PN | Pn | 12 25 36.2 | +0.2 |
| WMGZ | Waiomatatini S | 1.78 | 102 | PN | Pn | 12 25 36.6 | +0.1 |
| WHHZ | Waihua | 1.79 | 154 | PN | Pn | 12 25 36.6 | 0.0 |
| TUVZ | Tukino | 1.85 | 194 | PN | Pn | 12 25 37.5 | +0.1 |
| CNGZ | Carnagh Statio | 1.87 | 123 | PN | Pn | 12 25 37.7 | +0.3 |
| ARHZ | Aropaoanui | 1.89 | 161 | PN | Pn | 12 25 37.4 | -0.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WNVZ | Wahianoa | 1.92 | 195 | PN | Pn | 12 25 38.0 | -0.1 |
| KNZ | Kokohu | 1.93 | 144 | PN | Pn | 12 25 37.4 | -0.6 |
| KNZ | | | | AML | AML | 12 33 35.4 | |
| MOVZ | Moawhango | 1.97 | 191 | PN | Pn | 12 25 37.9 | -0.6 |
| MCHZ | McNeill Hill | 2.01 | 169 | PN | Pn | 12 25 39.0 | +0.2 |
| BHHZ | Black Hill Sta | 2.02 | 183 | PN | Pn | 12 25 38.3 | -0.8 |
| KRHZ | Kereru | 2.17 | 177 | PN | Pn | 12 25 40.0 | -0.7 |
| CKHZ | Cape Kidnapper | 2.29 | 163 | PN | Pn | 12 25 41.2 | -0.8 |
| KAHZ | Kahuranaki | 2.38 | 168 | PN | Pn | 12 25 42.1 | -1.0 |
| PNHZ | Pukenui | 2.44 | 180 | PN | Pn | 12 25 42.5 | -1.2 |
| TSZ | Takapari Road | 2.59 | 184 | PN | Pn | 12 25 43.9 | -1.6 |
| PXZ | Pawanui | 2.61 | 169 | PN | Pn | 12 25 43.8 | -1.8 |
| PXZ | | | | AML | AML | 12 26 19.8 | |
| PRHZ | Porangahau | 2.81 | 173 | PN | Pn | 12 25 46.2 | -1.8 |
| DVHZ | Dannevirke | 2.83 | 181 | PN | Pn | 12 25 46.1 | -2.1 |
| POWZ | Post Office Ro | 2.94 | 187 | PN | Pn | 12 25 47.3 | -2.2 |
| ANWZ | Angora Road | 2.99 | 176 | PN | Pn | 12 25 48.2 | -1.9 |
| PRWZ | Pori Road | 3.09 | 184 | PN | Pn | 12 25 49.2 | -2.1 |
| BFZ | Birch Farm | 3.21 | 180 | PN | Pn | 12 25 50.2 | -2.6 |
| MRZ | Mangatainoka R | 3.23 | 189 | ⇑PN | Pn | 12 25 50.2 | -2.9 |
| MRZ | | | | AML | AML | 12 26 31.4 | |
| TIWZ | Tintock | 3.31 | 184 | PN | Pn | 12 25 51.4 | -2.7 |
| OGWZ | Otaki Gorge | 3.44 | 193 | PN | Pn | 12 25 53.0 | -2.7 |
| HOWZ | Holdsworth Sta | 3.47 | 189 | PN | Pn | 12 25 52.9 | -3.2 |
| KIW | Kapiti Island | 3.54 | 196 | PN | Pn | 12 25 53.8 | -3.0 |
| MTW | Mount Morrison | 3.73 | 188 | PN | Pn | 12 25 55.6 | -3.6 |
| CAW | Cannon Point | 3.74 | 193 | PN | Pn | 12 25 55.9 | -3.5 |
| TRWZ | Traveller | 3.94 | 186 | PN | Pn | 12 25 58.3 | -3.7 |
| WEL | Wellington | 3.97 | 196 | PN | Pn | 12 25 58.7 | -3.6 |
| MSWZ | Moikau Station | 4.01 | 190 | PN | Pn | 12 25 58.9 | -3.9 |
| TCW | Tory Channel | 4.03 | 201 | PN | Pn | 12 25 59.8 | -3.2 |
| PLWZ | Palliser | 4.16 | 190 | PN | Pn | 12 26 00.6 | -4.1 |
| TUWZ | Tuamarina | 4.33 | 203 | PN | Pn | 12 26 03.2 | -3.6 |
| NNZ | Nelson | 4.34 | 210 | PN | Pn | 12 26 03.2 | -3.8 |
| KHZ | Kahutara | 5.35 | 202 | PN | Pn | 12 26 15.7 | -4.3 |

**IDC 09 12:53:04.0**±1.4**, 26°.29N×144°.61E, h0km, mb3.5**/3**, mb1 3.9**/4**, mb1mx3.5**/37**, mbtmp3.6**/4**, ML3.7**/1**, Error ellipse: s-maj=72.5km s-min=25.4km az=100.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MJAR | Matsushiro Arr | 11.59 | 333 | Pn | Pn | 12 55 49.2 | -1.5 |
| | 0.5nm,0.3s,baz=152,slow=11,SNR=5.9 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 21.82 | 106 | T | T | 13 20 49.4 | |
| | baz=292 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 21.82 | 106 | T | T | 13 20 49.2 | |
| | baz=292 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 21.83 | 106 | T | T | 13 20 54.0 | |
| | baz=292 | | | | | | |
| WRA | Warramunga Arr | 47.02 | 193 | P | P | 13 01 37.2 | -0.1 |
| | 1.0nm,0.7s,baz=18,slow=8.4,SNR=13 | | | | | | |
| ASAR | Alice Springs | 50.73 | 193 | P | P | 13 02 05.5 | -0.3 |
| | 0.2nm,0.5s,baz=7.9,slow=8.1,SNR=5.2 | | | | | | |
| ILAR | Eielson Array | 57.39 | 28 | P | P | 13 02 54.2 | +0.3 |
| | 0.4nm,0.9s,baz=253,slow=6.1,SNR=4.8 | | | | | | |

*SJA **09** 13:01:32.8±0.8, 33°.81S×72°.68W, h10km, ML3.9, MW3.4*
*GUC **09** 13:01:37.4±0.4, 34°.13S×72°.09W, h28km±6km, ML3.9*
**ISC 09 13:01:34.3**±2.1**, 34°.11S**±0°.06×**72°.4W**±0°.1**, h17km, n16, σ2$^s$.16**/22**, 3C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHPI | Pichilemu | 0.44 | 129 | iP | Pn | 13 01 44.5 | -1.4 |
| TALC | Talca | 1.44 | 153 | ⇓iP | Pg | 13 02 01.4 | -0.6 |
| SAN | Santiago | 1.61 | 66 | ⇑iP | Pb | 13 02 02.3 | -1.2 |
| SAN | | | | iS | Sn | 13 02 22.0 | -0.2 |
| ROC1 | El Roble | 1.63 | 46 | eP | Pb | 13 02 02.6 | -1.5 |
| ROC1 | | | | ⇓eS | Sg | 13 02 26.1 | -0.9 |
| CLCH | Cerro Calan | 1.72 | 66 | ⇑iP | Pb | 13 02 03.9 | -1.6 |
| CLCH | | | | iS | Sg | 13 02 32.1 | +2.2 |
| CLCH | | | | AML | AML | 13 02 34.6 | |
| | comp=N,1μm,0.5s | | | | | | |
| PEL | Peldehue | 1.74 | 57 | ⇑iP | Pb | 13 02 04.7 | -1.1 |
| PEL | | | | iS | Sb | 13 02 26.3 | -1.1 |
| PEL | | | | AML | AML | 13 02 35.6 | |
| | comp=E,7μm,0.4s | | | | | | |
| AUSP | Uspallata | 3.17 | 54 | eP | Pb | 13 02 26.4 | -3.9 |
| AUSP | | | | eS | Sb | 13 03 10.3 | +1.7 |
| RTLS | Leoncito | 3.50 | 50 | eP | Pb | 13 02 31.2 | -4.7 |
| RTLS | | | | eS | Sg | 13 03 23.2 | -3.4 |
| CANA | Caviahue | 3.92 | 164 | eP | Pb | 13 02 41.4 | -1.6 |
| CANA | | | | eS | Sg | 13 03 43.2 | +2.9 |
| RTCV | Cerro Valdivia | 3.96 | 56 | eP | Pb | 13 02 40.6 | -3.0 |
| RTCV | | | | eS | Sb | 13 03 34.1 | +2.9 |
| CFAA | Coronel Fontan | 4.32 | 56 | eP | Pn | 13 02 40.8 | +1.6 |
| CFAA | | | | eS | Sb | 13 03 45.9 | +4.3 |
| RTLL | Cerro Villicun | 4.33 | 51 | eP | Pn | 13 02 42.3 | +2.9 |
| RTLL | | | | eS | Sb | 13 03 43.2 | +1.2 |
| AMOG | MOGNA | 4.58 | 47 | eP | Pn | 13 02 44.8 | +1.9 |
| ACAN | Cantantal | 4.75 | 69 | eP | Pn | 13 02 47.9 | +2.6 |
| AGUA | GUANDACOL | 5.70 | 37 | eP | Pn | 13 02 59.8 | +1.6 |
| TCA | Tanti | 7.15 | 69 | eP | Pn | 13 03 18.8 | +0.6 |
| TCA | | | | IAML | | 13 05 23.8 | |
| | comp=Z,16nm,0.5s | | | | | | |

*IDC **09** 13:02:58.0±1.4, 23°.24N×124°.58E, h0km, mb3.4/3, mb1 3.4/4, mb1mx3.3/43, mbtmp3.3/4, ML2.3/1, MS2.9/4, Ms1 3.0/4, ms1mx2.6/28, Error ellipse: s-maj=45.7km s-min=26.0km az=76.0*
*ISCJB **09** 13:02:59.6±1.3, 23°.24N±0°.04×124°.56E±0°.04, h24km±9km, mb3.4/3, MS2.9/3, Error ellipse: s-maj=7.5km s-min=6.7km az=169.3*
*JMA **09** 13:03:01.2±0.2, 23°.27N×124°.55E, h41km, M3.2*
**ISC 09 13:03:00.1**±2.1**, 23°.30N**±0°.07×**124°.57E**±0°.04**, h17km**±12km**, n22, σ0$^s$.64**/31**, mb3.5**/3**, MS3.0**/3**, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HATJ | Hateruma jima | 1.03 | 317 | P | Pn | 13 03 19.5 | -0.2 |
| HATJ | | | | S | Sb | 13 03 32.7 | +0.1 |
| JKRS | Kuro-shima | 1.06 | 331 | P | Pg | 13 03 20.7 | -0.1 |
| JKRS | | | | eS | Sn | 13 03 34.7 | +0.1 |
| JIJ | Ishigaki jima | 1.13 | 340 | P | Pn | 13 03 21.1 | 0.0 |
| JIJ | | | | eS | Sb | 13 03 35.3 | -0.2 |
| IRIF | Iriomote-Funau | 1.28 | 324 | P | Pb | 13 03 23.7 | -0.1 |
| IRIF | | | | S | Sn | 13 03 40.0 | -0.1 |
| JISG | Ishigakijimahi | 1.30 | 350 | P | Pn | 13 03 23.7 | +0.2 |
| JISG | | | | S | Sn | 13 03 40.9 | +0.4 |
| JTJ | Tarama | 1.34 | 5 | P | Pb | 13 03 24.8 | 0.0 |
| JTJ | | | | S | Sb | 13 03 42.3 | +0.6 |
| JIRB | Irabujima | 1.62 | 20 | P | Pn | 13 03 28.2 | +0.3 |
| JIRB | | | | S | Sn | 13 03 48.9 | +0.5 |
| JOGS | Gusukube | 1.64 | 28 | P | Pn | 13 03 29.0 | +0.7 |
| JOGS | | | | eS | Sn | 13 03 49.4 | +0.4 |
| JMJ | Miyako jima 2 | 1.65 | 24 | P | Pn | 13 03 28.7 | +0.4 |
| JMJ | | | | S | Sb | 13 03 49.9 | -0.6 |
| JIKM | Ikemajima | 1.73 | 21 | P | Pn | 13 03 29.8 | +0.3 |
| JIKM | | | | S | Sb | 13 03 52.4 | -0.6 |
| YOJ | Yonaguni jima | 1.83 | 309 | P | Pn | 13 03 31.3 | +0.4 |
| YOJ | | | | S | Sn | 13 03 52.3 | -1.4 |
| JYNG | Yonagunijimaku | 1.87 | 308 | P | Pn | 13 03 31.8 | +0.4 |
| JYNG | | | | S | Sn | 13 03 53.6 | -1.1 |
| JKE | Kume jima 2 | 3.62 | 33 | P | Pn | 13 03 54.9 | -0.6 |
| JKE | | | | eS | Sn | 13 04 36.1 | -1.8 |
| JNTH | Nagotoyohara | 4.48 | 44 | P | Pn | 13 04 06.9 | -0.4 |
| JOW | Kunigami | 4.87 | 43 | Pn | Pn | 13 04 12.9 | +0.3 |
| | 0.2nm,0.3s,baz=112,slow=27,SNR=19 | | | | | | |
| KSRS | Korea Array | 14.40 | 11 | LR | LR | 13 12 15.9 | |
| | comp=Z,37nm,18.9s,baz=258,slow=39 | | | | | | |
| CMAR | Chiang Mai Arr | 24.41 | 263 | LR | LR | 13 18 36.4 | |
| | comp=Z,9.4nm,18.3s,baz=10.0,slow=38 | | | | | | |
| SONM | Songino Array | 28.45 | 334 | LR | LR | 13 19 48.5 | |
| | comp=Z,39nm,18.1s,baz=329,slow=35 | | | | | | |
| YAK | Yakutsk | 38.87 | 4 | LR | LR | 13 26 55.5 | |
| | comp=Z,40nm,18.2s,baz=199,slow=37 | | | | | | |
| MKAR | Makanchi Array | 41.13 | 315 | P | P | 13 10 44.2 | +0.9 |
| | 0.8nm,0.7s,baz=112,slow=8.0,SNR=6.0 | | | | | | |
| WRA | Warramunga Arr | 44.03 | 167 | P | P | 13 11 06.7 | -0.4 |
| | 0.4nm,0.7s,baz=347,slow=9.0,SNR=3.9 | | | | | | |
| ASAR | Alice Springs | 47.56 | 168 | P | P | 13 11 35.2 | +0.2 |
| | 0.3nm,0.7s,baz=352,slow=12,SNR=5.0 | | | | | | |

*NIED **09** 13:16:00, 26°.70N×144°.50E, h5km, Mw4.3 Best double couple: $M_0$3.03000×$10^{15}$ NP1:φs154.00000°, δ41.00000°, λ-49.00000°. NP2:φs285.00000°, δ60.00000°, λ-120.00000°.*
*BJI **09** 13:16:16.0, 25°.95N×144°.67E, h21km, mb4.6/38, mB4.8/25, Ms4.4/18, Ms7 4.4/12*
*IDC **09** 13:16:16.9±0.6, 26°.20N×144°.57E, h0km, mb4.4/21, mb1 4.6/22, mb1mx4.4/44, mbtmp4.4/22, ML3.6/1, MS3.3/7, Ms1 3.3/7, ms1mx2.9/40, Error ellipse: s-maj=17.4km s-min=14.6km az=109.0*
*JMA **09** 13:16:17.7±0.3, 26°.74N×144°.53E, h6km, M4.8*
*NEIC **09** 13:16:18.4±0.3, 26°.31N×144°.56E, h10km, mb4.9/20, MW4.3(NIED), Error ellipse: s-maj=8.3km s-min=7.8km az=112.0*
*ISCJB **09** 13:16:19.2±1.3, 26°.72N±0°.04×144°.50E±0°.04, h11km±8km, mb4.6/51, MS3.3/7, Error ellipse: s-maj=6.8km s-min=6.2km az=141.3*
*MOS **09** 13:16:20.5±1.5, 26°.29N×144°.51E, h33km, mb4.8/38, Error ellipse: s-maj=12.4km s-min=6.7km az=115.1*
**ISC 09 13:16:21.7**±0.7**, 26°.60N**±0°.06×**144°.52E**±0°.06**, h23km**±3km**, h23km:pP-P, n165, σ1$^s$.48**/164**, mb4.7**/51**, MS3.3**/7**, 7C-3D, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHHJ | Haha-jima-NKT | 2.09 | 271 | P | Pn | 13 16 54.1 | -1.3 |
| JHHJ | | | | eS | Sn | 13 17 21.6 | +0.9 |
| CBIJ | Chichi jima | 2.14 | 284 | P | Pn | 13 16 54.6 | -1.4 |
| CBIJ | Chichi jima | 2.14 | 284 | ePn | Pn | 13 16 54.8 | -1.3 |
| CBIJ | | | | eSn | Sn | 13 17 23.9 | +2.0 |
| JHJ | Hachijo jima 2 | 7.69 | 329 | Pn | Pn | 13 18 18.4 | +6.2 |
| | 12nm,0.3s,baz=244,slow=22,SNR=1.9 | | | | | | |
| JHJ | | | | Sn | Sn | 13 19 35.5 | -3.2 |
| | 17nm,0.3s,baz=62,slow=23,SNR=2.3 | | | | | | |
| BSO1 | Boso 1 | 8.59 | 340 | eS | Sn | 13 20 00.3 | +0.3 |
| BSO2 | Boso 2 | 8.75 | 339 | eS | Sn | 13 20 04.5 | +0.2 |
| JHU | Hanno | 10.25 | 335 | P | Pn | 13 18 46.7 | -0.7 |
| JHU | | | | S | Sn | 13 20 37.5 | -4.2 |
| JYT | Yasato | 10.29 | 340 | P | Pn | 13 18 48.0 | +0.2 |
| JYT | | | | S | Sn | 13 20 39.1 | -3.3 |
| JRY | Ryogami san | 10.54 | 334 | P | Pn | 13 18 51.1 | -0.3 |
| JRY | | | | S | Sn | 13 20 45.4 | -3.4 |
| MJAR | Matsushiro Arr | 11.28 | 333 | Pn | Pn | 13 19 01.0 | -0.4 |
| | 2.6nm,0.3s,baz=160,slow=11,SNR=58 | | | | | | |
| MJAR | Matsushiro Arr | 11.28 | 333 | P | Pn | 13 19 01.0 | -0.4 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| MAJO | Matsushiro | 11.28 | 333 d | iP | Pn | 13 19 01.3 | -0.2 |
| MAJO | Matsushiro | 11.28 | 333 | ePn | Pn | 13 19 01.1 | -0.4 |
| MAT | Matsushiro | 11.28 | 333 | P | Pn | 13 19 00.9 | -0.6 |
| MAT | | | | S | Sn | 13 21 05.7 | -1.1 |
| JMK | Ichinoseki | 12.63 | 348 | P | Pn | 13 19 17.8 | -2.1 |
| JMK | | | | eS | Sn | 13 21 33.1 | -6.7 |
| GUMO | Guam | 12.95 | 178 | LR | LR | 13 22 51.0 | |
| | comp=Z,76nm,21.1s,baz=358,slow=31 | | | | | | |
| ERM | Erimo | 15.42 | 356 | eP | Pn | 13 19 56.1 | -1.6 |
| YUK | Yuzh-Kuril'sk | 17.43 | 3 c | iP | Pn | 13 20 23.6 | +0.3 |
| YUK | | | | iS | Sn | 13 23 32.6 | -4.0 |
| YUK | | | | pmax | pmax | | |
| | comp=N,38nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,65nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,41nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,261nm,2.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,547nm,2.0s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,355nm,2.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,137nm,11.0s | | | | | | |
| ASAJ | Asahikawa | 17.55 | 355 | ePn | Pn | 13 20 24.5 | -0.2 |
| | comp=Z,19nm,1.0s | | | | | | |
| KSRS | Korea Array | 17.73 | 312 | P | P | 13 20 28.5 | +0.8 |
| | comp=Z,0.2nm,0.3s,baz=117,slow=13,SNR=20 | | | | | | |
| KSAR | Wonju Array Be | 17.75 | 312 | P | P | 13 20 28.5 | +0.6 |
| KSAR | Wonju Array Be | 17.75 | 312 | P | P | 13 20 28.5 | +0.6 |
| INCN | Inchon | 18.61 | 310 | P | Pn | 13 20 40.5 | +2.6 |
| | comp=Z,29nm,0.7s | | | | | | |
| KUR | Kuril'sk | 18.79 | 7 d | iP | P | 13 20 36.0 | -3.3 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,188nm,2.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,3.0nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,199nm,11.0s | | | | | | |
| USRK | Ussuriysk Ar. | 20.27 | 333 | P | Pn | 13 20 58.1 | +0.4 |
| | comp=Z,8.5nm,0.8s,baz=152,slow=12,SNR=9.6 | | | | | | |
| YSS | Yuzh-Sakhalins | 20.37 | 357 | eP | P | 13 20 57.0 | +0.5 |
| YSS | | | | e | | 13 21 38.0 | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 20.37 | 357 | eP | P | 13 20 57.6 | +1.1 |
| | comp=Z,22nm,1.1s | | | | | | |
| SSLB | Suanglung | 21.50 | 268 | eP | P | 13 21 08.5 | -0.6 |
| | comp=Z,327nm,2.5s | | | | | | |
| MDJ | Mudanjiang | 21.63 | 330 | P | P | 13 21 12.6 | +2.4 |
| MDJ | | | | PMZ | | | |
| | comp=Z,17nm,0.9s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,68nm,4.9s | | | | | | |
| MDJ | Mudanjiang | 21.63 | 330 | eP | P | 13 21 09.4 | -0.8 |
| | comp=Z,23nm,1.0s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 21.66 | 104 | T | T | 13 43 59.3 | |
| | baz=290,slow=74,SNR=7.0 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 21.67 | 104 | T | T | 13 43 54.9 | |
| | baz=290,slow=74,SNR=12 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 21.68 | 104 | T | T | 13 44 03.8 | |
| | baz=290,slow=74,SNR=12 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 21.98 | 107 | T | T | 13 44 13.1 | |
| | baz=294,slow=75,SNR=15 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 21.99 | 107 | T | T | 13 44 14.7 | |
| | baz=294,slow=75,SNR=6.1 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 22.00 | 107 | T | T | 13 44 03.8 | |
| | baz=294,slow=75,SNR=5.0 | | | | | | |
| HABR | Khabarovsk | 23.06 | 344 | eP | P | 13 21 23.6 | -1.7 |
| HABR | | | | e*PP | pP | 13 21 32.5 | +0.7 |
| HABR | | | | e*SP | sP | 13 21 36.8 | +2.0 |
| HABR | | | | ePPP | PPP | 13 21 56.5 | |
| HABR | | | | | | 13 25 14.2 | |
| HABR | | | | eS | S | 13 25 30.9 | -3.9 |
| HABR | | | | e*SS | sS | 13 25 46.5 | +0.4 |
| HABR | | | | eSSS | SSS | 13 26 17.5 | |
| HABR | | | | e | | 13 32 35.3 | |
| HABR | | | | pmax | pmax | | |
| | comp=E,9.0nm,0.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,40nm,2.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,40nm,2.5s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,66nm,16.0s | | | | | | |
| CN2 | Changchun | 23.09 | 323 | eP | P | 13 21 28.2 | +2.5 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| KLR | Kul'dur | 24.67 | 340 | eP | P | 13 21 39.2 | -1.5 |
| TIA | Tai'an | 25.20 | 299 | ⇑P | P | 13 21 46.8 | +1.2 |
| TIA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| PETK | Petropavlovsk- | 28.25 | 17 | LR | LR | 13 32 08.0 | |
| | comp=Z,45nm,22.0s,baz=194,slow=33 | | | | | | |
| HHC | Hu-ho-hao-te | 30.67 | 306 | eP | P | 13 22 37.6 | +2.9 |
| HHC | | | | S | S | 13 27 39.7 | +3.7 |
| HHC | | | | PMZ | | | |
| | comp=Z,24nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,130nm,7.4s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,99nm,11.1s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,300nm,14.6s | | | | | | |
| MYLDM | Lahad Datu | 32.72 | 234 | eP | P | 13 22 51.4 | -1.4 |
| | comp=Z,27nm,1.2s | | | | | | |
| GYA | Guiyang | 33.79 | 278 | eP | P | 13 23 02.0 | -0.2 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| LZH | Lanzhou | 35.79 | 295 | eP | P | 13 23 19.0 | -0.4 |
| LZH | | | | pP | pP | 13 23 26.1 | -0.3 |
| LZH | | | | sP | sP | 13 23 28.9 | -0.3 |
| LZH | | | | PMZ | | | |
| | comp=Z,14nm,1.0s | | | | | | |
| CD2 | Chengdu | 35.85 | 287 | eP | P | 13 23 19.0 | -0.9 |
| CD2 | | | | pP | pP | 13 23 25.7 | -1.1 |
| CD2 | | | | PP | PnPn | 13 24 40.8 | +0.5 |
| CD2 | | | | S | S | 13 28 56.7 | +0.2 |
| CD2 | | | | sS | sS | 13 29 08.1 | +0.1 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| ULN | Ulaanbaatar | 36.12 | 316 | eP | P | 13 23 23.4 | +1.3 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,25nm,1.6s | | | | | | |
| ULN | Ulaanbaatar | 36.12 | 316 | eP | P | 13 23 23.4 | +1.3 |
| | comp=Z,25nm,1.6s | | | | | | |
| SONA1 | Songino Array | 36.52 | 316 | eP | P | 13 23 27.2 | +1.7 |
| SONM | Songino Array | 36.52 | 316 | P | P | 13 23 27.2 | +1.7 |
| | comp=Z,4.2nm,0.8s,baz=128,slow=9.7,SNR=21 | | | | | | |
| SONM | | | | PcP | PcP | 13 25 49.2 | +0.4 |
| | comp=Z,0.3nm,0.4s,baz=38,slow=2.6,SNR=3.1 | | | | | | |
| SONM | | | | LR | LR | 13 38 30.6 | |
| | comp=Z,40nm,18.9s,baz=46,slow=36 | | | | | | |
| SONM | Songino Array | 36.52 | 316 | P | P | 13 23 27.2 | +1.7 |
| SONM | | | | | | 13 25 49.2 | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,41nm,18.9s | | | | | | |
| YAK | Yakutsk | 36.80 | 348 | eP | P | 13 23 29.2 | +1.8 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| KMI | Kunming | 37.50 | 277 | P | P | 13 23 29.9 | -4.3 |
| KMI | | | | pP | pP | 13 23 40.2 | -1.0 |
| KMI | | | | sP | sP | 13 23 45.5 | +1.4 |
| KMI | | | | PP | PnPn | 13 25 02.0 | +1.2 |
| KMI | | | | S | S | 13 29 20.7 | -1.5 |
| KMI | | | | PMZ | | | |
| | comp=Z,8.0nm,1.4s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,120nm,3.2s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,94nm,15.4s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,110nm,10.1s | | | | | | |
| GTA | Gaotai | 39.23 | 300 | eP | P | 13 23 48.2 | -0.3 |
| GTA | | | | pP | pP | 13 23 54.1 | -1.4 |
| GTA | | | | sP | sP | 13 23 57.1 | -1.2 |
| GTA | | | | S | S | 13 29 48.8 | +1.0 |
| GTA | | | | SS | SS | 13 32 35.6 | -5.6 |
| GTA | | | | PMZ | | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,65nm,5.2s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,98nm,16.2s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,100nm,18.5s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,180nm,15.9s | | | | | | |
| ZAK | Zakamensk | 39.36 | 318 | eP | P | 13 23 50.5 | +1.1 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| KAPI | Kappang | 39.53 | 221 | P | P | 13 23 47.8 | -3.2 |
| | comp=Z,8.8nm,0.8s,baz=32,slow=21,SNR=6.5 | | | | | | |
| CHTO | Chiang Mai | 42.57 | 269 | eP | P | 13 24 14.6 | -1.5 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| CHTO | Chiang Mai | 42.57 | 269 | eP | P | 13 24 14.6 | -1.5 |
| | comp=Z,6.3nm,1.0s | | | | | | |
| CMAR | Chiang Mai Arr | 42.69 | 269 | P | P | 13 24 15.9 | -1.2 |
| | comp=Z,2.5nm,0.9s,baz=53,slow=8.1,SNR=13 | | | | | | |
| CMAR | | | | LR | LR | 13 41 29.0 | |
| | comp=Z,36nm,19.4s,baz=70,slow=35 | | | | | | |
| CMAR | Chiang Mai Arr | 42.69 | 269 | iP | P | 13 24 16.3 | -0.8 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| BILL | Bilibino | 43.50 | 12 | eP | P | 13 24 25.9 | +3.0 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| MYKOM | Kota Tinggi | 46.16 | 245 | eP | P | 13 24 43.0 | -1.8 |
| | comp=Z,16nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 47.29 | 193 d | iP | P | 13 24 48.8 | -4.7 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,25nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 47.29 | 193 | eP | P | 13 24 49.1 | -4.5 |
| | comp=Z,15nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 47.30 | 193 | P | P | 13 24 49.1 | -4.5 |
| | comp=Z,11nm,0.8s,baz=12,slow=8.7,SNR=63 | | | | | | |
| WRA | Warramunga Arr | 47.30 | 193 | P | P | 13 24 49.1 | -4.5 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| WMQ | Urumqi | 48.55 | 306 | P | P | 13 25 05.0 | +1.8 |
| WMQ | | | | PMZ | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| LEM | Lembang | 48.82 | 232 | LR | LR | 13 48 41.6 | |
| | comp=Z,26nm,18.1s,slow=40 | | | | | | |
| PSI | Prapat | 49.65 | 249 | eP | P | 13 25 09.6 | -2.4 |
| PSI | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| PSI | Prapat | 49.65 | 249 | eP | P | 13 25 09.6 | -2.4 |
| | comp=Z,14nm,1.0s | | | | | | |
| TAPN | Taplejung | 50.24 | 284 | eP | P | 13 25 16.9 | +0.2 |
| ODAN | Odare | 50.63 | 284 | eP | P | 13 25 19.8 | +0.3 |
| AS01 | Alice Springs | 51.00 | 192 | eP | P | 13 25 16.5 | -5.4 |
| ASAR | Alice Springs | 51.01 | 193 | P | P | 13 25 17.1 | -4.8 |
| | comp=Z,1.6nm,0.7s,baz=15,slow=11,SNR=29 | | | | | | |
| ASAR | | | | PcP | PcP | 13 26 35.6 | -2.2 |
| | comp=Z,1.1nm,1.0s,baz=19,slow=4.9,SNR=4.5 | | | | | | |
| ASAR | Alice Springs | 51.01 | 193 | P | P | 13 25 17.2 | -4.8 |
| ASAR | | | | | | 13 26 35.7 | |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| ZAA0 | Zalesovo Array | 51.23 | 319 | eP | P | 13 25 24.4 | +1.1 |
| ZALV | Zalesovo Beam | 51.23 | 319 | P | P | 13 25 25.2 | +1.9 |
| | comp=Z,3.3nm,0.6s,baz=106,slow=7.0,SNR=13 | | | | | | |
| ZALV | | | | PcP | PcP | 13 26 38.2 | -0.1 |
| | comp=Z,1.3nm,0.6s,baz=76,slow=0.6,SNR=4.2 | | | | | | |
| ZALV | Zalesovo Beam | 51.23 | 319 | iP | P | 13 25 26.2 | +2.9 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| RAMN | Ramite | 51.30 | 284 | eP | P | 13 25 23.9 | -0.6 |
| GUN | Gumba | 51.70 | 286 | eP | P | 13 25 28.2 | +0.5 |
| | comp=Z,47nm,0.9s | | | | | | |
| PKI | Pulchoki | 52.19 | 285 | eP | P | 13 25 30.8 | -0.5 |
| | comp=Z,16nm,0.9s | | | | | | |
| PKIN | Phulchoki | 52.20 | 285 | eP | P | 13 25 31.0 | -0.3 |
| KKN | Kakani | 52.25 | 286 | eP | P | 13 25 31.1 | -0.5 |
| | comp=Z,20nm,0.9s | | | | | | |
| MKAR | Makanchi Array | 52.40 | 310 | P | P | 13 25 32.6 | +0.5 |
| | comp=Z,1.2nm,0.5s,baz=85,slow=10,SNR=6.7 | | | | | | |
| MKAR | Makanchi Array | 52.40 | 310 | iP | P | 13 25 34.0 | +1.8 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 52.40 | 310 | eP | P | 13 25 34.1 | +2.0 |
| DMN | Daman | 52.44 | 285 | eP | P | 13 25 33.0 | -0.1 |
| MAKZ | Makanchi | 52.61 | 310 | eP | P | 13 25 35.7 | +1.9 |
| GKN | Gorkha | 52.75 | 286 | eP | P | 13 25 35.4 | +0.2 |
| | comp=Z,35nm,1.2s | | | | | | |
| KDAK | Kodiak Island | 53.52 | 36 | P | P | 13 25 41.7 | +1.5 |
| | comp=Z,9.7nm,0.8s,baz=248,slow=7.9,SNR=5.8 | | | | | | |
| KDAK | Kodiak Island | 53.52 | 36 | iP | P | 13 25 43.4 | +3.2 |
| PDGK | Podgornoye | 54.53 | 306 | P | P | 13 25 48.7 | +0.9 |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| KURK | Kurchatov | 54.82 | 315 | eP | P | 13 25 49.7 | -0.1 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| KURK | Kurchatov | 54.82 | 315 | eP | P | 13 25 49.7 | -0.1 |
| | comp=Z,7.1nm,0.6s | | | | | | |
| MDM | Murphy Dome | 56.61 | 28 | eP | P | 13 26 03.5 | +1.0 |
| | comp=Z,75nm,2.8s | | | | | | |
| IL1 | Eielson Array | 57.16 | 28 | eP | P | 13 26 05.7 | -0.6 |
| ILAR | Eielson Array | 57.16 | 28 | P | P | 13 26 05.9 | -0.4 |
| | comp=Z,2.5nm,0.9s,baz=251,slow=6.1,SNR=29 | | | | | | |
| ILAR | Eielson Array | 57.16 | 28 | P | P | 13 26 05.9 | -0.4 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| KSH | Kashi | 57.62 | 302 | eP | P | 13 26 14.5 | +4.3 |
| KSH | | | | esP | sP | 13 26 24.9 | +4.7 |
| KSH | | | | ePP | PP | 13 28 27.8 | +10 |
| KSH | | | | PcS | PcS | 13 31 04.5 | -0.1 |
| KSH | | | | S | S | 13 34 13.9 | +6.7 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| KSH | | | | ScS | ScS | 13 36 00.0 | +1.4 |
| KSH | | | | SS | SS | 13 38 07.9 | +11 |
| KSH | | | | PMZ | | | |
| | comp=Z,57nm,4.0s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,130nm,6.1s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,72nm,4.0s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,110nm,5.3s | | | | | | |
| OTUK | Ortayu | 59.05 | 312 | P | P | 13 26 20.6 | +0.7 |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| VOSK | Vostochnaya | 59.48 | 317 | P | P | 13 26 23.2 | +0.4 |
| VOSK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| CHKZ | Chkalovo | 59.63 | 319 | P | P | 13 26 26.2 | +2.5 |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| BVA0 | Borovoye Array | 59.81 | 318 | P | P | 13 26 27.0 | +1.9 |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| BRVK | Borovoye | 59.88 | 318 | *ce*P | P | 13 26 26.1 | +0.6 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| BRVK | Borovoye | 59.88 | 318 | P | P | 13 26 24.6 | -0.9 |
| | comp=Z,10.0nm,0.8s | | | | | | |
| DAWY | Dawson | 60.36 | 29 | *e*P | P | 13 26 29.5 | +0.8 |
| | comp=Z,51nm,2.1s | | | | | | |
| ZRNK | Zerenda | 60.66 | 318 | P | P | 13 26 31.3 | +0.5 |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| KK31 | Karatay Array | 61.06 | 306 | *i* P | P | 13 26 34.4 | +0.6 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KKAR | Karatay Array | 61.06 | 306 | *e*P | P | 13 26 34.5 | +0.7 |
| KKAR | Karatay Array | 61.06 | 306 | *e*P | P | 13 26 34.5 | +0.7 |
| INK | Inuvik | 62.62 | 24 | P | P | 13 26 44.5 | +0.8 |
| | comp=Z,3.0nm,0.7s,baz=306,slow=6.8,SNR=13 | | | | | | |
| INK | Inuvik | 62.62 | 24 | P | P | 13 26 44.5 | +0.8 |
| INK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| PALK | Pallekele | 63.39 | 265 | LR | LR | 13 57 28.4 | |
| | comp=Z,26nm,18.1s,baz=116,slow=39 | | | | | | |
| SVE | Sverdlovsk | 64.88 | 323 | *e*P | P | 13 26 59.9 | +1.0 |
| ARU | Arti | 66.09 | 323 | *c i*P | P | 13 27 09.5 | +2.8 |
| ARU | | | | | | 13 29 33.1 | |
| ARU | | | | S | S | 13 35 57.1 | +3.6 |
| ARU | | | | SS | SS | 13 40 07.8 | -0.8 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| ARU | Arti | 66.09 | 323 | *e*P | P | 13 27 06.3 | -0.4 |
| | comp=Z,15nm,1.1s | | | | | | |
| ABKAR | Akbulak array | 66.93 | 315 | *e*P | P | 13 27 11.7 | -0.5 |
| AKTO | Aktyubinsk | 67.83 | 316 | P | P | 13 27 19.9 | +2.0 |
| | comp=Z,3.9nm,0.9s,baz=81,slow=6.9,SNR=10 | | | | | | |
| AKTO | Aktyubinsk | 67.83 | 316 | P | P | 13 27 20.1 | +2.2 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| YKA | Yellowknife Ar | 71.58 | 29 | P | P | 13 27 41.3 | +0.5 |
| | comp=Z,4.4nm,0.8s,baz=294,slow=5.6,SNR=8.0 | | | | | | |
| YKA | Yellowknife Ar | 71.58 | 29 | P | P | 13 27 41.3 | +0.5 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| RAR | Rarotonga | 71.91 | 126 | LR | LR | 13 52 27.3 | |
| | comp=Z,31nm,20.3s,baz=172,slow=30 | | | | | | |
| ARCES | ARCESS Array B | 74.69 | 341 | P | P | 13 28 01.7 | +2.7 |
| | comp=Z,5.7nm,1.0s,baz=341,slow=15,SNR=4.5 | | | | | | |
| ARCES | ARCESS Array B | 74.69 | 341 | P | P | 13 28 01.7 | +2.7 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| IANJ | Anjilo | 75.55 | 303 | *e*P | P | 13 28 05.4 | +0.5 |
| CMB | Columbia Colle | 77.85 | 54 | *e*P | P | 13 28 16.7 | -1.0 |
| CMB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| CMB | Columbia Colle | 77.85 | 54 | *e*P | P | 13 28 16.6 | -1.0 |
| | comp=Z,6.0nm,1.1s | | | | | | |
| OBN | Obninsk | 78.11 | 326 | *e*P | P | 13 28 20.6 | +1.9 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.4s | | | | | | |
| IPAR | Pars | 78.43 | 298 | *e*P | P | 13 28 21.1 | -0.3 |
| ISRV | Sarvestan | 78.57 | 297 | *e*P | P | 13 28 20.8 | -1.4 |
| IPIR | Pirpir | 78.95 | 301 | *e*P | P | 13 28 23.1 | -1.1 |
| NV01 | Mina Array Sit | 79.18 | 52 | *e*P | P | 13 28 25.4 | +0.2 |
| NVAR | Mina Array Bea | 79.18 | 52 | P | P | 13 28 25.8 | +0.6 |
| | comp=Z,3.7nm,0.8s,baz=270,slow=6.5,SNR=20 | | | | | | |
| FINES | FINESS Array B | 79.30 | 335 | P | P | 13 28 25.4 | +0.3 |
| | comp=Z,4.3nm,0.7s,baz=87,slow=5.0,SNR=17 | | | | | | |
| FINES | FINESS Array B | 79.30 | 335 | *i* P | P | 13 28 28.0 | +2.9 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| IKAZ | Kazeroun | 79.42 | 298 | *e*P | P | 13 28 26.8 | 0.0 |
| LRM | Limekiln Ridge | 79.80 | 44 | *e*P | P | 13 28 26.9 | -1.6 |
| | comp=Z,17nm,0.7s | | | | | | |
| KBZ | Khabaz | 79.86 | 314 | P | P | 13 28 29.2 | +0.8 |
| | comp=Z,7.3nm,0.9s,baz=116,slow=2.9,SNR=8.3 | | | | | | |
| KBZ | Khabaz | 79.86 | 314 | P | P | 13 28 29.3 | +0.8 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| KIV | Kislovodsk | 79.90 | 314 | *e*P | P | 13 28 31.3 | +2.5 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| VSU | Vasula | 80.82 | 332 | *ce*P | P | 13 28 34.2 | +0.8 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,28nm,1.0s | | | | | | |
| DNR | Dunn Ranch,Anz | 82.53 | 56 | *e*P | P | 13 28 42.6 | -0.4 |
| AKASG | Malin Array Be | 84.24 | 325 | P | P | 13 28 50.7 | -0.7 |
| | comp=Z,3.6nm,0.6s,baz=50,slow=4.9,SNR=13 | | | | | | |
| AKASG | Malin Array Be | 84.24 | 325 | *ce*P | P | 13 28 53.4 | +2.1 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| SRU | San Rafael | 84.26 | 49 | *e*P | P | 13 28 52.4 | +0.4 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| SRU | San Rafael | 84.26 | 49 | *e*P | P | 13 28 52.4 | +0.4 |
| | comp=Z,4.1nm,0.8s | | | | | | |
| AK11 | Malin Array Si | 84.28 | 325 | *e*P | P | 13 28 53.6 | +2.0 |
| NB2 | NORSAR Subarra | 84.83 | 339 | P | P | 13 28 56.2 | +2.0 |
| | comp=Z,1.8nm,0.6s,baz=43,slow=4.8 | | | | | | |
| NOA | NORSAR Array B | 84.83 | 339 | P | P | 13 28 54.5 | +0.3 |
| | comp=Z,4.0nm,0.8s,baz=41,slow=4.9,SNR=10 | | | | | | |
| NOA | NORSAR Array B | 84.83 | 339 | P | P | 13 28 54.5 | +0.3 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| RAYN | Ar Rayn | 87.25 | 295 | *e*P | P | 13 29 06.8 | -0.2 |
| | comp=Z,6.7nm,1.0s | | | | | | |
| BRTR | Keskin Array B | 87.86 | 314 | P | P | 13 29 08.8 | -0.9 |
| | comp=Z,1.8nm,0.9s,baz=58,slow=3.1,SNR=5.3 | | | | | | |
| BRTR | Keskin Array B | 87.86 | 314 | *i* P | P | 13 29 09.1 | -0.6 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| ANMO | Albuquerque | 89.19 | 51 | *ce*P | P | 13 29 16.4 | +0.3 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,2.5s | | | | | | |
| VYHS | Vyhne | 90.85 | 327 | *e*P | P | 13 29 24.7 | +1.3 |
| VYHS | Vyhne | 90.85 | 327 | *e*P | P | 13 29 24.7 | +1.3 |
| TXAR | Lajitas Array | 94.22 | 54 | P | P | 13 29 39.6 | +0.2 |
| | comp=Z,0.8nm,0.9s,baz=323,slow=4.7,SNR=5.4 | | | | | | |
| TXAR | Lajitas Array | 94.22 | 54 | P | P | 13 29 39.6 | +0.2 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| TORD | Torodi Ar. Bea | 126.46 | 313 | PKP | PKPdf | 13 35 23.0 | -0.6 |
| | comp=Z,0.5nm,0.9s,baz=2.1,slow=3.5,SNR=2.7 | | | | | | |
| VNA2 | Neumayer--Watz | 132.86 | 192 | P | PKPdf | 13 35 33.3 | -0.8 |
| | baz=79,slow=0.8 | | | | | | |
| VNA3 | Neumayer Olymp | 133.01 | 191 | P | PKPdf | 13 35 33.2 | -1.1 |
| VNA1 | Neumayer--Stat | 133.25 | 192 | P | PKPdf | 13 35 34.2 | -0.6 |
| PTGA | Pitinga | 145.13 | 46 | PKPbc | PKPbc | 13 35 56.8 | -0.9 |
| | comp=Z,4.9nm,0.6s,baz=309,slow=5.4,SNR=11 | | | | | | |
| LPAZ | La Paz | 148.01 | 78 | PKPbc | PKPbc | 13 36 06.5 | -0.3 |
| | comp=Z,3.0nm,1.0s,baz=273,slow=3.7,SNR=6.6 | | | | | | |
| LPAZ | La Paz | 148.01 | 78 | PKP2 | PKPbc | 13 36 06.5 | -0.3 |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |

**IDC 09 13:43:35.7**±1.8**, 6°.89S**×**120°.26E, h565**km±11km**, mb3.0**/4**, mb1 3.1**/6**, mb1mx2.8**/46**, mbtmp3.9**/6**, Error ellipse: s-maj=164.5km s-min=12.2km az=56.0, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KAPI | Kappang | 1.93 | 345 | P | P | 13 44 46.3 | -0.4 |
| | 3.5nm,0.3s,baz=232,slow=5.6,SNR=9.2 | | | | | | |
| KAPI | | | | S | S | 13 45 45.3 | +1.1 |
| | baz=206,slow=21,SNR=0.9 | | | | | | |
| BATI | Baumata | 4.71 | 135 | P | P | 13 45 04.4 | +0.1 |
| | 15nm,0.3s,baz=208,slow=0.3,SNR=24 | | | | | | |
| BATI | | | | S | S | 13 46 14.5 | -1.9 |
| | 1.9nm,0.3s,baz=227,slow=6.3,SNR=1.9 | | | | | | |
| WRA | Warramunga Arr | 18.85 | 135 | P | P | 13 47 21.7 | +1.0 |
| | 0.3nm,0.3s,baz=310,slow=10,SNR=14 | | | | | | |
| ASAR | Alice Springs | 21.22 | 143 | P | P | 13 47 42.5 | +0.3 |
| | 0.8nm,0.3s,baz=319,slow=8.5,SNR=41 | | | | | | |
| MKAR | Makanchi Array | 63.18 | 332 | P | P | 13 53 08.9 | -0.1 |
| | 0.5nm,0.5s,baz=156,slow=7.5,SNR=8.8 | | | | | | |
| ZALV | Zalesovo Beam | 67.54 | 338 | P | P | 13 53 35.6 | -0.4 |
| | 1.0nm,0.3s,baz=145,slow=6.1,SNR=4.9 | | | | | | |
| KURBB | Kurchatov Arra | 67.66 | 333 | P | P | 13 53 36.5 | -0.3 |
| | 0.2nm,0.2s,baz=147,slow=5.0,SNR=2.2 | | | | | | |

*ISCJB* ***09*** *13:54:27.6±0.4, 52°.97N±0°.04×158°.66E±0°.08, h132km±2km, mb3.4/7, Error ellipse: s-maj=9.9km s-min=4.8km az=36.6*
*MOS* ***09*** *13:54:27.0±0.8, 52°.93N×158°.66E, h126km, mb4.0/2, Error ellipse: s-maj=31.3km s-min=8.8km az=74.1*
*KRSC* ***09*** *13:54:27.3±0.7, 52°.93N×158°.73E, h126km±4km, ML4.0*
*IDC* ***09*** *13:54:28.8±0.7, 53°.21N×158°.22E, h127km±6km, mb3.2/7, mb1 3.4/7, mb1mx3.2/44, mbtmp3.6/7, MS3.5/1, Ms1 3.5/1, ms1mx2.6/16, Error ellipse: s-maj=28.3km s-min=20.1km az=145.0*
**ISC 09 13:54:28.3**±0.7**, 52°.96N**±0°.04×**158°.65E**±0°.05**, h129**km±4km**, n55, σ0s.99**/88**, mb3.3**/7**, 1D, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PET | Petropavlovsk | 0.07 | 3 | *e*P | Pn | 13 54 45.3 | -0.5 |
| PET | | | | *e*S | Sn | 13 54 58.4 | -0.6 |
| PET | Petropavlovsk | 0.07 | 3 | ⇓*i*PN | Pn | 13 54 45.2 | -0.5 |
| PET | | | | *e*S | Sn | 13 54 57.9 | -1.1 |
| PET | | | | pmax | pmax | | |
| | comp=Z,500nm,0.4s | | | | | | |
| PET | | | | pmax | pmax | | |
| | comp=Z,518nm,0.5s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,2µm,1.0s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,2µm,0.8s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,2µm,0.5s | | | | | | |
| UGLR | Uglovaya | 0.27 | 23 | *e*P | Pn | 13 54 46.2 | -0.2 |
| UGLR | | | | *e*S | Sn | 13 55 00.2 | +0.1 |
| AVH | Avacha | 0.31 | 10 | *e*P | Pn | 13 54 46.5 | 0.0 |
| AVH | | | | *e*S | Sn | 13 55 00.7 | +0.4 |
| AVH | Avacha | 0.31 | 10 | PN | Pn | 13 54 46.5 | 0.0 |
| AVH | | | | S | Sn | 13 55 00.7 | +0.4 |
| SMAR | Somma | 0.32 | 17 | *e*P | Pn | 13 54 46.4 | -0.3 |
| SMAR | | | | *e*S | Sn | 13 55 00.9 | +0.3 |
| SMAR | Somma | 0.32 | 17 | PN | Pn | 13 54 46.4 | -0.3 |
| SMAR | | | | S | Sn | 13 55 00.9 | +0.3 |
| KOK | Koryaka | 0.34 | 359 | *e*P | Pn | 13 54 46.5 | -0.1 |
| KOK | | | | *e*S | Sn | 13 55 00.5 | +0.1 |
| KOK | Koryaka | 0.34 | 359 | PN | Pn | 13 54 46.5 | -0.1 |
| KOK | | | | S | Sn | 13 55 00.5 | +0.1 |
| SDLR | Sedlovina | 0.35 | 24 | *e*P | Pn | 13 54 46.3 | -0.4 |
| SDLR | | | | *e*S | Sn | 13 55 00.5 | -0.1 |
| SDLR | Sedlovina | 0.35 | 24 | PN | Pn | 13 54 46.3 | -0.4 |
| SDLR | | | | S | Sn | 13 55 00.5 | -0.1 |
| KRX | Arik | 0.40 | 0 | *e*P | Pn | 13 54 46.6 | -0.3 |
| KRX | | | | *e*S | Sn | 13 55 00.4 | -0.7 |
| NLC | Nalytchevo | 0.47 | 63 | *e*P | Pn | 13 54 46.5 | -0.5 |
| NLC | | | | *e*S | Sn | 13 55 01.2 | 0.0 |
| NLC | Nalytchevo | 0.47 | 63 | PN | Pn | 13 54 46.5 | -0.5 |
| NLC | | | | S | Sn | 13 55 01.2 | 0.0 |
| RUS | Russkaya | 0.53 | 189 | *e*P | Pn | 13 54 46.8 | -0.6 |
| RUS | | | | *e*S | Sn | 13 55 01.2 | -0.6 |
| RUS | Russkaya | 0.53 | 189 | PN | Pn | 13 54 46.8 | -0.6 |
| RUS | | | | S | Sn | 13 55 01.2 | -0.6 |
| MTVR | Mutnovka | 0.55 | 211 | *e*P | Pn | 13 54 47.8 | +0.1 |
| MTVR | | | | *e*S | Sn | 13 55 03.3 | +0.9 |
| PETK | Petropavlovsk- | 0.59 | 285 | P | Pn | 13 54 47.2 | -0.5 |
| | comp=E,125nm,0.3s,baz=97,slow=12,SNR=3519 | | | | | | |
| PETK | | | | S | Sn | 13 55 01.8 | -0.8 |
| | comp=E,14nm,0.3s,baz=251,slow=9.2,SNR=4.1 | | | | | | |
| PETK | Petropavlovsk- | 0.59 | 285 | PN | Pn | 13 54 47.3 | -0.5 |
| PETK | | | | S | Sn | 13 55 01.8 | -0.8 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,125nm,0.3s | | | | | | |
| PETK | | | | smax | smax | | |
| | comp=N,15nm,0.3s | | | | | | |
| ASAK | Asacha | 0.73 | 219 | *e*P | Pn | 13 54 49.0 | +0.1 |
| ASAK | | | | *e*S | Sn | 13 55 05.6 | +1.1 |
| SPN | Mys Shipunski | 0.84 | 80 | *e*P | Pn | 13 54 49.1 | -0.6 |
| SPN | | | | *e*S | Sn | 13 55 05.1 | -0.8 |
| SPN | Mys Shipunski | 0.84 | 80 | PN | Pn | 13 54 49.1 | -0.6 |
| SPN | | | | S | Sn | 13 55 05.1 | -0.8 |
| GNL | Ganaly | 0.85 | 330 | *e*P | Pn | 13 54 49.2 | -0.7 |
| GNL | | | | *e*S | Sn | 13 55 05.3 | -1.0 |
| GNL | Ganaly | 0.85 | 330 | PN | Pn | 13 54 49.2 | -0.7 |
| GNL | | | | S | Sn | 13 55 05.3 | -1.0 |
| APC | Apacha | 0.90 | 269 | *e*P | Pn | 13 54 50.1 | -0.1 |
| APC | | | | *e*S | Sn | 13 55 06.8 | +0.1 |
| APC | Apacha | 0.90 | 269 | PN | Pn | 13 54 50.1 | -0.1 |
| APC | | | | S | Sn | 13 55 06.8 | +0.1 |
| KII | Karymskiy | 1.18 | 24 | *e*P | Pn | 13 54 53.3 | +0.4 |
| KII | | | | *e*S | Sn | 13 55 12.6 | +0.9 |
| KII | Karymskiy | 1.18 | 24 | PN | Pn | 13 54 53.3 | +0.4 |
| KII | | | | S | Sn | 13 55 12.6 | +0.9 |
| MIPR | Malaya Ipel'ka | 1.34 | 240 | *e*P | Pn | 13 54 54.9 | +0.4 |
| PAU | Pauzhetka | 1.87 | 218 | *e*P | Pn | 13 55 01.3 | +0.7 |
| PAU | Pauzhetka | 1.87 | 218 | PN | Pn | 13 55 01.3 | +0.7 |
| KZV | Kizimen | 2.37 | 24 | *e*P | Pn | 13 55 07.3 | +0.4 |
| KZV | | | | *e*S | Sn | 13 55 37.1 | +0.6 |
| MKZ | Mys Kozlova | 2.43 | 48 | *e*P | Pn | 13 55 07.0 | -0.5 |
| MKZ | | | | *e*S | Sn | 13 55 36.2 | -1.4 |
| MKZ | Mys Kozlova | 2.43 | 48 | PN | Pn | 13 55 07.0 | -0.5 |
| MKZ | | | | S | Sn | 13 55 36.2 | -1.4 |
| TUMR | Tumrok | 2.49 | 20 | *e*P | Pn | 13 55 09.6 | +1.2 |
| TUMR | | | | *e*S | Sn | 13 55 40.1 | +0.9 |
| TUMR | Tumrok | 2.49 | 20 | PN | Pn | 13 55 09.6 | +1.2 |
| TUMR | | | | S | Sn | 13 55 40.1 | +0.9 |
| SKR | Severo-Kuril's | 2.77 | 216 | *e*P | Pn | 13 55 12.4 | +0.6 |
| SKR | | | | *e*S | Sn | 13 55 45.8 | +0.5 |
| SKR | Severo-Kuril's | 2.77 | 216 | *e*PN | Pn | 13 55 09.5 | -2.3 |
| SKR | | | | *e*S | Sn | 13 55 41.9 | -3.4 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,120nm,0.2s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,240nm,0.2s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,180nm,0.5s | | | | | | |
| ESO | Esso | 2.97 | 1 | *e*P | Pn | 13 55 14.2 | -0.3 |
| ESO | Esso | 2.97 | 1 | PN | Pn | 13 55 14.2 | -0.3 |
| KBTR | Krutoberegovo | 4.06 | 35 | *e*P | Pn | 13 55 28.5 | -0.2 |
| KBTR | | | | *e*S | Sn | 13 56 12.5 | -3.1 |
| KBTR | Krutoberegovo | 4.06 | 35 | PN | Pn | 13 55 28.5 | -0.2 |
| KBTR | | | | S | Sn | 13 56 12.5 | -3.1 |
| ILAR | Eielson Array | 29.53 | 45 | P | P | 14 00 20.2 | +0.1 |
| | comp=E,0.6nm,0.9s,baz=246,slow=8.1,SNR=6.2 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 33.77 | 166 | T | T | 14 36 39.1 | |
| | baz=352,slow=76,SNR=3.2 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 33.79 | 166 | T | T | 14 36 45.6 | |
| | baz=352,slow=76,SNR=3.6 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 33.79 | 166 | T | T | 14 36 46.2 | |
| | baz=352,slow=76,SNR=3.9 | | | | | | |
| INK | Inuvik | 34.51 | 37 | P | P | 14 01 04.1 | +0.6 |
| | comp=E,2.3nm,1.1s,baz=288,slow=7.8,SNR=5.4 | | | | | | |
| INK | Inuvik | 34.51 | 37 | P | P | 14 01 04.1 | +0.6 |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| SPITS | Spitsbergen Ar | 47.12 | 350 | P | P | 14 02 45.4 | -1.3 |
| | comp=Z,3.3nm,0.8s,baz=29,slow=12,SNR=5.1 | | | | | | |
| SPITS | Spitsbergen Ar | 47.12 | 350 | P | P | 14 02 45.4 | -1.3 |
| SPITS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 47.42 | 295 | P | P | 14 02 46.8 | -2.6 |
| | comp=Z,0.1nm,0.4s,baz=56,slow=7.9,SNR=4.7 | | | | | | |
| ARU | Arti | 52.90 | 317 | LR | LR | 14 29 05.5 | |
| | comp=Z,39nm,18.1s,baz=285,slow=40 | | | | | | |
| NVAR | Mina Array Bea | 56.61 | 69 | P | P | 14 03 59.6 | +1.9 |
| | comp=Z,0.3nm,0.5s,baz=296,slow=8.6,SNR=3.6 | | | | | | |
| TXAR | Lajitas Array | 71.49 | 66 | P | P | 14 05 36.1 | +1.2 |
| | comp=Z,0.3nm,0.5s,baz=298,slow=4.9,SNR=5.9 | | | | | | |
| ASAR | Alice Springs | 79.28 | 203 | P | P | 14 06 20.8 | +1.7 |
| | comp=Z,0.3nm,0.9s,baz=14,slow=5.0,SNR=2.8 | | | | | | |

**IDC 09 14:03:27.2**±999.0**, 52°.78N**×**52°.56E, h0**km**, Error ellipse: s-maj=447.9km s-min=102.8km az=118.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I31KZ | AKTYUBINSK INF | 4.16 | 123 | *i* | | 14 31 25.7 | |
| | baz=306,slow=315,SNR=21 | | | | | | |
| I46RU | ZALESOVO INFRA | 19.20 | 74 | *i* | | 16 02 30.0 | |
| | baz=278,slow=318,SNR=1.0 | | | | | | |
| I34MN | SONGINO INFRAS | 34.08 | 76 | *i* | | 17 32 40.0 | |
| | baz=299,slow=326,SNR=0.5 | | | | | | |

*SZGRF* ***09*** *14:04:44.8, 2°.12S×74°.81W, h33km, mb5.1/15(BGR)*
*IGQ* ***09*** *14:04:44±0.9, 3°.13S×76°.81W, h14km±46km, Mb4.8, Error ellipse: s-maj=8.1km s-min=4.6km az=108.0*
*MOS* ***09*** *14:04:44.3±1.0, 2°.61S×76°.83W, h101km, mb5.4/47, MS4.2/6, Error ellipse: s-maj=12.0km s-min=5.3km az=108.9*
*GCMT* ***09*** *14:04:47.7±0.2, 2°.86S×76°.78W, h119km±1km, MW5.2/96, Moment Tensor Solution. s65,c79; s96,c169; Duration: 0 Moment tensor: Scale 10[16]Nm; $M_{rr}$-6.34±.12; $M_{\theta\theta}$1.26±.15; $M_{\phi\phi}$5.08±.19; $M_{r\theta}$0.35±.11; $M_{\theta\phi}$-3.76±.14; $M_{\phi r}$1.06±.16; Best double couple: $M_0$6.96800×10[16] NP1:$\phi_s$157.00000°, δ49.00000°, λ-78.00000°. NP2: $\phi_s$320.00000°, δ43.00000°, λ-103.00000°. Principal axes: T 7.4250, Plg3.0000°, Azm239.0000°; N -0.9160, Plg9.0000°, Azm329.0000°; P -6.5100, Plg81.0000°, Azm130.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*IDC* ***09*** *14:04:47.6±0.4, 2°.66S×76°.60W, h122km±3km, mb4.7/24, mb1 4.8/26, mb1mx4.8/29, mbtmp5.0/26, MS3.7/7, Ms1 3.7/7, ms1mx3.4/27 Error ellipse: s-maj=11.8km s-min=7.7km az=55.0*
*ISCJB* ***09*** *14:04:47.5±0.3, 2°.67S±0°.02×76°.73W±0°.03, h136km±2km, mb5.0/194, Error ellipse: s-maj=5.9km s-min=3.1km az=148.0*
*BJI* ***09*** *14:04:47.9, 2°.70S×76°.60W, h123km, mB5.2/26*
*NEIC* ***09*** *14:04:47.7±0.2, 2°.64S×76°.65W, mb5.3/151, MD4.9(IGQ), Error ellipse: s-maj=5.6km s-min=3.5km az=55.0*
**ISC 09 14:04:47.0**±0.3**, 2°.76S**±0°.04×**76°.69W**±0°.04**, h121**km±2km**, h121**km**:pP-P, n905, σ1s.05**/1021**, mb5.2**/195**, 7C-30D, Peru-Ecuador border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BPAT | Tungurahua Vol | 2.14 | 306 | ⇓P | Pn | 14 05 21.3 | -1.5 |
| ARRY | Arrayan | 2.16 | 305 | ⇓P | Pn | 14 05 21.2 | -1.7 |
| BRUN | Tungurahua Vol | 2.18 | 308 | ⇓P | Pn | 14 05 22.9 | -0.2 |
| BMAS | Trigal station | 2.18 | 305 | ⇓P | Pn | 14 05 22.7 | -0.5 |
| RIOE | Riobamba | 2.18 | 297 | ⇓P | Pn | 14 05 22.0 | -1.2 |
| RIOE | Riobamba | 2.18 | 297 | ⇓S | Sn | 14 05 48.5 | -2.3 |
| RETU | Refugio | 2.19 | 307 | ⇓P | Pn | 14 05 22.9 | -0.5 |
| RUN5 | Runtun | 2.19 | 308 | ⇓P | Pn | 14 05 22.8 | -0.4 |
| BBIL | Ulba Tungurahu | 2.22 | 306 | ⇓P | Pn | 14 05 22.3 | -1.3 |
| JUI6 | Juive | 2.22 | 307 | ⇓P | Pn | 14 05 22.1 | -1.5 |
| BIL2 | Estacion Bilba | 2.23 | 306 | ⇓P | Pn | 14 05 23.6 | -0.2 |
| IGUA | Igualata | 2.32 | 303 | ⇓P | Pn | 14 05 24.4 | -0.8 |
| PISA | Pisayambo | 2.39 | 315 | ⇓P | Pn | 14 05 25.0 | -1.0 |
| TAMB | Tambo | 2.65 | 321 | ⇓P | Pn | 14 05 29.3 | 0.0 |
| COV1 | Cotopaxi Volc | 2.66 | 322 | ⇓P | Pn | 14 05 31.7 | +2.1 |
| BMOR | Cotopaxi Volca | 2.68 | 319 | ⇓P | Pn | 14 05 30.7 | +0.9 |
| BTAM | Cotopaxi Volca | 2.68 | 321 | ⇓P | Pn | 14 05 30.8 | +1.0 |
| MOV1 | Cotopaxi Vol s | 2.68 | 319 | P | Pn | 14 05 30.6 | +0.7 |
| BVC2 | Cotopaxi Volca | 2.71 | 321 | ⇓P | Pn | 14 05 30.0 | -0.1 |
| VC1 | Cotopaxi 1 | 2.71 | 321 | ⇓P | Pn | 14 05 30.4 | +0.3 |
| BREF | Cotopaxi Volca | 2.72 | 320 | ⇓P | Pn | 14 05 31.6 | +1.3 |
| ANTI | Antisana | 2.73 | 327 | ⇓P | Pn | 14 05 31.0 | +0.6 |
| BNAS | Cotopaxi Volca | 2.74 | 319 | ⇓P | Pn | 14 05 31.8 | +1.3 |
| CAMI | Rancho Maria | 2.75 | 319 | P | Pn | 14 05 31.1 | +0.5 |
| NAS2 | Nasa | 2.75 | 320 | P | Pn | 14 05 31.1 | +0.5 |
| PITA | Cotopaxi Volc | 2.80 | 321 | ⇓P | Pn | 14 05 32.6 | +1.4 |
| LAV4 | Lava4-Reventad | 2.81 | 340 | P | Pn | 14 05 31.7 | +0.5 |
| CHAR | Charly | 2.83 | 340 | P | Pn | 14 05 31.1 | -0.5 |
| PAST | Pastocalle | 2.83 | 316 | P | Pn | 14 05 32.8 | +1.2 |
| CONE | Cono NE Rev Vo | 2.84 | 340 | P | Pn | 14 05 33.7 | +2.1 |
| ELAGU | Cayambe Volc | 3.01 | 334 | P | Pn | 14 05 34.4 | +0.3 |
| GGP | Refugio Guagua | 3.20 | 323 | ⇓P | Pn | 14 05 37.1 | +0.6 |
| TERV | Terraza Guagua | 3.20 | 323 | P | Pn | 14 05 38.6 | +2.1 |
| PINO | Pino | 3.22 | 323 | ⇓P | Pn | 14 05 38.6 | +1.8 |
| YANA | Yana | 3.23 | 324 | P | Pn | 14 05 37.4 | +0.5 |
| OTAV | Otavalo | 3.46 | 329 | ⇓P | Pn | 14 05 40.2 | +0.3 |
| OTAV | Otavalo | 3.46 | 329 | *e*Pn | Pn | 14 05 40.0 | +0.2 |
| COTA | Cotacachi | 3.49 | 332 | P | Pn | 14 05 41.4 | +1.1 |
| LITE | Lita | 3.92 | 335 | P | Pn | 14 05 48.7 | +3.0 |
| MAG1 | Magdalena | 4.08 | 311 | P | Pn | 14 05 47.3 | -0.4 |
| CHIS | Cerro-Chispas- | 4.38 | 293 | P | Pn | 14 05 48.0 | -3.7 |
| ATAH | Atahualpa | 4.66 | 201 | P | Pn | 14 05 55.3 | -0.6 |
| | 306nm,0.3s,baz=41,slow=6.4,SNR=786 | | | | | | |
| ATAH | | | | S | Sn | 14 06 45.8 | -3.6 |
| | 150nm,0.3s,baz=298,slow=21,SNR=4.8 | | | | | | |
| ROSC | El Rosal | 7.93 | 17 | P | Pn | 14 06 41.9 | +2.0 |
| | 8.4nm,0.3s,baz=163,slow=4.3,SNR=24 | | | | | | |
| NNA | Nana | 9.17 | 181 | P | Pn | 14 07 09.1 | +13 |
| | 87nm,0.3s,baz=352,slow=10,SNR=74 | | | | | | |
| NNA | | | | S | Sn | 14 08 42.4 | +4.6 |
| | 48nm,0.3s,baz=54,slow=19,SNR=14 | | | | | | |
| NNA | Nana | 9.17 | 181 | *ce*P | Pn | 14 06 55.3 | -1.1 |
| NNA | | | | pmax | pmax | | |
| | comp=Z,454nm,1.7s | | | | | | |
| NNA | Nana | 9.17 | 181 | Pn | Pn | 14 06 55.5 | -0.9 |
| | comp=Z,3µm,0.4s,SNR=48 | | | | | | |
| NNA | Nana | 9.17 | 181 | *e*Pn | Pn | 14 06 54.7 | -1.7 |
| NNA | | | | *e*Sn | Sn | 14 08 27.2 | -11 |
| NNA | | | | S | Sn | 14 08 42.4 | +4.6 |
| SDV | Santo Domingo | 13.05 | 27 | *e*Pn | Pn | 14 07 48.6 | +0.5 |
| PAYG | Puerto Ayora | 13.75 | 278 | *e*Pn | Pn | 14 07 55.7 | -1.3 |
| | comp=Z,278nm,1.4s | | | | | | |
| ARE | Arequipa | 14.54 | 160 | *e*P | P | 14 08 10.0 | -0.6 |
| ARE | Arequipa | 14.54 | 160 | *e*P | P | 14 08 10.0 | -0.6 |
| SAML | Samuel | 14.77 | 115 | *e*Pn | Pn | 14 08 07.0 | -3.0 |
| SAML | | | | *e*Sn | Sn | 14 10 48.8 | -4.7 |
| JTS | JuntasAbangare | 15.36 | 328 | P | P | 14 08 19.0 | -0.3 |
| | comp=Z,1.1nm,0.3s,baz=143,slow=4.6,SNR=15 | | | | | | |
| JTS | JuntasAbangare | 15.36 | 328 | P | P | 14 08 19.6 | +0.3 |
| | comp=Z,243nm,0.8s,SNR=7.5 | | | | | | |
| JTS | JuntasAbangare | 15.36 | 328 | *e*Pn | Pn | 14 08 17.8 | +0.4 |
| | comp=Z,46nm,1.0s | | | | | | |
| LPAZ | La Paz | 15.86 | 148 | P | Pn | 14 08 21.8 | -2.4 |
| | comp=Z,1.7nm,0.3s,baz=327,slow=6.7,SNR=23 | | | | | | |
| LPAZ | | | | LR | LR | 14 15 19.7 | |
| | comp=Z,214nm,21.3s,baz=326,slow=40 | | | | | | |
| PTGA | Pitinga | 16.84 | 83 | P | Pn | 14 08 32.7 | -2.9 |
| | comp=Z,1.8nm,0.3s,baz=258,slow=12,SNR=27 | | | | | | |
| PTGA | | | | S | Sn | 14 11 33.3 | -10 |
| | comp=Z,2.5nm,0.3s,baz=342,slow=20,SNR=1.9 | | | | | | |
| PCRV | Puerto La Cruz | 17.59 | 43 | P | P | 14 08 44.0 | 0.0 |
| | comp=Z,4.2nm,0.3s,baz=298,slow=2.9,SNR=13 | | | | | | |
| PCRV | | | | S | S | 14 11 59.4 | -1.4 |
| | comp=Z,0.3nm,0.3s,baz=166,slow=19,SNR=1.6 | | | | | | |
| TGUH | Tegucigalpa,Un | 19.73 | 328 | *e*P | Pn | 14 09 08.8 | -1.2 |
| | comp=Z,76nm,1.0s | | | | | | |
| SIV | San Ignacio | 20.23 | 132 | P | P | 14 09 13.9 | +1.2 |
| | comp=Z,29nm,0.4s,baz=324,slow=12,SNR=138 | | | | | | |
| SIV | | | | S | S | 14 12 55.2 | +1.9 |
| | comp=Z,10.0nm,0.9s,baz=130,slow=20,SNR=4.0 | | | | | | |
| GRGR | Grenville | 21.03 | 45 | P | P | 14 09 20.7 | -0.7 |
| | comp=Z,193nm,1.1s | | | | | | |
| GRGR | | | | LR | LR | | |
| | comp=Z,696nm,20.0s | | | | | | |
| LVC | Limon Verde | 21.13 | 160 | P | P | 14 09 24.6 | +2.0 |
| | comp=Z,372nm,0.9s,baz=322,slow=7.8,SNR=43 | | | | | | |
| LVC | | | | S | Sn | 14 13 21.7 | -4.6 |
| | comp=Z,79nm,1.1s,baz=307,slow=23,SNR=13 | | | | | | |
| LVC | Limon Verde | 21.13 | 160 | P | P | 14 09 24.6 | +2.0 |
| | comp=Z,30nm,1.0s | | | | | | |
| LVC | | | | S | Sn | 14 13 21.7 | -4.6 |
| TOSP | Speyside | 21.29 | 49 | *e*P | P | 14 09 26.2 | +2.0 |
| YJA | Yavi | 22.14 | 152 | *e*P | P | 14 09 34.3 | +0.7 |
| SDDR | Presa de Saban | 22.25 | 14 | PFAKE | | 14 09 40.0 | +5.8 |
| SDDR | | | | LR | LR | | |
| | comp=Z,349nm,22.0s | | | | | | |
| GTBY | Guantanamo Bay | 22.60 | 4 | P | P | 14 09 35.9 | -1.8 |
| | comp=Z,218nm,1.5s | | | | | | |
| GTBY | | | | LR | LR | | |
| | comp=Z,180nm,19.0s | | | | | | |
| OBIP | Obispado Ponce | 22.94 | 25 | *e*P | P | 14 09 39.9 | -1.0 |
| | comp=Z,41nm,0.9s | | | | | | |
| SMN1 | Samana, DR | 23.00 | 18 | *e*P | P | 14 09 40.8 | -0.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| HJA | Humahuaca | 23.08 | 153 | eP | P | 14 09 43.8 | +1.1 |
| SJG | San Juan | 23.20 | 26 | P | P | 14 09 42.5 | -0.8 |
| | comp=Z,72nm,0.7s,baz=195,slow=5.8,SNR=38 | | | | | | |
| SJG | | | | S | S | 14 13 46.4 | +0.5 |
| | comp=Z,5.9nm,0.3s,baz=294,slow=20,SNR=4.0 | | | | | | |
| SJG | San Juan | 23.20 | 26 | P | P | 14 09 42.5 | -0.8 |
| SJG | | | | S | S | 14 13 46.4 | +0.5 |
| SJG | | | | pmax | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | |
| SJG | | | | MLR | MLR | | |
| | comp=Z,462nm,22.0s | | | | | | |
| SJG | San Juan | 23.20 | 26 | P | P | 14 09 42.5 | -0.8 |
| | comp=Z,26nm,0.9s | | | | | | |
| SJG | | | | S | S | 14 13 46.4 | +0.5 |
| SJG | | | | LR | LR | | |
| | comp=Z,462nm,22.0s | | | | | | |
| FDF | Fort de France | 23.22 | 41 | eP | P | 14 09 42.4 | -1.2 |
| FDF | | | | pmax | pmax | | |
| | comp=Z,307nm,1.1s | | | | | | |
| FDF | | | | MLR | MLR | | |
| | comp=Z,809nm,19.0s | | | | | | |
| FDF | Fort de France | 23.22 | 41 | eP | pP | 14 10 02.8 | -4.7 |
| FDF | Fort de France | 23.22 | 41 | eP | P | 14 09 42.4 | -1.2 |
| | comp=Z,307nm,1.1s | | | | | | |
| FDF | | | | LR | LR | | |
| | comp=Z,809nm,19.0s | | | | | | |
| BBL | Barber's Block | 23.60 | 39 | eP | P | 14 09 45.5 | -1.6 |
| AZAP | Zapla | 24.11 | 153 | eP | P | 14 09 53.1 | +1.2 |
| ASTB | Santa Barbara | 24.14 | 152 | eP | P | 14 09 54.4 | +2.2 |
| SLA | San Lorenzo | 24.35 | 155 | eP | P | 14 09 56.4 | +2.4 |
| H05N1 | Guadeloupe/Mar | 24.46 | 39 | P | P | 14 09 53.1 | -1.7 |
| FSA | Cafayete | 25.36 | 157 | eP | P | 14 10 04.9 | +1.7 |
| TEIG | Tepich | 25.52 | 334 | P | P | 14 10 04.4 | 0.0 |
| | comp=Z,2.4nm,0.2s,baz=360,slow=23,SNR=6.3 | | | | | | |
| TEIG | Tepich | 25.52 | 334 | P | P | 14 10 04.5 | 0.0 |
| TEIG | | | | LR | LR | | |
| | comp=Z,99nm,20.0s | | | | | | |
| AHML | Horco Molle | 26.25 | 157 | eP | P | 14 10 12.2 | +1.1 |
| CMIG | Matias Romero | 26.68 | 318 | P | P | 14 10 15.0 | +0.1 |
| | comp=Z,29nm,0.7s,baz=112,slow=6.4,SNR=31 | | | | | | |
| CMIG | | | | pP | pP | 14 10 42.0 | +1.0 |
| | comp=Z,31nm,1.0s,baz=114,slow=9.6,SNR=7.2 | | | | | | |
| CMIG | | | | PcP | PcP | 14 13 36.4 | +0.7 |
| | comp=Z,5.1nm,0.7s,baz=72,slow=2.5,SNR=4.0 | | | | | | |
| LCO | Las Campanas | 26.72 | 168 | eP | P | 14 10 16.6 | +1.1 |
| | comp=Z,67nm,1.3s | | | | | | |
| VCA | Vinchina | 27.07 | 163 | eP | P | 14 10 19.8 | +1.3 |
| CYA | Choya | 27.57 | 159 | eP | P | 14 10 23.9 | +1.1 |
| RTLS | Leoncito | 29.71 | 167 | eP | P | 14 10 44.0 | +2.0 |
| CFAA | Coronel Fontan | 29.78 | 165 | P | P | 14 10 43.7 | +1.4 |
| | comp=Z,5.3nm,1.0s,baz=338,slow=8.3,SNR=45 | | | | | | |
| CFAA | | | | PcP | PcP | 14 13 44.2 | +0.9 |
| | comp=Z,0.6nm,0.7s,baz=314,slow=5.1,SNR=4.4 | | | | | | |
| CPUP | Villa Florida | 29.91 | 143 | P | P | 14 10 43.5 | 0.0 |
| | comp=Z,30nm,1.1s,baz=326,slow=9.7,SNR=23 | | | | | | |
| CPUP | | | | PcP | PcP | 14 13 44.3 | +0.7 |
| | comp=Z,7.4nm,0.8s,baz=334,slow=7.6,SNR=5.0 | | | | | | |
| CPUP | | | | LR | LR | 14 25 36.0 | |
| | comp=Z,117nm,21.6s,baz=334,slow=42 | | | | | | |
| AUSP | Uspallata | 30.10 | 168 | eP | P | 14 10 47.7 | +2.2 |
| ROC1 | El Roble | 30.52 | 171 | eP | P | 14 10 50.1 | +0.9 |
| BDFB | Brasilia | 31.00 | 116 | P | P | 14 10 53.4 | -0.1 |
| | comp=Z,28nm,0.9s,baz=279,slow=10,SNR=22 | | | | | | |
| BDFB | | | | PP | PnPn | 14 11 58.6 | -1.2 |
| | comp=Z,18nm,1.2s,baz=290,slow=15,SNR=3.5 | | | | | | |
| MRA | San Martin | 31.25 | 162 | eP | P | 14 10 56.7 | +1.3 |
| 035Z | Hargill | 35.65 | 326 | P | P | 14 11 34.1 | +0.6 |
| | baz=36 | | | | | | |
| 035A | Encino | 36.04 | 326 | P | P | 14 11 37.6 | +0.7 |
| | baz=36,SNR=5.7 | | | | | | |
| 034A | Hebbronville | 36.46 | 326 | P | P | 14 11 41.3 | +0.8 |
| | baz=36,SNR=26 | | | | | | |
| GOGA | Godfrey | 36.54 | 350 | eP | P | 14 11 41.2 | +0.2 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,30nm,1.3s | | | | | | |
| GOGA | Godfrey | 36.54 | 350 | eP | P | 14 11 41.2 | +0.2 |
| | comp=Z,30nm,1.3s | | | | | | |
| 934A | Benavides | 36.79 | 327 | P | P | 14 11 44.1 | +0.9 |
| | baz=37,SNR=18 | | | | | | |
| 736A | Circle Diamond | 37.10 | 330 | P | P | 14 11 46.7 | +0.8 |
| | baz=37 | | | | | | |
| 637A | Eagle Lake | 37.14 | 331 | P | P | 14 11 47.0 | +0.8 |
| | baz=37,SNR=8.2 | | | | | | |
| 834A | Tilden | 37.22 | 327 | P | P | 14 11 47.8 | +1.0 |
| | baz=37,SNR=9.3 | | | | | | |
| 933A | Laredo | 37.22 | 326 | P | P | 14 11 47.9 | +1.0 |
| | baz=37,SNR=20 | | | | | | |
| 735A | Kenedy | 37.40 | 329 | P | P | 14 11 49.1 | +0.7 |
| | baz=38 | | | | | | |
| 636A | Smothers Creek | 37.53 | 330 | P | P | 14 11 50.1 | +0.7 |
| | baz=38 | | | | | | |
| TRQA | Tornquist | 37.62 | 161 | eP | P | 14 11 50.2 | 0.0 |
| | comp=Z,61nm,1.2s | | | | | | |
| TRQA | | | | ePcP | PcP | 14 14 05.9 | +0.5 |
| 340A | Bronson | 37.73 | 336 | P | P | 14 11 50.9 | -0.1 |
| | baz=38 | | | | | | |
| 734A | La Parita Cree | 37.79 | 328 | P | P | 14 11 52.2 | +0.5 |
| | baz=38,SNR=6.1 | | | | | | |
| 635A | Leesville | 37.81 | 329 | P | P | 14 11 52.0 | +0.1 |
| | baz=38 | | | | | | |
| 833A | Chaparral WMA, | 37.84 | 326 | P | P | 14 11 52.8 | +0.8 |
| | baz=38,SNR=6.4 | | | | | | |
| 536A | Bastrop | 38.02 | 331 | P | P | 14 11 53.8 | +0.2 |
| | baz=38 | | | | | | |
| 733A | Divot King Ran | 38.09 | 327 | P | P | 14 11 54.9 | +0.7 |
| | baz=38,SNR=8.3 | | | | | | |
| 832A | Faith Ranch, C | 38.13 | 326 | P | P | 14 11 55.2 | +0.7 |
| | baz=38 | | | | | | |
| 535A | Dale | 38.23 | 330 | P | P | 14 11 55.7 | +0.3 |
| | baz=38 | | | | | | |
| 338A | Crockett | 38.28 | 334 | P | P | 14 11 56.3 | +0.6 |
| | baz=38 | | | | | | |
| NATX | Nacogdoches | 38.35 | 335 | PFAKE | | 14 12 10.0 | +14 |
| NATX | | | | LR | LR | | |
| | comp=Z,404nm,20.0s | | | | | | |
| 436A | Wall Ranch, Ga | 38.47 | 332 | P | P | 14 11 57.5 | +0.2 |
| | baz=38 | | | | | | |
| 732A | Laxson Ranch, | 38.47 | 326 | P | P | 14 11 57.9 | +0.6 |
| | baz=38,SNR=28 | | | | | | |
| 239A | Gary | 38.49 | 335 | P | P | 14 11 57.9 | +0.5 |
| | baz=39 | | | | | | |
| 337A | Centerville | 38.50 | 333 | P | P | 14 11 58.2 | +0.6 |
| | baz=39 | | | | | | |
| 633A | Saathoff Ranch | 38.60 | 328 | P | P | 14 11 59.0 | +0.5 |
| | baz=39,SNR=21 | | | | | | |
| 534A | Blanco | 38.69 | 329 | P | P | 14 11 59.2 | 0.0 |
| | baz=39,SNR=10 | | | | | | |
| CPCT | Cooper Cave | 38.71 | 350 | eP | P | 14 11 57.7 | -1.6 |
| 238A | Jacksonville | 38.75 | 335 | P | P | 14 12 00.1 | +0.5 |
| | baz=39 | | | | | | |
| SWET | Sewanee | 38.76 | 348 | eP | P | 14 11 58.8 | -0.9 |
| | comp=Z,3.4nm,0.7s | | | | | | |
| 435B | Jarrell | 38.86 | 331 | P | P | 14 12 01.0 | +0.5 |
| | baz=39 | | | | | | |
| OXF | Oxford | 38.96 | 343 | eP | P | 14 12 00.5 | -0.8 |
| OXF | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| OXF | Oxford | 38.96 | 343 | eP | P | 14 12 00.5 | -0.8 |
| | comp=Z,24nm,0.8s | | | | | | |
| 632A | Uvalde | 38.97 | 327 | P | P | 14 12 02.4 | +0.9 |
| | baz=39,SNR=37 | | | | | | |
| 533A | Kerrville | 39.02 | 328 | P | P | 14 12 02.5 | +0.5 |
| | baz=39,SNR=15 | | | | | | |
| 139A | Bunkhouse Ranc | 39.03 | 336 | P | P | 14 12 02.1 | +0.2 |
| | baz=39 | | | | | | |
| 237A | Washetta, Mont | 39.05 | 334 | P | P | 14 12 02.5 | +0.3 |
| | baz=39,SNR=5.1 | | | | | | |
| 335A | Moody | 39.19 | 331 | P | P | 14 12 03.6 | +0.3 |
| | baz=39,SNR=8.0 | | | | | | |
| 434A | Burnet | 39.22 | 330 | P | P | 14 12 03.7 | +0.1 |
| | baz=39,SNR=9.9 | | | | | | |
| 138A | Matatall Enter | 39.30 | 335 | P | P | 14 12 04.9 | +0.7 |
| | baz=39,SNR=5.6 | | | | | | |
| 631A | Perdido Creek | 39.33 | 326 | P | P | 14 12 05.4 | +0.9 |
| | baz=39,SNR=63 | | | | | | |
| 236A | Katherine and | 39.37 | 333 | P | P | 14 12 05.3 | +0.5 |
| | baz=39 | | | | | | |
| 532A | Rocksprings | 39.52 | 328 | P | P | 14 12 07.2 | +1.1 |
| | baz=40,SNR=184 | | | | | | |
| 433A | Art | 39.59 | 329 | P | P | 14 12 07.1 | +0.4 |
| | baz=40,SNR=107 | | | | | | |
| TZTN | Tazewell | 39.62 | 351 | eP | P | 14 12 05.7 | -1.1 |
| | comp=Z,24nm,0.8s | | | | | | |
| 334A | Lometa | 39.63 | 330 | P | P | 14 12 07.1 | +0.1 |
| | baz=40,SNR=46 | | | | | | |
| JCT | Junction City | 39.74 | 328 | P | P | 14 12 05.6 | -2.4 |
| JCT | | | | pmax | pmax | | |
| | comp=Z,159nm,1.8s | | | | | | |
| JCT | Junction City | 39.74 | 328 | P | P | 14 12 08.6 | +0.6 |
| | baz=40,SNR=16 | | | | | | |
| JCT | Junction City | 39.74 | 328 | P | P | 14 12 05.6 | -2.4 |
| | comp=Z,159nm,1.8s | | | | | | |
| 136A | Ennis | 39.77 | 333 | P | P | 14 12 08.5 | +0.4 |
| | baz=40 | | | | | | |
| Z38A | Mt. Pleasant | 39.77 | 336 | P | P | 14 12 08.4 | +0.3 |
| | baz=40 | | | | | | |
| WHTX | Lake Whitney | 39.79 | 332 | P | P | 14 12 08.9 | +0.6 |
| | baz=40 | | | | | | |
| WHTX | Lake Whitney | 39.79 | 332 | eP | P | 14 12 08.4 | +0.1 |
| | comp=Z,81nm,1.3s | | | | | | |
| WHTX | | | | epP | pP | 14 12 36.2 | +0.6 |
| 531A | Rocksprings | 39.90 | 327 | P | P | 14 12 10.0 | +0.8 |
| | baz=40,SNR=45 | | | | | | |
| 333A | Richland Sprin | 39.99 | 330 | P | P | 14 12 10.2 | +0.2 |
| | baz=40,SNR=23 | | | | | | |
| Z37A | Pogue Cattle C | 39.99 | 335 | P | P | 14 12 10.2 | +0.2 |
| | baz=40 | | | | | | |
| Y39A | Lockesburg | 40.02 | 337 | P | P | 14 12 10.3 | +0.2 |
| | baz=40,SNR=7.9 | | | | | | |
| 432A | Menard | 40.05 | 328 | P | P | 14 12 11.1 | +0.5 |
| | baz=40,SNR=38 | | | | | | |
| 234A | Clairette | 40.13 | 331 | P | P | 14 12 11.2 | +0.1 |
| | baz=40,SNR=19 | | | | | | |
| UALR | University of | 40.13 | 340 | eP | P | 14 12 09.6 | -1.4 |
| | comp=Z,51nm,0.8s | | | | | | |
| UALR | | | | epP | pP | 14 12 37.9 | -0.5 |
| Y38A | Idabel | 40.26 | 337 | P | P | 14 12 12.0 | -0.2 |
| | baz=40 | | | | | | |
| 530A | J-C Ranch, Com | 40.32 | 326 | P | P | 14 12 13.6 | +0.8 |
| | baz=40,SNR=63 | | | | | | |
| 431A | Sonora | 40.33 | 327 | P | P | 14 12 13.6 | +0.8 |
| | baz=40,SNR=42 | | | | | | |
| MIAR | Mount Ida | 40.36 | 338 | eP | P | 14 12 10.7 | -2.3 |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| MIAR | Mount Ida | 40.36 | 338 | P | P | 14 12 13.3 | +0.3 |
| | baz=40 | | | | | | |
| MIAR | Mount Ida | 40.36 | 338 | eP | P | 14 12 10.7 | -2.3 |
| | comp=Z,21nm,1.1s | | | | | | |
| 332A | Millersview | 40.42 | 329 | P | P | 14 12 14.1 | +0.5 |
| | baz=40,SNR=101 | | | | | | |
| 233A | Rising Star | 40.51 | 330 | P | P | 14 12 14.5 | +0.2 |
| | baz=41,SNR=35 | | | | | | |
| 134A | White-Moore Ra | 40.57 | 332 | P | P | 14 12 16.1 | +1.4 |
| | baz=41 | | | | | | |
| Y37A | Hugo | 40.67 | 336 | P | P | 14 12 15.6 | +0.1 |
| | baz=41,SNR=7.0 | | | | | | |
| 331A | San Angelo | 40.72 | 328 | P | P | 14 12 16.5 | +0.4 |
| | baz=41,SNR=22 | | | | | | |
| 430A | Baggett Ranch, | 40.75 | 327 | P | P | 14 12 16.8 | +0.4 |
| | baz=41,SNR=18 | | | | | | |
| 232A | Coleman | 40.78 | 329 | P | P | 14 12 16.9 | +0.4 |
| | baz=41,SNR=48 | | | | | | |
| RCBR | Riachuelo | 40.78 | 96 | LR | LR | 14 29 20.7 | |
| | comp=Z,212nm,21.2s,baz=266,slow=36 | | | | | | |
| RCBR | Riachuelo | 40.78 | 96 | eP | P | 14 12 18.1 | +1.3 |
| | comp=Z,21nm,1.0s | | | | | | |
| 529A | Stev Forest Ra | 40.80 | 325 | P | P | 14 12 17.3 | +0.6 |
| | baz=41,SNR=11 | | | | | | |
| Z35A | Perchaven, San | 40.82 | 333 | P | P | 14 12 17.2 | +0.5 |
| | baz=41 | | | | | | |
| Y36A | Durant | 40.88 | 335 | P | P | 14 12 17.8 | +0.5 |
| | baz=41 | | | | | | |
| X38A | Whitesboro | 40.95 | 337 | P | P | 14 12 18.1 | +0.3 |
| | baz=41,SNR=14 | | | | | | |
| 429A | Davenport Ranc | 40.99 | 326 | P | P | 14 12 18.9 | +0.5 |
| | baz=41,SNR=38 | | | | | | |
| 133A | Hamilton Ranch | 41.00 | 331 | P | P | 14 12 18.9 | +0.6 |
| | baz=41,SNR=42 | | | | | | |
| TXAR | Lajitas Array | 41.07 | 323 | P | P | 14 12 19.4 | +0.5 |
| | comp=Z,12nm,0.9s,baz=148,slow=8.2,SNR=86 | | | | | | |
| TXAR | | | | pP | pP | 14 12 47.7 | +1.3 |
| | comp=Z,18nm,1.1s,baz=134,slow=8.9,SNR=7.0 | | | | | | |
| TXAR | | | | PcP | PcP | 14 14 17.3 | +0.7 |
| | comp=Z,11nm,0.8s,baz=146,slow=6.5,SNR=19 | | | | | | |
| TXAR | | | | LR | LR | 14 28 43.6 | |
| | comp=Z,64nm,19.0s,baz=0.0,slow=35 | | | | | | |
| X37A | Clayton | 41.10 | 336 | P | P | 14 12 19.2 | +0.2 |
| | baz=41,SNR=11 | | | | | | |
| Z34A | Collier Ranch, | 41.15 | 333 | P | P | 14 12 19.1 | -0.4 |
| | baz=41 | | | | | | |
| 231A | Bronte | 41.16 | 329 | P | P | 14 12 19.8 | +0.2 |
| | baz=41,SNR=18 | | | | | | |
| W38A | Poteau | 41.18 | 338 | P | P | 14 12 19.9 | +0.2 |
| | baz=41,SNR=11 | | | | | | |
| 330A | Mertzon | 41.20 | 327 | P | P | 14 12 20.1 | +0.2 |
| | baz=41,SNR=18 | | | | | | |
| Y35A | Marietta | 41.21 | 334 | P | P | 14 12 20.5 | +0.5 |
| | baz=41,SNR=13 | | | | | | |
| ABTX | Abilene, Hawle | 41.37 | 330 | P | P | 14 12 21.8 | +0.5 |
| | baz=41,SNR=34 | | | | | | |
| ABTX | Abilene, Hawle | 41.37 | 330 | eP | P | 14 12 21.2 | -0.1 |
| | comp=Z,107nm,0.8s | | | | | | |
| PBMO | Poplar Bluff | 41.37 | 343 | eP | P | 14 12 19.7 | -1.4 |
| | comp=Z,60nm,0.9s | | | | | | |
| PBMO | | | | ePcP | PcP | 14 14 17.5 | +0.3 |
| Z33A | Whitaker Ranch | 41.48 | 332 | P | P | 14 12 22.7 | +0.5 |
| | baz=42,SNR=30 | | | | | | |
| X36A | Centrahoma | 41.48 | 335 | P | P | 14 12 22.2 | 0.0 |
| | baz=42,SNR=9.3 | | | | | | |
| 230A | Sterling City | 41.54 | 328 | P | P | 14 12 23.2 | +0.4 |
| | baz=42,SNR=22 | | | | | | |
| Y34A | Reagan Ranch, | 41.57 | 333 | P | P | 14 12 23.4 | +0.5 |
| | baz=42,SNR=17 | | | | | | |
| W37A | Quinton | 41.60 | 337 | P | P | 14 12 23.1 | 0.0 |
| | baz=42,SNR=13 | | | | | | |
| X35A | Drake | 41.60 | 334 | P | P | 14 12 23.4 | +0.3 |
| | baz=42,SNR=6.9 | | | | | | |
| 329A | Wagon Wheel Ra | 41.70 | 327 | P | P | 14 12 24.7 | +0.6 |
| | baz=42,SNR=37 | | | | | | |
| SLBS | Sierra La Lagu | 41.70 | 311 | eP | P | 14 12 24.3 | +0.1 |
| | comp=Z,28nm,0.9s | | | | | | |
| WCI | Wyandotte Cave | 41.74 | 349 | eP | P | 14 12 23.0 | -1.3 |
| WCI | | | | pmax | pmax | | |
| | comp=Z,135nm,1.1s | | | | | | |
| WCI | Wyandotte Cave | 41.74 | 349 | eP | P | 14 12 23.0 | -1.3 |
| | comp=Z,135nm,1.1s | | | | | | |
| USIN | University of | 41.78 | 347 | eP | P | 14 12 22.7 | -1.8 |
| | comp=Z,129nm,1.3s | | | | | | |
| 131A | Roby | 41.78 | 329 | P | P | 14 12 25.2 | +0.5 |
| | baz=42,SNR=24 | | | | | | |
| Z32A | Haskell | 41.84 | 331 | P | P | 14 12 25.7 | +0.6 |
| | baz=42,SNR=39 | | | | | | |
| V38A | Canehill | 41.84 | 338 | P | P | 14 12 24.5 | -0.7 |
| | baz=42,SNR=30 | | | | | | |
| SIUC | Southern Illin | 41.92 | 345 | eP | P | 14 12 24.0 | -1.6 |
| | comp=Z,96nm,0.9s | | | | | | |
| W36A | Wetumka | 41.92 | 336 | P | P | 14 12 25.5 | -0.2 |
| | baz=42,SNR=15 | | | | | | |
| Y33A | Hilltop Ranch, | 42.01 | 332 | P | P | 14 12 27.2 | +0.7 |
| | baz=42,SNR=17 | | | | | | |
| 130A | Snyder | 42.02 | 329 | P | P | 14 12 27.4 | +0.7 |
| | baz=42,SNR=27 | | | | | | |
| V37A | Hulbert | 42.14 | 337 | P | P | 14 12 27.0 | -0.4 |
| | baz=42,SNR=20 | | | | | | |
| X34A | Smith Ranch, M | 42.15 | 334 | P | P | 14 12 28.0 | +0.4 |
| | baz=42,SNR=12 | | | | | | |
| Z31A | Sharp Cattle R | 42.17 | 330 | P | P | 14 12 28.5 | +0.7 |
| | baz=42,SNR=41 | | | | | | |
| W35A | Tecumseh | 42.20 | 335 | P | P | 14 12 27.5 | -0.5 |
| | baz=42,SNR=17 | | | | | | |
| U38A | Gravette | 42.35 | 339 | P | P | 14 12 28.3 | -0.9 |
| | baz=42,SNR=20 | | | | | | |
| V36A | Jenks | 42.37 | 337 | P | P | 14 12 29.1 | -0.2 |
| | baz=42,SNR=12 | | | | | | |
| Y32A | R-V Farms, Ver | 42.39 | 332 | P | P | 14 12 30.3 | +0.8 |
| | baz=42,SNR=26 | | | | | | |
| X33A | Lawton | 42.40 | 333 | P | P | 14 12 29.6 | 0.0 |
| | baz=42,SNR=14 | | | | | | |
| TUL1 | Tulsa | 42.42 | 337 | P | P | 14 12 29.3 | -0.5 |
| | baz=42,SNR=10 | | | | | | |
| TUL1 | Tulsa | 42.42 | 337 | eP | P | 14 12 28.4 | -1.3 |
| | comp=Z,65nm,1.2s | | | | | | |
| TUL1 | | | | epP | pP | 14 12 57.6 | +0.3 |
| 228A | UT Block 9, Go | 42.51 | 327 | P | P | 14 12 30.7 | 0.0 |
| | baz=43,SNR=12 | | | | | | |
| 129A | Stewart Farms, | 42.52 | 328 | P | P | 14 12 30.9 | +0.2 |
| | baz=43,SNR=18 | | | | | | |
| U37A | Salina | 42.59 | 338 | P | P | 14 12 30.6 | -0.5 |
| | baz=43,SNR=25 | | | | | | |
| OLIL | Olney | 42.61 | 347 | eP | P | 14 12 29.9 | -1.3 |
| | comp=Z,47nm,1.0s | | | | | | |
| Z30A | Sanderson Ranc | 42.65 | 329 | P | P | 14 12 32.3 | +0.5 |
| | baz=43,SNR=51 | | | | | | |
| W34A | Bridge Creek, | 42.66 | 334 | P | P | 14 12 31.4 | -0.3 |
| | baz=43,SNR=7.4 | | | | | | |
| W34A | Bridge Creek, | 42.66 | 334 | eP | P | 14 12 30.3 | -1.4 |
| | comp=Z,27nm,0.8s | | | | | | |
| W34A | | | | ePcP | PcP | 14 14 22.3 | +0.7 |
| X32A | Elmer | 42.66 | 332 | P | P | 14 12 32.2 | +0.5 |
| | baz=43,SNR=27 | | | | | | |
| WMOK | Wichita Mounta | 42.69 | 333 | P | P | 14 12 31.1 | -0.9 |
| WMOK | | | | e*PP | pP | 14 12 58.3 | -1.3 |
| WMOK | | | | e | | 14 14 22.5 | |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,60nm,0.9s | | | | | | |
| WMOK | Wichita Mounta | 42.69 | 333 | P | P | 14 12 31.1 | -0.9 |
| | comp=Z,60nm,0.9s | | | | | | |
| WMOK | | | | epP | pP | 14 12 58.3 | -1.3 |
| WMOK | | | | ePcP | PcP | 14 14 22.5 | +0.8 |
| BLO | Bloomington | 42.70 | 349 | eP | P | 14 12 29.8 | -2.1 |
| BLO | | | | pmax | pmax | | |
| | comp=Z,36nm,0.6s | | | | | | |
| BLO | Bloomington | 42.70 | 349 | eP | P | 14 12 29.8 | -2.1 |
| | comp=Z,36nm,0.6s | | | | | | |
| V35A | Meyer Ranch, C | 42.71 | 336 | P | P | 14 12 31.5 | -0.6 |
| | baz=43,SNR=13 | | | | | | |
| Y31A | Rekieta Farm, | 42.75 | 331 | P | P | 14 12 33.4 | +0.9 |
| | baz=43,SNR=41 | | | | | | |
| CCM | Cathedral Cave | 42.79 | 343 | eP | P | 14 12 30.6 | -2.1 |
| CCM | | | | pmax | pmax | | |
| | comp=Z,45nm,0.9s | | | | | | |
| CCM | Cathedral Cave | 42.79 | 343 | eP | P | 14 12 30.6 | -2.1 |
| | comp=Z,44nm,0.9s | | | | | | |
| U36A | Oologah | 42.81 | 337 | P | P | 14 12 32.6 | -0.3 |
| | baz=43 | | | | | | |
| 128A | Castleberry Fa | 42.84 | 327 | P | P | 14 12 33.4 | +0.1 |
| | baz=43,SNR=15 | | | | | | |
| W33A | Caddo, Fort Co | 42.89 | 333 | P | P | 14 12 34.3 | +0.6 |
| | baz=43,SNR=14 | | | | | | |
| Z29A | Hungry Hill Ra | 42.92 | 329 | P | P | 14 12 34.2 | +0.2 |
| | baz=43,SNR=28 | | | | | | |
| Y30A | Stafford Cattl | 43.00 | 330 | P | P | 14 12 35.4 | +0.8 |
| | baz=43,SNR=45 | | | | | | |
| V34A | Guthrie | 43.05 | 335 | P | P | 14 12 34.3 | -0.6 |
| | baz=43,SNR=10 | | | | | | |
| V34A | Guthrie | 43.05 | 335 | eP | P | 14 12 34.5 | -0.5 |
| | comp=Z,114nm,1.0s | | | | | | |
| V34A | | | | epP | pP | 14 13 02.3 | -0.2 |
| V34A | | | | ePcP | PcP | 14 14 23.5 | +0.6 |
| T37A | Cheneyville 18 | 43.15 | 339 | P | P | 14 12 34.7 | -1.0 |
| | baz=43,SNR=33 | | | | | | |
| X31A | McDonald Ranch | 43.16 | 332 | P | P | 14 12 36.3 | +0.5 |
| | baz=43,SNR=54 | | | | | | |
| U35A | Pawnee | 43.19 | 336 | P | P | 14 12 35.7 | -0.3 |
| | baz=43,SNR=7.2 | | | | | | |
| W32A | Sentinel | 43.22 | 333 | P | P | 14 12 36.8 | +0.5 |
| | baz=43,SNR=107 | | | | | | |
| Z28A | Tucker Farm, M | 43.30 | 328 | P | P | 14 12 36.8 | -0.2 |
| | baz=43,SNR=14 | | | | | | |
| V33A | Lossen Ranch, | 43.37 | 334 | P | P | 14 12 37.3 | -0.2 |
| | baz=44,SNR=15 | | | | | | |
| Y29A | Porterfield Fa | 43.38 | 329 | P | P | 14 12 38.3 | +0.7 |
| | baz=44,SNR=34 | | | | | | |
| X30A | Coker Ranch, T | 43.44 | 331 | P | P | 14 12 38.7 | +0.6 |
| | baz=44,SNR=26 | | | | | | |
| T36A | Boggs Farm, Ca | 43.45 | 338 | P | P | 14 12 37.5 | -0.6 |
| | baz=44,SNR=17 | | | | | | |
| T35A | Sooner Cattle | 43.58 | 337 | P | P | 14 12 38.6 | -0.5 |
| | baz=44,SNR=6.3 | | | | | | |
| U34A | Anderson Ranch | 43.58 | 335 | P | P | 14 12 38.9 | -0.2 |
| | baz=44,SNR=11 | | | | | | |
| U34A | Anderson Ranch | 43.58 | 335 | eP | P | 14 12 38.0 | -1.1 |
| | comp=Z,103nm,1.1s | | | | | | |
| U34A | | | | epP | pP | 14 13 04.5 | -2.3 |
| W31A | Holland Ranch, | 43.59 | 332 | P | P | 14 12 39.3 | 0.0 |
| | baz=44,SNR=13 | | | | | | |
| V32A | Arapaho | 43.62 | 333 | P | P | 14 12 40.0 | +0.5 |
| | baz=44,SNR=23 | | | | | | |
| S37A | Fort Scott | 43.69 | 339 | P | P | 14 12 39.4 | -0.5 |
| | baz=44,SNR=25 | | | | | | |
| Y28A | McKinney Farm, | 43.71 | 329 | P | P | 14 12 40.7 | +0.4 |
| | baz=44,SNR=31 | | | | | | |
| MNTX | Cornudas Mount | 43.79 | 324 | P | P | 14 12 41.0 | 0.0 |
| | baz=44,SNR=47 | | | | | | |
| MNTX | Cornudas Mount | 43.79 | 324 | eP | P | 14 12 40.6 | -0.4 |
| | comp=Z,27nm,0.9s | | | | | | |
| MNTX | | | | epP | pP | 14 13 09.7 | +1.1 |
| U33A | Lingo Farm, Me | 43.81 | 335 | P | P | 14 12 41.1 | +0.1 |
| | baz=44,SNR=9.8 | | | | | | |
| X29A | Tulia | 43.85 | 330 | P | P | 14 12 41.9 | +0.4 |
| | baz=44,SNR=32 | | | | | | |
| W30A | Crocket Farms | 43.89 | 331 | P | P | 14 12 42.6 | +0.9 |
| | baz=44 | | | | | | |
| S36A | Lake Cedric, C | 43.93 | 338 | P | P | 14 12 41.3 | -0.6 |
| | baz=44,SNR=11 | | | | | | |
| T34A | McClaskey Farm | 43.94 | 336 | P | P | 14 12 42.3 | +0.4 |
| | baz=44,SNR=9.3 | | | | | | |
| MSTX | Muleshoe | 44.03 | 328 | P | P | 14 12 43.4 | +0.5 |
| | baz=44,SNR=22 | | | | | | |
| MSTX | Muleshoe | 44.03 | 328 | eP | P | 14 12 42.7 | -0.2 |
| | comp=Z,242nm,1.5s | | | | | | |
| MSTX | | | | epP | pP | 14 13 11.8 | +1.2 |
| MSTX | | | | ePcP | PcP | 14 14 26.8 | +0.4 |
| U32A | Winter Ranch, | 44.15 | 334 | P | P | 14 12 43.8 | +0.1 |
| | baz=44,SNR=22 | | | | | | |
| X28A | Dimmitt | 44.16 | 329 | P | P | 14 12 44.0 | +0.1 |
| | baz=44,SNR=5.8 | | | | | | |
| S35A | Otter Creek Ra | 44.17 | 338 | P | P | 14 12 43.3 | -0.5 |
| | baz=44,SNR=15 | | | | | | |
| AMTX | Amarillo | 44.19 | 330 | P | P | 14 12 44.4 | +0.3 |
| | baz=44 | | | | | | |
| AMTX | Amarillo | 44.19 | 330 | eP | P | 14 12 44.5 | +0.3 |
| | comp=Z,101nm,0.7s | | | | | | |
| AMTX | | | | epP | pP | 14 13 12.8 | +1.0 |
| AMTX | | | | ePcP | PcP | 14 14 27.6 | +0.7 |
| W29A | Amraillo | 44.36 | 330 | P | P | 14 12 45.9 | +0.4 |
| | baz=44,SNR=22 | | | | | | |
| V30A | Spur Ranch, Mi | 44.41 | 332 | P | P | 14 12 46.2 | +0.3 |
| | baz=44 | | | | | | |
| T33A | Patterson Ranc | 44.42 | 335 | P | P | 14 12 46.0 | +0.2 |
| | baz=44 | | | | | | |
| R36A | Gordon, Harris | 44.43 | 339 | P | P | 14 12 45.0 | -0.8 |
| | baz=44,SNR=6.6 | | | | | | |
| S34A | Willow Spring | 44.49 | 337 | P | P | 14 12 46.1 | -0.3 |
| | baz=45 | | | | | | |
| U31A | Nine Bar Ranch | 44.52 | 333 | P | P | 14 12 47.1 | +0.4 |
| | baz=45 | | | | | | |
| Q37A | Longview Farm, | 44.55 | 340 | P | P | 14 12 45.7 | -1.2 |
| | baz=45 | | | | | | |
| HDIL | Hopedale | 44.63 | 346 | P | P | 14 12 45.6 | -1.7 |
| | baz=45,SNR=9.1 | | | | | | |
| HDIL | Hopedale | 44.63 | 346 | eP | P | 14 12 45.2 | -2.1 |
| | comp=Z,79nm,0.5s | | | | | | |
| R35A | Emporia Munici | 44.69 | 338 | P | P | 14 12 47.5 | -0.4 |
| | baz=45 | | | | | | |
| W28A | Vega | 44.75 | 330 | P | P | 14 12 49.2 | +0.6 |
| | baz=45 | | | | | | |
| S33A | Kaszmaul Farm, | 44.76 | 336 | P | P | 14 12 48.4 | -0.1 |
| | baz=45,SNR=8.5 | | | | | | |
| V29A | Stinnett | 44.90 | 331 | P | P | 14 12 50.2 | +0.5 |
| | baz=45 | | | | | | |
| Q36A | Arnold C. Orve | 44.98 | 339 | P | P | 14 12 48.9 | -1.4 |
| | baz=45,SNR=17 | | | | | | |
| U30A | WK&E Inc. Balk | 45.02 | 332 | P | P | 14 12 51.4 | +0.7 |
| | baz=45,SNR=7.3 | | | | | | |
| T31A | Randall Ranch, | 45.05 | 334 | P | P | 14 12 51.2 | +0.4 |
| | baz=45,SNR=11 | | | | | | |
| R34A | Isabella, Hill | 45.06 | 337 | P | P | 14 12 50.6 | -0.3 |
| | baz=45,SNR=11 | | | | | | |
| Q35A | Mercer Eighty, | 45.10 | 339 | P | P | 14 12 50.3 | -0.8 |
| | baz=45,SNR=24 | | | | | | |
| V28A | Channing | 45.15 | 330 | P | P | 14 12 52.2 | +0.4 |
| | baz=45,SNR=7.7 | | | | | | |
| S32A | Newby Ranch, P | 45.24 | 335 | P | P | 14 12 53.1 | +0.8 |
| | baz=45,SNR=7.0 | | | | | | |
| U29A | Oasis Ranch, S | 45.25 | 332 | P | P | 14 12 53.4 | +0.9 |
| | baz=45 | | | | | | |
| R33A | Olander Ranch, | 45.36 | 336 | P | P | 14 12 53.2 | -0.1 |
| | baz=45 | | | | | | |
| T30A | Plains | 45.39 | 333 | P | P | 14 12 54.3 | +0.7 |
| | baz=46 | | | | | | |
| S31A | Mullinville | 45.40 | 334 | P | P | 14 12 54.3 | +0.6 |
| | baz=46,SNR=12 | | | | | | |
| V27A | Dan Oppiter Fa | 45.46 | 330 | P | P | 14 12 54.8 | +0.6 |
| | baz=46 | | | | | | |
| P36A | Good Intent, A | 45.48 | 340 | P | P | 14 12 53.6 | -0.5 |
| | baz=46,SNR=11 | | | | | | |
| Q34A | Chapman | 45.49 | 338 | P | P | 14 12 53.6 | -0.6 |
| | baz=46,SNR=22 | | | | | | |
| KSU1 | Kansas State U | 45.52 | 338 | P | P | 14 12 53.6 | -0.9 |
| | baz=46,SNR=5.2 | | | | | | |
| KSU1 | Kansas State U | 45.52 | 338 | eP | P | 14 12 53.4 | -1.1 |

comp=Z,56nm,0.8s
P35A **Duane Minner,** 45.68 339 P P 14 12 54.6 -1.2
baz=46,SNR=14
R32A **Long Quarter,** 45.76 336 P P 14 12 56.4 +0.1
baz=46
121A **Cookes Peak, D** 45.82 323 P P 14 12 57.8 +0.6
baz=46,SNR=16
121A **Cookes Peak, D** 45.82 323 P P 14 12 56.2 -1.0
comp=Z,59nm,1.2s
121A *e*pP pP 14 13 27.2 +2.1
121A *e*PcP PcP 14 14 33.1 +0.4
T29A **Hugoton** 45.83 332 P P 14 12 57.8 +0.8
baz=46,SNR=14
S30A **Montezuma** 45.85 334 P P 14 12 57.9 +0.7
baz=46,SNR=10
Q33A **Connelly Farm,** 45.90 337 P P 14 12 57.4 0.0
baz=46,SNR=8.5
U27A **Thompson Grove** 45.97 330 P P 14 12 58.7 +0.4
baz=46,SNR=5.8
R31A **Burdett** 45.98 335 P P 14 12 58.7 +0.5
baz=46,SNR=8.9
P34A **Walnut Farm, R** 45.99 338 P P 14 12 57.8 -0.4
baz=46,SNR=19
S29A **Ulysses** 46.13 333 P P 14 13 00.4 +1.1
baz=46,SNR=18
Q32A **Meitler Ranch,** 46.18 336 P P 14 12 59.7 0.0
baz=46,SNR=8.3
T28A **Walsh** 46.19 332 P P 14 13 00.3 +0.5
baz=46,SNR=9.7
P33A **Williams Farm,** 46.22 337 P P 14 12 60.0 0.0
baz=46
O35A **Humboldt** 46.30 340 P P 14 12 59.3 -1.3
baz=46,SNR=5.4
R30A **Dighton** 46.30 334 P P 14 13 01.7 +1.0
baz=46,SNR=16
LPM **Los Pinos Moun** 46.40 325 *e*P P 14 13 02.2 +0.5
comp=Z,28nm,1.2s
T27A **Campo** 46.43 331 P P 14 13 02.3 +0.5
baz=46,SNR=12
S28A **Manter** 46.46 332 P P 14 13 02.5 +0.5
baz=46,SNR=19
CBKS **Cedar Bluff** 46.51 335 *e*P P 14 13 01.8 -0.5
CBKS *e**PP pP 14 13 32.2 +1.9
CBKS pmax pmax
comp=Z,90nm,0.8s
CBKS MLR MLR
comp=Z,359nm,22.0s
CBKS **Cedar Bluff** 46.51 335 P P 14 13 02.9 +0.5
baz=47,SNR=15
CBKS **Cedar Bluff** 46.51 335 *e*P P 14 13 01.8 -0.5
comp=Z,90nm,0.8s
CBKS *e*pP pP 14 13 32.2 +1.9
CBKS LR LR
comp=Z,359nm,22.0s
Q31A **Ellis** 46.53 336 P P 14 13 02.9 +0.4
baz=47,SNR=5.8
O33A **Hebron** 46.74 338 P P 14 13 03.5 -0.5
baz=47,SNR=5.7
P32A **Huiting Farm,** 46.74 337 P P 14 13 04.1 0.0
baz=47
N35A **Tabor** 46.74 340 P P 14 13 02.5 -1.5
baz=47,SNR=8.1
LAZ **Ladron** 46.76 325 *e*P P 14 13 04.1 -0.5
comp=Z,13nm,1.0s
LAZ *e*PcP PcP 14 14 35.7 -0.3
ANMO **Albuquerque** 46.77 326 *d i*P P 14 13 05.4 +0.8
ANMO pmax pmax
comp=Z,83nm,0.8s
ANMO **Albuquerque** 46.77 326 *e*P P 14 13 04.9 +0.4
comp=Z,73nm,0.8s
R29A **Marienthal** 46.80 334 P P 14 13 05.3 +0.7
baz=47
Q30A **Quinter** 46.86 335 P P 14 13 05.6 +0.6
baz=47,SNR=24
SCIA **State Center** 46.92 343 P P 14 13 02.4 -3.0
comp=Z,83nm,0.8s
T26A **Comanche Natio** 46.95 330 P P 14 13 06.5 +0.5
baz=47,SNR=11
P31A **Stockton** 46.96 336 P P 14 13 06.1 +0.3
baz=47,SNR=8.3
S27A **Las Animas** 47.01 331 P P 14 13 06.8 +0.5
baz=47,SNR=16
R28A **Tribune** 47.03 333 P P 14 13 06.9 +0.5
baz=47,SNR=16
JFWS **Jewell Farm** 47.09 346 *e*P P 14 13 05.0 -1.7
JFWS *e* 14 14 36.9
JFWS pmax pmax
comp=Z,57nm,0.8s
JFWS **Jewell Farm** 47.09 346 *e*P P 14 13 05.0 -1.7
comp=Z,57nm,0.8s
JFWS *e*pP pP 14 13 34.6 -0.2
JFWS *e*PcP PcP 14 14 36.9 +0.2
Q29A **Oakley** 47.11 334 P P 14 13 07.5 +0.5
baz=47,SNR=12
O32A **Brockman Farm,** 47.16 337 P P 14 13 06.7 -0.6
baz=47,SNR=7.4
S26A **Kim** 47.24 331 P P 14 13 09.1 +1.0
baz=47,SNR=49
M35A **Neola** 47.30 341 P P 14 13 07.4 -0.9
baz=47,SNR=10
T25A **Trinidad** 47.33 330 P P 14 13 09.9 +1.0
baz=47,SNR=53
P30A **Selden** 47.34 335 P P 14 13 09.4 +0.6
baz=47,SNR=9.2
R27A **Eads** 47.44 332 P P 14 13 10.3 +0.7
baz=48,SNR=16
O31A **Woolen Ranch,** 47.48 336 P P 14 13 09.7 -0.1
baz=48
TUC **Tucson** 47.55 320 *e*P P 14 13 10.0 -0.6
TUC pmax pmax
comp=Z,30nm,1.0s
TUC MLR MLR
comp=Z,247nm,22.0s
TUC **Tucson** 47.55 320 *e*P P 14 13 09.9 -0.6
comp=Z,30nm,1.0s
TUC *e*pP pP 14 13 39.7 +1.0
TUC LR LR
comp=Z,247nm,22.0s
N32A **Stulken Farm,** 47.60 338 P P 14 13 10.4 -0.4
baz=48
Q28A **Sharon Springs** 47.63 333 P P 14 13 11.5 +0.4
baz=48,SNR=5.8
M34A **Aspy Farms, Fr** 47.63 340 P P 14 13 09.7 -1.2
baz=48
P29A **Atwood** 47.68 335 P P 14 13 12.0 +0.5
baz=48
R26A **Arlington** 47.76 331 P P 14 13 12.9 +0.7
baz=48,SNR=33
O30A **MW Ranch, Wils** 47.80 336 P P 14 13 12.3 0.0
baz=48,SNR=17
L35A **Bielow Farm, R** 47.83 341 P P 14 13 11.3 -1.1
baz=48,SNR=8.5
M33A **Taylor Creek F** 47.91 339 P P 14 13 12.2 -0.9
baz=48
KSCO **Kaye Shedlock'** 47.95 333 *e*P P 14 13 14.6 +1.0
comp=Z,102nm,1.4s
P28A **Saint Francis** 48.01 334 P P 14 13 14.6 +0.6
baz=48,SNR=15
O29A **4D Ranch, Culb** 48.06 335 P P 14 13 15.2 +0.8
baz=48,SNR=5.1
BGNE **Belgrade** 48.11 338 P P 14 13 14.5 -0.1
baz=48
BGNE **Belgrade** 48.11 338 *e*P P 14 13 11.8 -2.8
comp=Z,213nm,1.5s
Q26A **Hugo** 48.29 332 P P 14 13 17.1 +0.9
baz=48,SNR=5.3
SDCO **Great Sand Dun** 48.35 329 P P 14 13 17.5 +0.6
baz=48,SNR=146
SDCO **Great Sand Dun** 48.35 329 *e*pP pP 14 13 45.0 0.0
comp=Z,62nm,0.9s
SDCO *e*PcP PcP 14 14 42.3 +0.5
P27A **Ficken Ranch,** 48.37 333 P P 14 13 17.7 +0.9
baz=48
L33A **Hoskins** 48.46 340 P P 14 13 16.2 -1.1
baz=48,SNR=6.3
O28A **Krutsinger Ran** 48.48 334 P P 14 13 18.2 +0.7
baz=49,SNR=6.7
N29A **Votaw Ranch, W** 48.57 336 P P 14 13 18.8 +0.6
baz=49
I38A **Scanlan Farm,** 48.66 345 P P 14 13 17.1 -1.7
baz=49
K33A **Hardington** 48.75 340 P P 14 13 19.0 -0.5
baz=49
W18A **Petrified Fore** 48.78 324 P P 14 13 20.7 +0.6
baz=49,SNR=30
W18A **Petrified Fore** 48.78 324 *e*P P 14 13 20.4 +0.3
comp=Z,110nm,1.1s
W18A *e*pP pP 14 13 50.0 +1.7

O27A **Beecher Island** 48.84 334 P P 14 13 20.9 +0.6
baz=49,SNR=9.6
N28A **Pribbeno Ranch** 48.84 335 P P 14 13 20.5 +0.2
baz=49,SNR=8.6
J35A **Milford** 48.85 342 P P 14 13 19.1 -1.2
baz=49,SNR=5.2
J34A **George** 49.02 341 P P 14 13 20.5 -1.0
baz=49
L31A **Butterfield Fa** 49.03 338 P P 14 13 21.5 -0.2
baz=49,SNR=9.4
S22A **4UR Ranch, Cre** 49.04 328 P P 14 13 22.5 +0.4
baz=49,SNR=45
Q24A **Divide** 49.11 331 P P 14 13 23.2 +0.5
baz=49,SNR=8.2
M29A **Burnside Ranch** 49.12 336 P P 14 13 22.1 -0.3
baz=49
K32A **Verdigre** 49.14 339 P P 14 13 21.3 -1.2
baz=49
L30A **Spencer Herefo** 49.17 337 P P 14 13 22.6 -0.1
baz=49
O26A **Horse Wrangler** 49.25 333 P P 14 13 24.0 +0.5
baz=49
OGNE **Ogallala** 49.26 335 P P 14 13 24.1 +0.5
baz=49,SNR=7.9
OGNE **Ogallala** 49.26 335 *e*P P 14 13 23.5 0.0
H37A **Dierke Farm, C** 49.32 345 P P 14 13 23.2 -0.6
baz=49
M28A **Bar X Bar Ranc** 49.36 336 P P 14 13 24.9 +0.7
baz=49,SNR=7.7
J33A **Davis** 49.37 341 P P 14 13 23.1 -1.1
baz=50,SNR=5.3
K31A **O'Neill** 49.39 339 P P 14 13 24.1 -0.3
baz=50,SNR=5.2
MVCO **Mesa Verde** 49.54 326 P P 14 13 26.3 +0.4
baz=50,SNR=13
MVCO **Mesa Verde** 49.54 326 *e*P P 14 13 26.1 +0.2
comp=Z,211nm,2.2s
L29A **Maesberg Ranch** 49.56 337 P P 14 13 25.7 0.0
baz=50,SNR=7.5
H36A **Jessenland, He** 49.59 344 P P 14 13 24.4 -1.4
baz=50
ECSD **EROS Data Cent** 49.63 341 P P 14 13 24.8 -1.4
baz=50,SNR=17
ECSD **EROS Data Cent** 49.63 341 *e*P P 14 13 23.5 -2.7
comp=Z,24nm,0.8s
N26A **Koester Ranch,** 49.69 334 P P 14 13 27.4 +0.6
baz=50
J32A **Parkston** 49.72 340 P P 14 13 25.5 -1.4
baz=50
K30A **Basset** 49.75 338 P P 14 13 27.2 0.0
baz=50,SNR=7.4
SPMN **St. Paul** 49.89 345 P P 14 13 26.4 -1.6
baz=50,SNR=8.5
SPMN **St. Paul** 49.89 345 *e*P P 14 13 25.5 -2.6
comp=Z,47nm,1.0s
M27A **Reverse DX Ran** 49.90 335 P P 14 13 29.2 +0.9
baz=50,SNR=5.5
L28A **Connealy Angus** 49.93 336 P P 14 13 29.3 +0.7
baz=50,SNR=7.2
J31A **Geddes** 49.96 339 P P 14 13 27.6 -1.2
baz=50
I33A **Coleman** 49.97 341 P P 14 13 27.3 -1.4
baz=50
ISCO **Idaho Springs** 49.98 331 *e*P P 14 13 28.8 -0.5
ISCO *e* 14 14 48.8
ISCO pmax pmax
comp=Z,16nm,0.8s
ISCO **Idaho Springs** 49.98 331 P P 14 13 29.9 +0.6
baz=50,SNR=21
ISCO **Idaho Springs** 49.98 331 *e*P P 14 13 28.8 -0.5
comp=Z,16nm,0.8s
ISCO *e*pP pP 14 13 58.4 +0.7
ISCO *e*PcP PcP 14 14 48.8 +1.1
WUAZ **Wupatki** 50.03 323 P P 14 13 30.4 +0.8
baz=50,SNR=47
WUAZ **Wupatki** 50.03 323 *e*P P 14 13 29.8 +0.2
comp=Z,59nm,0.9s
WUAZ *e*pP pP 14 13 59.6 +1.7
WUAZ *e*PcP PcP 14 14 48.4 +0.6
K29A **Lazy Trails An** 50.09 337 P P 14 13 30.1 +0.3
baz=50
SMCO **Snowmass** 50.19 329 *e*P P 14 13 29.7 -1.3
comp=Z,20nm,1.0s
SMCO *e*PcP PcP 14 14 48.8 +0.3
H34A **Spellman Lake,** 50.21 342 P P 14 13 29.1 -1.4
baz=50
PV01 **Paradox Valley** 50.25 327 *e*P P 14 13 32.0 +0.8
comp=Z,4µm,1.0s
PV01 *e*pP pP 14 14 01.0 +1.4
J30A **Dallas** 50.26 338 P P 14 13 30.4 -0.6
baz=50,SNR=9.7
K28A **Ten Mile Ranch** 50.46 336 P P 14 13 33.5 +0.9
baz=50,SNR=32
H33A **Prehn Over Nor** 50.52 342 P P 14 13 31.5 -1.4
baz=51,SNR=8.3
M25A **Palm-Egli Farm** 50.55 333 P P 14 13 33.9 +0.6
baz=51,SNR=12
H32A **Carlson Farm,** 50.58 341 P P 14 13 32.3 -1.1
baz=51,SNR=5.7
PV04 **Paradox Valley** 50.62 327 *e*P P 14 13 33.0 -1.0
PV04 *e*pP pP 14 14 01.1 -1.3
J29A **Okreek** 50.65 338 P P 14 13 33.4 -0.5
baz=51,SNR=25
F36A **Milaca** 50.66 345 P P 14 13 32.6 -1.4
baz=51,SNR=10
I30A **Oacoma** 50.75 339 P P 14 13 33.7 -1.0
baz=51
Y12C **Blythe** 50.89 319 P P 14 13 36.6 +0.7
baz=51,SNR=5.5
H31A **Wolsey** 50.91 340 P P 14 13 35.1 -0.7
baz=51
F35A **Swanville** 50.94 344 P P 14 13 34.6 -1.4
baz=51,SNR=10
PDMCI **Parker Dam,Lak** 50.98 320 P P 14 13 37.5 +1.0
baz=51
N23A **Red Feather La** 50.99 332 P P 14 13 37.4 +0.6
baz=51,SNR=11
J28A **Allard Ranch,** 51.01 337 P P 14 13 36.7 +0.1
baz=51,SNR=19
SUSD **South Dakota S** 51.04 340 P P 14 13 35.6 -1.2
baz=51
F34A **Alexandria** 51.08 343 P P 14 13 35.6 -1.5
baz=51
I29A **Vivian Onida** 51.16 338 P P 14 13 37.0 -0.8
baz=51
J27A **Elkhorn Farm,** 51.17 336 P P 14 13 38.6 +0.7
baz=51,SNR=24
EFI **East Falkland** 51.18 165 *i* P P 14 13 38.9 +1.2
EFI pmax pmax
comp=Z,37nm,0.8s
SWSC **Sam W. Stewart** 51.25 317 P P 14 13 38.9 +0.3
baz=51
G32A **Webster** 51.27 341 P P 14 13 37.3 -1.2
baz=51,SNR=6.0
IBP **Imperial Bould** 51.29 317 P P 14 13 39.8 +0.8
baz=51
F33A **5 Mile Ranch,** 51.42 343 P P 14 13 38.1 -1.4
baz=52
I28A **Midland** 51.47 338 P P 14 13 39.9 -0.2
baz=52,SNR=26
E35A **Pequot Lakes** 51.54 344 P P 14 13 39.4 -1.1
baz=52,SNR=10
O20A **White River Ci** 51.55 329 P P 14 13 41.5 +0.6
baz=52,SNR=8.5
O20A **White River Ci** 51.55 329 *e*P P 14 13 39.2 -1.7
comp=Z,12nm,0.9s
IRM **Iron Mountain** 51.55 319 P P 14 13 39.8 -1.0
baz=52,SNR=21
D37A **Cotton** 51.60 346 P P 14 13 40.0 -1.0
baz=52,SNR=24
H29A **Onida** 51.65 339 P P 14 13 40.4 -1.0
baz=52
MONP **Monument Peak** 51.65 317 P P 14 13 41.6 -0.2
baz=52,SNR=8.1
J26A **Sides Ranch, S** 51.65 336 P P 14 13 42.5 +1.0
baz=52,SNR=9.7
BAR **Barrett** 51.70 316 *e*P P 14 13 41.5 -0.4
comp=Z,19nm,1.0s
BAR *e*pP pP 14 14 09.8 -0.6
E34A **Wadena** 51.71 344 P P 14 13 40.9 -0.9
baz=52
C39A **Grand Marais** 51.73 348 P P 14 13 40.6 -1.2
baz=52
D36A **Goodland** 51.80 346 P P 14 13 41.1 -1.2
baz=52,SNR=14
C38A **Sawbill Land.** 51.87 348 P P 14 13 41.3 -1.7
baz=52
I27A **Quinn** 51.87 337 P P 14 13 43.2 +0.2
baz=52,SNR=48
D35A **Remer** 51.93 345 P P 14 13 41.9 -1.4
baz=52,SNR=8.2
E33A **Westby DABS, E** 51.94 343 P P 14 13 42.9 -0.6
baz=52
H28A **Mission Ridge** 51.99 338 P P 14 13 43.6 -0.2
baz=52
SRU **San Rafael** 52.02 327 P P 14 13 43.6 -0.8
SRU *e* 14 14 54.8
SRU pmax pmax
comp=Z,51nm,1.1s
SRU **San Rafael** 52.02 327 P P 14 13 43.6 -0.8
comp=Z,51nm,1.1s
SRU *e*pP pP 14 14 13.0 +0.1
SRU *e*PcP PcP 14 14 54.8 -0.2
BELC **Belle Mtn. Jos** 52.02 318 P P 14 13 44.5 +0.1
baz=52,SNR=8.6
J25A **Sunshine Ranch** 52.02 335 P P 14 13 45.0 +0.8
baz=52,SNR=7.9
G29A **Hoven** 52.03 339 P P 14 13 43.6 -0.6
baz=52,SNR=12
F31A **Hecla** 52.05 341 P P 14 13 43.2 -1.1
baz=52,SNR=5.8
C37A **Embarrass** 52.08 347 P P 14 13 43.4 -1.0
baz=52,SNR=22
PFO **Pinyon Flat Ob** 52.09 317 *e*P P 14 13 44.9 -0.1
PFO *e**PP pP 14 14 13.6 +0.1
PFO *e* 14 14 55.0
PFO pmax pmax
comp=Z,22nm,1.2s
PFO **Pinyon Flat Ob** 52.09 317 P P 14 13 45.5 +0.6
baz=52,SNR=7.5
PFO **Pinyon Flat Ob** 52.09 317 *e*P P 14 13 44.9 -0.1
comp=Z,22nm,1.2s
PFO *e*pP pP 14 14 13.6 +0.1
PFO *e*PcP PcP 14 14 55.0 -0.5
EYMN **Ely** 52.13 347 P P 14 13 43.7 -1.2
baz=52,SNR=9.5
EYMN **Ely** 52.13 347 *e*P P 14 13 41.1 -3.7
I26A **New Underwood** 52.16 336 P P 14 13 45.9 +0.6
baz=52,SNR=33
P18A **Preston Nutter** 52.23 327 *e*P P 14 13 46.8 +0.6
comp=Z,90nm,1.7s
D34A **Park Rapids** 52.24 344 P P 14 13 44.6 -1.1
baz=52,SNR=14
GMRC **Granite Mounta** 52.26 319 P P 14 13 45.8 -0.4
baz=52,SNR=17
C36A **Pine Crest Far** 52.26 346 P P 14 13 45.0 -0.8
baz=52,SNR=42
F30A **Leola** 52.29 340 P P 14 13 45.3 -0.8
baz=52
G28A **Parade** 52.29 338 P P 14 13 45.9 -0.2
baz=52,SNR=19
E32A **Braaten, Kindr** 52.34 342 P P 14 13 45.3 -1.0
baz=52
H27A **Howes** 52.35 337 P P 14 13 45.9 -0.7
baz=52,SNR=34
P17A **Butcher Ranch,** 52.39 327 *e*P P 14 13 47.8 +0.7
comp=Z,52nm,1.1s
D33A **AnnSam, Waubun** 52.47 344 P P 14 13 46.5 -0.9
baz=53,SNR=5.5
C35A **Jirik Farms, M** 52.49 345 P P 14 13 46.2 -1.2
baz=53,SNR=11
I25A **Rochford** 52.51 336 P P 14 13 48.8 +0.9
baz=53,SNR=70
TMUT **Trail Mountain** 52.52 326 *e*P P 14 13 47.8 -0.4
comp=Z,94nm,1.2s
MSU **Marysvale** 52.53 325 *e*P P 14 13 49.1 +0.9
MSU *e**PP pP 14 14 18.0 +1.2
MSU *e* 14 14 58.0
MSU pmax pmax
comp=Z,23nm,1.0s
MSU **Marysvale** 52.53 325 *e*P P 14 13 49.1 +0.9
comp=Z,23nm,1.0s
MSU *e*pP pP 14 14 18.0 +1.2
MSU *e*PcP PcP 14 14 58.0 +1.0
E31A **Nome** 52.56 342 P P 14 13 47.1 -0.8
baz=53,SNR=9.0
F29A **Eureka** 52.56 340 P P 14 13 47.6 -0.4
baz=53,SNR=6.7
CCUT **Cedar City** 52.58 323 *e*P P 14 13 48.6 0.0
comp=Z,15nm,1.0s
CCUT *e*pP pP 14 14 18.4 +1.2
CCUT *e*PcP PcP 14 14 58.2 +0.9
K22A **Casper** 52.63 332 P P 14 13 48.9 +0.1
baz=53,SNR=7.4
K22A **Casper** 52.63 332 *e*P P 14 13 48.2 -0.6
comp=Z,27nm,1.1s
K22A *e*PcP PcP 14 14 57.5 +0.2
RSSD **Black Hills** 52.72 335 P P 14 13 48.0 -1.5
RSSD pmax pmax
comp=Z,44nm,0.9s
RSSD **Black Hills** 52.72 335 P P 14 13 48.0 -1.5
comp=Z,44nm,0.9s
HEC **Hector,Ludlow** 52.73 319 P P 14 13 49.8 +0.2
baz=53
TUQ **Turquoise Moun** 52.83 320 P P 14 13 49.6 -0.8
baz=53,SNR=12
E30A **Jud** 52.83 341 P P 14 13 49.4 -0.7
baz=53,SNR=11
F28A **McLaughlin** 52.91 339 P P 14 13 50.7 0.0
baz=53
G27A **Dupree** 52.93 338 P P 14 13 50.6 -0.3
baz=53,SNR=21
D31A **Mcclaflin, Tow** 52.94 342 P P 14 13 49.7 -1.1
baz=53
H25A **Fruitdale** 52.95 336 P P 14 13 51.4 +0.4
baz=53,SNR=12
SHPR **Sheep Range** 53.01 321 *e*P P 14 13 52.5 +0.8
SHPR *e*pP pP 14 14 21.7 +1.4
SHPR *e*PcP PcP 14 14 59.4 +0.5
C33A **Trail** 53.02 344 P P 14 13 51.6 +0.3
baz=53
G26A **Maurine** 53.11 337 P P 14 13 51.9 -0.3
baz=53,SNR=23
E29A **Napoleon** 53.13 340 P P 14 13 51.8 -0.5
baz=53,SNR=5.8
SCI **San Clemente I** 53.17 316 P P 14 13 53.2 +0.4
baz=53
RRX **Edison Barstow** 53.20 318 P P 14 13 53.8 +0.8
baz=53
MPU **Maple Canyon** 53.26 327 *e*P P 14 13 53.2 -0.3
comp=Z,123nm,1.1s
MPU *e*PcP PcP 14 15 00.3 +0.5
BFSC **Mount Baldy Ra** 53.27 317 P P 14 13 54.3 +0.7
baz=53,SNR=12
D30A **Buchanan** 53.32 341 P P 14 13 53.3 -0.3
baz=53,SNR=44
O16A **Springville** 53.32 327 *e*P P 14 13 46.7 -7.3
comp=Z,110nm,1.9s
GSC **Goldstone** 53.33 319 P P 14 13 53.6 -0.4
GSC pmax pmax
comp=Z,24nm,1.0s
GSC **Goldstone** 53.33 319 P P 14 13 54.9 +0.9
baz=53,SNR=16
GSC **Goldstone** 53.33 319 P P 14 13 53.6 -0.4
comp=Z,24nm,1.0s
GSC *e*pP pP 14 14 24.1 +1.5
G25A **Newell** 53.35 337 P P 14 13 53.9 0.0
baz=53,SNR=12
F27A **Lemmon** 53.38 338 P P 14 13 54.1 -0.1
baz=54,SNR=31
B34A **Aery, Baudette** 53.39 345 P P 14 13 53.4 -0.7
baz=54,SNR=19
NLU **North Lily Min** 53.46 326 *e*P P 14 13 56.2 +1.2
comp=Z,42nm,1.5s
E28A **Huff** 53.50 340 P P 14 13 55.2 +0.2
baz=54,SNR=9.6
AGMN **Agassiz Nation** 53.53 344 P P 14 13 54.3 -0.8
baz=54,SNR=13
AGMN **Agassiz Nation** 53.53 344 *e*P P 14 13 53.3 -1.8
comp=Z,89nm,0.8s
MWC **Mount Wilson** 53.53 317 *e*P P 14 13 55.5 -0.1
MWC *e**PP pP 14 14 24.3 0.0
MWC pmax pmax
comp=Z,71nm,1.4s
MWC **Mount Wilson** 53.53 317 *e*P P 14 13 55.5 -0.1
comp=Z,71nm,1.4s
MWC *e*pP pP 14 14 24.3 0.0
D29A **Pettibone, Tap** 53.55 341 P P 14 13 54.8 -0.5
baz=54,SNR=7.6
PASC **Pasadena Art C** 53.59 317 *e*P P 14 13 55.5 -0.3
comp=Z,62nm,1.3s
PASC *e*pP pP 14 14 26.5 +1.9
F26A **Lodgepole** 53.60 338 P P 14 13 55.6 -0.1
baz=54,SNR=33
C31A **Landman Farms,** 53.61 342 P P 14 13 55.1 -0.6

baz=54,SNR=9.1
**E27A Carson** 53.69 339 P P 14 13 56.5 +0.2
baz=54,SNR=19
**DECC Green Verdugo** 53.73 317 P P 14 13 57.7 +0.8
baz=54
**C30A Mose, Pekin** 53.76 342 P P 14 13 56.6 -0.2
baz=54,SNR=14
**CTU Camp Tracy** 53.80 327 eP P 14 13 57.4 -0.1
comp=Z,31nm,1.2s
CTU epP pP 14 14 27.4 +1.3
**B32A Ashes, Strandq** 53.81 344 P P 14 13 56.5 -0.6
baz=54,SNR=15
**EDW2 Edwards Air Fo** 53.86 318 P P 14 13 58.2 +0.3
baz=54,SNR=29
**TCUT Toone Canyon** 53.92 328 P P 14 13 57.0 -1.3
comp=Z,101nm,0.7s
TCUT epP pP 14 14 28.0 +0.9
TCUT ePcP PcP 14 15 02.3 0.0
**TPNV Topopah Spring** 53.97 321 P P 14 13 59.3 +0.5
baz=54,SNR=28
**A33A Warroad** 53.99 345 P P 14 13 57.8 -0.7
baz=54
**D28A Regan** 53.99 340 P P 14 13 59.0 +0.5
baz=54,SNR=10
**LRMC Laurel Mountai** 54.01 319 P P 14 13 59.5 +0.5
baz=54,SNR=16
**DUG Dugway** 54.04 326 eP P 14 13 59.6 +0.5
DUG e*PP pP 14 14 29.0 +1.1
DUG pmax pmax
comp=Z,142nm,1.6s
**DUG Dugway** 54.04 326 P P 14 13 59.8 +0.7
baz=54,SNR=42
**DUG Dugway** 54.04 326 eP P 14 13 59.6 +0.5
comp=Z,142nm,1.6s
DUG epP pP 14 14 29.0 +1.1
**E26A Carlson Angus** 54.05 338 P P 14 13 58.9 -0.1
baz=54,SNR=33
**FURC Furnace Creek,** 54.06 320 P P 14 13 59.9 +0.8
baz=54,SNR=10
**B31A Greenbush Farm** 54.15 343 P P 14 13 58.9 -0.7
baz=54,SNR=5.3
**BW06 Boulder Array** 54.17 330 eP P 14 13 58.5 -1.6
comp=Z,42nm,1.4s
**OSI Osito Adit** 54.21 317 P P 14 14 00.6 +0.2
baz=54
**MPMC Manual Prospec** 54.22 319 P P 14 14 00.7 +0.1
baz=54,SNR=12
**MDND Maddock** 54.24 341 P P 14 14 00.4 +0.1
baz=54
**D27A Center** 54.25 339 P P 14 14 00.5 0.0
baz=54,SNR=8.7
**HWUT Hardware Ranch** 54.35 328 eP P 14 14 00.9 -0.5
comp=Z,112nm,1.4s
HWUT epP pP 14 14 29.9 -0.2
HWUT ePcP PcP 14 15 03.5 -0.4
**B30A Myrvik Farm, E** 54.38 342 P P 14 14 00.6 -0.6
baz=54,SNR=13
**C28A Hausauer Farms** 54.38 340 P P 14 14 01.3 -0.1
baz=54
**E25A Miller Ranch,** 54.43 338 P P 14 14 01.4 -0.4
baz=54,SNR=25
**R11A Troy Canyon, C** 54.43 323 P P 14 14 01.9 -0.2
baz=54,SNR=41
**R11A Troy Canyon, C** 54.43 323 epP pP 14 14 32.4 +1.5
comp=Z,19nm,1.0s
R11A ePcP PcP 14 15 04.9 +0.6
**A31A Linda, St. Vin** 54.48 344 P P 14 14 02.0 +0.1
baz=55
**D26A Manning** 54.51 339 P P 14 14 01.4 -1.0
baz=55,SNR=33
**ARVC Arvin** 54.57 318 P P 14 14 01.7 -1.2
baz=55
**SPUT South Promonto** 54.61 327 eP P 14 14 02.6 -0.7
comp=Z,68nm,1.0s
SPUT epP pP 14 14 33.0 +0.9
**ISA Isabella** 54.64 318 eP P 14 14 04.4 +0.9
ISA e 14 15 05.5
ISA pmax pmax
comp=Z,23nm,1.1s
**ISA Isabella** 54.64 318 P P 14 14 04.2 +0.7
baz=55,SNR=13
**ISA Isabella** 54.64 318 eP P 14 14 04.4 +0.9
comp=Z,23nm,1.1s
ISA epP pP 14 14 34.5 +2.2
ISA ePcP PcP 14 15 05.5 +0.5
**BGU Big Grassy Mou** 54.66 327 eP P 14 14 03.5 -0.2
comp=Z,57nm,1.3s
**B29A Wagenman Farm,** 54.71 342 P P 14 14 04.2 +0.5
baz=55,SNR=14
**GRAC Grapevine Rang** 54.71 320 P P 14 14 04.9 +0.9
baz=55,SNR=9.6
**C27A Sayler Ranch,** 54.76 340 P P 14 14 04.5 +0.4
baz=55,SNR=6.5
**A30A Hoffart Farm,** 54.81 343 P P 14 14 04.0 -0.4
baz=55,SNR=19
**CWC Cottonwood Cre** 54.83 319 P P 14 14 05.4 +0.4
baz=55,SNR=12
**AHID Auburn Hatcher** 54.94 329 P P 14 14 03.3 -2.4
comp=Z,39nm,0.9s
**D25A Fairfield** 54.94 338 P P 14 14 06.2 +0.8
baz=55,SNR=34
**B28A Dugan Ranch, T** 55.02 341 P P 14 14 06.0 +0.2
baz=55
**C26A Wahner Farm, P** 55.07 339 P P 14 14 06.4 +0.1
baz=55,SNR=9.8
**A29A Manning Farm,** 55.07 342 P P 14 14 06.2 -0.1
baz=55,SNR=16
**HVU Hansel Valley** 55.11 328 eP P 14 14 07.0 +0.1
HVU pmax pmax
comp=Z,16nm,0.9s
**HVU Hansel Valley** 55.11 328 eP P 14 14 07.0 +0.1
comp=Z,16nm,0.9s
**PKM Peak Mountain** 55.11 317 P P 14 14 07.4 +0.3
baz=55,SNR=9.0
**REDW Red Top Meadow** 55.25 330 eP P 14 14 07.9 0.0
comp=Z,75nm,1.4s
**SNOW Snow King Moun** 55.27 330 eP P 14 14 06.8 -1.3
comp=Z,79nm,1.4s
**LOHW Long Hollow** 55.31 330 eP P 14 14 08.3 -0.1
comp=Z,28nm,0.9s
**ULM Lac du Bonnet** 55.32 345 P P 14 14 06.6 -1.4
comp=Z,46nm,0.6s,baz=158,slow=7.7,SNR=59
ULM PcP PcP 14 15 06.7 -0.5
comp=Z,8.2nm,0.8s,baz=186,slow=5.5,SNR=2.5
**ULM Lac du Bonnet** 55.32 345 eP P 14 14 06.6 -1.4
ULM 14 15 06.7
ULM pmax pmax
comp=Z,57nm,0.8s
**ULM Lac du Bonnet** 55.32 345 eP P 14 14 06.6 -1.4
comp=Z,57nm,0.8s
ULM PcP PcP 14 15 06.7 -0.5
**C25A Freed Ranch, W** 55.39 338 P P 14 14 09.4 +0.8
baz=56
**A28A Rude Farm, Bot** 55.39 341 P P 14 14 08.6 0.0
baz=56
**TPAW Teton Pass** 55.39 330 eP P 14 14 09.1 +0.1
comp=Z,15nm,0.8s
**SMMC Simmler** 55.47 317 P P 14 14 09.0 -0.4
baz=56
**MOOW Moose Ponds** 55.48 330 eP P 14 14 09.2 -0.4
comp=Z,18nm,1.0s
**B26A Jensen Ranch,** 55.58 340 P P 14 14 10.4 +0.5
baz=56,SNR=7.4
**IMW Indian Meadow** 55.68 330 eP P 14 14 11.3 +0.2
comp=Z,25nm,0.6s
IMW ePcP PcP 14 15 08.7 -0.4
**LAO LASA Array** 55.70 336 P P 14 14 11.1 +0.2
baz=56
**LAO LASA Array** 55.70 336 eP P 14 14 10.8 -0.1
comp=Z,26nm,0.8s
**FLWY Flagg Ranch** 55.70 331 eP P 14 14 10.9 -0.2
comp=Z,59nm,0.9s
**A27A Ledoux Ranch,** 55.74 341 P P 14 14 11.8 +0.8
baz=56
**ELK Elko** 55.78 325 eP P 14 14 11.4 -0.4
ELK pmax pmax
comp=Z,16nm,1.1s
**ELK Elko** 55.78 325 eP P 14 14 11.4 -0.4
comp=Z,16nm,1.1s
**RLMT Red Lodge** 55.80 333 P P 14 14 11.8 -0.1
baz=56,SNR=13
**RLMT Red Lodge** 55.80 333 eP P 14 14 11.0 -0.8
comp=Z,18nm,0.8s
**B25A Knox Farm, Ray** 55.82 339 P P 14 14 12.7 +1.0
baz=56
**H17A Grant Village** 55.87 331 P P 14 14 13.1 +0.7
baz=56
**H17A Grant Village** 55.87 331 eP P 14 14 13.4 +1.1
comp=Z,31nm,1.5s
**A26A Wade Farm, Ken** 55.96 340 P P 14 14 13.3 +0.6
baz=56,SNR=6.2
**MLAC Mammoth Lakes** 56.02 320 P P 14 14 13.9 +0.3
baz=56
**YNR Norris Junctio** 56.16 331 eP P 14 14 15.1 +0.6
comp=Z,22nm,0.7s
**NVAR Mina Array Bea** 56.16 321 P P 14 14 15.3 +0.8
comp=Z,12nm,0.8s,baz=135,slow=7.2,SNR=72
NVAR pP pP 14 14 45.7 +2.3
comp=Z,8.6nm,1.0s,baz=151,slow=7.0,SNR=4.6
NVAR PcP PcP 14 15 11.6 +0.5
comp=Z,5.2nm,0.8s,baz=136,slow=5.9,SNR=5.3
**DGMT Dagmar** 56.37 338 P P 14 14 15.9 +0.3
baz=56,SNR=7.4
**DGMT Dagmar** 56.37 338 eP P 14 14 15.0 -0.6
comp=Z,45nm,0.8s
**A25A Svangstu Ranch** 56.37 339 P P 14 14 16.2 +0.7
baz=56,SNR=11
**BMN Battle Mountai** 56.73 324 eP P 14 14 19.2 +0.8
BMN e*PP pP 14 14 48.0 +0.6
BMN pmax pmax
comp=Z,45nm,0.8s
**BMN Battle Mountai** 56.73 324 eP P 14 14 19.2 +0.8
comp=Z,45nm,0.8s
BMN epP pP 14 14 48.0 +0.6
**LRV Little Rabbit** 56.77 318 eP P 14 14 19.9 +1.2
**HLID Hailey** 57.22 328 P P 14 14 21.2 -0.7
baz=57,SNR=39
**HLID Hailey** 57.22 328 eP P 14 14 22.4 +0.5
**CMB Columbia Colle** 57.26 320 P P 14 14 21.6 -0.5
CMB pmax pmax
comp=Z,10.0nm,0.9s
**CMB Columbia Colle** 57.26 320 P P 14 14 21.6 -0.5
comp=Z,9.9nm,0.9s
**BOZ Bozeman (W)** 57.30 331 eP P 14 14 22.6 +0.3
BOZ e*PP pP 14 14 51.4 0.0
BOZ pmax pmax
comp=Z,38nm,0.8s
**BOZ Bozeman (W)** 57.30 331 P P 14 14 22.5 +0.1
baz=57,SNR=52
**BOZ Bozeman (W)** 57.30 331 eP P 14 14 22.6 +0.3
comp=Z,38nm,0.8s
BOZ epP pP 14 14 51.4 0.0
**MCMT McKenzie Canyo** 57.30 330 eP P 14 14 23.4 +0.9
**DLMT Dillon** 57.56 331 eP P 14 14 23.8 -0.4
comp=Z,10nm,1.0s
**LRM Limekiln Ridge** 57.82 331 eP P 14 14 26.3 +0.1
comp=Z,119nm,0.7s
**SCHQ Schefferville** 57.97 7 P P 14 14 26.9 +0.2
comp=Z,19nm,0.7s,baz=206,slow=5.8,SNR=11
**HRY Holter Researc** 58.17 332 eP P 14 14 28.5 +0.1
comp=Z,14nm,0.6s
**EGMT Eagleton** 58.23 334 P P 14 14 28.9 +0.1
baz=58,SNR=12
**EGMT Eagleton** 58.23 334 eP P 14 14 28.2 -0.6
comp=Z,60nm,1.3s
**WVOR Wild Horse Val** 58.81 325 eP P 14 14 32.9 0.0
WVOR pmax pmax
comp=Z,60nm,1.1s
**WVOR Wild Horse Val** 58.81 325 eP P 14 14 32.9 0.0
comp=Z,60nm,1.1s
**MSO Missoula** 59.26 331 P P 14 14 36.3 +0.4
baz=59,SNR=24
**MSO Missoula** 59.26 331 eP P 14 14 36.3 +0.4
comp=Z,45nm,1.0s
**J08A Circle Bar Ran** 59.30 326 eP P 14 14 36.5 +0.2
comp=Z,76nm,1.5s
**O03D Panes Creek** 59.45 321 P P 14 14 37.3 0.0
baz=60,SNR=9.8
**MOD Modoc** 59.47 323 eP P 14 14 35.9 -1.6
comp=Z,23nm,1.2s
**LBCM Butte Creek Ri** 59.48 322 P P 14 14 37.7 +0.2
**SWMT Swartz Lake** 59.77 332 eP P 14 14 40.3 +0.9
comp=Z,5.9nm,0.7s
**YBMT Yellow Bay** 60.03 332 eP P 14 14 41.9 +0.7
comp=Z,39nm,1.2s
**WDC Whiskeytown Da** 60.07 321 eP P 14 14 39.4 -2.1
WDC pmax pmax
comp=Z,7.0nm,0.6s
**WDC Whiskeytown Da** 60.07 321 eP P 14 14 39.4 -2.1
comp=Z,6.9nm,0.6s
**JTMT Jette** 60.08 332 eP P 14 14 42.1 +0.6
**BLMT Blacktail Moun** 60.30 332 eP P 14 14 43.9 +0.7
**K05A Summer Lake** 60.31 324 eP P 14 14 44.7 +1.4
comp=Z,84nm,1.3s
**M04C Macdoel** 60.32 322 P P 14 14 44.1 +0.7
baz=60,SNR=16
**I07A Izee** 60.34 326 eP P 14 14 35.6 -7.7
comp=Z,50nm,0.9s
**BSMT Bassoo Peak** 60.39 331 P P 14 14 44.4 +0.7
**N02D Trinity Center** 60.40 321 P P 14 14 42.7 -1.1
baz=60
**KMRM Mail Ridge** 60.62 320 eP P 14 14 46.6 +1.4
comp=Z,162nm,1.9s
**M02C Callahan** 60.73 322 P P 14 14 45.5 -0.5
baz=61,SNR=6.3
**K04D Chiloquin, OR** 60.76 323 P P 14 14 46.6 +0.4
baz=61
**G08A Pilot Rock** 60.80 327 eP P 14 14 47.0 +0.5
comp=Z,55nm,0.9s
**LNOR Lincton Mounta** 60.81 328 P P 14 14 47.0 +0.5
**LNOR Lincton Mounta** 60.81 328 P P 14 14 47.0 +0.5
**YBH Yreka Blue Hor** 60.83 322 eP P 14 14 46.1 -0.6
YBH pmax pmax
comp=Z,17nm,1.0s
**YBH Yreka Blue Hor** 60.83 322 eP P 14 14 46.1 -0.6
comp=Z,17nm,1.0s
**J05D Fort Rock, OR** 60.85 324 P P 14 14 47.5 +0.7
baz=61,SNR=18
**HOPE Hope Point** 60.91 154 eP P 14 14 48.8 +1.9
comp=Z,70nm,0.9s
**KHMM Horse Mountain** 60.99 321 eP P 14 14 49.1 +1.2
comp=Z,35nm,1.1s
**FFC Flin Flon** 60.99 344 eP P 14 14 46.9 -0.5
FFC pmax pmax
comp=Z,43nm,1.2s
**FFC Flin Flon** 60.99 344 P P 14 14 47.9 +0.5
comp=Z,164nm,1.1s,SNR=6.3
**FFC Flin Flon** 60.99 344 eP P 14 14 46.9 -0.5
comp=Z,43nm,1.2s
**I05D Terrebonne, OR** 61.54 325 P P 14 14 52.3 +0.9
baz=62,SNR=10
**VTHM Trough** 61.61 326 P P 14 14 53.2 +1.4
**L02D Cave Junction,** 61.62 322 P P 14 14 52.4 +0.5
baz=62
**CROR Criterion Ridg** 61.73 326 P P 14 14 54.0 +1.3
**NEW Newport** 61.81 331 LR LR 14 43 55.6
comp=Z,89nm,18.2s,baz=98,slow=38
**NEW Newport** 61.81 331 eP P 14 14 53.3 +0.2
NEW e*PP pP 14 15 22.6 +0.1
NEW pmax pmax
comp=Z,36nm,0.9s
**NEW Newport** 61.81 331 P P 14 14 53.5 +0.4
baz=62,SNR=22
**NEW Newport** 61.81 331 eP P 14 14 53.3 +0.2
comp=Z,36nm,0.9s
NEW epP pP 14 15 22.6 +0.1
**HAWA Hanford** 61.81 328 eP P 14 14 52.4 -0.7
comp=Z,11nm,0.7s
**I04A Tendick Farm,** 61.84 324 P P 14 14 53.3 -0.1
baz=62
**D08A Wollman Farm,** 61.92 329 eP P 14 14 54.4 +0.5
comp=Z,120nm,1.9s
**G05D Wamic, OR** 62.07 326 P P 14 14 55.8 +0.9
baz=62,SNR=7.7
**VFP Flag Point** 62.20 326 P P 14 14 57.1 +1.1
**I03D Drain, OR** 62.34 323 P P 14 14 57.5 +0.9
baz=62
**WTV Waterville** 62.87 329 P P 14 15 00.9 +0.7
**ETW Entiat** 63.00 328 P P 14 15 02.0 +0.8
**LON Longmire** 63.26 327 eP P 14 15 03.6 +0.7
LON pmax pmax
comp=Z,22nm,1.0s
**LON Longmire** 63.26 327 eP P 14 15 03.5 +0.7
comp=Z,22nm,1.0s
**NLW Nelson Butte** 63.31 329 P P 14 15 03.8 +0.5
**F04D Rainier, OR** 63.53 326 P P 14 15 05.3 +0.8
baz=64
**D05A Enumclaw** 63.63 327 eP P 14 15 05.9 +0.8
comp=Z,101nm,1.0s
**EDM Edmonton** 63.67 336 eP P 14 15 04.9 -0.5
EDM pmax pmax
comp=Z,65nm,0.8s
**EDM Edmonton** 63.67 336 eP P 14 15 04.9 -0.5
comp=Z,65nm,0.8s
**E03A Lebam** 64.11 326 eP P 14 15 09.6 +1.4
comp=Z,98nm,1.0s
**B05A Bryant** 64.34 328 P P 14 15 09.9 +0.1
baz=64,SNR=5.5
**VDB Vedder Mountai** 64.82 329 P P 14 15 13.0 +0.1
**YKA Yellowknife Ar** 71.13 342 P P 14 15 51.4 -0.6
comp=Z,20nm,0.8s,baz=139,slow=5.7,SNR=53
**LIC Lamto** 72.11 83 eP P 14 15 59.3 +0.4
comp=Z,68nm,1.0s
**TIC Toumodi** 72.15 82 eP P 14 15 59.4 +0.2
**DBIC Dimbokro** 72.31 82 P P 14 16 00.6 +0.4
comp=Z,58nm,0.9s,baz=243,slow=5.6,SNR=69
DBIC pP pP 14 16 30.1 -0.2
comp=Z,14nm,0.6s,baz=244,slow=2.7,SNR=3.7
**KIC Kosan Boka** 72.40 82 eP P 14 16 01.3 +0.6
comp=Z,178nm,0.9s
**PPT2 Papeete2** 72.86 253 eS S 14 25 20.9 +0.5
comp=Z,179nm,26.2s
PPT2 eLR LR 14 38 37.7
comp=Z,352nm,36.8s
**PNCL Nicolau / Gran** 74.71 49 eP P 14 16 16.2 +2.5
comp=Z,67nm,1.5s
**PVAQ Vaqueiros** 75.14 50 eP P 14 16 18.7 +2.5
comp=Z,90nm,1.9s
**EVO Evora** 75.22 49 eP P 14 16 16.1 -0.5
comp=Z,57nm,1.9s
**PMRV Marv??o** 75.92 48 eP P 14 16 20.9 +0.2
comp=Z,40nm,1.8s
**POLO Lamas de Olo** 76.16 46 eP P 14 16 22.7 +0.6
comp=Z,26nm,1.7s
**MVO Moncorvo** 76.66 47 eP P 14 16 25.6 +0.7
comp=Z,47nm,1.6s
**PBRG Braganca** 77.04 46 eP P 14 16 27.6 +0.6
comp=Z,34nm,2.1s
**PAB San Pablo** 78.23 49 eP P 14 16 33.7 0.0
PAB pmax pmax
comp=Z,12nm,0.9s
**PAB San Pablo** 78.23 49 eP P 14 16 33.7 0.0
comp=Z,12nm,0.9s
**ESDC Sonseca Array** 78.55 49 P P 14 16 35.7 +0.3
comp=Z,4.0nm,0.7s,baz=261,slow=7.2,SNR=26
**SUMG Summit** 79.00 11 eP P 14 16 37.4 -0.2
SUMG e*PP pP 14 17 04.1 -4.2
SUMG pmax pmax
comp=Z,96nm,1.2s
**SUMG Summit** 79.00 11 ⇓ *i*P pP 14 17 05.3 -3.0
comp=Z,25nm,0.8s
SUMG *i* 14 17 35.7
**SUMG Summit** 79.00 11 eP P 14 16 37.4 -0.2
comp=Z,96nm,1.2s
SUMG epP pP 14 17 04.1 -4.2
**TOA0 Torodi Ar. Sit** 79.33 76 eP P 14 16 39.4 -0.7
**TORD Torodi Ar. Bea** 79.33 76 P P 14 16 40.1 +0.1
comp=Z,21nm,0.9s,baz=298,slow=7.2,SNR=102
TORD pP pP 14 17 10.1 -0.7
comp=Z,7.6nm,0.4s,baz=281,slow=5.8,SNR=6.8
TORD PP PP 14 19 39.7 -2.1
comp=Z,3.0nm,1.1s,baz=282,slow=7.2,SNR=3.9
TORD S S 14 26 29.1 -2.2
comp=Z,2.9nm,1.1s,baz=255,slow=7.6,SNR=8.5
**VNA3 Neumayer Olymp** 80.13 162 P P 14 16 44.2 +0.9
**VNA1 Neumayer--Stat** 80.36 162 P P 14 16 45.8 +1.4
**VNA2 Neumayer--Watz** 80.72 162 P P 14 16 47.4 +1.0
baz=294,slow=4.7
**INK Inuvik** 80.87 342 eP P 14 16 47.6 +0.4
INK pmax pmax
comp=Z,64nm,0.9s
**INK Inuvik** 80.87 342 eP P 14 16 47.6 +0.4
comp=Z,64nm,0.9s
**XMAS Kiritimati** 80.87 273 PFAKE 14 17 00.0 +12
XMAS LR LR
comp=Z,6.0nm,21.0s
**BMRM Bremner River** 81.87 333 eP P 14 16 53.6 +0.9
comp=Z,49nm,1.1s
**MENT Mentasta** 82.20 335 eP P 14 16 54.3 -0.1
**SNAA Sanae** 82.34 162 P P 14 16 55.5 +0.5
**SNAA Sanae** 82.34 162 *ce*P P 14 16 55.4 +0.4
**SNAA Sanae** 82.34 162 eP P 14 16 55.5 +0.5
comp=Z,26nm,1.0s
**RAR Rarotonga** 82.56 249 PFAKE 14 17 10.0 +13
RAR LR LR
comp=Z,6.0nm,20.0s
**HARP HAARP** 82.62 334 ePP PP 14 20 12.1 +4.2
**KLU Klutina** 82.65 333 eP P 14 16 57.4 +0.6
comp=Z,28nm,0.9s
KLU ePP PP 14 20 06.6 -1.5
**PAX Paxson** 82.96 335 eP P 14 16 58.2 -0.2
PAX *e* 14 20 12.1
PAX pmax pmax
comp=Z,40nm,1.0s
**PAX Paxson** 82.96 335 eP P 14 16 58.2 -0.2
comp=Z,40nm,1.0s
PAX ePP PP 14 20 12.1 +1.5
**DHY Denali Highway** 83.81 334 eP P 14 17 02.8 -0.1
comp=Z,24nm,1.6s
**SML Sawmill** 83.84 333 eP P 14 17 03.2 +0.3
SML pmax pmax
comp=Z,18nm,1.2s
**SML Sawmill** 83.84 333 eP P 14 17 03.2 +0.3
comp=Z,18nm,1.2s
**HDA Harding Lake** 84.06 336 eP P 14 17 04.0 +0.1
comp=Z,41nm,1.2s
HDA ePP PP 14 20 21.3 +1.8
**ILAR Eielson Array** 84.16 336 P P 14 17 04.0 -0.4
comp=Z,9.3nm,0.9s,baz=119,slow=3.6,SNR=73
ILAR pP pP 14 17 35.7 +0.3
comp=Z,9.0nm,1.0s,baz=124,slow=3.4,SNR=9.2
ILAR PP PP 14 20 19.6 -0.6
comp=Z,2.2nm,0.9s,baz=106,slow=7.3,SNR=10
**CCB Clear Creek Bu** 84.49 336 ePP PP 14 20 20.8 -2.1
**COLA College** 84.58 336 *ce*P P 14 17 06.4 0.0
COLA pmax pmax
comp=Z,17nm,1.0s
**COLA College** 84.58 336 eP P 14 17 06.1 -0.3
comp=Z,14nm,0.9s
COLA epP pP 14 17 36.4 -1.1
**MCK McKinley** 84.68 335 eP P 14 17 07.5 +0.4
MCK e*PP pP 14 17 38.5 +0.4
MCK pmax pmax
comp=Z,19nm,1.0s
**MCK McKinley** 84.68 335 eP P 14 17 07.5 +0.4
comp=Z,19nm,1.0s
MCK epP pP 14 17 38.5 +0.4
**BWN Browne** 85.03 335 eP P 14 17 08.8 +0.1
comp=Z,55nm,1.0s
BWN epP pP 14 17 40.0 +0.2
BWN ePP PP 14 20 17.2 -10
**TRF Thorofare Moun** 85.18 334 eP P 14 17 09.7 -0.1
comp=Z,65nm,1.7s
**ALE Alert** 85.43 2 P P 14 17 10.0 -0.4
comp=Z,149nm,1.4s,SNR=11
**KTH Kantishna Hill** 85.48 334 eP P 14 17 11.4 +0.3
comp=Z,32nm,0.9s
**BPAW Bear Paw Mtn.** 85.66 335 eP P 14 17 11.9 0.0
comp=Z,44nm,0.9s
**PPLA Purkeypile** 85.87 334 eP P 14 17 13.1 0.0
comp=Z,97nm,1.4s
**CAST Castle Rocks** 85.95 334 eP P 14 17 13.2 -0.2
comp=Z,33nm,0.9s
**COLD Coldfoot** 86.20 338 eP P 14 17 15.5 +1.0
comp=Z,37nm,1.2s
**SNF Seneffe** 86.38 39 P P 14 17 16.0 +0.3
**DOU Dourbes** 86.51 40 P P 14 17 16.9 +0.6
comp=Z,14nm,1.1s
**NVL N'lazarevskaya** 86.92 161 eP P 14 17 19.6 +1.7
NVL pmax pmax
comp=Z,48nm,0.9s
**SVW2 Sparrevohn** 87.04 331 eP P 14 17 18.5 -0.2
comp=Z,22nm,1.1s
**WLF Walferdange** 87.45 40 P P 14 17 21.8 +0.8
comp=Z,21nm,1.3s
**WLF Walferdange** 87.45 40 eP P 14 17 22.0 +1.1
WLF pmax pmax
comp=Z,24nm,1.0s
**WLF Walferdange** 87.45 40 eP P 14 17 21.7 +0.8
comp=Z,29nm,1.1s,baz=266,slow=4.7
**WLF Walferdange** 87.45 40 eP P 14 17 22.0 +1.1
comp=Z,24nm,1.0s
**MEM Membach** 87.48 39 P P 14 17 21.7 +0.7
comp=Z,12nm,1.5s
**BUG Bochum--Univer** 88.37 39 eP P 14 17 25.9 +0.8
comp=Z,57nm,1.5s,baz=266,slow=4.7
**KEST Kesra** 88.38 54 P P 14 17 25.2 -0.5
comp=Z,15nm,1.0s,baz=284,slow=0.8,SNR=6.5
**IBBN Ibbenburen** 88.76 38 eP P 14 17 28.0 +1.0
comp=Z,21nm,1.0s,baz=266,slow=4.7

TNS Taunus Mts 88.99 40 eP P 14 17 28.9 +0.6
comp=Z,10.0nm,1.0s,baz=266,slow=4.7
TUE Stuetta 89.25 44 eP P 14 17 29.5 -0.2
comp=Z,5.6nm,0.8s
DAVOX Davos/Dischmat 89.64 43 P P 14 17 32.0 +0.4
comp=Z,9.7nm,0.7s,baz=330,slow=8.1,SNR=7.1
DAVOX Davos/Dischmat 89.64 43 P P 14 17 32.0 +0.4
NRDL Niedersach Rie 90.22 38 eP P 14 17 35.0 +1.3
comp=Z,34nm,1.7s,baz=266,slow=4.7
CLZ Clausthal 90.33 38 eP P 14 17 35.4 +0.9
comp=Z,21nm,1.4s,baz=266,slow=4.7
BSEG Bad Segeberg 90.44 36 eP P 14 17 35.9 +1.1
comp=Z,26nm,1.5s,baz=266,slow=4.7
GRF Grafenberg Arr 90.73 40 eP P 14 17 36.9 +0.6
comp=Z,16nm,1.2s,baz=266,slow=4.7
MOX Moxa 91.04 40 eP P 14 17 38.6 +0.9
comp=Z,9.0nm,1.4s,baz=266,slow=4.7
ROTZ Rotzenmuhle 91.37 40 eP P 14 17 40.5 +1.2
comp=Z,25nm,1.6s,baz=266,slow=4.7
NB2 NORSAR Subarra 91.38 29 P P 14 17 40.2 +1.1
comp=Z,7.4nm,0.9s,baz=268,slow=4.8
NOA NORSAR Array B 91.38 29 P P 14 17 39.6 +0.5
comp=Z,5.4nm,0.9s,baz=268,slow=4.7,SNR=11
NOA pP pP 14 18 10.4 -0.1
comp=Z,5.1nm,0.9s,baz=269,slow=4.7,SNR=6.8
TANN Tannenbergstha 91.57 40 eP P 14 17 41.3 +1.0
comp=Z,14nm,1.2s,baz=266,slow=4.7
CLTB Caltabellotta 91.59 53 PFAKE 14 17 50.0 +9.3
CLTB LR LR
comp=Z,105nm,22.0s
CLL Collm 91.94 39⇓iP P 14 17 42.7 +0.8
CLL e*PP pP 14 18 13.0 -0.3
CLL pmax pmax
comp=Z,6.0nm,0.8s
CLL Collm 91.94 39 eP P 14 17 42.8 +0.8
comp=Z,5.8nm,0.8s,baz=266,slow=4.7
CLL Collm 91.94 39⇓iP P 14 17 42.7 +0.8
comp=Z,6.0nm,0.8s
CLL epP pP 14 18 13.0 -0.3
KHC Kasperske Hory 92.25 41 i P P 14 17 44.2 +0.8
KHC Kasperske Hory 92.25 41 i P P 14 17 44.2 +0.8
KHC epP pP 14 18 16.4 +1.6
KHC esP sP 14 18 31.1 +3.5
GEC2 GERESS Array S 92.32 41 eP P 14 17 44.0 +0.1
comp=Z,2.3nm,0.9s,baz=266,slow=4.7
GERES GERESS Array B 92.32 41 P P 14 17 43.5 -0.3
comp=Z,1.1nm,0.8s,baz=226,slow=5.4,SNR=5.3
GERES LR LR 15 00 44.5
comp=Z,45nm,18.1s,baz=283,slow=36
BRG Berggiesshubel 92.52 39 eP P 14 17 45.7 +1.1
comp=Z,13nm,1.2s
BRG Berggiesshubel 92.52 39 eP P 14 17 45.7 +1.1
BRG pmax pmax
comp=Z,13nm,1.2s
BRG Berggiesshubel 92.52 39 eP P 14 17 45.5 +0.9
comp=Z,13nm,1.2s,baz=266,slow=4.7
SBA Scott Base 92.74 191 eP P 14 17 46.7 +1.6
SBA e*PP pP 14 18 18.0 +1.6
SBA pmax pmax
comp=Z,17nm,1.3s
SBA Scott Base 92.74 191 eP P 14 17 46.7 +1.6
comp=Z,16nm,1.3s
SBA epP pP 14 18 18.0 +1.6
PRU Pruhonice 92.89 40 i P P 14 17 47.2 +0.9
PRU Pruhonice 92.89 40 i P P 14 17 47.2 +0.9
VNDA Vanda 93.82 191 P P 14 17 51.1 +1.0
comp=Z,3.1nm,0.9s,baz=125,slow=5.5,SNR=20
VNDA pP pP 14 18 21.9 +0.5
comp=Z,3.0nm,1.0s,baz=97,slow=3.7,SNR=4.9
UPC Upice 93.84 40 i P P 14 17 51.9 +1.2
UPC Upice 93.84 40 i P P 14 17 51.9 +1.2
DPC Dobruska-Polom 94.04 40 i P P 14 17 52.6 +1.0
DPC e 14 18 23.6
DPC Dobruska-Polom 94.04 40 i P P 14 17 52.6 +1.0
DPC epP pP 14 18 23.6 +0.6
VRAC Vranov 94.22 41 P P 14 17 52.8 +0.3
comp=Z,3.9nm,0.7s,baz=176,slow=13,SNR=5.7
KRLC Kraliky 94.33 40 i P P 14 17 54.6 +1.6
KRLC Kraliky 94.33 40 i P P 14 17 54.6 +1.6
TIP Timpagrande 94.41 51 PFAKE 14 18 00.0 +6.4
TIP LR LR
comp=Z,126nm,20.0s
VYHS Vyhne 95.72 42 eP P 14 17 59.1 -0.2
VYHS pmax pmax
comp=Z,35nm,2.5s
VYHS Vyhne 95.72 42 eP P 14 17 59.1 -0.2
LANS Liptovska Anna 96.11 41 eP P 14 18 03.0 +1.9
LANS Liptovska Anna 96.11 41 eP P 14 18 03.0 +1.9
PSZ Piszkesteto 96.46 42 PFAKE 14 18 10.0 +7.2
PSZ LR LR
comp=Z,95nm,21.0s
SYO Syowa Base 96.59 161⇑eP P 14 18 01.4 -1.4
SYO Syowa Base 96.59 161⇑epP pP 14 18 33.6 -0.6
ARCES ARCESS Array B 96.84 20 P P 14 18 03.2 -0.7
comp=Z,2.0nm,0.6s,baz=262,slow=2.5,SNR=8.2
ARCES pP pP 14 18 34.6 -0.8
comp=Z,1.3nm,0.5s,baz=289,slow=3.7,SNR=1.5
FINES FINESS Array B 98.51 28 pP pP 14 18 42.7 -0.3
comp=Z,2.6nm,0.9s,baz=279,slow=15,SNR=2.7
FINES LR LR 15 01 22.9
comp=Z,25nm,18.8s,baz=286,slow=34
SANT Santorini 101.42 54 PFAKE 14 18 40.0 +15
SANT LR LR
comp=Z,150nm,19.0s
BILL Bilibino 102.42 340 PFAKE 14 18 40.0 +11
BILL LR LR
comp=Z,168nm,19.0s
OBN Obninsk 105.41 33 eP Pdif 14 18 41.5 -0.9
OBN pmax pmax
comp=Z,5.0nm,0.9s
BRTR Keskin Array B 107.34 49 Pdiff Pdif 14 18 55.7 +4.1
comp=Z,0.4nm,0.5s,baz=298,slow=9.5,SNR=2.0
MBAR Mbarara 107.38 91 PFAKE 14 23 10.0
MBAR LR LR
comp=Z,1μm,22.0s
CASY Casey 110.92 183 PFAKE 14 23 20.0
CASY LR LR
comp=Z,339nm,21.0s
MA2 Magadan 112.64 336 PFAKE 14 23 20.0
MA2 LR LR
comp=Z,1.0nm,21.0s
KIV Kislovodsk 112.77 43 i PKIKP PKiKP 14 23 00.9 -8.9
KIV pmax pmax
comp=Z,8.0nm,1.0s
KMBO Kilima Mbogo 113.85 92 PFAKE 14 23 20.0
KMBO LR LR
comp=Z,126nm,22.0s
ARU Arti 115.72 26 PFAKE 14 23 30.0 +15
ARU LR LR
comp=Z,149nm,20.0s
YAK Yakutsk 117.65 346 PFAKE 14 23 30.0 +11
YAK LR LR
comp=Z,92nm,22.0s
AKTO Aktyubinsk 119.09 31 PKP PKPdf 14 23 21.8 +0.1
comp=Z,4.2nm,0.9s,baz=319,slow=2.3,SNR=12
AKTO PKKPbc PKKPbc 14 33 36.4 -1.2
comp=Z,3.7nm,0.8s,baz=126,slow=3.1,SNR=8.0
AKTO Aktyubinsk 119.09 31 PKIKP PKPdf 14 23 21.9 +0.2
AKTO pmax pmax
comp=Z,6.0nm,1.0s
RAYN Ar Rayn 120.50 64 eP PKPdf 14 23 25.6 +0.3
RAYN LR LR
comp=Z,82nm,19.0s
AB31 Akbulak array 120.79 32 i PKIKP PKPdf 14 23 25.4 +0.4
AB31 pmax pmax
comp=Z,5.0nm,0.6s
ABKAR Akbulak array 120.79 32 ePKPdf PKPdf 14 23 25.3 +0.3
ZRNK Zerenda 122.50 24 PKIKP PKPdf 14 23 28.2 0.0
ZRNK pmax pmax
comp=Z,14nm,0.9s
CHKZ Chkalovo 122.59 22 PKIKP PKPdf 14 23 28.2 -0.1
CHKZ pmax pmax
comp=Z,4.0nm,0.7s
BRVK Borovoye 122.93 23 PKIKP PKPdf 14 23 28.2 -0.8
BRVK pmax pmax
comp=Z,5.0nm,0.7s
BRVK Borovoye 122.93 23 PFAKE 14 23 40.0 +11
BRVK LR LR
comp=Z,102nm,19.0s
VOSK Vostochnaya 123.46 23 PKIKP PKPdf 14 23 29.6 -0.4
VOSK pmax pmax
comp=Z,5.0nm,0.9s
YSS Yuzh-Sakhalins 124.28 328 ePKIKP PKPdf 14 23 32.6 +0.9
YSS pmax pmax
comp=Z,15nm,1.7s

BOD Bodaibo 124.45 353 ePKIKP PKPdf 14 23 29.7 -2.0
BOD pmax pmax
comp=Z,5.0nm,1.3s
GEYT Alibeck 125.87 44 PKP PKPdf 14 23 35.5 +0.4
comp=Z,9.4nm,0.9s,baz=261,slow=5.9,SNR=16
GEYT pPKP pPKPdf 14 24 07.6 -0.3
comp=Z,2.4nm,0.8s,baz=243,slow=6.5,SNR=2.2
ZALV Zalesovo Beam 126.77 14 PKP PKPdf 14 23 36.4 +0.1
comp=Z,18nm,0.9s,baz=274,slow=2.8,SNR=61
OTUK Ortayu 127.45 26 PKIKP PKPdf 14 23 36.7 -1.1
OTUK pmax pmax
comp=Z,7.0nm,0.9s
KLR Kul'dur 127.73 337 ePKIKP PKPdf 14 23 33.0 -5.3
KLR e 14 25 36.8
KLR pmax pmax
comp=Z,38nm,1.4s
KURK Kurchatov 127.87 20 ePKIKP PKPdf 14 23 38.9 +0.4
KURK MLR MLR
comp=Z,175nm,19.0s
KURK Kurchatov 127.87 20 ePKPdf PKPdf 14 23 38.9 +0.4
KURK PKP PKiKP 14 23 39.3 +0.2
KURK LR LR
comp=Z,175nm,19.0s
KURBB Kurchatov Arra 127.92 20 PKP PKPdf 14 23 39.3 +0.7
comp=Z,13nm,0.8s,baz=323,slow=2.3,SNR=109
KKAR Karatay Array 130.36 31 ePKIKP PKPdf 14 23 44.2 +0.7
KKAR Karatay Array 130.36 31 ePKPdf PKPdf 14 23 44.2 +0.7
TLY Talaya 131.25 360 ePKIKP PKPdf 14 23 46.1 +1.2
TLY pmax pmax
comp=Z,10.0nm,1.1s
TLY Talaya 131.25 360 PFAKE 14 24 00.0 +15
TLY LR LR
comp=Z,91nm,19.0s
USRK Ussuriysk Ar. 131.57 333 PKP PKPdf 14 23 45.6 -0.1
comp=Z,7.5nm,0.9s,baz=314,slow=1.4,SNR=14
HIA Hailar 131.59 346 PFAKE 14 24 00.0 +14
HIA LR LR
comp=Z,103nm,20.0s
MNAS Manas 131.82 31 PKIKP PKPdf 14 23 47.0 +0.5
MNAS pmax pmax
comp=Z,21nm,1.2s
CTA Charters Tower 132.14 240 PKP PKPdf 14 23 47.3 -0.2
comp=Z,7.8nm,0.8s,baz=220,slow=0.9,SNR=6.4
USP Ospenovka 132.22 28 P PKPdf 14 23 48.5 +1.4
SNR=11
DZET Dzherino 132.31 37 PKIKP PKPdf 14 23 48.5 +1.0
DZET pmax pmax
comp=Z,27nm,1.3s
EKS2 Erkin-Say 132.33 29 P PKPdf 14 23 49.2 +1.8
SNR=12
MK31 Makanchi Array 132.49 20 PKIKP PKPdf 14 23 47.5 +0.1
MK31 pmax pmax
comp=Z,3.0nm,0.5s
MKAR Makanchi Array 132.49 20 PKP PKPdf 14 23 47.5 +0.1
comp=Z,7.5nm,0.9s,baz=321,slow=1.7,SNR=36
MKAR SKP 14 27 17.3
comp=Z,1.4nm,0.9s,baz=357,slow=2.7,SNR=4.8
ZAK Zakamensk 132.55 0 ePKIKP PKPdf 14 23 46.0 -1.6
ZAK pmax pmax
comp=Z,6.0nm,1.4s
AML Almayashu 132.68 30 P PKPdf 14 23 50.4 +2.0
SNR=8.8
AAK Ala-Archa 132.70 29 PKP PKPdf 14 23 48.8 +0.6
comp=Z,12nm,1.1s,baz=200,slow=1.6,SNR=20
AAK Ala-Archa 132.70 29 i PKIKP PKPdf 14 23 49.3 +1.1
AAK pmax pmax
comp=Z,47nm,1.2s
AAK Ala-Archa 132.70 29 P PKPdf 14 23 49.9 +1.7
SNR=13
AAK Ala-Archa 132.70 29 PKP PKPdf 14 23 48.8 +0.6
AAK LR LR
comp=Z,95nm,21.0s
KBK Karagaybulak 132.90 29 P PKPdf 14 23 50.4 +1.9
SNR=5.9
TKM2 Tokmak 2 133.00 28 P PKPdf 14 23 50.1 +1.3
SNR=7.4
UCH Uchtor 133.01 29 P PKPdf 14 23 51.1 +2.0
SNR=18
MJAR Matsushiro Arr 133.48 321 PKP PKPdf 14 23 49.1 -0.5
comp=Z,2.5nm,0.8s,baz=99,slow=1.4,SNR=6.7
MAJO Matsushiro 133.48 321c iPKIKP PKPdf 14 23 49.8 +0.2
MAJO pmax pmax
comp=Z,31nm,2.5s
KZA Kyzart 133.49 29 P PKPdf 14 23 52.2 +2.2
SNR=7.9
ULHL Ulahol 133.83 28 P PKPdf 14 23 52.2 +1.8
SNR=6.3
SFK Sufi-Kurgan 134.13 32 PKIKP PKPdf 14 23 52.3 +1.3
SFK pmax pmax
comp=Z,15nm,0.8s
PDGK Podgornoye 134.39 24 PKIKP PKPdf 14 23 51.8 +0.8
PDGK pmax pmax
comp=Z,11nm,1.4s
CN2 Changchun 134.66 337 ePKP PKPdf 14 23 55.0 +3.4
ULN Ulaanbaatar 134.95 356 ePKIKP PKPdf 14 23 52.4 +0.2
ULN MLR MLR
comp=Z,29nm,20.0s
ULN Ulaanbaatar 134.95 356 ePKPdf PKPdf 14 23 52.4 +0.2
ULN LR LR
comp=Z,29nm,20.0s
SONM Songino Array 135.02 357 PKP PKPdf 14 23 52.7 +0.4
comp=Z,6.3nm,0.8s,baz=340,slow=1.3,SNR=36
SONM pPKP pPKPdf 14 24 25.1 0.0
comp=Z,0.9nm,0.5s,baz=332,slow=0.9,SNR=1.8
SONM PP PP 14 26 25.0 -2.2
comp=Z,1.2nm,0.9s,baz=342,slow=5.1,SNR=4.0
KSH Kashi 135.78 31 PKP PKPdf 14 23 56.0 +2.0
KSH PP PP 14 26 35.7 +3.1
KSH SKS SKSdf 14 30 53.1 -1.0
KSH SKKS SKKSac 14 33 16.3 -0.7
KSH SS SS 14 44 20.3 -0.7
KSH PPMZ
comp=Z,130nm,5.2s
KSH LN
comp=Z,150nm,7.7s
KSH LE
comp=Z,100nm,6.2s
KSH LZ
comp=Z,210nm,5.6s
WMQ Urumqi 136.83 17 PKP PKPdf 14 23 56.0 +0.3
KSRS Korea Array 138.73 330 PKhKP PKPpre 14 23 47.6
comp=Z,4.3nm,0.9s,baz=47,slow=3.1,SNR=13
KSRS PKP PKPdf 14 23 59.3 0.0
comp=Z,11nm,0.8s,baz=360,slow=1.7,SNR=21
KSRS pPKP pPKPdf 14 24 32.1 +0.1
comp=Z,7.1nm,1.0s,baz=19,slow=0.5,SNR=3.2
KSAR Wonju Array Be 138.76 330 PKHKP PKPpre 14 23 47.6
KSAR 14 23 59.3
KSAR 14 24 32.1
KSAR Wonju Array Be 138.76 330 PKPpre PKPpre 14 23 47.6
KSAR PKP PKPdf 14 23 59.3 0.0
KSAR pPKP pPKPdf 14 24 32.1 0.0
INCN Inchon 139.35 331 PFAKE 14 24 10.0 +10
INCN LR LR
comp=Z,188nm,19.0s
ASAR Alice Springs 140.28 227 PKhKP PKPpre 14 23 54.8
comp=Z,4.2nm,0.9s,baz=127,slow=3.6,SNR=25
ASAR PKP PKPdf 14 24 02.1 -0.4
comp=Z,9.1nm,0.9s,baz=122,slow=1.9,SNR=34
BJT Baijiatuau 141.12 344 PFAKE 14 24 20.0 +16
BJT LR LR
comp=Z,104nm,19.0s
HHC Hu-ho-hao-te 141.36 350 ePKP PKPdf 14 24 06.0 +1.9
HHC PP PP 14 27 12.4 +5.9
HHC SS SS 14 45 28.6 +3.0
HHC PPMZ
comp=Z,56nm,8.6s
WRAB Tennant Creek 142.09 232 ePKHKP PKPpre 14 24 01.9
WRAB Tennant Creek 142.09 232 ePKPdf PKPdf 14 24 05.6 -0.2
WRA Warramunga Arr 142.09 232 PKhKP PKPpre 14 24 00.7
comp=Z,7.0nm,0.8s,baz=118,slow=2.1,SNR=34
GTA Gaotai 143.38 5 ePKP PKPbc 14 24 04.7 -0.5
GTA PP PP 14 27 20.8 +2.1
GTA SKS SKSdf 14 31 02.9 -3.7
GTA SKKS SKKSac 14 33 59.4 -2.0
GTA SS SS 14 45 51.5 +2.6
GTA PPMZ
comp=Z,83nm,7.8s
GTA LN
comp=Z,59nm,15.2s
GTA LE
comp=Z,91nm,16.6s
GTA LZ
comp=Z,80nm,16.6s
TIA Tai'an 144.35 341 PKP PKPab 14 24 07.1 -0.6
LZH Lanzhou 146.84 359 ePKPbc PKPbc 14 24 15.5 -0.3

LZH pPKP pPKPdf 14 24 45.6 -1.1
LZH ePP PP 14 27 46.0 +6.8
LZH SKKS 14 34 18.2
LZH SS SS 14 46 30.1 +1.8
LZH PPMZ
comp=Z,130nm,5.0s
POO Poona 147.17 59⇑iP PKPdf 14 24 11.0 -3.7
NJ2 Nanjing 147.40 335 ePKPbc PKPdf 14 24 13.6 -1.1
XAN Xi'an 148.44 351 PKPbc PKPdf 14 24 16.7 +0.3
XAN PPMZ
comp=Z,50nm,3.3s
DANN Dangsing 148.46 34 eP PKPdf 14 24 18.2 +1.3
comp=Z,38nm,0.8s
KOLN Koldanda 148.81 35 eP PKPdf 14 24 18.0 +0.6
comp=Z,82nm,0.9s
GKN Gorkha 149.21 34 eP PKPdf 14 24 18.8 +0.8
comp=Z,199nm,0.9s
KKN Kakani 149.73 33 eP PKPdf 14 24 19.6 +0.7
comp=Z,282nm,1.1s
GUN Gumba 149.96 32 eP PKPdf 14 24 20.1 +0.7
PKIN Phulchoki 149.96 33 eP PKPdf 14 24 19.6 +0.3
comp=Z,120nm,0.9s
WHN Wuhan 150.46 340 i PKPbc PKPbc 14 24 25.0 0.0
FAKI Fak Fak 150.53 259 ePKPbc PKPbc 14 24 25.9 +0.2
FAKI ePKPab PKPab 14 24 32.7 -0.1
LSA Lhasa 150.83 22 PKPbc PKPdf 14 24 22.4 +1.5
LSA Lhasa 150.83 22 ePKIKP PKPdf 14 24 22.0 +1.1
LSA MLR MLR
comp=Z,99nm,19.0s
LSA Lhasa 150.83 22 ePKPdf PKPdf 14 24 22.0 +1.1
LSA LR LR
comp=Z,99nm,19.0s
RAMN Ramite 151.11 32 eP PKPdf 14 24 21.8 +0.7
comp=Z,182nm,0.9s
MBWA Marble Bar 151.30 213 PFAKE 14 24 30.0 +2.7
MBWA LR LR
comp=Z,136nm,19.0s
TAPN Taplejung 151.35 30 eP PKPdf 14 24 22.2 +0.7
comp=Z,86nm,0.6s
RPR Rampur 151.57 54 ePKPdf PKPdf 14 24 21.5 -0.2
RPR ePKiKP PKiKP 14 24 28.4 0.0
ODAN Odare 151.59 31 eP PKPdf 14 24 22.5 +0.7
comp=Z,205nm,1.0s
URV Uravakonda 151.60 63 ePKPdf PKPdf 14 24 21.4 -0.4
URV ePKiKP PKPbc 14 24 27.6 -0.6
HYBB Hyderabad (bro 151.67 57 ePKPdf PKPdf 14 24 20.3 -1.6
HYBB ePKPbc PKPbc 14 24 26.9 -1.4
HYBB ePKiKP PKiKP 14 24 28.0 -0.7
HYB Hyderabad 151.67 57 i PKP PKPdf 14 24 21.5 -0.4
HYB e 14 24 36.0
HYB esPKP 14 25 36.0
SIJI Sorong 151.82 263 PKP PKPdf 14 24 23.1 +0.8
comp=Z,5.0nm,0.7s,baz=178,slow=3.4,SNR=4.7
SIJI PKPbc PKPbc 14 24 28.3 -0.4
comp=Z,16nm,0.7s,baz=41,slow=6.7,SNR=9.5
SIJI pPKPbc pPKPbc 14 25 01.1 -0.3
comp=Z,9.8nm,0.7s,baz=32,slow=5.7,SNR=4.4
CD2 Chengdu 152.00 359 PKPbc PKPdf 14 24 20.0 -2.1
CD2 pPKP pPKPdf 14 24 53.2 -1.8
CD2 sPKP 14 25 06.1
CD2 PP PP 14 28 08.4 -0.5
CD2 SKS SKSdf 14 31 16.0 -2.7
CD2 SKKS SKKSac 14 34 46.2 -3.4
CD2 SS SS 14 47 25.5 -0.1
CD2 PPMZ
comp=Z,140nm,5.2s
ENH Enshi 152.02 349 ePKPdf PKPdf 14 24 22.1 0.0
ENH ePKPbc PKPbc 14 24 28.9 +0.1
ENH ePKPab PKPab 14 24 38.4 +0.1
NJS Nagarjunasagar 152.71 58 ePKPdf PKPdf 14 24 21.6 -1.8
NJS ePKiKP PKPbc 14 24 29.9 -0.7
SSLB Suanglung 153.02 322 ePKPdf PKPdf 14 24 23.8 +0.1
SSLB ePKPbc PKPbc 14 24 31.1 -0.1
SSLB ePKPab PKPab 14 24 42.9 +0.1
ADKI Addanki 153.60 59 ePKPdf PKPdf 14 24 23.6 -1.0
PVM Polavaram 154.29 54 ePKPdf PKPdf 14 24 24.1 -1.6
PVM ePKPab PKPab 14 24 48.9 +0.5
CHLP Challavanipeta 155.50 49 ePKPdf PKPdf 14 24 27.6 +0.3
GYA Guiyang 156.22 353 i PKP PKPdf 14 24 28.7 +0.5
GYA PKPab PKPab 14 24 56.8 +0.4
GYA pPKP pPKPdf 14 25 00.5 -0.6
GYA sPKP 14 25 13.0
GYA PKS PKSdf 14 27 59.0 -3.4
GYA PP PP 14 28 36.2 +3.5
GYA PPMZ
comp=Z,130nm,7.9s
DAV Davao City (W) 157.41 282 PFAKE 14 24 40.0 +10
DAV LR LR
comp=Z,114nm,19.0s
KMI Kunming 157.76 1 PKP PKPdf 14 24 30.4 0.0
KMI pPKP PKPab 14 24 59.1 -4.1
KMI SS SS 14 48 26.1 -2.3
KMI LZ
comp=Z,43nm,20.1s
CMAR Chiang Mai Arr 163.82 15 PKP PKPdf 14 24 37.1 +0.4
comp=Z,5.0nm,0.9s,baz=298,slow=2.1,SNR=24
CMAR pPKP pPKPdf 14 25 10.2 +0.5
comp=Z,2.9nm,0.9s,baz=296,slow=2.5,SNR=3.7
CMAR PKPab PKPab 14 25 29.1 -0.3
comp=Z,7.5nm,0.8s,baz=328,slow=5.6,SNR=18
CMAR pPKPab pPKPab 14 26 00.1 -1.0
comp=Z,7.4nm,0.9s,baz=326,slow=5.5,SNR=8.4
CMAR PP PP 14 29 14.4 +0.7
comp=Z,0.4nm,0.3s,baz=342,slow=6.1,SNR=4.2
KKM Kota Kinabalu 166.73 285 PFAKE 14 24 50.0 +11
KKM LR LR
comp=Z,288nm,20.0s
KSM Kuching 172.89 260 PFAKE 14 24 50.0 +7.1
KSM LR LR
comp=Z,100nm,22.0s
KULM Kulim 176.35 46 PFAKE 14 24 50.0 +6.0
KULM LR LR
comp=Z,139nm,22.0s

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*CSEM **09** 14:08:06.8±0.2, 45.°32N×21.°19E, h2km, ML1.8, Error ellipse: s-maj=4.6km s-min=3.0km az=133.0*
*BUC **09** 14:08:06.1±0.7, 45.°35N×21.°23E, h4km, MD2.5/2, Error ellipse: s-maj=7.5km s-min=5.3km az=359.0*
*BEO **09** 14:08:07.1±0.3, 45.°35N×21.°15E, h0km, ML1.8/7*
**ISC 09 14:08:07.0**±0.8**, 45.°34N**±0.°02×**21.°17E**±0.°02**, h5**km±6km**, n39,** σ0.s77/69**, 6C-10D, Romania**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
BANR Banloc 0.05 332⇓iP Pg 14 08 07.8 -0.5
BANR i S Sg 14 08 09.6 +0.3
BANR Banloc 0.05 332⇓iP Pg 14 08 07.8 -0.5
BANR S Sg 14 08 09.6 +0.3
BANR Banloc 0.05 332⇓iP Pg 14 08 07.8 -0.5
BANR S Sg 14 08 09.6 +0.3
BZS Buzias 0.42 48⇓iPg Pg 14 08 14.8 -0.3
BZS eSg Sg 14 08 21.6 +0.9
BZS Buzias 0.42 48⇓iP Pg 14 08 14.8 -0.3
BZS i S Sg 14 08 21.3 +0.6
BZS Buzias 0.42 48⇓iP Pg 14 08 14.8 -0.3
BZS S Sg 14 08 21.3 +0.6
BZS Buzias 0.42 48⇓iP Pg 14 08 14.8 -0.3
BZS S Sg 14 08 21.3 +0.6
BZS eSg Sg 14 08 21.6 +0.9
FGSL Fruska Gora 0.98 260 i Pg Pg 14 08 25.8 +0.1
FGSL eSg Sg 14 08 37.1 -1.3
FRGS Fruska Gora 0.98 260 i Pg Pg 14 08 25.8 +0.1
FRGS eSg Sg 14 08 37.1 -1.3
KUBS Kucevo 0.99 159 i Pg Pg 14 08 24.4 -1.6
KUBS eSg Sg 14 08 39.4 +0.5
KUBS Kucevo 0.99 159 i Pg Pg 14 08 24.4 -1.6
KUBS eSg Sg 14 08 39.4 +0.5
GZR Gura Zlata 1.13 87 ePg Pg 14 08 28.9 +0.1
GZR eSg Sg 14 08 43.5 0.0
GZR Gura Zlata 1.13 87⇑iP Pg 14 08 28.1 -0.7
GZR i S Sg 14 08 43.9 +0.4
GZR Gura Zlata 1.13 87⇑iP Pg 14 08 28.1 -0.7
GZR Gura Zlata 1.13 87 S Sg 14 08 43.9 +0.4
GZR Gura Zlata 1.13 87⇑iP Pg 14 08 28.1 -0.7
GZR Gura Zlata 1.13 87 ePg Pg 14 08 28.9 +0.1
GZR eSg Sg 14 08 43.5 0.0
GZR S Sg 14 08 43.9 +0.4
TEKS Tekeris 1.41 237 ePn Pg 14 08 34.6 +0.7
TEKS Tekeris 1.41 237 ePn Pg 14 08 34.6 +0.7
GRUS Gruza 1.48 193 ePg Pn 14 08 33.7 -0.6
GRUS eSg Sg 14 08 55.4 +0.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GRUS | Gruza | 1.48 | 193 | ePg | Pn | 14 08 33.7 | -0.6 |
| GRUS | | | | eSg | Sg | 14 08 55.4 | +0.8 |
| DIVS | Divibare | 1.50 | 215 | ePg | Pn | 14 08 32.5 | -2.1 |
| DIVS | | | | eSg | Sb | 14 08 54.7 | +0.1 |
| DIVS | Divibare | 1.50 | 215 | ⇓iP | Pg | 14 08 35.8 | +0.1 |
| DIVS | | | | iS | Sg | 14 08 56.4 | +1.3 |
| DIVS | Divibare | 1.50 | 215 | ⇓iP | Pg | 14 08 35.8 | +0.1 |
| DIVS | | | | S | Sg | 14 08 56.4 | +1.3 |
| DIVS | Divibare | 1.50 | 215 | ⇓iP | Pg | 14 08 35.8 | +0.1 |
| DIVS | | | | eSg | Sb | 14 08 54.7 | +0.1 |
| DIVS | | | | S | Sg | 14 08 56.4 | +1.3 |
| BOLS | Boljevac | 1.61 | 159 | ePg | Pn | 14 08 35.0 | -1.1 |
| BOLS | | | | eSg | Sn | 14 08 57.1 | -0.1 |
| DRGR | | 1.81 | 36 | ePn | Pn | 14 08 39.3 | +0.3 |
| DRGR | | | | eSn | Sn | 14 09 00.2 | -2.1 |
| DRGR | | 1.81 | 36 | ⇑iP | Pn | 14 08 39.2 | +0.3 |
| DRGR | | | | iS | Sn | 14 09 01.7 | -0.6 |
| DRGR | | 1.81 | 36 | ⇑iP | Pn | 14 08 39.2 | +0.3 |
| DRGR | | 1.81 | 36 | ⇑iP | Pn | 14 08 39.2 | +0.3 |
| DRGR | | | | S | Sn | 14 09 01.7 | -0.6 |
| LOT | Lotru | 1.83 | 86 | iS | Sn | 14 09 02.4 | -0.6 |
| LOT | Lotru | 1.83 | 86 | S | Sn | 14 09 02.4 | -0.6 |
| LOT | Lotru | 1.83 | 86 | S | Sn | 14 09 02.4 | -0.6 |
| BBLS | Lazići | 1.94 | 221 | eSg | Sb | 14 09 07.5 | +0.2 |
| BBLS | Lazići | 1.94 | 221 | eSg | Sb | 14 09 07.5 | +0.2 |
| SELS | Selova | 2.12 | 181 | ePg | Pb | 14 08 46.5 | +0.6 |
| SELS | | | | eSg | Sg | 14 09 15.0 | 0.0 |
| ZAPS | Zavoj | 2.31 | 152 | ePg | Pb | 14 08 50.2 | +1.0 |
| BARS | Barje | 2.56 | 169 | ePn | Pn | 14 08 49.7 | +0.5 |
| BARS | | | | eSg | Sg | 14 09 29.7 | +0.4 |
| BARS | Barje | 2.56 | 169 | ePn | Pn | 14 08 49.7 | +0.5 |
| BARS | | | | eSg | Sg | 14 09 29.7 | +0.4 |

*IDC **09** 14:19:36.4±0.7, 37.°34N×20.°50E, h0$^{km}$, mb3.9/21, mb1 3.9/30, mb1mx3.9/53, mbtmp3.9/30, ML3.7/9, MS3.2/3, Ms1 3.2/3, ms1mx2.6/42, Error ellipse: s-maj=14.9km s-min=12.7km az=172.0*

*ATH **09** 14:19:37.8, 37.°22N×20.°30E, h27$^{km}$±1$^{km}$, MD3.8/47, ML3.9*

*ISCJB **09** 14:19:38.1±0.5, 37.°27N±0.°02×20.°25E±0.°02, h25$^{km}$±3$^{km}$, mb3.9/23, MS3.2/2, Error ellipse: s-maj=3.8km s-min=2.3km az=40.4*

*MOS **09** 14:19:38.9±1.1, 37.°22N×20.°36E, h33$^{km}$, mb4.3/14, Error ellipse: s-maj=10.6km s-min=4.4km az=74.6*

*CSEM **09** 14:19:39.6±0.2, 37.°27N×20.°33E, h20$^{km}$, mb4.1/14, Error ellipse: s-maj=4.0km s-min=2.5km az=35.0*

*PDG **09** 14:19:39.8±0.6, 37.°31N×20.°42E, h22$^{km}$±1$^{km}$, ML4.2/10, Error ellipse: s-maj=1.1km s-min=1.3km az=0.0*

*THE **09** 14:19:40.6, 37.°24N×20.°35E, h25$^{km}$±2$^{km}$, ML4.0/7, Error ellipse: s-maj=3.6km s-min=1.5km az=220.0*

*NEIC **09** 14:19:40.6, 37.°24N×20.°35E, h25$^{km}$, ML3.9(ATH), ML4.0(THE), After THE.*

**ISC 09 14:19:39.7**±1.2, **37.°27N**±0.°03×**20.°33E**±0.°03, **h24**$^{km}$±9$^{km}$, **n488**, σ1.°03/552, **mb4.0**/23, **25C-21D, Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFD | Strofades | 0.55 | 92 | ePN | Pb | 14 19 50.0 | -0.7 |
| SFD | | | | eSN | Sb | 14 19 58.8 | +0.7 |
| SFD | Strofades | 0.55 | 92 | P | Pb | 14 19 50.0 | -0.7 |
| SFD | | | | S | Sn | 14 20 00.4 | 0.0 |
| SFD | Strofades | 0.55 | 92 | P | Pb | 14 19 50.0 | -0.7 |
| SFD | | | | eSn | Sb | 14 19 58.8 | +0.7 |
| SFD | | | | S | Sn | 14 20 00.4 | 0.0 |
| ZKS | Zakynthos | 0.56 | 40 | ePN | Pb | 14 19 49.8 | -1.2 |
| ZKS | | | | eSN | Sn | 14 19 59.3 | -1.5 |
| ZKS | Zakynthos | 0.56 | 40 | P | Pb | 14 19 49.7 | -1.2 |
| ZKS | Zakynthos | 0.56 | 40 | ePn | Pb | 14 19 49.8 | -1.2 |
| KFL | Anninata | 0.92 | 23 | ePB | Pb | 14 19 55.9 | -1.0 |
| KFL | | | | eSN | Sn | 14 20 10.6 | +1.1 |
| KFL | Anninata | 0.92 | 23 | P | Pb | 14 19 55.6 | -1.3 |
| KFL | | | | S | Sn | 14 20 11.2 | +1.7 |
| KFL | Anninata | 0.92 | 23 | P | Pb | 14 19 55.6 | -1.3 |
| KFL | Anninata | 0.92 | 23 | ePb | Pb | 14 19 55.9 | -1.0 |
| KFL | | | | eSn | Sn | 14 20 10.6 | +1.1 |
| KFL | | | | S | Sn | 14 20 11.2 | +1.7 |
| VLS | Valsamata | 0.93 | 13 | P | Pb | 14 19 56.3 | -0.9 |
| VLS | Valsamata | 0.93 | 13 | ePN | Pb | 14 19 56.9 | -0.3 |
| VLS | | | | eSN | Sn | 14 20 10.8 | +0.9 |
| VLS | Valsamata | 0.93 | 13 | P | Pb | 14 19 56.3 | -0.9 |
| VLS | Valsamata | 0.93 | 13 | P | Pb | 14 19 56.3 | -0.9 |
| VLS | Valsamata | 0.93 | 13 | P | Pb | 14 19 56.3 | -0.9 |
| VLS | Valsamata | 0.93 | 13 | ePn | Pb | 14 19 56.9 | -0.3 |
| VLS | | | | eSn | Sn | 14 20 10.8 | +0.9 |
| VTN | Vitineika | 0.94 | 46 | ePN | Pb | 14 19 56.7 | -0.6 |
| VTN | | | | eSN | Sn | 14 20 11.0 | +1.0 |
| VTN | Vitineika | 0.94 | 46 | ePn | Pb | 14 19 56.7 | -0.6 |
| VTN | | | | eSn | Sn | 14 20 11.0 | +1.0 |
| AMT | Artemida-Makis | 1.13 | 76 | ePN | Pn | 14 20 00.1 | 0.0 |
| AMT | | | | eSN | Sn | 14 20 16.0 | +1.2 |
| AMT | Artemida-Makis | 1.13 | 76 | P | Pn | 14 20 00.0 | 0.0 |
| AMT | Artemida-Makis | 1.13 | 76 | P | Pn | 14 20 00.0 | 0.0 |
| PYL | PYLOS | 1.19 | 108 | ePN | Pn | 14 20 00.6 | -0.3 |
| PYL | | | | eSN | Sb | 14 20 16.9 | +0.4 |
| PYL | PYLOS | 1.19 | 108 | P | Pn | 14 20 00.5 | -0.3 |
| PYL | | | | S | Sn | 14 20 16.1 | -0.1 |
| PYL | PYLOS | 1.19 | 108 | P | Pn | 14 20 00.5 | -0.3 |
| PYL | | | | S | Sn | 14 20 16.1 | -0.1 |
| PYL | PYLOS | 1.19 | 108 | ePn | Pn | 14 20 00.6 | -0.3 |
| PYL | | | | S | Sn | 14 20 16.1 | -0.1 |
| PYL | | | | eSn | Sb | 14 20 16.9 | +0.4 |
| RLS | Riolos of Patr | 1.20 | 49 | ePN | Pn | 14 20 00.8 | -0.1 |
| RLS | | | | eSN | Sn | 14 20 19.3 | +2.9 |
| RLS | Riolos of Patr | 1.20 | 49 | P | Pn | 14 20 00.5 | -0.4 |
| RLS | Riolos of Patr | 1.20 | 49 | P | Pn | 14 20 00.5 | -0.4 |
| RLS | Riolos of Patr | 1.20 | 49 | P | Pn | 14 20 00.5 | -0.4 |
| RLS | Riolos of Patr | 1.20 | 49 | ePn | Pn | 14 20 00.8 | -0.1 |
| RLS | | | | eSn | Sn | 14 20 19.3 | +2.9 |
| AXS | Araxos | 1.25 | 42 | P | Pn | 14 20 01.7 | +0.1 |
| AXS | Araxos | 1.25 | 42 | P | Pn | 14 20 01.7 | +0.1 |
| ITM | Ithomi | 1.28 | 93 | ePN | Pn | 14 20 02.2 | +0.1 |
| ITM | | | | eSN | Sb | 14 20 19.8 | +0.7 |
| ITM | Ithomi | 1.28 | 93 | P | Pn | 14 20 02.1 | 0.0 |
| ITM | Ithomi | 1.28 | 93 | P | Pn | 14 20 02.1 | 0.0 |
| ITM | Ithomi | 1.28 | 93 | ePn | Pn | 14 20 02.2 | +0.1 |
| ITM | | | | eSn | Sb | 14 20 19.8 | +0.7 |
| DRO | Drossia | 1.29 | 58 | ePN | Pn | 14 20 02.6 | +0.3 |
| DRO | | | | eSN | Sb | 14 20 20.4 | +0.9 |
| DRO | Drossia | 1.29 | 58 | P | Pn | 14 20 02.5 | +0.3 |
| DRO | Drossia | 1.29 | 58 | P | Pn | 14 20 02.5 | +0.3 |
| DRO | | | | eSn | Sb | 14 20 20.4 | +0.9 |
| PDO | Prodromos | 1.49 | 27 | ePN | Pb | 14 20 06.3 | -0.4 |
| PDO | | | | eSN | Sb | 14 20 26.2 | +1.0 |
| PDO | Prodromos | 1.49 | 27 | P | Pb | 14 20 06.6 | -0.1 |
| PDO | Prodromos | 1.49 | 27 | ePn | Pb | 14 20 06.3 | -0.4 |
| PDO | Prodromos | 1.49 | 27 | P | Pb | 14 20 06.6 | -0.1 |
| PDO | | | | eSn | Sb | 14 20 26.2 | +1.0 |
| UPR | University Cam | 1.54 | 48 | ePN | Pb | 14 20 06.9 | -0.6 |
| UPR | University Cam | 1.54 | 48 | P | Pb | 14 20 07.9 | +0.4 |
| UPR | University Cam | 1.54 | 48 | ePn | Pb | 14 20 06.9 | -0.6 |
| UPR | University Cam | 1.54 | 48 | P | Pb | 14 20 07.9 | +0.4 |
| LKD2 | Lefkada island | 1.54 | 10 | ePN | Pb | 14 20 06.8 | -0.8 |
| LKD2 | Lefkada island | 1.54 | 10 | P | Pb | 14 20 07.0 | -0.6 |
| LKD2 | Lefkada island | 1.54 | 10 | P | Pb | 14 20 07.0 | -0.6 |
| LKD2 | Lefkada island | 1.54 | 10 | ePn | Pb | 14 20 06.8 | -0.8 |
| LAKA | Lakka | 1.63 | 53 | ePN | Pb | 14 20 08.0 | -1.0 |
| LAKA | Lakka | 1.63 | 53 | P | Pb | 14 20 08.3 | -0.7 |
| LAKA | Lakka | 1.63 | 53 | P | Pb | 14 20 08.3 | -0.7 |
| LAKA | Lakka | 1.63 | 53 | ePn | Pb | 14 20 08.0 | -1.0 |
| LAKA | Lakka | 1.63 | 53 | P | Pb | 14 20 08.3 | -0.7 |
| VLX | Vlachokerasia | 1.64 | 86 | ePN | Pn | 14 20 07.4 | +0.3 |
| VLX | Vlachokerasia | 1.64 | 86 | P | Pn | 14 20 07.3 | +0.2 |
| VLX | Vlachokerasia | 1.64 | 86 | P | Pn | 14 20 07.3 | +0.2 |
| VLX | Vlachokerasia | 1.64 | 86 | P | Pn | 14 20 07.3 | +0.2 |
| KLV | Kalavryta, Ach | 1.64 | 61 | ePN | Pb | 14 20 08.3 | -1.0 |
| KLV | Kalavryta, Ach | 1.64 | 61 | P | Pb | 14 20 08.2 | -1.0 |
| KLV | Kalavryta, Ach | 1.64 | 61 | P | Pb | 14 20 08.2 | -1.0 |
| KLV | Kalavryta, Ach | 1.64 | 61 | P | Pb | 14 20 08.2 | -1.0 |
| PVO | Paravola | 1.65 | 35 | ePN | Pb | 14 20 09.1 | -0.2 |
| PVO | Paravola | 1.65 | 35 | P | Pb | 14 20 09.3 | 0.0 |
| PVO | Paravola | 1.65 | 35 | ePn | Pb | 14 20 09.1 | -0.2 |
| EFP | Efpalio | 1.70 | 47 | ePN | Pb | 14 20 09.1 | -1.2 |
| EFP | Efpalio | 1.70 | 47 | P | Pb | 14 20 09.6 | -0.7 |
| EFP | Efpalio | 1.70 | 47 | ePn | Pb | 14 20 09.1 | -1.2 |
| EFP | Efpalio | 1.70 | 47 | P | Pb | 14 20 09.6 | -0.7 |
| GUR | Goura | 1.73 | 67 | ePN | Pn | 14 20 09.2 | +0.8 |
| GUR | Goura | 1.73 | 67 | P | Pn | 14 20 09.2 | +0.8 |
| GUR | Goura | 1.73 | 67 | P | Pn | 14 20 09.2 | +0.8 |
| GUR | Goura | 1.73 | 67 | P | Pn | 14 20 09.2 | +0.8 |
| SERG | Sergoula | 1.78 | 50 | P | Pb | 14 20 10.8 | -0.9 |
| SERG | Sergoula | 1.78 | 50 | P | Pb | 14 20 10.8 | -0.9 |
| KALE | Kalithea | 1.82 | 51 | P | Pb | 14 20 11.5 | -0.8 |
| KALE | Kalithea | 1.82 | 51 | P | Pb | 14 20 11.5 | -0.8 |
| KALE | Kalithea | 1.82 | 51 | P | Pb | 14 20 11.5 | -0.8 |
| DSL | Palaion Diasel | 1.96 | 18 | ePB | Pb | 14 20 13.1 | -1.6 |
| DSL | Palaion Diasel | 1.96 | 18 | P | Pb | 14 20 13.7 | -1.0 |
| DSL | Palaion Diasel | 1.96 | 18 | P | Pb | 14 20 13.7 | -1.0 |
| DSL | Palaion Diasel | 1.96 | 18 | ePb | Pb | 14 20 13.1 | -1.6 |
| DSL | Palaion Diasel | 1.96 | 18 | P | Pb | 14 20 13.7 | -1.0 |
| THAL | Thalero | 2.01 | 67 | ePB | Pn | 14 20 13.4 | +1.4 |
| THAL | Thalero | 2.01 | 67 | P | Pn | 14 20 13.4 | +1.4 |
| THAL | Thalero | 2.01 | 67 | P | Pn | 14 20 13.4 | +1.4 |
| EVR | Evrytania | 2.02 | 35 | ePB | Pn | 14 20 13.7 | +1.4 |
| EVR | Evrytania | 2.02 | 35 | P | Pb | 14 20 14.5 | -1.2 |
| EVR | Evrytania | 2.02 | 35 | P | Pb | 14 20 14.5 | -1.2 |
| EVR | Evrytania | 2.02 | 35 | ePb | Pn | 14 20 13.7 | +1.4 |
| EVR | Evrytania | 2.02 | 35 | P | Pb | 14 20 14.5 | -1.2 |
| DSF | Desfina | 2.08 | 56 | ePB | Pn | 14 20 14.3 | +1.2 |
| DSF | Desfina | 2.08 | 56 | P | Pn | 14 20 14.4 | +1.3 |
| DSF | Desfina | 2.08 | 56 | P | Pn | 14 20 14.4 | +1.3 |
| DSF | Desfina | 2.08 | 56 | P | Pn | 14 20 14.4 | +1.3 |
| VLI | Veliai | 2.16 | 104 | ePB | Pn | 14 20 15.1 | +1.0 |
| VLI | Veliai | 2.16 | 104 | P | Pn | 14 20 15.4 | +1.3 |
| VLI | | | | S | Sn | 14 20 40.8 | +0.6 |
| VLI | Veliai | 2.16 | 104 | P | Pn | 14 20 15.4 | +1.3 |
| VLI | | | | S | Sn | 14 20 40.8 | +0.6 |
| VLI | Veliai | 2.16 | 104 | ePb | Pn | 14 20 15.1 | +1.0 |
| VLI | Veliai | 2.16 | 104 | P | Pn | 14 20 15.4 | +1.3 |
| VLI | | | | S | Sn | 14 20 40.8 | +0.6 |
| LOUT | Loutraki | 2.22 | 70 | ePN | Pn | 14 20 15.5 | +0.4 |
| LOUT | Loutraki | 2.22 | 70 | P | Pn | 14 20 15.4 | +0.4 |
| LOUT | Loutraki | 2.22 | 70 | P | Pn | 14 20 15.4 | +0.4 |
| LTK | Loutraki | 2.23 | 69 | ePN | Pn | 14 20 15.6 | +0.5 |
| LTK | Loutraki | 2.23 | 69 | P | Pn | 14 20 15.6 | +0.5 |
| LTK | Loutraki | 2.23 | 69 | P | Pn | 14 20 15.6 | +0.5 |
| LTK | Loutraki | 2.23 | 69 | P | Pn | 14 20 15.6 | +0.5 |
| MAKR | Makrakomi, Fth | 2.25 | 39 | ePB | Pn | 14 20 16.7 | +1.3 |
| MAKR | Makrakomi, Fth | 2.25 | 39 | P | Pb | 14 20 17.7 | -1.9 |
| MAKR | Makrakomi, Fth | 2.25 | 39 | P | Pb | 14 20 17.7 | -1.9 |
| MAKR | Makrakomi, Fth | 2.25 | 39 | ePb | Pn | 14 20 16.7 | +1.3 |
| MAKR | Makrakomi, Fth | 2.25 | 39 | P | Pb | 14 20 17.7 | -1.9 |
| KRND | KRANIDI | 2.25 | 86 | ePN | Pn | 14 20 15.5 | +0.1 |
| KRND | KRANIDI | 2.25 | 86 | P | Pn | 14 20 15.4 | +0.1 |
| KRND | KRANIDI | 2.25 | 86 | ePn | Pn | 14 20 15.5 | +0.1 |
| IGT | Igoumenitsa | 2.26 | 0 | P | Pn | 14 20 15.7 | +0.1 |
| IGT | Igoumenitsa | 2.26 | 0 | ePN | Pn | 14 20 16.3 | +0.7 |
| IGT | Igoumenitsa | 2.26 | 0 | P | Pn | 14 20 15.7 | +0.1 |
| IGT | Igoumenitsa | 2.26 | 0 | P | Pn | 14 20 15.7 | +0.1 |
| IGT | Igoumenitsa | 2.26 | 0 | P | Pn | 14 20 15.7 | +0.1 |
| IGT | Igoumenitsa | 2.26 | 0 | ePn | Pn | 14 20 16.3 | +0.7 |
| DIDY | Didyma | 2.31 | 84 | P | Pn | 14 20 16.1 | -0.2 |
| DIDY | Didyma | 2.31 | 84 | P | Pn | 14 20 16.1 | -0.2 |
| DID | Didima | 2.33 | 83 | ePN | Pn | 14 20 16.4 | -0.1 |
| DID | Didima | 2.33 | 83 | P | Pn | 14 20 16.2 | -0.3 |
| DID | Didima | 2.33 | 83 | P | Pn | 14 20 16.2 | -0.3 |
| DID | Didima | 2.33 | 83 | ePn | Pn | 14 20 16.4 | -0.1 |
| SGD | Sagiada | 2.34 | 358 | ePN | Pn | 14 20 17.4 | +0.7 |
| SGD | Sagiada | 2.34 | 358 | P | Pn | 14 20 17.2 | +0.5 |
| SGD | Sagiada | 2.34 | 358 | P | Pn | 14 20 17.2 | +0.5 |
| AGG | Agios Georgios | 2.36 | 41 | P | Pn | 14 20 18.6 | +1.7 |
| AGG | Agios Georgios | 2.36 | 41 | ePB | Pn | 14 20 18.4 | +1.5 |
| AGG | Agios Georgios | 2.36 | 41 | P | Pn | 14 20 18.6 | +1.7 |
| AGG | Agios Georgios | 2.36 | 41 | P | Pn | 14 20 18.6 | +1.7 |
| AGG | Agios Georgios | 2.36 | 41 | P | Pn | 14 20 18.6 | +1.7 |
| AXAR | Agios Charalam | 2.37 | 50 | ePB | Pn | 14 20 18.6 | +1.5 |
| AXAR | Agios Charalam | 2.37 | 50 | ePb | Pn | 14 20 18.6 | +1.5 |
| KYTH | Kithira | 2.39 | 114 | ePB | Pn | 14 20 18.4 | +1.1 |
| KYTH | Kithira | 2.39 | 114 | ePb | Pn | 14 20 18.4 | +1.1 |
| JAN | Janina | 2.42 | 10 | P | Pn | 14 20 19.5 | +1.7 |
| JAN | Janina | 2.42 | 10 | ePN | Pn | 14 20 18.7 | +0.9 |
| JAN | Janina | 2.42 | 10 | P | Pn | 14 20 19.5 | +1.7 |
| JAN | Janina | 2.42 | 10 | P | Pn | 14 20 19.5 | +1.7 |
| JAN | Janina | 2.42 | 10 | ePn | Pn | 14 20 18.7 | +0.9 |
| JAN | Janina | 2.42 | 10 | P | Pn | 14 20 19.5 | +1.7 |
| KEK | Kerkira | 2.48 | 351 | ePN | Pn | 14 20 19.0 | +0.4 |
| KEK | Kerkira | 2.48 | 351 | P | Pn | 14 20 18.9 | +0.4 |
| KEK | Kerkira | 2.48 | 351 | P | Pn | 14 20 18.9 | +0.4 |
| KEK | Kerkira | 2.48 | 351 | P | Pn | 14 20 18.9 | +0.4 |
| VIL2 | Platees | 2.51 | 67 | ePN | Pn | 14 20 19.2 | +0.2 |
| LKR | Lokris | 2.52 | 56 | ePN | Pn | 14 20 19.9 | +0.8 |
| LKR | Lokris | 2.52 | 56 | P | Pn | 14 20 19.7 | +0.6 |
| LKR | | | | S | Sn | 14 20 50.5 | +1.4 |
| LKR | Lokris | 2.52 | 56 | P | Pn | 14 20 19.7 | +0.6 |
| LKR | | | | S | Sn | 14 20 50.5 | +1.4 |
| LKR | Lokris | 2.52 | 56 | P | Pn | 14 20 19.7 | +0.6 |
| LKR | | | | S | Sn | 14 20 50.5 | +1.4 |
| VILL | Villia | 2.53 | 68 | P | Pn | 14 20 19.3 | 0.0 |
| VILL | Villia | 2.53 | 68 | P | Pn | 14 20 19.3 | 0.0 |
| ATAL | Atalanti | 2.56 | 55 | P | Pn | 14 20 20.3 | +0.6 |
| ATAL | Atalanti | 2.56 | 55 | P | Pn | 14 20 20.3 | +0.6 |
| ATAL | Atalanti | 2.56 | 55 | P | Pn | 14 20 20.3 | +0.6 |
| THL | Klokotos Trika | 2.65 | 29 | ePN | Pn | 14 20 22.5 | +1.6 |
| THL | Klokotos Trika | 2.65 | 29 | P | Pn | 14 20 22.5 | +1.6 |
| THL | Klokotos Trika | 2.65 | 29 | P | Pn | 14 20 22.5 | +1.6 |
| ANKY | Antikythira Is | 2.77 | 119 | ePN | Pn | 14 20 22.2 | -0.4 |
| ANKY | Antikythira Is | 2.77 | 119 | ePn | Pn | 14 20 22.2 | -0.4 |
| ATH | Athens Observa | 2.78 | 74 | P | Pn | 14 20 22.3 | -0.4 |
| ATH | Athens Observa | 2.78 | 74 | ePN | Pn | 14 20 22.6 | -0.1 |
| ATH | Athens Observa | 2.78 | 74 | P | Pn | 14 20 22.3 | -0.4 |
| ATH | Athens Observa | 2.78 | 74 | P | Pn | 14 20 22.3 | -0.4 |
| ATH | Athens Observa | 2.78 | 74 | P | Pn | 14 20 22.3 | -0.4 |
| ATH | Athens Observa | 2.78 | 74 | ePn | Pn | 14 20 22.6 | -0.1 |
| SMIA | Simia | 2.79 | 54 | ePN | Pn | 14 20 23.5 | +0.7 |
| SMIA | Simia | 2.79 | 54 | P | Pn | 14 20 23.5 | +0.7 |
| SMIA | Simia | 2.79 | 54 | P | Pn | 14 20 23.5 | +0.7 |
| VLY | Voula,Athens | 2.81 | 77 | P | Pn | 14 20 22.5 | -0.7 |
| VLY | Voula,Athens | 2.81 | 77 | P | Pn | 14 20 22.5 | -0.7 |
| VLY | Voula,Athens | 2.81 | 77 | P | Pn | 14 20 22.5 | -0.7 |
| ATHU | Athens Univers | 2.83 | 75 | P | Pn | 14 20 23.3 | -0.1 |
| ATHU | Athens Univers | 2.83 | 75 | P | Pn | 14 20 23.3 | -0.1 |
| ATHU | Athens Univers | 2.83 | 75 | P | Pn | 14 20 23.3 | -0.1 |
| PTL | Penteli | 2.91 | 73 | ePN | Pn | 14 20 25.0 | +0.4 |
| PTL | Penteli | 2.91 | 73 | P | Pn | 14 20 24.9 | +0.4 |
| PTL | Penteli | 2.91 | 73 | P | Pn | 14 20 24.9 | +0.4 |
| PTL | Penteli | 2.91 | 73 | P | Pn | 14 20 24.9 | +0.4 |
| MRKA | Markates | 2.95 | 60 | ePN | Pn | 14 20 25.4 | +0.4 |
| MRKA | Markates | 2.95 | 60 | P | Pn | 14 20 25.4 | +0.4 |
| MRKA | Markates | 2.95 | 60 | P | Pn | 14 20 25.4 | +0.4 |
| FYTO | Fytoko, Volos | 2.96 | 43 | P | Pn | 14 20 25.8 | +0.6 |
| FYTO | Fytoko, Volos | 2.96 | 43 | P | Pn | 14 20 25.8 | +0.6 |
| FYTO | Fytoko, Volos | 2.96 | 43 | P | Pn | 14 20 25.8 | +0.6 |
| NEO | Neokhori | 3.06 | 47 | ePN | Pn | 14 20 26.7 | +0.2 |
| NEO | Neokhori | 3.06 | 47 | P | Pn | 14 20 26.7 | +0.2 |
| NEO | Neokhori | 3.06 | 47 | P | Pn | 14 20 26.7 | +0.2 |
| NEO | Neokhori | 3.06 | 47 | P | Pn | 14 20 26.7 | +0.2 |
| EREA | Eretria | 3.08 | 67 | P | Pn | 14 20 26.9 | +0.1 |
| EREA | Eretria | 3.08 | 67 | P | Pn | 14 20 26.9 | +0.1 |
| XOR | Xorichti | 3.08 | 46 | ePN | Pn | 14 20 27.5 | +0.7 |
| XOR | Xorichti | 3.08 | 46 | P | Pn | 14 20 27.1 | +0.3 |
| XOR | Xorichti | 3.08 | 46 | P | Pn | 14 20 27.1 | +0.3 |
| XOR | Xorichti | 3.08 | 46 | P | Pn | 14 20 27.1 | +0.3 |
| XOR | Xorichti | 3.08 | 46 | ePn | Pn | 14 20 27.5 | +0.7 |
| SKIA | Skiathos | 3.11 | 52 | ePN | Pn | 14 20 27.7 | +0.4 |
| SKIA | Skiathos | 3.11 | 52 | P | Pn | 14 20 27.7 | +0.4 |
| SKIA | Skiathos | 3.11 | 52 | P | Pn | 14 20 27.7 | +0.4 |
| NEST | Nestorio | 3.19 | 10 | ePB | Pn | 14 20 31.1 | +2.7 |
| NEST | Nestorio | 3.19 | 10 | P | Pn | 14 20 30.9 | +2.5 |
| NEST | | | | S | Sn | 14 21 06.6 | +0.8 |
| NEST | Nestorio | 3.19 | 10 | P | Pn | 14 20 30.9 | +2.5 |
| NEST | | | | S | Sn | 14 21 06.6 | +0.8 |
| KZN | Kozani | 3.24 | 20 | P | Pn | 14 20 30.6 | +1.6 |
| KZN | Kozani | 3.24 | 20 | ePN | Pn | 14 20 30.8 | +1.8 |
| KZN | Kozani | 3.24 | 20 | P | Pn | 14 20 30.6 | +1.6 |
| KZN | | | | S | Sn | 14 21 07.5 | +0.6 |
| KZN | Kozani | 3.24 | 20 | P | Pn | 14 20 30.6 | +1.6 |
| KZN | Kozani | 3.24 | 20 | P | Pn | 14 20 30.6 | +1.6 |
| KZN | | | | S | Sn | 14 21 07.5 | +0.6 |
| LIT | Litokhoron | 3.30 | 30 | P | Pn | 14 20 30.3 | +0.5 |
| LIT | Litokhoron | 3.30 | 30 | ePN | Pn | 14 20 30.5 | +0.7 |
| LIT | Litokhoron | 3.30 | 30 | P | Pn | 14 20 30.3 | +0.5 |
| LIT | | | | S | Sn | 14 21 08.2 | 0.0 |
| LIT | Litokhoron | 3.30 | 30 | P | Pn | 14 20 30.3 | +0.5 |
| LIT | Litokhoron | 3.30 | 30 | P | Pn | 14 20 30.3 | +0.5 |
| LIT | | | | S | Sn | 14 21 08.2 | 0.0 |
| MHLO | Agia Marina, M | 3.31 | 99 | P | Pn | 14 20 29.8 | -0.2 |
| MHLO | Agia Marina, M | 3.31 | 99 | P | Pn | 14 20 29.8 | -0.2 |
| SERI | Serifos | 3.32 | 91 | ePN | Pn | 14 20 29.8 | -0.3 |
| SERI | Serifos | 3.32 | 91 | ePn | Pn | 14 20 29.8 | -0.3 |
| KARY | Karystos | 3.35 | 76 | P | Pn | 14 20 30.2 | -0.3 |
| AOS | Alonnisos | 3.38 | 55 | ePN | Pn | 14 20 31.2 | +0.3 |
| AOS | Alonnisos | 3.38 | 55 | P | Pn | 14 20 31.1 | +0.2 |
| AOS | Alonnisos | 3.38 | 55 | P | Pn | 14 20 31.1 | +0.2 |
| AOS | Alonnisos | 3.38 | 55 | ePn | Pn | 14 20 31.2 | +0.3 |
| TIP | Timpagrande | 3.40 | 305 | P | Pn | 14 20 32.6 | +1.4 |
| TIP | Timpagrande | 3.40 | 305 | ePn | Pn | 14 20 32.0 | +0.8 |
| TIP | | | | eSn | Sn | 14 21 11.4 | +0.6 |
| TIP | Timpagrande | 3.40 | 305 | ePn | Pn | 14 20 32.0 | +0.8 |
| TIP | Timpagrande | 3.40 | 305 | P | Pn | 14 20 32.6 | +1.4 |
| TIP | | | | eSn | Sn | 14 21 11.4 | +0.6 |
| IMMV | Iera Moni Meta | 3.46 | 120 | ePN | Pn | 14 20 33.0 | +1.0 |
| IMMV | Iera Moni Meta | 3.46 | 120 | ePn | Pn | 14 20 33.0 | +1.0 |
| FNA | Florina | 3.60 | 13 | P | Pn | 14 20 35.8 | +1.7 |
| FNA | Florina | 3.60 | 13 | ePN | Pn | 14 20 35.5 | +1.4 |
| FNA | Florina | 3.60 | 13 | P | Pn | 14 20 35.8 | +1.7 |
| FNA | Florina | 3.60 | 13 | P | Pn | 14 20 35.8 | +1.7 |
| FNA | Florina | 3.60 | 13 | ePn | Pn | 14 20 35.5 | +1.4 |
| FNA | Florina | 3.60 | 13 | P | Pn | 14 20 35.8 | +1.7 |
| VAM | Vamos | 3.63 | 120 | ePN | Pn | 14 20 35.3 | +0.9 |
| VAM | Vamos | 3.63 | 120 | ePn | Pn | 14 20 35.3 | +0.9 |
| PAIG | Paliouri | 3.73 | 44 | P | Pn | 14 20 35.4 | -0.4 |
| PAIG | Paliouri | 3.73 | 44 | ePN | Pn | 14 20 36.4 | +0.6 |
| PAIG | Paliouri | 3.73 | 44 | P | Pn | 14 20 35.4 | -0.4 |
| PAIG | Paliouri | 3.73 | 44 | P | Pn | 14 20 35.4 | -0.4 |
| PAIG | Paliouri | 3.73 | 44 | P | Pn | 14 20 35.4 | -0.4 |
| PAIG | Paliouri | 3.73 | 44 | ePn | Pn | 14 20 36.4 | +0.6 |
| OHR | Ohrid | 3.86 | 5 | iPn | Pn | 14 20 39.4 | +1.8 |
| OHR | | | | eSn | Sn | 14 21 21.9 | -0.3 |
| OHR | Ohrid | 3.86 | 5 | iPn | Pn | 14 20 39.3 | +1.8 |
| OHR | | | | eSn | Sn | 14 21 21.8 | -0.3 |
| THE | Thessaloniki | 3.94 | 31 | P | Pn | 14 20 38.8 | +0.2 |
| THE | Thessaloniki | 3.94 | 31 | ePN | Pn | 14 20 39.3 | +0.7 |
| THE | Thessaloniki | 3.94 | 31 | P | Pn | 14 20 38.8 | +0.2 |
| THE | Thessaloniki | 3.94 | 31 | P | Pn | 14 20 38.8 | +0.2 |
| THE | Thessaloniki | 3.94 | 31 | P | Pn | 14 20 38.8 | +0.2 |
| THE | Thessaloniki | 3.94 | 31 | ePn | Pn | 14 20 39.3 | +0.7 |
| PLG | Polygyros | 3.94 | 37 | P | Pn | 14 20 38.8 | +0.1 |
| PLG | Polygyros | 3.94 | 37 | ePN | Pn | 14 20 38.8 | +0.1 |
| PLG | Polygyros | 3.94 | 37 | P | Pn | 14 20 38.8 | +0.1 |
| PLG | Polygyros | 3.94 | 37 | P | Pn | 14 20 38.8 | +0.1 |
| PLG | Polygyros | 3.94 | 37 | P | Pn | 14 20 38.8 | +0.1 |
| HORT | Hortiatis | 3.96 | 32 | ePN | Pn | 14 20 39.9 | +0.8 |
| HORT | Hortiatis | 3.96 | 32 | P | Pn | 14 20 39.1 | 0.0 |
| HORT | Hortiatis | 3.96 | 32 | P | Pn | 14 20 39.1 | 0.0 |
| HORT | Hortiatis | 3.96 | 32 | P | Pn | 14 20 39.1 | 0.0 |
| HORT | Hortiatis | 3.96 | 32 | ePn | Pn | 14 20 39.9 | +0.8 |
| GRG | Griva | 4.02 | 23 | P | Pn | 14 20 40.4 | +0.6 |
| GRG | Griva | 4.02 | 23 | ePN | Pn | 14 20 40.4 | +0.6 |
| GRG | Griva | 4.02 | 23 | P | Pn | 14 20 40.4 | +0.6 |
| GRG | Griva | 4.02 | 23 | P | Pn | 14 20 40.4 | +0.6 |
| GRG | Griva | 4.02 | 23 | P | Pn | 14 20 40.4 | +0.6 |
| TAR1 | Taranto | 4.03 | 325 | ePn | Pn | 14 20 40.9 | +1.1 |
| TAR1 | | | | Sn | Sn | 14 21 24.6 | -1.6 |
| TIR | Tirane | 4.09 | 355 | eP | Pn | 14 20 39.6 | -1.1 |
| TIR | Tirane | 4.09 | 355 | ePn | Pn | 14 20 39.6 | -1.1 |
| TIR | Tirane | 4.09 | 355 | eP | Pn | 14 20 39.6 | -1.1 |
| THR5 | Thira Island, | 4.12 | 100 | P | Pn | 14 20 40.5 | -0.5 |
| THR5 | Thira Island, | 4.12 | 100 | P | Pn | 14 20 40.5 | -0.5 |
| APE | Apeiranthos | 4.16 | 91 | P | Pn | 14 20 40.7 | -1.0 |
| APE | Apeiranthos | 4.16 | 91 | ePN | Pn | 14 20 43.1 | +1.4 |
| APE | Apeiranthos | 4.16 | 91 | P | Pn | 14 20 40.7 | -1.0 |
| APE | Apeiranthos | 4.16 | 91 | P | Pn | 14 20 40.7 | -1.0 |
| APE | Apeiranthos | 4.16 | 91 | P | Pn | 14 20 40.7 | -1.0 |
| APE | Apeiranthos | 4.16 | 91 | ePn | Pn | 14 20 43.1 | +1.4 |
| IDI | Anoyia | 4.18 | 117 | Pn | Pn | 14 20 42.3 | +0.3 |
| | 2.1nm,0.3s,baz=312,slow=10,SNR=14 | | | | | | |
| IDI | | | | Sn | Sn | 14 21 26.9 | -3.3 |
| | 6.4nm,0.3s,baz=316,slow=16,SNR=5.3 | | | | | | |
| IDI | | | | LR | LR | 14 22 50.2 | |
| | comp=Z,124nm,20.1s,baz=277,slow=47 | | | | | | |
| IDI | Anoyia | 4.18 | 117 | ePN | Pn | 14 20 43.0 | +1.0 |
| OUR | Ouranopolis | 4.19 | 42 | ePN | Pn | 14 20 42.5 | +0.5 |
| OUR | Ouranopolis | 4.19 | 42 | ePn | Pn | 14 20 42.5 | +0.5 |
| SANT | Santorini | 4.21 | 101 | ePN | Pn | 14 20 42.5 | +0.1 |
| SANT | Santorini | 4.21 | 101 | ePn | Pn | 14 20 42.5 | +0.1 |
| SOH | Sokhos | 4.26 | 33 | P | Pn | 14 20 44.1 | +1.0 |
| SOH | Sokhos | 4.26 | 33 | ePN | Pn | 14 20 44.1 | +1.0 |
| SOH | Sokhos | 4.26 | 33 | P | Pn | 14 20 44.1 | +1.0 |
| SOH | Sokhos | 4.26 | 33 | P | Pn | 14 20 44.1 | +1.0 |
| SOH | Sokhos | 4.26 | 33 | P | Pn | 14 20 44.1 | +1.0 |
| KNT | Kendrikon | 4.37 | 26 | P | Pn | 14 20 45.4 | +0.8 |
| KNT | Kendrikon | 4.37 | 26 | ePN | Pn | 14 20 45.3 | +0.7 |
| KNT | Kendrikon | 4.37 | 26 | P | Pn | 14 20 45.4 | +0.8 |
| KNT | Kendrikon | 4.37 | 26 | P | Pn | 14 20 45.4 | +0.8 |
| KNT | Kendrikon | 4.37 | 26 | ePn | Pn | 14 20 45.3 | +0.7 |
| VAY | Valandovo | 4.41 | 23 | ePn | Pn | 14 20 44.1 | -0.9 |
| VAY | | | | eSn | Sn | 14 21 31.5 | -4.0 |
| VAY | Valandovo | 4.41 | 23 | ePn | Pn | 14 20 44.1 | -0.9 |
| VAY | | | | eSn | Sn | 14 21 31.5 | -4.0 |
| PHP | Peshkopia | 4.41 | 1 | P | Pn | 14 20 46.3 | +1.1 |
| PHP | Peshkopia | 4.41 | 1 | P | Pn | 14 20 46.3 | +1.1 |
| PHP | Peshkopia | 4.41 | 1 | P | Pn | 14 20 46.3 | +1.1 |
| PHP | Peshkopia | 4.41 | 1 | P | Pn | 14 20 46.3 | +1.1 |
| CUC | Castrocucco | 4.46 | 309 | ePn | Pn | 14 20 45.1 | -0.6 |
| CUC | Castrocucco | 4.46 | 309 | ePn | Pn | 14 20 45.2 | -0.6 |
| SG1 | Sgolgore (BA) | 4.56 | 323 | ePn | Pn | 14 20 49.9 | +2.7 |
| SG1 | | | | Sn | Sn | 14 21 36.8 | -2.6 |
| SRS | Serrai | 4.61 | 32 | P | Pn | 14 20 48.2 | +0.4 |
| SRS | Serrai | 4.61 | 32 | ePN | Pn | 14 20 48.5 | +0.7 |
| SRS | Serrai | 4.61 | 32 | P | Pn | 14 20 48.2 | +0.4 |
| SRS | Serrai | 4.61 | 32 | P | Pn | 14 20 48.2 | +0.4 |
| SRS | Serrai | 4.61 | 32 | P | Pn | 14 20 48.2 | +0.4 |
| SRS | Serrai | 4.61 | 32 | ePn | Pn | 14 20 48.5 | +0.7 |
| LIA | Limnos Island | 4.62 | 54 | ePN | Pn | 14 20 49.9 | +1.9 |
| LIA | Limnos Island | 4.62 | 54 | P | Pn | 14 20 47.8 | -0.2 |
| LIA | Limnos Island | 4.62 | 54 | P | Pn | 14 20 47.8 | -0.2 |
| LIA | Limnos Island | 4.62 | 54 | P | Pn | 14 20 47.8 | -0.2 |
| LIA | Limnos Island | 4.62 | 54 | ePn | Pn | 14 20 49.9 | +1.9 |
| LAST | Lasithi | 4.66 | 115 | ePN | Pn | 14 20 49.2 | +0.5 |
| LAST | Lasithi | 4.66 | 115 | ePn | Pn | 14 20 49.2 | +0.5 |
| CHOS | Chios island | 4.67 | 74 | ePN | Pn | 14 20 48.2 | -0.5 |
| CHOS | Chios island | 4.67 | 74 | ePn | Pn | 14 20 48.2 | -0.5 |
| BAI | Bari | 4.68 | 326 | ePn | Pn | 14 20 50.0 | +1.3 |
| NPS | Neapolis | 4.71 | 114 | ePN | Pn | 14 20 49.7 | +0.4 |
| NPS | Neapolis | 4.71 | 114 | ePn | Pn | 14 20 49.7 | +0.4 |
| SIGR | SIGRI | 4.76 | 64 | ePN | Pn | 14 20 51.8 | +1.9 |
| SIGR | SIGRI | 4.76 | 64 | ePn | Pn | 14 20 51.8 | +1.9 |
| ULC | Ulcinj | 4.76 | 350 | ⇑iPn | Pn | 14 20 50.0 | 0.0 |
| ULC | | | | eSn | Sn | 14 21 44.7 | +0.3 |
| ULC | Ulcinj | 4.76 | 350 | ⇑iPn | Pn | 14 20 50.0 | 0.0 |
| ULC | | | | eSn | Sn | 14 21 44.7 | +0.3 |
| SKO | Skopje | 4.78 | 10 | iPn | Pn | 14 20 51.4 | +1.2 |
| SKO | | | | eSn | Sn | 14 21 42.4 | -2.3 |
| SKO | Skopje | 4.78 | 10 | P | Pn | 14 20 50.7 | +0.6 |
| SKO | Skopje | 4.78 | 10 | P | Pn | 14 20 50.7 | +0.6 |
| SKO | Skopje | 4.78 | 10 | P | Pn | 14 20 50.7 | +0.6 |
| SKO | Skopje | 4.78 | 10 | P | Pn | 14 20 50.7 | +0.6 |
| SKO | Skopje | 4.78 | 10 | iPn | Pn | 14 20 51.3 | +1.2 |
| SKO | | | | eSn | Sn | 14 21 42.4 | -2.3 |
| WDD | Wield Dalam | 4.88 | 255 | ePn | Pn | 14 20 53.0 | +1.5 |
| WDD | Wield Dalam | 4.88 | 255 | ePn | Pn | 14 20 53.0 | +1.5 |
| NVR | Nevrokopi | 4.91 | 33 | ePN | Pn | 14 20 52.9 | +0.9 |
| NVR | Nevrokopi | 4.91 | 33 | P | Pn | 14 20 52.6 | +0.6 |
| NVR | Nevrokopi | 4.91 | 33 | P | Pn | 14 20 52.6 | +0.6 |
| NVR | Nevrokopi | 4.91 | 33 | P | Pn | 14 20 52.6 | +0.6 |
| NVR | Nevrokopi | 4.91 | 33 | ePn | Pn | 14 20 52.9 | +0.9 |
| CDT | Castel del Mon | 4.94 | 322 | ePn | Pn | 14 20 53.9 | +1.5 |
| CDT | | | | Sn | Sn | 14 21 45.4 | -3.4 |
| KAVA | Kavala | 4.95 | 40 | P | Pn | 14 20 52.1 | -0.3 |
| KAVA | Kavala | 4.95 | 40 | P | Pn | 14 20 52.1 | -0.3 |
| KAVA | Kavala | 4.95 | 40 | P | Pn | 14 20 52.1 | -0.3 |
| DRME | Dracevica, Mon | 4.99 | 350 | ⇓iPn | Pn | 14 20 53.5 | +0.4 |
| DRME | | | | eSn | Sn | 14 21 50.5 | +0.5 |
| DRME | Dracevica, Mon | 4.99 | 350 | ⇓iPn | Pn | 14 20 53.5 | +0.4 |
| DRME | | | | eSn | Sn | 14 21 50.5 | +0.5 |
| BUM | Brajici-Budva | 5.15 | 348 | ⇑iPn | Pn | 14 20 55.4 | +0.1 |
| BUM | | | | eSn | Sn | 14 21 54.6 | +0.7 |
| BUM | Brajici-Budva | 5.15 | 348 | ⇑iPn | Pn | 14 20 55.4 | +0.1 |
| BUM | | | | eSn | Sn | 14 21 54.6 | +0.7 |
| SMTH | Samothraki Isl | 5.17 | 50 | ePN | Pn | 14 20 56.1 | +0.6 |
| SMTH | Samothraki Isl | 5.17 | 50 | ePn | Pn | 14 20 56.1 | +0.6 |
| SMG | Samos | 5.20 | 83 | ePN | Pn | 14 20 57.7 | +1.8 |
| SMG | Samos | 5.20 | 83 | ePn | Pn | 14 20 57.7 | +1.8 |
| PDG | Podgorica | 5.22 | 351 | ⇓iPn | Pn | 14 20 57.5 | +1.3 |
| PDG | | | | eSn | Sn | 14 21 56.6 | +1.0 |
| TTG | Podgorica | 5.22 | 351 | ⇓iPn | Pn | 14 20 57.5 | +1.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TTG | | | | eSn | Sn | 14 21 56.6 | +1.0 |
| ZKR | Zakros | 5.22 | 113 | ePN | Pn | 14 20 57.5 | +1.2 |
| ZKR | Zakros | 5.22 | 113 | ePn | Pn | 14 20 57.5 | +1.2 |
| PVY | Plav | 5.33 | 357 | ⇓iPn | Pn | 14 20 59.4 | +1.6 |
| PVY | | | | eSn | Sn | 14 21 58.9 | +0.4 |
| PVY | Plav | 5.33 | 357 | ⇓iPn | Pn | 14 20 59.4 | +1.6 |
| PVY | | | | eSn | Sn | 14 21 58.9 | +0.4 |
| HCY | Herceg Novi | 5.36 | 345 | ⇑iPn | Pn | 14 20 57.4 | -0.8 |
| HCY | | | | eSn | Sn | 14 21 59.2 | +0.1 |
| HCY | Herceg Novi | 5.36 | 345 | ⇑iPn | Pn | 14 20 57.4 | -0.8 |
| HCY | | | | eSn | Sn | 14 21 59.2 | +0.1 |
| NKME | Niksic | 5.59 | 350 | ⇑iPn | Pn | 14 21 02.1 | +0.7 |
| NKME | | | | eSn | Sn | 14 22 04.9 | 0.0 |
| NKME | Niksic | 5.59 | 350 | ⇑iPn | Pn | 14 21 02.1 | +0.7 |
| NKME | | | | eSn | Sn | 14 22 04.9 | 0.0 |
| BEY | Berane | 5.61 | 357 | ⇑iPn | Pn | 14 21 02.7 | +1.1 |
| BEY | | | | eSn | Sn | 14 22 05.0 | -0.3 |
| IVA | Berane | 5.61 | 357 | ⇑iPn | Pn | 14 21 02.7 | +1.1 |
| IVA | | | | eSn | Sn | 14 22 05.0 | -0.3 |
| NKY | Niksic | 5.63 | 350 | ⇓iPn | Pn | 14 21 03.0 | +1.0 |
| NKY | | | | eSn | Sn | 14 22 06.1 | +0.2 |
| NKY | Niksic | 5.63 | 350 | ⇓iPn | Pn | 14 21 03.0 | +1.0 |
| NKY | | | | eSn | Sn | 14 22 06.1 | +0.2 |
| BARS | Barje | 5.66 | 11 | ⇑iPn | Pn | 14 21 02.2 | 0.0 |
| KARP | Karpathos | 5.77 | 105 | ePN | Pn | 14 21 04.9 | +1.1 |
| KARP | Karpathos | 5.77 | 105 | ePn | Pn | 14 21 04.9 | +1.1 |
| BRY | Bratogost | 5.79 | 347 | ⇑iPn | Pn | 14 21 03.2 | -1.0 |
| BRY | | | | eSn | Sn | 14 22 09.4 | -0.5 |
| BRY | Bratogost | 5.79 | 347 | ⇑iPn | Pn | 14 21 03.2 | -1.0 |
| BRY | | | | eSn | Sn | 14 22 09.4 | -0.5 |
| SJES | Sjenica | 5.99 | 358 | i Pn | Pn | 14 21 07.3 | +0.4 |
| UPM | Unac-Piva | 6.03 | 350 | ePn | Pn | 14 21 08.4 | +0.9 |
| UPM | | | | eSn | Sn | 14 22 15.4 | -0.4 |
| UPM | Unac-Piva | 6.03 | 350 | ePn | Pn | 14 21 08.4 | +0.9 |
| UPM | | | | eSn | Sn | 14 22 15.4 | -0.4 |
| PLE | Pljevlja | 6.10 | 354 | ⇓iPn | Pn | 14 21 09.4 | +1.0 |
| PLE | | | | eSn | Sn | 14 22 16.8 | -0.6 |
| PLE | Pljevlja | 6.10 | 354 | ⇓iPn | Pn | 14 21 09.4 | +1.0 |
| PLE | | | | eSn | Sn | 14 22 16.8 | -0.6 |
| GRUS | Gruza | 6.62 | 2 | i Pn | Pn | 14 21 14.9 | -0.5 |
| BBLS | Lazići | 6.63 | 354 | i Pn | Pn | 14 21 15.4 | -0.2 |
| DIVS | Divibare | 6.83 | 358 | ⇑iP | Pn | 14 21 16.9 | -1.4 |
| DIVS | Divibare | 6.83 | 358 | P | Pn | 14 21 16.7 | -1.7 |
| DIVS | Divibare | 6.83 | 358 | P | Pn | 14 21 16.7 | -1.7 |
| DIVS | Divibare | 6.83 | 358 | i Pn | Pn | 14 21 17.0 | -1.4 |
| TEKS | Tekeris | 7.30 | 355 | i Pn | Pn | 14 21 24.1 | -0.7 |
| FGSL | Fruska Gora | 7.89 | 357 | i Pn | Pn | 14 21 31.6 | -1.3 |
| GZR | Gura Zlata | 8.32 | 12 | ⇓iP | Pn | 14 21 38.4 | -0.5 |
| GZR | Gura Zlata | 8.32 | 12 | ⇓iP | Pn | 14 21 38.4 | -0.5 |
| BZS | Buzias | 8.40 | 6 | ⇓iP | Pn | 14 21 39.0 | -0.8 |
| BZS | Buzias | 8.40 | 6 | ⇓iP | Pn | 14 21 39.0 | -0.8 |
| LOT | Lotru | 8.57 | 16 | ⇓iP | Pn | 14 21 47.3 | +5.0 |
| VOIR | | 8.90 | 22 | ⇑iP | Pn | 14 21 45.0 | -1.8 |
| VOIR | | 8.90 | 22 | ⇑iP | Pn | 14 21 45.0 | -1.8 |
| KEST | Kesra | 8.98 | 263 | Pn | Pn | 14 21 49.4 | +1.5 |
| | 0.4nm,0.3s,baz=36,slow=12,SNR=3.5 | | | | | | |
| BOJS | Bojanci | 9.07 | 337 | i Pn | Pn | 14 21 49.7 | +0.7 |
| BOJS | Bojanci | 9.07 | 337 | Pn | Pn | 14 21 49.7 | +0.7 |
| MLR | Muntele Rosu | 9.23 | 25 | ⇓iP | Pn | 14 21 51.8 | +0.4 |
| MLR | Muntele Rosu | 9.23 | 25 | ⇓iP | Pn | 14 21 51.8 | +0.4 |
| VISS | Visnje | 9.47 | 336 | i Pn | Pn | 14 21 55.0 | +0.6 |
| VISS | Visnje | 9.47 | 336 | i Pn | Pn | 14 21 55.0 | +0.6 |
| DOPR | Dopca | 9.48 | 22 | ⇑iP | Pn | 14 21 54.6 | -0.1 |
| DOPR | Dopca | 9.48 | 22 | ⇑iP | Pn | 14 21 54.6 | -0.1 |
| DRGR | | 9.68 | 10 | ⇓P | Pn | 14 22 01.8 | +4.4 |
| DRGR | | 9.68 | 10 | ⇓iP | Pn | 14 22 01.8 | +4.4 |
| PLOR | Plostina | 9.79 | 27 | ⇓iP | Pn | 14 21 58.7 | -0.3 |
| PLOR | Plostina | 9.79 | 27 | ⇓iP | Pn | 14 21 58.7 | -0.3 |
| VRI | Vrincioaia | 9.84 | 27 | ⇑iP | Pn | 14 21 59.7 | +0.2 |
| VRI | Vrincioaia | 9.84 | 27 | ⇑iP | Pn | 14 21 59.7 | +0.2 |
| PERS | Pernice | 10.13 | 339 | i Pn | Pn | 14 22 02.7 | -0.9 |
| PERS | Pernice | 10.13 | 339 | i Pn | Pn | 14 22 02.7 | -0.9 |
| SOKA | Soboth | 10.19 | 339 | ⇑iPn | Pn | 14 22 03.5 | -1.0 |
| SOKA | Soboth | 10.19 | 339 | Pn | Pn | 14 22 03.5 | -1.0 |
| ARSA | Arzberg | 10.59 | 342 | ⇑iPn | Pn | 14 22 11.3 | +1.4 |
| ARSA | Arzberg | 10.59 | 342 | Pn | Pn | 14 22 11.3 | +1.4 |
| PSZ | Piszkesteto | 10.65 | 358 | ⇑iP | Pn | 14 22 10.5 | -0.2 |
| PSZ | Piszkesteto | 10.65 | 358 | ⇑iP | Pn | 14 22 10.5 | -0.2 |
| BRTR | Keskin Array B | 10.72 | 73 | Pn | Pn | 14 22 13.7 | +2.0 |
| | 0.1nm,0.3s,baz=250,slow=13,SNR=3.0 | | | | | | |
| VYHS | Vyhne | 11.27 | 355 | eP | Pn | 14 22 20.6 | +1.4 |
| VYHS | Vyhne | 11.27 | 355 | ePN | Pn | 14 22 20.6 | +1.4 |
| VYHS | Vyhne | 11.27 | 355 | eP | Pn | 14 22 20.6 | +1.4 |
| MOA | Molln | 11.48 | 339 | ⇑iPn | Pn | 14 22 22.0 | 0.0 |
| MOA | Molln | 11.48 | 339 | Pn | Pn | 14 22 22.0 | 0.0 |
| KOLS | Kolonicke sedl | 11.75 | 6 | eP | Pn | 14 22 20.5 | -5.1 |
| KOLS | Kolonicke sedl | 11.75 | 6 | ePN | Pn | 14 22 20.5 | -5.1 |
| DAVOX | Davos/Dischmat | 12.27 | 324 | Pn | Pn | 14 22 32.1 | -0.8 |
| | 0.2nm,0.3s,baz=156,slow=20,SNR=2.2 | | | | | | |
| DAVOX | | | | Sn | Sn | 14 24 43.7 | -5.2 |
| | 0.3nm,0.3s,baz=162,slow=20,SNR=3.4 | | | | | | |
| GERES | GERESS Array B | 12.54 | 339 | Pn | Pn | 14 22 36.8 | +0.2 |
| | 0.2nm,0.3s,baz=156,slow=14,SNR=5.3 | | | | | | |
| GERES | | | | Sn | Sn | 14 24 46.7 | -8.7 |
| | 0.3nm,0.3s,baz=153,slow=22,SNR=3.8 | | | | | | |
| MMAI | Mount Meron Ar | 13.04 | 105 | Pn | Pn | 14 22 39.9 | -3.6 |
| | 2.4nm,0.3s,baz=304,slow=13,SNR=7.6 | | | | | | |
| MALT | Malatya | 14.35 | 80 | i P | P | 14 23 09.0 | +0.7 |
| EIL | Elat | 14.36 | 118 | Pn | Pn | 14 22 58.4 | -3.0 |
| | 0.4nm,0.3s,baz=329,slow=5.9,SNR=4.5 | | | | | | |
| EIL | | | | Sn | Sn | 14 25 27.0 | -13 |
| | 0.6nm,0.3s,baz=342,slow=19,SNR=5.4 | | | | | | |
| AKASG | Malin Array Be | 14.86 | 23 | Pn | Pn | 14 23 04.3 | -3.8 |
| | 0.6nm,0.3s,baz=205,slow=12,SNR=3.7 | | | | | | |
| AKASG | Malin Array Be | 14.86 | 23 | P | Pn | 14 23 04.3 | -3.8 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ESDC | Sonseca Array | 19.16 | 285 | P | Pn | 14 24 02.8 | +0.4 |
| | comp=Z,0.1nm,0.3s,baz=90,slow=12,SNR=5.4 | | | | | | |
| VSR | Storozhevoye | 19.33 | 38 | eP | Pn | 14 24 09.8 | +5.7 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.1s | | | | | | |
| LPSR | Galich'ya Gora | 20.12 | 34 | eP | P | 14 24 10.6 | -1.0 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,5.0nm,0.6s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.5s | | | | | | |
| LPSR | Galich'ya Gora | 20.12 | 34 | eP | P | 14 24 10.6 | -1.0 |
| | comp=E,5.0nm,0.6s | | | | | | |
| VRH | Novokhopyorsk | 20.61 | 41 | eP | Pn | 14 24 22.4 | +3.1 |
| VRH | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.4s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,20nm,1.2s | | | | | | |
| MDT | Midelt | 20.88 | 265 | P | P | 14 24 21.1 | +0.9 |
| | comp=E,3.7nm,0.8s,baz=73,slow=7.0,SNR=4.6 | | | | | | |
| OBN | Obninsk | 21.00 | 27 | LR | LR | 14 32 33.0 | |
| | comp=E,86nm,19.6s,baz=271,slow=37 | | | | | | |
| HFS | Hagfors | 23.27 | 352 | P | P | 14 24 44.6 | -0.6 |
| | comp=E,2.5nm,0.5s,baz=160,slow=11,SNR=20 | | | | | | |
| HFS | Hagfors | 23.27 | 352 | P | P | 14 24 44.6 | -0.6 |
| HFS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| EKA | Eskdalemuir Ar | 24.09 | 326 | P | P | 14 24 54.4 | +1.3 |
| | comp=Z,0.5nm,0.4s,baz=310,slow=22,SNR=4.2 | | | | | | |
| EKA | Eskdalemuir Ar | 24.09 | 326 | P | P | 14 24 54.4 | +1.3 |
| EKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| FINES | FINESS Array B | 24.47 | 7 | P | P | 14 24 56.6 | +0.1 |
| | comp=Z,1.8nm,0.5s,baz=176,slow=11,SNR=15 | | | | | | |
| FINES | | | | LR | LR | 14 35 39.7 | |
| | comp=Z,82nm,19.6s,baz=243,slow=40 | | | | | | |
| FINES | FINESS Array B | 24.47 | 7 | P | P | 14 24 56.6 | +0.1 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,82nm,19.6s | | | | | | |
| NB2 | NORSAR Subarra | 24.48 | 349 | P | P | 14 24 56.9 | +0.2 |
| | comp=Z,1.6nm,0.6s,baz=162,slow=9.3 | | | | | | |
| NB2 | NORSAR Subarra | 24.48 | 349 | P | P | 14 24 56.9 | +0.2 |
| | comp=Z,1.6nm,0.6s,SNR=6.6 | | | | | | |
| NOA | NORSAR Array B | 24.48 | 349 | P | P | 14 24 56.9 | +0.2 |
| | comp=Z,1.3nm,0.6s,baz=158,slow=9.1,SNR=8.2 | | | | | | |
| NOA | NORSAR Array B | 24.48 | 349 | P | P | 14 24 56.9 | +0.2 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| TORD | Torodi Ar. Bea | 29.23 | 220 | P | P | 14 25 41.2 | +1.5 |
| | comp=Z,0.9nm,0.6s,baz=33,slow=9.2,SNR=11 | | | | | | |
| GEYT | Alibeck | 29.82 | 77 | P | P | 14 25 44.7 | -0.1 |
| | comp=Z,1.4nm,0.5s,baz=282,slow=6.8,SNR=3.1 | | | | | | |
| AKTK | Aktyubinsk | 29.86 | 52 | P | P | 14 25 43.4 | -1.6 |
| | comp=Z,1.0nm,0.4s | | | | | | |
| AKTO | Aktyubinsk | 29.86 | 52 | P | P | 14 25 43.4 | -1.6 |
| | comp=Z,0.8nm,0.4s,baz=231,slow=7.2,SNR=5.5 | | | | | | |
| AKTO | Aktyubinsk | 29.86 | 52 | P | P | 14 25 43.4 | -1.6 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ARU | Arti | 31.84 | 41 | P | P | 14 26 00.9 | -1.5 |
| | comp=Z,0.3nm,0.2s,baz=73,slow=19,SNR=2.3 | | | | | | |
| ARCES | ARCESS Array B | 32.45 | 3 | P | P | 14 26 07.0 | -0.6 |
| | comp=Z,2.8nm,1.0s,baz=191,slow=11,SNR=9.8 | | | | | | |
| ARCES | ARCESS Array B | 32.45 | 3 | P | P | 14 26 07.0 | -0.6 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| DBIC | Dimbokro | 38.12 | 223 | P | P | 14 26 58.0 | +1.1 |
| | comp=Z,3.7nm,0.8s,baz=31,slow=5.9,SNR=4.8 | | | | | | |
| DBIC | Dimbokro | 38.12 | 223 | P | P | 14 26 58.1 | +1.1 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| SPITS | Spitsbergen Ar | 41.05 | 359 | P | P | 14 27 20.6 | -0.1 |
| | comp=Z,9.8nm,1.0s,baz=134,slow=4.2,SNR=3.1 | | | | | | |
| SPITS | Spitsbergen Ar | 41.05 | 359 | P | P | 14 27 20.6 | -0.1 |
| SPITS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| AAK | Ala-Archa | 41.27 | 65 | P | P | 14 27 22.1 | -1.1 |
| | comp=Z,0.7nm,0.5s,baz=295,slow=13,SNR=3.3 | | | | | | |
| AAK | Ala-Archa | 41.27 | 65 | P | P | 14 27 22.1 | -1.1 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| KURBB | Kurchatov Arra | 42.90 | 53 | P | P | 14 27 34.5 | -1.6 |
| | comp=Z,1.0nm,0.5s,baz=278,slow=8.8,SNR=9.0 | | | | | | |
| KURK | Kurchatov | 42.95 | 53 | P | P | 14 27 34.5 | -1.9 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| KURK | Kurchatov | 42.95 | 53 | P | P | 14 27 34.5 | -1.9 |
| KURK | Kurchatov | 42.95 | 53 | P | P | 14 27 34.5 | -1.9 |
| | comp=Z,1.0nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 45.91 | 58 | P | P | 14 27 59.4 | -0.9 |
| | comp=Z,1.0nm,0.4s,baz=276,slow=7.6,SNR=16 | | | | | | |
| MKAR | Makanchi Array | 45.91 | 58 | P | P | 14 27 59.4 | -0.9 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ZALV | Zalesovo Beam | 46.41 | 47 | P | P | 14 28 02.3 | -1.8 |
| | comp=Z,1.7nm,0.4s,baz=265,slow=8.8,SNR=5.0 | | | | | | |
| ZALV | Zalesovo Beam | 46.41 | 47 | P | P | 14 28 02.3 | -1.8 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| SONM | Songino Array | 61.16 | 50 | P | P | 14 29 51.5 | -0.6 |
| | comp=Z,0.2nm,0.3s,baz=298,slow=3.1,SNR=2.3 | | | | | | |
| HHC | Hu-ho-hao-te | 67.68 | 55 | eP | P | 14 30 35.8 | +0.9 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,48nm,0.6s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,41nm,4.1s | | | | | | |
| CMAR | Chiang Mai Arr | 70.17 | 82 | P | P | 14 30 50.1 | -0.5 |
| | comp=Z,0.5nm,0.3s,baz=303,slow=8.5,SNR=3.1 | | | | | | |
| CMAR | Chiang Mai Arr | 70.17 | 82 | P | P | 14 30 50.2 | -0.5 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| INK | Inuvik | 72.93 | 350 | P | P | 14 31 07.0 | +0.6 |
| | comp=Z,6.7nm,1.3s,baz=321,slow=6.5,SNR=2.2 | | | | | | |
| INK | Inuvik | 72.93 | 350 | P | P | 14 31 07.0 | +0.6 |
| INK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| INK | Inuvik | 72.93 | 350 | P | P | 14 31 07.0 | +0.6 |
| | comp=Z,7.0nm,1.3s | | | | | | |
| ILAR | Eielson Array | 77.80 | 354 | P | P | 14 31 35.0 | +0.5 |
| | comp=Z,0.1nm,0.8s,baz=349,slow=3.7,SNR=3.1 | | | | | | |
| ILAR | Eielson Array | 77.80 | 354 | P | P | 14 31 35.0 | +0.5 |
| ILAR | Eielson Array | 77.80 | 354 | P | P | 14 31 35.0 | +0.5 |
| KSAR | Wonju Array Be | 80.01 | 50 | P | P | 14 31 46.5 | -0.6 |
| KSAR | Wonju Array Be | 80.01 | 50 | P | P | 14 31 46.5 | -0.6 |
| KSAR | Wonju Array Be | 80.01 | 50 | P | P | 14 31 46.5 | -0.6 |
| KSRS | Korea Array | 80.03 | 50 | P | P | 14 31 46.5 | -0.7 |
| | comp=Z,1.1nm,0.8s,baz=304,slow=4.8,SNR=4.2 | | | | | | |
| KSRS | Korea Array | 80.03 | 50 | P | P | 14 31 46.5 | -0.7 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ASAR | Alice Springs | 122.22 | 97 | PKP | PKPdf | 14 38 34.0 | +1.2 |
| | comp=Z,0.2nm,0.7s,baz=312,slow=2.1,SNR=3.3 | | | | | | |
| ASAR | Alice Springs | 122.22 | 97 | PKIKP | PKPdf | 14 38 34.0 | +1.2 |
| ASAR | Alice Springs | 122.22 | 97 | PKIKP | PKPdf | 14 38 34.0 | +1.2 |

**IDC 09 14:33:30.1**±1.9**, 27°.97N×43°.57W, h0**km**, mb3.8**/5**, mb1 4.1**/5**, mb1mx3.7**/40**, mbtmp3.8**/5**, MS3.6**/13**, Ms1 3.6**/13**, ms1mx3.4**/33**, Error ellipse: s-maj=72.0km s-min=27.3km az=14.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SJG | San Juan | 22.94 | 250 | LR | LR | 14 45 34.3 | |
| | comp=Z,90nm,21.6s,baz=5.5,slow=32 | | | | | | |
| PCRV | Puerto La Cruz | 26.56 | 232 | LR | LR | 14 50 21.3 | |
| | comp=Z,61nm,18.3s,baz=62,slow=38 | | | | | | |
| SCHQ | Schefferville | 31.71 | 334 | LR | LR | 14 51 01.3 | |
| | comp=Z,104nm,18.0s,baz=230,slow=33 | | | | | | |
| SADO | Sadowa | 32.87 | 310 | LR | LR | 14 50 53.3 | |
| | comp=Z,104nm,19.9s,baz=134,slow=32 | | | | | | |
| TKL | Tuckaleechee C | 34.82 | 293 | LR | LR | 14 53 43.6 | |
| | comp=Z,69nm,19.1s,baz=54,slow=35 | | | | | | |
| ROSC | El Rosal | 37.19 | 237 | LR | LR | 14 56 49.8 | |
| | comp=Z,46nm,18.1s,baz=211,slow=38 | | | | | | |
| DBIC | Dimbokro | 42.33 | 113 | LR | LR | 14 56 34.1 | |
| | comp=Z,140nm,18.5s,baz=296,slow=33 | | | | | | |
| TORD | Torodi Ar. Bea | 44.62 | 100 | P | P | 14 41 44.6 | +0.1 |
| | 2.5nm,0.9s,baz=300,slow=8.7,SNR=11 | | | | | | |
| TORD | | | | LR | LR | 14 57 54.7 | |
| | comp=Z,86nm,21.4s,baz=330,slow=33 | | | | | | |
| H10N2 | ASCENSION HYDR | 45.36 | 137 | T | T | 15 30 48.6 | |
| | baz=323,slow=75,SNR=196 | | | | | | |
| H10N3 | ASCENSION HYDR | 45.36 | 137 | T | T | 15 30 34.7 | |
| | baz=323,slow=75,SNR=169 | | | | | | |
| H10N1 | ASCENSION HYDR | 45.38 | 137 | T | T | 15 30 46.9 | |
| | baz=323,slow=75,SNR=134 | | | | | | |
| H10S1 | ASCENSION HYDR | 46.15 | 138 | T | T | 15 31 44.2 | |
| | baz=324,slow=75,SNR=206 | | | | | | |
| H10S3 | ASCENSION HYDR | 46.15 | 139 | T | T | 15 31 44.3 | |
| | baz=324,slow=75,SNR=290 | | | | | | |
| H10S2 | ASCENSION HYDR | 46.16 | 139 | T | T | 15 31 45.5 | |
| | baz=324,slow=75,SNR=216 | | | | | | |
| LPAZ | La Paz | 50.02 | 211 | LR | LR | 15 01 13.3 | |
| | comp=Z,67nm,20.1s,baz=90,slow=33 | | | | | | |
| TXAR | Lajitas Array | 52.23 | 287 | P | P | 14 42 42.9 | -0.4 |
| | 0.4nm,0.9s,baz=84,slow=8.3,SNR=2.8 | | | | | | |
| TXAR | | | | LR | LR | 15 04 04.2 | |
| | comp=Z,46nm,18.1s,baz=0.0,slow=35 | | | | | | |
| NVAR | Mina Array Bea | 61.85 | 301 | LR | LR | 15 09 35.5 | |
| | comp=Z,93nm,18.3s,baz=54,slow=35 | | | | | | |
| BRTR | Keskin Array B | 63.38 | 57 | P | P | 14 44 00.5 | -1.1 |
| | 0.7nm,0.7s,baz=297,slow=7.9,SNR=2.3 | | | | | | |
| KBZ | Khabaz | 68.85 | 51 | P | P | 14 44 38.0 | +1.5 |
| | 2.4nm,0.8s,baz=311,slow=9.3,SNR=2.8 | | | | | | |
| ILAR | Eielson Array | 70.47 | 334 | P | P | 14 44 46.4 | +0.3 |
| | 0.6nm,1.0s,baz=66,slow=5.1,SNR=5.0 | | | | | | |
| BOSA | Boshof | 86.64 | 125 | LR | LR | 15 20 42.0 | |
| | comp=Z,81nm,18.3s,baz=344,slow=33 | | | | | | |
| PETK | Petropavlovsk- | 97.16 | 347 | LR | LR | 15 29 18.9 | |
| | comp=Z,18nm,21.9s,baz=66,slow=34 | | | | | | |

*ISK* ***09*** *14:56:56.6, 38°.32N×38°.07E, h5km, MD2.6*
*CSEM* ***09*** *14:56:57.9±0.3, 38°.29N×38°.09E, h8km, MD2.6, Error ellipse: s-maj=10.4km s-min=5.5km az=3.0*
*ISCJB* ***09*** *14:56:58.0±0.6, 38°.38N±0°.06×38°.09E±0°.04, h6km±7km, Error ellipse: s-maj=10.6km s-min=4.8km az=166.3*
*DDA* ***09*** *14:56:58.2, 38°.28N×38°.12E, h7km, Md2.6*
**ISC 09 14:56:58.3**±0.9**, 38°.32N**±0°.04×**38°.09E**±0°.02**, h11**km±7km**, n20, σ0s.78**/27**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKCD | Akcadag | 0.13 | 259 | i P | Pg | 14 57 01.2 | -0.4 |
| AKCD | | | | i S | Sg | 14 57 04.4 | +0.5 |
| AKCD | Akcadag | 0.13 | 259 | P | Pg | 14 57 01.2 | -0.4 |
| AKCD | | | | S | Sg | 14 57 04.4 | +0.5 |
| MALT | Malatya | 0.27 | 92 | ePG | Pg | 14 57 03.2 | -0.5 |
| MALT | | | | eSG | Sg | 14 57 08.1 | +0.6 |
| MALT | Malatya | 0.27 | 92 | ePg | Pg | 14 57 03.3 | -0.5 |
| MALT | | | | eSg | Sg | 14 57 08.1 | +0.6 |
| DARE | Darende-Malaty | 0.54 | 298 | ePG | Pg | 14 57 07.8 | -1.0 |
| DARE | Darende-Malaty | 0.54 | 298 | ePg | Pg | 14 57 07.8 | -1.0 |
| ELZG | Elazig | 0.72 | 76 | i P | Pg | 14 57 12.0 | -0.4 |
| ELZG | | | | i S | Sb | 14 57 24.3 | +1.1 |
| ELZG | Elazig | 0.72 | 76 | P | Pg | 14 57 12.0 | -0.4 |
| ELZG | | | | S | Sb | 14 57 24.3 | +1.1 |
| SVRC | Sivrice-ELAZID | 0.96 | 86 | ePG | Pg | 14 57 16.2 | -0.6 |
| SVRC | Sivrice-ELAZID | 0.96 | 86 | ePg | Pg | 14 57 16.2 | -0.6 |
| URFA | Urfa | 1.05 | 146 | ePG | Pg | 14 57 17.8 | -0.8 |
| URFA | Urfa | 1.05 | 146 | ePg | Pg | 14 57 17.8 | -0.8 |
| PTK | Pertek | 1.17 | 60 | ePN | Pb | 14 57 20.2 | -0.5 |
| PTK | Pertek | 1.17 | 60 | ePn | Pb | 14 57 20.2 | -0.5 |
| KMRS | Kahramanmaras | 1.25 | 229 | ePN | Pn | 14 57 21.0 | -0.8 |
| KMRS | Kahramanmaras | 1.25 | 229 | ePn | Pn | 14 57 21.0 | -0.8 |
| SARI | SarD1z-Kayseri | 1.32 | 274 | ePN | Pn | 14 57 22.5 | -0.4 |
| AYKD | Aykdinkavak | 1.36 | 229 | P | Pg | 14 57 24.8 | +0.3 |
| AYKD | | | | S | Sg | 14 57 43.7 | +1.6 |
| SVSK | Karacayir | 1.80 | 332 | ePN | Pn | 14 57 29.8 | +0.4 |
| SVSK | Karacayir | 1.80 | 332 | ePn | Pn | 14 57 29.8 | +0.4 |

*ISCJB* ***09*** *15:00:11.9±0.6, 39°.45N±0°.03×28°.11E±0°.04, h1km±7km, Error ellipse: s-maj=5.9km s-min=4.3km az=155.2*
*DDA* ***09*** *15:00:11.9, 39°.45N×28°.07E, h7km, Md2.6*
*CSEM* ***09*** *15:00:12.3±0.1, 39°.47N×28°.16E, h8km, MD2.8, Error ellipse: s-maj=4.0km s-min=2.8km az=59.0*
*ISK* ***09*** *15:00:12.1, 39°.49N×28°.20E, h8km, MD2.8*
**ISC 09 15:00:11.8**±1.2**, 39°.46N**±0°.03×**28°.14E**±0°.03**, h5**km±11km**, n35, σ0s.42**/46**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BALB | Balikesir | 0.27 | 312 | ePG | Pg | 15 00 17.6 | +0.5 |
| BALB | | | | eSG | Sb | 15 00 23.1 | -1.1 |
| BALB | Balikesir | 0.27 | 312 | ePg | Pg | 15 00 17.6 | +0.5 |
| BALB | | | | eSg | Sb | 15 00 23.1 | -1.1 |
| DST | Dursunbey | 0.40 | 68 | ePG | Pg | 15 00 19.6 | +0.1 |
| DST | Dursunbey | 0.40 | 68 | ePg | Pg | 15 00 19.6 | +0.1 |
| BALY | Balya | 0.49 | 305 | i P | Pg | 15 00 21.0 | -0.3 |
| BALY | Balya | 0.49 | 305 | P | Pg | 15 00 21.0 | -0.3 |
| DEMI | Demirci | 0.61 | 133 | i P | Pg | 15 00 23.6 | +0.1 |
| DEMI | | | | i S | Sb | 15 00 33.7 | -0.2 |
| DEMI | Demirci | 0.61 | 133 | P | Pg | 15 00 23.6 | +0.1 |
| DEMI | | | | S | Sb | 15 00 33.7 | -0.2 |
| AKHS | Akhisar | 0.63 | 204 | i P | Pg | 15 00 23.9 | -0.1 |
| AKHS | | | | i S | Sg | 15 00 32.2 | 0.0 |
| AKHS | Akhisar | 0.63 | 204 | P | Pg | 15 00 23.9 | -0.1 |
| AKHS | | | | S | Sg | 15 00 32.2 | 0.0 |
| EDC | Edincik | 0.91 | 346 | ePG | Pb | 15 00 29.9 | -0.3 |
| EDC | Edincik | 0.91 | 346 | ePg | Pb | 15 00 29.9 | -0.3 |
| MANT | Manisa | 1.02 | 161 | i P | Pn | 15 00 32.6 | -0.4 |
| MANT | | | | i S | Sb | 15 00 46.4 | +0.5 |
| MANT | Manisa | 1.02 | 161 | P | Pn | 15 00 32.5 | -0.4 |
| MANT | | | | S | Sb | 15 00 46.4 | +0.5 |
| KULA | Kula-Manisa | 1.02 | 157 | ePG | Pn | 15 00 32.6 | -0.3 |
| KULA | Kula-Manisa | 1.02 | 157 | ePg | Pn | 15 00 32.7 | -0.3 |
| ULDT | Uludag | 1.02 | 48 | i P | Pb | 15 00 32.2 | 0.0 |
| ULDT | | | | i S | Sn | 15 00 48.5 | +0.5 |
| ULDT | Uludag | 1.02 | 48 | P | Pb | 15 00 32.2 | 0.0 |
| ULDT | | | | S | Sn | 15 00 48.5 | +0.5 |
| KRBG | Karabiga-Canak | 1.14 | 325 | ePN | Pn | 15 00 34.4 | -0.1 |
| KRBG | Karabiga-Canak | 1.14 | 325 | ePn | Pn | 15 00 34.4 | -0.1 |
| IGD | Bursa | 1.15 | 45 | P | Pb | 15 00 34.1 | -0.1 |
| IGD | | | | S | Sn | 15 00 51.4 | +0.8 |
| MRMT | Marmara Adasi | 1.22 | 340 | ePN | Pg | 15 00 35.4 | +0.2 |
| MRMT | Marmara Adasi | 1.22 | 340 | ePn | Pg | 15 00 35.4 | +0.2 |
| ARMT | Armutlu | 1.24 | 26 | ePN | Pg | 15 00 35.5 | 0.0 |
| ARMT | Armutlu | 1.24 | 26 | ePn | Pg | 15 00 35.5 | 0.0 |
| IZI | Iznik | 1.35 | 49 | ePN | Pn | 15 00 37.1 | -0.3 |
| IZI | Iznik | 1.35 | 49 | ePn | Pn | 15 00 37.1 | -0.3 |
| LPK | Lapseki | 1.40 | 311 | ePN | Pg | 15 00 39.0 | +0.3 |
| LPK | Lapseki | 1.40 | 311 | ePn | Pg | 15 00 39.0 | +0.3 |
| RKY | Sarkoy-Tekirda | 1.43 | 329 | ePN | Pb | 15 00 39.0 | -0.1 |
| RKY | Sarkoy-Tekirda | 1.43 | 329 | ePn | Pb | 15 00 39.0 | -0.1 |
| CAVI | Cavuskoy | 1.50 | 60 | ePN | Pn | 15 00 39.0 | -0.5 |
| CAVI | Cavuskoy | 1.50 | 60 | ePn | Pn | 15 00 39.0 | -0.5 |
| ERIK | Erikli-Kesan | 1.74 | 315 | ePN | Pn | 15 00 43.4 | +0.7 |
| ERIK | Erikli-Kesan | 1.74 | 315 | ePn | Pn | 15 00 43.4 | +0.7 |

**IDC 09 15:15:49.2**±2.7**, 7°.17S×128°.60E, h0**km**, mb3.5**/1**, mb1 3.6**/3**, mb1mx3.3**/19**, mbtmp3.4**/3**, ML3.6**/2**, Error ellipse: s-maj=287.0km s-min=32.1km az=66.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 13.86 | 157 | Pn | Pn | 15 19 06.1 | -1.1 |
| | 0.3nm,0.3s,baz=334,slow=14,SNR=14 | | | | | | |
| WRA | | | | Sn | Sn | 15 21 29.6 | -12 |
| | 0.6nm,0.3s,baz=336,slow=22,SNR=12 | | | | | | |
| ASAR | Alice Springs | 17.18 | 163 | Pn | P | 15 19 51.6 | -0.8 |
| | 0.1nm,0.3s,baz=343,slow=9.2,SNR=21 | | | | | | |
| ASAR | | | | Sn | Sn | 15 22 51.3 | -11 |
| | 0.1nm,0.3s,baz=359,slow=32,SNR=2.1 | | | | | | |
| MKAR | Makanchi Array | 67.61 | 328 | P | P | 15 26 47.9 | 0.0 |
| | 0.2nm,0.5s,baz=118,slow=7.4,SNR=5.8 | | | | | | |

*JMA* ***09*** *15:20:43.8, 24°.81N×122°.29E, h0km*
*TAP* ***09*** *15:20:44.6, 24°.82N×122°.23E, h3km±1km, ML2.5, D*
**ISC 09 15:20:44.1**±1.4**, 24°.84N**±0°.07×**122°.28E**±0°.05**, h10**km±13km**, n14, σ0s.77**/27**, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWC | Suao | 0.46 | 240 | eP | Pb | 15 20 53.8 | -0.4 |
| | baz=237 | | | | | | |
| TWC | | | | eS | Sb | 15 21 00.5 | -0.6 |
| | baz=237 | | | | | | |
| NWF | Wu-fen Shan | 0.51 | 297 | eP | Pb | 15 20 55.2 | 0.0 |
| | baz=301 | | | | | | |
| TWE | Neicheng | 0.57 | 258 | P | Pb | 15 20 56.0 | -0.2 |
| | baz=258 | | | | | | |
| TWE | | | | S | Sb | 15 21 04.9 | +0.5 |
| | baz=258 | | | | | | |
| ENA | Nanau | 0.64 | 230 | eP | Pb | 15 20 57.7 | +0.3 |
| | baz=228 | | | | | | |
| ENA | | | | eS | Sb | 15 21 06.1 | -0.3 |
| | baz=228 | | | | | | |
| TWA | Mucha | 0.65 | 282 | eP | Pb | 15 20 57.5 | 0.0 |
| | baz=285 | | | | | | |
| TWA | | | | eS | Sb | 15 21 07.6 | +1.0 |
| | baz=285 | | | | | | |
| ENTT | Nioudou | 0.68 | 253 | eP | Pn | 15 20 58.7 | -1.1 |
| | baz=253 | | | | | | |
| ENTT | | | | eS | Sb | 15 21 08.0 | +0.4 |
| | baz=253 | | | | | | |
| JYNG | Yonagunijimaku | 0.72 | 123 | P | Pg | 15 20 57.8 | -0.2 |
| JYNG | | | | S | Sg | 15 21 07.9 | +0.5 |
| YOJ | Yonaguni jima | 0.76 | 120 | P | Pg | 15 20 58.7 | -0.2 |
| YOJ | | | | S | Sg | 15 21 08.7 | -0.1 |
| NSK | Sanguang | 0.85 | 259 | eP | Pn | 15 21 01.5 | -0.8 |
| | baz=259 | | | | | | |
| NSK | | | | eS | Sb | 15 21 12.9 | +0.2 |
| | baz=259 | | | | | | |
| NNS | Nan Shan | 0.92 | 244 | eP | Pn | 15 21 02.6 | -0.7 |
| | baz=243 | | | | | | |
| NNS | | | | eS | Sn | 15 21 15.3 | -1.3 |
| | baz=243 | | | | | | |
| TWD | Chiawan | 0.98 | 220 | eP | Pn | 15 21 03.9 | 0.0 |
| | baz=217 | | | | | | |
| TWD | | | | eS | Sn | 15 21 17.6 | -0.3 |
| | baz=217 | | | | | | |
| WHF | Hehuan Shan | 1.16 | 233 | eP | Pn | 15 21 06.9 | +0.2 |
| | baz=232 | | | | | | |
| WHF | | | | eS | Sn | 15 21 22.8 | -0.1 |
| | baz=232 | | | | | | |
| TWT | Tachien | 1.17 | 240 | eP | Pn | 15 21 08.9 | +2.2 |
| | baz=239 | | | | | | |
| TWT | | | | eS | Sn | 15 21 24.1 | +1.4 |
| | baz=239 | | | | | | |
| WDT | Danda | 1.50 | 224 | eP | Pg | 15 21 12.8 | -0.2 |
| | baz=223 | | | | | | |
| WDT | | | | eS | Sg | 15 21 32.9 | +0.3 |
| | baz=223 | | | | | | |

*BUL* ***09*** *15:22:44.7±6.1, 26°.42S×31°.66E, h15km±999km, MD3.8*
*ISCJB* ***09*** *15:22:57.1±0.7, 25°.75S±0°.05×29°.30E±0°.04, h0km, Error ellipse: s-maj=6.9km s-min=5.0km az=158.7*
*PRE* ***09*** *15:22:57.2±1.2, 25°.81S×29°.31E, h0km, ML2.4, Explosion*
**ISC 09 15:22:57.3**±1.1**, 25°.74S**±0°.05×**29°.30E**±0°.05**, h0**km**, n11,**

σ1s62/21, South Africa

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNON | Benoni | 0.97 | 244 | eP | Pb | 15 23 16.9 | -0.3 |
| BNON | | | | eS | Sg | 15 23 29.1 | +0.5 |
| BNON | | | | AML | AML | 15 23 33.4 | |
| | comp=Z,54nm,0.2s | | | | | | |
| OBSV | Observatory | 1.19 | 248 | eP | Pg | 15 23 20.3 | +0.2 |
| OBSV | | | | eS | Sb | 15 23 36.5 | -0.3 |
| OBSV | | | | AML | AML | 15 23 42.9 | |
| | comp=Z,41nm,0.2s | | | | | | |
| WDLM | Western Deep L | 1.82 | 247 | eP | Pn | 15 23 29.9 | -0.1 |
| WDLM | | | | eS | Sb | 15 23 54.5 | -0.5 |
| WDLM | | | | AML | AML | 15 23 59.2 | |
| | comp=Z,54nm,0.2s | | | | | | |
| PRYS | Parys | 2.10 | 235 | eP | Pn | 15 23 34.1 | +0.1 |
| PRYS | | | | eS | Sn | 15 24 00.6 | -0.3 |
| PRYS | | | | AML | AML | 15 24 04.9 | |
| | comp=Z,25nm,0.3s | | | | | | |
| KSR | Koster | 2.17 | 266 | eP | Pn | 15 23 35.9 | +1.1 |
| KSR | | | | eS | Sn | 15 24 03.0 | +0.6 |
| KSR | | | | AML | AML | 15 24 10.7 | |
| | comp=Z,13nm,0.5s | | | | | | |
| POGA | Pongola | 2.64 | 129 | eP | Pn | 15 23 41.4 | +0.2 |
| POGA | | | | eS | Sn | 15 24 14.5 | +0.6 |
| POGA | | | | AML | AML | 15 24 17.6 | |
| | comp=Z,27nm,0.5s | | | | | | |
| SWZ | Schweizer | 3.83 | 247 | eP | Pn | 15 23 58.7 | +0.9 |
| SWZ | | | | eS | Sn | 15 24 42.2 | -1.4 |
| SWZ | | | | AML | AML | 15 24 57.9 | |
| | comp=Z,23nm,0.5s | | | | | | |
| BOSA | Boshof | 4.60 | 231 | i P | Pn | 15 24 11.9 | +3.6 |
| BOSA | | | | i S | Sb | 15 25 16.9 | +1.8 |
| MATP | Matopo | 5.33 | 352 | i P | Pn | 15 24 21.0 | +2.6 |
| MATP | | | | i S | Sb | 15 25 33.1 | -3.1 |
| BLWY | Bulawayo | 5.61 | 353 | i P | Pn | 15 24 21.0 | -1.1 |
| BLWY | | | | i S | Sn | 15 25 30.1 | +2.8 |
| UPI | Upington | 7.63 | 248 | eP | Pn | 15 24 50.0 | +0.1 |
| UPI | | | | eS | Sn | 15 26 13.6 | -3.5 |
| UPI | | | | AML | AML | 15 27 01.4 | |
| | comp=Z,1.7nm,0.6s | | | | | | |

*DDA 09 15:27:14.2, 38.°68N×26.°16E, h3km, Md2.6*
*THE 09 15:27:14.7, 38.°69N×26.°17E, h8km±2km, ML2.5/3, Error ellipse: s-maj=3.9km s-min=0.7km az=260.0*
*CSEM 09 15:27:15.3±0.2, 38.°68N×26.°15E, h0km±2km, ML2.5, Error ellipse: s-maj=4.2km s-min=2.7km az=68.0*
*ISK 09 15:27:15.6, 38.°69N×26.°20E, h6km, MD2.9*
**ISC 09 15:27:15.2±0.9, 38.°68N±0.°02×26.°13E±0.°02, h10km±10km, n55, σ0s76/81, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHOS | Chios island | 0.30 | 191 | PG | Pg | 15 27 22.4 | +1.1 |
| CHOS | | | | eSG | Sb | 15 27 28.2 | +0.5 |
| CHOS | Chios island | 0.30 | 191 | P | Pg | 15 27 21.4 | +0.1 |
| CHOS | | | | S | Sg | 15 27 25.8 | +0.4 |
| CHOS | Chios island | 0.30 | 191 | P | Pg | 15 27 21.4 | +0.1 |
| CHOS | Chios island | 0.30 | 191 | i Pg | Pg | 15 27 22.4 | +1.1 |
| CHOS | | | | S | Sg | 15 27 25.8 | +0.4 |
| CHOS | | | | eSg | Sb | 15 27 28.2 | +0.5 |
| URLA | Izmir | 0.49 | 131 | i P | Pg | 15 27 24.0 | -0.7 |
| URLA | | | | i S | Sg | 15 27 30.5 | -0.6 |
| URLA | Izmir | 0.49 | 131 | P | Pg | 15 27 24.0 | -0.7 |
| URLA | | | | S | Sg | 15 27 30.5 | -0.6 |
| ZEY | ˜zmir | 0.53 | 147 | P | Pg | 15 27 24.6 | -0.9 |
| ZEY | | | | S | Sg | 15 27 31.8 | -0.7 |
| SIGR | SIGRI | 0.57 | 338 | ePG | Pb | 15 27 27.3 | +0.1 |
| SIGR | | | | eSG | Sb | 15 27 35.8 | +0.5 |
| SIGR | SIGRI | 0.57 | 338 | P | Pg | 15 27 26.0 | -0.2 |
| SIGR | | | | S | Sg | 15 27 33.8 | +0.1 |
| SIGR | SIGRI | 0.57 | 338 | P | Pg | 15 27 26.0 | -0.2 |
| SIGR | SIGRI | 0.57 | 338 | ePg | Pb | 15 27 27.3 | +0.1 |
| SIGR | | | | S | Sg | 15 27 33.8 | +0.1 |
| SIGR | | | | eSg | Sb | 15 27 35.8 | +0.5 |
| DKL | Dikili | 0.72 | 57 | ePG | Pg | 15 27 29.2 | +0.1 |
| DKL | | | | eSG | Sb | 15 27 38.6 | -0.9 |
| DKL | Dikili | 0.72 | 57 | ePg | Pg | 15 27 29.2 | +0.1 |
| DKL | | | | eSg | Sb | 15 27 38.7 | -0.9 |
| AYVA | Ayvalik | 0.76 | 35 | i P | Pg | 15 27 29.2 | -0.7 |
| AYVA | | | | i S | Sg | 15 27 39.6 | -0.2 |
| AYVA | Ayvalik | 0.76 | 35 | P | Pg | 15 27 29.1 | -0.7 |
| AYVA | | | | S | Sg | 15 27 39.5 | -0.2 |
| IZM | Izmir | 0.93 | 107 | ePG | Pg | 15 27 32.9 | -0.2 |
| IZM | | | | eSG | Sb | 15 27 46.2 | +0.4 |
| IZM | Izmir | 0.93 | 107 | ePg | Pg | 15 27 32.9 | -0.2 |
| IZM | | | | eSg | Sb | 15 27 46.2 | +0.4 |
| SMG | Samos | 1.12 | 150 | P | Pg | 15 27 35.2 | -1.5 |
| SMG | | | | S | Sg | 15 27 51.2 | -0.1 |
| SMG | Samos | 1.12 | 150 | P | Pg | 15 27 35.2 | -1.5 |
| SMG | | | | S | Sg | 15 27 51.2 | -0.1 |
| EZN | Ezine | 1.15 | 7 | ePN | Pn | 15 27 38.1 | +0.9 |
| EZN | Ezine | 1.15 | 7 | ePn | Pn | 15 27 38.2 | +0.9 |
| BOZC | Bozcaada | 1.16 | 357 | P | Pb | 15 27 36.1 | -1.1 |
| BOZC | | | | S | Sg | 15 27 52.4 | -0.1 |
| AKS | Akhisar | 1.33 | 81 | ePN | Pg | 15 27 40.3 | -0.4 |
| AKS | Akhisar | 1.33 | 81 | ePn | Pg | 15 27 40.3 | -0.4 |
| AKHS | Akhisar | 1.33 | 81 | i P | Pg | 15 27 41.0 | +0.3 |
| AKHS | | | | i S | Sg | 15 27 57.6 | -0.4 |
| AKHS | Akhisar | 1.33 | 81 | P | Pg | 15 27 41.0 | +0.3 |
| AKHS | | | | S | Sg | 15 27 57.6 | -0.4 |
| LIA | Limnos Island | 1.42 | 329 | P | Pn | 15 27 40.3 | -0.6 |
| LIA | Limnos Island | 1.42 | 329 | P | Pn | 15 27 40.3 | -0.6 |
| GADA | Gvkgeada | 1.52 | 353 | ePN | Pg | 15 27 44.1 | -0.2 |
| GADA | Gvkgeada | 1.52 | 353 | ePn | Pg | 15 27 44.1 | -0.2 |
| BALY | Balya | 1.56 | 47 | i P | Pb | 15 27 44.0 | -0.2 |
| BALY | | | | i S | Sg | 15 28 06.3 | +0.7 |
| BALY | Balya | 1.56 | 47 | P | Pb | 15 27 44.0 | -0.2 |
| BALY | | | | S | Sg | 15 28 06.3 | +0.7 |
| AYDB | Zeytinkoy-Aydi | 1.57 | 117 | ePN | Pn | 15 27 43.8 | +0.7 |
| AYDB | Zeytinkoy-Aydi | 1.57 | 117 | ePn | Pn | 15 27 43.8 | +0.7 |
| BALB | Balikesir | 1.66 | 54 | ePN | Pb | 15 27 45.4 | -0.4 |
| BALB | Balikesir | 1.66 | 54 | ePn | Pb | 15 27 45.4 | -0.4 |
| APE | Apeiranthos | 1.68 | 197 | P | Pn | 15 27 43.1 | -1.5 |
| AYDN | Tasoluk | 1.71 | 126 | i P | Pg | 15 27 49.0 | +0.9 |
| AYDN | | | | i S | Sg | 15 28 10.8 | +0.5 |
| AYDN | Tasoluk | 1.71 | 126 | P | Pg | 15 27 49.0 | +0.9 |
| AYDN | | | | S | Sg | 15 28 10.8 | +0.5 |
| GELI | Tayfur-Gelibol | 1.73 | 9 | ePN | Pb | 15 27 46.9 | -0.1 |
| GELI | Tayfur-Gelibol | 1.73 | 9 | ePn | Pb | 15 27 46.9 | -0.1 |
| LPK | Lapseki | 1.75 | 16 | ePN | Pb | 15 27 47.3 | -0.1 |
| LPK | Lapseki | 1.75 | 16 | ePn | Pb | 15 27 47.3 | -0.1 |
| BODT | Bodrum | 1.87 | 150 | ePN | Pn | 15 27 48.2 | +1.0 |
| BODT | Bodrum | 1.87 | 150 | ePn | Pn | 15 27 48.2 | +1.0 |
| KRBG | Karabiga-Canak | 1.93 | 27 | ePN | Pb | 15 27 49.5 | -0.9 |
| KRBG | Karabiga-Canak | 1.93 | 27 | ePn | Pb | 15 27 49.5 | -0.9 |
| ERIK | Erikli-Kesan | 2.01 | 8 | ePN | Pb | 15 27 50.8 | -0.9 |
| ERIK | Erikli-Kesan | 2.01 | 8 | ePn | Pb | 15 27 50.8 | -0.9 |
| RKY | Sarkoy-Tekirda | 2.16 | 22 | ePN | Pb | 15 27 53.0 | -1.3 |
| RKY | Sarkoy-Tekirda | 2.16 | 22 | ePn | Pb | 15 27 53.0 | -1.3 |
| MRMT | Marmara Adasi | 2.23 | 30 | ePN | Pn | 15 27 53.9 | +1.8 |
| MRMT | Marmara Adasi | 2.23 | 30 | ePn | Pn | 15 27 53.9 | +1.8 |
| KCTX | Karacabey (Bur | 2.34 | 47 | ePN | Pn | 15 27 54.8 | +1.2 |
| KCTX | Karacabey (Bur | 2.34 | 47 | ePn | Pn | 15 27 54.8 | +1.2 |

*SJA 09 15:28:11.8±0.9, 27.°67S×70.°80W, h78km±15km, ML3.5, MW4.0*
*GUC 09 15:28:15.0±0.6, 27.°80S×70.°38W, h58km±6km, ML3.8*
**ISC 09 15:28:14.7±2.2, 27.°79S±0.°03×70.°54W±0.°07, h13km±15km, n16, σ1s02/23, 2C-1D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CPCH | Copiapo | 0.47 | 21 | ⇓iP | Pn | 15 28 26.4 | -0.7 |
| CPCH | | | | i S | Sn | 15 28 35.3 | 0.0 |
| CDCH | Caldera | 0.76 | 341 | eP | Pn | 15 28 31.2 | 0.0 |
| CDCH | | | | eS | Sn | 15 28 43.1 | +0.6 |
| VACH | Vallenar | 0.80 | 194 | ⇑iP | Pn | 15 28 31.3 | -0.5 |
| VACH | | | | i S | Sn | 15 28 43.4 | -0.2 |
| LCO | Las Campanas | 1.22 | 186 | ⇑iP | Pn | 15 28 36.8 | -1.0 |
| LCO | | | | i S | Sg | 15 28 54.4 | +0.1 |
| LCO | | | | AML | AML | 15 28 56.9 | |
| | comp=N,2μm,0.3s | | | | | | |
| LCO | Las Campanas | 1.22 | 186 | eP | Pn | 15 28 36.8 | -1.0 |
| LCO | | | | eS | Sg | 15 28 54.6 | +0.4 |
| LSCH | La Serena | 2.19 | 196 | eP | Pn | 15 28 51.0 | +0.1 |
| LSCH | | | | i S | Sn | 15 29 17.5 | -0.4 |
| VCA | Vinchina | 2.27 | 115 | eP | Pn | 15 28 52.8 | +0.8 |
| TLL | Tololo Astrono | 2.38 | 185 | eP | Pn | 15 28 52.9 | -0.8 |
| TLL | | | | eS | Sn | 15 29 21.9 | -0.9 |
| TLL | | | | AML | AML | 15 29 37.1 | |
| | comp=E,846nm,0.4s | | | | | | |
| AGUA | GUANDACOL | 2.47 | 134 | eP | Pn | 15 28 55.6 | +0.8 |
| AMOG | MOGNA | 3.61 | 151 | eP | Pn | 15 29 09.6 | -0.8 |
| RTLS | Leoncito | 4.14 | 165 | eP | Pn | 15 29 18.4 | +0.6 |
| CYA | Choya | 4.24 | 100 | eP | Pn | 15 29 17.2 | -1.8 |
| CYA | | | | AML | AML | 15 30 09.0 | |
| | comp=Z,44nm,0.4s | | | | | | |
| CFAA | Coronel Fontan | 4.29 | 153 | eP | Pn | 15 29 19.4 | -0.5 |
| FSA | Cafayete | 4.38 | 68 | eP | Pn | 15 29 21.9 | +0.7 |
| AHML | Horco Molle | 4.74 | 79 | eP | Pn | 15 29 24.7 | -1.3 |
| ROC1 | El Roble | 5.18 | 184 | eP | Pn | 15 29 28.8 | -3.4 |
| ROC1 | | | | eS | Sn | 15 30 34.6 | +2.6 |

*MOS 09 15:29:34.4±2.9, 50.°49N×99.°12E, h3km, mb4.4/1, Error ellipse: s-maj=40.9km s-min=15.6km az=52.4*
*BYKL 09 15:29:34.4±0.6, 50.°50N×99.°09E*
**ISC 09 15:29:35.5±1.1, 50.°59N±0.°06×99.°14E±0.°04, h10km, n30, σ2s33/35, 2C-6D, Mongolia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MOY | Mondy | 1.59 | 46 | ePG | Pb | 15 30 05.0 | 0.0 |
| MOY | | | | e | | 15 30 27.0 | |
| MOY | | | | pmax | pmax | | |
| | comp=Z,49nm,0.2s | | | | | | |
| MOY | | | | smax | smax | | |
| | comp=E,825nm,0.4s | | | | | | |
| MOY | Mondy | 1.59 | 46 | ⇓iPg | Pb | 15 30 04.8 | -0.2 |
| MOY | | | | e | | 15 30 06.5 | |
| MOY | | | | i Sg | Sb | 15 30 27.2 | +2.0 |
| MOY | | | | e | | 15 30 31.3 | |
| MOY | | | | max | | | |
| | comp=E,53nm,0.2s | | | | | | |
| MOY | | | | max | | | |
| | comp=E,885nm,0.8s | | | | | | |
| ORL | Orlik | 2.00 | 12 | ePN | Pb | 15 30 12.3 | +0.3 |
| ORL | | | | e | | 15 30 39.5 | |
| ORL | | | | pmax | pmax | | |
| | comp=Z,129nm,0.6s | | | | | | |
| ORL | | | | smax | smax | | |
| | comp=N,97nm,0.8s | | | | | | |
| ORL | Orlik | 2.00 | 12 | ⇓iPg | Pb | 15 30 12.2 | +0.3 |
| ORL | | | | ⇓i | | 15 30 13.4 | |
| ORL | | | | i Sg | Sb | 15 30 40.0 | +3.0 |
| ORL | | | | max | | | |
| | comp=N,91nm,0.4s | | | | | | |
| ORL | | | | Smax | | | |
| | comp=N,101nm,0.7s | | | | | | |
| ARS | Arshan | 2.46 | 56 | ePN | Pb | 15 30 18.2 | -1.5 |
| ARS | | | | e | | 15 30 54.1 | |
| ARS | | | | pmax | pmax | | |
| | comp=Z,52nm,0.3s | | | | | | |
| ARS | | | | smax | smax | | |
| | comp=E,263nm,0.3s | | | | | | |
| ARS | Arshan | 2.46 | 56 | ePn | Pb | 15 30 17.9 | -1.8 |
| ARS | | | | ePg | Pg | 15 30 20.5 | -2.0 |
| ARS | | | | ⇑iPgPg | PbPb | 15 30 24.3 | +1.4 |
| ARS | | | | eSg | Sg | 15 30 54.5 | +0.2 |
| ARS | | | | max | | | |
| | comp=E,52nm,0.4s | | | | | | |
| ARS | | | | Smax | | | |
| | comp=E,382nm,0.9s | | | | | | |
| ZAK | Zakamensk | 2.65 | 93 | ePN | Pn | 15 30 19.3 | +0.9 |
| ZAK | | | | e | | 15 30 22.5 | |
| ZAK | | | | e | | 15 30 57.3 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,45nm,0.5s | | | | | | |
| ZAK | | | | smax | smax | | |
| | comp=N,136nm,0.4s | | | | | | |
| ZAK | Zakamensk | 2.65 | 93 | ⇑iPn | Pn | 15 30 19.5 | +1.1 |
| ZAK | | | | ⇓iPg | Pb | 15 30 22.5 | -0.6 |
| ZAK | | | | ePgPg | Pg | 15 30 26.3 | +0.1 |
| ZAK | | | | eSg | Sg | 15 30 58.4 | -2.2 |
| ZAK | | | | max | | | |
| | comp=N,45nm,0.5s | | | | | | |
| ZAK | | | | Smax | | | |
| | comp=N,136nm,0.4s | | | | | | |
| TLY | Talaya | 3.04 | 67 | ePN | Pb | 15 30 29.7 | 0.0 |
| TLY | | | | e | | 15 31 10.6 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.3s | | | | | | |
| TLY | | | | smax | smax | | |
| | comp=N,97nm,0.6s | | | | | | |
| TLY | Talaya | 3.04 | 67 | ePn | Pn | 15 30 25.5 | +1.9 |
| TLY | | | | ⇓iPg | Pb | 15 30 30.4 | +0.7 |
| TLY | | | | i Sg | Sg | 15 31 11.0 | -2.0 |
| TLY | | | | Pmax | | | |
| | comp=N,20nm,0.5s | | | | | | |
| TLY | | | | Smax | | | |
| | comp=N,194nm,1.1s | | | | | | |
| HVS | Khovu-Aksy | 3.49 | 281 | e | Pn | 15 30 32.5 | +2.6 |
| HVS | | | | ePg | Pb | 15 30 36.5 | -0.9 |
| HVS | | | | ePgPg | PbPb | 15 30 38.7 | -1.8 |
| HVS | | | | e | | 15 31 06.2 | |
| HVS | | | | eSg | Sb | 15 31 22.1 | +2.3 |
| IRK | Irkutsk | 3.61 | 61 | ePN | Pb | 15 30 39.8 | +0.4 |
| IRK | | | | e | | 15 31 28.0 | |
| IRK | | | | pmax | pmax | | |
| | comp=Z,51nm,0.1s | | | | | | |
| IRK | | | | smax | smax | | |
| | comp=E,512nm,0.4s | | | | | | |
| IRK | Irkutsk | 3.61 | 61 | eSg | Sg | 15 31 28.3 | -3.1 |
| IRK | | | | e | | 15 31 32.5 | |
| IRK | | | | max | | | |
| | comp=E,512nm,0.4s | | | | | | |
| LSTR | Listvyanka | 3.80 | 68 | Pg | Pb | 15 30 43.8 | +1.2 |
| LSTR | | | | i Sg | Sb | 15 31 33.2 | +4.6 |
| LSTR | | | | Pmax | | | |
| | comp=E,6.0nm,0.4s | | | | | | |
| LSTR | | | | Smax | | | |
| | comp=E,75nm,0.7s | | | | | | |
| KAB | Kabansk | 4.93 | 70 | eSg | Sg | 15 32 09.5 | -4.3 |
| KAB | | | | Smax | | | |
| | comp=E,153nm,0.8s | | | | | | |
| TRG | Tyrgan | 4.98 | 61 | ⇓i | Pb | 15 31 02.8 | 0.0 |
| TRG | | | | eSg | Sb | 15 32 09.4 | +6.7 |
| TRG | | | | max | | | |
| | comp=E,11nm,0.8s | | | | | | |
| TRG | | | | Smax | | | |
| | comp=E,49nm,0.6s | | | | | | |
| HRMR | Khuramsha | 5.03 | 75 | ePg | Pb | 15 31 06.3 | +2.7 |
| HRMR | | | | i Sg | Sg | 15 32 12.9 | -4.0 |
| HRMR | | | | Pmax | | | |
| | comp=E,21nm,0.6s | | | | | | |
| HRMR | | | | Smax | | | |
| | comp=E,348nm,1.2s | | | | | | |
| ZRHB | Zarechye | 5.37 | 65 | Sg | Sg | 15 32 23.2 | -4.5 |
| ZRHB | | | | Smax | | | |
| | comp=E,249nm,1.1s | | | | | | |
| UUDB | Ulan-Yde | 5.50 | 73 | Pg | Pb | 15 31 14.9 | +3.3 |
| UUDB | | | | e | | 15 32 21.5 | |
| UUDB | | | | eSg | Sg | 15 32 27.2 | -4.9 |
| UUDB | | | | Pmax | | | |
| | comp=E,14nm,0.6s | | | | | | |
| UUDB | | | | Smax | | | |
| | comp=E,76nm,1.3s | | | | | | |
| OGRR | Ongureny | 6.04 | 56 | ePN | Pn | 15 31 05.4 | +0.6 |
| OGRR | | | | e | | 15 31 23.7 | |
| OGRR | | | | e | | 15 32 41.1 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=E,70nm,1.0s | | | | | | |
| OGRR | Ongureny | 6.04 | 56 | e | Pn | 15 31 09.4 | +4.6 |
| OGRR | | | | e | | 15 31 19.2 | |
| OGRR | | | | ePg | Pb | 15 31 23.0 | +2.3 |
| OGRR | | | | e | | 15 32 26.6 | |
| OGRR | | | | eSg | Sg | 15 32 43.3 | -5.9 |
| OGRR | | | | Pmax | | | |
| | comp=E,8.0nm,0.9s | | | | | | |
| OGRR | | | | Smax | | | |
| | comp=E,70nm,0.6s | | | | | | |
| SYVR | Suvo | 7.36 | 61 | eSg | Sg | 15 33 24.2 | -7.2 |
| NIZ | Nizh Angarsk | 8.12 | 46 | eSg | Sg | 15 33 48.2 | -7.7 |
| NIZ | | | | Smax | | | |
| | comp=E,36nm,1.5s | | | | | | |
| YLYR | Ulyunkhan | 8.46 | 55 | ePg | Pg | 15 32 07.1 | -10 |
| YLYR | | | | e | | 15 33 28.0 | |
| YLYR | | | | eSg | Sg | 15 33 56.3 | -11 |
| KMO | Kumora | 8.96 | 49 | Pg | Pn | 15 32 17.2 | +32 |
| KMO | | | | e | | 15 32 20.1 | |
| KMO | | | | Sg | Sn | 15 34 13.9 | +48 |
| KMO | | | | max | | | |
| | comp=E,5.0nm,0.8s | | | | | | |
| KMO | | | | Smax | | | |
| | comp=E,29nm,1.3s | | | | | | |
| UKT | Uakit | 10.00 | 55 | e | | 15 34 14.0 | |
| UKT | | | | eSg | Sn | 15 34 48.0 | +56 |
| UKT | | | | Smax | | | |
| | comp=E,11nm,1.5s | | | | | | |
| SVKR | Severomuysk | 10.24 | 52 | Sg | Sn | 15 34 54.0 | +57 |
| SVKR | | | | Smax | | | |
| | comp=E,55nm,1.2s | | | | | | |
| BOD | Bodaibo | 11.30 | 44 | e | Pn | 15 32 52.5 | +36 |
| BOD | | | | e | | 15 35 21.7 | |
| BOD | | | | Sg | | 15 35 26.4 | |
| BOD | | | | Smax | | | |
| | comp=E,5.0nm,0.1s | | | | | | |
| NLYR | Nelyaty | 11.48 | 53 | eSg | | 15 35 31.3 | |
| TUP | Tupik | 13.23 | 65 | eSg | S | 15 36 24.8 | +50 |

**JMA 09 15:37:04.8, 35.°42N×136.°54E, h41km, M3.0, 1C-6D**
**Broadband fault plane solution: P waves. NP1:** φs75.00000°, δ60.00000°, λ108.00000°. **NP2:** φs223.00000°, δ35.00000°, λ63.00000°. **Principal axes:** T Plg70.0000°, Azm24.0000°; N Plg15.0000°, Azm246.0000°; P Plg13.0000°, Azm152.0000°; **Western Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JEG | Eigenji | 0.31 | 203 | ⇑P | Pn | 15 37 13.2 | -0.1 |
| JEG | | | | S | Sn | 15 37 19.2 | 0.0 |
| JGM | Miyama | 0.31 | 27 | ⇓P | Pn | 15 37 13.3 | -0.1 |
| JGM | | | | S | Sn | 15 37 19.4 | 0.0 |
| TSUJ | Tsu 2 | 0.72 | 188 | ⇓P | Pn | 15 37 18.3 | -0.2 |
| TSUJ | | | | S | Sn | 15 37 28.4 | +0.1 |
| JKG | Kaga | 0.87 | 349 | ⇓P | Pn | 15 37 21.0 | +0.4 |
| JKG | | | | S | Sn | 15 37 32.8 | +0.7 |
| JWT | Wachi | 0.94 | 262 | ⇓P | Pn | 15 37 21.6 | 0.0 |
| JWT | | | | S | Sn | 15 37 33.8 | 0.0 |
| JIE | Ise | 1.03 | 172 | ⇓P | Pn | 15 37 23.0 | +0.2 |
| JIE | | | | S | Sn | 15 37 37.0 | +0.9 |
| JHE | Heguri | 1.04 | 223 | ⇓P | Pn | 15 37 23.1 | +0.2 |
| JHE | | | | S | Sn | 15 37 36.2 | 0.0 |
| JKY | Yasaka | 1.19 | 280 | P | Pn | 15 37 24.8 | -0.2 |
| JKY | | | | S | Sn | 15 37 40.7 | +0.7 |
| MAT | Matsushiro | 1.76 | 50 | P | Pn | 15 37 33.4 | +0.6 |
| MAT | | | | S | Sn | 15 37 55.3 | +1.3 |

*ISCJB 09 16:13:01.6±0.3, 38.°15N±0.°03×75.°34E±0.°05, h150km, mb3.5/10 Error ellipse: s-maj=6.5km s-min=3.8km az=151.0*
*IDC 09 16:13:02.2±3.7, 38.°11N×75.°37E, h148km±28km, mb3.4/10, mb1 3.4/16, mb1mx3.2/50, mbtmp3.8/16, MS3.1/1, Ms1 3.1/1, ms1mx2.4/36, Error ellipse: s-maj=33.5km s-min=20.2km az=158.0*
*BJI 09 16:13:05.3, 38.°34N×75.°57E, h153km, mb3.9/1*
*NNC 09 16:13:06.9±1.9, 38.°51N×74.°94E, h184km±13km, mb2.6, mpv3.6, Error ellipse: s-maj=19.1km s-min=13.2km az=135.0*
**ISC 09 16:13:02.1±0.5, 38.°16N±0.°06×75.°38E±0.°07, h150km, n49, σ1s16/48, mb3.6/10, 6C-6D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSH | Kashi | 1.44 | 19 | P | Pn | 16 13 29.0 | -2.1 |
| KSH | | | | S | Sn | 16 13 46.4 | -7.0 |
| KSH | | | | SMN | | | |
| | 1μm,0.5s | | | | | | |
| KSH | | | | SME | | | |
| | 3μm,0.3s | | | | | | |
| SFK | Sufi-Kurgan | 2.36 | 322 | ⇑P | Pn | 16 13 43.2 | +1.4 |
| | 6.2nm,0.2s | | | | | | |
| SFK | | | | ⇓S | Sn | 16 14 11.6 | -0.7 |
| | 102nm,0.3s | | | | | | |
| KZA | Kyzart | 3.92 | 359 | P | Pn | 16 14 02.2 | +0.6 |
| | SNR=97 | | | | | | |
| UCH | Uchtor | 4.12 | 351 | P | Pn | 16 14 05.0 | +0.7 |
| | SNR=16 | | | | | | |
| ULHL | Ulahol | 4.14 | 9 | P | Pn | 16 14 05.1 | +0.8 |
| | SNR=42 | | | | | | |
| AML | Almayashu | 4.17 | 343 | P | Pn | 16 14 05.8 | +0.8 |
| | SNR=9.8 | | | | | | |
| KBK | Karagaybulak | 4.51 | 356 | P | Pn | 16 14 10.2 | +1.0 |
| | SNR=11 | | | | | | |
| AAK | Ala-Archa | 4.52 | 352 | P | Pn | 16 14 09.9 | +0.6 |
| | 1.4nm,0.3s,baz=149,slow=7.5,SNR=13 | | | | | | |
| AAK | | | | S | Sn | 16 14 55.5 | -6.2 |
| | 2.1nm,0.3s,baz=125,slow=10,SNR=5.7 | | | | | | |
| AAK | Ala-Archa | 4.52 | 352 | P | Pn | 16 14 10.5 | +1.2 |
| | SNR=5.7 | | | | | | |
| TKM2 | Tokmak 2 | 4.76 | 2 | P | Pn | 16 14 13.5 | +0.9 |
| | SNR=8.1 | | | | | | |
| CHCP | Chirah Chowk | 4.80 | 202 | ⇑P | Pn | 16 14 17.7 | +4.7 |
| MNAS | Manas | 4.85 | 334 | ⇑P | Pn | 16 14 14.4 | +0.7 |
| | 1.6nm,0.2s | | | | | | |
| MNAS | | | | ⇓S | Sn | 16 15 05.7 | -3.7 |
| | 34nm,0.4s | | | | | | |
| CEP | Cherat | 5.16 | 214 | P | Pn | 16 14 21.4 | +3.6 |
| DZET | Dzherino | 5.18 | 279 | ⇑P | Pn | 16 14 18.0 | 0.0 |
| | 6.3nm,0.2s | | | | | | |
| DZET | | | | ⇓S | Sn | 16 15 14.6 | -2.6 |
| | 87nm,0.5s | | | | | | |
| THW | Thamme Wali | 6.12 | 210 | P | Pn | 16 14 33.3 | +2.9 |
| KK31 | Karatay Array | 6.17 | 325 | ⇓P | Pn | 16 14 31.1 | 0.0 |
| | 1.6nm,0.2s,baz=138,slow=12,SNR=161 | | | | | | |
| KK31 | | | | ⇑S | Sn | 16 15 35.0 | -5.7 |
| | 13nm,0.4s,baz=147,slow=22,SNR=19 | | | | | | |
| SARP | Sargodha | 6.60 | 200 | ⇓P | Pn | 16 14 38.9 | +2.0 |
| SMLA | Simla | 7.16 | 168 | i P | Pn | 16 14 47.6 | +3.2 |
| SMLA | | | | i S | Sn | 16 16 02.8 | -1.8 |
| SMLA | | | | AML | AML | 16 16 09.0 | |
| | comp=E,1μm,0.2s | | | | | | |
| SMLA | | | | AML | AML | 16 16 09.2 | |
| | comp=N,1μm,0.3s | | | | | | |
| MK31 | Makanchi Array | 10.03 | 28 | P | Pn | 16 15 22.7 | +0.3 |
| | comp=N,1.1nm,0.5s,baz=209,slow=14,SNR=12 | | | | | | |
| MKAR | Makanchi Array | 10.03 | 28 | P | Pn | 16 15 22.5 | +0.1 |
| | comp=N,0.3nm,0.3s,baz=209,slow=14,SNR=13 | | | | | | |
| KOLN | Koldanda | 12.44 | 144 | eP | Pn | 16 15 54.3 | 0.0 |
| | comp=N,11nm,0.5s | | | | | | |
| KOLN | | | | eS | Sn | 16 18 04.7 | -7.3 |
| KURBB | Kurchatov Arra | 12.66 | 9 | P | Pn | 16 15 54.7 | -2.1 |
| | comp=N,0.0nm,0.3s,baz=198,slow=11,SNR=4.1 | | | | | | |
| GKN | Gorkha | 12.75 | 140 | eP | Pn | 16 15 57.4 | -0.9 |
| | comp=N,6.6nm,0.3s | | | | | | |
| KKN | Kakani | 13.26 | 138 | eP | Pn | 16 16 04.5 | -0.3 |
| DMN | Daman | 13.31 | 139 | eP | Pn | 16 16 04.6 | -0.9 |
| | comp=N,8.2nm,0.5s | | | | | | |
| PKIN | Phulchoki | 13.49 | 139 | eP | Pn | 16 16 08.3 | +0.5 |
| PKI | Pulchoki | 13.50 | 139 | eP | Pn | 16 16 08.1 | +0.1 |
| GEYT | Alibeck | 13.61 | 274 | P | Pn | 16 16 08.1 | -0.9 |
| | comp=N,0.3nm,0.3s,baz=102,slow=12,SNR=2.9 | | | | | | |
| RAMN | Ramite | 14.63 | 137 | eP | Pn | 16 16 22.3 | +0.1 |
| TAPN | Taplejung | 14.94 | 133 | eP | P | 16 16 27.4 | -0.6 |
| ODAN | Odare | 15.13 | 135 | eP | P | 16 16 29.5 | -0.6 |
| BVAR | Borovoye Array | 15.27 | 348 | P | P | 16 16 31.6 | +0.6 |
| | comp=N,0.2nm,0.3s,baz=153,slow=11,SNR=7.9 | | | | | | |
| AB31 | Akbulak array | 15.70 | 320 | ⇑P | P | 16 16 36.4 | +0.5 |
| | comp=N,0.6nm,0.5s,baz=128,slow=12,SNR=9.1 | | | | | | |
| ZALV | Zalesovo Beam | 17.07 | 19 | P | P | 16 16 50.3 | -0.6 |
| | comp=N,0.3nm,0.3s,baz=207,slow=9.3,SNR=4.5 | | | | | | |
| AKTO | Aktyubinsk | 17.41 | 320 | ⇓P | Pn | 16 16 56.0 | +0.3 |
| | comp=N,3.5nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 17.41 | 320 | P | Pn | 16 16 56.0 | +0.3 |
| | comp=N,1.0nm,0.3s,baz=111,slow=9.9,SNR=17 | | | | | | |
| ARU | Arti | 21.44 | 334 | P | P | 16 17 39.2 | +1.0 |
| | comp=N,0.3nm,0.2s,baz=307,slow=20,SNR=2.4 | | | | | | |
| TLY | Talaya | 23.97 | 47 | LR | LR | 16 27 31.8 | |
| | comp=N,46nm,18.8s,baz=325,slow=36 | | | | | | |
| CD2 | Chengdu | 24.41 | 99 | eP | P | 16 18 08.2 | +1.5 |
| SONM | Songino Array | 24.52 | 57 | P | P | 16 18 09.5 | +1.9 |
| | comp=N,0.2nm,0.4s,baz=262,slow=11,SNR=2.0 | | | | | | |
| AKASG | Malin Array Be | 34.70 | 306 | P | P | 16 19 37.7 | +0.4 |
| | comp=N,0.2nm,0.4s,baz=79,slow=7.8,SNR=4.0 | | | | | | |
| FINES | FINESS Array B | 38.13 | 324 | P | P | 16 20 07.0 | +0.8 |
| | comp=N,2.1nm,0.3s,baz=122,slow=10.0,SNR=43 | | | | | | |
| ARCES | ARCESS Array B | 41.01 | 336 | P | P | 16 20 30.6 | +0.7 |
| | comp=N,1.6nm,0.5s,baz=108,slow=8.8,SNR=13 | | | | | | |
| NB2 | NORSAR Subarra | 45.20 | 322 | P | P | 16 21 03.9 | +0.2 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,0.9nm,0.5s,baz=91,slow=7.9 | | | | | | |
| NOA | NORSAR Array B | 45.20 | 322 | P | P | 16 21 04.2 | +0.4 |
| | comp=Z,0.8nm,0.4s,baz=90,slow=7.6,SNR=6.1 | | | | | | |
| ESDC | Sonseca Array | 59.75 | 299 | P | P | 16 22 51.5 | +0.3 |
| | comp=Z,0.3nm,0.4s,baz=53,slow=7.1,SNR=5.9 | | | | | | |
| TORD | Torodi Ar. Bea | 69.22 | 271 | P | P | 16 23 53.2 | +0.3 |
| | comp=Z,1.0nm,0.5s,baz=47,slow=5.5,SNR=21 | | | | | | |
| DBIC | Dimbokro | 78.24 | 269 | P | P | 16 24 46.1 | +0.6 |
| | comp=Z,1.8nm,0.7s,baz=56,slow=7.3,SNR=2.2 | | | | | | |
| YKA | Yellowknife Ar | 79.37 | 5 | P | P | 16 24 50.1 | -0.8 |
| | comp=Z,0.3nm,0.4s,baz=345,slow=5.2,SNR=4.1 | | | | | | |

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*ISCJB **09** 16:16:08.1±0.4, 32°.05N±0°.03×104°.54E±0°.04, h15km, mb3.9/9, MS3.5/1, Error ellipse: s-maj=5.1km s-min=4.5km az=14.6*

*IDC **09** 16:16:08.0±0.9, 32°.00N×104°.56E, h0km, mb3.9/8, mb1 3.9/11, mb1mx3.6/56, mbtmp3.8/11, ML3.5/3, MS2.9/3, Ms1 3.0/3, ms1mx2.6/39, Error ellipse: s-maj=34.2km s-min=16.6km az=60.0*

*BJI **09** 16:16:09.7, 32°.07N×104°.50E, h18km, mb4.0/3, ML4.1/26, Ms3.9/2*

*NEIC **09** 16:16:13.9±0.9, 32°.01N×104°.51E, h44km±10km, mb4.2/1, Error ellipse: s-maj=11.6km s-min=7.2km az=67.0*

**ISC 09 16:16:10.6**±0.5**, 31°.99N**±0°.04×**104°.53E**±0°.05**, h15km, n27, σ1s.62**/38**, mb4.1**/9**, 2C, Sichuan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CD2 | Chengdu | 1.26 | 212 | ⇑ iPg | Pg | 16 16 34.6 | -0.3 |
| CD2 | | | | Sg | Sg | 16 16 52.6 | +1.2 |
| CD2 | | | | SMN | | | |
| | 8μm,0.4s | | | | | | |
| CD2 | | | | SME | | | |
| | 10μm,0.5s | | | | | | |
| LZH | Lanzhou | 4.12 | 352 | ePn | Pn | 16 17 14.2 | +1.0 |
| LZH | | | | Pg | Pb | 16 17 25.0 | +2.0 |
| LZH | | | | Sg | Sb | 16 18 16.0 | +3.3 |
| LZH | | | | SMN | | | |
| | 520nm,0.8s | | | | | | |
| LZH | | | | SME | | | |
| | 620nm,0.6s | | | | | | |
| LZH | | | | LN | | | |
| | 490nm,6.7s | | | | | | |
| LZH | | | | LE | | | |
| | 2μm,5.9s | | | | | | |
| LZH | Lanzhou | 4.12 | 352 | ePn | Pn | 16 17 14.2 | +1.0 |
| LZH | | | | Pg | Pb | 16 17 25.0 | +2.0 |
| LZH | | | | Sg | Sb | 16 18 16.0 | +3.3 |
| XAN | Xi'an | 4.22 | 60 | Pn | Pn | 16 17 13.3 | -1.1 |
| XAN | | | | Pg | Pb | 16 17 25.3 | +0.8 |
| XAN | | | | Sn | Sn | 16 18 00.3 | -3.1 |
| XAN | | | | Sg | Sb | 16 18 17.6 | +2.4 |
| XAN | | | | SMN | | | |
| | 560nm,0.6s | | | | | | |
| XAN | | | | SME | | | |
| | 690nm,0.7s | | | | | | |
| ENH | Enshi | 4.58 | 111 | ePn | Pn | 16 17 21.9 | +2.5 |
| ENH | | | | eSn | Sn | 16 18 11.6 | -0.8 |
| GYA | Guiyang | 5.82 | 161 | ⇑ iPn | Pn | 16 17 37.0 | +0.5 |
| GYA | | | | Sn | Sn | 16 18 45.3 | +2.3 |
| GYA | | | | Sg | Sg | 16 19 16.5 | -0.9 |
| GYA | | | | SMN | | | |
| | 140nm,0.7s | | | | | | |
| GYA | | | | SME | | | |
| | 150nm,0.8s | | | | | | |
| GTA | Gaotai | 8.34 | 334 | eP | Pn | 16 18 10.5 | -0.5 |
| GTA | | | | pP | pP | 16 18 13.8 | |
| GTA | | | | sP | sP | 16 18 16.6 | |
| GTA | | | | S | Sn | 16 19 43.7 | -1.2 |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.1s | | | | | | |
| CMAR | Chiang Mai Arr | 14.39 | 202 | Pn | Pn | 16 19 34.9 | +1.1 |
| | 0.1nm,0.3s,baz=12,slow=10,SNR=4.1 | | | | | | |
| CMAR | | | | LR | LR | 16 24 42.7 | |
| | comp=Z,37nm,18.0s,baz=120,slow=36 | | | | | | |
| SONM | Songino Array | 15.89 | 5 | Pn | Pn | 16 19 53.0 | -0.7 |
| | 0.2nm,0.3s,baz=193,slow=12,SNR=2.3 | | | | | | |
| PKI | Pulchoki | 17.17 | 260 | eP | Pn | 16 20 08.1 | -2.2 |
| | 17nm,0.8s | | | | | | |
| PKIN | Phulchoki | 17.18 | 260 | eP | Pn | 16 20 08.1 | -2.2 |
| | 16nm,0.9s | | | | | | |
| DMN | Daman | 17.41 | 260 | eP | Pn | 16 20 11.1 | -2.1 |
| GKN | Gorkha | 17.68 | 262 | eP | Pn | 16 20 16.2 | -0.3 |
| | 7.8nm,0.5s | | | | | | |
| KOLN | Koldanda | 18.62 | 262 | eP | P | 16 20 25.5 | -2.3 |
| | 8.2nm,0.6s | | | | | | |
| KSAR | Wonju Array Be | 19.93 | 68 | P | P | 16 20 42.1 | +0.2 |
| KSRS | Korea Array | 19.97 | 68 | P | P | 16 20 42.1 | -0.1 |
| | 0.2nm,0.3s,baz=259,slow=10,SNR=5.6 | | | | | | |
| KSRS | | | | LR | LR | 16 29 14.1 | |
| | comp=Z,11nm,19.5s,baz=15,slow=40 | | | | | | |
| MKAR | Makanchi Array | 22.56 | 317 | P | P | 16 21 10.6 | +0.4 |
| | 1.1nm,0.9s,baz=122,slow=12,SNR=7.3 | | | | | | |
| ZALV | Zalesovo Beam | 26.09 | 333 | P | P | 16 21 43.0 | -0.5 |
| | 1.4nm,0.5s,baz=133,slow=9.2,SNR=8.3 | | | | | | |
| KURBB | Kurchatov Arra | 26.76 | 322 | P | P | 16 21 49.7 | +0.2 |
| | 0.7nm,0.7s,baz=128,slow=9.1,SNR=4.5 | | | | | | |
| KURK | Kurchatov | 26.76 | 322 | P | P | 16 21 49.7 | +0.1 |
| OBN | Obninsk | 52.07 | 318 | LR | LR | 16 48 44.0 | |
| | comp=Z,50nm,20.6s,baz=271,slow=38 | | | | | | |
| ARCES | ARCESS Array B | 56.60 | 336 | P | P | 16 25 52.8 | +0.5 |
| | 4.6nm,1.0s,baz=77,slow=9.3,SNR=3.5 | | | | | | |
| FINES | FINESS Array B | 57.04 | 326 | P | P | 16 25 54.3 | -1.3 |
| | 2.7nm,1.0s,baz=12,slow=14,SNR=2.9 | | | | | | |
| WRAB | Tennant Creek | 59.01 | 147 | eP | P | 16 26 08.6 | -1.3 |
| | 1.1nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 59.01 | 147 | P | P | 16 26 09.4 | -0.4 |
| | 1.2nm,0.8s,baz=328,slow=9.1,SNR=14 | | | | | | |
| ASAR | Alice Springs | 62.06 | 149 | P | P | 16 26 30.4 | -0.2 |
| | 0.5nm,0.7s,baz=334,slow=6.8,SNR=8.3 | | | | | | |
| INK | Inuvik | 71.20 | 19 | P | P | 16 27 28.0 | -0.4 |
| | 1.0nm,0.5s,baz=319,slow=3.0,SNR=3.8 | | | | | | |

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*ISCJB **09** 16:20:29.9±0.8, 1°.9N±0°.2×128°.4E±0°.2, h134km, mb3.6/5, Error ellipse: s-maj=39.8km s-min=10.0km az=141.0*

*IDC **09** 16:20:29.9±5.0, 1°.76N×128°.17E, h115km±53km, mb3.3/5, mb1 3.4/6, mb1mx3.1/40, mbtmp3.6/6, Error ellipse: s-maj=79.0km s-min=18.1km az=71.0*

**ISC 09 16:20:31.6**±1.0**, 1°.8N**±0°.2×**128°.4E**±0°.3**, h134km, n6, σ0s.23**/8**, mb3.5**/5**, Halmahera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 3.93 | 133 | P | Pn | 16 21 30.6 | 0.0 |
| | 1.0nm,0.3s,baz=328,slow=19,SNR=4.5 | | | | | | |
| SIJI | | | | S | Sn | 16 22 16.4 | 0.0 |
| | 1.0nm,0.3s,baz=197,slow=19,SNR=1.9 | | | | | | |
| WRA | Warramunga Arr | 22.40 | 165 | P | P | 16 25 19.1 | -0.1 |
| | 0.6nm,0.3s,baz=341,slow=10,SNR=11 | | | | | | |
| ASAR | Alice Springs | 25.89 | 168 | P | P | 16 25 51.4 | +0.1 |
| | 0.4nm,0.7s,baz=347,slow=7.2,SNR=6.9 | | | | | | |
| ASAR | | | | PcP | PcP | 16 29 17.1 | +0.2 |
| | 0.1nm,0.5s,baz=358,slow=2.2,SNR=4.7 | | | | | | |
| SONM | Songino Array | 49.63 | 341 | P | P | 16 29 09.8 | +0.2 |
| | 0.5nm,0.6s,baz=156,slow=8.7,SNR=5.4 | | | | | | |
| MKAR | Makanchi Array | 60.05 | 325 | P | P | 16 30 24.5 | 0.0 |
| | 1.2nm,0.6s,baz=123,slow=8.6,SNR=12 | | | | | | |
| KURBB | Kurchatov Arra | 64.23 | 327 | P | P | 16 30 51.9 | -0.4 |
| | 1.9nm,0.8s,baz=127,slow=5.9,SNR=17 | | | | | | |

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*ISCJB **09** 16:33:40.3±0.9, 41°.23N±0°.05×24°.67E±0°.04, h7km±5km, Error ellipse: s-maj=8.5km s-min=4.5km az=16.9*

*CSEM **09** 16:33:40.4±0.3, 41°.20N×24°.69E, h5km, ML1.8, Error ellipse: s-maj=7.2km s-min=3.1km az=18.0*

*THE **09** 16:33:40.7, 41°.20N×24°.66E, h12km±1km, ML1.8/3, Error ellipse: s-maj=1.2km s-min=0.4km az=267.0*

*ATH **09** 16:33:40.7, 41°.25N×24°.66E, h21km±3km, MD2.8/8*

**ISC 09 16:33:40.6**±1.2**, 41°.22N**±0°.04×**24°.68E**±0°.03**, h10km**±9km**, n26, σ0s.56**/50**, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KAVA | Kavala | 0.26 | 209 | P | Pg | 16 33 45.6 | -0.2 |
| KAVA | | | | S | Sg | 16 33 49.2 | 0.0 |
| KAVA | Kavala | 0.26 | 209 | P | Pg | 16 33 45.6 | -0.2 |
| KAVA | | | | S | Sg | 16 33 49.2 | 0.0 |
| NVR | Nevrokopi | 0.63 | 282 | ePB | Pg | 16 33 52.3 | -0.5 |
| NVR | | | | eSN | Sb | 16 34 01.9 | -0.7 |
| NVR | Nevrokopi | 0.63 | 282 | P | Pg | 16 33 52.2 | -0.5 |
| NVR | | | | S | Sg | 16 34 01.6 | +0.6 |
| NVR | Nevrokopi | 0.63 | 282 | P | Pg | 16 33 52.2 | -0.5 |
| NVR | | | | S | Sg | 16 34 01.6 | +0.6 |
| NVR | | | | eSn | Sb | 16 34 01.9 | -0.7 |
| SRS | Serrai | 0.82 | 263 | ePN | Pg | 16 33 56.3 | -0.2 |
| SRS | | | | eSN | Sg | 16 34 07.8 | +0.6 |
| SRS | Serrai | 0.82 | 263 | P | Pg | 16 33 56.1 | -0.4 |
| SRS | | | | S | Sb | 16 34 08.2 | 0.0 |
| SRS | Serrai | 0.82 | 263 | P | Pg | 16 33 56.1 | -0.4 |
| SRS | | | | eSn | Sg | 16 34 07.8 | +0.6 |
| SRS | | | | S | Sb | 16 34 08.2 | 0.0 |
| SMTH | Samothraki Isl | 0.99 | 139 | P | Pb | 16 33 59.3 | -0.6 |
| SMTH | | | | S | Sb | 16 34 13.1 | +0.1 |
| SMTH | Samothraki Isl | 0.99 | 139 | P | Pb | 16 33 59.3 | -0.6 |
| SMTH | | | | S | Sb | 16 34 13.1 | +0.1 |
| OUR | Ouranopolis | 1.03 | 211 | ePN | Pn | 16 34 00.9 | -0.2 |
| OUR | | | | eSN | Sn | 16 34 15.0 | -0.6 |
| OUR | Ouranopolis | 1.03 | 211 | ePn | Pn | 16 34 00.9 | -0.2 |
| OUR | | | | eSn | Sn | 16 34 15.0 | -0.6 |
| SOH | Sokhos | 1.08 | 249 | ePN | Pn | 16 34 02.1 | +0.3 |
| SOH | | | | eSN | Sg | 16 34 15.8 | +0.5 |
| SOH | Sokhos | 1.08 | 249 | ePn | Pn | 16 34 02.1 | +0.3 |
| SOH | | | | eSn | Sg | 16 34 15.8 | +0.5 |
| ALN | Alexandroupoli | 1.09 | 107 | ePN | Pb | 16 34 01.1 | -0.4 |
| ALN | | | | eSN | Sn | 16 34 17.6 | +0.6 |
| ALN | Alexandroupoli | 1.09 | 107 | ePn | Pb | 16 34 01.1 | -0.4 |
| ALN | | | | eSn | Sn | 16 34 17.6 | +0.6 |
| PLG | Polygyros | 1.26 | 228 | ePN | Pg | 16 34 05.1 | +0.3 |
| PLG | | | | eSN | Sg | 16 34 22.0 | +0.9 |
| PLG | Polygyros | 1.26 | 228 | ePn | Pg | 16 34 05.1 | +0.3 |
| PLG | | | | eSn | Sg | 16 34 22.0 | +0.9 |
| KNT | Kendrikon | 1.34 | 268 | ePN | Pg | 16 34 06.6 | +0.2 |
| KNT | | | | eSN | Sg | 16 34 25.1 | +1.3 |
| KNT | Kendrikon | 1.34 | 268 | ePn | Pg | 16 34 06.6 | +0.2 |
| KNT | | | | eSn | Sg | 16 34 25.1 | +1.3 |
| HORT | Hortiatis | 1.35 | 243 | ePN | Pg | 16 34 06.4 | -0.1 |
| HORT | | | | eSN | Sg | 16 34 24.9 | +1.0 |
| HORT | Hortiatis | 1.35 | 243 | ePn | Pg | 16 34 06.4 | -0.1 |
| HORT | | | | eSn | Sg | 16 34 24.9 | +1.0 |
| PAIG | Paliouri | 1.50 | 211 | ePN | Pn | 16 34 07.8 | +0.2 |
| PAIG | Paliouri | 1.50 | 211 | ePb | Pn | 16 34 07.8 | +0.2 |
| GRG | Griva | 1.74 | 262 | ePN | Pb | 16 34 12.3 | -0.4 |
| GRG | Griva | 1.74 | 262 | ePn | Pb | 16 34 12.3 | -0.4 |

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*IDC **09** 16:34:26.8±2.7, 62°.67S×170°.10E, h0km, mb3.9/2, mb1 4.0/3, mb1mx3.7/26, mbtmp3.8/3, ML2.9/1, MS3.4/3, Ms1 3.4/3, ms1mx3.1/21, Error ellipse: s-maj=119.7km s-min=27.6km az=72.0*

**ISC 09 16:34:27.5**±2.0**, 62°.7S**±0°.1×**170°.4E**±0°.6**, h10km, n13, σ1s.01**/7**, Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VNDA | Vanda | 15.19 | 187 | Pn | Pn | 16 38 00.6 | -1.1 |
| | 0.1nm,0.3s,baz=29,slow=16,SNR=12 | | | | | | |
| VNDA | | | | Sn | Sn | 16 40 50.1 | +0.4 |
| | 0.1nm,0.3s,baz=270,slow=19,SNR=1.3 | | | | | | |
| VNDA | | | | LR | LR | 16 41 54.8 | |
| | comp=Z,97nm,18.4s,baz=138,slow=30 | | | | | | |
| URZ | Urewera | 24.76 | 13 | LR | LR | 16 49 40.9 | |
| | comp=Z,81nm,18.5s,baz=148,slow=37 | | | | | | |
| QSPA | South Pole Qui | 27.45 | 180 | P | P | 16 40 14.7 | +1.4 |
| | 2.5nm,1.0s,baz=16,slow=4.1,SNR=6.4 | | | | | | |
| H01W1 | Cape Leeuwin H | 44.27 | 282 | T | T | 17 29 11.3 | |
| | baz=148,slow=76,SNR=21 | | | | | | |
| H01W2 | Cape Leeuwin H | 44.27 | 282 | T | T | 17 29 06.9 | |
| | baz=148,slow=76,SNR=16 | | | | | | |
| H01W3 | Cape Leeuwin H | 44.28 | 282 | T | T | 17 29 12.5 | |
| | baz=148,slow=76,SNR=19 | | | | | | |
| ASAR | Alice Springs | 46.01 | 311 | P | P | 16 42 51.2 | +0.3 |
| | 0.7nm,0.8s,baz=160,slow=8.7,SNR=10.0 | | | | | | |
| ASAR | | | | LR | LR | 17 01 20.4 | |
| | comp=Z,71nm,18.2s,baz=124,slow=35 | | | | | | |
| H08S2 | Diego Garcia H | 86.89 | 260 | T | T | 18 22 19.6 | |
| | baz=152,slow=76,SNR=32 | | | | | | |
| H08S1 | Diego Carcia H | 86.89 | 259 | T | T | 18 22 09.5 | |
| | baz=152,slow=76,SNR=25 | | | | | | |
| H08S3 | Diego Garcia H | 86.91 | 260 | T | T | 18 22 12.6 | |
| | baz=152,slow=76,SNR=32 | | | | | | |
| TORD | Torodi Ar. Bea | 129.92 | 194 | PKP | PKPdf | 16 53 36.8 | -0.3 |
| | 0.9nm,1.1s,baz=194,slow=3.7,SNR=4.1 | | | | | | |
| KBZ | Khabaz | 144.56 | 263 | PKP | PKPdf | 16 54 02.4 | -0.7 |
| | 3.8nm,0.9s,baz=132,slow=3.0,SNR=4.8 | | | | | | |
| BRTR | Keskin Array B | 145.49 | 249 | PKPbc | PKPbc | 16 54 05.0 | -0.1 |
| | 2.6nm,0.8s,baz=134,slow=3.6,SNR=10.0 | | | | | | |

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*NSSC **09** 16:36:51.9±2.7, 38°.76N×41°.61E, h56km±697km, MD2.0, ML3.8*

*ISK **09** 16:37:02.4, 38°.69N×39°.91E, h5km, ML3.7*

*DDA **09** 16:37:03.1, 38°.67N×39°.94E, h6km, Ml3.8*

*TEH **09** 16:37:04.4, 38°.67N×39°.93E, h2km, ML3.7*

*CSEM **09** 16:37:04.3±0.1, 38°.66N×39°.92E, h2km, ML3.7, Error ellipse: s-maj=4.1km s-min=3.4km az=152.0*

**ISC 09 16:37:02.9**±1.1**, 38°.69N**±0°.02×**39°.91E**±0°.02**, h0km**±10km**, n147, σ1s.35**/157**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PTK | Pertek | 0.45 | 297 | ePG | Pg | 16 37 12.0 | +0.5 |
| PTK | | | | eSG | Sb | 16 37 19.7 | -1.5 |
| PTK | Pertek | 0.45 | 297 | ePg | Pg | 16 37 12.0 | +0.5 |
| PTK | | | | eSg | Sb | 16 37 19.7 | -1.5 |
| SVRC | Sivrice-ELAZID | 0.56 | 237 | ePG | Pg | 16 37 14.1 | +0.5 |
| SVRC | Sivrice-ELAZID | 0.56 | 237 | ePg | Pg | 16 37 14.1 | +0.5 |
| BNGB | Bingˆ¶l | 0.68 | 63 | ePG | Pb | 16 37 16.4 | -1.2 |
| BNGB | | | | eSG | Sb | 16 37 26.8 | -0.8 |
| DYBB | Diyarbakir | 0.76 | 166 | ePG | Pb | 16 37 18.2 | -0.7 |
| DIY | Diyarbakir | 0.83 | 162 | ePg | Pg | 16 37 18.2 | -0.5 |
| ERZN | Erzincan | 0.91 | 351 | ePG | Pb | 16 37 20.8 | -0.9 |
| BNGL | BINGOL | 1.01 | 74 | P | Pb | 16 37 22.4 | -0.9 |
| BNGL | | | | S | Sn | 16 37 40.5 | +1.0 |
| EUZM | Uzumlu | 1.03 | 351 | iP | Pb | 16 37 23.2 | -0.5 |
| EUZM | | | | iS | Sn | 16 37 38.9 | -1.1 |
| EUZM | Uzumlu | 1.03 | 351 | P | Pb | 16 37 23.2 | -0.5 |
| EUZM | | | | S | Sn | 16 37 38.9 | -1.1 |
| SVAN | Silvan-Diyarba | 1.15 | 117 | ePN | Pn | 16 37 25.2 | -0.9 |
| SVAN | Silvan-Diyarba | 1.15 | 117 | ePn | Pn | 16 37 25.3 | -0.9 |
| MALT | Malatya | 1.22 | 253 | ePN | Pb | 16 37 26.2 | -0.6 |
| ILIC | ilic-Erzincan | 1.29 | 307 | ePN | Pg | 16 37 27.8 | +0.1 |
| ILIC | ilic-Erzincan | 1.29 | 307 | ePn | Pg | 16 37 27.8 | +0.1 |
| MAZI | Mazidag | 1.30 | 161 | ePN | Pg | 16 37 27.8 | +0.1 |
| MAZI | Mazidag | 1.30 | 161 | ePn | Pg | 16 37 27.8 | +0.1 |
| VRTB | Varto-Mus | 1.30 | 68 | ePN | Pg | 16 37 28.2 | +0.5 |
| VRTB | Varto-Mus | 1.30 | 68 | ePn | Pg | 16 37 28.3 | +0.5 |
| BTMT | Batman | 1.34 | 111 | ePN | Pg | 16 37 28.8 | +0.3 |
| BTMT | Batman | 1.34 | 111 | ePn | Pg | 16 37 28.8 | +0.3 |
| KOPT | Kop Dagi | 1.41 | 19 | iP | Pg | 16 37 30.1 | +0.2 |
| KOPT | Kop Dagi | 1.41 | 19 | P | Pg | 16 37 30.1 | +0.2 |
| URFA | Urfa | 1.51 | 215 | ePN | Pg | 16 37 31.5 | -0.3 |
| URFA | Urfa | 1.51 | 215 | ePn | Pg | 16 37 31.5 | -0.3 |
| MARD | Mardin | 1.53 | 153 | P | Pb | 16 37 31.6 | -0.7 |
| MARD | | | | S | Sg | 16 37 52.0 | -0.1 |
| KELT | Kelkit | 1.54 | 341 | iP | Pg | 16 37 33.0 | +0.5 |
| KELT | | | | iS | Sg | 16 37 54.3 | +1.8 |
| KELT | Kelkit | 1.54 | 341 | P | Pg | 16 37 33.0 | +0.5 |
| KELT | | | | S | Sg | 16 37 54.3 | +1.8 |
| AKCD | Akcadag | 1.60 | 257 | iP | Pb | 16 37 33.1 | -0.3 |
| AKCD | Akcadag | 1.60 | 257 | P | Pb | 16 37 33.1 | -0.3 |
| EZM | Erzurum | 1.66 | 42 | ePN | Pb | 16 37 34.0 | -0.5 |
| ERZM | Erzurum | 1.66 | 42 | iP | Pg | 16 37 35.3 | +0.5 |
| ERZM | Erzurum | 1.66 | 42 | P | Pg | 16 37 35.3 | +0.5 |
| BAYT | Ayd˜–ntepe-Bay | 1.71 | 6 | ePN | Pb | 16 37 34.8 | -0.6 |
| BAYT | Ayd˜–ntepe-Bay | 1.71 | 6 | ePn | Pb | 16 37 34.8 | -0.6 |
| ATAB | Bozova | 1.76 | 227 | iP | Pb | 16 37 35.3 | -0.7 |
| ATAB | | | | iS | Sg | 16 38 00.2 | +0.8 |
| ATAB | Bozova | 1.76 | 227 | P | Pb | 16 37 35.3 | -0.7 |
| ATAB | | | | S | Sg | 16 38 00.2 | +0.8 |
| EKAR | Karacoban | 1.78 | 71 | iP | Pg | 16 37 38.3 | +1.4 |
| EKAR | Karacoban | 1.78 | 71 | P | Pg | 16 37 38.3 | +1.4 |
| EKAR | | | | S | Sg | 16 38 10.6 | +10 |
| GUMT | Gumushane | 1.80 | 350 | ePN | Pb | 16 37 36.0 | -0.8 |
| GUMT | Gumushane | 1.80 | 350 | ePn | Pb | 16 37 36.0 | -0.8 |
| TATV | Tatvan | 1.86 | 95 | iP | Pb | 16 37 37.5 | -0.3 |
| TATV | | | | iS | Sg | 16 38 03.5 | +0.9 |
| TATV | Tatvan | 1.86 | 95 | P | Pb | 16 37 37.5 | -0.3 |
| TATV | | | | S | Sg | 16 38 03.5 | +0.9 |
| DARE | Darende-Malaty | 1.90 | 267 | ePN | Pb | 16 37 37.4 | -1.1 |
| DARE | Darende-Malaty | 1.90 | 267 | ePn | Pb | 16 37 37.4 | -1.1 |
| CUKAN | kangal_SIVAS | 2.00 | 289 | P | Pb | 16 37 39.8 | -0.5 |
| CUKAN | | | | S | Sg | 16 38 07.8 | +0.6 |
| SUSE | Susehri | 2.01 | 320 | iP | Pb | 16 37 40.1 | -0.4 |
| SUSE | Susehri | 2.01 | 320 | P | Pb | 16 37 40.0 | -0.4 |
| SUSE | | | | S | Sg | 16 38 06.8 | -0.8 |
| CUZAR | Zara_SIVAS | 2.05 | 307 | P | Pg | 16 37 41.6 | -0.5 |
| HOMI | Horasan | 2.06 | 48 | P | Pb | 16 37 41.1 | -0.1 |
| KTUT | Trabzon | 2.30 | 357 | ePN | Pb | 16 37 42.9 | -2.3 |
| KTUT | Trabzon | 2.30 | 357 | ePn | Pb | 16 37 42.9 | -2.3 |
| SIRT | Sirnak | 2.32 | 120 | ePN | Pb | 16 37 43.3 | -2.4 |
| SIRT | Sirnak | 2.32 | 120 | ePn | Pb | 16 37 43.3 | -2.4 |
| EATA | Eleskirt | 2.33 | 59 | iP | Pg | 16 37 46.8 | -0.7 |
| EATA | Eleskirt | 2.33 | 59 | P | Pg | 16 37 46.8 | -0.7 |
| TUTA | Tutak | 2.37 | 72 | iP | Pb | 16 37 44.8 | -1.9 |
| TUTA | Tutak | 2.37 | 72 | P | Pb | 16 37 44.8 | -1.9 |
| ESPY | Espiye-Giresun | 2.41 | 338 | ePN | Pb | 16 37 44.6 | -2.5 |
| ESPY | Espiye-Giresun | 2.41 | 338 | ePn | Pb | 16 37 44.6 | -2.5 |
| CUALT | Altinyayla-SIV | 2.52 | 284 | P | Pb | 16 37 48.8 | -0.4 |
| AGRB | Hanur-Agry | 2.56 | 69 | ePN | Pn | 16 37 46.8 | +1.0 |
| AGRB | Hanur-Agry | 2.56 | 69 | ePn | Pn | 16 37 46.8 | +1.0 |
| SVSK | Karacayir | 2.57 | 299 | ePN | Pb | 16 37 47.6 | -2.2 |
| SVSK | Karacayir | 2.57 | 299 | ePn | Pb | 16 37 47.6 | -2.2 |
| DDEM | Demirkent | 2.62 | 32 | iP | Pb | 16 37 48.7 | -2.1 |
| DDEM | Demirkent | 2.62 | 32 | P | Pb | 16 37 48.7 | -2.1 |
| KMRS | Kahramanmaras | 2.65 | 244 | ePN | Pn | 16 37 48.1 | +1.2 |
| KMRS | Kahramanmaras | 2.65 | 244 | ePn | Pn | 16 37 48.1 | +1.2 |
| TVAN | Van | 2.75 | 92 | iP | Pb | 16 37 53.0 | 0.0 |
| TVAN | Van | 2.75 | 92 | P | Pb | 16 37 53.0 | 0.0 |
| AYKD | Aykdinkavak | 2.76 | 244 | P | Pn | 16 37 48.7 | +0.4 |
| AYKD | | | | S | Sg | 16 38 31.1 | -0.3 |
| KSRV | Kasrt alli | 2.91 | 195 | eP | Pn | 16 37 51.5 | +1.1 |
| KSRV | | | | eS | Sg | 16 38 36.3 | 0.0 |
| KSRV | | | | AML | AML | 16 38 42.5 | |
| | comp=N,528nm,0.5s | | | | | | |
| KSRV | | | | AML | AML | 16 38 48.8 | |
| | comp=E,239nm,0.5s | | | | | | |
| KSRV | Kasrt alli | 2.91 | 195 | eP | Pn | 16 37 51.5 | +1.1 |
| KSRV | | | | eS | Sg | 16 38 36.3 | 0.0 |
| | comp=E,239nm,0.5s | | | | | | |
| SLMH | Al Salmeh | 2.93 | 213 | eP | Pn | 16 37 50.9 | +0.2 |
| SLMH | | | | eS | Sb | 16 38 31.5 | -0.8 |
| SLMH | | | | AML | AML | 16 38 42.6 | |
| | comp=E,538nm,0.6s | | | | | | |
| SLMH | | | | AML | AML | 16 38 46.8 | |
| | comp=N,771nm,0.7s | | | | | | |
| SLMH | Al Salmeh | 2.93 | 213 | eP | Pn | 16 37 50.9 | +0.2 |
| SLMH | | | | eS | Sb | 16 38 31.5 | -0.8 |
| | comp=N,771nm,0.7s | | | | | | |
| ARTV | Artvin | 2.94 | 31 | iP | Pn | 16 37 52.3 | +1.3 |
| ARTV | Artvin | 2.94 | 31 | P | Pn | 16 37 52.3 | +1.3 |
| KUZU | Kuzuini | 2.95 | 230 | iP | Pn | 16 37 51.3 | +0.3 |
| KUZU | | | | iS | Sb | 16 38 30.3 | -2.6 |
| KUZU | Kuzuini | 2.95 | 230 | P | Pn | 16 37 51.3 | +0.3 |
| KUZU | | | | S | Sb | 16 38 30.3 | -2.6 |
| KAMA | Osmaniye | 2.97 | 241 | P | Pn | 16 37 51.5 | +0.3 |
| KAMA | | | | S | Sb | 16 38 33.9 | +0.5 |
| DBOC | Borcka | 2.98 | 26 | iP | Pn | 16 37 53.0 | +1.6 |
| DBOC | Borcka | 2.98 | 26 | P | Pn | 16 37 53.0 | +1.6 |
| ANDN | Andirin | 3.02 | 250 | iP | Pb | 16 37 56.9 | -0.6 |
| ANDN | Andirin | 3.02 | 250 | P | Pb | 16 37 56.9 | -0.6 |
| ANDN | | | | S | Sg | 16 38 44.7 | +4.9 |
| BCA | Borcka | 3.05 | 25 | ePN | Pn | 16 37 53.8 | +1.4 |
| BCA | Borcka | 3.05 | 25 | ePn | Pn | 16 37 53.8 | +1.4 |
| TOKT | Tokat | 3.07 | 303 | ePN | Pn | 16 37 54.3 | +1.6 |
| TOKT | Tokat | 3.07 | 303 | ePn | Pn | 16 37 54.3 | +1.6 |
| TOKA | Tokat | 3.12 | 303 | P | Pg | 16 38 00.8 | -1.8 |
| CLDR | Caldiran | 3.16 | 80 | ePN | Pn | 16 37 55.2 | +1.2 |
| CLDR | Caldiran | 3.16 | 80 | ePn | Pn | 16 37 55.3 | +1.2 |
| BNN | Bunyan | 3.18 | 274 | ePN | Pn | 16 37 56.3 | +2.1 |
| BNN | Bunyan | 3.18 | 274 | ePn | Pn | 16 37 56.3 | +2.1 |
| HKR | Hakkari | 3.22 | 109 | ePN | Pn | 16 37 56.2 | +1.4 |
| HKR | Hakkari | 3.22 | 109 | ePn | Pn | 16 37 56.2 | +1.4 |
| CUKT | Cukurca | 3.26 | 115 | ePN | Pn | 16 37 56.7 | +1.4 |
| CUKT | Cukurca | 3.26 | 115 | ePn | Pn | 16 37 56.7 | +1.4 |
| KOZT | Kozan | 3.44 | 251 | ePN | Pn | 16 37 59.2 | +1.5 |
| KOZT | Kozan | 3.44 | 251 | ePn | Pn | 16 37 59.2 | +1.5 |
| YOZ | Yozgat | 3.69 | 286 | ePN | Pn | 16 38 03.7 | +2.4 |
| YOZ | Yozgat | 3.69 | 286 | ePn | Pn | 16 38 03.7 | +2.4 |
| CEYT | Ceyhan | 3.69 | 244 | ePN | Pn | 16 38 03.2 | +2.0 |
| CEYT | Ceyhan | 3.69 | 244 | ePn | Pn | 16 38 03.2 | +2.0 |
| TAHT | Tahtakopru-Hat | 3.75 | 233 | ePN | Pn | 16 38 04.2 | +2.2 |
| TAHT | Tahtakopru-Hat | 3.75 | 233 | ePn | Pn | 16 38 04.2 | +2.2 |
| BTCH | Batrach | 3.81 | 227 | eP | Pn | 16 38 02.6 | -0.3 |
| BTCH | | | | eS | Sb | 16 38 55.5 | -2.3 |
| BTCH | | | | AML | AML | 16 39 12.8 | |
| | comp=N,871nm,0.6s | | | | | | |
| BTCH | | | | AML | AML | 16 39 19.3 | |
| | comp=E,560nm,0.5s | | | | | | |
| BTCH | Batrach | 3.81 | 227 | eP | Pn | 16 38 02.6 | -0.3 |
| BTCH | | | | eS | Sb | 16 38 55.5 | -2.3 |
| | comp=E,560nm,0.5s | | | | | | |
| KVT | Kavak | 3.81 | 310 | ePN | Pn | 16 38 04.7 | +1.8 |
| KVT | Kavak | 3.81 | 310 | ePn | Pn | 16 38 04.7 | +1.8 |
| AKH | Akhalkalaki | 3.87 | 44 | P | Pg | 16 38 17.4 | +0.3 |
| KARA | Karaisali | 4.09 | 251 | ePN | Pn | 16 38 09.1 | +2.5 |
| KARA | Karaisali | 4.09 | 251 | ePn | Pn | 16 38 09.1 | +2.5 |
| NIG | Nigde | 4.20 | 264 | ePN | Pn | 16 38 10.1 | +1.7 |
| NIG | Nigde | 4.20 | 264 | ePn | Pn | 16 38 10.1 | +1.7 |
| ARNB | Al Arnab | 4.22 | 229 | eP | Pn | 16 38 09.4 | +0.9 |
| ARNB | | | | eS | Sb | 16 39 08.1 | -1.4 |
| ARNB | | | | AML | AML | 16 39 27.2 | |
| | comp=N,124nm,0.6s | | | | | | |
| ARNB | | | | AML | AML | 16 39 31.1 | |
| | comp=E,215nm,0.6s | | | | | | |
| ARNB | Al Arnab | 4.22 | 229 | eP | Pn | 16 38 09.4 | +0.9 |
| ARNB | | | | eS | Sb | 16 39 08.1 | -1.4 |
| | comp=E,215nm,0.6s | | | | | | |
| KFRA | Kufra | 4.27 | 217 | eP | Pn | 16 38 08.4 | -0.7 |
| KFRA | | | | eS | Sb | 16 39 04.2 | -6.7 |
| KFRA | | | | AML | AML | 16 39 31.0 | |
| | comp=E,870nm,0.6s | | | | | | |
| KFRA | | | | AML | AML | 16 39 51.2 | |
| | comp=N,366nm,0.6s | | | | | | |
| KFRA | Kufra | 4.27 | 217 | eP | Pn | 16 38 08.4 | -0.7 |
| KFRA | | | | eS | Sb | 16 39 04.2 | -6.7 |
| | comp=N,366nm,0.6s | | | | | | |
| CORM | Corum | 4.35 | 292 | ePN | Pn | 16 38 12.6 | +2.3 |
| CORM | Corum | 4.35 | 292 | ePn | Pn | 16 38 12.6 | +2.3 |
| GULA | Gulagac | 4.46 | 267 | ePN | Pn | 16 38 13.6 | +1.8 |
| GULA | Gulagac | 4.46 | 267 | ePn | Pn | 16 38 13.6 | +1.8 |
| DIKM | Dikmen | 4.63 | 311 | ePN | Pn | 16 38 16.2 | +2.1 |
| DIKM | Dikmen | 4.63 | 311 | ePn | Pn | 16 38 16.2 | +2.1 |
| BIDA | Albida | 4.66 | 219 | eP | Pn | 16 38 14.4 | -0.1 |
| BIDA | | | | eS | Sn | 16 39 11.6 | +2.3 |
| BIDA | | | | AML | AML | 16 39 47.2 | |
| | comp=E,164nm,0.6s | | | | | | |
| BIDA | | | | AML | AML | 16 39 53.2 | |
| | comp=N,382nm,0.6s | | | | | | |
| BIDA | Albida | 4.66 | 219 | eP | Pn | 16 38 14.4 | -0.1 |
| BIDA | | | | eS | Sn | 16 39 11.6 | +2.3 |
| | comp=N,382nm,0.6s | | | | | | |
| ONI | Oni | 4.74 | 34 | P | Pg | 16 38 30.3 | -3.5 |
| YAYX | Yaylak | 4.77 | 275 | ePN | Pn | 16 38 18.3 | +2.2 |
| YAYX | Yaylak | 4.77 | 275 | ePn | Pn | 16 38 18.3 | +2.2 |
| KAMT | Kaman | 4.87 | 280 | ePN | Pn | 16 38 20.5 | +3.0 |
| KAMT | Kaman | 4.87 | 280 | ePn | Pn | 16 38 20.5 | +3.0 |
| IAZR | Azarshahr | 4.89 | 100 | eP | Pg | 16 38 44.6 | +8.0 |
| YESY | Yesilyurt | 4.94 | 261 | ePN | Pn | 16 38 20.9 | +2.6 |
| YESY | Yesilyurt | 4.94 | 261 | ePn | Pn | 16 38 21.0 | +2.6 |
| HAWK | Haweek | 5.02 | 215 | eP | Pn | 16 38 20.0 | +0.5 |
| HAWK | | | | eS | Sn | 16 39 21.5 | +3.2 |
| HAWK | | | | AML | AML | 16 40 01.4 | |
| | comp=E,75nm,0.6s | | | | | | |
| HAWK | | | | AML | AML | 16 40 09.6 | |
| | comp=N,97nm,0.6s | | | | | | |
| HAWK | Haweek | 5.02 | 215 | eP | Pn | 16 38 20.0 | +0.5 |
| HAWK | | | | eS | Sn | 16 39 21.5 | +3.2 |
| | comp=N,97nm,0.6s | | | | | | |
| DGRG | David-gareji | 5.02 | 55 | P | Pn | 16 38 23.4 | +3.9 |
| DGRG | David-gareji | 5.02 | 55 | P | Pn | 16 38 23.4 | +3.9 |
| IHRS | Heris | 5.61 | 92 | eP | Pg | 16 38 51.3 | +0.9 |
| IDHR | Dehrash | 6.55 | 125 | eP | Pn | 16 38 40.9 | +0.2 |
| IDHR | Dehrash | 6.55 | 125 | eP | Pn | 16 38 40.9 | +0.2 |
| IGHG | Ghaleghazi | 6.91 | 127 | eP | Pn | 16 38 48.2 | +2.7 |
| IGHG | Ghaleghazi | 6.91 | 127 | eP | Pn | 16 38 48.2 | +2.7 |
| MMLI | Mount Malkishu | 7.22 | 212 | ePN | Pn | 16 38 52.7 | +3.0 |
| MMLI | Mount Malkishu | 7.22 | 212 | ePn | Pn | 16 38 52.7 | +3.0 |

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*ISCJB **09** 17:03:51.4±0.8, 34°.29S±0°.05×70°.8W±0°.1, h103km±8km, Error ellipse: s-maj=16.4km s-min=5.5km az=27.6*

*GUC **09** 17:03:52.1±0.6, 34°.25S×70°.81W, h105km±4km, ML3.9*

**ISC 09 17:03:52.2**±1.8**, 34°.29S**±0°.06×**70°.78W**±0°.09**, h99km**±14km**,**

**n19, σ0$^{s}$42/29, 3C-5D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TACH** | **Talagante** | **0.64** | **348** | ⇓*i*P | **Pn** | **17 04 08.9** | **-0.2** |
| TACH | | | | *i* S | **Sn** | **17 04 21.7** | **-0.1** |
| **PCH** | **Pirque** | **0.70** | **19** | ⇓*i*P | **Pn** | **17 04 09.7** | **+0.1** |
| PCH | | | | *i* S | **Sn** | **17 04 22.6** | **-0.1** |
| **ANTU** | **Antumapu** | **0.72** | **10** | *e*P | **Pn** | **17 04 09.8** | **-0.1** |
| ANTU | | | | *i* S | **Sn** | **17 04 23.3** | **+0.2** |
| ANTU | | | | AML | AML | 17 04 24.6 | |
| | comp=E,3µm,0.2s | | | | | | |
| **RCDM** | **Rinconada Maip** | **0.79** | **359** | *e*P | **Pn** | **17 04 10.3** | **-0.2** |
| RCDM | | | | *i* S | **Sn** | **17 04 24.1** | **-0.1** |
| RCDM | | | | AML | AML | 17 04 24.7 | |
| | comp=E,6µm,0.1s | | | | | | |
| **NICH** | **Los Niches** | **0.81** | **207** | ⇑*i*P | **Pn** | **17 04 10.9** | **+0.4** |
| NICH | | | | *i* S | **Sn** | **17 04 25.2** | **+0.9** |
| **SAN** | **Santiago** | **0.83** | **7** | ⇓*i*P | **Pn** | **17 04 10.8** | **-0.2** |
| SAN | | | | *i* S | **Sn** | **17 04 24.8** | **-0.1** |
| **LACH** | **Col Las Americ** | **0.86** | **14** | *i* S | **Sn** | **17 04 25.0** | **-0.3** |
| **CLCH** | **Cerro Calan** | **0.91** | **13** | ⇑*i*P | **Pn** | **17 04 11.7** | **0.0** |
| CLCH | | | | *i* S | **Sn** | **17 04 26.4** | **+0.1** |
| CLCH | | | | AML | AML | 17 04 27.9 | |
| | comp=E,3µm,0.5s | | | | | | |
| **CHPI** | **Pichilemu** | **1.01** | **264** | ⇑*i*P | **Pn** | **17 04 12.6** | **0.0** |
| CHPI | | | | *i* S | **Sn** | **17 04 27.9** | **-0.3** |
| **PEL** | **Peldehue** | **1.14** | **4** | ⇓*i*P | **Pn** | **17 04 14.2** | **0.0** |
| PEL | | | | *i* S | **Sn** | **17 04 31.0** | **+0.2** |
| PEL | | | | AML | AML | 17 04 32.2 | |
| | comp=E,6µm,0.4s | | | | | | |
| **TALC** | **Talca** | **1.31** | **212** | ⇓*i*P | **Pn** | **17 04 15.9** | **-0.2** |
| TALC | | | | *i* S | **Sn** | **17 04 33.8** | **-0.4** |
| **ROC1** | **El Roble** | **1.32** | **351** | *e*P | **Pn** | **17 04 16.4** | **-0.1** |
| **AUSP** | **Uspallata** | **2.37** | **30** | *e*P | **Pn** | **17 04 30.5** | **+0.7** |
| AUSP | | | | *e*S | Sn | 17 05 06.9 | +8.4 |
| **RTLS** | **Leoncito** | **2.77** | **27** | *e*P | **Pn** | **17 04 36.5** | **+1.3** |
| **RTCV** | **Cerro Valdivia** | **3.06** | **39** | *e*P | **Pn** | **17 04 38.9** | **+0.1** |
| **CFAA** | **Coronel Fontan** | **3.42** | **39** | *e*P | **Pn** | **17 04 43.3** | **-0.4** |
| **RTLL** | **Cerro Villicun** | **3.53** | **34** | *e*P | **Pn** | **17 04 45.1** | **+0.1** |
| **AMOG** | **MOGNA** | **3.85** | **31** | *e*P | **Pn** | **17 04 49.4** | **-0.1** |
| **MRA** | **San Martin** | **4.63** | **68** | *e*P | **Pn** | **17 04 59.3** | **-0.6** |

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*KRSC **09** 17:19:39.1±0.7, 55°.13N×160°.44E, h-2$^{km}$±6$^{km}$, ML4.7*

*IDC **09** 17:19:39.5±0.6, 55°.18N×160°.28E, h0$^{km}$, mb4.1/20, mb1 4.3/23, mb1mx4.2/37, mbtmp4.1/23, ML3.4/3, MS3.8/23, Ms1 3.8/23, ms1mx3.7/36, Error ellipse: s-maj=16.2km s-min=12.8km az=145.0*

*MOS **09** 17:19:39.2±0.9, 55°.14N×160°.29E, h6$^{km}$, mb4.7/27, Error ellipse: s-maj=8.9km s-min=3.6km az=87.3*

*ISCJB **09** 17:19:41.8±0.4, 55°.15N±0°.02×160°.22E±0°.04, h24$^{km}$±3$^{km}$, mb4.5/56, MS3.8/22, Error ellipse: s-maj=4.1km s-min=2.8km az=23.6*

*BJI **09** 17:19:42.8, 55°.03N×160°.64E, h53$^{km}$, mb4.6/32, mB5.0/23, Ms4.5/18, Ms7 4.1/19*

*NEIC **09** 17:19:45.5±0.8, 55°.19N×160°.06E, h38$^{km}$±8$^{km}$, mb4.7/26, Error ellipse: s-maj=7.4km s-min=4.8km az=157.0*

**ISC 09 17:19:41.0**±0.7, **55°.14N**±0°.02×**160°.25E**±0°.03, **h15**$^{km}$±4$^{km}$, **n243**, σ**1$^{s}$59**/255, **mb4.6**/56, **MS3.9**/22, **3C-2D, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZV** | **Kizimen** | **0.04** | **131** | *e*P | **Pg** | **17 19 41.8** | **-2.1** |
| **TUMR** | **Tumrok** | **0.16** | **338** | *e*P | **Pg** | **17 19 44.2** | **-0.9** |
| **TUMR** | **Tumrok** | **0.16** | **338** | PN | **Pg** | **17 19 44.2** | **-0.9** |
| **KMNR** | **Kamenistaya** | **0.62** | **359** | *e*P | **Pb** | **17 19 52.5** | **-1.1** |
| **KMNR** | **Kamenistaya** | **0.62** | **359** | PN | **Pb** | **17 19 52.5** | **-1.1** |
| **BZMR** | **Bezymyannaya** | **0.81** | **10** | *e*P | **Pn** | **17 19 56.9** | **-1.1** |
| **KIRR** | **Kirishev** | **0.82** | **4** | *e*P | **Pb** | **17 19 56.0** | **-1.0** |
| KIRR | | | | *e*S | **Sn** | **17 20 09.1** | **-1.0** |
| **KPT** | **Kopyto** | **0.83** | **359** | *e*P | **Pb** | **17 19 56.7** | **-0.5** |
| KPT | | | | *e*S | **Sn** | **17 20 10.3** | **0.0** |
| **KPT** | **Kopyto** | **0.83** | **359** | PN | **Pb** | **17 19 56.7** | **-0.5** |
| KPT | | | | S | **Sn** | **17 20 10.3** | **0.0** |
| **BZWR** | **Bezymyannyi-We** | **0.84** | **10** | *e*P | **Pb** | **17 19 56.5** | **-0.9** |
| BZWR | | | | *e*S | **Sn** | **17 20 10.2** | **-0.4** |
| **ZLN** | **Zelenaya** | **0.94** | **19** | *e*P | **Pn** | **17 19 58.4** | **-1.3** |
| **ZLN** | **Zelenaya** | **0.94** | **19** | PN | **Pn** | **17 19 58.4** | **-1.3** |
| **KOZ** | **Kozyrevsk** | **0.95** | **347** | *e*P | **Pb** | **17 19 58.2** | **-0.9** |
| **KOZ** | **Kozyrevsk** | **0.95** | **347** | PN | **Pb** | **17 19 58.2** | **-0.9** |
| **LGNR** | **Loginova** | **0.98** | **15** | *e*P | **Pn** | **17 19 59.6** | **-0.9** |
| LGNR | | | | *e*S | **Sn** | **17 20 14.2** | **0.0** |
| **LGNR** | **Loginova** | **0.98** | **15** | PN | **Pn** | **17 19 59.6** | **-0.9** |
| LGNR | | | | S | **Sn** | **17 20 14.2** | **0.0** |
| **CIRR** | **Tsirk** | **1.02** | **16** | *e*P | **Pn** | **17 20 00.6** | **-0.3** |
| **CIRR** | **Tsirk** | **1.02** | **16** | PN | **Pn** | **17 20 00.6** | **-0.3** |
| **MKZ** | **Mys Kozlova** | **1.04** | **124** | *e*P | **Pg** | **17 19 58.8** | **-2.1** |
| MKZ | | | | *e*S | **Sb** | **17 20 13.0** | **-0.9** |
| **MKZ** | **Mys Kozlova** | **1.04** | **124** | PN | **Pg** | **17 19 58.8** | **-2.1** |
| MKZ | | | | S | **Sb** | **17 20 13.0** | **-0.9** |
| **KRSR** | **Krestovskiy** | **1.10** | **9** | *e*P | **Pb** | **17 20 00.5** | **-1.2** |
| **KRSR** | **Krestovskiy** | **1.10** | **9** | PN | **Pb** | **17 20 00.5** | **-1.2** |
| **ESO** | **Esso** | **1.18** | **313** | *e*P | **Pg** | **17 20 01.7** | **-2.1** |
| ESO | | | | *e*S | **Sn** | **17 20 19.3** | **+0.5** |
| **ESO** | **Esso** | **1.18** | **313** | PN | **Pg** | **17 20 01.7** | **-2.1** |
| ESO | | | | S | **Sn** | **17 20 19.3** | **+0.5** |
| **KII** | **Karymskiy** | **1.20** | **203** | *e*P | **Pn** | **17 20 03.6** | **+0.4** |
| **KII** | **Karymskiy** | **1.20** | **203** | PN | **Pn** | **17 20 03.6** | **+0.4** |
| **KLY** | **Klyuchi** | **1.20** | **11** | *e*P | **Pn** | **17 20 02.7** | **-0.5** |
| KLY | | | | *e*S | **Sn** | **17 20 20.3** | **+1.1** |
| **SRDR** | **Sredinnyy** | **1.22** | **346** | P | **Pn** | **17 20 03.3** | **-0.3** |
| **SRDR** | **Sredinnyy** | **1.22** | **346** | PN | **Pn** | **17 20 03.3** | **-0.3** |
| **BDR** | **Baidarnaya** | **1.53** | **20** | *e*P | **Pb** | **17 20 07.9** | **-1.2** |
| BDR | | | | *e*S | **Sg** | **17 20 29.3** | **-1.1** |
| **SMKR** | **Semkarok** | **1.60** | **25** | *e*P | **Pg** | **17 20 09.6** | **-2.2** |
| SMKR | | | | *e*S | **Sg** | **17 20 31.6** | **-1.0** |
| **SMKR** | **Semkarok** | **1.60** | **25** | PN | **Pg** | **17 20 09.6** | **-2.2** |
| SMKR | | | | S | **Sg** | **17 20 31.6** | **-1.0** |
| **SRKR** | **Sorokina** | **1.61** | **18** | *e*P | **Pb** | **17 20 09.2** | **-1.2** |
| **SRKR** | **Sorokina** | **1.61** | **18** | PN | **Pb** | **17 20 09.2** | **-1.2** |
| **KBG** | **Krutoberegovo** | **1.79** | **50** | *e*P | **Pn** | **17 20 10.8** | **-0.4** |
| KBG | | | | *e*S | **Sb** | **17 20 34.6** | **-0.9** |
| **GNL** | **Ganaly** | **1.98** | **224** | *e*P | **Pb** | **17 20 15.4** | **-1.2** |
| **GNL** | **Ganaly** | **1.98** | **224** | PN | **Pb** | **17 20 15.4** | **-1.2** |
| **KRX** | **Arik** | **2.01** | **208** | *e*P | **Pb** | **17 20 16.6** | **-0.7** |
| **SDLR** | **Sedlovina** | **2.03** | **204** | *e*P | **Pb** | **17 20 16.8** | **-0.7** |
| SDLR | | | | *e*S | **Sg** | **17 20 44.8** | **-1.3** |
| **SDLR** | **Sedlovina** | **2.03** | **204** | PN | **Pb** | **17 20 16.8** | **-0.7** |
| SDLR | | | | S | **Sg** | **17 20 44.8** | **-1.3** |
| **NLC** | **Nalytchevo** | **2.04** | **195** | *e*P | **Pb** | **17 20 17.1** | **-0.5** |
| NLC | | | | *e*S | **Sg** | **17 20 45.3** | **-1.2** |
| **NLC** | **Nalytchevo** | **2.04** | **195** | PN | **Pb** | **17 20 17.1** | **-0.5** |
| NLC | | | | S | **Sg** | **17 20 45.3** | **-1.2** |
| **SPN** | **Mys Shipunski** | **2.05** | **184** | *e*P | **Pn** | **17 20 14.6** | **-0.2** |
| SPN | | | | *e*S | **Sn** | **17 20 41.3** | **+1.3** |
| **SPN** | **Mys Shipunski** | **2.05** | **184** | PN | **Pn** | **17 20 14.6** | **-0.2** |
| SPN | | | | S | **Sn** | **17 20 41.3** | **+1.3** |
| **SMAR** | **Somma** | **2.06** | **205** | *e*P | **Pb** | **17 20 17.0** | **-1.2** |
| **SMAR** | **Somma** | **2.06** | **205** | PN | **Pb** | **17 20 17.0** | **-1.2** |
| **AVH** | **Avacha** | **2.07** | **206** | *e*P | **Pb** | **17 20 17.2** | **-1.1** |
| **AVH** | **Avacha** | **2.07** | **206** | PN | **Pb** | **17 20 17.2** | **-1.1** |
| **UGLR** | **Uglovaya** | **2.10** | **204** | *e*P | **Pb** | **17 20 18.0** | **-0.8** |
| **PET** | **Petropavlovsk** | **2.32** | **205** | *e*P | **Pb** | **17 20 21.2** | **-1.2** |
| PET | | | | *e*S | **Sg** | **17 20 54.8** | **-0.5** |
| **PET** | **Petropavlovsk** | **2.32** | **205** | *e*PN | **Pb** | **17 20 20.2** | **-2.2** |
| PET | | | | *e*S | **Sg** | **17 20 53.1** | **-2.2** |
| PET | | | | pmax | pmax | | |
| | comp=Z,414nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,820nm,0.9s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,2µm,14.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,4µm,15.0s | | | | | | |
| **PET** | **Petropavlovsk** | **2.32** | **205** | *e*Pn | **Pb** | **17 20 20.7** | **-1.6** |
| **PEA0** | **Petropavlovsk-** | **2.53** | **217** | *e*Pn | **Pn** | **17 20 22.9** | **+1.5** |
| **PETK** | **Petropavlovsk-** | **2.53** | **217** | Pn | **Pn** | **17 20 23.1** | **+1.7** |
| | comp=Z,21nm,0.3s,baz=60,slow=14,SNR=176 | | | | | | |
| PETK | | | | LR | LR | 17 20 59.9 | |
| | comp=Z,226nm,19.2s,baz=36,slow=31 | | | | | | |
| **PETK** | **Petropavlovsk-** | **2.53** | **217** | PN | **Pn** | **17 20 23.1** | **+1.7** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,21nm,0.3s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,226nm,19.2s | | | | | | |
| **APC** | **Apacha** | **2.87** | **221** | *e*P | **Pb** | **17 20 28.7** | **-3.1** |
| **APC** | **Apacha** | **2.87** | **221** | PN | **Pb** | **17 20 28.7** | **-3.1** |
| **RUS** | **Russkaya** | **2.90** | **202** | *e*P | **Pn** | **17 20 28.7** | **+2.2** |
| RUS | | | | *e*S | **Sb** | **17 21 06.1** | **-1.4** |
| **RUS** | **Russkaya** | **2.90** | **202** | PN | **Pn** | **17 20 28.7** | **+2.2** |
| RUS | | | | S | **Sb** | **17 21 06.1** | **-1.4** |
| **MTVR** | **Mutnovka** | **2.93** | **206** | *e*P | **Pb** | **17 20 31.3** | **-1.6** |
| **ASAK** | **Asacha** | **3.09** | **208** | *e*P | **Pb** | **17 20 33.9** | **-1.7** |
| **BKI** | **Bering** | **3.28** | **86** | *e*P | **Pn** | **17 20 30.7** | **-1.1** |
| BKI | | | | *e*S | **Sn** | **17 21 08.8** | **-1.7** |
| **BKI** | **Bering** | **3.28** | **86** | PN | **Pn** | **17 20 30.7** | **-1.1** |
| **PAU** | **Pauzhetka** | **4.21** | **211** | *e*P | Pb | 17 20 49.8 | -4.9 |
| **PAU** | **Pauzhetka** | **4.21** | **211** | PN | Pb | 17 20 49.8 | -4.9 |
| **OSSR** | **Ossora** | **4.40** | **19** | *e*P | Pb | 17 20 51.5 | -6.3 |
| **SKR** | **Severo-Kuril's** | **5.11** | **211** | *e*PN | **Pn** | **17 20 58.2** | **+1.3** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,90nm,0.7s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=N,5µm,10.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,4µm,10.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=E,5µm,12.0s | | | | | | |
| **MA2** | **Magadan** | **6.79** | **315** | *i* PN | **Pn** | **17 21 22.5** | **+2.6** |
| **SMY** | **Shemya** | **8.52** | **101** | *e*PN | Pn | 17 21 52.8 | +9.1 |
| **SMY** | **Shemya** | **8.52** | **101** | *e*Pn | Pn | 17 21 52.8 | +9.1 |
| **SEY** | **Seymchan** | **8.80** | **336** | Pn | **Pn** | **17 21 49.7** | **+2.2** |
| | comp=E,0.3nm,0.3s,baz=265,slow=23,SNR=4.7 | | | | | | |
| **SEY** | **Seymchan** | **8.80** | **336** | *e*PN | Pn | 17 21 50.4 | +2.9 |
| **KUR** | **Kuril'sk** | **12.68** | **224** | ⇓*i*PN | **Pn** | **17 22 41.2** | **+0.7** |
| KUR | | | | pmax | pmax | | |
| | comp=N,3.0nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,9.0nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,148nm,4.1s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,271nm,14.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=E,161nm,14.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,298nm,14.0s | | | | | | |
| **UGL** | **Uglegorsk** | **12.70** | **249** | *e*PN | **Pn** | **17 22 39.3** | **-1.5** |
| **BILL** | **Bilibino** | **13.25** | **10** | *e*PN | **P** | **17 22 56.9** | **-1.2** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **BILL** | **Bilibino** | **13.25** | **10** | P | **Pn** | **17 22 48.9** | **+0.7** |
| **YSS** | **Yuzh-Sakhalins** | **13.69** | **240** | *e*P | **P** | **17 23 01.9** | **-1.1** |
| YSS | | | | MLR | MLR | | |
| | comp=N,300nm,12.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,500nm,12.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,400nm,13.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **13.69** | **240** | P | Pn | 17 22 50.1 | -4.2 |
| **YUK** | **Yuzh-Kuril'sk** | **14.47** | **226** | ⇑*i*P | **Pn** | **17 23 04.0** | **-1.1** |
| YUK | | | | pmax | pmax | | |
| | comp=N,27nm,0.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,26nm,0.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,67nm,0.6s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,515nm,14.0s | | | | | | |
| **ATKA** | **Atka Island** | **15.40** | **90** | *e*Pn | **P** | **17 23 22.3** | **+0.3** |
| | comp=Z,67nm,1.2s | | | | | | |
| **ASAJ** | **Asahikawa** | **15.84** | **233** | Pn | **P** | **17 23 27.7** | **+0.8** |
| | baz=335,slow=4.4 | | | | | | |
| **ASAJ** | **Asahikawa** | **15.84** | **233** | *e*Pn | **P** | **17 23 26.4** | **-0.5** |
| | comp=Z,89nm,1.8s | | | | | | |
| **HABR** | **Khabarovsk** | **16.89** | **257** | *e*P | **Pn** | **17 23 34.6** | **-1.9** |
| HABR | | | | *e*S | **Sn** | **17 26 37.6** | **-6.2** |
| HABR | | | | pmax | pmax | | |
| | comp=E,35nm,1.8s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,84nm,1.8s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,24nm,1.8s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,238nm,14.0s | | | | | | |
| **YAK** | **Yakutsk** | **17.23** | **306** | Pn | **P** | **17 23 43.5** | **+1.3** |
| | comp=Z,0.0nm,0.3s,baz=274,slow=19,SNR=2.3 | | | | | | |
| YAK | | | | LR | LR | 17 30 58.5 | |
| | comp=Z,388nm,18.0s,baz=98,slow=39 | | | | | | |
| **YAK** | **Yakutsk** | **17.23** | **306** | *e*P | **P** | **17 23 42.9** | **+0.7** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,3.0nm,1.4s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,1.0nm,1.1s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,62nm,19.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,33nm,20.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,55nm,18.0s | | | | | | |
| **YAK** | **Yakutsk** | **17.23** | **306** | *e*Pn | **Pn** | **17 23 37.1** | **-3.6** |
| | comp=Z,38nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **18.37** | **263** | *e*P | Pn | 17 23 49.0 | -5.8 |
| KLR | | | | MLR | MLR | | |
| | comp=E,900nm,12.0s | | | | | | |
| KLR | | | | MLR | MLR | | |
| | comp=Z,1µm,12.0s | | | | | | |
| **UNV** | **Unalaska Valle** | **19.26** | **80** | *e*P | **P** | **17 24 01.0** | **-3.6** |
| | comp=Z,35nm,1.1s | | | | | | |
| **CLNS** | **Chul'man** | **19.72** | **290** | *e*P | **Pn** | **17 24 12.6** | **+1.4** |
| CLNS | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=E,31nm,1.1s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=N,18nm,1.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=Z,127nm,12.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=N,269nm,12.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=E,276nm,13.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.16** | **251** | P | **P** | **17 24 27.9** | **+2.6** |
| | comp=E,4.7nm,0.7s,baz=50,slow=12,SNR=14 | | | | | | |
| USRK | | | | LR | LR | 17 33 20.5 | |
| | comp=E,306nm,18.1s,baz=41,slow=39 | | | | | | |
| **MDJ** | **Mudanjiang** | **22.20** | **254** | *e*P | **P** | **17 24 37.2** | **+0.7** |
| | comp=E,12nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **23.94** | **228** | *e*P | **P** | **17 24 55.0** | **+0.7** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **23.94** | **228** | *e*P | **P** | **17 24 55.0** | **+0.7** |
| | comp=Z,22nm,1.3s | | | | | | |
| **MAT** | **Matsushiro** | **23.94** | **228** | P | **P** | **17 24 54.5** | **+0.2** |
| MAT | | | | S | **S** | **17 29 05.2** | **-4.9** |
| **MJAR** | **Matsushiro Arr** | **23.94** | **228** | P | **P** | **17 24 55.4** | **+1.1** |
| | comp=Z,2.9nm,0.7s,baz=20,slow=9.5,SNR=10 | | | | | | |
| MJAR | | | | LR | LR | 17 34 43.0 | |
| | comp=Z,79nm,18.3s,baz=95,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **23.94** | **228** | P | **P** | **17 24 55.4** | **+1.1** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,79nm,18.3s | | | | | | |
| **CN2** | **Changchun** | **25.03** | **258** | *e*P | **P** | **17 25 06.0** | **+1.8** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **CAST** | **Castle Rocks** | **25.16** | **51** | *e*P | **P** | **17 25 05.6** | **+0.4** |
| | comp=Z,11nm,0.6s | | | | | | |
| **HIA** | **Hailar** | **25.23** | **274** | *e*P | **P** | **17 25 03.1** | **-2.9** |
| **HIA** | **Hailar** | **25.23** | **274** | *e*P | **P** | **17 25 03.1** | **-2.9** |
| **BOD** | **Bodaibo** | **25.30** | **295** | *e*P | **P** | **17 25 07.1** | **+0.7** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| **SPU** | **Mount Spurr** | **25.39** | **57** | *e*P | P | 17 25 12.2 | +4.9 |
| **MLY** | **Manley** | **25.69** | **48** | *e*P | **P** | **17 25 12.4** | **+2.4** |
| | comp=Z,9.2nm,1.2s | | | | | | |
| **KDAK** | **Kodiak Island** | **25.78** | **65** | LR | LR | 17 35 01.1 | |
| | comp=Z,33nm,21.9s,baz=281,slow=36 | | | | | | |
| **MCK** | **McKinley** | **26.54** | **51** | *e*P | **P** | **17 25 17.7** | **0.0** |
| **MCK** | **McKinley** | **26.54** | **51** | *e*P | **P** | **17 25 17.7** | **0.0** |
| **WRH** | **Wood River Hil** | **26.85** | **49** | *e*P | **P** | **17 25 24.1** | **+3.6** |
| | comp=Z,102nm,2.8s | | | | | | |
| **ILAR** | **Eielson Array** | **27.34** | **48** | P | **P** | **17 25 25.5** | **+0.6** |
| | comp=Z,0.9nm,0.6s,baz=255,slow=5.5,SNR=6.6 | | | | | | |
| ILAR | | | | LR | LR | 17 37 48.4 | |
| | comp=Z,168nm,18.1s,baz=302,slow=40 | | | | | | |
| **ILAR** | **Eielson Array** | **27.34** | **48** | P | **P** | **17 25 25.5** | **+0.6** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| ILAR | | | | MLR | MLR | | |
| | comp=Z,168nm,18.1s | | | | | | |
| **KSRS** | **Korea Array** | **28.13** | **245** | P | **P** | **17 25 34.2** | **+2.1** |
| | comp=Z,1.2nm,0.8s,baz=36,slow=9.0,SNR=3.9 | | | | | | |
| KSRS | | | | LR | LR | 17 35 44.4 | |
| | comp=Z,68nm,21.7s,baz=47,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **28.13** | **245** | P | **P** | **17 25 34.2** | **+2.1** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,68nm,21.7s | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.16** | **245** | P | **P** | **17 25 34.2** | **+1.8** |
| **KSAR** | **Wonju Array Be** | **28.16** | **245** | P | **P** | **17 25 34.2** | **+1.8** |
| **INK** | **Inuvik** | **32.21** | **40** | P | **P** | **17 26 08.3** | **+0.4** |
| | comp=Z,3.3nm,1.1s,baz=61,slow=9.6,SNR=3.2 | | | | | | |
| **INK** | **Inuvik** | **32.21** | **40** | P | **P** | **17 26 08.3** | **+0.4** |
| INK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **TLY** | **Talaya** | **33.13** | **288** | *e*P | **P** | **17 26 17.1** | **+0.9** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **TLY** | **Talaya** | **33.13** | **288** | *e*P | **P** | **17 26 17.1** | **+0.9** |
| | comp=Z,5.2nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **33.18** | **280** | *e*P | **P** | **17 26 17.9** | **+1.0** |
| **ULN** | **Ulaanbaatar** | **33.18** | **280** | *e*P | **P** | **17 26 17.9** | **+1.0** |
| | comp=Z,24nm,2.3s | | | | | | |
| **SONA1** | **Songino Array** | **33.56** | **280** | *e*P | **P** | **17 26 21.3** | **+1.2** |
| **SONM** | **Songino Array** | **33.57** | **280** | P | **P** | **17 26 21.4** | **+1.2** |
| | comp=Z,1.0nm,0.6s,baz=56,slow=6.8,SNR=9.7 | | | | | | |
| SONM | | | | PcP | **PcP** | **17 29 00.1** | **-0.2** |
| | comp=Z,1.4nm,1.0s,baz=111,slow=1.0,SNR=6.0 | | | | | | |
| SONM | | | | LR | LR | 17 41 08.6 | |
| | comp=Z,133nm,18.1s,baz=54,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **33.57** | **280** | P | **P** | **17 26 21.4** | **+1.2** |
| SONM | | | | | | 17 29 00.1 | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,133nm,18.1s | | | | | | |
| **ZAK** | **Zakamensk** | **33.97** | **286** | *e*P | **P** | **17 26 23.5** | **-0.1** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **34.81** | **266** | *e*P | **P** | **17 26 31.2** | **+0.2** |
| HHC | | | | S | S | 17 31 55.3 | -5.8 |
| HHC | | | | PMZ | | | |
| | comp=Z,36nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,100nm,5.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,200nm,13.6s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,180nm,14.8s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,160nm,14.8s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.70** | **169** | T | T | 18 03 58.2 | |
| | baz=355,slow=76,SNR=118 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.72** | **169** | T | T | 18 04 00.4 | |
| | baz=355,slow=76,SNR=91 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.72** | **169** | T | T | 18 03 59.5 | |
| | baz=355,slow=76,SNR=119 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.89** | **170** | T | T | 18 05 32.5 | |
| | baz=353,slow=76,SNR=6.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **36.91** | **170** | T | T | 18 05 25.8 | |
| | baz=353,slow=76,SNR=4.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **36.91** | **170** | T | T | 18 05 31.8 | |
| | baz=353,slow=76,SNR=3.8 | | | | | | |
| **NJ2** | **Nanjing** | **37.04** | **249** | *e*P | **P** | **17 26 50.6** | **+0.6** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,30nm,0.9s | | | | | | |
| **WHN** | **Wuhan** | **40.65** | **252** | P | **P** | **17 27 22.2** | **+2.0** |
| WHN | | | | LZ | | | |
| | comp=Z,400nm,21.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **41.61** | **44** | P | **P** | **17 27 27.4** | **-0.4** |
| | comp=Z,0.7nm,0.7s,baz=302,slow=8.0,SNR=3.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **41.61** | **44** | P | **P** | **17 27 27.4** | **-0.4** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **41.78** | **301** | *e*P | **P** | **17 27 30.3** | **+1.0** |
| **ZALV** | **Zalesovo Beam** | **41.78** | **301** | P | **P** | **17 27 30.2** | **+0.9** |
| | comp=Z,0.3nm,0.3s,baz=74,slow=5.3,SNR=4.6 | | | | | | |
| ZALV | | | | LR | LR | 17 46 13.2 | |
| | comp=Z,233nm,19.0s,baz=70,slow=38 | | | | | | |
| **NVS** | **Novosibirsk** | **42.06** | **303** | *e*P | **P** | **17 27 32.9** | **+1.3** |
| NVS | | | | pmax | pmax | | |
| | comp=N,8.0nm,1.4s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,12nm,1.4s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,19nm,1.4s | | | | | | |
| **LZH** | **Lanzhou** | **42.48** | **267** | *e*P | **P** | **17 27 35.3** | **-0.2** |
| LZH | | | | pP | pP | 17 27 47.3 | +7.1 |
| LZH | | | | sP | sP | 17 27 55.5 | +13 |
| LZH | | | | PMZ | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **GTA** | **Gaotai** | **42.51** | **274** | *e*P | **P** | **17 27 38.6** | **+3.0** |
| GTA | | | | pP | pP | 17 27 50.5 | +10 |
| GTA | | | | sP | sP | 17 27 55.4 | +13 |
| GTA | | | | S | **S** | **17 33 56.9** | **-0.2** |
| GTA | | | | sS | sS | 17 34 17.3 | +12 |
| GTA | | | | SS | **SS** | **17 37 01.0** | **-5.4** |
| GTA | | | | PMZ | | | |
| | comp=Z,4.0nm,1.3s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,100nm,4.0s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,270nm,14.3s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,260nm,13.8s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,400nm,13.3s | | | | | | |
| **CD2** | **Chengdu** | **46.29** | **262** | *e*P | **P** | **17 28 05.3** | **-0.6** |
| CD2 | | | | pP | pP | 17 28 19.2 | +8.6 |
| CD2 | | | | PP | **PP** | **17 29 54.1** | **-0.3** |
| CD2 | | | | PcS | **PcS** | **17 33 35.4** | **-0.3** |
| CD2 | | | | S | **S** | **17 34 47.5** | **-4.7** |
| CD2 | | | | sS | sS | 17 35 11.6 | +12 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| **WMQ** | **Urumqi** | **46.41** | **288** | P | **P** | **17 28 08.0** | **+1.3** |
| WMQ | | | | pP | pP | 17 28 24.4 | +13 |
| WMQ | | | | sP | sP | 17 28 30.0 | +17 |
| WMQ | | | | PP | **PP** | **17 29 58.0** | **+2.6** |
| WMQ | | | | S | **S** | **17 34 50.0** | **-3.6** |
| WMQ | | | | PMZ | | | |
| | comp=Z,18nm,1.0s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,38nm,5.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,160nm,18.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,130nm,17.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,200nm,20.0s | | | | | | |
| **KURK** | **Kurchatov** | **46.76** | **300** | *e*P | **P** | **17 28 09.3** | **+0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| **KURK** | **Kurchatov** | **46.76** | **300** | *e*P | **P** | **17 28 09.3** | **+0.2** |
| | comp=Z,25nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **47.38** | **294** | P | **P** | **17 28 14.1** | **0.0** |
| | comp=Z,3.5nm,0.8s,baz=57,slow=7.3,SNR=24 | | | | | | |
| MKAR | | | | LR | LR | 17 49 22.2 | |
| | comp=Z,129nm,18.4s,baz=43,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.38** | **294** | *e*P | **P** | **17 28 14.4** | **+0.3** |
| **MKAR** | **Makanchi Array** | **47.38** | **294** | *e*P | **P** | **17 28 14.5** | **+0.3** |
| **GYA** | **Guiyang** | **48.06** | **256** | *e*P | **P** | **17 28 21.0** | **+1.3** |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **POHA** | **Pohakuloa** | **48.49** | **119** | P | **P** | **17 28 25.7** | **+2.4** |
| | comp=Z,134nm,1.2s | | | | | | |
| **BRVK** | **Borovoye** | **49.23** | **307** | *ce*P | **P** | **17 28 29.8** | **+1.5** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,19nm,1.7s | | | | | | |
| **BRVK** | **Borovoye** | **49.23** | **307** | *e*P | **P** | **17 28 29.1** | **+0.7** |
| **BSMT** | **Bassoo Peak** | **50.28** | **61** | *e*P | **P** | **17 28 38.5** | **+2.0** |
| **JTMT** | **Jette** | **50.60** | **61** | *e*P | **P** | **17 28 40.6** | **+1.6** |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **SVE** | **Sverdlovsk** | **50.86** | **316** | *e*P | **P** | **17 28 42.4** | **+1.8** |
| **KMI** | **Kunming** | **51.30** | **258** | P | **P** | **17 28 45.6** | **+1.1** |
| KMI | | | | pP | pP | 17 29 00.6 | +11 |
| KMI | | | | sP | sP | 17 29 04.8 | +14 |
| KMI | | | | S | **S** | **17 36 04.7** | **+1.6** |
| KMI | | | | PMZ | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,8.0nm,1.3s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,99nm,5.8s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,230nm,19.1s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,160nm,19.3s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,83nm,20.5s | | | | | | |
| **SLMT** | **Seeley Lake** | **51.33** | **61** | *e*P | **P** | **17 28 45.9** | **+1.3** |
| **ARU** | **Arti** | **51.97** | **316** | *d i*P | **P** | **17 28 50.3** | **+1.4** |
| ARU | | | | | | 17 30 44.2 | |
| ARU | | | | S | **S** | **17 36 10.2** | **-0.9** |
| ARU | | | | SS | **SS** | **17 39 41.5** | **-5.8** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| ARU | | | | MLR | MLR | | |
| | comp=Z,239nm,18.0s | | | | | | |
| **ARU** | **Arti** | **51.97** | **316** | *e*P | **P** | **17 28 49.0** | **+0.1** |
| **AAK** | **Ala-Archa** | **54.28** | **295** | *e*P | **P** | **17 29 07.0** | **+0.7** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,25nm,1.2s | | | | | | |
| **AAK** | **Ala-Archa** | **54.28** | **295** | *e*P | **P** | **17 29 06.8** | **+0.5** |
| | comp=Z,9.3nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | **54.42** | **272** | P | **P** | **17 29 07.6** | **-0.3** |
| **LSA** | **Lhasa** | **54.42** | **272** | P | **P** | **17 29 07.6** | **-0.3** |
| **RLMT** | **Red Lodge** | **54.92** | **60** | *e*P | P | 17 29 15.0 | +4.0 |
| | comp=Z,83nm,2.5s | | | | | | |
| **IMW** | **Indian Meadow** | **54.95** | **62** | *e*P | P | 17 29 15.1 | +3.7 |
| | comp=Z,3.4nm,0.8s | | | | | | |
| **NV01** | **Mina Array Sit** | **54.98** | **72** | *e*P | **P** | **17 29 12.9** | **+1.4** |
| **NVAR** | **Mina Array Bea** | **54.98** | **72** | P | **P** | **17 29 13.6** | **+2.0** |
| | comp=Z,2.3nm,0.8s,baz=303,slow=7.0,SNR=15 | | | | | | |
| NVAR | | | | LR | LR | 17 49 46.9 | |
| | comp=Z,62nm,20.0s,baz=21,slow=33 | | | | | | |
| **FXWY** | **Fox Creek** | **55.09** | **62** | *e*P | **P** | **17 29 14.6** | **+2.3** |
| | comp=Z,44nm,2.8s | | | | | | |
| **TPAW** | **Teton Pass** | **55.23** | **62** | *e*P | **P** | **17 29 15.8** | **+2.4** |
| | comp=Z,45nm,2.2s | | | | | | |
| **KSH** | **Kashi** | **55.73** | **291** | P | P | 17 29 22.6 | +5.8 |
| KSH | | | | *e*sP | sP | 17 29 40.7 | +17 |
| KSH | | | | *e*ScP | **ScP** | **17 34 14.7** | **+0.6** |
| KSH | | | | PcS | **PcS** | **17 34 19.3** | **+3.0** |
| KSH | | | | S | **S** | **17 37 04.3** | **+1.6** |
| KSH | | | | ScS | **ScS** | **17 39 02.4** | **-2.9** |
| KSH | | | | PMZ | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,130nm,4.7s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,160nm,5.8s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,97nm,5.5s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,170nm,11.7s | | | | | | |
| **KKAR** | **Karatay Array** | **55.99** | **298** | P | **P** | **17 29 16.8** | **-1.7** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **55.99** | **298** | P | **P** | **17 29 16.8** | **-1.7** |
| | comp=Z,5.4nm,0.9s | | | | | | |
| **BW06** | **Boulder Array** | **56.46** | **62** | *e*P | **P** | **17 29 24.0** | **+1.9** |
| **ABKAR** | **Akbulak array** | **56.55** | **309** | *e*P | **P** | **17 29 22.8** | **+0.4** |
| **DUG** | **Dugway** | **56.65** | **66** | *e*P | **P** | **17 29 24.3** | **+0.9** |
| DUG | | | | pmax | pmax | | |
| | comp=Z,38nm,2.2s | | | | | | |
| **DUG** | **Dugway** | **56.65** | **66** | *e*P | **P** | **17 29 24.3** | **+0.9** |
| | comp=Z,38nm,2.2s | | | | | | |
| **TPNV** | **Topopah Spring** | **57.18** | **71** | *e*P | P | 17 29 30.5 | +3.3 |
| TPNV | | | | pmax | pmax | | |
| | comp=Z,53nm,2.6s | | | | | | |
| **TPNV** | **Topopah Spring** | **57.18** | **71** | *e*P | P | 17 29 30.5 | +3.3 |
| | comp=Z,53nm,2.6s | | | | | | |
| **ULM** | **Lac du Bonnet** | **57.36** | **48** | LR | LR | 17 56 39.6 | |
| | comp=Z,137nm,18.0s,baz=81,slow=39 | | | | | | |
| **GSC** | **Goldstone** | **58.08** | **73** | *e*P | P | 17 29 37.4 | +3.9 |
| **GSC** | **Goldstone** | **58.08** | **73** | *e*P | P | 17 29 37.4 | +3.9 |
| **FINES** | **FINESS Array B** | **58.28** | **336** | P | **P** | **17 29 34.5** | **+0.1** |
| | comp=Z,3.4nm,0.8s,baz=31,slow=8.9,SNR=6.3 | | | | | | |
| FINES | | | | LR | LR | 17 59 11.6 | |
| | comp=Z,67nm,18.9s,baz=20,slow=41 | | | | | | |
| **FINES** | **FINESS Array B** | **58.28** | **336** | *ce*P | P | 17 29 37.5 | +3.1 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **SRU** | **San Rafael** | **58.64** | **66** | *e*P | **P** | **17 29 39.3** | **+1.8** |
| SRU | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **SRU** | **San Rafael** | **58.64** | **66** | *e*P | **P** | **17 29 39.3** | **+1.8** |
| | comp=Z,4.6nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.71** | **257** | LR | LR | 17 58 00.5 | |
| | comp=Z,108nm,18.1s,baz=38,slow=39 | | | | | | |
| **PV05** | **Paradox Valley** | **60.16** | **65** | *e*P | **P** | **17 29 50.0** | **+2.0** |
| **NB2** | **NORSAR Subarra** | **61.60** | **343** | P | **P** | **17 29 57.4** | **+0.2** |
| | comp=Z,4.5nm,1.2s,baz=20,slow=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **61.60** | **343** | P | **P** | **17 29 57.5** | **+0.2** |
| | comp=Z,0.9nm,0.6s,baz=21,slow=6.8,SNR=5.2 | | | | | | |
| NOA | | | | LR | LR | 17 59 00.3 | |
| | comp=Z,16nm,18.4s,baz=295,slow=38 | | | | | | |
| **NOA** | **NORSAR Array B** | **61.60** | **343** | P | **P** | **17 29 57.5** | **+0.2** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,16nm,18.4s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **62.18** | **324** | *e*P | P | 17 30 04.4 | +3.2 |
| LPSR | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,7.0nm,0.9s | | | | | | |
| **VRH** | **Novokhopyorsk** | **62.36** | **321** | *e*P | **P** | **17 30 02.7** | **+0.3** |
| VRH | | | | pmax | pmax | | |
| | comp=E,20nm,1.1s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | |
| **VSR** | **Storozhevoye** | **63.25** | **323** | *e*P | P | 17 30 11.5 | +3.1 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,3.0nm,0.5s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.8s | | | | | | |
| **VORD** | **Divnogorie** | **63.42** | **323** | *e*P | **P** | **17 30 08.9** | **-0.5** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.8s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **63.91** | **66** | *e*P | P | 17 30 19.6 | +6.4 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **GEYT** | **Alibeck** | **66.06** | **302** | P | **P** | **17 30 27.8** | **+0.8** |
| | comp=Z,5.3nm,0.9s,baz=12,slow=7.6,SNR=8.8 | | | | | | |
| GEYT | | | | LR | LR | 18 02 03.3 | |
| | comp=Z,237nm,18.1s,baz=45,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **66.91** | **329** | P | **P** | **17 30 32.4** | **+0.2** |
| | comp=Z,1.2nm,0.6s,baz=24,slow=5.8,SNR=6.6 | | | | | | |
| AKASG | | | | LR | LR | 18 03 31.3 | |
| | comp=Z,108nm,18.7s,baz=30,slow=39 | | | | | | |
| **AKASG** | **Malin Array Be** | **66.91** | **329** | *i* P | **P** | **17 30 32.0** | **-0.1** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **MNTX** | **Cornudas Mount** | **67.00** | **67** | *e*P | **P** | **17 30 34.4** | **+1.4** |
| | comp=Z,42nm,2.8s | | | | | | |
| **KSM** | **Kuching** | **67.02** | **236** | P | **P** | **17 30 32.9** | **-0.4** |
| **WMOK** | **Wichita Mounta** | **68.01** | **61** | *e*P | **P** | **17 30 40.0** | **+0.6** |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **68.01** | **61** | *e*P | **P** | **17 30 40.0** | **+0.6** |
| | comp=Z,4.8nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **68.12** | **316** | P | **P** | **17 30 40.9** | **+1.0** |
| | comp=Z,6.9nm,1.0s,baz=37,slow=19,SNR=6.4 | | | | | | |
| KBZ | | | | LR | LR | 18 04 27.9 | |
| | comp=Z,155nm,20.1s,baz=24,slow=40 | | | | | | |
| **KBZ** | **Khabaz** | **68.12** | **316** | P | **P** | **17 30 40.9** | **+1.0** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| KBZ | | | | MLR | MLR | | |
| | comp=Z,155nm,20.1s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **69.76** | **68** | *e*P | **P** | **17 30 51.4** | **+1.0** |
| **TXAR** | **Lajitas Array** | **69.76** | **68** | P | **P** | **17 30 51.2** | **+0.8** |
| | comp=Z,2.6nm,0.8s,baz=292,slow=4.5,SNR=25 | | | | | | |
| TXAR | | | | LR | LR | 17 59 31.2 | |
| | comp=Z,34nm,18.4s,baz=0.0,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.76** | **68** | P | **P** | **17 30 51.3** | **+0.8** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| TXAR | | | | MLR | MLR | | |
| | comp=Z,34nm,18.4s | | | | | | |
| **STHS** | **Stebnicka Huta** | **70.31** | **333** | *e*P | **P** | **17 30 55.1** | **+1.7** |
| STHS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **STHS** | **Stebnicka Huta** | **70.31** | **333** | *e*P | **P** | **17 30 55.1** | **+1.7** |
| STHS | | | | *e* | | 18 03 55.9 | |
| **GNI** | **Garni** | **70.35** | **313** | *e*P | **P** | **17 30 56.5** | **+2.5** |
| **GNI** | **Garni** | **70.35** | **313** | *e*P | **P** | **17 30 56.5** | **+2.5** |
| **CLL** | **Collm** | **70.48** | **339** | *i* P | **P** | **17 30 55.7** | **+1.4** |
| CLL | | | | *i* | | 17 30 58.4 | |
| CLL | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **CLL** | **Collm** | **70.48** | **339** | *i* P | **P** | **17 30 55.7** | **+1.4** |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **70.48** | **332** | *e*P | **P** | **17 30 55.5** | **+1.1** |
| KOLS | | | | pmax | pmax | | |
| | comp=Z,22nm,2.3s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **70.48** | **332** | *e*P | **P** | **17 30 55.5** | **+1.1** |
| **DPC** | **Dobruska-Polom** | **70.65** | **336** | *e*P | **P** | **17 30 57.0** | **+1.5** |
| **DPC** | **Dobruska-Polom** | **70.65** | **336** | *e*P | **P** | **17 30 57.0** | **+1.5** |
| **KRLC** | **Kraliky** | **70.80** | **336** | *e*P | **P** | **17 30 58.2** | **+1.8** |
| KRLC | | | | *e* | | 17 31 01.1 | |
| **KRLC** | **Kraliky** | **70.80** | **336** | *e*P | **P** | **17 30 58.2** | **+1.8** |
| KRLC | | | | *e*x | x | 17 31 01.1 | |
| **BUR04** | **Bucovina Ar. S** | **70.85** | **330** | *e*P | **P** | **17 30 57.7** | **+0.9** |
| **JCT** | **Junction City** | **70.88** | **64** | P | **P** | **17 30 56.9** | **-0.3** |
| JCT | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **JCT** | **Junction City** | **70.88** | **64** | P | **P** | **17 30 56.9** | **-0.3** |
| | comp=Z,2.8nm,0.5s | | | | | | |
| **MORC** | **Moravsky Berou** | **70.90** | **335** | *e*P | **P** | **17 30 57.7** | **+0.6** |
| **MORC** | **Moravsky Berou** | **70.90** | **335** | *e*P | **P** | **17 30 57.6** | **+0.6** |
| **LANS** | **Liptovska Anna** | **71.01** | **334** | *e*P | **P** | **17 31 00.0** | **+2.3** |
| **LANS** | **Liptovska Anna** | **71.01** | **334** | *e*P | **P** | **17 31 00.0** | **+2.3** |
| **PRU** | **Pruhonice** | **71.39** | **337** | *e*P | **P** | **17 31 01.2** | **+1.3** |
| **PRU** | **Pruhonice** | **71.39** | **337** | *e*P | **P** | **17 31 01.2** | **+1.3** |
| **VRAC** | **Vranov** | **71.56** | **336** | LR | LR | 18 05 57.1 | |
| | comp=Z,111nm,19.6s,baz=21,slow=39 | | | | | | |
| **VYHS** | **Vyhne** | **71.78** | **334** | *e*P | **P** | **17 31 03.2** | **+0.9** |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,16nm,2.3s | | | | | | |
| **VYHS** | **Vyhne** | **71.78** | **334** | *e*P | **P** | **17 31 03.2** | **+0.9** |
| **KHC** | **Kasperske Hory** | **72.41** | **338** | *e*P | **P** | **17 31 07.6** | **+1.5** |
| **KHC** | **Kasperske Hory** | **72.41** | **338** | *e*P | **P** | **17 31 07.6** | **+1.5** |
| **GERES** | **GERESS Array B** | **72.65** | **338** | P | **P** | **17 31 09.1** | **+1.4** |
| | comp=Z,0.9nm,0.8s,baz=38,slow=6.8,SNR=4.3 | | | | | | |
| GERES | | | | LR | LR | 18 07 05.5 | |
| | comp=Z,67nm,18.0s,baz=346,slow=39 | | | | | | |
| **GERES** | **GERESS Array B** | **72.65** | **338** | P | **P** | **17 31 09.1** | **+1.4** |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| GERES | | | | MLR | MLR | | |
| | comp=Z,67nm,18.0s | | | | | | |
| **BRTR** | **Keskin Array B** | **75.10** | **320** | P | **P** | **17 31 22.0** | **-0.2** |
| | comp=Z,2.0nm,1.0s,baz=57,slow=4.6,SNR=4.9 | | | | | | |
| BRTR | | | | LR | LR | 18 07 37.4 | |
| | comp=Z,50nm,18.6s,baz=28,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **75.10** | **320** | *i* P | **P** | **17 31 23.0** | **+0.8** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **77.97** | **205** | P | **P** | **17 31 39.2** | **+1.0** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,12nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **77.97** | **205** | P | **P** | **17 31 39.2** | **+1.0** |
| | comp=Z,12nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **77.98** | **205** | P | **P** | **17 31 38.8** | **+0.4** |
| | comp=Z,2.1nm,0.9s,baz=21,slow=5.9,SNR=9.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **77.98** | **205** | *i* P | **P** | **17 31 39.7** | **+1.4** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **AS01** | **Alice Springs** | **81.65** | **204** | *e*P | **P** | **17 31 59.5** | **+1.3** |
| **ASAR** | **Alice Springs** | **81.66** | **204** | P | **P** | **17 31 59.5** | **+1.2** |
| | comp=Z,2.5nm,0.9s,baz=15,slow=5.2,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **81.66** | **204** | P | **P** | **17 31 59.5** | **+1.2** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **ATD** | **Arta Tunnel** | **95.53** | **299** | LR | LR | 18 20 24.7 | |
| | comp=Z,103nm,19.4s,baz=20,slow=38 | | | | | | |

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*ISCJB **09** 17:42:42.8±0.5, 37°.90N±0°.02×27°.29E±0°.03, h4km±5km, Error ellipse: s-maj=4.6km s-min=3.5km az=142.7*
*ISK **09** 17:42:42.0, 37°.93N×27°.32E, h5km, MD2.8*
*CSEM **09** 17:42:43.0±0.2, 37°.91N×27°.30E, h5km, MD2.7, Error ellipse: s-maj=4.3km s-min=3.3km az=70.0*
*DDA **09** 17:42:43.2, 37°.89N×27°.25E, h2km, Md2.7*
**ISC 09 17:42:42.9**±1.0**, 37°.90N**±0°.02×**27°.30E**±0°.02**, h8**km±9km**,**
**n39,** σ**0s.46**/58**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GCAM** | **G?zelcaml?** | **0.21** | **195** | *i* P | **Pg** | **17 42 46.9** | **-0.2** |
| GCAM | | | | *i* S | **Sg** | **17 42 49.8** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **0.21** | **195** | P | **Pg** | **17 42 46.9** | **-0.2** |
| GCAM | | | | S | **Sg** | **17 42 49.8** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.47** | **84** | PG | **Pg** | **17 42 51.8** | **-0.1** |
| AYDB | | | | *e*SG | **Sg** | **17 42 59.1** | **+1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.47** | **84** | *i* Pg | **Pg** | **17 42 51.8** | **-0.1** |
| AYDB | | | | *e*Sg | **Sg** | **17 42 59.1** | **+1.0** |
| **IZM** | **Izmir** | **0.49** | **356** | PG | **Pg** | **17 42 52.4** | **-0.1** |
| **IZM** | **Izmir** | **0.49** | **356** | *i* Pg | **Pg** | **17 42 52.4** | **-0.1** |
| **AYDN** | **Tasoluk** | **0.52** | **118** | *i* P | **Pb** | **17 42 54.6** | **+0.3** |
| AYDN | | | | *i* S | **Sb** | **17 43 01.3** | **-0.6** |
| **AYDN** | **Tasoluk** | **0.52** | **118** | P | **Pb** | **17 42 54.6** | **+0.3** |
| AYDN | | | | S | **Sb** | **17 43 01.3** | **-0.6** |
| **ZEY** | **˜zmir** | **0.71** | **298** | P | **Pg** | **17 42 56.3** | **-0.3** |
| ZEY | | | | S | **Sg** | **17 43 06.4** | **+0.4** |
| **URLA** | **Izmir** | **0.72** | **310** | *i* P | **Pg** | **17 42 56.7** | **0.0** |
| URLA | | | | *i* S | **Sb** | **17 43 07.8** | **0.0** |
| **URLA** | **Izmir** | **0.72** | **310** | P | **Pg** | **17 42 56.7** | **0.0** |
| URLA | | | | S | **Sb** | **17 43 07.8** | **0.0** |
| **BODT** | **Bodrum** | **0.84** | **180** | *e*PG | **Pb** | **17 42 59.8** | **+0.1** |
| **BODT** | **Bodrum** | **0.84** | **180** | *e*Pg | **Pb** | **17 42 59.8** | **+0.1** |
| **BDRM** | **Kayabasi** | **0.84** | **172** | *i* P | **Pg** | **17 42 58.9** | **-0.2** |
| BDRM | | | | *i* S | **Sb** | **17 43 11.2** | **-0.1** |
| **BDRM** | **Kayabasi** | **0.84** | **172** | P | **Pg** | **17 42 58.9** | **-0.2** |
| BDRM | | | | S | **Sb** | **17 43 11.2** | **-0.1** |
| **AKHS** | **Akhisar** | **1.05** | **22** | *i* P | **Pb** | **17 43 03.3** | **-0.1** |
| AKHS | | | | *i* S | **Sb** | **17 43 18.2** | **+0.8** |
| **AKHS** | **Akhisar** | **1.05** | **22** | P | **Pb** | **17 43 03.3** | **-0.1** |
| AKHS | | | | S | **Sb** | **17 43 18.2** | **+0.8** |
| **AKS** | **Akhisar** | **1.05** | **22** | *e*PG | **Pg** | **17 43 02.5** | **-0.6** |
| **AKS** | **Akhisar** | **1.05** | **22** | *e*Pg | **Pg** | **17 43 02.5** | **-0.6** |
| **YER** | **Yerkesik** | **1.09** | **134** | *e*PN | **Pb** | **17 43 04.2** | **+0.1** |
| **YER** | **Yerkesik** | **1.09** | **134** | *e*Pn | **Pb** | **17 43 04.2** | **+0.1** |
| **CHOS** | **Chios island** | **1.10** | **297** | *e*PN | **Pb** | **17 43 04.1** | **0.0** |
| **CHOS** | **Chios island** | **1.10** | **297** | *e*Pn | **Pb** | **17 43 04.1** | **0.0** |
| **MANT** | **Manisa** | **1.15** | **59** | *i* P | **Pn** | **17 43 06.1** | **+0.6** |
| MANT | | | | *i* S | **Sg** | **17 43 19.0** | **-0.9** |
| **MANT** | **Manisa** | **1.15** | **59** | P | **Pn** | **17 43 06.1** | **+0.6** |
| MANT | | | | S | **Sg** | **17 43 19.0** | **-0.9** |
| **DKL** | **Dikili** | **1.21** | **345** | *e*PN | **Pg** | **17 43 05.6** | **-0.4** |
| **DKL** | **Dikili** | **1.21** | **345** | *e*Pn | **Pg** | **17 43 05.6** | **-0.4** |
| **KULA** | **Kula-Manisa** | **1.23** | **60** | *e*PN | **Pg** | **17 43 06.0** | **-0.4** |
| **KULA** | **Kula-Manisa** | **1.23** | **60** | *e*Pn | **Pg** | **17 43 06.1** | **-0.4** |
| **TURN** | **Turunc** | **1.46** | **134** | *i* P | **Pn** | **17 43 09.6** | **+0.1** |
| TURN | | | | *i* S | **Sn** | **17 43 28.6** | **-0.2** |
| **TURN** | **Turunc** | **1.46** | **134** | P | **Pn** | **17 43 09.6** | **+0.1** |
| TURN | | | | S | **Sn** | **17 43 28.6** | **-0.2** |
| **DALY** | **Dalyan (Mu˜la** | **1.53** | **135** | *e*PN | **Pb** | **17 43 11.4** | **0.0** |
| **DALY** | **Dalyan (Mu˜la** | **1.53** | **135** | *e*Pn | **Pb** | **17 43 11.4** | **0.0** |
| **APE** | **Apeiranthos** | **1.64** | **240** | *e*PN | **Pb** | **17 43 13.3** | **-0.1** |
| **APE** | **Apeiranthos** | **1.64** | **240** | *e*Pn | **Pb** | **17 43 13.3** | **-0.1** |
| **SIGR** | **SIGRI** | **1.73** | **319** | *e*PN | **Pb** | **17 43 14.6** | **-0.3** |
| **SIGR** | **SIGRI** | **1.73** | **319** | *e*Pn | **Pb** | **17 43 14.6** | **-0.3** |
| **BALY** | **Balya** | **1.85** | **8** | *i* P | **Pn** | **17 43 15.9** | **+0.9** |
| BALY | | | | *i* S | **Sg** | **17 43 41.8** | **-0.6** |
| **BALY** | **Balya** | **1.85** | **8** | P | **Pn** | **17 43 15.9** | **+0.9** |
| BALY | | | | S | **Sg** | **17 43 41.8** | **-0.6** |

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*THE **09** 18:00:14.9, 35°.36N×27°.12E, h0km±3km, ML3.9/1, Error ellipse: s-maj=4.4km s-min=1.5km az=138.0*
*ISK **09** 18:00:15.0, 35°.10N×26°.91E, h22km, ML3.8*
*IDC **09** 18:00:16.9±1.0, 35°.25N×27°.23E, h0km, mb3.5/5, mb1 3.6/9, mb1mx3.5/35, mbtmp3.5/9, ML3.7/4, Error ellipse: s-maj=25.9km s-min=14.1km az=170.0*
*DDA **09** 18:00:17.1, 35°.33N×27°.37E, h5km, Ml3.9*
*ATH **09** 18:00:18.9, 35°.39N×27°.19E, h19km, MD3.4/16*
*CSEM **09** 18:00:19.0±0.2, 35°.39N×27°.18E, h2km, MD3.4, Error ellipse: s-maj=6.8km s-min=3.4km az=166.0*
**ISC 09 18:00:17.1**±1.1**, 35°.35N**±0°.03×**27°.24E**±0°.02**, h0**km±7km**,**
**n138,** σ**1s.53**/156**, mb3.4**/5**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KARP** | **Karpathos** | **0.21** | **341** | *e*PB | **Pg** | **18 00 22.5** | **+1.5** |
| KARP | | | | *e*SB | **Sg** | **18 00 26.9** | **+3.2** |
| **KARP** | **Karpathos** | **0.21** | **341** | P | **Pg** | **18 00 18.6** | **-2.4** |
| KARP | | | | S | **Sg** | **18 00 23.2** | **-0.5** |
| **ZKR** | **Zakros** | **0.87** | **255** | *e*PN | **Pb** | **18 00 34.3** | **-0.8** |
| ZKR | | | | *e*SN | **Sb** | **18 00 46.9** | **-0.4** |
| **ZKR** | **Zakros** | **0.87** | **255** | P | Pg | 18 00 29.2 | -4.6 |
| **ARG** | **Arkhangelos** | **1.12** | **40** | *e*PN | **Pn** | **18 00 40.7** | **+0.7** |
| ARG | | | | *e*SN | **Sn** | **18 00 56.2** | **0.0** |
| **ARG** | **Arkhangelos** | **1.12** | **40** | P | **Pg** | **18 00 37.0** | **-1.6** |
| ARG | | | | S | **Sg** | **18 00 54.4** | **+1.2** |
| **ARG** | **Arkhangelos** | **1.12** | **40** | P | **Pg** | **18 00 37.0** | **-1.6** |
| **ARG** | **Arkhangelos** | **1.12** | **40** | *e*Pn | **Pn** | **18 00 40.7** | **+0.7** |
| ARG | | | | S | **Sg** | **18 00 54.4** | **+1.2** |
| ARG | | | | *e*Sn | **Sn** | **18 00 56.2** | **0.0** |
| **NIS1** | **Nisyros Isl.** | **1.25** | **358** | *e*PN | **Pb** | **18 00 41.4** | **-0.1** |
| NIS1 | | | | *e*SN | **Sn** | **18 01 01.0** | **+1.7** |
| **NIS1** | **Nisyros Isl.** | **1.25** | **358** | *e*PN | **Pg** | **18 00 41.3** | **+0.3** |
| NIS1 | | | | *e*SN | **Sn** | **18 00 58.8** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **1.25** | **358** | *e*Pn | **Pb** | **18 00 41.4** | **-0.1** |
| NIS1 | | | | *e*Sn | **Sn** | **18 00 58.8** | **-0.5** |
| **NPS** | **Neapolis** | **1.34** | **267** | *e*PN | **Pn** | **18 00 43.9** | **+0.9** |
| NPS | | | | *e*SN | **Sn** | **18 01 01.5** | **0.0** |
| **NPS** | **Neapolis** | **1.34** | **267** | *e*Pn | **Pn** | **18 00 43.9** | **+0.9** |
| NPS | | | | *e*Sn | **Sn** | **18 01 01.5** | **0.0** |
| **LAST** | **Lasithi** | **1.46** | **263** | *e*PN | **Pb** | **18 00 45.5** | **+0.4** |
| LAST | | | | *e*SN | **Sn** | **18 01 05.5** | **+1.0** |
| **LAST** | **Lasithi** | **1.46** | **263** | P | Pn | 18 00 40.1 | -4.6 |
| **LAST** | **Lasithi** | **1.46** | **263** | *e*Pn | **Pb** | **18 00 45.5** | **+0.4** |
| LAST | | | | *e*Sn | **Sn** | **18 01 05.5** | **+1.0** |
| **BODT** | **Bodrum** | **1.71** | **2** | *e*PN | **Pn** | **18 00 48.1** | **0.0** |
| BODT | | | | *e*SN | **Sg** | **18 01 13.0** | **+1.0** |
| **BODT** | **Bodrum** | **1.71** | **2** | *e*Pn | **Pn** | **18 00 48.1** | **0.0** |
| BODT | | | | *e*Sn | **Sg** | **18 01 13.0** | **+1.0** |
| **BDRM** | **Kayabasi** | **1.72** | **5** | *i* P | **Pg** | **18 00 50.4** | **+0.4** |
| BDRM | | | | *i* S | **Sg** | **18 01 12.6** | **+0.3** |
| **BDRM** | **Kayabasi** | **1.72** | **5** | P | **Pg** | **18 00 50.4** | **+0.4** |
| BDRM | | | | S | **Sg** | **18 01 12.6** | **+0.3** |
| **SANT** | **Santorini** | **1.77** | **306** | *e*PN | **Pb** | **18 00 49.5** | **-0.9** |
| SANT | | | | *e*SN | **Sb** | **18 01 12.5** | **-0.7** |
| **SANT** | **Santorini** | **1.77** | **306** | *e*Pn | **Pb** | **18 00 49.5** | **-0.9** |
| SANT | | | | *e*Sn | **Sb** | **18 01 12.5** | **-0.7** |
| **THR1** | **Thera Island** | **1.77** | **306** | *e*PN | Pn | 18 00 44.8 | -4.2 |
| **IACM** | **Heraklion** | **1.78** | **269** | *e*PN | **Pg** | **18 00 50.6** | **-0.5** |
| IACM | | | | *e*SN | **Sg** | **18 01 13.8** | **-0.3** |
| **IACM** | **Heraklion** | **1.78** | **269** | *e*Pn | **Pg** | **18 00 50.6** | **-0.5** |
| IACM | | | | *e*Sn | **Sg** | **18 01 13.8** | **-0.3** |
| **THR6** | **Thira Island,** | **1.80** | **304** | P | Pn | 18 00 44.8 | -4.6 |
| **THR3** | **Thira Island,** | **1.83** | **306** | P | Pn | 18 00 45.5 | -4.2 |
| **DALY** | **Dalyan (Mu˜la** | **1.86** | **38** | *e*PN | **Pb** | **18 00 51.6** | **-0.2** |
| **DALY** | **Dalyan (Mu˜la** | **1.86** | **38** | *e*Pn | **Pb** | **18 00 51.6** | **-0.2** |
| **THR5** | **Thira Island,** | **1.87** | **305** | *e*PN | Pn | 18 00 46.2 | -4.1 |
| **TURN** | **Turunc** | **1.88** | **36** | *i* P | **Pn** | **18 00 47.5** | **-2.9** |
| **TURN** | **Turunc** | **1.88** | **36** | P | **Pn** | **18 00 47.5** | **-2.9** |
| TURN | | | | S | **Sn** | **18 01 09.3** | **-5.4** |
| **IDI** | **Anoyia** | **1.93** | **269** | Pn | **Pn** | **18 00 49.4** | **-1.8** |
| | 31nm,0.3s,baz=98,slow=18,SNR=66 | | | | | | |
| IDI | | | | Sn | **Sg** | **18 01 18.6** | **-0.4** |
| | 73nm,0.3s,baz=314,slow=22,SNR=16 | | | | | | |
| IDI | | | | LR | LR | 18 01 50.2 | |
| | comp=Z,120nm,21.6s,baz=94,slow=49 | | | | | | |
| **IDI** | **Anoyia** | **1.93** | **269** | *e*PN | **Pb** | **18 00 52.7** | **-0.4** |
| **IDI** | **Anoyia** | **1.93** | **269** | P | Pn | 18 00 47.5 | -3.6 |
| **IDI** | **Anoyia** | **1.93** | **269** | *e*Pn | **Pb** | **18 00 52.7** | **-0.4** |
| **FETY** | **Fethiye** | **1.97** | **49** | *e*PN | **Pb** | **18 00 53.4** | **-0.4** |
| **FETY** | **Fethiye** | **1.97** | **49** | *e*Pn | **Pb** | **18 00 53.4** | **-0.4** |
| **YER** | **Yerkesik** | **1.97** | **25** | *e*PN | **Pn** | **18 00 53.0** | **+1.3** |
| **YER** | **Yerkesik** | **1.97** | **25** | *e*Pn | **Pn** | **18 00 53.0** | **+1.3** |
| **SIVA** | **Sivas** | **2.02** | **261** | *e*PN | **Pb** | **18 00 53.7** | **-0.9** |
| **SIVA** | **Sivas** | **2.02** | **261** | *e*Pn | **Pb** | **18 00 53.7** | **-0.9** |
| **KSL** | **Kastellorizon** | **2.06** | **67** | *e*PN | **Pb** | **18 00 55.1** | **-0.3** |
| **AKAS** | **Kas** | **2.11** | **65** | *i* P | **Pn** | **18 00 55.4** | **+1.6** |
| AKAS | | | | *i* S | **Sg** | **18 01 25.1** | **+0.1** |
| **AKAS** | **Kas** | **2.11** | **65** | P | **Pn** | **18 00 55.4** | **+1.6** |
| AKAS | | | | S | **Sg** | **18 01 25.1** | **+0.1** |
| **APE** | **Apeiranthos** | **2.20** | **322** | *e*PN | **Pn** | **18 00 52.2** | **-2.8** |
| **APE** | **Apeiranthos** | **2.20** | **322** | *e*PB | **Pn** | **18 00 55.7** | **+0.8** |
| **APE** | **Apeiranthos** | **2.20** | **322** | P | Pn | 18 00 49.9 | -5.0 |
| **APE** | **Apeiranthos** | **2.20** | **322** | *e*Pn | **Pn** | **18 00 52.2** | **-2.8** |
| **APE** | **Apeiranthos** | **2.20** | **322** | *e*Pb | **Pn** | **18 00 55.7** | **+0.8** |
| **AYDN** | **Tasoluk** | **2.36** | **12** | *i* P | **Pb** | **18 01 00.7** | **+0.2** |
| **AYDN** | **Tasoluk** | **2.36** | **12** | P | **Pb** | **18 01 00.7** | **+0.2** |
| AYDN | | | | S | **Sg** | **18 01 32.4** | **-0.6** |
| **SMG** | **Samos** | **2.38** | **352** | *e*PN | **Pn** | **18 00 58.0** | **+0.7** |
| **SMG** | **Samos** | **2.38** | **352** | *e*Pn | **Pn** | **18 00 58.0** | **+0.7** |
| **VAM** | **Vamos** | **2.49** | **272** | *e*PB | **Pb** | **18 01 00.9** | **-1.7** |
| **VAM** | **Vamos** | **2.49** | **272** | *e*Pb | **Pb** | **18 01 00.9** | **-1.7** |
| **ELL** | **Elmali** | **2.57** | **56** | *e*PN | **Pn** | **18 01 01.7** | **+1.6** |
| **ELL** | **Elmali** | **2.57** | **56** | *e*Pn | **Pn** | **18 01 01.7** | **+1.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.64** | **11** | *e*PN | **Pn** | **18 01 02.1** | **+1.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.64** | **11** | *e*Pn | **Pn** | **18 01 02.2** | **+1.1** |
| **GOLH** | **Golhisar** | **2.66** | **44** | *i* P | **Pb** | **18 01 04.4** | **-1.1** |
| **GOLH** | **Golhisar** | **2.66** | **44** | P | **Pb** | **18 01 04.4** | **-1.1** |
| GOLH | | | | S | **Sg** | **18 01 45.4** | **+3.0** |
| **MHLO** | **Agia Marina, M** | **2.66** | **301** | *e*PN | **Pn** | **18 01 02.5** | **+1.3** |
| **MHLO** | **Agia Marina, M** | **2.66** | **301** | *e*Pn | **Pn** | **18 01 02.5** | **+1.3** |
| **IMMV** | **Iera Moni Meta** | **2.67** | **273** | *e*PN | **Pn** | **18 01 02.8** | **+1.5** |
| **IMMV** | **Iera Moni Meta** | **2.67** | **273** | *e*Pn | **Pn** | **18 01 02.8** | **+1.5** |
| **DNZL** | **Cakiroluk** | **2.75** | **31** | *i* P | **Pn** | **18 01 03.9** | **+1.3** |
| **DNZL** | **Cakiroluk** | **2.75** | **31** | P | **Pn** | **18 01 03.9** | **+1.3** |
| **DENT** | **Denizli** | **2.80** | **30** | *e*PN | **Pn** | **18 01 04.8** | **+1.7** |
| **DENT** | **Denizli** | **2.80** | **30** | *e*Pn | **Pn** | **18 01 04.8** | **+1.7** |
| **ZEY** | **˜zmir** | **2.94** | **349** | P | **Pn** | **18 01 06.5** | **+1.5** |
| **KORT** | **Korkueli** | **3.00** | **56** | *i* P | Pn | 18 01 09.2 | +3.1 |
| **KORT** | **Korkueli** | **3.00** | **56** | P | Pn | 18 01 09.2 | +3.1 |
| KORT | | | | S | **Sb** | **18 01 48.4** | **-0.5** |
| **IZM** | **Izmir** | **3.04** | **0** | *e*PN | **Pn** | **18 01 07.4** | **+0.9** |
| **IZM** | **Izmir** | **3.04** | **0** | *e*Pn | **Pn** | **18 01 07.4** | **+0.9** |
| **URLA** | **Izmir** | **3.05** | **350** | *i* P | **Pn** | **18 01 08.2** | **+1.7** |
| **URLA** | **Izmir** | **3.05** | **350** | P | **Pn** | **18 01 08.2** | **+1.7** |
| **ANTB** | **Antalya** | **3.17** | **60** | *e*PN | **Pn** | **18 01 10.0** | **+1.9** |
| **ANTB** | **Antalya** | **3.17** | **60** | *e*Pn | **Pn** | **18 01 10.0** | **+1.9** |
| **CHOS** | **Chios island** | **3.18** | **343** | *e*PN | **Pn** | **18 01 07.6** | **-0.7** |
| **CHOS** | **Chios island** | **3.18** | **343** | *e*PN | **Pn** | **18 01 09.6** | **+1.3** |
| **CHOS** | **Chios island** | **3.18** | **343** | P | Pn | 18 01 04.3 | -4.0 |
| **CHOS** | **Chios island** | **3.18** | **343** | *e*Pn | **Pn** | **18 01 09.6** | **+1.3** |
| **ANKY** | **Antikythira Is** | **3.25** | **280** | *e*PN | **Pn** | **18 01 11.2** | **+1.9** |
| **ANKY** | **Antikythira Is** | **3.25** | **280** | *e*Pn | **Pn** | **18 01 11.2** | **+1.9** |
| **MANT** | **Manisa** | **3.31** | **18** | *i* P | **Pn** | **18 01 11.4** | **+1.1** |
| MANT | | | | *i* S | **Sn** | **18 01 47.5** | **-2.9** |
| **MANT** | **Manisa** | **3.31** | **18** | P | **Pn** | **18 01 11.4** | **+1.1** |
| MANT | | | | S | **Sn** | **18 01 47.5** | **-2.9** |
| **KULA** | **Kula-Manisa** | **3.35** | **19** | *e*PN | **Pn** | **18 01 12.7** | **+1.9** |
| **KULA** | **Kula-Manisa** | **3.35** | **19** | *e*Pn | **Pn** | **18 01 12.7** | **+1.9** |
| **BCK** | **Bucak** | **3.42** | **51** | *e*PN | **Pn** | **18 01 14.0** | **+2.2** |
| **BCK** | **Bucak** | **3.42** | **51** | *e*Pn | **Pn** | **18 01 14.0** | **+2.2** |
| **KHAL** | **Karahalli** | **3.51** | **30** | *i* P | **Pn** | **18 01 14.4** | **+1.4** |
| KHAL | | | | *i* S | **Sn** | **18 01 57.1** | **+1.8** |
| **KHAL** | **Karahalli** | **3.51** | **30** | P | **Pn** | **18 01 14.4** | **+1.4** |
| KHAL | | | | S | **Sn** | **18 01 57.1** | **+1.8** |
| **KYTH** | **Kithira** | **3.54** | **286** | *e*PN | **Pn** | **18 01 14.7** | **+1.4** |
| **KYTH** | **Kithira** | **3.54** | **286** | *e*Pn | **Pn** | **18 01 14.7** | **+1.4** |
| **SUTC** | **Sutluce-Ispart** | **3.70** | **54** | *e*PN | **Pn** | **18 01 17.9** | **+2.3** |
| **SUTC** | **Sutluce-Ispart** | **3.70** | **54** | *e*Pn | **Pn** | **18 01 17.9** | **+2.3** |
| **VLI** | **Veliai** | **3.75** | **293** | *e*PN | **Pn** | **18 01 17.6** | **+1.5** |
| **VLI** | **Veliai** | **3.75** | **293** | *e*Pn | **Pn** | **18 01 17.6** | **+1.5** |
| **KRND** | **KRANIDI** | **3.88** | **303** | *e*PN | **Pn** | **18 01 19.9** | **+2.0** |
| **KRND** | **KRANIDI** | **3.88** | **303** | *e*Pn | **Pn** | **18 01 19.9** | **+2.0** |
| **SIGR** | **SIGRI** | **4.01** | **344** | *e*PN | **Pn** | **18 01 19.8** | **+0.1** |
| **SIGR** | **SIGRI** | **4.01** | **344** | *e*PN | **Pn** | **18 01 20.9** | **+1.2** |
| **SIGR** | **SIGRI** | **4.01** | **344** | *e*Pn | **Pn** | **18 01 20.9** | **+1.2** |
| **GAZI** | **Gazipasa** | **4.22** | **76** | *i* P | **Pn** | **18 01 22.8** | **+0.2** |
| **GAZI** | **Gazipasa** | **4.22** | **76** | P | **Pn** | **18 01 22.8** | **+0.2** |
| **BALY** | **Balya** | **4.39** | **4** | *i* P | **Pn** | **18 01 27.6** | **+2.6** |
| **BALY** | **Balya** | **4.39** | **4** | P | **Pn** | **18 01 27.6** | **+2.6** |
| **VLX** | **Vlachokerasia** | **4.41** | **299** | *e*PN | **Pn** | **18 01 27.0** | **+1.7** |
| **VLX** | **Vlachokerasia** | **4.41** | **299** | *e*Pn | **Pn** | **18 01 27.0** | **+1.7** |
| **HDMB** | **Hadim** | **4.54** | **68** | *e*PN | **Pn** | **18 01 29.7** | **+2.5** |
| **HDMB** | **Hadim** | **4.54** | **68** | *e*Pn | **Pn** | **18 01 29.7** | **+2.5** |
| **KONT** | **Konya--Tatoy** | **4.86** | **56** | *e*PN | Pn | 18 01 34.6 | +3.1 |
| **KONT** | **Konya--Tatoy** | **4.86** | **56** | *e*Pn | Pn | 18 01 34.6 | +3.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CSS | Prodhromos | 5.00 | 93 | ePN | Pn | 18 01 35.0 | +1.6 |
| CSS | Prodhromos | 5.00 | 93 | ePn | Pn | 18 01 35.0 | +1.6 |
| LPK | Lapseki | 5.03 | 356 | ePN | Pn | 18 01 35.0 | +1.3 |
| LPK | Lapseki | 5.03 | 356 | ePn | Pn | 18 01 35.0 | +1.3 |
| GELI | Tayfur-Gelibol | 5.08 | 353 | ePN | Pn | 18 01 35.4 | +1.1 |
| GELI | Tayfur-Gelibol | 5.08 | 353 | ePn | Pn | 18 01 35.4 | +1.1 |
| YESY | Yesilyurt | 5.77 | 63 | ePN | Pn | 18 01 47.4 | +3.4 |
| YESY | Yesilyurt | 5.77 | 63 | ePn | Pn | 18 01 47.4 | +3.4 |
| YAYX | Yaylak | 6.35 | 54 | ePN | Pn | 18 01 55.6 | +3.6 |
| YAYX | Yaylak | 6.35 | 54 | ePn | Pn | 18 01 55.6 | +3.6 |
| BRTR | Keskin Array B | 6.70 | 47 | Pn | Pn | 18 01 58.6 | +1.8 |
| | 0.3nm,0.3s,baz=219,slow=16,SNR=8.4 | | | | | | |
| BRTR | | | | Sn | Sn | 18 03 16.2 | +2.3 |
| | 0.2nm,0.3s,baz=211,slow=26,SNR=6.0 | | | | | | |
| GRG | Griva | 6.77 | 327 | ePN | Pn | 18 01 57.1 | -0.6 |
| GRG | Griva | 6.77 | 327 | ePn | Pn | 18 01 57.1 | -0.6 |
| MMAI | Mount Meron Ar | 7.15 | 107 | Pn | Pn | 18 02 03.7 | +0.7 |
| | 1.5nm,0.3s,baz=294,slow=11,SNR=4.0 | | | | | | |
| MMAI | | | | Sn | Sn | 18 03 22.7 | -2.3 |
| | 4.8nm,0.3s,baz=333,slow=36,SNR=3.7 | | | | | | |
| KOZT | Kozan | 7.24 | 70 | ePN | Pn | 18 02 07.0 | +3.0 |
| KOZT | Kozan | 7.24 | 70 | ePn | Pn | 18 02 07.1 | +3.0 |
| EIL | Elat | 8.63 | 129 | Pn | Pn | 18 02 22.8 | -0.4 |
| | 1.1nm,0.3s,baz=316,slow=10,SNR=8.0 | | | | | | |
| EIL | | | | Sn | Sn | 18 03 55.5 | -5.7 |
| | 1.9nm,0.3s,baz=148,slow=15,SNR=7.4 | | | | | | |
| ASF | Jabal al Asfar | 8.64 | 109 | Sn | Sn | 18 03 58.5 | -3.1 |
| | 0.2nm,0.3s,baz=5.1,slow=17,SNR=2.3 | | | | | | |
| GERES | GERESS Array B | 16.78 | 328 | Pn | P | 18 04 17.2 | +1.5 |
| | 0.2nm,0.3s,baz=131,slow=10,SNR=3.2 | | | | | | |
| ESDC | Sonseca Array | 25.06 | 289 | P | P | 18 05 42.5 | -0.5 |
| | 0.2nm,0.4s,baz=82,slow=9.4,SNR=4.9 | | | | | | |
| AKTO | Aktyubinsk | 26.88 | 46 | P | P | 18 05 59.8 | +0.4 |
| | 0.3nm,0.4s,baz=252,slow=9.6,SNR=2.4 | | | | | | |
| TORD | Torodi Ar. Bea | 31.94 | 233 | P | P | 18 06 44.1 | -0.5 |
| | 0.5nm,0.5s,baz=32,slow=8.1,SNR=8.3 | | | | | | |
| MKAR | Makanchi Array | 42.24 | 57 | P | P | 18 08 12.1 | +0.2 |
| | 0.3nm,0.4s,baz=275,slow=6.5,SNR=5.1 | | | | | | |
| SONM | Songino Array | 58.04 | 51 | P | P | 18 10 12.7 | +0.8 |
| | 0.2nm,0.6s,baz=285,slow=5.5,SNR=2.8 | | | | | | |

**IDC 09 18:14:56.5**±2.1**, 23°.41N×94°.18E, h0km, mb3.3**/3**, mb1 3.3**/4**, mb1mx3.1**/40**, mbtmp3.2**/4**, Error ellipse: s-maj=117.6km s-min=24.2km az=58.0, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 6.64 | 137 | Pn | Pn | 18 16 34.5 | -1.0 |
| | baz=311,slow=14,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 25.21 | 341 | P | P | 18 20 23.4 | -0.6 |
| | 0.6nm,0.7s,baz=148,slow=8.5,SNR=6.1 | | | | | | |
| KURBB | Kurchatov Arra | 29.77 | 340 | P | P | 18 21 05.3 | +0.6 |
| | 0.2nm,0.7s,baz=150,slow=9.6,SNR=3.7 | | | | | | |
| WRA | Warramunga Arr | 58.23 | 134 | P | P | 18 24 53.4 | +0.4 |
| | 0.2nm,0.7s,baz=323,slow=7.4,SNR=2.8 | | | | | | |

*SKO **09** 18:34:33.2, 42°.66N×21°.63E, h9km, M1.9, ML2.6*
*SOF **09** 18:34:37.8, 42°.42N×21°.65E, h2km, MD2.9*
*CSEM **09** 18:34:37.2±0.1, 42°.46N×21°.58E, h2km, ML2.5, Error ellipse: s-maj=3.6km s-min=2.7km az=60.0*
*THE **09** 18:34:39.8, 42°.49N×21°.66E, h24km±5km, ML2.4/1, Error ellipse: s-maj=5.4km s-min=1.1km az=292.0*
*BEO **09** 18:34:39.2±0.6, 42°.55N×21°.59E, h12km±3km, ML2.5/1*
**ISC 09 18:34:37.5**±1.0**, 42°.47N**±0°.02×**21°.62E**±0°.02**, h7**km±8km**, n81, σ0s.73**/102**, 2C, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GJIK | Gjilan | 0.13 | 267 | P | Pg | 18 34 40.2 | -0.2 |
| GJIK | | | | S | Sg | 18 34 42.5 | +0.1 |
| BARS | Barje | 0.38 | 23 | ⇑iPg | Pg | 18 34 45.5 | +0.6 |
| BARS | | | | eSg | Sb | 18 34 51.5 | -1.1 |
| SKO | Skopje | 0.51 | 195 | iPg | Pg | 18 34 47.2 | -0.3 |
| SKO | | | | iSg | Sg | 18 34 53.7 | -0.4 |
| SKO | | | | eLg | Lg | 18 34 53.8 | |
| | comp=E,47nm,0.3s | | | | | | |
| SKO | | | | eLg | Lg | 18 34 54.1 | |
| | comp=N,51nm,0.6s | | | | | | |
| SKO | Skopje | 0.51 | 195 | iPg | Pg | 18 34 47.1 | -0.3 |
| SKO | | | | iSg | Sg | 18 34 53.6 | -0.4 |
| SKO | | | | eLg | Lg | 18 34 53.7 | |
| | comp=N,47nm,0.3s | | | | | | |
| SELS | Selova | 0.83 | 334 | ⇑iPg | Pg | 18 34 52.9 | -0.7 |
| SELS | | | | eSg | Sg | 18 35 04.3 | -0.1 |
| PEJK | Peje | 1.00 | 280 | P | Pg | 18 34 55.7 | -1.1 |
| PEJK | | | | S | Sb | 18 35 10.5 | -0.1 |
| ZAPS | Zavoj | 1.10 | 43 | ePg | Pn | 18 34 59.5 | +0.2 |
| ZAPS | | | | eSg | Sn | 18 35 14.6 | -0.2 |
| VTS | Vitosha | 1.18 | 83 | P | Pn | 18 35 00.9 | +0.3 |
| VTS | Vitosha | 1.18 | 83 | P | Pn | 18 35 00.9 | +0.3 |
| KKB | Krupnik | 1.25 | 118 | P | Pg | 18 35 01.4 | 0.0 |
| KKB | Krupnik | 1.25 | 118 | P | Pg | 18 35 01.4 | 0.0 |
| BEY | Berane | 1.33 | 288 | P | Pn | 18 35 01.9 | -0.7 |
| VAY | Valandovo | 1.35 | 148 | ePg | Pn | 18 35 02.2 | -0.5 |
| VAY | | | | iSg | Sb | 18 35 20.1 | -0.4 |
| VAY | | | | eLg | Lg | 18 35 21.3 | |
| | comp=N,118nm,0.6s | | | | | | |
| VAY | | | | eLg | Lg | 18 35 21.5 | |
| | comp=E,74nm,0.4s | | | | | | |
| VAY | Valandovo | 1.35 | 148 | P | Pn | 18 35 02.1 | -0.6 |
| VAY | | | | S | Sb | 18 35 19.7 | -0.8 |
| VAY | Valandovo | 1.35 | 148 | P | Pn | 18 35 02.1 | -0.6 |
| VAY | | | | S | Sb | 18 35 19.7 | -0.8 |
| VAY | | | | iSg | Sb | 18 35 20.0 | -0.4 |
| VAY | | | | eLg | Lg | 18 35 21.3 | |
| | comp=E,118nm,0.6s | | | | | | |
| BOLS | Boljevac | 1.38 | 10 | ePg | Pn | 18 35 02.1 | -1.1 |
| BOLS | | | | eSg | Sb | 18 35 20.2 | -1.3 |
| BOLS | Boljevac | 1.38 | 10 | ePg | Pn | 18 35 02.1 | -1.1 |
| SJES | Sjenica | 1.44 | 304 | eSg | Sb | 18 35 23.7 | +0.3 |
| OHR | Ohrid | 1.49 | 205 | iPg | Pn | 18 35 04.6 | -0.1 |
| OHR | | | | iSg | Sn | 18 35 24.3 | 0.0 |
| OHR | | | | eLg | Lg | 18 35 24.8 | |
| | comp=E,100nm,1.0s | | | | | | |
| OHR | | | | eLg | Lg | 18 35 24.8 | |
| | comp=N,62nm,0.9s | | | | | | |
| OHR | Ohrid | 1.49 | 205 | iPg | Pn | 18 35 04.5 | -0.1 |
| OHR | | | | iSg | Sn | 18 35 24.3 | 0.0 |
| OHR | | | | eLg | Lg | 18 35 24.7 | |
| | comp=N,100nm,1.0s | | | | | | |
| IVAS | Ivanjica | 1.54 | 316 | iPg | Pn | 18 35 05.4 | 0.0 |
| IVAS | | | | eSg | Sg | 18 35 28.1 | +1.0 |
| IVAS | Ivanjica | 1.54 | 316 | iPg | Pn | 18 35 05.4 | 0.0 |
| IVAS | | | | eSg | Sg | 18 35 28.1 | +1.0 |
| GRUS | Gruza | 1.56 | 335 | iPg | Pn | 18 35 05.9 | +0.2 |
| GRUS | | | | eSg | Sg | 18 35 28.7 | +0.9 |
| GRUS | Gruza | 1.56 | 335 | iPg | Pn | 18 35 05.9 | +0.2 |
| GRUS | | | | eSg | Sg | 18 35 28.7 | +0.9 |
| KNT | Kendrikon | 1.62 | 143 | ePB | Pn | 18 35 06.4 | 0.0 |
| KNT | Kendrikon | 1.62 | 143 | ePB | Pn | 18 35 06.4 | 0.0 |
| KNT | Kendrikon | 1.62 | 143 | P | Pn | 18 35 06.3 | -0.1 |
| KNT | | | | S | Sn | 18 35 27.4 | -0.1 |
| KNT | Kendrikon | 1.62 | 143 | P | Pn | 18 35 06.3 | -0.1 |
| KNT | | | | S | Sn | 18 35 27.4 | -0.1 |
| GRG | Griva | 1.62 | 158 | ePN | Pn | 18 35 06.4 | 0.0 |
| GRG | Griva | 1.62 | 158 | ePN | Pn | 18 35 06.4 | 0.0 |
| GRG | Griva | 1.62 | 158 | P | Pn | 18 35 06.5 | 0.0 |
| GRG | Griva | 1.62 | 158 | P | Pn | 18 35 06.5 | 0.0 |
| FNA | Florina | 1.69 | 186 | ePB | Pn | 18 35 08.0 | +0.5 |
| FNA | Florina | 1.69 | 186 | ePB | Pn | 18 35 08.0 | +0.5 |
| FNA | Florina | 1.69 | 186 | P | Pn | 18 35 07.9 | +0.5 |
| FNA | Florina | 1.69 | 186 | P | Pn | 18 35 07.9 | +0.5 |
| PDG | Podgorica | 1.75 | 270 | ePn | Pn | 18 35 08.7 | +0.6 |
| PDG | Podgorica | 1.75 | 270 | ePn | Pn | 18 35 08.7 | +0.6 |
| MPEP | Malo Peshtene | 1.80 | 60 | P | Pb | 18 35 10.3 | -0.4 |
| MMB | Musomiste | 1.80 | 118 | P | Pb | 18 35 10.4 | -0.4 |
| MMB | Musomiste | 1.80 | 118 | P | Pb | 18 35 10.4 | -0.4 |
| PGB | Panagyurishte | 1.89 | 87 | P | Pb | 18 35 11.5 | -0.8 |
| PGB | Panagyurishte | 1.89 | 87 | P | Pb | 18 35 11.5 | -0.8 |
| KUBS | Kucevo | 1.94 | 1 | ePn | Pn | 18 35 10.1 | -0.8 |
| KUBS | | | | eSg | Sn | 18 35 35.8 | +0.3 |
| KUBS | Kucevo | 1.94 | 1 | ePn | Pn | 18 35 10.1 | -0.8 |
| SRS | Serrai | 2.00 | 132 | ePB | Pb | 18 35 14.9 | +0.7 |
| SRS | Serrai | 2.00 | 132 | ePB | Pb | 18 35 14.9 | +0.7 |
| DIVS | Divibare | 2.02 | 325 | ePg | Pn | 18 35 12.5 | +0.6 |
| DIVS | Divibare | 2.02 | 325 | P | Pn | 18 35 11.8 | -0.1 |
| DIVS | Divibare | 2.02 | 325 | P | Pn | 18 35 11.8 | -0.1 |
| NVR | Nevrokopi | 2.02 | 123 | ePN | Pn | 18 35 12.6 | +0.7 |
| NVR | Nevrokopi | 2.02 | 123 | ePN | Pn | 18 35 12.6 | +0.7 |
| NVR | Nevrokopi | 2.02 | 123 | P | Pn | 18 35 11.8 | -0.1 |
| NVR | Nevrokopi | 2.02 | 123 | P | Pn | 18 35 11.8 | -0.1 |
| NEST | Nestorio | 2.10 | 192 | ePN | Pn | 18 35 13.7 | +0.7 |
| NEST | Nestorio | 2.10 | 192 | ePN | Pn | 18 35 13.7 | +0.7 |
| NEST | Nestorio | 2.10 | 192 | P | Pn | 18 35 13.4 | +0.4 |
| NEST | Nestorio | 2.10 | 192 | P | Pn | 18 35 13.4 | +0.4 |
| SOH | Sokhos | 2.10 | 141 | ePN | Pn | 18 35 13.4 | +0.4 |
| SOH | Sokhos | 2.10 | 141 | ePN | Pn | 18 35 13.4 | +0.4 |
| BBLS | Lazići | 2.14 | 312 | ePg | Pn | 18 35 14.4 | +0.8 |
| HORT | Hortiatis | 2.18 | 149 | ePN | Pn | 18 35 14.4 | +0.3 |
| HORT | Hortiatis | 2.18 | 149 | ePN | Pn | 18 35 14.4 | +0.3 |
| TREB | Trebinje | 2.42 | 277 | ePn | Pn | 18 35 19.3 | +1.8 |
| TREB | Trebinje | 2.42 | 277 | ePn | Pn | 18 35 19.3 | +1.8 |
| RZN | Rozhen | 2.44 | 108 | P | Pn | 18 35 19.0 | +1.2 |
| RZN | Rozhen | 2.44 | 108 | P | Pn | 18 35 19.0 | +1.2 |
| PLG | Polygyros | 2.50 | 146 | ePN | Pn | 18 35 19.0 | +0.4 |
| PLG | Polygyros | 2.50 | 146 | ePN | Pn | 18 35 19.0 | +0.4 |
| TEKS | Tekeris | 2.58 | 325 | ePn | Pn | 18 35 19.5 | -0.1 |
| TEKS | Tekeris | 2.58 | 325 | ePn | Pn | 18 35 19.5 | -0.1 |
| THL | Klokotos Trika | 2.92 | 174 | ePN | Pn | 18 35 25.0 | +0.8 |
| THL | Klokotos Trika | 2.92 | 174 | ePN | Pn | 18 35 25.0 | +0.8 |
| KDZ | Kurdzhali | 2.95 | 105 | P | Pn | 18 35 27.0 | +2.3 |
| KDZ | Kurdzhali | 2.95 | 105 | P | Pn | 18 35 27.0 | +2.3 |
| PAIG | Paliouri | 2.98 | 148 | ePN | Pn | 18 35 25.0 | -0.1 |
| PAIG | Paliouri | 2.98 | 148 | ePN | Pn | 18 35 25.0 | -0.1 |
| FGSL | Fruska Gora | 2.99 | 335 | ePn | Pn | 18 35 25.1 | -0.2 |
| FRGS | Fruska Gora | 2.99 | 335 | ePn | Pn | 18 35 25.1 | -0.2 |
| BZS | Buzias | 3.15 | 0 | ePn | Pn | 18 35 29.1 | +1.7 |
| BZS | Buzias | 3.15 | 0 | ePn | Pn | 18 35 29.1 | +1.7 |

*NIED **09** 18:36:00, 48°.10N×154°.90E, h20km, Mw4.3 Best double couple: M0 3.44000×10^15 NP1:φs31.00000°, δ16.00000°, λ53.00000°. NP2:φs250.00000°, δ77.00000°, λ100.00000°.*
*BJI **09** 18:36:45.7, 48°.05N×154°.86E, h52km, mb4.4/29, mB4.8/23, Ms4.5/14, Ms7 4.2/10*
*ISCJB **09** 18:36:51.0±0.3, 48°.27N±0°.04×154°.30E±0°.06, h77km, mb4.1/35, Error ellipse: s-maj=7.9km s-min=3.2km az=137.4*
*MOS **09** 18:36:50.4±1.1, 48°.34N×154°.15E, h72km, mb4.4/23, Error ellipse: s-maj=9.9km s-min=6.8km az=66.5*
*SKHL **09** 18:36:51.9±0.7, 48°.20N×154°.38E, h85km±2km, mb5.3/2*
*NEIC **09** 18:36:52.8±1.1, 48°.28N×154°.14E, h81km±10km, mb4.5/12, Error ellipse: s-maj=17.7km s-min=7.3km az=142.0*
*IDC **09** 18:36:53.3±2.4, 48°.28N×154°.12E, h81km±21km, mb3.7/21, mb1 3.9/26, mb1mx3.8/50, mbtmp4.1/26, MS3.4/11, Ms1 3.4/11, ms1mx3.2/41, Error ellipse: s-maj=16.8km s-min=10.7km az=138.0*
**ISC 09 18:36:52.7**±0.5**, 48°.31N**±0°.06×**154°.22E**±0°.05**, h77km, n152, σ1s.51**/167**, mb4.2**/35**, 2C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 2.68 | 27 | ePN | Pn | 18 37 28.6 | -5.0 |
| SKR | | | | eS | Sn | 18 37 59.7 | -5.3 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,80nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=N,90nm,0.2s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=E,120nm,0.2s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,430nm,0.3s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,1μm,0.9s | | | | | | |
| SKR | Severo-Kuril's | 2.68 | 27 | eP | Pn | 18 37 31.9 | -1.7 |
| SKR | | | | AMB | AMB | 18 37 45.0 | |
| | comp=N,90nm,0.4s | | | | | | |
| SKR | | | | AMB | AMB | 18 37 45.0 | |
| | comp=N,120nm,0.4s | | | | | | |
| SKR | | | | AMB | AMB | 18 37 45.0 | |
| | comp=N,80nm,0.4s | | | | | | |
| SKR | | | | eS | Sn | 18 38 03.1 | -1.9 |
| SKR | | | | A | A | 18 38 11.6 | |
| | comp=N,140nm,0.3s | | | | | | |
| SKR | | | | A | A | 18 38 11.6 | |
| | comp=N,430nm,0.3s | | | | | | |
| SKR | | | | A | A | 18 38 11.6 | |
| | comp=N,330nm,0.3s | | | | | | |
| PAU | Pauzhetka | 3.58 | 27 | eP | Pn | 18 37 45.6 | -0.2 |
| PAU | | | | eS | Sn | 18 38 25.4 | -1.5 |
| PEA0 | Petropavlovsk- | 5.29 | 23 | ePn | Pn | 18 38 09.4 | +0.3 |
| PETK | Petropavlovsk- | 5.29 | 23 | P | Pn | 18 38 09.4 | +0.3 |
| | comp=N,3.2nm,0.3s,baz=188,slow=13,SNR=49 | | | | | | |
| PETK | | | | S | Sn | 18 39 22.4 | +14 |
| | comp=N,0.9nm,0.3s,baz=215,slow=48,SNR=1.9 | | | | | | |
| PETK | | | | LR | LR | 18 40 20.5 | |
| | comp=N,180nm,21.2s,baz=206,slow=39 | | | | | | |
| KUR | Kuril'sk | 5.34 | 237 | ⇑iPN | Pn | 18 38 10.8 | +1.0 |
| KUR | | | | iS | Sn | 18 39 12.2 | +2.3 |
| KUR | | | | pmax | pmax | | |
| | comp=N,19nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,14nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,33nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,132nm,2.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,50nm,0.8s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,59nm,0.8s | | | | | | |
| KUR | Kuril'sk | 5.34 | 237 | eP | Pn | 18 38 09.2 | -0.6 |
| KUR | | | | AMB | AMB | 18 38 12.7 | |
| | comp=E,19nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 18 38 12.7 | |
| | comp=E,14nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 18 38 12.7 | |
| | comp=E,33nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 18 38 19.8 | |
| | comp=E,132nm,2.0s | | | | | | |
| KUR | | | | eS | Sn | 18 39 07.7 | -2.2 |
| KUR | | | | A | A | 18 39 23.4 | |
| | comp=E,50nm,0.8s | | | | | | |
| KUR | | | | A | A | 18 39 23.4 | |
| | comp=E,59nm,0.8s | | | | | | |
| PET | Petropavlovsk | 5.50 | 29 | ePN | Pn | 18 38 12.5 | +0.6 |
| PET | | | | eS | Sn | 18 39 11.8 | -1.9 |
| PET | | | | smax | smax | | |
| | comp=N,138nm,0.6s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,200nm,17.0s | | | | | | |
| PET | Petropavlovsk | 5.50 | 29 | eP | Pn | 18 38 12.3 | +0.4 |
| PET | | | | AMB | AMB | 18 38 24.6 | |
| | comp=Z,30nm,0.6s | | | | | | |
| PET | | | | eS | Sn | 18 39 11.9 | -1.8 |
| PET | | | | A | A | 18 39 16.9 | |
| | comp=Z,140nm,0.6s | | | | | | |
| PET | | | | AMS | AMS | 18 40 32.2 | |
| | comp=Z,190nm,17.0s | | | | | | |
| PET | Petropavlovsk | 5.50 | 29 | ePn | Pn | 18 38 11.6 | -0.3 |
| PET | | | | eSn | Sn | 18 39 12.9 | -0.8 |
| SHO | Shikotan | 6.79 | 232 | eP | Pn | 18 38 28.6 | -1.0 |
| SHO | | | | AMB | AMB | 18 38 50.0 | |
| | comp=Z,40nm,0.7s | | | | | | |
| SHO | | | | eS | Sn | 18 39 41.2 | -4.1 |
| SHO | | | | A | A | 18 40 12.0 | |
| | comp=Z,170nm,0.7s | | | | | | |
| YUK | Yuzh-Kuril'sk | 7.20 | 237 | ⇑iPN | Pn | 18 38 36.3 | +1.0 |
| YUK | | | | iS | Sn | 18 39 57.8 | +2.3 |
| YUK | | | | pmax | pmax | | |
| | comp=N,14nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,12nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,45nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,428nm,2.5s | | | | | | |
| YUK | Yuzh-Kuril'sk | 7.20 | 237 | eP | Pn | 18 38 35.4 | +0.1 |
| YUK | | | | AMB | AMB | 18 38 37.2 | |
| | comp=Z,14nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 18 38 37.2 | |
| | comp=Z,12nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 18 38 37.2 | |
| | comp=Z,45nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 18 38 43.8 | |
| | comp=Z,430nm,2.0s | | | | | | |
| YUK | | | | eS | Sn | 18 39 52.2 | -3.3 |
| NEM2 | Nemuro 2 | 7.71 | 233 | P | Pn | 18 38 38.2 | -3.9 |
| NEM2 | | | | eS | Sn | 18 40 01.2 | -6.6 |
| YSS | Yuzh-Sakhalins | 7.86 | 264 | ⇓iPN | Pn | 18 38 45.0 | +0.8 |
| YSS | | | | pmax | pmax | | |
| | comp=E,30nm,0.8s | | | | | | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,100nm,16.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 7.86 | 264 | eP | Pn | 18 38 45.0 | +0.8 |
| YSS | | | | AMB | AMB | 18 38 46.0 | |
| | comp=Z,30nm,0.8s | | | | | | |
| YSS | | | | erx | rx | 18 39 02.1 | |
| YSS | | | | eS | Sn | 18 40 09.0 | -2.6 |
| YSS | | | | AMS | AMS | 18 41 30.0 | |
| | comp=Z,100nm,16.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 7.86 | 264 | ePn | Pn | 18 38 44.8 | +0.5 |
| YSS | | | | eSn | Sn | 18 40 09.3 | -2.3 |
| TYV | Tymovskoe | 7.94 | 293 | eP | Pn | 18 38 48.0 | +2.8 |
| TYV | | | | AMS | AMS | 18 42 26.0 | |
| | comp=Z,500nm,16.0s | | | | | | |
| UGL | Uglegorsk | 8.08 | 280 | ePN | Pn | 18 38 44.7 | -2.5 |
| UGL | | | | eS | Sn | 18 40 15.3 | -1.5 |
| UGL | Uglegorsk | 8.08 | 280 | eP | Pn | 18 38 49.0 | +1.8 |
| UGL | | | | AMB | AMB | 18 38 50.0 | |
| | comp=Z,51nm,0.6s | | | | | | |
| JTKR | Abashiri--Toko | 8.37 | 243 | P | Pn | 18 38 52.4 | +1.3 |
| JAK | Akkeshi | 8.52 | 235 | P | Pn | 18 38 49.6 | -3.7 |
| JAK | | | | eS | Sn | 18 40 20.6 | -7.1 |
| JMP | Maruseppu | 8.68 | 244 | P | Pn | 18 38 56.5 | +1.1 |
| JSE | Soyaes | 8.68 | 252 | P | Pn | 18 38 56.9 | +1.6 |
| JAR | Ashorobuto | 8.85 | 239 | P | Pn | 18 38 57.2 | -0.5 |
| JWK2 | Keihoku | 8.96 | 255 | P | Pn | 18 39 02.7 | +3.5 |
| JKA | Kamikawa-asahi | 9.08 | 247 | eP | Pn | 18 39 02.3 | +1.4 |
| ASAJ | Asahikawa | 9.08 | 247 | P | Pn | 18 39 02.6 | +1.7 |
| ASAJ | Asahikawa | 9.08 | 247 | P | Pn | 18 39 02.3 | +1.4 |
| | baz=53,slow=5.7 | | | | | | |
| ASAJ | Asahikawa | 9.08 | 247 | ePn | Pn | 18 39 02.6 | +1.7 |
| JKK2 | Kamakawa 2 | 9.12 | 245 | P | Pn | 18 39 01.8 | +0.4 |
| JCH | Churui | 9.51 | 237 | P | Pn | 18 39 03.5 | -3.3 |
| ERM | Erimo | 10.03 | 235 | ePN | Pn | 18 39 12.2 | -1.5 |
| ERM | Erimo | 10.03 | 235 | eP | Pn | 18 39 12.2 | -1.5 |
| ERM | Erimo | 10.03 | 235 | ePn | Pn | 18 39 11.1 | -2.6 |
| MA2 | Magadan | 11.47 | 351 | ePN | Pn | 18 39 33.3 | 0.0 |
| MA2 | Magadan | 11.47 | 351 | eP | Pn | 18 39 33.2 | 0.0 |
| HABR | Khabarovsk | 12.74 | 278 | PN | Pn | 18 39 47.8 | -2.9 |
| HABR | | | | pmax | pmax | | |
| | comp=E,27nm,1.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,25nm,1.5s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,12nm,3.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,52nm,15.0s | | | | | | |
| EKMR | Ekimchan | 14.28 | 297 | eP | Pn | 18 40 09.0 | -1.9 |
| EKMR | | | | AMB | AMB | 18 40 20.3 | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| SEY | Seymchan | 14.69 | 357 | P | P | 18 40 19.2 | -1.1 |
| | comp=Z,0.4nm,0.3s,baz=185,slow=16,SNR=5.2 | | | | | | |
| KLR | Kul'dur | 14.84 | 282 | eP | Pn | 18 40 19.0 | +0.8 |
| KLR | Kul'dur | 14.84 | 282 | erx | rx | 18 40 19.0 | |
| USRK | Ussuriysk Ar. | 15.90 | 263 | P | P | 18 40 33.0 | -0.9 |
| | comp=Z,0.1nm,0.3s,baz=80,slow=8.5,SNR=5.4 | | | | | | |
| USRK | | | | LR | LR | 18 47 04.9 | |
| | comp=Z,56nm,19.6s,baz=98,slow=39 | | | | | | |
| MAJO | Matsushiro | 16.63 | 231 | eP | P | 18 40 41.2 | -0.9 |
| MAJO | Matsushiro | 16.63 | 231 | eP | Pn | 18 40 38.6 | -2.3 |
| | comp=Z,139nm,2.6s | | | | | | |
| MAT | Matsushiro | 16.63 | 231 | P | Pn | 18 40 40.5 | -0.4 |
| MJAR | Matsushiro Arr | 16.63 | 231 | P | Pn | 18 40 38.5 | -2.4 |
| | comp=Z,0.2nm,0.3s,baz=28,slow=11,SNR=12 | | | | | | |
| MJAR | | | | LR | LR | 18 47 32.7 | |
| | comp=Z,27nm,21.8s,baz=5.0,slow=39 | | | | | | |
| BMKR | Bomnak | 16.99 | 302 | eP | P | 18 40 46.0 | +0.2 |
| BMKR | | | | AMB | AMB | 18 40 51.0 | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| MDJ | Mudanjiang | 17.34 | 267 | P | P | 18 40 49.7 | -0.1 |
| KROS | Kirovskiy | 18.01 | 300 | eP | Pn | 18 41 00.5 | +2.9 |
| KROS | | | | AMB | AMB | 18 41 02.6 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| YAK | Yakutsk | 19.45 | 324 | P | Pn | 18 41 14.3 | -0.4 |
| | comp=Z,0.0nm,0.3s,baz=121,slow=5.9,SNR=1.9 | | | | | | |
| YAK | | | | LR | LR | 18 48 36.1 | |
| | comp=Z,52nm,19.9s,baz=140,slow=36 | | | | | | |
| YAK | Yakutsk | 19.45 | 324 | eP | Pn | 18 41 13.5 | -1.2 |
| YAK | | | | pmax | pmax | | |
| | comp=N,1.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,1.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| YAK | Yakutsk | 19.45 | 324 | eP | Pn | 18 41 13.4 | -1.2 |
| YAK | Yakutsk | 19.45 | 324 | eP | Pn | 18 41 13.9 | -0.8 |
| | comp=Z,28nm,0.8s | | | | | | |
| CLNS | Chul'man | 19.63 | 307 | eP | Pn | 18 41 18.3 | +1.4 |
| CLNS | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=E,17nm,0.9s | | | | | | |
| CN2 | Changchun | 20.41 | 268 | eP | Pn | 18 41 25.3 | -0.8 |
| KSRS | Korea Array | 22.00 | 250 | P | P | 18 41 40.1 | -0.3 |
| | comp=E,9.3nm,0.8s,baz=42,slow=9.6,SNR=26 | | | | | | |
| KSRS | | | | LR | LR | 18 49 31.7 | |
| | comp=E,47nm,19.0s,baz=38,slow=34 | | | | | | |
| KSRS | Korea Array | 22.00 | 250 | P | P | 18 41 40.1 | -0.3 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,47nm,19.0s | | | | | | |
| KS01 | Wonju Array Si | 22.01 | 250 | eP | P | 18 41 39.7 | -0.8 |
| JNU | Nakatsue | 23.18 | 238 | P | P | 18 41 52.4 | -0.3 |
| | comp=Z,7.6nm,1.0s,baz=350,slow=9.8,SNR=2.4 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 30.30 | 156 | T | T | 19 14 33.4 | |
| | baz=344,slow=76,SNR=344 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 30.32 | 156 | T | T | 19 14 33.7 | |
| | baz=344,slow=76,SNR=648 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 30.32 | 156 | T | T | 19 14 35.3 | |
| | baz=344,slow=76,SNR=397 | | | | | | |
| HHC | Hu-ho-hao-te | 30.95 | 272 | eP | P | 18 43 04.1 | +1.7 |
| HHC | | | | S | S | 18 48 02.6 | +1.3 |
| HHC | | | | PMZ | | | |
| | comp=Z,19nm,0.6s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,61nm,7.8s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,92nm,12.3s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,100nm,12.3s | | | | | | |
| ULN | Ulaanbaatar | 31.12 | 287 | P | P | 18 43 00.7 | -3.2 |
| ULN | Ulaanbaatar | 31.12 | 287 | P | P | 18 43 00.7 | -3.2 |
| NJ2 | Nanjing | 31.18 | 252 | eP | P | 18 43 03.7 | -0.6 |
| NJ2 | | | | PMZ | | | |
| | comp=Z,40nm,0.8s | | | | | | |
| H11S1 | WAKE ISLAND Hy | 31.41 | 157 | T | T | 19 15 56.2 | |
| | baz=344,slow=76,SNR=3384 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 31.42 | 157 | T | T | 19 15 55.8 | |
| | baz=344,slow=76,SNR=2813 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 31.43 | 157 | T | T | 19 15 55.8 | |
| | baz=344,slow=76,SNR=1702 | | | | | | |
| SONM | Songino Array | 31.55 | 287 | P | P | 18 43 06.7 | -0.9 |
| | comp=Z,0.4nm,0.8s,baz=44,slow=8.6,SNR=3.3 | | | | | | |
| SONM | | | | PcP | PcP | 18 45 57.7 | -0.7 |
| | comp=Z,0.6nm,0.7s,baz=95,slow=1.8,SNR=5.5 | | | | | | |
| SONM | | | | LR | LR | 18 56 56.5 | |
| | comp=Z,98nm,19.4s,baz=85,slow=38 | | | | | | |
| SONM | Songino Array | 31.55 | 287 | P | P | 18 43 06.7 | -0.9 |
| SONM | | | | | | 18 45 57.7 | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,98nm,19.5s | | | | | | |
| COLD | Coldfoot | 33.62 | 35 | eP | P | 18 43 25.7 | +0.4 |
| | comp=Z,22nm,2.2s | | | | | | |
| BWN | Browne | 33.75 | 41 | eP | P | 18 43 28.4 | +1.9 |
| | comp=Z,20nm,1.1s | | | | | | |
| MDM | Murphy Dome | 34.29 | 40 | eP | P | 18 43 32.3 | +1.1 |
| | comp=Z,4.8nm,1.0s | | | | | | |
| SML | Sawmill | 34.33 | 45 | eP | P | 18 43 31.1 | -0.5 |
| SML | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| SML | Sawmill | 34.33 | 45 | eP | P | 18 43 31.1 | -0.5 |
| | comp=Z,2.3nm,0.8s | | | | | | |
| COLA | College | 34.45 | 40 | eP | P | 18 43 32.9 | +0.4 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| COLA | College | 34.45 | 40 | eP | P | 18 43 32.9 | +0.4 |
| COLA | College | 34.45 | 40 | eP | P | 18 43 32.9 | +0.4 |
| | comp=Z,5.1nm,0.8s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ILAR | Eielson Array | 34.87 | 40 | P | P | 18 43 36.4 | +0.3 |
| | comp=Z,2.3nm,1.1s,baz=259,slow=9.4,SNR=9.9 | | | | | | |
| ILAR | Eielson Array | 34.87 | 40 | P | P | 18 43 36.4 | +0.3 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| EGAK | Eagle | 37.32 | 40 | eP | P | 18 43 57.3 | +0.3 |
| | comp=Z,79nm,2.5s | | | | | | |
| LZH | Lanzhou | 38.60 | 271 | eP | P | 18 44 11.0 | +2.7 |
| LZH | | | | pP | pP | 18 44 27.4 | +0.6 |
| LZH | | | | PMZ | | | |
| | comp=Z,17nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,120nm,4.8s | | | | | | |
| GTA | Gaotai | 39.48 | 278 | eP | P | 18 44 17.7 | +2.1 |
| GTA | | | | pP | pP | 18 44 32.3 | -1.8 |
| GTA | | | | sP | sP | 18 44 39.1 | -3.9 |
| GTA | | | | PMZ | | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| INK | Inuvik | 39.94 | 33 | P | P | 18 44 19.9 | +1.1 |
| | comp=Z,1.3nm,0.5s,baz=301,slow=4.3,SNR=6.8 | | | | | | |
| INK | Inuvik | 39.94 | 33 | P | P | 18 44 19.9 | +1.1 |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| CD2 | Chengdu | 41.77 | 264 | eP | P | 18 44 34.0 | -0.4 |
| CD2 | | | | pP | pP | 18 44 49.6 | -3.4 |
| CD2 | | | | PP | PP | 18 46 11.4 | -0.8 |
| CD2 | | | | PcS | PcS | 18 50 21.2 | +0.1 |
| CD2 | | | | S | S | 18 50 46.8 | +0.8 |
| CD2 | | | | sS | sS | 18 51 13.9 | -4.0 |
| CD2 | | | | SS | SS | 18 53 55.5 | +1.2 |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| ZALV | Zalesovo Beam | 42.32 | 305 | PcP | PcP | 18 46 31.3 | +0.6 |
| | comp=Z,2.3nm,0.7s,baz=72,slow=2.9,SNR=10.0 | | | | | | |
| ZALV | | | | LR | LR | 19 02 40.7 | |
| | comp=Z,84nm,19.5s,baz=68,slow=37 | | | | | | |
| GYA | Guiyang | 42.79 | 257 | eP | P | 18 44 43.2 | +0.4 |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| WMQ | Urumqi | 45.07 | 290 | P | P | 18 45 03.0 | +2.1 |
| WMQ | | | | S | S | 18 51 37.0 | +2.9 |
| WMQ | | | | PMZ | | | |
| | comp=Z,12nm,1.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,62nm,20.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,52nm,16.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,44nm,18.0s | | | | | | |
| KMI | Kunming | 46.27 | 259 | P | P | 18 45 11.6 | +0.9 |
| KMI | | | | pP | pP | 18 45 24.1 | -5.5 |
| KMI | | | | sP | sP | 18 45 35.0 | -3.3 |
| KMI | | | | S | S | 18 51 53.5 | +1.6 |
| KMI | | | | PMZ | | | |
| | comp=Z,5.0nm,1.3s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,79nm,3.8s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,87nm,13.0s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,73nm,12.4s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,96nm,11.0s | | | | | | |
| MKAR | Makanchi Array | 46.90 | 297 | P | P | 18 45 13.8 | -1.3 |
| | comp=Z,1.0nm,0.6s,baz=69,slow=8.4,SNR=10 | | | | | | |
| MKAR | | | | PcP | PcP | 18 46 46.2 | -0.4 |
| | comp=Z,0.5nm,0.7s,baz=46,slow=4.2,SNR=3.3 | | | | | | |
| MKAR | | | | LR | LR | 19 06 37.7 | |
| | comp=Z,73nm,18.7s,baz=352,slow=38 | | | | | | |
| MKAR | Makanchi Array | 46.90 | 297 | i P | P | 18 45 14.8 | -0.3 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 46.90 | 297 | eP | P | 18 45 14.8 | -0.3 |
| MKAR | Makanchi Array | 46.90 | 297 | eP | P | 18 45 14.2 | -0.9 |
| MK01 | Makanchi Array | 46.91 | 297 | eP | P | 18 45 14.9 | -0.2 |
| KURK | Kurchatov | 47.13 | 303 | P | P | 18 45 16.2 | -0.6 |
| KURK | | | | | | 18 46 47.7 | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| KURK | Kurchatov | 47.13 | 303 | eP | P | 18 45 16.2 | -0.6 |
| KURK | Kurchatov | 47.13 | 303 | eP | P | 18 45 14.0 | -2.8 |
| | comp=Z,4.0nm,0.9s | | | | | | |
| KURBB | Kurchatov Arra | 47.23 | 303 | P | P | 18 45 16.2 | -1.4 |
| | comp=Z,1.1nm,0.6s,baz=63,slow=7.9,SNR=10 | | | | | | |
| KURBB | | | | PcP | PcP | 18 46 47.7 | +0.1 |
| | comp=Z,1.5nm,0.9s,baz=62,slow=3.4,SNR=9.0 | | | | | | |
| RES | Resolute Bay | 49.12 | 19 | P | P | 18 45 32.4 | +0.6 |
| | comp=Z,4.2nm,0.9s,baz=276,slow=7.3,SNR=6.3 | | | | | | |
| RES | Resolute Bay | 49.12 | 19 | P | P | 18 45 32.4 | +0.6 |
| RES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| YKA | Yellowknife Ar | 49.23 | 38 | P | P | 18 45 33.8 | +1.0 |
| | comp=Z,3.1nm,0.8s,baz=299,slow=6.8,SNR=4.7 | | | | | | |
| YKA | Yellowknife Ar | 49.23 | 38 | P | P | 18 45 33.8 | +1.0 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| BRVK | Borovoye | 50.49 | 309 | eP | P | 18 45 42.8 | +0.3 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| BRVK | Borovoye | 50.49 | 309 | eP | P | 18 45 42.8 | +0.3 |
| BRVK | Borovoye | 50.49 | 309 | P | P | 18 45 41.2 | -1.3 |
| CHTO | Chiang Mai | 53.21 | 256 | eP | P | 18 46 02.6 | -0.5 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 53.21 | 256 | eP | P | 18 46 02.6 | -0.5 |
| | comp=Z,5.2nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 53.47 | 256 | P | P | 18 46 05.5 | +0.5 |
| | comp=Z,3.5nm,0.8s,baz=34,slow=7.4,SNR=22 | | | | | | |
| CMAR | | | | PcP | PcP | 18 47 11.4 | +0.3 |
| | comp=Z,0.6nm,0.8s,baz=28,slow=2.9,SNR=4.9 | | | | | | |
| CMAR | | | | LR | LR | 19 12 33.2 | |
| | comp=Z,28nm,19.2s,baz=170,slow=40 | | | | | | |
| CM01 | Chiang Mai Arr | 53.48 | 256 | eP | P | 18 46 05.4 | +0.2 |
| ARU | Arti | 54.37 | 317 | P | P | 18 46 10.3 | -0.8 |
| | comp=Z,0.2nm,0.3s,baz=267,slow=23,SNR=1.7 | | | | | | |
| KSH | Kashi | 54.76 | 292 | eP | P | 18 46 18.0 | +3.7 |
| KSH | | | | epP | pP | 18 46 34.0 | +0.3 |
| KSH | | | | ePP | PP | 18 48 22.9 | +5.5 |
| KSH | | | | eScP | ScP | 18 51 10.6 | +3.3 |
| KSH | | | | PcS | PcS | 18 51 18.3 | +2.4 |
| KSH | | | | S | S | 18 53 53.1 | +4.0 |
| KSH | | | | PMZ | | | |
| | comp=Z,83nm,4.7s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,120nm,4.7s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,77nm,4.5s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,190nm,7.4s | | | | | | |
| JMIC | Jan Mayen | 60.37 | 354 | LR | LR | 19 13 36.3 | |
| | comp=Z,82nm,19.5s,baz=255,slow=36 | | | | | | |
| NVAR | Mina Array Bea | 61.06 | 64 | P | P | 18 46 59.5 | +1.0 |
| | comp=Z,0.8nm,0.7s,baz=292,slow=7.8,SNR=5.3 | | | | | | |
| NVAR | | | | PcP | PcP | 18 47 42.2 | +1.2 |
| | comp=Z,0.6nm,0.8s,baz=330,slow=5.2,SNR=3.3 | | | | | | |
| FINES | FINESS Array B | 62.95 | 335 | P | P | 18 47 11.1 | +0.6 |
| | comp=Z,1.6nm,0.7s,baz=52,slow=6.5,SNR=9.8 | | | | | | |
| FINES | FINESS Array B | 62.95 | 335 | i P | P | 18 47 10.3 | -0.2 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| FINES | FINESS Array B | 62.95 | 335 | eP | P | 18 47 10.3 | -0.2 |
| FRB | Frobisher Bay | 63.33 | 20 | LR | LR | 19 17 32.5 | |
| | comp=Z,129nm,18.6s,baz=202,slow=38 | | | | | | |
| OBN | Obninsk | 64.44 | 326 | eP | P | 18 47 20.3 | -0.2 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| OBN | Obninsk | 64.44 | 326 | eP | P | 18 47 20.2 | -0.2 |
| VSU | Vasula | 65.17 | 333 | eP | P | 18 47 24.9 | -0.2 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| GEYT | Alibeck | 66.44 | 301 | P | P | 18 47 34.8 | +1.1 |
| | comp=Z,1.0nm,0.6s,baz=90,slow=3.5,SNR=3.4 | | | | | | |
| NOA | NORSAR Array B | 66.99 | 341 | P | P | 18 47 37.2 | +0.4 |
| | comp=Z,0.7nm,0.6s,baz=26,slow=6.3,SNR=3.4 | | | | | | |
| NOA | NORSAR Array B | 66.99 | 341 | P | P | 18 47 37.2 | +0.4 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| WRAB | Tennant Creek | 70.22 | 200 | eP | P | 18 47 56.1 | -1.2 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| WRAB | Tennant Creek | 70.22 | 200 | eP | P | 18 47 56.1 | -1.2 |
| | comp=Z,4.5nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 70.23 | 200 | P | P | 18 47 56.5 | -0.9 |
| | comp=Z,4.2nm,0.7s,baz=15,slow=6.2,SNR=21 | | | | | | |
| WRA | Warramunga Arr | 70.23 | 200 | P | P | 18 47 56.5 | -0.9 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| AS01 | Alice Springs | 73.92 | 199 | eP | P | 18 48 19.3 | 0.0 |
| ASAR | Alice Springs | 73.93 | 199 | P | P | 18 48 19.6 | +0.2 |
| | comp=Z,1.0nm,0.6s,baz=16,slow=5.9,SNR=18 | | | | | | |
| ASAR | Alice Springs | 73.93 | 199 | P | P | 18 48 19.6 | +0.2 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| EKA | Eskdalemuir Ar | 74.99 | 347 | P | P | 18 48 25.5 | +0.2 |
| | comp=Z,1.1nm,0.5s,baz=22,slow=5.3,SNR=11 | | | | | | |
| EKA | Eskdalemuir Ar | 74.99 | 347 | P | P | 18 48 25.5 | +0.2 |
| EKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| CLL | Collm | 75.35 | 336 | eP | P | 18 48 27.0 | -0.4 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| CLL | Collm | 75.35 | 336 | eP | P | 18 48 27.0 | -0.4 |
| CLL | Collm | 75.35 | 336 | eP | P | 18 48 27.0 | -0.4 |
| | comp=Z,7.0nm,1.2s | | | | | | |
| MORC | Moravsky Berou | 75.40 | 333 | P | P | 18 48 24.0 | -3.8 |
| MORC | Moravsky Berou | 75.40 | 333 | P | P | 18 48 24.0 | -3.8 |
| TX31 | Lajitas Ar. Si | 76.08 | 62 | eP | P | 18 48 32.4 | +0.4 |
| TXAR | Lajitas Array | 76.08 | 62 | P | P | 18 48 32.5 | +0.4 |
| | comp=Z,1.0nm,0.7s,baz=297,slow=4.2,SNR=15 | | | | | | |
| TXAR | Lajitas Array | 76.08 | 62 | P | P | 18 48 32.5 | +0.4 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| KHC | Kasperske Hory | 77.15 | 335 | eP | P | 18 48 38.4 | +0.7 |
| KHC | Kasperske Hory | 77.15 | 335 | eP | P | 18 48 38.4 | +0.7 |
| KHC | Kasperske Hory | 77.15 | 335 | eP | P | 18 48 38.4 | +0.7 |
| GERES | GERESS Array B | 77.38 | 335 | P | P | 18 48 39.2 | +0.2 |
| | comp=Z,0.9nm,0.6s,baz=28,slow=6.0,SNR=4.1 | | | | | | |
| GERES | GERESS Array B | 77.38 | 335 | P | P | 18 48 39.2 | +0.2 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| BRTR | Keskin Array B | 77.76 | 317 | P | P | 18 48 41.8 | +0.4 |
| | comp=Z,1.4nm,0.9s,baz=26,slow=3.7,SNR=4.6 | | | | | | |
| BRTR | Keskin Array B | 77.76 | 317 | P | P | 18 48 41.8 | +0.4 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| RAYN | Ar Rayn | 84.33 | 299 | eP | P | 18 49 16.7 | +0.4 |
| | comp=Z,3.5nm,0.7s | | | | | | |
| TORD | Torodi Ar. Bea | 114.12 | 330 | PKP | PKPdf | 18 55 22.7 | -0.6 |
| | comp=Z,0.4nm,0.5s,baz=350,slow=1.5,SNR=7.7 | | | | | | |

*ISCJB **09** 18:40:40.0±0.6, 21°.46S±0°.08×178°.1W±0°.1, h412km, mb3.6/10, Error ellipse: s-maj=18.7km s-min=10.7km az=8.7*
*IDC **09** 18:40:41.3±3.8, 21°.36S×178°.09W, h416km±38km, mb3.3/10, mb1 3.6/11, mb1mx3.4/23, mbtmp4.1/11, Error ellipse: s-maj=20.2km s-min=18.8km az=96.0*
**ISC 09 18:40:40.7**±0.6**, 21°.5S**±0°.1×**178°.1W**±0°.2**, h412**km**, n27,** σ**1**s**27**/28**, mb3.6**/10**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 9.62 | 40 | S | S | 18 44 29.5 | -15 |
| | 4.9nm,0.3s,baz=34,slow=22,SNR=5.6 | | | | | | |
| DZM | Mont Dzumac | 14.39 | 265 | P | P | 18 43 51.3 | +4.9 |
| | 0.7nm,0.3s,baz=193,slow=7.2,SNR=6.3 | | | | | | |
| URZ | Urewera | 17.24 | 193 | P | P | 18 44 16.9 | +0.3 |
| | 1.6nm,0.3s,baz=279,slow=2.2,SNR=9.8 | | | | | | |
| URZ | | | | S | S | 18 47 11.5 | -3.8 |
| | 0.3nm,0.3s,baz=265,slow=3.8,SNR=2.0 | | | | | | |
| ASAR | Alice Springs | 44.23 | 258 | P | P | 18 48 12.3 | +0.6 |
| | 5.1nm,0.8s,baz=94,slow=8.3,SNR=52 | | | | | | |
| ASAR | | | | PcP | PcP | 18 49 47.9 | -0.1 |
| | 1.0nm,0.7s,baz=110,slow=3.9,SNR=6.1 | | | | | | |
| WRA | Warramunga Arr | 44.40 | 263 | P | P | 18 48 13.2 | +0.2 |
| | 1.3nm,0.3s,baz=95,slow=7.8,SNR=51 | | | | | | |
| WRA | | | | PcP | PcP | 18 49 49.0 | +0.4 |
| | 0.3nm,0.5s,baz=100,slow=3.2,SNR=2.7 | | | | | | |
| VNDA | Vanda | 56.94 | 185 | P | P | 18 49 46.5 | +2.1 |
| | 0.7nm,0.6s,baz=340,slow=6.9,SNR=3.6 | | | | | | |
| MJAR | Matsushiro Arr | 70.94 | 324 | P | P | 18 51 14.8 | -0.2 |
| | 0.5nm,0.5s,baz=156,slow=6.1,SNR=6.7 | | | | | | |
| PETK | Petropavlovsk- | 77.18 | 345 | P | P | 18 51 50.1 | -0.1 |
| | 3.9nm,0.6s,baz=143,slow=8.9,SNR=11 | | | | | | |
| MAW | Mawson | 80.63 | 200 | P | P | 18 52 09.3 | +0.7 |
| | 0.8nm,0.3s,baz=117,slow=11,SNR=3.1 | | | | | | |
| NVAR | Mina Array Bea | 81.78 | 43 | P | P | 18 52 15.8 | +0.5 |
| | 0.9nm,0.6s,baz=229,slow=8.0,SNR=8.9 | | | | | | |
| SNAA | Sanae | 87.05 | 178 | P | P | 18 52 39.3 | -1.4 |
| VNA3 | Neumayer Olymp | 87.19 | 176 | P | P | 18 52 41.6 | +0.3 |
| VNA2 | Neumayer--Watz | 87.63 | 177 | P | P | 18 52 43.9 | +0.6 |
| | baz=203,slow=3.6 | | | | | | |
| TXAR | Lajitas Array | 87.64 | 57 | P | P | 18 52 45.1 | +0.9 |
| | 0.4nm,0.7s,baz=218,slow=7.6,SNR=5.6 | | | | | | |
| VNA1 | Neumayer--Stat | 87.85 | 177 | P | P | 18 52 45.0 | +0.6 |
| ILAR | Eielson Array | 89.27 | 13 | P | P | 18 52 49.6 | -1.3 |
| | 0.4nm,0.3s,baz=219,slow=6.9,SNR=4.1 | | | | | | |
| CMAR | Chiang Mai Arr | 90.37 | 290 | P | P | 18 52 58.8 | +1.8 |
| | 0.6nm,0.7s,baz=105,slow=4.1,SNR=4.5 | | | | | | |
| ZALV | Zalesovo Beam | 111.19 | 321 | PKiKP | PKiKP | 18 58 24.3 | -1.7 |
| | 0.4nm,0.3s,baz=143,slow=0.7,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 111.80 | 313 | PKiKP | PKiKP | 18 58 25.3 | -2.1 |
| | 0.2nm,0.4s,baz=98,slow=0.6,SNR=5.8 | | | | | | |
| ARCES | ARCESS Array B | 129.85 | 349 | PKP | PKPdf | 18 59 00.5 | -0.8 |
| | 1.1nm,0.4s,baz=75,slow=1.8,SNR=12 | | | | | | |
| FINES | FINESS Array B | 136.67 | 343 | PKhKP | PKPpre | 18 59 08.3 | |
| | 0.8nm,0.7s,baz=62,slow=9.3,SNR=3.6 | | | | | | |
| FINES | | | | PKP | PKPdf | 18 59 15.0 | +0.7 |
| | 2.5nm,0.8s,baz=17,slow=2.0,SNR=5.1 | | | | | | |
| AKASG | Malin Array Be | 143.82 | 330 | PKP | PKPab | 18 59 24.9 | -1.2 |
| | 3.4nm,0.4s,baz=42,slow=4.2,SNR=22 | | | | | | |
| EKA | Eskdalemuir Ar | 145.97 | 5 | PKPbc | PKPbc | 18 59 31.8 | -0.9 |
| | 0.6nm,0.4s,baz=310,slow=3.1,SNR=5.0 | | | | | | |
| BRTR | Keskin Array B | 147.42 | 311 | PKPbc | PKPbc | 18 59 36.7 | -0.6 |
| | 2.7nm,0.6s,baz=143,slow=2.7,SNR=13 | | | | | | |
| BRG | Berggiesshubel | 149.17 | 345 | e(P) | PKPbc | 18 59 41.0 | -0.2 |
| | 2.4nm,0.6s | | | | | | |
| GERES | GERESS Array B | 151.10 | 344 | PKPbc | PKPbc | 18 59 45.3 | -0.7 |
| | 1.0nm,0.5s,baz=46,slow=3.9,SNR=6.4 | | | | | | |
| TORD | Torodi Ar. Bea | 171.72 | 178 | PKP | PKPdf | 19 00 00.5 | -1.1 |
| | 0.3nm,0.6s,baz=90,slow=0.8,SNR=3.2 | | | | | | |
| TORD | | | | PKPab | PKPab | 19 01 26.6 | +0.8 |
| | 0.8nm,0.6s,baz=185,slow=4.5,SNR=9.1 | | | | | | |

**IDC 09 18:42:50.9**±2.9**, 22°.60N**×**11°.87W, h0**km**, mb3.4**/3**, mb1 3.5**/5**, mb1mx3.3**/37**, mbtmp3.4**/5**, ML3.4**/2**, Error ellipse: s-maj=97.2km s-min=33.0km az=86.0, Mauritania**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I11CV | MAIO ISLAND IN | 12.96 | 238 | i | | 20 08 20.0 | |
| | baz=55,slow=313,SNR=1.0 | | | | | | |
| TORD | Torodi Ar. Bea | 15.96 | 124 | Pn | Pn | 18 46 38.0 | +1.0 |
| | 0.1nm,0.3s,baz=316,slow=12,SNR=5.2 | | | | | | |
| TORD | | | | Sn | Sn | 18 49 31.2 | -3.4 |
| | 0.1nm,0.3s,baz=310,slow=21,SNR=2.3 | | | | | | |
| DBIC | Dimbokro | 17.22 | 156 | P | Pn | 18 46 52.2 | -0.8 |
| | 0.4nm,0.3s,baz=324,slow=9.6,SNR=4.8 | | | | | | |
| GERES | GERESS Array B | 33.12 | 31 | P | P | 18 49 28.7 | -0.1 |
| | 0.3nm,0.5s,baz=234,slow=6.7,SNR=2.4 | | | | | | |
| KURBB | Kurchatov Arra | 73.11 | 42 | P | P | 18 54 23.1 | 0.0 |
| | 0.2nm,0.5s,baz=288,slow=5.9,SNR=2.9 | | | | | | |
| MKAR | Makanchi Array | 76.61 | 45 | P | P | 18 54 43.5 | 0.0 |
| | 0.3nm,0.8s,baz=313,slow=5.0,SNR=2.7 | | | | | | |
| WRA | Warramunga Arr | 148.43 | 92 | PKPbc | PKPbc | 19 02 39.7 | -0.6 |
| | 0.9nm,1.2s,baz=288,slow=2.9,SNR=2.7 | | | | | | |
| ASAR | Alice Springs | 148.55 | 99 | PKPbc | PKPbc | 19 02 40.0 | -0.5 |
| | 0.2nm,0.5s,baz=286,slow=2.9,SNR=5.0 | | | | | | |

**KRSC 09 18:58:16.3**±0.5**, 55°.16N**×**160°.35E, h4**km±2km**, ML3.6, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KZV | Kizimen | 0.06 | 216 | i P | Pg | 18 58 17.8 | 0.0 |
| KZV | | | | S | Sg | 18 58 19.1 | +0.3 |
| TUMR | Tumrok | 0.17 | 317 | i P | Pg | 18 58 19.2 | -0.7 |
| KMNR | Kamenistaya | 0.60 | 354 | eP | Pg | 18 58 27.9 | -0.2 |
| KMNR | | | | eS | Sg | 18 58 36.7 | +0.7 |
| BZMR | Bezymyannaya | 0.78 | 6 | P | Pn | 18 58 33.8 | -0.6 |
| KIRR | Kirishev | 0.80 | 360 | eP | Pb | 18 58 32.7 | -0.3 |
| KIRR | | | | eS | Sb | 18 58 44.3 | 0.0 |
| BZWR | Bezymyannyi-We | 0.81 | 6 | eP | Pb | 18 58 34.0 | +0.7 |
| KPT | Kopyto | 0.81 | 355 | eP | Pb | 18 58 33.5 | +0.3 |
| KOZ | Kozyrevsk | 0.94 | 343 | eP | Pb | 18 58 35.4 | +0.1 |
| KOZ | | | | eS | Sb | 18 58 48.5 | +0.3 |
| MKZ | Mys Kozlova | 1.00 | 127 | eP | Pg | 18 58 35.6 | +0.1 |
| MKZ | | | | eS | Sb | 18 58 49.6 | -0.1 |
| KLY | Klyuchi | 1.17 | 8 | eP | Pn | 18 58 39.9 | +0.4 |
| KLY | | | | eS | Sn | 18 58 57.6 | +1.7 |
| ESO | Esso | 1.21 | 310 | P | Pg | 18 58 38.5 | -1.1 |
| ESO | | | | S | Sg | 18 58 54.3 | -1.1 |
| SRDR | Sredinnyy | 1.22 | 343 | P | Pn | 18 58 40.2 | 0.0 |
| SRDR | | | | S | Sn | 18 58 58.0 | +0.8 |
| KII | Karymskiy | 1.24 | 205 | P | Pn | 18 58 40.9 | +0.3 |
| KII | | | | eS | Sn | 18 58 58.9 | +1.1 |
| SRKR | Sorokina | 1.57 | 17 | P | Pb | 18 58 46.1 | +0.1 |
| KBTR | Krutoberegovo | 1.75 | 52 | eP | Pn | 18 58 46.7 | -0.8 |
| KBTR | | | | eS | Sn | 18 59 09.7 | -0.5 |
| GNL | Ganaly | 2.03 | 225 | eP | Pn | 18 58 52.0 | +0.5 |
| GNL | | | | eS | Sn | 18 59 18.2 | +0.7 |
| KRX | Arik | 2.06 | 210 | P | Pb | 18 58 54.4 | -0.1 |
| SDLR | Sedlovina | 2.07 | 205 | P | Pb | 18 58 53.5 | -1.2 |
| SDLR | | | | S | Sb | 18 59 21.0 | +0.1 |
| SPN | Mys Shipunski | 2.07 | 185 | P | Pn | 18 58 51.8 | -0.1 |
| SPN | | | | S | Sn | 18 59 18.9 | +0.7 |
| SMAR | Somma | 2.11 | 206 | P | Pn | 18 58 53.9 | +1.2 |
| SMAR | | | | S | Sb | 18 59 21.9 | -0.2 |
| AVH | Avacha | 2.12 | 207 | eP | Pb | 18 58 54.6 | -0.8 |
| KOK | Koryaka | 2.12 | 209 | P | Pb | 18 58 54.7 | -0.8 |
| UGLR | Uglovaya | 2.15 | 205 | P | Pb | 18 58 56.2 | +0.2 |
| PET | Petropavlovsk | 2.36 | 206 | P | Pb | 18 58 59.7 | +0.3 |
| APC | Apacha | 2.92 | 221 | eP | Pn | 18 59 06.1 | +2.5 |
| APC | | | | S | Sn | 18 59 41.4 | +2.3 |
| RUS | Russkaya | 2.94 | 203 | P | Pn | 18 59 05.6 | +1.8 |
| RUS | | | | S | Sn | 18 59 41.2 | +1.7 |

*TIR **09** 19:04:42.1, 38°.01N×22°.76E, h4km, ML4.6*
*IDC **09** 19:04:47.5±0.5, 38°.17N×22°.74E, h0km, mb4.3/30, mb1 4.4/40, mb1mx4.3/54, mbtmp4.3/40, ML3.9/10, MS3.4/12, Ms1 3.4/12, ms1mx3.2/37, Error ellipse: s-maj=11.4km s-min=9.8km az=53.0*
*BJI **09** 19:04:47.2, 38°.12N×22°.20E, h27km, mb4.5/28, mB5.0/21, Ms4.7/15, Ms7 4.4/12*
*PDG **09** 19:04:49.7±0.5, 38°.18N×22°.72E, h10km, ML4.2/11, Error ellipse: s-maj=0.5km s-min=0.4km az=90.0*
*ISCJB **09** 19:04:49.8±0.2, 38°.163N±0°.010×22°.71E±0°.01, h20km±1km, mb4.7/81, MS3.4/9, Error ellipse: s-maj=1.7km s-min=1.3km az=30.2*
*MOS **09** 19:04:49.5±1.0, 38°.19N×22°.81E, h19km, mb4.7/34, Error ellipse: s-maj=6.1km s-min=2.9km az=89.8*
*CSEM **09** 19:04:49.8±0.1, 38°.14N×22°.69E, h10km, mb4.9/66, Error ellipse: s-maj=1.8km s-min=1.5km az=33.0*
*THE **09** 19:04:49.7, 38°.15N×22°.72E, h0km±2km, ML4.5/15, Error ellipse: s-maj=2.4km s-min=0.5km az=267.0*
*NEIC **09** 19:04:49.8±0.3, 38°.17N×22°.74E, h11km±2km, mb5.1/48, ML4.5(THE), Error ellipse: s-maj=2.7km s-min=2.3km az=221.0*
*ATH **09** 19:04:49.7, 38°.15N×22°.72E, h20km, MD3.5/49, ML4.3*
*HLW **09** 19:04:50.9, 37°.99N×23°.09E, h91km±23km, Md3.9, Ml3.8*
**ISC 09 19:04:50.2**±0.5**, 38°.15N**±0°.01×**22°.71E**±0°.01**, h12**km±2km**, n1121,** σ**1**s**11**/1226**, mb4.9**/85**, MS3.4**/9**, 47C-37D, Greece**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| THAL | Thalero | 0.12 | 198 | ePB | Pg | 19 04 53.2 | -0.1 |
| THAL | Thalero | 0.12 | 198 | P | Pg | 19 04 52.8 | -0.5 |
| THAL | | | | S | Sg | 19 04 55.1 | -0.4 |
| THAL | Thalero | 0.12 | 198 | P | Pg | 19 04 52.8 | -0.5 |
| THAL | Thalero | 0.12 | 198 | ePb | Pg | 19 04 53.2 | -0.1 |
| THAL | | | | S | Sg | 19 04 55.1 | -0.4 |
| LTK | Loutraki | 0.24 | 121 | ePB | Pg | 19 04 55.0 | -0.3 |
| LTK | | | | eSB | Sg | 19 04 58.9 | +0.2 |
| LTK | Loutraki | 0.24 | 121 | P | Pg | 19 04 55.0 | -0.3 |
| LTK | | | | S | Sg | 19 04 58.7 | 0.0 |
| LTK | Loutraki | 0.24 | 121 | P | Pg | 19 04 55.0 | -0.3 |
| LTK | | | | S | Sg | 19 04 58.7 | 0.0 |
| LTK | Loutraki | 0.24 | 121 | P | Pg | 19 04 55.0 | -0.3 |
| LTK | | | | S | Sg | 19 04 58.7 | 0.0 |
| LOUT | Loutraki | 0.26 | 127 | ePB | Pg | 19 04 55.5 | -0.3 |
| LOUT | | | | eSB | Sg | 19 04 59.5 | +0.2 |
| LOUT | Loutraki | 0.26 | 127 | P | Pg | 19 04 55.4 | -0.3 |
| LOUT | | | | S | Sg | 19 04 59.6 | +0.2 |
| LOUT | Loutraki | 0.26 | 127 | P | Pg | 19 04 55.4 | -0.3 |
| LOUT | | | | S | Sg | 19 04 59.6 | +0.2 |
| DSF | Desfina | 0.30 | 332 | ePB | Pg | 19 04 56.0 | -0.5 |
| DSF | | | | eSB | Sg | 19 05 01.0 | +0.4 |
| DSF | Desfina | 0.30 | 332 | P | Pg | 19 04 55.9 | -0.5 |
| DSF | Desfina | 0.30 | 332 | P | Pg | 19 04 55.9 | -0.5 |
| DSF | Desfina | 0.30 | 332 | ePb | Pg | 19 04 56.0 | -0.5 |
| DSF | | | | S | Sg | 19 05 00.8 | +0.2 |
| GUR | Goura | 0.36 | 234 | ePB | Pg | 19 04 56.8 | -0.7 |
| GUR | | | | eSB | Sg | 19 05 02.5 | +0.2 |
| GUR | Goura | 0.36 | 234 | P | Pg | 19 04 56.7 | -0.7 |
| GUR | | | | S | Sg | 19 05 01.2 | -1.1 |
| GUR | Goura | 0.36 | 234 | P | Pg | 19 04 56.7 | -0.7 |
| GUR | Goura | 0.36 | 234 | ePb | Pg | 19 04 56.8 | -0.7 |
| GUR | | | | S | Sg | 19 05 01.3 | -1.1 |
| GUR | | | | eSb | Sg | 19 05 02.5 | +0.2 |
| VIL2 | Platees | 0.45 | 82 | ePB | Pb | 19 04 59.8 | -0.2 |
| VIL2 | | | | eSB | Sb | 19 05 06.2 | -0.5 |
| KLV | Kalavryta, Ach | 0.45 | 257 | ePB | Pg | 19 04 58.5 | -0.7 |
| KLV | | | | eSB | Sg | 19 05 05.8 | +0.6 |
| KLV | Kalavryta, Ach | 0.45 | 257 | P | Pg | 19 04 58.2 | -1.0 |
| KLV | | | | S | Sg | 19 05 04.0 | -1.2 |
| KLV | Kalavryta, Ach | 0.45 | 257 | P | Pg | 19 04 58.2 | -1.0 |
| KLV | Kalavryta, Ach | 0.45 | 257 | P | Pg | 19 04 58.2 | -1.0 |
| KLV | Kalavryta, Ach | 0.45 | 257 | ePb | Pg | 19 04 58.5 | -0.7 |
| KLV | | | | S | Sg | 19 05 04.1 | -1.2 |
| KLV | | | | eSb | Sg | 19 05 05.8 | +0.6 |
| VILL | Villia | 0.48 | 88 | P | Pg | 19 04 59.2 | -0.4 |
| VILL | | | | S | Sb | 19 05 06.8 | -0.8 |
| VILL | Villia | 0.48 | 88 | P | Pg | 19 04 59.2 | -0.4 |
| VILL | Villia | 0.48 | 88 | ePb | Pg | 19 04 59.8 | +0.2 |
| VILL | | | | eSb | Sg | 19 05 06.2 | +0.2 |
| VILL | | | | S | Sb | 19 05 06.8 | -0.8 |
| KALE | Kalithea | 0.51 | 299 | ePN | Pg | 19 04 59.8 | -0.5 |
| KALE | | | | eSN | Sg | 19 05 07.3 | +0.3 |
| KALE | Kalithea | 0.51 | 299 | P | Pg | 19 04 59.6 | -0.7 |
| KALE | Kalithea | 0.51 | 299 | P | Pg | 19 04 59.6 | -0.7 |
| KALE | Kalithea | 0.51 | 299 | ePn | Pg | 19 04 59.8 | -0.5 |
| KALE | | | | S | Sg | 19 05 07.4 | +0.4 |
| LKR | Lokris | 0.55 | 24 | ePN | Pg | 19 05 00.4 | -0.7 |
| LKR | | | | eSN | Sg | 19 05 08.0 | -0.4 |
| LKR | Lokris | 0.55 | 24 | P | Pg | 19 05 00.2 | -0.9 |
| LKR | | | | S | Sb | 19 05 08.9 | -0.8 |
| LKR | Lokris | 0.55 | 24 | P | Pg | 19 05 00.2 | -0.9 |
| LKR | Lokris | 0.55 | 24 | ePn | Pg | 19 05 00.4 | -0.7 |
| LKR | | | | eSn | Sg | 19 05 08.0 | -0.4 |
| LKR | | | | S | Sb | 19 05 08.4 | -1.3 |
| SERG | Sergoula | 0.58 | 298 | P | Pg | 19 05 00.7 | -0.8 |
| SERG | Sergoula | 0.58 | 298 | P | Pg | 19 05 00.7 | -0.8 |
| LAKA | Lakka | 0.58 | 279 | ePN | Pg | 19 05 01.6 | 0.0 |
| LAKA | Lakka | 0.58 | 279 | P | Pg | 19 05 00.9 | -0.7 |
| LAKA | Lakka | 0.58 | 279 | P | Pg | 19 05 00.9 | -0.7 |
| LAKA | Lakka | 0.58 | 279 | P | Pg | 19 05 00.9 | -0.7 |
| LAKA | Lakka | 0.58 | 279 | ePn | Pg | 19 05 01.6 | 0.0 |
| ATAL | Atalanti | 0.60 | 24 | P | Pg | 19 05 01.0 | -0.9 |
| ATAL | Atalanti | 0.60 | 24 | P | Pg | 19 05 01.0 | -0.9 |
| ATAL | Atalanti | 0.60 | 24 | P | Pg | 19 05 01.0 | -0.9 |
| AXAR | Agios Charalam | 0.62 | 356 | ePB | Pg | 19 05 01.7 | -0.6 |
| AXAR | | | | eSN | Sg | 19 05 11.0 | +0.5 |
| AXAR | Agios Charalam | 0.62 | 356 | P | Pg | 19 05 01.7 | -0.6 |
| AXAR | Agios Charalam | 0.62 | 356 | P | Pg | 19 05 01.7 | -0.6 |
| AXAR | Agios Charalam | 0.62 | 356 | P | Pg | 19 05 01.7 | -0.6 |
| AXAR | | | | eSn | Sg | 19 05 11.0 | +0.5 |
| EFP | Efpalio | 0.69 | 294 | ePN | Pg | 19 05 03.1 | -0.6 |
| EFP | | | | eSN | Sb | 19 05 14.2 | +0.5 |
| EFP | Efpalio | 0.69 | 294 | P | Pg | 19 05 03.0 | -0.6 |
| EFP | Efpalio | 0.69 | 294 | P | Pg | 19 05 03.0 | -0.6 |
| EFP | | | | eSn | Sb | 19 05 14.2 | +0.5 |
| NAIG | Nisos Aigina | 0.73 | 122 | ePN | Pg | 19 05 04.2 | -0.2 |
| NAIG | Nisos Aigina | 0.73 | 122 | ePn | Pg | 19 05 04.2 | -0.2 |
| UPR | University Cam | 0.74 | 281 | ePN | Pg | 19 05 04.5 | -0.1 |
| UPR | | | | eSN | Sb | 19 05 15.1 | 0.0 |
| UPR | University Cam | 0.74 | 281 | P | Pg | 19 05 04.1 | -0.5 |
| UPR | University Cam | 0.74 | 281 | P | Pg | 19 05 04.0 | -0.5 |
| UPR | University Cam | 0.74 | 281 | ePn | Pg | 19 05 04.5 | -0.1 |
| UPR | | | | eSn | Sb | 19 05 15.1 | 0.0 |
| DID | Didima | 0.77 | 147 | ePN | Pg | 19 05 04.4 | -0.6 |
| DID | | | | eSN | Sg | 19 05 15.4 | +0.3 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| DID | Didima | 0.77 | 147 | P | Pg | 19 05 04.0 | -1.0 |
| DID | | | | S | Sg | 19 05 15.1 | 0.0 |
| DID | Didima | 0.77 | 147 | P | Pg | 19 05 04.0 | -1.0 |
| DID | | | | S | Sg | 19 05 15.1 | 0.0 |
| DID | Didima | 0.77 | 147 | P | Pg | 19 05 04.1 | -1.0 |
| DID | Didima | 0.77 | 147 | ePn | Pg | 19 05 04.4 | -0.6 |
| DID | | | | S | Sg | 19 05 15.1 | 0.0 |
| DID | | | | eSn | Sg | 19 05 15.4 | +0.3 |
| DIDY | Didyma | 0.78 | 149 | ePN | Pg | 19 05 04.5 | -0.8 |
| DIDY | | | | eSN | Sg | 19 05 15.5 | -0.1 |
| DIDY | Didyma | 0.78 | 149 | P | Pg | 19 05 04.5 | -0.8 |
| DIDY | Didyma | 0.78 | 149 | P | Pg | 19 05 04.5 | -0.8 |
| DIDY | | | | eSn | Sg | 19 05 15.5 | -0.1 |
| DRO | Drossia | 0.81 | 256 | ePN | Pb | 19 05 06.5 | +0.2 |
| DRO | | | | eSN | Sb | 19 05 17.5 | +0.3 |
| DRO | Drossia | 0.81 | 256 | P | Pg | 19 05 04.8 | -1.1 |
| DRO | Drossia | 0.81 | 256 | P | Pg | 19 05 04.8 | -1.1 |
| DRO | Drossia | 0.81 | 256 | ePn | Pb | 19 05 06.5 | +0.2 |
| DRO | | | | eSn | Sb | 19 05 17.5 | +0.3 |
| ATH | Athens Observa | 0.81 | 102 | P | Pg | 19 05 05.5 | -0.5 |
| ATH | | | | S | Sg | 19 05 16.6 | -0.1 |
| ATH | Athens Observa | 0.81 | 102 | ePN | Pg | 19 05 05.7 | -0.3 |
| ATH | | | | eSN | Sb | 19 05 17.0 | -0.2 |
| ATH | Athens Observa | 0.81 | 102 | P | Pg | 19 05 05.5 | -0.5 |
| ATH | | | | S | Sg | 19 05 16.6 | -0.1 |
| ATH | Athens Observa | 0.81 | 102 | P | Pg | 19 05 05.5 | -0.5 |
| ATH | | | | S | Sg | 19 05 16.6 | -0.1 |
| ATH | Athens Observa | 0.81 | 102 | P | Pg | 19 05 05.5 | -0.5 |
| ATH | | | | S | Sg | 19 05 16.6 | -0.1 |
| ATH | | | | eSn | Sb | 19 05 17.0 | -0.2 |
| VLX | Vlachokerasia | 0.82 | 199 | ePB | Pg | 19 05 05.1 | -1.1 |
| VLX | | | | eSN | Sg | 19 05 17.2 | +0.4 |
| VLX | Vlachokerasia | 0.82 | 199 | P | Pg | 19 05 05.0 | -1.1 |
| VLX | Vlachokerasia | 0.82 | 199 | P | Pg | 19 05 05.0 | -1.1 |
| VLX | Vlachokerasia | 0.82 | 199 | P | Pg | 19 05 05.0 | -1.1 |
| VLX | | | | S | Sg | 19 05 17.4 | +0.6 |
| SMIA | Simia | 0.83 | 28 | ePN | Pg | 19 05 05.6 | -0.7 |
| SMIA | Simia | 0.83 | 28 | P | Pg | 19 05 05.2 | -1.1 |
| SMIA | Simia | 0.83 | 28 | P | Pg | 19 05 05.2 | -1.1 |
| SMIA | Simia | 0.83 | 28 | ePn | Pg | 19 05 05.6 | -0.7 |
| KRND | KRANIDI | 0.84 | 155 | ePN | Pg | 19 05 05.8 | -0.7 |
| KRND | | | | eSN | Sg | 19 05 17.2 | -0.2 |
| KRND | KRANIDI | 0.84 | 155 | P | Pg | 19 05 05.4 | -1.1 |
| KRND | | | | S | Sg | 19 05 17.4 | 0.0 |
| KRND | KRANIDI | 0.84 | 155 | P | Pg | 19 05 05.4 | -1.1 |
| KRND | KRANIDI | 0.84 | 155 | ePn | Pg | 19 05 05.8 | -0.7 |
| KRND | | | | S | Sg | 19 05 17.4 | 0.0 |
| ATHU | Athens Univers | 0.87 | 102 | P | Pg | 19 05 06.3 | -0.7 |
| ATHU | | | | S | Sg | 19 05 18.1 | -0.3 |
| ATHU | Athens Univers | 0.87 | 102 | P | Pg | 19 05 06.3 | -0.7 |
| ATHU | | | | S | Sg | 19 05 18.1 | -0.3 |
| ATHU | Athens Univers | 0.87 | 102 | P | Pg | 19 05 06.3 | -0.7 |
| ATHU | | | | S | Sg | 19 05 18.1 | -0.3 |
| MRKA | Markates | 0.89 | 51 | ePN | Pg | 19 05 06.4 | -1.0 |
| MRKA | | | | eSN | Sg | 19 05 19.0 | 0.0 |
| MRKA | Markates | 0.89 | 51 | P | Pg | 19 05 06.0 | -1.4 |
| MRKA | Markates | 0.89 | 51 | P | Pg | 19 05 06.0 | -1.4 |
| MRKA | Markates | 0.89 | 51 | ePn | Pg | 19 05 06.4 | -1.0 |
| MRKA | | | | eSn | Sg | 19 05 19.0 | 0.0 |
| VLY | Voula,Athens | 0.91 | 109 | ePN | Pg | 19 05 07.3 | -0.4 |
| VLY | | | | eSN | Sb | 19 05 19.8 | -0.1 |
| VLY | Voula,Athens | 0.91 | 109 | P | Pg | 19 05 06.9 | -0.8 |
| VLY | | | | S | Sg | 19 05 18.9 | -0.7 |
| VLY | Voula,Athens | 0.91 | 109 | P | Pg | 19 05 06.9 | -0.8 |
| VLY | | | | S | Sg | 19 05 18.9 | -0.7 |
| VLY | Voula,Athens | 0.91 | 109 | P | Pg | 19 05 06.9 | -0.8 |
| VLY | Voula,Athens | 0.91 | 109 | ePn | Pg | 19 05 07.3 | -0.4 |
| VLY | | | | S | Sg | 19 05 18.9 | -0.7 |
| VLY | | | | eSn | Sb | 19 05 19.8 | -0.1 |
| PTL | Penteli | 0.92 | 96 | ePN | Pg | 19 05 07.5 | -0.5 |
| PTL | | | | eSN | Sg | 19 05 19.3 | -0.6 |
| PTL | Penteli | 0.92 | 96 | P | Pg | 19 05 07.2 | -0.8 |
| PTL | | | | S | Sb | 19 05 20.9 | +0.7 |
| PTL | Penteli | 0.92 | 96 | P | Pg | 19 05 07.2 | -0.8 |
| PTL | | | | S | Sb | 19 05 20.9 | +0.7 |
| PTL | Penteli | 0.92 | 96 | P | Pg | 19 05 07.2 | -0.8 |
| PTL | Penteli | 0.92 | 96 | ePn | Pg | 19 05 07.5 | -0.5 |
| PTL | | | | eSn | Sg | 19 05 19.3 | -0.6 |
| PTL | | | | S | Sb | 19 05 20.9 | +0.7 |
| AGG | Agios Georgios | 0.92 | 341 | ePG | Pb | 19 05 08.8 | +0.6 |
| AGG | | | | eSG | Sb | 19 05 22.2 | +1.9 |
| AGG | Agios Georgios | 0.92 | 341 | eP | Pg | 19 05 06.7 | -1.4 |
| AGG | | | | e | | 19 05 18.6 | |
| AGG | Agios Georgios | 0.92 | 341 | ePN | Pg | 19 05 07.9 | -0.2 |
| AGG | | | | eSN | Sg | 19 05 20.1 | 0.0 |
| AGG | Agios Georgios | 0.92 | 341 | P | Pg | 19 05 06.6 | -1.4 |
| AGG | | | | S | Sg | 19 05 20.3 | +0.2 |
| AGG | Agios Georgios | 0.92 | 341 | ePn | Pg | 19 05 06.7 | -1.4 |
| AGG | | | | eSn | Sg | 19 05 18.6 | -1.5 |
| AGG | Agios Georgios | 0.92 | 341 | P | Pg | 19 05 06.7 | -1.4 |
| AGG | Agios Georgios | 0.92 | 341 | ePn | Pg | 19 05 07.9 | -0.2 |
| AGG | Agios Georgios | 0.92 | 341 | ePg | Pb | 19 05 08.8 | +0.6 |
| AGG | | | | eSn | Sg | 19 05 18.6 | -1.5 |
| AGG | | | | S | Sg | 19 05 20.1 | 0.0 |
| AGG | | | | eSg | Sb | 19 05 22.3 | +1.9 |
| MAKR | Makrakomi, Fth | 0.98 | 333 | ePN | Pg | 19 05 08.7 | -0.4 |
| MAKR | | | | eSN | Sb | 19 05 23.0 | +1.1 |
| MAKR | Makrakomi, Fth | 0.98 | 333 | P | Pg | 19 05 08.2 | -0.8 |
| MAKR | | | | S | Sb | 19 05 23.6 | +1.7 |
| MAKR | Makrakomi, Fth | 0.98 | 333 | P | Pg | 19 05 08.2 | -0.8 |
| MAKR | | | | S | Sb | 19 05 23.6 | +1.7 |
| MAKR | Makrakomi, Fth | 0.98 | 333 | P | Pg | 19 05 08.3 | -0.8 |
| MAKR | Makrakomi, Fth | 0.98 | 333 | ePn | Pg | 19 05 08.7 | -0.4 |
| MAKR | | | | eSn | Sb | 19 05 23.0 | +1.1 |
| MAKR | | | | S | Sb | 19 05 23.6 | +1.7 |
| RLS | Riolos of Patr | 0.98 | 265 | ePN | Pg | 19 05 08.4 | -0.8 |
| RLS | | | | eSN | Sb | 19 05 23.0 | +0.9 |
| RLS | Riolos of Patr | 0.98 | 265 | P | Pg | 19 05 07.8 | -1.4 |
| RLS | Riolos of Patr | 0.98 | 265 | P | Pg | 19 05 07.8 | -1.4 |
| RLS | Riolos of Patr | 0.98 | 265 | P | Pg | 19 05 07.8 | -1.4 |
| RLS | Riolos of Patr | 0.98 | 265 | ePn | Pg | 19 05 08.4 | -0.8 |
| RLS | | | | eSn | Sb | 19 05 23.0 | +0.9 |
| AMT | Artemida-Makis | 1.00 | 232 | ePN | Pg | 19 05 08.5 | -1.0 |
| AMT | | | | eSN | Sb | 19 05 23.7 | +1.1 |
| AMT | Artemida-Makis | 1.00 | 232 | P | Pg | 19 05 08.1 | -1.4 |
| AMT | Artemida-Makis | 1.00 | 232 | P | Pg | 19 05 08.1 | -1.4 |
| AMT | Artemida-Makis | 1.00 | 232 | ePb | Pg | 19 05 08.5 | -1.0 |
| AMT | | | | eSn | Sb | 19 05 23.7 | +1.1 |
| EREA | Eretria | 1.00 | 74 | ePN | Pg | 19 05 08.9 | -0.6 |
| EREA | | | | eSN | Sb | 19 05 23.0 | +0.4 |
| EREA | Eretria | 1.00 | 74 | P | Pg | 19 05 08.1 | -1.4 |
| EREA | | | | S | Sb | 19 05 24.1 | +1.5 |
| EREA | Eretria | 1.00 | 74 | P | Pg | 19 05 08.1 | -1.4 |
| EREA | Eretria | 1.00 | 74 | ePn | Pg | 19 05 08.9 | -0.6 |
| EREA | | | | eSn | Sb | 19 05 23.0 | +0.4 |
| EREA | | | | S | Sb | 19 05 24.1 | +1.5 |
| PVO | Paravola | 1.04 | 297 | ePN | Pg | 19 05 10.1 | -0.2 |
| PVO | Paravola | 1.04 | 297 | P | Pg | 19 05 09.6 | -0.7 |
| PVO | Paravola | 1.04 | 297 | P | Pg | 19 05 09.6 | -0.7 |
| PVO | Paravola | 1.04 | 297 | ePn | Pg | 19 05 10.1 | -0.2 |
| EVR | Evrytania | 1.04 | 318 | ePN | Pg | 19 05 09.9 | -0.5 |
| EVR | | | | eSN | Sb | 19 05 25.1 | +1.2 |
| EVR | Evrytania | 1.04 | 318 | P | Pg | 19 05 08.8 | -1.6 |
| EVR | | | | S | Sg | 19 05 22.9 | -1.1 |
| EVR | Evrytania | 1.04 | 318 | P | Pg | 19 05 08.8 | -1.6 |
| EVR | | | | S | Sg | 19 05 22.9 | -1.1 |
| EVR | Evrytania | 1.04 | 318 | P | Pg | 19 05 08.8 | -1.6 |
| EVR | Evrytania | 1.04 | 318 | ePn | Pg | 19 05 09.9 | -0.5 |
| EVR | | | | S | Sg | 19 05 22.9 | -1.1 |
| EVR | | | | eSn | Sb | 19 05 25.1 | +1.2 |
| AXS | Araxos | 1.05 | 273 | P | Pg | 19 05 09.4 | -1.1 |
| AXS | Araxos | 1.05 | 273 | P | Pg | 19 05 09.4 | -1.1 |
| ITM | Ithomi | 1.15 | 213 | ePN | Pg | 19 05 11.2 | -1.1 |
| ITM | | | | eSN | Sb | 19 05 28.5 | +1.6 |
| ITM | Ithomi | 1.15 | 213 | P | Pg | 19 05 10.5 | -1.8 |
| ITM | Ithomi | 1.15 | 213 | P | Pg | 19 05 10.5 | -1.8 |
| ITM | Ithomi | 1.15 | 213 | P | Pg | 19 05 10.5 | -1.8 |
| ITM | Ithomi | 1.15 | 213 | ePn | Pg | 19 05 11.2 | -1.1 |
| ITM | | | | eSn | Sb | 19 05 28.5 | +1.6 |
| SKIA | Skiathos | 1.18 | 30 | ePN | Pg | 19 05 12.4 | -0.5 |
| SKIA | | | | eSN | Sb | 19 05 28.8 | +1.1 |
| SKIA | Skiathos | 1.18 | 30 | P | Pg | 19 05 11.5 | -1.4 |
| SKIA | | | | S | Sb | 19 05 28.2 | +0.5 |
| SKIA | Skiathos | 1.18 | 30 | P | Pg | 19 05 11.5 | -1.4 |
| SKIA | Skiathos | 1.18 | 30 | ePn | Pg | 19 05 12.4 | -0.5 |
| SKIA | | | | S | Sb | 19 05 28.2 | +0.5 |
| SKIA | | | | eSn | Sb | 19 05 28.8 | +1.1 |
| VTN | Vitineika | 1.22 | 260 | ePN | Pg | 19 05 13.5 | -0.3 |
| VTN | Vitineika | 1.22 | 260 | ePn | Pg | 19 05 13.5 | -0.3 |
| NEO | Neokhori | 1.23 | 19 | ePN | Pg | 19 05 12.4 | -1.4 |
| NEO | | | | eSN | Sb | 19 05 30.1 | +1.0 |
| NEO | Neokhori | 1.23 | 19 | P | Pg | 19 05 12.2 | -1.6 |
| NEO | | | | S | Sn | 19 05 30.8 | +1.1 |
| NEO | Neokhori | 1.23 | 19 | P | Pg | 19 05 12.2 | -1.6 |
| NEO | | | | S | Sn | 19 05 30.8 | +1.1 |
| NEO | Neokhori | 1.23 | 19 | ePn | Pg | 19 05 12.4 | -1.4 |
| NEO | | | | eSn | Sb | 19 05 30.1 | +1.0 |
| NEO | | | | S | Sn | 19 05 30.8 | +1.1 |
| FYTO | Fytoko, Volos | 1.27 | 8 | P | Pg | 19 05 13.4 | -1.3 |
| FYTO | Fytoko, Volos | 1.27 | 8 | P | Pg | 19 05 13.4 | -1.3 |
| FYTO | Fytoko, Volos | 1.27 | 8 | P | Pg | 19 05 13.4 | -1.3 |
| XOR | Xorichti | 1.27 | 17 | ePN | Pg | 19 05 13.3 | -1.5 |
| XOR | | | | eSN | Sb | 19 05 31.6 | +1.1 |
| XOR | Xorichti | 1.27 | 17 | P | Pg | 19 05 13.0 | -1.8 |
| XOR | Xorichti | 1.27 | 17 | P | Pg | 19 05 13.0 | -1.8 |
| XOR | Xorichti | 1.27 | 17 | P | Pg | 19 05 13.0 | -1.8 |
| XOR | Xorichti | 1.27 | 17 | ePn | Pg | 19 05 13.3 | -1.5 |
| XOR | | | | eSn | Sb | 19 05 31.6 | +1.1 |
| PDO | Prodromos | 1.28 | 291 | ePN | Pg | 19 05 14.4 | -0.5 |
| PDO | Prodromos | 1.28 | 291 | P | Pg | 19 05 14.0 | -0.9 |
| PDO | Prodromos | 1.28 | 291 | P | Pg | 19 05 14.0 | -0.9 |
| PDO | Prodromos | 1.28 | 291 | ePn | Pg | 19 05 14.4 | -0.5 |
| KARY | Karystos | 1.37 | 94 | P | Pg | 19 05 14.8 | -1.7 |
| AOS | Alonnisos | 1.37 | 42 | ePN | Pg | 19 05 14.2 | -2.4 |
| AOS | Alonnisos | 1.37 | 42 | ePB | Pg | 19 05 14.5 | -2.2 |
| AOS | Alonnisos | 1.37 | 42 | P | Pg | 19 05 14.4 | -2.2 |
| AOS | Alonnisos | 1.37 | 42 | P | Pg | 19 05 14.4 | -2.2 |
| AOS | Alonnisos | 1.37 | 42 | ePn | Pg | 19 05 14.5 | -2.2 |
| VLI | Veliai | 1.44 | 173 | ePN | Pn | 19 05 16.6 | +0.5 |
| VLI | | | | eSN | Sb | 19 05 36.2 | +1.0 |
| VLI | Veliai | 1.44 | 173 | P | Pn | 19 05 15.5 | -0.6 |
| VLI | Veliai | 1.44 | 173 | P | Pn | 19 05 15.5 | -0.6 |
| VLI | Veliai | 1.44 | 173 | P | Pn | 19 05 15.5 | -0.6 |
| VLI | Veliai | 1.44 | 173 | ePn | Pn | 19 05 16.6 | +0.5 |
| VLI | | | | eSn | Sb | 19 05 36.2 | +1.0 |
| PYL | PYLOS | 1.47 | 212 | ePN | Pb | 19 05 17.8 | +0.4 |
| PYL | PYLOS | 1.47 | 212 | P | Pn | 19 05 16.2 | -0.3 |
| PYL | PYLOS | 1.47 | 212 | P | Pn | 19 05 16.2 | -0.3 |
| PYL | PYLOS | 1.47 | 212 | P | Pn | 19 05 16.2 | -0.3 |
| PYL | PYLOS | 1.47 | 212 | ePn | Pb | 19 05 17.8 | +0.4 |
| KFL | Anninata | 1.52 | 269 | ePN | Pn | 19 05 18.2 | +1.1 |
| KFL | Anninata | 1.52 | 269 | P | Pn | 19 05 18.3 | +1.1 |
| KFL | Anninata | 1.52 | 269 | ePn | Pn | 19 05 18.2 | +1.1 |
| THL | Klokotos Trika | 1.52 | 339 | ePN | Pn | 19 05 17.7 | +0.6 |
| THL | Klokotos Trika | 1.52 | 339 | P | Pn | 19 05 17.2 | +0.1 |
| THL | Klokotos Trika | 1.52 | 339 | P | Pn | 19 05 17.2 | +0.1 |
| THL | Klokotos Trika | 1.52 | 339 | ePn | Pn | 19 05 17.7 | +0.6 |
| ZKS | Zakynthos | 1.59 | 254 | P | Pn | 19 05 19.2 | +1.1 |
| ZKS | Zakynthos | 1.59 | 254 | P | Pn | 19 05 19.2 | +1.1 |
| DSL | Palaion Diasel | 1.60 | 308 | P | Pn | 19 05 19.2 | +0.8 |
| DSL | Palaion Diasel | 1.60 | 308 | P | Pn | 19 05 19.2 | +0.8 |
| DSL | Palaion Diasel | 1.60 | 308 | P | Pn | 19 05 19.2 | +0.8 |
| VLS | Valsamata | 1.67 | 272 | P | Pn | 19 05 20.0 | +0.7 |
| VLS | Valsamata | 1.67 | 272 | ePN | Pn | 19 05 20.6 | +1.3 |
| VLS | Valsamata | 1.67 | 272 | P | Pn | 19 05 20.0 | +0.7 |
| VLS | Valsamata | 1.67 | 272 | P | Pn | 19 05 20.0 | +0.7 |
| VLS | Valsamata | 1.67 | 272 | P | Pn | 19 05 20.0 | +0.7 |
| VLS | Valsamata | 1.67 | 272 | ePn | Pn | 19 05 20.6 | +1.3 |
| SERI | Serifos | 1.72 | 124 | ePN | Pn | 19 05 20.5 | +0.5 |
| SERI | Serifos | 1.72 | 124 | ePn | Pn | 19 05 20.5 | +0.5 |
| LKD2 | Lefkada island | 1.73 | 292 | P | Pn | 19 05 21.5 | +1.3 |
| LKD2 | Lefkada island | 1.73 | 292 | P | Pn | 19 05 21.5 | +1.3 |
| LKD2 | Lefkada island | 1.73 | 292 | P | Pn | 19 05 21.5 | +1.3 |
| KYTH | Kithira | 1.88 | 172 | P | Pn | 19 05 22.6 | +0.4 |
| KYTH | Kithira | 1.88 | 172 | P | Pn | 19 05 22.6 | +0.4 |
| KYTH | Kithira | 1.88 | 172 | P | Pn | 19 05 22.6 | +0.4 |
| PAIG | Paliouri | 1.93 | 23 | P | Pn | 19 05 22.0 | -0.9 |
| PAIG | Paliouri | 1.93 | 23 | P | Pn | 19 05 22.0 | -0.9 |
| PAIG | Paliouri | 1.93 | 23 | P | Pn | 19 05 22.0 | -0.9 |
| PAIG | Paliouri | 1.93 | 23 | P | Pn | 19 05 22.0 | -0.9 |
| LIT | Litokhoron | 1.96 | 355 | P | Pn | 19 05 22.9 | -0.4 |
| LIT | Litokhoron | 1.96 | 355 | ePB | Pn | 19 05 23.4 | +0.1 |
| LIT | Litokhoron | 1.96 | 355 | P | Pn | 19 05 22.9 | -0.4 |
| LIT | Litokhoron | 1.96 | 355 | P | Pn | 19 05 22.9 | -0.4 |
| LIT | Litokhoron | 1.96 | 355 | P | Pn | 19 05 22.9 | -0.4 |
| LIT | Litokhoron | 1.96 | 355 | ePb | Pn | 19 05 23.4 | +0.1 |
| MHLO | Agia Marina, M | 1.98 | 137 | ePN | Pn | 19 05 24.4 | +0.8 |
| MHLO | Agia Marina, M | 1.98 | 137 | P | Pn | 19 05 23.7 | +0.1 |
| MHLO | Agia Marina, M | 1.98 | 137 | P | Pn | 19 05 23.7 | +0.1 |
| MHLO | Agia Marina, M | 1.98 | 137 | ePn | Pn | 19 05 24.4 | +0.8 |
| JAN | Janina | 2.09 | 317 | P | Pn | 19 05 27.3 | +2.2 |
| JAN | Janina | 2.09 | 317 | P | Pn | 19 05 27.3 | +2.2 |
| JAN | Janina | 2.09 | 317 | P | Pn | 19 05 27.3 | +2.2 |
| JAN | Janina | 2.09 | 317 | P | Pn | 19 05 27.3 | +2.2 |
| KZN | Kozani | 2.28 | 342 | P | Pn | 19 05 28.0 | +0.3 |
| KZN | Kozani | 2.28 | 342 | ePB | Pn | 19 05 28.2 | +0.5 |
| KZN | Kozani | 2.28 | 342 | P | Pn | 19 05 28.0 | +0.3 |
| KZN | Kozani | 2.28 | 342 | P | Pn | 19 05 28.0 | +0.3 |
| KZN | Kozani | 2.28 | 342 | P | Pn | 19 05 28.0 | +0.3 |
| PLG | Polygyros | 2.30 | 14 | P | Pn | 19 05 27.1 | -0.8 |
| PLG | Polygyros | 2.30 | 14 | ePN | Pn | 19 05 28.2 | +0.3 |
| PLG | Polygyros | 2.30 | 14 | P | Pn | 19 05 27.1 | -0.8 |
| PLG | Polygyros | 2.30 | 14 | P | Pn | 19 05 27.1 | -0.8 |
| PLG | Polygyros | 2.30 | 14 | P | Pn | 19 05 27.1 | -0.8 |
| PLG | Polygyros | 2.30 | 14 | ePn | Pn | 19 05 28.2 | +0.3 |
| IGT | Igoumenitsa | 2.31 | 307 | ePN | Pb | 19 05 31.0 | -0.9 |
| IGT | Igoumenitsa | 2.31 | 307 | P | Pn | 19 05 29.9 | +1.8 |
| IGT | Igoumenitsa | 2.31 | 307 | ePB | Pn | 19 05 29.8 | +1.7 |
| IGT | Igoumenitsa | 2.31 | 307 | P | Pn | 19 05 29.9 | +1.8 |
| IGT | Igoumenitsa | 2.31 | 307 | P | Pn | 19 05 29.9 | +1.8 |
| IGT | Igoumenitsa | 2.31 | 307 | ePb | Pn | 19 05 29.8 | +1.7 |
| IGT | Igoumenitsa | 2.31 | 307 | ePn | Pb | 19 05 31.0 | -0.9 |
| ANKY | Antikythira Is | 2.33 | 168 | ePN | Pn | 19 05 28.8 | +0.5 |
| ANKY | Antikythira Is | 2.33 | 168 | P | Pn | 19 05 28.6 | +0.3 |
| ANKY | Antikythira Is | 2.33 | 168 | P | Pn | 19 05 28.6 | +0.3 |
| ANKY | Antikythira Is | 2.33 | 168 | P | Pn | 19 05 28.6 | +0.3 |
| OUR | Ouranopolis | 2.40 | 24 | ePN | Pn | 19 05 29.7 | +0.4 |
| OUR | Ouranopolis | 2.40 | 24 | P | Pn | 19 05 28.7 | -0.6 |
| OUR | Ouranopolis | 2.40 | 24 | ePN | Pn | 19 05 29.8 | +0.5 |
| OUR | Ouranopolis | 2.40 | 24 | P | Pn | 19 05 28.7 | -0.6 |
| OUR | Ouranopolis | 2.40 | 24 | P | Pn | 19 05 28.7 | -0.6 |
| OUR | Ouranopolis | 2.40 | 24 | P | Pn | 19 05 28.7 | -0.6 |
| OUR | Ouranopolis | 2.40 | 24 | ePn | Pn | 19 05 29.8 | +0.5 |
| SGD | Sagiada | 2.42 | 308 | ePB | Pn | 19 05 31.2 | +1.6 |
| SGD | Sagiada | 2.42 | 308 | P | Pn | 19 05 31.6 | +2.0 |
| SGD | Sagiada | 2.42 | 308 | ePb | Pn | 19 05 31.2 | +1.6 |
| SGD | Sagiada | 2.42 | 308 | P | Pn | 19 05 31.6 | +2.0 |
| HORT | Hortiatis | 2.47 | 7 | ePN | Pn | 19 05 29.6 | -0.6 |
| HORT | Hortiatis | 2.47 | 7 | ePN | Pn | 19 05 30.7 | +0.4 |
| HORT | Hortiatis | 2.47 | 7 | P | Pn | 19 05 29.7 | -0.6 |
| HORT | Hortiatis | 2.47 | 7 | P | Pn | 19 05 29.7 | -0.6 |
| HORT | Hortiatis | 2.47 | 7 | P | Pn | 19 05 29.7 | -0.6 |
| HORT | Hortiatis | 2.47 | 7 | ePn | Pn | 19 05 30.7 | +0.4 |
| APE | Apeiranthos | 2.49 | 115 | ePN | Pn | 19 05 31.4 | +0.8 |
| APE | Apeiranthos | 2.49 | 115 | eP | Pn | 19 05 30.2 | -0.3 |
| APE | Apeiranthos | 2.49 | 115 | ePB | Pn | 19 05 32.2 | +1.6 |
| APE | Apeiranthos | 2.49 | 115 | P | Pn | 19 05 30.3 | -0.3 |
| APE | Apeiranthos | 2.49 | 115 | P | Pn | 19 05 30.3 | -0.3 |
| APE | Apeiranthos | 2.49 | 115 | eP | Pn | 19 05 30.2 | -0.3 |
| APE | Apeiranthos | 2.49 | 115 | ePn | Pn | 19 05 31.4 | +0.8 |
| APE | Apeiranthos | 2.49 | 115 | ePb | Pn | 19 05 32.2 | +1.6 |
| THE | Thessaloniki | 2.49 | 5 | P | Pn | 19 05 29.5 | -1.0 |
| THE | Thessaloniki | 2.49 | 5 | P | Pn | 19 05 29.5 | -1.0 |
| THE | Thessaloniki | 2.49 | 5 | P | Pn | 19 05 29.5 | -1.0 |
| THE | Thessaloniki | 2.49 | 5 | P | Pn | 19 05 29.5 | -1.0 |
| LIA | Limnos Island | 2.60 | 47 | ePN | Pn | 19 05 32.7 | +0.6 |
| LIA | Limnos Island | 2.60 | 47 | P | Pn | 19 05 31.3 | -0.8 |
| LIA | Limnos Island | 2.60 | 47 | P | Pn | 19 05 31.3 | -0.8 |
| LIA | Limnos Island | 2.60 | 47 | P | Pn | 19 05 31.3 | -0.8 |
| LIA | Limnos Island | 2.60 | 47 | ePn | Pn | 19 05 32.7 | +0.6 |
| NEST | Nestorio | 2.60 | 331 | ePB | Pn | 19 05 33.8 | +1.6 |
| NEST | Nestorio | 2.60 | 331 | P | Pn | 19 05 33.3 | +1.1 |
| NEST | Nestorio | 2.60 | 331 | P | Pn | 19 05 33.3 | +1.1 |
| NEST | Nestorio | 2.60 | 331 | ePb | Pn | 19 05 33.8 | +1.6 |
| CHOS | Chios island | 2.65 | 84 | ePN | Pn | 19 05 33.4 | +0.7 |
| CHOS | Chios island | 2.65 | 84 | ePN | Pn | 19 05 33.3 | +0.5 |
| CHOS | Chios island | 2.65 | 84 | P | Pn | 19 05 32.9 | +0.1 |
| CHOS | Chios island | 2.65 | 84 | P | Pn | 19 05 32.9 | +0.1 |
| CHOS | Chios island | 2.65 | 84 | P | Pn | 19 05 32.9 | +0.1 |
| CHOS | Chios island | 2.65 | 84 | ePn | Pn | 19 05 33.3 | +0.5 |
| SIGR | SIGRI | 2.68 | 66 | ePN | Pn | 19 05 33.1 | -0.1 |
| SIGR | SIGRI | 2.68 | 66 | ePN | Pn | 19 05 33.3 | +0.1 |
| SIGR | SIGRI | 2.68 | 66 | P | Pn | 19 05 32.6 | -0.6 |
| SIGR | SIGRI | 2.68 | 66 | P | Pn | 19 05 32.6 | -0.6 |
| SIGR | SIGRI | 2.68 | 66 | P | Pn | 19 05 32.6 | -0.6 |
| SIGR | SIGRI | 2.68 | 66 | ePn | Pn | 19 05 33.3 | +0.1 |
| SOH | Sokhos | 2.72 | 10 | P | Pn | 19 05 33.8 | +0.1 |
| SOH | Sokhos | 2.72 | 10 | ePN | Pn | 19 05 33.8 | +0.1 |
| SOH | Sokhos | 2.72 | 10 | P | Pn | 19 05 33.8 | +0.1 |
| SOH | Sokhos | 2.72 | 10 | P | Pn | 19 05 33.8 | +0.1 |
| SOH | Sokhos | 2.72 | 10 | P | Pn | 19 05 33.8 | +0.1 |
| THR5 | Thira Island, | 2.72 | 129 | ePN | Pn | 19 05 35.2 | +1.5 |
| THR5 | Thira Island, | 2.72 | 129 | P | Pn | 19 05 33.9 | +0.1 |
| THR5 | Thira Island, | 2.72 | 129 | P | Pn | 19 05 33.9 | +0.1 |
| THR5 | Thira Island, | 2.72 | 129 | ePn | Pn | 19 05 35.3 | +1.5 |
| SRN | Sarande | 2.73 | 310 | P | Pn | 19 05 35.6 | +1.8 |
| SRN | Sarande | 2.73 | 310 | P | Pn | 19 05 35.6 | +1.8 |
| SRN | Sarande | 2.73 | 310 | P | Pn | 19 05 35.6 | +1.8 |
| SRN | | | | i Sg | Pn | 19 05 35.9 | +2.1 |
| KEK | Kerkira | 2.76 | 305 | ePB | Pn | 19 05 36.2 | +2.0 |
| KEK | Kerkira | 2.76 | 305 | P | Pn | 19 05 35.8 | +1.6 |
| KEK | Kerkira | 2.76 | 305 | P | Pn | 19 05 35.8 | +1.6 |
| KEK | Kerkira | 2.76 | 305 | P | Pn | 19 05 35.8 | +1.6 |
| KEK | Kerkira | 2.76 | 305 | ePb | Pn | 19 05 36.2 | +2.0 |
| THR3 | Thira Island, | 2.76 | 128 | P | Pn | 19 05 35.2 | +0.9 |
| THR3 | Thira Island, | 2.76 | 128 | P | Pn | 19 05 35.2 | +0.9 |
| THR3 | Thira Island, | 2.76 | 128 | P | Pn | 19 05 35.2 | +0.9 |
| THR6 | Thira Island, | 2.79 | 129 | P | Pn | 19 05 35.0 | +0.3 |
| THR6 | Thira Island, | 2.79 | 129 | P | Pn | 19 05 35.0 | +0.3 |
| THR6 | Thira Island, | 2.79 | 129 | P | Pn | 19 05 35.0 | +0.3 |
| GRG | Griva | 2.82 | 355 | ePN | Pn | 19 05 35.3 | +0.3 |
| GRG | Griva | 2.82 | 355 | P | Pn | 19 05 34.8 | -0.3 |
| GRG | Griva | 2.82 | 355 | ePN | Pn | 19 05 35.2 | +0.1 |
| GRG | Griva | 2.82 | 355 | P | Pn | 19 05 34.8 | -0.3 |
| GRG | Griva | 2.82 | 355 | P | Pn | 19 05 34.8 | -0.3 |
| GRG | Griva | 2.82 | 355 | P | Pn | 19 05 34.8 | -0.3 |
| GRG | Griva | 2.82 | 355 | ePn | Pn | 19 05 35.2 | +0.1 |
| SANT | Santorini | 2.82 | 128 | ePN | Pn | 19 05 35.8 | +0.7 |
| SANT | Santorini | 2.82 | 128 | P | Pn | 19 05 35.3 | +0.2 |
| SANT | Santorini | 2.82 | 128 | ePn | Pn | 19 05 35.5 | +0.4 |
| SANT | Santorini | 2.82 | 128 | P | Pn | 19 05 35.3 | +0.2 |
| THR1 | Thera Island | 2.82 | 128 | ePN | Pn | 19 05 36.7 | +1.5 |
| THR1 | Thera Island | 2.82 | 128 | P | Pn | 19 05 35.2 | 0.0 |
| THR1 | Thera Island | 2.82 | 128 | P | Pn | 19 05 35.2 | 0.0 |
| THR1 | Thera Island | 2.82 | 128 | ePn | Pn | 19 05 36.7 | +1.5 |
| FNA | Florina | 2.83 | 339 | ePN | Pn | 19 05 37.0 | +1.7 |
| FNA | Florina | 2.83 | 339 | P | Pn | 19 05 35.7 | +0.4 |
| FNA | Florina | 2.83 | 339 | ePN | Pn | 19 05 36.0 | +0.7 |
| FNA | Florina | 2.83 | 339 | P | Pn | 19 05 35.7 | +0.4 |
| FNA | Florina | 2.83 | 339 | P | Pn | 19 05 35.7 | +0.4 |
| FNA | Florina | 2.83 | 339 | P | Pn | 19 05 35.7 | +0.4 |
| FNA | Florina | 2.83 | 339 | ePn | Pn | 19 05 36.0 | +0.7 |
| KBN | Korca | 2.89 | 330 | P | Pn | 19 05 38.0 | +1.9 |
| KBN | Korca | 2.89 | 330 | P | Pn | 19 05 38.0 | +1.9 |
| KBN | Korca | 2.89 | 330 | P | Pn | 19 05 38.0 | +1.9 |
| KBN | Korca | 2.89 | 330 | P | Pn | 19 05 38.0 | +1.9 |
| KBN | | | | i Sg | Pg | 19 05 46.0 | +0.4 |
| VAM | Vamos | 2.99 | 156 | P | Pn | 19 05 37.2 | -0.2 |
| VAM | Vamos | 2.99 | 156 | ePN | Pn | 19 05 38.5 | +1.1 |
| VAM | Vamos | 2.99 | 156 | P | Pn | 19 05 37.2 | -0.2 |
| VAM | Vamos | 2.99 | 156 | P | Pn | 19 05 37.2 | -0.2 |
| VAM | Vamos | 2.99 | 156 | P | Pn | 19 05 37.2 | -0.2 |
| VAM | Vamos | 2.99 | 156 | ePn | Pn | 19 05 38.5 | +1.1 |
| ZEY | ˜zmir | 2.99 | 87 | P | Pn | 19 05 37.6 | +0.2 |
| KNT | Kendrikon | 3.01 | 3 | ePN | Pn | 19 05 39.1 | +1.4 |
| KNT | Kendrikon | 3.01 | 3 | P | Pn | 19 05 38.0 | +0.2 |
| KNT | Kendrikon | 3.01 | 3 | ePN | Pn | 19 05 38.1 | +0.2 |
| KNT | Kendrikon | 3.01 | 3 | P | Pn | 19 05 38.0 | +0.2 |
| KNT | Kendrikon | 3.01 | 3 | P | Pn | 19 05 38.0 | +0.2 |
| KNT | Kendrikon | 3.01 | 3 | P | Pn | 19 05 38.0 | +0.2 |
| SRS | Serrai | 3.04 | 13 | P | Pn | 19 05 37.9 | -0.3 |
| SRS | Serrai | 3.04 | 13 | ePN | Pn | 19 05 39.0 | +0.8 |
| SRS | Serrai | 3.04 | 13 | P | Pn | 19 05 37.9 | -0.3 |
| SRS | Serrai | 3.04 | 13 | P | Pn | 19 05 37.9 | -0.3 |
| SRS | Serrai | 3.04 | 13 | P | Pn | 19 05 37.9 | -0.3 |
| SRS | Serrai | 3.04 | 13 | ePn | Pn | 19 05 39.0 | +0.8 |
| URLA | Izmir | 3.07 | 85 | i P | Pn | 19 05 39.4 | +0.9 |
| URLA | Izmir | 3.07 | 85 | P | Pn | 19 05 39.4 | +0.9 |
| BOZC | Bozcaada | 3.11 | 56 | P | Pn | 19 05 38.1 | -0.9 |
| KAVA | Kavala | 3.17 | 26 | P | Pn | 19 05 38.7 | -1.2 |
| KAVA | Kavala | 3.17 | 26 | P | Pn | 19 05 38.7 | -1.2 |
| KAVA | Kavala | 3.17 | 26 | P | Pn | 19 05 38.7 | -1.2 |
| VAY | Valandovo | 3.17 | 358 | i Pn | Pn | 19 05 41.0 | +1.1 |
| VAY | Valandovo | 3.17 | 358 | P | Pn | 19 05 40.1 | +0.2 |
| VAY | Valandovo | 3.17 | 358 | P | Pn | 19 05 40.1 | +0.2 |
| VAY | Valandovo | 3.17 | 358 | P | Pn | 19 05 40.1 | +0.2 |
| VAY | Valandovo | 3.17 | 358 | P | Pn | 19 05 40.1 | +0.2 |
| VAY | Valandovo | 3.17 | 358 | i Pn | Pn | 19 05 41.0 | +1.1 |
| SMTH | Samothraki Isl | 3.19 | 42 | P | Pn | 19 05 38.8 | -1.4 |
| SMTH | Samothraki Isl | 3.19 | 42 | P | Pn | 19 05 38.8 | -1.4 |
| SMTH | Samothraki Isl | 3.19 | 42 | P | Pn | 19 05 38.8 | -1.4 |
| GADA | Gvkgeada | 3.21 | 50 | ePN | Pn | 19 05 40.5 | 0.0 |
| GADA | Gvkgeada | 3.21 | 50 | ePn | Pn | 19 05 40.5 | 0.0 |
| SMG | Samos | 3.29 | 96 | ePN | Pn | 19 05 42.8 | +1.2 |
| SMG | Samos | 3.29 | 96 | P | Pn | 19 05 42.0 | +0.4 |
| SMG | Samos | 3.29 | 96 | P | Pn | 19 05 42.0 | +0.4 |
| SMG | Samos | 3.29 | 96 | P | Pn | 19 05 42.0 | +0.4 |
| SMG | Samos | 3.29 | 96 | ePn | Pn | 19 05 42.8 | +1.2 |
| OHR | Ohrid | 3.31 | 334 | i Pn | Pn | 19 05 43.2 | +1.4 |
| OHR | Ohrid | 3.31 | 334 | i Pn | Pn | 19 05 43.2 | +1.4 |
| NVR | Nevrokopi | 3.32 | 15 | ePN | Pn | 19 05 42.8 | +0.8 |
| NVR | Nevrokopi | 3.32 | 15 | P | Pn | 19 05 41.5 | -0.5 |
| NVR | Nevrokopi | 3.32 | 15 | P | Pn | 19 05 41.5 | -0.5 |
| NVR | Nevrokopi | 3.32 | 15 | P | Pn | 19 05 41.5 | -0.5 |
| NVR | Nevrokopi | 3.32 | 15 | ePn | Pn | 19 05 42.8 | +0.8 |
| AYVA | Ayvalik | 3.32 | 68 | i P | Pn | 19 05 42.7 | +0.7 |
| AYVA | Ayvalik | 3.32 | 68 | P | Pn | 19 05 42.7 | +0.7 |
| IDI | Anoyia | 3.35 | 148 | Pn | Pn | 19 05 41.8 | -0.6 |
| | 12nm,0.3s,baz=322,slow=14,SNR=79 | | | | | | |
| IDI | | | | Sn | Sn | 19 06 21.7 | -0.5 |
| | 17nm,0.3s,baz=200,slow=24,SNR=5.2 | | | | | | |
| IDI | | | | Lg | Lg | 19 06 32.3 | |
| | 24nm,0.3s,baz=334,slow=21,SNR=3.8 | | | | | | |
| IDI | Anoyia | 3.35 | 148 | P | Pn | 19 05 41.6 | -0.8 |
| IDI | Anoyia | 3.35 | 148 | ePn | Pn | 19 05 41.7 | -0.7 |
| IDI | | | | eSn | Sn | 19 06 21.5 | -0.6 |
| SIVA | Sivas | 3.55 | 151 | P | Pn | 19 05 47.1 | +2.0 |
| SIVA | Sivas | 3.55 | 151 | P | Pn | 19 05 47.1 | +2.0 |
| SIVA | Sivas | 3.55 | 151 | P | Pn | 19 05 47.1 | +2.0 |
| IZM | Izmir | 3.59 | 85 | ePN | Pn | 19 05 47.2 | +1.4 |
| IZM | Izmir | 3.59 | 85 | ePn | Pn | 19 05 47.2 | +1.4 |
| GCAM | G?zelcaml? | 3.61 | 96 | i P | Pn | 19 05 49.4 | +3.5 |
| GCAM | G?zelcaml? | 3.61 | 96 | P | Pn | 19 05 49.4 | +3.5 |
| GELI | Tayfur-Gelibol | 3.69 | 51 | ePN | Pn | 19 05 46.9 | -0.1 |
| GELI | Tayfur-Gelibol | 3.69 | 51 | ePn | Pn | 19 05 46.9 | -0.1 |
| NPS | Neapolis | 3.71 | 140 | ePN | Pn | 19 05 48.7 | +1.4 |
| NPS | Neapolis | 3.71 | 140 | ePn | Pn | 19 05 48.7 | +1.4 |
| RDO | Rodhopi | 3.71 | 35 | ePn | Pn | 19 05 46.8 | -0.5 |
| RDO | Rodhopi | 3.71 | 35 | ePn | Pn | 19 05 46.8 | -0.5 |
| ENEZ | Enez | 3.71 | 45 | ePN | Pn | 19 05 47.4 | 0.0 |
| ENEZ | Enez | 3.71 | 45 | ePn | Pn | 19 05 47.4 | 0.0 |
| LAST | Lasithi | 3.72 | 142 | P | Pn | 19 05 47.6 | 0.0 |
| LAST | Lasithi | 3.72 | 142 | ePn | Pn | 19 05 48.0 | +0.5 |
| LAST | Lasithi | 3.72 | 142 | P | Pn | 19 05 47.6 | 0.0 |
| LAST | Lasithi | 3.72 | 142 | ePn | Pn | 19 05 48.0 | +0.5 |
| ALN | Alexandroupoli | 3.77 | 42 | P | Pn | 19 05 46.4 | -1.7 |
| ALN | Alexandroupoli | 3.77 | 42 | P | Pn | 19 05 46.4 | -1.7 |
| ALN | Alexandroupoli | 3.77 | 42 | P | Pn | 19 05 46.4 | -1.7 |
| ALN | Alexandroupoli | 3.77 | 42 | P | Pn | 19 05 46.4 | -1.7 |
| BODT | Bodrum | 3.81 | 105 | ePN | Pn | 19 05 49.7 | +1.0 |
| BODT | Bodrum | 3.81 | 105 | ePn | Pn | 19 05 49.7 | +1.0 |
| LPK | Lapseki | 3.85 | 53 | ePN | Pn | 19 05 49.4 | +0.1 |
| LPK | Lapseki | 3.85 | 53 | ePn | Pn | 19 05 49.4 | +0.1 |
| TIR | Tirane | 3.88 | 326 | eP | Pn | 19 05 52.4 | +2.8 |
| TIR | Tirane | 3.88 | 326 | ePn | Pn | 19 05 52.4 | +2.8 |
| TIR | Tirane | 3.88 | 326 | eP | Pn | 19 05 52.4 | +2.8 |
| ERIK | Erikli-Kesan | 3.88 | 48 | ePN | Pn | 19 05 49.7 | +0.1 |
| ERIK | Erikli-Kesan | 3.88 | 48 | ePn | Pn | 19 05 49.7 | +0.1 |
| NIS1 | Nisyros Isl. | 3.88 | 112 | ePN | Pn | 19 05 51.6 | +1.9 |
| NIS1 | Nisyros Isl. | 3.88 | 112 | ePn | Pn | 19 05 51.6 | +1.9 |
| BDRM | Kayabasi | 3.91 | 105 | i P | Pn | 19 05 52.0 | +1.9 |
| BDRM | Kayabasi | 3.91 | 105 | P | Pn | 19 05 52.0 | +1.9 |
| PHP | Peshkopia | 3.94 | 334 | P | Pn | 19 05 51.5 | +1.0 |
| PHP | Peshkopia | 3.94 | 334 | P | Pn | 19 05 51.5 | +1.0 |
| PHP | Peshkopia | 3.94 | 334 | P | Pn | 19 05 51.5 | +1.0 |
| PHP | Peshkopia | 3.94 | 334 | P | Pn | 19 05 51.5 | +1.0 |
| SKO | Skopje | 3.94 | 346 | ePn | Pn | 19 05 52.0 | +1.4 |
| SKO | Skopje | 3.94 | 346 | ePn | Pn | 19 05 51.9 | +1.4 |
| AKS | Akhisar | 4.07 | 78 | ePN | Pn | 19 05 53.7 | +1.4 |
| AKS | Akhisar | 4.07 | 78 | ePn | Pn | 19 05 53.7 | +1.4 |
| AKHS | Akhisar | 4.07 | 78 | P | Pg | 19 06 08.4 | +0.2 |
| AYDB | Zeytinkoy-Aydi | 4.10 | 91 | ePN | Pn | 19 05 53.7 | +1.0 |
| AYDB | Zeytinkoy-Aydi | 4.10 | 91 | ePn | Pn | 19 05 53.7 | +1.0 |
| AYDN | Tasoluk | 4.12 | 95 | i P | Pn | 19 05 57.3 | +4.3 |
| AYDN | Tasoluk | 4.12 | 95 | P | Pn | 19 05 57.3 | +4.3 |
| ZKR | Zakros | 4.14 | 136 | P | Pn | 19 05 54.8 | +1.6 |
| ZKR | Zakros | 4.14 | 136 | P | Pn | 19 05 54.8 | +1.6 |

| Sta | Name | Dist | Az | Phase | Phase | Time | Res |
|---|---|---|---|---|---|---|---|
| ZKR | Zakros | 4.14 | 136 | P | Pn | 19 05 54.8 | +1.6 |
| BALY | Balya | 4.15 | 66 | i P | Pn | 19 05 54.3 | +0.9 |
| BALY | Balya | 4.15 | 66 | P | Pn | 19 05 54.2 | +0.9 |
| KRBG | Karabiga-Canak | 4.21 | 56 | ePN | Pn | 19 05 54.4 | +0.2 |
| KRBG | Karabiga-Canak | 4.21 | 56 | ePn | Pn | 19 05 54.4 | +0.2 |
| RKY | Sarkoy-Tekirda | 4.29 | 52 | ePN | Pn | 19 05 55.4 | 0.0 |
| RKY | Sarkoy-Tekirda | 4.29 | 52 | ePn | Pn | 19 05 55.4 | 0.0 |
| SART | Tekirdag | 4.29 | 52 | i P | Pn | 19 05 55.3 | -0.1 |
| SART | Tekirdag | 4.29 | 52 | P | Pn | 19 05 55.3 | -0.1 |
| BALB | Balikesir | 4.30 | 68 | ePN | Pn | 19 05 56.0 | +0.5 |
| BALB | Balikesir | 4.30 | 68 | ePn | Pn | 19 05 56.0 | +0.5 |
| MRMT | Marmara Adasi | 4.51 | 56 | ePN | Pn | 19 05 59.2 | +0.8 |
| MRMT | Marmara Adasi | 4.51 | 56 | ePn | Pn | 19 05 59.2 | +0.8 |
| YER | Yerkesik | 4.54 | 101 | ePN | Pn | 19 06 00.2 | +1.5 |
| YER | Yerkesik | 4.54 | 101 | ePn | Pn | 19 06 00.3 | +1.5 |
| EDC | Edincik | 4.56 | 60 | ePN | Pn | 19 05 59.6 | +0.5 |
| EDC | Edincik | 4.56 | 60 | ePn | Pn | 19 05 59.6 | +0.5 |
| ULC | Ulcinj | 4.65 | 326 | ⇓iPn | Pn | 19 06 01.1 | +0.9 |
| ULC | | | | eSn | Sn | 19 06 55.2 | +1.1 |
| ULC | Ulcinj | 4.65 | 326 | ⇓iPn | Pn | 19 06 01.1 | +0.9 |
| ULC | | | | eSn | Sn | 19 06 55.2 | +1.1 |
| TKR | Tekirdag | 4.69 | 51 | ePN | Pn | 19 06 01.3 | +0.6 |
| TKR | Tekirdag | 4.69 | 51 | ePn | Pn | 19 06 01.3 | +0.6 |
| KULA | Kula-Manisa | 4.70 | 84 | ePN | Pn | 19 06 01.9 | +0.9 |
| KULA | Kula-Manisa | 4.70 | 84 | ePn | Pn | 19 06 01.9 | +0.9 |
| BARS | Barje | 4.71 | 352 | ⇓iPn | Pn | 19 06 01.6 | +0.5 |
| TIP | Timpagrande | 4.77 | 284 | P | Pn | 19 06 03.1 | +1.2 |
| TIP | Timpagrande | 4.77 | 284 | ePn | Pn | 19 06 03.1 | +1.2 |
| TIP | | | | eSn | Sn | 19 06 53.5 | -3.7 |
| TIP | Timpagrande | 4.77 | 284 | P | Pn | 19 06 03.1 | +1.2 |
| TIP | | | | eSn | Sn | 19 06 53.5 | -3.7 |
| DEMI | Demirci | 4.79 | 77 | i P | Pn | 19 06 03.8 | +1.5 |
| DEMI | Demirci | 4.79 | 77 | P | Pn | 19 06 03.8 | +1.5 |
| EDRB | Edirne | 4.82 | 39 | ePN | Pn | 19 06 03.5 | +0.9 |
| EDRB | Edirne | 4.82 | 39 | ePn | Pn | 19 06 03.5 | +0.9 |
| TAR1 | Taranto | 4.83 | 301 | ePn | Pn | 19 06 02.9 | +0.2 |
| DST | Dursunbey | 4.84 | 71 | ePN | Pn | 19 06 03.7 | +0.9 |
| DST | Dursunbey | 4.84 | 71 | ePn | Pn | 19 06 03.7 | +0.9 |
| DRME | Dracevica, Mon | 4.85 | 327 | ePn | Pn | 19 06 04.1 | +1.1 |
| DRME | | | | eSn | Sn | 19 06 59.7 | +0.5 |
| DRME | Dracevica, Mon | 4.85 | 327 | ePn | Pn | 19 06 04.1 | +1.1 |
| DRME | | | | eSn | Sn | 19 06 59.7 | +0.5 |
| TURN | Turunc | 4.86 | 103 | i P | Pn | 19 06 00.6 | -2.4 |
| TURN | Turunc | 4.86 | 103 | P | Pn | 19 06 00.6 | -2.4 |
| KCTX | Karacabey (Bur | 4.87 | 63 | ePN | Pn | 19 06 04.0 | +0.8 |
| KCTX | Karacabey (Bur | 4.87 | 63 | ePn | Pn | 19 06 04.1 | +0.8 |
| PE1 | Pezze di Greco | 4.88 | 305 | ePn | Pn | 19 06 03.7 | +0.4 |
| DALY | Dalyan (Mu˜la | 4.91 | 104 | ePN | Pn | 19 06 05.7 | +1.9 |
| DALY | Dalyan (Mu˜la | 4.91 | 104 | ePn | Pn | 19 06 05.7 | +1.9 |
| PVY | Plav | 4.91 | 336 | ⇑iPn | Pn | 19 06 04.7 | +0.7 |
| PVY | | | | eSn | Sn | 19 07 01.7 | +0.9 |
| PVY | Plav | 4.91 | 336 | ⇑iPn | Pn | 19 06 04.7 | +0.7 |
| PVY | | | | eSn | Sn | 19 07 01.7 | +0.9 |
| DENT | Denizli | 5.01 | 93 | ePN | Pn | 19 06 06.7 | +1.4 |
| DENT | Denizli | 5.01 | 93 | ePn | Pn | 19 06 06.7 | +1.4 |
| PDG | Podgorica | 5.03 | 329 | P | Pn | 19 06 05.7 | +0.3 |
| PDG | Podgorica | 5.03 | 329 | P | Pn | 19 06 05.7 | +0.3 |
| PDG | Podgorica | 5.03 | 329 | ⇑iPn | Pn | 19 06 06.2 | +0.8 |
| PDG | | | | eSn | Sn | 19 07 04.4 | +1.0 |
| TTG | Podgorica | 5.03 | 329 | ⇑iPn | Pn | 19 06 06.2 | +0.8 |
| TTG | | | | eSn | Sn | 19 07 04.4 | +1.0 |
| TTG | Podgorica | 5.03 | 329 | P | Pn | 19 06 05.7 | +0.3 |
| TTG | Podgorica | 5.03 | 329 | P | Pn | 19 06 05.7 | +0.3 |
| TTG | Podgorica | 5.03 | 329 | P | Pn | 19 06 05.7 | +0.3 |
| DNZL | Cakiroluk | 5.03 | 93 | i P | Pn | 19 06 08.4 | +2.7 |
| DNZL | Cakiroluk | 5.03 | 93 | P | Pn | 19 06 08.4 | +2.7 |
| BUM | Brajici-Budva | 5.07 | 326 | ⇑iPn | Pn | 19 06 06.4 | +0.3 |
| BUM | | | | eSn | Sn | 19 07 05.3 | +0.7 |
| BUM | Brajici-Budva | 5.07 | 326 | ⇑iPn | Pn | 19 06 06.4 | +0.3 |
| BUM | | | | eSn | Sn | 19 07 05.3 | +0.7 |
| ORLT | Orhaneli | 5.17 | 67 | ePN | Pn | 19 06 08.4 | +0.9 |
| ORLT | Orhaneli | 5.17 | 67 | ePn | Pn | 19 06 08.4 | +0.9 |
| BEY | Berane | 5.18 | 336 | ePn | Pn | 19 06 08.9 | +1.2 |
| BEY | | | | eSn | Sn | 19 07 08.0 | +0.6 |
| IVA | Berane | 5.18 | 336 | ePn | Pn | 19 06 08.9 | +1.2 |
| IVA | | | | eSn | Sn | 19 07 08.0 | +0.6 |
| FETY | Fethiye | 5.30 | 105 | ePN | Pn | 19 06 11.0 | +1.8 |
| FETY | Fethiye | 5.30 | 105 | ePn | Pn | 19 06 11.0 | +1.8 |
| KHAL | Karahalli | 5.34 | 86 | i P | Pn | 19 06 11.7 | +1.8 |
| KHAL | Karahalli | 5.34 | 86 | P | Pn | 19 06 11.8 | +1.8 |
| ARMT | Armutlu | 5.34 | 61 | ePN | Pn | 19 06 10.4 | +0.7 |
| ARMT | Armutlu | 5.34 | 61 | ePn | Pn | 19 06 10.5 | +0.7 |
| HCY | Herceg Novi | 5.37 | 324 | ⇑iPn | Pn | 19 06 09.8 | -0.3 |
| HCY | | | | eSn | Sn | 19 07 12.5 | +0.7 |
| HCY | Herceg Novi | 5.37 | 324 | ⇑iPn | Pn | 19 06 09.8 | -0.3 |
| HCY | | | | eSn | Sn | 19 07 12.5 | +0.7 |
| SG1 | Sgolgore (BA) | 5.38 | 302 | i Pn | Pn | 19 06 10.8 | +0.5 |
| BAI | Bari | 5.38 | 305 | i Pn | Pn | 19 06 10.4 | +0.1 |
| NKME | Niksic | 5.43 | 329 | ⇑iPn | Pn | 19 06 11.6 | +0.6 |
| NKME | | | | eSn | Sn | 19 07 14.1 | +0.7 |
| NKME | Niksic | 5.43 | 329 | ⇑iPn | Pn | 19 06 11.6 | +0.6 |
| NKME | | | | eSn | Sn | 19 07 14.1 | +0.7 |
| CTKS | Kestanelik-??a | 5.43 | 54 | ePN | Pn | 19 06 12.1 | +1.1 |
| CTKS | Kestanelik-??a | 5.43 | 54 | ePn | Pn | 19 06 12.1 | +1.1 |
| NKY | Niksic | 5.45 | 330 | ⇑iPn | Pn | 19 06 12.2 | +0.8 |
| NKY | | | | eSn | Sn | 19 07 14.7 | +0.6 |
| NKY | Niksic | 5.45 | 330 | ⇑iPn | Pn | 19 06 12.2 | +0.8 |
| NKY | | | | eSn | Sn | 19 07 14.7 | +0.6 |
| IGD | Bursa | 5.47 | 65 | P | Pn | 19 06 12.4 | +0.9 |
| GOLH | Golhisar | 5.51 | 97 | P | Pn | 19 06 17.2 | +5.0 |
| BGKT | Bogazkoy | 5.57 | 55 | ePN | Pn | 19 06 14.2 | +1.3 |
| BGKT | Bogazkoy | 5.57 | 55 | ePn | Pn | 19 06 14.2 | +1.3 |
| CUC | Castrocucco | 5.67 | 291 | ePn | Pn | 19 06 15.3 | +1.0 |
| CUC | | | | eSn | Sn | 19 07 11.5 | -7.9 |
| CUC | Castrocucco | 5.67 | 291 | ePn | Pn | 19 06 15.3 | +1.0 |
| CUC | | | | eSn | Sn | 19 07 11.5 | -7.9 |
| IZI | Iznik | 5.69 | 65 | ePN | Pn | 19 06 15.6 | +1.0 |
| IZI | Iznik | 5.69 | 65 | ePn | Pn | 19 06 15.6 | +1.0 |
| BOLS | Boljevac | 5.71 | 354 | ⇑iPn | Pn | 19 06 13.7 | -1.0 |
| BRY | Bratogost | 5.71 | 328 | ⇓iPn | Pn | 19 06 15.8 | +0.8 |
| BRY | | | | eSn | Sn | 19 07 20.6 | +0.1 |
| BRY | Bratogost | 5.71 | 328 | ⇓iPn | Pn | 19 06 15.8 | +0.8 |
| BRY | | | | eSn | Sn | 19 07 20.6 | +0.1 |
| PLE | Pljevlja | 5.76 | 335 | ⇓iPn | Pn | 19 06 17.4 | +1.8 |
| PLE | | | | eSn | Sn | 19 07 21.7 | +0.1 |
| PLE | Pljevlja | 5.76 | 335 | ⇓iPn | Pn | 19 06 17.4 | +1.8 |
| PLE | | | | eSn | Sn | 19 07 21.7 | +0.1 |
| IVAS | Ivanjica | 5.76 | 341 | ePn | Pn | 19 06 17.2 | +1.7 |
| CDT | Castel del Mon | 5.77 | 303 | i Pn | Pn | 19 06 16.2 | +0.6 |
| UPM | Unac-Piva | 5.82 | 331 | ⇑iPn | Pn | 19 06 17.2 | +0.7 |
| UPM | | | | eSn | Sn | 19 07 23.6 | +0.4 |
| UPM | Unac-Piva | 5.82 | 331 | ⇑iPn | Pn | 19 06 17.2 | +0.7 |
| UPM | | | | eSn | Sn | 19 07 23.6 | +0.4 |
| AKAS | Kas | 5.83 | 107 | P | Pn | 19 06 23.3 | +6.8 |
| ELL | Elmali | 5.90 | 101 | ePN | Pn | 19 06 19.6 | +2.1 |
| ELL | Elmali | 5.90 | 101 | ePn | Pn | 19 06 19.6 | +2.1 |
| ADVT | Abdulvahap | 5.91 | 65 | ePN | Pn | 19 06 19.6 | +2.0 |
| ADVT | Abdulvahap | 5.91 | 65 | ePn | Pn | 19 06 19.6 | +2.0 |
| GRUS | Gruza | 5.93 | 346 | ePn | Pn | 19 06 17.8 | 0.0 |
| HRT | Hereke | 6.01 | 61 | ePN | Pn | 19 06 19.6 | +0.6 |
| HRT | Hereke | 6.01 | 61 | ePn | Pn | 19 06 19.6 | +0.6 |
| LTBQ | Tobruq | 6.16 | 170 | i P | Pn | 19 06 22.3 | +1.3 |
| | SNR=23 | | | | | | |
| LTBQ | | | | eS | Sn | 19 07 19.5 | -12 |
| | SNR=23 | | | | | | |
| KORT | Korkueli | 6.18 | 98 | P | Pn | 19 06 25.9 | +4.6 |
| SHUT | Suhut-Afyon | 6.18 | 84 | ePN | Pn | 19 06 23.9 | +2.5 |
| BBLS | Lazići | 6.24 | 337 | ⇓iPn | Pn | 19 06 22.5 | +0.4 |
| BORA | Eskisehir | 6.28 | 72 | i P | Pn | 19 06 24.3 | +1.7 |
| BORA | Eskisehir | 6.28 | 72 | P | Pn | 19 06 24.3 | +1.7 |
| DIVS | Divibare | 6.29 | 342 | ⇓iP | Pn | 19 06 22.7 | -0.1 |
| DIVS | Divibare | 6.29 | 342 | P | Pn | 19 06 23.0 | +0.2 |
| DIVS | Divibare | 6.29 | 342 | ⇓iPn | Pn | 19 06 22.2 | -0.6 |
| DIVS | Divibare | 6.29 | 342 | P | Pn | 19 06 23.0 | +0.2 |
| MS1 | Monte Sant'Ang | 6.30 | 306 | i Pn | Pn | 19 06 23.2 | +0.3 |
| KUBS | Kucevo | 6.31 | 353 | i Pn | Pn | 19 06 21.2 | -1.8 |
| GULT | Gulveren | 6.47 | 67 | ePN | Pn | 19 06 27.6 | +2.3 |
| GULT | Gulveren | 6.47 | 67 | ePn | Pn | 19 06 27.6 | +2.3 |
| BOLV | Bolvadin | 6.50 | 82 | P | Pn | 19 06 28.5 | +2.8 |
| ESKT | Eskisehir | 6.50 | 75 | P | Pn | 19 06 27.6 | +1.8 |
| SEYT | Eskypehyr | 6.50 | 75 | i P | Pn | 19 06 27.6 | +1.8 |
| SUTC | Sutluce-Ispart | 6.60 | 93 | ePN | Pn | 19 06 29.8 | +2.6 |
| HUMR | Humele | 6.60 | 14 | ⇓iP | Pn | 19 06 27.3 | +0.3 |
| HUMR | Humele | 6.60 | 14 | ⇓iP | Pn | 19 06 27.3 | +0.3 |
| BTAS | Taskesti | 6.87 | 67 | i P | Pn | 19 06 31.7 | +1.0 |
| BTAS | Taskesti | 6.87 | 67 | P | Pn | 19 06 31.7 | +1.0 |
| WDD | Wield Dalam | 6.93 | 253 | ePn | Pn | 19 06 30.0 | -1.6 |
| WDD | | | | eSn | Sn | 19 07 43.9 | -6.5 |
| WDD | Wield Dalam | 6.93 | 253 | ePn | Pn | 19 06 30.0 | -1.6 |

| Sta | Name | Dist | Az | Phase | Phase | Time | Res |
|---|---|---|---|---|---|---|---|
| WDD | | | | eSn | Sn | 19 07 43.9 | -6.5 |
| SLUM | | 6.95 | 162 | P | Pn | 19 06 30.0 | -1.9 |
| | baz=164 | | | | | | |
| SLUM | | | | S | Sn | 19 07 45.8 | -5.0 |
| | baz=164 | | | | | | |
| SLUM | | 6.95 | 162 | P | Pn | 19 06 30.0 | -1.9 |
| MDUB | Mudurnu | 6.98 | 68 | ePN | Pn | 19 06 33.4 | +1.0 |
| MDUB | Mudurnu | 6.98 | 68 | ePn | Pn | 19 06 33.4 | +1.0 |
| SVRH | Sivrihisar-ESK | 7.01 | 77 | ePN | Pn | 19 06 34.1 | +1.4 |
| SVRH | Sivrihisar-ESK | 7.01 | 77 | ePn | Pn | 19 06 34.1 | +1.4 |
| SULR | | 7.05 | 21 | ⇓iP | Pn | 19 06 34.2 | +1.1 |
| SULR | | 7.05 | 21 | ⇓iP | Pn | 19 06 34.2 | +1.1 |
| MSAB | Monastry St. A | 7.08 | 31 | ⇓iP | Pn | 19 06 33.2 | -0.4 |
| MSAB | Monastry St. A | 7.08 | 31 | ⇓iP | Pn | 19 06 33.2 | -0.4 |
| KIZT | Kizilcal | 7.23 | 81 | ePN | Pn | 19 06 37.2 | +1.4 |
| KIZT | Kizilcal | 7.23 | 81 | ePn | Pn | 19 06 37.2 | +1.4 |
| GZR | Gura Zlata | 7.24 | 0 | ⇓P | Pn | 19 06 35.8 | -0.1 |
| GZR | Gura Zlata | 7.24 | 0 | ⇓iP | Pn | 19 06 35.8 | -0.1 |
| GZR | Gura Zlata | 7.24 | 0 | P | Pn | 19 06 35.8 | -0.1 |
| FGSL | Fruska Gora | 7.33 | 344 | ePn | Pn | 19 06 34.8 | -2.3 |
| VOIR | | 7.49 | 13 | ⇓P | Pn | 19 06 40.1 | +0.8 |
| VOIR | | 7.49 | 13 | ⇓iP | Pn | 19 06 40.1 | +0.8 |
| VOIR | | 7.49 | 13 | P | Pn | 19 06 40.1 | +0.8 |
| BZS | Buzias | 7.51 | 354 | ePN | Pn | 19 06 41.5 | +2.0 |
| BZS | Buzias | 7.51 | 354 | ⇓P | Pn | 19 06 39.6 | +0.1 |
| BZS | Buzias | 7.51 | 354 | ⇓iP | Pn | 19 06 39.6 | +0.1 |
| BZS | Buzias | 7.51 | 354 | P | Pn | 19 06 39.6 | +0.1 |
| BZS | Buzias | 7.51 | 354 | ePn | Pn | 19 06 41.5 | +2.0 |
| LJBD | Adjabya | 7.51 | 197 | i P | Pn | 19 06 38.9 | -0.6 |
| | SNR=22 | | | | | | |
| CLTB | Caltabellotta | 7.53 | 269 | ePn | Pn | 19 06 42.3 | +2.4 |
| CLTB | | | | eSn | Sn | 19 07 50.9 | -14 |
| CLTB | Caltabellotta | 7.53 | 269 | ePn | Pn | 19 06 42.3 | +2.4 |
| CLTB | | | | eSn | Sn | 19 07 50.9 | -14 |
| ISR | Istrita | 7.53 | 21 | ⇑P | Pn | 19 06 40.7 | +0.8 |
| ISR | Istrita | 7.53 | 21 | ⇑iP | Pn | 19 06 40.7 | +0.8 |
| ISR | Istrita | 7.53 | 21 | P | Pn | 19 06 40.7 | +0.8 |
| KONT | Konya--Tatoy | 7.62 | 89 | ePN | Pn | 19 06 42.6 | +1.5 |
| KONT | Konya--Tatoy | 7.62 | 89 | ePn | Pn | 19 06 42.6 | +1.5 |
| HARR | Harsova | 7.62 | 29 | ⇓P | Pn | 19 06 41.6 | +0.6 |
| HARR | Harsova | 7.62 | 29 | ⇓iP | Pn | 19 06 41.6 | +0.6 |
| HARR | Harsova | 7.62 | 29 | P | Pn | 19 06 41.6 | +0.6 |
| TIRR | Tirgusor | 7.63 | 32 | ePN | Pn | 19 06 42.4 | +1.3 |
| TIRR | Tirgusor | 7.63 | 32 | ⇑P | Pn | 19 06 39.8 | -1.3 |
| TIRR | Tirgusor | 7.63 | 32 | ⇑iP | Pn | 19 06 39.8 | -1.3 |
| TIRR | Tirgusor | 7.63 | 32 | ePn | Pn | 19 06 39.7 | -1.3 |
| TIRR | | | | eSn | Sn | 19 07 51.3 | -16 |
| TIRR | Tirgusor | 7.63 | 32 | P | Pn | 19 06 39.8 | -1.3 |
| TIRR | | | | eSn | Sn | 19 07 51.3 | -16 |
| HDMB | Hadim | 7.86 | 96 | ePN | Pn | 19 06 46.4 | +1.9 |
| HDMB | Hadim | 7.86 | 96 | ePn | Pn | 19 06 46.4 | +1.9 |
| HMAT | Matruh | 7.91 | 152 | P | Pn | 19 06 42.3 | -2.7 |
| | baz=153 | | | | | | |
| HMAT | Matruh | 7.91 | 152 | P | Pn | 19 06 42.3 | -2.7 |
| BR231 | Keskin MP Arra | 8.02 | 75 | eP | Pn | 19 06 57.0 | +10 |
| BR231 | Keskin MP Arra | 8.02 | 75 | eP | Pn | 19 06 57.0 | +10 |
| ANTO | Ankara | 8.04 | 75 | ⇓P | Pn | 19 06 47.8 | +0.9 |
| ANTO | Ankara | 8.04 | 75 | ⇓iP | Pn | 19 06 47.8 | +0.9 |
| ANTO | Ankara | 8.04 | 75 | P | Pn | 19 06 47.8 | +0.9 |
| DOPR | Dopca | 8.06 | 13 | ⇑iP | Pn | 19 06 48.0 | +0.9 |
| DOPR | Dopca | 8.06 | 13 | ⇑iP | Pn | 19 06 48.0 | +0.9 |
| AFSR | Af¯ar-Bala (A | 8.20 | 78 | ePN | Pn | 19 06 50.2 | +1.2 |
| AFSR | Af¯ar-Bala (A | 8.20 | 78 | ePn | Pn | 19 06 50.2 | +1.2 |
| PLOR | Plostina | 8.24 | 20 | ⇑P | Pn | 19 06 50.3 | +0.8 |
| PLOR | Plostina | 8.24 | 20 | ⇑iP | Pn | 19 06 50.3 | +0.8 |
| PLOR | Plostina | 8.24 | 20 | P | Pn | 19 06 50.3 | +0.8 |
| VRI | Vrincioaia | 8.27 | 20 | ePN | Pn | 19 06 51.1 | +1.1 |
| VRI | Vrincioaia | 8.27 | 20 | ⇑P | Pn | 19 06 51.4 | +1.4 |
| VRI | Vrincioaia | 8.27 | 20 | ⇑iP | Pn | 19 06 51.3 | +1.3 |
| VRI | Vrincioaia | 8.27 | 20 | ePn | Pn | 19 06 51.1 | +1.1 |
| VRI | Vrincioaia | 8.27 | 20 | P | Pn | 19 06 51.4 | +1.4 |
| SAFT | Safranbolu | 8.29 | 65 | ePN | Pn | 19 06 51.8 | +1.6 |
| SAFT | Safranbolu | 8.29 | 65 | ePn | Pn | 19 06 51.8 | +1.6 |
| TLCR | | 8.38 | 31 | ⇑P | Pn | 19 06 51.6 | +0.1 |
| TLCR | | 8.38 | 31 | ⇑iP | Pn | 19 06 51.6 | +0.1 |
| TLCR | | 8.38 | 31 | P | Pn | 19 06 51.6 | +0.1 |
| CJR | Cluj-Napoca | 8.59 | 4 | ⇑P | Pn | 19 06 53.2 | -1.1 |
| CJR | Cluj-Napoca | 8.59 | 4 | ⇑iP | Pn | 19 06 53.2 | -1.1 |
| CJR | Cluj-Napoca | 8.59 | 4 | P | Pn | 19 06 53.2 | -1.1 |
| DRGR | | 8.64 | 0 | ⇓P | Pn | 19 06 54.7 | -0.4 |
| DRGR | | 8.64 | 0 | ⇓iP | Pn | 19 06 54.7 | -0.4 |
| DRGR | | 8.64 | 0 | P | Pn | 19 06 54.7 | -0.4 |
| BRTR | Keskin Array B | 8.66 | 76 | Pn | Pn | 19 06 58.0 | +2.5 |
| | 0.3nm,0.3s,baz=256,slow=12,SNR=17 | | | | | | |
| BRTR | Keskin Array B | 8.66 | 76 | P | Pn | 19 06 58.0 | +2.5 |
| BRTR | Keskin Array B | 8.66 | 76 | Pn | Pn | 19 06 58.0 | +2.5 |
| YESY | Yesilyurt | 8.72 | 89 | ePN | Pn | 19 06 57.6 | +1.4 |
| YESY | Yesilyurt | 8.72 | 89 | ePn | Pn | 19 06 57.7 | +1.4 |
| YAYX | Yaylak | 8.74 | 81 | ePN | Pn | 19 06 58.3 | +1.9 |
| YAYX | Yaylak | 8.74 | 81 | ePn | Pn | 19 06 58.3 | +1.9 |
| TESR | Tescani | 8.85 | 18 | ⇑iP | Pn | 19 06 58.9 | +1.0 |
| TESR | Tescani | 8.85 | 18 | ⇑iP | Pn | 19 06 58.9 | +1.0 |
| ARCR | ARCALIA | 9.02 | 7 | ⇓iP | Pn | 19 07 00.6 | +0.5 |
| ARCR | ARCALIA | 9.02 | 7 | ⇓iP | Pn | 19 07 00.6 | +0.5 |
| CSS | Prodhromos | 9.12 | 107 | ePn | Pn | 19 07 07.6 | +6.0 |
| CSS | Prodhromos | 9.12 | 107 | ePn | Pn | 19 07 07.6 | +6.0 |
| SWA2 | | 9.17 | 165 | P | Pn | 19 07 00.7 | -1.6 |
| | baz=166 | | | | | | |
| SWA2 | | 9.17 | 165 | P | Pn | 19 07 00.7 | -1.6 |
| CRES | Cresnjev | 9.38 | 327 | i Pn | Pn | 19 07 03.3 | -1.8 |
| CRES | Cresnjev | 9.38 | 327 | i Pn | Pn | 19 07 03.3 | -1.8 |
| CORM | Corum | 9.48 | 74 | ePN | Pn | 19 07 07.3 | +0.7 |
| CORM | Corum | 9.48 | 74 | ePn | Pn | 19 07 07.3 | +0.7 |
| VISS | Visnje | 9.63 | 325 | ePn | Pn | 19 07 07.3 | -1.3 |
| VISS | Visnje | 9.63 | 325 | ePn | Pn | 19 07 07.3 | -1.3 |
| BURAR | Bucovina Array | 9.64 | 10 | ⇑P | Pn | 19 07 09.9 | +1.1 |
| BURAR | Bucovina Array | 9.64 | 10 | ⇑iP | Pn | 19 07 09.9 | +1.1 |
| BURAR | Bucovina Array | 9.64 | 10 | ⇑iP | Pn | 19 07 09.9 | +1.1 |
| BUR04 | Bucovina Ar. S | 9.64 | 10 | ePn | Pn | 19 07 09.5 | +0.7 |
| BUR04 | Bucovina Ar. S | 9.64 | 10 | ePn | Pn | 19 07 09.5 | +0.7 |
| TRPA | Tarpa | 9.98 | 359 | ⇑iP | Pn | 19 07 14.0 | +0.7 |
| TRPA | Tarpa | 9.98 | 359 | ⇑iP | Pn | 19 07 14.0 | +0.7 |
| PSZ | Piszkesteto | 9.98 | 349 | ⇑P | Pn | 19 07 11.7 | -1.7 |
| PSZ | Piszkesteto | 9.98 | 349 | ⇑iP | Pn | 19 07 11.7 | -1.7 |
| PSZ | Piszkesteto | 9.98 | 349 | ePn | Pn | 19 07 13.6 | +0.2 |
| PSZ | Piszkesteto | 9.98 | 349 | P | Pn | 19 07 11.7 | -1.7 |
| PSZ | Piszkesteto | 9.98 | 349 | ePn | Pn | 19 07 13.6 | +0.2 |
| JAVS | Javornik | 10.06 | 323 | i Pn | Pn | 19 07 13.4 | -1.1 |
| JAVS | Javornik | 10.06 | 323 | i Pn | Pn | 19 07 13.4 | -1.1 |
| PERS | Pernice | 10.17 | 329 | i Pn | Pn | 19 07 16.1 | +0.1 |
| PERS | Pernice | 10.17 | 329 | i Pn | Pn | 19 07 16.1 | +0.1 |
| SOKA | Soboth | 10.23 | 329 | ⇑iPn | Pn | 19 07 15.9 | -1.1 |
| SOKA | Soboth | 10.23 | 329 | Pn | Pn | 19 07 15.9 | -1.1 |
| OBKA | Obir | 10.30 | 327 | ⇑iPn | Pn | 19 07 16.7 | -1.2 |
| OBKA | Obir | 10.30 | 327 | Pn | Pn | 19 07 16.7 | -1.2 |
| UZH | Uzhgorod | 10.48 | 358 | eP | Pn | 19 07 22.7 | +2.5 |
| UZH | Uzhgorod | 10.48 | 358 | eP | Pn | 19 07 22.7 | +2.5 |
| ARSA | Arzberg | 10.52 | 332 | ⇑iPn | Pn | 19 07 19.0 | -1.7 |
| ARSA | Arzberg | 10.52 | 332 | Pn | Pn | 19 07 19.0 | -1.7 |
| VYHS | Vyhne | 10.72 | 346 | eP | Pn | 19 07 23.2 | -0.3 |
| VYHS | Vyhne | 10.72 | 346 | ePN | Pn | 19 07 23.2 | -0.3 |
| VYHS | Vyhne | 10.72 | 346 | eP | Pn | 19 07 23.2 | -0.3 |
| KOLS | Kolonicke sedl | 10.79 | 358 | eP | Pn | 19 07 24.3 | -0.1 |
| KOLS | Kolonicke sedl | 10.79 | 358 | ePN | Pn | 19 07 24.3 | -0.1 |
| KOLS | Kolonicke sedl | 10.79 | 358 | eP | Pn | 19 07 24.3 | -0.1 |
| KEST | Kesra | 10.96 | 261 | Pn | Pn | 19 07 26.0 | -0.9 |
| | 0.3nm,0.3s,baz=47,slow=5.2,SNR=4.5 | | | | | | |
| KEST | Kesra | 10.96 | 261 | ePn | Pn | 19 07 30.1 | +3.1 |
| KEST | Kesra | 10.96 | 261 | ePn | Pn | 19 07 30.1 | +3.1 |
| STHS | Stebnicka Huta | 11.31 | 355 | eP | Pn | 19 07 34.5 | +2.9 |
| STHS | Stebnicka Huta | 11.31 | 355 | ePN | Pn | 19 07 34.5 | +2.9 |
| GLL | Jalalah | 11.35 | 136 | P | Pn | 19 07 29.9 | -2.3 |
| | baz=137 | | | | | | |
| GLL | Jalalah | 11.35 | 136 | P | Pn | 19 07 29.9 | -2.3 |
| NIE | Niedzica | 11.40 | 352 | eP | Pn | 19 07 35.5 | +2.7 |
| NIE | Niedzica | 11.40 | 352 | eP | Pn | 19 07 35.5 | +2.7 |
| KWP | Kalwaria Pacla | 11.48 | 360 | eP | Pn | 19 07 38.0 | +4.2 |
| KWP | Kalwaria Pacla | 11.48 | 360 | eP | Pn | 19 07 38.1 | +4.2 |
| MOA | Molln | 11.49 | 330 | ⇓iPn | Pn | 19 07 33.1 | -1.0 |
| MOA | Molln | 11.49 | 330 | Pn | Pn | 19 07 33.1 | -1.0 |
| MMAI | Mount Meron Ar | 11.53 | 113 | Pn | Pn | 19 07 35.2 | +0.5 |
| | 2.3nm,0.3s,baz=303,slow=12,SNR=4.6 | | | | | | |
| HFRF | Wahat Farafira | 11.94 | 155 | P | Pn | 19 07 38.5 | -1.7 |
| | baz=156 | | | | | | |
| HFRF | Wahat Farafira | 11.94 | 155 | P | Pn | 19 07 38.5 | -1.7 |
| VRAC | Vranov | 12.00 | 340 | Pn | Pn | 19 07 41.0 | +0.1 |
| | 0.2nm,0.3s,baz=172,slow=13,SNR=4.5 | | | | | | |
| VRAC | Vranov | 12.00 | 340 | ⇓P | Pn | 19 07 40.6 | -0.3 |
| VRAC | Vranov | 12.00 | 340 | ⇓iP | Pn | 19 07 40.6 | -0.3 |
| VRAC | Vranov | 12.00 | 340 | P | Pn | 19 07 40.6 | -0.3 |

| Sta | Name | Dist | Az | Phase | Phase | Time | Res |
|---|---|---|---|---|---|---|---|
| WTTA | Wattenberg | 12.21 | 322 | ⇓iPn | Pn | 19 07 42.8 | -1.2 |
| WTTA | Wattenberg | 12.21 | 322 | Pn | Pn | 19 07 42.8 | -1.2 |
| OJC | Ojcow | 12.25 | 351 | eP | Pn | 19 07 47.3 | +3.0 |
| OJC | Ojcow | 12.25 | 351 | ePn | Pn | 19 07 47.3 | +3.0 |
| HNKL | Nakhl | 12.43 | 128 | P | Pn | 19 07 44.6 | -2.3 |
| | baz=128 | | | | | | |
| HNKL | Nakhl | 12.43 | 128 | P | Pn | 19 07 44.6 | -2.3 |
| GEC2 | GERESS Array S | 12.52 | 332 | eP | Pn | 19 07 46.2 | -2.0 |
| GEC2 | GERESS Array S | 12.52 | 332 | ePn | Pn | 19 07 46.2 | -2.0 |
| GEC2 | GERESS Array S | 12.52 | 332 | eP | Pn | 19 07 46.2 | -2.0 |
| GERES | GERESS Array B | 12.52 | 332 | Pn | Pn | 19 07 46.9 | -1.3 |
| | 0.3nm,0.3s,baz=146,slow=14,SNR=9.7 | | | | | | |
| GERES | | | | LR | LR | 19 13 37.2 | |
| | comp=Z,188nm,21.9s,baz=142,slow=42 | | | | | | |
| MOTA | Moosalm | 12.53 | 321 | ⇑iPn | Pn | 19 07 48.5 | +0.2 |
| MOTA | Moosalm | 12.53 | 321 | Pn | Pn | 19 07 48.5 | +0.2 |
| DAVOX | Davos/Dischmat | 12.80 | 316 | Pn | Pn | 19 07 53.3 | +1.2 |
| | 0.5nm,0.3s,baz=136,slow=18,SNR=7.4 | | | | | | |
| DAVOX | | | | Sn | Sn | 19 10 09.6 | -4.9 |
| | 0.2nm,0.3s,baz=346,slow=20,SNR=1.7 | | | | | | |
| DAVOX | Davos/Dischmat | 12.80 | 316 | P | Pn | 19 07 53.3 | +1.2 |
| DAVOX | | | | | | 19 10 09.6 | |
| DAVOX | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KHC | Kasperske Hory | 12.80 | 332 | eP | Pn | 19 07 51.5 | -0.5 |
| KHC | Kasperske Hory | 12.80 | 332 | eP | Pn | 19 07 50.8 | -1.2 |
| KHC | | | | ex | x | 19 07 59.5 | |
| KHC | | | | AMS | AMS | 19 13 10.0 | |
| | comp=Z,1µm,10.5s | | | | | | |
| KHC | Kasperske Hory | 12.80 | 332 | ePn | Pn | 19 07 51.5 | -0.5 |
| KHC | Kasperske Hory | 12.80 | 332 | eP | Pn | 19 07 51.5 | -0.5 |
| TUE | Stuetta | 12.91 | 314 | ePn | Pn | 19 07 53.7 | +0.1 |
| TUE | Stuetta | 12.91 | 314 | ePn | Pn | 19 07 53.7 | +0.1 |
| DPC | Dobruska-Polom | 13.02 | 342 | eP | Pn | 19 07 55.0 | 0.0 |
| DPC | | | | MLR | MLR | | |
| | comp=Z,300nm,10.2s | | | | | | |
| DPC | Dobruska-Polom | 13.02 | 342 | eP | Pn | 19 07 55.0 | 0.0 |
| DPC | | | | ex | x | 19 08 02.0 | |
| DPC | | | | AMS | AMS | 19 13 40.0 | |
| | comp=Z,300nm,10.2s | | | | | | |
| DPC | Dobruska-Polom | 13.02 | 342 | eP | Pn | 19 07 55.0 | 0.0 |
| | comp=Z,300nm,10.2s | | | | | | |
| HRFI | Mount Harif | 13.02 | 125 | ePN | Pn | 19 07 56.3 | +1.2 |
| HRFI | Mount Harif | 13.02 | 125 | ePn | Pn | 19 07 56.3 | +1.2 |
| ASF | Jabal al Asfar | 13.04 | 113 | Pn | Pn | 19 07 55.2 | -0.2 |
| | comp=Z,0.3nm,0.3s,baz=285,slow=20,SNR=2.3 | | | | | | |
| PRU | Pruhonice | 13.20 | 336 | eP | Pn | 19 08 00.7 | +3.3 |
| PRU | | | | MLR | MLR | | |
| | comp=Z,300nm,8.6s | | | | | | |
| PRU | Pruhonice | 13.20 | 336 | eP | Pn | 19 08 00.7 | +3.3 |
| PRU | | | | ex | x | 19 08 07.3 | |
| PRU | | | | AMS | AMS | 19 14 30.0 | |
| | comp=Z,300nm,8.6s | | | | | | |
| EIL | Elat | 13.21 | 126 | Pn | Pn | 19 07 56.0 | -1.7 |
| | comp=Z,0.7nm,0.3s,baz=334,slow=14,SNR=7.5 | | | | | | |
| EIL | | | | Sn | Sn | 19 10 18.9 | -5.7 |
| | comp=Z,0.4nm,0.3s,baz=81,slow=19,SNR=2.7 | | | | | | |
| AKASG | Malin Array Be | 13.38 | 18 | Pn | Pn | 19 07 58.7 | -1.1 |
| | comp=Z,0.6nm,0.3s,baz=204,slow=12,SNR=5.5 | | | | | | |
| AKASG | Malin Array Be | 13.38 | 18 | i P | Pn | 19 08 00.5 | +0.7 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| AKASG | Malin Array Be | 13.38 | 18 | i P | Pn | 19 08 00.5 | +0.7 |
| | comp=Z,6.0nm,0.9s | | | | | | |
| HDK1 | Dakhla | 13.79 | 154 | P | Pn | 19 08 04.9 | -0.6 |
| | baz=155 | | | | | | |
| HDK1 | Dakhla | 13.79 | 154 | P | Pn | 19 08 04.9 | -0.6 |
| SENIN | Lac Senin/Sane | 14.04 | 311 | ePn | Pn | 19 08 10.4 | +1.4 |
| SENIN | Lac Senin/Sane | 14.04 | 311 | ePn | Pn | 19 08 10.4 | +1.4 |
| BRG | Berggiesshubel | 14.16 | 337 | eP | P | 19 08 18.6 | +0.5 |
| | comp=Z,7.5nm,0.9s | | | | | | |
| | comp=N,385nm,12.7s | | | | | | |
| | comp=E,314nm,9.2s | | | | | | |
| | comp=Z,608nm,10.0s | | | | | | |
| BRG | Berggiesshubel | 14.16 | 337 | eP | P | 19 08 18.6 | +0.5 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=N,385nm,12.7s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=E,314nm,9.2s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=Z,608nm,10.0s | | | | | | |
| GRFO | Grafenberg | 14.18 | 328 | eP | P | 19 08 15.6 | -2.7 |
| GRFO | Grafenberg | 14.18 | 328 | eP | P | 19 08 15.6 | -2.7 |
| GRFO | Grafenberg | 14.18 | 328 | eP | P | 19 08 15.6 | -2.7 |
| BFO | Black Forest | 14.58 | 319 | ceP | P | 19 08 21.2 | -1.6 |
| BFO | Black Forest | 14.58 | 319 | ePn | Pn | 19 08 19.6 | +3.3 |
| BFO | Black Forest | 14.58 | 319 | ePn | Pn | 19 08 19.6 | +3.3 |
| BFO | Black Forest | 14.58 | 319 | eP | P | 19 08 21.2 | -1.6 |
| CLL | Collm | 14.84 | 336 | eP | P | 19 08 24.5 | -1.0 |
| CLL | Collm | 14.84 | 336 | ePn | P | 19 08 24.5 | -1.0 |
| CLL | Collm | 14.84 | 336 | eP | P | 19 08 24.5 | -1.0 |
| SUW | Suwalki | 15.87 | 1 | eP | Pn | 19 08 35.8 | +2.5 |
| SUW | Suwalki | 15.87 | 1 | eP | Pn | 19 08 35.9 | +2.6 |
| SUW | Suwalki | 15.87 | 1 | eP | Pn | 19 08 35.9 | +2.6 |
| KIV | Kislovodsk | 16.14 | 63 | eP | Pn | 19 08 33.8 | -3.0 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,71nm,14.0s | | | | | | |
| KIV | Kislovodsk | 16.14 | 63 | ePn | P | 19 08 44.1 | +4.0 |
| | comp=Z,12nm,0.9s | | | | | | |
| KIV | Kislovodsk | 16.14 | 63 | ePn | P | 19 08 44.1 | +4.0 |
| | comp=Z,12nm,0.9s | | | | | | |
| KBZ | Khabaz | 16.23 | 64 | Pn | P | 19 08 45.2 | +4.2 |
| | comp=Z,0.1nm,0.3s,baz=320,slow=7.8,SNR=5.9 | | | | | | |
| KBZ | | | | LR | LR | 19 15 00.6 | |
| | comp=Z,97nm,18.7s,baz=248,slow=38 | | | | | | |
| NACGM | Naroch | 16.99 | 8 | e | P | 19 08 50.0 | +0.6 |
| VORD | Divnogorie | 17.38 | 37 | eP | Pn | 19 08 52.5 | +0.1 |
| VORD | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.8s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | |
| VORD | Divnogorie | 17.38 | 37 | eP | Pn | 19 08 52.5 | +0.1 |
| | comp=E,10.0nm,1.3s | | | | | | |
| VSR | Storozhevoye | 17.49 | 36 | eP | Pn | 19 08 53.9 | +0.2 |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.4s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,9.0nm,1.6s | | | | | | |
| VSR | Storozhevoye | 17.49 | 36 | eP | Pn | 19 08 53.9 | +0.2 |
| | comp=E,10.0nm,1.4s | | | | | | |
| LPSR | Galich'ya Gora | 18.34 | 33 | eP | Pn | 19 09 04.5 | +0.3 |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,30nm,1.5s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.9s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.9s | | | | | | |
| LPSR | Galich'ya Gora | 18.34 | 33 | eP | Pn | 19 09 04.5 | +0.3 |
| | comp=E,30nm,1.5s | | | | | | |
| VRH | Novokhopyorsk | 18.72 | 40 | eP | P | 19 09 09.5 | +1.0 |
| VRH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.0s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,20nm,0.9s | | | | | | |
| VRH | Novokhopyorsk | 18.72 | 40 | eP | P | 19 09 09.5 | +1.0 |
| | comp=E,10.0nm,1.0s | | | | | | |
| OBN | Obninsk | 19.39 | 24 | P | P | 19 09 15.9 | +0.1 |
| | comp=E,1.8nm,0.3s,baz=159,slow=24,SNR=3.9 | | | | | | |
| OBN | | | | LR | LR | 19 16 46.1 | |
| | comp=E,65nm,20.5s,baz=266,slow=37 | | | | | | |
| OBN | Obninsk | 19.39 | 24 | eP | P | 19 09 14.7 | -1.1 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,71nm,13.0s | | | | | | |
| MOS | Moscow | 20.25 | 25 | eP | Pn | 19 09 30.8 | +3.6 |
| MOS | | | | e | | 19 09 44.3 | |
| MOS | | | | e | | 19 09 49.2 | |
| MOS | | | | pmax | pmax | | |
| | comp=Z,68nm,1.6s | | | | | | |
| MUD | Monsted U'grnd | 20.42 | 338 | ⇑iP | P | 19 09 27.0 | +0.1 |
| MUD | | | | pmax | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | |
| MUD | Monsted U'grnd | 20.42 | 338 | ⇑iP | P | 19 09 27.0 | +0.1 |
| | comp=Z,17nm,0.7s | | | | | | |

**MUD Monsted U'grnd 20.42 338** *i* P **P** **19 09 27.0 +0.1**
comp=Z,17nm,0.7s
**VSU Vasula 20.50 6** *e*P **P** **19 09 26.4 -1.4**
**VSU Vasula 20.50 6** *e*P **P** **19 09 26.4 -1.4**
**ES19 SONSECA Array 20.74 283** *e*P **P** **19 09 30.6 -0.1**
**ES19 SONSECA Array 20.74 283** *e*P **P** **19 09 30.6 -0.1**
**ESDC Sonseca Array 20.79 283** P **P** **19 09 31.3 +0.1**
comp=Z,18nm,0.7s,baz=75,slow=11,SNR=93
**PAB San Pablo 21.09 282** *e*P **P** **19 09 34.7 +0.1**
PAB pmax pmax
comp=Z,28nm,0.9s
**PAB San Pablo 21.09 282** *e*P **P** **19 09 34.7 +0.1**
comp=Z,28nm,0.9s
**PAB San Pablo 21.09 282** *e*P **P** **19 09 34.7 +0.1**
comp=Z,28nm,0.9s
**TAM Tamanrasset 21.24 229** *e*P **P** **19 09 37.6 +1.3**
TAM pmax pmax
comp=Z,9.0nm,1.3s
**TAM Tamanrasset 21.24 229** *e*P **P** **19 09 37.6 +1.3**
comp=Z,9.3nm,1.3s
**TAM Tamanrasset 21.24 229** *e*P **P** **19 09 37.6 +1.3**
comp=Z,9.3nm,1.3s
**CWF Charnwood Fore 22.14 319** *e*P **P** **19 09 45.6 0.0**
comp=Z,175nm,2.1s
**CWF Charnwood Fore 22.14 319** *e*P **P** **19 09 45.6 0.0**
comp=Z,175nm,2.1s
**HFS Hagfors 22.74 348** P **P** **19 09 49.5 -2.4**
comp=Z,4.0nm,0.5s,baz=160,slow=9.1,SNR=22
HFS LR LR 19 19 49.5
comp=Z,107nm,18.8s,baz=210,slow=40
**MDT Midelt 22.84 265** P **P** **19 09 52.6 -0.7**
comp=Z,5.4nm,1.0s,baz=69,slow=12,SNR=4.2
**KONO Kongsberg 23.10 343** *e*P **P** **19 09 52.9 -2.7**
KONO pmax pmax
comp=Z,15nm,1.1s
**KONO Kongsberg 23.10 343** *e*P **P** **19 09 52.9 -2.7**
comp=Z,15nm,1.1s
**KONO Kongsberg 23.10 343** *e*P **P** **19 09 52.9 -2.7**
comp=Z,15nm,1.1s
**FINES FINESS Array B 23.42 4** P **P** **19 09 56.1 -2.7**
comp=Z,6.9nm,0.8s,baz=172,slow=11,SNR=16
FINES PcP **PcP** **19 13 43.8 -0.9**
comp=Z,1.7nm,0.7s,baz=160,slow=4.4,SNR=4.0
FINES ScP **ScP** **19 17 20.8 -1.8**
comp=Z,1.6nm,0.8s,baz=114,slow=9.2,SNR=4.3
FINES LR LR 19 19 40.4
comp=Z,166nm,21.5s,baz=203,slow=38
**FINES FINESS Array B 23.42 4** P **P** **19 09 56.1 -2.7**
FINES 19 13 43.8
FINES pmax pmax
comp=Z,7.0nm,0.8s
FINES pmax pmax
comp=Z,2.0nm,0.7s
FINES pmax pmax
comp=N,2.0nm,0.8s
FINES MLR MLR
comp=Z,166nm,21.5s
**NB2 NORSAR Subarra 24.02 346** P **P** **19 10 02.9 -1.8**
comp=Z,0.4nm,0.5s,baz=156,slow=11
**NB2 NORSAR Subarra 24.02 346** P **P** **19 10 02.9 -1.8**
comp=Z,0.4nm,0.5s,SNR=2.4
**NOA NORSAR Array B 24.02 346** P **P** **19 10 03.0 -1.8**
comp=Z,4.2nm,0.8s,baz=154,slow=9.4,SNR=21
NOA LR LR 19 19 59.4
comp=Z,52nm,20.6s,baz=160,slow=38
**NOA NORSAR Array B 24.02 346** P **P** **19 10 03.0 -1.8**
NOA pmax pmax
comp=Z,4.0nm,0.8s
NOA MLR MLR
comp=Z,52nm,20.6s
**NOA NORSAR Array B 24.02 346** P **P** **19 10 03.0 -1.8**
comp=Z,52nm,20.6s
**NBO02 NORSAR Array S 24.10 346** *e*P **P** **19 10 03.8 -1.6**
**NBO02 NORSAR Array S 24.10 346** *e*P **P** **19 10 03.8 -1.6**
**RAYN Ar Rayn 24.32 120** P **P** **19 10 09.7 +1.9**
comp=Z,41nm,1.2s,SNR=6.1
**RAYN Ar Rayn 24.32 120** *e*P **P** **19 10 09.8 +1.9**
comp=Z,8.3nm,1.1s
**RAYN Ar Rayn 24.32 120** *e*P **P** **19 10 09.8 +1.9**
comp=Z,8.3nm,1.1s
**EKA Eskdalemuir Ar 24.47 323** P **P** **19 10 08.1 -0.7**
comp=Z,14nm,0.8s,baz=120,slow=8.9,SNR=31
**EKA Eskdalemuir Ar 24.47 323** P **P** **19 10 08.1 -0.7**
EKA pmax pmax
comp=Z,15nm,0.8s
**ESK Eskdalemuir 24.48 323** *e*P **P** **19 10 08.3 -0.7**
ESK pmax pmax
comp=Z,260nm,2.3s
**ESK Eskdalemuir 24.48 323** *e*P **P** **19 10 08.3 -0.7**
comp=Z,260nm,2.3s
**ESK Eskdalemuir 24.48 323** *e*P **P** **19 10 08.3 -0.7**
comp=Z,260nm,2.3s
**PFVI Vila Bisbo 24.93 277** *e*P **P** **19 10 12.7 -0.5**
comp=Z,1μm,2.4s
**PFVI Vila Bisbo 24.93 277** *e*P **P** **19 10 12.7 -0.5**
comp=Z,1μm,2.4s
**KLMR Klimovskoe 25.06 20** *e*P **P** **19 10 13.4 -0.7**
KLMR pmax pmax
comp=Z,21nm,0.8s
**KLMR Klimovskoe 25.06 20** *e*P **P** **19 10 13.4 -0.7**
comp=Z,21nm,0.8s
**DSB Dublin 25.08 316** *e*P **P** **19 10 17.6 +3.2**
comp=Z,120nm,1.5s
**GEYT Alibeck 27.79 79** P **P** **19 10 39.2 +0.2**
comp=Z,1.2nm,0.5s,baz=289,slow=9.2,SNR=5.6
**AKTK Aktyubinsk 27.83 52** P **P** **19 10 37.9 -1.3**
comp=Z,1.0nm,0.6s
**AKTO Aktyubinsk 27.83 52** P **P** **19 10 37.9 -1.4**
comp=Z,1.2nm,0.6s,baz=251,slow=13,SNR=4.5
**AKTO Aktyubinsk 27.83 52** P **P** **19 10 37.9 -1.4**
AKTO pmax pmax
comp=Z,1.0nm,0.6s
**ABKAR Akbulak array 28.84 55** *e*P **P** **19 10 46.8 -1.4**
**ABKAR Akbulak array 28.84 55** *e*P **P** **19 10 46.8 -1.4**
**ARU Arti 29.95 41** P **P** **19 10 57.1 -0.9**
comp=Z,0.2nm,0.4s,baz=294,slow=24,SNR=1.4
ARU LR LR 19 22 27.6
comp=Z,61nm,18.6s,baz=248,slow=35
**ARU Arti 29.95 41** *d i*P **P** **19 10 57.7 -0.3**
ARU 19 11 53.4
ARU S **S** **19 15 56.7 +1.6**
ARU SS **SnSn** **19 17 32.8 +6.5**
ARU pmax pmax
comp=Z,6.0nm,1.4s
**ARU Arti 29.95 41** *e*P **P** **19 10 57.6 -0.4**
comp=Z,12nm,1.5s
**ARU Arti 29.95 41** *e*P **P** **19 10 57.6 -0.4**
comp=Z,12nm,1.5s
ARU S **S** **19 15 56.7 +1.6**
**TOA0 Torodi Ar. Sit 31.13 223** *e*P **P** **19 11 08.3 -0.4**
**TOA0 Torodi Ar. Sit 31.13 223** *e*P **P** **19 11 08.4 -0.4**
**TORD Torodi Ar. Bea 31.13 223** P **P** **19 11 08.1 -0.7**
comp=Z,2.0nm,0.6s,baz=35,slow=9.1,SNR=22
TORD LR LR 19 24 34.3
comp=Z,117nm,18.4s,baz=35,slow=38
**SVE Sverdlovsk 31.16 41** *e*P **P** **19 11 08.5 -0.2**
SVE pmax pmax
comp=Z,11nm,1.0s
**SVE Sverdlovsk 31.16 41** *e*P **P** **19 11 08.5 -0.2**
comp=Z,11nm,1.0s
**ARCES ARCESS Array B 31.48 2** P **P** **19 11 10.3 -1.1**
comp=Z,1.8nm,0.6s,baz=198,slow=9.5,SNR=11
ARCES PcP **PcP** **19 14 03.1 -1.0**
comp=Z,2.8nm,0.9s,baz=190,slow=2.6,SNR=6.0
ARCES LR LR 19 24 58.8
comp=Z,70nm,18.1s,baz=202,slow=38
**ARCES ARCESS Array B 31.48 2** P **P** **19 11 10.3 -1.1**
ARCES 19 14 03.1
ARCES pmax pmax
comp=Z,2.0nm,0.6s
ARCES pmax pmax
comp=Z,3.0nm,0.9s
ARCES MLR MLR
comp=Z,71nm,18.1s
**BRVK Borovoye 35.76 50** *e*P **P** **19 11 48.2 -0.6**
BRVK pmax pmax
comp=Z,6.0nm,0.8s
**BRVK Borovoye 35.76 50** *e*P **P** **19 11 48.2 -0.6**
comp=Z,5.5nm,0.8s
**BRVK Borovoye 35.76 50** *e*P **P** **19 11 48.2 -0.6**
comp=Z,5.5nm,0.8s
**KKAR Karatay Array 36.23 67** *e*P **P** **19 11 52.8 -0.2**
**KKAR Karatay Array 36.23 67** *e*P **P** **19 11 52.8 -0.2**
**KKAR Karatay Array 36.23 67** *e*P **P** **19 11 52.8 -0.2**
**AAK Ala-Archa 39.19 67** *e*P **P** **19 12 18.1 -0.1**
AAK pmax pmax
comp=Z,11nm,1.4s

**AAK Ala-Archa 39.19 67** *e*P **P** **19 12 18.3 +0.1**
comp=Z,4.4nm,0.9s
**AAK Ala-Archa 39.19 67** *e*P **P** **19 12 18.1 -0.1**
comp=Z,11nm,1.4s
**DBIC Dimbokro 40.07 226** P **P** **19 12 24.8 -0.7**
comp=Z,1.6nm,0.4s,baz=14,slow=9.0,SNR=8.9
DBIC LR LR 19 32 22.9
comp=Z,137nm,18.0s,baz=335,slow=41
**DBIC Dimbokro 40.07 226** P **P** **19 12 24.8 -0.7**
DBIC pmax pmax
comp=Z,2.0nm,0.4s
DBIC MLR MLR
comp=Z,137nm,18.0s
**SPITS Spitsbergen Ar 40.23 358** P **P** **19 12 26.0 -0.2**
comp=Z,7.7nm,0.9s,baz=149,slow=9.8,SNR=6.0
SPITS PcP **PcP** **19 14 29.3 -0.5**
comp=Z,10nm,1.0s,baz=204,slow=3.2,SNR=3.2
**SPITS Spitsbergen Ar 40.23 358** P **P** **19 12 26.0 -0.2**
SPITS 19 14 29.3
SPITS pmax pmax
comp=Z,8.0nm,0.9s
**KURK Kurchatov 40.91 54** P **P** **19 12 31.1 -1.0**
comp=Z,74nm,0.9s,SNR=12
**KSH Kashi 41.01 71** P **P** **19 12 31.9 -1.4**
KSH *e*pP pP 19 12 39.5 +2.4
KSH *e*PP **PP** **19 14 09.3 +1.6**
KSH PcS PcS 19 18 20.2 -4.0
KSH S S 19 18 39.5 -5.9
KSH PMZ
comp=Z,2.0nm,0.7s
KSH PMZ
comp=Z,130nm,5.6s
KSH LN
comp=Z,120nm,4.9s
KSH LE
comp=Z,73nm,6.7s
KSH LZ
comp=Z,190nm,5.7s
**NVS Novosibirsk 43.44 47** *e*P **P** **19 12 52.4 -0.2**
NVS pmax pmax
comp=Z,12nm,0.1s
NVS pmax pmax
comp=N,3.0nm,0.6s
NVS pmax pmax
comp=E,6.0nm,0.6s
**NVS Novosibirsk 43.44 47** *e*P **P** **19 12 52.4 -0.2**
comp=E,12nm,0.1s
**MAKZ Makanchi 43.63 59** *e*P **P** **19 12 53.4 -1.0**
**MAKZ Makanchi 43.63 59** *e*P **P** **19 12 53.4 -1.0**
**MKAR Makanchi Array 43.85 59** P **P** **19 12 55.4 -0.8**
comp=E,2.7nm,0.4s,baz=273,slow=7.5,SNR=36
MKAR PcP **PcP** **19 14 43.6 +1.3**
comp=E,2.0nm,0.9s,baz=291,slow=4.3,SNR=2.9
MKAR ScP **ScP** **19 18 30.8 -3.0**
comp=E,1.0nm,0.7s,baz=278,slow=4.5,SNR=5.2
MKAR LR LR 19 33 19.1
comp=E,46nm,18.3s,baz=273,slow=39
**MKAR Makanchi Array 43.85 59** P **P** **19 12 55.4 -0.8**
MKAR 19 14 43.6
MKAR pmax pmax
comp=Z,3.0nm,0.4s
MKAR pmax pmax
comp=Z,2.0nm,0.9s
MKAR pmax pmax
comp=N,1.0nm,0.7s
MKAR MLR MLR
comp=Z,46nm,18.3s
**MK01 Makanchi Array 43.86 59** *e*P **P** **19 12 55.3 -1.0**
**MK01 Makanchi Array 43.86 59** *e*P **P** **19 12 55.3 -1.0**
**ZAA0 Zalesovo Array 44.43 48** *e*P **P** **19 12 59.6 -1.0**
**ZAA0 Zalesovo Array 44.43 48** *e*P **P** **19 12 59.6 -1.0**
**ZALV Zalesovo Beam 44.43 48** P **P** **19 12 59.9 -0.8**
comp=Z,13nm,0.5s,baz=276,slow=8.8,SNR=61
ZALV PcP **PP** **19 14 43.4 -0.7**
comp=Z,1.0nm,0.5s,baz=258,slow=6.9,SNR=2.4
**ZALV Zalesovo Beam 44.43 48** P **P** **19 12 59.9 -0.8**
ZALV 19 14 43.4
ZALV pmax pmax
comp=Z,13nm,0.5s
ZALV pmax pmax
comp=Z,1.0nm,0.5s
**WMQ Urumqi 48.26 62** P **P** **19 13 32.0 +1.0**
WMQ S **S** **19 20 30.0 -0.4**
WMQ PMZ
comp=Z,12nm,0.9s
**KRAR Krasnoyarsk 48.76 45** *e*P **P** **19 13 34.4 -0.2**
KRAR pmax pmax
comp=Z,10.0nm,0.9s
**KRAR Krasnoyarsk 48.76 45** *e*P **P** **19 13 34.4 -0.2**
comp=Z,10.0nm,0.9s
**DANN Dangsing 51.18 82** *e*P **P** **19 13 52.2 -1.5**
**KOLN Koldanda 51.32 83** *e*P P 19 13 52.7 -2.0
**GKN Gorkha 52.02 82** *e*P P 19 13 57.2 -2.7
comp=Z,8.3nm,0.6s
**DMN Daman 52.57 82** *e*P **P** **19 14 02.3 -1.8**
comp=Z,14nm,0.7s
**KKN Kakani 52.62 82** *e*P P 19 14 02.3 -2.1
comp=Z,10nm,0.6s
**PKIN Phulchoki 52.82 82** *e*P **P** **19 14 04.3 -1.6**
**GUN Gumba 53.03 81** *e*P P 19 14 05.6 -2.0
**RAMN Ramite 54.05 82** *e*P P 19 14 12.6 -2.4
comp=Z,9.7nm,0.6s
**ODAN Odare 54.72 82** *e*P P 19 14 16.9 -2.9
**TAPN Taplejung 54.73 81** *e*P P 19 14 17.9 -2.0
**GTA Gaotai 58.31 63** *e*P **P** **19 14 46.8 +1.7**
GTA pP pP 19 14 54.3 +5.2
GTA sP sP 19 14 57.8 +7.3
GTA S **S** **19 22 47.3 -0.1**
GTA sS sS 19 23 00.1 +6.3
GTA SS **SS** **19 26 42.0 +3.1**
GTA PMZ
comp=Z,3.0nm,1.4s
GTA PMZ
comp=Z,73nm,5.0s
GTA LN
comp=Z,100nm,15.7s
GTA LE
comp=Z,97nm,15.2s
**SONM Songino Array 59.14 51** P **P** **19 14 49.8 -0.9**
comp=Z,1.2nm,0.6s,baz=282,slow=9.0,SNR=7.0
SONM ScP **ScP** **19 19 37.4 -2.3**
comp=Z,0.6nm,0.9s,baz=319,slow=6.3,SNR=3.5
**SONM Songino Array 59.14 51** P **P** **19 14 49.8 -0.9**
SONM pmax pmax
comp=Z,1.0nm,0.6s
SONM pmax pmax
comp=N,1.0nm,0.9s
**BOD Bodaibo 59.33 38** *e*P P 19 14 48.9 -2.8
BOD pmax pmax
comp=Z,6.0nm,1.2s
**SCHQ Schefferville 59.65 318** P **P** **19 14 53.5 -0.4**
comp=Z,18nm,0.7s,baz=65,slow=4.9,SNR=19
**SCHQ Schefferville 59.65 318** *e*P **P** **19 14 53.9 -0.1**
comp=Z,116nm,1.7s
**SCHQ Schefferville 59.65 318** *e*P **P** **19 14 53.9 -0.1**
comp=Z,116nm,1.7s
**LZH Lanzhou 62.67 64** *e*P **P** **19 15 16.4 +1.4**
LZH pP pP 19 15 24.9 +6.0
LZH sP sP 19 15 27.0 +6.6
LZH PMZ
comp=Z,15nm,1.0s
**YAK Yakutsk 64.28 30** P **P** **19 15 23.1 -1.8**
comp=Z,3.3nm,0.3s,baz=227,slow=1.2,SNR=1.7
**YAK Yakutsk 64.28 30** *e*P **P** **19 15 24.1 -0.8**
YAK pmax pmax
comp=Z,5.0nm,0.8s
**YAK Yakutsk 64.28 30** *e*P **P** **19 15 24.1 -0.8**
comp=Z,5.0nm,0.8s
**CD2 Chengdu 65.17 69** *e*P **P** **19 15 30.0 -1.4**
CD2 pP pP 19 15 38.3 +2.9
CD2 PP **PP** **19 17 52.9 -1.6**
CD2 S S 19 24 10.7 -3.6
CD2 sS sS 19 24 24.9 +4.1
CD2 SKS **SKSac** **19 25 22.7 -3.8**
CD2 SS **SS** **19 28 23.9 -2.5**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**HHC Hu-ho-hao-te 65.62 56** *e*P **P** **19 15 34.7 +0.5**
HHC S S 19 24 16.0 -3.6
HHC PMZ
comp=Z,13nm,0.7s
HHC PMZ
comp=Z,100nm,7.4s

HHC LN
comp=Z,120nm,18.5s
HHC LE
comp=Z,120nm,16.0s
HHC LZ
comp=Z,110nm,16.0s
**BOSA Boshof 66.46 178** P **P** **19 15 39.4 -0.1**
comp=Z,1.1nm,0.5s,baz=355,slow=6.3,SNR=3.3
**BOSA Boshof 66.46 178** P **P** **19 15 39.4 -0.1**
BOSA pmax pmax
comp=Z,1.0nm,0.5s
**KMI Kunming 67.45 75** P P 19 15 50.6 +4.3
KMI PMZ
comp=Z,4.0nm,2.0s
**CMAR Chiang Mai Arr 68.18 83** P P 19 15 48.2 -2.5
comp=Z,1.2nm,0.6s,baz=303,slow=8.4,SNR=11
**CMAR Chiang Mai Arr 68.18 83** *ce*P P 19 15 48.7 -2.0
CMAR pmax pmax
comp=Z,1.0nm,0.6s
**CMAR Chiang Mai Arr 68.18 83** *e*P P 19 15 48.7 -2.0
comp=Z,1.0nm,0.6s
**GYA Guiyang 69.69 72** *e*P **P** **19 16 00.4 +0.2**
GYA pP PcP 19 16 07.8 -15
GYA PP **PP** **19 18 34.5 +0.5**
GYA S S 19 25 04.2 -4.7
GYA SKS **SKiKP** **19 25 54.0 +6.1**
GYA SS **SS** **19 29 33.6 -3.1**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.9s
GYA LN
comp=Z,520nm,18.2s
GYA LE
comp=Z,470nm,19.0s
GYA LZ
comp=Z,490nm,18.5s
**SEY Seymchan 71.54 22** P P 19 16 08.7 -1.9
comp=Z,1.4nm,0.7s,baz=341,slow=3.7,SNR=6.7
**SEY Seymchan 71.54 22** P P 19 16 08.7 -1.9
SEY pmax pmax
comp=Z,1.0nm,0.7s
**SADO Sadowa 71.55 313** *e*P **P** **19 16 12.0 +1.0**
comp=Z,17nm,0.9s
**SADO Sadowa 71.55 313** *e*P **P** **19 16 12.0 +1.0**
comp=Z,17nm,0.9s
**INK Inuvik 72.38 351** P **P** **19 16 14.3 -1.2**
comp=Z,2.5nm,0.6s,baz=360,slow=9.4,SNR=5.9
**INK Inuvik 72.38 351** P **P** **19 16 14.3 -1.2**
INK pmax pmax
comp=Z,3.0nm,0.6s
**CN2 Changchun 72.64 48** *e*P **P** **19 16 17.2 -0.4**
CN2 *es*P sP 19 16 24.3 +1.3
CN2 *e*S S 19 25 37.7 -4.6
CN2 PMZ
comp=Z,10.0nm,0.8s
CN2 PMZ
comp=Z,100nm,4.0s
CN2 LN
comp=Z,300nm,17.0s
CN2 LE
comp=Z,400nm,17.0s
CN2 LZ
comp=Z,600nm,18.0s
**YKA Yellowknife Ar 74.00 341** P **P** **19 16 23.8 -1.4**
comp=Z,0.9nm,0.6s,baz=32,slow=5.2,SNR=4.6
**YKA Yellowknife Ar 74.00 341** P **P** **19 16 23.8 -1.4**
YKA pmax pmax
comp=Z,1.0nm,0.6s
**COLD Coldfoot 74.81 357** *e*P **P** **19 16 29.6 -0.3**
comp=Z,10nm,1.2s
**COLD Coldfoot 74.81 357** *e*P **P** **19 16 29.6 -0.3**
comp=Z,10nm,1.2s
**MCWV Mont Chateau 75.01 309** *e*P **P** **19 16 31.8 +0.3**
comp=Z,9.9nm,0.8s
**MCWV Mont Chateau 75.01 309** *e*P **P** **19 16 31.8 +0.3**
comp=Z,9.9nm,0.8s
**USRK Ussuriysk Ar. 76.11 44** P **P** **19 16 36.2 -1.5**
comp=Z,2.0nm,0.7s,baz=318,slow=5.4,SNR=5.6
**ULM Lac du Bonnet 76.73 325** P **P** **19 16 40.9 -0.3**
comp=Z,4.5nm,0.8s,baz=32,slow=2.6,SNR=4.5
**ULM Lac du Bonnet 76.73 325** P **P** **19 16 40.9 -0.3**
ULM pmax pmax
comp=Z,5.0nm,0.8s
**MDM Murphy Dome 76.98 356** *e*P **P** **19 16 42.0 -0.3**
comp=Z,8.2nm,0.7s
**MDM Murphy Dome 76.98 356** *e*P **P** **19 16 42.0 -0.3**
comp=Z,8.2nm,0.7s
**MLY Manley 77.03 357** *e*P **P** **19 16 42.4 -0.2**
comp=Z,7.2nm,0.9s
**MLY Manley 77.03 357** *e*P **P** **19 16 42.4 -0.2**
comp=Z,7.2nm,0.9s
**IL1 Eielson Array 77.09 355** *e*P **P** **19 16 42.3 -0.6**
**IL1 Eielson Array 77.09 355** *e*P **P** **19 16 42.3 -0.6**
**ILAR Eielson Array 77.09 355** P **P** **19 16 42.6 -0.3**
comp=Z,2.4nm,0.6s,baz=350,slow=3.7,SNR=13
**ILAR Eielson Array 77.09 355** P **P** **19 16 42.6 -0.3**
ILAR pmax pmax
comp=Z,2.0nm,0.6s
**DAWY Dawson 77.14 352** *e*P **P** **19 16 43.3 0.0**
comp=Z,11nm,0.7s
**DAWY Dawson 77.14 352** *e*P **P** **19 16 43.3 0.0**
comp=Z,11nm,0.7s
**B34A Aery, Baudette 77.40 323** P **P** **19 16 45.2 +0.3**
baz=77
**WRH Wood River Hil 77.46 356** *e*P **P** **19 16 44.6 -0.4**
comp=Z,12nm,0.7s
**WRH Wood River Hil 77.46 356** *e*P **P** **19 16 44.6 -0.4**
comp=Z,12nm,0.7s
**BPAW Bear Paw Mtn. 77.97 357** *e*P **P** **19 16 46.8 -1.1**
comp=Z,7.7nm,0.7s
**BPAW Bear Paw Mtn. 77.97 357** *e*P **P** **19 16 46.8 -1.1**
comp=Z,7.7nm,0.7s
**KSAR Wonju Array Be 77.99 52** P **P** **19 16 47.9 -0.5**
**KSAR Wonju Array Be 77.99 52** P **P** **19 16 47.9 -0.5**
**KSAR Wonju Array Be 77.99 52** P **P** **19 16 47.9 -0.5**
**KSRS Korea Array 78.00 52** P **P** **19 16 47.9 -0.6**
comp=Z,0.9nm,0.6s,baz=290,slow=3.5,SNR=3.8
KSRS LR LR 19 56 12.3
comp=Z,23nm,18.1s,baz=300,slow=40
**KSRS Korea Array 78.00 52** P **P** **19 16 47.9 -0.6**
KSRS pmax pmax
comp=Z,1.0nm,0.6s
KSRS MLR MLR
comp=Z,23nm,18.1s
**MCK McKinley 78.24 356** *e*P **P** **19 16 48.6 -0.9**
MCK pmax pmax
comp=Z,15nm,1.2s
**MCK McKinley 78.24 356** *e*P **P** **19 16 48.5 -0.9**
comp=Z,15nm,1.2s
**MCK McKinley 78.24 356** *e*P **P** **19 16 48.5 -0.9**
comp=Z,15nm,1.2s
**F36A Milaca 78.67 320** P **P** **19 16 51.9 -0.1**
baz=78
**CAST Castle Rocks 78.69 358** *e*P **P** **19 16 51.9 0.0**
comp=Z,8.1nm,0.7s
**CAST Castle Rocks 78.69 358** *e*P **P** **19 16 51.9 0.0**
comp=Z,8.1nm,0.7s
**KMSC Kings Mountain 78.71 306** P **P** **19 16 52.8 +0.2**
baz=78
**KMSC Kings Mountain 78.71 306** *e*P **P** **19 16 52.7 +0.2**
comp=Z,7.4nm,0.9s
**KMSC Kings Mountain 78.71 306** *e*P **P** **19 16 52.7 +0.2**
comp=Z,7.4nm,0.9s
**PAX Paxson 78.78 355** *e*P **P** **19 16 51.1 -1.4**
PAX pmax pmax
comp=Z,8.0nm,0.8s
**PAX Paxson 78.78 355** *e*P **P** **19 16 51.1 -1.4**
comp=Z,8.1nm,0.8s
**PAX Paxson 78.78 355** *e*P **P** **19 16 51.1 -1.4**
comp=Z,8.1nm,0.8s
**B30A Myrvik Farm, E 79.14 324** P **P** **19 16 54.1 -0.5**
baz=79
**PPLA Purkeypile 79.22 358** *e*P **P** **19 16 53.6 -1.3**
comp=Z,12nm,0.5s
**PPLA Purkeypile 79.22 358** *e*P **P** **19 16 53.6 -1.3**
comp=Z,12nm,0.5s
**I38A Scanlan Farm, 79.31 318** P **P** **19 16 55.0 -0.6**
baz=79
**SML Sawmill 80.13 356** *e*P **P** **19 16 59.4 -0.4**
**SML Sawmill 80.13 356** *e*P **P** **19 16 59.4 -0.4**
comp=Z,90nm,2.1s
**SML Sawmill 80.13 356** *e*P **P** **19 16 59.4 -0.4**
comp=Z,90nm,2.1s
**KLU Klutina 80.28 354** *e*P **P** **19 17 00.6 0.0**
comp=Z,34nm,1.7s
**KLU Klutina 80.28 354** *e*P **P** **19 17 00.6 0.0**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,34nm,1.7s | | | | | | |
| **J37A** | **Redenius Farm,** | **80.46** | **318** | P | **P** | **19 17 01.2** | **-0.7** |
| | baz=80 | | | | | | |
| **CPCT** | **Cooper Cave** | **80.53** | **308** | *e*P | **P** | **19 17 03.1** | **+0.7** |
| **CPCT** | **Cooper Cave** | **80.53** | **308** | *e*P | **P** | **19 17 03.1** | **+0.7** |
| **SPU** | **Mount Spurr** | **80.93** | **357** | *e*P | **P** | **19 17 03.1** | **-0.9** |
| **SPU** | **Mount Spurr** | **80.93** | **357** | *e*P | **P** | **19 17 03.2** | **-0.9** |
| **RSO** | **Redoubt South** | **81.67** | **358** | *e*P | P | 19 17 06.2 | -2.1 |
| **RSO** | **Redoubt South** | **81.67** | **358** | *e*P | P | 19 17 06.2 | -2.1 |
| **ECSD** | **EROS Data Cent** | **81.73** | **320** | P | **P** | **19 17 08.0** | **-0.6** |
| | baz=81 | | | | | | |
| **ECSD** | **EROS Data Cent** | **81.73** | **320** | *e*P | **P** | **19 17 08.9** | **+0.3** |
| | comp=Z,150nm,3.0s | | | | | | |
| **ECSD** | **EROS Data Cent** | **81.73** | **320** | *e*P | **P** | **19 17 08.9** | **+0.3** |
| | comp=Z,150nm,3.0s | | | | | | |
| **CCM** | **Cathedral Cave** | **82.82** | **313** | *e*P | **P** | **19 17 14.7** | **+0.2** |
| CCM | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **CCM** | **Cathedral Cave** | **82.82** | **313** | *e*P | **P** | **19 17 14.7** | **+0.2** |
| | comp=Z,7.7nm,0.6s | | | | | | |
| **CCM** | **Cathedral Cave** | **82.82** | **313** | *e*P | **P** | **19 17 14.6** | **+0.2** |
| | comp=Z,7.7nm,0.6s | | | | | | |
| **BGNE** | **Belgrade** | **84.20** | **320** | *e*P | P | 19 17 18.3 | -3.1 |
| | comp=Z,53nm,0.7s | | | | | | |
| **O34A** | **Beatrice** | **84.33** | **318** | P | **P** | **19 17 21.3** | **-0.9** |
| | baz=84 | | | | | | |
| **EGMT** | **Eagleton** | **84.34** | **330** | P | **P** | **19 17 21.7** | **-0.5** |
| | baz=84 | | | | | | |
| **EGMT** | **Eagleton** | **84.34** | **330** | *e*P | **P** | **19 17 21.2** | **-0.9** |
| | comp=Z,23nm,1.1s | | | | | | |
| **EGMT** | **Eagleton** | **84.34** | **330** | *e*P | **P** | **19 17 21.2** | **-0.9** |
| | comp=Z,23nm,1.1s | | | | | | |
| **KDAK** | **Kodiak Island** | **84.35** | **357** | P | **P** | **19 17 21.9** | **+0.1** |
| | comp=Z,13nm,0.8s,baz=344,slow=7.7,SNR=6.1 | | | | | | |
| **KDAK** | **Kodiak Island** | **84.35** | **357** | *ce*P | **P** | **19 17 22.0** | **+0.1** |
| **KDAK** | **Kodiak Island** | **84.35** | **357** | *e*P | **P** | **19 17 22.0** | **+0.1** |
| **P35A** | **Duane Minner,** | **84.44** | **317** | P | **P** | **19 17 22.4** | **-0.4** |
| | baz=84 | | | | | | |
| **Q36A** | **Arnold C. Orve** | **84.55** | **316** | P | **P** | **19 17 22.9** | **-0.4** |
| | baz=84 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **84.76** | **47** | P | **P** | **19 17 23.5** | **-0.9** |
| | comp=Z,1.3nm,0.9s,baz=322,slow=3.6,SNR=3.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **84.76** | **47** | P | **P** | **19 17 23.5** | **-0.9** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **P34A** | **Walnut Farm, R** | **84.86** | **318** | P | **P** | **19 17 25.0** | **+0.2** |
| | baz=85 | | | | | | |
| **I25A** | **Rochford** | **84.95** | **324** | P | P | 19 17 23.1 | -2.3 |
| | baz=85 | | | | | | |
| **R36A** | **Gordon, Harris** | **85.03** | **316** | P | **P** | **19 17 25.4** | **-0.3** |
| | baz=85 | | | | | | |
| **S37A** | **Fort Scott** | **85.06** | **315** | P | **P** | **19 17 24.6** | **-1.3** |
| | baz=85 | | | | | | |
| **Q34A** | **Chapman** | **85.38** | **317** | P | **P** | **19 17 27.8** | **+0.3** |
| | baz=85 | | | | | | |
| **P33A** | **Williams Farm,** | **85.40** | **318** | P | **P** | **19 17 28.0** | **+0.4** |
| | baz=85 | | | | | | |
| **S36A** | **Lake Cedric, C** | **85.50** | **316** | P | **P** | **19 17 27.9** | **-0.2** |
| | baz=85 | | | | | | |
| **T37A** | **Cheneyville 18** | **85.56** | **315** | P | **P** | **19 17 28.6** | **+0.2** |
| | baz=85 | | | | | | |
| **U38A** | **Gravette** | **85.74** | **314** | P | **P** | **19 17 28.3** | **-1.0** |
| | baz=86 | | | | | | |
| **S35A** | **Otter Creek Ra** | **85.93** | **316** | P | **P** | **19 17 30.2** | **0.0** |
| | baz=86 | | | | | | |
| **R34A** | **Isabella, Hill** | **85.99** | **317** | P | **P** | **19 17 30.6** | **0.0** |
| | baz=86 | | | | | | |
| **V38A** | **Canehill** | **86.17** | **314** | P | **P** | **19 17 31.7** | **+0.3** |
| | baz=86 | | | | | | |
| **U37A** | **Salina** | **86.18** | **314** | P | **P** | **19 17 31.4** | **0.0** |
| | baz=86 | | | | | | |
| **JTMT** | **Jette** | **86.28** | **333** | *e*P | **P** | **19 17 32.9** | **+0.9** |
| **JTMT** | **Jette** | **86.28** | **333** | *e*P | **P** | **19 17 32.9** | **+0.9** |
| **SWMT** | **Swartz Lake** | **86.38** | **332** | *e*P | **P** | **19 17 33.0** | **+0.6** |
| **SWMT** | **Swartz Lake** | **86.38** | **332** | *e*P | **P** | **19 17 33.0** | **+0.6** |
| **V37A** | **Hulbert** | **86.57** | **314** | P | **P** | **19 17 32.7** | **-0.6** |
| | baz=86 | | | | | | |
| **MIAR** | **Mount Ida** | **86.61** | **312** | *e*P | **P** | **19 17 34.1** | **+0.5** |
| **MIAR** | **Mount Ida** | **86.61** | **312** | P | **P** | **19 17 34.2** | **+0.5** |
| | baz=86 | | | | | | |
| **MIAR** | **Mount Ida** | **86.61** | **312** | *e*P | **P** | **19 17 34.0** | **+0.5** |
| | comp=Z,245nm,3.0s | | | | | | |
| **MIAR** | **Mount Ida** | **86.61** | **312** | *e*P | **P** | **19 17 34.0** | **+0.5** |
| | comp=Z,245nm,3.0s | | | | | | |
| **NEW** | **Newport** | **86.84** | **334** | *e*P | **P** | **19 17 34.7** | **+0.1** |
| NEW | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **NEW** | **Newport** | **86.84** | **334** | *e*P | **P** | **19 17 34.7** | **+0.1** |
| | comp=Z,8.4nm,1.0s | | | | | | |
| **NEW** | **Newport** | **86.84** | **334** | *e*P | **P** | **19 17 34.7** | **+0.1** |
| | comp=Z,8.4nm,1.0s | | | | | | |
| **T34A** | **McClaskey Farm** | **86.89** | **316** | P | **P** | **19 17 35.9** | **+0.9** |
| | baz=87 | | | | | | |
| **TUL1** | **Tulsa** | **86.92** | **314** | P | **P** | **19 17 35.5** | **+0.4** |
| | baz=87 | | | | | | |
| **TUL1** | **Tulsa** | **86.92** | **314** | *e*P | **P** | **19 17 34.1** | **-1.0** |
| | comp=Z,13nm,0.8s | | | | | | |
| **TUL1** | **Tulsa** | **86.92** | **314** | *e*P | **P** | **19 17 34.1** | **-1.0** |
| | comp=Z,13nm,0.8s | | | | | | |
| **O28A** | **Krutsinger Ran** | **86.98** | **321** | P | **P** | **19 17 34.4** | **-1.0** |
| | baz=87 | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.03** | **330** | *e*P | **P** | **19 17 36.1** | **+0.5** |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,51nm,2.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.03** | **330** | P | **P** | **19 17 35.7** | **0.0** |
| | baz=87 | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.03** | **330** | *e*P | **P** | **19 17 36.1** | **+0.5** |
| | comp=Z,51nm,2.6s | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.03** | **330** | *e*P | **P** | **19 17 36.1** | **+0.5** |
| | comp=Z,51nm,2.6s | | | | | | |
| **V36A** | **Jenks** | **87.09** | **314** | P | **P** | **19 17 36.6** | **+0.6** |
| | baz=87 | | | | | | |
| **X38A** | **Whitesboro** | **87.26** | **313** | P | **P** | **19 17 37.7** | **+0.9** |
| | baz=87 | | | | | | |
| **W37A** | **Quinton** | **87.26** | **314** | P | **P** | **19 17 37.5** | **+0.7** |
| | baz=87 | | | | | | |
| **K22A** | **Casper** | **87.29** | **325** | P | **P** | **19 17 36.2** | **-0.8** |
| | baz=87 | | | | | | |
| **X37A** | **Clayton** | **87.63** | **313** | P | **P** | **19 17 38.8** | **+0.3** |
| | baz=87 | | | | | | |
| **C09A** | **Chrisman Ranch** | **87.63** | **335** | *e*P | **P** | **19 17 37.4** | **-1.0** |
| | comp=Z,42nm,1.8s | | | | | | |
| **C09A** | **Chrisman Ranch** | **87.63** | **335** | *e*P | **P** | **19 17 37.4** | **-1.0** |
| | comp=Z,42nm,1.8s | | | | | | |
| **MOOW** | **Moose Ponds** | **88.23** | **328** | *e*P | **P** | **19 17 41.9** | **+0.3** |
| | comp=Z,65nm,2.8s | | | | | | |
| **MOOW** | **Moose Ponds** | **88.23** | **328** | *e*P | **P** | **19 17 41.9** | **+0.3** |
| | comp=Z,65nm,2.8s | | | | | | |
| **N23A** | **Red Feather La** | **88.41** | **324** | P | **P** | **19 17 42.5** | **0.0** |
| | baz=88 | | | | | | |
| **N23A** | **Red Feather La** | **88.41** | **324** | *e*P | **P** | **19 17 43.0** | **+0.5** |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **N23A** | **Red Feather La** | **88.41** | **324** | *e*P | **P** | **19 17 43.0** | **+0.5** |
| | comp=Z,9.9nm,1.0s | | | | | | |
| **BW06** | **Boulder Array** | **88.53** | **327** | *e*P | P | 19 17 41.2 | -1.8 |
| **BW06** | **Boulder Array** | **88.53** | **327** | *e*P | P | 19 17 41.2 | -1.8 |
| **X34A** | **Smith Ranch, M** | **89.01** | **315** | P | **P** | **19 17 45.7** | **+0.6** |
| | baz=89 | | | | | | |
| **ISCO** | **Idaho Springs** | **89.11** | **323** | *e*P | **P** | **19 17 45.6** | **-0.3** |
| ISCO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **ISCO** | **Idaho Springs** | **89.11** | **323** | P | **P** | **19 17 45.1** | **-0.7** |
| | baz=89 | | | | | | |
| **ISCO** | **Idaho Springs** | **89.11** | **323** | *e*P | **P** | **19 17 45.6** | **-0.3** |
| | comp=Z,7.4nm,1.3s | | | | | | |
| **ISCO** | **Idaho Springs** | **89.11** | **323** | *e*P | **P** | **19 17 45.6** | **-0.3** |
| | comp=Z,7.4nm,1.3s | | | | | | |
| **W32A** | **Sentinel** | **89.41** | **316** | P | **P** | **19 17 47.0** | **-0.1** |
| | baz=89 | | | | | | |
| **WMOK** | **Wichita Mounta** | **89.44** | **315** | *e*P | **P** | **19 17 46.9** | **-0.3** |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **89.44** | **315** | *e*P | **P** | **19 17 46.9** | **-0.3** |
| | comp=Z,10nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **89.44** | **315** | *e*P | **P** | **19 17 46.9** | **-0.3** |
| | comp=Z,10nm,1.0s | | | | | | |
| **O20A** | **White River Ci** | **90.07** | **325** | P | **P** | **19 17 49.7** | **-0.5** |
| | baz=90 | | | | | | |
| **O20A** | **White River Ci** | **90.07** | **325** | *e*P | **P** | **19 17 49.6** | **-0.5** |
| | comp=Z,13nm,1.1s | | | | | | |
| **O20A** | **White River Ci** | **90.07** | **325** | *e*P | **P** | **19 17 49.7** | **-0.5** |
| | comp=Z,13nm,1.1s | | | | | | |
| **236A** | **Katherine and** | **90.16** | **312** | P | **P** | **19 17 51.1** | **+0.5** |
| | baz=90 | | | | | | |
| **HWUT** | **Hardware Ranch** | **90.33** | **328** | *e*P | **P** | **19 17 50.9** | **-0.5** |
| | comp=Z,13nm,1.4s | | | | | | |
| **HWUT** | **Hardware Ranch** | **90.33** | **328** | *e*P | **P** | **19 17 50.9** | **-0.5** |
| | comp=Z,13nm,1.4s | | | | | | |
| **SDCO** | **Great Sand Dun** | **90.67** | **321** | P | **P** | **19 17 52.5** | **-0.7** |
| | baz=90 | | | | | | |
| **SDCO** | **Great Sand Dun** | **90.67** | **321** | *e*P | **P** | **19 17 52.4** | **-0.7** |
| | comp=Z,45nm,2.8s | | | | | | |
| **SDCO** | **Great Sand Dun** | **90.67** | **321** | *e*P | **P** | **19 17 52.4** | **-0.8** |
| | comp=Z,45nm,2.8s | | | | | | |
| **HVU** | **Hansel Valley** | **90.70** | **328** | *e*P | **P** | **19 17 53.1** | **0.0** |
| **HVU** | **Hansel Valley** | **90.70** | **328** | *e*P | **P** | **19 17 53.1** | **0.0** |
| | comp=Z,47nm,2.6s | | | | | | |
| **HVU** | **Hansel Valley** | **90.70** | **328** | *e*P | **P** | **19 17 53.1** | **0.0** |
| | comp=Z,47nm,2.6s | | | | | | |
| **X30A** | **Coker Ranch, T** | **90.81** | **316** | P | **P** | **19 17 53.8** | **+0.3** |
| | baz=90 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **90.83** | **316** | P | **P** | **19 17 53.5** | **-0.1** |
| | baz=91 | | | | | | |
| **Z32A** | **Haskell** | **90.89** | **315** | P | **P** | **19 17 54.8** | **+0.9** |
| | baz=91 | | | | | | |
| **133A** | **Hamilton Ranch** | **91.09** | **314** | P | **P** | **19 17 55.1** | **+0.3** |
| | baz=91 | | | | | | |
| **234A** | **Clairette** | **91.09** | **313** | P | **P** | **19 17 55.4** | **+0.5** |
| | baz=91 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **91.31** | **322** | P | **P** | **19 17 55.6** | **-0.6** |
| | baz=91 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **91.31** | **322** | *e*P | **P** | **19 17 55.9** | **-0.3** |
| | comp=Z,63nm,3.0s | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **91.31** | **322** | *e*P | **P** | **19 17 55.9** | **-0.3** |
| | comp=Z,63nm,3.0s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **91.49** | **315** | *e*P | **P** | **19 17 57.3** | **+0.6** |
| | comp=Z,13nm,1.0s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **91.49** | **315** | *e*P | **P** | **19 17 57.3** | **+0.6** |
| | comp=Z,13nm,1.0s | | | | | | |
| **BGU** | **Big Grassy Mou** | **91.52** | **328** | *e*P | **P** | **19 17 56.8** | **-0.1** |
| | comp=Z,70nm,3.0s | | | | | | |
| **BGU** | **Big Grassy Mou** | **91.52** | **328** | *e*P | **P** | **19 17 56.8** | **-0.1** |
| | comp=Z,70nm,3.0s | | | | | | |
| **233A** | **Rising Star** | **91.52** | **314** | P | **P** | **19 17 57.1** | **+0.2** |
| | baz=91 | | | | | | |
| **334A** | **Lometa** | **91.64** | **313** | P | **P** | **19 17 57.9** | **+0.4** |
| | baz=91 | | | | | | |
| **PV09** | **Paradox Valley** | **91.80** | **324** | *e*P | **P** | **19 17 58.2** | **-0.2** |
| **PV09** | **Paradox Valley** | **91.80** | **324** | *e*P | **P** | **19 17 58.2** | **-0.2** |
| **PV01** | **Paradox Valley** | **91.83** | **324** | *e*P | **P** | **19 17 58.0** | **-0.5** |
| **PV01** | **Paradox Valley** | **91.83** | **324** | *e*P | **P** | **19 17 58.0** | **-0.5** |
| **PV10** | **Paradox Valley** | **91.85** | **324** | *e*P | **P** | **19 17 59.5** | **+0.9** |
| **PV10** | **Paradox Valley** | **91.85** | **324** | *e*P | **P** | **19 17 59.5** | **+0.9** |
| **738A** | **Farr-Stevens R** | **91.91** | **309** | P | **P** | **19 17 58.0** | **-0.7** |
| | baz=92 | | | | | | |
| **SRU** | **San Rafael** | **91.93** | **325** | *e*P | P | 19 17 57.1 | -1.8 |
| **SRU** | **San Rafael** | **91.93** | **325** | *e*P | P | 19 17 57.1 | -1.8 |
| | comp=Z,67nm,2.6s | | | | | | |
| **SRU** | **San Rafael** | **91.93** | **325** | *e*P | P | 19 17 57.1 | -1.8 |
| | comp=Z,67nm,2.6s | | | | | | |
| **DUG** | **Dugway** | **92.03** | **328** | *e*P | **P** | **19 17 59.3** | **0.0** |
| DUG | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **DUG** | **Dugway** | **92.03** | **328** | P | **P** | **19 17 59.3** | **0.0** |
| | baz=92 | | | | | | |
| **DUG** | **Dugway** | **92.03** | **328** | *e*P | **P** | **19 17 59.3** | **0.0** |
| | comp=Z,4.1nm,1.0s | | | | | | |
| **DUG** | **Dugway** | **92.03** | **328** | *e*P | **P** | **19 17 59.3** | **0.0** |
| | comp=Z,4.1nm,1.0s | | | | | | |
| **434A** | **Burnet** | **92.04** | **312** | P | **P** | **19 17 59.6** | **+0.3** |
| | baz=92 | | | | | | |
| **333A** | **Richland Sprin** | **92.08** | **313** | P | **P** | **19 17 59.3** | **-0.2** |
| | baz=92 | | | | | | |
| **231A** | **Bronte** | **92.38** | **314** | P | **P** | **19 18 00.9** | **0.0** |
| | baz=92 | | | | | | |
| **332A** | **Millersview** | **92.47** | **314** | P | **P** | **19 18 01.6** | **+0.3** |
| | baz=92 | | | | | | |
| **433A** | **Art** | **92.56** | **313** | P | **P** | **19 18 01.9** | **+0.2** |
| | baz=92 | | | | | | |
| **431A** | **Sonora** | **93.48** | **314** | P | **P** | **19 18 06.5** | **+0.4** |
| | baz=93 | | | | | | |
| **532A** | **Rocksprings** | **93.50** | **313** | P | **P** | **19 18 05.5** | **-0.5** |
| | baz=93 | | | | | | |
| **531A** | **Rocksprings** | **93.84** | **313** | P | **P** | **19 18 07.3** | **-0.3** |
| | baz=94 | | | | | | |
| **530A** | **J-C Ranch, Com** | **94.30** | **314** | P | **P** | **19 18 08.7** | **-1.1** |
| | baz=94 | | | | | | |
| **529A** | **Stev Forest Ra** | **94.81** | **315** | P | **P** | **19 18 11.9** | **-0.3** |
| | baz=95 | | | | | | |
| **MNTX** | **Cornudas Mount** | **95.33** | **318** | P | **P** | **19 18 13.9** | **-0.5** |
| | baz=95 | | | | | | |
| **MNTX** | **Cornudas Mount** | **95.33** | **318** | *e*P | **P** | **19 18 14.0** | **-0.5** |
| | comp=Z,57nm,2.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **95.33** | **318** | *e*P | **P** | **19 18 14.0** | **-0.5** |
| | comp=Z,57nm,2.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **95.77** | **330** | P | **P** | **19 18 16.3** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=59,slow=5.8,SNR=3.0 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **96.23** | **315** | *e*P | **P** | **19 18 18.9** | **+0.2** |
| **TX31** | **Lajitas Ar. Si** | **96.23** | **315** | *e*P | **P** | **19 18 18.9** | **+0.2** |
| **TXAR** | **Lajitas Array** | **96.23** | **315** | P | **P** | **19 18 18.8** | **+0.1** |
| | comp=Z,1.5nm,0.9s,baz=69,slow=4.6,SNR=12 | | | | | | |
| **TXAR** | **Lajitas Array** | **96.23** | **315** | P | **P** | **19 18 18.8** | **+0.1** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **SYO** | **Syowa Base** | **107.58** | **174**⇓ | *e*Pdiff | **Pdif** | **19 19 09.2** | **+1.3** |
| **SYO** | **Syowa Base** | **107.58** | **174**⇓ | *e*pPKiKP | pPKiKP | 19 23 27.0 | +7.0 |
| **WRA** | **Warramunga Arr** | **118.81** | **94** | PKP | **PKPdf** | **19 23 36.7** | **-2.1** |
| | comp=Z,0.6nm,0.7s,baz=330,slow=1.9,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **118.81** | **94** | PKIKP | **PKPdf** | **19 23 36.7** | **-2.1** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **120.46** | **97** | PKP | **PKPdf** | **19 23 39.9** | **-1.9** |
| | comp=Z,0.8nm,0.6s,baz=319,slow=1.5,SNR=22 | | | | | | |
| **ASAR** | **Alice Springs** | **120.46** | **97** | PKIKP | **PKPdf** | **19 23 39.9** | **-1.9** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **AS01** | **Alice Springs** | **120.49** | **97** | *e*PKPdf | **PKPdf** | **19 23 39.7** | **-2.2** |
| **AS01** | **Alice Springs** | **120.49** | **97** | *e*PKIKP | **PKPdf** | **19 23 39.7** | **-2.2** |
| **ODZ** | **Otahua Downs** | **155.16** | **116** | *e*PKPbc | PKPdf | 19 24 54.3 | +11 |
| **THZ** | **Tophouse** | **156.93** | **108** | *e*PKPdf | **PKPdf** | **19 24 48.1** | **+2.7** |
| **THZ** | **Tophouse** | **156.93** | **108** | *e*PKIKP | **PKPdf** | **19 24 48.1** | **+2.7** |
| **KHZ** | **Kahutara** | **157.40** | **110** | *e*PKPdf | **PKPdf** | **19 24 45.8** | **0.0** |
| **KHZ** | **Kahutara** | **157.40** | **110** | *e*PKIKP | **PKPdf** | **19 24 45.8** | **0.0** |

*NIED* ***09*** *19:07:00, 41.°30N×144.°80E, h5km, Mw4.1 Best double couple: Mo1.39000×10^15 NP1:φs202.00000°, δ44.00000°, λ-89.00000°. NP2:φs20.00000°, δ46.00000°, λ-91.00000°.*
*JMA* ***09*** *19:07:38.9±0.2, 41.°29N×144.°82E, h51km±1km, M4.5*
*NEIC* ***09*** *19:07:41.5±0.4, 41.°31N×144.°67E, h35km, mb4.1/1, Error ellipse: s-maj=9.7km s-min=7.4km az=105.0*
*IDC* ***09*** *19:07:42.7±0.6, 41.°24N×144.°71E, h44km±5km, mb3.8/17, mb1 4.0/20, mb1mx3.8/41, mbtmp4.0/20, ML3.8/2, MS3.0/5, Ms1 3.0/5, ms1mx2.8/29, Error ellipse: s-maj=14.3km s-min=12.4km az=115.0*
**ISC 09 19:07:42.3**±0.7**, 41.°36N**±0.°05×**144.°75E**±0.°06**, h42**km±5km**,**
**n52,** σ**1**§**41**/61**, mb4.0**/19**, 5C, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ERM** | **Erimo** | **1.36** | **299** | *e*Pn | **Pn** | **19 08 03.4** | **-1.5** |
| ERM | | | | *e*Sn | **Sn** | **19 08 19.8** | **-1.9** |
| **JEM** | **Erimo** | **1.36** | **299** | ⇑P | **Pn** | **19 08 03.5** | **-1.4** |
| JEM | | | | *e*S | **Sn** | **19 08 20.9** | **-0.8** |
| **JCH** | **Churui** | **1.63** | **321** | ⇑P | **Pn** | **19 08 07.0** | **-1.5** |
| JCH | | | | *e*S | **Sn** | **19 08 27.1** | **-1.2** |
| **JAK** | **Akkeshi** | **1.64** | **359** | P | **Pn** | **19 08 06.7** | **-2.0** |
| JAK | | | | *e*S | **Sn** | **19 08 27.0** | **-1.5** |
| **JOB** | **Onbets** | **1.69** | **337** | ⇑P | **Pn** | **19 08 08.0** | **-1.4** |
| JOB | | | | *e*S | **Sn** | **19 08 30.0** | **+0.2** |
| **JNBK** | **Urakawa-nobuka** | **1.76** | **302** | ⇑P | **Pn** | **19 08 09.6** | **-0.7** |
| JNBK | | | | *e*S | **Sn** | **19 08 32.1** | **+0.7** |
| **JAR** | **Ashorobuto** | **2.07** | **340** | ⇑P | **Pn** | **19 08 12.6** | **-2.0** |
| JAR | | | | *e*S | **Sn** | **19 08 37.8** | **-1.4** |
| **NEM2** | **Nemuro 2** | **2.14** | **20** | P | **Pn** | **19 08 13.0** | **-2.5** |
| NEM2 | | | | *e*S | **Sn** | **19 08 37.8** | **-3.0** |
| **ASAJ** | **Asahikawa** | **3.18** | **331** | P | **Pn** | **19 08 29.4** | **-0.5** |
| | 6.8nm,0.3s,baz=185,slow=16,SNR=116 | | | | | | |
| **ASAJ** | **Asahikawa** | **3.18** | **331** | *e*Pn | **Pn** | **19 08 28.5** | **-1.4** |
| **YSS** | **Yuzh-Sakhalins** | **5.78** | **346** | *e*Pn | **Pn** | **19 09 04.1** | **-1.3** |
| **MAJO** | **Matsushiro** | **7.00** | **229** | *e*Pn | **Pn** | **19 09 19.6** | **-2.8** |
| | 23nm,1.0s | | | | | | |
| **MAT** | **Matsushiro** | **7.00** | **229** | P | **Pn** | **19 09 19.8** | **-2.6** |
| MAT | | | | S | **Sn** | **19 10 40.7** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **7.00** | **229** | P | **Pn** | **19 09 19.9** | **-2.5** |
| | 1.6nm,0.3s,baz=29,slow=15,SNR=25 | | | | | | |
| MJAR | | | | S | **Sn** | **19 10 39.2** | **-1.5** |
| | 0.8nm,0.3s,baz=98,slow=17,SNR=1.8 | | | | | | |
| MJAR | | | | LR | LR | 19 12 21.9 | |
| | comp=Z,119nm,19.9s,baz=55,slow=40 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **9.12** | **207** | P | Pn | 19 09 47.0 | -4.4 |
| | 12nm,0.3s,baz=322,slow=24,SNR=7.6 | | | | | | |
| JHJ | | | | S | Sn | 19 11 21.3 | -11 |
| | 36nm,0.3s,baz=70,slow=23,SNR=7.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.80** | **291** | P | **Pn** | **19 10 00.8** | **+0.1** |
| | 0.2nm,0.3s,baz=94,slow=14,SNR=5.8 | | | | | | |
| USRK | | | | LR | LR | 19 13 26.9 | |
| | comp=Z,103nm,21.3s,baz=138,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **13.58** | **259** | P | **P** | **19 10 57.3** | **-3.0** |
| | 0.1nm,0.3s,baz=69,slow=14,SNR=4.2 | | | | | | |
| KSRS | | | | LR | LR | 19 15 24.6 | |
| | comp=Z,30nm,20.9s,baz=155,slow=34 | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.62** | **259** | P | P | 19 10 57.3 | -3.4 |
| **JNU** | **Nakatsue** | **13.76** | **238** | LR | LR | 19 16 36.7 | |
| | comp=Z,43nm,20.7s,baz=98,slow=39 | | | | | | |
| **HIA** | **Hailar** | **19.22** | **303** | *e*P | **P** | **19 12 01.3** | **-1.5** |
| **SEY** | **Seymchan** | **22.08** | **9** | P | **P** | **19 12 31.3** | **-2.1** |
| | 1.2nm,0.5s,baz=223,slow=14,SNR=5.3 | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.41** | **297** | *e*P | **P** | **19 13 26.9** | **+2.9** |
| | 5.1nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **27.85** | **297** | P | **P** | **19 13 28.1** | **+0.2** |
| | 1.7nm,0.6s,baz=99,slow=8.5,SNR=14 | | | | | | |
| SONM | | | | LR | LR | 19 24 03.8 | |
| | comp=Z,68nm,18.2s,baz=48,slow=35 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.63** | **132** | T | T | 19 43 42.7 | |
| | baz=322,slow=74,SNR=12 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.64** | **132** | T | T | 19 43 42.7 | |
| | baz=322,slow=74,SNR=18 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.65** | **132** | T | T | 19 43 43.1 | |
| | baz=322,slow=74,SNR=14 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.51** | **134** | T | T | 19 44 43.0 | |
| | baz=329,slow=76,SNR=16 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.51** | **134** | T | T | 19 44 42.6 | |
| | baz=329,slow=76,SNR=18 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.53** | **134** | T | T | 19 44 44.9 | |
| | baz=329,slow=76,SNR=15 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.07** | **309** | P | **P** | **19 15 22.4** | **+0.9** |
| | 2.1nm,0.5s,baz=92,slow=7.9,SNR=7.6 | | | | | | |
| ZALV | | | | PcP | **PcP** | **19 17 21.2** | **+0.7** |
| | 1.4nm,0.6s,baz=103,slow=3.1,SNR=4.6 | | | | | | |
| **KDAK** | **Kodiak Island** | **42.18** | **45** | P | **P** | **19 15 30.8** | **+0.2** |
| | 5.2nm,0.6s,baz=276,slow=9.2,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.16** | **299** | P | **P** | **19 15 46.8** | **+0.1** |
| | 0.8nm,0.6s,baz=86,slow=8.6,SNR=4.6 | | | | | | |
| MKAR | | | | pP | **pP** | **19 16 00.1** | **+1.5** |
| | 1.9nm,0.6s,baz=84,slow=9.3,SNR=7.7 | | | | | | |
| **ILAR** | **Eielson Array** | **44.47** | **35** | P | **P** | **19 15 49.7** | **+0.8** |
| | 1.4nm,0.8s,baz=262,slow=6.4,SNR=12 | | | | | | |
| **ARU** | **Arti** | **54.89** | **317** | P | **P** | **19 17 08.9** | **+0.6** |
| | 0.2nm,0.3s,baz=300,slow=23,SNR=1.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **57.76** | **311** | P | **P** | **19 17 29.2** | **+0.4** |
| | 0.7nm,0.4s,baz=83,slow=8.1,SNR=3.9 | | | | | | |
| **WRAB** | **Tennant Creek** | **61.73** | **191** | P | **P** | **19 17 56.1** | **-0.3** |
| **WRA** | **Warramunga Arr** | **61.74** | **191** | P | **P** | **19 17 55.2** | **-1.3** |
| | 2.2nm,0.7s,baz=11,slow=7.1,SNR=15 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 18 36.9** | **-0.4** |
| | 1.1nm,0.8s,baz=360,slow=3.9,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **65.47** | **191** | P | **P** | **19 18 20.5** | **-0.5** |
| | 0.7nm,0.7s,baz=5.7,slow=5.5,SNR=16 | | | | | | |
| ASAR | | | | pP | **pP** | **19 18 33.0** | **-0.3** |
| | 0.5nm,0.7s,baz=6.7,slow=5.9,SNR=3.4 | | | | | | |
| **FINES** | **FINESS Array B** | **66.19** | **333** | P | **P** | **19 18 25.7** | **+0.5** |
| | 4.2nm,0.5s,baz=56,slow=6.6,SNR=40 | | | | | | |
| **KBZ** | **Khabaz** | **70.04** | **311** | P | **P** | **19 18 51.0** | **+1.4** |
| | 3.5nm,0.9s,baz=59,slow=4.1,SNR=6.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **70.37** | **56** | P | **P** | **19 18 53.3** | **+1.2** |
| | 0.6nm,0.7s,baz=289,slow=6.6,SNR=6.7 | | | | | | |
| NVAR | | | | pP | **pP** | **19 19 05.8** | **+1.3** |
| | 0.5nm,0.7s,baz=294,slow=6.5,SNR=2.7 | | | | | | |
| **NB2** | **NORSAR Subarra** | **71.18** | **338** | P | **P** | **19 18 56.6** | **+0.2** |
| | comp=Z,1.6nm,0.7s,baz=35,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **71.18** | **338** | P | **P** | **19 18 56.8** | **+0.4** |
| | comp=Z,1.0nm,0.7s,baz=36,slow=6.0,SNR=4.1 | | | | | | |
| NOA | | | | pP | **pP** | **19 19 09.8** | **+1.0** |
| | comp=Z,1.5nm,0.7s,baz=36,slow=6.2,SNR=4.3 | | | | | | |
| **HFS** | **Hagfors** | **71.19** | **337** | P | **P** | **19 18 56.6** | **+0.2** |
| | comp=Z,1.8nm,0.7s,baz=20,slow=4.6,SNR=6.3 | | | | | | |
| HFS | | | | pP | **pP** | **19 19 10.3** | **+1.5** |
| | comp=Z,1.7nm,0.6s,baz=53,slow=5.7,SNR=3.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **77.89** | **313** | P | **P** | **19 19 36.7** | **+0.9** |
| | comp=Z,1.3nm,1.0s,baz=33,slow=7.1,SNR=3.1 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **79.88** | **342** | P | **P** | **19 19 47.1** | **+0.9** |
| | comp=Z,1.4nm,0.8s,baz=17,slow=6.1,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.47** | **55** | P | **P** | **19 20 16.7** | **+0.8** |
| | comp=Z,0.5nm,0.5s,baz=299,slow=3.4,SNR=8.4 | | | | | | |
| TXAR | | | | pP | **pP** | **19 20 29.2** | **+0.6** |
| | comp=Z,0.4nm,0.5s,baz=312,slow=4.3,SNR=4.4 | | | | | | |
| **SNAA** | **Sanae** | **145.64** | **197** | P | **PKPdf** | **19 27 14.2** | **-0.6** |
| **SNAA** | **Sanae** | **145.64** | **197** | *e*PKPdf | **PKPdf** | **19 27 14.1** | **-0.7** |
| **VNA2** | **Neumayer--Watz** | **147.19** | **196** | P | **PKPbc** | **19 27 19.2** | **-0.5** |
| | baz=111,slow=2.0 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **147.40** | **195** | P | **PKPbc** | **19 27 19.9** | **-0.4** |
| **VNA1** | **Neumayer--Stat** | **147.59** | **196** | P | **PKPbc** | **19 27 20.5** | **-0.3** |

**DJA 09 19:23:49.7**±1.6**, 0°S**±8°×**12°5E**±°**, h36**km±24km**, M3.6**/10**,**
**mb3.5**/2**, MLv3.6**/10**, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.91** | **323** | P | Pn | 19 24 06.3 | +0.3 |
| **LUWI** | **Luwuk** | **1.96** | **244** | P | Pn | 19 24 20.5 | 0.0 |
| **SANI** | **Sanana** | **2.38** | **142** | P | Pn | 19 24 25.2 | -0.9 |
| **MRSI** | **Marisa** | **2.67** | **284** | P | Pn | 19 24 27.9 | -2.2 |
| **APSI** | **Ampana** | **2.98** | **255** | P | Pn | 19 24 35.3 | +0.9 |
| **LBMI** | **Labuha** | **3.01** | **99** | P | Pn | 19 24 35.7 | +0.9 |
| **NLAI** | **Namlea** | **3.99** | **140** | P | Pn | 19 24 48.1 | -0.3 |
| **TTSI** | **Tana Toraja** | **5.51** | **239** | P | Pn | 19 25 09.6 | +0.3 |
| | 8.9nm,1.1s,0.1nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **6.08** | **231** | P | Pn | 19 25 17.7 | +0.7 |

**MEX 09 19:29:46.2**±1.1**, 16.°38N**×**91.°97W, h5**km**, MD3.7,**
**Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCIG** | **Comitan** | **0.19** | **238** | *e*P | Pg | 19 29 48.8 | -1.4 |
| CCIG | | | | *i* S | Sg | 19 29 52.4 | -0.4 |
| **TGIG** | | **1.17** | **290** | *e*P | Pg | 19 30 05.3 | -3.6 |
| TGIG | | | | *i* S | Sg | 19 30 20.9 | -3.2 |
| **PCIG** | | **1.38** | **241** | *e*P | Pn | 19 30 09.5 | -2.6 |
| PCIG | | | | *i* S | Sb | 19 30 26.5 | -3.8 |

*ISCJB* ***09*** *19:32:22.7±0.7, 13.°32N±0.°03×61.°13W±0.°07, h138km±5km, Error ellipse: s-maj=11.5km s-min=4.2km az=8.7*
*TRN* ***09*** *19:32:22.7, 13.°35N×61.°08W, h132km, MD3.8*
*FUNV* ***09*** *19:32:23.1, 13.°19N×60.°70W, h86km, MW3.1*
**ISC 09 19:32:22.9**±1.6**, 13.°32N**±0.°04×**61.°13W**±0.°08**, h140**km±9km**,**
**n28,** σ**1**§**05**/42**, 3C-3D, Windward Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVV** | **Soufriere Volc** | **0.08** | **267** | *i* P | **Pn** | **19 32 42.0** | **+0.2** |
| SVV | | | | *e*S | **Sn** | **19 32 55.9** | **-0.2** |
| **SVB** | **Belmont** | **0.13** | **246** | *e*P | **Pn** | **19 32 41.8** | **-0.1** |
| SVB | | | | *e*S | **Sn** | **19 32 55.9** | **-0.3** |
| **FCV** | **Fort Charlotte** | **0.20** | **213** | *e*P | **Pn** | **19 32 41.9** | **-0.1** |
| FCV | | | | *e*S | **Sn** | **19 32 56.0** | **-0.5** |
| **MCLT** | **Moule a Chique** | **0.43** | **26** | *e*P | **Pn** | **19 32 42.6** | **-0.2** |
| MCLT | | | | *e*S | **Sn** | **19 32 57.4** | **-0.6** |
| **GRSS** | **Sisters** | **1.12** | **205**⇓ | *e*P | **Pn** | **19 32 48.9** | **+1.0** |
| GRSS | | | | *e*S | **Sn** | **19 33 07.4** | **+0.5** |
| **BIM** | **Bigot** | **1.19** | **3**⇑ | *i*P | **Pn** | **19 32 48.6** | **+0.1** |
| **GRHS** | **Sauteurs** | **1.20** | **204** | *e*P | **Pn** | **19 32 49.4** | **+0.7** |
| GRHS | | | | *e*S | **Sn** | **19 33 09.2** | **+0.9** |
| **MVM** | **Montagne Vaucl** | **1.25** | **11**⇑ | *i*P | **Pn** | **19 32 49.2** | **+0.1** |
| **LPMF** | **Morne Lapointe** | **1.25** | **7** | *e*P | **Pn** | **19 32 49.1** | **-0.1** |
| **GRW** | **Mount Saint Ca** | **1.27** | **204** | *e*P | **Pn** | **19 32 50.2** | **+0.8** |
| GRW | | | | *e*S | **Sn** | **19 33 10.2** | **+0.6** |
| **GRGR** | **Grenville** | **1.29** | **203**⇑ | *i*P | **Pn** | **19 32 49.4** | **-0.2** |
| GRGR | | | | *e*S | **Sn** | **19 33 09.6** | **-0.2** |
| **FDF** | **Fort de France** | **1.40** | **359**⇓ | *e*P | **Pn** | **19 32 50.3** | **-0.5** |
| FDF | | | | *e*S | **Sn** | **19 33 11.6** | **-0.5** |
| **BVM** | **Bellevue** | **1.41** | **3** | *e*P | **Pn** | **19 32 50.7** | **-0.1** |
| **PML** | **Morne Lenard** | **1.45** | **358** | *e*P | **Pn** | **19 32 51.1** | **-0.2** |
| **CXM** | **Morne La Croix** | **1.48** | **359**⇓ | *i*P | **Pn** | **19 32 51.9** | **+0.2** |
| CXM | | | | *e*S | **Sn** | **19 33 15.1** | **+1.4** |
| **BAMF** | **Morne Balai** | **1.48** | **359** | *e*P | **Pn** | **19 32 51.7** | **+0.1** |
| **PCM** | **Pelee Case Pet** | **1.49** | **357** | *e*P | **Pn** | **19 32 51.2** | **-0.4** |
| **TOSP** | **Speyside** | **2.10** | **164** | *e*P | **Pn** | **19 32 59.4** | **+0.7** |
| TOSP | | | | *e*S | **Sn** | **19 33 25.8** | **-0.2** |
| **BOT** | **Bacolet** | **2.18** | **169** | *e*S | **Sn** | **19 33 28.2** | **+0.3** |
| **TRN** | **Trinidad (W)** | **2.67** | **186** | *e*P | **Pn** | **19 33 07.6** | **+1.8** |
| TRN | | | | *e*S | **Sn** | **19 33 38.1** | **-0.7** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TBH | Brigand Hill | 2.82 | 179 | eS | Sn | 19 33 42.2 | 0.0 |
| GUIV | Guiria | 2.87 | 202 | eP | Pn | 19 33 06.7 | -1.5 |
| GUIV | | | | eS | Sn | 19 33 39.7 | -3.4 |
| CRUV | Carupano | 3.34 | 218 | eP | Pn | 19 33 15.2 | +0.9 |
| GUNV | Guanoco | 3.61 | 210 | eP | Pn | 19 33 17.1 | -0.7 |
| GUNV | | | | eS | Sn | 19 33 57.2 | -3.1 |
| PCRV | Puerto La Cruz | 4.64 | 228 | eP | Pn | 19 33 32.6 | +1.1 |
| ORIV | Oritupano | 4.78 | 208 | eP | Pn | 19 33 33.3 | 0.0 |
| CUPV | Cœpira | 5.60 | 235 | eP | Pn | 19 33 46.1 | +1.9 |
| CUPV | | | | eS | Sn | 19 34 47.5 | -0.2 |
| LUEV | Luepa | 7.44 | 183 | eP | Pn | 19 34 05.1 | -4.0 |
| LUEV | | | | eS | Sn | 19 35 21.3 | -11 |

**KRSC 09 19:39:45.4±0.4, 55°.15N×160°.37E, h4km±2km, ML3.7, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KZV | Kizimen | 0.06 | 231 | i P | Pg | 19 39 47.2 | +0.4 |
| KZV | | | | eS | Sg | 19 39 49.0 | +1.2 |
| TUMR | Tumrok | 0.19 | 317 | i P | Pg | 19 39 48.7 | -0.5 |
| KMNR | Kamenistaya | 0.61 | 353 | eP | Pb | 19 39 58.5 | -0.4 |
| KIRR | Kirishev | 0.81 | 359 | eP | Pb | 19 40 02.7 | +0.5 |
| KOZ | Kozyrevsk | 0.95 | 343 | eP | Pb | 19 40 04.3 | -0.3 |
| KOZ | | | | eS | Sb | 19 40 17.8 | +0.2 |
| MKZ | Mys Kozlova | 0.98 | 126 | eP | Pb | 19 40 04.8 | -0.2 |
| MKZ | | | | eS | Sb | 19 40 19.0 | +0.7 |
| KLY | Klyuchi | 1.18 | 8 | eP | Pn | 19 40 09.1 | +0.4 |
| KLY | | | | eS | Sn | 19 40 25.9 | +0.7 |
| ESO | Esso | 1.23 | 310 | eP | Pg | 19 40 08.4 | -0.6 |
| ESO | | | | eS | Sg | 19 40 24.5 | -0.4 |
| SRDR | Sredinnyy | 1.23 | 343 | eP | Pn | 19 40 09.5 | 0.0 |
| SRDR | | | | eS | Sn | 19 40 26.7 | +0.1 |
| KII | Karymskiy | 1.24 | 206 | eP | Pg | 19 40 09.2 | 0.0 |
| KII | | | | eS | Sn | 19 40 26.9 | +0.1 |
| SMKR | Semkarok | 1.57 | 23 | eP | Pb | 19 40 15.0 | -0.1 |
| SMKR | | | | eS | Sg | 19 40 36.6 | +0.7 |
| SRKR | Sorokina | 1.58 | 16 | eP | Pn | 19 40 13.1 | -1.2 |
| KBTR | Krutoberegovo | 1.75 | 52 | eP | Pn | 19 40 16.0 | -0.5 |
| KBTR | | | | eS | Sn | 19 40 39.4 | +0.1 |
| GNL | Ganaly | 2.03 | 225 | eP | Pn | 19 40 20.9 | +0.3 |
| GNL | | | | eS | Sb | 19 40 48.3 | -0.5 |
| KRX | Arik | 2.06 | 210 | eP | Pn | 19 40 22.1 | +1.2 |
| KRX | | | | eS | Sb | 19 40 49.5 | -0.1 |
| SPN | Mys Shipunski | 2.06 | 186 | eP | Pn | 19 40 20.8 | 0.0 |
| SPN | | | | eS | Sn | 19 40 47.8 | +0.8 |
| SDLR | Sedlovina | 2.07 | 206 | eP | Pb | 19 40 22.4 | -1.2 |
| SDLR | | | | eS | Sb | 19 40 50.2 | +0.4 |
| SMAR | Somma | 2.10 | 207 | eP | Pn | 19 40 22.7 | +1.1 |
| SMAR | | | | eS | Sb | 19 40 50.6 | -0.4 |
| AVH | Avacha | 2.12 | 208 | eP | Pb | 19 40 23.8 | -0.6 |
| KOK | Koryaka | 2.12 | 209 | eP | Pb | 19 40 23.4 | -1.1 |
| UGLR | Uglovaya | 2.14 | 206 | eP | Pb | 19 40 24.5 | -0.4 |
| APC | Apacha | 2.92 | 222 | eP | Pn | 19 40 34.0 | +1.4 |
| APC | | | | eS | Sn | 19 41 01.0 | -7.2 |
| RUS | Russkaya | 2.93 | 203 | eP | Pn | 19 40 35.0 | +2.2 |
| RUS | | | | eS | Sb | 19 41 12.2 | -2.2 |
| ASAK | Asacha | 3.13 | 209 | P | Pn | 19 40 37.8 | +2.1 |

**IDC 09 19:50:47.0±3.2, 4°.76S×152°.32E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.3/22, mbtmp3.2/3, Error ellipse: s-maj=106.7km s-min=30.1km az=109.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 23.11 | 228 | P | P | 19 55 55.0 | +0.2 |
| | 0.2nm,0.3s,baz=54,slow=10,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 25.86 | 222 | P | P | 19 56 20.8 | +0.3 |
| | 0.3nm,0.7s,baz=55,slow=8.6,SNR=4.1 | | | | | | |
| SONM | Songino Array | 66.04 | 328 | P | P | 20 01 36.0 | +0.2 |
| | 0.2nm,0.5s,baz=115,slow=9.7,SNR=2.3 | | | | | | |
| TORD | Torodi Ar. Bea | 149.84 | 288 | PKPbc | PKPbc | 20 10 39.1 | -1.1 |
| | 0.3nm,0.8s,baz=66,slow=2.7,SNR=2.6 | | | | | | |

*IDC 09 19:59:30.7±0.8, 15°.08S×173°.30W, h0km, mb4.1/8, mb1 4.3/8, mb1mx3.9/40, mbtmp4.1/8, MS3.8/12, Ms1 3.9/12, ms1mx3.7/28, Error ellipse: s-maj=35.7km s-min=20.6km az=130.0*
*ISCJB 09 19:59:33.0±0.7, 14°.7S±0°.2×173°.2W±0°.1, h33km, mb4.1/10, MS3.8/12, Error ellipse: s-maj=31.4km s-min=9.1km az=144.7*
*NEIC 09 19:59:34.6±0.8, 14°.79S×173°.22W, h35km, mb4.4/4, Error ellipse: s-maj=34.2km s-min=15.9km az=137.0*
**ISC 09 19:59:35.0±0.8, 14°.8S±0°.2×173°.1W±0°.2, h35km, n35, σ1s.81/13, mb4.1/10, MS3.9/12, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 1.54 | 55 | Pn | Pn | 19 59 59.5 | -0.7 |
| | 100nm,0.3s,baz=276,slow=3.5,SNR=116 | | | | | | |
| AFI | | | | Sn | Sn | 20 00 17.1 | -1.9 |
| | 576nm,0.3s,baz=50,slow=22,SNR=13 | | | | | | |
| AFI | | | | LR | LR | 20 00 32.8 | |
| | comp=Z,764nm,21.6s,baz=238,slow=33 | | | | | | |
| DZM | Mont Dzumac | 20.71 | 247 | eLR | LR | 20 09 30.2 | |
| | 523nm,24.6s | | | | | | |
| DZM | Mont Dzumac | 20.71 | 247 | LR | LR | 20 10 46.6 | |
| | comp=Z,484nm,19.7s,baz=352,slow=33 | | | | | | |
| PPT | Papeete | 22.74 | 100 | LR | LR | 20 11 29.4 | |
| | comp=Z,98nm,18.8s,baz=232,slow=31 | | | | | | |
| PPT2 | Papeete2 | 22.74 | 100 | eLR | LR | 20 09 55.2 | |
| | 182nm,24.5s | | | | | | |
| PAE | Paea | 22.74 | 100 | eT | T | 20 27 29.1 | |
| | 3.1nm,0.3s | | | | | | |
| TBI | Tubuai | 23.86 | 114 | eT | T | 20 28 58.9 | |
| | 7.7nm,0.3s | | | | | | |
| URZ | Urewera | 24.93 | 199 | P | P | 20 04 51.9 | -3.0 |
| | 4.6nm,0.3s,baz=320,slow=2.2,SNR=9.6 | | | | | | |
| URZ | | | | LR | LR | 20 13 12.1 | |
| | comp=Z,304nm,18.9s,baz=26,slow=33 | | | | | | |
| URZ | Urewera | 24.93 | 199 | eP | P | 20 04 51.5 | -3.4 |
| | 6.6nm,0.6s | | | | | | |
| HNR | Honiara | 26.89 | 278 | LR | LR | 20 13 16.5 | |
| | comp=Z,74nm,21.0s,baz=60,slow=31 | | | | | | |
| RKT | Rikitea | 36.89 | 109 | eT | T | 20 45 12.6 | |
| | 2.4nm,0.3s | | | | | | |
| H11S2 | WAKE ISLAND Hy | 38.62 | 328 | T | T | 20 48 30.0 | |
| | baz=149,slow=76,SNR=34 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 38.63 | 328 | T | T | 20 48 31.9 | |
| | baz=149,slow=76,SNR=5.3 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 38.63 | 328 | T | T | 20 48 27.7 | |
| | baz=149,slow=76,SNR=4.9 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 39.55 | 330 | T | T | 20 49 37.9 | |
| | baz=149,slow=76,SNR=8.6 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 39.56 | 330 | T | T | 20 49 38.3 | |
| | baz=149,slow=76,SNR=14 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 39.57 | 330 | T | T | 20 49 39.9 | |
| | baz=149,slow=76,SNR=22 | | | | | | |
| WRA | Warramunga Arr | 50.28 | 256 | P | P | 20 08 27.2 | -1.2 |
| | 0.9nm,0.5s,baz=90,slow=6.8,SNR=11 | | | | | | |
| ASAR | Alice Springs | 50.59 | 251 | P | P | 20 08 28.7 | -2.1 |
| | 1.7nm,0.3s,baz=91,slow=7.5,SNR=42 | | | | | | |
| SBA | Scott Base | 63.87 | 185 | P | P | 20 10 04.7 | +1.1 |
| | 16nm,1.2s | | | | | | |
| MJAR | Matsushiro Arr | 68.69 | 319 | LR | LR | 20 35 32.6 | |
| | comp=Z,36nm,21.4s,baz=95,slow=32 | | | | | | |
| CMB | Columbia Colle | 72.11 | 41 | P | P | 20 10 56.9 | +0.8 |
| | 0.7nm,0.5s | | | | | | |
| NVAR | Mina Array Bea | 73.68 | 42 | P | P | 20 11 09.4 | +3.8 |
| | 0.6nm,0.8s,baz=243,slow=4.0,SNR=3.6 | | | | | | |
| NVAR | | | | LR | LR | 20 37 39.9 | |
| | comp=Z,170nm,19.8s,baz=256,slow=31 | | | | | | |
| QSPA | South Pole Qui | 75.24 | 180 | P | P | 20 11 15.1 | +0.9 |
| | 5.6nm,1.0s,baz=96,slow=2.7,SNR=3.4 | | | | | | |
| QSPA | South Pole Qui | 75.24 | 180 | eP | P | 20 11 14.6 | +0.5 |
| | 4.3nm,1.0s | | | | | | |
| KSRS | Korea Array | 75.95 | 315 | LR | LR | 20 38 44.3 | |
| | comp=Z,19nm,21.9s,baz=280,slow=31 | | | | | | |
| USRK | Ussuriysk Ar. | 77.09 | 323 | LR | LR | 20 38 26.0 | |
| | comp=Z,62nm,21.2s,baz=79,slow=30 | | | | | | |
| BBB | Bella Bella | 77.22 | 26 | LR | LR | 20 40 14.9 | |
| | comp=Z,105nm,18.6s,baz=263,slow=32 | | | | | | |
| TXAR | Lajitas Array | 80.03 | 56 | P | P | 20 11 43.0 | +1.5 |
| | 1.1nm,1.2s,baz=225,slow=10,SNR=4.2 | | | | | | |
| NEW | Newport | 80.04 | 34 | LR | LR | 20 40 22.6 | |
| | comp=Z,122nm,19.9s,baz=244,slow=30 | | | | | | |
| DLBC | Dease Lake | 81.04 | 21 | LR | LR | 20 42 42.5 | |
| | comp=Z,100nm,18.9s,baz=228,slow=32 | | | | | | |
| ILAR | Eielson Array | 81.80 | 11 | P | P | 20 11 53.3 | +3.4 |
| | 0.7nm,0.7s,baz=223,slow=6.8,SNR=8.7 | | | | | | |
| ILAR | | | | LR | LR | 20 40 13.8 | |
| | comp=Z,86nm,20.4s,baz=160,slow=30 | | | | | | |
| SNAA | Sanae | 93.48 | 177 | P | P | 20 12 47.4 | +0.6 |
| | 1.2nm,1.2s,baz=204,slow=10.0,SNR=3.4 | | | | | | |
| GERES | GERESS Array B | 145.60 | 352 | PKPbc | PKPab | 20 19 09.4 | -0.9 |
| | 0.4nm,0.7s,baz=340,slow=12,SNR=2.1 | | | | | | |
| BRTR | Keskin Array B | 145.88 | 322 | PKPbc | PKPab | 20 19 14.4 | +2.7 |
| | 3.0nm,0.9s,baz=134,slow=1.2,SNR=9.0 | | | | | | |

*ISCJB 09 20:01:21.0±0.4, 58°.13S±0°.06×9°.2W±0°.2, h10km, mb4.3/14, MS4.3/15, Error ellipse: s-maj=12.3km s-min=8.4km az=155.8*
*IDC 09 20:01:21.4±0.7, 58°.03S×9°.18W, h0km, mb4.2/10, mb1 4.4/11, mb1mx4.2/23, mbtmp4.3/11, ML5.1/1, MS4.2/16, Ms1 4.2/16, ms1mx4.2/19, Error ellipse: s-maj=22.7km s-min=17.4km az=52.0*
*GCMT 09 20:01:26.6±0.2, 58°.15S×8°.99W, h18km±1km, MW5.2/102, Moment Tensor Solution. s60,c79; s102,c162; Duration: 1s.0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$0.01±.02; $M_{\theta\theta}$-0.37±.02; $M_{\phi\phi}$0.35±.02; $M_{r\theta}$0.29±.05; $M_{\theta\phi}$0.76±.02; $M_{\phi r}$-0.32±.05; Best double couple: $M_0$0.93400×$10^{17}$ NP1:$\phi_s$349.00000°, δ81.00000°, λ-158.00000°. NP2:$\phi_s$255.00000°, δ68.00000°, λ-10.00000°. Principal axes: T 0.8540, Plg9.0000°, Azm120.0000°; N 0.1620, Plg66.0000°, Azm10.0000°; P -1.0150, Plg22.0000°, Azm214.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC 09 20:01:26.6±0.4, 58°.14S×9°.19W, h35km, mb4.7/3 Error ellipse: s-maj=13.4km s-min=10.4km az=222.0*
*AWI 09 20:01:36.6, 58°.80S×8°.44W*
**ISC 09 20:01:23.0±0.5, 58°.10S±0°.09×9°.1W±0°.1, h10km, n44, σ0s.99/29, mb4.3/14, MS4.3/15, 1C, East of South Sandwich Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VNA1 | Neumayer--Stat | 12.61 | 179 | P | Pn | 20 04 22.4 | +0.3 |
| VNA2 | Neumayer--Watz | 12.90 | 177 | P | Pn | 20 04 25.9 | -0.2 |
| | baz=353,slow=16 | | | | | | |
| VNA3 | Neumayer Olymp | 13.21 | 181 | P | Pn | 20 04 29.5 | -0.7 |
| VNA3 | | | | x | x | 20 04 31.4 | |
| SNAA | Sanae | 13.88 | 172 | P | Pn | 20 04 39.5 | +0.1 |
| SNAA | Sanae | 13.88 | 172 | Pn | Pn | 20 04 39.0 | -0.5 |
| | 9.8nm,0.3s,baz=358,slow=13,SNR=419 | | | | | | |
| SNAA | | | | Sn | Sn | 20 06 59.6 | -14 |
| | 1.5nm,0.3s,baz=205,slow=23,SNR=2.9 | | | | | | |
| SNAA | | | | LR | LR | 20 10 12.0 | |
| | comp=Z,116nm,18.1s,baz=352,slow=38 | | | | | | |
| SNAA | Sanae | 13.88 | 172 | ePn | Pn | 20 04 38.0 | -1.4 |
| | 22nm,0.3s | | | | | | |
| SNAA | | | | eSn | Sn | 20 06 58.8 | -15 |
| SYO | Syowa Base | 23.55 | 137 | ⇑eP | P | 20 06 31.0 | -2.0 |
| PMSA | Palmer Station | 26.32 | 232 | LR | LR | 20 15 48.7 | |
| | comp=Z,987nm,18.9s,baz=96,slow=33 | | | | | | |
| QSPA | South Pole Qui | 32.14 | 180 | P | P | 20 07 50.9 | +0.6 |
| | 11nm,0.6s,baz=232,slow=1.5,SNR=49 | | | | | | |
| MAW | Mawson | 32.26 | 137 | P | P | 20 07 52.0 | +0.9 |
| | 6.5nm,0.8s,baz=251,slow=7.9,SNR=9.2 | | | | | | |
| MAW | | | | LR | LR | 20 19 02.2 | |
| | comp=Z,280nm,21.4s,baz=247,slow=33 | | | | | | |
| BOSA | Boshof | 37.90 | 54 | P | P | 20 08 39.9 | -0.4 |
| | 2.1nm,0.9s,baz=248,slow=5.4,SNR=2.4 | | | | | | |
| BOSA | | | | LR | LR | 20 20 11.1 | |
| | comp=Z,712nm,21.8s,baz=203,slow=30 | | | | | | |
| TRQA | Tornquist | 39.36 | 277 | eP | P | 20 08 51.9 | -0.4 |
| | 3.8nm,0.7s | | | | | | |
| VNDA | Vanda | 44.52 | 177 | P | P | 20 09 35.0 | +1.1 |
| | 3.3nm,0.5s,baz=208,slow=7.4,SNR=32 | | | | | | |
| VNDA | | | | LR | LR | 20 28 00.9 | |
| | comp=Z,569nm,19.7s,baz=182,slow=36 | | | | | | |
| CPUP | Villa Florida | 46.26 | 292 | P | P | 20 09 48.1 | -0.2 |
| | 1.3nm,0.6s,baz=104,slow=8.0,SNR=3.6 | | | | | | |
| CPUP | | | | LR | LR | 20 27 43.3 | |
| | comp=Z,286nm,19.4s,baz=156,slow=34 | | | | | | |
| CFAA | Coronel Fontan | 47.59 | 277 | P | P | 20 09 57.7 | -1.0 |
| | 0.6nm,0.6s,baz=147,slow=7.6,SNR=11 | | | | | | |
| H10S2 | ASCENSION HYDR | 49.21 | 353 | T | T | 21 03 36.8 | |
| | baz=179,slow=75,SNR=13 | | | | | | |
| H10S3 | ASCENSION HYDR | 49.22 | 353 | T | T | 21 03 34.7 | |
| | baz=179,slow=75,SNR=27 | | | | | | |
| H10S1 | ASCENSION HYDR | 49.23 | 353 | T | T | 21 03 36.6 | |
| | baz=179,slow=75,SNR=13 | | | | | | |
| H10N1 | ASCENSION HYDR | 50.30 | 353 | T | T | 21 04 57.8 | |
| | baz=154 | | | | | | |
| H10N3 | ASCENSION HYDR | 50.31 | 353 | T | T | 21 04 59.2 | |
| | baz=154,SNR=8.5 | | | | | | |
| H10N2 | ASCENSION HYDR | 50.32 | 353 | T | T | 21 04 56.4 | |
| | baz=154 | | | | | | |
| LSZ | Lusaka | 50.98 | 49 | eP | P | 20 10 23.6 | -1.3 |
| BDFB | Brasilia | 51.30 | 309 | P | P | 20 10 29.1 | +1.9 |
| | 4.4nm,0.8s,baz=147,slow=4.5,SNR=3.7 | | | | | | |
| BDFB | | | | LR | LR | 20 28 18.5 | |
| | comp=Z,413nm,20.0s,baz=174,slow=32 | | | | | | |
| LVC | Limon Verde | 55.20 | 283 | eP | P | 20 10 55.8 | -0.3 |
| | 4.1nm,0.5s | | | | | | |
| ABPO | Ambohimpanom | 56.43 | 71 | eP | P | 20 11 06.4 | +1.6 |
| | 18nm,0.9s | | | | | | |
| LPAZ | La Paz | 60.09 | 288 | P | P | 20 11 30.5 | -0.4 |
| | 3.2nm,0.7s,baz=136,slow=6.3,SNR=15 | | | | | | |
| LPAZ | | | | LR | LR | 20 35 45.6 | |
| | comp=Z,234nm,20.9s,baz=118,slow=34 | | | | | | |
| SAML | Samuel | 63.97 | 297 | eP | P | 20 11 55.0 | -1.4 |
| DBIC | Dimbokro | 64.64 | 5 | LR | LR | 20 34 28.0 | |
| | comp=Z,98nm,20.1s,baz=175,slow=31 | | | | | | |
| KMBO | Kilima Mbogo | 67.48 | 52 | LR | LR | 20 39 29.2 | |
| | comp=Z,610nm,18.6s,baz=184,slow=34 | | | | | | |
| NNA | Nana | 68.17 | 283 | P | P | 20 12 23.7 | +0.3 |
| PTGA | Pitinga | 69.76 | 304 | LR | LR | 20 40 42.0 | |
| | comp=Z,201nm,19.0s,baz=160,slow=34 | | | | | | |
| TORD | Torodi Ar. Bea | 71.54 | 11 | P | P | 20 12 43.7 | -0.2 |
| | 0.4nm,0.6s,baz=196,slow=6.5,SNR=6.4 | | | | | | |
| TORD | | | | LR | LR | 20 37 17.1 | |
| | comp=Z,145nm,20.8s,baz=200,slow=30 | | | | | | |
| ATAH | Atahualpa | 73.08 | 284 | LR | LR | 20 44 57.2 | |
| | comp=Z,130nm,19.8s,baz=142,slow=36 | | | | | | |
| ROSC | El Rosal | 81.34 | 294 | LR | LR | 20 49 47.8 | |
| | comp=Z,100nm,18.9s,baz=151,slow=36 | | | | | | |
| RKT | Rikitea | 87.46 | 228 | eLR | LR | 20 41 52.5 | |
| | 290nm,34.8s | | | | | | |
| ASAR | Alice Springs | 92.91 | 146 | P | P | 20 14 35.3 | -0.8 |
| | 0.9nm,1.0s,baz=205,slow=4.5,SNR=5.3 | | | | | | |
| WRA | Warramunga Arr | 96.55 | 146 | P | P | 20 14 51.9 | -0.9 |
| | 0.7nm,0.9s,baz=203,slow=4.3,SNR=2.7 | | | | | | |
| WRA | | | | LR | LR | 20 56 16.8 | |
| | comp=Z,70nm,18.6s,baz=190,slow=34 | | | | | | |
| PPT2 | Papeete2 | 97.83 | 218 | eLR | LR | 20 46 46.0 | |
| | 99nm,21.0s | | | | | | |
| PPT | Papeete | 97.85 | 218 | LR | LR | 20 52 01.5 | |
| | comp=Z,119nm,18.4s,baz=153,slow=31 | | | | | | |
| SONM | Songino Array | 141.28 | 76 | PKP | PKPdf | 20 20 54.8 | +1.9 |
| | 0.3nm,0.6s,baz=209,slow=2.6,SNR=2.6 | | | | | | |
| KSAR | Wonju Array Be | 145.29 | 108 | PKPbc | PKPbc | 20 20 59.7 | -0.2 |
| KSRS | Korea Array | 145.32 | 108 | PKPbc | PKPbc | 20 20 59.7 | -0.3 |
| | 5.1nm,1.1s,baz=227,slow=3.0,SNR=8.8 | | | | | | |
| MJAR | Matsushiro Arr | 149.58 | 121 | PKPbc | PKPbc | 20 21 11.8 | -0.1 |
| | 0.9nm,0.7s,baz=191,slow=2.9,SNR=4.7 | | | | | | |
| ILAR | Eielson Array | 159.09 | 306 | PKPab | PKPab | 20 21 56.0 | -0.6 |
| | 0.3nm,0.5s,baz=114,slow=3.8,SNR=4.9 | | | | | | |

*ISCJB 09 20:28:59.5±1.1, 2°.5N±0°.2×95°.4W±0°.1, h10km, mb4.3/21, MS3.8/3, Error ellipse: s-maj=29.2km s-min=10.3km az=43.8*
*IDC 09 20:29:00.1±1.6, 2°.52N×95°.34W, h0km, mb4.1/10, mb1 4.4/10, mb1mx4.1/38, mbtmp4.1/10, MS3.8/4, Ms1 3.9/4, ms1mx3.5/22, Error ellipse: s-maj=59.2km s-min=18.8km az=42.0*
*NEIC 09 20:29:01.0±0.9, 2°.43N×95°.45W, h10km, mb4.4/11, Error ellipse: s-maj=25.2km s-min=9.8km az=224.0*
**ISC 09 20:29:00.8±1.3, 2°.4N±0°.2×95°.4W±0°.2, h10km, n37, σ1s.17/29, mb4.3/21, MS3.8/3, Galapagos Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMIG | Matias Romero | 14.62 | 2 | Pn | Pn | 20 32 29.5 | +1.6 |
| | 0.2nm,0.3s,baz=191,slow=9.3,SNR=4.4 | | | | | | |
| CMIG | | | | LR | LR | 20 36 41.8 | |
| | comp=Z,512nm,20.8s,baz=172,slow=32 | | | | | | |
| OTAV | Otavalo | 17.11 | 97 | eP | P | 20 33 03.1 | +0.7 |
| | 17nm,1.3s | | | | | | |
| ROSC | El Rosal | 21.20 | 83 | P | P | 20 33 47.8 | +0.6 |
| | 5.2nm,0.5s,baz=252,slow=9.6,SNR=4.4 | | | | | | |
| H06E1 | SOCORRO T-PHAS | 22.27 | 318 | T | T | 20 56 59.0 | |
| | SNR=7.4 | | | | | | |
| TXAR | Lajitas Array | 27.92 | 345 | P | P | 20 34 52.1 | +0.6 |
| | 0.9nm,0.7s,baz=163,slow=9.2,SNR=9.1 | | | | | | |
| TXAR | | | | LR | LR | 20 44 49.6 | |
| | comp=Z,236nm,20.7s,baz=0.0,slow=34 | | | | | | |
| MIAR | Mount Ida | 32.04 | 3 | eP | P | 20 35 28.3 | +0.5 |
| WMOK | Wichita Mounta | 32.34 | 355 | eP | P | 20 35 30.4 | 0.0 |
| | 4.7nm,1.2s | | | | | | |
| OXF | Oxford | 32.45 | 9 | P | P | 20 35 30.8 | -0.6 |
| LPAZ | La Paz | 32.74 | 125 | P | P | 20 35 36.4 | +1.6 |
| | 2.5nm,1.0s,baz=336,slow=8.8,SNR=6.9 | | | | | | |
| LPAZ | | | | LR | LR | 20 47 43.9 | |
| | comp=Z,120nm,18.4s,baz=312,slow=34 | | | | | | |
| TUC | Tucson | 33.09 | 336 | eP | P | 20 35 36.2 | -0.9 |
| | 4.9nm,1.3s | | | | | | |
| SAML | Samuel | 34.05 | 110 | eP | P | 20 35 44.8 | -0.9 |
| | 5.1nm,1.0s | | | | | | |
| PTGA | Pitinga | 35.59 | 95 | P | P | 20 35 58.0 | -0.9 |
| | 3.8nm,0.8s,baz=294,slow=10,SNR=5.3 | | | | | | |
| SIUC | Southern Illin | 35.62 | 8 | eP | P | 20 35 56.7 | -2.1 |
| | 18nm,0.9s | | | | | | |
| CCM | Cathedral Cave | 35.71 | 6 | eP | P | 20 35 58.5 | -1.1 |
| | 9.8nm,1.0s | | | | | | |
| WCI | Wyandotte Cave | 36.64 | 12 | eP | P | 20 36 05.9 | -1.7 |
| | 96nm,1.1s | | | | | | |
| DUG | Dugway | 40.80 | 339 | eP | P | 20 36 43.0 | +0.3 |
| | 9.0nm,1.1s | | | | | | |
| NVAR | Mina Array Bea | 41.53 | 333 | P | P | 20 36 50.5 | +1.7 |
| | 1.6nm,0.8s,baz=154,slow=8.2,SNR=8.9 | | | | | | |
| HVU | Hansel Valley | 42.21 | 341 | eP | P | 20 36 54.9 | +0.7 |
| | 12nm,1.2s | | | | | | |
| RSSD | Black Hills | 42.26 | 351 | P | P | 20 36 54.2 | -0.4 |
| HLID | Hailey | 44.34 | 340 | eP | P | 20 37 11.8 | +0.4 |
| | 2.7nm,1.2s | | | | | | |
| QLMT | Earthquake Lak | 44.57 | 344 | eP | P | 20 37 14.5 | +1.2 |
| | 0.3nm,0.5s | | | | | | |
| CPUP | Villa Florida | 46.58 | 130 | LR | LR | 20 56 41.0 | |
| | comp=Z,116nm,18.6s,baz=208,slow=36 | | | | | | |
| ULM | Lac du Bonnet | 47.69 | 360 | P | P | 20 37 37.8 | +0.3 |
| | 2.6nm,0.6s,baz=180,slow=9.1,SNR=3.3 | | | | | | |
| SWMT | Swartz Lake | 47.74 | 343 | eP | P | 20 37 36.5 | -1.6 |
| | 7.3nm,1.2s | | | | | | |
| NEW | Newport | 49.38 | 341 | P | P | 20 37 48.9 | -1.7 |
| | 1.7nm,0.8s,baz=103,slow=6.7,SNR=3.0 | | | | | | |
| NEW | Newport | 49.38 | 341 | P | P | 20 37 48.5 | -2.1 |
| YKA | Yellowknife Ar | 61.66 | 350 | P | P | 20 39 17.7 | -0.9 |
| | 1.6nm,0.8s,baz=148,slow=6.2,SNR=4.3 | | | | | | |
| INK | Inuvik | 70.69 | 346 | P | P | 20 40 17.2 | +0.7 |
| | 6.1nm,1.1s,baz=148,slow=7.2,SNR=4.7 | | | | | | |
| ILAR | Eielson Array | 72.29 | 339 | P | P | 20 40 26.1 | -0.2 |
| | 0.9nm,0.5s,baz=151,slow=5.7,SNR=9.3 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 96.41 | 290 | T | T | 22 29 55.8 | |
| | baz=83 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 96.42 | 290 | T | T | 22 29 52.7 | |
| | baz=83 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 96.43 | 290 | T | T | 22 29 59.6 | |
| | baz=83 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 96.70 | 289 | T | T | 22 30 23.9 | |
| | baz=85,slow=74,SNR=43 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 96.71 | 289 | T | T | 22 30 27.5 | |
| | baz=85,slow=74,SNR=19 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 96.72 | 289 | T | T | 22 30 22.9 | |
| | baz=85,slow=74,SNR=28 | | | | | | |
| SONM | Songino Array | 126.47 | 342 | PKP | PKPdf | 20 48 05.1 | +0.5 |
| | 0.2nm,0.8s,baz=46,slow=4.2,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 130.99 | 2 | PKP | PKPdf | 20 48 13.1 | 0.0 |
| | 0.1nm,0.2s,baz=321,slow=2.6,SNR=3.3 | | | | | | |

*SKO 09 20:31:32.6, 42°.76N×21°.54E, h9km, M2.3, ML3.2*
*IDC 09 20:31:37.7±1.3, 42°.30N×21°.82E, h0km, mb3.7/4, mb1 3.8/5, mb1mx3.6/40, mbtmp3.6/5, ML3.4/1, Error ellipse: s-maj=26.8km s-min=17.1km az=39.0*
*THE 09 20:31:38.9, 42°.40N×21°.61E, h0km±3km, ML3.1/2, Error ellipse: s-maj=3.6km s-min=1.5km az=347.0*
*PDG 09 20:31:38.8±0.4, 42°.44N×21°.55E, h13km, ML3.0/10, Error ellipse: s-maj=0.4km s-min=0.5km az=0.0*
*SOF 09 20:31:38.2, 42°.41N×21°.58E, h3km, MD3.0*
*CSEM 09 20:31:38.5±0.1, 42°.45N×21°.56E, h2km, ML2.5, Error ellipse: s-maj=2.2km s-min=1.7km az=47.0*
*TIR 09 20:31:39.2±1.2, 42°.27N×21°.49E, h6km±999km, ML3.4*
*BEO 09 20:31:40.6±0.6, 42°.55N×21°.56E, h13km±3km, ML3.1/1*
**ISC 09 20:31:38.7±1.0, 42°.43N±0°.01×21°.58E±0°.02, h5km±7km, n236, σ0s.94/303, mb3.7/4, 30C-24D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GJIK | Gjilan | 0.11 | 286 | P | Pg | 20 31 41.4 | +0.3 |
| GJIK | | | | S | Sg | 20 31 43.3 | +0.7 |
| BARS | Barje | 0.42 | 24 | ⇑iPg | Pg | 20 31 46.9 | 0.0 |
| BARS | | | | eSg | Sg | 20 31 52.8 | +0.3 |
| BARS | Barje | 0.42 | 24 | ⇑iPg | Pg | 20 31 46.9 | 0.0 |
| BARS | | | | eSg | Sg | 20 31 52.8 | +0.3 |
| SKO | Skopje | 0.47 | 193 | i Pg | Pg | 20 31 48.2 | +0.5 |
| SKO | | | | i Sg | Sg | 20 31 54.6 | +0.7 |
| SKO | | | | eLg | Lg | 20 31 54.6 | |
| | comp=E,115nm,0.4s | | | | | | |
| SKO | | | | eLg | Lg | 20 31 55.2 | |
| | comp=N,150nm,0.4s | | | | | | |
| SKO | Skopje | 0.47 | 193 | P | Pg | 20 31 47.7 | -0.1 |
| SKO | | | | S | Sg | 20 31 52.6 | -1.3 |
| SKO | Skopje | 0.47 | 193 | P | Pg | 20 31 47.7 | -0.1 |
| SKO | Skopje | 0.47 | 193 | i Pg | Pg | 20 31 48.2 | +0.5 |
| SKO | | | | S | Sg | 20 31 52.6 | -1.3 |
| SKO | | | | i Sg | Sg | 20 31 54.5 | +0.7 |
| SKO | | | | eLg | Lg | 20 31 55.2 | |
| | comp=N,150nm,0.4s | | | | | | |
| SMRK | Smrekonice | 0.65 | 313 | P | Pg | 20 31 51.0 | -0.2 |
| SMRK | | | | S | Sg | 20 31 59.5 | -0.1 |
| SELS | Selova | 0.86 | 337 | ⇑iPg | Pg | 20 31 54.2 | -1.0 |
| SELS | | | | eSg | Sg | 20 32 06.1 | -0.2 |
| PEJK | Peje | 0.98 | 283 | P | Pg | 20 31 57.0 | -0.6 |
| PEJK | | | | S | Sb | 20 32 11.7 | +0.1 |
| BCI | Bajram Curri | 1.12 | 267 | i PG | Pg | 20 32 00.2 | 0.0 |
| BCI | | | | i SG | Sn | 20 32 17.2 | +0.3 |
| BCI | Bajram Curri | 1.12 | 267 | i Pg | Pg | 20 32 00.2 | 0.0 |
| | SNR=90 | | | | | | |
| BCI | | | | i Sg | Sn | 20 32 17.2 | +0.3 |
| | SNR=90 | | | | | | |
| PHP | Peshkopia | 1.13 | 229 | i PG | Pg | 20 32 00.0 | -0.4 |
| PHP | | | | i SG | Sg | 20 32 13.9 | -1.1 |
| PHP | Peshkopia | 1.13 | 229 | i Pg | Pg | 20 32 00.0 | -0.4 |
| | SNR=90 | | | | | | |
| PHP | | | | i Sg | Sg | 20 32 13.9 | -1.1 |
| | SNR=90 | | | | | | |
| ZAPS | Zavoj | 1.15 | 42 | ⇓iPg | Pg | 20 32 00.7 | 0.0 |
| ZAPS | | | | eSg | Sb | 20 32 16.1 | -0.1 |
| ZAPS | Zavoj | 1.15 | 42 | ⇓iPg | Pg | 20 32 00.7 | 0.0 |
| ZAPS | | | | eSg | Sb | 20 32 16.1 | -0.1 |
| PVY | Plav | 1.21 | 278 | ⇓iPg | Pg | 20 32 00.8 | -1.1 |
| PVY | | | | eSg | Sn | 20 32 19.2 | 0.0 |
| VTS | Vitosha | 1.22 | 82 | P | Pg | 20 32 02.1 | +0.1 |
| VTS | Vitosha | 1.22 | 82 | P | Pg | 20 32 02.1 | +0.1 |
| KKB | Krupnik | 1.25 | 116 | P | Pg | 20 32 02.7 | 0.0 |
| KKB | Krupnik | 1.25 | 116 | P | Pg | 20 32 02.7 | 0.0 |
| PUK | Puka | 1.31 | 253 | i PG | Pn | 20 32 03.2 | -0.5 |
| PUK | | | | i SG | Sn | 20 32 21.6 | -0.1 |
| PUK | Puka | 1.31 | 253 | i Pg | Pn | 20 32 03.2 | -0.5 |
| | SNR=90 | | | | | | |
| PUK | | | | i Sg | Sn | 20 32 21.6 | -0.1 |
| | SNR=90 | | | | | | |
| BEY | Berane | 1.32 | 290 | ⇑iPg | Pn | 20 32 03.2 | -0.7 |
| BEY | Berane | 1.32 | 290 | P | Pn | 20 32 03.8 | -0.1 |
| BEY | | | | eSg | Sn | 20 32 22.8 | +0.9 |
| IVA | Berane | 1.32 | 290 | ⇑iPg | Pn | 20 32 03.2 | -0.7 |
| IVA | | | | eSg | Sn | 20 32 22.8 | +0.9 |
| VAY | Valandovo | 1.33 | 146 | i Pg | Pn | 20 32 03.3 | -0.6 |
| VAY | | | | eSg | Sg | 20 32 21.5 | 0.0 |
| VAY | | | | eLg | Lg | 20 32 22.4 | |
| | comp=Z,115nm,0.7s | | | | | | |
| VAY | | | | eLg | Lg | 20 32 22.4 | |
| | comp=N,207nm,0.7s | | | | | | |
| VAY | Valandovo | 1.33 | 146 | P | Pn | 20 32 03.1 | -0.9 |
| VAY | | | | S | Sg | 20 32 20.7 | -0.8 |
| VAY | Valandovo | 1.33 | 146 | P | Pn | 20 32 03.1 | -0.9 |
| VAY | | | | S | Sg | 20 32 20.7 | -0.8 |
| VAY | | | | eSg | Sg | 20 32 21.5 | 0.0 |
| VAY | | | | eLg | Lg | 20 32 22.3 | |
| | comp=N,207nm,0.7s | | | | | | |
| BOLS | Boljevac | 1.42 | 11 | ⇓iPg | Pn | 20 32 03.0 | -2.2 |

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BOLS | | | | eSg | Sb | 20 32 22.0 | -2.2 |
| BOLS | Boljevac | 1.42 | 11 | ⇓iPg | Pn | 20 32 03.0 | -2.2 |
| BOLS | | | | eSg | Sb | 20 32 22.0 | -2.2 |
| OHR | Ohrid | 1.44 | 204 | i Pg | Pn | 20 32 05.1 | -0.5 |
| OHR | | | | eSg | Sb | 20 32 24.8 | +0.1 |
| OHR | | | | eLg | Lg | 20 32 27.1 | |
| | comp=N,262nm,0.7s | | | | | | |
| OHR | | | | eLg | Lg | 20 32 27.3 | |
| | comp=E,397nm,0.8s | | | | | | |
| OHR | Ohrid | 1.44 | 204 | i Pg | Pn | 20 32 05.0 | -0.5 |
| OHR | | | | eSg | Sb | 20 32 24.8 | +0.1 |
| OHR | | | | eLg | Lg | 20 32 27.2 | |
| | comp=E,397nm,0.8s | | | | | | |
| SJES | Sjenica | 1.44 | 306 | ⇑iPg | Pn | 20 32 05.0 | -0.6 |
| IVAS | Ivanjica | 1.55 | 318 | ⇓iPg | Pn | 20 32 06.7 | -0.4 |
| IVAS | | | | eSg | Sn | 20 32 27.1 | -0.5 |
| IVAS | Ivanjica | 1.55 | 318 | ⇓iPg | Pn | 20 32 06.7 | -0.4 |
| IVAS | | | | eSg | Sn | 20 32 27.1 | -0.5 |
| GRUS | Gruza | 1.59 | 337 | ⇑iPg | Pn | 20 32 07.1 | -0.4 |
| GRUS | Gruza | 1.59 | 337 | ⇑iPg | Pn | 20 32 07.1 | -0.4 |
| GRG | Griva | 1.60 | 157 | ePN | Pn | 20 32 08.0 | +0.4 |
| GRG | Griva | 1.60 | 157 | ePN | Pn | 20 32 07.7 | +0.1 |
| GRG | Griva | 1.60 | 157 | ePN | Pn | 20 32 07.7 | +0.1 |
| GRG | Griva | 1.60 | 157 | P | Pn | 20 32 07.5 | -0.1 |
| GRG | Griva | 1.60 | 157 | P | Pn | 20 32 07.5 | -0.1 |
| GRG | Griva | 1.60 | 157 | ePn | Pn | 20 32 08.0 | +0.4 |
| KNT | Kendrikon | 1.61 | 142 | ePN | Pn | 20 32 07.9 | +0.2 |
| KNT | | | | eSN | Sg | 20 32 30.9 | +0.6 |
| KNT | Kendrikon | 1.61 | 142 | ePN | Pn | 20 32 07.4 | -0.3 |
| KNT | Kendrikon | 1.61 | 142 | ePN | Pn | 20 32 07.4 | -0.3 |
| KNT | Kendrikon | 1.61 | 142 | P | Pn | 20 32 07.2 | -0.5 |
| KNT | Kendrikon | 1.61 | 142 | P | Pn | 20 32 07.2 | -0.5 |
| KNT | Kendrikon | 1.61 | 142 | ePn | Pn | 20 32 07.9 | +0.2 |
| KNT | | | | eSn | Sg | 20 32 30.9 | +0.6 |
| FNA | Florina | 1.65 | 185 | ePN | Pn | 20 32 08.7 | +0.4 |
| FNA | | | | eSN | Sg | 20 32 32.6 | +0.8 |
| FNA | Florina | 1.65 | 185 | ePN | Pn | 20 32 08.8 | +0.4 |
| FNA | Florina | 1.65 | 185 | ePN | Pn | 20 32 08.8 | +0.4 |
| FNA | Florina | 1.65 | 185 | P | Pn | 20 32 08.6 | +0.2 |
| FNA | Florina | 1.65 | 185 | P | Pn | 20 32 08.6 | +0.2 |
| FNA | | | | eSn | Sg | 20 32 32.6 | +0.8 |
| PDG | Podgorica | 1.72 | 271 | ePn | Pn | 20 32 09.7 | +0.4 |
| PDG | Podgorica | 1.72 | 271 | P | Pn | 20 32 09.5 | +0.2 |
| PDG | Podgorica | 1.72 | 271 | P | Pn | 20 32 09.5 | +0.2 |
| PDG | | | | eSn | Sb | 20 32 32.9 | +0.2 |
| TTG | Podgorica | 1.72 | 271 | ⇓iPn | Pn | 20 32 09.1 | -0.2 |
| TTG | | | | eSn | Sb | 20 32 32.9 | +0.2 |
| DRME | Dracevica, Mon | 1.79 | 263 | ⇓iPn | Pn | 20 32 10.2 | -0.1 |
| DRME | | | | eSn | Sb | 20 32 35.1 | +0.3 |
| DRME | Dracevica, Mon | 1.79 | 263 | ⇓iPn | Pn | 20 32 10.2 | -0.1 |
| DRME | | | | eSn | Sb | 20 32 35.1 | +0.3 |
| ULC | Ulcinj | 1.80 | 256 | ePn | Pn | 20 32 10.4 | 0.0 |
| ULC | | | | eSn | Sb | 20 32 35.0 | +0.1 |
| ULC | Ulcinj | 1.80 | 256 | ePn | Pn | 20 32 10.4 | 0.0 |
| ULC | | | | eSn | Sb | 20 32 35.0 | +0.1 |
| MMB | Musomiste | 1.81 | 117 | P | Pn | 20 32 11.0 | +0.4 |
| MMB | Musomiste | 1.81 | 117 | P | Pn | 20 32 11.0 | +0.4 |
| MPEP | Malo Peshtene | 1.84 | 59 | P | Pn | 20 32 11.3 | +0.4 |
| PLE | Pljevlja | 1.84 | 300 | ⇑iPn | Pn | 20 32 11.2 | +0.1 |
| PLE | | | | eSn | Sn | 20 32 35.6 | +0.7 |
| PLE | Pljevlja | 1.84 | 300 | ⇑iPn | Pn | 20 32 11.2 | +0.1 |
| PLE | | | | eSn | Sn | 20 32 35.6 | +0.7 |
| PGB | Panagyurishte | 1.92 | 86 | P | Pn | 20 32 12.8 | +0.7 |
| PGB | Panagyurishte | 1.92 | 86 | P | Pn | 20 32 12.8 | +0.7 |
| NKY | Niksic | 1.95 | 282 | ⇓iPn | Pn | 20 32 12.4 | -0.1 |
| NKY | | | | eSn | Sn | 20 32 38.2 | +0.8 |
| NKY | Niksic | 1.95 | 282 | ⇓iPn | Pn | 20 32 12.4 | -0.1 |
| NKME | Niksic | 1.97 | 281 | ⇓iPn | Pn | 20 32 12.9 | +0.1 |
| NKME | | | | eSn | Sb | 20 32 39.1 | -0.8 |
| NKME | Niksic | 1.97 | 281 | ⇓iPn | Pn | 20 32 12.9 | +0.1 |
| KUBS | Kucevo | 1.98 | 2 | i Pn | Pn | 20 32 10.9 | -2.0 |
| KUBS | | | | eSg | Sb | 20 32 39.9 | -0.4 |
| KUBS | Kucevo | 1.98 | 2 | i Pn | Pn | 20 32 10.9 | -2.0 |
| KUBS | | | | eSg | Sb | 20 32 39.9 | -0.4 |
| BUM | Brajici-Budva | 2.00 | 267 | ⇓iPn | Pn | 20 32 13.4 | +0.3 |
| BUM | | | | eSn | Sn | 20 32 39.6 | +1.1 |
| BUM | Brajici-Budva | 2.00 | 267 | ⇓iPn | Pn | 20 32 13.4 | +0.3 |
| SRS | Serrai | 2.00 | 130 | ePB | Pn | 20 32 12.9 | -0.2 |
| SRS | Serrai | 2.00 | 130 | ePB | Pn | 20 32 12.9 | -0.2 |
| SRS | Serrai | 2.00 | 130 | P | Pn | 20 32 12.5 | -0.6 |
| SRS | Serrai | 2.00 | 130 | P | Pn | 20 32 12.5 | -0.6 |
| NVR | Nevrokopi | 2.02 | 122 | ePN | Pn | 20 32 13.5 | +0.1 |
| NVR | Nevrokopi | 2.02 | 122 | ePN | Pn | 20 32 13.5 | +0.1 |
| NVR | Nevrokopi | 2.02 | 122 | P | Pn | 20 32 13.3 | -0.1 |
| NVR | | | | S | Sb | 20 32 40.8 | -0.5 |
| NVR | Nevrokopi | 2.02 | 122 | P | Pn | 20 32 13.3 | -0.1 |
| NVR | | | | S | Sb | 20 32 40.8 | -0.5 |
| DIVS | Divibare | 2.03 | 326 | i Pg | Pn | 20 32 13.2 | -0.5 |
| DIVS | | | | eSg | Sn | 20 32 39.9 | +0.4 |
| DIVS | Divibare | 2.03 | 326 | ⇓iP | Pn | 20 32 13.1 | -0.6 |
| DIVS | Divibare | 2.03 | 326 | S | Sg | 20 32 47.0 | +3.0 |
| DIVS | Divibare | 2.03 | 326 | P | Pn | 20 32 13.0 | -0.6 |
| DIVS | Divibare | 2.03 | 326 | P | Pn | 20 32 13.0 | -0.6 |
| DIVS | | | | eSg | Sn | 20 32 39.9 | +0.4 |
| NEST | Nestorio | 2.05 | 191 | ePN | Pn | 20 32 14.6 | +0.6 |
| NEST | Nestorio | 2.05 | 191 | ePN | Pn | 20 32 14.6 | +0.6 |
| NEST | Nestorio | 2.05 | 191 | P | Pn | 20 32 14.5 | +0.6 |
| NEST | | | | S | Sn | 20 32 40.9 | +0.9 |
| NEST | Nestorio | 2.05 | 191 | P | Pn | 20 32 14.5 | +0.6 |
| NEST | | | | S | Sn | 20 32 40.9 | +0.9 |
| THE | Thessaloniki | 2.08 | 149 | ePB | Pn | 20 32 14.2 | 0.0 |
| THE | Thessaloniki | 2.08 | 149 | ePB | Pn | 20 32 14.2 | 0.0 |
| SOH | Sokhos | 2.09 | 140 | ePN | Pn | 20 32 14.2 | -0.2 |
| SOH | Sokhos | 2.09 | 140 | ePN | Pn | 20 32 14.2 | -0.2 |
| SOH | Sokhos | 2.09 | 140 | P | Pn | 20 32 13.9 | -0.5 |
| SOH | Sokhos | 2.09 | 140 | P | Pn | 20 32 13.9 | -0.5 |
| UPM | Unac-Piva | 2.11 | 292 | ⇑iPn | Pn | 20 32 15.1 | +0.2 |
| UPM | | | | eSn | Sn | 20 32 42.1 | +0.5 |
| UPM | Unac-Piva | 2.11 | 292 | ⇑iPn | Pn | 20 32 15.1 | +0.2 |
| KZN | Kozani | 2.13 | 176 | ePN | Pn | 20 32 15.5 | +0.5 |
| KZN | Kozani | 2.13 | 176 | ePN | Pn | 20 32 15.5 | +0.5 |
| KZN | Kozani | 2.13 | 176 | P | Pn | 20 32 15.1 | +0.1 |
| KZN | Kozani | 2.13 | 176 | P | Pn | 20 32 15.1 | +0.1 |
| BBLS | Lazići | 2.14 | 313 | ⇑iPg | Pb | 20 32 16.9 | -1.1 |
| BBLS | | | | eSg | Sg | 20 32 47.4 | -0.1 |
| BBLS | Lazići | 2.14 | 313 | ⇑iPg | Pb | 20 32 16.9 | -1.1 |
| HORT | Hortiatis | 2.16 | 148 | ePN | Pn | 20 32 15.6 | +0.2 |
| HORT | Hortiatis | 2.16 | 148 | ePN | Pn | 20 32 15.2 | -0.2 |
| HORT | Hortiatis | 2.16 | 148 | ePN | Pn | 20 32 15.2 | -0.2 |
| HORT | Hortiatis | 2.16 | 148 | ePn | Pn | 20 32 15.6 | +0.2 |
| HCY | Herceg Novi | 2.28 | 271 | ⇑iPn | Pn | 20 32 17.2 | +0.1 |
| HCY | | | | eSn | Sn | 20 32 46.6 | +1.0 |
| HCY | Herceg Novi | 2.28 | 271 | ⇑iPn | Pn | 20 32 17.2 | +0.1 |
| HCY | | | | eSn | Sn | 20 32 46.6 | +1.0 |
| BRY | Bratogost | 2.29 | 283 | ⇑iPn | Pn | 20 32 17.0 | -0.3 |
| BRY | | | | eSn | Sn | 20 32 46.8 | +0.8 |
| BRY | Bratogost | 2.29 | 283 | ⇑iPn | Pn | 20 32 17.0 | -0.3 |
| BRY | | | | eSn | Sn | 20 32 46.8 | +0.8 |
| TREB | Trebinje | 2.40 | 278 | ePn | Pn | 20 32 20.3 | +1.6 |
| TREB | Trebinje | 2.40 | 278 | ePn | Pn | 20 32 20.3 | +1.6 |
| LIT | Litokhoron | 2.43 | 163 | ePN | Pn | 20 32 19.2 | +0.2 |
| LIT | Litokhoron | 2.43 | 163 | ePN | Pn | 20 32 19.2 | +0.2 |
| RZN | Rozhen | 2.45 | 107 | P | Pn | 20 32 20.2 | +0.7 |
| RZN | Rozhen | 2.45 | 107 | P | Pn | 20 32 20.2 | +0.7 |
| PLG | Polygyros | 2.49 | 145 | ePN | Pn | 20 32 20.0 | +0.1 |
| PLG | Polygyros | 2.49 | 145 | ePN | Pn | 20 32 20.0 | +0.1 |
| PLG | Polygyros | 2.49 | 145 | P | Pn | 20 32 19.8 | -0.1 |
| PLG | Polygyros | 2.49 | 145 | P | Pn | 20 32 19.8 | -0.1 |
| TEKS | Tekeris | 2.59 | 326 | ⇑iPn | Pn | 20 32 20.9 | -0.4 |
| TEKS | Tekeris | 2.59 | 326 | ⇑iPn | Pn | 20 32 20.9 | -0.4 |
| KAVA | Kavala | 2.62 | 122 | P | Pn | 20 32 21.7 | 0.0 |
| KAVA | Kavala | 2.62 | 122 | P | Pn | 20 32 21.7 | 0.0 |
| OUR | Ouranopolis | 2.77 | 138 | ePN | Pn | 20 32 23.4 | -0.3 |
| OUR | Ouranopolis | 2.77 | 138 | ePN | Pn | 20 32 23.7 | 0.0 |
| OUR | Ouranopolis | 2.77 | 138 | ePN | Pn | 20 32 23.7 | 0.0 |
| OUR | Ouranopolis | 2.77 | 138 | P | Pn | 20 32 23.3 | -0.3 |
| OUR | Ouranopolis | 2.77 | 138 | ePn | Pn | 20 32 23.4 | -0.3 |
| THL | Klokotos Trika | 2.88 | 173 | ePN | Pn | 20 32 25.9 | +0.6 |
| THL | Klokotos Trika | 2.88 | 173 | ePN | Pn | 20 32 25.9 | +0.6 |
| THL | Klokotos Trika | 2.88 | 173 | P | Pn | 20 32 25.5 | +0.2 |
| THL | Klokotos Trika | 2.88 | 173 | P | Pn | 20 32 25.5 | +0.2 |
| PAIG | Paliouri | 2.96 | 147 | ePN | Pn | 20 32 26.4 | +0.1 |
| PAIG | Paliouri | 2.96 | 147 | ePN | Pn | 20 32 26.4 | +0.1 |
| PAIG | Paliouri | 2.96 | 147 | P | Pn | 20 32 26.1 | -0.2 |
| PAIG | Paliouri | 2.96 | 147 | P | Pn | 20 32 26.1 | -0.2 |
| KDZ | Kurdzhali | 2.96 | 104 | P | Pn | 20 32 26.1 | -0.3 |
| KDZ | Kurdzhali | 2.96 | 104 | P | Pn | 20 32 26.1 | -0.3 |
| BANR | Banloc | 2.97 | 354 | S | Sg | 20 33 19.6 | +5.6 |
| FGSL | Fruska Gora | 3.01 | 335 | i Pn | Pn | 20 32 26.7 | -0.4 |
| FRGS | Fruska Gora | 3.01 | 335 | i Pn | Pn | 20 32 26.7 | -0.4 |
| IGT | Igoumenitsa | 3.04 | 198 | ePN | Pn | 20 32 28.6 | +1.1 |
| IGT | Igoumenitsa | 3.04 | 198 | ePN | Pn | 20 32 29.3 | +1.8 |
| IGT | Igoumenitsa | 3.04 | 198 | ePN | Pn | 20 32 29.3 | +1.8 |
| IGT | Igoumenitsa | 3.04 | 198 | ePn | Pn | 20 32 28.6 | +1.1 |
| GZR | Gura Zlata | 3.09 | 16 | ⇑iP | Pn | 20 32 28.2 | +0.1 |
| GZR | Gura Zlata | 3.09 | 16 | ⇑iP | Pn | 20 32 28.2 | +0.1 |
| BZS | Buzias | 3.19 | 0 | ePN | Pn | 20 32 29.2 | -0.3 |
| BZS | Buzias | 3.19 | 0 | ⇓iP | Pn | 20 32 29.3 | -0.1 |
| BZS | Buzias | 3.19 | 0 | S | Sn | 20 33 09.4 | +1.6 |
| BZS | Buzias | 3.19 | 0 | ⇓iP | Pn | 20 32 29.3 | -0.1 |
| BZS | | | | S | Sn | 20 33 09.4 | +1.6 |
| HUMR | Humele | 3.24 | 49 | ⇓iP | Pn | 20 32 30.5 | +0.3 |
| HUMR | Humele | 3.24 | 49 | ⇓iP | Pn | 20 32 30.5 | +0.3 |
| XOR | Xorichti | 3.30 | 158 | ePN | Pn | 20 32 31.1 | +0.1 |
| XOR | Xorichti | 3.30 | 158 | ePN | Pn | 20 32 31.1 | +0.1 |
| XOR | Xorichti | 3.30 | 158 | P | Pn | 20 32 30.6 | -0.4 |
| XOR | Xorichti | 3.30 | 158 | P | Pn | 20 32 30.6 | -0.4 |
| SZH | Strazhica | 3.31 | 74 | P | Pn | 20 32 32.4 | +1.2 |
| SZH | Strazhica | 3.31 | 74 | P | Pn | 20 32 32.4 | +1.2 |
| LOT | Lotru | 3.41 | 27 | ⇑iP | Pn | 20 32 33.8 | +1.2 |
| LOT | Lotru | 3.41 | 27 | S | Sg | 20 33 27.3 | -0.8 |
| LOT | Lotru | 3.41 | 27 | ⇑iP | Pn | 20 32 33.8 | +1.2 |
| AGG | Agios Georgios | 3.45 | 170 | ePN | Pn | 20 32 34.0 | +0.8 |
| AGG | Agios Georgios | 3.45 | 170 | ePN | Pn | 20 32 33.4 | +0.2 |
| AGG | Agios Georgios | 3.45 | 170 | ePN | Pn | 20 32 33.4 | +0.2 |
| AGG | Agios Georgios | 3.45 | 170 | ePn | Pn | 20 32 34.0 | +0.8 |
| EVR | Evrytania | 3.52 | 177 | ePN | Pn | 20 32 34.8 | +0.7 |
| EVR | Evrytania | 3.52 | 177 | ePN | Pn | 20 32 34.8 | +0.7 |
| DEV | Deva | 3.58 | 15 | ⇓iP | Pg | 20 32 45.2 | -2.1 |
| ALN | Alexandroupoli | 3.68 | 113 | ePN | Pn | 20 32 36.6 | +0.4 |
| ALN | Alexandroupoli | 3.68 | 113 | ePN | Pn | 20 32 36.6 | +0.4 |
| ALN | Alexandroupoli | 3.68 | 113 | P | Pn | 20 32 36.6 | +0.4 |
| ALN | Alexandroupoli | 3.68 | 113 | P | Pn | 20 32 36.6 | +0.4 |
| AOS | Alonnisos | 3.69 | 151 | ePN | Pn | 20 32 37.0 | +0.5 |
| AOS | Alonnisos | 3.69 | 151 | ePn | Pn | 20 32 37.0 | +0.5 |
| LKD2 | Lefkada island | 3.71 | 191 | ePN | Pn | 20 32 38.0 | +1.4 |
| LKD2 | Lefkada island | 3.71 | 191 | ePN | Pn | 20 32 38.0 | +1.4 |
| ENEZ | Enez | 3.83 | 115 | eP | Pn | 20 32 39.5 | +1.3 |
| ENEZ | Enez | 3.83 | 115 | eP | Pn | 20 32 39.6 | +1.3 |
| EDRB | Edirne | 3.88 | 97 | eP | Pn | 20 32 40.3 | +1.3 |
| EDRB | Edirne | 3.88 | 97 | eP | Pn | 20 32 40.3 | +1.3 |
| GADA | Gvkgeada | 3.95 | 123 | eP | Pn | 20 32 41.2 | +1.3 |
| GADA | Gvkgeada | 3.95 | 123 | eP | Pn | 20 32 41.2 | +1.3 |
| SULR | | 4.07 | 55 | ⇑iP | Pg | 20 33 02.4 | +5.6 |
| ERIK | Erikli-Kesan | 4.10 | 114 | eP | Pn | 20 32 42.3 | +0.3 |
| ERIK | Erikli-Kesan | 4.10 | 114 | eP | Pn | 20 32 42.3 | +0.3 |
| GELI | Tayfur-Gelibol | 4.20 | 117 | eP | Pn | 20 32 44.6 | +1.2 |
| GELI | Tayfur-Gelibol | 4.20 | 117 | eP | Pn | 20 32 44.6 | +1.2 |
| LPK | Lapseki | 4.41 | 116 | eP | Pn | 20 32 47.8 | +1.6 |
| LPK | Lapseki | 4.41 | 116 | eP | Pn | 20 32 47.8 | +1.6 |
| PKS6 | Bocsa | 4.41 | 342 | eSn | Sn | 20 33 39.7 | +1.7 |
| DOPR | Dopca | 4.47 | 36 | ⇑iP | Pn | 20 32 47.7 | +0.5 |
| DOPR | Dopca | 4.47 | 36 | ⇑iP | Pn | 20 32 47.7 | +0.5 |
| CJR | Cluj-Napoca | 4.52 | 18 | ⇓iP | Pn | 20 32 48.6 | +0.8 |
| CJR | Cluj-Napoca | 4.52 | 18 | S | Sg | 20 34 04.1 | +0.3 |
| CJR | Cluj-Napoca | 4.52 | 18 | ⇓iP | Pn | 20 32 48.6 | +0.8 |
| RKY | Sarkoy-Tekirda | 4.55 | 111 | eP | Pn | 20 32 50.3 | +2.1 |
| RKY | Sarkoy-Tekirda | 4.55 | 111 | eP | Pn | 20 32 50.3 | +2.1 |
| KRBG | Karabiga-Canak | 4.76 | 113 | eP | Pn | 20 32 52.9 | +1.8 |
| KRBG | Karabiga-Canak | 4.76 | 113 | eP | Pn | 20 32 52.9 | +1.8 |
| MRMT | Marmara Adasi | 4.87 | 110 | eP | Pn | 20 32 53.3 | +0.6 |
| MRMT | Marmara Adasi | 4.87 | 110 | eP | Pn | 20 32 53.3 | +0.6 |
| PKS7 | Kunszentmiklos | 4.93 | 340 | ePn | Pn | 20 32 52.2 | -1.1 |
| PKS7 | | | | eSn | Sn | 20 33 51.9 | +1.2 |
| KRND | KRANIDI | 5.18 | 166 | ePN | Pn | 20 32 57.3 | +0.4 |
| KRND | KRANIDI | 5.18 | 166 | ePN | Pn | 20 32 57.3 | +0.4 |
| PKST | Tˆ's | 5.45 | 334 | ePn | Pn | 20 33 00.2 | -0.3 |
| PKST | | | | eSn | Sn | 20 34 04.9 | +1.4 |
| BOJS | Bojanci | 5.50 | 306 | i Pn | Pn | 20 32 58.6 | -2.7 |
| CRES | Cresnjev | 5.56 | 310 | i Pn | Pn | 20 33 02.6 | +0.5 |
| CRES | Cresnjev | 5.56 | 310 | i Pn | Pn | 20 33 02.6 | +0.5 |
| PSZ | Piszkesteto | 5.62 | 348 | ⇑iP | Pn | 20 33 02.7 | -0.2 |
| PSZ | Piszkesteto | 5.62 | 348 | ⇑iP | Pn | 20 33 02.7 | -0.2 |
| PSZ | | | | eSn | Sn | 20 34 06.6 | -1.2 |
| VISS | Visnje | 5.91 | 307 | i Pn | Pn | 20 33 07.9 | +1.1 |
| VISS | Visnje | 5.91 | 307 | i Pn | Pn | 20 33 07.9 | +1.1 |
| VYHS | Vyhne | 6.36 | 343 | ePN | Pn | 20 33 13.9 | +0.8 |
| VYHS | | | | eSN | Sn | 20 34 24.9 | -1.2 |
| VYHS | Vyhne | 6.36 | 343 | ePn | Pn | 20 33 13.9 | +0.8 |
| VYHS | | | | eSn | Sn | 20 34 24.9 | -1.2 |
| JAVS | Javornik | 6.42 | 305 | i Pn | Pn | 20 33 14.9 | +1.0 |
| JAVS | Javornik | 6.42 | 305 | i Pn | Pn | 20 33 14.9 | +1.0 |
| ARSA | Arzberg | 6.46 | 320 | ⇑iPn | Pn | 20 33 14.8 | +0.3 |
| ARSA | Arzberg | 6.46 | 320 | Pn | Pn | 20 33 14.8 | +0.3 |
| KOLS | Kolonicke sedl | 6.52 | 4 | ePN | Pn | 20 33 16.0 | +0.7 |
| KOLS | | | | ePG | Pg | 20 33 44.6 | +1.0 |
| KOLS | | | | eSG | Sg | 20 35 08.7 | +0.7 |
| KOLS | Kolonicke sedl | 6.52 | 4 | ePn | Pn | 20 33 16.0 | +0.7 |
| AYDB | Zeytinkoy-Aydi | 6.59 | 131 | eP | Pn | 20 33 18.5 | +2.2 |
| AYDB | Zeytinkoy-Aydi | 6.59 | 131 | eP | Pn | 20 33 18.5 | +2.2 |
| GERES | GERESS Array B | 8.46 | 322 | Pn | Pn | 20 33 45.4 | +3.4 |
| | comp=E,0.2nm,0.3s,baz=144,slow=13,SNR=5.3 | | | | | | |
| GERES | | | | Sn | Sn | 20 35 23.8 | +6.0 |
| | comp=E,0.1nm,0.3s,baz=72,slow=28,SNR=1.8 | | | | | | |
| TORD | Torodi Ar. Bea | 33.89 | 216 | P | P | 20 38 22.9 | +0.5 |
| | comp=E,0.8nm,0.8s,baz=22,slow=8.6,SNR=5.4 | | | | | | |
| ZALV | Zalesovo Beam | 42.33 | 52 | P | P | 20 39 33.2 | -0.1 |
| | comp=E,0.4nm,0.3s,baz=283,slow=9.9,SNR=2.5 | | | | | | |
| MKAR | Makanchi Array | 42.50 | 62 | P | P | 20 39 34.0 | -0.8 |
| | comp=E,0.1nm,0.4s,baz=282,slow=10,SNR=2.5 | | | | | | |
| YKA | Yellowknife Ar | 69.67 | 340 | P | P | 20 42 48.2 | -0.6 |
| | comp=E,2.2nm,0.9s,baz=46,slow=6.9,SNR=3.3 | | | | | | |

*ISCJB 09 21:10:44.7±0.6, 39°.11N±0°.04×26°.11E±0°.07, h12km, Error ellipse: s-maj=8.8km s-min=4.1km az=156.0*
*CSEM 09 21:10:44.7±0.2, 39°.12N×26°.11E, h10km, MD2.6, Error ellipse: s-maj=6.3km s-min=3.9km az=60.0*
*DDA 09 21:10:44.2, 39°.09N×26°.06E, h6km, Md2.6*
*ISK 09 21:10:44.3, 39°.13N×26°.13E, h8km, MD2.6*
**ISC 09 21:10:44.4**±0.9, **39°.13N**±0°.03×**26°.14E**±0°.05, **h12**km, **n14**, σ0s.51/20, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIGR | SIGRI | 0.23 | 290 | PG | Pg | 21 10 48.9 | -0.4 |
| SIGR | | | | eSG | Sg | 21 10 53.7 | +1.0 |
| SIGR | SIGRI | 0.23 | 290 | i Pg | Pg | 21 10 48.9 | -0.4 |
| SIGR | | | | eSg | Sg | 21 10 53.7 | +1.0 |
| DKL | Dikili | 0.60 | 96 | ePG | Pb | 21 10 57.0 | +0.3 |
| DKL | Dikili | 0.60 | 96 | ePg | Pb | 21 10 57.1 | +0.3 |
| BOZC | Bozcaada | 0.71 | 355 | P | Pb | 21 10 58.7 | -0.1 |
| BOZC | | | | S | Sn | 21 11 10.1 | -1.1 |
| CHOS | Chios island | 0.75 | 185 | ePG | Pg | 21 10 59.0 | +0.2 |
| CHOS | Chios island | 0.75 | 185 | ePg | Pg | 21 10 59.0 | +0.2 |
| URLA | Izmir | 0.85 | 155 | i P | Pb | 21 11 00.9 | -0.1 |
| URLA | | | | i S | Sb | 21 11 12.4 | 0.0 |
| URLA | Izmir | 0.85 | 155 | P | Pb | 21 11 00.9 | -0.1 |
| URLA | | | | S | Sb | 21 11 12.4 | 0.0 |
| ZEY | ˜zmir | 0.94 | 162 | P | Pg | 21 11 01.7 | -0.7 |
| ZEY | | | | S | Sb | 21 11 14.9 | 0.0 |
| GADA | Gvkgeada | 1.07 | 350 | ePG | Pb | 21 11 04.9 | 0.0 |
| GADA | Gvkgeada | 1.07 | 350 | ePg | Pb | 21 11 04.9 | 0.0 |
| GELI | Tayfur-Gelibol | 1.29 | 11 | ePN | Pg | 21 11 09.2 | 0.0 |
| GELI | Tayfur-Gelibol | 1.29 | 11 | ePn | Pg | 21 11 09.2 | 0.0 |

**MEX 09 21:23:45.7**±0.6, **15°.75N**×**93°.38W**, **h117**km±7km, **MD3.7**,
**Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.16 | 106 | eP | Pn | 21 24 00.5 | -1.3 |
| PCIG | | | | eS | Sn | 21 24 12.0 | -1.9 |

*NEIC 09 21:29:36.1±1.1, 5°.45S×147°.93E, h270km±11km, mb4.7/19, Error ellipse: s-maj=11.4km s-min=7.2km az=94.0*
*IDC 09 21:29:36.7±1.7, 5°.50S×148°.00E, h275km±17km, mb3.9/13, mb1 3.9/18, mb1mx3.8/35, mbtmp4.5/18, Error ellipse: s-maj=16.9km s-min=10.3km az=88.0*
*ISCJB 09 21:29:37.9±0.3, 5°.47S±0°.03×147°.85E±0°.07, h300km, mb4.4/28, Error ellipse: s-maj=9.3km s-min=4.7km az=2.7*
*AUST 09 21:29:39.4, 5°.75S×148°.10E, h300km*
**ISC 09 21:29:38.7**±0.5, **5°.49S**±0°.06×**147°.93E**±0°.09, **h300**km, **n92**, σ1s.03/87, **mb4.5**/28, **Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase Op | Phase ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 3.96 | 191 | P | Pn | 21 30 39.3 | -5.2 |
| | 5.1nm,0.3s,baz=326,slow=6.1,SNR=14 | | | | | | |
| PMG | | | | S | S | 21 31 25.0 | -12 |
| | 23nm,0.3s,baz=318,slow=22,SNR=11 | | | | | | |
| PMG | Port Moresby | 3.96 | 191 | P | Pn | 21 30 39.7 | -4.8 |
| | baz=3.8,SNR=17 | | | | | | |
| PMG | Port Moresby | 3.96 | 191 | ePn | Pn | 21 30 39.8 | -4.8 |
| PMG | | | | eS | S | 21 31 23.6 | -14 |
| JAY | Jayapura | 7.79 | 292 | P | Pn | 21 31 28.6 | -1.3 |
| | 1.3nm,0.3s,baz=134,slow=7.2,SNR=7.2 | | | | | | |
| JAY | | | | S | S | 21 32 51.3 | -8.6 |
| | 0.6nm,0.3s,baz=216,slow=19,SNR=2.5 | | | | | | |
| COEN | Coen | 9.63 | 209 | P | Pn | 21 31 52.0 | -0.4 |
| | baz=9.5,SNR=48 | | | | | | |
| COEN | Coen | 9.63 | 209 | ePn | Pn | 21 31 51.9 | -0.4 |
| CTA | Charters Tower | 14.60 | 186 | P | Pn | 21 32 50.8 | -1.8 |
| | 1.2nm,0.3s,baz=4.3,slow=12,SNR=10.0 | | | | | | |
| KDU | Kakadu | 16.85 | 244 | P | Pn | 21 33 16.1 | -2.8 |
| | baz=17,SNR=60 | | | | | | |
| QIS | Mount Isa | 17.02 | 208 | P | Pn | 21 33 18.5 | -2.3 |
| | baz=17,SNR=46 | | | | | | |
| SIJI | Sorong | 17.25 | 285 | P | P | 21 33 20.4 | -0.2 |
| | 0.6nm,0.3s,baz=123,slow=18,SNR=2.7 | | | | | | |
| MTN | Manton Dam | 18.11 | 245 | P | P | 21 33 29.9 | +0.1 |
| | baz=18,SNR=14 | | | | | | |
| MTN | Manton Dam | 18.11 | 245 | eP | P | 21 33 29.0 | -0.7 |
| | 31nm,0.6s | | | | | | |
| MTN | | | | eS | S | 21 36 44.7 | +3.2 |
| WRAB | Tennant Creek | 19.51 | 221 | eP | P | 21 33 44.0 | -0.6 |
| | 41nm,0.9s | | | | | | |
| WRA | Warramunga Arr | 19.52 | 221 | P | P | 21 33 44.5 | -0.3 |
| | 5.8nm,0.3s,baz=48,slow=10.0,SNR=48 | | | | | | |
| WRA | | | | S | S | 21 37 09.8 | +1.1 |
| | 0.7nm,0.3s,baz=46,slow=20,SNR=9.4 | | | | | | |
| EIDS | Eidsvold | 20.00 | 172 | P | P | 21 33 49.9 | +0.3 |
| | baz=20,SNR=4.0 | | | | | | |
| RMQ | Roma | 20.89 | 178 | P | P | 21 33 59.4 | +0.8 |
| | baz=21,SNR=18 | | | | | | |
| QLP | Quilpie | 21.27 | 189 | P | P | 21 34 03.1 | +0.9 |
| | baz=21,SNR=20 | | | | | | |
| KNRA | Kununurra | 21.36 | 240 | P | P | 21 34 02.6 | -0.5 |
| | baz=21,SNR=17 | | | | | | |
| AS01 | Alice Springs | 22.53 | 215 | eP | P | 21 34 14.7 | +1.0 |
| AS12 | Alice Springs | 22.56 | 215 | eP | P | 21 34 15.2 | +1.2 |
| AS12 | | | | eS | S | 21 38 06.9 | +8.1 |
| ASAR | Alice Springs | 22.56 | 215 | P | P | 21 34 15.2 | +1.2 |
| | 34nm,0.6s,baz=49,slow=8.5,SNR=586 | | | | | | |
| ASAR | | | | S | S | 21 38 06.9 | +8.1 |
| | 6.9nm,0.8s,baz=31,slow=16,SNR=13 | | | | | | |
| DZM | Mont Dzumac | 24.34 | 134 | P | P | 21 34 30.6 | +0.4 |
| | 3.9nm,0.5s,baz=350,slow=22,SNR=8.0 | | | | | | |
| ARMA | Armidale | 25.04 | 172 | P | P | 21 34 37.6 | +1.2 |
| | baz=25,SNR=6.9 | | | | | | |
| WRKA | Warakurna | 27.06 | 222 | P | P | 21 34 55.1 | +0.6 |
| | baz=27,SNR=73 | | | | | | |
| HTT | Hallett | 29.04 | 196 | P | P | 21 35 09.4 | -2.4 |
| | baz=29,SNR=8.8 | | | | | | |
| BBOO | Buckleboo | 29.35 | 201 | P | P | 21 35 14.9 | +0.4 |
| | baz=29,SNR=4.6 | | | | | | |
| CAN | Canberra | 29.70 | 178 | eP | P | 21 35 18.6 | +0.9 |
| | 59nm,1.8s | | | | | | |
| CNB | Canberra Magne | 29.71 | 178 | P | P | 21 35 18.9 | +1.2 |
| | baz=30,SNR=5.8 | | | | | | |
| FORT | Forrest | 31.34 | 214 | eP | P | 21 35 30.7 | -1.2 |
| | 23nm,0.8s | | | | | | |
| MILA | Mila | 31.44 | 178 | P | P | 21 35 33.9 | +1.1 |
| | baz=31,SNR=7.5 | | | | | | |
| MBWA | Marble Bar | 31.46 | 238 | eP | P | 21 35 32.9 | -0.2 |
| | 48nm,1.8s | | | | | | |
| MEEK | Meekatharra | 34.99 | 230 | P | P | 21 36 04.4 | +0.9 |
| | baz=35,SNR=39 | | | | | | |
| KMBL | Kambalda | 35.48 | 220 | P | P | 21 36 08.2 | +0.6 |
| | baz=36,SNR=19 | | | | | | |
| TAU | Tasmania Unive | 37.27 | 181 | eP | P | 21 36 23.6 | +1.2 |
| | 673nm,2.8s | | | | | | |
| MORW | Morawa | 38.20 | 228 | P | P | 21 36 31.1 | +0.8 |
| | baz=38,SNR=8.4 | | | | | | |
| KLBR | Kellerberrin | 38.38 | 224 | P | P | 21 36 32.1 | +0.3 |
| | baz=38,SNR=7.5 | | | | | | |
| BLDU | Ballidu | 38.55 | 226 | P | P | 21 36 33.9 | +0.7 |
| | baz=39,SNR=9.1 | | | | | | |
| YULB | Yu-li | 38.73 | 319 | eP | P | 21 36 33.4 | -1.4 |
| | 52nm,1.8s | | | | | | |
| SSLB | Suanglung | 39.23 | 319 | eP | P | 21 36 37.4 | -1.6 |
| | 126nm,2.2s | | | | | | |
| NWAO | Narrogin (SRO) | 39.53 | 222 | P | P | 21 36 41.8 | +0.6 |
| | 8.6nm,0.8s,baz=41,slow=0.1,SNR=4.6 | | | | | | |
| NWAO | Narrogin (SRO) | 39.53 | 222 | eP | P | 21 36 41.4 | +0.1 |
| | 28nm,1.3s | | | | | | |
| YHNB | Yeheng | 39.58 | 320 | eP | P | 21 36 39.8 | -2.1 |
| | 61nm,1.4s | | | | | | |
| TATO | Taipei | 39.73 | 321 | eP | P | 21 36 41.1 | -1.9 |
| | 332nm,1.8s | | | | | | |
| JNU | Nakatsue | 41.67 | 338 | P | P | 21 36 59.4 | +0.7 |
| | 11nm,0.6s,baz=168,slow=6.0,SNR=19 | | | | | | |
| JNU | Nakatsue | 41.67 | 338 | eP | P | 21 36 59.4 | +0.7 |
| | 28nm,1.2s | | | | | | |
| MJAR | Matsushiro Arr | 42.79 | 348 | P | P | 21 37 07.3 | -0.3 |
| | 5.9nm,0.8s,baz=172,slow=8.4,SNR=20 | | | | | | |
| MAJO | Matsushiro | 42.79 | 348 | eP | P | 21 37 07.3 | -0.3 |
| | 156nm,2.6s | | | | | | |
| MAT | Matsushiro | 42.79 | 348 | P | P | 21 37 07.8 | +0.2 |
| KSRS | Korea Array | 46.62 | 338 | P | P | 21 37 38.8 | +1.2 |
| | 5.6nm,0.8s,baz=151,slow=8.6,SNR=20 | | | | | | |
| KS15 | Wonju Array Si | 46.62 | 338 | eP | P | 21 37 38.8 | +1.2 |
| KSAR | Wonju Array Be | 46.62 | 338 | P | P | 21 37 38.8 | +1.2 |
| KS01 | Wonju Array Si | 46.65 | 338 | eP | P | 21 37 38.2 | +0.4 |
| USRK | Ussuriysk Ar. | 51.51 | 345 | P | P | 21 38 15.2 | +1.0 |
| | 3.9nm,0.6s,baz=176,slow=6.1,SNR=14 | | | | | | |
| CM31 | Chiang Mai Arr | 53.83 | 297 | eP | P | 21 38 31.8 | +0.1 |
| CMAR | Chiang Mai Arr | 53.83 | 297 | P | P | 21 38 31.8 | +0.1 |
| | 0.9nm,0.8s,baz=118,slow=5.9,SNR=5.6 | | | | | | |
| CMAR | | | | pP | PcP | 21 39 26.9 | -6.4 |
| | 0.4nm,0.7s,baz=67,slow=36,SNR=2.9 | | | | | | |
| PEA0 | Petropavlovsk- | 58.96 | 7 | eP | P | 21 39 08.1 | +1.1 |
| PEA2 | Petropavlovsk- | 58.96 | 7 | eP | P | 21 39 07.8 | +0.8 |
| PETK | Petropavlovsk- | 58.96 | 7 | P | P | 21 39 07.8 | +0.8 |
| | 3.9nm,0.6s,baz=166,slow=7.3,SNR=12 | | | | | | |
| SONA0 | Songino Array | 64.42 | 330 | eP | P | 21 39 44.8 | +1.3 |
| SONA0 | | | | ePcP | PcP | 21 40 15.4 | +0.3 |
| SONM | Songino Array | 64.42 | 330 | P | P | 21 39 44.8 | +1.3 |
| | 1.3nm,0.5s,baz=146,slow=5.2,SNR=14 | | | | | | |
| SONM | | | | PcP | PcP | 21 40 15.4 | +0.3 |
| | 0.9nm,0.6s,baz=147,slow=4.3,SNR=5.6 | | | | | | |
| SONA1 | Songino Array | 64.42 | 330 | eP | P | 21 39 44.5 | +0.9 |
| GUN | Gumba | 68.37 | 303 | eP | P | 21 40 09.5 | +0.4 |
| | 8.5nm,0.4s | | | | | | |
| PKI | Pulchoki | 68.65 | 302 | eP | P | 21 40 11.0 | +0.1 |
| PKIN | Phulchoki | 68.67 | 302 | eP | P | 21 40 11.1 | +0.2 |
| DMN | Daman | 68.92 | 302 | eP | P | 21 40 13.1 | +0.7 |
| GKN | Gorkha | 69.44 | 302 | eP | P | 21 40 15.8 | +0.4 |
| | 7.8nm,0.6s | | | | | | |
| KOLN | Koldanda | 70.24 | 302 | eP | P | 21 40 20.7 | +0.3 |
| MK01 | Makanchi Array | 77.68 | 320 | eP | P | 21 41 03.4 | +0.7 |
| MK32 | Makanchi Array | 77.70 | 320 | eP | P | 21 41 03.5 | +0.8 |
| MKAR | Makanchi Array | 77.70 | 320 | P | P | 21 41 03.5 | +0.8 |
| | 2.6nm,0.6s,baz=97,slow=8.5,SNR=27 | | | | | | |
| MKAR | Makanchi Array | 77.70 | 320 | eP | P | 21 41 03.9 | +1.2 |
| MAKZ | Makanchi | 77.90 | 320 | eP | P | 21 41 04.5 | +0.7 |
| | 3.7nm,0.6s | | | | | | |
| ZAA0 | Zalesovo Array | 79.08 | 328 | eP | P | 21 41 09.7 | -0.3 |
| ZALV | Zalesovo Beam | 79.08 | 328 | P | P | 21 41 09.8 | -0.2 |
| | 3.6nm,0.6s,baz=111,slow=5.8,SNR=19 | | | | | | |
| ZAA1 | Zalesovo Array | 79.08 | 328 | eP | P | 21 41 09.8 | -0.3 |
| KURK | Kurchatov | 81.36 | 323 | eP | P | 21 41 21.3 | -0.9 |
| | 5.5nm,1.1s | | | | | | |
| AAK | Ala-Archa | 81.64 | 314 | eP | P | 21 41 25.5 | +1.4 |
| | 17nm,2.1s | | | | | | |
| MLY | Manley | 83.30 | 22 | eP | P | 21 41 33.2 | +1.3 |
| | 4.9nm,0.6s | | | | | | |
| CCB | Clear Creek Bu | 84.24 | 23 | eP | P | 21 41 36.4 | -0.2 |
| | 3.9nm,0.6s | | | | | | |
| COLD | Coldfoot | 84.54 | 20 | eP | P | 21 41 39.6 | +1.6 |
| | 42nm,2.5s | | | | | | |
| KKAR | Karatay Array | 84.60 | 314 | eP | P | 21 41 39.8 | +0.9 |
| IL1 | Eielson Array | 84.65 | 23 | eP | P | 21 41 37.4 | -1.3 |
| ILAR | Eielson Array | 84.65 | 23 | P | P | 21 41 37.8 | -0.9 |
| | 4.5nm,0.6s,baz=251,slow=5.2,SNR=27 | | | | | | |
| ILB | Eielson Array | 84.65 | 23 | eP | P | 21 41 37.8 | -0.9 |
| ABKAR | Akbulak array | 92.80 | 319 | eP | P | 21 42 17.3 | -0.2 |
| FIA0 | FINESS Array S | 109.62 | 334 | ePKiKP | PKiKP | 21 47 33.1 | -0.5 |
| FINES | FINESS Array B | 109.62 | 334 | PKiKP | PKiKP | 21 47 33.1 | -0.5 |
| | 1.0nm,0.7s,baz=352,slow=3.1,SNR=3.4 | | | | | | |
| GEC2 | GERESS Array S | 122.01 | 326 | ePKPdf | PKPdf | 21 47 57.4 | -0.5 |
| GERES | GERESS Array B | 122.01 | 326 | PKP | PKPdf | 21 47 57.4 | -0.5 |
| | 0.6nm,0.5s,baz=51,slow=5.3,SNR=5.1 | | | | | | |
| LPAZ | La Paz | 138.28 | 122 | PKhKP | PKPpre | 21 48 26.9 | |

1.5nm,0.8s,baz=258,slow=2.9,SNR=3.0
**TORD Torodi Ar. Bea 145.85 285** PKPbc **PKPab 21 48 43.9 -1.2**
5.0nm,0.6s,baz=65,slow=3.1,SNR=120
**BDFB Brasilia 153.73 143** PKPbc **PKPbc 21 49 03.8 +0.4**
2.9nm,0.5s,baz=270,slow=3.0,SNR=5.4

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*IDC* ***09*** *21:35:48.3±1.7, 5.°63S×153.°41E, h0km, mb3.8/6, mb1 4.0/7, mb1mx3.7/33, mbtmp3.8/7, ML1.8/1, MS3.4/1, Ms1 3.4/1, ms1mx2.7/23, Error ellipse: s-maj=50.9km s-min=23.1km az=123.0*
*ISCJB* ***09*** *21:35:54.7±1.5, 5.°6S±0.°2×153.°0E±0.°2, h43km, mb3.6/6, MS3.3/1, Error ellipse: s-maj=39.1km s-min=12.2km az=42.4*
**ISC 09 21:35:55.3**±1.7**, 5.°6S**±0.°2×**153.°2E**±0.°2**, h43km, n9, σ1s27**/9, **mb3.6**/6**, New Ireland region**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
**PMG Port Moresby 7.04 237** Pn **Pn 21 37 37.3 +1.4**
0.9nm,0.3s,baz=76,slow=4.2,SNR=2.7
PMG Sn **Sn 21 38 52.9 -1.8**
1.6nm,0.3s,baz=354,slow=19,SNR=2.6
**SIJI Sorong 22.37 281** P **P 21 40 49.4 -0.7**
7.2nm,0.6s,baz=68,slow=13,SNR=5.6
**WRA Warramunga Arr 23.19 230** P **P 21 40 59.0 +0.5**
0.9nm,0.4s,baz=50,slow=9.7,SNR=10
**ASAR Alice Springs 25.80 224** P **P 21 41 22.9 +0.3**
1.4nm,0.6s,baz=58,slow=8.9,SNR=12
**BATI Baumata 29.57 259** LR LR 21 54 09.5
comp=Z,71nm,20.1s,baz=120,slow=37
**SONM Songino Array 67.22 328** P **P 21 46 46.4 +1.0**
0.1nm,0.4s,baz=108,slow=3.2,SNR=3.6
**MKAR Makanchi Array 81.19 319** P **P 21 48 07.1 +0.4**
0.3nm,0.7s,baz=121,slow=6.9,SNR=3.1
**ILAR Eielson Array 82.79 22** P **P 21 48 13.5 -1.1**
0.8nm,0.7s,baz=248,slow=4.8,SNR=5.0
**TORD Torodi Ar. Bea 150.91 287** PKPbc **PKPbc 21 55 43.3 -1.1**
0.6nm,0.7s,baz=92,slow=2.0,SNR=7.0

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*NIED* ***09*** *21:46:00, 25.°80N×127.°80E, h50km, Mw4.6 Best double couple: M0 9.44000×10^15 NP1:φs301.00000°, δ74.00000°, λ4.00000°. NP2:φs210.00000°, δ86.00000°, λ164.00000°.*
*IDC* ***09*** *21:46:05.9±0.6, 25.°88N×127.°72E, h0km, mb4.4/15, mb1 4.5/18, mb1mx4.4/36, mbtmp4.4/18, ML4.1/3, MS3.6/10, Ms1 3.6/10, ms1mx3.3/34, Error ellipse: s-maj=20.3km s-min=12.9km az=100.0*
*ISCJB* ***09*** *21:46:08.9±0.6, 25.°79N±0.°03×127.°85E±0.°03, h32km±4km, mb4.5/36, MS3.5/9, Error ellipse: s-maj=5.6km s-min=2.8km az=44.8*
*BJI* ***09*** *21:46:08.7, 25.°80N×127.°74E, h28km, mb4.3/33, mB4.4/24, Ms4.1/26, Ms7 3.9/19*
*MOS* ***09*** *21:46:09.3±1.2, 25.°88N×127.°83E, h33km, mb4.5/25, Error ellipse: s-maj=10.2km s-min=7.0km az=87.1*
*NEIC* ***09*** *21:46:09.8±1.6, 25.°86N×127.°76E, h25km±12km, mb4.8/13, MW4.6(NIED), Error ellipse: s-maj=8.8km s-min=4.9km az=134.0*
*NEIC Felt [II] on Okinawa. Recorded [2 JMA] on Okinawa and [1 JMA] in the Kerama-retto.*
*JMA* ***09*** *21:46:10.0±0.2, 25.°81N×127.°81E, h43km±2km, M4.6*
*JMA Felt II J1.*
**ISC 09 21:46:09.7**±0.5**, 25.°82N**±0.°04×**127.°88E**±0.°03**, h27km**±2km**, h27km:pP-P, n165, σ1s66**/204**, mb4.7**/36**, MS3.5**/9**, 6C-1D, Ryukyu Islands**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
**JJT2 Tamagusuku 2 0.33 340** P **Pn 21 46 18.7 -0.1**
JJT2 S **Sn 21 46 25.4 +0.6**
**JNTH Nagotoyohara 0.70 11** P **Pn 21 46 23.9 0.0**
JNTH S **Sb 21 46 33.1 +0.3**
**JAGN Aguni-jima 0.95 323** P **Pb 21 46 27.4 -0.2**
JAGN S **Sb 21 46 39.1 -0.7**
**JOW Kunigami 1.07 20** P **Pb 21 46 29.3 -0.2**
JOW S **Sb 21 46 43.2 +0.1**
**JOW Kunigami 1.07 20** Pn **Pn 21 46 29.2 +0.2**
25nm,0.3s,baz=117,slow=28,SNR=1550
JOW Sn **Sn 21 46 42.6 -0.2**
128nm,0.3s,baz=308,slow=20,SNR=80
**JOW Kunigami 1.07 20** *e*Pn **Pb 21 46 29.4 -0.2**
JOW *e*Sn **Sb 21 46 43.4 +0.3**
**JKE Kume jima 2 1.10 297** P **Pn 21 46 29.0 -0.4**
JKE S **Sn 21 46 42.4 -1.3**
**JIH Iheya 1.21 4** P **Pb 21 46 31.4 -0.6**
JIH S **Sn 21 46 46.0 -0.4**
**JOKE Okinoerabujima 1.65 22** P **Pn 21 46 37.2 +0.2**
JOKE S **Sn 21 46 57.1 -0.3**
**JTK Tokunoshima 2.18 26** P **Pn 21 46 44.2 0.0**
JTK *e*S **Sn 21 47 11.7 +1.4**
**JOGS Gusukube 2.47 245** P **Pn 21 46 49.0 +0.8**
JOGS S **Sn 21 47 18.1 +0.5**
**JIKM Ikemajima 2.54 250** P **Pn 21 46 49.4 +0.2**
**JMJ Miyako jima 2 2.54 247** P **Pn 21 46 50.3 +1.1**
**JIRB Irabujima 2.64 249** P **Pn 21 46 50.6 +0.1**
**JAMN Amaminishikomi 2.67 25** P **Pn 21 46 51.2 +0.2**
JAMN S **Sn 21 47 21.9 -0.6**
**JAM Amami Oshima 3.00 30** P **Pn 21 46 55.8 +0.3**
JAM S **Sn 21 47 28.5 -2.2**
**JMZ Minamidaito 2 3.02 89** P **Pn 21 46 54.8 -0.9**
JMZ S **Sn 21 47 27.7 -3.2**
**JTJ Tarama 3.11 248** P **Pn 21 46 56.4 -0.5**
JTJ S **Sn 21 47 30.7 -2.5**
**JZK Kikaishima 3.11 37** P **Pn 21 46 57.4 +0.4**
JZK S **Sn 21 47 33.6 +0.4**
**JISG Ishigakijimahi 3.46 250** P **Pn 21 47 01.0 -0.8**
**JTAJ Takarajima 3.52 19** P **Pn 21 47 02.7 +0.1**
JTAJ S **Sn 21 47 41.1 -2.3**
**JIJ Ishigaki jima 3.68 248** P **Pn 21 47 04.0 -0.9**
**JKRS Kuro-shima 3.85 247** P **Pn 21 47 07.1 0.0**
**IRIF Iriomote-Funau 4.04 249** P **Pn 21 47 09.0 -0.8**
**YOJ Yonaguni jima 4.61 254** P **Pn 21 47 17.1 -0.6**
**YOJ Yonaguni jima 4.61 254** *e*P **Pn 21 47 16.0 -1.7**
**YOJ Yonaguni jima 4.61 254** *e*Pn **Pn 21 47 16.0 -1.7**
**JYNG Yonagunijimaku 4.67 254** P **Pn 21 47 17.8 -0.7**
**TATO Taipei 5.84 263** *e*Pn **Pn 21 47 35.0 +0.5**
**NACB Ninganchiao 5.93 255** *e*Pn **Pn 21 47 34.4 -1.5**
**YHNB Yeheng 6.00 260** *e*Pn **Pn 21 47 35.3 -1.5**
**YULB Yu-li 6.46 249** *e*Pn **Pn 21 47 40.0 -3.1**
**SSLB Suanglung 6.61 254** *e*Pn **Pn 21 47 43.2 -1.9**
**TWG Pinlang 6.89 246** *e*Pn Pn 21 47 45.4 -3.6
**TPUB Ta-pu 7.06 251** *e*Pn **Pn 21 47 50.3 -1.0**
**JNU Nakatsue 7.73 19** Pn **Pn 21 48 01.8 +1.3**
12nm,0.3s,baz=221,slow=4.8,SNR=136
JNU Sn **Sn 21 49 24.9 -2.3**
1.1nm,0.3s,baz=189,slow=19,SNR=2.4
**JNU Nakatsue 7.73 19** *e*Pn **Pn 21 48 02.1 +1.6**
JNU Sn **Sn 21 49 24.9 -2.3**
**NJ2 Nanjing 10.04 310** *e*P **Pn 21 48 31.4 -0.8**
NJ2 PMZ
30nm,1.0s
**KSAR Wonju Array Be 11.58 0** P **Pn 21 48 54.1 +0.8**
**KSAR Wonju Array Be 11.58 0** Pn **Pn 21 48 54.1 +0.8**
**KSRS Korea Array 11.60 0** Pn **Pn 21 48 54.1 +0.7**
0.2nm,0.3s,baz=177,slow=14,SNR=12
KSRS LR LR 21 53 32.8
comp=Z,358nm,20.1s,baz=180,slow=39
**WHN Wuhan 12.82 295** P **Pn 21 49 11.3 +1.1**
WHN S Sn 21 51 39.8 +7.7
WHN LN
1μm,6.0s
WHN LE
860nm,4.1s
**MAJO Matsushiro 13.86 37** *e*P **Pn 21 49 24.9 +0.5**
**MAJO Matsushiro 13.86 37** *e*Pn **Pn 21 49 24.9 +0.5**
**MAT Matsushiro 13.86 37** P **Pn 21 49 26.9 +2.5**
MAT S **Sn 21 52 01.4 +4.0**
**MJAR Matsushiro Arr 13.86 37** Pn **Pn 21 49 24.7 +0.3**
0.3nm,0.3s,baz=235,slow=12,SNR=6.3
**BJI Beijing 17.22 328** P **Pn 21 50 08.6 +0.3**
BJI PMZ
7.0nm,0.9s
**QIZ Qiongzhong 17.98 252** P **Pn 21 50 17.4 -0.5**
QIZ sP **sP 21 50 26.7 -2.2**
QIZ S **Sn 21 53 37.3 -0.4**
QIZ PMZ
23nm,2.2s
**CN2 Changchun 18.05 354** *e*P **P 21 50 21.5 +2.8**
CN2 *e*sP **sP 21 50 29.6 +0.1**
CN2 *e*S **Sn 21 53 39.9 +0.9**
CN2 PMZ
10.0nm,0.7s
CN2 PMZ
100nm,4.0s
CN2 LN
300nm,15.0s
CN2 LE
600nm,15.0s
CN2 LZ
800nm,16.0s
**USRK Ussuriysk Ar. 18.64 9** P **P 21 50 25.1 -0.2**
0.8nm,0.3s,baz=183,slow=8.7,SNR=14
USRK LR LR 21 57 03.2
comp=Z,192nm,21.5s,baz=188,slow=35
**GYA Guiyang 19.06 277** *e*P **P 21 50 30.0 -0.1**
GYA pP **pP 21 50 37.4 0.0**
GYA PP **PnPn 21 50 47.6 +3.8**
GYA sS **S 21 54 09.0 +4.1**
GYA SS **SnSn 21 54 22.2 +4.3**
GYA PMZ
10.0nm,0.7s
GYA PMZ
90nm,4.7s
GYA LN
470nm,15.2s
GYA LE
420nm,16.0s
GYA LZ
450nm,15.4s
**HHC Hu-ho-hao-te 20.20 322** *e*P Pn 21 50 43.5 -1.1
HHC S **S 21 54 22.5 -5.6**
HHC PMZ
14nm,0.7s
HHC PMZ
130nm,7.4s
HHC LN
210nm,13.3s
HHC LE
190nm,13.0s
**ERM Erimo 20.48 34** *e*P **P 21 50 45.1 -0.3**
ERM pmax pmax
comp=Z,75nm,2.5s
**ERM Erimo 20.48 34** *e*P **P 21 50 42.0 -3.4**
comp=Z,39nm,0.8s
**CD2 Chengdu 21.80 289** *e*P **P 21 50 59.0 -0.8**
CD2 pP **pP 21 51 07.0 -0.2**
CD2 sP **sP 21 51 11.0 +0.3**
CD2 S **S 21 54 58.2 -1.5**
CD2 sS **sS 21 55 11.6 +0.2**
CD2 SS **SnSn 21 55 31.3 +6.1**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,220nm,5.2s
CD2 LN
comp=Z,520nm,10.0s
**ASAJ Asahikawa 21.82 30** P **P 21 50 59.6 -0.1**
comp=Z,22nm,0.7s,baz=236,slow=14
**ASAJ Asahikawa 21.82 30** P **P 21 50 59.6 -0.1**
ASAJ pmax pmax
comp=Z,22nm,0.7s
**ASAJ Asahikawa 21.82 30** *e*P **P 21 50 59.6 -0.1**
comp=Z,23nm,0.7s
**KMI Kunming 22.70 274** P **P 21 51 10.9 +1.3**
KMI pP **pP 21 51 17.5 +0.5**
KMI sP **sP 21 51 19.6 -0.9**
KMI S **S 21 55 10.7 -6.0**
KMI SS **SnSn 21 55 53.5 +6.1**
KMI PMZ
comp=Z,8.0nm,0.6s
KMI PMZ
comp=Z,79nm,4.9s
KMI LN
comp=Z,270nm,16.4s
KMI LE
comp=Z,130nm,16.3s
**LZH Lanzhou 22.95 302** *e*P **P 21 51 10.1 -2.1**
LZH pP **pP 21 51 17.4 -2.2**
LZH sP **sP 21 51 20.2 -2.8**
LZH *e*S S 21 55 12.1 -8.8
LZH PMZ
comp=Z,19nm,1.0s
LZH PMZ
comp=Z,120nm,7.0s
LZH LN
comp=Z,180nm,13.0s
LZH LE
comp=Z,140nm,12.7s
LZH LZ
comp=Z,330nm,15.1s
**KLR Kul'dur 23.56 6** *e*P **P 21 51 13.7 -4.2**
**YSS Yuzh-Sakhalins 24.17 25**⇑*i*P **P 21 51 24.5 +0.9**
YSS *e* 21 51 35.9
YSS *e*S **S 21 55 38.0 -2.1**
YSS pmax pmax
comp=Z,50nm,0.9s
**YSS Yuzh-Sakhalins 24.17 25** *e*P **P 21 51 24.9 +1.3**
comp=Z,67nm,1.1s
**KUR Kuril'sk 25.17 35**⇓*i*P **P 21 51 32.1 -0.6**
KUR *e*S **S 21 55 57.4 +1.2**
KUR pmax pmax
comp=N,66nm,1.7s
KUR pmax pmax
comp=Z,52nm,1.7s
KUR pmax pmax
comp=Z,168nm,4.2s
KUR MLR MLR
comp=N,186nm,20.0s
KUR MLR MLR
comp=E,36nm,20.0s
KUR MLR MLR
comp=Z,124nm,20.0s
**GTA Gaotai 27.12 307** *e*P **P 21 51 49.3 -1.3**
GTA pP **pP 21 51 58.6 +0.1**
GTA sP **sP 21 52 02.6 +0.8**
GTA S **S 21 56 22.4 -5.0**
GTA sS **sS 21 56 38.5 -2.0**
GTA SS **SnSn 21 57 37.4 +2.2**
GTA PMZ
comp=Z,6.0nm,1.1s
GTA PMZ
comp=Z,80nm,5.2s
GTA LN
comp=Z,180nm,19.5s
GTA LE
comp=Z,120nm,17.6s
GTA LZ
comp=Z,160nm,19.9s
**ULN Ulaanbaatar 27.43 329** *e*P **P 21 51 55.3 +1.9**
ULN pmax pmax
comp=Z,3.0nm,0.9s
**ULN Ulaanbaatar 27.43 329** *e*P **P 21 51 55.3 +1.9**
comp=Z,3.4nm,0.9s
**CHTO Chiang Mai 27.62 261** *e*P **P 21 51 56.0 +0.8**
CHTO pmax pmax
comp=Z,6.0nm,0.8s
**CHTO Chiang Mai 27.62 261** *e*P **P 21 51 56.0 +0.8**
comp=Z,5.8nm,0.8s
**SONM Songino Array 27.72 328** P **P 21 51 54.2 -1.7**
comp=Z,2.7nm,0.7s,baz=141,slow=9.8,SNR=21
SONM LR LR 22 03 28.5
comp=Z,97nm,20.1s,baz=98,slow=38
**SONM Songino Array 27.72 328** P **P 21 51 54.2 -1.7**
SONM pmax pmax
comp=Z,3.0nm,0.7s
SONM MLR MLR
comp=Z,97nm,20.1s
**SONA1 Songino Array 27.73 328** *e*P **P 21 51 54.8 -1.2**
**CM01 Chiang Mai Arr 27.74 260** *e*P **P 21 51 54.8 -1.4**
**CMAR Chiang Mai Arr 27.74 261** P **P 21 51 56.7 +0.4**
comp=Z,2.1nm,0.8s,baz=53,slow=7.3,SNR=14
CMAR LR LR 22 04 07.3
comp=Z,91nm,18.2s,baz=54,slow=39
**CMAR Chiang Mai Arr 27.74 261** P **P 21 51 56.7 +0.4**
CMAR pmax pmax
comp=Z,2.0nm,0.8s
CMAR MLR MLR
comp=Z,91nm,18.2s
**FAKI Fak Fak 28.88 171** *e*P P 21 52 01.3 -5.0
comp=Z,76nm,1.2s
**KAPI Kappang 31.65 196** LR LR 22 04 35.4
comp=Z,97nm,18.7s,baz=2.8,slow=35
**TLY Talaya 31.71 331** LR LR 22 05 26.7
comp=Z,81nm,19.1s,baz=122,slow=37
**LSA Lhasa 32.64 285** *e*P **P 21 52 40.5 +0.4**
LSA pmax pmax
comp=Z,2.0nm,0.8s
**LSA Lhasa 32.64 285** *e*P **P 21 52 40.5 +0.4**
comp=Z,2.4nm,0.8s
**IPM Ipoh 33.35 235** *e*P **P 21 52 46.7 +0.9**
comp=Z,11nm,1.1s
**PETK Petropavlovsk- 35.21 31** P **P 21 53 01.5 0.0**
comp=Z,3.3nm,0.7s,baz=204,slow=6.5,SNR=4.1
PETK LR LR 22 06 39.8
comp=Z,66nm,21.0s,baz=211,slow=35
**PETK Petropavlovsk- 35.21 31** P **P 21 53 01.5 0.0**
PETK pmax pmax
comp=Z,3.0nm,0.7s
PETK MLR MLR
comp=Z,66nm,21.0s
**TAPN Taplejung 35.84 282** *e*P **P 21 53 07.9 +0.2**
comp=Z,6.2nm,0.5s
**BATI Baumata 36.05 187** P **P 21 53 08.1 -1.0**
comp=Z,42nm,0.6s,baz=331,slow=2.3,SNR=12
**ODAN Odare 36.19 281** *e*P **P 21 53 10.7 +0.2**
comp=Z,14nm,0.4s
**YAK Yakutsk 36.22 1** *e*P P 21 53 06.1 -3.9
YAK pmax pmax
comp=Z,3.0nm,1.0s
YAK pmax pmax
comp=N,2.0nm,1.5s
YAK pmax pmax
comp=E,1.0nm,1.1s
**RAMN Ramite 36.88 281** *e*P **P 21 53 15.5 -0.9**
**WMQ Urumqi 37.12 309** P **P 21 53 18.0 -0.1**
WMQ S **S 21 59 04.0 +1.2**
WMQ SS **SnSn 22 01 33.0 -5.1**
WMQ PMZ
comp=E,16nm,0.8s
WMQ LN
comp=E,150nm,16.0s
WMQ LE
comp=E,91nm,16.0s
WMQ LZ
comp=E,76nm,15.0s
**GUN Gumba 37.39 283** *e*P **P 21 53 21.2 +0.3**
comp=E,13nm,0.5s
**PKI Pulchoki 37.85 282** *e*P **P 21 53 24.6 -0.1**
comp=E,18nm,0.6s
**PKIN Phulchoki 37.86 282** *e*P **P 21 53 24.5 -0.2**
comp=E,12nm,0.4s
**KKN Kakani 37.93 283** *e*P **P 21 53 25.5 +0.2**
comp=E,15nm,0.5s
**DMN Daman 38.11 282** *e*P **P 21 53 27.0 +0.1**
**GKN Gorkha 38.47 283** *e*P **P 21 53 29.7 -0.1**
comp=E,20nm,0.6s
**MTN Manton Dam 38.56 175** *e*P **P 21 53 31.1 +0.8**
comp=E,36nm,1.0s
**DANN Dangsing 39.20 284** *e*P **P 21 53 36.5 +0.5**
**KOLN Koldanda 39.41 283** *e*P **P 21 53 38.1 +0.4**
comp=E,18nm,0.8s
**SEY Seymchan 40.50 17**⇑*e*P **P 21 53 48.0 +2.0**
**MKAR Makanchi Array 41.57 312** *i* P P 21 54 01.5 +6.4
MKAR pmax pmax
comp=Z,15nm,0.6s
**ZALV Zalesovo Beam 42.38 323** P **P 21 53 59.9 -1.6**
comp=Z,2.2nm,0.5s,baz=114,slow=8.6,SNR=6.7
**ZALV Zalesovo Beam 42.38 323** P **P 21 53 59.9 -1.6**
ZALV pmax pmax
comp=Z,2.0nm,0.5s
**KSH Kashi 45.19 301** *e*P P 21 54 27.8 +3.2
KSH *e*sP sP 21 54 42.5 +6.5
KSH *e*PP PP 21 56 17.6 +7.2
KSH S **S 22 01 04.7 +1.8**
KSH SS **SS 22 04 23.8 -1.9**
KSH PMZ
comp=Z,6.0nm,1.2s
KSH PMZ
comp=Z,99nm,5.7s
KSH LN
comp=Z,110nm,5.1s
KSH LE
comp=Z,120nm,4.9s
KSH LZ
comp=Z,170nm,10.8s
**WRAB Tennant Creek 45.92 172***ce*P **P 21 54 31.5 +1.3**
**WRA Warramunga Arr 45.92 172** P **P 21 54 31.4 +1.1**
comp=Z,17nm,0.7s,baz=352,slow=8.3,SNR=73
**WRA Warramunga Arr 45.92 172** P **P 21 54 31.4 +1.1**
WRA pmax pmax
comp=Z,17nm,0.7s
**BILL Bilibino 48.16 18** *e*P **P 21 54 49.3 +2.1**
BILL pmax pmax
comp=Z,5.0nm,1.1s
**ASAR Alice Springs 49.54 173** P **P 21 54 59.8 +1.5**
comp=Z,6.7nm,0.8s,baz=1.6,slow=14,SNR=85
**ASAR Alice Springs 49.54 173** P **P 21 54 59.8 +1.5**
ASAR pmax pmax
comp=Z,7.0nm,0.8s
**AS01 Alice Springs 49.55 173** *e*P **P 21 54 59.8 +1.4**
**BRVK Borovoye 50.44 319***ce*P **P 21 55 05.1 +0.3**
BRVK pmax pmax
comp=Z,12nm,0.8s
**BRVK Borovoye 50.44 319** *e*P **P 21 55 04.7 -0.1**
comp=Z,12nm,0.6s
**KBL Kabul 50.98 295** *e*P **P 21 55 10.1 +0.6**
KBL pmax pmax
comp=Z,14nm,0.8s
**KBL Kabul 50.98 295** *e*P **P 21 55 10.1 +0.6**
comp=Z,14nm,0.8s
**SVE Sverdlovsk 56.39 323** *e*P **P 21 55 49.0 +0.5**
SVE pmax pmax
comp=Z,12nm,1.5s
**ABKAR Akbulak array 56.69 313** *e*P **P 21 55 50.5 -0.3**
**GEYT Alibeck 59.22 300** LR LR 22 25 05.6
comp=Z,61nm,20.8s,baz=210,slow=40
**MDM Murphy Dome 64.35 28** *e*P **P 21 56 45.2 +2.4**
comp=Z,6.9nm,1.0s
**ILAR Eielson Array 64.94 28** P **P 21 56 46.8 +0.1**
comp=Z,0.5nm,0.3s,baz=277,slow=7.2,SNR=4.6
**ILAR Eielson Array 64.94 28** P **P 21 56 46.8 +0.1**
ILAR pmax pmax
comp=Z,1.0nm,0.3s
**KBZ Khabaz 69.17 309** P **P 21 57 14.4 +0.6**
comp=Z,4.6nm,0.8s,baz=123,slow=3.4,SNR=6.6
**KBZ Khabaz 69.17 309** P **P 21 57 14.4 +0.6**
KBZ pmax pmax
comp=Z,5.0nm,0.8s
**KIV Kislovodsk 69.25 310** *e*P **P 21 57 15.4 +0.9**
KIV *i* 21 57 25.7
KIV pmax pmax
comp=Z,8.0nm,1.1s
**OBN Obninsk 69.95 322** *e*P **P 21 57 17.4 -1.0**
OBN pmax pmax
comp=Z,3.0nm,0.8s
**ARCES ARCESS Array B 70.27 339** P **P 21 57 18.8 -1.4**
comp=Z,2.8nm,1.0s,baz=72,slow=8.0,SNR=4.8
**ARCES ARCESS Array B 70.27 339** P **P 21 57 18.8 -1.4**
ARCES pmax pmax
comp=Z,3.0nm,1.0s
**FINES FINESS Array B 73.06 331** P **P 21 57 36.9 -0.2**
comp=Z,2.6nm,0.5s,baz=84,slow=5.6,SNR=24
**FINES FINESS Array B 73.06 331** P **P 21 57 36.9 -0.2**
FINES pmax pmax
comp=Z,3.0nm,0.5s
**RAYN Ar Rayn 73.64 289** *e*P **P 21 57 42.0 +0.7**
comp=Z,8.3nm,1.1s
**AKASG Malin Array Be 75.63 320** P **P 21 57 51.7 -0.5**
comp=Z,2.2nm,0.6s,baz=58,slow=6.6,SNR=9.3
**AKASG Malin Array Be 75.63 320** P **P 21 57 51.7 -0.5**
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**BRTR Keskin Array B 77.03 308** P **P 21 58 00.9 +0.3**
comp=Z,3.5nm,1.0s,baz=82,slow=4.8,SNR=8.8
**BRTR Keskin Array B 77.03 308***ce*P **P 21 58 01.2 +0.6**
BRTR pmax pmax
comp=Z,4.0nm,1.0s
**BR231 Keskin MP Arra 77.60 308** *e*P **P 21 58 02.0 -1.8**
**BUR04 Bucovina Ar. S 79.32 318** *e*P **P 21 58 14.3 +1.2**
**NB2 NORSAR Subarra 79.54 334** P **P 21 58 13.6 -0.3**
comp=Z,1.2nm,0.6s,baz=54,slow=5.6
**NOA NORSAR Array B 79.54 334** P **P 21 58 13.3 -0.6**
comp=Z,1.9nm,0.8s,baz=53,slow=5.6,SNR=8.5
NOA LR LR 22 36 13.4
comp=Z,40nm,20.0s,baz=35,slow=38
**NOA NORSAR Array B 79.54 334** P **P 21 58 13.3 -0.6**
NOA pmax pmax
comp=Z,2.0nm,0.8s
NOA MLR MLR
comp=Z,41nm,20.0s
**KOLS Kolonicke sedl 80.45 320** *e*P **P 21 58 20.2 +1.1**
**KOLS Kolonicke sedl 80.45 320** *e*P **P 21 58 20.2 +1.1**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| STHS | Stebnicka Huta | 80.82 | 321 | eP | P | 21 58 21.5 | +0.5 |
| STHS | Stebnicka Huta | 80.82 | 321 | eP | P | 21 58 21.5 | +0.5 |
| LANS | Liptovska Anna | 81.96 | 321 | eP | P | 21 58 30.8 | +3.7 |
| LANS | Liptovska Anna | 81.96 | 321 | eP | P | 21 58 30.8 | +3.7 |
| OKC | Ostrava-Krasne | 82.35 | 322 | eP | P | 21 58 27.9 | -1.2 |
| OKC | | | | e | | 21 58 41.6 | |
| OKC | Ostrava-Krasne | 82.35 | 322 | eP | P | 21 58 27.9 | -1.2 |
| OKC | | | | esP | sP | 21 58 41.6 | +0.7 |
| VYHS | Vyhne | 82.65 | 321 | eP | P | 21 58 34.0 | +3.3 |
| VYHS | | | | e | | 21 58 41.9 | |
| VYHS | Vyhne | 82.65 | 321 | eP | P | 21 58 34.0 | +3.3 |
| VYHS | | | | epP | pP | 21 58 41.9 | +2.5 |
| DPC | Dobruska-Polom | 83.08 | 323 | eP | P | 21 58 36.6 | +3.7 |
| DPC | | | | e | | 21 58 45.5 | |
| DPC | Dobruska-Polom | 83.08 | 323 | eP | P | 21 58 36.6 | +3.7 |
| DPC | | | | esP | sP | 21 58 45.5 | +0.7 |
| BRG | Berggiesshubel | 84.06 | 324 | e(P) | P | 21 58 48.5 | +11 |
| | comp=Z,6.1nm,1.1s | | | | | | |
| PRU | Pruhonice | 84.23 | 323 | eP | P | 21 58 38.8 | 0.0 |
| PRU | | | | e | | 21 58 51.8 | |
| PRU | Pruhonice | 84.23 | 323 | eP | P | 21 58 38.8 | 0.0 |
| PRU | | | | esP | sP | 21 58 51.8 | +1.1 |
| CLL | Collm | 84.30 | 325 | eP | P | 21 58 40.0 | +0.9 |
| CLL | | | | e | | 21 58 51.0 | |
| CLL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| CLL | Collm | 84.30 | 325 | eP | P | 21 58 40.0 | +0.9 |
| | comp=Z,8.0nm,1.0s | | | | | | |
| CLL | | | | esP | sP | 21 58 51.0 | 0.0 |
| NKC | Novy Kostel | 85.21 | 324 | eP | P | 21 58 45.1 | +1.3 |
| NKC | | | | e | | 21 58 55.9 | |
| NKC | Novy Kostel | 85.21 | 324 | eP | P | 21 58 45.1 | +1.3 |
| NKC | | | | esP | sP | 21 58 55.9 | +0.3 |
| KHC | Kasperske Hory | 85.23 | 323 | eP | P | 21 58 45.3 | +1.4 |
| KHC | | | | e | | 21 58 56.0 | |
| KHC | Kasperske Hory | 85.23 | 323 | eP | P | 21 58 45.3 | +1.4 |
| KHC | | | | esP | sP | 21 58 56.0 | +0.2 |
| GERES | GERESS Array B | 85.33 | 323 | P | P | 21 58 44.8 | +0.3 |
| | comp=Z,2.0nm,0.9s,baz=35,slow=4.9,SNR=8.2 | | | | | | |
| GERES | GERESS Array B | 85.33 | 323 | P | P | 21 58 44.8 | +0.3 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| GRF | Grafenberg Arr | 86.17 | 324 | eP | P | 21 58 50.4 | +1.9 |
| | comp=Z,22nm,1.4s,baz=59,slow=4.5 | | | | | | |
| GRF | | | | epP | pP | 21 59 01.2 | +4.0 |
| | comp=Z,22nm,1.4s | | | | | | |
| YBH | Yreka Blue Hor | 86.38 | 45 | LR | LR | 22 34 41.8 | |
| | comp=Z,42nm,19.1s,baz=56,slow=34 | | | | | | |
| KMBO | Kilima Mbogo | 91.05 | 269 | ceP | P | 21 59 09.8 | -2.8 |
| TORD | Torodi Ar. Bea | 114.86 | 300 | PKP | PKPdf | 22 04 48.2 | -0.6 |
| | comp=Z,0.3nm,1.0s,baz=67,slow=1.4,SNR=4.7 | | | | | | |

*IDC* ***09*** *21:51:19.5±1.3, 43°.96N×86°.69E, h0km, mb3.6/2, mb1 3.5/5, mb1mx3.3/33, mbtmp3.3/5, ML2.7/3, Error ellipse: s-maj=40.6km s-min=19.3km az=42.0*
*NNC* ***09*** *21:51:23.2±3.6, 44°.12N×86°.66E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=32.9km s-min=16.7km az=122.0*
**ISC 09 21:51:20.5**±1.1, **44°.06N**±0°.09×**86°.64E**±0°.08, **h10km, n8, σ2s.48**/11, **4C-6D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MK31 | Makanchi Array | 4.10 | 313 | ⇓Pn | Pn | 21 52 28.2 | +4.9 |
| | 0.3nm,0.3s,baz=127,slow=14,SNR=85 | | | | | | |
| MK31 | | | | ⇓Pg | Pb | 21 52 34.9 | +2.1 |
| | 1.4nm,0.3s,baz=127,slow=14,SNR=10 | | | | | | |
| MK31 | | | | ⇓Sn | Sb | 21 53 19.3 | -3.2 |
| | 2.8nm,0.3s,baz=128,slow=24 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 21 53 34.9 | |
| | 33nm,0.8s,baz=130,slow=26 | | | | | | |
| MKAR | Makanchi Array | 4.10 | 313 | Pn | Pn | 21 52 28.2 | +4.9 |
| | 0.6nm,0.3s,baz=130,slow=14,SNR=40 | | | | | | |
| MKAR | | | | Sn | Sb | 21 53 19.8 | -2.7 |
| | 3.1nm,0.3s,baz=148,slow=17,SNR=6.6 | | | | | | |
| MKAR | | | | Lg | Lg | 21 53 33.0 | |
| | 2.2nm,0.3s,baz=132,slow=30,SNR=5.4 | | | | | | |
| PDGK | Podgornoye | 5.24 | 264 | ⇓Pn | Pn | 21 52 43.0 | +4.2 |
| | 3.7nm,0.7s | | | | | | |
| PDGK | | | | ⇑Pg | Pg | 21 52 58.7 | -2.1 |
| | 11nm,0.8s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 21 54 09.1 | |
| | 32nm,1.1s | | | | | | |
| KURBB | Kurchatov Arra | 8.56 | 323 | ⇓Pn | Pn | 21 53 27.3 | +2.9 |
| | 2.8nm,1.1s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 21 55 04.1 | +3.1 |
| | 14nm,0.7s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 21 55 53.9 | |
| | 22nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 9.97 | 354 | Pn | Pn | 21 53 44.1 | +0.5 |
| | 0.2nm,0.3s,baz=178,slow=13,SNR=6.7 | | | | | | |
| ZALV | | | | Sn | Sn | 21 55 33.7 | -1.8 |
| | 0.3nm,0.3s,baz=170,slow=25,SNR=7.1 | | | | | | |
| ZALV | | | | Lg | Lg | 21 56 36.1 | |
| | 0.1nm,0.3s,baz=156,slow=28,SNR=2.0 | | | | | | |
| SONM | Songino Array | 14.25 | 68 | Pn | Pn | 21 54 41.2 | -1.1 |
| | 0.0nm,0.3s,baz=268,slow=11,SNR=2.6 | | | | | | |
| SONM | | | | Lg | Lg | 21 58 50.0 | |
| | 0.1nm,0.3s,baz=273,slow=32,SNR=3.6 | | | | | | |
| WRA | Warramunga Arr | 77.20 | 134 | P | P | 22 03 15.4 | +0.8 |
| | 0.6nm,0.8s,baz=340,slow=5.2,SNR=3.7 | | | | | | |
| TORD | Torodi Ar. Bea | 77.38 | 276 | P | P | 22 03 15.6 | -0.3 |
| | 0.2nm,0.5s,baz=58,slow=5.0,SNR=5.4 | | | | | | |

*ISCJB* ***09*** *21:57:10.7±1.1, 23°.90S±0°.07×69°.8W±0°.1, h78km, mb3.5/3, Error ellipse: s-maj=15.3km s-min=9.3km az=177.0*
*SJA* ***09*** *21:57:12.2±0.6, 23°.89S×69°.54W, h58km±52km, ML2.9, MW2.4*
*IDC* ***09*** *21:57:13.4±2.0, 23°.88S×69°.30W, h86km±14km, mb3.3/3, mb1 3.4/6, mb1mx3.3/19, mbtmp3.6/6, Error ellipse: s-maj=29.6km s-min=20.4km az=85.0*
**ISC 09 21:57:11.4**±1.0, **23°.93S**±0°.05×**69°.7W**±0°.1, **h78km, n16, σ1s.82**/19, **mb3.6**/3, **Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LVC | Limon Verde | 1.50 | 29 | P | Pn | 21 57 37.4 | +0.6 |
| | 996nm,0.3s,baz=170,slow=7.2,SNR=47 | | | | | | |
| LVC | | | | S | Sn | 21 57 54.5 | -1.6 |
| | 4µm,0.3s,baz=211,slow=8.3,SNR=19 | | | | | | |
| LVC | Limon Verde | 1.50 | 29 | eP | Pn | 21 57 37.4 | +0.6 |
| LVC | | | | eS | Sn | 21 57 55.6 | -0.4 |
| SLA | San Lorenzo | 3.91 | 102 | eP | Pn | 21 58 11.3 | +2.1 |
| FSA | Cafayete | 3.98 | 124 | eP | Pn | 21 58 12.6 | +2.4 |
| HJA | Humahuaca | 4.00 | 81 | eP | Pn | 21 58 12.4 | +1.7 |
| AZAP | Zapla | 4.25 | 95 | eP | Pn | 21 58 15.4 | +1.5 |
| CYA | Choya | 5.70 | 143 | AML | AML | 21 59 20.5 | |
| | comp=N,5.2nm,0.7s | | | | | | |
| LPAZ | La Paz | 7.74 | 11 | P | Pn | 21 59 03.6 | +1.6 |
| | comp=N,0.2nm,0.3s,baz=195,slow=6.8,SNR=3.6 | | | | | | |
| CFAA | Coronel Fontan | 7.75 | 171 | P | Pn | 21 59 03.0 | +1.4 |
| | comp=N,0.1nm,0.3s,baz=355,slow=13,SNR=7.3 | | | | | | |
| CFAA | | | | S | Sn | 22 00 24.9 | -2.9 |
| | comp=N,0.1nm,0.3s,baz=17,slow=19,SNR=3.2 | | | | | | |
| CFAA | Coronel Fontan | 7.75 | 171 | eP | Pn | 21 59 03.2 | +1.6 |
| SIV | San Ignacio | 11.32 | 47 | P | Pn | 21 59 48.6 | -1.7 |
| | comp=N,0.8nm,0.3s,baz=243,slow=12,SNR=8.6 | | | | | | |
| SIV | | | | S | Sn | 22 01 39.0 | -16 |
| | comp=N,0.4nm,0.3s,baz=156,slow=20,SNR=3.1 | | | | | | |
| BDFB | Brasilia | 21.99 | 72 | P | P | 22 01 56.1 | -3.2 |
| | comp=N,2.5nm,0.6s,baz=226,slow=12,SNR=5.3 | | | | | | |
| TXAR | Lajitas Array | 62.22 | 327 | P | P | 22 07 26.7 | +1.7 |
| | comp=N,0.2nm,0.7s,baz=140,slow=4.7,SNR=2.8 | | | | | | |
| TORD | Torodi Ar. Bea | 78.86 | 70 | P | P | 22 09 05.7 | -0.8 |
| | comp=N,0.3nm,0.3s,baz=261,slow=5.6,SNR=16 | | | | | | |
| TORD | | | | pP | pP | 22 09 28.8 | +1.5 |
| | comp=N,2.8nm,0.7s,baz=253,slow=5.3,SNR=12 | | | | | | |
| ZALV | Zalesovo Beam | 144.45 | 26 | PKP | PKPdf | 22 16 38.5 | +0.2 |
| | comp=N,0.4nm,0.3s,baz=329,slow=1.7,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 148.01 | 38 | PKPbc | PKPbc | 22 16 48.1 | +0.3 |
| | comp=N,0.4nm,0.7s,baz=294,slow=1.2,SNR=4.9 | | | | | | |

*IDC* ***09*** *21:59:57.2±1.0, 43°.82N×87°.02E, h0km, mb3.5/4, mb1 3.5/9, mb1mx3.4/36, mbtmp3.4/9, ML2.7/5, Error ellipse: s-maj=32.1km s-min=16.7km az=41.0*
*ISCJB* ***09*** *21:59:58.3±0.5, 44°.03N±0°.08×86°.97E±0°.07, h10km, mb3.4/5, Error ellipse: s-maj=13.5km s-min=4.6km az=28.7*
*BJI* ***09*** *22:00:01.0, 43°.91N×87°.05E, h5km, ML3.5/12*
*NNC* ***09*** *22:00:03.7±3.0, 44°.07N×86°.54E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=24.1km s-min=15.3km az=98.0*
**ISC 09 22:00:00.4**±0.7, **44°.07N**±0°.08×**87°.14E**±0°.06, **h10km, n16, σ1s.67**/22, **mb3.6**/5, **8C-2D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WMQ | Urumqi | 0.47 | 122 | Pg | Pg | 22 00 10.0 | +0.4 |
| WMQ | | | | Sg | Sb | 22 00 18.7 | +0.8 |
| WMQ | | | | SMN | | | |
| | 3µm,0.6s | | | | | | |
| WMQ | | | | SME | | | |
| | 2µm,0.6s | | | | | | |
| MK31 | Makanchi Array | 4.37 | 310 | Pn | Pn | 22 01 07.5 | +0.7 |
| | 1.4nm,0.3s,baz=129,slow=15,SNR=66 | | | | | | |
| MK31 | | | | ⇑Pg | Pg | 22 01 23.4 | -0.6 |
| | 2.8nm,0.4s,baz=132,slow=14,SNR=10 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 22 01 56.2 | -1.6 |
| | 6.5nm,0.3s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 22 02 14.5 | |
| | 34nm,0.6s,baz=132,slow=28 | | | | | | |
| MKAR | Makanchi Array | 4.37 | 310 | Pn | Pn | 22 01 07.3 | +0.5 |
| | 1.2nm,0.3s,baz=126,slow=14,SNR=47 | | | | | | |
| MKAR | | | | Sn | Sn | 22 01 59.2 | +1.5 |
| | 7.8nm,0.3s,baz=133,slow=24,SNR=11 | | | | | | |
| MKAR | | | | Lg | Lg | 22 02 15.3 | |
| | 6.8nm,0.3s,baz=131,slow=26,SNR=8.9 | | | | | | |
| PDGK | Podgornoye | 5.60 | 265 | ⇓Pn | Pn | 22 01 22.4 | -1.3 |
| | 6.0nm,0.9s | | | | | | |
| PDGK | | | | ⇑Pg | Pb | 22 01 38.8 | +0.6 |
| | 18nm,1.0s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 22 02 50.3 | |
| | 39nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 8.78 | 321 | ⇑Pn | Pn | 22 02 06.9 | -0.4 |
| | 1.1nm,0.4s | | | | | | |
| KURBB | | | | ⇓Pg | Pg | 22 02 19.7 | -29 |
| | 2.9nm,0.6s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 22 03 43.6 | -2.6 |
| | 19nm,0.6s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 22 04 34.7 | |
| | 46nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 8.78 | 321 | Pn | Pn | 22 02 06.9 | -0.4 |
| | 0.1nm,0.3s,baz=134,slow=13,SNR=13 | | | | | | |
| KURBB | | | | Lg | Lg | 22 04 36.4 | |
| | baz=142,slow=32,SNR=4.0 | | | | | | |
| AAK | Ala-Archa | 9.33 | 266 | Pn | Pn | 22 02 13.2 | -1.8 |
| | 0.1nm,0.3s,baz=90,slow=16,SNR=2.5 | | | | | | |
| AAK | | | | Lg | Lg | 22 04 45.8 | |
| | 0.2nm,0.3s,baz=37,slow=20,SNR=2.2 | | | | | | |
| ZALV | Zalesovo Beam | 10.00 | 352 | Pn | Pn | 22 02 23.6 | -0.4 |
| | 0.2nm,0.3s,baz=175,slow=14,SNR=8.6 | | | | | | |
| ZALV | | | | Sn | Sn | 22 04 13.2 | -3.1 |
| | 0.4nm,0.3s,baz=176,slow=22,SNR=8.2 | | | | | | |
| ZALV | | | | Lg | Lg | 22 05 30.0 | |
| | baz=172,slow=23,SNR=3.3 | | | | | | |
| GTA | Gaotai | 10.55 | 112 | eP | Pn | 22 02 35.5 | +3.8 |
| GTA | | | | pP | | 22 02 38.7 | |
| GTA | | | | sP | | 22 02 41.6 | |
| GTA | | | | S | Sn | 22 04 29.2 | -0.8 |
| SONM | Songino Array | 13.91 | 68 | Pn | Pn | 22 03 18.2 | +0.6 |
| | 0.0nm,0.3s,baz=267,slow=12,SNR=3.0 | | | | | | |
| SONM | | | | Lg | Lg | 22 07 25.0 | |
| | 0.1nm,0.3s,baz=268,slow=27,SNR=2.5 | | | | | | |
| BVAR | Borovoye Array | 14.23 | 315 | Pn | Pn | 22 03 23.9 | +2.1 |
| | 0.1nm,0.3s,baz=122,slow=14,SNR=2.3 | | | | | | |
| BVAR | | | | Sn | Sn | 22 05 51.6 | -8.1 |
| | 0.2nm,0.3s,baz=106,slow=26,SNR=5.2 | | | | | | |
| ARU | Arti | 21.88 | 315 | P | P | 22 04 56.6 | +3.4 |
| | 0.2nm,0.3s,baz=73,slow=19,SNR=2.0 | | | | | | |
| NOA | NORSAR Array B | 46.31 | 319 | P | P | 22 08 26.9 | +1.0 |
| | 0.3nm,0.4s,baz=74,slow=8.0,SNR=3.6 | | | | | | |
| WRA | Warramunga Arr | 76.95 | 135 | P | P | 22 11 51.2 | -1.9 |
| | 0.4nm,0.6s,baz=335,slow=5.3,SNR=2.6 | | | | | | |
| TORD | Torodi Ar. Bea | 77.74 | 276 | P | P | 22 11 55.2 | -2.6 |
| | 0.5nm,0.6s,baz=46,slow=4.4,SNR=6.9 | | | | | | |
| ASAR | Alice Springs | 79.86 | 137 | P | P | 22 12 06.9 | -2.3 |
| | 0.2nm,0.8s,baz=343,slow=6.1,SNR=3.0 | | | | | | |

*DHMR* ***09*** *22:24:17.6±0.5, 13°.48N×40°.17E, h21km±999km, ML3.9*
**ISC 09 22:24:20.7**±4.9, **13°.7N**±0°.4×**40°.2E**±0°.3, **h10km, n4, σ1s.47**/6, **Ethiopia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| UDYN | Al 'Udayn | 3.69 | 85 | i P | Pn | 22 25 16.9 | -1.0 |
| UDYN | | | | i S | Sn | 22 26 03.1 | +1.6 |
| UDYN | | | | AML | AML | 22 26 09.3 | |
| | comp=N,409nm,0.6s | | | | | | |
| LBOS | | 4.92 | 87 | i S | Sn | 22 26 32.2 | -0.1 |
| FURI | Furi | 4.97 | 197 | ePN | Pn | 22 25 36.7 | +1.0 |
| FURI | | | | eS | Sn | 22 26 32.0 | -1.4 |
| BDHA | Al Bayda' | 5.24 | 86 | i S | Sn | 22 26 40.0 | +0.1 |

*IDC* ***09*** *22:28:50.7±1.5, 30°.39S×177°.58W, h0km, mb4.0/2, mb1 4.1/3, mb1mx3.7/20, mbtmp3.9/3, ML3.2/1, Error ellipse: s-maj=40.7km s-min=24.6km az=95.0*
**ISC 09 22:28:54.8**±1.6, **30°.31S**±0°.08×**177°.7W**±0°.3, **h33km, n7, σ1s.71**/9, **Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 1.07 | 351 | Pn | Pb | 22 29 14.2 | -0.7 |
| | 174nm,0.3s,baz=127,slow=20,SNR=9.5 | | | | | | |
| RAO | | | | Sn | Sn | 22 29 25.8 | -1.4 |
| | 3µm,0.3s,baz=86,slow=22,SNR=31 | | | | | | |
| URZ | Urewera | 9.00 | 207 | Pn | Pn | 22 31 00.0 | -2.4 |
| | 0.3nm,0.3s,baz=18,slow=19,SNR=2.3 | | | | | | |
| URZ | | | | Sn | Sn | 22 32 42.5 | -0.2 |
| | 1.2nm,0.3s,baz=60,slow=20,SNR=9.4 | | | | | | |
| ASAR | Alice Springs | 43.35 | 267 | P | P | 22 36 56.3 | +2.1 |
| | 0.4nm,0.3s,baz=104,slow=7.3,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 44.33 | 272 | P | P | 22 37 03.6 | +1.6 |
| | 1.2nm,0.3s,baz=110,slow=8.1,SNR=13 | | | | | | |
| FINES | FINESS Array B | 145.15 | 340 | PKPbc | PKPdf | 22 48 28.6 | +0.4 |
| | 1.9nm,0.5s,baz=44,slow=4.2,SNR=27 | | | | | | |
| AKASG | Malin Array Be | 151.38 | 323 | PKPbc | PKPbc | 22 48 45.5 | +0.8 |
| | 0.3nm,0.3s,baz=46,slow=2.0,SNR=2.8 | | | | | | |
| TORD | Torodi Ar. Bea | 162.91 | 178 | PKPab | PKPab | 22 49 44.4 | +1.1 |
| | 0.4nm,1.0s,baz=158,slow=3.6,SNR=3.0 | | | | | | |

*ISCJB* ***09*** *22:39:58.4±0.5, 46°.83S±0°.07×10°.3W±0°.1, h10km, mb4.4/15, MS4.1/14, Error ellipse: s-maj=12.9km s-min=10.3km az=155.9*
*IDC* ***09*** *22:39:58.2±0.6, 46°.90S×10°.33W, h0km, mb4.1/11, mb1 4.2/11, mb1mx4.1/22, mbtmp4.1/11, MS4.1/14, Ms1 4.1/14, ms1mx4.0/16, Error ellipse: s-maj=18.6km s-min=17.4km az=55.0*
*NEIC* ***09*** *22:40:00.0±0.3, 46°.87S×10°.24W, h10km, mb4.8/5, Error ellipse: s-maj=10.3km s-min=9.3km az=205.0*
*GCMT* ***09*** *22:40:00.0±0.5, 46°.68S×10°.05W, h27km±2km, MW5.1/69, Moment Tensor Solution. s18,c20; s69,c93; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-3.23±.42; $M_{\theta\theta}$0.98±.30; $M_{\phi\phi}$2.25±.27; $M_{r\theta}$4.50±.62; $M_{\theta\phi}$-1.99±.16; $M_{\phi r}$-1.53±.35; Best double couple: $M_0$5.88600×$10^{16}$ NP1:$\phi_s$297.00000°,δ73.00000°,λ-108.00000°. NP2: $\phi_s$166.00000°,δ24.00000°,λ-44.00000°. Principal axes: T 5.6740, Plg26.0000°, Azm41.0000°; N 0.4280, Plg17.0000°, Azm302.0000°; P -6.0980, Plg58.0000°, Azm183.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
**ISC 09 22:39:59.9**±0.6, **46°.9S**±0°.1×**10°.3W**±0°.1, **h10km, n48, σ0s.80**/39, **mb4.5**/15, **MS4.1**/14, **Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VNA1 | Neumayer--Stat | 23.86 | 178 | P | P | 22 45 13.6 | +0.7 |
| VNA2 | Neumayer--Watz | 24.15 | 178 | P | P | 22 45 16.2 | +0.4 |
| | baz=357,slow=11 | | | | | | |
| VNA3 | Neumayer Olymp | 24.43 | 180 | P | P | 22 45 18.5 | +0.1 |
| SNAA | Sanae | 25.11 | 174 | P | P | 22 45 24.3 | -0.2 |
| SNAA | Sanae | 25.11 | 174 | P | P | 22 45 24.2 | -0.4 |
| | 8.0nm,0.9s,baz=341,slow=9.2,SNR=37 | | | | | | |
| SNAA | | | | PcP | PcP | 22 48 57.3 | -1.0 |
| | 1.7nm,1.2s,baz=335,slow=1.7,SNR=3.8 | | | | | | |
| SNAA | | | | LR | LR | 22 52 41.9 | |
| | comp=Z,108nm,19.7s,baz=350,slow=30 | | | | | | |
| SNAA | Sanae | 25.11 | 174 | eP | P | 22 45 24.0 | -0.5 |
| | 19nm,1.2s | | | | | | |
| SNAA | | | | ePcP | PcP | 22 48 57.3 | -1.0 |
| BOSA | Boshof | 33.12 | 69 | LR | LR | 22 57 17.4 | |
| | comp=Z,555nm,20.6s,baz=237,slow=31 | | | | | | |
| LBTB | Lobatse | 35.87 | 65 | P | P | 22 47 00.1 | +0.1 |
| | 2.3nm,0.8s,baz=216,slow=6.1,SNR=3.4 | | | | | | |
| LBTB | Lobatse | 35.87 | 65 | eP | P | 22 47 00.1 | +0.1 |
| | 147nm,2.6s | | | | | | |
| H10S2 | ASCENSION HYDR | 37.98 | 353 | T | T | 23 27 48.0 | |
| | baz=175,slow=74,SNR=8.9 | | | | | | |
| H10S3 | ASCENSION HYDR | 37.99 | 353 | T | T | 23 27 43.1 | |
| | baz=175,slow=74,SNR=7.8 | | | | | | |
| H10S1 | ASCENSION HYDR | 38.00 | 353 | T | T | 23 27 50.9 | |
| | baz=175,slow=74,SNR=5.6 | | | | | | |
| TRQA | Tornquist | 38.54 | 264 | eP | P | 22 47 22.7 | +0.1 |
| | 49nm,1.8s | | | | | | |
| MATP | Matopo | 41.05 | 63 | P | P | 22 47 43.5 | -0.3 |
| | 1.5nm,0.8s,baz=215,slow=8.6,SNR=6.5 | | | | | | |
| MAW | Mawson | 41.55 | 146 | P | P | 22 47 47.5 | +0.5 |
| | 5.5nm,1.1s,baz=262,slow=9.6,SNR=6.3 | | | | | | |
| MAW | | | | LR | LR | 23 01 56.6 | |
| | comp=Z,256nm,18.0s,baz=240,slow=32 | | | | | | |
| MAW | Mawson | 41.55 | 146 | eP | P | 22 47 47.5 | +0.5 |
| | 2.2nm,1.2s | | | | | | |
| CPUP | Villa Florida | 42.24 | 282 | P | P | 22 47 52.4 | -0.8 |
| | 2.0nm,0.9s,baz=103,slow=14,SNR=3.5 | | | | | | |
| CPUP | | | | LR | LR | 23 02 20.5 | |
| | comp=Z,124nm,20.1s,baz=156,slow=32 | | | | | | |
| QSPA | South Pole Qui | 43.37 | 180 | P | P | 22 48 01.7 | -0.5 |
| | 7.3nm,0.8s,baz=220,slow=4.9,SNR=24 | | | | | | |
| QSPA | | | | PcP | PcP | 22 49 49.3 | -1.1 |
| | 4.0nm,1.1s,baz=156,slow=1.1,SNR=5.2 | | | | | | |
| QSPA | South Pole Qui | 43.37 | 180 | eP | P | 22 48 02.2 | 0.0 |
| QSPA | | | | ePP | PcP | 22 49 49.4 | -1.1 |
| BDFB | Brasilia | 44.15 | 302 | P | P | 22 48 08.9 | 0.0 |
| | 6.9nm,0.9s,baz=144,slow=12,SNR=5.6 | | | | | | |
| BDFB | | | | LR | LR | 23 04 57.8 | |
| | comp=Z,193nm,18.2s,baz=78,slow=34 | | | | | | |
| CFAA | Coronel Fontan | 46.38 | 268 | P | P | 22 48 25.4 | -1.0 |
| | 1.1nm,0.9s,baz=144,slow=12,SNR=17 | | | | | | |
| LVC | Limon Verde | 52.56 | 276 | eP | P | 22 49 15.5 | +1.6 |
| | 14nm,0.9s | | | | | | |
| DBIC | Dimbokro | 53.54 | 7 | LR | LR | 23 08 26.1 | |
| | comp=Z,160nm,19.1s,baz=163,slow=32 | | | | | | |
| SBA | Scott Base | 55.52 | 179 | eP | P | 22 49 35.7 | +1.2 |
| | 93nm,2.8s | | | | | | |
| VNDA | Vanda | 55.77 | 178 | P | P | 22 49 36.4 | 0.0 |
| | 2.2nm,1.0s,baz=224,slow=5.9,SNR=6.7 | | | | | | |
| VNDA | | | | LR | LR | 23 11 34.1 | |
| | comp=Z,276nm,19.5s,baz=168,slow=34 | | | | | | |
| VNDA | Vanda | 55.77 | 178 | eP | P | 22 49 36.8 | +0.5 |
| | 12nm,1.4s | | | | | | |
| LPAZ | La Paz | 56.41 | 283 | P | P | 22 49 42.7 | +0.3 |
| | 1.5nm,1.0s,baz=103,slow=3.9,SNR=3.5 | | | | | | |
| LPAZ | | | | LR | LR | 23 12 02.1 | |
| | comp=Z,126nm,20.2s,baz=132,slow=34 | | | | | | |
| SAML | Samuel | 58.60 | 293 | eP | P | 22 49 58.8 | +1.7 |
| | 12nm,1.3s | | | | | | |
| TOA0 | Torodi Ar. Sit | 60.71 | 13 | eP | P | 22 50 11.8 | +0.3 |
| TORD | Torodi Ar. Bea | 60.71 | 13 | P | P | 22 50 11.8 | +0.3 |
| | 1.5nm,1.0s,baz=192,slow=7.0,SNR=6.7 | | | | | | |
| TORD | | | | LR | LR | 23 11 12.9 | |
| | comp=Z,261nm,20.3s,baz=190,slow=31 | | | | | | |
| KMBO | Kilima Mbogo | 61.49 | 57 | LR | LR | 23 14 08.9 | |
| | comp=Z,323nm,21.6s,baz=186,slow=33 | | | | | | |
| ROSC | El Rosal | 76.25 | 293 | LR | LR | 23 24 42.5 | |
| | comp=Z,97nm,18.2s,baz=194,slow=35 | | | | | | |
| KEST | Kesra | 84.11 | 16 | LR | LR | 23 27 31.6 | |
| | comp=Z,123nm,18.5s,baz=254,slow=34 | | | | | | |
| BRTR | Keskin Array B | 94.71 | 32 | LR | LR | 23 36 48.3 | |
| | comp=Z,39nm,19.4s,baz=222,slow=36 | | | | | | |
| GERES | GERESS Array B | 97.60 | 16 | LR | LR | 23 34 14.8 | |
| | comp=Z,86nm,18.5s,baz=262,slow=33 | | | | | | |
| MK32 | Makanchi Array | 123.35 | 55 | ePKPdf | PKPdf | 22 58 55.0 | -1.4 |
| MKAR | Makanchi Array | 123.35 | 55 | PKP | PKPdf | 22 58 55.0 | -1.4 |
| | 0.5nm,0.8s,baz=146,slow=2.8,SNR=3.7 | | | | | | |
| FXWY | Fox Creek | 126.40 | 298 | ePKPdf | PKPdf | 22 59 02.9 | +0.2 |
| TLY | Talaya | 137.94 | 58 | ePKPpre | PKPpre | 22 59 18.0 | |
| INK | Inuvik | 144.62 | 328 | ePKPdf | PKPbc | 22 59 34.5 | +0.4 |
| KS15 | Wonju Array Si | 147.91 | 92 | ePKPbc | PKPbc | 22 59 45.8 | +0.9 |
| KSAR | Wonju Array Be | 147.91 | 92 | PKPbc | PKPbc | 22 59 45.8 | +0.9 |
| KSRS | Korea Array | 147.94 | 92 | PKPbc | PKPbc | 22 59 45.8 | +0.9 |
| | 1.9nm,0.9s,baz=242,slow=2.8,SNR=5.6 | | | | | | |
| EGAK | Eagle | 148.20 | 322 | ePKPbc | PKPbc | 22 59 45.1 | +0.3 |
| ILAR | Eielson Array | 150.59 | 323 | PKPbc | PKPbc | 22 59 50.3 | -0.5 |
| | 2.1nm,0.9s,baz=341,slow=0.8,SNR=11 | | | | | | |
| ILB | Eielson Array | 150.59 | 323 | ePKPbc | PKPbc | 22 59 50.3 | -0.5 |
| KLU | Klutina | 150.91 | 316 | epPKPdf | pPKPdf | 22 59 49.9 | +0.5 |
| COLD | Coldfoot | 151.00 | 329 | ePKPbc | PKPbc | 22 59 52.3 | +0.7 |

*KRNET* ***09*** *22:40:33.7±0.1, 39°.54N×73°.74E, mb2.7*
*NNC* ***09*** *22:40:33.1±2.9, 39°.74N×74°.12E, h0km, mb3.1, mpv2.8, Error ellipse: s-maj=40.4km s-min=14.6km az=26.0*
**ISC 09 22:40:34.3**±2.0, **39°.53N**±0°.09×**73°.74E**±0°.05, **h10km, n13, σ1s.43**/22, **19C-9D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 0.52 | 340 | ⇑P | Pg | 22 40 43.6 | -0.8 |
| | 22nm,0.2s | | | | | | |
| SFK | | | | ⇑S | Sg | 22 40 51.4 | +0.1 |
| | 64nm,0.2s | | | | | | |
| SFK | Sufi-Kurgan | 0.52 | 340 | ⇓iP | Pg | 22 40 43.7 | -0.8 |
| | baz=339 | | | | | | |
| SFK | | | | ⇓iS | Sg | 22 40 51.4 | +0.1 |
| | baz=339 | | | | | | |
| SFK | Sufi-Kurgan | 0.52 | 340 | ⇑iP | Pg | 22 40 43.6 | -0.8 |
| | baz=339 | | | | | | |
| SFK | | | | ⇑iS | Sg | 22 40 51.3 | +0.1 |
| | baz=339 | | | | | | |
| BTK | Batken | 2.31 | 284 | ⇓iP | Pb | 22 41 16.0 | -0.1 |
| | baz=284 | | | | | | |
| BTK | | | | ⇓iS | Sg | 22 41 46.8 | -1.8 |
| | baz=284 | | | | | | |
| ARLS | Aral | 2.37 | 11 | ⇑iP | Pg | 22 41 18.3 | -1.5 |
| | baz=11 | | | | | | |
| ARLS | | | | ⇑iS | Sg | 22 41 48.2 | -2.3 |
| | baz=11 | | | | | | |
| NRN | Naryn | 2.57 | 41 | ⇑eP | Pb | 22 41 20.1 | -0.6 |
| | baz=41 | | | | | | |
| NRN | | | | ⇑iS | Sb | 22 41 54.1 | +1.7 |
| | baz=41 | | | | | | |
| AML | Almayashu | 2.60 | 359 | ⇑iP | Pb | 22 41 20.1 | -1.2 |
| | baz=359 | | | | | | |
| AML | | | | ⇑iS | Sb | 22 41 54.0 | +0.6 |
| | baz=359 | | | | | | |
| ARK | Arkit | 2.64 | 330 | ⇓iP | Pb | 22 41 20.3 | -1.4 |
| | baz=330 | | | | | | |
| ARK | | | | ⇓eS | Sb | 22 41 54.4 | +0.2 |
| | baz=330 | | | | | | |
| UCH | Uchtor | 2.76 | 12 | ⇑iP | Pb | 22 41 22.7 | -1.3 |
| | baz=12 | | | | | | |
| UCH | | | | ⇑iS | Sb | 22 41 59.0 | +0.9 |
| | baz=12 | | | | | | |
| KZA | Kyzart | 2.79 | 24 | ⇑iP | Pb | 22 41 23.9 | -0.7 |
| | baz=24 | | | | | | |
| KZA | | | | ⇑iS | Sb | 22 42 01.0 | +2.0 |
| | baz=24 | | | | | | |
| MNAS | Manas | 3.10 | 343 | ⇑Pn | Pn | 22 41 24.3 | +0.8 |
| | 1.3nm,0.5s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 22 42 12.6 | |
| | 6.5nm,0.5s | | | | | | |
| DZET | Dzherino | 3.88 | 261 | ⇑Pn | Pn | 22 41 36.9 | +2.7 |
| | 4.1nm,0.7s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 22 42 41.3 | |
| | 12nm,0.5s | | | | | | |
| KK31 | Karatay Array | 4.32 | 327 | ⇑Pn | Pn | 22 41 43.4 | +3.4 |
| | 0.2nm,0.3s,baz=134,slow=12,SNR=11 | | | | | | |
| KK31 | | | | ⇑Pg | Pg | 22 41 53.5 | -3.6 |
| | 0.8nm,0.6s,baz=137,slow=16,SNR=4.6 | | | | | | |
| KK31 | | | | ⇓Sn | Sn | 22 42 33.8 | +3.4 |
| | 0.6nm,0.3s,baz=132,slow=23 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 22 42 48.7 | |
| | 3.7nm,0.7s,baz=134,slow=29 | | | | | | |

*ECX* ***09*** *23:03:24.3±0.4, 31°.22N×115°.64W, h5km, MD3.5, ML3.7*
**ISC 09 23:03:23.4**±1.2, **31°.28N**±0°.04×**115°.64W**±0°.04, **h2km**±12km, **n23, σ0s.64**/34, **1C-8D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SPIG | San Pedro Mart | 0.28 | 147 | ⇓eP | Pg | 23 03 28.9 | 0.0 |
| SPIG | | | | eS | Sg | 23 03 32.5 | 0.0 |
| SPX | San Pedro Mart | 0.28 | 147 | ⇓eP | Pg | 23 03 28.9 | 0.0 |
| SPX | | | | eS | Sg | 23 03 32.6 | 0.0 |
| SPX | | | | IAML | | 23 03 33.2 | |
| | comp=N,9µm,0.3s | | | | | | |
| ECBX | El Chinero | 0.54 | 69 | ⇑eP | Pg | 23 03 33.8 | +0.1 |
| ECBX | | | | eS | Sg | 23 03 41.4 | +0.6 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| ECNX | Esteban Cantu | 0.90 | 295 | ⇓eP | Pg | 23 03 40.6 | 0.0 |
| PBX | Punta Banda | 1.03 | 297 | ⇓eP | Pg | 23 03 42.9 | -0.4 |
| PBX | | | | eS | Sg | 23 03 56.9 | +0.3 |
| CPBX | Cerro Prieto | 1.17 | 14 | eP | Pg | 23 03 45.6 | -0.2 |
| CPBX | | | | eP | Pg | 23 03 45.7 | -0.2 |
| CBX | Cerro Bola | 1.35 | 320 | eP | Pn | 23 03 48.1 | -1.3 |
| CBX | | | | IAML | | 23 04 10.9 | |
| | comp=E,1µm,0.3s | | | | | | |
| CBX | | | | ⇓e | | 23 04 10.9 | |
| RMX | La Rumorosa | 1.37 | 344 | ⇓eP | Pn | 23 03 49.1 | -0.6 |
| RMX | | | | eS | Sb | 23 04 08.0 | +0.1 |
| IBP | Imperial Bould | 1.43 | 345 | P | Pn | 23 03 50.1 | -0.4 |
| | baz=1.8 | | | | | | |
| IBP | | | | S | Sb | 23 04 08.9 | -0.7 |
| | baz=1.8 | | | | | | |
| IBP | Imperial Bould | 1.43 | 345 | ⇓eP | Pn | 23 03 50.1 | -0.4 |
| IBP | | | | eS | Sn | 23 04 09.8 | 0.0 |
| BAR | Barrett | 1.65 | 328 | ⇓eP | Pn | 23 03 53.2 | -0.2 |
| SWSC | Sam W. Stewart | 1.66 | 355 | P | Pn | 23 03 52.5 | -1.0 |
| | baz=2.0 | | | | | | |
| MONP | Monument Peak | 1.73 | 338 | P | Pn | 23 03 54.9 | +0.1 |
| | baz=2.1 | | | | | | |
| MONP | | | | S | Sn | 23 04 17.5 | -0.1 |
| | baz=2.1 | | | | | | |
| SDRC | San Diego Road | 1.82 | 323 | eP | Pn | 23 03 55.8 | 0.0 |
| GLA | Glamis | 1.90 | 21 | P | Pn | 23 03 55.7 | -1.2 |
| | baz=2.3 | | | | | | |
| 109C | Camp Elliot, M | 2.03 | 323 | P | Pn | 23 03 59.1 | +0.5 |
| | baz=2.3 | | | | | | |
| 109C | | | | S | Sn | 23 04 25.3 | +0.7 |
| | baz=2.3 | | | | | | |
| PFO | Pinyon Flat Ob | 2.42 | 344 | P | Pn | 23 04 03.6 | -0.6 |
| | baz=2.8 | | | | | | |
| PFO | | | | Sb | Sb | 23 04 39.4 | +1.3 |
| | baz=2.8 | | | | | | |
| Y12C | Blythe | 2.64 | 21 | P | Pn | 23 04 06.5 | -0.4 |
| | baz=3.0 | | | | | | |
| MURC | Murrieta | 2.66 | 331 | Sb | Sb | 23 04 44.2 | -0.8 |
| | baz=3.0 | | | | | | |
| BELC | Belle Mtn. Jos | 2.73 | 354 | P | Pn | 23 04 08.3 | -0.1 |
| | baz=3.1 | | | | | | |
| IRM | Iron Mountain | 2.90 | 8 | P | Pn | 23 04 10.5 | -0.1 |
| | baz=3.3 | | | | | | |
| BBRC | Big Bear Solar | 3.16 | 340 | Sb | Sb | 23 05 01.2 | +1.6 |
| | baz=3.5 | | | | | | |
| BFSC | Mount Baldy Ra | 3.40 | 331 | Sb | Sb | 23 05 06.9 | +0.4 |
| | baz=3.7 | | | | | | |

**WEL 09 23:16:08.9±0.1, 43°.59S×172°.30E, h5km, ML3.7/15, 3C-4D, Error ellipse: s-maj=1.0km s-min=0.9km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CRLZ | Canterbury Las | 0.24 | 88 | ⇓PG | Pg | 23 16 13.8 | +0.3 |
| CRLZ | | | | SG | Sg | 23 16 17.4 | +0.8 |
| CRLZ | | | | AML | AML | 23 16 17.9 | |
| MQZ | McQueen's Vall | 0.28 | 115 | PG | Pg | 23 16 14.6 | +0.2 |
| MQZ | | | | SG | Sg | 23 16 19.1 | +0.9 |
| MQZ | | | | AML | AML | 23 16 20.2 | |
| OXZ | Oxford | 0.32 | 324 | ⇓PG | Pg | 23 16 15.3 | +0.2 |
| OXZ | | | | SG | Sg | 23 16 19.9 | +0.5 |
| LTZ | Lake Taylor | 0.80 | 359 | P* | Pg | 23 16 24.7 | +0.3 |
| LTZ | | | | S* | Sb | 23 16 35.8 | -0.9 |
| LTZ | | | | AML | AML | 23 16 37.9 | |
| RPZ | Rata Peaks | 0.91 | 261 | ⇓P* | Pb | 23 16 26.9 | -0.3 |
| RPZ | | | | AML | AML | 23 16 41.5 | |
| RPZ | | | | AML | AML | 23 16 44.7 | |
| WVZ | Waitaha Valley | 1.25 | 294 | P* | Pg | 23 16 32.2 | -0.6 |
| WVZ | | | | AML | AML | 23 16 51.6 | |
| WVZ | | | | AML | AML | 23 16 53.1 | |
| KHZ | Kahutara | 1.48 | 38 | PN | Pn | 23 16 34.4 | -1.8 |
| LBZ | Lake Benmore | 1.72 | 242 | ⇑PN | Pn | 23 16 38.8 | -0.7 |
| LBZ | | | | AML | AML | 23 17 11.3 | |
| LBZ | | | | AML | AML | 23 17 11.4 | |
| LBZ | | | | AML | AML | 23 17 16.1 | |
| LBZ | | | | AML | AML | 23 17 16.1 | |
| DSZ | Denniston Nort | 1.88 | 349 | ⇑PN | Pn | 23 16 40.6 | -1.1 |
| DSZ | | | | AML | AML | 23 17 09.4 | |
| DSZ | | | | AML | AML | 23 17 09.5 | |
| DSZ | | | | AML | AML | 23 17 12.4 | |
| DSZ | | | | AML | AML | 23 17 12.4 | |
| THZ | Tophouse | 1.88 | 14 | ⇑PN | Pn | 23 16 40.1 | -1.6 |
| ODZ | Otahua Downs | 1.88 | 219 | PN | Pn | 23 16 40.4 | -1.3 |
| ODZ | | | | AML | AML | 23 17 11.4 | |
| ODZ | | | | AML | AML | 23 17 11.4 | |
| ODZ | | | | AML | AML | 23 17 14.5 | |
| ODZ | | | | AML | AML | 23 17 17.4 | |
| FOZ | Fox Glacier | 1.90 | 270 | ⇓PN | Pn | 23 16 41.4 | -0.5 |
| FOZ | | | | AML | AML | 23 17 04.8 | |
| FOZ | | | | AML | AML | 23 17 04.8 | |
| FOZ | | | | AML | AML | 23 17 05.7 | |
| FOZ | | | | AML | AML | 23 17 11.2 | |
| BSWZ | Blackbirch Sta | 2.20 | 32 | PN | Pn | 23 16 44.8 | -1.4 |
| NNZ | Nelson | 2.50 | 19 | PN | Pn | 23 16 49.2 | -1.0 |
| JCZ | Jackson Bay | 2.61 | 258 | PN | Pn | 23 16 51.1 | -0.7 |
| JCZ | | | | AML | AML | 23 17 35.7 | |
| JCZ | | | | AML | AML | 23 17 45.0 | |
| WKZ | Wanaka | 2.66 | 241 | AML | AML | 23 17 42.3 | |
| WKZ | | | | AML | AML | 23 17 49.1 | |
| EAZ | Earnscleugh | 2.70 | 231 | PN | Pn | 23 16 51.8 | -1.2 |
| EAZ | | | | AML | AML | 23 17 37.5 | |
| EAZ | | | | AML | AML | 23 17 37.5 | |
| EAZ | | | | AML | AML | 23 17 39.8 | |
| EAZ | | | | AML | AML | 23 17 39.9 | |
| QRZ | Quartz Range | 2.76 | 4 | PN | Pn | 23 16 52.4 | -1.5 |
| QRZ | | | | AML | AML | 23 17 02.4 | |
| QRZ | | | | AML | AML | 23 17 02.4 | |
| QRZ | | | | AML | AML | 23 17 40.1 | |
| QRZ | | | | AML | AML | 23 17 40.1 | |
| TCW | Tory Channel | 2.79 | 32 | PN | Pn | 23 16 52.4 | -1.7 |
| PLWZ | Palliser | 2.97 | 48 | PN | Pn | 23 16 54.1 | -2.6 |
| TUZ | Tuapeka | 3.04 | 218 | PN | Pn | 23 16 56.4 | -1.1 |
| TUZ | | | | AML | AML | 23 17 53.4 | |
| TUZ | | | | AML | AML | 23 18 00.8 | |
| CAW | Cannon Point | 3.22 | 41 | PN | Pn | 23 16 57.5 | -2.6 |
| SYZ | Scrubby Hill | 3.70 | 216 | PN | Pn | 23 17 06.2 | -0.5 |
| MRZ | Mangatainoka R | 3.81 | 41 | PN | Pn | 23 17 05.5 | -2.7 |
| MRZ | | | | AML | AML | 23 17 57.4 | |

*NEIC **09** 23:23:44.6, 15°.99N×97°.59W, h17km, MD4.1(MEX), After MEX.*

**MEX 09 23:23:44.6±0.8, 15°.99N×97°.59W, h17km±802km, MD4.1, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PNIG | Pinotepa | 0.66 | 308 | eP | Pg | 23 23 55.0 | -2.6 |
| PNIG | | | | i S | Sg | 23 24 03.4 | -3.0 |
| PNIG | Pinotepa | 0.66 | 308 | eP | Pg | 23 23 55.0 | -2.6 |
| PNIG | | | | i S | Sg | 23 24 03.4 | -3.0 |
| HUIG | Huatulco | 1.44 | 98 | i P | Pn | 23 24 07.0 | -3.0 |
| HUIG | | | | eS | Sn | 23 24 23.1 | -5.4 |
| HUIG | Huatulco | 1.44 | 98 | i P | Pn | 23 24 07.0 | -3.0 |
| HUIG | | | | eS | Sn | 23 24 23.1 | -5.4 |
| TLIG | Tlapa | 1.83 | 329 | eP | Pn | 23 24 13.1 | -2.4 |
| TLIG | | | | eS | Sn | 23 24 33.6 | -4.8 |
| MEIG | Mezcala | 2.74 | 315 | eP | Pn | 23 24 25.8 | -2.2 |
| MEIG | | | | eS | Sn | 23 24 57.7 | -3.2 |
| MEIG | Mezcala | 2.74 | 315 | eP | Pn | 23 24 25.8 | -2.2 |
| MEIG | | | | eS | Sn | 23 24 57.7 | -3.2 |
| CAIG | El Cayaco | 2.78 | 293 | eP | Pn | 23 24 25.7 | -2.7 |
| CAIG | | | | eS | Sn | 23 24 58.1 | -3.5 |
| CAIG | El Cayaco | 2.78 | 293 | eP | Pn | 23 24 25.7 | -2.7 |
| CAIG | | | | eS | Sn | 23 24 58.1 | -3.5 |

*ISCJB **09** 23:33:00.7±0.5, 37°.91N±0°.02×27°.32E±0°.04, h1km±7km, Error ellipse: s-maj=5.4km s-min=3.6km az=150.4*
*DDA **09** 23:33:00.9, 37°.90N×27°.27E, h7km, Md2.8*
*ISK **09** 23:33:00.9, 37°.91N×27°.39E, h5km, MD2.8*
*CSEM **09** 23:33:01.1±0.2, 37°.91N×27°.35E, h2km, MD2.8, Error ellipse: s-maj=5.7km s-min=4.0km az=72.0*

**ISC 09 23:33:00.7±1.1, 37°.90N±0°.02×27°.35E±0°.02, h3km±13km, n35, σ0s.52/50, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GCAM | G?zelcaml? | 0.21 | 204 | i P | Pg | 23 33 04.7 | -0.1 |
| GCAM | | | | i S | Sg | 23 33 07.6 | 0.0 |
| GCAM | G?zelcaml? | 0.21 | 204 | P | Pg | 23 33 04.7 | -0.1 |
| GCAM | | | | S | Sg | 23 33 07.6 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 0.43 | 83 | PG | Pg | 23 33 09.7 | +0.6 |
| AYDB | Zeytinkoy-Aydi | 0.43 | 83 | i Pg | Pg | 23 33 09.7 | +0.6 |
| AYDN | Tasoluk | 0.48 | 119 | i P | Pb | 23 33 12.5 | +0.7 |
| AYDN | | | | i S | Sb | 23 33 19.3 | 0.0 |
| AYDN | Tasoluk | 0.48 | 119 | P | Pb | 23 33 12.5 | +0.7 |
| AYDN | | | | S | Sb | 23 33 19.3 | 0.0 |
| IZM | Izmir | 0.51 | 353 | PG | Pg | 23 33 10.6 | +0.2 |
| IZM | Izmir | 0.51 | 353 | i Pg | Pg | 23 33 10.6 | +0.2 |
| ZEY | ˜zmir | 0.75 | 298 | P | Pg | 23 33 14.2 | -0.8 |
| ZEY | | | | S | Sg | 23 33 24.5 | -0.2 |
| URLA | Izmir | 0.75 | 308 | i P | Pg | 23 33 15.5 | +0.4 |
| URLA | | | | i S | Sg | 23 33 24.8 | -0.1 |
| URLA | Izmir | 0.75 | 308 | P | Pg | 23 33 15.5 | +0.4 |
| URLA | | | | S | Sg | 23 33 24.8 | -0.1 |
| BODT | Bodrum | 0.83 | 182 | ePG | Pb | 23 33 17.7 | 0.0 |
| BODT | | | | eSG | Sb | 23 33 30.0 | +0.7 |
| BODT | Bodrum | 0.83 | 182 | ePg | Pb | 23 33 17.7 | 0.0 |
| BODT | | | | eSg | Sb | 23 33 30.0 | +0.7 |
| BDRM | Kayabasi | 0.83 | 175 | i P | Pb | 23 33 17.7 | 0.0 |
| BDRM | | | | i S | Sg | 23 33 27.3 | -0.1 |
| BDRM | Kayabasi | 0.83 | 175 | P | Pb | 23 33 17.7 | 0.0 |
| BDRM | | | | S | Sg | 23 33 27.3 | -0.1 |
| AKHS | Akhisar | 1.05 | 20 | i P | Pb | 23 33 21.5 | +0.1 |
| AKHS | | | | i S | Sb | 23 33 35.1 | -0.5 |
| AKHS | Akhisar | 1.05 | 20 | P | Pb | 23 33 21.5 | +0.1 |
| AKHS | | | | S | Sb | 23 33 35.1 | -0.5 |
| AKS | Akhisar | 1.05 | 20 | ePG | Pb | 23 33 21.0 | -0.4 |
| AKS | Akhisar | 1.05 | 20 | ePg | Pb | 23 33 21.0 | -0.4 |
| YER | Yerkesik | 1.06 | 135 | ePG | Pg | 23 33 21.1 | 0.0 |
| YER | Yerkesik | 1.06 | 135 | ePg | Pg | 23 33 21.1 | 0.0 |
| CHOS | Chios island | 1.13 | 296 | ePN | Pn | 23 33 23.7 | +0.3 |
| CHOS | Chios island | 1.13 | 296 | ePn | Pn | 23 33 23.7 | +0.3 |
| KULA | Kula-Manisa | 1.21 | 59 | ePN | Pg | 23 33 23.0 | -0.8 |
| KULA | Kula-Manisa | 1.21 | 59 | ePn | Pg | 23 33 23.0 | -0.8 |
| DKL | Dikili | 1.22 | 344 | ePN | Pn | 23 33 25.5 | +0.9 |
| DKL | Dikili | 1.22 | 344 | ePn | Pn | 23 33 25.5 | +0.9 |
| TURN | Turunc | 1.43 | 135 | i P | Pn | 23 33 26.1 | -1.3 |
| TURN | | | | i S | Sb | 23 33 47.0 | +0.5 |
| TURN | Turunc | 1.43 | 135 | P | Pn | 23 33 26.1 | -1.3 |
| TURN | | | | S | Sb | 23 33 47.0 | +0.5 |
| APE | Apeiranthos | 1.66 | 241 | ePN | Pg | 23 33 32.5 | -0.1 |
| APE | Apeiranthos | 1.66 | 241 | ePn | Pg | 23 33 32.5 | -0.1 |
| SIGR | SIGRI | 1.76 | 319 | ePN | Pb | 23 33 33.1 | -0.4 |
| SIGR | SIGRI | 1.76 | 319 | ePn | Pb | 23 33 33.1 | -0.4 |
| DST | Dursunbey | 1.98 | 30 | ePN | Pn | 23 33 35.3 | +0.3 |
| DST | Dursunbey | 1.98 | 30 | ePn | Pn | 23 33 35.3 | +0.3 |

*IDC **09** 23:34:55.8±2.1, 38°.36N×69°.74E, h0km, mb3.8/3, mb1 3.6/8, mb1mx3.4/46, mbtmp3.6/8, ML3.0/5, Error ellipse: s-maj=40.4km s-min=15.8km az=156.0*
*ISCJB **09** 23:34:57.0±0.5, 38°.46N±0°.05×69°.43E±0°.05, h12km, mb3.8/3, Error ellipse: s-maj=7.3km s-min=5.5km az=0.4*
*NNC **09** 23:34:58.4±1.1, 38°.49N×69°.60E, h0km, mb3.7, mpv3.5, Error ellipse: s-maj=13.5km s-min=2.5km az=5.0*

**ISC 09 23:34:58.2±0.8, 38°.42N±0°.07×69°.53E±0°.05, h12km, n22, σ1s.56/29, mb3.8/3, 8C-4D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 0.67 | 306 | ⇓P | Pg | 23 35 11.8 | +0.5 |
| | 696nm,0.6s | | | | | | |
| DZET | | | | ⇑S | Sb | 23 35 21.4 | +0.1 |
| | 788nm,0.5s | | | | | | |
| SFK | Sufi-Kurgan | 3.48 | 61 | ⇑Pn | Pn | 23 35 53.1 | +0.8 |
| | 1.8nm,0.4s | | | | | | |
| SFK | | | | ⇓Pg | Pb | 23 35 59.1 | -0.7 |
| | 12nm,0.6s | | | | | | |
| SFK | | | | ⇑Sn | Sn | 23 36 35.7 | +2.2 |
| | 28nm,0.4s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 23 36 44.8 | |
| | 72nm,0.8s | | | | | | |
| MNAS | Manas | 4.66 | 28 | ⇑Pn | Pn | 23 36 09.3 | +0.9 |
| | 7.5nm,0.7s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 23 37 02.6 | |
| | 15nm,0.7s | | | | | | |
| KK31 | Karatay Array | 4.74 | 9 | ⇑Pn | Pn | 23 36 10.4 | +0.9 |
| | 1.6nm,0.4s | | | | | | |
| KK31 | | | | ⇓Pg | Pb | 23 36 22.9 | +1.7 |
| | 3.4nm,0.5s,baz=192,slow=17,SNR=2.7 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 23 37 22.4 | |
| | 8.2nm,0.5s,baz=195,slow=28,SNR=5.9 | | | | | | |
| AAK | Ala-Archa | 5.66 | 40 | Pn | Pn | 23 36 22.3 | 0.0 |
| | 0.2nm,0.3s,baz=173,slow=7.9,SNR=4.7 | | | | | | |
| AAK | | | | Sn | Sn | 23 37 29.5 | +2.2 |
| | 0.4nm,0.3s,baz=360,slow=19,SNR=2.1 | | | | | | |
| GEYT | Alibeck | 9.00 | 270 | Pn | Pn | 23 37 07.8 | -0.2 |
| | 0.5nm,0.3s,baz=102,slow=10,SNR=5.8 | | | | | | |
| GEYT | | | | Sn | Sn | 23 38 51.0 | +1.8 |
| | 0.6nm,0.3s,baz=98,slow=20,SNR=4.3 | | | | | | |
| MKAR | Makanchi Array | 12.58 | 44 | Pn | Pn | 23 37 54.8 | -2.1 |
| | 0.0nm,0.3s,baz=230,slow=13,SNR=3.2 | | | | | | |
| AB31 | Akbulak array | 12.84 | 331 | P | Pn | 23 37 59.9 | -0.6 |
| | 0.5nm,0.3s,baz=153,slow=11,SNR=19 | | | | | | |
| AB31 | | | | ⇓S | Sn | 23 40 15.0 | -8.2 |
| | 0.9nm,0.5s | | | | | | |
| AKTO | Aktyubinsk | 14.54 | 329 | Pn | Pn | 23 38 21.2 | -2.4 |
| | 0.1nm,0.3s,baz=138,slow=13,SNR=2.4 | | | | | | |
| AKTO | | | | Sn | Sn | 23 41 00.3 | -4.3 |
| | 0.1nm,0.3s,baz=15,slow=20,SNR=2.2 | | | | | | |
| BVAR | Borovoye Array | 14.62 | 2 | Pn | Pn | 23 38 25.2 | +0.5 |
| | baz=167,slow=10,SNR=3.0 | | | | | | |
| KOLN | Koldanda | 15.85 | 128 | eP | P | 23 38 46.7 | +1.6 |
| GKN | Gorkha | 16.34 | 125 | eP | P | 23 38 51.1 | +0.6 |
| KKN | Kakani | 16.90 | 124 | eP | P | 23 38 56.5 | -0.3 |
| PKI | Pulchoki | 17.13 | 124 | eP | P | 23 38 59.9 | +0.4 |
| GUN | Gumba | 17.21 | 123 | eP | P | 23 39 00.5 | +0.1 |
| RAMN | Ramite | 18.33 | 124 | eP | Pn | 23 39 11.8 | -0.7 |
| | 7.1nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 18.73 | 29 | P | P | 23 39 14.2 | -2.4 |
| | 0.2nm,0.3s,baz=226,slow=9.9,SNR=3.1 | | | | | | |
| TAPN | Taplejung | 18.80 | 121 | eP | P | 23 39 16.7 | -1.2 |
| | 5.2nm,0.6s | | | | | | |
| ODAN | Odare | 18.91 | 122 | eP | P | 23 39 17.5 | -1.5 |
| FINES | FINESS Array B | 35.24 | 325 | P | P | 23 41 53.5 | +1.4 |
| | 3.4nm,1.0s,baz=119,slow=11,SNR=3.0 | | | | | | |
| HFS | Hagfors | 40.84 | 321 | P | P | 23 42 39.8 | +0.4 |
| | 1.5nm,0.7s,baz=115,slow=10,SNR=4.3 | | | | | | |
| TORD | Torodi Ar. Bea | 64.62 | 267 | P | P | 23 45 36.5 | +0.7 |
| | 0.3nm,0.7s,baz=40,slow=6.6,SNR=2.7 | | | | | | |

**DJA 09 23:43:22.9±0.5, 8°S±7°×10°9E±°, h60km±14km, M3.6/13, MLv3.6/13, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMJI | Cimerak | 0.64 | 352 | P | Pn | 23 43 37.6 | +1.2 |
| CNJI | Cibinong | 1.78 | 308 | P | Pn | 23 43 51.7 | +0.3 |
| LEM | Lembang | 1.83 | 330 | P | Pn | 23 43 52.6 | +0.3 |
| UGM | Wanagama | 2.03 | 76 | P | Pn | 23 43 55.0 | +0.2 |
| UGM | | | | S | Sn | 23 44 18.7 | -0.4 |
| SMRI | Semarang | 2.32 | 54 | P | Pn | 23 43 58.9 | +0.1 |
| SKJI | Sukabumi | 2.42 | 305 | P | Pn | 23 43 59.6 | -0.5 |
| SKJI | | | | S | Sn | 23 44 28.1 | -0.4 |
| PCJI | Pacitan | 2.62 | 85 | P | Pn | 23 44 03.5 | +0.7 |
| PCJI | | | | S | Sn | 23 44 32.9 | -0.6 |
| PWJI | Pagerwojo | 3.25 | 83 | P | Pn | 23 44 12.0 | +0.5 |
| CGJI | Cibinong | 3.34 | 302 | P | Pn | 23 44 13.2 | +0.4 |

**IDC 10 00:04:43.6±3.5, 17°.77S×174°.65W, h75km±34km, mb3.9/5, mb1 4.2/6, mb1mx3.8/32, mbtmp4.2/6, Error ellipse: s-maj=46.6km s-min=18.9km az=140.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 4.74 | 36 | P | Pn | 00 05 52.6 | -0.1 |
| | 4.5nm,0.3s,baz=180,slow=2.0,SNR=5.1 | | | | | | |
| AFI | | | | S | Sn | 00 06 42.9 | -3.5 |
| | 19nm,0.3s,baz=75,slow=22,SNR=7.4 | | | | | | |
| URZ | Urewera | 21.65 | 198 | P | P | 00 09 27.8 | 0.0 |
| | 2.6nm,0.3s,baz=7.3,slow=1.5,SNR=6.7 | | | | | | |
| WRA | Warramunga Arr | 48.17 | 259 | P | P | 00 13 16.5 | -0.3 |
| | 1.6nm,0.3s,baz=97,slow=8.0,SNR=2.7 | | | | | | |
| ASAR | Alice Springs | 48.27 | 254 | P | P | 00 13 17.6 | 0.0 |
| | 9.6nm,0.6s,baz=88,slow=8.3,SNR=25 | | | | | | |
| NVAR | Mina Array Bea | 76.89 | 42 | P | P | 00 16 28.3 | +0.2 |
| | 1.6nm,0.7s,baz=224,slow=9.7,SNR=9.2 | | | | | | |
| TXAR | Lajitas Array | 82.92 | 56 | P | P | 00 17 00.5 | -0.3 |
| | 0.4nm,0.9s,baz=215,slow=8.4,SNR=3.8 | | | | | | |

*IDC **10** 00:06:20.8±1.1, 8°.81S×126°.95E, h0km, mb4.2/7, mb1 4.3/11, mb1mx4.1/33, mbtmp4.2/11, ML4.1/4, MS3.4/1, Ms1 3.4/1, ms1mx2.6/25, Error ellipse: s-maj=25.9km s-min=24.2km az=109.0*
*ISCJB **10** 00:06:22.7±0.4, 8°.95S±0°.04×127°.11E±0°.04, h33km, mb4.1/10, Error ellipse: s-maj=6.6km s-min=5.4km az=44.2*
*NEIC **10** 00:06:25.5±0.6, 8°.88S×126°.97E, h35km, mb4.0/3, Error ellipse: s-maj=12.9km s-min=11.0km az=132.0*
*DJA **10** 00:06:29.2±3.0, 9°S±5°×12°7E±°, h26km±37km, M4.5/8, mb4.7/6, mB5.2/3, MLv4.5/8, Mw(mB)4.7/3, Mwp5.5/1*

**ISC 10 00:06:24.8±0.6, 8°.97S±0°.06×127°.08E±0°.07, h35km, n37, σ1s.33/38, mb4.1/10, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOEI | Soe | 2.88 | 254 | P | Pn | 00 07 09.8 | +1.4 |
| SOEI | Soe | 2.88 | 254 | ePn | Pn | 00 07 08.8 | +0.4 |
| SOEI | | | | eSn | Sn | 00 07 40.6 | -1.3 |
| BATI | Baumata | 3.58 | 250 | Pn | Pn | 00 07 19.1 | +1.1 |
| | 24nm,0.3s,baz=212,slow=1.0,SNR=20 | | | | | | |
| BATI | | | | Sn | Sn | 00 08 00.1 | +0.9 |
| | 33nm,0.3s,baz=100,slow=3.4,SNR=6.1 | | | | | | |
| BATI | Baumata | 3.58 | 250 | P | Pn | 00 07 19.9 | +1.9 |
| MMRI | Maumere | 4.79 | 274 | P | Pn | 00 07 43.7 | +9.1 |
| MMRI | Maumere | 4.79 | 274 | ePn | Pn | 00 07 32.5 | -2.1 |
| BBSI | Bau Bau | 5.65 | 307 | P | Pn | 00 07 50.1 | +3.7 |
| | 118nm,1.0s,1µm16µm0.3nm | | | | | | |
| SANI | Sanana | 6.96 | 351 | P | Pn | 00 08 10.8 | +6.5 |
| BSSI | Bau Bau, Buton | 7.11 | 293 | P | Pn | 00 08 06.9 | +0.5 |
| | 46nm,1.1s,0.1nm | | | | | | |
| WBSI | Waikabubak, Su | 7.62 | 264 | P | Pn | 00 08 15.9 | +2.5 |
| BKSI | Bulukumba | 7.79 | 297 | P | Pn | 00 08 17.6 | +1.8 |
| KAPI | Kappang | 8.26 | 298 | Pn | Pn | 00 08 21.6 | -0.7 |
| | 0.3nm,0.3s,baz=156,slow=12,SNR=2.7 | | | | | | |
| SPSI | Sidrap Palu | 8.80 | 304 | P | Pn | 00 08 39.5 | +10 |
| WRAB | Tennant Creek | 12.97 | 148 | ePn | Pn | 00 09 29.0 | +2.2 |
| | 18nm,0.8s | | | | | | |
| WRAB | | | | eSn | Sn | 00 11 48.7 | -1.3 |
| WRA | Warramunga Arr | 12.98 | 148 | Pn | Pn | 00 09 28.7 | +1.8 |
| | 1.9nm,0.3s,baz=318,slow=13,SNR=36 | | | | | | |
| WRA | | | | Sn | Sn | 00 11 47.2 | -2.9 |
| | 2.3nm,0.3s,baz=326,slow=21,SNR=14 | | | | | | |
| MBWA | Marble Bar | 14.04 | 209 | ePn | Pn | 00 09 40.7 | -0.6 |
| | 15nm,1.0s | | | | | | |
| MBWA | | | | eSn | Sn | 00 12 04.8 | -11 |
| ASAR | Alice Springs | 16.01 | 157 | Pn | P | 00 10 09.1 | -1.6 |
| | 1.3nm,0.3s,baz=318,slow=11,SNR=41 | | | | | | |
| ASAR | | | | Sn | Sn | 00 13 02.5 | -1.5 |
| | 1.0nm,0.3s,baz=322,slow=18,SNR=7.7 | | | | | | |
| ASAR | | | | LR | LR | 00 17 29.0 | |
| | comp=Z,130nm,18.7s,baz=339,slow=41 | | | | | | |
| CMAR | Chiang Mai Arr | 38.90 | 315 | P | P | 00 13 46.1 | -1.3 |
| | 2.4nm,0.6s,baz=143,slow=6.7,SNR=14 | | | | | | |
| CHTO | Chiang Mai | 39.14 | 315 | eP | P | 00 13 48.9 | -0.5 |
| | 1.8nm,0.7s | | | | | | |
| KSAR | Wonju Array Be | 46.17 | 1 | P | P | 00 14 47.0 | +0.9 |
| KSRS | Korea Array | 46.18 | 1 | P | P | 00 14 47.0 | +0.8 |
| | 0.4nm,0.5s,baz=180,slow=13,SNR=2.9 | | | | | | |
| TAPN | Taplejung | 52.51 | 315 | eP | P | 00 15 34.8 | -0.4 |
| RAMN | Ramite | 53.06 | 314 | eP | P | 00 15 39.5 | +0.3 |
| | 21nm,0.6s | | | | | | |
| GUN | Gumba | 54.14 | 314 | eP | P | 00 15 47.2 | 0.0 |
| | 23nm,0.7s | | | | | | |
| PKI | Pulchoki | 54.28 | 313 | eP | P | 00 15 47.9 | -0.3 |
| PKIN | Phulchoki | 54.29 | 313 | eP | P | 00 15 48.1 | -0.1 |
| DMN | Daman | 54.52 | 313 | eP | P | 00 15 49.9 | 0.0 |
| | 12nm,0.7s | | | | | | |
| GKN | Gorkha | 55.09 | 313 | eP | P | 00 15 53.5 | -0.3 |
| | 14nm,0.7s | | | | | | |
| KOLN | Koldanda | 55.70 | 312 | eP | P | 00 15 57.9 | -0.5 |
| | 6.7nm,0.6s | | | | | | |
| SONM | Songino Array | 59.45 | 344 | P | P | 00 16 23.7 | -0.5 |
| | 1.2nm,0.8s,baz=157,slow=8.3,SNR=9.5 | | | | | | |
| PETK | Petropavlovsk- | 67.11 | 19 | P | P | 00 17 16.2 | +1.5 |
| | 2.8nm,0.8s,baz=224,slow=8.0,SNR=3.3 | | | | | | |
| MKAR | Makanchi Array | 68.33 | 329 | P | P | 00 17 22.7 | +0.1 |
| | 2.6nm,0.6s,baz=131,slow=7.9,SNR=34 | | | | | | |
| AAK | Ala-Archa | 70.21 | 321 | eP | P | 00 17 34.7 | +0.1 |
| | 1.1nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 72.10 | 335 | P | P | 00 17 45.2 | -0.3 |
| | 5.1nm,0.6s,baz=138,slow=5.0,SNR=19 | | | | | | |
| GEYT | Alibeck | 79.30 | 311 | P | P | 00 18 25.6 | -1.5 |
| | 1.5nm,0.7s,baz=193,slow=6.1,SNR=4.8 | | | | | | |
| ABKAR | Akbulak array | 82.27 | 322 | eP | P | 00 18 42.1 | -0.5 |
| | 0.7nm,0.5s | | | | | | |
| TORD | Torodi Ar. Bea | 126.32 | 280 | PKP | PKPdf | 00 25 27.2 | +2.3 |
| | 0.7nm,0.8s,baz=62,slow=1.5,SNR=5.6 | | | | | | |

*ISCJB **10** 00:16:22.5±0.4, 37°.90N±0°.02×27°.30E±0°.03, h7km±5km, Error ellipse: s-maj=4.6km s-min=3.6km az=141.0*
*CSEM **10** 00:16:22.8±0.2, 37°.90N×27°.32E, h10km, MD2.9, Error ellipse: s-maj=4.1km s-min=3.2km az=68.0*
*DDA **10** 00:16:22.4, 37°.90N×27°.30E, h7km, Md2.9*
*ISK **10** 00:16:22.5, 37°.92N×27°.36E, h12km, MD2.8*

**ISC 10 00:16:22.6±0.9, 37°.88N±0°.02×27°.31E±0°.02, h10km±9km, n39, σ0s.44/56, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GCAM | G?zelcaml? | 0.19 | 199 | i P | Pg | 00 16 26.6 | -0.1 |
| GCAM | | | | i S | Sg | 00 16 29.4 | 0.0 |
| GCAM | G?zelcaml? | 0.19 | 199 | P | Pg | 00 16 26.6 | -0.1 |
| GCAM | | | | S | Sg | 00 16 29.4 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 0.46 | 82 | PG | Pg | 00 16 31.4 | -0.3 |
| AYDB | | | | eSG | Sg | 00 16 37.9 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 0.46 | 82 | i Pg | Pg | 00 16 31.4 | -0.3 |
| AYDB | | | | eSg | Sg | 00 16 37.9 | +0.1 |
| AYDN | Tasoluk | 0.50 | 116 | i P | Pb | 00 16 34.4 | +0.8 |
| AYDN | | | | i S | Sb | 00 16 41.1 | +0.1 |
| AYDN | Tasoluk | 0.50 | 116 | P | Pb | 00 16 34.4 | +0.8 |
| AYDN | | | | S | Sb | 00 16 41.1 | +0.1 |
| IZM | Izmir | 0.52 | 356 | PG | Pg | 00 16 32.4 | -0.3 |
| IZM | | | | eSG | Sg | 00 16 39.9 | +0.4 |
| IZM | Izmir | 0.52 | 356 | i Pg | Pg | 00 16 32.4 | -0.3 |
| IZM | | | | eSg | Sg | 00 16 39.9 | +0.4 |
| ZEY | ˜zmir | 0.73 | 299 | P | Pg | 00 16 36.2 | -0.5 |
| ZEY | | | | S | Sg | 00 16 46.2 | -0.1 |
| URLA | Izmir | 0.74 | 310 | i P | Pb | 00 16 37.4 | -0.2 |
| URLA | | | | i S | Sg | 00 16 46.8 | +0.2 |
| URLA | Izmir | 0.74 | 310 | P | Pb | 00 16 37.4 | -0.2 |
| URLA | | | | S | Sg | 00 16 46.8 | +0.2 |
| BODT | Bodrum | 0.82 | 180 | ePG | Pb | 00 16 39.4 | +0.4 |
| BODT | Bodrum | 0.82 | 180 | ePg | Pb | 00 16 39.4 | +0.4 |
| BDRM | Kayabasi | 0.82 | 173 | i P | Pb | 00 16 39.5 | +0.5 |
| BDRM | Kayabasi | 0.82 | 173 | P | Pb | 00 16 39.5 | +0.5 |
| AKHS | Akhisar | 1.07 | 22 | i P | Pg | 00 16 43.0 | -0.2 |
| AKHS | | | | i S | Sb | 00 16 57.3 | 0.0 |
| AKHS | Akhisar | 1.07 | 22 | P | Pg | 00 16 43.0 | -0.2 |
| AKHS | | | | S | Sb | 00 16 57.3 | 0.0 |
| AKS | Akhisar | 1.07 | 21 | ePG | Pg | 00 16 42.9 | -0.3 |
| AKS | Akhisar | 1.07 | 21 | ePg | Pg | 00 16 42.9 | -0.3 |
| YER | Yerkesik | 1.07 | 134 | ePG | Pb | 00 16 43.4 | +0.1 |
| YER | Yerkesik | 1.07 | 134 | ePg | Pb | 00 16 43.4 | +0.1 |
| CHOS | Chios island | 1.11 | 297 | ePN | Pn | 00 16 44.6 | +0.3 |
| CHOS | Chios island | 1.11 | 297 | ePn | Pn | 00 16 44.6 | +0.3 |
| MANT | Manisa | 1.15 | 58 | i P | Pn | 00 16 45.5 | +0.4 |
| MANT | | | | i S | Sb | 00 16 59.8 | -0.2 |
| MANT | Manisa | 1.15 | 58 | P | Pn | 00 16 45.5 | +0.4 |
| MANT | | | | S | Sb | 00 16 59.8 | -0.2 |
| KULA | Kula-Manisa | 1.24 | 59 | ePN | Pn | 00 16 45.4 | -0.7 |
| KULA | Kula-Manisa | 1.24 | 59 | ePn | Pn | 00 16 45.4 | -0.7 |
| TURN | Turunc | 1.44 | 134 | i P | Pn | 00 16 47.3 | -1.5 |
| TURN | | | | i S | Sb | 00 17 08.1 | +0.2 |
| TURN | Turunc | 1.44 | 134 | P | Pn | 00 16 47.3 | -1.5 |
| TURN | | | | S | Sb | 00 17 08.1 | +0.2 |
| DALY | Dalyan (Mu˜la | 1.51 | 134 | ePN | Pn | 00 16 49.9 | +0.2 |
| DALY | Dalyan (Mu˜la | 1.51 | 134 | ePn | Pn | 00 16 49.9 | +0.2 |
| APE | Apeiranthos | 1.63 | 241 | ePN | Pb | 00 16 52.9 | 0.0 |
| APE | Apeiranthos | 1.63 | 241 | ePn | Pb | 00 16 52.9 | 0.0 |
| SIGR | SIGRI | 1.75 | 320 | ePN | Pn | 00 16 53.5 | +0.5 |
| SIGR | SIGRI | 1.75 | 320 | ePn | Pn | 00 16 53.5 | +0.5 |
| BALB | Balikesir | 1.81 | 14 | ePN | Pn | 00 16 53.9 | 0.0 |
| BALB | Balikesir | 1.81 | 14 | ePn | Pn | 00 16 53.9 | 0.0 |
| DST | Dursunbey | 2.00 | 30 | ePN | Pn | 00 16 56.3 | -0.2 |
| DST | Dursunbey | 2.00 | 30 | ePn | Pn | 00 16 56.3 | -0.2 |

*ISCJB **10** 00:21:35.2±0.4, 37°.89N±0°.02×27°.29E±0°.03, h4km±5km,*

Error ellipse: s-maj=4.7km s-min=3.7km az=146.8
DDA **10** 00:21:35.2, 37°.90N×27°.28E, h7km, Md2.6
ISK **10** 00:21:35.2, 37°.91N×27°.34E, h6km, MD2.8
CSEM **10** 00:21:35.5±0.2, 37°.90N×27°.30E, h5km, MD2.6, Error ellipse: s-maj=4.6km s-min=3.6km az=77.0

**ISC 10 00:21:35.3±1.0, 37°.90N±0°.02×27°.31E±0°.02, h6km±11km, n37, σ0s.46/54, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GCAM | G?zelcaml? | 0.21 | 197 | iP | Pg | 00 21 39.2 | -0.2 |
| GCAM | | | | iS | Sg | 00 21 42.1 | -0.1 |
| GCAM | G?zelcaml? | 0.21 | 197 | P | Pg | 00 21 39.2 | -0.2 |
| GCAM | | | | S | Sg | 00 21 42.1 | -0.1 |
| AYDB | Zeytinkoy-Aydi | 0.46 | 84 | PG | Pg | 00 21 44.3 | +0.1 |
| AYDB | | | | eSG | Sg | 00 21 50.9 | +0.6 |
| AYDB | Zeytinkoy-Aydi | 0.46 | 84 | iPg | Pg | 00 21 44.3 | +0.1 |
| AYDB | | | | eSg | Sg | 00 21 50.9 | +0.6 |
| IZM | Izmir | 0.50 | 356 | PG | Pg | 00 21 45.1 | +0.2 |
| IZM | | | | eSG | Sb | 00 21 53.3 | -0.7 |
| IZM | Izmir | 0.50 | 356 | iPg | Pg | 00 21 45.1 | +0.2 |
| IZM | | | | eSg | Sb | 00 21 53.3 | -0.7 |
| AYDN | Tasoluk | 0.51 | 118 | iP | Pb | 00 21 47.1 | +0.4 |
| AYDN | | | | iS | Sb | 00 21 53.7 | -0.6 |
| AYDN | Tasoluk | 0.51 | 118 | P | Pb | 00 21 47.1 | +0.4 |
| AYDN | | | | S | Sb | 00 21 53.7 | -0.6 |
| ZEY | ˜zmir | 0.72 | 298 | P | Pg | 00 21 48.8 | -0.3 |
| ZEY | | | | S | Sg | 00 21 59.0 | +0.5 |
| URLA | Izmir | 0.73 | 309 | iP | Pb | 00 21 50.2 | -0.2 |
| URLA | | | | iS | Sg | 00 21 59.4 | +0.7 |
| URLA | Izmir | 0.73 | 309 | P | Pb | 00 21 50.2 | -0.2 |
| URLA | | | | S | Sg | 00 21 59.4 | +0.7 |
| BODT | Bodrum | 0.84 | 180 | ePG | Pb | 00 21 52.0 | -0.2 |
| BODT | Bodrum | 0.84 | 180 | ePg | Pb | 00 21 52.0 | -0.2 |
| BDRM | Kayabasi | 0.84 | 173 | iP | Pg | 00 21 51.5 | +0.1 |
| BDRM | | | | iS | Sg | 00 22 01.8 | -0.6 |
| BDRM | Kayabasi | 0.84 | 173 | P | Pg | 00 21 51.5 | +0.1 |
| BDRM | | | | S | Sg | 00 22 01.8 | -0.6 |
| AKHS | Akhisar | 1.05 | 22 | iP | Pb | 00 21 55.9 | 0.0 |
| AKHS | | | | iS | Sb | 00 22 10.2 | +0.2 |
| AKHS | Akhisar | 1.05 | 22 | P | Pb | 00 21 55.9 | 0.0 |
| AKHS | | | | S | Sb | 00 22 10.2 | +0.2 |
| AKS | Akhisar | 1.05 | 22 | ePG | Pg | 00 21 54.8 | -0.7 |
| AKS | Akhisar | 1.05 | 22 | ePg | Pg | 00 21 54.8 | -0.7 |
| YER | Yerkesik | 1.09 | 134 | ePN | Pg | 00 21 56.4 | +0.2 |
| YER | Yerkesik | 1.09 | 134 | ePn | Pg | 00 21 56.4 | +0.2 |
| CHOS | Chios island | 1.10 | 296 | ePN | Pb | 00 21 57.0 | +0.2 |
| CHOS | Chios island | 1.10 | 296 | ePn | Pb | 00 21 57.0 | +0.2 |
| MANT | Manisa | 1.15 | 59 | iP | Pn | 00 21 58.5 | +0.4 |
| MANT | Manisa | 1.15 | 59 | P | Pn | 00 21 58.5 | +0.4 |
| DKL | Dikili | 1.21 | 345 | ePN | Pg | 00 21 58.2 | -0.3 |
| DKL | Dikili | 1.21 | 345 | ePn | Pg | 00 21 58.2 | -0.3 |
| KULA | Kula-Manisa | 1.23 | 60 | ePN | Pb | 00 21 58.2 | -0.7 |
| KULA | Kula-Manisa | 1.23 | 60 | ePn | Pb | 00 21 58.2 | -0.7 |
| APE | Apeiranthos | 1.64 | 240 | ePN | Pb | 00 22 05.8 | -0.2 |
| APE | Apeiranthos | 1.64 | 240 | ePn | Pb | 00 22 05.8 | -0.2 |
| SIGR | SIGRI | 1.74 | 319 | ePN | Pn | 00 22 06.7 | +0.7 |
| SIGR | SIGRI | 1.74 | 319 | ePn | Pn | 00 22 06.7 | +0.7 |
| BALY | Balya | 1.85 | 7 | iP | Pn | 00 22 07.6 | 0.0 |
| BALY | | | | iS | Sg | 00 22 34.5 | -0.4 |
| BALY | Balya | 1.85 | 7 | P | Pn | 00 22 07.6 | 0.0 |
| BALY | | | | S | Sg | 00 22 34.5 | -0.4 |
| DST | Dursunbey | 1.98 | 31 | ePN | Pn | 00 22 10.1 | +0.7 |
| DST | Dursunbey | 1.98 | 31 | ePn | Pn | 00 22 10.1 | +0.7 |

**MEX 10 00:21:43.2±0.5, 14°.64N×92°.64W, h52km±28km, MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| THIG | | 0.45 | 54 | eP | Pn | 00 21 52.7 | -1.3 |
| PCIG | | 1.20 | 332 | eP | Pn | 00 22 02.0 | -1.7 |
| PCIG | | | | eS | Sn | 00 22 17.0 | -1.9 |

*NSSC **10** 00:47:24.3±1.5, 36°.15N×38°.11E, h40km±999km, MD0.8, ML2.3*
*DDA **10** 00:47:29.8, 36°.22N×37°.75E, h10km, Md2.9*
*CSEM **10** 00:47:30.0±0.7, 36°.08N×37°.44E, h15km, MD2.9, Error ellipse: s-maj=18.8km s-min=10.4km az=125.0*
*ISK **10** 00:47:32.0, 36°.29N×37°.39E, h12km, MD3.0*

**ISC 10 00:47:31.3±1.4, 36°.22N±0°.03×37°.42E±0°.04, h11km±11km, n32, σ1s.54/39, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUZU | Kuzuini | 0.62 | 334 | iP | Pb | 00 47 43.4 | -0.7 |
| KUZU | Kuzuini | 0.62 | 334 | P | Pb | 00 47 43.4 | -0.7 |
| KUZU | | | | S | Sn | 00 47 55.2 | -0.7 |
| BTCH | Batrach | 0.80 | 257 | eP | Pg | 00 47 47.0 | +0.4 |
| BTCH | | | | eS | Sn | 00 48 02.6 | +2.3 |
| BTCH | | | | AML | AML | 00 48 06.8 | |
| | comp=E,63nm,0.6s | | | | | | |
| BTCH | | | | AML | AML | 00 48 06.8 | |
| | comp=N,44nm,0.5s | | | | | | |
| BTCH | Batrach | 0.80 | 257 | eP | Pg | 00 47 47.0 | +0.4 |
| BTCH | | | | eS | Sn | 00 48 02.6 | +2.3 |
| | comp=N,44nm,0.5s | | | | | | |
| TAHT | Tahtakopru-Hat | 1.01 | 279 | ePG | Pn | 00 47 51.3 | 0.0 |
| TAHT | Tahtakopru-Hat | 1.01 | 279 | ePg | Pn | 00 47 51.3 | 0.0 |
| YAYL | Yayladag | 1.07 | 261 | iP | Pb | 00 47 52.2 | +0.3 |
| YAYL | Yayladag | 1.07 | 261 | P | Pb | 00 47 52.2 | +0.3 |
| YAYL | | | | S | Sn | 00 48 12.1 | +4.8 |
| KFRA | Kufra | 1.12 | 207 | eP | Pb | 00 47 48.0 | -4.7 |
| KFRA | | | | eS | Sb | 00 48 05.0 | -2.3 |
| KFRA | | | | AML | AML | 00 48 07.1 | |
| | comp=N,68nm,0.3s | | | | | | |
| KFRA | | | | AMP | | 00 48 08.1 | |
| | comp=E,3μm,0.1s | | | | | | |
| KFRA | | | | AML | AML | 00 48 08.3 | |
| | comp=E,152nm,0.3s | | | | | | |
| KFRA | Kufra | 1.12 | 207 | eP | Pb | 00 47 48.0 | -4.7 |
| KFRA | | | | eS | Sb | 00 48 05.0 | -2.3 |
| | comp=E,152nm,0.3s | | | | | | |
| KAMA | Osmaniye | 1.14 | 328 | P | Pn | 00 47 53.0 | -0.2 |
| KAMA | | | | S | Sn | 00 48 09.6 | +0.8 |
| GZT | Gaziantep | 1.14 | 6 | P | Pb | 00 47 48.9 | -4.2 |
| GZT | | | | S | Sb | 00 48 06.5 | -1.4 |
| AYKD | Aykdinkavak | 1.29 | 338 | P | Pb | 00 47 55.1 | -0.4 |
| AYKD | | | | S | Sg | 00 48 13.9 | +1.1 |
| KSRV | Kasrt alli | 1.33 | 105 | eP | Pn | 00 47 45.2 | -11 |
| KSRV | | | | eS | Sn | 00 47 57.8 | -16 |
| KSRV | | | | AML | AML | 00 48 01.0 | |
| | comp=E,16nm,0.3s | | | | | | |
| KSRV | | | | AML | AML | 00 48 01.3 | |
| | comp=N,40nm,0.3s | | | | | | |
| KSRV | Kasrt alli | 1.33 | 105 | eP | Pn | 00 47 45.2 | -11 |
| KSRV | | | | eS | Sn | 00 47 57.8 | -16 |
| | comp=N,40nm,0.3s | | | | | | |
| KMRS | Kahramanmaras | 1.35 | 342 | ePN | Pn | 00 47 55.7 | -0.3 |
| KMRS | | | | eSN | Sg | 00 48 14.1 | -0.6 |
| KMRS | Kahramanmaras | 1.35 | 342 | ePn | Pn | 00 47 55.7 | -0.3 |
| KMRS | | | | eSn | Sg | 00 48 14.1 | -0.6 |
| BIDA | Albida | 1.50 | 217 | eP | Pn | 00 47 52.8 | -5.3 |
| BIDA | | | | eS | Sn | 00 48 15.3 | -2.3 |
| BIDA | | | | AML | AML | 00 48 22.3 | |
| | comp=E,15nm,0.3s | | | | | | |
| BIDA | | | | AML | AML | 00 48 23.7 | |
| | comp=N,36nm,0.4s | | | | | | |
| BIDA | Albida | 1.50 | 217 | eP | Pn | 00 47 52.8 | -5.3 |
| BIDA | | | | eS | Sn | 00 48 15.3 | -2.3 |
| | comp=N,37nm,0.4s | | | | | | |
| ANDN | Andirin | 1.61 | 328 | iP | Pg | 00 48 01.3 | -0.8 |
| ANDN | Andirin | 1.61 | 328 | P | Pg | 00 48 01.3 | -0.8 |
| ANDN | | | | S | Sg | 00 48 25.1 | +2.1 |
| URFA | Urfa | 1.66 | 42 | ePN | Pb | 00 48 01.5 | -0.4 |
| URFA | Urfa | 1.66 | 42 | ePn | Pb | 00 48 01.5 | -0.4 |
| MALT | Malatya | 2.24 | 21 | ePN | Pn | 00 48 09.3 | +0.9 |
| MALT | Malatya | 2.24 | 21 | ePn | Pn | 00 48 09.3 | +0.9 |
| SARI | SarD1z-Kayseri | 2.33 | 340 | ePN | Pn | 00 48 10.4 | +0.9 |
| SVRC | Sivrice-ELAZID | 2.63 | 34 | ePN | Pn | 00 48 14.9 | +1.1 |
| SVRC | Sivrice-ELAZID | 2.63 | 34 | ePn | Pn | 00 48 14.9 | +1.1 |
| MAZI | Mazidag | 2.73 | 62 | ePN | Pn | 00 48 17.1 | +2.1 |
| MAZI | Mazidag | 2.73 | 62 | ePn | Pn | 00 48 17.2 | +2.1 |
| ILIC | ilic-Erzincan | 3.35 | 15 | ePN | Pn | 00 48 24.3 | +0.6 |
| ILIC | ilic-Erzincan | 3.35 | 15 | ePn | Pn | 00 48 24.3 | +0.6 |

*NIED **10** 01:00:00, 35°.90N×140°.60E, h38km, Mw4.0 Best double couple: M0 9.65000×10^14 NP1: ϕs289.00000°, δ30.00000°, λ167.00000°. NP2: ϕs30.00000°, δ84.00000°, λ60.00000°.*
*ISCJB **10** 01:00:03.5±0.5, 35°.81N±0°.04×140°.53E±0°.06, h38km±5km, mb3.8/12, MS3.0/1, Error ellipse: s-maj=8.1km s-min=5.8km az=147.4*
*JMA **10** 01:00:04.1, 35°.86N×140°.53E, h34km±1km, M4.2 Broadband fault plane solution: P waves. NP1: ϕs21.00000°, δ61.00000°, λ68.00000°. NP2: ϕs239.00000°, δ36.00000°, λ123.00000°. Principal axes: T Plg67.0000°, Azm249.0000°; N Plg19.0000°, Azm32.0000°; P Plg13.0000°, Azm126.0000°;*
*JMA Felt III J1.*
*IDC **10** 01:00:06.4±1.8, 35°.68N×140°.40E, h50km±16km, mb3.6/12, mb1 3.8/15, mb1mx3.7/33, mbtmp3.9/15, ML2.4/2, MS2.8/3, Ms1 2.8/3, ms1mx2.6/49 Error ellipse: s-maj=21.1km s-min=7.8km az=66.0*

**ISC 10 01:00:04.5±1.0, 35°.84N±0°.04×140°.55E±0°.06, h34km±3km, n31, σ1s.21/28, mb3.9/12, 1C-2D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHOJ | Chosi | 0.28 | 118 | ⇑P | Pb | 01 00 11.8 | -0.3 |
| CHOJ | | | | S | Sb | 01 00 17.2 | -0.1 |
| JYT | Yasato | 0.49 | 324 | ⇓P | Pb | 01 00 14.0 | -0.9 |
| JYT | | | | S | Sb | 01 00 20.6 | -1.5 |
| JHO | Hitachi | 0.77 | 1 | ⇓P | Pn | 01 00 17.8 | -1.2 |
| JHO | | | | S | Sn | 01 00 27.3 | -2.2 |
| BSO4 | Boso 4 | 0.86 | 192 | P | Pb | 01 00 20.8 | -0.2 |
| MJAR | Matsushiro Arr | 2.02 | 291 | P | Pn | 01 00 36.0 | -0.1 |
| | 32nm,0.3s,baz=91,slow=8.3,SNR=496 | | | | | | |
| MJAR | | | | S | Sn | 01 01 01.1 | +0.9 |
| | 21nm,0.3s,baz=117,slow=15,SNR=8.4 | | | | | | |
| MJAR | | | | LR | LR | 01 01 33.3 | |
| | comp=Z,297nm,18.3s,baz=110,slow=45 | | | | | | |
| MAT | Matsushiro | 2.02 | 291 | P | Pn | 01 00 36.6 | +0.4 |
| MAT | | | | eS | Sn | 01 01 00.7 | +0.4 |
| JHJ | Hachijo jima 2 | 2.78 | 193 | P | Pn | 01 00 46.0 | -0.7 |
| | 66nm,0.3s,baz=70,slow=18,SNR=2.4 | | | | | | |
| JHJ | | | | S | Sn | 01 01 16.8 | -2.3 |
| | 113nm,0.3s,baz=346,slow=23,SNR=6.0 | | | | | | |
| ASAJ | Asahikawa | 8.42 | 10 | LR | LR | 01 05 17.3 | |
| | comp=Z,45nm,19.6s,baz=101,slow=36 | | | | | | |
| KSRS | Korea Array | 10.28 | 283 | P | Pn | 01 02 30.2 | +0.8 |
| | 0.1nm,0.3s,baz=94,slow=15,SNR=2.5 | | | | | | |
| KSRS | | | | LR | LR | 01 06 41.5 | |
| | comp=Z,38nm,19.8s,baz=117,slow=39 | | | | | | |
| USRK | Ussuriysk Ar. | 10.62 | 324 | P | Pn | 01 02 37.0 | +2.9 |
| | 0.2nm,0.3s,baz=133,slow=12,SNR=6.2 | | | | | | |
| PETK | Petropavlovsk- | 21.07 | 30 | P | P | 01 04 48.7 | +3.2 |
| | 1.4nm,0.6s,baz=245,slow=3.1,SNR=4.2 | | | | | | |
| YAK | Yakutsk | 27.10 | 349 | LR | LR | 01 16 16.5 | |
| | comp=Z,41nm,19.5s,baz=135,slow=36 | | | | | | |
| SONM | Songino Array | 27.90 | 306 | P | P | 01 05 51.3 | 0.0 |
| | 0.5nm,0.5s,baz=106,slow=9.5,SNR=5.3 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 28.17 | 118 | T | T | 01 35 06.5 | |
| | baz=310,slow=75,SNR=51 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 28.18 | 118 | T | T | 01 35 15.2 | |
| | baz=310,slow=75,SNR=43 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 28.19 | 118 | T | T | 01 35 12.1 | |
| | baz=310,slow=75,SNR=50 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 28.83 | 120 | T | T | 01 35 57.6 | |
| | baz=312,slow=75,SNR=42 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 28.83 | 120 | T | T | 01 35 50.5 | |
| | baz=312,slow=75,SNR=57 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 28.85 | 120 | T | T | 01 35 59.9 | |
| | baz=312,slow=75,SNR=39 | | | | | | |
| ZALV | Zalesovo Beam | 42.22 | 313 | P | P | 01 07 53.4 | -0.6 |
| | 0.7nm,0.3s,baz=87,slow=7.6,SNR=8.1 | | | | | | |
| MKAR | Makanchi Array | 44.18 | 303 | P | P | 01 08 10.3 | +0.4 |
| | 13nm,1.3s,baz=86,slow=9.4,SNR=13 | | | | | | |
| ILAR | Eielson Array | 50.88 | 32 | P | P | 01 09 02.8 | +1.1 |
| | 0.4nm,0.5s,baz=310,slow=3.6,SNR=5.2 | | | | | | |
| WRA | Warramunga Arr | 55.78 | 187 | P | P | 01 09 36.8 | -1.4 |
| | 0.9nm,0.5s,baz=2.0,slow=7.5,SNR=12 | | | | | | |
| ASAR | Alice Springs | 59.51 | 187 | P | P | 01 10 04.6 | +0.2 |
| | 0.6nm,0.5s,baz=16,slow=12,SNR=9.9 | | | | | | |
| FINES | FINESS Array B | 69.55 | 332 | P | P | 01 11 09.8 | +0.4 |
| | 1.9nm,0.8s,baz=56,slow=4.8,SNR=8.0 | | | | | | |
| AKASG | Malin Array Be | 74.82 | 322 | P | P | 01 11 41.3 | +0.1 |
| | 1.3nm,0.5s,baz=48,slow=6.0,SNR=7.8 | | | | | | |
| NB2 | NORSAR Subarra | 75.02 | 337 | P | P | 01 11 42.5 | +0.3 |
| | comp=Z,0.9nm,0.5s,baz=42,slow=5.9 | | | | | | |
| NOA | NORSAR Array B | 75.02 | 337 | P | P | 01 11 42.8 | +0.5 |
| | comp=Z,1.1nm,0.5s,baz=41,slow=5.9,SNR=7.2 | | | | | | |
| GERES | GERESS Array B | 83.36 | 328 | P | P | 01 12 27.7 | -0.4 |
| | comp=Z,0.2nm,0.5s,baz=36,slow=8.5,SNR=3.2 | | | | | | |
| TXAR | Lajitas Array | 91.40 | 52 | P | P | 01 13 08.8 | +1.4 |
| | comp=Z,0.2nm,0.7s,baz=255,slow=1.8,SNR=3.4 | | | | | | |
| LPAZ | La Paz | 147.90 | 60 | PKPbc | PKPab | 01 19 48.5 | -1.3 |
| | comp=Z,0.8nm,0.7s,baz=36,slow=8.7,SNR=3.8 | | | | | | |

*ISK **10** 01:00:41.5, 37°.82N×27°.28E, h6km, MD2.7*
*CSEM **10** 01:00:42.3±0.5, 37°.86N×27°.20E, h10km, MD2.7, Error ellipse: s-maj=13.0km s-min=11.0km az=55.0*
*ISCJB **10** 01:00:43.2±0.6, 37°.90N±0°.04×27°.29E±0°.04, h13km, Error ellipse: s-maj=6.5km s-min=4.8km az=22.3*
*DDA **10** 01:00:43.7, 37°.89N×27°.25E, h7km, Md2.6*

**ISC 10 01:00:41.9±0.9, 37°.86N±0°.03×27°.23E±0°.04, h13km, n15, σ0s.68/22, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GCAM | G?zelcaml? | 0.16 | 178 | iP | Pb | 01 00 47.6 | +0.9 |
| GCAM | | | | iS | Sb | 01 00 50.5 | +0.6 |
| GCAM | G?zelcaml? | 0.16 | 178 | P | Pb | 01 00 47.6 | +0.9 |
| GCAM | | | | S | Sb | 01 00 50.5 | +0.6 |
| AYDB | Zeytinkoy-Aydi | 0.53 | 81 | ePG | Pg | 01 00 52.3 | -0.1 |
| AYDB | | | | eSG | Sg | 01 00 58.8 | -0.7 |
| AYDB | Zeytinkoy-Aydi | 0.53 | 81 | ePg | Pg | 01 00 52.3 | -0.1 |
| AYDB | | | | eSg | Sg | 01 00 58.8 | -0.7 |
| IZM | Izmir | 0.54 | 3 | ePG | Pb | 01 00 53.4 | +0.1 |
| IZM | Izmir | 0.54 | 3 | ePg | Pb | 01 00 53.4 | +0.1 |
| AYDN | Tasoluk | 0.56 | 111 | iP | Pn | 01 00 55.4 | -0.2 |
| AYDN | | | | iS | Sb | 01 01 02.2 | +0.8 |
| AYDN | Tasoluk | 0.56 | 111 | P | Pn | 01 00 55.4 | -0.2 |
| AYDN | | | | S | Sb | 01 01 02.2 | +0.8 |
| ZEY | ˜zmir | 0.68 | 304 | P | Pn | 01 00 57.1 | -0.2 |
| ZEY | | | | S | Sn | 01 01 07.4 | -0.4 |
| BODT | Bodrum | 0.80 | 175 | ePG | Pg | 01 00 56.2 | -1.2 |
| BODT | Bodrum | 0.80 | 175 | ePg | Pg | 01 00 56.2 | -1.2 |
| CHOS | Chios island | 1.06 | 300 | ePN | Pn | 01 01 03.2 | +0.6 |
| CHOS | Chios island | 1.06 | 300 | ePn | Pn | 01 01 03.2 | +0.6 |
| AKS | Akhisar | 1.12 | 24 | ePN | Pb | 01 01 03.5 | +0.4 |
| AKS | Akhisar | 1.12 | 24 | ePn | Pb | 01 01 03.5 | +0.4 |

*NIED **10** 01:04:00, 35°.90N×140°.50E, h20km, Mw3.6 Best double couple: M0 2.45000×10^14 NP1: ϕs222.00000°, δ16.00000°, λ70.00000°. NP2: ϕs63.00000°, δ75.00000°, λ96.00000°.*
*IDC **10** 01:04:55.0±1.5, 35°.90N×140°.54E, h0km, mb3.5/5, mb1 3.6/6, mb1mx3.5/28, mbtmp3.5/6, ML3.8/1, MS2.8/1, Ms1 2.8/1, ms1mx2.4/43, Error ellipse: s-maj=39.0km s-min=19.9km az=60.0*
*ISCJB **10** 01:04:57.1±0.6, 35°.92N±0°.05×140°.63E±0°.07, h33km±6km, mb3.7/9, Error ellipse: s-maj=10.3km s-min=6.7km az=139.2*
*JMA **10** 01:04:57.3±0.1, 35°.86N×140°.53E, h33km±1km, M3.6 Broadband fault plane solution: P waves. NP1: ϕs49.00000°, δ58.00000°, λ107.00000°. NP2: ϕs199.00000°, δ36.00000°, λ64.00000°. Principal axes: T Plg71.0000°, Azm0.0000°; N Plg15.0000°, Azm220.0000°; P Plg12.0000°, Azm127.0000°;*
*JMA Felt II J1.*
*NEIC **10** 01:04:59.8±0.8, 35°.97N×140°.49E, h35km, mb4.0/4 Error ellipse: s-maj=14.7km s-min=11.2km az=101.0*
*NEIC Recorded [3 JMA] in Chiba, [2 JMA] in Ibaraki and [1 JMA] in Saitama, Tochigi and Tokyo.*

**ISC 10 01:04:57.9±0.7, 35°.91N±0°.05×140°.54E±0°.05, h22km±4km, n18, σ0s.85/22, mb3.6/9, 1C-2D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHOJ | Chosi | 0.33 | 128 | ⇑P | Pb | 01 05 04.9 | -0.2 |
| CHOJ | | | | S | Sb | 01 05 10.2 | +0.2 |
| JYT | Yasato | 0.43 | 319 | ⇓P | Pb | 01 05 07.2 | +0.4 |
| JYT | | | | S | Sb | 01 05 13.8 | +1.0 |
| JHO | Hitachi | 0.70 | 2 | ⇓P | Pb | 01 05 11.0 | -0.6 |
| JHO | | | | S | Sb | 01 05 20.8 | 0.0 |
| MJAR | Matsushiro Arr | 1.99 | 289 | Pn | Pn | 01 05 29.0 | -1.3 |
| | 9.0nm,0.3s,baz=98,slow=15,SNR=40 | | | | | | |
| MJAR | | | | Sn | Sb | 01 05 57.3 | -0.5 |
| | 7.4nm,0.3s,baz=112,slow=16,SNR=5.4 | | | | | | |
| MAJO | Matsushiro | 1.99 | 289 | ePn | Pn | 01 05 29.9 | -0.4 |
| MAT | Matsushiro | 1.99 | 289 | P | Pn | 01 05 29.7 | -0.6 |
| MAT | | | | eS | Sn | 01 05 53.9 | -0.7 |
| ERM | Erimo | 6.43 | 18 | ePn | Pn | 01 06 30.8 | -0.4 |
| ASAJ | Asahikawa | 8.35 | 10 | Pn | Pn | 01 06 57.1 | -0.5 |
| | 1.2nm,0.3s,baz=182,slow=17,SNR=10 | | | | | | |
| JNU | Nakatsue | 8.45 | 254 | LR | LR | 01 10 32.9 | |
| | comp=Z,55nm,18.9s,baz=122,slow=40 | | | | | | |
| SONM | Songino Array | 27.85 | 306 | P | P | 01 10 46.2 | +0.3 |
| | 0.3nm,0.5s,baz=119,slow=9.4,SNR=3.6 | | | | | | |
| ZALV | Zalesovo Beam | 42.16 | 313 | P | P | 01 12 50.2 | +1.6 |
| | 0.5nm,0.5s,baz=90,slow=8.6,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 44.13 | 303 | P | P | 01 13 03.5 | -1.1 |
| | 0.5nm,0.8s,baz=91,slow=9.9,SNR=3.5 | | | | | | |
| KAPI | Kappang | 45.14 | 210 | eP | P | 01 13 12.8 | 0.0 |
| | 2.5nm,0.7s | | | | | | |
| KURK | Kurchatov | 46.08 | 309 | eP | P | 01 13 18.9 | -1.1 |
| | 0.8nm,0.3s | | | | | | |
| BRVK | Borovoye | 50.87 | 313 | eP | P | 01 13 56.5 | -0.5 |
| | 0.8nm,0.5s | | | | | | |
| EKS2 | Erkin-Say | 50.91 | 299 | eP | P | 01 13 58.0 | +0.4 |
| | 0.9nm,0.5s | | | | | | |
| WRA | Warramunga Arr | 55.85 | 187 | P | P | 01 14 33.2 | -0.6 |
| | 0.3nm,0.4s,baz=1.0,slow=7.4,SNR=6.1 | | | | | | |
| ASAR | Alice Springs | 59.58 | 187 | P | P | 01 15 01.4 | +1.4 |
| | 0.4nm,0.9s,baz=13,slow=9.5,SNR=3.6 | | | | | | |

**IDC 10 01:22:21.3±2.1, 5°.99S×149°.68E, h0km, mb3.5/3, mb1 3.8/4, mb1mx3.4/38, mbtmp3.6/4, ML1.2/1, Error ellipse: s-maj=135.6km s-min=24.6km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.21 | 216 | Pn | Pn | 01 23 28.6 | +1.7 |
| | 1.1nm,0.3s,baz=47,slow=18,SNR=2.4 | | | | | | |
| PMG | | | | Sn | Sn | 01 24 17.6 | +0.7 |
| | 1.4nm,0.3s,baz=4.5,slow=21,SNR=5.6 | | | | | | |
| WRA | Warramunga Arr | 20.36 | 226 | P | P | 01 27 00.1 | +0.4 |
| | 1.3nm,0.7s,baz=51,slow=10.0,SNR=6.7 | | | | | | |
| ASAR | Alice Springs | 23.22 | 219 | P | P | 01 27 28.8 | -1.5 |
| | 0.7nm,0.8s,baz=51,slow=10,SNR=5.8 | | | | | | |
| ILAR | Eielson Array | 84.43 | 23 | P | P | 01 34 55.2 | -0.3 |
| | 0.6nm,0.7s,baz=255,slow=5.2,SNR=4.5 | | | | | | |
| TORD | Torodi Ar. Bea | 147.66 | 285 | PKPbc | PKPbc | 01 42 08.8 | -0.1 |
| | 0.5nm,0.5s,baz=82,slow=2.5,SNR=14 | | | | | | |

**IDC 10 01:33:35.1±6.9, 17°.35S×70°.28W, h134km±32km, mb3.6/3, mb1 3.6/4, mb1mx3.3/30, mbtmp3.9/4, Error ellipse: s-maj=155.0km s-min=30.4km az=130.0, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 2.31 | 63 | P | Pn | 01 34 13.7 | -0.2 |
| | 6.8nm,0.3s,baz=252,slow=6.4,SNR=189 | | | | | | |
| LPAZ | | | | S | Sn | 01 34 43.9 | +0.2 |
| | 1.0nm,0.3s,baz=71,slow=10,SNR=3.6 | | | | | | |
| DBIC | Dimbokro | 68.87 | 76 | P | P | 01 44 25.8 | -0.1 |
| | 1.8nm,0.6s,baz=215,slow=10,SNR=5.3 | | | | | | |
| QSPA | South Pole Qui | 72.82 | 180 | P | P | 01 44 49.1 | +0.1 |
| | 2.6nm,1.2s,baz=221,slow=7.4,SNR=4.8 | | | | | | |
| TORD | Torodi Ar. Bea | 77.23 | 72 | P | P | 01 45 15.2 | +0.2 |
| | 0.2nm,0.3s,baz=246,slow=5.4,SNR=10 | | | | | | |

*ISCJB **10** 01:40:25.1±1.0, 9°.81S±0°.08×149°.11E±0°.10, h22km, mb4.2/3, MS3.0/2, Error ellipse: s-maj=13.5km s-min=11.9km az=179.6*
*IDC **10** 01:40:25.6±1.7, 9°.66S×148°.93E, h0km, mb4.2/2, mb1 4.3/5, mb1mx3.9/38, mbtmp4.1/5, ML3.6/3, MS3.1/3, Ms1 3.1/3, ms1mx2.8/29, Error ellipse: s-maj=32.9km s-min=23.9km az=113.0*
*NEIC **10** 01:40:30.5±1.4, 9°.73S×148°.87E, h35km, mb4.1/1, Error ellipse: s-maj=27.2km s-min=14.4km az=104.0*

**ISC 10 01:40:28.1±1.3, 9°.7S±0°.1×148°.9E±0°.1, h22km, n13, σ0s.74/12, mb4.2/3, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 1.79 | 281 | Pn | Pn | 01 40 56.7 | -1.0 |
| | 54nm,0.3s,baz=85,slow=5.1,SNR=54 | | | | | | |
| PMG | | | | Sn | Sb | 01 41 22.6 | +0.3 |
| | 111nm,0.3s,baz=215,slow=21,SNR=18 | | | | | | |
| COEN | Coen | 7.03 | 233 | ePn | Pn | 01 42 09.7 | 0.0 |
| CTA | Charters Tower | 10.61 | 194 | Pn | Pn | 01 42 58.2 | -0.7 |
| | 0.2nm,0.3s,baz=23,slow=15,SNR=2.7 | | | | | | |
| JAY | Jayapura | 10.89 | 311 | LR | LR | 01 47 45.6 | |
| | comp=Z,76nm,20.0s,baz=16,slow=41 | | | | | | |
| WRAB | Tennant Creek | 17.35 | 233 | ePn | P | 01 44 31.5 | +1.2 |
| WRA | Warramunga Arr | 17.36 | 233 | P | Pn | 01 44 28.5 | -0.7 |
| | 0.2nm,0.3s,baz=55,slow=11,SNR=8.9 | | | | | | |
| ASAR | Alice Springs | 19.95 | 224 | P | Pn | 01 45 01.1 | +0.5 |
| | 0.9nm,0.3s,baz=60,slow=9.9,SNR=63 | | | | | | |
| ASAR | | | | LR | LR | 01 52 47.2 | |
| | comp=Z,92nm,18.3s,baz=72,slow=37 | | | | | | |
| GUMO | Guam | 23.53 | 350 | LR | LR | 01 54 57.4 | |
| | comp=Z,37nm,18.2s,baz=103,slow=37 | | | | | | |
| KAPI | Kappang | 29.32 | 277 | eP | P | 01 46 29.4 | -0.1 |
| | 1.9nm,0.5s | | | | | | |
| MJAR | Matsushiro Arr | 47.13 | 348 | P | P | 01 48 58.9 | +0.1 |
| | 4.9nm,1.2s,baz=167,slow=9.0,SNR=4.7 | | | | | | |
| KSRS | Korea Array | 50.91 | 338 | P | P | 01 49 28.0 | +0.3 |
| | 2.2nm,0.8s,baz=169,slow=9.5,SNR=6.5 | | | | | | |
| KSAR | Wonju Array Be | 50.92 | 338 | P | P | 01 49 28.0 | +0.2 |
| TORD | Torodi Ar. Bea | 147.73 | 279 | PKPbc | PKPbc | 02 00 13.1 | +0.9 |
| | 1.0nm,0.8s,baz=100,slow=2.0,SNR=7.4 | | | | | | |

**KRSC 10 01:40:52.7±2.0, 56°.09N×163°.69E, h17km±14km, ML4.0, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KBTR | Krutoberegovo | 0.50 | 284 | eP | Pg | 01 41 02.5 | -0.2 |
| KBTR | | | | S | Sg | 01 41 07.9 | -1.6 |
| KBG | Krutoberegovo | 0.57 | 287 | eP | Pg | 01 41 03.6 | -0.4 |
| KBG | | | | eS | Sg | 01 41 09.9 | -1.8 |
| SMKR | Semkarok | 1.33 | 293 | eP | Pb | 01 41 17.3 | 0.0 |
| SMKR | | | | eS | Sn | 01 41 33.9 | -0.1 |
| BDR | Baidarnaya | 1.46 | 290 | eP | Pb | 01 41 19.6 | +0.1 |
| BDR | | | | eS | Sb | 01 41 38.0 | +0.1 |
| SRKR | Sorokina | 1.51 | 293 | eP | Pb | 01 41 20.4 | 0.0 |
| SRKR | | | | eS | Sn | 01 41 38.8 | +0.4 |
| KLY | Klyuchi | 1.71 | 279 | eP | Pn | 01 41 21.5 | -0.2 |
| KLY | | | | eS | Sn | 01 41 40.9 | -2.2 |
| MKZ | Mys Kozlova | 1.90 | 217 | eP | Pb | 01 41 27.0 | +0.2 |
| MKZ | | | | eS | Sb | 01 41 50.9 | +0.7 |
| KMNR | Kamenistaya | 1.97 | 262 | P | Pb | 01 41 28.2 | 0.0 |
| KMNR | | | | eS | Sb | 01 41 53.7 | +1.1 |
| KOZ | Kozyrevsk | 2.14 | 271 | eP | Pb | 01 41 31.2 | +0.2 |
| KZV | Kizimen | 2.16 | 244 | eP | Pb | 01 41 31.2 | -0.3 |
| KZV | | | | eS | Sb | 01 41 57.6 | -0.5 |
| TUMR | Tumrok | 2.16 | 250 | eP | Pb | 01 41 31.5 | 0.0 |
| SRDR | Sredinnyy | 2.23 | 278 | eP | Pb | 01 41 32.3 | -0.3 |
| SRDR | | | | eS | Sb | 01 42 00.4 | +0.5 |
| ESO | Esso | 2.80 | 269 | eP | Pb | 01 41 40.6 | -1.7 |
| ESO | | | | eS | Sb | 01 42 14.4 | -2.0 |
| OSSR | Ossora | 3.19 | 354 | eP | Pn | 01 41 43.9 | +2.0 |
| OSSR | | | | eS | Sn | 01 42 20.3 | +0.8 |
| KII | Karymskiy | 3.19 | 232 | eP | Pb | 01 41 46.3 | -2.7 |
| SPN | Mys Shipunski | 3.68 | 217 | eP | Pn | 01 41 51.5 | +2.8 |
| SPN | | | | eS | Sn | 01 42 32.3 | +0.7 |
| NLC | Nalytchevo | 3.86 | 223 | eP | Pn | 01 41 54.4 | +3.2 |
| NLC | | | | eS | Sn | 01 42 38.8 | +2.7 |
| SDLR | Sedlovina | 3.96 | 227 | eP | Pn | 01 41 57.3 | +4.5 |
| SDLR | | | | eS | Sn | 01 42 43.8 | +4.9 |
| KRX | Arik | 4.00 | 229 | eP | Pn | 01 41 57.9 | +4.5 |
| KRX | | | | S | Sn | 01 42 43.2 | +3.2 |
| SMAR | Somma | 4.01 | 227 | eP | Pn | 01 41 58.1 | +4.6 |
| SMAR | | | | eS | Sn | 01 42 43.0 | +2.7 |
| AVH | Avacha | 4.03 | 227 | eP | Pb | 01 41 58.7 | -4.6 |
| UGLR | Uglovaya | 4.04 | 226 | eP | Pn | 01 41 58.0 | +4.2 |
| KOK | Koryaka | 4.05 | 228 | eP | Pn | 01 41 58.6 | +4.6 |
| GNL | Ganaly | 4.09 | 236 | eP | Pn | 01 41 58.8 | +4.2 |
| PET | Petropavlovsk | 4.24 | 226 | eP | Pn | 01 41 59.8 | +3.3 |
| PET | | | | eS | Sn | 01 42 48.5 | +2.9 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| RUS | Russkaya | 4.75 | 222 | eP | Pn | 01 42 06.8 | +3.3 |
| RUS | | | | eS | Sn | 01 43 02.2 | +4.1 |

*IDC* **10** *01:41:39.6±0.5, 39.°12N×72.°46E, h0$^{km}$, mb4.4/26, mb1 4.5/33, mb1mx4.4/55, mbtmp4.4/33, ML4.2/7, MS3.7/19, Ms1 3.7/19, ms1mx3.6/39, Error ellipse: s-maj=10.1km s-min=9.2km az=170.0*

*ISCJB* **10** *01:41:40.7±0.1, 39.°12N±0.°02×72.°59E±0.°02, h10$^{km}$, mb4.4/66, MS3.6/15, Error ellipse: s-maj=2.5km s-min=2.4km az=165.8*

*KRNET* **10** *01:41:42.3±0.1, 39.°15N×72.°81E, mb5.0*

*NNC* **10** *01:41:42.4±1.4, 39.°32N×72.°51E, h0$^{km}$, mb5.1, mpv4.9, Error ellipse: s-maj=14.1km s-min=5.3km az=159.0*

*MOS* **10** *01:41:46.1±1.4, 39.°28N×72.°58E, h51$^{km}$, mb4.7/37, Error ellipse: s-maj=6.0km s-min=4.7km az=108.9*

*BJI* **10** *01:41:47.5, 39.°36N×72.°68E, h61$^{km}$, mb4.7/42, mB4.7/26, ML4.5/6, Ms4.1/26, Ms7 4.0/26*

*NEIC* **10** *01:41:48.3±0.6, 39.°27N×72.°46E, h62$^{km}$±5$^{km}$, mb4.7/25, Error ellipse: s-maj=5.2km s-min=4.0km az=184.0*

**ISC 10 01:41:41.8**±0.9**, 39.°29N**±0.°02×**72.°55E**±0.°02**, h10**$^{km}$±5$^{km}$**, n326, σ2.°06**/326**, mb4.5**/66**, MS3.6**/15**, 54C-50D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 1.03 | 45 | ⇓P | Pg | 01 42 02.1 | +0.4 |
| | 387nm,0.5s | | | | | | |
| SFK | | | | ⇑S | Sb | 01 42 17.0 | +1.4 |
| | 805nm,0.3s | | | | | | |
| SFK | Sufi-Kurgan | 1.03 | 45 | P | Pg | 01 42 02.0 | +0.4 |
| SFK | | | | S | Sn | 01 42 18.2 | +1.0 |
| SFK | | | | pmax | pmax | | |
| | comp=Z,368nm,0.5s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,685nm,0.2s | | | | | | |
| SFK | Sufi-Kurgan | 1.03 | 45 | ⇓iP | Pg | 01 42 02.1 | +0.4 |
| | baz=31 | | | | | | |
| SFK | | | | ⇓iS | Sg | 01 42 15.4 | +0.3 |
| | baz=31 | | | | | | |
| SFK | Sufi-Kurgan | 1.03 | 45 | ⇓iP | Pg | 01 42 02.1 | +0.4 |
| | baz=31 | | | | | | |
| SFK | | | | ⇓iS | Sg | 01 42 16.4 | +1.3 |
| | baz=31 | | | | | | |
| ARSB | Arslanbob | 2.06 | 9 | ⇓iP | Pb | 01 42 20.3 | +0.9 |
| | baz=3.0 | | | | | | |
| ARSB | | | | ⇓iS | Sg | 01 42 50.0 | +2.1 |
| | baz=3.0 | | | | | | |
| ARK | Arkit | 2.54 | 350 | ⇓iP | Pb | 01 42 26.1 | -1.5 |
| | baz=347 | | | | | | |
| ARK | | | | ⇓iS | Sg | 01 43 03.0 | -0.5 |
| | baz=347 | | | | | | |
| KSH | Kashi | 2.66 | 84 | ⇑iP | Pn | 01 42 25.6 | +0.7 |
| KSH | | | | S | Sn | 01 42 50.0 | -7.3 |
| KSH | | | | SMN | | | |
| | comp=N,2μm,0.8s | | | | | | |
| KSH | | | | SME | | | |
| | comp=N,4μm,1.4s | | | | | | |
| ARLS | Aral | 2.90 | 27 | ⇓iP | Pb | 01 42 32.3 | -1.4 |
| | baz=23 | | | | | | |
| ARLS | | | | ⇓iS | Sb | 01 43 10.5 | +1.1 |
| | baz=23 | | | | | | |
| DZET | Dzherino | 2.94 | 262 | ⇑Pn | Pn | 01 42 30.0 | +1.4 |
| | comp=N,652nm,0.4s | | | | | | |
| DZET | | | | ⇑Lg | Lg | 01 43 11.3 | |
| | comp=N,2μm,0.5s | | | | | | |
| DZET | Dzherino | 2.94 | 262 | PN | Pn | 01 42 30.7 | +2.1 |
| DZET | | | | | | 01 43 10.9 | |
| DZET | | | | pmax | pmax | | |
| | comp=Z,653nm,0.4s | | | | | | |
| DZET | | | | smax | smax | | |
| | comp=N,3μm,0.6s | | | | | | |
| AML | Almayashu | 2.97 | 17 | ⇓iP | Pb | 01 42 33.9 | -1.1 |
| | baz=12 | | | | | | |
| AML | | | | ⇓iS | Sb | 01 43 10.5 | -1.0 |
| | baz=12 | | | | | | |
| AML | Almayashu | 2.97 | 17 | P | Pb | 01 42 33.9 | -1.1 |
| | SNR=345 | | | | | | |
| MNAS | Manas | 3.19 | 359 | ⇓Pn | Pb | 01 42 36.4 | -2.3 |
| | comp=N,518nm,0.5s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 01 43 16.9 | |
| | comp=N,3μm,0.7s | | | | | | |
| MNAS | Manas | 3.19 | 359 | PN | Pb | 01 42 36.4 | -2.3 |
| MNAS | | | | | | 01 43 16.9 | |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,715nm,0.5s | | | | | | |
| MNAS | | | | smax | smax | | |
| | comp=N,3μm,0.7s | | | | | | |
| MNAS | Manas | 3.19 | 359 | ⇑iP | Pb | 01 42 36.3 | -2.4 |
| | baz=356 | | | | | | |
| MNAS | | | | ⇑iS | Sb | 01 43 18.2 | +0.4 |
| | baz=356 | | | | | | |
| MNAS | Manas | 3.19 | 359 | ⇓iP | Pb | 01 42 36.5 | -2.3 |
| | baz=356 | | | | | | |
| MNAS | | | | ⇓iS | Sb | 01 43 18.1 | +0.3 |
| | baz=356 | | | | | | |
| UCH | Uchtor | 3.29 | 26 | ⇓iP | Pb | 01 42 38.5 | -2.1 |
| | baz=22 | | | | | | |
| UCH | | | | ⇓iS | Sn | 01 43 17.6 | +4.3 |
| | baz=22 | | | | | | |
| UCH | Uchtor | 3.29 | 26 | P | Pb | 01 42 38.7 | -1.9 |
| | SNR=62 | | | | | | |
| NRN | Naryn | 3.40 | 50 | ⇑eP | Pn | 01 42 39.2 | +4.0 |
| | baz=46 | | | | | | |
| NRN | | | | ⇑iS | Sb | 01 43 27.2 | +3.4 |
| | baz=46 | | | | | | |
| KZA | Kyzart | 3.46 | 36 | ⇑iP | Pb | 01 42 41.0 | -2.4 |
| | baz=32 | | | | | | |
| KZA | | | | ⇑iS | Sb | 01 43 23.6 | -2.1 |
| | baz=32 | | | | | | |
| KZA | Kyzart | 3.46 | 36 | P | Pb | 01 42 41.5 | -1.9 |
| | SNR=41 | | | | | | |
| EKS2 | Erkin-Say | 3.50 | 15 | ePN | Pb | 01 42 40.8 | -3.0 |
| EKS2 | Erkin-Say | 3.50 | 15 | ⇑iP | Pb | 01 42 41.0 | -2.8 |
| | baz=12 | | | | | | |
| EKS2 | | | | ⇑iS | Sb | 01 43 23.8 | -2.6 |
| | baz=12 | | | | | | |
| EKS2 | Erkin-Say | 3.50 | 15 | P | Pb | 01 42 41.2 | -2.6 |
| | SNR=98 | | | | | | |
| EKS2 | Erkin-Say | 3.50 | 15 | ePn | Pb | 01 42 40.8 | -3.0 |
| EKS2 | | | | eSn | Sn | 01 43 19.2 | +1.4 |
| EKS | Erkin-Say | 3.50 | 15 | ⇓iP | Pb | 01 42 41.6 | -2.3 |
| | baz=12 | | | | | | |
| EKS | | | | ⇓iS | Sb | 01 43 25.3 | -1.3 |
| | baz=12 | | | | | | |
| AAK | Ala-Archa | 3.65 | 23 | Pn | Pb | 01 42 43.7 | -2.8 |
| | comp=N,17nm,0.3s,baz=195,slow=9.1,SNR=144 | | | | | | |
| AAK | | | | Sn | Sb | 01 43 30.5 | -0.4 |
| | comp=N,87nm,0.3s,baz=21,slow=20,SNR=11 | | | | | | |
| AAK | | | | LR | LR | 01 44 26.2 | |
| | comp=N,416nm,19.1s,baz=196,slow=43 | | | | | | |
| AAK | Ala-Archa | 3.65 | 23 | d iPN | Pb | 01 42 43.5 | -3.0 |
| AAK | Ala-Archa | 3.65 | 23 | ⇓iP | Pb | 01 42 43.7 | -2.8 |
| | baz=20 | | | | | | |
| AAK | | | | ⇓iS | Sb | 01 43 27.9 | -3.0 |
| | baz=20 | | | | | | |
| AAK | Ala-Archa | 3.65 | 23 | P | Pb | 01 42 43.8 | -2.8 |
| | SNR=109 | | | | | | |
| AAK | Ala-Archa | 3.65 | 23 | ePn | Pb | 01 42 43.7 | -2.8 |
| AAK | | | | eSn | Sb | 01 43 27.1 | -3.9 |
| KBK | Karagaybulak | 3.82 | 28 | ⇓iP | Pb | 01 42 46.5 | -2.9 |
| | baz=24 | | | | | | |
| KBK | | | | ⇓iS | Sn | 01 43 31.2 | +5.2 |
| | baz=24 | | | | | | |
| KBK | Karagaybulak | 3.82 | 28 | P | Pb | 01 42 46.5 | -2.9 |
| | SNR=51 | | | | | | |
| FRU | Bishkek | 3.87 | 23 | i PN | Pb | 01 42 47.0 | -3.2 |
| FRU | | | | eS | Sb | 01 43 36.0 | -1.1 |
| FRU | | | | pmax | pmax | | |
| | comp=Z,520nm,1.8s | | | | | | |
| FRU | | | | MLR | MLR | | |
| | comp=E,5μm,8.0s | | | | | | |
| FRU | | | | pmax | pmax | | |
| | comp=E,2μm,2.0s | | | | | | |
| CHMS | Chumysh | 4.06 | 23 | ⇓iP | Pn | 01 42 48.9 | +4.9 |
| | baz=20 | | | | | | |
| CHMS | | | | ⇓iS | Sn | 01 43 36.7 | +5.0 |
| | baz=20 | | | | | | |
| CHMS | Chumysh | 4.06 | 23 | P | Pb | 01 42 49.6 | -3.8 |
| | SNR=50 | | | | | | |
| ULHL | Ulahol | 4.07 | 42 | P | Pn | 01 42 49.3 | +4.9 |
| | SNR=40 | | | | | | |
| BOOM | Boomskoye usch | 4.10 | 38 | ⇑iP | Pn | 01 42 49.6 | +4.9 |
| | baz=34 | | | | | | |
| BOOM | | | | ⇑iS | Sb | 01 43 42.4 | -1.5 |
| | baz=34 | | | | | | |
| KK31 | Karatay Array | 4.11 | 339 | ⇓Pn | Pn | 01 42 47.6 | +3.0 |
| | comp=E,82nm,0.3s,baz=159,slow=13,SNR=932 | | | | | | |
| KK31 | | | | ⇓Pg | Pb | 01 42 56.7 | +2.5 |
| | comp=E,135nm,0.5s | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 01 43 37.6 | +4.8 |
| | comp=E,411nm,0.5s,baz=148,slow=23,SNR=6.8 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 01 43 51.1 | |
| | comp=E,187nm,0.4s | | | | | | |
| KK31 | Karatay Array | 4.11 | 339 | i PN | Pn | 01 42 47.6 | +3.0 |
| KK31 | | | | e | | 01 43 37.6 | |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,139nm,0.3s | | | | | | |
| KK31 | | | | smax | smax | | |
| | comp=N,503nm,0.5s | | | | | | |
| KKAR | Karatay Array | 4.11 | 339 | ePN | Pn | 01 42 47.2 | +2.6 |
| KKAR | | | | e | | 01 43 37.9 | |
| KKAR | Karatay Array | 4.11 | 339 | ePn | Pn | 01 42 47.2 | +2.6 |
| KKAR | | | | eSn | Sn | 01 43 37.9 | +5.1 |
| USP | Ospenovka | 4.24 | 20 | ⇓iP | Pn | 01 42 50.9 | +4.5 |
| | baz=17 | | | | | | |
| USP | | | | ⇓iS | Sn | 01 43 40.9 | +4.9 |
| | baz=17 | | | | | | |
| USP | Ospenovka | 4.24 | 20 | P | Pn | 01 42 51.3 | +4.8 |
| | SNR=119 | | | | | | |
| TKM2 | Tokmak 2 | 4.30 | 31 | ePN | Pn | 01 42 52.0 | +4.6 |
| TKM2 | Tokmak 2 | 4.30 | 31 | P | Pn | 01 42 52.7 | +5.2 |
| | SNR=62 | | | | | | |
| TKM2 | Tokmak 2 | 4.30 | 31 | ePn | Pn | 01 42 52.0 | +4.6 |
| KNDC | Almaty | 5.15 | 39 | ⇓Pn | Pn | 01 43 02.5 | +3.6 |
| | comp=N,74nm,1.4s | | | | | | |
| KNDC | | | | ⇓Pg | Pg | 01 43 17.5 | -2.8 |
| | comp=N,246nm,0.9s | | | | | | |
| KNDC | | | | ⇑Sn | Sn | 01 44 02.0 | +3.6 |
| | comp=N,297nm,0.8s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 01 44 26.5 | |
| | comp=N,1μm,0.8s | | | | | | |
| AAA | Alma-Ata | 5.18 | 38 | ePN | Pg | 01 43 18.1 | -2.8 |
| ANVS | Anan'yevo | 5.21 | 46 | ⇑iP | Pn | 01 43 02.5 | +2.5 |
| | baz=44 | | | | | | |
| ANVS | | | | ⇑eS | Sb | 01 44 22.6 | +6.8 |
| | baz=44 | | | | | | |
| CEP | Cherat | 5.48 | 186 | P | Pn | 01 43 07.4 | +3.8 |
| CEP | | | | S | Sb | 01 44 20.0 | -3.5 |
| KBL | Kabul | 5.51 | 212 | ePN | Pn | 01 43 08.0 | +3.9 |
| KBL | Kabul | 5.51 | 212 | ePn | Pn | 01 43 08.0 | +3.9 |
| CHCP | Chirah Chowk | 5.65 | 174 | P | Pn | 01 43 10.5 | +4.6 |
| THW | Thamme Wali | 6.51 | 186 | P | Pn | 01 43 21.8 | +4.1 |
| PDGK | Podgornoye | 6.60 | 50 | ⇓Pn | Pn | 01 43 22.4 | +3.6 |
| | comp=N,47nm,0.7s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 01 45 11.9 | |
| | comp=N,408nm,1.0s | | | | | | |
| OTUK | Ortayu | 8.95 | 359 | ⇑Pn | Pn | 01 43 52.7 | +1.6 |
| | comp=N,20nm,0.6s | | | | | | |
| OTUK | | | | Lg | Lg | 01 46 20.5 | |
| SMLA | Simla | 8.97 | 154 | i P | Pn | 01 43 54.2 | +2.7 |
| SMLA | | | | i S | Sn | 01 45 33.2 | +0.7 |
| SMLA | | | | AML | AML | 01 45 39.5 | |
| | comp=E,969nm,0.5s | | | | | | |
| SMLA | | | | AML | AML | 01 45 42.4 | |
| | comp=N,734nm,0.6s | | | | | | |
| DDI | Dehra Dun | 10.02 | 152 | eP | Pn | 01 44 07.2 | +1.3 |
| DDI | | | | eS | Sn | 01 45 59.5 | +1.0 |
| DDI | | | | AML | AML | 01 47 22.6 | |
| | comp=N,88nm,0.0s | | | | | | |
| DDI | | | | AML | AML | 01 47 22.6 | |
| | comp=E,84nm,0.3s | | | | | | |
| MAKZ | Makanchi | 10.20 | 39 | ePn | Pn | 01 44 12.9 | +4.8 |
| MK01 | Makanchi Array | 10.33 | 40 | ePn | Pn | 01 44 14.6 | +4.5 |
| MK31 | Makanchi Array | 10.34 | 40 | Pn | Pn | 01 44 14.5 | +4.3 |
| | comp=E,17nm,0.8s,baz=219,slow=15,SNR=146 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 01 47 14.6 | |
| | comp=E,60nm,1.5s,baz=224,slow=29,SNR=3.5 | | | | | | |
| MK31 | Makanchi Array | 10.34 | 40 | i P | Pn | 01 44 14.5 | +4.3 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 10.34 | 40 | Pn | Pn | 01 44 14.4 | +4.3 |
| | comp=Z,1.0nm,0.3s,baz=217,slow=13,SNR=55 | | | | | | |
| MKAR | | | | Lg | Lg | 01 47 19.5 | |
| | comp=Z,1.0nm,0.3s,baz=224,slow=28,SNR=6.2 | | | | | | |
| MKAR | | | | LR | LR | 01 48 39.8 | |
| | comp=Z,132nm,20.1s,baz=228,slow=40 | | | | | | |
| MKAR | Makanchi Array | 10.34 | 40 | i P | Pn | 01 44 14.8 | +4.6 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 10.34 | 40 | ePn | Pn | 01 44 15.1 | +4.9 |
| MKAR | | | | Lg | Lg | 01 47 19.5 | |
| NDI | New Delhi | 11.26 | 159 | eP | Pn | 01 44 23.0 | +0.2 |
| NDI | | | | eS | Sn | 01 46 27.0 | -1.8 |
| GEYT | Alibeck | 11.38 | 268 | Pn | Pn | 01 44 21.7 | -2.7 |
| | comp=Z,2.6nm,0.3s,baz=107,slow=9.4,SNR=10 | | | | | | |
| GEYT | | | | Sn | Sn | 01 46 27.9 | -3.6 |
| | comp=Z,3.7nm,0.3s,baz=138,slow=10.0,SNR=4.0 | | | | | | |
| GEYT | | | | LR | LR | 01 49 36.4 | |
| | comp=Z,873nm,18.1s,baz=75,slow=42 | | | | | | |
| KURBB | Kurchatov Arra | 12.09 | 18 | ⇓Pn | Pn | 01 44 35.0 | +0.9 |
| | comp=Z,13nm,0.6s | | | | | | |
| KURBB | | | | Sn | Sn | 01 46 51.1 | +2.2 |
| KURBB | | | | Lg | Lg | 01 48 04.8 | |
| KURBB | Kurchatov Arra | 12.09 | 18 | Pn | Pn | 01 44 35.1 | +1.1 |
| | comp=Z,0.8nm,0.3s,baz=211,slow=9.7,SNR=54 | | | | | | |
| KURK | Kurchatov | 12.20 | 19 | ⇑Pn | Pn | 01 44 34.4 | -1.1 |
| | comp=Z,37nm,1.1s | | | | | | |
| KURK | | | | Lg | Lg | 01 48 06.7 | |
| KURK | Kurchatov | 12.20 | 19 | P | Pn | 01 44 35.1 | -0.4 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KURK | Kurchatov | 12.20 | 19 | ePn | Pn | 01 44 36.1 | +0.6 |
| | comp=Z,42nm,1.0s | | | | | | |
| WMQ | Urumqi | 12.21 | 63 | P | Pn | 01 44 38.0 | +2.2 |
| WMQ | | | | pP | | 01 44 47.0 | |
| WMQ | | | | sP | | 01 44 56.5 | |
| WMQ | | | | S | Sn | 01 46 50.0 | -2.1 |
| WMQ | | | | SS | SnSn | 01 47 12.0 | +8.1 |
| WMQ | | | | PMZ | | | |
| | comp=Z,16nm,1.0s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,100nm,3.5s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,920nm,10.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,780nm,8.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,730nm,9.0s | | | | | | |
| AB31 | Akbulak array | 13.43 | 322 | P | Pn | 01 44 50.6 | -1.8 |
| | comp=Z,31nm,0.5s,baz=130,slow=13,SNR=367 | | | | | | |
| AB31 | | | | ⇑S | Sn | 01 47 15.1 | -6.5 |
| | comp=Z,43nm,0.7s,baz=127,slow=24,SNR=6.1 | | | | | | |
| AB31 | Akbulak array | 13.43 | 322 | eP | Pn | 01 44 50.5 | -1.8 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,43nm,0.5s | | | | | | |
| ABKAR | Akbulak array | 13.43 | 322 | ePn | Pn | 01 44 50.2 | -2.1 |
| | comp=Z,43nm,0.5s | | | | | | |
| ABKAR | | | | eSn | Sn | 01 47 15.0 | -6.6 |
| VOSK | Vostochnaya | 13.48 | 356 | ⇑P | Pn | 01 44 51.9 | -1.1 |
| | comp=Z,8.6nm,0.8s | | | | | | |
| VOSK | | | | ⇓S | Sn | 01 47 20.3 | -2.5 |
| | comp=Z,13nm,1.1s | | | | | | |
| BVA0 | Borovoye Array | 13.82 | 355 | P | Pn | 01 44 56.6 | -1.0 |
| | comp=Z,12nm,0.7s,baz=163,slow=11,SNR=68 | | | | | | |
| BVA0 | | | | ⇑S | Sn | 01 47 27.4 | -3.6 |
| | comp=Z,22nm,1.1s,baz=168,slow=24,SNR=3.0 | | | | | | |
| BVAR | Borovoye Array | 13.82 | 355 | Pn | Pn | 01 44 56.9 | -0.7 |
| | comp=Z,3.3nm,0.3s,baz=159,slow=13,SNR=58 | | | | | | |
| BVAR | | | | Sn | Sn | 01 47 27.1 | -3.9 |
| | comp=Z,1.3nm,0.3s,baz=157,slow=23,SNR=6.0 | | | | | | |
| BVAR | | | | LR | LR | 01 50 47.5 | |
| | comp=Z,214nm,18.4s,baz=220,slow=39 | | | | | | |
| BRVK | Borovoye | 13.86 | 354 | ⇑P | Pn | 01 44 57.2 | -0.9 |
| | comp=Z,34nm,0.9s | | | | | | |
| BRVK | | | | ⇑S | Sn | 01 47 29.9 | -2.2 |
| | comp=Z,26nm,1.0s | | | | | | |
| BRVK | Borovoye | 13.86 | 354 | c iP | Pn | 01 44 58.0 | -0.2 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,42nm,1.7s | | | | | | |
| BRVK | Borovoye | 13.86 | 354 | ePn | Pn | 01 44 57.6 | -0.6 |
| ZRNK | Zerenda | 13.88 | 351 | ⇓P | Pn | 01 44 57.0 | -1.5 |
| | comp=Z,18nm,0.7s | | | | | | |
| ZRNK | | | | ⇑S | Sn | 01 47 29.2 | -3.4 |
| | comp=Z,20nm,0.9s | | | | | | |
| DANN | Dangsing | 14.34 | 136 | eP | Pn | 01 45 02.7 | -2.4 |
| CHKZ | Chkalovo | 14.45 | 355 | ⇑P | Pn | 01 45 04.7 | -1.5 |
| | comp=Z,9.2nm,0.6s | | | | | | |
| CHKZ | | | | ⇓S | Sn | 01 47 48.0 | +1.6 |
| | comp=Z,12nm,0.8s | | | | | | |
| KOLN | Koldanda | 14.71 | 138 | eP | Pn | 01 45 07.2 | -3.0 |
| | comp=Z,21nm,0.5s | | | | | | |
| IGLO | Ghaloghah | 15.04 | 265 | eP | Pn | 01 45 11.6 | -2.9 |
| GKN | Gorkha | 15.09 | 135 | eP | Pn | 01 45 13.0 | -2.1 |
| | comp=Z,87nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 15.14 | 322 | ⇓P | Pn | 01 45 13.1 | -2.6 |
| | comp=Z,50nm,0.7s | | | | | | |
| AKTO | | | | ⇑S | Sn | 01 47 58.3 | -5.1 |
| | comp=Z,31nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 15.14 | 322 | Pn | Pn | 01 45 14.1 | -1.6 |
| | comp=Z,3.4nm,0.3s,baz=134,slow=13,SNR=72 | | | | | | |
| AKTO | | | | Sn | Sn | 01 47 55.7 | -7.7 |
| | comp=Z,2.0nm,0.3s,baz=317,slow=16,SNR=3.8 | | | | | | |
| AKTO | | | | LR | LR | 01 51 49.2 | |
| | comp=Z,469nm,18.9s,baz=138,slow=40 | | | | | | |
| KKN | Kakani | 15.61 | 133 | eP | Pn | 01 45 18.6 | -3.5 |
| | comp=Z,45nm,0.6s | | | | | | |
| DMN | Daman | 15.65 | 134 | eP | Pn | 01 45 19.6 | -3.1 |
| | comp=Z,56nm,0.8s | | | | | | |
| PKIN | Phulchoki | 15.84 | 134 | eP | Pn | 01 45 21.9 | -3.2 |
| PKI | Pulchoki | 15.85 | 134 | eP | Pn | 01 45 22.0 | -3.3 |
| | comp=Z,65nm,0.8s | | | | | | |
| GUN | Gumba | 15.86 | 132 | eP | Pn | 01 45 23.2 | -2.3 |
| ICHK | Chekchek | 16.30 | 250 | eP | P | 01 45 33.8 | -0.2 |
| BHPL | Bhopal | 16.53 | 164 | eP | Pn | 01 45 35.4 | +1.7 |
| BHPL | | | | AMB | AMB | 01 45 39.6 | |
| | comp=Z,24nm,0.7s | | | | | | |
| IDMV | Damavand | 16.71 | 264 | eP | Pn | 01 45 36.9 | +0.6 |
| ZALV | Zalesovo Beam | 16.87 | 26 | P | Pn | 01 45 38.9 | +0.9 |
| | comp=Z,0.8nm,0.3s,baz=220,slow=11,SNR=27 | | | | | | |
| ZALV | | | | LR | LR | 01 52 30.8 | |
| | comp=Z,166nm,18.1s,baz=245,slow=38 | | | | | | |
| RAMN | Ramite | 17.00 | 132 | eP | Pn | 01 45 36.0 | -4.0 |
| | comp=Z,72nm,0.8s | | | | | | |
| NVS | Novosibirsk | 17.14 | 21 | eP | Pn | 01 45 36.3 | -5.0 |
| NVS | | | | pmax | pmax | | |
| | comp=N,25nm,1.4s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,14nm,1.4s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,37nm,1.4s | | | | | | |
| TAPN | Taplejung | 17.36 | 129 | eP | Pn | 01 45 41.4 | -3.1 |
| | comp=Z,25nm,0.6s | | | | | | |
| IZEF | Zefreh | 17.53 | 255 | eP | P | 01 45 49.7 | +2.0 |
| ODAN | Odare | 17.53 | 131 | eP | Pn | 01 45 42.7 | -3.8 |
| | comp=Z,54nm,0.7s | | | | | | |
| IKLH | Kolahrood | 17.91 | 257 | eP | P | 01 45 55.8 | +3.9 |
| IRAM | Ramesheh | 18.01 | 252 | eP | P | 01 45 54.9 | +1.9 |
| LSA | Lhasa | 18.04 | 116 | eP | P | 01 45 57.2 | +3.6 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| LSA | Lhasa | 18.04 | 116 | ePn | P | 01 45 57.2 | +3.6 |
| | comp=Z,9.1nm,0.8s | | | | | | |
| IPAR | Pars | 18.59 | 245 | eP | Pn | 01 46 01.1 | +1.4 |
| IPIR | Pirpir | 18.70 | 256 | eP | Pn | 01 46 01.9 | +0.9 |
| ISRV | Sarvestan | 18.82 | 244 | eP | P | 01 46 02.3 | +0.4 |
| NGP | Nagpur | 18.92 | 161 | eP | Pn | 01 46 05.7 | +2.3 |
| HVS | Khovu-Aksy | 18.96 | 44 | eP | P | 01 46 03.2 | +0.1 |
| HVS | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| BOK | Bokaro | 19.14 | 140 | eP | P | 01 46 04.2 | -1.0 |
| SVE | Sverdlovsk | 19.22 | 340 | ⇓iP | Pn | 01 46 06.8 | +0.1 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,54nm,1.4s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=Z,761nm,11.0s | | | | | | |
| ARU | Arti | 19.48 | 336 | Pn | P | 01 46 08.7 | 0.0 |
| | comp=Z,0.0nm,0.3s,baz=330,slow=23,SNR=12 | | | | | | |
| ARU | | | | LR | LR | 01 54 16.4 | |
| | comp=Z,303nm,22.0s,baz=138,slow=39 | | | | | | |
| ARU | Arti | 19.48 | 336 | c iP | Pn | 01 46 10.3 | +0.4 |
| ARU | | | | S | S | 01 49 50.1 | +1.5 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,46nm,1.2s | | | | | | |
| ARU | | | | MLR | MLR | | |
| | comp=Z,401nm,13.0s | | | | | | |
| ARU | Arti | 19.48 | 336 | eP | Pn | 01 46 09.7 | -0.2 |
| | comp=Z,47nm,1.2s | | | | | | |
| POO | Poona | 20.72 | 177 | eP | P | 01 46 22.6 | +0.1 |
| DGRG | David-gareji | 20.79 | 285 | P | Pn | 01 46 24.6 | -0.9 |
| DGRG | David-gareji | 20.79 | 285 | P | Pn | 01 46 24.6 | -0.9 |
| GTA | Gaotai | 21.06 | 81 | P | P | 01 46 28.7 | +2.6 |
| GTA | | | | pP | pP | 01 46 42.0 | +13 |
| GTA | | | | sP | sP | 01 46 49.9 | +20 |
| GTA | | | | S | S | 01 50 15.7 | -5.0 |
| GTA | | | | sS | Sn | 01 50 35.4 | +8.5 |
| GTA | | | | SS | SnSn | 01 50 50.6 | +9.0 |
| GTA | | | | ScP | ScP | 01 54 05.8 | -3.6 |
| GTA | | | | PMZ | | | |
| | comp=Z,41nm,1.0s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,240nm,6.7s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,230nm,14.0s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,310nm,15.2s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,310nm,13.5s | | | | | | |
| TBLG | Delisi | 21.25 | 286 | P | P | 01 46 28.1 | 0.0 |
| TBLG | Delisi | 21.25 | 286 | P | P | 01 46 28.0 | 0.0 |
| GNI | Garni | 21.38 | 281 | eP | P | 01 46 30.9 | +1.3 |
| GNI | Garni | 21.38 | 281 | eP | P | 01 46 30.9 | +1.3 |
| | comp=Z,575nm,1.0s | | | | | | |
| KRAR | Krasnoyarsk | 21.48 | 32 | ⇓iP | P | 01 46 31.9 | +1.6 |
| KRAR | | | | pmax | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | |
| NCK | Nalchik | 22.07 | 290 | eP | P | 01 46 38.8 | +2.0 |
| ONI | Oni | 22.18 | 288 | P | P | 01 46 39.4 | +1.4 |
| ONI | Oni | 22.18 | 288 | P | P | 01 46 39.4 | +1.4 |
| AKH | Akhalkalaki | 22.20 | 285 | P | P | 01 46 39.7 | +1.2 |
| AKH | Akhalkalaki | 22.20 | 285 | P | P | 01 46 39.6 | +1.2 |
| HYB | Hyderabad | 22.41 | 165 | i P | P | 01 46 40.0 | -0.7 |
| HYB | Hyderabad | 22.41 | 165 | eP | P | 01 46 41.7 | +1.1 |
| KBZ | Khabaz | 22.58 | 291 | P | P | 01 46 40.8 | -1.4 |
| | comp=Z,5.9nm,0.7s,baz=126,slow=7.7,SNR=5.7 | | | | | | |
| KBZ | | | | LR | LR | 01 57 39.2 | |
| | comp=Z,221nm,18.0s,baz=92,slow=42 | | | | | | |
| KARS | Kars | 22.59 | 283 | eP | P | 01 46 45.4 | +2.9 |
| HKR | Hakkari | 22.59 | 275 | eP | P | 01 46 44.8 | +2.1 |
| KIV | Kislovodsk | 22.74 | 292 | eP | P | 01 46 49.0 | +5.0 |
| KIV | Kislovodsk | 22.74 | 292 | P | P | 01 46 45.0 | +1.0 |
| KIV | | | | e | | 01 46 55.6 | |
| KIV | | | | e | | 01 47 03.5 | |
| KIV | | | | e | | 01 47 14.3 | |
| KIV | | | | eS | S | 01 50 49.7 | -3.0 |
| KIV | | | | SS | SnSn | 01 51 28.0 | +5.4 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,155nm,16.0s | | | | | | |
| KIV | Kislovodsk | 22.74 | 292 | eP | P | 01 46 43.1 | -1.0 |
| | comp=Z,37nm,0.7s | | | | | | |
| CUKT | Cukurca | 22.77 | 274 | eP | P | 01 46 45.4 | +0.9 |
| AGRB | Hanur-Agry | 22.79 | 280 | eP | P | 01 46 47.3 | +2.6 |
| MOY | Mondy | 23.31 | 49 | eP | P | 01 46 52.6 | +2.7 |
| MOY | | | | pmax | pmax | | |
| | comp=Z,34nm,2.5s | | | | | | |
| EZM | Erzurum | 23.98 | 281 | eP | P | 01 46 55.6 | -1.1 |
| VRTB | Varto-Mus | 24.03 | 280 | eP | P | 01 46 51.1 | -5.9 |
| ZAK | Zakamensk | 24.28 | 53 | eP | P | 01 47 00.0 | +0.8 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| VRH | Novokhopyorsk | 24.57 | 309 | eP | P | 01 47 04.1 | +2.5 |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.9s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.5s | | | | | | |
| BNGB | Bingˆ¶l | 24.66 | 280 | eP | P | 01 47 03.9 | +1.1 |
| TLY | Talaya | 24.87 | 50 | P | P | 01 47 05.1 | +0.6 |
| | comp=E,4.5nm,0.7s,baz=274,slow=7.5,SNR=3.0 | | | | | | |
| TLY | | | | LR | LR | 01 58 19.5 | |
| | comp=E,52nm,19.3s,baz=259,slow=40 | | | | | | |
| TLY | Talaya | 24.87 | 50 | eP | P | 01 47 06.3 | +1.9 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,12nm,1.5s | | | | | | |
| LZH | Lanzhou | 24.91 | 87 | eP | P | 01 47 08.0 | +2.9 |
| LZH | | | | pP | pP | 01 47 25.3 | +17 |
| LZH | | | | sP | sP | 01 47 31.1 | +22 |
| LZH | | | | PP | PnPn | 01 47 47.0 | +9.3 |
| LZH | | | | eS | S | 01 51 21.3 | -7.2 |
| LZH | | | | sS | sS | 01 51 50.3 | +17 |
| LZH | | | | SS | SnSn | 01 52 23.1 | +7.1 |
| LZH | | | | PMZ | | | |
| | comp=Z,24nm,1.1s | | | | | | |

LZH PMZ
comp=Z,110nm,4.0s
LZH LN
comp=Z,320nm,14.8s
LZH LE
comp=Z,700nm,15.4s
LZH LZ
comp=Z,680nm,15.7s
**GUMT Gumushane 25.33 283** *e*P **P 01 47 10.9 +2.1**
**PTK Pertek 25.66 280** *e*P **P 01 47 13.3 +1.3**
**SONM Songino Array 25.80 60** P **P 01 47 14.7 +1.6**
comp=Z,11nm,1.0s,baz=264,slow=9.3,SNR=32
SONM ScP **ScP 01 54 22.0 0.0**
comp=Z,0.6nm,0.5s,baz=305,slow=5.2,SNR=4.8
SONM LR LR 01 58 23.8
comp=Z,264nm,18.2s,baz=264,slow=39
**SONA1 Songino Array 25.81 60** *e*P **P 01 47 14.5 +1.4**
**SVRC Sivrice-ELAZIĞ 25.83 279** *e*P **P 01 47 14.4 +0.9**
**VORD Divnogorie 25.98 308** *e*P **P 01 47 17.5 +3.0**
VORD pmax pmax
comp=Z,10.0nm,1.1s
VORD pmax pmax
comp=N,7.0nm,0.7s
VORD pmax pmax
comp=E,20nm,0.9s
**VSR Storozhevoye 26.12 308** *e*P **P 01 47 19.0 +3.3**
VSR pmax pmax
comp=Z,20nm,1.7s
VSR pmax pmax
comp=N,9.0nm,1.6s
VSR pmax pmax
comp=E,10.0nm,0.8s
**ILIC ilic-Erzincan 26.18 281** *e*P **P 01 47 19.2 +2.6**
**ULN Ulaanbaatar 26.25 60** *e*P **P 01 47 18.7 +1.6**
ULN pmax pmax
comp=Z,13nm,0.9s
**ULN Ulaanbaatar 26.25 60** *e*P **P 01 47 18.7 +1.6**
comp=Z,13nm,0.9s
**MALT Malatya 26.52 279** *e*P **P 01 47 23.1 +3.4**
**MALT Malatya 26.52 279** ⇑P **P 01 47 22.2 +2.6**
**MALT Malatya 26.52 279** ⇑*i*P **P 01 47 22.2 +2.6**
**LPSR Galich'ya Gora 26.63 311** *e*P **P 01 47 23.1 +2.8**
LPSR pmax pmax
comp=Z,10.0nm,0.7s
LPSR pmax pmax
comp=N,5.0nm,0.6s
LPSR pmax pmax
comp=E,8.0nm,0.6s
**CD2 Chengdu 26.77 99** *e*P **P 01 47 21.4 -0.5**
CD2 pP pP 01 47 36.4 +12
CD2 S **S 01 51 53.0 -4.8**
CD2 sS sS 01 52 19.3 +17
CD2 SS **SnSn 01 53 07.2 +5.8**
CD2 PMZ
comp=E,10.0nm,0.5s
CD2 PMZ
comp=E,120nm,5.2s
CD2 LN
comp=E,230nm,13.2s
CD2 LZ
comp=E,250nm,12.2s
**RAYN Ar Rayn 27.78 244** *e*P **P 01 47 31.2 +0.2**
comp=E,4.1nm,0.6s
**SARI SarD1z-Kayseri 28.04 280** *e*P **P 01 47 35.5 +2.2**
**BNN Bunyan 28.38 281** *e*P **P 01 47 37.1 +0.8**
**OBN Obninsk 28.72 315** P **P 01 47 40.0 +1.1**
OBN *i* *PP pP 01 47 53.6 +12
OBN *i* *SP sP 01 48 02.7 +20
OBN S **S 01 52 31.0 +3.1**
OBN pmax pmax
comp=Z,3.0nm,0.8s
OBN MLR MLR
comp=Z,133nm,14.0s
**OBN Obninsk 28.72 315** *e*P **P 01 47 38.5 -0.5**
**KOZT Kozan 28.72 278** *e*P **P 01 47 41.3 +2.1**
**SIM Simferopol' 28.87 294** P P 01 47 45.1 +4.7
SIM pmax pmax
comp=Z,19nm,0.8s
SIM MLR MLR
comp=Z,60nm,15.6s
**KMI Kunming 29.03 110** P **P 01 47 44.0 +1.6**
KMI PMZ
comp=Z,5.0nm,0.5s
KMI PMZ
comp=Z,110nm,6.4s
**KLMR Klimovskoe 29.72 327** *e*P **P 01 47 50.5 +2.7**
KLMR pmax pmax
comp=Z,21nm,1.4s
**HHC Hu-ho-hao-te 29.73 74** *e*P **P 01 47 49.7 +1.4**
HHC pP pP 01 48 04.0 +13
HHC sP sP 01 48 15.6 +23
HHC S S 01 52 36.3 -8.2
HHC sS sS 01 53 08.3 +19
HHC PMZ
comp=Z,13nm,0.9s
HHC PMZ
comp=Z,79nm,4.7s
HHC LN
comp=Z,160nm,10.4s
HHC LE
comp=Z,170nm,9.1s
HHC LZ
comp=Z,140nm,10.3s
**BRTR Keskin Array B 29.87 283** P **P 01 47 49.9 +0.4**
comp=Z,1.9nm,0.6s,baz=83,slow=6.9,SNR=15
BRTR LR LR 02 01 27.8
comp=Z,60nm,19.2s,baz=82,slow=40
**BRTR Keskin Array B 29.87 283***ce*P **P 01 47 51.0 +1.5**
BRTR pmax pmax
comp=Z,3.0nm,0.6s
**CMAR Chiang Mai Arr 30.88 125** P **P 01 47 57.1 -1.3**
comp=Z,3.9nm,0.4s,baz=313,slow=9.5,SNR=6.0
CMAR PcP **PcP 01 50 55.6 +0.4**
comp=Z,1.3nm,0.3s,baz=287,slow=4.2,SNR=4.1
CMAR LR LR 02 02 44.0
comp=Z,130nm,20.7s,baz=313,slow=41
**CMAR Chiang Mai Arr 30.88 125***ce*P **P 01 47 58.5 +0.1**
CMAR pmax pmax
comp=Z,2.0nm,0.4s
**GYA Guiyang 31.19 104** *e*P **P 01 48 02.7 +1.4**
GYA PMZ
comp=Z,10.0nm,0.8s
**AKASG Malin Array Be 32.25 305** P **P 01 48 10.0 -0.2**
comp=Z,0.6nm,0.5s,baz=79,slow=7.0,SNR=5.7
AKASG LR LR 02 03 13.4
comp=Z,138nm,18.4s,baz=105,slow=40
**AKASG Malin Array Be 32.25 305***ce*P P 01 48 13.5 +3.3
AKASG pmax pmax
comp=Z,3.0nm,0.6s
**EIL Elat 32.25 264** LR LR 02 04 00.7
comp=Z,218nm,18.5s,baz=64,slow=42
**KIEV Kiev 32.26 305** *e*P **P 01 48 09.6 -0.7**
KIEV pmax pmax
comp=Z,169nm,2.7s
**KIEV Kiev 32.26 305** *e*P **P 01 48 09.6 -0.7**
comp=Z,169nm,2.7s
**BOD Bodaibo 32.43 41** *e*P **P 01 48 10.6 -1.1**
BOD pmax pmax
comp=Z,8.0nm,1.0s
**BJI Beijing 33.34 75** P **P 01 48 19.6 -0.3**
BJI pP pP 01 48 35.1 +12
BJI PP **PP 01 49 34.8 -0.4**
BJI S **S 01 53 35.9 -4.7**
BJI PMZ
comp=Z,6.0nm,1.1s
BJI LN
comp=Z,140nm,13.0s
BJI LE
comp=Z,200nm,17.0s
BJI LZ
comp=Z,170nm,19.9s
**PLOR Plostina 34.05 296** ⇓*i*P P 01 48 30.7 +4.6
**NACGM Naroch 34.15 313** *e* **P 01 48 26.0 -0.8**
**PRAR RASCA 34.22 299** ⇓*i*P **P 01 48 28.5 +1.0**
**MLR Muntele Rosu 34.58 296** ⇓P **P 01 48 33.3 +2.5**
**MLR Muntele Rosu 34.58 296** ⇓*i*P **P 01 48 33.3 +2.5**
**BURAR Bucovina Array 34.89 300** ⇓*i*P P 01 48 37.5 +4.1
**DOPR Dopca 34.91 297** ⇑*i*P **P 01 48 34.9 +1.4**
**TIA Tai'an 35.11 81** ⇓P **P 01 48 37.4 +2.1**
TIA PMZ
comp=Z,10.0nm,0.5s
**ARCR ARCALIA 35.52 299** ⇑*i*P **P 01 48 39.9 +1.2**
**FINES FINESS Array B 35.91 324** P **P 01 48 41.9 0.0**
comp=Z,3.4nm,0.4s,baz=121,slow=9.8,SNR=29
FINES LR LR 02 04 21.3
comp=Z,315nm,18.2s,baz=96,slow=38
**FINES FINESS Array B 35.91 324** *i* P **P 01 48 42.9 +1.0**
FINES pmax pmax
comp=Z,3.0nm,0.4s
**CJR Cluj-Napoca 36.07 298** ⇑P **P 01 48 45.1 +1.6**
**CJR Cluj-Napoca 36.07 298** ⇑*i*P **P 01 48 45.1 +1.6**
**LOT Lotru 36.10 296** ⇓*i*P **P 01 48 45.8 +1.9**
**KWP Kalwaria Pacla 36.43 303** *e*P **P 01 48 48.9 +2.4**
**KWP Kalwaria Pacla 36.43 303** *e*P **P 01 48 48.9 +2.4**
**TRPA Tarpa 36.64 301** ⇑*i*P **P 01 48 50.3 +2.0**
**DRGR 36.66 298** ⇑P **P 01 48 50.4 +1.8**
**DRGR 36.66 298** ⇑*i*P **P 01 48 50.4 +1.8**
**APE Apeiranthos 36.70 282** ⇓*i*P P 01 48 40.3 -8.7
**KOLS Kolonicke sedl 36.76 302** *e*P P 01 48 54.0 +4.7
KOLS *e* 01 50 01.5
**GZR Gura Zlata 36.80 296** ⇑*i*P P 01 48 46.4 -3.4
**STHS Stebnicka Huta 37.40 303** *e*P **P 01 48 57.1 +2.4**
STHS pmax pmax
comp=Z,2.0nm,0.7s
**STHS Stebnicka Huta 37.40 303** *e*P **P 01 48 57.1 +2.4**
STHS *e*PP **PnPn 01 50 22.3 +1.8**
**BZS Buzias 37.58 297** ⇑P **P 01 48 57.6 +1.3**
**BZS Buzias 37.58 297** ⇑*i*P **P 01 48 57.6 +1.3**
**NJ2 Nanjing 37.97 86** *e*P **P 01 48 59.9 +0.2**
NJ2 PMZ
comp=Z,30nm,1.0s
**NIE Niedzica 38.01 303** *e*P P 01 49 04.2 +4.3
**NIE Niedzica 38.01 303** *e*P P 01 49 04.3 +4.3
**OJC Ojcow 38.27 304** *e*P **P 01 49 03.9 +1.8**
OJC pmax pmax
comp=Z,8.0nm,0.9s
**OJC Ojcow 38.27 304** *e*P **P 01 49 03.9 +1.8**
comp=Z,7.7nm,0.9s
**PSZ Piszkesteto 38.43 301** *e*P **P 01 49 03.0 -0.5**
PSZ pmax pmax
comp=Z,3.0nm,0.7s
**PSZ Piszkesteto 38.43 301** ⇑*i*P P 01 49 08.3 +4.7
**PSZ Piszkesteto 38.43 301** *e*P **P 01 49 03.0 -0.5**
comp=Z,3.0nm,0.7s
**DIVS Divibare 38.99 295** ⇑*i*P **P 01 49 09.3 +1.0**
**VYHS Vyhne 39.06 302** *e*P P 01 49 12.7 +3.9
VYHS pmax pmax
comp=Z,3.0nm,1.3s
**VYHS Vyhne 39.06 302** *e*P P 01 49 12.7 +3.9
VYHS *e*PP PP 01 50 31.1 -7.0
**ARCES ARCESS Array B 39.07 336** P **P 01 49 08.6 0.0**
comp=Z,5.7nm,0.7s,baz=113,slow=7.9,SNR=37
ARCES LR LR 02 05 30.9
comp=Z,91nm,19.0s,baz=147,slow=36
**OKC Ostrava-Krasne 39.36 304** *e*PP PP 01 50 45.0 +3.6
OKC *ex* x 01 50 51.6
**MORC Moravsky Berou 39.76 304** *e*P **P 01 49 14.8 +0.2**
MORC pmax pmax
comp=Z,9.0nm,0.7s
**MORC Moravsky Berou 39.76 304** *e*P **P 01 49 14.8 +0.2**
comp=Z,9.1nm,0.7s
**KRLC Kraliky 40.22 304** *e*P **P 01 49 18.8 +0.4**
KRLC *e* 01 50 54.8
**KRLC Kraliky 40.22 304** *e*P **P 01 49 18.8 +0.4**
KRLC *e*PP **PnPn 01 50 54.8 +0.5**
KRLC *ex* x 01 51 05.2
**VRAC Vranov 40.43 303** P **P 01 49 19.9 -0.2**
comp=Z,1.7nm,0.7s,baz=70,slow=8.3,SNR=4.2
**VRAC Vranov 40.43 303** ⇑P **P 01 49 21.2 +1.1**
**VRAC Vranov 40.43 303** ⇑*i*P **P 01 49 21.2 +1.1**
**DPC Dobruska-Polom 40.48 305** *e*P **P 01 49 21.4 +0.8**
DPC *e* 01 49 32.7
DPC *e* 01 51 02.5
**DPC Dobruska-Polom 40.48 305** *e*P **P 01 49 21.4 +0.8**
DPC *ex* x 01 49 32.7
DPC *e*PP **PP 01 50 53.8 +0.2**
DPC *ex* x 01 51 02.5
**UPC Upice 40.66 305** *e*P **P 01 49 22.7 +0.7**
**UPC Upice 40.66 305** *e*P **P 01 49 22.7 +0.7**
UPC *ex* x 01 49 30.4
**YAK Yakutsk 41.00 37** *e*P **P 01 49 24.9 +0.3**
YAK *e**PP pP 01 49 41.3 +14
YAK *e* 01 51 01.4
YAK *e* 01 51 20.9
YAK *e*PPP PPP 01 51 34.0
YAK *e*S S 01 55 30.4 -6.1
YAK *e*SS **SS 01 58 36.1 -1.9**
YAK *e* 01 59 18.0
YAK pmax pmax
comp=Z,2.0nm,0.9s
YAK pmax pmax
comp=E,1.0nm,1.8s
YAK pmax pmax
comp=Z,25nm,5.9s
YAK pmax pmax
comp=N,7.0nm,2.9s
YAK pmax pmax
comp=E,12nm,2.7s
YAK smax smax
comp=N,7.0nm,3.2s
YAK smax smax
comp=E,7.0nm,2.8s
**GOPC GO Pecny, Ondr 41.51 304** *e*P **P 01 49 30.5 +1.4**
**GOPC GO Pecny, Ondr 41.51 304** *e*P **P 01 49 30.5 +1.4**
**PVCC Panska Ves 41.57 305** *e*P **P 01 49 31.2 +1.7**
PVCC *e* 01 51 09.4
**PVCC Panska Ves 41.57 305** *e*P **P 01 49 31.2 +1.7**
PVCC *ex* x 01 49 35.4
PVCC *e*PP **PnPn 01 51 09.4 -0.7**
**PRU Pruhonice 41.66 305** *e*P **P 01 49 32.7 +2.5**
PRU *e* 01 51 11.6
PRU *e* 01 51 20.6
**PRU Pruhonice 41.66 305** *e*P **P 01 49 32.7 +2.5**
PRU *ex* x 01 49 37.7
PRU *e*PP **PnPn 01 51 11.6 +0.4**
PRU *ex* x 01 51 20.6
**HFS Hagfors 41.68 320** P **P 01 49 29.7 -0.6**
comp=E,8.0nm,0.5s,baz=98,slow=11,SNR=35
**BRG Berggiesshubel 41.92 306** *e*P **P 01 49 34.9 +2.5**
comp=E,4.8nm,0.9s
**BRG Berggiesshubel 41.92 306** *e*P **P 01 49 34.8 +2.5**
BRG pmax pmax
comp=Z,5.0nm,0.9s
**MDJ Mudanjiang 42.02 64** P **P 01 49 33.0 -0.2**
MDJ PMZ
comp=Z,4.0nm,0.5s
MDJ PMZ
comp=Z,21nm,2.6s
**KULM Kulim 42.32 136** *e*P **P 01 49 37.3 +1.3**
comp=Z,26nm,1.4s
**GERES GERESS Array B 42.38 303** P **P 01 49 36.0 -0.2**
comp=Z,1.2nm,0.8s,baz=58,slow=7.7,SNR=14
GERES PP **PP 01 51 19.0 +4.8**
comp=Z,0.8nm,0.7s,baz=75,slow=10,SNR=4.1
GERES LR LR 02 10 29.3
comp=Z,94nm,21.9s,baz=64,slow=41
**KHC Kasperske Hory 42.41 303** *e*P **P 01 49 36.3 -0.1**
KHC pmax pmax
comp=Z,31nm,2.7s
**KHC Kasperske Hory 42.41 303** *e*P **P 01 49 37.0 +0.6**
KHC *ex* x 01 49 48.2
**KHC Kasperske Hory 42.41 303** *e*P **P 01 49 36.3 -0.1**
comp=Z,31nm,2.7s
**CLL Collm 42.45 307** *e*P **P 01 49 36.0 -0.6**
CLL pmax pmax
comp=Z,4.0nm,1.1s
**CLL Collm 42.45 307** *e*P **P 01 49 36.0 -0.6**
comp=Z,4.0nm,1.1s
CLL *i* 01 49 41.9
CLL *e* 01 49 45.0
CLL *e*(PP) 01 51 29.0
**KLR Kul'dur 42.55 56** *e*P P 01 49 34.6 -2.9
**KS01 Wonju Array Si 42.85 74** *e*P **P 01 49 40.2 +0.1**
**KSAR Wonju Array Be 42.85 74** P **P 01 49 40.4 +0.3**
**KSAR Wonju Array Be 42.85 74** P **P 01 49 40.4 +0.3**
**KSRS Korea Array 42.88 74** P **P 01 49 40.4 +0.1**
comp=Z,2.1nm,0.8s,baz=278,slow=6.1,SNR=6.1
**KSRS Korea Array 42.88 74** P **P 01 49 40.4 +0.1**
KSRS pmax pmax
comp=Z,2.0nm,0.8s
**NB2 NORSAR Subarra 42.93 321** P **P 01 49 40.0 -0.5**
comp=Z,2.6nm,0.5s,baz=93,slow=8.6
**NOA NORSAR Array B 42.93 321** P **P 01 49 40.2 -0.3**
comp=Z,2.7nm,0.5s,baz=92,slow=8.1,SNR=14
NOA PP PcP 01 51 25.8 -5.2
comp=Z,2.6nm,0.9s,baz=88,slow=11,SNR=4.0
NOA LR LR 02 08 20.7
comp=Z,160nm,18.3s,baz=110,slow=37
**USRK Ussuriysk Ar. 43.78 64** LR LR 02 09 49.5
comp=Z,106nm,20.8s,baz=296,slow=38
**DAVOX Davos/Dischmat 45.33 301** P **P 01 50 00.1 0.0**
comp=Z,2.8nm,0.4s,baz=112,slow=6.1,SNR=19
**JNU Nakatsue 46.77 79** P **P 01 50 11.3 -0.2**
comp=Z,14nm,0.9s,baz=318,slow=3.3,SNR=5.9
**BNI Bardonecchia 47.95 299** *e*P **P 01 50 20.4 -0.2**
BNI pmax pmax
comp=Z,17nm,1.4s
**BNI Bardonecchia 47.95 299** *e*P **P 01 50 20.4 -0.2**
comp=Z,17nm,1.4s
**YSS Yuzh-Sakhalins 50.25 57** *e*P P 01 50 34.8 -3.2
YSS pmax pmax
comp=Z,17nm,1.7s
**MAJO Matsushiro 50.84 71** *e*P **P 01 50 42.3 -0.3**
MAJO pmax pmax
comp=Z,10.0nm,0.9s
**MAJO Matsushiro 50.84 71** *e*P **P 01 50 42.3 -0.3**
comp=Z,10nm,0.9s
**MJAR Matsushiro Arr 50.84 71** P **P 01 50 43.0 +0.3**
comp=Z,4.9nm,0.8s,baz=291,slow=9.1,SNR=14
**MJAR Matsushiro Arr 50.84 71** P **P 01 50 43.0 +0.3**
**EKA Eskdalemuir Ar 51.17 315** P **P 01 50 44.5 -0.2**
comp=Z,1.6nm,0.6s,baz=83,slow=7.8,SNR=9.9
**KMBO Kilima Mbogo 51.62 227** P **P 01 50 48.4 -0.5**
comp=Z,1.6nm,0.7s,baz=33,slow=14,SNR=6.8
**KMBO Kilima Mbogo 51.62 227***ce*P P 01 50 52.7 +3.8
KMBO pmax pmax
comp=Z,2.0nm,0.7s
**KMBO Kilima Mbogo 51.62 227** *e*P **P 01 50 48.8 -0.1**
comp=Z,3.6nm,1.0s
**MNAI Manna 51.70 140** *e*P **P 01 50 50.1 +0.9**
**BILL Bilibino 55.57 27** *e*P **P 01 51 17.3 +0.3**
BILL pmax pmax
comp=Z,3.0nm,0.9s
**BORG Borgarnes 56.82 329** *i* P P 01 51 29.3 +3.4
**ESDC Sonseca Array 57.27 297** P **P 01 51 29.0 -0.6**
comp=Z,1.5nm,0.6s,baz=58,slow=7.1,SNR=11
**TAM Tamanrasset 58.50 275** *e*P **P 01 51 39.5 +0.9**
TAM pmax pmax
comp=Z,3.0nm,1.1s
**TAM Tamanrasset 58.50 275** *e*P **P 01 51 39.5 +0.9**
comp=Z,2.9nm,1.1s
**SUMG Summit 58.83 341** *e*P **P 01 51 41.5 +1.1**
SUMG pmax pmax
comp=Z,13nm,0.7s
**SUMG Summit 58.83 341** *e*P **P 01 51 41.5 +1.1**
comp=Z,13nm,0.7s
**TOA0 Torodi Ar. Sit 67.02 268** *e*P **P 01 52 34.1 -1.2**
**TORD Torodi Ar. Bea 67.02 268** P **P 01 52 33.8 -1.5**
comp=Z,3.4nm,0.6s,baz=48,slow=5.4,SNR=33
**SOEI Soe 68.42 124** *e*P **P 01 52 43.7 -0.4**
**COLD Coldfoot 68.95 16** *e*P **P 01 52 47.8 +1.1**
comp=Z,7.2nm,1.0s
**FYU Fort Yukon 70.56 15** *e*P **P 01 52 57.3 +0.7**
**INK Inuvik 70.95 10** P **P 01 52 58.5 -0.3**
comp=Z,3.9nm,0.6s,baz=53,slow=7.5,SNR=12
**INK Inuvik 70.95 10** P **P 01 52 58.6 -0.3**
INK pmax pmax
comp=Z,4.0nm,0.6s
**INK Inuvik 70.95 10** *e*P **P 01 52 59.1 +0.2**
comp=Z,18nm,1.1s
**COLA College 71.46 17** *e*P **P 01 53 02.4 +0.4**
COLA pmax pmax
comp=Z,7.0nm,0.9s
**COLA College 71.46 17** *e*P **P 01 53 02.4 +0.4**
comp=Z,7.4nm,0.9s
**ILAR Eielson Array 71.76 17** P **P 01 53 03.3 -0.6**
comp=Z,2.4nm,0.7s,baz=317,slow=5.3,SNR=17
**PAX Paxson 73.64 17** *e*P **P 01 53 15.8 +0.6**
**PAX Paxson 73.64 17** *e*P **P 01 53 15.8 +0.6**
**PMR Palmer 73.94 19** *e*P **P 01 53 16.6 -0.2**
PMR pmax pmax
comp=Z,12nm,0.7s
**PMR Palmer 73.94 19** *e*P **P 01 53 16.6 -0.2**
comp=Z,12nm,0.7s
**YKA Yellowknife Ar 78.40 3** P **P 01 53 41.2 -0.9**
comp=Z,5.7nm,0.8s,baz=352,slow=6.2,SNR=4.0
**BOSA Boshof 80.66 221** P **P 01 53 53.5 -1.5**
comp=Z,3.7nm,1.0s,baz=116,slow=6.6,SNR=3.7
**WRA Warramunga Arr 82.46 123** P **P 01 54 03.4 -1.2**
comp=Z,4.2nm,0.9s,baz=325,slow=5.1,SNR=25
**WRAB Tennant Creek 82.46 123** *e*P **P 01 54 03.3 -1.3**
WRAB pmax pmax
comp=Z,8.0nm,0.9s
**WRAB Tennant Creek 82.46 123** *e*P **P 01 54 03.3 -1.3**
comp=Z,8.2nm,0.9s
**COEN Coen 84.33 113** *e*P **P 01 54 14.2 -0.1**
**ASAR Alice Springs 84.87 126** P **P 01 54 16.4 -0.6**
comp=Z,2.3nm,0.8s,baz=323,slow=5.3,SNR=18
**FFC Flin Flon 86.24 357** *e*P **P 01 54 23.6 +0.3**
FFC pmax pmax
comp=Z,11nm,1.1s
**FFC Flin Flon 86.24 357** *e*P **P 01 54 23.6 +0.3**
comp=Z,11nm,1.1s
**NEW Newport 92.40 6** *e*P **P 01 54 53.1 +0.5**
NEW pmax pmax
comp=Z,6.0nm,1.0s
**NEW Newport 92.40 6** *e*P **P 01 54 53.1 +0.5**
comp=Z,5.6nm,1.0s
**CHMT Chamberlain Mo 94.02 4** *e*P **P 01 55 00.3 0.0**
**BOZ Bozeman (W) 95.36 3** *e*P **P 01 55 06.9 +0.5**
BOZ pmax pmax
comp=Z,2.0nm,0.9s
**BOZ Bozeman (W) 95.36 3** *e*P **P 01 55 06.9 +0.5**
comp=Z,1.8nm,0.9s
**RSSD Black Hills 96.91 358** *e*P **P 01 55 13.7 +0.1**
RSSD pmax pmax
comp=Z,2.0nm,1.0s
**RSSD Black Hills 96.91 358** *e*P **P 01 55 13.7 +0.1**
comp=Z,2.3nm,1.0s
**SNAA Sanae 122.44 201** P **PKPdf 02 00 35.5 -0.6**
**VNA2 Neumayer--Watz 123.44 203** P **PKPdf 02 00 37.8 -0.2**
baz=30,slow=4.2
**VNA1 Neumayer--Stat 123.59 203** P **PKPdf 02 00 39.0 +0.7**
**JTS JuntasAbangare 126.42 332** *e*PKIKP **PKPdf 02 00 44.6 -1.0**
**JTS JuntasAbangare 126.42 332** *e*PKPdf **PKPdf 02 00 44.6 -1.0**
**OTAV Otavalo 132.54 319** *e*PKPdf **PKPdf 02 00 56.7 -1.0**
**LVC Limon Verde 143.32 285** *e*PKPdf **PKPdf 02 01 16.1 -0.8**
**TRQA Tornquist 144.76 257** *e*PKPdf **PKPab 02 01 17.5 -0.1**

*IDC* ***10*** *01:44:27.7±3.6, 4.°00S×102.°43E, h0km, mb3.7/6, mb1 3.9/6, mb1mx3.6/51, mbtmp3.8/6, Error ellipse: s-maj=151.3km s-min=19.3km az=56.0*
*ISCJB* ***10*** *01:44:37.6±0.9, 4.°23S±0.°07×102.°28E±0.°07, h65km, mb3.8/6, Error ellipse: s-maj=13.1km s-min=6.5km az=136.8*
*DJA* ***10*** *01:44:40.2±0.4, 4.°S±5.°×10.°2E±.°, h55km±5km, M4.0/13, mb4.3/2, MLv3.8/13*

**ISC 10 01:44:37.6±1.4, 4.°2S±0.°1×102.°3E±0.°1, h65km, n17, σ1.°81/15, mb3.8/6, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KSI** | **Kapahiang** | **0.61** | **28** | P | P | **Pn** | **01 44 52.5** | **+1.3** |
| KSI | | | | S | S | **Sn** | **01 45 01.3** | **+0.1** |
| **MNAI** | **Manna** | **0.67** | **104** | P | P | **Pn** | **01 44 53.6** | **+1.7** |
| MNAI | | | | S | S | **Sn** | **01 45 04.0** | **+1.7** |
| **MASI** | **Maura Aman, Be** | **1.05** | **357** | P | P | **Pn** | **01 44 57.4** | **+0.9** |
| MASI | | | | S | S | **Sn** | **01 45 12.0** | **+1.5** |
| **LHSI** | **Lahat** | **1.27** | **73** | P | P | **Pn** | **01 44 59.6** | **+0.2** |
| **MDSI** | **Maura Dua** | **1.90** | **99** | P | P | **Pn** | **01 45 08.4** | **+0.7** |
| **KASI** | **Kota Agung** | **2.56** | **121** | P | P | **Pn** | **01 45 18.5** | **+1.8** |
| **PPSI** | **Pulau Pagai** | **2.69** | **302** | P | P | Pn | 01 45 23.0 | +4.4 |
| **PDSI** | **Padang** | **3.74** | **331** | P | P | **Pn** | **01 45 35.8** | **+2.9** |
| **SISI** | **Saibi** | **4.29** | **312** | P | P | **Pn** | **01 45 43.4** | **+3.0** |
| **CMJI** | **Cimerak** | **7.08** | **121** | P | P | **Pn** | **01 46 20.0** | **+1.4** |
| | 47nm,1.6s,0.3nm | | | | | | | |
| **GSI** | **Gunungsitoli** | **7.22** | **319** | P | P | **Pn** | **01 46 20.6** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **22.75** | **352** | P | P | P | 01 49 29.6 | -5.0 |
| | 1.4nm,0.4s,baz=151,slow=6.2,SNR=4.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.91** | **119** | P | P | P | 01 51 20.6 | -2.7 |
| | 1.0nm,0.6s,baz=299,slow=9.0,SNR=12 | | | | | | | |
| **ASAR** | **Alice Springs** | **36.11** | **125** | P | P | **P** | **01 51 32.2** | **-1.4** |
| | 0.5nm,0.4s,baz=298,slow=7.8,SNR=14 | | | | | | | |
| **SONM** | **Songino Array** | **51.93** | **4** | P | P | | 01 53 37.5 | -2.5 |
| | 0.4nm,0.6s,baz=197,slow=8.1,SNR=3.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.77** | **343** | P | P | **P** | **01 53 51.3** | **-2.1** |
| | 0.3nm,0.3s,baz=161,slow=9.3,SNR=3.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.75** | **348** | P | P | | 01 54 32.4 | -3.2 |
| | 0.6nm,0.4s,baz=156,slow=7.9,SNR=2.9 | | | | | | | |

*CSEM* ***10*** *01:46:50.4±0.1, 38.°77N×22.°84E, h12km, MD2.6, Error*

*ellipse: s-maj=1.6km s-min=1.2km az=141.0*
*ATH **10** 01:46:51.0,38°.77N×22°.83E,h8km±2km,MD2.6/19*
**THE 10 01:46:50.7,38°.77N×22°.84E,h10km±1km,ML1.9/7,Error ellipse: s-maj=1.5km s-min=0.3km az=144.0,Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AXAR | Agios Charalam | 0.14 | 268 | ePG | Pg | 01 46 53.8 | -0.2 |
| AXAR | | | | eSG | Sg | 01 46 56.6 | +0.3 |
| AXAR | Agios Charalam | 0.14 | 268 | P | Pg | 01 46 53.8 | -0.2 |
| AXAR | | | | S | Sg | 01 46 56.1 | -0.2 |
| AXAR | Agios Charalam | 0.14 | 268 | ePg | Pg | 01 46 53.8 | -0.2 |
| AXAR | | | | S | Sg | 01 46 56.1 | -0.2 |
| AXAR | | | | eSg | Sg | 01 46 56.6 | +0.3 |
| ATAL | Atalanti | 0.16 | 118 | P | Pg | 01 46 54.3 | 0.0 |
| ATAL | | | | S | Sg | 01 46 57.1 | +0.2 |
| LKR | Lokris | 0.17 | 133 | ePG | Pg | 01 46 54.4 | -0.1 |
| LKR | | | | eSG | Sg | 01 46 57.5 | +0.4 |
| LKR | Lokris | 0.17 | 133 | P | Pg | 01 46 54.4 | -0.1 |
| LKR | | | | S | Sg | 01 46 57.4 | +0.3 |
| LKR | Lokris | 0.17 | 133 | ePg | Pg | 01 46 54.4 | -0.1 |
| LKR | | | | eSg | Sg | 01 46 57.5 | +0.4 |
| SMIA | Simia | 0.31 | 69 | ePG | Pg | 01 46 57.1 | +0.1 |
| SMIA | | | | eSB | Sg | 01 47 02.1 | +0.9 |
| SMIA | Simia | 0.31 | 69 | P | Pg | 01 46 56.8 | -0.2 |
| SMIA | | | | S | Sg | 01 47 01.7 | +0.5 |
| SMIA | Simia | 0.31 | 69 | P | Pg | 01 46 56.8 | -0.2 |
| SMIA | Simia | 0.31 | 69 | ePg | Pg | 01 46 57.1 | +0.1 |
| SMIA | | | | S | Sg | 01 47 01.7 | +0.5 |
| SMIA | | | | eSb | Sb | 01 47 02.1 | -1.4 |
| DSF | Desfina | 0.43 | 214 | ePG | Pg | 01 46 58.9 | -0.4 |
| DSF | | | | eSB | Sg | 01 47 05.7 | +0.6 |
| DSF | Desfina | 0.43 | 214 | P | Pg | 01 46 58.7 | -0.6 |
| DSF | | | | S | Sg | 01 47 05.5 | +0.4 |
| DSF | Desfina | 0.43 | 214 | ePg | Pg | 01 46 58.9 | -0.4 |
| DSF | | | | S | Sg | 01 47 05.5 | +0.4 |
| AGG | Agios Georgios | 0.47 | 303 | ePB | Pg | 01 46 59.5 | -0.5 |
| AGG | | | | eSB | Sg | 01 47 06.3 | +0.1 |
| AGG | Agios Georgios | 0.47 | 303 | P | Pg | 01 46 59.5 | -0.5 |
| AGG | | | | S | Sg | 01 47 06.3 | +0.1 |
| AGG | Agios Georgios | 0.47 | 303 | P | Pg | 01 46 59.5 | -0.5 |
| AGG | | | | S | Sg | 01 47 06.3 | +0.1 |
| MAKR | Makrakomi, Fth | 0.60 | 294 | ePB | Pg | 01 47 02.1 | -0.4 |
| MAKR | | | | eSB | Sb | 01 47 11.3 | -0.6 |
| MAKR | Makrakomi, Fth | 0.60 | 294 | P | Pg | 01 47 02.2 | -0.3 |
| MAKR | | | | S | Sb | 01 47 11.6 | -0.3 |
| MAKR | Makrakomi, Fth | 0.60 | 294 | P | Pg | 01 47 02.2 | -0.3 |
| MAKR | | | | eSb | Sb | 01 47 11.3 | -0.6 |
| MAKR | | | | S | Sg | 01 47 11.6 | +1.2 |
| NEO | Neokhori | 0.61 | 29 | ePB | Pg | 01 47 03.0 | +0.3 |
| NEO | | | | eSB | Sg | 01 47 11.0 | +0.1 |
| NEO | Neokhori | 0.61 | 29 | P | Pg | 01 47 02.3 | -0.4 |
| NEO | | | | S | Sg | 01 47 11.2 | +0.3 |
| NEO | Neokhori | 0.61 | 29 | P | Pg | 01 47 02.3 | -0.4 |
| NEO | Neokhori | 0.61 | 29 | ePb | Pg | 01 47 03.0 | +0.3 |
| NEO | | | | eSb | Sg | 01 47 11.0 | +0.1 |
| SKIA | Skiathos | 0.63 | 51 | ePB | Pb | 01 47 03.5 | -0.3 |
| SKIA | Skiathos | 0.63 | 51 | ePb | Pb | 01 47 03.5 | -0.3 |
| VIL2 | Platees | 0.65 | 149 | ePG | Pb | 01 47 04.3 | +0.1 |
| XOR | Xorichti | 0.66 | 25 | ePB | Pb | 01 47 04.0 | -0.3 |
| XOR | Xorichti | 0.66 | 25 | P | Pg | 01 47 03.0 | -0.5 |
| XOR | | | | S | Sg | 01 47 12.7 | +0.5 |
| XOR | Xorichti | 0.66 | 25 | P | Pg | 01 47 03.0 | -0.5 |
| XOR | Xorichti | 0.66 | 25 | ePb | Pb | 01 47 04.0 | -0.3 |
| XOR | | | | S | Sg | 01 47 12.7 | +0.5 |
| KALE | Kalithea | 0.67 | 235 | ePG | Pg | 01 47 03.3 | -0.4 |
| KALE | Kalithea | 0.67 | 235 | P | Pg | 01 47 03.1 | -0.6 |
| KALE | Kalithea | 0.67 | 235 | ePg | Pg | 01 47 03.3 | -0.4 |
| SERG | Sergoula | 0.71 | 240 | P | Pg | 01 47 03.6 | -0.9 |
| SERG | | | | S | Sb | 01 47 14.9 | -0.1 |
| SERG | Sergoula | 0.71 | 240 | P | Pg | 01 47 03.6 | -0.9 |
| SERG | | | | S | Sb | 01 47 14.9 | -0.1 |
| VILL | Villia | 0.71 | 148 | ePg | Pg | 01 47 04.3 | -0.3 |
| LTK | Loutraki | 0.75 | 172 | ePG | Pg | 01 47 05.0 | -0.3 |
| LTK | Loutraki | 0.75 | 172 | P | Pg | 01 47 04.9 | -0.4 |
| LTK | Loutraki | 0.75 | 172 | ePg | Pg | 01 47 05.0 | -0.3 |
| LOUT | Loutraki | 0.79 | 172 | ePB | Pb | 01 47 06.3 | -0.2 |
| LOUT | Loutraki | 0.79 | 172 | ePb | Pb | 01 47 06.3 | -0.2 |
| EFP | Efpalio | 0.81 | 245 | ePB | Pb | 01 47 06.6 | -0.2 |
| EFP | Efpalio | 0.81 | 245 | ePb | Pb | 01 47 06.6 | -0.2 |
| LAKA | Lakka | 0.86 | 232 | ePB | Pb | 01 47 07.6 | -0.1 |
| LAKA | Lakka | 0.86 | 232 | ePb | Pb | 01 47 07.6 | -0.1 |
| KLV | Kalavryta, Ach | 0.90 | 217 | ePB | Pg | 01 47 08.3 | +0.1 |
| KLV | Kalavryta, Ach | 0.90 | 217 | ePb | Pg | 01 47 08.3 | +0.1 |
| AOS | Alonnisos | 0.91 | 64 | ePG | Pg | 01 47 08.0 | -0.2 |
| AOS | Alonnisos | 0.91 | 64 | ePb | Pg | 01 47 08.0 | -0.2 |
| GUR | Goura | 0.92 | 205 | ePB | Pg | 01 47 08.6 | 0.0 |
| GUR | Goura | 0.92 | 205 | ePb | Pg | 01 47 08.6 | 0.0 |
| EREA | Eretria | 0.93 | 112 | ePN | Pb | 01 47 09.2 | +0.3 |
| EREA | Eretria | 0.93 | 112 | ePn | Pb | 01 47 09.2 | +0.3 |

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*DDA **10** 01:57:04.9,40°.64N×35°.49E,h5km,Md3.0*
*ISK **10** 01:57:05.3,40°.67N×35°.54E,h6km,MD3.1*
*CSEM **10** 01:57:06.0±0.2,40°.67N×35°.51E,h2km,MD3.0,Error ellipse: s-maj=4.2km s-min=3.8km az=108.0*
**ISC 10 01:57:05.7±1.1,40°.66N±0°.02×35°.55E±0°.02,h7km±11km, n41,σ0s.59/58,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HAVZ | Havza | 0.43 | 17 | i P | Pg | 01 57 14.4 | +0.3 |
| HAVZ | | | | i S | Sb | 01 57 21.2 | -1.3 |
| HAVZ | Havza | 0.43 | 17 | P | Pg | 01 57 14.4 | +0.3 |
| HAVZ | | | | S | Sb | 01 57 21.2 | -1.3 |
| KVT | Kavak | 0.56 | 42 | PG | Pg | 01 57 16.7 | 0.0 |
| KVT | | | | SG | Sg | 01 57 24.9 | +0.9 |
| TOKA | Tokat | 0.79 | 115 | i P | Pg | 01 57 20.6 | -0.3 |
| TOKA | | | | i S | Sg | 01 57 31.2 | +0.1 |
| TOKA | Tokat | 0.79 | 115 | P | Pg | 01 57 20.6 | -0.3 |
| TOKA | | | | S | Sg | 01 57 31.2 | +0.1 |
| TOKT | Tokat | 0.83 | 114 | ePG | Pg | 01 57 21.9 | +0.1 |
| TOKT | | | | eSG | Sb | 01 57 34.1 | 0.0 |
| CORM | Corum | 0.85 | 236 | ePG | Pg | 01 57 21.8 | -0.2 |
| CORM | | | | eSG | Sb | 01 57 34.6 | 0.0 |
| CORM | Corum | 0.85 | 236 | ePg | Pg | 01 57 21.8 | -0.2 |
| CORM | | | | eSg | Sb | 01 57 34.6 | 0.0 |
| BYBT | Boyabat | 1.00 | 324 | ePG | Pg | 01 57 24.8 | -0.1 |
| BYBT | | | | eSG | Sb | 01 57 38.7 | -0.1 |
| BYBT | Boyabat | 1.00 | 324 | ePg | Pg | 01 57 24.8 | -0.1 |
| BYBT | | | | eSg | Sb | 01 57 38.7 | -0.1 |
| DIKM | Dikmen | 1.01 | 348 | ePG | Pg | 01 57 24.8 | -0.3 |
| DIKM | Dikmen | 1.01 | 348 | ePg | Pg | 01 57 24.8 | -0.3 |
| TOS | Tosya | 1.22 | 288 | ePN | Pb | 01 57 28.9 | -0.3 |
| TOS | Tosya | 1.22 | 288 | ePn | Pb | 01 57 28.9 | -0.3 |
| SVSK | Karacayir | 1.34 | 123 | ePN | Pn | 01 57 31.2 | +0.4 |
| SVSK | Karacayir | 1.34 | 123 | ePn | Pn | 01 57 31.2 | +0.4 |
| CUSAR | Sarkisla-SIVAS | 1.35 | 156 | P | Pn | 01 57 30.8 | -0.4 |
| CUSAR | | | | S | Sn | 01 57 50.2 | +0.7 |
| CDAG | Cicekdag | 1.37 | 221 | i P | Pn | 01 57 30.9 | -0.6 |
| CDAG | | | | i S | Sb | 01 57 48.7 | -0.9 |
| CDAG | Cicekdag | 1.37 | 221 | P | Pn | 01 57 30.9 | -0.6 |
| CDAG | | | | S | Sb | 01 57 48.7 | -0.9 |
| SNOP | Sinop | 1.38 | 349 | ePN | Pg | 01 57 31.8 | -0.4 |
| SNOP | Sinop | 1.38 | 349 | ePn | Pg | 01 57 31.8 | -0.4 |
| CUALT | Altinyayla-SIV | 1.67 | 146 | P | Pb | 01 57 36.6 | -0.3 |
| CUALT | | | | S | Sg | 01 57 59.7 | +0.3 |
| BNN | Bunyan | 1.82 | 173 | ePN | Pn | 01 57 38.1 | +0.4 |
| BNN | Bunyan | 1.82 | 173 | ePn | Pn | 01 57 38.1 | +0.4 |
| SUSE | Susehri | 2.08 | 102 | i P | Pb | 01 57 43.8 | -0.1 |
| SUSE | Susehri | 2.08 | 102 | P | Pb | 01 57 43.8 | -0.1 |
| SUSE | | | | S | Sg | 01 58 12.3 | -0.1 |
| PINB | Pinarbasi | 2.09 | 161 | i P | Pb | 01 57 43.9 | -0.2 |
| PINB | Pinarbasi | 2.09 | 161 | P | Pb | 01 57 43.9 | -0.2 |
| PINB | | | | S | Sg | 01 58 12.4 | -0.4 |
| BBAL | Bala | 2.17 | 240 | i P | Pn | 01 57 43.7 | +1.3 |
| BBAL | Bala | 2.17 | 240 | P | Pn | 01 57 43.7 | +1.3 |
| BBAL | | | | S | Sg | 01 58 15.4 | 0.0 |
| YAYX | Yaylak | 2.18 | 218 | ePN | Pn | 01 57 43.3 | +0.8 |
| YAYX | Yaylak | 2.18 | 218 | ePn | Pn | 01 57 43.3 | +0.8 |
| AFSR | Af¯ar-Bala (A | 2.25 | 238 | ePN | Pn | 01 57 43.9 | +0.3 |
| AFSR | Af¯ar-Bala (A | 2.25 | 238 | ePn | Pn | 01 57 43.9 | +0.3 |
| SERE | Sereflikochisa | 2.29 | 222 | ePN | Pn | 01 57 45.0 | +0.9 |
| SERE | Sereflikochisa | 2.29 | 222 | ePn | Pn | 01 57 45.0 | +0.9 |
| SARI | SarD1z-Kayseri | 2.35 | 163 | ePN | Pn | 01 57 45.4 | +0.4 |
| GULA | Gulagac | 2.53 | 204 | ePN | Pn | 01 57 48.0 | +0.7 |
| GULA | Gulagac | 2.53 | 204 | ePn | Pn | 01 57 48.0 | +0.7 |
| SULT | Sultanhani-AKS | 2.92 | 213 | ePN | Pn | 01 57 53.6 | +0.9 |
| SULT | Sultanhani-AKS | 2.92 | 213 | ePn | Pn | 01 57 53.6 | +0.9 |

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**IDC 10 01:57:18.2±2.0,56°.43S×27°.61W,h0km,mb3.9/2, mb1 4.0/2,mb1mx3.6/21,mbtmp3.9/2,Error ellipse: s-maj=77.4km s-min=42.8km az=3.0,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 50.41 | 306 | P | P | 02 06 18.1 | 0.0 |
| | 0.6nm,0.6s,baz=184,slow=13,SNR=4.1 | | | | | | |
| TORD | Torodi Ar. Bea | 73.51 | 30 | P | P | 02 08 52.5 | 0.0 |
| | 1.1nm,0.5s,baz=200,slow=6.6,SNR=35 | | | | | | |
| ILAR | Eielson Array | 150.19 | 311 | PKPbc | PKPbc | 02 17 08.8 | -0.8 |
| | 1.1nm,0.9s,baz=119,slow=3.8,SNR=9.4 | | | | | | |
| SONM | Songino Array | 150.98 | 87 | PKPbc | PKPbc | 02 17 12.1 | 0.0 |
| | 0.5nm,0.4s,baz=236,slow=3.9,SNR=5.1 | | | | | | |

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*ISK **10** 02:06:41.7,37°.91N×27°.32E,h5km,MD2.6*
*ISCJB **10** 02:06:43.0±1.2,37°.89N±0°.04×27°.27E±0°.04,h6km±35km, Error ellipse: s-maj=7.2km s-min=4.6km az=32.0*
*DDA **10** 02:06:42.4,37°.89N×27°.28E,h4km,Md2.6*
*CSEM **10** 02:06:43.4±0.3,37°.90N×27°.29E,h2km,MD2.6,Error ellipse: s-maj=8.6km s-min=6.0km az=49.0*
**ISC 10 02:06:42.7±1.0,37°.89N±0°.03×27°.28E±0°.03,h11km±10km, n13,σ0s.59/24,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GCAM | G?zelcaml? | 0.19 | 191 | i P | Pg | 02 06 46.6 | -0.2 |
| GCAM | | | | i S | Sg | 02 06 49.5 | -0.1 |
| GCAM | G?zelcaml? | 0.19 | 191 | P | Pg | 02 06 46.6 | -0.2 |
| GCAM | | | | S | Sg | 02 06 49.5 | -0.1 |
| AYDB | Zeytinkoy-Aydi | 0.49 | 83 | ePG | Pg | 02 06 51.6 | -0.7 |
| AYDB | | | | eSG | Sg | 02 06 59.4 | +0.6 |
| AYDB | Zeytinkoy-Aydi | 0.49 | 83 | ePg | Pg | 02 06 51.6 | -0.7 |
| AYDB | | | | eSg | Sg | 02 06 59.4 | +0.6 |
| IZM | Izmir | 0.51 | 359 | ePG | Pg | 02 06 52.5 | -0.2 |
| IZM | | | | eSG | Sb | 02 07 00.4 | -0.9 |
| IZM | Izmir | 0.51 | 359 | ePg | Pg | 02 06 52.5 | -0.2 |
| IZM | | | | eSg | Sb | 02 07 00.4 | -0.9 |
| AYDN | Tasoluk | 0.53 | 115 | i P | Pb | 02 06 55.1 | +1.0 |
| AYDN | | | | i S | Sb | 02 07 01.2 | -0.5 |
| AYDN | Tasoluk | 0.53 | 115 | P | Pb | 02 06 55.1 | +1.0 |
| AYDN | | | | S | Sb | 02 07 01.2 | -0.5 |
| ZEY | ˜zmir | 0.70 | 300 | P | Pg | 02 06 56.2 | -0.2 |
| ZEY | | | | S | Sb | 02 07 06.5 | -0.3 |
| URLA | Izmir | 0.72 | 311 | i P | Pb | 02 06 57.8 | +0.5 |
| URLA | | | | i S | Sb | 02 07 07.0 | -0.1 |
| URLA | Izmir | 0.72 | 311 | P | Pb | 02 06 57.8 | +0.5 |
| URLA | | | | S | Sb | 02 07 07.0 | -0.1 |
| BODT | Bodrum | 0.82 | 178 | ePG | Pb | 02 06 59.3 | +0.2 |
| BODT | Bodrum | 0.82 | 178 | ePg | Pb | 02 06 59.3 | +0.2 |

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*IDC **10** 02:10:22.4±1.1,1°.06N×85°.22W,h0km,mb4.2/8, mb1 4.4/12,mb1mx4.1/33,mbtmp4.3/12,ML3.8/3,MS3.7/10, Ms1 3.7/10,ms1mx3.7/24,Error ellipse: s-maj=30.1km s-min=17.8km az=45.0*
*ISCJB **10** 02:10:25.3±0.4,0°.89N±0°.06×85°.22W±0°.06,h38km, mb4.6/43,MS3.7/7,Error ellipse: s-maj=10.0km s-min=5.7km az=137.3*
*NEIC **10** 02:10:28.6±1.1,0°.87N×85°.20W,h55km±10km,mb4.7/38, Error ellipse: s-maj=11.7km s-min=6.2km az=54.0*
*BJI **10** 02:10:29.8,0°.80N×85°.20W,h53km,mB5.0/1*
**ISC 10 02:10:27.1±0.6,0°.88N±0°.09×85°.2W±0°.1,h38km,n77, σ1s.28/72,mb4.7/44,MS3.8/7,Off coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OTAV | Otavalo | 6.81 | 95 | ePn | Pn | 02 12 04.5 | -0.5 |
| JTS | JuntasAbangare | 9.36 | 2 | Pn | Pn | 02 12 36.8 | -2.7 |
| | 0.4nm,0.3s,baz=307,slow=20,SNR=3.5 | | | | | | |
| JTS | | | | LR | LR | 02 15 27.4 | |
| | comp=Z,250nm,20.6s,baz=184,slow=33 | | | | | | |
| JTS | JuntasAbangare | 9.36 | 2 | ePn | Pn | 02 12 40.3 | +0.8 |
| BCIP | Isla Barro Col | 9.83 | 33 | ePn | Pn | 02 12 48.3 | +2.2 |
| ATAH | Atahualpa | 10.48 | 140 | Pn | Pn | 02 12 56.3 | +1.0 |
| | 3.5nm,0.3s,baz=315,slow=9.9,SNR=13 | | | | | | |
| ATAH | | | | LR | LR | 02 16 36.0 | |
| | comp=Z,884nm,20.3s,baz=316,slow=35 | | | | | | |
| ROSC | El Rosal | 11.58 | 70 | Pn | Pn | 02 13 10.2 | -0.2 |
| | baz=215,slow=4.2,SNR=5.4 | | | | | | |
| ROSC | | | | LR | LR | 02 17 12.8 | |
| | comp=Z,395nm,20.6s,baz=188,slow=36 | | | | | | |
| ROSC | El Rosal | 11.58 | 70 | ePn | Pn | 02 13 12.3 | +1.9 |
| TGUH | Tegucigalpa,Un | 13.25 | 351 | ePn | Pn | 02 13 34.8 | +2.0 |
| NNA | Nana | 15.26 | 147 | ePn | Pn | 02 13 58.5 | -1.6 |
| CMIG | Matias Romero | 18.70 | 330 | P | P | 02 14 41.8 | -0.6 |
| | 0.1nm,0.3s,baz=146,slow=5.2,SNR=6.6 | | | | | | |
| PCRV | Puerto La Cruz | 22.47 | 65 | P | P | 02 15 23.3 | -0.1 |
| | 9.9nm,0.9s,baz=296,slow=3.2,SNR=4.1 | | | | | | |
| LPAZ | La Paz | 24.00 | 136 | P | P | 02 15 40.1 | +1.0 |
| | 15nm,1.0s,baz=327,slow=8.2,SNR=28 | | | | | | |
| LPAZ | | | | LR | LR | 02 26 05.3 | |
| | comp=Z,181nm,21.5s,baz=302,slow=39 | | | | | | |
| LPAZ | La Paz | 24.00 | 136 | eP | P | 02 15 39.9 | +0.7 |
| | 25nm,1.1s | | | | | | |
| SAML | Samuel | 24.04 | 114 | eP | P | 02 15 38.1 | -0.9 |
| | 12nm,1.1s | | | | | | |
| OBIP | Obispado Ponce | 25.02 | 46 | eP | P | 02 15 49.7 | +1.9 |
| | 42nm,1.3s | | | | | | |
| CELP | Cerrillos | 25.06 | 46 | eP | P | 02 15 49.4 | +1.3 |
| SJG | San Juan | 25.39 | 46 | P | P | 02 15 50.2 | -1.0 |
| | 6.0nm,0.8s,baz=239,slow=5.3,SNR=4.2 | | | | | | |
| SJG | San Juan | 25.39 | 46 | eP | P | 02 15 50.9 | -0.2 |
| | 45nm,1.4s | | | | | | |
| CPD | Cerro la Pandu | 25.52 | 47 | eP | P | 02 15 51.8 | -0.5 |
| | 44nm,0.9s | | | | | | |
| HUMP | Col San Antoni | 25.63 | 47 | eP | P | 02 15 52.8 | -0.5 |
| | 17nm,1.0s | | | | | | |
| LVC | Limon Verde | 28.25 | 147 | eP | P | 02 16 16.7 | -0.5 |
| | 8.5nm,1.0s | | | | | | |
| TXAR | Lajitas Array | 33.31 | 330 | P | P | 02 17 01.3 | -0.3 |
| | 0.4nm,0.8s,baz=152,slow=5.6,SNR=5.7 | | | | | | |
| TXAR | | | | LR | LR | 02 28 34.7 | |
| | comp=Z,76nm,22.0s,baz=0.0,slow=33 | | | | | | |
| JSC | Jenkinsville | 33.44 | 6 | eP | P | 02 17 01.7 | -0.8 |
| | 13nm,1.3s | | | | | | |
| OXF | Oxford | 33.69 | 354 | eP | P | 02 17 02.9 | -1.7 |
| | 22nm,1.0s | | | | | | |
| KMSC | Kings Mountain | 34.28 | 6 | eP | P | 02 17 08.6 | -1.2 |
| | 8.1nm,1.0s | | | | | | |
| MNTX | Cornudas Mount | 36.09 | 330 | eP | P | 02 17 26.6 | +1.2 |
| | 22nm,2.1s | | | | | | |
| V34A | Guthrie | 36.61 | 343 | eP | P | 02 17 29.3 | -0.5 |
| | 10nm,0.9s | | | | | | |
| SIUC | Southern Illin | 36.84 | 355 | eP | P | 02 17 30.7 | -1.0 |
| | 19nm,1.1s | | | | | | |
| U34A | Anderson Ranch | 37.17 | 343 | eP | P | 02 17 34.2 | -0.3 |
| | 149nm,2.5s | | | | | | |
| WCI | Wyandotte Cave | 37.18 | 359 | eP | P | 02 17 32.3 | -2.4 |
| | 59nm,1.4s | | | | | | |
| CCM | Cathedral Cave | 37.41 | 352 | eP | P | 02 17 34.7 | -1.8 |
| | 104nm,2.5s | | | | | | |
| OLIL | Olney | 37.77 | 356 | eP | P | 02 17 39.1 | -0.4 |
| | 12nm,0.8s | | | | | | |
| CPUP | Villa Florida | 38.16 | 137 | LR | LR | 02 32 48.9 | |
| | comp=Z,160nm,18.3s,baz=270,slow=35 | | | | | | |
| ANMO | Albuquerque | 39.25 | 332 | eP | P | 02 17 53.2 | +0.8 |
| | 2.8nm,0.9s | | | | | | |
| BDFB | Brasilia | 40.27 | 116 | LR | LR | 02 33 52.4 | |
| | comp=Z,187nm,18.5s,baz=245,slow=35 | | | | | | |
| SDCO | Great Sand Dun | 41.16 | 335 | eP | P | 02 18 08.6 | +0.3 |
| | 9.5nm,1.4s | | | | | | |
| S22A | 4UR Ranch, Cre | 41.73 | 334 | eP | P | 02 18 13.7 | +0.7 |
| S22A | | | | epP | pP | 02 18 30.1 | +6.2 |
| ISCO | Idaho Springs | 42.96 | 337 | eP | P | 02 18 24.7 | +1.7 |
| | 34nm,2.3s | | | | | | |
| SPMN | St. Paul | 44.66 | 352 | eP | P | 02 18 34.4 | -1.8 |
| | 38nm,1.7s | | | | | | |
| CCUT | Cedar City | 44.76 | 328 | eP | P | 02 18 38.5 | +1.2 |
| | 8.2nm,1.2s | | | | | | |
| TMUT | Trail Mountain | 45.00 | 331 | eP | P | 02 18 39.0 | -0.4 |
| DAC | Darwin (Calif) | 46.25 | 323 | eP | P | 02 18 50.3 | +1.2 |
| | 3.7nm,0.9s | | | | | | |
| R11A | Troy Canyon, C | 46.54 | 327 | eP | P | 02 18 51.9 | +0.5 |
| | 3.0nm,1.1s | | | | | | |
| HWUT | Hardware Ranch | 46.99 | 333 | eP | P | 02 18 55.1 | +0.3 |
| | 3.9nm,0.8s | | | | | | |
| BW06 | Boulder Array | 47.06 | 336 | eP | P | 02 18 54.0 | -1.4 |
| BGU | Big Grassy Mou | 47.14 | 331 | eP | P | 02 18 56.6 | +0.7 |
| | 18nm,2.0s | | | | | | |
| SPUT | South Promonto | 47.16 | 332 | eP | P | 02 18 56.6 | +0.5 |
| | 64nm,2.9s | | | | | | |
| HVU | Hansel Valley | 47.69 | 332 | eP | P | 02 19 00.4 | +0.2 |
| | 54nm,2.6s | | | | | | |
| REDW | Red Top Meadow | 48.09 | 335 | eP | P | 02 19 03.6 | +0.2 |
| | 148nm,3.0s | | | | | | |
| NV01 | Mina Array Sit | 48.12 | 325 | eP | P | 02 19 04.4 | +0.6 |
| NVAR | Mina Array Bea | 48.12 | 325 | P | P | 02 19 02.8 | -1.0 |
| | 3.1nm,1.0s,baz=137,slow=8.4,SNR=11 | | | | | | |
| NVAR | | | | LR | LR | 02 37 25.9 | |
| | comp=Z,135nm,20.6s,baz=81,slow=34 | | | | | | |
| TPAW | Teton Pass | 48.23 | 335 | eP | P | 02 19 06.8 | +2.2 |
| | 73nm,2.8s | | | | | | |
| MDND | Maddock | 48.42 | 347 | eP | P | 02 19 04.7 | -0.9 |
| | 24nm,0.9s | | | | | | |
| HLID | Hailey | 49.83 | 332 | eP | P | 02 19 16.4 | -0.3 |
| | 6.0nm,1.2s | | | | | | |
| ULM | Lac du Bonnet | 50.02 | 351 | P | P | 02 19 16.2 | -1.5 |
| | 5.5nm,0.7s,baz=154,slow=5.9,SNR=5.7 | | | | | | |
| ULM | | | | LR | LR | 02 40 05.5 | |
| | comp=Z,90nm,21.4s,baz=42,slow=36 | | | | | | |
| MFID | Camas Ranch | 50.39 | 331 | eP | P | 02 19 22.2 | +1.4 |
| | 96nm,2.9s | | | | | | |
| WVOR | Wild Horse Val | 51.08 | 328 | eP | P | 02 19 26.9 | +0.8 |
| | 8.4nm,1.1s | | | | | | |
| MOD | Modoc | 51.61 | 327 | eP | P | 02 19 29.4 | -0.7 |
| | 2.1nm,0.6s | | | | | | |
| F10A | Beach Ranch, E | 52.96 | 332 | eP | P | 02 19 40.5 | +0.5 |
| | 12nm,1.0s | | | | | | |
| RKT | Rikitea | 53.92 | 240 | eLR | LR | 02 35 27.8 | |
| | 138nm,28.0s | | | | | | |
| SCHQ | Schefferville | 55.85 | 13 | LR | LR | 02 45 16.9 | |
| | comp=Z,60nm,18.6s,baz=20,slow=38 | | | | | | |
| PPT2 | Papeete2 | 65.90 | 250 | eLR | LR | 02 40 58.5 | |
| | 205nm,25.8s | | | | | | |
| TBI | Tubuai | 66.82 | 244 | eLR | LR | 02 41 25.8 | |
| | 150nm,28.8s | | | | | | |
| INK | Inuvik | 74.84 | 343 | eP | P | 02 22 03.4 | 0.0 |
| | 5.9nm,1.0s | | | | | | |
| ILAR | Eielson Array | 77.45 | 337 | P | P | 02 22 17.8 | -0.5 |
| | 1.4nm,0.9s,baz=136,slow=4.1,SNR=12 | | | | | | |
| ESDC | Sonseca Array | 82.72 | 50 | P | P | 02 22 47.8 | +0.5 |
| | 1.1nm,0.8s,baz=266,slow=5.1,SNR=5.6 | | | | | | |
| VNA1 | Neumayer--Stat | 86.52 | 161 | P | P | 02 23 05.0 | -0.7 |
| VNA2 | Neumayer--Watz | 86.86 | 161 | P | P | 02 23 06.9 | -0.5 |
| | baz=297,slow=5.0 | | | | | | |
| SNAA | Sanae | 88.43 | 162 | P | P | 02 23 14.1 | -0.9 |
| SNAA | Sanae | 88.43 | 162 | eP | P | 02 23 13.6 | -1.4 |
| | 1.8nm,1.1s | | | | | | |
| WMQ | Urumqi | 135.05 | 7 | ePKP | PKPdf | 02 29 43.0 | +0.2 |
| HHC | Hu-ho-hao-te | 135.74 | 342 | ePKP | PKPdf | 02 29 43.7 | -0.5 |
| ASAR | Alice Springs | 135.82 | 236 | PKP | PKPdf | 02 29 47.8 | +3.0 |
| | 1.0nm,0.9s,baz=135,slow=1.8,SNR=7.7 | | | | | | |
| KSH | Kashi | 136.27 | 21 | ePKP | PKPdf | 02 29 46.7 | +1.4 |
| KSH | | | | ePP | PP | 02 32 31.5 | +6.9 |
| KSH | | | | SKKS | | 02 39 18.0 | |
| KSH | | | | PPMZ | | | |
| | 39nm,5.0s | | | | | | |
| WRA | Warramunga Arr | 136.91 | 241 | PKP | PKPdf | 02 29 50.0 | +3.2 |
| | 1.5nm,1.0s,baz=114,slow=1.1,SNR=7.2 | | | | | | |
| LZH | Lanzhou | 142.26 | 348 | ePKP | PKPdf | 02 29 58.3 | +1.9 |
| LZH | | | | pPKP | pPKPdf | 02 30 09.9 | +1.3 |
| LZH | | | | sPKP | | 02 30 15.5 | |
| CD2 | Chengdu | 147.25 | 346 | PKPbc | PKPdf | 02 30 02.8 | -2.2 |

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**NEIC 10 02:22:07.8,51°.36N×175°.21W,h35km,ML2.6(AEIC), After AEIC.,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.86 | 323 | P | Pn | 02 22 23.7 | +0.2 |
| GSMY | | | | S | Sn | 02 22 37.0 | +2.1 |
| ETKA | Kagalaska Isla | 0.90 | 305 | P | Pn | 02 22 24.1 | +0.2 |
| GSTR | Great Sitkin T | 0.91 | 325 | ePn | Pn | 02 22 24.5 | +0.3 |
| GSTD | Great Sitkin T | 0.91 | 321 | P | Pn | 02 22 24.6 | +0.4 |
| ATKA | Atka Island | 1.06 | 36 | P | Pn | 02 22 25.2 | -0.9 |
| ATKA | | | | S | Sn | 02 22 39.4 | -0.2 |
| ADAG | Mount Adagdak | 1.07 | 306 | P | Pn | 02 22 27.5 | +1.2 |
| KOFP | Korovin Flat P | 1.15 | 37 | P | Pn | 02 22 28.1 | +0.6 |
| KOKL | Mount Kliuchef | 1.15 | 33 | P | Pn | 02 22 28.0 | +0.5 |
| KOWE | Korovin West | 1.17 | 30 | P | Pn | 02 22 28.4 | +0.6 |
| KOWE | | | | S | Sn | 02 22 43.5 | +1.0 |
| KIRH | Kanaga Island | 1.29 | 296 | P | Pn | 02 22 29.8 | +0.5 |
| KIKV | Kanaga Island | 1.33 | 294 | P | Pn | 02 22 30.3 | +0.4 |
| TAFP | Tanaga Falls P | 1.81 | 289 | P | Pn | 02 22 37.3 | +0.8 |
| TAFP | | | | S | Sn | 02 23 00.5 | +2.3 |
| TASE | Tanaga Southea | 1.82 | 286 | P | Pn | 02 22 37.8 | +1.1 |
| GANE | Gareloi Northe | 2.27 | 283 | P | Pn | 02 22 44.5 | +1.7 |
| TRAP | Trapper Creek | 17.40 | 41 | P | P | 02 26 13.8 | +5.4 |
| CUT | Chulitna | 17.42 | 41 | P | P | 02 26 13.2 | +4.5 |
| HUR | Hurricane | 17.95 | 40 | P | Pn | 02 26 11.7 | -2.6 |
| SCM | Sheep Creek Mo | 18.43 | 45 | P | Pn | 02 26 26.9 | +6.6 |
| RND | Reindeer | 18.47 | 39 | P | P | 02 26 15.7 | -4.7 |
| BWN | Browne | 18.61 | 37 | P | P | 02 26 21.2 | -0.7 |
| MLY | Manley | 18.63 | 33 | P | Pn | 02 26 30.9 | +8.3 |
| DHY | Denali Highway | 18.91 | 41 | P | P | 02 26 21.6 | -3.7 |
| WRH | Wood River Hil | 19.28 | 37 | P | P | 02 26 27.2 | -2.0 |
| PS11 | TAPS Pump St11 | 19.34 | 45 | P | Pn | 02 26 35.8 | +4.7 |
| CCB | Clear Creek Bu | 19.48 | 36 | P | P | 02 26 29.9 | -1.4 |
| MDM | Murphy Dome | 19.48 | 35 | P | Pn | 02 26 32.5 | -0.3 |
| HARP | HAARP | 19.59 | 44 | P | Pn | 02 26 36.5 | +2.3 |
| HDA | Harding Lake | 19.68 | 38 | P | P | 02 26 30.9 | -2.7 |
| PS08 | TAPS Pump Stn8 | 19.80 | 37 | P | P | 02 26 32.6 | -2.2 |
| IL1 | Eielson Array | 19.88 | 37 | P | P | 02 26 34.4 | -1.4 |
| BCA3 | Beaver Creek A | 21.27 | 44 | P | P | 02 26 54.5 | +3.7 |

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*NIED **10** 02:27:00,31°.20N×142°.00E,h5km,Mw5.3 Best double couple: $M_0$1.02000×10^17 NP1:$\phi_s$205.00000°,δ9.00000°, λ142.00000°. NP2:$\phi_s$333.00000°,δ85.00000°,λ83.00000°.*
*BJI **10** 02:27:44.8,31°.01N×141°.95E,h6km,mb4.9/69,mB5.0/52, Ms5.0/69,Ms7 4.8/67*
*IDC **10** 02:27:48.3±0.5,31°.11N×141°.76E,h0km,mb4.7/28, mb1 4.8/34,mb1mx4.8/45,mbtmp4.7/34,ML3.2/4,MS4.5/26, Ms1 4.5/26,ms1mx4.4/44,Error ellipse: s-maj=13.9km s-min=10.7km az=93.0*
*ISCJB **10** 02:27:49.4±0.8,31°.11N±0°.02×141°.66E±0°.02,h15km±4km, mb5.0/184,MS4.8/40,Error ellipse: s-maj=3.2km s-min=2.6km az=19.9*
*JMA **10** 02:27:49.6±0.3,31°.20N×142°.02E,h34km,M4.7*
*GCMT **10** 02:27:51.4±0.2,31°.04N×141°.99E,h18km,MW5.1/88, Moment Tensor Solution. s47,c62; s88,c131; Duration: 0 Moment tensor: Scale 10^16Nm; $M_{rr}$4.58±.21; $M_{\theta\theta}$-0.17±.13; $M_{\phi\phi}$-4.41±.15; $M_{r\theta}$-1.34±.35; $M_{\theta\phi}$1.66±.09; $M_{\phi r}$3.59±.34; Best double couple: $M_0$6.12700×10^16 NP1:$\phi_s$340.00000°,δ64.00000°,λ89.00000°. NP2: $\phi_s$162.00000°,δ26.00000°,λ92.00000°. Principal axes: T 5.9270, Plg71.0000°, Azm248.0000°; N 0.4020, Plg1.0000°, Azm340.0000°; P -6.3280, Plg19.0000°, Azm71.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC **10** 02:27:51.4±2.3,31°.07N×141°.61E,h15km±14km, mb5.1/115,MW5.3(NIED) Error ellipse: s-maj=4.6km s-min=3.6km az=126.0*
*MOS **10** 02:27:54.7±0.9,31°.37N×141°.52E,h42km,mb5.3/68, MS4.8/18,Error ellipse: s-maj=7.9km s-min=4.5km az=116.9*
**ISC 10 02:27:51.1±0.4,31°.12N±0°.03×141°.64E±0°.04,h16km±1km, h16km:pP-P,n701,σ1s.32/755,mb5.1/188,MS4.8/41, 30C-22D,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHJ2 | Mitsune | 2.52 | 323 | ePn | Pn | 02 28 28.2 | -3.1 |
| JHJ | Hachijo jima 2 | 2.54 | 322 | Pn | Pn | 02 28 31.1 | -0.5 |
| | 41nm,0.3s,baz=60,slow=20,SNR=2.7 | | | | | | |
| JHJ | | | | Sn | Sn | 02 29 03.0 | +0.8 |
| | 163nm,0.3s,baz=120,slow=2.4,SNR=7.4 | | | | | | |
| BSO1 | Boso 1 | 3.57 | 351 | P | Pn | 02 28 44.3 | -1.0 |
| BSO3 | Boso 3 | 3.79 | 346 | P | Pn | 02 28 47.9 | -0.7 |
| JIM2 | Oshima 3 | 4.04 | 333 | P | Pn | 02 28 52.8 | +0.5 |
| CBIJ | Chichi jima | 4.04 | 173 | P | Pn | 02 28 51.9 | -0.4 |
| CBIJ | | | | eS | Sn | 02 29 34.6 | -4.6 |
| CBIJ | Chichi jima | 4.04 | 173 | ePn | Pn | 02 28 51.3 | -1.0 |
| JIZS | Izushimoda | 4.27 | 328 | eS | Sn | 02 29 46.7 | +1.7 |
| TK02 | Tokai 2 | 4.32 | 312 | P | Pn | 02 28 57.7 | +1.7 |
| JYO | Yokosk | 4.41 | 339 | P | Pn | 02 28 59.2 | +1.8 |
| JYO | | | | eS | Sn | 02 29 49.2 | +0.8 |
| JHHJ | Haha-jima-NKT | 4.50 | 174 | P | Pn | 02 28 58.5 | -0.1 |
| JHHJ | | | | eS | Sn | 02 29 50.1 | -0.5 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CHOJ | Chosi | 4.62 | 352 | S | Sn | 02 29 50.4 | -3.0 | |
| JYN | Shimob | 5.08 | 330 | P | Pn | 02 29 08.8 | +2.2 | |
| JRY | Ryogami san | 5.39 | 336 | P | Pn | 02 29 12.8 | +1.9 | |
| JRY | | | | S | Sn | 02 30 14.1 | +1.5 | |
| JAG | Ashikaga | 5.59 | 342 | P | Pn | 02 29 13.5 | -0.1 | |
| JWY | Kouya | 5.96 | 303 | P | Pn | 02 29 22.6 | +3.9 | |
| MJAR | Matsushiro Arr | 6.11 | 333 | Pn | Pn | 02 29 21.1 | +0.3 | |
| | 15nm,0.3s,baz=158,slow=12,SNR=149 | | | | | | | |
| MJAR | | | | Sn | Sn | 02 30 31.5 | +1.2 | |
| | baz=157,slow=16,SNR=4.6 | | | | | | | |
| MAJO | Matsushiro | 6.12 | 333 | *c iP* | Pn | 02 29 22.6 | +1.8 | |
| MAJO | Matsushiro | 6.12 | 333 | *e*Pn | Pn | 02 29 22.8 | +2.0 | |
| MAT | Matsushiro | 6.12 | 333 | P | Pn | 02 29 22.6 | +1.8 | |
| MAT | | | | S | Sn | 02 30 31.2 | +0.8 | |
| JNU | Nakatsue | 9.34 | 285 | Pn | Pn | 02 30 07.8 | +2.7 | |
| | 0.2nm,0.3s,baz=27,slow=9.0,SNR=2.4 | | | | | | | |
| JNU | | | | LR | LR | 02 33 48.7 | | |
| | comp=Z,5μm,18.2s,baz=104,slow=38 | | | | | | | |
| JNU | Nakatsue | 9.34 | 285 | *e*Pn | Pn | 02 30 11.0 | +5.9 | |
| ERM | Erimo | 10.94 | 6 | *e*P | Pn | 02 30 24.1 | -2.8 | |
| ERM | Erimo | 10.94 | 6 | Pn | Pn | 02 30 24.8 | -2.1 | |
| | 288nm,1.2s,SNR=11 | | | | | | | |
| KSRS | Korea Array | 12.97 | 303 | Pn | Pn | 02 30 56.3 | +1.5 | |
| | 0.2nm,0.3s,baz=96,slow=25,SNR=4.2 | | | | | | | |
| KSRS | | | | LR | LR | 02 35 55.8 | | |
| | comp=Z,2μm,18.6s,baz=115,slow=37 | | | | | | | |
| ASAJ | Asahikawa | 13.00 | 3 | Pn | Pn | 02 30 52.6 | -2.4 | |
| | baz=190,slow=8.6 | | | | | | | |
| ASAJ | | | | Sn | Sn | 02 33 10.0 | -9.2 | |
| | 0.9nm,0.3s,baz=341,slow=24,SNR=6.1 | | | | | | | |
| ASAJ | Asahikawa | 13.00 | 3 | P | Pn | 02 30 52.6 | -2.4 | |
| ASAJ | | | | | | 02 33 10.0 | | |
| ASAJ | | | | smax | smax | | | |
| | comp=N,1.0nm,0.3s | | | | | | | |
| ASAJ | Asahikawa | 13.00 | 3 | *e*Pn | Pn | 02 30 51.7 | -3.3 | |
| ASAJ | | | | *e*Sn | Sn | 02 33 09.3 | -10 | |
| KSAR | Wonju Array Be | 13.00 | 303 | P | Pn | 02 30 56.3 | +1.2 | |
| KSAR | Wonju Array Be | 13.00 | 303 | Pn | Pn | 02 30 56.3 | +1.2 | |
| KS01 | Wonju Array Si | 13.01 | 303 | *e*Pn | Pn | 02 30 55.2 | 0.0 | |
| YUK | Yuzh-Kuril'sk | 13.32 | 13 | P | Pn | 02 30 55.0 | -4.4 | |
| YUK | | | | pmax | pmax | | | |
| | comp=N,62nm,0.8s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=E,62nm,0.8s | | | | | | | |
| YUK | | | | pmax | pmax | | | |
| | comp=Z,75nm,0.8s | | | | | | | |
| YUK | | | | MLR | MLR | | | |
| | comp=N,667nm,17.0s | | | | | | | |
| YUK | | | | MLR | MLR | | | |
| | comp=Z,714nm,17.0s | | | | | | | |
| INCN | Inchon | 13.93 | 301 | P | P | 02 31 17.0 | +1.2 | |
| | SNR=5.6 | | | | | | | |
| INCN | Inchon | 13.93 | 301 | *e*Pn | Pn | 02 31 06.8 | -1.0 | |
| VLA | Vladivostok | 14.27 | 330⇑ | *e*P | Pn | 02 31 14.5 | +2.1 | |
| VLA | | | | *e*S | Sn | 02 33 49.4 | -0.8 | |
| VLA | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.6s | | | | | | | |
| KUR | Kuril'sk | 14.91 | 17 | P | Pn | 02 31 13.1 | -8.0 | |
| KUR | | | | pmax | pmax | | | |
| | comp=Z,153nm,2.3s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=N,17nm,0.9s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=E,11nm,0.9s | | | | | | | |
| KUR | | | | pmax | pmax | | | |
| | comp=Z,22nm,0.9s | | | | | | | |
| KUR | | | | MLR | MLR | | | |
| | comp=N,575nm,12.0s | | | | | | | |
| KUR | | | | MLR | MLR | | | |
| | comp=E,206nm,12.0s | | | | | | | |
| KUR | | | | MLR | MLR | | | |
| | comp=Z,802nm,12.0s | | | | | | | |
| USRK | Ussuriysk Ar. | 15.11 | 332 | Pn | Pn | 02 31 22.8 | -1.1 | |
| | comp=Z,0.2nm,0.3s,baz=146,slow=12,SNR=8.1 | | | | | | | |
| USRK | | | | LR | LR | 02 37 14.4 | | |
| | comp=Z,2μm,18.3s,baz=138,slow=37 | | | | | | | |
| YSS | Yuzh-Sakhalins | 15.84 | 3⇑ | *e*P | Pn | 02 31 29.8 | -3.5 | |
| YSS | | | | *e*S | Sn | 02 34 15.0 | -13 | |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| YSS | | | | MLR | MLR | | | |
| | comp=Z,2μm,13.0s | | | | | | | |
| YSS | | | | MLR | MLR | | | |
| | comp=N,3μm,12.0s | | | | | | | |
| YSS | | | | MLR | MLR | | | |
| | comp=E,2μm,12.0s | | | | | | | |
| YSS | Yuzh-Sakhalins | 15.84 | 3 | *e*Pn | Pn | 02 31 30.1 | -3.1 | |
| | comp=E,94nm,1.3s | | | | | | | |
| MDJ | Mudanjiang | 16.46 | 328 | P | Pn | 02 31 42.5 | +1.1 | |
| MDJ | | | | pP | pP | 02 31 48.1 | -0.5 | |
| MDJ | | | | sP | sP | 02 31 49.3 | -1.4 | |
| MDJ | | | | S | Sn | 02 34 43.8 | +0.1 | |
| MDJ | | | | PcP | PcP | 02 36 35.7 | +3.0 | |
| MDJ | | | | ScS | ScS | 02 43 47.8 | +2.1 | |
| MDJ | | | | PMZ | | | | |
| | comp=E,22nm,1.1s | | | | | | | |
| MDJ | | | | PMZ | | | | |
| | comp=E,210nm,8.4s | | | | | | | |
| MDJ | | | | LN | | | | |
| | comp=E,2μm,19.1s | | | | | | | |
| MDJ | | | | LE | | | | |
| | comp=E,2μm,20.1s | | | | | | | |
| MDJ | | | | LZ | | | | |
| | comp=E,2μm,16.4s | | | | | | | |
| MDJ | Mudanjiang | 16.46 | 328 | *e*P | P | 02 31 43.2 | -0.8 | |
| | comp=E,20nm,0.8s | | | | | | | |
| SSE | Sheshan | 17.52 | 275 | P | Pn | 02 31 53.6 | -1.0 | |
| SSE | | | | S | S | 02 35 15.9 | -1.3 | |
| SSE | | | | PMZ | | | | |
| | comp=E,37nm,0.6s | | | | | | | |
| SSE | | | | PMZ | | | | |
| | comp=E,520nm,7.5s | | | | | | | |
| SSE | | | | LN | | | | |
| | comp=E,2μm,14.2s | | | | | | | |
| SSE | | | | LE | | | | |
| | comp=E,2μm,15.2s | | | | | | | |
| SSE | | | | LZ | | | | |
| | comp=E,3μm,17.2s | | | | | | | |
| GUMO | Guam | 17.70 | 170 | P | Pn | 02 31 56.6 | -0.4 | |
| | comp=E,5.0nm,0.3s,baz=303,slow=2.8,SNR=5.4 | | | | | | | |
| GUMO | | | | LR | LR | 02 38 25.2 | | |
| | comp=E,1μm,18.4s,baz=352,slow=36 | | | | | | | |
| GUMO | Guam | 17.70 | 170 | P | Pn | 02 31 56.6 | -0.4 | |
| GUMO | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.3s | | | | | | | |
| GUMO | | | | MLR | MLR | | | |
| | comp=Z,1μm,18.4s | | | | | | | |
| GUMO | Guam | 17.70 | 170 | *e*Pn | Pn | 02 31 54.8 | -2.2 | |
| | comp=Z,557nm,1.5s | | | | | | | |
| UGL | Uglegorsk | 17.94 | 1 | *e*P | P | 02 32 03.5 | +3.3 | |
| UGL | | | | pmax | pmax | | | |
| | comp=Z,67nm,1.0s | | | | | | | |
| UGL | | | | pmax | pmax | | | |
| | comp=Z,500nm,3.0s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=N,2μm,16.0s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=E,2μm,16.0s | | | | | | | |
| UGL | | | | MLR | MLR | | | |
| | comp=Z,2μm,16.0s | | | | | | | |
| SNY | Shenyang | 18.00 | 311 | ⇓P | P | 02 32 01.1 | +0.2 | |
| SNY | | | | S | Sn | 02 35 17.7 | -3.1 | |
| SNY | | | | PMZ | | | | |
| | comp=Z,49nm,1.2s | | | | | | | |
| SNY | | | | LN | | | | |
| | comp=Z,3μm,14.7s | | | | | | | |
| SNY | | | | LE | | | | |
| | comp=Z,3μm,14.7s | | | | | | | |
| SNY | | | | LZ | | | | |
| | comp=Z,2μm,16.5s | | | | | | | |
| CN2 | Changchun | 18.00 | 319 | *e*P | Pn | 02 32 00.6 | +0.1 | |
| CN2 | | | | *e*S | Sn | 02 35 18.7 | -2.2 | |
| CN2 | | | | PMZ | | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| CN2 | | | | LN | | | | |
| | comp=Z,1μm,15.0s | | | | | | | |
| CN2 | | | | LE | | | | |
| | comp=Z,1μm,15.0s | | | | | | | |
| CN2 | | | | LZ | | | | |
| | comp=Z,2μm,15.0s | | | | | | | |
| HABR | Khabarovsk | 18.04 | 346 | *e*P | Pn | 02 31 59.5 | -1.5 | |
| HABR | | | | *e*S | Sn | 02 35 17.7 | -4.1 | |
| HABR | | | | pmax | pmax | | | |
| | comp=Z,147nm,1.4s | | | | | | | |
| HABR | | | | MLR | MLR | | | |
| | comp=Z,1μm,16.0s | | | | | | | |
| DL2 | Dalian | 18.12 | 301 | P | P | 02 32 03.1 | +0.8 | |
| DL2 | | | | S | Sn | 02 35 22.1 | -1.7 | |
| DL2 | | | | PMZ | | | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| DL2 | | | | PMZ | | | | |
| | comp=Z,220nm,6.0s | | | | | | | |
| DL2 | | | | LN | | | | |
| | comp=Z,1μm,12.7s | | | | | | | |
| DL2 | | | | LE | | | | |
| | comp=Z,2μm,15.9s | | | | | | | |
| DL2 | | | | LZ | | | | |
| | comp=Z,2μm,16.3s | | | | | | | |
| TATO | Taipei | 18.80 | 256 | *e*P | P | 02 32 09.9 | 0.0 | |
| | comp=Z,268nm,1.4s | | | | | | | |
| YHNB | Yeheng | 19.02 | 255 | *e*P | Pn | 02 32 13.9 | +0.8 | |
| | comp=Z,73nm,0.9s | | | | | | | |
| NACB | Ninganchiao | 19.04 | 254 | *e*P | Pn | 02 32 13.7 | +0.3 | |
| | comp=Z,63nm,0.8s | | | | | | | |
| NJ2 | Nanjing | 19.43 | 279 | *e*P | P | 02 32 17.1 | +0.3 | |
| NJ2 | | | | pP | pP | 02 32 20.2 | -1.2 | |
| NJ2 | | | | S | Sn | 02 35 53.0 | -2.6 | |
| NJ2 | | | | sS | sS | 02 36 05.0 | +1.7 | |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,40nm,0.8s | | | | | | | |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,640nm,11.6s | | | | | | | |
| NJ2 | | | | LN | | | | |
| | comp=Z,4μm,17.7s | | | | | | | |
| NJ2 | | | | LE | | | | |
| | comp=Z,4μm,16.6s | | | | | | | |
| NJ2 | | | | LZ | | | | |
| | comp=Z,4μm,16.3s | | | | | | | |
| YULB | Yu-li | 19.64 | 252 | *e*P | Pn | 02 32 19.9 | -0.6 | |
| | comp=Z,90nm,0.8s | | | | | | | |
| SSLB | Suanglung | 19.74 | 253 | *e*P | Pn | 02 32 21.4 | -0.4 | |
| | comp=Z,182nm,1.1s | | | | | | | |
| TWG | Pinlang | 20.09 | 251 | *e*P | Pn | 02 32 25.4 | -0.4 | |
| | comp=Z,458nm,1.3s | | | | | | | |
| TPUB | Ta-pu | 20.22 | 252 | *e*P | Pn | 02 32 27.7 | +0.2 | |
| | comp=Z,88nm,1.0s | | | | | | | |
| TIA | Tai'an | 21.00 | 291 | ⇓P | P | 02 32 34.0 | +0.1 | |
| TIA | | | | S | Sn | 02 36 34.5 | +0.9 | |
| TIA | | | | PMZ | | | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| TIA | | | | PMZ | | | | |
| | comp=Z,260nm,9.0s | | | | | | | |
| TIA | | | | LN | | | | |
| | comp=Z,4μm,13.1s | | | | | | | |
| TIA | | | | LE | | | | |
| | comp=Z,3μm,14.9s | | | | | | | |
| TIA | | | | LZ | | | | |
| | comp=Z,5μm,15.3s | | | | | | | |
| QZH | Quanzhou | 21.23 | 259⇑ | *i*P | P | 02 32 38.0 | +1.6 | |
| QZH | | | | *e*S | S | 02 36 34.1 | +2.1 | |
| QZH | | | | LN | | | | |
| | comp=Z,2μm,17.3s | | | | | | | |
| QZH | | | | LE | | | | |
| | comp=Z,2μm,13.8s | | | | | | | |
| QZH | | | | LZ | | | | |
| | comp=Z,4μm,17.2s | | | | | | | |
| BJI | Beijing | 22.48 | 300 | P | P | 02 32 48.5 | -1.2 | |
| BJI | | | | S | S | 02 36 47.8 | -7.9 | |
| BJI | | | | PMZ | | | | |
| | comp=Z,46nm,1.0s | | | | | | | |
| BJI | | | | LN | | | | |
| | comp=Z,2μm,19.7s | | | | | | | |
| BJI | | | | LE | | | | |
| | comp=Z,3μm,17.5s | | | | | | | |
| BJI | | | | LZ | | | | |
| | comp=Z,2μm,18.0s | | | | | | | |
| BJT | Baijiatuau | 22.48 | 300 | *e*P | P | 02 32 48.8 | -0.9 | |
| BJT | | | | pmax | pmax | | | |
| | comp=Z,33nm,0.6s | | | | | | | |
| BJT | Baijiatuau | 22.48 | 300 | *e*P | P | 02 32 48.8 | -0.9 | |
| | comp=Z,33nm,0.6s | | | | | | | |
| HIA | Hailar | 24.52 | 324 | *e*P | P | 02 33 09.2 | -0.5 | |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,68nm,1.1s | | | | | | | |
| HIA | Hailar | 24.52 | 324 | *e*P | P | 02 33 09.2 | -0.5 | |
| | comp=Z,68nm,1.1s | | | | | | | |
| PETK | Petropavlovsk- | 24.88 | 23 | P | P | 02 33 11.9 | -1.1 | |
| | comp=Z,5.6nm,1.1s,baz=160,slow=11,SNR=2.3 | | | | | | | |
| PETK | | | | LR | LR | 02 45 25.3 | | |
| | comp=Z,522nm,18.8s,baz=216,slow=42 | | | | | | | |
| PET | Petropavlovsk | 25.14 | 25 | *e*P | P | 02 33 16.8 | +1.5 | |
| PET | | | | *e*S | S | 02 37 35.2 | -4.2 | |
| PET | | | | | | 02 38 45.3 | | |
| PET | | | | pmax | pmax | | | |
| | comp=Z,200nm,10.6s | | | | | | | |
| PET | | | | MLR | MLR | | | |
| | comp=Z,1μm,15.0s | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 25.41 | 111 | T | T | 02 59 42.5 | | |
| | baz=304,slow=74,SNR=5.6 | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 25.42 | 111 | T | T | 02 59 32.7 | | |
| | baz=304,slow=74,SNR=5.8 | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 25.43 | 111 | T | T | 03 00 02.1 | | |
| | baz=304,slow=74,SNR=6.8 | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 25.91 | 113 | T | T | 03 00 43.3 | | |
| | baz=304,slow=74,SNR=13 | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 25.91 | 113 | T | T | 03 00 23.0 | | |
| | baz=304,slow=74,SNR=12 | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 25.93 | 113 | T | T | 03 00 38.5 | | |
| | baz=304,slow=74,SNR=13 | | | | | | | |
| HHC | Hu-ho-hao-te | 26.09 | 300 | *e*P | P | 02 33 23.4 | -0.8 | |
| HHC | | | | PP | PnPn | 02 34 05.8 | +3.4 | |
| HHC | | | | S | S | 02 37 54.1 | -0.8 | |
| HHC | | | | sS | sS | 02 38 01.7 | -1.4 | |
| HHC | | | | SS | SnSn | 02 39 03.3 | +10 | |
| HHC | | | | PcS | PcS | 02 40 25.6 | -6.9 | |
| HHC | | | | PMZ | | | | |
| | comp=Z,27nm,0.9s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,190nm,4.7s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,2μm,10.8s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,3μm,10.6s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,3μm,10.4s | | | | | | | |
| BTO | Baotou | 27.19 | 299 | *e*P | P | 02 33 33.1 | -1.0 | |
| XAN | Xi'an | 27.66 | 285 | P | P | 02 33 37.4 | -0.9 | |
| XAN | | | | pP | pP | 02 33 41.4 | -1.8 | |
| XAN | | | | sP | sP | 02 33 44.1 | -1.2 | |
| XAN | | | | PP | PnPn | 02 34 25.3 | +1.5 | |
| XAN | | | | S | S | 02 38 15.5 | -4.1 | |
| XAN | | | | PMZ | | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| XAN | | | | PMZ | | | | |
| | comp=Z,38nm,4.3s | | | | | | | |
| XAN | | | | LN | | | | |
| | comp=Z,880nm,13.5s | | | | | | | |
| XAN | | | | LE | | | | |
| | comp=Z,2μm,14.5s | | | | | | | |
| XAN | | | | LZ | | | | |
| | comp=Z,1μm,14.5s | | | | | | | |
| CLNS | Chul'man | 28.23 | 340 | *e*P | P | 02 33 42.3 | -0.8 | |
| CLNS | | | | *e**PP | pP | 02 33 52.0 | +3.9 | |
| CLNS | | | | *e* | | 02 34 27.5 | | |
| CLNS | | | | *e* | | 02 36 56.6 | | |
| CLNS | | | | *e*S | S | 02 38 23.1 | -5.1 | |
| CLNS | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| CLNS | | | | pmax | pmax | | | |
| | comp=N,11nm,0.9s | | | | | | | |
| CLNS | | | | pmax | pmax | | | |
| | comp=E,5.0nm,0.9s | | | | | | | |
| CLNS | | | | pmax | pmax | | | |
| | comp=E,13nm,1.1s | | | | | | | |
| CLNS | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| CLNS | | | | pmax | pmax | | | |
| | comp=N,11nm,0.8s | | | | | | | |
| CLNS | | | | smax | smax | | | |
| | comp=E,442nm,12.5s | | | | | | | |
| CLNS | | | | smax | smax | | | |
| | comp=N,222nm,11.1s | | | | | | | |
| CLNS | | | | MLR | MLR | | | |
| | comp=E,798nm,13.0s | | | | | | | |
| CLNS | | | | MLR | MLR | | | |
| | comp=Z,741nm,15.0s | | | | | | | |
| CLNS | | | | MLR | MLR | | | |
| | comp=N,602nm,14.0s | | | | | | | |
| MA2 | Magadan | 29.11 | 10 | *e*P | P | 02 33 51.1 | +0.2 | |
| GYA | Guiyang | 30.92 | 270⇑ | *i*P | P | 02 34 10.9 | +3.5 | |
| GYA | | | | PP | PnPn | 02 35 09.8 | +1.7 | |
| GYA | | | | PcP | PcP | 02 37 05.0 | +1.2 | |
| GYA | | | | S | S | 02 39 10.2 | -1.0 | |
| GYA | | | | SS | SnSn | 02 40 53.4 | +2.3 | |
| GYA | | | | PMZ | | | | |
| | comp=N,20nm,0.8s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=N,120nm,4.9s | | | | | | | |
| GYA | | | | LN | | | | |
| | comp=N,590nm,16.7s | | | | | | | |
| GYA | | | | LE | | | | |
| | comp=N,540nm,17.0s | | | | | | | |
| GYA | | | | LZ | | | | |
| | comp=N,550nm,16.8s | | | | | | | |
| QIZ | Qiongzhong | 31.10 | 255 | P | P | 02 34 09.1 | +0.2 | |
| QIZ | | | | pP | pP | 02 34 12.0 | -1.9 | |
| QIZ | | | | sP | sP | 02 34 13.1 | -2.8 | |
| QIZ | | | | S | S | 02 39 14.9 | +1.1 | |
| QIZ | | | | sS | sS | 02 39 20.9 | -1.2 | |
| QIZ | | | | PMZ | | | | |
| | comp=N,30nm,2.7s | | | | | | | |
| QIZ | | | | PMZ | | | | |
| | comp=N,190nm,3.2s | | | | | | | |
| QIZ | | | | LN | | | | |
| | comp=N,690nm,18.1s | | | | | | | |
| QIZ | | | | LZ | | | | |
| | comp=N,1μm,18.8s | | | | | | | |
| ULN | Ulaanbaatar | 31.17 | 312 | *e*P | P | 02 34 10.6 | +1.2 | |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,59nm,1.2s | | | | | | | |
| ULN | Ulaanbaatar | 31.17 | 312 | P | P | 02 34 10.9 | +1.6 | |
| | SNR=23 | | | | | | | |
| ULN | Ulaanbaatar | 31.17 | 312 | *e*P | P | 02 34 10.6 | +1.2 | |
| | comp=Z,59nm,1.2s | | | | | | | |
| SONA1 | Songino Array | 31.57 | 312 | *e*P | P | 02 34 13.1 | +0.2 | |
| SONM | Songino Array | 31.57 | 312 | P | P | 02 34 13.9 | +0.9 | |
| | comp=Z,18nm,0.8s,baz=118,slow=8.3,SNR=104 | | | | | | | |
| SONM | | | | LR | LR | 02 47 34.0 | | |
| | comp=Z,953nm,18.4s,baz=105,slow=37 | | | | | | | |
| LZH | Lanzhou | 31.73 | 289 | *e*P | P | 02 34 14.3 | -0.2 | |
| LZH | | | | pP | pP | 02 34 17.5 | -2.0 | |
| LZH | | | | sP | sP | 02 34 20.4 | -1.1 | |
| LZH | | | | PP | PnPn | 02 35 17.0 | -1.5 | |
| LZH | | | | S | S | 02 39 19.3 | -4.5 | |
| LZH | | | | PMZ | | | | |
| | comp=Z,60nm,1.5s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,170nm,4.7s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,1μm,14.2s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,2μm,15.2s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,2μm,17.4s | | | | | | | |
| YAK | Yakutsk | 31.89 | 349 | *e*P | P | 02 34 14.2 | -1.1 | |
| YAK | | | | *e**PP | pP | 02 34 33.4 | +13 | |
| YAK | | | | *e* | | 02 35 22.1 | | |
| YAK | | | | *e*S | S | 02 39 17.9 | -7.3 | |
| YAK | | | | *e*SS | SnSn | 02 41 14.1 | +0.6 | |
| YAK | | | | *e* | | 02 44 36.7 | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,2.0nm,1.3s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,11nm,3.5s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,11nm,3.8s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,8.0nm,3.0s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=N,7.0nm,2.3s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=E,10.0nm,2.5s | | | | | | | |
| CD2 | Chengdu | 32.36 | 280 | *e*P | P | 02 34 19.0 | -0.9 | |
| CD2 | | | | pP | pP | 02 34 24.4 | -0.6 | |
| CD2 | | | | PP | PP | 02 35 33.0 | -0.1 | |
| CD2 | | | | S | S | 02 39 34.0 | +0.5 | |
| CD2 | | | | sS | sS | 02 39 41.5 | -0.3 | |
| CD2 | | | | PMZ | | | | |
| | comp=E,10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=E,160nm,5.0s | | | | | | | |
| CD2 | | | | LN | | | | |
| | comp=E,2μm,15.2s | | | | | | | |
| CD2 | | | | LE | | | | |
| | comp=E,2μm,13.7s | | | | | | | |
| CD2 | | | | LZ | | | | |
| | comp=E,2μm,14.2s | | | | | | | |
| SEY | Seymchan | 32.57 | 9 | P | P | 02 34 20.9 | -0.4 | |
| | comp=E,5.9nm,0.6s,baz=191,slow=7.3,SNR=9.7 | | | | | | | |
| SEY | Seymchan | 32.57 | 9 | *c e*P | P | 02 34 21.6 | +0.3 | |
| BOD | Bodaibo | 32.75 | 333 | *e*P | P | 02 34 21.4 | -1.5 | |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| TNTI | Ternate | 33.08 | 207 | P | P | 02 34 26.0 | -0.2 | |
| TNTI | Ternate | 33.08 | 207 | *e*P | P | 02 34 25.9 | -0.2 | |
| | comp=Z,135nm,1.4s | | | | | | | |
| MYLDM | Lahad Datu | 33.74 | 225 | *e*P | P | 02 34 33.8 | +1.8 | |
| | comp=Z,57nm,1.1s | | | | | | | |
| LBMI | Labuha | 34.32 | 206 | P | P | 02 34 37.4 | +0.4 | |
| LBMI | Labuha | 34.32 | 206 | P | P | 02 34 37.6 | +0.6 | |
| | comp=Z,82nm,1.1s | | | | | | | |
| ZAK | Zakamensk | 34.35 | 315 | *e*P | P | 02 34 37.2 | +0.1 | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.7s | | | | | | | |
| IRK | Irkutsk | 34.44 | 319 | *e*P | P | 02 34 38.8 | +1.0 | |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,65nm,2.4s | | | | | | | |
| KKM | Kota Kinabalu | 34.50 | 229 | *e*P | P | 02 34 38.6 | -0.1 | |
| | comp=Z,62nm,1.3s | | | | | | | |
| TLY | Talaya | 34.59 | 318 | *c i*P | P | 02 34 40.1 | +1.0 | |
| TLY | | | | *e* | | 02 40 12.4 | | |
| TLY | | | | pmax | pmax | | | |
| | comp=Z,40nm,1.3s | | | | | | | |
| TLY | | | | MLR | MLR | | | |
| | comp=Z,1μm,13.0s | | | | | | | |
| TLY | Talaya | 34.59 | 318 | P | P | 02 34 40.4 | +1.3 | |
| | comp=Z,121nm,1.5s,SNR=6.5 | | | | | | | |
| TLY | Talaya | 34.59 | 318 | P | P | 02 34 40.9 | +1.8 | |
| | SNR=10 | | | | | | | |
| TLY | Talaya | 34.59 | 318 | *e*P | P | 02 34 40.4 | +1.3 | |
| | comp=Z,36nm,1.2s | | | | | | | |
| KMI | Kunming | 34.70 | 270 | PKPbc | | 02 30 13.0 | | |
| KMI | Kunming | 34.70 | 270 | P | P | 02 34 41.6 | +1.1 | |
| KMI | | | | pP | pP | 02 34 46.7 | +1.1 | |
| KMI | | | | PP | PP | 02 35 58.6 | -0.6 | |
| KMI | | | | S | S | 02 40 13.8 | +3.7 | |
| KMI | | | | PMZ | | | | |
| | comp=Z,17nm,0.5s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,87nm,3.8s | | | | | | | |
| KMI | | | | LN | | | | |
| | comp=Z,620nm,13.4s | | | | | | | |
| KMI | | | | LE | | | | |
| | comp=Z,800nm,13.7s | | | | | | | |
| KMI | | | | LZ | | | | |
| | comp=Z,1μm,14.4s | | | | | | | |
| GTA | Gaotai | 34.88 | 295 | *e*P | P | 02 34 41.0 | -0.9 | |
| GTA | | | | pP | pP | 02 34 45.1 | -1.9 | |
| GTA | | | | sP | sP | 02 34 48.2 | -0.8 | |
| GTA | | | | PcP | PcP | 02 37 15.0 | +0.4 | |
| GTA | | | | S | S | 02 40 10.1 | -2.5 | |
| GTA | | | | PMZ | | | | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,160nm,7.1s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,2μm,16.4s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,2μm,17.1s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,2μm,17.1s | | | | | | | |
| SLVN | Son La | 35.08 | 263 | *e*P | P | 02 34 44.1 | +0.5 | |
| MRSI | Marisa | 35.74 | 215 | P | P | 02 34 50.0 | +0.7 | |
| | comp=Z,63nm,1.1s,comp=Z,5μm | | | | | | | |
| MOY | Mondy | 36.13 | 317 | *e*P | P | 02 34 53.8 | +1.3 | |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,57nm,1.6s | | | | | | | |
| LUWI | Luwuk | 36.67 | 213 | P | P | 02 34 55.3 | -1.9 | |
| LUWI | Luwuk | 36.67 | 213 | *e*P | P | 02 34 55.7 | -1.5 | |
| | comp=Z,178nm,1.5s | | | | | | | |
| SKNT | Sakolnakorn | 36.97 | 256 | P | P | 02 35 00.6 | +0.8 | |
| | comp=Z,16nm,1.5s | | | | | | | |
| APSI | Ampana | 37.09 | 215 | P | P | 02 34 59.7 | -1.1 | |
| | comp=Z,90nm,1.0s,comp=Z,963nm | | | | | | | |
| APSI | Ampana | 37.09 | 215 | P | P | 02 35 00.3 | -0.5 | |
| | comp=Z,90nm,1.0s,comp=Z,968nm | | | | | | | |

NONG **Nongkai** 37.15 259 P P 02 35 04.6 +3.3
comp=Z,28nm,1.4s,comp=Z,11µm
CRAI **Chiangrai** 38.54 264 P P 02 35 07.8 -5.3
LOEI **Loei** 38.99 259 P P **02 35 14.1 -2.8**
comp=Z,12nm,0.8s
PHRA **Phrae** 39.41 261 P P **02 35 20.8 +0.4**
comp=Z,150nm,0.7s,comp=Z,23µm
UTTA **Uttaradit** 39.48 260 P P 02 35 24.3 +3.3
comp=Z,3.7nm,0.8s
BILL **Bilibino** 39.67 14⇓ *eP* P **02 35 25.0 +3.1**
BILL S S **02 41 27.3 +3.0**
BILL pmax pmax
comp=Z,15nm,1.0s
BILL MLR MLR
comp=Z,940nm,18.0s
PBKT **Sadao Pong** 39.68 258 P P **02 35 24.1 +1.4**
comp=Z,20nm,1.2s
LAMP **Lampang** 39.91 262 P P 02 35 28.2 +3.6
comp=Z,5.1nm,0.7s,comp=Z,122nm
CHTO **Chiang Mai** 40.37 263 P P **02 35 28.4 0.0**
comp=Z,53nm,1.5s
CHTO **Chiang Mai** 40.37 263 *eP* P **02 35 28.1 -0.2**
CHTO pmax pmax
comp=Z,7.0nm,0.7s
CHTO **Chiang Mai** 40.37 263 *eP* P **02 35 28.1 -0.2**
comp=Z,7.4nm,0.7s
HVS **Khovu-Aksy** 40.41 314 *eP* P **02 35 28.6 +0.1**
HVS pmax pmax
comp=Z,58nm,1.0s
CMAR **Chiang Mai Arr** 40.52 262 P P **02 35 29.4 -0.3**
comp=Z,3.9nm,0.7s,baz=46,slow=7.5,SNR=9.3
CMAR PcP PcP **02 37 33.2 +1.2**
comp=Z,1.0nm,0.5s,baz=46,slow=2.6,SNR=4.4
CMAR LR LR 02 53 49.8
comp=Z,1µm,19.1s,baz=68,slow=38
CMAR **Chiang Mai Arr** 40.52 262 *ceP* P **02 35 31.6 +1.9**
CMAR pmax pmax
comp=Z,4.0nm,0.7s
PMG **Port Moresby** 40.64 172 *eP* P **02 35 30.8 +0.3**
PMG pmax pmax
comp=Z,49nm,1.3s
PMG **Port Moresby** 40.64 172 *eP* P **02 35 30.8 +0.3**
comp=Z,49nm,1.3s
KAPI **Kappang** 41.57 214 P P **02 35 38.5 +0.3**
comp=Z,28nm,0.9s,baz=22,slow=4.9,SNR=12
KAPI **Kappang** 41.57 214 P P **02 35 38.1 -0.1**
SNR=9.1
KAPI **Kappang** 41.57 214 *eP* P **02 35 38.7 +0.5**
comp=Z,26nm,0.8s
KSM **Kuching** 41.80 231 *eP* P **02 35 42.3 +2.1**
comp=Z,18nm,0.7s
KBKI **Kotabaru** 41.96 220 P P **02 35 44.1 +2.7**
comp=Z,15nm,1.1s,comp=Z,2µm
KRAR **Krasnoyarsk** 42.01 321 *eP* P **02 35 40.8 -0.6**
KRAR pmax pmax
comp=Z,10.0nm,0.8s
BSSI **Bau Bau, Buton** 42.21 212 P P **02 35 46.2 +2.7**
comp=Z,26nm,1.1s
MMRI **Maumere** 43.69 208 *eP* P **02 35 55.0 -0.4**
SOEI **Soe** 43.92 205 P P **02 35 57.2 -0.3**
comp=Z,41nm,1.3s
SOEI **Soe** 43.92 205 *eP* P **02 35 57.1 -0.3**
WMQ **Urumqi** 43.93 302 P P **02 35 58.0 +0.8**
WMQ sP **sP** **02 36 05.0 +0.6**
WMQ PP PcP **02 37 42.0 -1.0**
WMQ ScP ScP **02 41 34.0 -0.2**
WMQ S S **02 42 30.0 +1.9**
WMQ SS SS **02 45 38.0 -6.6**
WMQ PMZ
comp=Z,26nm,1.0s
WMQ PMZ
comp=Z,270nm,5.0s
WMQ LN
comp=Z,1µm,20.0s
WMQ LE
comp=Z,860nm,18.0s
WMQ LZ
comp=Z,520nm,18.0s
BATI **Baumata** 44.56 206 P P **02 36 02.5 0.0**
comp=Z,34nm,0.5s,baz=282,slow=3.4,SNR=5.6
BATI **Baumata** 44.56 206 P P **02 36 02.5 0.0**
comp=Z,31nm,0.9s
COEN **Coen** 44.84 178 *eP* P **02 36 05.9 +1.3**
comp=Z,26nm,0.8s
ZAA0 **Zalesovo Array** 46.19 317 *eP* P **02 36 14.4 -0.6**
ZAA0 *e* 02 37 50.2
ZALV **Zalesovo Beam** 46.19 317 P P **02 36 15.0 +0.1**
comp=Z,8.8nm,0.5s,baz=101,slow=6.2,SNR=53
ZALV PcP PcP **02 37 50.5 0.0**
comp=Z,10nm,0.8s,baz=88,slow=3.2,SNR=6.8
ZALV LR LR 02 56 12.3
comp=Z,537nm,18.7s,baz=70,slow=37
TWSI **Taliwang, Sumb** 46.19 215 P P **02 36 14.8 -0.5**
comp=Z,40nm,0.9s
KULM **Kulim** 46.23 245 *eP* P **02 36 16.7 +1.0**
comp=Z,6.1nm,0.7s
KMMI **Kalianget** 46.28 220 P P **02 36 17.9 +1.9**
comp=Z,40nm,1.4s,comp=Z,2µm
SRBI **Singaraja** 46.48 217 P P **02 36 15.5 -2.1**
comp=Z,38nm,0.8s
ABJI **Asem Bagus** 46.75 219 P P **02 36 21.1 +1.3**
comp=Z,38nm,1.4s,comp=Z,2µm
NVS **Novosibirsk** 47.20 318⇑ *iP* P **02 36 22.9 +0.1**
NVS *eS* S **02 43 12.5 -2.3**
NVS pmax pmax
comp=N,10.0nm,1.2s
NVS pmax pmax
comp=E,40nm,1.2s
NVS pmax pmax
comp=Z,55nm,1.2s
NVS smax smax
comp=N,9.0nm,2.0s
NVS smax smax
comp=E,28nm,2.0s
JAGI **Jajag, Banyuwa** 47.36 218 P P **02 36 24.9 +0.4**
JAGI **Jajag, Banyuwa** 47.36 218 *eP* P **02 36 24.1 -0.5**
comp=E,37nm,1.2s
MK01 **Makanchi Array** 47.61 307 *eP* P **02 36 26.0 -0.2**
MK31 **Makanchi Array** 47.62 307 *i P* P **02 36 26.7 +0.4**
MK31 pmax pmax
comp=Z,9.0nm,0.6s
MKAR **Makanchi Array** 47.62 307 P P **02 36 26.6 +0.3**
comp=Z,7.9nm,0.5s,baz=87,slow=9.8,SNR=57
MKAR LR LR 02 55 45.8
comp=Z,448nm,19.2s,baz=92,slow=35
MKAR **Makanchi Array** 47.62 307 P P **02 36 26.6 +0.3**
MKAR pmax pmax
comp=Z,8.0nm,0.5s
MKAR MLR MLR
comp=Z,448nm,19.2s
MKAR **Makanchi Array** 47.62 307 *eP* P **02 36 26.5 +0.2**
MAKZ **Makanchi** 47.83 307 *eP* P **02 36 28.7 +0.8**
KURK **Kurchatov** 49.88 312 *eP* P **02 36 43.4 -0.2**
KURK pmax pmax
comp=Z,47nm,0.6s
KURK **Kurchatov** 49.88 312 P P **02 36 43.3 -0.3**
comp=Z,242nm,0.6s,SNR=26
KURK **Kurchatov** 49.88 312 *eP* P **02 36 43.4 -0.2**
comp=Z,47nm,0.6s
PDGK **Podgornoye** 49.91 302 P P **02 36 43.8 -0.1**
PDGK pmax pmax
comp=Z,51nm,1.4s
CTA **Charters Tower** 51.11 174 P P **02 36 51.7 -1.4**
comp=Z,8.3nm,0.6s,baz=69,slow=6.0,SNR=3.2
GSI **Gunungsitoli** 51.12 243 P P **02 36 53.2 -0.1**
comp=Z,36nm,0.9s
GSI **Gunungsitoli** 51.12 243 *eP* P **02 36 52.5 -0.8**
comp=Z,26nm,0.9s
WRAB **Tennant Creek** 51.24 189 *eP* P **02 36 54.0 -0.1**
WRAB pmax pmax
comp=Z,40nm,0.9s
WRAB **Tennant Creek** 51.24 189 *eP* P **02 36 54.0 -0.1**
comp=Z,40nm,0.9s
WRA **Warramunga Arr** 51.25 189 P P **02 36 53.3 -0.9**
comp=Z,4.5nm,0.4s,baz=5.8,slow=8.0,SNR=18
WRA LR LR 02 59 00.3
comp=Z,550nm,18.2s,baz=10.0,slow=36
WRA **Warramunga Arr** 51.25 189 *i P* P **02 36 53.2 -0.9**
WRA pmax pmax
comp=Z,6.0nm,0.4s
FITZ **Fitzroy Crossi** 51.30 200 P P **02 36 53.9 -0.6**
comp=Z,4.5nm,0.8s,baz=346,slow=4.2,SNR=2.7
KDAK **Kodiak Island** 51.48 39 P P **02 36 53.3 -2.2**
comp=Z,20nm,1.0s,baz=216,slow=7.7,SNR=8.9
KDAK **Kodiak Island** 51.48 39 *i P* P **02 36 55.0 -0.5**
SPU **Mount Spurr** 51.91 34 *eP* P **02 36 59.3 +0.5**
SPU *ep*P pP 02 37 14.9 +11

PPLA **Purkeypile** 51.99 32 *eP* P **02 37 01.2 +1.8**
comp=Z,37nm,1.3s
CAST **Castle Rocks** 52.08 31 *eP* P **02 37 00.9 +1.0**
comp=Z,15nm,1.0s
SUA **Susitna One** 52.56 34 *eP* P **02 37 05.4 +1.8**
comp=Z,13nm,0.7s
KTH **Kantishna Hill** 52.61 31 *eP* P **02 37 03.7 -0.2**
comp=Z,32nm,1.5s
BPAW **Bear Paw Mtn.** 52.63 31 *eP* P **02 37 04.0 -0.1**
comp=Z,5.5nm,1.6s
TKM2 **Tokmak 2** 52.79 303 *eP* P **02 37 06.6 +0.9**
TKM2 pmax pmax
comp=Z,76nm,1.6s
TKM2 **Tokmak 2** 52.79 303 P P **02 37 06.8 +1.1**
SNR=14
TKM2 **Tokmak 2** 52.79 303 *eP* P **02 37 06.6 +0.9**
comp=Z,76nm,1.6s
TRF **Thorofare Moun** 52.89 32 *eP* P **02 37 09.0 +2.8**
comp=Z,13nm,1.0s
KSH **Kashi** 53.18 298 P P 02 37 12.8 +4.2
KSH *ep*P pP 02 37 17.2 +3.4
KSH S S **02 44 41.6 +2.7**
KSH sS sS 02 44 50.9 +3.5
KSH ScS ScS **02 46 58.9 +1.1**
KSH PMZ
comp=Z,40nm,1.7s
KSH PMZ
comp=Z,120nm,4.8s
KSH LN
comp=Z,1µm,15.2s
KSH LE
comp=Z,1µm,15.5s
KSH LZ
comp=Z,2µm,18.3s
KZA **Kyzart** 53.19 302 P P **02 37 11.0 +2.0**
SNR=8.2
CHLP **Challavanipeta** 53.23 271 *eP* P **02 37 09.9 +0.8**
COLD **Coldfoot** 53.28 27 *eP* P **02 37 09.7 +0.9**
comp=Z,33nm,1.8s
BWN **Browne** 53.30 31 *eP* P **02 37 11.0 +2.1**
comp=Z,60nm,1.4s
KBK **Karagaybulak** 53.30 302 P P **02 37 10.7 +1.1**
SNR=12
PMR **Palmer** 53.34 34 *eP* P **02 37 08.6 -0.6**
PMR pmax pmax
comp=Z,24nm,1.2s
PMR **Palmer** 53.34 34 *eP* P **02 37 08.6 -0.6**
comp=Z,24nm,1.2s
CHMS **Chumysh** 53.38 303 P P **02 37 10.9 +1.0**
SNR=5.8
FRU **Bishkek** 53.51 303 *eP* P **02 37 10.0 -0.9**
FRU pmax pmax
comp=Z,80nm,1.6s
FRU MLR MLR
comp=E,1µm,16.0s
MCK **McKinley** 53.51 31 *eP* P **02 37 11.3 +0.8**
MCK pmax pmax
comp=Z,55nm,1.6s
MCK **McKinley** 53.51 31 *eP* P **02 37 11.3 +0.8**
comp=Z,56nm,1.6s
AAK **Ala-Archa** 53.64 302 P P **02 37 12.1 +0.2**
comp=Z,5.7nm,0.7s,baz=130,slow=9.1
AAK LR LR 03 00 55.0
comp=Z,1µm,18.2s,baz=83,slow=37
AAK **Ala-Archa** 53.64 302 P P **02 37 12.1 +0.2**
AAK pmax pmax
comp=Z,6.0nm,0.7s
AAK MLR MLR
comp=Z,1µm,18.2s
AAK **Ala-Archa** 53.64 302 P P **02 37 12.9 +0.9**
comp=Z,64nm,0.7s,SNR=7.5
AAK **Ala-Archa** 53.64 302 P P **02 37 12.8 +0.8**
SNR=8.2
AAK **Ala-Archa** 53.64 302 P P **02 37 12.9 +0.9**
SNR=8.3
AAK **Ala-Archa** 53.64 302 *eP* P **02 37 12.8 +0.9**
comp=Z,27nm,1.4s
UCH **Uchtor** 53.70 302 P P **02 37 14.1 +1.3**
SNR=15
SML **Sawmill** 53.72 34 *eP* P **02 37 14.9 +2.8**
SML pmax pmax
comp=Z,28nm,1.1s
SML **Sawmill** 53.72 34 *eP* P **02 37 14.9 +2.8**
comp=Z,28nm,1.1s
MDM **Murphy Dome** 53.88 30 *eP* P **02 37 13.3 +0.1**
comp=Z,30nm,1.2s
WRH **Wood River Hil** 53.92 30 *eP* P **02 37 15.2 +1.7**
comp=Z,9.9nm,1.1s
COLA **College** 54.04 30 *eP* P **02 37 15.4 +1.1**
COLA **College** 54.04 30 *eP* P **02 37 15.9 +1.6**
comp=Z,6.2nm,0.8s
CCB **Clear Creek Bu** 54.05 30 *eP* P **02 37 15.2 +0.9**
comp=Z,39nm,2.2s
EKS2 **Erkin-Say** 54.15 303 *eP* P **02 37 16.2 +0.5**
EKS2 pmax pmax
comp=Z,10.0nm,0.9s
EKS2 **Erkin-Say** 54.15 303 *eP* P **02 37 16.2 +0.5**
comp=Z,10nm,0.9s
OTUK **Ortayu** 54.19 310 P P **02 37 16.0 +0.3**
OTUK pmax pmax
comp=Z,50nm,1.2s
SCM **Sheep Creek Mo** 54.20 34 *eP* P **02 37 15.9 +0.3**
SCM pmax pmax
comp=Z,24nm,0.9s
SCM **Sheep Creek Mo** 54.20 34 *eP* P **02 37 15.9 +0.3**
comp=Z,24nm,0.9s
AML **Almayashu** 54.32 302 P P **02 37 19.0 +1.8**
SNR=25
IL1 **Eielson Array** 54.45 30 *eP* P **02 37 15.7 -1.6**
ILAR **Eielson Array** 54.45 30 P P **02 37 15.8 -1.5**
comp=Z,5.0nm,1.0s,baz=269,slow=5.7,SNR=24
ILAR LR LR 03 03 51.8
comp=Z,114nm,18.9s,baz=283,slow=40
BVA0 **Borovoye Array** 54.80 316 *i P* P **02 37 20.1 0.0**
BVA0 pmax pmax
comp=Z,36nm,1.4s
BRVK **Borovoye** 54.86 316 *ceP* P **02 37 20.8 +0.3**
BRVK pmax pmax
comp=Z,17nm,1.0s
BRVK **Borovoye** 54.86 316 P P **02 37 20.2 -0.3**
comp=Z,80nm,0.6s,SNR=7.7
BRVK **Borovoye** 54.86 316 P P **02 37 21.2 +0.7**
SNR=9.6
BRVK **Borovoye** 54.86 316 *eP* P **02 37 20.9 +0.3**
comp=Z,14nm,0.9s
KLU **Klutina** 54.88 34 *eP* P **02 37 21.6 +1.1**
comp=Z,171nm,2.5s
SFK **Sufi-Kurgan** 54.92 299 P P **02 37 21.9 +0.4**
SFK pmax pmax
comp=Z,18nm,0.9s
DIV **Divide** 54.96 34 *eP* P **02 37 23.0 +1.8**
comp=Z,28nm,1.1s
ASAR **Alice Springs** 54.98 189 P P **02 37 21.6 0.0**
comp=Z,6.7nm,0.5s,baz=358,slow=5.3,SNR=5.0
ASAR LR LR 02 59 35.7
comp=Z,590nm,21.4s,baz=12,slow=35
MNAS **Manas** 55.11 303 P P **02 37 23.2 +0.6**
MNAS pmax pmax
comp=Z,32nm,1.4s
FYU **Fort Yukon** 55.19 28 *eP* P **02 37 25.3 +2.7**
comp=Z,160nm,2.2s
HARP **HAARP** 55.21 33 *eP* P 02 37 27.8 +4.9
comp=Z,51nm,1.3s
BMRM **Bremner River** 55.53 35 *eP* P **02 37 26.6 +1.3**
comp=Z,24nm,0.9s
PVM **Polavaram** 55.86 270 *eP* P **02 37 29.0 +0.9**
MBWA **Marble Bar** 56.07 205 *eP* P **02 37 29.7 +0.2**
comp=Z,5.4nm,0.6s
KK31 **Karatay Array** 56.40 304 *i* P P **02 37 31.9 +0.1**
KK31 pmax pmax
comp=Z,27nm,0.7s
KKAR **Karatay Array** 56.40 304 *eP* P **02 37 32.3 +0.6**
KKAR **Karatay Array** 56.40 304 *eP* P **02 37 32.3 +0.6**
RPR **Rampur** 57.17 273 *eP* P **02 37 37.3 -0.2**
DAWY **Dawson** 57.72 31 *eP* P **02 37 41.8 +1.0**
comp=Z,31nm,1.4s
ADKI **Addanki** 57.91 270 *eP* P **02 37 43.5 +0.8**
DZM **Mont Dzumac** 58.00 153 *eP* P **02 37 41.0 -2.2**
comp=Z,53nm,1.1s
DZM **Mont Dzumac** 58.00 153 *e*LR LR 02 54 27.6
comp=Z,662nm,27.4s
NJS **Nagarjunasagar** 58.16 271 *eP* P **02 37 45.0 +0.5**
HYBB **Hyderabad (bro** 58.42 272 *eP* P **02 37 47.3 +0.9**
DZET **Dzherino** 58.73 299 P P **02 37 49.2 +0.8**
DZET pmax pmax
comp=Z,20nm,0.5s
SKHT **Srikalahasti** 59.10 268 *eP* P **02 37 51.1 +0.1**

INK **Inuvik** 59.60 25 P P **02 37 53.8 +0.1**
comp=Z,3.9nm,0.6s,baz=296,slow=5.5,SNR=10
INK **Inuvik** 59.60 25 P P **02 37 53.8 +0.1**
INK pmax pmax
comp=Z,4.0nm,0.6s
INK **Inuvik** 59.60 25 *eP* P **02 37 56.0 +2.3**
comp=Z,14nm,1.3s
SVE **Sverdlovsk** 59.78 321 *d iP* P **02 37 55.8 +0.7**
SVE pmax pmax
comp=Z,63nm,1.2s
SVE MLR MLR
comp=Z,901nm,19.0s
KBL **Kabul** 59.87 294 *eP* P **02 37 57.0 +0.6**
KBL pmax pmax
comp=Z,17nm,1.1s
KBL **Kabul** 59.87 294 *eP* P **02 37 57.0 +0.6**
comp=Z,17nm,1.1s
URV **Uravakonda** 60.64 270 *eP* P **02 38 02.2 +0.5**
ARU **Arti** 60.98 321 *d iP* P **02 38 03.2 -0.2**
ARU *SP pP 02 38 15.9 +7.3
ARU 02 38 45.4
ARU 02 40 13.4
ARU S S **02 46 18.0 -2.9**
ARU pmax pmax
comp=Z,74nm,1.2s
ARU MLR MLR
comp=Z,571nm,18.0s
ARU **Arti** 60.98 321 P P **02 38 03.5 +0.1**
comp=Z,260nm,1.2s,SNR=22
ARU **Arti** 60.98 321 *eP* P **02 38 02.7 -0.7**
comp=Z,87nm,1.3s
PALK **Pallekele** 61.45 261 LR LR 03 06 11.8
comp=Z,307nm,20.4s,baz=117,slow=37
AB31 **Akbulak array** 61.99 313 *i* P P **02 38 10.3 0.0**
AB31 pmax pmax
comp=Z,19nm,0.6s
ABKAR **Akbulak array** 61.99 313 *eP* P **02 38 10.5 +0.2**
GEYT **Alibeck** 66.96 301 P P **02 38 43.9 +0.8**
comp=Z,12nm,1.0s,baz=58,slow=3.7,SNR=23
GEYT LR LR 03 09 43.1
comp=Z,413nm,18.2s,baz=70,slow=38
RES **Resolute Bay** 68.28 14 *eP* P **02 38 52.3 +1.6**
RES pmax pmax
comp=Z,16nm,1.2s
RES **Resolute Bay** 68.28 14 *eP* P **02 38 52.3 +1.6**
comp=Z,16nm,1.2s
YKA **Yellowknife Ar** 68.85 29 P P **02 38 55.4 +1.0**
comp=Z,2.9nm,0.6s,baz=296,slow=6.4,SNR=5.1
YKA **Yellowknife Ar** 68.85 29 P P **02 38 55.4 +1.0**
YKA pmax pmax
comp=Z,3.0nm,0.6s
KLMR **Klimovskoe** 68.88 329 *eP* P **02 38 53.7 -1.0**
KLMR pmax pmax
comp=Z,33nm,1.6s
ARCES **ARCESS Array B** 69.60 340 P P **02 38 59.8 +0.8**
comp=Z,9.6nm,1.0s,baz=46,slow=5.2,SNR=9.2
VRH **Novokhopyorsk** 72.13 319 *eP* P **02 39 14.5 -0.2**
VRH pmax pmax
comp=N,20nm,1.2s
VRH pmax pmax
comp=Z,10.0nm,1.2s
VRH pmax pmax
comp=E,10.0nm,0.7s
H04A **Detroit Lake** 72.87 48 *eP* P **02 39 21.2 +1.9**
comp=E,32nm,1.4s
OBN **Obninsk** 72.97 325⇓ *iP* P **02 39 20.0 +0.4**
OBN *SP sP **02 39 29.0 +2.1**
OBN pmax pmax
comp=Z,26nm,1.3s
OBN MLR MLR
comp=Z,892nm,16.0s
LPSR **Galich'ya Gora** 72.99 322 *eP* P **02 39 19.4 -0.4**
LPSR pmax pmax
comp=Z,10.0nm,1.1s
LPSR pmax pmax
comp=N,5.0nm,0.8s
LPSR pmax pmax
comp=E,10.0nm,1.6s
BANOM **Banah** 73.36 290⇑ *iP* P **02 39 23.5 +1.0**
SNR=8.7
VSR **Storozhevoye** 73.54 320 *eP* P **02 39 23.0 -0.1**
VSR pmax pmax
comp=Z,20nm,1.2s
VSR pmax pmax
comp=N,10.0nm,1.4s
VSR pmax pmax
comp=E,20nm,1.0s
J04D **Umpqua Nationa** 73.57 49 P P **02 39 22.6 -1.1**
baz=73
VORD **Divnogorie** 73.59 320 *eP* P **02 39 22.3 -1.1**
VORD pmax pmax
comp=Z,5.0nm,0.9s
VORD pmax pmax
comp=N,20nm,0.4s
VORD pmax pmax
comp=E,20nm,0.6s
HAWA **Hanford** 73.73 45 *eP* P **02 39 25.9 +1.5**
comp=E,156nm,2.8s
C09A **Chrisman Ranch** 73.83 44 *eP* P **02 39 26.1 +1.3**
comp=E,32nm,1.6s
YBH **Yreka Blue Hor** 73.87 51 *eP* P **02 39 26.9 +1.6**
YBH pmax pmax
comp=Z,156nm,3.0s
YBH **Yreka Blue Hor** 73.87 51 *eP* P **02 39 26.9 +1.6**
comp=Z,156nm,3.0s
UOSS **Wadi Hilu** 73.88 290 *eP* P **02 39 26.3 +0.8**
comp=Z,10nm,0.8s
EDM **Edmonton** 73.90 37 *eP* P **02 39 27.5 +2.3**
EDM **Edmonton** 73.90 37 *eP* P **02 39 27.5 +2.3**
M02C **Callahan** 73.93 51 P P **02 39 24.6 -1.1**
baz=74
HATD **Hatta, Dubai** 73.99 290⇓ *iP* P **02 39 27.0 +0.8**
SNR=8.3
ASHO **Ashiyiah** 74.11 289⇑ *iP* P **02 39 27.3 +0.4**
SNR=6.5
J05D **Fort Rock, OR** 74.12 49 P P **02 39 25.3 -1.5**
baz=74
FINES **FINESS Array B** 74.14 333 P P **02 39 26.6 +0.2**
comp=Z,3.4nm,0.5s,baz=89,slow=4.5,SNR=27
N02D **Trinity Center** 74.22 52 P P **02 39 26.1 -1.2**
baz=74
NEW **Newport** 74.28 43 LR LR 03 16 22.7
comp=Z,117nm,18.0s,slow=39
NEW **Newport** 74.28 43 *eP* P **02 39 28.6 +1.0**
NEW pmax pmax
comp=Z,14nm,1.1s
NEW **Newport** 74.28 43 P P **02 39 26.8 -0.7**
baz=74
NEW **Newport** 74.28 43 *eP* P **02 39 28.6 +1.0**
comp=Z,14nm,1.1s
NAZ **Nazwa, Dubai** 74.30 290 ⇓P P **02 39 28.3 +0.4**
ARQ **Araqi** 74.35 288 P P **02 39 29.5 +1.2**
SNR=11
M04C **Macdoel** 74.42 50 P P **02 39 27.4 -1.2**
baz=74
FAQ **Al Faqa, Dubai** 74.46 290 ⇑P P **02 39 29.4 +0.4**
WDC **Whiskeytown Da** 74.51 52 *eP* P **02 39 30.8 +1.8**
WDC pmax pmax
comp=Z,40nm,1.9s
WDC **Whiskeytown Da** 74.51 52 *eP* P **02 39 30.8 +1.8**
comp=Z,40nm,1.9s
K05A **Summer Lake** 74.60 49 *eP* P **02 39 31.4 +1.7**
comp=Z,163nm,2.3s
ASUD **Al Ashush, Dub** 74.73 290 ⇓P P **02 39 31.1 +0.7**
KBZ **Khabaz** 74.94 312 P P **02 39 32.1 +0.8**
comp=Z,18nm,0.8s,baz=85,slow=7.5,SNR=24
KBZ LR LR 03 15 02.6
comp=Z,254nm,18.8s,baz=72,slow=38
KIV **Kislovodsk** 74.97 312 *c iP* P **02 39 32.8 +1.1**
KIV *e* 02 39 41.6
KIV *e* 02 39 47.1
KIV *eS* S **02 49 13.1 +4.4**
KIV pmax pmax
comp=Z,16nm,0.6s
KIV MLR MLR
comp=Z,514nm,16.0s
KIV **Kislovodsk** 74.97 312 *eP* P **02 39 33.8 +2.1**
O03D **Paynes Creek** 75.15 52 P P **02 39 31.3 -1.4**
baz=75
MOD **Modoc** 75.38 50 *eP* P **02 39 36.5 +2.4**
GNI **Garni** 75.44 308 *eP* P **02 39 36.2 +1.6**
GNI pmax pmax
comp=Z,193nm,1.1s
GNI **Garni** 75.44 308 *eP* P **02 39 36.2 +1.6**
comp=Z,193nm,1.1s
VSU **Vasula** 75.66 331 *ceP* P **02 39 35.3 +0.1**

VSU pmax pmax
comp=Z,22nm,0.8s
**WALA Waterton Lakes 75.72 41** *e*P **P 02 39 37.2 +1.2**
comp=Z,13nm,0.9s
**OHCM Honcut 75.82 53** *e*P **P 02 39 36.8 +0.3**
**BSMT Bassoo Peak 75.84 42** *e*P **P 02 39 38.3 +1.5**
comp=Z,13nm,1.4s
**J08A Circle Bar Ran 75.85 48** *e*P **P 02 39 37.1 +0.3**
comp=Z,16nm,1.1s
**BLMT Blacktail Moun 76.01 42** *e*P **P 02 39 39.5 +1.8**
**JTMT Jette 76.19 42** *e*P **P 02 39 39.0 +0.3**
**WVOR Wild Horse Val 76.20 49** *e*P **P 02 39 40.4 +1.6**
WVOR pmax pmax
comp=Z,61nm,2.1s
**WVOR Wild Horse Val 76.20 49** *e*P **P 02 39 40.4 +1.6**
comp=Z,61nm,2.1s
**YBMT Yellow Bay 76.29 42** *e*P **P 02 39 40.3 +1.1**
**SWMT Swartz Lake 76.48 42** *e*P **P 02 39 41.0 +0.7**
**SUMG Summit 76.58 0** *e*P **P 02 39 41.9 +1.1**
SUMG pmax pmax
comp=Z,146nm,2.5s
**SUMG Summit 76.58 0** *e*P **P 02 39 41.9 +1.1**
comp=Z,146nm,2.5s
**MSO Missoula 76.86 43** P **P 02 39 41.6 -0.9**
baz=77
**MSO Missoula 76.86 43** *e*P **P 02 39 42.6 +0.1**
comp=Z,99nm,2.6s
**SLMT Seeley Lake 76.91 43** *e*P **P 02 39 42.4 -0.4**
**CMB Columbia Colle 77.20 53** *e*P **P 02 39 44.1 -0.3**
CMB pmax pmax
comp=Z,8.0nm,0.8s
**CMB Columbia Colle 77.20 53** *e*P **P 02 39 44.1 -0.3**
comp=Z,7.9nm,0.8s
**CHMT Chamberlain Mo 77.22 43** *e*P **P 02 39 45.4 +0.8**
**MFID Camas Ranch 77.49 47** *e*P **P 02 39 46.3 +0.2**
comp=Z,127nm,2.5s
**EKAR Karacoban 77.68 308** P **P 02 39 49.2 +1.8**
**NACGM Naroch 77.78 328** *e* **P 02 39 47.0 -0.3**
**BMN Battle Mountai 78.13 50** *e*P **P 02 39 51.9 +2.2**
**BMN Battle Mountai 78.13 50** *e*P **P 02 39 51.9 +2.2**
**HRY Holter Researc 78.16 42** *e*P **P 02 39 49.8 +0.1**
**LRM Limekiln Ridge 78.27 43** *e*P **P 02 39 50.3 -0.2**
**HLID Hailey 78.29 46** P **P 02 39 49.4 -1.3**
baz=78
**HLID Hailey 78.29 46** *e*P **P 02 39 51.6 +1.0**
comp=Z,14nm,1.4s
**NV01 Mina Array Sit 78.42 52** *e*P **P 02 39 51.0 -0.5**
**NVAR Mina Array Bea 78.42 52** P **P 02 39 51.3 -0.2**
comp=Z,7.2nm,0.7s,baz=289,slow=6.5,SNR=20
NVAR LR LR 03 11 27.0
comp=Z,784nm,19.1s,baz=272,slow=33
**DLMT Dillon 78.44 44** *e*P **P 02 39 51.6 +0.3**
comp=Z,59nm,1.8s
**FFC Flin Flon 78.59 32** *e*P **P 02 39 54.0 +2.2**
FFC pmax pmax
comp=Z,211nm,2.6s
**FFC Flin Flon 78.59 32** *e*P **P 02 39 54.0 +2.2**
comp=Z,211nm,2.6s
**LCCM Lewis and Clar 78.60 43** *e*P **P 02 39 52.0 -0.3**
**EGMT Eagleton 78.61 40** P **P 02 39 50.7 -1.4**
baz=78
**EGMT Eagleton 78.61 40** *e*P **P 02 39 53.5 +1.4**
comp=Z,34nm,1.4s
**MTUM Tungsten Hills 78.79 53** *e*P P 02 39 57.2 +3.7
**BOZ Bozeman (W) 78.85 43** *e*P **P 02 39 53.8 +0.2**
BOZ pmax pmax
comp=Z,45nm,1.7s
**BOZ Bozeman (W) 78.85 43** P **P 02 39 52.9 -0.8**
baz=79
**BOZ Bozeman (W) 78.85 43** *e*P **P 02 39 53.8 +0.2**
comp=Z,45nm,1.7s
**AKASG Malin Array Be 79.11 323** P **P 02 39 54.3 -0.3**
comp=Z,2.2nm,0.5s,baz=46,slow=6.0,SNR=30
AKASG LR LR 03 17 28.8
comp=Z,941nm,18.3s,baz=60,slow=38
**AKASG Malin Array Be 79.11 323***ce*P **P 02 39 54.2 -0.5**
AKASG pmax pmax
comp=Z,2.0nm,0.5s
**KIEV Kiev 79.12 323** *e*P **P 02 39 54.6 -0.1**
**KIEV Kiev 79.12 323** *e*P **P 02 39 54.6 -0.1**
**AK11 Malin Array Si 79.15 323** *e*P **P 02 39 55.0 +0.1**
**VES Vestal, Richgr 79.19 55** P **P 02 39 54.3 -1.2**
baz=79
**FCC Fort Churchill 79.21 26** *e*P **P 02 39 56.1 +1.0**
FCC pmax pmax
comp=Z,36nm,1.1s
**FCC Fort Churchill 79.21 26** *e*P **P 02 39 56.1 +1.0**
comp=Z,36nm,1.1s
**ELK Elko 79.25 49** *e*P **P 02 39 57.6 +1.6**
**ELK Elko 79.25 49** *e*P **P 02 39 57.6 +1.6**
**QLMT Earthquake Lak 79.42 44** *e*P **P 02 39 58.1 +1.3**
**SBC Santa Barbara 79.46 56** P **P 02 39 55.8 -1.1**
baz=79
**CWC Cottonwood Cre 79.59 54** P **P 02 39 55.9 -1.9**
baz=79
**NB2 NORSAR Subarra 79.71 338** P **P 02 39 57.0 -0.8**
comp=Z,14nm,1.1s,baz=41,slow=5.3
**NOA NORSAR Array B 79.71 338** P **P 02 39 57.4 -0.5**
comp=Z,8.0nm,1.0s,baz=41,slow=5.4,SNR=14
NOA LR LR 03 18 32.0
comp=Z,425nm,20.0s,baz=35,slow=38
**ISA Isabella 79.71 55** P **P 02 39 57.5 -0.9**
baz=80
**NBO02 NORSAR Array S 79.82 338** *e*P **P 02 39 58.0 -0.4**
**GCMT Greycliff 79.92 42** *e*P **P 02 40 00.8 +1.4**
**YFT Old Faithful 79.98 44** *e*P **P 02 40 02.4 +2.5**
comp=Z,7.9nm,0.7s
**DAC Darwin (Calif) 80.01 54** *e*P **P 02 40 00.1 -0.1**
DAC *e* 02 42 59.9
**DAC Darwin (Calif) 80.01 54** *e*P **P 02 40 00.1 -0.1**
DAC *e*PP **PP 02 42 59.9 -1.7**
**ELZG Elazig 80.13 309** P **P 02 39 59.2 -1.6**
**H17A Grant Village 80.17 44** P **P 02 39 60.0 -1.0**
baz=80
**H17A Grant Village 80.17 44** *e*P **P 02 40 02.6 +1.7**
comp=Z,25nm,1.0s
**MPMC Manual Prospec 80.19 54** P **P 02 39 59.7 -1.4**
baz=80,SNR=6.1
**IMW Indian Meadow 80.23 44** *e*P **P 02 40 03.0 +1.6**
**FLWY Flagg Ranch 80.27 44** *e*P **P 02 40 03.3 +1.9**
**HVU Hansel Valley 80.27 47** *e*P **P 02 40 01.9 +0.5**
HVU pmax pmax
comp=Z,16nm,1.1s
**HVU Hansel Valley 80.27 47** *e*P **P 02 40 01.9 +0.5**
comp=Z,16nm,1.1s
**R11A Troy Canyon, C 80.29 51** P **P 02 40 00.5 -1.1**
baz=80
**R11A Troy Canyon, C 80.29 51** *e*P **P 02 40 01.5 -0.1**
comp=Z,83nm,2.6s
**FXWY Fox Creek 80.32 45** *e*P **P 02 40 02.4 +0.6**
**LRMC Laurel Mountai 80.36 54** P **P 02 40 00.6 -1.3**
baz=80
**FURC Furnace Creek, 80.41 53** P **P 02 40 01.0 -1.0**
baz=80
**MOOW Moose Ponds 80.43 44** *e*P **P 02 40 02.9 +0.6**
**TPAW Teton Pass 80.45 45** *e*P **P 02 40 03.1 +0.7**
comp=Z,49nm,1.8s
**EDW2 Edwards Air Fo 80.45 55** P **P 02 40 01.3 -1.1**
baz=80,SNR=6.1
**RLMT Red Lodge 80.53 43** P **P 02 40 01.6 -1.2**
baz=80
**RLMT Red Lodge 80.53 43** *e*P **P 02 40 04.1 +1.3**
comp=Z,221nm,3.0s
**BGU Big Grassy Mou 80.57 48** *e*P **P 02 40 04.5 +1.4**
comp=Z,14nm,1.2s
**REDW Red Top Meadow 80.58 45** *e*P **P 02 40 04.2 +1.0**
comp=Z,46nm,1.9s
**TPNV Topopah Spring 80.58 53** *e*P **P 02 40 02.8 -0.4**
TPNV pmax pmax
comp=Z,23nm,1.2s
**TPNV Topopah Spring 80.58 53** P **P 02 40 02.1 -1.1**
baz=80,SNR=9.6
**TPNV Topopah Spring 80.58 53** *e*P **P 02 40 02.8 -0.4**
comp=Z,23nm,1.2s
**SNOW Snow King Moun 80.58 45** *e*P **P 02 40 04.4 +1.2**
comp=Z,11nm,1.1s
**MALT Malatya 80.60 309** *i*P **P 02 40 04.8 +1.6**
**CUKAN kangal_SIVAS 80.70 310** P **P 02 40 04.0 +0.2**
**SPUT South Promonto 80.73 47** *e*P **P 02 40 05.8 +1.9**
comp=Z,21nm,1.3s
**AKCD Akcadag 80.94 309** P **P 02 40 06.4 +1.3**
**BFSC Mount Baldy Ra 81.02 56** P **P 02 40 04.2 -1.4**
baz=81
**GSC Goldstone 81.06 54** *e*P **P 02 40 06.7 +1.0**
**GSC Goldstone 81.06 54** P **P 02 40 04.8 -0.9**
baz=81,SNR=5.4
**GSC Goldstone 81.06 54** *e*P **P 02 40 06.7 +1.0**
**DUG Dugway 81.11 48** *e*P **P 02 40 06.0 +0.1**
DUG pmax pmax
comp=Z,46nm,1.5s
**DUG Dugway 81.11 48** P **P 02 40 04.8 -1.1**
baz=81
**DUG Dugway 81.11 48** *e*P **P 02 40 06.0 +0.1**
comp=Z,46nm,1.5s
**HWUT Hardware Ranch 81.12 47** *e*P **P 02 40 06.3 +0.3**
comp=Z,59nm,1.6s
**LAO LASA Array 81.34 40** P **P 02 40 05.8 -1.2**
baz=81
**CUSAR Sarkisla-SIVAS 81.44 311** P **P 02 40 07.9 +0.3**
**TCUT Toone Canyon 81.49 47** *e*P **P 02 40 09.2 +1.2**
comp=Z,24nm,1.0s
**CTU Camp Tracy 81.51 47** *e*P **P 02 40 09.5 +1.4**
comp=Z,14nm,1.0s
**SHPR Sheep Range 81.56 52** *e*P **P 02 40 09.2 +0.8**
**TUQ Turquoise Moun 81.60 54** P **P 02 40 07.5 -1.1**
baz=82,SNR=6.4
**HEC Hector,Ludlow 81.64 54** P **P 02 40 08.4 -0.4**
baz=82,SNR=6.0
**MURC Murrieta 81.68 56** P **P 02 40 07.7 -1.2**
baz=82
**BW06 Boulder Array 81.70 45** *e*P **P 02 40 09.2 +0.1**
comp=Z,98nm,2.8s
**NLU North Lily Min 81.72 48** *e*P **P 02 40 10.5 +1.3**
comp=Z,8.4nm,1.0s
**PINB Pinasai 81.74 310** P **P 02 40 09.4 0.0**
**PPT Papeete 81.85 116** LR LR 03 15 14.7
comp=Z,198nm,18.8s,baz=304,slow=35
**PPT2 Papeete2 81.86 116** *e*LR LR 03 05 31.7
comp=Z,320nm,21.5s
**O16A Springville 81.94 48** *e*P P 02 40 16.2 +5.9
comp=Z,65nm,1.8s
**MPU Maple Canyon 81.96 48** *e*P **P 02 40 10.2 -0.4**
comp=Z,44nm,1.1s
**GMRC Granite Mounta 82.14 54** P **P 02 40 10.5 -0.9**
baz=82,SNR=5.9
**AYKD Aykdinkavak 82.16 309** P **P 02 40 11.4 0.0**
**CCUT Cedar City 82.20 51** *e*P **P 02 40 12.3 +0.5**
**PFO Pinyon Flat Ob 82.20 56** *e*P **P 02 40 11.2 -0.6**
PFO pmax pmax
comp=Z,19nm,1.4s
**PFO Pinyon Flat Ob 82.20 56** P **P 02 40 10.4 -1.4**
baz=82,SNR=5.9
**PFO Pinyon Flat Ob 82.20 56** *e*P **P 02 40 11.2 -0.6**
comp=Z,19nm,1.4s
**A26A Wade Farm, Ken 82.22 37** P **P 02 40 09.9 -1.6**
baz=82
**LVV L'vov 82.28 325** *e*P **P 02 40 12.2 +0.5**
LVV *e*S **S 02 50 26.9 +0.4**
LVV MLR MLR
comp=Z,900nm,18.0s
LVV MLR MLR
comp=N,600nm,16.0s
LVV MLR MLR
comp=E,700nm,16.0s
**BELC Belle Mtn. Jos 82.32 55** P **P 02 40 11.3 -1.1**
baz=82,SNR=7.1
**MSU Marysvale 82.45 49** *e*P **P 02 40 14.3 +1.2**
MSU pmax pmax
comp=Z,16nm,1.3s
**MSU Marysvale 82.45 49** *e*P **P 02 40 14.3 +1.2**
comp=Z,16nm,1.3s
**A27A Ledoux Ranch, 82.59 36** P **P 02 40 12.7 -0.6**
baz=82
**MONP Monument Peak 82.61 56** P **P 02 40 13.3 -0.7**
baz=82
**TMUT Trail Mountain 82.64 48** *e*P **P 02 40 15.6 +1.4**
comp=Z,298nm,2.5s
**D25A Fairfield 82.64 39** P **P 02 40 12.6 -1.1**
baz=82
**IRM Iron Mountain 82.82 54** P **P 02 40 13.9 -1.0**
baz=83
**P17A Butcher Ranch, 82.84 48** *e*P **P 02 40 16.2 +1.1**
comp=Z,16nm,0.9s
**BRTR Keskin Array B 82.93 312** P **P 02 40 16.4 +0.9**
comp=Z,11nm,0.8s,baz=108,slow=2.8,SNR=37
BRTR LR LR 03 23 14.0
comp=Z,113nm,18.3s,baz=36,slow=40
**BRTR Keskin Array B 82.93 312***ce*P **P 02 40 16.3 +0.8**
BRTR pmax pmax
comp=Z,11nm,0.8s
**IBP Imperial Mould 82.96 56** P **P 02 40 15.0 -0.7**
baz=83
**E25A Miller Ranch, 83.00 39** P **P 02 40 14.6 -1.0**
baz=83
**TESR Tescani 83.01 321** *i*P **P 02 40 16.2 +0.6**
**KWP Kalwaria Pacla 83.05 325** *e*P **P 02 40 16.5 +0.8**
**KWP Kalwaria Pacla 83.05 325** *e*P **P 02 40 16.6 +0.8**
**P18A Preston Nutter 83.06 48** *e*P **P 02 40 17.2 +0.8**
comp=Z,13nm,0.8s
**BUR04 Bucovina Ar. S 83.08 322** *e*P **P 02 40 16.2 +0.2**
**BURAR Bucovina Array 83.08 322** *i*P **P 02 40 16.9 +0.9**
**A28A Rude Farm, Bot 83.11 36** P **P 02 40 15.4 -0.7**
baz=83
**RAYN Ar Rayn 83.11 293** P **P 02 40 17.6 +1.0**
comp=Z,180nm,0.9s,SNR=25
**RAYN Ar Rayn 83.11 293** *e*P **P 02 40 17.5 +1.0**
comp=Z,93nm,1.5s
**SRU San Rafael 83.18 48** *e*P **P 02 40 16.8 -0.1**
SRU pmax pmax
comp=Z,12nm,0.9s
**SRU San Rafael 83.18 48** *e*P **P 02 40 16.8 -0.1**
comp=Z,12nm,0.9s
**D26A Manning 83.19 38** P **P 02 40 15.5 -1.0**
baz=83
**C27A Sayler Ranch, 83.24 37** P **P 02 40 16.0 -0.8**
baz=83
**B28A Dugan Ranch, T 83.36 36** P **P 02 40 16.0 -1.3**
baz=83
**BBAL Bala 83.36 312** P **P 02 40 17.9 +0.2**
**VRI Vrincioaia 83.37 320** *i*P **P 02 40 18.4 +0.9**
**ANTO Ankara 83.39 313** *e*P **P 02 40 18.9 +1.2**
**ANTO Ankara 83.39 313** *i*P **P 02 40 19.1 +1.3**
**ANTO Ankara 83.39 313** *e*P **P 02 40 18.9 +1.2**
**BR231 Keskin MP Arra 83.41 313** *e*P **P 02 40 16.5 -1.4**
**PLOR Plostina 83.42 320** *i*P **P 02 40 19.0 +1.2**
**Y12C Blythe 83.48 55** P **P 02 40 16.9 -1.4**
baz=83
**E26A Carlson Angus 83.52 39** P **P 02 40 17.3 -1.0**
baz=83
**K22A Casper 83.58 44** P **P 02 40 17.5 -1.3**
baz=83
**K22A Casper 83.58 44** *e*P **P 02 40 20.1 +1.2**
**A29A Manning Farm, 83.62 35** P **P 02 40 17.6 -1.1**
baz=83
**D27A Center 83.62 38** P **P 02 40 17.8 -0.9**
baz=83
**GLA Glamis 83.65 55** P **P 02 40 18.1 -1.1**
baz=84
**KOLS Kolonicke sedl 83.72 325** *e*P **P 02 40 19.5 +0.3**
KOLS pmax pmax
comp=Z,12nm,1.3s
**KOLS Kolonicke sedl 83.72 325** *e*P **P 02 40 19.5 +0.3**
**F26A Lodgepole 83.80 39** P **P 02 40 18.8 -1.0**
baz=84
**G25A Newell 83.81 40** P **P 02 40 18.9 -0.9**
baz=84
**C28A Hausauer Farms 83.82 37** P **P 02 40 19.0 -0.7**
baz=84
**B29A Wagenman Farm, 83.86 36** P **P 02 40 19.2 -0.7**
baz=84
**ARCR ARCALIA 83.87 322** *i*P **P 02 40 21.0 +1.0**
**STHS Stebnicka Huta 83.91 325** *e*P **P 02 40 21.4 +1.2**
STHS pmax pmax
comp=Z,8.0nm,1.1s
**STHS Stebnicka Huta 83.91 325** *e*P **P 02 40 21.4 +1.2**
**UZH Uzhgorod 83.92 324** *i*P **P 02 40 19.9 -0.3**
UZH *e* 02 40 31.3
UZH *e*S **S 02 50 39.5 -3.7**
**BMR Baia Mare 83.93 323** *i*P **P 02 40 21.6 +1.3**
**O20A White River Ci 84.03 46** P **P 02 40 20.0 -1.2**
baz=84
**O20A White River Ci 84.03 46** *e*P **P 02 40 21.0 -0.2**
**MLR Muntele Rosu 84.03 320** *i*P **P 02 40 21.5 +0.5**
**DOPR Dopca 84.03 321** *i*P **P 02 40 22.2 +1.3**
**E27A Carson 84.03 38** P **P 02 40 20.3 -0.6**
baz=84
**OJC Ojcow 84.06 327** *e*P **P 02 40 21.2 +0.3**
**OJC Ojcow 84.06 327** *e*P **P 02 40 21.2 +0.3**
**OJC Ojcow 84.06 327** *e*P **P 02 40 21.3 +0.3**
**H25A Fruitdale 84.06 41** P **P 02 40 19.6 -1.5**
baz=84
**D28A Regan 84.06 37** P **P 02 40 19.9 -1.1**
baz=84
**A30A Hoffart Farm, 84.06 35** P **P 02 40 19.7 -1.3**
baz=84
**TRPA Tarpa 84.12 324** *i*P **P 02 40 22.1 +0.9**
**RSSD Black Hills 84.12 41** *e*P **P 02 40 22.6 +1.0**
RSSD pmax pmax
comp=Z,18nm,1.5s
**RSSD Black Hills 84.12 41** *e*P **P 02 40 22.6 +1.0**
comp=Z,18nm,1.5s
**MDND Maddock 84.13 36** P **P 02 40 20.1 -1.3**
baz=84
**F27A Lemmon 84.14 39** P **P 02 40 20.7 -0.8**
baz=84
**AUMIH MIHALICIK 84.21 313** P **P 02 40 22.8 +0.8**
**ULM Lac du Bonnet 84.34 33** P **P 02 40 22.8 +0.5**
comp=Z,2.5nm,0.6s,baz=315,slow=4.9,SNR=3.1
ULM LR LR 03 19 33.5
comp=Z,218nm,19.2s,baz=324,slow=37
**ULM Lac du Bonnet 84.34 33** P **P 02 40 22.8 +0.5**
ULM pmax pmax
comp=Z,3.0nm,0.6s
ULM MLR MLR
comp=Z,218nm,19.2s
**I25A Rochford 84.36 41** P **P 02 40 21.4 -1.4**
baz=84
**NIE Niedzica 84.36 326** *e*P **P 02 40 23.1 +0.6**
**NIE Niedzica 84.36 326** *e*P **P 02 40 23.2 +0.7**
**B30A Myrvik Farm, E 84.38 35** P **P 02 40 21.6 -1.0**
baz=84
**E28A Huff 84.40 38** P **P 02 40 21.7 -1.0**
baz=84
**PV09 Paradox Valley 84.42 48** *e*P **P 02 40 25.0 +1.6**
**CJR Cluj-Napoca 84.50 322** *i*P **P 02 40 22.3 -1.0**
**G27A Dupree 84.50 39** P **P 02 40 22.6 -0.7**
baz=84,SNR=6.2
**H26A Fairpoint 84.52 40** P **P 02 40 22.6 -0.8**
baz=84
**VOIR 84.55 321** *i*P **P 02 40 25.4 +1.8**
**PV10 Paradox Valley 84.55 48** *e*P **P 02 40 24.6 +0.7**
**PV04 Paradox Valley 84.63 48** *e*P **P 02 40 23.7 -0.6**
**WUAZ Wupatki 84.66 52** P **P 02 40 23.7 -0.8**
baz=84,SNR=7.6
**WUAZ Wupatki 84.66 52** *e*P **P 02 40 25.3 +0.8**
**PV05 Paradox Valley 84.69 48** *e*P **P 02 40 25.5 +0.8**
**B31A Greenbush Farm 84.73 35** P **P 02 40 23.8 -0.5**
baz=84
**C30A Mose, Pekin 84.80 36** P **P 02 40 23.6 -1.1**
baz=85
**BORA Eskisehir 84.84 314** P **P 02 40 24.6 -0.6**
**I26A New Underwood 84.84 41** P **P 02 40 23.9 -1.2**
baz=85
**H27A Howes 84.90 40** P **P 02 40 24.1 -1.2**
baz=85
**DRGR 84.91 323** *i*P **P 02 40 25.9 +0.5**
**LANS Liptovska Anna 84.95 326** *e*P **P 02 40 26.9 +1.4**
**LANS Liptovska Anna 84.95 326** *e*P **P 02 40 26.9 +1.4**
**N23A Red Feather La 84.98 45** P **P 02 40 25.1 -1.0**
baz=85,SNR=12
**N23A Red Feather La 84.98 45** *e*P **P 02 40 26.7 +0.6**
**PV01 Paradox Valley 84.99 48** *e*P **P 02 40 25.9 -0.2**
**D30A Buchanan 85.05 37** P **P 02 40 25.3 -0.8**
baz=85
**OKC Ostrava-Krasne 85.09 327** *e*P **P 02 40 25.1 -1.0**
OKC *e* 02 40 38.5
OKC *e* 02 40 43.5
OKC *e* 02 50 47.8
OKC MLR MLR
comp=Z,500nm,16.2s
**OKC Ostrava-Krasne 85.09 327** *e*P **P 02 40 25.1 -1.0**
OKC *e*pP **pP 02 40 34.2 +2.6**
OKC *e*SKS S 02 50 47.8 -7.1
OKC AMS AMS 03 27 10.0
comp=Z,500nm,16.2s
**C31A Landman Farms, 85.11 36** P **P 02 40 25.4 -0.9**
baz=85,SNR=6.8
**J26A Sides Ranch, S 85.17 41** P **P 02 40 26.1 -0.7**
baz=85
**BOLV Bolvadin 85.22 313** P **P 02 40 26.0 -1.1**
**G28A Parade 85.25 39** P **P 02 40 26.3 -0.8**
baz=85
**I27A Quinn 85.27 40** P **P 02 40 26.1 -1.1**
baz=85
**B32A Ashes, Strandq 85.30 35** P **P 02 40 26.3 -0.9**
baz=85
**TBI Tubuai 85.35 121** *e*LR LR 03 07 10.0
comp=Z,380nm,22.0s,baz=298
**E30A Jud 85.38 37** P **P 02 40 26.1 -1.6**
baz=85
**SMCO Snowmass 85.38 47** *e*P **P 02 40 29.5 +1.2**
comp=Z,18nm,1.1s
**MORC Moravsky Berou 85.42 327** *e*P **P 02 40 28.3 +0.5**
**MORC Moravsky Berou 85.42 327** *i*P **P 02 40 28.3 +0.5**
**MORC Moravsky Berou 85.42 327** *e*P **P 02 40 28.3 +0.5**
**H28A Mission Ridge 85.45 39** P **P 02 40 27.1 -1.0**
baz=85
**A33A Warroad 85.48 34** P **P 02 40 27.1 -1.0**
baz=85
**KRLC Kraliky 85.56 328** *e*P **P 02 40 28.6 +0.1**
KRLC *e* 02 40 36.3
KRLC *e* 02 40 43.3
**KRLC Kraliky 85.56 328** *e*P **P 02 40 28.6 +0.1**
KRLC *e*pP **PcP 02 40 32.4 +1.0**
KRLC *e*sP **sP 02 40 36.3 +0.4**
**DPC Dobruska-Polom 85.57 328** *e*P **P 02 40 28.2 -0.4**
DPC *e* 02 40 38.4
DPC *e* 02 40 43.7
DPC MLR MLR
comp=Z,600nm,13.7s
**DPC Dobruska-Polom 85.57 328** *e*P **P 02 40 28.2 -0.4**
DPC *e*pP **pP 02 40 33.1 -0.9**
DPC *e*sP **sP 02 40 35.8 -0.1**
DPC *e*PP PP 02 43 40.0 -6.5
DPC AMS AMS 03 22 50.0
comp=Z,600nm,13.7s
**MVCO Mesa Verde 85.58 49** P **P 02 40 27.9 -1.2**
baz=85,SNR=6.8
**MVCO Mesa Verde 85.58 49** *e*P **P 02 40 30.3 +1.2**
comp=Z,20nm,1.4s
**PSZ Piszkesteto 85.58 325** *e*P **P 02 40 28.8 +0.1**
**PSZ Piszkesteto 85.58 325** *i*P **P 02 40 29.0 +0.3**
**PSZ Piszkesteto 85.58 325** *e*P **P 02 40 28.8 +0.1**
**UPC Upice 85.59 329** *e*P **P 02 40 29.0 +0.4**
UPC *e* 02 40 41.3
UPC MLR MLR
comp=Z,700nm,16.5s
**UPC Upice 85.59 329** *e*P **P 02 40 29.0 +0.4**
UPC *e*pP **pP 02 40 34.3 +0.2**
UPC AMS AMS 03 23 30.0
comp=Z,700nm,16.5s
**VYHS Vyhne 85.70 326** *e*P **P 02 40 29.6 +0.4**
VYHS pmax pmax
comp=Z,9.0nm,1.2s
**VYHS Vyhne 85.70 326** *e*P **P 02 40 29.6 +0.4**
**G29A Hoven 85.71 39** P **P 02 40 28.5 -0.8**
baz=86
**F30A Leola 85.76 38** P **P 02 40 28.4 -1.2**
baz=86
**I28A Midland 85.80 40** P **P 02 40 28.9 -1.0**
baz=86,SNR=11
**J27A Elkhorn Farm, 85.81 41** P **P 02 40 28.7 -1.3**
baz=86
**ISCO Idaho Springs 85.85 45** *e*P **P 02 40 32.3 +1.8**
ISCO pmax pmax
comp=Z,17nm,1.4s
**ISCO Idaho Springs 85.85 45** P **P 02 40 28.9 -1.6**
baz=86
**ISCO Idaho Springs 85.85 45** *e*P **P 02 40 32.3 +1.8**
comp=Z,17nm,1.4s
**CSS Prodhromos 85.86 309** *e*P **P 02 40 31.2 +0.9**
comp=Z,5.4nm,0.9s
**E31A Nome 85.86 37** P **P 02 40 29.3 -0.8**
baz=86,SNR=6.3
**H29A Onida 85.92 39** P **P 02 40 29.7 -0.7**
baz=86
**W18A Petrified Fore 85.99 51** P **P 02 40 29.8 -1.3**
baz=86
**C33A Trail 86.11 35** P **P 02 40 30.4 -0.9**
baz=86
**J28A Allard Ranch, 86.14 41** P **P 02 40 30.7 -0.8**
baz=86
**B34A Aery, Baudette 86.14 34** P **P 02 40 30.5 -0.8**
baz=86
**F31A Hecla 86.15 37** P **P 02 40 30.8 -0.7**
baz=86
**VRAC Vranov 86.19 328** *i*P **P 02 40 32.8 +1.2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PVCC | Panska Ves | 86.22 | 329 | eP | P | 02 40 31.8 | +0.1 |
| PVCC | | | | e | | 02 40 41.7 | |
| PVCC | Panska Ves | 86.22 | 329 | eP | P | 02 40 31.8 | +0.1 |
| PVCC | | | | ex | x | 02 40 41.7 | |
| PVCC | | | | AMS | AMS | 03 24 20.0 | |
| BRG | Berggiesshubel | 86.24 | 330 | eP | P | 02 40 31.3 | -0.5 |
| | comp=Z,20nm,1.7s | | | | | | |
| | comp=N,478nm,17.3s | | | | | | |
| | comp=E,373nm,11.9s | | | | | | |
| | comp=Z,595nm,13.0s | | | | | | |
| BRG | Berggiesshubel | 86.24 | 330 | eP | P | 02 40 31.3 | -0.5 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,20nm,1.7s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=N,478nm,17.3s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=E,373nm,11.9s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=Z,595nm,13.0s | | | | | | |
| I29A | Vivian Onida | 86.27 | 40 | P | P | 02 40 31.1 | -1.0 |
| | baz=86 | | | | | | |
| CLL | Collm | 86.32 | 331 | eP | P | 02 40 32.2 | 0.0 |
| CLL | Collm | 86.32 | 331⇓ | iP | P | 02 40 32.2 | 0.0 |
| | comp=Z,26nm,1.4s | | | | | | |
| CLL | | | | i | | 02 40 42.1 | |
| CLL | | | | e | | 02 40 49.0 | |
| CLL | | | | ePP | PP | 02 43 54.0 | +1.6 |
| CLL | | | | eS | S | 02 51 06.0 | -0.9 |
| CLL | | | | LmH | | 03 20 00.0 | |
| | comp=N,400nm,18.8s | | | | | | |
| CLL | | | | LmH | | 03 20 00.0 | |
| | comp=E,500nm,19.0s | | | | | | |
| CLL | | | | LmV | | 03 23 00.0 | |
| | comp=Z,300nm,19.5s | | | | | | |
| CLL | Collm | 86.32 | 331 | eP | P | 02 40 32.2 | 0.0 |
| S22A | 4UR Ranch, Cre | 86.33 | 48 | P | P | 02 40 31.9 | -1.1 |
| | baz=86,SNR=8.8 | | | | | | |
| S22A | 4UR Ranch, Cre | 86.33 | 48 | eP | P | 02 40 33.3 | +0.4 |
| SMOL | Smolenice | 86.36 | 327 | eP | P | 02 40 33.6 | +1.2 |
| SMOL | Smolenice | 86.36 | 327 | eP | P | 02 40 33.6 | +1.2 |
| K28A | Ten Mile Ranch | 86.52 | 41 | P | P | 02 40 32.4 | -1.1 |
| | baz=86 | | | | | | |
| GOPC | GO Pecny, Ondr | 86.57 | 329 | eP | P | 02 40 32.5 | -1.0 |
| GOPC | | | | e | | 02 40 40.4 | |
| GOPC | | | | e | | 02 50 58.6 | |
| GOPC | | | | MLR | MLR | | |
| | comp=Z,800nm,11.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 86.57 | 329 | eP | P | 02 40 32.5 | -1.0 |
| GOPC | | | | epP | pP | 02 40 40.4 | +1.5 |
| GOPC | | | | eSKS | SKSac | 02 50 58.6 | -0.9 |
| GOPC | | | | AMS | AMS | 03 24 20.0 | |
| | comp=Z,800nm,11.5s | | | | | | |
| G31A | Conde | 86.59 | 38 | P | P | 02 40 32.8 | -0.9 |
| | baz=86 | | | | | | |
| PRA | Prague | 86.61 | 329 | ex | SKSac | 02 51 09.9 | +10 |
| PRU | Pruhonice | 86.62 | 329 | eP | P | 02 40 32.5 | -1.2 |
| PRU | | | | e | | 02 40 43.4 | |
| PRU | | | | e | | 02 40 49.7 | |
| PRU | | | | eS | SKKSac | 02 51 07.4 | -0.5 |
| PRU | | | | MLR | MLR | | |
| | comp=Z,800nm,13.9s | | | | | | |
| PRU | Pruhonice | 86.62 | 329 | eP | P | 02 40 32.5 | -1.2 |
| PRU | | | | esP | sP | 02 40 43.4 | +2.3 |
| PRU | | | | eS | SKKSac | 02 51 07.4 | -0.5 |
| PRU | | | | AMS | AMS | 03 24 20.0 | |
| | comp=Z,800nm,13.9s | | | | | | |
| J29A | Okreek | 86.65 | 40 | P | P | 02 40 33.1 | -1.0 |
| | baz=86 | | | | | | |
| TREC | Trest | 86.70 | 328 | AMS | AMS | 03 23 10.0 | |
| | comp=Z,500nm,15.2s | | | | | | |
| I30A | Oacoma | 86.81 | 39 | P | P | 02 40 33.9 | -0.9 |
| | baz=87,SNR=6.2 | | | | | | |
| D34A | Park Rapids | 86.86 | 35 | P | P | 02 40 34.1 | -0.9 |
| | baz=87 | | | | | | |
| E33A | Westby DABS, E | 86.86 | 36 | P | P | 02 40 34.2 | -0.7 |
| | baz=87 | | | | | | |
| C35A | Jirik Farms, M | 87.02 | 34 | P | P | 02 40 34.4 | -1.3 |
| | baz=87 | | | | | | |
| J30A | Dallas | 87.17 | 40 | P | P | 02 40 35.5 | -1.0 |
| | baz=87 | | | | | | |
| F33A | 5 Mile Ranch, | 87.17 | 36 | P | P | 02 40 35.9 | -0.6 |
| | baz=87,SNR=6.7 | | | | | | |
| SDCO | Great Sand Dun | 87.17 | 47 | P | P | 02 40 35.6 | -1.4 |
| | baz=87,SNR=6.1 | | | | | | |
| SDCO | Great Sand Dun | 87.17 | 47 | eP | P | 02 40 37.2 | +0.2 |
| | comp=Z,100nm,2.8s | | | | | | |
| NKC | Novy Kostel | 87.35 | 330 | eP | P | 02 40 36.3 | -1.0 |
| NKC | | | | e | | 02 40 46.1 | |
| NKC | | | | MLR | MLR | | |
| | comp=Z,600nm,15.0s | | | | | | |
| NKC | Novy Kostel | 87.35 | 330 | eP | P | 02 40 36.3 | -1.0 |
| NKC | | | | ex | x | 02 40 46.1 | |
| NKC | | | | AMS | AMS | 03 28 00.0 | |
| | comp=Z,600nm,15.0s | | | | | | |
| L29A | Maesberg Ranch | 87.44 | 41 | P | P | 02 40 36.4 | -1.5 |
| | baz=87 | | | | | | |
| H32A | Carlson Farm, | 87.48 | 38 | P | P | 02 40 37.0 | -1.0 |
| | baz=87 | | | | | | |
| CONA | Conrad Observa | 87.51 | 327⇑ | iPcP | P | 02 40 38.3 | +0.1 |
| | comp=Z,8.9nm,1.3s | | | | | | |
| E35A | Pequot Lakes | 87.61 | 35 | P | P | 02 40 37.5 | -1.1 |
| | baz=87 | | | | | | |
| Q26A | Hugo | 87.66 | 45 | P | P | 02 40 37.8 | -1.4 |
| | baz=88 | | | | | | |
| KHC | Kasperske Hory | 87.68 | 329 | eP | P | 02 40 38.3 | -0.6 |
| KHC | | | | e | | 02 40 51.5 | |
| KHC | | | | e | | 02 44 02.9 | |
| KHC | | | | eS | SKKSac | 02 51 11.7 | -4.2 |
| KHC | | | | MLR | MLR | | |
| | comp=Z,600nm,14.0s | | | | | | |
| KHC | Kasperske Hory | 87.68 | 329 | eP | P | 02 40 38.3 | -0.6 |
| KHC | | | | epP | PcP | 02 40 42.2 | +1.4 |
| KHC | | | | esP | sP | 02 40 47.9 | +1.6 |
| KHC | | | | ePP | PP | 02 44 02.9 | -0.6 |
| KHC | | | | eSKS | SKKSac | 02 51 11.7 | -4.2 |
| KHC | | | | AMS | AMS | 03 25 00.0 | |
| | comp=Z,600nm,14.0s | | | | | | |
| KHC | Kasperske Hory | 87.68 | 329 | eP | P | 02 40 39.0 | +0.1 |
| F34A | Alexandria | 87.72 | 36 | P | P | 02 40 37.9 | -1.2 |
| | baz=88 | | | | | | |
| H33A | Prehn Over Nor | 87.73 | 37 | P | P | 02 40 38.2 | -1.0 |
| | baz=88,SNR=10 | | | | | | |
| AYDN | Tasoluk | 87.78 | 313 | P | P | 02 40 41.5 | +1.8 |
| GERES | GERESS Array B | 87.83 | 329 | P | P | 02 40 39.6 | -0.1 |
| | comp=Z,1.2nm,0.6s,baz=2.6,slow=2.9,SNR=3.8 | | | | | | |
| C37A | Embarrass | 87.84 | 33 | P | P | 02 40 38.5 | -1.2 |
| | baz=88 | | | | | | |
| EYMN | Ely | 88.01 | 33 | P | P | 02 40 39.0 | -1.5 |
| | baz=88 | | | | | | |
| LAZ | Ladron | 88.14 | 50 | eP | P | 02 40 44.5 | +3.0 |
| DIVS | Divibare | 88.14 | 322⇓ | iP | P | 02 40 41.1 | -0.2 |
| T25A | Trinidad | 88.23 | 47 | P | P | 02 40 40.6 | -1.4 |
| | baz=88 | | | | | | |
| T25A | Trinidad | 88.23 | 47 | eP | P | 02 40 43.5 | +1.5 |
| ANMO | Albuquerque | 88.26 | 50 | LR | LR | 03 18 38.7 | |
| | comp=Z,856nm,18.7s,baz=212,slow=35 | | | | | | |
| ANMO | Albuquerque | 88.26 | 50c | eP | P | 02 40 42.7 | +0.6 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.7s | | | | | | |
| ANMO | Albuquerque | 88.26 | 50 | eP | P | 02 40 43.4 | +1.3 |
| GRF | Grafenberg Arr | 88.28 | 330 | ePP | PP | 02 44 09.8 | +1.5 |
| ECSD | EROS Data Cent | 88.44 | 38 | P | P | 02 40 41.3 | -1.4 |
| | baz=88 | | | | | | |
| ECSD | EROS Data Cent | 88.44 | 38 | eP | P | 02 40 43.2 | +0.6 |
| S26A | Kim | 88.51 | 46 | P | P | 02 40 41.7 | -1.5 |
| | baz=88 | | | | | | |
| G35A | Watkins | 88.51 | 36 | P | P | 02 40 41.9 | -1.0 |
| | baz=88 | | | | | | |
| F36A | Milaca | 88.54 | 35 | P | P | 02 40 41.4 | -1.6 |
| | baz=88 | | | | | | |
| T26A | Comanche Natio | 88.71 | 47 | P | P | 02 40 43.1 | -1.1 |
| | baz=88 | | | | | | |
| SOKA | Soboth | 88.81 | 326⇑ | iP | P | 02 40 43.7 | -0.6 |
| | comp=Z,12nm,1.3s | | | | | | |
| H36A | Jessenland, He | 89.25 | 36 | P | P | 02 40 45.2 | -1.1 |
| | baz=89 | | | | | | |
| SPMN | St. Paul | 89.35 | 35 | P | P | 02 40 45.9 | -0.9 |
| | baz=89 | | | | | | |
| SPMN | St. Paul | 89.35 | 35 | eP | P | 02 40 48.5 | +1.7 |
| P31A | Stockton | 89.74 | 43 | P | P | 02 40 47.5 | -1.3 |
| | baz=90 | | | | | | |
| ABTA | Abfaltersbach | 89.93 | 328⇑ | iP | P | 02 40 48.2 | -1.4 |
| | comp=Z,6.0nm,0.9s | | | | | | |
| MOTA | Moosalm | 90.11 | 329⇓ | iPcP | P | 02 40 50.2 | -0.4 |
| | comp=Z,6.1nm,1.2s | | | | | | |
| V28A | Channing | 90.47 | 47 | P | P | 02 40 51.2 | -1.2 |
| | baz=90 | | | | | | |
| FETA | Feichten | 90.53 | 329⇑ | iP | P | 02 40 51.9 | -0.6 |
| | comp=Z,4.9nm,1.1s | | | | | | |
| BFO | Black Forest | 90.55 | 331 | iP | P | 02 40 53.3 | +0.9 |
| Q32A | Meitler Ranch, | 90.57 | 43 | P | P | 02 40 51.6 | -1.1 |
| | baz=90 | | | | | | |
| DAVA | Damuels | 90.69 | 329⇑ | iP | P | 02 40 52.2 | -1.1 |
| | comp=Z,19nm,1.2s | | | | | | |
| O34A | Beatrice | 90.83 | 41 | P | P | 02 40 52.9 | -0.9 |
| | baz=91 | | | | | | |
| MNTX | Cornudas Mount | 90.94 | 52 | P | P | 02 40 53.4 | -1.1 |
| | baz=91 | | | | | | |
| MNTX | Cornudas Mount | 90.94 | 52 | eP | P | 02 40 55.2 | +0.6 |
| SCHQ | Schefferville | 90.96 | 16 | LR | LR | 03 22 16.3 | |
| | comp=Z,53nm,22.0s,baz=328,slow=36 | | | | | | |
| P34A | Walnut Farm, R | 91.18 | 41 | P | P | 02 40 54.6 | -0.9 |
| | baz=91 | | | | | | |
| AMTX | Amarillo | 91.36 | 47 | P | P | 02 40 55.5 | -1.0 |
| | baz=91 | | | | | | |
| TUE | Stuetta | 91.56 | 329 | eP | P | 02 40 57.8 | +0.5 |
| Q35A | Mercer Eighty, | 92.10 | 41 | P | P | 02 40 58.8 | -1.0 |
| | baz=92 | | | | | | |
| 128A | Castleberry Fa | 92.29 | 49 | P | P | 02 40 60.0 | -0.9 |
| | baz=92 | | | | | | |
| R35A | Emporia Munici | 92.38 | 42 | P | P | 02 41 00.2 | -0.8 |
| | baz=92 | | | | | | |
| Z29A | Hungry Hill Ra | 92.39 | 49 | P | P | 02 41 00.4 | -0.9 |
| | baz=92 | | | | | | |
| X31A | McDonald Ranch | 92.59 | 47 | P | P | 02 41 00.9 | -1.2 |
| | baz=92 | | | | | | |
| W32A | Sentinel | 92.72 | 46 | P | P | 02 41 01.9 | -0.9 |
| | baz=92 | | | | | | |
| Z30A | Sanderson Ranc | 92.74 | 48 | P | P | 02 41 01.9 | -1.0 |
| | baz=93 | | | | | | |
| S35A | Otter Creek Ra | 92.75 | 42 | P | P | 02 41 01.7 | -1.1 |
| | baz=92 | | | | | | |
| R36A | Gordon, Harris | 92.77 | 41 | P | P | 02 41 02.0 | -0.9 |
| | baz=93 | | | | | | |
| Y31A | Rekieta Farm, | 92.85 | 47 | P | P | 02 41 02.9 | -0.5 |
| | baz=93 | | | | | | |
| WMOK | Wichita Mounta | 93.26 | 46 | eP | P | 02 41 05.6 | +0.4 |
| WMOK | Wichita Mounta | 93.26 | 46 | eP | P | 02 41 05.6 | +0.4 |
| 329A | Wagon Wheel Ra | 93.34 | 50 | P | P | 02 41 04.2 | -1.5 |
| | baz=93 | | | | | | |
| T36A | Boggs Farm, Ca | 93.43 | 43 | P | P | 02 41 04.5 | -1.4 |
| | baz=93 | | | | | | |
| S37A | Fort Scott | 93.55 | 41 | P | P | 02 41 05.0 | -1.4 |
| | baz=93 | | | | | | |
| TX31 | Lajitas Ar. Si | 93.56 | 53 | eP | P | 02 41 06.6 | -0.3 |
| TXAR | Lajitas Array | 93.57 | 53 | P | P | 02 41 07.0 | +0.2 |
| | comp=Z,5.4nm,0.8s,baz=298,slow=2.7,SNR=40 | | | | | | |
| TXAR | | | | LR | LR | 03 21 51.3 | |
| | comp=Z,432nm,18.8s,baz=0.0,slow=35 | | | | | | |
| TXAR | Lajitas Array | 93.57 | 53 | P | P | 02 41 07.0 | +0.2 |
| X33A | Lawton | 93.57 | 46 | P | P | 02 41 05.3 | -1.3 |
| | baz=93 | | | | | | |
| Z32A | Haskell | 93.77 | 47 | P | P | 02 41 06.4 | -1.2 |
| | baz=94 | | | | | | |
| BNI | Bardonecchia | 93.83 | 330 | eP | P | 02 41 11.2 | +3.4 |
| BNI | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| BNI | Bardonecchia | 93.83 | 330 | eP | P | 02 41 11.2 | +3.4 |
| | comp=Z,12nm,1.0s | | | | | | |
| 330A | Mertzon | 93.92 | 50 | P | P | 02 41 06.9 | -1.5 |
| | baz=94 | | | | | | |
| T37A | Cheneyville 18 | 93.94 | 42 | P | P | 02 41 07.0 | -1.2 |
| | baz=94 | | | | | | |
| 429A | Davenport Ranc | 93.95 | 51 | P | P | 02 41 07.1 | -1.4 |
| | baz=94 | | | | | | |
| 529A | Stev Forest Ra | 94.05 | 51 | P | P | 02 41 07.7 | -1.3 |
| | baz=94 | | | | | | |
| Z33A | Whitaker Ranch | 94.24 | 47 | P | P | 02 41 08.6 | -1.1 |
| | baz=94 | | | | | | |
| 430A | Baggett Ranch, | 94.28 | 50 | P | P | 02 41 09.2 | -0.8 |
| | baz=94 | | | | | | |
| U37A | Salina | 94.32 | 43 | P | P | 02 41 09.0 | -1.0 |
| | baz=94 | | | | | | |
| 530A | J-C Ranch, Com | 94.62 | 51 | P | P | 02 41 10.2 | -1.4 |
| | baz=94 | | | | | | |
| X36A | Centrahoma | 94.86 | 45 | P | P | 02 41 11.3 | -1.2 |
| | baz=95 | | | | | | |
| 332A | Millersview | 94.87 | 49 | P | P | 02 41 11.2 | -1.5 |
| | baz=95 | | | | | | |
| 233A | Rising Star | 94.99 | 48 | P | P | 02 41 12.0 | -1.3 |
| | baz=95 | | | | | | |
| 531A | Rocksprings | 95.13 | 50 | P | P | 02 41 13.2 | -0.7 |
| | baz=95 | | | | | | |
| 432A | Menard | 95.16 | 49 | P | P | 02 41 13.1 | -0.9 |
| | baz=95 | | | | | | |
| CCM | Cathedral Cave | 95.33 | 39 | eP | P | 02 41 15.7 | +1.1 |
| CCM | Cathedral Cave | 95.33 | 39 | eP | P | 02 41 15.7 | +1.1 |
| 333A | Richland Sprin | 95.39 | 49 | P | P | 02 41 13.6 | -1.5 |
| | baz=95 | | | | | | |
| JCT | Junction City | 95.42 | 50 | eP | P | 02 41 16.1 | +0.9 |
| JCT | Junction City | 95.42 | 50 | P | P | 02 41 14.3 | -0.9 |
| | baz=95 | | | | | | |
| JCT | Junction City | 95.42 | 50 | eP | P | 02 41 16.1 | +0.9 |
| 532A | Rocksprings | 95.58 | 50 | P | P | 02 41 14.6 | -1.4 |
| | baz=95 | | | | | | |
| 631A | Perdido Creek | 95.60 | 51 | P | P | 02 41 14.8 | -1.2 |
| | baz=95 | | | | | | |
| RKT | Rikitea | 96.31 | 113 | eLR | LR | 03 12 16.7 | |
| | comp=Z,228nm,24.5s | | | | | | |
| 732A | Laxson Ranch, | 96.44 | 51 | P | P | 02 41 19.1 | -0.8 |
| | baz=96 | | | | | | |
| 633A | Saathoff Ranch | 96.49 | 50 | P | P | 02 41 18.6 | -1.5 |
| | baz=96 | | | | | | |
| MIAR | Mount Ida | 96.52 | 43 | eP | P | 02 41 21.9 | +1.8 |
| MIAR | Mount Ida | 96.52 | 43 | P | P | 02 41 18.9 | -1.2 |
| | baz=96 | | | | | | |
| MIAR | Mount Ida | 96.52 | 43 | eP | P | 02 41 21.9 | +1.8 |
| 534A | Blanco | 96.58 | 49 | P | P | 02 41 19.5 | -1.0 |
| | baz=96 | | | | | | |
| 833A | Chaparral WMA, | 97.09 | 51 | P | P | 02 41 22.0 | -0.8 |
| | baz=97 | | | | | | |
| TORD | Torodi Ar. Bea | 121.55 | 313 | PKP | PKPdf | 02 46 43.4 | -1.2 |
| | comp=Z,0.8nm,0.7s,baz=45,slow=1.2,SNR=22 | | | | | | |
| SAML | Samuel | 148.05 | 52 | ePKPbc | PKPbc | 02 47 35.5 | -1.1 |
| LPAZ | La Paz | 149.12 | 68 | PKPbc | PKPbc | 02 47 39.8 | -0.2 |
| | comp=Z,3.4nm,0.7s,baz=356,slow=1.8,SNR=8.3 | | | | | | |
| LVC | Limon Verde | 151.53 | 80 | ePKPbc | PKPbc | 02 47 45.8 | +0.6 |

*ISCJB **10** 02:30:16.6±0.4, 32°.72S±0°.05×139°.95E±0°.04, h10km, mb4.3/11, Error ellipse: s-maj=7.4km s-min=5.3km az=15.1*
*IDC **10** 02:30:17.6±0.8, 32°.81S×139°.86E, h0km, mb4.2/8, mb1 4.4/12, mb1mx4.2/32, mbtmp4.3/12, ML4.3/4, Error ellipse: s-maj=38.8km s-min=16.6km az=85.0*
*NEIC **10** 02:30:18.0, 32°.90S×139°.96E, h0km, mb4.5/3, ML4.1(AUST), After AUST.*
*AUST **10** 02:30:18.2±0.0, 32°.90S×139°.96E, h0km, Error ellipse: s-maj=0.2km s-min=0.1km az=5.0*
**ISC 10 02:30:18.8**±0.5, **32°.70S**±0°.06×**139°.89E**±0°.05, **h10**km, **n32**, σ**1**$^{s}$**61**/38, **mb4.4**/11, **Near coast of South Australia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BBOO | Buckleboo | 3.23 | 267 | P | Pn | 02 31 10.5 | +0.9 |
| | baz=3.3 | | | | | | |
| BBOO | Buckleboo | 3.23 | 267 | ePn | Pn | 02 31 10.2 | +0.5 |
| BBOO | | | | ePg | Pb | 02 31 18.2 | +1.9 |
| BBOO | | | | eSn | Sn | 02 31 48.7 | +0.5 |
| ARPS | Mount Arapiles | 4.36 | 159 | P | Pn | 02 31 23.7 | -1.4 |
| | baz=4.2 | | | | | | |
| CMSA | Cobar Meteorol | 5.06 | 78 | P | Pn | 02 31 36.3 | +1.6 |
| | baz=5.0 | | | | | | |
| TOO | Toolangi | 6.68 | 138 | P | Pn | 02 31 56.0 | -1.0 |
| | baz=6.5 | | | | | | |
| CAN | Canberra | 8.00 | 112 | P | Pn | 02 32 14.4 | -0.8 |
| | baz=7.9 | | | | | | |
| CNB | Canberra Magne | 8.28 | 111 | P | Pn | 02 32 18.9 | -0.2 |
| | baz=8.1 | | | | | | |
| FORT | Forrest | 10.26 | 278 | ePn | Pn | 02 32 45.8 | -0.3 |
| | 79nm,0.5s | | | | | | |
| ARMA | Armidale | 10.27 | 80 | ePn | Pn | 02 32 44.9 | -1.5 |
| ARMA | | | | eSn | Sn | 02 34 40.6 | -1.1 |
| ASAR | Alice Springs | 10.43 | 328 | Pn | Pn | 02 32 48.9 | +0.3 |
| | 1.6nm,0.3s,baz=150,slow=12,SNR=67 | | | | | | |
| ASAR | | | | Sn | Sn | 02 34 42.0 | -3.6 |
| | 4.0nm,0.3s,baz=156,slow=24,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 13.64 | 337 | Pn | Pn | 02 33 31.6 | -0.9 |
| | 2.0nm,0.3s,baz=161,slow=12,SNR=62 | | | | | | |
| WRA | | | | Sn | Sn | 02 36 00.3 | -3.9 |
| | 1.3nm,0.3s,baz=158,slow=24,SNR=6.1 | | | | | | |
| WRAB | Tennant Creek | 13.65 | 337 | ePn | Pn | 02 33 31.6 | -0.9 |
| | 10nm,0.6s | | | | | | |
| WRAB | | | | eSn | Sn | 02 35 59.6 | -4.7 |
| CTA | Charters Tower | 13.79 | 26 | Pn | Pn | 02 33 34.9 | +0.4 |
| | 0.7nm,0.3s,baz=206,slow=15,SNR=11 | | | | | | |
| CTAO | Charters Tower | 13.79 | 26 | ePn | Pn | 02 33 35.1 | +0.6 |
| FITZ | Fitzroy Crossi | 19.39 | 315 | P | P | 02 34 44.0 | -1.0 |
| | 0.8nm,0.3s,baz=159,slow=12,SNR=21 | | | | | | |
| MBWA | Marble Bar | 21.30 | 298 | eP | P | 02 35 05.8 | +0.1 |
| | 30nm,1.0s | | | | | | |
| PMG | Port Moresby | 24.14 | 18 | P | P | 02 35 35.6 | +0.5 |
| | 5.7nm,0.3s,baz=140,slow=21,SNR=3.7 | | | | | | |
| VNDA | Vanda | 45.98 | 174 | P | P | 02 38 40.2 | -1.4 |
| | 1.6nm,0.8s,baz=333,slow=3.8,SNR=5.2 | | | | | | |
| MAW | Mawson | 55.30 | 207 | P | P | 02 39 51.6 | -0.5 |
| | 1.3nm,0.7s,baz=59,slow=17,SNR=4.5 | | | | | | |
| QSPA | South Pole Qui | 57.40 | 180 | P | P | 02 40 06.8 | -0.5 |
| | 3.1nm,0.9s,baz=341,slow=1.3,SNR=14 | | | | | | |
| CMAR | Chiang Mai Arr | 64.20 | 316 | P | P | 02 40 55.7 | +1.7 |
| | 1.1nm,0.4s,baz=155,slow=5.4,SNR=5.0 | | | | | | |
| KSAR | Wonju Array Be | 70.68 | 350 | P | P | 02 41 36.8 | +2.2 |
| KSRS | Korea Array | 70.69 | 350 | P | P | 02 41 36.8 | +2.2 |
| | 2.5nm,0.8s,baz=164,slow=6.8,SNR=8.1 | | | | | | |
| SNAA | Sanae | 72.67 | 192 | P | P | 02 41 45.8 | -0.5 |
| SNAA | Sanae | 72.67 | 192 | eP | P | 02 41 45.5 | -0.9 |
| | 1.3nm,0.9s | | | | | | |
| VNA2 | Neumayer--Watz | 74.06 | 191 | P | P | 02 41 54.3 | -0.2 |
| | baz=157,slow=5.0 | | | | | | |
| VNA3 | Neumayer Olymp | 74.12 | 190 | P | P | 02 41 54.7 | -0.2 |
| VNA1 | Neumayer--Stat | 74.44 | 191 | P | P | 02 41 56.5 | -0.2 |
| ULN | Ulaanbaatar | 85.44 | 339 | eP | P | 02 42 58.6 | +2.2 |
| | 3.3nm,0.7s | | | | | | |
| SONM | Songino Array | 85.62 | 338 | P | P | 02 42 57.6 | +0.3 |
| | 1.5nm,0.7s,baz=156,slow=6.0,SNR=7.5 | | | | | | |
| PETK | Petropavlovsk- | 86.85 | 11 | P | P | 02 43 04.3 | +1.2 |
| | 3.4nm,0.9s,baz=157,slow=7.8,SNR=2.5 | | | | | | |
| ESDC | Sonseca Array | 150.16 | 294 | PKPbc | PKPbc | 02 50 10.8 | +0.8 |
| | 0.6nm,0.8s,baz=89,slow=3.4,SNR=3.5 | | | | | | |

**JMA 10 02:31:07.7**±0.2, **31°.20N**×**142°.11E**, **h50**km, **M4.0**, **Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CBIJ | Chichi jima | 4.09 | 179 | P | Pn | 02 32 09.3 | +1.6 |
| JHU | Hanno | 5.21 | 334 | P | Pn | 02 32 24.8 | +1.8 |
| JHU | | | | eS | Sn | 02 33 24.1 | +2.3 |
| JNY | Yasuok | 5.46 | 321 | P | Pn | 02 32 28.5 | +1.9 |
| JRY | Ryogami san | 5.50 | 332 | P | Pn | 02 32 29.1 | +2.0 |
| JRY | | | | eS | Sn | 02 33 30.8 | +1.8 |
| JAG | Ashikaga | 5.66 | 338 | P | Pn | 02 32 31.9 | +2.6 |
| JAG | | | | eS | Sn | 02 33 34.9 | +2.0 |

*CSEM **10** 02:39:02.0, 42°.54N×13°.21E, h6km, MD1.1/4, After ROM*
**ROM 10 02:39:02.0**±0.1, **42°.54N**×**13°.21E**, **h6**km, **Md1.1**/4, **Ml0.6**/1, **Error ellipse: s-maj=0.6km s-min=0.4km az=108.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RM29 | Verrico (Monte | 0.02 | 348 | Pg | Pg | 02 39 03.4 | 0.0 |
| RM29 | | | | Sg | Sg | 02 39 04.5 | +0.1 |
| | 91nm,0.2s | | | | | | |
| RM29 | Verrico (Monte | 0.02 | 348 | Pg | Pg | 02 39 03.4 | 0.0 |
| RM29 | | | | Sg | Sg | 02 39 04.5 | +0.1 |
| | 91nm,0.2s | | | | | | |
| RM33 | Pellescritta ( | 0.03 | 172 | Pg | Pg | 02 39 03.6 | +0.2 |
| RM33 | | | | Sg | Sg | 02 39 04.5 | +0.1 |
| | 60nm,0.2s | | | | | | |
| RM33 | Pellescritta ( | 0.03 | 172 | Pg | Pg | 02 39 03.6 | +0.2 |
| RM33 | | | | Sg | Sg | 02 39 04.5 | +0.1 |
| | 60nm,0.2s | | | | | | |
| RM32 | Poggio Cancell | 0.07 | 63 | Pg | Pg | 02 39 04.0 | 0.0 |
| RM32 | | | | Sg | Sg | 02 39 05.4 | +0.1 |
| | 29nm,0.2s | | | | | | |
| RM32 | Poggio Cancell | 0.07 | 63 | Pg | Pg | 02 39 04.0 | 0.0 |
| RM32 | | | | Sg | Sg | 02 39 05.4 | +0.1 |
| | 29nm,0.2s | | | | | | |
| SMA1 | SAN MARTINO | 0.13 | 45 | Pg | Pg | 02 39 05.2 | +0.3 |
| SMA1 | | | | Sg | Sg | 02 39 07.7 | +0.8 |
| | 24nm,0.8s | | | | | | |
| SMA1 | SAN MARTINO | 0.13 | 45 | Pg | Pg | 02 39 05.2 | +0.3 |
| SMA1 | | | | Sg | Sg | 02 39 07.7 | +0.8 |
| | 24nm,0.8s | | | | | | |

*IDC **10** 02:40:37.4±2.6, 44°.04N×87°.40E, h0km, mb3.5/1, mb1 3.2/4, mb1mx3.1/33, mbtmp3.2/4, ML2.7/3, Error ellipse: s-maj=53.9km s-min=26.5km az=58.0*
*NNC **10** 02:40:38.5±4.8, 44°.11N×87°.30E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=39.5km s-min=29.1km az=90.0*
**ISC 10 02:40:40.9**±2.5, **44°.0N**±0°.1×**87°.3E**±0°.2, **h23**km, **n8**, σ**1**$^{s}$**15**/11, **8C-1D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MK31 | Makanchi Array | 4.52 | 310 | Pn | Pn | 02 41 49.3 | +1.4 |
| | 0.6nm,0.5s,baz=129,slow=14,SNR=8.9 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 02 42 40.3 | +0.6 |
| | 1.9nm,0.5s | | | | | | |
| MK31 | | | | Lg | Lg | 02 43 00.2 | |
| | 1.6nm,0.3s,baz=121,slow=28,SNR=4.9 | | | | | | |
| MKAR | Makanchi Array | 4.52 | 310 | Pn | Pn | 02 41 48.2 | +0.3 |
| | 0.6nm,0.3s,baz=124,slow=14,SNR=9.5 | | | | | | |
| MKAR | | | | Lg | Lg | 02 43 00.9 | |
| | 3.0nm,0.3s,baz=122,slow=28,SNR=9.6 | | | | | | |
| PDGK | Podgornoye | 5.71 | 266 | ⇑Pn | Pn | 02 42 02.6 | -1.7 |
| | 1.0nm,0.5s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 02 43 35.6 | |
| | 11nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 8.92 | 321 | ⇑Pn | Pn | 02 42 47.3 | -1.0 |
| | 1.6nm,1.0s | | | | | | |
| KURBB | | | | ⇓Sn | Sn | 02 44 28.9 | +0.9 |
| | 1.8nm,0.5s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 02 45 18.3 | |
| | 5.8nm,0.6s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 02 45 19.1 | |
| | 3.4nm,0.8s | | | | | | |
| KURBB | Kurchatov Arra | 8.92 | 321 | Pn | Pn | 02 42 48.0 | -0.3 |
| | 0.1nm,0.3s,baz=133,slow=13,SNR=7.1 | | | | | | |
| KURBB | | | | Lg | Lg | 02 45 20.6 | |
| | 0.1nm,0.3s,baz=163,slow=29,SNR=4.3 | | | | | | |
| KURK | Kurchatov | 8.95 | 322 | ⇑Pn | Pn | 02 42 47.3 | -1.3 |
| | 3.7nm,0.8s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 02 44 27.7 | -0.9 |
| | 5.5nm,1.2s | | | | | | |
| ZALV | Zalesovo Beam | 10.11 | 352 | Pn | Pn | 02 43 03.8 | -0.7 |
| | 0.2nm,0.3s,baz=166,slow=13,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 77.86 | 277 | P | P | 02 52 37.3 | +0.4 |
| | 0.4nm,0.9s,baz=39,slow=5.8,SNR=2.9 | | | | | | |

*IDC **10** 02:57:06.7±1.5, 9°.00N×126°.51E, h0km, mb3.8/9, mb1 4.0/9, mb1mx3.7/41, mbtmp3.8/9, Error ellipse: s-maj=159.8km s-min=18.7km az=69.0*
*ISCJB **10** 02:57:09.4±0.7, 9°.15N±0°.05×127°.06E±0°.06, h38km, mb4.0/13, Error ellipse: s-maj=9.3km s-min=7.2km az=19.6*
*MAN **10** 02:57:10, 9°.09N×126°.92E, h23km, mb4.8, ML3.7, MS3.7*
*NEIC **10** 02:57:11.7±0.7, 9°.07N×126°.75E, h35km, mb4.1/4, Error ellipse: s-maj=58.8km s-min=9.9km az=68.0*
**ISC 10 02:57:11.7**±0.9, **9°.10N**±0°.07×**127°.0E**±0°.1, **h38**km, **n20**, σ**0**$^{s}$**74**/22, **mb4.1**/13, **1C-2D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BIPH | Bislig | 1.09 | 213⇑ | iP | Pn | 02 57 30.3 | -0.2 |
| BIPH | | | | iS | Sn | 02 57 44.6 | +0.2 |
| BUTP | Butuan | 1.34 | 264 | eP | Pn | 02 57 33.4 | -0.5 |
| SCPH | Surigao | 1.61 | 295⇓ | eP | Pn | 02 57 36.0 | -1.6 |
| SCPH | | | | eS | Sn | 02 57 57.8 | +0.7 |
| BUKP | Musuan | 2.24 | 237 | eP | Pn | 02 57 49.9 | +3.5 |
| BUKP | | | | eS | Sn | 02 58 13.3 | +0.5 |
| MSLP | Maasin | 2.32 | 296 | eP | Pn | 02 57 47.5 | +0.2 |
| MSLP | | | | eS | Sn | 02 58 20.1 | +5.5 |
| RCP | Roxas | 4.82 | 301⇓ | eP | Pn | 02 58 23.1 | +1.3 |
| WRA | Warramunga Arr | 29.76 | 166 | P | P | 03 03 15.9 | +1.0 |
| | 0.4nm,0.6s,baz=346,slow=9.0,SNR=4.6 | | | | | | |
| ASAR | Alice Springs | 33.27 | 168 | P | P | 03 03 45.3 | -0.4 |
| | 0.4nm,0.4s,baz=353,slow=7.0,SNR=7.7 | | | | | | |
| SONM | Songino Array | 42.35 | 339 | P | P | 03 05 01.9 | -0.3 |
| | 0.3nm,0.6s,baz=134,slow=6.2,SNR=2.7 | | | | | | |
| MKAR | Makanchi Array | 53.37 | 323 | P | P | 03 06 27.2 | -0.3 |
| | 1.0nm,0.7s,baz=123,slow=8.8,SNR=8.3 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ZALV | Zalesovo Beam | 55.97 | 331 | P | P | 03 06 45.6 | -0.5 |
| | 0.4nm,0.3s,baz=123,slow=7.2,SNR=2.9 | | | | | | |
| TKM2 | Tokmak 2 | 55.98 | 316 | eP | P | 03 06 46.3 | -0.4 |
| | 0.8nm,0.4s | | | | | | |
| AAK | Ala-Archa | 56.63 | 316 | eP | P | 03 06 51.0 | -0.3 |
| | 0.6nm,0.3s | | | | | | |
| EKS2 | Erkin-Say | 57.14 | 315 | eP | P | 03 06 54.5 | -0.3 |
| | 1.1nm,0.5s | | | | | | |
| KURK | Kurchatov | 57.41 | 326 | eP | P | 03 06 55.9 | -0.6 |
| | 3.9nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 57.42 | 326 | P | P | 03 06 56.0 | -0.5 |
| | 1.1nm,0.5s,baz=125,slow=6.7,SNR=5.4 | | | | | | |
| BVAR | Borovoye Array | 63.01 | 326 | P | P | 03 07 33.7 | -1.1 |
| | 0.6nm,0.6s,baz=94,slow=8.7,SNR=3.8 | | | | | | |
| ARCES | ARCESS Array B | 85.52 | 340 | P | P | 03 09 46.6 | +1.1 |
| | 2.4nm,0.9s,baz=81,slow=7.5,SNR=4.9 | | | | | | |
| FINES | FINESS Array B | 87.24 | 332 | P | P | 03 09 53.7 | -0.3 |
| | 1.6nm,0.8s,baz=57,slow=5.1,SNR=3.5 | | | | | | |
| TORD | Torodi Ar. Bea | 121.33 | 291 | PKP | PKPdf | 03 16 02.1 | +0.2 |
| | 0.1nm,0.4s,baz=74,slow=1.9,SNR=4.2 | | | | | | |

**KMA 10 03:04:14.1±0.4, 35°.44N×126°.57E, h10km±4km, 13C-8D, Error ellipse: s-maj=4.3km s-min=1.9km az=97.0, South Korea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSJEU | Jeongeup | 0.30 | 79 | ⇑P | Pg | 03 04 20.2 | 0.0 |
| | SNR=37 | | | | | | |
| KSJEU | Jeongeup | 0.30 | 79 | ⇑P | Pg | 03 04 20.2 | 0.0 |
| | SNR=37 | | | | | | |
| KSKWJ | Gwangju | 0.44 | 128 | ⇑P | Pg | 03 04 22.9 | +0.1 |
| KSKWJ | Gwangju | 0.44 | 128 | ⇑P | Pg | 03 04 22.9 | +0.1 |
| KSGUS | GUNSAN | 0.62 | 16 | ⇑P | Pg | 03 04 26.1 | -0.2 |
| KSGUS | GUNSAN | 0.62 | 16 | ⇑P | Pg | 03 04 26.1 | -0.2 |
| KSMOK | Mokpo | 0.68 | 168 | ⇑P | Pg | 03 04 27.4 | 0.0 |
| KSMOK | Mokpo | 0.68 | 168 | ⇑P | Pg | 03 04 27.4 | 0.0 |
| KSJEO | Jeonju | 0.77 | 49 | ⇑P | Pg | 03 04 29.1 | 0.0 |
| KSJEO | Jeonju | 0.77 | 49 | ⇑P | Pg | 03 04 29.1 | 0.0 |
| KSYSU | YEOSU | 0.91 | 111 | ⇓P | Pg | 03 04 31.5 | -0.1 |
| KSYSU | YEOSU | 0.91 | 111 | ⇓P | Pg | 03 04 31.5 | -0.1 |
| KSJDO | Jindo | 0.99 | 192 | ⇑P | Pb | 03 04 33.3 | 0.0 |
| KSJDO | Jindo | 0.99 | 192 | ⇑P | Pb | 03 04 33.3 | 0.0 |
| KOHB | KOHEUNG | 1.00 | 144 | ⇓P | Pg | 03 04 33.2 | -0.2 |
| KOHB | KOHEUNG | 1.00 | 144 | ⇓P | Pg | 03 04 33.2 | -0.2 |
| KOHB | | | | ⇑S | Sn | 03 04 50.0 | +1.7 |
| KSBON | Boeun | 1.46 | 43 | ⇓P | Pb | 03 04 41.3 | -0.1 |
| | SNR=13 | | | | | | |
| KSBON | | | | ⇓S | Sg | 03 05 01.6 | +0.5 |
| KSBON | Boeun | 1.46 | 43 | ⇓P | Pb | 03 04 41.3 | -0.1 |
| | SNR=13 | | | | | | |
| KSBON | | | | ⇓S | Sg | 03 05 01.6 | +0.5 |

**DJA 10 03:08:24.6±0.7, 9°S±7°×10°9E±°, h52km±24km, M3.9/7, MLv3.9/7, Jawa**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMJI | Cimerak | 1.27 | 332 | P | Pn | 03 08 46.2 | +0.2 |
| CMJI | | | | S | Sn | 03 09 02.7 | +0.8 |
| UGM | Wanagama | 1.76 | 56 | P | Pn | 03 08 51.6 | -1.2 |
| UGM | | | | S | Sn | 03 09 15.2 | +1.1 |
| CISI | Cisompet, Garu | 1.82 | 318 | P | Pn | 03 08 54.4 | +0.8 |
| CISI | | | | S | Sn | 03 09 16.4 | +0.9 |
| PCJI | Pacitan | 2.22 | 71 | P | Pn | 03 08 57.2 | -1.8 |
| PCJI | | | | S | Sn | 03 09 26.1 | +0.8 |
| SMRI | Semarang | 2.31 | 37 | P | Pn | 03 09 01.2 | +1.0 |
| SMRI | | | | S | Sn | 03 09 28.0 | +0.6 |
| NGJI | Ngawi | 2.84 | 57 | P | Pn | 03 09 09.0 | +1.6 |
| PWJI | Pagerwojo | 2.86 | 72 | P | Pn | 03 09 07.1 | -0.7 |

*IDC **10** 03:10:48.5±1.2, 8°.73S×127°.19E, h0km, mb4.1/5, mb1 4.2/11, mb1mx4.0/31, mbtmp4.1/11, ML3.7/6, Error ellipse: s-maj=32.1km s-min=21.8km az=80.0*
*ISCJB **10** 03:10:51.0±0.5, 8°.94S±0°.06×127°.09E±0°.05, h33km, mb4.1/7, Error ellipse: s-maj=8.2km s-min=6.5km az=23.8*
*NEIC **10** 03:10:53.8±1.0, 8°.87S×127°.09E, h40km±12km, mb4.3/3, Error ellipse: s-maj=15.1km s-min=5.6km az=213.0*
**ISC 10 03:10:52.4±0.7, 8°.92S±0°.06×127°.14E±0°.07, h35km, n17, σ1s.66/22, mb4.2/7, Timor region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOEI | Soe | 2.96 | 253 | ePn | Pn | 03 11 37.6 | +0.6 |
| SOEI | | | | eSn | Sn | 03 12 08.4 | -3.0 |
| BATI | Baumata | 3.66 | 249 | Pn | Pn | 03 11 48.0 | +1.4 |
| | 10.0nm,0.3s,baz=306,slow=2.8,SNR=11 | | | | | | |
| BATI | | | | Sn | Sn | 03 12 27.5 | -1.1 |
| | 31nm,0.3s,baz=112,slow=3.6,SNR=7.4 | | | | | | |
| KAPI | Kappang | 8.30 | 297 | Pn | Pn | 03 12 51.0 | +0.7 |
| | 0.3nm,0.3s,baz=147,slow=17,SNR=2.7 | | | | | | |
| SIJI | Sorong | 8.99 | 27 | Pn | Pn | 03 12 56.9 | -2.8 |
| | 0.4nm,0.3s,baz=165,slow=21,SNR=3.6 | | | | | | |
| FITZ | Fitzroy Crossi | 9.25 | 189 | Pn | Pn | 03 13 05.5 | +2.2 |
| | 0.5nm,0.3s,baz=3.3,slow=10,SNR=41 | | | | | | |
| FITZ | | | | Sn | Sn | 03 14 44.4 | -1.8 |
| | 2.1nm,0.3s,baz=260,slow=21,SNR=11 | | | | | | |
| WRAB | Tennant Creek | 12.98 | 148 | ePn | Pn | 03 13 56.5 | +2.1 |
| | 11nm,1.0s | | | | | | |
| WRA | Warramunga Arr | 12.98 | 148 | Pn | Pn | 03 13 56.8 | +2.3 |
| | 0.6nm,0.3s,baz=322,slow=14,SNR=38 | | | | | | |
| WRA | | | | Sn | Sn | 03 16 17.1 | -0.7 |
| | 1.0nm,0.3s,baz=331,slow=22,SNR=12 | | | | | | |
| ASAR | Alice Springs | 16.03 | 157 | Pn | P | 03 14 37.7 | -0.7 |
| | 0.3nm,0.3s,baz=326,slow=12,SNR=23 | | | | | | |
| ASAR | | | | Sn | Sn | 03 17 28.9 | -3.2 |
| | 0.3nm,0.3s,baz=312,slow=18,SNR=8.1 | | | | | | |
| PMG | Port Moresby | 19.77 | 93 | eP | Pn | 03 15 21.2 | -0.1 |
| | 9.2nm,0.6s | | | | | | |
| CMAR | Chiang Mai Arr | 38.91 | 314 | P | P | 03 18 14.8 | -0.2 |
| | 2.1nm,0.3s,baz=143,slow=6.7,SNR=6.9 | | | | | | |
| SONM | Songino Array | 59.42 | 344 | P | P | 03 20 52.6 | +1.1 |
| | 0.5nm,0.7s,baz=157,slow=8.0,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 68.32 | 329 | P | P | 03 21 51.0 | +1.0 |
| | 1.5nm,0.7s,baz=132,slow=8.2,SNR=10 | | | | | | |
| EKS2 | Erkin-Say | 70.67 | 321 | eP | P | 03 22 05.6 | +0.8 |
| | 1.1nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 72.08 | 335 | P | P | 03 22 13.2 | +0.3 |
| | 2.8nm,0.6s,baz=136,slow=5.5,SNR=10 | | | | | | |
| BVAR | Borovoye Array | 78.20 | 329 | P | P | 03 22 48.7 | +0.5 |
| | 0.5nm,0.4s,baz=134,slow=4.3,SNR=3.9 | | | | | | |
| BRVK | Borovoye | 78.27 | 329 | eP | P | 03 22 48.8 | +0.2 |
| | 1.7nm,0.5s | | | | | | |
| ABKAR | Akbulak array | 82.27 | 322 | eP | P | 03 23 10.4 | +0.3 |

**KRSC 10 03:15:10.8±0.6, 55°.12N×160°.44E, h1km±2km, ML3.7, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KZV | Kizimen | 0.09 | 263 | i P | Pg | 03 15 13.3 | +0.5 |
| KZV | | | | eS | Sg | 03 15 16.2 | +2.2 |
| TUMR | Tumrok | 0.23 | 313 | i P | Pg | 03 15 16.0 | +0.5 |
| KMNR | Kamenistaya | 0.64 | 350 | eP | Pb | 03 15 24.4 | -0.7 |
| KMNR | | | | eS | Sb | 03 15 34.9 | +0.2 |
| KIRR | Kirishev | 0.83 | 356 | eP | Pb | 03 15 28.1 | -0.3 |
| KIRR | | | | eS | Sb | 03 15 41.1 | +0.9 |
| KPT | Kopyto | 0.85 | 352 | eP | Pb | 03 15 28.8 | +0.2 |
| MKZ | Mys Kozlova | 0.94 | 127 | eP | Pn | 03 15 30.5 | -0.6 |
| KOZ | Kozyrevsk | 0.99 | 341 | eP | Pb | 03 15 31.1 | +0.2 |
| KOZ | | | | eS | Sn | 03 15 46.3 | -0.3 |
| KLY | Klyuchi | 1.20 | 6 | eP | Pn | 03 15 35.1 | +0.4 |
| KII | Karymskiy | 1.23 | 208 | P | Pn | 03 15 35.4 | 0.0 |
| KII | | | | eS | Sn | 03 15 52.5 | -0.2 |
| SRDR | Sredinnyy | 1.27 | 341 | eP | Pb | 03 15 35.5 | -0.1 |
| SRDR | | | | eS | Sn | 03 15 53.4 | -0.1 |
| KBTR | Krutoberegovo | 1.73 | 50 | eP | Pb | 03 15 42.9 | -0.5 |
| KBTR | | | | eS | Sg | 03 16 07.3 | +0.9 |
| SPN | Mys Shipunski | 2.04 | 187 | eP | Pn | 03 15 47.0 | +0.6 |
| SPN | | | | eS | Sn | 03 16 13.5 | +1.0 |
| GNL | Ganaly | 2.05 | 227 | eP | Pn | 03 15 47.4 | +0.8 |
| GNL | | | | eS | Sn | 03 16 13.5 | +0.6 |
| KRX | Arik | 2.06 | 212 | eP | Pb | 03 15 48.5 | -0.7 |
| KRX | | | | eS | Sb | 03 16 16.0 | +0.6 |
| SDLR | Sedlovina | 2.06 | 207 | eP | Pb | 03 15 48.7 | -0.6 |
| SDLR | | | | eS | Sg | 03 16 16.6 | -0.8 |
| SMAR | Somma | 2.10 | 208 | eP | Pb | 03 15 49.1 | -0.9 |
| AVH | Avacha | 2.12 | 209 | eP | Pb | 03 15 49.5 | -0.6 |
| UGLR | Uglovaya | 2.14 | 207 | eP | Pb | 03 15 49.8 | -0.8 |
| PET | Petropavlovsk | 2.35 | 207 | eP | Pb | 03 15 52.4 | -1.6 |
| PET | | | | eS | Sb | 03 16 24.1 | +0.6 |
| RUS | Russkaya | 2.93 | 204 | eP | Pn | 03 16 01.0 | +2.5 |
| RUS | | | | eS | Sb | 03 16 37.4 | -2.7 |

*IDC **10** 03:47:24.8±1.5, 47°.88N×156°.62E, h0km, mb3.8/8, mb1 3.9/10, mb1mx3.7/44, mbtmp3.8/10, ML2.8/1, MS2.6/1, Ms1 2.6/1, ms1mx2.2/34, Error ellipse: s-maj=40.7km s-min=19.1km az=162.0*
*SKHL **10** 03:47:26.9±0.2, 47°.85N×156°.69E, h40km±1km, mb4.3/2*
*ISCJB **10** 03:47:28.5±0.9, 48°.07N±0°.08×156°.5E±0°.2, h33km, mb3.9/11, Error ellipse: s-maj=17.4km s-min=6.5km az=33.6*
*MOS **10** 03:47:29.9±1.6, 48°.16N×156°.35E, h44km, mb4.3/4, Error ellipse: s-maj=17.2km s-min=11.4km az=80.4*
*NEIC **10** 03:47:30.2±1.1, 47°.94N×156°.58E, h35km, mb4.2/3, Error ellipse: s-maj=25.9km s-min=11.4km az=146.0*
**ISC 10 03:47:30.6±1.1, 48°.0N±0°.1×156°.4E±0°.1, h35km, n36, σ1s.39/36, mb4.0/11, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 2.67 | 356 | ePN | Pn | 03 48 06.9 | -4.2 |
| SKR | | | | eS | Sn | 03 48 39.0 | -3.2 |
| SKR | | | | pmax | pmax | | |
| | comp=N,60nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=E,60nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,80nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,200nm,0.3s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,220nm,0.3s | | | | | | |
| SKR | Severo-Kuril's | 2.67 | 356 | eP | Pn | 03 48 10.6 | -0.5 |
| SKR | | | | AMB | AMB | 03 48 12.0 | |
| | comp=E,60nm,0.5s | | | | | | |
| SKR | | | | AMB | AMB | 03 48 12.0 | |
| | comp=E,80nm,0.5s | | | | | | |
| SKR | | | | eS | Sn | 03 48 43.5 | +1.3 |
| SKR | | | | A | A | 03 48 46.1 | |
| | comp=E,200nm,0.4s | | | | | | |
| SKR | | | | A | A | 03 48 46.1 | |
| | comp=E,220nm,0.4s | | | | | | |
| SKR | | | | A | A | 03 48 46.1 | |
| | comp=E,80nm,0.4s | | | | | | |
| PAU | Pauzhetka | 3.46 | 4 | eP | Pn | 03 48 22.4 | +0.5 |
| PETK | Petropavlovsk- | 5.16 | 9 | Pn | Pn | 03 48 44.5 | -0.9 |
| | comp=E,1.7nm,0.3s,baz=184,slow=14,SNR=14 | | | | | | |
| PETK | | | | LR | LR | 03 50 53.5 | |
| | comp=E,53nm,18.8s,baz=278,slow=40 | | | | | | |
| PET | Petropavlovsk | 5.21 | 15 | ePN | Pn | 03 48 44.5 | -1.4 |
| PET | | | | pmax | pmax | | |
| | comp=Z,28nm,0.8s | | | | | | |
| PET | Petropavlovsk | 5.21 | 15 | eP | Pn | 03 48 44.6 | -1.4 |
| PET | | | | AMB | AMB | 03 48 48.0 | |
| | comp=Z,30nm,0.8s | | | | | | |
| PET | | | | eS | Sn | 03 49 42.7 | -2.1 |
| PET | | | | A | A | 03 49 55.0 | |
| | comp=Z,44nm,0.6s | | | | | | |
| PET | | | | A | A | 03 49 55.0 | |
| | comp=Z,37nm,0.6s | | | | | | |
| KUR | Kuril'sk | 6.50 | 248 | PN | Pn | 03 49 03.2 | -0.5 |
| KUR | Kuril'sk | 6.50 | 248 | eP | Pn | 03 49 03.2 | -0.5 |
| KUR | | | | eS | Sn | 03 50 15.0 | -1.6 |
| KUR | | | | A | A | 03 50 20.6 | |
| | comp=Z,27nm,0.7s | | | | | | |
| KUR | | | | A | A | 03 50 20.6 | |
| | comp=Z,13nm,0.7s | | | | | | |
| SHO | Shikotan | 7.85 | 242 | eS | Sn | 03 50 46.0 | -3.8 |
| ASAJ | Asahikawa | 10.36 | 253 | Pn | Pn | 03 49 56.9 | +0.3 |
| | baz=251,slow=18 | | | | | | |
| KSRS | Korea Array | 23.30 | 254 | P | P | 03 52 35.4 | +0.2 |
| | comp=Z,0.8nm,0.5s,baz=52,slow=12,SNR=6.4 | | | | | | |
| KSRS | Korea Array | 23.30 | 254 | P | P | 03 52 35.4 | +0.2 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| KSAR | Wonju Array Be | 23.34 | 254 | P | P | 03 52 35.4 | -0.1 |
| KSAR | Wonju Array Be | 23.34 | 254 | eP | P | 03 52 35.4 | -0.1 |
| KSAR | Wonju Array Be | 23.34 | 254 | P | P | 03 52 35.4 | -0.1 |
| H11S1 | WAKE ISLAND Hy | 30.61 | 161 | T | T | 04 25 29.0 | |
| | baz=347,slow=76,SNR=14 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 30.62 | 161 | T | T | 04 25 29.8 | |
| | baz=347,slow=76,SNR=19 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 30.63 | 161 | T | T | 04 25 30.5 | |
| | baz=347,slow=76,SNR=17 | | | | | | |
| SONM | Songino Array | 33.03 | 289 | P | P | 03 54 02.3 | -0.1 |
| | comp=Z,0.2nm,0.4s,baz=162,slow=11,SNR=2.2 | | | | | | |
| ILAR | Eielson Array | 34.15 | 40 | P | P | 03 54 10.6 | -1.3 |
| | comp=Z,0.4nm,0.8s,baz=246,slow=8.0,SNR=8.0 | | | | | | |
| ZALV | Zalesovo Beam | 43.69 | 306 | P | P | 03 55 31.5 | -0.1 |
| | comp=Z,0.5nm,0.4s,baz=46,slow=6.2,SNR=3.0 | | | | | | |
| MKAR | Makanchi Array | 48.34 | 298 | P | P | 03 56 09.2 | +0.8 |
| | comp=Z,0.8nm,0.6s,baz=69,slow=8.1,SNR=7.5 | | | | | | |
| AAK | Ala-Archa | 55.26 | 297 | eP | P | 03 57 01.5 | +1.2 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| AAK | Ala-Archa | 55.26 | 297 | eP | P | 03 57 01.5 | +1.2 |
| AAK | Ala-Archa | 55.26 | 297 | eP | P | 03 57 01.4 | +1.2 |
| | comp=Z,1.5nm,0.7s | | | | | | |
| ARU | Arti | 55.57 | 318 | eP | P | 03 57 03.3 | +1.2 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| ARU | Arti | 55.57 | 318 | eP | P | 03 57 03.3 | +1.2 |
| ARU | Arti | 55.57 | 318 | eP | P | 03 57 03.3 | +1.2 |
| | comp=Z,2.2nm,0.4s | | | | | | |
| EKS2 | Erkin-Say | 55.67 | 298 | eP | P | 03 57 03.6 | +0.4 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| EKS2 | Erkin-Say | 55.67 | 298 | eP | P | 03 57 03.6 | +0.4 |
| | comp=Z,1.7nm,0.6s | | | | | | |
| ABKAR | Akbulak array | 59.31 | 311 | eP | P | 03 57 30.2 | +1.7 |
| FINES | FINESS Array B | 63.82 | 336 | P | P | 03 57 60.0 | +1.2 |
| | comp=Z,2.7nm,0.9s,baz=318,slow=2.6,SNR=11 | | | | | | |
| FINES | FINESS Array B | 63.82 | 336 | P | P | 03 58 00.0 | +1.2 |
| FINES | FINESS Array B | 63.82 | 336 | eP | P | 03 58 00.0 | +1.2 |
| AKASG | Malin Array Be | 71.70 | 328 | P | P | 03 58 50.7 | +2.1 |
| | comp=Z,0.8nm,0.5s,baz=33,slow=6.5,SNR=2.9 | | | | | | |
| TXAR | Lajitas Array | 74.92 | 63 | P | P | 03 59 07.3 | -0.8 |
| | comp=Z,0.9nm,0.5s,baz=303,slow=5.2,SNR=22 | | | | | | |

*ISCJB **10** 04:07:46.7±0.4, 5°.82S±0°.05×81°.37W±0°.06, h10km, mb4.1/24, MS3.5/4, Error ellipse: s-maj=9.7km s-min=6.2km az=148.9*
*IDC **10** 04:07:46.7±0.9, 5°.86S×81°.37W, h0km, mb3.9/10, mb1 4.1/12, mb1mx3.9/31, mbtmp3.9/12, ML3.7/2, MS3.6/6, Ms1 3.6/6, ms1mx3.3/25, Error ellipse: s-maj=29.0km s-min=14.8km az=35.0*
*NEIC **10** 04:07:52.1±1.1, 5°.85S×81°.31W, h39km±10km, mb4.2/18, Error ellipse: s-maj=12.3km s-min=5.8km az=60.0*
**ISC 10 04:07:47.9±0.6, 5°.88S±0°.07×81°.35W±0°.08, h10km, n53, σ1s.01/46, mb4.2/24, MS3.5/4, Near coast of northern Peru**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ATAH | Atahualpa | 3.19 | 113 | Pn | Pn | 04 08 40.4 | +1.9 |
| | 8.9nm,0.3s,baz=359,slow=5.9,SNR=37 | | | | | | |
| ATAH | | | | Pg | Pb | 04 08 46.6 | +1.6 |
| | 24nm,0.3s,baz=300,slow=20,SNR=32 | | | | | | |
| ATAH | | | | Sn | Sb | 04 09 20.9 | -3.2 |
| | 19nm,0.3s,baz=183,slow=24,SNR=6.1 | | | | | | |
| OTAV | Otavalo | 6.74 | 26 | ePn | Pn | 04 09 27.5 | +0.2 |
| | 12nm,0.3s | | | | | | |
| OTAV | | | | eSn | Sn | 04 10 44.1 | -0.2 |
| NNA | Nana | 7.53 | 144 | Pn | Pb | 04 09 52.7 | -5.9 |
| | 2.1nm,0.3s,baz=326,slow=14,SNR=6.7 | | | | | | |
| NNA | Nana | 7.53 | 144 | ePn | Pn | 04 09 39.1 | +1.3 |
| ROSC | El Rosal | 12.77 | 33 | LR | LR | 04 16 09.9 | |
| | comp=Z,141nm,18.3s,baz=196,slow=40 | | | | | | |
| JTS | JuntasAbangare | 16.46 | 347 | LR | LR | 04 16 43.6 | |
| | comp=Z,68nm,18.7s,baz=133,slow=33 | | | | | | |
| JTS | JuntasAbangare | 16.46 | 347 | ePn | Pn | 04 11 38.8 | -0.3 |
| LPAZ | La Paz | 16.58 | 130 | Pn | P | 04 11 42.4 | -1.4 |
| | 0.1nm,0.3s,baz=316,slow=17,SNR=8.1 | | | | | | |
| SAML | Samuel | 18.27 | 101 | eP | P | 04 12 01.4 | -0.5 |
| | 6.5nm,0.9s | | | | | | |
| LVC | Limon Verde | 20.52 | 145 | P | Pn | 04 12 28.2 | -0.8 |
| | 6.9nm,0.5s,baz=323,slow=7.8,SNR=5.7 | | | | | | |
| LVC | | | | LR | LR | 04 20 56.6 | |
| | comp=Z,366nm,18.3s,baz=237,slow=38 | | | | | | |
| LVC | Limon Verde | 20.52 | 145 | eP | Pn | 04 12 28.0 | -1.0 |
| | 4.5nm,0.9s | | | | | | |
| PTGA | Pitinga | 21.95 | 77 | P | P | 04 12 41.0 | -0.9 |
| | 7.9nm,0.9s,baz=255,slow=12,SNR=17 | | | | | | |
| PTGA | | | | LR | LR | 04 22 14.3 | |
| | comp=Z,134nm,19.1s,baz=214,slow=40 | | | | | | |
| SIV | San Ignacio | 22.28 | 118 | P | P | 04 12 45.8 | +0.3 |
| | 2.2nm,0.7s,baz=310,slow=3.5,SNR=4.1 | | | | | | |
| SIV | | | | LR | LR | 04 22 15.9 | |
| | comp=Z,198nm,20.5s,baz=131,slow=39 | | | | | | |
| PCRV | Puerto La Cruz | 23.06 | 46 | P | P | 04 12 54.2 | +0.4 |
| | 5.3nm,0.5s,baz=189,slow=10,SNR=6.6 | | | | | | |
| SJG | San Juan | 28.17 | 32 | P | P | 04 13 41.2 | +0.5 |
| | 6.9nm,0.6s,baz=187,slow=8.6,SNR=6.6 | | | | | | |
| SJG | | | | LR | LR | 04 26 40.1 | |
| | comp=Z,116nm,18.8s,baz=195,slow=40 | | | | | | |
| SJG | San Juan | 28.17 | 32 | eP | P | 04 13 41.5 | +0.8 |
| | 16nm,0.8s | | | | | | |
| H06S1 | SOCORRO T | 38.08 | 311 | T | T | 04 55 25.7 | |
| | SNR=23 | | | | | | |
| TXAR | Lajitas Array | 41.06 | 330 | P | P | 04 15 33.0 | +1.1 |
| | 0.2nm,0.5s,baz=147,slow=8.1,SNR=5.1 | | | | | | |
| TXAR | | | | PcP | PcP | 04 17 32.5 | +0.7 |
| | 0.2nm,0.5s,baz=134,slow=2.6,SNR=4.2 | | | | | | |
| WMOK | Wichita Mounta | 43.62 | 339 | eP | P | 04 15 53.1 | +0.5 |
| | 2.0nm,0.8s | | | | | | |
| MNTX | Cornudas Mount | 43.84 | 330 | eP | P | 04 15 54.8 | +0.4 |
| | 3.0nm,1.0s | | | | | | |
| WCI | Wyandotte Cave | 44.12 | 354 | eP | P | 04 15 55.0 | -1.6 |
| | 9.2nm,0.6s | | | | | | |
| ANMO | Albuquerque | 47.00 | 332 | eP | P | 04 16 21.1 | +1.4 |
| | 3.8nm,1.0s | | | | | | |
| TUC | Tucson | 47.19 | 325 | eP | P | 04 16 20.6 | -0.4 |
| | 1.8nm,0.7s | | | | | | |
| CBKS | Cedar Bluff | 47.63 | 341 | eP | P | 04 16 23.6 | -0.6 |
| | 4.5nm,0.6s | | | | | | |
| SDCO | Great Sand Dun | 48.89 | 335 | eP | P | 04 16 35.1 | +0.8 |
| | 2.2nm,0.9s | | | | | | |
| DUG | Dugway | 54.23 | 330 | eP | P | 04 17 14.0 | -0.2 |
| | 2.8nm,0.9s | | | | | | |
| HWUT | Hardware Ranch | 54.73 | 332 | eP | P | 04 17 18.2 | +0.4 |
| | 5.3nm,0.9s | | | | | | |
| BW06 | Boulder Array | 54.78 | 335 | eP | P | 04 17 18.4 | +0.2 |
| | 2.0nm,1.1s | | | | | | |
| NVAR | Mina Array Bea | 55.85 | 325 | P | P | 04 17 26.9 | +0.9 |
| | 1.0nm,0.8s,baz=135,slow=8.2,SNR=6.9 | | | | | | |
| NVAR | | | | PcP | PcP | 04 18 25.6 | +0.8 |
| | 0.7nm,0.7s,baz=144,slow=4.4,SNR=4.5 | | | | | | |
| TPAW | Teton Pass | 55.96 | 334 | eP | P | 04 17 27.5 | +0.8 |
| | 3.7nm,1.1s | | | | | | |
| HLID | Hailey | 57.58 | 332 | eP | P | 04 17 39.3 | +1.2 |
| | 2.2nm,0.8s | | | | | | |
| BOZ | Bozeman (W) | 57.99 | 335 | eP | P | 04 17 40.7 | -0.2 |
| | 4.7nm,1.1s | | | | | | |
| VNA3 | Neumayer Olymp | 78.61 | 162 | P | P | 04 19 50.1 | +0.6 |
| VNA1 | Neumayer--Stat | 78.91 | 161 | P | P | 04 19 52.0 | +0.9 |
| VNA2 | Neumayer--Watz | 79.25 | 161 | P | P | 04 19 53.5 | +0.4 |
| | baz=296,slow=6.1 | | | | | | |
| SNAA | Sanae | 80.84 | 162 | P | P | 04 20 01.9 | +0.2 |
| SNAA | Sanae | 80.84 | 162 | eP | P | 04 20 01.2 | -0.5 |
| | 2.4nm,1.0s | | | | | | |
| ESDC | Sonseca Array | 84.10 | 49 | P | P | 04 20 19.9 | +0.6 |
| | 0.2nm,0.4s,baz=263,slow=5.1,SNR=3.4 | | | | | | |
| TORD | Torodi Ar. Bea | 84.59 | 76 | P | P | 04 20 22.2 | -0.1 |
| | 0.9nm,0.5s,baz=288,slow=5.0,SNR=32 | | | | | | |
| ILAR | Eielson Array | 85.15 | 337 | P | P | 04 20 23.5 | -0.5 |
| | 0.2nm,0.6s,baz=120,slow=5.3,SNR=4.8 | | | | | | |
| BPAW | Bear Paw Mtn. | 86.53 | 336 | eP | P | 04 20 30.4 | -0.5 |
| | 0.6nm,0.7s | | | | | | |
| H11N3 | WAKE ISLAND Hy | 112.41 | 289 | T | T | 06 28 28.7 | |
| | baz=88,slow=75,SNR=19 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 112.42 | 289 | T | T | 06 28 34.4 | |
| | baz=88,slow=75,SNR=22 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 112.43 | 289 | T | T | 06 28 24.0 | |
| | baz=88,slow=75,SNR=22 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 112.63 | 287 | T | T | 06 28 59.9 | |
| | baz=88,slow=74,SNR=115 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 112.64 | 288 | T | T | 06 29 00.1 | |
| | baz=88,slow=74,SNR=107 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 112.65 | 288 | T | T | 06 28 51.4 | |
| | baz=88,slow=74,SNR=90 | | | | | | |
| ABKAR | Akbulak array | 125.84 | 30 | ePKPdf | PKPdf | 04 26 50.3 | +0.2 |
| ASAR | Alice Springs | 134.76 | 228 | PKP | PKPdf | 04 27 06.0 | -1.9 |
| | 0.5nm,0.8s,baz=106,slow=1.7,SNR=5.6 | | | | | | |
| WRA | Warramunga Arr | 136.51 | 233 | PKP | PKPdf | 04 27 09.8 | -1.5 |
| | 1.0nm,0.8s,baz=115,slow=2.0,SNR=10 | | | | | | |
| KSRS | Korea Array | 138.78 | 324 | PKP | PKPdf | 04 27 14.3 | -0.5 |
| | 1.2nm,0.7s,baz=347,slow=3.7,SNR=3.6 | | | | | | |
| KSAR | Wonju Array Be | 138.81 | 324 | PKP | PKPdf | 04 27 14.3 | -0.6 |
| MBWA | Marble Bar | 146.08 | 217 | ePKPbc | PKPab | 04 27 28.7 | -0.9 |

*NEIC **10** 04:10:33.5, 44°.59S×168°.12E, h91km, ML4.2(WEL), After WEL.*
**WEL 10 04:10:33.3±0.2, 44°.57S×168°.11E, h93km±2km, ML4.1/19, 8C, Error ellipse: s-maj=1.7km s-min=1.1km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSZ | Milford Sound | 0.17 | 231 | ⇑PN | Pn | 04 10 46.1 | -0.4 |
| MSZ | | | | SN | Sn | 04 10 55.8 | -0.5 |
| MSZ | | | | AML | AML | 04 10 56.0 | |
| MSZ | | | | AML | AML | 04 10 56.5 | |
| MSZ | | | | AML | AML | 04 10 56.8 | |
| MSZ | Milford Sound | 0.17 | 231 | Pn | Pn | 04 10 46.1 | -0.4 |
| MSZ | | | | Sn | Sn | 04 10 55.8 | -0.5 |
| JCZ | Jackson Bay | 0.68 | 44 | ⇑PN | Pn | 04 10 50.1 | +0.2 |
| JCZ | | | | SN | Sn | 04 11 01.9 | -0.6 |
| JCZ | | | | AML | AML | 04 11 02.2 | |
| JCZ | Jackson Bay | 0.68 | 44 | Pn | Pn | 04 10 49.9 | -0.1 |
| WKZ | Wanaka | 0.70 | 112 | PN | Pn | 04 10 50.0 | -0.1 |
| WKZ | | | | AML | AML | 04 11 01.3 | |
| WKZ | | | | AML | AML | 04 11 01.4 | |
| WKZ | | | | AML | AML | 04 11 02.2 | |
| WKZ | | | | AML | AML | 04 11 02.2 | |
| WKZ | Wanaka | 0.70 | 112 | Pn | Pn | 04 10 50.0 | -0.1 |
| WKZ | | | | Sn | Sn | 04 11 01.2 | -1.4 |
| MLZ | Mavora Lakes | 0.78 | 177 | PN | Pn | 04 10 50.8 | -0.1 |
| MLZ | | | | SN | Sn | 04 11 03.8 | -0.2 |
| MLZ | | | | AML | AML | 04 11 04.5 | |
| MLZ | Mavora Lakes | 0.78 | 177 | Pn | Pn | 04 10 50.5 | -0.4 |
| EAZ | Earnscleugh | 1.08 | 128 | ⇑PN | Pn | 04 10 53.8 | -0.2 |
| EAZ | | | | AML | AML | 04 11 08.5 | |
| EAZ | | | | AML | AML | 04 11 08.9 | |
| EAZ | | | | AML | AML | 04 11 09.1 | |
| EAZ | | | | AML | AML | 04 11 09.1 | |
| EAZ | Earnscleugh | 1.08 | 128 | Pn | Pn | 04 10 53.9 | -0.2 |
| DCZ | Deep Cove | 1.13 | 216 | ⇑PN | Pn | 04 10 54.3 | -0.4 |
| DCZ | | | | AML | AML | 04 11 13.2 | |
| DCZ | | | | AML | AML | 04 11 14.8 | |
| DCZ | | | | AML | AML | 04 11 14.8 | |
| DCZ | | | | AML | AML | 04 11 15.7 | |
| DCZ | Deep Cove | 1.13 | 216 | Pn | Pn | 04 10 54.4 | -0.3 |
| WHZ | Wether Hill Ro | 1.33 | 185 | PN | Pn | 04 10 57.2 | +0.1 |
| WHZ | | | | AML | AML | 04 11 14.4 | |
| WHZ | | | | AML | AML | 04 11 15.7 | |
| WHZ | Wether Hill Ro | 1.33 | 185 | Pn | Pn | 04 10 56.9 | -0.2 |
| LBZ | Lake Benmore | 1.50 | 84 | ⇑PN | Pn | 04 10 58.7 | -0.4 |
| LBZ | | | | AML | AML | 04 11 16.8 | |
| LBZ | | | | AML | AML | 04 11 16.8 | |
| LBZ | | | | AML | AML | 04 11 17.3 | |
| LBZ | | | | AML | AML | 04 11 17.3 | |
| LBZ | Lake Benmore | 1.50 | 84 | Pn | Pn | 04 10 58.7 | -0.4 |
| FOZ | Fox Glacier | 1.52 | 49 | PN | Pn | 04 11 00.1 | +0.8 |
| FOZ | | | | AML | AML | 04 11 22.1 | |
| FOZ | | | | AML | AML | 04 11 25.3 | |
| FOZ | Fox Glacier | 1.52 | 49 | Pn | Pn | 04 11 00.1 | +0.8 |
| TUZ | Tuapeka | 1.75 | 143 | PN | Pn | 04 11 02.4 | 0.0 |
| TUZ | | | | AML | AML | 04 11 21.6 | |
| TUZ | | | | AML | AML | 04 11 21.6 | |
| TUZ | | | | AML | AML | 04 11 21.8 | |
| TUZ | | | | AML | AML | 04 11 23.1 | |
| TUZ | Tuapeka | 1.75 | 143 | Pn | Pn | 04 11 01.9 | -0.4 |
| ODZ | Otahua Downs | 1.86 | 106 | ⇑PN | Pn | 04 11 03.5 | -0.3 |
| ODZ | | | | AML | AML | 04 11 23.7 | |
| ODZ | | | | AML | AML | 04 11 23.7 | |
| ODZ | | | | AML | AML | 04 11 24.4 | |
| ODZ | | | | AML | AML | 04 11 24.4 | |
| ODZ | Otahua Downs | 1.86 | 106 | Pn | Pn | 04 11 03.5 | -0.3 |
| PYZ | Puysegur Point | 1.89 | 212 | PN | Pn | 04 11 05.3 | +1.1 |
| PYZ | Puysegur Point | 1.89 | 212 | Pn | Pn | 04 11 05.7 | +1.5 |
| SYZ | Scrubby Hill | 2.10 | 160 | ⇑PN | Pn | 04 11 06.9 | +0.1 |
| SYZ | | | | AML | AML | 04 11 31.0 | |
| SYZ | | | | AML | AML | 04 11 31.4 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SYZ | | | | AML | AML | 04 11 31.6 | |
| SYZ | | | | AML | AML | 04 11 32.0 | |
| **SYZ** | **Scrubby Hill** | **2.10** | **160** | Pn | Pn | 04 11 06.9 | +0.1 |
| **HHSZ** | **Highcliff Hill** | **2.20** | **128** | ⇑PN | Pn | 04 11 08.5 | +0.4 |
| **HHSZ** | **Highcliff Hill** | **2.20** | **128** | Pn | Pn | 04 11 08.5 | +0.4 |
| **APZ** | **The Paps** | **2.27** | **182** | PN | Pn | 04 11 09.1 | 0.0 |
| APZ | | | | AML | AML | 04 11 36.7 | |
| APZ | | | | AML | AML | 04 11 38.8 | |
| **APZ** | **The Paps** | **2.27** | **182** | Pn | Pn | 04 11 09.1 | 0.0 |
| **RPZ** | **Rata Peaks** | **2.28** | **69** | PN | Pn | 04 11 08.4 | -0.9 |
| RPZ | | | | AML | AML | 04 11 37.4 | |
| RPZ | | | | AML | AML | 04 11 38.8 | |
| **RPZ** | **Rata Peaks** | **2.28** | **69** | Pn | Pn | 04 11 08.4 | -0.9 |
| **WVZ** | **Waitaha Valley** | **2.42** | **53** | AML | AML | 04 11 42.1 | |
| WVZ | | | | AML | AML | 04 12 07.7 | |
| **WVZ** | **Waitaha Valley** | **2.42** | **53** | Pn | Pn | 04 11 10.3 | -0.7 |
| **OXZ** | **Oxford** | **3.10** | **68** | Pn | Pn | 04 11 18.2 | -2.0 |
| **MQZ** | **McQueen's Vall** | **3.38** | **77** | Pn | Pn | 04 11 16.3 | -7.7 |
| **CRLZ** | **Canterbury Las** | **3.40** | **75** | Pn | Pn | 04 11 22.8 | -1.4 |
| **LTZ** | **Lake Taylor** | **3.51** | **61** | AML | AML | 04 11 50.2 | |
| **LTZ** | **Lake Taylor** | **3.51** | **61** | Pn | Pn | 04 11 24.0 | -1.7 |
| **DSZ** | **Denniston Nort** | **3.91** | **45** | AML | AML | 04 12 16.6 | |
| DSZ | | | | AML | AML | 04 12 16.6 | |
| DSZ | | | | AML | AML | 04 12 29.6 | |
| DSZ | | | | AML | AML | 04 12 29.6 | |
| **DSZ** | **Denniston Nort** | **3.91** | **45** | Pn | Pn | 04 11 31.6 | +0.5 |
| **THZ** | **Tophouse** | **4.49** | **53** | AML | AML | 04 12 31.9 | |
| THZ | | | | AML | AML | 04 12 33.8 | |
| **THZ** | **Tophouse** | **4.49** | **53** | Pn | Pn | 04 11 37.4 | -1.6 |
| **QRZ** | **Quartz Range** | **4.96** | **43** | AML | AML | 04 12 41.0 | |
| QRZ | | | | AML | AML | 04 12 41.1 | |
| QRZ | | | | AML | AML | 04 12 41.1 | |
| QRZ | | | | AML | AML | 04 12 41.5 | |
| **QRZ** | **Quartz Range** | **4.96** | **43** | Pn | Pn | 04 11 44.9 | -0.4 |
| **NNZ** | **Nelson** | **5.12** | **51** | Pn | Pn | 04 11 48.6 | +1.1 |
| **TCW** | **Tory Channel** | **5.63** | **56** | Pn | Pn | 04 11 57.0 | +2.5 |

**GUC 10 04:15:57.4±0.5, 34°.79S×70°.89W, h105km±3km, ML3.8, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NICH** | **Los Niches** | **0.35** | **233** | *i* P | Pn | 04 16 13.0 | +0.2 |
| NICH | | | | *i* S | Sn | 04 16 24.8 | +0.5 |
| NICH | | | | AML | AML | 04 16 25.4 | |
| | comp=E,8μm,0.3s | | | | | | |
| **TALC** | **Talca** | **0.86** | **225** | *i* P | Pn | 04 16 17.0 | +0.3 |
| TALC | | | | *i* S | Sn | 04 16 31.3 | 0.0 |
| **CHPI** | **Pichilemu** | **1.00** | **293** | *i* P | Pn | 04 16 18.3 | +0.2 |
| CHPI | | | | *i* S | Sn | 04 16 34.4 | +0.5 |
| **ANTU** | **Antumapu** | **1.24** | **10** | *i* P | Pn | 04 16 21.3 | +0.4 |
| ANTU | | | | *i* S | Sn | 04 16 39.4 | +0.8 |
| ANTU | | | | AML | AML | 04 16 41.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| **RCDM** | **Rinconada Maip** | **1.30** | **3** | *i* P | Pn | 04 16 21.7 | +0.1 |
| RCDM | | | | *i* S | Sn | 04 16 39.9 | 0.0 |
| **SAN** | **Santiago** | **1.35** | **8** | *i* P | Pn | 04 16 22.4 | +0.2 |
| SAN | | | | *i* S | Sn | 04 16 41.3 | +0.4 |
| **CLCH** | **Cerro Calan** | **1.42** | **12** | *i* P | Pn | 04 16 23.6 | +0.5 |
| CLCH | | | | *i* S | Sn | 04 16 43.2 | +0.6 |
| CLCH | | | | AML | AML | 04 16 44.5 | |
| | comp=N,2μm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **1.65** | **6** | *i* P | Pn | 04 16 26.3 | +0.4 |
| PEL | | | | *i* S | Sn | 04 16 47.9 | +0.3 |

**JMA 10 04:34:01.9±0.4, 26°.40N×124°.29E, h171km, M3.5, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIKM** | **Ikemajima** | **1.71** | **149** | P | Pn | 04 34 36.2 | +1.0 |
| JIKM | | | | S | Sn | 04 35 01.7 | +0.8 |
| **JIRB** | **Irabujima** | **1.76** | **153** | P | Pn | 04 34 36.2 | +0.5 |
| JIRB | | | | S | Sn | 04 35 01.7 | -0.2 |
| **JTJ** | **Tarama** | **1.79** | **168** | P | Pn | 04 34 36.7 | +0.6 |
| JTJ | | | | S | Sn | 04 35 02.5 | 0.0 |
| **JISG** | **Ishigakijimahi** | **1.81** | **179** | P | Pn | 04 34 36.5 | +0.2 |
| JISG | | | | S | Sn | 04 35 02.6 | -0.2 |
| **JMJ** | **Miyako jima 2** | **1.82** | **150** | P | Pn | 04 34 37.1 | +0.7 |
| JMJ | | | | S | Sn | 04 35 03.1 | 0.0 |
| **JOGS** | **Gusukube** | **1.92** | **148** | P | Pn | 04 34 38.3 | +0.8 |
| JOGS | | | | S | Sn | 04 35 05.3 | +0.3 |
| **JIJ** | **Ishigaki jima** | **2.03** | **184** | P | Pn | 04 34 38.2 | -0.5 |
| JIJ | | | | S | Sn | 04 35 05.5 | -1.8 |
| **IRIF** | **Iriomote-Funau** | **2.12** | **194** | P | Pn | 04 34 39.6 | -0.1 |
| IRIF | | | | S | Sn | 04 35 09.1 | +0.1 |
| **JKRS** | **Kuro-shima** | **2.17** | **187** | P | Pn | 04 34 40.0 | -0.3 |
| JKRS | | | | S | Sn | 04 35 08.8 | -1.2 |
| **JKE** | **Kume jima 2** | **2.24** | **91** | P | Pn | 04 34 41.5 | +0.5 |
| JKE | | | | S | Sn | 04 35 09.8 | -1.6 |
| **YOJ** | **Yonaguni jima** | **2.25** | **211** | P | Pn | 04 34 42.2 | +1.0 |
| YOJ | | | | S | Sn | 04 35 13.2 | +1.6 |
| **JYNG** | **Yonagunijimaku** | **2.29** | **212** | P | Pn | 04 34 41.8 | +0.1 |
| JYNG | | | | S | Sn | 04 35 14.0 | +1.6 |
| **HATJ** | **Hateruma jima** | **2.37** | **191** | P | Pn | 04 34 42.3 | -0.3 |
| HATJ | | | | S | Sn | 04 35 12.6 | -1.6 |
| **JAGN** | **Aguni-jima** | **2.65** | **85** | P | Pn | 04 34 45.5 | -0.4 |
| JAGN | | | | S | Sn | 04 35 18.4 | -1.6 |
| **JJT2** | **Tamagusuku 2** | **3.11** | **94** | P | Pn | 04 34 51.0 | -0.5 |
| JJT2 | | | | S | Sn | 04 35 27.9 | -2.3 |
| **JNTH** | **Nagotoyohara** | **3.35** | **87** | P | Pn | 04 34 53.2 | -1.2 |
| JNTH | | | | S | Sn | 04 35 31.2 | -4.1 |
| **JIH** | **Iheya** | **3.35** | **78** | P | Pn | 04 34 53.2 | -1.2 |
| **JOW** | **Kunigami** | **3.59** | **82** | P | Pn | 04 34 56.0 | -1.5 |
| JOW | | | | S | Sn | 04 35 35.6 | -5.3 |
| **JTK** | **Tokunoshima** | **4.38** | **71** | P | Pn | 04 35 05.3 | -2.3 |
| JTK | | | | S | Sn | 04 35 53.1 | -5.9 |
| **JAMN** | **Amaminishikomi** | **4.72** | **66** | P | Pn | 04 35 09.4 | -2.6 |
| JAMN | | | | S | Sn | 04 35 59.8 | -7.0 |

**IDC 10 04:46:04.7±1.7, 48°.84S×120°.68E, h0km, mb3.7/5, mb1 3.8/5, mb1mx3.6/33, mbtmp3.7/5, Error ellipse: s-maj=99.8km s-min=20.4km az=104.0, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H01W1** | **Cape Leeuwin H** | **14.75** | **338** | T | T | 05 04 59.6 | |
| | baz=162 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **14.75** | **338** | T | T | 05 04 59.2 | |
| | baz=162 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **14.76** | **338** | T | T | 05 05 00.8 | |
| | baz=162 | | | | | | |
| **ASAR** | **Alice Springs** | **27.21** | **27** | P | P | 04 51 49.5 | -0.7 |
| | 0.5nm,0.8s,baz=208,slow=10.0,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.85** | **26** | P | P | 04 52 23.1 | +0.6 |
| | 0.5nm,1.0s,baz=198,slow=8.2,SNR=3.5 | | | | | | |
| **VNDA** | **Vanda** | **32.77** | **165** | P | P | 04 52 38.8 | -0.1 |
| | 1.0nm,1.0s,baz=314,slow=10,SNR=2.5 | | | | | | |
| **QSPA** | **South Pole Qui** | **41.29** | **180** | P | P | 04 53 51.2 | -0.4 |
| | 5.7nm,1.1s,baz=329,slow=5.1,SNR=7.3 | | | | | | |
| **SNAA** | **Sanae** | **53.37** | **199** | P | P | 04 55 25.5 | +0.2 |
| | 1.0nm,1.1s,baz=157,slow=8.6,SNR=5.0 | | | | | | |
| **H08S2** | **Diego Garcia H** | **57.60** | **299** | T | T | 05 58 45.7 | |
| | baz=144,slow=76,SNR=4.7 | | | | | | |
| **H08S1** | **Diego Carcia H** | **57.61** | **299** | T | T | 05 58 42.9 | |
| | baz=144,slow=76,SNR=3.0 | | | | | | |
| **H08S3** | **Diego Garcia H** | **57.62** | **299** | T | T | 05 58 47.6 | |
| | baz=144,slow=76,SNR=4.5 | | | | | | |

*ISCJB **10** 04:47:40.3±0.4, 48°.93S±0°.06×121°.6E±0°.2, h13km, mb4.4/18, MS4.0/9, Error ellipse: s-maj=22.0km s-min=7.5km az=9.5*

*IDC **10** 04:47:40.2±0.6, 48°.91S×121°.53E, h0km, mb4.3/11, mb1 4.5/12, mb1mx4.3/33, mbtmp4.4/12, ML2.6/1, MS4.0/9, Ms1 4.0/9, ms1mx3.7/16, Error ellipse: s-maj=40.6km s-min=13.6km az=99.0*

*NEIC **10** 04:47:41.7±0.2, 48°.93S×121°.49E, h10km, mb4.6/10, Error ellipse: s-maj=12.7km s-min=5.6km az=96.0*

*GCMT **10** 04:47:41.7±0.4, 48°.95S×121°.64E, h28km, MW5.0/61, Moment Tensor Solution. s26,c31; s61,c82; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-4.84±.30; $M_{\theta\theta}$2.49±.20; $M_{\phi\phi}$2.35±.24; $M_{r\theta}$0.29±.29; $M_{\theta\phi}$-0.96±.10; $M_{\phi r}$0.38±.36; Best double couple: $M_0$4.12900×$10^{16}$ NP1:$\phi_s$137.00000°, δ45.00000°, λ-84.00000°. NP2: $\phi_s$309.00000°, δ45.00000°, λ-96.00000°. Principal axes: T 3.3820, Plg0.0000°, Azm223.0000°; N 1.4940, Plg4.0000°, Azm313.0000°; P -4.8760, Plg86.0000°, Azm129.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 10 04:47:42.3±0.4, 48°.93S±0°.08×121°.5E±0°.2, h13km, n201, σ0s.50/185, mb4.5/18, MS3.9/9, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H01W1** | **Cape Leeuwin H** | **15.04** | **336** | T | T | 05 06 39.4 | |
| | baz=160,slow=74,SNR=59 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **15.04** | **336** | T | T | 05 06 39.8 | |
| | baz=160,slow=74,SNR=103 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **15.06** | **336** | T | T | 05 06 38.5 | |
| | baz=160,slow=74,SNR=56 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **16.30** | **347** | Pn | **Pn** | **04 51 31.4** | **+0.6** |
| | 1.3nm,0.3s,baz=113,slow=0.2,SNR=8.8 | | | | | | |
| **CASY** | **Casey** | **18.31** | **194** | *e*P | **Pn** | **04 51 55.0** | **-0.6** |
| | 44nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **27.05** | **26** | P | **P** | **04 53 23.6** | **-0.7** |
| | 3.0nm,0.9s,baz=195,slow=8.7,SNR=16 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 56 44.8** | **-0.5** |
| | 0.6nm,0.5s,baz=187,slow=2.0,SNR=9.4 | | | | | | |
| ASAR | | | | LR | LR | 05 02 40.9 | |
| | comp=Z,908nm,21.7s,baz=188,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.70** | **24** | P | **P** | **04 53 56.0** | **-0.8** |
| | 2.3nm,0.9s,baz=198,slow=9.3,SNR=6.1 | | | | | | |
| WRA | | | | PcP | **PcP** | **04 56 53.6** | **-0.9** |
| | 1.4nm,0.8s,baz=211,slow=2.1,SNR=7.5 | | | | | | |
| WRA | | | | LR | LR | 05 05 07.3 | |
| | comp=Z,437nm,21.3s,baz=180,slow=34 | | | | | | |
| **WRAB** | **Tennant Creek** | **30.71** | **24** | *e*P | **P** | **04 53 56.8** | **-0.1** |
| | 4.6nm,0.9s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.93** | **8** | P | **P** | **04 53 58.8** | **+0.1** |
| | 2.8nm,0.8s,baz=186,slow=8.9,SNR=5.2 | | | | | | |
| FITZ | | | | LR | LR | 05 05 19.3 | |
| | comp=Z,271nm,20.9s,baz=200,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **32.54** | **165** | P | **P** | **04 54 12.9** | **+0.5** |
| | 4.3nm,1.0s,baz=315,slow=7.8,SNR=14 | | | | | | |
| VNDA | | | | LR | LR | 05 05 43.3 | |
| | comp=Z,404nm,21.0s,baz=322,slow=33 | | | | | | |
| **MAW** | **Mawson** | **34.33** | **215** | P | **P** | **04 54 27.7** | **-0.3** |
| | 4.3nm,0.7s,baz=79,slow=9.4,SNR=8.5 | | | | | | |
| MAW | | | | LR | LR | 05 05 57.8 | |
| | comp=Z,170nm,20.6s,baz=60,slow=32 | | | | | | |
| **SOEI** | **Soe** | **39.11** | **4** | *e*P | **P** | **04 55 09.2** | **-0.3** |
| **QSPA** | **South Pole Qui** | **41.20** | **180** | P | **P** | **04 55 26.6** | **+0.3** |
| | 6.8nm,0.6s,baz=330,slow=1.3,SNR=31 | | | | | | |
| **KAPI** | **Kappang** | **43.78** | **357** | P | **P** | **04 55 47.6** | **0.0** |
| | 3.3nm,0.6s,baz=306,slow=6.8,SNR=5.6 | | | | | | |
| **KAPI** | **Kappang** | **43.78** | **357** | *e*P | **P** | **04 55 48.8** | **+1.3** |
| | 15nm,1.3s | | | | | | |
| **PMG** | **Port Moresby** | **44.87** | **37** | *e*P | **P** | **04 55 56.2** | **-0.1** |
| | 22nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **53.46** | **199** | P | **P** | **04 57 01.1** | **-0.4** |
| **SNAA** | **Sanae** | **53.46** | **199** | P | **P** | **04 57 01.4** | **-0.2** |
| | 2.4nm,0.8s,baz=146,slow=10,SNR=22 | | | | | | |
| **SNAA** | **Sanae** | **53.46** | **199** | *e*P | **P** | **04 57 01.1** | **-0.4** |
| | 5.3nm,1.1s | | | | | | |
| **KKM** | **Kota Kinabalu** | **54.94** | **354** | *e*P | **P** | **04 57 12.6** | **-0.3** |
| | 43nm,1.2s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **54.99** | **198** | P | **P** | **04 57 12.7** | **+0.1** |
| | baz=143,slow=7.2 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **55.38** | **198** | P | **P** | **04 57 15.7** | **+0.3** |
| **IPM** | **Ipoh** | **56.11** | **335** | *e*P | **P** | **04 57 21.1** | **-0.2** |
| | 12nm,1.2s | | | | | | |
| **H08S2** | **Diego Garcia H** | **58.12** | **298** | T | T | 06 00 25.0 | |
| | baz=144,slow=76,SNR=7.0 | | | | | | |
| **H08S1** | **Diego Carcia H** | **58.13** | **298** | T | T | 06 00 26.1 | |
| | baz=144,slow=76,SNR=9.0 | | | | | | |
| **H08S3** | **Diego Garcia H** | **58.14** | **298** | T | T | 06 00 26.5 | |
| | baz=144,slow=76,SNR=7.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.03** | **337** | P | **P** | **04 58 54.1** | **+0.5** |
| | 1.1nm,0.2s,baz=188,slow=6.0,SNR=9.5 | | | | | | |
| CMAR | | | | LR | LR | 05 30 27.3 | |
| | comp=Z,40nm,18.6s,baz=160,slow=37 | | | | | | |
| **CHTO** | **Chiang Mai** | **70.37** | **337** | *e*P | **P** | **04 58 55.6** | **0.0** |
| | 1.6nm,0.4s | | | | | | |
| **SLVN** | **Son La** | **71.69** | **343** | *e*P | **P** | **04 59 03.8** | **+0.1** |
| | 2.8nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **72.84** | **246** | LR | LR | 05 24 28.4 | |
| | comp=Z,152nm,18.8s,baz=185,slow=30 | | | | | | |
| **LSZ** | **Lusaka** | **80.80** | **257** | *e*P | **P** | **04 59 56.2** | **+0.4** |
| | 6.6nm,1.2s | | | | | | |
| **KSAR** | **Wonju Array Be** | **86.18** | **5** | P | **P** | **05 00 22.8** | **+0.1** |
| **KSRS** | **Korea Array** | **86.19** | **5** | P | **P** | **05 00 22.8** | **+0.1** |
| | 2.0nm,1.1s,baz=184,slow=4.9,SNR=6.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **86.38** | **13** | P | **P** | **05 00 23.4** | **-0.3** |
| | 5.4nm,1.1s,baz=187,slow=8.0,SNR=7.5 | | | | | | |
| MJAR | | | | LR | LR | 05 38 27.2 | |
| | comp=Z,34nm,20.1s,baz=120,slow=35 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **93.20** | **8** | LR | LR | 05 44 45.6 | |
| | comp=Z,32nm,20.2s,baz=144,slow=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.30** | **256** | PKP | **PKPdf** | **05 06 30.5** | **-0.8** |
| | 0.7nm,0.6s,baz=90,slow=1.6,SNR=17 | | | | | | |
| **PSZ** | **Piszkesteto** | **130.20** | **300** | *e*PKPdf | **PKPdf** | **05 06 51.0** | **-0.3** |
| **MCK** | **McKinley** | **132.14** | **37** | *e*PKPdf | **PKPdf** | **05 06 55.1** | **+0.7** |
| **ILAR** | **Eielson Array** | **133.40** | **36** | PKP | **PKPdf** | **05 06 55.9** | **-0.9** |
| | 0.3nm,0.7s,baz=259,slow=3.2,SNR=4.6 | | | | | | |
| **KEBM** | **Edson Butte** | **135.07** | **72** | P | **Pdif** | **05 04 01.7** | **-0.9** |
| **JTS** | **JuntasAbangare** | **135.60** | **141** | *e*PKPdf | **PKPdf** | **05 07 02.8** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **136.53** | **81** | PKP | **PKPdf** | **05 07 04.7** | **+0.9** |
| | 0.6nm,0.8s,baz=233,slow=5.0,SNR=4.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **140.56** | **103** | PKhKP | PKPpre | 05 07 04.8 | |
| | 0.6nm,1.0s,baz=197,slow=3.9,SNR=3.7 | | | | | | |
| TXAR | | | | PKP | **PKPdf** | **05 07 12.3** | **+1.1** |
| | 0.3nm,0.8s,baz=185,slow=4.6,SNR=4.6 | | | | | | |
| **430A** | **Baggett Ranch,** | **143.10** | **103** | P | PKPbc | 05 07 12.1 | -0.5 |
| | baz=143 | | | | | | |
| **128A** | **Castleberry Fa** | **143.49** | **100** | P | **PKPdf** | **05 07 16.0** | **-0.3** |
| | baz=144 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **143.68** | **89** | P | PKPbc | 05 07 15.0 | +0.6 |
| | baz=144 | | | | | | |
| **735A** | **Kenedy** | **143.95** | **109** | P | PKPbc | 05 07 15.1 | +0.2 |
| | baz=144 | | | | | | |
| **432A** | **Menard** | **144.08** | **105** | P | PKPbc | 05 07 15.2 | -0.2 |
| | baz=144 | | | | | | |
| **IMW** | **Indian Meadow** | **144.09** | **78** | *e*PKPdf | PKPbc | 05 07 16.1 | +0.7 |
| **MOOW** | **Moose Ponds** | **144.15** | **78** | *e*PKPdf | **PKPdf** | **05 07 16.8** | **-0.5** |
| **Z29A** | **Hungry Hill Ra** | **144.40** | **100** | P | **PKPab** | **05 07 15.9** | **-0.2** |
| | baz=144 | | | | | | |
| **BOZ** | **Bozeman (W)** | **144.41** | **75** | P | **PKPdf** | **05 07 17.3** | **-0.3** |
| | baz=145 | | | | | | |
| **231A** | **Bronte** | **144.44** | **103** | P | PKPbc | 05 07 16.6 | 0.0 |
| | baz=144 | | | | | | |
| **433A** | **Art** | **144.45** | **106** | P | **PKPab** | **05 07 15.9** | **-0.4** |
| | baz=144 | | | | | | |
| **332A** | **Millersview** | **144.45** | **104** | P | PKPbc | 05 07 16.5 | 0.0 |
| | baz=144 | | | | | | |
| **SDCO** | **Great Sand Dun** | **144.56** | **90** | *e*PKPdf | PKPbc | 05 07 17.1 | +0.1 |
| **HRY** | **Holter Researc** | **144.73** | **73** | *e*PKPdf | **PKPdf** | **05 07 17.9** | **-0.2** |
| **Z30A** | **Sanderson Ranc** | **144.79** | **100** | P | **PKPab** | **05 07 17.1** | **-0.5** |
| | baz=145 | | | | | | |
| **Y29A** | **Porterfield Fa** | **144.79** | **99** | P | **PKPab** | **05 07 17.3** | **-0.3** |
| | baz=145 | | | | | | |
| **232A** | **Coleman** | **144.84** | **104** | P | PKPbc | 05 07 18.2 | +0.4 |
| | baz=145 | | | | | | |
| **X28A** | **Dimmitt** | **144.85** | **98** | P | **PKPab** | **05 07 17.3** | **-0.5** |
| | baz=145 | | | | | | |
| **333A** | **Richland Sprin** | **144.90** | **105** | P | **PKPab** | **05 07 17.2** | **-0.7** |
| | baz=145,SNR=5.7 | | | | | | |
| **T25A** | **Trinidad** | **144.94** | **92** | P | **PKPab** | **05 07 17.9** | **-0.3** |
| | baz=145 | | | | | | |
| **434A** | **Burnet** | **145.01** | **106** | P | PKPbc | 05 07 17.9 | -0.5 |
| | baz=145 | | | | | | |
| **X29A** | **Tulia** | **145.13** | **98** | P | **PKPbc** | **05 07 18.5** | **-0.3** |
| | baz=145 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.32** | **103** | P | **PKPbc** | **05 07 18.9** | **-0.4** |
| | baz=145 | | | | | | |
| **334A** | **Lometa** | **145.38** | **106** | P | **PKPbc** | **05 07 18.8** | **-0.7** |
| | baz=146 | | | | | | |
| **233A** | **Rising Star** | **145.41** | **104** | P | **PKPdf** | **05 07 19.6** | **-0.1** |
| | baz=146,SNR=12 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **145.44** | **101** | P | **PKPdf** | **05 07 19.2** | **-0.4** |
| | baz=146 | | | | | | |
| **Q24A** | **Divide** | **145.45** | **89** | P | **PKPbc** | **05 07 19.9** | **0.0** |
| | baz=146 | | | | | | |
| **T26A** | **Comanche Natio** | **145.50** | **93** | P | **PKPdf** | **05 07 19.6** | **-0.2** |
| | baz=146 | | | | | | |
| **U27A** | **Thompson Grove** | **145.57** | **94** | P | **PKPbc** | **05 07 20.0** | **-0.1** |
| | baz=146,SNR=6.7 | | | | | | |
| **W29A** | **Amraillo** | **145.58** | **97** | P | **PKPab** | **05 07 20.3** | **-0.1** |
| | baz=146 | | | | | | |
| **ISCO** | **Idaho Springs** | **145.59** | **87** | P | **PKPbc** | **05 07 20.3** | **0.0** |
| | baz=146,SNR=8.3 | | | | | | |
| **ISCO** | **Idaho Springs** | **145.59** | **87** | *e*PKPbc | **PKPab** | **05 07 21.2** | **+0.6** |
| **X30A** | **Coker Ranch, T** | **145.67** | **99** | P | **PKPbc** | **05 07 20.3** | **-0.1** |
| | baz=146,SNR=5.5 | | | | | | |
| **GCMT** | **Greycliff** | **145.73** | **75** | *e*PKPbc | **PKPab** | **05 07 21.5** | **+0.8** |
| **Y31A** | **Rekieta Farm,** | **145.77** | **100** | P | **PKPbc** | **05 07 20.7** | **0.0** |
| | baz=146,SNR=11 | | | | | | |
| **133A** | **Hamilton Ranch** | **145.78** | **103** | P | **PKPbc** | **05 07 20.6** | **-0.2** |
| | baz=146,SNR=14 | | | | | | |
| **S26A** | **Kim** | **145.83** | **92** | P | **PKPbc** | **05 07 20.7** | **-0.2** |
| | baz=146 | | | | | | |
| **335A** | **Moody** | **145.86** | **107** | P | **PKPbc** | **05 07 21.0** | **0.0** |
| | baz=146 | | | | | | |
| **Z32A** | **Haskell** | **145.87** | **102** | P | **PKPbc** | **05 07 21.1** | **+0.1** |
| | baz=146,SNR=18 | | | | | | |
| **234A** | **Clairette** | **145.89** | **105** | P | **PKPbc** | **05 07 20.9** | **-0.1** |
| | baz=146 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **145.91** | **108** | P | **PKPab** | **05 07 21.9** | **+0.3** |
| | baz=146 | | | | | | |
| **N23A** | **Red Feather La** | **145.93** | **85** | P | **PKPab** | **05 07 22.2** | **+0.4** |
| | baz=146,SNR=6.2 | | | | | | |
| **HKT** | **Hockley** | **145.94** | **110** | *e*PKPbc | **PKPab** | **05 07 22.2** | **+0.6** |
| **V29A** | **Stinnett** | **146.11** | **96** | P | **PKPbc** | **05 07 22.0** | **+0.3** |
| | baz=146 | | | | | | |
| **R26A** | **Arlington** | **146.22** | **91** | P | **PKPbc** | **05 07 22.3** | **+0.2** |
| | baz=146 | | | | | | |
| **336A** | **Riesel** | **146.29** | **107** | P | **PKPbc** | **05 07 22.2** | **-0.1** |
| | baz=146 | | | | | | |
| **134A** | **White-Moore Ra** | **146.29** | **104** | P | **PKPbc** | **05 07 21.8** | **-0.5** |
| | baz=146 | | | | | | |
| **WHTX** | **Lake Whitney** | **146.31** | **106** | P | **PKPbc** | **05 07 21.9** | **-0.4** |
| | baz=146 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **146.31** | **103** | P | **PKPbc** | **05 07 22.5** | **+0.1** |
| | baz=146,SNR=14 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **146.33** | **101** | P | **PKPbc** | **05 07 22.6** | **+0.2** |
| | baz=146,SNR=18 | | | | | | |
| **X31A** | **McDonald Ranch** | **146.37** | **99** | P | **PKPbc** | **05 07 22.4** | **-0.1** |
| | baz=146,SNR=12 | | | | | | |
| **K22A** | **Casper** | **146.39** | **82** | P | **PKPab** | **05 07 23.4** | **+0.1** |
| | baz=146 | | | | | | |
| **T28A** | **Walsh** | **146.44** | **94** | P | **PKPbc** | **05 07 23.1** | **+0.4** |
| | baz=146,SNR=8.7 | | | | | | |
| **Q26A** | **Hugo** | **146.51** | **90** | P | **PKPab** | **05 07 24.0** | **0.0** |
| | baz=147 | | | | | | |
| **V30A** | **Spur Ranch, Mi** | **146.59** | **97** | P | **PKPab** | **05 07 24.1** | **-0.2** |
| | baz=147,SNR=8.6 | | | | | | |
| **R27A** | **Eads** | **146.64** | **92** | P | **PKPab** | **05 07 24.3** | **-0.1** |
| | baz=147 | | | | | | |
| **X32A** | **Elmer** | **146.69** | **100** | P | **PKPbc** | **05 07 23.4** | **0.0** |
| | baz=147,SNR=12 | | | | | | |
| **W31A** | **Holland Ranch,** | **146.73** | **99** | P | **PKPbc** | **05 07 24.0** | **+0.4** |
| | baz=147,SNR=7.0 | | | | | | |
| **S28A** | **Manter** | **146.85** | **93** | P | **PKPbc** | **05 07 24.4** | **+0.5** |
| | baz=147,SNR=11 | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **146.86** | **102** | P | **PKPbc** | **05 07 23.9** | **+0.1** |
| | baz=147 | | | | | | |
| **Z34A** | **Collier Ranch,** | **146.91** | **103** | P | **PKPbc** | **05 07 23.2** | **-0.8** |
| | baz=147 | | | | | | |
| **T29A** | **Hugoton** | **147.00** | **95** | P | **PKPbc** | **05 07 24.7** | **+0.4** |
| | baz=147 | | | | | | |
| **U30A** | **WK&E Inc. Balk** | **147.06** | **96** | P | **PKPbc** | **05 07 24.6** | **+0.1** |
| | baz=147 | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **147.14** | **91** | P | **PKPab** | **05 07 25.8** | **-0.6** |
| | baz=147 | | | | | | |
| **W32A** | **Sentinel** | **147.15** | **99** | P | **PKPbc** | **05 07 25.3** | **+0.6** |
| | baz=147,SNR=13 | | | | | | |
| **136A** | **Ennis** | **147.22** | **106** | P | **PKPbc** | **05 07 25.2** | **+0.3** |
| | baz=147 | | | | | | |
| **X33A** | **Lawton** | **147.27** | **101** | P | **PKPbc** | **05 07 25.0** | **-0.1** |
| | baz=147 | | | | | | |
| **R28A** | **Tribune** | **147.32** | **92** | P | **PKPbc** | **05 07 25.6** | **+0.4** |
| | baz=147 | | | | | | |
| **S29A** | **Ulysses** | **147.38** | **94** | P | **PKPbc** | **05 07 25.8** | **+0.5** |
| | baz=148,SNR=7.1 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **147.39** | **103** | P | **PKPbc** | **05 07 25.5** | **+0.1** |
| | baz=148 | | | | | | |
| **U31A** | **Nine Bar Ranch** | **147.50** | **97** | P | **PKPab** | **05 07 26.7** | **-1.0** |
| | baz=148 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **147.67** | **100** | P | **PKPbc** | **05 07 26.5** | **+0.4** |
| | baz=148 | | | | | | |
| **Q28A** | **Sharon Springs** | **147.69** | **91** | P | **PKPbc** | **05 07 27.1** | **+0.9** |
| | baz=148 | | | | | | |
| **X34A** | **Smith Ranch, M** | **147.74** | **102** | P | **PKPbc** | **05 07 26.8** | **+0.5** |
| | baz=148 | | | | | | |
| **238A** | **Jacksonville** | **147.79** | **108** | P | **PKPbc** | **05 07 27.0** | **+0.5** |
| | baz=148 | | | | | | |
| **Z36A** | **Blue Ridge** | **147.80** | **105** | P | **PKPbc** | **05 07 26.6** | **+0.1** |
| | baz=148 | | | | | | |
| **R29A** | **Marienthal** | **147.81** | **93** | P | **PKPbc** | **05 07 27.3** | **+0.8** |
| | baz=148 | | | | | | |
| **S30A** | **Montezuma** | **147.82** | **95** | P | **PKPbc** | **05 07 27.2** | **+0.7** |
| | baz=148,SNR=11 | | | | | | |
| **Y35A** | **Marietta** | **147.82** | **103** | P | **PKPbc** | **05 07 26.2** | **-0.3** |
| | baz=148 | | | | | | |
| **O27A** | **Beecher Island** | **147.85** | **89** | P | **PKPbc** | **05 07 27.6** | **+1.0** |
| | baz=148 | | | | | | |
| **P28A** | **Saint Francis** | **148.01** | **90** | P | **PKPbc** | **05 07 28.3** | **+1.3** |
| | baz=148 | | | | | | |
| **T31A** | **Randall Ranch,** | **148.03** | **96** | P | **PKPbc** | **05 07 26.4** | **-0.7** |
| | baz=148 | | | | | | |
| **X35A** | **Drake** | **148.17** | **103** | P | **PKPbc** | **05 07 27.1** | **-0.4** |
| | baz=148 | | | | | | |
| **LAO** | **LASA Array** | **148.28** | **76** | P | **PKPbc** | **05 07 27.4** | **0.0** |
| | baz=148 | | | | | | |
| **Y36A** | **Durant** | **148.30** | **104** | P | **PKPbc** | **05 07 27.6** | **-0.1** |
| | baz=148 | | | | | | |
| **S31A** | **Mullinville** | **148.45** | **95** | P | **PKPbc** | **05 07 28.5** | **+0.3** |
| | baz=149 | | | | | | |
| **J25A** | **Sunshine Ranch** | **148.50** | **83** | P | **PKPbc** | **05 07 28.1** | **-0.1** |
| | baz=149 | | | | | | |
| **RSSD** | **Black Hills** | **148.67** | **81** | *e*PKPbc | **PKPbc** | **05 07 28.4** | **-0.3** |
| **X36A** | **Centrahoma** | **148.68** | **103** | P | **PKPbc** | **05 07 28.7** | **-0.1** |
| | baz=149 | | | | | | |
| **W35A** | **Tecumseh** | **148.70** | **102** | P | **PKPbc** | **05 07 28.7** | **-0.2** |
| | baz=149 | | | | | | |
| **Q30A** | **Quinter** | **148.71** | **93** | P | **PKPbc** | **05 07 29.5** | **+0.7** |
| | baz=149 | | | | | | |
| **Y37A** | **Hugo** | **148.77** | **105** | P | **PKPbc** | **05 07 29.5** | **+0.5** |
| | baz=149 | | | | | | |
| **R31A** | **Burdett** | **148.79** | **94** | P | **PKPbc** | **05 07 29.4** | **+0.4** |
| | baz=149 | | | | | | |
| **I25A** | **Rochford** | **148.82** | **82** | P | **PKPbc** | **05 07 29.6** | **+0.5** |
| | baz=149 | | | | | | |
| **J26A** | **Sides Ranch, S** | **148.94** | **83** | P | **PKPbc** | **05 07 29.8** | **+0.5** |
| | baz=149,SNR=11 | | | | | | |
| **U34A** | **Anderson Ranch** | **149.05** | **99** | P | **PKPbc** | **05 07 30.1** | **+0.4** |
| | baz=149 | | | | | | |
| **W36A** | **Wetumka** | **149.11** | **102** | P | **PKPbc** | **05 07 30.1** | **+0.3** |
| | baz=149 | | | | | | |
| **H25A** | **Fruitdale** | **149.16** | **81** | P | **PKPbc** | **05 07 30.3** | **+0.6** |
| | baz=149 | | | | | | |
| **Q31A** | **Ellis** | **149.27** | **93** | P | **PKPbc** | **05 07 30.8** | **+0.6** |
| | baz=149 | | | | | | |
| **X37A** | **Clayton** | **149.32** | **104** | P | **PKPbc** | **05 07 30.6** | **+0.2** |
| | baz=149,SNR=5.8 | | | | | | |
| **I26A** | **New Underwood** | **149.40** | **82** | P | **PKPbc** | **05 07 30.5** | **+0.2** |
| | baz=150 | | | | | | |
| **R32A** | **Long Quarter,** | **149.40** | **95** | P | **PKPbc** | **05 07 30.8** | **+0.3** |
| | baz=150 | | | | | | |
| **G25A** | **Newell** | **149.51** | **80** | P | **PKPbc** | **05 07 31.2** | **+0.6** |
| | baz=150 | | | | | | |
| **U35A** | **Pawnee** | **149.53** | **100** | P | **PKPbc** | **05 07 31.3** | **+0.5** |
| | baz=150 | | | | | | |
| **T34A** | **McClaskey Farm** | **149.61** | **98** | P | **PKPbc** | **05 07 31.4** | **+0.4** |
| | baz=150 | | | | | | |
| **W37A** | **Quinton** | **149.63** | **103** | P | **PKPbc** | **05 07 31.8** | **+0.7** |
| | baz=150 | | | | | | |
| **M29A** | **Burnside Ranch** | **149.65** | **88** | P | **PKPbc** | **05 07 32.4** | **+1.3** |
| | baz=150 | | | | | | |
| **V36A** | **Jenks** | **149.69** | **102** | P | **PKPbc** | **05 07 32.0** | **+0.8** |
| | baz=150,SNR=12 | | | | | | |
| **H26A** | **Fairpoint** | **149.70** | **81** | P | **PKPbc** | **05 07 31.5** | **+0.5** |
| | baz=150,SNR=5.6 | | | | | | |
| **X38A** | **Whitesboro** | **149.72** | **104** | P | **PKPbc** | **05 07 31.7** | **+0.3** |
| | baz=150,SNR=9.5 | | | | | | |
| **Y39A** | **Lockesburg** | **149.72** | **106** | P | **PKPbc** | **05 07 32.0** | **+0.6** |
| | baz=150 | | | | | | |
| **F25A** | **Bowman** | **149.77** | **78** | P | **PKPbc** | **05 07 31.1** | **-0.1** |
| | baz=150 | | | | | | |
| **K28A** | **Ten Mile Ranch** | **149.80** | **85** | P | **PKPbc** | **05 07 31.5** | **0.0** |
| | baz=150 | | | | | | |
| **Q32A** | **Meitler Ranch,** | **149.81** | **94** | P | **PKPbc** | **05 07 32.1** | **+0.6** |
| | baz=150,SNR=6.1 | | | | | | |
| **R33A** | **Olander Ranch,** | **149.82** | **96** | P | **PKPbc** | **05 07 32.1** | **+0.6** |
| | baz=150 | | | | | | |
| **TUL1** | **Tulsa** | **149.86** | **102** | P | **PKPbc** | **05 07 32.1** | **+0.4** |
| | baz=150,SNR=8.2 | | | | | | |
| **I27A** | **Quinn** | **149.94** | **83** | P | **PKPbc** | **05 07 32.0** | **+0.3** |
| | baz=150 | | | | | | |
| **T35A** | **Sooner Cattle** | **149.99** | **99** | P | **PKPbc** | **05 07 32.6** | **+0.6** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=150,SNR=9.0 | | | | | | |
| S34A | Willow Spring | 150.05 | 97 | P | PKPbc | 05 07 32.1 | 0.0 |
| | baz=150 | | | | | | |
| G26A | Maurine | 150.08 | 80 | P | PKPbc | 05 07 32.6 | +0.6 |
| | baz=150 | | | | | | |
| P32A | Huiting Farm, | 150.12 | 93 | P | PKPbc | 05 07 32.6 | +0.4 |
| | baz=150,SNR=5.4 | | | | | | |
| W38A | Poteau | 150.17 | 104 | P | PKPbc | 05 07 32.7 | +0.3 |
| | baz=150 | | | | | | |
| DGMT | Dagmar | 150.18 | 73 | P | PKPbc | 05 07 32.5 | +0.4 |
| | baz=150 | | | | | | |
| J28A | Allard Ranch, | 150.20 | 84 | P | PKPbc | 05 07 32.5 | +0.2 |
| | baz=150 | | | | | | |
| F26A | Lodgepole | 150.25 | 79 | P | PKPbc | 05 07 32.4 | 0.0 |
| | baz=150 | | | | | | |
| V37A | Hulbert | 150.27 | 102 | P | PKPbc | 05 07 32.8 | +0.1 |
| | baz=150 | | | | | | |
| Q33A | Connelly Farm, | 150.29 | 95 | P | PKPbc | 05 07 32.7 | +0.1 |
| | baz=150 | | | | | | |
| I28A | Midland | 150.49 | 83 | P | PKPbc | 05 07 32.8 | -0.2 |
| | baz=151 | | | | | | |
| T36A | Boggs Farm, Ca | 150.49 | 100 | P | PKPbc | 05 07 33.8 | +0.7 |
| | baz=151,SNR=7.3 | | | | | | |
| K29A | Lazy Trails An | 150.51 | 86 | P | PKPbc | 05 07 34.1 | +1.0 |
| | baz=151 | | | | | | |
| C25A | Freed Ranch, W | 150.53 | 75 | P | PKPbc | 05 07 34.7 | +1.7 |
| | baz=151 | | | | | | |
| G27A | Dupree | 150.55 | 80 | P | PKPbc | 05 07 33.1 | 0.0 |
| | baz=151 | | | | | | |
| S35A | Otter Creek Ra | 150.56 | 98 | P | PKPbc | 05 07 33.8 | +0.5 |
| | baz=151,SNR=5.7 | | | | | | |
| U37A | Salina | 150.60 | 101 | P | PKPbc | 05 07 33.6 | +0.2 |
| | baz=151 | | | | | | |
| E26A | Carlson Angus | 150.61 | 78 | P | PKPbc | 05 07 33.5 | +0.3 |
| | baz=151 | | | | | | |
| P33A | Williams Farm, | 150.62 | 94 | P | PKPbc | 05 07 33.9 | +0.5 |
| | baz=151 | | | | | | |
| O32A | Brockman Farm, | 150.66 | 92 | P | PKPbc | 05 07 33.6 | +0.1 |
| | baz=151 | | | | | | |
| F27A | Lemmon | 150.68 | 79 | P | PKPbc | 05 07 33.7 | +0.3 |
| | baz=151 | | | | | | |
| V38A | Canehill | 150.73 | 103 | P | PKPbc | 05 07 33.8 | +0.1 |
| | baz=151,SNR=6.7 | | | | | | |
| J29A | Okreek | 150.79 | 85 | P | PKPbc | 05 07 34.1 | +0.4 |
| | baz=151 | | | | | | |
| H28A | Mission Ridge | 150.86 | 82 | P | PKPbc | 05 07 34.3 | +0.5 |
| | baz=151 | | | | | | |
| O33A | Hebron | 151.02 | 93 | P | PKPbc | 05 07 35.0 | +0.6 |
| | baz=151 | | | | | | |
| S36A | Lake Cedric, C | 151.06 | 99 | P | PKPbc | 05 07 34.9 | +0.4 |
| | baz=151,SNR=7.3 | | | | | | |
| U38A | Gravette | 151.09 | 102 | P | PKPbc | 05 07 34.5 | -0.1 |
| | baz=151,SNR=5.2 | | | | | | |
| T37A | Cheneyville 18 | 151.15 | 100 | P | PKPbc | 05 07 35.1 | +0.4 |
| | baz=151,SNR=6.7 | | | | | | |
| KSU1 | Kansas State U | 151.15 | 95 | P | PKPbc | 05 07 35.4 | +0.7 |
| | baz=151 | | | | | | |
| E27A | Carson | 151.18 | 78 | P | PKPbc | 05 07 34.8 | +0.3 |
| | baz=151 | | | | | | |
| P34A | Walnut Farm, R | 151.25 | 94 | P | PKPbc | 05 07 35.2 | +0.3 |
| | baz=151,SNR=5.7 | | | | | | |
| J30A | Dallas | 151.30 | 86 | P | PKPbc | 05 07 34.7 | -0.2 |
| | baz=151 | | | | | | |
| BGNE | Belgrade | 151.31 | 90 | P | PKPbc | 05 07 34.8 | -0.2 |
| | baz=151 | | | | | | |
| F28A | McLaughlin | 151.46 | 80 | P | PKPbc | 05 07 35.4 | +0.2 |
| | baz=152 | | | | | | |
| O34A | Beatrice | 151.66 | 93 | P | PKPbc | 05 07 35.8 | 0.0 |
| | baz=152 | | | | | | |
| A26A | Wade Farm, Ken | 151.67 | 73 | P | PKPbc | 05 07 36.1 | +0.5 |
| | baz=152 | | | | | | |
| P35A | Duane Minner, | 151.77 | 95 | P | PKPbc | 05 07 36.3 | +0.2 |
| | baz=152 | | | | | | |
| G29A | Hoven | 151.78 | 82 | P | PKPbc | 05 07 35.8 | -0.1 |
| | baz=152 | | | | | | |
| E28A | Huff | 151.79 | 79 | P | PKPbc | 05 07 34.9 | -1.0 |
| | baz=152 | | | | | | |
| D30A | Buchanan | 153.22 | 78 | P | PKPbc | 05 07 38.3 | -0.8 |
| | baz=153 | | | | | | |
| ECSD | EROS Data Cent | 153.37 | 87 | P | PKPbc | 05 07 39.0 | -0.5 |
| | baz=154 | | | | | | |

*IDC **10** 04:49:39.9±1.5, 23°.18N×121°.89E, h0km, mb3.4/4, mb1 3.6/5, mb1mx3.4/39, mbtmp3.5/5, ML3.5/1, MS2.8/1, Ms1 2.8/1, ms1mx2.3/31, Error ellipse: s-maj=44.1km s-min=25.8km az=67.0*
*ISCJB **10** 04:49:42.6±0.4, 23°.28N±0°.02×121°.79E±0°.02, h20km±3km, mb3.4/4, Error ellipse: s-maj=3.1km s-min=2.2km az=136.7*
*JMA **10** 04:49:42.6±0.2, 23°.28N×121°.72E, h33km±4km, M3.4*
*TAP **10** 04:49:44.1, 23°.31N×121°.70E, h27km, ML4.1, B*
**ISC 10 04:49:43.2**±0.8, **23°.29N**±0°.02×**121°.75E**±0°.02, **h21**km±3km, **n80**, σ**0s.95**/135, **mb3.5**/4, **26C-3D, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHKT | Chengkung | 0.40 | 242 | ⇑P | Pb | 04 49 51.7 | +0.2 |
| | baz=227 | | | | | | |
| CHKT | | | | eS | Sb | 04 49 57.1 | 0.0 |
| | baz=227 | | | | | | |
| TWF1 | Yuli | 0.42 | 279 | ⇑iP | Pb | 04 49 52.2 | +0.3 |
| | baz=269 | | | | | | |
| TWF1 | | | | eS | Sb | 04 49 58.5 | +0.7 |
| | baz=269 | | | | | | |
| EHY | Hungye | 0.45 | 299 | ⇑iP | Pb | 04 49 52.4 | 0.0 |
| | baz=299 | | | | | | |
| EHY | | | | eS | Sb | 04 49 59.1 | +0.4 |
| | baz=299 | | | | | | |
| TEGC | Jichi Village | 0.46 | 335 | eP | Pn | 04 49 53.8 | -0.8 |
| | baz=341 | | | | | | |
| ESL | Shilin | 0.60 | 331 | ⇑iP | Pb | 04 49 54.8 | -0.3 |
| | baz=321 | | | | | | |
| ESL | | | | i S | Sb | 04 50 02.6 | -0.6 |
| | baz=321 | | | | | | |
| ESF | Shoufeng Towns | 0.62 | 339 | eP | Pb | 04 49 56.0 | +0.5 |
| | baz=350 | | | | | | |
| ELDTW | Lidau | 0.68 | 262 | ⇑iP | Pb | 04 49 55.8 | -0.8 |
| | baz=258 | | | | | | |
| ELDTW | | | | S | Sb | 04 50 03.9 | -1.8 |
| | baz=258 | | | | | | |
| HWA | Hwalien | 0.70 | 349 | eP | Pb | 04 49 57.0 | +0.3 |
| | baz=2.0 | | | | | | |
| HWA | | | | eS | Sn | 04 50 06.9 | -1.1 |
| | baz=2.0 | | | | | | |
| WDT | Danda | 0.73 | 310 | ⇑iP | Pb | 04 49 57.3 | -0.2 |
| | baz=311 | | | | | | |
| WDT | | | | S | Sb | 04 50 05.6 | -1.7 |
| | baz=311 | | | | | | |
| YUS | Yu-Shan | 0.76 | 285 | ⇑iP | Pb | 04 49 58.0 | -0.1 |
| | baz=276 | | | | | | |
| YUS | | | | i S | Sb | 04 50 07.3 | -0.9 |
| | baz=276 | | | | | | |
| TWG | Pinlang | 0.78 | 234 | ⇓iP | Pb | 04 49 57.4 | -0.7 |
| | baz=240 | | | | | | |
| TWG | | | | eS | Sb | 04 50 06.7 | -1.5 |
| | baz=240 | | | | | | |
| TWD | Chiawan | 0.80 | 350 | i P | Pb | 04 49 58.0 | -0.5 |
| | baz=4.0 | | | | | | |
| TWD | | | | i S | Sb | 04 50 08.0 | -0.8 |
| | baz=4.0 | | | | | | |
| ALS | Alishan | 0.90 | 285 | ⇑iP | Pb | 04 50 00.3 | 0.0 |
| | baz=283 | | | | | | |
| ALS | | | | i S | Sb | 04 50 11.3 | -0.6 |
| | baz=283 | | | | | | |
| STYT | Tauyuan | 0.92 | 262 | ⇑iP | Pb | 04 49 60.0 | -0.6 |
| | baz=255 | | | | | | |
| STYT | | | | i S | Sb | 04 50 11.1 | -1.4 |
| | baz=255 | | | | | | |
| WHF | Hehuan Shan | 0.96 | 333 | ⇑iP | Pb | 04 50 00.6 | -0.9 |
| | baz=335 | | | | | | |
| WHF | | | | S | Sb | 04 50 12.5 | -1.4 |
| | baz=335 | | | | | | |
| SMLT | Sun Moon Lake | 0.98 | 307 | ⇑iP | Pb | 04 50 01.2 | -0.4 |
| | baz=308 | | | | | | |
| SMLT | | | | eS | Sb | 04 50 13.9 | -0.2 |
| | baz=308 | | | | | | |
| ECL | Taimali | 1.01 | 227 | eP | Pn | 04 50 00.3 | -1.7 |
| | baz=234 | | | | | | |
| TYC | Yuchr | 1.02 | 307 | ⇑iP | Pn | 04 50 01.9 | -0.4 |
| | baz=319 | | | | | | |
| CHN5 | Tsauling | 1.03 | 288 | ⇑iP | Pb | 04 50 02.6 | +0.2 |
| | baz=293 | | | | | | |
| CHN5 | | | | S | Sn | 04 50 16.5 | +0.1 |
| | baz=293 | | | | | | |
| WTP | Ta-pu | 1.05 | 268 | ⇑iP | Pb | 04 50 02.7 | +0.1 |
| | baz=258 | | | | | | |
| WTP | | | | eS | Sb | 04 50 16.1 | +0.1 |
| | baz=258 | | | | | | |
| CHN4 | Tsaushan | 1.07 | 274 | ⇑iP | Pb | 04 50 03.2 | +0.2 |
| | baz=266 | | | | | | |
| CHN4 | | | | S | Sn | 04 50 17.2 | +0.1 |
| | baz=266 | | | | | | |
| SGST | Jiashian | 1.09 | 259 | ⇓iP | Pb | 04 50 03.6 | +0.2 |
| | baz=254 | | | | | | |
| SGST | | | | i S | Sn | 04 50 18.1 | +0.3 |
| | baz=254 | | | | | | |
| TWT | Tachien | 1.10 | 331 | ⇑iP | Pn | 04 50 03.2 | -0.3 |
| | baz=332 | | | | | | |
| TWT | | | | S | Sb | 04 50 15.7 | -1.8 |
| | baz=332 | | | | | | |
| CHN1 | Nanshi | 1.13 | 265 | ⇑iP | Pb | 04 50 04.3 | +0.3 |
| | baz=257 | | | | | | |
| CHN1 | | | | i S | Sn | 04 50 19.4 | +0.7 |
| | baz=257 | | | | | | |
| ENA | Nanau | 1.14 | 359 | ⇑P | Pn | 04 50 03.1 | -0.8 |
| | baz=13 | | | | | | |
| ENA | | | | eS | Sb | 04 50 17.5 | -1.0 |
| | baz=13 | | | | | | |
| WNT | Mingjian | 1.14 | 301 | ⇑iP | Pb | 04 50 04.6 | +0.4 |
| | baz=301 | | | | | | |
| WNT | | | | S | Sn | 04 50 19.5 | +0.5 |
| | baz=301 | | | | | | |
| TWK | Hsinying | 1.16 | 269 | eP | Pn | 04 50 04.2 | 0.0 |
| | baz=267 | | | | | | |
| TWK | | | | eS | Sb | 04 50 19.7 | +0.4 |
| | baz=267 | | | | | | |
| WGK | Gukeng | 1.16 | 290 | eP | Pb | 04 50 04.6 | +0.1 |
| | baz=290 | | | | | | |
| WGK | | | | eS | Sb | 04 50 19.9 | +0.7 |
| | baz=290 | | | | | | |
| SSD | Sandimen | 1.16 | 243 | eP | Pn | 04 50 03.9 | -0.3 |
| | baz=233 | | | | | | |
| CHN2 | Minshiung | 1.20 | 282 | eP | Pb | 04 50 06.0 | +0.8 |
| | baz=295 | | | | | | |
| CHN2 | | | | eS | Sb | 04 50 21.8 | +1.6 |
| | baz=295 | | | | | | |
| NNS | Nan Shan | 1.20 | 343 | eP | Pn | 04 50 04.2 | -0.7 |
| | baz=346 | | | | | | |
| NNS | | | | eS | Sn | 04 50 17.8 | -2.7 |
| | baz=346 | | | | | | |
| TAW | Tawu | 1.22 | 221 | eP | Pn | 04 50 03.8 | -1.1 |
| | baz=217 | | | | | | |
| EAST | Anshuo | 1.23 | 223 | ⇓iP | Pn | 04 50 03.9 | -1.3 |
| | baz=220 | | | | | | |
| CHY | Chiayi | 1.24 | 280 | ⇑iP | Pb | 04 50 06.0 | +0.2 |
| | baz=279 | | | | | | |
| CHY | | | | S | Sb | 04 50 22.3 | +0.9 |
| | baz=279 | | | | | | |
| LAY | Lan-yu | 1.26 | 189 | ⇑P | Pn | 04 50 04.0 | -1.6 |
| | baz=186 | | | | | | |
| LAY | | | | eS | Sn | 04 50 19.5 | -2.3 |
| | baz=186 | | | | | | |
| SGLT | Jiouru | 1.29 | 245 | eP | Pb | 04 50 09.0 | +2.2 |
| | baz=241 | | | | | | |
| CHN3 | Shinhua | 1.29 | 261 | eP | Pb | 04 50 07.7 | +0.9 |
| | baz=259 | | | | | | |
| CHN3 | | | | eS | Sb | 04 50 26.2 | +3.2 |
| | baz=259 | | | | | | |
| TCU | Taichung | 1.31 | 311 | ⇑iP | Pb | 04 50 07.2 | +0.1 |
| | baz=312 | | | | | | |
| TCU | | | | eS | Sb | 04 50 25.8 | +2.4 |
| | baz=312 | | | | | | |
| TWM1 | Shoushan | 1.31 | 250 | eP | Pb | 04 50 08.2 | +1.1 |
| | baz=248 | | | | | | |
| TWC | Suao | 1.32 | 4 | eP | Pn | 04 50 06.2 | -0.2 |
| | baz=16 | | | | | | |
| TWC | | | | S | Sn | 04 50 23.2 | -0.1 |
| | baz=16 | | | | | | |
| ENTT | Nioudou | 1.36 | 353 | ⇑P | Pn | 04 50 06.7 | -0.3 |
| | baz=343 | | | | | | |
| ENTT | | | | S | Sn | 04 50 22.9 | -1.4 |
| | baz=343 | | | | | | |
| TWQ1 | Liyutan | 1.39 | 320 | ⇑iP | Pb | 04 50 08.7 | +0.3 |
| | baz=331 | | | | | | |
| TWQ1 | | | | S | Sb | 04 50 26.3 | +0.7 |
| | baz=331 | | | | | | |
| SCZT | Fangliau | 1.39 | 229 | eP | Pn | 04 50 07.3 | 0.0 |
| | baz=222 | | | | | | |
| CHN8 | Yiju | 1.42 | 273 | eP | Pb | 04 50 09.0 | +0.1 |
| | baz=272 | | | | | | |
| CHN8 | | | | eS | Sb | 04 50 27.1 | +0.5 |
| | baz=272 | | | | | | |
| TAI1 | Yung-k'ang | 1.42 | 260 | eP | Pb | 04 50 09.6 | +0.5 |
| | baz=259 | | | | | | |
| NSK | Sanguang | 1.43 | 345 | ⇑iP | Pn | 04 50 08.0 | +0.1 |
| | baz=347 | | | | | | |
| NSK | | | | eS | Sn | 04 50 23.5 | -2.6 |
| | baz=347 | | | | | | |
| TWE | Neicheng | 1.43 | 357 | ⇑P | Pn | 04 50 07.8 | -0.1 |
| | baz=348 | | | | | | |
| TWE | | | | eS | Sn | 04 50 25.8 | -0.2 |
| | baz=348 | | | | | | |
| SCLT | Jiali | 1.44 | 266 | eP | Pb | 04 50 09.2 | -0.1 |
| | baz=264 | | | | | | |
| SCLT | | | | eS | Sb | 04 50 28.1 | +1.0 |
| | baz=264 | | | | | | |
| NSY | Sanyi | 1.44 | 321 | eP | Pb | 04 50 09.4 | 0.0 |
| | baz=337 | | | | | | |
| NSY | | | | S | Sb | 04 50 28.2 | +0.9 |
| | baz=337 | | | | | | |
| WSF | Szhu | 1.45 | 284 | eP | Pb | 04 50 08.9 | -0.5 |
| | baz=284 | | | | | | |
| WSF | | | | eS | Sb | 04 50 26.9 | -0.5 |
| | baz=284 | | | | | | |
| WTCT | Ta-ch'eng | 1.47 | 293 | eP | Pb | 04 50 09.1 | -0.6 |
| | baz=293 | | | | | | |
| WTCT | | | | eS | Sb | 04 50 27.6 | -0.4 |
| | baz=293 | | | | | | |
| NSTT | Nanjuang | 1.50 | 333 | P | Pb | 04 50 10.0 | -0.4 |
| | baz=345 | | | | | | |
| NSTT | | | | S | Sn | 04 50 28.1 | +0.2 |
| | baz=345 | | | | | | |
| KAU | Kaohsiung | 1.51 | 242 | eP | Pb | 04 50 11.4 | +0.9 |
| | baz=259 | | | | | | |
| EGS | | 1.56 | 6 | eP | Pn | 04 50 08.8 | -0.9 |
| | baz=18 | | | | | | |
| HEN | Hengchun | 1.58 | 216 | eP | Pb | 04 50 12.2 | +0.4 |
| | baz=214 | | | | | | |
| HEN | | | | eS | Sn | 04 50 28.7 | -1.1 |
| | baz=214 | | | | | | |
| TWP | Hsiaoliuchiu | 1.59 | 234 | eP | Pb | 04 50 12.6 | +0.8 |
| | baz=231 | | | | | | |
| TSEB | Hengchuen, Pin | 1.59 | 210 | eP | Pb | 04 50 11.4 | -0.5 |
| | baz=209 | | | | | | |
| TSEB | | | | eS | Sn | 04 50 29.9 | 0.0 |
| | baz=209 | | | | | | |
| JYNG | Yonagunijimaku | 1.59 | 43 | P | Pn | 04 50 10.8 | +0.7 |
| JYNG | | | | S | Sn | 04 50 30.1 | 0.0 |
| TWK1 | Hengchun | 1.60 | 213 | eP | Pn | 04 50 09.9 | -0.3 |
| | baz=210 | | | | | | |
| YOJ | Yonaguni jima | 1.64 | 44 | P | Pn | 04 50 11.4 | +0.6 |
| YOJ | | | | S | Sn | 04 50 31.1 | -0.2 |
| YOJ | Yonaguni jima | 1.64 | 44 | eP | Pn | 04 50 11.5 | +0.7 |
| | baz=59 | | | | | | |
| YOJ | | | | eS | Sn | 04 50 31.6 | +0.3 |
| | baz=59 | | | | | | |
| TWA | Mucha | 1.69 | 355 | eP | Pn | 04 50 10.7 | -0.8 |
| | baz=357 | | | | | | |
| NWF | Wu-fen Shan | 1.78 | 1 | eP | Pn | 04 50 13.8 | +1.0 |
| | baz=348 | | | | | | |
| NWF | | | | eS | Sn | 04 50 35.4 | +0.7 |
| | baz=348 | | | | | | |
| TWS1 | Kuangyinshan | 1.83 | 350 | eP | Pb | 04 50 14.7 | -1.3 |
| | baz=352 | | | | | | |
| WDGT | Dungji | 1.92 | 270 | eP | Pn | 04 50 14.2 | -0.5 |
| | baz=268 | | | | | | |
| WDGT | | | | eS | Sn | 04 50 36.4 | -1.8 |
| | baz=268 | | | | | | |
| HATJ | Hateruma jima | 2.03 | 67 | P | Pn | 04 50 17.0 | +0.8 |
| HATJ | | | | S | Sn | 04 50 40.7 | -0.2 |
| PNG | Penghu | 2.04 | 278 | eP | Pn | 04 50 16.5 | +0.3 |
| | baz=278 | | | | | | |
| PNG | | | | eS | Sn | 04 50 39.5 | -1.6 |
| | baz=278 | | | | | | |
| IRIF | Iriomote-Funau | 2.09 | 60 | S | Sn | 04 50 42.5 | +0.1 |
| JKRS | Kuro-shima | 2.27 | 65 | P | Pn | 04 50 20.3 | +0.8 |
| JKRS | | | | S | Sn | 04 50 47.4 | +0.5 |
| JIJ | Ishigaki jima | 2.44 | 63 | P | Pn | 04 50 22.4 | +0.6 |
| JIJ | | | | S | Sn | 04 50 49.5 | -1.4 |
| JISG | Ishigakijimahi | 2.67 | 61 | P | Pn | 04 50 25.5 | +0.5 |
| JISG | | | | S | Sn | 04 50 55.6 | -1.2 |
| JTJ | Tarama | 3.02 | 63 | P | Pn | 04 50 30.4 | +0.7 |
| JTJ | | | | S | Sn | 04 51 05.4 | +0.2 |
| KNM | Kinmen | 3.24 | 291 | eP | Pn | 04 50 33.9 | +1.1 |
| | baz=291 | | | | | | |
| KNM | | | | eS | Sn | 04 51 10.4 | -0.3 |
| | baz=291 | | | | | | |
| JIRB | Irabujima | 3.48 | 63 | P | Pn | 04 50 36.7 | +0.6 |
| JIRB | | | | S | Sn | 04 51 16.3 | -0.4 |
| JNU | Nakatsue | 12.67 | 37 | LR | LR | 04 57 15.3 | |
| | comp=Z,39nm,19.0s,baz=113,slow=36 | | | | | | |
| KSRS | Korea Array | 15.08 | 19 | Pn | Pn | 04 53 15.4 | +0.4 |
| | 0.2nm,0.3s,baz=196,slow=12,SNR=3.0 | | | | | | |
| CMAR | Chiang Mai Arr | 21.84 | 262 | P | P | 04 54 35.7 | +1.3 |
| | 0.7nm,0.3s,baz=60,slow=9.6,SNR=5.1 | | | | | | |
| MKAR | Makanchi Array | 39.34 | 316 | P | P | 04 57 11.5 | +0.5 |
| | 0.4nm,0.4s,baz=118,slow=6.8,SNR=3.7 | | | | | | |
| ZALV | Zalesovo Beam | 41.28 | 327 | P | P | 04 57 28.2 | +1.4 |
| | 0.3nm,0.3s,baz=128,slow=11,SNR=2.2 | | | | | | |
| WRA | Warramunga Arr | 44.69 | 163 | P | P | 04 57 53.4 | -1.4 |
| | 0.1nm,0.5s,baz=343,slow=8.2,SNR=4.0 | | | | | | |

*ISCJB **10** 05:06:47.8±0.7, 38°.21N±0°.04×27°.42E±0°.04, h10km±7km, Error ellipse: s-maj=7.7km s-min=4.8km az=26.2*
*DDA **10** 05:06:47.5, 38°.21N×27°.36E, h7km, Md2.5*
*ISK **10** 05:06:47.7, 38°.21N×27°.47E, h6km, MD2.5*
*CSEM **10** 05:06:48.7±0.3, 38°.23N×27°.46E, h5km, MD2.5, Error ellipse: s-maj=7.1km s-min=4.6km az=44.0*
**ISC 10 05:06:48.1**±0.9, **38°.20N**±0°.04×**27°.43E**±0°.03, **h13**km±10km, **n11**, σ**0s.52**/22, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IZM | Izmir | 0.24 | 327 | PG | Pg | 05 06 53.1 | -0.1 |
| IZM | | | | eSG | Sg | 05 06 57.0 | +0.3 |
| IZM | Izmir | 0.24 | 327 | i Pg | Pg | 05 06 53.1 | -0.1 |
| IZM | | | | eSg | Sg | 05 06 57.0 | +0.3 |
| AYDB | Zeytinkoy-Aydi | 0.45 | 124 | ePG | Pg | 05 06 56.5 | -0.5 |
| AYDB | | | | eSG | Sg | 05 07 02.8 | -0.1 |
| AYDB | Zeytinkoy-Aydi | 0.45 | 124 | ePg | Pg | 05 06 56.5 | -0.5 |
| AYDB | | | | eSg | Sg | 05 07 02.8 | -0.1 |
| AYDN | Tasoluk | 0.65 | 146 | i P | Pb | 05 07 01.9 | +0.7 |
| AYDN | | | | i S | Sb | 05 07 10.6 | +0.5 |
| AYDN | Tasoluk | 0.65 | 146 | P | Pb | 05 07 01.9 | +0.7 |
| AYDN | | | | S | Sb | 05 07 10.6 | +0.5 |
| ZEY | ˜zmir | 0.73 | 273 | P | Pg | 05 07 01.2 | -1.0 |
| ZEY | | | | S | Sg | 05 07 11.0 | -0.7 |
| MANT | Manisa | 0.94 | 71 | i P | Pn | 05 07 07.1 | 0.0 |
| MANT | | | | i S | Sg | 05 07 18.1 | -0.4 |
| MANT | Manisa | 0.94 | 71 | P | Pn | 05 07 07.1 | 0.0 |
| MANT | | | | S | Sg | 05 07 18.1 | -0.4 |
| KULA | Kula-Manisa | 1.02 | 72 | ePG | Pg | 05 07 07.1 | -0.7 |
| KULA | | | | eSG | Sb | 05 07 21.1 | +0.1 |
| KULA | Kula-Manisa | 1.02 | 72 | ePg | Pg | 05 07 07.1 | -0.7 |
| KULA | | | | eSg | Sb | 05 07 21.1 | +0.1 |

**MEX 10 05:19:55.1**±0.7, **15°.28N**×**92°.84W**, **h107**km±7km, **MD3.6, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.56 | 319 | eP | Pn | 05 20 11.0 | -1.1 |
| PCIG | | | | eS | Sn | 05 20 23.2 | -1.6 |
| CCIG | Comitan | 1.20 | 34 | eP | Pn | 05 20 17.6 | -0.9 |
| CCIG | | | | eS | Sn | 05 20 34.6 | -1.5 |
| TGIG | | 1.51 | 350 | eP | Pn | 05 20 20.4 | -1.7 |
| TGIG | | | | eS | Sn | 05 20 38.9 | -3.5 |

*JMA **10** 05:25:17.9, 34°.71N×136°.80E, h366km, M2.9*
*ISCJB **10** 05:25:19.5±0.5, 34°.83N±0°.08×136°.85E±0°.08, h350km, mb3.1/2, Error ellipse: s-maj=12.6km s-min=7.6km az=148.5*
*IDC **10** 05:25:20.7±0.8, 34°.81N×136°.71E, h329km±18km, mb3.0/2, mb1 3.0/6, mb1mx2.8/38, mbtmp3.5/6, Error ellipse: s-maj=35.9km s-min=22.4km az=164.0*
**ISC 10 05:25:19.2**±1.3, **34°.8N**±0°.1×**136°.81E**±0°.08, **h350**km, **n17**, σ**1s.08**/20, **Western Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JIE | Ise | 0.37 | 194 | P | Pn | 05 26 04.0 | +0.7 |
| JGM | Miyama | 0.94 | 355 | P | Pn | 05 26 05.5 | +0.8 |
| JWY | Kouya | 1.14 | 242 | P | Pn | 05 26 06.3 | +0.6 |
| JWT | Wachi | 1.27 | 295 | P | Pn | 05 26 06.8 | +0.7 |
| JWZ | Kozaga | 1.52 | 217 | P | Pn | 05 26 07.9 | +0.3 |
| JKG | Kaga | 1.57 | 346 | P | Pn | 05 26 08.3 | +0.7 |
| MAT | Matsushiro | 2.11 | 32 | P | Pn | 05 26 12.3 | +1.1 |
| MAT | | | | S | S | 05 26 51.7 | -1.4 |
| MAT | Matsushiro | 2.11 | 32 | P | Pn | 05 26 12.5 | +1.3 |
| MJAR | Matsushiro Arr | 2.11 | 32 | P | Pn | 05 26 11.1 | -0.1 |
| | 1.3nm,0.3s,baz=208,slow=8.3,SNR=24 | | | | | | |
| MJAR | | | | S | S | 05 26 51.5 | -1.6 |
| | 0.1nm,0.3s,baz=160,slow=31,SNR=4.2 | | | | | | |
| JRY | Ryogami san | 2.12 | 53 | P | Pn | 05 26 12.7 | +1.4 |
| JRY | | | | eS | S | 05 26 53.7 | +0.5 |
| JAG | Ashikaga | 2.72 | 52 | P | Pn | 05 26 16.5 | +0.5 |
| JAG | | | | S | S | 05 26 59.4 | -2.4 |
| BSO1 | Boso 1 | 3.43 | 91 | P | Pn | 05 26 22.3 | +0.4 |
| BSO1 | | | | eS | S | 05 27 11.4 | -1.1 |
| JNU | Nakatsue | 5.20 | 253 | P | Pn | 05 26 41.5 | +0.5 |
| | 0.6nm,0.3s,baz=247,slow=1.8,SNR=6.1 | | | | | | |
| KSRS | Korea Array | 7.68 | 293 | P | Pn | 05 27 09.3 | -0.2 |
| | 0.2nm,0.3s,baz=104,slow=14,SNR=6.9 | | | | | | |
| ASAJ | Asahikawa | 10.36 | 24 | P | P | 05 27 42.7 | +0.3 |
| | 0.4nm,0.3s,baz=219,slow=14,SNR=5.2 | | | | | | |
| WRA | Warramunga Arr | 54.45 | 183 | P | P | 05 34 15.3 | +3.8 |
| | 0.5nm,0.3s,baz=0.2,slow=7.7,SNR=17 | | | | | | |
| ASAR | Alice Springs | 58.17 | 183 | P | P | 05 34 41.2 | +3.7 |
| | 0.2nm,0.3s,baz=359,slow=6.0,SNR=6.9 | | | | | | |

*ISCJB **10** 05:33:14.2±1.0, 43°.14N±0°.07×145°.66E±0°.06, h50km±9km, Error ellipse: s-maj=12.1km s-min=5.5km az=153.5*
*JMA **10** 05:33:14.9±0.1, 43°.15N×145°.62E, h51km±1km, M4.0*
*JMA Felt II J1.*
*SKHL **10** 05:33:15.6±0.7, 43°.15N×145°.66E, h38km±7km, mb4.8/3*
**ISC 10 05:33:14.8**±2.9, **43°.13N**±0°.08×**145°.66E**±0°.05, **h36**km±2km, **n10**, σ**0s.74**/19, **3C-4D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NEM2 | Nemuro 2 | 0.24 | 14 | ⇓P | Pn | 05 33 23.4 | +0.5 |
| NEM2 | | | | eS | Sn | 05 33 29.5 | -0.6 |
| JAK | Akkeshi | 0.72 | 260 | ⇑P | Pn | 05 33 28.5 | 0.0 |
| JAK | | | | eS | Sn | 05 33 38.0 | -0.3 |
| JNK | Nakash | 0.82 | 304 | ⇓P | Pn | 05 33 29.5 | -0.4 |
| JNK | | | | eS | Sn | 05 33 39.9 | -1.0 |
| JRA | Rausu | 0.90 | 334 | ⇓P | Pn | 05 33 30.9 | 0.0 |
| JRA | | | | eS | Sn | 05 33 42.9 | +0.2 |
| YUK | Yuzh-Kuril'sk | 0.91 | 9 | eP | Pn | 05 33 30.8 | -0.3 |
| YUK | | | | AMB | AMB | 05 33 31.8 | |
| | 90nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 05 33 31.8 | |
| | 311nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 05 33 31.8 | |
| | 1µm,0.2s | | | | | | |
| YUK | | | | eS | Sn | 05 33 42.3 | -0.8 |
| YUK | | | | A | A | 05 33 45.9 | |
| | 1µm,0.4s | | | | | | |
| YUK | | | | A | A | 05 33 45.9 | |
| | 2µm,0.4s | | | | | | |
| SHO | Shikotan | 1.12 | 49 | eP | Pn | 05 33 33.6 | -0.4 |
| SHO | | | | AMB | AMB | 05 33 35.0 | |
| | 200nm,0.2s | | | | | | |
| SHO | | | | eS | Sn | 05 33 46.8 | -1.4 |
| SHO | | | | A | A | 05 33 48.7 | |
| | 2µm,0.4s | | | | | | |
| JOB | Onbets | 1.36 | 261 | ⇑P | Pn | 05 33 37.2 | 0.0 |
| JOB | | | | eS | Sn | 05 33 53.9 | -0.1 |
| JAR | Ashorobuto | 1.39 | 277 | ⇑P | Pn | 05 33 37.8 | +0.1 |
| JTKR | Abashiri--Toko | 1.53 | 304 | ⇓P | Pn | 05 33 40.0 | +0.5 |
| JTKR | | | | eS | Sn | 05 33 58.9 | +0.8 |
| KUR | Kuril'sk | 2.63 | 36 | eP | Pn | 05 33 56.2 | +1.5 |
| KUR | | | | AMB | AMB | 05 33 57.1 | |
| | 14nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 05 33 57.1 | |
| | 12nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 05 33 57.1 | |
| | 38nm,0.3s | | | | | | |
| KUR | | | | eS | Sn | 05 34 26.0 | +0.6 |
| KUR | | | | A | A | 05 34 33.1 | |
| | 125nm,0.4s | | | | | | |
| KUR | | | | A | A | 05 34 33.1 | |

123nm,0.4s

**IDC 10 05:40:51.4±2.5, 4°.41N×62°.84E, h0km, mb3.8/5, mb1 3.8/5, mb1mx3.4/62, mbtmp3.8/5, MS3.4/7, Ms1 3.4/7, ms1mx3.2/35, Error ellipse: s-maj=83.6km s-min=27.5km az=127.0, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08N2** | **Diego Garcia H** | **13.42** | **143** | T | T | 05 58 07.7 | |
| | baz=321,slow=76,SNR=154 | | | | | | |
| **H08N3** | **Diego Garcia H** | **13.43** | **143** | T | T | 05 58 08.5 | |
| | baz=321,slow=76,SNR=168 | | | | | | |
| **H08N1** | **Diego Carcia H** | **13.44** | **143** | T | T | 05 58 07.7 | |
| | baz=321,slow=76,SNR=141 | | | | | | |
| **PALK** | **Pallekele** | **17.99** | **80** | LR | LR | 05 50 43.5 | |
| | comp=Z,156nm,18.5s,baz=296,slow=33 | | | | | | |
| **ATD** | **Arta Tunnel** | **21.02** | **291** | LR | LR | 05 52 15.0 | |
| | comp=Z,56nm,18.6s,baz=94,slow=32 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **26.15** | **258** | LR | LR | 05 54 52.2 | |
| | comp=Z,120nm,21.7s,baz=46,slow=32 | | | | | | |
| **GEYT** | **Alibeck** | **33.64** | **353** | LR | LR | 06 00 35.1 | |
| | comp=Z,32nm,20.1s,baz=200,slow=35 | | | | | | |
| **PSI** | **Prapat** | **36.04** | **91** | LR | LR | 05 59 17.2 | |
| | comp=Z,105nm,21.5s,baz=218,slow=31 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.93** | **65** | LR | LR | 06 03 43.1 | |
| | comp=Z,31nm,18.3s,baz=238,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.45** | **19** | P | P | 05 49 13.3 | +1.1 |
| | 0.5nm,0.8s,baz=213,slow=6.9,SNR=3.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **46.04** | **356** | P | P | 05 49 16.4 | -0.4 |
| | 1.4nm,0.6s,baz=156,slow=6.8,SNR=5.4 | | | | | | |
| **BOSA** | **Boshof** | **48.83** | **225** | P | P | 05 49 38.8 | -0.2 |
| | 1.2nm,0.7s,baz=48,slow=12,SNR=3.1 | | | | | | |
| BOSA | | | | LR | LR | 06 08 14.7 | |
| | comp=Z,65nm,18.5s,baz=326,slow=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.54** | **16** | P | P | 05 50 05.2 | -1.2 |
| | 0.6nm,0.6s,baz=218,slow=9.0,SNR=3.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.92** | **283** | P | P | 05 51 06.8 | +0.1 |
| | 0.6nm,1.0s,baz=88,slow=8.9,SNR=2.6 | | | | | | |

*SZGRF **10** 05:47:16.4, 24°.76S×178°.91W, h33km*
*ISCJB **10** 05:48:17.4±0.2, 23°.36S±0°.04×179°.84W±0°.07, h536km, mb4.5/46, Error ellipse: s-maj=8.3km s-min=4.4km az=21.0*
*IDC **10** 05:48:17.2±2.1, 23°.27S×179°.69W, h529km±24km, mb3.8/17, mb1 4.0/18, mb1mx3.9/30, mbtmp4.7/18, Error ellipse: s-maj=14.5km s-min=12.7km az=125.0*
*BJI **10** 05:48:18.6, 23°.30S×179°.80W, h550km, mb4.7/16, mB4.8/10*
*NEIC **10** 05:48:20.2±0.8, 23°.41S×179°.83W, h562km±9km, mb4.8/34, Error ellipse: s-maj=9.6km s-min=7.0km az=125.0*
**ISC 10 05:48:17.6±0.4, 23°.44S±0°.06×179°.58W±0°.08, h536km, n160, σ1s56/193, mb4.5/46, 15C-8D, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **6.10** | **338** | *e*P | **P** | **05 49 59.2** | **+2.4** |
| **AFI** | **Afiamalu** | **12.02** | **39** | P | **P** | **05 50 54.5** | **-2.1** |
| | 14nm,0.3s,baz=98,slow=2.1,SNR=16 | | | | | | |
| **AFI** | **Afiamalu** | **12.02** | **39** | *e*P | **P** | **05 50 55.2** | **-1.3** |
| **DZM** | **Mont Dzumac** | **12.97** | **273** | P | **P** | **05 51 07.8** | **+1.4** |
| | 0.9nm,0.3s,baz=189,slow=5.0,SNR=8.2 | | | | | | |
| **MKAZ** | **Moumakai** | **14.36** | **197** | PN | **P** | **05 51 22.6** | **+2.2** |
| **URZ** | **Urewera** | **15.04** | **190** | P | **P** | **05 51 26.2** | **-1.4** |
| | 4.5nm,0.3s,baz=273,slow=4.5,SNR=19 | | | | | | |
| URZ | | | | S | **S** | **05 53 59.4** | **-4.6** |
| | 0.9nm,0.3s,baz=76,slow=21,SNR=6.0 | | | | | | |
| **URZ** | **Urewera** | **15.04** | **190** | *e*P | **P** | **05 51 27.4** | **-0.2** |
| | 203nm,2.2s | | | | | | |
| URZ | | | | S | **S** | **05 53 59.4** | **-4.6** |
| **RIGZ** | **Rimuhau** | **15.38** | **188** | PN | **P** | **05 51 31.8** | **+0.6** |
| RIGZ | | | | *e*SN | **S** | **05 54 07.0** | **-3.4** |
| **BKZ** | **Black Stump Fm** | **16.03** | **191** | *e*P | **P** | **05 51 36.8** | **-1.0** |
| | 24nm,1.1s | | | | | | |
| **SNZO** | **South Karori** | **18.45** | **194** | *e*P | **P** | **05 52 01.7** | **+1.6** |
| | 80nm,0.7s | | | | | | |
| **TCW** | **Tory Channel** | **18.45** | **195** | PN | **P** | **05 52 00.2** | **+0.1** |
| TCW | | | | SN | **S** | **05 55 02.3** | **+1.1** |
| **NNZ** | **Nelson** | **18.68** | **197** | PN | **P** | **05 52 02.8** | **+0.6** |
| NNZ | | | | SN | **S** | **05 55 07.6** | **+2.7** |
| **THZ** | **Tophouse** | **19.32** | **197** | PN | **P** | **05 52 09.2** | **+1.0** |
| THZ | | | | *e*SN | **S** | **05 55 12.0** | **-3.3** |
| **THZ** | **Tophouse** | **19.32** | **197** | *e*P | **P** | **05 52 09.8** | **+1.7** |
| | 58nm,0.6s | | | | | | |
| **KHZ** | **Kahutara** | **19.77** | **195** | PN | **P** | **05 52 12.0** | **-0.1** |
| **KHZ** | **Kahutara** | **19.77** | **195** | *e*P | **P** | **05 52 13.9** | **+1.8** |
| | 1µm,2.5s | | | | | | |
| **LTZ** | **Lake Taylor** | **20.44** | **197** | PN | **P** | **05 52 18.4** | **+0.2** |
| **OXZ** | **Oxford** | **21.01** | **197** | PN | **P** | **05 52 23.7** | **+0.4** |
| **RPZ** | **Rata Peaks** | **21.65** | **199** | P | **P** | **05 52 28.5** | **-0.6** |
| | 36nm,0.6s,baz=40,slow=0.9,SNR=9.7 | | | | | | |
| **CAN** | **Canberra** | **29.71** | **239** | *e*P | **P** | **05 53 41.1** | **+0.7** |
| | 26nm,0.6s | | | | | | |
| **CTA** | **Charters Tower** | **31.87** | **269** | P | **P** | **05 53 59.1** | **+0.1** |
| | 24nm,0.3s,baz=95,slow=11,SNR=65 | | | | | | |
| **CTAO** | **Charters Tower** | **31.87** | **269** | *e*P | **P** | **05 53 57.5** | **-1.6** |
| | 28nm,0.4s | | | | | | |
| **AS01** | **Alice Springs** | **42.45** | **260** | *e*P | **P** | **05 55 24.5** | **-1.3** |
| **ASAR** | **Alice Springs** | **42.49** | **260** | P | **P** | **05 55 25.4** | **-0.7** |
| | 7.7nm,0.5s,baz=96,slow=7.0,SNR=107 | | | | | | |
| ASAR | | | | S | S | 06 01 02.1 | -7.6 |
| | 1.2nm,0.8s,baz=93,slow=16,SNR=4.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.83** | **266** | P | **P** | **05 55 27.5** | **-1.3** |
| | 4.3nm,0.3s,baz=94,slow=8.5,SNR=156 | | | | | | |
| **JAY** | **Jayapura** | **43.70** | **292** | P | **P** | **05 55 34.0** | **-1.6** |
| | 7.7nm,0.6s,baz=186,slow=2.6,SNR=6.6 | | | | | | |
| **FORT** | **Forrest** | **46.84** | **249** | *e*P | **P** | **05 55 58.5** | **-0.9** |
| | 76nm,0.6s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.25** | **265** | P | **P** | **05 56 32.1** | **-0.1** |
| | 2.7nm,0.4s,baz=80,slow=7.2,SNR=21 | | | | | | |
| **SIJI** | **Sorong** | **52.66** | **288** | P | **P** | **05 56 41.3** | **-1.1** |
| | 19nm,0.7s,baz=61,slow=9.1,SNR=9.1 | | | | | | |
| **VNDA** | **Vanda** | **54.87** | **185** | P | **P** | **05 56 59.5** | **+2.5** |
| | 2.3nm,0.5s,baz=4.0,slow=9.4,SNR=20 | | | | | | |
| **VNDA** | **Vanda** | **54.87** | **185** | *e*P | **P** | **05 56 59.7** | **+2.8** |
| | 3.3nm,0.9s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **55.78** | **245** | P | **P** | **05 57 03.3** | **-0.8** |
| | 13nm,0.9s,baz=100,slow=0.1,SNR=6.4 | | | | | | |
| **CASY** | **Casey** | **60.69** | **206** | *e*P | **P** | **05 57 36.7** | **0.0** |
| | 7.6nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **66.64** | **180** | *e*P | **P** | **05 58 16.6** | **+1.8** |
| | 125nm,2.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **71.74** | **325** | P | **P** | **05 58 44.6** | **-1.1** |
| | 3.2nm,0.8s,baz=163,slow=5.8,SNR=10 | | | | | | |
| **KSRS** | **Korea Array** | **78.15** | **320** | P | **P** | **05 59 21.1** | **-0.4** |
| | 2.8nm,0.8s,baz=134,slow=5.8,SNR=14 | | | | | | |
| **KSAR** | **Wonju Array Be** | **78.16** | **320** | P | **P** | **05 59 21.1** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **78.75** | **346** | P | **P** | **05 59 23.8** | **-0.6** |
| | 9.3nm,0.7s,baz=148,slow=7.7,SNR=12 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **80.59** | **327** | P | **P** | **05 59 33.5** | **-0.7** |
| | 3.7nm,0.6s,baz=133,slow=4.5,SNR=7.8 | | | | | | |
| **NJ2** | **Nanjing** | **80.66** | **311** | *e*P | **P** | **05 59 34.1** | **-0.8** |
| NJ2 | | | | PMZ | | | |
| | 20nm,0.6s | | | | | | |
| **ISA** | **Isabella** | **82.43** | **46** | *e*P | **P** | **05 59 45.3** | **+1.3** |
| **CMB** | **Columbia Colle** | **82.60** | **43** | *e*P | **P** | **05 59 46.0** | **+1.2** |
| **WDC** | **Whiskeytown Da** | **82.86** | **40** | *e*P | **P** | **05 59 47.5** | **+1.6** |
| | 76nm,2.5s | | | | | | |
| **GSC** | **Goldstone** | **83.33** | **47** | *e*P | **P** | **05 59 49.9** | **+1.4** |
| | 5.8nm,0.9s | | | | | | |
| **NV01** | **Mina Array Sit** | **84.16** | **44** | *e*P | **P** | **05 59 53.4** | **+0.6** |
| **NVAR** | **Mina Array Bea** | **84.16** | **44** | P | **P** | **05 59 53.5** | **+0.8** |
| | 1.0nm,0.5s,baz=217,slow=8.3,SNR=6.0 | | | | | | |
| **TPNV** | **Topopah Spring** | **84.64** | **46** | *e*P | **P** | **05 59 56.0** | **+1.0** |
| | 79nm,2.8s | | | | | | |
| **TUC** | **Tucson** | **85.93** | **52** | *e*P | **P** | **06 00 03.6** | **+2.3** |
| | 5.8nm,0.9s | | | | | | |
| **WVOR** | **Wild Horse Val** | **86.31** | **40** | *e*P | **P** | **06 00 04.1** | **+1.2** |
| | 7.5nm,1.1s | | | | | | |
| **GYA** | **Guiyang** | **86.85** | **300** | *e*P | **P** | **06 00 05.8** | **0.0** |
| GYA | | | | pP | **pP** | **06 02 06.4** | **+3.3** |
| GYA | | | | sP | **sP** | **06 03 01.0** | **+3.7** |
| GYA | | | | PP | **PP** | **06 03 40.5** | **+1.7** |
| GYA | | | | S | **S** | **06 09 56.6** | **-2.8** |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **CCUT** | **Cedar City** | **86.89** | **47** | *e*P | **P** | **06 00 07.3** | **+1.4** |
| | 3.1nm,0.9s | | | | | | |
| **J08A** | **Circle Bar Ran** | **86.96** | **40** | *e*P | **P** | **06 00 07.1** | **+1.2** |
| | 15nm,1.4s | | | | | | |
| **SUA** | **Susitna One** | **87.75** | **13** | *e*P | **P** | **06 00 08.7** | **-0.5** |
| | 16nm,0.6s | | | | | | |
| **E07A** | **Sunnyside** | **88.10** | **37** | *e*P | **P** | **06 00 12.4** | **+1.3** |
| | 215nm,2.8s | | | | | | |
| **PMR** | **Palmer** | **88.21** | **14** | *e*P | **P** | **06 00 10.9** | **-0.3** |
| | 8.7nm,0.9s | | | | | | |
| **MFID** | **Camas Ranch** | **88.56** | **41** | *e*P | **P** | **06 00 14.6** | **+1.2** |
| | 6.5nm,0.9s | | | | | | |
| **D08A** | **Wollman Farm,** | **88.91** | **37** | *e*P | **P** | **06 00 16.0** | **+1.2** |
| | 56nm,2.0s | | | | | | |
| **CAST** | **Castle Rocks** | **89.24** | **12** | *e*P | **P** | **06 00 13.0** | **-3.0** |
| **TMUT** | **Trail Mountain** | **89.25** | **46** | *e*P | **P** | **06 00 18.9** | **+1.9** |
| | 28nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **89.40** | **298** | P | **P** | **06 00 18.6** | **+0.7** |
| KMI | | | | PMZ | | | |
| | 10.0nm,0.7s | | | | | | |
| KMI | | | | PMZ | | | |
| | 43nm,3.9s | | | | | | |
| **SPUT** | **South Promonto** | **89.50** | **44** | *e*P | **P** | **06 00 19.2** | **+1.3** |
| | 6.8nm,1.0s | | | | | | |
| **HLID** | **Hailey** | **89.50** | **41** | *e*P | **P** | **06 00 19.3** | **+1.4** |
| | 64nm,2.8s | | | | | | |
| **O16A** | **Springville** | **89.53** | **45** | *e*P | **P** | **06 00 18.1** | **0.0** |
| | 4.1nm,0.8s | | | | | | |
| **HVU** | **Hansel Valley** | **89.54** | **43** | *e*P | **P** | **06 00 19.3** | **+1.2** |
| | 5.2nm,0.7s | | | | | | |
| **SRU** | **San Rafael** | **89.60** | **47** | *e*P | **P** | **06 00 19.7** | **+1.3** |
| | 8.8nm,0.7s | | | | | | |
| **TRF** | **Thorofare Moun** | **89.62** | **13** | *e*P | **P** | **06 00 17.0** | **-0.9** |
| | 7.6nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **89.63** | **55** | *e*P | **P** | **06 00 20.0** | **+1.4** |
| | 3.7nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.73** | **290** | P | **P** | **06 00 19.6** | **+0.3** |
| | 3.1nm,0.8s,baz=137,slow=3.4,SNR=13 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **89.86** | **58** | *e*P | **P** | **06 00 21.1** | **+1.3** |
| **TXAR** | **Lajitas Array** | **89.86** | **58** | P | **P** | **06 00 21.5** | **+1.7** |
| | 2.8nm,0.7s,baz=214,slow=6.5,SNR=40 | | | | | | |
| **CHTO** | **Chiang Mai** | **89.88** | **290** | *e*P | **P** | **06 00 20.9** | **+0.9** |
| | 5.6nm,0.8s | | | | | | |
| **TCUT** | **Toone Canyon** | **90.06** | **45** | *e*P | **P** | **06 00 21.9** | **+1.3** |
| | 80nm,2.0s | | | | | | |
| **HWUT** | **Hardware Ranch** | **90.22** | **44** | *e*P | **P** | **06 00 22.0** | **+0.7** |
| | 4.6nm,0.7s | | | | | | |
| **ANMO** | **Albuquerque** | **90.37** | **52** | *e*P | **P** | **06 00 23.1** | **+0.9** |
| **HHC** | **Hu-ho-hao-te** | **90.37** | **315** | *e*P | **P** | **06 00 22.5** | **+0.6** |
| HHC | | | | pP | **pP** | **06 02 23.1** | **+3.0** |
| HHC | | | | sP | **sP** | **06 03 15.7** | **+1.7** |
| HHC | | | | S | **S** | **06 10 28.1** | **-2.9** |
| HHC | | | | PMZ | | | |
| | 12nm,1.3s | | | | | | |
| HHC | | | | PMZ | | | |
| | 100nm,8.3s | | | | | | |
| **AHID** | **Auburn Hatcher** | **91.12** | **43** | *e*P | **P** | **06 00 26.8** | **+1.4** |
| | 6.6nm,0.6s | | | | | | |
| **CD2** | **Chengdu** | **91.16** | **303** | P | **P** | **06 00 25.0** | **-0.7** |
| CD2 | | | | pP | **pP** | **06 02 25.7** | **+1.8** |
| CD2 | | | | sP | **sP** | **06 03 21.3** | **+3.5** |
| CD2 | | | | SKS | **SKSac** | **06 10 03.6** | **-3.0** |
| CD2 | | | | S | **S** | **06 10 35.6** | **-2.7** |
| CD2 | | | | sS | **sS** | **06 14 12.6** | **+2.7** |
| CD2 | | | | SS | **SS** | **06 16 57.5** | **-2.1** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| **CCB** | **Clear Creek Bu** | **91.20** | **13** | *e*P | **P** | **06 00 23.9** | **-1.0** |
| **ILAR** | **Eielson Array** | **91.50** | **13** | P | **P** | **06 00 24.9** | **-1.4** |
| | 0.9nm,0.7s,baz=223,slow=6.0,SNR=12 | | | | | | |
| **BW06** | **Boulder Array** | **92.09** | **44** | *e*P | **P** | **06 00 29.8** | **-0.1** |
| **SDCO** | **Great Sand Dun** | **92.37** | **50** | *e*P | **P** | **06 00 32.2** | **+0.8** |
| | 33nm,2.7s | | | | | | |
| **LZH** | **Lanzhou** | **93.40** | **308** | *e*P | **P** | **06 00 39.1** | **+3.1** |
| LZH | | | | PMZ | | | |
| | 14nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **111.85** | **321** | PKiKP | **PKiKP** | **06 05 48.7** | **-2.6** |
| | 0.7nm,0.4s,baz=333,slow=1.7,SNR=4.0 | | | | | | |
| **KSH** | **Kashi** | **115.34** | **304** | *e*PKP | **PKPdf** | **06 06 01.2** | **+2.5** |
| KSH | | | | *e*sPKP | | 06 09 01.7 | |
| KSH | | | | PKS | **PKSdf** | **06 09 37.2** | **+1.7** |
| KSH | | | | PPMZ | | | |
| | 44nm,6.4s | | | | | | |
| **GEYT** | **Alibeck** | **129.07** | **301** | PKP | **PKPdf** | **06 06 24.6** | **-0.4** |
| | 1.7nm,0.5s,baz=255,slow=2.9,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **131.52** | **349** | PKP | **PKPdf** | **06 06 26.8** | **-1.8** |
| | 3.2nm,0.5s,baz=28,slow=1.2,SNR=20 | | | | | | |
| **FINES** | **FINESS Array B** | **138.14** | **342** | PKhKP | PKPpre | 06 06 27.9 | |
| | 1.0nm,0.3s,baz=90,slow=3.2,SNR=11 | | | | | | |
| FINES | | | | PKP | **PKPdf** | **06 06 39.4** | **-1.7** |
| | 1.7nm,0.4s,baz=65,slow=2.4,SNR=11 | | | | | | |
| **NB2** | **NORSAR Subarra** | **141.69** | **352** | PKP | PKPpre | 06 06 42.0 | |
| | comp=Z,3.3nm,0.5s,baz=13,slow=3.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **141.69** | **352** | PKhKP | PKPpre | 06 06 42.3 | |
| | comp=Z,1.3nm,0.5s,baz=49,slow=0.9,SNR=19 | | | | | | |
| **NC602** | **NORSAR Array S** | **141.94** | **351** | *e*P | PKPdf | 06 06 42.7 | -5.3 |
| **SUE** | **Sulen** | **142.29** | **357** | *e*P | **PKPdf** | **06 06 44.7** | **-3.9** |
| **OSL** | **Oslo** | **142.82** | **351** | *e*P | **PKPdf** | **06 06 46.0** | **-3.5** |
| **ASK** | **Askoy** | **142.84** | **356** | *e*P | **PKPdf** | **06 06 46.3** | **-3.3** |
| **RUND** | **Rundenannen** | **142.89** | **356** | *e*P | **PKPdf** | **06 06 46.4** | **-3.4** |
| **BER** | **Bergen** | **142.93** | **356** | *e*P | **PKPdf** | **06 06 46.5** | **-3.2** |
| **KONO** | **Kongsberg** | **143.25** | **352** | *e*P | PKPab | 06 06 47.4 | -0.9 |
| KONO | | | | IAmb | IAmb | 06 06 48.3 | |
| | comp=Z,24nm,0.8s | | | | | | |
| **ODD1** | **Odda** | **143.30** | **355** | *e*P | PKPab | 06 06 47.7 | -0.9 |
| **BLS5** | **Blasjo** | **143.80** | **355** | *e*P | PKPbc | 06 06 49.7 | -0.7 |
| **KMY** | **Karmoy** | **144.10** | **356** | *e*P | PKPbc | 06 06 50.4 | -0.8 |
| KMY | | | | IAmb | IAmb | 06 06 51.4 | |
| | comp=Z,20nm,0.8s | | | | | | |
| **MALT** | **Malatya** | **144.44** | **304⇑** | *i*P | PKPbc | 06 06 51.8 | -1.4 |
| **HOMB** | **Homborsund** | **144.72** | **353** | *e*P | **PKPdf** | **06 06 52.9** | **-0.1** |
| **AKASG** | **Malin Array Be** | **144.80** | **328** | PKP | **PKPdf** | **06 06 52.1** | **-1.2** |
| | comp=Z,6.2nm,0.4s,baz=43,slow=4.0,SNR=64 | | | | | | |
| **SUW** | **Suwalki** | **145.00** | **337** | *e*PKP | **PKPdf** | **06 06 53.2** | **-0.3** |
| **BSD** | **Bornholm Skovb** | **146.58** | **345** | *i* P | **PKPbc** | **06 06 57.6** | **-1.1** |
| **BRTR** | **Keskin Array B** | **147.61** | **308** | PKPbc | **PKPbc** | **06 07 00.9** | **-1.3** |
| | comp=Z,3.0nm,0.6s,baz=145,slow=4.5,SNR=14 | | | | | | |
| BRTR | | | | PKPab | **PKPab** | **06 07 05.7** | **-0.6** |
| | comp=Z,4.3nm,0.7s,baz=87,slow=3.6,SNR=12 | | | | | | |
| **BEL** | **Belsk** | **147.62** | **336** | *e*PKP | **PKPbc** | **06 07 01.5** | **-0.1** |
| **KWP** | **Kalwaria Pacla** | **148.56** | **332** | *e*PKP | **PKPbc** | **06 07 03.5** | **-0.5** |
| **BSEG** | **Bad Segeberg** | **148.65** | **349** | *e*PKPbc | **PKPbc** | **06 07 03.7** | **-0.3** |
| | baz=21,slow=2.4 | | | | | | |
| BSEG | | | | *e*PKPab | **PKPab** | **06 07 09.4** | **-0.4** |
| | baz=21,slow=4.4 | | | | | | |
| **BURAR** | **Bucovina Array** | **148.81** | **327⇓** | *i*P | **PKPbc** | **06 07 05.2** | **+0.4** |
| **HARR** | **Harsova** | **149.13** | **320⇑** | *i*P | **PKPab** | **06 07 16.7** | **+4.6** |
| **KOLS** | **Kolonicke sedl** | **149.26** | **331** | *e*PKP | **PKPbc** | **06 07 05.6** | **-0.2** |
| KOLS | | | | *e* | | 06 07 13.2 | |
| **OJC** | **Ojcow** | **149.29** | **335** | *e*PKP | **PKPbc** | **06 07 05.1** | **-0.7** |
| **STHS** | **Stebnicka Huta** | **149.34** | **333** | *e*PKP | **PKPbc** | **06 07 05.7** | **-0.3** |
| **ARCR** | **ARCALIA** | **149.60** | **327⇓** | *i*P | **PKPab** | **06 07 17.5** | **+3.5** |
| **NIE** | **Niedzica** | **149.73** | **334** | *e*PKP | **PKPbc** | **06 07 06.8** | **-0.1** |
| **TRPA** | **Tarpa** | **149.74** | **330⇑** | *i*P | **PKPbc** | **06 07 05.5** | **-1.4** |
| **DOPR** | **Dopca** | **149.79** | **324⇓** | *i*P | **PKPbc** | **06 07 07.0** | **-0.2** |
| **KSP** | **Ksiaz** | **150.00** | **340** | *e*PKP | **PKPbc** | **06 07 07.1** | **-0.3** |
| **NRDL** | **Niedersach Rie** | **150.06** | **348** | *e*PKPbc | **PKPbc** | **06 07 06.9** | **-0.5** |
| | baz=21,slow=2.4 | | | | | | |
| **OKC** | **Ostrava-Krasne** | **150.22** | **337⇑** | *e*PKP | **PKPbc** | **06 07 07.4** | **-0.6** |
| OKC | | | | *e*PKPAB | **PKPab** | **06 07 15.8** | **-0.7** |
| **LANS** | **Liptovska Anna** | **150.27** | **334** | *e*PKP | **PKPbc** | **06 07 08.7** | **+0.5** |
| **ASSE** | **Asse, Remlinge** | **150.30** | **347** | *e*PKPbc | **PKPbc** | **06 07 07.5** | **-0.5** |
| | baz=21,slow=2.4 | | | | | | |
| ASSE | | | | *e*PKPab | **PKPab** | **06 07 16.1** | **-0.5** |
| | baz=21,slow=4.4 | | | | | | |
| **VOIR** | | **150.31** | **324⇑** | *i*P | **PKPbc** | **06 07 07.5** | **-1.0** |
| **UPC** | **Upice** | **150.38** | **340⇑** | *e*PKP | **PKPbc** | **06 07 08.1** | **-0.2** |
| UPC | | | | *e*PKPAB | **PKPab** | **06 07 17.2** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **150.41** | **339⇑** | *e*PKP | **PKPbc** | **06 07 08.3** | **-0.2** |
| DPC | | | | *e*PKPAB | **PKPab** | **06 07 17.1** | **-0.3** |
| **MORC** | **Moravsky Berou** | **150.49** | **337⇓** | *i*P | **PKPbc** | **06 07 08.2** | **-0.5** |
| **KRLC** | **Kraliky** | **150.50** | **338⇑** | *e*PKP | **PKPbc** | **06 07 08.3** | **-0.4** |
| KRLC | | | | *e*PKPAB | **PKPab** | **06 07 17.2** | **-0.5** |
| **CLL** | **Collm** | **150.53** | **344** | *e*PKPbc | **PKPbc** | **06 07 08.1** | **-0.5** |
| | baz=21,slow=2.4 | | | | | | |
| CLL | | | | *e*PKPab | **PKPab** | **06 07 17.1** | **-0.6** |
| | baz=21,slow=4.4 | | | | | | |
| **CLL** | **Collm** | **150.53** | **344⇓** | *i*PKPbc | **PKPbc** | **06 07 08.1** | **-0.5** |
| | comp=Z,24nm,0.8s | | | | | | |
| CLL | | | | *i* PKPab | **PKPab** | **06 07 16.4** | **-1.3** |
| | comp=Z,9.0nm,0.7s | | | | | | |
| **DRGR** | | **150.61** | **328⇓** | *i*P | **PKPbc** | **06 07 08.1** | **-1.0** |
| **CLZ** | **Clausthal** | **150.63** | **347** | *e*PKPbc | **PKPbc** | **06 07 08.6** | **-0.3** |
| | baz=21,slow=2.4 | | | | | | |
| CLZ | | | | *e*PKPab | **PKPab** | **06 07 17.7** | **-0.4** |
| | baz=21,slow=4.4 | | | | | | |
| **BRG** | **Berggiesshubel** | **150.67** | **342** | *i* PKP | **PKPbc** | **06 07 08.5** | **-0.5** |
| | comp=Z,18nm,0.6s | | | | | | |
| BRG | | | | *e* | | 06 07 17.6 | |
| | comp=Z,6.6nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **150.67** | **342** | *e*PKPbc | **PKPbc** | **06 07 08.6** | **-0.4** |
| | baz=21,slow=2.4 | | | | | | |
| BRG | | | | *e*PKPab | **PKPab** | **06 07 17.9** | **-0.4** |
| | baz=21,slow=4.4 | | | | | | |
| **FBE** | **Freiberg** | **150.79** | **343** | *e*PKPbc | **PKPbc** | **06 07 09.1** | **-0.1** |
| | baz=21,slow=2.4 | | | | | | |
| FBE | | | | *e*PKPab | **PKPab** | **06 07 18.8** | **-0.1** |
| | baz=21,slow=4.4 | | | | | | |
| **PVCC** | **Panska Ves** | **150.80** | **341⇑** | *e*PKP | **PKPbc** | **06 07 09.0** | **-0.3** |
| PVCC | | | | *e*PKPAB | **PKPab** | **06 07 19.0** | **+0.1** |
| **NEUB** | **Neuenburg** | **150.92** | **345** | *e*PKPab | **PKPab** | **06 07 18.9** | **-0.4** |
| | baz=21,slow=4.4 | | | | | | |
| **GTTG** | **Gvttingen** | **150.99** | **348** | *e*PKPbc | **PKPbc** | **06 07 09.2** | **-0.5** |
| | baz=21,slow=2.4 | | | | | | |
| **VYHS** | **Vyhne** | **151.05** | **334** | *e*PKP | **PKPbc** | **06 07 09.0** | **-1.0** |
| VYHS | | | | *e* | | 06 07 19.8 | |
| **PSZ** | **Piszkesteto** | **151.07** | **332⇓** | *i*P | **PKPbc** | **06 07 09.2** | **-0.9** |
| **VRAC** | **Vranov** | **151.22** | **338⇑** | *i*P | **PKPab** | **06 07 20.7** | **0.0** |
| **GOPC** | **GO Pecny, Ondr** | **151.28** | **341⇑** | *e*PKP | **PKPbc** | **06 07 09.9** | **-0.6** |
| GOPC | | | | *e*PKPAB | **PKPab** | **06 07 19.9** | **-1.1** |
| **PRU** | **Pruhonice** | **151.29** | **341⇑** | *e*PKP | **PKPbc** | **06 07 09.8** | **-0.6** |
| PRU | | | | *e*PKPAB | **PKPab** | **06 07 20.4** | **-0.6** |
| **MOX** | **Moxa** | **151.48** | **345** | *e*PKPbc | **PKPbc** | **06 07 10.2** | **-0.7** |
| | baz=21,slow=2.4 | | | | | | |
| MOX | | | | *e*PKPab | **PKPab** | **06 07 21.2** | **-0.6** |
| | baz=21,slow=4.4 | | | | | | |
| **WERD** | **Werda** | **151.50** | **344** | *e*PKPbc | **PKPbc** | **06 07 10.4** | **-0.5** |
| | baz=21,slow=2.4 | | | | | | |
| WERD | | | | *e*PKPab | **PKPab** | **06 07 21.5** | **-0.4** |
| | baz=21,slow=4.4 | | | | | | |
| **PLN** | **Plauen** | **151.50** | **344** | *e*PKPbc | **PKPbc** | **06 07 10.4** | **-0.5** |
| | baz=21,slow=2.4 | | | | | | |
| **GZR** | **Gura Zlata** | **151.55** | **326⇑** | *i*P | **PKPbc** | **06 07 10.1** | **-1.2** |
| **GUNZ** | **Gunzen** | **151.57** | **344** | *e*PKPbc | **PKPbc** | **06 07 10.7** | **-0.4** |
| | baz=21,slow=2.4 | | | | | | |
| GUNZ | | | | *e*PKPab | **PKPab** | **06 07 21.9** | **-0.2** |
| | baz=21,slow=4.4 | | | | | | |
| **WERN** | **Wernitzgruen** | **151.62** | **344** | *e*PKPab | **PKPab** | **06 07 22.2** | **-0.2** |
| | baz=21,slow=4.4 | | | | | | |
| **NKC** | **Novy Kostel** | **151.66** | **344⇑** | *e*PKP | **PKPbc** | **06 07 10.6** | **-0.7** |
| NKC | | | | *e*PKPAB | **PKPab** | **06 07 22.0** | **-0.5** |
| **MANZ** | **Manzenberg** | **151.97** | **344** | *e*PKPbc | **PKPbc** | **06 07 11.5** | **-0.5** |
| | baz=21,slow=2.4 | | | | | | |
| **BZS** | **Buzias** | **151.98** | **327⇓** | *i*P | **PKPbc** | **06 07 11.1** | **-1.0** |
| **KHC** | **Kasperske Hory** | **152.34** | **341⇑** | *e*PKP | **PKPbc** | **06 07 12.2** | **-0.7** |
| KHC | | | | *e*PKPAB | **PKPab** | **06 07 24.7** | **-0.8** |
| **TNS** | **Taunus Mts** | **152.54** | **349** | *e*PKPbc | **PKPbc** | **06 07 13.3** | **0.0** |
| | baz=21,slow=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | **152.56** | **341** | PKPbc | **PKPbc** | **06 07 12.3** | **-1.1** |
| | comp=Z,1.4nm,0.6s,baz=45,slow=2.5,SNR=11 | | | | | | |
| GERES | | | | PKPab | **PKPab** | **06 07 25.2** | **-1.3** |
| | comp=Z,1.0nm,0.6s,baz=35,slow=4.9,SNR=6.1 | | | | | | |
| **FUR** | **Furstenfeldbru** | **153.86** | **343** | *e*PKPab | **PKPab** | **06 07 31.9** | **0.0** |
| | baz=21,slow=4.4 | | | | | | |
| **PERS** | **Pernice** | **154.01** | **336** | *i* PKPbc | **PKPab** | **06 07 31.9** | **-0.8** |
| **BOJS** | **Bojanci** | **154.91** | **335** | *i* PKPbc | **PKPab** | **06 07 35.6** | **-0.9** |
| **JAVS** | **Javornik** | **155.02** | **337** | *e*PKPbc | **PKPab** | **06 07 35.5** | **-1.6** |
| **ESDC** | **Sonseca Array** | **163.40** | **12** | PKPab | **PKPab** | **06 08 12.7** | **-1.0** |
| | comp=Z,0.3nm,0.4s,baz=335,slow=3.7,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.69** | **187** | PKP | **PKPdf** | **06 07 22.6** | **-1.9** |
| | comp=Z,1.5nm,1.0s,baz=21,slow=1.3,SNR=5.9 | | | | | | |

*IDC **10** 05:54:55.6±5.0, 9°.17S×126°.95E, h86km±55km, mb3.8/4, mb1 3.9/8, mb1mx3.6/25, mbtmp4.0/8, ML3.9/4, MS2.8/1, Ms1 2.8/1, ms1mx2.4/29, Error ellipse: s-maj=48.8km s-min=15.2km az=35.0*
*AUST **10** 05:54:55.8±12.0, 9°.12S×126°.90E, h21km±1km, Error ellipse: s-maj=2.4km s-min=1.0km az=2.0*
**ISC 10 05:54:53.5±1.0, 9°.00S±0°.08×126°.92E±0°.06, h35km, n15, σ2s84/16, mb4.1/4, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **2.72** | **254** | P | **Pn** | **05 55 36.5** | **+1.5** |
| | baz=2.7,SNR=11 | | | | | | |
| **BATI** | **Baumata** | **3.43** | **249** | P | **Pn** | **05 55 46.0** | **+1.5** |
| | 10.0nm,0.3s,baz=277,slow=7.6,SNR=12 | | | | | | |
| BATI | | | | S | **Sn** | **05 56 26.4** | **+2.4** |
| | 42nm,0.3s,baz=116,slow=5.4,SNR=9.9 | | | | | | |
| **KDU** | **Kakadu** | **6.57** | **124** | P | **Pn** | **05 56 30.6** | **+2.9** |
| | baz=6.5,SNR=3.8 | | | | | | |
| **KNRA** | **Kununurra** | **6.87** | **165** | P | **Pn** | **05 56 34.8** | **+2.9** |
| | baz=6.8,SNR=5.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **9.13** | **188** | P | **Pn** | **05 57 03.6** | **+0.7** |
| | 0.7nm,0.3s,baz=20,slow=8.4,SNR=14 | | | | | | |
| FITZ | | | | S | **Sn** | **05 58 41.9** | **-2.5** |
| | 1.7nm,0.3s,baz=272,slow=18,SNR=9.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **9.13** | **188** | P | **Pn** | **05 57 04.1** | **+1.2** |
| | baz=9.1,SNR=3.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.03** | **147** | P | Pn | 05 57 54.6 | -1.6 |
| | 0.9nm,0.3s,baz=320,slow=13,SNR=15 | | | | | | |
| WRA | | | | S | **Sn** | **06 00 16.2** | **-3.8** |
| | 1.4nm,0.3s,baz=333,slow=22,SNR=9.5 | | | | | | |
| WRA | | | | LR | LR | 06 03 01.2 | |
| | comp=Z,46nm,20.5s,baz=215,slow=38 | | | | | | |
| **WRKA** | **Warakurna** | **16.00** | **175** | P | **P** | **05 58 43.3** | **+4.1** |
| | baz=16,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **16.04** | **156** | P | **Pn** | **05 58 34.6** | **-1.9** |
| | 0.5nm,0.3s,baz=324,slow=10,SNR=21 | | | | | | |
| ASAR | | | | S | **Sn** | **06 01 28.8** | **-4.7** |
| | 0.4nm,0.3s,baz=321,slow=20,SNR=6.1 | | | | | | |
| **COEN** | **Coen** | **16.67** | **109** | P | **P** | **05 58 48.3** | **+1.6** |
| | baz=17,SNR=4.0 | | | | | | |
| **QIS** | **Mount Isa** | **16.79** | **135** | P | **P** | **05 58 49.6** | **+1.6** |
| | baz=17,SNR=5.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **38.82** | **315** | P | P | 06 02 12.5 | -2.9 |
| | 1.8nm,0.5s,baz=142,slow=7.0,SNR=6.5 | | | | | | |
| **SONM** | **Songino Array** | **59.44** | **344** | P | **P** | **06 04 51.0** | **-1.9** |
| | 0.6nm,0.8s,baz=163,slow=7.5,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.28** | **329** | P | **P** | **06 05 49.1** | **-1.9** |
| | 1.1nm,0.5s,baz=128,slow=6.9,SNR=9.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.07** | **335** | P | P | 06 06 10.6 | -3.4 |
| | 1.8nm,0.4s,baz=142,slow=4.0,SNR=7.9 | | | | | | |

*IDC **10** 06:08:09.6±0.5, 51°.51N×175°.22W, h0km, mb5.0/30, mb1 5.1/32, mb1mx5.1/33, mbtmp5.0/32, ML4.7/2, MS4.9/30, Ms1 4.9/30, ms1mx4.9/34, Error ellipse: s-maj=17.0km s-min=10.0km az=168.0*
*BJI **10** 06:08:12.2, 51°.78N×175°.23W, h30km, mb5.5/80, mB5.4/52, Ms5.3/80, Ms7 5.1/76*
*ISCJB **10** 06:08:13.9±0.3, 51°.38N±0°.03×175°.08W±0°.02, h46km±2km, mb5.4/344, MS5.0/193, Error ellipse: s-maj=4.3km s-min=1.6km az=1.9*
*MOS **10** 06:08:13.1±0.9, 51°.52N×175°.24W, h33km, mb5.6/95, MS5.0/57, Error ellipse: s-maj=6.0km s-min=4.5km az=87.4*
*NEIC **10** 06:08:14.8±0.1, 51°.44N×175°.25W, mb5.4/233, MS5.0/146, ML5.2(AEIC), Error ellipse: s-maj=3.3km s-min=1.5km az=178.0*
*GCMT **10** 06:08:14.8±0.1, 51°.31N×175°.30W, h21km, MW5.5/113, Moment Tensor Solution. s93,c168; s113,c218; Duration: 1s4 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$1.69±.04; $M_{\theta\theta}$-1.60±.03; $M_{\phi\phi}$-0.09±.02; $M_{r\theta}$1.33±.05; $M_{\theta\phi}$-0.32±.02; $M_{\phi r}$0.30±.05; Best double couple: $M_0$2.16200×$10^{17}$ NP1:$\phi_s$78.00000°,δ65.00000°, λ89.00000°. NP2:$\phi_s$259.00000°,δ25.00000°,λ91.00000°. Principal axes: T 2.1740, Plg70.0000°, Azm347.0000°; N -0.0260, Plg0.0000°, Azm78.0000°; P -2.1500, Plg20.0000°, Azm168.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*SZGRF **10** 06:08:22.3, 52°.45N×177°.77W, h33km, mb5.3/20(BGR), Ms4.8/2(BGR)*
**ISC 10 06:08:14.8±0.3, 51°.46N±0°.05×175°.22W±0°.02, h33km, h33km:pP-P, n1431, σ1s23/1535, mb5.4/350, MS5.0/195, 51C-24D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.79** | **319** | P | **Pb** | **06 08 30.1** | **0.0** |
| **GSCK** | **Great Sitkin C** | **0.81** | **314** | P | **Pb** | **06 08 30.3** | **-0.2** |
| **GSTR** | **Great Sitkin T** | **0.82** | **321** | *e*Pn | **Pb** | **06 08 31.0** | **+0.2** |
| **GSTD** | **Great Sitkin T** | **0.83** | **317** | P | **Pb** | **06 08 30.9** | **-0.1** |
| **ETKA** | **Kagalaska Isla** | **0.84** | **299** | P | **Pn** | **06 08 30.4** | **+0.1** |
| **ATKA** | **Atka Island** | **0.98** | **40** | P | **Pn** | **06 08 31.6** | **-0.6** |
| ATKA | | | | S | **Sb** | **06 08 47.1** | **+1.2** |
| **ADAG** | **Mount Adagdak** | **1.01** | **302** | P | **Pb** | **06 08 33.8** | **0.0** |
| **KOKL** | **Mount Kliuchef** | **1.07** | **36** | P | **Pn** | **06 08 34.2** | **+0.7** |
| **KOFP** | **Korovin Flat P** | **1.07** | **40** | P | **Pn** | **06 08 34.1** | **+0.5** |
| **KOWE** | **Korovin West** | **1.09** | **33** | P | **Pb** | **06 08 34.7** | **-0.5** |
| **KIRH** | **Kanaga Island** | **1.25** | **292** | P | **Pn** | **06 08 36.3** | **+0.4** |
| **KIKV** | **Kanaga Island** | **1.29** | **290** | P | **Pn** | **06 08 36.6** | **+0.1** |

KICM Kanaga Island 1.31 291 P Pn 06 08 37.2 +0.4
TAPA Tanaga Point A 1.66 284 P Pn 06 08 41.7 +0.1
TAFL Tanaga Flats 1.70 281 P Pn 06 08 42.2 +0.2
TAFP Tanaga Falls P 1.78 286 P Pn 06 08 43.8 +0.6
GAEA Gareloi East 2.22 280 P Pn 06 08 50.6 +1.2
GALAA Gareloi Lava P 2.24 279 P Pn 06 08 50.5 +1.0
GANE Gareloi Northe 2.25 281 P Pn 06 08 50.8 +1.2
CERAA Semis' Rag'd T 3.20 280 P Pn 06 09 03.2 +0.4
CESW Semis' Southwe 3.28 280 P Pn 06 09 04.2 +0.4
CEAP Semis' Anvil P 3.28 282 P Pn 06 09 04.5 +0.7
AMKA Amchitka 3.43 271 P Pn 06 09 05.9 0.0
LSPA Little Sitkin 3.89 280 P Pn 06 09 13.1 +0.9
LSNW Little Sitkin 3.93 280 P Pn 06 09 13.4 +0.7
LSSA Little Sitkin 3.93 280 P Pn 06 09 14.5 +1.8
NIKH Nikolski High 4.20 66 P Pn 06 09 17.0 +0.6
NIKH S Sn 06 10 05.4 +1.1
OKAK Okmok 4.70 60 P Pn 06 09 24.1 +0.8
OKSO Okmok South 4.72 63 P Pn 06 09 24.8 +1.1
OKCE Okmok Cone E 4.75 63 P Pn 06 09 25.4 +1.4
OKTU Okmok Mt. Tuli 4.80 63 P Pn 06 09 26.6 +1.9
OKFG Magazine Ridge 4.88 64 P Pn 06 09 27.2 +1.4
MSOM Makushin Julie 5.56 62 P Pn 06 09 36.7 +1.6
MSOM Makushin Julie 5.56 62 P Pn 06 09 36.7 +1.6
MGOD Makushin Gods 5.60 62 P Pn 06 09 36.7 +1.0
UNV Unalaska Valle 5.82 62 P Pn 06 09 40.2 +1.5
AKRB Akutan Reef Bi 6.16 61 P Pn 06 09 45.3 +1.9
AKGG Akutan Green G 6.23 60 P Pn 06 09 46.2 +1.9
AKUT Akutan 6.33 61 ePn Pn 06 09 48.0 +2.4
WECS Westdahl Cape 7.01 60 P Pn 06 09 57.4 +2.3
SSBA Shishaldin 7.46 59 P Pn 06 10 02.5 +1.3
FALS False Pass 7.87 60 P Pn 06 10 08.0 +1.3
SDPT Sand Point 9.63 60 P Pn 06 10 30.3 -0.5
CHGN Chignik 11.03 57 ePn Pn 06 10 51.0 +0.9
SII Sitkinak Islan 13.36 59 ePn Pn 06 11 20.8 -1.1
OHAK Old Harbor 14.00 57 ePn Pn 06 11 28.6 -2.0
SVW2 Sparrevohn 14.51 41 ePn Pn 06 11 39.1 +1.6
KDAK Kodiak Island 14.52 55 Pn Pn 06 11 33.7 -3.9
3.3nm,0.3s,baz=175,slow=3.7,SNR=16
KDAK Sn S 06 14 27.0 -8.9
1.7nm,0.3s,baz=350,slow=18,SNR=5.0
KDAK Kodiak Island 14.52 55 eP Pn 06 11 39.0 +1.4
KDAK 06 14 27.0
KDAK Kodiak Island 14.52 55 P P 06 11 43.0 -0.8
2µm,0.7s,SNR=9.9
KDAK Kodiak Island 14.52 55 ePn Pn 06 11 39.0 +1.4
KDAK Sn S 06 14 26.9 -8.9
TNA Tin City 14.63 12 ePn P 06 11 43.0 -2.0
RSO Redoubt South 15.40 45 ePn P 06 11 53.1 -0.7
HOM Homer 15.59 49 ePn P 06 11 54.8 -0.9
496nm,0.8s
CNPM China Poot 15.74 50 ePn Pn 06 11 54.0 +0.3
157nm,0.9s
BRLK Bradley Lake 15.99 49 ePn Pn 06 11 58.2 +1.2
153nm,1.0s
SPU Mount Spurr 16.03 44 ePn P 06 12 00.2 -0.4
PET Petropavlovsk 16.05 286 eP Pn 06 11 56.5 -1.3
PET eS Sn 06 14 56.2 +1.7
PET pmax pmax
comp=Z,133nm,1.0s
PET pmax pmax
comp=Z,900nm,10.9s
PET pmax pmax
comp=Z,700nm,17.1s
PET MLR MLR
comp=Z,5µm,19.0s
PET MLR MLR
comp=Z,5µm,20.0s
PET Petropavlovsk 16.05 286 ePn P 06 12 02.1 +1.2
comp=Z,116nm,1.0s
PETK Petropavlovsk- 16.62 286 Pn Pn 06 12 04.9 -0.1
comp=Z,3.8nm,0.3s,baz=94,slow=13,SNR=87
PETK PcP PcP 06 16 50.7 -2.8
comp=Z,0.2nm,0.3s,baz=97,slow=9.3,SNR=4.0
PETK LR LR 06 18 04.5
comp=Z,5µm,21.8s,baz=98,slow=36
PETK ScP ScP 06 20 33.5 +8.1
comp=Z,0.1nm,0.3s,baz=145,slow=7.9,SNR=5.9
SUA Susitna One 16.72 44 ePn P 06 12 07.8 -0.6
comp=Z,72nm,0.9s
SUA eScP ScP 06 20 27.1 +1.6
SEW Seward 16.78 49 ePn Pn 06 12 06.4 -0.6
comp=Z,110nm,0.7s
SEW eSn Sn 06 15 14.0 +1.9
PPLA Purkeypile 16.83 38 ePn P 06 12 11.2 +1.6
comp=Z,762nm,1.5s
RC01 Rabbit Creek A 17.01 46 ePn Pn 06 12 10.3 +0.5
comp=Z,177nm,1.6s
CAST Castle Rocks 17.15 37 ePn P 06 12 13.4 +0.3
comp=Z,213nm,1.0s
PMR Palmer 17.48 44 eP P 06 12 16.4 -0.2
PMR pmax pmax
comp=Z,33nm,0.9s
PMR Palmer 17.48 44 ePn P 06 12 16.4 -0.2
comp=Z,33nm,0.9s
PMR eScP ScP 06 20 28.2 +1.3
KTH Kantishna Hill 17.66 37 eP P 06 12 18.8 +0.1
comp=Z,478nm,0.9s
TRF Thorofare Moun 17.85 38 ePn P 06 12 22.5 +1.6
comp=Z,240nm,1.0s
TRF eScP ScP 06 20 28.8 +0.9
SML Sawmill 17.91 44 eP Pn 06 12 20.2 -0.9
SML pmax pmax
comp=Z,78nm,0.9s
SML Sawmill 17.91 44 ePn Pn 06 12 20.2 -0.9
comp=Z,78nm,0.9s
SML eScP ScP 06 20 29.2 +1.3
BPAW Bear Paw Mtn. 17.94 36 ePn P 06 12 22.9 +1.2
comp=Z,469nm,1.0s
BPAW eScP ScP 06 20 28.4 +0.5
SKR Severo-Kuril's 17.99 279 eP Pn 06 12 18.5 -3.5
SKR pmax pmax
comp=E,2µm,10.0s
SKR pmax pmax
comp=Z,2µm,10.0s
SKR pmax pmax
comp=Z,670nm,1.0s
SKR pmax pmax
comp=N,220µm,1.0s
SKR pmax pmax
comp=E,220nm,1.0s
SKR MLR MLR
comp=N,4µm,18.0s
SKR MLR MLR
comp=E,6µm,18.0s
SKR MLR MLR
comp=Z,5µm,18.0s
SCM Sheep Creek Mo 18.36 45 eP P 06 12 25.0 -1.5
SCM pmax pmax
comp=Z,95nm,0.9s
SCM Sheep Creek Mo 18.36 45 eP P 06 12 25.0 -1.5
comp=Z,95nm,0.9s
RND Reindeer 18.39 39 eP P 06 12 26.1 -0.6
RND pmax pmax
comp=Z,179nm,0.8s
RND Reindeer 18.39 39 ePn P 06 12 26.1 -0.6
comp=Z,178nm,0.8s
RND eScP ScP 06 20 29.8 +0.8
MCK McKinley 18.52 38 eP P 06 12 27.5 -0.5
MCK pmax pmax
comp=Z,222nm,0.8s
MCK McKinley 18.52 38 eP P 06 12 27.5 -0.5
comp=Z,222nm,0.8s
MCK eScP ScP 06 20 30.3 +1.1
BWN Browne 18.54 37 eP Pn 06 12 29.9 +1.3
comp=Z,485nm,1.0s
MLY Manley 18.55 34 eP Pn 06 12 29.4 +0.5
comp=Z,231nm,0.9s
MLY eScP ScP 06 20 30.8 +1.6
EYAK Cordova Ski Ar 18.67 49 eP Pn 06 12 30.1 -0.1
comp=Z,83nm,1.2s
DIV Divide 18.83 48 eP P 06 12 31.4 -0.1
comp=Z,69nm,0.9s
KLU Klutina 18.88 47 eP P 06 12 31.0 -1.0
comp=Z,87nm,1.0s
BILL Bilibino 18.92 338 c iP Pn 06 12 34.4 +1.2
BILL pmax pmax
comp=Z,286nm,1.2s
BILL MLR MLR
comp=Z,5µm,21.0s
BILL Bilibino 18.92 338 eP Pn 06 12 34.3 +1.1
comp=Z,246nm,1.0s
RAGM Ragged Mountai 19.14 50 eP Pn 06 12 37.0 +1.0
comp=Z,85nm,1.0s
WRH Wood River Hil 19.21 37 eP P 06 12 34.1 -1.4
comp=Z,166nm,1.0s

BMRM Bremner River 19.33 49 eP P 06 12 36.6 -0.4
comp=Z,63nm,0.7s
CCB Clear Creek Bu 19.40 37 eP P 06 12 36.0 -1.7
comp=Z,119nm,0.8s
CCB eScP ScP 06 20 31.6 +0.6
MDM Murphy Dome 19.40 36 eP P 06 12 36.9 -0.8
comp=Z,308nm,0.9s
COLA College 19.50 36 eP Pn 06 12 39.5 -0.6
COLA pmax pmax
comp=Z,182nm,0.8s
COLA College 19.50 36 eP Pn 06 12 39.5 -0.6
comp=Z,182nm,0.8s
HARP HAARP 19.52 44 eP P 06 12 38.4 -0.7
comp=Z,145nm,1.0s
PAX Paxson 19.59 43 eP P 06 12 40.0 +0.1
PAX pmax pmax
comp=Z,73nm,0.8s
PAX Paxson 19.59 43 eP P 06 12 40.0 +0.1
comp=Z,73nm,0.8s
IL1 Eielson Array 19.81 37 eP P 06 12 38.3 -3.8
ILAR Eielson Array 19.81 37 P P 06 12 40.1 -2.0
comp=Z,2.7nm,0.3s,baz=222,slow=9.5,SNR=90
ILAR ScP ScP 06 20 31.9 -0.1
baz=259,slow=3.6,SNR=6.7
ILAR LR LR 06 21 00.1
comp=Z,5µm,18.3s,baz=240,slow=39
COLD Coldfoot 20.07 29 eP Pn 06 12 46.1 -0.8
comp=Z,282nm,0.9s
COLD LR LR
comp=Z,9µm,18.0s
MENT Mentasta 20.33 43 eP P 06 12 48.2 +0.3
MA2 Magadan 20.70 306 eP Pn 06 12 53.5 -0.8
SEY Seymchan 20.72 316 P P 06 12 52.1 +0.1
comp=Z,25nm,0.9s,baz=89,slow=12,SNR=48
SEY ScP ScP 06 20 36.4 +2.3
comp=Z,9.3nm,0.7s,baz=41,slow=20,SNR=16
SEY Seymchan 20.72 316 μ eP P 06 12 53.2 +1.2
FYU Fort Yukon 21.30 33 eP P 06 12 58.7 +0.5
comp=Z,152nm,1.0s
EGAK Eagle 22.04 40 eP P 06 13 04.9 -1.2
comp=Z,270nm,0.9s
EGAK LR LR
comp=Z,6µm,20.0s
DHAK Deception Hill 22.17 55 eP P 06 13 08.7 +0.9
comp=Z,119nm,0.8s
DAWY Dawson 22.53 42 eP P 06 13 11.3 -0.2
comp=Z,128nm,0.9s
DAWY eScP ScP 06 20 40.5 +1.7
MIDW Midway 23.27 185 PFAKE 06 13 30.0 +11
MIDW LR LR
comp=Z,3µm,20.0s
KUR Kuril'sk 25.11 270 c iP P 06 13 36.8 +0.5
KUR pmax pmax
comp=N,38nm,1.4s
KUR pmax pmax
comp=Z,225nm,1.4s
KUR pmax pmax
comp=Z,410nm,3.6s
KUR MLR MLR
comp=N,1µm,18.0s
KUR MLR MLR
comp=E,318nm,18.0s
KUR MLR MLR
comp=Z,789nm,18.0s
WRAK Wrangell Islan 25.40 62 eP P 06 13 41.1 +2.3
comp=Z,216nm,0.8s
WRAK LR LR
comp=Z,2µm,19.0s
INK Inuvik 26.12 34 P P 06 13 44.8 -0.5
comp=Z,40nm,0.8s,baz=236,slow=7.5,SNR=58
INK PcP PcP 06 17 11.9 +0.3
comp=Z,16nm,0.8s,baz=284,slow=4.0,SNR=6.4
INK ScP ScP 06 20 50.7 +2.2
comp=Z,5.3nm,0.9s,baz=62,slow=32,SNR=10
INK LR LR 06 25 14.7
comp=Z,4µm,18.8s,baz=220,slow=39
INK Inuvik 26.12 34 P P 06 13 44.8 -0.5
INK 06 17 12.0
INK pmax pmax
comp=Z,40nm,0.8s
INK pmax pmax
comp=Z,16nm,0.8s
INK pmax pmax
comp=N,5.0nm,1.0s
INK MLR MLR
comp=Z,4µm,18.8s
INK Inuvik 26.12 34 eP P 06 13 44.7 -0.5
comp=Z,62nm,0.8s
INK PcP PcP 06 17 11.9 +0.3
INK ScP ScP 06 20 50.7 +2.2
DLBC Dease Lake 26.44 57 P P 06 13 48.6 +0.2
comp=Z,48nm,0.9s,baz=284,slow=10,SNR=42
DLBC LR LR 06 24 38.5
comp=Z,3µm,19.4s,baz=286,slow=37
DLBC Dease Lake 26.44 57 eP P 06 13 49.7 +1.4
comp=Z,50nm,0.9s
YUK Yuzh-Kuril'sk 26.95 269 c iP P 06 13 53.1 +0.2
YUK i 06 17 14.6
YUK i S S 06 18 30.2 +2.6
YUK pmax pmax
comp=Z,502nm,2.5s
YUK pmax pmax
comp=N,166nm,1.5s
YUK pmax pmax
comp=E,147nm,1.5s
YUK pmax pmax
comp=Z,421nm,1.5s
YSS Yuzh-Sakhalins 27.54 277 ||| eP P 06 13 59.0 +0.8
YSS e 06 14 11.0
YSS e 06 17 14.0
YSS eS S 06 18 37.0 +0.1
YSS eSSS SSS 06 20 12.0
YSS smax smax
comp=E,1µm,4.0s
YSS MLR MLR
comp=N,2µm,16.0s
YSS MLR MLR
comp=E,2µm,16.0s
YSS MLR MLR
comp=Z,6µm,16.0s
YSS Yuzh-Sakhalins 27.54 277 eP P 06 13 59.5 +1.3
comp=Z,79nm,0.8s
YSS LR LR
comp=Z,1µm,20.0s
BBB Bella Bella 28.73 70 P P 06 14 09.3 +0.6
comp=Z,40nm,0.9s,baz=248,slow=4.3,SNR=3.2
BBB LR LR 06 23 37.1
comp=Z,2µm,20.9s,baz=264,slow=32
ASAJ Asahikawa 28.95 272 P P 06 14 11.4 +0.7
comp=Z,37nm,0.8s,baz=84,slow=3.8
ASAJ LR LR 06 27 08.4
comp=Z,1µm,19.1s,baz=94,slow=39
ASAJ Asahikawa 28.95 272 P P 06 14 11.4 +0.7
ASAJ pmax pmax
comp=Z,37nm,0.8s
ASAJ MLR MLR
comp=Z,1µm,19.1s
ASAJ Asahikawa 28.95 272 eP P 06 14 11.4 +0.7
comp=Z,60nm,0.9s
ERM Erimo 29.69 268 PFAKE 06 14 30.0 +13
ERM LR LR
comp=Z,2µm,22.0s
YAK Yakutsk 31.05 311 eP P 06 14 28.1 -1.0
YAK e*PP pP 06 14 37.7 -1.1
YAK e 06 15 28.1
YAK ePPP PPP 06 15 40.4
YAK e 06 17 23.6
YAK eS S 06 19 31.8 +0.1
YAK eSS SnSn 06 21 11.6 -2.2
YAK pmax pmax
comp=Z,5.0nm,0.8s
YAK pmax pmax
comp=N,11nm,2.3s
YAK pmax pmax
comp=Z,9.0nm,1.8s
YAK pmax pmax
comp=E,12nm,1.5s
YAK smax smax
comp=N,25nm,3.3s
YAK smax smax
comp=E,8.0nm,3.1s
YAK MLR MLR
comp=Z,563nm,19.0s
YAK MLR MLR
comp=N,374nm,19.0s
YAK MLR MLR
comp=E,405nm,18.0s

YAK Yakutsk 31.05 311 eP P 06 14 28.3 -0.8
comp=E,45nm,0.8s
YAK ePcP PcP 06 17 23.7 -0.2
YAK LR LR
comp=Z,4µm,20.0s
HABR Khabarovsk 31.64 285 eP P 06 14 33.4 -1.0
HABR e*PP pP 06 14 43.0 -1.1
HABR e*SP sP 06 14 47.4 -0.7
HABR 06 15 38.0
HABR ePPP PPP 06 15 47.7
HABR eS S 06 19 41.4 +0.3
HABR e*SS sS 06 19 57.7 +0.7
HABR eSS SnSn 06 21 30.2 +1.8
HABR eSSS SSS 06 21 46.3
HABR e 06 25 03.5
HABR pmax pmax
comp=Z,152nm,1.1s
HABR pmax pmax
comp=E,99nm,1.1s
HABR pmax pmax
comp=N,33nm,1.1s
HABR MLR MLR
comp=Z,3µm,19.0s
KLR Kul'dur 33.31 287 eP P 06 14 45.0 -4.1
KLR e 06 20 12.5
KLR pmax pmax
comp=Z,140nm,2.0s
KLR MLR MLR
comp=E,2µm,19.0s
YKA Yellowknife Ar 33.55 47 P P 06 14 50.2 -0.8
comp=E,3.8nm,0.5s,baz=281,slow=8.6,SNR=14
YKA PcP PcP 06 17 31.4 +0.6
comp=E,9.3nm,0.7s,baz=283,slow=3.3,SNR=10
E03A Lebam 33.66 78 eP P 06 14 52.5 +0.3
comp=E,103nm,1.0s
MBW Mount Baker 33.66 73 P P 06 14 53.6 +1.2
B05A Bryant 33.77 74 P P 06 14 51.6 -1.6
baz=34,SNR=6.9
D05A Enumclaw 34.32 76 eP P 06 14 59.8 +1.9
comp=E,153nm,1.1s
G03D McMinnville, O 34.48 80 P P 06 14 57.9 -1.4
baz=34
LON Longmire 34.63 76 eP P 06 15 02.1 +1.4
LON pmax pmax
comp=Z,39nm,1.3s
LON Longmire 34.63 76 eP P 06 15 02.1 +1.4
comp=Z,39nm,1.3s
H11N2 WAKE ISLAND Hy 34.64 211 T T 06 51 49.7
baz=18,slow=76,SNR=2972
F04A Amboy 34.65 78 eP P 06 15 01.8 +1.1
comp=Z,46nm,0.8s
H11N3 WAKE ISLAND Hy 34.65 211 T T 06 51 41.9
baz=18,slow=76,SNR=2691
H11N1 WAKE ISLAND Hy 34.66 211 T T 06 51 41.1
baz=18,slow=76,SNR=3032
LTY Liberty 35.08 75 eP P 06 15 05.3 +0.6
comp=Z,24nm,0.8s
ETW Entiat 35.13 74 P P 06 15 06.0 +0.9
WAKE Wake Island 35.14 211 PFAKE 06 15 20.0 +15
WAKE LR LR
comp=Z,2µm,19.0s
POHA Pohakuloa 35.22 147 PFAKE 06 15 20.0 +14
POHA LR LR
comp=Z,3µm,20.0s
WTV Waterville 35.31 74 P P 06 15 07.0 +0.5
H04A Detroit Lake 35.40 80 eP P 06 15 08.4 +1.0
comp=Z,50nm,0.8s
USRK Ussuriysk Ar. 35.50 279 P P 06 15 07.8 -0.3
comp=Z,31nm,0.7s,baz=52,slow=7.8,SNR=58
USRK PcP PcP 06 17 36.0 -0.8
comp=Z,8.1nm,0.8s,baz=113,slow=1.4,SNR=6.4
USRK LR LR 06 30 29.1
comp=Z,1µm,20.6s,baz=51,slow=38
VFP Flag Point 35.53 78 P P 06 15 09.5 +1.0
SAW Saint Andrews 35.64 74 P P 06 15 09.8 +0.5
G05D Wamic, OR 35.66 78 P P 06 15 08.0 -1.5
baz=36
I04A Tendick Farm, 35.72 81 P P 06 15 09.0 -1.1
baz=36,SNR=7.1
H11S1 WAKE ISLAND Hy 35.85 210 T T 06 53 17.2
baz=18,slow=76,SNR=3553
L02D Cave Junction, 35.85 84 P P 06 15 09.6 -1.6
baz=36
H11S2 WAKE ISLAND Hy 35.87 210 T T 06 53 22.5
baz=18,slow=76,SNR=1594
H11S3 WAKE ISLAND Hy 35.87 210 T T 06 53 18.5
baz=18,slow=76,SNR=757
E07A Sunnyside 35.91 75 eP P 06 15 12.6 +0.9
comp=Z,42nm,1.0s
E07A eScP ScP 06 21 22.4 +1.0
CROR Criterion Ridg 35.99 78 P P 06 15 13.3 +0.9
MAJO Matsushiro 36.02 264 de P 06 15 13.4 +0.7
MAJO Matsushiro 36.02 264 eP P 06 15 13.2 +0.5
comp=Z,109nm,1.1s
MAJO LR LR
comp=Z,2µm,21.0s
MJAR Matsushiro Arr 36.02 264 P P 06 15 12.7 0.0
comp=Z,24nm,0.9s,baz=53,slow=7.8,SNR=65
MJAR PcP PcP 06 17 39.0 +0.4
comp=Z,6.5nm,0.9s,baz=77,slow=2.9,SNR=4.7
MJAR ScP ScP 06 21 31.6 +10
comp=Z,1.7nm,0.9s,baz=52,slow=3.2,SNR=4.2
MJAR LR LR 06 28 11.2
comp=Z,1µm,21.8s,baz=75,slow=33
SNIWA Snively Ranch 36.07 76 P P 06 15 13.9 +1.0
G06A Carlson Farm, 36.08 78 eP P 06 15 13.9 +0.8
comp=Z,236nm,2.4s
I05D Terrebonne, OR 36.10 80 P P 06 15 11.9 -1.5
baz=36,SNR=7.8
VLA Vladivostok 36.13 278 α iP P 06 15 13.8 +0.3
VLA e 06 17 37.0
VLA eS S 06 20 50.6 -0.1
VLA pmax pmax
comp=Z,74nm,1.0s
RSW Rattlesnake Hi 36.14 76 P P 06 15 14.8 +1.1
VTHM Trough 36.15 78 P P 06 15 14.6 +0.9
HAWA Hanford 36.18 76 eP P 06 15 14.3 +0.4
comp=Z,57nm,0.9s
HAWA eScP ScP 06 21 23.1 +0.7
HAWA LR LR
comp=Z,2µm,20.0s
OD2 Odessa Site #2 36.20 74 P P 06 15 14.6 +0.4
D08A Wollman Farm, 36.23 74 eP P 06 15 14.9 +0.5
comp=Z,29nm,0.8s
H2OWA Water 36.24 75 P P 06 15 15.3 +0.9
C09A Chrisman Ranch 36.27 73 eP P 06 15 14.8 0.0
comp=Z,53nm,0.8s
KHMM Horse Mountain 36.49 86 eP P 06 15 18.5 +1.7
comp=Z,38nm,1.0s
YBH Yreka Blue Hor 36.65 84 eP P 06 15 19.6 +1.5
YBH pmax pmax
comp=Z,19nm,0.8s
YBH Yreka Blue Hor 36.65 84 eP P 06 15 19.6 +1.5
comp=Z,19nm,0.8s
J05D Fort Rock, OR 36.72 81 P P 06 15 17.3 -1.4
baz=37,SNR=13
NEW Newport 36.74 71 eP P 06 15 18.8 0.0
NEW pmax pmax
comp=Z,80nm,0.8s
NEW MLR MLR
comp=Z,2µm,20.0s
NEW Newport 36.74 71 P P 06 15 17.2 -1.6
baz=37,SNR=40
NEW Newport 36.74 71 eP P 06 15 18.8 0.0
comp=Z,80nm,0.8s
NEW eScP ScP 06 21 24.6 +0.1
NEW LR LR
comp=Z,2µm,20.0s
K04D Chiloquin, OR 36.75 82 P P 06 15 17.1 -1.9
baz=37
MDJ Mudanjiang 36.76 282 P P 06 15 18.0 -0.9
MDJ pP pP 06 15 26.8 -1.8
MDJ sP sP 06 15 30.7 -1.9
MDJ PP PP 06 16 40.2 -2.6
MDJ PcP PcP 06 17 38.7 -1.9
MDJ S S 06 20 58.2 -2.2
MDJ sS sS 06 21 14.5 -1.9
MDJ PcS PcS 06 21 28.7 +0.2
MDJ ScS ScS 06 25 28.9 -2.5
MDJ PMZ
comp=Z,46nm,0.9s
MDJ PMZ
comp=Z,170nm,6.4s
MDJ LN
comp=Z,1µm,17.2s
MDJ LE

comp=Z,2μm,19.9s
MDJ LZ
comp=Z,2μm,20.7s
MDJ Mudanjiang 36.76 282 eP P 06 15 18.0 -0.9
comp=Z,38nm,0.9s
MDJ LR LR
comp=Z,2μm,20.0s
EDM Edmonton 36.80 62 eP P 06 15 19.6 +0.3
EDM pmax pmax
comp=Z,261nm,0.6s
EDM Edmonton 36.80 62 eP P 06 15 19.6 +0.3
comp=Z,261nm,0.6s
MSHR Mys Shultsa 36.87 278 ceP P 06 15 20.9 +1.1
KMRM Mail Ridge 36.88 87 eP P 06 15 22.3 +2.3
KMRM epP pP 06 15 31.5 +1.7
N02D Trinity Center 37.07 85 P P 06 15 20.0 -1.7
baz=37
M04C Macdoel 37.16 84 P P 06 15 21.2 -1.3
baz=37,SNR=8.8
K05A Summer Lake 37.23 82 eP P 06 15 24.6 +1.5
comp=Z,78nm,0.9s
K05A eScP ScP 06 21 26.7 +0.1
KIPM Iron Peak 37.26 87 eP P 06 15 23.0 -0.3
comp=Z,44nm,1.1s
I07A Izee 37.36 79 eP P 06 15 25.2 +1.0
comp=Z,38nm,0.9s
WDC Whiskeytown Da 37.40 86 eP P 06 15 25.6 +1.2
WDC pmax pmax
comp=Z,22nm,1.0s
WDC Whiskeytown Da 37.40 86 eP P 06 15 25.6 +1.2
comp=Z,22nm,1.0s
WDC eScP ScP 06 21 27.5 +0.5
LASM Arnica Sink 37.42 84 P P 06 15 25.9 +1.1
F10A Beach Ranch, E 37.78 75 eP P 06 15 28.0 +0.4
comp=Z,43nm,1.1s
HOPS Hopland 37.99 88 eP P 06 15 31.4 +1.9
comp=Z,58nm,1.3s
O03D Paynes Creek 38.02 86 P P 06 15 28.4 -1.4
baz=38,SNR=18
MOD Modoc 38.05 82 eP P 06 15 31.0 +1.0
comp=Z,26nm,0.8s
MOD eScP ScP 06 21 30.2 +0.5
WALA Waterton Lakes 38.27 69 eP P 06 15 32.5 +0.7
comp=Z,71nm,0.9s
BSMT Bassoo Peak 38.32 71 eP P 06 15 32.3 0.0
J08A Circle Bar Ran 38.38 79 eP P 06 15 33.1 +0.3
comp=Z,40nm,1.0s
BLMT Blacktail Moun 38.49 70 eP P 06 15 34.1 +0.3
NSHM Saint Helena R 38.57 88 eP P 06 15 35.6 +1.3
JTMT Jette 38.67 71 eP P 06 15 35.7 +0.6
JTMT eS S 06 21 32.3 +2.8
RES Resolute Bay 38.74 25 eP P 06 15 35.2 0.0
RES e 06 17 46.6
RES pmax pmax
comp=Z,204nm,2.6s
RES Resolute Bay 38.74 25 eP P 06 15 35.2 0.0
comp=Z,204nm,2.6s
RES ePcP PcP 06 17 46.6 +0.5
YBMT Yellow Bay 38.77 70 eP P 06 15 36.0 0.0
YBMT eS S 06 21 32.7 +1.7
WVOR Wild Horse Val 38.78 81 eP P 06 15 36.4 +0.2
WVOR pmax pmax
comp=Z,46nm,0.9s
WVOR MLR MLR
comp=Z,2μm,21.0s
WVOR Wild Horse Val 38.78 81 eP P 06 15 36.4 +0.2
comp=Z,46nm,0.9s
WVOR LR LR
comp=Z,2μm,21.0s
OHCM Honcut 38.78 87 eP P 06 15 36.3 +0.3
OHCM eS S 06 21 32.4 +1.3
SWMT Swartz Lake 38.95 71 eP P 06 15 37.7 +0.1
SWMT eS S 06 21 32.7 -1.0
MSO Missoula 39.32 72 P P 06 15 39.2 -1.4
baz=39,SNR=29
MSO Missoula 39.32 72 eP P 06 15 40.1 -0.5
comp=Z,48nm,0.8s
MSO eS S 06 21 34.4 -4.9
SLMT Seeley Lake 39.38 71 eP P 06 15 41.3 +0.2
CHMT Chamberlain Mo 39.69 71 eP P 06 15 43.8 0.0
BOD Bodaibo 39.72 308 eP P 06 15 41.3 -2.3
BOD pmax pmax
comp=Z,12nm,1.9s
CN2 Changchun 39.73 283 eP P 06 15 42.9 -0.9
CN2 epP pP 06 15 52.7 -0.9
CN2 esP sP 06 15 56.7 -0.9
CN2 eS S 06 21 43.4 -1.8
CN2 PMZ
comp=Z,40nm,0.8s
CN2 PMZ
comp=Z,400nm,3.0s
CN2 LN
comp=Z,700nm,19.0s
CN2 LE
comp=Z,2μm,19.0s
CN2 LZ
comp=Z,3μm,19.0s
MFID Camas Ranch 39.97 77 eP P 06 15 46.0 0.0
comp=Z,30nm,1.0s
MFID eScP ScP 06 21 37.0 +0.1
CMB Columbia Colle 40.25 87 eP P 06 15 49.1 +0.7
CMB pmax pmax
comp=Z,15nm,0.9s
CMB Columbia Colle 40.25 87 eP P 06 15 49.1 +0.7
comp=Z,15nm,0.9s
CMB eScP ScP 06 21 37.8 -0.3
HIA Hailar 40.33 293 eP P 06 15 47.6 -1.2
HIA pmax pmax
comp=Z,29nm,0.6s
HIA MLR MLR
comp=Z,3μm,20.0s
HIA Hailar 40.33 293 eP P 06 15 47.6 -1.2
comp=Z,29nm,0.6s
HIA LR LR
comp=Z,3μm,20.0s
SAO San Andreas Ge 40.38 90 eP P 06 15 49.1 -0.2
SAO e*PP pP 06 16 01.7 +2.6
SAO San Andreas Ge 40.38 90 eP P 06 15 49.1 -0.2
SAO epP pP 06 16 01.7 +2.6
HRY Holter Researc 40.63 71 eP P 06 15 51.8 +0.3
LRM Limekiln Ridge 40.73 72 eP P 06 15 52.5 0.0
HLID Hailey 40.75 76 P P 06 15 50.9 -1.7
baz=41,SNR=25
HLID Hailey 40.75 76 eP P 06 15 52.5 -0.1
comp=Z,41nm,0.9s
HLID eScP ScP 06 21 40.8 +0.6
HLID LR LR
comp=Z,2μm,21.0s
BMN Battle Mountai 40.80 82 eP P 06 15 53.6 +0.7
BMN eS S 06 22 00.4 -1.1
BMN pmax pmax
comp=Z,20nm,0.7s
BMN Battle Mountai 40.80 82 eP P 06 15 53.6 +0.7
comp=Z,20nm,0.7s
BMN eS S 06 22 00.4 -1.1
DLMT Dillon 40.88 73 eP P 06 15 53.5 -0.1
comp=Z,27nm,1.1s
DLMT eScP ScP 06 21 41.4 +0.8
KSSKC Sokcho 40.99 274 P P 06 15 56.8 +2.5
SNR=8.7
KSSKC Sokcho 40.99 274 P P 06 15 56.8 +2.5
SNR=8.7
MCMT McKenzie Canyo 41.01 74 eP P 06 15 54.5 -0.3
KSJMJ Jumunjin 41.09 273 P P 06 15 56.3 +1.1
SNR=11
KSJMJ Jumunjin 41.09 273 P P 06 15 56.3 +1.1
SNR=11
SEHB SEOHWA 41.17 274 P P 06 15 58.6 +2.7
SNR=15
SEHB SEOHWA 41.17 274 P P 06 15 58.6 +2.7
SNR=15
EGMT Eagleton 41.18 68 P P 06 15 54.2 -1.8
baz=41,SNR=19
EGMT Eagleton 41.18 68 eP P 06 15 56.2 +0.3
comp=Z,83nm,1.1s
EGMT LR LR
comp=Z,2μm,22.0s
BOZ Bozeman (W) 41.31 72 eP P 06 15 56.9 -0.2
BOZ pmax pmax
comp=Z,51nm,0.8s
BOZ MLR MLR
comp=Z,1μm,19.0s
BOZ Bozeman (W) 41.31 72 P P 06 15 55.3 -1.8
baz=41,SNR=40
BOZ Bozeman (W) 41.31 72 eP P 06 15 56.9 -0.2
comp=Z,51nm,0.8s
BOZ eScP ScP 06 21 43.0 +0.8
BOZ LR LR
comp=Z,1μm,19.0s
NV01 Mina Array Sit 41.31 85 eP P 06 15 57.2 -0.1
NV01 eScP ScP 06 21 42.2 -0.2
NVAR Mina Array Bea 41.31 85 P P 06 15 57.8 +0.5
comp=Z,9.0nm,0.8s,baz=293,slow=7.3,SNR=47
NVAR PcP PcP 06 17 55.1 -0.2
comp=Z,6.5nm,0.9s,baz=276,slow=3.5,SNR=3.0
NVAR ScP ScP 06 21 42.8 +0.3
comp=Z,6.6nm,0.9s,baz=282,slow=4.2,SNR=13
NVAR LR LR 06 30 21.4
comp=Z,957nm,19.8s,baz=305,slow=32
KSIJA INJE 41.43 274 P P 06 15 59.1 +1.1
SNR=23
KSIJA INJE 41.43 274 P P 06 15 59.1 +1.1
SNR=23
KSTBA Taebaek 41.44 272 P P 06 15 59.4 +1.3
SNR=7.0
KSTBA Taebaek 41.44 272 P P 06 15 59.4 +1.3
SNR=7.0
MLAC Mammoth Lakes 41.47 87 P P 06 15 56.7 -1.9
baz=41
KSCWO Cheorwon 41.74 274 P P 06 16 03.5 +2.9
SNR=9.0
KSCWO Cheorwon 41.74 274 P P 06 16 03.5 +2.9
SNR=9.0
KSCHC Chuncheon 41.74 274 P P 06 16 03.2 +2.6
SNR=17
KSCHC Chuncheon 41.74 274 P P 06 16 03.2 +2.6
SNR=17
MTUM Tungsten Hills 41.81 87 eP P 06 16 02.3 +0.9
ELK Elko 41.84 80 eP P 06 16 02.2 +0.6
ELK pmax pmax
comp=Z,25nm,0.8s
ELK Elko 41.84 80 eP P 06 16 02.2 +0.6
comp=Z,25nm,0.8s
QLMT Earthquake Lak 41.86 73 eP P 06 16 02.0 +0.3
QLMT eScP ScP 06 21 45.8 +1.3
KSRS Korea Array 41.88 273 P P 06 16 02.0 +0.4
comp=Z,36nm,0.9s,baz=57,slow=7.6,SNR=74
KSRS PcP PcP 06 17 57.6 +0.8
comp=Z,7.6nm,0.9s,baz=44,slow=3.8,SNR=4.8
KSRS LR LR 06 33 06.3
comp=Z,546nm,20.4s,baz=46,slow=36
KSRS Korea Array 41.88 273 P P 06 16 02.0 +0.4
KSRS 06 17 57.6
KSRS pmax pmax
comp=Z,36nm,0.9s
KSRS pmax pmax
comp=Z,8.0nm,0.9s
KSRS MLR MLR
comp=Z,546nm,20.4s
KS01 Wonju Array Si 41.88 273 eP P 06 16 01.4 -0.2
KSAR Wonju Array Be 41.91 273 P P 06 16 02.0 +0.1
KSAR 06 17 57.6
KSAR Wonju Array Be 41.91 273 P P 06 16 02.0 +0.1
KSAR PcP PcP 06 17 57.6 +0.7
SNY Shenyang 41.97 282 ⇑P P 06 16 02.6 +0.3
SNY S S 06 22 11.7 -6.8
SNY PMZ
comp=Z,200nm,0.9s
SNY LN
comp=Z,860nm,19.8s
SNY LE
comp=Z,1μm,20.1s
SNY LZ
comp=Z,1μm,22.2s
YHB Horse Butte 42.05 73 eP P 06 16 03.3 0.0
YNCB YEONCHEON 42.14 275 P P 06 16 06.0 +2.3
SNR=17
YNCB YEONCHEON 42.14 275 P P 06 16 06.0 +2.3
SNR=17
ALE Alert 42.15 10 P P 06 16 03.3 -0.1
comp=Z,107nm,0.9s,SNR=7.0
SMMC Simmler 42.20 90 P P 06 16 03.2 -1.2
baz=42
KSCHJ Chungju 42.20 273 P P 06 16 06.4 +2.1
SNR=7.8
KSCHJ Chungju 42.20 273 P P 06 16 06.4 +2.1
SNR=7.8
YMR Madison River 42.23 73 eP P 06 16 04.4 -0.3
comp=Z,57nm,0.8s
YHH Holmes Hill 42.23 73 eP P 06 16 04.9 +0.1
FFC Flin Flon 42.26 56 eP P 06 16 04.4 -0.2
FFC pmax pmax
comp=Z,25nm,0.8s
FFC MLR MLR
comp=Z,2μm,20.0s
FFC Flin Flon 42.26 56 P P 06 16 04.0 -0.6
comp=Z,192nm,0.6s,SNR=6.3
FFC Flin Flon 42.26 56 eP P 06 16 04.4 -0.2
comp=Z,25nm,0.8s
FFC LR LR
comp=Z,2μm,20.0s
KSICN Icheon 42.29 274 P P 06 16 07.4 +2.4
SNR=8.2
KSICN Icheon 42.29 274 P P 06 16 07.4 +2.4
SNR=8.2
KSMUS Musan 42.33 275 P P 06 16 07.6 +2.3
SNR=8.1
KSMUS Musan 42.33 275 P P 06 16 07.6 +2.3
SNR=8.1
YNR Norris Junctio 42.37 73 eP P 06 16 06.5 +0.6
comp=Z,116nm,0.9s
GCMT Greycliff 42.39 71 eP P 06 16 06.6 +0.6
YFT Old Faithful 42.42 73 eP P 06 16 07.7 +1.4
comp=Z,46nm,0.9s
VES Vestal, Richgr 42.44 89 P P 06 16 05.0 -1.2
baz=42,SNR=5.5
KSSEO Seoul 42.48 274 P P 06 16 09.3 +2.8
SNR=17
KSSEO Seoul 42.48 274 P P 06 16 09.3 +2.8
SNR=17
KSBON Boeun 42.55 272 P P 06 16 09.7 +2.6
SNR=5.4
PKM Peak Mountain 42.58 91 P P 06 16 06.3 -1.4
baz=42
KSSWO Suwon 42.59 274 P P 06 16 10.1 +2.6
SNR=7.6
H17A Grant Village 42.61 73 P P 06 16 06.1 -1.8
baz=42,SNR=34
H17A Grant Village 42.61 73 eP P 06 16 09.3 +1.4
comp=Z,59nm,0.9s
LKWY Lake 42.62 73 eP P 06 16 09.6 +1.6
LKWY pmax pmax
comp=Z,67nm,0.8s
LKWY MLR MLR
comp=Z,2μm,20.0s
LKWY Lake 42.62 73 eP P 06 16 09.6 +1.6
comp=Z,67nm,0.8s
LKWY LR LR
comp=Z,2μm,20.0s
KSGAH Ganghwa 42.64 275 P P 06 16 10.0 +2.1
SNR=15
KSGAH Ganghwa 42.64 275 P P 06 16 10.0 +2.1
SNR=15
INCN Inchon 42.66 274 P P 06 16 10.1 +2.0
SNR=9.6
INCN Inchon 42.66 274 eP P 06 16 10.2 +2.2
INCN epP pP 06 16 20.8 +2.9
INCN LR LR
comp=Z,537nm,21.0s
IMW Indian Meadow 42.67 74 eP P 06 16 09.0 +0.6
comp=Z,41nm,0.9s
IMW eScP ScP 06 21 49.1 +1.3
FLWY Flagg Ranch 42.71 74 eP P 06 16 10.0 +1.4
comp=Z,67nm,1.1s
HVU Hansel Valley 42.75 78 eP P 06 16 09.5 +0.5
HVU pmax pmax
comp=Z,34nm,0.9s
HVU Hansel Valley 42.75 78 eP P 06 16 09.5 +0.5
comp=Z,34nm,0.9s
HVU eScP ScP 06 21 49.6 +1.5
FXWY Fox Creek 42.76 74 eP P 06 16 09.2 +0.2
comp=Z,12nm,0.9s
FXWY eScP ScP 06 21 49.6 +1.4
GRAC Grapevine Rang 42.78 86 P P 06 16 07.8 -1.2
baz=43,SNR=9.4
JNU Nakatsue 42.81 266 eP P 06 16 09.6 +0.2
comp=Z,106nm,1.1s
MOOW Moose Ponds 42.87 74 eP P 06 16 10.4 +0.5
comp=Z,13nm,1.0s
TPAW Teton Pass 42.89 74 eP P 06 16 11.0 +0.8
comp=Z,22nm,0.9s
TJN Taejon 42.90 273 deP P 06 16 10.3 +0.4
ISA Isabella 42.93 89 eP P 06 16 10.2 -0.2
ISA pmax pmax
comp=Z,16nm,1.0s
ISA Isabella 42.93 89 P P 06 16 08.8 -1.6
baz=43,SNR=7.8
ISA Isabella 42.93 89 eP P 06 16 10.2 -0.2
comp=Z,16nm,1.0s
RLMT Red Lodge 42.99 71 P P 06 16 09.2 -1.7
baz=43,SNR=57
RLMT Red Lodge 42.99 71 eP P 06 16 10.9 0.0
comp=Z,103nm,0.9s
RLMT LR LR
comp=Z,1μm,19.0s
REDW Red Top Meadow 43.02 75 eP P 06 16 11.9 +0.7
comp=Z,26nm,0.9s
SNOW Snow King Moun 43.02 74 eP P 06 16 12.1 +0.9
comp=Z,30nm,1.0s
LOHW Long Hollow 43.03 74 eP P 06 16 11.2 0.0
comp=Z,24nm,1.1s
R11A Troy Canyon, C 43.05 84 P P 06 16 09.9 -1.6
baz=43,SNR=30
R11A Troy Canyon, C 43.05 84 eP P 06 16 11.6 +0.1
comp=Z,38nm,1.0s
R11A eScP ScP 06 21 49.8 +0.4
DAC Darwin (Calif) 43.09 87 eP P 06 16 12.1 +0.3
DAC pmax pmax
comp=Z,14nm,1.0s
DAC Darwin (Calif) 43.09 87 eP P 06 16 12.1 +0.3
comp=Z,14nm,1.0s
BGU Big Grassy Mou 43.09 79 eP P 06 16 12.1 +0.4
comp=Z,23nm,0.9s
AHID Auburn Hatcher 43.21 75 eP P 06 16 13.3 +0.6
comp=Z,45nm,1.1s
AHID LR LR
comp=Z,2μm,20.0s
SPUT South Promonto 43.23 78 eP P 06 16 13.3 +0.6
comp=Z,23nm,1.0s
MPMC Manual Prospec 43.29 88 P P 06 16 11.8 -1.6
baz=43,SNR=6.7
FURC Furnace Creek, 43.43 87 P P 06 16 12.6 -1.6
baz=43
OSI Osito Adit 43.45 90 P P 06 16 13.1 -1.4
baz=43
OSI Osito Adit 43.45 90 eP P 06 16 15.4 +0.8
comp=Z,32nm,1.1s
TPNV Topopah Spring 43.51 86 eP P 06 16 15.5 +0.4
TPNV pmax pmax
comp=Z,47nm,0.8s
TPNV Topopah Spring 43.51 86 P P 06 16 13.6 -1.5
baz=43,SNR=46
TPNV Topopah Spring 43.51 86 eP P 06 16 15.5 +0.4
comp=Z,47nm,0.8s
NAIU Northern Antel 43.53 78 eP P 06 16 15.3 +0.1
LRMC Laurel Mountai 43.54 88 P P 06 16 13.7 -1.6
baz=43
KSBAR Backryungdo 43.55 276 P P 06 16 17.4 +2.2
SNR=6.4
BLG Laguna Peak 43.57 91 P P 06 16 14.1 -1.4
baz=44
HWUT Hardware Ranch 43.59 77 eP P 06 16 15.6 -0.1
comp=Z,25nm,1.0s
DUG Dugway 43.66 80 eP P 06 16 16.1 -0.1
DUG pmax pmax
comp=Z,88nm,1.0s
DUG MLR MLR
comp=Z,1μm,19.0s
DUG Dugway 43.66 80 P P 06 16 14.4 -1.8
baz=44,SNR=47
DUG Dugway 43.66 80 eP P 06 16 16.1 -0.1
comp=Z,88nm,1.0s
DUG eScP ScP 06 21 52.6 +0.8
DUG LR LR
comp=Z,1μm,19.0s
EDW2 Edwards Air Fo 43.74 89 P P 06 16 15.1 -1.7
baz=44
KSKWJ Gwangju 43.91 271 P P 06 16 20.9 +2.8
SNR=6.7
LAO LASA Array 43.93 68 P P 06 16 16.6 -1.7
baz=44,SNR=12
LAO LASA Array 43.93 68 eP P 06 16 19.1 +0.8
comp=Z,69nm,0.6s
LAO LR LR
comp=Z,2μm,19.0s
DECC Green Verdugo 43.93 90 P P 06 16 17.2 -1.2
baz=44
TCUT Toone Canyon 43.97 78 eP P 06 16 19.4 +0.5
comp=Z,79nm,1.1s
CTU Camp Tracy 44.02 78 eP P 06 16 19.4 +0.2
comp=Z,35nm,0.9s
PASC Pasadena Art C 44.08 90 eP P 06 16 19.1 -0.4
comp=Z,27nm,1.3s
MWC Mount Wilson 44.12 90 eP P 06 16 19.8 -0.3
MWC pmax pmax
comp=Z,40nm,1.1s
MWC Mount Wilson 44.12 90 eP P 06 16 19.8 -0.3
comp=Z,40nm,1.1s
BW06 Boulder Array 44.14 74 eP P 06 16 19.9 -0.3
BW06 eScP ScP 06 21 53.3 -0.5
BW06 LR LR
comp=Z,2μm,20.0s
DGMT Dagmar 44.14 65 P P 06 16 18.0 -1.9
baz=44,SNR=9.9
DGMT Dagmar 44.14 65 eP P 06 16 20.2 +0.4
comp=Z,105nm,1.1s
DGMT LR LR
comp=Z,3μm,21.0s
GSC Goldstone 44.21 88 eP P 06 16 21.0 +0.4
GSC pmax pmax
comp=Z,52nm,1.0s
GSC Goldstone 44.21 88 P P 06 16 19.1 -1.5
baz=44,SNR=20
GSC Goldstone 44.21 88 eP P 06 16 21.0 +0.4
comp=Z,52nm,1.0s
GSC eScP ScP 06 21 54.5 +0.5
NLU North Lily Min 44.26 79 eP P 06 16 21.4 +0.3
comp=Z,43nm,1.0s
NLU eScP ScP 06 21 54.9 +0.6
RRX Edison Barstow 44.36 88 P P 06 16 20.7 -1.0
baz=44
BFSC Mount Baldy Ra 44.36 90 P P 06 16 20.5 -1.4
baz=44,SNR=8.2
SHPR Sheep Range 44.47 85 eP P 06 16 22.5 -0.3
SHPR eScP ScP 06 21 56.0 +0.9
MPU Maple Canyon 44.49 79 eP P 06 16 23.1 +0.1
comp=Z,69nm,0.9s
A25A Svangstu Ranch 44.50 64 P P 06 16 21.0 -1.8
baz=44,SNR=30
TUQ Turquoise Moun 44.67 87 P P 06 16 22.9 -1.5
baz=45
DSCC Desert Studies 44.75 88 eP P 06 16 25.3 +0.4
BBRC Big Bear Solar 44.81 89 P P 06 16 23.7 -1.9
baz=45
HEC Hector,Ludlow 44.81 88 P P 06 16 23.8 -1.6
baz=45,SNR=6.5
B25A Knox Farm, Ray 44.83 64 P P 06 16 24.1 -1.3
baz=45,SNR=7.2
DL2 Dalian 44.90 279 P P 06 16 25.7 -0.2
DL2 S S 06 23 01.9 +0.5
DL2 PMZ
comp=Z,200nm,0.8s
DL2 PMZ
comp=Z,220nm,3.6s
DL2 LN
comp=Z,290nm,23.7s
DL2 LE
comp=Z,610nm,19.6s
DL2 LZ
comp=Z,540nm,18.0s
SGU Sterling 44.99 80 eP P 06 16 28.2 +1.2
MURC Murrieta 45.07 90 P P 06 16 26.1 -1.4
baz=45
C25A Freed Ranch, W 45.08 65 P P 06 16 25.6 -1.8
baz=45,SNR=8.6
A26A Wade Farm, Ken 45.12 63 P P 06 16 25.8 -1.9
baz=45,SNR=23
TMUT Trail Mountain 45.19 79 eP P 06 16 29.2 +0.5
comp=Z,176nm,0.9s
GMRC Granite Mounta 45.26 88 P P 06 16 27.4 -1.7
baz=45,SNR=8.2
B26A Jensen Ranch, 45.29 64 P P 06 16 27.5 -1.6
baz=45
D25A Fairfield 45.35 66 P P 06 16 27.8 -1.7
baz=45
P17A Butcher Ranch, 45.37 79 eP P 06 16 30.5 +0.6
comp=Z,36nm,1.0s
P17A eScP ScP 06 21 59.7 +0.9
LDFC Landfair 45.41 87 eP P 06 16 30.4 +0.1
comp=Z,45nm,0.9s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PFO | **Pinyon Flat Ob** | 45.53 | 89 | *e*P | | **P** | 06 16 30.7 | -0.5 | |
| PFO | comp=Z,20nm,1.2s | | | pmax | | pmax | | | |
| PFO | comp=Z,1μm,21.0s | | | MLR | | MLR | | | |
| **PFO** | **Pinyon Flat Ob** baz=45 | 45.53 | 89 | P | | **P** | 06 16 29.7 | -1.6 | |
| **PFO** | **Pinyon Flat Ob** comp=Z,20nm,1.2s | 45.53 | 89 | *e*P | | **P** | 06 16 30.7 | -0.5 | |
| PFO | | | | *e*ScP | | **ScP** | 06 21 59.8 | +0.3 | |
| PFO | comp=Z,1μm,21.0s | | | LR | | LR | | | |
| **A27A** | **Ledoux Ranch,** baz=45 | 45.54 | 63 | P | | **P** | 06 16 29.1 | -1.9 | |
| **BELC** | **Belle Mtn. Jos** baz=46 | 45.56 | 89 | P | | **P** | 06 16 29.8 | -1.7 | |
| **P18A** | **Preston Nutter** comp=Z,54nm,1.0s | 45.58 | 78 | *e*P | | **P** | 06 16 32.3 | +0.5 | |
| **109C** | **Camp Elliot, M** baz=46 | 45.60 | 91 | P | | **P** | 06 16 30.3 | -1.3 | |
| **E25A** | **Miller Ranch,** baz=46,SNR=17 | 45.66 | 67 | P | | **P** | 06 16 30.9 | -1.1 | |
| **C26A** | **Wahner Farm, P** baz=46,SNR=10.0 | 45.67 | 64 | P | | **P** | 06 16 30.1 | -1.9 | |
| **SRU** | **San Rafael** | 45.72 | 79 | *e*P | | **P** | 06 16 33.1 | +0.4 | |
| SRU | comp=Z,34nm,0.7s | | | pmax | | pmax | | | |
| **SRU** | **San Rafael** comp=Z,34nm,0.7s | 45.72 | 79 | *e*P | | **P** | 06 16 33.1 | +0.4 | |
| **B27A** | **Peters Farms,** baz=46,SNR=34 | 45.82 | 63 | P | | **P** | 06 16 31.7 | -1.6 | |
| **D26A** | **Manning** baz=46 | 45.92 | 65 | P | | **P** | 06 16 32.3 | -1.7 | |
| **F25A** | **Bowman** baz=46,SNR=7.3 | 45.95 | 67 | P | | **P** | 06 16 32.4 | -1.9 | |
| **IRM** | **Iron Mountain** baz=46,SNR=5.3 | 45.98 | 88 | P | | **P** | 06 16 33.2 | -1.5 | |
| **BAR** | **Barrett** | 46.01 | 91 | *e*P | | **P** | 06 16 35.1 | +0.2 | |
| BAR | | | | *ep*P | | **pP** | 06 16 42.7 | -2.1 | |
| **K22A** | **Casper** baz=46,SNR=19 | 46.03 | 73 | P | | **P** | 06 16 33.5 | -1.6 | |
| **K22A** | **Casper** comp=Z,44nm,0.8s | 46.03 | 73 | *e*P | | **P** | 06 16 34.6 | -0.5 | |
| **MONP** | **Monument Peak** baz=46 | 46.03 | 90 | P | | **P** | 06 16 33.5 | -1.7 | |
| **C27A** | **Sayler Ranch,** baz=46,SNR=14 | 46.07 | 64 | P | | **P** | 06 16 33.4 | -1.8 | |
| **A28A** | **Rude Farm, Bot** baz=46,SNR=32 | 46.10 | 62 | P | | **P** | 06 16 33.7 | -1.7 | |
| **E26A** | **Carlson Angus** baz=46,SNR=19 | 46.21 | 66 | P | | **P** | 06 16 34.6 | -1.8 | |
| **B28A** | **Dugan Ranch, T** baz=46,SNR=34 | 46.30 | 63 | P | | **P** | 06 16 35.7 | -1.3 | |
| **IBP** | **Imperial Bould** baz=46 | 46.38 | 90 | P | | **P** | 06 16 36.2 | -1.7 | |
| **G25A** | **Newell** baz=46,SNR=12 | 46.39 | 68 | P | | **P** | 06 16 36.2 | -1.6 | |
| **D27A** | **Center** baz=46,SNR=7.8 | 46.39 | 65 | P | | **P** | 06 16 35.8 | -1.9 | |
| **F26A** | **Lodgepole** baz=46 | 46.45 | 67 | P | | **P** | 06 16 36.4 | -1.8 | |
| **O20A** | **White River Ci** baz=46,SNR=28 | 46.49 | 77 | P | | **P** | 06 16 37.0 | -1.8 | |
| **O20A** | **White River Ci** comp=Z,77nm,0.9s | 46.49 | 77 | *e*P | | **P** | 06 16 38.3 | -0.5 | |
| **H25A** | **Fruitdale** baz=46,SNR=13 | 46.61 | 69 | P | | **P** | 06 16 38.1 | -1.5 | |
| **RSSD** | **Black Hills** | 46.64 | 70 | *e*P | | **P** | 06 16 39.6 | -0.4 | |
| RSSD | comp=Z,29nm,0.8s | | | pmax | | pmax | | | |
| **RSSD** | **Black Hills** comp=Z,30nm,0.8s | 46.64 | 70 | *e*P | | **P** | 06 16 39.6 | -0.4 | |
| **Y12C** | **Blythe** baz=46,SNR=5.9 | 46.64 | 88 | P | | **P** | 06 16 38.4 | -1.4 | |
| **A29A** | **Manning Farm,** baz=46,SNR=51 | 46.66 | 62 | P | | **P** | 06 16 37.9 | -1.9 | |
| **C28A** | **Hausauer Farms** baz=46,SNR=6.4 | 46.69 | 64 | P | | **P** | 06 16 38.0 | -2.0 | |
| **E27A** | **Carson** baz=47,SNR=11 | 46.75 | 66 | P | | **P** | 06 16 38.6 | -1.9 | |
| **G26A** | **Maurine** baz=47,SNR=24 | 46.80 | 68 | P | | **P** | 06 16 39.3 | -1.7 | |
| **F27A** | **Lemmon** baz=47,SNR=21 | 46.81 | 67 | P | | **P** | 06 16 39.2 | -1.8 | |
| **B29A** | **Wagenman Farm,** baz=47,SNR=10 | 46.85 | 62 | P | | **P** | 06 16 39.5 | -1.8 | |
| **I25A** | **Rochford** baz=47,SNR=13 | 46.88 | 70 | P | | **P** | 06 16 39.8 | -2.0 | |
| **D28A** | **Regan** baz=47,SNR=12 | 46.88 | 64 | P | | **P** | 06 16 39.5 | -2.0 | |
| **GLA** | **Glamis** | 46.92 | 89 | *e*P | | **P** | 06 16 42.8 | +0.8 | |
| GLA | comp=Z,22nm,0.8s | | | pmax | | pmax | | | |
| **GLA** | **Glamis** baz=47 | 46.92 | 89 | P | | **P** | 06 16 40.4 | -1.7 | |
| **GLA** | **Glamis** comp=Z,22nm,0.8s | 46.92 | 89 | *e*P | | **P** | 06 16 42.8 | +0.8 | |
| **PV09** | **Paradox Valley** | 46.95 | 79 | *e*P | | **P** | 06 16 42.5 | -0.1 | |
| **MDND** | **Maddock** baz=47,SNR=14 | 47.06 | 63 | P | | **P** | 06 16 41.0 | -1.9 | |
| **MDND** | **Maddock** comp=Z,292nm,1.0s | 47.06 | 63 | *e*P | | **P** | 06 16 43.5 | +0.6 | |
| **PV10** | **Paradox Valley** | 47.09 | 79 | *e*P | | **P** | 06 16 43.8 | +0.2 | |
| **H26A** | **Fairpoint** baz=47,SNR=9.6 | 47.09 | 68 | P | | **P** | 06 16 41.5 | -1.8 | |
| **G27A** | **Dupree** baz=47,SNR=25 | 47.14 | 67 | P | | **P** | 06 16 41.9 | -1.7 | |
| **PV04** | **Paradox Valley** | 47.16 | 79 | *e*P | | **P** | 06 16 43.4 | -0.7 | |
| **E28A** | **Huff** baz=47,SNR=10 | 47.16 | 65 | P | | **P** | 06 16 42.0 | -1.8 | |
| **A30A** | **Hoffart Farm,** baz=47,SNR=35 | 47.17 | 61 | P | | **P** | 06 16 42.4 | -1.4 | |
| **J25A** | **Sunshine Ranch** baz=47,SNR=17 | 47.21 | 70 | P | | **P** | 06 16 42.6 | -1.6 | |
| **PV05** | **Paradox Valley** | 47.23 | 79 | *e*P | | **P** | 06 16 44.7 | 0.0 | |
| **IRK** | **Irkutsk** | 47.26 | 304 | *e*P | | **P** | 06 16 42.4 | -2.1 | |
| IRK | | | | *e* | | | 06 18 15.7 | | |
| IRK | comp=Z,46nm,2.0s | | | pmax | | pmax | | | |
| **I26A** | **New Underwood** baz=47,SNR=8.3 | 47.38 | 69 | P | | **P** | 06 16 43.9 | -1.7 | |
| **N23A** | **Red Feather La** baz=47,SNR=17 | 47.42 | 74 | P | | **P** | 06 16 44.4 | -1.8 | |
| **B30A** | **Myrvik Farm, E** baz=47,SNR=64 | 47.42 | 62 | P | | **P** | 06 16 44.2 | -1.6 | |
| **WUAZ** | **Wupatki** baz=47,SNR=19 | 47.46 | 84 | P | | **P** | 06 16 44.6 | -1.8 | |
| **WUAZ** | **Wupatki** comp=Z,36nm,0.8s | 47.46 | 84 | *e*P | | **P** | 06 16 46.7 | +0.3 | |
| WUAZ | comp=Z,1μm,20.0s | | | LR | | LR | | | |
| **PHWY** | **Pilot Hill** comp=Z,15nm,0.8s | 47.47 | 74 | *e*P | | **P** | 06 16 46.0 | -0.5 | |
| **H27A** | **Howes** baz=47 | 47.49 | 68 | P | | **P** | 06 16 44.5 | -1.8 | |
| **D29A** | **Pettibone, Tap** baz=47,SNR=6.8 | 47.51 | 64 | P | | **P** | 06 16 44.7 | -1.7 | |
| **F28A** | **McLaughlin** baz=47,SNR=21 | 47.52 | 66 | P | | **P** | 06 16 44.7 | -1.8 | |
| **PV01** | **Paradox Valley** | 47.52 | 79 | *e*P | | **P** | 06 16 46.8 | -0.2 | |
| PV01 | | | | *e*ScP | | **ScP** | 06 22 09.0 | +1.0 | |
| **BJI** | **Beijing** | 47.54 | 284 | P | | **P** | 06 16 46.3 | -0.4 | |
| BJI | | | | PP | | **PP** | 06 18 38.4 | +0.3 | |
| BJI | | | | S | | **S** | 06 23 36.5 | -2.8 | |
| BJI | comp=Z,20nm,1.3s | | | PMZ | | | | | |
| BJI | comp=Z,790nm,4.0s | | | PMZ | | | | | |
| BJI | comp=Z,2μm,20.7s | | | LN | | | | | |
| BJI | comp=Z,1μm,20.3s | | | LE | | | | | |
| BJI | comp=Z,2μm,21.1s | | | LZ | | | | | |
| **BJT** | **Baijiatuau** | 47.56 | 284 | *e*P | | **P** | 06 16 47.2 | +0.3 | |
| BJT | comp=Z,119nm,0.8s | | | pmax | | pmax | | | |
| BJT | comp=Z,3μm,20.0s | | | MLR | | MLR | | | |
| **BJT** | **Baijiatuau** comp=Z,120nm,0.8s | 47.56 | 284 | *e*P | | **P** | 06 16 47.2 | +0.3 | |
| BJT | comp=Z,3μm,20.0s | | | LR | | LR | | | |
| **J26A** | **Sides Ranch, S** baz=48,SNR=9.4 | 47.68 | 70 | P | | **P** | 06 16 46.1 | -1.8 | |
| **ULM** | **Lac du Bonnet** comp=Z,49nm,0.9s,baz=305,slow=8.0,SNR=33 | 47.75 | 58 | P | | **P** | 06 16 47.9 | -0.3 | |
| ULM | comp=Z,1μm,18.1s,baz=313,slow=40 | | | LR | | LR | 06 39 56.7 | | |
| **ULM** | **Lac du Bonnet** | 47.75 | 58 | P | | **P** | 06 16 47.9 | -0.3 | |
| ULM | comp=Z,49nm,1.0s | | | pmax | | pmax | | | |
| ULM | comp=Z,1μm,18.1s | | | MLR | | MLR | | | |
| **ULM** | **Lac du Bonnet** comp=Z,59nm,1.0s | 47.75 | 58 | *e*P | | **P** | 06 16 48.0 | -0.3 | |
| **E29A** | **Napoleon** baz=48 | 47.76 | 64 | P | | **P** | 06 16 46.6 | -1.8 | |
| **C30A** | **Mose, Pekin** baz=48,SNR=10 | 47.77 | 63 | P | | **P** | 06 16 46.6 | -1.8 | |
| **A31A** | **Linda, St. Vin** baz=48 | 47.78 | 61 | P | | **P** | 06 16 47.1 | -1.3 | |
| **B31A** | **Greenbush Farm** baz=48,SNR=65 | 47.81 | 61 | P | | **P** | 06 16 47.1 | -1.7 | |
| **I27A** | **Quinn** baz=48,SNR=20 | 47.83 | 69 | P | | **P** | 06 16 47.3 | -1.7 | |
| **SMCO** | **Snowmass** comp=Z,24nm,1.1s | 47.85 | 77 | *e*P | | **P** | 06 16 48.0 | -1.7 | |
| **TLY** | **Talaya** | 47.90 | 304 | *c i* | P | **P** | 06 16 48.7 | -0.7 | |
| TLY | | | | *e* | | | 06 18 15.4 | | |
| TLY | | | | *e* | | | 06 18 33.7 | | |
| TLY | | | | *e* | S | S | 06 24 00.2 | +16 | |
| TLY | | | | *e* | | | 06 26 42.2 | | |
| TLY | comp=Z,22nm,1.1s | | | pmax | | pmax | | | |
| TLY | comp=Z,2μm,18.0s | | | MLR | | MLR | | | |
| **TLY** | **Talaya** | 47.90 | 304 | PFAKE | | | 06 17 00.0 | +11 | |
| TLY | comp=Z,2μm,19.0s | | | LR | | LR | | | |
| **G28A** | **Parade** baz=48,SNR=17 | 47.90 | 67 | P | | **P** | 06 16 47.6 | -1.9 | |
| **D30A** | **Buchanan** baz=48,SNR=41 | 47.95 | 63 | P | | **P** | 06 16 47.9 | -1.9 | |
| **H28A** | **Mission Ridge** baz=48,SNR=24 | 48.08 | 67 | P | | **P** | 06 16 49.2 | -1.7 | |
| **F29A** | **Eureka** baz=48,SNR=14 | 48.08 | 65 | P | | **P** | 06 16 49.2 | -1.7 | |
| **C31A** | **Landman Farms,** baz=48,SNR=34 | 48.13 | 62 | P | | **P** | 06 16 49.4 | -1.8 | |
| **MVCO** | **Mesa Verde** baz=48 | 48.15 | 80 | P | | **P** | 06 16 49.9 | -1.9 | |
| **MVCO** | **Mesa Verde** comp=Z,24nm,0.8s | 48.15 | 80 | *e*P | | **P** | 06 16 51.7 | -0.1 | |
| MVCO | comp=Z,976nm,19.0s | | | LR | | LR | | | |
| **E30A** | **Jud** baz=48,SNR=11 | 48.21 | 64 | P | | **P** | 06 16 50.2 | -1.7 | |
| **ULN** | **Ulaanbaatar** | 48.22 | 298 | *e*P | | **P** | 06 16 51.4 | -0.7 | |
| ULN | comp=Z,32nm,0.9s | | | pmax | | pmax | | | |
| ULN | comp=Z,2μm,19.0s | | | MLR | | MLR | | | |
| **ULN** | **Ulaanbaatar** SNR=14 | 48.22 | 298 | P | | **P** | 06 16 51.7 | -0.4 | |
| **ULN** | **Ulaanbaatar** comp=Z,32nm,0.9s | 48.22 | 298 | *e*P | | **P** | 06 16 51.4 | -0.7 | |
| ULN | | | | *e*ScP | | **ScP** | 06 22 13.8 | +3.2 | |
| ULN | comp=Z,2μm,19.0s | | | LR | | LR | | | |
| **ISCO** | **Idaho Springs** | 48.29 | 75 | *e*P | | **P** | 06 16 53.2 | +0.2 | |
| ISCO | comp=Z,24nm,1.1s | | | pmax | | pmax | | | |
| ISCO | comp=Z,2μm,22.0s | | | MLR | | MLR | | | |
| **ISCO** | **Idaho Springs** baz=48,SNR=12 | 48.29 | 75 | P | | **P** | 06 16 51.0 | -2.0 | |
| **ISCO** | **Idaho Springs** comp=Z,24nm,1.1s | 48.29 | 75 | *e*P | | **P** | 06 16 53.2 | +0.2 | |
| ISCO | comp=Z,2μm,22.0s | | | LR | | LR | | | |
| **J27A** | **Elkhorn Farm,** baz=48 | 48.34 | 69 | P | | **P** | 06 16 51.4 | -1.6 | |
| **I28A** | **Midland** baz=48,SNR=47 | 48.39 | 68 | P | | **P** | 06 16 52.0 | -1.3 | |
| **G29A** | **Hoven** baz=48,SNR=7.3 | 48.40 | 66 | P | | **P** | 06 16 52.0 | -1.4 | |
| **B32A** | **Ashes, Strandq** baz=48,SNR=44 | 48.44 | 61 | P | | **P** | 06 16 52.3 | -1.3 | |
| **F30A** | **Leola** baz=48,SNR=5.4 | 48.54 | 65 | P | | **P** | 06 16 53.1 | -1.3 | |
| **D31A** | **Mcclaflin, Tow** baz=48,SNR=30 | 48.56 | 63 | P | | **P** | 06 16 53.2 | -1.3 | |
| **H29A** | **Onida** baz=48,SNR=15 | 48.57 | 67 | P | | **P** | 06 16 53.3 | -1.4 | |
| **SONA1** | **Songino Array** | 48.59 | 298 | *e*P | | **P** | 06 16 53.8 | -1.2 | |
| **SONM** | **Songino Array** comp=Z,22nm,0.8s,baz=49,slow=9.4,SNR=83 | 48.60 | 298 | P | | **P** | 06 16 54.9 | -0.1 | |
| SONM | comp=Z,12nm,0.9s,baz=68,slow=1.1,SNR=7.5 | | | PcP | | **PcP** | 06 18 20.8 | +0.7 | |
| SONM | comp=Z,7.4nm,0.8s,baz=47,slow=3.1,SNR=15 | | | ScP | | **ScP** | 06 22 15.0 | +2.8 | |
| SONM | comp=Z,3μm,19.5s,baz=59,slow=38 | | | LR | | LR | 06 39 06.0 | | |
| **J28A** | **Allard Ranch,** baz=48,SNR=38 | 48.69 | 69 | P | | **P** | 06 16 54.3 | -1.4 | |
| **W18A** | **Petrified Fore** baz=49 | 48.73 | 83 | P | | **P** | 06 16 54.8 | -1.4 | |
| **A33A** | **Warroad** baz=49 | 48.75 | 60 | P | | **P** | 06 16 54.5 | -1.5 | |
| **E31A** | **Nome** baz=49,SNR=23 | 48.75 | 64 | P | | **P** | 06 16 54.7 | -1.4 | |
| **ZAK** | **Zakamensk** | 48.82 | 303 | *e*P | | **P** | 06 16 55.6 | -1.0 | |
| ZAK | | | | *e* | | | 06 18 20.7 | | |
| ZAK | comp=Z,30nm,1.1s | | | pmax | | pmax | | | |
| ZAK | comp=Z,24nm,1.0s | | | pmax | | pmax | | | |
| **S22A** | **4UR Ranch, Cre** baz=49,SNR=17 | 48.84 | 78 | P | | **P** | 06 16 55.6 | -1.6 | |
| **S22A** | **4UR Ranch, Cre** comp=Z,33nm,1.1s | 48.84 | 78 | *e*P | | **P** | 06 16 57.9 | +0.7 | |
| **AGMN** | **Agassiz Nation** baz=49,SNR=38 | 48.86 | 61 | P | | **P** | 06 16 55.4 | -1.4 | |
| **AGMN** | **Agassiz Nation** comp=Z,129nm,1.1s | 48.86 | 61 | *e*P | | **P** | 06 16 56.3 | -0.5 | |
| AGMN | comp=Z,2μm,20.0s | | | LR | | LR | | | |
| **D32A** | **Dogwood Acres,** baz=49,SNR=11 | 48.90 | 62 | P | | **P** | 06 16 55.7 | -1.5 | |
| **214A** | **Organ Pipe Nat** baz=49 | 48.91 | 88 | P | | **P** | 06 16 56.4 | -1.1 | |
| **214A** | **Organ Pipe Nat** comp=Z,70nm,0.9s | 48.91 | 88 | *e*P | | **P** | 06 16 57.3 | -0.2 | |
| **F31A** | **Hecla** baz=49,SNR=14 | 48.96 | 65 | P | | **P** | 06 16 56.4 | -1.2 | |
| **K28A** | **Ten Mile Ranch** baz=49,SNR=15 | 49.04 | 70 | P | | **P** | 06 16 57.0 | -1.5 | |
| **Q24A** | **Divide** baz=49 | 49.09 | 76 | P | | **P** | 06 16 57.3 | -1.9 | |
| **Q24A** | **Divide** comp=Z,14nm,0.8s | 49.09 | 76 | *e*P | | **P** | 06 16 59.6 | +0.5 | |
| **N26A** | **Koester Ranch,** baz=49 | 49.09 | 73 | P | | **P** | 06 16 57.5 | -1.4 | |
| **M27A** | **Reverse DX Ran** baz=49 | 49.16 | 71 | P | | **P** | 06 16 57.8 | -1.5 | |
| **E32A** | **Braaten, Kindr** baz=49,SNR=14 | 49.19 | 63 | P | | **P** | 06 16 58.0 | -1.3 | |
| **C33A** | **Trail** baz=49,SNR=20 | 49.23 | 61 | P | | **P** | 06 16 58.0 | -1.6 | |
| **J29A** | **Okreek** baz=49,SNR=62 | 49.23 | 68 | P | | **P** | 06 16 58.3 | -1.5 | |
| **MOY** | **Mondy** | 49.27 | 305 | *e*P | | **P** | 06 16 59.7 | -0.4 | |
| MOY | comp=Z,49nm,2.1s | | | pmax | | pmax | | | |
| **G31A** | **Conde** baz=49,SNR=8.7 | 49.36 | 65 | P | | **P** | 06 16 59.2 | -1.5 | |
| **TIA** | **Tai'an** | 49.37 | 280 | ⇓P | | **P** | 06 17 01.2 | +0.3 | |
| TIA | | | | sP | | sP | 06 17 09.5 | -5.3 | |
| TIA | | | | PP | | **PP** | 06 18 55.4 | +0.6 | |
| TIA | | | | S | | **S** | 06 24 08.1 | +2.9 | |
| TIA | comp=Z,160nm,0.8s | | | PMZ | | | | | |
| TIA | comp=Z,800nm,18.4s | | | LN | | | | | |
| TIA | comp=Z,900nm,16.0s | | | LE | | | | | |
| TIA | comp=Z,1μm,19.0s | | | LZ | | | | | |
| **L28A** | **Connealy Angus** baz=49 | 49.38 | 70 | P | | **P** | 06 16 59.3 | -1.7 | |
| **SUSD** | **South Dakota S** baz=49,SNR=35 | 49.40 | 66 | P | | **P** | 06 16 59.7 | -1.4 | |
| **O26A** | **Horse Wrangler** | 49.40 | 73 | P | | **P** | 06 16 59.5 | -1.7 | |
| **B34A** | **Aery, Baudette** baz=49,SNR=40 | 49.41 | 60 | P | | **P** | 06 16 59.6 | -1.5 | |
| **I30A** | **Oacoma** baz=49,SNR=24 | 49.45 | 67 | P | | **P** | 06 17 00.1 | -1.4 | |
| **N27A** | **Anderson Farm,** baz=49,SNR=8.0 | 49.52 | 72 | P | | **P** | 06 17 00.8 | -1.4 | |
| **D33A** | **AnnSam, Waubun** baz=49,SNR=39 | 49.55 | 62 | P | | **P** | 06 17 00.6 | -1.5 | |
| **K29A** | **Lazy Trails An** baz=50,SNR=13 | 49.63 | 69 | P | | **P** | 06 17 01.5 | -1.3 | |
| **SDCO** | **Great Sand Dun** baz=50,SNR=26 | 49.65 | 77 | P | | **P** | 06 17 01.7 | -1.7 | |
| **SDCO** | **Great Sand Dun** comp=Z,32nm,1.1s | 49.65 | 77 | *e*P | | **P** | 06 17 03.2 | -0.1 | |
| SDCO | comp=Z,909nm,19.0s | | | LR | | LR | | | |
| **H31A** | **Wolsey** baz=50,SNR=14 | 49.65 | 66 | P | | **P** | 06 17 01.5 | -1.4 | |
| **OGNE** | **Ogallala** baz=50 | 49.73 | 72 | P | | **P** | 06 17 02.0 | -1.7 | |
| **OGNE** | **Ogallala** comp=Z,113nm,1.1s | 49.73 | 72 | *e*P | | **P** | 06 17 04.2 | +0.5 | |
| OGNE | comp=Z,750nm,19.0s | | | LR | | LR | | | |
| **G32A** | **Webster** baz=50,SNR=27 | 49.74 | 65 | P | | **P** | 06 17 02.2 | -1.5 | |
| **J30A** | **Dallas** baz=50,SNR=30 | 49.77 | 68 | P | | **P** | 06 17 02.4 | -1.5 | |
| **KBS** | **Kingsbay** | 49.81 | 358 | *e*P | | **P** | 06 17 04.2 | +0.5 | |
| KBS | comp=Z,105nm,0.8s | | | pmax | | pmax | | | |
| KBS | comp=Z,2μm,20.0s | | | MLR | | MLR | | | |
| **KBS** | **Kingsbay** comp=Z,105nm,0.8s | 49.81 | 358 | *e*P | | **P** | 06 17 04.2 | +0.5 | |
| KBS | comp=Z,2μm,20.0s | | | LR | | LR | | | |
| **HHC** | **Hu-ho-hao-te** | 49.81 | 288 | *e*P | | **P** | 06 17 05.0 | +0.7 | |
| HHC | | | | pP | | **pP** | 06 17 12.4 | -1.9 | |
| HHC | | | | PcP | | **PcP** | 06 18 22.6 | -2.1 | |
| HHC | | | | PP | | **PP** | 06 19 03.4 | +4.5 | |
| HHC | | | | S | | **S** | 06 24 11.8 | +0.3 | |
| HHC | | | | sS | | **sS** | 06 24 28.1 | +0.1 | |
| HHC | comp=Z,72nm,1.0s | | | PMZ | | | | | |
| HHC | comp=Z,470nm,6.5s | | | PMZ | | | | | |
| HHC | comp=Z,2μm,14.7s | | | LN | | | | | |
| HHC | comp=Z,1μm,14.6s | | | LE | | | | | |
| HHC | comp=Z,2μm,14.8s | | | LZ | | | | | |
| **E33A** | **Westby DABS, E** baz=50,SNR=13 | 49.84 | 63 | P | | **P** | 06 17 02.8 | -1.5 | |
| **M28A** | **Bar X Bar Ranc** baz=50,SNR=5.2 | 49.85 | 71 | P | | **P** | 06 17 03.0 | -1.5 | |
| **I31A** | **Royce, Wessing** baz=50,SNR=10.0 | 49.89 | 67 | P | | **P** | 06 17 03.2 | -1.6 | |
| **O27A** | **Beecher Island** baz=50,SNR=12 | 49.94 | 73 | P | | **P** | 06 17 04.1 | -1.2 | |
| **D34A** | **Park Rapids** baz=50,SNR=85 | 49.94 | 62 | P | | **P** | 06 17 03.6 | -1.5 | |
| **TUC** | **Tucson** | 49.94 | 86 | *e*P | | **P** | 06 17 05.4 | 0.0 | |
| TUC | comp=Z,32nm,0.9s | | | pmax | | pmax | | | |
| TUC | comp=Z,1μm,20.0s | | | MLR | | MLR | | | |
| **TUC** | **Tucson** comp=Z,32nm,0.9s | 49.94 | 86 | *e*P | | **P** | 06 17 05.4 | 0.0 | |
| TUC | comp=Z,1μm,20.0s | | | LR | | LR | | | |
| **L29A** | **Maesberg Ranch** baz=50,SNR=8.2 | 49.96 | 70 | P | | **P** | 06 17 03.7 | -1.7 | |
| **F33A** | **5 Mile Ranch,** baz=50,SNR=13 | 50.07 | 63 | P | | **P** | 06 17 04.8 | -1.3 | |
| **K30A** | **Basset** baz=50,SNR=37 | 50.09 | 69 | P | | **P** | 06 17 04.9 | -1.4 | |
| **Q26A** | **Hugo** baz=50 | 50.11 | 75 | P | | **P** | 06 17 05.1 | -1.6 | |
| **N28A** | **Pribbeno Ranch** baz=50 | 50.19 | 72 | P | | **P** | 06 17 05.6 | -1.6 | |
| **M29A** | **Burnside Ranch** baz=50,SNR=8.4 | 50.22 | 71 | P | | **P** | 06 17 06.2 | -1.2 | |
| **J31A** | **Geddes** baz=50,SNR=43 | 50.22 | 67 | P | | **P** | 06 17 05.9 | -1.4 | |
| **H32A** | **Carlson Farm,** baz=50,SNR=24 | 50.23 | 65 | P | | **P** | 06 17 06.0 | -1.4 | |
| **SSE** | **Sheshan** | 50.24 | 272 | P | | **P** | 06 17 08.3 | +0.8 | |
| SSE | | | | S | | **S** | 06 24 17.2 | -0.2 | |
| SSE | | | | sS | | **sS** | 06 24 36.5 | +2.6 | |
| SSE | comp=Z,67nm,0.8s | | | PMZ | | | | | |
| SSE | comp=Z,280nm,3.9s | | | PMZ | | | | | |
| SSE | comp=Z,360nm,18.3s | | | LN | | | | | |
| SSE | comp=Z,600nm,19.9s | | | LZ | | | | | |
| **C35A** | **Jirik Farms, M** baz=50,SNR=26 | 50.24 | 60 | P | | **P** | 06 17 05.9 | -1.5 | |
| **P27A** | **Ficken Ranch,** baz=50,SNR=11 | 50.27 | 74 | P | | **P** | 06 17 06.5 | -1.4 | |
| **O28A** | **Krutsinger Ran** baz=50,SNR=16 | 50.40 | 73 | P | | **P** | 06 17 07.3 | -1.4 | |
| **SPB5** | **Spitsbergen Ar** | 50.43 | 357 | *e*P | | **P** | 06 17 08.1 | -0.3 | |
| **SPB1** | **Spitsbergen Ar** | 50.43 | 357 | *e*P | | **P** | 06 17 08.5 | +0.1 | |
| **SPA1** | **Spitsbergen Ar** | 50.43 | 357 | *e*P | | **P** | 06 17 08.6 | +0.1 | |
| **SPA0** | **Spitsbergen Ar** | 50.44 | 357 | *e*P | | **P** | 06 17 08.1 | -0.4 | |
| SPA0 | | | | IAmb | | IAmb | 06 17 09.6 | | |
| **SPA0** | **Spitsbergen Ar** comp=Z,128nm,0.9s | 50.44 | 357 | *e*P | | **P** | 06 17 08.7 | +0.2 | |
| **SPB4** | **Spitsbergen Ar** | 50.44 | 357 | *e*P | | **P** | 06 17 08.6 | +0.1 | |
| **SPA3** | **Spitsbergen Ar** | 50.44 | 357 | *e*P | | **P** | 06 17 08.6 | +0.2 | |
| **SPA2** | **Spitsbergen Ar** | 50.44 | 357 | *e*P | | **P** | 06 17 08.7 | +0.3 | |
| **SPB2** | **Spitsbergen Ar** | 50.44 | 357 | *e*P | | **P** | 06 17 08.7 | +0.2 | |
| **SPB3** | **Spitsbergen Ar** | 50.44 | 357 | *e*P | | **P** | 06 17 08.6 | +0.2 | |
| **L30A** | **Spencer Herefo** baz=50,SNR=12 | 50.48 | 69 | P | | **P** | 06 17 07.9 | -1.4 | |
| **I32A** | **Karley and Nic** baz=50,SNR=6.4 | 50.51 | 66 | P | | **P** | 06 17 08.0 | -1.4 | |
| **H33A** | **Prehn Over Nor** baz=50,SNR=37 | 50.52 | 65 | P | | **P** | 06 17 08.1 | -1.4 | |
| **R26A** | **Arlington** baz=50,SNR=12 | 50.55 | 75 | P | | **P** | 06 17 08.4 | -1.5 | |
| **D35A** | **Remer** baz=50,SNR=39 | 50.57 | 61 | P | | **P** | 06 17 08.4 | -1.4 | |
| **KSCO** | **Kaye Shedlock'** baz=50,SNR=14 | 50.59 | 74 | P | | **P** | 06 17 08.7 | -1.5 | |
| **KSCO** | **Kaye Shedlock'** comp=Z,105nm,1.0s | 50.59 | 74 | *e*P | | **P** | 06 17 10.9 | +0.7 | |
| **K31A** | **O'Neill** baz=50 | 50.62 | 68 | P | | **P** | 06 17 09.1 | -1.2 | |
| **M30A** | **Dale-Ortello V** baz=50 | 50.64 | 70 | P | | **P** | 06 17 09.1 | -1.5 | |
| **N29A** | **Votaw Ranch, W** baz=50,SNR=6.3 | 50.65 | 71 | P | | **P** | 06 17 09.2 | -1.4 | |
| **KRAR** | **Krasnoyarsk** | 50.67 | 313⇑ | *e*P | | **P** | 06 17 10.7 | +0.2 | |
| KRAR | comp=Z,25nm,0.8s | | | pmax | | pmax | | | |
| **F34A** | **Alexandria** baz=50 | 50.68 | 63 | P | | **P** | 06 17 09.5 | -1.2 | |
| **J32A** | **Parkston** baz=50,SNR=20 | 50.69 | 67 | P | | **P** | 06 17 09.5 | -1.3 | |
| **E35A** | **Pequot Lakes** baz=50,SNR=25 | 50.69 | 62 | P | | **P** | 06 17 09.5 | -1.3 | |
| **T25A** | **Trinidad** baz=51,SNR=34 | 50.70 | 77 | P | | **P** | 06 17 09.8 | -1.4 | |
| **T25A** | **Trinidad** comp=Z,136nm,1.1s | 50.70 | 77 | *e*P | | **P** | 06 17 11.4 | +0.1 | |
| **P28A** | **Saint Francis** baz=51 | 50.76 | 73 | P | | **P** | 06 17 10.2 | -1.3 | |
| **G34A** | **Benson** baz=51,SNR=14 | 50.80 | 64 | P | | **P** | 06 17 10.3 | -1.3 | |
| **LAZ** | **Ladron** | 50.81 | 82 | *e*P | | **P** | 06 17 12.2 | +0.1 | |
| **C36A** | **Pine Crest Far** baz=51,SNR=20 | 50.82 | 60 | P | | **P** | 06 17 10.3 | -1.4 | |
| **L31A** | **Butterfield Fa** baz=51 | 50.85 | 69 | P | | **P** | 06 17 10.9 | -1.2 | |
| **I33A** | **Coleman** baz=51 | 50.87 | 66 | P | | **P** | 06 17 11.0 | -1.2 | |
| **ANMO** | **Albuquerque** | 50.88 | 81⇓ | *e*P | | **P** | 06 17 12.4 | -0.1 | |
| ANMO | comp=Z,9.0nm,1.2s | | | pmax | | pmax | | | |
| **ANMO** | **Albuquerque** comp=Z,32nm,1.4s | 50.88 | 81 | *e*P | | **P** | 06 17 12.5 | -0.1 | |

ANMO eScP **ScP** 06 22 24.2 +1.9
ANMO LR LR
comp=Z,989nm,20.0s
**BTO Baotou** 50.88 289 eP **P** 06 17 12.5 +0.1
**R27A Eads** 50.95 75 P **P** 06 17 11.5 -1.4
baz=51
**S26A Kim** 50.97 76 P **P** 06 17 12.0 -1.2
baz=51,SNR=20
**N30A Hueftle Ranch,** 50.97 71 P **P** 06 17 11.7 -1.3
baz=51
**O29A 4D Ranch, Culb** 50.98 72 P **P** 06 17 11.7 -1.4
baz=51
**D36A Goodland** 51.00 60 P **P** 06 17 11.5 -1.6
baz=51,SNR=18
**F35A Swanville** 51.02 63 P **P** 06 17 11.8 -1.4
baz=51,SNR=27
**Q28A Sharon Springs** 51.03 74 P **P** 06 17 12.1 -1.4
baz=51,SNR=20
**NJ2 Nanjing** 51.05 274 eP **P** 06 17 14.1 +0.5
NJ2 pP **pP** 06 17 23.1 -0.5
NJ2 sP **sP** 06 17 26.9 -0.6
NJ2 S **S** 06 24 34.0 +5.4
NJ2 sS **sS** 06 24 47.5 +2.4
NJ2 PMZ
comp=Z,120nm,0.9s
NJ2 PMZ
comp=Z,1μm,7.4s
NJ2 LN
comp=Z,2μm,23.6s
NJ2 LE
comp=Z,2μm,27.4s
NJ2 LZ
comp=Z,2μm,22.5s
**K32A Verdigre** 51.05 68 P **P** 06 17 12.2 -1.4
baz=51,SNR=22
**H34A Spellman Lake,** 51.07 64 P **P** 06 17 12.3 -1.4
baz=51,SNR=19
**ECSD EROS Data Cent** 51.17 66 P **P** 06 17 13.0 -1.4
baz=51,SNR=23
**ECSD EROS Data Cent** 51.17 66 eP **P** 06 17 13.4 -1.1
comp=Z,33nm,0.6s
ECSD LR LR
comp=Z,2μm,21.0s
**DAG Danmarks Havn** 51.18 7 i P **P** 06 17 12.7 -1.3
DAG pmax pmax
comp=Z,19nm,0.9s
DAG MLR MLR
comp=Z,2μm,18.0s
**DAG Danmarks Havn** 51.18 7 i P **P** 06 17 12.7 -1.3
comp=Z,23nm,0.9s
comp=Z,2μm,18.0s
**LPM Los Pinos Moun** 51.19 81 eP **P** 06 17 15.4 +0.5
**C37A Embarrass** 51.19 59 P **P** 06 17 13.1 -1.4
baz=51,SNR=26
**J33A Davis** 51.23 66 P **P** 06 17 13.4 -1.5
baz=51,SNR=6.6
**P29A Atwood** 51.23 73 P **P** 06 17 13.6 -1.4
baz=51,SNR=18
**TIY Taiyuan** 51.27 284 P **P** 06 17 16.2 +0.9
TIY PP **PP** 06 19 10.7 -1.4
TIY S **S** 06 24 35.4 +3.6
TIY PMZ
comp=Z,170nm,0.9s
TIY PMZ
comp=Z,330nm,7.2s
TIY LN
comp=Z,870nm,14.7s
TIY LE
comp=Z,560nm,13.9s
TIY LZ
comp=Z,1μm,19.0s
**S27A Las Animas** 51.27 76 P **P** 06 17 14.0 -1.5
baz=51,SNR=9.7
**M31A Lambtecht Ranc** 51.29 70 P **P** 06 17 14.1 -1.3
baz=51
**BNM Barren Site** 51.30 82 eP **P** 06 17 16.3 +0.5
**O30A MW Ranch, Wils** 51.38 71 P **P** 06 17 14.8 -1.4
baz=51,SNR=21
**D37A Cotton** 51.41 60 P **P** 06 17 14.8 -1.4
baz=51,SNR=20
**I34A Hadley** 51.41 65 P **P** 06 17 15.1 -1.1
baz=51
**EYMN Ely** 51.43 59 P **P** 06 17 15.0 -1.3
baz=51,SNR=20
**EYMN Ely** 51.43 59 eP **P** 06 17 15.9 -0.4
comp=Z,79nm,1.0s
EYMN LR LR
comp=Z,1μm,20.0s
**L32A Elgin** 51.44 68 P **P** 06 17 15.2 -1.3
baz=51,SNR=22
**G35A Watkins** 51.46 63 P **P** 06 17 15.1 -1.4
baz=51,SNR=16
**R28A Tribune** 51.51 74 P **P** 06 17 15.7 -1.4
baz=51,SNR=20
**H35A Sunnyside Ranc** 51.59 64 P **P** 06 17 16.2 -1.4
baz=51
**F36A Milaca** 51.60 62 P **P** 06 17 16.2 -1.4
baz=51,SNR=12
**N31A Bailey Ranch,** 51.63 70 P **P** 06 17 16.5 -1.4
baz=52
**HSPB Hornsund (broa** 51.63 357 eP **P** 06 17 17.1 -0.3
HSPB eS **S** 06 24 37.9 +2.3
**K33A Hardington** 51.65 67 P **P** 06 17 16.7 -1.4
baz=52,SNR=7.6
**Q29A Oakley** 51.66 73 P **P** 06 17 16.8 -1.4
baz=52,SNR=9.9
**121A Cookes Peak, D** 51.66 84 P **P** 06 17 17.1 -1.3
baz=52,SNR=12
**121A Cookes Peak, D** 51.66 84 eP **P** 06 17 18.6 +0.2
comp=Z,19nm,0.8s
**P30A Selden** 51.67 72 P **P** 06 17 16.9 -1.4
baz=52,SNR=17
**C38A Sawbill Land.** 51.69 59 P **P** 06 17 16.8 -1.5
baz=52,SNR=15
**BGNE Belgrade** 51.73 69 P **P** 06 17 17.3 -1.4
baz=52,SNR=22
**BGNE Belgrade** 51.73 69 eP **P** 06 17 18.5 -0.2
comp=Z,170nm,0.8s
**T27A Campo** 51.78 76 P **P** 06 17 17.6 -1.6
baz=52
**J34A George** 51.82 66 P **P** 06 17 17.9 -1.5
baz=52,SNR=8.9
**O31A Woolen Ranch,** 51.84 71 P **P** 06 17 18.0 -1.5
baz=52,SNR=17
**G36A St. Michael** 51.86 63 P **P** 06 17 18.1 -1.5
baz=52,SNR=12
**R29A Marienthal** 51.86 74 P **P** 06 17 18.3 -1.5
baz=52,SNR=26
**S28A Manter** 51.94 75 P **P** 06 17 18.9 -1.5
baz=52,SNR=27
**I35A Creekview Farm** 52.02 65 P **P** 06 17 19.4 -1.4
baz=52,SNR=11
**Q30A Quinter** 52.05 73 P **P** 06 17 19.7 -1.5
baz=52,SNR=22
**N32A Stulken Farm,** 52.05 70 P **P** 06 17 19.7 -1.4
baz=52
**T28A Walsh** 52.11 76 P **P** 06 17 20.1 -1.5
baz=52,SNR=15
**K34A Le Mars** 52.12 67 P **P** 06 17 20.2 -1.4
baz=52,SNR=13
**U27A Thompson Grove** 52.14 77 P **P** 06 17 20.4 -1.5
baz=52,SNR=9.4
**H36A Jessenland, He** 52.17 63 P **P** 06 17 20.4 -1.5
baz=52
**M33A Taylor Creek F** 52.19 68 P **P** 06 17 20.6 -1.5
baz=52,SNR=7.7
**J35A Milford** 52.20 65 P **P** 06 17 20.8 -1.4
baz=52,SNR=13
**P31A Stockton** 52.21 72 P **P** 06 17 20.9 -1.3
baz=52,SNR=26
**C39A Grand Marais** 52.24 58 P **P** 06 17 21.0 -1.3
baz=52
**O32A Brookman Farm,** 52.38 70 P **P** 06 17 22.2 -1.3
baz=52
**SPMN St. Paul** 52.39 62 P **P** 06 17 22.1 -1.4
baz=52,SNR=11
**SPMN St. Paul** 52.39 62 eP **P** 06 17 23.1 -0.4
comp=Z,57nm,1.1s
SPMN eScP **ScP** 06 22 29.0 +0.6
**S29A Ulysses** 52.39 75 P **P** 06 17 22.5 -1.2
baz=52,SNR=5.4
**L34A Svendsen Farm,** 52.41 67 P **P** 06 17 22.3 -1.4
baz=52,SNR=23
**CBKS Cedar Bluff** 52.45 73 eP **P** 06 17 23.8 -0.3
CBKS pmax pmax
comp=Z,130nm,0.9s
CBKS MLR MLR
comp=Z,727nm,19.0s
**CBKS Cedar Bluff** 52.45 73 P **P** 06 17 22.6 -1.4
baz=52,SNR=35
**CBKS Cedar Bluff** 52.45 73 eP **P** 06 17 23.8 -0.3
comp=Z,130nm,0.9s
CBKS LR LR
comp=Z,727nm,19.0s
**R30A Dighton** 52.47 73 P **P** 06 17 22.9 -1.3
baz=52,SNR=28
**I36A Fitzsimmons Fa** 52.47 64 P **P** 06 17 22.5 -1.6
baz=52,SNR=7.1
**Q31A Ellis** 52.53 72 P **P** 06 17 23.3 -1.4
baz=52,SNR=12
**U28A Mallet** 52.53 76 P **P** 06 17 23.5 -1.3
baz=52,SNR=7.3
**N33A J Bar K, Exete** 52.57 69 P **P** 06 17 23.7 -1.2
baz=52
**V27A Dan Oppiter Fa** 52.57 77 P **P** 06 17 24.0 -1.1
baz=52
**M34A Aspy Farms, Fr** 52.59 68 P **P** 06 17 23.8 -1.2
baz=52
**T29A Hugoton** 52.59 75 P **P** 06 17 23.7 -1.5
baz=52,SNR=7.1
**K35A Storm Lake** 52.59 66 P **P** 06 17 23.4 -1.6
baz=52,SNR=6.5
**P32A Huiting Farm,** 52.60 71 P **P** 06 17 23.8 -1.4
baz=52,SNR=12
**SUMG Summit** 52.66 15 i P **P** 06 17 24.1 -1.5
SUMG pmax pmax
comp=Z,53nm,1.2s
**SUMG Summit** 52.66 15 i P **P** 06 17 24.1 -1.5
comp=Z,53nm,1.2s
**SUMG Summit** 52.66 15 eP **P** 06 17 24.4 -1.2
comp=Z,34nm,1.0s
**J36A Seneca 1, Swea** 52.72 65 P **P** 06 17 24.9 -1.1
baz=52
**H37A Dierke Farm, C** 52.73 63 P **P** 06 17 24.6 -1.4
baz=52
**S30A Montezuma** 52.77 74 P **P** 06 17 25.1 -1.4
baz=53,SNR=25
**L35A Bielow Farm, R** 52.80 67 P **P** 06 17 25.1 -1.5
baz=53
**I37A Lemond, Waseca** 52.81 64 P **P** 06 17 25.1 -1.5
baz=53
**ILULI Ilulissat** 52.88 22 i P **P** 06 17 25.9 -0.9
comp=Z,38nm,0.9s
**O33A Hebron** 52.91 70 P **P** 06 17 26.0 -1.4
baz=53,SNR=31
**R31A Burdett** 52.91 73 P **P** 06 17 26.0 -1.5
baz=53,SNR=24
**V28A Channing** 52.94 77 P **P** 06 17 26.3 -1.5
baz=53
**Q32A Meitler Ranch,** 53.03 72 P **P** 06 17 27.1 -1.3
baz=53,SNR=50
**N34A Lincoln** 53.06 69 P **P** 06 17 27.0 -1.4
baz=53,SNR=8.1
**U29A Oasis Ranch, S** 53.06 76 P **P** 06 17 27.1 -1.6
baz=53,SNR=6.8
**T30A Plains** 53.12 75 P **P** 06 17 27.6 -1.5
baz=53,SNR=6.0
**J37A Redenius Farm,** 53.17 64 P **P** 06 17 27.7 -1.6
baz=53
**HVS Khovu-Aksy** 53.25 308 ⇑ i P **P** 06 17 29.8 0.0
HVS pmax pmax
comp=Z,55nm,0.9s
**P33A Williams Farm,** 53.26 71 P **P** 06 17 28.6 -1.4
baz=53,SNR=13
**W28A Vega** 53.28 78 P **P** 06 17 29.1 -1.2
baz=53
**R32A Long Quarter,** 53.31 72 P **P** 06 17 29.1 -1.4
baz=53,SNR=21
**O34A Beatrice** 53.37 69 P **P** 06 17 29.4 -1.4
baz=53,SNR=31
**S31A Mullinville** 53.37 74 P **P** 06 17 29.5 -1.4
baz=53,SNR=10
**U30A WK&E Inc. Balk** 53.38 75 P **P** 06 17 29.7 -1.4
baz=53,SNR=16
**I38A Scanlan Farm,** 53.40 63 P **P** 06 17 29.4 -1.5
baz=53
**Q33A Connelly Farm,** 53.46 71 P **P** 06 17 30.2 -1.3
baz=53,SNR=42
**N35A Tabor** 53.54 68 P **P** 06 17 30.6 -1.4
baz=53,SNR=20
**T31A Randall Ranch,** 53.60 74 P **P** 06 17 31.2 -1.4
baz=53,SNR=14
**P34A Walnut Farm, R** 53.70 70 P **P** 06 17 31.8 -1.4
baz=54,SNR=15
**MNTX Cornudas Mount** 53.72 83 P **P** 06 17 32.4 -1.1
baz=54,SNR=28
**MNTX Cornudas Mount** 53.72 83 eP **P** 06 17 33.2 -0.3
comp=Z,43nm,0.8s
MNTX LR LR
comp=Z,783nm,19.0s
**O35A Humboldt** 53.77 69 P **P** 06 17 32.3 -1.4
baz=54
**X28A Dimmitt** 53.78 78 P **P** 06 17 32.6 -1.4
baz=54,SNR=9.6
**MSTX Muleshoe** 53.79 79 P **P** 06 17 32.7 -1.4
baz=54,SNR=8.8
**R33A Olander Ranch,** 53.82 72 P **P** 06 17 32.7 -1.5
baz=54,SNR=11
**COWI Dover** 53.84 59 eP **P** 06 17 33.7 -0.5
comp=Z,53nm,0.9s
COWI epP **pP** 06 17 44.4 +0.2
COWI esP **sP** 06 17 47.8 -0.4
COWI LR LR
comp=Z,1μm,20.0s
**AMTX Amarillo** 53.85 78 P **P** 06 17 33.1 -1.4
baz=54
**AMTX Amarillo** 53.85 78 eP **P** 06 17 34.5 0.0
comp=Z,37nm,1.0s
**U31A Nine Bar Ranch** 53.98 75 P **P** 06 17 34.0 -1.3
baz=54,SNR=5.6
**T32A Huddler Ranch,** 54.00 74 P **P** 06 17 34.0 -1.5
baz=54,SNR=6.6
**Q34A Chapman** 54.04 71 P **P** 06 17 34.3 -1.4
baz=54,SNR=27
**KSU1 Kansas State U** 54.12 70 P **P** 06 17 34.7 -1.5
baz=54,SNR=9.8
**KSU1 Kansas State U** 54.12 70 eP **P** 06 17 35.5 -0.7
comp=Z,96nm,0.9s
KSU1 LR LR
comp=Z,1μm,20.0s
**X29A Tulia** 54.13 78 P **P** 06 17 35.0 -1.5
baz=54,SNR=7.7
**P35A Duane Minner,** 54.18 70 P **P** 06 17 35.3 -1.4
baz=54,SNR=14
**R34A Isabella, Hill** 54.26 71 P **P** 06 17 35.9 -1.5
baz=54,SNR=8.5
**SCIA State Center** 54.26 66 eP **P** 06 17 37.0 -0.3
comp=Z,88nm,0.6s
SCIA LR LR
comp=Z,2μm,22.0s
**S33A Kaszmaul Farm,** 54.28 73 P **P** 06 17 36.3 -1.2
baz=54,SNR=8.6
**TATO Taipei** 54.35 266 PFAKE 06 17 50.0 +12
TATO LR LR
comp=Z,1μm,22.0s
**V31A Spring Creek L** 54.38 75 P **P** 06 17 36.9 -1.4
baz=54
**O36A Bolckow** 54.41 68 P **P** 06 17 36.9 -1.4
baz=54,SNR=22
**U32A Winter Ranch,** 54.48 74 P **P** 06 17 37.7 -1.3
baz=54,SNR=15
**Z28A Tucker Farm, M** 54.49 79 P **P** 06 17 37.8 -1.4
baz=54,SNR=12
**Y29A Porterfield Fa** 54.54 78 P **P** 06 17 38.1 -1.5
baz=54,SNR=23
**P36A Good Intent, A** 54.60 69 P **P** 06 17 38.3 -1.4
baz=54,SNR=37
**Q35A Mercer Eighty,** 54.61 70 P **P** 06 17 38.4 -1.5
baz=54,SNR=6.7
**X30A Coker Ranch, T** 54.64 77 P **P** 06 17 38.9 -1.3
baz=54
**YHNB Yeheng** 54.65 266 PFAKE 06 17 50.0 +10
YHNB LR LR
comp=Z,1μm,22.0s
**W31A Holland Ranch,** 54.71 76 P **P** 06 17 39.2 -1.4
baz=55,SNR=12
**SFJD Kangerlussuaq** 54.71 23 i P **P** 06 17 39.8 -0.3
SFJD pmax pmax
comp=Z,23nm,0.7s
**SFJD Kangerlussuaq** 54.71 23 i P **P** 06 17 39.8 -0.3
comp=Z,23nm,0.7s
**SFJD Kangerlussuaq** 54.71 23 eP **P** 06 17 40.1 0.0
comp=Z,49nm,1.0s
SFJD LR LR
comp=Z,2μm,20.0s
**S34A Willow Spring** 54.74 72 P **P** 06 17 39.2 -1.6
baz=55,SNR=5.5
**R35A Emporia Munici** 54.87 71 P **P** 06 17 40.3 -1.5
baz=55,SNR=10
**WHN Wuhan** 54.88 276 ⇓ P **P** 06 17 41.9 0.0
WHN S **S** 06 25 19.9 -1.0
WHN LN
comp=Z,1μm,15.3s
WHN LE
comp=Z,2μm,16.5s
WHN LZ
comp=Z,2μm,15.2s
**128A Castleberry Fa** 54.88 80 P **P** 06 17 40.7 -1.3
baz=55,SNR=22
**Q36A Arnold C. Orve** 54.88 70 P **P** 06 17 40.5 -1.4
baz=55,SNR=8.5
**V32A Arapaho** 54.90 75 P **P** 06 17 40.9 -1.1
baz=55
**Z29A Hungry Hill Ra** 54.93 79 P **P** 06 17 41.1 -1.3
baz=55,SNR=22
**Y30A Stafford Cattl** 55.01 78 P **P** 06 17 41.6 -1.3
baz=55,SNR=6.4
**X31A McDonald Ranch** 55.06 77 P **P** 06 17 41.9 -1.3
baz=55,SNR=9.5
**T34A McClaskey Farm** 55.14 73 P **P** 06 17 42.3 -1.4
baz=55,SNR=24
**228A UT Block 9, Go** 55.16 81 P **P** 06 17 42.8 -1.2
baz=55
**W32A Sentinel** 55.17 76 P **P** 06 17 42.8 -1.2
baz=55,SNR=11
**S35A Otter Creek Ra** 55.22 71 P **P** 06 17 42.8 -1.5
baz=55,SNR=34
**129A Stewart Farms,** 55.26 80 P **P** 06 17 43.4 -1.4
baz=55,SNR=5.7
**Z30A Sanderson Ranc** 55.27 79 P **P** 06 17 43.4 -1.4
baz=55,SNR=22
**R36A Gordon, Harris** 55.28 70 P **P** 06 17 43.3 -1.4
baz=55,SNR=53
**JFWS Jewell Farm** 55.28 63 eP **P** 06 17 43.5 -1.2
JFWS pmax pmax
comp=Z,75nm,0.8s
JFWS MLR MLR
comp=Z,3μm,20.0s
**JFWS Jewell Farm** 55.28 63 eP **P** 06 17 43.5 -1.2
comp=Z,75nm,0.8s
JFWS LR LR
comp=Z,3μm,20.0s
**V33A Lossen Ranch,** 55.28 74 P **P** 06 17 43.5 -1.3
baz=55,SNR=5.9
**U34A Anderson Ranch** 55.32 73 P **P** 06 17 43.8 -1.3
baz=55,SNR=17
**U34A Anderson Ranch** 55.32 73 eP **P** 06 17 44.5 -0.6
comp=Z,78nm,0.9s
**Y31A Rekieta Farm,** 55.34 77 P **P** 06 17 44.2 -1.0
baz=55
**Q37A Longview Farm,** 55.53 69 P **P** 06 17 45.1 -1.4
baz=55
**SSLB Suanglung** 55.55 266 eP **P** 06 17 45.5 -1.3
comp=Z,120nm,0.9s
**ZAA0 Zalesovo Array** 55.58 315 eP **P** 06 17 45.5 -1.1
**ZALV Zalesovo Beam** 55.58 315 P **P** 06 17 46.1 -0.5
comp=Z,1.7nm,0.3s,baz=36,slow=7.2,SNR=10
ZALV PcP **PcP** 06 18 46.4 +0.4
comp=Z,38nm,0.8s,baz=35,slow=3.7,SNR=3.6
ZALV LR LR 06 43 24.6
comp=Z,2μm,19.4s,baz=70,slow=38
**T35A Sooner Cattle** 55.62 72 P **P** 06 17 45.8 -1.4
baz=56,SNR=15
**X32A Elmer** 55.62 76 P **P** 06 17 46.2 -1.0
baz=56,SNR=8.5
**S36A Lake Cedric, C** 55.62 71 P **P** 06 17 45.8 -1.3
baz=56,SNR=13
**W33A Caddo, Fort Co** 55.62 75 P **P** 06 17 46.2 -1.1
baz=56,SNR=9.3
**YULB Yu-li** 55.62 265 eP **P** 06 17 46.4 -1.0
comp=Z,36nm,1.0s
**NVS Novosibirsk** 55.67 317 eP **P** 06 17 45.1 -2.2
NVS e 06 18 45.6
NVS eS **S** 06 25 27.2 -3.7
NVS e 06 27 33.8
NVS pmax pmax
comp=N,4.0nm,0.6s
NVS pmax pmax
comp=E,5.0nm,0.6s
NVS pmax pmax
comp=Z,11nm,0.6s
NVS smax smax
comp=N,5.0nm,1.4s
NVS smax smax
comp=E,17nm,2.0s
**WMOK Wichita Mounta** 55.71 76 eP **P** 06 17 47.8 -0.1
WMOK pmax pmax
comp=Z,62nm,1.1s
WMOK MLR MLR
comp=Z,1μm,20.0s
**WMOK Wichita Mounta** 55.71 76 eP **P** 06 17 47.8 -0.1
comp=Z,62nm,1.1s
WMOK LR LR
comp=Z,1μm,20.0s
**V34A Guthrie** 55.74 74 P **P** 06 17 46.7 -1.4
baz=56,SNR=19
**V34A Guthrie** 55.74 74 eP **P** 06 17 47.6 -0.4
comp=Z,79nm,1.1s
**229A Bryant Ranch,** 55.75 80 P **P** 06 17 46.9 -1.3
baz=56
**XAN Xi'an** 55.84 283 P **P** 06 17 48.2 -0.6
XAN pP **pP** 06 17 59.4 +0.5
XAN sP **sP** 06 18 03.6 +0.8
XAN PP **PP** 06 19 55.5 +2.2
XAN S **S** 06 25 32.1 -1.6
XAN sS **sS** 06 25 50.2 -0.1
XAN SS **SS** 06 29 18.3 -0.8
XAN PMZ
comp=Z,44nm,0.8s
XAN PMZ
comp=Z,270nm,6.2s
XAN LN
comp=Z,500nm,20.4s
XAN LE
comp=Z,820nm,17.7s
XAN LZ
comp=Z,1μm,18.7s
**130A Snyder** 55.84 79 P **P** 06 17 47.4 -1.4
baz=56,SNR=8.4
**Z31A Sharp Cattle R** 55.85 78 P **P** 06 17 47.4 -1.5
baz=56,SNR=16
**U35A Pawnee** 55.85 73 P **P** 06 17 47.5 -1.4
baz=56,SNR=9.7
**T36A Boggs Farm, Ca** 55.90 72 P **P** 06 17 47.7 -1.4
baz=56,SNR=12
**329A Wagon Wheel Ra** 55.97 81 P **P** 06 17 48.5 -1.3
baz=56,SNR=8.1
**W34A Bridge Creek,** 55.99 75 P **P** 06 17 48.4 -1.4
baz=56,SNR=8.2
**W34A Bridge Creek,** 55.99 75 eP **P** 06 17 49.9 +0.1
comp=Z,94nm,1.5s
**X33A Lawton** 56.02 76 P **P** 06 17 48.7 -1.4
baz=56,SNR=8.3
**S37A Fort Scott** 56.05 70 P **P** 06 17 48.5 -1.8
baz=56,SNR=29
**TPUB Ta-pu** 56.11 265 eP **P** 06 17 51.9 +1.0
comp=Z,51nm,1.1s
**131A Roby** 56.14 79 P **P** 06 17 49.6 -1.3
baz=56,SNR=9.0
**QZH Quanzhou** 56.19 268 ⇑ P **P** 06 17 52.8 +1.5
QZH S **S** 06 25 44.0 +5.6
QZH PMZ
comp=Z,130nm,1.0s
QZH PMZ
comp=Z,1μm,3.2s
QZH LZ
comp=Z,1μm,20.3s
**V35A Meyer Ranch, C** 56.20 73 P **P** 06 17 49.9 -1.4
baz=56,SNR=7.2
**230A Sterling City** 56.23 80 P **P** 06 17 50.4 -1.3
baz=56,SNR=31
**Z32A Haskell** 56.26 77 P **P** 06 17 50.6 -1.3
baz=56,SNR=20
**Y33A Hilltop Ranch,** 56.30 76 P **P** 06 17 50.8 -1.3
baz=56,SNR=8.7
**X34A Smith Ranch, M** 56.38 75 P **P** 06 17 51.4 -1.3
baz=56,SNR=9.1
**TX31 Lajitas Ar. Si** 56.42 84 eP **P** 06 17 52.1 -1.0
**TXAR Lajitas Array** 56.42 84 P **P** 06 17 52.6 -0.5
comp=Z,14nm,0.9s,baz=298,slow=5.0,SNR=117
TXAR ScP **ScP** 06 22 46.7 +0.3
comp=Z,2.5nm,0.9s,baz=305,slow=4.4,SNR=4.6
TXAR LR LR 06 41 14.9

comp=Z,501nm,18.4s,baz=0.0,slow=35
**T37A Cheneyville 18** 56.42 71 P P 06 17 51.6 -1.3
baz=56,SNR=34
**U36A Oologah** 56.43 72 P P 06 17 51.7 -1.3
baz=56
**330A Mertzon** 56.52 80 P P 06 17 52.5 -1.3
baz=56,SNR=8.9
**SLBS Sierra La Lagu** 56.53 93 *e*P P 06 17 54.3 +0.4
comp=Z,33nm,0.9s
**W35A Tecumseh** 56.59 74 P P 06 17 52.9 -1.2
baz=56,SNR=21
**429A Davenport Ranc** 56.62 81 P P 06 17 53.1 -1.4
baz=56,SNR=12
**ABTX Abilene, Hawle** 56.63 78 P P 06 17 53.2 -1.3
baz=56,SNR=12
**ABTX Abilene, Hawle** 56.63 78 *e*P P 06 17 54.3 -0.2
comp=Z,44nm,0.9s
**231A Bronte** 56.69 79 P P 06 17 53.7 -1.2
baz=57
**Z33A Whitaker Ranch** 56.71 77 P P 06 17 53.6 -1.4
baz=57,SNR=11
**V36A Jenks** 56.72 73 P P 06 17 53.7 -1.3
baz=57,SNR=18
**TUL1 Tulsa** 56.72 73 P P 06 17 53.9 -1.2
baz=57,SNR=14
**TUL1 Tulsa** 56.72 73 *e*P P 06 17 54.1 -1.0
comp=Z,51nm,0.9s
**529A Stev Forest Ra** 56.77 82 P P 06 17 54.4 -1.2
baz=57,SNR=16
**U37A Salina** 56.79 72 P P 06 17 54.2 -1.3
baz=57,SNR=40
**SCO Scoresbysund** 56.84 10 *i* P P 06 17 55.6 +0.2
SCO pmax pmax
comp=Z,26nm,0.8s
**SCO Scoresbysund** 56.84 10 *i* P P 06 17 55.6 +0.2
comp=Z,26nm,0.8s
**Y34A Reagan Ranch,** 56.86 76 P P 06 17 54.8 -1.3
baz=57,SNR=31
**430A Baggett Ranch,** 56.91 81 P P 06 17 55.3 -1.3
baz=57,SNR=38
**W36A Wetumka** 56.98 74 P P 06 17 55.6 -1.3
baz=57,SNR=12
**X35A Drake** 57.04 75 P P 06 17 56.0 -1.3
baz=57,SNR=16
**331A San Angelo** 57.05 80 P P 06 17 56.3 -1.2
baz=57,SNR=17
**133A Hamilton Ranch** 57.08 78 P P 06 17 56.4 -1.2
baz=57,SNR=21
**V37A Hulbert** 57.13 72 P P 06 17 56.6 -1.4
baz=57,SNR=15
**232A Coleman** 57.13 79 P P 06 17 56.8 -1.3
baz=57,SNR=17
**Z34A Collier Ranch,** 57.17 76 P P 06 17 56.9 -1.4
baz=57,SNR=20
**U38A Gravette** 57.20 71 P P 06 17 57.1 -1.3
baz=57,SNR=17
**X36A Centrahoma** 57.30 74 P P 06 17 57.8 -1.3
baz=57,SNR=21
**530A J-C Ranch, Com** 57.30 81 P P 06 17 58.1 -1.1
baz=57,SNR=52
**Y35A Marietta** 57.34 75 P P 06 17 58.2 -1.2
baz=57,SNR=16
**431A Sonora** 57.38 80 P P 06 17 58.5 -1.3
baz=57,SNR=41
**HDIL Hopedale** 57.38 64 P P 06 17 58.1 -1.5
baz=57,SNR=18
**HDIL Hopedale** 57.38 64 *e*P P 06 17 58.9 -0.7
comp=Z,100nm,0.7s
HDIL LR LR
comp=Z,2μm,21.0s
**332A Millersview** 57.42 79 P P 06 17 58.8 -1.3
baz=57
**W37A Quinton** 57.46 73 P P 06 17 59.1 -1.2
baz=57,SNR=21
**233A Rising Star** 57.50 78 P P 06 17 59.4 -1.2
baz=57,SNR=22
**LZH Lanzhou** 57.50 288 *e*P P 06 18 01.5 +0.7
LZH pP **pP** 06 18 15.7 +4.8
LZH sP **sP** 06 18 19.7 +4.9
LZH PP **PP** 06 20 10.5 +2.3
LZH *e*S **S** 06 25 53.0 -2.9
LZH sS **sS** 06 26 11.1 -1.5
LZH SS **SS** 06 29 45.0 -0.5
LZH PMZ
comp=Z,76nm,1.0s
LZH PMZ
comp=Z,480nm,4.0s
LZH LN
comp=Z,3μm,15.3s
LZH LE
comp=Z,3μm,15.3s
LZH LZ
comp=Z,3μm,17.0s
**V38A Canehill** 57.58 72 P P 06 17 59.6 -1.5
baz=57,SNR=24
**Z35A Perchaven, San** 57.60 76 P P 06 18 00.1 -1.2
baz=58,SNR=6.7
**GTA Gaotai** 57.60 294 P P 06 18 00.8 -0.6
GTA pP **pP** 06 18 11.7 +0.2
GTA sP **sP** 06 18 15.4 0.0
GTA PcP **PcP** 06 18 54.2 -0.2
GTA S **S** 06 25 54.1 -3.0
GTA sS **sS** 06 26 10.3 -3.5
GTA ScS **ScS** 06 27 47.6 -0.6
GTA SS **SS** 06 29 43.3 -3.6
GTA PMZ
comp=Z,20nm,0.8s
GTA PMZ
comp=Z,240nm,8.3s
GTA LN
comp=Z,2μm,19.5s
GTA LE
comp=Z,2μm,19.0s
GTA LZ
comp=Z,3μm,20.2s
**134A White-Moore Ra** 57.62 77 P P 06 18 00.2 -1.2
baz=58,SNR=19
**432A Menard** 57.74 80 P P 06 18 01.2 -1.2
baz=58,SNR=16
**531A Rocksprings** 57.77 81 P P 06 18 01.5 -1.1
baz=58,SNR=13
**Y36A Durant** 57.79 75 P P 06 18 01.4 -1.2
baz=58,SNR=16
**X37A Clayton** 57.87 74 P P 06 18 02.0 -1.2
baz=58,SNR=16
**333A Richland Sprin** 57.93 79 P P 06 18 02.5 -1.2
baz=58,SNR=16
**CCM Cathedral Cave** 57.95 68 *e*P P 06 18 01.9 -1.8
CCM pmax pmax
comp=Z,32nm,1.0s
**CCM Cathedral Cave** 57.95 68 *e*P P 06 18 01.9 -1.8
comp=Z,32nm,1.0s
**234A Clairette** 57.98 78 P P 06 18 02.7 -1.2
baz=58,SNR=26
**JCT Junction City** 58.01 80 *e*P P 06 18 03.1 -1.2
JCT pmax pmax
comp=Z,59nm,1.3s
JCT MLR MLR
comp=Z,1μm,20.0s
**JCT Junction City** 58.01 80 P P 06 18 03.1 -1.2
baz=58,SNR=12
**JCT Junction City** 58.01 80 *e*P P 06 18 03.1 -1.2
comp=Z,59nm,1.3s
JCT LR LR
comp=Z,1μm,20.0s
**KEV Kevo** 58.02 351 *e* P 06 18 03.5 -0.1
**KEV Kevo** 58.02 351 PFAKE 06 18 20.0 +16
KEV LR LR
comp=Z,1μm,20.0s
**135A Vickery Place,** 58.04 77 P P 06 18 03.2 -1.2
baz=58,SNR=9.6
**W38A Poteau** 58.05 73 P P 06 18 03.2 -1.2
baz=58,SNR=24
**ENH Enshi** 58.08 280 PFAKE 06 18 20.0 +15
ENH LR LR
comp=Z,341nm,20.0s
**SLM Saint Louis** 58.13 67 *e*P P 06 18 04.2 -0.8
SLM pmax pmax
comp=Z,38nm,0.7s
**SLM Saint Louis** 58.13 67 *e*P P 06 18 04.2 -0.8
comp=Z,38nm,0.7s
**Z36A Blue Ridge** 58.14 75 P P 06 18 03.9 -1.2
baz=58,SNR=14
**Y37A Hugo** 58.14 74 P P 06 18 04.1 -0.9
baz=58,SNR=6.3
**X38A Whitesboro** 58.14 73 P P 06 18 03.7 -1.4
baz=58,SNR=11

**532A Rocksprings** 58.20 80 P P 06 18 04.2 -1.4
baz=58,SNR=10
**433A Art** 58.26 79 P P 06 18 04.6 -1.4
baz=58,SNR=13
**631A Perdido Creek** 58.28 82 P P 06 18 04.6 -1.5
baz=58,SNR=19
**ARA0 ARCESS Array S** 58.37 352 *e*P P 06 18 05.2 -0.9
ARA0 *e*PcP **PcP** 06 18 56.8 +0.1
**ARCES ARCESS Array B** 58.37 352 P P 06 18 05.6 -0.6
comp=Z,16nm,0.7s,baz=19,slow=7.7,SNR=24
ARCES PcP **PcP** 06 18 56.7 0.0
comp=Z,41nm,0.8s,baz=19,slow=5.7,SNR=15
ARCES ScP **ScP** 06 22 55.9 +1.7
comp=Z,12nm,0.9s,baz=359,slow=6.7,SNR=6.6
ARCES LR LR 06 48 09.5
comp=Z,563nm,18.1s,baz=12,slow=41
**ARE0 ARCESS Array S** 58.37 352 *e*P P 06 18 05.2 -1.0
**334A Lometa** 58.38 78 P P 06 18 05.7 -1.1
baz=58,SNR=31
**WHTX Lake Whitney** 58.40 77 P P 06 18 05.7 -1.2
baz=58,SNR=9.9
**WHTX Lake Whitney** 58.40 77 *e*P P 06 18 06.1 -0.8
comp=Z,49nm,0.8s
**SCHQ Schefferville** 58.53 40 P P 06 18 06.6 -0.9
SCHQ LR LR 06 44 39.4
comp=Z,3μm,18.1s,baz=315,slow=37
**SCHQ Schefferville** 58.53 40 *e*P P 06 18 06.8 -0.7
comp=Z,43nm,0.8s
**136A Ennis** 58.63 76 P P 06 18 07.3 -1.2
baz=58
**Z37A Pogue Cattle C** 58.68 75 P P 06 18 07.3 -1.5
baz=58
**632A Uvalde** 58.70 81 P P 06 18 07.7 -1.3
baz=59,SNR=9.6
**Y38A Idabel** 58.71 74 P P 06 18 07.7 -1.4
baz=59,SNR=7.5
**434A Burnet** 58.72 79 P P 06 18 07.9 -1.3
baz=59,SNR=29
**SFIN Scholer Farm** 58.73 63 P P 06 18 07.7 -1.3
baz=58,SNR=33
**SFIN Scholer Farm** 58.73 63 *e*P P 06 18 08.2 -0.8
comp=Z,140nm,0.8s
**533A Kerrville** 58.77 80 P P 06 18 08.3 -1.3
baz=59,SNR=19
**TRO Tromso** 58.78 354 *e*P P 06 18 08.9 -0.1
**LVZ Lovozero** 58.89 347 *ce*P P 06 18 09.9 +0.1
LVZ pmax pmax
comp=Z,41nm,0.7s
**LVZ Lovozero** 58.89 347 P P 06 18 08.1 -1.7
comp=Z,361nm,0.8s,SNR=6.0
**LVZ Lovozero** 58.89 347 *e*P P 06 18 08.1 -1.7
comp=Z,46nm,0.8s
LVZ LR LR
comp=Z,978nm,19.0s
**335A Moody** 58.91 78 P P 06 18 09.3 -1.1
baz=59,SNR=7.6
**236A Katherine and** 58.96 77 P P 06 18 09.6 -1.2
baz=59,SNR=12
**MIAR Mount Ida** 58.98 72 *e*P P 06 18 09.9 -1.0
MIAR pmax pmax
comp=Z,91nm,1.0s
MIAR MLR MLR
comp=Z,1μm,21.0s
**MIAR Mount Ida** 58.98 72 P P 06 18 09.5 -1.3
baz=59,SNR=47
**MIAR Mount Ida** 58.98 72 *e*P P 06 18 09.9 -1.0
comp=Z,91nm,1.0s
MIAR LR LR
comp=Z,1μm,21.0s
**137A Heron Place, G** 59.01 75 P P 06 18 09.9 -1.3
baz=59
**Z38A Mt. Pleasant** 59.03 74 P P 06 18 10.1 -1.2
baz=59,SNR=11
**KTK1 Kautokeino** 59.08 352 *e*P P 06 18 11.1 0.0
**Y39A Lockesburg** 59.09 73 P P 06 18 10.3 -1.4
baz=59,SNR=9.0
**633A Saathoff Ranch** 59.12 80 P P 06 18 11.0 -0.9
baz=59
**732A Laxson Ranch,** 59.14 82 P P 06 18 10.9 -1.2
baz=59,SNR=23
**534A Blanco** 59.15 80 P P 06 18 11.0 -1.1
baz=59,SNR=14
**435B Jarrell** 59.16 78 P P 06 18 11.0 -1.2
baz=59
**336A Riesel** 59.20 77 P P 06 18 11.2 -1.2
baz=59,SNR=10.0
**OLIL Olney** 59.29 65 *e*P P 06 18 11.9 -1.0
comp=Z,133nm,0.8s
**PBMO Poplar Bluff** 59.29 68 *e*P P 06 18 11.0 -2.0
comp=Z,81nm,1.1s
**AAM Ann Arbor** 59.31 60 *e*P P 06 18 13.4 +0.4
AAM pmax pmax
comp=Z,30nm,0.8s
AAM MLR MLR
comp=Z,1μm,19.0s
**AAM Ann Arbor** 59.31 60 *e*P P 06 18 13.4 +0.4
comp=Z,30nm,0.8s
AAM LR LR
comp=Z,1μm,19.0s
**SIUC Southern Illin** 59.35 67 *e*P P 06 18 12.4 -1.0
comp=Z,52nm,0.9s
**APA Apatity** 59.36 348 ⇓ *i*P P 06 18 24.4 +11
APA MLR MLR
comp=Z,2μm,15.0s
**237A Washetta, Mont** 59.40 76 P P 06 18 12.7 -1.1
baz=59,SNR=6.7
**832A Faith Ranch, C** 59.45 82 P P 06 18 13.2 -1.0
baz=59,SNR=39
**UALR University of** 59.55 71 *e*P P 06 18 14.1 -0.7
comp=Z,58nm,1.4s
**733A Divot King Ran** 59.56 81 P P 06 18 13.9 -1.1
baz=59,SNR=8.9
**436A Wall Ranch, Ga** 59.66 78 P P 06 18 14.4 -1.2
baz=60,SNR=5.2
**535A Dale** 59.70 79 P P 06 18 14.8 -1.1
baz=60,SNR=8.6
**PARMO Parma** 59.77 68 *e*P P 06 18 15.4 -0.8
**139A Bunkhouse Ranc** 59.78 74 P P 06 18 15.3 -1.1
baz=60
**833A Chaparral WMA,** 59.78 82 P P 06 18 15.3 -1.2
baz=60,SNR=21
**238A Jacksonville** 59.81 76 P P 06 18 15.7 -1.0
baz=60
**BLO Bloomington** 59.88 64 *e*P P 06 18 16.4 -0.7
BLO pmax pmax
comp=Z,87nm,0.8s
**BLO Bloomington** 59.88 64 *e*P P 06 18 16.4 -0.7
comp=Z,87nm,0.8s
**734A La Parita Cree** 59.93 81 P P 06 18 16.5 -1.0
baz=60,SNR=8.3
**SADO Sadowa** 59.98 55 *e*P P 06 18 17.6 0.0
comp=Z,97nm,0.8s
**536A Bastrop** 59.98 78 P P 06 18 16.6 -1.2
baz=60
**HBAR Harrisburg** 60.00 70 *e*P P 06 18 17.3 -0.7
**437A Phantom Ranch,** 60.02 77 P P 06 18 16.9 -1.2
baz=60
**635A Leesville** 60.03 80 P P 06 18 17.2 -1.0
baz=60,SNR=12
**USIN University of** 60.07 66 *e*P P 06 18 17.8 -0.5
comp=Z,204nm,0.8s
**338A Crockett** 60.15 76 P P 06 18 18.0 -1.0
baz=60
**239A Gary** 60.20 75 P P 06 18 17.8 -1.5
baz=60
**NATX Nacogdoches** 60.26 75 PFAKE 06 18 30.0 +10
NATX LR LR
comp=Z,919nm,19.0s
**GLAT Glass** 60.31 68 *e*P P 06 18 20.2 +0.3
**933A Laredo** 60.36 82 P P 06 18 19.3 -1.2
baz=60,SNR=8.0
**735A Kenedy** 60.39 80 P P 06 18 19.4 -1.2
baz=60
**636A Smothers Creek** 60.41 79 P P 06 18 19.7 -1.1
baz=60
**537A Green Hill Far** 60.44 78 P P 06 18 19.9 -1.0
baz=60
**834A Tilden** 60.45 81 P P 06 18 20.0 -1.0
baz=60
**SZP Santa** 60.50 261 *e*P P 06 18 21.4 -0.2
comp=Z,276nm,0.8s
**UTMT University of** 60.50 68 *e*P P 06 18 21.5 +0.2
comp=Z,176nm,1.0s
**HALT Halls** 60.53 68 *e*P P 06 18 21.2 -0.3
**KURK Kurchatov** 60.56 315 P P 06 18 20.1 -1.4
comp=Z,672nm,0.5s,SNR=56
**KURK Kurchatov** 60.56 315 PFAKE 06 18 30.0 +8.5
KURK LR LR
comp=Z,5μm,19.0s
**339A Huntington** 60.62 76 P P 06 18 21.0 -1.2
baz=60
**WCI Wyandotte Cave** 60.66 65 *e*P P 06 18 22.2 -0.2
**WCI Wyandotte Cave** 60.66 65 *e*P P 06 18 22.2 -0.2
comp=Z,472nm,0.8s
**736A Circle Diamond** 60.77 79 P P 06 18 22.0 -1.2
baz=61,SNR=11
**835A Beeville** 60.78 80 P P 06 18 22.1 -1.2
baz=61,SNR=13
**HKT Hockley** 60.82 78 *e*P P 06 18 22.9 -0.6
HKT pmax pmax
comp=Z,47nm,1.3s
**HKT Hockley** 60.82 78 *e*P P 06 18 22.9 -0.6
comp=Z,47nm,1.3s
**934A Benavides** 60.84 81 P P 06 18 22.6 -1.1
baz=61
**538A Harpers Horsep** 60.84 77 P P 06 18 22.4 -1.3
baz=61
**637A Eagle Lake** 60.88 78 P P 06 18 23.0 -0.9
baz=61
**340A Bronson** 60.97 75 P P 06 18 23.4 -1.2
baz=61,SNR=8.2
**ACSO Alum Creek Sta** 61.11 61 *e*P P 06 18 25.4 -0.1
comp=Z,49nm,0.9s
ACSO LR LR
comp=Z,2μm,19.0s
**CD2 Chengdu** 61.14 284 P P 06 18 25.6 -0.2
CD2 pP **pP** 06 18 37.0 +1.0
CD2 PP **PP** 06 20 40.5 +0.1
CD2 PcS **PcS** 06 23 11.6 +0.2
CD2 S **S** 06 26 42.3 -0.5
CD2 sS **sS** 06 27 01.2 +1.6
CD2 SS **SS** 06 30 43.4 +0.8
CD2 PMZ
comp=Z,90nm,0.8s
CD2 PMZ
comp=Z,370nm,4.5s
CD2 LN
comp=Z,1μm,13.9s
CD2 LE
comp=Z,1μm,16.2s
CD2 LZ
comp=Z,960nm,15.1s
**WMQ Urumqi** 61.16 305 P P 06 18 26.0 +0.2
WMQ pP **pP** 06 18 35.0 -1.0
WMQ sP **sP** 06 18 41.0 +1.1
WMQ PP **PP** 06 20 43.0 +2.8
WMQ S **S** 06 26 46.0 +3.2
WMQ ScS **SKKSac** 06 28 09.5 -4.7
WMQ PMZ
comp=Z,76nm,1.0s
WMQ PMZ
comp=Z,160nm,5.0s
WMQ LN
comp=Z,2μm,20.0s
WMQ LE
comp=Z,2μm,20.0s
WMQ LZ
comp=Z,2μm,20.0s
**KVTX Kingsville** 61.27 81 PFAKE 06 18 40.0 +13
KVTX LR LR
comp=Z,1μm,19.0s
**737A Port Lavaca** 61.29 79 P P 06 18 25.8 -1.0
baz=61
**ERPA Erie** 61.39 58 *e*P P 06 18 27.8 +0.5
comp=Z,200nm,1.1s
ERPA LR LR
comp=Z,3μm,19.0s
**440A Kirbyville** 61.40 76 P P 06 18 26.6 -0.9
baz=61,SNR=6.1
**OXF Oxford** 61.46 70 *e*P P 06 18 27.3 -0.6
OXF pmax pmax
comp=Z,264nm,1.0s
**OXF Oxford** 61.46 70 *e*P P 06 18 27.3 -0.6
comp=Z,264nm,1.0s
**035A Encino** 61.57 82 P P 06 18 27.7 -1.0
baz=62,SNR=7.0
**CHKZ Chkalovo** 61.66 322 P P 06 18 28.0 -0.9
CHKZ pmax pmax
comp=Z,22nm,1.0s
**MK31 Makanchi Array** 61.72 310 *i* P P 06 18 28.3 -1.2
MK31 pmax pmax
comp=Z,37nm,0.7s
**MKAR Makanchi Array** 61.72 310 P P 06 18 28.7 -0.8
comp=Z,25nm,0.7s,baz=53,slow=7.2,SNR=144
MKAR LR LR 06 47 38.9
comp=Z,2μm,18.3s,baz=34,slow=38
**MKAR Makanchi Array** 61.72 310 *e*P P 06 18 28.3 -1.2
**MKAR Makanchi Array** 61.72 310 *e*P P 06 18 28.3 -1.2
**MK01 Makanchi Array** 61.73 310 *e*P P 06 18 27.9 -1.7
**TMCR Tamitsa** 61.84 344 *e*P P 06 18 33.3 +3.4
TMCR pmax pmax
comp=Z,39nm,0.8s
**MAKZ Makanchi** 61.86 311 *e*P P 06 18 29.7 -0.7
**035Z Hargill** 61.93 82 P P 06 18 30.3 -0.8
baz=62,SNR=5.0
**MMNY Mt. Morris Dam** 62.05 56 *e*P P 06 18 32.1 +0.4
comp=Z,175nm,1.0s
**BVA0 Borovoye Array** 62.25 322 P P 06 18 32.7 -0.2
BVA0 pmax pmax
comp=Z,101nm,0.9s
**BRVK Borovoye** 62.27 322 *c i*P P 06 18 32.7 -0.3
BRVK pmax pmax
comp=Z,38nm,0.7s
**BRVK Borovoye** 62.27 322 P P 06 18 32.2 -0.8
comp=Z,345nm,0.7s,SNR=24
**BRVK Borovoye** 62.27 322 P P 06 18 32.3 -0.7
SNR=15
**BRVK Borovoye** 62.27 322 *e*P P 06 18 32.6 -0.3
BRVK LR LR
comp=Z,4μm,20.0s
**BORG Borgarnes** 62.38 12 *e*P P 06 18 34.8 +1.3
BORG pmax pmax
comp=Z,693nm,2.6s
**BORG Borgarnes** 62.38 12 *e*P P 06 18 34.8 +1.3
comp=Z,693nm,2.6s
**LONY Lake Ozonia** 62.38 52 *e*P P 06 18 33.0 -0.9
comp=Z,102nm,1.1s
LONY LR LR
comp=Z,2μm,20.0s
**VBMS Vicksburg** 62.43 72 P P 06 18 33.1 -1.3
baz=62
**MOR8 Moi Rana** 62.47 356 *e*P P 06 18 32.7 -1.5
**GYA Guiyang** 62.54 279 ⇑ *i*P P 06 18 34.7 -0.7
GYA pP **pP** 06 18 46.8 +1.2
GYA PcP **PcP** 06 19 15.0 +0.7
GYA PP **PP** 06 20 55.6 +2.7
GYA ScP **ScP** 06 23 12.4 -1.2
GYA S **S** 06 26 58.2 -2.5
GYA sS **sS** 06 27 17.9 +0.3
GYA SS **SS** 06 31 04.6 -0.1
GYA PMZ
comp=Z,40nm,1.1s
GYA PMZ
comp=Z,130nm,6.3s
GYA LN
comp=Z,840nm,20.5s
GYA LE
comp=Z,940nm,20.8s
GYA LZ
comp=Z,820nm,20.8s
**SVE Sverdlovsk** 62.70 329 *e*P P 06 18 35.8 -0.1
SVE *e* 06 19 14.1
SVE *e* 06 20 53.4
SVE *e*S **S** 06 27 00.5 -1.2
SVE pmax pmax
comp=Z,23nm,0.8s
SVE MLR MLR
comp=Z,2μm,18.0s
**FRNY Flat Rock** 62.72 52 *e*P P 06 18 35.0 -1.1
comp=Z,16nm,0.6s
**ZRNK Zerenda** 62.84 322 P P 06 18 36.8 -0.1
ZRNK pmax pmax
comp=Z,41nm,0.5s
**NCB Newcomb** 63.03 53 *e*P P 06 18 37.9 -0.3
comp=Z,44nm,0.8s
NCB LR LR
comp=Z,2μm,21.0s
**MCWV Mont Chateau** 63.22 59 *e*P P 06 18 39.2 -0.4
comp=Z,73nm,0.9s
**TZTN Tazewell** 63.40 64 *e*P P 06 18 40.7 -0.1
comp=Z,56nm,0.8s
**BINY Binghamton** 63.42 55 *e*P P 06 18 41.5 +0.6
comp=Z,239nm,0.9s

MDV **Middlebury** 63.52 52 eP P 06 18 40.7 -0.8
SSPA **Standing Stone** 63.56 57 eP P 06 18 42.0 +0.3
comp=Z,222nm,0.6s
CPCT **Cooper Cave** 63.63 66 eP P 06 18 41.6 -0.8
ARU **Arti** 63.69 330 d iP P 06 18 42.6 +0.2
ARU *PP pP 06 18 55.9 +3.3
ARU 06 19 18.2
ARU 06 21 04.7
ARU S S 06 27 15.9 +1.9
ARU pmax pmax
comp=Z,26nm,0.7s
ARU MLR MLR
comp=Z,1μm,19.0s
ARU **Arti** 63.69 330 P P 06 18 42.4 0.0
comp=Z,235nm,0.6s,SNR=10.0
ARU **Arti** 63.69 330 eP P 06 18 41.8 -0.6
ARU LR LR
comp=Z,1μm,19.0s
ACCN **Adirondack Com** 63.73 53 eP P 06 18 42.3 -0.6
comp=Z,39nm,0.7s
TKL **Tuckaleechee C** 63.90 65 eP P 06 18 43.5 -0.6
TKL **Tuckaleechee C** 63.90 65 eP P 06 18 43.5 -0.6
LBNH **Lisbon** 63.96 51 eP P 06 18 44.4 0.0
LBNH pmax pmax
comp=Z,58nm,0.8s
LBNH **Lisbon** 63.96 51 eP P 06 18 44.4 0.0
comp=Z,58nm,0.8s
TRY **Troy** 64.21 53 eP P 06 18 46.0 -0.1
comp=Z,50nm,0.7s
NSS **Namsos** 64.22 357 eP P 06 18 45.5 -0.2
HNR **Honiara** 64.33 207 PFAKE 06 19 00.0 +13
HNR LR LR
comp=Z,1μm,21.0s
PKME **Peaks-Kenny Pk** 64.47 49 eP P 06 18 47.8 +0.1
comp=Z,67nm,1.0s
PKME LR LR
comp=Z,2μm,19.0s
KLMR **Klimovskoe** 64.63 342 eP P 06 18 43.4 -5.0
KLMR pmax pmax
comp=Z,12nm,0.8s
BLA **Blacksburg** 64.66 62 eP P 06 18 49.5 +0.3
BLA pmax pmax
comp=Z,149nm,0.8s
BLA MLR MLR
comp=Z,2μm,20.0s
BLA **Blacksburg** 64.66 62 eP P 06 18 49.5 +0.3
comp=Z,149nm,0.8s
BLA LR LR
comp=Z,2μm,20.0s
WVL **Waterville** 64.81 50 eP P 06 18 49.5 -0.4
comp=Z,65nm,0.8s
VWCC **Virginia Weste** 64.88 61 eP P 06 18 50.4 -0.1
LUPA **Lehigh Univers** 64.90 56 eP P 06 18 51.1 +0.6
comp=Z,185nm,1.2s
ODNJ **Ogdensburg** 64.94 55 eP P 06 18 51.0 +0.2
comp=Z,82nm,0.9s
SDMD **Soldier's Deli** 65.00 58 eP P 06 18 51.3 +0.1
comp=Z,58nm,1.0s
OTUK **Ortayu** 65.13 317 P P 06 18 50.6 -1.4
OTUK pmax pmax
comp=Z,30nm,0.7s
AFI **Afiamalu** 65.16 176 PFAKE 06 19 00.0 +7.6
AFI LR LR
comp=Z,931nm,20.0s
BRNJ **Basking Ridge** 65.25 55 eP P 06 18 53.4 +0.5
BRAL **Brewton** 65.34 71 eP P 06 18 52.8 -0.8
comp=Z,62nm,0.9s
BRAL LR LR
comp=Z,880nm,19.0s
PAL **Palisades** 65.35 55 eP P 06 18 53.0 -0.5
PAL pmax pmax
comp=Z,139nm,0.9s
PAL **Palisades** 65.35 55 eP P 06 18 53.0 -0.5
comp=Z,138nm,0.9s
HRV **Adam Dziewonsk** 65.42 52 eP P 06 18 53.9 0.0
HRV pmax pmax
comp=Z,65nm,0.8s
HRV **Adam Dziewonsk** 65.42 52 eP P 06 18 53.9 0.0
comp=Z,65nm,0.8s
JAY **Jayapura** 65.48 230 LR LR 06 42 06.1
comp=Z,1μm,21.2s,baz=38,slow=31
CPNY **Central Park** 65.49 55 eP P 06 18 54.8 +0.5
comp=Z,145nm,0.9s
DAV **Davao City (W)** 65.59 249 PFAKE 06 19 10.0 +15
DAV LR LR
comp=Z,717nm,21.0s
CBN **Corbin** 65.60 59 eP P 06 18 56.0 +0.9
comp=Z,232nm,1.4s
CBN LR LR
comp=Z,2μm,19.0s
PDGK **Podgornoye** 65.61 309 P P 06 18 54.7 -0.4
PDGK pmax pmax
comp=Z,86nm,0.9s
KMSC **Kings Mountain** 65.65 64 P P 06 18 54.0 -1.6
baz=66,SNR=38
KMSC **Kings Mountain** 65.65 64 eP P 06 18 55.3 -0.2
comp=Z,129nm,0.8s
GOGA **Godfrey** 65.70 67 eP P 06 18 54.3 -1.6
GOGA pmax pmax
comp=Z,66nm,0.8s
GOGA MLR MLR
comp=Z,2μm,22.0s
GOGA **Godfrey** 65.70 67 eP P 06 18 54.2 -1.6
comp=Z,66nm,0.8s
GOGA LR LR
comp=Z,2μm,22.0s
EMMW **East Machias** 65.74 48 eP P 06 18 56.0 +0.1
comp=Z,137nm,0.7s
BRYW **Bryant College** 65.87 53 eP P 06 18 56.8 -0.1
comp=Z,72nm,0.8s
KMI **Kunming** 65.93 280 P P 06 18 57.6 -0.1
KMI pP pP 06 19 06.1 -1.9
KMI sP sP 06 19 11.9 0.0
KMI PP PP 06 21 23.1 +0.4
KMI S S 06 27 41.2 -1.7
KMI sS sS 06 28 00.7 +0.9
KMI SKS SKSac 06 28 50.1 -1.2
KMI SS SS 06 31 57.3 -0.5
KMI PMZ
comp=Z,40nm,0.7s
KMI PMZ
comp=Z,490nm,5.0s
KMI LN
comp=Z,710nm,18.3s
KMI LE
comp=Z,370nm,18.3s
KMI LZ
comp=Z,630nm,18.3s
URVA **University of** 65.97 60 eP P 06 18 57.8 +0.3
QIZ **Qiongzhong** 66.01 271 P P 06 18 57.8 -0.2
QIZ sP sP 06 19 11.2 -1.0
QIZ S S 06 27 43.8 +0.3
QIZ PMZ
comp=Z,33nm,1.8s
QIZ PMZ
comp=Z,240nm,4.8s
QIZ LN
comp=Z,480nm,20.1s
QIZ LZ
comp=Z,440nm,23.2s
QIZ **Qiongzhong** 66.01 271 PFAKE 06 19 10.0 +12
QIZ LR LR
comp=Z,503nm,22.0s
FINES **FINESS Array B** 66.17 349 P P 06 18 57.1 -1.3
comp=Z,12nm,0.8s,baz=21,slow=6.1,SNR=21
FINES LR LR 06 51 16.1
comp=Z,860nm,19.4s,baz=16,slow=39
JSC **Jenkinsville** 66.32 64 eP P 06 18 59.9 +0.1
JSC pmax pmax
comp=Z,62nm,0.8s
JSC **Jenkinsville** 66.32 64 eP P 06 18 59.9 +0.1
comp=Z,62nm,0.8s
DRLN **Deer Lake** 66.50 39 eP P 06 19 01.0 +0.2
AKN **Aaknes** 66.70 359 eP P 06 19 02.4 +0.6
AKN IAmb IAmb 06 19 03.2
comp=Z,71nm,0.8s
TIGA **Tifton** 67.06 68 P P 06 19 03.3 -1.3
baz=67
TIGA **Tifton** 67.06 68 eP P 06 19 03.8 -0.8
comp=Z,58nm,1.4s
TAOE **Nuku Hiva Isla** 67.25 142 eT T 07 32 33.8
comp=Z,162nm,0.3s
FOO **Floro** 67.30 360 eP P 06 19 05.4 -0.1
CNNC **Cliffs of the** 67.50 61 eP P 06 19 07.5 +0.2
comp=Z,74nm,0.9s
CNNC LR LR
comp=Z,2μm,19.0s
HYA **Hoyanger** 67.72 359 eP P 06 19 09.2 +0.9
NB2 **NORSAR Subarra** 67.74 357 P P 06 19 07.5 -1.0
comp=Z,60nm,1.2s,baz=5.5,slow=6.5
NB2 **NORSAR Subarra** 67.74 357 P P 06 19 07.5 -1.0
baz=5.5,slow=6.5
NOA **NORSAR Array B** 67.74 357 P P 06 19 07.8 -0.7
comp=Z,29nm,0.9s,baz=4.1,slow=6.3,SNR=65
NOA LR LR 06 46 56.6
comp=Z,442nm,21.8s,baz=10.0,slow=34
NBO02 **NORSAR Array S** 67.74 357 eP P 06 19 07.5 -1.0
TKM2 **Tokmak 2** 67.77 311 P P 06 19 09.7 +0.5
SNR=30
TKM2 **Tokmak 2** 67.77 311 PFAKE 06 19 20.0 +11
TKM2 LR LR
comp=Z,1μm,20.0s
NHSC **New Hope** 67.79 65 eP P 06 19 09.7 +0.5
comp=Z,276nm,0.9s
NHSC LR LR
comp=Z,2μm,21.0s
RGRS **Roger Stewart** 67.93 65 eP P 06 19 11.0 +1.0
CSU **Charleston Sou** 67.94 65 eP P 06 19 12.1 +2.0
CSU epP pP 06 19 23.7 +3.2
ULHL **Ulahol** 67.99 311 P P 06 19 11.0 +0.4
SNR=31
SLVN **Son La** 68.00 277 eP P 06 19 11.2 +0.4
USP **Ospenovka** 68.02 312 P P 06 19 11.3 +0.8
SNR=40
NC602 **NORSAR Array S** 68.03 356 eP P 06 19 10.0 -0.3
CHMS **Chumysh** 68.11 312 P P 06 19 11.6 +0.5
SNR=11
KBK **Karagaybulak** 68.28 312 P P 06 19 13.0 +0.6
SNR=19
FRU **Bishkek** 68.30 312 i P P 06 19 12.0 -0.3
FRU e 06 19 32.0
FRU pmax pmax
comp=Z,140nm,2.0s
ASK **Askoy** 68.41 360 eP P 06 19 13.2 +0.6
RUND **Rundenannen** 68.48 360 eP P 06 19 14.0 +0.9
AAK **Ala-Archa** 68.51 312 c iP P 06 19 13.8 0.0
AAK pmax pmax
comp=Z,67nm,0.8s
AAK **Ala-Archa** 68.51 312 P P 06 19 14.0 +0.2
comp=Z,288nm,0.7s,SNR=29
AAK **Ala-Archa** 68.51 312 P P 06 19 14.7 +0.9
SNR=22
AAK **Ala-Archa** 68.51 312 P P 06 19 14.4 +0.7
SNR=47
AAK **Ala-Archa** 68.51 312 eP P 06 19 14.0 +0.2
comp=Z,42nm,0.9s
AAK LR LR
comp=Z,1μm,20.0s
BER **Bergen** 68.51 360 eP P 06 19 12.2 -1.1
KZA **Kyzart** 68.59 311 P P 06 19 15.3 +0.7
SNR=13
PMG **Port Moresby** 68.76 220 PFAKE 06 19 30.0 +15
PMG LR LR
comp=Z,824nm,22.0s
SAN1 **Sandwick** 68.77 3 ||| eP P 06 19 14.5 -0.4
UCH **Uchtor** 68.82 312 P P 06 19 16.8 +0.7
EKS2 **Erkin-Say** 68.82 312 P P 06 19 17.6 +1.9
SNR=6.5
EKS2 **Erkin-Say** 68.82 312 PFAKE 06 19 30.0 +14
EKS2 LR LR
comp=Z,1μm,21.0s
SWI **Sorong** 68.88 240 P P 06 19 15.7 -0.5
comp=Z,78nm,1.0s,comp=Z,1μm
AKTO **Aktyubinsk** 68.89 327 P P 06 19 15.7 -0.1
AKTO pmax pmax
comp=Z,34nm,0.7s
ODD1 **Odda** 68.98 359 eP P 06 19 15.7 -0.6
ODD1 IAmb IAmb 06 19 17.4
comp=Z,55nm,0.9s
VSU **Vasula** 68.98 348 c iP P 06 19 15.7 -0.5
VSU pmax pmax
comp=Z,137nm,1.2s
MSVF **Nonsavu** 69.14 187 PFAKE 06 19 30.0 +12
MSVF LR LR
comp=Z,2μm,19.0s
KONO **Kongsberg** 69.18 357 eP P 06 19 17.7 +0.3
KONO IAmb IAmb 06 19 18.7
comp=Z,26nm,0.7s
KONO eS S 06 28 29.5 +9.0
KONO **Kongsberg** 69.18 357 eP P 06 19 17.2 -0.2
KONO MLR MLR
comp=Z,819nm,21.0s
KONO **Kongsberg** 69.18 357 eP P 06 19 17.2 -0.2
KONO LR LR
comp=Z,819nm,21.0s
AB31 **Akbulak array** 69.20 325 i P P 06 19 17.8 +0.1
AB31 pmax pmax
comp=Z,15nm,0.6s
ABKAR **Akbulak array** 69.20 325 eP P 06 19 17.6 -0.2
AML **Almayashu** 69.27 312 P P 06 19 19.9 +1.0
SNR=34
BLS5 **Blasjo** 69.47 359 eP P 06 19 19.8 +0.5
BLS5 IAmb IAmb 06 19 20.4
comp=Z,32nm,0.9s
LSA **Lhasa** 69.51 292 PFAKE 06 19 30.0 +9.4
LSA LR LR
comp=Z,537nm,19.0s
MNAS **Manas** 69.54 313 P P 06 19 20.4 +0.2
MNAS pmax pmax
comp=Z,46nm,0.8s
KK31 **Karatay Array** 69.95 315 i P P 06 19 22.1 -0.4
KK31 pmax pmax
comp=Z,18nm,0.4s
KKAR **Karatay Array** 69.95 315 eP P 06 19 22.1 -0.4
KKAR **Karatay Array** 69.95 315 eP P 06 19 22.1 -0.4
BIGH **Upper Bighouse** 70.18 5 eP P 06 19 23.9 +0.3
BIGH AMB AMB 06 19 25.2
comp=Z,106nm,0.8s
KSH **Kashi** 70.22 309 P P 06 19 27.7 +3.3
KSH eSP sP 06 19 41.8 +3.2
KSH ePcP PcP 06 19 49.2 +3.1
KSH ePP PP 06 22 05.7 +6.2
KSH S S 06 28 35.2 +1.6
KSH SKS SKSac 06 29 22.4 -0.8
KSH PMZ
comp=Z,38nm,0.7s
KSH PMZ
comp=Z,360nm,3.7s
KSH LN
comp=Z,320nm,9.1s
KSH LE
comp=Z,1μm,16.2s
KSH LZ
comp=Z,1μm,21.1s
PMOR **Pomariorio Ree** 70.34 152 eT T 07 36 22.9
comp=Z,9.2nm,0.2s
OBN **Obninsk** 70.55 341 ||| eP P 06 19 24.7 -1.2
OBN *PP pP 06 19 33.0 -3.2
OBN *SP sP 06 19 39.0 -1.1
OBN 06 19 48.0
OBN eS SKiKP 06 29 01.6 -4.9
OBN pmax pmax
comp=Z,20nm,1.0s
OBN MLR MLR
comp=Z,927nm,22.0s
OBN **Obninsk** 70.55 341 PFAKE 06 19 40.0 +14
OBN LR LR
comp=Z,1μm,21.0s
HOMB **Homborsund** 70.59 358 eP P 06 19 25.8 -0.3
HOMB IAmb IAmb 06 19 27.2
comp=Z,22nm,0.7s
RRR **Rubha Reidh** 70.70 6 eP P 06 19 25.0 -1.8
MVH1 **Achvaich** 70.73 5 eP P 06 19 25.2 -1.8
DWPF **Disney** 70.78 69 eP P 06 19 27.3 -0.4
comp=Z,130nm,0.9s
NONG **Nongkai** 70.91 275 P P 06 19 29.0 +0.3
comp=Z,54nm,0.9s,comp=Z,6μm
CRAI **Chiangrai** 71.01 279 P P 06 19 23.8 -5.5
SFK **Sufi-Kurgan** 71.02 311 P P 06 19 29.2 -0.2
SFK pmax pmax
comp=Z,24nm,1.0s
KAC **Achnashellach** 71.09 6 eP P 06 19 29.3 +0.2
MCD **Coleburn Disti** 71.12 5 ||| eP P 06 19 29.3 -0.1
SKNT **Sakolnakorn** 71.21 274 P P 06 19 30.1 -0.4
comp=Z,76nm,0.8s
MYLDM **Lahad Datu** 71.30 254 eP P 06 19 33.0 +1.9
KSB **Sheil Bridge** 71.37 6 eP P 06 19 31.0 +0.1
UBPT **Khong Chiam** 71.56 271 P P 06 19 33.2 +0.6
comp=Z,51nm,1.0s
DRUM **Mains of Drumt** 71.83 4 eP P 06 19 32.5 -1.1
CMAI **Chiengmai2** 72.05 280 P P 06 19 37.2 +1.4
comp=Z,65nm,1.1s,comp=Z,857nm
EDU **Dundee** 72.17 5 eP P 06 19 34.3 -1.4
PPT **Papeete** 72.30 154 LR LR 06 47 29.8
comp=Z,1μm,18.4s,baz=316,slow=33
PPT2 **Papeete2** 72.32 154 eS S 06 28 59.8 +1.9
comp=Z,893nm,25.8s
PPT2 **Papeete2** 72.32 154 eLR LR 06 41 41.2
comp=Z,2μm,21.5s,baz=346
PPT2 **Papeete2** 72.32 154 eT T 07 38 51.3
comp=Z,21nm,0.3s
PHRA **Phrae** 72.40 278 P P 06 19 38.0 +0.4
comp=Z,301nm,0.8s
LPSR **Galich'ya Gora** 72.40 339 eP P 06 19 37.7 +0.6
LPSR pmax pmax
comp=E,6.0nm,0.8s
LPSR pmax pmax
comp=Z,40nm,0.8s
LPSR pmax pmax
comp=N,5.0nm,0.5s
NACGM **Naroch** 72.43 347 e P 06 19 34.0 -3.3
EAB **Aberfoyle** 72.46 5 eP P 06 19 37.2 -0.1
LOEI **Loei** 72.50 276 P P 06 19 36.4 -1.9
comp=N,42nm,0.9s,comp=N,523nm
TEIG **Tepich** 72.58 79 PFAKE 06 19 50.0 +11
TEIG LR LR
comp=Z,422nm,20.0s
LAMP **Lampang** 72.75 278 P P 06 19 44.4 +4.7
comp=Z,10nm,1.0s,comp=Z,102nm
UTTA **Uttaradit** 72.77 277 P P 06 19 39.9 +0.1
comp=Z,38nm,0.8s,comp=Z,300nm
CHTO **Chiang Mai** 72.96 279 P P 06 19 41.6 +0.6
comp=Z,80nm,1.2s,comp=Z,2μm
CHTO **Chiang Mai** 72.96 279 eP P 06 19 40.9 -0.1
CHTO pmax pmax
comp=Z,34nm,0.9s
CHTO MLR MLR
comp=Z,401nm,21.0s
CHTO **Chiang Mai** 72.96 279 eP P 06 19 40.9 -0.1
comp=Z,34nm,0.9s
CHTO LR LR
comp=Z,401nm,21.0s
VRH **Novokhopyorsk** 73.04 337 eP P 06 19 41.0 +0.1
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=Z,50nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.8s
CMAR **Chiang Mai Arr** 73.23 279 P P 06 19 42.9 +0.4
comp=E,13nm,0.9s,baz=24,slow=7.0,SNR=32
CMAR LR LR 06 54 39.9
comp=E,513nm,19.8s,baz=46,slow=38
CM01 **Chiang Mai Arr** 73.25 279 eP P 06 19 42.1 -0.5
TAPN **Taplejung** 73.26 293 eP P 06 19 43.4 +0.4
comp=E,277nm,0.8s
ESK **Eskdalemuir** 73.39 5 eP P 06 19 42.7 -0.2
ESK **Eskdalemuir** 73.39 5 i P P 06 19 43.9 +1.0
ESK **Eskdalemuir** 73.39 5 eP P 06 19 43.5 +0.6
ESK LR LR
comp=Z,965nm,20.0s
BSD **Bornholm Skovb** 73.46 354 i P P 06 19 42.3 -1.0
BSD pmax pmax
comp=Z,16nm,0.5s
BSD **Bornholm Skovb** 73.46 354 i P P 06 19 42.3 -1.0
comp=Z,16nm,0.5s
BWH **Wardlaw** 73.50 5 eP P 06 19 43.4 -0.2
ECK **Cauldkaine Hil** 73.53 5 ||| eP P 06 19 43.6 -0.2
BHH **Howats Hill** 73.61 5 eP P 06 19 43.8 -0.4
VSR **Storozhevoye** 73.64 338 eP P 06 19 44.9 +0.5
VSR pmax pmax
comp=Z,50nm,0.9s
VSR pmax pmax
comp=N,20nm,0.8s
VSR pmax pmax
comp=E,10.0nm,1.4s
SUW **Suwalki** 73.78 349 eP P 06 19 43.6 -1.6
SUW **Suwalki** 73.78 349 eP P 06 19 43.6 -1.6
ODAN **Odare** 73.82 293 eP P 06 19 46.3 +0.1
comp=E,115nm,0.9s
VORD **Divnogorie** 73.84 338 eP P 06 19 46.2 +0.6
VORD pmax pmax
comp=Z,30nm,0.8s
VORD pmax pmax
comp=N,40nm,0.6s
VORD pmax pmax
comp=E,20nm,1.0s
GUN **Gumba** 73.89 294 eP P 06 19 47.2 +0.5
DZET **Dzherino** 74.16 313 P P 06 19 47.4 -0.5
DZET pmax pmax
comp=Z,29nm,0.6s
RAMN **Ramite** 74.21 293 eP P 06 19 48.7 +0.2
comp=Z,530nm,0.8s
KKN **Kakani** 74.32 295 eP P 06 19 49.4 +0.3
comp=Z,126nm,0.7s
PKI **Pulchoki** 74.41 295 eP P 06 19 49.7 -0.1
comp=Z,189nm,0.9s
PKIN **Phulchoki** 74.42 295 eP P 06 19 49.7 0.0
comp=Z,126nm,0.9s
GKN **Gorkha** 74.52 295 eP P 06 19 50.2 0.0
comp=Z,171nm,0.7s
DMN **Daman** 74.56 295 eP P 06 19 50.9 +0.4
comp=Z,157nm,0.8s
DANN **Dangsing** 74.75 296 eP P 06 19 52.3 +0.6
comp=Z,68nm,0.8s
BSEG **Bad Segeberg** 74.88 357 eP P 06 19 51.4 -0.1
comp=Z,39nm,0.8s,baz=5.6,slow=5.6
DZM **Mont Dzumac** 74.96 198 eLR LR 06 42 56.4
comp=Z,1μm,26.9s
UMPA **Umpang Tak** 74.98 277 P P 06 19 55.0 +2.2
comp=Z,43nm,0.9s
UTHA **Uthaitani** 75.11 276 P P 06 19 54.8 +1.3
comp=Z,26nm,0.9s,comp=Z,212nm
GKP **Gorka Klasztor** 75.12 352 eP P 06 19 52.7 -0.3
GKP **Gorka Klasztor** 75.12 352 eP P 06 19 52.8 -0.3
LHO **Holmfirth** 75.22 4 eP P 06 19 53.1 -0.5
WME **Myndd Eilian** 75.24 6 eP P 06 19 54.6 +0.8
WME AMB AMB 06 19 56.7
comp=Z,92nm,0.9s
DSB **Dublin** 75.25 7 eP P 06 19 54.2 +0.5
KOLN **Koldanda** 75.28 296 eP P 06 19 54.7 0.0
comp=Z,137nm,0.7s
CWF **Charnwood Fore** 76.05 4 eP P 06 19 58.9 +0.5
AKASG **Malin Array Be** 76.12 344 P P 06 19 57.3 -1.5
comp=Z,8.9nm,0.4s,baz=18,slow=6.0,SNR=36
AKASG LR LR 06 59 34.7
comp=Z,1μm,18.0s,baz=15,slow=41
KIEV **Kiev** 76.13 344 eP P 06 19 57.7 -1.2
KIEV MLR MLR
comp=Z,1μm,20.0s
KIEV **Kiev** 76.13 344 eP P 06 19 57.7 -1.2
KIEV LR LR
comp=Z,1μm,20.0s
AK11 **Malin Array Si** 76.16 344 eP P 06 19 58.0 -0.9
BEL **Belsk** 76.20 350 eP P 06 19 59.3 +0.1
BEL **Belsk** 76.20 350 eP P 06 19 59.3 +0.1
VAL **Valentia** 76.20 10 ||| iP P 06 20 00.3 +1.1
PATY **Pattaya** 76.23 273 P P 06 20 01.7 +1.8
comp=Z,27nm,0.8s,comp=Z,2μm
NRDL **Niedersach Rie** 76.33 357 eP P 06 19 59.3 -0.5
comp=Z,29nm,1.2s,baz=5.6,slow=5.6
IBBN **Ibbenburen** 76.58 358 eP P 06 20 01.5 +0.1
comp=Z,65nm,0.9s,baz=5.6,slow=5.6
BBSR **BB Station** 76.70 55 PFAKE 06 20 10.0 +7.6
BBSR LR LR
comp=Z,921nm,21.0s
WTSB **Winterswijk** 76.94 359 eP P 06 20 02.9 -0.4
comp=Z,19nm,0.7s
CLZ **Clausthal** 76.97 356 eP P 06 20 03.7 0.0
comp=Z,41nm,0.8s,baz=5.6,slow=5.6
STRD **Stroud** 76.97 4 eP P 06 20 03.2 -0.4
STRD AMB AMB 06 20 04.7
comp=Z,98nm,1.1s
SBUM **Sibu** 77.26 258 eP P 06 20 06.5 +0.7
comp=Z,162nm,2.2s
GTTG **Gvttingen** 77.28 357 eP P 06 20 05.3 -0.1
comp=Z,54nm,1.0s,baz=5.6,slow=5.6
CLL **Collm** 77.38 355 ⇑ iP P 06 20 05.0 -0.9
CLL i 06 20 10.4
CLL pmax pmax
comp=Z,21nm,0.8s
CLL MLR MLR
comp=Z,500nm,19.0s
CLL **Collm** 77.38 355 eP P 06 20 04.9 -0.9
comp=Z,37nm,1.3s,baz=5.6,slow=5.6
CLL **Collm** 77.38 355 ⇑ iP P 06 20 05.0 -0.9

comp=Z,21nm,0.8s
CLL e(S) S 06 30 14.0 +20
CLL ePPS PPS 06 30 48.0
CLL eSS SS 06 35 07.0 +16
CLL eSSS SSS 06 38 06.0
CLL LmH 06 58 00.0
comp=N,400nm,18.6s
CLL LmH 06 58 00.0
comp=E,500nm,19.4s
CLL LmV 07 00 00.0
comp=Z,500nm,19.0s
**CLL Collm 77.38 355 eP P 06 20 05.0 -0.9**
**BUG Bochum--Univer 77.46 358** eP P **06 20 06.1 -0.2**
comp=Z,25nm,0.7s,baz=5.6,slow=5.6
**WOL Wolverton 77.48 4** eP P **06 20 06.3 -0.1**
WOL AMB AMB 06 20 11.9
comp=Z,137nm,1.8s
**KBL Kabul 77.53 310** eP P **06 20 06.6 -0.7**
**KBL Kabul 77.53 310** eP P **06 20 06.6 -0.7**
**BRG Berggiesshubel 77.75 354** *i* P P **06 20 07.2 -0.8**
comp=Z,21nm,0.8s
**BRG Berggiesshubel 77.75 354** *i* P P **06 20 07.2 -0.8**
BRG pmax pmax
comp=Z,21nm,0.8s
**BRG Berggiesshubel 77.75 354** eP P **06 20 07.2 -0.8**
comp=Z,20nm,0.8s,baz=5.6,slow=5.6
**LVV L'vov 77.78 347** eP P **06 20 08.4 +0.2**
LVV eS S 06 29 49.6 -8.3
LVV MLR MLR
comp=N,600nm,20.0s
LVV MLR MLR
comp=E,600nm,20.0s
LVV MLR MLR
comp=Z,1µm,20.0s
**TBI Tubuai 77.85 156** eS S **06 29 57.2 -1.8**
comp=Z,346nm,31.0s
**TBI Tubuai 77.85 156** eLR LR 06 44 07.5
comp=Z,2µm,23.0s,baz=338
**TBI Tubuai 77.85 156** eT T 07 45 44.9
comp=Z,8.1nm,0.3s
**TGUH Tegucigalpa,Un 77.88 83** eP P **06 20 10.6 +1.4**
comp=Z,46nm,0.9s
**OJC Ojcow 77.90 350** eP P **06 20 08.0 -0.8**
**OJC Ojcow 77.90 350** eP P **06 20 08.1 -0.8**
OJC pmax pmax
comp=Z,8.0nm,0.8s
**OJC Ojcow 77.90 350** eP P **06 20 08.1 -0.8**
comp=Z,8.2nm,0.8s
**UPC Upice 77.97 353** eP P **06 20 08.4 -0.8**
UPC e 06 20 18.8
UPC eSS SS 06 35 03.0 +3.2
UPC MLR MLR
comp=Z,700nm,16.4s
**UPC Upice 77.97 353** eP P **06 20 08.4 -0.8**
UPC epP **PcP 06 20 18.8 -0.1**
UPC eSS SS 06 35 03.0 +3.2
UPC AMS AMS 06 55 30.0
comp=Z,700nm,16.4s
**PVCC Panska Ves 78.05 354** eP P **06 20 09.3 -0.4**
PVCC MLR MLR
comp=Z,800nm,18.5s
**PVCC Panska Ves 78.05 354** eP P **06 20 09.3 -0.4**
PVCC AMS AMS 07 06 00.0
comp=Z,800nm,18.5s
**NDI New Delhi 78.08 301** eP P **06 20 08.5 -1.7**
**DPC Dobruska-Polom 78.10 352** eP P **06 20 09.4 -0.6**
DPC e 06 20 19.2
DPC eSS SS 06 35 06.6 +4.7
**DPC Dobruska-Polom 78.10 352** eP P **06 20 09.4 -0.6**
DPC epP **PcP 06 20 19.2 -0.3**
DPC eSS SS 06 35 06.6 +4.7
**MOX Moxa 78.11 356** eP P **06 20 09.7 -0.3**
comp=Z,26nm,1.0s,baz=5.6,slow=5.6
MOX eL L 06 53 37.2
comp=Z,422nm,21.0s
**BEBN Eben Emael 78.12 359** P P **06 20 10.6 +0.6**
comp=Z,11nm,1.1s
**KWP Kalwaria Pacla 78.14 348** eP P **06 20 10.0 -0.2**
**KWP Kalwaria Pacla 78.14 348** eP P **06 20 10.0 -0.2**
**HGN Heimansgroeve 78.15 359** eP P **06 20 09.5 -0.7**
comp=Z,58nm,0.9s
**TANN Tannenbergstha 78.30 355** eP P **06 20 10.6 -0.5**
comp=Z,15nm,1.2s,baz=5.6,slow=5.6
**MEM Membach 78.31 359** P P **06 20 11.3 +0.2**
comp=Z,24nm,1.2s
MEM AP **pP 06 20 23.8 +2.3**
**KRLC Kraliky 78.33 352** eP P **06 20 10.7 -0.6**
KRLC e 06 20 15.7
KRLC e 06 20 21.0
**KRLC Kraliky 78.33 352** eP P **06 20 10.7 -0.6**
KRLC epP **PcP 06 20 21.0 +0.4**
**SNF Seneffe 78.41 0** P P **06 20 11.7 +0.1**
**OKC Ostrava-Krasne 78.44 351** eP P **06 20 10.8 -1.0**
OKC e 06 20 21.8
OKC MLR MLR
comp=Z,900nm,17.1s
**OKC Ostrava-Krasne 78.44 351** eP P **06 20 10.8 -1.0**
OKC epP **pP 06 20 21.8 -0.5**
OKC AMS AMS 06 56 40.0
comp=Z,900nm,17.1s
**NKC Novy Kostel 78.48 355** eP P **06 20 11.7 -0.4**
NKC e 06 20 22.3
NKC eSS SS 06 35 14.7 +7.1
NKC MLR MLR
comp=Z,700nm,20.0s
**NKC Novy Kostel 78.48 355** eP P **06 20 11.7 -0.4**
NKC epP **pP 06 20 22.3 -0.2**
NKC eSS SS 06 35 14.7 +7.1
NKC AMS AMS 06 59 40.0
comp=Z,700nm,20.0s
**BCLA Clavier 78.50 360** P P **06 20 11.7 -0.5**
comp=Z,23nm,1.2s
BCLA AP **pP 06 20 25.4 +2.8**
**PRA Prague 78.52 354** eP P **06 20 11.1 -1.1**
PRA e 06 20 16.5
PRA eSS SS 06 35 10.9 +2.8
PRA MLR MLR
comp=Z,900nm,21.4s
**PRA Prague 78.52 354** eP P **06 20 11.1 -1.1**
PRA eSS SS 06 35 10.9 +2.8
PRA AMS AMS 07 06 20.0
comp=Z,900nm,21.4s
**STHS Stebnicka Huta 78.53 349** eP P **06 20 12.7 +0.3**
STHS pmax pmax
comp=Z,7.0nm,0.9s
**STHS Stebnicka Huta 78.53 349** eP P **06 20 12.7 +0.3**
**MORC Moravsky Berou 78.56 352** eP P **06 20 12.2 -0.4**
MORC e*PP **pP 06 20 23.2 +0.2**
**MORC Moravsky Berou 78.56 352** ||*i*P P **06 20 12.5 -0.1**
**MORC Moravsky Berou 78.56 352** eP P **06 20 12.2 -0.4**
MORC epP **pP 06 20 23.2 +0.2**
**PRU Pruhonice 78.59 354** eP P **06 20 12.4 -0.3**
PRU e 06 20 25.3
PRU e 06 30 27.8
PRU eSS SS 06 35 12.6 +3.4
PRU MLR MLR
comp=Z,800nm,18.2s
**PRU Pruhonice 78.59 354** eP P **06 20 12.4 -0.3**
PRU epP **pP 06 20 25.3 +2.2**
PRU ex x 06 30 27.8
PRU eSS SS 06 35 12.6 +3.4
PRU AMS AMS 06 58 30.0
comp=Z,800nm,18.2s
**NIE Niedzica 78.63 350** eP P **06 20 13.0 +0.1**
**NIE Niedzica 78.63 350** eP P **06 20 13.1 +0.1**
**GOPC GO Pecny, Ondr 78.65 353** eP P **06 20 12.6 -0.4**
GOPC e 06 20 23.4
GOPC eSS SS 06 35 12.1 +2.0
GOPC MLR MLR
comp=Z,800nm,19.1s
**GOPC GO Pecny, Ondr 78.65 353** eP P **06 20 12.6 -0.4**
GOPC epP **pP 06 20 23.4 -0.1**
GOPC eSS SS 06 35 12.1 +2.0
GOPC AMS AMS 06 58 40.0
comp=Z,800nm,19.1s
**TNS Taunus Mts 78.65 358** eP P **06 20 12.9 -0.2**
comp=Z,45nm,1.1s,baz=5.6,slow=5.6
**KAPI Kappang 78.73 247** P P **06 20 15.0 +1.1**
comp=Z,106nm,1.2s,SNR=6.0
**KAPI Kappang 78.73 247** P P **06 20 14.4 +0.6**
SNR=13
**KAPI Kappang 78.73 247** eP P **06 20 14.6 +0.7**
KAPI LR LR
comp=Z,210nm,20.0s

**DOU Dourbes 78.83 0** P P **06 20 13.4 -0.5**
comp=Z,26nm,1.3s
**CTAO Charters Tower 78.83 217** PFAKE 06 20 30.0 +16
CTAO LR LR
comp=Z,525nm,20.0s
**KOLS Kolonicke sedl 78.88 348** eP P **06 20 14.3 0.0**
KOLS pmax pmax
comp=Z,11nm,1.2s
**KOLS Kolonicke sedl 78.88 348** eP P **06 20 14.3 0.0**
**ROTZ Rotzenmuhle 78.96 355** eP P **06 20 14.7 0.0**
comp=Z,16nm,1.0s,baz=5.6,slow=5.6
**LANS Liptovska Anna 78.99 350** eP P **06 20 15.6 +0.7**
**LANS Liptovska Anna 78.99 350** eP P **06 20 15.6 +0.7**
**GRF Grafenberg Arr 79.08 356** eP P **06 20 15.5 +0.1**
comp=Z,44nm,0.9s,baz=5.6,slow=5.6
GRF eL L 06 54 16.4
comp=Z,487nm,21.7s
**GRFO Grafenberg 79.08 356** eP P **06 20 16.0 +0.6**
**GRFO Grafenberg 79.08 356** eP P **06 20 16.0 +0.6**
**MTN Manton Dam 79.08 233** eP P **06 20 15.4 -0.3**
**VRAC Vranov 79.11 352** ||*i*P P **06 20 15.6 +0.1**
**UZH Uzhgorod 79.17 348** eP P **06 20 15.1 -0.7**
UZH eS S **06 30 10.1 -2.8**
UZH MLR MLR
comp=N,500nm,21.0s
UZH MLR MLR
comp=E,300nm,21.0s
UZH MLR MLR
comp=Z,400nm,21.0s
**KSM Kuching 79.20 259** eP P **06 20 16.9 +0.4**
KSM LR LR
comp=Z,223nm,20.0s
**TREC Trest 79.21 353** AMS AMS 07 01 40.0
comp=Z,700nm,16.6s
**WLF Walferdange 79.25 359** P P **06 20 16.9 +0.6**
comp=Z,24nm,1.1s
**WLF Walferdange 79.25 359** eP P **06 20 17.3 +1.0**
WLF pmax pmax
comp=Z,34nm,0.9s
WLF MLR MLR
comp=Z,1µm,19.0s
**WLF Walferdange 79.25 359** eP P **06 20 16.5 +0.2**
comp=Z,41nm,0.9s,baz=5.6,slow=5.6
**WLF Walferdange 79.25 359** eP P **06 20 17.2 +1.0**
comp=Z,34nm,0.9s
WLF LR LR
comp=Z,1µm,19.0s
**KIV Kislovodsk 79.45 333**↑ eP P **06 20 18.1 +0.5**
KIV 06 20 26.0
KIV *PP **pP 06 20 28.0 -0.1**
KIV *SP **sP 06 20 32.0 0.0**
KIV pmax pmax
comp=Z,9.0nm,0.6s
KIV MLR MLR
comp=Z,664nm,24.0s
**KIV Kislovodsk 79.45 333** eP P **06 20 19.2 +1.6**
KIV LR LR
comp=Z,975nm,19.0s
**ABKT Ailbek 79.51 320** P P **06 20 18.2 +0.2**
comp=Z,344nm,0.9s,SNR=9.7
**GEYT Alibeck 79.51 320** P P **06 20 18.3 +0.4**
comp=Z,46nm,0.8s,baz=343,slow=4.6,SNR=55
GEYT LR LR 07 01 14.2
comp=Z,977nm,18.2s,baz=30,slow=40
**KHC Kasperske Hory 79.51 354** eP P **06 20 17.6 -0.2**
**KHC Kasperske Hory 79.51 354** eP P **06 20 17.6 -0.2**
KHC epP **pP 06 20 27.3 -0.9**
KHC ex x 06 30 38.7
KHC eSS SS 06 35 22.0 -1.1
KHC AMS AMS 07 05 10.0
comp=Z,1µm,20.0s
**KHC Kasperske Hory 79.51 354** eP P **06 20 17.6 -0.2**
**WET Wettzell 79.54 355** eP P **06 20 17.6 -0.3**
comp=Z,15nm,1.1s,baz=5.6,slow=5.6
**KBZ Khabaz 79.60 333** P P **06 20 18.8 +0.5**
comp=Z,8.6nm,0.8s,baz=96,slow=3.7,SNR=10
KBZ LR LR 06 59 21.9
comp=Z,967nm,21.6s,baz=12,slow=39
**NCK Nalchik 79.62 332**||eP P **06 20 20.1 +1.7**
**TRPA Tarpa 79.63 348**↑*i*P P **06 20 18.8 +0.4**
**VYHS Vyhne 79.70 351** eP P **06 20 18.3 -0.5**
VYHS pmax pmax
comp=Z,5.0nm,1.0s
**VYHS Vyhne 79.70 351** eP P **06 20 18.3 -0.5**
**BUR04 Bucovina Ar. S 79.76 346** eP P **06 20 18.4 -0.9**
**BURAR Bucovina Array 79.76 346**↑eP P **06 20 19.3 +0.1**
**KIS Kishinev 79.77 344** eP P **06 20 16.0 -3.1**
KIS eS S 06 30 08.0 -11
**KIS Kishinev 79.77 344** eP P **06 20 16.0 -3.1**
KIS e 06 25 12.0
KIS eS S 06 30 08.0 -11
KIS ePS PnS 06 31 20.0 +14
KIS MLR MLR
comp=Z,1µm,18.0s
KIS MLR MLR
comp=Z,700nm,17.0s
KIS MLR MLR
comp=Z,1µm,20.0s
**GEC2 GERESS Array S 79.79 354** eP P **06 20 19.1 -0.2**
**GEC2 GERESS Array S 79.79 354** eP P **06 20 18.4 -0.9**
comp=Z,14nm,1.1s,baz=5.6,slow=5.6
**GEC2 GERESS Array S 79.79 354** eP P **06 20 19.1 -0.2**
**GERES GERESS Array B 79.79 354** P P **06 20 19.1 -0.2**
comp=Z,9.9nm,0.8s,baz=20,slow=4.3,SNR=58
**SMOL Smolenice 79.82 351** eP P **06 20 19.2 -0.2**
**SMOL Smolenice 79.82 351** eP P **06 20 19.1 -0.3**
**PRAR RASCA 79.85 345**||*i*P P **06 20 19.2 -0.4**
**SURA Surathani 79.88 272** P P **06 20 30.6 +10**
**ANN Anapa 80.05 337** eP P **06 20 19.2 -1.5**
ANN eS S **06 30 24.5 +2.2**
ANN pmax pmax
comp=Z,61nm,1.0s
**STU Stuttgart 80.08 357** eP P **06 20 20.4 -0.4**
STU pmax pmax
comp=Z,34nm,1.1s
**STU Stuttgart 80.08 357** eP P **06 20 20.4 -0.4**
comp=Z,27nm,1.0s,baz=5.6,slow=5.6
**STU Stuttgart 80.08 357** eP P **06 20 20.4 -0.4**
comp=Z,34nm,1.1s
**PSZ Piszkesteto 80.16 350** eP P **06 20 21.0 -0.4**
PSZ pmax pmax
comp=Z,10.0nm,1.0s
PSZ MLR MLR
comp=Z,1µm,21.0s
**PSZ Piszkesteto 80.16 350**↑*i*P P **06 20 21.8 +0.5**
**PSZ Piszkesteto 80.16 350** eP P **06 20 21.0 -0.4**
comp=Z,10nm,1.0s
PSZ LR LR
comp=Z,1µm,21.0s
**RAO Raoul Island 80.39 182** PFAKE 06 20 30.0 +7.5
RAO LR LR
comp=Z,2µm,22.0s
**CONA Conrad Observa 80.54 352**↑*i*P P **06 20 23.3 -0.1**
SNR=7.8
**BFO Black Forest 80.55 358** *i* P P **06 20 23.7 +0.3**
**BFO Black Forest 80.55 358** eP P **06 20 22.9 -0.4**
comp=Z,16nm,1.0s,baz=5.6,slow=5.6
**BFO Black Forest 80.55 358** eP P **06 20 22.9 -0.4**
BFO LR LR
comp=Z,740nm,21.0s
**FUR Furstenfeldbru 80.60 356** eP P **06 20 23.3 -0.4**
comp=Z,32nm,0.9s,baz=5.6,slow=5.6
**MTDJ Mount Denham 80.62 73** PFAKE 06 20 40.0 +16
MTDJ LR LR
comp=Z,484nm,19.0s
**SIM Simferopol' 80.68 339** eP P 06 20 27.3 +3.2
SIM pmax pmax
comp=Z,100nm,8.9s
SIM MLR MLR
comp=E,600nm,16.9s
**GTBY Guantanamo Bay 80.74 70** eP P **06 20 26.2 +1.5**
comp=E,62nm,1.0s
GTBY LR LR
comp=Z,884nm,20.0s
**SKLT Songkhla 80.80 270** P P **06 20 26.3 +1.2**
comp=Z,57nm,0.9s
**VRI Vrincioaia 81.22 345**↑*i*P P **06 20 28.2 +1.2**
**ARSA Arzberg 81.24 353**↑*i*P P **06 20 27.0 -0.1**
comp=Z,9.7nm,0.8s,SNR=6.4
**PLOR Plostina 81.25 345**↑*i*P P **06 20 28.7 +1.5**
**DOPR Dopca 81.34 346**↑*i*P P **06 20 28.8 +1.2**
**WATA Walderalm 81.42 355**||*i*P P **06 20 27.8 -0.3**
comp=Z,28nm,1.1s,SNR=12
**MOTA Moosalm 81.43 356**↑*i*P P **06 20 27.8 -0.4**
comp=Z,25nm,1.1s,SNR=9.7

**WTTA Wattenberg 81.48 355**↑*i*P P **06 20 28.3 -0.2**
comp=Z,25nm,1.0s,SNR=8.0
**KBA Koelnbreinsper 81.57 354**↑*i*P P **06 20 29.2 +0.2**
comp=Z,59nm,0.8s,SNR=26
**CFR Carcaliu 81.65 344**↑*i*P P **06 20 29.6 +0.4**
**GRER 81.66 344**↑*i*P P **06 20 31.1 +1.8**
**FETA Feichten 81.77 356** *i* P P **06 20 30.5 +0.4**
comp=Z,27nm,0.9s,SNR=11
**GRTK Grand Turk 81.80 66** PFAKE 06 20 40.0 +10
GRTK LR LR
comp=Z,1µm,21.0s
**SOKA Soboth 81.85 353**↑*i*P P **06 20 30.1 -0.3**
comp=Z,29nm,0.9s,SNR=13
**PERS Pernice 81.88 353** eP P **06 20 30.0 -0.6**
**ABTA Abfaltersbach 81.95 355**↑*i*P P **06 20 30.2 -0.7**
comp=Z,19nm,1.2s
**OBKA Obir 82.05 353**↑*i*P P **06 20 31.2 -0.2**
comp=Z,19nm,0.7s,SNR=8.0
**FUORN Ofenpass-Fuorn 82.19 356** eP P **06 20 32.7 +0.3**
**CHLP Challavanipeta 82.20 290** eP P **06 20 32.6 +0.1**
**JTS JuntasAbangare 82.21 83**↑ eP P **06 20 32.1 -0.5**
JTS pmax pmax
comp=Z,14nm,1.0s
**JTS JuntasAbangare 82.21 83** PFAKE 06 20 40.0 +7.4
JTS LR LR
comp=Z,334nm,21.0s
**KULM Kulim 82.23 269** eP P **06 20 32.5 -0.3**
KULM LR LR
comp=Z,329nm,20.0s
**RKT Rikitea 82.24 143** eS S **06 30 42.6 -2.6**
comp=Z,299nm,29.8s
RKT eSS SS **06 36 05.9 -0.5**
comp=Z,344nm,28.8s
**RKT Rikitea 82.24 143** eLR LR 06 46 22.4
comp=Z,1µm,25.0s,baz=335
**RKT Rikitea 82.24 143** eT T 07 51 16.4
comp=Z,3.9nm,0.3s
**GNI Garni 82.33 330** PFAKE 06 20 40.0 +6.8
GNI LR LR
comp=Z,1µm,19.0s
**TUE Stuetta 82.37 357** eP P **06 20 33.7 +0.4**
TUE LR LR
comp=Z,723nm,20.0s
**SENIN Lac Senin/Sane 82.54 358** eP P **06 20 35.3 +1.1**
**IPM Ipoh 82.62 268** eP P **06 20 34.4 -0.4**
**WBSI Waikabubak, Su 82.70 245** P P 06 20 38.4 +3.3
comp=Z,79nm,0.9s
**BOJS Bojanci 83.00 353** eP P **06 20 35.7 -0.6**
**SSB Saint Sauveur 83.64 0** eP P **06 20 40.1 +0.4**
SSB MLR MLR
comp=Z,735nm,20.0s
**SSB Saint Sauveur 83.64 0** eP P **06 20 40.1 +0.4**
SSB LR LR
comp=Z,735nm,20.0s
**WRAB Tennant Creek 83.65 227**↑ eP P **06 20 39.9 +0.1**
WRAB pmax pmax
comp=Z,41nm,1.7s
**WRAB Tennant Creek 83.65 227** eP P **06 20 38.3 -1.5**
comp=Z,42nm,1.3s
WRAB LR LR
comp=Z,904nm,20.0s
**WRA Warramunga Arr 83.66 227** P P **06 20 38.5 -1.4**
comp=Z,3.1nm,0.7s,baz=32,slow=5.4,SNR=40
WRA LR LR 06 54 52.1
comp=Z,693nm,20.6s,baz=20,slow=34
**SDDR Presa de Saban 83.70 68** eP P **06 20 41.0 +0.6**
SDDR LR LR
comp=Z,828nm,20.0s
**BNI Bardonecchia 83.86 359** eP P **06 20 41.9 +1.0**
BNI MLR MLR
comp=Z,1µm,20.0s
**BNI Bardonecchia 83.86 359** eP P **06 20 41.9 +1.0**
BNI LR LR
comp=Z,1µm,20.0s
**PVM Polavaram 84.62 291** eP P **06 20 44.1 -0.9**
**VLC Villacollemand 84.64 356** PFAKE 06 21 00.0 +15
VLC LR LR
comp=Z,576nm,21.0s
**RPR Rampur 84.70 294** eP P **06 20 44.3 -1.0**
**SMN1 Samana, DR 84.70 66** eP P **06 20 45.4 -0.1**
SMN1 epP **pP 06 20 54.4 -1.6**
SMN1 esP **sP 06 20 58.8 -1.0**
**PLE Pljevlja 84.75 349**↑*i*P P **06 20 45.6 +0.2**
**UPM Unac-Piva 84.92 350** eP P **06 20 45.9 -0.5**
**IVA Berane 85.14 349** eP P **06 20 47.0 -0.3**
**PSI Prapat 85.24 269** eP P **06 20 48.7 +0.4**
**PSI Prapat 85.24 269** eP P **06 20 48.7 +0.4**
**BRY Bratogost 85.26 350**↑*i*P P **06 20 47.8 -0.2**
**NKY Niksic 85.30 350**↑*i*P P **06 20 47.9 -0.3**
**NKME Niksic 85.35 350**↑*i*P P **06 20 48.0 -0.4**
**PVY Plav 85.40 349**↑*i*P P **06 20 48.0 -0.7**
**TTG Podgorica 85.65 349**↑*i*P P **06 20 49.9 +0.2**
**HCY Herceg Novi 85.72 350**↑*i*P P **06 20 49.6 -0.5**
**BRTR Keskin Array B 85.76 338** P P **06 20 50.4 -0.2**
comp=Z,13nm,0.8s,baz=57,slow=2.7,SNR=39
BRTR LR LR 07 05 10.8
comp=Z,270nm,18.1s,baz=23,slow=40
**PWJI Pagerwojo 85.80 252** P P **06 20 49.2 -1.6**
comp=Z,84nm,0.9s
**ANTO Ankara 85.82 339** PFAKE 06 21 00.0 +9.2
ANTO LR LR
comp=Z,604nm,20.0s
**BUM Brajici-Budva 85.82 350**↑*i*P P **06 20 50.5 -0.2**
**SKO Skopje 85.83 348** eP P **06 20 50.7 0.0**
**BR231 Keskin MP Arra 85.85 339** eP P **06 20 50.8 -0.2**
**MALT Malatya 85.88 334**||*i*P P **06 20 52.7 +1.6**
**DRME Dracevica, Mon 85.90 349**↑*i*P P **06 20 50.4 -0.6**
**ULC Ulcinj 86.11 349**↑*i*P P **06 20 52.0 -0.1**
**BCIP Isla Barro Col 86.24 80** PFAKE 06 21 00.0 +6.9
BCIP LR LR
comp=Z,548nm,22.0s
**HYBB Hyderabad (bro 86.26 293** eP P **06 20 52.2 -1.0**
**HYB Hyderabad 86.27 293** *i* P P **06 20 52.0 -1.2**
**VAY Valandovo 86.31 347** eP P **06 20 51.1 -1.9**
**FITZ Fitzroy Crossi 86.31 235** eP P **06 20 53.4 +0.2**
**NJS Nagarjunasagar 86.52 292** eP P **06 20 54.5 +0.1**
**PCAB Cabril 86.54 10** eP P **06 20 55.5 +1.2**
comp=Z,58nm,1.6s
**PBRG Braganca 86.58 9** eP P **06 20 55.2 +0.8**
comp=Z,36nm,1.7s
**TIR Tirane 86.64 349** eP P **06 20 54.4 -0.3**
TIR MLR MLR
comp=Z,1µm,22.0s
**TIR Tirane 86.64 349** eP P **06 20 54.4 -0.3**
TIR LR LR
comp=Z,1µm,22.0s
**ADKI Addanki 86.69 291** eP P **06 20 55.2 -0.1**
**LRS Lares 86.79 65** eP P **06 20 56.3 +0.5**
**AOPR Arecibo Observ 86.80 64** eP P **06 20 56.6 +0.8**
**PPI Padang Panjang 86.84 265** P P **06 20 56.0 0.0**
comp=Z,27nm,1.2s,comp=Z,621nm
**POLO Lamas de Olo 86.90 9** eP P **06 20 57.1 +1.0**
comp=Z,22nm,2.1s
**PVRL Vila Real 87.01 9** eP P **06 20 57.6 +1.1**
comp=Z,33nm,1.7s
**AS01 Alice Springs 87.08 225** eP P **06 20 56.0 -0.9**
**ASAR Alice Springs 87.10 225** P P **06 20 56.4 -0.6**
comp=Z,2.6nm,0.7s,baz=29,slow=5.5,SNR=35
ASAR LR LR 06 56 22.6
comp=Z,822nm,20.9s,baz=30,slow=33
**CELP Cerrillos 87.11 64** eP P **06 20 58.0 +0.7**
**OBIP Obispado Ponce 87.12 65** eP P **06 20 57.7 +0.3**
**MVO Moncorvo 87.18 9** eP P **06 20 57.6 +0.2**
comp=Z,38nm,1.9s
**SJG San Juan 87.33 64** eP P **06 20 59.0 +0.6**
SJG MLR MLR
comp=Z,855nm,20.0s
**SJG San Juan 87.33 64** eP P **06 20 59.0 +0.6**
SJG LR LR
comp=Z,855nm,20.0s
**HUMP Col San Antoni 87.47 64** eP P **06 20 59.6 +0.6**
**CPD Cerro la Pandu 87.52 64** eP P **06 20 59.5 +0.2**
**CPD Cerro la Pandu 87.52 64** eP P **06 20 59.5 +0.2**
**PVIS Viseu 87.54 10** eP P **06 21 00.4 +1.3**
comp=Z,54nm,1.8s
**MDSI Maura Dua 87.64 260** P P **06 20 57.7 -2.1**
comp=Z,17nm,1.2s
**MTE Manteigas 87.89 9** eP P **06 21 02.0 +1.2**
comp=Z,52nm,1.5s
**MTE Manteigas 87.89 9** PFAKE 06 21 10.0 +9.2
MTE LR LR
comp=Z,612nm,19.0s
**POO Poona 88.03 298**||*i*P P 06 20 57.0 -4.8
comp=Z,38nm,1.0s
**PCAS Casmilo, Conde 88.13 10** eP P **06 21 02.7 +0.8**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,54nm,1.6s | | | | | | |
| CUC | Castrocucco | 88.42 | 352 | PFAKE | | 06 21 10.0 | +6.7 |
| CUC | | | | LR | LR | | |
| | comp=Z,453nm,19.0s | | | | | | |
| PCBR | Castelo Branco | 88.45 | 9 | eP | P | 06 21 04.2 | +0.8 |
| | comp=Z,30nm,1.9s | | | | | | |
| SKHT | Srikalahasti | 88.51 | 290 | eP | P | 06 21 03.1 | -0.9 |
| PTOM | Tomar | 88.57 | 10 | eP | P | 06 21 04.8 | +0.8 |
| | comp=Z,49nm,1.4s | | | | | | |
| PMRV | Marv??o | 88.87 | 9 | eP | P | 06 21 05.9 | +0.5 |
| | comp=Z,36nm,2.0s | | | | | | |
| ES19 | SONSECA Array | 88.90 | 7 | eP | P | 06 21 05.3 | -0.4 |
| ESDC | Sonseca Array | 88.92 | 7 | P | P | 06 21 05.1 | -0.6 |
| | comp=Z,6.0nm,0.8s,baz=350,slow=4.3,SNR=24 | | | | | | |
| ESDC | | | | LR | LR | 07 02 11.0 | |
| | comp=Z,260nm,19.1s,baz=315,slow=36 | | | | | | |
| URV | Uravakonda | 88.98 | 293 | eP | P | 06 21 06.3 | 0.0 |
| PAB | San Pablo | 89.02 | 7 | PFAKE | | 06 21 20.0 | +14 |
| PAB | | | | LR | LR | | |
| | comp=Z,1μm,20.0s | | | | | | |
| TIP | Timpagrande | 89.14 | 351 | PFAKE | | 06 21 20.0 | +13 |
| TIP | | | | LR | LR | | |
| | comp=Z,456nm,19.0s | | | | | | |
| VSL | Villasalto | 89.33 | 356 | PFAKE | | 06 21 20.0 | +12 |
| VSL | | | | LR | LR | | |
| | comp=Z,744nm,20.0s | | | | | | |
| ANWB | Willy Bob | 90.11 | 61 | PFAKE | | 06 21 20.0 | +8.5 |
| ANWB | | | | LR | LR | | |
| | comp=Z,906nm,21.0s | | | | | | |
| PBAR | Barrancos | 90.14 | 9 | eP | P | 06 21 11.8 | +0.4 |
| | comp=Z,97nm,1.4s | | | | | | |
| CSS | Prodhromos | 90.37 | 337 | eP | P | 06 21 12.8 | +0.3 |
| CSS | | | | LR | LR | | |
| | comp=Z,144nm,19.0s | | | | | | |
| BANOM | Banah | 90.66 | 315 | ⇓iP | P | 06 21 13.7 | -0.3 |
| | SNR=5.6 | | | | | | |
| SANT | Santorini | 90.68 | 343 | PFAKE | | 06 21 30.0 | +16 |
| SANT | | | | LR | LR | | |
| | comp=Z,804nm,21.0s | | | | | | |
| CLTB | Caltabellotta | 91.03 | 353 | PFAKE | | 06 21 30.0 | +14 |
| CLTB | | | | LR | LR | | |
| | comp=Z,481nm,19.0s | | | | | | |
| UOSS | Wadi Hilu | 91.55 | 315 | eP | P | 06 21 16.9 | -1.2 |
| HATD | Hatta, Dubai | 91.68 | 315 | ⇑iP | P | 06 21 17.8 | -0.9 |
| | SNR=13 | | | | | | |
| ASHO | Ashiyiah | 91.84 | 315 | ⇓iP | P | 06 21 18.2 | -1.3 |
| | SNR=11 | | | | | | |
| MBWA | Marble Bar | 91.92 | 238 | eP | P | 06 21 19.4 | -0.2 |
| MBWA | | | | LR | LR | | |
| | comp=Z,471nm,20.0s | | | | | | |
| CAN | Canberra | 91.94 | 209 | PFAKE | | 06 21 30.0 | +11 |
| CAN | | | | LR | LR | | |
| | comp=Z,595nm,19.0s | | | | | | |
| FAQ | Al Faqa, Dubai | 91.99 | 315 | ⇑P | P | 06 21 18.7 | -1.5 |
| SDV | Santo Domingo | 92.06 | 73 | PFAKE | | 06 21 30.0 | +9.1 |
| SDV | | | | LR | LR | | |
| | comp=Z,763nm,22.0s | | | | | | |
| ASUD | Al Ashush, Dub | 92.21 | 315 | ⇑iP | P | 06 21 20.3 | -0.8 |
| | SNR=11 | | | | | | |
| HOQ | Hoqain | 92.23 | 313 | P | P | 06 21 20.5 | -0.8 |
| | SNR=6.2 | | | | | | |
| WBK | Wadi Bani Khal | 92.30 | 311 | P | P | 06 21 22.5 | +0.9 |
| | SNR=7.4 | | | | | | |
| SMDO | Samad | 92.34 | 312 | P | P | 06 21 21.6 | -0.4 |
| | SNR=7.9 | | | | | | |
| WDD | Wield Dalam | 92.63 | 352 | PFAKE | | 06 21 30.0 | +7.1 |
| WDD | | | | LR | LR | | |
| | comp=Z,417nm,20.0s | | | | | | |
| ARQ | Araqi | 92.80 | 314 | P | P | 06 21 23.6 | -0.4 |
| | SNR=24 | | | | | | |
| FDF | Fort de France | 92.85 | 62 | PFAKE | | 06 21 40.0 | +16 |
| FDF | | | | LR | LR | | |
| | comp=Z,945nm,20.0s | | | | | | |
| JMDO | Jabal Madar | 92.91 | 312 | P | P | 06 21 24.3 | -0.2 |
| | SNR=9.6 | | | | | | |
| ROSC | El Rosal | 92.99 | 78 | P | P | 06 21 26.4 | +1.0 |
| | comp=Z,3.3nm,0.7s,baz=93,slow=18,SNR=4.2 | | | | | | |
| ROSC | | | | LR | LR | 07 04 12.1 | |
| | comp=Z,108nm,21.1s,baz=21,slow=36 | | | | | | |
| KEST | Kesra | 93.09 | 356 | P | P | 06 21 24.1 | -1.1 |
| | comp=Z,2.7nm,0.7s,baz=208,slow=4.0,SNR=2.4 | | | | | | |
| OTAV | Otavalo | 94.04 | 85 | eP | P | 06 21 31.5 | +1.2 |
| OTAV | | | | LR | LR | | |
| | comp=Z,360nm,19.0s | | | | | | |
| GRGR | Grenville | 94.69 | 64 | PFAKE | | 06 21 40.0 | +7.3 |
| GRGR | | | | LR | LR | | |
| | comp=Z,764nm,20.0s | | | | | | |
| BBGH | Gun Hill | 95.03 | 62 | PFAKE | | 06 21 50.0 | +16 |
| BBGH | | | | LR | LR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| RAYN | Ar Rayn | 97.22 | 323 | P | P | 06 21 43.6 | -0.6 |
| | comp=Z,203nm,0.8s,SNR=5.7 | | | | | | |
| RAYN | Ar Rayn | 97.22 | 323 | eP | P | 06 21 39.8 | -4.4 |
| RAYN | | | | LR | LR | | |
| | comp=Z,698nm,19.0s | | | | | | |
| NWAO | Narrogin (SRO) | 102.77 | 233 | PFAKE | | 06 22 20.0 | +12 |
| NWAO | | | | LR | LR | | |
| | comp=Z,686nm,22.0s | | | | | | |
| PTGA | Pitinga | 106.07 | 70 | PFAKE | | 06 26 50.0 | |
| PTGA | | | | LR | LR | | |
| | comp=Z,35μm,22.0s | | | | | | |
| TAM | Tamanrasset | 106.07 | 359 | PFAKE | | 06 26 50.0 | |
| TAM | | | | LR | LR | | |
| | comp=Z,552nm,20.0s | | | | | | |
| SAML | Samuel | 110.64 | 78 | PFAKE | | 06 27 00.0 | |
| SAML | | | | LR | LR | | |
| | comp=Z,605nm,19.0s | | | | | | |
| TOA0 | Torodi Ar. Sit | 115.61 | 3 | ePKIKP | PKPdf | 06 26 52.6 | -1.0 |
| TORD | Torodi Ar. Bea | 115.61 | 3 | PKP | PKPdf | 06 26 52.4 | -1.2 |
| | comp=Z,4.3nm,0.6s,baz=347,slow=2.2,SNR=34 | | | | | | |
| TORD | | | | PP | PP | 06 27 55.5 | +0.6 |
| | comp=Z,2.7nm,0.9s,baz=355,slow=5.5,SNR=3.9 | | | | | | |
| TORD | | | | SKP | | 06 30 30.1 | |
| | comp=Z,1.5nm,1.0s,baz=345,slow=1.5,SNR=5.4 | | | | | | |
| TORD | | | | PKKPbc | PKKPbc | 06 37 23.8 | -0.5 |
| | comp=Z,1.1nm,0.6s,baz=177,slow=3.2,SNR=4.0 | | | | | | |
| DBIC | Dimbokro | 121.51 | 11 | PKP | PKPdf | 06 27 04.8 | -0.1 |
| | comp=Z,8.0nm,0.8s,baz=337,slow=2.2,SNR=7.9 | | | | | | |
| TIC | Toumodi | 121.52 | 11 | ePKIKP | PKPdf | 06 27 04.9 | -0.1 |
| KIC | Kosan Boka | 121.83 | 11 | ePKIKP | PKPdf | 06 27 05.3 | -0.3 |
| | comp=Z,22nm,0.9s | | | | | | |
| KMBO | Kilima Mbogo | 122.89 | 320 | PKP | PKPdf | 06 27 07.8 | -0.1 |
| | comp=Z,6.2nm,0.8s,baz=24,slow=3.7,SNR=15 | | | | | | |
| KMBO | Kilima Mbogo | 122.89 | 320 | PKIKP | PKPdf | 06 27 07.8 | -0.1 |
| KMBO | | | | MLR | MLR | | |
| | comp=Z,573nm,21.0s | | | | | | |
| KMBO | Kilima Mbogo | 122.89 | 320 | PKP | PKPdf | 06 27 07.8 | -0.1 |
| KMBO | | | | LR | LR | | |
| | comp=Z,573nm,21.0s | | | | | | |
| RCBR | Riachuelo | 123.42 | 51 | PFAKE | | 06 27 20.0 | +11 |
| RCBR | | | | LR | LR | | |
| | comp=Z,717nm,20.0s | | | | | | |
| MBAR | Mbarara | 124.80 | 328 | PFAKE | | 06 27 20.0 | +8.5 |
| MBAR | | | | LR | LR | | |
| | comp=Z,578nm,19.0s | | | | | | |
| BDFB | Brasilia | 125.00 | 70 | PKP | PKPdf | 06 27 10.9 | -0.7 |
| | comp=Z,2.9nm,1.0s,baz=321,slow=2.0,SNR=5.1 | | | | | | |
| CPUP | Villa Florida | 127.36 | 86 | PKP | PKPdf | 06 27 15.2 | -0.5 |
| | comp=Z,2.8nm,0.7s,baz=279,slow=3.7,SNR=9.9 | | | | | | |
| SBA | Scott Base | 129.52 | 185 | PFAKE | | 06 27 30.0 | +12 |
| SBA | | | | LR | LR | | |
| | comp=Z,650nm,20.0s | | | | | | |
| CASY | Casey | 130.14 | 211 | PFAKE | | 06 27 30.0 | +10 |
| CASY | | | | LR | LR | | |
| | comp=Z,504nm,19.0s | | | | | | |
| ABPO | Ambohimpanom | 133.59 | 298 | PFAKE | | 06 27 40.0 | +12 |
| ABPO | | | | LR | LR | | |
| | comp=Z,215nm,19.0s | | | | | | |
| LSZ | Lusaka | 139.32 | 324 | PFAKE | | 06 27 50.0 | +11 |
| LSZ | | | | LR | LR | | |
| | comp=Z,530nm,20.0s | | | | | | |
| QSPA | South Pole Qui | 141.21 | 180 | PFAKE | | 06 27 50.0 | +10 |
| QSPA | | | | LR | LR | | |
| | comp=Z,505nm,19.0s | | | | | | |
| MAW | Mawson | 147.92 | 218 | PKPbc | PKPbc | 06 27 55.1 | +0.2 |
| | comp=Z,22nm,0.9s,baz=109,slow=2.6,SNR=37 | | | | | | |
| BOSA | Boshof | 152.50 | 318 | PKPbc | PKPbc | 06 28 07.6 | +0.2 |
| | comp=Z,18nm,0.8s,baz=299,slow=1.7,SNR=8.9 | | | | | | |
| HOPE | Hope Point | 155.18 | 113 | PFAKE | | 06 28 10.0 | +6.8 |
| HOPE | | | | LR | LR | | |
| | comp=Z,530nm,19.0s | | | | | | |
| SYO | Syowa Base | 155.89 | 210 | ⇑epPKPdf | pPKPdf | 06 28 15.4 | +0.7 |
| SYO | Syowa Base | 155.89 | 210 | ⇓eX | pPKPab | 06 28 40.9 | -0.8 |
| VNA3 | Neumayer Olymp | 159.09 | 167 | P | PKPdf | 06 28 01.7 | -6.1 |
| SNAA | Sanae | 159.43 | 173 | P | PKPdf | 06 28 07.7 | -0.6 |
| VNA2 | Neumayer--Watz | 159.69 | 168 | P | PKPdf | 06 28 09.5 | +1.0 |
| | baz=267,slow=0.8 | | | | | | |
| VNA1 | Neumayer--Stat | 159.82 | 167 | P | PKPdf | 06 28 09.3 | +0.7 |

*BEO* ***10*** *06:09:35.8±1.2, 41°.09N×19°.81E, h9km±4km, ML2.6/5*
*ATH* ***10*** *06:09:36.3, 41°.31N×19°.77E, h45km, MD3.1/6*
*CSEM* ***10*** *06:09:36.2±0.2, 41°.11N×19°.92E, h2km, ML2.8, Error ellipse: s-maj=5.3km s-min=2.7km az=61.0*
*TIR* ***10*** *06:09:36.3±1.3, 41°.15N×19°.95E, h19km±8km, ML2.8*
*SKO* ***10*** *06:09:37.1, 41°.18N×19°.94E, h20km*
*PDG* ***10*** *06:09:38.6±0.3, 41°.25N×19°.94E, h12km, ML2.7/11, Error ellipse: s-maj=0.9km s-min=0.8km az=90.0*
**ISC 10 06:09:37.3**±0.9**, 41°.19N**±0°.02×**19°.96E**±0°.03**, h18**km±3km**, n65, σ1s.05**/104**, 12C-7D, Albania**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| TIR | Tirane | 0.17 | 337 | i PG | Pb | 06 09 41.5 | -0.2 |
| TIR | | | | i SG | Sg | 06 09 45.9 | +0.8 |
| TIR | Tirane | 0.17 | 337 | ⇓iPg | Pb | 06 09 41.3 | -0.4 |
| TIR | | | | eSg | Sg | 06 09 46.0 | +1.0 |
| TIR | Tirane | 0.17 | 337 | i Pg | Pb | 06 09 41.5 | -0.2 |
| | SNR=127 | | | | | | |
| TIR | | | | i Sg | Sg | 06 09 45.8 | +0.8 |
| | SNR=127 | | | | | | |
| PHP | Peshkopia | 0.61 | 36 | i PG | Pb | 06 09 48.9 | -0.7 |
| PHP | | | | i SG | Sn | 06 09 58.9 | -1.8 |
| PHP | Peshkopia | 0.61 | 36 | i Pg | Pb | 06 09 48.9 | -0.7 |
| | SNR=99 | | | | | | |
| PHP | | | | i Sg | Sn | 06 09 58.9 | -1.8 |
| | SNR=99 | | | | | | |
| OHR | Ohrid | 0.64 | 97 | i Pg | Pb | 06 09 49.3 | -0.7 |
| OHR | | | | eSg | Sn | 06 10 00.7 | -0.7 |
| OHR | Ohrid | 0.64 | 97 | i Pg | Pb | 06 09 49.3 | -0.7 |
| OHR | | | | eSg | Sn | 06 10 00.6 | -0.7 |
| PUK | Puka | 0.85 | 357 | i PG | Pg | 06 09 53.6 | -0.4 |
| PUK | | | | i SG | Sn | 06 10 08.1 | +1.4 |
| PUK | Puka | 0.85 | 357 | i Pg | Pg | 06 09 53.6 | -0.4 |
| | SNR=96 | | | | | | |
| PUK | | | | i Sg | Sn | 06 10 08.1 | +1.4 |
| | SNR=96 | | | | | | |
| ULC | Ulcinj | 0.94 | 326 | ⇓iPg | Pg | 06 09 55.4 | -0.2 |
| ULC | | | | eSg | Sn | 06 10 09.2 | +0.5 |
| ULC | Ulcinj | 0.94 | 326 | ⇓iPg | Pg | 06 09 55.4 | -0.2 |
| ULC | | | | eSg | Sn | 06 10 09.2 | +0.5 |
| NEST | Nestorio | 1.13 | 133 | eP | Pg | 06 09 58.7 | -0.6 |
| NEST | | | | eS | Sg | 06 10 16.6 | +2.5 |
| NEST | Nestorio | 1.13 | 133 | ePb | Pg | 06 09 58.7 | -0.6 |
| NEST | | | | eSb | Sg | 06 10 16.6 | +2.5 |
| FNA | Florina | 1.15 | 110 | eP | Pg | 06 09 58.8 | -0.8 |
| FNA | | | | eS | Sg | 06 10 16.3 | +1.7 |
| FNA | Florina | 1.15 | 110 | ePb | Pg | 06 09 58.8 | -0.8 |
| FNA | | | | eSb | Sg | 06 10 16.3 | +1.7 |
| DRME | Dracevica, Mon | 1.15 | 330 | ePg | Pg | 06 09 59.0 | -0.7 |
| DRME | | | | eSg | Sg | 06 10 16.2 | +1.4 |
| DRME | Dracevica, Mon | 1.15 | 330 | ePg | Pg | 06 09 59.0 | -0.7 |
| DRME | | | | eSg | Sg | 06 10 16.2 | +1.4 |
| BCI | Bajram Curri | 1.18 | 4 | i PG | Pg | 06 10 00.6 | +0.4 |
| BCI | Bajram Curri | 1.18 | 4 | i Pg | Pg | 06 10 00.6 | +0.4 |
| | SNR=93 | | | | | | |
| PDG | Podgorica | 1.35 | 337 | i Pg | Pb | 06 10 02.3 | +0.3 |
| PDG | | | | eSg | Sg | 06 10 21.4 | +0.5 |
| PDG | Podgorica | 1.35 | 337 | ⇑iPg | Pg | 06 10 02.4 | -0.9 |
| PDG | | | | eSg | Sg | 06 10 22.6 | +1.7 |
| TTG | Podgorica | 1.35 | 337 | ⇑iPg | Pg | 06 10 02.4 | -0.9 |
| TTG | | | | eSg | Sg | 06 10 22.6 | +1.7 |
| BUM | Brajici-Budva | 1.37 | 325 | ⇓iPg | Pb | 06 10 02.4 | 0.0 |
| BUM | | | | eSg | Sg | 06 10 23.4 | +1.8 |
| BUM | Brajici-Budva | 1.37 | 325 | ⇓iPg | Pb | 06 10 02.4 | 0.0 |
| BUM | | | | eSg | Sg | 06 10 23.4 | +1.8 |
| PVY | Plav | 1.41 | 0 | ⇓iPg | Pg | 06 10 03.7 | -0.8 |
| PVY | | | | eSg | Sg | 06 10 24.6 | +1.8 |
| PVY | Plav | 1.41 | 0 | ⇓iPg | Pg | 06 10 03.7 | -0.8 |
| PVY | | | | eSg | Sg | 06 10 24.6 | +1.8 |
| KEK | Kerkira | 1.48 | 185 | eP | Pn | 06 10 02.7 | -0.4 |
| KEK | Kerkira | 1.48 | 185 | ePg | Pn | 06 10 02.7 | -0.4 |
| HCY | Herceg Novi | 1.67 | 319 | ⇑iPn | Pb | 06 10 07.3 | -0.2 |
| HCY | | | | eSn | Sg | 06 10 31.3 | +0.2 |
| HCY | Herceg Novi | 1.67 | 319 | ⇑iPn | Pb | 06 10 07.3 | -0.2 |
| HCY | | | | eSn | Sg | 06 10 31.3 | +0.2 |
| JAN | Janina | 1.68 | 156 | eP | Pb | 06 10 07.8 | +0.1 |
| JAN | Janina | 1.68 | 156 | ePg | Pb | 06 10 07.8 | +0.1 |
| IGT | Igoumenitsa | 1.68 | 170 | eP | Pb | 06 10 06.8 | -0.9 |
| IGT | Igoumenitsa | 1.68 | 170 | ePg | Pb | 06 10 06.8 | -0.9 |
| BEY | Berane | 1.68 | 358 | ⇑iPn | Pg | 06 10 08.7 | -1.0 |
| BEY | | | | eSn | Sg | 06 10 31.0 | -0.6 |
| IVA | Berane | 1.68 | 358 | ⇑iPn | Pg | 06 10 08.7 | -1.0 |
| IVA | | | | eSn | Sg | 06 10 31.0 | -0.6 |
| NKME | Niksic | 1.75 | 335 | ⇑iPn | Pb | 06 10 09.0 | +0.1 |
| NKME | | | | eSn | Sg | 06 10 32.8 | -0.8 |
| NKME | Niksic | 1.75 | 335 | ⇑iPn | Pb | 06 10 09.0 | +0.1 |
| NKME | | | | eSn | Sg | 06 10 32.8 | -0.8 |
| NKY | Niksic | 1.77 | 336 | ⇑iPn | Pb | 06 10 09.8 | +0.4 |
| NKY | | | | eSn | Sg | 06 10 33.0 | -1.6 |
| NKY | Niksic | 1.77 | 336 | ⇑iPn | Pb | 06 10 09.8 | +0.4 |
| NKY | | | | eSn | Sg | 06 10 33.0 | -1.6 |
| GRG | Griva | 1.86 | 96 | eP | Pb | 06 10 10.4 | -0.5 |
| GRG | Griva | 1.86 | 96 | ePn | Pb | 06 10 10.4 | -0.5 |
| TREB | Trebinje | 1.94 | 322 | ePn | Pn | 06 10 09.0 | -0.4 |
| TREB | | | | eSg | Sb | 06 10 36.6 | +0.5 |
| TREB | Trebinje | 1.94 | 322 | ePn | Pn | 06 10 09.0 | -0.4 |
| TREB | | | | eSg | Sb | 06 10 36.6 | +0.5 |
| BRY | Bratogost | 2.01 | 329 | ePn | Pb | 06 10 12.5 | -1.0 |
| BRY | | | | eSn | Sb | 06 10 39.3 | +1.1 |
| BRY | Bratogost | 2.01 | 329 | ePn | Pb | 06 10 12.5 | -1.0 |
| BRY | | | | eSn | Sb | 06 10 39.3 | +1.1 |
| SJES | Sjenica | 2.07 | 0 | ePn | Pb | 06 10 12.7 | -1.8 |
| SJES | | | | eSg | Sg | 06 10 45.0 | +1.0 |
| BARS | Barje | 2.14 | 40 | ePn | Pn | 06 10 12.5 | +0.4 |
| BARS | Barje | 2.14 | 40 | ePn | Pn | 06 10 12.5 | +0.4 |
| UPM | Unac-Piva | 2.16 | 339 | ePn | Pb | 06 10 14.5 | -1.5 |
| UPM | | | | eSn | Sb | 06 10 42.1 | -0.4 |
| UPM | Unac-Piva | 2.16 | 339 | ePn | Pb | 06 10 14.5 | -1.5 |
| UPM | | | | eSn | Sb | 06 10 42.1 | -0.4 |
| PLE | Pljevlja | 2.18 | 349 | ⇑iPn | Pb | 06 10 15.6 | -0.7 |
| PLE | | | | eSn | Sb | 06 10 42.6 | -0.5 |
| PLE | Pljevlja | 2.18 | 349 | ⇑iPn | Pb | 06 10 15.6 | -0.7 |
| PLE | | | | eSn | Sb | 06 10 42.6 | -0.5 |
| IVAS | Ivanjica | 2.39 | 3 | i Pn | Pn | 06 10 17.2 | +1.5 |
| IVAS | Ivanjica | 2.39 | 3 | i Pn | Pn | 06 10 17.2 | +1.5 |
| BBLS | Lazići | 2.71 | 352 | i Pn | Pn | 06 10 21.2 | +1.2 |
| BBLS | Lazići | 2.71 | 352 | i Pn | Pn | 06 10 21.2 | +1.2 |
| GRUS | Gruza | 2.76 | 11 | ePn | Pn | 06 10 22.5 | +1.9 |
| GRUS | Gruza | 2.76 | 11 | ePn | Pn | 06 10 22.5 | +1.9 |
| ZAPS | Zavoj | 2.88 | 43 | i Pn | Pb | 06 10 24.7 | -3.5 |
| ZAPS | Zavoj | 2.88 | 43 | i Pn | Pb | 06 10 24.7 | -3.5 |
| DIVS | Divibare | 2.91 | 0 | ePn | Pn | 06 10 23.0 | +0.2 |
| DIVS | Divibare | 2.91 | 0 | ePn | Pn | 06 10 23.0 | +0.2 |
| KUBS | Kucevo | 3.46 | 21 | i Pn | Pn | 06 10 31.6 | +1.3 |
| KUBS | Kucevo | 3.46 | 21 | i Pn | Pn | 06 10 31.6 | +1.3 |

**NEIC 10 06:10:41.4, 51°.32N**×**175°.18W, h14**km**, ML3.5**(AEIC)**, After AEIC., Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.91 | 323 | P | Pb | 06 10 58.5 | -0.4 |
| GSCK | Great Sitkin C | 0.92 | 319 | P | Pb | 06 10 58.6 | -0.6 |
| ETKA | Kagalaska Isla | 0.94 | 306 | P | Pb | 06 10 58.8 | -0.6 |
| GSTD | Great Sitkin T | 0.95 | 321 | P | Pb | 06 10 59.2 | -0.6 |
| ATKA | Atka Island | 1.07 | 34 | P | Pb | 06 11 00.7 | -1.0 |
| ATKA | | | | S | Sb | 06 11 14.8 | -0.8 |
| ADAG | Mount Adagdak | 1.10 | 307 | P | Pb | 06 11 02.1 | -0.2 |
| KOFP | Korovin Flat P | 1.16 | 35 | P | Pn | 06 11 03.1 | -0.2 |
| KOWE | Korovin West | 1.19 | 28 | P | Pn | 06 11 03.5 | -0.2 |
| KOSE | Korovin Southe | 1.24 | 34 | P | Pn | 06 11 04.3 | 0.0 |
| KOSE | | | | S | Sg | 06 11 21.6 | +0.1 |
| KIRH | Kanaga Island | 1.33 | 296 | P | Pn | 06 11 04.5 | -1.0 |
| KIKV | Kanaga Island | 1.36 | 295 | P | Pn | 06 11 04.9 | -1.1 |
| TAFP | Tanaga Falls P | 1.84 | 289 | P | Pn | 06 11 12.1 | -0.5 |
| TAFP | | | | S | Sn | 06 11 35.1 | -0.7 |
| TASE | Tanaga Southea | 1.86 | 287 | P | Pn | 06 11 12.4 | -0.4 |
| GANE | Gareloi Northe | 2.30 | 284 | P | Pn | 06 11 19.3 | +0.4 |

*DDA* ***10*** *06:19:21.6, 36°.66N×29°.14E, h7km, Md2.7*
*ISCJB* ***10*** *06:19:22.7±0.7, 36°.66N±0°.05×29°.16E±0°.06, h14km±7km, Error ellipse: s-maj=9.1km s-min=6.6km az=36.4*
*ISK* ***10*** *06:19:22.1, 36°.84N×29°.15E, h5km, MD2.7*
*CSEM* ***10*** *06:19:22.3±0.6, 36°.73N×29°.20E, h5km, MD2.7, Error ellipse: s-maj=15.9km s-min=10.7km az=3.0*
**ISC 10 06:19:21.6**±1.5**, 36°.67N**±0°.04×**29°.18E**±0°.03**, h5**km±16km**, n17, σ0s.87**/23**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| FETY | Fethiye | 0.08 | 246 | ePG | Pg | 06 19 26.7 | +3.3 |
| FETY | | | | eSG | Sg | 06 19 31.5 | +6.9 |
| FETY | Fethiye | 0.08 | 246 | ePg | Pg | 06 19 26.7 | +3.3 |
| FETY | | | | eSg | Sg | 06 19 31.5 | +6.9 |
| DALY | Dalyan (Mu˜la | 0.45 | 290 | ePG | Pg | 06 19 30.3 | +0.2 |
| DALY | | | | eSG | Sb | 06 19 38.0 | -0.9 |
| DALY | Dalyan (Mu˜la | 0.45 | 290 | ePg | Pg | 06 19 30.3 | +0.2 |
| DALY | | | | eSg | Sb | 06 19 38.0 | -0.9 |
| TURN | Turunc | 0.50 | 294 | i P | Pn | 06 19 35.4 | 0.0 |
| TURN | Turunc | 0.50 | 294 | P | Pn | 06 19 35.4 | 0.0 |
| TURN | | | | S | Sb | 06 19 46.8 | +6.3 |
| AKAS | Kas | 0.56 | 141 | i P | Pg | 06 19 32.3 | 0.0 |
| AKAS | | | | i S | Sb | 06 19 41.7 | -0.5 |
| AKAS | Kas | 0.56 | 141 | P | Pg | 06 19 32.3 | 0.0 |
| AKAS | | | | S | Sb | 06 19 41.7 | -0.5 |
| ELL | Elmali | 0.59 | 82 | ePG | Pb | 06 19 35.6 | +1.1 |
| ELL | Elmali | 0.59 | 82 | ePg | Pb | 06 19 35.6 | +1.1 |
| GOLH | Golhisar | 0.65 | 28 | i P | Pg | 06 19 34.2 | +0.2 |
| GOLH | | | | i S | Sb | 06 19 44.9 | +0.1 |
| GOLH | Golhisar | 0.65 | 28 | P | Pg | 06 19 34.2 | +0.2 |
| GOLH | | | | S | Sb | 06 19 44.9 | +0.1 |
| YER | Yerkesik | 0.85 | 303 | ePG | Pg | 06 19 38.0 | +0.1 |
| YER | Yerkesik | 0.85 | 303 | ePg | Pg | 06 19 38.0 | +0.1 |
| KORT | Korkueli | 1.00 | 70 | i P | Pg | 06 19 38.7 | -2.0 |
| KORT | | | | i S | Sb | 06 19 55.9 | +0.9 |
| KORT | Korkueli | 1.00 | 70 | P | Pg | 06 19 38.7 | -2.0 |
| KORT | | | | S | Sb | 06 19 55.9 | +0.9 |
| AYDB | Zeytinkoy-Aydi | 1.64 | 322 | ePN | Pb | 06 19 52.0 | -0.3 |

*IDC* ***10*** *06:25:24.1±0.5, 51°.48N×175°.20W, h0km, mb4.4/29, mb1 4.6/30, mb1mx4.6/38, mbtmp4.5/30, ML4.8/1, MS4.7/17, Ms1 4.7/17, ms1mx4.5/33, Error ellipse: s-maj=17.2km s-min=10.5km az=158.0*
*NEIC* ***10*** *06:25:27.6, 51°.26N×175°.16W, h19km, mb5.1/171, ML5.1(AEIC), After AEIC.*
*MOS* ***10*** *06:25:27.9±1.0, 51°.56N×175°.28W, h33km, mb5.1/60, MS4.5/8, Error ellipse: s-maj=7.3km s-min=5.9km az=75.8*
*GCMT* ***10*** *06:25:27.6±0.2, 51°.31N×175°.28W, h18km, MW5.2/102, Moment Tensor Solution. s72,c104; s102,c173; Duration: 1s.0 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$0.70±.03; $M_{\theta\theta}$-0.69±.02; $M_{\phi\phi}$0.00±.01; $M_{r\theta}$0.60±.04; $M_{\theta\phi}$-0.08±.01; $M_{\phi r}$0.12±.04; Best double couple: $M_0$0.92800×$10^{17}$ NP1:$\phi_s$80.00000°, δ66.00000°, λ87.00000°. NP2:$\phi_s$267.00000°, δ25.00000°, λ96.00000°. Principal axes: T 0.9270, Plg69.0000°, Azm345.0000°; N 0.0040, Plg3.0000°, Azm81.0000°; P -0.9300, Plg21.0000°, Azm172.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI* ***10*** *06:25:28.9, 52°.03N×175°.45W, h32km, mb5.0/54, mB5.2/29, Ms5.1/31, Ms7 4.8/29*
*ISCJB* ***10*** *06:25:29.1±0.4, 51°.41N±0°.04×175°.10W±0°.02, h52km±2km, mb5.0/199, MS4.6/16, Error ellipse: s-maj=5.9km s-min=2.0km az=0.5*
**ISC 10 06:25:29.8**±0.4**, 51°.46N**±0°.07×**175°.22W**±0°.03**, h41**km±2km**, h40**km**:pP-P, n930, σ1s.08**/958**, mb5.1**/199**, MS4.7**/16**, 17C-8D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 0.78 | 318 | P | Pn | 06 25 45.2 | +0.9 |
| GSCK | Great Sitkin C | 0.80 | 314 | P | Pn | 06 25 45.4 | +0.8 |
| GSTR | Great Sitkin T | 0.82 | 321 | ePn | Pn | 06 25 46.1 | +1.2 |
| GSTD | Great Sitkin T | 0.83 | 316 | P | Pn | 06 25 45.8 | +0.8 |
| ETKA | Kagalaska Isla | 0.84 | 299 | P | Pn | 06 25 45.5 | +0.4 |
| ATKA | Atka Island | 0.98 | 40 | P | Pn | 06 25 46.7 | -0.3 |
| ATKA | | | | S | Sn | 06 26 03.6 | +4.1 |
| ADAG | Mount Adagdak | 1.00 | 302 | P | Pn | 06 25 48.9 | +1.5 |
| KOKL | Mount Kliuchef | 1.07 | 36 | P | Pn | 06 25 49.3 | +1.0 |
| KOFP | Korovin Flat P | 1.07 | 40 | P | Pn | 06 25 49.2 | +0.9 |
| KOWE | Korovin West | 1.08 | 33 | P | Pn | 06 25 49.8 | +1.3 |
| KIRH | Kanaga Island | 1.25 | 291 | P | Pn | 06 25 51.3 | +0.6 |
| KIKV | Kanaga Island | 1.28 | 290 | P | Pn | 06 25 51.6 | +0.4 |
| KICM | Kanaga Island | 1.31 | 291 | P | Pn | 06 25 52.4 | +0.8 |
| TAPA | Tanaga Point A | 1.66 | 283 | P | Pn | 06 25 56.8 | +0.5 |
| TAFL | Tanaga Flats | 1.70 | 281 | P | Pn | 06 25 57.4 | +0.6 |
| TAFP | Tanaga Falls P | 1.78 | 285 | P | Pn | 06 25 58.8 | +0.9 |
| GAEA | Gareloi East | 2.22 | 280 | P | Pn | 06 26 05.4 | +1.4 |
| GALAA | Gareloi Lava P | 2.23 | 279 | P | Pn | 06 26 05.5 | +1.3 |
| GANE | Gareloi Northe | 2.25 | 281 | P | Pn | 06 26 05.8 | +1.4 |
| CERAA | Semis' Rag'd T | 3.20 | 280 | P | Pn | 06 26 18.2 | +0.7 |
| CESW | Semis' Southwe | 3.28 | 280 | P | Pn | 06 26 19.0 | +0.5 |
| LSPA | Little Sitkin | 3.89 | 280 | P | Pn | 06 26 27.9 | +0.9 |
| LSNW | Little Sitkin | 3.93 | 280 | P | Pn | 06 26 28.1 | +0.6 |
| NIKH | Nikolski High | 4.20 | 66 | P | Pn | 06 26 31.8 | +0.6 |
| NIKH | | | | S | Sn | 06 27 19.9 | +1.0 |
| OKSO | Okmok South | 4.72 | 64 | P | Pn | 06 26 39.5 | +1.2 |
| OKCE | Okmok Cone E | 4.74 | 63 | P | Pn | 06 26 40.1 | +1.4 |
| OKTU | Okmok Mt. Tuli | 4.80 | 64 | P | Pn | 06 26 41.4 | +2.0 |
| OKFG | Magazine Ridge | 4.88 | 64 | P | Pn | 06 26 41.8 | +1.3 |
| MSOM | Makushin Julie | 5.56 | 62 | P | Pn | 06 26 50.9 | +1.1 |
| MSOM | Makushin Julie | 5.56 | 62 | P | Pn | 06 26 50.9 | +1.1 |
| MSW | Makushin Switc | 5.69 | 61 | P | Pn | 06 26 52.9 | +1.3 |
| UNV | Unalaska Valle | 5.82 | 62 | S | Sn | 06 28 00.1 | +1.4 |
| AKRB | Akutan Reef Bi | 6.16 | 61 | P | Pn | 06 26 60.0 | +1.9 |
| AKGG | Akutan Green G | 6.23 | 60 | P | Pn | 06 27 00.2 | +1.2 |
| WECS | Westdahl Cape | 7.01 | 60 | P | Pn | 06 27 12.3 | +2.5 |
| WESN | West Dahl Nort | 7.13 | 60 | P | Pn | 06 27 13.0 | +1.6 |
| SSBA | Shishaldin | 7.45 | 59 | P | Pn | 06 27 16.9 | +1.1 |
| CHGN | Chignik | 11.03 | 57 | ePn | Pn | 06 28 06.5 | +1.8 |
| SII | Sitkinak Islan | 13.36 | 59 | ePn | Pn | 06 28 35.4 | -1.1 |
| OHAK | Old Harbor | 14.00 | 57 | ePn | Pn | 06 28 45.4 | +0.1 |
| SVW2 | Sparrevohn | 14.50 | 41 | ePn | Pn | 06 28 54.0 | +2.0 |
| KDAK | Kodiak Island | 14.52 | 55 | Pn | Pn | 06 28 48.8 | -3.4 |
| | 1.6nm,0.3s,baz=262,slow=1.6,SNR=14 | | | | | | |
| KDAK | | | | Sn | Sn | 06 31 39.9 | +8.3 |
| | 0.5nm,0.3s,baz=108,slow=20,SNR=3.4 | | | | | | |
| KDAK | | | | LR | LR | 06 35 24.9 | |
| | comp=Z,7μm,19.1s,baz=245,slow=41 | | | | | | |
| KDAK | Kodiak Island | 14.52 | 55 | P | Pn | 06 28 48.8 | -3.4 |
| KDAK | | | | | | 06 31 39.9 | |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| KDAK | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| KDAK | | | | MLR | MLR | | |
| | comp=Z,7μm,19.1s | | | | | | |
| KDAK | Kodiak Island | 14.52 | 55 | Pn | Pn | 06 28 49.0 | -3.2 |
| | comp=Z,641nm,0.6s,SNR=9.3 | | | | | | |
| KDAK | Kodiak Island | 14.52 | 55 | ePn | Pn | 06 28 51.9 | -0.3 |
| KDAK | | | | Sn | Sn | 06 31 39.9 | +8.3 |
| RSO | Redoubt South | 15.40 | 45 | ePn | P | 06 29 08.1 | 0.0 |
| CNPM | China Poot | 15.73 | 50 | ePn | Pn | 06 29 09.4 | +1.2 |
| | comp=Z,240nm,1.4s | | | | | | |
| BRLK | Bradley Lake | 15.98 | 49 | ePn | Pn | 06 29 12.4 | +1.1 |
| | comp=Z,104nm,0.9s | | | | | | |
| SPU | Mount Spurr | 16.03 | 44 | ePn | P | 06 29 14.2 | -0.7 |
| PET | Petropavlovsk | 16.05 | 286 | eP | P | 06 29 17.8 | +2.7 |
| PET | | | | eS | Sn | 06 32 12.9 | +4.0 |
| PET | | | | pmax | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,3μm,19.0s | | | | | | |
| PETK | Petropavlovsk- | 16.62 | 286 | Pn | P | 06 29 22.2 | +0.7 |
| | comp=Z,1.3nm,0.3s,baz=95,slow=15,SNR=13 | | | | | | |
| PETK | | | | LR | LR | 06 35 19.8 | |
| | comp=Z,2μm,21.7s,baz=99,slow=36 | | | | | | |
| SUA | Susitna One | 16.72 | 44 | ePn | P | 06 29 22.1 | -0.5 |
| | comp=Z,128nm,1.6s | | | | | | |
| SEW | Seward | 16.78 | 49 | ePn | Pn | 06 29 20.5 | -0.9 |
| | comp=Z,238nm,1.6s | | | | | | |
| PPLA | Purkeypile | 16.82 | 38 | ePn | P | 06 29 25.4 | +1.6 |
| | comp=Z,378nm,1.5s | | | | | | |
| RC01 | Rabbit Creek A | 17.01 | 46 | ePn | P | 06 29 25.3 | -0.4 |
| CAST | Castle Rocks | 17.15 | 37 | ePn | P | 06 29 28.4 | +1.1 |
| | comp=Z,70nm,0.9s | | | | | | |
| PMR | Palmer | 17.47 | 44 | eP | P | 06 29 32.1 | +1.3 |
| PMR | | | | pmax | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | |
| PMR | Palmer | 17.47 | 44 | ePn | P | 06 29 32.1 | +1.3 |
| | comp=Z,34nm,1.0s | | | | | | |
| KTH | Kantishna Hill | 17.66 | 37 | eP | P | 06 29 33.6 | +0.6 |
| | comp=Z,214nm,1.2s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TRF | Thorofare Moun | 17.85 | 38 | ePn | P | 06 29 36.0 | +0.9 |
| | comp=Z,182nm,1.3s | | | | | | |
| SML | Sawmill | 17.91 | 44 | eP | Pn | 06 29 34.6 | -0.9 |
| SML | | | | pmax | pmax | | |
| | comp=Z,89nm,1.2s | | | | | | |
| SML | Sawmill | 17.91 | 44 | ePn | Pn | 06 29 34.5 | -0.9 |
| | comp=Z,89nm,1.2s | | | | | | |
| BPAW | Bear Paw Mtn. | 17.93 | 36 | ePn | P | 06 29 37.2 | +1.3 |
| | comp=Z,96nm,1.1s | | | | | | |
| SKR | Severo-Kuril's | 17.99 | 279 | eP | P | 06 29 42.5 | +6.0 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,130nm,0.9s | | | | | | |
| SCM | Sheep Creek Mo | 18.36 | 45 | eP | P | 06 29 39.7 | -1.0 |
| SCM | | | | pmax | pmax | | |
| | comp=Z,64nm,1.0s | | | | | | |
| SCM | Sheep Creek Mo | 18.36 | 45 | eP | P | 06 29 39.7 | -1.0 |
| | comp=Z,64nm,1.0s | | | | | | |
| RND | Reindeer | 18.39 | 39 | eP | P | 06 29 40.4 | -0.6 |
| RND | | | | pmax | pmax | | |
| | comp=Z,66nm,1.0s | | | | | | |
| RND | Reindeer | 18.39 | 39 | eP | P | 06 29 40.4 | -0.6 |
| | comp=Z,66nm,1.0s | | | | | | |
| MCK | McKinley | 18.51 | 38 | eP | P | 06 29 42.3 | 0.0 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,77nm,0.9s | | | | | | |
| MCK | McKinley | 18.51 | 38 | eP | P | 06 29 42.3 | 0.0 |
| | comp=Z,77nm,0.9s | | | | | | |
| BWN | Browne | 18.53 | 37 | eP | Pn | 06 29 43.4 | +0.4 |
| | comp=Z,278nm,1.1s | | | | | | |
| MLY | Manley | 18.55 | 34 | eP | Pn | 06 29 44.4 | +1.2 |
| | comp=Z,101nm,1.2s | | | | | | |
| EYAK | Cordova Ski Ar | 18.67 | 49 | eP | Pn | 06 29 45.5 | +0.9 |
| | comp=Z,93nm,1.5s | | | | | | |
| DIV | Divide | 18.83 | 48 | eP | P | 06 29 46.1 | +0.3 |
| | comp=Z,35nm,0.9s | | | | | | |
| KLU | Klutina | 18.87 | 47 | eP | P | 06 29 45.7 | -0.6 |
| | comp=Z,36nm,0.8s | | | | | | |
| BILL | Bilibino | 18.91 | 338 | d iP | Pn | 06 29 49.5 | +2.0 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,47nm,1.1s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| BILL | Bilibino | 18.91 | 338 | eP | Pn | 06 29 49.2 | +1.7 |
| | comp=Z,234nm,1.4s | | | | | | |
| WRH | Wood River Hil | 19.20 | 37 | eP | P | 06 29 49.2 | -0.6 |
| | comp=Z,44nm,0.8s | | | | | | |
| BMRM | Bremner River | 19.32 | 49 | eP | P | 06 29 51.3 | +0.1 |
| | comp=Z,106nm,1.2s | | | | | | |
| MDM | Murphy Dome | 19.40 | 36 | eP | P | 06 29 51.9 | -0.1 |
| | comp=Z,126nm,1.2s | | | | | | |
| COLA | College | 19.49 | 36 | d iP | Pn | 06 29 55.0 | +0.6 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | |
| COLA | College | 19.49 | 36 | eP | P | 06 29 52.8 | -0.2 |
| | comp=Z,174nm,1.4s | | | | | | |
| HARP | HAARP | 19.52 | 44 | eP | P | 06 29 53.3 | 0.0 |
| | comp=Z,86nm,0.8s | | | | | | |
| PAX | Paxson | 19.59 | 43 | eP | P | 06 29 48.5 | -5.7 |
| PAX | | | | pmax | pmax | | |
| | comp=Z,157nm,1.9s | | | | | | |
| PAX | Paxson | 19.59 | 43 | eP | P | 06 29 48.5 | -5.7 |
| | comp=Z,157nm,1.9s | | | | | | |
| HDA | Harding Lake | 19.60 | 38 | eP | P | 06 29 54.8 | +0.6 |
| | comp=Z,88nm,0.8s | | | | | | |
| IL1 | Eielson Array | 19.80 | 37 | eP | P | 06 29 55.0 | -1.3 |
| ILAR | Eielson Array | 19.80 | 37 | P | P | 06 29 54.5 | -1.8 |
| | comp=Z,1.2nm,0.3s,baz=241,slow=10,SNR=35 | | | | | | |
| ILAR | | | | LR | LR | 06 38 14.9 | |
| | comp=Z,3µm,18.1s,baz=240,slow=39 | | | | | | |
| COLD | Coldfoot | 20.07 | 29 | eP | Pn | 06 30 01.1 | -0.1 |
| | comp=Z,102nm,1.0s | | | | | | |
| MENT | Mentasta | 20.32 | 43 | eP | P | 06 30 02.9 | +0.8 |
| MA2 | Magadan | 20.70 | 306 | eP | P | 06 30 06.0 | -0.1 |
| SEY | Seymchan | 20.71 | 316 | P | P | 06 30 06.9 | +0.7 |
| | comp=Z,7.0nm,0.7s,baz=115,slow=9.4,SNR=6.9 | | | | | | |
| SEY | | | | LR | LR | 06 38 48.4 | |
| | comp=Z,4µm,18.2s,baz=144,slow=39 | | | | | | |
| SEY | Seymchan | 20.71 | 316 | ⇑eP | Pn | 06 30 07.6 | -1.2 |
| PCA | Pinnacle | 21.24 | 52 | eP | P | 06 30 14.9 | +2.9 |
| | comp=Z,113nm,1.0s | | | | | | |
| FYU | Fort Yukon | 21.29 | 33 | eP | P | 06 30 14.2 | +1.9 |
| | comp=Z,214nm,1.4s | | | | | | |
| EGAK | Eagle | 22.03 | 40 | eP | P | 06 30 19.9 | -0.4 |
| | comp=Z,201nm,1.1s | | | | | | |
| DAWY | Dawson | 22.52 | 42 | eP | P | 06 30 25.8 | 0.0 |
| | comp=Z,43nm,0.8s | | | | | | |
| WRAK | Wrangell Islan | 25.39 | 62 | eP | P | 06 30 55.5 | +2.6 |
| | comp=Z,168nm,0.9s | | | | | | |
| INK | Inuvik | 26.12 | 34 | P | P | 06 30 59.0 | -0.3 |
| | comp=Z,12nm,0.8s,baz=233,slow=6.9,SNR=16 | | | | | | |
| INK | | | | LR | LR | 06 42 30.1 | |
| | comp=Z,2µm,18.2s,baz=226,slow=39 | | | | | | |
| INK | Inuvik | 26.12 | 34 | P | P | 06 30 59.0 | -0.3 |
| INK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| INK | | | | MLR | MLR | | |
| | comp=Z,2µm,18.3s | | | | | | |
| INK | Inuvik | 26.12 | 34 | eP | P | 06 30 59.7 | +0.3 |
| | comp=Z,28nm,1.0s | | | | | | |
| DLBC | Dease Lake | 26.44 | 57 | P | P | 06 31 02.8 | +0.3 |
| | comp=Z,27nm,0.9s,baz=284,slow=9.5,SNR=26 | | | | | | |
| DLBC | | | | LR | LR | 06 41 42.3 | |
| | comp=Z,2µm,18.7s,baz=284,slow=37 | | | | | | |
| DLBC | Dease Lake | 26.44 | 57 | eP | P | 06 31 05.1 | +2.6 |
| | comp=Z,48nm,1.0s | | | | | | |
| YSS | Yuzh-Sakhalins | 27.54 | 277 | P | P | 06 31 11.0 | -1.3 |
| ASAJ | Asahikawa | 28.95 | 272 | P | P | 06 31 25.5 | +0.6 |
| | comp=Z,3.8nm,0.4s,baz=83,slow=18,SNR=8.0 | | | | | | |
| ASAJ | | | | LR | LR | 06 44 32.8 | |
| | comp=Z,504nm,19.0s,baz=74,slow=40 | | | | | | |
| ASAJ | Asahikawa | 28.95 | 272 | P | P | 06 31 25.5 | +0.6 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,504nm,19.0s | | | | | | |
| HABR | Khabarovsk | 31.63 | 285 | deP | P | 06 31 47.4 | -1.2 |
| HABR | | | | e*PP | pP | 06 31 56.9 | -2.9 |
| HABR | | | | e*SP | sP | 06 32 01.3 | -3.4 |
| HABR | | | | e | | 06 32 51.4 | |
| HABR | | | | e | | 06 34 39.0 | |
| HABR | | | | eS | S | 06 36 54.9 | +0.3 |
| HABR | | | | e*SS | sS | 06 37 11.1 | -2.2 |
| HABR | | | | eSS | SnSn | 06 38 42.9 | +0.1 |
| HABR | | | | e | | 06 42 17.8 | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,45nm,1.4s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,46nm,2.8s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,50nm,1.5s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| KLR | Kul'dur | 33.30 | 287 | eP | P | 06 32 00.0 | -3.2 |
| A05A | Maple Falls | 33.46 | 73 | eP | P | 06 32 06.4 | +1.8 |
| | comp=Z,23nm,1.7s | | | | | | |
| YKA | Yellowknife Ar | 33.54 | 47 | P | P | 06 32 05.1 | 0.0 |
| | comp=Z,3.2nm,0.9s,baz=269,slow=9.0,SNR=8.0 | | | | | | |
| YKA | | | | PcP | PcP | 06 34 45.7 | +0.9 |
| | comp=Z,4.3nm,0.8s,baz=276,slow=2.4,SNR=4.7 | | | | | | |
| B05A | Bryant | 33.77 | 74 | P | P | 06 32 06.9 | -0.4 |
| | baz=34,SNR=7.7 | | | | | | |
| D05A | Enumclaw | 34.31 | 76 | eP | P | 06 32 14.6 | +2.5 |
| | comp=Z,131nm,1.2s | | | | | | |
| LON | Longmire | 34.63 | 76 | eP | P | 06 32 17.2 | +2.4 |
| LON | | | | pmax | pmax | | |
| | comp=Z,24nm,1.1s | | | | | | |
| LON | Longmire | 34.63 | 76 | eP | P | 06 32 17.1 | +2.4 |
| | comp=Z,24nm,1.1s | | | | | | |
| F04A | Amboy | 34.64 | 78 | eP | P | 06 32 16.1 | +1.2 |
| | comp=Z,43nm,1.1s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 34.65 | 211 | T | T | 07 09 07.9 | |
| | baz=18,slow=76,SNR=183 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 34.66 | 211 | T | T | 07 09 01.2 | |
| | baz=18,slow=76,SNR=128 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 34.67 | 211 | T | T | 07 09 01.1 | |
| | baz=18,slow=76,SNR=112 | | | | | | |
| NLW | Nelson Butte | 34.91 | 73 | P | P | 06 32 18.9 | +1.6 |
| TWW | Teanaway | 35.02 | 75 | P | P | 06 32 20.0 | +1.8 |
| ASR | Mount Adams--S | 35.04 | 77 | P | P | 06 32 20.0 | +1.5 |
| LTY | Liberty | 35.08 | 75 | eP | P | 06 32 20.0 | +1.2 |
| | comp=Z,37nm,1.2s | | | | | | |
| ETW | Entiat | 35.13 | 74 | P | P | 06 32 20.4 | +1.2 |
| TBM | Table Mountain | 35.17 | 75 | P | P | 06 32 20.9 | +1.4 |
| I03D | Drain, OR | 35.19 | 82 | P | P | 06 32 19.1 | -0.5 |
| | baz=35 | | | | | | |
| EBG | Ellensburg | 35.30 | 75 | P | P | 06 32 22.3 | +1.7 |
| WTV | Waterville | 35.31 | 74 | P | P | 06 32 21.2 | +0.5 |
| H04A | Detroit Lake | 35.40 | 80 | eP | P | 06 32 22.8 | +1.3 |
| | comp=Z,44nm,1.1s | | | | | | |
| USRK | Ussuriysk Ar. | 35.50 | 279 | P | P | 06 32 22.3 | 0.0 |
| | comp=Z,3.4nm,0.5s,baz=60,slow=10,SNR=12 | | | | | | |
| USRK | | | | LR | LR | 06 46 40.9 | |
| | comp=Z,494nm,21.3s,baz=50,slow=36 | | | | | | |
| G05D | Wamic, OR | 35.66 | 78 | P | P | 06 32 22.8 | -0.8 |
| | baz=36 | | | | | | |
| I04A | Tendick Farm, | 35.72 | 81 | P | P | 06 32 23.7 | -0.5 |
| | baz=36 | | | | | | |
| L02D | Cave Junction, | 35.85 | 84 | P | P | 06 32 24.7 | -0.6 |
| | baz=36 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 35.86 | 210 | T | T | 07 11 47.8 | |
| | baz=20,slow=76,SNR=319 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 35.87 | 210 | T | T | 07 11 39.1 | |
| | baz=20,slow=76,SNR=159 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 35.87 | 210 | T | T | 07 11 35.4 | |
| | baz=20,slow=76,SNR=77 | | | | | | |
| E07A | Sunnyside | 35.90 | 76 | eP | P | 06 32 27.4 | +1.7 |
| E07A | | | | epP | pP | 06 32 37.5 | +0.4 |
| MJAR | Matsushiro Arr | 36.02 | 264 | P | P | 06 32 27.5 | +0.7 |
| | comp=Z,2.3nm,0.5s,baz=45,slow=7.7,SNR=11 | | | | | | |
| MJAR | | | | LR | LR | 06 45 26.1 | |
| | comp=Z,631nm,21.9s,baz=85,slow=33 | | | | | | |
| MAJO | Matsushiro | 36.02 | 264 | ⇓eP | P | 06 32 25.4 | -1.4 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,102nm,1.0s | | | | | | |
| MAJO | Matsushiro | 36.02 | 264 | eP | P | 06 32 28.1 | +1.3 |
| | comp=Z,248nm,2.5s | | | | | | |
| MAT | Matsushiro | 36.02 | 264 | P | P | 06 32 27.4 | +0.6 |
| MAT | | | | S | S | 06 38 05.8 | +3.0 |
| SNIWA | Snively Ranch | 36.07 | 76 | P | P | 06 32 28.7 | +1.6 |
| I05D | Terrebonne, OR | 36.10 | 80 | P | P | 06 32 26.8 | -0.7 |
| | baz=36,SNR=6.8 | | | | | | |
| VLA | Vladivostok | 36.13 | 278 | c iP | P | 06 32 29.4 | +1.8 |
| VLA | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| RSW | Rattlesnake Hi | 36.14 | 76 | P | P | 06 32 29.4 | +1.6 |
| VTHM | Trough | 36.15 | 78 | P | P | 06 32 29.0 | +1.1 |
| J04D | Umpqua Nationa | 36.20 | 82 | P | P | 06 32 27.7 | -0.8 |
| | baz=36 | | | | | | |
| D08A | Wollman Farm, | 36.23 | 74 | eP | P | 06 32 29.2 | +0.7 |
| | comp=Z,63nm,1.6s | | | | | | |
| C09A | Chrisman Ranch | 36.27 | 73 | eP | P | 06 32 29.8 | +0.9 |
| | comp=Z,31nm,1.0s | | | | | | |
| KHMM | Horse Mountain | 36.49 | 86 | eP | P | 06 32 33.2 | +2.3 |
| | comp=Z,162nm,2.0s | | | | | | |
| YBH | Yreka Blue Hor | 36.64 | 84 | eP | P | 06 32 34.4 | +2.2 |
| YBH | | | | pmax | pmax | | |
| | comp=Z,16nm,1.1s | | | | | | |
| YBH | Yreka Blue Hor | 36.64 | 84 | eP | P | 06 32 34.4 | +2.2 |
| | comp=Z,16nm,1.1s | | | | | | |
| J05D | Fort Rock, OR | 36.72 | 81 | P | P | 06 32 32.1 | -0.7 |
| | baz=37,SNR=8.4 | | | | | | |
| NEW | Newport | 36.74 | 71 | eP | P | 06 32 33.8 | +0.9 |
| NEW | | | | pmax | pmax | | |
| | comp=Z,34nm,0.9s | | | | | | |
| NEW | Newport | 36.74 | 71 | P | P | 06 32 32.2 | -0.7 |
| | baz=37,SNR=31 | | | | | | |
| NEW | Newport | 36.74 | 71 | eP | P | 06 32 33.8 | +0.9 |
| | comp=Z,34nm,0.9s | | | | | | |
| M02C | Callahan | 36.74 | 85 | P | P | 06 32 32.5 | -0.6 |
| | baz=37 | | | | | | |
| K04D | Chiloquin, OR | 36.75 | 82 | P | P | 06 32 32.5 | -0.6 |
| | baz=37 | | | | | | |
| MDJ | Mudanjiang | 36.76 | 282 | P | P | 06 32 33.3 | +0.3 |
| MDJ | | | | PMZ | | | |
| | comp=Z,7.0nm,0.5s | | | | | | |
| EDM | Edmonton | 36.80 | 62 | eP | P | 06 32 34.6 | +1.2 |
| EDM | Edmonton | 36.80 | 62 | eP | P | 06 32 34.6 | +1.2 |
| | comp=Z,252nm,1.1s | | | | | | |
| MSHR | Mys Shultsa | 36.87 | 278 | ⇑eP | P | 06 32 34.7 | +0.7 |
| KMRM | Mail Ridge | 36.88 | 87 | eP | P | 06 32 36.2 | +2.0 |
| | comp=Z,275nm,2.3s | | | | | | |
| N02D | Trinity Center | 37.07 | 85 | P | P | 06 32 35.2 | -0.6 |
| | baz=37 | | | | | | |
| M04C | Macdoel | 37.16 | 84 | P | P | 06 32 36.3 | -0.3 |
| | baz=37,SNR=5.8 | | | | | | |
| K05A | Summer Lake | 37.23 | 82 | eP | P | 06 32 39.0 | +1.7 |
| | comp=Z,33nm,0.9s | | | | | | |
| KCPM | Cahto Peak | 37.27 | 88 | eP | P | 06 32 39.5 | +2.0 |
| KCPM | | | | epP | pP | 06 32 50.6 | +1.7 |
| I07A | Izee | 37.36 | 79 | eP | P | 06 32 39.5 | +1.2 |
| | comp=Z,17nm,0.8s | | | | | | |
| WDC | Whiskeytown Da | 37.40 | 86 | eP | P | 06 32 40.2 | +1.7 |
| WDC | | | | pmax | pmax | | |
| | comp=Z,48nm,1.6s | | | | | | |
| WDC | Whiskeytown Da | 37.40 | 86 | eP | P | 06 32 40.2 | +1.7 |
| | comp=Z,48nm,1.6s | | | | | | |
| F10A | Beach Ranch, E | 37.78 | 75 | eP | P | 06 32 42.4 | +0.6 |
| | comp=Z,26nm,1.0s | | | | | | |
| LBCM | Butte Creek Ri | 37.99 | 85 | P | P | 06 32 45.1 | +1.4 |
| O03D | Paynes Creek | 38.02 | 86 | P | P | 06 32 43.1 | -0.8 |
| | baz=38,SNR=16 | | | | | | |
| MOD | Modoc | 38.05 | 82 | eP | P | 06 32 45.2 | +1.1 |
| | comp=Z,60nm,1.6s | | | | | | |
| WALA | Waterton Lakes | 38.26 | 69 | eP | P | 06 32 47.3 | +1.4 |
| | comp=Z,51nm,1.1s | | | | | | |
| BSMT | Bassoo Peak | 38.32 | 71 | eP | P | 06 32 47.4 | +0.9 |
| J08A | Circle Bar Ran | 38.38 | 79 | eP | P | 06 32 47.9 | +1.1 |
| | comp=Z,23nm,0.8s | | | | | | |
| BLMT | Blacktail Moun | 38.49 | 70 | eP | P | 06 32 48.8 | +0.9 |
| JTMT | Jette | 38.67 | 71 | eP | P | 06 32 50.1 | +0.9 |
| YBMT | Yellow Bay | 38.77 | 70 | eP | P | 06 32 50.9 | +0.8 |
| WVOR | Wild Horse Val | 38.78 | 81 | eP | P | 06 32 51.4 | +1.1 |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| WVOR | Wild Horse Val | 38.78 | 81 | eP | P | 06 32 51.4 | +1.1 |
| | comp=Z,28nm,0.9s | | | | | | |
| OHCM | Honcut | 38.78 | 87 | eP | P | 06 32 51.1 | +1.0 |
| SWMT | Swartz Lake | 38.95 | 71 | eP | P | 06 32 52.5 | +0.9 |
| MSO | Missoula | 39.32 | 72 | P | P | 06 32 53.8 | -0.9 |
| | baz=39,SNR=28 | | | | | | |
| MSO | Missoula | 39.32 | 72 | eP | P | 06 32 55.2 | +0.5 |
| | comp=Z,42nm,1.1s | | | | | | |
| SLMT | Seeley Lake | 39.38 | 71 | eP | P | 06 32 55.9 | +0.6 |
| CHMT | Chamberlain Mo | 39.69 | 71 | eP | P | 06 32 58.1 | +0.2 |
| BOD | Bodaibo | 39.71 | 308 | eP | P | 06 32 52.6 | -5.1 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,5.0nm,2.1s | | | | | | |
| MFID | Camas Ranch | 39.97 | 78 | eP | P | 06 33 00.7 | +0.5 |
| | comp=Z,24nm,1.2s | | | | | | |
| CMB | Columbia Colle | 40.25 | 87 | eP | P | 06 33 03.9 | +1.4 |
| CMB | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| CMB | Columbia Colle | 40.25 | 87 | eP | P | 06 33 03.9 | +1.4 |
| | comp=Z,14nm,1.1s | | | | | | |
| HRY | Holter Researc | 40.63 | 71 | eP | P | 06 33 06.2 | +0.6 |
| LRM | Limekiln Ridge | 40.72 | 72 | eP | P | 06 33 07.3 | +0.7 |
| HLID | Hailey | 40.75 | 76 | P | P | 06 33 05.5 | -1.1 |
| | baz=41,SNR=26 | | | | | | |
| HLID | Hailey | 40.75 | 76 | eP | P | 06 33 07.3 | +0.6 |
| | comp=Z,31nm,1.1s | | | | | | |
| BMN | Battle Mountai | 40.79 | 82 | eP | P | 06 33 08.3 | +1.2 |
| BMN | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| BMN | Battle Mountai | 40.79 | 82 | eP | P | 06 33 08.3 | +1.2 |
| | comp=Z,11nm,0.9s | | | | | | |
| DLMT | Dillon | 40.88 | 73 | eP | P | 06 33 08.4 | +0.7 |
| | comp=Z,19nm,1.1s | | | | | | |
| MCMT | McKenzie Canyo | 41.01 | 74 | eP | P | 06 33 09.4 | +0.5 |
| EGMT | Eagleton | 41.18 | 68 | P | P | 06 33 09.1 | -0.9 |
| | baz=41,SNR=16 | | | | | | |
| EGMT | Eagleton | 41.18 | 68 | eP | P | 06 33 10.7 | +0.6 |
| | comp=Z,43nm,0.8s | | | | | | |
| BOZ | Bozeman (W) | 41.30 | 72 | eP | P | 06 33 11.8 | +0.6 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| BOZ | Bozeman (W) | 41.30 | 72 | P | P | 06 33 10.2 | -1.0 |
| | baz=41,SNR=34 | | | | | | |
| BOZ | Bozeman (W) | 41.30 | 72 | eP | P | 06 33 11.8 | +0.6 |
| | comp=Z,28nm,0.9s | | | | | | |
| NV01 | Mina Array Sit | 41.31 | 85 | eP | P | 06 33 12.1 | +0.7 |
| NVAR | Mina Array Bea | 41.31 | 85 | P | P | 06 33 12.3 | +0.9 |
| | comp=Z,7.1nm,0.9s,baz=290,slow=8.1,SNR=41 | | | | | | |
| NVAR | | | | ScP | ScP | 06 38 57.4 | +1.7 |
| | comp=Z,1.6nm,1.0s,baz=262,slow=1.8,SNR=4.1 | | | | | | |
| MLAC | Mammoth Lakes | 41.47 | 87 | P | P | 06 33 11.9 | -0.9 |
| | baz=41 | | | | | | |
| MTUM | Tungsten Hills | 41.81 | 87 | eP | P | 06 33 16.8 | +1.3 |
| ELK | Elko | 41.84 | 80 | eP | P | 06 33 16.6 | +0.9 |
| ELK | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| ELK | Elko | 41.84 | 80 | eP | P | 06 33 16.6 | +0.9 |
| | comp=Z,12nm,0.8s | | | | | | |
| QLMT | Earthquake Lak | 41.86 | 73 | eP | P | 06 33 16.8 | +0.9 |
| KSRS | Korea Array | 41.88 | 273 | P | P | 06 33 16.8 | +1.1 |
| | comp=Z,4.6nm,0.8s,baz=58,slow=8.3,SNR=16 | | | | | | |
| KSRS | | | | LR | LR | 06 48 48.0 | |
| | comp=Z,240nm,21.6s,baz=36,slow=34 | | | | | | |
| KS01 | Wonju Array Si | 41.88 | 273 | eP | P | 06 33 18.2 | +2.5 |
| KSAR | Wonju Array Be | 41.91 | 273 | P | P | 06 33 16.8 | +0.8 |
| KSAR | Wonju Array Be | 41.91 | 273 | P | P | 06 33 16.8 | +0.8 |
| SNY | Shenyang | 41.97 | 282 | ⇑P | P | 06 33 17.8 | +1.4 |
| SNY | | | | PMZ | | | |
| | comp=Z,62nm,1.0s | | | | | | |
| SMMC | Simmler | 42.20 | 90 | P | P | 06 33 17.8 | -0.7 |
| | baz=42 | | | | | | |
| YMR | Madison River | 42.23 | 73 | eP | P | 06 33 19.4 | +0.6 |
| | comp=Z,99nm,1.3s | | | | | | |
| FFC | Flin Flon | 42.26 | 56 | eP | P | 06 33 19.4 | +0.7 |
| FFC | | | | pmax | pmax | | |
| | comp=Z,230nm,2.5s | | | | | | |
| FFC | Flin Flon | 42.26 | 56 | eP | P | 06 33 19.4 | +0.7 |
| | comp=Z,230nm,2.5s | | | | | | |
| YNR | Norris Junctio | 42.37 | 73 | eP | P | 06 33 21.6 | +1.6 |
| | comp=Z,103nm,1.2s | | | | | | |
| GCMT | Greycliff | 42.39 | 71 | eP | P | 06 33 21.3 | +1.3 |
| YFT | Old Faithful | 42.42 | 73 | eP | P | 06 33 22.4 | +1.9 |
| | comp=Z,19nm,0.9s | | | | | | |
| VES | Vestal, Richgr | 42.44 | 89 | P | P | 06 33 19.8 | -0.5 |
| | baz=42,SNR=5.6 | | | | | | |
| PKM | Peak Mountain | 42.58 | 91 | P | P | 06 33 21.2 | -0.5 |
| | baz=42 | | | | | | |
| H17A | Grant Village | 42.61 | 73 | P | P | 06 33 20.8 | -1.2 |
| | baz=42,SNR=24 | | | | | | |
| H17A | Grant Village | 42.61 | 73 | eP | P | 06 33 24.1 | +2.1 |
| | comp=Z,74nm,1.4s | | | | | | |
| LKWY | Lake | 42.62 | 73 | eP | P | 06 33 24.2 | +2.1 |
| LKWY | | | | pmax | pmax | | |
| | comp=Z,29nm,0.8s | | | | | | |
| LKWY | Lake | 42.62 | 73 | eP | P | 06 33 24.2 | +2.1 |
| | comp=Z,29nm,0.8s | | | | | | |
| IMW | Indian Meadow | 42.67 | 74 | eP | P | 06 33 23.5 | +1.0 |
| | comp=Z,17nm,0.9s | | | | | | |
| CWC | Cottonwood Cre | 42.68 | 88 | P | P | 06 33 21.7 | -0.8 |
| | baz=42 | | | | | | |
| FLWY | Flagg Ranch | 42.71 | 74 | eP | P | 06 33 24.0 | +1.3 |
| | comp=Z,33nm,1.1s | | | | | | |
| HVU | Hansel Valley | 42.75 | 78 | eP | P | 06 33 24.0 | +0.9 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | |
| HVU | Hansel Valley | 42.75 | 78 | eP | P | 06 33 24.0 | +0.9 |
| | comp=Z,16nm,0.8s | | | | | | |
| FXWY | Fox Creek | 42.76 | 74 | eP | P | 06 33 24.1 | +0.9 |
| | comp=Z,30nm,1.8s | | | | | | |
| GRAC | Grapevine Rang | 42.78 | 86 | P | P | 06 33 22.5 | -0.6 |
| | baz=43 | | | | | | |
| MOOW | Moose Ponds | 42.87 | 74 | eP | P | 06 33 24.8 | +0.8 |
| | comp=Z,112nm,2.7s | | | | | | |
| TPAW | Teton Pass | 42.89 | 74 | eP | P | 06 33 25.4 | +1.1 |
| | comp=Z,34nm,1.4s | | | | | | |
| TJN | Taejon | 42.90 | 273 | ⇑eP | P | 06 33 25.0 | +1.0 |
| ISA | Isabella | 42.93 | 89 | P | P | 06 33 23.8 | -0.6 |
| | baz=43,SNR=8.6 | | | | | | |
| RLMT | Red Lodge | 42.99 | 71 | P | P | 06 33 24.0 | -1.0 |
| | baz=43,SNR=37 | | | | | | |
| RLMT | Red Lodge | 42.99 | 71 | eP | P | 06 33 26.0 | +1.0 |
| | comp=Z,66nm,1.0s | | | | | | |
| REDW | Red Top Meadow | 43.02 | 75 | eP | P | 06 33 26.2 | +0.9 |
| | comp=Z,34nm,1.2s | | | | | | |
| SNOW | Snow King Moun | 43.02 | 74 | eP | P | 06 33 26.9 | +1.6 |
| | comp=Z,50nm,1.5s | | | | | | |
| LOHW | Long Hollow | 43.03 | 74 | eP | P | 06 33 26.2 | +0.8 |
| | comp=Z,14nm,1.1s | | | | | | |
| ARVC | Arvin | 43.05 | 90 | P | P | 06 33 24.8 | -0.6 |
| | baz=43 | | | | | | |
| R11A | Troy Canyon, C | 43.05 | 84 | P | P | 06 33 24.7 | -0.9 |
| | baz=43,SNR=20 | | | | | | |
| R11A | Troy Canyon, C | 43.05 | 84 | eP | P | 06 33 25.9 | +0.4 |
| | comp=Z,11nm,1.0s | | | | | | |
| DAC | Darwin (Calif) | 43.09 | 87 | eP | P | 06 33 26.6 | +0.7 |
| DAC | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| DAC | Darwin (Calif) | 43.09 | 87 | eP | P | 06 33 26.6 | +0.7 |
| | comp=Z,9.4nm,1.1s | | | | | | |
| BGU | Big Grassy Mou | 43.09 | 79 | eP | P | 06 33 26.7 | +0.9 |
| | comp=Z,12nm,0.9s | | | | | | |
| SPUT | South Promonto | 43.22 | 78 | eP | P | 06 33 27.8 | +0.9 |
| | comp=Z,12nm,1.0s | | | | | | |
| MPMC | Manual Prospec | 43.29 | 88 | P | P | 06 33 26.6 | -0.9 |
| | baz=43,SNR=5.7 | | | | | | |
| FURC | Furnace Creek, | 43.43 | 87 | P | P | 06 33 27.7 | -0.6 |
| | baz=43,SNR=10 | | | | | | |
| TPNV | Topopah Spring | 43.51 | 86 | eP | P | 06 33 29.9 | +0.7 |
| TPNV | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| TPNV | Topopah Spring | 43.51 | 86 | P | P | 06 33 28.6 | -0.6 |
| | baz=43,SNR=17 | | | | | | |
| TPNV | Topopah Spring | 43.51 | 86 | eP | P | 06 33 29.9 | +0.7 |
| | comp=Z,22nm,0.9s | | | | | | |
| LRMC | Laurel Mountai | 43.54 | 88 | P | P | 06 33 28.8 | -0.6 |
| | baz=43 | | | | | | |
| BLG | Laguna Peak | 43.57 | 91 | P | P | 06 33 29.1 | -0.5 |
| | baz=43 | | | | | | |
| HWUT | Hardware Ranch | 43.59 | 77 | eP | P | 06 33 30.6 | +0.8 |
| | comp=Z,14nm,0.9s | | | | | | |
| DUG | Dugway | 43.66 | 80 | P | P | 06 33 29.5 | -0.8 |
| | baz=44,SNR=24 | | | | | | |
| EDW2 | Edwards Air Fo | 43.74 | 89 | P | P | 06 33 30.4 | -0.5 |
| | baz=44,SNR=5.1 | | | | | | |
| LAO | LASA Array | 43.93 | 68 | P | P | 06 33 31.2 | -1.1 |
| | baz=44,SNR=8.5 | | | | | | |
| LAO | LASA Array | 43.93 | 68 | eP | P | 06 33 33.8 | +1.4 |
| | comp=Z,29nm,1.0s | | | | | | |
| TCUT | Toone Canyon | 43.97 | 78 | eP | P | 06 33 33.9 | +0.9 |
| | comp=Z,34nm,1.0s | | | | | | |
| CTU | Camp Tracy | 44.01 | 78 | eP | P | 06 33 34.1 | +0.9 |
| | comp=Z,16nm,1.0s | | | | | | |
| MWC | Mount Wilson | 44.12 | 90 | eP | P | 06 33 35.0 | +0.8 |
| MWC | | | | pmax | pmax | | |
| | comp=Z,34nm,1.3s | | | | | | |
| MWC | Mount Wilson | 44.12 | 90 | eP | P | 06 33 35.0 | +0.8 |
| | comp=Z,34nm,1.3s | | | | | | |
| DGMT | Dagmar | 44.14 | 65 | P | P | 06 33 33.0 | -0.9 |
| | baz=44,SNR=6.8 | | | | | | |
| DGMT | Dagmar | 44.14 | 65 | eP | P | 06 33 34.9 | +0.9 |
| | comp=Z,598nm,2.8s | | | | | | |
| BW06 | Boulder Array | 44.14 | 74 | eP | P | 06 33 34.7 | +0.4 |
| | comp=Z,33nm,0.8s | | | | | | |
| GSC | Goldstone | 44.21 | 88 | eP | P | 06 33 35.4 | +0.7 |
| GSC | | | | pmax | pmax | | |
| | comp=Z,24nm,1.0s | | | | | | |
| GSC | Goldstone | 44.21 | 88 | P | P | 06 33 34.0 | -0.7 |
| | baz=44,SNR=16 | | | | | | |
| GSC | Goldstone | 44.21 | 88 | eP | P | 06 33 35.4 | +0.7 |
| | comp=Z,24nm,1.0s | | | | | | |
| NLU | North Lily Min | 44.25 | 79 | eP | P | 06 33 35.9 | +0.7 |
| | comp=Z,53nm,1.5s | | | | | | |
| BFSC | Mount Baldy Ra | 44.36 | 90 | P | P | 06 33 35.4 | -0.7 |
| | baz=44,SNR=9.1 | | | | | | |
| O16A | Springville | 44.45 | 79 | eP | P | 06 33 45.5 | +8.7 |
| | comp=Z,25nm,1.1s | | | | | | |
| SHPR | Sheep Range | 44.47 | 85 | eP | P | 06 33 37.7 | +0.8 |
| A25A | Svangstu Ranch | 44.50 | 64 | P | P | 06 33 36.0 | -0.9 |
| | baz=44,SNR=12 | | | | | | |
| TUQ | Turquoise Moun | 44.67 | 87 | P | P | 06 33 37.8 | -0.7 |
| | baz=44 | | | | | | |
| HEC | Hector,Ludlow | 44.81 | 88 | P | P | 06 33 39.0 | -0.5 |
| | baz=45 | | | | | | |
| B25A | Knox Farm, Ray | 44.83 | 64 | P | P | 06 33 38.6 | -0.8 |
| | baz=45,SNR=7.1 | | | | | | |
| CCUT | Cedar City | 44.93 | 83 | eP | P | 06 33 41.7 | +1.1 |
| | comp=Z,7.7nm,0.9s | | | | | | |
| C25A | Freed Ranch, W | 45.07 | 65 | P | P | 06 33 40.5 | -1.0 |
| | baz=45,SNR=6.0 | | | | | | |
| A26A | Wade Farm, Ken | 45.12 | 63 | P | P | 06 33 40.8 | -1.0 |
| | baz=45,SNR=9.4 | | | | | | |
| TMUT | Trail Mountain | 45.18 | 79 | eP | P | 06 33 44.0 | +1.3 |
| | comp=Z,84nm,1.1s | | | | | | |
| GMRC | Granite Mounta | 45.26 | 88 | P | P | 06 33 42.4 | -0.8 |
| | baz=45,SNR=6.9 | | | | | | |
| B26A | Jensen Ranch, | 45.29 | 64 | P | P | 06 33 42.1 | -1.0 |
| | baz=45 | | | | | | |
| D25A | Fairfield | 45.34 | 66 | P | P | 06 33 42.7 | -0.9 |
| | baz=45 | | | | | | |
| P17A | Butcher Ranch, | 45.37 | 79 | eP | P | 06 33 44.9 | +0.9 |
| | comp=Z,14nm,0.8s | | | | | | |
| LDFC | Landfair | 45.41 | 87 | eP | P | 06 33 45.0 | +0.6 |
| | comp=Z,51nm,1.2s | | | | | | |
| PFO | Pinyon Flat Ob | 45.53 | 89 | eP | P | 06 33 50.2 | +4.9 |
| PFO | | | | pmax | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | |
| PFO | Pinyon Flat Ob | 45.53 | 89 | P | P | 06 33 44.7 | -0.7 |

baz=45
PFO Pinyon Flat Ob 45.53 89 eP P 06 33 50.2 +4.9
comp=Z,14nm,1.2s
A27A Ledoux Ranch, 45.53 63 P P 06 33 44.0 -1.1
baz=45
BELC Belle Mtn. Jos 45.56 89 P P 06 33 44.6 -0.9
baz=45
109C Camp Elliot, M 45.60 91 P P 06 33 45.2 -0.5
baz=45
E25A Miller Ranch, 45.66 67 P P 06 33 45.1 -1.0
baz=46,SNR=12
C26A Wahner Farm, P 45.67 64 P P 06 33 45.3 -0.8
baz=46
SRU San Rafael 45.72 79 eP P 06 33 47.8 +0.9
SRU pmax pmax
comp=Z,26nm,1.0s
SRU San Rafael 45.72 79 eP P 06 33 47.8 +0.9
comp=Z,26nm,1.0s
B27A Peters Farms, 45.82 63 P P 06 33 46.4 -0.9
baz=46,SNR=7.8
D26A Manning 45.91 65 P P 06 33 47.0 -1.1
baz=46
F25A Bowman 45.95 67 P P 06 33 47.4 -1.0
baz=46,SNR=5.4
IRM Iron Mountain 45.98 88 P P 06 33 48.3 -0.5
baz=46
BAR Barrett 46.01 91 eP P 06 33 49.9 +0.9
BAR e 06 33 56.5
K22A Casper 46.02 73 P P 06 33 48.1 -1.0
baz=46,SNR=13
K22A Casper 46.02 73 eP P 06 33 49.1 0.0
comp=Z,25nm,0.8s
MONP Monument Peak 46.03 90 P P 06 33 48.4 -1.0
baz=46
C27A Sayler Ranch, 46.06 64 P P 06 33 48.3 -1.0
baz=46
A28A Rude Farm, Bot 46.10 62 P P 06 33 48.7 -0.8
baz=46,SNR=13
E26A Carlson Angus 46.21 66 P P 06 33 49.3 -1.2
baz=46,SNR=17
B28A Dugan Ranch, T 46.30 63 P P 06 33 49.9 -1.1
baz=46,SNR=12
SWSC Sam W. Stewart 46.38 90 P P 06 33 51.4 -0.5
baz=46
G25A Newell 46.38 68 P P 06 33 51.0 -0.9
baz=46,SNR=8.7
IBP Imperial Bould 46.38 90 P P 06 33 51.4 -0.6
baz=46
F26A Lodgepole 46.44 67 P P 06 33 51.4 -0.9
baz=46,SNR=8.3
O20A White River Ci 46.49 77 P P 06 33 51.9 -1.0
baz=46,SNR=27
PDMCI Parker Dam,Lak 46.52 87 P P 06 33 52.5 -0.4
baz=46
H25A Fruitdale 46.61 69 P P 06 33 52.9 -0.7
baz=46
RSSD Black Hills 46.64 70 eP P 06 33 54.1 +0.1
RSSD pmax pmax
comp=Z,13nm,0.8s
RSSD Black Hills 46.64 70 eP P 06 33 54.1 +0.1
comp=Z,13nm,0.8s
Y12C Blythe 46.64 88 P P 06 33 53.6 -0.4
baz=46,SNR=6.0
A29A Manning Farm, 46.66 62 P P 06 33 52.9 -1.0
baz=46,SNR=18
C28A Hausauer Farms 46.69 64 P P 06 33 53.1 -1.1
baz=47
E27A Carson 46.75 66 P P 06 33 53.6 -1.0
baz=47,SNR=5.8
G26A Maurine 46.80 68 P P 06 33 54.1 -1.0
baz=47,SNR=11
F27A Lemmon 46.80 67 P P 06 33 54.1 -0.9
baz=47,SNR=5.8
B29A Wagenman Farm, 46.85 62 P P 06 33 54.7 -0.7
baz=47
I25A Rochford 46.88 70 P P 06 33 54.6 -1.3
baz=47,SNR=6.2
GLA Glamis 46.92 89 P P 06 33 55.5 -0.7
baz=47
PV09 Paradox Valley 46.95 79 eP P 06 33 57.3 +0.6
MDND Maddock 47.05 63 P P 06 33 56.0 -1.0
baz=47,SNR=9.6
MDND Maddock 47.05 63 eP P 06 33 58.1 +1.1
comp=Z,214nm,1.4s
PV10 Paradox Valley 47.09 79 eP P 06 33 58.4 +0.8
H26A Fairpoint 47.09 68 P P 06 33 56.3 -1.1
baz=47,SNR=5.7
G27A Dupree 47.14 67 P P 06 33 56.6 -1.1
baz=47,SNR=18
PV04 Paradox Valley 47.16 79 eP P 06 33 58.2 +0.1
E28A Huff 47.16 65 P P 06 33 56.8 -1.1
baz=47,SNR=7.2
A30A Hoffart Farm, 47.16 61 P P 06 33 56.9 -1.0
baz=47,SNR=10.0
J25A Sunshine Ranch 47.20 70 P P 06 33 57.3 -1.0
baz=47,SNR=9.6
PV05 Paradox Valley 47.23 79 eP P 06 33 59.5 +0.8
I26A New Underwood 47.38 69 P P 06 33 58.7 -1.0
baz=47,SNR=6.0
N23A Red Feather La 47.42 74 P P 06 33 59.2 -1.1
baz=47,SNR=13
N23A Red Feather La 47.42 74 eP P 06 34 00.8 +0.5
comp=Z,41nm,1.1s
B30A Myrvik Farm, E 47.42 62 P P 06 33 58.9 -1.0
baz=47,SNR=24
WUAZ Wupatki 47.45 84 P P 06 33 59.7 -0.8
baz=47,SNR=14
WUAZ Wupatki 47.45 84 eP P 06 34 01.2 +0.8
comp=Z,18nm,1.0s
PHWY Pilot Hill 47.47 74 eP P 06 34 00.9 +0.3
comp=Z,121nm,2.6s
H27A Howes 47.49 68 P P 06 33 59.5 -0.9
baz=47
D29A Pettibone, Tap 47.50 64 P P 06 33 59.6 -0.9
baz=47
F28A McLaughlin 47.52 66 P P 06 33 59.7 -0.9
baz=47,SNR=5.1
PV01 Paradox Valley 47.52 79 eP P 06 34 01.1 +0.1
BJI Beijing 47.54 284 P P 06 34 01.0 +0.2
BJI PMZ
comp=Z,13nm,1.6s
J26A Sides Ranch, S 47.68 70 P P 06 34 01.0 -1.0
baz=48
ULM Lac du Bonnet 47.74 58 P P 06 34 02.0 -0.3
comp=Z,24nm,1.0s,baz=302,slow=9.5,SNR=15
ULM LR LR 06 55 13.4
comp=Z,654nm,18.9s,baz=319,slow=38
ULM Lac du Bonnet 47.74 58 P P 06 34 02.0 -0.3
ULM pmax pmax
comp=Z,24nm,1.0s
ULM MLR MLR
comp=Z,655nm,18.9s
ULM Lac du Bonnet 47.74 58 eP P 06 34 02.4 +0.1
comp=Z,67nm,1.3s
C30A Mose, Pekin 47.76 63 P P 06 34 01.7 -0.8
baz=48
A31A Linda, St. Vin 47.77 61 P P 06 34 01.7 -0.8
baz=48
B31A Greenbush Farm 47.81 61 P P 06 34 01.9 -0.9
baz=48,SNR=24
I27A Quinn 47.83 69 P P 06 34 02.4 -0.8
baz=48,SNR=16
SMCO Snowmass 47.85 77 eP P 06 34 04.2 +0.4
comp=Z,8.2nm,0.9s
TLY Talaya 47.89 304 eP P 06 34 03.9 +0.4
TLY pmax pmax
comp=Z,5.0nm,1.1s
G28A Parade 47.90 67 P P 06 34 02.7 -0.9
baz=48,SNR=9.9
D30A Buchanan 47.95 63 P P 06 34 02.9 -1.1
baz=48,SNR=24
H28A Mission Ridge 48.07 67 P P 06 34 04.0 -0.9
baz=48,SNR=13
F29A Eureka 48.08 65 P P 06 34 04.0 -1.0
baz=48,SNR=5.4
C31A Landman Farms, 48.12 62 P P 06 34 04.4 -0.8
baz=48,SNR=7.1
MVCO Mesa Verde 48.15 80 P P 06 34 04.9 -1.0
baz=48,SNR=7.0
MVCO Mesa Verde 48.15 80 eP P 06 34 06.4 +0.5
comp=Z,28nm,1.3s
E30A Jud 48.21 64 P P 06 34 05.1 -0.9
baz=48,SNR=7.7
ULN Ulaanbaatar 48.22 298 eP P 06 34 06.3 +0.1
ULN pmax pmax
comp=Z,7.0nm,1.1s
ULN Ulaanbaatar 48.22 298 eP P 06 34 06.3 +0.1
comp=Z,7.4nm,1.1s

ISCO Idaho Springs 48.29 75 eP P 06 34 07.7 +0.7
ISCO pmax pmax
comp=Z,20nm,1.4s
ISCO Idaho Springs 48.29 75 P P 06 34 05.9 -1.1
baz=48,SNR=5.9
ISCO Idaho Springs 48.29 75 eP P 06 34 07.7 +0.7
comp=Z,20nm,1.4s
J27A Elkhorn Farm, 48.34 69 P P 06 34 06.1 -1.0
baz=48,SNR=8.8
I28A Midland 48.38 68 P P 06 34 06.5 -0.9
baz=48,SNR=33
G29A Hoven 48.40 66 P P 06 34 06.5 -1.0
baz=48,SNR=6.0
B32A Ashes, Strandq 48.44 61 P P 06 34 06.7 -0.9
baz=48,SNR=16
D31A Mcclaflin, Tow 48.56 63 P P 06 34 07.5 -1.1
baz=48,SNR=9.4
H29A Onida 48.57 67 P P 06 34 08.0 -0.7
baz=48,SNR=7.3
SONA1 Songino Array 48.59 298 eP P 06 34 09.3 +0.4
SONM Songino Array 48.60 298 P P 06 34 09.4 +0.3
comp=Z,4.5nm,1.0s,baz=54,slow=9.3,SNR=13
SONM PcP PcP 06 35 34.9 +0.8
comp=Z,2.8nm,0.9s,baz=90,slow=2.9,SNR=4.7
SONM ScP ScP 06 39 28.9 +3.5
comp=Z,0.7nm,0.6s,baz=90,slow=2.9,SNR=3.6
SONM LR LR 06 57 49.7
comp=Z,1μm,18.0s,baz=58,slow=40
J28A Allard Ranch, 48.69 69 P P 06 34 08.8 -0.9
baz=48,SNR=23
W18A Petrified Fore 48.73 83 eP P 06 34 11.4 +1.0
comp=Z,19nm,0.9s
A33A Warroad 48.75 60 P P 06 34 09.5 -0.5
baz=49
E31A Nome 48.75 64 P P 06 34 09.5 -0.6
baz=49,SNR=10
ZAK Zakamensk 48.81 303 eP P 06 34 10.2 -0.5
ZAK pmax pmax
comp=Z,12nm,1.4s
S22A 4UR Ranch, Cre 48.84 78 P P 06 34 10.3 -1.0
baz=49,SNR=15
S22A 4UR Ranch, Cre 48.84 78 eP P 06 34 12.6 +1.4
comp=Z,28nm,1.3s
AGMN Agassiz Nation 48.86 61 P P 06 34 10.1 -0.8
baz=49,SNR=17
AGMN Agassiz Nation 48.86 61 eP P 06 34 10.8 -0.1
comp=Z,77nm,1.2s
I29A Vivian Onida 48.87 68 P P 06 34 10.4 -0.7
baz=49,SNR=11
D32A Dogwood Acres, 48.90 62 P P 06 34 10.3 -1.0
baz=49
214A Organ Pipe Nat 48.91 88 P P 06 34 11.3 -0.3
baz=49
214A Organ Pipe Nat 48.91 88 eP P 06 34 11.1 -0.4
comp=Z,43nm,1.1s
F31A Hea 48.96 65 P P 06 34 11.1 -0.6
baz=49,SNR=6.6
K28A Ten Mile Ranch 49.04 70 P P 06 34 11.5 -1.0
baz=49,SNR=6.4
Q24A Divide 49.09 76 P P 06 34 11.8 -1.4
baz=49
N26A Koester Ranch, 49.09 73 P P 06 34 12.0 -1.0
baz=49
M27A Reverse DX Ran 49.16 71 P P 06 34 12.4 -1.1
baz=49
E32A Braaten, Kindr 49.19 63 P P 06 34 12.5 -1.0
baz=49,SNR=5.3
C33A Trail 49.22 61 P P 06 34 12.8 -0.9
baz=49,SNR=8.9
J29A Okreek 49.23 68 P P 06 34 12.9 -1.0
baz=49,SNR=42
G31A Conde 49.36 65 P P 06 34 13.7 -1.1
baz=49
L28A Connealy Angus 49.38 70 P P 06 34 14.3 -0.8
baz=49
SUSD South Dakota S 49.40 66 P P 06 34 14.1 -1.0
baz=49,SNR=15
O26A Horse Wrangler 49.40 73 P P 06 34 14.4 -0.9
baz=49,SNR=5.4
B34A Aery, Baudette 49.41 60 P P 06 34 14.2 -1.0
baz=49,SNR=16
I30A Oacoma 49.45 67 P P 06 34 14.4 -1.1
baz=49,SNR=8.1
N27A Anderson Farm, 49.52 72 P P 06 34 15.3 -0.9
baz=49,SNR=5.8
D33A AnnSam, Waubun 49.55 62 P P 06 34 15.5 -0.7
baz=49,SNR=9.9
K29A Lazy Trails An 49.63 69 P P 06 34 16.1 -0.8
baz=50,SNR=7.2
SDCO Great Sand Dun 49.65 77 P P 06 34 16.5 -0.9
baz=50,SNR=16
H31A Wolsey 49.65 66 P P 06 34 16.1 -0.9
baz=50,SNR=5.0
OGNE Ogallala 49.73 72 P P 06 34 16.8 -1.0
baz=50
OGNE Ogallala 49.73 72 eP P 06 34 19.1 +1.3
comp=Z,93nm,1.3s
G32A Webster 49.74 65 P P 06 34 16.7 -1.1
baz=50,SNR=13
J30A Dallas 49.76 68 P P 06 34 17.1 -0.9
baz=50,SNR=15
HHC Hu-ho-hao-te 49.81 288 eP P 06 34 19.3 +0.9
HHC PMZ
comp=Z,28nm,1.0s
HHC PMZ
comp=Z,350nm,6.2s
E33A Westby DABS, E 49.83 63 P P 06 34 17.3 -1.1
baz=50
M28A Bar X Bar Ranc 49.84 71 P P 06 34 18.0 -0.6
baz=50
I31A Royce, Wessing 49.89 67 P P 06 34 17.8 -1.0
baz=50,SNR=6.5
O27A Beecher Island 49.93 73 P P 06 34 18.6 -0.8
baz=50,SNR=7.6
D34A Park Rapids 49.94 62 P P 06 34 18.0 -1.1
baz=50,SNR=20
TUC Tucson 49.94 86 eP P 06 34 20.3 +0.8
TUC pmax pmax
comp=Z,13nm,1.0s
TUC Tucson 49.94 86 eP P 06 34 20.3 +0.8
comp=Z,13nm,1.0s
L29A Maesberg Ranch 49.96 70 P P 06 34 18.9 -0.6
baz=50
F33A 5 Mile Ranch, 50.07 63 P P 06 34 19.2 -0.9
baz=50,SNR=5.3
K30A Basset 50.09 69 P P 06 34 19.4 -1.0
baz=50,SNR=14
Q26A Hugo 50.10 75 P P 06 34 19.9 -0.8
baz=50
M29A Burnside Ranch 50.22 71 P P 06 34 20.7 -0.8
baz=50,SNR=6.1
J31A Geddes 50.22 67 P P 06 34 20.5 -0.8
baz=50,SNR=8.7
H32A Carlson Farm, 50.23 65 P P 06 34 20.6 -0.9
baz=50,SNR=13
C35A Jirik Farms, M 50.24 60 P P 06 34 20.3 -1.1
baz=50,SNR=13
P27A Ficken Ranch, 50.27 74 P P 06 34 21.1 -0.9
baz=50,SNR=6.8
O28A Krtsinger Ran 50.40 73 P P 06 34 21.9 -0.9
baz=50,SNR=11
SPB1 Spitsbergen Ar 50.43 357 eP P 06 34 23.1 +0.7
I32A Karley and Nic 50.50 66 P P 06 34 22.5 -1.0
baz=50
H33A Prehn Over Nor 50.52 65 P P 06 34 22.8 -0.8
baz=50,SNR=15
R26A Arlington 50.54 75 P P 06 34 23.0 -1.0
baz=50,SNR=12
D35A Remer 50.56 61 P P 06 34 23.0 -1.0
baz=50,SNR=15
KSCO Kaye Shedlock' 50.59 74 P P 06 34 23.4 -0.9
baz=50,SNR=13
KSCO Kaye Shedlock' 50.59 74 eP P 06 34 25.7 +1.3
comp=Z,88nm,1.3s
K31A O'Neill 50.62 68 P P 06 34 23.6 -0.8
baz=50,SNR=6.7
N29A Votaw Ranch, W 50.64 71 P P 06 34 23.9 -0.7
baz=50
F34A Alexandria 50.67 63 P P 06 34 23.9 -0.8
baz=50
J32A Parkston 50.68 67 P P 06 34 24.1 -0.7
baz=50,SNR=8.6
E35A Pequot Lakes 50.69 62 P P 06 34 23.9 -0.9
baz=50,SNR=11
T25A Trinidad 50.70 77 P P 06 34 24.3 -1.0
baz=50,SNR=26
T25A Trinidad 50.70 77 eP P 06 34 26.6 +1.3
comp=Z,91nm,1.4s

P28A Saint Francis 50.76 73 P P 06 34 24.5 -1.0
baz=51,SNR=18
G34A Benson 50.80 64 P P 06 34 24.8 -0.9
baz=51
LAZ Ladron 50.81 82 eP P 06 34 27.5 +1.3
C36A Pine Crest Far 50.82 60 P P 06 34 24.9 -0.9
baz=51,SNR=12
L31A Butterfield Fa 50.85 69 P P 06 34 25.2 -1.0
baz=51,SNR=13
I33A Coleman 50.87 66 P P 06 34 25.4 -0.9
baz=51
ANMO Albuquerque 50.87 81 eP P 06 34 27.3 +0.7
ANMO pmax pmax
comp=Z,13nm,1.3s
ANMO Albuquerque 50.87 81 eP P 06 34 27.3 +0.7
comp=Z,13nm,1.3s
R27A Eads 50.95 75 P P 06 34 26.2 -0.8
baz=51,SNR=14
S26A Kim 50.96 76 P P 06 34 26.3 -0.9
baz=51,SNR=15
O29A 4D Ranch, Culb 50.98 72 P P 06 34 26.2 -0.9
baz=51,SNR=12
D36A Goodland 50.99 60 P P 06 34 26.5 -0.6
baz=51
F35A Swanville 51.02 63 P P 06 34 26.4 -0.9
baz=51,SNR=8.9
Q28A Sharon Springs 51.03 74 P P 06 34 26.8 -0.9
baz=51,SNR=11
NJ2 Nanjing 51.05 274 eP P 06 34 30.4 +2.7
NJ2 PMZ
comp=Z,40nm,1.0s
K32A Verdigre 51.05 68 P P 06 34 26.6 -1.0
baz=51,SNR=9.3
H34A Spellman Lake, 51.07 64 P P 06 34 26.8 -0.9
baz=51,SNR=9.1
ECSD EROS Data Cent 51.17 66 P P 06 34 27.5 -1.0
baz=51,SNR=13
ECSD EROS Data Cent 51.17 66 eP P 06 34 27.9 -0.6
comp=Z,16nm,0.8s
LPM Los Pinos Moun 51.19 81 eP P 06 34 30.1 +1.2
C37A Embarrass 51.19 59 P P 06 34 27.8 -0.8
baz=51,SNR=11
J33A Davis 51.22 66 P P 06 34 28.1 -0.8
baz=51,SNR=5.8
P29A Atwood 51.23 73 P P 06 34 28.2 -0.8
baz=51,SNR=16
M31A Lambtecht Ranc 51.29 70 P P 06 34 28.6 -0.8
baz=51,SNR=5.8
BNM Barren Site 51.30 82 eP P 06 34 31.0 +1.2
O30A MW Ranch, Wils 51.38 71 P P 06 34 29.3 -0.9
baz=51,SNR=14
D37A Cotton 51.40 60 P P 06 34 29.5 -0.7
baz=51,SNR=7.6
EYMN Ely 51.43 59 P P 06 34 29.5 -0.9
baz=51,SNR=12
EYMN Ely 51.43 59 eP P 06 34 30.4 0.0
comp=Z,81nm,1.3s
L32A Elgin 51.44 68 P P 06 34 29.8 -0.8
baz=51,SNR=14
G35A Watkins 51.46 63 P P 06 34 29.7 -0.9
baz=51
R28A Tribune 51.51 74 P P 06 34 30.3 -0.9
baz=51,SNR=14
H35A Sunnyside Ranc 51.58 64 P P 06 34 30.8 -0.8
baz=51
F36A Milaca 51.60 62 P P 06 34 30.8 -0.9
baz=52
N31A Bailey Ranch, 51.63 70 P P 06 34 31.3 -0.7
baz=52,SNR=7.4
K33A Hardington 51.65 67 P P 06 34 31.3 -0.8
baz=52
Q29A Oakley 51.65 73 P P 06 34 31.6 -0.7
baz=52,SNR=8.5
121A Cookes Peak, D 51.66 84 P P 06 34 31.9 -0.7
baz=52,SNR=11
121A Cookes Peak, D 51.66 84 eP P 06 34 33.0 +0.5
comp=Z,8.3nm,0.8s
P30A Selden 51.67 72 P P 06 34 31.8 -0.6
baz=52,SNR=12
C38A Sawbill Land. 51.69 59 P P 06 34 31.4 -0.9
baz=52,SNR=6.4
BGNE Belgrade 51.73 69 P P 06 34 32.0 -0.8
baz=52,SNR=10
BGNE Belgrade 51.73 69 eP P 06 34 33.3 +0.5
comp=Z,85nm,0.9s
T27A Campo 51.78 76 P P 06 34 32.4 -0.9
baz=52,SNR=5.6
J34A George 51.82 66 P P 06 34 32.4 -1.0
baz=52
O31A Woolen Ranch, 51.83 71 P P 06 34 32.7 -0.9
baz=52,SNR=15
G36A St. Michael 51.86 63 P P 06 34 32.7 -0.9
baz=52
R29A Marienthal 51.86 74 P P 06 34 32.9 -0.9
baz=52,SNR=22
S28A Manter 51.94 75 P P 06 34 33.9 -0.5
baz=52,SNR=19
I35A Creekview Farm 52.02 65 P P 06 34 34.0 -0.8
baz=52,SNR=5.9
Q30A Quinter 52.05 73 P P 06 34 34.4 -0.8
baz=52,SNR=8.7
N32A Stulken Farm, 52.05 70 P P 06 34 34.4 -0.8
baz=52
T28A Walsh 52.11 76 P P 06 34 34.9 -0.8
baz=52,SNR=11
K34A Le Mars 52.12 67 P P 06 34 34.8 -0.8
baz=52,SNR=9.7
U27A Thompson Grove 52.13 77 P P 06 34 35.3 -0.7
baz=52,SNR=11
H36A Jessenland, He 52.16 63 P P 06 34 35.0 -0.9
baz=52
M33A Taylor Creek F 52.18 68 P P 06 34 35.3 -0.8
baz=52,SNR=7.5
J35A Milford 52.20 65 P P 06 34 35.3 -0.9
baz=52,SNR=6.5
P31A Stockton 52.20 72 P P 06 34 35.6 -0.7
baz=52,SNR=17
C39A Grand Marais 52.23 58 P P 06 34 35.3 -1.0
baz=52
O32A Brookman Farm, 52.38 70 P P 06 34 36.8 -0.8
baz=52
SPMN St. Paul 52.39 62 P P 06 34 36.7 -0.8
baz=52,SNR=5.8
SPMN St. Paul 52.39 62 eP P 06 34 37.4 -0.1
comp=Z,80nm,1.7s
S29A Ulysses 52.39 75 P P 06 34 37.0 -0.8
baz=52
L34A Svendsen Farm, 52.41 67 P P 06 34 36.9 -0.9
baz=52,SNR=6.6
CBKS Cedar Bluff 52.45 73 eP P 06 34 38.5 +0.4
CBKS pmax pmax
comp=Z,75nm,0.8s
CBKS Cedar Bluff 52.45 73 P P 06 34 37.4 -0.7
baz=52,SNR=24
CBKS Cedar Bluff 52.45 73 eP P 06 34 38.5 +0.4
comp=Z,75nm,0.8s
R30A Dighton 52.46 73 P P 06 34 37.4 -0.9
baz=52,SNR=20
Q31A Ellis 52.53 72 P P 06 34 37.8 -0.9
baz=52,SNR=7.0
U28A Mallet 52.53 76 P P 06 34 38.1 -0.8
baz=52,SNR=5.8
V27A Dan Oppiter Fa 52.56 77 P P 06 34 38.3 -0.8
baz=52,SNR=5.2
T29A Hugoton 52.58 75 P P 06 34 38.4 -0.8
baz=52
K35A Storm Lake 52.59 66 P P 06 34 38.4 -0.7
baz=52
P32A Hutting Farm, 52.60 71 P P 06 34 38.3 -0.9
baz=52,SNR=8.9
SUMG Summit 52.66 15 eP P 06 34 40.1 +0.5
SUMG pmax pmax
comp=Z,35nm,1.3s
SUMG Summit 52.66 15 eP P 06 34 40.1 +0.5
comp=Z,35nm,1.3s
J36A Seneca 1, Swea 52.71 65 P P 06 34 38.9 -1.1
baz=53
H37A Dierke Farm, C 52.73 63 P P 06 34 39.2 -0.9
baz=53
S30A Montezuma 52.77 74 P P 06 34 39.6 -1.0
baz=53,SNR=18
L35A Bielow Farm, R 52.80 67 P P 06 34 39.7 -0.9
baz=53
I37A Lemond, Waseca 52.81 64 P P 06 34 40.0 -0.7
baz=53
O33A Hebron 52.91 70 P P 06 34 40.5 -1.0
baz=53,SNR=16
R31A Burdett 52.91 73 P P 06 34 40.7 -0.9

baz=53,SNR=19
V28A **Channing** 52.94 77 P P 06 34 41.3 -0.7
baz=53
Q32A **Meitler Ranch,** 53.03 72 P P 06 34 41.6 -0.8
baz=53,SNR=32
N34A **Lincoln** 53.05 69 P P 06 34 41.6 -0.9
baz=53
U29A **Oasis Ranch, S** 53.06 76 P P 06 34 42.0 -0.7
baz=53
T30A **Plains** 53.12 75 P P 06 34 42.1 -1.0
baz=53
M35A **Neola** 53.12 68 P P 06 34 42.1 -0.9
baz=53
J37A **Redenius Farm,** 53.17 64 P P 06 34 42.4 -1.0
baz=53
HVS **Khovu-Aksy** 53.24 308 eP P 06 34 44.2 +0.3
HVS pmax pmax
comp=Z,8.0nm,1.0s
P33A **Williams Farm,** 53.26 71 P P 06 34 43.3 -0.7
baz=53,SNR=11
R32A **Long Quarter,** 53.31 72 P P 06 34 43.7 -0.8
baz=53,SNR=15
O34A **Beatrice** 53.36 69 P P 06 34 44.0 -0.8
baz=53,SNR=18
S31A **Mullinville** 53.37 74 P P 06 34 44.3 -0.7
baz=53,SNR=6.6
U30A **WK&E Inc. Balk** 53.38 75 P P 06 34 44.2 -0.9
baz=53,SNR=8.8
I38A **Scanlan Farm,** 53.39 63 P P 06 34 44.0 -1.0
baz=53
Q33A **Connelly Farm,** 53.46 71 P P 06 34 44.8 -0.8
baz=53,SNR=25
N35A **Tabor** 53.54 68 P P 06 34 45.3 -0.8
baz=53,SNR=11
T31A **Randall Ranch,** 53.60 74 P P 06 34 45.9 -0.7
baz=53,SNR=10
P34A **Walnut Farm, R** 53.70 70 P P 06 34 46.6 -0.7
baz=54,SNR=9.0
MNTX **Cornudas Mount** 53.72 83 P P 06 34 47.1 -0.4
baz=54,SNR=16
MNTX **Cornudas Mount** 53.72 83 eP P 06 34 48.0 +0.5
comp=Z,30nm,1.4s
O35A **Humboldt** 53.77 69 P P 06 34 47.0 -0.8
baz=54
X28A **Dimmitt** 53.78 78 P P 06 34 47.5 -0.6
baz=54,SNR=6.8
MSTX **Muleshoe** 53.79 79 P P 06 34 47.7 -0.4
baz=54,SNR=17
MSTX **Muleshoe** 53.79 79 eP P 06 34 47.6 -0.6
comp=Z,29nm,1.0s
R33A **Olander Ranch,** 53.82 72 P P 06 34 47.6 -0.6
baz=54
COWI **Conover** 53.84 59 eP P 06 34 48.7 +0.4
comp=Z,31nm,1.1s
AMTX **Amarillo** 53.85 78 P P 06 34 47.9 -0.7
baz=54
U31A **Nine Bar Ranch** 53.97 75 P P 06 34 48.7 -0.7
baz=54
T32A **Huddler Ranch,** 54.00 74 P P 06 34 49.0 -0.6
baz=54,SNR=5.3
Q34A **Chapman** 54.03 71 P P 06 34 49.2 -0.5
baz=54,SNR=11
KSU1 **Kansas State U** 54.11 70 P P 06 34 49.6 -0.7
baz=54,SNR=7.2
KSU1 **Kansas State U** 54.11 70 eP P 06 34 50.3 0.0
comp=Z,46nm,0.9s
X29A **Tulia** 54.13 78 P P 06 34 50.0 -0.7
baz=54
P35A **Duane Minner,** 54.18 70 P P 06 34 49.9 -0.9
baz=54,SNR=7.4
R34A **Isabella, Hill** 54.26 71 P P 06 34 50.6 -0.8
baz=54,SNR=8.1
SCIA **State Center** 54.26 66 eP P 06 34 51.6 +0.3
comp=Z,40nm,1.0s
S33A **Kaszmaul Farm,** 54.28 73 P P 06 34 50.7 -0.8
baz=54,SNR=6.0
V31A **Spring Creek L** 54.37 75 P P 06 34 51.5 -0.8
baz=54
O36A **Bolckow** 54.40 68 P P 06 34 51.6 -0.8
baz=54,SNR=6.8
U32A **Winter Ranch,** 54.48 74 P P 06 34 52.3 -0.8
baz=54,SNR=7.8
Z28A **Tucker Farm, M** 54.49 79 P P 06 34 52.6 -0.6
baz=54,SNR=9.1
Y29A **Porterfield Fa** 54.54 78 P P 06 34 53.1 -0.5
baz=54,SNR=15
P36A **Good Intent, A** 54.60 69 P P 06 34 53.2 -0.6
baz=54,SNR=8.5
Q35A **Mercer Eighty,** 54.61 70 P P 06 34 53.1 -0.8
baz=54
X30A **Coker Ranch, T** 54.63 77 P P 06 34 53.7 -0.6
baz=54,SNR=6.7
W31A **Holland Ranch,** 54.70 76 P P 06 34 54.3 -0.5
baz=54,SNR=5.5
S34A **Willow Spring** 54.74 72 P P 06 34 54.2 -0.7
baz=55,SNR=5.7
R35A **Emporia Munici** 54.87 71 P P 06 34 55.1 -0.7
baz=55,SNR=6.1
Q36A **Arnold C. Orve** 54.88 70 P P 06 34 54.9 -1.0
baz=55
128A **Castleberry Fa** 54.88 80 P P 06 34 55.4 -0.7
baz=55,SNR=17
WHN **Wuhan** 54.88 276 P P 06 34 58.7 +2.7
Z29A **Hungry Hill Ra** 54.93 79 P P 06 34 55.7 -0.7
baz=55,SNR=12
U33A **Lingo Farm, Me** 54.98 74 P P 06 34 55.7 -0.9
baz=55
Y30A **Stafford Cattl** 55.01 78 P P 06 34 56.1 -0.8
baz=55
X31A **McDonald Ranch** 55.06 77 P P 06 34 56.4 -0.8
baz=55,SNR=9.1
T34A **McClaskey Farm** 55.14 73 P P 06 34 57.0 -0.8
baz=55,SNR=14
228A **UT Block 9, Go** 55.16 81 P P 06 34 57.5 -0.6
baz=55
W32A **Sentinel** 55.17 76 P P 06 34 57.4 -0.7
baz=55,SNR=12
S35A **Otter Creek Ra** 55.22 71 P P 06 34 57.6 -0.8
baz=55,SNR=17
129A **Stewart Farms,** 55.26 80 P P 06 34 58.1 -0.7
baz=55,SNR=5.5
Z30A **Sanderson Ranc** 55.26 79 P P 06 34 58.3 -0.5
baz=55,SNR=7.4
R36A **Gordon, Harris** 55.27 70 P P 06 34 58.0 -0.7
baz=55,SNR=17
JFWS **Jewell Farm** 55.28 63 eP P 06 34 58.3 -0.4
JFWS pmax pmax
comp=Z,20nm,0.8s
JFWS **Jewell Farm** 55.28 63 eP P 06 34 58.3 -0.4
comp=Z,20nm,0.8s
V33A **Lossen Ranch,** 55.28 74 P P 06 34 58.1 -0.7
baz=55
U34A **Anderson Ranch** 55.32 73 P P 06 34 58.4 -0.7
baz=55,SNR=14
Y31A **Rekieta Farm,** 55.34 77 P P 06 34 58.5 -0.8
baz=55
Q37A **Longview Farm,** 55.53 69 P P 06 34 59.7 -0.8
baz=55
ZALV **Zalesovo Beam** 55.58 315 P P 06 35 01.5 +0.9
comp=Z,1.7nm,0.4s,baz=44,slow=6.0,SNR=6.4
ZALV PcP PcP 06 36 01.5 +1.5
comp=Z,7.4nm,0.9s,baz=33,slow=3.4,SNR=11
ZALV LR LR 07 00 39.9
comp=Z,1µm,19.6s,baz=70,slow=38
T35A **Sooner Cattle** 55.61 72 P P 06 35 00.5 -0.7
baz=56,SNR=11
X32A **Elmer** 55.62 76 P P 06 35 00.8 -0.5
baz=56,SNR=11
S36A **Lake Cedric, C** 55.62 71 P P 06 35 00.5 -0.7
baz=56,SNR=7.5
W33A **Caddo, Fort Co** 55.62 75 P P 06 35 00.6 -0.7
baz=56,SNR=11
WMOK **Wichita Mounta** 55.71 76 eP P 06 35 02.2 +0.2
WMOK pmax pmax
comp=Z,22nm,0.9s
WMOK **Wichita Mounta** 55.71 76 eP P 06 35 02.2 +0.2
comp=Z,22nm,0.9s
V34A **Guthrie** 55.74 74 P P 06 35 01.3 -0.8
baz=56,SNR=10
229A **Bryant Ranch,** 55.74 80 P P 06 35 01.6 -0.7
baz=56
Y32A **R-V Farms, Ver** 55.81 77 P P 06 35 02.2 -0.4
baz=56,SNR=17
130A **Snyder** 55.83 79 P P 06 35 02.5 -0.4
baz=56
XAN **Xi'an** 55.83 283 P P 06 35 03.1 +0.2
XAN pP pP 06 35 13.6 -1.1
XAN S S 06 42 43.7 -3.4
XAN sS sS 06 43 02.5 -4.2
XAN PMZ
comp=Z,16nm,1.5s
XAN LN
comp=Z,330nm,15.1s
XAN LE
comp=Z,480nm,16.6s
XAN LZ
comp=Z,540nm,15.9s
Z31A **Sharp Cattle R** 55.84 78 P P 06 35 02.5 -0.5
baz=56,SNR=5.9
U35A **Pawnee** 55.85 73 P P 06 35 02.3 -0.5
baz=56
T36A **Boggs Farm, Ca** 55.89 72 P P 06 35 02.6 -0.5
baz=56,SNR=9.0
329A **Wagon Wheel Ra** 55.97 81 P P 06 35 03.4 -0.5
baz=56,SNR=7.6
W34A **Bridge Creek,** 55.99 75 P P 06 35 03.4 -0.5
baz=56,SNR=5.6
W34A **Bridge Creek,** 55.99 75 eP P 06 35 04.6 +0.7
comp=Z,28nm,1.1s
X33A **Lawton** 56.02 76 P P 06 35 03.6 -0.5
baz=56
S37A **Fort Scott** 56.05 70 P P 06 35 03.7 -0.6
baz=56,SNR=6.5
131A **Roby** 56.13 79 P P 06 35 04.5 -0.5
baz=56
V35A **Meyer Ranch, C** 56.19 73 P P 06 35 04.8 -0.5
baz=56,SNR=5.1
230A **Sterling City** 56.23 80 P P 06 35 05.2 -0.5
baz=56,SNR=24
Z32A **Haskell** 56.26 77 P P 06 35 05.3 -0.6
baz=56,SNR=17
Y33A **Hilltop Ranch,** 56.30 76 P P 06 35 05.6 -0.5
baz=56
X34A **Smith Ranch, M** 56.38 75 P P 06 35 06.0 -0.7
baz=56,SNR=7.4
TX31 **Lajitas Ar. Si** 56.42 84 eP P 06 35 07.0 -0.2
TXAR **Lajitas Array** 56.42 84 P P 06 35 07.1 0.0
comp=Z,8.1nm,0.8s,baz=295,slow=5.0,SNR=92
T37A **Cheneyville 18** 56.42 71 P P 06 35 06.2 -0.7
baz=56,SNR=19
U36A **Oologah** 56.43 72 P P 06 35 06.6 -0.5
baz=56
330A **Mertzon** 56.52 80 P P 06 35 07.4 -0.5
baz=56,SNR=6.3
W35A **Tecumseh** 56.58 74 P P 06 35 07.5 -0.7
baz=56,SNR=15
429A **Davenport Ranc** 56.62 81 P P 06 35 08.0 -0.5
baz=56,SNR=9.4
ABTX **Abilene, Hawle** 56.63 78 P P 06 35 08.0 -0.5
baz=56,SNR=7.6
ABTX **Abilene, Hawle** 56.63 78 eP P 06 35 09.0 +0.5
231A **Bronte** 56.69 79 P P 06 35 08.3 -0.6
baz=56
Z33A **Whitaker Ranch** 56.71 77 P P 06 35 08.6 -0.5
baz=57,SNR=10
V36A **Jenks** 56.71 73 P P 06 35 08.3 -0.7
baz=57,SNR=10
TUL1 **Tulsa** 56.72 73 P P 06 35 08.5 -0.6
baz=57,SNR=12
TUL1 **Tulsa** 56.72 73 eP P 06 35 09.3 +0.2
comp=Z,31nm,0.9s
529A **Stev Forest Ra** 56.77 82 P P 06 35 09.1 -0.5
baz=57,SNR=11
U37A **Salina** 56.79 72 P P 06 35 08.9 -0.6
baz=57,SNR=17
Y34A **Reagan Ranch,** 56.86 76 P P 06 35 09.5 -0.6
baz=57,SNR=22
430A **Baggett Ranch,** 56.91 81 P P 06 35 10.2 -0.5
baz=57,SNR=20
W36A **Wetumka** 56.98 74 P P 06 35 10.4 -0.5
baz=57,SNR=9.6
X35A **Drake** 57.03 75 P P 06 35 10.7 -0.6
baz=57,SNR=14
331A **San Angelo** 57.05 80 P P 06 35 11.2 -0.4
baz=57,SNR=9.3
133A **Hamilton Ranch** 57.08 78 P P 06 35 11.4 -0.4
baz=57,SNR=17
V37A **Hulbert** 57.13 72 P P 06 35 11.4 -0.6
baz=57,SNR=11
232A **Coleman** 57.13 79 P P 06 35 11.5 -0.6
baz=57,SNR=12
Z34A **Collier Ranch,** 57.17 76 P P 06 35 11.7 -0.6
baz=57,SNR=13
U38A **Gravette** 57.20 71 P P 06 35 11.7 -0.8
baz=57,SNR=9.1
X36A **Centrahoma** 57.29 74 P P 06 35 12.8 -0.4
baz=57,SNR=13
530A **J-C Ranch, Com** 57.30 81 P P 06 35 13.0 -0.3
baz=57,SNR=31
Y35A **Marietta** 57.33 75 P P 06 35 13.2 -0.3
baz=57,SNR=12
HDIL **Hopedale** 57.37 64 P P 06 35 13.2 -0.5
baz=57,SNR=9.8
HDIL **Hopedale** 57.37 64 eP P 06 35 13.4 -0.2
comp=Z,40nm,0.9s
431A **Sonora** 57.38 80 P P 06 35 13.4 -0.5
baz=57,SNR=27
332A **Millersview** 57.42 79 P P 06 35 14.0 -0.1
baz=57
W37A **Quinton** 57.46 73 P P 06 35 13.8 -0.6
baz=57,SNR=9.6
LZH **Lanzhou** 57.50 288 eP P 06 35 16.6 +1.8
LZH pP pP 06 35 29.6 +2.9
LZH sP sP 06 35 34.7 +3.3
LZH PMZ
comp=Z,94nm,1.5s
LZH PMZ
comp=Z,450nm,5.0s
233A **Rising Star** 57.50 78 P P 06 35 14.0 -0.7
baz=57,SNR=16
V38A **Canehill** 57.58 72 P P 06 35 14.8 -0.4
baz=57,SNR=16
Z35A **Perchaven, San** 57.60 76 P P 06 35 15.1 -0.3
baz=57,SNR=6.1
GTA **Gaotai** 57.60 294 eP P 06 35 15.8 +0.4
GTA pP pP 06 35 25.9 -1.4
GTA sP sP 06 35 30.0 -2.0
GTA S S 06 43 08.7 -1.8
GTA sS sS 06 43 24.8 -5.4
GTA SS SS 06 46 59.6 -0.8
GTA PMZ
comp=Z,8.0nm,1.0s
GTA PMZ
comp=Z,200nm,7.1s
GTA LN
comp=Z,850nm,20.9s
GTA LE
comp=Z,1µm,19.0s
GTA LZ
comp=Z,1µm,20.0s
134A **White-Moore Ra** 57.62 77 P P 06 35 14.9 -0.6
baz=58,SNR=17
432A **Menard** 57.74 80 P P 06 35 15.7 -0.7
baz=58,SNR=12
531A **Rocksprings** 57.77 81 P P 06 35 16.0 -0.7
baz=58,SNR=8.1
Y36A **Durant** 57.79 75 P P 06 35 16.2 -0.5
baz=58,SNR=12
X37A **Clayton** 57.87 74 P P 06 35 16.5 -0.7
baz=58,SNR=9.6
333A **Richland Sprin** 57.93 79 P P 06 35 17.2 -0.5
baz=58,SNR=9.5
CCM **Cathedral Cave** 57.94 68 eP P 06 35 15.7 -2.0
CCM pmax pmax
comp=Z,19nm,1.1s
CCM **Cathedral Cave** 57.94 68 eP P 06 35 15.7 -2.0
comp=Z,19nm,1.1s
234A **Clairette** 57.98 78 P P 06 35 17.5 -0.5
baz=58,SNR=20
JCT **Junction City** 58.01 80 eP P 06 35 17.9 -0.4
JCT pmax pmax
comp=Z,25nm,1.2s
JCT **Junction City** 58.01 80 P P 06 35 17.8 -0.6
baz=58,SNR=6.7
JCT **Junction City** 58.01 80 eP P 06 35 17.9 -0.4
comp=Z,26nm,1.2s
135A **Vickery Place,** 58.03 77 P P 06 35 18.0 -0.4
baz=58
W38A **Poteau** 58.05 73 P P 06 35 17.9 -0.6
baz=58,SNR=20
Z36A **Blue Ridge** 58.13 75 P P 06 35 18.5 -0.6
baz=58,SNR=9.1
Y37A **Hugo** 58.14 74 P P 06 35 18.4 -0.7
baz=58
X38A **Whitesboro** 58.14 73 P P 06 35 18.5 -0.6
baz=58,SNR=8.2
532A **Rocksprings** 58.20 80 P P 06 35 18.9 -0.7
baz=58,SNR=8.8
433A **Art** 58.26 79 P P 06 35 19.4 -0.7
baz=58,SNR=11
631A **Perdido Creek** 58.28 82 P P 06 35 19.6 -0.6
baz=58,SNR=8.9
ARCES **ARCESS Array B** 58.36 352 P P 06 35 19.4 -0.8
comp=Z,2.8nm,0.7s,baz=1.9,slow=7.4,SNR=4.4
ARCES PcP PcP 06 36 11.5 +0.8
comp=Z,13nm,0.9s,baz=19,slow=5.7,SNR=4.9
334A **Lometa** 58.38 78 P P 06 35 20.2 -0.6
baz=58,SNR=33
WHTX **Lake Whitney** 58.40 77 P P 06 35 20.4 -0.6
baz=58,SNR=7.7
WHTX **Lake Whitney** 58.40 77 eP P 06 35 21.6 +0.7
comp=Z,90nm,1.4s
SCHQ **Schefferville** 58.52 40 P P 06 35 21.6 +0.1
comp=Z,11nm,0.9s,baz=322,slow=8.4,SNR=5.9
136A **Ennis** 58.63 76 P P 06 35 22.1 -0.4
baz=58
Z37A **Pogue Cattle C** 58.68 75 P P 06 35 22.4 -0.5
baz=58
632A **Uvalde** 58.70 81 P P 06 35 22.6 -0.5
baz=59,SNR=7.3
Y38A **Idabel** 58.71 74 P P 06 35 22.3 -0.7
baz=59
434A **Burnet** 58.72 79 P P 06 35 22.6 -0.7
baz=59,SNR=14
SFIN **Scholer Farm** 58.73 63 P P 06 35 22.4 -0.7
baz=59,SNR=13
SFIN **Scholer Farm** 58.73 63 eP P 06 35 23.2 +0.1
comp=Z,36nm,0.8s
533A **Kerrville** 58.77 80 P P 06 35 23.3 -0.3
baz=59
335A **Moody** 58.91 78 P P 06 35 23.9 -0.6
baz=59
236A **Katherine and** 58.96 77 P P 06 35 24.3 -0.5
baz=59
MIAR **Mount Ida** 58.98 72 eP P 06 35 24.8 -0.1
MIAR pmax pmax
comp=Z,46nm,1.0s
MIAR **Mount Ida** 58.98 72 P P 06 35 24.4 -0.5
baz=59,SNR=28
MIAR **Mount Ida** 58.98 72 eP P 06 35 24.8 -0.1
comp=Z,46nm,1.0s
137A **Heron Place, G** 59.01 75 P P 06 35 24.9 -0.3
baz=59
Z38A **Mt. Pleasant** 59.02 74 P P 06 35 24.7 -0.6
baz=59,SNR=5.4
Y39A **Lockesburg** 59.08 73 P P 06 35 25.2 -0.5
baz=59,SNR=7.2
633A **Saathoff Ranch** 59.11 80 P P 06 35 25.4 -0.6
baz=59
732A **Laxson Ranch,** 59.14 82 P P 06 35 25.8 -0.3
baz=59,SNR=13
534A **Blanco** 59.15 80 P P 06 35 25.5 -0.7
baz=59,SNR=7.2
435B **Jarrell** 59.16 78 P P 06 35 25.9 -0.4
baz=59
336A **Riesel** 59.19 77 P P 06 35 26.1 -0.4
baz=59,SNR=10
OLIL **Olney** 59.29 65 eP P 06 35 26.8 -0.2
comp=Z,60nm,0.9s
PBMO **Poplar Bluff** 59.29 68 eP P 06 35 26.4 -0.7
comp=Z,52nm,1.3s
237A **Washetta, Mont** 59.40 76 P P 06 35 27.1 -0.7
baz=59
832A **Faith Ranch, C** 59.45 82 P P 06 35 27.8 -0.5
baz=59,SNR=24
733A **Divot King Ran** 59.56 81 P P 06 35 28.6 -0.4
baz=59
436A **Wall Ranch, Ga** 59.66 78 P P 06 35 29.3 -0.4
baz=60
535A **Dale** 59.70 79 P P 06 35 29.5 -0.4
baz=60
PARMO **Parma** 59.76 68 eP P 06 35 30.1 -0.2
PARMO ePcP PcP 06 36 14.0 -2.8
833A **Chaparral WMA,** 59.78 82 P P 06 35 29.9 -0.6
baz=60,SNR=9.5
238A **Jacksonville** 59.81 76 P P 06 35 30.1 -0.6
baz=60
BLO **Bloomington** 59.88 64 eP P 06 35 31.2 +0.1
BLO pmax pmax
comp=Z,43nm,0.9s
BLO **Bloomington** 59.88 64 eP P 06 35 31.2 +0.1
comp=Z,43nm,0.9s
SADO **Sadowa** 59.97 55 eP P 06 35 32.2 +0.5
comp=Z,48nm,1.0s
635A **Leesville** 60.03 80 P P 06 35 31.7 -0.6
baz=60,SNR=9.2
USIN **University of** 60.06 66 eP P 06 35 32.3 -0.1
comp=Z,48nm,0.8s
933A **Laredo** 60.36 82 P P 06 35 34.1 -0.5
baz=60,SNR=7.5
735A **Kenedy** 60.38 80 P P 06 35 34.2 -0.5
baz=60
636A **Smothers Creek** 60.40 79 P P 06 35 34.3 -0.5
baz=60
537A **Green Hill Far** 60.43 78 P P 06 35 34.5 -0.5
baz=60
834A **Tilden** 60.44 81 P P 06 35 34.7 -0.4
baz=60
HALT **Halls** 60.52 68 eP P 06 35 35.9 +0.4
KURK **Kurchatov** 60.56 315 P P 06 35 35.2 -0.3
comp=Z,172nm,0.4s,SNR=6.8
WCI **Wyandotte Cave** 60.66 65 eP P 06 35 36.1 -0.4
WCI **Wyandotte Cave** 60.66 65 eP P 06 35 36.0 -0.4
736A **Circle Diamond** 60.77 79 P P 06 35 36.9 -0.4
baz=61,SNR=5.8
835A **Beeville** 60.77 80 P P 06 35 37.2 -0.2
baz=61,SNR=7.8
HKT **Hockley** 60.82 78 eP P 06 35 37.8 +0.3
HKT **Hockley** 60.82 78 eP P 06 35 37.8 +0.3
934A **Benavides** 60.84 82 P P 06 35 37.5 -0.3
baz=61,SNR=6.3
340A **Bronson** 60.97 75 P P 06 35 38.3 -0.3
baz=61,SNR=5.7
ACSO **Alum Creek Sta** 61.10 61 eP P 06 35 39.7 +0.2
comp=Z,61nm,1.6s
034A **Hebbronville** 61.12 82 P P 06 35 39.3 -0.4
baz=61
CD2 **Chengdu** 61.14 284 eP P 06 35 40.7 +0.8
CD2 pP pP 06 35 51.2 -0.6
CD2 PP PP 06 37 55.3 +0.8
CD2 PcS PcS 06 40 26.3 +0.9
CD2 S S 06 43 57.3 +1.1
CD2 sS sS 06 44 15.3 -0.8
CD2 SS SS 06 47 58.4 +2.3
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.0s
WMQ **Urumqi** 61.16 305 P P 06 35 41.0 +1.2
WMQ pP pP 06 35 51.0 -0.8
WMQ sP sP 06 35 55.0 -1.5
WMQ PP PP 06 37 58.0 +3.7
WMQ S S 06 43 56.0 -0.1
WMQ ScS SKKSac 06 45 26.0 -1.4
WMQ SS SS 06 47 58.0 +2.2
WMQ PMZ
comp=Z,20nm,1.0s
WMQ PMZ
comp=Z,43nm,5.0s
WMQ LN
comp=Z,680nm,17.0s
WMQ LE
comp=Z,790nm,18.0s
WMQ LZ
comp=Z,680nm,17.0s
ERPA **Erie** 61.39 58 eP P 06 35 42.4 +1.1
comp=Z,108nm,1.3s
440A **Kirbyville** 61.40 76 P P 06 35 40.9 -0.6
baz=61
CHKZ **Chkalovo** 61.66 322 P P 06 35 43.2 +0.3
CHKZ pmax pmax
comp=Z,6.0nm,1.1s
MK31 **Makanchi Array** 61.71 310 P P 06 35 43.5 0.0
MK31 pmax pmax
comp=Z,2.0nm,0.3s
MKAR **Makanchi Array** 61.71 310 P P 06 35 43.5 0.0
comp=Z,4.8nm,0.4s,baz=47,slow=5.9,SNR=54
MK01 **Makanchi Array** 61.73 310 eP P 06 35 42.9 -0.7
MAKZ **Makanchi** 61.85 311 eP P 06 35 44.5 +0.1
MMNY **Mt. Morris Dam** 62.04 56 eP P 06 35 46.8 +1.1
comp=Z,76nm,1.0s
BVA0 **Borovoye Array** 62.24 322 i P P 06 35 47.6 +0.7
BVA0 pmax pmax

comp=Z,10.0nm,0.4s
**VOSK Vostochnaya 62.24 321 P P 06 35 47.8 +0.9**
VOSK pmax pmax
comp=Z,7.0nm,1.0s
**BRVK Borovoye 62.26 322** *ce*P **P 06 35 48.0 +1.0**
BRVK pmax pmax
comp=Z,3.0nm,0.4s
**BRVK Borovoye 62.26 322** P **P 06 35 48.6 +1.6**
comp=Z,60nm,0.5s,SNR=5.5
**BRVK Borovoye 62.26 322** *e*P **P 06 35 48.2 +1.2**
**LONY Lake Ozonia 62.38 52** *e*P **P 06 35 48.0 +0.1**
comp=Z,17nm,0.7s
**GYA Guiyang 62.53 279**⇑ *i*P **P 06 35 50.6 +1.2**
GYA pP **pP 06 36 01.8 +0.4**
GYA PcP **PcP 06 36 30.0 +1.8**
GYA PP **PP 06 38 10.2 +3.2**
GYA ScP **ScP 06 40 28.4 +1.6**
GYA S **S 06 44 14.0 -0.1**
GYA sS **sS 06 44 30.9 -3.1**
GYA SS **SS 06 48 19.8 +1.6**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,130nm,5.2s
GYA LN
comp=Z,540nm,20.2s
GYA LE
comp=Z,480nm,20.0s
GYA LZ
comp=Z,520nm,20.6s
**ZRNK Zerenda 62.84 322** P **P 06 35 51.6 +0.7**
ZRNK pmax pmax
comp=Z,6.0nm,0.4s
**NCB Newcomb 63.02 53** *e*P **P 06 35 52.6 +0.3**
**MCWV Mont Chateau 63.21 59** *e*P **P 06 35 54.6 +1.0**
comp=Z,72nm,1.6s
**TZTN Tazewell 63.40 64** *e*P **P 06 35 54.9 +0.1**
comp=Z,28nm,1.1s
**BINY Binghamton 63.41 55** *e*P **P 06 35 56.1 +1.2**
comp=Z,152nm,1.1s
**SSPA Standing Stone 63.55 57** *e*P **P 06 35 56.5 +0.7**
comp=Z,66nm,0.7s
SSPA *e*PP **PP 06 38 16.2 +0.8**
**CPCT Cooper Cave 63.62 66** *e*P **P 06 35 56.3 0.0**
**ARU Arti 63.68 330** *d i*P **P 06 35 56.2 -0.2**
ARU 06 36 32.0
ARU S **S 06 44 29.2 +1.8**
ARU SS **SS 06 48 32.1 -2.3**
ARU pmax pmax
comp=Z,5.0nm,0.9s
**ACCN Adirondack Com 63.73 53** *e*P **P 06 35 57.4 +0.5**
comp=Z,25nm,1.1s
**TKL Tuckaleechee C 63.90 65** *e*P **P 06 35 58.4 +0.2**
**TKL Tuckaleechee C 63.90 65** *e*P **P 06 35 58.4 +0.2**
**KLMR Klimovskoe 64.62 342** *e*P **P 06 36 00.5 -1.9**
KLMR pmax pmax
comp=Z,18nm,1.6s
**MVL Millersville 64.82 57** *e*P **P 06 36 01.6 -2.6**
**VWCC Virginia Weste 64.88 61** *e*P **P 06 36 05.3 +0.8**
**LUPA Lehigh Univers 64.90 56** *e*P **P 06 36 05.8 +1.3**
comp=Z,66nm,1.1s
**ODNJ Ogdensburg 64.94 55** *e*P **P 06 36 05.9 +1.1**
comp=Z,72nm,1.2s
**SDMD Soldier's Deli 65.00 58** *e*P **P 06 36 06.0 +0.8**
comp=Z,14nm,0.9s
**OTUK Ortayu 65.13 317** P **P 06 36 06.5 +0.5**
OTUK pmax pmax
comp=Z,16nm,1.2s
**BRNJ Basking Ridge 65.25 55** *e*P **P 06 36 08.1 +1.3**
**BRAL Brewton 65.34 71** *e*P **P 06 36 07.4 -0.2**
comp=Z,43nm,1.0s
**PAL Palisades 65.35 55** *e*P **P 06 36 08.3 +0.8**
PAL *e* 06 36 18.2
**PAL Palisades 65.35 55** *e*P **P 06 36 08.3 +0.8**
PAL *e* 06 36 18.2
**CPNY Central Park 65.48 55** *e*P **P 06 36 09.3 +0.9**
comp=Z,75nm,1.0s
**CBN Corbin 65.59 59** *e*P **P 06 36 10.3 +1.1**
comp=Z,45nm,1.3s
**PDGK Podgornoye 65.61 309** P **P 06 36 10.2 +1.1**
PDGK pmax pmax
comp=Z,29nm,1.2s
**KMSC Kings Mountain 65.65 64** P **P 06 36 08.9 -0.7**
baz=66,SNR=8.6
**KMSC Kings Mountain 65.65 64** *e*P **P 06 36 09.9 +0.3**
**GOGA Godfrey 65.70 67** *e*P **P 06 36 09.3 -0.6**
GOGA pmax pmax
comp=Z,20nm,0.9s
**GOGA Godfrey 65.70 67** *e*P **P 06 36 09.2 -0.6**
comp=Z,20nm,0.9s
**EMMW East Machias 65.74 48** *e*P **P 06 36 10.4 +0.5**
**KMI Kunming 65.92 280** P **P 06 36 12.6 +0.9**
KMI PMZ
comp=Z,11nm,0.6s
KMI PMZ
comp=Z,270nm,4.2s
**URVA University of 65.97 60** *e*P **P 06 36 12.6 +1.0**
**QIZ Qiongzhong 66.01 271** P **P 06 36 13.1 +1.1**
QIZ pP **pP 06 36 22.1 -2.0**
QIZ S **S 06 44 57.8 +0.9**
QIZ PMZ
comp=Z,11nm,1.2s
QIZ LN
comp=Z,450nm,17.5s
QIZ LZ
comp=Z,540nm,16.2s
**FINES FINESS Array B 66.16 349** P **P 06 36 12.0 -0.4**
comp=Z,1.5nm,0.6s,baz=49,slow=5.3,SNR=9.5
**JSC Jenkinsville 66.32 64** *e*P **P 06 36 14.6 +0.8**
JSC pmax pmax
comp=Z,27nm,1.1s
**JSC Jenkinsville 66.32 64** *e*P **P 06 36 14.6 +0.8**
comp=Z,27nm,1.1s
**CNNC Cliffs of the 67.49 62** *e*P **P 06 36 22.6 +1.3**
comp=Z,147nm,2.2s
**NB2 NORSAR Subarra 67.73 357** P **P 06 36 22.2 -0.3**
comp=Z,15nm,1.2s,baz=5.9,slow=6.5
**NOA NORSAR Array B 67.73 357** P **P 06 36 22.4 -0.1**
comp=Z,0.4nm,0.4s,baz=327,slow=20,SNR=20
NOA LR LR 07 08 40.7
comp=Z,197nm,18.0s,baz=345,slow=38
**TKM2 Tokmak 2 67.77 311** P **P 06 36 24.7 +1.5**
SNR=6.1
**NHSC New Hope 67.79 65** *e*P **P 06 36 24.1 +0.9**
comp=Z,68nm,1.0s
**ULHL Ulahol 67.98 311** P **P 06 36 26.1 +1.5**
SNR=6.7
**USP Ospenovka 68.01 312** P **P 06 36 26.1 +1.6**
SNR=11
**KBK Karagaybulak 68.28 312** P **P 06 36 27.7 +1.4**
SNR=6.9
**FRU Bishkek 68.29 312** *e*P **P 06 36 27.0 +0.7**
FRU *e* 06 36 46.0
FRU pmax pmax
comp=Z,60nm,1.6s
**AAK Ala-Archa 68.50 312** *ce*P **P 06 36 28.8 +1.0**
AAK pmax pmax
comp=Z,16nm,1.1s
**AAK Ala-Archa 68.50 312** P **P 06 36 29.6 +1.8**
comp=Z,62nm,0.6s,SNR=6.8
**AAK Ala-Archa 68.50 312** P **P 06 36 28.6 +0.8**
SNR=10
**AAK Ala-Archa 68.50 312** *e*P **P 06 36 28.6 +0.8**
comp=Z,7.4nm,0.6s
**KZA Kyzart 68.58 311** P **P 06 36 30.2 +1.6**
SNR=5.0
**EKS2 Erkin-Say 68.82 312** P **P 06 36 31.6 +1.9**
SNR=5.7
**AKTO Aktyubinsk 68.88 327** P **P 06 36 30.5 +0.7**
AKTO pmax pmax
comp=Z,7.0nm,0.8s
**SIJI Sorong 68.89 240** P **P 06 36 28.8 -1.5**
comp=Z,5.9nm,0.6s,baz=270,slow=20,SNR=2.9
**AB31 Akbulak array 69.19 325** P **P 06 36 32.7 +1.0**
AB31 pmax pmax
comp=Z,3.0nm,0.4s
**ABKAR Akbulak array 69.19 325** *e*P **P 06 36 32.8 +1.1**
**AML Almayashu 69.27 312** P **P 06 36 34.7 +1.8**
SNR=6.9
**MNAS Manas 69.54 313** P **P 06 36 35.1 +0.9**
MNAS pmax pmax
comp=Z,7.0nm,0.5s
**KK31 Karatay Array 69.95 315** *e*P **P 06 36 36.9 +0.4**
KK31 pmax pmax
comp=Z,8.0nm,0.4s
**KSH Kashi 70.22 309** P P 06 36 42.9 +4.5
KSH *e*sP sP 06 36 57.2 +2.0
KSH S **S 06 45 49.5 +2.5**
KSH SKS **SKSac 06 46 35.4 -1.1**
KSH SS SS 06 50 24.4 +7.8
KSH PMZ
comp=Z,12nm,0.5s
KSH PMZ
comp=Z,150nm,6.2s
KSH LN
comp=Z,420nm,13.5s
KSH LE
comp=Z,190nm,10.4s
KSH LZ
comp=Z,660nm,24.1s
**PMOR Pomariorio Ree 70.34 152** *e*T T 07 53 52.2
comp=Z,5.9nm,0.2s
**OBN Obninsk 70.55 341** P **P 06 36 40.0 +0.1**
OBN *PP **pP 06 36 53.0 +1.0**
OBN 06 37 02.0
OBN 06 39 14.0
OBN S S 06 45 58.0 +8.1
OBN pmax pmax
comp=Z,5.0nm,0.9s
OBN MLR MLR
comp=Z,445nm,19.0s
**PPT Papeete 72.31 154** LR LR 07 04 43.3
comp=Z,682nm,18.8s,baz=322,slow=33
**PPT2 Papeete2 72.33 154** *e*LR LR 06 58 55.5
comp=Z,838nm,21.5s,baz=345
**PPT2 Papeete2 72.33 154** *e*T T 07 56 20.2
comp=Z,4.2nm,0.3s
**LPSR Galich'ya Gora 72.39 339** *e*P **P 06 36 50.9 -0.2**
LPSR pmax pmax
comp=Z,8.0nm,0.8s
LPSR pmax pmax
comp=N,10.0nm,1.8s
LPSR pmax pmax
comp=E,10.0nm,1.8s
**VRH Novokhopyorsk 73.03 337** *e*P **P 06 36 53.6 -1.3**
VRH pmax pmax
comp=Z,7.0nm,0.8s
VRH pmax pmax
comp=N,10.0nm,0.7s
VRH pmax pmax
comp=E,20nm,0.7s
**CMAR Chiang Mai Arr 73.23 279** P **P 06 36 57.5 +0.9**
comp=E,1.4nm,0.4s,baz=26,slow=6.0,SNR=6.3
**CM01 Chiang Mai Arr 73.24 279** *e*P **P 06 36 57.3 +0.7**
**TAPN Taplejung 73.26 293** *e*P **P 06 36 58.4 +1.4**
**ESK Eskdalemuir 73.38 5** *i*P **P 06 36 58.5 +1.6**
**BSD Bornholm Skovb 73.46 354** *i*P **P 06 36 57.3 0.0**
**BSD Bornholm Skovb 73.46 354** *i*P **P 06 36 57.3 0.0**
**VSR Storozhevoye 73.63 338** *e*P **P 06 36 57.8 -0.6**
VSR pmax pmax
comp=Z,10.0nm,1.1s
VSR pmax pmax
comp=N,20nm,1.3s
VSR pmax pmax
comp=E,8.0nm,0.8s
**ODAN Odare 73.82 293** *e*P **P 06 37 01.4 +1.2**
**VORD Divnogorie 73.83 338** *e*P **P 06 36 59.3 -0.3**
VORD pmax pmax
comp=Z,10.0nm,1.3s
VORD pmax pmax
comp=N,10.0nm,0.6s
VORD pmax pmax
comp=E,10.0nm,0.7s
**GUN Gumba 73.88 294** *e*P **P 06 37 02.1 +1.4**
**RAMN Ramite 74.20 293** *i*P **P 06 37 03.5 +1.0**
comp=E,167nm,1.1s
**KKN Kakani 74.32 295** *e*P **P 06 37 04.4 +1.3**
**PKI Pulchoki 74.41 295** *e*P **P 06 37 04.8 +1.0**
**PKIN Phulchoki 74.41 295** *e*P **P 06 37 04.6 +0.9**
**GKN Gorkha 74.52 295** *e*P **P 06 37 05.2 +1.0**
**DMN Daman 74.55 295** *e*P **P 06 37 05.7 +1.2**
**DANN Dangsing 74.74 296** *e*P **P 06 37 07.0 +1.3**
**KOLN Koldanda 75.28 296** *e*P **P 06 37 09.7 +1.0**
comp=E,17nm,0.5s
**AKASG Malin Array Be 76.12 344** P **P 06 37 12.5 -0.3**
comp=E,1.7nm,0.3s,baz=18,slow=6.1,SNR=8.8
**KIEV Kiev 76.13 344** *e*P **P 06 37 12.2 -0.6**
**KIEV Kiev 76.13 344** *e*P **P 06 37 12.2 -0.6**
**CLL Collm 77.37 355**⇑ *i*P **P 06 37 19.9 +0.1**
CLL pmax pmax
comp=Z,7.0nm,1.2s
**CLL Collm 77.37 355**⇑ *i*P **P 06 37 19.9 +0.1**
comp=Z,7.0nm,1.2s
CLL *e*PP **PP 06 40 18.0 +4.4**
**KBL Kabul 77.52 310** *e*P **P 06 37 21.8 +0.5**
**KBL Kabul 77.52 310** *e*P **P 06 37 21.8 +0.5**
**BRG Berggiesshubel 77.74 354** *e*P **P 06 37 22.1 +0.2**
comp=Z,20nm,1.4s
**BRG Berggiesshubel 77.74 354** *e*P **P 06 37 22.1 +0.2**
BRG pmax pmax
comp=Z,20nm,1.4s
**TBI Tubuai 77.86 156** *e*LR LR 07 01 20.6
comp=Z,682nm,24.0s,baz=341
**TBI Tubuai 77.86 156** *e*T T 08 03 13.5
comp=Z,8.1nm,0.4s
**UPC Upice 77.96 353** *e*P **P 06 37 23.4 +0.2**
**UPC Upice 77.96 353** *e*P **P 06 37 23.4 +0.2**
**DPC Dobruska-Polom 78.09 352** *e*P **P 06 37 23.8 -0.2**
DPC *e* 06 37 33.0
DPC *e* 06 37 40.5
**DPC Dobruska-Polom 78.09 352** *e*P **P 06 37 23.8 -0.2**
DPC *ep*P **PcP 06 37 33.0 -0.5**
**MEM Membach 78.30 359** P **P 06 37 25.9 +0.8**
**KRLC Kraliky 78.32 352** *e*P **P 06 37 25.7 +0.4**
KRLC *e* 06 37 37.5
KRLC *e* 06 37 42.6
**KRLC Kraliky 78.32 352** *e*P **P 06 37 25.7 +0.4**
KRLC *ex* x 06 37 37.5
**NKC Novy Kostel 78.47 355** *e*P **P 06 37 25.7 -0.3**
NKC *e* 06 37 40.1
**NKC Novy Kostel 78.47 355** *e*P **P 06 37 25.7 -0.3**
NKC *ex* x 06 37 40.1
**STHS Stebnicka Huta 78.52 349** *e*P **P 06 37 27.7 +1.4**
**STHS Stebnicka Huta 78.52 349** *e*P **P 06 37 27.7 +1.4**
**PRU Pruhonice 78.58 354** *e*P **P 06 37 25.8 -0.8**
**PRU Pruhonice 78.58 354** *e*P **P 06 37 25.8 -0.8**
**KAPI Kappang 78.73 247** P **P 06 37 28.1 +0.2**
comp=Z,4.0nm,1.0s,baz=25,slow=5.3,SNR=7.0
**DOU Dourbes 78.82 0** P **P 06 37 28.6 +0.7**
**CTA Charters Tower 78.84 217** P **P 06 37 30.8 +2.6**
comp=Z,2.7nm,0.7s,baz=50,slow=16,SNR=2.5
**KOLS Kolonicke sedl 78.87 348** *e*P **P 06 37 29.6 +1.4**
**KOLS Kolonicke sedl 78.87 348** *e*P **P 06 37 29.6 +1.4**
**LANS Liptovska Anna 78.98 350** *e*P **P 06 37 30.9 +2.0**
**LANS Liptovska Anna 78.98 350** *e*P **P 06 37 30.9 +2.0**
**GRF Grafenberg Arr 79.07 356** *e*P **P 06 37 30.4 +1.1**
comp=Z,12nm,1.2s,baz=4.1,slow=4.8
**KHC Kasperske Hory 79.50 354** *e*P **P 06 37 32.1 +0.4**
KHC pmax pmax
comp=Z,6.0nm,1.5s
**KHC Kasperske Hory 79.50 354** *e*P **P 06 37 32.2 +0.5**
KHC *ep*P **PcP 06 37 40.8 +1.2**
KHC *es*P **sP 06 37 44.0 -4.7**
**KHC Kasperske Hory 79.50 354** *e*P **P 06 37 32.1 +0.4**
comp=Z,5.6nm,1.5s
**GEYT Alibeck 79.50 320** P **P 06 37 32.9 +0.9**
comp=Z,8.7nm,0.8s,baz=316,slow=4.1,SNR=7.4
**TRPA Tarpa 79.62 348**⇓ *i*P **P 06 37 33.3 +1.0**
**VYHS Vyhne 79.70 351** *e*P **P 06 37 33.1 +0.3**
**VYHS Vyhne 79.70 351** *e*P **P 06 37 33.1 +0.3**
**GERES GERESS Array B 79.78 354** P **P 06 37 33.6 +0.3**
comp=Z,1.9nm,0.9s,baz=18,slow=4.8,SNR=10.0
**DRGR 80.92 348**⇑ *i*P **P 06 37 40.6 +1.2**
**VRI Vrincioaia 81.22 345**⇑ *i*P **P 06 37 42.6 +1.6**
**TLCR 81.52 343**⇑ *i*P **P 06 37 43.9 +1.4**
**MLR Muntele Rosu 81.71 345**⇑ *i*P **P 06 37 45.0 +1.3**
**VOIR 81.91 346**⇑ *i*P **P 06 37 46.6 +1.9**
**CHLP Challavanipeta 82.20 290** *e*P **P 06 37 47.5 +1.0**
**RKT Rikitea 82.24 143** *e*LR LR 07 03 33.1
comp=Z,635nm,23.0s,baz=334
**RKT Rikitea 82.24 143** *e*T T 08 08 46.5
comp=Z,1.8nm,0.3s
**JAVS Javornik 82.69 353** *i*P **P 06 37 48.6 -0.2**
**BOJS Bojanci 82.99 353** *i*P **P 06 37 50.8 +0.5**
**WRAB Tennant Creek 83.66 227**⇓ *e*P **P 06 37 55.6 +1.8**
WRAB pmax pmax
comp=Z,60nm,3.9s
**WRA Warramunga Arr 83.67 227** P **P 06 37 52.8 -1.1**
comp=Z,0.9nm,0.9s,baz=34,slow=5.8,SNR=6.4
WRA LR LR 07 12 16.7
comp=Z,316nm,20.4s,baz=50,slow=34
**PVM Polavaram 84.61 291** *e*P **P 06 37 59.2 +0.3**
**SMN1 Samana, DR 84.70 66** *e*P **P 06 38 00.5 +1.1**
**BRTR Keskin Array B 85.75 338** P **P 06 38 05.0 +0.5**
comp=Z,1.8nm,0.7s,baz=80,slow=1.4,SNR=7.3
**BR231 Keskin MP Arra 85.84 339** *e*P **P 06 38 06.9 +2.0**
**MALT Malatya 85.87 334**⇑ *i*P **P 06 38 07.6 +2.5**
**HYBB Hyderabad (bro 86.26 293** *e*P **P 06 38 07.5 +0.2**
**HYB Hyderabad 86.26 293** *i*P **P 06 38 06.0 -1.2**
**NJS Nagarjunasagar 86.51 292** *e*P **P 06 38 08.9 +0.5**
**ADKI Addanki 86.69 291** *e*P **P 06 38 09.4 +0.2**
**LRS Lares 86.79 65** *e*P **P 06 38 11.7 +1.9**
**AS01 Alice Springs 87.08 225** *e*P **P 06 38 10.0 -0.9**
**ASAR Alice Springs 87.10 225** P **P 06 38 11.0 0.0**
comp=Z,0.5nm,0.7s,baz=19,slow=4.7,SNR=5.9
ASAR LR LR 07 13 36.9
comp=Z,430nm,20.8s,baz=28,slow=33
**ICMP Isla Caja de M 87.29 65** *e*P **P 06 38 13.9 +1.8**
**CPD Cerro la Pandu 87.52 64** *e*P **P 06 38 14.5 +1.2**
**CPD Cerro la Pandu 87.52 64** *e*P **P 06 38 14.5 +1.2**
**POO Poona 88.03 298**⇓ *i*P P 06 38 13.0 -2.8
comp=Z,5.0nm,1.2s
**SKHT Srikalahasti 88.51 290** *e*P **P 06 38 18.1 +0.1**
**ESDC Sonseca Array 88.92 7** P **P 06 38 20.4 +0.7**
comp=Z,0.5nm,0.4s,baz=344,slow=4.7,SNR=6.3
**URV Uravakonda 88.97 293** *e*P **P 06 38 20.4 +0.2**
**RAYN Ar Rayn 97.21 323** *e*P Pdif 06 38 58.8 +0.6
**TORD Torodi Ar. Bea 115.61 3** PKP **PKPdf 06 44 06.1 -1.5**
comp=Z,0.4nm,0.4s,baz=326,slow=2.7,SNR=6.1
**DBIC Dimbokro 121.51 11** PKP **PKPdf 06 44 18.0 -0.9**
comp=Z,3.0nm,0.9s,baz=180,slow=7.1,SNR=2.5
**DBIC Dimbokro 121.51 11** PKIKP **PKPdf 06 44 18.0 -0.9**
**KMBO Kilima Mbogo 122.88 320** PKP **PKPdf 06 44 22.6 +0.7**
comp=Z,0.5nm,0.3s,baz=240,slow=20,SNR=2.8
**CPUP Villa Florida 127.36 86** PKP **PKPdf 06 44 31.3 +1.7**
comp=Z,1.5nm,0.8s,baz=146,slow=7.3,SNR=2.3
**MAW Mawson 147.92 218** PKPbc **PKPbc 06 45 08.5 -0.4**
comp=Z,4.9nm,1.0s,baz=30,slow=3.4,SNR=12
**BOSA Boshof 152.49 318** PKPbc **PKPbc 06 45 22.1 +0.7**
comp=Z,4.3nm,0.4s,baz=35,slow=1.8,SNR=22
**SNAA Sanae 159.43 173** P **PKPdf 06 45 27.0 +4.8**
**VNA2 Neumayer--Watz 159.69 168** P **PKPdf 06 45 21.9 -0.5**

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*DDA* ***10*** *06:33:09.4, 38°.83N×35°.71E, h7km, Md2.8*
*ISCJB* ***10*** *06:33:10.2±0.7, 38°.85N±0°.04×35°.76E±0°.06, h9km, Error ellipse: s-maj=7.4km s-min=5.6km az=156.1*
*CSEM* ***10*** *06:33:10.5±0.2, 38°.94N×35°.93E, h20km, MD2.8, Error ellipse: s-maj=7.4km s-min=5.1km az=39.0*
*ISK* ***10*** *06:33:10.1, 38°.94N×35°.95E, h22km, MD2.8*
**ISC 10 06:33:09.9±1.0, 38°.93N±0°.04×35°.80E±0°.03, h9km, n18, σ1s39/22, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PINB** | **Pinarbasi** | **0.54** | **118** | *i* | P | | **Pg** | **06 33 20.1** | **-0.2** |
| **PINB** | **Pinarbasi** | **0.54** | **118** | | P | | **Pg** | **06 33 20.1** | **-0.2** |
| **CUSAR** | **Sarkisla-SIVAS** | **0.59** | **35** | | P | | **Pn** | **06 33 23.3** | **-1.4** |
| CUSAR | | | | | S | | **Sn** | **06 33 34.4** | **-0.1** |
| **SARI** | **SarD1z-Kayseri** | **0.71** | **137** | *e* | PG | | **Pg** | **06 33 22.8** | **-0.8** |
| SARI | | | | *e* | SG | | **Sb** | **06 33 33.7** | **-0.8** |
| **SARI** | **SarD1z-Kayseri** | **0.71** | **137** | *e* | Pg | | **Pg** | **06 33 22.8** | **-0.8** |
| SARI | | | | *e* | Sg | | **Sb** | **06 33 33.7** | **-0.8** |
| **YOZ** | **Yozgat** | **0.80** | **332** | *e* | PG | | **Pn** | **06 33 27.3** | **-0.2** |
| **YOZ** | **Yozgat** | **0.80** | **332** | *e* | Pg | | **Pn** | **06 33 27.3** | **-0.2** |
| **NIG** | **Nigde** | **1.24** | **229** | *e* | PN | | **Pg** | **06 33 34.3** | **+0.6** |
| **NIG** | **Nigde** | **1.24** | **229** | *e* | Pn | | **Pg** | **06 33 34.3** | **+0.6** |
| **CDAG** | **Cicekdag** | **1.31** | **302** | *i* | P | | **Pg** | **06 33 34.3** | **-0.7** |
| **CDAG** | **Cicekdag** | **1.31** | **302** | | P | | **Pg** | **06 33 34.3** | **-0.7** |
| **CUKAN** | **kangal_SIVAS** | **1.35** | **73** | | P | | **Pg** | **06 33 36.3** | **+0.5** |
| CUKAN | | | | | S | | **Sg** | **06 33 58.0** | **+4.7** |
| **SVSK** | **Karacayir** | **1.35** | **43** | *e* | PN | | **Pn** | **06 33 33.1** | **-1.8** |
| **SVSK** | **Karacayir** | **1.35** | **43** | *e* | Pn | | **Pn** | **06 33 33.1** | **-1.8** |
| **ANDN** | **Andirin** | **1.42** | **162** | *i* | P | | **Pn** | **06 33 35.3** | **-0.6** |
| **ANDN** | **Andirin** | **1.42** | **162** | | P | | **Pn** | **06 33 35.3** | **-0.6** |
| **KOZT** | **Kozan** | **1.45** | **179** | *e* | PN | | **Pn** | **06 33 35.6** | **-0.7** |
| **KOZT** | **Kozan** | **1.45** | **179** | *e* | Pn | | **Pn** | **06 33 35.6** | **-0.7** |

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*AUST* ***10*** *06:54:42.0±9.2, 7°.73S×106°.60E, h8km, Error ellipse: s-maj=2.4km s-min=1.0km az=240.0*
*ISCJB* ***10*** *06:54:43.5±1.0, 7°.65S±0°.1×106°.66E±0°.06, h88km±10km, Error ellipse: s-maj=19.9km s-min=6.5km az=26.6*
*DJA* ***10*** *06:54:44.6±0.4, 8°.5S±4°×10°.7E±°, h66km±5km, M4.1/14, mb4.2/3, MLv4.1/14*
**ISC 10 06:54:44.0±1.8, 7°.6S±0°.1×106°.65E±0°.07, h88km±13km, n17, σ0s65/23, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CNJI** | **Cibinong** | **0.53** | **63** | | P | | **Pn** | **06 54 59.4** | **+0.6** |
| CNJI | | | | | S | | **Sn** | **06 55 08.9** | **-0.9** |
| **SKJI** | **Sukabumi** | **0.56** | **350** | | P | | **Pn** | **06 54 59.9** | **+0.9** |
| SKJI | | | | | S | | **Sn** | **06 55 09.0** | **-1.2** |
| **CISI** | **Cisompet, Garu** | **1.15** | **90** | | P | | **Pn** | **06 55 06.1** | **+0.7** |
| | baz=1.2,SNR=32 | | | | | | | | |
| **CISI** | **Cisompet, Garu** | **1.15** | **90** | | P | | **Pn** | **06 55 05.8** | **+0.4** |
| CISI | | | | | S | | **Sn** | **06 55 20.6** | **-0.9** |
| **LEM** | **Lembang** | **1.20** | **53** | | P | | **Pn** | **06 55 07.1** | **+1.0** |
| | baz=1.4,SNR=22 | | | | | | | | |
| **LEM** | **Lembang** | **1.20** | **53** | | P | | **Pn** | **06 55 06.9** | **+0.8** |
| LEM | | | | | S | | **Sn** | **06 55 22.3** | **-0.4** |
| **CGJI** | **Cibinong** | **1.33** | **314** | | P | | **Pn** | **06 55 08.0** | **+0.4** |
| CGJI | | | | | S | | **Sn** | **06 55 25.2** | **-0.2** |
| **TNG** | **Tangerang** | **1.37** | **360** | | P | | **Pn** | **06 55 07.9** | **-0.2** |
| TNG | | | | | P | | **Pn** | **06 55 07.8** | **-0.3** |
| TNG | | | | | S | | **Sn** | **06 55 26.5** | **+0.3** |
| **SBJI** | **Serang** | **1.52** | **340** | | P | | **Sn** | **06 55 29.3** | **-0.2** |
| **CMJI** | **Cimerak** | **1.79** | **97** | | P | | **Pn** | **06 55 13.8** | **+0.4** |
| CMJI | | | | | S | | **Sn** | **06 55 35.4** | **-0.4** |
| **KASI** | **Kota Agung** | **2.94** | **313** | | P | | **Pn** | **06 55 28.9** | **+0.2** |
| **UGM** | **Wanagama** | **3.85** | **96** | | P | | **Pn** | **06 55 41.6** | **+0.5** |
| | baz=3.9,SNR=8.3 | | | | | | | | |
| **UGM** | **Wanagama** | **3.85** | **96** | | P | | **Pn** | **06 55 41.0** | **0.0** |
| **MDSI** | **Maura Dua** | **3.92** | **321** | | P | | Pn | 06 55 48.7 | +6.8 |
| **PCJI** | **Pacitan** | **4.53** | **98** | | P | | **Pn** | **06 55 50.2** | **0.0** |
| **JAGI** | **Jajag, Banyuwa** | **7.48** | **97** | | P | | **Pn** | **06 56 31.1** | **+0.6** |
| | baz=7.5,SNR=6.8 | | | | | | | | |
| **BTDF** | **Bukit Timah Da** | **9.31** | **342** | | P | | Pn | 06 57 01.9 | +6.5 |
| | baz=9.5,SNR=4.0 | | | | | | | | |

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*KRNET* ***10*** *06:58:03.3±0.1, 40°.67N×73°.12E, h14km, mb2.4*
*NNC* ***10*** *06:58:03.2±0.4, 40°.69N×73°.15E, h0km, mb3.1, mpv2.9, Error ellipse: s-maj=6.2km s-min=2.2km az=61.0*
**ISC 10 06:58:03.9±1.3, 40°.68N±0°.03×73°.15E±0°.04, h1km±12km, n18, σ0s96/35, 24C-14D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.72** | **158** | ⇑ | P | | **Pg** | **06 58 17.4** | **-0.4** |
| | 5.6nm,0.1s | | | | | | | | |
| SFK | | | | ⇓ | S | | **Sg** | **06 58 27.5** | **+0.3** |
| | 13nm,0.2s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.72** | **158** | ⇓ | *i*P | | **Pg** | **06 58 17.5** | **-0.3** |
| | baz=156 | | | | | | | | |
| SFK | | | | ⇓ | *i*S | | **Sg** | **06 58 27.7** | **+0.6** |
| | baz=156 | | | | | | | | |
| **ARK** | **Arkit** | **1.43** | **322** | ⇓ | *i*P | | **Pn** | **06 58 30.0** | **-1.1** |
| | baz=323 | | | | | | | | |
| ARK | | | | ⇓ | *i*S | | **Sn** | **06 58 50.1** | **-0.4** |
| | baz=323 | | | | | | | | |
| **ARLS** | **Aral** | **1.47** | **37** | ⇓ | *e*P | | **Pg** | **06 58 32.3** | **+0.2** |
| | baz=37 | | | | | | | | |
| ARLS | | | | ⇓ | *i*S | | **Sg** | **06 58 52.5** | **+1.3** |
| | baz=37 | | | | | | | | |
| **AML** | **Almayashu** | **1.50** | **16** | ⇑ | *i*P | | **Pg** | **06 58 32.8** | **+0.1** |
| | baz=16 | | | | | | | | |
| AML | | | | ⇑ | *i*S | | **Sg** | **06 58 53.7** | **+1.5** |
| | baz=16 | | | | | | | | |
| **UCH** | **Uchtor** | **1.85** | **33** | ⇑ | *i*P | | **Pb** | **06 58 38.8** | **0.0** |
| | baz=34 | | | | | | | | |
| UCH | | | | ⇑ | *i*S | | **Sg** | **06 59 04.1** | **+0.7** |
| | baz=34 | | | | | | | | |
| **MNAS** | **Manas** | **1.86** | **345** | ⇓ | Pg | | **Pn** | **06 58 37.3** | **+0.2** |
| | 7.2nm,0.4s | | | | | | | | |
| MNAS | | | | ⇓ | Lg | | Lg | 06 59 03.1 | |
| | 8.9nm,0.3s | | | | | | | | |
| **MNAS** | **Manas** | **1.86** | **345** | ⇑ | *i*P | | **Pb** | **06 58 38.7** | **-0.2** |
| | baz=346 | | | | | | | | |
| MNAS | | | | ⇑ | *i*S | | **Sg** | **06 59 03.3** | **-0.6** |
| | baz=346 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.03** | **13** | ⇓ | *i*P | | **Pb** | **06 58 41.7** | **0.0** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | baz=14 | | | | | | |
| EKS2 | | | | ⇓iS | Sg | 06 59 08.9 | -0.3 |
| | baz=14 | | | | | | |
| KZA | Kyzart | 2.10 | 48 | ⇑iP | Pb | 06 58 43.0 | -0.1 |
| | baz=48 | | | | | | |
| KZA | | | | ⇑iS | Sg | 06 59 12.1 | +0.5 |
| | baz=48 | | | | | | |
| AAK | Ala-Archa | 2.19 | 27 | ⇑iP | Pb | 06 58 43.9 | -0.5 |
| | baz=27 | | | | | | |
| AAK | | | | ⇑iS | Sg | 06 59 13.5 | -0.9 |
| | baz=27 | | | | | | |
| NRN | Naryn | 2.28 | 70 | ⇑iP | Pb | 06 58 45.2 | -0.8 |
| | baz=70 | | | | | | |
| NRN | | | | ⇑iS | Sb | 06 59 14.9 | +0.1 |
| | baz=70 | | | | | | |
| KBK | Karagaybulak | 2.39 | 34 | ⇑iP | Pb | 06 58 48.4 | +0.6 |
| | baz=34 | | | | | | |
| KBK | | | | ⇑iS | Sg | 06 59 19.9 | -0.7 |
| | baz=34 | | | | | | |
| BOOM | Boomskoye usch | 2.76 | 48 | ⇑eP | Pn | 06 58 50.9 | +1.4 |
| | baz=48 | | | | | | |
| BOOM | | | | ⇑iS | Sb | 06 59 28.6 | 0.0 |
| | baz=48 | | | | | | |
| USP | Ospenovka | 2.77 | 21 | ⇑iP | Pb | 06 58 51.9 | -2.3 |
| | baz=21 | | | | | | |
| USP | | | | ⇑iS | Sb | 06 59 29.3 | +0.7 |
| | baz=21 | | | | | | |
| ULHL | Ulahol | 2.80 | 55 | ⇑iP | Pb | 06 58 52.6 | -2.2 |
| | baz=55 | | | | | | |
| ULHL | | | | ⇑iS | Sb | 06 59 30.8 | +1.2 |
| | baz=55 | | | | | | |
| KK31 | Karatay Array | 3.12 | 322 | ⇑Pg | Pb | 06 59 00.3 | +0.2 |
| | 0.5nm,0.3s,baz=144,slow=14,SNR=9.7 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 06 59 41.0 | |
| | 2.8nm,0.5s,baz=139,slow=30,SNR=4.0 | | | | | | |
| DZET | Dzherino | 3.83 | 242 | ⇑Pn | Pn | 06 59 02.4 | -1.6 |
| | 0.6nm,0.3s | | | | | | |
| DZET | | | | ⇑Pg | Pb | 06 59 13.5 | +1.3 |
| | 2.5nm,0.7s | | | | | | |
| DZET | | | | ⇓Sn | Sn | 06 59 50.3 | +0.7 |
| | 1.8nm,0.4s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 07 00 05.8 | |
| | 5.7nm,0.5s | | | | | | |

**MEX 10 06:59:01.9**±0.6**, 18°.67N**×**102°.40W, h83**km±18km**, MD3.9, Michoacan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MMIG | Aquila | 0.97 | 247 | eP | Pn | 06 59 19.3 | -1.5 |
| MMIG | | | | eS | Sn | 06 59 33.4 | -1.5 |
| ZIIG | Zihuatanejo | 1.39 | 140 | eP | Pn | 06 59 25.8 | 0.0 |
| ZIIG | | | | eS | Sn | 06 59 42.0 | -1.9 |
| EZ5V | | 1.39 | 305 | eP | Pn | 06 59 24.7 | -1.5 |
| EZ5V | | | | eS | Sn | 06 59 42.8 | -1.8 |
| ARIG | Puente Sto Nin | 1.99 | 101 | eP | Pn | 06 59 34.3 | +0.5 |
| ARIG | | | | eS | Sn | 06 59 56.4 | -1.7 |

**IDC 10 07:04:32.1**±5.8**, 3°.74S**×**133°.35E, h0**km**, mb3.4**/2**, mb1 3.5**/4**, mb1mx3.3**/26**, mbtmp3.3**/4**, ML3.3**/2**, Error ellipse: s-maj=368.4km s-min=27.1km az=77.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 16.14 | 177 | Pn | Pn | 07 08 18.4 | -2.2 |
| | 0.1nm,0.3s,baz=357,slow=13,SNR=6.6 | | | | | | |
| WRA | | | | Sn | Sn | 07 11 08.3 | -12 |
| | 0.1nm,0.3s,baz=360,slow=23,SNR=5.0 | | | | | | |
| ASAR | Alice Springs | 19.82 | 179 | P | Pn | 07 09 05.5 | -0.6 |
| | 0.2nm,0.3s,baz=356,slow=11,SNR=17 | | | | | | |
| ASAR | | | | S | S | 07 12 33.0 | -16 |
| | 0.1nm,0.3s,baz=355,slow=29,SNR=2.8 | | | | | | |
| MKAR | Makanchi Array | 67.43 | 325 | P | P | 07 15 29.7 | 0.0 |
| | 0.2nm,0.3s,baz=112,slow=6.4,SNR=2.7 | | | | | | |
| KURBB | Kurchatov Arra | 71.56 | 327 | P | P | 07 15 55.0 | 0.0 |
| | 0.1nm,0.4s,baz=127,slow=5.3,SNR=2.7 | | | | | | |

*IDC 10 07:06:43.8±4.4, 50°.08N×174°.64W, h0km, mb3.5/5, mb1 3.7/6, mb1mx3.4/41, mbtmp3.6/6, ML2.7/1, Error ellipse: s-maj=118.3km s-min=27.2km az=175.0*
*NEIC 10 07:06:56.5, 51°.31N×175°.19W, h20km, ML2.8(AEIC), After AEIC.*
**ISC 10 07:06:54.9**±2.3**, 51°.2N**±0°.1×**175°.11W**±0°.05**, h24**km±13km**, n20, σ0s.70**/24**, mb3.9**/4**, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSMY | Great Sitkin M | 1.02 | 325 | P | Pb | 07 07 13.4 | -0.4 |
| GSMY | | | | S | Sn | 07 07 28.0 | +0.8 |
| GSCK | Great Sitkin C | 1.03 | 321 | P | Pb | 07 07 13.8 | -0.4 |
| ETKA | Kagalaska Isla | 1.04 | 309 | P | Pb | 07 07 13.8 | -0.4 |
| GSTD | Great Sitkin T | 1.06 | 323 | P | Pn | 07 07 14.1 | -0.3 |
| GSTR | Great Sitkin T | 1.06 | 326 | ePg | Pn | 07 07 14.3 | +0.1 |
| GSTR | | | | eSg | Sn | 07 07 29.1 | +0.8 |
| ATKA | Atka Island | 1.14 | 30 | P | Pn | 07 07 14.9 | -0.4 |
| ATKA | | | | S | Sb | 07 07 30.2 | 0.0 |
| ADAG | Mount Adagdak | 1.21 | 310 | P | Pb | 07 07 17.1 | 0.0 |
| KOFP | Korovin Flat P | 1.23 | 30 | P | Pb | 07 07 17.5 | 0.0 |
| KOKL | Mount Kliuchef | 1.24 | 27 | P | Pb | 07 07 17.8 | +0.1 |
| KOWE | Korovin West | 1.27 | 24 | P | Pb | 07 07 18.1 | 0.0 |
| KOWE | | | | S | Sb | 07 07 34.9 | +0.9 |
| KIRH | Kanaga Island | 1.42 | 300 | P | Pn | 07 07 19.5 | +0.3 |
| TAPA | Tanaga Point A | 1.79 | 291 | P | Pn | 07 07 24.8 | +0.4 |
| TAPA | | | | S | Sb | 07 07 48.1 | -1.1 |
| TAFP | Tanaga Falls P | 1.92 | 292 | P | Pn | 07 07 26.9 | +0.8 |
| GANE | Gareloi Northe | 2.37 | 286 | P | Pn | 07 07 34.0 | +1.7 |
| PETK | Petropavlovsk- | 16.76 | 287 | P | Pn | 07 10 48.3 | +0.5 |
| | 0.1nm,0.3s,baz=80,slow=16,SNR=2.5 | | | | | | |
| ILAR | Eielson Array | 19.96 | 36 | P | P | 07 11 25.1 | +0.2 |
| | 0.2nm,0.4s,baz=222,slow=9.5,SNR=5.6 | | | | | | |
| ULM | Lac du Bonnet | 47.81 | 58 | P | P | 07 15 25.4 | -4.7 |
| | 1.5nm,0.5s,baz=297,slow=16,SNR=3.0 | | | | | | |
| KURBB | Kurchatov Arra | 60.89 | 316 | P | P | 07 17 04.7 | -0.4 |
| | 0.5nm,0.6s,baz=41,slow=7.0,SNR=6.1 | | | | | | |
| MKAR | Makanchi Array | 61.92 | 311 | P | P | 07 17 11.2 | -1.1 |
| | 0.2nm,0.4s,baz=50,slow=9.5,SNR=3.3 | | | | | | |
| BVAR | Borovoye Array | 62.48 | 322 | P | P | 07 17 15.8 | -0.1 |
| | 0.4nm,0.4s,baz=56,slow=7.8,SNR=3.4 | | | | | | |

*NNC 10 07:17:27.6±1.0, 49°.95N×78°.45E, h0km, mb3.0, mpv2.8, Error ellipse: s-maj=18.7km s-min=3.9km az=84.0*
*ISCJB 10 07:17:29.4±0.7, 50°.02N±0°.04×78°.7E±0°.1, h10km, Error ellipse: s-maj=11.9km s-min=3.7km az=161.2*
*IDC 10 07:17:30.2±1.1, 50°.06N×78°.73E, h0km, mb1 2.8/2, mb1mx2.7/30, mbtmp2.8/2, ML2.2/2, Error ellipse: s-maj=13.9km s-min=7.0km az=66.0*
**ISC 10 07:17:30.8**±1.0**, 50°.02N**±0°.05×**78°.6E**±0°.1**, h10**km**, n16, σ1s.41**/29**, 4C-4D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUR07 | Kurchatov Arra | 0.56 | 353 | P | Pg | 07 17 40.5 | -1.3 |
| KUR07 | | | | S | Sb | 07 17 49.6 | -1.3 |
| KUR06 | Kurchatov Arra | 0.58 | 353 | P | Pg | 07 17 41.0 | -1.2 |
| KUR06 | | | | S | Sg | 07 17 49.7 | -0.1 |
| KUR14 | Kurchatov Arra | 0.59 | 358 | P | Pg | 07 17 40.9 | -1.4 |
| KUR14 | | | | S | Sg | 07 17 49.6 | -0.5 |
| KUR15 | Kurchatov Arra | 0.60 | 356 | P | Pg | 07 17 40.9 | -1.4 |
| KUR15 | | | | S | Sg | 07 17 50.3 | +0.1 |
| KURBB | Kurchatov Arra | 0.60 | 354 | ⇓P | Pg | 07 17 40.6 | -1.9 |
| | 30nm,0.8s | | | | | | |
| KURBB | | | | ⇑S | Sb | 07 17 50.7 | -1.3 |
| | 104nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 0.60 | 354 | Pg | Pg | 07 17 41.1 | -1.4 |
| | 0.7nm,0.3s,baz=165,slow=19,SNR=85 | | | | | | |
| KURBB | | | | Lg | Lg | 07 17 49.8 | |
| | 1.6nm,0.3s,baz=166,slow=31,SNR=44 | | | | | | |
| KUR16 | Kurchatov Arra | 0.61 | 352 | P | Pg | 07 17 41.3 | -1.3 |
| KUR16 | | | | S | Sg | 07 17 50.0 | -0.6 |
| KUR17 | Kurchatov Arra | 0.62 | 350 | P | Pg | 07 17 41.5 | -1.3 |
| KUR17 | | | | S | Sg | 07 17 50.8 | -0.1 |
| KUR05 | Kurchatov Arra | 0.62 | 355 | P | Pg | 07 17 41.4 | -1.4 |
| KUR05 | | | | S | Sg | 07 17 49.9 | -1.1 |
| KUR04 | Kurchatov Arra | 0.64 | 355 | P | Pg | 07 17 41.8 | -1.4 |
| KUR04 | | | | S | Sg | 07 17 50.6 | -1.0 |
| KURK | Kurchatov | 0.69 | 360 | ⇑P | Pg | 07 17 41.4 | -2.8 |
| | 20nm,0.7s | | | | | | |
| KURK | | | | ⇓S | Sg | 07 17 53.0 | -0.3 |
| | 55nm,0.7s | | | | | | |
| MK31 | Makanchi Array | 4.05 | 142 | ⇑Pn | Pn | 07 18 32.1 | -0.7 |
| | 0.4nm,0.5s,baz=66,slow=26,SNR=4.3 | | | | | | |
| MK31 | | | | ⇓Pg | Pb | 07 18 42.2 | 0.0 |
| | 1.2nm,0.6s,baz=332,slow=15,SNR=7.7 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 07 19 21.7 | +1.4 |
| | 0.3nm,0.5s,baz=328,slow=25,SNR=14 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 19 36.1 | |
| | 5.6nm,0.7s,baz=326,slow=26,SNR=6.0 | | | | | | |
| MKAR | Makanchi Array | 4.05 | 142 | Pn | Pn | 07 18 33.5 | +0.7 |
| | 0.2nm,0.3s,baz=335,slow=13,SNR=4.5 | | | | | | |
| MKAR | | | | Pg | Pb | 07 18 41.7 | -0.5 |
| | 0.4nm,0.3s,baz=326,slow=14,SNR=4.8 | | | | | | |
| MKAR | | | | Lg | Lg | 07 19 34.4 | |
| | 0.7nm,0.3s,baz=335,slow=26,SNR=16 | | | | | | |
| I46RU | ZALESOVO INFRA | 5.48 | 42 | i | | 07 51 00.0 | |
| | baz=223,slow=325,SNR=1.3 | | | | | | |
| ZALV | Zalesovo Beam | 5.48 | 42 | Pn | Pn | 07 18 53.6 | +1.2 |
| | 0.4nm,0.3s,baz=232,slow=15,SNR=6.9 | | | | | | |
| ZALV | | | | Pg | Pb | 07 19 08.5 | +1.9 |
| | 0.2nm,0.3s,baz=228,slow=15,SNR=3.0 | | | | | | |
| ZALV | | | | Lg | Lg | 07 20 23.9 | |
| | 0.2nm,0.3s,baz=209,slow=26,SNR=4.3 | | | | | | |
| BVAR | Borovoye Array | 5.96 | 303 | Sn | Sn | 07 20 10.2 | +3.0 |
| | 0.4nm,0.3s,baz=115,slow=24,SNR=5.4 | | | | | | |

*IDC 10 07:19:26.6±7.4, 31°.96S×179°.82E, h410km±81km, mb2.5/2, mb1 2.8/3, mb1mx2.7/17, mbtmp3.4/3, Error ellipse: s-maj=91.7km s-min=34.8km az=12.0*
**ISC 10 07:19:27.1**±1.8**, 31°.7S**±0°.1×**178°.6E**±0°.6**, h400**km**, n11, σ1s.33**/13**, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HAZ | Te Kaha | 6.07 | 186 | ePN | Pn | 07 21 01.3 | +0.9 |
| HAZ | | | | eSN | S | 07 22 14.0 | -2.5 |
| WMGZ | Waiomatatini S | 6.10 | 181 | ePN | Pn | 07 21 01.6 | +0.9 |
| PUZ | Puketiti | 6.36 | 182 | PN | P | 07 21 04.5 | +0.9 |
| PUZ | | | | SN | S | 07 22 20.0 | -2.3 |
| URZ | Urewera | 6.65 | 190 | P | Pn | 07 21 07.1 | +0.4 |
| | 1.4nm,0.3s,baz=268,slow=6.2,SNR=22 | | | | | | |
| URZ | | | | S | S | 07 22 28.2 | +0.1 |
| | 1.5nm,0.3s,baz=249,slow=24,SNR=14 | | | | | | |
| URZ | Urewera | 6.65 | 190 | ePN | P | 07 21 07.9 | +0.5 |
| URZ | | | | SN | S | 07 22 28.1 | 0.0 |
| MWZ | Matawai | 6.67 | 187 | ePN | P | 07 21 08.8 | +1.2 |
| KNZ | Kokohu | 7.34 | 186 | PN | P | 07 21 15.6 | +0.6 |
| ASAR | Alice Springs | 40.16 | 270 | P | P | 07 26 33.4 | +6.8 |
| | 0.4nm,0.9s,baz=105,slow=7.2,SNR=3.0 | | | | | | |
| WRA | Warramunga Arr | 41.27 | 276 | P | P | 07 26 42.8 | +7.2 |
| | 0.2nm,0.4s,baz=111,slow=8.1,SNR=14 | | | | | | |
| KURBB | Kurchatov Arra | 119.87 | 314 | PKP | PKPdf | 07 37 30.2 | 0.0 |
| | 0.2nm,0.6s,baz=118,slow=1.8,SNR=3.5 | | | | | | |
| FINES | FINESS Array B | 145.28 | 337 | PKPbc | PKPab | 07 38 17.4 | -1.3 |
| | 1.2nm,0.5s,baz=41,slow=3.5,SNR=12 | | | | | | |

*IDC 10 07:23:39.6±2.8, 38°.18N×71°.51E, h0km, mb3.7/2, mb1 3.7/5, mb1mx3.3/36, mbtmp3.6/5, ML3.3/3, Error ellipse: s-maj=67.4km s-min=17.1km az=137.0*
*ISCJB 10 07:23:40.9±1.2, 38°.20N±0°.09×71°.1E±0°.1, h10km, mb3.8/2, Error ellipse: s-maj=15.7km s-min=10.3km az=37.3*
*NNC 10 07:23:42.1±1.9, 38°.11N×71°.33E, h169km±15km, mb2.4, mpv3.5, Error ellipse: s-maj=16.1km s-min=5.9km az=161.0*
**ISC 10 07:23:42.4**±1.6**, 38°.1N**±0°.1×**71°.24E**±0°.07**, h10**km**, n15, σ1s.34**/19**, 7C-2D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.01 | 290 | ⇑P | Pb | 07 24 19.1 | 0.0 |
| | 43nm,0.4s | | | | | | |
| DZET | | | | ⇑S | Sg | 07 24 48.9 | +1.9 |
| | 139nm,0.5s | | | | | | |
| SFK | Sufi-Kurgan | 2.57 | 43 | ⇑P | Pn | 07 24 24.7 | +0.4 |
| | 20nm,0.3s | | | | | | |
| SFK | | | | ⇓S | Sn | 07 24 58.9 | +3.3 |
| | 33nm,0.3s | | | | | | |
| AML | Almayashu | 4.41 | 24 | P | Pn | 07 24 49.4 | -0.3 |
| | SNR=17 | | | | | | |
| MNAS | Manas | 4.45 | 12 | ⇑P | Pn | 07 24 49.7 | -0.3 |
| | 1.1nm,0.3s | | | | | | |
| MNAS | | | | ⇑S | Sn | 07 25 41.5 | -0.4 |
| | 4.6nm,0.4s | | | | | | |
| UCH | Uchtor | 4.79 | 30 | P | Pn | 07 24 55.0 | 0.0 |
| | SNR=5.9 | | | | | | |
| EKS2 | Erkin-Say | 4.91 | 22 | P | Pn | 07 24 56.7 | +0.3 |
| | SNR=14 | | | | | | |
| KK31 | Karatay Array | 4.99 | 354 | P | Pn | 07 24 57.2 | -0.1 |
| | 0.8nm,0.2s,baz=179,slow=13,SNR=74 | | | | | | |
| KK31 | | | | ⇑S | Sn | 07 25 54.7 | -0.4 |
| | 1.7nm,0.3s | | | | | | |
| AAK | Ala-Archa | 5.13 | 28 | Pn | Pn | 07 24 59.8 | +0.4 |
| | 2.2nm,0.3s,baz=161,slow=3.5,SNR=16 | | | | | | |
| AAK | | | | Sn | Sn | 07 26 00.1 | +1.4 |
| | baz=120,slow=20,SNR=1.7 | | | | | | |
| AAK | Ala-Archa | 5.13 | 28 | P | Pn | 07 24 59.5 | +0.1 |
| | SNR=6.4 | | | | | | |
| USP | Ospenovka | 5.69 | 25 | P | Pn | 07 25 06.9 | 0.0 |
| | SNR=11 | | | | | | |
| MKAR | Makanchi Array | 11.88 | 40 | Pn | Pn | 07 26 29.9 | -1.9 |
| | 0.2nm,0.3s,baz=230,slow=13,SNR=4.4 | | | | | | |
| AB31 | Akbulak array | 13.78 | 327 | ⇑P | Pn | 07 26 52.6 | -5.0 |
| | 0.2nm,0.4s,baz=150,slow=11,SNR=4.2 | | | | | | |
| AB31 | | | | ⇓S | Sn | 07 29 22.1 | -8.5 |
| | 0.5nm,0.5s,baz=158,slow=22,SNR=2.6 | | | | | | |
| ZALV | Zalesovo Beam | 18.35 | 26 | P | Pn | 07 27 53.9 | -2.9 |
| | 0.2nm,0.3s,baz=220,slow=11,SNR=4.6 | | | | | | |
| FINES | FINESS Array B | 36.24 | 325 | P | P | 07 30 45.0 | -0.2 |
| | 1.9nm,0.9s,baz=110,slow=12,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 65.96 | 268 | P | P | 07 34 29.1 | +0.1 |
| | 0.4nm,0.8s,baz=54,slow=4.8,SNR=3.2 | | | | | | |

*IDC 10 07:28:15.8±0.8, 29°.52N×69°.50E, h0km, mb3.7/15, mb1 3.8/17, mb1mx3.7/38, mbtmp3.7/17, ML3.6/2, MS3.3/2, Ms1 3.3/2, ms1mx2.9/38, Error ellipse: s-maj=20.7km s-min=16.3km az=21.0*
**ISC 10 07:28:20.2**±0.9**, 29°.89N**±0°.08×**69°.49E**±0°.06**, h15**km**, n25, σ1s.94**/25**, mb3.6**/15**, 3C, Pakistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KHET | Khetri | 5.83 | 107 | eP | Pn | 07 29 53.8 | +7.8 |
| KHET | | | | eS | Sb | 07 31 15.6 | +4.5 |
| KHET | | | | AML | AML | 07 31 30.8 | |
| | comp=N,33nm,0.5s | | | | | | |
| KHET | | | | AML | AML | 07 31 30.8 | |
| | comp=N,33nm,0.5s | | | | | | |
| DHRM | DHARAMSHALA | 6.30 | 66 | eP | Pn | 07 29 49.6 | -3.1 |
| DHRM | | | | eS | Sn | 07 31 05.3 | +0.7 |
| DHRM | | | | AML | AML | 07 31 49.9 | |
| | comp=E,143nm,0.8s | | | | | | |
| DHRM | | | | AML | AML | 07 31 50.3 | |
| | comp=N,158nm,0.6s | | | | | | |
| KUDL | Kundal | 6.38 | 104 | eP | Pn | 07 29 59.8 | +6.2 |
| KUDL | | | | eS | Sb | 07 31 28.6 | +1.7 |
| KUDL | | | | AML | AML | 07 31 47.0 | |
| | comp=N,35nm,0.6s | | | | | | |
| KUDL | | | | AML | AML | 07 31 47.7 | |
| | comp=E,33nm,0.6s | | | | | | |
| BHJ | Bhuj | 6.61 | 179 | ex | Sn | 07 31 04.4 | -7.6 |
| SMLA | Simla | 6.74 | 78 | eP | Pn | 07 29 58.6 | 0.0 |
| SMLA | | | | ex | Sn | 07 31 14.7 | -0.4 |
| SMLA | | | | AML | AML | 07 31 55.1 | |
| | comp=N,69nm,0.9s | | | | | | |
| SMLA | | | | AML | AML | 07 32 00.5 | |
| | comp=E,65nm,0.5s | | | | | | |
| NDI | New Delhi | 6.86 | 98 | eP | Pn | 07 30 04.0 | +3.8 |
| NDI | | | | eS | Sb | 07 31 37.0 | -3.8 |
| MNAS | Manas | 12.80 | 10 | ⇑Pn | Pn | 07 31 22.3 | +0.6 |
| | comp=E,5.6nm,1.4s | | | | | | |
| MNAS | | | | ⇑Sn | Sn | 07 33 40.9 | -3.1 |
| KK31 | Karatay Array | 13.21 | 3 | Pn | Pn | 07 31 28.0 | +0.8 |
| | comp=E,2.1nm,0.7s,baz=183,slow=12,SNR=18 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 07 33 51.3 | -2.5 |
| | comp=E,0.9nm,0.5s,baz=184,slow=24 | | | | | | |
| AAK | Ala-Archa | 13.34 | 16 | Pn | Pn | 07 31 30.2 | +1.1 |
| | comp=E,0.3nm,0.3s,baz=156,slow=2.0,SNR=9.4 | | | | | | |
| AAK | | | | Sn | Sn | 07 33 57.0 | -0.1 |
| | comp=E,0.1nm,0.3s,baz=315,slow=20,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 19.59 | 27 | P | P | 07 32 49.3 | +1.6 |
| | comp=E,0.1nm,0.3s,baz=213,slow=13,SNR=4.5 | | | | | | |
| MKAR | | | | LR | LR | 07 41 30.6 | |
| | comp=E,55nm,21.5s,baz=252,slow=40 | | | | | | |
| KURBB | Kurchatov Arra | 21.79 | 16 | P | P | 07 33 13.0 | +1.6 |
| | comp=E,6.0nm,0.9s,baz=208,slow=9.6,SNR=28 | | | | | | |
| AKTO | Aktyubinsk | 22.26 | 340 | P | P | 07 33 18.2 | +1.7 |
| | comp=E,0.6nm,0.3s,baz=247,slow=15,SNR=2.2 | | | | | | |
| AKTO | | | | LR | LR | 07 43 13.5 | |
| | comp=E,129nm,19.9s,baz=209,slow=40 | | | | | | |
| BVAR | Borovoye Array | 23.12 | 1 | P | P | 07 33 27.5 | +2.0 |
| | comp=E,1.3nm,0.7s,baz=171,slow=10,SNR=6.2 | | | | | | |
| ZALV | Zalesovo Beam | 26.49 | 21 | P | P | 07 33 58.6 | +1.9 |
| | comp=E,0.5nm,0.5s,baz=215,slow=17,SNR=1.9 | | | | | | |
| CMAR | Chiang Mai Arr | 29.10 | 106 | P | P | 07 34 18.7 | -1.7 |
| | comp=E,0.9nm,0.3s,baz=296,slow=11,SNR=4.4 | | | | | | |
| BRTR | Keskin Array B | 30.85 | 298 | P | P | 07 34 37.1 | +1.2 |
| | comp=E,1.6nm,0.8s,baz=106,slow=9.1,SNR=7.2 | | | | | | |
| SONM | Songino Array | 33.46 | 47 | P | P | 07 34 59.2 | +0.5 |
| | comp=E,0.4nm,0.6s,baz=251,slow=9.0,SNR=4.4 | | | | | | |
| AKASG | Malin Array Be | 36.48 | 316 | P | P | 07 35 24.4 | -0.1 |
| | comp=E,0.4nm,0.4s,baz=97,slow=7.6,SNR=4.0 | | | | | | |
| KSRS | Korea Array | 48.55 | 65 | P | P | 07 37 00.2 | -2.6 |
| | comp=E,0.9nm,0.6s,baz=285,slow=6.8,SNR=3.8 | | | | | | |
| NOA | NORSAR Array B | 49.05 | 327 | P | P | 07 37 05.6 | -0.7 |
| | comp=E,1.3nm,0.9s,baz=100,slow=7.8,SNR=2.9 | | | | | | |
| ESDC | Sonseca Array | 59.59 | 301 | P | P | 07 38 23.0 | -0.5 |
| | comp=E,0.9nm,0.8s,baz=61,slow=6.0,SNR=3.4 | | | | | | |
| TORD | Torodi Ar. Bea | 64.42 | 271 | P | P | 07 38 53.7 | -2.5 |
| | comp=E,0.4nm,0.9s,baz=34,slow=5.6,SNR=2.7 | | | | | | |
| WRA | Warramunga Arr | 79.69 | 120 | P | P | 07 40 24.0 | -3.6 |
| | comp=E,0.7nm,0.9s,baz=322,slow=5.2,SNR=5.5 | | | | | | |
| ILAR | Eielson Array | 81.47 | 15 | P | P | 07 40 36.2 | -0.2 |
| | comp=E,0.6nm,1.0s,baz=307,slow=3.3,SNR=5.5 | | | | | | |
| ASAR | Alice Springs | 81.61 | 123 | P | P | 07 40 35.5 | -2.4 |
| | comp=E,0.3nm,0.7s,baz=308,slow=5.5,SNR=5.0 | | | | | | |

*ISCJB 10 07:38:25.9±0.8, 39°.00N±0°.05×37°.40E±0°.06, h12km±10km, Error ellipse: s-maj=8.7km s-min=7.0km az=38.8*
*DDA 10 07:38:25.2, 39°.00N×37°.38E, h7km, Md2.8*
*CSEM 10 07:38:26.2±0.5, 38°.94N×37°.33E, h5km, MD2.8, Error ellipse: s-maj=12.0km s-min=8.3km az=60.0*
*ISK 10 07:38:28.4, 39°.08N×37°.06E, h5km, MD2.8*
**ISC 10 07:38:25.6**±1.3**, 39°.02N**±0°.03×**37°.30E**±0°.05**, h3**km±12km**, n9, σ0s.89**/17**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CUKAN | kangal_SIVAS | 0.33 | 24 | P | Pg | 07 38 31.9 | -0.1 |
| CUKAN | | | | S | Sg | 07 38 37.1 | +0.9 |
| DARE | Darende-Malaty | 0.47 | 162 | ePG | Pn | 07 38 41.4 | +2.1 |
| PINB | Pinarbasi | 0.78 | 244 | i P | Pg | 07 38 40.5 | 0.0 |
| PINB | | | | i S | Sb | 07 38 53.5 | +0.6 |
| PINB | Pinarbasi | 0.78 | 244 | P | Pg | 07 38 40.5 | 0.0 |
| PINB | | | | S | Sb | 07 38 53.5 | +0.6 |
| AKCD | Akcadag | 0.87 | 146 | i P | Pg | 07 38 41.8 | -0.4 |
| AKCD | | | | i S | Sg | 07 38 52.5 | -1.0 |
| AKCD | Akcadag | 0.87 | 146 | P | Pg | 07 38 41.8 | -0.4 |
| AKCD | | | | S | Sg | 07 38 52.5 | -1.0 |
| SARI | SarD1z-Kayseri | 0.92 | 229 | ePG | Pn | 07 38 45.4 | -0.1 |
| SARI | | | | eSG | Sn | 07 38 58.6 | -0.7 |
| SVSK | Karacayir | 0.93 | 346 | ePG | Pn | 07 38 45.7 | +0.2 |
| SVSK | | | | eSG | Sn | 07 38 58.5 | -0.9 |
| SVSK | Karacayir | 0.93 | 346 | ePg | Pn | 07 38 45.7 | +0.2 |
| SVSK | | | | eSg | Sn | 07 38 58.5 | -0.9 |

**IDC 10 07:47:55.5**±9.1**, 6°.27S**×**103°.10E, h0**km**, mb3.3**/3**, mb1 3.5**/3**, mb1mx3.3**/31**, mbtmp3.3**/3**, Error ellipse: s-maj=453.4km s-min=29.7km az=50.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 33.24 | 117 | P | P | 07 54 34.5 | -0.2 |
| | 0.3nm,0.9s,baz=290,slow=12,SNR=3.3 | | | | | | |
| ASAR | Alice Springs | 34.29 | 124 | P | P | 07 54 44.0 | +0.1 |
| | 0.5nm,1.1s,baz=286,slow=8.5,SNR=3.1 | | | | | | |
| MKAR | Makanchi Array | 55.97 | 343 | P | P | 07 57 35.6 | -0.1 |
| | 0.3nm,0.5s,baz=159,slow=7.8,SNR=4.2 | | | | | | |

*NIED 10 07:53:00, 31°.20N×142°.10E, h5km, Mw4.6 Best double couple: M₀8.00000×10^15 NP1:φs135.00000°, δ23.00000°, λ19.00000°. NP2:φs28.00000°, δ83.00000°, λ112.00000°.*
*IDC 10 07:53:13.3±0.6, 31°.14N×141°.85E, h0km, mb4.5/22, mb1 4.6/28, mb1mx4.5/35, mbtmp4.5/28, ML3.7/5, MS3.8/17, Ms1 3.9/17, ms1mx3.7/36, Error ellipse: s-maj=15.9km s-min=13.7km az=64.0*
*JMA 10 07:53:14.5±0.2, 31°.23N×142°.13E, h29km, M4.5*
*ISCJB 10 07:53:16.3±0.2, 31°.16N±0°.03×141°.65E±0°.04, h24km, mb4.7/91, MS3.9/10, Error ellipse: s-maj=4.6km s-min=3.4km az=149.5*
*MOS 10 07:53:17.3±1.1, 31°.06N×141°.65E, h37km, mb5.0/43, Error ellipse: s-maj=11.0km s-min=5.3km az=113.9*
*BJI 10 07:53:17.3, 31°.16N×141°.78E, h42km, mb4.6/45, mB4.8/33, Ms4.5/36, Ms7 4.2/35*
*NEIC 10 07:53:19.3±0.8, 31°.10N×141°.73E, h36km±7km, mb4.8/47, MW4.5(NIED), Error ellipse: s-maj=5.5km s-min=5.1km az=189.0*
**ISC 10 07:53:17.3**±0.4**, 31°.17N**±0°.04×**141°.86E**±0°.05**, h24**km**, n208, σ1s.67**/227**, mb4.8**/91**, MS3.9**/10**, 9C-8D, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHJ2 | Mitsune | 2.60 | 319 | P | Pn | 07 53 57.6 | -0.3 |
| JHJ | Hachijo jima 2 | 2.63 | 318 | Pn | Pn | 07 53 56.3 | -1.9 |
| | 13nm,0.3s,baz=270,slow=20,SNR=8.3 | | | | | | |
| JHJ | | | | Sn | Sn | 07 54 29.7 | +0.3 |
| | 49nm,0.3s,baz=57,slow=19,SNR=4.2 | | | | | | |
| JHJ | | | | LR | LR | 07 55 14.5 | |
| | comp=Z,2µm,18.4s,baz=86,slow=46 | | | | | | |
| BSO1 | Boso 1 | 3.56 | 348 | P | Pn | 07 54 09.7 | -0.8 |
| BSO1 | | | | S | Sn | 07 54 50.9 | -0.6 |
| BSO3 | Boso 3 | 3.80 | 343 | P | Pn | 07 54 13.2 | -0.9 |
| BSO4 | Boso 4 | 4.02 | 342 | P | Pn | 07 54 16.8 | -0.5 |
| CBIJ | Chichi jima | 4.07 | 176 | P | Pn | 07 54 17.5 | -0.6 |
| CBIJ | | | | S | Sn | 07 55 01.0 | -3.9 |
| CBIJ | Chichi jima | 4.07 | 176 | ePn | Pn | 07 54 18.4 | +0.3 |
| JHU | Hanno | 5.14 | 336 | P | Pn | 07 54 32.8 | -0.1 |
| JHU | | | | S | Sn | 07 55 31.6 | +0.1 |
| JYT | Yasato | 5.24 | 345 | P | Pn | 07 54 33.7 | -0.4 |
| JYT | | | | S | Sn | 07 55 32.9 | -0.8 |
| JRY | Ryogami san | 5.43 | 334 | P | Pn | 07 54 37.4 | +0.6 |
| JRY | | | | S | Sn | 07 55 38.3 | -0.3 |
| JHO | Hitachi | 5.54 | 349 | P | Pn | 07 54 36.5 | -1.7 |
| JHO | | | | S | Sn | 07 55 37.4 | -3.7 |
| JAG | Ashikaga | 5.62 | 340 | P | Pn | 07 54 39.2 | -0.1 |
| JAG | | | | S | Sn | 07 55 41.7 | -1.4 |
| MJAR | Matsushiro Arr | 6.16 | 331 | Pn | Pn | 07 54 47.5 | +0.7 |
| | 4.6nm,0.3s,baz=152,slow=11,SNR=89 | | | | | | |
| MJAR | | | | Sn | Sn | 07 55 58.9 | +2.3 |
| | baz=232,slow=33,SNR=3.0 | | | | | | |
| MJAR | | | | LR | LR | 07 57 26.4 | |
| | comp=Z,458nm,18.7s,baz=180,slow=41 | | | | | | |
| MAJO | Matsushiro | 6.16 | 331 | c iP | Pn | 07 54 47.9 | +1.0 |
| MAJO | Matsushiro | 6.16 | 331 | ePn | Pn | 07 54 48.1 | +1.2 |
| MAT | Matsushiro | 6.16 | 331 | P | Pn | 07 54 47.8 | +0.9 |
| MAT | | | | S | Sn | 07 55 55.2 | -1.4 |
| JNU | Nakatsue | 9.51 | 285 | Pn | Pn | 07 55 33.7 | +0.8 |
| | 0.2nm,0.3s,baz=140,slow=3.3,SNR=4.5 | | | | | | |
| JNU | | | | LR | LR | 07 59 13.4 | |
| | comp=Z,843nm,18.4s,baz=113,slow=38 | | | | | | |
| ASAJ | Asahikawa | 12.94 | 2 | Pn | Pn | 07 56 16.9 | -2.8 |
| | 1.2nm,0.3s,baz=222,slow=11,SNR=13 | | | | | | |
| ASAJ | | | | LR | LR | 08 02 06.2 | |
| | comp=Z,387nm,20.6s,baz=185,slow=41 | | | | | | |
| ASAJ | Asahikawa | 12.94 | 2 | P | Pn | 07 56 16.9 | -2.8 |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,387nm,20.6s | | | | | | |
| KSRS | Korea Array | 13.11 | 302 | Pn | Pn | 07 56 26.0 | +4.0 |
| | comp=Z,0.3nm,0.3s,baz=113,slow=13,SNR=11 | | | | | | |
| KSRS | | | | LR | LR | 08 01 29.3 | |
| | comp=Z,391nm,18.1s,baz=116,slow=38 | | | | | | |
| KSRS | Korea Array | 13.11 | 302 | P | Pn | 07 56 26.0 | +4.0 |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,391nm,18.1s | | | | | | |
| KSAR | Wonju Array Be | 13.13 | 302 | P | Pn | 07 56 26.0 | +3.6 |
| KSAR | Wonju Array Be | 13.13 | 302 | Pn | Pn | 07 56 26.0 | +3.6 |
| YUK | Yuzh-Kuril'sk | 13.23 | 13 | ⇓iP | P | 07 56 29.2 | -4.1 |
| YUK | | | | i S | Sn | 07 58 58.1 | +8.2 |
| YUK | | | | pmax | pmax | | |

YUK MLR MLR
comp=Z,405nm,2.1s
comp=Z,255nm,13.0s
**MSHR Mys Shultsa 14.24 326** ⇓ *e*P **Pn 07 56 40.0 +2.6**
**VLA Vladivostok 14.32 329** ⇓ *e*P **Pn 07 56 39.4 +0.8**
**KUR Kuril'sk 14.81 17** *d* iP **P 07 56 51.3 +0.5**
KUR *i* S S 07 59 38.7 -7.7
KUR pmax pmax
comp=Z,173nm,2.0s
KUR smax smax
comp=N,195nm,2.4s
KUR smax smax
comp=E,112nm,2.4s
KUR MLR MLR
comp=N,295nm,16.0s
KUR MLR MLR
comp=E,251nm,16.0s
KUR MLR MLR
comp=Z,304nm,16.0s
**USRK Ussuriysk Ar. 15.16 332** Pn **Pn 07 56 47.8 -2.1**
comp=Z,0.1nm,0.3s,baz=150,slow=13,SNR=6.7
USRK LR LR 08 02 39.0
comp=Z,344nm,18.4s,baz=136,slow=37
**YSS Yuzh-Sakhalins 15.78 2** *e*P **Pn 07 56 55.0 -2.9**
YSS pmax pmax
comp=Z,50nm,1.0s
YSS MLR MLR
comp=N,700nm,12.0s
YSS MLR MLR
comp=Z,400nm,12.0s
**YSS Yuzh-Sakhalins 15.78 2** *e*Pn **Pn 07 56 55.0 -2.9**
comp=Z,28nm,0.9s
**MDJ Mudanjiang 16.53 328** P **P 07 57 08.9 -1.0**
MDJ PMZ
comp=Z,11nm,0.8s
MDJ PMZ
comp=Z,55nm,4.1s
**GUMO Guam 17.71 170** P **Pn 07 57 21.0 -1.5**
comp=Z,0.6nm,0.3s,baz=192,slow=20,SNR=2.9
GUMO LR LR 08 04 00.0
comp=Z,271nm,18.2s,baz=350,slow=37
**GUMO Guam 17.71 170** P **Pn 07 57 21.0 -1.5**
**GUMO Guam 17.71 170** P **Pn 07 57 21.0 -1.5**
**HABR Khabarovsk 18.05 345** *e*P **Pn 07 57 26.0 -0.3**
HABR *e*S **Sn 08 00 47.6 +0.7**
HABR pmax pmax
comp=N,56nm,1.7s
HABR pmax pmax
comp=Z,113nm,1.7s
HABR pmax pmax
comp=E,20nm,1.1s
HABR MLR MLR
comp=Z,164nm,15.0s
**CN2 Changchun 18.09 319** *e*P **Pn 07 57 26.0 -0.9**
**SNY Shenyang 18.11 311** ⇓ P **Pn 07 57 26.5 -0.7**
SNY S Sn 08 00 38.7 -10
SNY PMZ
comp=Z,21nm,0.8s
SNY LN
comp=Z,530nm,14.4s
SNY LE
comp=Z,490nm,16.5s
SNY LZ
comp=Z,340nm,16.2s
**KLR Kul'dur 19.59 340** *e*P **P 07 57 39.2 -4.5**
**NJ2 Nanjing 19.61 279** *e*P **P 07 57 44.0 0.0**
NJ2 PMZ
comp=Z,30nm,0.7s
**YULB Yu-li 19.83 252** *e*P **P 07 57 46.0 -0.4**
comp=Z,28nm,0.9s
**SSLB Suanglung 19.93 253** *e*P **Pn 07 57 48.2 -1.1**
comp=Z,64nm,1.0s
**TPUB Ta-pu 20.42 253** *e*P **P 07 57 53.6 +0.7**
comp=Z,38nm,1.0s
**BJI Beijing 22.62 300** P **P 07 58 14.4 -2.0**
BJI S **S 08 02 19.1 -3.7**
BJI PMZ
comp=Z,26nm,0.8s
BJI LN
comp=Z,260nm,21.0s
BJI LE
comp=Z,510nm,17.6s
BJI LZ
comp=Z,430nm,18.5s
**WHN Wuhan 23.61 276** P P 07 58 19.8 -6.7
WHN LN
comp=Z,1μm,18.2s
WHN LE
comp=Z,1μm,17.4s
WHN LZ
comp=Z,1μm,18.4s
**HIA Hailar 24.59 324** *e*P **P 07 58 35.0 -0.5**
HIA pmax pmax
comp=Z,16nm,0.6s
**HIA Hailar 24.59 324** *e*P **P 07 58 35.0 -0.5**
comp=Z,16nm,0.6s
**PETK Petropavlovsk- 24.77 23** LR LR 08 10 14.0
comp=Z,91nm,19.2s,baz=228,slow=41
**PET Petropavlovsk 25.02 24** *e*P **P 07 58 41.6 +2.3**
PET pmax pmax
comp=Z,14nm,1.2s
**HHC Hu-ho-hao-te 26.23 300** *e*P **P 07 58 50.8 +0.2**
HHC PcP **PcP 08 02 20.5 +3.6**
HHC S S 08 03 12.7 -8.9
HHC SS **SnSn 08 04 29.2 +7.7**
HHC PMZ
comp=Z,14nm,0.7s
HHC PMZ
comp=Z,84nm,4.4s
HHC LN
comp=Z,240nm,10.2s
HHC LE
comp=Z,420nm,10.5s
HHC LZ
comp=Z,590nm,10.9s
**XAN Xi'an 27.83 285** P **P 07 59 02.7 -2.3**
XAN PMZ
comp=Z,8.0nm,1.0s
XAN PMZ
comp=Z,64nm,6.4s
**GYA Guiyang 31.11 270** *e*P **P 07 59 34.0 -0.2**
GYA PMZ
comp=Z,10.0nm,0.8s
**ULN Ulaanbaatar 31.28 312** *e*P **P 07 59 36.0 +0.5**
ULN pmax pmax
comp=Z,24nm,1.1s
**ULN Ulaanbaatar 31.28 312** *e*P **P 07 59 36.0 +0.5**
comp=Z,24nm,1.1s
**QIZ Qiongzhong 31.30 255** P **P 07 59 35.1 -0.6**
QIZ sP sP 07 59 51.2 +5.3
QIZ S **S 08 04 39.7 -1.6**
QIZ PMZ
comp=Z,16nm,2.1s
QIZ LZ
comp=Z,270nm,17.9s
**SONM Songino Array 31.69 312** P **P 07 59 39.4 +0.4**
comp=Z,12nm,0.9s,baz=116,slow=8.6,SNR=53
SONM LR LR 08 12 58.6
comp=Z,171nm,19.0s,baz=98,slow=37
**YAK Yakutsk 31.88 349** LR LR 08 12 42.1
comp=Z,69nm,18.6s,baz=176,slow=37
**LZH Lanzhou 31.89 289** *e*P **P 07 59 41.0 -0.1**
LZH pP pP 07 59 53.4 +5.2
LZH sP **sP 07 59 55.9 +4.7**
LZH PMZ
comp=Z,17nm,1.0s
LZH PMZ
comp=Z,65nm,4.3s
LZH LN
comp=Z,350nm,13.5s
LZH LE
comp=Z,340nm,14.0s
LZH LZ
comp=Z,360nm,15.5s
**SEY Seymchan 32.49 9** P **P 07 59 45.4 -0.3**
comp=Z,1.8nm,0.6s,baz=159,slow=8.9,SNR=6.4
**CD2 Chengdu 32.54 280** *e*P **P 07 59 46.7 0.0**
CD2 pP **pP 07 59 58.4 +4.6**
CD2 S **S 08 04 58.9 -1.8**
CD2 sS sS 08 05 19.2 +6.6
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
CD2 LN
comp=Z,430nm,11.2s
CD2 LE
comp=Z,440nm,11.7s
CD2 LZ
comp=Z,490nm,10.8s
**BOD Bodaibo 32.80 333** *e*P **P 07 59 45.8 -2.7**
BOD pmax pmax
comp=Z,6.0nm,1.6s
**TLY Talaya 34.68 317** *i* P **P 08 00 05.6 +0.6**
TLY pmax pmax
comp=Z,6.0nm,1.0s
**KMI Kunming 34.89 270** P **P 08 00 08.1 +0.8**
KMI PMZ
comp=Z,10.0nm,1.0s
KMI PMZ
comp=Z,51nm,4.6s
**GTA Gaotai 35.04 295** *e*P **P 08 00 06.5 -1.9**
GTA pP **pP 08 00 18.6 +3.0**
GTA sP sP 08 00 23.9 +5.4
GTA S S 08 05 32.8 -6.5
GTA sS **sS 08 05 54.4 +3.2**
GTA SS **SnSn 08 07 47.0 -8.7**
GTA PMZ
comp=Z,7.0nm,1.0s
GTA PMZ
comp=Z,100nm,7.4s
GTA LN
comp=Z,270nm,17.8s
GTA LE
comp=Z,440nm,17.8s
GTA LZ
comp=Z,480nm,16.4s
**HVS Khovu-Aksy 40.52 314** *d* iP **P 08 00 55.2 +0.7**
HVS pmax pmax
comp=Z,36nm,1.0s
**CMAR Chiang Mai Arr 40.72 262** P **P 08 00 54.9 -1.5**
comp=Z,0.9nm,0.3s,baz=57,slow=6.6,SNR=3.2
CMAR LR LR 08 19 14.9
comp=Z,172nm,18.9s,baz=68,slow=38
**WMQ Urumqi 44.06 302** P P 08 01 27.0 +3.6
WMQ S **S 08 07 56.0 +1.5**
WMQ SS **SS 08 11 06.0 -5.9**
WMQ PMZ
comp=Z,12nm,1.0s
WMQ PMZ
comp=Z,36nm,5.0s
WMQ LN
comp=Z,240nm,16.0s
WMQ LE
comp=Z,220nm,15.0s
WMQ LZ
comp=Z,87nm,15.0s
**MTN Manton Dam 44.95 195** *e*P **P 08 01 29.1 -1.5**
comp=Z,15nm,1.0s
**ZAA0 Zalesovo Array 46.29 317** *e*P **P 08 01 40.4 -0.5**
ZAA0 *e*PcP **PcP 08 03 15.8 -0.1**
**ZALV Zalesovo Beam 46.29 317** P **P 08 01 40.9 +0.1**
comp=Z,9.0nm,0.9s,baz=97,slow=6.1,SNR=34
ZALV PcP **PcP 08 03 15.7 -0.2**
comp=Z,4.9nm,0.7s,baz=114,slow=2.5,SNR=10.0
ZALV LR LR 08 20 30.3
comp=Z,88nm,19.0s,baz=72,slow=35
**NVS Novosibirsk 47.30 318** *e*P **P 08 01 47.4 -1.3**
NVS pmax pmax
comp=N,6.0nm,0.9s
NVS pmax pmax
comp=E,15nm,0.9s
NVS pmax pmax
comp=Z,20nm,0.9s
**MK01 Makanchi Array 47.74 307** *e*P **P 08 01 51.8 -0.5**
**MK31 Makanchi Array 47.74 307** *i* P **P 08 01 52.1 -0.2**
MK31 pmax pmax
comp=Z,8.0nm,0.8s
**MKAR Makanchi Array 47.74 307** P **P 08 01 52.1 -0.2**
comp=Z,7.2nm,0.9s,baz=91,slow=9.7,SNR=37
MKAR LR LR 08 21 09.7
comp=Z,115nm,19.3s,baz=72,slow=35
**MKAR Makanchi Array 47.74 307** *ce*P **P 08 01 52.0 -0.3**
MKAR pmax pmax
comp=Z,7.0nm,0.9s
**MKAR Makanchi Array 47.74 307** *e*P **P 08 01 51.8 -0.5**
**MAKZ Makanchi 47.96 307** *e*P **P 08 01 54.1 +0.1**
**KURK Kurchatov 49.99 312** P **P 08 02 09.5 0.0**
**KURK Kurchatov 49.99 312** P **P 08 02 09.5 0.0**
**PDGK Podgornoye 50.05 302** P **P 08 02 09.3 -0.7**
PDGK pmax pmax
comp=Z,16nm,1.1s
**KURBB Kurchatov Arra 50.05 312** P **P 08 02 09.5 -0.4**
comp=Z,10.0nm,0.8s,baz=88,slow=7.3,SNR=101
**WRAB Tennant Creek 51.32 189** *c* iP **P 08 02 18.6 -1.1**
WRAB pmax pmax
comp=Z,8.0nm,0.5s
**WRA Warramunga Arr 51.33 189** P **P 08 02 19.0 -0.8**
comp=Z,4.2nm,0.5s,baz=6.5,slow=7.7,SNR=56
**KDAK Kodiak Island 51.33 39** P **P 08 02 18.4 -1.0**
comp=Z,4.4nm,0.7s,baz=326,slow=11,SNR=4.9
**CAST Castle Rocks 51.95 31** *e*P **P 08 02 25.6 +1.6**
comp=Z,91nm,2.7s
**TKM2 Tokmak 2 52.92 303** *e*P **P 08 02 31.3 -0.6**
TKM2 pmax pmax
comp=Z,3.0nm,0.7s
**TKM2 Tokmak 2 52.92 303** *e*P **P 08 02 31.2 -0.6**
comp=Z,3.2nm,0.7s
**KSH Kashi 53.33 298** *e*P P 08 02 39.1 +4.3
KSH *es*P sP 08 02 57.0 +12
KSH PcS **PcS 08 07 44.4 +3.3**
KSH S **S 08 10 07.0 +1.8**
KSH ScS **ScS 08 12 22.4 -0.6**
KSH SS **SKiKP 08 13 47.5 -2.6**
KSH PMZ
comp=Z,4.0nm,1.0s
KSH PMZ
comp=Z,67nm,4.8s
KSH LN
comp=Z,180nm,8.4s
KSH LE
comp=Z,180nm,6.7s
KSH LZ
comp=Z,230nm,9.6s
**MCK McKinley 53.37 31** *e*P **P 08 02 36.2 +1.6**
MCK pmax pmax
comp=Z,26nm,1.6s
**MCK McKinley 53.37 31** *e*P **P 08 02 36.2 +1.6**
comp=Z,26nm,1.6s
**SML Sawmill 53.58 34** *e*P **P 08 02 37.1 +0.9**
SML pmax pmax
comp=Z,13nm,1.0s
**SML Sawmill 53.58 34** *e*P **P 08 02 37.1 +0.9**
comp=Z,13nm,1.0s
**AAK Ala-Archa 53.77 302** *de*P **P 08 02 38.0 0.0**
AAK pmax pmax
comp=Z,8.0nm,0.9s
**AAK Ala-Archa 53.77 302** *e*P **P 08 02 38.4 +0.3**
comp=Z,3.0nm,0.9s
**COLA College 53.91 30** ⇓ *e*P **P 08 02 39.8 +1.4**
COLA pmax pmax
comp=Z,2.0nm,0.8s
**HDA Harding Lake 54.27 30** *e*P **P 08 02 41.2 0.0**
comp=Z,91nm,2.7s
**OTUK Ortayu 54.30 310** P **P 08 02 41.5 -0.2**
OTUK pmax pmax
comp=Z,22nm,1.2s
**ILAR Eielson Array 54.31 30** P **P 08 02 41.0 -0.4**
comp=Z,2.9nm,0.9s,baz=264,slow=6.0,SNR=23
**IL1 Eielson Array 54.31 30** *e*P **P 08 02 40.1 -1.3**
**VOSK Vostochnaya 54.58 315** P **P 08 02 42.3 -1.3**
VOSK pmax pmax
comp=Z,9.0nm,0.9s
**CHKZ Chkalovo 54.70 316** P **P 08 02 43.0 -1.3**
CHKZ pmax pmax
comp=Z,9.0nm,1.0s
**BRVK Borovoye 54.96 316** *c* iP **P 08 02 46.2 -0.1**
BRVK pmax pmax
comp=Z,6.0nm,1.0s
**BRVK Borovoye 54.96 316** *e*P **P 08 02 46.4 +0.1**
comp=Z,5.5nm,0.9s
**AS01 Alice Springs 55.04 189** *e*P **P 08 02 46.1 -1.0**
**ASAR Alice Springs 55.05 189** P **P 08 02 46.7 -0.5**
comp=Z,3.4nm,0.6s,baz=3.3,slow=4.7,SNR=34
**SFK Sufi-Kurgan 55.07 299** P **P 08 02 47.3 -0.3**
SFK pmax pmax
comp=Z,7.0nm,0.9s
**MNAS Manas 55.24 303** P **P 08 02 48.9 +0.2**
MNAS pmax pmax
comp=Z,12nm,1.4s
**ZRNK Zerenda 55.74 316** P **P 08 02 51.1 -0.8**
ZRNK pmax pmax
comp=Z,7.0nm,0.8s
**KK31 Karatay Array 56.54 304** *i* P **P 08 02 57.5 -0.3**
KK31 pmax pmax
comp=Z,15nm,0.9s
**KKAR Karatay Array 56.54 304** *e*P **P 08 02 58.1 +0.3**
**KKAR Karatay Array 56.54 304** *e*P **P 08 02 58.1 +0.3**
**DZET Dzherino 58.88 299** P **P 08 03 15.6 +1.2**
DZET pmax pmax
comp=Z,7.0nm,0.6s
**INK Inuvik 59.47 25** P **P 08 03 16.9 -0.9**
comp=Z,2.4nm,0.7s,baz=319,slow=9.3,SNR=3.1
**SVE Sverdlovsk 59.86 321** *e*P **P 08 03 21.1 +0.3**
SVE pmax pmax
comp=Z,24nm,1.1s
**ARU Arti 61.07 321** *c i* P **P 08 03 28.8 -0.2**
ARU 08 04 08.4
ARU 08 05 39.1
ARU S **S 08 11 47.2 +0.9**
ARU SS **SS 08 15 46.1 +0.5**
ARU pmax pmax
comp=Z,47nm,1.7s
**ARU Arti 61.07 321** *e*P **P 08 03 29.0 0.0**
comp=Z,49nm,1.4s
**AB31 Akbulak array 62.09 313** *i* P **P 08 03 35.6 -0.5**
AB31 pmax pmax
comp=Z,3.0nm,0.4s
**ABKAR Akbulak array 62.09 313** *e*P **P 08 03 35.9 -0.1**
**AKTO Aktyubinsk 62.95 314** P **P 08 03 41.1 -0.7**
AKTO pmax pmax
comp=Z,12nm,1.2s
**GEYT Alibeck 67.10 301** P **P 08 04 09.1 0.0**
comp=Z,7.2nm,1.0s,baz=90,slow=1.5,SNR=9.2
**YKA Yellowknife Ar 68.72 29** P **P 08 04 19.5 +0.9**
comp=Z,1.9nm,0.7s,baz=295,slow=5.9,SNR=3.9
**KLMR Klimovskoe 68.94 329** *e*P **P 08 04 19.0 -1.1**
KLMR pmax pmax
comp=Z,48nm,2.5s
**ARCES ARCESS Array B 69.62 340** P **P 08 04 24.3 +0.1**
comp=Z,5.9nm,0.9s,baz=41,slow=8.1,SNR=6.1
**OBN Obninsk 73.05 325** LR LR 08 39 28.3
comp=Z,119nm,18.5s,baz=89,slow=38
**OBN Obninsk 73.05 325** ⇓ *e*P **P 08 04 45.4 +0.3**
OBN pmax pmax
comp=Z,29nm,1.7s
OBN MLR MLR
comp=Z,137nm,15.0s
**YBH Yreka Blue Hor 73.69 51** LR LR 08 34 34.7
comp=Z,71nm,18.4s,baz=342,slow=34
**UOSS Wadi Hilu 74.04 290** *e*P **P 08 04 51.9 +0.3**
comp=Z,7.7nm,1.0s
**FINES FINESS Array B 74.19 333** P **P 08 04 51.0 -0.7**
comp=Z,4.9nm,0.9s,baz=90,slow=7.6,SNR=6.7
**FINES FINESS Array B 74.19 333** *i* P **P 08 04 52.2 +0.5**
FINES pmax pmax
comp=Z,5.0nm,0.9s
**KBZ Khabaz 75.05 312** P **P 08 04 56.8 -0.2**
comp=Z,7.7nm,1.0s,baz=41,slow=5.7,SNR=7.2
**KIV Kislovodsk 75.08 312** P **P 08 04 56.0 -1.3**
KIV *e* 08 05 08.8
KIV pmax pmax
comp=Z,17nm,1.3s
**SWMT Swartz Lake 76.31 43** *e*P **P 08 05 05.4 +1.1**
**SLMT Seeley Lake 76.75 43** *e*P **P 08 05 07.6 +0.7**
**CMB Columbia Colle 77.02 53** *e*P **P 08 05 09.4 +1.0**
CMB pmax pmax
comp=Z,6.0nm,1.0s
**CMB Columbia Colle 77.02 53** *e*P **P 08 05 09.4 +1.0**
comp=Z,5.9nm,1.0s
**MFID Camas Ranch 77.32 47** *e*P **P 08 05 11.4 +1.2**
comp=Z,53nm,2.3s
**HRY Holter Researc 77.99 42** *e*P **P 08 05 15.0 +1.2**
**LRM Limekiln Ridge 78.11 43** *e*P **P 08 05 15.9 +1.2**
**HLID Hailey 78.12 46** *e*P **P 08 05 16.4 +1.7**
comp=Z,58nm,2.6s
**NV01 Mina Array Sit 78.24 52** *e*P **P 08 05 16.5 +1.0**
**NVAR Mina Array Bea 78.24 52** P **P 08 05 16.5 +1.0**
comp=Z,2.5nm,0.6s,baz=289,slow=6.3,SNR=24
NVAR LR LR 08 37 23.0
comp=Z,136nm,19.8s,baz=317,slow=34
**BOZ Bozeman (W) 78.69 43** *e*P **P 08 05 19.0 +1.2**
BOZ pmax pmax
comp=Z,70nm,2.8s
**BOZ Bozeman (W) 78.69 43** *e*P **P 08 05 19.0 +1.2**
comp=Z,70nm,2.8s
**AKASG Malin Array Be 79.19 323** P **P 08 05 19.9 -0.2**
comp=Z,2.6nm,0.7s,baz=48,slow=5.6,SNR=14
**AKASG Malin Array Be 79.19 323** *ce*P **P 08 05 19.8 -0.3**
AKASG pmax pmax
comp=Z,3.0nm,0.7s
**AK11 Malin Array Si 79.23 323** *e*P **P 08 05 20.5 +0.1**
**HFS Hagfors 79.59 336** P **P 08 05 21.7 -0.5**
comp=Z,3.0nm,0.8s,baz=72,slow=4.8,SNR=6.2
**NB2 NORSAR Subarra 79.74 338** P **P 08 05 22.7 -0.3**
comp=Z,1.1nm,0.6s,baz=41,slow=5.3
**NOA NORSAR Array B 79.74 338** P **P 08 05 22.7 -0.3**
comp=Z,2.9nm,0.9s,baz=42,slow=5.4,SNR=5.7
NOA LR LR 08 43 57.2
comp=Z,74nm,19.9s,baz=225,slow=38
**H17A Grant Village 80.00 44** *e*P **P 08 05 28.2 +3.1**
comp=Z,7.2nm,0.9s
**IMW Indian Meadow 80.06 45** *e*P **P 08 05 27.3 +1.8**
comp=Z,4.8nm,0.8s
**HVU Hansel Valley 80.10 47** *e*P **P 08 05 27.1 +1.6**
HVU pmax pmax
comp=Z,6.0nm,1.0s
**HVU Hansel Valley 80.10 47** *e*P **P 08 05 27.1 +1.6**
comp=Z,6.0nm,1.0s
**R11A Troy Canyon, C 80.11 51** *e*P **P 08 05 27.1 +1.4**
comp=Z,37nm,2.7s
**FXWY Fox Creek 80.15 45** *e*P **P 08 05 27.4 +1.6**
comp=Z,75nm,2.9s
**MOOW Moose Ponds 80.26 45** *e*P **P 08 05 28.0 +1.6**
comp=Z,54nm,2.7s
**TPAW Teton Pass 80.28 45** *e*P **P 08 05 28.3 +1.7**
comp=Z,46nm,2.1s
**TPNV Topopah Spring 80.40 53** *e*P **P 08 05 28.1 +0.8**
TPNV pmax pmax
comp=Z,5.0nm,0.9s
**TPNV Topopah Spring 80.40 53** *e*P **P 08 05 28.1 +0.8**
comp=Z,5.1nm,0.9s
**LOHW Long Hollow 80.42 45** *e*P **P 08 05 29.1 +1.8**
comp=Z,14nm,1.6s
**SPUT South Promonto 80.56 47** *e*P **P 08 05 29.8 +1.8**
comp=Z,36nm,2.2s
**DUG Dugway 80.94 48** *e*P **P 08 05 30.7 +0.7**
DUG pmax pmax
comp=Z,4.0nm,0.8s
**DUG Dugway 80.94 48** *e*P **P 08 05 30.7 +0.7**
comp=Z,3.9nm,0.8s
**HWUT Hardware Ranch 80.95 47** *e*P **P 08 05 31.1 +1.0**
comp=Z,7.8nm,1.0s
**TCUT Toone Canyon 81.32 47** *e*P **P 08 05 33.9 +1.7**
comp=Z,7.0nm,0.9s
**CTU Camp Tracy 81.34 48** *e*P **P 08 05 33.8 +1.6**
comp=Z,5.0nm,0.8s
**BW06 Boulder Array 81.53 45** *e*P **P 08 05 33.7 +0.4**
**NLU North Lily Min 81.54 48** *e*P **P 08 05 34.5 +1.2**
comp=Z,4.5nm,1.0s
**CCUT Cedar City 82.02 51** *e*P **P 08 05 37.5 +1.6**
comp=Z,32nm,2.4s
**BAR Barrett 82.36 57** *e*P P 08 05 42.6 +5.1
comp=Z,4.1nm,0.9s
**P17A Butcher Ranch, 82.67 48** *e*P **P 08 05 40.8 +1.6**
comp=Z,6.4nm,0.8s
**P18A Preston Nutter 82.89 48** *e*P **P 08 05 38.2 -2.4**
comp=Z,4.9nm,0.9s
**SRU San Rafael 83.01 48** *e*P **P 08 05 42.0 +1.0**
SRU pmax pmax
comp=Z,5.0nm,0.8s
**SRU San Rafael 83.01 48** *e*P **P 08 05 42.0 +1.0**
comp=Z,5.4nm,0.8s
**BRTR Keskin Array B 83.05 312** P **P 08 05 41.8 +0.6**
comp=Z,7.0nm,0.9s,baz=111,slow=4.0,SNR=19
**BRTR Keskin Array B 83.05 312** *ce*P **P 08 05 41.7 +0.6**
BRTR pmax pmax
comp=Z,7.0nm,0.9s
**BUR04 Bucovina Ar. S 83.16 322** *e*P **P 08 05 41.7 +0.2**
**RAYN Ar Rayn 83.27 293** *e*P **P 08 05 43.4 +1.0**
comp=Z,62nm,1.9s
**BR231 Keskin MP Arra 83.52 313** *e*P **P 08 05 41.4 -2.1**
**KOLS Kolonicke sedl 83.80 325** *e*P **P 08 05 45.6 +1.0**
KOLS pmax pmax
comp=Z,3.0nm,1.1s
**KOLS Kolonicke sedl 83.80 325** *e*P **P 08 05 45.6 +1.0**
**O20A White River Ci 83.86 46** *e*P **P 08 05 46.6 +1.2**
comp=Z,69nm,2.3s

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| STHS | Stebnicka Huta | 83.98 | 326 | eP | P | 08 05 47.0 | +1.4 |
| STHS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| STHS | Stebnicka Huta | 83.98 | 326 | eP | P | 08 05 47.0 | +1.4 |
| OJC | Ojcow | 84.12 | 327 | eP | P | 08 05 46.5 | +0.2 |
| OJC | | | | pmax | pmax | | |
| | comp=Z,29nm,1.6s | | | | | | |
| OJC | Ojcow | 84.12 | 327 | eP | P | 08 05 46.5 | +0.2 |
| | comp=Z,29nm,1.6s | | | | | | |
| PV09 | Paradox Valley | 84.25 | 48 | eP | P | 08 05 49.1 | +1.6 |
| PV10 | Paradox Valley | 84.38 | 48 | eP | P | 08 05 49.3 | +1.2 |
| WUAZ | Wupatki | 84.48 | 52 | eP | P | 08 05 49.8 | +1.2 |
| | comp=Z,5.3nm,0.9s | | | | | | |
| PV05 | Paradox Valley | 84.52 | 49 | eP | P | 08 05 49.8 | +1.0 |
| N23A | Red Feather La | 84.82 | 45 | eP | P | 08 05 52.2 | +1.9 |
| | comp=Z,14nm,1.4s | | | | | | |
| PV01 | Paradox Valley | 84.82 | 48 | eP | P | 08 05 51.2 | +0.8 |
| KRLC | Kraliky | 85.62 | 328 | eP | P | 08 05 54.1 | +0.3 |
| KRLC | | | | e | | 08 06 08.4 | |
| KRLC | Kraliky | 85.62 | 328 | eP | P | 08 05 54.1 | +0.3 |
| KRLC | | | | ex | x | 08 05 58.1 | |
| KRLC | | | | esP | sP | 08 06 08.4 | +3.9 |
| DPC | Dobruska-Polom | 85.63 | 328 | eP | P | 08 05 53.9 | 0.0 |
| DPC | | | | e | | 08 06 10.1 | |
| DPC | Dobruska-Polom | 85.63 | 328 | eP | P | 08 05 53.9 | 0.0 |
| DPC | | | | ePCP | PcP | 08 05 57.6 | +0.8 |
| DPC | | | | esP | sP | 08 06 10.1 | +5.6 |
| VYHS | Vyhne | 85.77 | 326 | eP | P | 08 05 55.0 | +0.4 |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| VYHS | Vyhne | 85.77 | 326 | eP | P | 08 05 55.0 | +0.4 |
| S22A | 4UR Ranch, Cre | 86.16 | 48 | eP | P | 08 05 58.9 | +1.8 |
| | comp=Z,64nm,2.8s | | | | | | |
| CLL | Collm | 86.37 | 331 | eP | P | 08 05 58.0 | +0.6 |
| CLL | Collm | 86.37 | 331 | eP | P | 08 05 58.0 | +0.6 |
| GOPC | GO Pecny, Ondr | 86.63 | 329 | eP | P | 08 05 55.7 | -3.1 |
| GOPC | GO Pecny, Ondr | 86.63 | 329 | eP | P | 08 05 55.7 | -3.1 |
| GOPC | | | | ePCP | PcP | 08 05 58.8 | -2.3 |
| ANMO | Albuquerque | 88.08 | 50⇓ | eP | P | 08 06 08.7 | +2.4 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,9.0nm,2.5s | | | | | | |
| FUORN | Ofenpass-Fuorn | 91.10 | 329 | eP | P | 08 06 20.6 | +0.3 |
| | comp=Z,35nm,1.8s | | | | | | |
| TX31 | Lajitas Ar. Si | 93.39 | 53 | eP | P | 08 06 32.1 | +1.1 |
| TXAR | Lajitas Array | 93.39 | 53 | P | P | 08 06 32.0 | +1.0 |
| | comp=Z,2.4nm,0.7s,baz=298,slow=3.1,SNR=27 | | | | | | |
| TORD | Torodi Ar. Bea | 121.66 | 313 | PKP | PKPdf | 08 12 08.5 | -1.3 |
| | comp=Z,0.7nm,0.9s,baz=356,slow=4.3,SNR=2.9 | | | | | | |
| LPAZ | La Paz | 148.93 | 68 | PKPbc | PKPbc | 08 13 03.9 | -0.6 |
| | comp=Z,2.4nm,0.8s,baz=67,slow=3.4,SNR=12 | | | | | | |

*CSEM **10** 08:16:57.4±0.3, 40°.47N×21°.86E, h15km, MD2.9, Error ellipse: s-maj=8.6km s-min=7.6km az=5.0*

**ATH 10 08:16:57.9, 40°.45N×21°.86E, h5km±1km, MD2.9/6, Greece**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KZN | Kozani | 0.16 | 205 | ePG | Pg | 08 17 01.1 | -0.1 |
| KZN | Kozani | 0.16 | 205 | ePg | Pg | 08 17 01.1 | -0.1 |
| FNA | Florina | 0.50 | 312 | ePB | Pg | 08 17 07.8 | +0.2 |
| FNA | | | | eSB | Sg | 08 17 15.0 | +0.8 |
| FNA | Florina | 0.50 | 312 | ePb | Pg | 08 17 07.8 | +0.2 |
| FNA | | | | eSb | Sg | 08 17 15.0 | +0.8 |
| LIT | Litokhoron | 0.59 | 126 | ePB | Pg | 08 17 09.4 | 0.0 |
| LIT | | | | eSB | Sb | 08 17 18.7 | -0.9 |
| LIT | Litokhoron | 0.59 | 126 | ePb | Pg | 08 17 09.4 | 0.0 |
| LIT | | | | eSb | Sb | 08 17 18.7 | -0.9 |
| NEST | Nestorio | 0.62 | 267 | ePB | Pg | 08 17 10.2 | +0.2 |
| NEST | Nestorio | 0.62 | 267 | ePb | Pg | 08 17 10.2 | +0.2 |
| GRG | Griva | 0.65 | 39 | ePG | Pg | 08 17 10.4 | -0.1 |
| GRG | Griva | 0.65 | 39 | ePg | Pg | 08 17 10.4 | -0.1 |
| THE | Thessaloniki | 0.86 | 77 | ePB | Pg | 08 17 14.7 | +0.3 |
| THE | Thessaloniki | 0.86 | 77 | ePb | Pg | 08 17 14.7 | +0.3 |
| THL | Klokotos Trika | 0.89 | 172 | ePB | Pg | 08 17 15.2 | +0.2 |
| THL | Klokotos Trika | 0.89 | 172 | ePb | Pg | 08 17 15.2 | +0.2 |
| AGG | Agios Georgios | 1.47 | 166 | ePB | Pb | 08 17 25.9 | +0.1 |
| AGG | Agios Georgios | 1.47 | 166 | ePb | Pb | 08 17 25.9 | +0.1 |

*CSEM **10** 08:17:10.2±0.1, 40°.51N×23°.46E, h15km, MD2.8, Error ellipse: s-maj=3.1km s-min=2.1km az=54.0*
*THE **10** 08:17:11.0, 40°.53N×23°.49E, h6km±6km, ML1.9/4, Error ellipse: s-maj=6.1km s-min=0.5km az=224.0*

**ATH 10 08:17:10.8, 40°.53N×23°.48E, h10km±2km, MD2.8/6, Greece**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PLG | Polygyros | 0.16 | 190 | ePG | Pg | 08 17 14.5 | +0.1 |
| PLG | | | | eSG | Sg | 08 17 16.1 | -0.7 |
| PLG | Polygyros | 0.16 | 190 | P | Pg | 08 17 14.5 | +0.1 |
| PLG | | | | S | Sg | 08 17 16.7 | -0.1 |
| PLG | Polygyros | 0.16 | 190 | P | Pg | 08 17 14.5 | +0.1 |
| PLG | | | | eSg | Sg | 08 17 16.1 | -0.7 |
| PLG | | | | S | Sg | 08 17 16.7 | -0.1 |
| HORT | Hortiatis | 0.30 | 283 | ePG | Pg | 08 17 16.9 | 0.0 |
| HORT | | | | eSG | Sg | 08 17 21.2 | +0.2 |
| HORT | Hortiatis | 0.30 | 283 | P | Pg | 08 17 17.0 | +0.1 |
| HORT | | | | S | Sg | 08 17 20.9 | -0.1 |
| HORT | Hortiatis | 0.30 | 283 | ePg | Pg | 08 17 16.9 | 0.0 |
| HORT | | | | S | Sg | 08 17 20.9 | -0.1 |
| HORT | | | | eSg | Sb | 08 17 21.2 | -2.3 |
| HORT | Hortiatis | 0.30 | 283 | P | Pg | 08 17 17.0 | +0.1 |
| SOH | Sokhos | 0.31 | 342 | ePB | Pg | 08 17 17.2 | +0.1 |
| SOH | | | | eSB | Sg | 08 17 21.4 | +0.1 |
| SOH | Sokhos | 0.31 | 342 | P | Pg | 08 17 17.2 | +0.1 |
| SOH | | | | S | Sg | 08 17 21.6 | +0.3 |
| SOH | Sokhos | 0.31 | 342 | ePb | Pg | 08 17 17.2 | +0.1 |
| SOH | | | | S | Sg | 08 17 21.6 | +0.3 |
| SOH | Sokhos | 0.31 | 342 | P | Pg | 08 17 17.2 | +0.1 |
| OUR | Ouranopolis | 0.43 | 117 | ePB | Pg | 08 17 19.3 | +0.1 |
| OUR | | | | eSB | Sg | 08 17 25.4 | +0.5 |
| OUR | Ouranopolis | 0.43 | 117 | P | Pg | 08 17 19.3 | +0.1 |
| OUR | | | | S | Sg | 08 17 25.1 | +0.2 |
| OUR | Ouranopolis | 0.43 | 117 | P | Pg | 08 17 19.3 | +0.1 |
| OUR | | | | S | Sg | 08 17 25.1 | +0.2 |
| OUR | | | | eSb | Sb | 08 17 25.4 | -1.6 |
| SRS | Serrai | 0.59 | 8 | ePB | Pg | 08 17 22.1 | -0.3 |
| SRS | Serrai | 0.59 | 8 | ePb | Pg | 08 17 22.1 | -0.3 |
| PAIG | Paliouri | 0.62 | 166 | ePG | Pg | 08 17 22.2 | -0.6 |
| PAIG | Paliouri | 0.62 | 166 | P | Pg | 08 17 22.2 | -0.6 |
| PAIG | Paliouri | 0.62 | 166 | ePb | Pg | 08 17 22.2 | -0.6 |
| PAIG | Paliouri | 0.62 | 166 | P | Pg | 08 17 22.2 | -0.6 |
| KNT | Kendrikon | 0.77 | 325 | P | Pg | 08 17 25.4 | -0.3 |
| KNT | Kendrikon | 0.77 | 325 | P | Pg | 08 17 25.4 | -0.3 |
| NVR | Nevrokopi | 0.87 | 19 | ePB | Pg | 08 17 27.5 | -0.1 |
| NVR | | | | eSB | Sg | 08 17 39.4 | +0.4 |
| NVR | Nevrokopi | 0.87 | 19 | P | Pg | 08 17 27.4 | -0.2 |
| NVR | | | | S | Sg | 08 17 39.4 | +0.4 |
| NVR | Nevrokopi | 0.87 | 19 | ePb | Pg | 08 17 27.5 | -0.1 |
| NVR | | | | S | Sg | 08 17 39.4 | +0.4 |
| NVR | Nevrokopi | 0.87 | 19 | P | Pg | 08 17 27.4 | -0.2 |

**DJA 10 08:31:08.5±1.1, 3°S±3°×12°3E±°, h28km±17km, M3.8/7, MLv3.8/7, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDI | Kendari | 1.25 | 187 | P | Pn | 08 31 29.5 | -0.6 |
| LUWI | Luwuk | 1.66 | 360 | P | Pn | 08 31 35.6 | -0.1 |
| LUWI | | | | S | Sn | 08 31 56.9 | +0.8 |
| APSI | Ampana | 2.12 | 328 | P | Pn | 08 31 42.2 | +0.2 |
| APSI | | | | S | Sn | 08 32 08.5 | +1.1 |
| TTSI | Tana Toraja | 2.98 | 264 | P | Pn | 08 31 53.6 | -0.3 |
| TTSI | | | | S | Sn | 08 32 29.8 | +1.1 |
| SPSI | Sidrap Palu | 3.25 | 247 | P | Pn | 08 31 58.9 | +1.2 |
| SPSI | | | | S | Sn | 08 32 36.6 | +1.1 |
| SANI | Sanana | 3.27 | 79 | P | Pn | 08 31 57.8 | -0.2 |
| PCI | Palu | 3.44 | 301 | P | Pn | 08 32 02.3 | +1.9 |
| MPSI | Mapaga | 4.18 | 316 | P | Pn | 08 32 11.0 | +0.6 |

*NEIC **10** 08:35:35.9, 50°.52N×130°.30W, h10km, MW4.1(OTT), After OTT.*

**PGC 10 08:35:35.9±1.5, 50°.52N×130°.30W, h10km, ML3.5/27, Mw4.1, 1D, 204km west of Pt. Hardy, Bc Vancouver Island Region, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HOLB | Holberg | 1.39 | 84 | Pn | Pn | 08 35 59.2 | -2.2 |
| HOLB | | | | Sn | Sb | 08 36 15.7 | -4.1 |
| HOLB | Holberg | 1.39 | 84 | Pn | Pn | 08 35 59.2 | -2.2 |
| HOLB | | | | Sn | Sb | 08 36 15.7 | -4.1 |
| BPBC | Brooks Peninsu | 1.66 | 102 | Pn | Pn | 08 36 02.5 | -2.7 |
| BPBC | | | | Sn | Sn | 08 36 21.2 | -5.5 |
| BPBC | Brooks Peninsu | 1.66 | 102 | Pn | Pn | 08 36 02.5 | -2.7 |
| BPBC | | | | Sn | Sn | 08 36 21.2 | -5.5 |
| PHC | Port Hardy | 1.84 | 83 | Pn | Pn | 08 36 05.7 | -1.9 |
| PHC | | | | Sn | Sn | 08 36 26.6 | -4.2 |
| PHC | Port Hardy | 1.84 | 83 | Pn | Pn | 08 36 05.7 | -1.9 |
| PHC | | | | Sn | Sn | 08 36 26.6 | -4.2 |
| MAYB | Maynard | 2.00 | 92 | Pn | Pn | 08 36 07.9 | -2.1 |
| MAYB | Maynard | 2.00 | 92 | Pn | Pn | 08 36 07.9 | -2.1 |
| FHRB | Fair Harbour | 2.10 | 102 | Pn | Pn | 08 36 08.9 | -2.1 |
| FHRB | | | | Sn | Sn | 08 36 32.7 | -4.4 |
| EDB | Eliza Dome | 2.15 | 106 | Pn | Pn | 08 36 09.7 | -2.1 |
| EDB | | | | Sn | Sn | 08 36 35.2 | -3.3 |
| EDB | Eliza Dome | 2.15 | 106 | Pn | Pn | 08 36 09.7 | -2.1 |
| EDB | | | | Sn | Sn | 08 36 35.2 | -3.3 |
| BBB | Bella Bella | 2.16 | 39 | Pn | Pn | 08 36 10.2 | -1.7 |
| BBB | | | | Sn | Sn | 08 36 34.6 | -4.1 |
| BBB | Bella Bella | 2.16 | 39 | Pn | Pn | 08 36 10.2 | -1.7 |
| BBB | | | | Sn | Sn | 08 36 34.6 | -4.1 |
| TLCB | Telegraph Cove | 2.21 | 88 | Pn | Pn | 08 36 11.4 | -1.3 |
| TLCB | | | | Sn | Sn | 08 36 36.7 | -3.4 |
| WOSB | Woss | 2.42 | 97 | Pn | Pn | 08 36 14.1 | -1.5 |
| WOSB | Woss | 2.42 | 97 | Pn | Pn | 08 36 14.1 | -1.5 |
| NCRB | Newcastle Ridg | 2.72 | 91 | Pn | Pn | 08 36 18.1 | -1.7 |
| NCRB | Newcastle Ridg | 2.72 | 91 | Pn | Pn | 08 36 18.1 | -1.7 |
| GDR | Gold River | 2.84 | 103 | Pn | Pn | 08 36 19.8 | -1.6 |
| GDR | Gold River | 2.84 | 103 | Pn | Pn | 08 36 19.8 | -1.6 |
| SPLB | Strathcona Par | 3.05 | 100 | Pn | Pn | 08 36 23.2 | -1.1 |
| TOFB | Tofino | 3.16 | 114 | Pn | Pn | 08 36 24.4 | -1.2 |
| CBB | Campbell River | 3.21 | 97 | Pn | Pn | 08 36 25.2 | -1.1 |
| CBB | | | | Sn | Sn | 08 37 01.4 | -3.2 |
| CBB | Campbell River | 3.21 | 97 | Pn | Pn | 08 36 25.2 | -1.1 |
| CBB | | | | Sn | Sn | 08 37 01.4 | -3.2 |
| BTB | Buttle Lake | 3.26 | 107 | Pn | Pn | 08 36 25.7 | -1.6 |
| BTB | Buttle Lake | 3.26 | 107 | Pn | Pn | 08 36 25.7 | -1.6 |
| MWAB | Mount Washingt | 3.31 | 102 | Pn | Pn | 08 36 26.9 | -1.1 |
| OZB | Mount Ozzard | 3.49 | 115 | Pn | Pn | 08 36 28.7 | -1.6 |
| OZB | Mount Ozzard | 3.49 | 115 | Pn | Pn | 08 36 28.7 | -1.6 |
| B927 | Port Alberni | 3.78 | 108 | Pn | Pn | 08 36 32.7 | -1.5 |
| TXB | Texada | 3.87 | 100 | Pn | Pn | 08 36 34.5 | -1.0 |
| TXB | Texada | 3.87 | 100 | Pn | Pn | 08 36 34.5 | -1.0 |
| MGB | Mount Grey | 3.94 | 111 | Pn | Pn | 08 36 35.5 | -1.1 |
| MGB | Mount Grey | 3.94 | 111 | Pn | Pn | 08 36 35.5 | -1.1 |
| YOUB | Youbou, Lake C | 4.24 | 110 | Pn | Pn | 08 36 40.7 | 0.0 |
| YOUB | Youbou, Lake C | 4.24 | 110 | Pn | Pn | 08 36 40.7 | 0.0 |
| SHB | Sechelt | 4.24 | 100 | Pn | Pn | 08 36 40.0 | -0.8 |
| SHB | Sechelt | 4.24 | 100 | Pn | Pn | 08 36 40.0 | -0.8 |
| NLLB | Nanaimo Lost L | 4.28 | 105 | Pn | Pn | 08 36 41.2 | +0.1 |
| NLLB | Nanaimo Lost L | 4.28 | 105 | Pn | Pn | 08 36 41.2 | +0.1 |
| PFB | Port Renfrew | 4.29 | 115 | Pn | Pn | 08 36 40.4 | -0.8 |
| PFB | Port Renfrew | 4.29 | 115 | Pn | Pn | 08 36 40.4 | -0.8 |
| UBRB | Upper Baezaeko | 4.54 | 56 | Pn | Pn | 08 36 45.3 | +0.5 |
| UBRB | | | | Sn | Sn | 08 37 35.6 | -2.1 |
| UBRB | Upper Baezaeko | 4.54 | 56 | Pn | Pn | 08 36 45.3 | +0.5 |
| UBRB | | | | Sn | Sn | 08 37 35.6 | -2.1 |
| BPCB | Bare Point | 4.57 | 108 | Pn | Pn | 08 36 46.1 | +1.0 |
| BPCB | Bare Point | 4.57 | 108 | Pn | Pn | 08 36 46.1 | +1.0 |
| LZB | Mount Lazard | 4.63 | 112 | Pn | Pn | 08 36 45.9 | -0.1 |
| LZB | Mount Lazard | 4.63 | 112 | Pn | Pn | 08 36 45.9 | -0.1 |
| WPB | Watts Point | 4.65 | 98 | Pn | Pn | 08 36 45.7 | -0.4 |
| WPB | Watts Point | 4.65 | 98 | Pn | Pn | 08 36 45.7 | -0.4 |
| BIB | Bowen Island | 4.65 | 101 | Pn | Pn | 08 36 46.4 | +0.2 |
| BIB | Bowen Island | 4.65 | 101 | Pn | Pn | 08 36 46.4 | +0.2 |
| PGC | Sidney | 4.83 | 110 | Pn | Pn | 08 36 48.8 | +0.1 |
| PGC | Sidney | 4.83 | 110 | ePn | Pn | 08 36 48.6 | 0.0 |
| PGC | | | | eSn | Sn | 08 37 38.9 | -5.8 |
| SNB | Saturna Island | 4.95 | 108 | Pn | Pn | 08 36 51.6 | +1.3 |
| SNB | Saturna Island | 4.95 | 108 | Pn | Pn | 08 36 51.6 | +1.3 |
| VGZ | Gonzales | 5.01 | 112 | Pn | Pn | 08 36 51.0 | -0.2 |
| VGZ | Gonzales | 5.01 | 112 | Pn | Pn | 08 36 51.0 | -0.2 |
| MCW | Mount Constitu | 5.20 | 108 | Pn | Pn | 08 36 54.8 | +1.0 |
| MCW | Mount Constitu | 5.20 | 108 | Pn | Pn | 08 36 54.8 | +1.0 |
| NLWA | Neilton Lookou | 5.27 | 124 | ePn | Pn | 08 36 55.7 | +1.0 |
| LLLB | Lillooet | 5.37 | 86 | Pn | Pn | 08 36 56.0 | -0.1 |
| LLLB | Lillooet | 5.37 | 86 | Pn | Pn | 08 36 56.0 | -0.1 |
| BLN | Blyn Mountain | 5.42 | 115 | Pn | Pn | 08 36 57.7 | +0.9 |
| BLN | Blyn Mountain | 5.42 | 115 | Pn | Pn | 08 36 57.7 | +0.9 |
| VDB | Vedder Mountai | 5.52 | 103 | Pn | Pn | 08 36 59.3 | +1.1 |
| VDB | Vedder Mountai | 5.52 | 103 | Pn | Pn | 08 36 59.3 | +1.1 |
| A05A | Maple Falls | 5.54 | 103 | Pn | Pn | 08 36 59.7 | +1.3 |
| A05A | Maple Falls | 5.54 | 103 | P | Pn | 08 36 59.6 | +1.2 |
| MBW | Mount Baker | 5.73 | 104 | Pn | Pn | 08 37 02.3 | +1.1 |
| MBW | Mount Baker | 5.73 | 104 | Pn | Pn | 08 37 02.3 | +1.1 |
| RPW | Rockport | 6.09 | 107 | ⇓P | Pn | 08 37 06.9 | +0.8 |
| LON | Longmire | 6.77 | 121 | ePn | Pn | 08 37 17.1 | +1.6 |
| NLW | Nelson Butte | 6.96 | 107 | P | Pn | 08 37 18.8 | +0.7 |
| ETW | Entiat | 7.17 | 110 | P | Pn | 08 37 22.5 | +1.5 |
| TBM | Table Mountain | 7.23 | 114 | P | Pn | 08 37 23.4 | +1.7 |
| NAC | Naches | 7.33 | 117 | P | Pn | 08 37 25.0 | +1.9 |
| DHW2 | Dyer Hill 2 | 7.34 | 106 | P | Pn | 08 37 24.4 | +1.1 |
| WTV | Waterville | 7.36 | 109 | P | Pn | 08 37 24.4 | +1.0 |
| NEW | Newport | 8.89 | 100 | ePn | Pn | 08 37 45.4 | +0.9 |
| EDM | Edmonton | 10.83 | 69 | ePn | Pn | 08 38 20.4 | +9.5 |
| MOD | Modoc | 11.05 | 137 | Pn | Pn | 08 38 13.2 | -0.9 |
| MCMT | McKenzie Canyo | 13.06 | 109 | ePn | Pn | 08 38 42.3 | +0.6 |

*IDC **10** 08:42:56.6±0.7, 34°.37S×72°.11W, h0km, mb4.0/10, mb1 4.1/12, mb1mx4.0/22, mbtmp4.0/12, ML3.5/3, MS4.2/1, Ms1 4.2/1, ms1mx3.3/19, Error ellipse: s-maj=26.7km s-min=16.9km az=103.0*
*GUC **10** 08:43:00.9±0.5, 34°.46S×71°.87W, h85km±20km, ML4.5*
*ISCJB **10** 08:43:01.5±1.0, 34°.37S±0°.03×72°.11W±0°.10, h46km±8km, mb4.1/13, Error ellipse: s-maj=13.9km s-min=5.3km az=11.0*
*NEIC **10** 08:43:01.9±0.4, 34°.34S×72°.07W, h35km, mb4.2/4, ML4.5(GUC), Error ellipse: s-maj=11.4km s-min=8.9km az=94.0*

**ISC 10 08:43:03.3±1.6, 34°.41S±0°.04×72°.0W±0°.1, h45km±13km, n44, σ1s.24/47, mb4.0/13, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NICH | Los Niches | 0.85 | 134 | eP | Pn | 08 43 18.4 | -0.5 |
| NICH | | | | eS | Sn | 08 43 31.6 | +1.3 |
| TALC | Talca | 1.02 | 164 | eP | Pn | 08 43 20.4 | -0.8 |
| TALC | | | | eS | Sn | 08 43 35.2 | +0.8 |
| TACH | Talagante | 1.15 | 49 | eP | Pn | 08 43 20.9 | -2.0 |
| ANTU | Antumapu | 1.40 | 53 | eP | Pn | 08 43 25.9 | -0.4 |
| ANTU | | | | eS | Sn | 08 43 44.4 | +0.7 |
| PCH | Pirque | 1.45 | 57 | eP | Pn | 08 43 26.6 | -0.6 |
| SAN | Santiago | 1.45 | 49 | eP | Pn | 08 43 26.7 | -0.4 |
| SAN | | | | eS | Sn | 08 43 46.0 | +1.0 |
| LACH | Col Las Americ | 1.54 | 52 | eP | Pn | 08 43 27.2 | -1.1 |
| LACH | | | | eS | Sn | 08 43 47.6 | +0.5 |
| CLCH | Cerro Calan | 1.57 | 50 | eP | Pn | 08 43 28.0 | -0.7 |
| CLCH | | | | eS | Sn | 08 43 48.5 | +0.6 |
| CLCH | | | | AML | AML | 08 43 56.5 | |
| | comp=E,6μm,0.5s | | | | | | |
| ROC1 | El Roble | 1.64 | 29 | eP | Pn | 08 43 28.8 | -1.1 |
| ROC1 | | | | eS | Sn | 08 43 53.8 | +3.9 |
| PEL | Peldehue | 1.66 | 41 | eP | Pn | 08 43 29.3 | -0.7 |
| PEL | | | | eS | Sn | 08 43 51.1 | +0.9 |
| PEL | | | | AML | AML | 08 43 58.5 | |
| | comp=N,9μm,0.4s | | | | | | |
| CANA | Caviahue | 3.55 | 168 | eP | Pn | 08 43 58.1 | +2.1 |
| RTCV | Cerro Valdivia | 3.84 | 50 | eP | Pn | 08 44 01.8 | +1.8 |
| CFAA | Coronel Fontan | 4.21 | 49 | Pn | Pn | 08 44 05.0 | 0.0 |
| | comp=N,0.4nm,0.3s,baz=227,slow=11,SNR=32 | | | | | | |
| CFAA | | | | Lg | Lg | 08 45 04.8 | |
| | comp=N,6.4nm,0.3s,baz=142,slow=23,SNR=9.3 | | | | | | |
| CFAA | Coronel Fontan | 4.21 | 49 | eP | Pn | 08 44 05.8 | +0.8 |
| ACAN | Cantantal | 4.54 | 63 | eP | Pn | 08 44 11.5 | +1.9 |
| AMOG | MOGNA | 4.54 | 41 | eP | Pn | 08 44 10.1 | +0.5 |
| AGUA | GUANDACOL | 5.73 | 32 | eP | Pn | 08 44 25.9 | -0.1 |
| CYA | Choya | 7.95 | 43 | AML | AML | 08 46 56.8 | |
| | comp=Z,23nm,0.6s | | | | | | |
| TRQA | Tornquist | 8.86 | 117 | ePn | Pn | 08 45 10.2 | +1.5 |
| | comp=Z,10nm,0.6s | | | | | | |
| LVC | Limon Verde | 12.06 | 14 | Lg | Lg | 08 48 32.5 | |
| | comp=Z,12nm,0.3s,baz=218,slow=19,SNR=2.8 | | | | | | |
| LVC | | | | LR | LR | 08 50 28.6 | |
| | comp=Z,1μm,21.4s,baz=206,slow=38 | | | | | | |
| CPUP | Villa Florida | 14.98 | 61 | Pn | Pn | 08 46 28.7 | -3.3 |
| | comp=Z,0.1nm,0.3s,baz=266,slow=19,SNR=2.4 | | | | | | |
| LPAZ | La Paz | 18.38 | 12 | P | P | 08 47 14.6 | -0.5 |
| | comp=Z,0.2nm,0.3s,baz=150,slow=3.7,SNR=9.7 | | | | | | |
| USHA | Ushuaia | 20.57 | 174 | P | P | 08 47 37.1 | -1.0 |
| | comp=Z,6.1nm,0.9s,baz=90,slow=2.0,SNR=3.0 | | | | | | |
| SIV | San Ignacio | 20.80 | 31 | P | P | 08 47 39.7 | -1.2 |
| | comp=Z,1.4nm,0.6s,baz=217,slow=12,SNR=5.9 | | | | | | |
| NNA | Nana | 22.76 | 348 | P | P | 08 48 05.1 | +3.2 |
| | comp=Z,3.4nm,0.3s,baz=192,slow=9.3,SNR=2.9 | | | | | | |
| BDFB | Brasilia | 28.52 | 55 | P | P | 08 48 55.9 | +1.0 |
| | comp=Z,1.7nm,0.7s,baz=69,slow=17,SNR=2.9 | | | | | | |
| VNA2 | Neumayer--Watz | 49.61 | 157 | P | P | 08 51 50.5 | +0.8 |
| | baz=284,slow=8.4 | | | | | | |
| SNAA | Sanae | 51.19 | 158 | P | P | 08 52 02.5 | +0.8 |
| SNAA | Sanae | 51.19 | 158 | eP | P | 08 52 02.4 | +0.7 |
| | comp=Z,4.9nm,1.3s | | | | | | |
| QSPA | South Pole Qui | 55.83 | 180 | P | P | 08 52 36.7 | +0.8 |
| | comp=Z,4.7nm,0.8s,baz=324,slow=0.7,SNR=24 | | | | | | |
| TXAR | Lajitas Array | 70.12 | 331 | P | P | 08 54 10.8 | -0.3 |
| | comp=Z,0.3nm,0.5s,baz=156,slow=8.5,SNR=11 | | | | | | |
| ABTX | Abilene, Hawle | 71.58 | 336 | P | P | 08 54 19.0 | -0.8 |
| | comp=Z,0.8nm,0.4s | | | | | | |
| MAW | Mawson | 72.77 | 163 | P | P | 08 54 27.3 | +0.9 |
| | comp=Z,0.9nm,0.5s,baz=285,slow=9.0,SNR=3.9 | | | | | | |
| AMTX | Amarillo | 74.33 | 335 | eP | P | 08 54 35.0 | -1.1 |
| | comp=Z,25nm,2.1s | | | | | | |
| DBIC | Dimbokro | 75.26 | 71 | P | P | 08 54 41.7 | -0.2 |
| | comp=Z,2.1nm,0.6s,baz=256,slow=4.2,SNR=3.0 | | | | | | |
| ANMO | Albuquerque | 76.17 | 331 | eP | P | 08 54 46.2 | -0.6 |
| | comp=Z,1.8nm,1.1s | | | | | | |
| BOSA | Boshof | 79.83 | 118 | P | P | 08 55 08.0 | +0.5 |
| | comp=Z,2.9nm,0.8s,baz=222,slow=10,SNR=3.9 | | | | | | |
| NVAR | Mina Array Bea | 84.25 | 325 | P | P | 08 55 29.9 | -0.4 |
| | comp=Z,0.4nm,0.6s,baz=146,slow=5.6,SNR=4.0 | | | | | | |
| TORD | Torodi Ar. Bea | 84.30 | 70 | P | P | 08 55 30.7 | -0.1 |
| | comp=Z,1.0nm,0.7s,baz=282,slow=5.6,SNR=8.6 | | | | | | |
| WRA | Warramunga Arr | 120.43 | 209 | PKP | PKPdf | 09 01 49.3 | -1.1 |
| | comp=Z,0.5nm,0.6s,baz=160,slow=1.7,SNR=7.9 | | | | | | |
| BVAR | Borovoye Array | 147.54 | 43 | PKPbc | PKPbc | 09 02 41.0 | -1.0 |
| | comp=Z,1.1nm,0.5s,baz=12,slow=7.4,SNR=5.5 | | | | | | |
| AAK | Ala-Archa | 152.65 | 63 | PKPbc | PKPbc | 09 02 54.7 | -0.3 |
| | comp=Z,0.9nm,0.5s,baz=205,slow=2.6,SNR=4.6 | | | | | | |
| ZALV | Zalesovo Beam | 154.54 | 33 | PKPbc | PKPbc | 09 02 58.0 | -0.5 |
| | comp=Z,1.5nm,0.7s,baz=180,slow=0.9,SNR=5.7 | | | | | | |
| MKAR | Makanchi Array | 156.99 | 50 | PKPab | PKPab | 09 03 23.2 | -0.8 |
| | comp=Z,0.5nm,0.5s,baz=284,slow=4.9,SNR=3.7 | | | | | | |

*DJA **10** 08:52:12.5±0.6, 0°S±2°×12°3E±°, h12km±5km, M4.3/12, mb4.4/3, mB5.0/1, MLv4.2/12, Mw(mB)4.4/1*
*ISCJB **10** 08:52:13.3±0.5, 0°.52S±0°.04×123°.44E±0°.04, h54km, mb3.8/3, Error ellipse: s-maj=6.4km s-min=5.0km az=143.8*
*IDC **10** 08:52:15.9±3.2, 0°.61S×123°.40E, h58km±34km, mb3.6/3, mb1 3.8/6, mb1mx3.4/41, mbtmp3.9/6, ML3.7/3, MS3.4/1, Ms1 3.4/1, ms1mx2.6/28, Error ellipse: s-maj=23.4km s-min=21.6km az=172.0*

**ISC 10 08:52:14.8±0.9, 0°.46S±0°.05×123°.39E±0°.04, h54km, n18, σ1s.62/22, mb3.8/3, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LUWI | Luwuk | 0.85 | 227 | P | Pn | 08 52 28.3 | -2.3 |
| LUWI | | | | S | Sn | 08 52 41.1 | -1.2 |
| GTOI | Gorontalo | 1.15 | 341 | P | Pn | 08 52 34.0 | -0.6 |
| KMSI | Cibinong | 1.18 | 30 | P | Pn | 08 52 33.1 | -2.0 |
| KMSI | | | | S | Sn | 08 52 50.2 | +0.1 |
| MRSI | Marisa | 1.72 | 303 | P | Pn | 08 52 39.8 | -2.6 |
| APSI | Ampana | 1.80 | 255 | P | Pn | 08 52 44.2 | +0.8 |
| APSI | | | | S | Sn | 08 53 07.8 | +2.6 |
| SANI | Sanana | 3.04 | 121 | P | Pn | 08 52 59.0 | -1.4 |
| SANI | | | | S | Sn | 08 53 38.0 | +2.3 |
| KDI | Kendari | 3.56 | 192 | P | Pn | 08 53 06.6 | -1.0 |
| MPSI | Mapaga | 3.58 | 283 | P | Pn | 08 53 11.8 | +4.0 |
| MPSI | | | | S | Sn | 08 53 51.3 | +2.4 |
| TTSI | Tana Toraja | 4.40 | 234 | P | Pn | 08 53 19.3 | +0.2 |
| NLAI | Namlea | 4.62 | 127 | P | Pn | 08 53 22.2 | 0.0 |
| SPSI | Sidrap Palu | 5.02 | 226 | P | Pn | 08 53 28.4 | +0.8 |
| | 34nm,0.5s,0.2nm | | | | | | |
| KAPI | Kappang | 5.81 | 219 | P | Pn | 08 53 38.9 | +0.5 |
| | 3.8nm,0.3s,baz=18,slow=5.8,SNR=15 | | | | | | |
| KAPI | | | | S | Sn | 08 54 42.2 | -1.5 |
| | 2.8nm,0.3s,baz=129,slow=23,SNR=6.8 | | | | | | |
| SIJI | Sorong | 7.89 | 93 | P | Pn | 08 54 08.1 | +1.1 |
| | 1.5nm,0.3s,baz=266,slow=19,SNR=8.9 | | | | | | |
| JAY | Jayapura | 17.43 | 97 | LR | LR | 09 04 23.6 | |
| | comp=Z,136nm,20.9s,baz=155,slow=42 | | | | | | |
| FITZ | Fitzroy Crossi | 17.67 | 173 | P | Pn | 08 56 15.9 | -1.4 |
| | 0.1nm,0.3s,baz=171,slow=19,SNR=2.0 | | | | | | |
| WRA | Warramunga Arr | 22.14 | 152 | P | P | 08 57 04.7 | -1.4 |
| | 3.2nm,0.6s,baz=333,slow=10,SNR=37 | | | | | | |
| ASAR | Alice Springs | 25.23 | 157 | P | P | 08 57 36.2 | +0.3 |
| | 1.6nm,0.5s,baz=328,slow=8.2,SNR=36 | | | | | | |
| MKAR | Makanchi Array | 59.20 | 328 | P | P | 09 02 11.8 | +1.4 |
| | 0.3nm,0.4s,baz=124,slow=7.7,SNR=2.6 | | | | | | |

**IDC 10 08:57:48.9±1.8, 10°.30N×93°.71E, h0km, mb3.6/5, mb1 3.7/5, mb1mx3.4/46, mbtmp3.6/5, MS2.8/1, Ms1 3.0/1, ms1mx2.5/42, Error ellipse: s-maj=62.0km s-min=25.8km az=54.0, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 9.56 | 31 | LR | LR | 09 03 44.1 | |
| | comp=Z,59nm,18.9s,baz=238,slow=37 | | | | | | |
| MKAR | Makanchi Array | 37.64 | 347 | P | P | 09 05 06.2 | +0.5 |
| | 0.2nm,0.3s,baz=153,slow=9.7,SNR=2.5 | | | | | | |
| SONM | Songino Array | 38.91 | 14 | P | P | 09 05 16.6 | +0.2 |
| | 0.2nm,0.4s,baz=211,slow=5.0,SNR=2.2 | | | | | | |
| GEYT | Alibeck | 42.13 | 317 | P | P | 09 05 43.4 | +0.2 |
| | 1.6nm,0.5s,baz=132,slow=8.6,SNR=2.2 | | | | | | |
| ZALV | Zalesovo Beam | 44.11 | 352 | P | P | 09 05 57.1 | -1.7 |
| | 0.9nm,0.3s,baz=165,slow=12,SNR=4.4 | | | | | | |
| WRA | Warramunga Arr | 50.03 | 127 | P | P | 09 06 45.5 | -0.1 |
| | 0.3nm,0.7s,baz=306,slow=8.2,SNR=3.2 | | | | | | |

*ISCJB **10** 09:23:25.1±0.3, 6°.62S±0°.03×128°.90E±0°.04, h200km, mb3.9/13, Error ellipse: s-maj=5.6km s-min=4.2km az=4.5*
*DJA **10** 09:23:25.7±0.3, 7°S±3°×12°9E±°, h10km, M5.5/8, mb5.3/8, mB5.5/6, MLv5.9/1, Mw(mB)5.0/6*
*IDC **10** 09:23:27.0±1.4, 6°.54S×128°.71E, h230km±13km, mb3.7/13, mb1 3.9/17, mb1mx3.8/34, mbtmp4.4/17, Error ellipse: s-maj=13.9km s-min=8.7km az=76.0*
*AUST **10** 09:23:26.5±0.0, 6°.59S×128°.84E, h218km, Error ellipse: s-maj=1.1km s-min=0.8km az=279.0*

**ISC 10 09:23:25.2±0.5, 6°.62S±0°.05×128°.85E±0°.06, h200km, n55, σ1s.96/57, mb4.0/13, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNDI | Bandanaira | 2.33 | 27 | P | Pn | 09 24 07.1 | -0.2 |
| BNDI | | | | S | Sn | 09 24 48.7 | +8.6 |
| SAUI | Saumlaki | 2.79 | 119 | P | Pn | 09 24 16.2 | +3.9 |
| SAUI | | | | S | Sn | 09 24 58.0 | +8.9 |
| NLAI | Namlea | 3.78 | 333 | P | Pn | 09 24 23.9 | -0.4 |
| FAKI | Fak Fak | 5.00 | 43 | P | Pn | 09 24 41.3 | +1.7 |
| | baz=5.0,SNR=41 | | | | | | |
| FAKI | Fak Fak | 5.00 | 43 | P | Pn | 09 24 41.5 | +1.9 |
| FAKI | | | | S | Sn | 09 25 43.8 | +5.5 |
| SANI | Sanana | 5.36 | 328 | P | Pn | 09 24 45.6 | +1.4 |
| SOEI | Soe | 5.50 | 235 | P | Pn | 09 24 48.5 | +2.4 |
| | baz=5.5,SNR=45 | | | | | | |
| SOEI | Soe | 5.50 | 235 | P | Pn | 09 24 47.5 | +1.4 |
| SOEI | | | | S | Sn | 09 25 52.9 | +2.8 |
| LBMI | Labuha | 6.09 | 347 | P | Pn | 09 24 56.1 | +2.4 |
| LBMI | | | | S | Sn | 09 26 07.5 | +3.7 |
| SIJI | Sorong | 6.20 | 23 | P | Pn | 09 24 56.4 | +1.3 |
| | 18nm,0.3s,baz=59,slow=8.0,SNR=50 | | | | | | |
| SIJI | | | | S | Sn | 09 26 04.2 | -2.1 |
| | 3.8nm,0.3s,baz=258,slow=23,SNR=5.8 | | | | | | |
| SWI | Sorong | 6.21 | 23 | P | Pn | 09 24 56.6 | +1.5 |
| | baz=6.2,SNR=11 | | | | | | |
| SWI | Sorong | 6.21 | 23 | P | Pn | 09 24 56.4 | +1.3 |
| | 178nm,0.7s,2μm | | | | | | |
| BATI | Baumata | 6.24 | 235 | P | Pn | 09 24 57.9 | +2.2 |
| | 94nm,0.3s,baz=116,slow=1.3,SNR=147 | | | | | | |
| BATI | | | | S | Sn | 09 26 08.5 | +1.2 |
| | 70nm,0.3s,baz=229,slow=19,SNR=7.1 | | | | | | |
| BATI | Baumata | 6.24 | 235 | P | Pn | 09 24 57.9 | +2.2 |
| | 598nm,0.7s,6μm | | | | | | |
| MTN | Manton Dam | 6.58 | 160 | P | Pn | 09 25 03.1 | +3.1 |
| | baz=6.6,SNR=66 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDU | Kakadu | 7.01 | 150 | P | Pn | 09 25 08.5 | +3.0 |
| | baz=7.1,SNR=27 | | | | | | |
| LUWI | Luwuk | 8.21 | 312 | P | Pn | 09 25 22.8 | +1.6 |
| | baz=8.2,SNR=3.6 | | | | | | |
| BASI | Baing, Sumba | 8.93 | 246 | P | Pn | 09 25 31.4 | +0.9 |
| | 112nm,0.9s,2μm | | | | | | |
| KNRA | Kununurra | 9.00 | 181 | P | Pn | 09 25 32.9 | +1.4 |
| | baz=9.1,SNR=60 | | | | | | |
| WBSI | Waikabubak, Su | 9.83 | 252 | P | Pn | 09 25 42.5 | +0.2 |
| JAY | Jayapura | 12.50 | 72 | P | P | 09 26 19.7 | -0.8 |
| | 0.5nm,0.3s,baz=230,slow=15,SNR=2.8 | | | | | | |
| WRA | Warramunga Arr | 14.28 | 159 | P | Pn | 09 26 39.3 | +0.7 |
| | 4.7nm,0.3s,baz=334,slow=13,SNR=129 | | | | | | |
| WRA | | | | S | S | 09 29 13.4 | -4.2 |
| | 4.4nm,0.3s,baz=330,slow=22,SNR=9.1 | | | | | | |
| PALU | Palau | 14.96 | 22 | P | P | 09 26 49.0 | +1.2 |
| | baz=15,SNR=5.7 | | | | | | |
| COEN | Coen | 15.87 | 118 | P | Pn | 09 26 59.6 | +1.6 |
| | baz=16,SNR=104 | | | | | | |
| QIS | Mount Isa | 17.34 | 144 | P | P | 09 27 15.6 | +1.6 |
| | baz=17,SNR=55 | | | | | | |
| ASAR | Alice Springs | 17.63 | 165 | P | P | 09 27 18.8 | +1.6 |
| | 12nm,0.3s,baz=346,slow=12,SNR=859 | | | | | | |
| ASAR | | | | S | S | 09 30 27.3 | -2.6 |
| | 1.2nm,0.3s,baz=345,slow=25,SNR=20 | | | | | | |
| WRKA | Warakurna | 18.32 | 182 | P | P | 09 27 25.9 | +1.3 |
| | baz=18,SNR=93 | | | | | | |
| CTA | Charters Tower | 21.56 | 130 | P | P | 09 28 00.3 | +1.2 |
| | 13nm,1.0s,baz=297,slow=12,SNR=8.5 | | | | | | |
| MEEK | Meekatharra | 22.17 | 205 | P | P | 09 28 00.8 | -4.3 |
| | baz=22,SNR=4.8 | | | | | | |
| FORT | Forrest | 24.05 | 182 | P | P | 09 28 24.2 | +2.2 |
| | baz=24,SNR=8.7 | | | | | | |
| QLP | Quilpie | 24.68 | 145 | P | P | 09 28 28.2 | +0.4 |
| | baz=25,SNR=10 | | | | | | |
| BBOO | Buckleboo | 26.91 | 166 | P | P | 09 28 47.4 | -0.4 |
| | baz=27,SNR=22 | | | | | | |
| HTT | Hallett | 28.27 | 162 | P | P | 09 28 56.9 | -3.1 |
| | baz=28,SNR=8.5 | | | | | | |
| CMSA | Cobar Meteorol | 29.37 | 150 | P | P | 09 29 10.3 | +0.6 |
| | baz=30,SNR=12 | | | | | | |
| ARPS | Mount Arapiles | 32.27 | 160 | P | P | 09 29 35.8 | +0.8 |
| | baz=32,SNR=12 | | | | | | |
| YNG | Young | 32.94 | 149 | P | P | 09 29 42.0 | +1.1 |
| | baz=33,SNR=9.8 | | | | | | |
| CNB | Canberra Magne | 34.23 | 149 | P | P | 09 29 53.3 | +1.2 |
| | baz=34,SNR=7.9 | | | | | | |
| TOO | Toolangi | 34.33 | 156 | P | P | 09 29 54.5 | +1.6 |
| | baz=34,SNR=9.0 | | | | | | |
| DZM | Mont Dzumac | 39.39 | 117 | P | P | 09 30 35.2 | -0.6 |
| | 5.8nm,0.9s,baz=0.8,slow=8.3,SNR=2.7 | | | | | | |
| MJAR | Matsushiro Arr | 43.82 | 11 | P | P | 09 31 08.4 | -3.0 |
| | 2.6nm,0.8s,baz=184,slow=9.6,SNR=6.3 | | | | | | |
| KSRS | Korea Array | 43.85 | 359 | P | P | 09 31 10.4 | -1.2 |
| | 2.5nm,0.6s,baz=178,slow=9.2,SNR=13 | | | | | | |
| USRK | Ussuriysk Ar. | 50.66 | 3 | P | P | 09 32 02.4 | -1.7 |
| | 2.9nm,0.6s,baz=182,slow=8.5,SNR=12 | | | | | | |
| RPZ | Rata Peaks | 52.24 | 142 | P | P | 09 32 16.2 | +0.3 |
| | 15nm,0.5s,baz=280,slow=2.5,SNR=12 | | | | | | |
| URZ | Urewera | 53.76 | 133 | P | P | 09 32 27.2 | +0.2 |
| | 5.1nm,0.6s,baz=0.0,slow=19,SNR=5.1 | | | | | | |
| SONM | Songino Array | 57.73 | 342 | P | P | 09 32 54.1 | -1.0 |
| | 1.0nm,0.6s,baz=162,slow=6.9,SNR=6.3 | | | | | | |
| NIUE | Niue | 60.70 | 108 | P | P | 09 33 23.6 | +7.7 |
| | baz=61,SNR=3.1 | | | | | | |
| MKAR | Makanchi Array | 67.28 | 327 | P | P | 09 33 56.6 | -1.7 |
| | 1.7nm,0.5s,baz=121,slow=8.1,SNR=17 | | | | | | |
| ZALV | Zalesovo Beam | 70.74 | 334 | P | P | 09 34 16.6 | -2.7 |
| | 2.2nm,0.8s,baz=113,slow=3.9,SNR=5.5 | | | | | | |
| VNDA | Vanda | 72.96 | 173 | P | P | 09 34 30.8 | -1.5 |
| | 1.7nm,0.6s,baz=322,slow=6.7,SNR=13 | | | | | | |
| MAW | Mawson | 74.89 | 201 | P | P | 09 34 41.6 | -1.9 |
| | 1.4nm,0.7s,baz=54,slow=11,SNR=5.8 | | | | | | |
| ILAR | Eielson Array | 93.49 | 25 | P | P | 09 36 14.1 | -3.7 |
| | 0.3nm,0.9s,baz=270,slow=4.5,SNR=2.4 | | | | | | |
| TXAR | Lajitas Array | 125.71 | 59 | PKP | PKPdf | 09 42 01.5 | -2.2 |
| | 0.2nm,0.7s,baz=330,slow=5.2,SNR=2.8 | | | | | | |
| TORD | Torodi Ar. Bea | 127.61 | 281 | PKP | PKPdf | 09 42 04.3 | -3.2 |
| | 0.3nm,0.7s,baz=100,slow=1.8,SNR=3.4 | | | | | | |
| CPUP | Villa Florida | 146.70 | 170 | PKPbc | PKPdf | 09 42 42.4 | +0.2 |
| | 3.9nm,0.7s,baz=164,slow=3.5,SNR=5.7 | | | | | | |
| LPAZ | La Paz | 151.71 | 144 | PKPbc | PKPbc | 09 42 56.1 | -1.6 |
| | 0.5nm,0.5s,baz=315,slow=2.9,SNR=5.0 | | | | | | |
| LPAZ | | | | PKPab | PKPab | 09 43 07.0 | 0.0 |
| | 1.3nm,0.7s,baz=245,slow=1.6,SNR=6.4 | | | | | | |

**IDC 10 09:31:17.9±2.6, 17°.37S×174°.45W, h142km±27km, mb3.5/5, mb1 3.8/6, mb1mx3.5/21, mbtmp4.0/6, Error ellipse: s-maj=41.3km s-min=17.2km az=133.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 4.30 | 37 | P | Pn | 09 32 21.9 | 0.0 |
| | 50nm,0.3s,baz=196,slow=2.6,SNR=66 | | | | | | |
| AFI | | | | S | Sn | 09 33 06.9 | -4.8 |
| | 233nm,0.3s,baz=75,slow=21,SNR=19 | | | | | | |
| URZ | Urewera | 22.09 | 198 | P | P | 09 36 01.5 | 0.0 |
| | 7.3nm,0.3s,baz=358,slow=0.8,SNR=16 | | | | | | |
| WRA | Warramunga Arr | 48.44 | 259 | P | P | 09 39 45.9 | -0.4 |
| | 0.6nm,0.7s,baz=97,slow=7.1,SNR=10 | | | | | | |
| ASAR | Alice Springs | 48.57 | 254 | P | P | 09 39 47.5 | +0.2 |
| | 1.8nm,0.5s,baz=89,slow=8.6,SNR=25 | | | | | | |
| NVAR | Mina Array Bea | 76.46 | 42 | P | P | 09 42 52.6 | +0.2 |
| | 0.6nm,0.9s,baz=220,slow=7.7,SNR=2.7 | | | | | | |
| ILAR | Eielson Array | 84.56 | 11 | P | P | 09 43 34.4 | -0.3 |
| | 0.2nm,0.5s,baz=227,slow=6.1,SNR=7.1 | | | | | | |

**IDC 10 09:33:01.7±3.7, 28°.50S×178°.42W, h0km, mb3.7/2, mb1 4.0/2, mb1mx3.6/20, mbtmp3.7/2, MS4.3/1, Ms1 4.3/1, ms1mx2.9/23, Error ellipse: s-maj=100.7km s-min=17.6km az=42.0, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 0.87 | 149 | Pn | Pn | 09 33 21.9 | +0.7 |
| | 68nm,0.3s,baz=252,slow=20,SNR=2.6 | | | | | | |
| RAO | | | | Sn | Sn | 09 33 34.1 | -0.5 |
| | 352nm,0.3s,baz=187,slow=22,SNR=10 | | | | | | |
| ASAR | Alice Springs | 42.87 | 265 | P | P | 09 41 01.6 | -0.5 |
| | 0.3nm,0.5s,baz=98,slow=7.4,SNR=3.1 | | | | | | |
| WRA | Warramunga Arr | 43.69 | 270 | P | P | 09 41 08.9 | +0.2 |
| | 0.7nm,0.3s,baz=110,slow=8.2,SNR=13 | | | | | | |
| GUMO | Guam | 54.88 | 315 | LR | LR | 10 03 25.1 | |
| | comp=Z,295nm,21.6s,baz=174,slow=33 | | | | | | |
| FINES | FINESS Array B | 143.24 | 341 | PKP | PKPbc | 09 52 34.8 | +0.7 |
| | 1.9nm,0.9s,baz=116,slow=3.2,SNR=4.2 | | | | | | |

*ISCJB 10 09:49:27.6±0.3, 3°.80N±0°.03×128°.23E±0°.04, h71km, mb4.3/24, Error ellipse: s-maj=5.8km s-min=3.9km az=9.1*
*NEIC 10 09:49:32.8±1.0, 3°.62N×128°.18E, h114km±11km, mb4.5/13, Error ellipse: s-maj=12.5km s-min=8.3km az=78.0*
*IDC 10 09:49:32.1±2.5, 3°.60N×128°.20E, h110km±26km, mb3.9/16, mb1 4.0/17, mb1mx3.7/45, mbtmp4.3/17, Error ellipse: s-maj=21.5km s-min=13.6km az=77.0*
*DJA 10 09:49:34.5±0.5, 4°N±4°×12°8E±°, h64km±10km, M4.9/16, mb5.0/16, mB5.4/11, MLv5.0/14, Mw(mB)4.8/11*
**ISC 10 09:49:29.5±0.6, 3°.83N±0°.04×128°.24E±0°.06, h71km, n58, σ1s.64/59, mb4.3/24, North of Halmahera**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGSI | Sangihe | 2.71 | 267 | P | Pn | 09 50 11.5 | +0.8 |
| SGSI | | | | S | Sn | 09 50 42.0 | -0.4 |
| TNTI | Ternate | 3.16 | 196 | P | Pn | 09 50 17.9 | +1.0 |
| TNTI | | | | S | Sn | 09 50 52.2 | -1.3 |
| TNTI | Ternate | 3.16 | 196 | ePn | Pn | 09 50 18.1 | +1.2 |
| MATI | Mati | 3.67 | 328 | eP | Pn | 09 50 29.7 | +5.8 |
| MATI | | | | eS | Sn | 09 51 01.9 | -4.0 |
| LBMI | Labuha | 4.50 | 189 | P | Pn | 09 50 35.3 | +0.1 |
| LBMI | | | | S | Sn | 09 51 26.6 | +0.3 |
| BIPH | Bislig | 4.71 | 337 | eP | Pn | 09 50 41.4 | +3.4 |
| BIPH | | | | eS | Sn | 09 51 29.0 | -2.4 |
| BUKP | Musuan | 5.11 | 322 | eP | Pn | 09 50 48.3 | +4.7 |
| KMSI | Cibinong | 5.34 | 233 | P | Pn | 09 50 46.9 | +0.2 |
| KMSI | | | | S | Sn | 09 51 44.6 | -2.3 |
| SWI | Sorong | 5.56 | 147 | P | Pn | 09 50 52.3 | +2.7 |
| | 653nm,0.5s,10μm3.0nm | | | | | | |
| SIJI | Sorong | 5.56 | 147 | P | Pn | 09 50 52.4 | +2.6 |
| | 121nm,0.3s,baz=117,slow=10,SNR=222 | | | | | | |
| SIJI | | | | S | Sn | 09 51 50.6 | -1.8 |
| | baz=343,slow=19,SNR=2.4 | | | | | | |
| GTOI | Gorontalo | 6.11 | 239 | P | Pn | 09 50 57.8 | +0.6 |
| | 509nm,0.7s,77μm2.0nm | | | | | | |
| SANI | Sanana | 6.26 | 201 | P | Pn | 09 50 58.1 | -1.1 |
| | 52nm,0.5s,2μm0.4nm | | | | | | |
| PAGZ | Pagadian | 6.26 | 310 | eP | Pn | 09 51 01.8 | +2.5 |
| MRSI | Marisa | 7.12 | 242 | P | Pn | 09 51 11.7 | +0.7 |
| | 916nm,0.5s,12μm3.6nm | | | | | | |
| MSAI | Masohi | 7.16 | 174 | P | Pn | 09 51 14.6 | +3.0 |
| | 17nm,0.6s,334nm0.1nm | | | | | | |
| LUWI | Luwuk | 7.30 | 229 | P | Pn | 09 51 14.0 | +0.6 |
| | 118nm,0.9s,1.2nm | | | | | | |
| LUWI | Luwuk | 7.30 | 229 | ePn | Pn | 09 51 14.1 | +0.6 |
| | 104nm,0.8s | | | | | | |
| LUWI | | | | eSn | Sn | 09 52 35.0 | +0.1 |
| FAKI | Fak Fak | 7.81 | 149 | ePn | Pn | 09 51 22.7 | +2.2 |
| MPSI | Mapaga | 9.03 | 248 | P | Pn | 09 51 37.7 | +0.6 |
| | 28nm,0.8s,945nm | | | | | | |
| KDI | Kendari | 9.56 | 216 | P | Pn | 09 51 42.0 | -2.4 |
| | 71nm,0.9s,1μm | | | | | | |
| PCI | Palu | 9.62 | 241 | P | Pn | 09 51 45.4 | +0.1 |
| | 99nm,0.7s,1μm | | | | | | |
| TTSI | Tana Toraja | 10.84 | 231 | P | Pn | 09 51 59.8 | -2.0 |
| | 61nm,0.7s,1μm | | | | | | |
| SPSI | Sidrap Palu | 11.47 | 228 | P | Pn | 09 52 09.4 | -1.1 |
| | 58nm,0.6s,566nm | | | | | | |
| KAPI | Kappang | 12.21 | 224 | P | Pn | 09 52 18.7 | -1.9 |
| | 2.7nm,0.3s,baz=62,slow=9.2,SNR=8.6 | | | | | | |
| KAPI | | | | S | Sn | 09 54 25.7 | -9.3 |
| | 0.8nm,0.3s,baz=54,slow=23,SNR=5.7 | | | | | | |
| KAPI | Kappang | 12.21 | 224 | ePn | Pn | 09 52 18.2 | -2.3 |
| | 6.7nm,0.6s | | | | | | |
| BSSI | Bau Bau, Buton | 12.57 | 218 | P | Pn | 09 52 25.8 | +0.3 |
| | 48nm,0.6s | | | | | | |
| JAGI | Jajag, Banyuwa | 18.62 | 229 | eP | Pn | 09 53 42.4 | 0.0 |
| | 38nm,0.8s | | | | | | |
| SSLB | Suanglung | 21.05 | 341 | eP | P | 09 54 09.6 | +1.8 |
| | 20nm,0.8s | | | | | | |
| NACB | Ninganchiao | 21.22 | 343 | eP | P | 09 54 12.6 | +3.1 |
| | 31nm,0.9s | | | | | | |
| YHNB | Yeheng | 21.75 | 343 | eP | P | 09 54 17.4 | +2.2 |
| | 16nm,0.5s | | | | | | |
| WRAB | Tennant Creek | 24.37 | 166 | eP | P | 09 54 38.6 | -2.5 |
| | 14nm,1.2s | | | | | | |
| WRA | Warramunga Arr | 24.37 | 166 | P | P | 09 54 38.4 | -2.7 |
| | 3.2nm,0.5s,baz=344,slow=10,SNR=36 | | | | | | |
| ASAR | Alice Springs | 27.88 | 169 | P | P | 09 55 10.1 | -2.8 |
| | 0.6nm,0.5s,baz=356,slow=8.4,SNR=14 | | | | | | |
| JNU | Nakatsue | 29.25 | 5 | P | P | 09 55 25.7 | +0.9 |
| | 7.6nm,1.2s,baz=334,slow=4.5,SNR=4.7 | | | | | | |
| CMAR | Chiang Mai Arr | 32.13 | 299 | P | P | 09 55 51.7 | +1.3 |
| | 2.1nm,0.6s,baz=116,slow=6.9,SNR=6.7 | | | | | | |
| KSAR | Wonju Array Be | 33.45 | 359 | P | P | 09 56 03.0 | +1.4 |
| KSRS | Korea Array | 33.46 | 360 | P | P | 09 56 03.0 | +1.3 |
| | 1.8nm,0.6s,baz=174,slow=9.4,SNR=12 | | | | | | |
| MJAR | Matsushiro Arr | 33.82 | 15 | P | P | 09 56 05.0 | 0.0 |
| | 5.0nm,0.7s,baz=181,slow=10,SNR=19 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 40.32 | 66 | T | T | 10 40 31.2 | |
| | baz=253,slow=75,SNR=8.7 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 40.33 | 66 | T | T | 10 40 27.9 | |
| | baz=253,slow=75,SNR=4.7 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 40.33 | 66 | T | T | 10 40 27.9 | |
| | baz=253,slow=75,SNR=6.2 | | | | | | |
| USRK | Ussuriysk Ar. | 40.34 | 4 | P | P | 09 57 00.7 | +0.6 |
| | 3.2nm,0.7s,baz=187,slow=7.6,SNR=8.7 | | | | | | |
| SONM | Songino Array | 47.70 | 340 | P | P | 09 57 59.5 | +0.4 |
| | 1.0nm,0.7s,baz=151,slow=8.2,SNR=5.8 | | | | | | |
| PETK | Petropavlovsk- | 54.78 | 21 | P | P | 09 58 52.8 | +0.9 |
| | 1.9nm,0.6s,baz=190,slow=5.7,SNR=4.8 | | | | | | |
| MKAR | Makanchi Array | 58.34 | 325 | P | P | 09 59 17.3 | 0.0 |
| | 7.8nm,0.4s,baz=118,slow=8.4,SNR=79 | | | | | | |
| TKM2 | Tokmak 2 | 60.67 | 318 | eP | P | 09 59 33.7 | 0.0 |
| | 3.9nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 61.19 | 332 | P | P | 09 59 35.2 | -1.4 |
| | 0.9nm,0.3s,baz=127,slow=7.3,SNR=4.6 | | | | | | |
| AAK | Ala-Archa | 61.30 | 317 | P | P | 09 59 37.7 | -0.2 |
| | 1.4nm,0.4s,baz=123,slow=3.6,SNR=5.1 | | | | | | |
| AAK | Ala-Archa | 61.30 | 317 | eP | P | 09 59 37.5 | -0.3 |
| | 1.4nm,0.6s | | | | | | |
| KURK | Kurchatov | 62.47 | 327 | eP | P | 09 59 44.7 | -0.7 |
| | 12nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 62.47 | 327 | P | P | 09 59 44.7 | -0.6 |
| | 6.3nm,0.6s,baz=126,slow=6.3,SNR=46 | | | | | | |
| KKAR | Karatay Array | 64.19 | 317 | eP | P | 09 59 56.3 | -0.6 |
| | 2.8nm,0.7s | | | | | | |
| BVAR | Borovoye Array | 68.06 | 327 | P | P | 10 00 20.9 | -0.6 |
| | 3.6nm,0.6s,baz=126,slow=7.7,SNR=16 | | | | | | |
| BRVK | Borovoye | 68.13 | 327 | eP | P | 10 00 21.1 | -0.8 |
| | 5.6nm,0.9s | | | | | | |
| AKTO | Aktyubinsk | 74.52 | 321 | P | P | 10 00 58.6 | -1.9 |
| | 1.7nm,0.7s,baz=100,slow=7.9,SNR=7.9 | | | | | | |
| ARU | Arti | 75.66 | 327 | P | P | 10 01 05.0 | -1.9 |
| | 0.4nm,0.2s,baz=287,slow=19,SNR=2.2 | | | | | | |
| ARU | Arti | 75.66 | 327 | eP | P | 10 01 04.8 | -2.1 |
| | 5.2nm,0.8s | | | | | | |
| TXAR | Lajitas Array | 120.34 | 53 | PKP | PKPdf | 10 08 12.5 | -1.0 |
| | 0.1nm,0.5s,baz=90,slow=0.9,SNR=2.6 | | | | | | |

**SJA 10 10:00:09.4±1.0, 30°.51S×69°.54W, h114km±50km, MD3.6, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RTLL | Cerro Villicun | 1.22 | 132 | eP | Pn | 10 00 34.7 | +1.3 |
| AGUA | GUANDACOL | 1.37 | 42 | eP | Pn | 10 00 35.8 | +0.7 |
| CFAA | Coronel Fontan | 1.56 | 135 | eP | Pn | 10 00 38.5 | +1.3 |
| RTCV | Cerro Valdivia | 1.59 | 148 | eP | Pn | 10 00 37.9 | +0.3 |
| RTCV | | | | eS | Sn | 10 01 00.0 | +0.9 |
| VCA | Vinchina | 2.12 | 34 | eP | Pn | 10 00 42.9 | -1.4 |
| ROC1 | El Roble | 2.76 | 207 | eP | Pn | 10 00 53.9 | +1.2 |

*IDC 10 10:04:20.4±1.0, 5°.25S×133°.78E, h0km, mb3.9/6, mb1 4.0/10, mb1mx3.9/24, mbtmp3.9/10, ML3.5/4, Error ellipse: s-maj=34.3km s-min=22.3km az=70.0*
*ISCJB 10 10:04:22.3±0.6, 5°.32S±0°.08×133°.88E±0°.07, h32km, mb3.8/6, Error ellipse: s-maj=11.7km s-min=8.6km az=151.3*
**ISC 10 10:04:24.6±0.7, 5°.29S±0°.09×133°.84E±0°.08, h32km, n13, σ1s.18/14, mb3.8/6, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 5.09 | 330 | Pn | Pn | 10 05 36.4 | -2.3 |
| | 2.4nm,0.3s,baz=259,slow=23,SNR=10 | | | | | | |
| SIJI | | | | Sn | Sn | 10 06 27.9 | -8.6 |
| | 3.0nm,0.3s,baz=38,slow=23,SNR=6.1 | | | | | | |
| JAY | Jayapura | 7.38 | 68 | Pn | Pn | 10 06 10.5 | +0.3 |
| | 0.4nm,0.3s,baz=100,slow=19,SNR=2.5 | | | | | | |
| JAY | | | | Sn | Sn | 10 07 33.5 | +0.6 |
| | 0.5nm,0.3s,baz=48,slow=15,SNR=2.2 | | | | | | |
| BATI | Baumata | 11.20 | 244 | Pn | Pn | 10 07 04.3 | +1.6 |
| | 4.9nm,0.3s,baz=93,slow=4.6,SNR=4.1 | | | | | | |
| WRA | Warramunga Arr | 14.57 | 178 | Pn | Pn | 10 07 46.9 | -1.8 |
| | 0.2nm,0.3s,baz=357,slow=13,SNR=12 | | | | | | |
| ASAR | Alice Springs | 18.27 | 180 | P | P | 10 08 35.2 | -0.5 |
| | 0.3nm,0.3s,baz=2.3,slow=11,SNR=28 | | | | | | |
| CMAR | Chiang Mai Arr | 41.72 | 305 | P | P | 10 12 11.4 | +0.5 |
| | 0.4nm,0.3s,baz=143,slow=9.1,SNR=4.6 | | | | | | |
| KSRS | Korea Array | 42.88 | 353 | P | P | 10 12 20.6 | +0.5 |
| | 1.2nm,0.8s,baz=166,slow=8.9,SNR=5.9 | | | | | | |
| MKAR | Makanchi Array | 68.97 | 325 | P | P | 10 15 27.5 | +0.7 |
| | 2.2nm,0.7s,baz=115,slow=8.2,SNR=16 | | | | | | |
| ZALV | Zalesovo Beam | 71.82 | 332 | P | P | 10 15 42.9 | -1.1 |
| | 0.5nm,0.4s,baz=100,slow=5.8,SNR=4.4 | | | | | | |
| BVAR | Borovoye Array | 78.71 | 327 | P | P | 10 16 24.3 | +0.6 |
| | 1.1nm,0.5s,baz=130,slow=5.8,SNR=4.6 | | | | | | |
| ILAR | Eielson Array | 90.19 | 25 | P | P | 10 17 21.6 | 0.0 |
| | 0.3nm,0.6s,baz=268,slow=4.5,SNR=4.8 | | | | | | |
| TORD | Torodi Ar. Bea | 132.19 | 283 | PKP | PKPdf | 10 23 37.1 | +0.8 |
| | 0.2nm,0.6s,baz=58,slow=1.1,SNR=2.2 | | | | | | |
| CPUP | Villa Florida | 146.75 | 162 | PKPbc | PKPab | 10 24 05.8 | +0.6 |
| | 4.3nm,1.0s,baz=201,slow=3.5,SNR=4.3 | | | | | | |

**IDC 10 10:07:20.5±3.8, 6°.39N×93°.92E, h0km, mb3.7/3, mb1 3.9/3, mb1mx3.4/38, mbtmp3.7/3, Error ellipse: s-maj=342.3km s-min=30.9km az=48.0, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S3 | Diego Garcia H | 25.51 | 237 | T | T | 10 38 58.3 | |
| | baz=62,slow=74,SNR=8.7 | | | | | | |
| H08S2 | Diego Garcia H | 25.52 | 237 | T | T | 10 39 08.1 | |
| | baz=62,slow=74,SNR=11 | | | | | | |
| H08S1 | Diego Carcia H | 25.53 | 237 | T | T | 10 39 06.9 | |
| | baz=62,SNR=11 | | | | | | |
| H08N1 | Diego Carcia H | 26.12 | 241 | T | T | 10 40 47.0 | |
| | baz=40,SNR=23 | | | | | | |
| H08N2 | Diego Garcia H | 26.13 | 242 | T | T | 10 40 47.3 | |
| | baz=40,SNR=19 | | | | | | |
| H08N3 | Diego Garcia H | 26.14 | 241 | T | T | 10 40 47.0 | |
| | baz=40,SNR=20 | | | | | | |
| WRA | Warramunga Arr | 47.60 | 124 | P | P | 10 15 58.2 | -0.4 |
| | 0.5nm,0.6s,baz=302,slow=9.5,SNR=9.1 | | | | | | |
| ASAR | Alice Springs | 49.15 | 129 | P | P | 10 16 10.8 | +0.2 |
| | 0.3nm,0.4s,baz=303,slow=7.7,SNR=4.5 | | | | | | |
| FINES | FINESS Array B | 73.91 | 332 | P | P | 10 18 57.2 | -0.1 |
| | 1.1nm,0.6s,baz=114,slow=4.6,SNR=4.4 | | | | | | |

*IDC 10 10:46:45.5±2.1, 54°.25N×86°.11E, h0km, mb1 3.4/3, mb1mx3.2/37, mbtmp3.4/3, ML3.1/3, Error ellipse: s-maj=18.5km s-min=10.5km az=61.0*
*NNC 10 10:46:47.6±7.5, 54°.17N×85°.85E, h0km, mb3.8, mpv3.4, Error ellipse: s-maj=66.9km s-min=41.3km az=58.0*
**ISC 10 10:46:52.6±5.4, 54°.1N±0°.2×85°.4E±0°.3, h10km, n10, σ0s.87/10, 5C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 0.39 | 244 | i | | 10 52 20.0 | |
| | baz=68,slow=332,SNR=3.5 | | | | | | |
| ZALV | Zalesovo Beam | 0.39 | 244 | Pg | Pg | 10 46 59.8 | -0.5 |
| | 2.0nm,0.3s,baz=64,slow=17,SNR=15 | | | | | | |
| ZALV | | | | Lg | Lg | 10 47 13.3 | |
| | 8.2nm,0.3s,baz=69,slow=29,SNR=28 | | | | | | |
| KURK | Kurchatov | 5.38 | 233 | ⇓Pn | Pn | 10 48 12.4 | -0.4 |
| | 3.5nm,0.7s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 10 49 48.2 | |
| | 10nm,1.1s | | | | | | |
| KURBB | Kurchatov Arra | 5.48 | 233 | ⇓Pn | Pn | 10 48 14.8 | +0.5 |
| | 1.1nm,0.3s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 10 49 50.1 | |
| | 5.0nm,0.7s | | | | | | |
| KURBB | Kurchatov Arra | 5.48 | 233 | Pn | Pn | 10 48 13.8 | -0.5 |
| | 0.2nm,0.3s,baz=52,slow=14,SNR=21 | | | | | | |
| KURBB | | | | Lg | Lg | 10 49 57.4 | |
| | 0.1nm,0.3s,baz=52,slow=33,SNR=6.6 | | | | | | |
| MK31 | Makanchi Array | 7.60 | 196 | ⇓Pn | Pn | 10 48 42.3 | -1.2 |
| | 1.1nm,0.5s,baz=28,slow=14,SNR=17 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 10 50 10.3 | +0.7 |
| | 1.6nm,0.9s,baz=22,slow=22 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 10 50 52.3 | |
| | 1.6nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 7.60 | 196 | Pn | Pn | 10 48 41.9 | -1.5 |
| | 0.5nm,0.3s,baz=22,slow=12,SNR=19 | | | | | | |
| MKAR | | | | Sn | Sn | 10 50 10.5 | +0.9 |
| | 0.2nm,0.3s,baz=20,slow=29,SNR=5.5 | | | | | | |
| MKAR | | | | Lg | Lg | 10 50 56.6 | |
| | 0.1nm,0.3s,baz=18,slow=29,SNR=5.6 | | | | | | |
| VOSK | Vostochnaya | 8.73 | 267 | ⇑Pn | Pn | 10 48 58.7 | -0.2 |
| | 1.6nm,0.7s | | | | | | |
| VOSK | | | | ⇓Sn | Sn | 10 50 36.6 | -0.7 |
| | 1.4nm,0.8s | | | | | | |
| BVAR | Borovoye Array | 9.01 | 269 | Pn | Pn | 10 49 02.6 | -0.1 |
| | 0.2nm,0.3s,baz=74,slow=12,SNR=3.3 | | | | | | |
| ZRNK | Zerenda | 9.84 | 270 | ⇓Pn | Pn | 10 49 15.3 | +1.3 |
| | 1.6nm,0.7s | | | | | | |

**IDC 10 11:00:58.9±4.8, 18°.58S×178°.13W, h273km±34km, mb2.8/4, mb1 3.3/5, mb1mx3.0/19, mbtmp3.6/5, Error ellipse: s-maj=178.7km s-min=17.1km az=155.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 7.66 | 54 | P | Pn | 11 02 49.4 | +1.1 |
| | 1.7nm,0.3s,baz=256,slow=19,SNR=6.1 | | | | | | |
| AFI | | | | S | S | 11 04 15.2 | -1.3 |
| | 0.9nm,0.3s,baz=53,slow=20,SNR=3.7 | | | | | | |
| WRA | Warramunga Arr | 44.78 | 260 | P | P | 11 08 46.4 | +0.2 |
| | 0.2nm,0.3s,baz=96,slow=7.8,SNR=19 | | | | | | |
| ASAR | Alice Springs | 44.87 | 255 | P | P | 11 08 46.0 | -0.9 |
| | 0.4nm,0.9s,baz=87,slow=8.1,SNR=4.3 | | | | | | |
| NVAR | Mina Array Bea | 79.72 | 44 | P | P | 11 12 37.7 | +0.8 |
| | 0.4nm,0.8s,baz=225,slow=8.9,SNR=3.1 | | | | | | |
| TXAR | Lajitas Array | 86.12 | 57 | P | P | 11 13 08.6 | -1.2 |
| | 0.2nm,0.7s,baz=207,slow=7.1,SNR=4.2 | | | | | | |

*IPEC 10 11:02:18.9±0.3, 51°.64N×16°.12E, h0km, ML1.9/1, Error ellipse: s-maj=3.4km s-min=1.7km az=66.0*
*ISCJB 10 11:02:19.4±0.8, 51°.47N±0°.04×15°.96E±0°.04, h0km, Error ellipse: s-maj=5.7km s-min=3.2km az=18.7*
*CSEM 10 11:02:19.8±0.5, 51°.52N×15°.98E, h2km, ML3.0/9, Error ellipse: s-maj=7.4km s-min=4.6km az=5.0*
*PRU 10 11:02:20.7, 51°.51N×16°.00E, h0km*
**ISC 10 11:02:20.6±1.4, 51°.49N±0°.06×15°.96E±0°.03, h0km, n26, σ0s.91/51, Poland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.68 | 162 | ePg | Pb | 11 02 34.6 | -0.7 |
| KSP | | | | i | | 11 02 36.8 | |
| KSP | | | | eSg | Sb | 11 02 44.7 | -0.5 |
| KSP | Ksiaz | 0.68 | 162 | ePg | Pb | 11 02 34.6 | -0.7 |
| KSP | | | | eSg | Sb | 11 02 44.7 | -0.5 |
| UPC | Upice | 0.98 | 178 | ePG | Pg | 11 02 39.5 | +0.1 |
| UPC | | | | eSG | Sg | 11 02 52.2 | +0.1 |
| | comp=Z,28nm,0.4s | | | | | | |
| UPC | Upice | 0.98 | 178 | Pg | Pg | 11 02 39.5 | +0.1 |
| UPC | | | | Sg | Sg | 11 02 52.2 | +0.1 |
| | 28nm,0.4s | | | | | | |
| DPC | Dobruska-Polom | 1.16 | 169 | ePG | Pg | 11 02 42.7 | -0.1 |
| DPC | | | | eSG | Sg | 11 02 57.8 | -0.1 |
| | comp=Z,13nm,0.4s | | | | | | |
| DPC | Dobruska-Polom | 1.16 | 169 | Pg | Pg | 11 02 42.7 | -0.1 |
| DPC | | | | Sg | Sg | 11 02 57.8 | -0.1 |
| | 13nm,0.4s | | | | | | |
| PVCC | Panska Ves | 1.30 | 223 | ePG | Pb | 11 02 45.8 | -0.2 |
| PVCC | | | | eSG | Sb | 11 03 03.6 | +0.4 |
| | comp=Z,54nm,0.2s | | | | | | |
| PVCC | Panska Ves | 1.30 | 223 | Pg | Pb | 11 02 45.8 | -0.2 |
| PVCC | | | | Sg | Sb | 11 03 03.6 | +0.4 |
| | 54nm,0.2s | | | | | | |
| BRG | Berggiesshubel | 1.41 | 245 | PG | Pn | 11 02 47.5 | -0.1 |
| BRG | | | | SG | Sn | 11 03 07.6 | +0.7 |
| | 58nm,0.4s | | | | | | |
| KRLC | Kraliky | 1.51 | 159 | ePG | Pn | 11 02 48.5 | -0.4 |
| KRLC | | | | eSG | Sg | 11 03 08.6 | -0.4 |
| KRLC | Kraliky | 1.51 | 159 | Pg | Pn | 11 02 48.5 | -0.4 |
| KRLC | | | | Sg | Sg | 11 03 08.6 | -0.4 |
| PRA | Prague | 1.72 | 215 | eSG | Sg | 11 03 16.6 | +0.8 |
| | comp=Z,9.8nm,0.3s | | | | | | |
| PRA | Prague | 1.72 | 215 | Sg | Sg | 11 03 16.6 | +0.8 |
| | 9.8nm,0.3s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.74 | 206 | ePG | Pb | 11 02 53.4 | -0.1 |
| GOPC | | | | eSG | Sg | 11 03 17.0 | +0.4 |
| | comp=Z,8.4nm,0.4s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.74 | 206 | Pg | Pb | 11 02 53.4 | -0.1 |
| GOPC | | | | Sg | Sg | 11 03 17.0 | +0.4 |
| | 8.4nm,0.4s | | | | | | |
| PRU | Pruhonice | 1.75 | 212 | ePN | Pn | 11 02 52.1 | -0.1 |
| PRU | | | | ePG | Pb | 11 02 53.6 | 0.0 |
| PRU | | | | eSG | Sg | 11 03 17.3 | +0.5 |
| | comp=Z,13nm,0.3s | | | | | | |
| PRU | Pruhonice | 1.75 | 212 | Pn | Pn | 11 02 52.1 | -0.1 |
| CLL | Collm | 1.86 | 266 | ePn | Pn | 11 02 52.0 | -1.7 |
| CLL | | | | ePg | Pb | 11 02 55.0 | -0.5 |
| CLL | | | | i | | 11 02 59.0 | |
| CLL | | | | eSg | Sg | 11 03 21.0 | +0.6 |
| | comp=Z,8.0nm,0.4s | | | | | | |
| MORC | Moravsky Berou | 1.99 | 149 | ePn | Pn | 11 02 54.9 | -0.6 |
| MORC | | | | eSg | Sg | 11 03 23.9 | -0.5 |
| | comp=Z,6.9nm,0.3s,baz=335 | | | | | | |
| OKC | Ostrava-Krasne | 2.16 | 139 | ePG | Pb | 11 03 00.3 | -0.2 |
| OKC | | | | eSG | Sg | 11 03 29.0 | -0.9 |
| | comp=Z,7.9nm,0.4s | | | | | | |
| OKC | Ostrava-Krasne | 2.16 | 139 | Pg | Pb | 11 03 00.3 | -0.2 |
| OKC | | | | Sg | Sg | 11 03 29.0 | -0.9 |
| | comp=Z,7.9nm,0.4s | | | | | | |
| VRAC | Vranov | 2.22 | 169 | ePn | Pn | 11 02 59.0 | +0.3 |
| VRAC | | | | eSg | Sg | 11 03 32.8 | +1.0 |
| | baz=353 | | | | | | |
| KRUC | Moravsky | 2.44 | 173 | ePn | Pn | 11 03 01.9 | +0.2 |
| | baz=356 | | | | | | |
| KRUC | | | | eSg | Sg | 11 03 39.8 | +0.7 |
| | baz=356 | | | | | | |
| KHC | Kasperske Hory | 2.81 | 214 | ePN | Pn | 11 03 06.9 | +0.1 |
| KHC | | | | ePG | Pb | 11 03 12.7 | +1.0 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| KHC | | | | eSN | Sn | 11 03 40.8 | -0.6 |
| KHC | | | | eSG | Sg | 11 03 50.5 | -0.4 |
| | comp=Z,4.6nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.81** | **214** | Pn | **Pn** | **11 03 06.9** | **+0.1** |
| **STHS** | **Stebnicka Huta** | **3.96** | **120** | eSG | **Sg** | **11 04 32.8** | **+5.0** |

*LDG **10** 11:23:12.9±0.1, 44°.47N×7°.21E, h10km, Md2.5/3, Ml2.5/22, Error ellipse: s-maj=1.8km s-min=1.0km az=68.0*
*GEN **10** 11:23:12.8, 44°.46N×7°.18E, h14km, ML2.3*
*CSEM **10** 11:23:12.3±0.1, 44°.47N×7°.21E, h15km, ML2.7/25, Error ellipse: s-maj=3.0km s-min=1.8km az=63.0*
*ROM **10** 11:23:12.4±0.1, 44°.47N×7°.20E, h15km±1km, Md2.3/11, Ml2.1/7, Error ellipse: s-maj=2.2km s-min=1.0km az=53.0*
*ISCJB **10** 11:23:12.5±0.2, 44°.47N±0°.01×7°.19E±0°.03, h22km±2km, Error ellipse: s-maj=3.6km s-min=2.1km az=156.7*
*STR **10** 11:23:13.0±0.1, 44°.46N×7°.16E, h5km, Ml2.5, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
**ISC 10 11:23:12.1**±0.8**, 44°.48N**±0°.01×**7°.20E**±0°.02**, h18**km±3km**,**
**n101, σ0s.97**/181**, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DOI** | **San Damiano** | **0.04** | **50** | Pg | **Pg** | **11 23 15.9** | **+0.5** |
| DOI | | | | Sg | **Sg** | **11 23 17.8** | **+0.1** |
| | 5μm,0.1s | | | | | | |
| **DOI** | **San Damiano** | **0.04** | **50** | Pg | **Pg** | **11 23 15.9** | **+0.5** |
| DOI | | | | Sg | **Sg** | **11 23 17.8** | **+0.1** |
| | 5μm,0.1s | | | | | | |
| **PZZ** | **Stroppo** | **0.07** | **298** | Pg | **Pg** | **11 23 15.7** | **+0.1** |
| PZZ | | | | Sg | **Sg** | **11 23 17.6** | **-0.4** |
| | 4μm,0.1s | | | | | | |
| **PZZ** | **Stroppo** | **0.07** | **298** | P | **Pg** | **11 23 15.7** | **+0.1** |
| PZZ | | | | S | **Sg** | **11 23 17.6** | **-0.4** |
| **STV** | **Sant Anna di V** | **0.25** | **158** | Pg | **Pb** | **11 23 18.3** | **+0.2** |
| STV | | | | Sg | **Sg** | **11 23 21.5** | **-0.1** |
| | 543nm,0.2s | | | | | | |
| **STV** | **Sant Anna di V** | **0.25** | **158** | P | **Pg** | **11 23 18.0** | **+0.2** |
| **STV** | **Sant Anna di V** | **0.25** | **158** | Pg | **Pb** | **11 23 18.3** | **+0.2** |
| STV | | | | S | **Sg** | **11 23 21.5** | **-0.1** |
| **SURF** | **Saint Ours** | **0.28** | **271** | Pg | **Pg** | **11 23 18.5** | **+0.2** |
| SURF | | | | Sg | **Sg** | **11 23 21.8** | **-0.8** |
| **SURF** | **Saint Ours** | **0.28** | **271** | Pg | **Pg** | **11 23 18.5** | **+0.2** |
| SURF | | | | Sg | **Sg** | **11 23 21.8** | **-0.8** |
| **ENR** | **Entracque** | **0.29** | **147** | P | **Pg** | **11 23 18.8** | **+0.2** |
| ENR | | | | S | **Sg** | **11 23 22.8** | **-0.2** |
| **BHB** | **Bricherasio** | **0.37** | **7** | Pg | **Pg** | **11 23 20.1** | **+0.3** |
| BHB | | | | Sg | **Sg** | **11 23 25.4** | **+0.4** |
| | 90nm,0.3s | | | | | | |
| **BHB** | **Bricherasio** | **0.37** | **7** | P | **Pg** | **11 23 20.1** | **+0.3** |
| BHB | | | | S | **Sg** | **11 23 25.4** | **+0.4** |
| **OG22** | **Abries** | **0.39** | **332** | Pg | **Pg** | **11 23 20.7** | **+0.4** |
| OG22 | | | | Sg | **Sg** | **11 23 26.2** | **+0.4** |
| **OG22** | **Abries** | **0.39** | **332** | Pg | **Pg** | **11 23 20.7** | **+0.4** |
| OG22 | | | | Sg | **Sg** | **11 23 26.2** | **+0.4** |
| **MBDF** | **Montbardon** | **0.40** | **310** | ePg | **Pg** | **11 23 20.7** | **+0.4** |
| MBDF | | | | eSg | **Sg** | **11 23 26.1** | **+0.2** |
| | 357nm,0.3s | | | | | | |
| **MBDF** | **Montbardon** | **0.40** | **310** | ePg | **Pg** | **11 23 20.7** | **+0.4** |
| MBDF | | | | eSg | **Sg** | **11 23 26.1** | **+0.2** |
| | 179nm,0.3s | | | | | | |
| **AUTN** | **L'Aution** | **0.51** | **161** | Pg | **Pg** | **11 23 22.3** | **-0.1** |
| AUTN | | | | Sg | **Sg** | **11 23 29.1** | **-0.1** |
| **AUTN** | **L'Aution** | **0.51** | **161** | Pg | **Pg** | **11 23 22.3** | **-0.1** |
| AUTN | | | | Sg | **Sg** | **11 23 29.1** | **-0.1** |
| **RRL** | **Rocca Remolon** | **0.53** | **327** | Pg | **Pg** | **11 23 23.2** | **+0.4** |
| RRL | | | | Sg | **Sb** | **11 23 30.8** | **+0.3** |
| | 73nm,0.3s | | | | | | |
| **RRL** | **Rocca Remolon** | **0.53** | **327** | P | **Pg** | **11 23 23.2** | **+0.4** |
| RRL | | | | S | **Sg** | **11 23 30.4** | **+0.3** |
| RRL | | | | Sg | **Sb** | **11 23 30.8** | **+0.3** |
| | 73nm,0.3s | | | | | | |
| **MVIF** | **Mont Vial** | **0.58** | **183** | Pg | **Pg** | **11 23 23.9** | **+0.2** |
| MVIF | | | | Sg | **Sg** | **11 23 31.5** | **0.0** |
| **MVIF** | **Mont Vial** | **0.58** | **183** | Pg | **Pg** | **11 23 23.9** | **+0.2** |
| MVIF | | | | Sg | **Sg** | **11 23 31.5** | **0.0** |
| **LUCF** | **Luceram** | **0.59** | **170** | Pg | **Pg** | **11 23 24.0** | **+0.1** |
| LUCF | | | | Sg | **Sg** | **11 23 32.0** | **+0.2** |
| **LUCF** | **Luceram** | **0.59** | **170** | Pg | **Pg** | **11 23 24.0** | **+0.1** |
| LUCF | | | | Sg | **Sg** | **11 23 32.0** | **+0.2** |
| **SBF** | **Sospel** | **0.64** | **164** | ePg | **Pg** | **11 23 25.0** | **+0.3** |
| SBF | | | | eSg | **Sg** | **11 23 33.3** | **+0.2** |
| | 63nm,0.2s | | | | | | |
| **SBF** | **Sospel** | **0.64** | **164** | ePg | **Pg** | **11 23 25.0** | **+0.3** |
| SBF | | | | eSg | **Sg** | **11 23 33.3** | **+0.2** |
| | 32nm,0.2s | | | | | | |
| **RSP** | **Reno Superiore** | **0.67** | **4** | Pg | **Pb** | **11 23 25.0** | **-0.4** |
| RSP | | | | Sg | **Sg** | **11 23 35.2** | **+0.8** |
| **RSP** | **Reno Superiore** | **0.67** | **4** | P | **Pb** | **11 23 25.1** | **-0.4** |
| RSP | | | | S | **Sb** | **11 23 34.0** | **-0.5** |
| RSP | | | | Sg | **Sg** | **11 23 35.2** | **+0.8** |
| **BNI** | **Bardonecchia** | **0.69** | **327** | Pg | **Pg** | **11 23 26.0** | **+0.4** |
| BNI | | | | Sg | **Sb** | **11 23 35.0** | **+0.2** |
| **BNI** | **Bardonecchia** | **0.69** | **327** | Pg | **Pg** | **11 23 26.0** | **+0.4** |
| BNI | | | | Sg | **Sb** | **11 23 35.0** | **+0.2** |
| **RORO** | **Rocca Rossa** | **0.72** | **120** | Pg | **Pb** | **11 23 26.2** | **+0.1** |
| RORO | | | | Sg | **Sb** | **11 23 35.9** | **+0.2** |
| | 72nm,0.2s | | | | | | |
| **RORO** | **Rocca Rossa** | **0.72** | **120** | P | **Pb** | **11 23 26.2** | **+0.1** |
| RORO | | | | S | **Sb** | **11 23 35.3** | **-0.4** |
| RORO | | | | Sg | **Sb** | **11 23 35.9** | **+0.2** |
| | 72nm,0.2s | | | | | | |
| **REVF** | **Revere** | **0.74** | **171** | Pg | **Pg** | **11 23 27.3** | **+0.6** |
| REVF | | | | Sg | **Sg** | **11 23 37.8** | **+1.2** |
| **REVF** | **Revere** | **0.74** | **171** | Pg | **Pg** | **11 23 27.3** | **+0.6** |
| REVF | | | | Sg | **Sg** | **11 23 37.8** | **+1.2** |
| **IMI** | **Imperia** | **0.75** | **138** | Pg | **Pb** | **11 23 26.7** | **0.0** |
| IMI | | | | Sg | **Sb** | **11 23 36.6** | **-0.1** |
| **IMI** | **Imperia** | **0.75** | **138** | P | **Pb** | **11 23 26.7** | **0.0** |
| IMI | | | | S | **Sb** | **11 23 36.3** | **-0.4** |
| IMI | | | | Sg | **Sb** | **11 23 36.6** | **-0.1** |
| **CALN** | **Calern** | **0.76** | **197** | Pg | **Pg** | **11 23 27.4** | **+0.5** |
| CALN | | | | Sg | **Sb** | **11 23 37.1** | **+0.2** |
| **CALN** | **Calern** | **0.76** | **197** | Pg | **Pg** | **11 23 27.4** | **+0.5** |
| CALN | | | | Sg | **Sb** | **11 23 37.1** | **+0.2** |
| **FINB** | **Finale Ligure** | **0.86** | **110** | Pg | **Pb** | **11 23 28.8** | **+0.3** |
| FINB | | | | Sg | **Sg** | **11 23 40.3** | **+0.1** |
| | 69nm,0.2s | | | | | | |
| **FINB** | **Finale Ligure** | **0.86** | **110** | Pg | **Pb** | **11 23 28.8** | **+0.3** |
| FINB | | | | Sg | **Sg** | **11 23 40.3** | **+0.1** |
| | 69nm,0.2s | | | | | | |
| **PCP** | **Piancastagn** | **0.96** | **86** | Pg | **Pn** | **11 23 30.8** | **0.0** |
| PCP | | | | Sg | **Sg** | **11 23 43.7** | **+0.2** |
| | 27nm,0.3s | | | | | | |
| **PCP** | **Piancastagn** | **0.96** | **86** | Pg | **Pn** | **11 23 30.8** | **0.0** |
| PCP | | | | Sg | **Sg** | **11 23 43.7** | **+0.2** |
| | 27nm,0.3s | | | | | | |
| **LSD** | **Lago del Serru** | **0.98** | **357** | Pg | **Pn** | **11 23 31.4** | **+0.1** |
| LSD | | | | Sg | **Sb** | **11 23 44.1** | **+0.5** |
| | 33nm,0.3s | | | | | | |
| **LSD** | **Lago del Serru** | **0.98** | **357** | Pg | **Pn** | **11 23 31.4** | **+0.1** |
| LSD | | | | Sg | **Sb** | **11 23 44.1** | **+0.5** |
| | 33nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.04** | **296** | ePn | **Pn** | **11 23 32.2** | **+0.3** |
| ORIF | | | | eSn | **Sb** | **11 23 45.1** | **+0.1** |
| | 28nm,0.2s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.04** | **296** | ePn | **Pn** | **11 23 32.2** | **+0.3** |
| ORIF | | | | eSn | **Sb** | **11 23 45.1** | **+0.1** |
| | 14nm,0.2s | | | | | | |
| **LPG** | **La Plagne** | **1.07** | **343** | ePn | **Pg** | **11 23 33.2** | **+0.3** |
| **LPG** | **La Plagne** | **1.07** | **343** | ePg | **Pg** | **11 23 33.9** | **+1.0** |
| LPG | | | | eSg | **Sn** | **11 23 47.5** | **+0.4** |
| | 16nm,0.2s | | | | | | |
| **LPG** | **La Plagne** | **1.07** | **343** | ePn | **Pg** | **11 23 33.2** | **+0.3** |
| **LPG** | **La Plagne** | **1.07** | **343** | ePg | **Pg** | **11 23 33.9** | **+1.0** |
| LPG | | | | eSg | **Sn** | **11 23 47.5** | **+0.4** |
| | 8.1nm,0.2s | | | | | | |
| **LPL** | **La Plagne** | **1.09** | **343** | ePn | **Pn** | **11 23 33.3** | **+0.6** |
| **LPL** | **La Plagne** | **1.09** | **343** | ePg | **Pg** | **11 23 34.2** | **+0.9** |
| LPL | | | | eSg | **Sg** | **11 23 48.2** | **+0.6** |
| | 19nm,0.2s | | | | | | |
| **LPL** | **La Plagne** | **1.09** | **343** | ePn | **Pn** | **11 23 33.3** | **+0.6** |
| **LPL** | **La Plagne** | **1.09** | **343** | ePg | **Pg** | **11 23 34.2** | **+0.9** |
| LPL | | | | eSg | **Sg** | **11 23 48.2** | **+0.6** |
| | 9.6nm,0.2s | | | | | | |
| **LMR** | **La Mourre** | **1.25** | **204** | ePg | **Pb** | **11 23 35.7** | **+0.6** |
| LMR | | | | eSg | **Sg** | **11 23 52.2** | **-0.2** |
| | 52nm,0.2s | | | | | | |
| **LMR** | **La Mourre** | **1.25** | **204** | ePg | **Pb** | **11 23 35.7** | **+0.6** |
| LMR | | | | eSg | **Sg** | **11 23 52.2** | **-0.2** |
| | 26nm,0.2s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.27** | **247** | ePn | **Pn** | **11 23 35.3** | **+0.3** |
| **SMRF** | **Simiane la Rot** | **1.27** | **247** | ePg | **Pg** | **11 23 37.1** | **+0.5** |
| SMRF | | | | eSg | **Sg** | **11 23 53.6** | **+0.4** |
| | 66nm,0.4s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.27** | **247** | ePn | **Pn** | **11 23 35.3** | **+0.3** |
| **SMRF** | **Simiane la Rot** | **1.27** | **247** | ePg | **Pg** | **11 23 37.1** | **+0.5** |
| SMRF | | | | eSg | **Sg** | **11 23 53.6** | **+0.4** |
| | 33nm,0.4s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.84** | **283** | eP | **Pb** | **11 23 44.7** | **-0.6** |
| **VIVF** | **Saint-Julien-l** | **1.84** | **283** | ePg | **Pg** | **11 23 47.5** | **0.0** |
| VIVF | | | | eSn | **Sn** | **11 24 05.6** | **-0.2** |
| | 17nm,0.5s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.84** | **283** | eP | **Pb** | **11 23 44.7** | **-0.6** |
| **VIVF** | **Saint-Julien-l** | **1.84** | **283** | ePg | **Pg** | **11 23 47.5** | **0.0** |
| VIVF | | | | eSn | **Sn** | **11 24 05.6** | **-0.2** |
| | 8.7nm,0.5s | | | | | | |
| **CABF** | **La Chapelle** | **2.27** | **340** | eP | **Pb** | **11 23 51.6** | **-1.1** |
| **CABF** | **La Chapelle** | **2.27** | **340** | ePg | **Pg** | **11 23 56.2** | **+0.5** |
| CABF | | | | eSn | **Sn** | **11 24 16.1** | **-0.4** |
| | 7.0nm,0.5s | | | | | | |
| **CABF** | **La Chapelle** | **2.27** | **340** | eP | **Pb** | **11 23 51.6** | **-1.1** |
| **CABF** | **La Chapelle** | **2.27** | **340** | ePg | **Pg** | **11 23 56.2** | **+0.5** |
| CABF | | | | eSn | **Sn** | **11 24 16.1** | **-0.4** |
| | 3.5nm,0.5s | | | | | | |
| **PGF** | **Pioggiola** | **2.33** | **145** | ePn | **Pn** | **11 23 49.4** | **-0.2** |
| PGF | | | | eSn | **Sn** | **11 24 16.3** | **-1.6** |
| | 5.0nm,0.2s | | | | | | |
| **PGF** | **Pioggiola** | **2.33** | **145** | ePn | **Pn** | **11 23 49.4** | **-0.2** |
| PGF | | | | eSn | **Sn** | **11 24 16.3** | **-1.6** |
| | 2.5nm,0.2s | | | | | | |
| **LASF** | **Ste Croix** | **2.43** | **262** | ePn | **Pn** | **11 23 51.8** | **+0.8** |
| **LASF** | **Ste Croix** | **2.43** | **262** | ePg | **Pg** | **11 23 57.8** | **-0.9** |
| LASF | | | | eSn | **Sn** | **11 24 19.9** | **-0.4** |
| | 4.2nm,0.3s | | | | | | |
| **LASF** | **Ste Croix** | **2.43** | **262** | ePn | **Pn** | **11 23 51.8** | **+0.8** |
| **LASF** | **Ste Croix** | **2.43** | **262** | ePg | **Pg** | **11 23 57.8** | **-0.9** |
| LASF | | | | eSn | **Sn** | **11 24 19.9** | **-0.4** |
| | 2.1nm,0.3s | | | | | | |
| **SMF** | **Signal de Mont** | **3.21** | **314** | ePn | **Pn** | **11 24 01.8** | **+0.2** |
| **SMF** | **Signal de Mont** | **3.21** | **314** | eP | **Pn** | **11 24 04.4** | **+2.8** |
| SMF | | | | eSg | **Sg** | **11 24 53.9** | **-1.1** |
| | 5.0nm,0.4s | | | | | | |
| **SMF** | **Signal de Mont** | **3.21** | **314** | ePn | **Pn** | **11 24 01.8** | **+0.2** |
| **SMF** | **Signal de Mont** | **3.21** | **314** | eP | **Pn** | **11 24 04.4** | **+2.8** |
| SMF | | | | eSg | **Sg** | **11 24 53.9** | **-1.1** |
| | 2.5nm,0.4s | | | | | | |
| **HINF** | **Hinteralfeld** | **3.35** | **356** | ePn | **Pn** | **11 24 03.8** | **+0.2** |
| HINF | | | | eSn | **Sn** | **11 24 42.3** | **-0.7** |
| | 1.1nm,0.2s | | | | | | |
| **HINF** | **Hinteralfeld** | **3.35** | **356** | ePn | **Pn** | **11 24 03.8** | **+0.2** |
| HINF | | | | eSn | **Sn** | **11 24 42.3** | **-0.7** |
| | 0.6nm,0.2s | | | | | | |
| **AVF** | **Avril sur Loir** | **3.56** | **312** | eP | **Pn** | **11 24 08.8** | **+2.4** |
| AVF | | | | eSn | **Sn** | **11 24 47.4** | **-0.5** |
| | 1.2nm,0.3s | | | | | | |
| **AVF** | **Avril sur Loir** | **3.56** | **312** | eP | **Pn** | **11 24 08.8** | **+2.4** |
| AVF | | | | eSn | **Sn** | **11 24 47.4** | **-0.5** |
| | 0.6nm,0.3s | | | | | | |
| **LOR** | **Lormes** | **3.64** | **321** | eP | **Pn** | **11 24 10.1** | **+2.5** |
| LOR | | | | eSn | **Sn** | **11 24 48.3** | **-1.7** |
| | 0.9nm,0.3s | | | | | | |
| **LOR** | **Lormes** | **3.64** | **321** | eP | **Pn** | **11 24 10.1** | **+2.5** |
| LOR | | | | eSn | **Sn** | **11 24 48.3** | **-1.7** |
| | 0.4nm,0.3s | | | | | | |
| **SSF** | **Saint Saulge** | **3.66** | **316** | eP | **Pn** | **11 24 10.8** | **+3.0** |
| SSF | | | | eSn | **Sn** | **11 24 48.9** | **-1.5** |
| | 1.1nm,0.3s | | | | | | |
| **SSF** | **Saint Saulge** | **3.66** | **316** | eP | **Pn** | **11 24 10.8** | **+3.0** |
| SSF | | | | eSn | **Sn** | **11 24 48.9** | **-1.5** |
| | 0.6nm,0.3s | | | | | | |
| **CAF** | **Calviac** | **3.69** | **279** | ePn | **Pn** | **11 24 08.8** | **+0.5** |
| **CAF** | **Calviac** | **3.69** | **279** | ePn | **Pn** | **11 24 08.8** | **+0.5** |
| **BGF** | **Bois d'Agland** | **3.70** | **306** | eP | **Pn** | **11 24 10.8** | **+2.4** |
| BGF | | | | eSn | **Sn** | **11 24 49.7** | **-1.9** |
| | 1.7nm,0.2s | | | | | | |
| **BGF** | **Bois d'Agland** | **3.70** | **306** | eP | **Pn** | **11 24 10.8** | **+2.4** |
| BGF | | | | eSn | **Sn** | **11 24 49.7** | **-1.9** |
| | 0.9nm,0.2s | | | | | | |
| **MTLF** | **Montolieu** | **3.77** | **254** | ePn | **Pn** | **11 24 10.1** | **+0.7** |
| MTLF | | | | eSn | **Sn** | **11 24 51.9** | **-1.5** |
| | 0.9nm,0.3s | | | | | | |
| **MTLF** | **Montolieu** | **3.77** | **254** | ePn | **Pn** | **11 24 10.1** | **+0.7** |
| MTLF | | | | eSn | **Sn** | **11 24 51.9** | **-1.5** |
| | 0.4nm,0.3s | | | | | | |
| **CDF** | **Champ du Feu** | **3.94** | **1** | ePn | **Pn** | **11 24 11.2** | **-0.5** |
| CDF | | | | eSn | **Sn** | **11 24 55.1** | **-2.4** |
| | 1.4nm,0.3s | | | | | | |
| **CDF** | **Champ du Feu** | **3.94** | **1** | ePn | **Pn** | **11 24 11.2** | **-0.5** |
| CDF | | | | eSn | **Sn** | **11 24 55.1** | **-2.4** |
| | 0.7nm,0.3s | | | | | | |
| **SFTF** | **Sexfontaines** | **4.02** | **339** | eSn | **Sn** | **11 24 57.5** | **-1.9** |
| | 3.3nm,0.2s | | | | | | |
| **SFTF** | **Sexfontaines** | **4.02** | **339** | eSn | **Sn** | **11 24 57.5** | **-1.9** |
| | 1.6nm,0.2s | | | | | | |
| **MFF** | **Saint Martin d** | **5.58** | **295** | eP | Pn | 11 24 37.6 | +3.4 |
| **LDF** | **La Druitiere** | **6.51** | **312** | eP | **Pn** | **11 24 50.0** | **+3.0** |
| **LDF** | **La Druitiere** | **6.51** | **312** | eP | **Pn** | **11 24 50.0** | **+3.0** |
| **FLN** | **La Foliniere** | **6.81** | **312** | ePn | **Pn** | **11 24 51.0** | **0.0** |
| **FLN** | **La Foliniere** | **6.81** | **312** | ePn | **Pn** | **11 24 51.0** | **0.0** |

*ISCJB **10** 11:27:07.6±0.4, 37°.21N±0°.04×28°.18E±0°.03, h11km±6km, Error ellipse: s-maj=6.8km s-min=3.9km az=26.1*
*DDA **10** 11:27:07.4, 37°.23N×28°.18E, h10km, Md2.7*
*CSEM **10** 11:27:07.8±0.2, 37°.26N×28°.21E, h2km, MD2.8, Error ellipse: s-maj=5.6km s-min=4.3km az=47.0*
*ISK **10** 11:27:07.3, 37°.25N×28°.19E, h7km, MD2.8*
**ISC 10 11:27:07.3**±1.2**, 37°.23N**±0°.03×**28°.18E**±0°.02**, h4**km±11km**,**
**n30, σ0s.81**/42**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.13** | **139** | ePG | **Pg** | **11 27 10.6** | **+0.7** |
| **YER** | **Yerkesik** | **0.13** | **139** | ePg | **Pg** | **11 27 10.6** | **+0.7** |
| **AYDN** | **Tasoluk** | **0.49** | **331** | i P | **Pb** | **11 27 19.1** | **+0.5** |
| **AYDN** | **Tasoluk** | **0.49** | **331** | P | **Pb** | **11 27 19.1** | **+0.5** |
| AYDN | | | | S | **Sb** | **11 27 26.3** | **+0.1** |
| **TURN** | **Turunc** | **0.49** | **136** | i P | **Pg** | **11 27 16.4** | **-0.4** |
| TURN | | | | i S | **Sg** | **11 27 22.8** | **-0.4** |
| **TURN** | **Turunc** | **0.49** | **136** | P | **Pg** | **11 27 16.4** | **-0.4** |
| TURN | | | | S | **Sg** | **11 27 22.8** | **-0.4** |
| **DALY** | **Dalyan (Mu˜la** | **0.56** | **137** | ePG | **Pg** | **11 27 18.4** | **+0.3** |
| DALY | | | | eSG | **Sb** | **11 27 27.3** | **-0.8** |
| **DALY** | **Dalyan (Mu˜la** | **0.56** | **137** | ePg | **Pg** | **11 27 18.4** | **+0.3** |
| DALY | | | | eSg | **Sb** | **11 27 27.3** | **-0.8** |
| **BDRM** | **Kayabasi** | **0.61** | **254** | i P | **Pg** | **11 27 19.4** | **+0.3** |
| **BDRM** | **Kayabasi** | **0.61** | **254** | P | **Pg** | **11 27 19.4** | **+0.3** |
| BDRM | | | | S | **Sg** | **11 27 27.4** | **+0.4** |
| **BODT** | **Bodrum** | **0.71** | **257** | ePG | **Pb** | **11 27 22.3** | **-0.1** |
| BODT | | | | eSG | **Sb** | **11 27 32.0** | **-0.5** |
| **BODT** | **Bodrum** | **0.71** | **257** | ePg | **Pb** | **11 27 22.3** | **-0.1** |
| BODT | | | | eSg | **Sb** | **11 27 32.0** | **-0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.75** | **342** | ePG | **Pg** | **11 27 22.0** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.75** | **342** | ePg | **Pg** | **11 27 22.0** | **+0.2** |
| **DNZL** | **Cakiroluk** | **0.83** | **56** | i P | **Pg** | **11 27 23.2** | **-0.1** |
| **DNZL** | **Cakiroluk** | **0.83** | **56** | P | **Pg** | **11 27 23.2** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **0.89** | **302** | i P | **Pg** | **11 27 24.5** | **+0.2** |
| **GCAM** | **G?zelcaml?** | **0.89** | **302** | P | **Pg** | **11 27 24.5** | **+0.2** |
| GCAM | | | | S | **Sb** | **11 27 36.9** | **-0.5** |
| **FETY** | **Fethiye** | **0.94** | **129** | ePG | **Pb** | **11 27 26.0** | **-0.2** |
| **FETY** | **Fethiye** | **0.94** | **129** | ePg | **Pb** | **11 27 26.0** | **-0.2** |
| **GOLH** | **Golhisar** | **1.10** | **89** | i P | **Pb** | **11 27 29.0** | **-0.1** |
| **GOLH** | **Golhisar** | **1.10** | **89** | P | **Pb** | **11 27 29.0** | **-0.1** |
| GOLH | | | | S | **Sn** | **11 27 48.3** | **+2.9** |
| **MANT** | **Manisa** | **1.29** | **13** | i P | **Pn** | **11 27 30.6** | **-1.8** |
| MANT | | | | i S | **Sb** | **11 27 49.2** | **-0.2** |
| **MANT** | **Manisa** | **1.29** | **13** | P | **Pn** | **11 27 30.6** | **-1.8** |
| MANT | | | | S | **Sb** | **11 27 49.2** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.34** | **16** | ePN | **Pn** | **11 27 32.6** | **-0.3** |
| **KULA** | **Kula-Manisa** | **1.34** | **16** | ePn | **Pn** | **11 27 32.6** | **-0.3** |
| **AKAS** | **Kas** | **1.52** | **131** | i P | **Pg** | **11 27 37.7** | **+1.2** |
| **AKAS** | **Kas** | **1.52** | **131** | P | **Pg** | **11 27 37.7** | **+1.2** |
| AKAS | | | | S | Sg | 11 28 03.1 | +6.9 |
| **KHAL** | **Karahalli** | **1.54** | **42** | i P | **Pn** | **11 27 34.9** | **-0.8** |
| **KHAL** | **Karahalli** | **1.54** | **42** | P | **Pn** | **11 27 34.9** | **-0.8** |

*TIR **10** 11:49:08.3±1.1, 40°.34N×20°.58E, h10km±23km, ML2.7*
*BEO **10** 11:49:09.7±1.7, 40°.15N×20°.62E, h11km±7km, ML2.7/5*
*THE **10** 11:49:10.8, 40°.37N×20°.57E, h0km±3km, ML2.7/5, Error ellipse: s-maj=3.7km s-min=1.0km az=301.0*
*ATH **10** 11:49:10.3, 40°.37N×20°.56E, h13km±1km, MD3.5/29*
*CSEM **10** 11:49:10.9±0.2, 40°.33N×20°.61E, h2km, ML2.7, Error ellipse: s-maj=4.8km s-min=3.5km az=88.0*
*SKO **10** 11:49:13.3, 40°.38N×20°.76E, h0km, M1.4, ML1.8*
**ISC 10 11:49:10.8**±1.1**, 40°.32N**±0°.02×**20°.60E**±0°.02**, h1**km±10km**,**
**n127, σ0s.97**/159**, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBN** | **Korca** | **0.33** | **25** | i PG | **Pg** | **11 49 17.0** | **-0.2** |
| KBN | | | | i SG | **Sg** | **11 49 22.7** | **+1.2** |
| **KBN** | **Korca** | **0.33** | **25** | P | **Pg** | **11 49 17.0** | **-0.2** |
| KBN | | | | S | **Sg** | **11 49 20.8** | **-0.7** |
| **KBN** | **Korca** | **0.33** | **25** | i Pg | **Pg** | **11 49 17.0** | **-0.2** |
| | SNR=101 | | | | | | |
| KBN | | | | i Sg | **Sg** | **11 49 22.7** | **+1.2** |
| | SNR=101 | | | | | | |
| **NEST** | **Nestorio** | **0.35** | **75** | ePB | **Pg** | **11 49 18.3** | **+0.7** |
| NEST | | | | eSB | **Sb** | **11 49 24.1** | **-1.9** |
| **NEST** | **Nestorio** | **0.35** | **75** | P | **Pg** | **11 49 18.3** | **+0.7** |
| | 2μm,0.3s | | | | | | |
| NEST | | | | S | **Sb** | **11 49 24.4** | **-1.6** |
| **NEST** | **Nestorio** | **0.35** | **75** | ePb | **Pg** | **11 49 18.3** | **+0.7** |
| NEST | | | | eSb | **Sb** | **11 49 24.1** | **-1.9** |
| **SRN** | **Sarande** | **0.64** | **226** | i PG | **Pg** | **11 49 23.2** | **+0.1** |
| SRN | | | | i SG | **Sb** | **11 49 33.4** | **-0.8** |
| **SRN** | **Sarande** | **0.64** | **226** | P | **Pg** | **11 49 23.2** | **+0.1** |
| SRN | | | | S | **Sb** | **11 49 33.1** | **-1.1** |
| **SRN** | **Sarande** | **0.64** | **226** | P | **Pg** | **11 49 23.2** | **+0.1** |
| SRN | | | | S | **Sb** | **11 49 33.1** | **-1.1** |
| **JAN** | **Janina** | **0.69** | **164** | ePB | **Pg** | **11 49 24.0** | **-0.1** |
| JAN | | | | eSB | **Sb** | **11 49 34.8** | **-0.9** |
| **JAN** | **Janina** | **0.69** | **164** | P | **Pg** | **11 49 23.9** | **-0.1** |
| **JAN** | **Janina** | **0.69** | **164** | ePb | **Pg** | **11 49 24.0** | **-0.1** |
| JAN | | | | eSb | **Sb** | **11 49 34.8** | **-0.9** |
| **FNA** | **Florina** | **0.75** | **52** | ePB | **Pg** | **11 49 24.9** | **-0.2** |
| FNA | | | | eSB | **Sg** | **11 49 35.4** | **+0.6** |
| **FNA** | **Florina** | **0.75** | **52** | P | **Pg** | **11 49 24.9** | **-0.2** |
| | 555nm,0.2s | | | | | | |
| FNA | | | | S | **Sg** | **11 49 35.4** | **+0.6** |
| **FNA** | **Florina** | **0.75** | **52** | ePb | **Pg** | **11 49 24.9** | **-0.2** |
| FNA | | | | eSb | **Sg** | **11 49 35.4** | **+0.6** |
| **SGD** | **Sagiada** | **0.77** | **202** | ePB | **Pg** | **11 49 25.5** | **0.0** |
| SGD | | | | eSB | **Sb** | **11 49 37.0** | **-0.8** |
| **SGD** | **Sagiada** | **0.77** | **202** | P | **Pg** | **11 49 25.7** | **+0.2** |
| **SGD** | **Sagiada** | **0.77** | **202** | P | **Pg** | **11 49 25.7** | **+0.2** |
| SGD | | | | eSb | **Sb** | **11 49 37.0** | **-0.8** |
| **OHR** | **Ohrid** | **0.80** | **11** | ePg | **Pg** | **11 49 25.4** | **-0.7** |
| OHR | | | | eSg | **Sg** | **11 49 37.3** | **+0.7** |
| **OHR** | **Ohrid** | **0.80** | **11** | ePg | **Pg** | **11 49 25.4** | **-0.7** |
| OHR | | | | eSg | **Sg** | **11 49 37.2** | **+0.7** |
| **IGT** | **Igoumenitsa** | **0.82** | **195** | ePG | **Pg** | **11 49 26.4** | **-0.1** |
| **IGT** | **Igoumenitsa** | **0.82** | **195** | P | **Pg** | **11 49 26.6** | **+0.1** |
| | 480nm,0.6s | | | | | | |
| IGT | | | | S | **Sn** | **11 49 40.9** | **-1.2** |
| **IGT** | **Igoumenitsa** | **0.82** | **195** | P | **Pg** | **11 49 26.6** | **+0.1** |
| | 480nm,0.6s | | | | | | |
| **VLO** | **Vlora** | **0.86** | **280** | i PG | **Pg** | **11 49 27.8** | **+0.5** |
| **VLO** | **Vlora** | **0.86** | **280** | i Pg | **Pg** | **11 49 27.8** | **+0.5** |
| | SNR=90 | | | | | | |
| **KEK** | **Kerkira** | **0.87** | **226** | ePG | **Pg** | **11 49 26.9** | **-0.6** |
| KEK | | | | eSB | **Sg** | **11 49 39.8** | **+1.1** |
| **KEK** | **Kerkira** | **0.87** | **226** | P | **Pg** | **11 49 26.5** | **-1.0** |
| **KEK** | **Kerkira** | **0.87** | **226** | P | **Pg** | **11 49 26.5** | **-1.0** |
| **KEK** | **Kerkira** | **0.87** | **226** | ePb | **Pg** | **11 49 26.9** | **-0.6** |
| KEK | | | | eSb | **Sg** | **11 49 39.8** | **+1.1** |
| **KZN** | **Kozani** | **0.89** | **91** | ePB | **Pg** | **11 49 28.2** | **+0.3** |
| **KZN** | **Kozani** | **0.89** | **91** | P | **Pg** | **11 49 27.5** | **-0.4** |
| **KZN** | **Kozani** | **0.89** | **91** | ePb | **Pg** | **11 49 28.2** | **+0.3** |
| **TIR** | **Tirane** | **1.17** | **332** | i PG | **Pb** | **11 49 33.4** | **-0.3** |
| TIR | | | | i SG | **Sn** | **11 49 52.5** | **+1.7** |
| **TIR** | **Tirane** | **1.17** | **332** | ePg | **Pg** | **11 49 33.2** | **0.0** |
| **TIR** | **Tirane** | **1.17** | **332** | ePg | **Pg** | **11 49 33.2** | **0.0** |
| TIR | | | | i Sg | **Sn** | **11 49 52.5** | **+1.7** |
| | SNR=90 | | | | | | |
| **DSL** | **Palaion Diasel** | **1.25** | **162** | ePN | **Pn** | **11 49 34.0** | **-1.3** |
| **DSL** | **Palaion Diasel** | **1.25** | **162** | P | **Pn** | **11 49 34.1** | **-1.3** |
| **DSL** | **Palaion Diasel** | **1.25** | **162** | P | **Pn** | **11 49 34.1** | **-1.3** |
| **THL** | **Klokotos Trika** | **1.32** | **125** | ePN | **Pn** | **11 49 35.2** | **-1.2** |
| THL | | | | eSB | **Sn** | **11 49 55.8** | **+1.2** |
| **THL** | **Klokotos Trika** | **1.32** | **125** | P | **Pn** | **11 49 34.8** | **-1.6** |
| | 135nm,0.7s | | | | | | |
| THL | | | | S | **Sn** | **11 49 56.5** | **+1.9** |
| **THL** | **Klokotos Trika** | **1.32** | **125** | P | **Pn** | **11 49 34.8** | **-1.6** |
| | 135nm,0.7s | | | | | | |
| **THL** | **Klokotos Trika** | **1.32** | **125** | ePn | **Pn** | **11 49 35.2** | **-1.2** |
| THL | | | | eSb | **Sn** | **11 49 55.8** | **+1.2** |
| **PHP** | **Peshkopia** | **1.36** | **355** | i PG | **Pb** | **11 49 36.6** | **-0.6** |
| PHP | | | | i SG | **Sn** | **11 49 57.2** | **+1.5** |
| **PHP** | **Peshkopia** | **1.36** | **355** | P | **Pn** | **11 49 36.2** | **-0.8** |
| **PHP** | **Peshkopia** | **1.36** | **355** | P | **Pn** | **11 49 36.2** | **-0.8** |
| **PHP** | **Peshkopia** | **1.36** | **355** | i Pg | **Pb** | **11 49 36.6** | **-0.6** |
| | SNR=90 | | | | | | |
| PHP | | | | i Sg | **Sn** | **11 49 57.2** | **+1.5** |
| | SNR=90 | | | | | | |
| **LIT** | **Litokhoron** | **1.46** | **98** | ePG | **Pb** | **11 49 38.3** | **-0.5** |
| **LIT** | **Litokhoron** | **1.46** | **98** | P | **Pb** | **11 49 38.2** | **-0.5** |
| | 175nm,0.8s | | | | | | |
| LIT | | | | S | **Sg** | **11 49 58.7** | **+1.0** |
| **LIT** | **Litokhoron** | **1.46** | **98** | ePg | **Pb** | **11 49 38.3** | **-0.5** |
| LIT | | | | S | **Sg** | **11 49 58.7** | **+1.0** |
| **GRG** | **Griva** | **1.51** | **65** | ePG | **Pn** | **11 49 38.6** | **-0.3** |
| **GRG** | **Griva** | **1.51** | **65** | P | **Pb** | **11 49 38.9** | **-0.7** |
| **GRG** | **Griva** | **1.51** | **65** | ePg | **Pn** | **11 49 38.6** | **-0.3** |
| **GRG** | **Griva** | **1.51** | **65** | P | **Pb** | **11 49 38.9** | **-0.7** |
| **LKD2** | **Lefkada island** | **1.53** | **178** | ePG | **Pn** | **11 49 39.4** | **+0.1** |
| **LKD2** | **Lefkada island** | **1.53** | **178** | ePg | **Pn** | **11 49 39.4** | **+0.1** |
| **EVR** | **Evrytania** | **1.69** | **146** | ePN | **Pb** | **11 49 41.8** | **-0.8** |
| **EVR** | **Evrytania** | **1.69** | **146** | P | **Pb** | **11 49 42.5** | **-0.1** |
| **EVR** | **Evrytania** | **1.69** | **146** | ePn | **Pb** | **11 49 41.8** | **-0.8** |
| **EVR** | **Evrytania** | **1.69** | **146** | P | **Pb** | **11 49 42.5** | **-0.1** |
| **MAKR** | **Makrakomi, Fth** | **1.76** | **138** | ePG | **Pb** | **11 49 44.0** | **+0.1** |
| **MAKR** | **Makrakomi, Fth** | **1.76** | **138** | ePg | **Pb** | **11 49 44.0** | **+0.1** |
| **SKO** | **Skopje** | **1.76** | **21** | ePn | **Pg** | **11 49 44.8** | **+0.1** |
| SKO | | | | eLg | Lg | 11 50 09.8 | |
| | comp=N,8.6nm,0.5s | | | | | | |
| SKO | | | | eLg | Lg | 11 50 10.1 | |
| | comp=E,9.4nm,0.5s | | | | | | |
| **SKO** | **Skopje** | **1.76** | **21** | ePn | **Pg** | **11 49 44.7** | **+0.1** |
| SKO | | | | eLg | Lg | 11 50 09.7 | |
| | comp=E,8.6nm,0.5s | | | | | | |
| **PDO** | **Prodromos** | **1.78** | **165** | ePN | **Pb** | **11 49 44.0** | **-0.2** |
| **PDO** | **Prodromos** | **1.78** | **165** | ePn | **Pb** | **11 49 44.0** | **-0.2** |
| **VAY** | **Valandovo** | **1.79** | **56** | ePg | **Pb** | **11 49 44.3** | **-0.1** |
| VAY | | | | eSg | **Sg** | **11 50 09.1** | **+0.7** |
| **VAY** | **Valandovo** | **1.79** | **56** | ePg | **Pb** | **11 49 44.3** | **-0.1** |
| VAY | | | | eSg | **Sg** | **11 50 09.1** | **+0.7** |
| **PUK** | **Puka** | **1.80** | **343** | i PG | **Pb** | **11 49 44.0** | **-0.6** |
| **PUK** | **Puka** | **1.80** | **343** | i Pg | **Pb** | **11 49 44.0** | **-0.6** |
| | SNR=90 | | | | | | |
| **AGG** | **Agios Georgios** | **1.86** | **134** | ePN | **Pb** | **11 49 44.6** | **-1.0** |
| **AGG** | **Agios Georgios** | **1.86** | **134** | P | **Pb** | **11 49 45.0** | **-0.6** |
| **AGG** | **Agios Georgios** | **1.86** | **134** | ePn | **Pb** | **11 49 44.6** | **-1.0** |
| **AGG** | **Agios Georgios** | **1.86** | **134** | P | **Pb** | **11 49 45.0** | **-0.6** |
| **HORT** | **Hortiatis** | **1.92** | **81** | ePB | **Pn** | **11 49 44.2** | **-0.5** |
| **HORT** | **Hortiatis** | **1.92** | **81** | ePb | **Pn** | **11 49 44.2** | **-0.5** |
| **VLS** | **Valsamata** | **2.14** | **180** | ePN | **Pb** | **11 49 49.7** | **-0.7** |
| **VLS** | **Valsamata** | **2.14** | **180** | ePn | **Pb** | **11 49 49.7** | **-0.7** |
| **EFP** | **Efpalio** | **2.15** | **152** | ePN | **Pb** | **11 49 49.9** | **-0.5** |
| **EFP** | **Efpalio** | **2.15** | **152** | ePn | **Pb** | **11 49 49.9** | **-0.5** |
| **PLG** | **Polygyros** | **2.17** | **88** | ePN | **Pn** | **11 49 48.4** | **+0.3** |
| **PLG** | **Polygyros** | **2.17** | **88** | ePn | **Pn** | **11 49 48.4** | **+0.3** |
| **XOR** | **Xorichti** | **2.21** | **115** | ePB | **Pn** | **11 49 48.8** | **+0.2** |
| **XOR** | **Xorichti** | **2.21** | **115** | ePb | **Pn** | **11 49 48.8** | **+0.2** |
| **AXAR** | **Agios Charalam** | **2.22** | **134** | ePN | **Pb** | **11 49 50.3** | **-1.5** |
| **AXAR** | **Agios Charalam** | **2.22** | **134** | ePn | **Pb** | **11 49 50.3** | **-1.5** |
| **KALE** | **Kalithea** | **2.27** | **148** | ePN | **Pb** | **11 49 51.0** | **-1.5** |
| **KALE** | **Kalithea** | **2.27** | **148** | ePn | **Pb** | **11 49 51.0** | **-1.5** |
| **PDG** | **Podgorica** | **2.34** | **335** | ePn | **Pn** | **11 49 50.3** | **0.0** |
| **PDG** | **Podgorica** | **2.34** | **335** | ePn | **Pn** | **11 49 50.3** | **0.0** |
| **LAKA** | **Lakka** | **2.34** | **152** | ePN | **Pb** | **11 49 52.2** | **-1.5** |
| **LAKA** | **Lakka** | **2.34** | **152** | ePn | **Pb** | **11 49 52.2** | **-1.5** |
| **DSF** | **Desfina** | **2.42** | **141** | ePN | **Pb** | **11 49 53.6** | **-1.6** |
| **DSF** | **Desfina** | **2.42** | **141** | ePn | **Pb** | **11 49 53.6** | **-1.6** |
| **DESF** | **Desfina** | **2.42** | **141** | ePN | **Pb** | **11 49 53.3** | **-1.9** |
| **DESF** | **Desfina** | **2.42** | **141** | ePn | **Pb** | **11 49 53.3** | **-1.9** |
| **LKR** | **Lokris** | **2.50** | **131** | ePB | **Pn** | **11 49 53.6** | **+1.1** |
| **LKR** | **Lokris** | **2.50** | **131** | ePb | **Pn** | **11 49 53.6** | **+1.1** |
| **DRO** | **Drossia** | **2.52** | **160** | ePN | **Pn** | **11 49 54.3** | **+1.4** |
| **DRO** | **Drossia** | **2.52** | **160** | ePn | **Pn** | **11 49 54.3** | **+1.4** |
| **KLV** | **Kalavryta, Ach** | **2.58** | **152** | ePB | **Pn** | **11 49 54.7** | **+1.1** |
| **KLV** | **Kalavryta, Ach** | **2.58** | **152** | ePb | **Pn** | **11 49 54.7** | **+1.1** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OUR | Ouranopolis | 2.58 | 89 | ePB | Pn | 11 49 54.2 | +0.5 |
| OUR | Ouranopolis | 2.58 | 89 | ePb | Pn | 11 49 54.2 | +0.5 |
| BARS | Barje | 2.65 | 20 | ePn | Pn | 11 49 54.3 | -0.4 |
| GUR | Goura | 2.74 | 150 | ePB | Pn | 11 49 58.0 | +2.0 |
| GUR | Goura | 2.74 | 150 | ePb | Pn | 11 49 58.0 | +2.0 |
| SELS | Selova | 2.92 | 7 | ePn | Pn | 11 49 58.4 | 0.0 |
| TREB | Trebinje | 2.93 | 325 | ePn | Pn | 11 49 57.3 | -1.2 |
| TREB | Trebinje | 2.93 | 325 | ePn | Pn | 11 49 57.3 | -1.2 |
| LTK | Loutraki | 2.94 | 141 | ePN | Pn | 11 50 00.1 | +1.5 |
| LTK | Loutraki | 2.94 | 141 | ePn | Pn | 11 50 00.1 | +1.5 |
| VIL2 | Platees | 2.95 | 135 | ePB | Pb | 11 50 01.6 | -2.6 |
| SJES | Sjenica | 2.97 | 351 | ePn | Pn | 11 50 00.9 | +1.7 |
| VILL | Villia | 3.01 | 135 | ePb | Pn | 11 50 01.6 | +2.0 |
| ZAPS | Zavoj | 3.31 | 27 | ePn | Pn | 11 50 03.9 | +0.1 |
| DID | Didima | 3.48 | 143 | ePN | Pn | 11 50 07.5 | +1.4 |
| DID | Didima | 3.48 | 143 | ePn | Pn | 11 50 07.5 | +1.4 |
| DIDY | Didyma | 3.50 | 144 | ePN | Pn | 11 50 07.2 | +0.9 |
| DIDY | Didyma | 3.50 | 144 | ePn | Pn | 11 50 07.2 | +0.9 |
| GRUS | Gruza | 3.56 | 1 | ePn | Pn | 11 50 06.9 | -0.3 |
| GRUS | Gruza | 3.56 | 1 | ePn | Pn | 11 50 06.9 | -0.3 |
| BBLS | Lazići | 3.65 | 346 | ePn | Pn | 11 50 08.1 | -0.3 |
| BBLS | Lazići | 3.65 | 346 | ePn | Pn | 11 50 08.1 | -0.3 |
| DIVS | Divibare | 3.80 | 353 | ePn | Pn | 11 50 11.3 | +0.8 |
| DIVS | Divibare | 3.80 | 353 | ePn | Pn | 11 50 11.3 | +0.8 |
| KUBS | Kucevo | 4.16 | 11 | ePn | Pn | 11 50 15.0 | -0.4 |
| KUBS | Kucevo | 4.16 | 11 | ePn | Pn | 11 50 15.0 | -0.4 |

*IDC **10** 12:05:04.0±0.9, 11°.79N×124°.99E, h0km, mb3.8/10, mb1 3.9/10, mb1mx3.7/34, mbtmp3.8/10, MS2.3/1, Ms1 2.3/1, ms1mx2.1/25, Error ellipse: s-maj=44.9km s-min=17.0km az=79.0*

*ISCJB **10** 12:05:13.2±0.5, 12°.03N±0°.03×125°.09E±0°.07, h66km, mb3.7/10, Error ellipse: s-maj=10.5km s-min=4.9km az=2.0*

*MAN **10** 12:05:14, 11°.93N×125°.03E, h49km, mb4.7, ML3.6, MS3.6*

**ISC 10 12:05:13.6**±0.7**, 11°.97N**±0°.04×**125°.08E**±0°.08**, h66km, n29, σ1s51**/26**, mb3.8**/10**, 4C-1D, Samar**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BESP | Borongan | 0.51 | 137 | eP | Pn | 12 05 27.7 | +1.5 |
| PLP | Palo | 0.81 | 187 | ⇑iP | Pn | 12 05 29.8 | +0.2 |
| PLP | | | | i S | Sn | 12 05 41.9 | +0.6 |
| OCLP | Ormoc | 1.03 | 207 | eP | Pn | 12 05 33.6 | +1.3 |
| MSLP | Maasin | 1.84 | 187 | eP | Pn | 12 05 44.1 | +1.1 |
| MSLP | | | | eS | Sn | 12 06 08.5 | +3.1 |
| PVCP | Virac | 1.85 | 331 | ⇑iP | Pn | 12 05 45.2 | +2.1 |
| PVCP | | | | i S | Sn | 12 06 06.2 | +0.6 |
| SCPH | Surigao | 2.21 | 170 | ⇑eP | Pn | 12 05 49.3 | +1.2 |
| RCP | Roxas | 2.32 | 260 | ⇓eP | Pn | 12 05 50.8 | +1.2 |
| GUIM | Jordan | 2.79 | 242 | eP | Pn | 12 05 56.4 | +0.5 |
| SNPH | Sibulan | 3.18 | 215 | ⇑iP | Pn | 12 06 02.2 | +0.8 |
| SNPH | | | | i S | Sn | 12 06 39.0 | +0.9 |
| BUKP | Musuan | 4.07 | 180 | eP | Pn | 12 06 15.8 | +2.3 |
| PAGZ | Pagadian | 4.43 | 202 | eP | Pn | 12 06 20.0 | +1.7 |
| GUMO | Guam | 19.36 | 83 | LR | LR | 12 17 24.3 | |
| | comp=Z,9.0nm,19.3s,baz=310,slow=38 | | | | | | |
| KSRS | Korea Array | 25.50 | 5 | P | P | 12 10 36.5 | +0.7 |
| | 1.3nm,0.5s,baz=186,slow=10,SNR=8.4 | | | | | | |
| USRK | Ussuriysk Ar. | 32.66 | 9 | P | P | 12 11 39.6 | +0.2 |
| | 1.9nm,0.7s,baz=182,slow=7.2,SNR=5.7 | | | | | | |
| WRA | Warramunga Arr | 33.00 | 164 | P | P | 12 11 39.8 | -2.8 |
| | 0.2nm,0.5s,baz=345,slow=9.3,SNR=3.5 | | | | | | |
| ASAR | Alice Springs | 36.46 | 166 | P | P | 12 12 10.2 | -2.3 |
| | 0.3nm,0.4s,baz=348,slow=7.1,SNR=18 | | | | | | |
| SONM | Songino Array | 39.03 | 340 | P | P | 12 12 34.4 | +0.4 |
| | 0.6nm,0.5s,baz=153,slow=8.1,SNR=4.6 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 40.59 | 76 | T | T | 12 56 09.1 | |
| | baz=316,slow=76,SNR=11 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 40.61 | 76 | T | T | 12 56 02.3 | |
| | baz=316,slow=76,SNR=8.4 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 40.61 | 76 | T | T | 12 56 03.0 | |
| | baz=316,slow=76,SNR=9.2 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.87 | 74 | T | T | 12 56 30.5 | |
| | baz=266,slow=74,SNR=32 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 40.87 | 74 | T | T | 12 56 25.5 | |
| | baz=266,slow=74,SNR=28 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 40.88 | 74 | T | T | 12 56 31.8 | |
| | baz=266,slow=74,SNR=32 | | | | | | |
| PETK | Petropavlovsk- | 48.60 | 26 | P | P | 12 13 51.8 | +1.3 |
| | 3.2nm,0.8s,baz=189,slow=8.2,SNR=3.6 | | | | | | |
| MKAR | Makanchi Array | 49.97 | 322 | P | P | 12 14 01.5 | +0.3 |
| | 0.7nm,0.7s,baz=132,slow=7.3,SNR=5.4 | | | | | | |
| ZALV | Zalesovo Beam | 52.58 | 331 | P | P | 12 14 18.8 | -1.6 |
| | 0.4nm,0.3s,baz=117,slow=6.8,SNR=4.1 | | | | | | |
| ILAR | Eielson Array | 78.43 | 26 | P | P | 12 17 06.8 | -0.3 |
| | 0.2nm,0.6s,baz=252,slow=4.0,SNR=3.8 | | | | | | |
| ARCES | ARCESS Array B | 82.20 | 340 | P | P | 12 17 26.6 | -0.6 |
| | 2.4nm,0.8s,baz=90,slow=7.2,SNR=4.4 | | | | | | |
| TXAR | Lajitas Array | 117.58 | 48 | PKP | PKPdf | 12 23 51.6 | -1.3 |
| | 0.2nm,0.7s,baz=162,slow=0.3,SNR=2.7 | | | | | | |

**NNC 10 12:39:53.6**±8.1**, 37°.34N×74°.53E, h0km, mb3.7, mpv3.3, 4C-5D, Error ellipse: s-maj=61.5km s-min=36.0km az=131.0, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 2.78 | 344 | ⇑Pn | Pn | 12 40 40.7 | +0.9 |
| | 9.4nm,0.5s | | | | | | |
| SFK | | | | ⇓Sn | Sb | 12 41 16.9 | -2.6 |
| | 24nm,0.4s | | | | | | |
| DZET | Dzherino | 4.73 | 290 | ⇑Pn | Pn | 12 41 05.8 | -0.5 |
| DZET | | | | ⇓Pg | Pb | 12 41 19.8 | +2.2 |
| DZET | | | | ⇓Sn | Sn | 12 42 02.4 | +0.4 |
| | 12nm,0.4s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 12 42 22.2 | |
| | 23nm,0.9s | | | | | | |
| MNAS | Manas | 5.37 | 344 | ⇑Pn | Pn | 12 41 14.3 | -0.9 |
| | 2.5nm,0.4s | | | | | | |
| MNAS | | | | ⇓Sn | Sn | 12 42 16.3 | -1.5 |
| | 3.7nm,0.6s | | | | | | |
| KK31 | Karatay Array | 6.52 | 333 | Pn | Pn | 12 41 30.2 | -0.6 |
| | 0.4nm,0.3s,baz=135,slow=13,SNR=14 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 12 42 43.6 | -2.4 |
| | 4.3nm,0.7s,baz=141,slow=22,SNR=3.6 | | | | | | |

*ISCJB **10** 13:17:21.0±1.0, 6°.30S±0°.09×129°.4E±0°.2, h10km, mb3.5/1, Error ellipse: s-maj=26.2km s-min=12.2km az=175.1*

*IDC **10** 13:17:21.5±2.2, 6°.46S×129°.02E, h0km, mb3.5/1, mb1 3.6/3, mb1mx3.4/19, mbtmp3.4/3, ML3.8/2, Error ellipse: s-maj=113.1km s-min=32.8km az=67.0*

*AUST **10** 13:17:30.7, 6°.48S×129°.53E, h100km*

**ISC 10 13:17:22.5**±1.2**, 6°.43S**±0°.09×**129°.4E**±0°.2**, h10km, n9, σ3s02**/7**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 4.47 | 39 | P | Pb | 13 18 40.2 | -1.0 |
| | baz=4.5,SNR=4.1 | | | | | | |
| KDU | Kakadu | 6.91 | 155 | P | Pn | 13 19 10.2 | +6.3 |
| | baz=6.8,SNR=18 | | | | | | |
| KNRA | Kununurra | 9.22 | 184 | P | Pn | 13 19 45.3 | +10 |
| | baz=9.2,SNR=9.9 | | | | | | |
| WRA | Warramunga Arr | 14.26 | 161 | Pn | Pn | 13 20 46.3 | +1.6 |
| | 0.6nm,0.3s,baz=338,slow=13,SNR=24 | | | | | | |
| WRA | | | | Sn | Sn | 13 23 12.9 | -10 |
| | 0.8nm,0.3s,baz=327,slow=25,SNR=9.9 | | | | | | |
| PALU | Palau | 14.57 | 20 | P | Pn | 13 20 48.3 | -0.7 |
| | baz=15,SNR=3.2 | | | | | | |
| COEN | Coen | 15.45 | 120 | P | Pn | 13 21 02.0 | +1.2 |
| | baz=15,SNR=3.9 | | | | | | |
| ASAR | Alice Springs | 17.67 | 166 | P | P | 13 21 30.0 | +0.1 |
| | 0.2nm,0.3s,baz=346,slow=11,SNR=4.0 | | | | | | |
| ASAR | | | | S | Sn | 13 24 41.1 | -5.0 |
| | 0.2nm,0.3s,baz=1.0,slow=26,SNR=5.5 | | | | | | |
| WRKA | Warakurna | 18.54 | 183 | P | Pn | 13 21 42.3 | +2.7 |
| | baz=19,SNR=5.6 | | | | | | |
| MKAR | Makanchi Array | 67.44 | 327 | P | P | 13 28 17.9 | -0.6 |
| | 0.3nm,0.5s,baz=117,slow=8.2,SNR=3.7 | | | | | | |

*AUST **10** 13:35:36.6, 6°.48S×129°.53E, h100km*

*ISCJB **10** 13:35:38.2±0.2, 6°.36S±0°.03×130°.05E±0°.03, h146km, mb4.2/24, Error ellipse: s-maj=4.6km s-min=3.5km az=170.6*

*NEIC **10** 13:35:42.3±0.6, 6°.35S×129°.88E, h177km±6km, mb4.5/12, Error ellipse: s-maj=7.2km s-min=6.2km az=175.0*

*IDC **10** 13:35:42.6±1.6, 6°.34S×129°.87E, h177km±15km, mb3.9/16, mb1 4.0/21, mb1mx3.9/31, mbtmp4.4/21, MS3.2/1, Ms1 3.2/1, ms1mx2.4/28, Error ellipse: s-maj=13.8km s-min=10.4km az=81.0*

*DJA **10** 13:35:43.1±0.2, 6°S±2°×13°0E±°, h148km±4km, M5.2/19, mB5.3/5, mb4.7/19, MLv5.7/1, Mw(mB)4.7/5*

**ISC 10 13:35:39.2**±0.4**, 6°.46S**±0°.04×**130°.03E**±0°.04**, h146km, n104, σ2s02**/99**, mb4.3**/24**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BNDI | Bandanaira | 1.93 | 356 | P | Pn | 13 36 18.8 | +5.6 |
| BNDI | | | | S | Sn | 13 36 44.3 | +4.9 |
| SAUI | Saumlaki | 1.97 | 140 | P | Pn | 13 36 19.8 | +6.0 |
| SAUI | | | | S | Sn | 13 36 46.2 | +5.9 |
| MSAI | Masohi | 3.28 | 340 | P | Pn | 13 36 33.4 | +3.4 |
| MSAI | | | | S | Sn | 13 37 13.0 | +3.6 |
| AAI | Ambon | 3.30 | 326 | P | Pn | 13 36 34.4 | +4.1 |
| FAKI | Fak Fak | 4.16 | 32 | P | Pn | 13 36 44.3 | +2.9 |
| | baz=4.5,SNR=399 | | | | | | |
| FAKI | Fak Fak | 4.16 | 32 | P | Pn | 13 36 44.5 | +3.1 |
| FAKI | | | | S | Sn | 13 37 31.7 | +1.9 |
| FAKI | Fak Fak | 4.16 | 32 | ePn | Pn | 13 36 44.0 | +2.6 |
| FAKI | | | | eSn | Sn | 13 37 23.9 | -5.9 |
| NLAI | Namlea | 4.33 | 318 | P | Pn | 13 36 47.8 | +4.1 |
| SIJI | Sorong | 5.69 | 13 | P | Pn | 13 37 03.5 | +1.7 |
| | 14nm,0.3s,baz=225,slow=22,SNR=55 | | | | | | |
| SIJI | | | | S | Sn | 13 38 04.2 | -2.1 |
| | 81nm,0.3s,baz=144,slow=23,SNR=34 | | | | | | |
| SWI | Sorong | 5.69 | 13 | P | Pn | 13 37 03.7 | +1.9 |
| | baz=5.9,SNR=33 | | | | | | |
| SWI | Sorong | 5.69 | 13 | P | Pn | 13 37 03.7 | +1.9 |
| SWI | | | | S | Sn | 13 38 02.4 | -3.9 |
| SANI | Sanana | 5.95 | 317 | P | Pn | 13 37 08.2 | +3.0 |
| SANI | | | | S | Sn | 13 38 15.3 | +2.8 |
| LBMI | Labuha | 6.31 | 336 | P | Pn | 13 37 13.7 | +3.7 |
| LBMI | | | | S | Sn | 13 38 18.5 | -2.6 |
| RKPI | Ransiki, Papua | 6.43 | 40 | P | Pn | 13 37 15.9 | +4.3 |
| RKPI | | | | S | Sn | 13 38 23.3 | -0.6 |
| MTN | Manton Dam | 6.44 | 170 | P | Pn | 13 37 15.1 | +3.4 |
| | baz=6.6,SNR=52 | | | | | | |
| SOEI | Soe | 6.58 | 240 | P | Pn | 13 37 16.3 | +2.6 |
| | baz=6.2,SNR=48 | | | | | | |
| SOEI | Soe | 6.58 | 240 | P | Pn | 13 37 16.3 | +2.6 |
| SOEI | | | | S | Sn | 13 38 24.5 | -3.2 |
| SOEI | Soe | 6.58 | 240 | ePn | Pn | 13 37 16.1 | +2.4 |
| | 232nm,0.8s | | | | | | |
| KDU | Kakadu | 6.64 | 159 | P | Pn | 13 37 17.8 | +3.3 |
| | baz=6.8,SNR=152 | | | | | | |
| BATI | Baumata | 7.32 | 239 | P | Pn | 13 37 25.3 | +1.8 |
| | 53nm,0.3s,baz=138,slow=2.1,SNR=70 | | | | | | |
| BATI | | | | S | Sn | 13 38 42.8 | -2.5 |
| | 25nm,0.3s,baz=296,slow=24,SNR=12 | | | | | | |
| BATI | Baumata | 7.32 | 239 | P | Pn | 13 37 24.9 | +1.4 |
| MMRI | Maumere | 8.02 | 254 | ePn | Pn | 13 37 35.1 | +2.2 |
| KNRA | Kununurra | 9.24 | 188 | P | Pn | 13 37 50.5 | +1.2 |
| | baz=9.2,SNR=245 | | | | | | |
| BSSI | Bau Bau, Buton | 9.48 | 271 | P | Pn | 13 37 55.2 | +2.7 |
| SMPI | Sarmi | 9.73 | 63 | P | Pn | 13 37 59.6 | +3.9 |
| BKSI | Bulukumba | 9.92 | 276 | P | Pn | 13 37 59.7 | +1.5 |
| APSI | Ampana | 10.01 | 303 | P | Pn | 13 38 02.5 | +3.0 |
| KAPI | Kappang | 10.32 | 277 | P | Pn | 13 38 06.0 | +2.4 |
| | 0.4nm,0.3s,baz=156,slow=4.1,SNR=3.7 | | | | | | |
| SPSI | Sidrap Palu | 10.51 | 283 | P | Pn | 13 38 09.9 | +3.8 |
| | 16nm,0.9s | | | | | | |
| TTSI | Tana Toraja | 10.72 | 288 | P | Pn | 13 38 16.3 | +7.4 |
| GENI | Genyem | 10.81 | 70 | P | Pn | 13 38 16.2 | +6.1 |
| | 68nm,0.9s | | | | | | |
| WBSI | Waikabubak, Su | 10.99 | 253 | P | Pn | 13 38 11.9 | -0.6 |
| | 106nm,0.7s,1μm | | | | | | |
| JAY | Jayapura | 11.34 | 70 | P | P | 13 38 22.3 | -2.9 |
| | 0.9nm,0.3s,baz=299,slow=10,SNR=5.2 | | | | | | |
| JAY | Jayapura | 11.34 | 70 | P | P | 13 38 26.1 | +1.0 |
| | baz=12,SNR=4.1 | | | | | | |
| TWSI | Taliwang, Sumb | 13.22 | 259 | P | Pn | 13 38 40.9 | -0.6 |
| | 26nm,0.7s | | | | | | |
| WRAB | Tennant Creek | 14.04 | 163 | ePn | Pn | 13 38 52.8 | +0.9 |
| | 21nm,0.8s | | | | | | |
| WRAB | | | | eSn | Sn | 13 41 15.6 | -12 |
| WRA | Warramunga Arr | 14.04 | 163 | P | Pn | 13 38 52.9 | +1.0 |
| | 0.9nm,0.3s,baz=345,slow=13,SNR=43 | | | | | | |
| WRA | | | | S | Sn | 13 41 24.3 | -3.3 |
| | 4.7nm,0.3s,baz=353,slow=24,SNR=8.4 | | | | | | |
| KBKI | Kotabaru | 14.16 | 282 | P | P | 13 38 55.7 | -0.8 |
| | 32nm,1.2s | | | | | | |
| SRBI | Singaraja | 14.78 | 263 | P | Pn | 13 39 00.9 | -0.3 |
| | 82nm,0.9s | | | | | | |
| COEN | Coen | 14.93 | 121 | P | P | 13 39 06.5 | +1.6 |
| | baz=15,SNR=39 | | | | | | |
| COEN | Coen | 14.93 | 121 | ePn | P | 13 39 06.3 | +1.3 |
| | 20nm,0.6s | | | | | | |
| COEN | | | | eS | Sn | 13 41 43.5 | -5.2 |
| BBKI | Banjar Baru | 15.42 | 280 | P | P | 13 39 11.9 | +1.5 |
| | 84nm,1.2s,2μm | | | | | | |
| JAGI | Jajag, Banyuwa | 15.87 | 262 | P | Pn | 13 39 12.9 | -1.7 |
| | baz=15,SNR=8.8 | | | | | | |
| JAGI | Jajag, Banyuwa | 15.87 | 262 | eP | Pn | 13 39 12.9 | -1.7 |
| KMMI | Kalianget | 15.96 | 267 | P | P | 13 39 19.6 | +3.2 |
| | 54nm,1.2s | | | | | | |
| BLJI | Banyuglugur | 16.36 | 265 | P | P | 13 39 22.8 | +2.0 |
| | 201nm,0.7s,3μm | | | | | | |
| QIS | Mount Isa | 16.82 | 147 | P | Pn | 13 39 28.4 | +2.3 |
| | baz=17,SNR=17 | | | | | | |
| PMG | Port Moresby | 17.22 | 101 | P | Pn | 13 39 33.8 | +2.7 |
| | 0.9nm,0.3s,baz=283,slow=18,SNR=4.0 | | | | | | |
| PMG | Port Moresby | 17.22 | 101 | P | Pn | 13 39 40.2 | +9.1 |
| | baz=18,SNR=3.3 | | | | | | |
| ASAR | Alice Springs | 17.51 | 168 | P | Pn | 13 39 36.1 | +1.6 |
| | 2.3nm,0.3s,baz=346,slow=9.3,SNR=210 | | | | | | |
| ASAR | | | | S | S | 13 42 46.6 | -1.8 |
| | 0.9nm,0.3s,baz=354,slow=23,SNR=13 | | | | | | |
| ASAR | | | | LR | LR | 13 47 15.4 | |
| | comp=Z,65nm,18.4s,baz=74,slow=39 | | | | | | |
| MBWA | Marble Bar | 17.69 | 213 | eP | P | 13 39 35.7 | +0.3 |
| | 13nm,0.6s | | | | | | |
| WRKA | Warakurna | 18.55 | 185 | P | Pn | 13 39 47.2 | +0.4 |
| | baz=19,SNR=37 | | | | | | |
| STKI | Sintang | 19.61 | 289 | P | P | 13 39 52.8 | -3.6 |
| CTA | Charters Tower | 20.78 | 132 | P | Pn | 13 40 12.0 | -1.1 |
| | 12nm,0.9s,baz=304,slow=12,SNR=6.2 | | | | | | |
| CISI | Cisompet, Garu | 22.07 | 266 | P | P | 13 40 22.7 | 0.0 |
| LEM | Lembang | 22.26 | 268 | P | P | 13 40 24.4 | -0.3 |
| | 23nm,0.7s,baz=319,slow=19,SNR=4.9 | | | | | | |
| LEM | Lembang | 22.26 | 268 | P | P | 13 40 26.6 | +1.9 |
| CNJI | Cibinong | 22.75 | 267 | P | P | 13 40 28.1 | -1.1 |
| MEEK | Meekatharra | 22.82 | 207 | P | P | 13 40 31.0 | +1.2 |
| | baz=23,SNR=4.8 | | | | | | |
| QLP | Quilpie | 24.16 | 148 | P | P | 13 40 43.9 | +2.0 |
| | baz=24,SNR=5.6 | | | | | | |
| CGJI | Cibinong | 24.18 | 268 | P | P | 13 40 40.9 | -1.3 |
| BBOO | Buckleboo | 26.81 | 169 | P | P | 13 41 06.5 | +0.6 |
| | baz=27,SNR=6.0 | | | | | | |
| HTT | Hallett | 28.08 | 164 | P | P | 13 41 15.7 | -1.5 |
| | baz=28,SNR=3.2 | | | | | | |
| CMSA | Cobar Meteorol | 28.94 | 152 | P | P | 13 41 26.7 | +1.9 |
| | baz=29,SNR=19 | | | | | | |
| CMAR | Chiang Mai Arr | 39.41 | 309 | P | P | 13 42 53.8 | -1.3 |
| | 0.7nm,0.4s,baz=135,slow=5.9,SNR=4.5 | | | | | | |
| MJAR | Matsushiro Arr | 43.46 | 10 | P | P | 13 43 26.5 | -1.3 |
| | 8.8nm,0.8s,baz=185,slow=10.0,SNR=10 | | | | | | |
| MAT | Matsushiro | 43.46 | 10 | P | P | 13 43 26.5 | -1.3 |
| KSAR | Wonju Array Be | 43.72 | 358 | P | P | 13 43 29.5 | -0.3 |
| KSRS | Korea Array | 43.73 | 358 | P | P | 13 43 29.5 | -0.4 |
| | 1.4nm,0.6s,baz=174,slow=8.9,SNR=8.8 | | | | | | |
| USRK | Ussuriysk Ar. | 50.45 | 2 | P | P | 13 44 21.4 | -0.5 |
| | 4.5nm,0.6s,baz=179,slow=6.7,SNR=11 | | | | | | |
| ULN | Ulaanbaatar | 57.76 | 342 | eP | P | 13 45 14.7 | -0.4 |
| | 4.7nm,0.7s | | | | | | |
| SONM | Songino Array | 57.94 | 341 | P | P | 13 45 16.0 | -0.3 |
| | 1.0nm,0.6s,baz=154,slow=6.5,SNR=7.8 | | | | | | |
| PETK | Petropavlovsk- | 63.80 | 18 | P | P | 13 45 56.0 | +0.3 |
| | 5.7nm,0.6s,baz=174,slow=3.9,SNR=16 | | | | | | |
| MKAR | Makanchi Array | 67.79 | 327 | P | P | 13 46 20.9 | -0.5 |
| | 11nm,0.5s,baz=119,slow=8.1,SNR=125 | | | | | | |
| YAK | Yakutsk | 68.29 | 360 | P | P | 13 46 20.7 | -3.3 |
| | 24nm,0.7s | | | | | | |
| TKM2 | Tokmak 2 | 69.59 | 320 | P | P | 13 46 32.5 | -0.3 |
| | SNR=8.7 | | | | | | |
| TKM2 | Tokmak 2 | 69.59 | 320 | eP | P | 13 46 32.1 | -0.7 |
| | 6.0nm,0.6s | | | | | | |
| UCH | Uchtor | 69.94 | 319 | P | P | 13 46 35.7 | +0.5 |
| | SNR=7.3 | | | | | | |
| AAK | Ala-Archa | 70.15 | 320 | P | P | 13 46 36.4 | +0.3 |
| | SNR=6.8 | | | | | | |
| AAK | Ala-Archa | 70.15 | 320 | eP | P | 13 46 35.9 | -0.2 |
| | 8.6nm,0.9s | | | | | | |
| AML | Almayashu | 70.42 | 319 | P | P | 13 46 38.5 | +0.4 |
| | SNR=9.2 | | | | | | |
| USP | Ospenovka | 70.45 | 320 | P | P | 13 46 37.6 | -0.3 |
| | SNR=6.4 | | | | | | |
| EKS2 | Erkin-Say | 70.62 | 319 | P | P | 13 46 39.2 | +0.2 |
| | SNR=9.3 | | | | | | |
| EKS2 | Erkin-Say | 70.62 | 319 | eP | P | 13 46 38.7 | -0.3 |
| | 6.0nm,0.6s | | | | | | |
| ZALV | Zalesovo Beam | 71.11 | 334 | P | P | 13 46 39.6 | -1.9 |
| | 2.3nm,0.6s,baz=118,slow=5.3,SNR=12 | | | | | | |
| KURK | Kurchatov | 72.07 | 329 | eP | P | 13 46 46.3 | -1.0 |
| | 16nm,1.1s | | | | | | |
| KKAR | Karatay Array | 72.95 | 319 | eP | P | 13 46 51.9 | -0.8 |
| | 6.4nm,0.9s | | | | | | |
| VNDA | Vanda | 72.98 | 173 | P | P | 13 46 52.5 | +0.2 |
| | 1.6nm,0.6s,baz=326,slow=6.5,SNR=8.3 | | | | | | |
| MAW | Mawson | 75.46 | 201 | P | P | 13 47 07.3 | +0.5 |
| | 1.3nm,0.6s,baz=70,slow=6.5,SNR=10 | | | | | | |
| MAW | Mawson | 75.46 | 201 | P | P | 13 47 07.1 | +0.4 |
| | baz=75,SNR=7.7 | | | | | | |
| BVAR | Borovoye Array | 77.62 | 328 | P | P | 13 47 18.3 | -1.0 |
| | 2.0nm,0.7s,baz=142,slow=5.6,SNR=14 | | | | | | |
| BRVK | Borovoye | 77.69 | 328 | eP | P | 13 47 17.9 | -1.7 |
| | 7.2nm,1.1s | | | | | | |
| ABKAR | Akbulak array | 82.10 | 322 | eP | P | 13 47 41.3 | -2.1 |
| | 1.6nm,0.7s | | | | | | |
| AKTO | Aktyubinsk | 83.66 | 322 | P | P | 13 47 49.9 | -1.5 |
| | 1.7nm,0.7s,baz=121,slow=9.8,SNR=6.7 | | | | | | |
| ARU | Arti | 85.26 | 328 | P | P | 13 47 57.7 | -1.6 |
| | 0.0nm,0.3s,baz=343,slow=19,SNR=3.7 | | | | | | |
| ILAR | Eielson Array | 92.85 | 25 | P | P | 13 48 32.6 | -2.4 |
| | 1.0nm,0.7s,baz=258,slow=4.5,SNR=14 | | | | | | |
| BRTR | Keskin Array B | 99.00 | 309 | P | P | 13 49 02.4 | -1.3 |
| | 0.3nm,0.3s,baz=100,slow=4.8,SNR=3.1 | | | | | | |
| ANMO | Albuquerque | 120.96 | 53 | PKP | PKPdf | 13 54 15.3 | +0.2 |
| | 0.5nm,0.4s,baz=261,slow=3.6,SNR=4.7 | | | | | | |
| TXAR | Lajitas Array | 124.63 | 59 | PKP | PKPdf | 13 54 22.2 | 0.0 |
| | 1.6nm,1.2s,baz=221,slow=2.5,SNR=5.6 | | | | | | |
| TORD | Torodi Ar. Bea | 128.73 | 282 | PKP | PKPdf | 13 54 27.9 | -2.3 |
| | 0.5nm,0.5s,baz=68,slow=1.7,SNR=4.5 | | | | | | |
| TKL | Tuckaleechee C | 137.50 | 42 | PKP | PKPdf | 13 54 45.0 | -1.2 |
| | 2.8nm,0.8s,baz=244,slow=1.3,SNR=5.8 | | | | | | |
| LVC | Limon Verde | 145.67 | 148 | ePKPbc | PKPab | 13 55 02.9 | +0.4 |
| CPUP | Villa Florida | 146.63 | 168 | PKPbc | PKPbc | 13 55 04.4 | 0.0 |
| | 6.5nm,0.8s,baz=192,slow=2.9,SNR=12 | | | | | | |
| LPAZ | La Paz | 151.13 | 142 | PKPbc | PKPbc | 13 55 17.2 | +0.3 |
| | 2.9nm,0.6s,baz=220,slow=0.4,SNR=13 | | | | | | |

*MAN **10** 13:46:20, 5°.31N×126°.68E, h26km, mb5.0, ML4.0, MS4.1*

*IDC **10** 13:46:26.8±2.2, 5°.85N×126°.76E, h41km±19km, mb3.7/10, mb1 3.9/11, mb1mx3.7/33, mbtmp3.9/11, ML3.6/1, MS3.0/9, Ms1 3.0/9, ms1mx2.9/36, Error ellipse: s-maj=44.1km s-min=13.4km az=64.0*

*ISCJB **10** 13:46:27.0±0.6, 5°.68N±0°.03×126°.50E±0°.07, h58km±6km, mb3.9/11, MS3.0/6, Error ellipse: s-maj=11.7km s-min=4.4km az=170.2*

*DJA **10** 13:46:28.0±1.9, 6°N±11°×12°6E±°, h13km±23km, M4.4/2, mb4.1/2, MLv4.5/1*

*AUST **10** 13:46:43.3±9.2, 4°.52N×126°.61E, h97km, Error ellipse: s-maj=5.0km s-min=1.7km az=234.0*

**ISC 10 13:46:29.8**±1.0**, 5°.65N**±0°.04×**126°.34E**±0°.08**, h62km**±10km**, n55, σ1s68**/49**, mb3.8**/11**, 3C-2D, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MATI | Mati | 1.29 | 356 | eP | Pn | 13 46 47.9 | -3.8 |
| GSPH | General Santos | 1.45 | 288 | ⇓iP | Pn | 13 46 49.6 | -4.3 |
| GSPH | | | | i S | Sn | 13 47 08.4 | -3.8 |
| DAV | Davao City (W) | 1.60 | 332 | P | Pn | 13 46 54.9 | -1.0 |
| | 152nm,0.3s,baz=80,slow=1.3,SNR=17 | | | | | | |
| DMPH | Davao City--Mi | 1.65 | 330 | ⇑eP | Pn | 13 46 55.3 | -1.2 |
| DMPH | | | | eS | Sn | 13 47 24.7 | +8.0 |
| KCP | Kidapawan | 1.83 | 317 | ⇑eP | Pn | 13 46 57.3 | -1.8 |
| KCP | | | | i S | Sn | 13 47 26.4 | +5.0 |
| SGSI | Sangihe | 2.11 | 203 | P | Pn | 13 47 00.7 | -2.1 |
| SGSI | | | | S | Sn | 13 47 30.1 | +2.1 |
| BIPH | Bislig | 2.52 | 0 | ⇑eP | Pn | 13 47 07.2 | -1.1 |
| BIPH | | | | eS | Sn | 13 47 42.0 | +4.1 |
| BUKP | Musuan | 2.55 | 330 | eP | Pn | 13 47 07.3 | -1.5 |
| BUKP | | | | eS | Sn | 13 47 38.5 | -0.3 |
| BUTP | Butuan | 3.38 | 348 | eP | Pn | 13 47 19.3 | -0.7 |
| PAGZ | Pagadian | 3.66 | 307 | eP | Pn | 13 47 24.1 | +0.2 |
| SCPH | Surigao | 4.19 | 348 | ⇓eP | Pn | 13 47 32.6 | +1.4 |
| TNTI | Ternate | 4.95 | 168 | P | Pn | 13 47 41.1 | -0.5 |
| KMSI | Cibinong | 5.56 | 205 | P | Pn | 13 47 51.4 | +1.4 |
| GTOI | Gorontalo | 5.99 | 214 | P | Pn | 13 47 55.0 | -0.8 |
| LBMI | Labuha | 6.35 | 169 | P | Pn | 13 48 00.1 | -0.7 |
| LBMI | | | | S | Sn | 13 49 13.3 | +1.3 |
| MRSI | Marisa | 6.76 | 221 | P | Pn | 13 48 07.1 | +0.7 |
| LUWI | Luwuk | 7.54 | 208 | P | Pn | 13 48 20.9 | +3.8 |
| | baz=6.8,SNR=8.6 | | | | | | |
| LUWI | Luwuk | 7.54 | 208 | P | Pn | 13 48 18.1 | +1.0 |
| SANI | Sanana | 7.66 | 183 | P | Pn | 13 48 17.7 | -1.0 |
| APSI | Ampana | 8.03 | 216 | P | Pn | 13 48 25.6 | +1.9 |
| SWI | Sorong | 8.12 | 143 | P | Pn | 13 48 23.2 | -1.9 |
| SIJI | Sorong | 8.13 | 143 | P | Pn | 13 48 21.1 | -4.2 |
| | 0.9nm,0.3s,baz=332,slow=16,SNR=6.4 | | | | | | |
| NLAI | Namlea | 8.86 | 175 | P | Pn | 13 48 34.5 | -0.7 |
| TTSI | Tana Toraja | 10.82 | 217 | P | Pn | 13 49 02.9 | +1.0 |
| KAPI | Kappang | 12.47 | 212 | LR | LR | 13 53 56.1 | |
| | comp=Z,65nm,21.7s,baz=107,slow=35 | | | | | | |
| BATI | Baumata | 15.97 | 190 | P | P | 13 50 14.9 | +1.8 |
| | 2.6nm,0.3s,baz=293,slow=3.0,SNR=4.4 | | | | | | |
| JAY | Jayapura | 16.48 | 119 | LR | LR | 13 56 17.4 | |
| | comp=Z,35nm,19.4s,baz=262,slow=36 | | | | | | |
| MTN | Manton Dam | 18.98 | 165 | P | P | 13 50 44.7 | -1.6 |
| | baz=18,SNR=5.2 | | | | | | |
| GUMO | Guam | 19.89 | 65 | LR | LR | 13 57 12.5 | |
| | comp=Z,37nm,21.5s,baz=219,slow=33 | | | | | | |
| KNRA | Kununurra | 21.32 | 174 | P | P | 13 51 11.3 | -0.4 |
| | baz=20,SNR=19 | | | | | | |
| PMG | Port Moresby | 25.58 | 126 | LR | LR | 14 02 24.5 | |
| | comp=Z,52nm,19.4s,baz=254,slow=38 | | | | | | |
| WRA | Warramunga Arr | 26.62 | 163 | P | P | 13 52 01.7 | -0.9 |
| | 1.4nm,0.5s,baz=344,slow=10.0,SNR=18 | | | | | | |
| WRA | | | | PcP | PcP | 13 55 25.7 | +0.2 |
| | 0.5nm,0.5s,baz=334,slow=2.4,SNR=5.9 | | | | | | |
| QIS | Mount Isa | 29.12 | 154 | P | P | 13 52 25.4 | +0.4 |
| | baz=28,SNR=3.4 | | | | | | |
| CMAR | Chiang Mai Arr | 29.60 | 298 | P | P | 13 52 30.9 | +1.6 |
| | 0.5nm,0.5s,baz=115,slow=8.0,SNR=3.0 | | | | | | |
| CMAR | | | | LR | LR | 14 04 26.5 | |
| | comp=Z,19nm,19.8s,baz=255,slow=36 | | | | | | |
| ASAR | Alice Springs | 30.06 | 166 | P | P | 13 52 33.4 | +0.1 |
| | 0.6nm,0.5s,baz=342,slow=7.0,SNR=16 | | | | | | |
| ASAR | | | | PcP | PcP | 13 55 34.0 | -0.1 |
| | 1.5nm,0.5s,baz=348,slow=2.3,SNR=22 | | | | | | |
| ASAR | | | | ScP | ScP | 13 59 13.8 | +2.8 |
| | 0.2nm,0.5s,baz=347,slow=3.3,SNR=4.7 | | | | | | |
| WRKA | Warakurna | 30.56 | 177 | P | P | 13 52 38.6 | +0.9 |
| | baz=30,SNR=6.2 | | | | | | |
| KSRS | Korea Array | 31.69 | 2 | P | P | 13 52 49.0 | +1.6 |
| | 0.5nm,0.5s,baz=190,slow=10,SNR=3.0 | | | | | | |
| KSRS | | | | LR | LR | 14 05 09.1 | |
| | comp=Z,18nm,21.7s,baz=226,slow=36 | | | | | | |
| MJAR | Matsushiro Arr | 32.62 | 18 | LR | LR | 14 05 08.8 | |
| | comp=Z,21nm,21.7s,baz=180,slow=35 | | | | | | |
| MEEK | Meekatharra | 32.96 | 193 | P | P | 13 52 57.9 | -0.8 |
| | baz=32,SNR=6.3 | | | | | | |
| QLP | Quilpie | 36.43 | 152 | P | P | 13 53 29.8 | +1.2 |
| | baz=36,SNR=3.5 | | | | | | |
| BBOO | Buckleboo | 39.35 | 167 | P | P | 13 53 57.3 | +4.2 |
| | baz=38,SNR=6.1 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 41.36 | 68 | T | T | 14 38 06.5 | |
| | baz=244,slow=72,SNR=8.1 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 41.37 | 68 | T | T | 14 38 07.7 | |
| | baz=244,slow=72,SNR=6.8 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 41.37 | 68 | T | T | 14 38 05.7 | |
| | baz=244,slow=72,SNR=8.9 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 41.83 | 67 | T | T | 14 38 43.1 | |
| | baz=254,slow=74,SNR=6.5 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.84 | 67 | T | T | 14 38 36.0 | |
| | baz=254,slow=74,SNR=5.2 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 41.84 | 67 | T | T | 14 38 44.5 | |
| | baz=254,slow=74,SNR=5.3 | | | | | | |
| SONM | Songino Array | 45.37 | 341 | P | P | 13 54 40.5 | -1.6 |
| | 0.3nm,0.6s,baz=148,slow=8.5,SNR=2.2 | | | | | | |
| SONM | | | | PcP | PcP | 13 56 20.8 | +0.2 |
| | 1.3nm,0.7s,baz=169,slow=3.3,SNR=7.6 | | | | | | |
| SONM | | | | LR | LR | 14 15 20.9 | |
| | comp=Z,46nm,18.3s,baz=163,slow=38 | | | | | | |
| MKAR | Makanchi Array | 55.77 | 325 | P | P | 13 55 59.4 | -1.0 |
| | 0.8nm,0.5s,baz=119,slow=9.8,SNR=7.2 | | | | | | |
| MKAR | | | | LR | LR | 14 21 11.7 | |
| | comp=Z,36nm,19.0s,baz=80,slow=37 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **58.71** | **333** | P | **P** | **13 56 19.4** | **-1.5** |
| | 0.5nm,0.3s,baz=120,slow=8.7,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **83.55** | **26** | P | **P** | **13 58 48.9** | **-2.0** |
| | 0.4nm,0.7s,baz=236,slow=6.4,SNR=4.3 | | | | | | |
| **VNDA** | **Vanda** | **85.37** | **173** | P | **P** | **13 58 59.8** | **+0.1** |
| | 0.5nm,0.6s,baz=338,slow=2.8,SNR=3.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.53** | **340** | P | **P** | **13 59 14.6** | **-0.7** |
| | 4.3nm,0.7s,baz=85,slow=5.9,SNR=10 | | | | | | |
| **FINES** | **FINESS Array B** | **89.97** | **332** | P | **P** | **13 59 21.6** | **-0.6** |
| | 1.8nm,0.7s,baz=0.0,slow=1.9,SNR=7.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.94** | **289** | PKP | **PKPdf** | **14 05 17.2** | **-0.9** |
| | 1.3nm,0.7s,baz=31,slow=2.0,SNR=8.8 | | | | | | |

*TRN **10** 13:50:16.8, 15°.29N×61°.41W, h161km, MD3.8*
*ISCJB **10** 13:50:17.0±0.3, 15°.26N±0°.03×61°.48W±0°.06, h163km±2km, mb3.5/9, Error ellipse: s-maj=10.1km s-min=3.7km az=163.3*
*NEIC **10** 13:50:18.0±1.6, 15°.32N×61°.46W, h151km±27km, mb4.5/2, Error ellipse: s-maj=25.1km s-min=10.0km az=63.0*
*IDC **10** 13:50:18.4±2.8, 15°.27N×61°.48W, h162km±26km, mb3.3/9, mb1 3.5/11, mb1mx3.4/35, mbtmp3.8/11, Error ellipse: s-maj=21.0km s-min=16.5km az=40.0*
**ISC 10 13:50:18.1**±0.7, **15°.28N**±0°.03×**61°.42W**±0°.06, **h160**km±5km, **n69**, σ**0s.95**/87, **mb3.7**/9, **8C-4D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DPMT** | **Pointe Michel** | **0.05** | **115** | eP | **Pn** | **13 50 40.2** | **+0.9** |
| **MDN** | **Morne-Daniel** | **0.05** | **35** | eP | **Pn** | **13 50 39.9** | **+0.6** |
| **DBCT** | **Belle View Cho** | **0.07** | **98** | eP | **Pn** | **13 50 40.2** | **+0.8** |
| **DSHT** | **Scott's Head** | **0.08** | **146** | eP | **Pn** | **13 50 40.2** | **+0.7** |
| **DSTT** | **Stowe** | **0.12** | **107** | eP | **Pn** | **13 50 40.2** | **+0.8** |
| **DLPL** | **La Plaine** | **0.17** | **73** | eP | **Pn** | **13 50 39.4** | **-0.2** |
| **BBL** | **Barber's Block** | **0.25** | **349** | ⇓iP | **Pn** | **13 50 39.4** | **-0.3** |
| BBL | | | | eS | **Sn** | **13 50 56.1** | **-0.2** |
| **PCM** | **Pelee Case Pet** | **0.51** | **156** | eP | **Pn** | **13 50 40.5** | **-0.1** |
| **PCM** | **Pelee Case Pet** | **0.51** | **156** | eP | **Pn** | **13 50 41.0** | **+0.3** |
| **CXM** | **Morne La Croix** | **0.53** | **152** | eP | **Pn** | **13 50 40.7** | **-0.2** |
| CXM | | | | eS | **Sn** | **13 50 58.5** | **+0.2** |
| **BAMF** | **Morne Balai** | **0.53** | **150** | ⇓eP | **Pn** | **13 50 41.1** | **+0.2** |
| **GBMF** | **Grand Be** | **0.54** | **153** | eP | **Pn** | **13 50 41.1** | **+0.2** |
| **PML** | **Morne Lenard** | **0.55** | **155** | eP | **Pn** | **13 50 40.8** | **-0.1** |
| **FDF** | **Fort de France** | **0.60** | **154** | ⇓iP | **Pn** | **13 50 41.0** | **-0.2** |
| FDF | | | | eS | **Sn** | **13 50 58.1** | **-0.8** |
| **FDF** | **Fort de France** | **0.60** | **154** | ePn | **Pn** | **13 50 40.7** | **-0.5** |
| FDF | | | | eSn | **Sn** | **13 50 58.0** | **-0.8** |
| **TBG** | **Guadaloupe-3** | **0.61** | **339** | eP | **Pn** | **13 50 40.6** | **-0.5** |
| **TBG** | **Guadaloupe-3** | **0.61** | **339** | eP | **Pn** | **13 50 40.9** | **-0.2** |
| TBG | | | | eS | **Sn** | **13 50 58.3** | **-0.5** |
| **MGG** | **Marie-Galante** | **0.64** | **9** | eP | **Pn** | **13 50 40.8** | **-0.5** |
| **MGG** | **Marie-Galante** | **0.64** | **9** | eP | **Pn** | **13 50 41.0** | **-0.3** |
| MGG | | | | eS | **Sn** | **13 50 58.4** | **-0.8** |
| **BVM** | **Bellevue** | **0.64** | **148** | eP | **Pn** | **13 50 41.6** | **+0.2** |
| **HMG** | **Houelmont** | **0.75** | **339** | eP | **Pn** | **13 50 41.8** | **-0.2** |
| HMG | | | | eS | **Sn** | **13 50 59.8** | **-0.6** |
| **PHG** | **Guadaloupe-2** | **0.76** | **344** | eP | **Pn** | **13 50 41.6** | **-0.6** |
| **DOG** | **Dongo Capester** | **0.77** | **346** | eP | **Pn** | **13 50 42.1** | **-0.1** |
| **SCG** | **Saint Claude** | **0.79** | **341** | eP | **Pn** | **13 50 42.3** | **0.0** |
| **ECG** | **Echelle** | **0.79** | **343** | eP | **Pn** | **13 50 42.4** | **-0.1** |
| **ZAM** | **Aeronautique** | **0.80** | **152** | eP | **Pn** | **13 50 42.3** | **0.0** |
| **FNG** | **Fond-Bernard** | **0.82** | **342** | eP | **Pn** | **13 50 42.5** | **0.0** |
| **TRMF** | **Trois Ilets** | **0.82** | **154** | eP | **Pn** | **13 50 42.4** | **-0.1** |
| **MLG** | **Mont-d'or** | **0.82** | **340** | eP | **Pn** | **13 50 42.3** | **-0.2** |
| MLG | | | | eS | **Sn** | **13 51 00.8** | **-0.6** |
| **BIM** | **Bigot** | **0.83** | **156** | ⇓eP | **Pn** | **13 50 42.8** | **+0.2** |
| BIM | | | | eS | **Sn** | **13 51 01.1** | **-0.3** |
| **SSG** | **Sans Toucher** | **0.84** | **343** | ⇑iP | **Pn** | **13 50 42.5** | **-0.2** |
| **MVM** | **Montagne Vaucl** | **0.88** | **145** | ⇑eP | **Pn** | **13 50 42.9** | **-0.1** |
| **DEG** | **La Desirade** | **1.08** | **19** | eP | **Pn** | **13 50 44.2** | **-0.4** |
| DEG | | | | eS | **Sn** | **13 51 03.7** | **-1.3** |
| **SEG** | **Port Louis** | **1.12** | **356** | ⇑iP | **Pn** | **13 50 44.6** | **-0.2** |
| **MLYT** | **Lee's Yard** | **1.61** | **333** | eP | **Pn** | **13 50 49.5** | **-0.1** |
| MLYT | | | | eS | **Sn** | **13 51 13.2** | **-0.8** |
| **MCLT** | **Moule a Chique** | **1.63** | **163** | eP | **Pn** | **13 50 49.5** | **-0.3** |
| MCLT | | | | eS | **Sn** | **13 51 13.4** | **-0.8** |
| **BPA** | **Boggy Peak** | **1.81** | **347** | eP | **Pn** | **13 50 51.9** | **+0.2** |
| BPA | | | | eS | **Sn** | **13 51 16.6** | **-1.1** |
| **SVV** | **Soufriere Volc** | **1.96** | **174** | ⇑iP | **Pn** | **13 50 54.2** | **+0.7** |
| **SVB** | **Belmont** | **2.00** | **175** | ⇑iP | **Pn** | **13 50 53.6** | **-0.3** |
| **FCV** | **Fort Charlotte** | **2.12** | **175** | ⇑iP | **Pn** | **13 50 55.5** | **+0.3** |
| FCV | | | | eS | **Sn** | **13 51 23.3** | **-0.6** |
| **ANWB** | **Willy Bob** | **2.40** | **352** | eP | **Pn** | **13 50 57.5** | **-1.0** |
| **ANWB** | **Willy Bob** | **2.40** | **352** | ePn | **Pn** | **13 50 56.9** | **-1.6** |
| ANWB | | | | eSn | **Sn** | **13 51 26.2** | **-3.6** |
| **SKI** | **Saint Kitts** | **2.40** | **328** | ⇑iP | **Pn** | **13 50 58.2** | **-0.3** |
| SKI | | | | eS | **Sn** | **13 51 29.5** | **-0.4** |
| **BBGH** | **Gun Hill** | **2.79** | **139** | eP | **Pn** | **13 51 04.0** | **+0.8** |
| **BBGH** | **Gun Hill** | **2.79** | **139** | ePn | **Pn** | **13 51 03.8** | **+0.6** |
| **SABA** | **Saba** | **2.91** | **323** | ⇑iP | **Pn** | **13 51 04.3** | **-0.4** |
| **GRGR** | **Grenville** | **3.14** | **184** | eP | **Pn** | **13 51 07.4** | **-0.2** |
| GRGR | | | | eS | **Sn** | **13 51 44.5** | **-1.6** |
| **GRGR** | **Grenville** | **3.14** | **184** | ePn | **Pn** | **13 51 07.0** | **-0.7** |
| **TOSP** | **Speyside** | **4.05** | **168** | eP | **Pn** | **13 51 18.9** | **-0.4** |
| **TOSP** | **Speyside** | **4.05** | **168** | eS | **Sn** | **13 52 03.9** | **-3.1** |
| **STVI** | **Saint Thomas** | **4.56** | **313** | ePn | **Pn** | **13 51 25.0** | **-0.9** |
| **TRN** | **Trinidad (W)** | **4.61** | **180** | eP | **Pn** | **13 51 25.7** | **-0.9** |
| **TRN** | **Trinidad (W)** | **4.61** | **180** | eS | **Sn** | **13 52 17.5** | **-2.4** |
| **SJG** | **San Juan** | **5.34** | **303** | P | **Pn** | **13 51 35.2** | **-0.8** |
| | 4.9nm,0.3s,baz=63,slow=8.3,SNR=12 | | | | | | |
| SJG | | | | S | **Sn** | **13 52 40.7** | **+3.6** |
| | 4.5nm,0.3s,baz=330,slow=17,SNR=7.1 | | | | | | |
| **SJG** | **San Juan** | **5.34** | **303** | ePn | **Pn** | **13 51 35.0** | **-1.1** |
| | 32nm,0.8s | | | | | | |
| **CELP** | **Cerrillos** | **5.67** | **300** | ePn | **Pn** | **13 51 39.7** | **-0.8** |
| **LRS** | **Lares** | **6.00** | **301** | ePn | **Pn** | **13 51 45.6** | **+0.7** |
| **CRPR** | **Cabo Rojo, PR** | **6.09** | **297** | ePn | **Pn** | **13 51 44.6** | **-1.4** |
| | 16nm,0.6s | | | | | | |
| **PTGA** | **Pitinga** | **15.97** | **175** | P | **Pn** | **13 53 53.3** | **-0.8** |
| | 0.9nm,0.3s,baz=356,slow=17,SNR=10 | | | | | | |
| **SIV** | **San Ignacio** | **31.07** | **179** | P | **P** | **13 56 22.1** | **+0.8** |
| | 2.4nm,0.6s,baz=10,slow=8.4,SNR=6.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **41.28** | **297** | P | **P** | **13 57 48.2** | **+0.2** |
| | 0.1nm,0.5s,baz=126,slow=9.1,SNR=4.0 | | | | | | |
| TXAR | | | | PcP | **PcP** | **13 59 44.4** | **+0.7** |
| | 0.1nm,0.5s,baz=125,slow=4.7,SNR=3.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **54.81** | **306** | P | **P** | **13 59 32.4** | **+0.5** |
| | 0.3nm,0.6s,baz=96,slow=4.6,SNR=3.1 | | | | | | |
| **ESDC** | **Sonseca Array** | **55.44** | **52** | P | **P** | **13 59 37.5** | **+1.3** |
| | 0.8nm,0.6s,baz=270,slow=7.1,SNR=7.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.97** | **335** | P | **P** | **14 00 06.6** | **-0.6** |
| | 0.6nm,0.7s,baz=104,slow=7.6,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **61.03** | **83** | P | **P** | **14 00 16.2** | **+0.9** |
| | 0.7nm,0.5s,baz=287,slow=6.8,SNR=8.1 | | | | | | |
| **ILAR** | **Eielson Array** | **74.38** | **334** | P | **P** | **14 01 37.6** | **-0.4** |
| | 0.3nm,0.6s,baz=94,slow=5.1,SNR=6.2 | | | | | | |
| **FINES** | **FINESS Array B** | **75.53** | **30** | P | **P** | **14 01 45.1** | **+0.4** |
| | 2.1nm,0.9s,baz=242,slow=6.0,SNR=4.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **84.20** | **51** | P | **P** | **14 02 31.2** | **-0.8** |
| | 1.3nm,0.9s,baz=256,slow=4.3,SNR=3.6 | | | | | | |
| **VNDA** | **Vanda** | **114.11** | **189** | PKP | PKPdf | 14 08 35.5 | -2.0 |
| | 0.4nm,0.7s,baz=147,slow=2.9,SNR=3.7 | | | | | | |

*IDC **10** 13:59:18.6±1.2, 6°.57N×126°.72E, h0km, mb3.7/4, mb1 3.8/4, mb1mx3.4/36, mbtmp3.7/4, Error ellipse: s-maj=38.8km s-min=13.4km az=39.0*
*ISCJB **10** 13:59:22.7±1.5, 6°.23N±0°.05×126°.29E±0°.06, h33km±11km, mb3.6/4, Error ellipse: s-maj=9.6km s-min=8.4km az=148.1*
*MAN **10** 13:59:25, 6°.46N×126°.30E, h23km, mb4.7, ML3.6, MS3.6*
**ISC 10 13:59:22.6**±1.1, **6°.23N**±0°.08×**126°.22E**±0°.07, **h21**km±6km, **n15**, σ**1s.13**/20, **mb3.8**/4, **2C-3D, Mindanao**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **0.72** | **3** | eP | **Pb** | **13 59 36.0** | **-0.4** |
| MATI | | | | eS | **Sb** | **13 59 45.8** | **0.0** |
| **DAV** | **Davao City (W)** | **1.05** | **323** | Pg | **Pb** | **13 59 43.4** | **+1.4** |
| | 107nm,0.3s,baz=176,slow=0.8,SNR=5.6 | | | | | | |
| DAV | | | | Lg | Lg | 13 59 57.9 | |
| | 363nm,0.3s,baz=198,slow=20,SNR=41 | | | | | | |
| **DMPH** | **Davao City--Mi** | **1.10** | **321** | ⇑eP | **Pb** | **13 59 43.8** | **+0.8** |
| DMPH | | | | iS | **Sn** | **13 59 58.5** | **+1.1** |
| **GSPH** | **General Santos** | **1.27** | **264** | ⇓iP | **Pn** | **13 59 44.9** | **-0.3** |
| GSPH | | | | iS | **Sn** | **14 00 00.9** | **-0.6** |
| **KCP** | **Kidapawan** | **1.36** | **305** | ⇓eP | **Pn** | **13 59 44.6** | **-1.7** |
| KCP | | | | iS | **Sn** | **14 00 04.1** | **+0.2** |
| **BIPH** | **Bislig** | **1.95** | **4** | ⇓eP | **Pn** | **13 59 54.2** | **-0.2** |
| BIPH | | | | iS | **Sn** | **14 00 17.2** | **-1.0** |
| **BUKP** | **Musuan** | **2.00** | **325** | eP | **Pn** | **13 59 55.8** | **+0.6** |
| BUKP | | | | eS | **Sn** | **14 00 19.4** | **-0.2** |
| **CTBH** | **Cotabato--PC H** | **2.19** | **297** | ⇑iP | **Pb** | **14 00 00.0** | **-1.5** |
| CTBH | | | | iS | **Sn** | **14 00 26.3** | **+2.1** |
| **BUTP** | **Butuan** | **2.79** | **348** | eP | Pb | 14 00 17.6 | +5.9 |
| **MSLP** | **Maasin** | **4.11** | **341** | eP | Pb | 14 00 42.8 | +8.6 |
| **WRA** | **Warramunga Arr** | **27.20** | **163** | P | **P** | **14 05 06.4** | **+1.4** |
| | 0.4nm,0.7s,baz=347,slow=9.8,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **30.64** | **166** | P | **P** | **14 05 36.9** | **+1.2** |
| | 0.7nm,0.6s,baz=345,slow=7.0,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.23** | **325** | P | **P** | **14 08 53.9** | **-0.2** |
| | 0.7nm,0.6s,baz=125,slow=8.0,SNR=7.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **64.97** | **327** | P | **P** | **14 10 00.5** | **-0.2** |
| | 0.6nm,0.6s,baz=101,slow=7.6,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.63** | **289** | PKP | **PKPdf** | **14 18 14.6** | **-1.1** |
| | 0.4nm,0.7s,baz=71,slow=1.7,SNR=2.5 | | | | | | |

*ISCJB **10** 14:37:22.6±0.5, 38°.49N±0°.02×31°.87E±0°.03, h2km±4km, Error ellipse: s-maj=3.9km s-min=3.7km az=141.3*
*CSEM **10** 14:37:22.6±0.1, 38°.48N×31°.87E, h2km, MD3.1, Error ellipse: s-maj=2.4km s-min=2.2km az=44.0*
*DDA **10** 14:37:22.1, 38°.51N×31°.90E, h16km, Md3.1*
*ISK **10** 14:37:22.3, 38°.48N×31°.89E, h5km, MD3.2, ML3.2*
**ISC 10 14:37:22.8**±1.0, **38°.48N**±0°.02×**31°.87E**±0°.02, **h5**km±9km, **n56**, σ**0s.60**/77, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDHN** | **Kadinhani** | **0.20** | **79** | iP | **Pg** | **14 37 26.7** | **0.0** |
| KDHN | | | | iS | **Sg** | **14 37 29.6** | **+0.3** |
| **KDHN** | **Kadinhani** | **0.20** | **79** | P | **Pg** | **14 37 26.7** | **0.0** |
| KDHN | | | | S | **Sg** | **14 37 29.6** | **+0.3** |
| **KIZT** | **Kizilcal** | **0.40** | **1** | ePG | **Pg** | **14 37 30.0** | **-0.6** |
| KIZT | | | | eSG | **Sg** | **14 37 36.3** | **+0.5** |
| **KIZT** | **Kizilcal** | **0.40** | **1** | ePg | **Pg** | **14 37 30.0** | **-0.6** |
| KIZT | | | | eSg | **Sg** | **14 37 36.3** | **+0.5** |
| **KONT** | **Konya--Tatoy** | **0.66** | **144** | ePG | **Pg** | **14 37 35.5** | **0.0** |
| KONT | | | | eSG | **Sg** | **14 37 44.9** | **+0.8** |
| **KONT** | **Konya--Tatoy** | **0.66** | **144** | ePg | **Pg** | **14 37 35.5** | **0.0** |
| KONT | | | | eSg | **Sg** | **14 37 44.9** | **+0.8** |
| **BOLV** | **Bolvadin** | **0.76** | **288** | iP | **Pg** | **14 37 36.9** | **-0.5** |
| BOLV | | | | iS | **Sg** | **14 37 47.9** | **+0.6** |
| **BOLV** | **Bolvadin** | **0.76** | **288** | P | **Pg** | **14 37 36.9** | **-0.5** |
| BOLV | | | | S | **Sg** | **14 37 47.9** | **+0.6** |
| **BAGO** | **Egridir - ISPA** | **0.99** | **240** | P | **Pg** | **14 37 41.7** | **-0.1** |
| BAGO | | | | S | **Sb** | **14 37 56.6** | **+0.9** |
| **SVRH** | **Sivrihisar-ESK** | **1.00** | **344** | ePG | **Pg** | **14 37 42.1** | **+0.1** |
| **SVRH** | **Sivrihisar-ESK** | **1.00** | **344** | ePg | **Pg** | **14 37 42.1** | **+0.1** |
| **SHUT** | **Suhut-Afyon** | **1.04** | **274** | ePG | **Pg** | **14 37 42.6** | **-0.2** |
| **SHUT** | **Suhut-Afyon** | **1.04** | **274** | ePg | **Pg** | **14 37 42.6** | **-0.2** |
| **SUTC** | **Sutluce-Ispart** | **1.22** | **215** | ePN | **Pg** | **14 37 45.9** | **-0.3** |
| **SUTC** | **Sutluce-Ispart** | **1.22** | **215** | ePn | **Pg** | **14 37 45.9** | **-0.3** |
| **ESKT** | **Eskisehir** | **1.31** | **323** | ePN | **Pg** | **14 37 47.9** | **0.0** |
| **ESKT** | **Eskisehir** | **1.31** | **323** | ePn | **Pg** | **14 37 47.9** | **0.0** |
| **ESKT** | **Eskisehir** | **1.31** | **323** | P | **Pn** | **14 37 47.1** | **-0.7** |
| ESKT | | | | S | **Sb** | **14 38 04.0** | **-1.0** |
| **SEYT** | **Eskypehyr** | **1.31** | **323** | iP | **Pn** | **14 37 47.1** | **-0.7** |
| SEYT | | | | iS | **Sb** | **14 38 04.0** | **-1.0** |
| **SULT** | **Sultanhani-AKS** | **1.32** | **102** | ePN | **Pn** | **14 37 47.7** | **-0.3** |
| **SULT** | **Sultanhani-AKS** | **1.32** | **102** | ePn | **Pn** | **14 37 47.7** | **-0.3** |
| **AFSR** | **Af¯ar-Bala (A** | **1.34** | **44** | ePN | **Pg** | **14 37 48.4** | **-0.1** |
| **AFSR** | **Af¯ar-Bala (A** | **1.34** | **44** | ePn | **Pg** | **14 37 48.4** | **-0.1** |
| **AUMIH** | **MIHALICIK** | **1.42** | **348** | P | **Pb** | **14 37 49.5** | **-0.3** |
| AUMIH | | | | S | **Sg** | **14 38 09.6** | **+1.2** |
| **BCK** | **Bucak** | **1.44** | **225** | ePN | **Pb** | **14 37 49.8** | **-0.4** |
| **BCK** | **Bucak** | **1.44** | **225** | ePn | **Pb** | **14 37 49.8** | **-0.4** |
| **HDMB** | **Hadim** | **1.59** | **162** | ePN | **Pn** | **14 37 51.7** | **-0.1** |
| **HDMB** | **Hadim** | **1.59** | **162** | ePn | **Pn** | **14 37 51.7** | **-0.1** |
| **KAMT** | **Kaman** | **1.69** | **58** | ePN | **Pn** | **14 37 53.3** | **+0.3** |
| **KAMT** | **Kaman** | **1.69** | **58** | ePn | **Pn** | **14 37 53.3** | **+0.3** |
| **BORA** | **Eskisehir** | **1.78** | **322** | iP | **Pn** | **14 37 53.7** | **-0.6** |
| BORA | | | | iS | **Sn** | **14 38 17.0** | **-0.3** |
| **BORA** | **Eskisehir** | **1.78** | **322** | P | **Pn** | **14 37 53.7** | **-0.6** |
| BORA | | | | S | **Sn** | **14 38 17.0** | **-0.3** |
| **KHL** | **Karahalli** | **1.85** | **266** | ePN | **Pb** | **14 37 56.2** | **-1.0** |
| **KHL** | **Karahalli** | **1.85** | **266** | ePn | **Pb** | **14 37 56.2** | **-1.0** |
| **ANTB** | **Antalya** | **1.85** | **212** | ePN | **Pn** | **14 37 55.5** | **+0.4** |
| **ANTB** | **Antalya** | **1.85** | **212** | ePn | **Pn** | **14 37 55.6** | **+0.4** |
| **KHAL** | **Karahalli** | **1.87** | **267** | iP | **Pn** | **14 37 55.7** | **+0.1** |
| **KHAL** | **Karahalli** | **1.87** | **267** | P | **Pn** | **14 37 55.8** | **+0.1** |
| **KORT** | **Korkueli** | **1.91** | **220** | iP | **Pn** | **14 37 56.7** | **+0.6** |
| KORT | | | | iS | **Sn** | **14 38 21.1** | **+0.5** |
| **KORT** | **Korkueli** | **1.91** | **220** | P | **Pn** | **14 37 56.7** | **+0.6** |
| KORT | | | | S | **Sn** | **14 38 21.1** | **+0.5** |
| **MDUB** | **Mudurnu** | **2.05** | **345** | ePN | **Pn** | **14 37 58.9** | **+0.8** |
| **MDUB** | **Mudurnu** | **2.05** | **345** | ePn | **Pn** | **14 37 58.9** | **+0.8** |
| **GULT** | **Gulveren** | **2.21** | **332** | ePN | **Pn** | **14 38 01.0** | **+0.8** |
| **GULT** | **Gulveren** | **2.21** | **332** | ePn | **Pn** | **14 38 01.0** | **+0.8** |
| **CDAG** | **Cicekdag** | **2.25** | **59** | iP | **Pn** | **14 38 01.2** | **+0.4** |
| CDAG | | | | iS | **Sn** | **14 38 29.2** | **+0.2** |
| **CDAG** | **Cicekdag** | **2.25** | **59** | P | **Pn** | **14 38 01.2** | **+0.4** |
| CDAG | | | | S | **Sn** | **14 38 29.2** | **+0.2** |
| **GAZI** | **Gazipasa** | **2.27** | **171** | iP | **Pb** | **14 38 03.4** | **-0.9** |
| **GAZI** | **Gazipasa** | **2.27** | **171** | P | **Pb** | **14 38 03.4** | **-0.9** |
| GAZI | | | | S | **Sg** | **14 38 35.6** | **-0.2** |
| **CAVI** | **Cavuskoy** | **2.33** | **318** | ePN | **Pn** | **14 38 03.0** | **+1.2** |
| **CAVI** | **Cavuskoy** | **2.33** | **318** | ePn | **Pn** | **14 38 03.0** | **+1.2** |
| **KULA** | **Kula-Manisa** | **2.52** | **272** | ePN | **Pn** | **14 38 05.7** | **+1.2** |
| **KULA** | **Kula-Manisa** | **2.52** | **272** | ePn | **Pn** | **14 38 05.7** | **+1.2** |
| **ULDT** | **Uludag** | **2.69** | **309** | iP | **Pn** | **14 38 07.0** | **+0.1** |
| ULDT | | | | iS | **Sn** | **14 38 40.2** | **+0.2** |
| **ULDT** | **Uludag** | **2.69** | **309** | P | **Pn** | **14 38 07.0** | **+0.1** |
| ULDT | | | | S | **Sn** | **14 38 40.2** | **+0.2** |
| **CORM** | **Corum** | **2.73** | **51** | ePN | **Pn** | **14 38 08.2** | **+0.8** |
| **CORM** | **Corum** | **2.73** | **51** | ePn | **Pn** | **14 38 08.2** | **+0.8** |

*NIED **10** 14:47:00, 35°.60N×141°.10E, h32km, Mw4.0 Best double couple: M₀1.22000×10^15 NP1:φs283.00000°, δ43.00000°, λ-94.00000°. NP2:φs109.00000°, δ47.00000°, λ-86.00000°.*
*IDC **10** 14:47:09.6±0.7, 35°.57N×140°.90E, h0km, mb3.9/12, mb1 4.1/13, mb1mx3.9/42, mbtmp3.9/13, ML3.5/1, MS3.0/5, Ms1 3.1/5, ms1mx2.9/30, Error ellipse: s-maj=22.8km s-min=14.9km az=98.0*
*NEIC **10** 14:47:10.2±1.8, 35°.59N×140°.86E, h4km±10km, mb4.4/3, Error ellipse: s-maj=11.0km s-min=6.8km az=106.0*
*ISCJB **10** 14:47:11.9±0.8, 35°.54N±0°.04×141°.30E±0°.09, h39km±7km, mb3.9/15, MS3.1/3, Error ellipse: s-maj=11.8km s-min=6.4km az=3.6*
*JMA **10** 14:47:13.8±0.2, 35°.57N×141°.13E, h36km±1km, M3.5*
**ISC 10 14:47:13.2**±1.3, **35°.52N**±0°.06×**141°.19E**±0°.08, **h29**km±8km, **n47**, σ**1s.09**/40, **mb3.9**/15, **MS3.1**/3, **2C-1D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHOJ** | **Chosi** | **0.32** | **304** | ⇓P | **Pb** | **14 47 21.2** | **+0.3** |
| CHOJ | | | | S | **Sb** | **14 47 26.3** | **+0.1** |
| **KTR** | **Katsuura** | **0.81** | **243** | P | **Pn** | **14 47 28.6** | **0.0** |
| **JCN** | **Nagara** | **0.81** | **263** | P | **Pb** | **14 47 29.5** | **+0.7** |
| **BSO4** | **Boso 4** | **0.88** | **233** | ⇑P | **Pn** | **14 47 29.7** | **+0.2** |
| **BSO3** | **Boso 3** | **0.91** | **218** | ⇑P | **Pn** | **14 47 30.0** | **+0.2** |
| **JYT** | **Yasato** | **1.07** | **311** | P | **Pn** | **14 47 31.9** | **-0.3** |
| **JHO** | **Hitachi** | **1.20** | **335** | P | **Pn** | **14 47 33.6** | **-0.4** |
| **JIM2** | **Oshima 3** | **1.65** | **241** | P | **Pn** | **14 47 39.1** | **-1.1** |
| **JAG** | **Ashikaga** | **1.67** | **303** | P | **Pn** | **14 47 40.7** | **+0.2** |
| **JOD2** | **Odawara 2** | **1.73** | **262** | P | **Pn** | **14 47 41.7** | **+0.3** |
| **MJAR** | **Matsushiro Arr** | **2.62** | **294** | Pn | **Pn** | **14 47 54.0** | **+0.4** |
| | 4.8nm,0.3s,baz=157,slow=2.5,SNR=35 | | | | | | |
| **MAJO** | **Matsushiro** | **2.62** | **294** | ePg | **Pn** | **14 47 54.7** | **+1.1** |
| **MAT** | **Matsushiro** | **2.62** | **294** | P | **Pn** | **14 47 54.6** | **+1.0** |
| MAT | | | | eS | **Sn** | **14 48 26.2** | **+1.7** |
| **JHJ2** | **Mitsune** | **2.66** | **206** | ePn | **Pn** | **14 47 54.4** | **+0.3** |
| **JHJ** | **Hachijo jima 2** | **2.66** | **206** | Pn | **Pn** | **14 47 54.3** | **+0.2** |
| | 24nm,0.3s,baz=286,slow=23,SNR=14 | | | | | | |
| JHJ | | | | Sn | **Sn** | **14 48 25.4** | **-0.1** |
| | 53nm,0.3s,baz=264,slow=23,SNR=6.9 | | | | | | |
| **ERM** | **Erimo** | **6.66** | **13** | ePn | **Pn** | **14 48 48.4** | **-0.7** |
| **CBIJ** | **Chichi jima** | **8.44** | **174** | ePn | **Pn** | **14 49 11.6** | **-2.0** |
| **ASAJ** | **Asahikawa** | **8.65** | **7** | Pn | **Pn** | **14 49 14.9** | **-1.4** |
| | baz=212,slow=13 | | | | | | |
| **JNU** | **Nakatsue** | **8.86** | **257** | LR | LR | 14 53 09.8 | |
| | comp=Z,226nm,18.6s,baz=110,slow=42 | | | | | | |
| **KSRS** | **Korea Array** | **10.85** | **284** | LR | LR | 14 52 59.2 | |
| | comp=Z,15nm,19.1s,baz=80,slow=33 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **11.48** | **5** | P | **Pn** | **14 49 55.4** | **+0.3** |
| | 12nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **21.09** | **28** | LR | LR | 15 00 35.8 | |
| | comp=Z,19nm,20.8s,baz=215,slow=38 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.57** | **118** | T | T | 15 22 05.1 | |
| | baz=311,slow=75,SNR=72 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.57** | **118** | T | T | 15 22 01.8 | |
| | baz=311,slow=75,SNR=54 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.58** | **118** | T | T | 15 22 02.6 | |
| | baz=311,slow=75,SNR=67 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.23** | **120** | T | T | 15 22 48.5 | |
| | baz=312,slow=76,SNR=138 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.23** | **120** | T | T | 15 22 48.5 | |
| | baz=312,slow=76,SNR=117 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.24** | **120** | T | T | 15 22 49.7 | |
| | baz=312,slow=76,SNR=99 | | | | | | |
| **SONM** | **Songino Array** | **28.50** | **306** | P | **P** | **14 53 04.9** | **-1.2** |
| | 0.6nm,0.6s,baz=107,slow=8.8,SNR=6.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.96** | **257** | LR | LR | 15 13 33.4 | |
| | comp=Z,30nm,21.1s,baz=215,slow=39 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.81** | **314** | P | **P** | **14 55 07.2** | **-1.0** |
| | 1.3nm,0.5s,baz=95,slow=7.7,SNR=7.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.78** | **303** | P | **P** | **14 55 23.8** | **-0.4** |
| | 0.6nm,0.4s,baz=89,slow=10.0,SNR=7.0 | | | | | | |
| **KURK** | **Kurchatov** | **46.73** | **309** | eP | **P** | **14 55 38.2** | **-1.3** |
| | 6.1nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **50.87** | **32** | P | **P** | **14 56 12.3** | **+1.3** |
| | 1.2nm,0.8s,baz=263,slow=6.0,SNR=15 | | | | | | |
| **KKAR** | **Karatay Array** | **53.73** | **301** | P | **P** | **14 56 30.1** | **-2.6** |
| **WRAB** | **Tennant Creek** | **55.53** | **188** | eP | **P** | **14 56 45.8** | **+0.1** |
| | 1.8nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **55.54** | **188** | P | **P** | **14 56 46.0** | **+0.1** |
| | 1.6nm,0.6s,baz=2.7,slow=7.5,SNR=31 | | | | | | |
| **INK** | **Inuvik** | **55.81** | **27** | P | **P** | **14 56 48.7** | **+1.4** |
| | 1.5nm,0.6s,baz=299,slow=2.5,SNR=3.4 | | | | | | |
| **ABKAR** | **Akbulak array** | **58.78** | **311** | eP | **P** | **14 57 07.5** | **-1.0** |
| | 0.5nm,0.4s | | | | | | |
| **ASAR** | **Alice Springs** | **59.27** | **188** | P | **P** | **14 57 13.2** | **+1.0** |
| | 0.5nm,0.8s,baz=22,slow=11,SNR=15 | | | | | | |
| **FINES** | **FINESS Array B** | **70.06** | **332** | P | **P** | **14 58 21.6** | **-0.5** |
| | 1.9nm,0.7s,baz=35,slow=4.7,SNR=3.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **75.38** | **322** | P | **P** | **14 58 53.0** | **-0.9** |
| | 0.9nm,0.5s,baz=48,slow=6.1,SNR=5.1 | | | | | | |
| **NB2** | **NORSAR Subarra** | **75.51** | **337** | P | **P** | **14 58 54.5** | **0.0** |
| | comp=Z,0.1nm,0.6s,baz=46,slow=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **75.51** | **337** | P | **P** | **14 58 54.8** | **+0.3** |
| | comp=Z,1.0nm,0.7s,baz=40,slow=5.7,SNR=4.2 | | | | | | |
| NOA | | | | LR | LR | 15 35 12.2 | |
| | comp=Z,29nm,18.3s,baz=215,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.04** | **53** | P | **P** | **14 59 00.4** | **+2.2** |
| | comp=Z,0.7nm,0.8s,baz=312,slow=5.7,SNR=4.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.19** | **52** | P | **P** | **15 00 18.1** | **+2.2** |
| | comp=Z,0.1nm,0.5s,baz=286,slow=3.3,SNR=3.4 | | | | | | |
| **LPAZ** | **La Paz** | **147.60** | **61** | PKPbc | **PKPbc** | **15 06 56.5** | **+0.5** |
| | comp=Z,1.2nm,0.8s,baz=327,slow=6.1,SNR=3.8 | | | | | | |

*BJI **10** 14:50:58.3, 22°.09N×101°.72E, h8km, ML4.0/3, Ms3.2/1, Ms7 3.2/1*
*ISCJB **10** 14:50:59.1±0.7, 22°.12N±0°.04×101°.88E±0°.04, h10km, mb3.6/4, MS3.0/2, Error ellipse: s-maj=6.3km s-min=4.2km az=37.4*
*IDC **10** 14:50:59.9±1.2, 22°.09N×101°.51E, h0km, mb3.7/4, mb1 3.8/5, mb1mx3.4/42, mbtmp3.7/5, ML4.4/1, MS3.0/3, Ms1 3.1/3, ms1mx2.7/40, Error ellipse: s-maj=30.6km s-min=16.8km az=102.0*
*PLV **10** 14:51:01.5±2.8, 22°.10N×101°.88E, h0km±16km, ML3.6*
**ISC 10 14:51:01.2**±0.9, **22°.07N**±0°.04×**101°.83E**±0°.04, **h10**km, **n19**, σ**1s.46**/29, **mb3.6**/4, **Myanmar-China border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TGV** | **Tuan Giao** | **1.55** | **108** | ePg | **Pg** | **14 51 31.4** | **+0.4** |
| TGV | | | | eSg | **Sg** | **14 51 51.2** | **+0.1** |
| TGV | | | | AML | AML | 14 51 54.9 | |
| | comp=N,564nm,0.5s | | | | | | |
| **SPV** | **Sa-pa** | **1.88** | **82** | ePg | **Pb** | **14 51 36.0** | **+0.3** |
| SPV | | | | eSg | **Sg** | **14 51 59.5** | **-2.1** |
| SPV | | | | AML | AML | 14 52 07.3 | |
| | comp=E,894nm,0.3s | | | | | | |
| **TTVN** | **Tram Tau** | **2.42** | **104** | ePn | **Pb** | **14 51 42.7** | **-2.3** |
| TTVN | | | | eSg | **Sg** | **14 52 19.7** | **+0.6** |
| TTVN | | | | AML | AML | 14 52 37.7 | |
| | comp=N,288nm,0.6s | | | | | | |
| **VTVB** | **Vinh Tuy** | **2.85** | **86** | ePg | **Pg** | **14 51 56.0** | **+0.2** |
| **MCVV** | **Moc Chau** | **2.92** | **115** | eSg | **Sg** | **14 52 35.0** | **0.0** |
| MCVV | | | | AML | AML | 14 52 51.0 | |
| | comp=N,154nm,0.6s | | | | | | |
| **HGVB** | **Ha Giang** | **3.02** | **75** | ePn | **Pn** | **14 51 50.2** | **+1.1** |
| HGVB | | | | ePg | **Pg** | **14 51 58.4** | **-0.7** |
| HGVB | | | | eSg | **Sg** | **14 52 38.5** | **+0.1** |
| HGVB | | | | AML | AML | 14 52 47.2 | |
| | comp=N,150nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **3.15** | **15** | Pg | **Pg** | **14 52 00.9** | **-0.7** |
| KMI | | | | Sg | **Sg** | **14 52 42.8** | **+0.4** |
| KMI | | | | smax | smax | | |
| | comp=N,120nm,1.1s | | | | | | |
| KMI | | | | smax | smax | | |
| | comp=E,150nm,1.5s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=N,630nm,5.9s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=E,690nm,6.2s | | | | | | |
| KMI | | | | LR | LR | | |
| | comp=Z,580nm,8.5s | | | | | | |
| **BCVB** | **Bac Can** | **3.66** | **92** | ePn | **Pn** | **14 52 00.4** | **+2.4** |
| BCVB | | | | eSg | **Sg** | **14 52 58.0** | **-1.0** |
| **CBVB** | **Cao Bang** | **4.08** | **81** | ePn | **Pn** | **14 52 04.0** | **+0.3** |
| CBVB | | | | ePg | **Pg** | **14 52 19.0** | **-0.4** |
| CBVB | | | | eSg | **Sg** | **14 53 11.1** | **-1.2** |
| CBVB | | | | AML | AML | 14 53 17.2 | |
| | comp=N,120nm,0.6s | | | | | | |
| **CCVB** | **Con Cuong** | **4.15** | **136** | ePn | **Pn** | **14 52 04.4** | **-0.3** |
| CCVB | | | | ePg | **Pg** | **14 52 19.3** | **-1.4** |
| CCVB | | | | AML | AML | 14 53 16.0 | |
| | comp=N,107nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **4.50** | **218** | Pn | Pn | 14 52 06.2 | -3.4 |
| | comp=N,4.8nm,0.3s,baz=26,slow=12,SNR=60 | | | | | | |
| CMAR | | | | Pg | **Pb** | **14 52 20.7** | **+0.2** |
| | comp=N,7.1nm,0.3s,baz=34,slow=17,SNR=48 | | | | | | |
| CMAR | | | | Lg | Lg | 14 53 15.9 | |
| | comp=N,12nm,0.3s,baz=58,slow=5.1,SNR=12 | | | | | | |
| CMAR | | | | LR | LR | 14 54 13.0 | |
| | comp=N,130nm,19.8s,baz=21,slow=44 | | | | | | |
| **GYA** | **Guiyang** | **6.20** | **44** | ePn | **Pn** | **14 52 33.6** | **+0.6** |
| GYA | | | | Sn | **Sn** | **14 53 42.3** | **-1.8** |
| GYA | | | | Sg | **Sb** | **14 54 07.6** | **+3.8** |
| GYA | | | | SMN | | | |
| | comp=N,80nm,0.9s | | | | | | |
| GYA | | | | SME | | | |
| | comp=N,100nm,0.9s | | | | | | |
| **CD2** | **Chengdu** | **8.97** | **11** | eP | **Pn** | **14 53 08.5** | **-2.4** |
| **PALK** | **Pallekele** | **25.13** | **237** | LR | LR | 15 05 58.2 | |
| | comp=N,53nm,21.7s,baz=116,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **25.96** | **7** | P | **P** | **14 56 34.2** | **+0.1** |
| | comp=N,0.6nm,0.7s,baz=185,slow=9.0,SNR=4.6 | | | | | | |
| **KSRS** | **Korea Array** | **27.23** | **50** | LR | LR | 15 08 16.3 | |
| | comp=N,34nm,18.3s,baz=238,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **29.30** | **332** | P | **P** | **14 57 02.8** | **-1.0** |
| | comp=N,0.5nm,0.6s,baz=145,slow=9.0,SNR=3.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **34.34** | **342** | P | **P** | **14 57 46.7** | **-1.3** |
| | comp=N,1.4nm,0.7s,baz=158,slow=9.3,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.47** | **140** | P | **P** | **15 00 17.0** | **+2.5** |
| | comp=N,1.2nm,1.1s,baz=327,slow=8.5,SNR=4.7 | | | | | | |

*ISK **10** 14:54:22.3, 37°.27N×28°.20E, h2km, MD2.7*
*ISCJB **10** 14:54:23.6±0.6, 37°.20N±0°.04×28°.18E±0°.05, h9km±8km, Error ellipse: s-maj=8.6km s-min=4.6km az=34.7*
*DDA **10** 14:54:23.5, 37°.22N×28°.20E, h7km, Md2.7*
*CSEM **10** 14:54:23.5±0.3, 37°.22N×28°.20E, h10km, MD2.7, Error ellipse: s-maj=8.3km s-min=5.2km az=46.0*
**ISC 10 14:54:23.4**±1.0, **37°.24N**±0°.03×**28°.20E**±0°.03, **h10**km±7km, **n16**, σ**0s.50**/28, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.13** | **149** | PG | **Pg** | **14 54 26.1** | **-0.3** |
| YER | | | | eSG | **Sg** | **14 54 28.6** | **+0.1** |
| **YER** | **Yerkesik** | **0.13** | **149** | iPg | **Pg** | **14 54 26.1** | **-0.3** |
| YER | | | | eSg | **Sg** | **14 54 28.6** | **+0.1** |
| **AYDN** | **Tasoluk** | **0.49** | **329** | iP | **Pb** | **14 54 34.7** | **+0.6** |
| AYDN | | | | iS | **Sb** | **14 54 41.8** | **+0.4** |
| **AYDN** | **Tasoluk** | **0.49** | **329** | P | **Pb** | **14 54 34.7** | **+0.6** |
| AYDN | | | | S | **Sb** | **14 54 41.8** | **+0.4** |
| **TURN** | **Turunc** | **0.49** | **139** | iP | **Pg** | **14 54 31.7** | **-1.2** |
| TURN | | | | iS | **Sg** | **14 54 39.4** | **0.0** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TURN** | **Turunc** | **0.49** | **139** | P | **Pg** | **14 54 31.7** | **-1.2** |
| TURN | | | | S | **Sg** | **14 54 39.4** | **0.0** |
| **DALY** | **Dalyan (Mu˜la** | **0.56** | **139** | *e*PG | **Pg** | **14 54 34.3** | **+0.1** |
| DALY | | | | *e*SG | **Sb** | **14 54 43.4** | **0.0** |
| **DALY** | **Dalyan (Mu˜la** | **0.56** | **139** | *e*Pg | **Pg** | **14 54 34.3** | **+0.1** |
| DALY | | | | *e*Sg | **Sb** | **14 54 43.4** | **0.0** |
| **BODT** | **Bodrum** | **0.73** | **256** | *e*PG | **Pg** | **14 54 37.3** | **-0.2** |
| BODT | | | | *e*SG | **Sb** | **14 54 48.5** | **+0.1** |
| **BODT** | **Bodrum** | **0.73** | **256** | *e*Pg | **Pg** | **14 54 37.3** | **-0.2** |
| BODT | | | | *e*Sg | **Sb** | **14 54 48.5** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.74** | **341** | *e*PG | **Pg** | **14 54 37.0** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.74** | **341** | *e*Pg | **Pg** | **14 54 37.0** | **-0.8** |
| **DNZL** | **Cakiroluk** | **0.81** | **56** | *i* P | **Pg** | **14 54 39.0** | **0.0** |
| DNZL | | | | *i* S | **Sn** | **14 54 52.7** | **-0.5** |
| **DNZL** | **Cakiroluk** | **0.81** | **56** | P | **Pg** | **14 54 39.0** | **0.0** |
| DNZL | | | | S | **Sn** | **14 54 52.7** | **-0.5** |
| **FETY** | **Fethiye** | **0.93** | **130** | *e*PG | **Pg** | **14 54 41.4** | **+0.1** |
| **FETY** | **Fethiye** | **0.93** | **130** | *e*Pg | **Pg** | **14 54 41.4** | **+0.1** |

*IDC **10** 14:56:26.0±1.4, 2°.48N×95°.69E, h0km, mb4.1/9, mb1 4.1/11, mb1mx3.8/40, mbtmp4.0/11, ML4.0/2, MS3.1/2, Ms1 3.1/2, ms1mx2.7/34, Error ellipse: s-maj=41.4km s-min=16.6km az=50.0*
*ISCJB **10** 14:56:28.4±0.4, 2°.47N±0°.04×95°.70E±0°.04, h25km, mb4.0/11, Error ellipse: s-maj=6.9km s-min=4.8km az=135.3*
*NEIC **10** 14:56:31.9±1.7, 2°.54N×95°.81E, h38km±13km, mb4.0/2, Error ellipse: s-maj=19.9km s-min=6.6km az=61.0*
*DJA **10** 14:56:33.3±0.7, 3°N±3°×9°6E±°, h58km±9km, M4.2/4, mb4.6/4, mB4.7/2, MLv4.0/3, Mw(mB)4.0/2*
**ISC 10 14:56:30.2**±0.7**, 2°.54N**±0°.07×**95°.75E**±0°.07**, h25**km**, n51, σ1s.02**/43**, mb4.2**/11**, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLSI** | **Meulaboh, Aceh** | **1.83** | **21** | P | **Pn** | **14 57 00.7** | **+0.5** |
| MLSI | | | | S | **Sb** | **14 57 25.1** | **-0.5** |
| **GSI** | **Gunungsitoli** | **2.20** | **124** | P | **Pn** | **14 57 05.3** | **0.0** |
| **GSI** | **Gunungsitoli** | **2.20** | **124** | *e*Pn | **Pn** | **14 57 05.0** | **-0.3** |
| **KCSI** | **Kotacane, Aceh** | **2.24** | **64** | P | **Pn** | **14 57 06.3** | **+0.5** |
| KCSI | | | | S | **Sn** | **14 57 33.7** | **+1.0** |
| **LHMI** | **Lhok Sumawe** | **2.92** | **24** | *e*Pn | **Pn** | **14 57 15.4** | **+0.3** |
| **TSI** | **Tuntungan** | **2.97** | **71** | P | **Pn** | **14 57 17.1** | **+1.3** |
| TSI | | | | S | **Sn** | **14 57 51.7** | **+1.1** |
| **PSI** | **Prapat** | **3.18** | **85** | Pn | **Pn** | **14 57 19.2** | **+0.3** |
| | 5.2nm,0.3s,baz=337,slow=7.0,SNR=7.6 | | | | | | |
| PSI | | | | LR | LR | 14 58 52.9 | |
| | comp=Z,230nm,18.4s,baz=255,slow=45 | | | | | | |
| **MNSI** | **Mandailing Nat** | **4.21** | **114** | P | **Pn** | **14 57 33.6** | **+0.8** |
| **PPI** | **Padang Panjang** | **5.52** | **123** | P | **Pn** | **14 57 52.6** | **+1.7** |
| **KULM** | **Kulim** | **5.60** | **61** | *e*Pn | **Pn** | **14 57 51.7** | **-0.3** |
| | 45nm,0.8s | | | | | | |
| **IPM** | **Ipoh** | **5.61** | **70** | *e*Pn | **Pn** | **14 57 52.1** | **-0.1** |
| | 39nm,0.4s | | | | | | |
| **PDSI** | **Padang** | **5.83** | **126** | P | **Pn** | **14 57 56.4** | **+1.2** |
| **PPSI** | **Pulau Pagai** | **6.78** | **141** | P | **Pn** | **14 58 09.1** | **+0.9** |
| **KSI** | **Kapahiang** | **9.20** | **132** | P | **Pn** | **14 58 43.7** | **+2.1** |
| **MNAI** | **Manna** | **9.95** | **134** | *e*P | Pn | 14 58 47.3 | -4.4 |
| **MDSI** | **Maura Dua** | **10.94** | **130** | P | **Pn** | **14 59 05.9** | **+0.6** |
| **PPBI** | **Pangkal Pinang** | **11.39** | **114** | P | **Pn** | **14 59 12.3** | **+0.8** |
| **LEM** | **Lembang** | **15.07** | **128** | LR | LR | 15 07 01.8 | |
| | comp=Z,72nm,18.8s,baz=231,slow=42 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **16.12** | **11** | Pn | **Pn** | **15 00 17.0** | **+1.6** |
| | 0.4nm,0.3s,baz=199,slow=11,SNR=12 | | | | | | |
| **BKB** | **Balikpapan** | **21.48** | **100** | P | **P** | **15 01 13.8** | **-3.4** |
| **KAPI** | **Kappang** | **25.13** | **107** | P | **P** | **15 01 53.0** | **-0.5** |
| | 7.2nm,0.8s,baz=82,slow=21,SNR=5.2 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.31** | **246** | T | T | 15 28 06.9 | |
| | baz=67,slow=76,SNR=427 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.32** | **246** | T | T | 15 28 06.9 | |
| | baz=67,slow=76,SNR=262 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.33** | **246** | T | T | 15 28 08.2 | |
| | baz=67,slow=76,SNR=746 | | | | | | |
| **ODAN** | **Odare** | **25.47** | **342** | *e*P | **P** | **15 01 57.6** | **+0.8** |
| | 15nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **25.80** | **341** | *e*P | **P** | **15 02 01.4** | **+1.6** |
| | 32nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **25.84** | **343** | *e*P | **P** | **15 02 01.4** | **+1.2** |
| **H08N1** | **Diego Carcia H** | **26.23** | **250** | T | T | 15 30 15.0 | |
| | baz=130,SNR=15 | | | | | | |
| **H08N2** | **Diego Garcia H** | **26.23** | **250** | T | T | 15 30 18.6 | |
| | baz=130,SNR=16 | | | | | | |
| **H08N3** | **Diego Garcia H** | **26.25** | **250** | T | T | 15 30 18.9 | |
| | baz=130,SNR=19 | | | | | | |
| **PKI** | **Pulchoki** | **26.78** | **339** | *e*P | **P** | **15 02 09.4** | **+0.7** |
| **PKIN** | **Phulchoki** | **26.79** | **339** | *e*P | **P** | **15 02 09.3** | **+0.6** |
| **GUN** | **Gumba** | **26.93** | **340** | *e*P | **P** | **15 02 11.2** | **+1.1** |
| **KKN** | **Kakani** | **27.02** | **339** | *e*P | **P** | **15 02 11.4** | **+0.6** |
| **GKN** | **Gorkha** | **27.45** | **338** | *e*P | **P** | **15 02 15.0** | **+0.4** |
| | 15nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **27.64** | **336** | *e*P | **P** | **15 02 17.1** | **+0.8** |
| | 9.8nm,0.6s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **41.04** | **157** | T | T | 15 47 47.2 | |
| | baz=332,slow=76,SNR=187 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **41.05** | **157** | T | T | 15 47 48.1 | |
| | baz=332,slow=76,SNR=152 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **41.05** | **157** | T | T | 15 47 46.6 | |
| | baz=332,slow=76,SNR=146 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.97** | **122** | P | **P** | **15 04 35.3** | **-0.6** |
| | 0.5nm,0.6s,baz=298,slow=9.5,SNR=12 | | | | | | |
| **WRAB** | **Tennant Creek** | **43.98** | **122** | *e*P | **P** | **15 04 35.8** | **-0.1** |
| **ASAR** | **Alice Springs** | **45.36** | **127** | P | **P** | **15 04 46.9** | **0.0** |
| | 0.4nm,0.5s,baz=301,slow=7.9,SNR=17 | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.57** | **36** | P | **P** | **15 04 47.5** | **-0.7** |
| **KSRS** | **Korea Array** | **45.60** | **36** | P | **P** | **15 04 47.5** | **-1.0** |
| | 0.7nm,0.6s,baz=229,slow=7.7,SNR=5.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.61** | **347** | P | **P** | **15 04 48.8** | **+0.3** |
| | 2.1nm,0.5s,baz=159,slow=8.2,SNR=16 | | | | | | |
| **SONM** | **Songino Array** | **46.05** | **10** | P | **P** | **15 04 51.7** | **-0.4** |
| | 1.5nm,0.6s,baz=191,slow=9.1,SNR=16 | | | | | | |
| **KKAR** | **Karatay Array** | **46.22** | **334** | *e*P | **P** | **15 04 53.6** | **+0.3** |
| | 3.4nm,0.9s | | | | | | |
| **GEYT** | **Alibeck** | **49.26** | **320** | P | **P** | **15 05 16.4** | **-0.7** |
| | 2.3nm,0.8s,baz=120,slow=8.8,SNR=4.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.02** | **352** | P | **P** | **15 05 37.7** | **+0.2** |
| | 1.8nm,0.5s,baz=176,slow=6.2,SNR=11 | | | | | | |
| **ABKAR** | **Akbulak array** | **55.66** | **332** | *e*P | **P** | **15 06 03.7** | **-0.5** |
| | 0.5nm,0.5s | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.79** | **340** | P | **P** | **15 08 41.3** | **-0.1** |
| | 5.0nm,0.9s,baz=91,slow=5.5,SNR=4.5 | | | | | | |

*ISK **10** 15:04:36.9, 40°.33N×40°.92E, h4km, MD2.9*
*ISCJB **10** 15:04:37.4±0.6, 40°.32N±0°.04×40°.91E±0°.04, h11km±7km, Error ellipse: s-maj=6.1km s-min=4.6km az=172.0*
*DDA **10** 15:04:37.3, 40°.32N×40°.92E, h7km, Md2.9*
*CSEM **10** 15:04:37.3±0.3, 40°.33N×40°.92E, h12km, MD2.9, Error ellipse: s-maj=6.7km s-min=5.5km az=133.0*
**ISC 10 15:04:37.3**±1.0**, 40°.35N**±0°.03×**40°.93E**±0°.02**, h13**km±10km**, n25, σ0s.67**/38**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOPT** | **Kop Dagi** | **0.46** | **225** | *i* P | **Pg** | **15 04 46.0** | **-0.6** |
| KOPT | | | | *i* S | **Sg** | **15 04 52.9** | **+0.1** |
| **KOPT** | **Kop Dagi** | **0.46** | **225** | P | **Pg** | **15 04 46.0** | **-0.6** |
| KOPT | | | | S | **Sg** | **15 04 52.9** | **+0.1** |
| **EZM** | **Erzurum** | **0.55** | **143** | PG | **Pg** | **15 04 48.1** | **-0.1** |
| EZM | | | | *e*SG | **Sg** | **15 04 56.2** | **+0.6** |
| **ERZM** | **Erzurum** | **0.55** | **142** | *i* P | **Pg** | **15 04 48.0** | **-0.3** |
| ERZM | | | | *i* S | **Sg** | **15 04 56.1** | **+0.4** |
| **ERZM** | **Erzurum** | **0.55** | **142** | P | **Pg** | **15 04 48.0** | **-0.3** |
| ERZM | | | | S | **Sg** | **15 04 56.1** | **+0.4** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **0.60** | **275** | PG | **Pg** | **15 04 49.0** | **-0.2** |
| BAYT | | | | *e*SG | **Sg** | **15 04 57.6** | **+0.5** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **0.60** | **275** | *i* Pg | **Pg** | **15 04 49.0** | **-0.2** |
| BAYT | | | | *e*Sg | **Sg** | **15 04 57.6** | **+0.5** |
| **DDEM** | **Demirkent** | **0.83** | **49** | *i* P | **Pg** | **15 04 53.6** | **+0.1** |
| DDEM | | | | *i* S | **Sg** | **15 05 03.9** | **-0.5** |
| **DDEM** | **Demirkent** | **0.83** | **49** | P | **Pg** | **15 04 53.6** | **+0.1** |
| DDEM | | | | S | **Sg** | **15 05 04.0** | **-0.5** |
| **KTUT** | **Trabzon** | **1.09** | **306** | *e*PN | **Pn** | **15 04 58.6** | **+0.3** |
| **KTUT** | **Trabzon** | **1.09** | **306** | *e*Pn | **Pn** | **15 04 58.6** | **+0.3** |
| **ARTV** | **Artvin** | **1.13** | **42** | *i* P | **Pg** | **15 04 59.1** | **-0.1** |
| ARTV | | | | *i* S | **Sn** | **15 05 14.5** | **-0.2** |
| **ARTV** | **Artvin** | **1.13** | **42** | P | **Pg** | **15 04 59.1** | **-0.1** |
| ARTV | | | | S | **Sn** | **15 05 14.5** | **-0.2** |
| **DBOC** | **Borcka** | **1.15** | **29** | *i* P | **Pb** | **15 04 59.2** | **+0.1** |
| DBOC | | | | *i* S | **Sg** | **15 05 14.1** | **-0.2** |
| **DBOC** | **Borcka** | **1.15** | **29** | P | **Pb** | **15 04 59.2** | **+0.1** |
| DBOC | | | | S | **Sg** | **15 05 14.1** | **-0.2** |
| **ERZN** | **Erzincan** | **1.20** | **231** | *e*PN | **Pn** | **15 04 59.7** | **-0.2** |
| **BCA** | **Borcka** | **1.22** | **25** | *e*PN | **Pg** | **15 05 00.8** | **0.0** |
| **BCA** | **Borcka** | **1.22** | **25** | *e*Pn | **Pg** | **15 05 00.8** | **0.0** |
| **EZC** | **Erzincan** | **1.34** | **244** | *e*Pn | **Pn** | **15 04 59.7** | **-2.3** |
| **BNGB** | **Bing˘¶l** | **1.37** | **188** | *e*PN | **Pn** | **15 05 02.7** | **+0.4** |
| **BINT** | **Bingol** | **1.51** | **193** | *e*Pn | **Pn** | **15 05 02.7** | **-1.5** |
| **ESPY** | **Espiye-Giresun** | **1.77** | **290** | *e*PN | **Pb** | **15 05 09.9** | **+0.3** |
| **ESPY** | **Espiye-Giresun** | **1.77** | **290** | *e*Pn | **Pb** | **15 05 09.9** | **+0.3** |
| **PTK** | **Pertek** | **1.87** | **220** | *e*PN | **Pn** | **15 05 10.8** | **+1.5** |
| **PTK** | **Pertek** | **1.87** | **220** | *e*Pn | **Pn** | **15 05 10.8** | **+1.5** |

*ISCJB **10** 15:32:02.7±0.6, 30°.78S±0°.05×178°.6W±0°.1, h50km, mb4.2/5, MS2.8/1, Error ellipse: s-maj=19.0km s-min=5.1km az=16.4*
*NEIC **10** 15:32:04.8±1.2, 30°.73S×178°.31W, h77km±10km, mb4.3/2, Error ellipse: s-maj=20.4km s-min=13.5km az=111.0*
*IDC **10** 15:32:04.4±1.7, 30°.82S×178°.24W, h77km±13km, mb4.0/3, mb1 4.1/4, mb1mx3.6/23, mbtmp4.2/4, MS3.0/2, Ms1 3.0/2, ms1mx2.6/23, Error ellipse: s-maj=31.1km s-min=12.8km az=114.0*
**ISC 10 15:32:03.7**±0.8**, 30°.73S**±0°.08×**178°.5W**±0°.2**, h50**km**, n32, σ1s.83**/34**, mb4.2**/5**, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.55** | **18** | P | **Pn** | **15 32 30.7** | **+1.8** |
| | 189nm,0.3s,baz=53,slow=20,SNR=4.4 | | | | | | |
| RAO | | | | S | **Sn** | **15 32 50.6** | **+2.8** |
| | 510nm,0.3s,baz=190,slow=22,SNR=6.1 | | | | | | |
| **MXZ** | **Matakaoa Point** | **7.32** | **201** | PN | **Pn** | **15 33 47.9** | **-0.1** |
| MXZ | | | | *e*SN | **Sn** | **15 35 11.6** | **+1.9** |
| **WMGZ** | **Waiomatatini S** | **7.53** | **199** | PN | **Pn** | **15 33 51.2** | **+0.4** |
| **HAZ** | **Te Kaha** | **7.66** | **203** | PN | **Pn** | **15 33 53.3** | **+0.6** |
| HAZ | | | | *e*SN | **Sn** | **15 35 22.3** | **+4.2** |
| **PUZ** | **Puketiti** | **7.81** | **199** | *e*PN | **Pn** | **15 33 54.2** | **-0.5** |
| PUZ | | | | SN | **Sn** | **15 35 22.4** | **+0.6** |
| **TWGZ** | **Tauwhareparae** | **7.99** | **201** | PN | **Pn** | **15 33 57.1** | **-0.1** |
| TWGZ | | | | SN | **Sn** | **15 35 27.2** | **+1.1** |
| **CNGZ** | **Carnagh Statio** | **8.21** | **199** | PN | **Pn** | **15 34 00.1** | **0.0** |
| **MWZ** | **Matawai** | **8.27** | **202** | PN | **Pn** | **15 34 00.4** | **-0.7** |
| **URZ** | **Urewera** | **8.35** | **205** | P | **Pn** | **15 34 01.6** | **-0.6** |
| | 0.6nm,0.3s,baz=276,slow=5.2,SNR=32 | | | | | | |
| URZ | | | | S | **Sn** | **15 35 35.8** | **+0.9** |
| | 1.9nm,0.3s,baz=229,slow=20,SNR=9.9 | | | | | | |
| **URZ** | **Urewera** | **8.35** | **205** | PN | **Pn** | **15 34 01.5** | **-0.6** |
| URZ | | | | SN | **Sn** | **15 35 37.5** | **+2.5** |
| **URZ** | **Urewera** | **8.35** | **205** | *e*Pn | **Pn** | **15 34 02.6** | **+0.5** |
| URZ | | | | *e*Sn | Sn | 15 35 29.1 | -5.8 |
| URZ | | | | S | **Sn** | **15 35 35.8** | **+0.9** |
| **RAGZ** | **Rawiri** | **8.46** | **203** | *e*PN | Pn | 15 34 00.1 | -3.5 |
| **BKZ** | **Black Stump Fm** | **9.38** | **205** | *e*PN | Pn | 15 34 14.0 | -2.2 |
| **MRZ** | **Mangatainoka R** | **11.02** | **204** | SN | Sn | 15 36 34.6 | -5.9 |
| **DZM** | **Mont Dzumac** | **16.02** | **299** | LR | LR | 15 40 32.2 | |
| | comp=Z,79nm,20.5s,baz=234,slow=31 | | | | | | |
| **CTA** | **Charters Tower** | **33.45** | **280** | P | **P** | **15 38 39.2** | **+1.1** |
| | 3.1nm,0.6s,baz=100,slow=11,SNR=7.0 | | | | | | |
| **CTAO** | **Charters Tower** | **33.45** | **280** | *e*P | **P** | **15 38 38.5** | **+0.4** |
| **ASAR** | **Alice Springs** | **42.69** | **268** | P | **P** | **15 39 55.4** | **-0.5** |
| | 0.9nm,0.4s,baz=105,slow=7.3,SNR=80 | | | | | | |
| **WRAB** | **Tennant Creek** | **43.70** | **273** | *e*P | P | 15 40 03.1 | -1.0 |
| | 1.9nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.70** | **273** | P | **P** | **15 40 03.5** | **-0.7** |
| | 1.6nm,0.3s,baz=111,slow=8.1,SNR=83 | | | | | | |
| **GUMO** | **Guam** | **56.43** | **316** | LR | LR | 16 04 28.2 | |
| | comp=Z,6.8nm,18.3s,baz=172,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.38** | **180** | P | **P** | **15 42 00.4** | **-0.3** |
| | 1.1nm,0.9s,baz=79,slow=1.9,SNR=7.3 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.38** | **180** | P | **P** | **15 42 00.7** | **0.0** |
| | 1.3nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **120.98** | **314** | PKP | **PKPdf** | **15 50 46.5** | **-3.7** |
| **KURBB** | **Kurchatov Arra** | **121.02** | **314** | PKP | **PKPdf** | **15 50 46.5** | **-3.8** |
| | 0.5nm,0.6s,baz=120,slow=1.9,SNR=5.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **126.36** | **316** | PKP | **PKPdf** | **15 50 58.2** | **-2.3** |
| | 0.6nm,0.6s,baz=126,slow=2.0,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **138.82** | **347** | PKP | **PKPdf** | **15 51 22.5** | **-0.9** |
| | 1.5nm,0.6s,baz=3.8,slow=1.4,SNR=5.8 | | | | | | |
| **FINES** | **FINESS Array B** | **145.31** | **339** | PKPbc | **PKPbc** | **15 51 31.8** | **-3.3** |
| | 3.6nm,0.5s,baz=66,slow=3.7,SNR=44 | | | | | | |
| **NB2** | **NORSAR Subarra** | **149.01** | **351** | PKP | **PKPdf** | **15 51 42.4** | **+0.9** |
| | comp=Z,1.3nm,0.5s,baz=17,slow=2.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **149.01** | **351** | PKPbc | **PKPdf** | **15 51 42.7** | **+1.2** |
| | comp=Z,2.0nm,0.6s,baz=16,slow=4.2,SNR=9.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.31** | **322** | PKPbc | **PKPdf** | **15 51 48.3** | **+3.0** |
| | comp=Z,2.2nm,0.5s,baz=49,slow=2.7,SNR=7.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.50** | **181** | PKPab | **PKPab** | **15 52 47.0** | **-1.4** |
| | comp=Z,0.6nm,0.6s,baz=177,slow=2.9,SNR=4.6 | | | | | | |

*CSEM **10** 15:40:02.5±0.1, 41°.50N×24°.91E, h2km, MD2.5, Error ellipse: s-maj=2.7km s-min=2.0km az=23.0*
*THE **10** 15:40:03.0, 41°.47N×24°.92E, h6km±1km, ML2.4/6, Error ellipse: s-maj=2.5km s-min=0.9km az=191.0*
*ATH **10** 15:40:03.0, 41°.47N×24°.92E, h16km±1km, MD3.4/9*
*SOF **10** 15:40:03.1, 41°.52N×24°.94E, h12km, MD2.5*
*ISK **10** 15:40:05.6, 41°.44N×25°.23E, h4km, MD2.9*
*BEO **10** 15:40:09.0±1.2, 41°.58N×24°.61E, h0km, ML2.4/4*
**ISC 10 15:40:02.7**±1.0**, 41°.52N**±0°.02×**24°.93E**±0°.02**, h10**km±9km**, n72, σ0s.68**/108**, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RZN** | **Rozhen** | **0.23** | **317** | *i* P | **Pg** | **15 40 08.3** | **+0.7** |
| **RZN** | **Rozhen** | **0.23** | **317** | *i* P | **Pg** | **15 40 08.3** | **+0.7** |
| **KDZ** | **Kurdzhali** | **0.39** | **70** | *i* P | **Pg** | **15 40 09.9** | **-0.5** |
| **KDZ** | **Kurdzhali** | **0.39** | **70** | *i* P | **Pg** | **15 40 09.9** | **-0.5** |
| **PLD** | **Plovdiv** | **0.61** | **344** | *i* P | **Pb** | **15 40 15.6** | **+0.1** |
| **PLD** | **Plovdiv** | **0.61** | **344** | *i* P | **Pb** | **15 40 15.6** | **+0.1** |
| **KAVA** | **Kavala** | **0.61** | **211** | P | **Pg** | **15 40 14.2** | **-0.3** |
| KAVA | | | | S | **Sg** | **15 40 22.6** | **+0.1** |
| **KAVA** | **Kavala** | **0.61** | **211** | P | **Pg** | **15 40 14.2** | **-0.3** |
| KAVA | | | | S | **Sg** | **15 40 22.6** | **+0.1** |
| **NVR** | **Nevrokopi** | **0.82** | **258** | *e*PN | **Pg** | **15 40 18.1** | **-0.4** |
| NVR | | | | *e*SN | **Sg** | **15 40 29.6** | **+0.4** |
| **NVR** | **Nevrokopi** | **0.82** | **258** | P | **Pg** | **15 40 18.2** | **-0.3** |
| NVR | | | | S | **Sg** | **15 40 29.3** | **+0.1** |
| **NVR** | **Nevrokopi** | **0.82** | **258** | *e*Pg | **Pg** | **15 40 18.1** | **-0.4** |
| NVR | | | | S | **Sg** | **15 40 29.3** | **+0.1** |
| NVR | | | | *e*Sb | **Sg** | **15 40 29.6** | **+0.4** |
| **MMB** | **Musomiste** | **0.90** | **275** | *i* P | **Pg** | **15 40 19.8** | **-0.3** |
| **MMB** | **Musomiste** | **0.90** | **275** | *i* P | **Pg** | **15 40 19.8** | **-0.3** |
| **ALN** | **Alexandroupoli** | **1.05** | **126** | *e*PN | **Pg** | **15 40 22.8** | **-0.1** |
| ALN | | | | *e*SN | **Sg** | **15 40 36.6** | **+0.1** |
| **ALN** | **Alexandroupoli** | **1.05** | **126** | P | **Pg** | **15 40 22.8** | **-0.1** |
| ALN | | | | S | **Sg** | **15 40 36.4** | **-0.1** |
| **ALN** | **Alexandroupoli** | **1.05** | **126** | P | **Pg** | **15 40 22.8** | **-0.1** |
| ALN | | | | S | **Sg** | **15 40 36.4** | **-0.1** |
| **SRS** | **Serrai** | **1.08** | **249** | *e*PN | **Pg** | **15 40 23.1** | **-0.5** |
| SRS | | | | *e*SN | **Sg** | **15 40 37.8** | **+0.1** |
| **SRS** | **Serrai** | **1.08** | **249** | P | **Pg** | **15 40 23.1** | **-0.5** |
| SRS | | | | S | **Sg** | **15 40 37.6** | **-0.1** |
| **SRS** | **Serrai** | **1.08** | **249** | P | **Pg** | **15 40 23.1** | **-0.5** |
| SRS | | | | *e*Sb | **Sg** | **15 40 37.8** | **+0.1** |
| **SMTH** | **Samothraki Isl** | **1.14** | **156** | *e*PN | **Pg** | **15 40 24.0** | **-0.6** |
| SMTH | | | | *e*SN | **Sg** | **15 40 38.9** | **-0.6** |
| **SMTH** | **Samothraki Isl** | **1.14** | **156** | P | **Pg** | **15 40 24.1** | **-0.6** |
| SMTH | | | | S | **Sg** | **15 40 39.2** | **-0.3** |
| **SMTH** | **Samothraki Isl** | **1.14** | **156** | P | **Pg** | **15 40 24.1** | **-0.6** |
| SMTH | | | | *e*Sb | **Sg** | **15 40 38.9** | **-0.6** |
| SMTH | | | | S | **Sg** | **15 40 39.2** | **-0.3** |
| **PGB** | **Panagyurishte** | **1.18** | **331** | *i* P | **Pg** | **15 40 25.0** | **-0.3** |
| **PGB** | **Panagyurishte** | **1.18** | **331** | *i* P | **Pg** | **15 40 25.0** | **-0.3** |
| **ENEZ** | **Enez** | **1.21** | **130** | *e*PG | **Pb** | **15 40 25.1** | **-0.7** |
| **ENEZ** | **Enez** | **1.21** | **130** | *e*Pg | **Pb** | **15 40 25.1** | **-0.7** |
| **SOH** | **Sokhos** | **1.38** | **240** | *e*PN | **Pn** | **15 40 27.9** | **-0.2** |
| SOH | | | | *e*SN | **Sg** | **15 40 47.4** | **+0.3** |
| **SOH** | **Sokhos** | **1.38** | **240** | P | **Pn** | **15 40 27.9** | **-0.2** |
| SOH | | | | S | **Sb** | **15 40 46.1** | **-0.2** |
| **SOH** | **Sokhos** | **1.38** | **240** | P | **Pn** | **15 40 27.9** | **-0.2** |
| SOH | | | | S | **Sb** | **15 40 46.1** | **-0.2** |
| SOH | | | | *e*Sb | **Sg** | **15 40 47.4** | **+0.3** |
| **OUR** | **Ouranopolis** | **1.39** | **211** | *e*PB | **Pn** | **15 40 27.1** | **-1.0** |
| OUR | | | | *e*SN | **Sg** | **15 40 47.3** | **0.0** |
| **OUR** | **Ouranopolis** | **1.39** | **211** | P | **Pn** | **15 40 27.1** | **-1.0** |
| **OUR** | **Ouranopolis** | **1.39** | **211** | P | **Pn** | **15 40 27.1** | **-1.0** |
| OUR | | | | *e*Sb | **Sg** | **15 40 47.3** | **0.0** |
| **EDRB** | **Edirne** | **1.40** | **76** | *e*PN | **Pb** | **15 40 29.2** | **+0.2** |
| EDRB | | | | *e*SN | **Sb** | **15 40 46.5** | **-0.4** |
| **EDRB** | **Edirne** | **1.40** | **76** | *e*Pn | **Pb** | **15 40 29.2** | **+0.2** |
| EDRB | | | | *e*Sn | **Sb** | **15 40 46.5** | **-0.4** |
| **KKB** | **Krupnik** | **1.42** | **285** | *i* P | **Pn** | **15 40 29.0** | **+0.3** |
| **KKB** | **Krupnik** | **1.42** | **285** | *i* P | **Pn** | **15 40 29.0** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **1.47** | **125** | *e*PN | **Pn** | **15 40 29.7** | **+0.4** |
| **ERIK** | **Erikli-Kesan** | **1.47** | **125** | *e*Pn | **Pn** | **15 40 29.7** | **+0.4** |
| **GADA** | **Gvkgeada** | **1.52** | **151** | *e*PN | **Pg** | **15 40 31.7** | **-0.2** |
| **GADA** | **Gvkgeada** | **1.52** | **151** | *e*Pn | **Pg** | **15 40 31.7** | **-0.2** |
| **KNT** | **Kendrikon** | **1.57** | **257** | P | **Pn** | **15 40 30.4** | **-0.3** |
| KNT | | | | S | **Sb** | **15 40 52.3** | **+0.5** |
| **KNT** | **Kendrikon** | **1.57** | **257** | P | **Pn** | **15 40 30.4** | **-0.3** |
| KNT | | | | S | **Sb** | **15 40 52.3** | **+0.5** |
| **PLG** | **Polygyros** | **1.60** | **225** | *e*PN | **Pb** | **15 40 32.2** | **-0.3** |
| PLG | | | | *e*SN | **Sb** | **15 40 53.0** | **+0.2** |
| **PLG** | **Polygyros** | **1.60** | **225** | *e*Pb | **Pb** | **15 40 32.2** | **-0.3** |
| PLG | | | | *e*Sb | **Sb** | **15 40 53.0** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.62** | **133** | *e*PN | **Pb** | **15 40 32.5** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.62** | **133** | *e*Pn | **Pb** | **15 40 32.5** | **-0.2** |
| **LIA** | **Limnos Island** | **1.63** | **173** | *e*PN | **Pn** | **15 40 32.1** | **+0.6** |
| LIA | | | | *e*SN | **Sb** | **15 40 53.7** | **+0.1** |
| **LIA** | **Limnos Island** | **1.63** | **173** | *e*Pg | **Pn** | **15 40 32.1** | **+0.6** |
| LIA | | | | *e*Sb | **Sb** | **15 40 53.7** | **+0.1** |
| **HORT** | **Hortiatis** | **1.66** | **237** | *e*PN | **Pb** | **15 40 33.9** | **+0.4** |
| HORT | | | | *e*SN | **Sb** | **15 40 55.3** | **+0.8** |
| **HORT** | **Hortiatis** | **1.66** | **237** | *e*Pb | **Pb** | **15 40 33.9** | **+0.4** |
| HORT | | | | *e*Sb | **Sb** | **15 40 55.3** | **+0.8** |
| **VTS** | **Vitosha** | **1.67** | **310** | *i* P | **Pb** | **15 40 34.1** | **+0.4** |
| **VTS** | **Vitosha** | **1.67** | **310** | *i* P | **Pb** | **15 40 34.1** | **+0.4** |
| **VAY** | **Valandovo** | **1.78** | **264** | *e*Pg | **Pg** | **15 40 37.6** | **+0.6** |
| VAY | | | | *e*Sg | **Sn** | **15 40 57.2** | **+0.8** |
| **VAY** | **Valandovo** | **1.78** | **264** | *e*Pg | **Pg** | **15 40 37.6** | **+0.6** |
| VAY | | | | *e*Sg | **Sn** | **15 40 57.2** | **+0.8** |
| **RKY** | **Sarkoy-Tekirda** | **1.89** | **115** | *e*PN | **Pn** | **15 40 36.2** | **+1.0** |
| **RKY** | **Sarkoy-Tekirda** | **1.89** | **115** | *e*Pn | **Pn** | **15 40 36.2** | **+1.0** |
| **GRG** | **Griva** | **1.99** | **254** | *e*PN | **Pg** | **15 40 40.2** | **-0.6** |
| **GRG** | **Griva** | **1.99** | **254** | *e*Pn | **Pg** | **15 40 40.2** | **-0.6** |
| **MPEP** | **Malo Peshtene** | **2.03** | **335** | *i* P | **Pb** | **15 40 40.1** | **+0.3** |
| **KRBG** | **Karabiga-Canak** | **2.12** | **121** | *e*PN | **Pn** | **15 40 39.4** | **+1.2** |
| **KRBG** | **Karabiga-Canak** | **2.12** | **121** | *e*Pn | **Pn** | **15 40 39.4** | **+1.2** |
| **MRMT** | **Marmara Adasi** | **2.22** | **114** | *e*PN | **Pn** | **15 40 40.6** | **+1.0** |
| **MRMT** | **Marmara Adasi** | **2.22** | **114** | *e*Pn | **Pn** | **15 40 40.6** | **+1.0** |
| **ZAPS** | **Zavoj** | **2.44** | **317** | *e*Pg | **Pg** | **15 40 49.6** | **+0.1** |
| ZAPS | | | | *e*Sg | **Sb** | **15 41 18.6** | **+1.7** |
| **BARS** | **Barje** | **2.65** | **300** | *e*Pn | **Pb** | **15 40 49.2** | **-1.1** |
| BARS | | | | *e*Sg | **Sg** | **15 41 26.3** | **-1.6** |
| **BOLS** | **Boljevac** | **3.18** | **317** | *e*Sg | **Sg** | **15 41 43.2** | **-1.8** |
| **BOLS** | **Boljevac** | **3.18** | **317** | *e*Sg | **Sg** | **15 41 43.2** | **-1.8** |
| **SELS** | **Selova** | **3.29** | **302** | *e*Sg | **Sg** | **15 41 47.2** | **-1.3** |
| **GRUS** | **Gruza** | **3.90** | **309** | *e*Sg | **Sg** | **15 42 06.4** | **-1.7** |
| **GRUS** | **Gruza** | **3.90** | **309** | *e*Sg | **Sg** | **15 42 06.4** | **-1.7** |
| **BZS** | **Buzias** | **4.75** | **331** | *e*Sg | **Sg** | **15 42 34.0** | **-1.2** |
| **BZS** | **Buzias** | **4.75** | **331** | *e*Sg | **Sg** | **15 42 34.0** | **-1.2** |

*ISCJB **10** 15:49:37.4±1.3, 6°.5S±0°.2×129°.5E±0°.5, h10km, mb3.7/3, Error ellipse: s-maj=76.2km s-min=11.4km az=153.5*
*IDC **10** 15:49:37.4±1.7, 6°.35S×130°.00E, h0km, mb3.7/3, mb1 4.0/5, mb1mx3.5/29, mbtmp3.8/5, ML4.0/2, Error ellipse: s-maj=122.7km s-min=28.5km az=71.0*
**ISC 10 15:49:39.4**±2.0**, 6°.6S**±0°.4×**129°.5E**±0°.8**, h10**km**, n13, σ0s.34**/13**, mb3.9**/3**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.09** | **161** | Pn | **Pn** | **15 52 59.5** | **+0.3** |
| | 0.6nm,0.3s,baz=343,slow=9.9,SNR=32 | | | | | | |
| WRA | | | | Sn | Sn | 15 55 22.1 | -14 |
| | 1.9nm,0.3s,baz=330,slow=22,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **17.50** | **166** | P | **P** | **15 53 44.4** | **-0.5** |
| | 1.3nm,0.3s,baz=345,slow=11,SNR=222 | | | | | | |
| ASAR | | | | S | Sn | 15 56 45.0 | -14 |
| | 0.5nm,0.3s,baz=346,slow=26,SNR=9.3 | | | | | | |
| **ODAN** | **Odare** | **52.59** | **311** | *e*P | **P** | **15 58 54.0** | **+0.1** |
| | 4.9nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **52.62** | **312** | *e*P | **P** | **15 58 54.4** | **+0.2** |
| | 5.2nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **53.23** | **311** | *e*P | **P** | **15 58 59.1** | **+0.4** |
| | 9.8nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **54.29** | **311** | *e*P | **P** | **15 59 06.5** | **0.0** |
| | 12nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **54.46** | **311** | *e*P | **P** | **15 59 07.4** | **-0.4** |
| **PKIN** | **Phulchoki** | **54.47** | **311** | *e*P | **P** | **15 59 07.5** | **-0.3** |
| | 2.7nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **55.27** | **311** | *e*P | **P** | **15 59 13.2** | **-0.2** |
| **KOLN** | **Koldanda** | **55.94** | **310** | *e*P | **P** | **15 59 18.1** | **-0.2** |
| **MKAR** | **Makanchi Array** | **67.60** | **327** | P | **P** | **16 00 36.8** | **+0.5** |
| | 0.5nm,0.5s,baz=121,slow=7.0,SNR=4.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.99** | **334** | P | **P** | **16 00 56.9** | **-0.2** |
| | 0.3nm,0.3s,baz=130,slow=7.3,SNR=2.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.89** | **329** | P | **P** | **16 01 02.6** | **0.0** |
| | 0.4nm,0.5s,baz=124,slow=5.1,SNR=8.6 | | | | | | |

**MEX 10 16:01:06.6**±0.4**, 15°.52N**×**93°.17W, h94**km±5km**, MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.19** | **345** | *e*P | Pn | 16 01 18.8 | -1.3 |
| PCIG | | | | *e*S | Sn | 16 01 28.3 | -1.8 |
| **TGIG** | | **1.25** | **2** | *i* P | Pn | 16 01 28.4 | -1.3 |
| TGIG | | | | *i* S | Sn | 16 01 45.4 | -1.6 |

*ISCJB **10** 16:01:54.3±0.7, 36°.09N±0°.05×28°.20E±0°.05, h67km±8km, Error ellipse: s-maj=8.9km s-min=5.6km az=154.5*
*ISK **10** 16:01:54.3, 36°.10N×28°.22E, h61km, MD2.7*
*CSEM **10** 16:01:55.1±0.2, 36°.08N×28°.23E, h60km, MD2.8, Error ellipse: s-maj=7.8km s-min=4.6km az=153.0*
*DDA **10** 16:01:55.8, 36°.24N×28°.29E, h28km, Md2.8*
*ATH **10** 16:01:55.2, 36°.09N×28°.09E, h62km±1km*
**ISC 10 16:01:54.8**±1.3**, 36°.09N**±0°.05×**28°.22E**±0°.03**, h65**km±8km**, n34, σ1s.16**/52**, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARG** | **Arkhangelos** | **0.14** | **328** | *e*P | **Pn** | **16 02 05.1** | **+0.6** |
| ARG | | | | *e*S | **Sn** | **16 02 12.4** | **+0.8** |
| **ARG** | **Arkhangelos** | **0.14** | **328** | *e*P | **Pn** | **16 02 05.1** | **+0.6** |
| ARG | | | | *e*S | **Sn** | **16 02 12.4** | **+0.8** |
| **DALY** | **Dalyan (Mu˜la** | **0.80** | **26** | *e*PG | **Pn** | **16 02 10.5** | **0.0** |
| DALY | | | | *e*SG | **Sn** | **16 02 22.2** | **+0.1** |
| **DALY** | **Dalyan (Mu˜la** | **0.80** | **26** | *e*Pg | **Pn** | **16 02 10.5** | **0.0** |
| DALY | | | | *e*Sg | **Sn** | **16 02 22.2** | **+0.1** |
| **TURN** | **Turunc** | **0.84** | **21** | *i* P | **Pn** | **16 02 09.5** | **-1.4** |
| TURN | | | | *i* S | **Sn** | **16 02 19.5** | **-3.4** |
| **TURN** | **Turunc** | **0.84** | **21** | P | **Pn** | **16 02 09.5** | **-1.4** |
| TURN | | | | S | **Sn** | **16 02 19.5** | **-3.4** |
| **FETY** | **Fethiye** | **0.88** | **52** | *e*PG | **Pn** | **16 02 11.4** | **-0.1** |
| **FETY** | **Fethiye** | **0.88** | **52** | *e*Pg | **Pn** | **16 02 11.4** | **-0.1** |
| **YER** | **Yerkesik** | **1.04** | **3** | *e*PG | **Pn** | **16 02 13.6** | **0.0** |
| **YER** | **Yerkesik** | **1.04** | **3** | *e*Pg | **Pn** | **16 02 13.6** | **0.0** |
| **AKAS** | **Kas** | **1.13** | **83** | *i* P | **Pn** | **16 02 14.9** | **+0.1** |
| AKAS | | | | *i* S | **Sn** | **16 02 29.8** | **+0.1** |
| **AKAS** | **Kas** | **1.13** | **83** | P | **Pn** | **16 02 14.9** | **+0.1** |
| AKAS | | | | S | **Sn** | **16 02 29.8** | **+0.1** |
| **BDRM** | **Kayabasi** | **1.15** | **327** | *i* P | **Pn** | **16 02 15.3** | **+0.3** |
| BDRM | | | | *i* S | **Sn** | **16 02 28.9** | **-1.2** |
| **BDRM** | **Kayabasi** | **1.15** | **327** | P | **Pn** | **16 02 15.3** | **+0.3** |
| BDRM | | | | S | **Sn** | **16 02 28.9** | **-1.2** |
| **BODT** | **Bodrum** | **1.21** | **323** | *e*PN | **Pn** | **16 02 15.9** | **+0.1** |
| **BODT** | **Bodrum** | **1.21** | **323** | *e*Pn | **Pn** | **16 02 15.9** | **+0.1** |
| **ELL** | **Elmali** | **1.51** | **64** | *e*PN | **Pn** | **16 02 20.3** | **+0.4** |
| **ELL** | **Elmali** | **1.51** | **64** | *e*Pn | **Pn** | **16 02 20.3** | **+0.4** |
| **GOLH** | **Golhisar** | **1.57** | **43** | *i* P | **Pn** | **16 02 21.5** | **+0.9** |
| GOLH | | | | *i* S | **Sn** | **16 02 41.3** | **+1.2** |
| **GOLH** | **Golhisar** | **1.57** | **43** | P | **Pn** | **16 02 21.5** | **+0.9** |
| GOLH | | | | S | **Sn** | **16 02 41.3** | **+1.2** |
| **AYDN** | **Tasoluk** | **1.59** | **350** | *i* P | **Pn** | **16 02 23.3** | **+2.5** |
| AYDN | | | | *i* S | **Sn** | **16 02 41.9** | **+1.4** |
| **AYDN** | **Tasoluk** | **1.59** | **350** | P | **Pn** | **16 02 23.3** | **+2.5** |
| AYDN | | | | S | **Sn** | **16 02 41.9** | **+1.4** |
| **DNZL** | **Cakiroluk** | **1.73** | **22** | *i* P | **Pn** | **16 02 22.6** | **-0.2** |
| DNZL | | | | *i* S | **Sn** | **16 02 42.5** | **-1.4** |
| **DNZL** | **Cakiroluk** | **1.73** | **22** | P | **Pn** | **16 02 22.6** | **-0.2** |
| DNZL | | | | S | **Sn** | **16 02 42.5** | **-1.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.87** | **352** | *e*PN | **Pn** | **16 02 25.1** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.87** | **352** | *e*Pn | **Pn** | **16 02 25.1** | **+0.4** |
| **NPS** | **Neapolis** | **2.28** | **249** | *e*P | **Pn** | **16 02 30.5** | **+0.4** |
| NPS | | | | *e*S | **Sn** | **16 02 55.7** | **-1.5** |
| **NPS** | **Neapolis** | **2.28** | **249** | *e*P | **Pn** | **16 02 30.5** | **+0.4** |
| NPS | | | | *e*S | **Sn** | **16 02 55.7** | **-1.5** |
| **APE** | **Apeiranthos** | **2.37** | **295** | *e*P | **Pn** | **16 02 32.3** | **+0.9** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| **APE** | **Apeiranthos** | **2.37** | **295** | *e*P | **Pn** | **16 02 32.3** | **+0.9** |
| **LAST** | **Lasithi** | **2.42** | **248** | *e*P | **Pn** | **16 02 32.6** | **+0.5** |
| **LAST** | **Lasithi** | **2.42** | **248** | *e*P | **Pn** | **16 02 32.6** | **+0.5** |
| **IDI** | **Anoyia** | **2.83** | **254** | *e*P | **Pn** | **16 02 37.6** | **0.0** |
| **IDI** | **Anoyia** | **2.83** | **254** | *e*P | **Pn** | **16 02 37.6** | **0.0** |

**IDC 10 16:08:43.5**±3.5**, 5°.74S**×**153°.59E, h0**$^{km}$**, mb3.2**/2**, mb1 3.5**/2**, mb1mx3.2**/25**, mbtmp3.3**/2**, Error ellipse: s-maj=163.8km s-min=47.2km az=124.0, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.45** | **231** | P | P | 16 13 55.4 | +0.6 |
| | 1.4nm,1.1s,baz=56,slow=9.8,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **26.02** | **225** | P | P | 16 14 17.9 | -0.7 |
| | 0.3nm,0.9s,baz=58,slow=9.7,SNR=9.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.34** | **287** | PKPbc | PKPbc | 16 28 40.2 | -0.1 |
| | 0.9nm,1.1s,baz=54,slow=4.1,SNR=2.4 | | | | | | |

**IDC 10 16:11:03.9**±2.1**, 16°.70S**×**178°.29W, h0**$^{km}$**, mb4.1**/4**, mb1 4.5**/4**, mb1mx3.8**/27**, mbtmp4.1**/4**, Error ellipse: s-maj=123.7km s-min=27.2km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **44.97** | **258** | P | P | 16 19 21.3 | 0.0 |
| | 1.5nm,0.4s,baz=95,slow=7.5,SNR=56 | | | | | | |
| **ASAR** | **Alice Springs** | **45.23** | **253** | P | P | 16 19 23.2 | -0.2 |
| | 15nm,0.6s,baz=88,slow=8.5,SNR=512 | | | | | | |
| **ILAR** | **Eielson Array** | **84.69** | **13** | P | P | 16 23 38.9 | -0.4 |
| | 0.3nm,0.7s,baz=237,slow=5.0,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.26** | **58** | P | P | 16 23 43.5 | +0.4 |
| | 0.6nm,0.9s,baz=224,slow=5.9,SNR=5.2 | | | | | | |

**MEX 10 16:14:27.6**±0.5**, 15°.42N**×**92°.98W, h84**$^{km}$±7$^{km}$**, MD3.6, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.37** | **322** | *i* P | Pn | 16 14 39.4 | -1.4 |
| PCIG | | | | *e*S | Sn | 16 14 49.0 | -1.5 |
| **CCIG** | **Comitan** | **1.19** | **43** | *i* P | Pn | 16 14 48.0 | -1.4 |
| CCIG | | | | *i* S | Sn | 16 15 04.1 | -1.7 |

*NIED **10** 16:23:00, 33°.10N×142°.70E, h5$^{km}$, Mw3.7 Best double couple: $M_0$4.13000×$10^{14}$ NP1:$\phi_s$10.00000°, δ18.00000°, λ-102.00000°. NP2:$\phi_s$202.00000°, δ72.00000°, λ-86.00000°.*
*ISCJB **10** 16:23:56.0±0.8, 33°.07N±0°.06×142°.7E±0°.1, h33$^{km}$, mb3.5/2, Error ellipse: s-maj=14.3km s-min=6.3km az=150.0*
*JMA **10** 16:23:56.3±0.4, 33°.07N×142°.73E, h48$^{km}$, M3.8*
*IDC **10** 16:24:03.0±3.7, 33°.27N×142°.11E, h84$^{km}$±37$^{km}$, mb3.1/2, mb1 3.3/4, mb1mx3.0/34, mbtmp3.5/4, MS2.4/2, Ms1 2.4/2, ms1mx2.2/11, Error ellipse: s-maj=37.3km s-min=17.1km az=108.0*
**ISC 10 16:23:57.6**±1.1**, 33°.10N**±0°.06×**142°.55E**±0°.08**, h33**$^{km}$**, n18,** $\sigma$**2$^s$.39**/26**, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BSO1** | **Boso 1** | **2.03** | **320** | P | **Pn** | **16 24 30.7** | **+1.7** |
| BSO1 | | | | *e*S | **Sb** | **16 24 56.2** | **-1.9** |
| **JHJ** | **Hachijo jima 2** | **2.33** | **271** | P | **Pn** | **16 24 34.4** | **+0.9** |
| | 10nm,0.3s,baz=65,slow=21,SNR=8.7 | | | | | | |
| JHJ | | | | S | **Sn** | **16 24 58.0** | **-3.0** |
| | 37nm,0.3s,baz=68,slow=22,SNR=5.9 | | | | | | |
| **BSO3** | **Boso 3** | **2.40** | **316** | P | **Pn** | **16 24 35.9** | **+1.6** |
| **BSO4** | **Boso 4** | **2.63** | **316** | P | **Pn** | **16 24 40.1** | **+2.4** |
| BSO4 | | | | *e*S | **Sb** | **16 25 12.6** | **-3.3** |
| **JYN** | **Shimob** | **4.09** | **307** | P | **Pn** | **16 25 00.5** | **+2.6** |
| JYN | | | | S | **Sn** | **16 25 47.7** | **+3.1** |
| **JAG** | **Ashikaga** | **4.18** | **323** | P | **Pn** | **16 25 01.0** | **+1.9** |
| **JRY** | **Ryogami san** | **4.19** | **315** | P | **Pn** | **16 25 01.4** | **+2.2** |
| JRY | | | | S | **Sn** | **16 25 49.7** | **+2.7** |
| **JFT** | **Otama** | **4.77** | **338** | P | **Pn** | **16 25 08.5** | **+1.4** |
| JFT | | | | *e*S | **Sn** | **16 26 00.5** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **4.96** | **315** | P | **Pn** | **16 25 11.3** | **+1.5** |
| | 1.9nm,0.3s,baz=122,slow=8.9,SNR=36 | | | | | | |
| MJAR | | | | S | **Sn** | **16 26 01.4** | **-4.4** |
| | 2.2nm,0.3s,baz=156,slow=12,SNR=8.7 | | | | | | |
| **MAT** | **Matsushiro** | **4.96** | **315** | P | **Pn** | **16 25 12.4** | **+2.7** |
| MAT | | | | S | **Sn** | **16 26 08.9** | **+3.0** |
| **MAT** | **Matsushiro** | **4.96** | **315** | P | **Pn** | **16 25 12.4** | **+2.7** |
| **JMK** | **Ichinoseki** | **5.94** | **350** | P | **Pn** | **16 25 24.7** | **+1.5** |
| JMK | | | | S | **Sn** | **16 26 26.9** | **-3.1** |
| **CBIJ** | **Chichi jima** | **5.99** | **183** | P | **Pn** | **16 25 23.7** | **-0.3** |
| **JNU** | **Nakatsue** | **9.79** | **273** | LR | LR | 16 29 51.8 | |
| | comp=Z,25nm,21.6s,baz=115,slow=37 | | | | | | |
| **ASAJ** | **Asahikawa** | **11.00** | **0** | P | **Pn** | **16 26 33.5** | **+0.9** |
| | baz=207,slow=16 | | | | | | |
| **KSRS** | **Korea Array** | **12.72** | **294** | LR | LR | 16 32 22.5 | |
| | comp=Z,18nm,18.6s,baz=24,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.33** | **190** | P | **P** | **16 33 14.5** | **+0.9** |
| | 0.6nm,0.6s,baz=7.8,slow=7.7,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **57.05** | **189** | P | **P** | **16 33 41.1** | **+0.6** |
| | 0.2nm,0.6s,baz=356,slow=5.3,SNR=6.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 34 34.0** | **-1.3** |
| | 0.4nm,1.0s,baz=352,slow=5.7,SNR=4.1 | | | | | | |

**JMA 10 16:24:47.9**±0.5**, 33°.03N**×**142°.42E, h26**$^{km}$**, M3.6, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BSO1** | **Boso 1** | **2.02** | **324** | *e*S | Sb | 16 25 45.9 | -1.4 |
| **JHJ2** | **Mitsune** | **2.19** | **273** | *e*S | Sn | 16 25 50.7 | +1.9 |
| **BSO3** | **Boso 3** | **2.38** | **319** | S | Sn | 16 25 55.4 | +2.5 |
| **BSO4** | **Boso 4** | **2.61** | **319** | P | Pn | 16 25 29.8 | +1.5 |
| BSO4 | | | | S | Sn | 16 26 02.1 | +3.1 |
| **JOD2** | **Odawara 2** | **3.55** | **310** | *e*S | Sn | 16 26 25.2 | +2.7 |
| **JYN** | **Shimob** | **4.04** | **309** | *e*S | Sn | 16 26 37.8 | +3.0 |
| **JRY** | **Ryogami san** | **4.16** | **317** | S | Sn | 16 26 39.3 | +1.7 |
| **JFT** | **Otama** | **4.79** | **340** | S | Sn | 16 26 49.4 | -3.7 |
| **MAT** | **Matsushiro** | **4.93** | **316** | S | Sn | 16 26 58.2 | +1.7 |
| **JMK** | **Ichinoseki** | **5.99** | **351** | *e*S | Sn | 16 27 16.7 | -5.8 |

**IDC 10 16:34:12.4**±1.7**, 6°.34S**×**129°.83E, h162**$^{km}$±20$^{km}$**, mb3.4**/1**, mb1 3.3**/5**, mb1mx2.9**/36**, mbtmp3.8**/5**, MS3.0**/2**, Ms1 3.0**/2**, ms1mx2.4**/18**, Error ellipse: s-maj=28.7km s-min=13.5km az=115.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.62** | **15** | P | Pn | 16 35 35.4 | +1.2 |
| | 1.1nm,0.3s,baz=238,slow=22,SNR=24 | | | | | | |
| SIJI | | | | S | Sn | 16 36 38.0 | -0.4 |
| | 2.9nm,0.3s,baz=37,slow=23,SNR=12 | | | | | | |
| **BATI** | **Baumata** | **7.21** | **237** | P | Pn | 16 35 56.7 | +1.2 |
| | 4.1nm,0.3s,baz=251,slow=1.4,SNR=9.5 | | | | | | |
| BATI | | | | S | Sn | 16 37 15.0 | -1.5 |
| | 5.0nm,0.3s,baz=164,slow=22,SNR=7.5 | | | | | | |
| **JAY** | **Jayapura** | **11.48** | **71** | LR | LR | 16 42 41.2 | |
| | comp=Z,90nm,21.6s,baz=216,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.22** | **162** | P | Pn | 16 37 26.9 | +0.2 |
| | 0.3nm,0.3s,baz=345,slow=12,SNR=6.4 | | | | | | |
| WRA | | | | S | Sn | 16 39 54.0 | -11 |
| | 0.3nm,0.3s,baz=322,slow=26,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **17.67** | **168** | P | P | 16 38 06.8 | -0.6 |
| | 0.2nm,0.3s,baz=343,slow=11,SNR=31 | | | | | | |
| ASAR | | | | LR | LR | 16 44 55.1 | |
| | comp=Z,39nm,18.2s,baz=134,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.58** | **327** | P | P | 16 44 51.6 | 0.0 |
| | 0.5nm,0.4s,baz=112,slow=8.0,SNR=5.8 | | | | | | |

*ISCJB **10** 16:52:45.5±0.6, 25°.62S±0°.03×70°.84W±0°.10, h35$^{km}$, mb3.7/6, Error ellipse: s-maj=12.6km s-min=3.8km az=2.0*
*GUC **10** 16:52:45.8±0.7, 25°.64S×70°.86W, h48$^{km}$±867$^{km}$, ML4.5*
*IDC **10** 16:52:49.0±2.3, 25°.68S×70°.36W, h51$^{km}$±19$^{km}$, mb3.6/6, mb1 3.8/10, mb1mx3.7/28, mbtmp3.8/10, ML3.5/4, MS2.9/3, Ms1 2.9/3, ms1mx2.9/15, Error ellipse: s-maj=27.3km s-min=14.9km az=87.0*
**ISC 10 16:52:47.1**±0.7**, 25°.65S**±0°.04×**70°.7W**±0°.1**, h35**$^{km}$**, n37,** $\sigma$**1$^s$.45**/34**, mb3.8**/6**, 3C-2D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CDCH** | **Caldera** | **1.42** | **185** | *e*P | **Pn** | **16 53 09.9** | **-0.5** |
| CDCH | | | | *i* S | **Sn** | **16 53 27.7** | **-0.2** |
| **CPCH** | **Copiapo** | **1.73** | **170** | ⇑*i*P | **Pn** | **16 53 14.6** | **-0.1** |
| CPCH | | | | *i* S | **Sn** | **16 53 36.3** | **+0.7** |
| **PB10** | **IPOC Station P** | **2.13** | **3** | ⇑*i*P | **Pn** | **16 53 19.8** | **-0.4** |
| PB10 | | | | AML | AML | 16 54 01.9 | |
| | comp=N,3μm,0.4s | | | | | | |
| **VACH** | **Vallenar** | **2.92** | **181** | *e*P | **Pn** | **16 53 30.7** | **-0.4** |
| VACH | | | | *i* S | **Sn** | **16 54 04.3** | **-0.7** |
| **PB06** | **IPOC Station P** | **3.10** | **19** | ⇑*i*P | **Pn** | **16 53 33.8** | **+0.1** |
| PB06 | | | | *i* S | **Sn** | **16 54 10.3** | **+0.7** |
| PB06 | | | | AML | AML | 16 54 27.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **3.33** | **8** | ⇓*i*P | **Pn** | **16 53 36.2** | **-0.7** |
| PB04 | | | | AML | AML | 16 54 34.0 | |
| | comp=N,900nm,0.8s | | | | | | |
| **LVC** | **Limon Verde** | **3.42** | **28** | P | **Pn** | **16 53 40.1** | **+1.9** |
| | comp=N,233nm,0.3s,baz=137,slow=7.6,SNR=15 | | | | | | |
| LVC | | | | S | Sn | 16 54 26.1 | +8.3 |
| | comp=N,3μm,0.3s,baz=263,slow=10,SNR=9.0 | | | | | | |
| **PB09** | **IPOC Station P** | **4.05** | **19** | *e*P | **Pn** | **16 53 47.4** | **+0.6** |
| **FSA** | **Cafayete** | **4.22** | **97** | *e*P | **Pn** | **16 53 52.0** | **+2.8** |
| **AGUA** | **GUANDACOL** | **4.29** | **154** | *e*P | Pn | 16 53 53.4 | +3.4 |
| AGUA | | | | *e*S | Sn | 16 54 51.6 | +13 |
| **PB01** | **IPOC Station P** | **4.71** | **14** | ⇓*i*P | **Pn** | **16 53 55.1** | **-0.7** |
| **AHML** | **Horco Molle** | **4.93** | **104** | *e*P | **Pn** | **16 54 01.4** | **+2.7** |
| **CYA** | **Choya** | **5.16** | **124** | *e*P | **Pn** | **16 54 04.6** | **+2.7** |
| CYA | | | | AML | AML | 16 55 08.8 | |
| | comp=Z,31nm,0.7s | | | | | | |
| **AMOG** | **MOGNA** | **5.61** | **160** | *e*P | **Pn** | **16 54 10.2** | **+2.1** |
| AMOG | | | | *e*S | Sn | 16 55 22.3 | +11 |
| **CFAA** | **Coronel Fontan** | **6.31** | **161** | P | **Pn** | **16 54 19.1** | **+1.4** |
| | comp=Z,0.3nm,0.3s,baz=349,slow=12,SNR=26 | | | | | | |
| CFAA | | | | S | **Sn** | **16 55 27.6** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=265,slow=13,SNR=2.0 | | | | | | |
| CFAA | | | | LR | LR | 16 57 17.2 | |
| | comp=Z,26nm,21.3s,baz=288,slow=43 | | | | | | |
| **CFAA** | **Coronel Fontan** | **6.31** | **161** | *e*P | **Pn** | **16 54 19.0** | **+1.2** |
| CFAA | | | | *e*S | Sn | 16 55 38.5 | +10 |
| **RTCV** | **Cerro Valdivia** | **6.47** | **164** | *e*P | **Pn** | **16 54 21.6** | **+1.7** |
| **ACAN** | **Cantantal** | **7.27** | **156** | *e*P | **Pn** | **16 54 32.0** | **+1.1** |
| ACAN | | | | *e*S | Sn | 16 56 03.2 | +11 |
| **LPAZ** | **La Paz** | **9.61** | **15** | P | **Pn** | **16 55 03.1** | **-0.5** |
| | comp=Z,0.3nm,0.3s,baz=193,slow=5.9,SNR=8.0 | | | | | | |
| LPAZ | | | | LR | LR | 16 59 19.1 | |
| | comp=Z,104nm,20.5s,baz=212,slow=41 | | | | | | |
| **CPUP** | **Villa Florida** | **12.03** | **96** | P | **Pn** | **16 55 34.7** | **-1.3** |
| | comp=Z,0.1nm,0.3s,baz=299,slow=4.0,SNR=3.4 | | | | | | |
| CPUP | | | | LR | LR | 17 00 42.7 | |
| | comp=Z,137nm,21.3s,baz=234,slow=40 | | | | | | |
| **SIV** | **San Ignacio** | **13.14** | **45** | P | Pn | 16 55 48.7 | -2.7 |
| | comp=Z,0.3nm,0.3s,baz=250,slow=11,SNR=4.1 | | | | | | |
| **BDFB** | **Brasilia** | **23.39** | **69** | P | **P** | **16 57 49.8** | **-3.3** |
| | comp=Z,1.4nm,0.4s,baz=258,slow=5.6,SNR=3.6 | | | | | | |
| **PTGA** | **Pitinga** | **26.84** | **24** | P | **P** | **16 58 25.1** | **+0.7** |
| | comp=Z,1.4nm,0.5s,baz=131,slow=20,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **63.18** | **328** | P | **P** | **17 03 12.6** | **+0.8** |
| | comp=Z,0.1nm,0.4s,baz=153,slow=8.4,SNR=4.1 | | | | | | |
| **DBIC** | **Dimbokro** | **71.48** | **73** | P | **P** | **17 04 02.6** | **-2.0** |
| | comp=Z,1.9nm,0.5s,baz=232,slow=5.1,SNR=3.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.80** | **324** | P | **P** | **17 04 42.1** | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=179,slow=4.3,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.27** | **70** | P | **P** | **17 04 53.7** | **-1.1** |
| | comp=Z,0.8nm,0.5s,baz=262,slow=5.2,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **125.50** | **208** | PKP | **PKPdf** | **17 11 44.1** | **-1.1** |
| | comp=Z,0.3nm,0.7s,baz=125,slow=1.9,SNR=4.2 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **126.69** | **275** | T | T | 19 31 30.7 | |
| | baz=108,slow=75,SNR=49 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **126.70** | **275** | T | T | 19 31 39.7 | |
| | baz=108,slow=75,SNR=73 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **126.70** | **275** | T | T | 19 31 43.0 | |
| | baz=108,slow=75,SNR=56 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **126.88** | **276** | T | T | 19 31 39.6 | |
| | baz=113,slow=80,SNR=11 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **126.90** | **276** | T | T | 19 31 43.4 | |
| | baz=113,slow=80,SNR=7.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **126.90** | **276** | T | T | 19 31 41.0 | |
| | baz=113,slow=80,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **128.57** | **211** | PKP | **PKPdf** | **17 11 50.8** | **-0.4** |
| | comp=Z,0.6nm,1.0s,baz=157,slow=2.0,SNR=5.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **146.38** | **26** | PKPbc | **PKPdf** | **17 12 23.7** | **+1.1** |
| | comp=Z,1.7nm,0.7s,baz=317,slow=4.2,SNR=8.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **149.90** | **39** | PKPbc | **PKPbc** | **17 12 33.6** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=340,slow=3.2,SNR=5.2 | | | | | | |

**GUC 10 17:15:19.0**±0.6**, 34°.49S**×**72°.19W, h32**$^{km}$±3$^{km}$**, ML3.6, 2C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NICH** | **Los Niches** | **0.94** | **123** | ⇓*i*P | Pn | 17 15 36.3 | +0.3 |
| NICH | | | | *i* S | Sb | 17 15 49.1 | +0.1 |
| **TALC** | **Talca** | **1.01** | **153** | ⇑*i*P | Pn | 17 15 37.1 | +0.2 |
| TALC | | | | *i* S | Sn | 17 15 50.5 | +0.3 |
| **TACH** | **Talagante** | **1.33** | **52** | *e*P | Pn | 17 15 41.8 | +0.4 |
| TACH | | | | *e*S | Sb | 17 15 59.3 | -1.0 |
| **RCDM** | **Rinconada Maip** | **1.52** | **49** | ⇓*i*P | Pn | 17 15 44.8 | +0.8 |
| RCDM | | | | *i* S | Sb | 17 16 04.9 | -0.7 |
| RCDM | | | | AML | AML | 17 16 07.3 | |
| | comp=N,936nm,0.1s | | | | | | |
| **ANTU** | **Antumapu** | **1.58** | **55** | *e*P | Pb | 17 15 46.4 | -1.4 |
| ANTU | | | | *i* S | Sb | 17 16 06.9 | -0.6 |
| ANTU | | | | AML | AML | 17 16 12.2 | |
| | comp=E,1μm,0.8s | | | | | | |
| **PCH** | **Pirque** | **1.64** | **58** | *e*P | Pb | 17 15 47.3 | -1.4 |
| PCH | | | | *e*S | Sb | 17 16 08.2 | -0.9 |
| **CLCH** | **Cerro Calan** | **1.75** | **52** | *e*P | Pn | 17 15 48.9 | +1.6 |
| CLCH | | | | *i* S | Sb | 17 16 11.4 | -1.0 |
| CLCH | | | | AML | AML | 17 16 19.1 | |
| | comp=E,918nm,0.7s | | | | | | |
| **PEL** | **Peldehue** | **1.84** | **43** | ⇑*i*P | Pn | 17 15 49.9 | +1.5 |
| PEL | | | | *i* S | Sb | 17 16 13.0 | -1.7 |
| PEL | | | | AML | AML | 17 16 23.2 | |
| | comp=N,1μm,0.4s | | | | | | |

**IDC 10 17:21:30.2**±2.1**, 6°.01S**×**151°.77E, h0**$^{km}$**, mb3.4**/3**, mb1 3.8**/4**, mb1mx3.5**/26**, mbtmp3.6**/4**, ML2.1**/1**, Error ellipse: s-maj=132.4km s-min=27.1km az=129.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **5.68** | **233** | Pn | Pn | 17 22 57.9 | +2.0 |
| | 3.3nm,0.3s,baz=79,slow=5.7,SNR=15 | | | | | | |
| PMG | | | | Sn | Sn | 17 23 58.1 | -3.7 |
| | 12nm,0.3s,baz=323,slow=20,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.88** | **229** | P | P | 17 26 24.0 | -0.9 |
| | 0.4nm,0.5s,baz=53,slow=9.9,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **24.57** | **223** | P | P | 17 26 51.9 | -0.2 |
| | 0.8nm,0.6s,baz=56,slow=8.9,SNR=21 | | | | | | |
| **ILAR** | **Eielson Array** | **83.66** | **22** | P | P | 17 34 00.6 | +0.1 |
| | 0.3nm,0.6s,baz=251,slow=6.0,SNR=4.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.68** | **286** | PKPbc | PKPbc | 17 41 22.5 | -0.5 |
| | 0.6nm,0.6s,baz=87,slow=2.4,SNR=4.6 | | | | | | |

*ISK **10** 17:37:49.4, 38°.71N×27°.93E, h5$^{km}$, MD2.5*
*DDA **10** 17:37:50.9, 38°.67N×27°.89E, h7$^{km}$, Md2.6*
*CSEM **10** 17:37:50.2±0.2, 38°.71N×27°.91E, h2$^{km}$, MD2.6, Error ellipse: s-maj=4.4km s-min=3.9km az=66.0*
**ISC 10 17:37:50.3**±1.4**, 38°.72N**±0°.04×**27°.91E**±0°.04**, h7**$^{km}$±18$^{km}$**, n12,** $\sigma$**0$^s$.41**/20**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKS** | **Akhisar** | **0.18** | **335** | PG | **Pg** | **17 37 53.8** | **-0.1** |
| **AKS** | **Akhisar** | **0.18** | **335** | *i* Pg | **Pg** | **17 37 53.8** | **-0.1** |
| **MANT** | **Manisa** | **0.55** | **114** | *i* S | **Sg** | **17 38 08.6** | **+0.4** |
| **MANT** | **Manisa** | **0.55** | **114** | S | **Sg** | **17 38 08.6** | **+0.4** |
| **KULA** | **Kula-Manisa** | **0.62** | **109** | *e*PG | **Pg** | **17 38 01.4** | **-0.8** |
| KULA | | | | *e*SG | **Sg** | **17 38 10.5** | **+0.2** |
| **KULA** | **Kula-Manisa** | **0.62** | **109** | *e*Pg | **Pg** | **17 38 01.4** | **-0.8** |
| KULA | | | | *e*Sg | **Sg** | **17 38 10.5** | **+0.2** |
| **DEMI** | **Demirci** | **0.71** | **62** | *i* P | **Pg** | **17 38 04.1** | **+0.2** |
| DEMI | | | | *i* S | **Sg** | **17 38 13.0** | **-0.1** |
| **DEMI** | **Demirci** | **0.71** | **62** | P | **Pg** | **17 38 04.1** | **+0.2** |
| DEMI | | | | S | **Sg** | **17 38 13.0** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.77** | **181** | *e*PG | **Pg** | **17 38 04.9** | **-0.1** |
| AYDB | | | | *e*SG | **Sg** | **17 38 15.3** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.77** | **181** | *e*Pg | **Pg** | **17 38 04.9** | **-0.1** |
| AYDB | | | | *e*Sg | **Sg** | **17 38 15.3** | **+0.3** |
| **KHAL** | **Karahalli** | **1.29** | **105** | *i* P | **Pg** | **17 38 15.4** | **+0.5** |
| KHAL | | | | *i* S | **Sb** | **17 38 31.4** | **-0.2** |
| **KHAL** | **Karahalli** | **1.29** | **105** | P | **Pg** | **17 38 15.4** | **+0.5** |
| KHAL | | | | S | **Sb** | **17 38 31.4** | **-0.2** |

*IDC **10** 17:58:30.9±1.9, 17°.41S×178°.50W, h441$^{km}$±26$^{km}$, mb3.3/8, mb1 3.6/9, mb1mx3.3/21, mbtmp4.1/9, Error ellipse: s-maj=26.4km s-min=13.8km az=138.0*
*ISCJB **10** 17:58:31.3±0.5, 17°.3S±0°.1×178°.56W±0°.08, h450$^{km}$, mb3.6/8, Error ellipse: s-maj=18.9km s-min=7.8km az=159.1*
*AUST **10** 17:58:32.3±46.0, 17°.21S×178°.64W, h424$^{km}$±1$^{km}$, Error ellipse: s-maj=6.8km s-min=3.2km az=279.0*
**ISC 10 17:58:32.3**±0.7**, 17°.3S**±0°.1×**178°.51W**±0°.09**, h450**$^{km}$**, n18,** $\sigma$**1$^s$.07**/19**, mb3.6**/8**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.30** | **64** | P | **P** | **18 00 19.7** | **-0.7** |
| | 2.1nm,0.3s,baz=188,slow=1.3,SNR=3.4 | | | | | | |
| AFI | | | | S | **S** | **18 01 48.7** | **-0.1** |
| | 1.9nm,0.3s,baz=174,slow=17,SNR=3.1 | | | | | | |
| **NIUE** | **Niue** | **8.35** | **104** | P | **P** | **18 00 32.8** | **+1.3** |
| | baz=8.5,SNR=7.7 | | | | | | |
| **URZ** | **Urewera** | **21.25** | **190** | P | **P** | **18 02 42.4** | **-2.5** |
| | 4.6nm,0.3s,baz=300,slow=2.0,SNR=3.9 | | | | | | |
| **RMQ** | **Roma** | **31.65** | **247** | P | **P** | **18 04 18.4** | **+1.3** |
| | baz=32,SNR=8.3 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.38** | **240** | P | **P** | **18 04 49.4** | **+0.7** |
| | baz=35,SNR=6.0 | | | | | | |
| **QLP** | **Quilpie** | **35.67** | **248** | P | **P** | **18 04 51.6** | **+0.3** |
| | baz=36,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.66** | **259** | P | **P** | **18 06 02.2** | **-1.7** |
| | 0.9nm,0.6s,baz=94,slow=7.1,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **44.87** | **254** | P | **P** | **18 06 05.4** | **-0.1** |
| | 10nm,0.5s,baz=89,slow=7.9,SNR=361 | | | | | | |
| **KDU** | **Kakadu** | **47.48** | **268** | P | **P** | **18 06 25.9** | **+0.4** |
| | baz=47,SNR=5.3 | | | | | | |
| **WRKA** | **Warakurna** | **49.95** | **252** | P | **P** | **18 06 43.8** | **-0.1** |
| | baz=50,SNR=22 | | | | | | |
| **KNRA** | **Kununurra** | **50.46** | **264** | P | **P** | **18 06 47.8** | **+0.1** |
| | baz=50,SNR=6.6 | | | | | | |
| **SWI** | **Sorong** | **52.01** | **283** | P | **P** | **18 07 00.5** | **+1.4** |
| | baz=52,SNR=5.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.35** | **323** | P | **P** | **18 08 41.4** | **-0.2** |
| | 0.8nm,0.6s,baz=144,slow=5.5,SNR=8.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.06** | **345** | P | **P** | **18 09 15.3** | **+0.1** |
| | 1.3nm,0.6s,baz=120,slow=9.0,SNR=4.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.04** | **44** | P | **P** | **18 09 49.2** | **+0.1** |
| | 0.7nm,0.7s,baz=240,slow=7.2,SNR=4.6 | | | | | | |
| **ILAR** | **Eielson Array** | **85.30** | **13** | P | **P** | **18 10 19.0** | **-1.1** |
| | 0.6nm,0.4s,baz=222,slow=5.5,SNR=12 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.74** | **58** | P | **P** | **18 10 24.4** | **+1.1** |
| | 0.2nm,0.7s,baz=232,slow=4.4,SNR=3.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.28** | **315** | PKP | **PKPdf** | **18 17 16.1** | **-0.5** |
| | 2.7nm,1.2s,baz=44,slow=1.0,SNR=3.5 | | | | | | |

*ISCJB **10** 18:26:07.6±1.6, 5°.42S±0°.08×102°.47E±0°.09, h51$^{km}$±13$^{km}$, mb3.7/7, Error ellipse: s-maj=18.2km s-min=8.0km az=140.2*
*IDC **10** 18:26:08.0±2.1, 5°.48S×102°.35E, h40$^{km}$±6$^{km}$, mb3.5/7, mb1 3.6/8, mb1mx3.4/39, mbtmp3.7/8, ML3.9/1, MS2.9/1, Ms1 2.9/1, ms1mx2.4/31, Error ellipse: s-maj=83.9km s-min=14.9km az=49.0*
*DJA **10** 18:26:09.7±0.6, 5°S±3°×10°3E±°, h10$^{km}$, M4.3/12, mb5.3/1, MLv3.8/12*
**ISC 10 18:26:08.2**±1.0**, 5°.38S**±0°.08×**102°.51E**±0°.09**, h33**$^{km}$±3$^{km}$**, n18,** $\sigma$**1$^s$.20**/26**, mb3.6**/7**, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **1.11** | **24** | P | **Pn** | **18 26 26.6** | **-0.9** |
| MNAI | | | | S | **Sn** | **18 26 41.1** | **-0.6** |
| **LWLI** | **Liwa** | **1.59** | **77** | P | **Pn** | **18 26 33.2** | **-1.0** |
| LWLI | | | | S | **Sn** | **18 26 55.3** | **+1.7** |
| **KSI** | **Kapahiang** | **1.72** | **3** | P | **Pn** | **18 26 36.9** | **+0.9** |
| KSI | | | | S | **Sn** | **18 26 59.2** | **+2.4** |
| **LHSI** | **Lahat** | **1.85** | **33** | P | **Pn** | **18 26 39.5** | **+1.9** |
| **MDSI** | **Maura Dua** | **1.89** | **62** | P | **Pn** | **18 26 38.7** | **+0.5** |
| MDSI | | | | S | **Sn** | **18 27 01.9** | **+1.0** |
| **KASI** | **Kota Agung** | **1.99** | **94** | P | **Pn** | **18 26 39.5** | **0.0** |
| KASI | | | | S | **Sn** | **18 27 03.6** | **+0.3** |
| **KLI** | **Kotabumi** | **2.40** | **78** | P | **Pb** | **18 26 49.6** | **-1.2** |
| **CGJI** | **Cibinong** | **3.40** | **111** | P | **Pn** | **18 26 59.0** | **+0.1** |
| **LEM** | **Lembang** | **5.28** | **106** | Pn | **Pn** | **18 27 27.8** | **+2.8** |
| | 3.6nm,0.3s,baz=303,slow=9.5,SNR=5.1 | | | | | | |
| LEM | | | | LR | LR | 18 29 54.3 | |
| | comp=Z,97nm,18.3s,baz=230,slow=42 | | | | | | |
| **LEM** | **Lembang** | **5.28** | **106** | P | Pn | 18 27 28.6 | +3.6 |
| **BATI** | **Baumata** | **21.50** | **104** | P | **P** | **18 30 54.4** | **-0.1** |
| | 11nm,0.4s,baz=103,slow=5.2,SNR=7.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.95** | **352** | P | **P** | **18 31 18.7** | **-0.9** |
| | 0.2nm,0.3s,baz=174,slow=10.0,SNR=3.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.17** | **118** | P | **P** | **18 32 50.3** | **-0.4** |
| | 0.5nm,0.6s,baz=297,slow=9.6,SNR=5.5 | | | | | | |
| WRA | | | | pP | **pP** | **18 33 01.4** | **+1.1** |
| | 0.8nm,0.7s,baz=294,slow=9.8,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **35.27** | **124** | P | **P** | **18 33 00.6** | **+0.4** |
| | 0.6nm,1.0s,baz=293,slow=7.8,SNR=4.9 | | | | | | |
| ASAR | | | | pP | **pP** | **18 33 09.7** | **-0.2** |
| | 0.9nm,0.9s,baz=301,slow=8.0,SNR=5.0 | | | | | | |
| **SONM** | **Songino Array** | **53.10** | **3** | P | **P** | **18 35 22.3** | **-0.3** |
| | 0.6nm,0.8s,baz=198,slow=9.1,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.95** | **343** | P | **P** | **18 35 35.5** | **-0.5** |
| | 0.5nm,0.5s,baz=147,slow=8.1,SNR=5.0 | | | | | | |
| MKAR | | | | pP | **pP** | **18 35 47.2** | **+1.1** |
| | 0.4nm,0.5s,baz=148,slow=7.1,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.95** | **348** | P | **P** | **18 36 16.4** | **-1.5** |
| | 0.4nm,0.4s,baz=176,slow=4.3,SNR=3.9 | | | | | | |
| ZALV | | | | pP | **pP** | **18 36 28.9** | **+0.8** |
| | 0.7nm,0.5s,baz=149,slow=6.9,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.66** | **43** | PKPbc | **PKPdf** | **18 45 43.9** | **-0.2** |
| | 0.8nm,0.8s,baz=318,slow=1.2,SNR=7.8 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 18 45 56.3 | +1.1 |
| | 0.4nm,0.6s,baz=242,slow=1.1,SNR=4.5 | | | | | | |

**IDC 10 18:26:27.4**±7.3**, 4°.12S**×**142°.76E, h142**$^{km}$±46$^{km}$**, mb3.5**/2**, mb1 3.5**/4**, mb1mx3.1**/31**, mbtmp3.8**/4**, Error ellipse: s-maj=105.6km s-min=21.0km az=82.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **2.59** | **308** | P | Pn | 18 27 09.3 | -0.1 |
| | 0.5nm,0.3s,baz=139,slow=8.8,SNR=9.0 | | | | | | |
| JAY | | | | S | Sn | 18 27 42.2 | +0.5 |
| | 1.5nm,0.3s,baz=237,slow=23,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.74** | **207** | P | P | 18 30 23.1 | -1.3 |
| | 0.4nm,0.3s,baz=29,slow=13,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **21.23** | **203** | P | P | 18 31 02.9 | +0.6 |
| | 7.4nm,0.6s,baz=32,slow=10,SNR=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **73.38** | **321** | P | P | 18 37 43.8 | 0.0 |
| | 0.5nm,0.8s,baz=114,slow=6.7,SNR=4.4 | | | | | | |

*ISCJB **10** 18:26:41.7±0.4, 23°.85N±0°.02×122°.54E±0°.02, h17$^{km}$±4$^{km}$, Error ellipse: s-maj=4.2km s-min=2.5km az=163.0*
*TAP **10** 18:26:41.4, 23°.84N×122°.62E, h24$^{km}$, ML2.9, D*
*JMA **10** 18:26:42.2±0.3, 23°.95N×122°.49E, h22$^{km}$±5$^{km}$, M2.0*
**ISC 10 18:26:41.4**±1.2**, 23°.87N**±0°.03×**122°.55E**±0°.02**, h19**$^{km}$±3$^{km}$**, n45,** $\sigma$**0$^s$.57**/79**, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.68** | **32** | P | **Pb** | **18 26 54.7** | **+0.1** |
| JYNG | | | | S | **Sb** | **18 27 02.7** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **0.72** | **35** | P | **Pb** | **18 26 55.5** | **+0.1** |
| YOJ | | | | S | **Sb** | **18 27 03.9** | **-1.0** |
| **TWD** | **Chiawan** | **0.90** | **284** | *e*S | **Sb** | **18 27 09.6** | **-0.3** |
| | baz=284 | | | | | | |
| **ENA** | **Nanau** | **0.93** | **307** | *e*P | **Pb** | **18 26 58.4** | **-0.4** |
| | baz=306 | | | | | | |
| ENA | | | | *e*S | **Sn** | **18 27 12.3** | **+0.1** |
| | baz=306 | | | | | | |
| **TWC** | **Suao** | **0.98** | **319** | *e*P | **Pb** | **18 26 59.0** | **-0.7** |
| | baz=317 | | | | | | |
| TWC | | | | *e*S | **Sb** | **18 27 11.8** | **-0.4** |
| | baz=317 | | | | | | |
| **ESL** | **Shilin** | **1.03** | **267** | *e*P | **Pb** | **18 27 00.4** | **-0.1** |
| | baz=268 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ESL | | | | eS | Sb | 18 27 12.7 | -0.9 |
| | baz=268 | | | | | | |
| EGS | | 1.12 | 330 | P | Pn | 18 27 01.9 | -0.2 |
| | baz=328 | | | | | | |
| EGS | | | | eS | Sn | 18 27 17.1 | +0.1 |
| | baz=328 | | | | | | |
| HATJ | Hateruma jima | 1.16 | 80 | P | Pg | 18 27 04.0 | +0.1 |
| HATJ | | | | S | Sg | 18 27 19.2 | 0.0 |
| TWE | Neicheng | 1.17 | 317 | iP | Pn | 18 27 03.0 | +0.2 |
| | baz=315 | | | | | | |
| TWE | | | | S | Sn | 18 27 18.7 | +0.5 |
| | baz=315 | | | | | | |
| IRIF | Iriomote-Funau | 1.17 | 66 | P | Pg | 18 27 04.0 | -0.1 |
| IRIF | | | | S | Sg | 18 27 19.3 | -0.2 |
| EHY | Hungye | 1.18 | 253 | iP | Pn | 18 27 03.1 | +0.2 |
| | baz=254 | | | | | | |
| EHY | | | | eS | Sb | 18 27 18.1 | 0.0 |
| | baz=254 | | | | | | |
| ENTT | Nioudou | 1.18 | 311 | P | Pn | 18 27 02.9 | 0.0 |
| | baz=309 | | | | | | |
| ENTT | | | | eS | Sn | 18 27 19.0 | +0.5 |
| | baz=309 | | | | | | |
| NNS | Nan Shan | 1.22 | 298 | eP | Pn | 18 27 03.3 | -0.2 |
| | baz=297 | | | | | | |
| NNS | | | | eS | Sb | 18 27 18.6 | -0.7 |
| | baz=297 | | | | | | |
| TWF1 | Yuli | 1.26 | 246 | iP | Pn | 18 27 04.4 | +0.4 |
| | baz=247 | | | | | | |
| TWF1 | | | | S | Sn | 18 27 20.0 | -0.4 |
| | baz=247 | | | | | | |
| WDT | Danda | 1.30 | 265 | iP | Pn | 18 27 04.8 | -0.1 |
| | baz=266 | | | | | | |
| WDT | | | | eS | Sn | 18 27 20.9 | -1.0 |
| | baz=266 | | | | | | |
| TWT | Tachien | 1.31 | 287 | iP | Pb | 18 27 05.8 | +0.2 |
| | baz=287 | | | | | | |
| CHKT | Chengkung | 1.33 | 235 | eS | Sn | 18 27 20.6 | -1.5 |
| | baz=237 | | | | | | |
| NSK | Sanguang | 1.35 | 307 | iP | Pn | 18 27 05.4 | +0.1 |
| | baz=306 | | | | | | |
| NSK | | | | eS | Sb | 18 27 23.8 | +0.6 |
| | baz=306 | | | | | | |
| JKRS | Kuro-shima | 1.38 | 74 | P | Pg | 18 27 07.5 | -0.6 |
| NWF | Wu-fen Shan | 1.39 | 330 | eP | Pn | 18 27 06.0 | +0.2 |
| | baz=328 | | | | | | |
| NWF | | | | eS | Sb | 18 27 24.3 | +0.1 |
| | baz=328 | | | | | | |
| TWA | Mucha | 1.42 | 322 | eP | Pn | 18 27 05.4 | -0.7 |
| | baz=320 | | | | | | |
| TWA | | | | eS | Sb | 18 27 25.4 | +0.5 |
| | baz=320 | | | | | | |
| SMLT | Sun Moon Lake | 1.51 | 271 | eP | Pn | 18 27 08.0 | +0.5 |
| | baz=271 | | | | | | |
| SMLT | | | | S | Sn | 18 27 27.1 | +0.3 |
| | baz=271 | | | | | | |
| YUS | Yu-Shan | 1.51 | 256 | eP | Pn | 18 27 08.8 | +0.9 |
| | baz=256 | | | | | | |
| YUS | | | | S | Sn | 18 27 26.9 | -0.4 |
| | baz=256 | | | | | | |
| JIJ | Ishigaki jima | 1.54 | 71 | P | Pb | 18 27 08.9 | -0.3 |
| JIJ | | | | S | Sb | 18 27 28.7 | +0.4 |
| TYC | Yuchr | 1.55 | 272 | eP | Pn | 18 27 08.6 | +0.7 |
| | baz=272 | | | | | | |
| TYC | | | | eS | Sg | 18 27 32.5 | +1.0 |
| | baz=272 | | | | | | |
| ELDTW | Lidau | 1.56 | 245 | P | Pn | 18 27 08.0 | -0.2 |
| | baz=245 | | | | | | |
| ELDTW | | | | eS | Sn | 18 27 26.9 | -1.0 |
| | baz=245 | | | | | | |
| NSTT | Nanjuang | 1.61 | 299 | eP | Pn | 18 27 09.2 | +0.5 |
| | baz=298 | | | | | | |
| NSTT | | | | S | Sn | 18 27 29.4 | +0.5 |
| | baz=298 | | | | | | |
| ALS | Alishan | 1.64 | 258 | eP | Pn | 18 27 09.7 | +0.3 |
| | baz=258 | | | | | | |
| ALS | | | | eS | Sn | 18 27 30.5 | +0.3 |
| | baz=258 | | | | | | |
| TWQ1 | Liyutan | 1.69 | 287 | eP | Pn | 18 27 10.7 | +0.8 |
| | baz=286 | | | | | | |
| TWQ1 | | | | eS | Sn | 18 27 31.8 | +0.7 |
| | baz=286 | | | | | | |
| TWG | Pinlang | 1.71 | 233 | S | Sn | 18 27 31.6 | +0.1 |
| | baz=234 | | | | | | |
| CHN5 | Tsauling | 1.74 | 261 | eP | Pb | 18 27 12.2 | -0.5 |
| | baz=262 | | | | | | |
| CHN5 | | | | S | Sn | 18 27 33.0 | +0.7 |
| | baz=262 | | | | | | |
| TCU | Taichung | 1.74 | 280 | eP | Pb | 18 27 12.6 | 0.0 |
| | baz=279 | | | | | | |
| TCU | | | | eS | Sb | 18 27 34.1 | 0.0 |
| | baz=279 | | | | | | |
| JISG | Ishigakijimahi | 1.76 | 66 | P | Pn | 18 27 11.6 | +0.8 |
| JISG | | | | S | Sn | 18 27 33.3 | +0.6 |
| STYT | Tauyuan | 1.79 | 247 | eP | Pg | 18 27 15.5 | -0.3 |
| | baz=248 | | | | | | |
| STYT | | | | S | Sn | 18 27 33.7 | +0.2 |
| | baz=248 | | | | | | |
| WGK | Gukeng | 1.83 | 265 | eS | Sg | 18 27 39.7 | -0.8 |
| | baz=265 | | | | | | |
| CHN4 | Tsaushan | 1.87 | 254 | eP | Pb | 18 27 15.2 | +0.3 |
| | baz=255 | | | | | | |
| CHN4 | | | | eS | Sb | 18 27 38.8 | +0.9 |
| | baz=255 | | | | | | |
| WTP | Ta-pu | 1.88 | 251 | eP | Pb | 18 27 14.7 | -0.5 |
| | baz=252 | | | | | | |
| WTP | | | | eS | Sn | 18 27 35.8 | -0.1 |
| | baz=252 | | | | | | |
| ECL | Taimali | 1.94 | 230 | eS | Sn | 18 27 36.8 | -0.3 |
| | baz=230 | | | | | | |
| SGST | Jiashian | 1.97 | 247 | eS | Sn | 18 27 37.9 | 0.0 |
| | baz=247 | | | | | | |
| CHN1 | Nanshi | 1.98 | 250 | eP | Pn | 18 27 14.8 | +1.0 |
| | baz=251 | | | | | | |
| CHN1 | | | | eS | Sb | 18 27 41.0 | 0.0 |
| | baz=251 | | | | | | |
| TWK | Hsinying | 1.99 | 253 | eS | Sb | 18 27 41.9 | +0.6 |
| | baz=253 | | | | | | |
| LAY | Lan-yu | 2.04 | 207 | P | Pn | 18 27 14.5 | -0.2 |
| | baz=208 | | | | | | |
| LAY | | | | eS | Sn | 18 27 39.0 | -0.7 |
| | baz=208 | | | | | | |
| SSD | Sandimen | 2.09 | 238 | eP | Pb | 18 27 18.5 | -0.2 |
| | baz=239 | | | | | | |
| SSD | | | | eS | Sn | 18 27 41.4 | +0.5 |
| | baz=239 | | | | | | |
| EAST | Anshuo | 2.15 | 227 | eP | Pn | 18 27 17.8 | +1.5 |
| | baz=228 | | | | | | |
| SGLT | Jiouru | 2.21 | 239 | S | Sn | 18 27 43.8 | 0.0 |
| | baz=240 | | | | | | |

**GUC 10 18:30:04.0±0.6, 35°.87S×73°.46W, h34km±7km, ML4.3, 2C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| COCH | Cobquecura | 0.61 | 116 | ⇑iP | Pn | 18 30 15.8 | -0.3 |
| COCH | | | | iS | Sn | 18 30 24.5 | -0.2 |
| CCHI | Chillan | 1.34 | 124 | eP | Pn | 18 30 27.2 | +1.0 |
| CCHI | | | | iS | Sb | 18 30 44.8 | -0.6 |
| TALC | Talca | 1.56 | 73 | eP | Pb | 18 30 31.1 | -1.1 |
| TALC | | | | iS | Sb | 18 30 51.2 | -0.5 |
| NICH | Los Niches | 2.02 | 65 | eP | Pb | 18 30 38.2 | -1.8 |
| NICH | | | | iS | Sb | 18 31 03.3 | -1.5 |
| RCDM | Rinconada Maip | 3.23 | 43 | eP | Pn | 18 30 53.4 | +1.1 |
| CLCH | Cerro Calan | 3.45 | 45 | ⇑iP | Pn | 18 30 56.7 | +1.3 |
| CLCH | | | | AML | AML | 18 32 02.1 | |
| | comp=N,428nm,0.7s | | | | | | |
| PEL | Peldehue | 3.55 | 41 | eP | Pn | 18 30 58.3 | +1.5 |
| PEL | | | | eS | Sn | 18 31 39.1 | +1.4 |
| PEL | | | | AML | AML | 18 32 14.3 | |
| | comp=E,386nm,0.6s | | | | | | |

*ISK 10 18:40:49.4, 37°.76N×29°.29E, h4km, MD2.9*
*ISCJB 10 18:40:50.9±0.6, 37°.78N±0°.03×29°.19E±0°.05, h3km±7km, Error ellipse: s-maj=6.6km s-min=4.5km az=8.2*
*DDA 10 18:40:50.9, 37°.77N×29°.18E, h7km, Md2.6*
*CSEM 10 18:40:50.6±0.3, 37°.77N×29°.23E, h5km, MD2.6, Error ellipse: s-maj=5.7km s-min=4.2km az=105.0*
**ISC 10 18:40:50.4±1.1, 37°.75N±0°.03×29°.25E±0°.03, h8km±8km, n22, σ0s.43/35, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DENT | Denizli | 0.17 | 270 | ePG | Pg | 18 40 53.9 | 0.0 |
| DENT | Denizli | 0.17 | 270 | ePg | Pg | 18 40 53.9 | 0.0 |
| DNZL | Cakiroluk | 0.17 | 248 | iP | Pg | 18 40 54.2 | +0.2 |
| DNZL | | | | iS | Sg | 18 40 56.2 | -0.3 |
| DNZL | Cakiroluk | 0.17 | 248 | P | Pg | 18 40 54.2 | +0.2 |
| DNZL | | | | S | Sg | 18 40 56.2 | -0.3 |
| GOLH | Golhisar | 0.57 | 154 | iP | Pb | 18 41 03.0 | +0.3 |
| GOLH | Golhisar | 0.57 | 154 | P | Pb | 18 41 03.0 | +0.3 |
| GOLH | | | | S | Sn | 18 41 13.6 | -1.1 |
| KHL | Karahalli | 0.61 | 21 | ePG | Pg | 18 41 01.6 | -0.5 |
| KHL | Karahalli | 0.61 | 21 | ePg | Pg | 18 41 01.6 | -0.5 |
| KHAL | Karahalli | 0.65 | 17 | iP | Pg | 18 41 03.3 | +0.5 |
| KHAL | | | | iS | Sb | 18 41 12.9 | -0.3 |
| KHAL | Karahalli | 0.65 | 17 | P | Pg | 18 41 03.3 | +0.5 |
| KHAL | | | | S | Sb | 18 41 12.9 | -0.3 |
| KULA | Kula-Manisa | 0.89 | 329 | ePG | Pg | 18 41 07.1 | -0.4 |
| KULA | | | | eSG | Sb | 18 41 19.9 | -0.4 |
| KULA | Kula-Manisa | 0.89 | 329 | ePg | Pg | 18 41 07.1 | -0.4 |
| KULA | | | | eSg | Sb | 18 41 19.9 | -0.4 |
| MANT | Manisa | 0.92 | 324 | iP | Pg | 18 41 08.0 | 0.0 |
| MANT | | | | iS | Sg | 18 41 20.1 | +0.2 |
| MANT | Manisa | 0.92 | 324 | P | Pg | 18 41 08.0 | 0.0 |
| MANT | | | | S | Sg | 18 41 20.1 | +0.2 |
| YER | Yerkesik | 0.99 | 232 | ePG | Pg | 18 41 09.3 | 0.0 |
| YER | Yerkesik | 0.99 | 232 | ePg | Pg | 18 41 09.3 | 0.0 |
| DALY | Dalyan (Mu˜la | 1.05 | 207 | ePG | Pg | 18 41 10.3 | -0.2 |
| DALY | Dalyan (Mu˜la | 1.05 | 207 | ePg | Pg | 18 41 10.3 | -0.2 |
| AYDN | Tasoluk | 1.09 | 266 | iP | Pn | 18 41 12.9 | +0.9 |
| AYDN | | | | iS | Sb | 18 41 25.4 | -0.6 |
| AYDN | Tasoluk | 1.09 | 266 | P | Pn | 18 41 12.9 | +0.9 |
| AYDN | | | | S | Sb | 18 41 25.4 | -0.6 |
| AYDB | Zeytinkoy-Aydi | 1.09 | 281 | ePN | Pb | 18 41 11.4 | -0.2 |
| AYDB | | | | eSN | Sn | 18 41 27.6 | +0.1 |
| AYDB | Zeytinkoy-Aydi | 1.09 | 281 | ePn | Pb | 18 41 11.4 | -0.2 |
| AYDB | | | | eSn | Sn | 18 41 27.6 | +0.1 |

*ISCJB 10 19:13:11.8±0.7, 18°.4S±0°.2×178°.2W±0°.1, h400km, mb3.8/10, Error ellipse: s-maj=23.2km s-min=10.1km az=152.3*
*IDC 10 19:13:14.5±2.4, 18°.38S×178°.17W, h414km±24km, mb3.4/10, mb1 3.7/11, mb1mx3.5/24, mbtmp4.2/11, Error ellipse: s-maj=20.4km s-min=14.6km az=146.0*
**ISC 10 19:13:13.5±0.7, 18°.3S±0°.2×178°.1W±0°.1, h400km, n39, σ1s.48/39, mb3.8/10, 8C-5D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 7.50 | 55 | P | P | 19 15 05.5 | +2.1 |
| | 5.8nm,0.3s,baz=201,slow=3.0,SNR=7.1 | | | | | | |
| AFI | | | | S | S | 19 16 29.2 | -3.2 |
| | 10nm,0.3s,baz=30,slow=22,SNR=7.8 | | | | | | |
| WRA | Warramunga Arr | 44.84 | 260 | P | P | 19 20 49.6 | -0.6 |
| | 0.4nm,0.6s,baz=94,slow=7.0,SNR=10 | | | | | | |
| ASAR | Alice Springs | 44.96 | 255 | P | P | 19 20 50.5 | -0.6 |
| | 2.1nm,0.6s,baz=91,slow=8.5,SNR=66 | | | | | | |
| GUMO | Guam | 48.35 | 308 | P | P | 19 21 16.3 | -0.7 |
| | 20nm,0.6s,baz=0.0,slow=20,SNR=2.4 | | | | | | |
| VNDA | Vanda | 60.06 | 185 | P | P | 19 22 38.5 | -1.0 |
| | 0.9nm,0.9s,baz=359,slow=8.7,SNR=3.2 | | | | | | |
| MJAR | Matsushiro Arr | 68.40 | 323 | P | P | 19 23 33.2 | -0.4 |
| | 0.6nm,0.5s,baz=145,slow=6.1,SNR=5.2 | | | | | | |
| PETK | Petropavlovsk- | 74.15 | 345 | P | P | 19 24 08.0 | +0.8 |
| | 5.4nm,0.8s,baz=116,slow=10,SNR=5.4 | | | | | | |
| USRK | Ussuriysk Ar. | 77.11 | 326 | P | P | 19 24 23.4 | -0.5 |
| | 2.5nm,0.7s,baz=146,slow=44,SNR=3.2 | | | | | | |
| NVAR | Mina Array Bea | 79.52 | 44 | P | P | 19 24 37.5 | +0.1 |
| | 1.1nm,0.7s,baz=226,slow=8.5,SNR=13 | | | | | | |
| TXAR | Lajitas Array | 85.97 | 57 | P | P | 19 25 10.9 | +0.6 |
| | 1.5nm,0.7s,baz=217,slow=6.4,SNR=24 | | | | | | |
| ILAR | Eielson Array | 86.22 | 13 | P | P | 19 25 09.1 | -1.4 |
| | 1.1nm,0.4s,baz=218,slow=5.1,SNR=24 | | | | | | |
| ARCES | ARCESS Array B | 126.77 | 350 | PKP | PKPdf | 19 31 27.9 | -1.7 |
| | 3.4nm,1.0s,baz=46,slow=2.6,SNR=4.3 | | | | | | |
| FINES | FINESS Array B | 133.66 | 344 | PKP | PKPdf | 19 31 41.7 | -1.1 |
| | 3.0nm,0.9s,baz=289,slow=5.8,SNR=3.1 | | | | | | |
| AKASG | Malin Array Be | 141.05 | 332 | PKP | PKPdf | 19 31 56.4 | -0.3 |
| | 0.3nm,0.3s,baz=43,slow=2.7,SNR=3.5 | | | | | | |
| BURAR | Bucovina Array | 145.11 | 332 | ⇑iP | PKPbc | 19 32 05.6 | +1.0 |
| TESR | Tescani | 145.25 | 330 | ⇑iP | PKPdf | 19 32 05.7 | +1.4 |
| BRTR | Keskin Array B | 145.27 | 315 | PKPbc | PKPdf | 19 32 05.3 | +0.6 |
| | 1.5nm,0.6s,baz=132,slow=4.7,SNR=9.6 | | | | | | |
| VRI | Vrincioaia | 145.68 | 329 | ⇓iP | PKPbc | 19 32 07.6 | +1.4 |
| PLOR | Plostina | 145.72 | 329 | ⇑iP | PKPdf | 19 32 01.8 | -3.4 |
| TRPA | Tarpa | 145.84 | 335 | ⇓iP | PKPdf | 19 32 06.7 | +1.5 |
| HARR | Harsova | 145.87 | 326 | ⇑iP | PKPab | 19 32 19.0 | +11 |
| CLL | Collm | 145.92 | 348 | ⇓iPKP | PKPdf | 19 32 06.1 | +0.8 |
| | comp=Z,12nm,1.0s | | | | | | |
| UPC | Upice | 145.96 | 344 | ePKP | PKPdf | 19 32 06.9 | +1.5 |
| UPC | | | | ex | x | 19 32 09.3 | |
| DPC | Dobruska-Polom | 146.02 | 343 | ePKP | PKPdf | 19 32 07.2 | +1.7 |
| DPC | | | | ex | x | 19 32 08.5 | |
| DPC | | | | ex | x | 19 32 09.5 | |
| BRG | Berggiesshubel | 146.13 | 346 | eP | PKPdf | 19 32 07.2 | +1.6 |
| | comp=Z,5.2nm,0.8s | | | | | | |
| BRG | | | | e | | 19 32 09.6 | |
| | comp=Z,3.4nm,0.9s | | | | | | |
| KRLC | Kraliky | 146.14 | 343 | ePKP | PKPdf | 19 32 07.3 | +1.5 |
| KRLC | | | | ex | x | 19 32 09.7 | |
| DOPR | Dopca | 146.25 | 330 | ⇑iP | PKPbc | 19 32 08.6 | +0.7 |
| PVCC | Panska Ves | 146.31 | 345 | ePKP | PKPdf | 19 32 07.4 | +1.5 |
| PVCC | | | | ex | x | 19 32 10.3 | |
| MLR | Muntele Rosu | 146.33 | 329 | ⇑iP | PKPdf | 19 32 08.4 | +2.1 |
| VOIR | | 146.80 | 330 | ⇑iP | PKPab | 19 32 12.9 | +1.0 |
| PRU | Pruhonice | 146.81 | 345 | ePKP | PKPdf | 19 32 08.8 | +2.0 |
| PRU | | | | ex | x | 19 32 12.1 | |
| DRGR | | 146.83 | 333 | ⇑iP | PKPbc | 19 32 09.5 | -0.1 |
| VRAC | Vranov | 146.88 | 342 | PKPbc | PKPdf | 19 32 08.8 | +1.8 |
| | comp=Z,1.7nm,0.6s,baz=153,slow=2.3,SNR=2.0 | | | | | | |
| VRAC | Vranov | 146.88 | 342 | ⇓iP | PKPab | 19 32 12.8 | +0.8 |
| NKC | Novy Kostel | 147.06 | 348 | ePKP | PKPbc | 19 32 10.0 | 0.0 |
| NKC | | | | ex | x | 19 32 12.4 | |
| KHC | Kasperske Hory | 147.84 | 346 | ePKP | PKPbc | 19 32 11.7 | -0.4 |
| KHC | | | | ex | x | 19 32 16.5 | |
| GZR | Gura Zlata | 147.89 | 332 | ⇓iP | PKPbc | 19 32 12.0 | -0.4 |
| GERES | GERESS Array B | 148.08 | 345 | PKPbc | PKPdf | 19 32 11.9 | +2.9 |
| | comp=Z,1.8nm,0.5s,baz=31,slow=3.0,SNR=18 | | | | | | |
| DAVOX | Davos/Dischmat | 150.86 | 349 | PKPbc | PKPbc | 19 32 19.2 | -0.5 |
| | comp=Z,4.2nm,0.4s,baz=250,slow=4.7,SNR=16 | | | | | | |

*CSEM 10 19:16:46.3, 39°.84N×15°.95E, h8km, MD2.1/9, After ROM*
**ROM 10 19:16:46.3±0.4, 39°.84N×15°.95E, h8km±1km, Md2.1/9, Ml1.7/8, Error ellipse: s-maj=5.2km s-min=1.8km az=25.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MMN | Mormanno | 0.06 | 28 | Pg | Pg | 19 16 48.9 | +0.7 |
| MMN | | | | Sg | Sg | 19 16 49.8 | +0.2 |
| | 1μm,0.1s | | | | | | |
| MMN | Mormanno | 0.06 | 28 | Pg | Pg | 19 16 48.9 | +0.7 |
| MMN | | | | Sg | Sg | 19 16 49.8 | +0.2 |
| | 1μm,0.1s | | | | | | |
| CUC | Castrocucco | 0.19 | 326 | Pg | Pg | 19 16 51.2 | +0.9 |
| CUC | | | | Sg | Sg | 19 16 54.1 | +1.0 |
| | 177nm,0.3s | | | | | | |
| CUC | Castrocucco | 0.19 | 326 | Pg | Pg | 19 16 51.2 | +0.9 |
| CUC | | | | Sg | Sg | 19 16 54.1 | +1.0 |
| | 177nm,0.3s | | | | | | |
| SALB | San Lorenzo Be | 0.31 | 82 | Pg | Pg | 19 16 52.7 | +0.1 |
| SALB | | | | Sg | Sb | 19 16 59.2 | -0.3 |
| | 98nm,0.5s | | | | | | |
| SALB | San Lorenzo Be | 0.31 | 82 | Pg | Pg | 19 16 52.7 | +0.1 |
| SALB | | | | Sg | Sb | 19 16 59.2 | -0.3 |
| | 98nm,0.5s | | | | | | |
| SIRI | Monte Sirino - | 0.35 | 349 | Pg | Pg | 19 16 53.9 | +0.5 |
| SIRI | | | | Sg | Sb | 19 16 59.6 | -1.2 |
| | 123nm,0.5s | | | | | | |
| SIRI | Monte Sirino - | 0.35 | 349 | Pg | Pg | 19 16 53.9 | +0.5 |
| SIRI | | | | Sg | Sb | 19 16 59.6 | -1.2 |
| | 123nm,0.5s | | | | | | |
| SCHR | S. Chirico Rap | 0.38 | 15 | Pg | Pg | 19 16 54.5 | +0.7 |
| SCHR | | | | Sg | Sg | 19 16 59.8 | +0.9 |
| | 41nm,0.8s | | | | | | |
| ORI | Oriolo Calabro | 0.45 | 59 | Pg | Pg | 19 16 55.2 | +0.2 |
| ORI | | | | Sg | Sb | 19 17 03.2 | -0.1 |
| | 155nm,0.4s | | | | | | |
| ORI | Oriolo Calabro | 0.45 | 59 | Pg | Pg | 19 16 55.2 | +0.2 |
| ORI | | | | Sg | Sb | 19 17 03.2 | -0.1 |
| | 155nm,0.4s | | | | | | |
| MTSN | Montesano sull | 0.46 | 340 | Pg | Pg | 19 16 55.7 | +0.3 |
| MTSN | | | | Sg | Sb | 19 17 03.6 | -0.2 |
| | 19nm,0.6s | | | | | | |
| MTSN | Montesano sull | 0.46 | 340 | Pg | Pg | 19 16 55.7 | +0.3 |
| MTSN | | | | Sg | Sb | 19 17 03.6 | -0.2 |
| | 19nm,0.6s | | | | | | |
| MCEL | Monticello | 0.50 | 347 | Pg | Pg | 19 16 56.3 | +0.1 |
| MCEL | | | | Sg | Sb | 19 17 04.6 | -0.5 |
| | 25nm,0.4s | | | | | | |
| MCEL | Monticello | 0.50 | 347 | Pg | Pg | 19 16 56.3 | +0.1 |
| MCEL | | | | Sg | Sb | 19 17 04.6 | -0.5 |
| | 25nm,0.4s | | | | | | |
| SLCN | Sala Consilina | 0.61 | 336 | Pg | Pg | 19 16 58.5 | +0.3 |
| | 91nm,1.2s | | | | | | |
| SLCN | Sala Consilina | 0.61 | 336 | Pg | Pg | 19 16 58.5 | +0.3 |
| | 91nm,1.2s | | | | | | |

*BJI 10 19:17:50.5, 35°.30N×22°.20E, h10km, mb4.5/10, mB4.7/4, Ms4.6/1, Ms7 3.9/1*
*IDC 10 19:17:52.6±0.5, 35°.53N×22°.43E, h0km, mb4.3/30, mb1 4.4/38, mb1mx4.4/50, mbtmp4.3/38, ML4.2/7, MS3.5/14, Ms1 3.5/14, ms1mx3.2/47, Error ellipse: s-maj=11.6km s-min=10.3km az=90.0*
*MOS 10 19:17:54.2±1.3, 35°.46N×22°.25E, h25km, mb4.6/21, Error ellipse: s-maj=6.9km s-min=2.9km az=86.7*
*ISCJB 10 19:17:56.0±0.2, 35°.42N±0°.02×22°.25E±0°.02, h44km, mb4.3/49, MS3.5/11, Error ellipse: s-maj=2.7km s-min=1.8km az=43.1*
*PDG 10 19:17:55.3±0.3, 35°.64N×21°.94E, h10km±1km, ML4.4/11, Error ellipse: s-maj=6.6km s-min=2.2km az=90.0*
*HLW 10 19:17:55.0, 35°.66N×22°.66E, h20km±14km, Md3.6, Ml3.6*
*CSEM 10 19:17:57.8±0.1, 35°.39N×22°.28E, h40km, mb4.4/17, Error ellipse: s-maj=3.9km s-min=2.9km az=53.0*
*THE 10 19:17:58.5, 35°.41N×22°.35E, h47km±10km, ML4.4/3, Error ellipse: s-maj=10.9km s-min=1.2km az=38.0*
*ATH 10 19:17:59.0, 35°.56N×22°.50E, h37km±3km, MD4.1/48, ML4.0*
*NEIC 10 19:17:59.0, 35°.56N×22°.50E, h37km, mb4.3/12, ML4.0(ATH), ML4.4(THE), After ATH.*
*NIC 10 19:18:02.1, 35°.12N×23°.08E, h25km, mb5.1, ML4.6*
**ISC 10 19:17:58.5±0.4, 35°.46N±0°.04×22°.35E±0°.04, h44km, n806, σ1s.37/813, mb4.4/49, MS3.5/11, 27C-39D, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANKY | Antikythira Is | 0.88 | 62 | ePN | Pn | 19 18 13.1 | -1.3 |
| ANKY | | | | eSN | Sn | 19 18 24.8 | -1.2 |
| ANKY | Antikythira Is | 0.88 | 62 | P | Pn | 19 18 13.1 | -1.3 |
| ANKY | | | | S | Sn | 19 18 26.9 | +0.9 |
| ANKY | Antikythira Is | 0.88 | 62 | P | Pn | 19 18 13.1 | -1.3 |
| ANKY | | | | S | Sn | 19 18 26.9 | +0.9 |
| ANKY | Antikythira Is | 0.88 | 62 | P | Pn | 19 18 13.1 | -1.3 |
| ANKY | | | | eSn | Sn | 19 18 24.8 | -1.2 |
| ANKY | | | | S | Sn | 19 18 26.9 | +0.9 |
| KYTH | Kithira | 0.99 | 34 | ePN | Pn | 19 18 15.1 | -1.0 |
| KYTH | Kithira | 0.99 | 34 | P | Pn | 19 18 15.0 | -1.0 |
| KYTH | Kithira | 0.99 | 34 | P | Pn | 19 18 15.0 | -1.0 |
| KYTH | Kithira | 0.99 | 34 | ePn | Pn | 19 18 15.1 | -1.0 |
| IMMV | Iera Moni Meta | 1.33 | 89 | ePN | Pn | 19 18 21.6 | +1.0 |
| IMMV | Iera Moni Meta | 1.33 | 89 | ePn | Pn | 19 18 21.6 | +1.0 |
| VLI | Veliai | 1.34 | 21 | ePN | Pn | 19 18 21.7 | +0.9 |
| VLI | Veliai | 1.34 | 21 | P | Pn | 19 18 21.4 | +0.6 |
| VLI | Veliai | 1.34 | 21 | P | Pn | 19 18 21.4 | +0.6 |
| VLI | Veliai | 1.34 | 21 | P | Pn | 19 18 21.4 | +0.6 |
| VLI | Veliai | 1.34 | 21 | ePn | Pn | 19 18 21.7 | +0.9 |
| VAM | Vamos | 1.51 | 91 | P | Pn | 19 18 24.0 | +0.9 |
| VAM | Vamos | 1.51 | 91 | ePN | Pn | 19 18 23.8 | +0.7 |
| VAM | Vamos | 1.51 | 91 | P | Pn | 19 18 24.0 | +0.9 |
| VAM | Vamos | 1.51 | 91 | P | Pn | 19 18 24.0 | +0.9 |
| VAM | Vamos | 1.51 | 91 | ePn | Pn | 19 18 23.8 | +0.7 |
| PYL | PYLOS | 1.52 | 341 | ePN | Pn | 19 18 25.1 | +1.9 |
| PYL | PYLOS | 1.52 | 341 | P | Pn | 19 18 23.0 | -0.2 |
| PYL | | | | S | Sn | 19 18 43.2 | +1.5 |
| PYL | PYLOS | 1.52 | 341 | P | Pn | 19 18 23.0 | -0.2 |
| PYL | | | | S | Sn | 19 18 43.2 | +1.5 |
| PYL | PYLOS | 1.52 | 341 | P | Pn | 19 18 23.0 | -0.2 |
| PYL | PYLOS | 1.52 | 341 | ePn | Pn | 19 18 25.1 | +1.9 |
| PYL | | | | S | Sn | 19 18 43.2 | +1.5 |
| ITM | Ithomi | 1.75 | 349 | ePB | Pn | 19 18 28.9 | +2.5 |
| ITM | Ithomi | 1.75 | 349 | P | Pn | 19 18 26.7 | +0.3 |
| ITM | Ithomi | 1.75 | 349 | P | Pn | 19 18 26.7 | +0.3 |
| ITM | Ithomi | 1.75 | 349 | P | Pn | 19 18 26.7 | +0.3 |
| ITM | Ithomi | 1.75 | 349 | ePb | Pn | 19 18 28.9 | +2.5 |
| VLX | Vlachokerasia | 1.91 | 1 | ePN | Pn | 19 18 29.7 | +1.1 |
| VLX | Vlachokerasia | 1.91 | 1 | P | Pn | 19 18 29.9 | +1.3 |
| VLX | Vlachokerasia | 1.91 | 1 | P | Pn | 19 18 29.9 | +1.3 |
| VLX | Vlachokerasia | 1.91 | 1 | ePn | Pn | 19 18 29.7 | +1.1 |
| KRND | KRANIDI | 2.03 | 18 | ePB | Pn | 19 18 31.4 | +1.2 |
| KRND | KRANIDI | 2.03 | 18 | P | Pn | 19 18 31.4 | +1.2 |
| KRND | KRANIDI | 2.03 | 18 | P | Pn | 19 18 31.4 | +1.2 |
| SIVA | Sivas | 2.06 | 102 | ePN | Pn | 19 18 31.4 | +0.8 |
| SIVA | Sivas | 2.06 | 102 | ePn | Pn | 19 18 31.4 | +0.8 |
| MHLO | Agia Marina, M | 2.07 | 53 | ePN | Pn | 19 18 31.3 | +0.6 |
| MHLO | Agia Marina, M | 2.07 | 53 | P | Pn | 19 18 31.4 | +0.7 |
| MHLO | Agia Marina, M | 2.07 | 53 | ePn | Pn | 19 18 31.3 | +0.6 |
| IDI | Anoyia | 2.08 | 94 | Pn | Pn | 19 18 31.8 | +0.8 |
| | 232nm,0.3s,baz=284,slow=17,SNR=1806 | | | | | | |
| IDI | | | | LR | LR | 19 18 58.8 | |
| | comp=Z,130nm,20.9s,baz=274,slow=33 | | | | | | |
| IDI | | | | Sn | Sn | 19 18 59.2 | +3.4 |
| | 62nm,0.3s,baz=42,slow=22,SNR=5.6 | | | | | | |
| IDI | Anoyia | 2.08 | 94 | ePN | Pn | 19 18 32.1 | +1.1 |
| IDI | Anoyia | 2.08 | 94 | P | Pn | 19 18 31.4 | +0.4 |
| IDI | Anoyia | 2.08 | 94 | ePn | Pn | 19 18 32.1 | +1.1 |
| IDI | | | | eSn | Sn | 19 18 54.0 | -1.8 |
| IDI | | | | Sn | Sn | 19 18 59.1 | +3.3 |
| IDI | Anoyia | 2.08 | 94 | P | Pn | 19 18 31.4 | +0.4 |
| IDI | Anoyia | 2.08 | 94 | ePn | Pn | 19 18 32.1 | +1.1 |
| IDI | | | | eSn | Sn | 19 18 54.0 | -1.8 |
| DIDY | Didyma | 2.13 | 19 | ePN | Pn | 19 18 32.3 | +0.6 |
| DIDY | Didyma | 2.13 | 19 | P | Pn | 19 18 32.4 | +0.7 |
| DIDY | Didyma | 2.13 | 19 | ePn | Pn | 19 18 32.3 | +0.6 |
| AMT | Artemida-Makis | 2.13 | 346 | ePN | Pn | 19 18 33.0 | +1.3 |
| AMT | Artemida-Makis | 2.13 | 346 | P | Pn | 19 18 32.8 | +1.1 |
| AMT | Artemida-Makis | 2.13 | 346 | P | Pn | 19 18 32.8 | +1.1 |
| DID | Didima | 2.17 | 19 | P | Pn | 19 18 32.7 | +0.6 |
| DID | Didima | 2.17 | 19 | P | Pn | 19 18 32.7 | +0.6 |
| DID | Didima | 2.17 | 19 | P | Pn | 19 18 32.7 | +0.6 |
| IACM | Heraklion | 2.23 | 93 | ePN | Pn | 19 18 34.5 | +1.6 |
| IACM | Heraklion | 2.23 | 93 | ePn | Pn | 19 18 34.5 | +1.6 |
| SERI | Serifos | 2.42 | 45 | ePN | Pn | 19 18 35.4 | -0.2 |
| SERI | Serifos | 2.42 | 45 | ePn | Pn | 19 18 35.4 | -0.2 |
| GUR | Goura | 2.47 | 360 | ePN | Pn | 19 18 38.0 | +1.6 |
| GUR | Goura | 2.47 | 360 | P | Pn | 19 18 38.6 | +2.2 |
| GUR | Goura | 2.47 | 360 | P | Pn | 19 18 38.6 | +2.2 |
| GUR | Goura | 2.47 | 360 | ePn | Pn | 19 18 38.0 | +1.6 |
| GUR | Goura | 2.47 | 360 | P | Pn | 19 18 38.6 | +2.2 |
| DRO | Drossia | 2.54 | 349 | P | Pn | 19 18 38.9 | +1.7 |
| DRO | Drossia | 2.54 | 349 | P | Pn | 19 18 38.9 | +1.7 |
| ZKS | Zakynthos | 2.56 | 331 | P | Pn | 19 18 36.7 | -0.9 |
| ZKS | Zakynthos | 2.56 | 331 | P | Pn | 19 18 36.7 | -0.9 |
| LOUT | Loutraki | 2.57 | 11 | ePN | Pn | 19 18 39.2 | +1.5 |
| LOUT | Loutraki | 2.57 | 11 | P | Pn | 19 18 39.5 | +1.8 |
| LOUT | Loutraki | 2.57 | 11 | ePn | Pn | 19 18 39.2 | +1.5 |
| LOUT | Loutraki | 2.57 | 11 | P | Pn | 19 18 39.5 | +1.8 |
| LAST | Lasithi | 2.58 | 96 | ePN | Pn | 19 18 39.1 | +1.3 |
| LAST | Lasithi | 2.58 | 96 | ePn | Pn | 19 18 39.1 | +1.3 |
| KLV | Kalavryta, Ach | 2.58 | 357 | ePN | Pn | 19 18 39.9 | +2.0 |
| KLV | Kalavryta, Ach | 2.58 | 357 | P | Pn | 19 18 40.3 | +2.4 |
| KLV | Kalavryta, Ach | 2.58 | 357 | P | Pn | 19 18 40.3 | +2.4 |
| KLV | Kalavryta, Ach | 2.58 | 357 | ePn | Pn | 19 18 39.9 | +2.0 |
| KLV | Kalavryta, Ach | 2.58 | 357 | P | Pn | 19 18 40.3 | +2.4 |
| THAL | Thalero | 2.59 | 6 | ePN | Pn | 19 18 39.4 | +1.6 |
| THAL | Thalero | 2.59 | 6 | P | Pn | 19 18 39.7 | +1.9 |
| THAL | Thalero | 2.59 | 6 | ePn | Pn | 19 18 39.4 | +1.6 |
| THAL | Thalero | 2.59 | 6 | P | Pn | 19 18 39.7 | +1.9 |
| LTK | Loutraki | 2.61 | 11 | ePN | Pn | 19 18 39.6 | +1.4 |
| LTK | Loutraki | 2.61 | 11 | P | Pn | 19 18 39.6 | +1.4 |
| LTK | Loutraki | 2.61 | 11 | P | Pn | 19 18 39.6 | +1.4 |
| LTK | Loutraki | 2.61 | 11 | P | Pn | 19 18 39.6 | +1.4 |
| THR5 | Thira Island, | 2.62 | 68 | P | Pn | 19 18 38.6 | +0.4 |
| THR6 | Thira Island, | 2.63 | 69 | P | Pn | 19 18 38.9 | +0.4 |
| THR6 | Thira Island, | 2.63 | 69 | P | Pn | 19 18 38.9 | +0.4 |
| THR3 | Thira Island, | 2.65 | 68 | P | Pn | 19 18 39.2 | +0.5 |
| THR3 | Thira Island, | 2.65 | 68 | P | Pn | 19 18 39.2 | +0.5 |
| VLY | Voula,Athens | 2.66 | 26 | ePN | Pn | 19 18 39.0 | +0.2 |
| VLY | Voula,Athens | 2.66 | 26 | P | Pn | 19 18 38.8 | 0.0 |
| VLY | Voula,Athens | 2.66 | 26 | P | Pn | 19 18 38.8 | 0.0 |
| VLY | Voula,Athens | 2.66 | 26 | ePn | Pn | 19 18 39.0 | +0.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NPS | Neapolis | 2.67 | 93 | ePN | Pn | 19 18 39.6 | +0.5 |
| NPS | Neapolis | 2.67 | 93 | ePn | Pn | 19 18 39.6 | +0.5 |
| THR7 | Fira-Santorini | 2.68 | 68 | P | Pn | 19 18 39.4 | +0.3 |
| SANT | Santorini | 2.68 | 69 | ePN | Pn | 19 18 39.5 | +0.3 |
| SANT | Santorini | 2.68 | 69 | P | Pn | 19 18 39.5 | +0.3 |
| SANT | Santorini | 2.68 | 69 | ePn | Pn | 19 18 39.0 | -0.2 |
| SANT | Santorini | 2.68 | 69 | ePn | Pn | 19 18 39.5 | +0.3 |
| THR1 | Thera Island | 2.68 | 69 | P | Pn | 19 18 39.6 | +0.4 |
| RLS | Riolos of Patr | 2.69 | 345 | ePN | Pn | 19 18 40.6 | +1.3 |
| RLS | Riolos of Patr | 2.69 | 345 | P | Pn | 19 18 40.5 | +1.3 |
| RLS | Riolos of Patr | 2.69 | 345 | P | Pn | 19 18 40.5 | +1.3 |
| RLS | Riolos of Patr | 2.69 | 345 | P | Pn | 19 18 40.5 | +1.3 |
| THR2 | Thira island, | 2.69 | 68 | P | Pn | 19 18 39.3 | 0.0 |
| THR2 | Thira island, | 2.69 | 68 | P | Pn | 19 18 39.3 | 0.0 |
| ATH | Athens Observa | 2.74 | 23 | P | Pn | 19 18 41.0 | +1.1 |
| ATH | Athens Observa | 2.74 | 23 | ePN | Pn | 19 18 41.1 | +1.1 |
| ATH | Athens Observa | 2.74 | 23 | P | Pn | 19 18 41.0 | +1.1 |
| ATH | Athens Observa | 2.74 | 23 | P | Pn | 19 18 41.0 | +1.1 |
| ATH | Athens Observa | 2.74 | 23 | P | Pn | 19 18 41.0 | +1.1 |
| ATHU | Athens Univers | 2.76 | 24 | P | Pn | 19 18 40.7 | +0.5 |
| ATHU | Athens Univers | 2.76 | 24 | P | Pn | 19 18 40.7 | +0.5 |
| ATHU | Athens Univers | 2.76 | 24 | P | Pn | 19 18 40.7 | +0.5 |
| LAKA | Lakka | 2.79 | 354 | ePN | Pn | 19 18 42.9 | +2.2 |
| LAKA | Lakka | 2.79 | 354 | P | Pn | 19 18 42.5 | +1.8 |
| LAKA | Lakka | 2.79 | 354 | P | Pn | 19 18 42.5 | +1.8 |
| LAKA | Lakka | 2.79 | 354 | P | Pn | 19 18 42.5 | +1.8 |
| LAKA | Lakka | 2.79 | 354 | ePn | Pn | 19 18 42.9 | +2.2 |
| VILL | Villia | 2.81 | 16 | P | Pn | 19 18 41.2 | +0.2 |
| VILL | Villia | 2.81 | 16 | P | Pn | 19 18 41.2 | +0.2 |
| VILL | Villia | 2.81 | 16 | ePn | Pn | 19 18 41.8 | +0.8 |
| AXS | Araxos | 2.84 | 344 | P | Pn | 19 18 43.1 | +1.8 |
| AXS | Araxos | 2.84 | 344 | P | Pn | 19 18 43.1 | +1.8 |
| VIL2 | Platees | 2.84 | 15 | ePN | Pn | 19 18 41.8 | +0.4 |
| PTL | Penteli | 2.86 | 25 | ePN | Pn | 19 18 42.2 | +0.6 |
| PTL | Penteli | 2.86 | 25 | P | Pn | 19 18 42.5 | +0.9 |
| PTL | Penteli | 2.86 | 25 | P | Pn | 19 18 42.5 | +0.9 |
| PTL | Penteli | 2.86 | 25 | ePn | Pn | 19 18 42.2 | +0.6 |
| PTL | Penteli | 2.86 | 25 | P | Pn | 19 18 42.5 | +0.9 |
| KFL | Anninata | 2.93 | 335 | P | Pn | 19 18 42.3 | -0.2 |
| KFL | Anninata | 2.93 | 335 | P | Pn | 19 18 42.3 | -0.2 |
| KALE | Kalithea | 2.93 | 357 | ePN | Pn | 19 18 44.2 | +1.6 |
| KALE | Kalithea | 2.93 | 357 | P | Pn | 19 18 44.1 | +1.5 |
| KALE | Kalithea | 2.93 | 357 | P | Pn | 19 18 44.1 | +1.5 |
| KALE | Kalithea | 2.93 | 357 | P | Pn | 19 18 44.1 | +1.5 |
| DSF | Desfina | 2.95 | 3 | ePN | Pn | 19 18 43.6 | +0.7 |
| DSF | Desfina | 2.95 | 3 | P | Pn | 19 18 43.8 | +0.9 |
| DSF | Desfina | 2.95 | 3 | P | Pn | 19 18 43.8 | +0.9 |
| DSF | Desfina | 2.95 | 3 | ePn | Pn | 19 18 43.6 | +0.7 |
| SERG | Sergoula | 2.96 | 356 | P | Pn | 19 18 44.7 | +1.7 |
| SERG | Sergoula | 2.96 | 356 | P | Pn | 19 18 44.7 | +1.7 |
| EFP | Efpalio | 2.98 | 353 | ePN | Pn | 19 18 45.7 | +2.4 |
| EFP | Efpalio | 2.98 | 353 | P | Pn | 19 18 46.0 | +2.7 |
| EFP | Efpalio | 2.98 | 353 | ePn | Pn | 19 18 45.7 | +2.4 |
| EFP | Efpalio | 2.98 | 353 | P | Pn | 19 18 46.0 | +2.7 |
| APE | Apeiranthos | 3.03 | 57 | d iP | Pn | 19 18 44.5 | +0.4 |
| APE | Apeiranthos | 3.03 | 57 | ⇑iP | Pn | 19 18 44.2 | +0.3 |
| APE | Apeiranthos | 3.03 | 57 | ePN | Pn | 19 18 44.3 | +0.3 |
| APE | Apeiranthos | 3.03 | 57 | P | Pn | 19 18 44.4 | +0.4 |
| APE | Apeiranthos | 3.03 | 57 | P | Pn | 19 18 44.4 | +0.4 |
| APE | Apeiranthos | 3.03 | 57 | ePn | Pn | 19 18 44.3 | +0.3 |
| VLS | Valsamata | 3.06 | 333 | P | Pn | 19 18 44.2 | -0.1 |
| VLS | Valsamata | 3.06 | 333 | P | Pn | 19 18 44.2 | -0.1 |
| VLS | Valsamata | 3.06 | 333 | P | Pn | 19 18 44.2 | -0.1 |
| VLS | Valsamata | 3.06 | 333 | P | Pn | 19 18 44.2 | -0.1 |
| KARY | Karystos | 3.07 | 33 | P | Pn | 19 18 44.9 | +0.5 |
| ZKR | Zakros | 3.18 | 95 | P | Pn | 19 18 47.2 | +1.2 |
| ZKR | Zakros | 3.18 | 95 | P | Pn | 19 18 47.2 | +1.2 |
| ZKR | Zakros | 3.18 | 95 | P | Pn | 19 18 47.2 | +1.2 |
| EREA | Eretria | 3.22 | 23 | ePN | Pn | 19 18 47.1 | +0.6 |
| EREA | Eretria | 3.22 | 23 | P | Pn | 19 18 46.9 | +0.4 |
| EREA | Eretria | 3.22 | 23 | ePn | Pn | 19 18 47.1 | +0.6 |
| LKR | Lokris | 3.23 | 9 | ePN | Pn | 19 18 47.8 | +1.1 |
| LKR | Lokris | 3.23 | 9 | P | Pn | 19 18 47.7 | +1.1 |
| LKR | Lokris | 3.23 | 9 | P | Pn | 19 18 47.7 | +1.1 |
| LKR | Lokris | 3.23 | 9 | P | Pn | 19 18 47.7 | +1.1 |
| PDO | Prodromos | 3.27 | 344 | P | Pn | 19 18 48.9 | +1.7 |
| PDO | Prodromos | 3.27 | 344 | P | Pn | 19 18 48.9 | +1.7 |
| ATAL | Atalanti | 3.27 | 9 | P | Pn | 19 18 48.7 | +1.4 |
| ATAL | Atalanti | 3.27 | 9 | P | Pn | 19 18 48.7 | +1.4 |
| ATAL | Atalanti | 3.27 | 9 | P | Pn | 19 18 48.7 | +1.4 |
| AXAR | Agios Charalam | 3.31 | 4 | ePN | Pn | 19 18 49.1 | +1.3 |
| AXAR | Agios Charalam | 3.31 | 4 | P | Pn | 19 18 49.1 | +1.3 |
| AXAR | Agios Charalam | 3.31 | 4 | P | Pn | 19 18 49.1 | +1.3 |
| AXAR | Agios Charalam | 3.31 | 4 | P | Pn | 19 18 49.1 | +1.3 |
| MRKA | Markates | 3.39 | 17 | ePN | Pn | 19 18 50.1 | +1.2 |
| MRKA | Markates | 3.39 | 17 | P | Pn | 19 18 49.6 | +0.7 |
| MRKA | Markates | 3.39 | 17 | P | Pn | 19 18 49.6 | +0.7 |
| MRKA | Markates | 3.39 | 17 | ePn | Pn | 19 18 50.1 | +1.2 |
| EVR | Evrytania | 3.48 | 353 | ePN | Pn | 19 18 52.9 | +2.7 |
| EVR | Evrytania | 3.48 | 353 | P | Pn | 19 18 52.6 | +2.4 |
| EVR | Evrytania | 3.48 | 353 | P | Pn | 19 18 52.6 | +2.4 |
| EVR | Evrytania | 3.48 | 353 | P | Pn | 19 18 52.6 | +2.4 |
| EVR | Evrytania | 3.48 | 353 | ePn | Pn | 19 18 52.9 | +2.7 |
| SMIA | Simia | 3.48 | 11 | ePN | Pn | 19 18 50.8 | +0.6 |
| SMIA | Simia | 3.48 | 11 | P | Pn | 19 18 50.6 | +0.4 |
| SMIA | Simia | 3.48 | 11 | P | Pn | 19 18 50.6 | +0.4 |
| MAKR | Makrakomi, Fth | 3.55 | 357 | ePN | Pn | 19 18 52.9 | +1.8 |
| MAKR | Makrakomi, Fth | 3.55 | 357 | P | Pn | 19 18 53.0 | +1.8 |
| MAKR | Makrakomi, Fth | 3.55 | 357 | P | Pn | 19 18 53.0 | +1.8 |
| MAKR | Makrakomi, Fth | 3.55 | 357 | ePn | Pn | 19 18 52.9 | +1.8 |
| AGG | Agios Georgios | 3.56 | 360 | P | Pn | 19 18 52.2 | +1.0 |
| AGG | Agios Georgios | 3.56 | 360 | ePN | Pn | 19 18 53.5 | +2.3 |
| AGG | Agios Georgios | 3.56 | 360 | P | Pn | 19 18 52.2 | +1.0 |
| AGG | Agios Georgios | 3.56 | 360 | P | Pn | 19 18 52.2 | +1.0 |
| AGG | Agios Georgios | 3.56 | 360 | P | Pn | 19 18 52.2 | +1.0 |
| AGG | Agios Georgios | 3.56 | 360 | ePn | Pn | 19 18 53.5 | +2.3 |
| LKD2 | Lefkada island | 3.59 | 338 | ePN | Pn | 19 18 52.6 | +1.0 |
| LKD2 | Lefkada island | 3.59 | 338 | P | Pn | 19 18 52.1 | +0.5 |
| LKD2 | Lefkada island | 3.59 | 338 | P | Pn | 19 18 52.1 | +0.5 |
| LKD2 | Lefkada island | 3.59 | 338 | P | Pn | 19 18 52.1 | +0.5 |
| LKD2 | Lefkada island | 3.59 | 338 | ePn | Pn | 19 18 52.6 | +1.0 |
| LTBQ | Tobruq | 3.64 | 158 | i P | Pn | 19 18 52.8 | +0.5 |
| | SNR=45 | | | | | | |
| LTBQ | | | | eS | Sn | 19 19 33.0 | -1.0 |
| | 152nm,0.9s,SNR=45 | | | | | | |
| DSL | Palaion Diasel | 3.80 | 345 | ePN | Pn | 19 18 56.0 | +1.4 |
| DSL | Palaion Diasel | 3.80 | 345 | P | Pn | 19 18 55.7 | +1.1 |
| DSL | Palaion Diasel | 3.80 | 345 | P | Pn | 19 18 55.7 | +1.1 |
| DSL | Palaion Diasel | 3.80 | 345 | P | Pn | 19 18 55.7 | +1.1 |
| DSL | Palaion Diasel | 3.80 | 345 | ePn | Pn | 19 18 56.0 | +1.4 |
| SKIA | Skiathos | 3.81 | 13 | ePN | Pn | 19 18 55.8 | +1.2 |
| SKIA | Skiathos | 3.81 | 13 | P | Pn | 19 18 55.5 | +0.9 |
| SKIA | Skiathos | 3.81 | 13 | P | Pn | 19 18 55.5 | +0.9 |
| SKIA | Skiathos | 3.81 | 13 | ePn | Pn | 19 18 55.8 | +1.2 |
| AOS | Alonnisos | 3.90 | 18 | ePN | Pn | 19 18 56.5 | +0.6 |
| AOS | Alonnisos | 3.90 | 18 | P | Pn | 19 18 56.3 | +0.4 |
| AOS | Alonnisos | 3.90 | 18 | P | Pn | 19 18 56.3 | +0.4 |
| AOS | Alonnisos | 3.90 | 18 | P | Pn | 19 18 56.3 | +0.4 |
| NEO | Neokhori | 3.90 | 10 | ePN | Pn | 19 18 56.6 | +0.6 |
| NEO | Neokhori | 3.90 | 10 | P | Pn | 19 18 56.5 | +0.6 |
| NEO | Neokhori | 3.90 | 10 | P | Pn | 19 18 56.5 | +0.6 |
| NEO | Neokhori | 3.90 | 10 | P | Pn | 19 18 56.5 | +0.6 |
| KARP | Karpathos | 3.93 | 87 | ePN | Pn | 19 18 55.7 | -0.6 |
| KARP | Karpathos | 3.93 | 87 | P | Pn | 19 18 55.7 | -0.6 |
| KARP | Karpathos | 3.93 | 87 | P | Pn | 19 18 55.7 | -0.6 |
| KARP | Karpathos | 3.93 | 87 | P | Pn | 19 18 55.7 | -0.6 |
| XOR | Xorichti | 3.96 | 10 | ePN | Pn | 19 18 57.6 | +0.9 |
| XOR | Xorichti | 3.96 | 10 | P | Pn | 19 18 56.3 | -0.4 |
| XOR | Xorichti | 3.96 | 10 | P | Pn | 19 18 56.3 | -0.4 |
| XOR | Xorichti | 3.96 | 10 | P | Pn | 19 18 56.3 | -0.4 |
| XOR | Xorichti | 3.96 | 10 | ePn | Pn | 19 18 57.6 | +0.9 |
| FYTO | Fytoko, Volos | 3.97 | 7 | P | Pn | 19 18 58.2 | +1.4 |
| FYTO | Fytoko, Volos | 3.97 | 7 | P | Pn | 19 18 58.2 | +1.4 |
| FYTO | Fytoko, Volos | 3.97 | 7 | P | Pn | 19 18 58.2 | +1.4 |
| NIS1 | Nisyros Isl. | 4.08 | 72 | ePN | Pn | 19 18 59.6 | +1.3 |
| NIS1 | Nisyros Isl. | 4.08 | 72 | P | Pn | 19 18 59.7 | +1.4 |
| NIS1 | Nisyros Isl. | 4.08 | 72 | P | Pn | 19 18 59.7 | +1.4 |
| NIS1 | Nisyros Isl. | 4.08 | 72 | ePn | Pn | 19 18 59.6 | +1.3 |
| THL | Klokotos Trika | 4.11 | 356 | ePN | Pn | 19 18 59.9 | +1.2 |
| THL | Klokotos Trika | 4.11 | 356 | P | Pn | 19 18 59.6 | +0.9 |
| THL | Klokotos Trika | 4.11 | 356 | P | Pn | 19 18 59.6 | +0.9 |
| THL | Klokotos Trika | 4.11 | 356 | ePn | Pn | 19 18 59.9 | +1.2 |
| SMG | Samos | 4.25 | 57 | ePN | Pn | 19 19 01.3 | +0.6 |
| SMG | Samos | 4.25 | 57 | P | Pn | 19 19 01.3 | +0.6 |
| SMG | Samos | 4.25 | 57 | P | Pn | 19 19 01.3 | +0.6 |
| SMG | Samos | 4.25 | 57 | P | Pn | 19 19 01.3 | +0.6 |
| BODT | Bodrum | 4.32 | 67 | ePG | Pn | 19 19 02.8 | +1.2 |
| BODT | Bodrum | 4.32 | 67 | ePg | Pn | 19 19 02.8 | +1.2 |
| ZEY | ˜zmir | 4.34 | 49 | P | Pn | 19 19 01.3 | -0.5 |
| JAN | Janina | 4.36 | 345 | P | Pn | 19 19 02.9 | +0.7 |
| JAN | Janina | 4.36 | 345 | P | Pn | 19 19 02.9 | +0.7 |
| JAN | Janina | 4.36 | 345 | P | Pn | 19 19 02.9 | +0.7 |
| JAN | Janina | 4.36 | 345 | P | Pn | 19 19 02.9 | +0.7 |
| IGT | Igoumenitsa | 4.37 | 339 | P | Pn | 19 19 01.8 | -0.6 |
| IGT | Igoumenitsa | 4.37 | 339 | P | Pn | 19 19 01.8 | -0.6 |
| IGT | Igoumenitsa | 4.37 | 339 | P | Pn | 19 19 01.8 | -0.6 |
| IGT | Igoumenitsa | 4.37 | 339 | P | Pn | 19 19 01.8 | -0.6 |
| SGD | Sagiada | 4.47 | 339 | P | Pn | 19 19 03.3 | -0.4 |
| SGD | Sagiada | 4.47 | 339 | P | Pn | 19 19 03.3 | -0.4 |
| PAIG | Paliouri | 4.58 | 13 | P | Pn | 19 19 05.6 | +0.3 |
| PAIG | Paliouri | 4.58 | 13 | P | Pn | 19 19 05.6 | +0.3 |
| PAIG | Paliouri | 4.58 | 13 | P | Pn | 19 19 05.6 | +0.3 |
| PAIG | Paliouri | 4.58 | 13 | P | Pn | 19 19 05.6 | +0.3 |
| SLUM | | 4.62 | 148 | P | Pn | 19 19 04.9 | -0.9 |
| | baz=152 | | | | | | |
| SLUM | | | | S | Sn | 19 19 57.9 | -0.3 |
| | baz=152 | | | | | | |
| SLUM | | 4.62 | 148 | P | Pn | 19 19 04.9 | -0.9 |
| SLUM | | | | S | Sn | 19 19 57.9 | -0.3 |
| LIT | Litokhoron | 4.64 | 1 | P | Pn | 19 19 06.0 | 0.0 |
| LIT | Litokhoron | 4.64 | 1 | P | Pn | 19 19 06.0 | 0.0 |
| LIT | Litokhoron | 4.64 | 1 | P | Pn | 19 19 06.0 | 0.0 |
| LIT | Litokhoron | 4.64 | 1 | P | Pn | 19 19 06.0 | 0.0 |
| SIGR | SIGRI | 4.67 | 36 | P | Pn | 19 19 06.0 | -0.5 |
| SIGR | SIGRI | 4.67 | 36 | P | Pn | 19 19 06.0 | -0.5 |
| SIGR | SIGRI | 4.67 | 36 | P | Pn | 19 19 06.0 | -0.5 |
| KEK | Kerkira | 4.71 | 335 | P | Pn | 19 19 05.5 | -1.4 |
| KEK | Kerkira | 4.71 | 335 | P | Pn | 19 19 05.5 | -1.4 |
| KEK | Kerkira | 4.71 | 335 | P | Pn | 19 19 05.5 | -1.4 |
| ARG | Arkhangelos | 4.75 | 79 | P | Pn | 19 19 07.8 | +0.2 |
| ARG | Arkhangelos | 4.75 | 79 | P | Pn | 19 19 07.8 | +0.2 |
| ARG | | | | S | Sn | 19 20 02.1 | +0.7 |
| ARG | Arkhangelos | 4.75 | 79 | P | Pn | 19 19 07.8 | +0.2 |
| SRN | Sarande | 4.79 | 338 | P | Pn | 19 19 07.4 | -0.7 |
| SRN | Sarande | 4.79 | 338 | P | Pn | 19 19 07.4 | -0.7 |
| KZN | Kozani | 4.86 | 355 | P | Pn | 19 19 09.6 | +0.5 |
| KZN | Kozani | 4.86 | 355 | P | Pn | 19 19 09.6 | +0.5 |
| KZN | Kozani | 4.86 | 355 | P | Pn | 19 19 09.6 | +0.5 |
| KZN | Kozani | 4.86 | 355 | P | Pn | 19 19 09.6 | +0.5 |
| LJBD | Adjabya | 4.88 | 202 | i P | Pn | 19 19 08.1 | -1.2 |
| | SNR=45 | | | | | | |
| LJBD | | | | eS | Sn | 19 20 00.2 | -4.3 |
| | SNR=45 | | | | | | |
| PRK | Paraskevi | 4.91 | 38 | P | Pn | 19 19 09.6 | -0.1 |
| PRK | Paraskevi | 4.91 | 38 | ePN | Pn | 19 19 10.4 | +0.7 |
| PRK | Paraskevi | 4.91 | 38 | P | Pn | 19 19 09.6 | -0.1 |
| PRK | Paraskevi | 4.91 | 38 | P | Pn | 19 19 09.6 | -0.1 |
| PRK | Paraskevi | 4.91 | 38 | P | Pn | 19 19 09.6 | -0.1 |
| PRK | Paraskevi | 4.91 | 38 | ePn | Pn | 19 19 10.4 | +0.7 |
| IZM | Izmir | 4.91 | 52 | ePG | Pn | 19 19 11.8 | +2.0 |
| IZM | Izmir | 4.91 | 52 | ePg | Pn | 19 19 11.8 | +2.0 |
| AYDN | Tasoluk | 4.96 | 62 | i P | Pn | 19 19 13.4 | +2.9 |
| AYDN | Tasoluk | 4.96 | 62 | P | Pn | 19 19 13.4 | +2.9 |
| LIA | Limnos Island | 4.97 | 26 | P | Pn | 19 19 10.1 | -0.4 |
| LIA | Limnos Island | 4.97 | 26 | P | Pn | 19 19 10.1 | -0.4 |
| LIA | Limnos Island | 4.97 | 26 | P | Pn | 19 19 10.1 | -0.4 |
| PLG | Polygyros | 4.98 | 10 | P | Pn | 19 19 11.1 | +0.3 |
| PLG | Polygyros | 4.98 | 10 | P | Pn | 19 19 11.1 | +0.3 |
| PLG | Polygyros | 4.98 | 10 | P | Pn | 19 19 11.1 | +0.3 |
| OUR | Ouranopolis | 5.04 | 14 | P | Pn | 19 19 12.2 | +0.8 |
| OUR | Ouranopolis | 5.04 | 14 | ePN | Pn | 19 19 12.4 | +1.0 |
| OUR | Ouranopolis | 5.04 | 14 | P | Pn | 19 19 12.2 | +0.8 |
| OUR | Ouranopolis | 5.04 | 14 | P | Pn | 19 19 12.2 | +0.8 |
| OUR | Ouranopolis | 5.04 | 14 | ePn | Pn | 19 19 12.4 | +1.0 |
| NEST | Nestorio | 5.05 | 349 | P | Pn | 19 19 12.8 | +1.0 |
| NEST | Nestorio | 5.05 | 349 | P | Pn | 19 19 12.8 | +1.0 |
| YER | Yerkesik | 5.08 | 69 | ePG | Pn | 19 19 13.6 | +1.5 |
| YER | Yerkesik | 5.08 | 69 | ePg | Pn | 19 19 13.6 | +1.5 |
| AYDB | Zeytinkoy-Aydi | 5.10 | 59 | ePG | Pn | 19 19 14.3 | +1.8 |
| AYDB | Zeytinkoy-Aydi | 5.10 | 59 | ePg | Pn | 19 19 14.3 | +1.8 |
| DKL | Dikili | 5.12 | 44 | ePG | Pn | 19 19 14.4 | +1.8 |
| DKL | Dikili | 5.12 | 44 | ePg | Pn | 19 19 14.4 | +1.8 |
| HORT | Hortiatis | 5.17 | 6 | P | Pn | 19 19 13.1 | -0.2 |
| HORT | Hortiatis | 5.17 | 6 | P | Pn | 19 19 13.1 | -0.2 |
| HORT | Hortiatis | 5.17 | 6 | P | Pn | 19 19 13.1 | -0.2 |
| THE | Thessaloniki | 5.19 | 5 | P | Pn | 19 19 13.5 | 0.0 |
| THE | Thessaloniki | 5.19 | 5 | P | Pn | 19 19 13.5 | 0.0 |
| THE | Thessaloniki | 5.19 | 5 | P | Pn | 19 19 13.5 | 0.0 |
| THE | Thessaloniki | 5.19 | 5 | P | Pn | 19 19 13.5 | 0.0 |
| TURN | Turunc | 5.25 | 73 | P | Pn | 19 19 10.9 | -3.5 |
| TURN | | | | S | Sn | 19 20 04.9 | -8.8 |
| DALY | Dalyan (Mu˜la | 5.28 | 73 | ePG | Pn | 19 19 16.0 | +1.2 |
| DALY | Dalyan (Mu˜la | 5.28 | 73 | ePg | Pn | 19 19 16.0 | +1.2 |
| KBN | Korca | 5.30 | 347 | P | Pn | 19 19 16.2 | +1.0 |
| KBN | Korca | 5.30 | 347 | P | Pn | 19 19 16.2 | +1.0 |
| KBN | Korca | 5.30 | 347 | P | Pn | 19 19 16.2 | +1.0 |
| KBN | Korca | 5.30 | 347 | P | Pn | 19 19 16.2 | +1.0 |
| FNA | Florina | 5.37 | 352 | P | Pn | 19 19 16.2 | +0.1 |
| FNA | Florina | 5.37 | 352 | P | Pn | 19 19 16.2 | +0.1 |
| FNA | Florina | 5.37 | 352 | P | Pn | 19 19 16.2 | +0.1 |
| FNA | Florina | 5.37 | 352 | P | Pn | 19 19 16.2 | +0.1 |
| SOH | Sokhos | 5.41 | 8 | P | Pn | 19 19 17.2 | +0.5 |
| SOH | Sokhos | 5.41 | 8 | P | Pn | 19 19 17.2 | +0.5 |
| SOH | Sokhos | 5.41 | 8 | P | Pn | 19 19 17.2 | +0.5 |
| SOH | Sokhos | 5.41 | 8 | P | Pn | 19 19 17.2 | +0.5 |
| GRG | Griva | 5.49 | 0 | P | Pn | 19 19 17.5 | -0.2 |
| GRG | Griva | 5.49 | 0 | P | Pn | 19 19 17.5 | -0.2 |
| GRG | Griva | 5.49 | 0 | P | Pn | 19 19 17.5 | -0.2 |
| GRG | Griva | 5.49 | 0 | P | Pn | 19 19 17.5 | -0.2 |
| GADA | Gvkgeada | 5.50 | 30 | ePG | Pn | 19 19 18.2 | +0.4 |
| FETY | Fethiye | 5.58 | 76 | ePG | Pn | 19 19 19.6 | +0.6 |
| SMTH | Samothraki Isl | 5.60 | 26 | P | Pn | 19 19 18.4 | -0.8 |
| SMTH | Samothraki Isl | 5.60 | 26 | P | Pn | 19 19 18.4 | -0.8 |
| KNT | Kendrikon | 5.71 | 4 | P | Pn | 19 19 20.9 | +0.2 |
| KNT | Kendrikon | 5.71 | 4 | P | Pn | 19 19 20.9 | +0.2 |
| KNT | Kendrikon | 5.71 | 4 | P | Pn | 19 19 20.9 | +0.2 |
| KNT | Kendrikon | 5.71 | 4 | P | Pn | 19 19 20.9 | +0.2 |
| SRS | Serrai | 5.73 | 9 | P | Pn | 19 19 21.4 | +0.3 |
| SRS | Serrai | 5.73 | 9 | P | Pn | 19 19 21.4 | +0.3 |
| SRS | Serrai | 5.73 | 9 | P | Pn | 19 19 21.4 | +0.3 |
| SRS | Serrai | 5.73 | 9 | P | Pn | 19 19 21.4 | +0.3 |
| OHR | Ohrid | 5.77 | 348 | ⇓iP | Pn | 19 19 21.5 | -0.2 |
| KAVA | Kavala | 5.79 | 16 | P | Pn | 19 19 22.0 | +0.3 |
| KAVA | Kavala | 5.79 | 16 | P | Pn | 19 19 22.0 | +0.3 |
| KAVA | Kavala | 5.79 | 16 | P | Pn | 19 19 22.0 | +0.3 |
| MATC | Matruh | 5.79 | 134 | P | Pn | 19 19 19.9 | -1.8 |
| | baz=137 | | | | | | |
| TIP | Timpagrande | 5.80 | 311 | P | Pn | 19 19 19.6 | -2.4 |
| TIP | Timpagrande | 5.80 | 311 | P | Pn | 19 19 19.6 | -2.4 |
| TIP | | | | ePn | Pn | 19 19 20.6 | -1.5 |
| TIP | | | | Sn | Sn | 19 20 30.1 | +2.9 |
| DNZL | Cakiroluk | 5.83 | 66 | P | Pn | 19 19 25.2 | +2.6 |
| DENT | Denizli | 5.84 | 65 | ePN | Pn | 19 19 25.2 | +2.6 |
| VAY | Valandovo | 5.86 | 2 | ⇓iP | Pn | 19 19 23.3 | +0.6 |
| VAY | Valandovo | 5.86 | 2 | P | Pn | 19 19 22.7 | 0.0 |
| VAY | Valandovo | 5.86 | 2 | P | Pn | 19 19 22.7 | 0.0 |
| VAY | Valandovo | 5.86 | 2 | P | Pn | 19 19 22.7 | 0.0 |
| VAY | Valandovo | 5.86 | 2 | P | Pn | 19 19 22.7 | 0.0 |
| HMAT | Matruh | 5.89 | 136 | P | Pn | 19 19 22.0 | -1.3 |
| | baz=139 | | | | | | |
| HMAT | | | | S | Sn | 19 20 27.7 | -1.9 |
| | baz=139 | | | | | | |
| KULA | Kula-Manisa | 5.90 | 57 | ePN | Pn | 19 19 25.2 | +1.8 |
| GELI | Tayfur-Gelibol | 5.91 | 32 | ePN | Pn | 19 19 24.1 | +0.6 |
| AKAS | Kas | 5.95 | 80 | P | Pn | 19 19 23.1 | -1.0 |
| AKAS | | | | S | Sn | 19 20 27.8 | -3.1 |
| NVR | Nevrokopi | 6.00 | 11 | P | Pn | 19 19 24.6 | -0.1 |
| NVR | Nevrokopi | 6.00 | 11 | P | Pn | 19 19 24.6 | -0.1 |
| NVR | Nevrokopi | 6.00 | 11 | P | Pn | 19 19 24.6 | -0.1 |
| LPK | Lapseki | 6.02 | 34 | ePN | Pn | 19 19 25.7 | +0.8 |
| BALB | Balikesir | 6.06 | 45 | ePN | Pn | 19 19 26.6 | +1.1 |
| ENEZ | Enez | 6.06 | 29 | ePN | Pn | 19 19 25.6 | 0.0 |
| ERIK | Erikli-Kesan | 6.15 | 31 | ePN | Pn | 19 19 27.1 | +0.4 |
| ALN | Alexandroupoli | 6.16 | 27 | P | Pn | 19 19 25.4 | -1.5 |
| ALN | Alexandroupoli | 6.16 | 27 | P | Pn | 19 19 25.4 | -1.5 |
| ALN | Alexandroupoli | 6.16 | 27 | P | Pn | 19 19 25.4 | -1.5 |
| ALN | Alexandroupoli | 6.16 | 27 | P | Pn | 19 19 25.4 | -1.5 |
| TIR | Tirane | 6.19 | 342 | eP | Pn | 19 19 26.3 | -1.1 |
| TIR | | | | pmax | pmax | | |
| | comp=Z,141nm,0.6s | | | | | | |
| TIR | Tirane | 6.19 | 342 | ePn | Pn | 19 19 26.3 | -1.1 |
| | comp=Z,141nm,0.6s | | | | | | |
| TIR | Tirane | 6.19 | 342 | eP | Pn | 19 19 26.3 | -1.1 |
| | comp=Z,141nm,0.6s | | | | | | |
| MMB | Musomiste | 6.22 | 10 | i P | Pn | 19 19 27.3 | -0.4 |
| ELL | Elmali | 6.25 | 76 | ePN | Pn | 19 19 28.8 | +0.5 |
| KRBG | Karabiga-Canak | 6.29 | 37 | ePN | Pn | 19 19 29.6 | +1.0 |
| KHAL | Karahalli | 6.42 | 61 | P | Pn | 19 19 32.4 | +1.9 |
| KHAL | | | | S | Sn | 19 20 44.0 | +1.5 |
| KHL | Karahalli | 6.42 | 61 | ePN | Pn | 19 19 32.1 | +1.5 |
| KKB | Krupnik | 6.42 | 5 | i P | Pn | 19 19 30.3 | -0.2 |
| RKY | Sarkoy-Tekirda | 6.46 | 35 | ePN | Pn | 19 19 31.5 | +0.4 |
| LSRT | Sirt | 6.46 | 229 | i P | Pn | 19 19 28.8 | -2.3 |
| | SNR=43 | | | | | | |
| LSRT | | | | eS | Sn | 19 20 35.5 | -8.0 |
| | comp=Z,28nm,0.5s,SNR=43 | | | | | | |
| SART | Tekirdag | 6.46 | 35 | P | Pn | 19 19 31.5 | +0.4 |
| RZN | Rozhen | 6.49 | 16 | i P | Pn | 19 19 32.1 | +0.5 |
| SKO | Skopje | 6.54 | 354 | ⇓iP | Pn | 19 19 32.1 | 0.0 |
| SKO | Skopje | 6.54 | 354 | P | Pn | 19 19 31.5 | -0.6 |
| SKO | Skopje | 6.54 | 354 | P | Pn | 19 19 31.5 | -0.6 |
| SKO | Skopje | 6.54 | 354 | P | Pn | 19 19 31.5 | -0.6 |
| SKO | Skopje | 6.54 | 354 | P | Pn | 19 19 31.5 | -0.6 |
| MRMT | Marmara Adasi | 6.60 | 37 | ePN | Pn | 19 19 33.7 | +0.8 |
| KDZ | Kurdzhali | 6.63 | 20 | i P | Pn | 19 19 33.5 | +0.1 |
| KCTX | Karacabey (Bur | 6.75 | 43 | ePN | Pn | 19 19 36.0 | +1.0 |
| LMSR | Misrath | 6.86 | 245 | i P | Pn | 19 19 33.0 | -3.6 |
| | SNR=43 | | | | | | |
| LMSR | | | | eS | Sn | 19 20 45.8 | -7.5 |
| | SNR=43 | | | | | | |
| CUC | Castrocucco | 6.88 | 313 | ePn | Pn | 19 19 36.1 | -0.6 |
| | comp=Z,59nm,0.8s | | | | | | |
| CUC | Castrocucco | 6.88 | 313 | ePn | Pn | 19 19 36.1 | -0.6 |
| | comp=Z,59nm,0.8s | | | | | | |
| PLD | Plovdiv | 6.89 | 15 | i P | Pn | 19 19 37.8 | +1.0 |
| ULC | Ulcinj | 6.93 | 340 | ⇓iPn | Pn | 19 19 36.1 | -1.4 |
| ULC | | | | eSn | Sn | 19 20 51.7 | -3.4 |
| ULC | Ulcinj | 6.93 | 340 | ⇓iPn | Pn | 19 19 36.1 | -1.4 |
| BCK | Bucak | 6.94 | 71 | ePN | Pn | 19 19 38.4 | +0.7 |
| DIM | Dimitrovgrad | 7.04 | 20 | i P | Pn | 19 19 39.7 | +0.8 |
| DRME | Dracevica, Mon | 7.16 | 341 | ⇓iPn | Pn | 19 19 38.8 | -1.8 |
| DRME | | | | eSn | Sn | 19 20 57.0 | -3.5 |
| PGB | Panagyurishte | 7.22 | 11 | i P | Pn | 19 19 40.6 | -0.9 |
| PGB | | | | i P | Pn | 19 19 40.9 | -0.6 |
| PGB | Panagyurishte | 7.22 | 11 | i P | Pn | 19 19 40.9 | -0.6 |
| EDRB | Edirne | 7.25 | 27 | ePN | Pn | 19 19 41.4 | -0.4 |
| SHUT | Suhut-Afyon | 7.25 | 62 | ePN | Pn | 19 19 43.9 | +1.9 |
| SUTC | Sutluce-Ispart | 7.25 | 71 | ePN | Pn | 19 19 42.7 | +0.6 |
| BUM | Brajici-Budva | 7.34 | 340 | ⇓iPn | Pn | 19 19 40.7 | -2.5 |
| BUM | | | | eSn | Sn | 19 21 02.0 | -3.2 |
| PVY | Plav | 7.36 | 346 | ⇓iPn | Pn | 19 19 42.8 | -0.7 |
| PVY | | | | eSn | Sn | 19 21 03.1 | -2.7 |
| PVY | Plav | 7.36 | 346 | ⇓iPn | Pn | 19 19 42.8 | -0.7 |
| PDG | Podgorica | 7.37 | 342 | P | Pn | 19 19 41.3 | -2.1 |
| TTG | Podgorica | 7.37 | 342 | ⇓iPn | Pn | 19 19 41.2 | -2.1 |
| TTG | | | | eSn | Sn | 19 21 02.5 | -3.1 |
| TTG | Podgorica | 7.37 | 342 | P | Pn | 19 19 41.3 | -2.1 |
| TTG | Podgorica | 7.37 | 342 | P | Pn | 19 19 41.3 | -2.1 |
| TTG | Podgorica | 7.37 | 342 | P | Pn | 19 19 41.3 | -2.1 |
| CTKS | Kestanelik-??a | 7.53 | 38 | ePN | Pn | 19 19 46.6 | +1.0 |
| HCY | Herceg Novi | 7.60 | 338 | ⇓iPn | Pn | 19 19 43.5 | -3.1 |
| HCY | | | | eSn | Sn | 19 21 07.2 | -4.1 |
| BEY | Berane | 7.64 | 346 | ⇓iPn | Pn | 19 19 46.2 | -1.1 |
| IVA | Berane | 7.64 | 346 | ⇓iPn | Pn | 19 19 46.2 | -1.1 |
| IVA | | | | eSn | Sn | 19 21 09.7 | -2.9 |
| NKME | Niksic | 7.76 | 341 | ePn | Pn | 19 19 46.5 | -2.4 |
| NKME | | | | eSn | Sn | 19 21 12.5 | -2.9 |
| NKY | Niksic | 7.79 | 341 | ⇑iPn | Pn | 19 19 47.5 | -1.9 |
| NKY | | | | eSn | Sn | 19 21 12.5 | -3.8 |
| HBRG | Burj al ‘Arab | 7.95 | 126 | P | Pn | 19 19 49.5 | -2.1 |
| | baz=128 | | | | | | |
| MPEP | Malo Peshtene | 7.96 | 7 | i P | Pn | 19 19 51.4 | -0.2 |
| BRY | Bratogost | 8.00 | 339 | ⇑iPn | Pn | 19 19 49.5 | -2.7 |
| BRY | | | | eSn | Sn | 19 21 17.4 | -4.0 |
| GAZI | Gazipasa | 8.13 | 82 | P | Pn | 19 19 50.8 | -3.1 |
| GAZI | | | | S | Sn | 19 21 15.0 | -10 |
| AKMC | Akamas | 8.18 | 90 | P | Pn | 19 19 51.0 | -3.6 |
| | baz=273 | | | | | | |
| AKMC | Akamas | 8.18 | 90 | P | Pn | 19 19 51.0 | -3.6 |
| UPM | Unac-Piva | 8.18 | 342 | ⇓iPn | Pn | 19 19 52.7 | -2.1 |
| UPM | | | | eSn | Sn | 19 21 22.7 | -3.2 |
| PLE | Pljevlja | 8.19 | 345 | ⇑iPn | Pn | 19 19 53.8 | -1.0 |
| PLE | | | | eSn | Sn | 19 21 22.7 | -3.3 |
| PLE | Pljevlja | 8.19 | 345 | ⇑iPn | Pn | 19 19 53.8 | -1.0 |
| PPCY | Paphos | 8.21 | 91 | P | Pn | 19 19 51.4 | -3.6 |
| | baz=274 | | | | | | |
| PPCY | Paphos | 8.21 | 91 | P | Pn | 19 19 51.4 | -3.6 |
| SVRH | Sivrihisar-ESK | 8.31 | 59 | ePN | Pn | 19 19 57.4 | +1.0 |
| HDMB | Hadim | 8.33 | 77 | ePN | Pn | 19 19 56.4 | -0.4 |
| KIZT | Kizilcal | 8.34 | 63 | ePN | Pn | 19 19 58.6 | +1.8 |
| ALFC | Alevga | 8.38 | 89 | P | Pn | 19 19 53.9 | -3.6 |
| | baz=272 | | | | | | |
| ALFC | | | | S | Sn | 19 21 21.8 | -9.0 |
| ALFC | Alevga | 8.38 | 89 | P | Pn | 19 19 53.9 | -3.6 |
| ALFC | | | | S | Sn | 19 21 21.8 | -9.0 |
| LJFR | Jufra | 8.41 | 223 | ⇑iP | Pn | 19 19 53.9 | -3.9 |
| | SNR=43 | | | | | | |
| LJFR | | | | eS | Sn | 19 21 20.7 | -11 |
| | comp=Z,26nm,0.5s,SNR=43 | | | | | | |
| KONT | Konya--Tatoy | 8.41 | 70 | ePN | Pn | 19 19 58.1 | +0.2 |
| LEF | Lefka | 8.63 | 89 | ePN | Pn | 19 19 56.8 | -4.0 |
| SZAC | Souni-Zanaja | 8.66 | 92 | P | Pn | 19 19 57.6 | -3.6 |
| | baz=275 | | | | | | |
| SZAC | Souni-Zanaja | 8.66 | 92 | P | Pn | 19 19 57.6 | -3.6 |
| PRD | Provadia | 8.66 | 25 | i P | Pn | 19 20 01.4 | +0.2 |
| LSHF | Shwairf | 8.73 | 234 | i P | Pn | 19 19 58.9 | -3.4 |
| | SNR=43 | | | | | | |
| LSHF | | | | eS | Sn | 19 21 27.5 | -12 |
| | SNR=43 | | | | | | |
| MAMC | Mammari | 8.89 | 89 | P | Pn | 19 20 01.1 | -3.2 |
| | baz=272 | | | | | | |
| MAMC | Mammari | 8.89 | 89 | P | Pn | 19 20 01.1 | -3.2 |
| CSS | Prodhromos | 9.00 | 90 | P | Pn | 19 20 02.4 | -3.5 |
| | baz=273 | | | | | | |
| CSS | | | | S | Sn | 19 21 35.1 | -11 |
| CSS | Prodhromos | 9.00 | 90 | P | Pn | 19 20 01.7 | -4.2 |
| CSS | Prodhromos | 9.00 | 90 | P | Pn | 19 20 01.7 | -4.2 |
| CSS | | | | eSn | Sn | 19 21 47.6 | +1.7 |
| CSS | Prodhromos | 9.00 | 90 | P | Pn | 19 20 02.4 | -3.5 |
| CSS | | | | S | Sn | 19 21 35.1 | -11 |
| CSS | | | | eSn | Sn | 19 21 47.6 | +1.6 |
| LFK | Lefkose | 9.14 | 88 | ePN | Pn | 19 20 05.5 | -2.3 |
| ANTO | Ankara | 9.38 | 59 | ⇓iP | Pn | 19 20 13.3 | +2.2 |
| MSAB | Monastry St. A | 9.59 | 24 | ⇓iP | Pn | 19 20 14.4 | +0.5 |
| EREN | Erenkoy | 9.64 | 86 | ePN | Pn | 19 20 12.4 | -2.2 |
| SULR | | 9.68 | 17 | ⇓iP | Pn | 19 20 14.7 | -0.4 |
| BRTR | Keskin Array B | 9.92 | 61 | Pn | Pn | 19 20 20.3 | +1.7 |
| | comp=Z,0.7nm,0.3s,baz=243,slow=16,SNR=28 | | | | | | |
| BRTR | Keskin Array B | 9.92 | 61 | i P | Pn | 19 20 21.3 | +2.8 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| BRTR | Keskin Array B | 9.92 | 61 | i P | Pn | 19 20 21.3 | +2.8 |
| | comp=Z,9.0nm,0.8s | | | | | | |
| MTUR | Matau | 9.97 | 11 | ⇑iP | Pn | 19 20 20.1 | +0.9 |
| LOT | Lotru | 10.04 | 6 | ⇓iP | Pn | 19 20 19.8 | -0.3 |
| TIRR | Tirgusor | 10.12 | 26 | ePn | Pn | 19 20 21.5 | +0.4 |
| TIRR | Tirgusor | 10.12 | 26 | ⇑iP | Pn | 19 20 21.4 | +0.4 |
| HARR | Harsova | 10.16 | 23 | ⇓iP | Pn | 19 20 22.0 | +0.3 |
| BZS | Buzias | 10.16 | 357 | ⇑iP | Pn | 19 20 19.2 | -2.5 |
| VOIR | | 10.18 | 11 | ⇓iP | Pn | 19 20 21.5 | -0.5 |
| MLR | Muntele Rosu | 10.39 | 14 | ePn | Pn | 19 20 25.3 | +0.4 |
| MLR | Muntele Rosu | 10.39 | 14 | ⇓iP | Pn | 19 20 25.0 | +0.1 |
| KARA | Karaisali | 10.40 | 76 | ePN | Pn | 19 20 24.4 | -0.7 |
| KEST | Kesra | 10.59 | 275 | LR | LR | 19 24 60.0 | |
| | comp=Z,104nm,21.2s,baz=266,slow=40 | | | | | | |
| CFR | Carcaliu | 10.66 | 23 | ⇓iP | Pn | 19 20 28.3 | -0.2 |
| DOPR | Dopca | 10.75 | 11 | ⇓iP | Pn | 19 20 29.8 | +0.1 |
| PLOR | Plostina | 10.88 | 16 | ⇓iP | Pn | 19 20 31.7 | +0.1 |
| TLCR | | 10.89 | 25 | ⇑iP | Pn | 19 20 31.4 | -0.3 |
| VRI | Vrincioaia | 10.91 | 16 | ⇓iP | Pn | 19 20 32.2 | +0.2 |
| MMAI | Mount Meron Ar | 11.08 | 99 | Pn | Pn | 19 20 29.5 | -4.8 |
| | comp=Z,7.0nm,0.3s,baz=299,slow=10,SNR=11 | | | | | | |
| MMAI | | | | Sn | Sn | 19 22 29.9 | -7.0 |
| | comp=Z,6.6nm,0.3s,baz=301,slow=25,SNR=5.8 | | | | | | |
| ARNB | Al Arnab | 11.09 | 84 | eP | Pn | 19 20 30.2 | -4.4 |
| TAHT | Tahtakopru-Hat | 11.26 | 81 | ePN | Pn | 19 20 35.0 | -1.7 |
| PKS6 | Bocsa | 11.33 | 350 | ⇑ePn | Pn | 19 20 34.8 | -2.8 |
| BOJS | Bojanci | 11.39 | 334 | i Pn | Pn | 19 20 36.3 | -2.2 |
| BOJS | | | | i Sn | Sn | 19 22 38.5 | -5.8 |
| BRBR | Barbar | 11.42 | 96 | eP | Pn | 19 20 34.0 | -5.2 |
| BIDA | Albida | 11.44 | 88 | eP | Pn | 19 20 34.5 | -4.7 |
| WRDH | Warideh | 11.47 | 86 | eP | Pn | 19 20 35.1 | -4.6 |
| BTCH | Batrach | 11.48 | 83 | eP | Pn | 19 20 35.4 | -4.5 |
| TESR | Tescani | 11.51 | 15 | ⇑iP | Pn | 19 20 47.6 | +7.5 |
| HAWK | Haweek | 11.57 | 91 | eP | Pn | 19 20 36.0 | -5.1 |
| PKSN | Nyarlorinc | 11.58 | 351 | ⇑ePn | Pn | 19 20 39.9 | -1.1 |
| PKSN | Nyarlorinc | 11.58 | 351 | ⇑eP | Pn | 19 20 39.9 | -1.1 |
| TCHB | Talchebab | 11.63 | 100 | eP | Pn | 19 20 36.3 | -5.7 |
| SARI | SarD1z-Kayseri | 11.64 | 71 | ePN | Pn | 19 20 41.5 | -0.6 |
| QASN | Qassioun | 11.65 | 95 | eP | Pn | 19 20 37.5 | -4.8 |
| BEHE | Becsehely | 11.78 | 341 | ⇓ePn | Pn | 19 20 41.2 | -2.5 |

PKS7 **Kunszentmiklos** 11.82 349⇓ *e*Pn **Pn** **19 20 42.5 -1.9**
EIL **Elat** 12.09 115 Pn Pn 19 20 44.2 -3.9
comp=Z,5.9nm,0.3s,baz=288,slow=2.3,SNR=41
EIL Sn Sn 19 22 50.8 -11
comp=Z,3.9nm,0.3s,baz=329,slow=18,SNR=5.2
**JAVS** **Javornik** 12.16 331 *i* Pn **Pn** **19 20 46.6 -2.6**
JAVS *i* Sn Sn 19 22 56.0 -7.4
**PKST** **T"s** 12.22 346⇑ *e*Pn **Pn** **19 20 47.9 -2.0**
**BMR** **Baia Mare** 12.23 4⇓ *i*P **Pn** **19 20 49.5 -0.5**
**RABH** **Abou Rabah** 12.24 91 *e*P Pn 19 20 44.8 -5.4
**SALA** **Sala** 12.24 99 *e*P Pn 19 20 43.5 -6.8
**BUD** **Budapest** 12.27 349 *e*Pn **Pn** **19 20 49.0 -1.5**
**BURAR** **Bucovina Array** 12.33 9⇓ *i*P **Pn** **19 20 51.3 -0.2**
**PERS** **Pernice** 12.42 336 *i* Pn Pn 19 20 49.3 -3.4
PERS *e*Sn Sn 19 23 03.1 -6.4
**SOKA** **Soboth** 12.49 336 *i* Pn Pn 19 20 50.0 -3.5
SNR=8.2
**OBKA** **Obir** 12.51 334 *e*Pn **Pn** **19 20 51.8 -2.0**
OBKA *e*Sn Sn 19 23 02.1 -10
**OBKA** **Obir** 12.51 334⇓ *i*Pn Pn 19 20 50.6 -3.2
**ASF** **Jabal al Asfar** 12.54 101 Pn Pn 19 20 50.8 -3.5
comp=Z,1.8nm,0.3s,baz=254,slow=6.1,SNR=16
ASF Sn Sn 19 23 02.7 -10
comp=Z,0.5nm,0.3s,baz=220,slow=17,SNR=2.4
**PSZ** **Piszkesteto** 12.58 352 *e*P **Pn** **19 20 51.7 -3.1**
PSZ pmax pmax
comp=Z,11nm,0.7s
**PSZ** **Piszkesteto** 12.58 352 *e*Pn **Pn** **19 20 52.5 -2.3**
**PSZ** **Piszkesteto** 12.58 352⇓ *i*P **Pn** **19 20 52.2 -2.6**
**PSZ** **Piszkesteto** 12.58 352⇓ *e*Pn **Pn** **19 20 53.0 -1.8**
**PSZ** **Piszkesteto** 12.58 352 *e*Pn **Pn** **19 20 51.7 -3.1**
comp=Z,11nm,0.7s
**PSZ** **Piszkesteto** 12.58 352 *e*Pn **Pn** **19 20 51.7 -3.1**
comp=Z,11nm,0.7s
**TRPA** **Tarpa** 12.66 1⇑ *i*P **Pn** **19 20 54.6 -1.2**
**ZALF** **Zalf** 12.66 97 *e*P Pn 19 20 49.3 -6.7
**ARSA** **Arzberg** 12.84 339 *e*Pn Pn 19 20 55.2 -3.2
**ARSA** **Arzberg** 12.84 339⇓ *i*Pn Pn 19 20 55.1 -3.2
**UZH** **Uzhgorod** 13.16 360 *e*P **Pn** **19 21 00.9 -1.8**
UZH *e*S **Sn** **19 23 28.1 +0.6**
**UZH** **Uzhgorod** 13.16 360 *e*P **Pn** **19 21 00.9 -1.8**
UZH *e*S **Sn** **19 23 28.1 +0.6**
**MALT** **Malatya** 13.18 73⇑ *i*P **Pn** **19 21 03.8 +0.7**
**VYHS** **Vyhne** 13.28 350 *e*P **Pn** **19 21 01.4 -2.9**
**VYHS** **Vyhne** 13.28 350 *e*PN **Pn** **19 21 01.4 -2.9**
**KBA** **Koelnbreinsper** 13.43 333 *e*Pn **Pn** **19 21 05.5 -0.9**
KBA *e*Sn Sn 19 23 25.9 -8.4
**KOLS** **Kolonicke sedl** 13.47 360 *e*P **Pn** **19 21 06.0 -0.8**
**KOLS** **Kolonicke sedl** 13.47 360 *e*PN **Pn** **19 21 06.0 -0.8**
**KOLS** **Kolonicke sedl** 13.47 360 *e*Pn **Pn** **19 21 06.0 -0.8**
**ABTA** **Abfaltersbach** 13.48 330⇑ *i*Pn **Pn** **19 21 04.5 -2.7**
SNR=4.3
**SMOL** **Smolenice** 13.54 346 *e*P **Pn** **19 21 04.8 -3.1**
**SMOL** **Smolenice** 13.54 346 *e* **Pn** **19 21 04.8 -3.1**
SMOL *e* 19 21 13.4
**MOA** **Molln** 13.76 337 *e*Pn **Pn** **19 21 07.9 -3.0**
**MOA** **Molln** 13.76 337⇓ *i*Pn **Pn** **19 21 08.0 -2.9**
SNR=6.0
**STHS** **Stebnicka Huta** 13.97 357 *e*P **Pn** **19 21 12.3 -1.4**
**STHS** **Stebnicka Huta** 13.97 357 *e*PN **Pn** **19 21 12.3 -1.4**
**STHS** **Stebnicka Huta** 13.97 357 *e*P **P** **19 21 22.3 +1.6**
**STHS** **Stebnicka Huta** 13.97 357 *e*Pn **Pn** **19 21 12.3 -1.4**
**PTK** **Pertek** 14.02 71 *e*PN **Pn** **19 21 12.8 -1.8**
**WTTA** **Wattenberg** 14.26 329 *e*Pn **Pn** **19 21 16.7 -1.1**
WTTA *e*Sn Sn 19 23 47.4 -7.1
**LVV** **L'vov** 14.40 4 *i* P **Pn** **19 21 21.8 +2.3**
**VRAC** **Vranov** 14.47 345 Pn Pn 19 21 16.9 -3.5
comp=Z,0.3nm,0.3s,baz=170,slow=13,SNR=9.1
VRAC Sn Sn 19 23 49.6 -10
comp=Z,0.2nm,0.3s,baz=194,slow=4.2,SNR=2.6
**VRAC** **Vranov** 14.47 345⇑ *i*P Pn 19 21 16.9 -3.5
**MOTA** **Moosalm** 14.55 328⇑ *i*Pn **Pn** **19 21 20.3 -1.3**
SNR=6.3
**MOTA** **Moosalm** 14.55 328 Pn **Pn** **19 21 20.3 -1.3**
SNR=6.3
**DAVOX** **Davos/Dischmat** 14.68 324 Pn **Pn** **19 21 20.7 -2.7**
comp=Z,0.1nm,0.3s,baz=167,slow=17,SNR=3.6
DAVOX Sn Sn 19 23 55.8 -9.1
comp=Z,0.2nm,0.3s,baz=163,slow=20,SNR=2.4
DAVOX LR LR 19 29 45.9
comp=Z,171nm,19.1s,baz=85,slow=49
**OKC** **Ostrava-Krasne** 14.70 349 *e*P Pn 19 21 20.2 -3.2
OKC MLR MLR
comp=Z,400nm,16.9s
**OKC** **Ostrava-Krasne** 14.70 349 *e*P Pn 19 21 20.2 -3.2
OKC *ep*P **P** **19 21 29.8 +1.1**
OKC AMS AMS 19 28 50.0
comp=Z,400nm,16.9s
**TREC** **Trest** 14.72 342 AMS AMS 19 27 50.0
comp=Z,600nm,13.9s
**TUE** **Stuetta** 14.73 322 *e*Pn **Pn** **19 21 23.3 -0.7**
comp=Z,8.6nm,0.7s
**TUE** **Stuetta** 14.73 322 *e*Pn **Pn** **19 21 23.3 -0.7**
comp=Z,8.6nm,0.7s
**MORC** **Moravsky Berou** 14.73 348 *e*P **Pn** **19 21 23.0 -1.0**
MORC pmax pmax
comp=Z,45nm,0.6s
**MORC** **Moravsky Berou** 14.73 348⇑ *i*P **P** **19 21 29.5 +0.3**
**MORC** **Moravsky Berou** 14.73 348 *e*Pn **Pn** **19 21 23.0 -1.0**
comp=Z,45nm,0.6s
**MORC** **Moravsky Berou** 14.73 348 *e*Pn **Pn** **19 21 23.0 -1.0**
comp=Z,45nm,0.6s
**MORC** **Moravsky Berou** 14.73 348⇑ *i*P **P** **19 21 29.5 +0.3**
**GEC2** **GERESS Array S** 14.82 337 *e*Pn **Pn** **19 21 23.1 -2.0**
**GERES** **GERESS Array B** 14.82 337 Pn Pn 19 21 21.1 -4.0
comp=Z,0.2nm,0.3s,baz=158,slow=15,SNR=13
GERES Sn Sn 19 23 57.4 -11
comp=Z,0.1nm,0.3s,baz=147,slow=16,SNR=2.5
GERES LR LR 19 28 28.8
comp=Z,606nm,18.0s,baz=114,slow=43
**DAVA** **Damuels** 15.05 326 *e*Pn **Pn** **19 21 28.9 +0.6**
**KHC** **Kasperske Hory** 15.11 337 *e*P **Pn** **19 21 26.5 -2.4**
KHC *e*S **Sn** **19 24 17.2 +2.2**
KHC MLR MLR
comp=Z,700nm,16.0s
**KHC** **Kasperske Hory** 15.11 337 *e*P **Pn** **19 21 26.5 -2.4**
KHC *ep*P **P** **19 21 34.3 +0.9**
KHC *es*P sP 19 21 39.3 -10
KHC *e*S **Sn** **19 24 17.2 +2.2**
KHC AMS AMS 19 28 20.0
comp=Z,700nm,16.0s
**KHC** **Kasperske Hory** 15.11 337 *e*Pn **Pn** **19 21 29.1 +0.2**
comp=Z,5.8nm,0.8s
**KHC** **Kasperske Hory** 15.11 337 *e*Pn **Pn** **19 21 29.1 +0.2**
comp=Z,5.8nm,0.8s
**KRLC** **Kraliky** 15.16 346 *e*P **Pn** **19 21 28.0 -1.6**
**KRLC** **Kraliky** 15.16 346 *e*P **Pn** **19 21 28.0 -1.6**
KRLC *ep*P **P** **19 21 35.2 +1.2**
KRLC *es*P sP 19 21 37.8 -12
**WET** **Wettzell** 15.35 336 *e*Pn **Pn** **19 21 32.0 0.0**
**GOPC** **GO Pecny, Ondr** 15.47 341 *e*P **Pn** **19 21 31.7 -1.8**
GOPC MLR MLR
comp=Z,400nm,15.4s
**GOPC** **GO Pecny, Ondr** 15.47 341 *e*P **Pn** **19 21 31.7 -1.8**
GOPC *ex* x 19 21 37.5
GOPC *ex* x 19 21 40.0
GOPC AMS AMS 19 28 20.0
comp=Z,400nm,15.4s
**DPC** **Dobruska-Polom** 15.52 345 *e*P **Pn** **19 21 31.2 -3.0**
DPC MLR MLR
comp=Z,300nm,15.6s
**DPC** **Dobruska-Polom** 15.52 345 *e*P **Pn** **19 21 31.2 -3.0**
DPC *ex* x 19 21 38.1
DPC AMS AMS 19 30 00.0
comp=Z,300nm,15.6s
**PRU** **Pruhonice** 15.60 341 *e*P **Pn** **19 21 33.2 -2.0**
PRU MLR MLR
comp=Z,500nm,16.0s
**PRU** **Pruhonice** 15.60 341 *e*P **Pn** **19 21 33.2 -2.0**
PRU *ep*P **P** **19 21 38.8 0.0**
PRU AMS AMS 19 28 40.0
comp=Z,500nm,16.0s
**PRA** **Prague** 15.70 341 *e*P **Pn** **19 21 34.5 -2.0**
PRA MLR MLR
comp=Z,600nm,13.9s
**PRA** **Prague** 15.70 341 *e*P **Pn** **19 21 34.5 -2.0**
PRA *ep*P **P** **19 21 39.9 0.0**
PRA AMS AMS 19 28 40.0
comp=Z,600nm,13.9s
**UPC** **Upice** 15.73 345 *e*P **Pn** **19 21 35.6 -1.3**
UPC MLR MLR
comp=Z,300nm,15.6s
**UPC** **Upice** 15.73 345 *e*P **Pn** **19 21 35.6 -1.3**
UPC *ep*P **P** **19 21 41.2 +1.0**
UPC *ex* x 19 21 49.3
UPC AMS AMS 19 29 10.0
comp=Z,300nm,15.6s
**KIEV** **Kiev** 16.02 16 *e*P **Pn** **19 21 37.1 -3.4**
KIEV *e* 19 24 36.7
KIEV pmax pmax
comp=Z,12nm,0.6s
**KIEV** **Kiev** 16.02 16 *e*Pn **Pn** **19 21 37.1 -3.4**
comp=Z,12nm,0.6s
KIEV *e*Sn **Sn** **19 24 36.7 -0.3**
**KIEV** **Kiev** 16.02 16 *e*Pn **Pn** **19 21 37.1 -3.4**
comp=Z,12nm,0.6s
KIEV *e*Sn **Sn** **19 24 36.7 -0.3**
**AKASG** **Malin Array Be** 16.03 16 Pn **Pn** **19 21 36.9 -3.8**
comp=Z,1.7nm,0.3s,baz=206,slow=12,SNR=12
AKASG Sn **Sn** **19 24 36.0 -1.2**
comp=Z,0.3nm,0.3s,baz=178,slow=26,SNR=2.9
**PVCC** **Panska Ves** 16.09 342 *e*P **Pn** **19 21 38.3 -3.1**
PVCC MLR MLR
comp=Z,400nm,14.4s
**PVCC** **Panska Ves** 16.09 342 *e*P **Pn** **19 21 38.3 -3.1**
PVCC *ex* x 19 21 43.8
PVCC *ex* x 19 21 47.6
PVCC AMS AMS 19 28 50.0
comp=Z,400nm,14.4s
**ROTZ** **Rotzenmuhle** 16.11 336 *e*Pn **P** **19 21 45.1 +0.7**
**NKC** **Novy Kostel** 16.43 337 *e*P Pn 19 21 40.7 -5.1
NKC MLR MLR
comp=Z,600nm,17.0s
**NKC** **Novy Kostel** 16.43 337 *e*P Pn 19 21 40.7 -5.1
NKC *ex* x 19 21 45.6
NKC *ep*P **P** **19 21 48.8 +0.8**
NKC AMS AMS 19 29 10.0
comp=Z,600nm,17.0s
**BFO** **Black Forest** 16.53 325 *e*Pn **Pn** **19 21 46.6 -0.5**
**BRG** **Berggiesshubel** 16.56 341 *e*P **P** **19 21 49.9 +0.4**
comp=Z,6.2nm,0.9s
comp=N,266nm,13.7s
comp=E,217nm,13.5s
comp=Z,517nm,15.8s
**BRG** **Berggiesshubel** 16.56 341 *e*P **P** **19 21 49.9 +0.4**
BRG pmax pmax
comp=Z,6.0nm,0.9s
BRG MLR MLR
comp=N,266nm,13.7s
BRG MLR MLR
comp=E,217nm,13.5s
BRG MLR MLR
comp=Z,517nm,15.8s
**BRG** **Berggiesshubel** 16.56 341 *e*P **P** **19 21 49.9 +0.4**
comp=Z,517nm,15.8s
**TANN** **Tannenbergstha** 16.58 337 *e*Pn **Pn** **19 21 48.1 +0.3**
**AGRB** **Hanur-Agry** 16.88 70 *e*PN **Pn** **19 21 52.3 +0.6**
**MOX** **Moxa** 17.05 336 *e*Pn **Pn** **19 21 53.6 0.0**
**CLL** **Collm** 17.21 340 *e*P **Pn** **19 21 55.0 -0.5**
**CLL** **Collm** 17.21 340 *e*Pn **P** **19 21 58.4 +1.8**
**CLL** **Collm** 17.21 340 *e*P **Pn** **19 21 55.0 -0.5**
CLL *i* 19 21 57.4
comp=Z,9.0nm,0.8s
CLL *e* 19 21 59.0
**CLL** **Collm** 17.21 340 *e*P **Pn** **19 21 55.0 -0.5**
**KIV** **Kislovodsk** 17.77 55 *de*P **P** **19 22 03.5 +0.6**
KIV pmax pmax
comp=Z,6.0nm,0.8s
KIV MLR MLR
comp=Z,40nm,14.0s
**KIV** **Kislovodsk** 17.77 55 *e*Pn **Pn** **19 22 02.7 +0.1**
comp=Z,5.7nm,0.6s
**KIV** **Kislovodsk** 17.77 55 *e*Pn **Pn** **19 22 02.7 +0.1**
comp=Z,5.7nm,0.6s
**KIV** **Kislovodsk** 17.77 55 *e*P **P** **19 22 03.5 +0.6**
comp=Z,40nm,14.0s
**KBZ** **Khabaz** 17.83 56 P **Pn** **19 22 01.0 -2.2**
comp=Z,1.1nm,0.3s,baz=248,slow=11,SNR=9.0
**KBZ** **Khabaz** 17.83 56 P **Pn** **19 22 01.0 -2.2**
**KBZ** **Khabaz** 17.83 56 P **Pn** **19 22 01.0 -2.2**
**TNS** **Taunus Mts** 17.89 330 *e*Pn **P** **19 22 07.6 +3.4**
**NCK** **Nalchik** 18.23 57⇑ *e*P **Pn** **19 22 09.6 +1.5**
**NCK** **Nalchik** 18.23 57 *e*P **Pn** **19 22 09.6 +1.5**
**GNI** **Garni** 18.29 68 *e*P **P** **19 22 07.0 -1.8**
GNI pmax pmax
comp=Z,38nm,0.9s
**GNI** **Garni** 18.29 68 *e*Pn **P** **19 22 07.0 -1.8**
comp=Z,38nm,0.9s
**GNI** **Garni** 18.29 68 *e*P **P** **19 22 07.0 -1.8**
comp=Z,38nm,0.9s
**WLF** **Walferdange** 18.48 325 P **Pn** **19 22 12.5 +1.3**
comp=Z,16nm,1.1s
**WLF** **Walferdange** 18.48 325 *e*Pn **Pn** **19 22 13.2 +2.1**
**CLZ** **Clausthal** 18.49 336 *e*Pn **Pn** **19 22 11.6 +0.4**
**IMRD** **Marand** 18.90 73 *e*P **P** **19 22 14.3 -1.2**
**IMRD** **Marand** 18.90 73 *e*P **P** **19 22 14.3 -1.2**
**DGRG** **David-gareji** 18.97 65 P **P** **19 22 16.5 +0.3**
**DGRG** **David-gareji** 18.97 65 P **P** **19 22 16.4 +0.3**
**DGRG** **David-gareji** 18.97 65 P **P** **19 22 16.4 +0.3**
**NRDL** **Niedersach Rie** 19.13 337 *e*Pn **Pn** **19 22 19.1 +0.3**
**MEM** **Membach** 19.22 327 P **Pn** **19 22 20.9 +0.9**
comp=Z,12nm,1.0s
**HGN** **Heimansgroeve** 19.36 327 *e*P **Pn** **19 22 22.7 +1.0**
comp=Z,9.1nm,0.8s
**HGN** **Heimansgroeve** 19.36 327 *e*P **Pn** **19 22 22.7 +1.0**
comp=Z,9.1nm,0.8s
**BCLA** **Clavier** 19.41 326 P **Pn** **19 22 22.0 -0.2**
**DOU** **Dourbes** 19.52 324 P **Pn** **19 22 23.1 -0.4**
comp=Z,12nm,0.7s
**IDHR** **Dehrash** 19.68 85 *e*P **P** **19 22 23.9 -0.2**
**IDHR** **Dehrash** 19.68 85 *e*P **P** **19 22 23.9 -0.2**
**NACGM** **Naroch** 19.69 8 *e*P **P** **19 22 21.0 -2.7**
**VORD** **Divnogorie** 19.74 33 *e*P **P** **19 22 22.9 -1.5**
VORD pmax pmax
comp=Z,10.0nm,0.9s
VORD pmax pmax
comp=N,40nm,0.6s
VORD pmax pmax
comp=E,50nm,0.6s
**VORD** **Divnogorie** 19.74 33 *e*P **P** **19 22 22.9 -1.5**
comp=E,10.0nm,0.9s
**IBST** **Bostanabad** 19.83 76 *e*P **P** **19 22 25.7 0.0**
**IBST** **Bostanabad** 19.83 76 *e*P **P** **19 22 25.7 0.0**
**VSR** **Storozhevoye** 19.87 32 *e*P **P** **19 22 24.5 -1.2**
VSR pmax pmax
comp=Z,30nm,0.5s
VSR pmax pmax
comp=N,30nm,1.1s
VSR pmax pmax
comp=E,20nm,1.0s
**VSR** **Storozhevoye** 19.87 32 *e*P **P** **19 22 24.5 -1.2**
comp=E,30nm,1.1s
**IGHG** **Ghaleghazi** 19.89 86 *e*P **P** **19 22 26.4 -0.1**
**IGHG** **Ghaleghazi** 19.89 86 *e*P **P** **19 22 26.4 -0.1**
**WTSB** **Winterswijk** 19.89 331 *e*P **Pn** **19 22 29.3 +1.4**
comp=E,12nm,0.7s
**IHRS** **Heris** 19.94 74 *e*P **P** **19 22 26.0 -0.9**
**IHRS** **Heris** 19.94 74 *e*P **P** **19 22 26.0 -0.9**
**SNF** **Seneffe** 19.94 325 P **Pn** **19 22 27.7 -0.8**
**IVIS** **Veis** 20.09 86 *e*P **P** **19 22 28.0 -0.4**
**IVIS** **Veis** 20.09 86 *e*P **P** **19 22 28.0 -0.4**
**ILIN** **Lien** 20.12 84 *e*P **P** **19 22 28.3 -0.6**
**ILIN** **Lien** 20.12 84 *e*P **P** **19 22 28.3 -0.6**
**BSEG** **Bad Segeberg** 20.30 339 *e*Pn **P** **19 22 30.5 0.0**
**BSD** **Bornholm Skovb** 20.32 348 *i* P **P** **19 22 29.0 -1.6**
BSD pmax pmax
comp=Z,57nm,0.6s
**BSD** **Bornholm Skovb** 20.32 348 *i* P **P** **19 22 29.0 -1.6**
comp=Z,57nm,0.6s
**BSD** **Bornholm Skovb** 20.32 348 *i* P **P** **19 22 29.0 -1.6**
comp=Z,57nm,0.6s
**ISRB** **Sarab** 20.44 76 *e*P **P** **19 22 30.9 -1.4**
**ISRB** **Sarab** 20.44 76 *e*P **P** **19 22 30.9 -1.4**
**IKOM** **Komasi** 20.69 86 *e*P **P** **19 22 34.7 -0.3**
**IKOM** **Komasi** 20.69 86 *e*P **P** **19 22 34.7 -0.3**
**LPSR** **Galich'ya Gora** 20.79 29 *e*P **P** **19 22 34.2 -1.5**
LPSR pmax pmax
comp=Z,30nm,0.7s
LPSR pmax pmax
comp=N,10.0nm,0.6s
LPSR pmax pmax
comp=E,10.0nm,0.5s
**LPSR** **Galich'ya Gora** 20.79 29 *e*P **P** **19 22 34.2 -1.5**
comp=E,10.0nm,0.6s
**VRH** **Novokhopyorsk** 21.02 36 *e*P **P** **19 22 37.2 -1.0**
VRH pmax pmax
comp=Z,20nm,0.5s
VRH pmax pmax
comp=N,10.0nm,0.7s
VRH pmax pmax
comp=E,20nm,0.8s
**VRH** **Novokhopyorsk** 21.02 36 *e*P **P** **19 22 37.2 -1.0**
comp=E,10.0nm,0.7s
**ESDC** **Sonseca Array** 21.25 289 P **P** **19 22 41.2 +0.4**
comp=E,3.9nm,0.6s,baz=82,slow=9.4,SNR=27
**COP** **Copenhagen** 21.34 344 *i* P **P** **19 22 41.9 +0.3**
COP pmax pmax
comp=Z,22nm,0.7s
**COP** **Copenhagen** 21.34 344 *i* P **P** **19 22 41.9 +0.3**
comp=Z,22nm,0.7s
**COP** **Copenhagen** 21.34 344 *i* P **P** **19 22 41.9 +0.3**
comp=Z,22nm,0.7s
**OBN** **Obninsk** 21.97 22 P **P** **19 22 46.8 -1.6**
comp=Z,18nm,0.3s,baz=50,slow=2.6,SNR=6.5
**OBN** **Obninsk** 21.97 22 *ce*P **P** **19 22 47.2 -1.2**
OBN *SP sP 19 22 53.1 -12
OBN *e* 19 22 57.5
OBN 19 23 09.0
OBN *eS* **S** **19 26 48.8 +0.6**
OBN pmax pmax
comp=Z,15nm,0.5s
OBN MLR MLR
comp=Z,81nm,15.0s
**OBN** **Obninsk** 21.97 22 *e*P **P** **19 22 47.4 -1.0**
**OBN** **Obninsk** 21.97 22 *e*P **P** **19 22 47.4 -1.0**
OBN *eS* **S** **19 26 48.8 +0.6**
comp=Z,81nm,15.0s
**MDT** **Midelt** 22.45 271 P **P** **19 22 55.3 +1.4**
comp=Z,2.0nm,0.8s,baz=108,slow=13,SNR=2.6
MDT LR LR 19 31 44.9
comp=Z,165nm,18.5s,baz=49,slow=37
**IRAZ** **Razeghan** 22.45 82 *e*P **P** **19 22 53.6 -0.4**
**IGZV** **Ghazvin** 22.56 79 *e*P **P** **19 22 54.8 -0.4**
**MUD** **Monsted U'grnd** 22.83 341 *i* P **P** **19 22 58.5 +1.0**
MUD pmax pmax
comp=Z,14nm,0.8s
**MUD** **Monsted U'grnd** 22.83 341 *i* P **P** **19 22 58.5 +1.0**
comp=Z,14nm,0.8s
**IR5** **Iran Long-Peri** 23.01 82 *e*P **P** **19 22 58.5 -1.2**
**VSU** **Vasula** 23.20 6⇓ *e*P **P** **19 23 00.8 -0.4**
VSU pmax pmax
comp=Z,64nm,0.9s
**IR3** **Iran Long-Peri** 23.32 82 *e*P **P** **19 23 00.3 -2.5**
**RAYN** **Ar Rayn** 23.34 114 *e*P **P** **19 23 04.5 +1.5**
comp=Z,5.5nm,1.0s
**RAYN** **Ar Rayn** 23.34 114 *e*P **P** **19 23 04.5 +1.5**
comp=Z,5.5nm,1.0s
**IPIR** **Pirpir** 23.77 88 *e*P **P** **19 23 06.1 -1.2**
**IPIR** **Pirpir** 23.77 88 *e*P **P** **19 23 06.1 -1.2**
**IDMV** **Damavand** 24.12 81 *e*P **P** **19 23 11.0 +0.5**
**IDMV** **Damavand** 24.12 81 *e*P **P** **19 23 11.0 +0.5**
**IKLH** **Kolahrood** 24.18 87 *e*P **P** **19 23 12.7 +1.1**
IKLH *e*P **P** **19 23 12.2 +1.1**
**IKLH** **Kolahrood** 24.18 87 *e*P **P** **19 23 12.7 +1.1**
**IFIR** **Firoozkooh** 24.70 81 *e*P **P** **19 23 16.4 +0.7**
**IFIR** **Firoozkooh** 24.70 81 *e*P **P** **19 23 16.4 +0.7**
**IGAR** **Gharneh** 24.78 88 *e*P **P** **19 23 17.4 +0.9**
**IZEF** **Zefreh** 24.89 87 *e*P **P** **19 23 18.3 +0.8**
**IZEF** **Zefreh** 24.89 87 *e*P **P** **19 23 18.3 +0.8**
**ILAS** **Lasjerd** 24.90 81 *e*P **P** **19 23 17.5 0.0**
**ILAS** **Lasjerd** 24.90 81 *e*P **P** **19 23 17.5 0.0**
**ISHM** **Shahmirzad** 25.11 80 *e*P **P** **19 23 19.9 +0.4**
**IRAM** **Ramesheh** 25.22 90 *e*P **P** **19 23 20.9 +0.4**
**IRAM** **Ramesheh** 25.22 90 *e*P **P** **19 23 20.9 +0.4**
**HFS** **Hagfors** 25.32 350 P **P** **19 23 19.5 -1.3**
comp=Z,14nm,0.6s,baz=155,slow=11,SNR=60
HFS LR LR 19 34 18.5
comp=Z,101nm,19.1s,baz=128,slow=39
**IGLO** **Ghaloghah** 25.44 78 *e*P **P** **19 23 21.8 -0.7**
**IANJ** **Anjilo** 25.66 81 *e*P **P** **19 23 24.4 0.0**
**IANJ** **Anjilo** 25.66 81 *e*P **P** **19 23 24.4 0.0**
**FINES** **FINESS Array B** 26.11 4 P **P** **19 23 26.4 -1.6**
comp=Z,6.3nm,0.5s,baz=163,slow=12,SNR=27
FINES LR LR 19 35 32.4
comp=Z,122nm,20.0s,baz=201,slow=41
**ISAD** **Sadrabad** 26.26 89 *e*P **P** **19 23 31.0 +1.1**
**ISAD** **Sadrabad** 26.26 89 *e*P **P** **19 23 31.0 +1.1**
**IPAR** **Pars** 26.39 94 *e*P **P** **19 23 31.4 +0.3**
**IPAR** **Pars** 26.39 94 *e*P **P** **19 23 31.4 +0.3**
**EKA** **Eskdalemuir Ar** 26.50 327 P **P** **19 23 31.1 -0.4**
comp=Z,13nm,0.7s,baz=127,slow=10,SNR=28
**ESK** **Eskdalemuir** 26.51 326 *i* P **P** **19 23 34.3 +2.7**
**NB2** **NORSAR Subarra** 26.57 348 P **P** **19 23 31.3 -0.9**
comp=Z,5.6nm,0.8s,baz=159,slow=9.3
**NB2** **NORSAR Subarra** 26.57 348 P **P** **19 23 31.3 -0.9**
comp=Z,5.6nm,0.8s,SNR=4.3
**NOA** **NORSAR Array B** 26.57 348 P **P** **19 23 30.9 -1.3**
comp=Z,3.9nm,0.8s,baz=157,slow=9.2,SNR=14
**ISRV** **Sarvestan** 26.60 94 *e*P **P** **19 23 34.0 +0.9**
**ISRV** **Sarvestan** 26.60 94 *e*P **P** **19 23 34.0 +0.9**
**ICHK** **Chekchek** 26.75 88 *e*P **P** **19 23 36.3 +2.0**
**ICHK** **Chekchek** 26.75 88 *e*P **P** **19 23 36.3 +2.0**
**IMEH** **Mehriz** 27.16 89 *e*P **P** **19 23 39.0 +0.9**
**IMEH** **Mehriz** 27.16 89 *e*P **P** **19 23 39.0 +0.9**
**KLMR** **Klimovskoe** 27.70 18 *e*P **P** **19 23 40.8 -1.4**
KLMR pmax pmax
comp=Z,13nm,0.8s
**KLMR** **Klimovskoe** 27.70 18 *e*P **P** **19 23 40.8 -1.4**
comp=Z,13nm,0.8s
**GEYT** **Alibeck** 28.68 74 P **P** **19 23 51.1 -0.2**
comp=Z,3.6nm,0.6s,baz=282,slow=8.9,SNR=10
**TORD** **Torodi Ar. Bea** 29.00 225 P **P** **19 23 54.5 +0.4**
comp=Z,2.0nm,0.6s,baz=34,slow=8.4,SNR=14
TORD PcP **PcP** **19 27 04.4 +2.3**
comp=Z,0.6nm,1.0s,baz=27,slow=1.6,SNR=3.2
**AKTK** **Aktyubinsk** 29.76 49 P **P** **19 23 59.6 -1.0**
**AKTO** **Aktyubinsk** 29.76 49 P **P** **19 23 59.5 -1.1**
comp=Z,1.5nm,0.5s,baz=256,slow=13,SNR=8.2
**ITEG** **Tejag** 30.12 84 *e*P **P** **19 24 04.9 +0.6**
**ITEG** **Tejag** 30.12 84 *e*P **P** **19 24 04.9 +0.6**
**ABKAR** **Akbulak array** 30.67 52 *e*P **P** **19 24 07.4 -1.3**
comp=Z,1.1nm,0.5s
**ABKAR** **Akbulak array** 30.67 52 *e*P **P** **19 24 07.4 -1.3**
comp=Z,1.1nm,0.5s
**IMON** **Monand** 30.79 83 *e*P **P** **19 24 10.2 0.0**
**IMON** **Monand** 30.79 83 *e*P **P** **19 24 10.2 0.0**
**ARU** **Arti** 32.21 38 *c* *i*P **P** **19 24 21.0 -1.1**
ARU **19 25 27.8**
ARU S **S** **19 29 35.1 +3.2**
ARU pmax pmax
comp=Z,6.0nm,1.7s
**ARU** **Arti** 32.21 38 *e*P **P** **19 24 20.0 -2.1**
comp=Z,6.1nm,0.8s
**ARU** **Arti** 32.21 38 *i* P **P** **19 24 21.0 -1.1**
comp=Z,6.0nm,1.7s
**SVE** **Sverdlovsk** 33.42 38⇑ *e*P **P** **19 24 32.9 +0.2**
SVE pmax pmax
comp=Z,20nm,0.6s
**SVE** **Sverdlovsk** 33.42 38 *e*P **P** **19 24 32.9 +0.2**
comp=Z,20nm,0.6s
**ARCES** **ARCESS Array B** 34.18 2 P **P** **19 24 38.6 -0.6**
comp=Z,14nm,0.7s,baz=183,slow=8.1,SNR=29
ARCES LR LR 19 40 22.8
comp=Z,99nm,19.1s,baz=236,slow=40
**KKAR** **Karatay Array** 37.62 63 *e*P **P** **19 25 08.2 -0.8**
KKAR pmax pmax
comp=Z,2.0nm,0.4s
**KKAR** **Karatay Array** 37.62 63 *e*P **P** **19 25 08.2 -0.8**
comp=Z,1.5nm,0.4s
**KKAR** **Karatay Array** 37.62 63 *e*P **P** **19 25 08.2 -0.8**
comp=Z,1.5nm,0.4s
**BRVK** **Borovoye** 37.76 47⇓ *e*P **P** **19 25 11.1 +1.1**
BRVK pmax pmax
comp=Z,4.0nm,1.7s
**BRVK** **Borovoye** 37.76 47 *e*P **P** **19 25 11.1 +1.1**
comp=Z,4.0nm,1.7s
**DBIC** **Dimbokro** 38.02 228 P **P** **19 25 12.7 +0.2**
comp=Z,3.7nm,0.7s,baz=360,slow=8.3,SNR=4.7
**KMBO** **Kilima Mbogo** 38.97 156 P **P** **19 25 21.0 +0.2**
comp=Z,0.5nm,0.6s,baz=22,slow=16,SNR=2.1
KMBO LR LR 19 43 31.1
comp=Z,68nm,18.2s,baz=68,slow=39
**EKS2** **Erkin-Say** 40.06 64 *e*P **P** **19 25 28.4 -1.1**
EKS2 pmax pmax
comp=Z,3.0nm,0.7s
**EKS2** **Erkin-Say** 40.06 64 *e*P **P** **19 25 28.4 -1.1**
comp=Z,3.0nm,0.7s
**EKS2** **Erkin-Say** 40.06 64 *e*P **P** **19 25 28.4 -1.1**
comp=Z,3.0nm,0.7s
**AAK** **Ala-Archa** 40.59 64 P **P** **19 25 33.9 0.0**
comp=Z,1.6nm,0.6s,baz=218,slow=6.2,SNR=6.8
**AAK** **Ala-Archa** 40.59 64⇓ *e*P **P** **19 25 34.6 +0.6**
AAK pmax pmax
comp=Z,14nm,2.1s

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **42.22** | **68** | P | **P** | **19 25 46.3** | **-1.1** |
| KSH | | | | PMZ | | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,32nm,3.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.73** | **51** | P | **P** | **19 25 50.9** | **-0.2** |
| | comp=Z,6.2nm,0.6s,baz=279,slow=8.6,SNR=42 | | | | | | |
| **KURK** | **Kurchatov** | **42.78** | **51** | *e*P | **P** | **19 25 49.8** | **-1.8** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **42.78** | **51** | *e*P | **P** | **19 25 49.8** | **-1.8** |
| | comp=Z,6.7nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **42.78** | **51** | *e*P | **P** | **19 25 49.8** | **-1.8** |
| | comp=Z,6.7nm,0.6s | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **42.90** | **358** | P | **P** | **19 25 52.2** | **0.0** |
| | comp=Z,9.1nm,0.6s,baz=161,slow=7.9,SNR=17 | | | | | | |
| **NVS** | **Novosibirsk** | **45.50** | **45** | *i* P | **P** | **19 26 13.2** | **-0.1** |
| **NVS** | **Novosibirsk** | **45.50** | **45** | *i* P | **P** | **19 26 13.2** | **-0.1** |
| **MKAR** | **Makanchi Array** | **45.53** | **56** | P | **P** | **19 26 13.1** | **-0.6** |
| | comp=Z,6.8nm,0.7s,baz=282,slow=6.5,SNR=49 | | | | | | |
| MKAR | | | | PcP | **PcP** | **19 27 53.1** | **+1.3** |
| | comp=Z,1.7nm,0.7s,baz=264,slow=3.4,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.53** | **56** | *c e*P | **P** | **19 26 13.3** | **-0.4** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.46** | **46** | P | **P** | **19 26 19.8** | **-1.0** |
| | comp=Z,4.7nm,0.5s,baz=266,slow=9.5,SNR=31 | | | | | | |
| **DANN** | **Dangsing** | **51.89** | **80** | *e*P | **P** | **19 27 03.4** | **+0.3** |
| **KOLN** | **Koldanda** | **52.01** | **80** | *e*P | **P** | **19 27 03.4** | **-0.5** |
| **GKN** | **Gorkha** | **52.74** | **80** | *e*P | **P** | **19 27 08.8** | **-0.5** |
| **DMN** | **Daman** | **53.28** | **80** | *e*P | **P** | **19 27 13.4** | **0.0** |
| **KKN** | **Kakani** | **53.35** | **80** | *e*P | **P** | **19 27 13.2** | **-0.6** |
| **PKIN** | **Phulchoki** | **53.53** | **80** | *e*P | **P** | **19 27 14.7** | **-0.5** |
| | comp=Z,14nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **53.54** | **80** | *e*P | **P** | **19 27 14.8** | **-0.6** |
| **GUN** | **Gumba** | **53.78** | **79** | *e*P | **P** | **19 27 16.8** | **-0.3** |
| | comp=Z,15nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **55.48** | **79** | *e*P | **P** | **19 27 28.4** | **-1.0** |
| **MATP** | **Matopo** | **55.88** | **173** | P | **P** | **19 27 32.3** | **+0.4** |
| | comp=Z,3.0nm,1.0s,baz=315,slow=4.3,SNR=3.7 | | | | | | |
| **LSA** | **Lhasa** | **57.21** | **75** | *e*P | **P** | **19 27 41.3** | **-0.6** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **57.21** | **75** | *e*P | **P** | **19 27 41.3** | **-0.6** |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **57.21** | **75** | *e*P | **P** | **19 27 41.3** | **-0.6** |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **ZAK** | **Zakamensk** | **58.26** | **48** | *e*P | P | 19 27 45.0 | -3.5 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **GTA** | **Gaotai** | **59.84** | **61** | *e*P | **P** | **19 28 00.5** | **+0.8** |
| GTA | | | | pP | pP | 19 28 04.7 | -7.6 |
| GTA | | | | sP | sP | 19 28 07.8 | -10 |
| GTA | | | | PMZ | | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **LBTB** | **Lobatse** | **60.22** | **177** | P | **P** | **19 28 03.2** | **+1.0** |
| | comp=Z,3.5nm,0.9s,baz=346,slow=12,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **61.06** | **50** | P | **P** | **19 28 07.9** | **0.0** |
| | comp=Z,2.2nm,0.6s,baz=279,slow=8.0,SNR=19 | | | | | | |
| **SCHQ** | **Schefferville** | **61.46** | **319** | P | **P** | **19 28 10.6** | **+0.3** |
| | comp=Z,2.8nm,0.5s,baz=15,slow=2.1,SNR=4.6 | | | | | | |
| **ULN** | **Ulaanbaatar** | **61.46** | **50** | *e*P | **P** | **19 28 10.7** | **+0.1** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **61.46** | **50** | *e*P | **P** | **19 28 10.7** | **+0.1** |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **61.46** | **50** | *e*P | **P** | **19 28 10.7** | **+0.1** |
| | comp=Z,3.5nm,0.8s | | | | | | |
| **BOD** | **Bodaibo** | **61.62** | **37** | *e*P | **P** | **19 28 09.5** | **-1.8** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BOD** | **Bodaibo** | **61.62** | **37** | *e*P | **P** | **19 28 09.5** | **-1.8** |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **63.79** | **177** | P | **P** | **19 28 26.2** | **+0.1** |
| | comp=Z,1.7nm,0.7s,baz=344,slow=8.2,SNR=5.0 | | | | | | |
| BOSA | | | | LR | LR | 19 59 02.4 | |
| | comp=Z,52nm,19.6s,baz=322,slow=39 | | | | | | |
| **YAK** | **Yakutsk** | **66.75** | **29** | *e*P | **P** | **19 28 44.5** | **-0.3** |
| YAK | | | | *e* | | 19 29 13.2 | |
| YAK | | | | *e* | | 19 31 13.1 | |
| YAK | | | | *e*PPP | PPP | 19 32 47.3 | |
| YAK | | | | *e*S | **S** | **19 37 30.3** | **-3.1** |
| YAK | | | | *e**SS | sS | 19 38 13.7 | +19 |
| YAK | | | | *e* | | 19 38 35.7 | |
| YAK | | | | *e*SS | **SS** | **19 41 55.4** | **+4.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,31nm,3.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,30nm,3.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,31nm,4.4s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,28nm,3.5s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,28nm,3.0s | | | | | | |
| **YAK** | **Yakutsk** | **66.75** | **29** | *e*P | **P** | **19 28 44.5** | **-0.3** |
| | comp=E,1.0nm,0.9s | | | | | | |
| **YAK** | **Yakutsk** | **66.75** | **29** | *e*PcP | **PcP** | **19 29 13.2** | **-0.3** |
| **HHC** | **Hu-ho-hao-te** | **67.37** | **55** | *e*P | **P** | **19 28 50.6** | **+1.3** |
| HHC | | | | S | **S** | **19 37 42.5** | **+0.7** |
| HHC | | | | PMZ | | | |
| | comp=E,18nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=E,66nm,4.3s | | | | | | |
| HHC | | | | LN | | | |
| | comp=E,150nm,19.7s | | | | | | |
| HHC | | | | LE | | | |
| | comp=E,190nm,17.3s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=E,53nm,13.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **68.81** | **82** | P | **P** | **19 28 58.0** | **-0.5** |
| | comp=E,1.5nm,0.8s,baz=302,slow=7.5,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 20 04 59.6 | |
| | comp=E,11nm,19.2s,baz=175,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **68.81** | **82** | *i* P | **P** | **19 28 58.5** | **0.0** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **73.33** | **13** | P | **P** | **19 29 26.0** | **+1.0** |
| BILL | | | | *e* | | 19 29 30.2 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **BILL** | **Bilibino** | **73.33** | **13** | P | **P** | **19 29 26.0** | **+1.0** |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **INK** | **Inuvik** | **74.98** | **351** | P | **P** | **19 29 35.1** | **+0.5** |
| | comp=Z,5.0nm,1.1s,baz=12,slow=7.5,SNR=4.6 | | | | | | |
| **MA2** | **Magadan** | **76.17** | **24** | *e*P | **P** | **19 29 41.9** | **+0.2** |
| **YKA** | **Yellowknife Ar** | **76.44** | **341** | P | **P** | **19 29 43.8** | **+0.7** |
| | comp=Z,2.1nm,0.7s,baz=30,slow=5.0,SNR=4.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **78.24** | **44** | P | **P** | **19 29 54.2** | **+0.7** |
| | comp=Z,1.6nm,0.7s,baz=312,slow=3.2,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **79.74** | **355** | P | **P** | **19 30 02.1** | **+0.8** |
| | comp=Z,1.4nm,0.7s,baz=357,slow=3.6,SNR=21 | | | | | | |
| **KSAR** | **Wonju Array Be** | **79.89** | **51** | P | **P** | **19 30 03.4** | **+0.8** |
| **KSAR** | **Wonju Array Be** | **79.89** | **51** | P | **P** | **19 30 03.4** | **+0.8** |
| **KSAR** | **Wonju Array Be** | **79.89** | **51** | P | **P** | **19 30 03.4** | **+0.8** |
| **KSRS** | **Korea Array** | **79.90** | **51** | P | **P** | **19 30 03.4** | **+0.7** |
| | comp=Z,0.9nm,0.6s,baz=312,slow=5.6,SNR=7.4 | | | | | | |
| KSRS | | | | LR | LR | 20 09 59.4 | |
| | comp=Z,15nm,18.5s,baz=315,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **79.90** | **51** | P | **P** | **19 30 03.4** | **+0.7** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,15nm,18.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **83.65** | **25** | LR | LR | 20 11 33.1 | |
| | comp=Z,25nm,19.8s,baz=287,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **86.81** | **47** | P | **P** | **19 30 38.5** | **+0.2** |
| | comp=Z,0.9nm,0.7s,baz=164,slow=18,SNR=2.9 | | | | | | |
| **KDAK** | **Kodiak Island** | **87.02** | **357** | *i* P | **P** | **19 30 40.7** | **+1.9** |
| **NVAR** | **Mina Array Bea** | **97.95** | **330** | LR | LR | 20 18 22.3 | |
| | comp=Z,113nm,18.4s,baz=38,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **118.91** | **95** | PKP | **PKPdf** | **19 36 42.3** | **-0.3** |
| | comp=Z,0.3nm,0.9s,baz=324,slow=1.3,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **120.37** | **99** | PKP | **PKPdf** | **19 36 45.6** | **+0.3** |
| | comp=Z,0.6nm,0.8s,baz=303,slow=1.3,SNR=6.8 | | | | | | |

*IDC **10** 19:25:48.5±0.8, 31°.72S×179°.96W, h325km±9km, mb3.4/2, mb1 3.8/5, mb1mx3.3/21, mbtmp4.4/5, Error ellipse: s-maj=25.0km s-min=12.7km az=121.0*

**ISC 10 19:25:49.3**±0.7**, 31°.78S**±0°.09×**179°.9W**±0°.2**, h350**km**, n58,** σ**1s.40**/54**, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **3.02** | **34** | P | **Pn** | **19 26 48.0** | **-1.0** |
| | 74nm,0.3s,baz=75,slow=20,SNR=3.0 | | | | | | |
| RAO | | | | S | **S** | **19 27 32.5** | **-4.4** |
| | 68nm,0.3s,baz=78,slow=20,SNR=2.5 | | | | | | |
| **MXZ** | **Matakaoa Point** | **5.96** | **194** | PN | Pn | 19 27 23.7 | +4.1 |
| MXZ | | | | SN | **S** | **19 28 31.8** | **-1.0** |
| **WMGZ** | **Waiomatatini S** | **6.19** | **193** | PN | Pn | 19 27 26.6 | +4.5 |
| **HAZ** | **Te Kaha** | **6.27** | **197** | PN | Pn | 19 27 26.2 | +3.1 |
| HAZ | | | | SN | **S** | **19 28 38.1** | **-1.1** |
| **PUZ** | **Puketiti** | **6.46** | **193** | PN | Pn | 19 27 28.5 | +3.1 |
| **TWGZ** | **Tauwhareparae** | **6.62** | **195** | PN | Pn | 19 27 31.4 | +4.2 |
| TWGZ | | | | SN | **S** | **19 28 46.4** | **-0.4** |
| **CNGZ** | **Carnagh Statio** | **6.87** | **193** | PN | Pn | 19 27 34.3 | +4.2 |
| **MWZ** | **Matawai** | **6.88** | **197** | PN | Pn | 19 27 34.0 | +3.7 |
| MWZ | | | | SN | **S** | **19 28 50.4** | **-1.9** |
| **TKGZ** | **Te Karaka** | **6.90** | **195** | PN | Pn | 19 27 35.0 | +4.6 |
| **URZ** | **Urewera** | **6.93** | **200** | P | **Pn** | **19 27 31.4** | **+0.7** |
| | 6.6nm,0.3s,baz=280,slow=4.0,SNR=95 | | | | | | |
| URZ | | | | S | **S** | **19 28 49.8** | **-3.3** |
| | 12nm,0.3s,baz=298,slow=0.7,SNR=24 | | | | | | |
| **URZ** | **Urewera** | **6.93** | **200** | *e*PN | Pn | 19 27 33.8 | +3.1 |
| URZ | | | | SN | **S** | **19 28 51.1** | **-2.1** |
| **RIGZ** | **Rimuhau** | **7.18** | **195** | *e*PN | Pn | 19 27 38.6 | +4.9 |
| **SNGZ** | **Shannon Statio** | **7.35** | **197** | PN | Pn | 19 27 38.7 | +3.0 |
| **KNZ** | **Kokohu** | **7.50** | **195** | PN | Pn | 19 27 41.5 | +4.1 |
| **RAHZ** | **Arahi** | **7.54** | **199** | PN | **Pn** | **19 27 40.6** | **+2.6** |
| **MHGZ** | **Mahia Peninsul** | **7.58** | **193** | *e*PN | Pn | 19 27 43.1 | +4.7 |
| **ARHZ** | **Aropaoanui** | **7.89** | **198** | PN | **Pn** | **19 27 44.4** | **+2.3** |
| **BKZ** | **Black Stump Fm** | **7.95** | **201** | PN | **Pn** | **19 27 44.5** | **+1.8** |
| BKZ | | | | *e*SN | **S** | **19 29 12.4** | **-2.9** |
| **MCHZ** | **McNeill Hill** | **8.14** | **199** | PN | **P** | **19 27 47.2** | **-0.8** |
| **KWHZ** | **Kaweka Forest** | **8.21** | **201** | *e*PN | **P** | **19 27 48.0** | **-0.7** |
| **WHVZ** | **Whangaehu Hut** | **8.35** | **205** | PN | **P** | **19 27 50.3** | **-0.3** |
| **BHHZ** | **Black Hill Sta** | **8.38** | **202** | PN | **P** | **19 27 49.0** | **-1.7** |
| **WNVZ** | **Wahianoa** | **8.39** | **205** | PN | **P** | **19 27 50.3** | **-0.6** |
| **MOVZ** | **Moawhango** | **8.41** | **204** | PN | **P** | **19 27 50.1** | **-0.9** |
| **KRHZ** | **Kereru** | **8.42** | **200** | PN | **P** | **19 27 50.6** | **-0.5** |
| **PXZ** | **Pawanui** | **8.65** | **197** | PN | **P** | **19 27 53.5** | **-0.1** |
| **PNHZ** | **Pukenui** | **8.72** | **200** | *e*PN | **Pn** | **19 27 52.4** | **+0.4** |
| **WPHZ** | **Waipukurau** | **8.79** | **199** | PN | **P** | **19 27 55.7** | **+0.5** |
| **TSZ** | **Takapari Road** | **8.93** | **201** | PN | **P** | **19 27 55.8** | **-1.0** |
| **DVHZ** | **Dannevirke** | **9.09** | **200** | *e*PN | **P** | **19 27 57.6** | **-0.9** |
| **PRWZ** | **Pori Road** | **9.38** | **200** | *e*PN | **P** | **19 28 01.5** | **-0.3** |
| **BFZ** | **Birch Farm** | **9.42** | **198** | *e*PN | **P** | **19 28 02.3** | **+0.1** |
| **MRZ** | **Mangatainoka R** | **9.60** | **201** | *e*PN | **P** | **19 28 04.1** | **-0.1** |
| **HOWZ** | **Holdsworth Sta** | **9.83** | **201** | PN | **P** | **19 28 05.5** | **-1.3** |
| **OGWZ** | **Otaki Gorge** | **9.87** | **203** | PN | **P** | **19 28 06.0** | **-1.2** |
| **KIW** | **Kapiti Island** | **10.00** | **204** | *e*PN | **P** | **19 28 08.0** | **-0.6** |
| **MTW** | **Mount Morrison** | **10.08** | **200** | *e*PN | **P** | **19 28 08.9** | **-0.6** |
| **CAW** | **Cannon Point** | **10.16** | **202** | PN | **P** | **19 28 09.3** | **-1.1** |
| **DUWZ** | **D'Urville Isla** | **10.31** | **207** | *e*PN | **Pn** | **19 28 10.6** | **-0.2** |
| **MSWZ** | **Moikau Station** | **10.39** | **201** | PN | **P** | **19 28 12.4** | **-0.5** |
| **TCW** | **Tory Channel** | **10.53** | **205** | PN | **P** | **19 28 13.7** | **-0.8** |
| **TUWZ** | **Tuamarina** | **10.84** | **206** | *e*PN | **Pn** | **19 28 16.2** | **-0.9** |
| **NNZ** | **Nelson** | **10.87** | **208** | PN | **Pn** | **19 28 16.9** | **-0.7** |
| **QRZ** | **Quartz Range** | **10.91** | **212** | PN | **P** | **19 28 17.7** | **-1.1** |
| **BSWZ** | **Blackbirch Sta** | **11.11** | **205** | *e*PN | **P** | **19 28 20.6** | **-0.3** |
| **THZ** | **Tophouse** | **11.53** | **208** | *e*PN | **Pn** | **19 28 24.3** | **-1.1** |
| THZ | | | | SN | S | 19 30 26.6 | -7.4 |
| **KHZ** | **Kahutara** | **11.85** | **205** | PN | **P** | **19 28 28.3** | **-0.8** |
| **LTZ** | **Lake Taylor** | **12.64** | **207** | PN | **Pn** | **19 28 38.3** | **-0.2** |
| **RPZ** | **Rata Peaks** | **13.90** | **208** | P | **Pn** | **19 28 52.9** | **-0.4** |
| | 0.6nm,0.3s,baz=17,slow=20,SNR=3.4 | | | | | | |
| RPZ | | | | S | S | 19 31 12.8 | -10 |
| | 0.4nm,0.3s,baz=270,slow=7.1,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **41.48** | **269** | P | **P** | **19 33 04.1** | **+0.6** |
| | 1.2nm,0.5s,baz=108,slow=7.4,SNR=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.59** | **275** | P | **P** | **19 33 12.8** | **+0.3** |
| | 3.5nm,0.8s,baz=112,slow=7.9,SNR=56 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **118.00** | **318** | PKP | **PKPdf** | **19 43 55.3** | **+1.0** |
| | 0.2nm,0.3s,baz=48,slow=2.1,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **145.86** | **338** | PKPbc | **PKPab** | **19 44 48.4** | **0.0** |
| | 1.4nm,0.4s,baz=65,slow=3.5,SNR=13 | | | | | | |
| **NB2** | **NORSAR Subarra** | **149.84** | **349** | PKP | **PKPbc** | **19 44 59.1** | **+1.4** |
| | comp=Z,0.9nm,0.5s,baz=15,slow=2.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **149.84** | **349** | PKPbc | **PKPbc** | **19 44 59.2** | **+1.5** |
| | comp=Z,1.2nm,0.6s,baz=13,slow=4.1,SNR=5.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.38** | **320** | PKPbc | **PKPbc** | **19 45 02.9** | **+1.4** |
| | comp=Z,0.7nm,0.5s,baz=56,slow=2.3,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **151.81** | **296** | PKPbc | **PKPbc** | **19 45 04.0** | **+0.9** |
| | comp=Z,0.4nm,0.5s,baz=116,slow=3.4,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **161.40** | **185** | PKP | **PKPdf** | **19 45 11.3** | **+2.2** |
| | comp=Z,0.3nm,0.9s,baz=183,slow=2.6,SNR=2.5 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **19 45 56.8** | **+1.6** |
| | comp=Z,0.5nm,0.5s,baz=190,slow=3.6,SNR=14 | | | | | | |

*ISCJB **10** 20:01:03.3±0.6, 11°.36N±0°.04×62°.25W±0°.03, h132km±6km, Error ellipse: s-maj=7.2km s-min=4.4km az=142.2*
*FUNV **10** 20:01:05.0, 11°.30N×62°.13W, h136km, MW3.2*
*TRN **10** 20:01:06.4, 11°.45N×62°.05W, h125km, MD3.6*

**ISC 10 20:01:01.0**±1.4**, 11°.35N**±0°.04×**62°.17W**±0°.04**, h158**km±9km**,** **n27,** σ**2s.20**/50**, 3C, Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUIV** | **Guiria** | **0.70** | **184** | *e*P | **Pn** | **20 01 25.1** | **+0.8** |
| GUIV | | | | *e*S | **Sn** | **20 01 39.8** | **-2.5** |
| **TCE** | **Chacachacare** | **0.77** | **148** | *e*P | **Pn** | **20 01 27.0** | **+2.2** |
| TCE | | | | *e*S | **Sn** | **20 01 42.6** | **-0.4** |
| **GRGR** | **Grenville** | **0.92** | **33** | *e*P | **Pn** | **20 01 27.1** | **+1.2** |
| **GRW** | **Mount Saint Ca** | **0.94** | **32** | *e*P | **Pn** | **20 01 27.3** | **+1.1** |
| GRW | | | | *e*S | **Sn** | **20 01 41.9** | **-3.6** |
| **GRHS** | **Sauteurs** | **1.01** | **31** | *e*P | **Pn** | **20 01 28.0** | **+1.4** |
| GRHS | | | | *e*S | **Sn** | **20 01 43.8** | **-2.4** |
| **TRN** | **Trinidad (W)** | **1.03** | **133** | ⇑*i*P | **Pn** | **20 01 29.2** | **+2.6** |
| TRN | | | | *e*S | **Sn** | **20 01 45.6** | **-0.8** |
| **GRSS** | **Sisters** | **1.09** | **30** | *e*P | **Pn** | **20 01 28.6** | **+1.4** |
| GRSS | | | | *e*S | **Sn** | **20 01 44.2** | **-3.2** |
| **TPP** | **Pointe-a-Pierr** | **1.25** | **146** | *e*P | **Pn** | **20 01 31.5** | **+2.9** |
| TPP | | | | *e*S | **Sn** | **20 01 49.9** | **0.0** |
| **CRUV** | **Carupano** | **1.25** | **237** | *e*P | **Pn** | **20 01 30.3** | **+1.7** |
| CRUV | | | | *e*S | **Sn** | **20 01 49.2** | **-0.7** |
| **TBH** | **Brigand Hill** | **1.38** | **128** | *e*P | **Pn** | **20 01 32.4** | **+2.4** |
| TBH | | | | *e*S | **Sn** | **20 01 51.9** | **-0.3** |
| **GUNV** | **Guanoco** | **1.41** | **213** | *e*P | **Pn** | **20 01 32.0** | **+1.8** |
| GUNV | | | | *e*S | **Sn** | **20 01 51.6** | **-1.1** |
| **BOT** | **Bacolet** | **1.43** | **97** | ⇑*i*P | **Pn** | **20 01 32.5** | **+2.1** |
| BOT | | | | *e*S | **Sn** | **20 01 51.3** | **-1.7** |
| **TOSP** | **Speyside** | **1.60** | **92** | ⇑*i*P | **Pn** | **20 01 33.1** | **+1.0** |
| TOSP | | | | *e*S | **Sn** | **20 01 54.9** | **-1.2** |
| **SVB** | **Belmont** | **2.11** | **25** | *e*P | **Pn** | **20 01 40.0** | **+2.1** |
| **ORIV** | **Oritupano** | **2.58** | **208** | *e*P | **Pn** | **20 01 45.5** | **+2.1** |
| ORIV | | | | *e*S | **Sn** | **20 02 14.8** | **-1.4** |
| **MCLT** | **Moule a Chique** | **2.63** | **27** | *e*P | **Pn** | **20 01 46.2** | **+2.1** |
| MCLT | | | | *e*S | **Sn** | **20 02 14.9** | **-2.6** |
| **PCRV** | **Puerto La Cruz** | **2.69** | **245** | *e*P | **Pn** | **20 01 46.7** | **+1.8** |
| PCRV | | | | *e*S | **Sn** | **20 02 17.5** | **-1.3** |
| **BBGH** | **Gun Hill** | **3.11** | **55** | *e*P | **Pn** | **20 01 53.1** | **+3.1** |
| BBGH | | | | *e*S | **Sn** | **20 02 26.0** | **-2.1** |
| **GURV** | **El Guri** | **3.68** | **194** | *e*P | **Pn** | **20 01 58.0** | **+0.6** |
| GURV | | | | *e*S | **Sn** | **20 02 38.9** | **-2.4** |
| **CUPV** | **Cœpira** | **3.78** | **250** | *e*P | **Pn** | **20 02 00.5** | **+1.8** |
| CUPV | | | | *e*S | **Sn** | **20 02 42.1** | **-1.5** |
| **BIRV** | **Birongo** | **4.12** | **258** | *e*P | **Pn** | **20 02 05.8** | **+2.8** |
| BIRV | | | | *e*S | **Sn** | **20 02 49.4** | **-1.9** |
| **MERV** | **Las Mercedes** | **4.57** | **243** | *e*P | **Pn** | **20 02 10.6** | **+1.7** |
| MERV | | | | *e*S | **Sn** | **20 03 00.3** | **-1.5** |
| **LUEV** | **Luepa** | **5.52** | **173** | *e*P | **Pn** | **20 02 21.6** | **0.0** |
| LUEV | | | | *e*S | **Sn** | **20 03 20.7** | **-3.9** |
| **TURV** | **Turiamo** | **5.64** | **261** | *e*P | **Pn** | **20 02 25.9** | **+2.9** |
| **BAUV** | **El Baul** | **6.26** | **248** | *e*P | **Pn** | **20 02 32.6** | **+1.4** |
| BAUV | | | | *e*S | **Sn** | **20 03 37.7** | **-4.3** |
| **MAPV** | **Macapo** | **6.37** | **257** | *e*P | **Pn** | **20 02 34.9** | **+2.2** |
| MAPV | | | | *e*S | **Sn** | **20 03 41.2** | **-3.4** |
| **TEPV** | **Terepaima** | **7.04** | **259** | *e*P | **Pn** | **20 02 44.4** | **+2.7** |

**WEL 10 20:02:11.7**±0.1**, 43°.57S**×**172°.42E, h5**km**, ML2.6**/5**, 2D, Error ellipse: s-maj=0.9km s-min=0.8km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.15** | **92** | PG | Pg | 20 02 14.9 | +0.3 |
| CRLZ | | | | SG | Sg | 20 02 17.2 | +0.5 |
| **MQZ** | **McQueen's Vall** | **0.22** | **129** | ⇓PG | Pg | 20 02 16.1 | +0.1 |
| MQZ | | | | SG | Sg | 20 02 19.2 | +0.3 |
| MQZ | | | | AML | AML | 20 02 19.6 | |
| **OXZ** | **Oxford** | **0.37** | **312** | PG | Pg | 20 02 18.9 | 0.0 |
| **LTZ** | **Lake Taylor** | **0.80** | **352** | ⇓P* | Pg | 20 02 27.2 | +0.2 |
| LTZ | | | | S* | Sg | 20 02 38.0 | +0.6 |
| LTZ | | | | AML | AML | 20 02 38.4 | |
| **RPZ** | **Rata Peaks** | **1.00** | **261** | P* | Pg | 20 02 30.9 | 0.0 |
| RPZ | | | | S* | Sg | 20 02 44.1 | +0.2 |
| **LBZ** | **Lake Benmore** | **1.81** | **242** | AML | AML | 20 03 11.0 | |

**DJA 10 20:05:33.4**±0.2**, 8°S**±3°×**11°1E**±°**, h10**km**, M4.1**/11**, MLv4.1**/11**, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **0.04** | **316** | P | Pg | 20 05 36.0 | +0.6 |
| UGM | | | | S | Sg | 20 05 38.2 | +1.4 |
| **WOJI** | **Wonogiri, Jawa** | **0.38** | **75** | P | Pg | 20 05 40.1 | -0.9 |
| WOJI | | | | S | Sg | 20 05 45.9 | -0.2 |
| **PCJI** | **Pacitan** | **0.67** | **112** | P | Pg | 20 05 45.9 | -0.5 |
| PCJI | | | | S | Sg | 20 05 55.2 | 0.0 |
| **SMRI** | **Semarang** | **0.89** | **353** | P | Pg | 20 05 49.7 | -0.9 |
| **NGJI** | **Ngawi** | **1.07** | **58** | P | Pb | 20 05 54.2 | +0.2 |
| **PWJI** | **Pagerwojo** | **1.25** | **94** | P | Pn | 20 05 54.3 | -2.6 |
| PWJI | | | | S | Sn | 20 06 14.2 | +0.5 |
| **UWJI** | **Ujung Watu** | **1.56** | **15** | P | Pn | 20 05 59.9 | -1.3 |
| UWJI | | | | S | Sn | 20 06 20.3 | -1.3 |
| **TBJI** | **Tambak Boyo** | **1.70** | **49** | P | Pn | 20 06 01.9 | -1.3 |
| **KPJI** | **Karang Pucung** | **1.71** | **290** | P | Pn | 20 06 03.1 | -0.2 |
| **CMJI** | **Cimerak** | **2.09** | **274** | P | Pn | 20 06 07.3 | -1.2 |
| **GRJI** | **Gresik** | **2.17** | **62** | P | Pn | 20 06 08.5 | -1.1 |
| **CISI** | **Cisompet, Garu** | **2.74** | **278** | P | Pn | 20 06 16.7 | -0.8 |
| CISI | | | | S | Sn | 20 06 50.9 | +0.2 |
| **GMJI** | **Gumukmas** | **2.88** | **97** | P | Pn | 20 06 18.9 | -0.5 |
| **BWJI** | **Bawean** | **2.95** | **45** | P | Pn | 20 06 20.0 | -0.3 |
| **BLJI** | **Banyuglugur** | **3.02** | **87** | P | Pn | 20 06 21.1 | -0.3 |
| **LEM** | **Lembang** | **3.11** | **291** | P | Pn | 20 06 23.8 | +1.0 |
| **CNJI** | **Cibinong** | **3.45** | **280** | P | Pn | 20 06 28.3 | +1.1 |
| **KMMI** | **Kalianget** | **3.50** | **76** | P | Pn | 20 06 28.1 | +0.2 |
| **JAGI** | **Jajag, Banyuwa** | **3.60** | **99** | P | Pn | 20 06 31.7 | +2.3 |
| **ABJI** | **Asem Bagus** | **3.65** | **88** | P | Pn | 20 06 30.2 | +0.2 |
| **CBJI** | **Citeko** | **3.97** | **292** | P | Pn | 20 06 32.6 | -1.8 |

*IDC **10** 20:20:37.3±5.3, 24°.41S×68°.93W, h0km, mb3.9/1, mb1 3.8/2, mb1mx3.5/17, mbtmp3.7/2, ML3.8/1, Error ellipse: s-maj=248.1km s-min=56.3km az=20.0*
*GUC **10** 20:20:45.0±0.8, 27°.68S×69°.06W, h84km±28km, ML3.5*

**ISC 10 20:20:44.2**±1.2**, 27°.71S**±0°.08×**68°.94W**±0°.10**, h74**km±18km**,** **n9,** σ**1s.01**/13**, 1C-3D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPCH** | **Copiapo** | **1.30** | **285** | ⇑*i*P | **Pn** | **20 21 06.8** | **0.0** |
| CPCH | | | | *i* S | **Sn** | **20 21 23.5** | **-0.3** |
| **CDCH** | **Caldera** | **1.79** | **291** | *e*P | **Pn** | **20 21 13.5** | **+0.3** |
| CDCH | | | | *i* S | **Sn** | **20 21 34.3** | **-0.9** |
| **VACH** | **Vallenar** | **1.82** | **241** | ⇓*i*P | **Pn** | **20 21 14.1** | **+0.5** |
| VACH | | | | *e*S | **Sn** | **20 21 36.4** | **+0.5** |
| **LCO** | **Las Campanas** | **2.02** | **230** | ⇓*i*P | **Pn** | **20 21 17.0** | **+0.5** |
| LCO | | | | *i* S | **Sn** | **20 21 42.4** | **+1.3** |
| LCO | | | | AML | AML | 20 21 44.0 | |
| | comp=E,478nm,0.9s | | | | | | |
| **LSCH** | **La Serena** | **2.98** | **222** | ⇓*i*P | **Pn** | **20 21 28.4** | **-0.8** |
| LSCH | | | | *i* S | **Sn** | **20 22 02.2** | **-1.7** |
| **CPUP** | **Villa Florida** | **10.45** | **85** | Pn | **Pn** | **20 23 11.1** | **0.0** |
| | comp=E,0.2nm,0.3s,baz=270,slow=20,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.53** | **69** | P | P | 20 32 40.3 | -3.1 |
| | comp=E,0.5nm,0.5s,baz=259,slow=4.9,SNR=19 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **147.48** | **29** | PKP | **PKPdf** | **20 40 15.8** | **-0.8** |
| | comp=E,0.8nm,0.4s,baz=294,slow=4.4,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **150.47** | **42** | PKPbc | **PKPdf** | **20 40 23.1** | **+1.3** |
| | comp=E,1.2nm,0.7s,baz=298,slow=2.1,SNR=6.4 | | | | | | |

*DDA **10** 20:26:22.5, 37°.37N×36°.15E, h7km, Md3.1*
*ISK **10** 20:26:22.0, 37°.38N×36°.13E, h3km, MD2.8*
*CSEM **10** 20:26:23.0±0.2, 37°.38N×36°.10E, h2km, MD2.8, Error ellipse: s-maj=4.4km s-min=3.6km az=169.0*

**ISC 10 20:26:22.8**±1.1**, 37°.37N**±0°.03×**36°.14E**±0°.02**, h3**km±10km**,** **n28,** σ**0s.73**/42**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANDN** | **Andirin** | **0.27** | **37** | *i* P | **Pg** | **20 26 27.7** | **-0.3** |
| ANDN | | | | *i* S | **Sg** | **20 26 32.3** | **+0.8** |
| **ANDN** | **Andirin** | **0.27** | **37** | P | **Pg** | **20 26 27.7** | **-0.3** |
| ANDN | | | | S | **Sg** | **20 26 32.3** | **+0.8** |
| **KOZT** | **Kozan** | **0.28** | **295** | PG | **Pg** | **20 26 28.0** | **-0.1** |
| KOZT | | | | *e*SG | **Sg** | **20 26 32.3** | **+0.6** |
| **KOZT** | **Kozan** | **0.28** | **295** | *i* Pg | **Pg** | **20 26 28.0** | **-0.1** |
| KOZT | | | | *e*Sg | **Sg** | **20 26 32.3** | **+0.6** |
| **KAMA** | **Osmaniye** | **0.46** | **113** | P | **Pg** | **20 26 32.0** | **+0.5** |
| KAMA | | | | S | **Sg** | **20 26 38.3** | **+0.9** |
| **CEYT** | **Ceyhan** | **0.47** | **222** | *e*PG | **Pg** | **20 26 32.1** | **+0.3** |
| **CEYT** | **Ceyhan** | **0.47** | **222** | *e*Pg | **Pg** | **20 26 32.1** | **+0.3** |
| **AYKD** | **Aykdinkavak** | **0.53** | **84** | P | **Pg** | **20 26 33.1** | **+0.1** |
| AYKD | | | | S | **Sg** | **20 26 40.3** | **+0.4** |
| **KMRS** | **Kahramanmaras** | **0.62** | **77** | *e*PG | **Pg** | **20 26 34.8** | **+0.2** |
| **KMRS** | **Kahramanmaras** | **0.62** | **77** | *e*Pg | **Pg** | **20 26 34.8** | **+0.2** |
| **KARA** | **Karaisali** | **0.87** | **263** | *e*PG | **Pg** | **20 26 39.0** | **-0.5** |
| **KARA** | **Karaisali** | **0.87** | **263** | *e*Pg | **Pg** | **20 26 39.0** | **-0.5** |
| **KUZU** | **Kuzuini** | **0.95** | **128** | *i* P | **Pn** | **20 26 42.9** | **-0.2** |
| KUZU | | | | *i* S | **Sn** | **20 26 56.1** | **-1.1** |
| **KUZU** | **Kuzuini** | **0.95** | **128** | P | **Pn** | **20 26 42.9** | **-0.2** |
| KUZU | | | | S | **Sn** | **20 26 56.1** | **-1.1** |
| **TAHT** | **Tahtakopru-Hat** | **0.99** | **178** | *e*PG | **Pb** | **20 26 42.0** | **-0.6** |
| **TAHT** | **Tahtakopru-Hat** | **0.99** | **178** | *e*Pg | **Pb** | **20 26 42.0** | **-0.6** |
| **SARI** | **SarD1z-Kayseri** | **1.06** | **12** | *e*PG | **Pg** | **20 26 42.8** | **-0.3** |
| **GULE** | **Gulek** | **1.09** | **266** | *i* P | **Pg** | **20 26 43.4** | **-0.3** |
| **GULE** | **Gulek** | **1.09** | **266** | P | **Pg** | **20 26 43.4** | **-0.3** |
| GULE | | | | S | **Sn** | **20 27 03.0** | **+2.1** |
| **GZT** | **Gaziantep** | **1.13** | **90** | P | **Pn** | **20 26 45.5** | **-0.2** |
| GZT | | | | S | **Sn** | **20 27 03.7** | **+1.8** |
| **PINB** | **Pinarbasi** | **1.33** | **9** | *i* P | **Pg** | **20 26 48.2** | **0.0** |
| PINB | | | | *i* S | **Sn** | **20 27 07.9** | **+1.1** |
| **PINB** | **Pinarbasi** | **1.33** | **9** | P | **Pg** | **20 26 48.2** | **0.0** |
| PINB | | | | S | **Sn** | **20 27 07.9** | **+1.1** |
| **NIG** | **Nigde** | **1.43** | **302** | *e*PN | **Pn** | **20 26 49.4** | **-0.4** |
| **NIG** | **Nigde** | **1.43** | **302** | *e*Pn | **Pn** | **20 26 49.4** | **-0.4** |
| **DARE** | **Darende-Malaty** | **1.60** | **41** | *e*PN | **Pb** | **20 26 52.1** | **-1.0** |
| **DARE** | **Darende-Malaty** | **1.60** | **41** | *e*Pn | **Pb** | **20 26 52.1** | **-1.0** |
| **AKCD** | **Akcadag** | **1.69** | **56** | *i* P | **Pb** | **20 26 54.3** | **-0.3** |
| AKCD | | | | *i* S | **Sg** | **20 27 16.9** | **-0.1** |
| **AKCD** | **Akcadag** | **1.69** | **56** | P | **Pb** | **20 26 54.3** | **-0.3** |
| AKCD | | | | S | **Sg** | **20 27 16.9** | **-0.1** |

**IDC 10 20:31:26.8**±1.7**, 1°.37S**×**129°.81E, h0**km**, mb3.7**/2**, mb1 3.9**/3**, mb1mx3.3**/28**, mbtmp3.6**/3**, ML3.5**/1**, MS3.2**/1**, Ms1 3.2**/1**, ms1mx2.4**/30**, Error ellipse: s-maj=27.1km s-min=16.4km az=141.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **1.53** | **71** | Pg | Pn | 20 31 54.5 | -0.9 |
| | 17nm,0.3s,baz=252,slow=19,SNR=163 | | | | | | |
| SIJI | | | | Lg | Lg | 20 32 15.8 | |
| | 46nm,0.3s,baz=246,slow=20,SNR=17 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.99** | **167** | P | P | 20 35 49.5 | -0.6 |
| | 0.2nm,0.3s,baz=354,slow=12,SNR=11 | | | | | | |
| WRA | | | | S | Sn | 20 39 15.2 | -8.8 |
| | 0.1nm,0.3s,baz=1.1,slow=22,SNR=8.4 | | | | | | |
| **ASAR** | **Alice Springs** | **22.52** | **170** | P | P | 20 36 28.8 | +0.4 |
| | 3.7nm,1.0s,baz=358,slow=10.0,SNR=20 | | | | | | |
| ASAR | | | | S | Sn | 20 40 43.4 | -5.8 |
| | 0.9nm,1.0s,baz=359,slow=29,SNR=3.6 | | | | | | |
| **LEM** | **Lembang** | **22.79** | **256** | LR | LR | 20 46 20.5 | |
| | comp=Z,56nm,19.6s,baz=214,slow=39 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **38.51** | **11** | P | P | 20 38 50.7 | -0.3 |
| | 0.7nm,0.8s,baz=200,slow=13,SNR=2.9 | | | | | | |

*ISCJB **10** 20:36:07.9±0.6, 59°.46N±0°.02×151°.28W±0°.03, h15km±4km, mb3.9/8, Error ellipse: s-maj=3.5km s-min=2.7km az=145.0*
*NEIC **10** 20:36:09.0, 59°.49N×151°.36W, h4km, ML3.6(AEIC), After AEIC.*
*NEIC Felt [II] at Homer. Also felt at Anchor Point and Seldovia.*
*IDC **10** 20:36:11.9±1.2, 59°.46N×151°.13W, h44km±14km, mb3.6/8, mb1 3.8/11, mb1mx3.5/35, mbtmp3.8/11, ML3.4/3, Error*

*ellipse: s-maj=24.2km s-min=8.6km az=116.0*

**ISC 10 20:36:07.8**±0.9**, 59°.45N**±0°.03×**151°.35W**±0°.03**, h12**$^{km}$±5$^{km}$**, n77,** σ1$^s$06/100**, mb4.0**/8**, Kenai Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CNPM | China Poot | 0.10 | 38 | P | Pg | 20 36 10.9 | +0.2 |
| CNPM | | | | S | Sg | 20 36 12.8 | +0.1 |
| HOM | Homer | 0.26 | 325 | P | Pb | 20 36 14.6 | +0.2 |
| BRLK | Bradley Lake | 0.40 | 37 | P | Pg | 20 36 15.5 | -0.1 |
| BRLK | | | | S | Sg | 20 36 21.2 | +0.3 |
| NNL | Ninilchik | 0.60 | 3 | P | Pb | 20 36 20.7 | +0.6 |
| OPT | Oil Point | 0.98 | 283 | P | Pb | 20 36 26.6 | 0.0 |
| IVE | Iliamna Volcan | 1.02 | 305 | P | Pg | 20 36 27.0 | -0.4 |
| IVE | | | | S | Sb | 20 36 41.0 | +0.3 |
| AUE | Augustine Isla | 1.04 | 266 | P | Pg | 20 36 27.4 | -0.3 |
| AUP | Augustine Pinn | 1.06 | 266 | P | Pg | 20 36 27.9 | -0.3 |
| AUI | Augustine Isla | 1.07 | 265 | P | Pg | 20 36 27.7 | -0.6 |
| AUL | Augustine Lava | 1.07 | 267 | P | Pg | 20 36 28.0 | -0.3 |
| AUL | | | | S | Sn | 20 36 43.5 | +0.3 |
| ILW | Iliamna West | 1.09 | 305 | P | Pg | 20 36 28.3 | -0.5 |
| SEW | Seward | 1.17 | 55 | P | Pg | 20 36 28.7 | -1.5 |
| SEW | | | | S | Sg | 20 36 43.4 | -1.9 |
| RED | Redoubt Volcan | 1.21 | 324 | P | Pb | 20 36 29.9 | -0.7 |
| RED | | | | S | Sb | 20 36 46.6 | +0.4 |
| RSO | Redoubt South | 1.24 | 326 | *e*Pg | Pb | 20 36 30.3 | -0.9 |
| RSO | | | | *e*Sg | Sb | 20 36 47.1 | 0.0 |
| RDN | Redoubt North | 1.28 | 327 | P | Pn | 20 36 31.1 | -0.5 |
| RDWB | Redoubt West | 1.28 | 325 | P | Pn | 20 36 30.8 | -0.8 |
| RDWB | | | | S | Sb | 20 36 48.7 | +0.3 |
| RDJH | Redoubt Jeurge | 1.36 | 328 | P | Pn | 20 36 32.1 | -0.5 |
| RDJH | | | | S | Sb | 20 36 50.4 | -0.1 |
| NCT | North Crescent | 1.37 | 325 | P | Pn | 20 36 32.2 | -0.6 |
| PDB | Pedro Bay | 1.48 | 284 | P | Pn | 20 36 34.4 | +0.2 |
| MCNL | McNeil River | 1.55 | 261 | P | Pn | 20 36 35.6 | +0.4 |
| KAPH | Katmai Pasha | 1.77 | 242 | P | Pn | 20 36 39.0 | +0.8 |
| KDAK | Kodiak Island | 1.79 | 202 | P | Pn | 20 36 39.5 | +1.1 |
| | 54nm,0.3s,baz=47,slow=8.3,SNR=294 | | | | | | |
| KDAK | | | | S | Sb | 20 37 03.6 | +0.8 |
| | 38nm,0.3s,baz=250,slow=22,SNR=11 | | | | | | |
| SPCR | Spurr Chakacha | 1.81 | 347 | P | Pn | 20 36 39.2 | +0.4 |
| SPCR | | | | S | Sb | 20 37 03.4 | -0.1 |
| FIB | Fire Island | 1.82 | 18 | P | Pb | 20 36 40.8 | -0.1 |
| CKN | Chakachatna No | 1.83 | 347 | P | Pn | 20 36 39.9 | +0.8 |
| RC01 | Rabbit Creek A | 1.83 | 25 | P | Pn | 20 36 40.1 | +1.1 |
| SPBG | Spurr Blockage | 1.89 | 345 | P | Pn | 20 36 40.6 | +0.8 |
| SPBG | | | | S | Sb | 20 37 05.4 | -0.2 |
| KAHG | Katmai Hook Gl | 1.91 | 241 | P | Pb | 20 36 41.6 | -0.9 |
| SUA | Susitna One | 2.04 | 8 | P | Pn | 20 36 43.3 | +1.2 |
| KAHC | Katmai Hardscr | 2.05 | 249 | P | Pn | 20 36 43.4 | +1.3 |
| PWL | Port Wells | 2.07 | 46 | P | Pn | 20 36 43.4 | +1.1 |
| PWL | | | | S | Sn | 20 37 09.3 | +1.3 |
| KAKN | Katmai Knife C | 2.25 | 241 | P | Pn | 20 36 46.5 | +1.7 |
| KABR | Katmai Barrier | 2.30 | 236 | P | Pn | 20 36 47.3 | +1.8 |
| PMR | Palmer | 2.42 | 26 | *e*Pn | Pn | 20 36 48.9 | +1.9 |
| PMR | | | | *e*Sn | Sn | 20 37 16.8 | +0.4 |
| OHAK | Old Harbor | 2.46 | 205 | *e*Pn | Pn | 20 36 48.4 | +0.9 |
| OHAK | | | | *e*Sn | Sn | 20 37 19.9 | +2.5 |
| GLI | Glacier Island | 2.57 | 54 | P | Pn | 20 36 49.1 | -0.1 |
| HIN | Hinchinbrook I | 2.62 | 67 | P | Pn | 20 36 50.5 | +0.6 |
| SVW2 | Sparrevohn | 2.68 | 310 | P | Pn | 20 36 52.0 | +1.4 |
| FID | Port Fidalgo | 2.77 | 60 | P | Pn | 20 36 51.3 | -0.6 |
| JPK | Jack Peak | 2.87 | 54 | P | Pn | 20 36 53.8 | +0.5 |
| VLZ | Valdez | 3.02 | 54 | P | Pn | 20 36 56.3 | +1.1 |
| SCM | Sheep Creek Mo | 3.11 | 38 | P | Pn | 20 36 58.7 | +2.1 |
| DIV | Divide | 3.25 | 56 | P | Pn | 20 36 58.9 | +0.4 |
| SGAM | Sherman Glacie | 3.27 | 69 | P | Pn | 20 36 59.2 | +0.5 |
| SII | Sitkinak Islan | 3.27 | 209 | P | Pn | 20 36 59.8 | +1.1 |
| KLU | Klutina | 3.38 | 50 | P | Pn | 20 37 01.5 | +1.1 |
| PPLA | Purkeypile | 3.48 | 354 | *e*Pn | Pn | 20 37 04.4 | +2.5 |
| PPLA | | | | *e*Sn | Sn | 20 37 44.5 | +1.5 |
| GOAT | Goat Mountain | 3.52 | 68 | P | Pn | 20 37 02.6 | +0.4 |
| BMRM | Bremner River | 3.70 | 63 | P | Pn | 20 37 05.0 | +0.3 |
| BERG | Berg Lake | 3.97 | 73 | P | Pn | 20 37 09.1 | +0.7 |
| TRF | Thorofare Moun | 4.05 | 7 | Pn | Pn | 20 37 10.8 | +1.2 |
| TRF | | | | *e*Sn | Sn | 20 37 58.2 | +1.2 |
| GRIN | Grindle Hills | 4.14 | 75 | P | Pn | 20 37 12.7 | +2.0 |
| GRIN | | | | S | Sn | 20 37 59.4 | +0.5 |
| TT01 | Tatalina | 4.14 | 329 | P | Pn | 20 37 12.3 | +1.6 |
| GLB | Gilahina Butte | 4.24 | 59 | P | Pn | 20 37 12.6 | +0.5 |
| VRDI | Verde Repeater | 4.31 | 62 | P | Pn | 20 37 13.8 | +0.5 |
| MCK | McKinley | 4.45 | 14 | Pn | Pn | 20 37 15.9 | +0.9 |
| MCK | | | | *e*Sn | Sn | 20 38 07.1 | +0.4 |
| PAX | Paxson | 4.54 | 36 | P | Pn | 20 37 17.6 | +1.4 |
| BARK | Barkley Ridge | 4.56 | 74 | P | Pn | 20 37 17.3 | +0.7 |
| MCARA | McCarthy VSAT | 4.56 | 61 | P | Pn | 20 37 17.1 | +0.6 |
| BPAW | Bear Paw Mtn. | 4.67 | 2 | *e*Pn | Pn | 20 37 20.9 | +2.9 |
| CHGN | Chignik | 4.92 | 233 | *e*Pn | Pn | 20 37 23.3 | +2.0 |
| COLA | College | 5.69 | 15 | *e*Pn | Pn | 20 37 33.4 | +1.5 |
| | 25nm,0.5s | | | | | | |
| COLA | | | | *e*Sn | Sn | 20 38 38.7 | +1.7 |
| ILAR | Eielson Array | 5.74 | 20 | P | Pn | 20 37 34.8 | +2.2 |
| | 4.0nm,0.3s,baz=203,slow=14,SNR=123 | | | | | | |
| ILAR | | | | S | Sn | 20 38 38.8 | +0.5 |
| | 3.7nm,0.3s,baz=198,slow=22,SNR=8.0 | | | | | | |
| EGAK | Eagle | 7.17 | 37 | *e*Pn | Pn | 20 37 53.7 | +1.5 |
| | 18nm,0.7s | | | | | | |
| COLD | Coldfoot | 7.83 | 3 | *e*Pn | Pn | 20 38 02.4 | +1.1 |
| | 8.9nm,0.8s | | | | | | |
| COLD | | | | *e*Sn | Sn | 20 39 31.0 | +1.4 |
| DLBC | Dease Lake | 11.05 | 86 | P | Pn | 20 38 45.0 | -0.5 |
| | 0.1nm,0.3s,baz=266,slow=14,SNR=2.6 | | | | | | |
| INK | Inuvik | 11.80 | 34 | P | Pn | 20 38 55.4 | -0.3 |
| | 0.1nm,0.3s,baz=232,slow=16,SNR=1.6 | | | | | | |
| TXAR | Lajitas Array | 44.01 | 112 | P | P | 20 44 13.8 | -1.2 |
| | 0.4nm,0.8s,baz=311,slow=6.8,SNR=3.3 | | | | | | |
| ARCES | ARCESS Array B | 51.29 | 1 | P | P | 20 45 10.5 | -0.4 |
| | 2.4nm,0.8s,baz=8.5,slow=7.3,SNR=3.5 | | | | | | |
| KSRS | Korea Array | 54.12 | 284 | P | P | 20 45 32.2 | 0.0 |
| | 0.6nm,0.6s,baz=255,slow=34,SNR=2.9 | | | | | | |
| KSAR | Wonju Array Be | 54.15 | 284 | P | P | 20 45 32.2 | -0.2 |
| SONM | Songino Array | 55.79 | 307 | P | P | 20 45 45.3 | +0.9 |
| | 0.5nm,0.6s,baz=41,slow=6.8,SNR=4.8 | | | | | | |
| SONM | | | | PcP | PcP | 20 46 44.3 | +1.1 |
| | 0.7nm,0.6s,baz=77,slow=0.9,SNR=5.7 | | | | | | |
| ZALV | Zalesovo Beam | 58.31 | 325 | P | P | 20 46 00.9 | -1.0 |
| | 1.0nm,0.6s,baz=21,slow=6.6,SNR=5.5 | | | | | | |
| FINES | FINESS Array B | 59.42 | 1 | P | P | 20 46 09.1 | -0.4 |
| | 1.7nm,0.6s,baz=350,slow=7.9,SNR=7.3 | | | | | | |
| MKAR | Makanchi Array | 65.38 | 323 | P | P | 20 46 49.4 | -0.2 |
| | 0.2nm,0.4s,baz=24,slow=8.2,SNR=2.4 | | | | | | |
| AKASG | Malin Array Be | 70.21 | 360 | P | P | 20 47 19.3 | -0.6 |
| | 1.8nm,0.6s,baz=1.8,slow=5.9,SNR=6.5 | | | | | | |
| BOSA | Boshof | 149.08 | 6 | PKPbc | PKPbc | 20 55 54.7 | -0.7 |
| | 2.8nm,1.1s,baz=22,slow=5.4,SNR=2.7 | | | | | | |

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*ISCJB **10** 20:43:56.7±0.7, 37°.90N±0°.03×27°.29E±0°.08, h5$^{km}$±8$^{km}$, Error ellipse: s-maj=11.1km s-min=4.1km az=160.9*
*DDA **10** 20:43:56.5, 37°.89N×27°.27E, h7$^{km}$, Md2.6*
*CSEM **10** 20:43:56.7±0.1, 37°.89N×27°.32E, h5$^{km}$, MD2.6, Error ellipse: s-maj=6.0km s-min=2.5km az=70.0*
*ISK **10** 20:43:56.4, 37°.91N×27°.32E, h3$^{km}$, MD2.6*

**ISC 10 20:43:57.0**±1.1**, 37°.88N**±0°.03×**27°.28E**±0°.05**, h6**$^{km}$±10$^{km}$**, n13,** σ0$^s$41/25**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GCAM | G?zelcaml? | 0.19 | 192 | *i* P | Pg | 20 44 00.7 | -0.1 |
| GCAM | | | | *i* S | Sg | 20 44 03.7 | +0.4 |
| GCAM | G?zelcaml? | 0.19 | 192 | P | Pg | 20 44 00.7 | -0.1 |
| GCAM | | | | S | Sg | 20 44 03.7 | +0.4 |
| IZM | Izmir | 0.51 | 358 | *e*PG | Pg | 20 44 06.7 | -0.3 |
| IZM | | | | *e*SG | Sg | 20 44 13.9 | +0.2 |
| IZM | Izmir | 0.51 | 358 | *e*Pg | Pg | 20 44 06.7 | -0.3 |
| IZM | | | | *e*Sg | Sg | 20 44 13.9 | +0.2 |
| ZEY | ˜zmir | 0.71 | 300 | P | Pg | 20 44 10.2 | -0.5 |
| ZEY | | | | S | Sg | 20 44 20.0 | 0.0 |
| URLA | Izmir | 0.72 | 312 | *i* P | Pg | 20 44 10.6 | -0.3 |
| URLA | | | | *i* S | Sg | 20 44 20.6 | +0.3 |
| URLA | Izmir | 0.72 | 312 | P | Pg | 20 44 10.6 | -0.3 |
| URLA | | | | S | Sg | 20 44 20.6 | +0.3 |
| BODT | Bodrum | 0.82 | 178 | *e*PG | Pb | 20 44 13.1 | -0.6 |
| BODT | | | | *e*SG | Sb | 20 44 25.8 | +0.9 |
| BODT | Bodrum | 0.82 | 178 | *e*Pg | Pb | 20 44 13.1 | -0.6 |
| YER | Yerkesik | 1.09 | 133 | *e*PN | Pg | 20 44 17.9 | -0.1 |
| YER | | | | *e*SN | Sn | 20 44 33.9 | -0.4 |
| YER | Yerkesik | 1.09 | 133 | *e*Pn | Pg | 20 44 17.9 | -0.1 |
| YER | | | | *e*Sn | Sn | 20 44 33.9 | -0.4 |
| DKL | Dikili | 1.22 | 346 | *e*PN | Pg | 20 44 20.6 | +0.1 |
| DKL | | | | *e*SN | Sn | 20 44 38.0 | +0.5 |
| DKL | Dikili | 1.22 | 346 | *e*Pn | Pg | 20 44 20.6 | +0.1 |
| DKL | | | | *e*Sn | Sn | 20 44 38.0 | +0.5 |

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**MAN 10 20:50:44, 9°.25N×125°.41E, h1**$^{km}$**, mb4.5, ML3.4, MS3.3, 2C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BUTP | Butuan | 0.35 | 143 | *e*P | Pg | 20 50 50.5 | -0.2 |
| BUTP | | | | *e*S | Sb | 20 50 57.5 | -1.6 |
| SCPH | Surigao | 0.54 | 9 | ⇑*e*P | Pg | 20 50 53.5 | -0.8 |
| SCPH | | | | *e*S | Sg | 20 51 01.1 | -0.2 |
| MSLP | Maasin | 1.03 | 328 | *e*P | Pg | 20 51 03.7 | -0.1 |
| MSLP | | | | *e*S | Sn | 20 51 19.8 | -1.0 |
| BUKP | Musuan | 1.40 | 194 | *e*P | Pb | 20 51 11.2 | +0.1 |
| BUKP | | | | *e*S | Sn | 20 51 29.8 | -0.1 |
| BIPH | Bislig | 1.42 | 138 | ⇑*e*P | Pn | 20 51 09.4 | -1.5 |
| BIPH | | | | *e*S | Sg | 20 51 25.6 | -4.0 |
| MATI | Mati | 2.44 | 160 | *e*P | Pn | 20 51 25.4 | +0.4 |
| PAGZ | Pagadian | 2.44 | 235 | *e*P | Pn | 20 51 26.8 | +1.8 |

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*DDA **10** 20:57:59.6, 37°.44N×36°.15E, h7$^{km}$, Ml3.2*
*ISK **10** 20:57:59.3, 37°.43N×36°.13E, h5$^{km}$, MD3.3*
*CSEM **10** 20:58:00.9±0.1, 37°.41N×36°.13E, h2$^{km}$, ML3.2, Error ellipse: s-maj=3.7km s-min=2.7km az=170.0*

**ISC 10 20:58:00.2**±1.1**, 37°.43N**±0°.02×**36°.14E**±0°.02**, h3**$^{km}$±10$^{km}$**, n62,** σ1$^s$31/78**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANDN | Andirin | 0.22 | 47 | *i* P | Pg | 20 58 04.8 | +0.3 |
| ANDN | | | | *i* S | Sg | 20 58 09.5 | +2.1 |
| ANDN | Andirin | 0.22 | 47 | P | Pg | 20 58 04.8 | +0.3 |
| ANDN | | | | S | Sg | 20 58 09.5 | +2.1 |
| KOZT | Kozan | 0.26 | 282 | *e*PG | Pg | 20 58 05.0 | -0.1 |
| KOZT | | | | *e*SG | Sg | 20 58 09.3 | +0.8 |
| KOZT | Kozan | 0.26 | 282 | *e*Pg | Pg | 20 58 05.0 | -0.1 |
| KOZT | | | | *e*Sg | Sg | 20 58 09.3 | +0.8 |
| KAMA | Osmaniye | 0.48 | 120 | P | Pg | 20 58 08.6 | -0.9 |
| KAMA | | | | S | Sg | 20 58 15.8 | +0.1 |
| CEYT | Ceyhan | 0.52 | 217 | *e*PG | Pb | 20 58 10.9 | -1.1 |
| CEYT | Ceyhan | 0.52 | 217 | *e*Pg | Pb | 20 58 10.9 | -1.1 |
| AYKD | Aykdinkavak | 0.53 | 91 | P | Pg | 20 58 10.1 | -0.2 |
| AYKD | | | | S | Sg | 20 58 17.4 | +0.2 |
| KMRS | Kahramanmaras | 0.61 | 83 | *e*PG | Pg | 20 58 11.8 | -0.1 |
| KMRS | Kahramanmaras | 0.61 | 83 | *e*Pg | Pg | 20 58 11.8 | -0.1 |
| KARA | Karaisali | 0.88 | 259 | *e*PG | Pg | 20 58 16.7 | -0.4 |
| KARA | Karaisali | 0.88 | 259 | *e*Pg | Pg | 20 58 16.7 | -0.4 |
| KUZU | Kuzuini | 0.99 | 131 | *i* P | Pb | 20 58 19.5 | -0.5 |
| KUZU | | | | *i* S | Sn | 20 58 34.4 | -1.2 |
| KUZU | Kuzuini | 0.99 | 131 | P | Pb | 20 58 19.5 | -0.5 |
| KUZU | | | | S | Sn | 20 58 34.4 | -1.2 |
| SARI | SarD1z-Kayseri | 1.00 | 12 | *e*PG | Pb | 20 58 19.3 | -1.0 |
| TAHT | Tahtakopru-Hat | 1.05 | 178 | *e*PG | Pb | 20 58 20.2 | -0.8 |
| TAHT | Tahtakopru-Hat | 1.05 | 178 | *e*Pg | Pb | 20 58 20.2 | -0.8 |
| KRTS | Karatas | 1.05 | 216 | *e*PG | Pn | 20 58 20.8 | -1.0 |
| KRTS | Karatas | 1.05 | 216 | *e*Pg | Pn | 20 58 20.8 | -1.0 |
| GULE | Gulek | 1.10 | 263 | *i* P | Pg | 20 58 20.6 | -0.6 |
| GULE | | | | *i* S | Sb | 20 58 36.6 | -0.1 |
| GULE | Gulek | 1.10 | 263 | P | Pg | 20 58 20.6 | -0.6 |
| GULE | | | | S | Sb | 20 58 36.6 | -0.1 |
| GZT | Gaziantep | 1.14 | 93 | P | Pn | 20 58 22.4 | -0.7 |
| GZT | | | | S | Sn | 20 58 39.5 | +0.2 |
| PINB | Pinarbasi | 1.26 | 9 | *i* S | Sn | 20 58 45.0 | +2.4 |
| PINB | Pinarbasi | 1.26 | 9 | P | Pn | 20 58 22.9 | -2.0 |
| PINB | | | | S | Sn | 20 58 45.0 | +2.4 |
| NIG | Nigde | 1.39 | 300 | *e*PN | Pg | 20 58 26.9 | 0.0 |
| NIG | Nigde | 1.39 | 300 | *e*Pn | Pg | 20 58 26.9 | 0.0 |
| YAYL | Yayladag | 1.39 | 181 | *i* P | Pb | 20 58 26.3 | -0.6 |
| YAYL | | | | *i* S | Sg | 20 58 46.2 | +1.3 |
| YAYL | Yayladag | 1.39 | 181 | P | Pb | 20 58 26.3 | -0.6 |
| YAYL | | | | S | Sg | 20 58 46.2 | +1.3 |
| DARE | Darende-Malaty | 1.56 | 42 | *e*PN | Pg | 20 58 29.2 | -0.8 |
| DARE | Darende-Malaty | 1.56 | 42 | *e*Pn | Pg | 20 58 29.2 | -0.8 |
| AKCD | Akcadag | 1.65 | 58 | *i* P | Pb | 20 58 30.7 | -0.6 |
| AKCD | | | | *i* S | Sg | 20 58 53.0 | -0.3 |
| AKCD | Akcadag | 1.65 | 58 | P | Pb | 20 58 30.8 | -0.6 |
| AKCD | | | | S | Sg | 20 58 53.0 | -0.3 |
| ATAB | Bozova | 1.71 | 88 | *i* P | Pg | 20 58 32.7 | -0.3 |
| ATAB | | | | *i* S | Sg | 20 58 55.2 | 0.0 |
| ATAB | Bozova | 1.71 | 88 | P | Pg | 20 58 32.7 | -0.3 |
| ATAB | | | | S | Sg | 20 58 55.2 | 0.0 |
| URFA | Urfa | 2.13 | 89 | *e*PN | Pb | 20 58 37.9 | -1.6 |
| URFA | Urfa | 2.13 | 89 | *e*Pn | Pb | 20 58 37.9 | -1.6 |
| SULT | Sultanhani-AKS | 2.22 | 291 | *e*PN | Pb | 20 58 39.0 | -2.0 |
| SULT | Sultanhani-AKS | 2.22 | 291 | *e*Pn | Pb | 20 58 39.0 | -2.0 |
| SVSK | Karacayir | 2.57 | 15 | *e*PN | Pb | 20 58 44.1 | -2.9 |
| SVSK | Karacayir | 2.57 | 15 | *e*Pn | Pb | 20 58 44.1 | -2.9 |
| SVRC | Sivrice-ELAZID | 2.68 | 68 | *e*PN | Pn | 20 58 45.5 | +1.2 |
| SVRC | Sivrice-ELAZID | 2.68 | 68 | *e*Pn | Pn | 20 58 45.5 | +1.2 |
| KAMT | Kaman | 2.72 | 316 | *e*PN | Pb | 20 58 46.6 | -2.9 |
| KAMT | Kaman | 2.72 | 316 | *e*Pn | Pb | 20 58 46.6 | -2.9 |
| PTK | Pertek | 2.95 | 59 | *e*PN | Pn | 20 58 49.6 | +1.5 |
| PTK | Pertek | 2.95 | 59 | *e*Pn | Pn | 20 58 49.6 | +1.5 |
| HDMB | Hadim | 2.96 | 262 | *e*PN | Pn | 20 58 49.2 | +1.1 |
| HDMB | Hadim | 2.96 | 262 | *e*Pn | Pn | 20 58 49.3 | +1.1 |
| CORM | Corum | 2.99 | 337 | *e*PN | Pn | 20 58 49.9 | +1.3 |
| CORM | Corum | 2.99 | 337 | *e*Pn | Pn | 20 58 49.9 | +1.3 |
| LFK | Lefkose | 3.01 | 225 | *e*PN | Pn | 20 58 49.9 | +1.2 |
| LFK | Lefkose | 3.01 | 225 | *e*Pn | Pn | 20 58 49.9 | +1.2 |
| KONT | Konya--Tatoy | 3.04 | 281 | *e*PN | Pn | 20 58 50.6 | +1.4 |
| KONT | Konya--Tatoy | 3.04 | 281 | *e*Pn | Pn | 20 58 50.6 | +1.4 |
| AFSR | Af¯ar-Bala (A | 3.14 | 311 | *e*PN | Pn | 20 58 52.0 | +1.3 |
| AFSR | Af¯ar-Bala (A | 3.14 | 311 | *e*Pn | Pn | 20 58 52.0 | +1.3 |
| MAZI | Mazidag | 3.43 | 88 | *e*PN | Pn | 20 58 56.1 | +1.5 |
| MAZI | Mazidag | 3.43 | 88 | *e*Pn | Pn | 20 58 56.1 | +1.5 |
| SVAN | Silvan-Diyarba | 4.07 | 78 | *e*PN | Pn | 20 59 05.4 | +2.0 |
| SVAN | Silvan-Diyarba | 4.07 | 78 | *e*Pn | Pn | 20 59 05.4 | +2.0 |
| SUTC | Sutluce-Ispart | 4.09 | 272 | *e*PN | Pn | 20 59 05.7 | +2.0 |
| SUTC | Sutluce-Ispart | 4.09 | 272 | *e*Pn | Pn | 20 59 05.7 | +2.0 |

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**MEX 10 21:00:50.4**±0.4**, 14°.49N×92°.02W, h72**$^{km}$±41$^{km}$**, MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.68 | 316 | *i* P | Pn | 21 01 16.5 | -1.3 |
| PCIG | | | | *i* S | Sn | 21 01 36.5 | -2.0 |

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*ISCJB **10** 21:11:36.4±1.0, 37°.36N±0°.07×36°.12E±0°.05, h15$^{km}$, Error ellipse: s-maj=10.8km s-min=5.4km az=18.3*
*DDA **10** 21:11:36.6, 37°.37N×36°.14E, h7$^{km}$, Md2.6*

**ISC 10 21:11:36.2**±1.5**, 37°.33N**±0°.07×**36°.13E**±0°.05**, h15**$^{km}$**, n5,** σ0$^s$85/9**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KOZT | Kozan | 0.28 | 303 | PG | Pg | 21 11 42.0 | -0.3 |
| KOZT | | | | SG | Sg | 21 11 46.2 | -0.2 |
| ANDN | Andirin | 0.31 | 34 | P | Pg | 21 11 41.7 | -1.1 |
| ANDN | | | | S | Sg | 21 11 46.8 | -0.5 |
| KAMA | Osmaniye | 0.45 | 108 | P | Pg | 21 11 45.7 | +0.4 |
| KAMA | | | | S | Sb | 21 11 52.8 | +0.3 |
| AYKD | Aykdinkavak | 0.55 | 80 | P | Pg | 21 11 46.9 | -0.2 |
| AYKD | | | | S | Sg | 21 11 54.1 | -0.3 |
| SARI | SarD1z-Kayseri | 1.10 | 12 | *e*PG | Pg | 21 11 59.1 | +1.5 |

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**MEX 10 21:13:57.7**±0.5**, 16°.83N×96°.78W, h16**$^{km}$±7$^{km}$**, MD3.9, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HUIG | Huatulco | 1.24 | 149 | *e*P | Pn | 21 14 16.9 | -3.4 |
| HUIG | | | | *i* S | Sb | 21 14 31.0 | -5.4 |
| PNIG | Pinotepa | 1.36 | 252 | *e*P | Pn | 21 14 18.4 | -3.7 |
| PNIG | | | | *i* S | Sn | 21 14 35.0 | -4.8 |

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*IDC **10** 21:39:25.7±0.9, 8°.17S×120°.29E, h0$^{km}$, mb3.9/5, mb1 4.2/9, mb1mx3.9/37, mbtmp4.0/9, ML4.0/4, MS3.1/3, Ms1 3.1/3, ms1mx2.7/33, Error ellipse: s-maj=30.7km s-min=16.1km az=66.0*
*ISCJB **10** 21:39:28.2±0.5, 8°.17S±0°.03×120°.12E±0°.03, h35$^{km}$±7$^{km}$, mb4.1/5, MS4.6/1, Error ellipse: s-maj=6.1km s-min=4.5km az=33.0*
*AUST **10** 21:39:29.0, 8°.50S×119°.98E, h15$^{km}$*
*DJA **10** 21:39:30.0±0.2, 8°S±2°×12°0E±°, h42$^{km}$±5$^{km}$, M4.3/3, MLv4.3/3*

**ISC 10 21:39:30.9**±0.6**, 8°.20S**±0°.03×**120°.18E**±0°.04**, h44**$^{km}$±6$^{km}$**, n46,** σ1$^s$86/50**, mb3.7**/5**, Flores region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WSI | Waingapu | 1.46 | 175 | P | Pn | 21 39 55.9 | +1.0 |
| WSI | | | | S | Sn | 21 40 03.8 | -9.1 |
| EDFI | Ende, Flores | 1.59 | 110 | P | Pn | 21 39 55.8 | -1.0 |
| EDFI | | | | S | Sn | 21 40 16.9 | +0.6 |
| WBSI | Waikabubak, Su | 1.63 | 208 | P | Pn | 21 39 58.2 | +1.0 |
| WBSI | | | | S | Sn | 21 40 22.1 | +5.1 |
| BASI | Baing, Sumba | 2.04 | 169 | P | Pn | 21 40 04.5 | +1.6 |
| BASI | | | | S | Sn | 21 40 22.4 | -4.8 |
| BSSI | Bau Bau, Buton | 2.07 | 9 | P | Pn | 21 40 00.6 | -2.6 |
| MMRI | Maumere | 2.09 | 102 | P | Pn | 21 40 01.5 | -1.9 |
| MMRI | | | | S | Sn | 21 40 28.8 | +0.6 |
| BKSI | Bulukumba | 2.86 | 359 | P | Pn | 21 40 12.1 | -2.0 |
| BKSI | | | | S | Sn | 21 40 50.2 | +2.9 |
| KAPI | Kappang | 3.19 | 352 | Pn | Pn | 21 40 16.8 | -1.8 |
| | 32nm,0.3s,baz=159,slow=11,SNR=39 | | | | | | |
| KAPI | | | | Sn | Sn | 21 40 54.0 | -1.5 |
| | 11nm,0.3s,baz=25,slow=18,SNR=6.3 | | | | | | |
| TWSI | Taliwang, Sumb | 3.30 | 260 | P | Pn | 21 40 21.2 | +1.1 |
| TWSI | | | | S | Sn | 21 40 55.6 | -2.6 |
| BATI | Baumata | 3.98 | 120 | Pn | Pn | 21 40 28.6 | -0.9 |
| | 2.4nm,0.3s,baz=324,slow=19,SNR=3.2 | | | | | | |
| BATI | | | | Sn | Sn | 21 41 14.4 | -0.5 |
| | 6.8nm,0.3s,baz=288,slow=20,SNR=3.9 | | | | | | |
| BATI | | | | LR | LR | 21 42 33.8 | |
| | comp=Z,331nm,18.6s,baz=49,slow=48 | | | | | | |
| BATI | Baumata | 3.98 | 120 | P | Pn | 21 40 29.7 | +0.2 |
| SPSI | Sidrap Palu | 4.23 | 355 | P | Pn | 21 40 32.8 | -0.1 |
| SOEI | Soe | 4.33 | 111 | P | Pn | 21 40 37.7 | +3.3 |
| | baz=4.4,SNR=22 | | | | | | |
| SOEI | Soe | 4.33 | 111 | P | Pn | 21 40 37.6 | +3.3 |
| SRBI | Singaraja | 4.91 | 271 | P | Pn | 21 40 39.9 | -2.4 |
| DNP | Denpasar | 4.93 | 264 | P | Pn | 21 40 39.0 | -3.6 |
| IGBI | Denpasar | 5.01 | 263 | P | Pn | 21 40 40.8 | -2.8 |
| TTSI | Tana Toraja | 5.13 | 356 | P | Pn | 21 40 44.4 | -0.9 |
| KMMI | Kalianget | 6.26 | 280 | P | Pn | 21 40 59.3 | -1.5 |
| BLJI | Banyuglugur | 6.53 | 274 | P | Pn | 21 41 01.8 | -2.7 |
| KNRA | Kununurra | 11.21 | 132 | P | Pn | 21 42 07.6 | -1.1 |
| | baz=11,SNR=6.7 | | | | | | |
| MTN | Manton Dam | 11.72 | 114 | P | Pn | 21 42 16.9 | +1.3 |
| | baz=12,SNR=4.7 | | | | | | |
| LEM | Lembang | 12.53 | 275 | LR | LR | 21 47 48.3 | |
| | comp=Z,93nm,18.0s,baz=42,slow=40 | | | | | | |
| KDU | Kakadu | 12.89 | 111 | P | Pn | 21 42 31.3 | -0.3 |
| | baz=13,SNR=3.8 | | | | | | |
| FAKI | Fak Fak | 13.11 | 67 | P | Pn | 21 42 38.3 | +3.6 |
| | baz=13,SNR=3.7 | | | | | | |
| SIJI | Sorong | 13.23 | 57 | Pn | Pn | 21 42 35.3 | -1.1 |
| | 0.5nm,0.3s,baz=270,slow=20,SNR=1.9 | | | | | | |
| DAV | Davao City (W) | 16.10 | 20 | LR | LR | 21 49 32.6 | |
| | comp=Z,32nm,21.6s,baz=230,slow=38 | | | | | | |
| WRA | Warramunga Arr | 18.01 | 132 | P | Pn | 21 43 36.0 | -2.1 |
| | 1.0nm,0.3s,baz=306,slow=13,SNR=38 | | | | | | |
| WRA | | | | S | Sn | 21 46 45.7 | -13 |
| | 0.1nm,0.3s,baz=307,slow=24,SNR=4.6 | | | | | | |
| MEEK | Meekatharra | 18.40 | 184 | P | Pn | 21 43 44.9 | +2.0 |
| | baz=18,SNR=12 | | | | | | |
| WRKA | Warakurna | 18.45 | 156 | P | Pn | 21 43 44.1 | +0.6 |
| | baz=18,SNR=41 | | | | | | |
| ASAR | Alice Springs | 20.24 | 141 | P | P | 21 44 02.5 | -0.1 |
| | 7.0nm,0.4s,baz=316,slow=10,SNR=79 | | | | | | |
| ASAR | | | | S | S | 21 47 41.5 | -5.9 |
| | 0.7nm,0.8s,baz=318,slow=22,SNR=3.6 | | | | | | |
| MORW | Morawa | 21.12 | 190 | P | P | 21 44 13.4 | +1.4 |
| | baz=21,SNR=5.8 | | | | | | |
| QIS | Mount Isa | 22.44 | 125 | P | P | 21 44 25.5 | -0.9 |
| | baz=22,SNR=7.4 | | | | | | |
| BLDU | Ballidu | 22.53 | 188 | P | P | 21 44 27.6 | +0.4 |
| | baz=22,SNR=6.3 | | | | | | |
| COEN | Coen | 23.27 | 106 | P | P | 21 44 34.0 | -0.9 |
| | baz=23,SNR=6.6 | | | | | | |
| KLBR | Kellerberrin | 23.38 | 185 | P | P | 21 44 36.2 | +0.4 |
| | baz=23,SNR=12 | | | | | | |
| NWAO | Narrogin (SRO) | 24.75 | 186 | P | P | 21 44 48.9 | +0.3 |
| | 19nm,1.1s,baz=232,slow=0.1,SNR=5.7 | | | | | | |
| NWAO | Narrogin (SRO) | 24.75 | 186 | P | P | 21 44 50.0 | +1.5 |
| | baz=25,SNR=4.5 | | | | | | |
| BBOO | Buckleboo | 28.57 | 151 | P | P | 21 45 22.7 | -0.2 |
| | baz=28,SNR=10 | | | | | | |
| CMSA | Cobar Meteorol | 33.22 | 138 | P | P | 21 46 04.6 | +0.7 |
| | baz=33,SNR=7.3 | | | | | | |
| CMAR | Chiang Mai Arr | 33.77 | 322 | P | P | 21 46 11.5 | +2.7 |
| | 0.4nm,0.6s,baz=159,slow=7.7,SNR=3.7 | | | | | | |
| MJAR | Matsushiro Arr | 47.62 | 20 | P | P | 21 48 02.0 | -0.7 |
| | 0.6nm,0.7s,baz=210,slow=7.1,SNR=3.4 | | | | | | |
| HHC | Hu-ho-hao-te | 49.45 | 351 | *e*P | P | 21 48 17.9 | +1.1 |
| HHC | | | | sP | sP | 21 48 36.7 | +2.5 |
| HHC | | | | S | S | 21 55 22.0 | +0.8 |
| HHC | | | | sS | sS | 21 55 40.4 | -1.2 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,77nm,3.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,630nm,10.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,250nm,8.8s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,380nm,11.4s | | | | | | |
| SONM | Songino Array | 57.11 | 349 | P | P | 21 49 13.2 | +0.1 |
| | comp=Z,0.3nm,0.5s,baz=166,slow=7.4,SNR=3.3 | | | | | | |
| CPUP | Villa Florida | 145.59 | 184 | PKPbc | PKPdf | 21 59 05.6 | +0.4 |
| | comp=Z,2.7nm,0.7s,baz=221,slow=4.7,SNR=3.4 | | | | | | |
| LPAZ | La Paz | 154.32 | 161 | PKPab | PKPab | 21 59 43.9 | +1.8 |
| | comp=Z,1.7nm,0.7s,baz=201,slow=5.3,SNR=7.2 | | | | | | |

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*SZGRF **10** 21:44:14.5, 32°.14N×73°.85E, h33$^{km}$, mb5.0/17(BGR), Ms4.5/2(BGR)*
*NDI **10** 21:44:19.7±2.9, 34°.23N×72°.71E, h33$^{km}$, mb5.1, ML5.1, mb5.2(NEIC)*
*ISCJB **10** 21:44:22.4±0.5, 33°.83N±0°.01×72°.94E±0°.02, h22$^{km}$±4$^{km}$, mb5.0/179, MS4.5/48, Error ellipse: s-maj=2.6km s-min=2.0km az=27.6*
*IDC **10** 21:44:23.7±2.0, 33°.82N×72°.88E, h21$^{km}$±12$^{km}$, mb4.7/35, mb1 4.8/40, mb1mx4.8/47, mbtmp4.9/40, ML5.2/6, MS4.3/22, Ms1 4.3/22, ms1mx4.3/26, Error ellipse: s-maj=10.9km s-min=8.4km az=34.0*
*MOS **10** 21:44:24.2±0.9, 33°.84N×72°.90E, h33$^{km}$, mb5.3/50, MS4.7/23, Error ellipse: s-maj=5.8km s-min=3.8km az=117.3*
*NEIC **10** 21:44:25.9±0.8, 33°.87N×72°.89E, h33$^{km}$±5$^{km}$, mb5.2/68, Error ellipse: s-maj=4.3km s-min=3.4km az=178.0*
*NEIC One person killed, 15 injured and at least 100 buildings damaged in the Khanpur-Haripur area. Felt [V] at Topi. Also felt at Islamabad, Lahore, Peshawar, Rawalpindi and Taxila. Felt at Srinagar, India.*
*BJI **10** 21:44:26.3, 34°.00N×73°.11E, h32$^{km}$, mb5.0/51, mB4.9/38, ML5.4/2, Ms4.8/60, Ms7 4.5/57*
*NNC **10** 21:44:27.9±3.7, 33°.90N×72°.58E, h67$^{km}$±18$^{km}$, mb5.5, mpv6.0, Error ellipse: s-maj=29.0km s-min=28.8km az=147.0*

**ISC 10 21:44:26.1**±0.3**, 33°.83N**±0°.03×**72°.88E**±0°.03**, h34**$^{km}$±1$^{km}$**, h35**$^{km}$**:pP-P, n718,** σ1$^s$47/815**, mb5.1**/194**, MS4.6**/48**, 59C-36D, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHCP | Chirah Chowk | 0.36 | 118 | ⇓P | Pb | 21 44 31.2 | -3.6 |
| THW | Thamme Wali | 1.40 | 223 | ⇓P | Pn | 21 44 50.3 | +1.0 |
| SARP | Sargodha | 1.91 | 185 | P | Pn | 21 44 57.1 | +0.9 |
| KBL | Kabul | 3.26 | 284 | *e*P | Pn | 21 45 16.4 | +1.4 |
| KBL | Kabul | 3.26 | 284 | *e*Pn | Pn | 21 45 16.4 | +1.4 |
| DHRM | DHARAMSHALA | 3.27 | 118 | *e*P | Pn | 21 45 16.2 | +1.1 |
| DHRM | | | | *e*S | Sn | 21 45 51.8 | -1.2 |
| DHRM | | | | AML | AML | 21 46 04.9 | |
| | comp=E,12µm,0.5s | | | | | | |
| DHRM | | | | AML | AML | 21 46 06.6 | |
| | comp=N,11µm,0.3s | | | | | | |
| BHK | Bhakra | 3.83 | 128 | *e*x | Pn | 21 45 20.0 | -2.6 |
| BHK | | | | *e*x | Sb | 21 46 20.8 | +1.9 |
| SMLA | Simla | 4.51 | 125 | *e*P | Pn | 21 45 32.6 | +0.6 |
| SMLA | | | | *e*S | Sn | 21 46 21.8 | -1.4 |
| SMLA | | | | AML | AML | 21 46 57.4 | |
| | comp=E,8µm,0.2s | | | | | | |
| SMLA | | | | AML | AML | 21 46 59.7 | |

**DDI Dehra Dun 5.61 127** *e*P **Pn** **21 45 46.0 -1.1**
DDI *e*P **Pn** **21 45 47.6 +0.5**
DDI *e*S **Sn** **21 46 49.0 -1.4**
DDI *e*S **Sn** **21 46 51.9 +1.4**
DDI AML AML 21 47 39.8
comp=E,3µm,0.2s
DDI AML AML 21 47 43.8
comp=N,4µm,0.8s
**DZET Dzherino 5.95 328** ⇓P **Pn** **21 45 52.0 +0.1**
comp=N,274nm,0.5s
DZET ⇓S **Sn** **21 46 59.0 +0.2**
comp=N,832nm,0.6s
**BHGR Bahadurgarh 6.19 145** *e*P **Pn** **21 45 55.3 +0.3**
BHGR *e*P **Pn** **21 45 55.3 +0.3**
**SFK Sufi-Kurgan 6.20 4** ⇓P **Pn** **21 45 58.3 +2.9**
comp=N,2µm,0.6s
SFK ⇑S **Sn** **21 47 07.2 +2.2**
comp=N,1µm,0.4s
**KSH Kashi 6.20 23** ⇑*i*P **Pn** **21 45 52.3 -3.0**
KSH S **Sn** 21 46 57.9 -7.1
KSH pmax pmax
comp=Z,3µm,0.5s
KSH smax smax
comp=N,2µm,0.3s
KSH smax smax
comp=E,2µm,0.3s
**KHET Khetri 6.26 156** *e*P **Pn** **21 45 55.2 -0.8**
KHET *e*S **Sn** **21 47 05.4 -0.9**
**NDI New Delhi 6.33 143** *e*P **Pn** **21 45 56.0 -1.0**
NDI *ex* x 21 46 22.0
NDI *ex* **Sn** **21 47 12.0 +4.0**
**AML Almayashu 8.32 4** P **Pn** **21 46 25.8 +1.3**
SNR=3120
**KZA Kyzart 8.45 12** P **Pn** **21 46 28.4 +2.0**
SNR=308
**UCH Uchtor 8.49 8** P **Pn** **21 46 28.4 +1.5**
SNR=2316
**MNAS Manas 8.65 358** ⇑Pn **Pn** **21 46 29.8 +0.8**
comp=E,586nm,0.6s
MNAS ⇑S **Sn** **21 48 03.7 -1.7**
comp=E,336nm,0.7s
**ULHL Ulahol 8.81 16** P **Pn** **21 46 33.6 +2.4**
SNR=179
**EKS2 Erkin-Say 8.85 4** *e*P **Pn** **21 46 33.1 +1.5**
**EKS2 Erkin-Say 8.85 4** P **Pn** **21 46 33.2 +1.5**
SNR=1761
**EKS2 Erkin-Say 8.85 4** *e*Pn **Pn** **21 46 33.1 +1.5**
**AAK Ala-Archa 8.88 8** Pn **Pn** **21 46 34.2 +2.0**
comp=E,141nm,0.3s,baz=158,slow=6.3,SNR=844
AAK Sn **Sn** **21 48 10.0 -1.1**
comp=E,31nm,0.3s,baz=87,slow=17,SNR=5.9
**AAK Ala-Archa 8.88 8** *e*P **Pn** **21 46 33.6 +1.4**
AAK *e* 21 48 09.3
**AAK Ala-Archa 8.88 8** Pn **Pn** **21 46 33.7 +1.6**
comp=E,8µm,0.5s
**AAK Ala-Archa 8.88 8** P **Pn** **21 46 33.9 +1.8**
SNR=188
**AAK Ala-Archa 8.88 8** P **Pn** **21 46 33.6 +1.4**
SNR=1137
**AAK Ala-Archa 8.88 8** *e*Pn **Pn** **21 46 33.6 +1.4**
AAK *e*Sn **Sn** **21 48 09.3 -1.8**
**KBK Karagaybulak 8.96 10** P **Pn** **21 46 34.9 +1.7**
SNR=385
**FRU Bishkek 9.10 8** *i* P **Pn** **21 46 36.0 +1.1**
FRU *i* 21 48 24.0
FRU pmax pmax
comp=Z,960nm,1.8s
FRU pmax pmax
comp=N,2µm,1.8s
FRU MLR MLR
comp=E,7µm,8.0s
**CHMS Chumysh 9.28 9** P **Pn** **21 46 39.3 +2.0**
SNR=108
**TKM2 Tokmak 2 9.33 12** *e*P **Pn** **21 46 39.5 +1.2**
**TKM2 Tokmak 2 9.33 12** P **Pn** **21 46 40.5 +2.3**
SNR=64
**TKM2 Tokmak 2 9.33 12** *e*Pn **Pn** **21 46 39.5 +1.2**
**KK31 Karatay Array 9.45 349** ⇑Pn **Pn** **21 46 39.7 -0.1**
comp=E,588nm,0.6s,baz=156,slow=11
KK31 ⇑Sn **Sn** **21 48 22.8 -1.9**
comp=E,180nm,0.6s,baz=157,slow=22
**KKAR Karatay Array 9.45 349** *e*P **Pn** **21 46 39.8 +0.1**
KKAR *e* 21 48 22.9
**KKAR Karatay Array 9.45 349** *e*Pn **Pn** **21 46 39.8 +0.1**
KKAR *e*Sn **Sn** **21 48 22.9 -1.8**
**USP Ospenovka 9.51 7** P **Pn** **21 46 42.2 +1.5**
SNR=94
**KNDC Almaty 9.90 18** ⇑Pn **Pn** **21 46 48.1 +2.0**
comp=E,237nm,0.6s
**AAA Alma-Ata 9.95 17** *i* P **Pn** **21 46 48.6 +1.9**
AAA pmax pmax
comp=Z,500nm,0.3s
AAA MLR MLR
comp=Z,9µm,6.0s
**IMYA Miami 10.77 287** *e*P **Pn** **21 46 59.5 +1.5**
**PDGK Podgornoye 10.80 27** ⇑Pn **Pn** **21 46 58.8 +0.7**
comp=Z,307nm,0.6s
PDGK ⇑Sn **Sn** **21 48 56.6 -1.1**
comp=Z,215nm,1.0s
**DANN Dangsing 10.80 117** *e*P **Pn** **21 46 56.6 -2.0**
comp=Z,37nm,0.3s
**BHJ Bhuj 10.91 196** *e*P **Pn** **21 46 58.2 -1.6**
BHJ *ex* **Sn** **21 48 58.5 -2.1**
BHJ AML AML 21 50 27.9
comp=E,409nm,1.3s
BHJ AML AML 21 50 31.3
comp=N,499nm,0.2s
**IDAH Dahanechah 10.95 268** *e*P **Pn** **21 47 01.7 +1.2**
**KOLN Koldanda 11.01 120** *e*P **Pn** **21 46 59.3 -2.1**
comp=N,304nm,0.4s
**IMON Monand 11.05 270** *e*P **Pn** **21 47 04.0 +2.0**
**ISRO Mashad 11.27 286** *e*P **Pn** **21 47 04.7 -0.1**
**BHPL Bhopal 11.27 158** *e*P **Pn** **21 47 02.0 -2.8**
BHPL *ex* Sn 21 48 59.9 -10
**IMOG Moghan 11.34 285** *e*P **Pn** **21 47 06.4 +0.4**
**GKN Gorkha 11.64 117** *e*P **Pn** **21 47 07.3 -2.6**
comp=N,396nm,0.4s
**IKOO Kooshah 11.72 267** *e*P **Pn** **21 47 11.8 +0.6**
**ITEG Tejag 11.86 269** *e*P **Pn** **21 47 15.5 +2.6**
**IAKL Akhelmad 11.88 287** *e*P **Pn** **21 47 12.6 -0.8**
**IEMG Emamgholi 12.12 291** *e*P **Pn** **21 47 15.2 -1.4**
**DMN Daman 12.20 117** *e*P **Pn** **21 47 14.7 -3.0**
**KKN Kakani 12.23 116** *e*P Pn 21 47 14.7 -3.4
**PKIN Phulchoki 12.43 117** *e*P Pn 21 47 17.4 -3.5
**PKI Pulchoki 12.45 117** *e*P Pn 21 47 17.6 -3.5
**ISFR Sfrayin 12.56 289** *e*P **Pn** **21 47 20.8 -1.8**
**GUN Gumba 12.62 114** *e*P Pn 21 47 20.0 -3.5
comp=N,352nm,0.4s
**ABKT Ailbek 12.65 293** Pn **Pn** **21 47 21.1 -2.6**
comp=N,250nm,0.7s,SNR=6.0
**GEYT Alibeck 12.65 293** Pn **Pn** **21 47 21.9 -1.8**
comp=N,1.7nm,0.3s,baz=107,slow=20,SNR=37
GEYT Sn **Sn** **21 49 45.0 +1.7**
comp=N,0.6nm,0.3s,baz=333,slow=35,SNR=2.2
**RAMN Ramite 13.67 116** *e*P Pn 21 47 32.7 -5.1
**NGP Nagpur 13.76 155** *ex* Pn 21 47 33.6 -5.1
NGP *ex* Sn 21 50 00.3 -10
**TAPN Taplejung 14.30 113** *e*P Pn 21 47 41.7 -4.7
comp=N,232nm,0.5s
**ODAN Odare 14.31 115** *e*P Pn 21 47 41.3 -5.2
**OTUK Ortayu 14.41 359** ⇑Pn **Pn** **21 47 44.8 -2.7**
comp=N,251nm,0.6s
OTUK ⇓Sn **Sn** **21 50 26.6 +0.6**
comp=N,21nm,0.7s
**MAKZ Makanchi 14.69 25** *e*Pn **Pn** **21 47 50.2 -1.1**
**IBAF Bafgh 14.75 266** *e*P **Pn** **21 47 54.9 +2.5**
**MK01 Makanchi Array 14.78 26** *e*Pn **Pn** **21 47 49.8 -2.7**
**MK31 Makanchi Array 14.79 26** ⇓P **Pn** **21 47 51.5 -1.2**
comp=N,47nm,0.6s,baz=205,slow=12,SNR=332
MK31 ⇑S **Sn** **21 50 39.7 +4.4**
comp=N,16nm,0.6s
**MK32 Makanchi Array 14.79 26** *e*Pn **Pn** **21 47 51.5 -1.2**
MK32 *e*Sn **Sn** **21 50 32.3 -3.0**
**MKAR Makanchi Array 14.79 26** Pn **Pn** **21 47 51.5 -1.2**
comp=N,5.0nm,0.3s,baz=190,slow=11,SNR=90
MKAR Sn **Sn** **21 50 32.3 -3.0**
comp=N,0.8nm,0.3s,baz=173,slow=21,SNR=2.1
**MKAR Makanchi Array 14.79 26** P **Pn** **21 47 51.5 -1.2**
MKAR 21 50 32.3
MKAR pmax pmax
comp=Z,5.0nm,0.3s
MKAR smax smax
comp=N,1.0nm,0.3s
**MKAR Makanchi Array 14.79 26** *e*Pn **Pn** **21 47 51.6 -1.1**

**BOK Bokaro 15.14 128** *ex* Pn 21 47 52.4 -5.1
**WMQ Urumqi 15.24 45** P **Pn** **21 47 57.0 -1.7**
WMQ pP **P** **21 48 05.0 +1.8**
WMQ sP sP 21 48 10.0 -6.6
WMQ SS **S** **21 51 03.0 +0.8**
WMQ PMZ
comp=N,380nm,3.5s
WMQ LN
comp=N,4µm,7.0s
WMQ LE
comp=N,3µm,7.0s
WMQ LZ
comp=N,3µm,8.0s
**POO Poona 15.26 177** ⇑*i*P Pn 21 47 51.0 -8.1
comp=N,6.0nm,1.0s
POO *i* PP **P** **21 48 02.0 -1.6**
POO *i* PPP PPP 21 48 09.0
POO *i* LQ LQ 21 50 25.0
POO *i* S Sn 21 50 31.0 -16
POO *i* SS **Sn** **21 50 47.0 0.0**
POO *i* SSS SSS 21 51 00.0
POO *i* PCP PcP 21 53 09.0 +5.5
POO *i* PCS **PcS** **21 56 44.0 +4.9**
POO *i* SCS **ScS** **22 00 19.0 +5.6**
**POO Poona 15.26 177** *e*P **Pn** **21 47 56.0 -3.1**
POO AMB AMB 21 48 01.6
comp=Z,82nm,1.3s
**ICHK Chekchek 15.58 269** *e*P **P** **21 48 07.9 +0.6**
**IMEH Mehriz 15.59 266** *e*P **P** **21 48 06.2 -1.3**
**IANJ Anjilo 15.70 281** *e*P **Pn** **21 48 05.1 +0.2**
**IGLO Ghaloghah 15.81 285** *e*P **P** **21 48 08.5 -1.3**
**RPR Rampur 15.97 157** *e*P Pn 21 48 01.8 -6.4
RPR IAmb IAmb 21 48 03.7
comp=Z,88nm,1.5s
RPR *e*Sn **Sn** **21 51 00.5 -3.7**
RPR IVMs_BB IVMs_BB 21 54 19.9
comp=Z,5µm,10.0s
**LSA Lhasa 16.07 100** *e*P **Pn** **21 48 06.2 -3.7**
LSA pmax pmax
comp=Z,59nm,0.8s
**LSA Lhasa 16.07 100** *e*Pn **Pn** **21 48 06.2 -3.7**
comp=Z,59nm,0.8s
**ISHM Shahmirzad 16.21 283** *e*P **P** **21 48 15.8 +1.4**
**ISAD Sadrabad 16.25 269** *e*P **P** **21 48 15.7 +1.0**
**ILAS Lasjerd 16.48 281** *e*P **P** **21 48 16.9 -0.4**
**WBK Wadi Bani Khal 16.57 231** P **Pn** **21 48 15.8 0.0**
SNR=14
**IFIR Firoozkooh 16.65 282** *e*P **P** **21 48 18.4 -0.8**
**SMDO Samad 16.87 234** P **Pn** **21 48 19.1 -0.6**
SNR=11
**IPRN Peran 17.00 284** *e*P **P** **21 48 23.0 +0.1**
**UOSS Wadi Hilu 17.00 243** *e*Pn **Pn** **21 48 20.5 -0.8**
comp=Z,22nn,0.8s
**HYBB Hyderabad (bro 17.11 161** *e*Pn Pn 21 48 16.6 -6.1
HYBB IAmb IAmb 21 48 21.0
comp=Z,118nm,1.3s
HYBB *e*Sn Sn 21 51 24.4 -7.6
HYBB IVMsBB 21 54 58.6
comp=Z,5µm,12.0s
**HYB Hyderabad 17.11 161** *e*P Pn 21 48 15.0 -7.7
HYB *e*S **Sn** **21 51 28.0 -4.1**
**HYB Hyderabad 17.11 161** *i* P Pn 21 48 15.0 -7.7
HYB *e*S **Sn** **21 51 36.0 +3.9**
**HYB Hyderabad 17.11 161** *ex* **Pn** **21 48 18.1 -4.6**
HYB AMB AMB 21 48 20.0
comp=Z,64nm,0.4s
**HYB Hyderabad 17.11 161** *e*P Pn 21 48 15.0 -7.7
HYB *e*S **Sn** **21 51 28.0 -4.1**
**HATD Hatta, Dubai 17.12 243** ⇑P **Pn** **21 48 23.1 +0.3**
**IZEF Zefreh 17.20 273** *e*P **Pn** **21 48 24.5 +0.6**
**IDMV Damavand 17.24 282** *e*P **P** **21 48 26.6 +0.9**
**ASHO Ashiyiah 17.26 243** P **P** **21 48 25.4 -0.4**
SNR=11
**ASHO Ashiyiah 17.26 243** ⇑*i*P **Pn** **21 48 24.5 0.0**
SNR=10
**KURBB Kurchatov Arra 17.29 12** ⇓P **Pn** **21 48 21.6 -3.0**
comp=Z,79nm,0.6s
**KURBB Kurchatov Arra 17.29 12** P **Pn** **21 48 22.4 -2.2**
comp=Z,2.2nm,0.3s,baz=201,slow=12,SNR=158
KURBB S Sn 21 51 27.6 -8.2
baz=188,slow=26,SNR=2.5
**JMDO Jabal Madar 17.31 233** P P 21 48 33.1 +6.9
SNR=7.0
**IPAR Pars 17.31 262** *e*P **Pn** **21 48 25.9 +0.4**
**IRAM Ramesheh 17.35 269** *e*P **Pn** **21 48 25.2 -0.6**
**NAZ Nazwa, Dubai 17.38 244** ⇑*i*P **P** **21 48 27.3 +0.3**
SNR=8.9
**KURK Kurchatov 17.39 12** ⇑P **Pn** **21 48 23.2 -2.7**
comp=Z,220nm,0.7s
KURK ⇑S **Sn** **21 51 39.8 +1.4**
comp=Z,90nm,1.0s
**KURK Kurchatov 17.39 12** *e*P **Pn** **21 48 22.5 -3.5**
KURK *e* 21 51 27.7
KURK pmax pmax
comp=Z,18nm,0.6s
**KURK Kurchatov 17.39 12** Pn **Pn** **21 48 23.3 -2.7**
comp=Z,970nm,0.6s,SNR=29
**KURK Kurchatov 17.39 12** *e*Pn **Pn** **21 48 22.4 -3.5**
comp=Z,18nm,0.6s
KURK *e*Sn Sn 21 51 27.6 -11
**IGAR Gharneh 17.52 271** *e*P **P** **21 48 30.0 +1.3**
**FAQ Al Faqa, Dubai 17.57 244** ⇑P **P** **21 48 29.0 -0.1**
**ARQ Araqi 17.75 238** P **P** **21 48 32.0 +0.9**
SNR=20
**IKLH Kolahrood 17.76 274** *e*P **Pn** **21 48 29.6 -1.3**
**ASUD Al Ashush, Dub 17.84 244** ⇓P **P** **21 48 32.9 +0.8**
**NJS Nagarjunasagar 18.14 160** *e*Pn **Pn** **21 48 31.3 -4.1**
NJS IAmb IAmb 21 48 36.9
comp=Z,186nm,1.2s
NJS *e*Sn **Sn** **21 51 52.5 -4.5**
NJS IVMs_BB IVMs_BB 21 55 32.3
comp=Z,4µm,10.7s
**AB31 Akbulak array 18.16 332** ⇑P **Pn** **21 48 32.3 -3.1**
comp=Z,49nm,0.5s
AB31 ⇑S Sn 21 51 47.7 -9.3
comp=Z,22nn,0.6s
**ABKAR Akbulak array 18.16 332** *e*Pn **Pn** **21 48 32.3 -3.1**
**CHLP Challavanipeta 18.24 144** *e*P P 21 48 31.3 -5.2
CHLP IAmb IAmb 21 48 34.5
comp=Z,40nm,1.1s
CHLP *e*Sn Sn 21 51 50.5 -8.6
CHLP IVMs_BB IVMs_BB 21 55 37.2
comp=Z,5µm,10.6s
**GOA Goa 18.27 177** *e*P **P** **21 48 35.9 -1.0**
GOA AMB AMB 21 48 41.6
comp=Z,83nm,0.7s
**PVM Polavaram 18.28 152** *e*P **P** **21 48 32.8 -4.2**
PVM IAmb IAmb 21 48 36.1
comp=Z,200nm,1.0s
PVM *e*Sn Sn 21 51 48.0 -12
PVM IVMs_BB IVMs_BB 21 55 37.0
comp=Z,4µm,9.6s
**IKAZ Kazeroun 18.33 263** *e*P **Pn** **21 48 38.1 +0.1**
**IMHD Mahdasht 18.35 282** *e*P **Pn** **21 48 39.0 +1.0**
**SHL Shillong 18.43 112** *e*P **P** **21 48 35.0 -3.8**
SHL AMB AMB 21 48 40.7
comp=Z,121nm,1.9s
**IPIR Pirpir 18.43 273** *e*P **Pn** **21 48 39.5 +0.4**
**IR5 Iran Long-Peri 18.43 281** *e*P **P** **21 48 37.5 -1.2**
**VIS Vishakhapatnam 18.57 147** *e*P **P** **21 48 36.7 -3.4**
VIS AMB AMB 21 48 40.4
comp=Z,46nm,1.1s
**IGZV Ghazvin 18.71 284** *e*P **P** **21 48 41.0 -0.9**
**VOSK Vostochnaya 18.94 356** ⇓P **P** **21 48 41.7 -2.3**
comp=Z,107nm,0.8s
VOSK ⇑S **Sn** **21 52 14.9 -0.9**
comp=Z,28nm,1.1s
**IRAZ Razeghan 18.95 281** *e*P **P** **21 48 44.8 +0.2**
**ADKI Addanki 19.01 159** *e*P **P** **21 48 42.7 -2.3**
ADKI IAmb IAmb 21 48 46.1
comp=Z,61nm,1.1s
ADKI *e*Sn Sn 21 52 03.8 -14
ADKI IVMs_BB IVMs_BB 21 55 60.0
comp=Z,3µm,10.3s
**URV Uravakonda 19.21 167** *e*P **P** **21 48 44.8 -2.4**
URV IAmb IAmb 21 48 49.3
comp=Z,85nm,1.0s
URV *e*Sn Sn 21 52 14.1 -8.7
URV IVMs_BB IVMs_BB 21 56 06.0
comp=Z,3µm,10.2s
**BVA0 Borovoye Array 19.27 355** P **P** **21 48 46.5 -1.1**
comp=Z,148nm,0.6s,baz=162,slow=13,SNR=934
BVA0 ⇓S **Sn** **21 52 22.2 -1.6**
comp=Z,37nm,1.1s

**BVAR Borovoye Array 19.27 355** P **P** **21 48 45.8 -1.8**
comp=Z,49nm,0.3s,baz=157,slow=9.6,SNR=633
BVAR S Sn 21 52 15.7 -8.1
baz=184,slow=21,SNR=2.6
**BRVK Borovoye 19.32 355** P **P** **21 48 46.5 -1.6**
**BRVK Borovoye 19.32 355***c i*P **P** **21 48 47.1 -1.0**
BRVK pmax pmax
comp=Z,222nm,0.8s
**BRVK Borovoye 19.32 355** P **P** **21 48 47.2 -0.9**
comp=Z,2µm,0.6s
**BRVK Borovoye 19.32 355** P **P** **21 48 47.2 -0.9**
SNR=136
**ZRNK Zerenda 19.32 353** ⇑P **P** **21 48 46.7 -1.5**
comp=Z,122nm,0.7s
ZRNK ⇓S **S** **21 52 19.0 -5.8**
comp=Z,25nm,0.9s
**AKTO Aktyubinsk 19.86 331** ⇓P **P** **21 48 52.7 -1.4**
comp=Z,105nm,0.6s
AKTO ⇓S S 21 52 28.5 -7.3
comp=Z,26nm,1.0s
**AKTO Aktyubinsk 19.86 331** P **P** **21 48 53.2 -0.9**
comp=Z,18nm,0.3s,baz=138,slow=9.8,SNR=319
AKTO S S 21 52 28.6 -7.1
comp=Z,0.2nm,0.3s,baz=50,slow=18,SNR=2.1
**CHKZ Chkalovo 19.91 356** ⇓P **P** **21 48 52.9 -1.6**
comp=Z,106nm,0.7s
CHKZ ⇓S **S** **21 52 35.9 -0.7**
comp=Z,25nn,1.4s
**SKHT Srikalahasti 20.94 161** *e*P **P** **21 49 05.9 -0.1**
SKHT IAmb IAmb 21 49 17.6
comp=Z,52nm,0.8s
SKHT *e*S **S** **21 52 58.3 +0.9**
SKHT IVMs_BB IVMs_BB 21 57 08.9
comp=Z,5µm,8.0s
**IKOM Komasi 21.03 278** *e*P **P** **21 49 06.7 -0.4**
**ILIN Lien 21.41 280** *e*P **P** **21 49 11.6 +0.4**
**IVIS Veis 21.54 279** *e*P **P** **21 49 11.7 -0.7**
**MDRS Chennai 21.73 160** *e*P **P** **21 49 13.1 -1.3**
MDRS AMB AMB 21 49 22.5
comp=Z,116nm,1.5s
**IGHG Ghaleghazi 21.79 279** *e*P **P** **21 49 14.7 -0.6**
**ZAA0 Zalesovo Array 21.82 19** *e*P **P** **21 49 12.7 -2.5**
**ZALV Zalesovo Beam 21.82 19** P **P** **21 49 13.7 -1.5**
comp=Z,153nm,0.5s,baz=215,slow=11,SNR=738
ZALV S S 21 53 07.2 -7.1
comp=Z,6.7nm,0.6s,baz=211,slow=18,SNR=4.1
**ZALV Zalesovo Beam 21.82 19** *i* P **P** **21 49 13.6 -1.5**
ZALV pmax pmax
comp=Z,154nm,0.5s
**ZAA1 Zalesovo Array 21.82 19** *e*P **P** **21 49 13.7 -1.5**
ZAA1 *e*S S 21 53 07.2 -7.2
**IDHR Dehrash 21.90 280** *e*P **P** **21 49 16.2 -0.2**
**NVS Novosibirsk 22.23 16** ⇓*i*P **P** **21 49 18.0 -1.5**
NVS *i* S **S** **21 53 21.1 -0.9**
NVS pmax pmax
comp=E,23nm,0.5s
NVS pmax pmax
comp=Z,102nm,0.5s
NVS pmax pmax
comp=N,95nm,0.7s
NVS smax smax
comp=N,50nm,1.6s
NVS smax smax
comp=E,43nm,1.4s
**GTA Gaotai 22.28 68** P **P** **21 49 21.4 +1.0**
GTA pP **pP** **21 49 30.7 +1.1**
GTA sP **sP** **21 49 34.6 +0.6**
GTA S **S** **21 53 19.3 -4.3**
GTA sS Sn 21 53 34.8 -1.7
GTA PMZ
comp=E,29nm,0.8s
GTA PMZ
comp=E,240nm,6.9s
GTA LN
comp=E,940nm,16.6s
GTA LE
comp=E,600nm,12.1s
GTA LZ
comp=E,480nm,12.1s
**HVS Khovu-Aksy 23.00 35** ⇓*e*P **P** **21 49 28.7 +0.9**
HVS pmax pmax
comp=Z,43nm,0.5s
**DGRG David-gareji 23.01 297** P **P** **21 49 28.6 +0.6**
**DGRG David-gareji 23.01 297** P **P** **21 49 28.6 +0.6**
**GNI Garni 23.29 294** *e*P **P** **21 49 33.3 +2.3**
GNI pmax pmax
comp=Z,592nm,0.9s
**GNI Garni 23.29 294** *e*P **P** **21 49 33.3 +2.3**
comp=Z,592nm,0.9s
**TBLG Delisi 23.53 298** P **P** **21 49 34.4 +1.3**
**TBLG Delisi 23.53 298** P **P** **21 49 34.4 +1.3**
**CUKT Cukurca 24.02 287** *e*P **P** **21 49 38.4 +0.4**
**AKH Akhalkalaki 24.40 297** P **P** **21 49 43.7 +2.2**
**AKH Akhalkalaki 24.40 297** P **P** **21 49 43.6 +2.2**
**SVE Sverdlovsk 24.48 344** ⇓*e*P **P** **21 49 41.3 -0.5**
SVE *e*S **S** **21 54 02.7 +3.1**
SVE pmax pmax
comp=Z,81nm,0.6s
SVE MLR MLR
comp=Z,4µm,12.0s
**AGRB Hanur-Agry 24.58 292** *e*P **P** **21 49 45.4 +2.3**
**KARS Kars 24.61 295** *e*P **P** **21 49 44.8 +1.5**
**ONI Oni 24.63 299** P **P** **21 49 45.2 +1.9**
**ONI Oni 24.63 299** P **P** **21 49 45.2 +1.9**
**ARU Arti 24.66 341** P **P** **21 49 42.9 -0.5**
comp=Z,4.5nm,0.4s,baz=324,slow=23,SNR=73
ARU S **S** **21 53 56.3 -6.2**
comp=Z,0.2nm,0.3s,baz=129,slow=20,SNR=2.0
**ARU Arti 24.66 341***c i*P **P** **21 49 42.5 -0.9**
ARU 21 50 12.7
ARU PPP PPP 21 50 26.2
ARU S **S** **21 54 03.2 +0.8**
ARU SS **SnSn** **21 54 49.2 -0.6**
ARU pmax pmax
comp=Z,94nm,0.6s
ARU MLR MLR
comp=Z,3µm,15.0s
**ARU Arti 24.66 341** P **P** **21 49 42.2 -1.2**
comp=Z,1µm,0.5s,SNR=73
**ARU Arti 24.66 341** *e*P **P** **21 49 42.1 -1.3**
comp=Z,111nm,0.6s
ARU *e*S **S** **21 53 56.2 -6.2**
**NCK Nalchik 24.71 302** ⇓*e*P **P** **21 49 44.4 +0.3**
**SIRT Sirnak 24.95 287** *e*P **P** **21 49 47.1 +0.8**
**KBZ Khabaz 25.26 302** P **P** **21 49 49.0 +0.1**
comp=Z,30nm,0.9s,baz=134,slow=7.4,SNR=39
KBZ LR LR 22 02 37.3
comp=Z,1µm,18.2s,baz=84,slow=43
**LZH Lanzhou 25.42 76** ⇑P **P** **21 49 52.7 +2.0**
LZH pP **pP** **21 50 03.6 +3.0**
LZH sP **sP** **21 50 07.3 +2.5**
LZH PP **PnPn** **21 50 32.2 +5.6**
LZH S **S** **21 54 15.2 -0.2**
LZH sS **sS** **21 54 31.0 -0.7**
LZH SS **SnSn** **21 55 15.0 +5.9**
LZH PMZ
comp=Z,59nm,1.0s
LZH PMZ
comp=Z,150nm,4.6s
LZH LN
comp=Z,650nm,10.1s
LZH LE
comp=Z,700nm,11.9s
LZH LZ
comp=Z,720nm,10.2s
**KIV Kislovodsk 25.46 302***ce*P **P** **21 49 51.6 +0.7**
KIV *e**PP **pP** **21 50 02.7 +2.0**
KIV *e* 21 50 26.3
KIV *e*PPP PPP 21 50 35.4
KIV 21 53 23.0
KIV *e*S **S** **21 54 15.6 -0.1**
KIV pmax pmax
comp=Z,65nm,1.0s
KIV MLR MLR
comp=Z,2µm,15.0s
**KIV Kislovodsk 25.46 302** P **P** **21 49 51.2 +0.3**
comp=Z,373nn,0.8s,SNR=11
**KIV Kislovodsk 25.46 302** P **P** **21 49 53.5 +2.6**
SNR=9.7
**KIV Kislovodsk 25.46 302** ⇓*i*P **P** **21 49 51.2 +0.3**
SNR=22
**KIV Kislovodsk 25.46 302** *e*P **P** **21 49 50.9 0.0**
comp=Z,50nn,0.8s
**TRD Trivandrum 25.48 171** *e*P **P** **21 49 49.0 -2.1**
TRD AMB AMB 21 49 53.3

comp=Z,48nm,0.3s
**CHVG Ch'k'valeri 25.64 299** P **P** **21 49 54.9 +2.4**
**BCA Borcka 25.80 296** *e*P **P** **21 49 56.8 +2.9**
**RAYN Ar Rayn 26.05 254** P **P** **21 49 56.0 -0.4**
comp=Z,109nm,1.1s,SNR=13
**RAYN Ar Rayn 26.05 254** *e*P **P** **21 49 56.2 -0.2**
comp=Z,46nm,1.1s
**KRAR Krasnoyarsk 26.13 26**⇓ *e*P **P** **21 49 57.5 +0.8**
KRAR pmax pmax
comp=Z,26nm,1.0s
**CD2 Chengdu 26.19 88** *e*P **P** **21 49 58.0 +0.4**
CD2 pP **pP** **21 50 07.4 0.0**
CD2 sP **sP** **21 50 11.7 0.0**
CD2 S **S** **21 54 28.6 +1.2**
CD2 sS **sS** **21 54 44.7 +0.9**
CD2 PMZ
comp=Z,50nm,0.8s
CD2 PMZ
comp=Z,160nm,4.4s
CD2 LN
comp=Z,610nm,10.8s
CD2 LE
comp=Z,830nm,11.9s
CD2 LZ
comp=Z,1μm,11.9s
**MOY Mondy 27.02 40** *e*P **P** **21 50 09.4 +4.4**
MOY pmax pmax
comp=Z,56nm,2.8s
**CMAI Chiengmai2 27.03 114** P **P** **21 50 04.7 -0.7**
comp=Z,44nm,0.7s,comp=Z,3μm
**KMI Kunming 27.33 101** P **P** **21 50 08.2 +0.1**
KMI pP **pP** **21 50 18.5 +0.6**
KMI sP **sP** **21 50 23.1 +1.0**
KMI PP **PnPn** **21 50 51.4 -1.3**
KMI S **S** **21 54 44.3 -1.4**
KMI sS **sS** **21 55 02.7 +0.6**
KMI PMZ
comp=Z,28nm,0.7s
KMI PMZ
comp=Z,100nm,3.1s
KMI LN
comp=Z,320nm,9.3s
KMI LE
comp=Z,710nm,13.7s
KMI LZ
comp=Z,690nm,14.3s
**PTK Pertek 27.35 290** *e*P **P** **21 50 06.8 -1.3**
**PALK Pallekele 27.39 163** P **P** **21 50 08.7 +0.2**
comp=Z,13nm,1.1s,baz=292,slow=5.4,SNR=2.5
PALK LR LR 22 01 41.3
comp=Z,1μm,20.1s,baz=296,slow=38
**PALK Pallekele 27.39 163** *e*P **P** **21 50 08.7 +0.2**
PALK pmax pmax
comp=Z,117nm,1.5s
**PALK Pallekele 27.39 163** *e*P **P** **21 50 08.7 +0.2**
comp=Z,117nm,1.5s
**SVRC Sivrice-ELAZID 27.42 289** *e*P **P** **21 50 04.5 -4.2**
**SOC Sochi 27.50 301** *e*P P 21 50 03.7 -5.5
SOC *e* 21 50 52.3
SOC *e*S **S** **21 54 41.2 -6.5**
SOC *e*S S 21 54 49.9 +2.2
**CHTO Chiang Mai 27.63 116** P **P** **21 50 10.8 +0.2**
comp=Z,466nm,1.2s,comp=Z,5μm
**CHTO Chiang Mai 27.63 116** *e*P **P** **21 50 10.3 -0.3**
CHTO pmax pmax
comp=Z,79nm,1.0s
**CHTO Chiang Mai 27.63 116** P **P** **21 50 14.3 +3.7**
SNR=20
**CHTO Chiang Mai 27.63 116** *e*P **P** **21 50 10.3 -0.3**
comp=Z,80nm,1.0s
**ZAK Zakamensk 27.71 44** *e*P **P** **21 50 11.3 +0.2**
ZAK pmax pmax
comp=Z,12nm,1.3s
**CM31 Chiang Mai Arr 27.85 117** *e*P **P** **21 50 12.8 +0.2**
CM31 *e*ScP **ScP** **21 57 06.9 +0.8**
**CMAR Chiang Mai Arr 27.85 117** P **P** **21 50 12.8 +0.2**
comp=Z,37nm,0.9s,baz=300,slow=8.9,SNR=53
CMAR ScP **ScP** **21 57 06.9 +0.8**
comp=Z,2.9nm,0.9s,baz=292,slow=4.1,SNR=8.2
CMAR LR LR 22 05 03.4
comp=Z,635nm,18.2s,baz=300,slow=44
**CRAI Chiangrai 27.88 112** P P 21 50 07.8 -5.0
**CM01 Chiang Mai Arr 27.88 117** *e*P **P** **21 50 12.1 -0.7**
CM01 *e*ScP **ScP** **21 57 06.3 +0.1**
**LAMP Lampang 28.32 116** P **P** **21 50 18.8 +2.1**
comp=Z,13nm,1.0s,comp=Z,96nm
**TLY Talaya 28.48 42** P **P** **21 50 19.2 +1.3**
comp=Z,4.8nm,0.6s,baz=247,slow=7.5,SNR=3.1
TLY LR LR 22 03 15.2
comp=Z,2μm,19.4s,baz=260,slow=40
**VRH Novokhopyorsk 28.50 317** *e*P **P** **21 50 17.6 -0.4**
VRH pmax pmax
comp=N,20nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.6s
VRH pmax pmax
comp=Z,20nm,0.6s
VRH MLR MLR
comp=E,830nm,20.0s
VRH MLR MLR
comp=Z,2μm,20.0s
VRH MLR MLR
comp=N,600nm,19.0s
**SONA0 Songino Array 28.71 51** *e*P **P** **21 50 21.3 +1.2**
**SONM Songino Array 28.71 51** P **P** **21 50 21.3 +1.2**
comp=N,21nm,0.9s,baz=252,slow=9.6,SNR=104
SONM ScP **ScP** **21 57 09.3 +0.8**
comp=N,1.7nm,1.0s,baz=197,slow=4.5,SNR=4.4
**SONA1 Songino Array 28.72 51** *e*P **P** **21 50 21.0 +0.8**
**PHRA Phrae 28.78 115** P **P** **21 50 21.9 +1.1**
comp=N,155nm,1.0s,comp=N,31μm
**NANT Nan 28.96 114** P **P** **21 50 22.7 +0.3**
comp=N,6.4nm,1.1s
**IRK Irkutsk 29.08 41** *e*P **P** **21 50 24.5 +1.3**
IRK pmax pmax
comp=Z,36nm,2.6s
**ULN Ulaanbaatar 29.14 51** *e*P **P** **21 50 24.9 +0.9**
ULN pmax pmax
comp=Z,13nm,0.9s
**ULN Ulaanbaatar 29.14 51** P **P** **21 50 25.5 +1.6**
SNR=6.6
**ULN Ulaanbaatar 29.14 51** *e*P **P** **21 50 24.9 +0.9**
comp=Z,13nm,0.9s
**ANN Anapa 29.32 303** *e*P **P** **21 50 25.4 0.0**
ANN MLR MLR
comp=N,1μm,18.0s
ANN MLR MLR
comp=Z,2μm,18.0s
ANN MLR MLR
comp=E,2μm,18.0s
**UTTA Uttaradit 29.49 116** P **P** **21 50 27.8 +0.7**
comp=E,9.2nm,0.7s,comp=E,86nm
**SARI SarD1z-Kayseri 29.68 289** *e*P **P** **21 50 28.1 -0.8**
**VORD Divnogorie 29.80 315** *e*P **P** **21 50 29.0 -0.6**
VORD pmax pmax
comp=N,6.0nm,0.4s
VORD pmax pmax
comp=E,8.0nm,0.4s
VORD pmax pmax
comp=Z,10.0nm,0.4s
VORD MLR MLR
comp=N,750nm,16.0s
VORD MLR MLR
comp=E,2μm,16.0s
VORD MLR MLR
comp=Z,2μm,16.0s
**XAN Xi'an 29.81 79** P **P** **21 50 30.0 +0.1**
XAN pP **pP** **21 50 39.6 -0.2**
XAN sP **sP** **21 50 45.5 +1.5**
XAN PP **PnPn** **21 51 27.1 +0.8**
XAN S **S** **21 55 22.3 -2.0**
XAN sS **sS** **21 55 38.3 -2.4**
XAN PMZ
comp=Z,8.0nm,1.0s
XAN PMZ
comp=Z,31nm,4.3s
XAN LN
comp=Z,360nm,12.2s
XAN LE
comp=Z,450nm,11.9s
XAN LZ
comp=Z,510nm,12.2s
**VSR Storozhevoye 29.97 316** *e*P **P** **21 50 30.4 -0.7**
VSR pmax pmax
comp=N,10.0nm,1.1s
VSR pmax pmax
comp=E,20nm,1.1s
VSR pmax pmax
comp=Z,30nm,1.1s
VSR pmax pmax
comp=N,10.0nm,0.8s
VSR pmax pmax
comp=E,40nm,0.8s
VSR pmax pmax
comp=Z,30nm,0.8s
VSR MLR MLR
comp=N,520nm,17.0s
VSR MLR MLR
comp=E,880nm,17.0s
VSR MLR MLR
comp=Z,1μm,17.0s
**GYA Guiyang 30.02 95**⇑ *i*P **P** **21 50 31.7 -0.3**
GYA pP **pP** **21 50 43.8 +1.9**
GYA PP **PnPn** **21 51 32.6 +3.2**
GYA PcP **PcP** **21 53 34.4 +0.9**
GYA S **S** **21 55 27.5 -0.5**
GYA sS **sS** **21 55 43.0 -1.4**
GYA SS **SnSn** **21 57 06.9 +5.4**
GYA ScP **ScP** **21 57 14.0 +0.9**
GYA ScS **ScS** **22 01 08.2 -0.6**
GYA PMZ
comp=Z,20nm,0.8s
GYA PMZ
comp=Z,120nm,4.6s
GYA LN
comp=Z,140nm,10.6s
GYA LE
comp=Z,110nm,13.2s
GYA LZ
comp=Z,120nm,8.7s
**LOEI Loei 30.16 115** P **P** **21 50 35.3 +2.2**
comp=Z,16nm,0.8s
**PBKT Sadao Pong 30.53 117** P **P** **21 50 37.9 +1.6**
comp=Z,32nm,0.8s
**LPSR Galich'ya Gora 30.66 318** *e*P **P** **21 50 36.8 -0.3**
LPSR pmax pmax
comp=E,10.0nm,0.9s
LPSR pmax pmax
comp=Z,50nm,0.9s
LPSR pmax pmax
comp=N,2.0nm,0.7s
**KARA Karaisali 30.84 287** *e*P **P** **21 50 39.2 +0.3**
**HHC Hu-ho-hao-te 31.35 66** *e*P **P** **21 50 44.5 +1.0**
HHC sP **sP** **21 50 56.4 -1.2**
HHC PP **PnPn** **21 51 47.8 +1.3**
HHC S **S** **21 55 51.7 +3.2**
HHC SS **SnSn** **21 57 32.9 -0.6**
HHC ScS **ScS** **22 01 13.6 -1.2**
HHC PMZ
comp=N,9.0nm,0.9s
HHC PMZ
comp=N,98nm,4.8s
HHC LN
comp=N,620nm,10.4s
HHC LE
comp=N,430nm,10.1s
HHC LZ
comp=N,390nm,10.0s
**BR101 Keskin Array S 31.80 292** *e*P **P** **21 50 48.5 +1.1**
**BRTR Keskin Array B 31.80 292** P **P** **21 50 48.5 +1.1**
comp=N,4.3nm,0.7s,baz=101,slow=9.0,SNR=17
BRTR ScP **ScP** **21 57 22.4 +3.7**
comp=N,1.6nm,0.9s,baz=122,slow=5.2,SNR=4.7
BRTR LR LR 22 06 53.1
comp=N,117nm,19.2s,baz=72,slow=42
**AFSR Af'ar-Bala (A 32.25 292** *e*P **P** **21 50 53.6 +2.2**
**LFK Lefkose 32.30 284** *e*P **P** **21 50 51.8 -0.1**
**BR231 Keskin MP Arra 32.46 292** *e*P P 21 50 49.5 -3.8
**CSS Prodhromos 32.51 283** *e*pP pP 21 51 02.9 -0.7
**SKNT Sakolnakorn 32.55 113** P **P** **21 50 54.9 +0.8**
comp=N,26nm,1.2s
**MOS Moscow 32.71 323** *e*P **P** **21 50 53.5 -1.6**
MOS *e* 21 52 03.9
MOS *e*S **S** **21 56 05.9 -3.2**
MOS pmax pmax
comp=Z,73nm,1.3s
MOS MLR MLR
comp=Z,2μm,15.0s
MOS MLR MLR
comp=E,2μm,16.0s
**LEF Lefka 32.84 284** *e*P **P** **21 50 55.7 -0.8**
**KONT Konya--Tatoy 32.91 289** *e*P **P** **21 50 56.5 -0.6**
**OBN Obninsk 32.98 321** *d i*P **P** **21 50 56.6 -0.8**
OBN *e**PP **pP** **21 51 07.7 +0.3**
OBN *SP **sP** **21 51 15.0 +3.5**
OBN 21 52 11.0
OBN *e*S **S** **21 56 15.0 +1.8**
OBN *e*SS **SnSn** **21 58 13.1 +0.7**
OBN pmax pmax
comp=Z,145nm,1.7s
OBN MLR MLR
comp=Z,992nm,17.0s
**OBN Obninsk 32.98 321** P **P** **21 50 56.2 -1.2**
comp=Z,669nm,0.5s,SNR=5.6
**OBN Obninsk 32.98 321** *e*P **P** **21 50 56.8 -0.6**
comp=Z,64nm,0.6s
**KIZT Kizilcal 33.20 291** *e*P P 21 50 51.8 -8.0
**SUTC Sutluce-Ispart 34.03 288** *e*P **P** **21 51 06.8 -0.2**
**SHUT Suhut-Afyon 34.27 290** *e*P **P** **21 51 09.1 +0.1**
**KLMR Klimovskoe 34.56 332** *e*P P 21 51 07.6 -3.5
KLMR pmax pmax
comp=Z,51nm,1.8s
KLMR MLR MLR
comp=Z,1μm,14.0s
**BJI Beijing 34.89 67** P **P** **21 51 15.5 +1.3**
BJI S **S** **21 56 47.6 +4.4**
BJI PMZ
comp=Z,8.0nm,1.7s
BJI LN
comp=Z,590nm,9.4s
BJI LE
comp=Z,610nm,10.5s
BJI LZ
comp=Z,190nm,13.4s
**ELL Elmali 34.99 287** *e*P **P** **21 51 15.6 +0.3**
**WHN Wuhan 35.08 84** P **P** **21 51 15.5 -0.5**
WHN S **S** **21 56 45.7 -0.6**
WHN LN
comp=Z,800nm,12.2s
WHN LE
comp=Z,980nm,11.2s
WHN LZ
comp=Z,1μm,14.4s
**KHL Karahalli 35.09 290** *e*P **P** **21 51 14.6 -1.5**
**AKASG Malin Array Be 35.84 311** P **P** **21 51 21.3 -1.0**
comp=Z,21nm,0.6s,baz=81,slow=7.0,SNR=84
AKASG PP **PnPn** **21 52 40.2 -2.7**
comp=Z,4.9nm,0.7s,baz=85,slow=9.8,SNR=2.9
AKASG LR LR 22 09 09.1
comp=Z,745nm,18.5s,baz=105,slow=41
**AKBB Malin Array Si 35.84 311** *e*P **P** **21 51 21.3 -1.0**
**AKBB Malin Array Si 35.84 311** *e*P **P** **21 51 21.3 -1.0**
**KIEV Kiev 35.85 311** *e*P **P** **21 51 21.3 -1.1**
KIEV pmax pmax
comp=Z,29nm,0.7s
**KIEV Kiev 35.85 311** *e*P **P** **21 51 21.3 -1.1**
comp=Z,29nm,0.7s
**AK11 Malin Array Si 35.88 311** *e*P **P** **21 51 21.5 -1.1**
**CFR Carcaliu 35.92 302**⇑ *i*P **P** **21 51 24.4 +1.4**
**QIZ Qiongzhong 36.02 105** P **P** **21 51 25.8 +1.7**
QIZ sP **sP** **21 51 38.2 -0.1**
QIZ S **S** **21 57 02.9 +2.1**
QIZ PMZ
comp=Z,9.0nm,1.4s
QIZ LZ
comp=Z,420nm,18.5s
**MSAB Monastry St. A 36.11 300**⇑ *i*P **P** **21 51 26.3 +1.7**
**BOD Bodaibo 36.52 36** *e*P **P** **21 51 27.5 -0.5**
BOD pmax pmax
comp=Z,8.0nm,1.8s
**KRBG Karabiga-Canak 36.62 294** *e*P **P** **21 51 28.8 -0.2**
**GRER 36.74 302**⇑ *i*P **P** **21 51 32.6 +2.5**
**IZM Izmir 36.85 291** *e*P **P** **21 51 32.0 +0.8**
**VRI Vrincioaia 36.94 303**⇑ *i*P **P** **21 51 33.4 +1.7**
**PLOR Plostina 36.99 303**⇑ *i*P **P** **21 51 34.0 +1.8**
**TESR Tescani 37.02 304**⇑ *i*P **P** **21 51 33.4 +0.9**
**ISR Istrita 37.04 302**⇑ *i*P **P** **21 51 34.4 +1.7**
**TMCR Tamitsa 37.12 335** *e*P **P** **21 51 32.8 -0.2**
TMCR *e*S **S** **21 57 19.9 +3.3**
TMCR pmax pmax
comp=Z,32nm,0.6s
**GELI Tayfur-Gelibol 37.24 294** *e*P **P** **21 51 35.2 +0.8**
**SMG Samos 37.28 289** *e*P **P** **21 51 34.5 -0.3**
**SMG Samos 37.28 289** *e*P **P** **21 51 34.5 -0.3**
**SMG Samos 37.28 289** P **P** **21 51 34.4 -0.3**
**SMG Samos 37.28 289** *e*P **P** **21 51 34.4 -0.3**
**PRAR RASCA 37.36 305**⇑ *i*P **P** **21 51 34.8 -0.5**
**KARP Karpathos 37.38 286** *e*P **P** **21 51 35.4 -0.3**
**KARP Karpathos 37.38 286** *e*P **P** **21 51 35.4 -0.3**
**KARP Karpathos 37.38 286** P **P** **21 51 35.4 -0.3**
**KARP Karpathos 37.38 286** *e*P **P** **21 51 35.4 -0.3**
**MLR Muntele Rosu 37.47 302**⇑ *i*P **P** **21 51 38.2 +1.8**
**SZH Strazhica 37.48 299** *e*P **P** **21 51 36.9 +0.5**
**PRK Paraskevi 37.52 292** *e*P **P** **21 51 35.6 -1.1**
**PRK Paraskevi 37.52 292** *e*P **P** **21 51 35.8 -0.9**
**PRK Paraskevi 37.52 292** *e*P **P** **21 51 35.8 -0.9**
**PRK Paraskevi 37.52 292** P **P** **21 51 35.6 -1.1**
**PRK Paraskevi 37.52 292** *e*P **P** **21 51 35.6 -1.1**
**MNK Minsk 37.52 317** *e*P P 21 51 28.0 -8.6
MNK *e* 21 53 02.0
**DOPR Dopca 37.87 303**⇓ *i*P **P** **21 51 40.6 +0.9**
**KDZ Kurdzhali 37.95 296** *e*P **P** **21 51 43.2 +2.9**
**SMTH Samothraki Isl 37.96 294** *e*P **P** **21 51 39.4 -1.0**
**SMTH Samothraki Isl 37.96 294** *e*P **P** **21 51 39.4 -1.0**
**BURAR Bucovina Array 38.06 306**⇓ *i*P **P** **21 51 42.0 +0.6**
**BUR04 Bucovina Ar. S 38.07 306** *e*P **P** **21 51 41.4 0.0**
**VOIR 38.10 302**⇓ *i*P **P** **21 51 42.4 +0.7**
**NACGM Naroch 38.21 318** *e* **P** **21 51 41.0 -1.4**
**ZKR Zakros 38.22 285** *e*P **P** **21 51 40.8 -1.9**
**ZKR Zakros 38.22 285** *e*P **P** **21 51 40.8 -1.9**
**IDID Didziasalis 38.34 318** *e*P **P** **21 51 43.0 -0.5**
IDID IAmb IAmb 21 51 44.4
comp=Z,16nm,0.8s
**NJ2 Nanjing 38.38 80** *e*P **P** **21 51 45.2 +1.2**
NJ2 PMZ
comp=Z,30nm,0.7s
**APE Apeiranthos 38.40 289** *de*P **P** **21 51 44.5 +0.3**
APE pmax pmax
comp=Z,11nm,0.8s
**APE Apeiranthos 38.40 289**⇑ *i*P **P** **21 51 44.6 +0.3**
**APE Apeiranthos 38.40 289** *e*P **P** **21 51 43.7 -0.6**
**APE Apeiranthos 38.40 289** *e*P **P** **21 51 43.7 -0.6**
**APE Apeiranthos 38.40 289** P **P** **21 51 43.9 -0.4**
**APE Apeiranthos 38.40 289** *e*P **P** **21 51 43.9 -0.4**
**RZN Rozhen 38.47 296** *e*P **P** **21 51 46.0 +1.1**
**ARCR ARCALIA 38.62 305**⇑ *i*P **P** **21 51 47.3 +1.3**
**IIGN Ignalina 38.63 318** *e*P **P** **21 51 45.4 -0.5**
IIGN IAmb IAmb 21 51 47.2
comp=Z,25nm,0.7s
**IZAR Zarasai 38.72 319** *e*P **P** **21 51 46.2 -0.5**
IZAR IAmb IAmb 21 51 47.8
comp=Z,29nm,0.7s
**ISAL Salakas 38.74 319** *e*P **P** **21 51 46.4 -0.4**
ISAL IAmb IAmb 21 51 48.1
comp=Z,38nm,1.3s
**LAST Lasithi 38.80 286** *e*P **P** **21 51 47.8 +0.1**
**LAST Lasithi 38.80 286** *e*P **P** **21 51 47.8 +0.1**
**LAST Lasithi 38.80 286** *e*P **P** **21 51 48.1 +0.4**
**PGB Panagyurishte 38.81 298** *e*P **P** **21 51 49.0 +1.3**
**LOT Lotru 39.00 302**⇑ *i*P **P** **21 51 49.7 +0.4**
**LVV L'vov 39.02 309** *e*P **P** **21 51 48.8 -0.4**
LVV *e* 21 53 58.0
LVV *e*S **S** **21 57 47.8 +2.0**
LVV *e* 22 01 54.0
LVV MLR MLR
comp=Z,400nm,13.0s
LVV MLR MLR
comp=E,500nm,14.0s
LVV MLR MLR
comp=N,200nm,13.0s
**MPEP Malo Peshtene 39.08 299** *e*P **P** **21 51 50.3 +0.5**
**IACM Heraklion 39.10 286** *e*P P 21 51 54.3 +4.2
**IACM Heraklion 39.10 286** *e*P P 21 51 54.3 +4.2
**CJR Cluj-Napoca 39.13 304**⇑ *i*P **P** **21 51 51.6 +1.3**
**NVR Nevrokopi 39.13 296** P **P** **21 51 50.8 +0.5**
**NVR Nevrokopi 39.13 296** *e*P **P** **21 51 50.8 +0.5**
**MMB Musomiste 39.21 296** *e*P **P** **21 51 51.6 +0.6**
**BMR Baia Mare 39.23 306**⇓ *i*P **P** **21 51 52.3 +1.3**
**VSU Vasula 39.24 323** *ce*P **P** **21 51 50.1 -0.8**
VSU pmax pmax
comp=Z,143nm,1.0s
**IDI Anoyia 39.25 286** *e*P **P** **21 51 51.2 -0.2**
**IDI Anoyia 39.25 286** *e*P **P** **21 51 51.2 -0.2**
**IDI Anoyia 39.25 286** *e*P **P** **21 51 50.4 -1.0**
comp=Z,19nm,0.9s
**PSI Prapat 39.29 136** P **P** **21 51 50.5 -1.4**
comp=Z,4.7nm,0.4s,baz=301,slow=12,SNR=4.6
PSI LR LR 22 09 00.7
comp=Z,476nm,20.5s,baz=299,slow=38
**PSI Prapat 39.29 136** *e*P **P** **21 51 51.8 -0.1**
**PSI Prapat 39.29 136** *e*P **P** **21 51 51.8 -0.1**
**SRS Serrai 39.36 295** *e*P **P** **21 51 52.2 0.0**
**SRS Serrai 39.36 295** P **P** **21 51 52.2 0.0**
**SRS Serrai 39.36 295** *e*P **P** **21 51 52.2 0.0**
**SIVA Sivas 39.37 286** *e*P **P** **21 51 52.3 0.0**
**SIVA Sivas 39.37 286** *e*P **P** **21 51 52.3 0.0**
**PAIG Paliouri 39.42 294** *e*P **P** **21 51 53.0 +0.3**
**PAIG Paliouri 39.42 294** P **P** **21 51 53.0 +0.3**
**PAIG Paliouri 39.42 294** *e*P **P** **21 51 53.0 +0.3**
**VTS Vitosha 39.52 298** *e*P **P** **21 51 53.4 -0.3**
**PTL Penteli 39.55 291** P **P** **21 51 54.0 +0.2**
**PTL Penteli 39.55 291** *e*P **P** **21 51 54.0 +0.2**
**PLG Polygyros 39.55 294** *e*P **P** **21 51 54.2 +0.4**
**PLG Polygyros 39.55 294** *e*P **P** **21 51 54.3 +0.4**
**PLG Polygyros 39.55 294** *e*P **P** **21 51 54.3 +0.4**
**PLG Polygyros 39.55 294** P **P** **21 51 54.2 +0.4**
**PLG Polygyros 39.55 294** *e*P **P** **21 51 54.2 +0.4**
**SOH Sokhos 39.57 295** *e*P **P** **21 51 54.1 +0.1**
**SOH Sokhos 39.57 295** P **P** **21 51 54.1 +0.1**
**SOH Sokhos 39.57 295** *e*P **P** **21 51 54.1 +0.1**
**VLY Voula,Athens 39.63 290** *e*P **P** **21 51 51.4 -3.1**
**VLY Voula,Athens 39.63 290** *e*P **P** **21 51 51.4 -3.1**
**KKB Krupnik 39.67 297** *e*P **P** **21 51 54.8 0.0**
**GZR Gura Zlata 39.70 302**⇑ *i*P **P** **21 51 55.5 +0.4**
**DRGR 39.74 304**⇑ *i*P **P** **21 51 56.3 +0.9**
**GSI Gunungsitoli 39.77 139** *e*P **P** **21 51 55.8 0.0**
comp=Z,24nm,0.8s
**VAM Vamos 39.77 286** *e*P **P** **21 51 55.7 0.0**
**VAM Vamos 39.77 286** *e*P **P** **21 51 55.7 0.0**
**KWP Kalwaria Pacla 39.86 309** *e*P **P** **21 51 57.3 +1.0**
**KWP Kalwaria Pacla 39.86 309** *e*P **P** **21 51 57.4 +1.1**
**XOR Xorichti 39.87 293** P **P** **21 51 56.3 -0.2**
**XOR Xorichti 39.87 293** *e*P **P** **21 51 56.3 -0.2**
**KNT Kendrikon 39.88 296** *e*P **P** **21 51 56.5 0.0**
**KNT Kendrikon 39.88 296** P **P** **21 51 56.5 0.0**
**KNT Kendrikon 39.88 296** *e*P **P** **21 51 56.5 0.0**
**TRPA Tarpa 39.89 306**⇑ *i*P **P** **21 51 57.3 +0.8**
**IMMV Iera Moni Meta 39.94 287** *e*P **P** **21 51 55.3 -1.8**
**IMMV Iera Moni Meta 39.94 287** *e*P **P** **21 51 55.3 -1.8**
**UZH Uzhgorod 40.07 307** *i*P **P** **21 51 57.3 -0.7**
UZH *e* 21 52 02.5
**SUW Suwalki 40.09 316** *e*P P 21 51 54.1 -3.9
SUW *e* 21 53 33.6
**SUW Suwalki 40.09 316** *e*P P 21 51 54.1 -3.9
SUW *e* 21 53 33.6
**KOLS Kolonicke sedl 40.10 308** *e*P **P** **21 51 58.2 -0.1**
KOLS pmax pmax
comp=Z,10.0nm,0.8s
**KOLS Kolonicke sedl 40.10 308** *e*P **P** **21 51 58.2 -0.1**
KOLS *e*PP **PP** **21 53 32.3 +1.6**
**GRG Griva 40.27 295** *e*P **P** **21 51 59.3 -0.5**
**GRG Griva 40.27 295** P **P** **21 51 59.3 -0.5**
**GRG Griva 40.27 295** *e*P **P** **21 51 59.3 -0.5**
**SNY Shenyang 40.34 63**⇓ *i*P **P** **21 52 01.7 +1.4**
SNY S **S** **21 58 05.5 -0.2**
SNY PMZ
comp=Z,12nm,0.5s
SNY LN
comp=Z,360nm,10.5s
SNY LE
comp=Z,440nm,11.7s
SNY LZ
comp=Z,620nm,12.9s
**LVZ Lovozero 40.51 339**⇑ *e*P **P** **21 51 58.6 -2.8**
LVZ pmax pmax
comp=Z,57nm,1.7s
**VLI Veliai 40.51 289** *e*P **P** **21 51 59.8 -2.0**
**VLI Veliai 40.51 289** *e*P **P** **21 51 59.8 -2.0**
**BZS Buzias 40.51 303**⇑ *i*P **P** **21 52 02.4 +0.7**
**SSE Sheshan 40.55 80** P **P** **21 52 01.1 -1.1**
SSE S **S** **21 58 10.3 +1.1**
SSE sS **sS** **21 58 23.9 -2.0**

SSE PMZ
comp=Z,35nm,0.7s
SSE PMZ
comp=Z,42nm,4.3s
SSE LN
comp=Z,430nm,13.9s
SSE LZ
comp=Z,420nm,13.1s
**FIA0 FINESS Array S 40.56 327** *e*P **P 21 52 00.6 -1.2**
**FIA0 FINESS Array S 40.56 327** *e*P **P 21 52 00.6 -1.2**
**FINES FINESS Array B 40.56 327** P **P 21 52 00.6 -1.2**
comp=Z,8,4nm,0.5s,baz=125,slow=8.9,SNR=40
FINES LR LR 22 10 23.0
comp=Z,898nm,19.2s,baz=71,slow=38
**AGG Agios Georgios 40.58 292** *e*P **P 21 52 01.4 -1.0**
AGG pmax pmax
comp=Z,34nm,1.3s
**AGG Agios Georgios 40.58 292** *e*P **P 21 52 01.4 -1.0**
comp=Z,34nm,1.3s
**APA Apatity 40.69 338**⇓ *i*P **P 21 52 04.0 +1.2**
APA MLR MLR
comp=Z,3µm,13.0s
**MAKR Makrakomi, Fth 40.74 292** P **P 21 52 03.3 -0.4**
**MAKR Makrakomi, Fth 40.74 292** *e*P **P 21 52 03.3 -0.4**
**THL Klokotos Trika 40.74 293** P **P 21 52 03.0 -0.7**
**STHS Stebnicka Huta 40.80 308** *e*P **P 21 52 04.3 +0.2**
STHS pmax pmax
comp=Z,12nm,0.6s
**STHS Stebnicka Huta 40.80 308** *e*P **P 21 52 04.2 +0.2**
STHS *e*PP **PP 21 53 39.4 +1.1**
**EVR Evrytania 41.00 292** P **P 21 52 05.4 -0.6**
**EVR Evrytania 41.00 292** *e*P **P 21 52 05.4 -0.6**
**FNA Florina 41.06 295** *e*P **P 21 52 06.4 0.0**
**FNA Florina 41.06 295** P **P 21 52 06.4 0.0**
**FNA Florina 41.06 295** *e*P **P 21 52 06.4 0.0**
**ITM Ithomi 41.22 290** *e*P **P 21 52 05.7 -1.9**
**ITM Ithomi 41.22 290** *e*P **P 21 52 05.7 -1.9**
**MNSI Mandailing Nat 41.30 137** P **P 21 52 08.5 +0.1**
comp=Z,35nm,0.9s
**NEST Nestorio 41.36 295** P **P 21 52 08.5 -0.4**
**NIE Niedzica 41.41 308** *e*P **P 21 52 10.2 +1.1**
**NIE Niedzica 41.41 308** *e*P **P 21 52 10.3 +1.1**
**JAN Janina 41.62 294** *e*P **P 21 52 10.5 -0.4**
**JAN Janina 41.62 294** P **P 21 52 10.5 -0.4**
**JAN Janina 41.62 294** *e*P **P 21 52 10.5 -0.4**
**PSZ Piszkesteto 41.66 306** *e*P **P 21 52 11.7 +0.4**
PSZ pmax pmax
comp=Z,18nm,0.8s
**PSZ Piszkesteto 41.66 306**⇑ *i*P **P 21 52 11.6 +0.4**
**PSZ Piszkesteto 41.66 306** *e*P **P 21 52 11.7 +0.4**
comp=Z,18nm,0.8s
**DIVS Divibare 41.75 300** P **P 21 52 12.1 +0.1**
**OJC Ojcow 41.77 310** *e*P **P 21 52 11.5 -0.5**
**OJC Ojcow 41.77 310** *e*P **P 21 52 11.5 -0.5**
**OJC Ojcow 41.77 310** *e*P **P 21 52 11.6 -0.5**
comp=Z,36nm,1.4s
**CLNS Chul'man 41.88 40** *e*P **P 21 52 11.3 -1.5**
CLNS pmax pmax
comp=Z,17nm,0.8s
CLNS pmax pmax
comp=N,6.0nm,0.9s
CLNS MLR MLR
comp=N,216nm,14.0s
CLNS MLR MLR
comp=Z,740nm,13.0s
**LKD2 Lefkada island 41.91 292** P **P 21 52 12.1 -1.2**
**LKD2 Lefkada island 41.91 292** *e*P **P 21 52 12.1 -1.2**
**KFL Anninata 41.93 291** P **P 21 52 12.1 -1.3**
**LANS Liptovska Anna 41.95 308** *e*P **P 21 52 14.6 +1.1**
LANS *e* 21 53 51.1
**LANS Liptovska Anna 41.95 308** *e*P **P 21 52 14.6 +1.1**
LANS *e*PP **PP 21 53 51.1 +0.3**
**TIR Tirane 42.12 296** *e*P P 21 52 19.2 +4.2
TIR pmax pmax
comp=Z,23nm,0.8s
**TIR Tirane 42.12 296** *e*P P 21 52 19.2 +4.2
comp=Z,23nm,0.8s
**VYHS Vyhne 42.37 307** *e*P **P 21 52 17.1 +0.2**
VYHS pmax pmax
comp=Z,6.0nm,1.1s
**VYHS Vyhne 42.37 307** *e*P **P 21 52 17.1 +0.2**
VYHS *e*PP **PP 21 53 52.9 -2.4**
**PPI Padang Panjang 42.79 137** P **P 21 52 21.2 +0.6**
comp=Z,20nm,0.7s
**OKC Ostrava-Krasne 42.82 309** *e*P **P 21 52 20.9 +0.4**
OKC *e* 21 52 26.8
OKC *e* 21 52 33.4
OKC *e* 21 53 58.7
OKC *e* 21 54 08.5
OKC *e*SS SS 22 01 54.8 +0.8
OKC MLR MLR
comp=Z,500nm,17.6s
**OKC Ostrava-Krasne 42.82 309** *e*P **P 21 52 20.9 +0.4**
OKC *ex* x 21 52 26.8
OKC *ex* x 21 52 33.4
OKC *e*PP **PP 21 53 58.7 -1.4**
OKC *ex* x 21 54 08.5
OKC *e*SS SS 22 01 54.8 +0.8
OKC AMS AMS 22 14 50.0
comp=Z,500nm,17.6s
**PDSI Padang 43.20 137** P **P 21 52 24.3 +0.4**
comp=Z,35nm,1.1s
**MORC Moravsky Berou 43.22 309** *e*P **P 21 52 23.8 0.0**
MORC *e* 21 54 03.1
MORC pmax pmax
comp=Z,87nm,0.6s
**MORC Moravsky Berou 43.22 309**⇑ *i*P **P 21 52 24.2 +0.4**
**MORC Moravsky Berou 43.22 309** *e*P **P 21 52 23.8 0.0**
comp=Z,87nm,0.6s
MORC *e*PP **PP 21 54 03.1 -1.2**
**SMOL Smolenice 43.30 307** *e*P **P 21 52 24.8 +0.3**
**SMOL Smolenice 43.30 307** *e*P **P 21 52 24.8 +0.3**
**TWG Pinlang 43.47 92** *e*P **P 21 52 28.6 +2.5**
comp=Z,296nm,1.7s
**GKP Gorka Klasztor 43.52 314** *e*P **P 21 52 26.1 0.0**
**GKP Gorka Klasztor 43.52 314** *e*P **P 21 52 26.2 +0.1**
**ZST Bratislava 43.53 307** *e*P **P 21 52 26.5 +0.2**
**ZST Bratislava 43.53 307** *e*P **P 21 52 26.5 +0.2**
**KRLC Kraliky 43.71 309** *e*P **P 21 52 27.8 +0.1**
KRLC *e* 21 52 36.8
KRLC *e* 21 54 14.1
**KRLC Kraliky 43.71 309** *e*P **P 21 52 27.8 +0.1**
KRLC *e*pP **pP 21 52 36.8 -1.1**
KRLC *e*PP **PcP 21 54 14.1 -0.2**
**VRAC Vranov 43.84 308**⇑ *i*P **P 21 52 29.4 +0.6**
**DPC Dobruska-Polom 44.00 310** *e*P **P 21 52 30.4 +0.3**
DPC *e* 21 52 40.6
DPC *e* 21 54 15.2
DPC *e*SS SS 22 02 17.6 +0.5
DPC MLR MLR
comp=Z,600nm,11.6s
**DPC Dobruska-Polom 44.00 310** *e*P **P 21 52 30.4 +0.3**
DPC *e*pP **pP 21 52 40.6 +0.3**
DPC *e*PP **PcP 21 54 15.2 -0.1**
DPC *ex* x 21 54 22.1
DPC *e*SS SS 22 02 17.6 +0.5
DPC AMS AMS 22 14 30.0
comp=Z,600nm,11.6s
**TJN Taejon 44.15 71** *de*P P 21 52 34.8 +3.4
**ARA0 ARCESS Array S 44.20 338** *e*P **P 21 52 30.7 -0.7**
**ARCES ARCESS Array B 44.20 338** P **P 21 52 30.7 -0.7**
comp=Z,30nm,0.5s,baz=110,slow=8.2,SNR=131
ARCES LR LR 22 12 20.4
comp=Z,1µm,20.7s,baz=88,slow=38
**ARE0 ARCESS Array S 44.20 338** *e*P **P 21 52 30.5 -0.9**
ARE0 IAmb IAmb 21 52 31.8
comp=Z,38nm,0.6s
**UPC Upice 44.20 310** *e*P **P 21 52 31.8 +0.2**
UPC *e*SS SS 22 02 19.8 -1.1
UPC MLR MLR
comp=Z,700nm,15.0s
**UPC Upice 44.20 310** *e*P **P 21 52 31.8 +0.2**
UPC *e*SS SS 22 02 19.8 -1.1
UPC AMS AMS 22 14 40.0
comp=Z,700nm,15.0s
**KS01 Wonju Array Si 44.32 69** *e*P **P 21 52 33.3 +0.6**
KS01 *e*ScP **ScP 21 58 05.5 -0.4**
**KS15 Wonju Array Si 44.32 69** *e*P **P 21 52 32.6 -0.1**
KS15 *e*ScP **ScP 21 58 05.3 -0.6**
**KSAR Wonju Array Be 44.32 69** P **P 21 52 32.6 -0.1**
**KSAR Wonju Array Be 44.32 69** P **P 21 52 32.6 -0.1**
**KSRS Korea Array 44.35 69** P **P 21 52 32.6 -0.3**
comp=Z,5.9nm,0.9s,baz=272,slow=7.2,SNR=21
KSRS ScP **ScP 21 58 05.3 -0.7**
comp=Z,1.8nm,0.9s,baz=290,slow=3.1,SNR=6.1
KSRS LR LR 22 12 31.7
comp=Z,117nm,19.1s,baz=275,slow=38
**KSRS Korea Array 44.35 69** P **P 21 52 32.6 -0.3**
KSRS pmax pmax
comp=Z,6.0nm,0.9s
KSRS pmax pmax
comp=N,2.0nm,1.0s
KSRS MLR MLR
comp=Z,117nm,19.1s
**CONA Conrad Observa 44.37 306**⇑ *i*P **P 21 52 33.4 +0.2**
comp=Z,20nm,0.8s,SNR=14
**MDJ Mudanjiang 44.42 59** P **P 21 52 33.5 0.0**
MDJ pP **pP 21 52 42.4 -1.3**
MDJ sP **sP 21 52 46.3 -1.5**
MDJ PP **PP 21 54 17.1 -0.2**
MDJ S **S 21 59 05.9 0.0**
MDJ sS **sS 21 59 21.2 -1.5**
MDJ PMZ
comp=Z,6.0nm,0.6s
MDJ PMZ
comp=Z,76nm,3.7s
MDJ LN
comp=Z,200nm,13.4s
MDJ LE
comp=Z,710nm,14.1s
MDJ LZ
comp=Z,850nm,15.0s
**TREC Trest 44.56 308** AMS AMS 22 16 10.0
comp=Z,400nm,13.2s
**KTK1 Kautokeino 44.68 337** *e*P **P 21 52 34.2 -1.0**
KTK1 IAmb IAmb 21 52 35.1
comp=Z,33nm,0.6s
**TIP Timpagrande 44.83 294** *e*P **P 21 52 37.6 +0.8**
comp=Z,31nm,1.5s
**PERS Pernice 44.97 304** *i*P **P 21 52 38.2 +0.3**
**BOJS Bojanci 44.98 303** *e*P **P 21 52 38.3 +0.4**
**BSD Bornholm Skovb 44.99 316** *i*P **P 21 52 35.7 -2.2**
**BSD Bornholm Skovb 44.99 316** *i*P **P 21 52 35.7 -2.2**
**GOPC GO Pecny, Ondr 45.00 309** *e*P **P 21 52 38.4 +0.4**
GOPC *e* 21 52 47.6
GOPC *e*SS SS 22 02 34.4 -1.9
GOPC MLR MLR
comp=Z,700nm,15.5s
**GOPC GO Pecny, Ondr 45.00 309** *e*P **P 21 52 38.4 +0.4**
GOPC *e*pP **pP 21 52 47.6 -0.6**
GOPC *e*SS SS 22 02 34.4 -1.9
GOPC AMS AMS 22 14 50.0
comp=Z,700nm,15.5s
**SOKA Soboth 45.02 305**⇑ *i*P **P 21 52 38.8 +0.4**
comp=Z,16nm,0.7s,SNR=9.3
**PVCC Panska Ves 45.12 310** *e*P **P 21 52 39.6 +0.6**
PVCC *e* 21 52 47.6
PVCC *e* 21 52 52.4
PVCC *e* 21 54 20.2
PVCC MLR MLR
comp=Z,700nm,16.6s
**PVCC Panska Ves 45.12 310** *e*P **P 21 52 39.6 +0.6**
PVCC *ex* x 21 52 42.1
PVCC *e*pP **pP 21 52 47.6 -1.6**
PVCC *ex* x 21 52 52.4
PVCC *e*PP **PcP 21 54 20.2 +1.2**
PVCC AMS AMS 22 15 00.0
comp=Z,700nm,16.6s
**PRU Pruhonice 45.15 309** *e*P **P 21 52 39.5 +0.3**
PRU *e* 21 54 26.2
PRU MLR MLR
comp=Z,800nm,14.5s
**PRU Pruhonice 45.15 309** *e*P **P 21 52 39.5 +0.3**
PRU *ex* x 21 52 42.9
PRU *e*PP **PP 21 54 26.2 +1.2**
PRU AMS AMS 22 14 50.0
comp=Z,800nm,14.5s
**PRA Prague 45.22 309** *e*P **P 21 52 39.7 0.0**
PRA MLR MLR
comp=Z,700nm,15.5s
**PRA Prague 45.22 309** *e*P **P 21 52 39.7 0.0**
PRA AMS AMS 22 15 00.0
comp=Z,700nm,15.5s
**VISS Visnje 45.24 303** *i*P **P 21 52 40.8 +0.8**
**HAMF Hammerfest 45.27 339** *e*P **P 21 52 39.9 0.0**
HAMF IAmb IAmb 21 52 40.6
comp=Z,99nm,0.6s
**YAK Yakutsk 45.29 34** *e*P **P 21 52 40.1 0.0**
YAK *e* 21 54 19.1
YAK *e* 21 54 31.8
YAK *e*S **S 21 59 12.7 -5.2**
YAK *e*SS **ScS 22 02 34.9 +1.3**
YAK *e*SSS SSS 22 03 32.4
YAK pmax pmax
comp=Z,4.0nm,0.7s
YAK pmax pmax
comp=E,2.0nm,1.0s
YAK pmax pmax
comp=Z,30nm,3.3s
YAK pmax pmax
comp=N,25nm,2.5s
YAK pmax pmax
comp=E,54nm,3.2s
YAK smax smax
comp=N,37nm,2.3s
YAK smax smax
comp=E,20nm,2.2s
**YAK Yakutsk 45.29 34** *e*P **P 21 52 40.1 0.0**
comp=E,52nm,0.7s
**OBKA Obir 45.37 304**⇑ *i*P **P 21 52 42.2 +1.0**
comp=E,20nm,1.1s,SNR=5.3
**CUC Castrocucco 45.38 295** *e*P **P 21 52 41.8 +0.6**
comp=E,40nm,0.6s
**MOA Molln 45.45 306**⇑ *i*P **P 21 52 41.7 +0.1**
comp=E,19nm,0.8s,SNR=9.5
**BRG Berggiesshubel 45.51 310** *i*P **P 21 52 41.7 -0.3**
comp=E,17nm,0.7s
BRG *e* 21 52 54.2
comp=E,16nm,1.2s
comp=N,254nm,11.6s
comp=E,322nm,13.2s
comp=Z,496nm,13.4s
**BRG Berggiesshubel 45.51 310** *i*P **P 21 52 41.7 -0.3**
BRG *e* 21 52 54.2
BRG pmax pmax
comp=Z,17nm,0.7s
BRG MLR MLR
comp=N,254nm,11.6s
BRG MLR MLR
comp=E,322nm,13.2s
BRG MLR MLR
comp=Z,496nm,13.4s
**BRG Berggiesshubel 45.51 310** *e*P **P 21 52 42.6 +0.6**
comp=Z,17nm,0.7s,baz=86,slow=7.7
**KLR Kul'dur 45.53 52** *e*P P 21 52 39.0 -3.2
KLR pmax pmax
comp=Z,64nm,1.8s
**GEC2 GERESS Array S 45.76 308** *e*P **P 21 52 44.7 +0.5**
GEC2 *e* 21 54 21.6
**GEC2 GERESS Array S 45.76 308** *e*P **P 21 52 44.4 +0.3**
comp=Z,12nm,1.3s,baz=86,slow=7.7
**GEC2 GERESS Array S 45.76 308** *e*P **P 21 52 44.7 +0.5**
GEC2 *e*PcP **PcP 21 54 21.6 +0.2**
GEC2 *e*ScP **ScP 21 58 11.4 -0.3**
**GERES GERESS Array B 45.76 308** P **P 21 52 43.9 -0.3**
comp=Z,2.7nm,0.7s,baz=84,slow=6.8,SNR=20
GERES PcP **PcP 21 54 21.6 +0.2**
comp=Z,2.3nm,0.6s,baz=92,slow=4.0,SNR=5.9
GERES ScP **ScP 21 58 11.4 -0.3**
comp=Z,0.4nm,0.6s,baz=224,slow=4.1,SNR=2.5
GERES LR LR 22 15 20.8
comp=Z,307nm,19.9s,baz=90,slow=41
**JAVS Javornik 45.77 303** *e*P **P 21 52 45.1 +0.8**
**KHC Kasperske Hory 45.82 308** *e*P **P 21 52 45.1 +0.5**
KHC *e* 21 52 56.7
KHC *e* 21 54 33.2
KHC MLR MLR
comp=Z,300nm,10.2s
**KHC Kasperske Hory 45.82 308** *e*P **P 21 52 45.1 +0.5**
KHC *e*pP **pP 21 52 56.7 +1.9**
KHC *e*PP **PP 21 54 33.2 +1.1**
KHC AMS AMS 22 15 50.0
comp=Z,300nm,10.2s
**KHC Kasperske Hory 45.82 308** *e*P **P 21 52 44.7 +0.1**
comp=Z,6.9nm,1.6s
**CLL Collm 46.09 311** *i*P **P 21 52 46.1 -0.5**
CLL pmax pmax
comp=Z,10.0nm,0.8s
**CLL Collm 46.09 311** *e*P **P 21 52 46.6 0.0**
comp=Z,10nm,0.8s,baz=86,slow=7.7
**CLL Collm 46.09 311** *i*P **P 21 52 46.1 -0.5**
comp=Z,10.0nm,0.8s
CLL *i* 21 52 50.1
CLL *e*PP **PP 21 54 32.0 -2.9**
CLL *e* 21 54 40.0
CLL *e*SS SS 22 03 00.0 +5.2
**CLL Collm 46.09 311** *e*P **P 21 52 45.5 -1.1**
comp=Z,12nm,0.8s
**KBA Koelnbreinsper 46.14 305**⇑ *i*P **P 21 52 47.0 -0.3**
comp=Z,5.8nm,0.6s
**USRK Ussuriysk Ar. 46.18 59** P **P 21 52 47.4 0.0**
comp=Z,3.8nm,0.6s,baz=273,slow=7.8,SNR=17
USRK LR LR 22 13 38.8
comp=Z,253nm,18.5s,baz=275,slow=38
**TRO Tromso 46.33 337** *e*P **P 21 52 47.3 -0.9**
**RJOB Jochberg 46.45 306** *e*P **P 21 52 49.7 +0.1**
comp=Z,25nm,1.9s,baz=86,slow=7.7
**TANN Tannenbergstha 46.47 310** *e*P **P 21 52 50.1 +0.5**
comp=Z,44nm,2.1s,baz=86,slow=7.7
**NKC Novy Kostel 46.49 310** *e*P **P 21 52 50.4 +0.6**
NKC *e* 21 53 01.6
NKC MLR MLR
comp=Z,700nm,12.2s
**NKC Novy Kostel 46.49 310** *e*P **P 21 52 50.4 +0.6**
NKC *e*pP **pP 21 53 01.6 +1.6**
NKC AMS AMS 22 16 00.0
comp=Z,700nm,12.2s
**KSI Kapahiang 46.64 137** P **P 21 52 50.6 -0.8**
comp=Z,15nm,0.6s
**ROTZ Rotzenmuhle 46.67 309** *e*P **P 21 52 52.4 +1.1**
comp=Z,25nm,1.5s,baz=86,slow=7.7
**MOR8 Moi Rana 46.90 332** *e*P **P 21 52 51.3 -1.5**
MOR8 IAmb IAmb 21 52 52.9
comp=Z,92nm,0.6s
**MOX Moxa 46.99 310** *e*P **P 21 52 54.3 +0.5**
comp=Z,12nm,0.8s,baz=86,slow=7.7
MOX *e*L L 22 16 30.5
comp=Z,262nm,18.3s
**NC602 NORSAR Array S 47.25 324** *e*P **P 21 52 53.2 -2.4**
**WTTA Wattenberg 47.28 306**⇑ *i*P **P 21 52 55.3 -1.0**
comp=Z,14nm,0.8s,SNR=5.3
**WATA Walderalm 47.31 306**⇑ *i*P **P 21 52 55.8 -0.6**
comp=Z,8.8nm,0.8s
**GRF Grafenberg Arr 47.31 309** *e*P **P 21 52 57.4 +1.2**
comp=Z,11nm,0.7s,baz=86,slow=7.7
GRF *e*L L 22 16 35.1
comp=Z,625nm,18.5s
**GRFO Grafenberg 47.32 309** *e*P **P 21 52 57.5 +1.2**
GRFO pmax pmax
comp=Z,57nm,1.8s
**GRFO Grafenberg 47.32 309** *e*P **P 21 52 57.5 +1.2**
comp=Z,57nm,1.8s
**FLOS Flostrand 47.36 332** *e*P **P 21 52 56.8 +0.5**
**NB2 NORSAR Subarra 47.44 324** P **P 21 52 55.4 -1.7**
comp=Z,47nm,0.6s,baz=97,slow=7.9
**NB2 NORSAR Subarra 47.44 324** P **P 21 52 55.4 -1.7**
baz=97,slow=7.9
**NB200 NORSAR Array S 47.44 324** *e*P **P 21 52 56.0 -1.2**
**NOA NORSAR Array B 47.44 324** P **P 21 52 56.0 -1.2**
comp=Z,41nm,0.6s,baz=97,slow=7.7,SNR=200
NOA LR LR 22 16 13.3
comp=Z,409nm,20.3s,baz=100,slow=40
**NOA NORSAR Array B 47.44 324** P **P 21 52 56.0 -1.2**
**KONS Konsvik 47.49 332** *e*P **P 21 52 56.4 -0.9**
**NSS Namsos 47.58 329** *e*P **P 21 52 57.1 -0.9**
**NBO02 NORSAR Array S 47.62 324** *e*P **P 21 52 56.8 -1.6**
**MOTA Moosalm 47.63 306**⇑ *i*P **P 21 52 57.6 -1.3**
comp=Z,9.6nm,0.7s,SNR=11
**BSEG Bad Segeberg 47.65 315** *e*P **P 21 52 59.2 +0.4**
comp=Z,18nm,0.7s,baz=86,slow=7.7
**CLZ Clausthal 47.70 312** *e*P **P 21 52 59.6 +0.3**
comp=Z,35nm,1.5s,baz=86,slow=7.7
**LOF Lofoten 47.72 334** *e*P **P 21 52 57.7 -1.4**
**NRDL Niedersach Rie 47.83 313** *e*P **P 21 53 00.7 +0.6**
comp=Z,16nm,0.7s,baz=86,slow=7.7
**FETA Feichten 47.92 305**⇓ *i*P **P 21 53 00.4 -0.8**
comp=Z,13nm,0.8s
**HOPEN Hopen 47.96 346** *e*P **P 21 53 01.3 +0.5**
**GTTG Gvttingen 47.98 312** *e*P **P 21 53 01.8 +0.5**
comp=Z,26nm,0.9s,baz=86,slow=7.7
**KONO Kongsberg 48.14 322** *e*P **P 21 53 00.7 -1.7**
KONO IAmb IAmb 21 53 02.2
comp=Z,25nm,0.8s
**KONO Kongsberg 48.14 322** *e*P **P 21 53 01.0 -1.4**
KONO pmax pmax
comp=Z,25nm,0.7s
**KONO Kongsberg 48.14 322** *e*P **P 21 53 01.0 -1.4**
comp=Z,25nm,0.7s
**TBLU Trondheim 48.14 327** *e*P **P 21 53 00.8 -1.6**
**KMBO Kilima Mbogo 48.27 231** P **P 21 53 04.0 -0.3**
comp=Z,5.6nm,0.9s,baz=32,slow=10,SNR=18
KMBO LR LR 22 15 32.0
comp=Z,338nm,18.7s,baz=356,slow=39
**KMBO Kilima Mbogo 48.27 231** P **P 21 53 04.0 -0.3**
KMBO pmax pmax
comp=Z,6.0nm,0.9s
KMBO MLR MLR
comp=Z,339nm,18.7s
**KMBO Kilima Mbogo 48.27 231** *e*P **P 21 53 06.2 +1.9**
comp=Z,18nm,1.3s
**MUD Monsted U'grnd 48.27 318** *i*P **P 21 53 03.6 +0.1**
**MUD Monsted U'grnd 48.27 318** *i*P **P 21 53 03.6 +0.1**
**FUORN Ofenpass-Fuorn 48.29 305** *e*P **P 21 53 04.4 +0.2**
comp=Z,14nm,0.7s
**DAVA Damuels 48.46 306**⇑ *i*P **P 21 53 04.8 -0.6**
comp=Z,43nm,0.7s,SNR=11
**HOMB Homborsund 48.65 321** *e*P **P 21 53 05.5 -0.8**
HOMB IAmb IAmb 21 53 06.3
comp=Z,35nm,0.7s
**STU Stuttgart 48.73 308** *e*P **P 21 53 08.0 +0.8**
STU pmax pmax
comp=Z,16nm,0.6s
**STU Stuttgart 48.73 308** *e*P **P 21 53 08.0 +0.8**
comp=Z,16nm,0.6s
**TUE Stuetta 48.94 305** *e*P **P 21 53 08.9 -0.2**
comp=Z,59nm,2.0s
**TNS Taunus Mts 49.05 310** *e*P **P 21 53 09.6 -0.1**
comp=Z,23nm,1.4s,baz=86,slow=7.7
**IBBN Ibbenburen 49.28 313** *e*P **P 21 53 11.7 +0.3**
comp=Z,31nm,0.7s,baz=86,slow=7.7
**SNART Snartemo 49.34 321** *e*P **P 21 53 11.2 -0.4**
SNART IAmb IAmb 21 53 13.0
comp=Z,53nm,1.3s
**BFO Black Forest 49.36 307** *e*P **P 21 53 11.8 -0.2**
comp=Z,5.4nm,1.0s,baz=86,slow=7.7
**AKN Aaknes 49.54 326** *e*P **P 21 53 14.3 +1.1**
**ODD1 Odda 49.65 323** *e*P **P 21 53 13.4 -0.7**
**BUG Bochum--Univer 49.66 312** *e*P **P 21 53 14.5 +0.3**
comp=Z,17nm,1.0s,baz=86,slow=7.7
**BLS5 Blasjo 49.73 322** *e*P **P 21 53 13.8 -0.9**
**HSPB Hornsund (broa 50.11 346** *e*P **P 21 53 15.9 -1.3**
HSPB IAmb IAmb 21 53 16.9
comp=Z,27nm,0.5s
**RUND Rundenannen 50.28 323** *e*P **P 21 53 18.5 -0.4**
**BER Bergen 50.30 323** *e*P **P 21 53 18.2 -0.7**
BER IAmb IAmb 21 53 22.3
comp=Z,34nm,0.8s
**SENIN Lac Senin/Sane 50.36 305** *e*P **P 21 53 19.6 -0.3**
comp=Z,28nm,0.8s
**ASK Askoy 50.37 323** *e*P **P 21 53 18.2 -1.2**
**SPB2 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.1 +0.3**
**SPB1 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.1 +0.3**
**SPA2 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.1 +0.4**
**SPA1 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.1 +0.3**
**SPA0 Spitsbergen Ar 50.44 347** *e*P **P 21 53 19.4 -0.4**
SPA0 IAmb IAmb 21 53 20.7
comp=Z,39nm,0.6s
**SPA0 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.1 +0.3**
**SPB3 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.1 +0.3**
**SPA3 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.1 +0.3**
**SPB5 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.1 +0.3**
**SPB4 Spitsbergen Ar 50.44 347** *e*P **P 21 53 20.2 +0.3**
**FOO Floro 50.45 325** *e*P **P 21 53 19.3 -0.7**
**MEM Membach 50.55 311** P **P 21 53 21.0 0.0**
comp=Z,7.5nm,1.0s
**WLF Walferdange 50.59 309** P **P 21 53 22.2 +0.8**
**BNI Bardonecchia 51.03 303** *e*P **P 21 53 25.3 +0.4**
BNI pmax pmax
comp=Z,50nm,1.4s
**BNI Bardonecchia 51.03 303** *e*P **P 21 53 25.3 +0.4**
comp=Z,50nm,1.4s
**KEST Kesra 51.39 291** P **P 21 53 28.5 +0.8**
comp=Z,28nm,0.5s,baz=343,slow=2.1,SNR=60
KEST LR LR 22 21 29.4

comp=Z,104nm,18.6s,baz=246,slow=43
**KEST Kesra 51.39 291** *e*P **P 21 53 28.8 +1.1**
**DOU Dourbes 51.52 310** P **P 21 53 29.0 +0.7**
**KBS Kingsbay 51.55 348** *e*P **P 21 53 27.1 -1.0**
KBS IAmb IAmb 21 53 29.6
comp=Z,41nm,1.0s
**SNF Seneffe 51.66 311** P **P 21 53 29.8 +0.5**
**LEM Lembang 52.13 134** P **P 21 53 34.1 +0.7**
comp=Z,16nm,0.8s,baz=324,slow=19,SNR=3.4
**LEM Lembang 52.13 134** P P 21 53 40.9 +7.5
**MBAR Mbarara 52.31 238** *e*P **P 21 53 35.6 +0.8**
MBAR pmax pmax
comp=Z,8.0nm,0.8s
**MBAR Mbarara 52.31 238** *e*P **P 21 53 35.6 +0.8**
comp=Z,8.0nm,0.8s
**MAJO Matsushiro 52.53 67** *de*P **P 21 53 36.1 +0.1**
MAJO pmax pmax
comp=Z,70nm,0.9s
**MAJO Matsushiro 52.53 67** *e*P **P 21 53 36.4 +0.3**
comp=Z,19nm,0.8s
**MAT Matsushiro 52.53 67** P **P 21 53 35.8 -0.2**
**MJAR Matsushiro Arr 52.53 67** P **P 21 53 36.2 +0.2**
comp=Z,1.5nm,0.7s,baz=176,slow=14,SNR=4.1
**CMAH Djebel Manchou 52.61 293** P **P 21 53 38.2 +1.5**
**ABSA Djebel Ababsia 52.67 292** P **P 21 53 39.2 +2.0**
**YSS Yuzh-Sakhalins 53.14 54** *e*P **P 21 53 41.0 +0.7**
YSS *e* 21 53 59.0
YSS pmax pmax
comp=Z,40nm,0.9s
YSS MLR MLR
comp=N,500nm,12.0s
YSS MLR MLR
comp=E,500nm,12.0s
YSS MLR MLR
comp=Z,700nm,12.0s
**YSS Yuzh-Sakhalins 53.14 54** *e*P **P 21 53 41.7 +1.4**
comp=Z,42nm,0.9s
**CKFL Kef-Lekhel 53.22 293** P **P 21 53 42.5 +1.2**
**CASM Ain Smara 53.44 293** P **P 21 53 43.3 +0.5**
**CTEI Djebel Teioual 53.56 293** P **P 21 53 44.1 +0.3**
**CKHR Kef el Ahmar 54.26 293** P P 21 53 45.0 -3.9
**SET Setif 54.29 293** P **P 21 53 50.0 +0.9**
**MPSI Mapaga 55.19 117** P **P 21 53 57.1 +1.4**
comp=Z,10nm,1.5s,comp=Z,558nm
**ESK Eskdalemuir 55.32 318** *i* P **P 21 53 57.2 +1.1**
**SEY Seymchan 55.80 33**⇑*e*P **P 21 54 01.1 +1.7**
**ABPO Ambohimpanom 57.96 209** *e*P **P 21 54 16.3 +0.9**
**ABPO Ambohimpanom 57.96 209** *e*P **P 21 54 16.3 +0.9**
**TAM Tamanrasset 59.39 278** *e*P **P 21 54 25.1 -0.4**
TAM pmax pmax
comp=Z,3.0nm,1.0s
**TAM Tamanrasset 59.39 278** *e*P **P 21 54 25.1 -0.4**
comp=Z,3.3nm,1.0s
**ES19 SONSECA Array 60.04 300** *e*P **P 21 54 29.5 -0.1**
**ESDC Sonseca Array 60.10 300** P **P 21 54 29.9 -0.2**
comp=Z,11nm,0.7s,baz=61,slow=7.3,SNR=76
ESDC PcP **PcP 21 55 15.8 +0.2**
comp=Z,2.3nm,0.6s,baz=49,slow=4.6,SNR=5.6
**BILL Bilibino 60.34 26**⇓*e*P **P 21 54 32.4 +1.3**
BILL *PP **pP 21 54 43.0 +1.4**
BILL *SP **sP 21 54 46.0 +0.3**
BILL 21 56 44.0
BILL pmax pmax
comp=Z,21nm,1.0s
BILL MLR MLR
comp=Z,795nm,17.0s
**BILL Bilibino 60.34 26** *e*P **P 21 54 32.0 +0.9**
comp=Z,24nm,1.0s
**PAB San Pablo 60.42 300** *e*P **P 21 54 32.4 +0.2**
PAB pmax pmax
comp=Z,28nm,1.0s
**PAB San Pablo 60.42 300** *e*P **P 21 54 32.4 +0.2**
comp=Z,28nm,1.0s
**PETK Petropavlovsk- 60.83 43** P **P 21 54 35.1 +0.3**
comp=Z,3.2nm,0.7s,baz=204,slow=3.2,SNR=3.7
PETK LR LR 22 23 16.7
comp=Z,474nm,18.8s,baz=284,slow=38
**PEA2 Petropavlovsk- 60.83 43** *e*P **P 21 54 35.1 +0.3**
**MVO Moncorvo 61.74 302** *e*P **P 21 54 41.7 +0.5**
comp=Z,36nm,2.1s
**POLO Lamas de Olo 62.20 303** *e*P **P 21 54 45.1 +0.8**
comp=Z,34nm,1.9s
**PGAV Gavieira, Arco 62.31 304** *e*P **P 21 54 45.5 +0.4**
comp=Z,94nm,1.9s
**MTE Manteigas 62.39 302** *e*P **P 21 54 46.0 +0.4**
comp=Z,61nm,1.5s
**PVIS Viseu 62.52 302** *e*P **P 21 54 47.0 +0.6**
comp=Z,47nm,1.5s
**PCBR Castelo Branco 62.55 301** *e*P **P 21 54 47.7 +1.1**
comp=Z,44nm,1.7s
**PMRV Marv??o 62.65 301** *e*P **P 21 54 48.6 +1.4**
comp=Z,46nm,1.6s
**PBAR Barrancos 62.88 299** *e*P **P 21 54 49.1 +0.3**
comp=Z,114nm,1.5s
**PCAS Casmilo, Conde 63.20 302** *e*P **P 21 54 51.9 +1.0**
comp=Z,70nm,1.5s
**PTOM Tomar 63.30 301** *e*P **P 21 54 52.2 +0.7**
comp=Z,45nm,1.6s
**EVO Evora 63.45 300** *e*P **P 21 54 52.7 +0.2**
comp=Z,39nm,1.3s
**PBEJ Beja 63.54 299** *e*P **P 21 54 53.8 +0.7**
comp=Z,42nm,1.7s
**PVAQ Vaqueiros 63.68 299** *e*P **P 21 54 54.6 +0.5**
comp=Z,45nm,1.7s
**MESJ Messejana 63.87 299** *e*P **P 21 54 57.0 +1.7**
comp=Z,64nm,1.5s
**PBDV Barranco-do-Ve 63.90 299** *e*P **P 21 54 57.0 +1.4**
comp=Z,75nm,1.7s
**SUMG Summit 64.08 342** *e*P **P 21 54 56.4 -0.2**
SUMG pmax pmax
comp=Z,43nm,0.7s
**SUMG Summit 64.08 342** *e*P **P 21 54 56.4 -0.2**
comp=Z,43nm,0.7s
**SIJI Sorong 64.66 110** P **P 21 54 59.5 -1.3**
comp=Z,2.2nm,0.3s,baz=288,slow=7.6,SNR=4.3
**LSZ Lusaka 64.78 229** *e*P **P 21 55 02.7 +1.1**
LSZ pmax pmax
comp=Z,56nm,1.9s
**LSZ Lusaka 64.78 229** *e*P **P 21 55 02.7 +1.1**
comp=Z,56nm,1.9s
**SOEI Soe 65.24 122** *e*P P 21 55 09.5 +4.9
comp=Z,37nm,0.8s
**TOA0 Torodi Ar. Sit 67.25 271** *e*P **P 21 55 16.0 -1.5**
**TOA0 Torodi Ar. Sit 67.25 271** *e*P **P 21 55 15.9 -1.5**
**TORD Torodi Ar. Bea 67.25 271** P **P 21 55 15.9 -1.5**
comp=Z,5.0nm,0.6s,baz=48,slow=5.8,SNR=80
TORD LR LR 22 27 22.3
comp=Z,127nm,19.1s,baz=60,slow=38
**GUMO Guam 67.69 88** P **P 21 55 19.0 -1.2**
comp=Z,9.3nm,0.4s,baz=266,slow=19,SNR=1.8
**ILULI Ilulissat 69.42 342** *i* P **P 21 55 29.6 -0.6**
comp=Z,42nm,0.6s
**SFJD Kangerlussuaq 70.80 340** *i* P **P 21 55 37.6 -1.0**
SFJD pmax pmax
comp=Z,10.0nm,0.5s
**SFJD Kangerlussuaq 70.80 340** *i* P **P 21 55 37.6 -1.0**
comp=Z,10nm,0.5s
**JAY Jayapura 73.15 105** P **P 21 55 52.2 -1.4**
comp=Z,6.5nm,0.9s,baz=284,slow=7.1,SNR=2.9
**LBTB Lobatse 73.78 224** *e*P **P 21 55 58.2 +1.1**
**LBTB Lobatse 73.78 224** *e*P **P 21 55 58.2 +1.1**
**COLD Coldfoot 74.11 16** *e*P **P 21 55 58.6 +0.2**
comp=Z,22nm,1.1s
**MLY Manley 75.76 18** *e*P **P 21 56 05.6 -2.4**
comp=Z,10nm,0.6s
**DBIC Dimbokro 76.14 269** P **P 21 56 09.9 -1.0**
comp=Z,7.4nm,0.9s,baz=46,slow=9.0,SNR=8.3
DBIC LR LR 22 33 58.6
comp=Z,127nm,19.3s,baz=37,slow=39
**DBIC Dimbokro 76.14 269** *e*P **P 21 56 12.3 +1.4**
**DBIC Dimbokro 76.14 269** *e*P **P 21 56 12.3 +1.4**
**KIC Kosan Boka 76.21 268** *e*P **P 21 56 12.8 +1.4**
comp=Z,31nm,0.9s
**INK Inuvik 76.28 10** *e*P **P 21 56 11.0 +0.2**
INK pmax pmax
comp=Z,10.0nm,0.6s
**INK Inuvik 76.28 10** *e*P **P 21 56 11.0 +0.2**
comp=Z,10nm,0.6s
**TIC Toumodi 76.29 269** *e*P **P 21 56 10.9 -0.9**
**MDM Murphy Dome 76.44 17** *e*P **P 21 56 11.4 -0.4**
comp=Z,12nm,0.8s
**LIC Lamto 76.53 268** *e*P **P 21 56 11.4 -1.7**
comp=Z,60nm,1.3s
**COLA College 76.60 17** *di*P **P 21 56 13.1 +0.4**
COLA pmax pmax
comp=Z,12nm,0.8s
**CAST Castle Rocks 76.71 19** *e*P **P 21 56 13.3 -0.1**
comp=Z,30nm,0.9s
**BOSA Boshof 76.75 222** P **P 21 56 13.7 -0.5**
comp=Z,9.7nm,0.8s,baz=21,slow=3.9,SNR=15
**BWN Browne 76.78 18** *e*P **P 21 56 14.8 +1.0**
comp=Z,22nm,0.8s
**WRH Wood River Hil 76.88 17** *e*P **P 21 56 13.7 -0.6**
comp=Z,8.2nm,0.9s
**IL1 Eielson Array 76.91 16** *e*P **P 21 56 13.1 -1.4**
**ILAR Eielson Array 76.92 16** P **P 21 56 13.4 -1.1**
comp=Z,2.7nm,0.6s,baz=290,slow=6.0,SNR=40
ILAR PP **PP 21 59 05.7 -1.4**
comp=Z,2.6nm,0.8s,baz=316,slow=6.7,SNR=6.2
**ILB Eielson Array 76.92 16** *e*P **P 21 56 13.4 -1.1**
ILB *ePP **PP 21 59 05.7 -1.4**
**PPLA Purkeypile 77.10 19** *e*P **P 21 56 16.0 +0.3**
comp=Z,51nm,1.7s
**TRF Thorofare Moun 77.16 18** *e*P **P 21 56 16.4 +0.2**
comp=Z,6.7nm,0.9s
**HDA Harding Lake 77.21 17** *e*P **P 21 56 14.9 -1.2**
comp=Z,8.8nm,1.0s
**MCK McKinley 77.28 18** *e*P **P 21 56 16.9 +0.3**
MCK pmax pmax
comp=Z,168nm,3.0s
**MCK McKinley 77.28 18** *e*P **P 21 56 16.9 +0.3**
comp=Z,168nm,3.0s
**RND Reindeer 77.57 18** *e*P **P 21 56 17.9 -0.4**
RND pmax pmax
comp=Z,34nm,1.5s
**RND Reindeer 77.57 18** *e*P **P 21 56 17.9 -0.4**
comp=Z,34nm,1.5s
**EGAK Eagle 78.17 14** *e*P **P 21 56 22.1 +0.6**
comp=Z,187nm,2.9s
**NWAO Narrogin (SRO) 78.41 143** P **P 21 56 21.7 -1.5**
comp=Z,6.4nm,0.6s,baz=260,slow=0.1,SNR=5.6
**RSO Redoubt South 78.88 21** *e*P **P 21 56 26.6 +0.9**
**PMR Palmer 79.00 19** *e*P **P 21 56 25.7 -0.4**
PMR pmax pmax
comp=Z,9.0nm,0.8s
**PMR Palmer 79.00 19** *e*P **P 21 56 25.7 -0.4**
comp=Z,9.1nm,0.8s
**SML Sawmill 79.03 19** *e*P **P 21 56 25.5 -0.9**
SML pmax pmax
comp=Z,7.0nm,0.8s
**SML Sawmill 79.03 19** *e*P **P 21 56 25.5 -0.9**
comp=Z,6.8nm,0.8s
**RC01 Rabbit Creek A 79.25 20** *e*P **P 21 56 27.2 -0.3**
comp=Z,12nm,0.6s
**WRA Warramunga Arr 79.26 123** P **P 21 56 27.9 -0.2**
comp=Z,6.6nm,0.6s,baz=322,slow=5.3,SNR=68
WRA LR LR 22 38 18.0
comp=Z,37nm,18.2s,baz=330,slow=41
**WRA Warramunga Arr 79.26 123** *e*P **P 21 56 28.0 -0.2**
**WRAB Tennant Creek 79.26 123** *di*P **P 21 56 28.3 +0.2**
WRAB pmax pmax
comp=Z,19nm,0.7s
**WRAB Tennant Creek 79.26 123** P **P 21 56 28.0 -0.1**
comp=Z,106nm,0.6s,SNR=15
**SCM Sheep Creek Mo 79.28 18** *e*P **P 21 56 27.8 0.0**
SCM pmax pmax
comp=Z,17nm,0.7s
**SCM Sheep Creek Mo 79.28 18** *e*P **P 21 56 27.8 0.0**
comp=Z,17nm,0.7s
**KLU Klutina 79.92 18** *e*P **P 21 56 31.5 +0.2**
comp=Z,11nm,0.9s
**BRLK Bradley Lake 80.00 21** *e*P **P 21 56 31.1 -0.5**
comp=Z,304nm,2.4s
**DIV Divide 80.27 18** *e*P **P 21 56 33.8 +0.6**
comp=Z,12nm,0.7s
**KDAK Kodiak Island 81.08 23** *i* P **P 21 56 37.4 0.0**
**KDAK Kodiak Island 81.08 23** P **P 21 56 38.0 +0.6**
comp=Z,213nm,0.7s,SNR=7.9
**KDAK Kodiak Island 81.08 23** *e*P **P 21 56 38.2 +0.9**
comp=Z,28nm,0.8s
**OHAK Old Harbor 81.29 23** *e*P **P 21 56 38.4 -0.1**
comp=Z,43nm,1.2s
**AS12 Alice Springs 81.45 126** *e*P **P 21 56 39.6 -0.3**
**ASAR Alice Springs 81.45 126** P **P 21 56 39.6 -0.3**
comp=Z,6.0nm,0.5s,baz=314,slow=5.2,SNR=66
ASAR LR LR 22 38 35.2
comp=Z,71nm,18.4s,baz=298,slow=40
**AS01 Alice Springs 81.48 126** *e*P **P 21 56 39.6 -0.5**
**FORT Forrest 82.70 135** *e*P **P 21 56 46.6 +0.4**
comp=Z,33nm,0.7s
**YKA Yellowknife Ar 83.83 3** P **P 21 56 50.4 -1.2**
comp=Z,5.7nm,0.7s,baz=348,slow=5.2,SNR=9.6
**YKB5 Yellowknife Ar 83.83 3** *e*P **P 21 56 50.4 -1.2**
**SCHQ Schefferville 85.15 338** P **P 21 56 56.8 -1.8**
comp=Z,6.9nm,0.8s,baz=356,slow=6.4,SNR=4.9
SCHQ LR LR 22 33 57.4
comp=Z,247nm,20.0s,baz=24,slow=35
**SCHQ Schefferville 85.15 338** *e*P **P 21 56 56.8 -1.8**
comp=Z,396nm,2.6s
**CTA Charters Tower 88.01 116** P **P 21 57 11.6 -1.4**
comp=Z,3.3nm,0.5s,baz=318,slow=6.8,SNR=5.2
**BBOO Buckleboo 89.00 131** *e*P **P 21 57 17.8 +0.4**
comp=Z,27nm,1.0s
**ULM Lac du Bonnet 95.70 353** LR LR 22 45 21.2
comp=Z,351nm,18.4s,baz=346,slow=38
**LTY Liberty 98.37 9** *e*P **P 21 57 58.9 -1.6**
comp=Z,9.8nm,0.6s
**TXAR Lajitas Array 117.10 357** PKKPbc PKKPbc 22 13 30.9 -1.4
comp=Z,0.2nm,0.8s,baz=193,slow=3.7,SNR=3.2
**SNAA Sanae 117.43 200** P **PKPdf 22 03 06.0 -1.1**
**VNA2 Neumayer--Watz 118.49 202** P PKPdf 22 03 03.7 -5.4
baz=279,slow=1.2
**VNA1 Neumayer--Stat 118.67 202** P PKPdf 22 03 19.0 +10
**VNDA Vanda 122.52 165** PKP **PKPdf 22 03 16.7 0.0**
comp=Z,0.5nm,0.7s,baz=247,slow=7.7,SNR=3.8
**QSPA South Pole Qui 123.63 180** *e*PKPdf **PKPdf 22 03 20.0 +0.9**
**TRQA Tornquist 143.49 250** *e*PKPdf PKPbc 22 03 55.2 +0.8
**LVC Limon Verde 144.72 278** *e*PKPdf **PKPdf 22 04 00.0 +0.1**
**NNA Nana 144.87 301** *e*PKIKP PKPbc 22 03 59.3 0.0
**NNA Nana 144.87 301** *e*PKPdf PKPbc 22 03 59.3 0.0

**DJA 10 21:45:22.1±0.2, 8°S±2°×12°0E±°, h10km, M4.0/14, MLv4.0/14, Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EDFI** | **Ende, Flores** | **1.55** | **116** | P | Pn | 21 45 49.9 | 0.0 |
| EDFI | | | | S | Sn | 21 46 09.9 | -0.3 |
| **WSI** | **Waingapu** | **1.59** | **179** | P | Pn | 21 45 50.4 | +0.1 |
| WSI | | | | S | Sb | 21 46 11.4 | -0.3 |
| **WBSI** | **Waikabubak, Su** | **1.79** | **209** | P | Pn | 21 45 52.6 | -0.6 |
| WBSI | | | | S | Sn | 21 46 16.3 | +0.2 |
| **BSSI** | **Bau Bau, Buton** | **1.93** | **6** | P | Pn | 21 45 54.7 | -0.3 |
| BSSI | | | | S | Sn | 21 46 18.7 | -0.6 |
| **MMRI** | **Maumere** | **2.02** | **106** | P | Pn | 21 45 56.0 | -0.2 |
| MMRI | | | | S | Sn | 21 46 21.7 | +0.2 |
| **BASI** | **Baing, Sumba** | **2.15** | **172** | P | Pn | 21 46 01.8 | 0.0 |
| **BKSI** | **Bulukumba** | **2.73** | **357** | P | Pn | 21 46 06.4 | +0.3 |
| **TWSI** | **Taliwang, Sumb** | **3.43** | **259** | P | Pn | 21 46 15.2 | -0.4 |
| **BATI** | **Baumata** | **3.96** | **123** | P | Pn | 21 46 19.4 | -3.6 |
| **SPSI** | **Sidrap Palu** | **4.11** | **353** | P | Pn | 21 46 25.8 | +0.8 |
| **SOEI** | **Soe** | **4.28** | **113** | P | Pn | 21 46 27.6 | +0.1 |

*CSEM* ***10*** *21:49:23.6, 42°.60N×13°.03E, h5km, MD1.7/5, After ROM*
**ROM 10 21:49:23.6±0.1, 42°.60N×13°.03E, h5km, Md1.7/5, Ml1.0/4, Error ellipse: s-maj=0.8km s-min=0.6km az=10.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LNSS** | **Leonessa** | **0.01** | **50** | Pg | Pg | 21 49 24.6 | 0.0 |
| LNSS | | | | Sg | Sg | 21 49 25.3 | -0.1 |
| | 3μm,0.1s | | | | | | |
| **LNSS** | **Leonessa** | **0.01** | **50** | Pg | Pg | 21 49 24.6 | 0.0 |
| LNSS | | | | Sg | Sg | 21 49 25.3 | -0.1 |
| | 3μm,0.1s | | | | | | |
| **RM29** | **Verrico (Monte** | **0.13** | **105** | Pg | Pg | 21 49 26.9 | +0.4 |
| RM29 | | | | Sg | Sg | 21 49 29.2 | +0.8 |
| | 62nm,0.8s | | | | | | |
| **RM29** | **Verrico (Monte** | **0.13** | **105** | Pg | Pg | 21 49 26.9 | +0.4 |
| RM29 | | | | Sg | Sg | 21 49 29.2 | +0.8 |
| | 62nm,0.8s | | | | | | |
| **RM33** | **Pellescritta (** | **0.16** | **122** | Pg | Pg | 21 49 27.3 | +0.3 |
| RM33 | | | | Sg | Sg | 21 49 30.0 | +0.7 |
| | 24nm,0.3s | | | | | | |
| **RM33** | **Pellescritta (** | **0.16** | **122** | Pg | Pg | 21 49 27.3 | +0.3 |
| RM33 | | | | Sg | Sg | 21 49 30.0 | +0.7 |
| | 24nm,0.3s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.20** | **97** | Pg | Pg | 21 49 28.1 | +0.4 |
| RM32 | | | | Sg | Sg | 21 49 31.3 | +0.9 |
| | 18nm,0.3s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.20** | **97** | Pg | Pg | 21 49 28.1 | +0.4 |
| RM32 | | | | Sg | Sg | 21 49 31.3 | +0.9 |
| | 18nm,0.3s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.23** | **81** | Pg | Pg | 21 49 28.7 | +0.4 |
| SMA1 | | | | Sg | Sg | 21 49 32.5 | +1.1 |
| | 31nm,0.2s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.23** | **81** | Pg | Pg | 21 49 28.7 | +0.4 |
| SMA1 | | | | Sg | Sg | 21 49 32.5 | +1.1 |
| | 31nm,0.2s | | | | | | |

*ISCJB* ***10*** *21:53:49.8±0.8, 4°.4N±0°.1×123°.0E±0°.3, h582km, mb3.6/7, Error ellipse: s-maj=44.5km s-min=12.8km az=171.4*
*IDC* ***10*** *21:53:52.1±4.2, 4°.30N×122°.94E, h599km±67km, mb2.9/7, mb1 3.1/8, mb1mx2.7/36, mbtmp4.1/8, Error ellipse: s-maj=39.4km s-min=16.5km az=78.0*
**ISC 10 21:53:51.0±0.8, 4°.3N±0°.1×122°.9E±0°.3, h582km, n8, σ0°.28/8, mb3.6/7, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **14.45** | **177** | P | **P** | **21 56 54.4** | **-0.1** |
| | 8.2nm,0.3s,baz=333,slow=6.8,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.58** | **155** | P | **P** | **21 58 44.2** | **+0.1** |
| | 1.9nm,0.4s,baz=337,slow=9.7,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **29.80** | **159** | P | **P** | **21 59 12.2** | **+0.2** |
| | 1.0nm,0.4s,baz=320,slow=8.6,SNR=4.4 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **37.43** | **188** | P | **P** | **22 00 15.9** | **+0.1** |
| | 13nm,1.1s,baz=89,slow=0.0,SNR=2.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **40.51** | **10** | P | **P** | **22 00 40.7** | **+0.3** |
| | 1.2nm,0.6s,baz=144,slow=1.5,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **45.63** | **344** | P | **P** | **22 01 20.4** | **+0.1** |
| | 0.6nm,0.7s,baz=164,slow=5.8,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.96** | **327** | P | **P** | **22 02 28.0** | **-0.1** |
| | 0.7nm,0.4s,baz=126,slow=7.9,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **86.20** | **25** | P | **P** | **22 05 30.7** | **-0.5** |
| | 0.2nm,0.8s,baz=267,slow=5.4,SNR=2.6 | | | | | | |

**DJA 10 21:54:36.8±0.3, 8°S±2°×12°0E±°, h10km, M3.7/2, MLv3.7/2, Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EDFI** | **Ende, Flores** | **1.54** | **116** | S | Sn | 21 55 24.2 | -0.5 |
| **WSI** | **Waingapu** | **1.59** | **180** | P | Pn | 21 55 03.9 | -1.1 |
| WSI | | | | S | Sn | 21 55 25.9 | +0.3 |
| **WBSI** | **Waikabubak, Su** | **1.80** | **210** | P | Pn | 21 55 07.2 | -0.7 |
| WBSI | | | | S | Sn | 21 55 31.3 | +0.4 |
| **BSSI** | **Bau Bau, Buton** | **1.93** | **6** | P | Pn | 21 55 09.5 | -0.2 |
| BSSI | | | | S | Sn | 21 55 33.5 | -0.5 |
| **MMRI** | **Maumere** | **2.01** | **106** | P | Pn | 21 55 10.1 | -0.7 |
| MMRI | | | | S | Sn | 21 55 36.2 | +0.2 |
| **BKSI** | **Bulukumba** | **2.73** | **357** | P | Pn | 21 55 21.2 | +0.4 |

*IDC* ***10*** *22:08:10.0±3.6, 36°.31N×71°.39E, h123km±31km, mb3.2/8, mb1 3.3/13, mb1mx3.2/38, mbtmp3.7/13, Error ellipse: s-maj=27.8km s-min=17.3km az=4.0*
*ISCJB* ***10*** *22:08:10.3±0.4, 36°.52N±0°.04×71°.14E±0°.05, h114km, mb3.5/8, Error ellipse: s-maj=6.4km s-min=4.8km az=146.8*
*NNC* ***10*** *22:08:18.9±2.4, 37°.01N×71°.23E, h162km±22km, mb3.1, mpv4.2, Error ellipse: s-maj=21.3km s-min=9.5km az=164.0*
**ISC 10 22:08:11.2±0.7, 36°.55N±0°.07×71°.26E±0°.06, h114km, n39, σ1s64/42, mb3.4/8, 4C-4D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.96** | **320** | ⇑P | Pn | 22 09 02.0 | +5.1 |
| | 16nm,0.2s | | | | | | |
| DZET | | | | ⇑S | **Sn** | **22 09 35.9** | **+3.8** |
| | 242nm,0.5s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.88** | **26** | ⇑P | Pn | 22 09 12.9 | +3.7 |
| | 82nm,0.3s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **22 09 55.5** | **+1.5** |
| | 32nm,0.2s | | | | | | |
| **AML** | **Almayashu** | **5.88** | **18** | P | **Pn** | **22 09 38.2** | **+2.0** |
| | SNR=134 | | | | | | |
| **MNAS** | **Manas** | **6.00** | **9** | ⇓P | **Pn** | **22 09 39.9** | **+2.3** |
| | 7.4nm,0.3s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **22 10 44.5** | **-0.6** |
| | 24nm,0.5s | | | | | | |
| **UCH** | **Uchtor** | **6.20** | **23** | P | **Pn** | **22 09 42.6** | **+2.0** |
| | SNR=26 | | | | | | |
| **KZA** | **Kyzart** | **6.32** | **28** | P | **Pn** | **22 09 44.3** | **+2.1** |
| | SNR=8.6 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.40** | **17** | P | **Pn** | **22 09 45.0** | **+2.0** |
| | SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **6.56** | **21** | P | **Pn** | **22 09 47.0** | **+1.7** |
| | 3.8nm,0.3s,baz=158,slow=5.9,SNR=33 | | | | | | |
| AAK | | | | S | **Sn** | **22 10 55.4** | **-3.3** |
| | baz=319,slow=20,SNR=4.0 | | | | | | |
| **AAK** | **Ala-Archa** | **6.56** | **21** | P | **Pn** | **22 09 47.5** | **+2.2** |
| | SNR=17 | | | | | | |
| **KK31** | **Karatay Array** | **6.57** | **355** | ⇑P | **Pn** | **22 09 47.6** | **+2.5** |
| | 8.5nm,0.3s,baz=169,slow=10.0,SNR=411 | | | | | | |
| KK31 | | | | S | **Sn** | **22 10 57.2** | **-1.4** |
| | 3.6nm,0.3s,baz=184,slow=24,SNR=10 | | | | | | |
| **ULHL** | **Ulahol** | **6.87** | **33** | P | **Pn** | **22 09 51.5** | **+2.0** |
| | SNR=9.2 | | | | | | |
| **CHMS** | **Chumysh** | **6.97** | **22** | P | **Pn** | **22 09 52.6** | **+2.0** |
| | SNR=9.3 | | | | | | |
| **USP** | **Ospenovka** | **7.15** | **19** | P | **Pn** | **22 09 54.3** | **+1.2** |
| | SNR=10.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.18** | **26** | P | **Pn** | **22 09 55.5** | **+1.9** |
| | SNR=5.7 | | | | | | |
| **GEYT** | **Alibeck** | **10.57** | **281** | P | **Pn** | **22 10 40.1** | **+0.7** |
| | 0.7nm,0.3s,baz=115,slow=10.0,SNR=9.4 | | | | | | |
| GEYT | | | | S | **Sn** | **22 12 33.7** | **-2.2** |
| | 0.1nm,0.3s,baz=92,slow=23,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.12** | **35** | P | **Pn** | **22 11 13.4** | **+0.3** |
| | 0.1nm,0.3s,baz=215,slow=14,SNR=4.7 | | | | | | |
| **KOLN** | **Koldanda** | **13.62** | **127** | *e*P | **Pn** | **22 11 19.2** | **-0.7** |
| | 3.1nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **14.15** | **123** | *e*P | **Pn** | **22 11 26.9** | **+0.2** |
| **DMN** | **Daman** | **14.72** | **123** | *e*P | **Pn** | **22 11 34.4** | **+0.4** |
| | 9.2nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **14.73** | **122** | *e*P | **Pn** | **22 11 34.3** | **+0.3** |
| | 4.4nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **14.94** | **123** | *e*P | **Pn** | **22 11 37.9** | **+1.1** |
| **PKI** | **Pulchoki** | **14.95** | **123** | *e*P | **Pn** | **22 11 37.8** | **+0.8** |
| **KURBB** | **Kurchatov Arra** | **15.01** | **18** | P | **Pn** | **22 11 35.1** | **-2.0** |
| | 0.0nm,0.3s,baz=206,slow=11,SNR=4.2 | | | | | | |
| **AB31** | **Akbulak array** | **15.14** | **331** | P | **P** | **22 11 40.9** | **-0.4** |
| | 0.7nm,0.5s,baz=149,slow=13,SNR=16 | | | | | | |
| AB31 | | | | ⇓S | Sn | 22 14 18.0 | -8.1 |
| | 0.1nm,0.3s,baz=156,slow=22,SNR=7.2 | | | | | | |
| **RAMN** | **Ramite** | **16.16** | **122** | *e*P | **Pn** | **22 11 53.3** | **+1.3** |
| | 8.1nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.48** | **358** | P | **Pn** | **22 11 54.3** | **-1.1** |
| | 0.1nm,0.3s,baz=163,slow=12,SNR=3.0 | | | | | | |
| **TAPN** | **Taplejung** | **16.68** | **119** | *e*P | **P** | **22 12 00.3** | **+1.4** |
| **ODAN** | **Odare** | **16.76** | **121** | *e*P | **P** | **22 12 00.6** | **+0.9** |
| **AKTO** | **Aktyubinsk** | **16.84** | **330** | P | **P** | **22 12 00.9** | **+0.8** |
| | 0.4nm,0.3s,baz=131,slow=6.2,SNR=8.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.78** | **24** | P | **P** | **22 12 31.6** | **-0.5** |
| | 0.8nm,0.3s,baz=223,slow=12,SNR=8.5 | | | | | | |
| **ARU** | **Arti** | **21.65** | **341** | P | **P** | **22 12 53.3** | **+1.1** |
| | 0.2nm,0.3s,baz=308,slow=19,SNR=2.0 | | | | | | |
| **SONM** | **Songino Array** | **28.13** | **55** | P | **P** | **22 13 51.0** | **-1.5** |
| | 0.4nm,0.8s,baz=279,slow=11,SNR=2.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **33.08** | **309** | P | **P** | **22 14 35.5** | **-0.2** |
| | 0.3nm,0.3s,baz=81,slow=7.5,SNR=2.6 | | | | | | |
| **FINES** | **FINESS Array B** | **37.56** | **326** | P | **P** | **22 15 14.0** | **0.0** |
| | 3.7nm,0.9s,baz=120,slow=11,SNR=5.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.18** | **338** | P | **P** | **22 15 44.1** | **+0.2** |
| | 1.9nm,0.9s,baz=102,slow=9.2,SNR=5.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.47** | **323** | P | **P** | **22 16 10.4** | **-0.2** |
| | comp=Z,0.8nm,0.5s,baz=98,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.47** | **323** | P | **P** | **22 16 10.6** | **0.0** |
| | comp=Z,1.0nm,0.4s,baz=97,slow=7.7,SNR=6.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.93** | **269** | P | **P** | **22 18 43.5** | **-1.7** |
| | comp=Z,0.2nm,0.5s,baz=47,slow=6.4,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **81.84** | **122** | P | P | 22 20 14.6 | -3.2 |
| | comp=Z,0.2nm,0.4s,baz=327,slow=4.9,SNR=2.7 | | | | | | |

**JMA 10 22:21:59.0±0.5, 32°.95N×142°.23E, h0km, M3.7, Southeast of Honshu**

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BSO3** | **Boso 3** | **2.34** | **323** | P | Pn | 22 22 39.7 | +1.4 |
| BSO3 | | | | *e*S | Sb | 22 23 10.4 | -0.4 |
| **JHU** | **Hanno** | **3.78** | **321** | P | Pn | 22 23 00.3 | +1.7 |
| JHU | | | | *e*S | Sn | 22 23 45.6 | +1.7 |
| **JHO** | **Hitachi** | **3.90** | **340** | P | Pn | 22 23 01.1 | +0.9 |
| **JYN** | **Shimob** | **3.97** | **311** | P | Pn | 22 23 04.0 | +2.7 |
| **JRY** | **Ryogami san** | **4.11** | **319** | P | Pn | 22 23 04.8 | +1.6 |
| JRY | | | | *e*S | Sn | 22 23 54.0 | +2.0 |
| **JAG** | **Ashikaga** | **4.15** | **327** | P | Pn | 22 23 05.1 | +1.4 |
| **JNY** | **Yasuok** | **4.35** | **305** | P | Pn | 22 23 08.4 | +2.0 |
| **JFT** | **Otama** | **4.81** | **342** | P | Pn | 22 23 15.2 | +2.4 |
| **JMK** | **Ichinoseki** | **6.04** | **352** | P | Pn | 22 23 30.7 | +1.1 |
| JMK | | | | *e*S | Sn | 22 24 38.8 | -0.7 |

**MEX 10 22:50:04.3**±0.4**, 16°.77N×92°.83W, h30**km**, MD3.6, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.13** | **200** | *i* P | Pn | 22 50 21.9 | -2.1 |
| PCIG | | | | *i* S | Sn | 22 50 35.4 | -3.2 |

**IDC 10 23:07:15.4**±2.4**, 4°.80N×127°.55E, h0**km**, mb3.3**/3**, mb1 3.5**/3**, mb1mx3.3**/23**, mbtmp3.3**/3**, Error ellipse: s-maj=180.3km s-min=26.0km az=67.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **25.48** | **165** | P | P | 23 12 45.2 | -0.3 |
| | 0.4nm,0.4s,baz=345,slow=10,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **28.97** | **168** | P | P | 23 13 17.1 | +0.3 |
| | 0.2nm,0.4s,baz=356,slow=9.3,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.16** | **324** | P | P | 23 17 04.0 | -0.1 |
| | 0.2nm,0.5s,baz=118,slow=5.6,SNR=2.2 | | | | | | |

**MEX 10 23:39:28.2**±0.5**, 16°.16N×95°.37W, h20**km±31km**, MD4.0, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HUIG** | **Huatulco** | **0.81** | **241** | *i* P | Pb | 23 39 41.0 | -2.7 |
| HUIG | | | | *i* S | Sb | 23 39 51.4 | -2.9 |
| **CMIG** | **Matias Romero** | **1.03** | **27** | *e*P | Pb | 23 39 44.6 | -2.8 |
| CMIG | | | | *i* S | Sb | 23 39 56.4 | -4.1 |
| **PNIG** | **Pinotepa** | **2.66** | **275** | *e*P | Pn | 23 40 07.6 | -2.4 |
| PNIG | | | | *i* S | Sn | 23 40 38.8 | -2.9 |

*ATH **11** 00:01:42.9, 38°.85N×28°.10E, h36km±18km, MD3.3/5*
*ISK **11** 00:01:43.6, 38°.78N×27°.84E, h5km, MD2.8*
*CSEM **11** 00:01:44.6±0.1, 38°.79N×27°.82E, h2km, MD2.8, Error ellipse: s-maj=2.9km s-min=2.7km az=80.0*
*DDA **11** 00:01:44.1, 38°.80N×27°.84E, h7km, Md3.0*
**ISC 11 00:01:44.2**±1.0**, 38°.80N**±0°.02×**27°.83E**±0°.02**, h6**km±8km**, n74, σ0ˢ.59**/100**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKS** | **Akhisar** | **0.08** | **353** | PG | **Pg** | **00 01 46.2** | **+0.1** |
| **AKS** | **Akhisar** | **0.08** | **353** | *i* Pg | **Pg** | **00 01 46.2** | **+0.1** |
| **IZM** | **Izmir** | **0.60** | **228** | *e*PG | **Pg** | **00 01 55.8** | **+0.1** |
| IZM | | | | *e*SG | **Sb** | **00 02 05.4** | **-0.5** |
| **IZM** | **Izmir** | **0.60** | **228** | *e*Pg | **Pg** | **00 01 55.8** | **+0.1** |
| IZM | | | | *e*Sg | **Sb** | **00 02 05.4** | **-0.5** |
| **MANT** | **Manisa** | **0.65** | **118** | *i* P | **Pg** | **00 01 56.0** | **-0.8** |
| MANT | | | | *i* S | **Sg** | **00 02 05.2** | **-0.1** |
| **MANT** | **Manisa** | **0.65** | **118** | P | **Pg** | **00 01 56.0** | **-0.8** |
| MANT | | | | S | **Sg** | **00 02 05.2** | **-0.1** |
| **KULA** | **Kula-Manisa** | **0.71** | **113** | *e*PG | **Pg** | **00 01 58.1** | **+0.2** |
| **KULA** | **Kula-Manisa** | **0.71** | **113** | *e*Pg | **Pg** | **00 01 58.1** | **+0.2** |
| **DEMI** | **Demirci** | **0.74** | **70** | *i* P | **Pg** | **00 01 58.4** | **0.0** |
| DEMI | | | | *i* S | **Sg** | **00 02 08.6** | **+0.6** |
| **DEMI** | **Demirci** | **0.74** | **70** | P | **Pg** | **00 01 58.4** | **0.0** |
| DEMI | | | | S | **Sg** | **00 02 08.6** | **+0.6** |
| **DKL** | **Dikili** | **0.77** | **291** | *e*PG | **Pb** | **00 01 59.9** | **-0.1** |
| **DKL** | **Dikili** | **0.77** | **291** | *e*Pg | **Pb** | **00 01 59.9** | **-0.1** |
| **BALB** | **Balikesir** | **0.84** | **3** | *e*PG | **Pb** | **00 02 01.3** | **0.0** |
| **BALB** | **Balikesir** | **0.84** | **3** | *e*Pg | **Pb** | **00 02 01.3** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.85** | **177** | *e*PG | **Pg** | **00 02 00.7** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.85** | **177** | *e*Pg | **Pg** | **00 02 00.7** | **+0.1** |
| **BALY** | **Balya** | **0.95** | **350** | *i* P | **Pg** | **00 02 02.5** | **-0.1** |
| BALY | | | | *i* S | **Sb** | **00 02 15.8** | **-0.3** |
| **BALY** | **Balya** | **0.95** | **350** | P | **Pg** | **00 02 02.5** | **-0.1** |
| BALY | | | | S | **Sb** | **00 02 15.8** | **-0.3** |
| **DST** | **Dursunbey** | **1.01** | **37** | *e*PG | **Pg** | **00 02 03.5** | **-0.2** |
| **DST** | **Dursunbey** | **1.01** | **37** | *e*Pg | **Pg** | **00 02 03.5** | **-0.2** |
| **URLA** | **Izmir** | **1.06** | **246** | *i* P | **Pg** | **00 02 04.1** | **-0.5** |
| URLA | | | | *i* S | **Sb** | **00 02 18.8** | **-0.3** |
| **URLA** | **Izmir** | **1.06** | **246** | P | **Pg** | **00 02 04.1** | **-0.5** |
| URLA | | | | S | **Sb** | **00 02 18.8** | **-0.3** |
| **AYDN** | **Tasoluk** | **1.14** | **178** | *i* P | **Pn** | **00 02 07.7** | **+0.9** |
| AYDN | | | | *i* S | **Sn** | **00 02 22.8** | **0.0** |
| **AYDN** | **Tasoluk** | **1.14** | **178** | P | **Pn** | **00 02 07.7** | **+0.9** |
| AYDN | | | | S | **Sn** | **00 02 22.8** | **0.0** |
| **ZEY** | **˜zmir** | **1.18** | **242** | P | **Pg** | **00 02 06.5** | **-0.4** |
| ZEY | | | | S | **Sb** | **00 02 23.0** | **+0.5** |
| **PRK** | **Paraskevi** | **1.29** | **291** | *e*PB | **Pn** | **00 02 08.6** | **-0.2** |
| PRK | | | | *e*SN | **Sn** | **00 02 27.4** | **+1.0** |
| **PRK** | **Paraskevi** | **1.29** | **291** | *e*Pb | **Pn** | **00 02 08.6** | **-0.2** |
| PRK | | | | *e*Sn | **Sn** | **00 02 27.4** | **+1.0** |
| **SMG** | **Samos** | **1.34** | **216** | *e*PN | **Pn** | **00 02 09.4** | **-0.1** |
| SMG | | | | *e*SN | **Sn** | **00 02 28.8** | **+1.1** |
| **SMG** | **Samos** | **1.34** | **216** | *e*Pn | **Pn** | **00 02 09.4** | **-0.1** |
| SMG | | | | *e*Sn | **Sn** | **00 02 28.8** | **+1.1** |
| **KHAL** | **Karahalli** | **1.37** | **108** | *i* P | **Pg** | **00 02 10.9** | **+0.3** |
| KHAL | | | | *i* S | **Sb** | **00 02 27.7** | **-0.6** |
| **KHAL** | **Karahalli** | **1.37** | **108** | P | **Pg** | **00 02 10.9** | **+0.3** |
| KHAL | | | | S | **Sb** | **00 02 27.7** | **-0.6** |
| **DNZL** | **Cakiroluk** | **1.47** | **139** | *i* P | **Pg** | **00 02 12.5** | **+0.1** |
| DNZL | | | | *i* S | **Sg** | **00 02 31.8** | **+0.4** |
| **DNZL** | **Cakiroluk** | **1.47** | **139** | P | **Pg** | **00 02 12.5** | **+0.1** |
| DNZL | | | | S | **Sg** | **00 02 31.8** | **+0.4** |
| **ORLT** | **Orhaneli** | **1.50** | **33** | *e*PN | **Pg** | **00 02 13.0** | **+0.1** |
| **ORLT** | **Orhaneli** | **1.50** | **33** | *e*Pn | **Pg** | **00 02 13.0** | **+0.1** |
| **KCTX** | **Karacabey (Bur** | **1.52** | **15** | *e*PN | **Pb** | **00 02 12.5** | **-0.4** |
| **KCTX** | **Karacabey (Bur** | **1.52** | **15** | *e*Pn | **Pb** | **00 02 12.5** | **-0.4** |
| **EDC** | **Edincik** | **1.54** | **1** | *e*PN | **Pg** | **00 02 14.0** | **+0.1** |
| **EDC** | **Edincik** | **1.54** | **1** | *e*Pn | **Pg** | **00 02 14.0** | **+0.1** |
| **EZN** | **Ezine** | **1.55** | **312** | *e*PN | **Pg** | **00 02 13.7** | **-0.3** |
| **EZN** | **Ezine** | **1.55** | **312** | *e*Pn | **Pg** | **00 02 13.7** | **-0.3** |
| **SIGR** | **SIGRI** | **1.59** | **286** | *e*PB | **Pb** | **00 02 13.7** | **-0.3** |
| SIGR | | | | *e*SN | **Sg** | **00 02 35.9** | **+0.6** |
| **SIGR** | **SIGRI** | **1.59** | **286** | *e*Pb | **Pb** | **00 02 13.7** | **-0.3** |
| SIGR | | | | *e*Sn | **Sg** | **00 02 35.9** | **+0.6** |
| **KRBG** | **Karabiga-Canak** | **1.64** | **346** | *e*PN | **Pb** | **00 02 14.5** | **-0.5** |
| **KRBG** | **Karabiga-Canak** | **1.64** | **346** | *e*Pn | **Pb** | **00 02 14.5** | **-0.5** |
| **ULDT** | **Uludag** | **1.68** | **37** | *i* P | **Pb** | **00 02 15.6** | **-0.1** |
| ULDT | | | | *i* S | **Sb** | **00 02 37.3** | **+0.1** |
| **ULDT** | **Uludag** | **1.68** | **37** | P | **Pb** | **00 02 15.6** | **-0.1** |
| ULDT | | | | S | **Sb** | **00 02 37.3** | **+0.1** |
| **YER** | **Yerkesik** | **1.70** | **168** | *e*PN | **Pb** | **00 02 15.6** | **-0.4** |
| **YER** | **Yerkesik** | **1.70** | **168** | *e*Pn | **Pb** | **00 02 15.6** | **-0.4** |
| **MDNY** | **Mudanya-Bursa** | **1.77** | **27** | *e*PN | **Pb** | **00 02 16.9** | **-0.2** |
| **MDNY** | **Mudanya-Bursa** | **1.77** | **27** | *e*Pn | **Pb** | **00 02 16.9** | **-0.2** |
| **BODT** | **Bodrum** | **1.78** | **193** | *e*PN | **Pb** | **00 02 16.6** | **-0.7** |
| **BODT** | **Bodrum** | **1.78** | **193** | *e*Pn | **Pb** | **00 02 16.6** | **-0.7** |
| **IGD** | **Bursa** | **1.81** | **36** | P | **Pb** | **00 02 17.8** | **0.0** |
| IGD | | | | S | **Sn** | **00 02 39.4** | **+0.2** |
| **MRMT** | **Marmara Adasi** | **1.81** | **354** | *e*PN | **Pb** | **00 02 17.5** | **-0.4** |
| **MRMT** | **Marmara Adasi** | **1.81** | **354** | *e*Pn | **Pb** | **00 02 17.5** | **-0.4** |
| **GELI** | **Tayfur-Gelibol** | **1.91** | **327** | *e*PN | **Pb** | **00 02 19.2** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.91** | **327** | *e*Pn | **Pb** | **00 02 19.2** | **-0.2** |
| **ARMT** | **Armutlu** | **1.94** | **24** | *e*PN | **Pb** | **00 02 19.2** | **-0.8** |
| **ARMT** | **Armutlu** | **1.94** | **24** | *e*Pn | **Pb** | **00 02 19.2** | **-0.8** |
| **GEMT** | **Gemlik** | **1.94** | **32** | *e*PN | **Pb** | **00 02 19.2** | **-0.9** |
| **GEMT** | **Gemlik** | **1.94** | **32** | *e*Pn | **Pb** | **00 02 19.2** | **-0.9** |
| **RKY** | **Sarkoy-Tekirda** | **1.95** | **345** | *e*PN | **Pb** | **00 02 19.6** | **-0.7** |
| **RKY** | **Sarkoy-Tekirda** | **1.95** | **345** | *e*Pn | **Pb** | **00 02 19.6** | **-0.7** |
| **ERIK** | **Erikli-Kesan** | **2.12** | **332** | *e*PN | **Pb** | **00 02 21.9** | **-1.3** |
| **ERIK** | **Erikli-Kesan** | **2.12** | **332** | *e*Pn | **Pb** | **00 02 21.9** | **-1.3** |
| **ADVT** | **Abdulvahap** | **2.20** | **42** | *e*PN | **Pb** | **00 02 23.2** | **-1.3** |
| **ADVT** | **Abdulvahap** | **2.20** | **42** | *e*Pn | **Pb** | **00 02 23.2** | **-1.3** |
| **ENEZ** | **Enez** | **2.32** | **327** | *e*PN | **Pn** | **00 02 24.5** | **+1.4** |
| **ENEZ** | **Enez** | **2.32** | **327** | *e*Pn | **Pn** | **00 02 24.5** | **+1.4** |
| **SMTH** | **Samothraki Isl** | **2.44** | **314** | *e*PN | **Pn** | **00 02 23.5** | **-1.1** |
| **SMTH** | **Samothraki Isl** | **2.44** | **314** | *e*Pn | **Pn** | **00 02 23.5** | **-1.1** |
| **ALN** | **Alexandroupoli** | **2.50** | **327** | *e*PN | **Pn** | **00 02 24.7** | **-0.8** |
| **ALN** | **Alexandroupoli** | **2.50** | **327** | *e*Pn | **Pn** | **00 02 24.7** | **-0.8** |

*DDA **11** 00:22:08.7, 36°.62N×29°.08E, h7km, Md2.8*
*ISCJB **11** 00:22:09.8±0.6, 36°.54N±0°.05×29°.13E±0°.04, h28km±4km, Error ellipse: s-maj=7.8km s-min=4.6km az=15.8*
*ISK **11** 00:22:09.2, 36°.63N×29°.15E, h28km, MD2.9*
*CSEM **11** 00:22:09.6±0.4, 36°.54N×29°.15E, h25km±3km, MD2.9, Error ellipse: s-maj=10.1km s-min=5.5km az=13.0*
**ISC 11 00:22:09.8**±1.0**, 36°.58N**±0°.04×**29°.16E**±0°.02**, h27**km±6km**, n32, σ1ˢ.00**/53**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FETY** | **Fethiye** | **0.08** | **312** | *e*PG | **Pb** | **00 22 13.9** | **-0.7** |
| FETY | | | | *e*SG | **Sb** | **00 22 18.6** | **+0.7** |
| **FETY** | **Fethiye** | **0.08** | **312** | *e*Pg | **Pb** | **00 22 13.9** | **-0.7** |
| FETY | | | | *e*Sg | **Sb** | **00 22 18.6** | **+0.7** |
| **DALY** | **Dalyan (Mu˜la** | **0.47** | **300** | *e*PG | **Pb** | **00 22 19.0** | **-0.5** |
| DALY | | | | *e*SG | **Sb** | **00 22 26.6** | **+0.4** |
| **DALY** | **Dalyan (Mu˜la** | **0.47** | **300** | *e*Pg | **Pb** | **00 22 19.0** | **-0.5** |
| DALY | | | | *e*Sg | **Sb** | **00 22 26.6** | **+0.4** |
| **AKAS** | **Kas** | **0.50** | **134** | *i* P | **Pb** | **00 22 19.5** | **-0.7** |
| AKAS | | | | *i* S | **Sn** | **00 22 28.6** | **-0.7** |
| **AKAS** | **Kas** | **0.50** | **134** | P | **Pb** | **00 22 19.5** | **-0.7** |
| AKAS | | | | S | **Sn** | **00 22 28.6** | **-0.7** |
| **TURN** | **Turunc** | **0.53** | **303** | *i* P | **Pn** | **00 22 23.1** | **+1.4** |
| **TURN** | **Turunc** | **0.53** | **303** | P | **Pn** | **00 22 23.1** | **+1.4** |
| TURN | | | | S | **Sn** | **00 22 33.2** | **+3.5** |
| **ELL** | **Elmali** | **0.63** | **74** | *e*PG | **Pb** | **00 22 21.6** | **-0.7** |
| **ELL** | **Elmali** | **0.63** | **74** | *e*Pg | **Pb** | **00 22 21.6** | **-0.7** |
| **GOLH** | **Golhisar** | **0.73** | **26** | *i* P | **Pb** | **00 22 23.7** | **-0.3** |
| GOLH | | | | *i* S | **Sn** | **00 22 34.6** | **-0.3** |
| **GOLH** | **Golhisar** | **0.73** | **26** | P | **Pb** | **00 22 23.7** | **-0.3** |
| GOLH | | | | S | **Sn** | **00 22 34.6** | **-0.3** |
| **YER** | **Yerkesik** | **0.89** | **308** | *e*PG | **Pn** | **00 22 25.4** | **-1.3** |
| YER | | | | *e*SG | **Sb** | **00 22 37.8** | **-0.4** |
| **YER** | **Yerkesik** | **0.89** | **308** | *e*Pg | **Pn** | **00 22 25.4** | **-1.3** |
| YER | | | | *e*Sg | **Sb** | **00 22 37.8** | **-0.4** |
| **KORT** | **Korkueli** | **1.05** | **66** | *i* P | **Pn** | **00 22 28.9** | **0.0** |
| KORT | | | | *i* S | **Sb** | **00 22 45.6** | **+2.8** |
| **KORT** | **Korkueli** | **1.05** | **66** | P | **Pn** | **00 22 28.9** | **0.0** |
| KORT | | | | S | **Sb** | **00 22 45.5** | **+2.8** |
| **DNZL** | **Cakiroluk** | **1.11** | **356** | *i* P | **Pn** | **00 22 29.7** | **-0.1** |
| DNZL | | | | *i* S | **Sn** | **00 22 44.6** | **+0.3** |
| **DNZL** | **Cakiroluk** | **1.11** | **356** | P | **Pn** | **00 22 29.6** | **-0.1** |
| DNZL | | | | S | **Sn** | **00 22 44.6** | **+0.3** |
| **BCK** | **Bucak** | **1.44** | **52** | *e*PN | **Pn** | **00 22 34.1** | **-0.2** |
| **BCK** | **Bucak** | **1.44** | **52** | *e*Pn | **Pn** | **00 22 34.1** | **-0.2** |
| **BDRM** | **Kayabasi** | **1.46** | **290** | *i* P | **Pn** | **00 22 34.2** | **-0.2** |
| BDRM | | | | *i* S | **Sn** | **00 22 52.8** | **+0.2** |
| **BDRM** | **Kayabasi** | **1.46** | **290** | P | **Pn** | **00 22 34.1** | **-0.2** |
| BDRM | | | | S | **Sn** | **00 22 52.8** | **+0.2** |
| **AYDN** | **Tasoluk** | **1.48** | **317** | *i* P | **Pb** | **00 22 36.5** | **-0.3** |
| AYDN | | | | *i* S | **Sb** | **00 22 55.7** | **+0.5** |
| **AYDN** | **Tasoluk** | **1.48** | **317** | P | **Pb** | **00 22 36.5** | **-0.3** |
| AYDN | | | | S | **Sb** | **00 22 55.7** | **+0.5** |
| **BODT** | **Bodrum** | **1.56** | **288** | *e*PN | **Pn** | **00 22 35.9** | **+0.1** |
| **BODT** | **Bodrum** | **1.56** | **288** | *e*Pn | **Pn** | **00 22 35.9** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.69** | **324** | *e*PN | **Pn** | **00 22 36.8** | **-1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.69** | **324** | *e*Pn | **Pn** | **00 22 36.8** | **-1.0** |
| **SUTC** | **Sutluce-Ispart** | **1.72** | **58** | *e*PN | **Pn** | **00 22 38.3** | **+0.1** |
| **SUTC** | **Sutluce-Ispart** | **1.72** | **58** | *e*Pn | **Pn** | **00 22 38.3** | **+0.1** |
| **KHAL** | **Karahalli** | **1.81** | **8** | *i* P | **Pb** | **00 22 41.4** | **-0.9** |
| KHAL | | | | *i* S | **Sb** | **00 23 03.8** | **-0.7** |
| **KHAL** | **Karahalli** | **1.81** | **8** | P | **Pb** | **00 22 41.4** | **-0.9** |
| KHAL | | | | S | **Sb** | **00 23 03.8** | **-0.7** |

*ISCJB **11** 00:24:48.5±0.9, 24°.57N±0°.06×122°.31E±0°.03, h71km±8km, Error ellipse: s-maj=10.1km s-min=3.6km az=173.1*
*JMA **11** 00:24:48.7±0.1, 24°.72N×122°.40E, h76km, M1.8*
*TAP **11** 00:24:49.3, 24°.58N×122°.27E, h65km±1km, ML2.9, D*
**ISC 11 00:24:48.6**±1.8**, 24°.59N**±0°.09×**122°.31E**±0°.03**, h72**km±13km**, n22, σ0ˢ.56**/36**, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWC** | **Suao** | **0.42** | **273** | P | **Pn** | **00 25 00.8** | **-0.1** |
| | baz=273 | | | | | | |
| TWC | | | | *e*S | **Sn** | **00 25 09.6** | **-0.3** |
| | baz=273 | | | | | | |
| **EGS** | | **0.43** | **307** | *e*P | **Pn** | **00 25 01.1** | **+0.2** |
| | baz=310 | | | | | | |
| EGS | | | | *e*S | **Sn** | **00 25 09.5** | **-0.5** |
| | baz=310 | | | | | | |
| **ENA** | **Nanau** | **0.54** | **253** | *e*P | **Pn** | **00 25 02.2** | **+0.2** |
| | baz=251 | | | | | | |
| ENA | | | | *e*S | **Sn** | **00 25 12.4** | **+0.6** |
| | baz=251 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.60** | **103** | P | **Pn** | **00 25 02.8** | **+0.3** |
| JYNG | | | | S | **Sn** | **00 25 13.2** | **+0.4** |
| **TWE** | **Neicheng** | **0.60** | **283** | *e*P | **Pn** | **00 25 02.8** | **+0.3** |
| | baz=284 | | | | | | |
| TWE | | | | *e*S | **Sn** | **00 25 12.3** | **-0.6** |
| | baz=284 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.65** | **101** | P | **Pn** | **00 25 03.3** | **+0.2** |
| YOJ | | | | S | **Sn** | **00 25 14.0** | **+0.1** |
| **ENTT** | **Nioudou** | **0.68** | **274** | *e*P | **Pn** | **00 25 04.0** | **+0.6** |
| | baz=274 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **00 25 14.8** | **+0.4** |
| | baz=274 | | | | | | |
| **TWD** | **Chiawan** | **0.82** | **232** | *e*S | **Sn** | **00 25 17.0** | **-0.3** |
| | baz=230 | | | | | | |
| **NNS** | **Nan Shan** | **0.86** | **260** | *e*P | **Pn** | **00 25 05.4** | **-0.3** |
| | baz=259 | | | | | | |
| NNS | | | | *e*S | **Sn** | **00 25 17.4** | **-1.0** |
| | baz=259 | | | | | | |
| **NSK** | **Sanguang** | **0.87** | **276** | *e*P | **Pn** | **00 25 05.8** | **+0.2** |
| | baz=276 | | | | | | |
| NSK | | | | *e*S | **Sn** | **00 25 18.3** | **-0.1** |
| | baz=276 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.05** | **245** | *e*S | **Sn** | **00 25 22.8** | **-0.1** |
| | baz=244 | | | | | | |
| **TWT** | **Tachien** | **1.08** | **252** | *e*S | **Sn** | **00 25 23.3** | **+0.1** |
| | baz=251 | | | | | | |
| **ESL** | **Shilin** | **1.11** | **226** | *e*S | **Sn** | **00 25 22.2** | **-1.4** |
| | baz=224 | | | | | | |
| **NSTT** | **Nanjuang** | **1.19** | **272** | *e*S | **Sn** | **00 25 25.2** | **-0.1** |
| | baz=272 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.32** | **101** | P | **Pn** | **00 25 10.9** | **-0.4** |
| IRIF | | | | S | **Sn** | **00 25 27.9** | **-0.4** |
| **EHY** | **Hungye** | **1.41** | **220** | *e*S | **Sn** | **00 25 30.6** | **+0.3** |
| | baz=218 | | | | | | |
| **TYC** | **Yuchr** | **1.49** | **243** | *e*S | **Sn** | **00 25 32.8** | **+0.5** |
| | baz=242 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.59** | **102** | P | **Pn** | **00 25 15.1** | **+0.3** |
| JKRS | | | | S | **Sn** | **00 25 34.9** | **+0.3** |
| **YUS** | **Yu-Shan** | **1.65** | **229** | *e*P | **Pn** | **00 25 16.4** | **+0.3** |
| | baz=227 | | | | | | |
| YUS | | | | *e*S | **Sn** | **00 25 36.0** | **-0.9** |
| | baz=227 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.69** | **97** | P | **Pn** | **00 25 16.3** | **+0.2** |
| JIJ | | | | S | **Sn** | **00 25 36.2** | **-0.7** |
| **ALS** | **Alishan** | **1.74** | **232** | *e*P | **Pn** | **00 25 18.0** | **+0.9** |
| | baz=231 | | | | | | |
| ALS | | | | *e*S | **Sn** | **00 25 37.4** | **-1.3** |
| | baz=231 | | | | | | |
| **CHN5** | **Tsauling** | **1.79** | **237** | *e*S | **Sn** | **00 25 39.9** | **+0.4** |
| | baz=236 | | | | | | |

*BJI **11** 00:34:32.6, 42°.40N×21°.60E, h2km, mB5.0/1, Ms4.5/1, Ms7 4.3/1*
*MOS **11** 00:34:33.6±1.4, 42°.44N×21°.33E, h12km, mb4.6/23, Error ellipse: s-maj=4.8km s-min=2.7km az=111.2*
*ISCJB **11** 00:34:33.9±0.3, 42°.465N±0°.009×21°.59E±0°.01, h5km±2km, mb4.3/39, MS3.4/7, Error ellipse: s-maj=1.7km s-min=1.4km az=135.9*
*CSEM **11** 00:34:34.8±0.1, 42°.44N×21°.60E, h2km, mb4.3/22, Error ellipse: s-maj=2.0km s-min=1.6km az=40.0*
*SOF **11** 00:34:34.9, 42°.40N×21°.63E, h1km, MD4.0*
*SKO **11** 00:34:34.6, 42°.43N×21°.67E, h15km, M3.5, ML3.9*
*IDC **11** 00:34:34.1±0.6, 42°.41N×21°.51E, h0km, mb4.2/21, mb1 4.3/32, mb1mx4.2/44, mbtmp4.2/32, ML3.9/11, MS3.3/16, Ms1 3.3/16, ms1mx3.1/55, Error ellipse: s-maj=11.7km s-min=8.9km az=21.0*
*NEIC **11** 00:34:34.9±1.1, 42°.45N×21°.62E, h3km±8km, mb4.3/5, ML4.1(THE), Error ellipse: s-maj=4.2km s-min=3.1km az=53.0*
*THE **11** 00:34:35.7, 42°.41N×21°.66E, h2km±2km, ML4.1/7, Error ellipse: s-maj=2.2km s-min=0.8km az=170.0*
*LDG **11** 00:34:35.0±0.1, 42°.46N×21°.57E, h10km, Ml4.1/7, Error ellipse: s-maj=1.9km s-min=1.5km az=23.0*
*PRU **11** 00:34:35.0, 42°.34N×21°.61E, h3km, M4.5*
*BEO **11** 00:34:35.1±0.3, 42°.43N×21°.58E, h9km±3km, ML4.3/1*
*PDG **11** 00:34:35.2±0.5, 42°.43N×21°.53E, h12km, MD4.2/11, ML4.2/11, Error ellipse: s-maj=0.5km s-min=0.5km az=0.0*
*SZGRF **11** 00:34:37.7, 42°.49N×21°.72E, h10km, ML4.5(BGR)*
*TIR **11** 00:34:37.0, 42°.35N×21°.56E, h0km, ML4.4*
*VIE **11** 00:34:39.7, 42°.46N×21°.47E, h31km, mb4.2, ML3.8*
**ISC 11 00:34:35.9**±0.7**, 42°.44N**±0°.01×**21°.60E**±0°.02**, h11**km±4km**, n795, σ1ˢ.22**/837**, mb4.5**/39**, MS3.4**/7**, 54C-65D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BARS** | **Barje** | **0.41** | **22** | ⇓*i*Pg | **Pg** | **00 34 43.5** | **-0.6** |
| BARS | | | | *e*Sg | **Sg** | **00 34 49.5** | **0.0** |
| **BARS** | **Barje** | **0.41** | **22** | ⇓*i*Pg | **Pg** | **00 34 43.5** | **-0.6** |
| BARS | | | | *e*Sg | **Sg** | **00 34 49.5** | **0.0** |
| **SKO** | **Skopje** | **0.48** | **195** | ⇑*i*Pg | **Pg** | **00 34 44.8** | **-0.5** |
| SKO | | | | *e*Lg | Lg | 00 34 51.1 | |
| | comp=E,1µm,0.4s | | | | | | |
| SKO | | | | *e*Lg | Lg | 00 34 51.5 | |
| | comp=N,2µm,0.5s | | | | | | |
| **SKO** | **Skopje** | **0.48** | **195** | P | **Pg** | **00 34 44.0** | **-1.2** |
| SKO | | | | S | **Sg** | **00 34 50.0** | **-1.5** |
| **SKO** | **Skopje** | **0.48** | **195** | P | **Pg** | **00 34 44.0** | **-1.2** |
| SKO | | | | S | **Sg** | **00 34 50.0** | **-1.5** |
| **SKO** | **Skopje** | **0.48** | **195** | P | **Pg** | **00 34 44.0** | **-1.2** |
| SKO | | | | S | **Sg** | **00 34 50.0** | **-1.5** |
| **SKO** | **Skopje** | **0.48** | **195** | P | **Pg** | **00 34 44.0** | **-1.2** |
| **SKO** | **Skopje** | **0.48** | **195** | ⇑*i*Pg | **Pg** | **00 34 44.7** | **-0.5** |
| SKO | | | | S | **Sg** | **00 34 50.0** | **-1.5** |
| SKO | | | | *e*Lg | Lg | 00 34 51.5 | |
| | comp=N,2µm,0.5s | | | | | | |
| **SELS** | **Selova** | **0.86** | **336** | ⇑*i*Pg | **Pg** | **00 34 50.8** | **-1.7** |
| SELS | | | | *e*Sg | **Sb** | **00 35 04.2** | **-0.3** |
| **ZAPS** | **Zavoj** | **1.13** | **42** | ⇓*i*Pg | **Pb** | **00 34 57.2** | **-0.3** |
| ZAPS | | | | *e*Sg | **Sb** | **00 35 12.3** | **+0.1** |
| **BCI** | **Bajram Curri** | **1.14** | **267** | *i* PG | **Pg** | **00 34 56.8** | **-1.0** |
| BCI | | | | *i* SG | **Sb** | **00 35 13.1** | **+0.7** |
| **BCI** | **Bajram Curri** | **1.14** | **267** | *i* Pg | **Pg** | **00 34 56.8** | **-1.0** |
| BCI | | | | *i* Sg | **Sb** | **00 35 13.1** | **+0.7** |
| **PHP** | **Peshkopia** | **1.14** | **229** | *i* PG | **Pg** | **00 34 55.5** | **-2.4** |
| PHP | | | | *i* SG | **Sg** | **00 35 10.4** | **-2.4** |
| **PHP** | **Peshkopia** | **1.14** | **229** | *i* Pg | **Pg** | **00 34 55.5** | **-2.4** |
| PHP | | | | *i* Sg | **Sg** | **00 35 10.4** | **-2.4** |
| **VTS** | **Vitosha** | **1.20** | **82** | *i* P | **Pg** | **00 34 58.3** | **-0.6** |
| **VTS** | **Vitosha** | **1.20** | **82** | *i* P | **Pg** | **00 34 58.3** | **-0.6** |
| **PVY** | **Plav** | **1.23** | **278** | ⇓*i*Pg | **Pg** | **00 34 57.2** | **-2.2** |
| PVY | | | | *e*Sg | **Sg** | **00 35 14.4** | **-1.0** |
| **KKB** | **Krupnik** | **1.24** | **117** | *i* P | **Pb** | **00 34 59.1** | **-0.2** |
| **KKB** | **Krupnik** | **1.24** | **117** | *i* P | **Pb** | **00 34 59.1** | **-0.2** |
| **VAY** | **Valandovo** | **1.33** | **147** | *i* Pn | **Pn** | **00 34 59.6** | **-0.8** |
| VAY | | | | *e*Lg | Lg | 00 35 23.7 | |
| | comp=E,3µm,0.7s | | | | | | |
| VAY | | | | *e*Lg | Lg | 00 35 26.5 | |
| | comp=N,4µm,0.9s | | | | | | |
| **VAY** | **Valandovo** | **1.33** | **147** | *i* Pg | **Pn** | **00 34 58.4** | **-2.0** |
| VAY | | | | *e*Sg | **Sg** | **00 35 17.4** | **-1.2** |
| **VAY** | **Valandovo** | **1.33** | **147** | P | **Pn** | **00 34 59.5** | **-0.8** |
| VAY | | | | S | **Sn** | **00 35 18.7** | **+0.7** |
| **VAY** | **Valandovo** | **1.33** | **147** | P | **Pn** | **00 34 59.5** | **-0.8** |
| VAY | | | | S | **Sn** | **00 35 18.7** | **+0.7** |
| **VAY** | **Valandovo** | **1.33** | **147** | P | **Pn** | **00 34 59.5** | **-0.8** |
| VAY | | | | S | **Sn** | **00 35 18.7** | **+0.7** |
| **VAY** | **Valandovo** | **1.33** | **147** | *i* Pg | **Pn** | **00 34 58.4** | **-2.0** |
| **VAY** | **Valandovo** | **1.33** | **147** | P | **Pn** | **00 34 59.5** | **-0.8** |
| VAY | | | | *e*Sg | **Sg** | **00 35 17.4** | **-1.2** |
| VAY | | | | S | **Sn** | **00 35 18.7** | **+0.7** |
| VAY | | | | *e*Lg | Lg | 00 35 23.7 | |
| | comp=N,3µm,0.7s | | | | | | |
| **PUK** | **Puka** | **1.33** | **253** | *i* PG | **Pn** | **00 35 00.1** | **-0.4** |
| PUK | | | | *i* SG | **Sn** | **00 35 19.6** | **+1.4** |
| **PUK** | **Puka** | **1.33** | **253** | *i* Pg | **Pn** | **00 35 00.1** | **-0.4** |
| PUK | | | | *i* Sg | **Sn** | **00 35 19.6** | **+1.4** |
| **BEY** | **Berane** | **1.33** | **290** | ⇑*i*Pg | **Pn** | **00 34 59.3** | **-1.3** |
| BEY | | | | *e*Sg | **Sn** | **00 35 19.2** | **+0.8** |
| **IVA** | **Berane** | **1.33** | **290** | ⇑*i*Pg | **Pn** | **00 34 59.3** | **-1.3** |
| IVA | | | | *e*Sg | **Sn** | **00 35 19.2** | **+0.8** |
| **BOLS** | **Boljevac** | **1.42** | **10** | ⇓*i*Pg | **Pn** | **00 34 59.8** | **-1.8** |
| BOLS | | | | *e*Sg | **Sb** | **00 35 19.8** | **-0.6** |
| **BOLS** | **Boljevac** | **1.42** | **10** | ⇓*i*Pg | **Pn** | **00 34 59.8** | **-1.8** |
| BOLS | | | | *e*Sg | **Sb** | **00 35 19.8** | **-0.6** |
| **OHR** | **Ohrid** | **1.45** | **205** | *i* Pn | **Pn** | **00 35 01.4** | **-0.7** |
| OHR | | | | *e*Lg | Lg | 00 35 24.9 | |
| | comp=E,9µm,0.9s | | | | | | |
| OHR | | | | *e*Lg | Lg | 00 35 27.1 | |
| | comp=N,7µm,0.7s | | | | | | |
| **OHR** | **Ohrid** | **1.45** | **205** | *i* Pn | **Pn** | **00 35 01.4** | **-0.7** |
| OHR | | | | *e*Lg | Lg | 00 35 24.9 | |
| | comp=N,9µm,0.9s | | | | | | |
| **SJES** | **Sjenica** | **1.46** | **305** | ⇑*i*Pg | **Pn** | **00 35 01.5** | **-0.7** |
| SJES | | | | *e*Sg | **Sg** | **00 35 22.5** | **-0.2** |
| **IVAS** | **Ivanjica** | **1.56** | **318** | *i* Pg | **Pn** | **00 35 03.3** | **-0.3** |
| **IVAS** | **Ivanjica** | **1.56** | **318** | *i* Pg | **Pn** | **00 35 03.3** | **-0.3** |
| **GRUS** | **Gruza** | **1.59** | **336** | ⇓*i*Pg | **Pn** | **00 35 03.4** | **-0.6** |
| **GRUS** | **Gruza** | **1.59** | **336** | ⇓*i*Pg | **Pn** | **00 35 03.4** | **-0.6** |
| **GRG** | **Griva** | **1.59** | **158** | P | **Pn** | **00 35 04.0** | **0.0** |
| GRG | | | | S | **Sn** | **00 35 25.2** | **+0.5** |
| **GRG** | **Griva** | **1.59** | **158** | *e*P | **Pn** | **00 35 04.1** | **0.0** |
| **GRG** | **Griva** | **1.59** | **158** | *e*P | **Pn** | **00 35 04.1** | **0.0** |
| **GRG** | **Griva** | **1.59** | **158** | P | **Pn** | **00 35 04.0** | **0.0** |
| GRG | | | | S | **Sn** | **00 35 25.2** | **+0.5** |
| **GRG** | **Griva** | **1.59** | **158** | P | **Pn** | **00 35 04.0** | **0.0** |
| GRG | | | | S | **Sn** | **00 35 25.2** | **+0.5** |
| **GRG** | **Griva** | **1.59** | **158** | P | **Pn** | **00 35 04.0** | **0.0** |
| GRG | | | | S | **Sn** | **00 35 25.2** | **+0.5** |
| **KNT** | **Kendrikon** | **1.60** | **142** | P | **Pn** | **00 35 03.7** | **-0.4** |
| KNT | | | | S | **Sb** | **00 35 25.6** | **-0.1** |
| **KNT** | **Kendrikon** | **1.60** | **142** | P | **Pn** | **00 35 03.7** | **-0.4** |
| KNT | | | | S | **Sb** | **00 35 25.6** | **-0.1** |
| **KNT** | **Kendrikon** | **1.60** | **142** | P | **Pn** | **00 35 03.7** | **-0.4** |
| KNT | | | | S | **Sb** | **00 35 25.6** | **-0.1** |
| **KNT** | **Kendrikon** | **1.60** | **142** | P | **Pn** | **00 35 03.7** | **-0.4** |
| KNT | | | | S | **Sb** | **00 35 25.6** | **-0.1** |
| **FNA** | **Florina** | **1.66** | **186** | P | **Pn** | **00 35 05.0** | **0.0** |
| FNA | | | | S | **Sb** | **00 35 27.1** | **-0.3** |
| **FNA** | **Florina** | **1.66** | **186** | *e*P | **Pn** | **00 35 05.4** | **+0.4** |
| **FNA** | **Florina** | **1.66** | **186** | *e*P | **Pn** | **00 35 05.4** | **+0.4** |
| **FNA** | **Florina** | **1.66** | **186** | P | **Pn** | **00 35 05.0** | **0.0** |
| FNA | | | | S | **Sb** | **00 35 27.1** | **-0.3** |
| **FNA** | **Florina** | **1.66** | **186** | P | **Pn** | **00 35 05.0** | **0.0** |
| FNA | | | | S | **Sb** | **00 35 27.1** | **-0.3** |
| **FNA** | **Florina** | **1.66** | **186** | P | **Pn** | **00 35 05.0** | **0.0** |
| FNA | | | | S | **Sb** | **00 35 27.1** | **-0.3** |
| **TIR** | **Tirane** | **1.69** | **231** | *i* PN | **Pb** | **00 35 07.0** | **0.0** |
| TIR | | | | *i* SN | **Sg** | **00 35 30.2** | **-0.1** |
| **TIR** | **Tirane** | **1.69** | **231** | *e*Pn | **Pb** | **00 35 06.2** | **-0.8** |
| **TIR** | **Tirane** | **1.69** | **231** | P | **Pb** | **00 35 06.0** | **-1.0** |
| TIR | | | | S | **Sg** | **00 35 29.9** | **-0.4** |
| **TIR** | **Tirane** | **1.69** | **231** | P | **Pb** | **00 35 06.0** | **-1.0** |
| TIR | | | | S | **Sg** | **00 35 29.9** | **-0.4** |
| **TIR** | **Tirane** | **1.69** | **231** | P | **Pb** | **00 35 06.0** | **-1.0** |
| TIR | | | | S | **Sg** | **00 35 29.9** | **-0.4** |
| **TIR** | **Tirane** | **1.69** | **231** | P | **Pb** | **00 35 06.0** | **-1.0** |
| TIR | | | | S | **Sg** | **00 35 29.9** | **-0.4** |
| TIR | | | | *i* Sn | **Sg** | **00 35 30.2** | **-0.1** |
| **PDG** | **Podgorica** | **1.74** | **271** | ⇓*i*Pn | **Pn** | **00 35 06.0** | **+0.1** |
| **PDG** | **Podgorica** | **1.74** | **271** | *e*Pn | **Pn** | **00 35 06.2** | **+0.2** |
| **PDG** | **Podgorica** | **1.74** | **271** | P | **Pn** | **00 35 06.1** | **+0.1** |
| PDG | | | | S | **Sb** | **00 35 30.0** | **+0.4** |
| **PDG** | **Podgorica** | **1.74** | **271** | P | **Pn** | **00 35 06.1** | **+0.1** |
| PDG | | | | *e*Sn | **Sb** | **00 35 29.6** | **0.0** |
| PDG | | | | S | **Sb** | **00 35 30.0** | **+0.4** |
| **TTG** | **Podgorica** | **1.74** | **271** | ⇑*i*Pn | **Pn** | **00 35 06.1** | **+0.1** |
| TTG | | | | *e*Sn | **Sb** | **00 35 29.6** | **0.0** |
| **TTG** | **Podgorica** | **1.74** | **271** | P | **Pn** | **00 35 06.1** | **+0.1** |
| TTG | | | | S | **Sb** | **00 35 30.0** | **+0.4** |
| **TTG** | **Podgorica** | **1.74** | **271** | P | **Pn** | **00 35 06.1** | **+0.1** |
| TTG | | | | S | **Sb** | **00 35 30.0** | **+0.4** |
| **TTG** | **Podgorica** | **1.74** | **271** | P | **Pn** | **00 35 06.1** | **+0.1** |
| TTG | | | | S | **Sb** | **00 35 30.0** | **+0.4** |
| **MMB** | **Musomiste** | **1.79** | **117** | *i* P | **Pn** | **00 35 07.3** | **+0.4** |
| **MMB** | **Musomiste** | **1.79** | **117** | *i* P | **Pn** | **00 35 07.3** | **+0.4** |
| **DRME** | **Dracevica, Mon** | **1.81** | **263** | ⇓*i*Pn | **Pn** | **00 35 07.5** | **+0.5** |
| DRME | | | | *e*Sn | **Sn** | **00 35 30.9** | **+0.9** |
| **DRME** | **Dracevica, Mon** | **1.81** | **263** | ⇓*i*Pn | **Pn** | **00 35 07.5** | **+0.5** |
| DRME | | | | *e*Sn | **Sn** | **00 35 30.9** | **+0.9** |
| **ULC** | **Ulcinj** | **1.81** | **256** | ⇓*i*Pn | **Pn** | **00 35 06.8** | **-0.3** |

ULC eSn Sn 00 35 31.1 +1.0
ULC Ulcinj 1.81 256⇓iPn Pn 00 35 06.8 -0.3
ULC eSn Sn 00 35 31.1 +1.0
MPEP Malo Peshtene 1.82 59 iP Pn 00 35 07.9 +0.7
PLE Pljevlja 1.86 300⇑iPn Pn 00 35 08.0 +0.2
PLE eSn Sn 00 35 32.7 +1.4
PLE Pljevlja 1.86 300⇑iPn Pn 00 35 08.0 +0.2
PLE eSn Sn 00 35 32.7 +1.4
PGB Panagyurishte 1.90 86 iP Pn 00 35 09.3 +1.0
PGB Panagyurishte 1.90 86 iP Pn 00 35 09.3 +1.0
KBN Korca 1.91 199 iPG Pn 00 35 08.9 +0.4
KBN iSG Sg 00 35 36.8 -0.5
KBN Korca 1.91 199 P Pn 00 35 08.6 +0.1
KBN Korca 1.91 199 P Pn 00 35 08.6 +0.1
KBN Korca 1.91 199 P Pn 00 35 08.6 +0.1
KBN Korca 1.91 199 P Pn 00 35 08.6 +0.1
KBN Korca 1.91 199 iPg Pn 00 35 08.9 +0.4
KBN iSg Sg 00 35 36.8 -0.5
NKY Niksic 1.96 282⇓iPn Pn 00 35 09.4 +0.2
NKY eSn Sn 00 35 34.8 +0.9
NKY Niksic 1.96 282⇓iPn Pn 00 35 09.4 +0.2
NKY eSn Sn 00 35 34.8 +0.9
KUBS Kucevo 1.98 2 iPn Pn 00 35 07.3 -2.0
KUBS Kucevo 1.98 2 iPn Pn 00 35 07.3 -2.0
NKME Niksic 1.98 281 ePn Pn 00 35 09.2 -0.3
NKME eSn Sn 00 35 35.0 +0.7
NKME Niksic 1.98 281 ePn Pn 00 35 09.2 -0.3
NKME eSn Sn 00 35 35.0 +0.7
SRS Serrai 1.99 131 P Pn 00 35 09.0 -0.5
SRS Serrai 1.99 131 eP Pn 00 35 09.3 -0.2
SRS Serrai 1.99 131 eP Pn 00 35 09.3 -0.2
SRS Serrai 1.99 131 P Pn 00 35 09.0 -0.5
SRS Serrai 1.99 131 P Pn 00 35 09.0 -0.5
SRS Serrai 1.99 131 P Pn 00 35 09.0 -0.5
NVR Nevrokopi 2.00 122 eP Pn 00 35 09.9 +0.2
NVR Nevrokopi 2.00 122 eP Pn 00 35 09.9 +0.2
NVR Nevrokopi 2.00 122 P Pn 00 35 09.5 -0.2
NVR S Sn 00 35 35.8 +1.0
NVR Nevrokopi 2.00 122 P Pn 00 35 09.5 -0.2
NVR S Sn 00 35 35.8 +1.0
NVR Nevrokopi 2.00 122 P Pn 00 35 09.5 -0.2
NVR S Sn 00 35 35.8 +1.0
BUM Brajici-Budva 2.01 267⇓iPn Pn 00 35 09.6 -0.2
BUM eSn Sn 00 35 35.6 +0.6
BUM Brajici-Budva 2.01 267⇓iPn Pn 00 35 09.6 -0.2
BUM eSn Sn 00 35 35.6 +0.6
DIVS Divibare 2.04 325⇓iPg Pn 00 35 09.6 -0.7
DIVS Divibare 2.04 325⇓iP Pn 00 35 09.8 -0.4
DIVS Divibare 2.04 325 P Pn 00 35 09.5 -0.7
DIVS S Sb 00 35 39.4 +1.1
DIVS Divibare 2.04 325⇓iPg Pn 00 35 09.6 -0.7
DIVS S Sb 00 35 39.4 +1.1
NEST Nestorio 2.06 192 eP Pn 00 35 11.2 +0.6
NEST Nestorio 2.06 192 eP Pn 00 35 11.2 +0.6
NEST Nestorio 2.06 192 P Pn 00 35 11.0 +0.4
NEST S Sn 00 35 37.4 +1.1
NEST Nestorio 2.06 192 P Pn 00 35 11.0 +0.4
NEST S Sn 00 35 37.4 +1.1
THE Thessaloniki 2.07 150 P Pn 00 35 10.1 -0.5
THE S Sn 00 35 36.5 +0.1
THE Thessaloniki 2.07 150 eP Pn 00 35 10.1 -0.5
THE Thessaloniki 2.07 150 eP Pn 00 35 10.1 -0.5
THE Thessaloniki 2.07 150 P Pn 00 35 10.1 -0.5
THE S Sn 00 35 36.5 +0.1
THE Thessaloniki 2.07 150 P Pn 00 35 10.1 -0.5
THE S Sn 00 35 36.5 +0.1
THE Thessaloniki 2.07 150 P Pn 00 35 10.1 -0.5
THE S Sn 00 35 36.5 +0.1
SOH Sokhos 2.08 140 P Pn 00 35 10.2 -0.6
SOH Sokhos 2.08 140 eP Pn 00 35 10.5 -0.3
SOH Sokhos 2.08 140 eP Pn 00 35 10.5 -0.3
SOH Sokhos 2.08 140 P Pn 00 35 10.2 -0.6
SOH Sokhos 2.08 140 P Pn 00 35 10.2 -0.6
SOH Sokhos 2.08 140 P Pn 00 35 10.2 -0.6
UPM Unac-Piva 2.13 292⇓iPn Pn 00 35 11.7 +0.1
UPM eSn Sn 00 35 38.9 +0.8
UPM Unac-Piva 2.13 292⇓iPn Pn 00 35 11.7 +0.1
UPM eSn Sn 00 35 38.9 +0.8
KZN Kozani 2.13 177 P Pn 00 35 11.7 +0.2
KZN S Sn 00 35 38.8 +0.8
KZN Kozani 2.13 177 eP Pn 00 35 11.8 +0.2
KZN Kozani 2.13 177 eP Pn 00 35 11.8 +0.2
KZN Kozani 2.13 177 P Pn 00 35 11.7 +0.2
KZN S Sn 00 35 38.8 +0.8
KZN Kozani 2.13 177 P Pn 00 35 11.7 +0.2
KZN S Sn 00 35 38.8 +0.8
KZN Kozani 2.13 177 P Pn 00 35 11.7 +0.2
KZN S Sn 00 35 38.8 +0.8
BBLS Lazići 2.15 312⇓iPg Pn 00 35 11.3 -0.5
BBLS Lazići 2.15 312⇓iPg Pn 00 35 11.3 -0.5
HORT Hortiatis 2.15 148 eP Pn 00 35 11.7 -0.1
HORT Hortiatis 2.15 148 eP Pn 00 35 11.7 -0.1
HORT Hortiatis 2.15 148 P Pn 00 35 11.4 -0.4
HORT Hortiatis 2.15 148 P Pn 00 35 11.4 -0.4
HORT Hortiatis 2.15 148 P Pn 00 35 11.4 -0.4
HCY Herceg Novi 2.30 271⇓iPn Pn 00 35 15.0 +1.2
HCY eSn Sn 00 35 42.7 +0.6
HCY Herceg Novi 2.30 271⇓iPn Pn 00 35 15.0 +1.2
HCY eSn Sn 00 35 42.7 +0.6
BRY Bratogost 2.31 283⇑iPn Pn 00 35 14.0 0.0
BRY eSn Sn 00 35 42.9 +0.5
BRY Bratogost 2.31 283⇑iPn Pn 00 35 14.0 0.0
BRY eSn Sn 00 35 42.9 +0.5
PLD Plovdiv 2.33 97 iP Pn 00 35 14.8 +0.7
PLD Plovdiv 2.33 97 iP Pn 00 35 14.8 +0.7
DJES Djerdap 2.33 16 ePn Pn 00 35 13.2 -1.0
RMGR Halanga-Turnu 2.36 19⇑iP Pb 00 35 17.4 -1.1
LIT Litokhoron 2.43 164 P Pn 00 35 15.6 +0.1
LIT Litokhoron 2.43 164 eP Pn 00 35 15.7 +0.2
LIT Litokhoron 2.43 164 eP Pn 00 35 15.7 +0.2
LIT Litokhoron 2.43 164 P Pn 00 35 15.6 +0.1
LIT Litokhoron 2.43 164 P Pn 00 35 15.6 +0.1
LIT Litokhoron 2.43 164 P Pn 00 35 15.6 +0.1
RZN Rozhen 2.44 107 iP Pn 00 35 16.6 +0.8
RZN Rozhen 2.44 107 iP Pn 00 35 16.6 +0.8
CRAR CRAIOVA 2.48 40⇓iP Pn 00 35 17.0 +0.8
PLG Polygyros 2.48 145 P Pn 00 35 16.3 0.0
PLG Polygyros 2.48 145 P Pn 00 35 16.3 0.0
PLG Polygyros 2.48 145 eP Pn 00 35 16.3 0.0
PLG Polygyros 2.48 145 P Pn 00 35 16.3 0.0
PLG Polygyros 2.48 145 P Pn 00 35 16.3 0.0
PLG Polygyros 2.48 145 P Pn 00 35 16.3 0.0
BEO Beograd 2.51 341 ePn Pn 00 35 15.3 -1.3
SRE Strehaia 2.51 27⇓iP Pn 00 35 17.0 +0.3
VLO Vlora 2.52 220 iPN Pb 00 35 20.5 -0.7
VLO Vlora 2.52 220 iPn Pb 00 35 20.5 -0.7
TEKS Tekeris 2.60 325 iPn Pn 00 35 17.5 -0.4
TEKS Tekeris 2.60 325 iPn Pn 00 35 17.5 -0.4
KAVA Kavala 2.61 122 P Pn 00 35 18.1 +0.1
KAVA S Sn 00 35 51.2 +1.5
KAVA Kavala 2.61 122 P Pn 00 35 18.1 +0.1
KAVA S Sn 00 35 51.2 +1.5
KAVA Kavala 2.61 122 P Pn 00 35 18.1 +0.1
KAVA S Sn 00 35 51.2 +1.5
OUR Ouranopolis 2.76 139 eP Pn 00 35 20.0 0.0
OUR Ouranopolis 2.76 139 eP Pn 00 35 20.0 0.0
SRN Sarande 2.82 206 iPN Pn 00 35 22.4 +1.3
SRN iSN Sb 00 36 02.4 +1.5
SRN Sarande 2.82 206 iPn Pn 00 35 22.2 +1.3
JAN Janina 2.83 192 eP Pn 00 35 22.4 +1.3
JAN Janina 2.83 192 eP Pn 00 35 22.4 +1.3
PVL Pavlikeni 2.85 73 iP Pg 00 35 28.5 -2.1
THL Klokotos Trika 2.88 174 eP Pn 00 35 22.4 +0.6
THL Klokotos Trika 2.88 174 eP Pn 00 35 22.4 +0.6
DIM Dimitrovgrad 2.94 96 iP Pn 00 35 23.5 +0.9
DIM Dimitrovgrad 2.94 96 iP Pn 00 35 23.5 +0.9
KDZ Kurdzhali 2.95 104 iP Pn 00 35 22.1 -0.6
KDZ Kurdzhali 2.95 104 iP Pn 00 35 22.1 -0.6
BANR Banloc 2.97 354⇓iP Pn 00 35 23.5 +0.6
BANR Banloc 2.97 354 S Sb 00 36 06.0 +1.0
SGD Sagiada 3.00 201 eP Pn 00 35 24.4 +1.0
SGD Sagiada 3.00 201 eP Pn 00 35 24.4 +1.0
FGSL Fruska Gora 3.02 335⇓iPn Pn 00 35 22.8 -0.8
FRGS Fruska Gora 3.02 335⇓iPn Pn 00 35 22.8 -0.8
ZIMR 3.02 65⇑iP Pn 00 35 24.3 +0.7
KEK Kerkira 3.04 207 eP Pn 00 35 24.5 +0.5
KEK Kerkira 3.04 207 eP Pn 00 35 24.5 +0.5
GZR Gura Zlata 3.08 16⇑iP Pn 00 35 24.7 +0.2
GZR Gura Zlata 3.08 16 S Sb 00 36 10.1 +1.8
BZS Buzias 3.18 0⇓iP Pn 00 35 25.1 -0.8
BZS Buzias 3.18 0 S Sb 00 36 14.2 +3.0
HUMR Humele 3.23 48⇓iP Pn 00 35 27.5 +1.0
TIM Timisoara 3.31 355⇓iP Pn 00 35 27.2 -0.4
DSL Palaion Diasel 3.32 187 eP Pn 00 35 29.5 +1.7
DSL Palaion Diasel 3.32 187 eP Pn 00 35 29.5 +1.7
NEO Neokhori 3.36 158 eP Pn 00 35 27.9 -0.4
NEO Neokhori 3.36 158 eP Pn 00 35 27.9 -0.4
LOT Lotru 3.40 27⇓iP Pn 00 35 29.0 +0.1
GOLR 3.42 44⇓iP Pn 00 35 31.5 +2.3
MAKR Makrakomi, Fth 3.44 173 eP Pn 00 35 30.0 +0.5
MAKR Makrakomi, Fth 3.44 173 eP Pn 00 35 30.0 +0.5
AGG Agios Georgios 3.45 171 eP Pn 00 35 30.0 +0.3
AGG Agios Georgios 3.45 171 eP Pn 00 35 30.0 +0.3
EVR Evrytania 3.52 177 eP Pn 00 35 31.1 +0.5
EVR Evrytania 3.52 177 eP Pn 00 35 31.1 +0.5
PE1 Pezze di Greco 3.53 244 ePn Pn 00 35 31.2 +0.6
SMTH Samothraki Isl 3.54 122 eP Pn 00 35 30.4 -0.5
SMTH Samothraki Isl 3.54 122 eP Pn 00 35 30.4 -0.5
DEV Deva 3.57 15⇑iP Pn 00 35 32.6 +1.4
DEV Deva 3.57 15 S Sb 00 36 20.6 -1.8
ALN Alexandroupoli 3.67 113 eP Pn 00 35 33.0 +0.5
ALN Alexandroupoli 3.67 113 eP Pn 00 35 33.0 +0.5
LIA Limnos Island 3.71 132 eP Pn 00 35 32.8 -0.2
LIA Limnos Island 3.71 132 eP Pn 00 35 32.8 -0.2
BUC1 Bucharest 3.75 58⇓iP Pn 00 35 35.1 +1.4
AXAR Agios Charalam 3.75 167 eP Pn 00 35 34.1 +0.4
AXAR Agios Charalam 3.75 167 eP Pn 00 35 34.1 +0.4
TAR1 Taranto 3.76 241 ePn Pn 00 35 34.8 +1.0
BAI Bari 3.77 251 ePn Pn 00 35 34.0 0.0
ENEZ Enez 3.81 115 ePN Pn 00 35 34.9 +0.4
ENEZ Enez 3.81 115 ePn Pn 00 35 34.9 +0.4
PDO Prodromos 3.84 185 eP Pn 00 35 38.5 +3.5
PDO Prodromos 3.84 185 eP Pn 00 35 38.5 +3.5
EDRB Edirne 3.87 97 ePN Pn 00 35 35.5 +0.2
EDRB Edirne 3.87 97 ePn Pn 00 35 35.5 +0.2
VOIR 3.90 39⇑iP Pn 00 35 37.2 +1.4
LKR Lokris 3.93 164 eP Pn 00 35 37.2 +1.1
LKR Lokris 3.93 164 eP Pn 00 35 37.2 +1.1
GADA Gvkgeada 3.94 123 ePN Pn 00 35 36.1 -0.1
GADA Gvkgeada 3.94 123 ePn Pn 00 35 36.1 -0.1
EFP Efpalio 4.01 177 eP Pn 00 35 38.3 +1.0
EFP Efpalio 4.01 177 eP Pn 00 35 38.3 +1.0
SG1 Sgolgore (BA) 4.02 248 ePn Pn 00 35 37.0 -0.4
SULR 4.06 55⇓iP Pn 00 35 39.5 +1.6
KALE Kalithea 4.06 174 eP Pn 00 35 38.5 +0.5
KALE Kalithea 4.06 174 eP Pn 00 35 38.5 +0.5
DESF Desfina 4.08 170 eP Pn 00 35 38.3 0.0
DESF Desfina 4.08 170 eP Pn 00 35 38.3 0.0
DSF Desfina 4.08 170 eP Pn 00 35 38.3 0.0
DSF Desfina 4.08 170 eP Pn 00 35 38.3 0.0
ERIK Erikli-Kesan 4.08 114 ePN Pn 00 35 38.6 +0.4
ERIK Erikli-Kesan 4.08 114 ePn Pn 00 35 38.6 +0.4
SECR 4.15 50⇑iP Pn 00 35 41.5 +2.3
GELI Tayfur-Gelibol 4.19 117 ePN Pn 00 35 39.6 -0.1
GELI Tayfur-Gelibol 4.19 117 ePn Pn 00 35 39.6 -0.1
LAKA Lakka 4.20 176 eP Pn 00 35 40.9 +1.0
LAKA Lakka 4.20 176 eP Pn 00 35 40.9 +1.0
CDT Castel del Mon 4.21 253 ePn Pn 00 35 39.7 -0.3
MDB Medias 4.21 27⇓iP Pn 00 35 44.5 +4.5
MS1 Monte Sant'Ang 4.28 262 ePn Pn 00 35 40.7 -0.3
VLS Valsamata 4.32 191 eP Pn 00 35 41.1 -0.5
VLS Valsamata 4.32 191 eP Pn 00 35 41.1 -0.5
PRD Provadia 4.33 78 iP Pn 00 35 42.7 +1.0
PRD Provadia 4.33 78 iP Pn 00 35 42.7 +1.0
KFL Anninata 4.37 188 eP Pn 00 35 42.1 0.0
KFL Anninata 4.37 188 eP Pn 00 35 42.1 0.0
RLS Riolos of Patr 4.37 181 eP Pn 00 35 43.2 +1.0
RLS Riolos of Patr 4.37 181 eP Pn 00 35 43.2 +1.0
MLR Muntele Rosu 4.38 44 ePn Pn 00 35 43.5 +1.0
MLR Muntele Rosu 4.38 44⇑iP Pn 00 35 44.2 +1.8
LPK Lapseki 4.39 116 ePN Pn 00 35 42.4 -0.1
LPK Lapseki 4.39 116 ePn Pn 00 35 42.4 -0.1
KLV Kalavryta, Ach 4.41 174 eP Pn 00 35 43.4 +0.6
KLV Kalavryta, Ach 4.41 174 eP Pn 00 35 43.4 +0.6
PKS6 Bocsa 4.41 341⇑ePn Pn 00 35 42.7 0.0
PKS6 Bocsa 4.41 341 eSn Sn 00 36 36.7 +2.6
EZN Ezine 4.42 125 ePN Pn 00 35 42.8 0.0
EZN Ezine 4.42 125 ePn Pn 00 35 42.8 0.0
DRGR 4.43 10⇓iP Pn 00 35 42.8 -0.3
DRGR 4.43 10 S Sb 00 36 46.0 -1.1
DOPR Dopca 4.46 36⇑iP Pn 00 35 45.1 +1.7
ISR Istrita 4.47 51⇑iP Pn 00 35 46.2 +2.5
PHSR Pinarhisar 4.48 98 ePN Pn 00 35 44.0 +0.2
PHSR Pinarhisar 4.48 98 ePn Pn 00 35 44.0 +0.2
CJR Cluj-Napoca 4.51 18⇑iP Pn 00 35 45.4 +1.2
GUR Goura 4.53 173 eP Pn 00 35 44.8 +0.3
GUR Goura 4.53 173 eP Pn 00 35 44.8 +0.3
RKY Sarkoy-Tekirda 4.53 111 ePN Pn 00 35 44.7 +0.2
RKY Sarkoy-Tekirda 4.53 111 ePn Pn 00 35 44.7 +0.2
PGOR Pogoanele 4.62 56⇓iP Pn 00 35 47.9 +2.3
PKSN Nyarlorinc 4.63 345⇓ePn Pn 00 35 46.1 +0.4
PKSN Nyarlorinc 4.63 345⇓ePn Pn 00 35 46.1 +0.4
TKR Tekirdag 4.67 106 eP Pn 00 35 47.1 +0.8
TKR Tekirdag 4.67 106 eP Pn 00 35 47.1 +0.8
PTL Penteli 4.71 158 eP Pn 00 35 47.3 +0.4
PTL Penteli 4.71 158 eP Pn 00 35 47.3 +0.4
KRBG Karabiga-Canak 4.74 114 eP Pn 00 35 47.4 +0.1
KRBG Karabiga-Canak 4.74 114 eP Pn 00 35 47.4 +0.1
PRK Paraskevi 4.76 130 eP Pn 00 35 48.3 +0.7
PRK Paraskevi 4.76 130 eP Pn 00 35 48.3 +0.7
CRLT Corlu 4.77 104 eP Pn 00 35 48.2 +0.5
CRLT Corlu 4.77 104 eP Pn 00 35 48.2 +0.5
MSAB Monastry St. A 4.84 68⇑iP Pn 00 35 49.6 +1.0
MRMT Marmara Adasi 4.86 110 eP Pn 00 35 48.8 -0.2
MRMT Marmara Adasi 4.86 110 eP Pn 00 35 48.8 -0.2
GRER 4.87 51⇑iP Pn 00 35 51.5 +2.4
TIP Timpagrande 4.91 230 ePn Pn 00 35 50.1 +0.4
TIP eSn Sn 00 36 46.3 -0.2
TIP Timpagrande 4.91 230 ePn Pn 00 35 50.1 +0.4
TIP eSn Sn 00 36 46.3 -0.2
PKS7 Kunszentmiklos 4.93 340⇑ePn Pn 00 35 50.0 +0.2
PKS7 eSn Sn 00 36 46.7 -0.1
PKS7 Kunszentmiklos 4.93 340⇑ePn Pn 00 35 50.0 +0.2
PKS7 eSn Sn 00 36 46.7 -0.1
PSN Preselentsi 4.98 73 iP Pn 00 35 50.6 0.0
PSN Preselentsi 4.98 73 iP Pn 00 35 50.6 0.0
PLOR Plostina 4.99 45⇓iP Pn 00 35 52.0 +1.3
CUC Castrocucco 5.00 243 ePn Pn 00 35 51.8 +0.9
comp=N,33nm,0.6s
CUC eSn Sn 00 36 50.6 +1.9
CUC Castrocucco 5.00 243 ePn Pn 00 35 51.8 +0.9
comp=N,33nm,0.6s
CUC eSn Sn 00 36 50.6 +1.9
VRI Vrincioaia 5.04 45⇓iP Pn 00 35 53.2 +1.8
ARCR ARCALIA 5.05 22⇑iP Pn 00 35 53.7 +2.2
CVD Cernavoda 5.05 66⇑iP Pn 00 35 53.0 +1.5
EDC Edincik 5.15 112 eP Pn 00 35 53.3 +0.4
EDC Edincik 5.15 112 eP Pn 00 35 53.3 +0.4
KRND KRANIDI 5.18 166 eP Pn 00 35 53.9 +0.5
KRND KRANIDI 5.18 166 eP Pn 00 35 53.9 +0.5
BNT Bandirma 5.19 111 eP Pn 00 35 53.8 +0.4
BNT Bandirma 5.19 111 eP Pn 00 35 53.8 +0.4
PETR Petresti 5.22 49⇓iP Pn 00 35 55.2 +1.4
DKL Dikili 5.24 128 eP Pn 00 35 54.8 +0.6
DKL Dikili 5.24 128 eP Pn 00 35 54.8 +0.6
ITM Ithomi 5.25 177 eP Pn 00 35 55.5 +1.1
ITM Ithomi 5.25 177 eP Pn 00 35 55.5 +1.1
CTKS Kestanelik-??a 5.29 101 eP Pn 00 35 55.4 +0.5
CTKS Kestanelik-??a 5.29 101 eP Pn 00 35 55.4 +0.5
MANR Mangalia 5.30 73⇓iP Pn 00 35 55.2 +0.3
BEHE Becsehely 5.31 321⇓ePn Pn 00 35 55.4 +0.3
BEHE eSn Sn 00 36 58.3 +2.0
BEHE Becsehely 5.31 321⇓ePn Pn 00 35 55.4 +0.3
BEHE eSn Sn 00 36 58.3 +2.0
TIRR Tirgusor 5.36 66 eP Pn 00 35 56.1 +0.4
TIRR pmax pmax
comp=Z,58nm,0.8s
TIRR Tirgusor 5.36 66 ePn Pn 00 35 56.4 +0.8
TIRR eSg Sg 00 37 22.6 -5.1
TIRR Tirgusor 5.36 66⇓iP Pn 00 35 56.5 +0.8
TIRR Tirgusor 5.36 66 ePn Pn 00 35 56.1 +0.4
comp=Z,58nm,0.8s
TIRR Tirgusor 5.36 66 eP Pn 00 35 56.1 +0.4
comp=Z,58nm,0.8s
BUD Budapest 5.37 341 ePn Pn 00 35 56.2 +0.4
BUD eSn Sn 00 36 59.6 +1.9
BUD Budapest 5.37 341⇓ePn Pn 00 35 56.3 +0.4
BUD eSn Sn 00 36 59.0 +1.3
BUD Budapest 5.37 341⇓ePn Pn 00 35 56.3 +0.4
BUD eSn Sn 00 36 59.0 +1.3
BMR Baia Mare 5.41 14⇑iP Pn 00 35 57.5 +1.1
TESR Tescani 5.45 40⇑iP Pn 00 35 58.6 +1.6
PKST T''s 5.45 333⇑ePn Pn 00 35 57.2 +0.2
PKST eSn Sn 00 37 01.5 +1.8
PKST T''s 5.45 333⇑ePn Pn 00 35 57.2 +0.2
PKST eSn Sn 00 37 01.5 +1.8
PKSG 5.46 336⇓ePn Pn 00 35 57.2 +0.1
PKSG eSn Sn 00 36 59.6 -0.2
PKSG 5.46 336⇓ePn Pn 00 35 57.2 +0.1
PKSG eSn Sn 00 36 59.6 -0.2
CFR Carcaliu 5.47 58⇑iP Pn 00 35 57.9 +0.7
BGKT Bogazkoy 5.50 101 eP Pn 00 35 57.7 0.0
BALB Balikesir 5.51 118 eP Pn 00 35 58.9 +1.0
KCTX Karacabey (Bur 5.53 111 eP Pn 00 35 58.6 +0.5
PSZ Piszkesteto 5.62 348 eP Pn 00 35 58.5 -0.9
PSZ pmax pmax
comp=Z,93nm,0.6s
PSZ Piszkesteto 5.62 348 ePn Pn 00 35 59.1 -0.2
PSZ Piszkesteto 5.62 348⇓iP Pn 00 35 58.9 -0.5
PSZ Piszkesteto 5.62 348⇑ePn Pn 00 35 59.1 -0.2
PSZ eSn Sn 00 37 04.9 +1.0
PSZ Piszkesteto 5.62 348 ePn Pn 00 35 58.5 -0.9
comp=Z,94nm,0.6s
PSZ Piszkesteto 5.62 348 eP Pn 00 35 58.5 -0.9
comp=Z,93nm,0.6s
PSZ eSn Sn 00 37 04.9 +1.0
KLYT Kilyos 5.68 100 eP Pn 00 36 00.4 +0.2
TRPA Tarpa 5.73 6⇑iP Pn 00 36 01.1 +0.2
TRPA Tarpa 5.73 6 ePn Pn 00 36 00.8 -0.1
TRPA Tarpa 5.73 6 ePn Pn 00 36 00.8 -0.1
ISK Istanbul-Kandi 5.74 101 eP Pn 00 36 01.1 +0.1
ARMT Armutlu 5.76 106 eP Pn 00 36 01.9 +0.6
BURAR Bucovina Array 5.78 25⇑iP Pn 00 36 02.9 +1.3
VLI Veliai 5.80 169 eP Pn 00 36 02.4 +0.5
VLI Veliai 5.80 169 eP Pn 00 36 02.4 +0.5
MDNY Mudanya-Bursa 5.85 108 eP Pn 00 36 02.9 +0.4
TLCR 5.90 60⇑iP Pn 00 36 04.5 +1.3
IZM Izmir 5.91 131 eP Pn 00 36 04.7 +1.3
ORLT Orhaneli 5.99 111 eP Pn 00 36 05.3 +0.8
DST Dursunbey 6.01 116 eP Pn 00 36 05.8 +0.9
GEMT Gemlik 6.04 107 eP Pn 00 36 05.7 +0.5
SILT Sile 6.14 99 eP Pn 00 36 08.5 +1.9
APE Apeiranthos 6.15 149ciP Pn 00 36 06.9 +0.1
APE Apeiranthos 6.15 149⇓iP Pn 00 36 06.8 0.0
APE Apeiranthos 6.15 149 iP Pn 00 36 06.9 +0.1
SMG Samos 6.20 138 eP Pn 00 36 07.9 +0.6
SMG Samos 6.20 138 eP Pn 00 36 07.9 +0.6
UZH Uzhgorod 6.22 4 eP Pn 00 36 06.9 -0.6
UZH eS Sn 00 37 16.9 -1.6
UZH MLR MLR
comp=N,80nm,1.0s
UZH MLR MLR
comp=E,50nm,1.0s
UZH MLR MLR
comp=Z,100nm,1.0s
UZH Uzhgorod 6.22 4 eP Pn 00 36 06.9 -0.6
UZH eS Sn 00 37 16.9 -1.6
LJU Ljubljana 6.23 308 ePn Pn 00 36 08.2 +0.4
LJU eSg Sg 00 38 06.0 +10
HRT Hereke 6.25 102 eP Pn 00 36 08.7 +0.5
IZI Iznik 6.28 107 eP Pn 00 36 09.3 +0.8
SOKA Soboth 6.33 314⇑iPn Pn 00 36 08.3 -0.8
SNR=26
SOKA Soboth 6.33 314 Pn Pn 00 36 08.3 -0.8
SNR=26
SOP Sopron 6.35 327 ePn Pn 00 36 10.1 +0.7
SOP eSn Sn 00 37 19.7 -2.1
SOP Sopron 6.35 327⇑ePn Pn 00 36 10.2 +0.9
SOP eSn Sn 00 37 19.1 -2.7
SOP Sopron 6.35 327⇑ePn Pn 00 36 10.2 +0.9
SOP eSn Sn 00 37 19.1 -2.7
VYHS Vyhne 6.36 343 eP Pn 00 36 08.7 -0.9
VYHS e 00 37 20.0
VYHS Vyhne 6.36 343 ePN Pn 00 36 08.7 -0.9
VYHS eSN Sn 00 37 20.0 -2.2
VYHS eSG Sg 00 37 54.7 -5.3
VYHS Vyhne 6.36 343 eP Pn 00 36 08.7 -0.9
VYHS eS Sn 00 37 20.0 -2.2
ADVT Abdulvahap 6.43 105 eP Pn 00 36 11.7 +1.2
ARSA Arzberg 6.47 320 ePn Pn 00 36 10.5 -0.6
ARSA eSn Sn 00 37 22.0 -2.8
ARSA Arzberg 6.47 320 iPn Pn 00 36 10.4 -0.6
SNR=83
ARSA Arzberg 6.47 320 Pn Pn 00 36 10.4 -0.6
SNR=83
OBKA Obir 6.48 311 ePn Pn 00 36 11.6 +0.3
OBKA Obir 6.48 311⇑iPn Pn 00 36 11.5 +0.2
SNR=31
OBKA Obir 6.48 311 Pn Pn 00 36 11.5 +0.2
SNR=31
KOLS Kolonicke sedl 6.52 4 eP Pn 00 36 12.5 +0.8
KOLS MLR MLR
comp=Z,400nm,1.8s
KOLS Kolonicke sedl 6.52 4 ePN Pn 00 36 12.5 +0.8
KOLS ePG Pg 00 36 42.8 +2.2
KOLS eSG Sg 00 38 04.0 -0.9
KOLS Kolonicke sedl 6.52 4 eP Pn 00 36 12.5 +0.8
comp=Z,400nm,1.8s
TRI Trieste 6.53 303 eP Pn 00 36 12.2 +0.4
TRI pmax pmax
comp=Z,87nm,0.7s
TRI Trieste 6.53 303 ePn Pn 00 36 12.2 +0.4
comp=Z,88nm,0.7s
TRI Trieste 6.53 303 eP Pn 00 36 12.2 +0.4
comp=Z,87nm,0.7s
AYDB Zeytinkoy-Aydi 6.58 131 eP Pn 00 36 13.9 +1.2
KULA Kula-Manisa 6.65 124 eP Pn 00 36 14.2 +0.5
SMOL Smolenice 6.75 336 eP Pn 00 36 15.8 +0.9
SMOL e 00 37 28.3
SMOL Smolenice 6.75 336 ePN Pn 00 36 15.8 +0.9
SMOL eSN Sn 00 37 28.3 -3.4
SMOL Smolenice 6.75 336 eP Pn 00 36 15.8 +0.9
CONA Conrad Observa 6.83 326⇓iPn Pn 00 36 16.8 +0.8
SNR=28
CONA Conrad Observa 6.83 326 Pn Pn 00 36 16.8 +0.8
SNR=28
KIS Kishinev 6.87 46 eP Pn 00 36 23.0 +6.5
KIS LRM MLR 00 39 52.0
comp=Z,600nm,10.0s
KIS Kishinev 6.87 46 eP Pn 00 36 23.0 +6.5
KIS e 00 37 30.0
KIS MLR MLR
comp=Z,500nm,10.0s
KIS MLR MLR
comp=Z,600nm,10.0s
LANS Liptovska Anna 6.88 348 eP Pn 00 36 17.8 +1.1
LANS Liptovska Anna 6.88 348 ePN Pn 00 36 17.8 +1.1
LANS Liptovska Anna 6.88 348 eP Pn 00 36 17.8 +1.1
BODT Bodrum 6.94 139 eP Pn 00 36 18.6 +1.1
STHS Stebnicka Huta 6.99 358 eP Pn 00 36 18.4 +0.2
STHS Stebnicka Huta 6.99 358 ePN Pn 00 36 18.4 +0.2
STHS Stebnicka Huta 6.99 358 eP Pn 00 36 18.4 +0.2
JAVC Velka Javorina 6.99 338 ePn Pn 00 36 19.6 +1.4
GULT Gulveren 6.99 104 eP Pn 00 36 20.1 +1.8
NIE Niedzica 7.04 353 ePn Pn 00 36 19.8 +0.9
NIE eSn Sb 00 38 03.9 +1.7
NIE Niedzica 7.04 353 eP Pn 00 36 19.9 +1.0
NIE Niedzica 7.04 353 eP Pn 00 36 19.9 +1.0
KWP Kalwaria Pacla 7.24 6 ePn Pn 00 36 23.7 +2.2
KWP eSn Sn 00 37 52.7 +8.9
KWP Kalwaria Pacla 7.24 6 eP Pn 00 36 23.8 +2.2
KWP e 00 37 52.8
KWP Kalwaria Pacla 7.24 6 eP Pn 00 36 23.8 +2.2
YER Yerkesik 7.38 134 eP Pn 00 36 25.1 +1.5
MDUB Mudurnu 7.47 102 eP Pn 00 36 26.5 +1.6
KBA Koelnbreinsper 7.49 311 ePn Pn 00 36 26.0 +0.8
KBA eSn Sn 00 37 46.7 -3.4
KBA Koelnbreinsper 7.49 311⇓iPn Pn 00 36 25.6 +0.4
SNR=36
KBA Koelnbreinsper 7.49 311 Pn Pn 00 36 25.6 +0.4
SNR=36
MOA Molln 7.50 319 ePn Pn 00 36 25.6 +0.5
MOA eSn Sn 00 37 47.5 -2.6
MOA Molln 7.50 319⇓iPn Pn 00 36 25.4 +0.3
SNR=26
MOA Molln 7.50 319 Pn Pn 00 36 25.4 +0.3
SNR=26
KRUC Moravsky 7.56 333 ePn Pn 00 36 25.1 -0.9
IDI Anoyia 7.58 159 Pn Pn 00 36 27.2 +0.8
comp=Z,2.0nm,0.3s,baz=343,slow=8.3,SNR=14
IDI Sn Sn 00 37 47.3 -5.1

baz=338,slow=18,SNR=1.1
IDI LR LR 00 40 06.3
comp=Z,143nm,20.4s,baz=332,slow=44
**IDI Anoyia 7.58 159** *e*Pn **Pn 00 36 26.7 +0.3**
comp=Z,34nm,0.9s
IDI Sn **Sn 00 37 47.3 -5.1**
**IDI Anoyia 7.58 159** *e*Pn **Pn 00 36 26.7 +0.3**
comp=Z,34nm,0.9s
**VRAC Vranov 7.71 335** Pn **Pn 00 36 28.6 +0.5**
comp=Z,2.2nm,0.3s,baz=154,slow=12,SNR=24
VRAC Sn **Sn 00 37 52.8 -2.6**
comp=Z,2.1nm,0.3s,baz=68,slow=16,SNR=6.3
VRAC LR LR 00 40 26.6
comp=Z,310nm,19.3s,baz=171,slow=46
**VRAC Vranov 7.71 335** P **Pn 00 36 28.6 +0.5**
VRAC 00 37 52.8
VRAC pmax pmax
comp=Z,2.0nm,0.3s
VRAC smax smax
comp=N,2.0nm,0.3s
VRAC MLR MLR
comp=Z,310nm,19.3s
**VRAC Vranov 7.71 335** *e*Pn **Pn 00 36 28.8 +0.7**
**VRAC Vranov 7.71 335**⇑ *i*P **Pn 00 36 28.3 +0.2**
**OKC Ostrava-Krasne 7.78 343** *e*P **Pn 00 36 28.4 -0.6**
OKC *e* 00 37 55.0
OKC MLR MLR
comp=Z,800nm,9.2s
**OKC Ostrava-Krasne 7.78 343** *e*Pn **Pn 00 36 30.3 +1.3**
**OKC Ostrava-Krasne 7.78 343** *e*PN **Pn 00 36 28.4 -0.6**
OKC *ex* x 00 36 38.7
OKC *e*SN **Sn 00 37 55.0 -2.1**
OKC AMS AMS 00 40 00.0
comp=Z,800nm,9.2s
**OKC Ostrava-Krasne 7.78 343** Pn **Pn 00 36 28.4 -0.6**
OKC Sn **Sn 00 37 55.0 -2.1**
**ABTA Abfaltersbach 7.79 307**⇑ *i*Pn **Pn 00 36 29.4 +0.2**
SNR=32
**ABTA Abfaltersbach 7.79 307** Pn **Pn 00 36 29.4 +0.2**
SNR=32
**SHUT Suhut-Afyon 7.84 117** *e*P **Pn 00 36 31.2 +1.2**
**MORC Moravsky Berou 7.87 340** *e*P **Pn 00 36 29.1 -1.1**
MORC *e* 00 37 57.1
MORC pmax pmax
comp=Z,81nm,0.7s
**MORC Moravsky Berou 7.87 340** *e*Pn **Pn 00 36 29.5 -0.7**
**MORC Moravsky Berou 7.87 340**⇑ *i*P **Pn 00 36 29.4 -0.8**
**MORC Moravsky Berou 7.87 340** *e*Pn **Pn 00 36 29.1 -1.1**
comp=Z,81nm,0.7s
MORC *e*Sn **Sn 00 37 57.1 -2.1**
**MORC Moravsky Berou 7.87 340** *e*P **Pn 00 36 29.1 -1.1**
comp=Z,81nm,0.7s
MORC *e*S **Sn 00 37 57.1 -2.1**
**OJC Ojcow 7.89 352** *e*Pn **Pn 00 36 31.9 +1.4**
OJC *e*Sn **Sb 00 38 26.5 +0.1**
**OJC Ojcow 7.89 352** *e*P **Pn 00 36 31.9 +1.4**
**OJC Ojcow 7.89 352** *e*Pn **Pn 00 36 32.2 +1.7**
**OJC Ojcow 7.89 352** *e*P **Pn 00 36 31.9 +1.4**
**TREC Trest 8.08 330** AMS AMS 00 39 50.0
comp=Z,1μm,9.6s
**SVRH Sivrihisar-ESK 8.08 108** *e*P **Pn 00 36 34.1 +0.8**
**RJOB Jochberg 8.18 313** *e*Pn **Pn 00 36 36.0 +1.4**
RJOB *e*Sn **Sn 00 38 05.2 -1.7**
**FETY Fethiye 8.18 133** *e*P **Pn 00 36 36.8 +2.2**
**KRLC Kraliky 8.34 338** *e*P **Pn 00 36 37.4 +0.7**
KRLC *e* 00 38 08.9
**KRLC Kraliky 8.34 338** *e*PN **Pn 00 36 37.4 +0.7**
KRLC *ex* x 00 36 40.8
KRLC *e*SN **Sn 00 38 08.9 -1.9**
KRLC *ex* x 00 38 31.8
**KRLC Kraliky 8.34 338** Pn **Pn 00 36 37.4 +0.7**
KRLC Sn **Sn 00 38 08.9 -1.9**
**GEC2 GERESS Array S 8.46 322** *e*Pn **Pn 00 36 39.8 +1.3**
**GERES GERESS Array B 8.46 322** Pn **Pn 00 36 39.3 +0.8**
comp=Z,1.2nm,0.3s,baz=148,slow=13,SNR=31
GERES Sn **Sn 00 38 13.3 -0.7**
comp=Z,0.6nm,0.3s,baz=129,slow=24,SNR=2.4
GERES LR LR 00 40 04.9
comp=Z,218nm,19.7s,baz=109,slow=39
**GERES GERESS Array B 8.46 322** P **Pn 00 36 39.3 +0.8**
GERES 00 38 13.3
GERES pmax pmax
comp=Z,1.0nm,0.3s
GERES smax smax
comp=N,1.0nm,0.3s
GERES MLR MLR
comp=Z,218nm,19.7s
**ELL Elmali 8.56 129** *e*P **Pn 00 36 40.3 +0.4**
**WTTA Wattenberg 8.57 308** *e*Pn **Pn 00 36 41.4 +1.4**
**WTTA Wattenberg 8.57 308**⇑ *i*Pn **Pn 00 36 41.2 +1.2**
SNR=61
**WTTA Wattenberg 8.57 308** Pn **Pn 00 36 41.2 +1.2**
SNR=61
**KIZT Kizilcal 8.58 111** *e*P **Pn 00 36 40.8 +0.7**
**WATA Walderalm 8.64 308**⇑ *i*Pn **Pn 00 36 41.8 +0.9**
SNR=79
**WATA Walderalm 8.64 308** Pn **Pn 00 36 41.8 +0.9**
SNR=79
**DPC Dobruska-Polom 8.71 337** *e*P **Pn 00 36 42.0 +0.1**
DPC *e* 00 38 17.7
DPC MLR MLR
comp=Z,800nm,8.9s
**DPC Dobruska-Polom 8.71 337** *e*Pn **Pn 00 36 43.5 +1.6**
**DPC Dobruska-Polom 8.71 337** *e*PN **Pn 00 36 42.0 +0.1**
DPC *ex* x 00 36 51.1
DPC *e*SN **Sn 00 38 17.7 -2.4**
DPC *ex* x 00 38 30.7
DPC AMS AMS 00 40 40.0
comp=Z,800nm,8.9s
**DPC Dobruska-Polom 8.71 337** Pn **Pn 00 36 42.0 +0.1**
DPC Sn **Sn 00 38 17.7 -2.4**
**KHC Kasperske Hory 8.73 323** *e*P **Pn 00 36 43.4 +1.3**
KHC pmax pmax
comp=Z,12nm,0.8s
**KHC Kasperske Hory 8.73 323** *e*Pn **Pn 00 36 43.3 +1.3**
**KHC Kasperske Hory 8.73 323** *e*PN **Pn 00 36 41.9 -0.2**
KHC *ex* x 00 36 52.2
KHC *e*SN **Sn 00 38 17.4 -3.0**
KHC *ex* x 00 38 36.7
KHC AMS AMS 00 40 20.0
comp=Z,1μm,9.9s
**KHC Kasperske Hory 8.73 323** *e*Pn **Pn 00 36 43.4 +1.3**
comp=Z,12nm,0.8s
**KHC Kasperske Hory 8.73 323** Pn **Pn 00 36 41.9 -0.2**
**KHC Kasperske Hory 8.73 323** *e*P **Pn 00 36 43.4 +1.3**
comp=Z,12nm,0.8s
**SUTC Sutluce-Ispart 8.75 121** *e*P **Pn 00 36 43.7 +1.3**
**GOPC GO Pecny, Ondr 8.85 330** *e*P **Pn 00 36 43.5 -0.1**
GOPC *e* 00 38 20.5
GOPC MLR MLR
comp=Z,800nm,9.2s
**GOPC GO Pecny, Ondr 8.85 330** *e*PN **Pn 00 36 43.5 -0.1**
GOPC *ex* x 00 36 53.4
GOPC *e*SN **Sn 00 38 20.5 -2.8**
GOPC *ex* x 00 38 35.5
GOPC AMS AMS 00 40 30.0
comp=Z,800nm,9.2s
**GOPC GO Pecny, Ondr 8.85 330** Pn **Pn 00 36 43.5 -0.1**
GOPC Sn **Sn 00 38 20.5 -2.8**
**MOTA Moosalm 8.92 307**⇑ *i*Pn **Pn 00 36 45.5 +0.7**
SNR=144
**MOTA Moosalm 8.92 307** Pn **Pn 00 36 45.5 +0.7**
SNR=144
**UPC Upice 8.95 336** *e*P **Pn 00 36 45.3 +0.3**
UPC *e* 00 38 22.4
UPC MLR MLR
comp=Z,900nm,11.0s
**UPC Upice 8.95 336** *e*PN **Pn 00 36 45.3 +0.3**
UPC *ex* x 00 36 49.9
UPC *e*SN **Sn 00 38 22.4 -3.3**
UPC *ex* x 00 38 37.8
UPC AMS AMS 00 40 40.0
comp=Z,900nm,11.0s
**UPC Upice 8.95 336** Pn **Pn 00 36 45.3 +0.3**
**FETA Feichten 8.99 304**⇓ *i*Pn **Pn 00 36 46.4 +0.6**
SNR=23
**FETA Feichten 8.99 304** Pn **Pn 00 36 46.4 +0.6**
SNR=23
**PRU Pruhonice 9.00 330** *e*P **Pn 00 36 45.1 -0.6**
PRU *e* 00 38 23.9
PRU MLR MLR
comp=Z,700nm,9.5s
**PRU Pruhonice 9.00 330** *e*PN **Pn 00 36 45.1 -0.6**
PRU *ex* x 00 36 53.6
PRU *e*SN **Sn 00 38 23.9 -3.1**
PRU *ex* x 00 38 36.9
PRU *ex* x 00 39 15.4
PRU AMS AMS 00 40 30.0
comp=Z,700nm,9.5s
**PRU Pruhonice 9.00 330** Pn **Pn 00 36 45.1 -0.6**
**WET Wettzell 9.06 321** *e*Pn **Pn 00 36 47.9 +1.4**
**PRA Prague 9.11 329** *e*P **Pn 00 36 46.4 -0.8**
PRA *e* 00 38 26.6
PRA MLR MLR
comp=Z,800nm,9.3s
**PRA Prague 9.11 329** *e*PN **Pn 00 36 46.4 -0.8**
PRA *ex* x 00 36 56.7
PRA *ex* x 00 37 01.2
PRA *e*SN **Sn 00 38 26.6 -3.0**
PRA *ex* x 00 38 40.6
PRA AMS AMS 00 40 40.0
comp=Z,800nm,9.3s
**PRA Prague 9.11 329** Pn **Pn 00 36 46.4 -0.8**
**KSP Ksiaz 9.17 338** *e*P **Pn 00 36 49.9 +1.9**
KSP *e*Sn Sn 00 38 42.6 +11
**KSP Ksiaz 9.17 338** *e*P **Pn 00 36 49.9 +1.9**
**KSP Ksiaz 9.17 338** *e*Pn **Pn 00 36 50.3 +2.3**
**KSP Ksiaz 9.17 338** *e*P **Pn 00 36 49.9 +1.9**
**AFSR Af'ar-Bala (A 9.18 105** *e*P **Pn 00 36 49.5 +1.2**
**RETA Reutte 9.19 307**⇑ *i*Pn **Pn 00 36 49.7 +1.2**
SNR=8.0
**RETA Reutte 9.19 307** Pn **Pn 00 36 49.7 +1.2**
SNR=8.0
**FUR Furstenfeldbru 9.26 312** *e*Pn **Pn 00 36 50.4 +1.1**
**PGF Pioggiola 9.31 275** *e*Pn Pn 00 36 46.6 -3.5
**PGF Pioggiola 9.31 275** *e*P Pn 00 36 46.6 -3.5
**PGF Pioggiola 9.31 275** *e*Pn Pn 00 36 46.6 -3.5
**PGF Pioggiola 9.31 275** *e*Pn Pn 00 36 46.6 -3.5
**KONT Konya--Tatoy 9.37 115** *e*P **Pn 00 36 50.7 -0.2**
**DAVOX Davos/Dischmat 9.42 301** Pn **Pn 00 36 51.3 -0.4**
comp=Z,1.2nm,0.3s,baz=107,slow=15,SNR=22
DAVOX Sn **Sn 00 38 37.6 0.0**
comp=Z,0.5nm,0.3s,baz=242,slow=17,SNR=1.8
DAVOX LR LR 00 41 06.9
comp=Z,655nm,18.9s,baz=94,slow=42
**DAVOX Davos/Dischmat 9.42 301** P **Pn 00 36 51.3 -0.4**
DAVOX 00 38 37.6
DAVOX pmax pmax
comp=Z,1.0nm,0.3s
DAVOX smax smax
comp=N,1.0nm,0.3s
DAVOX MLR MLR
comp=Z,655nm,18.9s
**BEL Belsk 9.42 357** *e*P Pn 00 37 00.2 +8.8
**BEL Belsk 9.42 357** *e*P Pn 00 37 00.3 +8.8
**PVCC Panska Ves 9.43 332** *e*P **Pn 00 36 52.4 +0.8**
PVCC MLR MLR
comp=Z,900nm,8.2s
**PVCC Panska Ves 9.43 332** *e*PN **Pn 00 36 52.4 +0.8**
PVCC *ex* x 00 36 56.4
PVCC AMS AMS 00 40 50.0
comp=Z,900nm,8.2s
**PVCC Panska Ves 9.43 332** Pn **Pn 00 36 52.4 +0.8**
**BRTR Keskin Array B 9.48 103** Pn **Pn 00 36 53.0 +0.4**
comp=Z,0.2nm,0.3s,baz=283,slow=13,SNR=7.2
BRTR Sn **Sn 00 38 38.4 -0.8**
comp=Z,0.1nm,0.3s,baz=291,slow=17,SNR=3.1
BRTR LR LR 00 40 20.4
comp=Z,121nm,19.5s,baz=292,slow=36
**BRTR Keskin Array B 9.48 103** *i*P **Pn 00 36 54.5 +2.0**
BRTR pmax pmax
comp=Z,1.0nm,0.5s
**BRTR Keskin Array B 9.48 103** Pn **Pn 00 36 53.0 +0.4**
**BRTR Keskin Array B 9.48 103** *i*P **Pn 00 36 54.5 +2.0**
comp=Z,1.0nm,0.5s
BRTR Sn **Sn 00 38 38.4 -0.8**
**DAVA Damuels 9.63 304**⇓ *i*Pn **Pn 00 36 55.8 +1.3**
SNR=8.4
**DAVA Damuels 9.63 304** Pn **Pn 00 36 55.8 +1.3**
SNR=8.4
**TUE Stuetta 9.65 299** *e*Pn **Pn 00 36 56.7 +1.9**
comp=Z,28nm,0.8s
**TUE Stuetta 9.65 299** *e*Pn **Pn 00 36 56.7 +1.9**
comp=Z,28nm,0.8s
**KAMT Kaman 9.67 104** *e*P **Pn 00 36 54.5 -0.5**
**KIEV Kiev 9.78 30** *e*P Pn 00 37 05.1 +8.8
**AKASG Malin Array Be 9.79 30** Pn **Pn 00 36 56.9 +0.4**
comp=Z,1.0nm,0.3s,baz=218,slow=13,SNR=7.3
AKASG Lg Lg 00 39 47.1
comp=Z,0.3nm,0.3s,baz=221,slow=25,SNR=4.7
**ROTZ Rotzenmuhle 9.81 322** *e*Pn **Pn 00 36 56.8 0.0**
**BRG Berggiesshubel 9.94 331** PN **Pn 00 37 00.6 +2.0**
BRG *i* 00 37 27.6
BRG *e* 00 37 57.2
comp=Z,17nm,1.0s
comp=N,445nm,8.4s
comp=E,318nm,10.7s
comp=Z,703nm,9.4s
**MANZ Manzenberg 10.01 322** *e*Pn **Pn 00 37 00.3 +0.7**
**NKC Novy Kostel 10.04 324** *e*P **Pn 00 36 59.8 -0.2**
NKC *e* 00 38 48.4
NKC MLR MLR
comp=Z,1μm,11.6s
**NKC Novy Kostel 10.04 324** *e*PN **Pn 00 36 59.8 -0.2**
NKC *ex* x 00 37 09.4
NKC *e*SN **Sn 00 38 48.4 -4.1**
NKC *ex* x 00 39 14.0
NKC AMS AMS 00 41 10.0
comp=Z,1μm,11.6s
**NKC Novy Kostel 10.04 324** Pn **Pn 00 36 59.8 -0.2**
**TANN Tannenbergstha 10.17 325** *e*Pn **Pn 00 37 04.4 +2.6**
**GRFO Grafenberg 10.22 319** *e*P **Pn 00 37 03.5 +1.0**
GRFO pmax pmax
comp=Z,25nm,0.9s
**GRFO Grafenberg 10.22 319** *e*Pn **Pn 00 37 03.5 +1.0**
comp=Z,25nm,0.9s
**GRFO Grafenberg 10.22 319** *e*P **Pn 00 37 03.5 +1.0**
comp=Z,25nm,0.9s
**SBF Sospel 10.45 283** *e*Pn Pn 00 37 02.0 -3.7
**SBF Sospel 10.45 283** *e*P Pn 00 37 02.0 -3.7
**SBF Sospel 10.45 283** *e*Pn Pn 00 37 02.0 -3.7
**SBF Sospel 10.45 283** *e*Pn Pn 00 37 02.0 -3.7
**CLL Collm 10.64 329** *e*P **Pn 00 37 08.0 -0.2**
**CLL Collm 10.64 329** *e*Pn **Pn 00 37 08.3 +0.1**
**CLL Collm 10.64 329** *e*Pn **Pn 00 37 08.0 -0.2**
CLL *i* 00 37 19.2
comp=Z,16nm,0.8s
CLL *e*Sn Sn 00 38 41.0 -26
CLL *e* 00 39 06.0
CLL *e*Sb 00 39 30.0
CLL *e*Sg 00 40 21.0
CLL Lmax 00 41 00.0
**CLL Collm 10.64 329** *e*P **Pn 00 37 08.0 -0.2**
**MOX Moxa 10.70 324** *e*Pn **Pn 00 37 09.9 +0.9**
**STU Stuttgart 10.75 310** *e*P **Pn 00 37 10.7 +1.0**
STU pmax pmax
comp=Z,29nm,0.6s
**STU Stuttgart 10.75 310** *e*Pn **Pn 00 37 11.0 +1.3**
**STU Stuttgart 10.75 310** *e*Pn **Pn 00 37 10.7 +1.0**
comp=Z,29nm,0.6s
**STU Stuttgart 10.75 310** *e*P **Pn 00 37 10.7 +1.0**
comp=Z,29nm,0.6s
**MBDF Montbardon 11.00 287** *e*Pn Pn 00 37 09.4 -3.9
**MBDF Montbardon 11.00 287** *e*P Pn 00 37 09.4 -3.9
**MBDF Montbardon 11.00 287** *e*Pn Pn 00 37 09.4 -3.9
**MBDF Montbardon 11.00 287** *e*Pn Pn 00 37 09.4 -3.9
**BFO Black Forest 11.03 307** *e*P **Pn 00 37 13.3 -0.3**
BFO pmax pmax
comp=Z,54nm,0.5s
**BFO Black Forest 11.03 307** *e*Pn **Pn 00 37 13.6 0.0**
**BFO Black Forest 11.03 307** *e*Pn **Pn 00 37 13.3 -0.3**
comp=Z,54nm,0.5s
**BFO Black Forest 11.03 307** *e*P **Pn 00 37 13.3 -0.3**
comp=Z,54nm,0.5s
**LMR La Mourre 11.11 280** *e*Pn Pn 00 37 10.9 -3.8
**LMR La Mourre 11.11 280** *e*P Pn 00 37 10.9 -3.8
**LMR La Mourre 11.11 280** *e*Pn Pn 00 37 10.9 -3.8
**LMR La Mourre 11.11 280** *e*Pn Pn 00 37 10.9 -3.8
**LPG La Plagne 11.13 291** *e*Pn Pn 00 37 11.5 -3.7
LPG *e*Sn Sn 00 39 09.3 -11
comp=Z,10nm,0.7s
**LPG La Plagne 11.13 291** *e*P Pn 00 37 11.5 -3.7
LPG *e* 00 39 09.3
**LPG La Plagne 11.13 291** *e*Pn Pn 00 37 11.5 -3.7
LPG *e*Sn Sn 00 39 09.3 -11
**LPG La Plagne 11.13 291** *e*Pn Pn 00 37 11.5 -3.7
LPG *e*Sn Sn 00 39 09.3 -11
comp=Z,5.2nm,0.7s
**LPL La Plagne 11.15 291** *e*Pn Pn 00 37 11.8 -3.6
LPL *e*Sn Sn 00 39 09.5 -11
comp=Z,73nm,1.1s
**LPL La Plagne 11.15 291** *e*P Pn 00 37 11.8 -3.6
LPL *e* 00 39 09.5
**LPL La Plagne 11.15 291** *e*Pn Pn 00 37 11.8 -3.6
LPL *e*Sn Sn 00 39 09.5 -11
**LPL La Plagne 11.15 291** *e*Pn Pn 00 37 11.8 -3.6
LPL *e*Sn Sn 00 39 09.5 -11
comp=Z,36nm,1.1s
**GKP Gorka Klasztor 11.23 346** *e*P **Pn 00 37 18.9 +2.8**
**GKP Gorka Klasztor 11.23 346** *e*P **Pn 00 37 19.0 +2.8**
**GKP Gorka Klasztor 11.23 346** *e*P **Pn 00 37 19.0 +2.8**
**SUW Suwalki 11.63 5** *e*P **Pn 00 37 23.0 +1.3**
SUW *e*S Sn 00 39 37.8 +6.3
**SUW Suwalki 11.63 5** *e*P **Pn 00 37 23.1 +1.3**
SUW *e*S Sn 00 39 37.8 +6.3
**SUW Suwalki 11.63 5** *e*P **Pn 00 37 23.1 +1.3**
**KEST Kesra 11.63 239** Pn **Pn 00 37 24.9 +2.9**
comp=Z,0.1nm,0.3s,baz=36,slow=17,SNR=3.0
**ORIF Oris-en-Rattie 11.65 288** *e*Pn Pn 00 37 18.3 -3.9
**ORIF Oris-en-Rattie 11.65 288** *e*P Pn 00 37 18.3 -3.9
**ORIF Oris-en-Rattie 11.65 288** *e*Pn Pn 00 37 18.3 -3.9
**ORIF Oris-en-Rattie 11.65 288** *e*Pn Pn 00 37 18.3 -3.9
**CDF Champ du Feu 11.70 306** *e*Pn Pn 00 37 18.9 -3.9
**CDF Champ du Feu 11.70 306** *e*P Pn 00 37 18.9 -3.9
**CDF Champ du Feu 11.70 306** *e*Pn Pn 00 37 18.9 -3.9
**CDF Champ du Feu 11.70 306** *e*Pn Pn 00 37 18.9 -3.9
**ANN Anapa 11.72 73** *e*P **Pn 00 37 25.5 +2.6**
ANN pmax pmax
comp=Z,160nm,1.0s
**ANN Anapa 11.72 73** *e*P **Pn 00 37 25.5 +2.6**
comp=Z,160nm,1.0s
**HINF Hinteralfeld 11.72 302** *e*Pn Pn 00 37 19.4 -3.6
**HINF Hinteralfeld 11.72 302** *e*P Pn 00 37 19.4 -3.6
**HINF Hinteralfeld 11.72 302** *e*Pn Pn 00 37 19.4 -3.6
**HINF Hinteralfeld 11.72 302** *e*Pn Pn 00 37 19.4 -3.6
**SMRF Simiane la Rot 11.80 283** *e*Pn Pn 00 37 20.4 -3.7
**SMRF Simiane la Rot 11.80 283** *e*Pn Pn 00 37 20.4 -3.7
**SMRF Simiane la Rot 11.80 283** *e*Pn Pn 00 37 20.4 -3.7
**CABF La Chapelle 11.83 296** *e*Pn Pn 00 37 20.8 -3.8
**CABF La Chapelle 11.83 296** *e*P Pn 00 37 20.8 -3.8
**CABF La Chapelle 11.83 296** *e*Pn Pn 00 37 20.8 -3.8
**CABF La Chapelle 11.83 296** *e*Pn Pn 00 37 20.8 -3.8
**TNS Taunus Mts 11.96 315** *e*Pn **Pn 00 37 27.7 +1.4**
**HAU Haudompre 12.11 303** *e*Pn Pn 00 37 24.5 -3.8
HAU *e*Sn Sn 00 39 32.1 -11
comp=Z,7.1nm,0.5s
**HAU Haudompre 12.11 303** *e*P Pn 00 37 24.5 -3.8
HAU *e* 00 39 32.1
**HAU Haudompre 12.11 303** *e*Pn Pn 00 37 24.5 -3.8
HAU *e*Sn Sn 00 39 32.1 -11
**VIVF Saint-Julien-l 12.50 287** *e*Pn Pn 00 37 29.9 -3.8
**VIVF Saint-Julien-l 12.50 287** *e*P Pn 00 37 29.9 -3.8
**VIVF Saint-Julien-l 12.50 287** *e*Pn Pn 00 37 29.9 -3.8
**VIVF Saint-Julien-l 12.50 287** *e*Pn Pn 00 37 29.9 -3.8
**PAGF Fort de Pagny 12.70 304** *e*Pn Pn 00 37 32.7 -3.6
baz=116
**PAGF Fort de Pagny 12.70 304** *e*Pn Pn 00 37 32.7 -3.6
**PAGF Fort de Pagny 12.70 304** *e*Pn Pn 00 37 32.7 -3.6
**WLF Walferdange 12.93 309** P **Pn 00 37 41.6 +2.2**
comp=Z,15nm,1.5s
**SFTF Sexfontaines 13.00 302** *e*Pn Pn 00 37 36.3 -4.1
**SFTF Sexfontaines 13.00 302** *e*Pn Pn 00 37 36.3 -4.1
**LASF Ste Croix 13.04 283** *e*Pn Pn 00 37 37.1 -4.0
**LASF Ste Croix 13.04 283** *e*Pn Pn 00 37 37.1 -4.0
**LASF Ste Croix 13.04 283** *e*Pn Pn 00 37 37.1 -4.0
**MEZF Maizieres J'vi 13.09 303** *e*Pn Pn 00 37 37.8 -3.9
baz=121
**MEZF Maizieres J'vi 13.09 303** *e*Pn Pn 00 37 37.8 -3.9
**MEZF Maizieres J'vi 13.09 303** *e*Pn Pn 00 37 37.8 -3.9
**SMF Signal de Mont 13.35 294** *e*Pn Pn 00 37 41.3 -3.9
SMF *e*Sn Sn 00 40 01.6 -12
comp=Z,3.9nm,0.6s
**SMF Signal de Mont 13.35 294** *e*P Pn 00 37 41.3 -3.9
SMF *e* 00 40 01.6
**SMF Signal de Mont 13.35 294** *e*Pn Pn 00 37 41.3 -3.9
SMF *e*Sn Sn 00 40 01.6 -12
**SMF Signal de Mont 13.35 294** *e*Pn Pn 00 37 41.3 -3.9
SMF *e*Sn Sn 00 40 01.6 -12
comp=Z,2.0nm,0.6s
**MEM Membach 13.48 313** P **Pn 00 37 49.0 +2.1**
comp=Z,10nm,1.0s
**LOR Lormes 13.48 297** *e*Pn Pn 00 37 43.1 -3.9
baz=117
LOR *e*Sn Sn 00 40 04.7 -12
comp=Z,7.7nm,0.7s
**LOR Lormes 13.48 297** *e*P Pn 00 37 43.1 -3.9
LOR *e* 00 40 04.7
**LOR Lormes 13.48 297** *e*Pn Pn 00 37 43.1 -3.9
LOR *e*Sn Sn 00 40 04.7 -12
**LOR Lormes 13.48 297** *e*Pn Pn 00 37 43.1 -3.9
LOR *e*Sn Sn 00 40 04.7 -12
comp=Z,3.8nm,0.7s
**SSF Saint Saulge 13.66 296** *e*Pn Pn 00 37 45.4 -4.1
SSF *e*Sn Sn 00 40 09.2 -12
comp=Z,5.6nm,0.8s
**SSF Saint Saulge 13.66 296** *e*P Pn 00 37 45.4 -4.1
SSF *e* 00 40 09.2
**SSF Saint Saulge 13.66 296** *e*Pn Pn 00 37 45.4 -4.1
SSF *e*Sn Sn 00 40 09.2 -12
**SSF Saint Saulge 13.66 296** *e*Pn Pn 00 37 45.4 -4.1
SSF *e*Sn Sn 00 40 09.2 -12
comp=Z,2.8nm,0.8s
**AVF Avril sur Loir 13.71 295** *e*Pn Pn 00 37 45.9 -4.2
**AVF Avril sur Loir 13.71 295** *e*P Pn 00 37 45.9 -4.2
**AVF Avril sur Loir 13.71 295** *e*Pn Pn 00 37 45.9 -4.2
**BCLA Clavier 13.77 311** P **Pn 00 37 53.1 +2.2**
**GIVF Givet 13.89 309** *e*Pn Pn 00 37 48.7 -3.9
**GIVF Givet 13.89 309** *e*P Pn 00 37 48.7 -3.9
**GIVF Givet 13.89 309** *e*Pn Pn 00 37 48.7 -3.9
**GIVF Givet 13.89 309** *e*Pn Pn 00 37 48.7 -3.9
**BGF Bois d'Agland 14.00 294** *e*Pn Pn 00 37 50.5 -3.6
**BGF Bois d'Agland 14.00 294** *e*P Pn 00 37 50.5 -3.6
**BGF Bois d'Agland 14.00 294** *e*Pn Pn 00 37 50.5 -3.6
**BGF Bois d'Agland 14.00 294** *e*Pn Pn 00 37 50.5 -3.6
**DOU Dourbes 14.02 309** P Pn 00 37 57.5 +3.2
**BAIF Baives 14.23 308** *e*Pn Pn 00 37 53.1 -4.1
**BAIF Baives 14.23 308** *e*P Pn 00 37 53.1 -4.1
**BAIF Baives 14.23 308** *e*Pn Pn 00 37 53.1 -4.1
**MTLF Montolieu 14.24 280** *e*Pn Pn 00 37 53.2 -4.3
**MTLF Montolieu 14.24 280** *e*P Pn 00 37 53.2 -4.3
**MTLF Montolieu 14.24 280** *e*Pn Pn 00 37 53.2 -4.3
**HYF Humbligny 14.28 296** *e*Pn Pn 00 37 54.1 -3.9
**HYF Humbligny 14.28 296** *e*Pn Pn 00 37 54.1 -3.9
**HYF Humbligny 14.28 296** *e*Pn Pn 00 37 54.1 -3.9
**CAF Calviac 14.36 287** *e*Pn Pn 00 37 54.7 -4.3
**CAF Calviac 14.36 287** *e*P Pn 00 37 54.7 -4.3
**CAF Calviac 14.36 287** *e*Pn Pn 00 37 54.7 -4.3
**CAF Calviac 14.36 287** *e*Pn Pn 00 37 54.7 -4.3
**RJF Les Rejaudoux 14.77 288** *e*Pn Pn 00 38 00.4 -4.2
**RJF Les Rejaudoux 14.77 288** *e*P Pn 00 38 00.4 -4.2
**RJF Les Rejaudoux 14.77 288** *e*Pn Pn 00 38 00.4 -4.2
**RJF Les Rejaudoux 14.77 288** *e*Pn Pn 00 38 00.4 -4.2
**VORD Divnogorie 14.81 49** *e*P **Pn 00 38 02.3 -2.8**
VORD pmax pmax
comp=N,9.0nm,0.6s
VORD pmax pmax
comp=E,20nm,0.6s
VORD pmax pmax
comp=Z,5.0nm,0.6s
**VSR Storozhevoye 14.86 48** *e*P Pn 00 38 02.5 -3.3
VSR pmax pmax
comp=N,8.0nm,0.9s
VSR pmax pmax
comp=E,5.0nm,0.9s
VSR pmax pmax
comp=Z,8.0nm,0.9s
**KIV Kislovodsk 15.45 77**⇑ *e*P **Pn 00 38 11.4 -2.4**
KIV pmax pmax
comp=Z,5.0nm,1.1s
KIV MLR MLR
comp=Z,59nm,16.0s
**LPSR Galich'ya Gora 15.46 43** *e*P **Pn 00 38 13.6 -0.2**
LPSR pmax pmax
comp=N,3.0nm,0.8s
LPSR pmax pmax
comp=E,10.0nm,0.8s
LPSR pmax pmax
comp=Z,20nm,0.8s
**KBZ Khabaz 15.61 78** Pn **P 00 38 19.9 -0.1**
comp=Z,0.1nm,0.3s,baz=267,slow=14,SNR=5.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KBZ | | | | LR | LR | 00 45 01.3 | |
| | comp=Z,33nm,18.9s,baz=297,slow=40 | | | | | | |
| **OBN** | **Obninsk** | **16.02** | **33** | Pn | **Pn** | **00 38 19.0** | **-2.1** |
| | comp=Z,1.6nm,0.3s,baz=156,slow=20,SNR=5.2 | | | | | | |
| OBN | | | | LR | LR | 00 45 55.8 | |
| | comp=Z,60nm,18.1s,baz=273,slow=42 | | | | | | |
| **OBN** | **Obninsk** | **16.02** | **33***d* | *i*P | **Pn** | **00 38 18.9** | **-2.1** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,58nm,13.0s | | | | | | |
| **OBN** | **Obninsk** | **16.02** | **33** | *e*Pn | **Pn** | **00 38 19.6** | **-1.4** |
| **OBN** | **Obninsk** | **16.02** | **33** | *e*Pn | **Pn** | **00 38 19.6** | **-1.4** |
| **MFF** | **Saint Martin d** | **16.05** | **292** | *e*Pn | **Pn** | **00 38 18.1** | **-3.3** |
| **MFF** | **Saint Martin d** | **16.05** | **292** | *e*P | **Pn** | **00 38 18.1** | **-3.3** |
| **MFF** | **Saint Martin d** | **16.05** | **292** | *e*Pn | **Pn** | **00 38 18.1** | **-3.3** |
| **MFF** | **Saint Martin d** | **16.05** | **292** | *e*Pn | **Pn** | **00 38 18.1** | **-3.3** |
| **NCK** | **Nalchik** | **16.13** | **79**⇑ | *e*P | **Pn** | **00 38 22.1** | **-0.5** |
| **VRH** | **Novokhopyorsk** | **16.28** | **51** | *e*P | **Pn** | **00 38 22.1** | **-2.3** |
| VRH | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,5.0nm,0.7s | | | | | | |
| **ETSF** | **Etsaut** | **16.30** | **279** | *e*Pn | **Pn** | **00 38 21.4** | **-3.4** |
| **ETSF** | **Etsaut** | **16.30** | **279** | *e*P | **Pn** | **00 38 21.4** | **-3.4** |
| **ETSF** | **Etsaut** | **16.30** | **279** | *e*Pn | **Pn** | **00 38 21.4** | **-3.4** |
| **ETSF** | **Etsaut** | **16.30** | **279** | *e*Pn | **Pn** | **00 38 21.4** | **-3.4** |
| **VSU** | **Vasula** | **16.37** | **10**⇑ | *e*P | **P** | **00 38 27.2** | **-1.1** |
| VSU | | | | pmax | pmax | | |
| | comp=Z,54nm,1.2s | | | | | | |
| **VSU** | **Vasula** | **16.37** | **10** | *e*P | **P** | **00 38 27.2** | **-1.1** |
| | comp=Z,54nm,1.2s | | | | | | |
| **LDF** | **La Druitiere** | **16.40** | **299** | *e*Pn | **Pn** | **00 38 23.0** | **-2.9** |
| **LDF** | **La Druitiere** | **16.40** | **299** | *e*P | **Pn** | **00 38 23.0** | **-2.9** |
| **LDF** | **La Druitiere** | **16.40** | **299** | *e*Pn | **Pn** | **00 38 23.0** | **-2.9** |
| **FLN** | **La Foliniere** | **16.67** | **300** | *e*Pn | **Pn** | **00 38 26.1** | **-3.2** |
| **FLN** | **La Foliniere** | **16.67** | **300** | *e*P | **Pn** | **00 38 26.1** | **-3.2** |
| **FLN** | **La Foliniere** | **16.67** | **300** | *e*Pn | **Pn** | **00 38 26.1** | **-3.2** |
| **FLN** | **La Foliniere** | **16.67** | **300** | *e*Pn | **Pn** | **00 38 26.1** | **-3.2** |
| **GRR** | **Gorron** | **16.83** | **298** | *e*Pn | **Pn** | **00 38 28.8** | **-2.5** |
| **GRR** | **Gorron** | **16.83** | **298** | *e*P | **Pn** | **00 38 28.8** | **-2.5** |
| **GRR** | **Gorron** | **16.83** | **298** | *e*Pn | **Pn** | **00 38 28.8** | **-2.5** |
| **GRR** | **Gorron** | **16.83** | **298** | *e*Pn | **Pn** | **00 38 28.8** | **-2.5** |
| **MOS** | **Moscow** | **16.89** | **32** | *e*P | **Pn** | **00 38 28.6** | **-3.5** |
| MOS | | | | pmax | pmax | | |
| | comp=Z,40nm,0.8s | | | | | | |
| **HFS** | **Hagfors** | **18.38** | **347** | Pn | **Pn** | **00 38 47.7** | **-2.7** |
| | comp=Z,0.2nm,0.3s,baz=144,slow=11,SNR=6.1 | | | | | | |
| **FINES** | **FINESS Array B** | **19.23** | **7** | P | **P** | **00 38 58.6** | **-1.2** |
| | comp=Z,0.3nm,0.3s,baz=185,slow=9.4,SNR=10.0 | | | | | | |
| FINES | | | | LR | LR | 00 47 05.6 | |
| | comp=Z,106nm,18.5s,baz=191,slow=39 | | | | | | |
| **ESDC** | **Sonseca Array** | **19.45** | **270** | P | **P** | **00 39 00.7** | **-1.8** |
| | comp=Z,0.2nm,0.3s,baz=66,slow=10,SNR=11 | | | | | | |
| **NB2** | **NORSAR Subarra** | **19.66** | **345** | P | **P** | **00 39 04.0** | **-0.6** |
| | comp=Z,14nm,1.0s,baz=156,slow=11 | | | | | | |
| **NB2** | **NORSAR Subarra** | **19.66** | **345** | P | **P** | **00 39 04.0** | **-0.6** |
| | comp=Z,14nm,1.0s,SNR=4.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **19.66** | **345** | P | **P** | **00 39 04.2** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=152,slow=11,SNR=15 | | | | | | |
| NOA | | | | LR | LR | 00 46 02.4 | |
| | comp=Z,61nm,22.0s,baz=160,slow=35 | | | | | | |
| **NOA** | **NORSAR Array B** | **19.66** | **345** | P | **P** | **00 39 04.3** | **-0.4** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| NOA | | | | MLR | MLR | | |
| | comp=Z,61nm,22.0s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **20.64** | **317** | P | **P** | **00 39 14.5** | **-0.7** |
| | comp=Z,13nm,0.7s,baz=113,slow=10,SNR=31 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **20.64** | **317** | P | **P** | **00 39 14.5** | **-0.7** |
| EKA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **ESK** | **Eskdalemuir** | **20.65** | **317** | *i* P | **P** | **00 39 15.8** | **+0.4** |
| **ESK** | **Eskdalemuir** | **20.65** | **317** | *i* P | **P** | **00 39 15.8** | **+0.4** |
| **PBRG** | **Braganca** | **21.00** | **278** | *e*P | **P** | **00 39 19.1** | **-0.2** |
| | comp=Z,54nm,2.3s | | | | | | |
| **MVO** | **Moncorvo** | **21.34** | **276** | *e*P | **P** | **00 39 24.1** | **+1.1** |
| | comp=Z,31nm,1.9s | | | | | | |
| **KLMR** | **Klimovskoe** | **21.40** | **24** | *e*P | **P** | **00 39 22.2** | **-1.2** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,54nm,1.1s | | | | | | |
| **KLMR** | **Klimovskoe** | **21.40** | **24** | *e*P | **P** | **00 39 22.2** | **-1.2** |
| | comp=Z,54nm,1.1s | | | | | | |
| **PCBR** | **Castelo Branco** | **22.01** | **273** | *e*P | **P** | **00 39 29.4** | **-0.7** |
| | comp=Z,44nm,1.7s | | | | | | |
| **PBAR** | **Barrancos** | **22.20** | **269** | *e*P | **P** | **00 39 33.1** | **+0.9** |
| | comp=Z,93nm,1.6s | | | | | | |
| **MDT** | **Midelt** | **22.80** | **254** | P | **P** | **00 39 37.3** | **-1.4** |
| | comp=Z,4.2nm,0.7s,baz=80,slow=11,SNR=4.8 | | | | | | |
| **EVO** | **Evora** | **22.80** | **270** | *e*P | **P** | **00 39 38.7** | **+0.1** |
| | comp=Z,42nm,1.8s | | | | | | |
| **PBEJ** | **Beja** | **22.87** | **269** | *e*P | **P** | **00 39 40.7** | **+1.4** |
| | comp=Z,39nm,1.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **22.98** | **267** | *e*P | **P** | **00 39 40.6** | **+0.2** |
| | comp=Z,84nm,1.7s | | | | | | |
| **PCVE** | **Castro Verde** | **23.13** | **268** | *e*P | **P** | **00 39 42.5** | **+0.5** |
| | comp=Z,56nm,2.1s | | | | | | |
| **MESJ** | **Messejana** | **23.19** | **269** | *e*P | **P** | **00 39 43.2** | **+0.6** |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **23.20** | **267** | *e*P | **P** | **00 39 43.1** | **+0.4** |
| | comp=Z,98nm,1.8s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **23.33** | **269** | *e*P | **P** | **00 39 43.9** | **-0.1** |
| | comp=Z,95nm,2.1s | | | | | | |
| **TMCR** | **Tamitsa** | **23.73** | **18** | *e*P | **P** | **00 39 45.7** | **-2.0** |
| TMCR | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **TMCR** | **Tamitsa** | **23.73** | **18** | *e*P | **P** | **00 39 45.7** | **-2.0** |
| | comp=Z,24nm,0.8s | | | | | | |
| **TAM** | **Tamanrasset** | **23.74** | **219** | *e*P | **P** | **00 39 50.0** | **+1.7** |
| TAM | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **TAM** | **Tamanrasset** | **23.74** | **219** | *e*P | **P** | **00 39 50.0** | **+1.7** |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **TAM** | **Tamanrasset** | **23.74** | **219** | *e*P | **P** | **00 39 50.0** | **+1.7** |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **AKTK** | **Aktyubinsk** | **26.13** | **60** | P | **P** | **00 40 09.3** | **-0.5** |
| | comp=Z,46nm,20.9s | | | | | | |
| **AKTO** | **Aktyubinsk** | **26.13** | **60** | P | **P** | **00 40 09.3** | **-0.4** |
| | comp=Z,3.2nm,0.7s,baz=272,slow=12,SNR=9.7 | | | | | | |
| AKTO | | | | LR | LR | 00 51 31.4 | |
| | comp=Z,46nm,20.9s,baz=261,slow=39 | | | | | | |
| **AKTO** | **Aktyubinsk** | **26.13** | **60** | P | **P** | **00 40 09.3** | **-0.4** |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| AKTO | | | | MLR | MLR | | |
| | comp=Z,46nm,20.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **27.24** | **3** | P | **P** | **00 40 18.0** | **-1.6** |
| | comp=Z,3.2nm,0.7s,baz=189,slow=6.1,SNR=10.0 | | | | | | |
| ARCES | | | | LR | LR | 00 50 26.8 | |
| | comp=Z,45nm,21.6s,baz=228,slow=35 | | | | | | |
| **ARCES** | **ARCESS Array B** | **27.24** | **3** | P | **P** | **00 40 18.0** | **-1.6** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| ARCES | | | | MLR | MLR | | |
| | comp=Z,45nm,21.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **27.34** | **62** | *e*P | **P** | **00 40 21.1** | **+0.4** |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **27.34** | **62** | *e*P | **P** | **00 40 21.1** | **+0.4** |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **ARU** | **Arti** | **27.42** | **46** | P | **P** | **00 40 21.1** | **-0.3** |
| | comp=Z,0.3nm,0.2s,baz=270,slow=20,SNR=3.5 | | | | | | |
| **ARU** | **Arti** | **27.42** | **46***c* | *i*P | **P** | **00 40 21.3** | **-0.1** |
| ARU | | | | | | 00 41 04.6 | |
| ARU | | | | S | **S** | **00 45 03.2** | **+1.8** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,21nm,1.7s | | | | | | |
| **ARU** | **Arti** | **27.42** | **46** | *e*P | **P** | **00 40 21.3** | **-0.1** |
| **ARU** | **Arti** | **27.42** | **46** | *i* P | **P** | **00 40 21.3** | **-0.1** |
| | comp=Z,21nm,1.7s | | | | | | |
| ARU | | | | S | **S** | **00 45 03.2** | **+1.8** |
| **GEYT** | **Alibeck** | **28.11** | **87** | P | **P** | **00 40 29.4** | **+1.6** |
| | comp=Z,2.5nm,0.7s,baz=272,slow=10,SNR=7.0 | | | | | | |
| **SVE** | **Sverdlovsk** | **28.63** | **46**⇓ | *i*P | **P** | **00 40 32.8** | **+0.6** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,16nm,1.5s | | | | | | |
| **SVE** | **Sverdlovsk** | **28.63** | **46** | *i* P | **P** | **00 40 32.8** | **+0.6** |
| | comp=Z,16nm,1.5s | | | | | | |
| **BRVK** | **Borovoye** | **33.80** | **55***d* | *i*P | **P** | **00 41 18.4** | **+0.8** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | |
| **BRVK** | **Borovoye** | **33.80** | **55** | *e*P | **P** | **00 41 18.2** | **+0.6** |
| | comp=Z,11nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **33.80** | **55** | *e*P | **P** | **00 41 18.2** | **+0.6** |
| | comp=Z,11nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **33.86** | **55** | P | **P** | **00 41 18.7** | **+0.5** |
| | comp=Z,4.7nm,0.7s,baz=274,slow=7.1,SNR=21 | | | | | | |
| **BVAR** | **Borovoye Array** | **33.86** | **55** | P | **P** | **00 41 18.7** | **+0.5** |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.90** | **216** | P | **P** | **00 41 19.1** | **+0.2** |
| | comp=Z,13nm,0.8s,baz=24,slow=5.8,SNR=59 | | | | | | |
| **KKAR** | **Karatay Array** | **35.50** | **72** | *e*P | **P** | **00 41 32.9** | **+0.4** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **KKAR** | **Karatay Array** | **35.50** | **72** | *e*P | **P** | **00 41 32.9** | **+0.4** |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **KKAR** | **Karatay Array** | **35.50** | **72** | *e*P | **P** | **00 41 32.9** | **+0.4** |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **38.44** | **71** | P | **P** | **00 41 59.3** | **+1.6** |
| | comp=Z,1.5nm,0.7s,baz=255,slow=7.8,SNR=6.0 | | | | | | |
| **AAK** | **Ala-Archa** | **38.44** | **71**⇓ | *e*P | **P** | **00 41 58.8** | **+1.1** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,16nm,1.6s | | | | | | |
| **AAK** | **Ala-Archa** | **38.44** | **71** | *e*P | **P** | **00 41 58.4** | **+0.7** |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **AAK** | **Ala-Archa** | **38.44** | **71** | *e*P | **P** | **00 41 58.4** | **+0.7** |
| | comp=Z,7.3nm,1.4s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **39.14** | **58** | P | **P** | **00 42 03.1** | **-0.1** |
| | comp=Z,0.9nm,0.2s,baz=292,slow=9.5,SNR=4.1 | | | | | | |
| **KURK** | **Kurchatov** | **39.18** | **58** | P | **P** | **00 42 03.1** | **-0.5** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **KURK** | **Kurchatov** | **39.18** | **58** | P | **P** | **00 42 03.1** | **-0.5** |
| **KURK** | **Kurchatov** | **39.18** | **58** | P | **P** | **00 42 03.1** | **-0.5** |
| | comp=Z,1.0nm,0.2s | | | | | | |
| **NVS** | **Novosibirsk** | **41.25** | **51** | *i* P | **P** | **00 42 21.4** | **+0.7** |
| **NVS** | **Novosibirsk** | **41.25** | **51** | *i* P | **P** | **00 42 21.4** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **42.32** | **52** | P | **P** | **00 42 29.7** | **+0.3** |
| | comp=Z,9.4nm,0.6s,baz=277,slow=8.8,SNR=44 | | | | | | |
| ZALV | | | | LR | LR | 01 02 12.8 | |
| | comp=Z,52nm,18.2s,baz=248,slow=39 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.32** | **52** | P | **P** | **00 42 29.7** | **+0.3** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| ZALV | | | | MLR | MLR | | |
| | comp=Z,52nm,18.2s | | | | | | |
| **MKAR** | **Makanchi Array** | **42.48** | **63** | P | **P** | **00 42 31.3** | **+0.3** |
| | comp=Z,2.5nm,0.7s,baz=284,slow=6.2,SNR=15 | | | | | | |
| MKAR | | | | PcP | **PcP** | **00 44 23.3** | **-0.3** |
| | comp=Z,1.0nm,0.9s,baz=336,slow=2.6,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.48** | **63** | P | **P** | **00 42 31.3** | **+0.3** |
| MKAR | | | | | | 00 44 23.3 | |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **DBIC** | **Dimbokro** | **42.62** | **221** | P | **P** | **00 42 31.6** | **-0.7** |
| | comp=Z,5.1nm,0.6s,baz=14,slow=10,SNR=12 | | | | | | |
| **DBIC** | **Dimbokro** | **42.62** | **221** | P | **P** | **00 42 31.6** | **-0.7** |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **HVS** | **Khovu-Aksy** | **48.28** | **53**⇑ | *e*P | **P** | **00 43 17.7** | **+0.8** |
| **HVS** | **Khovu-Aksy** | **48.28** | **53** | *e*P | **P** | **00 43 17.7** | **+0.8** |
| **SONM** | **Songino Array** | **57.18** | **53** | P | **P** | **00 44 23.3** | **+0.5** |
| | comp=Z,1.9nm,0.8s,baz=288,slow=8.8,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **57.18** | **53** | P | **P** | **00 44 23.3** | **+0.5** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **64.00** | **58** | *e*P | **P** | **00 45 09.8** | **+0.4** |
| HHC | | | | PP | **PP** | **00 47 32.2** | **+2.4** |
| HHC | | | | S | **S** | **00 53 44.6** | **-0.9** |
| HHC | | | | sS | **sS** | **00 53 53.2** | **+1.9** |
| HHC | | | | SS | **SS** | **00 57 54.9** | **+1.4** |
| HHC | | | | PMZ | | | |
| | comp=Z,86nm,4.0s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,120nm,17.3s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,150nm,18.5s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,130nm,13.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **68.56** | **84** | P | **P** | **00 45 40.5** | **+1.6** |
| | comp=Z,0.8nm,0.3s,baz=313,slow=7.0,SNR=5.4 | | | | | | |
| CMAR | | | | LR | LR | 01 24 08.0 | |
| | comp=Z,9.3nm,18.5s,baz=245,slow=43 | | | | | | |
| **BOSA** | **Boshof** | **70.78** | **177** | P | **P** | **00 45 55.0** | **+2.8** |
| | comp=Z,3.0nm,0.8s,baz=3.1,slow=6.5,SNR=8.2 | | | | | | |
| BOSA | | | | LR | LR | 01 18 53.5 | |
| | comp=Z,50nm,18.3s,baz=344,slow=38 | | | | | | |
| **BOSA** | **Boshof** | **70.78** | **177** | P | **P** | **00 45 55.0** | **+2.8** |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| BOSA | | | | MLR | MLR | | |
| | comp=Z,50nm,18.3s | | | | | | |
| **ILAR** | **Eielson Array** | **72.75** | **355** | P | **P** | **00 46 03.8** | **+0.2** |
| | comp=Z,0.3nm,0.7s,baz=8.5,slow=7.3,SNR=3.1 | | | | | | |
| **ULM** | **Lac du Bonnet** | **72.77** | **323** | P | **P** | **00 46 03.4** | **-0.6** |
| | comp=Z,5.8nm,0.9s,baz=9.2,slow=7.7,SNR=3.9 | | | | | | |
| **ULM** | **Lac du Bonnet** | **72.77** | **323** | P | **P** | **00 46 03.4** | **-0.6** |
| ULM | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **KSAR** | **Wonju Array Be** | **76.01** | **52** | P | **P** | **00 46 23.7** | **+0.6** |
| **KSAR** | **Wonju Array Be** | **76.01** | **52** | P | **P** | **00 46 23.6** | **+0.6** |
| **KSAR** | **Wonju Array Be** | **76.01** | **52** | P | **P** | **00 46 23.6** | **+0.5** |
| **KSRS** | **Korea Array** | **76.02** | **52** | P | **P** | **00 46 23.6** | **+0.5** |
| | comp=Z,1.2nm,0.6s,baz=314,slow=4.9,SNR=4.8 | | | | | | |
| KSRS | | | | LR | LR | 01 21 46.9 | |
| | comp=Z,18nm,19.8s,baz=285,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **76.02** | **52** | P | **P** | **00 46 23.7** | **+0.5** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,19nm,19.8s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **76.86** | **37** | *e*P | **P** | **00 46 27.1** | **-0.6** |
| **YSS** | **Yuzh-Sakhalins** | **76.86** | **37** | *e*P | **P** | **00 46 27.1** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **82.44** | **47** | P | **P** | **00 46 58.4** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=293,slow=4.0,SNR=3.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **82.44** | **47** | P | **P** | **00 46 58.4** | **+0.1** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.64** | **330** | P | **P** | **00 47 44.0** | **+0.6** |
| | comp=Z,0.2nm,0.6s,baz=41,slow=6.1,SNR=4.1 | | | | | | |
| NVAR | | | | LR | LR | 01 34 41.7 | |
| | comp=Z,92nm,18.5s,baz=232,slow=39 | | | | | | |
| **TXAR** | **Lajitas Array** | **92.61** | **314** | P | **P** | **00 47 47.4** | **-0.5** |
| | comp=Z,2.1nm,1.0s,baz=48,slow=2.7,SNR=9.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **92.61** | **314** | P | **P** | **00 47 47.4** | **-0.5** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **121.73** | **94** | PKP | **PKPdf** | **00 53 29.1** | **-0.9** |
| | comp=Z,1.2nm,0.7s,baz=338,slow=1.8,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **121.73** | **94** | PKIKP | **PKPdf** | **00 53 29.2** | **-0.9** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |

*DDA* ***11*** *00:52:22.7, 38°.81N×27°.85E, h7km, Md2.7*
*ISK* ***11*** *00:52:22.0, 38°.75N×27°.83E, h5km, MD2.8*
**CSEM 11 00:52:23.3**±0.2**, 38°.78N×27°.83E, h2km, MD2.8, Error ellipse: s-maj=4.7km s-min=3.7km az=83.0, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKS** | **Akhisar** | **0.10** | **353** | PG | Pg | 00 52 24.7 | -0.6 |
| **AKS** | **Akhisar** | **0.10** | **353** | *i* Pg | Pg | 00 52 24.7 | -0.6 |
| **IZM** | **Izmir** | **0.59** | **229** | *e*PG | Pg | 00 52 33.6 | -1.1 |
| IZM | | | | *e*SG | Sg | 00 52 43.7 | +1.4 |
| **IZM** | **Izmir** | **0.59** | **229** | *e*Pg | Pg | 00 52 33.6 | -1.1 |
| IZM | | | | *e*Sg | Sg | 00 52 43.7 | +1.4 |
| **MANT** | **Manisa** | **0.64** | **117** | *i* P | Pg | 00 52 35.4 | -0.5 |
| MANT | | | | *i* S | Sg | 00 52 44.3 | -0.2 |
| **MANT** | **Manisa** | **0.64** | **117** | P | Pg | 00 52 35.4 | -0.5 |
| MANT | | | | S | Sg | 00 52 44.3 | -0.2 |
| **KULA** | **Kula-Manisa** | **0.70** | **112** | *e*PG | Pg | 00 52 36.6 | -0.4 |
| **KULA** | **Kula-Manisa** | **0.70** | **112** | *e*Pg | Pg | 00 52 36.6 | -0.4 |
| **DEMI** | **Demirci** | **0.74** | **69** | *i* P | Pg | 00 52 36.8 | -0.8 |
| DEMI | | | | *i* S | Sg | 00 52 47.0 | -0.3 |
| **DEMI** | **Demirci** | **0.74** | **69** | P | Pg | 00 52 36.8 | -0.9 |
| DEMI | | | | S | Sg | 00 52 47.0 | -0.3 |
| **DKL** | **Dikili** | **0.78** | **292** | *e*PG | Pg | 00 52 37.9 | -0.3 |
| **DKL** | **Dikili** | **0.78** | **292** | *e*Pg | Pg | 00 52 37.9 | -0.3 |
| **AYDB** | **Zeytinkoy-Aydi** | **0.84** | **177** | *e*PG | Pg | 00 52 38.8 | -0.7 |
| AYDB | | | | *e*SG | Sg | 00 52 50.6 | +0.1 |
| **AYDB** | **Zeytinkoy-Aydi** | **0.84** | **177** | *e*Pg | Pg | 00 52 38.8 | -0.7 |
| AYDB | | | | *e*Sg | Sg | 00 52 50.6 | +0.1 |
| **BALB** | **Balikesir** | **0.86** | **3** | *e*PG | Pb | 00 52 40.7 | -0.2 |
| **BALB** | **Balikesir** | **0.86** | **3** | *e*Pg | Pb | 00 52 40.7 | -0.2 |
| **BALY** | **Balya** | **0.97** | **350** | *i* P | Pg | 00 52 40.9 | -1.1 |
| BALY | | | | *i* S | Sg | 00 52 54.3 | -0.4 |
| **BALY** | **Balya** | **0.97** | **350** | P | Pg | 00 52 40.9 | -1.1 |
| BALY | | | | S | Sg | 00 52 54.3 | -0.3 |
| **DST** | **Dursunbey** | **1.02** | **37** | *e*PG | Pb | 00 52 43.5 | -0.4 |
| **DST** | **Dursunbey** | **1.02** | **37** | *e*Pg | Pb | 00 52 43.5 | -0.4 |
| **AYDN** | **Tasoluk** | **1.12** | **178** | *i* P | Pn | 00 52 46.6 | +0.5 |
| AYDN | | | | *i* S | Sb | 00 53 01.2 | +0.6 |
| **AYDN** | **Tasoluk** | **1.12** | **178** | P | Pn | 00 52 46.6 | +0.5 |
| AYDN | | | | S | Sb | 00 53 01.1 | +0.5 |
| **KHAL** | **Karahalli** | **1.37** | **107** | *i* P | Pn | 00 52 49.3 | -0.3 |
| KHAL | | | | *i* S | Sg | 00 53 07.3 | -0.2 |
| **KHAL** | **Karahalli** | **1.37** | **107** | P | Pn | 00 52 49.3 | -0.3 |
| KHAL | | | | S | Sg | 00 53 07.3 | -0.3 |
| **EDC** | **Edincik** | **1.56** | **1** | *e*PN | Pb | 00 52 52.9 | -0.1 |
| **EDC** | **Edincik** | **1.56** | **1** | *e*Pn | Pb | 00 52 52.9 | -0.1 |
| **KRBG** | **Karabiga-Canak** | **1.66** | **346** | *e*PN | Pb | 00 52 54.3 | -0.3 |
| **KRBG** | **Karabiga-Canak** | **1.66** | **346** | *e*Pn | Pb | 00 52 54.3 | -0.3 |
| **BODT** | **Bodrum** | **1.77** | **194** | *e*PN | Pn | 00 52 53.8 | -1.1 |
| **BODT** | **Bodrum** | **1.77** | **194** | *e*Pn | Pn | 00 52 53.8 | -1.1 |

*ISCJB* ***11*** *00:53:39.6±1.7, 35°.21N±0°.03×37°.69E±0°.05, h14km±14km, Error ellipse: s-maj=7.1km s-min=4.4km az=19.4*
*CSEM* ***11*** *00:53:39.0±0.4, 35°.21N×37°.72E, h2km, MD3.3, Error ellipse: s-maj=9.0km s-min=5.6km az=113.0*
*NSSC* ***11*** *00:53:40.2±2.0, 35°.21N×37°.68E, h35km±8km, MD1.1, ML1.9*
*DDA* ***11*** *00:53:41.8, 35°.41N×37°.58E, h3km, Md2.8*
*ISK* ***11*** *00:53:43.6, 35°.37N×37°.49E, h5km, MD3.3*
**ISC 11 00:53:38.5**±1.4**, 35°.22N**±0°.05×**37°.73E**±0°.04**, h14**km±10km**, n31, σ1s.40**/43**, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KFRA** | **Kufra** | **0.76** | **270** | *e*P | **Pg** | **00 53 54.2** | **+1.0** |
| KFRA | | | | *e*S | **Sg** | **00 54 02.9** | **-0.3** |
| KFRA | | | | AML | AML | 00 54 05.4 | |
| | comp=N,37nm,0.8s | | | | | | |
| KFRA | | | | AML | AML | 00 54 08.7 | |
| | comp=E,116nm,0.2s | | | | | | |
| **KFRA** | **Kufra** | **0.76** | **270** | *e*P | **Pg** | **00 53 54.2** | **+1.0** |
| KFRA | | | | *e*S | **Sg** | **00 54 02.9** | **-0.3** |
| | comp=E,116nm,0.2s | | | | | | |
| **RABH** | **Abou Rabah** | **0.89** | **209** | *e*P | Pg | 00 53 56.9 | +1.2 |
| RABH | | | | *e*S | Sg | 00 54 07.4 | -0.1 |
| RABH | | | | AML | AML | 00 54 10.5 | |
| | comp=N,30nm,0.4s | | | | | | |
| RABH | | | | AML | AML | 00 54 12.0 | |
| | comp=E,25nm,0.2s | | | | | | |
| **RABH** | **Abou Rabah** | **0.89** | **209** | *e*P | Pg | 00 53 56.9 | +1.2 |
| RABH | | | | *e*S | Sg | 00 54 07.4 | -0.1 |
| | comp=E,25nm,0.2s | | | | | | |
| **SLMH** | **Al Salmeh** | **1.00** | **9** | *e*P | **Pg** | **00 53 58.5** | **+0.6** |
| SLMH | | | | *e*S | **Sb** | **00 54 10.7** | **0.0** |
| SLMH | | | | AML | AML | 00 54 13.9 | |
| | comp=N,47nm,0.8s | | | | | | |
| SLMH | | | | AML | AML | 00 54 15.1 | |
| | comp=E,27nm,0.3s | | | | | | |
| **SLMH** | **Al Salmeh** | **1.00** | **9** | *e*P | **Pg** | **00 53 58.5** | **+0.6** |
| SLMH | | | | *e*S | **Sb** | **00 54 10.7** | **0.0** |
| | comp=E,27nm,0.3s | | | | | | |
| **ROOS** | **tl_alroos** | **1.11** | **199** | *e*P | Pg | 00 54 00.2 | +0.3 |
| ROOS | | | | *e*S | Sg | 00 54 13.1 | -1.3 |
| ROOS | | | | AML | AML | 00 54 16.1 | |
| | comp=N,38nm,0.7s | | | | | | |
| ROOS | | | | AML | AML | 00 54 16.7 | |
| | comp=E,54nm,0.2s | | | | | | |
| **ROOS** | **tl_alroos** | **1.11** | **199** | *e*P | Pg | 00 54 00.2 | +0.3 |
| ROOS | | | | *e*S | Sg | 00 54 13.1 | -1.3 |
| | comp=E,55nm,0.2s | | | | | | |
| **BIDA** | **Albida** | **1.17** | **260** | *e*P | **Pg** | **00 54 01.1** | **+0.1** |
| BIDA | | | | *e*S | **Sg** | **00 54 14.3** | **-2.0** |
| BIDA | | | | AML | AML | 00 54 17.9 | |
| | comp=N,33nm,0.2s | | | | | | |
| BIDA | | | | AML | AML | 00 54 18.8 | |
| | comp=E,9.7nm,0.3s | | | | | | |
| **BIDA** | **Albida** | **1.17** | **260** | *e*P | **Pg** | **00 54 01.1** | **+0.1** |
| BIDA | | | | *e*S | **Sg** | **00 54 14.3** | **-2.0** |
| | comp=E,10.0nm,0.3s | | | | | | |
| **HAWK** | **Haweek** | **1.29** | **238** | *e*P | Pn | 00 54 02.6 | +0.6 |
| HAWK | | | | *e*S | Sb | 00 54 15.9 | -3.1 |
| HAWK | | | | AML | AML | 00 54 21.0 | |
| | comp=N,30nm,0.2s | | | | | | |
| HAWK | | | | AML | AML | 00 54 21.4 | |
| | comp=E,18nm,0.4s | | | | | | |
| **HAWK** | **Haweek** | **1.29** | **238** | *e*P | Pn | 00 54 02.7 | +0.6 |
| HAWK | | | | *e*S | Sb | 00 54 15.9 | -3.1 |
| | comp=E,18nm,0.4s | | | | | | |
| **BTCH** | **Batrach** | **1.31** | **309** | *e*P | **Pg** | **00 54 03.4** | **-0.4** |
| BTCH | | | | *e*S | **Sg** | **00 54 17.6** | **-3.3** |
| BTCH | | | | AML | AML | 00 54 23.3 | |
| | comp=E,65nm,0.5s | | | | | | |
| BTCH | | | | AML | AML | 00 54 24.6 | |
| | comp=N,56nm,0.4s | | | | | | |
| **BTCH** | **Batrach** | **1.31** | **309** | *e*P | **Pg** | **00 54 03.4** | **-0.4** |
| BTCH | | | | *e*S | **Sg** | **00 54 17.6** | **-3.3** |
| | comp=N,56nm,0.4s | | | | | | |
| **MNKR** | **ALMNKUR** | **1.45** | **60** | *e*P | Pn | 00 54 05.0 | +0.7 |
| MNKR | | | | *e*S | **Sb** | **00 54 21.9** | **-1.7** |
| MNKR | | | | AML | AML | 00 54 27.0 | |
| | comp=N,53nm,0.1s | | | | | | |
| MNKR | | | | AML | AML | 00 54 28.1 | |
| | comp=E,148nm,0.2s | | | | | | |
| **MNKR** | **ALMNKUR** | **1.45** | **60** | *e*P | Pn | 00 54 05.0 | +0.7 |
| MNKR | | | | *e*S | **Sb** | **00 54 21.9** | **-1.7** |
| | comp=E,148nm,0.2s | | | | | | |
| **YAYL** | **Yayladag** | **1.55** | **302** | *i* S | **Sb** | **00 54 27.0** | **+0.5** |
| **YAYL** | **Yayladag** | **1.55** | **302** | P | **Pn** | **00 54 05.6** | **-0.1** |
| YAYL | | | | S | **Sb** | **00 54 27.0** | **+0.5** |
| **ARNB** | **Al Arnab** | **1.56** | **295** | *e*P | **Pn** | **00 54 07.0** | **+1.1** |
| ARNB | | | | *e*S | **Sn** | **00 54 23.9** | **-2.1** |
| ARNB | | | | AML | AML | 00 54 30.1 | |
| | comp=N,12nm,0.2s | | | | | | |
| ARNB | | | | AML | AML | 00 54 31.3 | |
| | comp=E,33nm,0.3s | | | | | | |
| **ARNB** | **Al Arnab** | **1.56** | **295** | *e*P | **Pn** | **00 54 07.0** | **+1.1** |
| ARNB | | | | *e*S | **Sn** | **00 54 23.9** | **-2.1** |
| | comp=E,33nm,0.3s | | | | | | |
| **KUZU** | **Kuzuini** | **1.64** | **341** | *i* P | **Pn** | **00 54 08.7** | **+1.9** |
| KUZU | | | | *i* S | **Sb** | **00 54 29.3** | **+0.4** |
| **KUZU** | **Kuzuini** | **1.64** | **341** | P | **Pn** | **00 54 08.7** | **+1.9** |
| KUZU | | | | S | **Sb** | **00 54 29.3** | **+0.4** |
| **TAHT** | **Tahtakopru-Hat** | **1.70** | **313** | *e*PN | **Pb** | **00 54 11.2** | **+1.7** |
| TAHT | | | | *e*SN | **Sg** | **00 54 33.2** | **0.0** |
| **TAHT** | **Tahtakopru-Hat** | **1.70** | **313** | *e*Pn | **Pb** | **00 54 11.2** | **+1.7** |
| TAHT | | | | *e*Sn | **Sg** | **00 54 33.2** | **0.0** |
| **KAMA** | **Osmaniye** | **2.14** | **337** | P | **Pn** | **00 54 13.6** | **-0.2** |
| KAMA | | | | S | **Sg** | **00 54 45.1** | **-2.2** |
| **KMRS** | **Kahramanmaras** | **2.38** | **344** | *e*PN | **Pb** | **00 54 22.0** | **+1.0** |
| **KMRS** | **Kahramanmaras** | **2.38** | **344** | *e*Pn | **Pb** | **00 54 22.0** | **+1.0** |
| **URFA** | **Urfa** | **2.39** | **21** | *e*PN | **Pg** | **00 54 25.3** | **+1.1** |
| URFA | | | | *e*SN | **Sg** | **00 54 53.9** | **-1.3** |
| **URFA** | **Urfa** | **2.39** | **21** | *e*Pn | **Pg** | **00 54 25.3** | **+1.1** |
| URFA | | | | *e*Sn | **Sg** | **00 54 53.9** | **-1.3** |
| **SVRC** | **Sivrice-ELAZID** | **3.40** | **21** | *e*PN | **Pb** | **00 54 39.3** | **+0.8** |
| **SVRC** | **Sivrice-ELAZID** | **3.40** | **21** | *e*Pn | **Pb** | **00 54 39.3** | **+0.8** |

*IDC* ***11*** *00:59:50.6±1.1, 35°.23N×23°.43E, h0km, mb3.6/5, mb1 3.6/7, mb1mx3.3/47, mbtmp3.5/7, ML3.2/2, Error ellipse: s-maj=34.0km s-min=18.2km az=134.0*
*ISCJB* ***11*** *00:59:56.6±0.4, 35°.20N±0°.03×23°.32E±0°.03, h68km±5km, mb3.4/5, Error ellipse: s-maj=6.3km s-min=3.3km az=36.0*
*HLW* ***11*** *00:59:57.0, 35°.01N×23°.39E, h19km±11km, Md3.2*
*ATH* ***11*** *00:59:57.2, 35°.27N×23°.30E, h52km±3km, MD3.4/30, ML3.2*
*CSEM* ***11*** *00:59:57.4±0.2, 35°.17N×23°.32E, h49km±5km, MD3.4, Error ellipse: s-maj=4.4km s-min=2.1km az=40.0*
*THE* ***11*** *00:59:59.0, 35°.29N×23°.39E, h54km±2km, ML2.9/5, Error ellipse: s-maj=3.0km s-min=0.7km az=44.0*
**ISC 11 00:59:57.2**±0.9**, 35°.18N**±0°.03×**23°.29E**±0°.04**, h53**km±9km**, n164, σ0s.83**/208**, mb3.4**/5**, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IMMV** | **Iera Moni Meta** | **0.63** | **64** | *e*P | **Pn** | **01 00 09.6** | **-0.7** |
| IMMV | | | | *e*S | **Sn** | **01 00 20.1** | **+0.4** |
| **IMMV** | **Iera Moni Meta** | **0.63** | **64** | *e*P | **Pn** | **01 00 09.6** | **-0.7** |
| IMMV | | | | *e*S | **Sn** | **01 00 20.1** | **+0.4** |
| **ANKY** | **Antikythira Is** | **0.69** | **1** | *e*P | **Pn** | **01 00 11.2** | **+0.3** |
| ANKY | | | | *e*S | **Sn** | **01 00 20.3** | **-0.5** |
| **ANKY** | **Antikythira Is** | **0.69** | **1** | P | **Pn** | **01 00 10.8** | **-0.1** |
| ANKY | | | | S | **Sn** | **01 00 20.3** | **-0.5** |
| **ANKY** | **Antikythira Is** | **0.69** | **1** | *e*P | **Pn** | **01 00 11.2** | **+0.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ANKY | | | | eS | Sn | 01 00 20.3 | -0.5 |
| VAM | Vamos | 0.78 | 73 | eP | Pn | 01 00 12.3 | +0.2 |
| VAM | | | | eS | Sn | 01 00 23.0 | 0.0 |
| VAM | Vamos | 0.78 | 73 | P | Pn | 01 00 12.0 | -0.1 |
| VAM | | | | S | Sn | 01 00 22.5 | -0.5 |
| VAM | Vamos | 0.78 | 73 | eP | Pn | 01 00 12.3 | +0.2 |
| VAM | | | | S | Sn | 01 00 22.5 | -0.5 |
| KYTH | Kithira | 1.12 | 350 | eP | Pn | 01 00 16.6 | 0.0 |
| KYTH | Kithira | 1.12 | 350 | P | Pn | 01 00 17.5 | +0.9 |
| KYTH | Kithira | 1.12 | 350 | eP | Pn | 01 00 16.6 | 0.0 |
| SIVA | Sivas | 1.26 | 97 | eP | Pn | 01 00 19.3 | +0.8 |
| SIVA | | | | eS | Sn | 01 00 36.2 | +1.8 |
| SIVA | Sivas | 1.26 | 97 | P | Pn | 01 00 18.8 | +0.3 |
| SIVA | Sivas | 1.26 | 97 | P | Pn | 01 00 18.8 | +0.3 |
| SIVA | | | | eS | Sn | 01 00 36.2 | +1.8 |
| IDI | Anoyia | 1.32 | 85 | eP | Pn | 01 00 20.0 | +0.6 |
| IDI | | | | eS | Sn | 01 00 36.9 | +1.0 |
| IDI | Anoyia | 1.32 | 85 | P | Pn | 01 00 19.9 | +0.6 |
| IDI | | | | S | Sn | 01 00 35.4 | -0.5 |
| IDI | Anoyia | 1.32 | 85 | P | Pn | 01 00 19.9 | +0.6 |
| IDI | | | | S | Sn | 01 00 35.4 | -0.5 |
| IACM | Heraklion | 1.47 | 85 | eP | Pn | 01 00 22.7 | +1.4 |
| IACM | | | | eS | Sn | 01 00 40.0 | +0.6 |
| IACM | Heraklion | 1.47 | 85 | eP | Pn | 01 00 22.7 | +1.4 |
| IACM | | | | eS | Sn | 01 00 40.0 | +0.6 |
| VLI | Veliai | 1.56 | 350 | eP | Pn | 01 00 22.7 | +0.1 |
| VLI | | | | eS | Sn | 01 00 41.7 | 0.0 |
| VLI | Veliai | 1.56 | 350 | P | Pn | 01 00 23.8 | +1.2 |
| VLI | | | | S | Sn | 01 00 42.1 | +0.4 |
| VLI | Veliai | 1.56 | 350 | eP | Pn | 01 00 22.7 | +0.1 |
| VLI | | | | eS | Sn | 01 00 41.7 | 0.0 |
| MHLO | Agia Marina, M | 1.76 | 31 | eP | Pn | 01 00 25.0 | -0.3 |
| MHLO | | | | eS | Sn | 01 00 46.5 | 0.0 |
| MHLO | Agia Marina, M | 1.76 | 31 | P | Pn | 01 00 24.9 | -0.3 |
| MHLO | | | | S | Sn | 01 00 45.6 | -0.9 |
| MHLO | Agia Marina, M | 1.76 | 31 | eP | Pn | 01 00 25.0 | -0.3 |
| MHLO | | | | S | Sn | 01 00 45.6 | -0.9 |
| LAST | Lasithi | 1.80 | 90 | eP | Pn | 01 00 27.0 | +1.1 |
| LAST | | | | eS | Sn | 01 00 49.2 | +1.6 |
| LAST | Lasithi | 1.80 | 90 | P | Pn | 01 00 26.6 | +0.7 |
| LAST | | | | S | Sn | 01 00 47.9 | +0.3 |
| LAST | Lasithi | 1.80 | 90 | P | Pn | 01 00 26.6 | +0.7 |
| LAST | | | | S | Sn | 01 00 47.9 | +0.3 |
| NPS | Neapolis | 1.91 | 87 | eP | Pn | 01 00 28.8 | +1.5 |
| NPS | | | | eS | Sn | 01 00 51.1 | +0.9 |
| NPS | Neapolis | 1.91 | 87 | eP | Pn | 01 00 28.8 | +1.5 |
| NPS | | | | eS | Sn | 01 00 51.1 | +0.9 |
| THR6 | Thira Island, | 2.08 | 55 | P | Pn | 01 00 29.5 | -0.2 |
| THR6 | Thira Island, | 2.08 | 55 | P | Pn | 01 00 29.5 | -0.2 |
| THR5 | Thira Island, | 2.08 | 53 | P | Pn | 01 00 29.5 | -0.2 |
| THR5 | Thira Island, | 2.08 | 53 | P | Pn | 01 00 29.5 | -0.2 |
| THR3 | Thira Island, | 2.11 | 54 | P | Pn | 01 00 29.6 | -0.5 |
| THR3 | Thira Island, | 2.11 | 54 | P | Pn | 01 00 29.6 | -0.5 |
| PYL | PYLOS | 2.12 | 324 | eP | Pn | 01 00 30.0 | -0.2 |
| PYL | | | | eS | Sn | 01 00 55.0 | -0.4 |
| PYL | PYLOS | 2.12 | 324 | P | Pn | 01 00 30.2 | 0.0 |
| PYL | PYLOS | 2.12 | 324 | P | Pn | 01 00 30.2 | 0.0 |
| PYL | | | | eS | Sn | 01 00 55.0 | -0.4 |
| SANT | Santorini | 2.13 | 55 | eP | Pn | 01 00 30.1 | -0.3 |
| SANT | | | | eS | Sn | 01 00 55.2 | -0.5 |
| SANT | Santorini | 2.13 | 55 | eP | Pn | 01 00 30.1 | -0.3 |
| SANT | | | | eS | Sn | 01 00 55.2 | -0.5 |
| KRND | KRANIDI | 2.20 | 357 | eP | Pn | 01 00 31.6 | +0.3 |
| KRND | | | | eS | Sn | 01 00 57.0 | -0.4 |
| KRND | KRANIDI | 2.20 | 357 | P | Pn | 01 00 31.8 | +0.5 |
| KRND | KRANIDI | 2.20 | 357 | eP | Pn | 01 00 31.6 | +0.3 |
| KRND | | | | eS | Sn | 01 00 57.0 | -0.4 |
| SERI | Serifos | 2.20 | 26 | eP | Pn | 01 00 30.6 | -0.8 |
| SERI | | | | eS | Sn | 01 00 57.0 | -0.4 |
| SERI | Serifos | 2.20 | 26 | eP | Pn | 01 00 30.6 | -0.8 |
| SERI | | | | eS | Sn | 01 00 57.0 | -0.4 |
| ITM | Ithomi | 2.28 | 332 | eP | Pn | 01 00 32.7 | +0.4 |
| ITM | Ithomi | 2.28 | 332 | P | Pn | 01 00 32.8 | +0.4 |
| ITM | Ithomi | 2.28 | 332 | P | Pn | 01 00 32.8 | +0.4 |
| DIDY | Didyma | 2.29 | 359 | eP | Pn | 01 00 33.1 | +0.4 |
| DIDY | Didyma | 2.29 | 359 | P | Pn | 01 00 33.1 | +0.4 |
| DIDY | Didyma | 2.29 | 359 | eP | Pn | 01 00 33.1 | +0.4 |
| VLX | Vlachokerasia | 2.31 | 342 | eP | Pn | 01 00 33.2 | +0.3 |
| VLX | Vlachokerasia | 2.31 | 342 | eP | Pn | 01 00 33.2 | +0.3 |
| DID | Didima | 2.32 | 359 | eP | Pn | 01 00 33.0 | 0.0 |
| DID | Didima | 2.32 | 359 | P | Pn | 01 00 32.7 | -0.3 |
| DID | | | | S | Sn | 01 00 59.9 | -0.5 |
| DID | Didima | 2.32 | 359 | eP | Pn | 01 00 33.0 | 0.0 |
| DID | | | | S | Sn | 01 00 59.9 | -0.5 |
| ZKR | Zakros | 2.40 | 91 | eP | Pn | 01 00 35.6 | +1.5 |
| ZKR | Zakros | 2.40 | 91 | P | Pn | 01 00 35.2 | +1.1 |
| ZKR | Zakros | 2.40 | 91 | P | Pn | 01 00 35.2 | +1.1 |
| NAIG | Nisos Aigina | 2.58 | 4 | eP | Pn | 01 00 37.1 | +0.6 |
| NAIG | Nisos Aigina | 2.58 | 4 | eP | Pn | 01 00 37.1 | +0.6 |
| APE | Apeiranthos | 2.62 | 43 | eP | Pn | 01 00 37.2 | +0.1 |
| APE | Apeiranthos | 2.62 | 43 | P | Pn | 01 00 36.2 | -0.9 |
| APE | | | | S | Sn | 01 01 06.4 | -1.3 |
| APE | Apeiranthos | 2.62 | 43 | eP | Pn | 01 00 37.2 | +0.1 |
| APE | | | | S | Sn | 01 01 06.4 | -1.3 |
| AMT | Artemida-Makis | 2.67 | 332 | eP | Pn | 01 00 38.6 | +0.8 |
| AMT | Artemida-Makis | 2.67 | 332 | P | Pn | 01 00 39.1 | +1.3 |
| AMT | Artemida-Makis | 2.67 | 332 | eP | Pn | 01 00 38.6 | +0.8 |
| VLY | Voula,Athens | 2.70 | 9 | eP | Pn | 01 00 38.7 | +0.6 |
| VLY | Voula,Athens | 2.70 | 9 | P | Pn | 01 00 38.7 | +0.6 |
| VLY | Voula,Athens | 2.70 | 9 | eP | Pn | 01 00 38.7 | +0.6 |
| ATH | Athens Observa | 2.81 | 7 | eP | Pn | 01 00 40.3 | +0.7 |
| ATH | Athens Observa | 2.81 | 7 | eP | Pn | 01 00 40.3 | +0.7 |
| LTK | Loutraki | 2.85 | 355 | eP | Pn | 01 00 40.9 | +0.7 |
| LTK | Loutraki | 2.85 | 355 | P | Pn | 01 00 40.6 | +0.4 |
| LTK | Loutraki | 2.85 | 355 | P | Pn | 01 00 40.6 | +0.4 |
| GUR | Goura | 2.85 | 345 | eP | Pn | 01 00 41.6 | +1.2 |
| GUR | Goura | 2.85 | 345 | P | Pn | 01 00 41.2 | +0.8 |
| GUR | Goura | 2.85 | 345 | P | Pn | 01 00 41.2 | +0.8 |
| PTL | Penteli | 2.90 | 9 | eP | Pn | 01 00 41.2 | +0.3 |
| PTL | Penteli | 2.90 | 9 | P | Pn | 01 00 40.8 | -0.1 |
| PTL | Penteli | 2.90 | 9 | eP | Pn | 01 00 41.2 | +0.3 |
| VILL | Villia | 2.98 | 0 | eP | Pn | 01 00 42.1 | +0.1 |
| KARY | Karystos | 2.99 | 18 | P | Pn | 01 00 41.6 | -0.6 |
| KLV | Kalavryta, Ach | 3.00 | 343 | eP | Pn | 01 00 43.1 | +0.8 |
| KLV | Kalavryta, Ach | 3.00 | 343 | P | Pn | 01 00 42.9 | +0.6 |
| KLV | Kalavryta, Ach | 3.00 | 343 | P | Pn | 01 00 42.9 | +0.6 |
| VIL2 | Platees | 3.03 | 360 | eP | Pn | 01 00 42.1 | -0.5 |
| DRO | Drossia | 3.04 | 336 | eP | Pn | 01 00 44.5 | +1.6 |
| DRO | Drossia | 3.04 | 336 | P | Pn | 01 00 43.7 | +0.8 |
| DRO | Drossia | 3.04 | 336 | P | Pn | 01 00 43.7 | +0.8 |
| KARP | Karpathos | 3.19 | 82 | eP | Pn | 01 00 45.8 | +0.9 |
| KARP | Karpathos | 3.19 | 82 | P | Pn | 01 00 44.8 | -0.1 |
| KARP | | | | S | Sn | 01 01 22.1 | +0.4 |
| KARP | Karpathos | 3.19 | 82 | P | Pn | 01 00 44.8 | -0.1 |
| KARP | | | | S | Sn | 01 01 22.1 | +0.4 |
| RLS | Riolos of Patr | 3.22 | 334 | eP | Pn | 01 00 46.0 | +0.7 |
| RLS | Riolos of Patr | 3.22 | 334 | eP | Pn | 01 00 46.0 | +0.7 |
| LAKA | Lakka | 3.23 | 341 | P | Pn | 01 00 46.3 | +0.9 |
| LAKA | Lakka | 3.23 | 341 | P | Pn | 01 00 46.3 | +0.9 |
| EREA | Eretria | 3.27 | 9 | eP | Pn | 01 00 46.5 | +0.4 |
| EREA | Eretria | 3.27 | 9 | P | Pn | 01 00 46.5 | +0.4 |
| EREA | Eretria | 3.27 | 9 | eP | Pn | 01 00 46.5 | +0.4 |
| DSF | Desfina | 3.28 | 350 | eP | Pn | 01 00 47.0 | +0.8 |
| DSF | Desfina | 3.28 | 350 | P | Pn | 01 00 46.5 | +0.3 |
| DSF | Desfina | 3.28 | 350 | P | Pn | 01 00 46.5 | +0.3 |
| KALE | Kalithea | 3.33 | 344 | eP | Pn | 01 00 47.4 | +0.5 |
| KALE | Kalithea | 3.33 | 344 | P | Pn | 01 00 47.2 | +0.3 |
| KALE | Kalithea | 3.33 | 344 | eP | Pn | 01 00 47.4 | +0.5 |
| SERG | Sergoula | 3.37 | 343 | P | Pn | 01 00 48.7 | +1.3 |
| SERG | Sergoula | 3.37 | 343 | P | Pn | 01 00 48.7 | +1.3 |
| EFP | Efpalio | 3.42 | 342 | eP | Pn | 01 00 49.8 | +1.7 |
| EFP | Efpalio | 3.42 | 342 | eP | Pn | 01 00 49.8 | +1.7 |
| LKR | Lokris | 3.47 | 356 | eP | Pn | 01 00 49.5 | +0.8 |
| LKR | Lokris | 3.47 | 356 | P | Pn | 01 00 48.7 | 0.0 |
| LKR | Lokris | 3.47 | 356 | eP | Pn | 01 00 49.5 | +0.8 |
| AXAR | Agios Charalam | 3.61 | 352 | eP | Pn | 01 00 51.7 | +1.0 |
| AXAR | Agios Charalam | 3.61 | 352 | P | Pn | 01 00 52.1 | +1.4 |
| AXAR | Agios Charalam | 3.61 | 352 | eP | Pn | 01 00 51.7 | +1.0 |
| PVO | Paravola | 3.71 | 338 | P | Pn | 01 00 52.7 | +0.7 |
| PVO | Paravola | 3.71 | 338 | P | Pn | 01 00 52.7 | +0.7 |
| BODT | Bodrum | 3.76 | 59 | ePN | Pn | 01 00 52.4 | -0.3 |
| BODT | Bodrum | 3.76 | 59 | ePn | Pn | 01 00 52.4 | -0.3 |
| PDO | Prodromos | 3.81 | 334 | P | Pn | 01 00 55.2 | +1.9 |
| PDO | Prodromos | 3.81 | 334 | P | Pn | 01 00 55.2 | +1.9 |
| SMG | Samos | 3.82 | 48 | eP | Pn | 01 00 53.8 | +0.3 |
| SMG | Samos | 3.82 | 48 | P | Pn | 01 00 52.6 | -0.9 |
| SMG | Samos | 3.82 | 48 | eP | Pn | 01 00 53.8 | +0.3 |
| AGG | Agios Georgios | 3.91 | 349 | eP | Pn | 01 00 55.7 | +0.9 |
| AGG | Agios Georgios | 3.91 | 349 | P | Pn | 01 00 55.3 | +0.5 |
| AGG | Agios Georgios | 3.91 | 349 | P | Pn | 01 00 55.3 | +0.5 |
| EVR | Evrytania | 3.91 | 343 | eP | Pn | 01 00 56.0 | +1.1 |
| EVR | Evrytania | 3.91 | 343 | eP | Pn | 01 00 56.0 | +1.1 |
| MAKR | Makrakomi, Fth | 3.94 | 347 | eP | Pn | 01 00 56.3 | +1.2 |
| MAKR | Makrakomi, Fth | 3.94 | 347 | eP | Pn | 01 00 56.3 | +1.2 |
| SLUM | | 4.02 | 156 | P | Pn | 01 00 55.3 | -0.9 |
| | baz=156 | | | | | | |
| SLUM | | | | S | Sn | 01 01 39.6 | -2.4 |
| | baz=156 | | | | | | |
| SLUM | | 4.02 | 156 | P | Pn | 01 00 55.3 | -0.9 |
| SLUM | | | | S | Sn | 01 01 39.6 | -2.4 |
| ARG | Arkhangelos | 4.07 | 74 | P | Pn | 01 00 56.9 | -0.1 |
| ARG | Arkhangelos | 4.07 | 74 | P | Pn | 01 00 56.9 | -0.1 |
| DSL | Palaion Diasel | 4.32 | 337 | eP | Pn | 01 01 01.1 | +0.8 |
| DSL | Palaion Diasel | 4.32 | 337 | eP | Pn | 01 01 01.1 | +0.8 |
| YER | Yerkesik | 4.49 | 63 | ePN | Pn | 01 01 01.4 | -1.4 |
| YER | Yerkesik | 4.49 | 63 | ePn | Pn | 01 01 01.4 | -1.4 |
| THL | Klokotos Trika | 4.49 | 347 | eP | Pn | 01 01 03.1 | +0.4 |
| THL | Klokotos Trika | 4.49 | 347 | eP | Pn | 01 01 03.1 | +0.4 |
| AYDB | Zeytinkoy-Aydi | 4.62 | 52 | ePN | Pn | 01 01 04.9 | +0.3 |
| AYDB | Zeytinkoy-Aydi | 4.62 | 52 | ePn | Pn | 01 01 04.9 | +0.3 |
| DALY | Dalyan (Mu˜la | 4.65 | 68 | ePN | Pn | 01 01 04.1 | -0.7 |
| DALY | Dalyan (Mu˜la | 4.65 | 68 | ePn | Pn | 01 01 04.1 | -0.7 |
| FETY | Fethiye | 4.92 | 71 | eP | Pn | 01 01 08.3 | -0.4 |
| FETY | Fethiye | 4.92 | 71 | eP | Pn | 01 01 08.3 | -0.4 |
| HMAT | Matruh | 5.18 | 141 | P | Pn | 01 01 11.6 | -0.6 |
| | baz=140 | | | | | | |
| HMAT | | | | S | Sn | 01 02 08.1 | -2.5 |
| | baz=140 | | | | | | |
| HMAT | Matruh | 5.18 | 141 | P | Pn | 01 01 11.6 | -0.6 |
| HMAT | | | | S | Sn | 01 02 08.1 | -2.5 |
| NEST | Nestorio | 5.52 | 342 | eP | Pn | 01 01 17.5 | +0.6 |
| NEST | Nestorio | 5.52 | 342 | eP | Pn | 01 01 17.5 | +0.6 |
| ELL | Elmali | 5.59 | 72 | eP | Pn | 01 01 17.7 | -0.2 |
| ELL | Elmali | 5.59 | 72 | eP | Pn | 01 01 17.7 | -0.2 |
| SWA2 | | 6.20 | 162 | P | Pn | 01 01 25.6 | -0.6 |
| | baz=162 | | | | | | |
| SWA2 | | 6.20 | 162 | P | Pn | 01 01 25.6 | -0.6 |
| BRTR | Keskin Array B | 9.40 | 58 | Pn | Pn | 01 02 09.5 | -0.6 |
| | 0.0nm,0.3s,baz=239,slow=12,SNR=4.5 | | | | | | |
| GERES | GERESS Array B | 15.38 | 336 | Pn | Pn | 01 03 31.0 | +0.2 |
| | 0.1nm,0.3s,baz=153,slow=15,SNR=2.7 | | | | | | |
| HFS | Hagfors | 25.73 | 349 | P | P | 01 05 21.6 | -0.9 |
| | 1.1nm,0.7s,baz=150,slow=15,SNR=2.8 | | | | | | |
| TORD | Torodi Ar. Bea | 29.35 | 227 | P | P | 01 05 56.6 | +1.4 |
| | 0.4nm,0.5s,baz=31,slow=9.0,SNR=22 | | | | | | |
| DBIC | Dimbokro | 38.40 | 229 | P | P | 01 07 14.6 | +1.0 |
| | 2.4nm,0.6s,baz=29,slow=11,SNR=3.9 | | | | | | |
| KURBB | Kurchatov Arra | 42.30 | 51 | P | P | 01 07 44.5 | -1.0 |
| | 0.1nm,0.3s,baz=277,slow=8.3,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 45.04 | 56 | P | P | 01 08 06.6 | -1.1 |
| | 0.2nm,0.3s,baz=268,slow=7.7,SNR=6.5 | | | | | | |

**WEL 11 01:06:01.4**±0.5**,39°.14S**×**175°.02E,h230**km±3km**,ML3.8**/12**, 6C-1D,Error ellipse: s-maj=4.3km s-min=3.1km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WHVZ | Whangaehu Hut | 0.46 | 108 | PN | Pn | 01 06 31.7 | -0.4 |
| WNVZ | Wahianoa | 0.48 | 113 | PN | Pn | 01 06 31.6 | -0.4 |
| WNVZ | | | | SN | S | 01 06 55.2 | -0.8 |
| WAZ | Wanganui | 0.62 | 183 | ⇑PN | Pn | 01 06 32.6 | +0.3 |
| MOVZ | Moawhango | 0.63 | 116 | ⇑PN | Pn | 01 06 31.9 | -0.6 |
| MOVZ | | | | SN | S | 01 06 55.4 | -1.4 |
| BHHZ | Black Hill Sta | 0.88 | 114 | PN | Pn | 01 06 33.2 | -0.4 |
| BHHZ | | | | SN | S | 01 06 57.5 | -1.3 |
| BKZ | Black Stump Fm | 1.14 | 92 | PN | Pn | 01 06 34.2 | -0.9 |
| BKZ | | | | AML | AML | 01 07 02.4 | |
| BKZ | | | | AML | AML | 01 07 04.6 | |
| KRHZ | Kereru | 1.16 | 116 | PN | Pn | 01 06 35.3 | 0.0 |
| KRHZ | | | | SN | S | 01 07 01.7 | -0.1 |
| PNHZ | Pukenui | 1.19 | 131 | ⇑PN | Pn | 01 06 35.6 | +0.1 |
| MCHZ | McNeill Hill | 1.33 | 104 | PN | Pn | 01 06 36.8 | +0.4 |
| POWZ | Post Office Ro | 1.38 | 156 | PN | Pn | 01 06 36.8 | 0.0 |
| WPHZ | Waipukurau | 1.43 | 131 | PN | Pn | 01 06 37.4 | +0.2 |
| DVHZ | Dannevirke | 1.46 | 143 | PN | Pn | 01 06 37.4 | 0.0 |
| ARHZ | Aropaoanui | 1.54 | 95 | PN | Pn | 01 06 38.0 | -0.1 |
| MRZ | Mangatainoka R | 1.58 | 164 | PN | Pn | 01 06 38.2 | -0.2 |
| MRZ | | | | AML | AML | 01 07 09.6 | |
| MRZ | | | | AML | AML | 01 07 09.7 | |
| PRWZ | Pori Road | 1.59 | 153 | PN | Pn | 01 06 38.7 | +0.3 |
| RAHZ | Arahi | 1.62 | 83 | PN | Pn | 01 06 38.2 | -0.6 |
| OGWZ | Otaki Gorge | 1.68 | 176 | ⇑PN | Pn | 01 06 39.2 | 0.0 |
| KIW | Kapiti Island | 1.72 | 183 | PN | Pn | 01 06 39.3 | -0.3 |
| KIW | | | | AML | AML | 01 07 10.8 | |
| KIW | | | | AML | AML | 01 07 10.9 | |
| ANWZ | Angora Road | 1.73 | 140 | PN | Pn | 01 06 39.8 | +0.2 |
| HOWZ | Holdsworth Sta | 1.80 | 168 | ⇑PN | Pn | 01 06 39.9 | -0.4 |
| URZ | Urewera | 1.85 | 62 | ⇓PN | Pn | 01 06 38.1 | -2.7 |
| URZ | | | | AML | AML | 01 07 07.9 | |
| URZ | | | | AML | AML | 01 07 08.6 | |
| DUWZ | D'Urville Isla | 1.86 | 207 | PN | Pn | 01 06 40.4 | -0.5 |
| CAW | Cannon Point | 1.97 | 179 | PN | Pn | 01 06 41.5 | -0.3 |
| CAW | | | | AML | AML | 01 07 15.0 | |
| CAW | | | | AML | AML | 01 07 15.7 | |
| KNZ | Kokohu | 2.07 | 88 | PN | Pn | 01 06 41.7 | -1.1 |
| MWZ | Matawai | 2.12 | 68 | PN | Pn | 01 06 41.0 | -2.4 |
| MWZ | | | | AML | AML | 01 07 12.7 | |
| MWZ | | | | AML | AML | 01 07 13.0 | |
| TCW | Tory Channel | 2.15 | 195 | PN | Pn | 01 06 43.4 | -0.1 |
| TCW | | | | AML | AML | 01 07 18.4 | |
| TCW | | | | AML | AML | 01 07 19.4 | |
| RIGZ | Rimuhau | 2.18 | 79 | PN | Pn | 01 06 42.5 | -1.5 |
| PAWZ | Paruwai Farm | 2.26 | 172 | PN | Pn | 01 06 44.2 | -0.5 |
| PAWZ | | | | AML | AML | 01 07 19.2 | |
| MSWZ | Moikau Station | 2.28 | 176 | PN | Pn | 01 06 44.3 | -0.6 |
| MSWZ | | | | AML | AML | 01 07 21.3 | |
| MSWZ | | | | AML | AML | 01 07 22.7 | |
| TRWZ | Traveller | 2.31 | 168 | AML | AML | 01 07 21.8 | |
| NNZ | Nelson | 2.43 | 211 | ⇑PN | Pn | 01 06 45.4 | -1.0 |
| TUWZ | Tuamarina | 2.43 | 200 | PN | Pn | 01 06 45.9 | -0.5 |
| TUWZ | | | | AML | AML | 01 07 22.0 | |
| TUWZ | | | | AML | AML | 01 07 22.1 | |
| PLWZ | Palliser | 2.43 | 176 | PN | Pn | 01 06 45.7 | -0.8 |
| QRZ | Quartz Range | 2.55 | 228 | PN | Pn | 01 06 45.6 | -2.0 |
| HAZ | Te Kaha | 2.57 | 58 | PN | Pn | 01 06 44.1 | -3.8 |
| BSWZ | Blackbirch Sta | 2.72 | 198 | PN | Pn | 01 06 48.9 | -0.5 |
| WMGZ | Waiomatatini S | 2.97 | 65 | PN | Pn | 01 06 49.2 | -3.1 |
| THZ | Tophouse | 3.08 | 211 | PN | Pn | 01 06 52.1 | -1.4 |
| KHZ | Kahutara | 3.46 | 199 | PN | Pn | 01 06 56.8 | -1.0 |
| KHZ | | | | AML | AML | 01 07 43.6 | |
| KHZ | | | | AML | AML | 01 09 28.3 | |
| LTZ | Lake Taylor | 4.19 | 209 | PN | Pn | 01 07 04.7 | -1.9 |
| OXZ | Oxford | 4.75 | 207 | PN | Pn | 01 07 10.6 | -2.7 |
| RPZ | Rata Peaks | 5.46 | 212 | PN | Pn | 01 07 19.2 | -3.0 |
| JCZ | Jackson Bay | 6.81 | 222 | PN | Pn | 01 07 35.7 | -3.7 |

*LJU 11 01:06:58.8,45°.59N×14°.25E,h7km,ML2.6*
*ISCJB 11 01:06:58.4±0.3,45°.59N±0°.02×14°.27E±0°.02,h9km±2km, Error ellipse: s-maj=3.4km s-min=2.1km az=13.8*
*VIE 11 01:06:59.7±0.3,45°.66N×14°.27E,h7km±1km,mb2.4/9, ml3.0/12,Error ellipse: s-maj=2.5km s-min=1.2km az=174.0*
*ROM 11 01:06:59.2±0.3,45°.50N×14°.21E,h4km±4km,Md3.0/16, Ml2.8/16,Error ellipse: s-maj=3.4km s-min=1.9km az=60.0*
*CSEM 11 01:06:59.0±0.1,45°.61N×14°.26E,h2km,ML3.5/18,Error ellipse: s-maj=2.7km s-min=1.7km az=14.0*
*PRU 11 01:07:00.3,45°.61N×14°.30E,h7km*
**ISC 11 01:06:59.3**±0.8**,45°.60N**±0°.02×**14°.26E**±0°.01**,h9**km±6km**, n159,**σ**0s.98**/241**,24C-27D,Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KNDS | Knezji Dol | 0.11 | 130 | ⇑iPg | Pg | 01 07 01.5 | -0.5 |
| KNDS | | | | iSg | Sg | 01 07 03.3 | -0.6 |
| | comp=Z,1µm,0.1s | | | | | | |
| KNDS | Knezji Dol | 0.11 | 130 | Pg | Pg | 01 07 01.5 | -0.5 |
| KNDS | | | | iSg | Sg | 01 07 03.3 | -0.6 |
| | comp=Z,1µm,0.1s | | | | | | |
| CEY | Cerknica | 0.18 | 39 | ⇓iPg | Pg | 01 07 03.0 | -0.2 |
| CEY | | | | iSg | Sg | 01 07 06.2 | +0.4 |
| | comp=Z,1µm,0.2s | | | | | | |
| CEY | Cerknica | 0.18 | 39 | ⇓iPg | Pg | 01 07 03.0 | -0.2 |
| CEY | | | | iSg | Sg | 01 07 06.2 | +0.4 |
| | comp=Z,1µm,0.2s | | | | | | |
| SKDS | Skadanscina | 0.18 | 254 | ⇑iPg | Pg | 01 07 02.5 | -0.6 |
| SKDS | | | | iSg | Sg | 01 07 05.4 | -0.4 |
| SKDS | Skadanscina | 0.18 | 254 | ⇑iPg | Pg | 01 07 02.5 | -0.6 |
| SKDS | | | | iSg | Sg | 01 07 05.4 | -0.4 |
| JAVS | Javornik | 0.33 | 335 | ⇓iPg | Pg | 01 07 05.5 | -0.4 |
| | comp=Z,514nm,0.2s | | | | | | |
| JAVS | Javornik | 0.33 | 335 | ⇓iPg | Pg | 01 07 05.5 | -0.4 |
| | comp=Z,514nm,0.2s | | | | | | |
| TRI | Trieste | 0.37 | 288 | ⇑ePg | Pg | 01 07 05.8 | -0.7 |
| TRI | | | | eSg | Sg | 01 07 11.7 | +0.3 |
| TRI | Trieste | 0.37 | 288 | eP | Pg | 01 07 05.8 | -0.7 |
| TRI | | | | eSg | Sg | 01 07 11.7 | +0.3 |
| GBRS | Gornja Briga | 0.39 | 100 | iPg | Pg | 01 07 06.6 | -0.4 |
| VISS | Visnje | 0.45 | 63 | iPg | Pg | 01 07 07.9 | -0.2 |
| VISS | Visnje | 0.45 | 63 | iPg | Pg | 01 07 07.9 | -0.2 |
| CRNS | Crni Vrh | 0.48 | 360 | ⇓iPg | Pg | 01 07 08.2 | -0.6 |
| | comp=Z,148nm,0.2s | | | | | | |
| LJU | Ljubljana | 0.48 | 22 | iPg | Pg | 01 07 08.9 | +0.2 |
| LJU | | | | eSg | Sb | 01 07 16.5 | -0.7 |
| | comp=Z,281nm,0.2s | | | | | | |
| LJU | Ljubljana | 0.48 | 22 | iPg | Pg | 01 07 08.9 | +0.2 |
| VOJS | Vojsko | 0.51 | 329 | ⇓iPg | Pg | 01 07 08.6 | -0.6 |
| VOJS | | | | iSg | Sb | 01 07 17.1 | -0.9 |
| | comp=Z,139nm,0.2s | | | | | | |
| VOJS | Vojsko | 0.51 | 329 | ⇓iPg | Pg | 01 07 08.6 | -0.6 |
| VNDS | Vrh nad Dolski | 0.59 | 31 | iPg | Pg | 01 07 10.7 | -0.1 |
| | comp=Z,117nm,0.1s | | | | | | |
| SABO | M.te Sabotino | 0.60 | 310 | ⇑ePg | Pg | 01 07 10.0 | -1.0 |
| SABO | | | | eSg | Sg | 01 07 19.4 | +0.5 |
| SABO | M.te Sabotino | 0.60 | 310 | eP | Pg | 01 07 10.0 | -1.0 |
| SABO | | | | eSg | Sg | 01 07 19.4 | +0.5 |
| PDKS | Podkum | 0.69 | 48 | iPg | Pg | 01 07 12.8 | +0.1 |
| PDKS | | | | eSg | Sg | 01 07 21.9 | +0.2 |
| | comp=Z,124nm,0.1s | | | | | | |
| PDKS | Podkum | 0.69 | 48 | iPg | Pg | 01 07 12.8 | +0.1 |
| PDKS | | | | eSg | Sg | 01 07 21.9 | +0.2 |
| | comp=Z,124nm,0.1s | | | | | | |
| BOJS | Bojanci | 0.70 | 97 | iPg | Pg | 01 07 11.9 | -0.9 |
| BOJS | | | | eSg | Sg | 01 07 21.9 | 0.0 |
| | comp=Z,129nm,0.2s | | | | | | |
| BOJS | Bojanci | 0.70 | 97 | iPg | Pg | 01 07 11.9 | -0.9 |
| BOJS | | | | eSg | Sg | 01 07 22.0 | 0.0 |
| | comp=Z,129nm,0.2s | | | | | | |
| MOZS | Mozjanca | 0.71 | 10 | ePg | Pg | 01 07 12.9 | -0.1 |
| | comp=Z,85nm,0.2s | | | | | | |
| MOZS | Mozjanca | 0.71 | 10 | ePg | Pg | 01 07 12.9 | -0.1 |
| | comp=Z,85nm,0.2s | | | | | | |
| DRE | Drenchia | 0.72 | 323 | ⇓ePg | Pg | 01 07 12.4 | -0.8 |
| DRE | | | | eSg | Sb | 01 07 23.8 | -0.3 |
| DRE | Drenchia | 0.72 | 323 | eP | Pg | 01 07 12.4 | -0.8 |
| DRE | | | | eSg | Sb | 01 07 23.8 | -0.3 |
| CADS | Cadrg | 0.73 | 330 | iPg | Pg | 01 07 12.5 | -0.9 |
| | comp=Z,86nm,0.2s | | | | | | |
| CADS | Cadrg | 0.73 | 330 | iPg | Pg | 01 07 12.5 | -0.9 |
| | comp=Z,86nm,0.2s | | | | | | |
| GORS | Gorjuse | 0.74 | 345 | ePg | Pg | 01 07 12.8 | -0.9 |
| GORS | | | | eSg | Sb | 01 07 24.6 | -0.2 |
| | comp=Z,93nm,0.2s | | | | | | |
| GORS | Gorjuse | 0.74 | 345 | ePg | Pg | 01 07 12.8 | -0.9 |
| LEGS | Legarje | 0.82 | 64 | ePg | Pg | 01 07 14.6 | -0.4 |
| LEGS | Legarje | 0.82 | 64 | ePg | Pg | 01 07 14.6 | -0.4 |
| COLI | Coloredo | 0.82 | 311 | ⇓ePg | Pg | 01 07 14.0 | -1.1 |
| COLI | | | | eSg | Sb | 01 07 27.1 | +0.3 |
| COLI | Coloredo | 0.82 | 311 | eP | Pg | 01 07 14.0 | -1.1 |
| COLI | | | | eSg | Sb | 01 07 27.1 | +0.3 |
| ROBS | Robic | 0.83 | 321 | ePg | Pg | 01 07 14.2 | -1.2 |
| ROBS | | | | eSg | Sb | 01 07 27.0 | -0.3 |
| ROBS | Robic | 0.83 | 321 | ePg | Pg | 01 07 14.2 | -1.2 |
| ROBS | | | | eSg | Sb | 01 07 27.0 | -0.3 |
| CRES | Cresnjev | 0.87 | 74 | ePg | Pg | 01 07 15.4 | -0.6 |
| | comp=Z,94nm,0.1s | | | | | | |
| CRES | Cresnjev | 0.87 | 74 | ePg | Pg | 01 07 15.4 | -0.6 |
| | comp=Z,94nm,0.1s | | | | | | |
| CESS | Cesta pri Krsk | 0.92 | 65 | iPg | Pb | 01 07 17.4 | 0.0 |
| | comp=Z,126nm,0.1s | | | | | | |
| CESS | Cesta pri Krsk | 0.92 | 65 | iPg | Pb | 01 07 17.4 | 0.0 |
| | comp=Z,126nm,0.1s | | | | | | |
| OBKA | Obir | 0.93 | 12 | ⇓ePg | Pg | 01 07 16.8 | -0.5 |
| | SNR=65 | | | | | | |
| OBKA | Obir | 0.93 | 12 | Pg | Pg | 01 07 16.8 | -0.5 |
| | SNR=65 | | | | | | |
| VINO | Villanova | 0.95 | 314 | ⇑ePg | Pg | 01 07 16.1 | -1.6 |
| VINO | | | | eSg | Sb | 01 07 30.7 | 0.0 |
| VINO | Villanova | 0.95 | 314 | Pg | Pb | 01 07 18.1 | +0.1 |
| VINO | | | | Sg | Sn | 01 07 32.7 | +0.1 |
| | comp=Z,131nm,0.3s | | | | | | |
| VINO | Villanova | 0.95 | 314 | eP | Pg | 01 07 16.0 | -1.6 |
| VINO | | | | eSg | Sb | 01 07 30.7 | 0.0 |
| BAD | Bernadia | 0.96 | 312 | ePg | Pg | 01 07 16.4 | -1.3 |
| BAD | Bernadia | 0.96 | 312 | ePg | Pg | 01 07 16.4 | -1.3 |
| GCIS | Gornji Cirnik | 0.99 | 74 | iPg | Pg | 01 07 18.0 | -0.4 |
| GCIS | Gornji Cirnik | 0.99 | 74 | iPg | Pg | 01 07 18.0 | -0.4 |
| DOBS | Dobrina | 1.01 | 56 | iPg | Pb | 01 07 18.7 | -0.2 |
| | comp=Z,126nm,0.2s | | | | | | |
| DOBS | Dobrina | 1.01 | 56 | iPg | Pb | 01 07 18.7 | -0.2 |
| | comp=Z,126nm,0.2s | | | | | | |
| BUA | Buia | 1.01 | 308 | ePg | Pb | 01 07 18.8 | -0.2 |
| BUA | | | | eSg | Sn | 01 07 34.0 | 0.0 |
| BUA | Buia | 1.01 | 308 | eP | Pb | 01 07 18.8 | -0.2 |
| BUA | | | | eSg | Sn | 01 07 34.0 | 0.0 |
| LSR | Lussari | 1.02 | 330 | ⇓ePg | Pg | 01 07 17.8 | -1.1 |
| LSR | | | | eSg | Sb | 01 07 33.6 | +0.9 |
| LSR | Lussari | 1.02 | 330 | eP | Pg | 01 07 17.8 | -1.1 |
| LSR | | | | eSg | Sb | 01 07 33.6 | +0.9 |
| PTCC | Patocco-Chiusa | 1.03 | 322 | Pg | Pb | 01 07 19.3 | 0.0 |
| PTCC | | | | Sg | Sn | 01 07 34.2 | -0.3 |
| | comp=Z,107nm,0.4s | | | | | | |
| PTCC | Patocco-Chiusa | 1.03 | 322 | Pg | Pb | 01 07 19.3 | 0.0 |
| PTCC | | | | Sg | Sn | 01 07 34.2 | -0.3 |
| | comp=Z,107nm,0.4s | | | | | | |
| GOLS | Golise | 1.04 | 66 | ePg | Pg | 01 07 18.9 | -0.4 |
| | comp=Z,131nm,0.2s | | | | | | |
| GOLS | Golise | 1.04 | 66 | ePg | Pg | 01 07 18.9 | -0.4 |
| | comp=Z,131nm,0.2s | | | | | | |
| ACOM | Acomizza, Ital | 1.08 | 331 | ePg | Pg | 01 07 19.2 | -1.0 |
| ACOM | | | | eSg | Sn | 01 07 36.6 | +0.5 |
| ACOM | Acomizza, Ital | 1.08 | 331 | Pg | Pn | 01 07 21.8 | +1.0 |
| ACOM | | | | Sg | Sn | 01 07 37.3 | +1.2 |
| | comp=Z,406nm,0.4s | | | | | | |
| ACOM | Acomizza, Ital | 1.08 | 331 | eP | Pg | 01 07 19.2 | -1.0 |
| ACOM | | | | eSg | Sn | 01 07 36.6 | +0.5 |
| MPRI | Monte Prat | 1.10 | 306 | ⇓ePg | Pg | 01 07 19.2 | -1.2 |
| MPRI | | | | eSg | Sn | 01 07 36.8 | +0.6 |
| MPRI | Monte Prat | 1.10 | 306 | eP | Pg | 01 07 19.2 | -1.2 |
| MPRI | | | | eSg | Sn | 01 07 36.8 | +0.6 |
| PERS | Pernice | 1.20 | 29 | iPg | Pg | 01 07 21.4 | -0.9 |
| PERS | | | | eSg | Sb | 01 07 37.9 | +0.2 |
| | comp=Z,185nm,0.2s | | | | | | |
| PERS | Pernice | 1.20 | 29 | iPg | Pg | 01 07 21.4 | -0.9 |
| PERS | | | | eSg | Sb | 01 07 37.9 | +0.2 |
| | comp=Z,185nm,0.2s | | | | | | |
| FUSE | Fusea | 1.20 | 313 | ePg | Pg | 01 07 21.7 | -0.7 |
| FUSE | Fusea | 1.20 | 313 | ePg | Pg | 01 07 21.7 | -0.7 |
| SOKA | Soboth | 1.21 | 26 | ⇓ePg | Pg | 01 07 21.9 | -0.6 |
| | SNR=124 | | | | | | |
| SOKA | | | | ⇑iSg | Sb | 01 07 38.0 | 0.0 |
| | comp=Z,72nm,0.3s | | | | | | |
| SOKA | Soboth | 1.21 | 26 | Pg | Pg | 01 07 21.9 | -0.6 |
| | SNR=124 | | | | | | |
| SOKA | | | | Sg | Sb | 01 07 38.0 | 0.0 |
| | comp=Z,72nm,0.3s | | | | | | |
| BISS | Bistriski jare | 1.21 | 29 | iPg | Pg | 01 07 21.7 | -0.9 |
| BISS | Bistriski jare | 1.21 | 29 | iPg | Pg | 01 07 21.7 | -0.9 |
| STAL | STALIGIAL | 1.27 | 302 | Pg | Pg | 01 07 23.4 | -0.3 |
| STAL | | | | Sg | Sn | 01 07 42.0 | +1.6 |
| | comp=Z,188nm,0.3s | | | | | | |
| STAL | STALIGIAL | 1.27 | 302 | Pg | Pg | 01 07 23.4 | -0.3 |
| STAL | | | | Sg | Sn | 01 07 42.0 | +1.6 |
| | comp=Z,188nm,0.3s | | | | | | |
| MLNI | Malnisio | 1.28 | 296 | ⇑ePg | Pg | 01 07 23.7 | -0.2 |
| MLNI | Malnisio | 1.28 | 296 | ⇑ePg | Pg | 01 07 23.7 | -0.2 |
| POLC | Polcenigo | 1.31 | 290 | Pg | Pb | 01 07 24.4 | +0.4 |
| POLC | | | | Sg | Sb | 01 07 41.5 | +0.7 |
| | comp=Z,340nm,0.4s | | | | | | |
| POLC | Polcenigo | 1.31 | 290 | Pg | Pb | 01 07 24.4 | +0.4 |
| POLC | | | | Sg | Sb | 01 07 41.5 | +0.7 |
| | comp=Z,340nm,0.4s | | | | | | |
| ZOU | Zoufplan | 1.31 | 317 | ePg | Pn | 01 07 23.3 | -0.7 |
| ZOU | Zoufplan | 1.31 | 317 | ePg | Pn | 01 07 23.3 | -0.7 |
| ZOU | Zoufplan | 1.31 | 317 | ePg | Pn | 01 07 23.3 | -0.7 |
| CAE | Caneva | 1.34 | 288 | ⇓ePg | Pn | 01 07 24.7 | +0.4 |
| CAE | Caneva | 1.34 | 288 | ⇓ePg | Pn | 01 07 24.7 | +0.4 |
| FVI | Forni Avoltri | 1.44 | 315 | Pg | Pg | 01 07 26.8 | -0.1 |
| FVI | | | | Sg | Sg | 01 07 47.3 | +1.8 |
| | comp=Z,216nm,0.4s | | | | | | |
| FVI | Forni Avoltri | 1.44 | 315 | Pg | Pg | 01 07 26.8 | -0.1 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| FVI | | | | Sg | **Sg** | **01 07 47.3** | **+1.8** |
| | comp=Z,216nm,0.4s | | | | | | |
| **CSMI** | **Casera Mimoias** | **1.45** | **310** | ⇑*e*Pg | **Pb** | **01 07 26.6** | **+0.1** |
| **CSMI** | **Casera Mimoias** | **1.45** | **310** | ⇑*e*Pg | **Pb** | **01 07 26.6** | **+0.1** |
| **CIMO** | **Cimolais** | **1.46** | **300** | ⇓*e*Pg | **Pn** | **01 07 26.3** | **+0.5** |
| **CIMO** | **Cimolais** | **1.46** | **300** | ⇓*e*Pg | **Pn** | **01 07 26.3** | **+0.5** |
| **MTLO** | **Montello** | **1.53** | **279** | ⇑*e*Pg | **Pn** | **01 07 27.3** | **+0.5** |
| **MTLO** | **Montello** | **1.53** | **279** | ⇑*e*Pg | **Pn** | **01 07 27.3** | **+0.5** |
| **KBA** | **Koelnbreinsper** | **1.61** | **337** | ⇑*i*Pn | **Pn** | **01 07 28.1** | **0.0** |
| KBA | | | | ⇑*e*Pg | **Pg** | **01 07 30.2** | **-0.1** |
| | SNR=11 | | | | | | |
| KBA | | | | ⇑*i*Sg | **Sg** | **01 07 51.9** | **+0.7** |
| | comp=Z,68nm,0.4s | | | | | | |
| **KBA** | **Koelnbreinsper** | **1.61** | **337** | Pn | **Pn** | **01 07 28.1** | **0.0** |
| **ABTA** | **Abfaltersbach** | **1.68** | **314** | ⇓*e*Pn | **Pb** | **01 07 30.1** | **-0.3** |
| | SNR=26 | | | | | | |
| **ABTA** | **Abfaltersbach** | **1.68** | **314** | Pn | **Pb** | **01 07 30.1** | **-0.3** |
| | SNR=26 | | | | | | |
| **AGOR** | **Agordo** | **1.69** | **295** | *e*Pn | **Pn** | **01 07 29.6** | **+0.5** |
| **AGOR** | **Agordo** | **1.69** | **295** | Pg | **Pn** | **01 07 29.6** | **+0.5** |
| AGOR | | | | Sg | **Sg** | **01 07 53.2** | **-0.5** |
| | comp=Z,80nm,0.3s | | | | | | |
| **CGRP** | **Cima Grappa** | **1.75** | **280** | ⇓*e*Pn | **Pn** | **01 07 30.1** | **+0.1** |
| **CGRP** | **Cima Grappa** | **1.75** | **280** | Pg | **Pn** | **01 07 30.7** | **+0.7** |
| | comp=Z,125nm,0.4s | | | | | | |
| **CGRP** | **Cima Grappa** | **1.75** | **280** | ⇓*e*Pn | **Pn** | **01 07 30.1** | **+0.1** |
| **CGRP** | **Cima Grappa** | **1.75** | **280** | Pg | **Pn** | **01 07 30.7** | **+0.7** |
| | comp=Z,125nm,0.4s | | | | | | |
| **ARSA** | **Arzberg** | **1.87** | **27** | ⇑*e*Pn | **Pn** | **01 07 31.8** | **+0.3** |
| | SNR=7.7 | | | | | | |
| ARSA | | | | ⇓*i*Sn | **Sn** | **01 07 55.1** | **-0.1** |
| **ARSA** | **Arzberg** | **1.87** | **27** | Pg | **Pg** | **01 07 34.2** | **-0.9** |
| | comp=Z,18nm,0.4s | | | | | | |
| **ARSA** | **Arzberg** | **1.87** | **27** | Pn | **Pn** | **01 07 31.8** | **+0.3** |
| | SNR=7.7 | | | | | | |
| **ARSA** | **Arzberg** | **1.87** | **27** | Pg | **Pg** | **01 07 34.2** | **-0.9** |
| | comp=Z,18nm,0.4s | | | | | | |
| ARSA | | | | Sn | **Sn** | **01 07 55.1** | **-0.1** |
| **RISI** | **Rein** | **2.03** | **312** | Pg | **Pb** | **01 07 35.6** | **-0.9** |
| | comp=Z,242nm,0.5s | | | | | | |
| **RISI** | **Rein** | **2.03** | **312** | ⇑*e*Pn | **Pb** | **01 07 35.4** | **-1.1** |
| **AOI** | **Ancona** | **2.10** | **193** | Pg | **Pn** | **01 07 34.8** | **+0.1** |
| | comp=Z,47nm,0.8s | | | | | | |
| **FSSB** | **Fossombrone** | **2.18** | **210** | Pg | **Pn** | **01 07 35.4** | **-0.3** |
| | comp=Z,26nm,0.3s | | | | | | |
| **ROVR** | **Rover¤ Verone** | **2.24** | **272** | Pg | **Pn** | **01 07 37.2** | **+0.5** |
| | comp=Z,71nm,0.4s | | | | | | |
| **ROVR** | **Rover¤ Verone** | **2.24** | **272** | Pg | **Pn** | **01 07 37.2** | **+0.5** |
| | comp=Z,71nm,0.4s | | | | | | |
| **MOA** | **Molln** | **2.25** | **0** | ⇓*e*Pn | **Pn** | **01 07 37.0** | **+0.3** |
| | SNR=6.4 | | | | | | |
| MOA | | | | ⇑*i*Sn | **Sn** | **01 08 04.9** | **+0.2** |
| **MOA** | **Molln** | **2.25** | **0** | Pn | **Pn** | **01 07 37.0** | **+0.3** |
| | SNR=6.4 | | | | | | |
| MOA | | | | Sn | **Sn** | **01 08 04.9** | **+0.2** |
| **APPI** | **Appiano** | **2.29** | **294** | Pg | **Pn** | **01 07 38.4** | **+1.1** |
| **APPI** | **Appiano** | **2.29** | **294** | Pg | **Pn** | **01 07 38.4** | **+1.1** |
| **ARVD** | **Arcevia** | **2.30** | **205** | Pg | **Pn** | **01 07 37.3** | **-0.1** |
| | comp=Z,20nm,0.5s | | | | | | |
| **ABSI** | **Aberstueckl** | **2.34** | **300** | ⇑*e*Pn | **Pn** | **01 07 39.0** | **+0.9** |
| **ROSI** | **Rosskopf** | **2.38** | **305** | *e*Pn | **Pb** | **01 07 41.2** | **-1.3** |
| **PIEI** | **Pieia** | **2.40** | **212** | Pg | **Pn** | **01 07 38.5** | **-0.3** |
| | comp=Z,36nm,0.4s | | | | | | |
| **WTTA** | **Wattenberg** | **2.47** | **313** | ⇓*e*Pn | **Pn** | **01 07 39.9** | **+0.1** |
| | SNR=12 | | | | | | |
| **WTTA** | **Wattenberg** | **2.47** | **313** | Pn | **Pn** | **01 07 39.9** | **+0.1** |
| | SNR=12 | | | | | | |
| **SNTG** | **Esanatoglia** | **2.53** | **203** | Pg | **Pn** | **01 07 40.2** | **-0.3** |
| | comp=Z,38nm,0.8s | | | | | | |
| **WATA** | **Walderalm** | **2.54** | **314** | ⇑*e*Pn | **Pn** | **01 07 42.6** | **+1.7** |
| | SNR=16 | | | | | | |
| **WATA** | **Walderalm** | **2.54** | **314** | Pn | **Pn** | **01 07 42.6** | **+1.7** |
| | SNR=16 | | | | | | |
| **CONA** | **Conrad Observa** | **2.58** | **25** | ⇑*e*Pn | **Pn** | **01 07 40.9** | **-0.4** |
| | SNR=7.6 | | | | | | |
| CONA | | | | ⇓*i*Sn | **Sn** | **01 08 12.6** | **-0.2** |
| **CONA** | **Conrad Observa** | **2.58** | **25** | Pn | **Pn** | **01 07 40.9** | **-0.4** |
| | SNR=7.6 | | | | | | |
| CONA | | | | Sn | **Sn** | **01 08 12.6** | **-0.2** |
| **MOTA** | **Moosalm** | **2.80** | **310** | ⇓*e*Pn | **Pn** | **01 07 44.6** | **+0.2** |
| | SNR=10.0 | | | | | | |
| **MOTA** | **Moosalm** | **2.80** | **310** | Pn | **Pn** | **01 07 44.6** | **+0.2** |
| | SNR=10.0 | | | | | | |
| **RETA** | **Reutte** | **3.07** | **309** | ⇓*i*Pn | **Pn** | **01 07 48.5** | **+0.5** |
| RETA | | | | ⇑*e*Sn | **Sn** | **01 08 25.4** | **+0.6** |
| | SNR=5.2 | | | | | | |
| **RETA** | **Reutte** | **3.07** | **309** | Pn | **Pn** | **01 07 48.5** | **+0.5** |
| RETA | | | | Sn | **Sn** | **01 08 25.4** | **+0.6** |
| | SNR=5.2 | | | | | | |
| **KHC** | **Kasperske Hory** | **3.57** | **353** | *e*PN | **Pn** | **01 07 55.4** | **+0.6** |
| KHC | | | | *e*PG | **Pb** | **01 08 03.6** | **+1.1** |
| KHC | | | | *e*SN | **Sn** | **01 08 37.6** | **+0.6** |
| KHC | | | | *e*SG | **Sg** | **01 08 52.1** | **-1.7** |
| | comp=Z,7.0nm,0.6s | | | | | | |
| KHC | | | | *e*x | x | 01 09 03.2 | |
| **KHC** | **Kasperske Hory** | **3.57** | **353** | Pn | **Pn** | **01 07 55.4** | **+0.6** |
| **TEKS** | **Tekeris** | **3.87** | **104** | *e*Pn | **Pn** | **01 08 02.0** | **+3.0** |
| **BBLS** | **Lazići** | **4.05** | **113** | ⇓*i*Pn | **Pn** | **01 08 02.9** | **+1.4** |
| **GOPC** | **GO Pecny, Ondr** | **4.33** | **4** | *e*PG | **Pb** | **01 08 18.5** | **+2.9** |
| GOPC | | | | *e*SN | **Sn** | **01 08 55.8** | **-0.1** |
| GOPC | | | | *e*SG | **Sg** | **01 09 17.6** | **-0.8** |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **4.33** | **4** | Pg | **Pb** | **01 08 18.5** | **+2.9** |
| GOPC | | | | Sn | **Sn** | **01 08 55.8** | **-0.1** |
| GOPC | | | | Sg | **Sg** | **01 09 17.6** | **-0.8** |
| | comp=Z,5.5nm,0.7s | | | | | | |
| **DIVS** | **Divibare** | **4.34** | **108** | *e*Pn | **Pn** | **01 08 06.1** | **+0.6** |
| **PRU** | **Pruhonice** | **4.40** | **2** | *e*PG | **Pb** | **01 08 19.1** | **+2.4** |
| PRU | | | | *e*SN | **Sn** | **01 08 57.3** | **-0.2** |
| PRU | | | | *e*SG | **Sg** | **01 09 19.8** | **-0.6** |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **PRU** | **Pruhonice** | **4.40** | **2** | Pg | **Pb** | **01 08 19.1** | **+2.4** |
| PRU | | | | Sn | **Sn** | **01 08 57.3** | **-0.2** |
| PRU | | | | Sg | **Sg** | **01 09 19.8** | **-0.6** |
| | comp=Z,4.9nm,0.6s | | | | | | |
| **PRA** | **Prague** | **4.48** | **1** | *e*SG | **Sg** | **01 09 21.0** | **-2.0** |
| | comp=Z,5.3nm,0.5s | | | | | | |
| **PRA** | **Prague** | **4.48** | **1** | Sg | **Sg** | **01 09 21.0** | **-2.0** |
| | comp=Z,5.3nm,0.5s | | | | | | |
| **KRLC** | **Kraliky** | **4.79** | **20** | *e*SG | **Sg** | **01 09 32.1** | **-0.9** |
| **KRLC** | **Kraliky** | **4.79** | **20** | Sg | **Sg** | **01 09 32.1** | **-0.9** |
| **GRUS** | **Gruza** | **4.90** | **108** | *e*Pn | **Pn** | **01 08 12.0** | **-1.1** |
| **PVCC** | **Panska Ves** | **4.94** | **2** | *e*SN | **Sn** | **01 09 09.3** | **-1.5** |
| PVCC | | | | *e*SG | **Sg** | **01 09 36.3** | **-1.5** |
| | comp=Z,9.7nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **4.94** | **2** | Sn | **Sn** | **01 09 09.3** | **-1.5** |
| PVCC | | | | Sg | **Sg** | **01 09 36.3** | **-1.5** |
| | comp=Z,9.7nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **4.95** | **15** | *e*PG | **Pb** | **01 08 28.9** | **+2.8** |
| DPC | | | | *e*SG | **Sg** | **01 09 36.8** | **-1.4** |
| **DPC** | **Dobruska-Polom** | **4.95** | **15** | Pg | **Pb** | **01 08 28.9** | **+2.8** |
| DPC | | | | Sg | **Sg** | **01 09 36.8** | **-1.4** |
| **OKC** | **Ostrava-Krasne** | **4.99** | **30** | *e*SN | **Sn** | **01 09 10.4** | **-1.6** |
| OKC | | | | *e*SG | **Sg** | **01 09 37.7** | **-1.6** |
| **OKC** | **Ostrava-Krasne** | **4.99** | **30** | Sn | **Sn** | **01 09 10.4** | **-1.6** |
| OKC | | | | Sg | **Sg** | **01 09 37.7** | **-1.6** |
| **UPC** | **Upice** | **5.05** | **13** | *e*SG | **Sg** | **01 09 40.0** | **-1.4** |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **UPC** | **Upice** | **5.05** | **13** | Sg | **Sg** | **01 09 40.0** | **-1.4** |
| | comp=Z,4.1nm,0.6s | | | | | | |
| **BRG** | **Berggiesshubel** | **5.28** | **358** | SG | **Sg** | **01 09 47.9** | **-0.9** |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **SELS** | **Selova** | **5.46** | **113** | *e*Pn | **Pn** | **01 08 22.1** | **+1.3** |
| **CLL** | **Collm** | **5.78** | **352** | *e*Sg | **Sg** | **01 10 01.0** | **-3.6** |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **BARS** | **Barje** | **6.10** | **114** | ⇑*i*Pn | **Pn** | **01 08 31.5** | **+1.9** |

*PGC **11** 01:21:05.5±0.1, 50°.71N×130°.44W, h10km, ML3.6/29, Mw4.3, 213km west of Pt. Hardy, Bc Vancouver Island Region*
*NEIC **11** 01:21:05.5, 50°.71N×130°.44W, h10km, mb3.9/9, MW4.3(OTT), After OTT.*
*ISCJB **11** 01:21:07.9±0.5, 50°.79N±0°.04×130°.01W±0°.07, h14km, mb3.5/2, MS3.3/2, Error ellipse: s-maj=6.6km s-min=4.5km az=149.9*
*IDC **11** 01:21:07.7±1.7, 50°.82N×129°.94W, h0km, mb3.3/1, mb1 3.7/5, mb1mx3.5/46, mbtmp3.3/5, ML3.2/4, MS3.3/4, Ms1 3.3/4, ms1mx2.9/19, Error ellipse: s-maj=22.7km s-min=11.2km az=71.0*
**ISC 11 01:21:07.8**±1.0**, 50°.75N**±0°.05×**130°.23W**±0°.07**, h14km, n139,** σ1s**53**/136**, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOLB** | **Holberg** | **1.34** | **94** | Pn | **Pn** | **01 21 30.1** | **-2.0** |
| HOLB | | | | Sn | **Sn** | **01 21 47.9** | **-1.7** |
| **HOLB** | **Holberg** | **1.34** | **94** | Pn | **Pn** | **01 21 30.1** | **-2.0** |
| HOLB | | | | Sn | **Sn** | **01 21 48.0** | **-1.7** |
| **BPBC** | **Brooks Peninsu** | **1.68** | **110** | Pn | **Pn** | **01 21 34.1** | **-2.6** |
| BPBC | | | | Sn | **Sn** | **01 21 55.6** | **-2.5** |
| **BPBC** | **Brooks Peninsu** | **1.68** | **110** | Pn | **Pn** | **01 21 34.1** | **-2.6** |
| BPBC | | | | Sn | **Sn** | **01 21 55.6** | **-2.5** |
| **PHC** | **Port Hardy** | **1.78** | **90** | Pn | **Pn** | **01 21 36.3** | **-1.7** |
| PHC | | | | Sn | **Sn** | **01 21 58.8** | **-1.6** |
| **PHC** | **Port Hardy** | **1.78** | **90** | Pn | **Pn** | **01 21 36.3** | **-1.7** |
| PHC | | | | Sn | **Sn** | **01 21 58.8** | **-1.6** |
| **BBB** | **Bella Bella** | **1.95** | **42** | Pn | **Pn** | **01 21 38.5** | **-1.9** |
| | 16nm,0.3s,baz=222,slow=7.2,SNR=48 | | | | | | |
| BBB | | | | Sn | **Sn** | **01 22 01.6** | **-3.1** |
| | 112nm,0.3s,baz=66,slow=20,SNR=19 | | | | | | |
| **BBB** | **Bella Bella** | **1.95** | **42** | Pn | **Pn** | **01 21 38.5** | **-1.9** |
| BBB | | | | Sn | **Sn** | **01 22 01.6** | **-3.1** |
| **MAYB** | **Maynard** | **1.98** | **99** | Pn | **Pn** | **01 21 39.1** | **-1.8** |
| MAYB | | | | Sn | **Sn** | **01 22 03.6** | **-2.0** |
| **MAYB** | **Maynard** | **1.98** | **99** | Pn | **Pn** | **01 21 39.1** | **-1.8** |
| MAYB | | | | Sn | **Sn** | **01 22 03.6** | **-2.0** |
| **FHRB** | **Fair Harbour** | **2.11** | **108** | Pn | **Pn** | **01 21 40.4** | **-2.1** |
| **TLCB** | **Telegraph Cove** | **2.17** | **94** | Pn | **Pn** | **01 21 42.2** | **-1.2** |
| TLCB | | | | Sn | **Sn** | **01 22 08.6** | **-1.4** |
| **EDB** | **Eliza Dome** | **2.18** | **113** | Pn | **Pn** | **01 21 41.2** | **-2.4** |
| EDB | | | | Sn | **Sn** | **01 22 07.6** | **-2.6** |
| **WOSB** | **Woss** | **2.41** | **103** | Pn | **Pn** | **01 21 45.4** | **-1.4** |
| **NCRB** | **Newcastle Ridg** | **2.68** | **96** | Pn | **Pn** | **01 21 49.0** | **-1.6** |
| **DIB** | **Dawson Inlet,** | **2.82** | **331** | Pn | Pn | 01 21 48.8 | -3.6 |
| **H02S1** | **DAWSON INLET T** | **2.82** | **331** | Pn | Pn | 01 21 48.5 | -3.8 |
| H02S1 | | | | Sn | **Sn** | **01 22 21.4** | **-4.7** |
| **GDR** | **Gold River** | **2.86** | **108** | Pn | **Pn** | **01 21 51.2** | **-1.7** |
| **SPLB** | **Strathcona Par** | **3.06** | **105** | Pn | **Pn** | **01 21 54.6** | **-1.0** |
| **CBB** | **Campbell River** | **3.19** | **101** | Pn | **Pn** | **01 21 56.8** | **-0.7** |
| CBB | | | | Sn | **Sn** | **01 22 34.1** | **-1.2** |
| **TOFB** | **Tofino** | **3.21** | **118** | Pn | **Pn** | **01 21 55.7** | **-2.1** |
| **BTB** | **Buttle Lake** | **3.29** | **111** | Pn | **Pn** | **01 21 57.4** | **-1.6** |
| **MWAB** | **Mount Washingt** | **3.32** | **106** | Pn | **Pn** | **01 21 58.4** | **-1.0** |
| MWAB | | | | Sn | **Sn** | **01 22 36.7** | **-1.9** |
| **OZB** | **Mount Ozzard** | **3.55** | **119** | Pn | **Pn** | **01 22 00.8** | **-1.7** |
| **B927** | **Port Alberni** | **3.82** | **112** | Pn | **Pn** | **01 22 04.8** | **-1.2** |
| **B928** | **Bamfield** | **3.82** | **118** | Pn | **Pn** | **01 22 04.9** | **-1.1** |
| **TXB** | **Texada** | **3.87** | **104** | Pn | **Pn** | **01 22 05.9** | **-0.8** |
| **MGB** | **Mount Grey** | **3.98** | **114** | Pn | **Pn** | **01 22 06.7** | **-1.8** |
| **SHB** | **Sechelt** | **4.24** | **103** | Pn | **Pn** | **01 22 11.4** | **-0.7** |
| **YOUB** | **Youbou, Lake C** | **4.28** | **113** | Pn | **Pn** | **01 22 11.5** | **-1.0** |
| **NLLB** | **Nanaimo Lost L** | **4.30** | **108** | Pn | **Pn** | **01 22 11.7** | **-1.0** |
| **PFB** | **Port Renfrew** | **4.34** | **118** | Pn | **Pn** | **01 22 12.6** | **-0.8** |
| **UBRB** | **Upper Baezaeko** | **4.37** | **58** | Pn | **Pn** | **01 22 14.4** | **+0.6** |
| **OCP** | **Olym-Cheeka Pk** | **4.40** | **122** | Pn | **Pn** | **01 22 14.2** | **+0.2** |
| **BPCB** | **Bare Point** | **4.60** | **111** | Pn | **Pn** | **01 22 17.0** | **+0.2** |
| **WPB** | **Watts Point** | **4.64** | **101** | Pn | **Pn** | **01 22 17.1** | **-0.3** |
| **BIB** | **Bowen Island** | **4.66** | **104** | Pn | **Pn** | **01 22 16.9** | **-0.7** |
| **LZB** | **Mount Lazard** | **4.68** | **115** | Pn | **Pn** | **01 22 17.6** | **-0.3** |
| LZB | | | | Sn | **Sn** | **01 23 09.8** | **-2.2** |
| **OBC** | **Olympics--Boni** | **4.85** | **122** | Pn | **Pn** | **01 22 20.7** | **+0.4** |
| **PGC** | **Sidney** | **4.87** | **113** | Pn | **Pn** | **01 22 20.4** | **-0.2** |
| **PGC** | **Sidney** | **4.87** | **113** | *e*Pn | **Pn** | **01 22 21.2** | **+0.6** |
| **SNB** | **Saturna Island** | **4.98** | **111** | Pn | **Pn** | **01 22 22.5** | **+0.4** |
| **MCW** | **Mount Constitu** | **5.22** | **111** | Pn | **Pn** | **01 22 25.6** | **+0.1** |
| **LLLB** | **Lillooet** | **5.31** | **88** | Pn | **Pn** | **01 22 26.9** | **+0.3** |
| **NLWA** | **Neilton Lookou** | **5.36** | **126** | *e*Pn | **Pn** | **01 22 27.5** | **+0.2** |
| **BLN** | **Blyn Mountain** | **5.48** | **117** | Pn | **Pn** | **01 22 29.1** | **+0.2** |
| **VDB** | **Vedder Mountai** | **5.53** | **105** | Pn | **Pn** | **01 22 29.5** | **-0.1** |
| **VDB** | **Vedder Mountai** | **5.53** | **105** | P | **Pn** | **01 22 30.2** | **+0.6** |
| **A05A** | **Maple Falls** | **5.55** | **105** | Pn | **Pn** | **01 22 31.0** | **+1.1** |
| **A05A** | **Maple Falls** | **5.55** | **105** | *e*Pn | **Pn** | **01 22 30.7** | **+0.8** |
| **MBW** | **Mount Baker** | **5.74** | **107** | Pn | **Pn** | **01 22 33.1** | **+0.4** |
| **MBW** | **Mount Baker** | **5.74** | **107** | P | **Pn** | **01 22 33.6** | **+0.9** |
| **CMW** | **Cultus Mountai** | **5.76** | **111** | Pn | **Pn** | **01 22 33.6** | **+0.7** |
| **CMW** | **Cultus Mountai** | **5.76** | **111** | P | **Pn** | **01 22 33.7** | **+0.7** |
| **B05A** | **Bryant** | **5.85** | **112** | P | **Pn** | **01 22 34.6** | **+0.6** |
| | baz=5.9 | | | | | | |
| **JCW** | **Jim Creek** | **5.98** | **112** | Pn | **Pn** | **01 22 37.0** | **+1.1** |
| **JCW** | **Jim Creek** | **5.98** | **112** | P | **Pn** | **01 22 37.1** | **+1.3** |
| **RPW** | **Rockport** | **6.12** | **109** | Pn | **Pn** | **01 22 38.5** | **+0.7** |
| **RPW** | **Rockport** | **6.12** | **109** | P | **Pn** | **01 22 38.4** | **+0.7** |
| **HTW** | **Haystack Looko** | **6.27** | **115** | P | **Pn** | **01 22 41.2** | **+1.4** |
| **GPW** | **Glacier Peak** | **6.49** | **110** | Pn | **Pn** | **01 22 44.5** | **+1.5** |
| **GPW** | **Glacier Peak** | **6.49** | **110** | P | **Pn** | **01 22 44.5** | **+1.5** |
| **D05A** | **Enumclaw** | **6.49** | **120** | *e*Pn | **Pn** | **01 22 44.1** | **+1.3** |
| **FMW** | **Mount Fremont** | **6.82** | **121** | Pn | **Pn** | **01 22 48.5** | **+1.0** |
| **FMW** | **Mount Fremont** | **6.82** | **121** | P | **Pn** | **01 22 48.7** | **+1.3** |
| **LON** | **Longmire** | **6.85** | **122** | Pn | **Pn** | **01 22 49.2** | **+1.4** |
| **LON** | **Longmire** | **6.85** | **122** | *e*Pn | **Pn** | **01 22 49.1** | **+1.2** |
| LON | | | | *e*S | **Sn** | **01 24 04.1** | **-1.6** |
| **TDL** | **Tradedollar La** | **6.90** | **127** | P | **Pn** | **01 22 49.9** | **+1.3** |
| **F04A** | **Amboy** | **7.09** | **130** | *e*Pn | **Pn** | **01 22 52.3** | **+1.2** |
| **LTY** | **Liberty** | **7.19** | **115** | Pn | **Pn** | **01 22 53.5** | **+1.1** |
| **LTY** | **Liberty** | **7.19** | **115** | *e*Pn | **Pn** | **01 22 53.6** | **+1.1** |
| **ETW** | **Entiat** | **7.21** | **112** | P | **Pn** | **01 22 54.2** | **+1.4** |
| **DLBC** | **Dease Lake** | **7.70** | **1** | Pn | **Pn** | **01 22 59.6** | **+0.2** |
| | 0.2nm,0.3s,baz=183,slow=17,SNR=3.6 | | | | | | |
| DLBC | | | | Sn | **Sn** | **01 24 27.1** | **+0.6** |
| | 0.2nm,0.3s,baz=292,slow=19,SNR=2.8 | | | | | | |
| DLBC | | | | Lg | Lg | 01 25 09.2 | |
| | 0.1nm,0.3s,baz=270,slow=19,SNR=3.3 | | | | | | |
| DLBC | | | | LR | LR | 01 25 57.3 | |
| | comp=Z,155nm,19.9s,baz=273,slow=38 | | | | | | |
| **H04A** | **Detroit Lake** | **8.13** | **135** | *e*Pn | **Pn** | **01 23 07.1** | **+1.7** |
| **OD2** | **Odessa Site #2** | **8.28** | **110** | P | **Pn** | **01 23 07.7** | **+0.4** |
| **HAWA** | **Hanford** | **8.32** | **117** | *e*Pn | **Pn** | **01 23 09.2** | **+1.2** |
| **C09A** | **Chrisman Ranch** | **8.36** | **106** | Pn | **Pn** | **01 23 09.0** | **+0.7** |
| **NEW** | **Newport** | **8.88** | **101** | Pn | **Pn** | **01 23 14.7** | **-1.0** |
| | 0.4nm,0.3s,baz=306,slow=17,SNR=3.8 | | | | | | |
| NEW | | | | LR | LR | 01 26 50.6 | |
| | comp=Z,221nm,18.8s,baz=276,slow=39 | | | | | | |
| **MSO** | **Missoula** | **11.43** | **104** | P | **Pn** | **01 23 50.5** | **-0.1** |
| | baz=12 | | | | | | |
| **CHMT** | **Chamberlain Mo** | **11.82** | **102** | *e*Pn | **Pn** | **01 23 57.1** | **+1.1** |
| **HLID** | **Hailey** | **12.93** | **118** | P | Pn | 01 24 13.7 | +2.6 |
| | baz=13 | | | | | | |
| **BOZ** | **Bozeman (W)** | **13.40** | **105** | P | **Pn** | **01 24 18.4** | **+0.8** |
| | baz=14 | | | | | | |
| **IMW** | **Indian Meadow** | **14.74** | **110** | *e*Pn | P | 01 24 38.6 | -3.5 |
| **NVAR** | **Mina Array Bea** | **14.94** | **141** | Pn | **P** | **01 24 41.5** | **-2.7** |
| | 0.0nm,0.3s,baz=321,slow=9.9,SNR=2.1 | | | | | | |
| **TPAW** | **Teton Pass** | **14.97** | **112** | *e*Pn | **P** | **01 24 41.1** | **-3.5** |
| **DUG** | **Dugway** | **16.10** | **124** | P | **P** | **01 24 56.9** | **-0.1** |
| | baz=16 | | | | | | |
| **DUG** | **Dugway** | **16.10** | **124** | *e*Pn | **P** | **01 24 56.6** | **-0.5** |
| | 47nm,2.5s | | | | | | |
| **BW06** | **Boulder Array** | **16.22** | **111** | *e*Pn | **P** | **01 24 58.6** | **+0.2** |
| | 8.1nm,1.0s | | | | | | |
| **LAO** | **LASA Array** | **16.33** | **95** | P | **P** | **01 24 58.1** | **-1.3** |
| | baz=16 | | | | | | |
| **ILAR** | **Eielson Array** | **16.54** | **334** | Pn | **P** | **01 25 03.3** | **+1.7** |
| | 0.0nm,0.3s,baz=141,slow=10,SNR=6.1 | | | | | | |
| **NLU** | **North Lily Min** | **16.66** | **123** | *e*Pn | **P** | **01 25 02.1** | **-1.2** |
| | 4.0nm,1.1s | | | | | | |
| **C25A** | **Freed Ranch, W** | **17.84** | **89** | P | **P** | **01 25 16.7** | **+0.7** |
| | baz=18 | | | | | | |
| **K22A** | **Casper** | **18.11** | **107** | P | **P** | **01 25 19.9** | **+0.7** |
| | baz=18 | | | | | | |
| **K22A** | **Casper** | **18.11** | **107** | *e*Pn | **P** | **01 25 21.9** | **+2.6** |
| | 8.9nm,0.9s | | | | | | |
| **F25A** | **Bowman** | **18.39** | **95** | P | **Pn** | **01 25 24.2** | **+2.0** |
| | baz=18 | | | | | | |
| **O20A** | **White River Ci** | **18.65** | **116** | P | **Pn** | **01 25 27.6** | **+2.0** |
| | baz=19 | | | | | | |
| **O20A** | **White River Ci** | **18.65** | **116** | *e*Pn | **Pn** | **01 25 28.0** | **+2.4** |
| | 66nm,2.5s | | | | | | |
| **G25A** | **Newell** | **18.73** | **97** | P | **Pn** | **01 25 27.6** | **+1.2** |
| | baz=19 | | | | | | |
| **RSSD** | **Black Hills** | **18.86** | **100** | *e*Pn | **Pn** | **01 25 30.1** | **+2.0** |
| | 4.6nm,1.0s | | | | | | |
| **H25A** | **Fruitdale** | **18.89** | **99** | P | **Pn** | **01 25 30.3** | **+2.1** |
| | baz=19 | | | | | | |
| **F26A** | **Lodgepole** | **18.92** | **94** | P | **Pn** | **01 25 30.0** | **+1.3** |
| | baz=19 | | | | | | |
| **C27A** | **Sayler Ranch,** | **18.95** | **88** | P | **Pn** | **01 25 30.4** | **+1.5** |
| | baz=19 | | | | | | |
| **I25A** | **Rochford** | **19.10** | **100** | P | **Pn** | **01 25 31.8** | **+0.9** |
| | baz=19 | | | | | | |
| **G26A** | **Maurine** | **19.21** | **96** | P | **Pn** | **01 25 33.2** | **+1.1** |
| | baz=19 | | | | | | |
| **H26A** | **Fairpoint** | **19.41** | **98** | P | **Pn** | **01 25 35.9** | **+1.4** |
| | baz=20 | | | | | | |
| **B28A** | **Dugan Ranch, T** | **19.43** | **85** | P | **Pn** | **01 25 36.2** | **+1.5** |
| | baz=20 | | | | | | |
| **N23A** | **Red Feather La** | **19.50** | **111** | P | **Pn** | **01 25 36.5** | **+0.6** |
| | baz=20 | | | | | | |
| **I26A** | **New Underwood** | **19.64** | **99** | P | **Pn** | **01 25 38.6** | **+1.3** |
| | baz=20 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **19.71** | **143** | P | **Pn** | **01 25 38.5** | **+0.2** |
| | baz=20 | | | | | | |
| **J26A** | **Sides Ranch, S** | **19.87** | **101** | P | **Pn** | **01 25 40.6** | **+0.6** |
| | baz=20 | | | | | | |
| **A29A** | **Manning Farm,** | **20.00** | **83** | P | Pn | 01 25 41.2 | -0.3 |
| | baz=20 | | | | | | |
| **B29A** | **Wagenman Farm,** | **20.07** | **84** | P | Pn | 01 25 42.0 | -0.3 |
| | baz=20 | | | | | | |
| **I27A** | **Quinn** | **20.12** | **98** | P | Pn | 01 25 42.7 | -0.3 |
| | baz=20 | | | | | | |
| **G28A** | **Parade** | **20.37** | **95** | P | Pn | 01 25 45.9 | 0.0 |
| | baz=20 | | | | | | |
| **D29A** | **Pettibone, Tap** | **20.39** | **88** | P | Pn | 01 25 46.7 | +0.6 |
| | baz=20 | | | | | | |
| **WUAZ** | **Wupatki** | **20.43** | **131** | P | Pn | 01 25 46.2 | -0.6 |
| | baz=20 | | | | | | |
| **WUAZ** | **Wupatki** | **20.43** | **131** | *e*Pn | Pn | 01 25 47.5 | +0.7 |
| | 4.1nm,0.8s | | | | | | |
| **H28A** | **Mission Ridge** | **20.49** | **96** | P | **P** | **01 25 45.3** | **+0.3** |
| | baz=20 | | | | | | |
| **MVCO** | **Mesa Verde** | **20.58** | **123** | P | Pn | 01 25 47.9 | -0.7 |
| | baz=21 | | | | | | |
| **MVCO** | **Mesa Verde** | **20.58** | **123** | *e*P | Pn | 01 25 48.3 | -0.3 |
| | 72nm,2.5s | | | | | | |
| **A30A** | **Hoffart Farm,** | **20.59** | **83** | P | **P** | **01 25 45.0** | **-1.1** |
| | baz=21 | | | | | | |
| **B30A** | **Myrvik Farm, E** | **20.72** | **84** | P | Pn | 01 25 48.7 | -1.2 |
| | baz=21 | | | | | | |
| **D30A** | **Buchanan** | **20.91** | **88** | P | **P** | **01 25 50.9** | **+1.3** |
| | baz=21 | | | | | | |
| **J28A** | **Allard Ranch,** | **20.96** | **99** | P | **P** | **01 25 52.2** | **+2.0** |
| | baz=21 | | | | | | |
| **GLA** | **Glamis** | **21.00** | **142** | P | **P** | **01 25 51.8** | **+1.1** |
| | baz=21 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **21.10** | **119** | P | **P** | **01 25 53.9** | **+1.9** |
| | baz=21 | | | | | | |
| **B31A** | **Greenbush Farm** | **21.16** | **84** | P | **P** | **01 25 53.2** | **+1.0** |
| | baz=21 | | | | | | |
| **ULM** | **Lac du Bonnet** | **21.75** | **78** | LR | LR | 01 34 36.9 | |
| | comp=Z,108nm,20.8s,baz=44,slow=38 | | | | | | |
| **SDCO** | **Great Sand Dun** | **21.84** | **117** | P | **P** | **01 26 00.3** | **+0.2** |
| | baz=22 | | | | | | |
| **B32A** | **Ashes, Strandq** | **21.87** | **83** | P | **P** | **01 26 00.7** | **+0.8** |
| | baz=22 | | | | | | |
| **TUC** | **Tucson** | **23.36** | **135** | *e*P | **P** | **01 26 18.7** | **+2.9** |
| | 6.9nm,1.3s | | | | | | |
| **MNTX** | **Cornudas Mount** | **26.46** | **127** | P | **P** | **01 26 45.4** | **+1.1** |
| | baz=26 | | | | | | |
| **TXAR** | **Lajitas Array** | **29.24** | **127** | P | **P** | **01 27 10.8** | **+1.6** |
| | 0.3nm,0.9s,baz=342,slow=7.0,SNR=3.8 | | | | | | |
| TXAR | | | | LR | LR | 01 39 40.9 | |
| | comp=Z,72nm,18.4s,baz=0.0,slow=38 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **57.86** | **262** | T | T | 02 33 23.3 | |
| | baz=42,slow=76,SNR=550 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **57.86** | **262** | T | T | 02 33 22.5 | |
| | baz=42,slow=76,SNR=494 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **57.88** | **262** | T | T | 02 33 26.3 | |
| | baz=42,slow=76,SNR=526 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **58.89** | **261** | T | T | 02 34 36.5 | |
| | baz=46,slow=75,SNR=24 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **58.90** | **261** | T | T | 02 34 38.1 | |
| | baz=46,slow=75,SNR=19 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **58.91** | **261** | T | T | 02 34 38.5 | |
| | baz=46,slow=75,SNR=24 | | | | | | |

*IDC **11** 01:24:31.0±1.2, 7°.17S×151°.04E, h0km, mb3.6/5, mb1 3.9/5, mb1mx3.6/34, mbtmp3.6/5, Error ellipse: s-maj=48.6km s-min=26.6km az=129.0*
*ISCJB **11** 01:24:35.2±1.4, 7°.2S±0°.3×150°.9E±0°.3, h40km, mb3.5/4, Error ellipse: s-maj=53.6km s-min=24.9km az=44.7*
**ISC 11 01:24:37.0**±1.3**, 7°.2S**±0°.3×**150°.9E**±0°.3**, h40km, n6,** σ**0s64**/6**, mb3.6**/4**, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.49** | **230** | P | **P** | **01 29 11.8** | **0.0** |
| | 1.7nm,0.6s,baz=55,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **23.15** | **223** | P | **P** | **01 29 39.5** | **-0.5** |
| | 0.6nm,0.7s,baz=63,slow=9.1,SNR=5.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.92** | **244** | P | **P** | **01 30 14.6** | **-0.1** |
| | 1.7nm,0.6s,baz=45,slow=8.8,SNR=7.6 | | | | | | |
| **VNDA** | **Vanda** | **70.54** | **177** | P | **P** | **01 35 47.5** | **+0.1** |
| | 0.3nm,0.5s,baz=349,slow=7.6,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **85.05** | **22** | P | **P** | **01 37 07.8** | **-0.4** |
| | 0.4nm,0.9s,baz=251,slow=5.6,SNR=3.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.16** | **284** | PKPbc | **PKPbc** | **01 44 23.1** | **+0.9** |
| | 0.4nm,0.8s,baz=55,slow=3.0,SNR=4.0 | | | | | | |

*AUST **11** 01:25:31.7, 18°.04S×173°.21W, h200km*
*SZGRF **11** 01:25:34.0, 17°.77S×177°.49W, h33km*
*IDC **11** 01:26:36.8±1.6, 18°.35S×177°.83W, h620km±20km, mb3.6/11, mb1 3.8/13, mb1mx3.4/31, mbtmp4.6/13, Error ellipse: s-maj=22.7km s-min=13.9km az=147.0*
**ISC 11 01:26:33.0**±0.7**, 18°.3S**±0°.2×**178°.0W**±0°.1**, h557km, n53,** σ**1s89**/52**, mb4.3**/10**, 6C-2D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.37** | **55** | P | P | 01 28 30.7 | +5.8 |
| | 2.3nm,0.3s,baz=233,slow=10,SNR=4.6 | | | | | | |
| AFI | | | | S | **S** | **01 30 02.1** | **+5.6** |
| | 0.5nm,0.3s,baz=18,slow=19,SNR=2.9 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.10** | **253** | P | **P** | **01 29 47.2** | **+3.7** |
| | 0.5nm,0.3s,baz=358,slow=0.9,SNR=3.9 | | | | | | |
| **URZ** | **Urewera** | **20.38** | **191** | P | **P** | **01 30 31.7** | **-0.3** |
| | 3.6nm,0.3s,baz=342,slow=19,SNR=4.5 | | | | | | |
| **EIDS** | **Eidsvold** | **29.53** | **251** | P | **P** | **01 31 55.3** | **+2.3** |
| | baz=34,SNR=3.4 | | | | | | |
| **RMQ** | **Roma** | **31.75** | **249** | P | P | 01 32 15.1 | +2.9 |
| | baz=36,SNR=6.0 | | | | | | |
| **CTA** | **Charters Tower** | **33.79** | **261** | P | **P** | **01 32 31.1** | **+1.7** |
| | 10nm,0.6s,baz=98,slow=11,SNR=14 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.33** | **241** | P | **P** | **01 32 44.2** | **+2.1** |
| | baz=39,SNR=11 | | | | | | |
| **QLP** | **Quilpie** | **35.79** | **250** | P | **P** | **01 32 47.8** | **+1.8** |
| | baz=40,SNR=10 | | | | | | |
| **COEN** | **Coen** | **37.51** | **271** | P | **P** | **01 33 02.7** | **+2.4** |
| | baz=42,SNR=31 | | | | | | |
| **QIS** | **Mount Isa** | **39.99** | **260** | P | **P** | **01 33 22.7** | **+2.4** |
| | baz=44,SNR=4.9 | | | | | | |
| **HTT** | **Hallett** | **41.32** | **240** | P | **P** | **01 33 28.9** | **-1.8** |
| | baz=45,SNR=4.2 | | | | | | |
| **JAY** | **Jayapura** | **43.39** | **286** | P | **P** | **01 33 48.9** | **+1.7** |
| | baz=48,SNR=9.4 | | | | | | |
| **BBOO** | **Buckleboo** | **43.59** | **241** | P | **P** | **01 33 49.6** | **+1.2** |
| | baz=48,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.97** | **260** | P | **P** | **01 33 59.7** | **+0.5** |
| | 8.3nm,0.4s,baz=96,slow=7.6,SNR=130 | | | | | | |
| WRA | | | | PcP | **PcP** | **01 35 26.5** | **-2.0** |
| | 0.6nm,0.4s,baz=100,slow=3.3,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **45.09** | **255** | P | **P** | **01 34 01.0** | **+0.8** |
| | 16nm,0.7s,baz=91,slow=7.8,SNR=151 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 35 27.2** | **-1.8** |
| | 1.4nm,0.5s,baz=101,slow=3.8,SNR=5.9 | | | | | | |
| ASAR | | | | S | **S** | **01 39 54.2** | **-5.0** |
| | 1.5nm,0.8s,baz=91,slow=16,SNR=8.8 | | | | | | |
| **KDU** | **Kakadu** | **47.95** | **269** | P | **P** | **01 34 22.5** | **+0.6** |
| | baz=52,SNR=7.2 | | | | | | |
| **WRKA** | **Warakurna** | **50.12** | **252** | P | **P** | **01 34 38.3** | **+0.5** |
| | baz=54,SNR=61 | | | | | | |
| **SIJI** | **Sorong** | **52.71** | **283** | P | **P** | **01 34 57.2** | **+0.6** |
| | 24nm,0.5s,baz=220,slow=4.4,SNR=7.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.37** | **261** | P | **P** | **01 35 01.1** | **-0.1** |
| | 1.5nm,0.3s,baz=58,slow=3.7,SNR=23 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.37** | **261** | P | **P** | **01 35 01.6** | **+0.4** |
| | baz=58,SNR=14 | | | | | | |
| **MEEK** | **Meekatharra** | **58.69** | **250** | P | **P** | **01 35 37.4** | **-0.4** |
| | baz=63,SNR=5.0 | | | | | | |
| **LUWI** | **Luwuk** | **60.56** | **279** | P | **P** | **01 35 52.1** | **+1.7** |
| | baz=65,SNR=3.3 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.43** | **323** | P | **P** | **01 36 38.7** | **-1.0** |
| | 1.5nm,0.5s,baz=152,slow=6.0,SNR=5.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.12** | **345** | P | **P** | **01 37 11.5** | **-1.0** |
| | 3.4nm,0.8s,baz=134,slow=10,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.84** | **57** | P | **P** | **01 38 14.3** | **-0.2** |
| | 0.5nm,0.7s,baz=231,slow=5.1,SNR=6.9 | | | | | | |
| **ILAR** | **Eielson Array** | **86.14** | **13** | P | **P** | **01 38 12.3** | **-2.6** |
| | 0.5nm,0.5s,baz=220,slow=5.0,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.38** | **290** | P | **P** | **01 38 31.0** | **-0.2** |
| | 1.9nm,0.2s,baz=128,slow=1.5,SNR=7.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.73** | **350** | PKP | **PKPdf** | **01 44 29.9** | **-3.0** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 7.1nm,1.0s,baz=316,slow=5.1,SNR=5.5 | | | | | | |
| FINES | FINESS Array B | 133.64 | 344 | PKP | PKPdf | 01 44 43.5 | -2.6 |
| | 4.4nm,0.9s,baz=134,slow=4.0,SNR=3.6 | | | | | | |
| AKASG | Malin Array Be | 141.06 | 332 | PKhKP | PKPpre | 01 44 51.2 | |
| | 0.4nm,0.3s,baz=40,slow=3.7,SNR=6.2 | | | | | | |
| EKA | Eskdalemuir Ar | 142.78 | 5 | PKhKP | PKPpre | 01 44 55.7 | |
| | 0.6nm,0.5s,baz=318,slow=2.4,SNR=6.7 | | | | | | |
| BSEG | Bad Segeberg | 143.82 | 352 | ePKPbc | PKPbc | 01 45 02.3 | -1.6 |
| | baz=16,slow=2.9 | | | | | | |
| BURAR | Bucovina Array | 145.11 | 332 | ⇑iP | PKPbc | 01 45 07.9 | -0.5 |
| BRTR | Keskin Array B | 145.32 | 315 | PKPbc | PKPdf | 01 45 07.0 | -1.1 |
| | 1.4nm,0.6s,baz=125,slow=4.0,SNR=7.2 | | | | | | |
| CLZ | Clausthal | 145.85 | 351 | ePKPbc | PKPdf | 01 45 08.7 | +0.3 |
| | baz=16,slow=2.9 | | | | | | |
| CLL | Collm | 145.89 | 348 | ePKPbc | PKPdf | 01 45 08.6 | +0.2 |
| | baz=16,slow=2.9 | | | | | | |
| CLL | Collm | 145.89 | 348 | ⇓iPKP | PKPdf | 01 45 08.4 | -0.1 |
| | comp=Z,7.0nm,0.6s | | | | | | |
| BRG | Berggiesshubel | 146.10 | 346 | ePKPbc | PKPdf | 01 45 09.4 | +0.5 |
| | baz=16,slow=2.9 | | | | | | |
| FBE | Freiberg | 146.19 | 347 | ePKPbc | PKPdf | 01 45 09.9 | +0.9 |
| | baz=16,slow=2.9 | | | | | | |
| GTTG | Gvttingen | 146.20 | 351 | ePKPbc | PKPdf | 01 45 09.5 | +0.5 |
| | baz=16,slow=2.9 | | | | | | |
| NEUB | Neuenburg | 146.22 | 349 | ePKPbc | PKPdf | 01 45 09.7 | +0.6 |
| | baz=16,slow=2.9 | | | | | | |
| DOPR | Dopca | 146.26 | 330 | ⇑iP | PKPdf | 01 45 10.3 | +1.0 |
| MLR | Muntele Rosu | 146.34 | 329 | ⇑iP | PKPdf | 01 45 09.9 | +0.3 |
| MOX | Moxa | 146.79 | 349 | ePKPbc | PKPdf | 01 45 11.1 | +1.0 |
| | baz=16,slow=2.9 | | | | | | |
| DRGR | | 146.83 | 334 | ⇑iP | PKPdf | 01 45 11.4 | +1.1 |
| PLN | Plauen | 146.84 | 348 | ePKPbc | PKPdf | 01 45 11.3 | +1.2 |
| | baz=16,slow=2.9 | | | | | | |
| WERD | Werda | 146.85 | 348 | ePKPbc | PKPdf | 01 45 11.4 | +1.3 |
| | baz=16,slow=2.9 | | | | | | |
| GZR | Gura Zlata | 147.90 | 332 | ⇓iP | PKPdf | 01 45 13.8 | +1.7 |
| GEC2 | GERESS Array S | 148.06 | 345 | ePKPbc | PKPbc | 01 45 14.5 | -1.8 |
| | baz=16,slow=2.9 | | | | | | |
| GERES | GERESS Array B | 148.06 | 345 | PKPbc | PKPdf | 01 45 13.7 | +1.3 |
| | comp=Z,1.0nm,0.5s,baz=57,slow=4.9,SNR=6.5 | | | | | | |
| WTTA | Wattenberg | 150.01 | 347 | ⇑iPKPbc | PKPbc | 01 45 19.0 | -2.1 |
| | comp=Z,4.7nm,0.6s | | | | | | |
| ABTA | Abfaltersbach | 150.30 | 345 | ⇑iPKPbc | PKPbc | 01 45 19.0 | -2.8 |
| | comp=Z,4.5nm,0.8s | | | | | | |
| DAVOX | Davos/Dischmat | 150.83 | 349 | PKPbc | PKPbc | 01 45 20.9 | -2.2 |
| | comp=Z,3.6nm,0.4s,baz=34,slow=8.6,SNR=14 | | | | | | |

**IDC 11 01:36:31.1**±3.5**,7°.23S×150°.69E,h0km,mb3.4**/3**, mb1 3.7**/3**,mb1mx3.4**/31**,mbtmp3.5**/3**,Error ellipse: s-maj=118.6km s-min=47.8km az=124.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 20.28 | 230 | P | Pn | 01 41 10.3 | -0.2 |
| | 0.8nm,0.5s,baz=55,slow=11,SNR=5.9 | | | | | | |
| ASAR | Alice Springs | 22.95 | 223 | P | P | 01 41 36.2 | -1.1 |
| | 0.3nm,0.7s,baz=58,slow=8.8,SNR=4.4 | | | | | | |
| FITZ | Fitzroy Crossi | 26.68 | 244 | P | P | 01 42 11.5 | -0.6 |
| | 1.9nm,1.0s,baz=63,slow=9.0,SNR=3.5 | | | | | | |
| TORD | Torodi Ar. Bea | 148.94 | 283 | PKPbc | PKPbc | 01 56 21.8 | -0.3 |
| | 0.4nm,0.9s,baz=61,slow=1.9,SNR=3.0 | | | | | | |

**IDC 11 01:37:38.1**±3.5**,5°.95S×154°.51E,h0km,mb3.4**/2**, mb1 3.7**/2**,mb1mx3.3**/29**,mbtmp3.4**/2**,Error ellipse: s-maj=182.7km s-min=47.8km az=127.0,Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 24.03 | 233 | P | P | 01 42 55.5 | +0.3 |
| | 0.8nm,0.6s,baz=58,slow=9.5,SNR=5.8 | | | | | | |
| ASAR | Alice Springs | 26.52 | 226 | P | P | 01 43 17.4 | -0.3 |
| | 0.3nm,0.7s,baz=54,slow=9.3,SNR=2.6 | | | | | | |
| TORD | Torodi Ar. Bea | 152.27 | 287 | PKPbc | PKPbc | 01 57 37.0 | -0.1 |
| | 0.6nm,1.0s,baz=106,slow=2.5,SNR=3.1 | | | | | | |

*ISCJB **11** 01:54:26.7±0.5, 39°.01N±0°.02×25°.95E±0°.03, h8km±3km, Error ellipse: s-maj=4.4km s-min=2.8km az=162.3*
*CSEM **11** 01:54:26.7±0.1, 39°.00N×25°.94E, h8km, MD2.9, Error ellipse: s-maj=4.0km s-min=2.8km az=73.0*
*ATH **11** 01:54:26.2, 39°.01N×25°.98E, h22km±1km, MD2.9/8*
*DDA **11** 01:54:26.7, 39°.01N×25°.90E, h22km, Md3.2*
*THE **11** 01:54:27.0, 39°.01N×26°.03E, h9km±1km, ML2.3/6, Error ellipse: s-maj=1.3km s-min=0.6km az=87.0*
**ISC 11 01:54:26.7**±0.9**,39°.01N**±0°.02×**25°.99E**±0°.02**,h14**km±7km**, n50,σ0$^s$64**/88**,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIGR | SIGRI | 0.23 | 332 | ePB | Pg | 01 54 31.6 | -0.1 |
| SIGR | | | | eSB | Sg | 01 54 35.3 | +0.2 |
| SIGR | SIGRI | 0.23 | 332 | P | Pg | 01 54 31.6 | -0.1 |
| SIGR | | | | S | Sg | 01 54 35.2 | +0.2 |
| SIGR | SIGRI | 0.23 | 332 | P | Pg | 01 54 31.6 | -0.1 |
| SIGR | | | | S | Sg | 01 54 35.2 | +0.2 |
| PRK | Paraskevi | 0.32 | 43 | ePB | Pb | 01 54 33.4 | -0.8 |
| PRK | | | | eSB | Sb | 01 54 38.7 | -0.6 |
| PRK | Paraskevi | 0.32 | 43 | P | Pb | 01 54 33.4 | -0.8 |
| PRK | | | | S | Sb | 01 54 38.3 | -1.0 |
| PRK | Paraskevi | 0.32 | 43 | P | Pb | 01 54 33.4 | -0.8 |
| PRK | | | | S | Sb | 01 54 38.3 | -1.0 |
| PRK | | | | eSb | Sb | 01 54 38.7 | -0.6 |
| AYVA | Ayvalik | 0.62 | 61 | iP | Pb | 01 54 39.2 | -0.1 |
| AYVA | | | | iS | Sb | 01 54 48.2 | +0.3 |
| AYVA | Ayvalik | 0.62 | 61 | P | Pb | 01 54 39.2 | -0.1 |
| AYVA | | | | S | Sb | 01 54 48.2 | +0.3 |
| CHOS | Chios island | 0.63 | 176 | ePN | Pb | 01 54 39.2 | -0.4 |
| CHOS | | | | eSN | Sg | 01 54 47.2 | -0.1 |
| CHOS | Chios island | 0.63 | 176 | P | Pg | 01 54 39.0 | 0.0 |
| CHOS | | | | S | Sg | 01 54 47.8 | +0.5 |
| CHOS | Chios island | 0.63 | 176 | ePn | Pb | 01 54 39.2 | -0.4 |
| CHOS | | | | eSn | Sg | 01 54 47.2 | -0.1 |
| CHOS | | | | S | Sg | 01 54 47.8 | +0.5 |
| URLA | Izmir | 0.81 | 144 | iP | Pb | 01 54 42.3 | -0.3 |
| URLA | | | | iS | Sn | 01 54 55.1 | -0.4 |
| URLA | Izmir | 0.81 | 144 | P | Pb | 01 54 42.3 | -0.3 |
| URLA | | | | S | Sn | 01 54 55.1 | -0.4 |
| BOZC | Bozcaada | 0.83 | 3 | P | Pb | 01 54 42.5 | -0.5 |
| BOZC | | | | S | Sn | 01 54 55.0 | -1.1 |
| ZEY | ˜zmir | 0.87 | 152 | P | Pb | 01 54 43.6 | 0.0 |
| ZEY | | | | S | Sb | 01 54 56.2 | +1.1 |
| LIA | Limnos Island | 1.08 | 325 | ePN | Pn | 01 54 47.3 | -0.2 |
| LIA | | | | eSN | Sn | 01 55 02.0 | -0.4 |
| LIA | Limnos Island | 1.08 | 325 | P | Pn | 01 54 47.5 | 0.0 |
| LIA | | | | S | Sn | 01 55 03.3 | +0.9 |
| LIA | Limnos Island | 1.08 | 325 | P | Pn | 01 54 47.5 | 0.0 |
| LIA | | | | eSn | Sn | 01 55 02.0 | -0.4 |
| LIA | | | | S | Sn | 01 55 03.3 | +0.9 |
| BALY | Balya | 1.46 | 60 | iP | Pb | 01 54 53.7 | 0.0 |
| BALY | | | | iS | Sg | 01 55 14.4 | +0.8 |
| BALY | Balya | 1.46 | 60 | P | Pb | 01 54 53.7 | 0.0 |
| BALY | | | | S | Sg | 01 55 14.4 | +0.8 |
| SMG | Samos | 1.46 | 153 | ePN | Pn | 01 54 53.0 | +0.2 |
| SMG | | | | eSN | Sg | 01 55 13.4 | -0.4 |
| SMG | Samos | 1.46 | 153 | P | Pn | 01 54 52.4 | -0.4 |
| SMG | | | | S | Sb | 01 55 12.4 | +0.2 |
| SMG | Samos | 1.46 | 153 | P | Pn | 01 54 52.4 | -0.4 |
| SMG | Samos | 1.46 | 153 | ePn | Pn | 01 54 53.0 | +0.2 |
| SMG | | | | S | Sb | 01 55 12.4 | +0.2 |
| SMG | | | | eSn | Sg | 01 55 13.4 | -0.4 |
| SMTH | Samothraki Isl | 1.50 | 346 | ePN | Pb | 01 54 54.1 | -0.3 |
| SMTH | | | | eSN | Sb | 01 55 13.3 | -0.1 |
| SMTH | Samothraki Isl | 1.50 | 346 | P | Pn | 01 54 53.4 | +0.1 |
| SMTH | | | | S | Sb | 01 55 13.2 | -0.1 |
| SMTH | Samothraki Isl | 1.50 | 346 | P | Pn | 01 54 53.4 | +0.1 |
| SMTH | Samothraki Isl | 1.50 | 346 | ePn | Pb | 01 54 54.1 | -0.3 |
| SMTH | | | | S | Sb | 01 55 13.2 | -0.1 |
| AOS | Alonnisos | 1.65 | 276 | ePN | Pb | 01 54 56.1 | -0.9 |
| AOS | Alonnisos | 1.65 | 276 | P | Pb | 01 54 56.1 | -0.9 |
| AOS | | | | S | Sb | 01 55 18.4 | +0.7 |
| AOS | Alonnisos | 1.65 | 276 | P | Pb | 01 54 56.1 | -0.9 |
| AOS | | | | S | Sb | 01 55 18.4 | +0.7 |
| ALN | Alexandroupoli | 1.88 | 1 | ePN | Pn | 01 54 59.1 | +0.6 |
| ALN | Alexandroupoli | 1.88 | 1 | P | Pn | 01 54 58.6 | +0.1 |
| ALN | | | | S | Sn | 01 55 22.5 | +0.4 |
| ALN | Alexandroupoli | 1.88 | 1 | P | Pn | 01 54 58.6 | +0.1 |
| ALN | Alexandroupoli | 1.88 | 1 | ePn | Pn | 01 54 59.1 | +0.6 |
| ALN | | | | S | Sn | 01 55 22.5 | +0.4 |
| SART | Tekirdag | 1.91 | 28 | iP | Pb | 01 55 00.2 | -1.2 |
| SART | | | | iS | Sb | 01 55 25.9 | +0.8 |
| SART | Tekirdag | 1.91 | 28 | P | Pb | 01 55 00.2 | -1.2 |
| SART | | | | S | Sb | 01 55 25.9 | +0.8 |
| APE | Apeiranthos | 1.98 | 191 | ePN | Pn | 01 55 00.3 | +0.4 |
| APE | Apeiranthos | 1.98 | 191 | P | Pn | 01 54 59.0 | -0.9 |
| APE | Apeiranthos | 1.98 | 191 | P | Pn | 01 54 59.0 | -0.9 |
| APE | Apeiranthos | 1.98 | 191 | ePn | Pn | 01 55 00.3 | +0.4 |
| AYDN | Tasoluk | 2.01 | 132 | iP | Pb | 01 55 01.7 | -1.3 |
| AYDN | Tasoluk | 2.01 | 132 | P | Pb | 01 55 01.7 | -1.3 |
| AYDN | | | | S | Sg | 01 55 33.2 | +2.0 |
| PAIG | Paliouri | 2.01 | 298 | P | Pn | 01 55 00.8 | +0.5 |
| PAIG | Paliouri | 2.01 | 298 | P | Pn | 01 55 00.8 | +0.5 |
| OUR | Ouranopolis | 2.04 | 311 | ePN | Pn | 01 55 01.5 | +0.8 |
| OUR | Ouranopolis | 2.04 | 311 | P | Pn | 01 55 01.4 | +0.8 |
| OUR | Ouranopolis | 2.04 | 311 | P | Pn | 01 55 01.4 | +0.8 |
| DEMI | Demirci | 2.12 | 88 | iP | Pb | 01 55 05.7 | +0.7 |
| DEMI | Demirci | 2.12 | 88 | P | Pb | 01 55 05.7 | +0.7 |
| DEMI | | | | S | Sg | 01 55 34.7 | -0.3 |

**PGC 11 02:05:27.7**±0.0**,49°.18N×129°.62W,h10km,ML2.9**/6**, Mw3.5**/6**,230km southwest of Pt. Hardy, Bc Vancouver Island Region,Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BPBC | Brooks Peninsu | 1.54 | 50 | Pn | Pn | 02 05 52.9 | -2.5 |
| BPBC | | | | Sn | Sn | 02 06 11.6 | -4.0 |
| FHRB | Fair Harbour | 1.84 | 61 | Pn | Pn | 02 05 57.0 | -2.3 |
| FHRB | | | | Sn | Sn | 02 06 19.0 | -3.7 |
| MAYB | Maynard | 2.00 | 51 | Pn | Pn | 02 05 59.7 | -2.0 |
| PHC | Port Hardy | 2.08 | 42 | Pn | Pn | 02 06 00.7 | -1.9 |
| PHC | | | | Sn | Sn | 02 06 24.3 | -4.2 |
| WOSB | Woss | 2.21 | 63 | Pn | Pn | 02 06 02.8 | -1.7 |
| TLCB | Telegraph Cove | 2.26 | 52 | Pn | Pn | 02 06 03.4 | -1.7 |
| TLCB | | | | Sn | Sn | 02 06 28.4 | -4.5 |
| NCRB | Newcastle Ridg | 2.61 | 61 | Pn | Pn | 02 06 08.9 | -1.3 |
| BTB | Buttle Lake | 2.69 | 82 | Pn | Pn | 02 06 09.5 | -1.8 |
| BBB | Bella Bella | 3.15 | 17 | Pn | Pn | 02 06 16.4 | -1.0 |

*CSEM **11** 02:05:49.9±0.2, 38°.24N×23°.17E, h10km, MD2.6, Error ellipse: s-maj=4.3km s-min=3.0km az=47.0*
**ATH 11 02:05:50.5,38°.22N×23°.14E,h13**km±3km**,MD2.6**/11**, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VIL2 | Platees | 0.10 | 95 | ePG | Pg | 02 05 53.9 | +0.4 |
| VIL2 | | | | eSG | Sb | 02 05 56.8 | -0.2 |
| VILL | Villia | 0.15 | 112 | ePg | Pg | 02 05 53.9 | -0.3 |
| VILL | | | | eSg | Sg | 02 05 56.8 | 0.0 |
| LTK | Loutraki | 0.24 | 215 | ePG | Pg | 02 05 55.8 | +0.1 |
| LTK | | | | eSG | Sg | 02 05 59.5 | +0.4 |
| LTK | Loutraki | 0.24 | 215 | ePg | Pg | 02 05 55.8 | +0.1 |
| LTK | | | | eSg | Sg | 02 05 59.5 | +0.4 |
| LOUT | Loutraki | 0.27 | 209 | ePG | Pg | 02 05 55.9 | -0.2 |
| LOUT | | | | eSG | Sg | 02 05 59.7 | -0.2 |
| LOUT | Loutraki | 0.27 | 209 | ePg | Pg | 02 05 55.9 | -0.2 |
| LOUT | | | | eSg | Sg | 02 05 59.7 | -0.2 |
| LKR | Lokris | 0.44 | 346 | ePG | Pg | 02 05 58.4 | -0.9 |
| LKR | | | | eSB | Sg | 02 06 06.0 | +0.7 |
| LKR | Lokris | 0.44 | 346 | ePb | Pg | 02 05 58.4 | -0.9 |
| LKR | | | | eSb | Sg | 02 06 06.0 | +0.7 |
| DESF | Desfina | 0.52 | 292 | ePB | Pg | 02 05 59.9 | -0.9 |
| DESF | | | | eSB | Sg | 02 06 08.1 | +0.4 |
| DESF | Desfina | 0.52 | 292 | ePb | Pg | 02 05 59.9 | -0.9 |
| DESF | | | | eSb | Sg | 02 06 08.1 | +0.4 |
| DSF | Desfina | 0.52 | 292 | ePB | Pg | 02 05 59.9 | -0.9 |
| DSF | | | | eSB | Sb | 02 06 08.5 | -0.6 |
| DSF | Desfina | 0.52 | 292 | ePb | Pg | 02 05 59.9 | -0.9 |
| DSF | | | | eSb | Sb | 02 06 08.5 | -0.6 |
| NAIG | Nisos Aigina | 0.54 | 149 | ePB | Pb | 02 06 01.5 | -0.3 |
| NAIG | Nisos Aigina | 0.54 | 149 | ePb | Pb | 02 06 01.5 | -0.3 |
| PTL | Penteli | 0.60 | 106 | ePB | Pg | 02 06 00.7 | -1.5 |
| PTL | | | | eSB | Sg | 02 06 09.7 | -0.5 |
| PTL | Penteli | 0.60 | 106 | ePb | Pg | 02 06 00.7 | -1.5 |
| PTL | | | | eSb | Sg | 02 06 09.7 | -0.5 |
| VLY | Voula,Athens | 0.63 | 125 | ePB | Pb | 02 06 03.4 | -0.1 |
| VLY | | | | eSB | Sg | 02 06 11.4 | +0.1 |
| VLY | Voula,Athens | 0.63 | 125 | ePb | Pb | 02 06 03.4 | -0.1 |
| VLY | | | | eSb | Sg | 02 06 11.4 | +0.1 |
| SMIA | Simia | 0.66 | 5 | ePB | Pg | 02 06 02.7 | -0.8 |
| SMIA | | | | eSB | Sb | 02 06 13.4 | +0.3 |
| SMIA | Simia | 0.66 | 5 | ePb | Pg | 02 06 02.7 | -0.8 |
| SMIA | | | | eSb | Sb | 02 06 13.4 | +0.3 |
| AXAR | Agios Charalam | 0.66 | 325 | ePB | Pg | 02 06 02.6 | -0.9 |
| AXAR | | | | eSB | Sb | 02 06 13.4 | +0.2 |
| AXAR | Agios Charalam | 0.66 | 325 | ePb | Pg | 02 06 02.6 | -0.9 |
| AXAR | | | | eSb | Sb | 02 06 13.4 | +0.2 |
| KLV | Kalavryta, Ach | 0.80 | 258 | ePB | Pb | 02 06 06.3 | -0.1 |
| KLV | Kalavryta, Ach | 0.80 | 258 | ePb | Pb | 02 06 06.3 | -0.1 |
| KRND | KRANIDI | 0.84 | 179 | ePB | Pg | 02 06 06.5 | -0.2 |
| KRND | KRANIDI | 0.84 | 179 | ePb | Pg | 02 06 06.5 | -0.2 |
| LAKA | Lakka | 0.92 | 272 | ePN | Pb | 02 06 08.6 | +0.3 |
| LAKA | Lakka | 0.92 | 272 | ePn | Pb | 02 06 08.6 | +0.3 |

*ISCJB **11** 02:05:51.8±0.6, 40°.18N±0°.02×21°.67E±0°.04, h3km±5km, Error ellipse: s-maj=5.1km s-min=3.5km az=154.9*
*ATH **11** 02:05:51.9, 40°.17N×21°.68E, h5km±3km, MD2.7/6*
*CSEM **11** 02:05:51.9±0.2, 40°.18N×21°.68E, h5km, MD2.7, Error ellipse: s-maj=3.7km s-min=3.0km az=70.0*
*THE **11** 02:05:52.0, 40°.18N×21°.66E, h2km±3km, ML1.7/5, Error ellipse: s-maj=3.1km s-min=0.4km az=329.0*
**ISC 11 02:05:52.0**±0.9**,40°.17N**±0°.03×**21°.68E**±0°.02**,h7**km±8km**, n30,σ0$^s$52**/50**,Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KZN | Kozani | 0.15 | 26 | ePG | Pg | 02 05 55.5 | +0.3 |
| KZN | | | | eSG | Sg | 02 05 57.6 | +0.1 |
| KZN | Kozani | 0.15 | 26 | P | Pg | 02 05 55.2 | 0.0 |
| KZN | | | | S | Sg | 02 05 57.4 | -0.1 |
| KZN | Kozani | 0.15 | 26 | P | Pg | 02 05 55.2 | 0.0 |
| KZN | Kozani | 0.15 | 26 | ePg | Pg | 02 05 55.5 | +0.3 |
| KZN | | | | S | Sg | 02 05 57.4 | -0.1 |
| NEST | Nestorio | 0.54 | 297 | ePB | Pg | 02 06 01.8 | -0.7 |
| NEST | | | | eSB | Sg | 02 06 10.6 | +1.0 |
| NEST | Nestorio | 0.54 | 297 | P | Pg | 02 06 01.8 | -0.7 |
| NEST | Nestorio | 0.54 | 297 | P | Pg | 02 06 01.8 | -0.7 |
| NEST | | | | eSb | Sg | 02 06 10.6 | +1.0 |
| LIT | Litokhoron | 0.62 | 96 | ePG | Pg | 02 06 03.9 | -0.1 |
| LIT | | | | eSB | Sb | 02 06 14.0 | -0.2 |
| LIT | Litokhoron | 0.62 | 96 | P | Pg | 02 06 03.7 | -0.3 |
| LIT | | | | S | Sb | 02 06 13.9 | -0.2 |
| LIT | Litokhoron | 0.62 | 96 | ePg | Pg | 02 06 03.9 | -0.1 |
| LIT | | | | S | Sb | 02 06 13.9 | -0.2 |
| THL | Klokotos Trika | 0.65 | 157 | ePG | Pg | 02 06 04.1 | -0.5 |
| THL | | | | eSB | Sb | 02 06 14.3 | -0.6 |
| THL | Klokotos Trika | 0.65 | 157 | P | Pg | 02 06 04.0 | -0.5 |
| THL | | | | S | Sb | 02 06 14.4 | -0.5 |
| THL | Klokotos Trika | 0.65 | 157 | ePg | Pg | 02 06 04.1 | -0.5 |
| THL | | | | eSb | Sb | 02 06 14.3 | -0.6 |
| FNA | Florina | 0.66 | 339 | ePB | Pg | 02 06 04.0 | -0.7 |
| FNA | | | | eSB | Sb | 02 06 14.5 | -0.7 |
| FNA | Florina | 0.66 | 339 | P | Pg | 02 06 03.9 | -0.7 |
| FNA | | | | S | Sg | 02 06 13.9 | +0.6 |
| FNA | Florina | 0.66 | 339 | ePb | Pg | 02 06 04.0 | -0.7 |
| FNA | | | | S | Sg | 02 06 13.9 | +0.6 |
| FNA | | | | eSb | Sb | 02 06 14.5 | -0.7 |
| GRG | Griva | 0.96 | 35 | ePB | Pg | 02 06 10.4 | 0.0 |
| GRG | Griva | 0.96 | 35 | P | Pg | 02 06 10.1 | -0.3 |
| GRG | | | | S | Sb | 02 06 23.6 | -0.3 |
| GRG | Griva | 0.96 | 35 | P | Pg | 02 06 10.1 | -0.3 |
| GRG | Griva | 0.96 | 35 | ePb | Pg | 02 06 10.4 | 0.0 |
| GRG | | | | S | Sb | 02 06 23.6 | -0.3 |
| MAKR | Makrakomi, Fth | 1.20 | 163 | P | Pb | 02 06 15.1 | 0.0 |
| MAKR | | | | S | Sn | 02 06 32.5 | +0.7 |
| MAKR | Makrakomi, Fth | 1.20 | 163 | P | Pb | 02 06 15.1 | 0.0 |
| MAKR | | | | S | Sn | 02 06 32.5 | +0.7 |
| SGD | Sagiada | 1.24 | 244 | ePB | Pn | 02 06 15.7 | 0.0 |
| SGD | Sagiada | 1.24 | 244 | ePb | Pn | 02 06 15.7 | 0.0 |
| EVR | Evrytania | 1.25 | 175 | P | Pn | 02 06 15.2 | -0.7 |
| EVR | | | | S | Sn | 02 06 33.9 | +0.8 |
| EVR | Evrytania | 1.25 | 175 | P | Pn | 02 06 15.2 | -0.7 |
| KEK | Kerkira | 1.52 | 253 | ePB | Pg | 02 06 21.5 | +0.5 |
| KEK | Kerkira | 1.52 | 253 | ePb | Pg | 02 06 21.5 | +0.5 |
| AOS | Alonnisos | 1.97 | 120 | P | Pn | 02 06 25.7 | 0.0 |
| AOS | Alonnisos | 1.97 | 120 | P | Pn | 02 06 25.7 | 0.0 |

*DJA **11** 02:07:43.5±0.2, 8°S±2°×12°0E±°, h10km, M4.8/23, mb4.8/9, mB5.2/6, MLv4.8/20, MLv4.8/23, Mw(mB)4.6/6*
*ISCJB **11** 02:07:43.6±0.2, 8°.17S±0°.02×120°.32E±0°.03, h33km, mb4.3/15, MS3.5/12, Error ellipse: s-maj=4.4km s-min=3.2km az=152.4*
*BJI **11** 02:07:45.5, 8°.20S×120°.30E, h40km, mb4.7/18, mB5.0/11, Ms4.5/7, Ms7 4.1/7*
*IDC **11** 02:07:45.9±2.2, 8°.14S×120°.34E, h41km±20km, mb4.0/12, mb1 4.2/14, mb1mx4.0/33, mbtmp4.3/14, ML4.1/2, MS3.5/14, Ms1 3.5/14, ms1mx3.2/43, Error ellipse: s-maj=31.8km s-min=12.2km az=81.0*
*NEIC **11** 02:07:45.5±0.8, 8°.24S×120°.29E, h39km±8km, mb4.5/5, Error ellipse: s-maj=10.4km s-min=6.8km az=59.0*
*NEIC Felt [II] at Labuhanbajo and Ruteng.*
*AUST **11** 02:07:49.0, 8°.50S×120°.48E, h60km*
**ISC 11 02:07:45.3**±0.3**,8°.22S**±0°.03×**120°.32E**±0°.04**,h33**km**,n99, σ1$^s$81**/105**,mb4.3**/15**,MS3.4**/12**,1C,Flores region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WSI | Waingapu | 1.44 | 181 | P | Pb | 02 08 10.6 | -1.0 |
| WSI | | | | S | Sb | 02 08 31.7 | +2.1 |
| EDFI | Ende, Flores | 1.46 | 111 | P | Pn | 02 08 10.2 | +0.8 |
| EDFI | | | | S | Sb | 02 08 29.7 | -0.5 |
| WBSI | Waikabubak, Su | 1.68 | 213 | P | Pn | 02 08 12.6 | +0.1 |
| MMRI | Maumere | 1.94 | 102 | P | Pn | 02 08 16.0 | -0.1 |
| MMRI | Maumere | 1.94 | 102 | ePn | Pn | 02 08 16.0 | -0.1 |
| MMRI | | | | eS | Sn | 02 08 41.2 | +1.9 |
| BASI | Baing, Sumba | 2.00 | 173 | P | Pn | 02 08 17.6 | +0.7 |
| BSSI | Bau Bau, Buton | 2.07 | 5 | P | Pn | 02 08 14.6 | -3.2 |
| BSSI | | | | S | Sn | 02 08 39.4 | -3.1 |
| BKSI | Bulukumba | 2.89 | 356 | P | Pn | 02 08 26.7 | -2.3 |
| KAPI | Kappang | 3.23 | 350 | P | Pn | 02 08 32.0 | -1.8 |
| | 24nm,0.3s,baz=212,slow=5.0,SNR=62 | | | | | | |
| KAPI | | | | S | Sn | 02 09 08.2 | -3.0 |
| | 34nm,0.3s,baz=246,slow=20,SNR=8.3 | | | | | | |
| KAPI | Kappang | 3.23 | 350 | ePn | Pn | 02 08 32.5 | -1.3 |
| KAPI | | | | eS | Sn | 02 09 12.4 | +1.2 |
| TWSI | Taliwang, Sumb | 3.44 | 261 | P | Pn | 02 08 36.1 | -0.5 |
| BATI | Baumata | 3.85 | 121 | P | Pn | 02 08 46.8 | +4.5 |
| | 25nm,0.3s,baz=285,slow=3.2,SNR=23 | | | | | | |
| BATI | | | | S | Sb | 02 09 39.0 | +0.2 |
| | baz=86,slow=16,SNR=3.7 | | | | | | |
| BATI | | | | LR | LR | 02 10 29.6 | |
| | comp=Z,2μm,18.7s,baz=34,slow=42 | | | | | | |
| BATI | Baumata | 3.85 | 121 | P | Pn | 02 08 46.0 | +3.7 |
| SOEI | Soe | 4.19 | 112 | P | Pn | 02 08 52.2 | +5.2 |
| | baz=3.9,SNR=42 | | | | | | |
| SOEI | Soe | 4.19 | 112 | P | Pn | 02 08 50.7 | +3.6 |
| SOEI | Soe | 4.19 | 112 | ePn | Pn | 02 08 50.4 | +3.4 |
| SPSI | Sidrap Palu | 4.26 | 353 | P | Pn | 02 08 46.9 | -1.1 |
| KDI | Kendari | 4.81 | 29 | P | Pn | 02 08 56.1 | +0.6 |
| SRBI | Singaraja | 5.05 | 271 | P | Pn | 02 08 59.9 | +1.1 |
| | 67nm,0.9s,1μm0.6nm | | | | | | |
| IGBI | Denpasar | 5.15 | 263 | P | Pn | 02 09 01.0 | +0.9 |
| | 339nm,0.7s,6μm2.5nm | | | | | | |
| TTSI | Tana Toraja | 5.17 | 354 | P | Pn | 02 09 02.7 | +2.3 |
| ABJI | Asem Bagus | 6.04 | 274 | P | Pn | 02 09 13.5 | +1.1 |
| | 101nm,0.9s,0.5nm | | | | | | |
| JAGI | Jajag, Banyuwa | 6.11 | 267 | P | Pn | 02 09 13.4 | 0.0 |
| | baz=6.3,SNR=19 | | | | | | |
| JAGI | Jajag, Banyuwa | 6.11 | 267 | P | Pn | 02 09 13.3 | 0.0 |
| | 84nm,0.5s,2μm0.5nm | | | | | | |
| JAGI | Jajag, Banyuwa | 6.11 | 267 | ePn | Pn | 02 09 13.3 | 0.0 |
| | 74nm,0.4s | | | | | | |
| JAGI | | | | eS | Sb | 02 10 33.6 | -10 |
| KBKI | Kotabaru | 6.40 | 320 | P | Pn | 02 09 17.3 | 0.0 |
| | 13nm,0.8s,2μm0.2nm | | | | | | |
| KMMI | Kalianget | 6.40 | 280 | P | Pn | 02 09 18.1 | +0.7 |
| | 72nm,1.3s,0.3nm | | | | | | |
| BLJI | Banyuglugur | 6.67 | 274 | P | Pb | 02 09 32.7 | -8.0 |
| GMJI | Gumukmas | 6.80 | 269 | P | Pn | 02 09 23.8 | +0.9 |
| | 64nm,1.2s,1μm0.3nm0.3nm | | | | | | |
| LUWI | Luwuk | 7.54 | 19 | P | Pb | 02 09 49.1 | -6.3 |
| LUWI | Luwuk | 7.54 | 19 | ePn | Pn | 02 09 34.2 | +1.2 |
| | 31nm,0.8s | | | | | | |
| NLAI | Namlea | 8.37 | 54 | P | Pn | 02 09 50.0 | +5.6 |
| KNRA | Kununurra | 11.10 | 133 | P | Pn | 02 10 21.8 | +0.1 |
| | baz=11,SNR=13 | | | | | | |
| FITZ | Fitzroy Crossi | 11.10 | 153 | P | Pn | 02 10 21.7 | -0.2 |
| | 1.0nm,0.3s,baz=350,slow=5.9,SNR=17 | | | | | | |
| FITZ | | | | S | Sn | 02 12 18.0 | -6.9 |
| | 0.3nm,0.3s,baz=217,slow=20,SNR=2.0 | | | | | | |
| FITZ | Fitzroy Crossi | 11.10 | 153 | P | Pn | 02 10 22.0 | +0.1 |
| | baz=11,SNR=32 | | | | | | |
| FITZ | Fitzroy Crossi | 11.10 | 153 | ePn | Pn | 02 10 22.1 | +0.1 |
| | 25nm,1.0s | | | | | | |
| FITZ | | | | eS | Sn | 02 12 26.4 | +1.5 |
| MTN | Manton Dam | 11.58 | 114 | P | Pn | 02 10 27.3 | -1.2 |
| | baz=11,SNR=44 | | | | | | |
| KDU | Kakadu | 12.75 | 111 | P | Pn | 02 10 45.7 | +1.3 |
| | baz=12,SNR=6.3 | | | | | | |
| MBWA | Marble Bar | 12.88 | 182 | ePn | Pn | 02 10 43.9 | -2.2 |
| MBWA | | | | eS | Sn | 02 12 57.7 | -11 |
| FAKI | Fak Fak | 12.99 | 67 | P | Pn | 02 10 52.6 | +4.9 |
| | baz=13,SNR=7.0 | | | | | | |
| FAKI | Fak Fak | 12.99 | 67 | P | P | 02 10 56.1 | -1.7 |
| FAKI | Fak Fak | 12.99 | 67 | eP | Pn | 02 10 49.3 | +1.6 |
| | 42nm,0.9s | | | | | | |
| SWI | Sorong | 13.12 | 57 | P | P | 02 11 02.8 | +3.5 |
| KSM | Kuching | 13.87 | 314 | ePn | Pn | 02 10 59.4 | -0.3 |
| GIRL | Giralia | 15.49 | 202 | P | P | 02 11 23.6 | -1.8 |
| | baz=15,SNR=3.9 | | | | | | |
| WRA | Warramunga Arr | 17.89 | 132 | P | Pn | 02 11 49.3 | -2.5 |
| | 1.8nm,0.3s,baz=307,slow=12,SNR=71 | | | | | | |
| WRA | | | | S | Sn | 02 14 58.8 | -12 |
| | baz=307,slow=24,SNR=7.5 | | | | | | |
| WRA | | | | LR | LR | 02 20 08.0 | |
| | comp=Z,259nm,18.6s,baz=320,slow=41 | | | | | | |
| WRAB | Tennant Creek | 17.89 | 132 | ePn | Pn | 02 11 50.6 | -1.2 |
| | 20nm,0.9s | | | | | | |
| WRAB | | | | eS | Sn | 02 14 57.1 | -13 |
| WRKA | Warakurna | 18.38 | 156 | P | Pn | 02 11 58.6 | +0.9 |
| | baz=18,SNR=27 | | | | | | |
| MEEK | Meekatharra | 18.39 | 185 | P | Pn | 02 11 59.2 | +1.4 |
| | baz=18,SNR=16 | | | | | | |
| ASAR | Alice Springs | 20.14 | 141 | P | P | 02 12 16.8 | 0.0 |
| | 25nm,0.7s,baz=314,slow=10,SNR=123 | | | | | | |
| ASAR | | | | S | S | 02 15 57.3 | -4.1 |
| | 1.8nm,1.0s,baz=336,slow=22,SNR=3.6 | | | | | | |
| ASAR | | | | ScP | ScP | 02 20 01.8 | -3.5 |
| | 0.2nm,0.4s,baz=338,slow=2.0,SNR=4.4 | | | | | | |
| ASAR | | | | LR | LR | 02 20 39.0 | |
| | comp=Z,206nm,20.3s,baz=318,slow=38 | | | | | | |
| PALU | Palau | 20.93 | 43 | P | P | 02 12 22.9 | -2.6 |
| | baz=21,SNR=5.3 | | | | | | |
| MORW | Morawa | 21.13 | 190 | P | P | 02 12 28.6 | +1.2 |
| | baz=21,SNR=8.2 | | | | | | |
| QIS | Mount Isa | 22.32 | 125 | P | P | 02 12 39.7 | -0.6 |
| | baz=22,SNR=12 | | | | | | |
| BLDU | Ballidu | 22.54 | 188 | P | P | 02 12 42.0 | -0.5 |
| | baz=22,SNR=14 | | | | | | |
| COEN | Coen | 23.13 | 106 | P | P | 02 12 47.9 | -1.0 |
| | baz=23,SNR=6.1 | | | | | | |
| COEN | Coen | 23.13 | 106 | eP | P | 02 12 47.5 | -1.5 |
| | 24nm,1.0s | | | | | | |
| KLBR | Kellerberrin | 23.38 | 186 | P | P | 02 12 50.6 | -0.5 |
| | baz=23,SNR=9.5 | | | | | | |
| NWAO | Narrogin (SRO) | 24.75 | 186 | P | P | 02 13 03.9 | -0.1 |
| | 16nm,0.8s,baz=288,slow=0.2,SNR=7.1 | | | | | | |
| NWAO | Narrogin (SRO) | 24.75 | 186 | P | P | 02 13 04.7 | +0.8 |
| | baz=25,SNR=5.7 | | | | | | |
| NWAO | Narrogin (SRO) | 24.75 | 186 | eP | P | 02 13 04.2 | +0.3 |
| BBOO | Buckleboo | 28.49 | 151 | P | P | 02 13 37.1 | -0.6 |
| | baz=28,SNR=20 | | | | | | |
| QIZ | Qiongzhong | 28.98 | 339 | P | P | 02 13 43.3 | +1.2 |
| QIZ | | | | pP | pP | 02 13 54.1 | +2.5 |
| QIZ | | | | sP | sP | 02 13 59.1 | +3.5 |
| QIZ | | | | S | S | 02 18 32.9 | +1.8 |
| QIZ | | | | sS | sS | 02 18 52.3 | +5.4 |
| QIZ | | | | PMZ | | | |
| | 3.0nm,1.0s | | | | | | |
| HTT | Hallett | 30.41 | 148 | P | P | 02 13 52.4 | -2.4 |
| | baz=30,SNR=7.0 | | | | | | |
| CMSA | Cobar Meteorol | 33.11 | 138 | P | P | 02 14 19.2 | +0.8 |
| | baz=33,SNR=8.6 | | | | | | |
| CMAR | Chiang Mai Arr | 33.88 | 322 | P | P | 02 14 26.0 | +0.7 |
| | 1.4nm,0.3s,baz=137,slow=7.1,SNR=6.3 | | | | | | |
| CMAR | | | | LR | LR | 02 29 24.7 | |
| | comp=Z,75nm,20.7s,baz=176,slow=38 | | | | | | |
| GYA | Guiyang | 36.93 | 339 | eP | P | 02 14 53.8 | +2.3 |
| GYA | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KMI** | **Kunming** | **37.30** | **333** | P | P | 02 14 58.1 | +3.3 |
| KMI | | | | PMZ | | | |
| | 4.0nm,0.5s | | | | | | |
| KMI | | | | PMZ | | | |
| | 86nm,4.5s | | | | | | |
| **NJ2** | **Nanjing** | **40.07** | **358** | *e*P | **P** | **02 15 17.2** | **-0.4** |
| NJ2 | | | | PMZ | | | |
| | 30nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **42.39** | **290** | LR | LR | 02 34 08.4 | |
| | comp=Z,88nm,18.2s,baz=116,slow=37 | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.97** | **8** | P | **P** | **02 16 05.2** | **-0.1** |
| **KSRS** | **Korea Array** | **45.99** | **8** | P | **P** | **02 16 05.2** | **-0.2** |
| | 1.1nm,0.6s,baz=187,slow=7.0,SNR=6.2 | | | | | | |
| KSRS | | | | LR | LR | 02 37 17.3 | |
| | comp=Z,23nm,20.3s,baz=230,slow=39 | | | | | | |
| **LZH** | **Lanzhou** | **46.72** | **342** | *e*P | **P** | **02 16 13.0** | **+1.5** |
| LZH | | | | pP | **pP** | **02 16 24.8** | **+3.5** |
| LZH | | | | sP | **sP** | **02 16 30.2** | **+4.9** |
| LZH | | | | PMZ | | | |
| | 20nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | 85nm,4.2s | | | | | | |
| **LSA** | **Lhasa** | **47.00** | **325** | *e*P | **P** | **02 16 15.4** | **+1.3** |
| | 4.2nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **47.59** | **20** | P | **P** | **02 16 16.6** | **-1.5** |
| | 2.9nm,1.0s,baz=195,slow=8.8,SNR=5.0 | | | | | | |
| MJAR | | | | LR | LR | 02 37 21.5 | |
| | comp=Z,15nm,18.8s,baz=265,slow=37 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.49** | **351** | *e*P | **P** | **02 16 34.8** | **+2.1** |
| HHC | | | | sP | sP | 02 16 52.7 | +6.1 |
| HHC | | | | S | **S** | **02 23 40.4** | **+2.2** |
| HHC | | | | SS | **SS** | **02 27 06.4** | **-4.3** |
| HHC | | | | PMZ | | | |
| | 16nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | 130nm,3.6s | | | | | | |
| HHC | | | | LN | | | |
| | 90nm,17.3s | | | | | | |
| HHC | | | | LE | | | |
| | 77nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | 62nm,13.6s | | | | | | |
| **GTA** | **Gaotai** | **51.06** | **340** | *e*P | **P** | **02 16 45.5** | **+0.8** |
| GTA | | | | pP | **pP** | **02 16 57.9** | **+3.2** |
| GTA | | | | sP | **sP** | **02 17 03.4** | **+4.8** |
| GTA | | | | PMZ | | | |
| | 7.0nm,1.1s | | | | | | |
| **CN2** | **Changchun** | **51.98** | **5** | *e*P | P | 02 16 55.2 | +3.9 |
| **USRK** | **Ussuriysk Ar.** | **53.23** | **10** | P | **P** | **02 16 59.3** | **-1.2** |
| | 2.3nm,1.0s,baz=189,slow=8.6,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **57.16** | **349** | P | **P** | **02 17 28.2** | **-0.8** |
| | 0.7nm,0.5s,baz=167,slow=10,SNR=4.8 | | | | | | |
| **TLY** | **Talaya** | **61.37** | **348** | LR | LR | 02 47 55.1 | |
| | comp=Z,20nm,18.8s,baz=130,slow=39 | | | | | | |
| **KSH** | **Kashi** | **62.77** | **323** | P | **P** | **02 18 07.1** | **-0.6** |
| KSH | | | | *e*pP | **pP** | **02 18 20.0** | **+2.1** |
| KSH | | | | *e*PcP | **PcP** | **02 18 45.7** | **-0.4** |
| KSH | | | | PP | **PP** | **02 20 26.7** | **+0.5** |
| KSH | | | | S | S | 02 26 28.4 | -6.3 |
| KSH | | | | sS | **sS** | **02 26 50.8** | **-0.7** |
| KSH | | | | ScS | **SKSac** | **02 27 52.2** | **-5.9** |
| KSH | | | | PMZ | | | |
| | 11nm,0.8s | | | | | | |
| KSH | | | | PMZ | | | |
| | 47nm,3.0s | | | | | | |
| KSH | | | | LN | | | |
| | 100nm,4.5s | | | | | | |
| KSH | | | | LE | | | |
| | 51nm,5.3s | | | | | | |
| KSH | | | | LZ | | | |
| | 170nm,5.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **64.37** | **332** | P | **P** | **02 18 17.8** | **-0.2** |
| | 1.6nm,0.6s,baz=143,slow=7.2,SNR=9.7 | | | | | | |
| **AAK** | **Ala-Archa** | **65.59** | **324** | *e*P | **P** | **02 18 25.2** | **-1.0** |
| | 4.9nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **68.79** | **338** | P | **P** | **02 18 43.5** | **-2.5** |
| | 2.2nm,0.5s,baz=149,slow=5.3,SNR=11 | | | | | | |
| ZALV | | | | LR | LR | 02 51 51.2 | |
| | comp=Z,14nm,19.7s,baz=70,slow=38 | | | | | | |
| **KURK** | **Kurchatov** | **68.89** | **333** | *e*P | **P** | **02 18 45.8** | **-0.9** |
| **MAW** | **Mawson** | **70.41** | **200** | P | **P** | **02 18 56.2** | **+0.3** |
| | 4.2nm,1.0s,baz=53,slow=6.1,SNR=7.2 | | | | | | |
| MAW | | | | LR | LR | 02 48 46.2 | |
| | comp=Z,65nm,18.0s,baz=240,slow=35 | | | | | | |
| **MAW** | **Mawson** | **70.41** | **200** | P | **P** | **02 18 57.3** | **+1.5** |
| | baz=70,SNR=5.5 | | | | | | |
| **VNDA** | **Vanda** | **72.55** | **171** | P | **P** | **02 19 08.9** | **+0.3** |
| | 1.3nm,0.6s,baz=317,slow=7.5,SNR=14 | | | | | | |
| VNDA | | | | LR | LR | 02 50 14.9 | |
| | comp=Z,44nm,19.8s,baz=122,slow=35 | | | | | | |
| **GEYT** | **Alibeck** | **73.85** | **313** | LR | LR | 02 57 22.7 | |
| | comp=Z,42nm,19.2s,baz=260,slow=40 | | | | | | |
| **ABKAR** | **Akbulak array** | **77.68** | **324** | *e*P | **P** | **02 19 36.7** | **-2.0** |
| | 1.2nm,0.8s | | | | | | |
| **SYO** | **Syowa Base** | **79.05** | **201** | ⇑*e*P | **P** | **02 19 44.8** | **-1.0** |
| **QSPA** | **South Pole Qui** | **81.77** | **180** | *e*P | **P** | **02 20 00.4** | **-0.3** |
| **BOSA** | **Boshof** | **90.52** | **241** | P | **P** | **02 20 44.2** | **-0.5** |
| | 2.0nm,0.9s,baz=124,slow=7.3,SNR=5.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **92.65** | **310** | LR | LR | 03 07 12.0 | |
| | comp=Z,9.8nm,20.2s,baz=134,slow=38 | | | | | | |
| **ARCES** | **ARCESS Array B** | **99.33** | **339** | LR | LR | 03 13 02.2 | |
| | comp=Z,28nm,20.7s,baz=265,slow=40 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.60** | **280** | PKP | **PKPdf** | **02 26 29.7** | **-3.1** |
| | 0.6nm,0.5s,baz=46,slow=1.6,SNR=12 | | | | | | |
| **CPUP** | **Villa Florida** | **145.58** | **184** | PKPbc | **PKPdf** | **02 27 20.6** | **-0.4** |
| | 11nm,1.1s,baz=189,slow=5.7,SNR=9.2 | | | | | | |
| **LVC** | **Limon Verde** | **148.05** | **164** | PKPbc | **PKPbc** | **02 27 29.1** | **+0.4** |
| | 5.6nm,0.5s,baz=239,slow=1.6,SNR=2.8 | | | | | | |
| **LPAZ** | **La Paz** | **154.25** | **161** | PKPab | **PKPab** | **02 27 57.7** | **+0.1** |
| | 5.0nm,0.9s,baz=139,slow=3.1,SNR=11 | | | | | | |

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**MEX 11 02:10:38.7**±0.7**, 19°.26N×104°.87W, h16**km±11km**, MD3.6, Near coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CJM** | **Chamela** | **0.29** | **326** | *i* P | Pg | 02 10 43.9 | -1.0 |
| CJM | | | | *i* S | Sg | 02 10 47.7 | -1.4 |
| **R15V** | | **0.85** | **96** | *i* P | Pb | 02 10 51.9 | -3.3 |
| R15V | | | | *e*S | Sb | 02 11 01.6 | -4.7 |
| **EZ5V** | | **1.22** | **80** | *i* P | Pn | 02 10 58.2 | -3.2 |
| EZ5V | | | | *i* S | Sb | 02 11 12.1 | -5.4 |
| **MMIG** | **Aquila** | **1.74** | **124** | *i* P | Pn | 02 11 04.7 | -3.5 |
| MMIG | | | | *i* S | Sn | 02 11 25.0 | -5.1 |

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*IDC 11 02:19:49.3±1.0, 53°.01N×163°.44W, h0km, mb3.9/12, mb1 4.0/14, mb1mx3.8/56, mbtmp3.9/14, ML3.6/2, MS3.1/1, Ms1 3.3/1, ms1mx2.4/49, Error ellipse: s-maj=27.0km s-min=16.2km az=3.0*

*NEIC 11 02:19:51.5, 52°.91N×163°.65W, h10km, ML3.4(AEIC), After AEIC.*

**ISC 11 02:19:50.6**±3.7**, 52°.93N**±0°.08×**163°.53W**±0°.04**, h11**km±23km**, n48, σ1s.07**/54**, mb4.0**/11**, South of Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WESE** | **West Dahl East** | **1.67** | **338** | P | **Pn** | **02 20 20.5** | **+0.7** |
| **BRPK** | **Brown Peak** | **1.72** | **356** | P | **Pn** | **02 20 21.2** | **+0.7** |
| **WESN** | **West Dahl Nort** | **1.76** | **340** | P | **Pn** | **02 20 21.9** | **+1.0** |
| **WECS** | **Westdahl Cape** | **1.77** | **336** | P | **Pn** | **02 20 22.1** | **+1.0** |
| **AKSA** | **Akutan Strait** | **1.77** | **314** | P | **Pn** | **02 20 21.3** | **+0.2** |
| AKSA | | | | S | **Sn** | **02 20 43.1** | **-0.4** |
| **AKUT** | **Akutan** | **1.80** | **313** | *e*Pn | **Pn** | **02 20 21.8** | **+0.3** |
| AKUT | | | | *e*S | **Sn** | **02 20 43.1** | **-1.2** |
| **ISLZ** | **Isanotski Laza** | **1.80** | **357** | P | **Pn** | **02 20 22.1** | **+0.5** |
| **SSLS** | **Shishaldin Sou** | **1.81** | **351** | P | **Pn** | **02 20 22.7** | **+1.0** |
| **WEBT** | **Westdahl Beart** | **1.81** | **337** | P | **Pb** | **02 20 23.2** | **-0.6** |
| **ZRO** | **Akutan Zero** | **1.87** | **310** | P | **Pn** | **02 20 22.6** | **+0.2** |
| ZRO | | | | S | **Sn** | **02 20 45.8** | **-0.2** |
| **SSBA** | **Shishaldin** | **1.88** | **349** | P | **Pn** | **02 20 23.2** | **+0.5** |
| **FALS** | **False Pass** | **1.93** | **2** | *e*Pn | **Pn** | **02 20 24.1** | **+0.7** |
| FALS | | | | *e*S | **Sb** | **02 20 49.0** | **-0.9** |
| **AKRB** | **Akutan Reef Bi** | **1.93** | **309** | P | **Pn** | **02 20 23.5** | **+0.1** |
| AKRB | | | | S | **Sn** | **02 20 47.8** | **+0.1** |
| **AKGG** | **Akutan Green G** | **1.94** | **312** | P | **Pn** | **02 20 23.8** | **+0.4** |
| AKGG | | | | S | **Sn** | **02 20 48.3** | **+0.4** |
| **UNV** | **Unalaska Valle** | **2.00** | **298** | *e*Pn | **Pn** | **02 20 23.6** | **-0.7** |
| UNV | | | | S | **Sn** | **02 20 48.0** | **-1.2** |
| **MTBL** | **Makushin Table** | **2.15** | **300** | P | **Pn** | **02 20 26.4** | **0.0** |
| MTBL | | | | S | **Sn** | **02 20 52.1** | **-1.0** |
| **MSW** | **Makushin Switc** | **2.18** | **298** | P | **Pn** | **02 20 26.6** | **-0.1** |
| MSW | | | | S | **Sn** | **02 20 52.4** | **-1.3** |
| **MSOM** | **Makushin Julie** | **2.23** | **295** | P | **Pn** | **02 20 27.1** | **-0.4** |
| **DT1** | **Dutton Round H** | **2.30** | **18** | P | **Pn** | **02 20 28.6** | **+0.1** |
| **DTNA** | **Dutton South F** | **2.35** | **18** | P | **Pn** | **02 20 29.5** | **+0.4** |
| **PS4A** | **Pavlof South-4** | **2.61** | **21** | P | **Pn** | **02 20 33.8** | **+1.1** |
| **OKTU** | **Okmok Mt. Tuli** | **2.75** | **281** | P | **Pn** | **02 20 34.5** | **-0.2** |
| **OKSO** | **Okmok South** | **2.82** | **281** | P | **Pn** | **02 20 34.6** | **-1.0** |
| **OKCE** | **Okmok Cone E** | **2.83** | **282** | P | **Pn** | **02 20 35.3** | **-0.4** |
| **SDPT** | **Sand Point** | **3.02** | **35** | *e*Pn | **Pn** | **02 20 39.4** | **+1.2** |
| SDPT | | | | *e*S | **Sn** | **02 21 14.7** | **+0.4** |
| **CHGN** | **Chignik** | **4.50** | **39** | *e*Pn | **Pn** | **02 20 59.6** | **+1.0** |
| CHGN | | | | *e*S | **Sn** | **02 21 50.8** | **-0.1** |
| **OHAK** | **Old Harbor** | **7.28** | **50** | *e*Pn | **Pn** | **02 21 36.3** | **-0.5** |
| **KDAK** | **Kodiak Island** | **7.91** | **48** | Pn | **Pn** | **02 21 43.8** | **-1.5** |
| | 0.8nm,0.3s,baz=229,slow=9.1,SNR=13 | | | | | | |
| KDAK | | | | Sn | **Sn** | **02 23 09.0** | **-5.7** |
| | 0.4nm,0.3s,baz=323,slow=20,SNR=4.3 | | | | | | |
| **ILAR** | **Eielson Array** | **14.60** | **29** | Pn | Pn | 02 23 12.7 | -4.2 |
| | 0.1nm,0.3s,baz=218,slow=13,SNR=6.0 | | | | | | |
| ILAR | | | | LR | LR | 02 29 18.4 | |
| | comp=Z,76nm,18.1s,baz=34,slow=39 | | | | | | |
| **INK** | **Inuvik** | **20.97** | **31** | P | **P** | **02 24 33.5** | **+0.2** |
| | 3.8nm,0.8s,baz=253,slow=14,SNR=6.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **23.14** | **286** | P | **P** | **02 24 56.2** | **-0.2** |
| | 1.8nm,0.6s,baz=87,slow=13,SNR=5.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.15** | **97** | P | **P** | **02 26 35.5** | **-0.2** |
| | 1.0nm,0.8s,baz=306,slow=11,SNR=7.6 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.26** | **226** | T | T | 03 11 57.5 | |
| | baz=26,slow=76,SNR=6.3 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.27** | **226** | T | T | 03 12 00.2 | |
| | baz=26,slow=76,SNR=11 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.28** | **226** | T | T | 03 12 00.2 | |
| | baz=26,slow=76,SNR=7.7 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.43** | **225** | T | T | 03 13 29.3 | |
| | baz=25,slow=76,SNR=5.9 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.44** | **225** | T | T | 03 13 29.3 | |
| | baz=25,slow=76,SNR=8.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.45** | **225** | T | T | 03 13 29.3 | |
| | baz=25,slow=76,SNR=6.4 | | | | | | |
| **KSRS** | **Korea Array** | **48.84** | **280** | P | **P** | **02 28 35.6** | **-0.1** |
| | 1.0nm,0.7s,baz=60,slow=8.8,SNR=4.0 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.87** | **280** | P | **P** | **02 28 35.6** | **-0.4** |
| **TXAR** | **Lajitas Array** | **49.21** | **94** | P | **P** | **02 28 39.3** | **+0.4** |
| | 0.5nm,0.6s,baz=299,slow=5.0,SNR=8.7 | | | | | | |
| TXAR | | | | PcP | **PcP** | **02 30 01.7** | **-0.2** |
| | 0.1nm,0.5s,baz=242,slow=1.9,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **54.01** | **304** | P | **P** | **02 29 15.1** | **+0.6** |
| | 0.3nm,0.3s,baz=45,slow=8.4,SNR=4.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.67** | **356** | P | **P** | **02 29 40.7** | **+0.4** |
| | 3.2nm,0.9s,baz=21,slow=7.7,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.34** | **320** | P | **P** | **02 29 53.3** | **+1.1** |
| | 0.8nm,0.4s,baz=52,slow=5.7,SNR=3.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **65.23** | **327** | P | **P** | **02 30 32.8** | **+1.2** |
| | 2.0nm,0.7s,baz=39,slow=9.6,SNR=9.5 | | | | | | |
| **FINES** | **FINESS Array B** | **65.72** | **355** | P | **P** | **02 30 35.1** | **+0.5** |
| | 4.4nm,0.9s,baz=345,slow=4.8,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.92** | **317** | P | **P** | **02 30 36.7** | **+0.5** |
| | 0.3nm,0.5s,baz=45,slow=4.3,SNR=2.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **76.18** | **352** | P | **P** | **02 31 38.0** | **-0.3** |
| | 0.8nm,0.5s,baz=11,slow=5.4,SNR=4.1 | | | | | | |

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**MEX 11 02:25:28.9**±0.6**, 17°.01N×99°.85W, h16**km±7km**, MD3.8, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAIG** | **El Cayaco** | **0.40** | **275** | *i* P | Pg | 02 25 35.8 | -1.3 |
| CAIG | | | | *i* S | Sg | 02 25 41.0 | -1.6 |
| **MEIG** | **Mezcala** | **0.94** | **14** | *i* P | Pb | 02 25 43.8 | -3.1 |
| MEIG | | | | *i* S | Sb | 02 25 54.7 | -4.5 |
| **ARIG** | **Puente Sto Nin** | **1.35** | **339** | *i* P | Pn | 02 25 50.1 | -3.0 |
| ARIG | | | | *i* S | Sn | 02 26 05.4 | -5.3 |
| **PLIG** | **Platanillo** | **1.41** | **14** | *i* P | Pn | 02 25 50.6 | -3.5 |
| PLIG | | | | *i* S | Sn | 02 26 07.5 | -5.0 |
| **PNIG** | **Pinotepa** | **1.76** | **110** | *i* P | Pn | 02 25 55.7 | -3.1 |
| PNIG | | | | *i* S | Sn | 02 26 16.0 | -4.9 |

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**IDC 11 02:26:21.5**±2.2**, 0°.42S×97°.14E, h0**km**, mb3.4**/3**, mb1 3.8**/5**, mb1mx3.4**/50**, mbtmp3.6**/5**, ML4.0**/2**, Error ellipse: s-maj=67.5km s-min=23.5km az=65.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **3.66** | **29** | Pn | Pn | 02 27 18.0 | -1.6 |
| | 1.8nm,0.3s,baz=175,slow=12,SNR=4.4 | | | | | | |
| PSI | | | | Sn | Sn | 02 27 59.1 | -4.5 |
| | 2.3nm,0.3s,baz=172,slow=15,SNR=2.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.84** | **5** | P | Pn | 02 30 44.5 | +0.9 |
| | 0.9nm,0.3s,baz=199,slow=11,SNR=5.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.60** | **253** | T | T | 02 59 33.5 | |
| | baz=73,slow=75,SNR=7.9 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.60** | **253** | T | T | 02 59 29.5 | |
| | baz=73,slow=75,SNR=7.5 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.62** | **253** | T | T | 02 59 26.4 | |
| | baz=73,slow=75,SNR=28 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **37.78** | **157** | T | T | 03 14 24.4 | |
| | baz=334,slow=76,SNR=5.2 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **37.80** | **157** | T | T | 03 14 24.9 | |
| | baz=334,slow=76,SNR=5.5 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **37.80** | **157** | T | T | 03 14 23.2 | |
| | baz=334,slow=76,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.25** | **120** | P | P | 02 34 08.7 | 0.0 |
| | 0.5nm,0.9s,baz=304,slow=8.9,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **42.49** | **126** | P | P | 02 34 18.6 | -0.2 |
| | 0.4nm,0.6s,baz=291,slow=7.8,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.79** | **346** | P | P | 02 35 07.8 | -0.6 |
| | 0.8nm,0.7s,baz=154,slow=8.0,SNR=5.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.06** | **33** | PKPbc | PKPbc | 02 46 00.3 | -0.8 |
| | 0.3nm,0.6s,baz=286,slow=1.6,SNR=5.7 | | | | | | |

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*ISK 11 02:28:55.4, 38°.89N×38°.95E, h5km, MD2.9*

*CSEM 11 02:28:56.4±0.2, 38°.90N×38°.94E, h2km, MD2.9, Error ellipse: s-maj=4.7km s-min=3.4km az=98.0*

*DDA 11 02:28:56.1, 38°.91N×38°.95E, h7km, Ml3.2*

**ISC 11 02:28:56.8**±1.0**, 38°.91N**±0°.02×**38°.95E**±0°.02**, h9**km±10km**, n30, σ0s.85**/45**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PTK** | **Pertek** | **0.34** | **93** | *e*PG | **Pg** | **02 29 03.5** | **-0.1** |
| **PTK** | **Pertek** | **0.34** | **93** | *e*Pg | **Pg** | **02 29 03.5** | **-0.1** |
| **ELZG** | **Elazig** | **0.41** | **177** | *i* P | **Pg** | **02 29 04.5** | **-0.4** |
| ELZG | | | | *i* S | **Sg** | **02 29 11.4** | **+1.0** |
| **ELZG** | **Elazig** | **0.41** | **177** | P | **Pg** | **02 29 04.5** | **-0.4** |
| ELZG | | | | S | **Sg** | **02 29 11.4** | **+1.0** |
| **SVRC** | **Sivrice-ELAZID** | **0.60** | **152** | *e*PG | **Pg** | **02 29 07.9** | **-0.5** |
| SVRC | | | | *e*SG | **Sg** | **02 29 16.5** | **+0.2** |
| **SVRC** | **Sivrice-ELAZID** | **0.60** | **152** | *e*Pg | **Pg** | **02 29 07.9** | **-0.5** |
| SVRC | | | | *e*Sg | **Sg** | **02 29 16.5** | **+0.2** |
| **EZC** | **Erzincan** | **0.90** | **20** | *e*Pg | **Pg** | **02 29 13.3** | **-0.8** |
| **ERZN** | **Erzincan** | **0.90** | **41** | *e*PG | **Pg** | **02 29 13.3** | **-0.9** |
| **EUZM** | **Uzumlu** | **0.98** | **36** | *i* P | **Pg** | **02 29 15.3** | **-0.4** |
| EUZM | | | | *i* S | **Sb** | **02 29 28.6** | **-0.7** |
| **EUZM** | **Uzumlu** | **0.98** | **36** | P | **Pg** | **02 29 15.3** | **-0.4** |
| EUZM | | | | S | **Sb** | **02 29 28.6** | **-0.7** |
| **AKCD** | **Akcadag** | **1.01** | **233** | *i* P | **Pg** | **02 29 15.3** | **-1.0** |
| AKCD | | | | *i* S | **Sb** | **02 29 30.6** | **+0.5** |
| **AKCD** | **Akcadag** | **1.01** | **233** | P | **Pg** | **02 29 15.3** | **-1.0** |
| AKCD | | | | S | **Sb** | **02 29 30.6** | **+0.5** |
| **DARE** | **Darende-Malaty** | **1.20** | **254** | *e*PN | **Pg** | **02 29 19.1** | **-0.7** |
| **DARE** | **Darende-Malaty** | **1.20** | **254** | *e*Pn | **Pg** | **02 29 19.1** | **-0.7** |
| **CUKAN** | **kangal_SIVAS** | **1.23** | **290** | P | **Pg** | **02 29 19.7** | **-0.6** |
| CUKAN | | | | S | **Sn** | **02 29 37.0** | **0.0** |
| **KELT** | **Kelkit** | **1.26** | **11** | *i* P | **Pg** | **02 29 20.3** | **-0.7** |
| KELT | | | | *i* S | **Sn** | **02 29 37.7** | **-0.3** |
| **KELT** | **Kelkit** | **1.26** | **11** | P | **Pg** | **02 29 20.2** | **-0.7** |
| KELT | | | | S | **Sn** | **02 29 37.7** | **-0.3** |
| **CUZAR** | **Zara_SIVAS** | **1.34** | **317** | P | **Pn** | **02 29 21.8** | **-0.1** |
| CUZAR | | | | S | **Sn** | **02 29 41.7** | **+1.8** |
| **SUSE** | **Susehri** | **1.42** | **336** | *i* P | **Pb** | **02 29 23.2** | **-0.4** |
| SUSE | | | | *i* S | **Sg** | **02 29 44.5** | **+2.0** |
| **SUSE** | **Susehri** | **1.42** | **336** | P | **Pb** | **02 29 23.2** | **-0.4** |
| SUSE | | | | S | **Sg** | **02 29 44.5** | **+2.0** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **1.74** | **31** | *e*PN | **Pb** | **02 29 28.6** | **-0.5** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **1.74** | **31** | *e*Pn | **Pb** | **02 29 28.6** | **-0.5** |
| **CUALT** | **Altinyayla-SIV** | **1.75** | **283** | P | **Pb** | **02 29 29.1** | **-0.1** |
| CUALT | | | | S | **Sg** | **02 29 53.1** | **+0.1** |
| **SVSK** | **Karacayir** | **1.82** | **304** | *e*PN | **Pn** | **02 29 29.0** | **+0.7** |
| **SVSK** | **Karacayir** | **1.82** | **304** | *e*Pn | **Pn** | **02 29 29.0** | **+0.7** |
| **SVAN** | **Silvan-Diyarba** | **1.92** | **113** | *e*PN | **Pn** | **02 29 30.4** | **+0.7** |
| **SVAN** | **Silvan-Diyarba** | **1.92** | **113** | *e*Pn | **Pn** | **02 29 30.4** | **+0.7** |
| **ESPY** | **Espiye-Giresun** | **2.01** | **355** | *e*PN | **Pb** | **02 29 32.4** | **-1.2** |
| **ESPY** | **Espiye-Giresun** | **2.01** | **355** | *e*Pn | **Pb** | **02 29 32.4** | **-1.2** |
| **SARI** | **SarD1z-Kayseri** | **2.05** | **257** | *e*PN | **Pb** | **02 29 32.9** | **-1.4** |

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*IDC 11 02:28:55.0±2.0, 38°.45S×73°.37W, h0km, mb4.0/5, mb1 4.1/6, mb1mx3.8/20, mbtmp4.0/6, ML3.3/2, MS2.4/1, Ms1 2.4/1, ms1mx2.4/15, Error ellipse: s-maj=43.7km s-min=40.1km az=175.0*

**ISC 11 02:28:58.7**±1.4**, 38°.3S**±0°.2×**73°.2W**±0°.2**, h18**km**, n8, σ1s.00**/9**, mb4.0**/5**, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CFAA** | **Coronel Fontan** | **7.82** | **33** | Pn | **Pn** | **02 30 51.1** | **-0.6** |
| | 0.1nm,0.3s,baz=200,slow=8.5,SNR=20 | | | | | | |
| CFAA | | | | Sn | **Sn** | **02 32 19.4** | **-0.3** |
| | 0.1nm,0.3s,baz=312,slow=16,SNR=2.2 | | | | | | |
| CFAA | | | | LR | LR | 02 34 30.4 | |
| | comp=Z,25nm,18.0s,baz=219,slow=42 | | | | | | |
| **CPUP** | **Villa Florida** | **17.93** | **53** | P | **P** | **02 33 07.5** | **-0.1** |
| | 0.1nm,0.3s,baz=220,slow=10.0,SNR=4.4 | | | | | | |
| **LPAZ** | **La Paz** | **22.37** | **13** | P | **P** | **02 33 58.6** | **+2.1** |
| | 3.8nm,0.7s,baz=195,slow=6.3,SNR=13 | | | | | | |
| **SIV** | **San Ignacio** | **24.65** | **29** | P | **P** | **02 34 18.9** | **+0.5** |
| | 2.8nm,0.9s,baz=214,slow=7.0,SNR=5.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **73.04** | **332** | P | **P** | **02 40 26.7** | **-0.8** |
| | 0.3nm,0.7s,baz=152,slow=7.8,SNR=5.3 | | | | | | |
| **DBIC** | **Dimbokro** | **77.47** | **71** | P | **P** | **02 40 53.9** | **+0.6** |
| | 3.9nm,0.8s,baz=273,slow=3.6,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.56** | **70** | P | **P** | **02 41 40.8** | **-0.2** |
| | 0.9nm,0.8s,baz=218,slow=5.9,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **170.45** | **2** | PKPab | **PKPab** | **02 50 22.0** | **0.0** |
| | 1.0nm,1.1s,baz=354,slow=5.8,SNR=3.2 | | | | | | |

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**WEL 11 02:53:13.8**±0.2**, 39°.81S×174°.13E, h139**km±2km**, ML3.7**/12**, 7C-3D, Error ellipse: s-maj=1.4km s-min=0.9km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LREZ** | **Lake Rotokare** | **0.41** | **31** | PN | Pn | 02 53 33.5 | 0.0 |
| LREZ | | | | SN | Sn | 02 53 47.6 | -0.6 |
| **NMEZ** | **Namu Road** | **0.44** | **334** | SN | Sn | 02 53 48.1 | -0.4 |
| **WAZ** | **Wanganui** | **0.66** | **86** | ⇓PN | Pn | 02 53 35.1 | +0.3 |
| **VRZ** | **Vera Road** | **0.84** | **36** | ⇓PN | Pn | 02 53 35.9 | -0.2 |
| VRZ | | | | SN | Sn | 02 53 52.0 | -1.0 |
| **DUWZ** | **D'Urville Isla** | **1.00** | **189** | ⇑PN | Pn | 02 53 37.4 | -0.2 |
| DUWZ | | | | SN | Sn | 02 53 54.1 | -1.7 |
| **KIW** | **Kapiti Island** | **1.21** | **151** | PN | Pn | 02 53 39.3 | -0.2 |
| KIW | | | | SN | Sn | 02 53 55.6 | -3.4 |
| KIW | | | | AML | AML | 02 53 58.0 | |
| **TRVZ** | **Turoa** | **1.21** | **65** | PN | Pn | 02 53 39.3 | -0.4 |
| TRVZ | | | | SN | Sn | 02 53 57.5 | -2.0 |
| **FWVZ** | **Far West T-bar** | **1.23** | **64** | PN | Pn | 02 53 39.6 | -0.4 |
| **WNVZ** | **Wahianoa** | **1.23** | **67** | ⇑PN | Pn | 02 53 39.6 | -0.3 |
| **WHVZ** | **Whangaehu Hut** | **1.24** | **65** | PN | Pn | 02 53 39.9 | -0.2 |
| **OGWZ** | **Otaki Gorge** | **1.28** | **142** | PN | Pn | 02 53 40.1 | 0.0 |
| **MOVZ** | **Moawhango** | **1.31** | **73** | PN | Pn | 02 53 40.0 | -0.6 |
| **POWZ** | **Post Office Ro** | **1.38** | **115** | PN | Pn | 02 53 41.1 | -0.1 |
| **MRZ** | **Mangatainoka R** | **1.40** | **128** | PN | Pn | 02 53 41.2 | -0.2 |
| MRZ | | | | AML | AML | 02 53 59.7 | |
| MRZ | | | | AML | AML | 02 54 02.1 | |
| **TCW** | **Tory Channel** | **1.41** | **176** | PN | Pn | 02 53 41.6 | +0.1 |
| TCW | | | | AML | AML | 02 54 01.4 | |
| TCW | | | | AML | AML | 02 54 02.5 | |
| **HIZ** | **Hauiti** | **1.41** | **24** | PN | Pn | 02 53 41.4 | -0.2 |
| **TSZ** | **Takapari Road** | **1.43** | **101** | PN | Pn | 02 53 41.5 | -0.3 |
| TSZ | | | | AML | AML | 02 54 03.8 | |
| TSZ | | | | AML | AML | 02 54 04.4 | |
| **CAW** | **Cannon Point** | **1.48** | **151** | PN | Pn | 02 53 42.3 | 0.0 |
| CAW | | | | AML | AML | 02 54 02.0 | |
| CAW | | | | AML | AML | 02 54 02.2 | |
| **HOWZ** | **Holdsworth Sta** | **1.52** | **136** | PN | Pn | 02 53 42.5 | -0.2 |
| **NNZ** | **Nelson** | **1.52** | **202** | ⇑PN | Pn | 02 53 42.6 | 0.0 |
| **BHHZ** | **Black Hill Sta** | **1.52** | **78** | PN | Pn | 02 53 41.8 | -1.1 |
| **QRZ** | **Quartz Range** | **1.59** | **230** | ⇑PN | Pn | 02 53 43.1 | -0.4 |
| **PRWZ** | **Pori Road** | **1.59** | **118** | PN | Pn | 02 53 43.7 | +0.1 |
| **PNHZ** | **Pukenui** | **1.59** | **94** | PN | Pn | 02 53 43.8 | +0.2 |
| **TUWZ** | **Tuamarina** | **1.62** | **185** | PN | Pn | 02 53 43.7 | -0.1 |
| TUWZ | | | | AML | AML | 02 54 05.5 | |
| TUWZ | | | | AML | AML | 02 54 06.7 | |
| **DVHZ** | **Dannevirke** | **1.64** | **108** | PN | Pn | 02 53 43.6 | -0.4 |
| **WPHZ** | **Waipukurau** | **1.79** | **99** | PN | Pn | 02 53 45.7 | -0.1 |
| **MSWZ** | **Moikau Station** | **1.81** | **152** | ⇑PN | Pn | 02 53 45.8 | -0.3 |
| MSWZ | | | | AML | AML | 02 54 07.5 | |
| MSWZ | | | | AML | AML | 02 54 07.7 | |
| **BFZ** | **Birch Farm** | **1.84** | **119** | PN | Pn | 02 53 45.9 | -0.4 |
| BFZ | | | | AML | AML | 02 54 08.7 | |
| BFZ | | | | AML | AML | 02 54 08.7 | |
| BFZ | | | | AML | AML | 02 54 09.7 | |
| **PAWZ** | **Paruwai Farm** | **1.85** | **148** | PN | Pn | 02 53 46.2 | -0.2 |
| PAWZ | | | | AML | AML | 02 54 08.3 | |
| PAWZ | | | | AML | AML | 02 54 08.4 | |
| **ANWZ** | **Angora Road** | **1.91** | **111** | ⇓PN | Pn | 02 53 47.2 | 0.0 |
| **BSWZ** | **Blackbirch Sta** | **1.91** | **186** | PN | Pn | 02 53 47.4 | +0.2 |
| **CPWZ** | **Castlepoint** | **1.93** | **125** | PN | Pn | 02 53 47.8 | +0.5 |
| **BKZ** | **Black Stump Fm** | **1.94** | **71** | PN | Pn | 02 53 46.8 | -0.7 |
| **PLWZ** | **Palliser** | **1.95** | **154** | PN | Pn | 02 53 47.2 | -0.5 |
| **TRWZ** | **Traveller** | **1.98** | **144** | AML | AML | 02 54 11.8 | |
| TRWZ | | | | AML | AML | 02 54 11.8 | |
| **KAHZ** | **Kahuranaki** | **2.11** | **90** | PN | Pn | 02 53 49.1 | -0.5 |
| **THZ** | **Tophouse** | **2.16** | **205** | PN | Pn | 02 53 49.9 | -0.4 |
| **KHZ** | **Kahutara** | **2.64** | **190** | ⇑PN | Pn | 02 53 55.7 | -0.4 |
| KHZ | | | | AML | AML | 02 54 27.7 | |
| KHZ | | | | AML | AML | 02 54 27.8 | |
| **URZ** | **Urewera** | **2.79** | **57** | PN | Pn | 02 53 56.6 | -1.4 |
| **KNZ** | **Kokohu** | **2.85** | **75** | PN | Pn | 02 53 57.6 | -1.2 |
| KNZ | | | | AML | AML | 02 54 36.3 | |
| KNZ | | | | AML | AML | 02 55 13.9 | |
| **MHGZ** | **Mahia Peninsul** | **2.99** | **79** | PN | Pn | 02 53 59.8 | -0.8 |
| **MWZ** | **Matawai** | **3.02** | **62** | ⇑PN | Pn | 02 54 00.0 | -1.1 |
| **RIGZ** | **Rimuhau** | **3.03** | **70** | PN | Pn | 02 53 59.8 | -1.3 |
| **LTZ** | **Lake Taylor** | **3.29** | **205** | PN | Pn | 02 54 03.2 | -1.2 |
| **HAZ** | **Te Kaha** | **3.51** | **55** | PN | Pn | 02 54 05.2 | -2.1 |
| **OXZ** | **Oxford** | **3.85** | **203** | PN | Pn | 02 54 09.8 | -1.9 |
| **MQZ** | **McQueen's Vall** | **4.05** | **195** | PN | Pn | 02 54 11.5 | -2.7 |

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*IDC 11 03:00:34.4±1.3, 32°.60N×141°.75E, h0km, mb3.5/5, mb1 3.7/7, mb1mx3.5/31, mbtmp3.6/7, ML3.3/2, MS2.8/3, Ms1 2.8/3, ms1mx2.5/30, Error ellipse: s-maj=28.9km s-min=24.4km az=67.0*

*ISCJB 11 03:00:37.2±0.9, 32°.76N±0°.05×141°.80E±0°.08, h31km, mb3.6/5, MS2.6/1, Error ellipse: s-maj=9.3km s-min=7.2km az=159.7*

*JMA 11 03:00:37.7±0.6, 32°.76N×141°.71E, h30km, M3.3*

**ISC 11 03:00:39.1**±1.2**, 32°.71N**±0°.08×**141°.73E**±0°.09**, h31**km**, n21, σ0s.96**/25**, mb3.7**/5**, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ2** | **Mitsune** | **1.66** | **285** | P | **Pn** | **03 01 05.3** | **-0.8** |
| **JHCJ** | **Hachijojimakas** | **1.66** | **283** | P | **Pn** | **03 01 05.2** | **-1.0** |
| **JHJ** | **Hachijo jima 2** | **1.69** | **285** | Pn | **Pn** | **03 01 05.3** | **-1.2** |
| | 36nm,0.3s,baz=97,slow=16,SNR=25 | | | | | | |
| JHJ | | | | Sn | **Sn** | **03 01 27.1** | **+0.1** |
| | 47nm,0.3s,baz=224,slow=21,SNR=5.8 | | | | | | |
| JHJ | | | | LR | LR | 03 01 55.3 | |
| | comp=Z,353nm,18.8s,baz=54,slow=47 | | | | | | |
| **BSO1** | **Boso 1** | **2.04** | **342** | P | **Pn** | **03 01 10.4** | **-0.4** |
| BSO1 | | | | *e*S | **Sn** | **03 01 34.3** | **-0.6** |
| **BSO3** | **Boso 3** | **2.32** | **334** | P | **Pn** | **03 01 14.4** | **-0.6** |
| **JIM2** | **Oshima 3** | **2.77** | **317** | P | **Pn** | **03 01 20.1** | **-1.3** |
| JIM2 | | | | S | **Sn** | **03 01 52.8** | **-1.0** |
| **JYN** | **Shimob** | **3.83** | **317** | S | **Sn** | **03 02 20.6** | **+0.4** |
| **JRY** | **Ryogami san** | **4.04** | **325** | P | **Pn** | **03 01 39.3** | **+0.4** |
| JRY | | | | S | **Sn** | **03 02 26.2** | **+1.0** |
| **JAG** | **Ashikaga** | **4.16** | **334** | P | **Pn** | **03 01 40.7** | **+0.3** |
| JAG | | | | S | **Sn** | **03 02 27.5** | **-0.4** |
| **MJAR** | **Matsushiro Arr** | **4.80** | **324** | Pn | **Pn** | **03 01 49.2** | **-0.1** |
| | 0.9nm,0.3s,baz=143,slow=12,SNR=6.5 | | | | | | |
| MJAR | | | | Sn | **Sn** | **03 02 43.0** | **-0.9** |
| | 0.6nm,0.3s,baz=160,slow=14,SNR=2.9 | | | | | | |
| **MAT** | **Matsushiro** | **4.80** | **324** | P | **Pn** | **03 01 50.0** | **+0.7** |
| **JFT** | **Otama** | **4.93** | **347** | P | **Pn** | **03 01 50.9** | **-0.2** |
| JFT | | | | S | **Sn** | **03 02 44.7** | **-2.4** |
| **JNU** | **Nakatsue** | **9.13** | **276** | LR | LR | 03 06 33.8 | |
| | comp=Z,54nm,18.2s,baz=116,slow=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **11.41** | **3** | Pn | **Pn** | **03 03 19.6** | **-0.3** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | 0.3nm,0.3s,baz=180,slow=14,SNR=2.7 | | | | | | |
| **KSRS** | **Korea Array** | **12.26** | **297** | LR | LR | 03 07 54.2 | |
| | comp=Z,48nm,19.9s,baz=104,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **30.59** | **310** | P | **P** | **03 06 52.0** | **+1.7** |
| | 0.5nm,0.6s,baz=124,slow=8.1,SNR=2.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.84** | **260** | LR | LR | 03 26 04.6 | |
| | comp=Z,9.4nm,19.7s,baz=155,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.74** | **306** | P | **P** | **03 09 06.0** | **+0.6** |
| | 0.6nm,0.5s,baz=88,slow=9.8,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.95** | **311** | P | **P** | **03 09 21.7** | **-0.7** |
| | 0.2nm,0.3s,baz=84,slow=6.2,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.83** | **189** | P | **P** | **03 09 50.9** | **-0.9** |
| | 0.4nm,0.4s,baz=5.2,slow=7.6,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **53.04** | **31** | P | **P** | **03 09 53.4** | **+0.5** |
| | 0.2nm,0.6s,baz=270,slow=6.3,SNR=2.9 | | | | | | |

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*IDC **11** 03:03:59.3±3.2, 32°.46N×141°.57E, h0km, mb3.6/2, mb1 3.7/3, mb1mx3.3/30, mbtmp3.4/3, ML3.0/1, Error ellipse: s-maj=89.6km s-min=27.9km az=61.0*

*JMA **11** 03:04:01.6±0.5, 32°.80N×141°.83E, h68km, M3.2*

*ISCJB **11** 03:04:03.0±2.0, 32°.81N±0°.07×141°.7E±0°.2, h31km, mb3.6/2, Error ellipse: s-maj=20.4km s-min=10.2km az=0.5*

**ISC 11 03:04:03.3**±1.6**, 32°.64N**±0°.09×**141°.5E**±0°.1**, h31km, n10,** σ**1s.36**/13**, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ2** | **Mitsune** | **1.51** | **289** | P | **Pb** | **03 04 29.6** | **-1.0** |
| **JHCJ** | **Hachijojimakas** | **1.51** | **287** | P | **Pb** | **03 04 30.7** | **0.0** |
| **JHJ** | **Hachijo jima 2** | **1.54** | **289** | Pn | **Pb** | **03 04 29.5** | **-1.6** |
| | 29nm,0.3s,baz=72,slow=19,SNR=7.9 | | | | | | |
| JHJ | | | | Sn | **Sn** | **03 04 46.3** | **-1.1** |
| | 24nm,0.3s,baz=54,slow=19,SNR=5.1 | | | | | | |
| **BSO1** | **Boso 1** | **2.06** | **348** | *e*S | **Sn** | **03 04 57.6** | **-2.0** |
| **JIM2** | **Oshima 3** | **2.71** | **321** | *e*S | **Sn** | **03 05 18.0** | **+1.6** |
| **JRY** | **Ryogami san** | **4.00** | **328** | P | **Pn** | **03 05 02.6** | **+0.1** |
| JRY | | | | S | **Sn** | **03 05 49.1** | **+0.7** |
| **JAG** | **Ashikaga** | **4.14** | **336** | *e*S | **Sn** | **03 05 50.3** | **-1.5** |
| **MJAR** | **Matsushiro Arr** | **4.75** | **326** | Pn | **Pn** | **03 05 13.5** | **+0.7** |
| | 0.7nm,0.3s,baz=150,slow=13,SNR=4.9 | | | | | | |
| MJAR | | | | Sn | **Sn** | **03 06 06.8** | **-0.1** |
| | 0.5nm,0.3s,baz=151,slow=18,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.64** | **306** | P | **P** | **03 12 30.6** | **+1.9** |
| | 0.4nm,0.5s,baz=86,slow=8.8,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.73** | **188** | P | **P** | **03 13 14.5** | **-0.7** |
| | 0.3nm,0.3s,baz=5.4,slow=7.6,SNR=4.6 | | | | | | |

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*NNC **11** 03:16:33.7±1.8, 39°.06N×70°.64E, h0km, mb3.8, mpv3.4, Error ellipse: s-maj=26.6km s-min=7.6km az=156.0*

**ISC 11 03:16:36.6**±1.7**, 39°.1N**±0°.1×**70°.52E**±0°.07**, h17km, n13,** σ**2s.06**/17**, 14C-4D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **1.36** | **257** | ⇑P | Pn | 03 16 56.9 | -4.1 |
| | 33nm,0.4s | | | | | | |
| DZET | | | | ⇑S | **Sg** | **03 17 21.7** | **+1.2** |
| | 110nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.47** | **68** | ⇑Pn | Pn | 03 17 13.1 | -3.2 |
| | 7.0nm,0.3s | | | | | | |
| SFK | | | | ⇑Sn | **Sn** | **03 17 48.0** | **+1.7** |
| | 125nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **3.68** | **23** | ⇑Pn | **Pn** | **03 17 32.3** | **-0.6** |
| | 5.1nm,0.6s | | | | | | |
| MNAS | | | | ⇑Sn | **Sn** | **03 18 20.2** | **+4.2** |
| **AML** | **Almayashu** | **3.85** | **38** | P | **Pn** | **03 17 33.6** | **-2.0** |
| | SNR=15 | | | | | | |
| **KK31** | **Karatay Array** | **3.98** | **360** | ⇑Pg | **Pb** | **03 17 45.9** | **-0.4** |
| | 2.5nm,0.4s,baz=172,slow=14 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **03 18 25.6** | **+2.5** |
| | 1.3nm,0.3s,baz=187,slow=23,SNR=6.0 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 03 18 40.3 | |
| | 16nm,0.6s,baz=180,slow=31 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.31** | **34** | P | **Pn** | **03 17 42.8** | **+1.2** |
| | SNR=10 | | | | | | |
| **UCH** | **Uchtor** | **4.34** | **43** | P | **Pn** | **03 17 41.2** | **-1.0** |
| | SNR=7.0 | | | | | | |
| **AAK** | **Ala-Archa** | **4.62** | **39** | ⇑Pn | **Pn** | **03 17 45.1** | **-0.8** |
| | 4.0nm,0.6s | | | | | | |
| AAK | | | | ⇑Sn | **Sn** | **03 18 41.2** | **+2.0** |
| AAK | | | | ⇑Lg | Lg | 03 18 59.5 | |
| | 12nm,0.9s | | | | | | |
| **KZA** | **Kyzart** | **4.66** | **49** | P | **Pn** | **03 17 46.6** | **+0.1** |
| | SNR=7.3 | | | | | | |
| **USP** | **Ospenovka** | **5.11** | **35** | P | **Pn** | **03 17 51.3** | **-1.2** |
| | SNR=6.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.40** | **44** | ⇓Pn | **Pn** | **03 17 54.9** | **-1.7** |
| | 2.8nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Sn | **Sn** | **03 18 57.2** | **-1.1** |
| TKM2 | | | | ⇓Lg | Lg | 03 19 23.5 | |
| | 5.5nm,0.7s | | | | | | |
| **AB31** | **Akbulak array** | **12.64** | **327** | ⇑Pn | Pn | 03 19 31.7 | -3.9 |
| | 0.6nm,0.5s,baz=150,slow=11,SNR=13 | | | | | | |
| AB31 | | | | ⇓Sn | **Sn** | **03 21 52.2** | **-3.7** |
| | 0.7nm,0.5s,baz=148,slow=24,SNR=4.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.36** | **326** | ⇑Pn | **Pn** | **03 19 59.6** | **+0.6** |
| | 3.8nm,1.3s | | | | | | |

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*BJI **11** 03:17:24.6, 19°.05N×145°.05E, h609km, mb4.8/41, mB4.7/24*

*ISCJB **11** 03:17:25.8±0.5, 19°.10N±0°.03×144°.88E±0°.06, h615km±6km, mb4.5/82, Error ellipse: s-maj=8.0km s-min=5.2km az=172.2*

*MOS **11** 03:17:25.6±0.8, 19°.17N×144°.87E, h614km, mb4.6/40, Error ellipse: s-maj=12.9km s-min=5.9km az=114.6*

*NEIC **11** 03:17:27.2±0.5, 19°.11N×144°.86E, h614km±6km, mb4.6/29, Error ellipse: s-maj=7.0km s-min=4.4km az=85.0*

*IDC **11** 03:17:28.1±1.0, 19°.14N×144°.88E, h626km±12km, mb3.8/29, mb1 3.9/32, mb1mx3.8/42, mbtmp4.8/32, Error ellipse: s-maj=11.3km s-min=6.8km az=88.0*

**ISC 11 03:17:26.0**±0.4**, 19°.10N**±0°.04×**144°.96E**±0°.07**, h605km**±3km**, h606km:pP-P, n187,** σ**1s.38**/227**, mb4.5**/82**, 8C-7D, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **5.48** | **181** | P | **P** | **03 19 03.9** | **+0.7** |
| | 62nm,0.3s,baz=319,slow=3.6,SNR=31 | | | | | | |
| GUMO | | | | S | **S** | **03 20 22.1** | **-0.3** |
| | 16nm,0.3s,baz=350,slow=20,SNR=6.9 | | | | | | |
| **GUMO** | **Guam** | **5.48** | **181** | *e*P | **P** | **03 19 03.5** | **+0.3** |
| GUMO | | | | *e*S | **S** | **03 20 20.1** | **-2.3** |
| **GUMO** | **Guam** | **5.48** | **181** | *e*P | **P** | **03 19 03.5** | **+0.3** |
| GUMO | | | | *e*S | **S** | **03 20 20.1** | **-2.3** |
| **CBIJ** | **Chichi jima** | **8.36** | **343** | *e*P | **P** | **03 19 29.7** | **+0.9** |
| CBIJ | | | | *e*S | S | 03 21 00.1 | -9.4 |
| **JHJ** | **Hachijo jima 2** | **14.71** | **343** | P | **P** | **03 20 30.8** | **-0.5** |
| | 19nm,0.3s,baz=11,slow=13,SNR=11 | | | | | | |
| JHJ | | | | S | **S** | **03 23 00.7** | **-1.7** |
| | 4.2nm,0.3s,baz=36,slow=18,SNR=2.8 | | | | | | |
| **JOW** | **Kunigami** | **17.18** | **300** | P | **P** | **03 20 54.5** | **+0.5** |
| | 0.3nm,0.3s,baz=66,slow=15,SNR=5.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.36** | **343** | P | **P** | **03 21 04.3** | **-0.3** |
| | 1.8nm,0.3s,baz=165,slow=10,SNR=17 | | | | | | |
| MJAR | | | | S | **S** | **03 24 07.1** | **+5.2** |
| | 0.4nm,0.3s,baz=165,slow=19,SNR=7.7 | | | | | | |
| **MAJO** | **Matsushiro** | **18.37** | **343** | *e*P | **P** | **03 21 04.6** | **0.0** |
| MAJO | | | | *e*S | **S** | **03 23 58.4** | **-3.5** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,67nm,1.8s | | | | | | |
| **MAJO** | **Matsushiro** | **18.37** | **343** | *e*P | **P** | **03 21 04.5** | **0.0** |
| | comp=Z,67nm,1.8s | | | | | | |
| MAJO | | | | *e*S | **S** | **03 23 58.4** | **-3.5** |
| **MAT** | **Matsushiro** | **18.37** | **343** | P | **P** | **03 21 04.5** | **-0.1** |
| MAT | | | | *e*S | **S** | **03 24 03.7** | **+1.8** |
| **JNU** | **Nakatsue** | **18.81** | **321** | P | **P** | **03 21 09.1** | **+0.3** |
| | comp=Z,5.3nm,0.3s,baz=133,slow=1.1,SNR=47 | | | | | | |
| **JNU** | **Nakatsue** | **18.81** | **321** | *e*P | **P** | **03 21 08.9** | **+0.2** |
| | comp=Z,4.7nm,0.6s | | | | | | |
| **JAY** | **Jayapura** | **21.88** | **191** | P | **P** | **03 21 37.9** | **+1.3** |
| | comp=Z,11nm,0.7s,baz=76,slow=1.7,SNR=4.9 | | | | | | |
| **TJN** | **Taejon** | **23.15** | **322** | *d i*P | **P** | **03 21 47.0** | **-0.5** |
| **KSRS** | **Korea Array** | **23.59** | **324** | P | **P** | **03 21 51.9** | **+0.5** |
| | comp=Z,24nm,0.8s,baz=146,slow=9.1,SNR=79 | | | | | | |
| **KSAR** | **Wonju Array Be** | **23.60** | **324** | P | **P** | **03 21 51.9** | **+0.4** |
| **KSAR** | **Wonju Array Be** | **23.60** | **324** | P | **P** | **03 21 51.9** | **+0.4** |
| **KS01** | **Wonju Array Si** | **23.62** | **324** | *e*P | **P** | **03 21 51.8** | **+0.1** |
| **SIJI** | **Sorong** | **23.97** | **216** | P | **P** | **03 21 55.4** | **+0.2** |
| | comp=Z,22nm,0.7s,baz=26,slow=9.0,SNR=5.0 | | | | | | |
| **ASAJ** | **Asahikawa** | **25.02** | **356** | P | **P** | **03 22 05.5** | **+1.6** |
| | comp=Z,2.2nm,0.3s,baz=198,slow=8.2 | | | | | | |
| ASAJ | | | | PcP | **PcP** | **03 25 17.6** | **+0.4** |
| | comp=Z,6.2nm,0.8s,baz=76,slow=1.4,SNR=4.6 | | | | | | |
| **FAKI** | **Fak Fak** | **25.20** | **211** | *e*P | **P** | **03 22 05.8** | **-0.1** |
| | comp=Z,25nm,0.8s | | | | | | |
| **NJ2** | **Nanjing** | **26.77** | **304** | *e*P | **P** | **03 22 18.3** | **-1.2** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,30nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **27.29** | **339** | P | **P** | **03 22 24.9** | **+1.1** |
| | comp=Z,5.0nm,0.6s,baz=159,slow=8.3,SNR=12 | | | | | | |
| **PMG** | **Port Moresby** | **28.41** | **175** | P | **P** | **03 22 35.0** | **+1.1** |
| | comp=Z,10.0nm,0.6s,baz=315,slow=7.1,SNR=3.2 | | | | | | |
| **PMG** | **Port Moresby** | **28.41** | **175** | P | **P** | **03 22 35.0** | **+1.1** |
| **CN2** | **Changchun** | **29.58** | **331** | *e*P | **P** | **03 22 46.4** | **+2.7** |
| **LUWI** | **Luwuk** | **29.59** | **230** | *e*P | **P** | **03 22 42.9** | **-1.3** |
| | comp=Z,69nm,0.5s | | | | | | |
| **HABR** | **Khabarovsk** | **30.38** | **347** | *e*P | **P** | **03 22 48.8** | **-1.7** |
| HABR | | | | *e* | | 03 25 29.4 | |
| HABR | | | | *e**SP | **sP** | **03 25 34.7** | **-2.7** |
| HABR | | | | *e*S | **S** | **03 27 08.6** | **-1.1** |
| HABR | | | | *e* | | 03 32 12.6 | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,17nm,1.4s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,216nm,21.0s | | | | | | |
| **KLR** | **Kul'dur** | **31.89** | **344** | *e*P | **P** | **03 23 01.7** | **-1.6** |
| **BJI** | **Beijing** | **32.37** | **316** | P | **P** | **03 23 08.0** | **+0.6** |
| BJI | | | | PcP | **PcP** | **03 25 36.9** | **+0.6** |
| BJI | | | | sP | **sP** | **03 25 54.4** | **-0.7** |
| BJI | | | | S | **S** | **03 27 40.9** | **+0.7** |
| BJI | | | | ScS | **ScS** | **03 32 24.9** | **+0.4** |
| BJI | | | | PMZ | | | |
| | comp=Z,18nm,0.6s | | | | | | |
| **COEN** | **Coen** | **32.89** | **183** | *e*P | **P** | **03 23 14.0** | **+1.8** |
| | comp=Z,13nm,0.5s | | | | | | |
| **KAPI** | **Kappang** | **34.50** | **229** | *e*P | **P** | **03 23 25.7** | **0.0** |
| **MTN** | **Manton Dam** | **34.54** | **204** | *e*P | **P** | **03 23 26.4** | **+0.5** |
| | comp=Z,54nm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **35.30** | **302** | P | **P** | **03 23 32.6** | **+0.5** |
| XAN | | | | PMZ | | | |
| | comp=Z,13nm,0.6s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **35.83** | **314** | *e*P | **P** | **03 23 37.6** | **+1.2** |
| HHC | | | | pP | **PP** | **03 25 19.4** | **-1.9** |
| HHC | | | | S | **S** | **03 28 33.6** | **+1.2** |
| HHC | | | | SS | SS | 03 31 38.6 | -11 |
| HHC | | | | PMZ | | | |
| | comp=Z,36nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,86nm,3.7s | | | | | | |
| **BATI** | **Baumata** | **35.90** | **218** | P | **P** | **03 23 37.6** | **+0.4** |
| | comp=Z,19nm,0.3s,baz=0.0,slow=3.0,SNR=3.1 | | | | | | |
| **GYA** | **Guiyang** | **35.96** | **289** | *e*P | **P** | **03 23 38.0** | **+0.2** |
| GYA | | | | pP | **pP** | **03 25 19.6** | **+1.9** |
| GYA | | | | sP | **sP** | **03 26 28.0** | **+1.0** |
| GYA | | | | S | **S** | **03 28 35.4** | **+0.5** |
| GYA | | | | sS | **sS** | **03 31 37.7** | **-2.0** |
| GYA | | | | ScS | **ScS** | **03 32 44.2** | **-0.7** |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **HIA** | **Hailar** | **36.28** | **332** | *e*P | **P** | **03 23 41.0** | **+1.1** |
| **HIA** | **Hailar** | **36.28** | **332** | *e*P | **P** | **03 23 41.0** | **+1.1** |
| **CTA** | **Charters Tower** | **38.96** | **178** | P | **P** | **03 24 03.4** | **+1.4** |
| | comp=Z,6.1nm,0.5s,baz=359,slow=9.8,SNR=9.7 | | | | | | |
| **CTAO** | **Charters Tower** | **38.96** | **178** | *e*P | **P** | **03 24 02.8** | **+0.8** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **38.96** | **178** | *e*P | **P** | **03 24 02.8** | **+0.8** |
| | comp=Z,7.1nm,0.6s | | | | | | |
| **KMI** | **Kunming** | **39.46** | **287** | P | P | 03 24 10.8 | +4.5 |
| KMI | | | | PMZ | | | |
| | comp=Z,7.0nm,1.3s | | | | | | |
| **LZH** | **Lanzhou** | **39.85** | **304** | ⇓P | **P** | **03 24 10.8** | **+1.7** |
| LZH | | | | pP | **pP** | **03 25 55.0** | **+3.2** |
| LZH | | | | PMZ | | | |
| | comp=Z,55nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,100nm,4.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **40.16** | **196** | *c i*P | **P** | **03 24 12.3** | **+0.7** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,36nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **40.16** | **196** | *e*P | **P** | **03 24 12.2** | **+0.7** |
| | comp=Z,22nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **40.17** | **196** | P | **P** | **03 24 12.3** | **+0.6** |
| | comp=Z,15nm,0.5s,baz=23,slow=8.8,SNR=391 | | | | | | |
| WRA | | | | ScP | **ScP** | **03 28 51.6** | **-1.4** |
| | comp=Z,2.0nm,0.8s,baz=10,slow=4.0,SNR=9.2 | | | | | | |
| WRA | | | | S | **S** | **03 29 33.6** | **-2.8** |
| | comp=Z,0.7nm,0.6s,baz=16,slow=14,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.17** | **196** | *i* P | **P** | **03 24 12.3** | **+0.6** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.3s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.56** | **208** | *e*P | **P** | **03 24 23.3** | **+0.7** |
| | comp=Z,13nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **42.03** | **322** | *e*P | **P** | **03 24 26.6** | **+0.4** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,19nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **42.03** | **322** | *e*P | **P** | **03 24 26.6** | **+0.4** |
| | comp=Z,19nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **42.40** | **321** | P | **P** | **03 24 30.1** | **+1.1** |
| | comp=Z,15nm,0.6s,baz=133,slow=6.4,SNR=92 | | | | | | |
| SONM | | | | PcP | **PcP** | **03 26 07.5** | **-0.2** |
| | comp=Z,2.0nm,0.5s,baz=145,slow=4.0,SNR=5.2 | | | | | | |
| **SONA1** | **Songino Array** | **42.40** | **321** | *e*P | **P** | **03 24 30.0** | **+0.9** |
| **CM01** | **Chiang Mai Arr** | **43.47** | **277** | *e*P | **P** | **03 24 37.8** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **43.48** | **277** | P | **P** | **03 24 38.9** | **+1.2** |
| | comp=Z,18nm,0.7s,baz=70,slow=6.5,SNR=55 | | | | | | |
| **GTA** | **Gaotai** | **43.75** | **307** | *e*P | **P** | **03 24 40.6** | **+0.9** |
| GTA | | | | pP | **pP** | **03 26 26.7** | **+1.4** |
| GTA | | | | sP | **sP** | **03 27 32.2** | **-0.8** |
| GTA | | | | PMZ | | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **AS01** | **Alice Springs** | **43.84** | **195** | *e*P | **P** | **03 24 40.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **43.85** | **195** | P | **P** | **03 24 40.9** | **+0.5** |
| | comp=Z,6.5nm,0.4s,baz=13,slow=6.8,SNR=114 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 26 13.0** | **0.0** |
| | comp=Z,1.3nm,0.4s,baz=26,slow=2.9,SNR=6.1 | | | | | | |
| ASAR | | | | ScP | **ScP** | **03 29 06.4** | **-1.4** |
| | comp=Z,1.0nm,0.9s,baz=22,slow=5.1,SNR=4.2 | | | | | | |
| ASAR | | | | S | **S** | **03 30 26.1** | **-2.9** |
| | comp=Z,1.8nm,0.8s,baz=20,slow=20,SNR=11 | | | | | | |
| **SEY** | **Seymchan** | **44.10** | **5** | P | **P** | **03 24 41.8** | **+0.1** |
| | comp=Z,2.1nm,0.2s,baz=180,slow=20,SNR=3.3 | | | | | | |
| **YAK** | **Yakutsk** | **44.20** | **350** | P | **P** | **03 24 43.1** | **+0.6** |
| | comp=Z,8.9nm,0.4s,baz=170,slow=18,SNR=3.8 | | | | | | |
| **YAK** | **Yakutsk** | **44.20** | **350** | *e*P | **P** | **03 24 42.0** | **-0.5** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,48nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,11nm,1.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.5s | | | | | | |
| **ZAK** | **Zakamensk** | **45.41** | **323** | *e*P | **P** | **03 24 51.8** | **-0.3** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| **TLY** | **Talaya** | **45.84** | **325** | *e*P | **P** | **03 24 55.3** | **+0.1** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,19nm,0.7s | | | | | | |
| **TLY** | **Talaya** | **45.84** | **325** | *e*P | **P** | **03 24 55.6** | **+0.4** |
| | comp=Z,22nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **50.75** | **10** | ⇑*e*P | **P** | **03 25 32.2** | **+1.0** |
| BILL | | | | *e* | | 03 26 36.1 | |
| BILL | | | | *e**PP | **pP** | **03 27 20.5** | **-1.4** |
| BILL | | | | *e* | | 03 27 36.2 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **HVS** | **Khovu-Aksy** | **51.29** | **321** | ⇑*e*P | **P** | **03 25 37.3** | **+1.8** |
| HVS | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **52.87** | **290** | *e*P | **P** | **03 25 48.3** | **+0.8** |
| **ODAN** | **Odare** | **53.19** | **290** | *e*P | **P** | **03 25 50.3** | **+0.6** |
| **RAMN** | **Ramite** | **53.89** | **290** | *e*P | **P** | **03 25 55.0** | **+0.4** |
| | comp=Z,30nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **54.45** | **291** | *e*P | **P** | **03 25 59.6** | **+0.9** |
| **PKI** | **Pulchoki** | **54.89** | **291** | *e*P | **P** | **03 26 02.0** | **+0.3** |
| **PKIN** | **Phulchoki** | **54.90** | **291** | *e*P | **P** | **03 26 02.0** | **+0.3** |
| | comp=Z,77nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **54.99** | **291** | *e*P | **P** | **03 26 02.8** | **+0.5** |
| **DMN** | **Daman** | **55.16** | **291** | *e*P | **P** | **03 26 04.1** | **+0.6** |
| | comp=Z,68nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **55.54** | **291** | *e*P | **P** | **03 26 06.5** | **+0.5** |
| | comp=Z,55nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **56.28** | **292** | *e*P | **P** | **03 26 12.1** | **+0.8** |
| | comp=Z,22nm,0.5s | | | | | | |
| **KOLN** | **Koldanda** | **56.47** | **291** | *e*P | **P** | **03 26 12.8** | **+0.3** |
| | comp=Z,45nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.28** | **322** | *e*P | **P** | **03 26 17.0** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **57.28** | **322** | P | **P** | **03 26 17.1** | **-0.1** |
| | comp=Z,8.4nm,0.3s,baz=113,slow=8.1,SNR=41 | | | | | | |
| ZALV | | | | PcP | **PcP** | **03 27 01.8** | **-1.0** |
| | comp=Z,3.7nm,0.5s,baz=114,slow=3.0,SNR=6.8 | | | | | | |
| **MK01** | **Makanchi Array** | **57.68** | **314** | *e*P | **P** | **03 26 20.8** | **+0.7** |
| **MK31** | **Makanchi Array** | **57.69** | **314** | *e*P | **P** | **03 26 20.9** | **+0.7** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.69** | **314** | P | **P** | **03 26 20.7** | **+0.6** |
| | comp=Z,16nm,0.4s,baz=89,slow=8.2,SNR=119 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.69** | **314** | *c e*P | **P** | **03 26 20.8** | **+0.6** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,16nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.69** | **314** | *e*P | **P** | **03 26 21.1** | **+0.9** |
| **MAKZ** | **Makanchi** | **57.90** | **314** | *e*P | **P** | **03 26 22.5** | **+0.9** |
| **NVS** | **Novosibirsk** | **58.37** | **323** | *i* P | **P** | **03 26 24.4** | **-0.1** |
| **KDAK** | **Kodiak Island** | **59.41** | **33** | P | **P** | **03 26 32.1** | **+0.7** |
| | comp=Z,7.8nm,0.9s,baz=217,slow=2.3,SNR=11 | | | | | | |
| **KDAK** | **Kodiak Island** | **59.41** | **33** | *i* P | **P** | **03 26 32.5** | **+1.1** |
| **PDGK** | **Podgornoye** | **59.42** | **310** | P | **P** | **03 26 32.5** | **+0.8** |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **60.51** | **318** | P | **P** | **03 26 38.6** | **-0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,57nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **60.51** | **318** | *e*P | **P** | **03 26 39.1** | **+0.3** |
| | comp=Z,148nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.56** | **318** | P | **P** | **03 26 39.4** | **+0.2** |
| | comp=Z,103nm,0.7s,baz=96,slow=7.2,SNR=674 | | | | | | |
| **CAST** | **Castle Rocks** | **61.06** | **27** | *e*P | **P** | **03 26 43.4** | **+1.2** |
| | comp=Z,34nm,2.2s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **61.71** | **27** | *e*P | **P** | **03 26 47.6** | **+1.2** |
| **ULHL** | **Ulahol** | **61.79** | **308** | P | **P** | **03 26 48.6** | **+0.9** |
| | SNR=6.0 | | | | | | |
| **KSH** | **Kashi** | **62.07** | **305** | P | P | 03 26 53.0 | +3.6 |
| KSH | | | | *e*pP | pP | 03 28 51.2 | +4.0 |
| KSH | | | | *e*PP | PP | 03 29 24.6 | +8.2 |
| KSH | | | | *e*sP | sP | 03 29 53.7 | +2.6 |
| KSH | | | | *e*ScP | **ScP** | **03 30 32.0** | **+5.0** |
| KSH | | | | S | **S** | **03 34 32.4** | **+3.6** |
| KSH | | | | ScS | **SKSac** | **03 35 38.4** | **-3.6** |
| KSH | | | | PMZ | | | |
| | comp=Z,13nm,0.6s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,75nm,4.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **62.26** | **309** | *e*P | **P** | **03 26 51.1** | **+0.4** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **62.26** | **309** | P | **P** | **03 26 51.5** | **+0.8** |
| | SNR=16 | | | | | | |
| **TKM2** | **Tokmak 2** | **62.26** | **309** | *e*P | **P** | **03 26 51.1** | **+0.4** |
| | comp=Z,13nm,0.8s | | | | | | |
| **KZA** | **Kyzart** | **62.53** | **308** | P | **P** | **03 26 54.2** | **+1.6** |
| | SNR=23 | | | | | | |
| **USP** | **Ospenovka** | **63.06** | **309** | P | **P** | **03 26 56.1** | **+0.6** |
| | SNR=8.4 | | | | | | |
| **UCH** | **Uchtor** | **63.08** | **308** | P | **P** | **03 26 57.5** | **+1.3** |
| | SNR=18 | | | | | | |
| **AAK** | **Ala-Archa** | **63.08** | **309** | *d i*P | **P** | **03 26 56.2** | **+0.3** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| **AAK** | **Ala-Archa** | **63.08** | **309** | P | **P** | **03 26 55.8** | **0.0** |
| | SNR=6.7 | | | | | | |
| **AAK** | **Ala-Archa** | **63.08** | **309** | *e*P | **P** | **03 26 56.1** | **+0.3** |
| | comp=Z,12nm,1.3s | | | | | | |
| **ILAR** | **Eielson Array** | **63.60** | **26** | P | **P** | **03 26 58.0** | **-0.5** |
| | comp=Z,1.8nm,0.5s,baz=244,slow=6.1,SNR=29 | | | | | | |
| ILAR | | | | PcP | **PcP** | **03 27 27.3** | **-1.0** |
| | comp=Z,0.7nm,0.5s,baz=258,slow=4.6,SNR=4.1 | | | | | | |
| ILAR | | | | pP | **pP** | **03 28 56.4** | **-0.7** |
| | comp=Z,0.2nm,0.5s,baz=322,slow=34,SNR=2.0 | | | | | | |
| **EKS2** | **Erkin-Say** | **63.61** | **309** | *e*P | **P** | **03 26 58.9** | **-0.2** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **EKS2** | **Erkin-Say** | **63.61** | **309** | P | **P** | **03 26 59.0** | **-0.2** |
| | SNR=5.5 | | | | | | |
| **EKS2** | **Erkin-Say** | **63.61** | **309** | *e*P | **P** | **03 26 58.9** | **-0.2** |
| | comp=Z,8.5nm,1.0s | | | | | | |
| **AML** | **Almayashu** | **63.69** | **308** | P | **P** | **03 27 01.2** | **+1.2** |
| | SNR=13 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **63.95** | **306** | P | **P** | **03 27 01.8** | **+0.3** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| **OTUK** | **Ortayu** | **64.49** | **315** | P | **P** | **03 27 04.6** | **+0.1** |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **MNAS** | **Manas** | **64.55** | **309** | P | **P** | **03 27 05.6** | **+0.4** |
| **VOSK** | **Vostochnaya** | **65.36** | **320** | *c e*P | **P** | **03 27 09.4** | **-0.5** |
| VOSK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.4s | | | | | | |
| **CHKZ** | **Chkalovo** | **65.59** | **321** | *i* P | **P** | **03 27 10.2** | **-1.0** |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| **BVA0** | **Borovoye Array** | **65.72** | **320** | *i* P | **P** | **03 27 12.2** | **+0.1** |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,21nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **65.79** | **320** | *d i*P | **P** | **03 27 12.5** | **0.0** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **65.79** | **320** | *e*P | **P** | **03 27 12.3** | **-0.2** |
| | comp=Z,21nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **65.98** | **309** | *i* P | **P** | **03 27 14.0** | **+0.1** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.4s | | | | | | |
| **KKAR** | **Karatay Array** | **65.98** | **309** | *e*P | **P** | **03 27 14.2** | **+0.3** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,20nm,0.7s | | | | | | |
| **KKAR** | **Karatay Array** | **65.98** | **309** | *e*P | **P** | **03 27 14.2** | **+0.3** |
| | comp=Z,20nm,0.7s | | | | | | |
| **ZRNK** | **Zerenda** | **66.56** | **320** | *i* P | **P** | **03 27 17.2** | **-0.1** |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | |
| **DZET** | **Dzherino** | **67.67** | **305** | P | **P** | **03 27 24.6** | **+0.1** |
| DZET | | | | pmax | pmax | | |
| | comp=Z,18nm,0.5s | | | | | | |
| **KBL** | **Kabul** | **68.07** | **300** | *e*P | **P** | **03 27 27.2** | **+0.1** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,19nm,0.7s | | | | | | |
| **KBL** | **Kabul** | **68.07** | **300** | *e*P | **P** | **03 27 27.2** | **+0.1** |
| | comp=Z,18nm,0.7s | | | | | | |
| **INK** | **Inuvik** | **69.28** | **23** | P | **P** | **03 27 33.9** | **+0.5** |
| | comp=Z,4.2nm,0.7s,baz=264,slow=6.9,SNR=14 | | | | | | |
| **SVE** | **Sverdlovsk** | **71.15** | **325** | *e*P | **P** | **03 27 44.9** | **+0.2** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,24nm,0.7s | | | | | | |
| **ARU** | **Arti** | **72.34** | **324** | *d i*P | **P** | **03 27 51.5** | **0.0** |
| ARU | | | | S | **S** | **03 36 28.7** | **+1.4** |
| ARU | | | | SS | **SS** | **03 41 17.4** | **-4.7** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,28nm,0.6s | | | | | | |
| **ARU** | **Arti** | **72.34** | **324** | *e*P | **P** | **03 27 51.6** | **+0.1** |
| | comp=Z,38nm,0.5s | | | | | | |
| **AB31** | **Akbulak array** | **72.57** | **317** | *i* P | **P** | **03 27 52.5** | **-0.5** |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,11nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **72.57** | **317** | *e*P | **P** | **03 27 52.8** | **-0.3** |
| | comp=Z,10nm,0.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **73.61** | **318** | P | **P** | **03 27 58.1** | **-0.8** |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **GEYT** | **Alibeck** | **76.10** | **306** | P | **P** | **03 28 13.5** | **+0.4** |
| | comp=Z,5.6nm,0.7s,baz=39,slow=0.9,SNR=8.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.96** | **28** | P | **P** | **03 28 23.0** | **+0.4** |
| | comp=Z,3.6nm,0.4s,baz=286,slow=5.4,SNR=22 | | | | | | |
| **TMCR** | **Tamitsa** | **80.11** | **335** | *e*P | **P** | **03 28 32.2** | **-1.7** |
| TMCR | | | | pmax | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | |
| **KLMR** | **Klimovskoe** | **80.78** | **331** | *e*P | **P** | **03 28 35.3** | **-2.1** |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **UOSS** | **Wadi Hilu** | **81.08** | **293** | *e*P | **P** | **03 28 39.7** | **-0.1** |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.90** | **342** | P | **P** | **03 28 42.8** | **-0.2** |
| | comp=Z,11nm,0.7s,baz=87,slow=8.4,SNR=47 | | | | | | |
| **VRH** | **Novokhopyorsk** | **83.31** | **322** | *e*P | **P** | **03 28 48.6** | **-1.8** |
| VRH | | | | pmax | pmax | | |
| | comp=N,5.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,3.0nm,0.5s | | | | | | |
| **NV01** | **Mina Array Sit** | **83.44** | **52** | *e*P | **P** | **03 28 52.5** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **83.44** | **52** | P | **P** | **03 28 52.9** | **+1.2** |
| | comp=E,2.3nm,0.6s,baz=265,slow=6.6,SNR=18 | | | | | | |
| **MFID** | **Camas Ranch** | **83.54** | **46** | *e*P | **P** | **03 28 52.9** | **+1.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,7.8nm,0.8s | | | | | | |
| LPSR | Galich'ya Gora | 84.35 | 324 | eP | P | 03 28 53.7 | -1.8 |
| LPSR | | | | pmax | pmax | | |
| | comp=N,3.0nm,0.9s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.9s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| HLID | Hailey | 84.45 | 46 | eP | P | 03 28 57.5 | +1.0 |
| | comp=Z,57nm,2.8s | | | | | | |
| OBN | Obninsk | 84.56 | 327⇓ | eP | P | 03 28 55.0 | -1.5 |
| OBN | | | | e*PP | pP | 03 31 08.1 | +3.1 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| VSR | Storozhevoye | 84.78 | 323 | eP | P | 03 28 56.1 | -1.6 |
| VSR | | | | pmax | pmax | | |
| | comp=N,5.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| VORD | Divnogorie | 84.81 | 322 | eP | P | 03 28 56.2 | -1.6 |
| VORD | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.7s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.7s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| ELK | Elko | 84.88 | 49 | eP | P | 03 29 00.1 | +1.4 |
| ELK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| ELK | Elko | 84.88 | 49 | eP | P | 03 29 00.1 | +1.4 |
| | comp=Z,3.5nm,0.8s | | | | | | |
| NCK | Nalchik | 84.98 | 314⇑ | eP | P | 03 28 58.2 | -0.7 |
| HRY | Holter Researc | 84.99 | 42 | eP | P | 03 29 00.0 | +1.1 |
| KBZ | Khabaz | 85.37 | 315 | P | P | 03 28 59.6 | -1.0 |
| | comp=Z,8.0nm,0.9s,baz=137,slow=4.1,SNR=11 | | | | | | |
| KIV | Kislovodsk | 85.43 | 315⇓ | eP | P | 03 29 00.7 | -0.4 |
| KIV | | | | e | | 03 32 32.9 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| TPNV | Topopah Spring | 85.47 | 53 | eP | P | 03 29 02.6 | +1.1 |
| TPNV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| TPNV | Topopah Spring | 85.47 | 53 | eP | P | 03 29 02.6 | +1.1 |
| | comp=Z,3.9nm,0.6s | | | | | | |
| FINES | FINESS Array B | 86.23 | 335 | P | P | 03 29 02.6 | -1.8 |
| | comp=Z,3.9nm,0.3s,baz=84,slow=4.2,SNR=59 | | | | | | |
| FINES | FINESS Array B | 86.23 | 335 | i P | P | 03 29 02.7 | -1.6 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| VSU | Vasula | 87.62 | 332⇑ | eP | P | 03 29 09.3 | -1.6 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,39nm,1.2s | | | | | | |
| O16A | Springville | 87.73 | 48 | eP | P | 03 29 17.2 | +5.1 |
| | comp=Z,4.1nm,0.7s | | | | | | |
| ANN | Anapa | 88.53 | 317 | eP | P | 03 29 22.5 | +7.1 |
| SRU | San Rafael | 88.86 | 49 | eP | P | 03 29 18.1 | +0.7 |
| SRU | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| SRU | San Rafael | 88.86 | 49 | eP | P | 03 29 18.1 | +0.7 |
| | comp=Z,6.2nm,0.5s | | | | | | |
| PV10 | Paradox Valley | 90.22 | 49 | eP | P | 03 29 24.8 | +1.0 |
| AKASG | Malin Array Be | 90.58 | 325 | P | P | 03 29 22.7 | -2.2 |
| | comp=Z,0.3nm,0.3s,baz=57,slow=5.1,SNR=3.7 | | | | | | |
| RAYN | Ar Rayn | 90.78 | 295 | eP | P | 03 29 25.0 | -1.4 |
| | comp=Z,4.9nm,0.9s | | | | | | |
| NB2 | NORSAR Subarra | 91.96 | 339 | P | P | 03 29 29.1 | -1.9 |
| | comp=Z,0.9nm,0.6s,baz=44,slow=4.6 | | | | | | |
| NOA | NORSAR Array B | 91.96 | 339 | P | P | 03 29 29.3 | -1.7 |
| | comp=Z,1.0nm,0.5s,baz=38,slow=4.5,SNR=6.4 | | | | | | |
| BRTR | Keskin Array B | 93.34 | 314 | P | P | 03 29 36.3 | -1.7 |
| | comp=Z,2.9nm,0.7s,baz=120,slow=3.3,SNR=18 | | | | | | |
| BRTR | Keskin Array B | 93.34 | 314 | ceP | P | 03 29 36.2 | -1.7 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| BR231 | Keskin MP Arra | 93.86 | 314 | eP | P | 03 29 37.1 | -3.2 |
| TXAR | Lajitas Array | 98.18 | 55 | P | P | 03 30 01.0 | +1.1 |
| | comp=Z,0.1nm,0.5s,baz=294,slow=4.8,SNR=2.5 | | | | | | |
| TXAR | Lajitas Array | 98.18 | 55 | P | P | 03 30 01.0 | +1.1 |
| ESDC | Sonseca Array | 114.73 | 334 | PKP | PKPdf | 03 34 58.5 | -0.6 |
| | comp=Z,0.1nm,0.4s,baz=352,slow=3.5,SNR=3.3 | | | | | | |
| SNAA | Sanae | 124.17 | 192 | ePKIKP | PKPdf | 03 35 15.6 | -0.7 |
| SNAA | Sanae | 124.17 | 192 | ePKPdf | PKPdf | 03 35 15.6 | -0.7 |
| TORD | Torodi Ar. Bea | 131.66 | 309 | PKhKP | PKPpre | 03 35 13.0 | |
| | comp=Z,0.1nm,0.5s,baz=68,slow=1.8,SNR=5.0 | | | | | | |
| TORD | | | | PKP | PKPdf | 03 35 30.8 | -1.3 |
| | comp=Z,1.0nm,0.5s,baz=23,slow=1.9,SNR=23 | | | | | | |
| TORD | | | | SKPbc | SKPbc | 03 37 58.5 | -3.8 |
| | comp=Z,1.1nm,0.8s,baz=40,slow=2.9,SNR=7.7 | | | | | | |
| SJG | San Juan | 132.03 | 41 | ePKIKP | PKPdf | 03 35 35.7 | +3.0 |
| SJG | San Juan | 132.03 | 41 | ePKPdf | PKPdf | 03 35 35.7 | +3.0 |
| CPD | Cerro la Pandu | 132.23 | 41 | ePKIKP | PKPdf | 03 35 32.0 | -1.1 |
| CPD | Cerro la Pandu | 132.23 | 41 | ePKPdf | PKPdf | 03 35 32.0 | -1.1 |
| DBIC | Dimbokro | 140.76 | 308 | PKhKP | PKPpre | 03 35 42.6 | |
| | comp=Z,2.6nm,0.3s,baz=33,slow=4.6,SNR=17 | | | | | | |
| CFAA | Coronel Fontan | 147.65 | 119 | PKPbc | PKPbc | 03 36 03.9 | -0.2 |
| | comp=Z,0.4nm,0.4s,baz=258,slow=3.2,SNR=16 | | | | | | |
| LVC | Limon Verde | 148.19 | 102 | PKPbc | PKPbc | 03 36 07.2 | +1.3 |
| | comp=Z,22nm,0.6s,baz=255,slow=3.5,SNR=14 | | | | | | |
| LPAZ | La Paz | 148.37 | 90 | PKPbc | PKPbc | 03 36 07.6 | +0.6 |
| | comp=Z,4.0nm,0.5s,baz=266,slow=4.3,SNR=29 | | | | | | |
| PTGA | Pitinga | 149.49 | 56 | PKP | PKPdf | 03 36 03.9 | +0.1 |
| | comp=Z,2.0nm,0.7s,baz=210,slow=5.4,SNR=5.1 | | | | | | |
| PTGA | | | | PKPbc | PKPbc | 03 36 09.0 | 0.0 |
| | comp=Z,10nm,0.6s,baz=284,slow=4.4,SNR=25 | | | | | | |
| PTGA | | | | PKPab | PKPab | 03 36 15.7 | -0.8 |
| | comp=Z,1.9nm,0.5s,baz=354,slow=4.6,SNR=4.4 | | | | | | |
| PTGA | Pitinga | 149.49 | 56 | PKP | PKPdf | 03 36 03.9 | +0.1 |
| PTGA | | | | ePKPdf | PKPbc | 03 36 04.3 | -4.8 |
| PTGA | | | | PKPbc | PKPbc | 03 36 09.0 | 0.0 |
| PTGA | | | | PKPab | PKPab | 03 36 15.7 | -0.8 |
| SAML | Samuel | 150.93 | 74 | ePKPdf | PKPdf | 03 36 06.2 | +0.3 |

*ISCJB **11** 03:35:57.6±0.8, 17°.71S±0°.06×69°.33W±0°.08, h126km, mb4.3/2, Error ellipse: s-maj=11.7km s-min=8.6km az=18.4*

*IDC **11** 03:36:00.7±1.8, 17°.82S×69°.28W, h138km±9km, mb4.0/3, mb1 3.9/6, mb1mx3.5/25, mbtmp4.4/6, Error ellipse: s-maj=36.3km s-min=9.8km az=104.0*

**ISC 11 03:35:59.0**±0.9**, 17°.76S**±0°.08×**69°.39W**±0°.10**, h126**km**, n10, σ1s.66**/12**, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 1.89 | 40 | P | Pn | 03 36 35.6 | +3.6 |
| | 20nm,0.3s,baz=228,slow=7.0,SNR=456 | | | | | | |
| LPAZ | | | | S | Sn | 03 37 00.1 | +3.0 |
| | 2.9nm,0.3s,baz=64,slow=16,SNR=7.3 | | | | | | |
| LVC | Limon Verde | 4.85 | 175 | P | Pn | 03 37 12.7 | +2.4 |
| | 168nm,0.3s,baz=354,slow=9.9,SNR=82 | | | | | | |
| LVC | | | | S | Sn | 03 38 05.8 | +0.1 |
| | 392nm,0.3s,baz=205,slow=18,SNR=19 | | | | | | |
| SIV | San Ignacio | 8.15 | 79 | P | Pn | 03 37 54.8 | +0.2 |
| | 3.9nm,0.3s,baz=276,slow=11,SNR=33 | | | | | | |
| SIV | | | | S | Sn | 03 39 22.6 | -2.5 |
| | baz=15,slow=19,SNR=3.4 | | | | | | |
| ATAH | Atahualpa | 13.73 | 319 | P | Pn | 03 39 07.8 | -1.2 |
| | 1.0nm,0.3s,baz=62,slow=9.1,SNR=4.7 | | | | | | |
| CFAA | Coronel Fontan | 13.83 | 176 | P | Pn | 03 39 08.2 | -1.5 |
| | 0.0nm,0.3s,baz=1.0,slow=14,SNR=6.5 | | | | | | |
| PTGA | Pitinga | 19.29 | 30 | P | P | 03 40 13.7 | -0.4 |
| | 1.2nm,0.3s,baz=203,slow=17,SNR=15 | | | | | | |
| BDFB | Brasilia | 20.58 | 87 | P | P | 03 40 28.4 | +0.2 |
| | 3.4nm,0.4s,baz=259,slow=11,SNR=11 | | | | | | |
| DBIC | Dimbokro | 68.15 | 75 | P | P | 03 46 46.3 | +0.2 |
| | 5.4nm,0.8s,baz=250,slow=6.5,SNR=5.7 | | | | | | |
| TORD | Torodi Ar. Bea | 76.56 | 71 | P | P | 03 47 36.0 | 0.0 |
| | 1.4nm,0.4s,baz=257,slow=5.2,SNR=76 | | | | | | |
| SONM | Songino Array | 149.80 | 6 | PKPbc | PKPbc | 03 55 34.4 | 0.0 |
| | 0.4nm,0.7s,baz=345,slow=2.3,SNR=2.6 | | | | | | |

*CSEM **11** 03:56:56.1±0.4, 37°.25N×21°.74E, h25km±2km, MD2.7, Error ellipse: s-maj=11.4km s-min=6.9km az=66.0*

**ATH 11 03:56:56.3, 37°.28N×21°.66E, h20**km±2km**, MD2.7**/8**, Southern Greece**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ITM | Ithomi | 0.23 | 115 | ePB | Pb | 03 57 01.7 | -0.3 |
| ITM | | | | eSB | Sb | 03 57 05.8 | -0.1 |
| ITM | Ithomi | 0.23 | 115 | ePb | Pb | 03 57 01.7 | -0.3 |
| ITM | | | | eSb | Sb | 03 57 05.8 | -0.1 |
| AMT | Artemida-Makis | 0.26 | 9 | ePB | Pb | 03 57 02.5 | +0.1 |
| AMT | | | | eSB | Sb | 03 57 07.9 | +1.4 |
| AMT | Artemida-Makis | 0.26 | 9 | ePb | Pb | 03 57 02.5 | +0.1 |
| AMT | | | | eSb | Sb | 03 57 07.9 | +1.4 |
| PYL | PYLOS | 0.39 | 170 | ePB | Pb | 03 57 04.2 | -0.3 |
| PYL | | | | eSB | Sb | 03 57 10.6 | +0.5 |
| PYL | PYLOS | 0.39 | 170 | ePb | Pb | 03 57 04.2 | -0.3 |
| PYL | | | | eSb | Sb | 03 57 10.6 | +0.5 |
| VLX | Vlachokerasia | 0.58 | 81 | ePN | Pb | 03 57 07.0 | -1.0 |
| VLX | | | | eSN | Sb | 03 57 16.5 | +0.6 |
| VLX | Vlachokerasia | 0.58 | 81 | ePn | Pb | 03 57 07.0 | -1.0 |
| VLX | | | | eSn | Sb | 03 57 16.5 | +0.6 |
| DRO | Drossia | 0.67 | 3 | ePB | Pb | 03 57 08.9 | -0.5 |
| DRO | | | | eSN | Sn | 03 57 20.0 | -0.7 |
| DRO | Drossia | 0.67 | 3 | ePb | Pb | 03 57 08.9 | -0.5 |
| DRO | | | | eSn | Sn | 03 57 20.0 | -0.7 |
| RLS | Riolos of Patr | 0.79 | 349 | ePN | Pb | 03 57 11.6 | +0.2 |
| RLS | Riolos of Patr | 0.79 | 349 | ePn | Pb | 03 57 11.6 | +0.2 |
| GUR | Goura | 0.85 | 39 | ePB | Pb | 03 57 11.9 | -0.7 |
| GUR | | | | eSN | Sn | 03 57 24.5 | -0.8 |
| GUR | Goura | 0.85 | 39 | ePb | Pb | 03 57 11.9 | -0.7 |
| GUR | | | | eSn | Sn | 03 57 24.5 | -0.8 |
| LAKA | Lakka | 0.99 | 15 | ePN | Pn | 03 57 15.5 | +0.4 |
| LAKA | | | | eSN | Sn | 03 57 30.0 | +1.4 |
| LAKA | Lakka | 0.99 | 15 | ePn | Pn | 03 57 15.5 | +0.4 |
| KALE | Kalithea | 1.17 | 19 | ePN | Pb | 03 57 18.9 | +0.9 |
| KALE | Kalithea | 1.17 | 19 | ePn | Pb | 03 57 18.9 | +0.9 |
| DID | Didima | 1.28 | 79 | ePN | Pb | 03 57 21.5 | +1.8 |
| KYTH | Kithira | 1.49 | 132 | ePN | Pb | 03 57 24.5 | +1.2 |

*DDA **11** 03:57:44.2, 37°.93N×27°.11E, h20km, Md3.2*

*ISK **11** 03:57:45.4, 37°.93N×27°.19E, h2km, MD3.1*

*ISCJB **11** 03:57:45.2±0.4, 37°.92N±0°.02×27°.09E±0°.02, h8km±3km, Error ellipse: s-maj=2.9km s-min=2.6km az=138.0*

*THE **11** 03:57:45.1, 37°.97N×27°.03E, h0km±1km, ML3.0/4, Error ellipse: s-maj=3.0km s-min=1.0km az=91.0*

*ATH **11** 03:57:45.4, 37°.86N×27°.03E, h25km±1km, MD3.0/7*

*CSEM **11** 03:57:45.2±0.2, 37°.91N×27°.10E, h2km, MD3.0, Error ellipse: s-maj=4.7km s-min=4.6km az=110.0*

**ISC 11 03:57:44.7**±0.7**, 37°.92N**±0°.01×**27°.10E**±0°.02**, h13**km±6km**, n98, σ0s.98**/138**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GCAM | G?zelcaml? | 0.25 | 154 | i P | Pg | 03 57 49.8 | -0.1 |
| GCAM | | | | i S | Sg | 03 57 53.5 | +0.1 |
| GCAM | G?zelcaml? | 0.25 | 154 | P | Pg | 03 57 49.8 | -0.1 |
| GCAM | | | | S | Sg | 03 57 53.5 | +0.1 |
| SMG | Samos | 0.30 | 224 | ePB | Pg | 03 57 51.3 | +0.5 |
| SMG | | | | eSB | Sg | 03 57 56.3 | +1.4 |
| SMG | Samos | 0.30 | 224 | P | Pg | 03 57 51.1 | +0.3 |
| SMG | | | | S | Sg | 03 57 55.9 | +1.0 |
| SMG | Samos | 0.30 | 224 | P | Pg | 03 57 51.1 | +0.3 |
| SMG | Samos | 0.30 | 224 | ePb | Pg | 03 57 51.3 | +0.5 |
| SMG | | | | S | Sg | 03 57 55.9 | +1.0 |
| SMG | | | | eSb | Sg | 03 57 56.3 | +1.4 |
| IZM | Izmir | 0.49 | 15 | PG | Pg | 03 57 54.4 | 0.0 |
| IZM | Izmir | 0.49 | 15 | i Pg | Pg | 03 57 54.4 | 0.0 |
| ZEY | ˜zmir | 0.56 | 304 | P | Pg | 03 57 56.2 | +0.5 |
| ZEY | | | | S | Sb | 03 58 04.4 | 0.0 |
| URLA | Izmir | 0.59 | 318 | i S | Sb | 03 58 05.2 | 0.0 |
| URLA | Izmir | 0.59 | 318 | i P | Pg | 03 57 56.7 | +0.5 |
| URLA | Izmir | 0.59 | 318 | P | Pg | 03 57 56.7 | +0.6 |
| URLA | | | | S | Sb | 03 58 05.2 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 0.63 | 88 | ePG | Pg | 03 57 57.0 | 0.0 |
| AYDB | | | | eSG | Sg | 03 58 05.8 | +0.5 |
| AYDB | Zeytinkoy-Aydi | 0.63 | 88 | ePg | Pg | 03 57 57.0 | 0.0 |
| AYDB | | | | eSg | Sg | 03 58 05.8 | +0.5 |
| AYDN | Tasoluk | 0.67 | 113 | i P | Pb | 03 57 59.2 | +0.9 |
| AYDN | | | | i S | Sb | 03 58 08.4 | +0.8 |
| AYDN | Tasoluk | 0.67 | 113 | P | Pb | 03 57 59.2 | +0.9 |
| AYDN | | | | S | Sb | 03 58 08.4 | +0.8 |
| BODT | Bodrum | 0.88 | 169 | ePG | Pn | 03 58 03.0 | +0.2 |
| BODT | | | | eSG | Sn | 03 58 15.3 | -0.1 |
| BODT | Bodrum | 0.88 | 169 | eSg | Sn | 03 58 15.3 | -0.1 |
| BODT | Bodrum | 0.88 | 169 | ePg | Pn | 03 58 03.0 | +0.2 |
| BDRM | Kayabasi | 0.90 | 162 | i S | Sg | 03 58 13.7 | -0.1 |
| BDRM | Kayabasi | 0.90 | 162 | i P | Pg | 03 58 01.9 | -0.2 |
| BDRM | Kayabasi | 0.90 | 162 | P | Pg | 03 58 01.9 | -0.2 |
| BDRM | | | | S | Sg | 03 58 13.8 | -0.1 |
| CHOS | Chios island | 0.94 | 300 | ePN | Pg | 03 58 03.2 | +0.3 |
| CHOS | | | | eSN | Sb | 03 58 16.2 | +0.8 |
| CHOS | Chios island | 0.94 | 300 | P | Pg | 03 58 02.7 | -0.2 |
| CHOS | | | | S | Sg | 03 58 15.5 | +0.3 |
| CHOS | Chios island | 0.94 | 300 | P | Pg | 03 58 02.7 | -0.2 |
| CHOS | Chios island | 0.94 | 300 | ePn | Pg | 03 58 03.2 | +0.3 |
| CHOS | | | | S | Sg | 03 58 15.5 | +0.3 |
| AKHS | Akhisar | 1.11 | 30 | i P | Pb | 03 58 05.2 | -0.5 |
| AKHS | | | | i S | Sb | 03 58 19.2 | -0.9 |
| AKHS | Akhisar | 1.11 | 30 | P | Pb | 03 58 05.2 | -0.5 |
| AKHS | | | | S | Sb | 03 58 19.2 | -0.9 |
| AKS | Akhisar | 1.11 | 30 | ePG | Pn | 03 58 06.4 | +0.5 |
| AKS | | | | eSG | Sg | 03 58 21.0 | +0.5 |
| AKS | Akhisar | 1.11 | 30 | ePg | Pn | 03 58 06.4 | +0.5 |
| AKS | | | | eSg | Sg | 03 58 21.0 | +0.5 |
| DKL | Dikili | 1.16 | 353 | ePN | Pg | 03 58 08.5 | +1.6 |
| DKL | Dikili | 1.16 | 353 | ePn | Pg | 03 58 08.5 | +1.6 |
| YER | Yerkesik | 1.23 | 130 | ePN | Pg | 03 58 08.7 | +0.4 |
| YER | Yerkesik | 1.23 | 130 | ePn | Pg | 03 58 08.7 | +0.4 |
| MANT | Manisa | 1.28 | 63 | i P | Pg | 03 58 09.8 | +0.4 |
| MANT | | | | i S | Sb | 03 58 23.7 | -1.6 |
| MANT | Manisa | 1.28 | 63 | P | Pg | 03 58 09.8 | +0.4 |
| MANT | | | | S | Sb | 03 58 23.7 | -1.6 |
| NIS1 | Nisyros Isl. | 1.32 | 177 | ePB | Pn | 03 58 08.4 | -0.4 |
| NIS1 | Nisyros Isl. | 1.32 | 177 | P | Pg | 03 58 10.7 | +0.7 |
| NIS1 | Nisyros Isl. | 1.32 | 177 | P | Pg | 03 58 10.7 | +0.7 |
| KULA | Kula-Manisa | 1.37 | 64 | ePN | Pb | 03 58 10.8 | +0.7 |
| KULA | Kula-Manisa | 1.37 | 64 | ePn | Pb | 03 58 10.8 | +0.7 |
| PRK | Paraskevi | 1.47 | 334 | ePN | Pg | 03 58 13.5 | +0.6 |
| PRK | | | | eSN | Sg | 03 58 32.4 | +0.4 |
| PRK | Paraskevi | 1.47 | 334 | P | Pn | 03 58 10.9 | 0.0 |
| PRK | | | | S | Sn | 03 58 30.4 | +0.4 |
| PRK | Paraskevi | 1.47 | 334 | P | Pn | 03 58 10.9 | 0.0 |
| PRK | Paraskevi | 1.47 | 334 | ePn | Pg | 03 58 13.5 | +0.6 |
| PRK | | | | S | Sn | 03 58 30.4 | +0.4 |
| PRK | | | | eSn | Sg | 03 58 32.4 | +0.4 |
| APE | Apeiranthos | 1.51 | 236 | ePN | Pb | 03 58 12.9 | +0.3 |
| APE | | | | eSN | Sn | 03 58 31.2 | +0.2 |
| APE | Apeiranthos | 1.51 | 236 | P | Pn | 03 58 11.0 | -0.5 |
| APE | | | | S | Sg | 03 58 33.5 | +0.2 |
| APE | Apeiranthos | 1.51 | 236 | P | Pn | 03 58 11.0 | -0.5 |
| APE | Apeiranthos | 1.51 | 236 | ePn | Pb | 03 58 12.9 | +0.3 |
| APE | | | | eSn | Sn | 03 58 31.2 | +0.2 |
| APE | | | | S | Sg | 03 58 33.5 | +0.2 |
| DENT | Denizli | 1.54 | 96 | ePN | Pb | 03 58 14.1 | +0.9 |
| DENT | Denizli | 1.54 | 96 | ePn | Pb | 03 58 14.1 | +0.9 |
| DNZL | Cakiroluk | 1.56 | 98 | i P | Pn | 03 58 11.8 | -0.5 |
| DNZL | | | | i S | Sg | 03 58 36.3 | +1.3 |
| DNZL | Cakiroluk | 1.56 | 98 | P | Pn | 03 58 11.8 | -0.5 |
| DNZL | | | | S | Sg | 03 58 36.3 | +1.3 |
| TURN | Turunc | 1.59 | 131 | i P | Pn | 03 58 10.5 | -2.0 |
| TURN | | | | i S | Sn | 03 58 31.8 | -1.2 |
| TURN | Turunc | 1.59 | 131 | P | Pn | 03 58 10.5 | -2.0 |
| TURN | | | | S | Sn | 03 58 31.8 | -1.2 |
| SIGR | SIGRI | 1.61 | 323 | ePN | Pg | 03 58 15.4 | -0.2 |
| SIGR | SIGRI | 1.61 | 323 | P | Pn | 03 58 12.4 | -0.4 |
| SIGR | | | | S | Sn | 03 58 34.2 | +0.7 |
| SIGR | SIGRI | 1.61 | 323 | P | Pn | 03 58 12.4 | -0.4 |
| SIGR | SIGRI | 1.61 | 323 | ePn | Pg | 03 58 15.4 | -0.2 |
| SIGR | SIGRI | 1.61 | 323 | S | Sn | 03 58 34.2 | +0.7 |
| DALY | Dalyan (Mu˜la | 1.66 | 131 | ePN | Pb | 03 58 16.1 | +1.0 |
| DALY | Dalyan (Mu˜la | 1.66 | 131 | ePn | Pb | 03 58 16.2 | +1.1 |
| DEMI | Demirci | 1.69 | 48 | i P | Pb | 03 58 15.8 | +0.1 |
| DEMI | | | | i S | Sn | 03 58 34.4 | -1.2 |
| DEMI | Demirci | 1.69 | 48 | P | Pb | 03 58 15.8 | +0.1 |
| DEMI | | | | S | Sn | 03 58 34.4 | -1.2 |
| BALB | Balikesir | 1.82 | 19 | ePN | Pb | 03 58 18.8 | +0.9 |
| BALB | Balikesir | 1.82 | 19 | ePn | Pb | 03 58 18.8 | +0.9 |
| BALY | Balya | 1.86 | 13 | i P | Pn | 03 58 16.1 | -0.2 |
| BALY | | | | i S | Sb | 03 58 42.0 | +0.3 |
| BALY | Balya | 1.86 | 13 | P | Pn | 03 58 16.1 | -0.2 |
| BALY | | | | S | Sb | 03 58 42.0 | +0.3 |
| KHAL | Karahalli | 1.94 | 76 | i P | Pn | 03 58 17.9 | +0.4 |
| KHAL | | | | i S | Sb | 03 58 43.6 | -0.5 |
| KHAL | Karahalli | 1.94 | 76 | P | Pn | 03 58 17.9 | +0.4 |
| KHAL | | | | S | Sb | 03 58 43.6 | -0.5 |
| FETY | Fethiye | 2.04 | 128 | ePN | Pn | 03 58 20.5 | +1.7 |
| FETY | Fethiye | 2.04 | 128 | ePn | Pn | 03 58 20.5 | +1.7 |
| DST | Dursunbey | 2.06 | 35 | ePN | Pb | 03 58 21.6 | -0.4 |
| DST | Dursunbey | 2.06 | 35 | ePn | Pb | 03 58 21.6 | -0.3 |
| GADA | Gvkgeada | 2.45 | 338 | ePN | Pb | 03 58 28.1 | -0.4 |
| GADA | Gvkgeada | 2.45 | 338 | ePn | Pb | 03 58 28.1 | -0.4 |
| KRBG | Karabiga-Canak | 2.47 | 4 | ePN | Pb | 03 58 28.1 | -0.8 |
| KRBG | Karabiga-Canak | 2.47 | 4 | ePn | Pb | 03 58 28.1 | -0.8 |
| EDC | Edincik | 2.49 | 14 | ePN | Pb | 03 58 28.1 | -1.2 |
| EDC | Edincik | 2.49 | 14 | ePn | Pb | 03 58 28.1 | -1.2 |
| GELI | Tayfur-Gelibol | 2.52 | 349 | ePN | Pb | 03 58 29.5 | -0.2 |
| GELI | Tayfur-Gelibol | 2.52 | 349 | ePn | Pb | 03 58 29.5 | -0.2 |
| KCTX | Karacabey (Bur | 2.54 | 22 | ePN | Pb | 03 58 28.5 | -1.5 |
| KCTX | Karacabey (Bur | 2.54 | 22 | ePn | Pb | 03 58 28.5 | -1.5 |
| ORLT | Orhaneli | 2.54 | 33 | ePN | Pb | 03 58 28.5 | -1.6 |
| ORLT | Orhaneli | 2.54 | 33 | ePn | Pb | 03 58 28.5 | -1.6 |
| RKY | Sarkoy-Tekirda | 2.76 | 1 | ePN | Pb | 03 58 32.7 | -1.2 |
| RKY | Sarkoy-Tekirda | 2.76 | 1 | ePn | Pb | 03 58 32.7 | -1.2 |
| ERIK | Erikli-Kesan | 2.78 | 351 | ePN | Pb | 03 58 32.7 | -1.5 |
| ERIK | Erikli-Kesan | 2.78 | 351 | ePn | Pb | 03 58 32.7 | -1.5 |
| ENEZ | Enez | 2.90 | 346 | ePN | Pb | 03 58 34.6 | -1.7 |
| ENEZ | Enez | 2.90 | 346 | ePn | Pb | 03 58 34.6 | -1.7 |
| ARMT | Armutlu | 2.97 | 27 | ePN | Pn | 03 58 34.6 | +3.0 |
| ARMT | Armutlu | 2.97 | 27 | ePn | Pn | 03 58 34.6 | +3.0 |
| IZI | Iznik | 3.04 | 37 | ePN | Pn | 03 58 35.5 | +3.0 |
| IZI | Iznik | 3.04 | 37 | ePn | Pn | 03 58 35.5 | +3.0 |
| GULT | Gulveren | 3.65 | 46 | ePN | Pn | 03 58 44.4 | +3.4 |
| GULT | Gulveren | 3.65 | 46 | ePn | Pn | 03 58 44.4 | +3.4 |

*IDC **11** 04:02:57.7±0.9, 1°.08S×120°.98E, h0km, mb3.7/6, mb1 3.9/7, mb1mx3.7/37, mbtmp3.7/7, ML3.7/1, MS2.8/3, Ms1 2.8/3, ms1mx2.5/26, Error ellipse: s-maj=53.8km s-min=17.2km az=65.0*

*ISCJB **11** 04:03:00.7±1.9, 1°.19S±0°.04×120°.59E±0°.04, h9km±13km, mb3.7/6, Error ellipse: s-maj=7.0km s-min=5.5km az=40.7*

*DJA **11** 04:03:02.3±0.2, 1°S±2°×12°1E±°, h10km, M4.1/14, MLv4.1/14*

**ISC 11 04:02:59.4**±1.3**, 1°.20S**±0°.04×**120°.68E**±0°.04**, h4**km±10km**, n23, σ1s.73**/30**, mb3.7**/6**, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCI | Palu | 0.89 | 289 | P | Pg | 04 03 16.0 | -0.5 |
| PCI | | | | S | Sg | 04 03 27.7 | -0.3 |
| APSI | Ampana | 1.01 | 73 | P | Pn | 04 03 21.7 | +1.3 |
| APSI | | | | S | Sn | 04 03 38.8 | +3.6 |
| MPSI | Mapaga | 1.72 | 333 | P | Pg | 04 03 31.7 | -0.6 |
| MPSI | | | | S | Sg | 04 03 56.0 | +1.4 |
| TTSI | Tana Toraja | 2.02 | 205 | P | Pn | 04 03 35.4 | +1.1 |
| TTSI | | | | S | Sg | 04 04 04.7 | +0.3 |
| MRSI | Marisa | 2.09 | 37 | P | Pn | 04 03 35.9 | +0.6 |
| MRSI | | | | S | Sb | 04 04 03.9 | -0.5 |
| LUWI | Luwuk | 2.10 | 86 | P | Pb | 04 03 37.1 | -1.0 |
| LUWI | | | | S | Sg | 04 04 08.6 | +1.6 |
| SPSI | Sidrap Palu | 2.89 | 198 | P | Pn | 04 03 47.5 | +1.3 |
| SPSI | | | | S | Sn | 04 04 24.4 | +2.9 |
| GTOI | Gorontalo | 2.96 | 52 | P | Pn | 04 03 49.2 | +1.9 |
| KDI | Kendari | 3.35 | 145 | P | Pb | 04 03 58.3 | -1.2 |
| KMSI | Cibinong | 3.75 | 62 | P | Pb | 04 04 06.4 | +0.2 |
| KAPI | Kappang | 3.90 | 194 | Pn | Pn | 04 04 01.5 | +1.4 |
| | 4.8nm,0.3s,baz=338,slow=4.9,SNR=16 | | | | | | |
| KAPI | | | | Sn | Sn | 04 04 46.9 | +0.6 |
| | 2.0nm,0.3s,baz=300,slow=20,SNR=4.2 | | | | | | |
| KAPI | | | | Lg | Lg | 04 04 58.3 | |
| | 1.7nm,0.3s,baz=233,slow=21,SNR=3.5 | | | | | | |
| KAPI | | | | LR | LR | 04 05 41.5 | |
| | comp=Z,122nm,18.6s,baz=107,slow=40 | | | | | | |
| BKSI | Bulukumba | 4.13 | 188 | P | Pn | 04 04 05.2 | +1.9 |
| BSSI | Bau Bau, Buton | 4.91 | 182 | P | Pn | 04 04 15.1 | +1.0 |
| KBKI | Kotabaru | 4.96 | 245 | P | Pn | 04 04 17.9 | +3.1 |
| BBKI | Banjar Baru | 6.25 | 249 | P | Pn | 04 04 35.6 | +3.2 |
| BATI | Baumata | 9.43 | 162 | LR | LR | 04 09 25.4 | |
| | comp=Z,71nm,19.3s,baz=82,slow=41 | | | | | | |
| DAV | Davao City (W) | 9.56 | 31 | LR | LR | 04 09 09.6 | |
| | comp=Z,53nm,20.3s,baz=228,slow=40 | | | | | | |
| WRA | Warramunga Arr | 22.93 | 145 | P | P | 04 08 03.2 | -1.5 |
| | 2.5nm,1.0s,baz=324,slow=10,SNR=11 | | | | | | |
| ASAR | Alice Springs | 25.75 | 151 | P | P | 04 08 29.9 | -1.4 |
| | 0.6nm,0.7s,baz=320,slow=6.8,SNR=7.3 | | | | | | |
| ASAR | | | | PcP | PcP | 04 12 00.1 | -1.6 |
| | 0.3nm,0.5s,baz=335,slow=1.9,SNR=5.8 | | | | | | |
| CMAR | Chiang Mai Arr | 28.96 | 313 | P | P | 04 09 00.9 | +0.7 |
| | 0.9nm,0.5s,baz=147,slow=7.2,SNR=3.2 | | | | | | |
| SONM | Songino Array | 50.40 | 348 | P | P | 04 11 57.1 | -0.9 |
| | 0.5nm,0.8s,baz=152,slow=9.6,SNR=2.6 | | | | | | |
| MKAR | Makanchi Array | 58.45 | 330 | P | P | 04 12 55.6 | -0.9 |
| | 0.6nm,0.8s,baz=148,slow=8.5,SNR=4.3 | | | | | | |
| ZALV | Zalesovo Beam | 62.47 | 337 | P | P | 04 13 21.9 | -1.9 |
| | 0.6nm,0.4s,baz=141,slow=7.1,SNR=2.6 | | | | | | |

*IDC **11** 04:26:21.9±1.5, 35°.35N×143°.06E, h0km, mb3.4/2, mb1 3.7/3, mb1mx3.4/25, mbtmp3.3/3, ML3.1/1, Error ellipse: s-maj=33.9km s-min=32.1km az=124.0*

*ISCJB **11** 04:26:25.8±1.0, 35°.57N±0°.05×142°.90E±0°.07, h59km, mb3.5/2, Error ellipse: s-maj=8.7km s-min=6.3km az=16.6*

*JMA **11** 04:26:25.0±0.6, 35°.56N×142°.95E, h39km, M3.4*

**ISC 11 04:26:27.6**±1.2**, 35°.54N**±0°.05×**142°.93E**±0°.09**, h59**km**, n13, σ1s.91**/20**, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BSO1 | Boso 1 | 1.82 | 242 | P | Pn | 04 26 54.6 | -1.5 |
| BSO1 | | | | S | Sn | 04 27 17.3 | -0.6 |
| BSO3 | Boso 3 | 2.11 | 250 | P | Pn | 04 27 00.6 | +0.3 |
| JFT | Otama | 2.87 | 314 | P | Pn | 04 27 10.5 | -0.5 |
| JFT | | | | S | Sn | 04 27 42.9 | -1.4 |
| JAG | Ashikaga | 2.95 | 288 | S | Sn | 04 27 44.2 | -2.1 |
| JOD2 | Odawara 2 | 3.15 | 266 | P | Pn | 04 27 14.0 | -0.7 |
| JRY | Ryogami san | 3.31 | 279 | P | Pn | 04 27 16.9 | 0.0 |
| JRY | | | | S | Sn | 04 27 53.9 | -1.1 |
| JHJ2 | Mitsune | 3.53 | 228 | P | Pn | 04 27 17.0 | -3.0 |
| JHJ2 | | | | S | Sn | 04 27 58.1 | -2.4 |
| JYN | Shimob | 3.58 | 271 | S | Sn | 04 28 02.0 | +0.4 |
| JMK | Ichinoseki | 3.67 | 339 | P | Pn | 04 27 20.4 | -1.4 |
| JMK | | | | S | Sn | 04 28 00.4 | -3.4 |
| MJAR | Matsushiro Arr | 3.95 | 286 | Pn | Pn | 04 27 26.7 | +1.0 |
| | 1.3nm,0.3s,baz=100,slow=9.6,SNR=11 | | | | | | |
| MJAR | | | | Sn | Sn | 04 28 12.4 | +1.6 |
| | 1.2nm,0.3s,baz=122,slow=25,SNR=4.6 | | | | | | |
| JOM | Ohasama | 4.14 | 342 | P | Pn | 04 27 28.1 | -0.1 |
| JOM | | | | S | Sn | 04 28 11.9 | -3.4 |
| ILAR | Eielson Array | 50.11 | 32 | P | P | 04 35 19.1 | +2.7 |
| | 0.6nm,0.8s,baz=257,slow=6.0,SNR=6.3 | | | | | | |
| WRA | Warramunga Arr | 55.77 | 190 | P | P | 04 35 59.3 | +0.8 |
| | 0.3nm,0.8s,baz=8.1,slow=7.5,SNR=3.2 | | | | | | |

**MEX 11 04:37:48.7**±0.4**, 15°.11N**×**93°.11W, h36**km±70km**, MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 0.60 | 350 | i P | Pn | 04 37 59.2 | -1.6 |
| PCIG | | | | eS | Sn | 04 38 06.7 | -2.5 |

*ISCJB **11** 04:41:39.4±1.0, 4°.42S±0°.06×131°.6E±0°.2, h33km, mb3.7/3, MS2.4/1, Error ellipse: s-maj=26.7km s-min=8.2km az=179.3*

*IDC **11** 04:41:40.5±1.3, 4°.13S×131°.28E, h0km, mb3.7/3, mb1 3.9/5, mb1mx3.7/29, mbtmp3.7/5, ML3.7/2, MS2.7/2, Ms1 2.7/2, ms1mx2.3/38, Error ellipse: s-maj=74.8km s-min=26.6km az=82.0*

**ISC 11 04:41:41.8**±1.0**, 4°.29S**±0°.06×**131°.6E**±0°.2**, h35**km**, n13, σ3s.48**/11**, mb3.6**/3**, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 3.42 | 354 | Pn | Pn | 04 42 31.1 | -1.5 |
| | 2.9nm,0.3s,baz=197,slow=11,SNR=9.7 | | | | | | |
| SIJI | | | | Sn | Sn | 04 43 07.2 | -4.8 |
| | 7.0nm,0.3s,baz=155,slow=14,SNR=6.9 | | | | | | |
| SWI | Sorong | 3.42 | 354 | P | Sn | 04 43 10.4 | -1.8 |
| | baz=14,SNR=4.5 | | | | | | |
| KDU | Kakadu | 8.38 | 174 | P | Pn | 04 43 44.8 | +3.9 |
| | baz=17,SNR=18 | | | | | | |
| MTN | Manton Dam | 8.51 | 183 | P | Pn | 04 43 35.6 | -7.0 |
| | baz=16,SNR=3.7 | | | | | | |
| FITZ | Fitzroy Crossi | 14.91 | 203 | Pn | Pn | 04 45 09.1 | -1.0 |
| | 0.4nm,0.3s,baz=24,slow=6.0,SNR=17 | | | | | | |
| FITZ | | | | Sn | Sn | 04 47 50.9 | -3.3 |
| | 0.1nm,0.3s,baz=76,slow=19,SNR=2.2 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **15.78** | **170** | Pn | **Pn** | **04 45 20.1** | **-1.4** |
| | 0.5nm,0.3s,baz=356,slow=13,SNR=27 | | | | | | |
| WRA | | | | Sn | **Sn** | **04 48 11.3** | **-4.1** |
| | 0.3nm,0.3s,baz=356,slow=23,SNR=6.1 | | | | | | |
| **PMG** | **Port Moresby** | **16.26** | **109** | LR | LR | 04 54 08.7 | |
| | comp=Z,29nm,18.4s,baz=217,slow=45 | | | | | | |
| **ASAR** | **Alice Springs** | **19.39** | **174** | P | **Pn** | **04 46 08.6** | **+2.5** |
| | 0.6nm,0.3s,baz=352,slow=9.5,SNR=32 | | | | | | |
| **GUMO** | **Guam** | **22.12** | **36** | LR | LR | 04 56 28.2 | |
| | comp=Z,14nm,18.9s,baz=270,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **56.43** | **340** | P | **P** | **04 51 21.9** | **+1.8** |
| | 0.3nm,0.4s,baz=159,slow=6.3,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.88** | **325** | P | **P** | **04 52 31.9** | **+1.5** |
| | 0.4nm,0.4s,baz=109,slow=7.8,SNR=6.2 | | | | | | |
| **ILAR** | **Eielson Array** | **90.24** | **25** | P | P | 04 54 43.3 | +4.7 |
| | 0.3nm,0.8s,baz=265,slow=4.2,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **129.79** | **283** | PKP | **PKPdf** | **05 00 53.7** | **+5.1** |
| | 0.2nm,0.7s,baz=56,slow=3.0,SNR=2.7 | | | | | | |

**KRSC 11 04:41:42.2**±0.6**, 53°.52N×159°.30E, h119**km±5km**, ML3.7,**
**Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SDLR** | **Sedlovina** | **0.35** | **226** | *e*P | Pn | 04 42 00.2 | +0.9 |
| SDLR | | | | *e*S | Sn | 04 42 13.2 | +1.0 |
| **NLC** | **Nalytchevo** | **0.35** | **176** | *e*P | Pn | 04 42 00.1 | +1.0 |
| NLC | | | | *e*S | Sn | 04 42 13.2 | +1.4 |
| **SMAR** | **Somma** | **0.40** | **229** | *e*P | Pn | 04 42 00.5 | +0.9 |
| SMAR | | | | *e*S | Sn | 04 42 14.3 | +1.5 |
| **KRX** | **Arik** | **0.42** | **248** | *e*P | Pn | 04 42 00.6 | +0.9 |
| KRX | | | | *e*S | Sn | 04 42 14.2 | +1.3 |
| **AVH** | **Avacha** | **0.42** | **233** | *e*P | Pn | 04 42 01.0 | +1.4 |
| AVH | | | | *e*S | Sn | 04 42 14.6 | +1.9 |
| **UGLR** | **Uglovaya** | **0.42** | **223** | *e*P | Pn | 04 42 00.8 | +1.1 |
| **KOK** | **Koryaka** | **0.46** | **240** | *e*P | Pn | 04 42 00.9 | +1.1 |
| KOK | | | | *e*S | Sn | 04 42 14.5 | +1.4 |
| **SPN** | **Mys Shipunski** | **0.61** | **134** | *e*P | Pn | 04 42 01.4 | +0.8 |
| SPN | | | | *e*S | Sn | 04 42 15.3 | +0.8 |
| **PET** | **Petropavlovsk** | **0.63** | **218** | *e*P | Pn | 04 42 01.6 | +0.8 |
| PET | | | | *e*S | Sn | 04 42 15.3 | +0.5 |
| **GNL** | **Ganaly** | **0.83** | **283** | *e*P | Pn | 04 42 02.9 | +0.3 |
| GNL | | | | *e*S | Sn | 04 42 18.6 | +0.6 |
| **RUS** | **Russkaya** | **1.19** | **204** | *e*P | Pn | 04 42 06.4 | +0.4 |
| RUS | | | | *e*S | Sn | 04 42 24.2 | +0.2 |
| **MTVR** | **Mutnovka** | **1.24** | **213** | *e*P | Pn | 04 42 08.0 | +1.3 |
| MTVR | | | | *e*S | Sn | 04 42 27.6 | +2.2 |
| **APC** | **Apacha** | **1.42** | **246** | *e*P | Pn | 04 42 09.7 | +1.2 |
| APC | | | | *e*S | Sn | 04 42 30.0 | +1.5 |
| **ASAK** | **Asacha** | **1.42** | **217** | *e*P | Pn | 04 42 10.0 | +1.3 |
| ASAK | | | | *e*S | Sn | 04 42 31.4 | +2.6 |
| **MKZ** | **Mys Kozlova** | **1.77** | **53** | *e*P | Pn | 04 42 13.9 | +1.3 |
| MKZ | | | | *e*S | Sn | 04 42 37.5 | +1.7 |
| **ESO** | **Esso** | **2.43** | **352** | *e*P | Pn | 04 42 22.3 | +1.3 |
| ESO | | | | *e*S | Sn | 04 42 52.3 | +1.4 |
| **KBTR** | **Krutoberegovo** | **3.37** | **36** | *e*P | Pn | 04 42 35.7 | +2.5 |
| KBTR | | | | *e*S | Sn | 04 43 14.8 | +2.1 |

*IDC **11** 05:08:49.4±6.5, 4°.86S×134°.45E, h0km, mb4.1/1, mb1 4.3/3, mb1mx3.7/26, mbtmp4.1/3, ML3.9/2, MS3.2/3, Ms1 3.2/3, ms1mx2.8/22, Error ellipse: s-maj=351.5km s-min=31.2km az=79.0*
*AUST **11** 05:09:58.4±3.6, 9°.57S×132°.65E, h72km, Error ellipse: s-maj=2.5km s-min=1.0km az=265.0*
**ISC 11 05:08:52.8**±1.6**, 4°.86S**±0°.09×**134°.6E**±0°.3**, h35**km**, n9,**
σ**2s.18**/7**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDU** | **Kakadu** | **8.06** | **195** | P | Pn | 05 10 50.0 | +2.6 |
| | baz=3.1,SNR=5.1 | | | | | | |
| **MTN** | **Manton Dam** | **8.64** | **203** | P | **Pn** | **05 10 55.6** | **+0.2** |
| | baz=3.6,SNR=22 | | | | | | |
| **PALU** | **Palau** | **12.12** | **359** | P | **Sn** | **05 13 55.9** | **-1.3** |
| | baz=17,SNR=6.6 | | | | | | |
| **KNRA** | **Kununurra** | **12.19** | **208** | P | **Pn** | **05 11 42.3** | **-1.7** |
| | baz=7.2,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.99** | **181** | Pn | **Pn** | **05 12 20.7** | **-1.5** |
| | 0.4nm,0.3s,baz=360,slow=13,SNR=27 | | | | | | |
| WRA | | | | Sn | Sn | 05 14 58.6 | -8.6 |
| | 0.1nm,0.3s,baz=352,slow=25,SNR=2.8 | | | | | | |
| WRA | | | | LR | LR | 05 18 44.9 | |
| | comp=Z,78nm,20.1s,baz=350,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.81** | **213** | P | **Pn** | **05 12 30.0** | **-2.9** |
| | baz=11,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **18.71** | **182** | P | **Pn** | **05 13 10.2** | **+1.3** |
| | 0.8nm,0.3s,baz=2.6,slow=10,SNR=35 | | | | | | |
| ASAR | | | | LR | LR | 05 21 10.2 | |
| | comp=Z,124nm,19.5s,baz=348,slow=40 | | | | | | |
| **WRKA** | **Warakurna** | **20.96** | **196** | P | Pn | 05 13 36.5 | +0.8 |
| | baz=16,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.06** | **324** | P | **P** | **05 19 56.7** | **+1.5** |
| | 1.1nm,0.5s,baz=127,slow=7.1,SNR=7.0 | | | | | | |
| MKAR | | | | LR | LR | 05 53 06.4 | |
| | comp=Z,14nm,18.9s,baz=332,slow=38 | | | | | | |

**MEX 11 05:19:55.3**±0.5**, 16°.67N×99°.39W, h16**km±34km**, MD3.6,**
**Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAIG** | **El Cayaco** | **0.92** | **294** | *e*P | Pb | 05 20 09.6 | -3.4 |
| CAIG | | | | *e*S | Sb | 05 20 20.6 | -4.3 |
| **PLIG** | **Platanillo** | **1.72** | **356** | *e*P | Pn | 05 20 21.2 | -3.5 |
| PLIG | | | | *i* S | Sn | 05 20 40.8 | -5.7 |
| **ARIG** | **Puente Sto Nin** | **1.85** | **330** | *e*P | Pn | 05 20 23.0 | -3.4 |
| ARIG | | | | *i* S | Sn | 05 20 45.0 | -4.5 |

*IDC **11** 06:18:07.3±0.9, 34°.66N×89°.58E, h0km, mb3.6/6, mb1 3.7/11, mb1mx3.6/38, mbtmp3.6/11, ML3.5/5, MS3.1/8, Ms1 3.1/8, ms1mx2.8/37, Error ellipse: s-maj=34.0km s-min=18.3km az=59.0*
*ISCJB **11** 06:18:09.0±0.8, 34°.8N±0°.1×89°.6E±0°.2, h25km, mb3.5/6, MS3.2/5, Error ellipse: s-maj=20.1km s-min=12.7km az=152.8*
**ISC 11 06:18:10.6**±0.9**, 34°.7N**±0°.1×**89°.6E**±0°.2**, h25**km**, n17,**
σ**1s.67**/11**, mb3.6**/6**, MS3.2**/5**, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **13.26** | **338** | Pn | **Pn** | **06 21 15.3** | **-1.8** |
| | 0.1nm,0.3s,baz=150,slow=13,SNR=2.2 | | | | | | |
| **AAK** | **Ala-Archa** | **14.18** | **308** | LR | LR | 06 28 06.2 | |
| | comp=Z,84nm,20.2s,baz=106,slow=42 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.81** | **336** | Pn | **Pn** | **06 22 14.0** | **-2.6** |
| | 0.0nm,0.3s,baz=146,slow=12,SNR=7.9 | | | | | | |
| **SONM** | **Songino Array** | **18.14** | **39** | P | **Pn** | **06 22 20.6** | **-0.2** |
| | 0.2nm,0.3s,baz=247,slow=10,SNR=2.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.22** | **150** | P | **P** | **06 22 19.3** | **-2.5** |
| | 0.4nm,0.3s,baz=338,slow=12,SNR=4.6 | | | | | | |
| CMAR | | | | LR | LR | 06 30 35.8 | |
| | comp=Z,14nm,20.5s,baz=315,slow=41 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.51** | **352** | P | **Pn** | **06 22 36.7** | **-0.5** |
| | 0.4nm,0.3s,baz=164,slow=11,SNR=5.1 | | | | | | |
| ZALV | | | | LR | LR | 06 30 34.6 | |
| | comp=Z,31nm,18.6s,baz=244,slow=38 | | | | | | |
| **BVAR** | **Borovoye Array** | **22.81** | **329** | P | **P** | **06 23 12.9** | **+1.5** |
| | 0.6nm,0.6s,baz=143,slow=13,SNR=4.6 | | | | | | |
| **GEYT** | **Alibeck** | **25.50** | **286** | LR | LR | 06 35 45.9 | |
| | comp=Z,57nm,21.6s,baz=290,slow=42 | | | | | | |
| **AKTO** | **Aktyubinsk** | **27.78** | **314** | LR | LR | 06 36 27.0 | |
| | comp=Z,44nm,18.6s,baz=349,slow=40 | | | | | | |
| **ARU** | **Arti** | **30.27** | **325** | LR | LR | 06 38 03.1 | |
| | comp=Z,60nm,20.4s,baz=112,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **44.22** | **294** | P | **P** | **06 26 18.5** | **+0.6** |
| | 0.5nm,0.6s,baz=85,slow=6.2,SNR=2.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **45.84** | **310** | LR | LR | 06 49 19.9 | |
| | comp=Z,31nm,18.3s,baz=280,slow=41 | | | | | | |
| **NOA** | **NORSAR Array B** | **54.82** | **324** | LR | LR | 06 52 34.6 | |
| | comp=Z,26nm,18.0s,baz=285,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **69.02** | **135** | P | **P** | **06 29 15.0** | **+0.9** |
| | 0.8nm,0.9s,baz=328,slow=6.2,SNR=5.8 | | | | | | |
| **ILAR** | **Eielson Array** | **71.49** | **22** | P | **P** | **06 29 29.8** | **+1.1** |
| | 0.6nm,0.9s,baz=314,slow=5.0,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **71.70** | **138** | P | **P** | **06 29 31.6** | **+1.1** |
| | 0.5nm,0.8s,baz=331,slow=7.6,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.93** | **280** | P | **P** | **06 30 23.4** | **+0.2** |
| | 0.6nm,0.8s,baz=64,slow=3.4,SNR=3.3 | | | | | | |

**CASC 11 06:40:20.4**±1.3**, 12°.52N×88°.21W, h36**km±216km**, MD3.8,**
**ML3.6, 1C-1D, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNCH** | **Conchagua** | **0.84** | **26**⇓ | *e*P | Pn | 06 40 35.9 | 0.0 |
| CNCH | | | | *e*S | Sn | 06 40 48.1 | +0.9 |
| **VSM** | **San Miguel** | **0.91** | **356** | *e*P | Pn | 06 40 37.4 | +0.4 |
| VSM | | | | *e*S | Sn | 06 40 49.9 | +0.7 |
| **CAHU** | **Cacacuatique** | **1.25** | **0** | *e*P | Pn | 06 40 42.1 | +0.6 |
| **SNVI** | **San Vicente** | **1.25** | **331** | *e*P | Pn | 06 40 41.4 | -0.1 |
| **LFRS** | **El Faro** | **1.38** | **323** | *e*P | Pn | 06 40 42.8 | -0.4 |
| **LBRS** | **Las Brisas** | **1.46** | **326** | *e*P | Pn | 06 40 44.1 | -0.2 |
| LBRS | | | | *e*S | Sn | 06 41 02.9 | +0.6 |
| **LFU** | **La Fuente** | **1.51** | **324** | *e*P | Pn | 06 40 45.0 | 0.0 |
| LFU | | | | *e*S | Sn | 06 41 04.0 | +0.6 |
| **SNET** | **Serv Nac Est T** | **1.53** | **320** | *e*P | Pn | 06 40 44.9 | -0.4 |
| SNET | | | | AML | AML | 06 41 11.3 | |
| | comp=Z,956nm,0.2s | | | | | | |
| **BOQS** | **Boqueron** | **1.59** | **319** | *e*P | Pn | 06 40 46.7 | +0.3 |
| BOQS | | | | *e*S | Sn | 06 41 07.5 | +1.5 |
| **COPN** | **Copaltepe** | **1.62** | **102** | *e*P | Pn | 06 40 45.4 | -1.1 |
| COPN | | | | *e*S | Sn | 06 41 06.0 | -0.1 |
| **SBLS** | **San Blas** | **1.90** | **314** | *e*P | Pn | 06 40 50.9 | +0.3 |
| **RTR** | **El Retiro** | **1.96** | **315** | *e*P | Pn | 06 40 51.0 | -0.3 |
| **MRL** | **Marmol** | **2.91** | **331** | *e*P | Pn | 06 41 05.2 | +0.7 |
| **JCR** | **Jicaral** | **4.04** | **131** | *e*P | Pn | 06 41 20.8 | +1.0 |
| **BUS** | **Buena Vista** | **5.27** | **123**⇑ | *e*P | Pn | 06 41 39.6 | +2.4 |
| BUS | | | | *e*S | Sn | 06 42 34.2 | -3.0 |

*AUST **11** 06:58:38.5±99.0, 16°.00S×171°.90W, h100km±6km, Error ellipse: s-maj=14.1km s-min=4.1km az=240.0*
*ISCJB **11** 07:00:05.2±0.8, 17°.5S±0°.3×178°.7W±0°.2, h547km, mb4.2/3, Error ellipse: s-maj=44.3km s-min=12.9km az=155.8*
*IDC **11** 07:00:05.8±2.2, 17°.42S×178°.74W, h540km±20km, mb3.6/3, mb1 3.9/5, mb1mx3.3/25, mbtmp4.6/5, Error ellipse: s-maj=196.4km s-min=19.4km az=159.0*
**ISC 11 07:00:06.0**±1.0**, 17°.6S**±0°.4×**178°.6W**±0°.2**, h547**km**, n16,**
σ**0s.84**/19**, mb4.2**/3**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.53** | **62** | P | **P** | **07 01 58.3** | **-0.9** |
| | 4.0nm,0.3s,baz=225,slow=1.4,SNR=6.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.75** | **250** | P | **P** | **07 03 12.8** | **-0.2** |
| | 1.0nm,0.3s,baz=360,slow=18,SNR=6.8 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.14** | **240** | P | **P** | **07 06 14.9** | **+0.8** |
| | baz=42,SNR=14 | | | | | | |
| **QLP** | **Quilpie** | **35.46** | **249** | P | **P** | **07 06 17.2** | **+0.3** |
| | baz=42,SNR=7.8 | | | | | | |
| **COEN** | **Coen** | **36.91** | **270** | P | **P** | **07 06 29.8** | **+0.8** |
| | baz=43,SNR=5.9 | | | | | | |
| **TOO** | **Toolangi** | **37.22** | **230** | P | **P** | **07 06 32.5** | **+1.2** |
| | baz=43,SNR=4.9 | | | | | | |
| **HTT** | **Hallett** | **41.14** | **239** | P | **P** | **07 07 01.1** | **-1.9** |
| | baz=47,SNR=8.1 | | | | | | |
| **BBOO** | **Buckleboo** | **43.39** | **241** | P | **P** | **07 07 21.0** | **+0.5** |
| | baz=50,SNR=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.50** | **259** | P | **P** | **07 07 28.7** | **-0.6** |
| | 3.9nm,0.5s,baz=93,slow=6.9,SNR=104 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 08 60.0** | **-0.9** |
| | 0.5nm,0.5s,baz=93,slow=3.5,SNR=3.2 | | | | | | |
| WRA | | | | ScP | **ScP** | **07 12 01.1** | **0.0** |
| | 0.3nm,0.7s,baz=97,slow=4.1,SNR=3.6 | | | | | | |
| **ASAR** | **Alice Springs** | **44.69** | **254** | P | **P** | **07 07 31.0** | **+0.2** |
| | 28nm,0.4s,baz=89,slow=8.1,SNR=452 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 09 01.3** | **-0.2** |
| | 0.6nm,0.5s,baz=95,slow=4.4,SNR=3.4 | | | | | | |
| **KDU** | **Kakadu** | **47.37** | **269** | P | **P** | **07 07 51.1** | **-0.1** |
| | baz=54,SNR=4.9 | | | | | | |
| **MTN** | **Manton Dam** | **48.61** | **268** | P | **P** | **07 08 00.3** | **-0.2** |
| | baz=55,SNR=3.1 | | | | | | |
| **WRKA** | **Warakurna** | **49.76** | **252** | P | **P** | **07 08 09.0** | **+0.2** |
| | baz=56,SNR=93 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.89** | **260** | P | **P** | **07 08 31.9** | **+0.4** |
| | baz=60,SNR=5.4 | | | | | | |
| **MEEK** | **Meekatharra** | **58.36** | **249** | P | **P** | **07 09 08.9** | **-0.6** |
| | baz=65,SNR=5.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.99** | **58** | P | **P** | **07 11 50.6** | **+1.5** |
| | 0.4nm,0.8s,baz=216,slow=5.5,SNR=6.4 | | | | | | |

**WEL 11 07:09:04.5**±0.5**, 38°.13S×176°.01E, h156**km±4km**, ML3.6**/8**,**
**5C-1D, Error ellipse: s-maj=3.4km s-min=3.3km az=0.0,**
**North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **0.88** | **99** | PN | Pn | 07 09 28.8 | -0.1 |
| URZ | | | | SN | Sn | 07 09 46.9 | -0.5 |
| **BKZ** | **Black Stump Fm** | **1.10** | **160** | ⇑PN | Pn | 07 09 30.6 | -0.2 |
| BKZ | | | | SN | Sn | 07 09 49.7 | -1.3 |
| **NMHZ** | **Naumai** | **1.15** | **147** | PN | Pn | 07 09 32.1 | +0.9 |
| NMHZ | | | | SN | Sn | 07 09 52.1 | +0.3 |
| **RAHZ** | **Arahi** | **1.16** | **133** | ⇑PN | Pn | 07 09 31.8 | +0.6 |
| RAHZ | | | | SN | Sn | 07 09 51.8 | +0.1 |
| **FWVZ** | **Far West T-bar** | **1.18** | **197** | PN | Pn | 07 09 31.8 | +0.2 |
| **MWZ** | **Matawai** | **1.22** | **100** | PN | Pn | 07 09 31.9 | +0.2 |
| MWZ | | | | SN | Sn | 07 09 51.9 | -0.7 |
| MWZ | | | | AML | AML | 07 09 53.2 | |
| MWZ | | | | AML | AML | 07 09 53.2 | |
| MWZ | | | | AML | AML | 07 09 55.3 | |
| **WNVZ** | **Wahianoa** | **1.24** | **195** | PN | Pn | 07 09 32.1 | 0.0 |
| **MOVZ** | **Moawhango** | **1.29** | **189** | PN | Pn | 07 09 32.1 | -0.4 |
| **KWHZ** | **Kaweka Forest** | **1.33** | **166** | PN | Pn | 07 09 32.8 | -0.1 |
| **BHHZ** | **Black Hill Sta** | **1.36** | **178** | PN | Pn | 07 09 32.7 | -0.5 |
| **ARHZ** | **Aropaoanui** | **1.37** | **146** | PN | Pn | 07 09 33.4 | +0.3 |
| **VRZ** | **Vera Road** | **1.39** | **224** | ⇑PN | Pn | 07 09 34.0 | +0.6 |
| **MCHZ** | **McNeill Hill** | **1.42** | **158** | PN | Pn | 07 09 34.1 | +0.4 |
| **HAZ** | **Te Kaha** | **1.45** | **76** | PN | Pn | 07 09 33.7 | -0.3 |
| **RIGZ** | **Rimuhau** | **1.49** | **113** | PN | Pn | 07 09 34.7 | +0.2 |
| **KRHZ** | **Kereru** | **1.54** | **169** | PN | Pn | 07 09 34.5 | -0.4 |
| **TWGZ** | **Tauwhareparae** | **1.56** | **92** | PN | Pn | 07 09 35.6 | +0.4 |
| **KNZ** | **Kokohu** | **1.58** | **125** | PN | Pn | 07 09 35.1 | -0.1 |
| KNZ | | | | AML | AML | 07 14 49.9 | |
| KNZ | | | | AML | AML | 07 17 38.9 | |
| **PUZ** | **Puketiti** | **1.78** | **89** | PN | Pn | 07 09 37.3 | -0.2 |
| **PNHZ** | **Pukenui** | **1.79** | **175** | PN | Pn | 07 09 36.6 | -1.0 |
| **KAHZ** | **Kahuranaki** | **1.79** | **158** | PN | Pn | 07 09 37.4 | -0.3 |
| **MHGZ** | **Mahia Peninsul** | **1.81** | **125** | PN | Pn | 07 09 37.7 | -0.1 |
| **WAZ** | **Wanganui** | **1.81** | **206** | ⇓PN | Pn | 07 09 37.5 | -0.3 |
| **TSZ** | **Takapari Road** | **1.93** | **181** | ⇑PN | Pn | 07 09 38.1 | -1.1 |
| **WPHZ** | **Waipukurau** | **1.96** | **170** | PN | Pn | 07 09 38.5 | -1.0 |
| **PXZ** | **Pawanui** | **2.01** | **161** | PN | Pn | 07 09 39.1 | -0.9 |
| PXZ | | | | AML | AML | 07 09 44.3 | |
| **DVHZ** | **Dannevirke** | **2.17** | **177** | PN | Pn | 07 09 40.1 | -1.8 |
| **POWZ** | **Post Office Ro** | **2.27** | **185** | PN | Pn | 07 09 41.4 | -1.7 |
| **ANWZ** | **Angora Road** | **2.35** | **171** | PN | Pn | 07 09 42.9 | -1.2 |
| **PRWZ** | **Pori Road** | **2.42** | **181** | PN | Pn | 07 09 43.4 | -1.5 |
| **MRZ** | **Mangatainoka R** | **2.55** | **187** | ⇑PN | Pn | 07 09 44.3 | -2.1 |
| MRZ | | | | AML | AML | 07 10 16.9 | |
| MRZ | | | | AML | AML | 07 10 18.4 | |
| **BFZ** | **Birch Farm** | **2.55** | **176** | PN | Pn | 07 09 44.5 | -2.0 |
| **TIWZ** | **Tintock** | **2.65** | **182** | PN | Pn | 07 09 45.6 | -2.1 |
| **OGWZ** | **Otaki Gorge** | **2.76** | **193** | PN | Pn | 07 09 46.9 | -2.2 |
| **HOWZ** | **Holdsworth Sta** | **2.79** | **188** | PN | Pn | 07 09 46.8 | -2.6 |
| **KIW** | **Kapiti Island** | **2.86** | **197** | PN | Pn | 07 09 47.6 | -2.6 |
| **MTW** | **Mount Morrison** | **3.05** | **187** | PN | Pn | 07 09 49.7 | -3.0 |
| **CAW** | **Cannon Point** | **3.06** | **193** | PN | Pn | 07 09 49.8 | -3.0 |
| CAW | | | | AML | AML | 07 09 53.6 | |
| **DUWZ** | **D'Urville Isla** | **3.12** | **211** | PN | Pn | 07 09 50.9 | -2.7 |
| **TRWZ** | **Traveller** | **3.27** | **184** | PN | Pn | 07 09 52.5 | -3.0 |
| **WEL** | **Wellington** | **3.29** | **196** | PN | Pn | 07 09 52.5 | -3.2 |
| **MSWZ** | **Moikau Station** | **3.33** | **190** | PN | Pn | 07 09 52.9 | -3.3 |
| MSWZ | | | | AML | AML | 07 10 31.5 | |
| MSWZ | | | | AML | AML | 07 10 32.1 | |
| **TCW** | **Tory Channel** | **3.35** | **203** | PN | Pn | 07 09 53.5 | -3.1 |
| **PLWZ** | **Palliser** | **3.48** | **189** | PN | Pn | 07 09 54.6 | -3.6 |
| **TUWZ** | **Tuamarina** | **3.66** | **205** | PN | Pn | 07 09 56.9 | -3.5 |
| **QRZ** | **Quartz Range** | **3.81** | **224** | PN | Pn | 07 09 58.6 | -3.7 |
| **BSWZ** | **Blackbirch Sta** | **3.94** | **204** | PN | Pn | 07 10 00.3 | -3.7 |

*TIR **11** 07:58:11.1±2.8, 41°.66N×19°.80E, h10km±21km, ML2.7*
*ISCJB **11** 07:58:11.4±0.6, 41°.61N±0°.03×19°.74E±0°.04, h0km±6km, Error ellipse: s-maj=5.9km s-min=3.6km az=39.5*
*PDG **11** 07:58:11.9±0.3, 41°.62N×19°.75E, h13km, ML2.4/10, Error ellipse: s-maj=0.8km s-min=0.7km az=90.0*
*CSEM **11** 07:58:11.9±0.3, 41°.63N×19°.72E, h2km, ML2.4, Error ellipse: s-maj=7.4km s-min=4.4km az=46.0*
*SKO **11** 07:58:12.2, 41°.48N×19°.51E, h3km, M2.0, ML2.3*
*BEO **11** 07:58:13.4±0.4, 41°.63N×19°.92E, h13km±4km, ML2.4/5*
**ISC 11 07:58:12.4**±1.1**, 41°.66N**±0°.03×**19°.75E**±0°.02**, h7**km±9km**,**
**n43,** σ**0s.99**/78**, 10C-10D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.32** | **165** | *i* PG | **Pg** | **07 58 18.6** | **0.0** |
| TIR | | | | *i* SG | **Sb** | **07 58 27.8** | **+1.9** |
| **TIR** | **Tirane** | **0.32** | **165** | *e*Pg | **Pg** | **07 58 18.6** | **0.0** |
| **TIR** | **Tirane** | **0.32** | **165** | *e*Pg | **Pg** | **07 58 18.6** | **0.0** |
| **PUK** | **Puka** | **0.40** | **15** | *i* PG | **Pg** | **07 58 19.8** | **-0.4** |
| PUK | | | | *i* SG | **Sb** | **07 58 27.6** | **-0.7** |
| **PUK** | **Puka** | **0.40** | **15** | *i* Pg | **Pg** | **07 58 19.8** | **-0.4** |
| | SNR=125 | | | | | | |
| PUK | | | | *i* Sg | **Sb** | **07 58 27.6** | **-0.7** |
| | SNR=125 | | | | | | |
| **ULC** | **Ulcinj** | **0.49** | **309**⇓ | *i*Pg | **Pg** | **07 58 21.0** | **-0.8** |
| ULC | | | | *e*Sg | **Sb** | **07 58 30.0** | **-0.7** |
| **ULC** | **Ulcinj** | **0.49** | **309**⇓ | *i*Pg | **Pg** | **07 58 21.0** | **-0.8** |
| ULC | | | | *e*Sg | **Sb** | **07 58 30.0** | **-0.7** |
| **PHP** | **Peshkopia** | **0.52** | **87** | *i* PG | **Pg** | **07 58 21.6** | **-0.7** |
| PHP | | | | *i* SG | **Sg** | **07 58 29.6** | **+0.5** |
| **PHP** | **Peshkopia** | **0.52** | **87** | *i* Pg | **Pg** | **07 58 21.6** | **-0.7** |
| | SNR=119 | | | | | | |
| PHP | | | | *i* Sg | **Sg** | **07 58 29.6** | **+0.5** |
| | SNR=119 | | | | | | |
| **DRME** | **Dracevica, Mon** | **0.68** | **321**⇑ | *i*Pg | **Pg** | **07 58 24.8** | **-0.6** |
| DRME | | | | *e*Sg | **Sb** | **07 58 36.1** | **-0.1** |
| **DRME** | **Dracevica, Mon** | **0.68** | **321**⇑ | *i*Pg | **Pg** | **07 58 24.8** | **-0.6** |
| DRME | | | | *e*Sg | **Sb** | **07 58 36.1** | **-0.1** |
| **BCI** | **Bajram Curri** | **0.75** | **18** | *i* PG | **Pg** | **07 58 27.0** | **+0.3** |
| BCI | | | | *i* SG | **Sb** | **07 58 38.2** | **0.0** |
| **BCI** | **Bajram Curri** | **0.75** | **18** | *i* Pg | **Pg** | **07 58 27.0** | **+0.3** |
| | SNR=108 | | | | | | |
| BCI | | | | *i* Sg | **Sb** | **07 58 38.2** | **0.0** |
| | SNR=108 | | | | | | |
| **PDG** | **Podgorica** | **0.86** | **335** | *e*Pg | **Pb** | **07 58 29.7** | **+0.1** |
| PDG | | | | *e*Sg | **Sn** | **07 58 43.6** | **-0.1** |
| **PDG** | **Podgorica** | **0.86** | **335**⇓ | *i*Pg | **Pg** | **07 58 29.2** | **+0.4** |
| PDG | | | | *e*Sg | **Sn** | **07 58 42.4** | **-1.3** |
| **TTG** | **Podgorica** | **0.86** | **335**⇓ | *i*Pg | **Pg** | **07 58 29.2** | **+0.4** |
| TTG | | | | *e*Sg | **Sn** | **07 58 42.4** | **-1.3** |
| **BUM** | **Brajici-Budva** | **0.91** | **315**⇑ | *i*Pg | **Pg** | **07 58 29.2** | **-0.6** |
| BUM | | | | *e*Sg | **Sn** | **07 58 44.4** | **-0.7** |
| **BUM** | **Brajici-Budva** | **0.91** | **315**⇑ | *i*Pg | **Pg** | **07 58 29.2** | **-0.6** |
| BUM | | | | *e*Sg | **Sn** | **07 58 44.4** | **-0.7** |
| **PVY** | **Plav** | **0.95** | **9**⇑ | *i*Pg | **Pg** | **07 58 30.3** | **-0.3** |
| PVY | | | | *e*Sg | **Sn** | **07 58 45.3** | **-0.9** |
| **PVY** | **Plav** | **0.95** | **9**⇑ | *i*Pg | **Pg** | **07 58 30.3** | **-0.3** |
| PVY | | | | *e*Sg | **Sn** | **07 58 45.3** | **-0.9** |
| **OHR** | **Ohrid** | **0.96** | **124** | *i* Pg | **Pg** | **07 58 31.0** | **+0.2** |
| OHR | | | | *i* Sg | **Sn** | **07 58 45.2** | **-1.1** |
| OHR | | | | *e*Lg | Lg | 07 58 47.5 | |
| | comp=N,91nm,0.4s | | | | | | |
| OHR | | | | *e*Lg | Lg | 07 58 48.3 | |
| | comp=E,43nm,0.5s | | | | | | |
| **OHR** | **Ohrid** | **0.96** | **124** | *i* Pg | **Pg** | **07 58 31.0** | **+0.2** |
| OHR | | | | *i* Sg | **Sn** | **07 58 45.2** | **-1.1** |
| OHR | | | | *e*Lg | Lg | 07 58 47.4 | |
| | comp=E,91nm,0.4s | | | | | | |
| **BEY** | **Berane** | **1.22** | **5**⇓ | *i*Pg | **Pn** | **07 58 35.1** | **-0.9** |
| BEY | | | | *e*Sg | **Sn** | **07 58 54.7** | **+1.9** |
| **IVA** | **Berane** | **1.22** | **5**⇓ | *i*Pg | **Pn** | **07 58 35.1** | **-0.9** |
| IVA | | | | *e*Sg | **Sn** | **07 58 54.7** | **+1.9** |
| **HCY** | **Herceg Novi** | **1.23** | **311**⇑ | *i*Pg | **Pn** | **07 58 35.0** | **-1.0** |
| HCY | | | | *e*Sg | **Sn** | **07 58 54.4** | **+1.6** |
| **HCY** | **Herceg Novi** | **1.23** | **311**⇑ | *i*Pg | **Pn** | **07 58 35.0** | **-1.0** |
| HCY | | | | *e*Sg | **Sn** | **07 58 54.4** | **+1.6** |
| **NKME** | **Niksic** | **1.26** | **332**⇓ | *i*Pg | **Pn** | **07 58 35.8** | **-0.7** |
| NKME | | | | *e*Sg | **Sn** | **07 58 55.6** | **+1.9** |
| **NKME** | **Niksic** | **1.26** | **332**⇓ | *i*Pg | **Pn** | **07 58 35.8** | **-0.7** |
| NKME | | | | *e*Sg | **Sn** | **07 58 55.6** | **+1.9** |
| **NKY** | **Niksic** | **1.28** | **334**⇑ | *i*Pg | **Pn** | **07 58 36.5** | **-0.4** |
| NKY | | | | *e*Sg | **Sn** | **07 58 57.1** | **+2.6** |
| **NKY** | **Niksic** | **1.28** | **334**⇑ | *i*Pg | **Pn** | **07 58 36.5** | **-0.4** |
| NKY | | | | *e*Sg | **Sn** | **07 58 57.1** | **+2.6** |
| **BRY** | **Bratogost** | **1.54** | **324**⇓ | *i*Pg | **Pn** | **07 58 40.1** | **-0.3** |
| BRY | | | | *e*Sg | **Sg** | **07 59 02.8** | **+1.1** |
| **BRY** | **Bratogost** | **1.54** | **324**⇓ | *i*Pg | **Pn** | **07 58 40.1** | **-0.3** |
| BRY | | | | *e*Sg | **Sg** | **07 59 02.8** | **+1.1** |
| **SJES** | **Sjenica** | **1.61** | **6** | *e*Pg | **Pn** | **07 58 41.8** | **+0.4** |
| SJES | | | | *e*Sg | **Sg** | **07 59 05.9** | **+1.7** |
| **SJES** | **Sjenica** | **1.61** | **6** | *e*Pg | **Pn** | **07 58 41.8** | **+0.4** |
| SJES | | | | *e*Sg | **Sg** | **07 59 05.9** | **+1.7** |
| **UPM** | **Unac-Piva** | **1.67** | **338** | *e*Pn | **Pn** | **07 58 42.0** | **-0.2** |
| UPM | | | | *e*Sn | **Sg** | **07 59 06.3** | **+0.3** |
| **UPM** | **Unac-Piva** | **1.67** | **338** | *e*Pn | **Pn** | **07 58 42.0** | **-0.2** |
| UPM | | | | *e*Sn | **Sg** | **07 59 06.3** | **+0.3** |
| **BARS** | **Barje** | **1.92** | **52** | *e*Pg | **Pb** | **07 58 47.1** | **-0.7** |
| BARS | | | | *e*Sg | **Sb** | **07 59 11.5** | **-0.4** |
| **IVAS** | **Ivanjica** | **1.94** | **9** | *e*Pn | **Pn** | **07 58 45.0** | **-0.9** |
| **IVAS** | **Ivanjica** | **1.94** | **9** | *e*Pn | **Pn** | **07 58 45.0** | **-0.9** |
| **BBLS** | **Lazići** | **2.22** | **354** | *e*Pn | **Pb** | **07 58 52.0** | **-0.9** |
| **BBLS** | **Lazići** | **2.22** | **354** | *e*Pn | **Pb** | **07 58 52.0** | **-0.9** |
| **DIVS** | **Divibare** | **2.45** | **4** | *e*Pn | **Pn** | **07 58 53.9** | **+1.1** |
| **DIVS** | **Divibare** | **2.45** | **4** | *e*Pn | **Pn** | **07 58 53.9** | **+1.1** |

*AUST **11** 08:21:12.0, 9°.39S×109°.36E, h5km*
*ISCJB **11** 08:21:14.4±0.4, 9°.47S±0°.04×109°.53E±0°.04, h33km, mb3.9/12, MS3.3/5, Error ellipse: s-maj=6.1km s-min=6.1km az=142.7*
*DJA **11** 08:21:14.0±0.4, 9°S±4°×11°0E±°, h10km, M4.5/16, mb4.7/2, mB4.9/1, MLv4.3/16, Mw(mB)4.2/1*
*IDC **11** 08:21:20.9±2.2, 9°.14S×109°.84E, h77km±21km, mb3.7/12, mb1 3.8/14, mb1mx3.7/35, mbtmp4.0/14, MS3.3/7, Ms1 3.3/7, ms1mx2.9/44, Error ellipse: s-maj=24.1km s-min=13.0km az=58.0*
**ISC 11 08:21:16.1**±0.6**, 9°.46S**±0°.06×**109°.54E**±0°.05**, h35**km**, n41,**
σ**1s.84**/38**, mb4.0**/12**, MS3.2**/5**, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **1.82** | **32** | P | **Pn** | **08 21 42.3** | **-2.7** |
| | baz=1.9,SNR=53 | | | | | | |
| **UGM** | **Wanagama** | **1.82** | **32** | P | **Pn** | **08 21 42.1** | **-2.9** |
| UGM | | | | S | **Sn** | **08 22 06.6** | **-0.2** |
| **CMJI** | **Cimerak** | **1.99** | **327** | P | **Pn** | **08 21 45.9** | **-1.4** |
| CMJI | | | | S | **Sn** | **08 22 12.3** | **+1.3** |
| **PCJI** | **Pacitan** | **2.05** | **52** | P | **Pn** | **08 21 46.5** | **-1.6** |
| **WOJI** | **Wonogiri, Jawa** | **2.11** | **40** | P | **Pn** | **08 21 48.6** | **-0.4** |
| **CISI** | **Cisompet, Garu** | **2.55** | **318** | P | **Pn** | **08 21 54.5** | **-0.6** |
| | baz=2.4,SNR=20 | | | | | | |
| **CISI** | **Cisompet, Garu** | **2.55** | **318** | P | **Pn** | **08 21 54.3** | **-0.8** |
| **SMRI** | **Semarang** | **2.56** | **20** | P | **Pn** | **08 21 55.5** | **+0.3** |
| | baz=2.6,SNR=18 | | | | | | |
| **SMRI** | **Semarang** | **2.56** | **20** | P | **Pn** | **08 21 55.4** | **+0.3** |
| **PWJI** | **Pagerwojo** | **2.65** | **58** | P | **Pn** | **08 21 56.5** | **+0.1** |
| **NGJI** | **Ngawi** | **2.82** | **42** | P | **Pn** | **08 22 01.6** | **+3.0** |
| **LEM** | **Lembang** | **3.24** | **324** | P | **Pn** | **08 22 07.0** | **+2.3** |
| | 38nm,0.3s,baz=127,slow=18,SNR=17 | | | | | | |
| LEM | | | | S | **Sn** | **08 22 47.2** | **+5.1** |
| | 6.0nm,0.3s,baz=334,slow=23,SNR=6.2 | | | | | | |
| LEM | | | | LR | LR | 08 23 34.6 | |
| | comp=Z,476nm,18.9s,baz=284,slow=42 | | | | | | |
| **LEM** | **Lembang** | **3.24** | **324** | P | Pn | 08 22 10.2 | +5.5 |
| | baz=3.1,SNR=4.7 | | | | | | |
| **LEM** | **Lembang** | **3.24** | **324** | P | **Pn** | **08 22 07.0** | **+2.3** |
| **TBJI** | **Tambak Boyo** | **3.48** | **41** | P | **Pn** | **08 22 08.7** | **+0.9** |
| **XMI** | **Christmas Isla** | **3.92** | **255** | P | **Pn** | **08 22 13.3** | **-0.6** |
| | baz=3.8,SNR=4.6 | | | | | | |
| **XMIS** | **Christmas Isla** | **3.96** | **255** | P | **Pn** | **08 22 13.5** | **-1.0** |
| | baz=3.8,SNR=8.7 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **4.66** | **78** | P | **Pn** | **08 22 24.2** | **+0.2** |
| | baz=4.8,SNR=11 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **4.66** | **78** | P | **Pn** | **08 22 24.2** | **+0.2** |
| **TWSI** | **Taliwang, Sumb** | **7.28** | **85** | P | **Pn** | **08 23 00.9** | **+0.8** |
| **GIRL** | **Giralia** | **13.86** | **162** | P | **Pn** | **08 24 27.9** | **-2.1** |
| | baz=14,SNR=5.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.82** | **121** | P | **Pn** | **08 25 21.4** | **-0.1** |
| | 0.1nm,0.3s,baz=304,slow=11,SNR=3.0 | | | | | | |
| FITZ | | | | S | Sn | 08 28 27.2 | -12 |
| | 0.1nm,0.3s,baz=358,slow=2.5,SNR=2.8 | | | | | | |
| FITZ | | | | LR | LR | 08 31 59.1 | |
| | comp=Z,66nm,19.4s,baz=294,slow=36 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **17.82** | **121** | P | **P** | **08 25 24.1** | **+2.2** |
| | baz=18,SNR=3.1 | | | | | | |
| **MEEK** | **Meekatharra** | **19.12** | **154** | P | **Pn** | **08 25 38.7** | **+1.5** |
| | baz=19,SNR=8.8 | | | | | | |
| **WRKA** | **Warakurna** | **23.63** | **133** | P | **P** | **08 26 26.1** | **+1.9** |
| | baz=24,SNR=3.4 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **26.11** | **116** | P | **P** | **08 26 47.5** | **+0.6** |
| | 1.2nm,0.5s,baz=288,slow=12,SNR=10 | | | | | | |
| WRA | | | | pP | pP | 08 27 09.2 | +12 |
| | 3.1nm,0.7s,baz=288,slow=11,SNR=9.0 | | | | | | |
| WRA | | | | LR | LR | 08 38 53.1 | |
| | comp=Z,47nm,19.0s,baz=270,slow=40 | | | | | | |
| **ASAR** | **Alice Springs** | **27.22** | **124** | P | **P** | **08 26 57.6** | **+0.6** |
| | 0.8nm,0.6s,baz=300,slow=9.4,SNR=9.2 | | | | | | |
| ASAR | | | | pP | pP | 08 27 19.8 | +13 |
| | 1.0nm,0.7s,baz=301,slow=9.5,SNR=6.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.65** | **339** | P | **P** | **08 27 17.1** | **-1.4** |
| | 1.0nm,0.3s,baz=166,slow=7.9,SNR=3.0 | | | | | | |
| CMAR | | | | LR | LR | 08 39 51.9 | |
| | comp=Z,59nm,19.1s,baz=160,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** | **36.67** | **270** | T | T | 09 07 08.1 | |
| | baz=95,slow=74,SNR=8.1 | | | | | | |
| **H08S3** | **Diego Garcia H** | **36.68** | **270** | T | T | 09 07 08.7 | |
| | baz=95,slow=74,SNR=8.0 | | | | | | |
| **H08S1** | **Diego Carcia H** | **36.69** | **270** | T | T | 09 07 09.2 | |
| | baz=95,slow=74,SNR=5.3 | | | | | | |
| **JNU** | **Nakatsue** | **46.97** | **25** | LR | LR | 08 52 09.1 | |
| | comp=Z,27nm,18.1s,baz=216,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **49.75** | **19** | P | **P** | **08 30 03.1** | **-2.0** |
| | 0.5nm,0.3s,baz=196,slow=7.9,SNR=5.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.11** | **29** | P | P | 08 30 26.6 | -3.8 |
| | 0.9nm,0.5s,baz=217,slow=8.5,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **57.11** | **357** | P | **P** | **08 30 57.6** | **-1.5** |
| | 0.6nm,0.5s,baz=159,slow=8.9,SNR=3.1 | | | | | | |
| SONM | | | | LR | LR | 08 57 48.3 | |
| | comp=Z,34nm,18.5s,baz=126,slow=38 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **57.16** | **19** | P | **P** | **08 30 57.0** | **-2.3** |
| | 2.3nm,0.8s,baz=247,slow=3.9,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.06** | **339** | P | **P** | **08 31 24.8** | **-1.6** |
| | 1.6nm,0.5s,baz=151,slow=7.5,SNR=17 | | | | | | |
| MKAR | | | | LR | LR | 09 00 17.2 | |
| | comp=Z,24nm,19.5s,baz=223,slow=38 | | | | | | |
| **MAW** | **Mawson** | **65.78** | **198** | P | **P** | **08 31 59.7** | **+2.5** |
| | 0.8nm,0.6s,baz=71,slow=6.1,SNR=6.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **66.55** | **344** | P | **P** | **08 32 00.3** | **-2.0** |
| | 1.2nm,0.6s,baz=155,slow=4.8,SNR=3.5 | | | | | | |
| **VNDA** | **Vanda** | **73.10** | **170** | P | **P** | **08 32 44.2** | **+1.8** |
| | 0.6nm,0.7s,baz=318,slow=6.4,SNR=5.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **85.34** | **311** | P | **P** | **08 33 51.3** | **+1.2** |
| | 0.8nm,0.6s,baz=120,slow=4.3,SNR=3.7 | | | | | | |

**WEL 11 08:33:50.6**±0.6**, 35°.78S**×**178°.14E, h208**km±13km**, ML3.4**/4**, Error ellipse: s-maj=9.1km s-min=9.0km az=0.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **2.00** | **188** | PN | Pn | 08 34 29.3 | -0.2 |
| HAZ | | | | SN | S | 08 34 59.1 | -0.7 |
| **WMGZ** | **Waiomatatini S** | **2.05** | **174** | PN | Pn | 08 34 30.5 | +0.3 |
| **MWZ** | **Matawai** | **2.60** | **191** | PN | Pn | 08 34 36.5 | +0.4 |
| **URZ** | **Urewera** | **2.61** | **198** | PN | Pn | 08 34 36.4 | +0.3 |
| URZ | | | | SN | S | 08 35 12.5 | +1.0 |
| **TKGZ** | **Te Karaka** | **2.67** | **185** | PN | Pn | 08 34 36.7 | 0.0 |
| TKGZ | | | | SN | S | 08 35 12.1 | -0.6 |
| **CNGZ** | **Carnagh Statio** | **2.71** | **179** | PN | Pn | 08 34 37.4 | +0.3 |
| **BKZ** | **Black Stump Fm** | **3.63** | **201** | PN | Pn | 08 34 48.6 | +0.5 |
| **PNHZ** | **Pukenui** | **4.41** | **200** | PN | Pn | 08 34 56.3 | -1.4 |
| **MRZ** | **Mangatainoka R** | **5.28** | **202** | PN | Pn | 08 35 06.9 | -1.8 |

*SJA **11** 08:35:24.6±1.3, 33°.74S×72°.26W, h7km±25km, MD4.0*

*IDC **11** 08:35:25.3±0.5, 33°.79S×71°.86W, h0km, mb4.4/13, mb1 4.5/16, mb1mx4.4/31, mbtmp4.4/16, ML4.0/3, MS3.7/12, Ms1 3.7/12, ms1mx3.6/21, Error ellipse: s-maj=19.5km s-min=14.2km az=110.0*

*ISCJB **11** 08:35:29.7±0.1, 33°.79S±0°.03×71°.94W±0°.03, h33km, mb4.8/62, MS3.7/8, Error ellipse: s-maj=3.7km s-min=3.2km az=5.7*

*GUC **11** 08:35:30.6±0.4, 33°.86S×71°.72W, h65km±17km, ML4.4*

*NEIC **11** 08:35:32.3±0.7, 33°.79S×71°.68W, h45km±6km, mb4.9/60, Error ellipse: s-maj=7.5km s-min=4.0km az=81.0*

*NEIC Felt [IV] at San Antonio; [III] at La Estella, Linares, Navidad, Parral, Rancagua and Valparaiso; [II] at Paredones, Pichilemu, San Fernando and Talca. Also felt at Santa Cruz, Santiago and Vina del Mar.*

*BJI **11** 08:35:32.3, 33°.80S×71°.70W, h38km, Ms4.9/1, Ms7 4.7/1*

**ISC 11 08:35:30.5**±1.1**, 33°.84S**±0°.03×**71°.81W**±0°.06**, h32**km±7km**, n463,** σ**0s.80**/475**, mb4.8**/66**, MS3.7**/8**, 1C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANTU** | **Antumapu** | **1.01** | **75** | *i* P | **Pb** | **08 35 49.2** | **-0.3** |
| ANTU | | | | *i* S | **Sb** | **08 36 03.3** | **+0.7** |
| **SAN** | **Santiago** | **1.03** | **68** | *i* P | **Pn** | **08 35 49.3** | **+0.6** |
| SAN | | | | *i* S | **Sb** | **08 36 03.7** | **+0.7** |
| **ROC1** | **El Roble** | **1.08** | **38** | *e*P | **Pn** | **08 35 49.4** | **-0.3** |
| ROC1 | | | | *e*S | **Sb** | **08 36 07.8** | **+3.0** |
| **LACH** | **Col Las Americ** | **1.13** | **70** | *i* P | **Pn** | **08 35 50.5** | **+0.4** |
| LACH | | | | *i* S | **Sb** | **08 36 06.4** | **+0.5** |
| LACH | | | | AML | AML | 08 36 09.9 | |
| | comp=N,6μm,0.4s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.15** | **68** | *i* P | **Pb** | **08 35 51.2** | **-0.6** |
| CLCH | | | | *i* S | **Sb** | **08 36 06.8** | **+0.4** |
| CLCH | | | | AML | AML | 08 36 14.8 | |
| | comp=N,14μm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **1.17** | **54** | *i* P | **Pb** | **08 35 51.6** | **-0.5** |
| PEL | | | | *i* S | **Sb** | **08 36 07.6** | **+0.7** |
| PEL | | | | AML | AML | 08 36 14.8 | |
| | comp=N,29μm,0.4s | | | | | | |
| **NICH** | **Los Niches** | **1.25** | **158** | *i* P | **Pn** | **08 35 52.0** | **+0.2** |
| NICH | | | | *i* S | **Sb** | **08 36 11.0** | **+1.6** |
| **TALC** | **Talca** | **1.56** | **175** | *i* P | **Pn** | **08 35 57.1** | **+1.1** |
| TALC | | | | *i* S | **Sb** | **08 36 17.1** | **-1.1** |
| **AUSP** | **Uspallata** | **2.59** | **52** | *e*P | **Pb** | **08 36 14.7** | **-1.8** |
| **RTLS** | **Leoncito** | **2.93** | **47** | *e*P | Pn | 08 36 18.9 | +3.7 |
| **RTCV** | **Cerro Valdivia** | **3.38** | **55** | *e*P | Pn | 08 36 24.6 | +3.5 |
| **CFAA** | **Coronel Fontan** | **3.74** | **54** | Pn | **Pn** | **08 36 26.5** | **+0.4** |
| | comp=N,1.7nm,0.3s,baz=216,slow=8.9,SNR=56 | | | | | | |
| CFAA | | | | Lg | Lg | 08 37 23.0 | |
| | comp=N,8.4nm,0.3s,baz=325,slow=18,SNR=8.1 | | | | | | |
| CFAA | | | | LR | LR | 08 38 07.0 | |
| | comp=N,148nm,18.5s,baz=224,slow=43 | | | | | | |
| **CFAA** | **Coronel Fontan** | **3.74** | **54** | *e*P | **Pn** | **08 36 28.7** | **+2.7** |
| **RTLL** | **Cerro Villicun** | **3.76** | **49** | *e*P | Pn | 08 36 29.7 | +3.3 |
| **AMOG** | **MOGNA** | **4.03** | **45** | *e*P | **Pn** | **08 36 33.0** | **+3.0** |
| **CANA** | **Caviahue** | **4.08** | **172** | *e*P | **Pn** | **08 36 33.4** | **+2.5** |
| **ACAN** | **Cantantal** | **4.18** | **69** | *e*P | Pn | 08 36 35.3 | +3.2 |
| **LCO** | **Las Campanas** | **4.90** | **11** | *e*Pn | **Pn** | **08 36 41.5** | **-0.8** |
| LCO | | | | *e*Sn | **Sn** | **08 37 36.7** | **-1.4** |
| **LCO** | **Las Campanas** | **4.90** | **11** | *e*P | **Pn** | **08 36 41.9** | **-0.4** |
| **AGUA** | **GUANDACOL** | **5.18** | **34** | *e*P | **Pn** | **08 36 48.5** | **+2.6** |
| **PLCA** | **Paso Flores** | **6.95** | **172** | *e*Pn | **Pn** | **08 37 11.7** | **+1.5** |
| PLCA | | | | *e*Sn | **Sn** | **08 38 24.8** | **-3.4** |
| **TRQA** | **Tornquist** | **9.01** | **121** | *e*Pn | **Pn** | **08 37 40.8** | **+2.4** |
| TRQA | | | | *e*Sn | **Sn** | **08 39 18.3** | **-0.4** |
| **LVC** | **Limon Verde** | **11.47** | **14** | Pn | **Pn** | **08 38 14.0** | **+1.6** |
| | comp=N,22nm,0.3s,baz=236,slow=7.5,SNR=4.3 | | | | | | |
| LVC | | | | Sn | Sn | 08 40 32.6 | +13 |
| | comp=N,17nm,0.3s,baz=212,slow=15,SNR=2.0 | | | | | | |
| LVC | | | | LR | LR | 08 43 21.2 | |
| | comp=N,1μm,21.9s,baz=206,slow=42 | | | | | | |
| **LVC** | **Limon Verde** | **11.47** | **14** | *e*Pn | Pn | 08 38 08.7 | -3.7 |
| LVC | | | | *e*Sn | **Sn** | **08 40 22.9** | **+3.4** |
| **CPUP** | **Villa Florida** | **14.59** | **63** | Pn | **Pn** | **08 38 54.4** | **-0.2** |
| | comp=N,0.4nm,0.3s,baz=236,slow=13,SNR=8.0 | | | | | | |
| CPUP | | | | LR | LR | 08 45 12.4 | |
| | comp=N,429nm,18.6s,baz=233,slow=40 | | | | | | |
| **CPUP** | **Villa Florida** | **14.59** | **63** | *e*Pn | **Pn** | **08 38 54.4** | **-0.2** |
| CPUP | | | | *e*Sn | **Sn** | **08 41 33.8** | **-1.4** |
| **LPAZ** | **La Paz** | **17.79** | **12** | P | **Pn** | **08 39 36.2** | **-0.1** |
| | comp=N,0.4nm,0.3s,baz=187,slow=7.5,SNR=30 | | | | | | |
| LPAZ | | | | LR | LR | 08 46 41.6 | |
| | comp=N,194nm,21.0s,baz=172,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **17.79** | **12** | *e*Pn | **Pn** | **08 39 36.4** | **+0.1** |
| | comp=N,17nm,0.8s | | | | | | |
| **SIV** | **San Ignacio** | **20.24** | **31** | P | **P** | **08 40 02.5** | **-0.6** |
| | comp=N,4.1nm,0.7s,baz=223,slow=10,SNR=18 | | | | | | |
| SIV | | | | LR | LR | 08 49 16.3 | |
| | comp=N,285nm,19.1s,baz=164,slow=41 | | | | | | |
| **EFI** | **East Falkland** | **20.42** | **155** | *e*P | **P** | **08 40 04.5** | **-0.3** |
| | comp=N,268nm,1.6s | | | | | | |
| **USHA** | **Ushuaia** | **21.12** | **175** | P | **P** | **08 40 12.8** | **+0.5** |
| | comp=N,10.0nm,0.8s,baz=333,slow=9.0,SNR=4.6 | | | | | | |
| USHA | | | | LR | LR | 08 48 25.6 | |
| | comp=N,478nm,18.0s,baz=330,slow=37 | | | | | | |
| **NNA** | **Nana** | **22.23** | **347** | LR | LR | 08 46 53.4 | |
| | comp=N,153nm,21.5s,baz=170,slow=31 | | | | | | |
| **SAML** | **Samuel** | **26.01** | **20** | *e*P | **P** | **08 41 00.3** | **-0.4** |
| | comp=N,17nm,0.8s | | | | | | |
| **ATAH** | **Atahualpa** | **27.26** | **346** | LR | LR | 08 49 37.2 | |
| | comp=N,117nm,20.3s,baz=192,slow=31 | | | | | | |
| **BDFB** | **Brasilia** | **28.08** | **56** | P | **P** | **08 41 18.2** | **-1.2** |
| | comp=N,2.9nm,0.6s,baz=227,slow=9.8,SNR=5.9 | | | | | | |
| **BDFB** | **Brasilia** | **28.08** | **56** | *e*P | **P** | **08 41 18.2** | **-1.2** |
| | comp=N,215nm,2.8s | | | | | | |
| **PTGA** | **Pitinga** | **34.76** | **21** | *e*P | **P** | **08 42 17.4** | **-0.6** |
| | comp=N,10nm,0.8s | | | | | | |
| **ROSC** | **El Rosal** | **38.56** | **356** | LR | LR | 08 59 04.5 | |
| | comp=N,90nm,19.6s,baz=238,slow=37 | | | | | | |
| **SNAA** | **Sanae** | **51.66** | **158** | P | **P** | **08 44 34.4** | **+0.5** |
| **SNAA** | **Sanae** | **51.66** | **158** | P | **P** | **08 44 34.6** | **+0.7** |
| | comp=N,4.6nm,0.8s,baz=295,slow=5.7,SNR=30 | | | | | | |
| **SNAA** | **Sanae** | **51.66** | **158** | *e*P | **P** | **08 44 34.4** | **+0.5** |
| | comp=N,8.0nm,1.0s | | | | | | |
| **CELP** | **Cerrillos** | **51.86** | **6** | *e*P | **P** | **08 44 35.7** | **-0.1** |
| **QSPA** | **South Pole Qui** | **56.40** | **180** | *e*P | **P** | **08 45 09.5** | **+0.9** |
| | comp=N,12nm,0.9s | | | | | | |
| **VNDA** | **Vanda** | **64.30** | **191** | P | **P** | **08 46 02.1** | **-0.1** |
| | comp=N,0.7nm,0.7s,baz=122,slow=5.2,SNR=5.2 | | | | | | |
| **035A** | **Encino** | **65.39** | **334** | P | **P** | **08 46 11.3** | **+1.4** |
| | baz=66 | | | | | | |
| **034A** | **Hebbronville** | **65.72** | **334** | P | **P** | **08 46 13.8** | **+1.8** |
| | baz=66 | | | | | | |
| **SYO** | **Syowa Base** | **65.94** | **158**⇑ | *e*P | **P** | **08 46 11.8** | **-1.2** |
| **SYO** | **Syowa Base** | **65.94** | **158**⇓ | *e*pP | pP | 08 46 20.0 | -2.8 |
| **934A** | **Benavides** | **66.15** | **334** | P | **P** | **08 46 16.7** | **+1.9** |
| | baz=66 | | | | | | |
| **738A** | **Farr-Stevens R** | **66.30** | **337** | P | **P** | **08 46 18.1** | **+2.4** |
| | baz=67 | | | | | | |
| **933A** | **Laredo** | **66.44** | **333** | P | **P** | **08 46 18.0** | **+1.4** |
| | baz=67 | | | | | | |
| **834A** | **Tilden** | **66.64** | **334** | P | **P** | **08 46 19.2** | **+1.3** |
| | baz=67,SNR=5.1 | | | | | | |
| **735A** | **Kenedy** | **67.04** | **335** | P | **P** | **08 46 21.8** | **+1.4** |
| | baz=67 | | | | | | |
| **540A** | **Vidor** | **67.06** | **339** | P | **P** | **08 46 22.1** | **+1.6** |
| | baz=67 | | | | | | |
| **833A** | **Chaparral WMA,** | **67.12** | **334** | P | **P** | **08 46 21.6** | **+0.6** |
| | baz=67,SNR=9.2 | | | | | | |
| **734A** | **La Parita Cree** | **67.30** | **335** | P | **P** | **08 46 22.7** | **+0.6** |
| | baz=68 | | | | | | |
| **832A** | **Faith Ranch, C** | **67.30** | **333** | P | **P** | **08 46 22.6** | **+0.4** |
| | baz=68,SNR=6.6 | | | | | | |
| **636A** | **Smothers Creek** | **67.36** | **336** | P | **P** | **08 46 23.8** | **+1.4** |
| | baz=68 | | | | | | |
| **733A** | **Divot King Ran** | **67.44** | **334** | P | **P** | **08 46 23.7** | **+0.7** |
| | baz=68 | | | | | | |
| **732A** | **Laxson Ranch,** | **67.70** | **333** | P | **P** | **08 46 25.1** | **+0.4** |
| | baz=68,SNR=12 | | | | | | |
| **439A** | **Center Grove,** | **67.84** | **339** | P | **P** | **08 46 26.4** | **+1.0** |
| | baz=68 | | | | | | |
| **536A** | **Bastrop** | **67.91** | **336** | P | **P** | **08 46 26.9** | **+1.0** |
| | baz=68 | | | | | | |
| **VBMS** | **Vicksburg** | **68.03** | **343** | P | **P** | **08 46 27.1** | **+0.5** |
| | baz=68 | | | | | | |
| **535A** | **Dale** | **68.03** | **336** | P | **P** | **08 46 27.3** | **+0.6** |
| | baz=68 | | | | | | |
| **633A** | **Saathoff Ranch** | **68.07** | **334** | P | **P** | **08 46 27.6** | **+0.6** |
| | baz=68 | | | | | | |
| **340A** | **Bronson** | **68.17** | **340** | P | **P** | **08 46 28.2** | **+0.7** |
| | baz=68 | | | | | | |
| **339A** | **Huntington** | **68.28** | **339** | P | **P** | **08 46 29.3** | **+1.1** |
| | baz=69 | | | | | | |
| **632A** | **Uvalde** | **68.34** | **334** | P | **P** | **08 46 29.1** | **+0.4** |
| | baz=69,SNR=8.3 | | | | | | |
| **338A** | **Crockett** | **68.53** | **338** | P | **P** | **08 46 30.7** | **+1.0** |
| | baz=69 | | | | | | |
| **631A** | **Perdido Creek** | **68.55** | **333** | P | **P** | **08 46 30.7** | **+0.8** |
| | baz=69 | | | | | | |
| **533A** | **Kerrville** | **68.58** | **335** | P | **P** | **08 46 30.7** | **+0.6** |
| | baz=69,SNR=5.5 | | | | | | |
| **337A** | **Centerville** | **68.67** | **338** | P | **P** | **08 46 32.0** | **+1.3** |
| | baz=69 | | | | | | |
| **532A** | **Rocksprings** | **68.94** | **334** | P | **P** | **08 46 33.4** | **+0.9** |
| | baz=69,SNR=11 | | | | | | |
| **434A** | **Burnet** | **68.99** | **336** | P | **P** | **08 46 32.9** | **+0.2** |
| | baz=69,SNR=6.1 | | | | | | |
| **336A** | **Riesel** | **69.04** | **337** | P | **P** | **08 46 33.4** | **+0.4** |
| | baz=69 | | | | | | |
| **KMSC** | **Kings Mountain** | **69.20** | **352** | P | **P** | **08 46 33.9** | **0.0** |
| | baz=70 | | | | | | |
| **531A** | **Rocksprings** | **69.21** | **334** | P | **P** | **08 46 34.5** | **+0.4** |
| | baz=70,SNR=5.8 | | | | | | |
| **433A** | **Art** | **69.22** | **335** | P | **P** | **08 46 34.5** | **+0.3** |
| | baz=70,SNR=11 | | | | | | |
| **JCT** | **Junction City** | **69.22** | **334** | P | **P** | **08 46 34.4** | **+0.2** |
| | baz=70,SNR=7.3 | | | | | | |
| **JCT** | **Junction City** | **69.22** | **334** | *e*P | **P** | **08 46 34.8** | **+0.6** |
| | comp=N,18nm,1.1s | | | | | | |
| **334A** | **Lometa** | **69.45** | **336** | P | **P** | **08 46 35.9** | **+0.4** |
| | baz=70 | | | | | | |
| **530A** | **J-C Ranch, Com** | **69.50** | **333** | P | **P** | **08 46 36.8** | **+0.9** |
| | baz=70,SNR=11 | | | | | | |
| **432A** | **Menard** | **69.58** | **334** | P | **P** | **08 46 36.2** | **-0.2** |
| | baz=70,SNR=5.0 | | | | | | |
| **138A** | **Matatall Enter** | **69.68** | **339** | P | **P** | **08 46 37.5** | **+0.6** |
| | baz=70 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.69** | **331** | P | **P** | **08 46 37.4** | **+0.2** |
| | comp=N,1.4nm,0.6s,baz=157,slow=7.7,SNR=24 | | | | | | |
| TXAR | | | | LR | LR | 09 12 00.4 | |
| | comp=N,67nm,20.6s,baz=0.0,slow=32 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **69.69** | **331** | *e*P | **P** | **08 46 36.5** | **-0.6** |
| **431A** | **Sonora** | **69.70** | **334** | P | **P** | **08 46 37.5** | **+0.4** |
| | baz=70 | | | | | | |
| **333A** | **Richland Sprin** | **69.70** | **335** | P | **P** | **08 46 37.3** | **+0.2** |
| | baz=70,SNR=7.3 | | | | | | |
| **WHTX** | **Lake Whitney** | **69.80** | **337** | P | **P** | **08 46 37.9** | **+0.3** |
| | baz=70 | | | | | | |
| **529A** | **Stev Forest Ra** | **69.81** | **332** | P | **P** | **08 46 38.3** | **+0.5** |
| | baz=70,SNR=12 | | | | | | |
| **CPCT** | **Cooper Cave** | **69.95** | **349** | *e*P | **P** | **08 46 38.3** | **-0.2** |
| **SWET** | **Sewanee** | **69.96** | **348** | *e*P | **P** | **08 46 38.5** | **-0.1** |
| | comp=N,11nm,0.7s | | | | | | |
| **OXF** | **Oxford** | **69.97** | **345** | *e*P | **P** | **08 46 37.9** | **-0.7** |
| | comp=N,15nm,0.6s | | | | | | |
| **332A** | **Millersview** | **70.02** | **335** | P | **P** | **08 46 39.3** | **+0.2** |
| | baz=70,SNR=6.0 | | | | | | |
| **430A** | **Baggett Ranch,** | **70.03** | **333** | P | **P** | **08 46 39.2** | **0.0** |
| | baz=70,SNR=7.8 | | | | | | |
| **234A** | **Clairette** | **70.03** | **336** | P | **P** | **08 46 39.8** | **+0.6** |
| | baz=70,SNR=6.8 | | | | | | |
| **TKL** | **Tuckaleechee C** | **70.04** | **350** | *e*P | **P** | **08 46 38.5** | **-0.5** |
| **429A** | **Davenport Ranc** | **70.13** | **333** | P | **P** | **08 46 40.2** | **+0.4** |
| | baz=70,SNR=5.2 | | | | | | |
| **331A** | **San Angelo** | **70.20** | **334** | P | **P** | **08 46 40.2** | **+0.1** |
| | baz=70,SNR=7.7 | | | | | | |
| **233A** | **Rising Star** | **70.31** | **336** | P | **P** | **08 46 40.9** | **+0.1** |
| | baz=71 | | | | | | |
| **232A** | **Coleman** | **70.45** | **335** | P | **P** | **08 46 41.8** | **+0.1** |
| | baz=71 | | | | | | |
| **134A** | **White-Moore Ra** | **70.54** | **337** | P | **P** | **08 46 43.1** | **+0.9** |
| | baz=71 | | | | | | |
| **330A** | **Mertzon** | **70.56** | **334** | P | **P** | **08 46 42.2** | **-0.2** |
| | baz=71,SNR=5.2 | | | | | | |
| **Z36A** | **Blue Ridge** | **70.66** | **338** | P | **P** | **08 46 43.3** | **+0.5** |
| | baz=71 | | | | | | |
| **231A** | **Bronte** | **70.73** | **335** | P | **P** | **08 46 43.2** | **-0.2** |
| | baz=71,SNR=7.2 | | | | | | |
| **133A** | **Hamilton Ranch** | **70.85** | **336** | P | **P** | **08 46 44.6** | **+0.5** |
| | baz=71 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **70.94** | **333** | P | **P** | **08 46 44.9** | **+0.2** |
| | baz=71,SNR=5.3 | | | | | | |
| **Z35A** | **Perchaven, San** | **70.97** | **338** | P | **P** | **08 46 45.1** | **+0.3** |
| | baz=71 | | | | | | |
| **MIAR** | **Mount Ida** | **71.02** | **341** | P | **P** | **08 46 45.7** | **+0.7** |
| | baz=71 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **71.11** | **335** | P | **P** | **08 46 46.3** | **+0.6** |
| | baz=71 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **71.11** | **335** | *e*P | **P** | **08 46 46.1** | **+0.4** |
| | comp=N,18nm,1.3s | | | | | | |
| **Y36A** | **Durant** | **71.19** | **339** | P | **P** | **08 46 46.7** | **+0.6** |
| | baz=72 | | | | | | |
| **Z34A** | **Collier Ranch,** | **71.22** | **337** | P | **P** | **08 46 46.5** | **+0.2** |
| | baz=72 | | | | | | |
| **229A** | **Bryant Ranch,** | **71.30** | **333** | P | **P** | **08 46 47.3** | **+0.4** |
| | baz=72 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **71.42** | **336** | P | **P** | **08 46 47.7** | **+0.2** |
| | baz=72,SNR=6.4 | | | | | | |
| **131A** | **Roby** | **71.42** | **335** | P | **P** | **08 46 47.9** | **+0.3** |
| | baz=72 | | | | | | |
| **X38A** | **Whitesboro** | **71.49** | **340** | P | **P** | **08 46 48.2** | **+0.4** |
| | baz=72 | | | | | | |
| **130A** | **Snyder** | **71.56** | **334** | P | **P** | **08 46 48.3** | **-0.1** |
| | baz=72 | | | | | | |
| **Z32A** | **Haskell** | **71.68** | **336** | P | **P** | **08 46 49.5** | **+0.4** |
| | baz=72,SNR=8.0 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **71.71** | **337** | P | **P** | **08 46 49.4** | **+0.2** |
| | baz=72 | | | | | | |
| **228A** | **UT Block 9, Go** | **71.73** | **333** | P | **P** | **08 46 49.5** | **0.0** |
| | baz=72 | | | | | | |
| **W38A** | **Poteau** | **71.78** | **341** | P | **P** | **08 46 50.1** | **+0.5** |
| | baz=72 | | | | | | |
| **X36A** | **Centrahoma** | **71.84** | **339** | P | **P** | **08 46 49.6** | **-0.4** |
| | baz=72 | | | | | | |
| **129A** | **Stewart Farms,** | **71.92** | **334** | P | **P** | **08 46 51.4** | **+0.8** |
| | baz=72 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **71.92** | **335** | P | **P** | **08 46 50.8** | **+0.2** |
| | baz=72,SNR=6.1 | | | | | | |
| **W37A** | **Quinton** | **72.10** | **340** | P | **P** | **08 46 52.1** | **+0.6** |
| | baz=72 | | | | | | |
| **128A** | **Castleberry Fa** | **72.14** | **333** | P | **P** | **08 46 52.1** | **+0.1** |
| | baz=72 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **72.24** | **334** | P | **P** | **08 46 52.5** | **+0.1** |
| | baz=73 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **72.30** | **336** | P | **P** | **08 46 53.1** | **+0.3** |
| | baz=73 | | | | | | |
| **X34A** | **Smith Ranch, M** | **72.32** | **338** | P | **P** | **08 46 52.7** | **-0.2** |
| | baz=73 | | | | | | |
| **W36A** | **Wetumka** | **72.33** | **339** | P | **P** | **08 46 52.4** | **-0.5** |
| | baz=73 | | | | | | |
| **PBMO** | **Poplar Bluff** | **72.37** | **344** | *e*P | **P** | **08 46 52.6** | **-0.5** |
| | comp=N,7.7nm,0.6s | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **72.42** | **334** | P | **P** | **08 46 53.3** | **-0.4** |
| | baz=73 | | | | | | |
| **MNTX** | **Cornudas Mount** | **72.47** | **330** | P | **P** | **08 46 53.0** | **-0.9** |
| | baz=73 | | | | | | |
| **MNTX** | **Cornudas Mount** | **72.47** | **330** | *e*P | **P** | **08 46 53.0** | **-0.9** |
| | comp=N,3.7nm,0.8s | | | | | | |
| **V38A** | **Canehill** | **72.49** | **341** | P | **P** | **08 46 53.4** | **-0.5** |
| | baz=73 | | | | | | |
| **W35A** | **Tecumseh** | **72.54** | **339** | P | **P** | **08 46 54.1** | **0.0** |
| | baz=73 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **72.54** | **335** | P | **P** | **08 46 54.5** | **+0.2** |
| | baz=73 | | | | | | |
| **X32A** | **Elmer** | **72.63** | **336** | P | **P** | **08 46 54.7** | **-0.1** |
| | baz=73 | | | | | | |
| **Z28A** | **Tucker Farm, M** | **72.70** | **333** | P | **P** | **08 46 54.8** | **-0.5** |
| | baz=73 | | | | | | |
| **V37A** | **Hulbert** | **72.71** | **340** | P | **P** | **08 46 55.1** | **-0.1** |
| | baz=73 | | | | | | |
| **WMOK** | **Wichita Mounta** | **72.75** | **337** | *e*P | **P** | **08 46 55.0** | **-0.5** |
| | comp=N,8.3nm,1.4s | | | | | | |
| **V36A** | **Jenks** | **72.85** | **340** | P | **P** | **08 46 55.8** | **-0.2** |
| | baz=73 | | | | | | |
| **W34A** | **Bridge Creek,** | **72.89** | **338** | P | **P** | **08 46 56.1** | **-0.2** |
| | baz=73 | | | | | | |
| **TUL1** | **Tulsa** | **72.92** | **340** | P | **P** | **08 46 56.1** | **-0.4** |
| | baz=73 | | | | | | |
| **TUL1** | **Tulsa** | **72.92** | **340** | *e*P | **P** | **08 46 56.2** | **-0.2** |
| | comp=N,10nm,0.9s | | | | | | |
| **Y29A** | **Porterfield Fa** | **72.95** | **334** | P | **P** | **08 46 56.5** | **-0.2** |
| | baz=73,SNR=5.8 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **73.03** | **337** | P | **P** | **08 46 57.7** | **+0.6** |
| | baz=73,SNR=5.9 | | | | | | |
| **X31A** | **McDonald Ranch** | **73.05** | **336** | P | **P** | **08 46 57.3** | **0.0** |
| | baz=73,SNR=5.3 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **73.09** | **339** | P | **P** | **08 46 56.9** | **-0.5** |
| | baz=73 | | | | | | |
| **U37A** | **Salina** | **73.19** | **341** | P | **P** | **08 46 58.0** | **0.0** |
| | baz=74 | | | | | | |
| **Y28A** | **McKinney Farm,** | **73.20** | **334** | P | **P** | **08 46 58.3** | **0.0** |
| | baz=74 | | | | | | |
| **W32A** | **Sentinel** | **73.26** | **337** | P | **P** | **08 46 58.6** | **+0.2** |
| | baz=74 | | | | | | |
| **MAW** | **Mawson** | **73.28** | **163** | P | **P** | **08 46 58.3** | **+0.1** |
| | comp=N,4.4nm,0.8s,baz=205,slow=7.3,SNR=15 | | | | | | |
| MAW | | | | LR | LR | 09 20 30.3 | |
| | comp=N,107nm,18.4s,baz=241,slow=37 | | | | | | |
| **MAW** | **Mawson** | **73.28** | **163** | *e*P | **P** | **08 46 59.0** | **+0.8** |
| | comp=N,0.9nm,0.8s | | | | | | |
| **MSTX** | **Muleshoe** | **73.45** | **334** | P | **P** | **08 46 59.5** | **-0.3** |
| | baz=74,SNR=5.5 | | | | | | |
| **MSTX** | **Muleshoe** | **73.45** | **334** | *e*P | **P** | **08 46 59.8** | **0.0** |
| | comp=N,7.7nm,0.8s | | | | | | |
| **W31A** | **Holland Ranch,** | **73.55** | **336** | P | **P** | **08 47 00.1** | **-0.1** |
| | baz=74 | | | | | | |
| **V33A** | **Lossen Ranch,** | **73.59** | **338** | P | **P** | **08 47 00.3** | **-0.1** |
| | baz=74 | | | | | | |
| **U35A** | **Pawnee** | **73.62** | **339** | P | **P** | **08 47 00.8** | **+0.2** |
| | baz=74 | | | | | | |
| **T37A** | **Cheneyville 18** | **73.81** | **341** | P | **P** | **08 47 01.4** | **-0.2** |
| | baz=74 | | | | | | |
| **AMTX** | **Amarillo** | **73.87** | **335** | P | **P** | **08 47 02.2** | **0.0** |
| | baz=74 | | | | | | |
| **AMTX** | **Amarillo** | **73.87** | **335** | *e*P | **P** | **08 47 02.5** | **+0.4** |
| | comp=N,13nm,1.3s | | | | | | |
| **U34A** | **Anderson Ranch** | **73.93** | **339** | P | **P** | **08 47 02.2** | **-0.1** |
| | baz=74 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **74.02** | **340** | P | **P** | **08 47 02.8** | **-0.1** |
| | baz=74 | | | | | | |
| **T35A** | **Sooner Cattle** | **74.07** | **340** | P | **P** | **08 47 03.4** | **+0.2** |
| | baz=74 | | | | | | |
| **W29A** | **Amraillo** | **74.08** | **335** | P | **P** | **08 47 03.8** | **+0.4** |
| | baz=74 | | | | | | |
| **121A** | **Cookes Peak, D** | **74.20** | **329** | P | **P** | **08 47 05.0** | **+0.8** |
| | baz=74 | | | | | | |
| **V30A** | **Spur Ranch, Mi** | **74.32** | **336** | P | **P** | **08 47 04.2** | **-0.5** |
| | baz=75 | | | | | | |
| **U32A** | **Winter Ranch,** | **74.33** | **337** | P | **P** | **08 47 05.0** | **+0.3** |
| | baz=75 | | | | | | |
| **T34A** | **McClaskey Farm** | **74.36** | **339** | P | **P** | **08 47 05.0** | **+0.1** |
| | baz=75 | | | | | | |
| **S37A** | **Fort Scott** | **74.39** | **341** | P | **P** | **08 47 04.6** | **-0.3** |
| | baz=75 | | | | | | |
| **W28A** | **Vega** | **74.40** | **335** | P | **P** | **08 47 04.6** | **-0.6** |
| | baz=75 | | | | | | |
| **ACSO** | **Alum Creek Sta** | **74.42** | **351** | *e*P | **P** | **08 47 04.8** | **-0.4** |
| | comp=N,16nm,0.8s | | | | | | |
| **S36A** | **Lake Cedric, C** | **74.56** | **341** | P | **P** | **08 47 05.8** | **-0.2** |
| | baz=75 | | | | | | |
| **S35A** | **Otter Creek Ra** | **74.72** | **340** | P | **P** | **08 47 07.1** | **+0.1** |
| | baz=75 | | | | | | |
| **V28A** | **Channing** | **74.84** | **335** | P | **P** | **08 47 08.6** | **+0.8** |
| | baz=75 | | | | | | |
| **DBIC** | **Dimbokro** | **74.94** | **71** | P | **P** | **08 47 08.1** | **-0.7** |
| | comp=N,5.6nm,1.0s,baz=187,slow=8.1,SNR=3.0 | | | | | | |
| DBIC | | | | LR | LR | 09 18 35.4 | |
| | comp=N,47nm,18.7s,baz=252,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **74.94** | **71** | *e*P | **P** | **08 47 08.1** | **-0.7** |
| | comp=N,24nm,1.4s | | | | | | |
| **U30A** | **WK&E Inc. Balk** | **75.01** | **336** | P | **P** | **08 47 09.2** | **+0.5** |
| | baz=75 | | | | | | |
| **T32A** | **Huddler Ranch,** | **75.04** | **338** | P | **P** | **08 47 09.5** | **+0.7** |
| | baz=75 | | | | | | |
| **V27A** | **Dan Oppiter Fa** | **75.07** | **334** | P | **P** | **08 47 09.5** | **+0.4** |
| | baz=75 | | | | | | |
| **T31A** | **Randall Ranch,** | **75.20** | **337** | P | **P** | **08 47 09.9** | **+0.2** |
| | baz=76 | | | | | | |
| **TUC** | **Tucson** | **75.34** | **327** | *e*P | **P** | **08 47 11.8** | **+1.1** |
| | comp=N,57nm,3.0s | | | | | | |
| **S32A** | **Newby Ranch, P** | **75.52** | **338** | P | **P** | **08 47 11.9** | **+0.3** |
| | baz=76 | | | | | | |
| **R34A** | **Isabella, Hill** | **75.57** | **340** | P | **P** | **08 47 11.9** | **+0.1** |
| | baz=76 | | | | | | |
| **U27A** | **Thompson Grove** | **75.66** | **335** | P | **P** | **08 47 13.3** | **+0.7** |
| | baz=76 | | | | | | |
| **ANMO** | **Albuquerque** | **75.73** | **331** | *e*P | **P** | **08 47 14.0** | **+0.9** |
| | comp=N,4.9nm,1.1s | | | | | | |
| **Q35A** | **Mercer Eighty,** | **75.74** | **341** | P | **P** | **08 47 12.3** | **-0.5** |
| | baz=76 | | | | | | |
| **HDIL** | **Hopedale** | **75.77** | **346** | P | **P** | **08 47 12.6** | **-0.2** |
| | baz=76 | | | | | | |
| **T29A** | **Hugoton** | **75.79** | **336** | P | **P** | **08 47 13.3** | **+0.1** |
| | baz=76 | | | | | | |
| **214A** | **Organ Pipe Nat** | **76.00** | **325** | P | **P** | **08 47 15.5** | **+1.1** |
| | baz=76 | | | | | | |
| **T28A** | **Walsh** | **76.04** | **335** | P | **P** | **08 47 15.2** | **+0.5** |
| | baz=76,SNR=5.3 | | | | | | |
| **Q34A** | **Chapman** | **76.06** | **340** | P | **P** | **08 47 14.6** | **0.0** |
| | baz=76 | | | | | | |
| **R32A** | **Long Quarter,** | **76.11** | **339** | P | **P** | **08 47 15.3** | **+0.3** |
| | baz=76 | | | | | | |
| **S29A** | **Ulysses** | **76.15** | **336** | P | **P** | **08 47 15.7** | **+0.5** |
| | baz=76 | | | | | | |
| **T27A** | **Campo** | **76.20** | **335** | P | **P** | **08 47 16.1** | **+0.5** |
| | baz=76 | | | | | | |
| **P36A** | **Good Intent, A** | **76.23** | **342** | P | **P** | **08 47 14.9** | **-0.7** |
| | baz=77 | | | | | | |
| **R31A** | **Burdett** | **76.25** | **338** | P | **P** | **08 47 15.8** | **0.0** |
| | baz=77 | | | | | | |
| **P35A** | **Duane Minner,** | **76.37** | **341** | P | **P** | **08 47 16.1** | **-0.2** |
| | baz=77 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Q33A | Connelly Farm, baz=77 | 76.38 | 339 | P | | P | 08 47 | 16.6 | +0.1 |
| S28A | Manter baz=77,SNR=7.2 | 76.39 | 336 | P | | P | 08 47 | 16.9 | +0.3 |
| R30A | Dighton baz=77 | 76.48 | 337 | P | | P | 08 47 | 17.2 | +0.1 |
| Q32A | Meitler Ranch, baz=77 | 76.59 | 339 | P | | P | 08 47 | 18.1 | +0.5 |
| P34A | Walnut Farm, R baz=77 | 76.61 | 340 | P | | P | 08 47 | 17.3 | -0.4 |
| T26A | Comanche Natio baz=77 | 76.61 | 334 | P | | P | 08 47 | 18.6 | +0.6 |
| O36A | Bolckow baz=77 | 76.65 | 342 | P | | P | 08 47 | 17.1 | -0.8 |
| P33A | Williams Farm, baz=77 | 76.75 | 340 | P | | P | 08 47 | 18.9 | +0.4 |
| CBKS | Cedar Bluff baz=77 | 76.79 | 338 | P | | P | 08 47 | 19.0 | +0.2 |
| Q31A | Ellis baz=77 | 76.86 | 338 | P | | P | 08 47 | 19.6 | +0.4 |
| T25A | Trinidad baz=77,SNR=8.6 | 76.87 | 334 | P | | P | 08 47 | 20.5 | +1.0 |
| T25A | Trinidad comp=N,9.4nm,0.8s | 76.87 | 334 | eP | | P | 08 47 | 20.5 | +1.0 |
| R29A | Marienthal baz=77 | 76.89 | 337 | P | | P | 08 47 | 20.2 | +0.8 |
| S26A | Kim baz=77,SNR=8.4 | 76.96 | 335 | P | | P | 08 47 | 20.6 | +0.7 |
| R28A | Tribune baz=77 | 77.03 | 336 | P | | P | 08 47 | 20.8 | +0.6 |
| Q30A | Quinter baz=77,SNR=6.9 | 77.09 | 338 | P | | P | 08 47 | 20.9 | +0.4 |
| O34A | Beatrice baz=78 | 77.16 | 341 | P | | P | 08 47 | 20.8 | 0.0 |
| P32A | Huiting Farm, baz=78 | 77.19 | 339 | P | | P | 08 47 | 21.2 | +0.2 |
| Q29A | Oakley baz=78 | 77.26 | 337 | P | | P | 08 47 | 21.8 | +0.4 |
| R27A | Eads baz=78,SNR=8.4 | 77.32 | 335 | P | | P | 08 47 | 22.3 | +0.4 |
| P31A | Stockton baz=78 | 77.33 | 338 | P | | P | 08 47 | 22.2 | +0.4 |
| N35A | Tabor baz=78 | 77.51 | 342 | P | | P | 08 47 | 22.8 | +0.1 |
| R26A | Arlington baz=78,SNR=5.7 | 77.56 | 335 | P | | P | 08 47 | 23.6 | +0.4 |
| P30A | Selden baz=78 | 77.62 | 338 | P | | P | 08 47 | 24.1 | +0.7 |
| O32A | Brockman Farm, baz=78 | 77.68 | 340 | P | | P | 08 47 | 24.1 | +0.3 |
| Q28A | Sharon Springs baz=78 | 77.69 | 337 | P | | P | 08 47 | 24.4 | +0.4 |
| N34A | Lincoln baz=78 | 77.72 | 341 | P | | P | 08 47 | 23.6 | -0.3 |
| SDCO | Great Sand Dun baz=78 | 77.81 | 333 | P | | P | 08 47 | 25.5 | +0.6 |
| SDCO | Great Sand Dun comp=N,3.3nm,0.9s | 77.81 | 333 | eP | | P | 08 47 | 25.7 | +0.8 |
| P29A | Atwood baz=78 | 77.89 | 337 | P | | P | 08 47 | 25.8 | +0.9 |
| O31A | Woolen Ranch, baz=78 | 77.89 | 339 | P | | P | 08 47 | 25.5 | +0.6 |
| KSCO | Kaye Shedlock' baz=78 | 77.91 | 336 | P | | P | 08 47 | 26.1 | +0.9 |
| M35A | Neola baz=78 | 78.09 | 342 | P | | P | 08 47 | 26.4 | +0.4 |
| P28A | Saint Francis baz=78 | 78.13 | 337 | P | | P | 08 47 | 27.2 | +0.8 |
| Q26A | Hugo baz=78 | 78.14 | 335 | P | | P | 08 47 | 27.2 | +0.7 |
| JFWS | Jewell Farm comp=N,82nm,2.3s | 78.23 | 346 | eP | | P | 08 47 | 26.4 | -0.3 |
| SWSC | Sam W. Stewart baz=79 | 78.25 | 323 | P | | P | 08 47 | 28.5 | +1.5 |
| Y12C | Blythe baz=79 | 78.29 | 325 | P | | P | 08 47 | 28.5 | +1.3 |
| WUAZ | Wupatki baz=79 | 78.30 | 328 | P | | P | 08 47 | 28.7 | +1.3 |
| S22A | 4UR Ranch, Cre baz=79 | 78.32 | 332 | P | | P | 08 47 | 28.8 | +1.1 |
| S22A | 4UR Ranch, Cre comp=N,60nm,3.0s | 78.32 | 332 | eP | | P | 08 47 | 28.3 | +0.6 |
| O29A | 4D Ranch, Culb baz=79 | 78.32 | 338 | P | | P | 08 47 | 28.1 | +0.8 |
| MVCO | Mesa Verde baz=79 | 78.52 | 331 | P | | P | 08 47 | 29.3 | +0.6 |
| MVCO | Mesa Verde comp=N,47nm,2.5s | 78.52 | 331 | eP | | P | 08 47 | 29.1 | +0.4 |
| MONP | Monument Peak baz=79 | 78.53 | 323 | P | | P | 08 47 | 30.3 | +1.4 |
| O28A | Krutsinger Ran baz=79 | 78.64 | 337 | P | | P | 08 47 | 29.8 | +0.7 |
| Q24A | Divide baz=79 | 78.76 | 334 | P | | P | 08 47 | 31.0 | +0.9 |
| M31A | Lambtecht Ranc baz=79 | 78.88 | 339 | P | | P | 08 47 | 31.0 | +0.6 |
| N29A | Votaw Ranch, W baz=79 | 78.90 | 338 | P | | P | 08 47 | 31.1 | +0.6 |
| IRM | Iron Mountain baz=79 | 78.92 | 325 | P | | P | 08 47 | 31.6 | +0.8 |
| O27A | Beecher Island baz=79 | 78.92 | 337 | P | | P | 08 47 | 31.8 | +1.0 |
| PFO | Pinyon Flat Ob baz=79 | 79.12 | 323 | P | | P | 08 47 | 33.4 | +1.4 |
| PFO | Pinyon Flat Ob comp=N,6.6nm,1.0s | 79.12 | 323 | eP | | P | 08 47 | 33.6 | +1.7 |
| BELC | Belle Mtn. Jos baz=80 | 79.21 | 324 | P | | P | 08 47 | 33.6 | +1.2 |
| M30A | Dale-Ortello V baz=80 | 79.33 | 339 | P | | P | 08 47 | 32.5 | -0.3 |
| MURC | Murrieta baz=80 | 79.48 | 323 | P | | P | 08 47 | 35.1 | +1.2 |
| M29A | Burnside Ranch baz=80 | 79.49 | 338 | P | | P | 08 47 | 34.2 | +0.5 |
| N27A | Anderson Farm, baz=80 | 79.50 | 337 | P | | P | 08 47 | 32.9 | -0.9 |
| K33A | Hardington baz=80 | 79.50 | 341 | P | | P | 08 47 | 33.7 | 0.0 |
| L31A | Butterfield Fa baz=80 | 79.61 | 340 | P | | P | 08 47 | 35.2 | +0.8 |
| L30A | Spencer Herefo baz=80 | 79.66 | 339 | P | | P | 08 47 | 35.3 | +0.7 |
| ISCO | Idaho Springs baz=80 | 79.67 | 334 | P | | P | 08 47 | 35.5 | +0.5 |
| ISCO | Idaho Springs comp=N,51nm,2.8s | 79.67 | 334 | eP | | P | 08 47 | 35.8 | +0.8 |
| GMRC | Granite Mounta baz=80 | 79.67 | 325 | P | | P | 08 47 | 36.4 | +1.5 |
| PV10 | Paradox Valley | 79.74 | 331 | eP | | P | 08 47 | 35.9 | +0.5 |
| J35A | Milford baz=80 | 79.76 | 343 | P | | P | 08 47 | 34.6 | -0.5 |
| K32A | Verdigre baz=80 | 79.82 | 341 | P | | P | 08 47 | 35.3 | -0.1 |
| J34A | George baz=80 | 79.87 | 342 | P | | P | 08 47 | 35.8 | +0.2 |
| BOSA | Boshof comp=N,3.0nm,0.9s,baz=221,slow=3.9,SNR=3.9 | 79.97 | 118 | P | | P | 08 47 | 37.4 | +0.4 |
| L29A | Maesberg Ranch baz=80 | 79.99 | 339 | P | | P | 08 47 | 36.9 | +0.5 |
| K31A | O'Neill baz=80 | 80.00 | 340 | P | | P | 08 47 | 36.9 | +0.5 |
| HEC | Hector,Ludlow baz=80 | 80.04 | 324 | P | | P | 08 47 | 38.1 | +1.2 |
| I36A | Fitzsimmons Fa baz=80 | 80.09 | 344 | P | | P | 08 47 | 36.3 | -0.5 |
| J33A | Davis baz=80,SNR=6.0 | 80.16 | 342 | P | | P | 08 47 | 37.0 | -0.2 |
| I35A | Creekview Farm baz=80 | 80.16 | 343 | P | | P | 08 47 | 36.8 | -0.5 |
| BFSC | Mount Baldy Ra baz=80 | 80.22 | 323 | P | | P | 08 47 | 39.3 | +1.4 |
| K30A | Basset baz=81 | 80.29 | 340 | P | | P | 08 47 | 38.3 | +0.3 |
| TUQ | Turquoise Moun baz=81 | 80.33 | 325 | P | | P | 08 47 | 39.6 | +1.1 |
| J32A | Parkston baz=81 | 80.44 | 341 | P | | P | 08 47 | 38.6 | -0.1 |
| ECSD | EROS Data Cent baz=81,SNR=9.0 | 80.45 | 342 | P | | P | 08 47 | 38.6 | -0.3 |
| ECSD | EROS Data Cent comp=N,12nm,0.8s | 80.45 | 342 | eP | | P | 08 47 | 38.5 | -0.3 |
| K29A | Lazy Trails An baz=81 | 80.58 | 339 | P | | P | 08 47 | 40.0 | +0.4 |
| J31A | Geddes baz=81 | 80.61 | 340 | P | | P | 08 47 | 39.7 | 0.0 |
| GSC | Goldstone baz=81 | 80.65 | 324 | P | | P | 08 47 | 41.2 | +1.1 |
| N23A | Red Feather La baz=81 | 80.75 | 334 | P | | P | 08 47 | 41.2 | +0.4 |
| I33A | Coleman baz=81 | 80.80 | 342 | P | | P | 08 47 | 40.5 | -0.1 |
| BLG | Laguna Peak baz=81 | 80.83 | 322 | P | | P | 08 47 | 41.8 | +0.7 |
| K28A | Ten Mile Ranch baz=81 | 80.85 | 338 | P | | P | 08 47 | 42.3 | +1.2 |
| CCUT | Cedar City comp=N,4.2nm,0.9s | 80.87 | 328 | eP | | P | 08 47 | 43.2 | +1.7 |
| EDW2 | Edwards Air Fo baz=81 | 80.90 | 323 | P | | P | 08 47 | 41.7 | +0.2 |
| PHWY | Pilot Hill comp=N,4.4nm,0.9s | 80.93 | 335 | eP | | P | 08 47 | 42.4 | +0.6 |
| O20A | White River Ci baz=81 | 80.94 | 333 | P | | P | 08 47 | 42.2 | +0.4 |
| I32A | Karley and Nic baz=81 | 80.95 | 342 | P | | P | 08 47 | 40.8 | -0.6 |
| SPMN | St. Paul baz=81 | 80.97 | 345 | P | | P | 08 47 | 40.8 | -0.7 |
| H34A | Spellman Lake, baz=82 | 81.12 | 343 | P | | P | 08 47 | 42.0 | -0.3 |
| J29A | Okreek baz=82,SNR=8.8 | 81.17 | 339 | P | | P | 08 47 | 43.2 | +0.6 |
| LRMC | Laurel Mountai baz=82 | 81.22 | 324 | P | | P | 08 47 | 43.9 | +0.6 |
| I31A | Royce, Wessing baz=82 | 81.24 | 341 | P | | P | 08 47 | 43.0 | 0.0 |
| G35A | Watkins baz=82 | 81.33 | 344 | P | | P | 08 47 | 43.3 | -0.2 |
| P17A | Butcher Ranch, comp=N,7.1nm,1.1s | 81.36 | 331 | eP | | P | 08 47 | 44.7 | +0.7 |
| H33A | Prehn Over Nor baz=82,SNR=5.8 | 81.37 | 342 | P | | P | 08 47 | 43.9 | +0.2 |
| I30A | Oacoma baz=82,SNR=7.8 | 81.38 | 340 | P | | P | 08 47 | 43.8 | +0.1 |
| H32A | Carlson Farm, baz=82 | 81.39 | 342 | P | | P | 08 47 | 43.4 | -0.4 |
| J28A | Allard Ranch, baz=82 | 81.46 | 339 | P | | P | 08 47 | 44.9 | +0.6 |
| J27A | Elkhorn Farm, baz=82,SNR=6.3 | 81.54 | 338 | P | | P | 08 47 | 46.5 | +1.8 |
| FURC | Furnace Creek, baz=82 | 81.61 | 325 | P | | P | 08 47 | 46.7 | +1.6 |
| G34A | Benson baz=82 | 81.63 | 343 | P | | P | 08 47 | 44.4 | -0.6 |
| H31A | Wolsey baz=82 | 81.64 | 341 | P | | P | 08 47 | 45.0 | -0.1 |
| TPNV | Topopah Spring baz=82 | 81.70 | 325 | P | | P | 08 47 | 46.9 | +1.0 |
| TPNV | Topopah Spring comp=N,3.6nm,0.8s | 81.70 | 325 | eP | | P | 08 47 | 46.7 | +0.9 |
| F36A | Milaca baz=82,SNR=5.4 | 81.73 | 345 | P | | P | 08 47 | 44.8 | -0.7 |
| I29A | Vivian Onida baz=82 | 81.73 | 340 | P | | P | 08 47 | 45.4 | -0.2 |
| SUSD | South Dakota S baz=82 | 81.74 | 341 | P | | P | 08 47 | 46.7 | +1.1 |
| ISA | Isabella baz=82 | 81.76 | 323 | P | | P | 08 47 | 47.1 | +1.1 |
| PKM | Peak Mountain baz=82 | 81.84 | 322 | P | | P | 08 47 | 47.8 | +1.2 |
| J26A | Sides Ranch, S baz=82 | 81.93 | 338 | P | | P | 08 47 | 47.4 | +0.7 |
| F35A | Swanville baz=82 | 81.96 | 344 | P | | P | 08 47 | 46.5 | -0.2 |
| I28A | Midland baz=82 | 81.96 | 339 | P | | P | 08 47 | 47.6 | +0.8 |
| G32A | Webster baz=82 | 82.10 | 342 | P | | P | 08 47 | 47.0 | -0.5 |
| MPU | Maple Canyon comp=N,7.2nm,1.1s | 82.19 | 330 | eP | | P | 08 47 | 49.1 | +0.7 |
| VES | Vesal, Richgr baz=82 | 82.20 | 323 | P | | P | 08 47 | 48.9 | +0.7 |
| J25A | Sunshine Ranch baz=83 | 82.23 | 337 | P | | P | 08 47 | 49.3 | +0.9 |
| SMMC | Simmler baz=83 | 82.25 | 322 | P | | P | 08 47 | 50.0 | +1.5 |
| H29A | Onida baz=83 | 82.26 | 340 | P | | P | 08 47 | 48.5 | +0.2 |
| I27A | Quinn baz=83 | 82.29 | 339 | P | | P | 08 47 | 48.8 | +0.2 |
| O16A | Springville comp=N,5.7nm,0.9s | 82.30 | 330 | eP | | P | 08 47 | 43.6 | -5.3 |
| NLU | North Lily Min comp=N,50nm,2.7s | 82.32 | 330 | eP | | P | 08 47 | 50.1 | +1.0 |
| F33A | 5 Mile Ranch, baz=83 | 82.35 | 343 | P | | P | 08 47 | 48.5 | -0.2 |
| K22A | Casper baz=83 | 82.50 | 335 | P | | P | 08 47 | 50.7 | +0.9 |
| I26A | New Underwood baz=83 | 82.51 | 338 | P | | P | 08 47 | 49.8 | +0.1 |
| R11A | Troy Canyon, C baz=83 | 82.53 | 327 | P | | P | 08 47 | 51.4 | +1.3 |
| R11A | Troy Canyon, C comp=N,5.1nm,1.0s | 82.53 | 327 | eP | | P | 08 47 | 51.2 | +1.1 |
| H28A | Mission Ridge baz=83,SNR=6.6 | 82.53 | 339 | P | | P | 08 47 | 50.0 | +0.2 |
| G29A | Hoven baz=83,SNR=6.0 | 82.69 | 340 | P | | P | 08 47 | 50.2 | -0.4 |
| E34A | Wadena baz=83 | 82.71 | 344 | P | | P | 08 47 | 50.4 | -0.2 |
| D37A | Cotton baz=83 | 82.73 | 346 | P | | P | 08 47 | 50.3 | -0.4 |
| I25A | Rochford baz=83 | 82.77 | 337 | P | | P | 08 47 | 51.7 | +0.4 |
| H27A | Howes baz=83,SNR=6.0 | 82.81 | 339 | P | | P | 08 47 | 51.4 | +0.1 |
| DUG | Dugway baz=83 | 82.83 | 330 | P | | P | 08 47 | 52.3 | +0.7 |
| DUG | Dugway comp=N,50nm,2.4s | 82.83 | 330 | eP | | P | 08 47 | 52.5 | +0.9 |
| F31A | Hecla baz=83 | 82.86 | 342 | P | | P | 08 47 | 51.1 | -0.4 |
| G28A | Parade baz=83,SNR=6.0 | 82.87 | 340 | P | | P | 08 47 | 51.8 | +0.3 |
| E33A | Westby DABS, E baz=83 | 82.90 | 343 | P | | P | 08 47 | 51.0 | -0.6 |
| D36A | Golland baz=83 | 82.90 | 346 | P | | P | 08 47 | 51.4 | -0.2 |
| RSSD | Black Hills comp=N,66nm,2.3s | 82.96 | 337 | eP | | P | 08 47 | 52.5 | +0.2 |
| D35A | Remer baz=83,SNR=5.0 | 83.00 | 345 | P | | P | 08 47 | 51.8 | -0.3 |
| F30A | Leola baz=83 | 83.04 | 341 | P | | P | 08 47 | 51.7 | -0.7 |
| C38A | Sawbill Land. baz=83 | 83.05 | 347 | P | | P | 08 47 | 51.5 | -0.8 |
| C37A | Embarrass baz=84 | 83.23 | 346 | P | | P | 08 47 | 52.9 | -0.5 |
| F29A | Eureka baz=84,SNR=6.2 | 83.26 | 341 | P | | P | 08 47 | 53.3 | -0.2 |
| D34A | Park Rapids baz=84 | 83.26 | 344 | P | | P | 08 47 | 53.4 | -0.1 |
| H25A | Fruitdale baz=84 | 83.27 | 338 | P | | P | 08 47 | 54.2 | +0.6 |
| EYMN | Ely baz=84 | 83.31 | 347 | P | | P | 08 47 | 53.1 | -0.6 |
| C36A | Pine Crest Far baz=84 | 83.39 | 346 | P | | P | 08 47 | 53.7 | -0.5 |
| E31A | Nome baz=84 | 83.41 | 342 | P | | P | 08 47 | 54.5 | +0.2 |
| G27A | Dupree baz=84,SNR=5.7 | 83.44 | 339 | P | | P | 08 47 | 54.4 | -0.1 |
| D33A | AnnSam, Waubun baz=84 | 83.46 | 344 | P | | P | 08 47 | 54.4 | -0.1 |
| MLAC | Mammoth Lakes baz=84 | 83.49 | 324 | P | | P | 08 47 | 56.3 | +1.1 |
| HWUT | Hardware Ranch comp=N,6.3nm,0.8s | 83.50 | 331 | eP | | P | 08 47 | 55.4 | +0.3 |
| F28A | McLaughlin baz=84 | 83.54 | 340 | P | | P | 08 47 | 55.0 | 0.0 |
| G26A | Maurine baz=84 | 83.57 | 339 | P | | P | 08 47 | 55.1 | 0.0 |
| SPUT | South Promonto comp=N,6.0nm,0.8s | 83.61 | 330 | eP | | P | 08 47 | 56.2 | +0.5 |
| BW06 | Boulder Array | 83.71 | 333 | eP | | P | 08 47 | 55.6 | -0.6 |
| G25A | Newell baz=84,SNR=8.8 | 83.73 | 338 | P | | P | 08 47 | 56.3 | +0.3 |
| D32A | Dogwood Acres, baz=84 | 83.73 | 343 | P | | P | 08 47 | 55.7 | -0.2 |
| D31A | Mcclaflin, Tow baz=84 | 83.83 | 343 | P | | P | 08 47 | 56.3 | -0.1 |
| NV01 | Mina Array Sit | 83.86 | 325 | eP | | P | 08 47 | 57.6 | +0.5 |
| NVAR | Mina Array Bea comp=N,2.2nm,0.8s,baz=152,slow=6.5,SNR=12 | 83.86 | 325 | P | | P | 08 47 | 57.6 | +0.5 |
| E29A | Napoleon baz=84 | 83.88 | 341 | P | | P | 08 47 | 56.8 | 0.0 |
| F27A | Lemmon | 83.92 | 339 | P | | P | 08 47 | 57.1 | +0.1 |
| TOA0 | Torodi Ar. Sit baz=84,SNR=8.6 | 83.97 | 70 | eP | | P | 08 47 | 57.9 | 0.0 |
| TORD | Torodi Ar. Bea comp=N,6.5nm,0.8s,baz=258,slow=4.4,SNR=33 | 83.97 | 70 | P | | P | 08 47 | 57.9 | 0.0 |
| C33A | Trail baz=84 | 84.03 | 344 | P | | P | 08 47 | 56.9 | -0.5 |
| F26A | Lodgepole baz=84 | 84.09 | 339 | P | | P | 08 47 | 57.7 | -0.2 |
| HVU | Hansel Valley comp=N,6.3nm,0.8s | 84.14 | 330 | eP | | P | 08 47 | 58.6 | +0.2 |
| D30A | Buchanan baz=84,SNR=5.4 | 84.15 | 342 | P | | P | 08 47 | 58.1 | +0.1 |
| E28A | Huff baz=84 | 84.18 | 340 | P | | P | 08 47 | 58.1 | -0.1 |
| E27A | Carson baz=85 | 84.29 | 340 | P | | P | 08 47 | 58.8 | 0.0 |
| D29A | Pettibone, Tap baz=85 | 84.32 | 341 | P | | P | 08 47 | 59.0 | +0.1 |
| ELK | Elko comp=N,3.4nm,0.8s | 84.33 | 328 | eP | | P | 08 48 | 00.0 | +0.6 |
| F25A | Bowman baz=85 | 84.40 | 338 | P | | P | 08 47 | 59.3 | -0.1 |
| B34A | Aery, Baudette baz=85 | 84.46 | 345 | P | | P | 08 47 | 59.0 | -0.6 |
| C31A | Landman Farms, baz=85 | 84.52 | 343 | P | | P | 08 47 | 59.8 | -0.1 |
| AGMN | Agassiz Nation baz=85 | 84.55 | 344 | P | | P | 08 47 | 59.7 | -0.4 |
| E26A | Carlson Angus baz=85 | 84.59 | 339 | P | | P | 08 48 | 00.6 | +0.2 |
| C30A | Mose, Pekin baz=85,SNR=6.0 | 84.63 | 342 | P | | P | 08 48 | 01.0 | +0.6 |
| D28A | Regan baz=85 | 84.71 | 341 | P | | P | 08 48 | 00.9 | 0.0 |
| SNOW | Snow King Moun comp=N,119nm,2.9s | 84.76 | 333 | eP | | P | 08 48 | 01.8 | +0.3 |
| B32A | Ashes, Strandq baz=85,SNR=5.3 | 84.80 | 344 | P | | P | 08 48 | 01.4 | +0.1 |
| LOHW | Long Hollow comp=N,59nm,2.8s | 84.83 | 333 | eP | | P | 08 48 | 02.0 | +0.2 |
| TPAW | Teton Pass comp=N,89nm,2.8s | 84.86 | 333 | eP | | P | 08 48 | 02.3 | +0.2 |
| E25A | Miller Ranch, baz=85 | 84.90 | 339 | P | | P | 08 48 | 01.9 | -0.1 |
| FXWY | Fox Creek comp=N,48nm,2.8s | 85.01 | 333 | eP | | P | 08 48 | 02.9 | +0.2 |
| MDND | Maddock baz=85,SNR=5.4 | 85.05 | 342 | P | | P | 08 48 | 02.5 | -0.1 |
| MDND | Maddock comp=N,28nm,0.8s | 85.05 | 342 | eP | | P | 08 48 | 02.8 | +0.2 |
| D26A | Manning baz=85 | 85.09 | 340 | P | | P | 08 48 | 02.9 | +0.1 |
| B31A | Greenbush Farm baz=85 | 85.09 | 343 | P | | P | 08 48 | 02.5 | -0.3 |
| C28A | Hausauer Farms baz=86 | 85.14 | 341 | P | | P | 08 48 | 03.1 | 0.0 |
| IMW | Indian Meadow comp=N,7.7nm,1.1s | 85.20 | 333 | eP | | P | 08 48 | 04.1 | +0.3 |
| FLWY | Flagg Ranch comp=N,8.9nm,0.8s | 85.26 | 333 | eP | | P | 08 48 | 04.7 | +0.7 |
| B30A | Myrvik Farm, E baz=86,SNR=8.3 | 85.28 | 343 | P | | P | 08 48 | 03.9 | +0.2 |
| C27A | Sayler Ranch, baz=86 | 85.44 | 340 | P | | P | 08 48 | 04.7 | +0.1 |
| D25A | Fairfield baz=86 | 85.46 | 339 | P | | P | 08 48 | 05.4 | +0.7 |
| B29A | Wagenman Farm, baz=86 | 85.56 | 342 | P | | P | 08 48 | 05.1 | +0.1 |
| RLMT | Red Lodge baz=86 | 85.62 | 334 | P | | P | 08 48 | 05.9 | +0.1 |
| RLMT | Red Lodge comp=N,6.0nm,0.8s | 85.62 | 334 | eP | | P | 08 48 | 06.1 | +0.3 |
| A30A | Hoffart Farm, baz=86 | 85.73 | 343 | P | | P | 08 48 | 05.5 | -0.4 |
| B28A | Dugan Ranch, T baz=86 | 85.81 | 341 | P | | P | 08 48 | 06.5 | +0.2 |
| A29A | Manning Farm, baz=86,SNR=7.3 | 85.95 | 342 | P | | P | 08 48 | 07.1 | +0.1 |
| LAO | LASA Array baz=86 | 85.95 | 337 | P | | P | 08 48 | 07.0 | -0.1 |
| LAO | LASA Array comp=N,109nm,2.4s | 85.95 | 337 | eP | | P | 08 48 | 07.3 | +0.1 |
| A28A | Rude Farm, Bot baz=86 | 86.20 | 342 | P | | P | 08 48 | 08.6 | +0.3 |
| HLID | Hailey baz=87 | 86.29 | 330 | P | | P | 08 48 | 09.9 | +0.8 |
| HLID | Hailey comp=N,3.7nm,0.8s | 86.29 | 330 | eP | | P | 08 48 | 10.1 | +1.0 |
| ULM | Lac du Bonnet comp=N,3.8nm,0.7s,baz=164,slow=2.4,SNR=4.4 | 86.39 | 345 | P | | P | 08 48 | 07.7 | -1.4 |
| B25A | Knox Farm, Ray baz=87 | 86.42 | 340 | P | | P | 08 48 | 10.2 | +0.8 |
| A27A | Ledoux Ranch, baz=87 | 86.50 | 341 | P | | P | 08 48 | 10.4 | +0.6 |
| MCMT | McKenzie Canyo | 86.72 | 332 | eP | | P | 08 48 | 12.2 | +1.0 |
| MFID | Camas Ranch comp=N,3.6nm,0.9s | 86.76 | 330 | eP | | P | 08 48 | 11.9 | +0.6 |
| DGMT | Dagmar baz=87 | 86.90 | 339 | P | | P | 08 48 | 12.1 | +0.3 |
| DGMT | Dagmar comp=N,20nm,0.8s | 86.90 | 339 | eP | | P | 08 48 | 11.9 | +0.2 |
| BOZ | Bozeman (W) baz=87 | 86.94 | 333 | P | | P | 08 48 | 12.1 | -0.1 |
| BOZ | Bozeman (W) comp=N,96nm,3.0s | 86.94 | 333 | eP | | P | 08 48 | 11.4 | -0.8 |
| A25A | Svangstu Ranch baz=87 | 87.01 | 340 | P | | P | 08 48 | 12.8 | +0.6 |
| O03D | Paynes Creek baz=87 | 87.01 | 324 | P | | P | 08 48 | 12.8 | +0.3 |
| DLMT | Dillon comp=N,19nm,1.6s | 87.07 | 333 | eP | | P | 08 48 | 13.6 | +0.8 |
| MOD | Modoc comp=N,108nm,3.0s | 87.54 | 326 | eP | | P | 08 48 | 16.0 | +0.9 |
| J08A | Circle Bar Ran comp=N,12nm,0.8s | 87.86 | 328 | eP | | P | 08 48 | 17.8 | +1.2 |
| M04C | Macdoel baz=88 | 88.17 | 325 | P | | P | 08 48 | 19.2 | +1.0 |
| YBH | Yreka Blue Hor comp=N,3.2nm,0.7s,baz=80,slow=5.2,SNR=6.5 | 88.55 | 324 | P | | P | 08 48 | 18.7 | -1.2 |
| YBH | Yreka Blue Hor comp=N,141nm,2.8s | 88.55 | 324 | eP | | P | 08 48 | 19.6 | -0.3 |
| J05D | Fort Rock, OR baz=89 | 89.05 | 326 | P | | P | 08 48 | 22.9 | +0.7 |
| KHC | Kasperske Hory | 111.96 | 45 | ePdif | | Pdif | 08 50 | 04.8 | -0.5 |
| AS12 | Alice Springs | 117.80 | 207 | ePKPdf | | PKPdf | 08 54 | 13.0 | -1.2 |
| ASAR | Alice Springs comp=N,0.4nm,0.8s,baz=130,slow=1.7,SNR=3.7 | 117.80 | 207 | PKP | | PKPdf | 08 54 | 13.0 | -1.2 |
| WRA | Warramunga Arr comp=N,1.7nm,0.6s,baz=155,slow=1.8,SNR=16 | 121.00 | 209 | PKP | | PKPdf | 08 54 | 19.1 | -1.2 |
| H11S2 | WAKE ISLAND Hyl baz=118,slow=74,SNR=15 | 125.97 | 269 | T | | T | 11 13 | 29.0 | |
| H11S1 | WAKE ISLAND Hyl baz=118,slow=74,SNR=14 | 125.98 | 269 | T | | T | 11 13 | 27.3 | |
| H11S3 | WAKE ISLAND Hyl baz=118,slow=74,SNR=11 | 125.98 | 269 | T | | T | 11 13 | 30.4 | |
| H11N3 | WAKE ISLAND Hyl baz=145 | 126.38 | 271 | T | | T | 11 13 | 50.8 | |
| H11N1 | WAKE ISLAND Hyl baz=145 | 126.39 | 271 | T | | T | 11 13 | 43.5 | |
| H11N2 | WAKE ISLAND Hyl baz=145 | 126.39 | 271 | T | | T | 11 13 | 50.3 | |
| BRVK | Borovoye | 146.96 | 43 | ePKPbc | | PKPbc | 08 55 | 09.9 | +0.6 |
| BVAR | Borovoye Array comp=N,2.9nm,0.6s,baz=318,slow=4.0,SNR=10 | 147.03 | 43 | PKPbc | | PKPdf | 08 55 | 07.8 | +0.4 |
| KKAR | Karatay Array | 149.30 | 61 | ePKPbc | | PKPbc | 08 55 | 15.9 | +0.1 |
| KKAR | | | | ePKPab | | PKPab | 08 55 | 21.2 | +0.7 |
| AAK | Ala-Archa comp=N,5.4nm,0.8s,baz=244,slow=1.0,SNR=12 | 152.26 | 62 | PKPbc | | PKPbc | 08 55 | 23.2 | +0.2 |
| AAK | Ala-Archa | 152.26 | 62 | ePKPdf | | PKPdf | 08 55 | 16.4 | +0.1 |
| AAK | | | | ePKPbc | | PKPbc | 08 55 | 23.2 | +0.2 |
| AAK | | | | ePKPbc | | PKPbc | 08 55 | 24.0 | +0.9 |
| AAK | | | | ePKPbc | | PKPbc | 08 55 | 24.0 | +0.9 |
| AAK | | | | ePKPab | | PKPab | 08 55 | 33.4 | +0.3 |
| AAK | | | | ePKPab | | PKPab | 08 55 | 33.5 | +0.4 |
| KURBB | Kurchatov Arra comp=N,2.5nm,0.7s,baz=299,slow=3.0,SNR=20 | 152.62 | 43 | PKPbc | | PKPbc | 08 55 | 23.1 | -0.2 |
| KURK | Kurchatov | 152.63 | 43 | ePKPbc | | PKPbc | 08 55 | 23.1 | -0.2 |
| KSH | Kashi | 153.63 | 68 | PKPbc | | PKPbc | 08 55 | 26.0 | -0.1 |
| KSH | | | | epPKP | | PKPab | 08 55 | 37.0 | -1.9 |
| KSH | | | | esPKP | | | 08 55 | 40.6 | |
| KSH | | | | PKS | | PKSdf | 08 58 | 56.8 | +4.1 |
| KSH | | | | ePP | | PP | 08 59 | 43.2 | +30 |
| KSH | | | | SKS | | SKSdf | 09 02 | 23.1 | +0.1 |
| KSH | comp=Z,57nm,3.8s | | | AMB | | AMB | | | |
| KSH | comp=N,87nm,7.2s | | | LR | | LR | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| KSH | | | | LR | LR | | |
| | comp=E,98nm,5.5s | | | | | | |
| KSH | | | | LR | LR | | |
| | comp=Z,150nm,5.1s | | | | | | |
| **ZAA1** | **Zalesovo Array** | **153.98** | **32** | *e*PKPdf | **PKPdf** | **08 55 17.5** | **-0.6** |
| ZAA1 | | | | *e*PKPbc | **PKPbc** | **08 55 26.0** | **-0.2** |
| **ZAA0** | **Zalesovo Array** | **153.99** | **32** | *e*PKPdf | **PKPdf** | **08 55 17.7** | **-0.4** |
| ZAA0 | | | | *e*PKPbc | **PKPbc** | **08 55 25.9** | **-0.2** |
| ZAA0 | | | | *e*PKPab | **PKPab** | **08 55 39.0** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **153.99** | **32** | PKP | **PKPdf** | **08 55 17.5** | **-0.6** |
| | comp=Z,0.8nm,0.5s,baz=207,slow=1.6,SNR=4.6 | | | | | | |
| ZALV | | | | PKPbc | **PKPbc** | **08 55 26.0** | **-0.2** |
| | comp=Z,4.9nm,0.7s,baz=296,slow=3.0,SNR=12 | | | | | | |
| **MK32** | **Makanchi Array** | **156.51** | **49** | *e*PKPdf | **PKPdf** | **08 55 21.8** | **-0.1** |
| MK32 | | | | *e*PKPab | **PKPab** | **08 55 50.6** | **-0.2** |
| **MKAR** | **Makanchi Array** | **156.51** | **49** | PKP | **PKPdf** | **08 55 21.8** | **0.0** |
| | comp=Z,0.6nm,0.8s,baz=270,slow=1.2,SNR=4.0 | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **08 55 50.6** | **-0.2** |
| | comp=Z,1.5nm,0.7s,baz=314,slow=3.5,SNR=8.6 | | | | | | |
| **WMQ** | **Urumqi** | **161.22** | **52** | *e*PKP | **PKPdf** | **08 55 27.8** | **+0.2** |
| **CN2** | **Changchun** | **163.31** | **312** | *e*PKP | **PKPdf** | **08 55 30.7** | **+1.1** |
| **SONA0** | **Songino Array** | **165.95** | **5** | *e*PKPab | **PKPab** | **08 56 30.5** | **-1.5** |
| **SONM** | **Songino Array** | **165.95** | **5** | PKPab | **PKPab** | **08 56 30.5** | **-1.5** |
| | comp=Z,0.3nm,0.4s,baz=346,slow=2.4,SNR=5.2 | | | | | | |
| **KMI** | **Kunming** | **170.10** | **150** | PKP | **PKPdf** | **08 55 33.7** | **-1.9** |
| **NJ2** | **Nanjing** | **170.87** | **262** | *e*PKP | **PKPdf** | **08 55 36.3** | **+0.8** |
| **CD2** | **Chengdu** | **175.24** | **127** | PKP | **PKPdf** | **08 55 36.3** | **-1.1** |
| **LZH** | **Lanzhou** | **175.78** | **57** | *e*PKP | **PKPdf** | **08 55 36.6** | **-0.9** |
| LZH | | | | pPKP | **pPKPdf** | **08 55 46.7** | **-1.4** |
| LZH | | | | sPKP | | 08 55 50.5 | |
| LZH | | | | LN | | | |
| | comp=Z,130nm,18.0s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,130nm,17.9s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,170nm,20.1s | | | | | | |

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*IDC **11** 08:40:19.3±3.4, 53°.61N×90°.63E, h0km, mb1 3.5/3, mb1mx3.1/53, mbtmp3.5/3, ML3.2/2, Error ellipse: s-maj=27.7km s-min=23.8km az=58.0*
*NNC **11** 08:40:22.2±2.3, 53°.76N×90°.23E, h0km±11km, mb4.2, mpv3.9, Error ellipse: s-maj=18.1km s-min=16.0km az=0.0*
**ISC 11 08:40:19.9**±4.1**, 53°.8N**±0°.1×**90°.6E**±0°.2**, h10**km**, n10, σ1s.39**/12**, 6C-5D, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **3.42** | **276** | *i* | | 09 06 40.0 | |
| | baz=90,slow=331,SNR=3.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **3.42** | **276** | Pn | **Pn** | **08 41 14.5** | **+1.3** |
| | baz=97,slow=12,SNR=2.2 | | | | | | |
| ZALV | | | | Pg | **Pb** | **08 41 19.4** | **-1.1** |
| | 2.0nm,0.3s,baz=92,slow=16,SNR=20 | | | | | | |
| ZALV | | | | Lg | Lg | 08 42 08.5 | |
| | 4.8nm,0.3s,baz=94,slow=24,SNR=3.8 | | | | | | |
| **KURK** | **Kurchatov** | **7.95** | **252** | ⇑Pn | **Pn** | **08 42 15.9** | **+0.5** |
| | 9.6nm,1.0s | | | | | | |
| KURK | | | | ⇑Sn | **Sn** | **08 43 47.0** | **+1.7** |
| | 20nm,1.0s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 08 44 29.4 | |
| | 104nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.04** | **252** | ⇓Pn | **Pn** | **08 42 17.8** | **+1.1** |
| | 3.6nm,0.4s | | | | | | |
| KURBB | | | | ⇑Sn | **Sn** | **08 43 47.1** | **-0.5** |
| | 32nm,0.9s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 08 44 30.5 | |
| | 85nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.04** | **252** | Pn | **Pn** | **08 42 17.3** | **+0.6** |
| | 0.3nm,0.3s,baz=65,slow=14,SNR=8.8 | | | | | | |
| KURBB | | | | Sn | **Sn** | **08 43 47.0** | **-0.5** |
| | 0.1nm,0.3s,baz=71,slow=20,SNR=7.7 | | | | | | |
| KURBB | | | | Lg | Lg | 08 44 32.5 | |
| | 0.0nm,0.3s,baz=69,slow=33,SNR=4.2 | | | | | | |
| **MK31** | **Makanchi Array** | **8.76** | **221** | ⇓Pn | Pn | 08 42 28.2 | +1.6 |
| | 2.3nm,0.8s,baz=46,slow=14,SNR=4.8 | | | | | | |
| MK31 | | | | ⇓Pg | Pg | 08 43 00.1 | -7.3 |
| | 6.4nm,1.1s | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **08 44 07.8** | **+2.6** |
| | 7.6nm,1.1s,baz=44,slow=21,SNR=3.8 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 08 44 53.9 | |
| | 30nm,1.3s,baz=36,slow=28,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.76** | **221** | Pn | **Pn** | **08 42 26.2** | **-0.3** |
| | 0.3nm,0.3s,baz=34,slow=16,SNR=4.8 | | | | | | |
| MKAR | | | | Sn | **Sn** | **08 44 04.0** | **-1.2** |
| | 0.2nm,0.3s,baz=31,slow=20,SNR=2.2 | | | | | | |
| MKAR | | | | Lg | Lg | 08 44 51.9 | |
| | 0.1nm,0.3s,baz=34,slow=27,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **11.62** | **114** | Lg | Lg | 08 46 11.2 | |
| | 0.1nm,0.3s,baz=309,slow=32,SNR=12 | | | | | | |
| **BVAR** | **Borovoye Array** | **12.08** | **275** | Sn | **Sn** | **08 45 25.5** | **-1.0** |
| | 0.4nm,0.3s,baz=68,slow=24,SNR=3.1 | | | | | | |
| **OTUK** | **Ortayu** | **12.73** | **252** | ⇓Lg | Lg | 08 47 03.1 | |
| | 9.2nm,1.1s | | | | | | |

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*AUST **11** 09:07:09.6, 1°.51N×98°.50E, h100km*
*IDC **11** 09:07:12.7±0.9, 2°.09N×99°.28E, h129km±4km, mb3.9/8, mb1 4.0/9, mb1mx3.5/50, mbtmp4.3/9, Error ellipse: s-maj=54.4km s-min=12.5km az=55.0*
*NEIC **11** 09:07:12.8±0.5, 1°.95N×99°.07E, h139km±4km, mb4.1/1, Error ellipse: s-maj=9.7km s-min=6.6km az=60.0*
*ISCJB **11** 09:07:12.1±0.3, 1°.96N±0°.04×98°.94E±0°.05, h150km, mb4.2/10, Error ellipse: s-maj=7.7km s-min=5.0km az=143.9*
*DJA **11** 09:07:14.7±0.6, 2°N±4°×9°9E±°, h114km±7km, M4.0/11, MLv4.0/11*
*KLM **11** 09:07:18.0, 2°.25N×99°.20E, h132km, mb4.3, ML3.6*
**ISC 11 09:07:13.8**±0.6**, 2°.00N**±0°.05×**98°.97E**±0°.05**, h150**km**, n44, σ1s.63**/48**, mb4.0**/10**, 2C-2D, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **0.80** | **357** | P | **Pn** | **09 07 34.3** | **-2.9** |
| | 130nm,0.3s,baz=236,slow=6.8,SNR=210 | | | | | | |
| PSI | | | | S | **Sn** | **09 07 49.6** | **-5.4** |
| | 85nm,0.3s,baz=207,slow=9.0,SNR=118 | | | | | | |
| **PSI** | **Prapat** | **0.80** | **357** | P | **Pn** | **09 07 34.3** | **-2.9** |
| | baz=1.3,SNR=78 | | | | | | |
| **MNSI** | **Mandailing Nat** | **1.34** | **153** | P | **Pn** | **09 07 40.5** | **-1.3** |
| **TSI** | **Tuntungan** | **1.55** | **345** | P | **Pn** | **09 07 42.6** | **-1.3** |
| **GSI** | **Gunungsitoli** | **1.56** | **244** | P | **Pn** | **09 07 43.1** | **-0.9** |
| **GSI** | **Gunungsitoli** | **1.56** | **244** | *e*Pn | **Pn** | **09 07 42.9** | **-1.1** |
| GSI | | | | *e*Sn | **Sn** | **09 08 04.7** | **-2.4** |
| **KCSI** | **Kotacane, Aceh** | **1.93** | **322** | P | **Pn** | **09 07 47.3** | **-0.9** |
| **BKNI** | **Bangkinang** | **2.65** | **129** | P | **Pn** | **09 07 56.3** | **-0.5** |
| | baz=2.8,SNR=4.1 | | | | | | |
| **BKNI** | **Bangkinang** | **2.65** | **129** | P | **Pn** | **09 07 56.2** | **-0.6** |
| BKNI | | | | S | **Sn** | **09 08 28.6** | **-1.4** |
| **BKNI** | **Bangkinang** | **2.65** | **129** | *e*Pn | **Pn** | **09 07 54.1** | **-2.7** |
| **PPI** | **Padang Panjang** | **2.82** | **150** | P | **Pn** | **09 07 59.0** | **0.0** |
| **FRIM** | **Kepong** | **2.92** | **65** | ⇓P | **Pn** | **09 07 58.7** | **-1.4** |
| **IPM** | **Ipoh** | **3.21** | **40** | ⇓P | **Pn** | **09 08 03.8** | **-0.1** |
| **IPM** | **Ipoh** | **3.21** | **40** | *e*Pn | **Pn** | **09 08 03.5** | **-0.3** |
| **SISI** | **Saibi** | **3.31** | **178** | P | **Pn** | **09 08 02.5** | **-2.6** |
| **MLSI** | **Meulaboh, Aceh** | **3.41** | **311** | P | **Pn** | **09 08 05.5** | **-1.0** |
| **KULM** | **Kulim** | **3.67** | **27** | ⇑P | **Pn** | **09 08 08.9** | **-0.9** |
| **KULM** | **Kulim** | **3.67** | **27** | *e*Pn | **Pn** | **09 08 08.7** | **-1.2** |
| **LHMI** | **Lhok Sumawe** | **3.79** | **328** | P | **Pn** | **09 08 11.1** | **-0.3** |
| | baz=4.0,SNR=3.5 | | | | | | |
| **PPSI** | **Pulau Pagai** | **4.84** | **168** | P | Pn | 09 08 21.6 | -3.6 |
| **MYKOM** | **Kota Tinggi** | **4.88** | **92** | ⇑P | Pn | 09 08 27.3 | +1.6 |
| **CMAR** | **Chiang Mai Arr** | **16.36** | **360** | P | **P** | **09 10 55.1** | **0.0** |
| | 2.5nm,0.3s,baz=191,slow=11,SNR=9.8 | | | | | | |
| **KAPI** | **Kappang** | **21.90** | **109** | P | **P** | **09 11 53.0** | **-2.1** |
| | 3.6nm,0.4s,baz=232,slow=18,SNR=2.4 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.10** | **250** | T | T | 09 41 02.2 | |
| | baz=73,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.10** | **250** | T | T | 09 41 02.4 | |
| | baz=73,slow=75 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.12** | **250** | T | T | 09 40 55.6 | |
| | baz=73,slow=75 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **32.99** | **128** | P | **P** | **09 13 35.8** | **+1.0** |
| | baz=33,SNR=4.5 | | | | | | |
| **KNRA** | **Kununurra** | **34.29** | **122** | P | **P** | **09 13 47.2** | **+1.2** |
| | baz=34,SNR=4.1 | | | | | | |
| **WRKA** | **Warakurna** | **39.12** | **135** | P | P | 09 14 28.8 | +1.9 |
| | baz=39,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.98** | **124** | P | **P** | **09 14 41.8** | **-0.5** |
| | 16nm,0.5s,baz=302,slow=9.1,SNR=121 | | | | | | |
| WRA | | | | PcP | **PcP** | **09 16 40.1** | **+0.4** |
| | 0.4nm,0.5s,baz=314,slow=2.6,SNR=3.7 | | | | | | |
| **WRAB** | **Tennant Creek** | **40.98** | **124** | *e*P | **P** | **09 14 42.0** | **-0.3** |
| | 14nm,0.4s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.49** | **129** | P | **P** | **09 14 53.6** | **-0.9** |
| | 1.9nm,0.4s,baz=299,slow=7.7,SNR=31 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 16 44.8** | **+0.1** |
| | 0.4nm,0.6s,baz=302,slow=3.0,SNR=3.6 | | | | | | |
| ASAR | | | | ScP | **ScP** | **09 20 23.0** | **+1.5** |
| | 0.3nm,0.6s,baz=282,slow=4.4,SNR=3.8 | | | | | | |
| **QIS** | **Mount Isa** | **45.68** | **121** | P | **P** | **09 15 20.4** | **+0.4** |
| | baz=46,SNR=7.5 | | | | | | |
| **SONM** | **Songino Array** | **46.11** | **7** | P | **P** | **09 15 22.0** | **-1.0** |
| | 0.5nm,0.3s,baz=226,slow=6.2,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.93** | **344** | P | **P** | **09 15 30.1** | **+0.8** |
| | 1.4nm,0.4s,baz=152,slow=8.8,SNR=16 | | | | | | |
| MKAR | | | | ScP | **ScP** | **09 20 41.7** | **+2.4** |
| | 0.2nm,0.4s,baz=191,slow=2.9,SNR=2.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.45** | **343** | P | **P** | **09 16 04.8** | **+1.3** |
| | 1.1nm,0.3s,baz=156,slow=7.2,SNR=13 | | | | | | |
| KURBB | | | | PcP | **PcP** | **09 17 17.5** | **+1.7** |
| | 0.5nm,0.5s,baz=157,slow=3.8,SNR=5.8 | | | | | | |
| KURBB | | | | ScP | **ScP** | **09 21 00.9** | **+2.5** |
| | 0.2nm,0.2s,baz=148,slow=5.5,SNR=3.0 | | | | | | |
| **KURK** | **Kurchatov** | **51.51** | **344** | P | **P** | **09 16 04.8** | **+0.9** |
| KURK | | | | PcP | **PcP** | **09 17 17.5** | **+1.5** |
| KURK | | | | ScP | **ScP** | **09 21 00.9** | **+2.2** |
| **QLP** | **Quilpie** | **52.08** | **126** | P | **P** | **09 16 09.6** | **+0.9** |
| | baz=52,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.08** | **350** | P | **P** | **09 16 16.4** | **+1.0** |
| | 4.1nm,0.4s,baz=166,slow=7.0,SNR=13 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **55.46** | **131** | P | **P** | **09 16 33.8** | **+0.7** |
| | baz=56,SNR=8.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **56.10** | **340** | P | **P** | **09 16 38.0** | **+0.7** |
| | 1.0nm,0.4s,baz=126,slow=7.4,SNR=4.7 | | | | | | |
| **EIDS** | **Eidsvold** | **57.28** | **122** | P | **P** | **09 16 46.9** | **+0.7** |
| | baz=58,SNR=3.7 | | | | | | |
| **ABKAR** | **Akbulak array** | **57.67** | **331** | *e*P | **P** | **09 16 49.2** | **+0.8** |
| | 1.1nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **142.05** | **33** | PKhKP | PKPpre | 09 26 26.1 | |
| | 0.2nm,0.6s,baz=248,slow=1.0,SNR=3.8 | | | | | | |

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*AUST **11** 09:35:37.8, 16°.57S×173°.37W, h450km*
*ISCJB **11** 09:36:19.8±0.7, 17°.1S±0°.2×179°.1W±0°.1, h500km, mb3.5/4, Error ellipse: s-maj=34.3km s-min=11.3km az=151.8*
*IDC **11** 09:36:20.9±2.2, 17°.05S×179°.13W, h502km±27km, mb2.8/3, mb1 3.3/4, mb1mx3.0/22, mbtmp3.9/4, Error ellipse: s-maj=87.4km s-min=17.0km az=154.0*
**ISC 11 09:36:20.8**±0.9**, 17°.1S**±0°.3×**179°.0W**±0°.2**, h500**km**, n24, σ1s.05**/23**, mb3.5**/4**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.68** | **66** | P | **P** | **09 38 14.7** | **+0.6** |
| | 4.4nm,0.3s,baz=197,slow=19,SNR=9.4 | | | | | | |
| **EIDS** | **Eidsvold** | **28.99** | **248** | P | **P** | **09 41 39.9** | **+0.4** |
| | baz=34,SNR=4.7 | | | | | | |
| **ARMA** | **Armidale** | **29.84** | **238** | P | **P** | **09 41 47.6** | **+0.8** |
| | baz=35,SNR=8.2 | | | | | | |
| **RMQ** | **Roma** | **31.25** | **247** | P | **P** | **09 42 00.3** | **+1.3** |
| | baz=36,SNR=7.3 | | | | | | |
| **CNB** | **Canberra Magne** | **33.45** | **231** | P | **P** | **09 42 17.7** | **+0.1** |
| | baz=38,SNR=8.8 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.03** | **239** | P | **P** | **09 42 30.9** | **0.0** |
| | baz=40,SNR=17 | | | | | | |
| **QLP** | **Quilpie** | **35.27** | **248** | P | **P** | **09 42 33.3** | **+0.3** |
| | baz=40,SNR=12 | | | | | | |
| **COEN** | **Coen** | **36.51** | **270** | P | **P** | **09 42 45.8** | **+2.3** |
| | baz=42,SNR=6.6 | | | | | | |
| **TOO** | **Toolangi** | **37.22** | **230** | P | **P** | **09 42 48.0** | **-1.0** |
| | baz=42,SNR=3.8 | | | | | | |
| **HTT** | **Hallett** | **41.04** | **239** | P | P | 09 43 16.8 | -3.3 |
| | baz=46,SNR=7.0 | | | | | | |
| **BBOO** | **Buckleboo** | **43.28** | **240** | P | **P** | **09 43 37.3** | **-0.4** |
| | baz=48,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.20** | **259** | P | **P** | **09 43 43.7** | **-1.4** |
| | 2.0nm,0.7s,baz=89,slow=8.3,SNR=79 | | | | | | |
| WRA | | | | PcP | **pP** | **09 45 18.2** | **+0.5** |
| | 0.4nm,0.5s,baz=96,slow=3.4,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **44.44** | **253** | P | **P** | **09 43 47.1** | **+0.2** |
| | 17nm,0.6s,baz=89,slow=8.0,SNR=360 | | | | | | |
| ASAR | | | | PcP | **pP** | **09 45 18.4** | **-1.3** |
| | 0.7nm,0.4s,baz=105,slow=3.9,SNR=6.4 | | | | | | |
| **KDU** | **Kakadu** | **46.98** | **268** | P | **P** | **09 44 07.7** | **+1.3** |
| | baz=52,SNR=4.8 | | | | | | |
| **WRKA** | **Warakurna** | **49.53** | **251** | P | **P** | **09 44 25.4** | **0.0** |
| | baz=55,SNR=16 | | | | | | |
| **KNRA** | **Kununurra** | **49.98** | **264** | P | **P** | **09 44 29.7** | **+0.9** |
| | baz=55,SNR=5.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **52.58** | **260** | P | **P** | **09 44 48.5** | **+0.9** |
| | baz=58,SNR=4.6 | | | | | | |
| **MEEK** | **Meekatharra** | **58.16** | **249** | P | **P** | **09 45 25.6** | **-1.0** |
| | baz=63,SNR=4.0 | | | | | | |
| **LUWI** | **Luwuk** | **59.40** | **279** | P | **P** | **09 45 33.3** | **-1.7** |
| | baz=65,SNR=4.3 | | | | | | |
| **ILAR** | **Eielson Array** | **85.26** | **13** | P | **P** | **09 48 02.5** | **-1.2** |
| | 0.2nm,0.3s,baz=224,slow=5.3,SNR=6.9 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **85.83** | **277** | P | P | 09 48 12.3 | +4.6 |
| | baz=91,SNR=3.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.08** | **58** | P | **P** | **09 48 09.1** | **+0.5** |
| | 0.1nm,0.6s,baz=229,slow=5.5,SNR=2.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **143.81** | **315** | PKP | PKPab | 09 54 57.9 | -0.1 |
| | 1.1nm,0.7s,baz=90,slow=4.3,SNR=3.2 | | | | | | |
| **GERES** | **GERESS Array B** | **146.70** | **345** | PKPbc | **PKPbc** | **09 55 06.2** | **-0.1** |
| | 0.4nm,0.4s,baz=32,slow=5.8,SNR=1.9 | | | | | | |

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*ISCJB **11** 09:44:08.3±0.6, 32°.14N±0°.03×115°.16W±0°.05, h21km±10km, Error ellipse: s-maj=7.0km s-min=4.6km az=171.8*
*ECX **11** 09:44:09.5±0.5, 32°.13N×115°.18W, h8km, MD2.8, ML3.0*
*MEX **11** 09:44:10.0±0.4, 32°.20N×115°.05W, h18km±704km, MD3.5*
**ISC 11 09:44:08.1**±1.4**, 32°.13N**±0°.03×**115°.16W**±0°.04**, h21**km±2km**, n20, σ0s.34**/28**, 5C-10D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.28** | **354** | *e*P | **Pb** | **09 44 14.7** | **+0.2** |
| MBIG | | | | *e*S | **Sb** | **09 44 18.3** | **-0.6** |
| **MBIG** | **Mexicali** | **0.28** | **354** | ⇓*e*P | **Pb** | **09 44 15.0** | **+0.5** |
| **CPBX** | **Cerro Prieto** | **0.31** | **337** | ⇓*e*P | **Pb** | **09 44 15.0** | **+0.1** |
| CPBX | | | | ⇓*e*P | **Pb** | **09 44 15.1** | **+0.1** |
| CPBX | | | | *e*S | **Sb** | **09 44 19.7** | **+0.1** |
| CPBX | | | | IAML | | 09 44 21.9 | |
| | comp=E,6μm,0.3s | | | | | | |
| CPBX | | | | ⇑*e* | | 09 44 21.9 | |
| **EMSC** | **East Mesa** | **0.62** | **14** | ⇓*i*P | **Pb** | **09 44 20.6** | **+0.2** |
| **ECBX** | **El Chinero** | **0.67** | **172** | ⇓*e*P | **Pb** | **09 44 21.1** | **+0.1** |
| ECBX | | | | *e*S | **Sb** | **09 44 30.4** | **+0.5** |
| **YMD** | **Yuma Desert** | **0.67** | **51** | *e*P | **Pb** | **09 44 21.2** | **+0.1** |
| **RDX** | **Rancho Dawling** | **0.69** | **253** | ⇑*e*P | **Pb** | **09 44 21.8** | **+0.1** |
| RDX | | | | *e*S | **Sb** | **09 44 30.8** | **-0.1** |
| RDX | | | | IAML | | 09 44 31.3 | |
| | comp=N,386nm,0.5s | | | | | | |
| RDX | | | | ⇑*e* | | 09 44 31.3 | |
| **SGL** | **Mount Signal** | **0.70** | **317** | *e*P | **Pb** | **09 44 21.7** | **+0.1** |
| **DREC** | **Desert Rsrch C** | **0.71** | **340** | *e*P | **Pb** | **09 44 22.1** | **+0.3** |
| **COA** | **Coachella** | **0.73** | **3** | ⇓*i*P | **Pb** | **09 44 21.9** | **-0.2** |
| **WESC** | **Westside Schoo** | **0.79** | **322** | *e*P | **Pb** | **09 44 23.4** | **+0.3** |
| **YUH** | **Yuha Desert** | **0.82** | **309** | ⇓*i*P | **Pb** | **09 44 23.2** | **-0.5** |
| **RMX** | **La Rumorosa** | **0.91** | **301** | ⇑*e*P | **Pb** | **09 44 25.1** | **-0.1** |
| RMX | | | | *e*S | **Sb** | **09 44 36.7** | **-0.2** |
| RMX | | | | IAML | | 09 44 38.3 | |
| | comp=N,407nm,0.2s | | | | | | |
| RMX | | | | ⇓*e* | | 09 44 38.3 | |
| **SPIG** | **San Pedro Mart** | **1.11** | **194** | *e*P | **Pn** | **09 44 28.8** | **0.0** |
| SPIG | | | | *i* S | **Sb** | **09 44 42.9** | **-0.2** |
| **SPIG** | **San Pedro Mart** | **1.11** | **194** | ⇓*e*P | **Pn** | **09 44 28.7** | **-0.1** |
| **SPX** | **San Pedro Mart** | **1.11** | **193** | ⇓*e*P | **Pn** | **09 44 28.8** | **0.0** |
| **ZAX** | **El Zacaton** | **1.13** | **237** | IAML | | 09 44 47.0 | |
| | comp=E,543nm,0.5s | | | | | | |
| **CBX** | **Cerro Bola** | **1.28** | **278** | *e*P | **Pn** | **09 44 31.1** | **+0.1** |
| CBX | | | | *e*S | **Sn** | **09 44 47.2** | **-0.4** |
| **CBX** | **Cerro Bola** | **1.28** | **278** | *e*P | **Pn** | **09 44 31.3** | **+0.3** |
| CBX | | | | *e*S | **Sb** | **09 44 48.7** | **+0.9** |
| CBX | | | | IAML | | 09 44 52.4 | |
| | comp=E,412nm,0.5s | | | | | | |
| CBX | | | | ⇑*e* | | 09 44 52.4 | |
| **BAR** | **Barrett** | **1.39** | **294** | *e*P | **Pn** | **09 44 32.6** | **+0.3** |

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**MEX 11 09:44:33.6**±0.6**, 17°.14N**×**101°.00W, h29**km±10km**, MD4.0, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAIG** | **El Cayaco** | **0.71** | **97** | *e*P | Pb | 09 44 45.0 | -2.4 |
| CAIG | | | | *i* S | Sb | 09 44 54.3 | -2.6 |
| **ARIG** | **Puente Sto Nin** | **1.29** | **29** | *e*P | Pn | 09 44 53.2 | -2.6 |
| ARIG | | | | *e*S | Sn | 09 45 08.8 | -3.5 |
| **MEIG** | **Mezcala** | **1.53** | **59** | *e*P | Pn | 09 44 57.5 | -1.6 |
| MEIG | | | | *i* S | Sn | 09 45 15.3 | -3.0 |
| **PLIG** | **Platanillo** | **1.90** | **49** | *e*P | Pn | 09 45 02.5 | -1.6 |
| PLIG | | | | *i* S | Sn | 09 45 24.0 | -3.2 |
| **PNIG** | **Pinotepa** | **2.85** | **105** | *e*P | Pn | 09 45 15.1 | -2.2 |
| PNIG | | | | *i* S | Sn | 09 45 47.4 | -3.4 |

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**IDC 11 09:53:21.9**±2.9**, 5°.17S**×**151°.69E, h0**km**, mb3.7**/3**, mb1 4.0**/4**, mb1mx3.4**/39**, mbtmp3.8**/4**, ML1.5**/1**, MS2.7**/1**, Ms1 2.7**/1**, ms1mx2.3**/29**, Error ellipse: s-maj=106.5km s-min=36.6km az=125.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **6.16** | **227** | Pn | Pn | 09 54 55.7 | +1.5 |
| | 0.7nm,0.3s,baz=58,slow=19,SNR=2.3 | | | | | | |
| PMG | | | | Sn | Sn | 09 56 05.7 | +0.2 |
| | 1.3nm,0.3s,baz=131,slow=19,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.38** | **227** | P | P | 09 58 21.6 | -0.5 |
| | 1.0nm,0.6s,baz=52,slow=9.9,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **25.14** | **221** | P | P | 09 58 49.3 | +0.3 |
| | 1.2nm,0.5s,baz=57,slow=8.7,SNR=33 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.52** | **241** | P | P | 09 59 19.0 | -0.4 |
| | 0.7nm,0.4s,baz=55,slow=8.9,SNR=8.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.37** | **344** | LR | LR | 10 18 54.0 | |
| | comp=Z,9.5nm,20.5s,baz=120,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.36** | **287** | PKPbc | PKPbc | 10 13 13.5 | -0.5 |
| | 0.3nm,0.6s,baz=65,slow=3.4,SNR=3.7 | | | | | | |

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**MEX 11 10:22:01.5**±0.4**, 14°.31N**×**92°.15W, h16**km±92km**, MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.73** | **324** | *i* P | Pn | 10 22 27.4 | -3.6 |
| PCIG | | | | *i* S | Sn | 10 22 48.1 | -4.6 |

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*IDC **11** 10:41:02.3±1.1, 1°.56N×127°.22E, h0km, mb4.1/6, mb1 4.2/8, mb1mx3.8/41, mbtmp4.1/8, ML3.8/2, MS2.8/4, Ms1 2.8/4, ms1mx2.5/42, Error ellipse: s-maj=53.5km s-min=17.1km az=72.0*
*DJA **11** 10:41:11.8±0.6, 2°N±3°×12°7E±°, h21km±10km, M4.4/9, mb4.5/3, mB4.9/1, MLv4.4/7, MLv4.4/9, Mw(mB)4.2/1*
*ISCJB **11** 10:41:12.7±0.7, 1°.49N±0°.05×126°.95E±0°.06, h103km, mb4.0/6, Error ellipse: s-maj=8.4km s-min=6.6km az=148.0*
**ISC 11 10:41:14.2**±0.9**, 1°.50N**±0°.06×**126°.99E**±0°.08**, h103**km**, n22, σ1s.52**/20**, mb3.9**/6**, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **0.81** | **152** | P | Pn | 10 41 27.8 | -5.2 |
| **LBMI** | **Labuha** | **2.18** | **166** | P | **Pn** | **10 41 47.6** | **-1.7** |
| LBMI | | | | S | **Sn** | **10 42 16.0** | **-0.1** |
| **SGSI** | **Sangihe** | **2.62** | **326** | P | **Pn** | **10 41 55.0** | **0.0** |
| SGSI | | | | S | **Sn** | **10 42 22.5** | **-3.8** |
| **KMSI** | **Cibinong** | **3.14** | **253** | P | **Pn** | **10 42 00.1** | **-1.8** |
| KMSI | | | | S | **Sn** | **10 42 37.7** | **-1.0** |
| **GTOI** | **Gorontalo** | **4.07** | **258** | P | **Pn** | **10 42 13.8** | **-0.5** |
| **NLAI** | **Namlea** | **4.70** | **179** | P | **Sn** | **10 43 14.5** | **-1.9** |
| **SIJI** | **Sorong** | **4.88** | **119** | LR | LR | 10 43 31.5 | |
| | comp=Z,60nm,19.2s,baz=259,slow=32 | | | | | | |
| **LUWI** | **Luwuk** | **4.91** | **239** | P | **Pn** | **10 42 26.5** | **+0.8** |
| LUWI | | | | S | **Sn** | **10 43 21.5** | **+0.1** |
| **MRSI** | **Marisa** | **5.14** | **259** | P | **Pn** | **10 42 27.3** | **-1.6** |
| | 58nm,0.8s,0.2nm | | | | | | |
| **APSI** | **Ampana** | **5.85** | **246** | P | **Pn** | **10 42 38.0** | **-0.5** |
| **BKSI** | **Bulukumba** | **9.64** | **225** | P | **Pn** | **10 43 29.6** | **-0.4** |
| **KAPI** | **Kappang** | **9.70** | **228** | Pn | Pn | 10 43 27.0 | -3.8 |
| | 1.9nm,0.3s,baz=9.8,slow=5.7,SNR=4.8 | | | | | | |
| **BATI** | **Baumata** | **12.09** | **196** | LR | LR | 10 49 25.1 | |
| | comp=Z,49nm,20.0s,baz=318,slow=41 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **19.52** | **184** | P | **P** | **10 45 32.0** | **-1.6** |
| | 0.1nm,0.3s,baz=29,slow=10,SNR=2.7 | | | | | | |
| **GUMO** | **Guam** | **21.39** | **55** | LR | LR | 10 52 52.7 | |
| | comp=Z,25nm,20.2s,baz=219,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.49** | **162** | P | **P** | **10 46 04.2** | **-1.1** |
| | 2.5nm,0.4s,baz=338,slow=10,SNR=91 | | | | | | |
| **PMG** | **Port Moresby** | **22.83** | **119** | LR | LR | 10 57 52.0 | |
| | comp=Z,38nm,19.3s,baz=292,slow=45 | | | | | | |
| **ASAR** | **Alice Springs** | **25.90** | **165** | P | **P** | **10 46 36.5** | **-0.3** |
| | 2.7nm,0.8s,baz=347,slow=12,SNR=26 | | | | | | |
| **SONM** | **Songino Array** | **49.48** | **342** | P | **P** | **10 49 55.1** | **+0.8** |
| | 1.2nm,0.8s,baz=168,slow=11,SNR=6.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.53** | **326** | P | **P** | **10 51 08.3** | **+1.4** |
| | 3.0nm,0.6s,baz=123,slow=8.5,SNR=18 | | | | | | |
| **GEYT** | **Alibeck** | **72.49** | **309** | P | **P** | **10 52 31.9** | **+1.8** |
| | 2.3nm,0.6s,baz=114,slow=7.0,SNR=3.0 | | | | | | |
| **VNDA** | **Vanda** | **81.19** | **173** | P | **P** | **10 53 18.6** | **+0.5** |
| | 0.9nm,0.9s,baz=320,slow=8.1,SNR=4.0 | | | | | | |

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*NEIC **11** 10:46:46.4, 40°.42S×176°.29E, h36km, ML3.8(WEL), After WEL.*
*NEIC Felt at Dannevirke.*
**WEL 11 10:46:46.5**±0.1**, 40°.41S**×**176°.25E, h33**km**, ML3.9**/43**, 14C-5D, Error ellipse: s-maj=1.5km s-min=0.8km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DVHZ** | **Dannevirke** | **0.13** | **330** | P* | Pb | 10 46 51.8 | -0.7 |
| DVHZ | | | | S* | Sb | 10 46 56.1 | -0.4 |
| **DVHZ** | **Dannevirke** | **0.13** | **330** | P* | Pb | 10 46 51.8 | -0.7 |
| DVHZ | | | | S* | Sb | 10 46 56.1 | -0.4 |
| **ANWZ** | **Angora Road** | **0.18** | **106** | ⇑P* | Pb | 10 46 52.8 | 0.0 |
| ANWZ | | | | S* | Sb | 10 46 58.0 | +0.8 |
| **PRWZ** | **Pori Road** | **0.26** | **235** | ⇑P* | Pn | 10 46 54.3 | +0.5 |
| PRWZ | | | | S* | Sb | 10 47 00.5 | +1.8 |
| **PRWZ** | **Pori Road** | **0.26** | **235** | P* | Pn | 10 46 54.3 | +0.5 |
| PRWZ | | | | S* | Sb | 10 47 00.5 | +1.8 |
| **BFZ** | **Birch Farm** | **0.27** | **180** | P* | Pn | 10 46 54.1 | +0.1 |
| BFZ | | | | S* | Sb | 10 47 00.2 | +1.2 |
| BFZ | | | | AML | AML | 10 47 00.5 | |
| BFZ | | | | AML | AML | 10 47 00.5 | |
| BFZ | | | | AML | AML | 10 47 02.0 | |
| **BFZ** | **Birch Farm** | **0.27** | **180** | P* | Pb | 10 46 53.8 | -0.2 |
| BFZ | | | | S* | Sb | 10 47 00.2 | +1.2 |
| **PRHZ** | **Porangahau** | **0.33** | **64** | ⇑P* | Pb | 10 46 54.3 | -0.3 |
| **PRHZ** | **Porangahau** | **0.33** | **64** | P* | Pb | 10 46 54.3 | -0.3 |
| **POWZ** | **Post Office Ro** | **0.37** | **273** | P* | Pn | 10 46 55.4 | -0.2 |
| **POWZ** | **Post Office Ro** | **0.37** | **273** | P* | Pn | 10 46 55.4 | -0.2 |
| **WPHZ** | **Waipukurau** | **0.37** | **23** | P* | Pb | 10 46 54.7 | -0.5 |
| **WPHZ** | **Waipukurau** | **0.37** | **23** | P* | Pb | 10 46 54.8 | -0.5 |
| **TSZ** | **Takapari Road** | **0.41** | **328** | ⇑P* | Pb | 10 46 55.2 | -0.7 |
| TSZ | | | | AML | AML | 10 47 02.1 | |
| TSZ | | | | AML | AML | 10 47 02.1 | |
| TSZ | | | | AML | AML | 10 47 02.1 | |
| TSZ | | | | AML | AML | 10 47 02.1 | |
| **TSZ** | **Takapari Road** | **0.41** | **328** | P* | Pb | 10 46 55.2 | -0.6 |
| **TIWZ** | **Tintock** | **0.46** | **217** | P* | Pn | 10 46 57.1 | +0.3 |
| TIWZ | | | | AML | AML | 10 47 05.6 | |
| TIWZ | | | | AML | AML | 10 47 05.7 | |
| **TIWZ** | **Tintock** | **0.46** | **217** | P* | Pn | 10 46 57.1 | +0.3 |
| **PNHZ** | **Pukenui** | **0.50** | **356** | ⇑P* | Pb | 10 46 56.4 | -0.7 |
| **PNHZ** | **Pukenui** | **0.50** | **356** | P* | Pb | 10 46 56.4 | -0.7 |
| **CPWZ** | **Castlepoint** | **0.50** | **184** | ⇑P* | Pn | 10 46 58.1 | +0.8 |
| **CPWZ** | **Castlepoint** | **0.50** | **184** | P* | Pn | 10 46 58.1 | +0.8 |
| **MRZ** | **Mangatainoka R** | **0.57** | **244** | P* | Pn | 10 46 58.3 | 0.0 |
| MRZ | | | | AML | AML | 10 47 08.7 | |
| MRZ | | | | AML | AML | 10 47 08.8 | |
| **MRZ** | **Mangatainoka R** | **0.57** | **244** | P* | Pn | 10 46 58.3 | 0.0 |
| **PXZ** | **Pawanui** | **0.60** | **51** | ⇓P* | Pn | 10 46 58.1 | -0.6 |
| PXZ | | | | AML | AML | 10 47 10.4 | |
| PXZ | | | | AML | AML | 10 47 10.4 | |
| PXZ | | | | AML | AML | 10 47 12.0 | |
| PXZ | | | | AML | AML | 10 47 12.1 | |
| **PXZ** | **Pawanui** | **0.60** | **51** | P* | Pn | 10 46 58.1 | -0.6 |
| **HOWZ** | **Holdsworth Sta** | **0.74** | **229** | ⇓P* | Pn | 10 47 00.7 | 0.0 |
| **HOWZ** | **Holdsworth Sta** | **0.74** | **229** | P* | Pn | 10 47 00.7 | 0.0 |
| **TMWZ** | **Te Maipa** | **0.75** | **201** | P* | Pn | 10 47 00.7 | -0.1 |
| **TMWZ** | **Te Maipa** | **0.75** | **201** | P* | Pn | 10 47 00.7 | -0.1 |
| **KRHZ** | **Kereru** | **0.77** | **7** | ⇑PN | Pn | 10 47 00.5 | -0.6 |
| **KAHZ** | **Kahuranaki** | **0.78** | **38** | PN | Pn | 10 47 00.8 | -0.5 |
| **KAHZ** | **Kahuranaki** | **0.78** | **38** | Pn | Pn | 10 47 00.8 | -0.5 |
| **OGWZ** | **Otaki Gorge** | **0.92** | **243** | ⇓P* | Pn | 10 47 03.2 | +0.2 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OGWZ | Otaki Gorge | 0.92 | 243 | P* | Pn | 10 47 03.2 | +0.2 |
| BHHZ | Black Hill Sta | 0.93 | 351 | ⇑PN | Pn | 10 47 03.0 | -0.3 |
| BHHZ | Black Hill Sta | 0.93 | 351 | Pn | Pn | 10 47 03.0 | -0.3 |
| MTW | Mount Morrison | 0.94 | 217 | ⇓P* | Pn | 10 47 03.0 | -0.4 |
| MTW | | | | AML | AML | 10 47 16.5 | |
| MTW | | | | AML | AML | 10 47 30.2 | |
| MTW | Mount Morrison | 0.94 | 217 | P* | Pn | 10 47 03.0 | -0.4 |
| KWHZ | Kaweka Forest | 0.99 | 8 | PN | Pn | 10 47 03.7 | -0.5 |
| MCHZ | McNeill Hill | 1.02 | 20 | ⇑PN | Pn | 10 47 04.2 | -0.4 |
| MCHZ | McNeill Hill | 1.02 | 20 | Pn | Pn | 10 47 04.2 | -0.4 |
| MOVZ | Moawhango | 1.07 | 339 | PN | Pn | 10 47 05.5 | +0.2 |
| MOVZ | | | | AML | AML | 10 47 21.0 | |
| MOVZ | | | | AML | AML | 10 47 21.2 | |
| MOVZ | Moawhango | 1.07 | 339 | Pn | Pn | 10 47 05.5 | +0.2 |
| TRWZ | Traveller | 1.08 | 203 | P* | Pn | 10 47 04.9 | -0.4 |
| TRWZ | | | | AML | AML | 10 47 20.0 | |
| TRWZ | | | | AML | AML | 10 47 23.7 | |
| TRWZ | Traveller | 1.08 | 203 | P* | Pn | 10 47 04.9 | -0.4 |
| KIW | Kapiti Island | 1.11 | 246 | P* | Pn | 10 47 06.0 | +0.2 |
| KIW | | | | AML | AML | 10 47 21.9 | |
| KIW | | | | AML | AML | 10 47 22.2 | |
| KIW | Kapiti Island | 1.11 | 246 | P* | Pn | 10 47 06.0 | +0.2 |
| CAW | Cannon Point | 1.14 | 232 | ⇓P* | Pn | 10 47 05.8 | -0.3 |
| CAW | | | | AML | AML | 10 47 23.9 | |
| CAW | | | | AML | AML | 10 47 27.5 | |
| CAW | Cannon Point | 1.14 | 232 | P* | Pn | 10 47 05.8 | -0.2 |
| PAWZ | Paruwai Farm | 1.15 | 212 | P* | Pn | 10 47 05.8 | -0.5 |
| PAWZ | | | | AML | AML | 10 47 34.9 | |
| PAWZ | | | | AML | AML | 10 47 37.3 | |
| PAWZ | Paruwai Farm | 1.15 | 212 | P* | Pn | 10 47 05.8 | -0.5 |
| WAZ | Wanganui | 1.17 | 304 | PN | Pb | 10 47 07.7 | -0.5 |
| WAZ | | | | AML | AML | 10 47 25.9 | |
| WAZ | | | | AML | AML | 10 47 26.9 | |
| MTVZ | Mangateitei | 1.19 | 329 | PN | Pb | 10 47 08.1 | -0.4 |
| MTVZ | | | | AML | AML | 10 47 25.5 | |
| MTVZ | | | | AML | AML | 10 47 27.7 | |
| WNVZ | Wahianoa | 1.19 | 335 | ⇑PN | Pn | 10 47 07.6 | +0.5 |
| WNVZ | Wahianoa | 1.19 | 335 | Pn | Pn | 10 47 07.6 | +0.6 |
| TUVZ | Tukino | 1.23 | 338 | PN | Pn | 10 47 08.3 | +0.8 |
| TUVZ | | | | AML | AML | 10 47 26.0 | |
| TUVZ | | | | AML | AML | 10 47 26.9 | |
| TUVZ | Tukino | 1.23 | 338 | Pn | Pn | 10 47 08.3 | +0.8 |
| TRVZ | Turoa | 1.23 | 334 | PN | Pn | 10 47 08.3 | +0.6 |
| TRVZ | | | | AML | AML | 10 47 26.6 | |
| TRVZ | | | | AML | AML | 10 47 26.7 | |
| TRVZ | Turoa | 1.23 | 334 | Pn | Pn | 10 47 08.3 | +0.6 |
| WHVZ | Whangaehu Hut | 1.24 | 336 | PN | Pn | 10 47 08.3 | +0.5 |
| WHVZ | Whangaehu Hut | 1.24 | 336 | Pn | Pn | 10 47 08.3 | +0.5 |
| DRZ | Dome Shelter | 1.25 | 335 | PN | Pn | 10 47 08.9 | +0.9 |
| DRZ | | | | AML | AML | 10 47 29.1 | |
| DRZ | | | | AML | AML | 10 47 32.9 | |
| DRZ | Dome Shelter | 1.25 | 335 | Pn | Pn | 10 47 08.9 | +0.9 |
| BKZ | Black Stump Fm | 1.26 | 9 | PN | Pn | 10 47 07.2 | -0.6 |
| BKZ | | | | AML | AML | 10 47 27.9 | |
| BKZ | | | | AML | AML | 10 47 29.3 | |
| BKZ | Black Stump Fm | 1.26 | 9 | Pn | Pn | 10 47 07.2 | -0.6 |
| MSWZ | Moikau Station | 1.26 | 217 | ⇑P* | Pn | 10 47 07.0 | -0.8 |
| MSWZ | | | | AML | AML | 10 47 23.7 | |
| MSWZ | | | | AML | AML | 10 47 23.8 | |
| MSWZ | Moikau Station | 1.26 | 217 | Pn | Pn | 10 47 07.0 | -0.8 |
| FWVZ | Far West T-bar | 1.27 | 335 | ⇑PN | Pn | 10 47 08.8 | +0.6 |
| FWVZ | | | | AML | AML | 10 47 26.8 | |
| FWVZ | | | | AML | AML | 10 47 28.3 | |
| FWVZ | Far West T-bar | 1.27 | 335 | Pn | Pn | 10 47 08.8 | +0.6 |
| ARHZ | Aropaoanui | 1.28 | 27 | PN | Pn | 10 47 07.5 | -0.5 |
| ARHZ | Aropaoanui | 1.28 | 27 | Pn | Pn | 10 47 07.5 | -0.5 |
| PKVZ | Pokaka | 1.32 | 328 | PN | Pn | 10 47 09.6 | +1.0 |
| PKVZ | | | | AML | AML | 10 47 30.2 | |
| PKVZ | | | | AML | AML | 10 47 33.2 | |
| PKVZ | Pokaka | 1.32 | 328 | Pn | Pn | 10 47 09.6 | +1.0 |
| WPVZ | Whakapapa | 1.32 | 336 | AML | AML | 10 47 28.9 | |
| WPVZ | | | | AML | AML | 10 47 29.0 | |
| OTVZ | Oturere | 1.32 | 340 | PN | Pn | 10 47 09.4 | +0.6 |
| OTVZ | | | | AML | AML | 10 47 30.3 | |
| OTVZ | | | | AML | AML | 10 47 32.9 | |
| OTVZ | Oturere | 1.32 | 340 | Pn | Pn | 10 47 09.4 | +0.6 |
| COVZ | Chateau Observ | 1.33 | 336 | PN | Pb | 10 47 10.0 | -1.0 |
| COVZ | Chateau Observ | 1.33 | 336 | Pn | Pn | 10 47 09.8 | +0.9 |
| COVZ | | | | Pn | Pb | 10 47 10.0 | -1.0 |
| NGZ | Ngauruhoe | 1.33 | 338 | PN | Pn | 10 47 09.8 | +0.9 |
| NGZ | | | | AML | AML | 10 47 29.9 | |
| NGZ | | | | AML | AML | 10 47 33.2 | |
| NGZ | Ngauruhoe | 1.33 | 338 | Pn | Pn | 10 47 09.8 | +0.9 |
| NMHZ | Naumai | 1.38 | 18 | PN | Pn | 10 47 09.1 | -0.5 |
| PLWZ | Palliser | 1.38 | 213 | PN | Pn | 10 47 08.5 | -1.0 |
| PLWZ | Palliser | 1.38 | 213 | Pn | Pn | 10 47 08.5 | -1.0 |
| WTVZ | West Tongariro | 1.39 | 338 | AML | AML | 10 47 31.2 | |
| WTVZ | | | | AML | AML | 10 47 34.4 | |
| KRVZ | Karewarewa | 1.39 | 340 | PN | Pn | 10 47 10.9 | +1.1 |
| KRVZ | | | | AML | AML | 10 47 31.1 | |
| KRVZ | | | | AML | AML | 10 47 34.5 | |
| WEL | Wellington | 1.42 | 232 | PN | Pn | 10 47 09.6 | -0.4 |
| WEL | | | | AML | AML | 10 47 28.7 | |
| WEL | Wellington | 1.42 | 232 | Pn | Pn | 10 47 09.6 | -0.4 |
| BHW | Baring Head | 1.44 | 226 | PN | Pn | 10 47 09.6 | -0.7 |
| BHW | | | | AML | AML | 10 47 28.4 | |
| BHW | | | | AML | AML | 10 47 28.5 | |
| BHW | Baring Head | 1.44 | 226 | Pn | Pn | 10 47 09.6 | -0.7 |
| RITZ | Rihia Road | 1.46 | 348 | PN | Pn | 10 47 11.2 | +0.6 |
| RITZ | | | | AML | AML | 10 47 41.6 | |
| RITZ | | | | AML | AML | 10 47 42.5 | |
| RITZ | Rihia Road | 1.46 | 348 | Pn | Pn | 10 47 11.2 | +0.6 |
| RATZ | Rangitukua | 1.58 | 346 | AML | AML | 10 47 37.8 | |
| RATZ | | | | AML | AML | 10 47 51.8 | |
| RAHZ | Arahi | 1.62 | 24 | PN | Pn | 10 47 11.8 | -1.0 |
| TCW | Tory Channel | 1.70 | 241 | PN | Pn | 10 47 13.4 | -0.4 |
| TCW | | | | AML | AML | 10 47 40.1 | |
| TCW | | | | AML | AML | 10 47 40.1 | |
| TCW | Tory Channel | 1.70 | 241 | Pn | Pn | 10 47 13.4 | -0.4 |
| VRZ | Vera Road | 1.72 | 318 | ⇑PN | Pn | 10 47 15.0 | +0.9 |
| VRZ | | | | AML | AML | 10 47 46.1 | |
| VRZ | | | | AML | AML | 10 47 50.4 | |
| VRZ | Vera Road | 1.72 | 318 | Pn | Pn | 10 47 15.0 | +0.9 |
| WATZ | Wairara | 1.75 | 347 | PN | Pn | 10 47 14.3 | -0.2 |
| WATZ | | | | AML | AML | 10 47 43.8 | |
| WATZ | Wairara | 1.75 | 347 | Pn | Pn | 10 47 14.3 | -0.2 |
| KNZ | Kokohu | 1.77 | 39 | PN | Pn | 10 47 13.1 | -1.6 |
| DUWZ | D'Urville Isla | 1.81 | 257 | PN | Pn | 10 47 15.7 | +0.3 |
| DUWZ | | | | AML | AML | 10 47 39.7 | |
| DUWZ | | | | AML | AML | 10 47 39.9 | |
| DUWZ | D'Urville Isla | 1.81 | 257 | Pn | Pn | 10 47 15.7 | +0.3 |
| SNGZ | Shannon Statio | 1.83 | 28 | PN | Pn | 10 47 14.6 | -1.1 |
| SNGZ | Shannon Statio | 1.83 | 28 | Pn | Pn | 10 47 14.6 | -1.1 |
| ALRZ | Allen Road | 1.85 | 2 | PN | Pn | 10 47 15.1 | -0.7 |
| ALRZ | Allen Road | 1.85 | 2 | Pn | Pn | 10 47 15.1 | -0.7 |
| PRGZ | Paritu Road | 1.95 | 41 | PN | Pn | 10 47 15.4 | -1.8 |
| PRGZ | Paritu Road | 1.95 | 41 | Pn | Pn | 10 47 15.4 | -1.8 |
| TUWZ | Tuamarina | 2.02 | 239 | PN | Pn | 10 47 17.2 | -1.0 |
| TUWZ | | | | AML | AML | 10 47 43.0 | |
| TUWZ | | | | AML | AML | 10 47 43.8 | |
| TUWZ | Tuamarina | 2.02 | 239 | Pn | Pn | 10 47 17.2 | -1.0 |
| RIGZ | Rimuhau | 2.07 | 35 | PN | Pn | 10 47 17.3 | -1.6 |
| RRRZ | Republican Roa | 2.08 | 6 | PN | Pn | 10 47 17.9 | -1.1 |
| RRRZ | Republican Roa | 2.08 | 6 | Pn | Pn | 10 47 17.9 | -1.1 |
| TLZ | Tolley Road | 2.15 | 345 | PN | Pn | 10 47 19.4 | -0.7 |
| TLZ | Tolley Road | 2.15 | 345 | Pn | Pn | 10 47 19.4 | -0.7 |
| HIZ | Hauiti | 2.18 | 330 | PN | Pn | 10 47 21.8 | +1.3 |
| HIZ | | | | AML | AML | 10 47 58.9 | |
| HIZ | | | | AML | AML | 10 48 00.8 | |
| HIZ | Hauiti | 2.18 | 330 | Pn | Pn | 10 47 21.8 | +1.3 |
| BSWZ | Blackbirch Sta | 2.22 | 233 | AML | AML | 10 47 42.1 | |
| URZ | Urewera | 2.25 | 18 | ⇑PN | Pn | 10 47 19.5 | -1.9 |
| URZ | | | | AML | AML | 10 47 47.5 | |
| URZ | | | | AML | AML | 10 48 01.1 | |
| MWZ | Matawai | 2.30 | 26 | AML | AML | 10 47 49.4 | |
| MWZ | | | | AML | AML | 10 47 50.3 | |
| NNZ | Nelson | 2.32 | 249 | PN | Pn | 10 47 22.3 | -0.1 |
| NNZ | | | | AML | AML | 10 47 52.6 | |
| NNZ | | | | AML | AML | 10 47 53.9 | |
| NNZ | Nelson | 2.32 | 249 | Pn | Pn | 10 47 22.3 | -0.1 |
| TOZ | Tahuroa Road | 2.74 | 348 | AML | AML | 10 48 17.2 | |
| KHZ | Kahutara | 2.86 | 225 | PN | Pn | 10 47 27.7 | -2.1 |
| KHZ | Kahutara | 2.86 | 225 | Pn | Pn | 10 47 27.7 | -2.1 |
| QRZ | Quartz Range | 2.86 | 260 | PN | Pn | 10 47 29.7 | -0.1 |
| QRZ | | | | AML | AML | 10 48 06.9 | |
| QRZ | | | | AML | AML | 10 48 07.3 | |
| QRZ | | | | AML | AML | 10 48 17.5 | |
| QRZ | | | | AML | AML | 10 51 53.8 | |
| QRZ | Quartz Range | 2.86 | 260 | Pn | Pn | 10 47 29.7 | -0.1 |
| THZ | Tophouse | 2.87 | 241 | PN | Pn | 10 47 28.7 | -1.2 |
| THZ | | | | AML | AML | 10 48 10.7 | |
| THZ | | | | AML | AML | 10 48 13.1 | |
| THZ | Tophouse | 2.87 | 241 | Pn | Pn | 10 47 28.7 | -1.2 |
| HAZ | Te Kaha | 2.91 | 25 | PN | Pn | 10 47 28.2 | -2.2 |
| DSZ | Denniston Nort | 3.62 | 247 | PN | Pn | 10 47 39.3 | -0.9 |
| DSZ | | | | AML | AML | 10 48 22.8 | |
| DSZ | Denniston Nort | 3.62 | 247 | Pn | Pn | 10 47 39.4 | -0.9 |
| CRLZ | Canterbury Las | 4.16 | 219 | PN | Pn | 10 47 45.2 | -2.4 |
| CRLZ | Canterbury Las | 4.16 | 219 | Pn | Pn | 10 47 45.2 | -2.4 |
| MQZ | McQueen's Vall | 4.25 | 218 | PN | Pn | 10 47 45.5 | -3.2 |
| MQZ | McQueen's Vall | 4.25 | 218 | Pn | Pn | 10 47 45.5 | -3.2 |
| OXZ | Oxford | 4.29 | 226 | PN | Pn | 10 47 46.0 | -3.4 |
| OXZ | Oxford | 4.29 | 226 | Pn | Pn | 10 47 46.0 | -3.4 |
| WVZ | Waitaha Valley | 4.91 | 235 | PN | Pn | 10 47 55.7 | -2.2 |
| RPZ | Rata Peaks | 5.08 | 228 | PN | Pn | 10 47 58.5 | -1.9 |
| LBZ | Lake Benmore | 6.00 | 226 | PN | Pn | 10 48 10.8 | -2.1 |
| LBZ | Lake Benmore | 6.00 | 226 | Pn | Pn | 10 48 10.8 | -2.1 |
| ODZ | Otahua Downs | 6.20 | 220 | PN | Pn | 10 48 12.8 | -2.9 |
| ODZ | Otahua Downs | 6.20 | 220 | Pn | Pn | 10 48 12.8 | -2.9 |

**IDC 11 11:06:13.8±2.0, 1°.16N×126°.19E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.1/40, mbtmp3.2/3, Error ellipse: s-maj=189.8km s-min=24.9km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 22.44 | 160 | P | P | 11 11 13.8 | -0.8 |
| | 0.3nm,0.4s,baz=338,slow=10,SNR=8.0 | | | | | | |
| ASAR | Alice Springs | 25.79 | 164 | P | P | 11 11 47.4 | +0.6 |
| | 0.3nm,0.7s,baz=348,slow=14,SNR=7.4 | | | | | | |
| MKAR | Makanchi Array | 59.36 | 326 | P | P | 11 16 18.0 | 0.0 |
| | 0.3nm,0.6s,baz=142,slow=7.3,SNR=2.5 | | | | | | |

*DDA 11 11:17:09.7, 39°.15N×27°.61E, h8km, Md2.8*
*ISCJB 11 11:17:10.4±0.4, 39°.15N±0°.03×27°.66E±0°.04, h0km, Error ellipse: s-maj=4.6km s-min=3.3km az=149.8*
*CSEM 11 11:17:11.0±0.3, 39°.12N×27°.77E, h1km, MD2.7, Error ellipse: s-maj=9.0km s-min=6.4km az=88.0, Mining explosion.*
*ISK 11 11:17:11.4, 39°.09N×27°.97E, h17km, MD2.7*
**ISC 11 11:17:10.9±0.8, 39°.16N±0°.02×27°.72E±0°.03, h0km, n33, σ1s.05/44, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKHS | Akhisar | 0.28 | 165 | i P | Pg | 11 17 16.1 | -0.2 |
| AKHS | | | | i S | Sg | 11 17 21.0 | +1.0 |
| AKHS | Akhisar | 0.28 | 165 | P | Pg | 11 17 16.1 | -0.2 |
| AKHS | | | | S | Sg | 11 17 21.0 | +1.0 |
| AKS | Akhisar | 0.28 | 166 | ePG | Pg | 11 17 16.5 | +0.2 |
| AKS | | | | eSG | Sg | 11 17 21.4 | +1.4 |
| AKS | Akhisar | 0.28 | 166 | ePg | Pg | 11 17 16.5 | +0.2 |
| AKS | | | | eSg | Sg | 11 17 21.4 | +1.4 |
| BALB | Balikesir | 0.50 | 14 | ePG | Pb | 11 17 23.0 | +0.5 |
| BALB | Balikesir | 0.50 | 14 | ePg | Pb | 11 17 23.0 | +0.5 |
| BALY | Balya | 0.59 | 352 | i P | Pg | 11 17 22.7 | +0.5 |
| BALY | Balya | 0.59 | 352 | P | Pg | 11 17 22.7 | +0.5 |
| BALY | | | | S | Sg | 11 17 29.4 | -0.5 |
| DKL | Dikili | 0.64 | 263 | ePG | Pn | 11 17 28.7 | +1.5 |
| DKL | Dikili | 0.64 | 263 | ePg | Pn | 11 17 28.7 | +1.5 |
| DEMI | Demirci | 0.78 | 98 | i P | Pg | 11 17 26.0 | +0.1 |
| DEMI | | | | i S | Sb | 11 17 39.1 | +0.5 |
| DEMI | Demirci | 0.78 | 98 | P | Pg | 11 17 25.9 | +0.1 |
| DEMI | | | | S | Sb | 11 17 39.1 | +0.5 |
| KULA | Kula-Manisa | 0.97 | 131 | ePG | Pg | 11 17 28.1 | -1.4 |
| KULA | Kula-Manisa | 0.97 | 131 | ePg | Pg | 11 17 28.1 | -1.4 |
| URLA | Izmir | 1.19 | 228 | i P | Pg | 11 17 32.1 | -1.5 |
| URLA | | | | i S | Sg | 11 17 48.5 | -0.4 |
| URLA | Izmir | 1.19 | 228 | P | Pg | 11 17 32.1 | -1.5 |
| URLA | | | | S | Sg | 11 17 48.5 | -0.4 |
| EDC | Edincik | 1.20 | 5 | ePN | Pg | 11 17 34.1 | +0.3 |
| EDC | Edincik | 1.20 | 5 | ePn | Pg | 11 17 34.1 | +0.3 |
| AYDB | Zeytinkoy-Aydi | 1.21 | 174 | ePN | Pg | 11 17 33.2 | -0.9 |
| AYDB | Zeytinkoy-Aydi | 1.21 | 174 | ePn | Pg | 11 17 33.2 | -0.9 |
| BOZC | Bozcaada | 1.46 | 298 | P | Pn | 11 17 37.0 | -1.5 |
| BOZC | | | | S | Sg | 11 17 54.5 | -3.4 |
| ULDT | Uludag | 1.47 | 47 | i P | Pn | 11 17 38.6 | -0.2 |
| ULDT | Uludag | 1.47 | 47 | P | Pn | 11 17 38.6 | -0.2 |
| CHOS | Chios island | 1.51 | 240 | ePN | Pg | 11 17 40.7 | +0.9 |
| CHOS | Chios island | 1.51 | 240 | ePn | Pg | 11 17 40.7 | +0.9 |
| GELI | Tayfur-Gelibol | 1.57 | 323 | ePN | Pg | 11 17 41.5 | +0.5 |
| GELI | Tayfur-Gelibol | 1.57 | 323 | ePn | Pg | 11 17 41.5 | +0.5 |
| KHAL | Karahalli | 1.59 | 119 | i P | Pn | 11 17 39.3 | -1.1 |
| KHAL | Karahalli | 1.59 | 119 | P | Pn | 11 17 39.3 | -1.1 |
| KHAL | | | | S | Sg | 11 18 02.9 | +1.0 |
| ARMT | Armutlu | 1.66 | 32 | ePN | Pn | 11 17 40.0 | -1.3 |
| ARMT | Armutlu | 1.66 | 32 | ePn | Pn | 11 17 40.0 | -1.3 |
| ERIK | Erikli-Kesan | 1.78 | 329 | ePN | Pg | 11 17 44.9 | 0.0 |
| ERIK | Erikli-Kesan | 1.78 | 329 | ePn | Pg | 11 17 44.9 | 0.0 |

**IDC 11 11:18:12.3±968.0, 53°.23N×52°.33E, h0km, Error ellipse: s-maj=432.2km s-min=96.1km az=122.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I31KZ | AKTYUBINSK INF | 4.53 | 126 | i | | 11 49 50.0 | |
| | baz=310,slow=323,SNR=35 | | | | | | |
| I46RU | ZALESOVO INFRA | 19.21 | 75 | i | | 13 16 45.0 | |
| | baz=279,slow=314,SNR=7.5 | | | | | | |
| I34MN | SONGINO INFRAS | 34.11 | 77 | i | | 14 47 40.0 | |
| | baz=299,slow=326,SNR=0.7 | | | | | | |

**PGC 11 11:19:25.4±0.8, 54°.50N×123°.81W, h1km, ML3.5/15, 94km Wnw of Prince George, Bc British Columbia, British Columbia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| UBRB | Upper Baezaeko | 1.62 | 186 | Pn | Pn | 11 19 55.1 | -0.2 |
| UBRB | | | | Sg | Sn | 11 20 17.1 | +0.2 |
| WAPA | Wapiti River | 2.72 | 74 | Pg | Pb | 11 20 14.6 | -0.4 |
| WAPA | | | | Sg | Sb | 11 20 49.3 | +0.4 |
| BCBC | Bella Coola | 2.77 | 221 | Sg | Sb | 11 20 51.2 | +1.3 |
| BBB | Bella Bella | 3.47 | 230 | Pn | Pn | 11 20 19.2 | -1.3 |
| BBB | | | | Sn | Sn | 11 20 59.5 | -2.6 |
| BBB | | | | Sg | Sb | 11 21 13.2 | +3.1 |
| BLBC | Blue River | 3.69 | 130 | Pn | Pn | 11 20 23.3 | -0.6 |
| BLBC | | | | Sg | Sb | 11 21 19.8 | +2.7 |
| MNB | Mounoet Dainar | 3.99 | 123 | Sg | Sb | 11 21 28.5 | +2.8 |
| LLLB | Lillooet | 4.07 | 162 | Pn | Pn | 11 20 27.8 | -1.1 |
| LLLB | | | | Sn | Sn | 11 21 14.6 | -2.6 |
| LLLB | | | | Sg | Sg | 11 21 32.6 | -3.7 |
| NCRB | Newcastle Ridg | 4.33 | 199 | Pn | Pn | 11 20 31.6 | -0.8 |
| TLCB | Telegraph Cove | 4.37 | 206 | Sg | Sb | 11 21 39.8 | +3.7 |
| DOWB | Downie Slide | 4.38 | 131 | Pn | Pn | 11 20 31.4 | -1.7 |
| DOWB | | | | Pg | Pb | 11 20 44.6 | +1.5 |
| DOWB | | | | Sg | Sb | 11 21 40.9 | +4.5 |
| PHC | Port Hardy | 4.39 | 212 | Sg | Sg | 11 21 42.0 | -4.5 |
| FNBB | Fort Nelson | 4.42 | 5 | Pn | Pn | 11 20 31.5 | -2.1 |
| FNBB | | | | Pg | Pg | 11 20 47.2 | -3.0 |
| FNBB | | | | Sg | Sg | 11 21 44.4 | -3.1 |
| MAYB | Maynard | 4.59 | 208 | Pg | Pb | 11 20 47.0 | 0.0 |
| WOSB | Woss | 4.67 | 202 | Pn | Pn | 11 20 36.4 | -0.6 |
| WOSB | | | | Pg | Pb | 11 20 48.8 | +0.7 |
| WOSB | | | | Sg | Sb | 11 21 49.1 | +4.2 |
| TXB | Texada | 4.83 | 185 | Pn | Pn | 11 20 39.2 | 0.0 |
| TXB | | | | Pg | Pb | 11 20 51.5 | +0.8 |
| TXB | | | | Sg | Sb | 11 21 53.9 | +4.5 |
| SHB | Sechelt | 4.91 | 180 | Pg | Pb | 11 20 53.5 | +1.1 |
| SHB | | | | Sg | Sb | 11 21 56.5 | +4.5 |
| BTB | Buttle Lake | 5.15 | 193 | Sg | Sg | 11 22 05.4 | -5.8 |
| DLBC | Dease Lake | 5.24 | 321 | Pg | Pb | 11 20 59.4 | +1.6 |
| DLBC | | | | Sg | Sg | 11 22 08.2 | -5.5 |
| PNT | Penticton | 5.80 | 152 | Pn | Pn | 11 20 46.4 | -6.3 |
| PNT | | | | Sn | Sn | 11 21 55.9 | -3.9 |
| PNT | | | | Sg | Sg | 11 22 25.8 | -6.1 |

**IDC 11 11:35:18.5±999.0, 51°.30N×47°.31E, h0km, Error ellipse: s-maj=1048.0km s-min=146.5km az=90.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I31KZ | AKTYUBINSK INF | 6.85 | 93 | i | | 12 17 00.0 | |
| | baz=282,slow=315,SNR=9.6 | | | | | | |
| I46RU | ZALESOVO INFRA | 22.75 | 69 | i | | 13 55 40.3 | |
| | baz=279,slow=324,SNR=3.5 | | | | | | |
| I34MN | SONGINO INFRAS | 37.60 | 71 | i | | 15 24 30.0 | |
| | baz=299,slow=322,SNR=0.9 | | | | | | |

*ISCJB 11 12:34:55.3±0.5, 10°.39N±0°.04×61°.84W±0°.04, h61km±6km, Error ellipse: s-maj=6.9km s-min=4.7km az=135.9*
*FUNV 11 12:34:56.3, 10°.20N×61°.87W, h14km, MW2.8*
*TRN 11 12:34:58.5, 10°.51N×61°.75W, h46km, MD3.4*
**ISC 11 12:34:54.9±1.3, 10°.33N±0°.04×61°.82W±0°.04, h63km±8km, n22, σ1s.80/35, Trinidad**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TPP | Pointe-a-Pierr | 0.37 | 91 | eP | Pn | 12 35 08.0 | +2.1 |
| TPP | | | | eS | Sn | 12 35 15.5 | +1.7 |
| TCE | Chacachacare | 0.38 | 11 | eP | Pn | 12 35 06.0 | +0.1 |
| TCE | | | | eS | Sn | 12 35 12.1 | -1.8 |
| GUIV | Guiria | 0.51 | 309 | i P | Pn | 12 35 06.5 | -0.7 |
| GUIV | | | | eS | Sn | 12 35 13.6 | -2.4 |
| TRN | Trinidad (W) | 0.52 | 52 | eP | Pn | 12 35 07.8 | +0.5 |
| TRN | | | | eS | Sn | 12 35 15.2 | -1.2 |
| TBH | Brigand Hill | 0.76 | 78 | eP | Pn | 12 35 12.0 | +1.9 |
| GUNV | Guanoco | 1.11 | 262 | eP | Pn | 12 35 16.6 | +2.0 |
| GUNV | | | | eS | Sn | 12 35 29.6 | +0.5 |
| BOT | Bacolet | 1.37 | 52 | eP | Pn | 12 35 19.7 | +1.8 |
| CRUV | Carupano | 1.43 | 284 | eP | Pn | 12 35 21.1 | +2.3 |
| CRUV | | | | eS | Sn | 12 35 38.5 | +1.8 |
| TOSP | Speyside | 1.59 | 53 | eP | Pn | 12 35 21.5 | +0.6 |
| TOSP | | | | eS | Sn | 12 35 39.2 | -1.3 |
| GRGR | Grenville | 1.80 | 5 | eP | Pn | 12 35 24.0 | +0.2 |
| GRGR | | | | eS | Sn | 12 35 44.2 | -1.4 |
| GRW | Mount Saint Ca | 1.83 | 5 | eP | Pn | 12 35 25.4 | +1.2 |
| GRW | | | | eS | Sn | 12 35 45.2 | -1.2 |
| GRSS | Sisters | 1.97 | 6 | eP | Pn | 12 35 27.5 | +1.4 |
| ORIV | Oritupano | 2.00 | 232 | eP | Pn | 12 35 27.1 | +0.6 |
| RIOV | Rio Grande | 2.24 | 180 | eP | Pn | 12 35 31.2 | +1.4 |
| PCRV | Puerto La Cruz | 2.77 | 267 | eP | Pn | 12 35 39.0 | +2.0 |
| GURV | El Guri | 2.84 | 206 | eP | Pn | 12 35 38.6 | +0.7 |
| SVB | Belmont | 2.98 | 11 | eP | Pn | 12 35 40.8 | +1.0 |
| SVB | | | | eS | Sn | 12 36 13.2 | -1.3 |
| SVV | Soufriere Volc | 3.03 | 11 | eP | Pn | 12 35 42.9 | +2.3 |
| SVV | | | | eS | Sn | 12 36 13.9 | -1.8 |
| CUPV | Cœpira | 3.91 | 266 | eP | Pn | 12 35 53.8 | +1.2 |
| BIRV | Birongo | 4.38 | 272 | eP | Pn | 12 36 01.5 | +2.6 |
| LUEV | Luepa | 4.47 | 175 | eP | Pn | 12 36 00.8 | +0.4 |
| LUEV | | | | eS | Sn | 12 36 47.9 | -3.3 |
| BAUV | El Baul | 6.28 | 258 | eP | Pn | 12 36 25.3 | +0.3 |
| BAUV | | | | eS | Sn | 12 37 31.6 | -4.0 |

**BJI 11 12:55:02.6, 37°.50N×102°.24E, h10km, ML3.6/15, Ms3.3/4, Ms7 3.0/3, Gansu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LZH | Lanzhou | 1.91 | 137 | Pg | Pn | 12 55 35.8 | +0.4 |
| LZH | | | | Sg | Sb | 12 56 02.3 | +0.5 |
| LZH | | | | SMN | | | |
| | 1µm,1.0s | | | | | | |
| LZH | | | | SME | | | |
| | 710nm,0.9s | | | | | | |
| GTA | Gaotai | 2.69 | 316 | Pg | Pb | 12 55 50.5 | -0.6 |
| GTA | | | | Sg | Sb | 12 56 25.1 | +0.7 |
| GTA | | | | SMN | | | |
| | 270nm,0.7s | | | | | | |
| GTA | | | | SME | | | |
| | 330nm,0.6s | | | | | | |
| XAN | Xi'an | 6.43 | 120 | Pg | Pb | 12 57 00.2 | +5.4 |
| XAN | | | | Sg | Sg | 12 58 24.9 | -4.4 |
| XAN | | | | SMN | | | |
| | 29nm,1.1s | | | | | | |
| XAN | | | | SME | | | |
| | 25nm,1.0s | | | | | | |
| XAN | | | | LN | | | |
| | 94nm,8.8s | | | | | | |
| XAN | | | | LE | | | |
| | 110nm,8.2s | | | | | | |
| XAN | | | | LZ | | | |
| | 130nm,10.5s | | | | | | |

*ISCJB 11 13:00:36.9±0.4, 4°.93S±0°.04×133°.80E±0°.04, h10km, mb4.0/5, MS3.2/1, Error ellipse: s-maj=5.5km s-min=5.0km az=139.6*
*IDC 11 13:00:37.0±2.4, 4°.80S×134°.05E, h0km, mb4.0/4, mb1 4.2/5, mb1mx3.7/24, mbtmp4.1/5, ML4.5/1, MS3.3/2, Ms1 3.3/2, ms1mx2.7/21, Error ellipse: s-maj=153.7km s-min=24.5km az=76.0*
*NEIC 11 13:00:37.9±5.1, 4°.81S×133°.98E, h6km±35km, mb4.5/2, Error ellipse: s-maj=20.1km s-min=11.7km az=218.0*
*DJA 11 13:00:40.3±0.3, 5°S±3°×13°4E±°, h10km, M4.9/16, mb5.0/14, mB5.5/10, MLv4.8/16, Mw(mB)4.9/10*
*AUST 11 13:00:41.3±3.0, 4°.90S×133°.77E, h35km, Error ellipse: s-maj=0.9km s-min=0.6km az=237.0*
**ISC 11 13:00:38.4±0.7, 4°.82S±0°.06×133°.81E±0°.07, h10km, n43, σ1s.52/41, mb4.1/5, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.45 | 321 | P | Pn | 13 01 18.5 | 0.0 |
| | baz=2.5,SNR=192 | | | | | | |
| FAKI | Fak Fak | 2.45 | 321 | P | Pn | 13 01 18.4 | 0.0 |
| FAKI | | | | S | Sn | 13 01 45.7 | -2.7 |
| FAKI | Fak Fak | 2.45 | 321 | ePn | Pn | 13 01 18.4 | 0.0 |
| FAKI | | | | eSn | Sn | 13 01 46.0 | -2.4 |
| RKPI | Ransiki, Papua | 3.31 | 6 | P | Pn | 13 01 32.2 | +1.9 |
| RKPI | | | | S | Sn | 13 02 10.5 | +0.8 |
| BNDI | Bandanaira | 3.90 | 274 | P | Pn | 13 01 39.8 | +1.4 |
| BNDI | | | | S | Sn | 13 02 25.5 | +1.2 |
| SAUI | Saumlaki | 4.01 | 218 | P | Pn | 13 01 42.2 | +2.3 |
| SWI | Sorong | 4.68 | 327 | P | Pn | 13 01 50.4 | +1.2 |
| | baz=4.8,SNR=12 | | | | | | |
| SWI | Sorong | 4.68 | 327 | P | Pn | 13 01 49.8 | +0.6 |
| MSAI | Masohi | 5.08 | 287 | P | Pn | 13 01 55.8 | +1.1 |
| | 33nm,0.5s,666nm0.2nm | | | | | | |
| MSAI | | | | S | Sn | 13 02 50.9 | -2.6 |
| | 33nm,0.5s,666nm0.2nm | | | | | | |
| SMPI | Sarmi | 5.64 | 60 | P | Pn | 13 02 04.8 | +2.4 |
| | 11nm,0.5s,14µm0.1nm | | | | | | |
| AAI | Ambon | 5.71 | 281 | P | Pn | 13 02 04.1 | +0.8 |
| | baz=5.7,SNR=28 | | | | | | |
| AAI | Ambon | 5.71 | 281 | P | Pn | 13 02 04.3 | +1.0 |
| | 192nm,0.6s,5µm1.0nm | | | | | | |
| GENI | Genyem | 6.72 | 71 | P | Pn | 13 02 20.3 | +3.1 |
| | 74nm,0.6s,5µm0.4nm | | | | | | |
| NLAI | Namlea | 6.87 | 283 | P | Pn | 13 02 21.1 | +1.8 |
| | 93nm,0.7s,3µm0.5nm | | | | | | |
| JAY | Jayapura | 7.25 | 72 | P | Pn | 13 02 28.1 | +3.5 |
| | baz=7.3,SNR=3.7 | | | | | | |
| JAY | Jayapura | 7.25 | 72 | P | Pn | 13 02 25.5 | +0.9 |
| | 224nm,1.1s,0.8nm | | | | | | |
| LBMI | Labuha | 7.55 | 303 | P | Pn | 13 02 29.9 | +1.3 |
| | 86nm,0.5s,1µm0.4nm | | | | | | |
| KDU | Kakadu | 7.92 | 189 | P | Pn | 13 02 34.3 | +0.6 |
| | baz=7.9,SNR=64 | | | | | | |
| SANI | Sanana | 8.28 | 289 | P | Pn | 13 02 38.5 | -0.1 |
| | 48nm,0.5s,712nm | | | | | | |
| MTN | Manton Dam | 8.40 | 198 | P | Pn | 13 02 40.1 | -0.2 |
| | baz=8.4,SNR=83 | | | | | | |
| SOEI | Soe | 10.65 | 242 | P | Pn | 13 03 12.1 | +0.7 |
| | baz=11,SNR=5.5 | | | | | | |
| SOEI | Soe | 10.65 | 242 | P | Pn | 13 03 11.9 | +0.6 |
| | 53nm,1.3s | | | | | | |
| SOEI | Soe | 10.65 | 242 | ePn | Pn | 13 03 10.8 | -0.5 |
| | 34nm,0.7s | | | | | | |
| BATI | Baumata | 11.39 | 241 | P | Pn | 13 03 22.1 | +0.8 |
| | 21nm,0.8s | | | | | | |
| KNRA | Kununurra | 11.87 | 204 | P | Pn | 13 03 26.5 | -1.4 |
| | baz=12,SNR=224 | | | | | | |
| APSI | Ampana | 12.75 | 287 | P | Pn | 13 03 40.7 | +0.8 |
| COEN | Coen | 12.95 | 135 | P | Pn | 13 03 40.8 | -1.8 |
| | baz=13,SNR=24 | | | | | | |
| COEN | Coen | 12.95 | 135 | ePn | Pn | 13 03 40.7 | -1.9 |
| KAPI | Kappang | 14.01 | 269 | eP | Pn | 13 04 01.7 | +4.6 |
| PMG | Port Moresby | 14.01 | 110 | P | Pn | 13 03 56.9 | -0.2 |
| | baz=14,SNR=3.6 | | | | | | |
| PMG | Port Moresby | 14.01 | 110 | eP | Pn | 13 03 56.1 | -1.0 |
| WRAB | Tennant Creek | 15.03 | 178 | eP | Pn | 13 04 07.3 | -3.7 |
| | 11nm,0.6s | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **15.04** | **178** | Pn | **Pn** | **13 04 07.2** | **-4.0** |
| | 1.5nm,0.3s,baz=5.5,slow=13,SNR=56 | | | | | | |
| WRA | | | | Sn | Sn | 13 06 44.1 | -14 |
| | 0.8nm,0.3s,baz=347,slow=23,SNR=5.7 | | | | | | |
| **QIS** | **Mount Isa** | **16.63** | **161** | P | **Pn** | **13 04 30.8** | **-0.9** |
| | baz=17,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **18.73** | **180** | P | **P** | **13 04 55.9** | **-1.6** |
| | 1.5nm,0.3s,baz=0.3,slow=7.1,SNR=106 | | | | | | |
| ASAR | | | | S | Sn | 13 08 14.9 | -13 |
| | 0.3nm,0.3s,baz=357,slow=26,SNR=4.8 | | | | | | |
| ASAR | | | | LR | LR | 13 13 19.0 | |
| | comp=Z,108nm,18.6s,baz=7.0,slow=41 | | | | | | |
| **WRKA** | **Warakurna** | **20.79** | **194** | P | **P** | **13 05 20.2** | **+0.3** |
| | baz=21,SNR=32 | | | | | | |
| **MBWA** | **Marble Bar** | **21.22** | **219** | *e*P | **P** | **13 05 25.4** | **+0.8** |
| | 16nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **23.82** | **156** | P | **P** | **13 05 52.7** | **+1.0** |
| | baz=24,SNR=9.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.35** | **5** | LR | LR | 13 23 27.3 | |
| | comp=Z,31nm,20.7s,baz=40,slow=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.57** | **325** | P | **P** | **13 11 42.5** | **+1.1** |
| | 0.8nm,0.5s,baz=112,slow=8.1,SNR=8.4 | | | | | | |
| **VNDA** | **Vanda** | **74.17** | **174** | P | **P** | **13 12 15.4** | **+0.7** |
| | 1.1nm,0.8s,baz=326,slow=7.1,SNR=7.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **78.30** | **327** | P | **P** | **13 12 39.0** | **+0.4** |
| | 0.6nm,0.4s,baz=125,slow=11,SNR=4.8 | | | | | | |
| **MAW** | **Mawson** | **78.35** | **202** | P | **P** | **13 12 40.2** | **+1.5** |
| | 1.6nm,1.0s,baz=91,slow=11,SNR=6.8 | | | | | | |

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*ISCJB **11** 13:04:07.9±0.6, 10.°83N±0.°04×62.°00W±0.°03, h67km±8km, Error ellipse: s-maj=7.6km s-min=4.7km az=156.5*
*TRN **11** 13:04:10.8, 10.°96N×61.°84W, h23km, MD3.0*
*FUNV **11** 13:04:11.2, 10.°63N×61.°99W, h50km, MW2.6*
**ISC 11 13:04:08.3**±1.3**, 10.°82N**±0.°05×**62.°01W**±0.°03**, h64**km±10km**, n18, σ1.s58**/28**, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUIV** | **Guiria** | **0.27** | **231** | *e*P | **Pn** | **13 04 19.2** | **+0.6** |
| GUIV | | | | *e*S | **Sn** | **13 04 25.9** | **-0.2** |
| **TCE** | **Chacachacare** | **0.28** | **115** | *e*P | **Pn** | **13 04 18.1** | **-0.6** |
| **TRN** | **Trinidad (W)** | **0.62** | **106** | *e*P | **Pn** | **13 04 21.6** | **-0.4** |
| TRN | | | | *e*S | **Sn** | **13 04 29.2** | **-2.7** |
| **TPP** | **Pointe-a-Pierr** | **0.74** | **132** | *e*P | **Pn** | **13 04 25.4** | **+2.1** |
| TPP | | | | *e*S | **Sn** | **13 04 35.9** | **+1.6** |
| **TBH** | **Brigand Hill** | **0.99** | **110** | *e*P | **Pn** | **13 04 29.1** | **+2.7** |
| TBH | | | | *e*S | **Sn** | **13 04 40.4** | **+0.6** |
| **GUNV** | **Guanoco** | **1.12** | **235** | *e*P | **Pn** | **13 04 29.8** | **+1.7** |
| GUNV | | | | *e*S | **Sn** | **13 04 42.5** | **-0.3** |
| **CRUV** | **Carupano** | **1.21** | **263** | *e*P | **Pn** | **13 04 30.2** | **+1.0** |
| CRUV | | | | *e*S | **Sn** | **13 04 45.4** | **+0.5** |
| **BOT** | **Bacolet** | **1.32** | **75** | *e*P | **Pn** | **13 04 31.0** | **+0.3** |
| BOT | | | | *e*S | **Sn** | **13 04 47.3** | **-0.2** |
| **GRGR** | **Grenville** | **1.35** | **15** | *e*P | **Pn** | **13 04 32.1** | **+1.0** |
| GRGR | | | | *e*S | **Sn** | **13 04 47.9** | **-0.4** |
| **GRW** | **Mount Saint Ca** | **1.38** | **14** | *e*P | **Pn** | **13 04 32.4** | **+0.8** |
| **TOSP** | **Speyside** | **1.53** | **72** | *e*P | **Pn** | **13 04 33.7** | **+0.3** |
| TOSP | | | | *e*S | **Sn** | **13 04 51.8** | **-0.7** |
| **SVB** | **Belmont** | **2.55** | **17** | *e*S | **Sn** | **13 05 16.0** | **-1.3** |
| **PCRV** | **Puerto La Cruz** | **2.66** | **256** | *e*P | **Pn** | **13 04 50.3** | **+1.5** |
| **GURV** | **El Guri** | **3.22** | **199** | *e*P | **Pn** | **13 04 56.2** | **-0.3** |
| **CUPV** | **Cœpira** | **3.79** | **259** | *e*P | **Pn** | **13 05 05.7** | **+1.4** |
| **BIRV** | **Birongo** | **4.20** | **266** | *e*P | **Pn** | **13 05 11.8** | **+2.0** |
| **LUEV** | **Luepa** | **4.97** | **174** | *e*P | **Pn** | **13 05 19.9** | **-0.7** |
| LUEV | | | | *e*S | Sn | 13 06 09.3 | -7.7 |
| **BAUV** | **El Baul** | **6.22** | **253** | *e*P | **Pn** | **13 05 37.9** | **+0.3** |
| BAUV | | | | *e*S | **Sn** | **13 06 42.9** | **-4.5** |

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*IDC **11** 13:26:36.0±1.2, 52.°54N×169.°64W, h0km, mb3.7/4, mb1 3.9/5, mb1mx3.5/42, mbtmp3.6/5, ML3.1/1, Error ellipse: s-maj=55.8km s-min=23.0km az=135.0*
*ISCJB **11** 13:26:38.3±1.3, 52.°6N±0.°2×169.°4W±0.°3, h27km±7km, mb3.8/4, Error ellipse: s-maj=41.6km s-min=9.0km az=141.0*
*NEIC **11** 13:26:39.1, 52.°56N×169.°13W, h14km, ML3.4(AEIC), After AEIC.*
**ISC 11 13:26:38.4**±2.0**, 52.°8N**±0.°2×**169.°6W**±0.°1**, h16**km±10km**, n26, σ0.s80**/27**, mb3.8**/4**, Fox Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKH** | **Nikolski High** | **0.48** | **68** | P | **Pg** | **13 26 48.0** | **0.0** |
| NIKH | | | | S | **Sb** | **13 26 55.4** | **+0.1** |
| **OKSP** | **Okmok Steeple** | **0.91** | **59** | P | **Pb** | **13 26 55.9** | **+0.1** |
| OKSP | | | | S | **Sg** | **13 27 08.1** | **+0.1** |
| **OKSO** | **Okmok South** | **1.03** | **56** | P | **Pb** | **13 26 57.3** | **-0.5** |
| OKSO | | | | S | **Sg** | **13 27 11.6** | **-0.1** |
| **OKCE** | **Okmok Cone E** | **1.06** | **53** | P | **Pb** | **13 26 58.3** | **-0.1** |
| **OKAK** | **Okmok** | **1.08** | **43** | P | **Pb** | **13 26 57.5** | **-1.2** |
| **OKTU** | **Okmok Mt. Tuli** | **1.10** | **57** | P | **Pb** | **13 26 58.9** | **-0.2** |
| **OKFG** | **Magazine Ridge** | **1.18** | **58** | P | **Pn** | **13 26 59.5** | **-0.8** |
| OKFG | | | | S | **Sn** | **13 27 16.0** | **0.0** |
| **MSOM** | **Makushin Julie** | **1.88** | **56** | P | **Pn** | **13 27 09.5** | **-0.4** |
| MSOM | | | | S | **Sn** | **13 27 32.9** | **-0.4** |
| **MGOD** | **Makushin Gods** | **1.91** | **57** | P | **Pn** | **13 27 09.6** | **-0.7** |
| **MSW** | **Makushin Switc** | **2.02** | **55** | P | **Pn** | **13 27 11.7** | **-0.1** |
| MSW | | | | S | **Sn** | **13 27 37.2** | **+0.6** |
| **UNV** | **Unalaska Valle** | **2.13** | **59** | P | **Pn** | **13 27 12.5** | **-0.7** |
| UNV | | | | S | **Sn** | **13 27 37.3** | **-2.0** |
| **ZRO** | **Akutan Zero** | **2.52** | **57** | P | **Pn** | **13 27 19.3** | **+0.6** |
| **AKGG** | **Akutan Green G** | **2.57** | **55** | P | **Pn** | **13 27 19.9** | **+0.6** |
| **AKUT** | **Akutan** | **2.65** | **58** | P | **Pn** | **13 27 20.5** | **+0.2** |
| **KDAK** | **Kodiak Island** | **10.89** | **56** | Pn | **Pn** | **13 29 13.2** | **-0.2** |
| | 0.8nm,0.3s,baz=240,slow=6.4,SNR=13 | | | | | | |
| **ILAR** | **Eielson Array** | **16.68** | **35** | Pn | **Pn** | **13 30 31.3** | **+0.2** |
| | 0.0nm,0.3s,baz=223,slow=10,SNR=3.0 | | | | | | |
| **INK** | **Inuvik** | **23.07** | **34** | P | **P** | **13 31 45.0** | **+2.3** |
| | 3.7nm,1.0s,baz=224,slow=6.0,SNR=2.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **37.71** | **218** | T | T | 14 13 55.9 | |
| | baz=24,slow=76,SNR=66 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **37.71** | **218** | T | T | 14 13 57.6 | |
| | baz=24,slow=76,SNR=95 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.73** | **218** | T | T | 14 13 56.0 | |
| | baz=24,slow=76,SNR=30 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.90** | **217** | T | T | 14 15 20.3 | |
| | baz=23,slow=76,SNR=108 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.91** | **217** | T | T | 14 15 21.8 | |
| | baz=23,slow=76,SNR=108 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.91** | **217** | T | T | 14 15 29.0 | |
| | baz=23,slow=76,SNR=79 | | | | | | |
| **TXAR** | **Lajitas Array** | **52.87** | **89** | P | **P** | **13 35 53.7** | **+0.3** |
| | 0.7nm,0.6s,baz=296,slow=5.2,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **87.17** | **231** | P | **P** | **13 39 22.7** | **-0.9** |
| | 0.2nm,0.5s,baz=36,slow=5.7,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **90.57** | **230** | P | **P** | **13 39 39.3** | **-0.2** |
| | 0.5nm,0.8s,baz=24,slow=4.5,SNR=9.9 | | | | | | |

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**IDC 11 13:26:43.8**±1.9**, 4.°61S**×**152.°31E, h0**km**, mb3.5**/3**, mb1 3.8**/4**, mb1mx3.4**/31**, mbtmp3.6**/4**, ML1.7**/1**, Error ellipse: s-maj=136.0km s-min=23.9km az=127.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **6.98** | **227** | Pn | Pn | 13 28 29.7 | +2.2 |
| | 0.7nm,0.3s,baz=178,slow=9.5,SNR=3.0 | | | | | | |
| PMG | | | | Sn | Sn | 13 29 45.0 | -2.7 |
| | 1.0nm,0.3s,baz=124,slow=23,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.20** | **227** | P | P | 13 31 51.5 | -1.1 |
| | 0.5nm,0.6s,baz=51,slow=9.9,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **25.96** | **221** | P | P | 13 32 18.6 | +0.3 |
| | 0.3nm,0.4s,baz=60,slow=9.6,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **82.17** | **22** | P | P | 13 39 06.4 | 0.0 |
| | 1.1nm,0.7s,baz=242,slow=5.5,SNR=17 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.78** | **288** | PKPbc | PKPbc | 13 46 36.5 | -0.5 |
| | 0.5nm,0.4s,baz=100,slow=2.5,SNR=5.8 | | | | | | |

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*ISK **11** 13:31:51.1, 38.°74N×39.°20E, h22km, MD2.5*
*CSEM **11** 13:31:51.1, 38.°74N×39.°20E, h22km, MD2.5, After ISK*
**ISC 11 13:31:51.6**±1.1**, 38.°73N**±0.°03×**39.°16E**±0.°05**, h19**km±2km**, n10, σ0.s41**/18**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PTK** | **Pertek** | **0.24** | **48** | *e*PG | **Pb** | **13 31 56.9** | **-0.4** |
| PTK | | | | *e*SG | **Sg** | **13 32 01.3** | **-0.1** |
| **PTK** | **Pertek** | **0.24** | **48** | *e*Pg | **Pb** | **13 31 56.9** | **-0.4** |
| PTK | | | | *e*Sg | **Sg** | **13 32 01.3** | **-0.1** |
| **ELZG** | **Elazig** | **0.27** | **210** | P | **Pg** | **13 31 57.6** | **-0.2** |
| ELZG | | | | S | **Sg** | **13 32 02.4** | **+0.3** |
| **SVRC** | **Sivrice-ELAZID** | **0.37** | **162** | *e*PG | **Pg** | **13 31 59.5** | **0.0** |
| SVRC | | | | *e*SG | **Sb** | **13 32 05.6** | **+0.4** |
| **SVRC** | **Sivrice-ELAZID** | **0.37** | **162** | *e*Pg | **Pg** | **13 31 59.5** | **0.0** |
| SVRC | | | | *e*Sg | **Sb** | **13 32 05.6** | **+0.4** |
| **ILIC** | **ilic-Erzincan** | **0.85** | **328** | *e*PG | **Pg** | **13 32 08.4** | **+0.1** |
| ILIC | | | | *e*SG | **Sn** | **13 32 21.0** | **+0.2** |
| **ILIC** | **ilic-Erzincan** | **0.85** | **328** | *e*Pg | **Pg** | **13 32 08.4** | **+0.1** |
| ILIC | | | | *e*Sg | **Sn** | **13 32 21.0** | **+0.2** |
| **ERZN** | **Erzincan** | **0.96** | **27** | *e*PG | **Pb** | **13 32 09.9** | **+0.1** |
| **EZC** | **Erzincan** | **1.03** | **8** | *e*Pg | **Pb** | **13 32 09.9** | **-1.1** |
| **KELT** | **Kelkit** | **1.42** | **3** | P | **Pg** | **13 32 19.5** | **+0.5** |
| KELT | | | | S | **Sg** | **13 32 37.7** | **+0.1** |

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*ISCJB **11** 13:33:37.9±0.2, 35.°34N±0.°01×92.°32W±0.°02, h10km, Error ellipse: s-maj=2.1km s-min=1.7km az=145.3*
*NEIC **11** 13:33:40.0, 35.°31N×92.°32W, h6km, mb3.7/1, MW4.0 Best double couple: NP1:φs115.00000°, δ80.00000°, λ-5.00000°. NP2:φs206.00000°, δ85.00000°, λ-170.00000°. Principal axes: T 1.1800, Plg4.0000°, Azm340.0000°; N 0.0000, Plg79.0000°, Azm232.0000°; P -1.1800, Plg11.0000°, Azm71.0000°; After CERI.*
*NEIC Felt [IV] at Greenbrier; [III] at Damascus, Edgemont, Fairfield Bay and Quitman; [II] at Batesville, Calico Rock, Cherokee Village, Clinton, Conway, Drasco, Fayetteville, Flippin, Heber Springs, Higden, Jonesboro, Melbourne, Mountain Home, Mountain View, Searcy, Siloam Springs, Springdale and Timbo. Also felt [II] at West Plains, Missouri. Felt in much of north-central and northwestern Arkansas and in parts of southern Missouri.*
**ISC 11 13:33:39.7**±0.6**, 35.°32N**±0.°03×**92.°30W**±0.°02**, h10**km**, n268, σ0.s98**/307**, Arkansas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UALR** | **University of** | **0.54** | **183** | *e*Pg | **Pg** | **13 33 50.1** | **-0.2** |
| UALR | | | | *e*Sg | **Sg** | **13 33 57.7** | **+0.3** |
| **MIAR** | **Mount Ida** | **1.30** | **234** | P | **Pn** | **13 34 03.4** | **-0.5** |
| | baz=1.3 | | | | | | |
| MIAR | | | | S | **Sb** | **13 34 20.6** | **-0.3** |
| | baz=1.3 | | | | | | |
| **MIAR** | **Mount Ida** | **1.30** | **234** | *e*Pg | **Pn** | **13 34 03.1** | **-0.8** |
| MIAR | | | | *e*Sg | **Sb** | **13 34 20.6** | **-0.3** |
| **HBAR** | **Harrisburg** | **1.36** | **80** | *e*Pn | **Pn** | **13 34 05.1** | **+0.3** |
| HBAR | | | | *e*S | **Sb** | **13 34 23.4** | **+0.6** |
| **V38A** | **Canehill** | **1.80** | **288** | P | **Pn** | **13 34 11.8** | **+0.9** |
| | baz=1.8,SNR=278 | | | | | | |
| V38A | | | | S | **Sb** | **13 34 35.8** | **+0.4** |
| | baz=1.8 | | | | | | |
| **W38A** | **Poteau** | **1.83** | **263** | P | **Pb** | **13 34 12.5** | **-0.8** |
| | baz=1.8,SNR=447 | | | | | | |
| **MET** | **Memphis--Engin** | **1.95** | **95** | *e*Pn | **Pn** | **13 34 13.5** | **+0.6** |
| MET | | | | *e*Sn | **Sn** | **13 34 37.9** | **+0.5** |
| MET | | | | *e*Sg | **Sb** | **13 34 41.2** | **+1.5** |
| **GNAR** | **Gosnell** | **1.97** | **70** | *e*Pn | **Pn** | **13 34 14.4** | **+1.2** |
| GNAR | | | | *e*Sn | **Sn** | **13 34 37.9** | **0.0** |
| **Y39A** | **Lockesburg** | **2.02** | **228** | P | **Pn** | **13 34 14.9** | **+1.1** |
| | baz=2.0 | | | | | | |
| **U38A** | **Gravette** | **2.03** | **304** | P | **Pn** | **13 34 15.4** | **+1.4** |
| | baz=2.0 | | | | | | |
| **X38A** | **Whitesboro** | **2.17** | **253** | P | **Pn** | **13 34 17.4** | **+1.4** |
| | baz=2.2,SNR=607 | | | | | | |
| X38A | | | | Sb | **Sg** | **13 34 47.8** | **-1.7** |
| | baz=2.2 | | | | | | |
| **V37A** | **Hulbert** | **2.38** | **285** | P | **Pn** | **13 34 19.8** | **+1.0** |
| | baz=2.4,SNR=64 | | | | | | |
| V37A | | | | S | **Sn** | **13 34 49.7** | **+1.7** |
| | baz=2.4 | | | | | | |
| **Y38A** | **Idabel** | **2.44** | **236** | P | **Pn** | **13 34 20.3** | **+0.7** |
| | baz=2.4,SNR=16 | | | | | | |
| Y38A | | | | S | **Sn** | **13 34 51.2** | **+1.8** |
| | baz=2.4 | | | | | | |
| **PARMO** | **Parma** | **2.47** | **56** | *e*Pn | **Pn** | **13 34 21.4** | **+1.4** |
| PARMO | | | | *e*Sn | **Sb** | **13 34 53.1** | **-1.5** |
| **HALT** | **Halls** | **2.49** | **75** | *e*Pn | **Pn** | **13 34 21.0** | **+0.7** |
| HALT | | | | *e*Sn | **Sn** | **13 34 51.1** | **+0.4** |
| **OXF** | **Oxford** | **2.51** | **108** | *e*Pn | **Pn** | **13 34 21.4** | **+0.8** |
| OXF | | | | *e*Pg | **Pg** | **13 34 28.2** | **+0.3** |
| OXF | | | | *e*Sn | **Sn** | **13 34 51.7** | **+0.5** |
| **U37A** | **Salina** | **2.53** | **296** | P | **Pn** | **13 34 22.0** | **+1.1** |
| | baz=2.5,SNR=62 | | | | | | |
| U37A | | | | S | **Sn** | **13 34 54.1** | **+2.4** |
| | baz=2.5 | | | | | | |
| **W37A** | **Quinton** | **2.56** | **267** | P | **Pn** | **13 34 22.1** | **+0.8** |
| | baz=2.5,SNR=70 | | | | | | |
| W37A | | | | Sb | **Sb** | **13 34 59.3** | **+1.9** |
| | baz=2.5 | | | | | | |
| **Z39A** | **Irene McRaven,** | **2.59** | **217** | P | **Pn** | **13 34 22.2** | **+0.5** |
| | baz=2.6 | | | | | | |
| Z39A | | | | Sb | **Sb** | **13 35 00.2** | **+2.1** |
| | baz=2.6 | | | | | | |
| **X37A** | **Clayton** | **2.62** | **255** | P | **Pn** | **13 34 23.2** | **+1.1** |
| | baz=2.6,SNR=73 | | | | | | |
| X37A | | | | Sb | **Sb** | **13 35 01.4** | **+2.3** |
| | baz=2.6 | | | | | | |
| **GLAT** | **Glass** | **2.63** | **68** | *e*Pn | **Pn** | **13 34 23.1** | **+0.8** |
| GLAT | | | | *e*Pg | **Pb** | **13 34 27.7** | **+0.8** |
| **T37A** | **Cheneyville 18** | **2.78** | **311** | P | **Pn** | **13 34 25.1** | **+0.8** |
| | baz=2.8 | | | | | | |
| T37A | | | | S | **Sn** | **13 35 00.1** | **+2.2** |
| | baz=2.8 | | | | | | |
| **TUL1** | **Tulsa** | **2.90** | **283** | P | **Pn** | **13 34 26.7** | **+0.7** |
| | baz=2.9,SNR=20 | | | | | | |
| TUL1 | | | | S | **Sn** | **13 35 02.5** | **+1.5** |
| | baz=2.9 | | | | | | |
| **TUL1** | **Tulsa** | **2.90** | **283** | *e*Pn | **Pn** | **13 34 26.9** | **+0.9** |
| TUL1 | | | | *e*Pg | **Pb** | **13 34 32.9** | **+1.3** |
| **UTMT** | **University of** | **2.98** | **69** | *e*Pg | **Pb** | **13 34 35.0** | **+2.2** |
| UTMT | | | | *e*Sg | **Sb** | **13 35 12.9** | **+3.7** |
| **U36A** | **Oologah** | **2.98** | **292** | P | **Pn** | **13 34 27.8** | **+0.7** |
| | baz=3.0,SNR=22 | | | | | | |
| U36A | | | | S | **Sn** | **13 35 04.6** | **+1.6** |
| | baz=3.0 | | | | | | |
| **V36A** | **Jenks** | **3.00** | **280** | P | **Pn** | **13 34 28.1** | **+0.7** |
| | baz=3.0,SNR=22 | | | | | | |
| V36A | | | | S | **Sn** | **13 35 05.0** | **+1.5** |
| | baz=3.0 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.03** | **228** | P | **Pn** | **13 34 28.3** | **+0.6** |
| | baz=3.0 | | | | | | |
| Z38A | | | | Sb | **Sb** | **13 35 13.4** | **+2.6** |
| | baz=3.0 | | | | | | |
| **139A** | **Bunkhouse Ranc** | **3.15** | **214** | P | **Pn** | **13 34 30.2** | **+0.8** |
| | baz=3.1 | | | | | | |
| 139A | | | | S | **Sn** | **13 35 08.0** | **+0.9** |
| | baz=3.1 | | | | | | |
| **S37A** | **Fort Scott** | **3.17** | **321** | P | **Pn** | **13 34 30.9** | **+1.1** |
| | baz=3.2 | | | | | | |
| S37A | | | | Sb | **Sb** | **13 35 18.2** | **+3.3** |
| | baz=3.2 | | | | | | |
| **W36A** | **Wetumka** | **3.22** | **268** | P | **Pn** | **13 34 30.8** | **+0.4** |
| | baz=3.2,SNR=18 | | | | | | |
| W36A | | | | Sb | **Sb** | **13 35 18.8** | **+2.7** |
| | baz=3.2 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **3.37** | **302** | P | **Pn** | **13 34 33.4** | **+0.9** |
| | baz=3.4,SNR=25 | | | | | | |
| T36A | | | | Sb | **Sb** | **13 35 23.8** | **+3.0** |
| | baz=3.4 | | | | | | |
| **X36A** | **Centrahoma** | **3.41** | **259** | P | **Pn** | **13 34 33.6** | **+0.6** |
| | baz=3.4,SNR=19 | | | | | | |
| X36A | | | | Sb | **Sb** | **13 35 24.9** | **+3.2** |
| | baz=3.4 | | | | | | |
| **SIUC** | **Southern Illin** | **3.45** | **45** | *e*Pn | **Pn** | **13 34 35.5** | **+2.0** |
| SIUC | | | | *e*Pg | **Pb** | **13 34 42.1** | **+1.2** |
| SIUC | | | | *e*Sg | **Sg** | **13 35 28.4** | **-2.1** |
| **S36A** | **Lake Cedric, C** | **3.58** | **313** | P | **Pn** | **13 34 36.3** | **+1.1** |
| | baz=3.6,SNR=18 | | | | | | |
| **Y36A** | **Durant** | **3.58** | **248** | P | **Pn** | **13 34 35.9** | **+0.7** |
| | baz=3.6 | | | | | | |
| **SLM** | **Saint Louis** | **3.70** | **26** | *e*Pn | **Pn** | **13 34 37.3** | **+0.3** |
| SLM | | | | *e*Pg | **Pg** | **13 34 49.6** | **-1.0** |
| SLM | | | | *e*Sg | **Sb** | **13 35 32.0** | **+1.8** |
| **V35A** | **Meyer Ranch, C** | **3.72** | **278** | P | **Pn** | **13 34 37.8** | **+0.5** |
| | baz=3.7,SNR=24 | | | | | | |
| **W35A** | **Tecumseh** | **3.75** | **269** | P | **Pn** | **13 34 38.1** | **+0.5** |
| | baz=3.7,SNR=15 | | | | | | |
| **U35A** | **Pawnee** | **3.75** | **288** | P | **Pn** | **13 34 38.5** | **+0.8** |
| | baz=3.7 | | | | | | |
| **239A** | **Gary** | **3.75** | **209** | P | **Pn** | **13 34 38.1** | **+0.4** |
| | baz=3.7 | | | | | | |
| **T35A** | **Sooner Cattle** | **3.76** | **296** | P | **Pn** | **13 34 38.5** | **+0.7** |
| | baz=3.8,SNR=36 | | | | | | |
| **Q37A** | **Longview Farm,** | **3.94** | **335** | P | **Pn** | **13 34 41.6** | **+1.2** |
| | baz=4.0 | | | | | | |
| **X35A** | **Drake** | **3.95** | **258** | P | **Pn** | **13 34 40.7** | **+0.3** |
| | baz=3.9 | | | | | | |
| **R36A** | **Gordon, Harris** | **3.95** | **320** | P | **Pn** | **13 34 41.3** | **+0.9** |
| | baz=4.0,SNR=16 | | | | | | |
| **Z36A** | **Blue Ridge** | **3.98** | **240** | P | **Pn** | **13 34 41.3** | **+0.4** |
| | baz=4.0 | | | | | | |
| **S35A** | **Otter Creek Ra** | **4.00** | **307** | P | **Pn** | **13 34 41.6** | **+0.4** |
| | baz=4.0 | | | | | | |
| **NATX** | **Nacogdoches** | **4.06** | **210** | Pn | **Pn** | **13 34 40.6** | **-1.3** |
| **340A** | **Bronson** | **4.11** | **199** | P | **Pn** | **13 34 43.1** | **+0.5** |
| | baz=4.1 | | | | | | |
| **Y35A** | **Marietta** | **4.15** | **252** | P | **Pn** | **13 34 43.4** | **+0.3** |
| | baz=4.1 | | | | | | |
| **V34A** | **Guthrie** | **4.28** | **278** | P | **Pn** | **13 34 45.4** | **+0.4** |
| | baz=4.3 | | | | | | |
| **V34A** | **Guthrie** | **4.28** | **278** | *e*Pn | **Pn** | **13 34 45.6** | **+0.6** |
| V34A | | | | *e*Pg | **Pb** | **13 34 54.8** | **-0.3** |
| V34A | | | | *e*Sg | **Sg** | **13 35 53.0** | **-4.2** |
| **T34A** | **McClaskey Farm** | **4.30** | **295** | P | **Pn** | **13 34 46.0** | **+0.8** |
| | baz=4.3,SNR=9.6 | | | | | | |
| **R35A** | **Emporia Munici** | **4.33** | **315** | P | **Pn** | **13 34 46.5** | **+0.9** |
| | baz=4.3 | | | | | | |
| **U34A** | **Anderson Ranch** | **4.39** | **286** | P | **Pn** | **13 34 47.0** | **+0.5** |
| | baz=4.4 | | | | | | |
| **U34A** | **Anderson Ranch** | **4.39** | **286** | Pn | **Pn** | **13 34 47.6** | **+1.1** |
| **237A** | **Washetta, Mont** | **4.41** | **222** | P | **Pn** | **13 34 47.2** | **+0.4** |
| | baz=4.4 | | | | | | |
| **Q36A** | **Arnold C. Orve** | **4.42** | **326** | P | **Pn** | **13 34 48.0** | **+1.1** |
| | baz=4.4,SNR=18 | | | | | | |
| **W34A** | **Bridge Creek,** | **4.47** | **271** | P | **Pn** | **13 34 48.1** | **+0.5** |
| | baz=4.5,SNR=8.9 | | | | | | |
| **W34A** | **Bridge Creek,** | **4.47** | **271** | *e*Pn | **Pn** | **13 34 48.3** | **+0.7** |
| W34A | | | | *e*Pg | Pg | 13 35 02.2 | -3.3 |
| W34A | | | | *e*Sg | **Sg** | **13 35 59.2** | **-4.2** |
| **136A** | **Ennis** | **4.51** | **232** | P | **Pn** | **13 34 48.3** | **+0.1** |
| | baz=4.5 | | | | | | |
| **S34A** | **Willow Spring** | **4.54** | **303** | P | **Pn** | **13 34 49.3** | **+0.8** |
| | baz=4.5 | | | | | | |
| **Z35A** | **Perchaven, San** | **4.55** | **246** | P | **Pn** | **13 34 49.1** | **+0.4** |
| | baz=4.5 | | | | | | |
| **USIN** | **University of** | **4.57** | **53** | *e*Pn | **Pn** | **13 34 50.3** | **+1.3** |
| **X34A** | **Smith Ranch, M** | **4.60** | **263** | P | **Pn** | **13 34 50.1** | **+0.8** |
| | baz=4.6,SNR=13 | | | | | | |
| **Q35A** | **Mercer Eighty,** | **4.62** | **321** | P | **Pn** | **13 34 51.0** | **+1.3** |
| | baz=4.6,SNR=56 | | | | | | |
| **338A** | **Crockett** | **4.68** | **213** | P | **Pn** | **13 34 51.1** | **+0.6** |
| | baz=4.7 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **4.70** | **255** | P | **Pn** | **13 34 51.2** | **+0.5** |
| | baz=4.7,SNR=9.4 | | | | | | |
| **440A** | **Kirbyville** | **4.77** | **197** | P | **Pn** | **13 34 52.2** | **+0.5** |
| | baz=4.8 | | | | | | |
| **OLIL** | **Olney** | **4.79** | **43** | *e*Pn | **Pn** | **13 34 52.7** | **+0.8** |
| **236A** | **Katherine and** | **4.83** | **228** | P | **Pn** | **13 34 53.0** | **+0.5** |
| | baz=4.8 | | | | | | |
| **U33A** | **Lingo Farm, Me** | **4.85** | **285** | P | **Pn** | **13 34 53.2** | **+0.5** |
| | baz=4.8 | | | | | | |
| **P36A** | **Good Intent, A** | **4.88** | **333** | P | **Pn** | **13 34 54.4** | **+1.3** |
| | baz=4.9 | | | | | | |
| **V33A** | **Lossen Ranch,** | **4.90** | **278** | P | **Pn** | **13 34 54.1** | **+0.6** |
| | baz=4.9 | | | | | | |
| **R34A** | **Isabella, Hill** | **4.96** | **308** | P | **Pn** | **13 34 55.2** | **+0.9** |
| | baz=5.0,SNR=19 | | | | | | |
| **Z34A** | **Collier Ranch,** | **5.03** | **249** | P | **Pn** | **13 34 55.8** | **+0.5** |
| | baz=5.0 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **5.05** | **270** | P | **Pn** | **13 34 56.2** | **+0.7** |
| | baz=5.0,SNR=17 | | | | | | |
| **135A** | **Vickery Place,** | **5.06** | **238** | P | **Pn** | **13 34 56.2** | **+0.6** |
| | baz=5.0 | | | | | | |
| **KSU1** | **Kansas State U** | **5.11** | **319** | P | **Pn** | **13 34 56.8** | **+0.5** |
| | baz=5.1 | | | | | | |
| **KSU1** | **Kansas State U** | **5.11** | **319** | Pn | **Pn** | **13 34 56.0** | **-0.3** |
| | 127nm,0.4s | | | | | | |
| **T33A** | **Patterson Ranc** | **5.12** | **292** | P | **Pn** | **13 34 57.1** | **+0.6** |
| | baz=5.1 | | | | | | |
| **S33A** | **Kaszmaul Farm,** | **5.12** | **298** | P | **Pn** | **13 34 57.1** | **+0.6** |
| | baz=5.1 | | | | | | |
| **P35A** | **Duane Minner,** | **5.14** | **326** | P | **Pn** | **13 34 57.3** | **+0.5** |
| | baz=5.1,SNR=5.5 | | | | | | |
| **X33A** | **Lawton** | **5.15** | **263** | P | **Pn** | **13 34 57.4** | **+0.4** |
| | baz=5.1 | | | | | | |
| **Q34A** | **Chapman** | **5.16** | **316** | P | **Pn** | **13 34 57.2** | **+0.1** |
| | baz=5.2,SNR=7.8 | | | | | | |
| **SWET** | **Sewanee** | **5.21** | **89** | *e*Pn | **Pn** | **13 34 58.4** | **+0.5** |
| | 44nm,1.2s | | | | | | |
| **O36A** | **Bolckow** | **5.25** | **337** | P | **Pn** | **13 34 59.1** | **+0.8** |
| | baz=5.3 | | | | | | |
| **438A** | **Sam Houston St** | **5.28** | **211** | P | **Pn** | **13 34 59.4** | **+0.8** |
| | baz=5.3 | | | | | | |
| **WMOK** | **Wichita Mounta** | **5.35** | **266** | *e*Pn | **Pn** | **13 34 59.8** | **+0.2** |
| | 76nm,0.4s | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **5.37** | **258** | P | **Pn** | **13 35 00.6** | **+0.7** |
| | baz=5.3,SNR=8.8 | | | | | | |
| **WHTX** | **Lake Whitney** | **5.43** | **234** | P | **Pn** | **13 35 01.1** | **+0.4** |
| | baz=5.4 | | | | | | |
| **WHTX** | **Lake Whitney** | **5.43** | **234** | *e*Pn | **Pn** | **13 35 01.2** | **+0.4** |
| | 40nm,0.3s | | | | | | |
| **R33A** | **Olander Ranch,** | **5.45** | **305** | P | **Pn** | **13 35 02.0** | **+1.0** |
| | baz=5.4 | | | | | | |
| **336A** | **Riesel** | **5.46** | **225** | P | **Pn** | **13 35 01.4** | **+0.2** |
| | baz=5.4 | | | | | | |
| **V32A** | **Arapaho** | **5.51** | **276** | P | **Pn** | **13 35 02.1** | **+0.2** |
| | baz=5.5 | | | | | | |
| **134A** | **White-Moore Ra** | **5.53** | **242** | P | **Pn** | **13 35 02.3** | **+0.2** |
| | baz=5.5 | | | | | | |
| **P34A** | **Walnut Farm, R** | **5.55** | **321** | P | **Pn** | **13 35 02.8** | **+0.4** |
| | baz=5.5,SNR=21 | | | | | | |
| **WCI** | **Wyandotte Cave** | **5.63** | **57** | *e*Pn | **Pn** | **13 35 03.6** | **0.0** |
| | 267nm,0.4s | | | | | | |
| **W32A** | **Sentinel** | **5.69** | **270** | P | **Pn** | **13 35 04.6** | **+0.3** |
| | baz=5.7,SNR=17 | | | | | | |
| **O35A** | **Humboldt** | **5.71** | **331** | P | **Pn** | **13 35 05.3** | **+0.8** |
| | baz=5.7 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **5.72** | **251** | P | **Pn** | **13 35 05.2** | **+0.5** |
| | baz=5.7,SNR=20 | | | | | | |
| **Q33A** | **Connelly Farm,** | **5.74** | **311** | P | **Pn** | **13 35 05.7** | **+0.6** |
| | baz=5.7,SNR=19 | | | | | | |
| **HDIL** | **Hopedale** | **5.75** | **24** | P | **Pn** | **13 35 06.1** | **+1.0** |
| | baz=5.8 | | | | | | |
| **HDIL** | **Hopedale** | **5.75** | **24** | *e*Pn | **Pn** | **13 35 05.2** | **+0.2** |
| | 76nm,0.3s | | | | | | |
| **S32A** | **Newby Ranch, P** | **5.85** | **296** | P | **Pn** | **13 35 06.4** | **-0.1** |
| | baz=5.8 | | | | | | |
| **234A** | **Clairette** | **5.88** | **237** | P | **Pn** | **13 35 06.9** | **0.0** |
| | baz=5.9 | | | | | | |
| **335A** | **Moody** | **5.88** | **228** | P | **Pn** | **13 35 07.3** | **+0.3** |
| | baz=5.9 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **5.90** | **221** | P | **Pn** | **13 35 07.4** | **+0.2** |
| | baz=5.9 | | | | | | |
| **P33A** | **Williams Farm,** | **5.94** | **315** | P | **Pn** | **13 35 08.3** | **+0.5** |
| | baz=5.9,SNR=6.8 | | | | | | |
| **O34A** | **Beatrice** | **5.97** | **326** | P | **Pn** | **13 35 08.8** | **+0.6** |
| | baz=6.0 | | | | | | |
| **R32A** | **Long Quarter,** | **6.00** | **303** | P | **Pn** | **13 35 09.1** | **+0.6** |
| | baz=6.0 | | | | | | |
| **BLO** | **Bloomington** | **6.00** | **48** | *e*Pn | **Pn** | **13 35 09.2** | **+0.5** |
| | 27nm,0.5s | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **6.03** | **259** | P | **Pn** | **13 35 09.4** | **+0.4** |
| | baz=6.0 | | | | | | |
| **133A** | **Hamilton Ranch** | **6.12** | **246** | P | **Pn** | **13 35 10.8** | **+0.5** |
| | baz=6.1 | | | | | | |
| **N35A** | **Tabor** | **6.13** | **336** | P | **Pn** | **13 35 11.2** | **+0.8** |
| | baz=6.1 | | | | | | |
| **Q32A** | **Meitler Ranch,** | **6.20** | **308** | P | **Pn** | **13 35 11.7** | **+0.4** |
| | baz=6.2,SNR=14 | | | | | | |
| **U31A** | **Nine Bar Ranch** | **6.22** | **282** | P | **Pn** | **13 35 12.3** | **+0.6** |
| | baz=6.2 | | | | | | |
| **T31A** | **Randall Ranch,** | **6.22** | **289** | P | **Pn** | **13 35 12.3** | **+0.6** |
| | baz=6.2 | | | | | | |
| **537A** | **Green Hill Far** | **6.22** | **214** | P | **Pn** | **13 35 11.7** | **+0.1** |
| | baz=6.2 | | | | | | |
| **W31A** | **Holland Ranch,** | **6.25** | **271** | P | **Pn** | **13 35 12.1** | **0.0** |
| | baz=6.2,SNR=9.6 | | | | | | |
| **Z32A** | **Haskell** | **6.27** | **253** | P | **Pn** | **13 35 12.6** | **+0.3** |
| | baz=6.2,SNR=16 | | | | | | |
| **O33A** | **Hebron** | **6.33** | **320** | P | **Pn** | **13 35 13.9** | **+0.8** |
| | baz=6.3,SNR=11 | | | | | | |
| **435B** | **Jarrell** | **6.33** | **226** | P | **Pn** | **13 35 13.3** | **+0.1** |
| | baz=6.3 | | | | | | |
| **X31A** | **McDonald Ranch** | **6.34** | **266** | P | **Pn** | **13 35 13.6** | **+0.4** |
| | baz=6.3,SNR=28 | | | | | | |
| **CPCT** | **Cooper Cave** | **6.36** | **87** | *e*Pn | **Pn** | **13 35 14.1** | **+0.6** |
| **334A** | **Lometa** | **6.36** | **233** | P | **Pn** | **13 35 13.5** | **-0.1** |
| | baz=6.3 | | | | | | |
| **233A** | **Rising Star** | **6.41** | **241** | P | **Pn** | **13 35 14.0** | **-0.2** |
| | baz=6.4 | | | | | | |
| **N34A** | **Lincoln** | **6.43** | **330** | P | **Pn** | **13 35 15.2** | **+0.7** |
| | baz=6.4 | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| R31A | Burdett<br>baz=6.5 | 6.51 | 299 | P | Pn | 13 35 15.9 +0.2 |
| SFIN | Scholer Farm<br>36nm,0.4s | 6.52 | 38 | *e*Pn | Pn | 13 35 18.0 +2.3 |
| P32A | Huiting Farm,<br>baz=6.6 | 6.60 | 312 | P | Pn | 13 35 17.7 +0.8 |
| SCIA | State Center<br>106nm,0.3s | 6.62 | 354 | *e*Pn | Pn | 13 35 17.9 +0.8 |
| ABTX | Abilene, Hawle<br>baz=6.6,SNR=9.0 | 6.66 | 248 | P | Pn | 13 35 17.5 -0.2 |
| ABTX | Abilene, Hawle<br>56nm,0.4s | 6.66 | 248 | *e*Pn | Pn | 13 35 17.4 -0.4 |
| Y31A | Rekieta Farm,<br>baz=6.7 | 6.70 | 261 | P | Pn | 13 35 18.2 0.0 |
| 434A | Burnet<br>baz=6.7 | 6.72 | 230 | P | Pn | 13 35 18.2 -0.4 |
| Q31A | Ellis<br>baz=6.7 | 6.75 | 305 | P | Pn | 13 35 19.4 +0.4 |
| N33A | J Bar K, Exete<br>baz=6.8,SNR=6.1 | 6.76 | 325 | P | Pn | 13 35 20.1 +1.0 |
| 637A | Eagle Lake<br>baz=6.8 | 6.78 | 211 | P | Pn | 13 35 19.5 +0.2 |
| Z31A | Sharp Cattle R<br>baz=6.8 | 6.79 | 255 | P | Pn | 13 35 20.0 +0.5 |
| O32A | Brockman Farm,<br>baz=6.8 | 6.83 | 318 | P | Pn | 13 35 20.5 +0.4 |
| V30A | Spur Ranch, Mi<br>baz=6.8 | 6.85 | 276 | P | Pn | 13 35 21.1 +0.7 |
| 333A | Richland Sprin<br>baz=6.8 | 6.86 | 236 | P | Pn | 13 35 20.2 -0.2 |
| U30A | WK&E Inc. Balk<br>baz=6.9,SNR=9.0 | 6.88 | 283 | P | Pn | 13 35 21.3 +0.5 |
| CBKS | Cedar Bluff<br>baz=6.9,SNR=7.5 | 6.89 | 303 | P | Pn | 13 35 21.7 +0.9 |
| CBKS | Cedar Bluff<br>45nm,0.5s | 6.89 | 303 | *e*Pn | Pn | 13 35 21.6 +0.7 |
| S30A | Montezuma<br>baz=7.0 | 6.97 | 292 | P | Pn | 13 35 22.1 +0.1 |
| 232A | Coleman<br>baz=7.0 | 7.02 | 243 | P | Pn | 13 35 22.1 -0.5 |
| P31A | Stockton<br>baz=7.0,SNR=17 | 7.02 | 309 | P | Pn | 13 35 23.2 +0.6 |
| M34A | Aspy Farms, Fr<br>baz=7.0 | 7.03 | 333 | P | Pn | 13 35 24.2 +1.5 |
| R30A | Dighton<br>baz=7.0 | 7.05 | 297 | P | Pn | 13 35 23.6 +0.6 |
| X30A | Coker Ranch, T<br>baz=7.1,SNR=9.2 | 7.10 | 265 | P | Pn | 13 35 23.7 0.0 |
| N32A | Stulken Farm,<br>baz=7.2 | 7.20 | 321 | P | Pn | 13 35 25.6 +0.4 |
| TZTN | Tazewell<br>22nm,0.6s | 7.21 | 78 | *e*Pn | Pn | 13 35 25.8 +0.6 |
| 131A | Roby<br>baz=7.2,SNR=20 | 7.21 | 251 | P | Pn | 13 35 25.3 0.0 |
| Y30A | Stafford Cattl<br>baz=7.2,SNR=15 | 7.23 | 261 | P | Pn | 13 35 25.8 +0.2 |
| 433A | Art<br>baz=7.3 | 7.29 | 233 | P | Pn | 13 35 25.6 -0.8 |
| Q30A | Quinter<br>baz=7.3 | 7.30 | 302 | P | Pn | 13 35 26.1 -0.4 |
| M33A | Taylor Creek F<br>baz=7.3 | 7.33 | 330 | P | Pn | 13 35 27.1 +0.3 |
| 332A | Millersview<br>baz=7.3 | 7.36 | 240 | P | Pn | 13 35 26.2 -1.0 |
| L34A | Svendsen Farm,<br>baz=7.4 | 7.36 | 336 | P | Pn | 13 35 28.1 +0.8 |
| 534A | Blanco<br>baz=7.4 | 7.41 | 226 | P | Pn | 13 35 27.2 -0.7 |
| 231A | Bronte<br>baz=7.5 | 7.49 | 245 | P | Pn | 13 35 28.6 -0.4 |
| GOGA | Godfrey<br>12nm,0.4s | 7.55 | 102 | *e*Pn | Pn | 13 35 30.0 +0.1 |
| Z30A | Sanderson Ranc<br>baz=7.6,SNR=30 | 7.58 | 257 | P | Pn | 13 35 30.5 +0.2 |
| P30A | Selden<br>baz=7.6,SNR=14 | 7.60 | 306 | P | Pn | 13 35 30.9 +0.3 |
| BGNE | Belgrade<br>baz=7.6,SNR=10 | 7.62 | 325 | P | Pn | 13 35 31.1 +0.3 |
| BGNE | Belgrade<br>111nm,0.3s | 7.62 | 325 | *e*Pn | Pn | 13 35 31.5 +0.7 |
| W29A | Amraillo<br>baz=7.6 | 7.65 | 271 | P | Pn | 13 35 31.1 -0.2 |
| 432A | Menard<br>baz=7.7 | 7.69 | 237 | P | Pn | 13 35 31.2 -0.6 |
| 130A | Snyder<br>baz=7.7 | 7.69 | 252 | P | Pn | 13 35 31.8 -0.1 |
| AMTX | Amarillo<br>baz=7.7 | 7.70 | 269 | P | Pn | 13 35 31.5 -0.5 |
| AMTX | Amarillo<br>48nm,0.5s | 7.70 | 269 | *e*Pn | Pn | 13 35 31.3 -0.7 |
| 533A | Kerrville<br>baz=7.7 | 7.71 | 229 | P | Pn | 13 35 31.8 -0.4 |
| R29A | Marienthal<br>baz=7.7 | 7.73 | 296 | P | Pn | 13 35 32.8 +0.4 |
| K35A | Storm Lake<br>baz=7.8 | 7.74 | 344 | P | Pn | 13 35 33.1 +0.7 |
| JFWS | Jewell Farm<br>34nm,0.4s | 7.75 | 11 | *e*Pn | Pn | 13 35 32.2 -0.4 |
| X29A | Tulia<br>baz=7.7 | 7.77 | 266 | P | Pn | 13 35 32.8 -0.3 |
| Q29A | Oakley<br>baz=7.8 | 7.79 | 300 | P | Pn | 13 35 33.7 +0.5 |
| 634A | China Grove, S<br>baz=7.8 | 7.82 | 223 | P | Pn | 13 35 34.2 +0.6 |
| O30A | MW Ranch, Wils<br>baz=7.8,SNR=12 | 7.83 | 311 | P | Pn | 13 35 33.9 +0.2 |
| Y29A | Porterfield Fa<br>baz=7.8 | 7.86 | 262 | P | Pn | 13 35 34.4 +0.2 |
| 331A | San Angelo<br>baz=7.9 | 7.89 | 242 | P | Pn | 13 35 34.7 +0.2 |
| JCT | Junction City<br>baz=7.9 | 7.94 | 235 | P | Pn | 13 35 34.7 -0.5 |
| JCT | Junction City<br>25nm,0.4s | 7.94 | 235 | *e*Pn | Pn | 13 35 34.5 -0.8 |
| S28A | Manter<br>baz=8.0 | 8.06 | 289 | P | Pn | 13 35 36.9 0.0 |
| P29A | Atwood<br>baz=8.1 | 8.08 | 304 | P | Pn | 13 35 37.8 +0.5 |
| V28A | Channing<br>baz=8.1 | 8.10 | 276 | P | Pn | 13 35 37.4 -0.2 |
| 230A | Sterling City<br>baz=8.1,SNR=10.0 | 8.10 | 248 | P | Pn | 13 35 37.3 -0.2 |
| U28A | Mallet<br>baz=8.1 | 8.12 | 280 | P | Pn | 13 35 38.6 +0.7 |
| T28A | Walsh<br>baz=8.1,SNR=12 | 8.13 | 286 | P | Pn | 13 35 37.8 -0.1 |
| K33A | Hardington<br>baz=8.2 | 8.14 | 335 | P | Pn | 13 35 39.2 +1.2 |
| X28A | Dimmitt<br>baz=8.1 | 8.17 | 267 | P | Pn | 13 35 38.5 +0.1 |
| R28A | Tribune<br>baz=8.2,SNR=11 | 8.20 | 294 | P | Pn | 13 35 39.0 +0.2 |
| 532A | Rocksprings<br>baz=8.2 | 8.23 | 233 | P | Pn | 13 35 38.5 -0.8 |
| 633A | Saathoff Ranch<br>baz=8.2 | 8.24 | 227 | P | Pn | 13 35 38.2 -1.1 |
| O29A | 4D Ranch, Culb<br>baz=8.3,SNR=8.2 | 8.26 | 308 | P | Pn | 13 35 40.0 +0.3 |
| Y28A | McKinney Farm,<br>baz=8.3 | 8.32 | 263 | P | Pn | 13 35 40.4 -0.1 |
| 431A | Sonora<br>baz=8.3 | 8.37 | 239 | P | Pn | 13 35 40.5 -0.7 |
| 330A | Mertzon<br>baz=8.4 | 8.38 | 245 | P | Pn | 13 35 40.4 -0.9 |
| L31A | Butterfield Fa<br>baz=8.5 | 8.54 | 325 | P | Pn | 13 35 44.1 +0.6 |
| K32A | Verdigre<br>baz=8.6 | 8.55 | 331 | P | Pn | 13 35 43.8 +0.1 |
| N29A | Votaw Ranch, W<br>baz=8.5 | 8.55 | 312 | P | Pn | 13 35 44.1 +0.4 |
| Z28A | Tucker Farm, M<br>baz=8.6,SNR=6.5 | 8.58 | 259 | P | Pn | 13 35 44.0 -0.2 |
| M30A | Dale-Ortello V<br>baz=8.6 | 8.59 | 319 | P | Pn | 13 35 44.5 +0.4 |
| T27A | Campo<br>baz=8.6 | 8.60 | 285 | P | Pn | 13 35 44.3 -0.1 |
| U27A | Thompson Grove<br>baz=8.6 | 8.61 | 280 | P | Pn | 13 35 44.2 -0.3 |
| 531A | Rocksprings<br>baz=8.6 | 8.63 | 236 | P | Pn | 13 35 43.9 -1.0 |
| MSTX | Muleshoe<br>baz=8.7 | 8.73 | 264 | P | Pn | 13 35 45.9 -0.3 |
| MSTX | Muleshoe<br>49nm,0.8s | 8.73 | 264 | *e*Pn | Pn | 13 35 45.9 -0.3 |
| 430A | Baggett Ranch,<br>baz=8.7 | 8.75 | 241 | P | Pn | 13 35 45.4 -1.1 |
| L30A | Spencer Herefo<br>baz=8.8 | 8.80 | 321 | P | Pn | 13 35 47.1 0.0 |
| K31A | O'Neill<br>baz=8.9 | 8.85 | 327 | P | Pn | 13 35 48.0 +0.2 |
| ACSO | Alum Creek Sta<br>22nm,0.4s | 8.86 | 54 | *e*Pn | Pn | 13 35 47.2 -0.6 |
| 128A | Castleberry Fa<br>baz=8.8,SNR=21 | 8.87 | 255 | P | Pn | 13 35 47.8 -0.3 |
| O28A | Krutsinger Ran<br>baz=8.9,SNR=8.1 | 8.90 | 305 | P | Pn | 13 35 48.5 0.0 |
| R27A | Eads<br>baz=8.9 | 8.92 | 292 | P | Pn | 13 35 48.0 -0.8 |
| 329A | Wagon Wheel Ra<br>baz=8.9 | 8.95 | 247 | P | Pn | 13 35 48.1 -1.0 |
| M29A | Burnside Ranch<br>baz=9.0,SNR=8.0 | 8.98 | 315 | P | Pn | 13 35 49.3 -0.3 |
| KSCO | Kaye Shedlock'<br>baz=9.0,SNR=8.8 | 9.03 | 297 | P | Pn | 13 35 50.1 -0.1 |
| ECSD | EROS Data Cent<br>baz=9.1 | 9.04 | 340 | P | Pn | 13 35 50.3 0.0 |
| ECSD | EROS Data Cent<br>11nm,0.3s | 9.04 | 340 | *e*Pn | Pn | 13 35 50.3 0.0 |
| N28A | Pribbeno Ranch<br>baz=9.0 | 9.05 | 309 | P | Pn | 13 35 50.1 -0.3 |
| J32A | Parkston<br>baz=9.1 | 9.12 | 334 | P | Pn | 13 35 51.4 +0.1 |
| 631A | Perdido Creek<br>baz=9.1 | 9.14 | 232 | P | Pn | 13 35 51.2 -0.6 |
| 228A | UT Block 9, Go<br>baz=9.1 | 9.14 | 252 | P | Pn | 13 35 51.1 -0.7 |
| 530A | J-C Ranch, Com<br>baz=9.2 | 9.19 | 238 | P | Pn | 13 35 51.9 -0.5 |
| P27A | Ficken Ranch,<br>baz=9.2 | 9.20 | 300 | P | Pn | 13 35 52.5 -0.1 |
| 833A | Chaparral WMA,<br>baz=9.2 | 9.22 | 223 | P | Pn | 13 35 52.9 +0.1 |
| S26A | Kim<br>baz=9.3,SNR=6.9 | 9.28 | 288 | P | Pn | 13 35 53.1 -0.7 |
| K30A | Basset<br>baz=9.3,SNR=6.5 | 9.29 | 324 | P | Pn | 13 35 53.3 -0.4 |
| T26A | Comanche Natio<br>baz=9.3,SNR=17 | 9.31 | 285 | P | Pn | 13 35 53.4 -0.7 |
| 429A | Davenport Ranc<br>baz=9.3 | 9.31 | 243 | P | Pn | 13 35 52.7 -1.5 |
| M28A | Bar X Bar Ranc<br>baz=9.3 | 9.35 | 313 | P | Pn | 13 35 54.8 +0.2 |
| O27A | Beecher Island<br>baz=9.4,SNR=8.4 | 9.41 | 304 | P | Pn | 13 35 55.5 0.0 |
| R26A | Arlington<br>baz=9.4,SNR=14 | 9.42 | 292 | P | Pn | 13 35 55.1 -0.5 |
| OGNE | Ogallala<br>baz=9.5 | 9.50 | 309 | P | Pn | 13 35 56.9 +0.2 |
| K29A | Lazy Trails An<br>baz=9.7 | 9.70 | 322 | P | Pn | 13 35 59.9 +0.6 |
| H34A | Spellman Lake,<br>baz=9.7 | 9.71 | 345 | P | Pn | 13 35 59.9 +0.4 |
| J30A | Dallas<br>baz=9.7,SNR=7.5 | 9.74 | 327 | P | Pn | 13 35 59.9 0.0 |
| N27A | Anderson Farm,<br>baz=9.7 | 9.75 | 307 | P | Pn | 13 35 59.8 -0.3 |
| BLA | Blacksburg<br>12nm,0.5s | 9.78 | 75 | *e*Pn | Pn | 13 36 00.6 +0.1 |
| SPMN | St. Paul<br>34nm,0.3s | 9.90 | 358 | *e*Pn | Pn | 13 36 00.4 -1.7 |
| T25A | Trinidad<br>baz=9.9 | 9.95 | 284 | P | Pn | 13 36 02.5 -0.5 |
| J29A | Okreek<br>baz=10 | 10.18 | 325 | P | Pn | 13 36 05.3 -0.7 |
| I30A | Oacoma<br>baz=10 | 10.19 | 330 | P | Pn | 13 36 05.7 -0.4 |
| N26A | Koester Ranch,<br>baz=10 | 10.21 | 306 | P | Pn | 13 36 05.7 -0.8 |
| F36A | Milaca<br>baz=11 | 10.57 | 355 | P | Pn | 13 36 10.9 -0.4 |
| J28A | Allard Ranch,<br>baz=11,SNR=7.2 | 10.64 | 322 | P | Pn | 13 36 12.4 +0.2 |
| I29A | Vivian Onida<br>baz=11 | 10.65 | 327 | P | Pn | 13 36 11.3 -1.0 |
| F35A | Swanville<br>baz=11 | 10.67 | 351 | P | Pn | 13 36 12.2 -0.4 |
| SDCO | Great Sand Dun<br>6.2nm,0.7s | 10.89 | 287 | *e*Pn | Pn | 13 36 16.5 +0.6 |
| J27A | Elkhorn Farm,<br>baz=11,SNR=13 | 10.92 | 319 | P | Pn | 13 36 16.6 +0.6 |
| F33A | 5 Mile Ranch,<br>baz=11 | 10.94 | 345 | P | Pn | 13 36 16.2 -0.1 |
| I28A | Midland<br>baz=11 | 11.03 | 324 | P | Pn | 13 36 17.1 -0.5 |
| COWI | Conover<br>12nm,0.3s | 11.04 | 12 | *e*Pn | Pn | 13 36 16.2 -1.4 |
| G29A | Hoven<br>baz=12 | 11.45 | 332 | P | Pn | 13 36 21.4 -1.8 |
| ISCO | Idaho Springs<br>6.3nm,0.5s | 11.47 | 297 | *e*Pn | Pn | 13 36 23.8 0.0 |
| H28A | Mission Ridge<br>baz=12 | 11.48 | 327 | P | Pn | 13 36 21.9 -1.8 |
| MNTX | Cornudas Mount<br>baz=12 | 11.50 | 255 | P | Pn | 13 36 23.1 -0.9 |
| MNTX | Cornudas Mount<br>10nm,0.7s | 11.50 | 255 | *e*Pn | Pn | 13 36 22.8 -1.2 |
| E33A | Westby DABS, E<br>baz=12 | 11.52 | 347 | P | Pn | 13 36 23.2 -1.0 |
| ANMO | Albuquerque<br>3.2nm,0.8s | 11.60 | 272 | *e*Pn | Pn | 13 36 26.1 +0.6 |
| G27A | Dupree<br>baz=12 | 12.44 | 327 | P | Pn | 13 36 35.5 -1.3 |
| SSPA | Standing Stone | 12.55 | 61 | *e*Pn | Pn | 13 36 36.0 -2.2 |
| G26A | Maurine<br>baz=13,SNR=6.8 | 12.68 | 325 | P | Pn | 13 36 39.2 -0.9 |
| AGMN | Agassiz Nation<br>11nm,0.3s | 13.24 | 350 | *e*Pn | Pn | 13 36 45.5 -2.2 |
| TUC | Tucson<br>5.7nm,1.1s | 15.65 | 264 | *e*P | P | 13 37 26.3 +1.6 |

*ISCJB **11** 13:37:57.6±0.8,6˚.50S×0˚.08×130˚.22E±0˚.09,h146km, mb3.3/1,Error ellipse: s-maj=12.2km s-min=10.4km az=17.2*
*IDC **11** 13:37:58.6±2.2,6˚.49S×130˚.19E,h139km±27km, mb3.2/1, mb1 3.3/5,mb1mx3.1/34,mbtmp3.7/5,Error ellipse: s-maj=30.5km s-min=20.1km az=113.0*
*AUST **11** 13:38:18.4±0.0,8˚.07S×129˚.54E,h159km,Error ellipse: s-maj=1.5km s-min=1.2km az=275.0*

**ISC 11 13:37:58.0±1.0,6˚.46S±0˚.08×130˚.3E±0˚.1,h146km,n12, σ1°89/11,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak<br>baz=5.8,SNR=5.1 | 4.03 | 29 | P | | Sn | 13 39 42.5 | -3.1 |
| SIJI | Sorong<br>1.0nm,0.3s,baz=133,slow=23,SNR=17 | 5.64 | 10 | P | | Pn | 13 39 20.8 | +0.9 |
| SIJI | | | | S | | Sn | 13 40 19.6 | -4.3 |
| SWI | Sorong<br>2.9nm,0.3s,baz=270,slow=23,SNR=11 | 5.64 | 10 | P | | Sn | 13 40 19.9 | -4.1 |
| MTN | Manton Dam<br>baz=7.4,SNR=4.6 | 6.41 | 172 | P | | Pn | 13 39 35.6 | +5.5 |
| KDU | Kakadu<br>baz=5.0,SNR=6.2 | 6.56 | 161 | P | | Pn | 13 39 33.2 | +1.0 |
| SOEI | Soe<br>baz=5.4,SNR=11 | 6.79 | 241 | P | | Pn | 13 39 36.9 | +1.5 |
| BATI | Baumata<br>baz=5.5,SNR=7.5 | 7.52 | 240 | P | | Pn | 13 39 46.5 | +1.4 |
| BATI | | | | S | | Sn | 13 41 06.1 | -3.1 |
| KNRA | Kununurra<br>3.9nm,0.3s,baz=212,slow=1.6,SNR=16 | 9.28 | 189 | P | | Pn | 13 40 07.7 | -0.9 |
| WRA | Warramunga Arr<br>baz=7.6,SNR=12 | 13.98 | 164 | P | | Pn | 13 41 09.3 | -0.6 |
| WRA | | | | S | | Sn | 13 43 34.3 | -10 |
| ASAR | Alice Springs<br>0.3nm,0.3s,baz=347,slow=12,SNR=30 | 17.47 | 169 | P | | Pn | 13 41 53.5 | +0.7 |
| WRKA | Warakurna<br>0.2nm,0.3s,baz=349,slow=11,SNR=26 | 18.57 | 186 | P | | Pn | 13 42 05.4 | -0.5 |
| MKAR | Makanchi Array<br>baz=17,SNR=4.0 | 67.92 | 327 | P | | P | 13 48 42.1 | +1.1 |
| | 0.3nm,0.5s,baz=117,slow=8.2,SNR=2.9 | | | | | | | |

*NEIC **11** 13:43:31.0,35˚.29N×92˚.34W,h7km,MD2.5(CERI),After CERI.*
*NEIC Felt [III] at Greenbrier. Felt in the Conway-Mountain Home area.*

**ISC 11 13:43:30.2±1.2,35˚.32N±0˚.04×92˚.36W±0˚.03,h4km±12km, n16,σ0°80/25,Arkansas**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| UALR | University of | 0.55 | 178 | *e*Pg | | Pg | 13 43 41.4 | +0.7 |
| UALR | | | | Sg | | Sg | 13 43 47.6 | -0.2 |
| MIAR | Mount Ida<br>baz=1.3 | 1.26 | 232 | P | | Pn | 13 43 54.6 | 0.0 |
| MIAR | | | | S | | Sn | 13 44 11.6 | -0.3 |
| MIAR | Mount Ida<br>baz=1.3 | 1.26 | 232 | *e*Pn | | Pn | 13 43 54.5 | 0.0 |
| MIAR | | | | *e*Sg | | Sb | 13 44 09.7 | -1.4 |
| HBAR | Harrisburg<br>baz=1.4 | 1.41 | 80 | *e*Pn | | Pb | 13 43 57.1 | 0.0 |
| HBAR | | | | *e*S | | Sg | 13 44 16.0 | +0.4 |
| V38A | Canehill<br>baz=1.8 | 1.75 | 289 | Pb | | Pb | 13 44 02.9 | -0.1 |
| V38A | | | | S | | Sg | 13 44 26.7 | +0.2 |
| W38A | Poteau<br>baz=1.8 | 1.78 | 263 | Pb | | Pb | 13 44 03.5 | +0.1 |
| W38A | | | | Sb | | Sg | 13 44 28.2 | +0.6 |
| U38A | Gravette<br>baz=2.0 | 1.99 | 305 | Pb | | Pb | 13 44 06.8 | -0.1 |
| U38A | | | | Sb | | Sg | 13 44 34.0 | -0.1 |
| GNAR | Gosnell<br>baz=2.0 | 2.01 | 71 | *e*Pg | | Pg | 13 44 08.8 | -0.1 |
| X38A | Whitesboro<br>baz=2.1 | 2.13 | 253 | Pb | | Pb | 13 44 09.2 | -0.2 |
| X38A | | | | Sb | | Sg | 13 44 38.6 | 0.0 |
| V37A | Hulbert<br>baz=2.4 | 2.33 | 285 | Sb | | Sb | 13 44 43.3 | +1.3 |
| X37A | Clayton<br>baz=2.6 | 2.58 | 254 | Sb | | Sg | 13 44 51.6 | -1.4 |
| GLAT | Glass | 2.67 | 68 | *e*Pg | | Pb | 13 44 19.7 | +1.1 |
| T37A | Cheneyville 18<br>baz=2.8 | 2.74 | 312 | Sb | | Sb | 13 44 54.6 | +1.0 |
| U36A | Oologah<br>baz=3.0 | 2.94 | 292 | Sb | | Sb | 13 45 00.9 | +1.5 |
| UTMT | University of | 3.02 | 69 | Pn | | Pn | 13 44 18.2 | -0.5 |
| SIUC | Southern Illin | 3.48 | 46 | *e*Pn | | Pn | 13 44 24.7 | -0.4 |
| SIUC | | | | *e*Pg | | Pg | 13 44 35.8 | -1.2 |

*IDC **11** 13:43:44.8±1.1,34˚.90S×71˚.73W,h43km±6km, mb3.7/4, mb1 3.8/5,mb1mx3.7/19,mbtmp3.9/5,ML3.8/1,Error ellipse: s-maj=44.2km s-min=22.9km az=59.0*
*GUC **11** 13:43:44.3±0.7,34˚.85S×71˚.75W,h55km±13km,ML4.2*
*ISCJB **11** 13:43:45.0±0.6,34˚.85S±0˚.04×71˚.81W±0˚.09,h58km±6km, mb3.9/4,Error ellipse: s-maj=12.9km s-min=5.0km az=20.8*
*NEIC **11** 13:43:45.2±1.1,34˚.94S×71˚.69W,MG4.2(GUC),Error ellipse: s-maj=45.6km s-min=20.4km az=78.0*
*NEIC Felt [IV] at Talca, [III] at San Javier and [II] at Curico.*

**ISC 11 13:43:45.3±0.7,34˚.83S±0˚.04×71˚.83W±0˚.07,h43km±6km, n28,σ1°52/41,mb4.0/4,4C-4D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| NICH | Los Niches | 0.52 | 109 | ↓*i*P | | Pn | 13 43 56.2 | -0.3 |
| NICH | | | | *i* S | | Sn | 13 44 04.6 | +0.2 |
| TALC | Talca | 0.59 | 164 | ↑*i*P | | Pn | 13 43 57.6 | +0.3 |
| TALC | | | | *i* S | | Sn | 13 44 06.7 | +0.8 |
| TACH | Talagante | 1.39 | 33 | ↓*i*P | | Pn | 13 44 08.3 | 0.0 |
| COCH | Cobquecura | 1.51 | 211 | ↓*i*P | | Pn | 13 44 10.5 | +0.5 |
| COCH | | | | *i* S | | Sn | 13 44 31.9 | +3.5 |
| RCDM | Rinconada Maip | 1.59 | 33 | *e*P | | Pn | 13 44 09.7 | -1.3 |
| RCDM | | | | *i* S | | Sn | 13 44 30.6 | +0.3 |
| RCDM | | | | AML | AML | | 13 44 32.1 | |
| | comp=E,3μm,0.7s | | | | | | | |
| ANTU | Antumapu | 1.60 | 39 | *e*P | | Pn | 13 44 11.6 | +0.4 |
| ANTU | | | | *e*S | | Sn | 13 44 32.2 | +1.4 |
| ANTU | | | | AML | AML | | 13 44 35.4 | |
| | comp=E,3μm,0.4s | | | | | | | |
| PCH | Pirque | 1.63 | 43 | ↑*i*P | | Pn | 13 44 11.6 | 0.0 |
| PCH | | | | *i* S | | Sn | 13 44 32.5 | +1.1 |
| SAN | Santiago | 1.68 | 36 | ↑*i*P | | Pn | 13 44 12.6 | +0.3 |
| CLCH | Cerro Calan | 1.79 | 37 | ↑*i*P | | Pn | 13 44 14.0 | +0.2 |
| CLCH | | | | AML | AML | | 13 44 41.2 | |
| | comp=N,5μm,0.8s | | | | | | | |
| PEL | Peldehue | 1.93 | 30 | ↓*i*P | | Pn | 13 44 16.2 | +0.4 |
| PEL | | | | AML | AML | | 13 44 44.0 | |
| | comp=E,5μm,0.4s | | | | | | | |
| ROC1 | El Roble | 1.97 | 20 | *e*P | | Pn | 13 44 16.8 | +0.4 |
| ROC1 | | | | *e*S | | Sn | 13 44 42.8 | +2.7 |
| ROCH | El Roble | 1.98 | 20 | *e*P | | Pn | 13 44 16.6 | +0.1 |
| ROCH | | | | *i* S | | Sn | 13 44 41.3 | +1.2 |
| CANA | Caviahue | 3.11 | 169 | *e*P | | Pn | 13 44 35.2 | +3.1 |
| AUSP | Uspallata | 3.31 | 39 | *e*P | | Pn | 13 44 37.2 | +2.3 |
| AUSP | | | | *e*S | | Sn | 13 45 27.8 | +14 |
| RTLS | Leoncito | 3.69 | 36 | *e*P | | Pn | 13 44 42.3 | +2.1 |
| RTCV | Cerro Valdivia | 4.04 | 44 | *e*P | | Pn | 13 44 48.3 | +3.5 |
| CFAA | Coronel Fontan | 4.41 | 44 | *e*P | | Pn | 13 44 50.4 | +0.7 |
| RTLL | Cerro Villicun | 4.49 | 40 | *e*P | | Pn | 13 44 51.6 | +0.8 |
| RTLL | | | | *e*S | | Sn | 13 45 44.4 | +2.6 |
| ACAN | Cantantal | 4.64 | 58 | *e*P | | Pn | 13 44 54.5 | +1.5 |
| AMOG | MOGNA | 4.79 | 37 | *e*P | | Pn | 13 44 55.5 | +0.5 |
| AGUA | GUANDACOL | 6.03 | 29 | *e*P | | Pn | 13 45 12.2 | 0.0 |
| VCA | Vinchina | 6.81 | 28 | *e*P | | Pn | 13 45 22.8 | -0.1 |
| VCA | | | | *e*S | | Sn | 13 46 51.6 | +12 |
| TCA | Tanti | 7.00 | 62 | *e*P | | Pn | 13 45 26.2 | +0.8 |
| TCA | | | | *e*S | | Sn | 13 46 48.4 | +4.6 |
| LPAZ | La Paz<br>comp=E,0.1nm,0.3s,baz=200,slow=10,SNR=6.4 | 18.76 | 11 | P | | Pn | 13 48 02.8 | +0.5 |
| TXAR | Lajitas Array<br>comp=E,0.2nm,0.5s,baz=159,slow=8.6,SNR=5.5 | 70.54 | 331 | P | | P | 13 54 55.9 | +0.1 |
| TXAR | | | | pP | | pP | 13 55 08.5 | 0.0 |
| | comp=E,0.5nm,0.5s,baz=158,slow=9.5,SNR=8.9 | | | | | | | |
| MAW | Mawson<br>comp=E,1.0nm,0.7s,baz=249,slow=8.6,SNR=2.9 | 72.34 | 163 | P | | P | 13 55 05.2 | -0.9 |
| BOSA | Boshof<br>comp=E,4.7nm,1.0s,baz=225,slow=8.6,SNR=3.3 | 79.53 | 117 | P | | P | 13 55 47.1 | -0.9 |
| BOSA | | | | pP | | pP | 13 56 00.3 | -0.5 |
| | comp=E,2.5nm,0.8s,baz=229,slow=9.1,SNR=1.7 | | | | | | | |
| TORD | Torodi Ar. Bea<br>comp=E,1.2nm,0.8s,baz=252,slow=4.9,SNR=5.2 | 84.33 | 70 | P | | P | 13 56 11.3 | -1.9 |
| TORD | | | | pP | | pP | 13 56 26.0 | -0.1 |
| | comp=E,0.5nm,0.6s,baz=291,slow=3.7,SNR=2.7 | | | | | | | |
| TORD | | | | sP | | sP | 13 56 29.9 | -1.0 |
| | comp=E,1.0nm,0.7s,baz=277,slow=7.1,SNR=3.8 | | | | | | | |

*ISCJB **11** 13:50:29.0±0.5,50˚.07N±0˚.03×19˚.04E±0˚.03,h0km,Error ellipse: s-maj=4.3km s-min=3.1km az=172.5*
*CSEM **11** 13:50:29.6±0.2,50˚.11N×19˚.08E,h2km,ML2.6/10*
*PRU **11** 13:50:30.3,50˚.11N×19˚.08E,h0km*
*IPEC **11** 13:50:30.1±0.2,50˚.13N×19˚.13E,h1km±1km,ML1.9/3, Error ellipse: s-maj=2.7km s-min=1.1km az=165.0*

**ISC 11 13:50:30.1±0.9,50˚.07N±0˚.04×19˚.10E±0˚.02,h0km,n26, σ0°77/42,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| CHZP | Chorzow | 0.23 | 343 | *e*Pg | | Pg | 13 50 35.7 | +1.2 |
| CHZP | | | | *e*Sg | | Sg | 13 50 37.1 | -0.4 |
| OJC | Ojcow | 0.48 | 72 | *e*Pg | | Pg | 13 50 38.7 | -0.5 |
| OJC | | | | *e*Sg | | Sg | 13 50 44.9 | -0.5 |
| OJC | Ojcow | 0.48 | 72 | *e*Pg | | Pg | 13 50 38.7 | -0.5 |
| OJC | | | | *e*Sg | | Sg | 13 50 44.9 | -0.5 |
| OKC | Ostrava-Krasne | 0.66 | 249 | *e*PG | | Pg | 13 50 42.2 | -0.4 |
| OKC | | | | *e*SG | | Sg | 13 50 51.7 | +0.6 |
| | comp=Z,15nm,0.5s | | | | | | | |
| OKC | Ostrava-Krasne | 0.66 | 249 | Pg | | Pg | 13 50 42.2 | -0.4 |
| OKC | | | | Sg | | Sg | 13 50 51.7 | +0.6 |
| | 15nm,0.5s | | | | | | | |
| MORC | Moravsky Berou<br>baz=70 | 1.05 | 254 | *e*Pg | | Pb | 13 50 50.7 | -0.4 |
| MORC | | | | *e*Sg | | Sg | 13 51 04.2 | +0.5 |
| | 20nm,0.3s,baz=70 | | | | | | | |
| KRLC | Kraliky | 1.49 | 271 | *e*PG | | Pn | 13 50 57.1 | -1.1 |
| KRLC | | | | *e*SG | | Sn | 13 51 17.9 | -0.5 |
| KRLC | Kraliky | 1.49 | 271 | Pg | | Pn | 13 50 57.1 | -1.1 |
| KRLC | | | | Sg | | Sn | 13 51 17.9 | -0.5 |
| STHS | Stebnicka Huta | 1.54 | 114 | *e*PG | | Pg | 13 51 00.0 | +0.4 |
| STHS | Stebnicka Huta | 1.54 | 114 | *e*Pg | | Pg | 13 51 00.0 | +0.4 |
| VYHS | Vyhne | 1.59 | 186 | *e*PG | | Pn | 13 50 59.6 | +0.1 |
| VYHS | | | | *e*SG | | Sn | 13 51 20.9 | +0.2 |
| VYHS | Vyhne | 1.59 | 186 | *e*Pg | | Pn | 13 50 59.6 | +0.1 |
| VYHS | | | | *e*Sg | | Sn | 13 51 20.9 | +0.2 |
| VRAC | Vranov<br>baz=62 | 1.79 | 246 | *e*Pn | | Pn | 13 51 02.8 | +0.5 |
| VRAC | | | | *e*Sg | | Sg | 13 51 27.7 | 0.0 |
| | 6.0nm,0.3s,baz=62 | | | | | | | |
| DPC | Dobruska-Polom | 1.80 | 280 | *e*PG | | Pn | 13 51 02.5 | 0.0 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| DPC | | | | eSG | Sg | 13 51 27.6 | -0.4 |
| | comp=Z,12nm,0.5s | | | | | | |
| DPC | Dobruska-Polom | 1.80 | 280 | Pg | Pn | 13 51 02.5 | 0.0 |
| DPC | | | | Sg | Sg | 13 51 27.6 | -0.4 |
| | 12nm,0.5s | | | | | | |
| KSP | Ksiaz | 1.95 | 294 | ePg | Pg | 13 51 08.1 | +0.6 |
| KSP | | | | eSg | Sg | 13 51 33.3 | +0.6 |
| UPC | Upice | 2.02 | 284 | eSG | Sg | 13 51 34.7 | -0.4 |
| | comp=Z,4.9nm,0.5s | | | | | | |
| UPC | Upice | 2.02 | 284 | Sg | Sg | 13 51 34.7 | -0.4 |
| | 4.9nm,0.5s | | | | | | |
| KRUC | Moravsky | 2.03 | 241 | ePn | Pn | 13 51 06.1 | +0.6 |
| | baz=58 | | | | | | |
| KRUC | | | | eSg | Sg | 13 51 35.1 | -0.1 |
| | 6.1nm,0.4s,baz=58 | | | | | | |
| GOPC | GO Pecny, Ondr | 2.78 | 268 | eSG | Sg | 13 51 58.1 | -1.4 |
| | comp=Z,3.1nm,0.3s | | | | | | |
| GOPC | GO Pecny, Ondr | 2.78 | 268 | Sg | Sg | 13 51 58.1 | -1.4 |
| | 3.1nm,0.3s | | | | | | |
| PRU | Pruhonice | 2.94 | 270 | eSG | Sg | 13 52 03.3 | -1.1 |
| | comp=Z,2.6nm,0.4s | | | | | | |
| PRU | Pruhonice | 2.94 | 270 | Sg | Sg | 13 52 03.3 | -1.1 |
| | 2.6nm,0.4s | | | | | | |
| PVCC | Panska Ves | 2.94 | 281 | eSG | Sg | 13 52 03.4 | -1.0 |
| | comp=Z,8.5nm,0.4s | | | | | | |
| PVCC | Panska Ves | 2.94 | 281 | Sg | Sg | 13 52 03.4 | -1.0 |
| | 8.5nm,0.4s | | | | | | |
| KHC | Kasperske Hory | 3.71 | 257 | ePG | Pb | 13 51 38.1 | +1.6 |
| KHC | | | | eSG | Sg | 13 52 27.5 | -1.7 |
| | comp=Z,3.1nm,0.5s | | | | | | |

*NIED* ***11*** *14:10:00, 41°.10N×141°.30E, h83km, Mw4.3 Best double couple: M₀2.67000×10^15 NP1:φs96.00000°, δ43.00000°, λ-115.00000°. NP2:φs309.00000°, δ52.00000°, λ-69.00000°.*

*BJI* ***11*** *14:10:31.9, 41°.10N×141°.30E, h105km, mb4.6/14, mB4.7/8*

*ISCJB* ***11*** *14:10:31.4±0.2, 41°.14N±0°.02×141°.28E±0°.04, h101km±1km, mb4.4/56, Error ellipse: s-maj=5.0km s-min=3.4km az=23.0*

*MOS* ***11*** *14:10:31.8±0.9, 41°.19N×141°.24E, h104km, mb4.4/42, Error ellipse: s-maj=7.3km s-min=5.4km az=102.0*

*JMA* ***11*** *14:10:32.6±0.1, 41°.10N×141°.30E, h88km±1km, M4.2 Broadband fault plane solution: P waves. NP1: φs305.00000°, δ53.00000°, λ-61.00000°. NP2:φs83.00000°, δ45.00000°, λ-123.00000°. Principal axes: T Plg4.0000°, Azm15.0000°; N Plg23.0000°, Azm107.0000°; P Plg67.0000°, Azm275.0000°;*

*JMA Felt II J1.*

*NEIC* ***11*** *14:10:33.6±0.6, 41°.13N×141°.26E, h108km±5km, mb4.7/12, MW4.2(NIED) Error ellipse: s-maj=8.7km s-min=5.6km az=129.0*

*NEIC Recorded [2 JMA] in Aomori and [1 JMA] in Iwate, Honshu. Also recorded [1 JMA] in southwestern Hokkaido.*

*IDC* ***11*** *14:10:35.8±2.2, 41°.06N×141°.11E, h125km±20km, mb4.0/20, mb1 4.1/24, mb1mx4.0/51, mbtmp4.4/24, MS2.7/5, Ms1 2.8/5, ms1mx2.5/29, Error ellipse: s-maj=15.4km s-min=11.7km az=87.0*

**ISC 11 14:10:32.7**±0.6, **41°.11N**±0°.03×**141°.28E**±0°.04, **h97**km±5km, **n146,** σ1s**24**/166, **mb4.5**/55, **15C-7D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JOT | Ohata | 0.32 | 327 | ⇓P | Pn | 14 10 46.1 | -0.9 |
| JOT | | | | eS | Sn | 14 10 56.4 | -1.4 |
| JTM | Tenmabayashi | 0.36 | 207 | ⇓P | Pn | 14 10 46.0 | -1.3 |
| JTM | | | | eS | Sn | 14 10 56.2 | -2.0 |
| JANG | Nango | 0.76 | 167 | ⇑P | Pn | 14 10 49.1 | -1.3 |
| JANG | | | | eS | Sn | 14 11 01.3 | -2.4 |
| JSR | Shiriuchi | 0.77 | 303 | ⇑P | Pn | 14 10 49.9 | -0.6 |
| JSR | | | | eS | Sn | 14 11 02.3 | -1.6 |
| JKB | Kayabe | 0.80 | 346 | ⇑P | Pn | 14 10 50.4 | -0.3 |
| JKB | | | | eS | Sn | 14 11 03.8 | -0.5 |
| JAH | Hinai | 1.05 | 208 | ⇑P | Pn | 14 10 52.9 | -0.5 |
| JAH | | | | eS | Sn | 14 11 08.4 | -0.6 |
| JIW | Iwasaki | 1.10 | 242 | ⇑P | Pn | 14 10 53.4 | -0.6 |
| JIW | | | | eS | Sn | 14 11 09.1 | -1.0 |
| JYM2 | Yakumo 2 | 1.22 | 326 | ⇑P | Pn | 14 10 55.2 | -0.1 |
| JYM2 | | | | eS | Sn | 14 11 12.4 | 0.0 |
| JNB | Noboribetsu | 1.37 | 352 | eS | Sn | 14 11 15.6 | 0.0 |
| JNBK | Urakawa-nobuka | 1.60 | 43 | ⇑P | Pn | 14 11 00.0 | 0.0 |
| JOM | Ohasama | 1.64 | 180 | ⇑P | Pn | 14 11 00.3 | -0.2 |
| JOM | | | | eS | Sn | 14 11 21.2 | -0.4 |
| JOSM | Okushiri--Mats | 1.67 | 306 | ⇑P | Pn | 14 11 00.1 | -0.7 |
| JOSM | | | | eS | Sn | 14 11 21.2 | -1.1 |
| ERM | Erimo | 1.67 | 57 | d iP | Pn | 14 11 01.4 | +0.6 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,382nm,0.6s | | | | | | |
| ERM | Erimo | 1.67 | 57 | ePn | Pn | 14 11 01.4 | +0.6 |
| ERM | | | | eSn | Sn | 14 11 24.2 | +1.9 |
| JEW | Eniwo | 1.73 | 4 | ⇑P | Pn | 14 11 02.1 | +0.4 |
| JEW | | | | eS | Sn | 14 11 24.1 | +0.4 |
| ASAJ | Asahikawa | 3.15 | 17 | ePn | Pn | 14 11 20.5 | +0.1 |
| YUK | Yuzh-Kuril'sk | 4.47 | 48 | c iP | Pn | 14 11 37.7 | -0.3 |
| YUK | | | | iS | Sn | 14 12 25.3 | -3.5 |
| YUK | | | | pmax | pmax | | |
| | comp=N,140nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,362nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,109nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,59nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,906nm,0.6s | | | | | | |
| MAJO | Matsushiro | 5.16 | 209 | c iP | Pn | 14 11 48.9 | +1.4 |
| MAJO | Matsushiro | 5.16 | 209 | ePn | Pn | 14 11 48.9 | +1.4 |
| | comp=E,112nm,0.6s | | | | | | |
| MAT | Matsushiro | 5.16 | 209 | P | Pn | 14 11 49.3 | +1.8 |
| MAT | | | | S | Sn | 14 12 47.4 | +1.7 |
| MJAR | Matsushiro Arr | 5.16 | 209 | P | Pn | 14 11 49.5 | +2.0 |
| | comp=E,16nm,0.3s,baz=26,slow=14,SNR=143 | | | | | | |
| MJAR | | | | LR | LR | 14 14 14.0 | |
| | comp=E,85nm,19.6s,baz=15,slow=43 | | | | | | |
| YSS | Yuzh-Sakhalins | 5.94 | 10 | ⇓iP | Pn | 14 11 58.0 | +0.1 |
| YSS | | | | eS | Sn | 14 13 04.0 | -0.5 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,60nm,1.0s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,40nm,1.1s | | | | | | |
| YSS | Yuzh-Sakhalins | 5.94 | 10 | ePn | Pn | 14 11 58.7 | +0.7 |
| | comp=E,36nm,0.4s | | | | | | |
| KUR | Kuril'sk | 6.33 | 47 | d iP | Pn | 14 12 03.2 | -0.2 |
| KUR | | | | iS | Sn | 14 13 12.8 | -1.4 |
| KUR | | | | pmax | pmax | | |
| | comp=N,47nm,1.0s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,72nm,1.0s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,57nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,76nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,111nm,0.4s | | | | | | |
| VLA | Vladivostok | 7.27 | 289 | eP | Pn | 14 12 16.4 | +0.3 |
| VLA | | | | pmax | pmax | | |
| | comp=Z,34nm,1.0s | | | | | | |
| USRK | Ussuriysk Ar. | 7.51 | 297 | P | Pn | 14 12 21.4 | +1.9 |
| | comp=Z,2.6nm,0.3s,baz=94,slow=14,SNR=32 | | | | | | |
| MSHR | Mys Shultsa | 7.70 | 284 | eP | Pn | 14 12 22.8 | +0.8 |
| UGL | Uglegorsk | 7.99 | 4 | P | Pn | 14 12 23.6 | -2.2 |
| UGL | | | | eS | Sn | 14 13 52.0 | -2.3 |
| HABR | Khabarovsk | 8.59 | 331 | eP | Pn | 14 12 31.9 | -2.1 |
| HABR | | | | eS | Sn | 14 14 06.9 | -2.1 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,22nm,1.4s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,14nm,1.4s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,14nm,1.4s | | | | | | |
| MDJ | Mudanjiang | 9.27 | 296 | P | Pn | 14 12 45.9 | +2.5 |
| MDJ | | | | PMZ | | | |
| | comp=E,20nm,0.8s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=E,63nm,5.5s | | | | | | |
| MDJ | Mudanjiang | 9.27 | 296 | ePn | Pn | 14 12 45.3 | +1.9 |
| | comp=E,24nm,0.8s | | | | | | |
| KLR | Kul'dur | 10.54 | 324 | eP | Pn | 14 13 01.8 | +1.3 |
| KSRS | Korea Array | 10.98 | 255 | P | Pn | 14 13 08.0 | +1.3 |
| | comp=E,0.2nm,0.3s,baz=74,slow=13,SNR=9.7 | | | | | | |
| KSRS | | | | S | Sn | 14 15 15.0 | +7.6 |
| | comp=E,0.2nm,0.3s,baz=64,slow=24,SNR=5.3 | | | | | | |
| KSRS | | | | LR | LR | 14 16 45.4 | |
| | comp=E,38nm,20.9s,baz=74,slow=34 | | | | | | |
| KSAR | Wonju Array Be | 11.01 | 255 | P | Pn | 14 13 08.0 | +0.9 |
| KSAR | | | | S | Sn | 14 15 15.0 | +6.8 |
| KSAR | Wonju Array Be | 11.01 | 255 | P | Pn | 14 13 08.0 | +0.9 |
| KSAR | | | | S | Sn | 14 15 15.0 | +6.8 |
| JNU | Nakatsue | 11.51 | 229 | P | Pn | 14 13 14.3 | +0.5 |
| | comp=E,0.4nm,0.3s,baz=318,slow=1.1,SNR=6.6 | | | | | | |
| JNU | | | | LR | LR | 14 17 35.0 | |
| | comp=E,30nm,21.0s,baz=70,slow=37 | | | | | | |
| SKR | Severo-Kuril's | 14.06 | 42 | eP | Pn | 14 13 46.0 | -1.2 |
| PETK | Petropavlovsk- | 16.35 | 37 | P | Pn | 14 14 12.5 | -3.6 |
| | comp=E,0.6nm,0.3s,baz=214,slow=10,SNR=15 | | | | | | |
| PETK | Petropavlovsk- | 16.35 | 37 | P | Pn | 14 14 12.5 | -3.6 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| PET | Petropavlovsk | 16.74 | 39 | eP | Pn | 14 14 20.5 | -0.4 |
| YAK | Yakutsk | 22.09 | 345 | eP | P | 14 15 18.1 | -1.4 |
| YAK | | | | e*PP | pP | 14 15 42.1 | +3.7 |
| YAK | | | | eS | S | 14 19 15.2 | -1.4 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,5.0nm,1.2s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,2.0nm,0.9s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,278nm,3.8s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,267nm,4.8s | | | | | | |
| HHC | Hu-ho-hao-te | 22.39 | 279 | eP | P | 14 15 22.0 | -1.1 |
| HHC | | | | pP | pP | 14 15 43.6 | +1.5 |
| HHC | | | | PP | PnPn | 14 15 55.9 | +4.9 |
| HHC | | | | S | S | 14 19 10.1 | -12 |
| HHC | | | | SS | SnSn | 14 20 02.6 | +2.5 |
| HHC | | | | PMZ | | | |
| | comp=E,17nm,1.1s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=E,61nm,3.6s | | | | | | |
| HHC | | | | LN | | | |
| | comp=E,88nm,8.2s | | | | | | |
| HHC | | | | LE | | | |
| | comp=E,66nm,7.4s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=E,44nm,9.1s | | | | | | |
| SEY | Seymchan | 22.83 | 13 | P | P | 14 15 24.9 | -2.2 |
| | comp=E,1.7nm,0.3s,baz=221,slow=19,SNR=12 | | | | | | |
| SEY | Seymchan | 22.83 | 13 | P | P | 14 15 25.0 | -2.2 |
| SEY | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| BOD | Bodaibo | 24.11 | 323 | eP | P | 14 15 38.2 | -0.8 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| ULN | Ulaanbaatar | 25.19 | 297 | ⇓iP | P | 14 15 48.5 | -0.6 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| ULN | Ulaanbaatar | 25.19 | 297 | P | P | 14 15 47.9 | -1.2 |
| | comp=Z,4.2nm,0.9s | | | | | | |
| SONM | Songino Array | 25.63 | 297 | P | P | 14 15 52.0 | -1.1 |
| | comp=Z,2.3nm,0.7s,baz=95,slow=9.6,SNR=7.9 | | | | | | |
| SONM | Songino Array | 25.63 | 297 | P | P | 14 15 52.0 | -1.1 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| TLY | Talaya | 27.73 | 305 | LR | LR | 14 27 39.6 | |
| | comp=Z,28nm,19.3s,baz=347,slow=37 | | | | | | |
| TLY | Talaya | 27.73 | 305 | eP | P | 14 16 11.4 | -0.4 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| ZAK | Zakamensk | 27.83 | 302 | eP | P | 14 16 11.9 | -0.8 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| BILL | Bilibino | 30.17 | 18 | eP | P | 14 16 35.3 | +2.2 |
| BILL | | | | e | | 14 19 27.5 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.4s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,30nm,15.0s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 30.50 | 127 | T | T | 14 47 58.9 | |
| | baz=318,slow=75,SNR=148 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 30.50 | 127 | T | T | 14 47 55.4 | |
| | baz=318,slow=75,SNR=287 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 30.51 | 127 | T | T | 14 47 54.1 | |
| | baz=318,slow=75,SNR=211 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 31.32 | 128 | T | T | 14 50 18.2 | |
| | baz=323,slow=76,SNR=104 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 31.32 | 128 | T | T | 14 50 18.4 | |
| | baz=323,slow=76,SNR=85 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 31.34 | 128 | T | T | 14 50 19.5 | |
| | baz=323,slow=76,SNR=78 | | | | | | |
| KRAR | Krasnoyarsk | 34.55 | 312 | eP | P | 14 17 10.7 | -0.8 |
| KRAR | | | | pmax | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | |
| ZALV | Zalesovo Beam | 39.19 | 309 | P | P | 14 17 50.8 | 0.0 |
| | comp=Z,12nm,0.7s,baz=88,slow=7.4,SNR=58 | | | | | | |
| ZALV | | | | PcP | PcP | 14 19 58.3 | +0.2 |
| | comp=Z,3.9nm,0.4s,baz=86,slow=2.9,SNR=11 | | | | | | |
| NVS | Novosibirsk | 40.04 | 310 | ⇑iP | P | 14 17 57.3 | -0.5 |
| NVS | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,7.0nm,1.0s | | | | | | |
| LSA | Lhasa | 41.90 | 271 | eP | P | 14 18 15.0 | +1.0 |
| LSA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| LSA | Lhasa | 41.90 | 271 | eP | P | 14 18 15.0 | +1.0 |
| | comp=Z,10nm,0.8s | | | | | | |
| MK31 | Makanchi Array | 41.98 | 298 | P | P | 14 18 13.1 | -0.9 |
| MKAR | Makanchi Array | 41.98 | 298 | P | P | 14 18 13.8 | -0.2 |
| | comp=Z,12nm,0.6s,baz=81,slow=10,SNR=55 | | | | | | |
| MKAR | | | | PcP | PcP | 14 20 07.2 | -0.1 |
| | comp=Z,0.7nm,0.6s,baz=64,slow=9.8,SNR=2.8 | | | | | | |
| MKAR | Makanchi Array | 41.98 | 298 | P | P | 14 18 13.8 | -0.2 |
| MKAR | | | | | | 14 20 07.2 | |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| CHTO | Chiang Mai | 42.35 | 251 | eP | P | 14 18 17.4 | +0.1 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| CHTO | Chiang Mai | 42.35 | 251 | eP | P | 14 18 17.4 | +0.1 |
| | comp=Z,4.7nm,0.6s | | | | | | |
| CMAR | Chiang Mai Arr | 42.59 | 251 | P | P | 14 18 19.3 | +0.2 |
| | comp=Z,1.9nm,0.5s,baz=42,slow=7.6,SNR=9.9 | | | | | | |
| CMAR | | | | LR | LR | 14 35 57.8 | |
| | comp=Z,7.4nm,18.1s,baz=155,slow=36 | | | | | | |
| CMAR | Chiang Mai Arr | 42.59 | 251 | ceP | P | 14 18 19.6 | +0.5 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| SIJI | Sorong | 42.77 | 195 | P | P | 14 18 21.1 | +0.5 |
| | comp=Z,8.4nm,0.7s,baz=60,slow=3.7,SNR=5.3 | | | | | | |
| KURK | Kurchatov | 43.43 | 305 | eP | P | 14 18 25.2 | -0.4 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,43nm,0.8s | | | | | | |
| KURK | Kurchatov | 43.43 | 305 | eP | P | 14 18 25.1 | -0.4 |
| | comp=Z,43nm,0.8s | | | | | | |
| KDAK | Kodiak Island | 44.20 | 45 | eP | P | 14 18 33.0 | +1.4 |
| KDAK | Kodiak Island | 44.20 | 45 | eP | P | 14 18 33.0 | +1.4 |
| COLD | Coldfoot | 44.68 | 31 | eP | P | 14 18 36.8 | +1.5 |
| PDGK | Podgornoye | 44.89 | 294 | P | P | 14 18 36.0 | -1.3 |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | |
| TAPN | Taplejung | 45.70 | 270 | eP | P | 14 18 44.5 | +0.2 |
| | comp=Z,17nm,0.5s | | | | | | |
| COLA | College | 45.73 | 34 | eP | P | 14 18 45.6 | +2.0 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| ILAR | Eielson Array | 46.15 | 34 | P | P | 14 18 48.1 | +1.2 |
| | comp=Z,2.4nm,0.7s,baz=276,slow=8.2,SNR=26 | | | | | | |
| ILAR | Eielson Array | 46.15 | 34 | P | P | 14 18 48.1 | +1.2 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ODAN | Odare | 46.20 | 270 | eP | P | 14 18 48.1 | 0.0 |
| RAMN | Ramite | 46.75 | 270 | eP | P | 14 18 52.3 | -0.1 |
| | comp=Z,44nm,0.7s | | | | | | |
| GUN | Gumba | 46.79 | 272 | eP | P | 14 18 54.0 | +1.1 |
| | comp=Z,162nm,0.3s | | | | | | |
| KKN | Kakani | 47.31 | 272 | eP | P | 14 18 56.7 | 0.0 |
| PKI | Pulchoki | 47.32 | 272 | eP | P | 14 18 56.6 | -0.4 |
| | comp=Z,22nm,0.5s | | | | | | |
| PKIN | Phulchoki | 47.33 | 272 | eP | P | 14 18 56.6 | -0.4 |
| | comp=Z,18nm,0.4s | | | | | | |
| CHKZ | Chkalovo | 47.52 | 310 | iP | P | 14 18 57.2 | -0.6 |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| DMN | Daman | 47.53 | 272 | eP | P | 14 18 58.5 | 0.0 |
| VOSK | Vostochnaya | 47.56 | 309 | ceP | P | 14 18 57.7 | -0.4 |
| VOSK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| GKN | Gorkha | 47.68 | 273 | eP | P | 14 18 59.3 | -0.3 |
| TKM2 | Tokmak 2 | 47.70 | 295 | eP | P | 14 18 59.8 | +0.2 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| TKM2 | Tokmak 2 | 47.70 | 295 | eP | P | 14 18 59.8 | +0.2 |
| | comp=Z,17nm,0.8s | | | | | | |
| BVA0 | Borovoye Array | 47.82 | 310 | P | P | 14 18 59.6 | -0.5 |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| BRVK | Borovoye | 47.88 | 310 | iP | P | 14 19 00.2 | -0.3 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| OTUK | Ortayu | 48.04 | 303 | P | P | 14 19 01.6 | -0.3 |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.3s | | | | | | |
| DANN | Dangsing | 48.16 | 274 | eP | P | 14 19 03.9 | +0.5 |
| | comp=Z,29nm,0.5s | | | | | | |
| AAK | Ala-Archa | 48.56 | 295 | eP | P | 14 19 04.9 | -1.3 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| KOLN | Koldanda | 48.58 | 273 | eP | P | 14 19 06.5 | -0.1 |
| ZRNK | Zerenda | 48.65 | 310 | iP | P | 14 19 05.5 | -1.0 |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| EKS2 | Erkin-Say | 49.04 | 296 | eP | P | 14 19 09.2 | -0.6 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| EKS2 | Erkin-Say | 49.04 | 296 | eP | P | 14 19 09.2 | -0.6 |
| | comp=Z,5.9nm,0.8s | | | | | | |
| MNAS | Manas | 49.98 | 296 | P | P | 14 19 16.6 | -0.3 |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | |
| SFK | Sufi-Kurgan | 50.29 | 292 | P | P | 14 19 18.6 | -0.8 |
| SFK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| INK | Inuvik | 50.83 | 29 | P | P | 14 19 23.8 | +1.1 |
| | comp=Z,1.8nm,0.4s,baz=253,slow=7.3,SNR=11 | | | | | | |
| INK | Inuvik | 50.83 | 29 | P | P | 14 19 23.8 | +1.1 |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| KK31 | Karatay Array | 51.08 | 297 | eP | P | 14 19 24.4 | -0.7 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| KKAR | Karatay Array | 51.08 | 297 | eP | P | 14 19 24.0 | -1.1 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| KKAR | Karatay Array | 51.08 | 297 | eP | P | 14 19 23.9 | -1.1 |
| | comp=Z,2.2nm,0.5s | | | | | | |
| SVE | Sverdlovsk | 52.07 | 317 | eP | P | 14 19 32.8 | +0.6 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| ARU | Arti | 53.29 | 317 | d iP | P | 14 19 40.4 | -0.7 |
| ARU | | | | | | 14 20 45.8 | |
| ARU | | | | | | 14 21 39.7 | |
| ARU | | | | S | S | 14 27 05.2 | +0.3 |
| ARU | | | | SS | SS | 14 30 43.9 | -1.3 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,13nm,1.7s | | | | | | |
| AB31 | Akbulak array | 55.29 | 308 | iP | P | 14 19 55.5 | -0.3 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ABKAR | Akbulak array | 55.29 | 308 | eP | P | 14 19 55.2 | -0.5 |
| | comp=Z,2.7nm,0.4s | | | | | | |
| AKTO | Aktyubinsk | 55.93 | 310 | P | P | 14 19 59.3 | -1.0 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| WRAB | Tennant Creek | 61.07 | 187 | eP | P | 14 20 35.6 | -0.7 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| WRAB | Tennant Creek | 61.07 | 187 | eP | P | 14 20 35.2 | -1.0 |
| | comp=Z,3.6nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 61.08 | 187 | P | P | 14 20 35.2 | -1.1 |
| | comp=Z,3.4nm,0.3s,baz=7.8,slow=7.7,SNR=132 | | | | | | |
| WRA | Warramunga Arr | 61.08 | 187 | P | P | 14 20 35.3 | -1.1 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| GEYT | Alibeck | 61.83 | 297 | P | P | 14 20 40.8 | -0.6 |
| | comp=Z,2.5nm,0.5s,baz=56,slow=5.6,SNR=4.7 | | | | | | |
| OBN | Obninsk | 64.80 | 322 | iP | P | 14 21 00.7 | +0.1 |
| OBN | | | | e | | 14 21 28.3 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| ASAR | Alice Springs | 64.81 | 187 | P | P | 14 21 00.5 | -0.5 |
| | comp=Z,1.5nm,0.4s,baz=2.0,slow=7.6,SNR=72 | | | | | | |
| ASAR | Alice Springs | 64.81 | 187 | P | P | 14 21 00.5 | -0.5 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| FINES | FINESS Array B | 65.18 | 331 | P | P | 14 21 02.6 | -0.4 |
| | comp=Z,4.8nm,0.5s,baz=42,slow=8.0,SNR=39 | | | | | | |
| FINES | FINESS Array B | 65.18 | 331 | P | P | 14 21 02.6 | -0.4 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| KIV | Kislovodsk | 68.19 | 310 | eP | P | 14 21 23.7 | +1.1 |
| KIV | | | | e*PP | PcP | 14 21 49.7 | +1.9 |
| KIV | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| KBZ | Khabaz | 68.20 | 309 | P | P | 14 21 22.6 | +0.1 |
| | comp=Z,3.7nm,0.9s,baz=70,slow=5.5,SNR=4.3 | | | | | | |
| KBZ | Khabaz | 68.20 | 309 | P | P | 14 21 22.6 | +0.1 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| HFS | Hagfors | 70.34 | 335 | P | P | 14 21 35.4 | 0.0 |
| | comp=Z,2.1nm,0.3s,baz=35,slow=6.4,SNR=19 | | | | | | |
| HFS | Hagfors | 70.34 | 335 | P | P | 14 21 35.4 | 0.0 |
| HFS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| NB2 | NORSAR Subarra | 70.40 | 337 | P | P | 14 21 35.5 | -0.3 |
| | comp=Z,1.9nm,0.6s,baz=38,slow=6.2 | | | | | | |
| NOA | NORSAR Array B | 70.40 | 337 | P | P | 14 21 35.8 | 0.0 |
| | comp=Z,2.4nm,0.6s,baz=38,slow=6.1,SNR=14 | | | | | | |
| NOA | NORSAR Array B | 70.40 | 337 | P | P | 14 21 35.8 | 0.0 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| AKASG | Malin Array Be | 71.03 | 321 | P | P | 14 21 39.3 | -0.4 |
| | comp=Z,2.1nm,0.6s,baz=44,slow=6.0,SNR=8.1 | | | | | | |
| AKASG | Malin Array Be | 71.03 | 321 | P | P | 14 21 39.3 | -0.4 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 72.65 | 54 | P | P | 14 21 51.7 | +1.8 |
| | comp=Z,1.2nm,0.7s,baz=278,slow=6.0,SNR=9.2 | | | | | | |
| GERES | GERESS Array B | 79.20 | 328 | P | P | 14 22 26.5 | -0.3 |
| | comp=Z,0.7nm,0.5s,baz=23,slow=7.2,SNR=3.9 | | | | | | |
| GERES | GERESS Array B | 79.20 | 328 | P | P | 14 22 26.5 | -0.3 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| EKA | Eskdalemuir Ar | 79.26 | 340 | P | P | 14 22 27.3 | +0.4 |
| | comp=Z,2.2nm,0.6s,baz=29,slow=5.0,SNR=6.2 | | | | | | |
| EKA | Eskdalemuir Ar | 79.26 | 340 | P | P | 14 22 27.3 | +0.4 |
| EKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| IDI | Anoyia | 84.15 | 313 | P | P | 14 22 52.0 | -1.1 |
| | comp=Z,3.8nm,0.4s,baz=43,slow=10,SNR=7.4 | | | | | | |
| TXAR | Lajitas Array | 87.71 | 52 | P | P | 14 23 10.2 | -0.5 |
| | comp=Z,0.4nm,0.7s,baz=219,slow=0.8,SNR=3.9 | | | | | | |
| MDT | Midelt | 99.99 | 331 | P | Pdif | 14 24 05.1 | -2.0 |
| | comp=Z,8.2nm,0.5s,baz=243,slow=6.9,SNR=9.6 | | | | | | |
| TORD | Torodi Ar. Bea | 114.36 | 316 | PKP | PKPdf | 14 29 00.5 | -0.9 |
| | comp=Z,0.3nm,0.5s,baz=346,slow=2.2,SNR=4.2 | | | | | | |
| SNAA | Sanae | 144.60 | 199 | ePKIKP | PKPab | 14 29 55.2 | -0.2 |
| SNAA | Sanae | 144.60 | 199 | eP | PKPab | 14 29 55.2 | -0.2 |

*IDC* ***11*** *14:11:22.4±1.3, 14°.48N×92°.55W, h0km, mb4.4/8, mb1 4.7/10, mb1mx4.2/42, mbtmp4.5/10, ML4.5/2, MS3.5/8, Ms1 3.5/8, ms1mx3.3/20, Error ellipse: s-maj=45.3km s-min=20.7km az=45.0*

*ISCJB* ***11*** *14:11:29.4±0.5, 14°.75N±0°.06×92°.54W±0°.05, h50km, mb4.6/27, MS3.7/8, Error ellipse: s-maj=10.6km s-min=2.6km az=36.0*

*NEIC* ***11*** *14:11:29.9±1.3, 14°.54N×92°.63W, h51km±9km, mb4.4/26, MD4.4(MEX), Error ellipse: s-maj=18.9km s-min=8.9km az=224.0*

*MEX* ***11*** *14:11:30.5±1.0, 14°.49N×92°.81W, h16km±76km, MD4.4*

*CASC* ***11*** *14:11:33.0±2.2, 14°.19N×92°.41W, h23km±17km, MD4.2, ML4.1*

**ISC 11 14:11:29.9**±1.1, **14°.52N**±0°.08×**92°.71W**±0°.07, **h54**km±9km, **n221,** σ1s**22**/229, **mb4.5**/28, **MS3.6**/8, **1C, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JAT | Jato | 1.06 | 101 | eP | Pn | 14 11 48.7 | +0.2 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.28 | 337 | *i* P | Pn | 14 11 49.3 | -2.1 |
| PCIG | | | | *e*S | Sn | 14 12 04.5 | -3.1 |
| PCIG | | 1.28 | 337 | *i* P | Pn | 14 11 49.3 | -2.1 |
| PCIG | | | | *e*S | Sn | 14 12 04.5 | -3.1 |
| FUG | Fuego 3 | 1.81 | 92 | *e*P | Pn | 14 11 58.4 | -0.4 |
| CCIG | Comitan | 1.84 | 17 | *i* P | Pn | 14 11 60.0 | +0.7 |
| CCIG | | | | *i* S | Sn | 14 12 21.2 | -0.3 |
| CCIG | Comitan | 1.84 | 17 | *i* P | Pn | 14 11 60.0 | +0.7 |
| CCIG | | | | *i* S | Sn | 14 12 21.2 | -0.3 |
| PCG | Pacaya | 2.04 | 93 | *e*P | Pn | 14 12 02.6 | +0.5 |
| PCG | | | | *e*S | Sn | 14 12 27.0 | +0.5 |
| TGIG | | 2.28 | 350 | *i* P | Pn | 14 12 05.0 | -0.3 |
| TGIG | | | | *e*S | Sn | 14 12 31.2 | -1.0 |
| TGIG | | 2.28 | 350 | *i* P | Pn | 14 12 05.0 | -0.3 |
| TGIG | | | | *e*S | Sn | 14 12 31.2 | -1.0 |
| NBG | Las Nubes | 2.29 | 88 | *e*P | Pn | 14 12 06.8 | +1.3 |
| RBDL | Robledal | 2.96 | 97 | *e*P | Pn | 14 12 14.8 | +0.2 |
| RBDL | | | | *e*S | Sn | 14 12 46.1 | -2.8 |
| MRL | Marmol | 2.97 | 79 | *e*P | Pn | 14 12 15.0 | +0.2 |
| MRL | | | | ⇑*e*P | Pn | 14 12 15.8 | +1.1 |
| MRL | | | | *e*S | Sn | 14 12 51.1 | +1.8 |
| RTR | El Retiro | 3.03 | 101 | *e*P | Pn | 14 12 15.7 | +0.1 |
| SBLS | San Blas | 3.07 | 102 | *e*P | Pn | 14 12 15.9 | -0.2 |
| SBLS | | | | *e*S | Sn | 14 12 49.5 | -2.2 |
| SNJE | San Jose | 3.08 | 102 | *e*P | Pn | 14 12 16.1 | -0.1 |
| CMIG | Matias Romero | 3.31 | 321 | Pn | Pn | 14 12 17.7 | -1.4 |
| | 51nm,0.3s,baz=146,slow=13,SNR=196 | | | | | | |
| CMIG | | | | Sn | Sn | 14 12 54.6 | -2.6 |
| | 131nm,0.3s,baz=138,slow=13,SNR=8.6 | | | | | | |
| CMIG | | | | LR | LR | 14 13 38.7 | |
| | comp=Z,290nm,19.3s,baz=154,slow=40 | | | | | | |
| BOQS | Boqueron | 3.42 | 103 | *e*P | Pn | 14 12 21.1 | +0.2 |
| BOQS | | | | *e*S | Sn | 14 12 57.2 | -3.1 |
| SNET | Serv Nac Est T | 3.47 | 103 | AML | AML | 14 13 16.8 | |
| | comp=Z,1µm,0.3s | | | | | | |
| LFU | La Fuente | 3.57 | 102 | *e*P | Pn | 14 12 22.4 | -0.4 |
| LBRS | Las Brisas | 3.64 | 102 | *e*P | Pn | 14 12 23.0 | -0.8 |
| LFRS | El Faro | 3.65 | 104 | *e*P | Pn | 14 12 23.6 | -0.4 |
| LFRS | | | | *e*S | Sn | 14 13 02.1 | -3.7 |
| CNCH | Conchagua | 4.89 | 104 | *e*P | Pn | 14 12 40.9 | -0.2 |
| COPN | Copaltepe | 6.39 | 111 | *e*P | Pn | 14 13 01.6 | +0.1 |
| COPN | | | | *e*S | Sn | 14 14 08.4 | -4.8 |
| JTS | JuntasAbangare | 8.66 | 118 | Pn | Pn | 14 13 33.6 | +0.9 |
| | comp=Z,1.2nm,0.3s,baz=268,slow=8.3,SNR=6.1 | | | | | | |
| JTS | JuntasAbangare | 8.66 | 118 | *e*P | Pn | 14 13 33.7 | +1.0 |
| | comp=Z,32nm,0.7s | | | | | | |
| 933A | Laredo | 14.39 | 336 | P | Pn | 14 14 52.1 | +1.4 |
| | baz=14 | | | | | | |
| 737A | Port Lavaca | 14.59 | 347 | P | Pn | 14 14 51.9 | -1.3 |
| | baz=15 | | | | | | |
| 833A | Chaparral WMA, | 15.08 | 337 | P | Pn | 14 15 00.1 | +0.5 |
| | baz=15 | | | | | | |
| 832A | Faith Ranch, C | 15.27 | 335 | P | Pn | 14 15 03.8 | +1.7 |
| | baz=15 | | | | | | |
| 636A | Smothers Creek | 15.43 | 346 | P | Pn | 14 15 05.1 | +1.0 |
| | baz=16 | | | | | | |
| 537A | Green Hill Far | 15.84 | 348 | P | Pn | 14 15 08.2 | -1.2 |
| | baz=16 | | | | | | |
| 633A | Saathoff Ranch | 16.03 | 339 | P | Pn | 14 15 11.6 | -0.2 |
| | baz=16 | | | | | | |
| 632A | Uvalde | 16.29 | 337 | P | Pn | 14 15 15.2 | +0.1 |
| | baz=16 | | | | | | |
| 534A | Blanco | 16.33 | 342 | P | Pn | 14 15 15.6 | 0.0 |
| | baz=16 | | | | | | |
| 631A | Perdido Creek | 16.51 | 335 | P | Pn | 14 15 18.3 | +0.4 |
| | baz=17,SNR=7.0 | | | | | | |
| 533A | Kerrville | 16.54 | 340 | P | Pn | 14 15 18.1 | -0.3 |
| | baz=17 | | | | | | |
| 532A | Rocksprings | 16.89 | 338 | P | Pn | 14 15 22.7 | 0.0 |
| | baz=17,SNR=8.1 | | | | | | |
| 434A | Burnet | 17.01 | 343 | P | Pn | 14 15 23.0 | -1.1 |
| | baz=17 | | | | | | |
| 531A | Rocksprings | 17.17 | 336 | P | Pn | 14 15 25.8 | -0.3 |
| | baz=17 | | | | | | |
| 433A | Art | 17.19 | 341 | P | Pn | 14 15 25.8 | -0.6 |
| | baz=17,SNR=7.8 | | | | | | |
| 335A | Moody | 17.24 | 346 | P | Pn | 14 15 26.4 | -0.6 |
| | baz=17 | | | | | | |
| 530A | J-C Ranch, Com | 17.47 | 334 | P | Pn | 14 15 29.8 | -0.1 |
| | baz=18,SNR=6.1 | | | | | | |
| 334A | Lometa | 17.49 | 344 | P | Pn | 14 15 29.3 | -0.7 |
| | baz=18,SNR=6.4 | | | | | | |
| 431A | Sonora | 17.65 | 337 | P | Pn | 14 15 31.9 | -0.2 |
| | baz=18 | | | | | | |
| 333A | Richland Sprin | 17.69 | 342 | P | Pn | 14 15 31.8 | -0.7 |
| | baz=18 | | | | | | |
| 529A | Stev Forest Ra | 17.84 | 332 | P | P | 14 15 35.3 | +0.9 |
| | baz=18,SNR=39 | | | | | | |
| TXAR | Lajitas Array | 17.89 | 327 | P | Pn | 14 15 36.3 | +1.3 |
| | comp=Z,0.3nm,0.3s,baz=145,slow=9.8,SNR=41 | | | | | | |
| WHTX | Lake Whitney | 17.93 | 347 | P | P | 14 15 34.4 | -0.9 |
| | baz=18 | | | | | | |
| WHTX | Lake Whitney | 17.93 | 347 | P | Pn | 14 15 37.1 | +1.7 |
| | comp=Z,14nm,0.7s | | | | | | |
| H06E1 | SOCORRO T-PHAS | 17.96 | 286 | T | T | 14 33 32.6 | |
| | SNR=12 | | | | | | |
| 332A | Millersview | 17.98 | 340 | P | P | 14 15 36.1 | 0.0 |
| | baz=18,SNR=6.7 | | | | | | |
| 430A | Baggett Ranch, | 17.99 | 336 | P | Pn | 14 15 37.0 | +0.8 |
| | baz=18 | | | | | | |
| 429A | Davenport Ranc | 18.12 | 334 | P | Pn | 14 15 38.6 | +0.8 |
| | baz=18,SNR=24 | | | | | | |
| 331A | San Angelo | 18.15 | 338 | P | Pn | 14 15 38.3 | +0.1 |
| | baz=18 | | | | | | |
| 138A | Matatall Enter | 18.19 | 354 | P | Pn | 14 15 38.3 | -0.2 |
| | baz=18 | | | | | | |
| 233A | Rising Star | 18.32 | 343 | P | P | 14 15 39.4 | -0.3 |
| | baz=18 | | | | | | |
| 232A | Coleman | 18.42 | 341 | P | P | 14 15 41.0 | +0.2 |
| | baz=18 | | | | | | |
| 330A | Mertzon | 18.52 | 337 | P | P | 14 15 41.8 | -0.1 |
| | baz=19 | | | | | | |
| 230A | Sterling City | 18.92 | 337 | P | Pn | 14 15 47.0 | -0.4 |
| | baz=19 | | | | | | |
| ABTX | Abilene, Hawle | 19.10 | 342 | P | P | 14 15 48.8 | +0.5 |
| | baz=19 | | | | | | |
| ABTX | Abilene, Hawle | 19.10 | 342 | *e*P | Pn | 14 15 49.0 | -0.6 |
| | comp=Z,12nm,0.6s | | | | | | |
| Z34A | Collier Ranch, | 19.36 | 347 | P | P | 14 15 51.6 | +0.6 |
| | baz=19 | | | | | | |
| 131A | Roby | 19.38 | 340 | P | Pn | 14 15 52.2 | -0.7 |
| | baz=20 | | | | | | |
| Z33A | Whitaker Ranch | 19.48 | 345 | P | P | 14 15 53.1 | +0.7 |
| | baz=20 | | | | | | |
| 130A | Snyder | 19.51 | 339 | P | P | 14 15 53.4 | +0.6 |
| | baz=20 | | | | | | |
| Y37A | Hugo | 19.56 | 353 | P | P | 14 15 53.2 | +0.1 |
| | baz=20 | | | | | | |
| Y36A | Durant | 19.57 | 351 | P | P | 14 15 52.9 | -0.5 |
| | baz=20 | | | | | | |
| Z32A | Haskell | 19.69 | 343 | P | P | 14 15 55.1 | +0.4 |
| | baz=20 | | | | | | |
| Y35A | Marietta | 19.70 | 349 | P | P | 14 15 55.0 | +0.2 |
| | baz=20 | | | | | | |
| 228A | UT Block 9, Go | 19.71 | 334 | P | P | 14 15 55.7 | +0.7 |
| | baz=20 | | | | | | |
| 129A | Stewart Farms, | 19.87 | 337 | P | P | 14 15 56.1 | -0.6 |
| | baz=20 | | | | | | |
| Y34A | Reagan Ranch, | 19.89 | 348 | P | P | 14 15 56.6 | -0.2 |
| | baz=20 | | | | | | |
| Z31A | Sharp Cattle R | 19.90 | 341 | P | P | 14 15 56.8 | -0.2 |
| | baz=20,SNR=8.5 | | | | | | |
| MIAR | Mount Ida | 19.96 | 358 | P | P | 14 15 57.9 | +0.3 |
| | baz=20,SNR=21 | | | | | | |
| MIAR | Mount Ida | 19.96 | 358 | *e*P | Pn | 14 15 59.6 | -0.1 |
| | comp=Z,32nm,0.8s | | | | | | |
| 128A | Castleberry Fa | 20.11 | 335 | P | P | 14 15 59.9 | +0.6 |
| | baz=20,SNR=16 | | | | | | |
| X37A | Clayton | 20.13 | 354 | P | P | 14 15 58.8 | -0.6 |
| | baz=20 | | | | | | |
| Y33A | Hilltop Ranch, | 20.13 | 346 | P | P | 14 15 58.8 | -0.7 |
| | baz=20 | | | | | | |
| X38A | Whitesboro | 20.16 | 355 | P | P | 14 15 59.7 | 0.0 |
| | baz=20,SNR=8.8 | | | | | | |
| Z30A | Sanderson Ranc | 20.19 | 339 | P | P | 14 15 59.7 | -0.5 |
| | baz=20,SNR=8.2 | | | | | | |
| X36A | Centrahoma | 20.24 | 351 | P | P | 14 16 00.1 | -0.5 |
| | baz=20 | | | | | | |
| Y32A | R-V Farms, Ver | 20.34 | 344 | P | P | 14 16 00.8 | -0.9 |
| | baz=20 | | | | | | |
| Z29A | Hungry Hill Ra | 20.37 | 338 | P | P | 14 16 00.8 | -1.4 |
| | baz=20,SNR=9.0 | | | | | | |
| Y31A | Rekieta Farm, | 20.53 | 342 | P | P | 14 16 03.8 | 0.0 |
| | baz=21,SNR=11 | | | | | | |
| GOGA | Godfrey | 20.60 | 22 | *e*P | P | 14 16 01.6 | -3.0 |
| | comp=Z,20nm,0.8s | | | | | | |
| Y30A | Stafford Cattl | 20.65 | 340 | P | P | 14 16 05.1 | -0.1 |
| | baz=21,SNR=8.7 | | | | | | |
| Z28A | Tucker Farm, M | 20.65 | 336 | P | P | 14 16 04.8 | -0.4 |
| | baz=21 | | | | | | |
| MNTX | Cornudas Mount | 20.66 | 328 | P | P | 14 16 05.7 | +0.4 |
| | baz=21,SNR=14 | | | | | | |
| MNTX | Cornudas Mount | 20.66 | 328 | *e*P | P | 14 16 06.3 | +1.1 |
| | comp=Z,4.6nm,0.6s | | | | | | |
| W37A | Quinton | 20.68 | 354 | P | P | 14 16 05.6 | +0.2 |
| | baz=21 | | | | | | |
| X32A | Elmer | 20.69 | 344 | P | P | 14 16 04.7 | -0.9 |
| | baz=21 | | | | | | |
| W36A | Wetumka | 20.78 | 352 | P | P | 14 16 05.6 | -0.9 |
| | baz=21 | | | | | | |
| WMOK | Wichita Mounta | 20.87 | 346 | *e*P | P | 14 16 06.7 | -0.7 |
| | comp=Z,6.7nm,0.8s | | | | | | |
| W35A | Tecumseh | 20.89 | 350 | P | P | 14 16 06.7 | -1.0 |
| | baz=21 | | | | | | |
| Y29A | Porterfield Fa | 20.90 | 339 | P | P | 14 16 06.7 | -1.2 |
| | baz=21 | | | | | | |
| CPRX | Cap Rock | 21.04 | 333 | P | P | 14 16 11.9 | +2.5 |
| | comp=Z,5.8nm,0.8s | | | | | | |
| X31A | McDonald Ranch | 21.08 | 343 | P | P | 14 16 09.5 | -0.2 |
| | baz=21,SNR=13 | | | | | | |
| W34A | Bridge Creek, | 21.13 | 348 | P | P | 14 16 09.4 | -0.8 |
| | baz=21 | | | | | | |
| Y28A | McKinney Farm, | 21.15 | 338 | P | P | 14 16 10.9 | +0.3 |
| | baz=21,SNR=14 | | | | | | |
| X30A | Coker Ranch, T | 21.17 | 341 | P | P | 14 16 09.9 | -0.8 |
| | baz=21,SNR=5.4 | | | | | | |
| W33A | Caddo, Fort Co | 21.19 | 347 | P | P | 14 16 10.2 | -0.7 |
| | baz=21 | | | | | | |
| V38A | Canehill | 21.31 | 356 | P | P | 14 16 12.0 | -0.2 |
| | baz=21 | | | | | | |
| W32A | Sentinel | 21.35 | 345 | P | P | 14 16 12.1 | -0.5 |
| | baz=21 | | | | | | |
| V37A | Hulbert | 21.39 | 355 | P | P | 14 16 12.4 | -0.6 |
| | baz=22 | | | | | | |
| MSTX | Muleshoe | 21.41 | 337 | P | P | 14 16 13.3 | 0.0 |
| | baz=22,SNR=7.9 | | | | | | |
| MSTX | Muleshoe | 21.41 | 337 | *e*P | P | 14 16 13.1 | -0.2 |
| | comp=Z,14nm,0.7s | | | | | | |
| V35A | Meyer Ranch, C | 21.48 | 351 | P | P | 14 16 13.1 | -0.8 |
| | baz=22 | | | | | | |
| TUL1 | Tulsa | 21.48 | 353 | P | P | 14 16 13.4 | -0.6 |
| | baz=22 | | | | | | |
| W31A | Holland Ranch, | 21.59 | 344 | P | P | 14 16 14.6 | -0.6 |
| | baz=22 | | | | | | |
| V33A | Lossen Ranch, | 21.80 | 348 | P | P | 14 16 17.4 | 0.0 |
| | baz=22 | | | | | | |
| AMTX | Amarillo | 21.83 | 340 | P | P | 14 16 17.4 | -0.4 |
| | baz=22 | | | | | | |
| AMTX | Amarillo | 21.83 | 340 | *e*P | P | 14 16 17.4 | -0.4 |
| | comp=Z,21nm,0.8s | | | | | | |
| U38A | Gravette | 21.88 | 356 | P | P | 14 16 17.3 | -1.0 |
| | baz=22 | | | | | | |
| U37A | Salina | 21.91 | 355 | P | P | 14 16 17.9 | -0.6 |
| | baz=22 | | | | | | |
| W29A | Amraillo | 22.04 | 340 | P | P | 14 16 19.7 | -0.3 |
| | baz=22 | | | | | | |
| U33A | Lingo Farm, Me | 22.36 | 348 | P | P | 14 16 21.9 | -1.4 |
| | baz=22 | | | | | | |
| U32A | Winter Ranch, | 22.49 | 347 | P | P | 14 16 23.7 | -1.2 |
| | baz=23 | | | | | | |
| TKL | Tuckaleechee C | 22.53 | 19 | P | P | 14 16 23.7 | -1.5 |
| | comp=Z,9.0nm,1.2s,baz=194,slow=12,SNR=7.7 | | | | | | |
| T35A | Sooner Cattle | 22.57 | 352 | P | P | 14 16 24.2 | -1.4 |
| | baz=23 | | | | | | |
| 121A | Cookes Peak, D | 22.59 | 325 | P | P | 14 16 26.7 | +0.6 |
| | baz=23,SNR=13 | | | | | | |
| 121A | Cookes Peak, D | 22.59 | 325 | P | P | 14 16 24.9 | -1.3 |
| | comp=Z,11nm,0.7s | | | | | | |
| T37A | Cheneyville 18 | 22.60 | 355 | P | P | 14 16 24.9 | -1.1 |
| | baz=23 | | | | | | |
| T36A | Boggs Farm, Ca | 22.63 | 353 | P | P | 14 16 24.7 | -1.6 |
| | baz=23 | | | | | | |
| T34A | McClaskey Farm | 22.77 | 351 | P | P | 14 16 26.1 | -1.6 |
| | baz=23 | | | | | | |
| KMSC | Kings Mountain | 22.95 | 24 | P | P | 14 16 27.3 | -2.3 |
| | baz=23 | | | | | | |
| S37A | Fort Scott | 23.23 | 356 | P | P | 14 16 30.5 | -1.9 |
| | baz=23 | | | | | | |
| T32A | Huddler Ranch, | 23.24 | 347 | P | P | 14 16 30.6 | -2.0 |
| | baz=23 | | | | | | |
| S36A | Lake Cedric, C | 23.26 | 354 | P | P | 14 16 31.1 | -1.5 |
| | baz=23 | | | | | | |
| S35A | Otter Creek Ra | 23.30 | 353 | P | P | 14 16 31.8 | -1.2 |
| | baz=23 | | | | | | |
| LPM | Los Pinos Moun | 23.38 | 330 | *e*P | P | 14 16 35.1 | +1.0 |
| | comp=Z,4.4nm,0.6s | | | | | | |
| U27A | Thompson Grove | 23.62 | 339 | P | P | 14 16 35.3 | -0.9 |
| | baz=24,SNR=7.2 | | | | | | |
| LAZ | Ladron | 23.71 | 329 | *e*P | P | 14 16 38.4 | +1.3 |
| | comp=Z,3.5nm,1.0s | | | | | | |
| T29A | Hugoton | 23.81 | 343 | P | P | 14 16 36.1 | -1.8 |
| | baz=24 | | | | | | |
| ANMO | Albuquerque | 23.82 | 331 | P | P | 14 16 38.8 | +0.7 |
| | comp=Z,4.3nm,0.8s,baz=138,slow=12,SNR=13 | | | | | | |
| ANMO | Albuquerque | 23.82 | 331 | *e*P | P | 14 16 38.6 | +0.5 |
| | comp=Z,4.4nm,0.8s | | | | | | |
| T28A | Walsh | 24.02 | 341 | P | P | 14 16 38.8 | -1.1 |
| | baz=24 | | | | | | |
| R34A | Isabella, Hill | 24.03 | 351 | P | P | 14 16 38.6 | -1.2 |
| | baz=24 | | | | | | |
| R33A | Olander Ranch, | 24.15 | 350 | P | P | 14 16 40.8 | -0.1 |
| | baz=24 | | | | | | |
| T27A | Campo | 24.16 | 340 | P | P | 14 16 41.3 | +0.1 |
| | baz=24 | | | | | | |
| TUC | Tucson | 24.20 | 320 | *e*P | P | 14 16 43.2 | +1.7 |
| | comp=Z,4.7nm,1.0s | | | | | | |
| R32A | Long Quarter, | 24.40 | 349 | P | P | 14 16 41.6 | -1.6 |
| | baz=24 | | | | | | |
| R31A | Burdett | 24.44 | 347 | P | P | 14 16 42.0 | -1.5 |
| | baz=24 | | | | | | |
| T26A | Comanche Natio | 24.56 | 339 | P | P | 14 16 44.7 | -0.2 |
| | baz=25,SNR=6.2 | | | | | | |
| T25A | Trinidad | 24.82 | 337 | P | P | 14 16 48.0 | +0.6 |
| | baz=25,SNR=11 | | | | | | |
| Q32A | Meitler Ranch, | 24.92 | 349 | P | P | 14 16 47.4 | -0.6 |
| | baz=25,SNR=8.5 | | | | | | |
| S26A | Kim | 24.92 | 339 | P | P | 14 16 47.5 | -0.6 |
| | baz=25 | | | | | | |
| CBKS | Cedar Bluff | 24.98 | 347 | P | P | 14 16 48.5 | -0.1 |
| | baz=25 | | | | | | |
| R28A | Tribune | 25.06 | 343 | P | P | 14 16 48.8 | -0.5 |
| | baz=25 | | | | | | |
| P35A | Duane Minner, | 25.09 | 354 | P | P | 14 16 48.5 | -0.9 |
| | baz=25 | | | | | | |
| P34A | Walnut Farm, R | 25.20 | 353 | P | P | 14 16 49.6 | -0.8 |
| | baz=25 | | | | | | |
| Q30A | Quinter | 25.25 | 346 | P | P | 14 16 50.7 | -0.2 |
| | baz=25 | | | | | | |
| Q29A | Oakley | 25.35 | 345 | P | P | 14 16 51.0 | -0.9 |
| | baz=25 | | | | | | |
| R26A | Arlington | 25.53 | 340 | P | P | 14 16 53.0 | -0.5 |
| | baz=26 | | | | | | |
| P31A | Stockton | 25.59 | 348 | P | P | 14 16 53.9 | -0.2 |
| | baz=26 | | | | | | |
| SDCO | Great Sand Dun | 25.77 | 336 | P | P | 14 16 56.2 | +0.2 |
| | baz=26,SNR=5.6 | | | | | | |
| P30A | Selden | 25.80 | 347 | P | P | 14 16 55.6 | -0.3 |
| | baz=26 | | | | | | |
| S22A | 4UR Ranch, Cre | 26.31 | 334 | P | P | 14 17 01.6 | +0.7 |
| | baz=26 | | | | | | |
| MVCO | Mesa Verde | 26.62 | 331 | P | P | 14 17 04.7 | +1.2 |
| | baz=27,SNR=14 | | | | | | |
| MVCO | Mesa Verde | 26.62 | 331 | *e*P | P | 14 17 05.4 | +1.8 |
| | comp=Z,15nm,0.8s | | | | | | |
| WUAZ | Wupatki | 26.80 | 325 | P | P | 14 17 06.7 | +1.5 |
| | baz=27 | | | | | | |
| WUAZ | Wupatki | 26.80 | 325 | *e*P | P | 14 17 06.9 | +1.7 |
| | comp=Z,3.8nm,0.8s | | | | | | |
| PV01 | Paradox Valley | 27.40 | 332 | *e*P | P | 14 17 11.6 | +1.0 |
| | comp=Z,398nm,0.9s | | | | | | |
| PDMCI | Parker Dam,Lak | 27.62 | 319 | P | P | 14 17 13.3 | +1.0 |
| | baz=28 | | | | | | |
| PV04 | Paradox Valley | 27.76 | 332 | *e*P | P | 14 17 14.9 | +1.1 |
| BELC | Belle Mtn. Jos | 28.64 | 317 | P | P | 14 17 22.8 | +1.2 |
| | baz=29 | | | | | | |
| O20A | White River Ci | 28.92 | 335 | P | P | 14 17 25.0 | +0.9 |
| | baz=29 | | | | | | |
| ECSD | EROS Data Cent | 29.31 | 354 | P | P | 14 17 26.1 | -1.1 |
| | baz=29 | | | | | | |
| K22A | Casper | 30.46 | 340 | P | P | 14 17 37.7 | +0.1 |
| | baz=31 | | | | | | |
| TPNV | Topopah Spring | 30.64 | 321 | P | P | 14 17 40.5 | +1.2 |
| | baz=31 | | | | | | |
| MPMC | Manual Prospec | 30.86 | 319 | P | P | 14 17 42.8 | +1.5 |
| | baz=31 | | | | | | |
| G29A | Hoven | 31.18 | 350 | P | P | 14 17 44.1 | +0.3 |
| | baz=31 | | | | | | |
| R11A | Troy Canyon, C | 31.18 | 324 | P | P | 14 17 45.7 | +1.6 |
| | baz=31 | | | | | | |
| F31A | Hecla | 31.59 | 353 | P | P | 14 17 47.7 | +0.3 |
| | baz=32 | | | | | | |
| D37A | Cotton | 32.54 | 0 | P | P | 14 17 54.8 | -0.9 |
| | baz=33 | | | | | | |
| REDW | Red Top Meadow | 32.69 | 335 | *e*P | P | 14 17 58.1 | +0.8 |
| | comp=Z,18nm,0.9s | | | | | | |
| SNOW | Snow King Moun | 32.73 | 335 | *e*P | P | 14 17 58.6 | +0.9 |
| | comp=Z,32nm,0.8s | | | | | | |
| SNOW | | | | *e* | | 14 18 11.4 | |
| TPAW | Teton Pass | 32.83 | 335 | *e*P | P | 14 17 59.5 | +0.9 |
| | comp=Z,10.0nm,1.1s | | | | | | |
| NVAR | Mina Array Bea | 32.84 | 321 | P | P | 14 18 00.9 | +2.2 |
| | comp=Z,4.9nm,0.7s,baz=134,slow=8.2,SNR=46 | | | | | | |
| NVAR | | | | LR | LR | 14 32 22.9 | |
| | comp=Z,88nm,20.1s,baz=186,slow=38 | | | | | | |
| E26A | Carlson Angus | 32.89 | 348 | P | P | 14 17 59.1 | +0.3 |
| | baz=33 | | | | | | |
| C35A | Jirik Farms, M | 33.10 | 358 | P | P | 14 17 59.4 | -1.2 |
| | baz=33 | | | | | | |
| FLWY | Flagg Ranch | 33.23 | 336 | *e*P | P | 14 18 02.4 | +0.4 |
| | comp=Z,6.0nm,0.8s | | | | | | |
| D26A | Manning | 33.42 | 348 | P | P | 14 18 03.3 | -0.1 |
| | baz=34 | | | | | | |
| H17A | Grant Village | 33.44 | 336 | P | P | 14 18 04.7 | +0.8 |
| | baz=34 | | | | | | |
| C27A | Sayler Ranch, | 33.90 | 349 | P | P | 14 18 07.2 | -0.3 |
| | baz=34 | | | | | | |
| B34A | Aery, Baudette | 33.91 | 358 | P | P | 14 18 06.8 | -0.8 |
| | baz=34 | | | | | | |
| B32A | Ashes, Strandq | 33.93 | 355 | P | P | 14 18 06.5 | -1.3 |
| | baz=34 | | | | | | |
| LAO | LASA Array | 34.01 | 343 | P | P | 14 18 07.7 | -0.9 |
| | baz=34 | | | | | | |
| HLID | Hailey | 34.40 | 332 | P | P | 14 18 13.2 | +1.1 |
| | baz=34,SNR=7.1 | | | | | | |
| HLID | Hailey | 34.40 | 332 | *e*P | P | 14 18 13.0 | +0.9 |
| | comp=Z,3.8nm,0.8s | | | | | | |
| MCMT | McKenzie Canyo | 34.71 | 335 | *e*P | P | 14 18 16.6 | +1.7 |
| | comp=Z,8.3nm,0.8s | | | | | | |
| A29A | Manning Farm, | 34.73 | 352 | P | P | 14 18 14.4 | -0.2 |
| | baz=35 | | | | | | |
| BOZ | Bozeman (W) | 34.90 | 337 | P | P | 14 18 16.8 | +0.5 |
| | baz=35 | | | | | | |
| A26A | Wade Farm, Ken | 35.13 | 349 | P | P | 14 18 18.3 | +0.1 |
| | baz=35 | | | | | | |
| LRM | Limekiln Ridge | 35.36 | 336 | *e*P | P | 14 18 21.2 | +0.7 |
| | comp=Z,42nm,0.9s | | | | | | |
| A25A | Svangstu Ranch | 35.38 | 348 | P | P | 14 18 20.2 | -0.1 |
| | baz=36 | | | | | | |
| ULM | Lac du Bonnet | 35.73 | 357 | LR | LR | 14 34 50.2 | |
| | comp=Z,47nm,18.2s,baz=12,slow=39 | | | | | | |
| PTGA | Pitinga | 35.77 | 112 | P | P | 14 18 23.1 | -1.0 |
| | comp=Z,4.7nm,0.7s,baz=300,slow=7.1,SNR=11 | | | | | | |
| MSO | Missoula | 36.78 | 335 | P | P | 14 18 32.6 | +0.2 |
| | baz=37 | | | | | | |
| BSMT | Bassoo Peak | 37.95 | 336 | *e*P | P | 14 18 42.6 | +0.2 |
| J04D | Umpqua Nationa | 38.13 | 324 | P | P | 14 18 45.8 | +1.8 |
| | baz=38 | | | | | | |
| I04A | Tendick Farm, | 38.65 | 325 | P | P | 14 18 50.5 | +2.3 |
| | baz=39 | | | | | | |
| G05D | Wamic, OR | 39.02 | 327 | P | P | 14 18 53.4 | +2.2 |
| | baz=39 | | | | | | |
| NEW | Newport | 39.23 | 334 | P | P | 14 18 53.1 | +0.1 |
| | baz=39 | | | | | | |
| B05A | Bryant | 41.48 | 330 | P | P | 14 19 12.1 | +0.6 |
| | baz=42 | | | | | | |
| A04D | Lummi Island | 42.09 | 330 | P | P | 14 19 18.3 | +1.9 |
| | baz=42 | | | | | | |
| SCHQ | Schefferville | 44.98 | 21 | LR | LR | 14 38 43.2 | |
| | comp=Z,148nm,20.3s,baz=252,slow=36 | | | | | | |
| YKA | Yellowknife Ar | 50.37 | 347 | P | P | 14 20 21.0 | -0.3 |
| | comp=Z,9.2nm,0.7s,baz=148,slow=7.6,SNR=11 | | | | | | |
| CPUP | Villa Florida | 53.22 | 140 | LR | LR | 14 43 19.0 | |
| | comp=Z,48nm,18.6s,baz=14,slow=36 | | | | | | |
| INK | Inuvik | 59.75 | 344 | P | P | 14 21 28.8 | -0.1 |
| | comp=Z,8.4nm,0.9s,baz=130,slow=13,SNR=6.1 | | | | | | |
| ILAR | Eielson Array | 62.10 | 337 | P | P | 14 21 44.6 | -0.2 |
| | comp=Z,1.5nm,0.7s,baz=136,slow=4.8,SNR=17 | | | | | | |
| TRF | Thorofare Moun | 62.88 | 335 | *e*P | P | 14 21 50.8 | +0.5 |
| | comp=Z,6.8nm,0.8s | | | | | | |
| KTH | Kantishna Hill | 63.18 | 335 | *e*P | P | 14 21 51.8 | -0.4 |
| | comp=Z,4.6nm,0.8s | | | | | | |
| BILL | Bilibino | 80.73 | 338 | *e*P | P | 14 23 36.6 | -0.5 |
| | comp=Z,6.3nm,0.8s | | | | | | |
| DBIC | Dimbokro | 86.29 | 84 | LR | LR | 14 55 56.4 | |
| | comp=Z,24nm,20.6s,baz=273,slow=31 | | | | | | |
| SEY | Seymchan | 88.00 | 335 | P | P | 14 24 14.4 | +0.5 |
| | comp=Z,3.3nm,0.7s,baz=83,slow=8.9,SNR=7.6 | | | | | | |
| FINES | FINESS Array B | 90.32 | 25 | LR | LR | 15 04 30.5 | |
| | comp=Z,26nm,20.2s,baz=309,slow=35 | | | | | | |
| TORD | Torodi Ar. Bea | 90.92 | 76 | LR | LR | 15 04 57.5 | |
| | comp=Z,19nm,18.4s,baz=285,slow=35 | | | | | | |
| LZH | Lanzhou | 127.29 | 343 | *e*PKP | PKPdf | 14 30 33.8 | +4.7 |
| LZH | | | | pPKP | pPKPdf | 14 30 51.0 | +5.7 |
| LZH | | | | sPKP | | 14 31 00.5 | |
| LZH | | | | LR | LR | | |
| | comp=N,130nm,19.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,130nm,19.9s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,170nm,20.1s | | | | | | |
| WRA | Warramunga Arr | 134.85 | 256 | PKP | PKPdf | 14 30 43.3 | -0.3 |
| | comp=Z,0.6nm,0.7s,baz=86,slow=2.4,SNR=12 | | | | | | |
| ASAR | Alice Springs | 135.19 | 251 | PKP | PKPdf | 14 30 43.7 | -0.4 |
| | comp=Z,0.3nm,0.7s,baz=76,slow=2.3,SNR=5.9 | | | | | | |
| CMAR | Chiang Mai Arr | 145.28 | 340 | PKPbc | PKPbc | 14 31 01.9 | -0.4 |
| | comp=Z,2.8nm,0.8s,baz=339,slow=3.1,SNR=15 | | | | | | |

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**IDC 11 14:11:30.5**±2.2**, 1°.35N**×**126°.60E, h0km, mb3.5**/3**, mb1 3.8**/3**, mb1mx3.3**/37**, mbtmp3.6**/3**, Error ellipse: s-maj=178.0km s-min=26.8km az=66.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 22.48 | 161 | P | P | 14 16 31.1 | -0.6 |
| | 0.9nm,0.5s,baz=339,slow=11,SNR=14 | | | | | | |
| ASAR | Alice Springs | 25.86 | 164 | P | P | 14 17 04.4 | +0.4 |
| | 0.4nm,0.4s,baz=348,slow=13,SNR=19 | | | | | | |
| MKAR | Makanchi Array | 59.44 | 326 | P | P | 14 21 35.1 | 0.0 |
| | 0.4nm,0.4s,baz=127,slow=8.4,SNR=3.7 | | | | | | |

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*IDC* ***11*** *14:26:29.0±2.0, 1°.34N×126°.75E, h0km, mb3.8/4, mb1 4.0/4, mb1mx3.5/28, mbtmp3.8/4, MS2.5/2, Ms1 2.5/2, ms1mx2.2/23, Error ellipse: s-maj=175.9km s-min=23.3km az=66.0*

*DJA* ***11*** *14:26:37.3±1.0, 2°N±4°×12°7E±°, h14km±11km, M4.0/9, mb4.2/3, MLv3.9/9*

**ISC 11 14:26:30.6**±1.4**, 1°.5N**±0°.1×**126°.69E**±0°.07**, h10km, n14,** σ1°.82/11**, mb3.8**/4**, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TNTI | Ternate | 0.97 | 135 | P | Pn | 14 26 53.6 | +3.3 |
| TNTI | | | | S | Sn | 14 27 06.4 | +2.3 |
| LBMI | Labuha | 2.24 | 159 | P | Pg | 14 27 14.1 | +0.4 |
| SGSI | Sangihe | 2.49 | 332 | P | Pg | 14 27 26.5 | +8.1 |
| KMSI | Cibinong | 2.85 | 252 | P | Pg | 14 27 25.8 | +0.5 |
| KMSI | | | | S | Sg | 14 28 03.5 | +1.3 |
| GTOI | Gorontalo | 3.77 | 257 | P | Pb | 14 27 39.2 | +1.9 |
| LUWI | Luwuk | 4.64 | 238 | P | Pb | 14 27 51.0 | -1.2 |
| MRSI | Marisa | 4.85 | 258 | P | Pb | 14 27 52.9 | -2.8 |
| | 24nm,0.5s,0.1nm | | | | | | |
| SIJI | Sorong | 5.13 | 117 | LR | LR | 14 30 01.5 | |
| | comp=Z,27nm,19.0s,baz=355,slow=42 | | | | | | |
| APSI | Ampana | 5.56 | 245 | P | Pb | 14 28 03.3 | -4.6 |
| GUMO | Guam | 21.65 | 55 | LR | LR | 14 39 00.3 | |
| | comp=Z,18nm,19.6s,baz=146,slow=35 | | | | | | |
| WRA | Warramunga Arr | 22.56 | 161 | P | P | 14 31 29.9 | -1.3 |
| | 1.3nm,0.5s,baz=340,slow=11,SNR=22 | | | | | | |
| ASAR | Alice Springs | 25.95 | 165 | P | P | 14 32 02.2 | -1.3 |
| | 0.6nm,0.3s,baz=346,slow=12,SNR=28 | | | | | | |
| MKAR | Makanchi Array | 59.39 | 326 | P | P | 14 36 34.4 | +1.1 |
| | 0.9nm,0.6s,baz=124,slow=8.6,SNR=11 | | | | | | |
| VNDA | Vanda | 81.20 | 173 | P | P | 14 38 44.9 | -1.3 |
| | 0.8nm,0.8s,baz=351,slow=5.4,SNR=5.4 | | | | | | |

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**MAN 11 14:31:02, 15°.57N×121°.81E, h0km, mb4.5, ML3.4, MS3.3,**

**1C-1D, Luzon**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BALP** | **Baler** | **0.28** | **307** | eP | Pg | 14 31 08.5 | +1.1 |
| BALP | | | | eS | Sg | 14 31 12.8 | +1.7 |
| **PCPH** | **Palayan** | **0.69** | **269** | ⇓eP | Pb | 14 31 16.2 | -0.6 |
| PCPH | | | | iS | Sb | 14 31 26.4 | -0.6 |
| **CAUP** | **Cauayan** | **1.36** | **1** | eP | Pg | 14 31 27.1 | -1.1 |
| **BCPH** | **Baguio City Da** | **1.43** | **304** | ⇑iP | Pn | 14 31 29.4 | -0.1 |
| BCPH | | | | iS | Sn | 14 31 49.4 | +0.3 |
| **PALP** | **Palanan** | **1.59** | **22** | eP | Pn | 14 31 31.4 | -0.1 |
| **APYP** | **Conner** | **2.34** | **347** | eP | Pn | 14 31 43.4 | +1.6 |

**TAP 11 15:03:20.6, 24.°81N×122.°00E, h9km, ML1.9, 1C-1D, C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | baz=304 | **0.07** | **299** | ⇓iP | Pg | 15 03 23.1 | +0.4 |
| EGS | baz=304 | | | iS | Sg | 15 03 24.8 | +0.4 |
| **TWB1** | **Santiao Chiao** baz=359 | **0.20** | **356** | iP | Pg | 15 03 25.3 | +0.5 |
| TWB1 | baz=359 | | | iS | Sg | 15 03 28.0 | +0.4 |
| **TWC** | **Suao** baz=213 | **0.24** | **215** | P | Pg | 15 03 25.9 | +0.3 |
| TWC | baz=213 | | | iS | Sg | 15 03 29.0 | +0.2 |
| **TWE** | **Neicheng** baz=253 | **0.32** | **254** | ⇑P | Pg | 15 03 27.5 | +0.5 |
| TWE | baz=253 | | | eS | Sg | 15 03 31.6 | +0.4 |
| **NWF** | **Wu-fen Shan** baz=322 | **0.33** | **322** | eP | Pb | 15 03 28.1 | -0.6 |
| **ENTT** | **Nioudou** baz=247 | **0.43** | **247** | eP | Pb | 15 03 29.8 | -0.6 |
| **ENA** | **Nanau** baz=211 | **0.45** | **212** | eP | Pb | 15 03 30.2 | -0.4 |
| **NSK** | **Sanguang** baz=267 | **0.60** | **257** | eP | Pg | 15 03 32.5 | +0.2 |
| **WHF** | **Hehuan Shan** baz=226 | **0.94** | **226** | eP | Pb | 15 03 40.0 | +0.4 |

*TAP **11** 15:03:26.0, 24.°81N×122.°00E, h9km, ML3.5, B*
*JMA **11** 15:03:26.3±0.1, 24.°80N×121.°97E, h32km, M2.9*
**ISC 11 15:03:25.9**±0.9, **24.°80N**±0.°02×**122.°05E**±0.°02, **h7**km±8km, **n53**, σ**0.s80**/85, **1C-4D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | baz=299 | **0.12** | **290** | iP | **Pg** | **15 03 28.4** | **0.0** |
| EGS | baz=299 | | | S | **Sg** | **15 03 30.1** | **0.0** |
| **TWB1** | **Santiao Chiao** baz=357 | **0.21** | **344** | ⇓iP | **Pg** | **15 03 30.6** | **+0.4** |
| TWB1 | baz=357 | | | iS | **Sg** | **15 03 33.3** | **+0.3** |
| **TWC** | **Suao** baz=214 | **0.27** | **224** | iP | **Pg** | **15 03 31.3** | **+0.1** |
| TWC | baz=214 | | | iS | **Sg** | **15 03 34.3** | **-0.4** |
| **ILA** | **Ilan** baz=258 | **0.28** | **262** | eP | **Pg** | **15 03 31.5** | **+0.1** |
| ILA | baz=258 | | | eS | **Sg** | **15 03 35.5** | **+0.3** |
| **TWE** | **Neicheng** baz=253 | **0.36** | **257** | iP | **Pg** | **15 03 32.7** | **-0.2** |
| TWE | baz=253 | | | iS | **Sg** | **15 03 37.1** | **-0.5** |
| **NWF** | **Wu-fen Shan** baz=313 | **0.36** | **317** | iP | **Pg** | **15 03 33.5** | **+0.5** |
| NWF | baz=313 | | | S | **Sg** | **15 03 38.5** | **+0.7** |
| **TWA** | **Mucha** baz=283 | **0.46** | **292** | ⇓iP | **Pg** | **15 03 35.0** | **+0.2** |
| TWA | baz=283 | | | iS | **Sg** | **15 03 40.4** | **-0.5** |
| **ENA** | **Nanau** baz=212 | **0.47** | **217** | eP | **Pg** | **15 03 35.1** | **+0.1** |
| **ENTT** | **Nioudou** baz=247 | **0.47** | **250** | P | **Pg** | **15 03 35.2** | **+0.1** |
| ENTT | baz=247 | | | S | **Sg** | **15 03 41.0** | **-0.2** |
| **TAP1** | **Taipei** baz=288 | **0.54** | **296** | eP | **Pb** | **15 03 36.9** | **-0.8** |
| **NSK** | **Sanguang** baz=257 | **0.65** | **259** | ⇑iP | **Pg** | **15 03 37.6** | **-0.7** |
| NSK | baz=257 | | | eS | **Sg** | **15 03 46.9** | **+0.2** |
| **TWS1** | **Kuangyinshan** baz=298 | **0.65** | **297** | P | **Pb** | **15 03 39.0** | **-0.6** |
| **NNS** | **Nan Shan** baz=237 | **0.72** | **240** | eP | **Pg** | **15 03 39.4** | **-0.4** |
| **NCU** | **National Centr** baz=281 | **0.80** | **282** | P | **Pb** | **15 03 42.6** | **+0.4** |
| **PCYT** | **Pengchaiyu** baz=357 | **0.82** | **1** | ⇓P | **Pb** | **15 03 42.4** | **-0.2** |
| PCYT | baz=357 | | | eS | **Sb** | **15 03 53.2** | **-0.7** |
| **TWD** | **Chiawan** baz=200 | **0.83** | **210** | P | **Pg** | **15 03 41.5** | **-0.4** |
| TWD | baz=200 | | | S | **Sg** | **15 03 52.4** | **-0.3** |
| **JYNG** | **Yonagunijimaku** | **0.88** | **113** | P | **Pb** | **15 03 43.7** | **+0.1** |
| JYNG | | | | eS | **Sg** | **15 03 55.5** | **+1.1** |
| **HWA** | **Hwalien** baz=204 | **0.92** | **207** | eP | **Pg** | **15 03 43.9** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **0.94** | **111** | P | **Pg** | **15 03 44.3** | **+0.4** |
| YOJ | | | | eS | **Sb** | **15 03 57.6** | **+0.5** |
| **YOJ** | **Yonaguni jima** baz=112 | **0.94** | **111** | P | **Pg** | **15 03 44.3** | **+0.4** |
| YOJ | baz=112 | | | iS | **Sb** | **15 03 57.7** | **+0.6** |
| **TWT** | **Tachien** baz=230 | **0.97** | **236** | eP | **Pb** | **15 03 45.0** | **-0.2** |
| TWT | baz=230 | | | eS | **Sg** | **15 03 57.6** | **+0.5** |
| **NSTT** | **Nanjuang** baz=259 | **0.97** | **260** | eP | **Pb** | **15 03 45.0** | **-0.1** |
| NSTT | baz=259 | | | eS | **Sn** | **15 03 59.2** | **-0.9** |
| **WHF** | **Hehuan Shan** baz=227 | **0.97** | **228** | eP | **Pg** | **15 03 44.0** | **-0.6** |
| WHF | baz=227 | | | eS | **Sg** | **15 03 56.5** | **-0.8** |
| **HSN** | **Hsinchu** baz=286 | **0.98** | **270** | eP | **Pb** | **15 03 44.9** | **-0.4** |
| HSN | baz=286 | | | eS | **Sn** | **15 03 59.1** | **-1.3** |
| **ESL** | **Shilin** baz=210 | **1.14** | **210** | P | **Pg** | **15 03 46.8** | **-0.9** |
| ESL | baz=210 | | | eS | **Sg** | **15 04 01.4** | **-1.0** |
| **NSY** | **Sanyi** baz=257 | **1.24** | **252** | P | **Pg** | **15 03 50.2** | **+0.5** |
| NSY | baz=257 | | | eS | **Sn** | **15 04 08.7** | **+2.0** |
| **TWQ1** | **Liyutan** baz=240 | **1.25** | **249** | P | **Pg** | **15 03 50.3** | **+0.4** |
| TWQ1 | baz=240 | | | eS | **Sn** | **15 04 08.4** | **+1.4** |
| **WDT** | **Danda** baz=228 | **1.34** | **219** | eP | **Pn** | **15 03 50.8** | **-0.6** |
| WDT | baz=228 | | | eS | **Sb** | **15 04 08.4** | **-0.7** |
| **SMLT** | **Sun Moon Lake** baz=229 | **1.40** | **229** | P | **Pb** | **15 03 52.5** | **+0.1** |
| SMLT | baz=229 | | | eS | **Sg** | **15 04 11.5** | **+0.7** |
| **TYC** | **Yuchr** baz=221 | **1.41** | **231** | eP | **Pn** | **15 03 52.1** | **0.0** |
| **TCU** | **Taichung** baz=243 | **1.42** | **243** | eP | **Pg** | **15 03 54.0** | **+1.0** |
| TCU | baz=243 | | | eS | **Sg** | **15 04 14.0** | **+2.6** |
| **EHY** | **Hungye** baz=209 | **1.46** | **207** | eP | **Pn** | **15 03 52.6** | **-0.1** |
| **IRIF** | **Iriomote-Funau** | **1.60** | **107** | P | **Pn** | **15 03 53.1** | **-1.5** |
| **TWF1** | **Yuli** baz=217 | **1.60** | **206** | eP | **Pn** | **15 03 55.1** | **+0.4** |
| **YUS** | **Yu-Shan** baz=228 | **1.65** | **218** | P | **Pb** | **15 03 57.3** | **+0.3** |
| **ALS** | **Alishan** baz=211 | **1.72** | **222** | eP | **Pg** | **15 03 59.1** | **+0.1** |
| ALS | baz=211 | | | eS | **Sg** | **15 04 22.2** | **+1.0** |
| **CHN5** | **Tsauling** baz=229 | **1.74** | **227** | P | **Pg** | **15 03 59.3** | **0.0** |
| CHN5 | baz=229 | | | S | **Sg** | **15 04 22.7** | **+0.9** |
| **HATJ** | **Hateruma jima** | **1.76** | **115** | P | **Pn** | **15 03 55.8** | **-1.1** |
| **CHKT** | **Chengkung** baz=218 | **1.81** | **200** | eP | **Pb** | **15 03 59.3** | **-0.1** |
| **ELDTW** | **Lidau** baz=213 | **1.87** | **211** | eP | **Pn** | **15 03 58.9** | **+0.5** |
| **JKRS** | **Kuro-shima** | **1.87** | **107** | P | **Pn** | **15 03 58.1** | **-0.2** |
| **JIJ** | **Ishigaki jima** | **1.95** | **103** | P | **Pn** | **15 03 59.1** | **-0.4** |
| JIJ | | | | eS | **Sn** | **15 04 24.2** | **-0.1** |
| **CHN4** | **Tsaushan** baz=227 | **1.97** | **223** | eP | **Pb** | **15 04 02.8** | **+0.7** |
| CHN4 | baz=227 | | | eS | **Sg** | **15 04 31.4** | **+2.2** |
| **STYT** | **Tauyuan** baz=209 | **2.02** | **216** | eP | **Pb** | **15 04 03.1** | **+0.1** |
| STYT | baz=209 | | | eS | **Sg** | **15 04 30.4** | **-0.4** |
| **WTP** | **Ta-pu** baz=212 | **2.03** | **221** | ⇓P | **Pb** | **15 04 03.3** | **+0.1** |
| WTP | baz=212 | | | eS | **Sg** | **15 04 32.0** | **+0.7** |
| **JISG** | **Ishigakijimahi** | **2.06** | **96** | P | **Pn** | **15 03 59.8** | **-1.2** |
| **CHN1** | **Nanshi** baz=212 | **2.13** | **221** | eP | **Pb** | **15 04 04.6** | **-0.3** |
| CHN1 | baz=212 | | | eS | **Sg** | **15 04 34.1** | **-0.3** |
| **TWG** | **Pinlang** baz=207 | **2.17** | **205** | eP | **Pn** | **15 04 03.4** | **+0.9** |
| **SGST** | **Jiashian** baz=210 | **2.18** | **218** | eP | **Pb** | **15 04 05.0** | **-0.7** |
| SGST | baz=210 | | | eS | **Sg** | **15 04 35.4** | **-0.5** |
| **SSD** | **Sandimen** baz=215 | **2.43** | **213** | eP | **Pb** | **15 04 09.6** | **-0.4** |
| **EAST** | **Anshuo** baz=197 | **2.65** | **205** | eP | **Pn** | **15 04 11.0** | **+1.8** |
| **SCZT** | **Fangliau** baz=212 | **2.75** | **209** | eP | **Pb** | **15 04 13.7** | **-1.8** |
| **LAY** | **Lan-yu** baz=182 | **2.79** | **190** | eP | **Pn** | **15 04 09.9** | **-1.1** |

**TAP 11 15:03:55.7, 24.°82N×121.°99E, h10km, ML2.7, 1D, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | baz=292 | **0.06** | **291** | iP | Pg | 15 03 58.2 | +0.4 |
| EGS | baz=292 | | | iS | Sg | 15 03 59.7 | +0.4 |
| **TWB1** | **Santiao Chiao** baz=360 | **0.18** | **359** | ⇓iP | Pg | 15 04 00.1 | +0.5 |
| TWB1 | baz=360 | | | iS | Sg | 15 04 02.8 | +0.4 |
| **TWC** | **Suao** baz=211 | **0.25** | **211** | P | Pg | 15 04 00.9 | 0.0 |
| TWC | baz=211 | | | eS | Sg | 15 04 04.1 | -0.2 |
| **NWF** | **Wu-fen Shan** baz=313 | **0.31** | **322** | P | Pb | 15 04 03.0 | -0.5 |
| **TWE** | **Neicheng** baz=250 | **0.31** | **251** | eP | Pg | 15 04 02.6 | +0.6 |
| TWE | baz=250 | | | eS | Sg | 15 04 06.5 | +0.3 |
| **ENTT** | **Nioudou** baz=245 | **0.43** | **245** | eP | Pb | 15 04 05.2 | -0.2 |
| **ENA** | **Nanau** baz=211 | **0.46** | **210** | eP | Pg | 15 04 04.8 | +0.2 |
| **NSK** | **Sanguang** baz=263 | **0.59** | **256** | eP | Pb | 15 04 07.9 | -0.4 |

*JMA **11** 15:04:03.7±0.4, 24.°98N×121.°95E, h18km, M2.9*
*TAP **11** 15:04:04.6, 24.°81N×122.°01E, h9km, ML3.4, B*
**ISC 11 15:04:04.2**±0.8, **24.°82N**±0.°03×**122.°03E**±0.°02, **h12**km±6km, **n36**, σ**0.s96**/53, **Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | baz=300 | **0.10** | **284** | P | **Pg** | **15 04 07.2** | **+0.2** |
| EGS | baz=300 | | | S | **Sg** | **15 04 08.7** | **-0.4** |
| **TWB1** | **Santiao Chiao** baz=345 | **0.19** | **348** | iP | **Pg** | **15 04 09.1** | **+0.7** |
| TWB1 | baz=345 | | | S | **Sg** | **15 04 11.9** | **+0.5** |
| **ILA** | **Ilan** baz=259 | **0.27** | **258** | P | **Pb** | **15 04 10.6** | **-0.3** |
| ILA | baz=259 | | | S | **Sg** | **15 04 14.2** | **+0.8** |
| **TWC** | **Suao** baz=215 | **0.27** | **218** | P | **Pg** | **15 04 09.8** | **0.0** |
| TWC | baz=215 | | | S | **Sg** | **15 04 12.9** | **-0.7** |
| **NWF** | **Wu-fen Shan** baz=313 | **0.34** | **317** | iP | **Pb** | **15 04 12.3** | **+0.1** |
| NWF | baz=313 | | | iS | **Sb** | **15 04 17.2** | **-0.3** |
| **TWE** | **Neicheng** baz=253 | **0.35** | **253** | iP | **Pg** | **15 04 11.4** | **+0.2** |
| TWE | baz=253 | | | S | **Sg** | **15 04 15.7** | **-0.3** |
| **TWA** | **Mucha** baz=284 | **0.44** | **291** | eP | **Pb** | **15 04 14.1** | **+0.2** |
| TWA | baz=284 | | | iS | **Sg** | **15 04 19.4** | **+0.6** |
| **ENTT** | **Nioudou** baz=247 | **0.46** | **247** | eP | **Pg** | **15 04 13.7** | **+0.4** |
| **ENA** | **Nanau** baz=213 | **0.47** | **214** | eP | **Pb** | **15 04 14.2** | **-0.3** |
| **TAP1** | **Taipei** baz=288 | **0.51** | **295** | eP | **Pn** | **15 04 16.4** | **-0.8** |
| **TWS1** | **Kuangyinshan** baz=298 | **0.62** | **297** | P | **Pn** | **15 04 17.7** | **-1.2** |
| **NSK** | **Sanguang** baz=257 | **0.63** | **257** | P | **Pg** | **15 04 16.2** | **-0.3** |
| NSK | baz=257 | | | S | **Sg** | **15 04 23.7** | **-1.1** |
| **NNS** | **Nan Shan** baz=238 | **0.71** | **238** | eP | **Pg** | **15 04 18.6** | **+0.6** |
| NNS | baz=238 | | | eS | **Sb** | **15 04 26.7** | **-1.6** |
| **PCYT** | **Pengchaiyu** baz=3.0 | **0.81** | **2** | eP | **Pn** | **15 04 20.8** | **-0.5** |
| **TWD** | **Chiawan** baz=201 | **0.84** | **208** | eP | **Pg** | **15 04 20.6** | **+0.2** |
| TWD | baz=201 | | | S | **Sb** | **15 04 31.1** | **-0.8** |
| **JYNG** | **Yonagunijimaku** | **0.91** | **114** | P | **Pn** | **15 04 22.9** | **+0.2** |
| JYNG | | | | eS | **Sn** | **15 04 35.2** | **-0.5** |
| **HWA** | **Hwalien** baz=205 | **0.93** | **205** | eP | **Pn** | **15 04 23.2** | **+0.2** |
| **NSTT** | **Nanjuang** baz=259 | **0.96** | **259** | eP | **Pn** | **15 04 24.4** | **+0.9** |
| **YOJ** | **Yonaguni jima** | **0.96** | **112** | P | **Pg** | **15 04 23.5** | **+0.8** |
| YOJ | | | | eS | **Sn** | **15 04 36.5** | **-0.5** |
| **YOJ** | **Yonaguni jima** baz=112 | **0.96** | **112** | P | **Pg** | **15 04 23.8** | **+1.0** |
| YOJ | baz=112 | | | eS | **Sn** | **15 04 36.4** | **-0.6** |
| **TWT** | **Tachien** baz=227 | **0.96** | **234** | eP | **Pn** | **15 04 24.2** | **+0.5** |
| **WHF** | **Hehuan Shan** baz=227 | **0.97** | **226** | P | **Pg** | **15 04 23.9** | **+0.9** |
| WHF | baz=227 | | | S | **Sb** | **15 04 35.7** | **-0.4** |
| **ESL** | **Shilin** baz=210 | **1.14** | **209** | P | **Pg** | **15 04 26.3** | **+0.1** |
| ESL | baz=210 | | | S | **Sn** | **15 04 40.4** | **-1.2** |
| **NSY** | **Sanyi** baz=257 | **1.23** | **251** | eP | **Pg** | **15 04 29.5** | **+1.7** |
| NSY | baz=257 | | | eS | **Sg** | **15 04 47.1** | **+3.3** |
| **TWQ1** | **Liyutan** baz=264 | **1.24** | **248** | eP | **Pg** | **15 04 29.6** | **+1.5** |
| **WDT** | **Danda** baz=219 | **1.34** | **218** | eP | **Pb** | **15 04 29.2** | **-0.3** |
| **SMLT** | **Sun Moon Lake** baz=229 | **1.39** | **228** | eP | **Pg** | **15 04 31.4** | **+0.4** |
| **TCU** | **Taichung** baz=262 | **1.41** | **242** | eP | **Pg** | **15 04 32.9** | **+1.7** |
| **TYC** | **Yuchr** baz=221 | **1.41** | **230** | eP | **Pg** | **15 04 33.5** | **+2.2** |
| **EHY** | **Hungye** baz=209 | **1.46** | **207** | eP | **Pb** | **15 04 31.4** | **+0.1** |
| **IRIF** | **Iriomote-Funau** | **1.62** | **107** | eS | **Sg** | **15 04 57.4** | **+1.1** |
| **YUS** | **Yu-Shan** baz=228 | **1.65** | **217** | eP | **Pg** | **15 04 36.3** | **+0.3** |
| **CHN5** | **Tsauling** baz=229 | **1.74** | **226** | eP | **Pg** | **15 04 37.9** | **+0.3** |
| CHN5 | baz=229 | | | eS | **Sg** | **15 05 01.6** | **+1.4** |
| **HATJ** | **Hateruma jima** | **1.79** | **115** | eS | **Sg** | **15 05 01.4** | **-0.3** |
| **JKRS** | **Kuro-shima** | **1.89** | **108** | eS | **Sb** | **15 05 01.4** | **-0.8** |
| **JIJ** | **Ishigaki jima** | **1.97** | **103** | eS | **Sb** | **15 05 04.2** | **-0.4** |

*JMA **11** 15:05:02.7±0.4, 24.°89N×121.°97E, h15km, M2.2*
*TAP **11** 15:05:03.0, 24.°81N×121.°99E, h9km, ML2.9, B*
**ISC 11 15:05:02.7**±0.9, **24.°84N**±0.°03×**122.°00E**±0.°03, **h13**km±6km, **n34**, σ**0.s60**/52, **1C-3D, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | baz=305 | **0.06** | **280** | iP | **Pg** | **15 05 05.6** | **+0.4** |
| EGS | baz=305 | | | iS | **Sg** | **15 05 06.8** | **-0.2** |
| **TWB1** | **Santiao Chiao** baz=1.0 | **0.17** | **357** | ⇓iP | **Pb** | **15 05 07.5** | **-0.2** |
| TWB1 | baz=1.0 | | | iS | **Sb** | **15 05 10.2** | **-0.9** |
| **ILA** | **Ilan** baz=257 | **0.24** | **253** | eP | **Pb** | **15 05 08.6** | **-0.2** |
| ILA | baz=257 | | | S | **Sb** | **15 05 12.9** | **0.0** |
| **TWC** | **Suao** baz=211 | **0.26** | **211** | ⇓iP | **Pg** | **15 05 08.2** | **0.0** |
| TWC | baz=211 | | | iS | **Sg** | **15 05 11.2** | **-0.7** |
| **NWF** | **Wu-fen Shan** baz=314 | **0.31** | **320** | ⇓iP | **Pb** | **15 05 10.3** | **+0.2** |
| NWF | baz=314 | | | iS | **Sb** | **15 05 15.2** | **+0.1** |
| **TWE** | **Neicheng** baz=252 | **0.32** | **249** | ⇑iP | **Pg** | **15 05 09.6** | **+0.4** |
| TWE | baz=252 | | | iS | **Sg** | **15 05 13.7** | **+0.1** |
| **TWA** | **Mucha** baz=294 | **0.40** | **291** | P | **Pb** | **15 05 11.8** | **+0.1** |
| **ENTT** | **Nioudou** baz=246 | **0.44** | **244** | P | **Pb** | **15 05 12.0** | **-0.3** |
| ENTT | baz=246 | | | S | **Sg** | **15 05 17.7** | **+0.4** |
| **ENA** | **Nanau** baz=217 | **0.47** | **210** | eP | **Pg** | **15 05 12.2** | **+0.3** |
| ENA | baz=217 | | | eS | **Sg** | **15 05 18.2** | **0.0** |
| **TWS1** | **Kuangyinshan** baz=299 | **0.59** | **297** | eP | **Pn** | **15 05 16.1** | **-0.7** |
| **NSK** | **Sanguang** baz=257 | **0.60** | **255** | P | **Pg** | **15 05 14.4** | **0.0** |
| NSK | baz=257 | | | S | **Sg** | **15 05 21.6** | **-0.8** |
| **NNS** | **Nan Shan** baz=237 | **0.69** | **235** | eP | **Pb** | **15 05 16.4** | **-0.2** |
| NNS | baz=237 | | | eS | **Sg** | **15 05 24.9** | **-0.4** |
| **PCYT** | **Pengchaiyu** baz=2.0 | **0.79** | **5** | eP | **Pn** | **15 05 19.3** | **-0.3** |
| **TWD** | **Chiawan** baz=200 | **0.83** | **206** | P | **Pg** | **15 05 18.5** | **-0.4** |
| TWD | baz=200 | | | S | **Sg** | **15 05 29.3** | **-0.6** |
| **NSTT** | **Nanjuang** baz=259 | **0.93** | **258** | eP | **Pn** | **15 05 21.8** | **+0.4** |
| NSTT | baz=259 | | | eS | **Sn** | **15 05 34.0** | **-0.6** |
| **JYNG** | **Yonagunijimaku** | **0.94** | **114** | P | **Pb** | **15 05 21.1** | **+0.2** |
| JYNG | | | | eS | **Sb** | **15 05 33.5** | **+0.2** |
| **TWT** | **Tachien** baz=230 | **0.95** | **232** | eP | **Pn** | **15 05 22.0** | **+0.2** |
| TWT | baz=230 | | | eS | **Sn** | **15 05 35.2** | **-0.1** |
| **WHF** | **Hehuan Shan** baz=226 | **0.96** | **224** | eP | **Pn** | **15 05 21.8** | **-0.5** |
| WHF | baz=226 | | | S | **Sb** | **15 05 33.5** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **0.99** | **112** | P | **Pb** | **15 05 21.5** | **-0.3** |
| YOJ | | | | eS | **Sb** | **15 05 34.8** | **0.0** |
| **YOJ** | **Yonaguni jima** baz=112 | **0.99** | **112** | eP | **Pn** | **15 05 23.1** | **+0.8** |
| **ESL** | **Shilin** baz=209 | **1.14** | **207** | eP | **Pb** | **15 05 23.9** | **-0.3** |
| **NSY** | **Sanyi** baz=268 | **1.20** | **250** | eP | **Pg** | **15 05 27.9** | **+2.1** |
| **TWQ1** | **Liyutan** baz=263 | **1.22** | **247** | eP | **Pg** | **15 05 27.6** | **+1.5** |
| **WDT** | **Danda** baz=218 | **1.33** | **216** | eP | **Pg** | **15 05 28.6** | **+0.2** |
| **SMLT** | **Sun Moon Lake** baz=219 | **1.38** | **227** | eP | **Pg** | **15 05 29.7** | **+0.5** |
| **TYC** | **Yuchr** baz=220 | **1.39** | **229** | eP | **Pg** | **15 05 29.8** | **+0.3** |
| **TWF1** | **Yuli** baz=216 | **1.61** | **204** | eP | **Pb** | **15 05 32.5** | **+0.2** |
| **YUS** | **Yu-Shan** baz=227 | **1.65** | **216** | eP | **Pb** | **15 05 33.8** | **+0.6** |
| **ALS** | **Alishan** baz=208 | **1.71** | **220** | eP | **Pg** | **15 05 35.9** | **+0.4** |
| **CHN5** | **Tsauling** baz=228 | **1.72** | **225** | P | **Pg** | **15 05 36.8** | **+1.0** |
| CHN5 | baz=228 | | | S | **Sg** | **15 05 59.5** | **+1.3** |
| **ELDTW** | **Lidau** baz=212 | **1.87** | **209** | eP | **Pb** | **15 05 36.5** | **-0.3** |
| **CHN4** | **Tsaushan** baz=226 | **1.96** | **221** | eP | **Pg** | **15 05 39.9** | **-0.4** |
| CHN4 | baz=226 | | | eS | **Sg** | **15 06 05.8** | **+0.1** |
| **STYT** | **Tauyuan** baz=206 | **2.01** | **215** | eP | **Pb** | **15 05 39.5** | **+0.3** |
| **WTP** | **Ta-pu** baz=222 | **2.02** | **219** | eP | **Pg** | **15 05 41.1** | **-0.4** |

*ISCJB **11** 15:07:29.2±1.0, 37.°62N±0.°04×19.°58E±0.°07, h11km±10km, Error ellipse: s-maj=9.8km s-min=5.7km az=156.2*
*ATH **11** 15:07:29.6, 37.°64N×19.°61E, h24km±1km, MD3.6/26*
*CSEM **11** 15:07:29.4±0.5, 37.°67N×19.°62E, h2km, MD3.6, Error ellipse: s-maj=9.3km s-min=6.2km az=63.0*
*THE **11** 15:07:30.3, 37.°63N×19.°62E, h2km±1km, ML3.3/2, Error ellipse: s-maj=2.3km s-min=1.3km az=123.0*
**ISC 11 15:07:30.6**±1.7, **37.°65N**±0.°04×**19.°62E**±0.°05, **h12**km±10km, **n120**, σ**0.s60**/142, **Ionian Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VLS** | **Valsamata** | **0.93** | **55** | ePN | **Pg** | **15 07 48.1** | **-0.5** |
| VLS | | | | eSN | **Sb** | **15 08 01.2** | **+0.1** |
| **VLS** | **Valsamata** | **0.93** | **55** | P | **Pg** | **15 07 48.2** | **-0.4** |
| VLS | | | | S | **Sb** | **15 08 01.4** | **+0.3** |
| **VLS** | **Valsamata** | **0.93** | **55** | P | **Pg** | **15 07 48.2** | **-0.4** |
| VLS | | | | S | **Sb** | **15 08 01.4** | **+0.3** |
| **KFL** | **Anninata** | **1.03** | **63** | ePN | **Pg** | **15 07 50.0** | **-0.5** |
| KFL | | | | eSN | **Sb** | **15 08 04.2** | **+0.2** |
| **KFL** | **Anninata** | **1.03** | **63** | P | **Pg** | **15 07 49.7** | **-0.8** |
| KFL | | | | S | **Sb** | **15 08 04.7** | **+0.7** |
| **KFL** | **Anninata** | **1.03** | **63** | P | **Pg** | **15 07 49.7** | **-0.8** |
| **KFL** | **Anninata** | **1.03** | **63** | ePn | **Pg** | **15 07 50.0** | **-0.5** |
| KFL | | | | eSn | **Sb** | **15 08 04.2** | **+0.2** |
| KFL | | | | S | **Sb** | **15 08 04.7** | **+0.7** |
| **SFD** | **Strofades** | **1.18** | **109** | P | **Pg** | **15 07 53.1** | **-0.2** |
| **SFD** | **Strofades** | **1.18** | **109** | P | **Pg** | **15 07 53.1** | **-0.2** |
| **LKD2** | **Lefkada island** | **1.40** | **35** | ePN | **Pn** | **15 07 56.4** | **+0.4** |
| LKD2 | | | | eSN | **Sb** | **15 08 15.1** | **+0.5** |
| **LKD2** | **Lefkada island** | **1.40** | **35** | P | **Pn** | **15 07 56.3** | **+0.3** |
| LKD2 | | | | S | **Sg** | **15 08 16.6** | **+0.8** |
| **LKD2** | **Lefkada island** | **1.40** | **35** | ePn | **Pn** | **15 07 56.4** | **+0.4** |
| LKD2 | | | | eSn | **Sb** | **15 08 15.1** | **+0.5** |
| LKD2 | | | | S | **Sg** | **15 08 16.6** | **+0.8** |
| **RLS** | **Riolos of Patr** | **1.52** | **74** | ePN | **Pn** | **15 07 57.6** | **0.0** |
| **RLS** | **Riolos of Patr** | **1.52** | **74** | P | **Pn** | **15 07 57.6** | **0.0** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RLS | Riolos of Patr | 1.52 | 74 | P | Pn | 15 07 57.6 | 0.0 |
| PDO | Prodromos | 1.56 | 52 | *e*PN | Pn | 15 07 58.3 | +0.2 |
| PDO | | | | *e*SN | Sb | 15 08 19.0 | 0.0 |
| PDO | Prodromos | 1.56 | 52 | P | Pn | 15 07 58.3 | +0.2 |
| PDO | | | | S | Sg | 15 08 20.6 | -0.1 |
| PDO | Prodromos | 1.56 | 52 | P | Pn | 15 07 58.3 | +0.2 |
| PDO | | | | *e*Sn | Sb | 15 08 19.0 | 0.0 |
| PDO | | | | S | Sg | 15 08 20.6 | -0.1 |
| AMT | Artemida-Makis | 1.67 | 93 | *e*PB | Pn | 15 07 58.7 | -0.9 |
| AMT | Artemida-Makis | 1.67 | 93 | P | Pn | 15 07 58.5 | -1.1 |
| AMT | Artemida-Makis | 1.67 | 93 | *e*Pb | Pn | 15 07 58.7 | -0.9 |
| DRO | Drossia | 1.69 | 79 | *e*PN | Pn | 15 08 00.1 | +0.2 |
| DRO | Drossia | 1.69 | 79 | P | Pn | 15 07 59.5 | -0.4 |
| DRO | Drossia | 1.69 | 79 | P | Pn | 15 07 59.5 | -0.4 |
| DRO | Drossia | 1.69 | 79 | *e*Pn | Pn | 15 08 00.1 | +0.2 |
| PVO | Paravola | 1.79 | 57 | P | Pn | 15 08 02.3 | +1.0 |
| PVO | Paravola | 1.79 | 57 | P | Pn | 15 08 02.3 | +1.0 |
| PYL | PYLOS | 1.85 | 113 | *e*PN | Pn | 15 08 02.3 | +0.1 |
| PYL | PYLOS | 1.85 | 113 | P | Pn | 15 08 02.4 | +0.2 |
| PYL | | | | S | Sn | 15 08 23.5 | -2.1 |
| PYL | PYLOS | 1.85 | 113 | *e*Pn | Pn | 15 08 02.3 | +0.1 |
| DSL | Palaion Diasel | 1.89 | 38 | *e*PN | Pn | 15 08 03.2 | +0.5 |
| DSL | | | | *e*SN | Sn | 15 08 26.8 | +0.4 |
| DSL | Palaion Diasel | 1.89 | 38 | *e*Pn | Pn | 15 08 03.2 | +0.5 |
| DSL | | | | *e*Sn | Sn | 15 08 26.8 | +0.4 |
| ITM | Ithomi | 1.90 | 104 | *e*PB | Pn | 15 08 02.1 | -0.7 |
| ITM | Ithomi | 1.90 | 104 | *e*Pb | Pn | 15 08 02.1 | -0.7 |
| LAKA | Lakka | 1.96 | 72 | *e*PN | Pn | 15 08 03.9 | +0.3 |
| LAKA | Lakka | 1.96 | 72 | P | Pn | 15 08 04.0 | +0.3 |
| LAKA | Lakka | 1.96 | 72 | *e*Pn | Pn | 15 08 03.9 | +0.3 |
| IGT | Igoumenitsa | 1.96 | 16 | *e*PB | Pn | 15 08 02.9 | -0.8 |
| IGT | Igoumenitsa | 1.96 | 16 | *e*Pb | Pn | 15 08 02.9 | -0.8 |
| EFP | Efpalio | 1.97 | 66 | *e*PN | Pn | 15 08 04.2 | +0.5 |
| EFP | Efpalio | 1.97 | 66 | P | Pn | 15 08 03.9 | +0.1 |
| EFP | Efpalio | 1.97 | 66 | P | Pn | 15 08 03.9 | +0.1 |
| EFP | Efpalio | 1.97 | 66 | *e*Pn | Pn | 15 08 04.2 | +0.5 |
| KLV | Kalavryta, Ach | 2.04 | 78 | *e*PN | Pn | 15 08 05.0 | +0.1 |
| KLV | Kalavryta, Ach | 2.04 | 78 | P | Pn | 15 08 05.0 | +0.1 |
| KLV | Kalavryta, Ach | 2.04 | 78 | P | Pn | 15 08 05.0 | +0.1 |
| KEK | Kerkira | 2.07 | 4 | *e*PN | Pn | 15 08 04.4 | -0.7 |
| KEK | Kerkira | 2.07 | 4 | *e*Pn | Pn | 15 08 04.4 | -0.7 |
| SERG | Sergoula | 2.07 | 68 | P | Pn | 15 08 05.6 | +0.4 |
| SERG | Sergoula | 2.07 | 68 | P | Pn | 15 08 05.6 | +0.4 |
| KALE | Kalithea | 2.13 | 69 | *e*PB | Pn | 15 08 06.3 | +0.3 |
| KALE | Kalithea | 2.13 | 69 | *e*Pb | Pn | 15 08 06.3 | +0.3 |
| EVR | Evrytania | 2.14 | 53 | *e*PN | Pn | 15 08 06.2 | 0.0 |
| EVR | Evrytania | 2.14 | 53 | P | Pn | 15 08 07.2 | +1.0 |
| EVR | Evrytania | 2.14 | 53 | *e*Pb | Pn | 15 08 06.2 | 0.0 |
| EVR | Evrytania | 2.14 | 53 | P | Pn | 15 08 07.2 | +1.0 |
| GUR | Goura | 2.18 | 82 | *e*PN | Pn | 15 08 06.8 | 0.0 |
| GUR | Goura | 2.18 | 82 | P | Pn | 15 08 06.4 | -0.4 |
| GUR | Goura | 2.18 | 82 | P | Pn | 15 08 06.4 | -0.4 |
| GUR | Goura | 2.18 | 82 | *e*Pn | Pn | 15 08 06.8 | 0.0 |
| VLX | Vlachokerasia | 2.21 | 96 | *e*PN | Pn | 15 08 06.9 | -0.3 |
| VLX | | | | *e*SN | Sn | 15 08 34.3 | -0.3 |
| VLX | Vlachokerasia | 2.21 | 96 | *e*Pn | Pn | 15 08 06.9 | -0.3 |
| VLX | | | | *e*Sn | Sn | 15 08 34.3 | -0.3 |
| JAN | Janina | 2.23 | 25 | *e*PB | Pn | 15 08 07.5 | +0.1 |
| JAN | Janina | 2.23 | 25 | *e*Pb | Pn | 15 08 07.5 | +0.1 |
| MAKR | Makrakomi, Fth | 2.40 | 55 | *e*PB | Pn | 15 08 10.7 | +0.9 |
| MAKR | Makrakomi, Fth | 2.40 | 55 | *e*Pb | Pn | 15 08 10.7 | +0.9 |
| DSF | Desfina | 2.42 | 71 | *e*PN | Pn | 15 08 10.0 | -0.1 |
| DSF | Desfina | 2.42 | 71 | *e*Pn | Pn | 15 08 10.0 | -0.1 |
| DESF | Desfina | 2.42 | 71 | *e*PN | Pn | 15 08 09.0 | -1.1 |
| DESF | Desfina | 2.42 | 71 | *e*Pn | Pn | 15 08 09.0 | -1.1 |
| AGG | Agios Georgios | 2.54 | 56 | *e*PN | Pn | 15 08 11.3 | -0.3 |
| AGG | | | | *e*SN | Sn | 15 08 42.0 | -0.5 |
| AGG | Agios Georgios | 2.54 | 56 | P | Pn | 15 08 12.3 | +0.7 |
| AGG | Agios Georgios | 2.54 | 56 | *e*Pn | Pn | 15 08 11.3 | -0.3 |
| AGG | Agios Georgios | 2.54 | 56 | P | Pn | 15 08 12.3 | +0.7 |
| AGG | | | | *e*Sn | Sn | 15 08 42.0 | -0.5 |
| AXAR | Agios Charalam | 2.64 | 64 | *e*PN | Pn | 15 08 13.4 | +0.3 |
| AXAR | Agios Charalam | 2.64 | 64 | *e*Pn | Pn | 15 08 13.4 | +0.3 |
| LTK | Loutraki | 2.68 | 81 | *e*PN | Pn | 15 08 13.8 | +0.2 |
| LTK | Loutraki | 2.68 | 81 | *e*Pn | Pn | 15 08 13.8 | +0.2 |
| THL | Klokotos Trika | 2.68 | 44 | *e*PN | Pn | 15 08 13.8 | +0.2 |
| THL | Klokotos Trika | 2.68 | 44 | P | Pn | 15 08 14.4 | +0.8 |
| THL | Klokotos Trika | 2.68 | 44 | *e*Pn | Pn | 15 08 13.8 | +0.2 |
| THL | Klokotos Trika | 2.68 | 44 | P | Pn | 15 08 14.4 | +0.8 |
| TIP | Timpagrande | 2.72 | 305 | P | Pn | 15 08 14.3 | +0.2 |
| TIP | Timpagrande | 2.72 | 305 | P | Pn | 15 08 14.3 | +0.2 |
| VLI | Veliai | 2.81 | 108 | *e*PN | Pn | 15 08 16.2 | +0.9 |
| VLI | Veliai | 2.81 | 108 | *e*Pn | Pn | 15 08 16.2 | +0.9 |
| LKR | Lokris | 2.85 | 68 | *e*PN | Pn | 15 08 16.4 | +0.5 |
| LKR | Lokris | 2.85 | 68 | *e*Pn | Pn | 15 08 16.4 | +0.5 |
| DIDY | Didyma | 2.86 | 92 | *e*PN | Pn | 15 08 15.1 | -1.1 |
| DIDY | Didyma | 2.86 | 92 | *e*Pn | Pn | 15 08 15.1 | -1.1 |
| DID | Didima | 2.88 | 92 | *e*PN | Pn | 15 08 15.5 | -0.8 |
| DID | Didima | 2.88 | 92 | *e*Pn | Pn | 15 08 15.5 | -0.8 |
| VIL2 | Platees | 2.94 | 78 | *e*PN | Pn | 15 08 18.1 | +0.9 |
| VILL | Villia | 2.97 | 79 | *e*Pn | Pn | 15 08 18.1 | +0.5 |
| NEST | Nestorio | 2.98 | 22 | *e*PN | Pn | 15 08 18.1 | +0.3 |
| NEST | Nestorio | 2.98 | 22 | *e*Pn | Pn | 15 08 18.1 | +0.3 |
| KYTH | Kithira | 3.06 | 115 | *e*PN | Pn | 15 08 19.8 | +1.0 |
| KYTH | Kithira | 3.06 | 115 | *e*Pn | Pn | 15 08 19.8 | +1.0 |
| SMIA | Simia | 3.08 | 65 | *e*PN | Pn | 15 08 18.3 | -0.8 |
| SMIA | Simia | 3.08 | 65 | *e*Pn | Pn | 15 08 18.3 | -0.8 |
| LIT | Litokhoron | 3.32 | 42 | *e*PN | Pn | 15 08 22.8 | +0.4 |
| LIT | Litokhoron | 3.32 | 42 | *e*Pn | Pn | 15 08 22.8 | +0.4 |
| FNA | Florina | 3.42 | 23 | *e*PN | Pn | 15 08 23.5 | -0.2 |
| FNA | Florina | 3.42 | 23 | *e*Pn | Pn | 15 08 23.5 | -0.2 |
| EREA | Eretria | 3.49 | 76 | *e*PN | Pn | 15 08 25.3 | +0.5 |
| EREA | Eretria | 3.49 | 76 | *e*Pn | Pn | 15 08 25.3 | +0.5 |
| GRG | Griva | 3.95 | 32 | *e*PN | Pn | 15 08 31.1 | +0.1 |
| GRG | Griva | 3.95 | 32 | *e*Pn | Pn | 15 08 31.1 | +0.1 |
| HORT | Hortiatis | 4.00 | 42 | *e*PN | Pn | 15 08 31.5 | -0.3 |
| HORT | Hortiatis | 4.00 | 42 | *e*Pn | Pn | 15 08 31.5 | -0.3 |
| PLG | Polygyros | 4.04 | 46 | *e*PN | Pn | 15 08 31.6 | -0.7 |
| PLG | Polygyros | 4.04 | 46 | *e*Pn | Pn | 15 08 31.6 | -0.7 |
| SOH | Sokhos | 4.30 | 41 | *e*PN | Pn | 15 08 36.5 | +0.7 |
| SOH | Sokhos | 4.30 | 41 | *e*Pn | Pn | 15 08 36.5 | +0.7 |
| OUR | Ouranopolis | 4.33 | 50 | *e*PN | Pn | 15 08 36.2 | 0.0 |
| OUR | Ouranopolis | 4.33 | 50 | *e*Pn | Pn | 15 08 36.2 | 0.0 |
| IDI | Anoyia | 4.86 | 117 | *e*PN | Pn | 15 08 44.3 | +0.7 |
| IDI | Anoyia | 4.86 | 117 | *e*Pn | Pn | 15 08 44.3 | +0.7 |
| LAST | Lasithi | 5.34 | 116 | *e*PN | Pn | 15 08 51.5 | +1.3 |
| LAST | Lasithi | 5.34 | 116 | *e*Pn | Pn | 15 08 51.5 | +1.3 |

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**MAN 11 15:14:30, 11.35N×124.61E, h1km, mb4.5, ML3.4, MS3.3, 1D, Leyte**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OCLP | Ormoc | 0.30 | 181 | *e*P | Pg | 15 14 36.4 | +0.7 |
| OCLP | | | | *e*S | Sb | 15 14 48.0 | +4.5 |
| PLP | Palo | 0.40 | 117 | ⇓*e*P | Pg | 15 14 38.2 | +0.5 |
| PLP | | | | *i* S | Sb | 15 14 45.5 | -1.1 |
| MSLP | Maasin | 1.23 | 169 | *e*P | Pb | 15 14 54.1 | 0.0 |
| MSLP | | | | *e*S | Sn | 15 15 13.7 | +2.0 |
| GUIM | Jordan | 2.11 | 250 | *e*P | Pn | 15 15 07.4 | +0.9 |

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**CASC 11 15:34:11.1±1.0, 10.20N×84.28W, h89km±4km, MD3.6, Costa Rica**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CGA2 | Cerro Gallo 2 | 0.26 | 226 | *e*P | Pn | 15 34 24.2 | -0.2 |
| CGA2 | | | | *e*S | Sn | 15 34 34.7 | +0.5 |
| CEDE | Laguna Cedeˆ–o | 0.51 | 304 | *i* P | Pn | 15 34 26.4 | +0.5 |
| CEDE | | | | *i* S | Sn | 15 34 37.9 | +1.0 |
| BANL | Banca Lucia | 0.63 | 300 | *i* P | Pn | 15 34 27.3 | +0.3 |
| BANL | | | | *i* S | Sn | 15 34 39.4 | +0.6 |
| AMAS | Alto Masis | 0.82 | 300 | *i* P | Pn | 15 34 29.2 | +0.4 |
| BUS | Buena Vista | 0.82 | 141 | *e*P | Pn | 15 34 29.2 | -0.1 |
| BUS | | | | *e*S | Sn | 15 34 43.3 | +0.4 |
| PTEN | Parque Tenorio | 0.87 | 306 | *i* P | Pn | 15 34 29.6 | +0.2 |
| PTEN | | | | *i* S | Sn | 15 34 43.5 | +0.5 |
| JCR | Jicaral | 0.90 | 247 | *e*P | Pn | 15 34 29.9 | +0.3 |
| JCR | | | | *e*S | Sn | 15 34 45.0 | +1.5 |
| CUI | Cuipilapa | 0.99 | 298 | *i* P | Pn | 15 34 31.0 | +0.3 |
| CUI | | | | *i* S | Sn | 15 34 45.8 | +0.5 |
| HORNC | Hornillas | 1.02 | 300 | *i* P | Pn | 15 34 31.3 | +0.2 |
| HORNC | | | | *i* S | Sn | 15 34 46.6 | +0.4 |
| MESS | Mesas | 1.05 | 301 | *i* P | Pn | 15 34 31.8 | +0.3 |
| MESS | | | | *i* S | Sn | 15 34 47.2 | +0.5 |
| GPS3 | Bodega del ICE | 1.21 | 297 | *i* P | Pn | 15 34 33.5 | +0.2 |
| GPS3 | | | | *i* S | Sn | 15 34 50.4 | +0.4 |
| GB1A | Borinquen Arri | 1.26 | 299 | *i* P | Pn | 15 34 34.2 | +0.2 |
| LAPC | Finca la Perla | 1.27 | 296 | *i* P | Pn | 15 34 34.0 | 0.0 |
| LAPC | | | | *i* S | Sn | 15 34 51.2 | 0.0 |
| GBS2 | Las Lilas | 1.32 | 299 | *i* P | Pn | 15 34 34.9 | +0.3 |
| GBS2 | | | | *i* S | Sn | 15 34 52.8 | +0.5 |

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*ISCJB* ***11*** *16:05:09.8±0.5, 27.31N±0.05×140.19E±0.08, h450km, mb3.5/10, Error ellipse: s-maj=9.8km s-min=6.5km az=169.0*

*IDC* ***11*** *16:05:09.8±1.5, 27.32N×140.39E, h458km±15km, mb3.2/10, mb1 3.3/15, mb1mx3.1/37, mbtmp4.1/15, Error ellipse: s-maj=32.1km s-min=11.4km az=82.0*

*JMA* ***11*** *16:05:11.0±0.1, 27.40N×140.32E, h455km, M3.6*

**ISC 11 16:05:10.0±0.7, 27.33N±0.08×140.2E±0.1, h450km, n30, σ1s67/35, mb3.5/10, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CBIJ | Chichi jima | 1.78 | 97 | P | P | 16 06 10.6 | +1.2 |
| CBIJ | | | | *e*S | S | 16 06 57.0 | -0.5 |
| JHHJ | Haha-jima-NKT | 1.90 | 111 | P | P | 16 06 11.8 | +1.8 |
| JHHJ | | | | *e*S | S | 16 07 00.0 | +1.4 |
| JHJ | Hachijo jima 2 | 5.79 | 357 | P | P | 16 06 43.6 | +1.5 |
| | 4.9nm,0.3s,baz=116,slow=23,SNR=13 | | | | | | |
| JHJ | | | | S | S | 16 07 55.5 | -1.8 |
| | 12nm,0.3s,baz=60,slow=22,SNR=2.9 | | | | | | |
| BSO1 | Boso 1 | 7.33 | 5 | P | P | 16 06 59.8 | +2.2 |
| BSO1 | | | | *e*S | S | 16 08 26.8 | +0.9 |
| JIE | Ise | 7.66 | 338 | P | P | 16 07 05.2 | +3.6 |
| JTO | Tosashimizu | 8.45 | 312 | P | P | 16 07 13.4 | +3.1 |
| JRY | Ryogami san | 8.73 | 353 | P | P | 16 07 14.4 | +1.1 |
| JRY | | | | *e*S | S | 16 08 52.6 | -2.0 |
| MJAR | Matsushiro Arr | 9.34 | 350 | P | P | 16 07 21.0 | +1.1 |
| | 1.3nm,0.3s,baz=184,slow=9.1,SNR=20 | | | | | | |
| MJAR | | | | S | S | 16 09 06.3 | -0.4 |
| | 0.3nm,0.3s,baz=104,slow=9.8,SNR=5.0 | | | | | | |
| MAT | Matsushiro | 9.34 | 350 | P | P | 16 07 21.7 | +1.8 |
| MAT | | | | *e*S | S | 16 09 04.6 | -2.1 |
| JHS | Saijyo | 9.76 | 323 | P | P | 16 07 27.4 | +2.9 |
| JAMN | Amaminishikomi | 9.81 | 278 | P | P | 16 07 29.2 | +4.1 |
| JNU | Nakatsue | 9.92 | 308 | P | P | 16 07 28.9 | +2.7 |
| | 2.0nm,0.3s,baz=162,slow=4.1,SNR=24 | | | | | | |
| JSJ | Shimokoshiki | 10.11 | 298 | P | P | 16 07 30.5 | +2.2 |
| JOW | Kunigami | 10.64 | 270 | P | P | 16 07 36.2 | +2.0 |
| JOW | Kunigami | 10.64 | 270 | P | P | 16 07 36.3 | +2.1 |
| | 0.2nm,0.3s,baz=119,slow=29,SNR=14 | | | | | | |
| JTU | Tsushima | 11.72 | 310 | P | P | 16 07 48.8 | +3.0 |
| KSRS | Korea Array | 14.46 | 317 | P | P | 16 08 15.2 | 0.0 |
| | 0.2nm,0.3s,baz=288,slow=30,SNR=6.3 | | | | | | |
| USRK | Ussuriysk Ar. | 18.09 | 341 | P | P | 16 08 54.3 | +0.8 |
| | 0.5nm,0.3s,baz=169,slow=9.5,SNR=20 | | | | | | |
| SONM | Songino Array | 33.33 | 317 | P | P | 16 11 08.9 | -0.2 |
| | 0.8nm,0.8s,baz=126,slow=7.5,SNR=4.4 | | | | | | |
| WRA | Warramunga Arr | 47.33 | 188 | P | P | 16 13 01.0 | -0.8 |
| | 0.4nm,0.4s,baz=5.7,slow=7.6,SNR=19 | | | | | | |
| ZALV | Zalesovo Beam | 48.16 | 319 | P | P | 16 13 07.0 | -0.6 |
| | 2.0nm,0.3s,baz=114,slow=7.1,SNR=11 | | | | | | |
| MKAR | Makanchi Array | 48.97 | 309 | P | P | 16 13 13.8 | 0.0 |
| | 0.8nm,0.4s,baz=92,slow=11,SNR=6.4 | | | | | | |
| ASAR | Alice Springs | 51.06 | 187 | P | P | 16 13 28.2 | -1.3 |
| | 0.2nm,0.4s,baz=1.6,slow=4.3,SNR=13 | | | | | | |
| ARCES | ARCESS Array B | 72.74 | 340 | P | P | 16 15 51.1 | +0.2 |
| | 4.0nm,0.8s,baz=74,slow=9.0,SNR=11 | | | | | | |
| FINES | FINESS Array B | 76.95 | 333 | P | P | 16 16 14.2 | -0.5 |
| | 4.3nm,0.4s,baz=86,slow=5.1,SNR=34 | | | | | | |
| AKASG | Malin Array Be | 81.38 | 323 | P | P | 16 16 37.7 | -0.8 |
| | 0.5nm,0.4s,baz=52,slow=5.8,SNR=6.9 | | | | | | |
| NB2 | NORSAR Subarra | 82.73 | 338 | P | P | 16 16 44.3 | -1.1 |
| | comp=Z,0.8nm,0.5s,baz=51,slow=4.4 | | | | | | |
| NB2 | NORSAR Subarra | 82.73 | 338 | P | P | 16 16 44.3 | -1.1 |
| | baz=51,slow=4.4 | | | | | | |
| NOA | NORSAR Array B | 82.73 | 338 | P | P | 16 16 44.4 | -1.0 |
| | comp=Z,1.6nm,0.7s,baz=46,slow=4.8,SNR=6.3 | | | | | | |
| BRTR | Keskin Array B | 84.54 | 312 | P | P | 16 16 54.0 | -0.9 |
| | comp=Z,0.3nm,0.5s,baz=66,slow=3.4,SNR=3.0 | | | | | | |

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*ISCJB* ***11*** *16:06:04.2±0.2, 35.33N±0.02×92.29W±0.02, h10km, Error ellipse: s-maj=3.3km s-min=2.1km az=163.5*

*NEIC* ***11*** *16:06:04.0, 35.32N×92.34W, h6km, MW3.6, Moment Tensor Solution. s31 Moment tensor: Scale 10^14 Nm; Mrr0.31; Mθθ1.94; Mφφ-2.26; Mrθ-0.83; Mθφ2.75; Mφr-0.68; Best double couple: Mo3.60000×10^14 NP1:φs290.00000°, δ75.00000°, λ10.00000°. NP2:φs197.00000°, δ80.00000°, λ165.00000°. Principal axes: T 3.6300, Plg18.0000°, Azm153.0000°; N 0.0000, Plg72.0000°, Azm346.0000°; P -3.6400, Plg4.0000°, Azm244.0000°; After CERI.*

*NEIC Felt [IV] at Quitman, [III] at Damascus and Greenbrier and [II] at Conway. Felt in many parts of north-central Arkansas and as far as Van Buren, Missouri.*

**ISC 11 16:06:04.1±0.7, 35.34N±0.03×92.32W±0.02, h10km, n90, σ1s60/109, Arkansas**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| UALR | University of | 0.56 | 182 | *e*Pg | Pb | 16 06 15.1 | -1.0 |
| MIAR | Mount Ida | 1.30 | 233 | P | Pb | 16 06 28.1 | -0.5 |
| | baz=1.3,SNR=452 | | | | | | |
| MIAR | | | | S | Sg | 16 06 45.7 | -0.3 |
| | baz=1.3 | | | | | | |
| HBAR | Harrisburg | 1.37 | 80 | *e*Pn | Pb | 16 06 30.0 | +0.1 |
| V38A | Canehill | 1.78 | 288 | P | Pb | 16 06 36.6 | -0.3 |
| | baz=1.8,SNR=174 | | | | | | |
| V38A | | | | Sb | Sg | 16 07 00.9 | -0.6 |
| | baz=1.8 | | | | | | |
| W38A | Poteau | 1.82 | 262 | P | Pb | 16 06 37.2 | -0.4 |
| | baz=1.8,SNR=182 | | | | | | |
| W38A | | | | Sb | Sg | 16 07 02.0 | -0.8 |
| | baz=1.8 | | | | | | |
| MET | Memphis--Engin | 1.96 | 96 | *e*Pn | Pn | 16 06 32.8 | -4.6 |
| MET | | | | *e*Sb | Sb | 16 07 04.8 | +0.4 |
| GNAR | Gosnell | 1.97 | 71 | *e*Pn | Pn | 16 06 39.1 | +1.4 |
| U38A | Gravette | 2.01 | 304 | P | Pb | 16 06 40.1 | -0.7 |
| | baz=2.0,SNR=126 | | | | | | |
| U38A | | | | Sb | Sg | 16 07 07.5 | -1.2 |
| | baz=2.0 | | | | | | |
| Y39A | Lockesburg | 2.02 | 227 | P | Pb | 16 06 39.4 | -1.6 |
| | baz=2.0,SNR=46 | | | | | | |
| Y39A | | | | S | Sb | 16 07 05.9 | -0.4 |
| | baz=2.0 | | | | | | |
| PBMO | Poplar Bluff | 2.10 | 46 | *e*Pn | Pb | 16 06 41.4 | -0.9 |
| X38A | Whitesboro | 2.17 | 253 | P | Pb | 16 06 42.3 | -1.2 |
| | baz=2.1,SNR=394 | | | | | | |
| X38A | | | | Sb | Sg | 16 07 12.0 | -1.8 |
| | baz=2.1 | | | | | | |
| V37A | Hulbert | 2.37 | 284 | P | Pn | 16 06 44.5 | +1.5 |
| | baz=2.4,SNR=80 | | | | | | |
| Y38A | Idabel | 2.44 | 235 | P | Pn | 16 06 45.3 | +1.3 |
| | baz=2.4,SNR=18 | | | | | | |
| PARMO | Parma | 2.46 | 57 | *e*Pn | Pn | 16 06 46.1 | +1.8 |
| PARMO | | | | *e*Sb | Sb | 16 07 18.1 | -0.8 |
| HALT | Halls | 2.49 | 76 | *e*Pn | Pn | 16 06 46.1 | +1.4 |
| U37A | Salina | 2.51 | 296 | P | Pn | 16 06 46.6 | +1.6 |
| | baz=2.5,SNR=54 | | | | | | |
| OXF | Oxford | 2.53 | 108 | *e*Pn | Pn | 16 06 46.6 | +1.3 |
| OXF | | | | *e*Sn | Sn | 16 07 16.9 | +0.9 |
| W37A | Quinton | 2.55 | 266 | P | Pn | 16 06 47.2 | +1.5 |
| | baz=2.5,SNR=151 | | | | | | |
| W37A | | | | Sb | Sb | 16 07 23.1 | +1.6 |
| | baz=2.5 | | | | | | |
| Z39A | Irene McRaven, | 2.60 | 217 | P | Pb | 16 06 48.0 | -2.8 |
| | baz=2.6 | | | | | | |
| X37A | Clayton | 2.62 | 254 | Sb | Sg | 16 07 25.2 | -3.1 |
| | baz=2.6 | | | | | | |
| GLAT | Glass | 2.63 | 68 | *e*Pn | Pn | 16 06 48.7 | +2.0 |
| T37A | Cheneyville 18 | 2.76 | 311 | P | Pn | 16 06 50.2 | +1.8 |
| | baz=2.8,SNR=39 | | | | | | |
| TUL1 | Tulsa | 2.89 | 282 | P | Pn | 16 06 51.8 | +1.5 |
| | baz=2.9 | | | | | | |
| TUL1 | Tulsa | 2.89 | 282 | *e*Pn | Pn | 16 06 52.1 | +1.9 |
| U36A | Oologah | 2.97 | 292 | P | Pn | 16 06 52.6 | +1.3 |
| | baz=3.0 | | | | | | |
| U36A | | | | S | Sn | 16 07 28.7 | +1.7 |
| | baz=3.0 | | | | | | |
| UTMT | University of | 2.98 | 69 | *e*Pg | Pb | 16 06 59.2 | +2.0 |
| V36A | Jenks | 2.99 | 280 | P | Pn | 16 06 53.3 | +1.6 |
| | baz=3.0,SNR=22 | | | | | | |
| V36A | | | | Sb | Sb | 16 07 36.0 | +2.0 |
| | baz=3.0 | | | | | | |
| S37A | Fort Scott | 3.15 | 321 | P | Pn | 16 06 55.7 | +1.9 |
| | baz=3.2,SNR=26 | | | | | | |
| S37A | | | | Sb | Sg | 16 07 42.5 | -2.9 |
| | baz=3.2 | | | | | | |
| 139A | Bunkhouse Ranc | 3.16 | 214 | S | Sn | 16 07 34.2 | +2.5 |
| | baz=3.1 | | | | | | |
| W36A | Wetumka | 3.21 | 268 | P | Pn | 16 06 55.7 | +1.1 |
| | baz=3.2,SNR=12 | | | | | | |
| T36A | Boggs Farm, Ca | 3.36 | 302 | P | Pn | 16 06 58.2 | +1.5 |
| | baz=3.4,SNR=23 | | | | | | |
| X36A | Centrahoma | 3.40 | 258 | P | Pn | 16 06 58.6 | +1.4 |
| | baz=3.4,SNR=23 | | | | | | |
| SIUC | Southern Illin | 3.44 | 46 | *e*Pn | Pn | 16 06 59.9 | +2.1 |
| Z37A | Pogue Cattle C | 3.47 | 233 | P | Pn | 16 06 59.9 | +1.7 |
| | baz=3.4 | | | | | | |
| 138A | Matatall Enter | 3.53 | 222 | P | Pn | 16 07 00.7 | +1.8 |
| | baz=3.5 | | | | | | |
| 138A | | | | S | Sn | 16 07 42.7 | +2.0 |
| | baz=3.5 | | | | | | |
| S36A | Lake Cedric, C | 3.56 | 313 | P | Pn | 16 07 00.8 | +1.5 |
| | baz=3.6,SNR=12 | | | | | | |
| Y36A | Durant | 3.57 | 247 | P | Pn | 16 07 01.0 | +1.3 |
| | baz=3.5 | | | | | | |
| Y36A | | | | Pb | Pb | 16 07 07.3 | -0.2 |
| | baz=3.5,SNR=14 | | | | | | |
| V35A | Meyer Ranch, C | 3.71 | 278 | P | Pn | 16 07 02.8 | +1.3 |
| | baz=3.7,SNR=13 | | | | | | |
| W35A | Tecumseh | 3.74 | 268 | P | Pn | 16 07 03.2 | +1.3 |
| | baz=3.7,SNR=39 | | | | | | |
| T35A | Sooner Cattle | 3.74 | 296 | P | Pn | 16 07 03.5 | +1.5 |
| | baz=3.7,SNR=18 | | | | | | |
| 239A | Gary | 3.77 | 209 | P | Pn | 16 07 04.1 | +1.8 |
| | baz=3.7 | | | | | | |
| Q37A | Longview Farm, | 3.92 | 335 | P | Pn | 16 07 06.7 | +2.3 |
| | baz=3.9 | | | | | | |
| R36A | Gordon, Harris | 3.93 | 320 | P | Pn | 16 07 06.3 | +1.8 |
| | baz=3.9,SNR=13 | | | | | | |
| X35A | Drake | 3.94 | 258 | P | Pn | 16 07 05.9 | +1.2 |
| | baz=3.9 | | | | | | |
| X35A | | | | Pb | Pb | 16 07 13.7 | -0.1 |
| | baz=3.9,SNR=12 | | | | | | |
| 137A | Heron Place, G | 3.96 | 227 | P | Pn | 16 07 06.5 | +1.6 |
| | baz=3.9 | | | | | | |
| S35A | Otter Creek Ra | 3.98 | 307 | P | Pn | 16 07 07.0 | +1.7 |
| | baz=4.0 | | | | | | |
| 238A | Jacksonville | 4.07 | 216 | P | Pn | 16 07 08.1 | +1.7 |
| | baz=4.0 | | | | | | |
| Y35A | Marietta | 4.15 | 251 | P | Pn | 16 07 08.4 | +0.9 |
| | baz=4.1 | | | | | | |
| V34A | Guthrie | 4.27 | 278 | P | Pn | 16 07 10.3 | +1.2 |
| | baz=4.2 | | | | | | |
| V34A | Guthrie | 4.27 | 278 | *e*Pn | Pn | 16 07 10.7 | +1.5 |
| T34A | McClaskey Farm | 4.29 | 295 | P | Pn | 16 07 10.5 | +1.1 |
| | baz=4.3,SNR=7.7 | | | | | | |
| R35A | Emporia Munici | 4.31 | 315 | P | Pn | 16 07 11.5 | +1.7 |
| | baz=4.3 | | | | | | |
| U34A | Anderson Ranch | 4.38 | 286 | Pn | Pn | 16 07 10.7 | 0.0 |
| Q36A | Arnold C. Orve | 4.40 | 326 | P | Pn | 16 07 13.0 | +2.0 |
| | baz=4.4,SNR=6.8 | | | | | | |
| 237A | Washetta, Mont | 4.42 | 222 | P | Pn | 16 07 12.9 | +1.6 |
| | baz=4.4 | | | | | | |
| W34A | Bridge Creek, | 4.46 | 270 | P | Pn | 16 07 12.8 | +0.9 |
| | baz=4.4 | | | | | | |
| W34A | Bridge Creek, | 4.46 | 270 | *e*Pn | Pn | 16 07 12.4 | +0.5 |
| USIN | University of | 4.57 | 54 | *e*Pn | Pn | 16 07 14.7 | +1.5 |
| USIN | | | | *e*Pb | Pb | 16 07 28.1 | +3.7 |
| USIN | | | | *e*Sb | Sg | 16 08 26.2 | -4.6 |
| X34A | Smith Ranch, M | 4.59 | 262 | P | Pn | 16 07 14.7 | +1.1 |
| | baz=4.6,SNR=12 | | | | | | |
| Q35A | Mercer Eighty, | 4.60 | 321 | P | Pn | 16 07 15.6 | +1.8 |
| | baz=4.6,SNR=18 | | | | | | |
| Y34A | Reagan Ranch, | 4.69 | 254 | P | Pn | 16 07 16.3 | +1.3 |
| | baz=4.7 | | | | | | |
| 338A | Crockett | 4.69 | 213 | P | Pn | 16 07 17.0 | +2.0 |
| | baz=4.7 | | | | | | |
| OLIL | Olney | 4.78 | 44 | *e*Pb | Pb | 16 07 31.2 | +3.2 |
| 236A | Katherine and | 4.84 | 228 | P | Pn | 16 07 18.4 | +1.3 |
| | baz=4.8 | | | | | | |
| R34A | Isabella, Hill | 4.94 | 308 | P | Pn | 16 07 19.5 | +1.1 |
| | baz=4.9,SNR=18 | | | | | | |
| KSU1 | Kansas State U | 5.08 | 319 | *e*Pn | Pn | 16 07 21.6 | +1.2 |
| KSU1 | | | | *e*Pb | Pg | 16 07 37.6 | -3.9 |
| SWET | Sewanee | 5.22 | 89 | *e*Pn | Pn | 16 07 23.4 | +1.0 |
| | 21nm,0.7s | | | | | | |
| WMOK | Wichita Mounta | 5.34 | 265 | *e*Pn | Pn | 16 07 24.6 | +0.7 |
| | 66nm,0.8s | | | | | | |
| WHTX | Lake Whitney | 5.43 | 234 | *e*Pn | Pn | 16 07 25.8 | +0.7 |
| P34A | Walnut Farm, R | 5.53 | 321 | P | Pn | 16 07 27.9 | +1.4 |
| | baz=5.5,SNR=12 | | | | | | |
| WCI | Wyandotte Cave | 5.63 | 57 | Pn | Pn | 16 07 30.2 | +2.3 |
| HDIL | Hopedale | 5.73 | 24 | *e*Pn | Pn | 16 07 31.9 | +2.7 |
| BLO | Bloomington | 6.00 | 49 | *e*Pn | Pn | 16 07 35.3 | +2.4 |
| BLO | | | | *e*Pb | Pb | 16 07 52.3 | +3.5 |
| BLO | | | | *e*Sb | Sg | 16 09 09.8 | -6.9 |
| Z32A | Haskell | 6.26 | 253 | P | Pn | 16 07 37.1 | +0.5 |
| | baz=6.2,SNR=8.0 | | | | | | |
| CPCT | Cooper Cave | 6.37 | 87 | *e*Pn | Pn | 16 07 39.5 | +1.5 |
| SFIN | Scholer Farm | 6.51 | 38 | *e*Pn | Pn | 16 07 41.5 | +1.5 |
| ABTX | Abilene, Hawle | 6.66 | 248 | *e*Pn | Pn | 16 07 42.1 | 0.0 |
| ABTX | | | | *e*Pb | Pb | 16 07 59.0 | -1.1 |
| CBKS | Cedar Bluff | 6.87 | 303 | *e*Pn | Pn | 16 07 45.3 | +0.3 |
| CBKS | | | | *e*Pb | Pg | 16 08 10.7 | -5.0 |
| CBKS | | | | *e*Sg | Sg | 16 09 43.8 | -0.9 |
| TZTN | Tazewell | 7.21 | 78 | *e*Pn | Pn | 16 07 51.2 | +1.6 |
| | 6.8nm,0.6s | | | | | | |
| GOGA | Godfrey | 7.56 | 102 | *e*Pn | Pn | 16 07 55.7 | +1.3 |
| Z30A | Sanderson Ranc | 7.57 | 257 | P | Pn | 16 07 55.1 | +0.5 |
| | baz=7.5,SNR=36 | | | | | | |
| BGNE | Belgrade | 7.60 | 325 | Pn | Pn | 16 07 56.9 | +2.0 |
| BGNE | | | | *e*Pb | Pg | 16 08 26.4 | -3.2 |
| AMTX | Amarillo | 7.69 | 269 | *e*Pn | Pn | 16 07 56.8 | +0.5 |
| JFWS | Jewell Farm | 7.74 | 11 | *e*Pn | Pn | 16 07 57.4 | +0.6 |
| JFWS | | | | *e*Sb | Sg | 16 10 03.9 | -8.4 |
| JCT | Junction City | 7.94 | 235 | *e*Pn | Pn | 16 07 58.5 | -1.2 |
| 128A | Castleberry Fa | 8.87 | 255 | P | Pn | 16 08 12.8 | +0.4 |
| | baz=8.8,SNR=7.1 | | | | | | |
| ECSD | EROS Data Cent | 9.02 | 340 | *e*Pn | Pn | 16 08 15.2 | +0.9 |
| MNTX | Cornudas Mount | 11.49 | 255 | *e*Pn | Pn | 16 08 48.1 | -0.2 |
| | 4.0nm,0.5s | | | | | | |
| SSPA | Standing Stone | 12.55 | 61 | Pn | Pn | 16 09 01.8 | -0.9 |
| AGMN | Agassiz Nation | 13.21 | 350 | *e*Pn | Pn | 16 09 14.5 | +2.7 |

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**DJA 11 16:25:53.5±1.6, 11°S±16°×12°7E±1°3, h10km, M4.1/3, mb4.8/1, MLv3.7/3, Timor Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SOEI | Soe | 2.73 | 304 | P | Pn | 16 26 37.3 | -0.2 |
| SOEI | | | | S | Sn | 16 27 11.9 | +1.2 |
| BATI | Baumata | 3.04 | 291 | P | Pn | 16 26 41.0 | -0.8 |
| BATI | | | | S | Sn | 16 27 19.5 | +1.2 |
| BASI | Baing, Sumba | 5.97 | 280 | P | Pn | 16 27 22.3 | +0.3 |
| WSI | Waingapu | 6.36 | 284 | P | Pn | 16 27 31.9 | +4.5 |

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**WEL 11 16:29:46.1±0.1, 43.59S×172.06E, h5km, ML3.5/15, 3C-2D, Error ellipse: s-maj=1.3km s-min=1.2km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OXZ | Oxford | 0.27 | 356 | PG | Pg | 16 29 51.3 | -0.1 |
| OXZ | | | | SG | Sg | 16 29 55.4 | +0.5 |
| CRLZ | Canterbury Las | 0.41 | 88 | PG | Pg | 16 29 54.7 | +0.8 |
| CRLZ | | | | SG | Sg | 16 30 00.3 | +1.1 |
| CRLZ | | | | AML | AML | 16 30 05.8 | |
| MQZ | McQueen's Vall | 0.44 | 105 | ⇑PG | Pg | 16 29 55.1 | +0.5 |
| MQZ | | | | SG | Sg | 16 30 01.4 | +1.0 |
| MQZ | | | | AML | AML | 16 30 04.9 | |
| RPZ | Rata Peaks | 0.74 | 260 | ⇑P* | Pg | 16 30 00.5 | +0.1 |
| RPZ | | | | S* | Sb | 16 30 11.4 | -0.6 |
| RPZ | | | | AML | AML | 16 30 13.7 | |
| LTZ | Lake Taylor | 0.82 | 11 | P* | Pg | 16 30 02.4 | +0.4 |
| LTZ | | | | S* | Sb | 16 30 13.7 | -0.7 |
| LTZ | | | | AML | AML | 16 30 14.2 | |
| WVZ | Waitaha Valley | 1.10 | 298 | P* | Pg | 16 30 06.9 | -0.2 |
| WVZ | | | | AML | AML | 16 30 23.4 | |
| WVZ | | | | AML | AML | 16 30 23.5 | |
| LBZ | Lake Benmore | 1.57 | 239 | PN | Pn | 16 30 13.5 | -1.2 |
| LBZ | | | | AML | AML | 16 30 37.5 | |
| LBZ | | | | AML | AML | 16 30 37.9 | |
| LBZ | | | | AML | AML | 16 30 39.0 | |
| LBZ | | | | AML | AML | 16 30 39.0 | |
| KHZ | Kahutara | 1.60 | 43 | ⇑PN | Pn | 16 30 13.1 | -1.8 |
| FOZ | Fox Glacier | 1.73 | 270 | ⇓PN | Pn | 16 30 15.5 | -1.2 |
| FOZ | | | | AML | AML | 16 30 46.8 | |
| ODZ | Otahua Downs | 1.77 | 215 | PN | Pn | 16 30 15.7 | -1.8 |
| ODZ | | | | AML | AML | 16 30 43.6 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| ODZ | | | | AML | AML | 16 30 43.8 | |
| ODZ | | | | AML | AML | 16 30 44.7 | |
| ODZ | | | | AML | AML | 16 30 46.5 | |
| DSZ | Denniston Nort | 1.85 | 354 | PN | Pn | 16 30 16.6 | -2.0 |
| DSZ | | | | AML | AML | 16 30 48.5 | |
| DSZ | | | | AML | AML | 16 30 48.6 | |
| DSZ | | | | AML | AML | 16 30 51.2 | |
| THZ | Tophouse | 1.93 | 19 | ⇓PN | Pn | 16 30 17.8 | -1.9 |
| THZ | | | | AML | AML | 16 30 46.0 | |
| THZ | | | | AML | AML | 16 38 13.9 | |
| JCZ | Jackson Bay | 2.44 | 257 | PN | Pn | 16 30 25.4 | -1.3 |
| WKZ | Wanaka | 2.51 | 240 | AML | AML | 16 31 09.7 | |
| WKZ | | | | AML | AML | 16 31 09.7 | |
| NNZ | Nelson | 2.56 | 23 | PN | Pn | 16 30 27.3 | -1.0 |
| EAZ | Earnscleugh | 2.57 | 229 | PN | Pn | 16 30 26.7 | -1.6 |
| EAZ | | | | AML | AML | 16 31 09.4 | |
| EAZ | | | | AML | AML | 16 31 10.7 | |
| EAZ | | | | AML | AML | 16 31 10.7 | |
| EAZ | | | | AML | AML | 16 31 12.7 | |
| TUWZ | Tuamarina | 2.57 | 33 | PN | Pn | 16 30 26.6 | -1.7 |
| QRZ | Quartz Range | 2.79 | 7 | PN | Pn | 16 30 29.9 | -1.4 |
| QRZ | | | | AML | AML | 16 31 46.8 | |
| QRZ | | | | AML | AML | 16 32 34.6 | |
| TUZ | Tuapeka | 2.93 | 215 | PN | Pn | 16 30 31.5 | -1.7 |
| TUZ | | | | AML | AML | 16 31 23.1 | |
| TUZ | | | | AML | AML | 16 31 23.6 | |
| MSZ | Milford Sound | 3.17 | 249 | PN | Pn | 16 30 34.9 | -1.6 |
| MSZ | | | | AML | AML | 16 31 31.6 | |
| MSZ | | | | AML | AML | 16 31 33.6 | |
| CAW | Cannon Point | 3.33 | 43 | PN | Pn | 16 30 36.7 | -2.2 |
| SYZ | Scrubby Hill | 3.60 | 214 | PN | Pn | 16 30 41.3 | -1.2 |
| WHZ | Wether Hill Ro | 3.73 | 230 | PN | Pn | 16 30 41.9 | -2.4 |
| MRZ | Mangatainoka R | 3.93 | 43 | PN | Pn | 16 30 44.1 | -2.9 |

*ISCJB **11** 16:33:37.2±0.5, 24°.37S±0°.06×179°.89W±0°.07, h505$^{km}$, mb4.3/15, Error ellipse: s-maj=9.3km s-min=7.0km az=28.3*
*NEIC **11** 16:33:38.4±0.9, 24°.42S×179°.83W, h506$^{km}$±10$^{km}$, mb4.6/4, Error ellipse: s-maj=13.3km s-min=10.2km az=69.0*
*IDC **11** 16:33:40.8±2.0, 24°.52S×179°.98W, h526$^{km}$±21$^{km}$, mb3.9/14, mb1 4.0/15, mb1mx3.6/34, mbtmp4.8/15, Error ellipse: s-maj=16.4km s-min=11.4km az=33.0*
*AUST **11** 16:33:45.3, 24°.16S×179°.87E, h600$^{km}$*
**ISC 11 16:33:37.9**±0.5, **24°.36S**±0°.07×**179°.80W**±0°.08, **h505**$^{km}$, **n57**, σ1$^s$**09**/60, **mb4.3**/15, **1C, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 6.89 | 343 | eP | P | 16 35 24.6 | +1.2 |
| | 74nm,1.3s | | | | | | |
| NIUE | Niue | 10.58 | 62 | P | P | 16 36 08.7 | +7.3 |
| | baz=11,SNR=10 | | | | | | |
| DZM | Mont Dzumac | 12.85 | 277 | P | P | 16 36 24.4 | -1.1 |
| | 0.6nm,0.3s,baz=357,slow=16,SNR=4.0 | | | | | | |
| DZM | Mont Dzumac | 12.85 | 277 | eP | P | 16 36 25.8 | +0.2 |
| AFI | Afiamalu | 12.87 | 38 | P | P | 16 36 24.4 | -1.4 |
| | 2.2nm,0.3s,baz=133,slow=3.1,SNR=7.2 | | | | | | |
| AFI | | | | S | S | 16 38 42.6 | -1.5 |
| | 4.7nm,0.3s,baz=74,slow=13,SNR=6.8 | | | | | | |
| URZ | Urewera | 14.10 | 190 | P | P | 16 36 37.7 | -0.7 |
| | 4.2nm,0.3s,baz=331,slow=2.2,SNR=16 | | | | | | |
| URZ | | | | S | S | 16 39 05.0 | -2.2 |
| | 6.4nm,0.3s,baz=210,slow=23,SNR=16 | | | | | | |
| RPZ | Rata Peaks | 20.71 | 199 | P | P | 16 37 41.4 | -1.1 |
| | 28nm,0.6s,baz=226,slow=0.6,SNR=24 | | | | | | |
| ARMA | Armidale | 26.03 | 250 | P | P | 16 38 32.0 | +1.7 |
| | baz=26,SNR=6.6 | | | | | | |
| EIDS | Eidsvold | 26.41 | 262 | P | P | 16 38 34.4 | +0.8 |
| | baz=26,SNR=6.6 | | | | | | |
| EIDS | Eidsvold | 26.41 | 262 | eP | P | 16 38 34.6 | +0.9 |
| MGCD | Mangrove Creek | 26.90 | 244 | P | P | 16 38 39.7 | +1.9 |
| | baz=27,SNR=8.4 | | | | | | |
| RMQ | Roma | 28.44 | 259 | P | P | 16 38 53.2 | +1.8 |
| | baz=28,SNR=23 | | | | | | |
| CMSA | Cobar Meteorol | 31.21 | 249 | P | P | 16 39 16.0 | +0.6 |
| | baz=31,SNR=30 | | | | | | |
| CTA | Charters Tower | 31.66 | 271 | P | P | 16 39 20.4 | +1.1 |
| | 18nm,0.5s,baz=93,slow=11,SNR=50 | | | | | | |
| CTAO | Charters Tower | 31.66 | 271 | eP | P | 16 39 19.8 | +0.4 |
| TOO | Toolangi | 32.35 | 238 | P | P | 16 39 25.8 | +0.8 |
| | baz=32,SNR=13 | | | | | | |
| QLP | Quilpie | 32.48 | 258 | P | P | 16 39 26.5 | +0.3 |
| | baz=32,SNR=13 | | | | | | |
| MOO | Moorlands | 32.65 | 228 | P | P | 16 39 28.5 | +1.0 |
| | baz=32,SNR=3.6 | | | | | | |
| RABL | Rabaul | 33.63 | 302 | P | P | 16 39 33.5 | -2.7 |
| | baz=33,SNR=4.1 | | | | | | |
| PMG | Port Moresby | 34.81 | 290 | P | P | 16 39 46.9 | +0.8 |
| | 9.3nm,1.0s,baz=140,slow=5.5,SNR=4.8 | | | | | | |
| ARPS | Mount Arapiles | 35.04 | 240 | P | P | 16 39 48.2 | +0.5 |
| | baz=35,SNR=7.1 | | | | | | |
| HTT | Hallett | 37.05 | 246 | P | P | 16 40 01.2 | -3.3 |
| | baz=37,SNR=17 | | | | | | |
| BBOO | Buckleboo | 39.43 | 247 | P | P | 16 40 23.3 | -0.5 |
| | baz=39,SNR=23 | | | | | | |
| ASAR | Alice Springs | 42.14 | 261 | P | P | 16 40 45.6 | 0.0 |
| | 4.8nm,0.5s,baz=94,slow=6.5,SNR=141 | | | | | | |
| ASAR | | | | PcP | PcP | 16 42 28.5 | -0.1 |
| | 1.5nm,0.8s,baz=98,slow=4.2,SNR=5.1 | | | | | | |
| ASAR | | | | ScP | ScP | 16 45 20.8 | -10 |
| | 0.7nm,0.6s,baz=104,slow=3.2,SNR=4.1 | | | | | | |
| ASAR | | | | S | S | 16 46 26.6 | -2.0 |
| | 1.3nm,0.8s,baz=98,slow=16,SNR=8.0 | | | | | | |
| WRAB | Tennant Creek | 42.55 | 267 | eP | P | 16 40 48.6 | -0.3 |
| | 13nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 42.55 | 267 | P | P | 16 40 48.6 | -0.4 |
| | 13nm,0.5s,baz=102,slow=8.3,SNR=194 | | | | | | |
| WRA | | | | PcP | PcP | 16 42 30.5 | +0.4 |
| | 0.4nm,0.6s,baz=102,slow=3.7,SNR=5.4 | | | | | | |
| WRA | | | | S | S | 16 46 32.2 | -2.5 |
| | 3.2nm,1.0s,baz=101,slow=15,SNR=11 | | | | | | |
| FORT | Forrest | 46.32 | 250 | P | P | 16 41 17.2 | -0.7 |
| | baz=46,SNR=28 | | | | | | |
| KDU | Kakadu | 46.51 | 276 | P | P | 16 41 19.2 | -0.3 |
| | baz=46,SNR=3.7 | | | | | | |
| WRKA | Warakurna | 46.91 | 258 | P | P | 16 41 22.1 | -0.4 |
| | baz=47,SNR=28 | | | | | | |
| MTN | Manton Dam | 47.67 | 275 | P | P | 16 41 27.9 | -0.4 |
| | baz=47,SNR=3.6 | | | | | | |
| KNRA | Kununurra | 48.87 | 270 | P | P | 16 41 37.6 | +0.4 |
| | baz=48,SNR=40 | | | | | | |
| SIJI | Sorong | 52.75 | 289 | P | P | 16 42 05.9 | +0.3 |
| | 5.0nm,0.5s,baz=102,slow=11,SNR=5.5 | | | | | | |
| SWI | Sorong | 52.76 | 289 | P | P | 16 41 57.3 | -8.4 |
| | baz=52,SNR=5.0 | | | | | | |
| SBA | Scott Base | 53.93 | 183 | eP | P | 16 42 14.6 | +1.7 |
| | 14nm,0.9s | | | | | | |
| VNDA | Vanda | 53.93 | 185 | P | P | 16 42 13.9 | +0.9 |
| | 2.6nm,0.6s,baz=358,slow=7.7,SNR=25 | | | | | | |
| VNDA | | | | PcP | PcP | 16 43 10.8 | +0.3 |
| | 1.2nm,0.6s,baz=35,slow=5.2,SNR=3.6 | | | | | | |
| KLBR | Kellerberrin | 54.98 | 247 | P | P | 16 42 20.3 | -0.8 |
| | baz=55,SNR=13 | | | | | | |
| MEEK | Meekatharra | 55.15 | 254 | P | P | 16 42 21.4 | -1.0 |
| | baz=55,SNR=8.7 | | | | | | |
| NWAO | Narrogin (SRO) | 55.21 | 246 | P | P | 16 42 21.9 | -0.8 |
| | 5.4nm,0.7s,baz=119,slow=0.2,SNR=6.2 | | | | | | |
| NWAO | Narrogin (SRO) | 55.21 | 246 | P | P | 16 42 22.4 | -0.4 |
| | baz=55,SNR=4.3 | | | | | | |
| BATI | Baumata | 55.44 | 274 | P | P | 16 42 25.8 | +1.2 |
| | 8.8nm,0.5s,baz=188,slow=6.0,SNR=5.9 | | | | | | |
| BLDU | Ballidu | 56.02 | 248 | P | P | 16 42 27.9 | -0.6 |
| | baz=56,SNR=16 | | | | | | |
| MORW | Morawa | 56.88 | 250 | P | P | 16 42 34.1 | -0.4 |
| | baz=57,SNR=12 | | | | | | |
| QSPA | South Pole Qui | 65.72 | 180 | P | P | 16 43 32.4 | +0.5 |
| | 17nm,0.8s,baz=20,slow=1.0,SNR=122 | | | | | | |
| QSPA | South Pole Qui | 65.72 | 180 | eP | P | 16 43 32.2 | +0.3 |
| | 33nm,1.1s | | | | | | |
| LEM | Lembang | 71.36 | 271 | P | P | 16 44 07.8 | +0.7 |
| | 24nm,0.7s,baz=20,slow=4.9,SNR=7.5 | | | | | | |
| MAW | Mawson | 77.38 | 200 | P | P | 16 44 40.3 | +0.4 |
| | 10nm,0.6s,baz=134,slow=6.1,SNR=60 | | | | | | |
| MAW | Mawson | 77.38 | 200 | P | P | 16 44 40.2 | +0.4 |
| | baz=77,SNR=49 | | | | | | |
| SYO | Syowa Base | 82.60 | 193 | ⇑iP | P | 16 45 05.1 | -2.1 |
| CMAR | Chiang Mai Arr | 89.85 | 290 | P | P | 16 45 44.2 | +1.3 |
| | 1.3nm,0.8s,baz=156,slow=2.7,SNR=7.9 | | | | | | |
| TXAR | Lajitas Array | 90.52 | 58 | P | P | 16 45 47.3 | +1.4 |
| | 0.9nm,0.7s,baz=216,slow=6.2,SNR=6.9 | | | | | | |
| ARCES | ARCESS Array B | 132.38 | 348 | PKP | PKPdf | 16 51 54.1 | +0.5 |
| | 2.9nm,0.9s,baz=72,slow=2.9,SNR=3.0 | | | | | | |
| NOA | NORSAR Array B | 142.56 | 351 | PKhKP | PKPpre | 16 52 08.6 | |
| | 1.2nm,0.8s,baz=16,slow=4.9,SNR=3.8 | | | | | | |
| AKASG | Malin Array Be | 145.46 | 327 | PKPbc | PKPbc | 16 52 18.4 | -0.5 |
| | 1.5nm,0.5s,baz=42,slow=3.8,SNR=12 | | | | | | |
| BRTR | Keskin Array B | 148.00 | 307 | PKPbc | PKPbc | 16 52 26.1 | -0.3 |
| | 1.8nm,0.6s,baz=146,slow=5.3,SNR=8.9 | | | | | | |
| CLL | Collm | 151.35 | 343 | i PKPbc | PKPbc | 16 52 34.0 | +0.2 |
| | comp=Z,6.0nm,0.8s | | | | | | |
| BRG | Berggiesshubel | 151.48 | 342 | ePKP | PKPbc | 16 52 34.4 | +0.2 |
| | comp=Z,3.3nm,0.7s | | | | | | |
| TORD | Torodi Ar. Bea | 168.75 | 188 | PKP | PKPdf | 16 52 46.3 | -1.0 |
| | comp=Z,1.0nm,1.0s,baz=234,slow=0.8,SNR=6.4 | | | | | | |

*NIED **11** 16:47:00, 24°.90N×122°.30E, h5$^{km}$, Mw4.1 Best double couple: Mo1.72000×10$^{15}$ NP1:φs280.00000°, δ40.00000°, λ-58.00000°. NP2:φs60.00000°, δ57.00000°, λ-114.00000°.*
*IDC **11** 16:47:15.2±0.9, 24°.72N×122°.01E, h0$^{km}$, mb4.0/8, mb1 4.1/9, mb1mx3.9/35, mbtmp4.0/9, ML1.4/1, MS3.3/10, Ms1 3.3/10, ms1mx3.0/39, Error ellipse: s-maj=26.7km s-min=17.3km az=65.0*
*ISCJB **11** 16:47:15.8±0.4, 24°.96N±0°.02×122°.38E±0°.02, h6$^{km}$±2$^{km}$, mb4.0/9, MS3.3/7, Error ellipse: s-maj=3.9km s-min=2.6km az=6.6*
*BJI **11** 16:47:16.5, 24°.92N×122°.23E, h6$^{km}$, mb4.0/11, mB4.3/8, ML4.2/5, Ms3.9/8, Ms7 3.7/8*
*TAP **11** 16:47:17.4, 24°.93N×122°.27E, h16$^{km}$, ML4.4, B*
*JMA **11** 16:47:17.1±0.1, 24°.90N×122°.34E, h48$^{km}$±2$^{km}$, M3.5*
**ISC 11 16:47:17.5**±0.7, **24°.89N**±0°.03×**122°.33E**±0°.02, **h15**$^{km}$±4$^{km}$, **n96**, σ1$^s$**28**/127, **mb4.0**/9, **MS3.2**/7, **18C-5D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWB1 | Santiao Chiao | 0.34 | 291 | ⇓iP | Pg | 16 47 23.8 | -0.7 |
| | baz=283 | | | | | | |
| TWB1 | | | | i S | Sg | 16 47 27.8 | -1.4 |
| | baz=283 | | | | | | |
| EGS | | 0.37 | 264 | ⇓iP | Pg | 16 47 24.6 | -0.4 |
| | baz=251 | | | | | | |
| EGS | | | | S | Sb | 16 47 30.0 | -1.3 |
| | baz=251 | | | | | | |
| TWC | Suao | 0.52 | 238 | ⇓iP | Pg | 16 47 27.1 | -0.7 |
| | baz=226 | | | | | | |
| TWC | | | | eS | Sg | 16 47 33.2 | -1.6 |
| | baz=226 | | | | | | |
| NWF | Wu-fen Shan | 0.53 | 290 | ⇓iP | Pg | 16 47 27.8 | -0.3 |
| | baz=288 | | | | | | |
| NWF | | | | i S | Sg | 16 47 34.5 | -0.8 |
| | baz=288 | | | | | | |
| ILA | Ilan | 0.55 | 257 | i P | Pb | 16 47 28.4 | -0.4 |
| | baz=242 | | | | | | |
| ILA | | | | eS | Sb | 16 47 36.4 | -0.1 |
| | baz=242 | | | | | | |
| TWE | Neicheng | 0.63 | 255 | P | Pg | 16 47 29.1 | -0.8 |
| | baz=240 | | | | | | |
| TWE | | | | S | Sb | 16 47 38.3 | -0.6 |
| | baz=240 | | | | | | |
| TWA | Mucha | 0.69 | 278 | ⇑iP | Pb | 16 47 30.9 | -0.4 |
| | baz=275 | | | | | | |
| TWA | | | | i S | Sb | 16 47 39.5 | -1.1 |
| | baz=275 | | | | | | |
| JYNG | Yonagunijimaku | 0.70 | 128 | P | Pg | 16 47 30.8 | -0.5 |
| JYNG | | | | S | Sg | 16 47 41.0 | +0.4 |
| ENA | Nanau | 0.71 | 230 | ⇓iP | Pg | 16 47 30.4 | -0.9 |
| | baz=220 | | | | | | |
| ENTT | Nioudou | 0.74 | 251 | ⇑iP | Pg | 16 47 31.4 | -0.6 |
| | baz=238 | | | | | | |
| ENTT | | | | S | Sb | 16 47 42.0 | -0.1 |
| | baz=238 | | | | | | |
| YOJ | Yonaguni jima | 0.75 | 124 | P | Pg | 16 47 31.4 | -0.7 |
| YOJ | | | | eS | Sg | 16 47 42.1 | +0.1 |
| YOJ | Yonaguni jima | 0.75 | 124 | ⇑iP | Pg | 16 47 31.5 | -0.6 |
| | baz=114 | | | | | | |
| YOJ | | | | eS | Sg | 16 47 42.6 | +0.6 |
| | baz=114 | | | | | | |
| TAP1 | Taipei | 0.75 | 282 | ⇑iP | Pb | 16 47 32.1 | -0.2 |
| | baz=279 | | | | | | |
| TAP1 | | | | S | Sb | 16 47 41.5 | -1.0 |
| | baz=279 | | | | | | |
| TAP | Taipei | 0.77 | 282 | eP | Pb | 16 47 32.1 | -0.5 |
| | baz=279 | | | | | | |
| TAP | | | | eS | Sb | 16 47 41.9 | -0.9 |
| | baz=279 | | | | | | |
| TWY | Chenhua | 0.77 | 300 | P | Pb | 16 47 32.3 | -0.4 |
| | baz=287 | | | | | | |
| TWY | | | | i S | Sb | 16 47 42.9 | -0.1 |
| | baz=287 | | | | | | |
| PCYT | Pengchaiyu | 0.78 | 342 | ⇑P | Pg | 16 47 32.0 | -0.7 |
| | baz=345 | | | | | | |
| TWS1 | Kuangyinshan | 0.86 | 285 | ⇑iP | Pg | 16 47 33.9 | -0.4 |
| | baz=283 | | | | | | |
| TWS1 | | | | eS | Sg | 16 47 44.7 | -0.8 |
| | baz=283 | | | | | | |
| NSK | Sanguang | 0.91 | 257 | ⇑iP | Pb | 16 47 34.2 | -0.9 |
| | baz=268 | | | | | | |
| NSK | | | | eS | Sb | 16 47 46.1 | -1.1 |
| | baz=268 | | | | | | |
| NNS | Nan Shan | 0.98 | 243 | ⇑iP | Pb | 16 47 35.8 | -0.6 |
| | baz=231 | | | | | | |
| NNS | | | | eS | Sb | 16 47 48.4 | -0.8 |
| | baz=231 | | | | | | |
| NCU | National Centr | 1.04 | 275 | eP | Pb | 16 47 36.5 | -0.9 |
| | baz=273 | | | | | | |
| NCU | | | | eS | Sg | 16 47 50.4 | -1.0 |
| | baz=273 | | | | | | |
| TWD | Chiawan | 1.05 | 220 | P | Pb | 16 47 36.8 | -0.6 |
| | baz=218 | | | | | | |
| TWD | | | | S | Sb | 16 47 50.5 | -0.4 |
| | baz=218 | | | | | | |
| HWA | Hwalien | 1.12 | 216 | P | Pg | 16 47 39.2 | 0.0 |
| | baz=215 | | | | | | |
| WHF | Hehuan Shan | 1.22 | 233 | ⇑P | Pn | 16 47 39.9 | -0.7 |
| | baz=232 | | | | | | |
| WHF | | | | eS | Sb | 16 47 56.0 | -0.5 |
| | baz=232 | | | | | | |
| TWT | Tachien | 1.23 | 239 | ⇑iP | Pb | 16 47 40.2 | -0.4 |
| | baz=231 | | | | | | |
| TWT | | | | eS | Sb | 16 47 55.7 | -0.6 |
| | baz=231 | | | | | | |
| NSTT | Nanjuang | 1.24 | 258 | ⇑iP | Pn | 16 47 39.6 | -0.7 |
| | baz=257 | | | | | | |
| NSTT | | | | eS | Sg | 16 47 57.4 | -0.2 |
| | baz=257 | | | | | | |
| HSN | Hsinchu | 1.24 | 266 | eP | Pn | 16 47 39.1 | -1.3 |
| | baz=267 | | | | | | |
| ESL | Shilin | 1.35 | 218 | eP | Pn | 16 47 41.5 | -0.4 |
| | baz=223 | | | | | | |
| ESL | | | | eS | Sb | 16 47 59.4 | -0.2 |
| | baz=223 | | | | | | |
| IRIF | Iriomote-Funau | 1.39 | 113 | P | Pn | 16 47 40.3 | -2.1 |
| NSY | Sanyi | 1.51 | 252 | eP | Pb | 16 47 44.3 | -1.0 |
| | baz=267 | | | | | | |
| TWQ1 | Liyutan | 1.52 | 250 | eP | Pn | 16 47 44.3 | +0.1 |
| | baz=265 | | | | | | |
| HATJ | Hateruma jima | 1.57 | 121 | P | Pn | 16 47 43.7 | -1.3 |
| SMLT | Sun Moon Lake | 1.65 | 233 | ⇑iP | Pb | 16 47 47.4 | -0.3 |
| | baz=233 | | | | | | |
| EHY | Hungye | 1.66 | 214 | eP | Pn | 16 47 44.9 | -1.2 |
| | baz=212 | | | | | | |
| JKRS | Kuro-shima | 1.66 | 113 | P | Pn | 16 47 44.6 | -1.5 |
| TYC | Yuchr | 1.67 | 234 | ⇑iP | Pb | 16 47 47.8 | -0.2 |
| | baz=235 | | | | | | |
| TYC | | | | eS | Sg | 16 48 10.1 | -1.1 |
| | baz=235 | | | | | | |
| TCU | Taichung | 1.68 | 244 | eP | Pb | 16 47 48.1 | -0.1 |
| | baz=245 | | | | | | |
| JIJ | Ishigaki jima | 1.73 | 107 | P | Pn | 16 47 45.0 | -2.1 |
| TWF1 | Yuli | 1.80 | 212 | eP | Pn | 16 47 47.3 | -0.8 |
| | baz=212 | | | | | | |
| WNT | Mingjian | 1.81 | 237 | eP | Pb | 16 47 49.8 | -0.6 |
| | baz=256 | | | | | | |
| WNT | | | | eS | Sg | 16 48 15.4 | -0.4 |
| | baz=256 | | | | | | |
| JISG | Ishigakijimahi | 1.82 | 99 | P | Pn | 16 47 46.5 | -1.9 |
| YUS | Yu-Shan | 1.88 | 222 | ⇑iP | Pn | 16 47 50.5 | +0.9 |
| | baz=207 | | | | | | |
| YUS | | | | eS | Sb | 16 48 16.2 | +0.8 |
| | baz=207 | | | | | | |
| ALS | Alishan | 1.96 | 226 | ⇑P | Pb | 16 47 52.1 | -1.0 |
| | baz=213 | | | | | | |
| ALS | | | | eS | Sb | 16 48 18.9 | +1.4 |
| | baz=213 | | | | | | |
| CHN5 | Tsauling | 1.98 | 230 | P | Pb | 16 47 53.0 | -0.5 |
| | baz=233 | | | | | | |
| CHN5 | | | | eS | Sg | 16 48 20.5 | -0.9 |
| | baz=233 | | | | | | |
| CHKT | Chengkung | 1.99 | 207 | eP | Pn | 16 47 49.4 | -1.3 |
| | baz=190 | | | | | | |
| WGK | Gukeng | 2.01 | 234 | eP | Pb | 16 47 52.2 | -1.6 |
| | baz=235 | | | | | | |
| ELDTW | Lidau | 2.08 | 216 | eP | Pn | 16 47 51.9 | -0.1 |
| | baz=202 | | | | | | |
| CHN2 | Minshiung | 2.17 | 232 | eP | Pb | 16 47 55.6 | -0.9 |
| | baz=252 | | | | | | |
| CHN2 | | | | eS | Sb | 16 48 23.3 | 0.0 |
| | baz=252 | | | | | | |
| CHN4 | Tsaushan | 2.21 | 226 | ⇑iP | Pb | 16 47 55.4 | -1.8 |
| | baz=212 | | | | | | |
| CHN4 | | | | eS | Sb | 16 48 25.6 | +1.3 |
| | baz=212 | | | | | | |
| CHY | Chiayi | 2.23 | 232 | eP | Pn | 16 47 54.9 | +1.0 |
| | baz=253 | | | | | | |
| CHY | | | | eS | Sb | 16 48 25.5 | +0.7 |
| | baz=253 | | | | | | |
| STYT | Tauyuan | 2.24 | 220 | ⇑P | Pn | 16 47 55.4 | +1.1 |
| | baz=222 | | | | | | |
| STYT | | | | eS | Sb | 16 48 24.9 | -0.5 |
| | baz=222 | | | | | | |
| WTP | Ta-pu | 2.27 | 224 | P | Pb | 16 47 56.2 | -2.0 |
| | baz=210 | | | | | | |
| WTP | | | | eS | Sb | 16 48 26.9 | +0.7 |
| | baz=210 | | | | | | |
| WSF | Szhu | 2.29 | 238 | eP | Pb | 16 47 56.5 | -2.2 |
| | baz=240 | | | | | | |
| TWK | Hsinying | 2.33 | 227 | eP | Pb | 16 47 58.1 | -1.3 |
| | baz=228 | | | | | | |
| TWG | Pinlang | 2.36 | 210 | eP | Pn | 16 47 55.0 | -0.8 |
| | baz=210 | | | | | | |
| CHN1 | Nanshi | 2.37 | 225 | ⇑P | Pn | 16 47 57.6 | +1.7 |
| | baz=226 | | | | | | |
| TTN | Taitung | 2.38 | 207 | eP | Pb | 16 47 58.6 | -1.6 |
| | baz=208 | | | | | | |
| SGST | Jiashian | 2.41 | 222 | eP | Pn | 16 47 58.1 | +1.6 |
| | baz=223 | | | | | | |
| CHN3 | Shinhua | 2.55 | 225 | eP | Pn | 16 48 00.3 | +1.9 |
| | baz=227 | | | | | | |
| CHN3 | | | | eS | Sb | 16 48 35.0 | +0.9 |
| | baz=227 | | | | | | |
| SCLT | Jiali | 2.59 | 229 | eP | Pn | 16 48 00.8 | +1.8 |
| | baz=231 | | | | | | |
| ECL | Taimali | 2.61 | 209 | eP | Pn | 16 47 58.3 | -0.9 |
| | baz=210 | | | | | | |
| SSD | Sandimen | 2.64 | 217 | eP | Pn | 16 48 00.3 | +0.7 |
| | baz=202 | | | | | | |
| SSD | | | | eS | Sb | 16 48 34.3 | -2.5 |
| | baz=202 | | | | | | |
| TAI1 | Yung-k'ang | 2.66 | 227 | eP | Pb | 16 48 02.1 | -2.8 |
| | baz=228 | | | | | | |
| TWM1 | Shoushan | 2.70 | 221 | eP | Pb | 16 48 03.0 | -2.5 |
| | baz=222 | | | | | | |
| SGLT | Jiouru | 2.73 | 218 | eP | Pb | 16 48 04.5 | -1.7 |
| | baz=219 | | | | | | |
| EAST | Anshuo | 2.84 | 209 | eP | Pn | 16 48 03.0 | +0.5 |
| | baz=198 | | | | | | |
| TAW | Tawu | 2.84 | 208 | eP | Pn | 16 48 04.3 | +1.8 |
| | baz=197 | | | | | | |
| PNG | Penghu | 2.86 | 243 | eP | Pn | 16 48 01.9 | -0.7 |
| | baz=246 | | | | | | |
| LAY | Lan-yu | 2.92 | 194 | eP | Pn | 16 48 02.0 | -1.6 |
| | baz=195 | | | | | | |
| WDGT | Dungji | 2.93 | 237 | eP | Pn | 16 48 05.1 | +1.5 |
| | baz=240 | | | | | | |
| SCZT | Fangliau | 2.96 | 212 | eP | Pn | 16 48 06.2 | +2.2 |
| | baz=213 | | | | | | |
| TWP | Hsiaoliuchiu | 3.11 | 216 | eP | Pn | 16 48 08.0 | +1.9 |
| | baz=216 | | | | | | |
| HEN | Hengchun | 3.22 | 207 | eP | Pn | 16 48 10.2 | +2.6 |
| | baz=196 | | | | | | |
| TWK1 | Hengchun | 3.25 | 206 | eP | Pn | 16 48 07.2 | -0.8 |
| | baz=197 | | | | | | |
| TWK1 | | | | eS | Sn | 16 48 49.0 | +2.5 |
| | baz=197 | | | | | | |
| TSEB | Hengchuen, Pin | 3.25 | 204 | eP | Pn | 16 48 08.9 | +0.8 |
| | baz=197 | | | | | | |
| KNM | Kinmen | 3.58 | 263 | eP | Pn | 16 48 12.9 | +0.4 |
| | baz=265 | | | | | | |
| JOW | Kunigami | 5.69 | 69 | Pn | Pn | 16 48 44.0 | +2.4 |
| | 0.0nm,0.3s,baz=119,slow=28,SNR=2.9 | | | | | | |
| WHN | Wuhan | 9.04 | 310 | P | Pn | 16 49 17.5 | -10 |
| WHN | | | | S | Sn | 16 51 02.7 | -6.5 |
| WHN | | | | LR | LR | | |
| | comp=N,1μm,12.7s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=E,1μm,10.6s | | | | | | |
| WHN | | | | LR | LR | | |
| | comp=Z,1μm,11.1s | | | | | | |
| JNU | Nakatsue | 11.10 | 40 | Pn | Pn | 16 50 06.6 | +11 |
| | comp=Z,0.1nm,0.3s,baz=187,slow=11,SNR=4.2 | | | | | | |
| JNU | | | | LR | LR | 16 54 52.7 | |
| | comp=Z,68nm,20.1s,baz=264,slow=40 | | | | | | |
| KSRS | Korea Array | 13.40 | 20 | Pn | P | 16 50 39.2 | +2.5 |
| | comp=Z,0.2nm,0.3s,baz=192,slow=12,SNR=8.7 | | | | | | |
| KSRS | | | | LR | LR | 16 55 59.5 | |
| | comp=Z,74nm,19.8s,baz=200,slow=38 | | | | | | |
| CD2 | Chengdu | 17.47 | 294 | eP | Pn | 16 51 19.5 | -1.3 |
| MJAR | Matsushiro Arr | 17.89 | 46 | P | P | 16 51 31.0 | +4.5 |
| | baz=234,slow=10,SNR=3.0 | | | | | | |
| MJAR | | | | LR | LR | 16 59 14.7 | |
| | comp=Z,64nm,19.1s,baz=250,slow=39 | | | | | | |
| USRK | Ussuriysk Ar. | 20.81 | 20 | P | Pn | 16 52 01.7 | +0.8 |
| | comp=Z,3.3nm,0.9s,baz=188,slow=8.7,SNR=3.4 | | | | | | |
| CMAR | Chiang Mai Arr | 22.64 | 258 | P | P | 16 52 18.5 | +0.2 |
| | comp=Z,1.9nm,0.9s,baz=61,slow=8.5,SNR=8.8 | | | | | | |
| GTA | Gaotai | 23.85 | 313 | eP | P | 16 52 30.0 | -0.5 |
| GTA | | | | pP | pP | 16 52 35.0 | +0.1 |
| GTA | | | | sP | sP | 16 52 38.8 | +2.0 |
| GTA | | | | PMZ | | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| SONM | Songino Array | 26.15 | 335 | P | P | 16 52 51.8 | +0.5 |
| | comp=Z,4.2nm,0.9s,baz=150,slow=9.1,SNR=20 | | | | | | |
| SONM | | | | LR | LR | 17 04 05.8 | |
| | comp=Z,61nm,21.4s,baz=170,slow=39 | | | | | | |
| KAPI | Kappang | 29.83 | 185 | LR | LR | 17 05 53.3 | |
| | comp=Z,44nm,21.1s,baz=29,slow=38 | | | | | | |
| MKAR | Makanchi Array | 38.58 | 315 | P | P | 16 54 39.4 | -0.5 |
| | comp=Z,2.7nm,0.7s,baz=105,slow=10,SNR=17 | | | | | | |
| ZALV | Zalesovo Beam | 40.24 | 326 | P | P | 16 54 52.7 | -0.8 |
| | comp=Z,2.2nm,0.7s,baz=111,slow=7.8,SNR=11 | | | | | | |
| ZALV | | | | LR | LR | 17 11 04.4 | |
| | comp=Z,24nm,19.0s,baz=72,slow=36 | | | | | | |
| PMG | Port Moresby | 41.81 | 142 | LR | LR | 17 12 34.0 | |
| | comp=Z,31nm,19.6s,baz=304,slow=36 | | | | | | |
| WRA | Warramunga Arr | 46.07 | 164 | P | P | 16 55 40.0 | -1.0 |
| | comp=Z,3.5nm,0.8s,baz=345,slow=8.4,SNR=18 | | | | | | |
| ASAR | Alice Springs | 49.55 | 166 | P | P | 16 56 07.8 | -0.3 |
| | comp=Z,1.2nm,0.8s,baz=350,slow=7.7,SNR=11 | | | | | | |
| GEYT | Alibeck | 55.35 | 300 | P | P | 16 56 51.1 | 0.0 |
| | comp=Z,1.0nm,0.6s,baz=318,slow=8.6,SNR=3.7 | | | | | | |
| FINES | FINESS Array B | 71.37 | 330 | P | P | 16 58 39.3 | +2.7 |
| | comp=Z,3.8nm,1.0s,baz=90,slow=7.6,SNR=6.3 | | | | | | |
| FINES | | | | LR | LR | 17 32 22.3 | |
| | comp=Z,45nm,18.7s,baz=26,slow=38 | | | | | | |
| BRTR | Keskin Array B | 73.60 | 307 | P | P | 16 58 48.2 | -2.4 |
| | comp=Z,1.1nm,0.8s,baz=115,slow=5.6,SNR=4.9 | | | | | | |
| HFS | Hagfors | 77.47 | 331 | LR | LR | 17 35 32.4 | |
| | comp=Z,49nm,19.3s,baz=72,slow=37 | | | | | | |
| NOA | NORSAR Array B | 78.09 | 332 | LR | LR | 17 36 07.0 | |
| | comp=Z,16nm,18.1s,baz=245,slow=38 | | | | | | |

*ISCJB **11** 16:58:39.8±0.4, 32°.33N±0°.03×115°.32W±0°.04, h13$^{km}$±4$^{km}$, Error ellipse: s-maj=5.6km s-min=4.1km az=139.3*
*NEIC **11** 16:58:41.4, 32°.31N×115°.33W, h6$^{km}$, ML2.9(PAS), ML3.2(ECX), After ECX.*
*ECX **11** 16:58:41.4±0.5, 32°.31N×115°.33W, h6$^{km}$, MD3.0, ML3.2*
*MEX **11** 16:58:42.5±0.6, 32°.36N×115°.24W, h12$^{km}$±412$^{km}$, MD3.6*
**ISC 11 16:58:39.7**±0.8, **32°.32N**±0°.03×**115°.34W**±0°.03, **h16**$^{km}$±5$^{km}$, **n25**, σ**0**$^s$**45**/40, **8C-6D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CPBX | Cerro Prieto | 0.10 | 16 | ⇑eP | Pg | 16 58 43.3 | +0.1 |
| CPBX | | | | eS | Sg | 16 58 45.6 | +0.1 |
| CPBX | | | | IAML | | 16 58 46.5 | |
| | comp=N,27μm,0.2s | | | | | | |
| CPBX | | | | ⇑e | | 16 58 46.5 | |
| CPBX | Cerro Prieto | 0.10 | 16 | i P | Pg | 16 58 43.3 | +0.1 |
| CPBX | | | | eS | Sg | 16 58 45.5 | +0.1 |
| MBIG | Mexicali | 0.15 | 53 | eP | Pb | 16 58 44.3 | +0.2 |
| MBIG | | | | eS | Sg | 16 58 45.7 | -0.6 |
| WESC | Westside Schoo | 0.55 | 323 | eP | Pb | 16 58 51.7 | +0.7 |
| COA | Coachella | 0.57 | 18 | ⇑iP | Pb | 16 58 52.0 | +0.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YUH** | **Yuha Desert** | **0.59** | **304** | ⇓*i*P | **Pb** | **16 58 51.8** | **+0.1** |
| **RDX** | **Rancho Dawling** | **0.64** | **233** | ⇑*e*P | **Pb** | **16 58 53.0** | **+0.4** |
| RDX | | | | *e*S | **Sb** | **16 59 01.6** | **+0.1** |
| RDX | | | | IAML | | 16 59 03.9 | |
| | comp=E,789nm,0.5s | | | | | | |
| RDX | | | | ⇑*e* | | 16 59 03.9 | |
| RDX | | | | ⇑*e* | | 16 59 04.0 | |
| RDX | | | | IAML | | 16 59 04.0 | |
| | comp=N,498nm,0.5s | | | | | | |
| **RMX** | **La Rumorosa** | **0.69** | **295** | ⇓*e*P | **Pg** | **16 58 53.5** | **+0.3** |
| RMX | | | | *e*S | **Sg** | **16 59 02.6** | **+0.2** |
| RMX | | | | IAML | | 16 59 05.3 | |
| | comp=N,1μm,0.2s | | | | | | |
| **IBP** | **Imperial Bould** | **0.72** | **298** | ⇓*e*P | **Pb** | **16 58 54.2** | **+0.2** |
| IBP | | | | *e*S | **Sb** | **16 59 04.0** | **+0.3** |
| **CRR** | **Carrizo Plain** | **0.78** | **317** | ⇓*i*P | **Pg** | **16 58 55.2** | **+0.3** |
| **GLA** | **Glamis** | **0.85** | **30** | *e*Pg | **Pb** | **16 58 55.8** | **-0.4** |
| GLA | | | | *e*Sg | **Sg** | **16 59 07.7** | **+0.3** |
| **ECBX** | **El Chinero** | **0.88** | **164** | ⇓*e*P | **Pn** | **16 58 57.3** | **-0.1** |
| ECBX | | | | *e*S | **Sn** | **16 59 09.2** | **-0.6** |
| **CBX** | **Cerro Bola** | **1.12** | **270** | *i* P | **Pg** | **16 59 01.6** | **+0.2** |
| CBX | | | | *i* S | **Sn** | **16 59 15.9** | **-0.2** |
| **CBX** | **Cerro Bola** | **1.12** | **270** | *e*P | **Pg** | **16 59 01.4** | **0.0** |
| CBX | | | | *e*S | **Sg** | **16 59 16.4** | **+0.3** |
| CBX | | | | *e* | | 16 59 18.5 | |
| CBX | | | | IAML | | 16 59 18.5 | |
| | comp=E,520nm,0.3s | | | | | | |
| **CBX** | **Cerro Bola** | **1.12** | **270** | *i* P | **Pg** | **16 59 01.6** | **+0.2** |
| CBX | | | | *i* S | **Sn** | **16 59 15.9** | **-0.2** |
| **BAR** | **Barrett** | **1.18** | **288** | ⇓*e*P | **Pg** | **16 59 02.3** | **-0.2** |
| **BAR** | **Barrett** | **1.18** | **288** | *e*Pg | **Pg** | **16 59 02.3** | **-0.2** |
| BAR | | | | *e*Sg | **Sn** | **16 59 17.7** | **+0.2** |
| **SPIG** | **San Pedro Mart** | **1.27** | **185** | *e*P | **Pn** | **16 59 03.4** | **+0.2** |
| SPIG | | | | *i* S | **Sb** | **16 59 19.0** | **-0.8** |
| **SPIG** | **San Pedro Mart** | **1.27** | **185** | *e*P | **Pn** | **16 59 03.4** | **+0.2** |
| SPIG | | | | *i* S | **Sb** | **16 59 19.0** | **-0.8** |
| **SPX** | **San Pedro Mart** | **1.27** | **185** | ⇑*e*P | **Pb** | **16 59 03.6** | **+0.1** |
| SPX | | | | IAML | | 16 59 23.0 | |
| | comp=N,257nm,0.4s | | | | | | |
| SPX | | | | ⇑*e* | | 16 59 23.0 | |
| **SPX** | **San Pedro Mart** | **1.27** | **185** | *i* P | **Pn** | **16 59 03.5** | **+0.3** |
| SPX | | | | *i* S | **Sb** | **16 59 18.9** | **-0.8** |
| **PFO** | **Pinyon Flat Ob** | **1.59** | **324** | *e*Pn | **Pn** | **16 59 06.6** | **-0.8** |
| **214A** | **Organ Pipe Nat** | **2.17** | **99** | *e*Pn | **Pn** | **16 59 14.8** | **-0.5** |
| **LDFC** | **Landfair** | **2.76** | **4** | Pg | **Pg** | **16 59 32.5** | **-0.1** |
| **TUC** | **Tucson** | **3.86** | **89** | *e*Pg | **Pg** | **16 59 54.8** | **+1.2** |

*JMA **11** 17:00:16.8±0.4, 24°.80N×122°.30E, h1km±4km, M2.6*
*TAP **11** 17:00:17.6, 24°.86N×122°.19E, h2km±1km, ML3.1, D*
**ISC 11 17:00:16.8**±1.1**, 24°.87N**±0°.03×**122°.31E**±0°.02**, h6**km±9km**,**
**n41, σ0.s69**/74**, 3D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.32** | **295** | ⇓*i*P | **Pg** | **17 00 23.3** | **+0.2** |
| | baz=309 | | | | | | |
| TWB1 | | | | *i* S | **Sg** | **17 00 27.4** | **0.0** |
| | baz=309 | | | | | | |
| **EGS** | | **0.34** | **266** | P | **Pb** | **17 00 24.2** | **-1.1** |
| | baz=264 | | | | | | |
| **TWC** | **Suao** | **0.49** | **238** | ⇓*i*P | **Pg** | **17 00 26.6** | **+0.3** |
| | baz=229 | | | | | | |
| TWC | | | | *i* S | **Sg** | **17 00 33.6** | **+0.8** |
| | baz=229 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.52** | **293** | ⇓*i*P | **Pb** | **17 00 27.4** | **-1.0** |
| | baz=299 | | | | | | |
| NWF | | | | *i* S | **Sg** | **17 00 34.0** | **+0.3** |
| | baz=299 | | | | | | |
| **ILA** | **Ilan** | **0.52** | **259** | *e*P | **Pb** | **17 00 28.4** | **+0.1** |
| | baz=255 | | | | | | |
| ILA | | | | *e*S | **Sb** | **17 00 35.2** | **-0.9** |
| | baz=255 | | | | | | |
| **TWE** | **Neicheng** | **0.60** | **256** | *e*P | **Pb** | **17 00 28.8** | **-0.9** |
| | baz=252 | | | | | | |
| TWE | | | | *e*S | **Sg** | **17 00 36.9** | **+0.6** |
| | baz=252 | | | | | | |
| **TWA** | **Mucha** | **0.67** | **280** | *e*P | **Pb** | **17 00 30.4** | **-0.5** |
| | baz=281 | | | | | | |
| TWA | | | | *e*S | **Sb** | **17 00 39.6** | **-0.7** |
| | baz=281 | | | | | | |
| **ENA** | **Nanau** | **0.68** | **230** | P | **Pg** | **17 00 30.0** | **+0.1** |
| | baz=222 | | | | | | |
| ENA | | | | *e*S | **Sg** | **17 00 38.8** | **+0.1** |
| | baz=222 | | | | | | |
| **ENTT** | **Nioudou** | **0.71** | **251** | P | **Pb** | **17 00 31.0** | **-0.6** |
| | baz=248 | | | | | | |
| ENTT | | | | *e*S | **Sb** | **17 00 41.8** | **+0.2** |
| | baz=248 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.71** | **126** | P | **Pg** | **17 00 30.5** | **-0.1** |
| JYNG | | | | *e*S | **Sg** | **17 00 40.0** | **+0.2** |
| **TAP1** | **Taipei** | **0.73** | **283** | *e*P | **Pb** | **17 00 31.7** | **-0.3** |
| | baz=285 | | | | | | |
| TAP1 | | | | *e*S | **Sb** | **17 00 41.9** | **-0.3** |
| | baz=285 | | | | | | |
| **TAP** | **Taipei** | **0.75** | **283** | *e*S | **Sb** | **17 00 42.1** | **-0.6** |
| | baz=285 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.76** | **122** | P | **Pg** | **17 00 31.2** | **-0.2** |
| YOJ | | | | *e*S | **Sg** | **17 00 41.6** | **+0.4** |
| **TWY** | **Chenhua** | **0.76** | **302** | *e*S | **Sb** | **17 00 42.3** | **-0.7** |
| | baz=307 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.84** | **286** | *e*P | **Pb** | **17 00 33.2** | **-0.6** |
| | baz=288 | | | | | | |
| TWS1 | | | | *e*S | **Sb** | **17 00 45.0** | **-0.3** |
| | baz=288 | | | | | | |
| **NSK** | **Sanguang** | **0.89** | **258** | *e*P | **Pb** | **17 00 34.2** | **-0.4** |
| | baz=255 | | | | | | |
| NSK | | | | *e*S | **Sb** | **17 00 45.8** | **-0.9** |
| | baz=255 | | | | | | |
| **NNS** | **Nan Shan** | **0.95** | **244** | P | **Pb** | **17 00 35.5** | **-0.3** |
| | baz=240 | | | | | | |
| NNS | | | | S | **Sb** | **17 00 48.3** | **-0.4** |
| | baz=240 | | | | | | |
| **TWD** | **Chiawan** | **1.02** | **220** | P | **Pb** | **17 00 36.5** | **-0.3** |
| | baz=214 | | | | | | |
| TWD | | | | S | **Sb** | **17 00 50.0** | **-0.5** |
| | baz=214 | | | | | | |
| **NCU** | **National Centr** | **1.02** | **276** | *e*S | **Sn** | **17 00 53.0** | **+0.7** |
| | baz=276 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.19** | **233** | P | **Pg** | **17 00 39.8** | **0.0** |
| | baz=229 | | | | | | |
| WHF | | | | S | **Sb** | **17 00 56.1** | **+0.1** |
| | baz=229 | | | | | | |
| **TWT** | **Tachien** | **1.20** | **239** | P | **Pn** | **17 00 40.2** | **0.0** |
| | baz=236 | | | | | | |
| TWT | | | | S | **Sb** | **17 00 56.3** | **+0.5** |
| | baz=236 | | | | | | |
| **NSTT** | **Nanjuang** | **1.21** | **259** | *e*P | **Pg** | **17 00 39.3** | **-0.8** |
| | baz=257 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **17 00 58.4** | **+1.4** |
| | baz=257 | | | | | | |
| **ESL** | **Shilin** | **1.32** | **217** | *e*P | **Pn** | **17 00 41.6** | **-0.1** |
| | baz=213 | | | | | | |
| ESL | | | | *e*S | **Sn** | **17 00 59.5** | **-0.2** |
| | baz=213 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.40** | **112** | P | **Pg** | **17 00 43.9** | **+0.2** |
| IRIF | | | | *e*S | **Sb** | **17 01 01.5** | **+0.1** |
| **TWQ1** | **Liyutan** | **1.49** | **250** | *e*P | **Pg** | **17 00 46.1** | **+0.7** |
| | baz=248 | | | | | | |
| TWQ1 | | | | *e*S | **Sg** | **17 01 07.7** | **+2.9** |
| | baz=248 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.59** | **120** | P | **Pn** | **17 00 46.1** | **+0.7** |
| **SMLT** | **Sun Moon Lake** | **1.62** | **233** | *e*P | **Pg** | **17 00 47.7** | **-0.2** |
| | baz=230 | | | | | | |
| SMLT | | | | *e*S | **Sg** | **17 01 08.9** | **+0.1** |
| | baz=230 | | | | | | |
| **EHY** | **Hungye** | **1.63** | **214** | *e*P | **Pn** | **17 00 46.5** | **+0.4** |
| | baz=210 | | | | | | |
| EHY | | | | *e*S | **Sg** | **17 01 09.2** | **0.0** |
| | baz=210 | | | | | | |
| **TYC** | **Yuchr** | **1.64** | **234** | *e*P | **Pg** | **17 00 48.3** | **+0.1** |
| | baz=231 | | | | | | |
| TYC | | | | *e*S | **Sg** | **17 01 09.4** | **-0.1** |
| | baz=231 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.67** | **112** | P | **Pn** | **17 00 46.0** | **-0.6** |
| **JIJ** | **Ishigaki jima** | **1.74** | **106** | P | **Pn** | **17 00 48.3** | **+0.7** |
| **TWF1** | **Yuli** | **1.77** | **212** | *e*P | **Pn** | **17 00 47.9** | **-0.1** |
| | baz=208 | | | | | | |
| TWF1 | | | | *e*S | **Sg** | **17 01 13.6** | **-0.2** |
| | baz=208 | | | | | | |
| **YUS** | **Yu-Shan** | **1.85** | **222** | *e*P | **Pn** | **17 00 50.4** | **+0.9** |
| | baz=219 | | | | | | |
| YUS | | | | *e*S | **Sb** | **17 01 14.9** | **0.0** |
| | baz=219 | | | | | | |
| **ALS** | **Alishan** | **1.93** | **226** | *e*P | **Pb** | **17 00 52.1** | **-0.4** |
| | baz=223 | | | | | | |
| ALS | | | | *e*S | **Sg** | **17 01 18.7** | **-0.1** |
| | baz=223 | | | | | | |
| **CHN5** | **Tsauling** | **1.96** | **230** | *e*P | **Pb** | **17 00 52.7** | **-0.2** |
| | baz=227 | | | | | | |
| CHN5 | | | | *e*S | **Sg** | **17 01 20.3** | **+0.6** |
| | baz=227 | | | | | | |
| **ELDTW** | **Lidau** | **2.05** | **215** | *e*P | **Pn** | **17 00 51.5** | **-0.4** |
| | baz=212 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **17 01 18.3** | **+0.5** |
| | baz=212 | | | | | | |
| **CHN4** | **Tsaushan** | **2.18** | **226** | *e*P | **Pb** | **17 00 55.4** | **-1.2** |
| | baz=224 | | | | | | |
| CHN4 | | | | *e*S | **Sg** | **17 01 25.7** | **-1.1** |
| | baz=224 | | | | | | |
| **STYT** | **Tauyuan** | **2.21** | **220** | *e*P | **Pb** | **17 00 56.7** | **-0.6** |
| | baz=217 | | | | | | |
| STYT | | | | *e*S | **Sb** | **17 01 24.1** | **-0.8** |
| | baz=217 | | | | | | |
| **WTP** | **Ta-pu** | **2.24** | **224** | *e*P | **Pb** | **17 00 57.2** | **-0.5** |
| | baz=221 | | | | | | |
| WTP | | | | *e*S | **Sg** | **17 01 27.1** | **-1.7** |
| | baz=221 | | | | | | |
| **CHN1** | **Nanshi** | **2.34** | **225** | *e*P | **Pn** | **17 00 56.6** | **+0.9** |
| | baz=222 | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **17 01 28.2** | **-0.2** |
| | baz=222 | | | | | | |
| **SGST** | **Jiashian** | **2.38** | **222** | *e*S | **Sb** | **17 01 30.1** | **+0.4** |
| | baz=219 | | | | | | |

*IDC **11** 17:01:51.5±2.1, 10°.62S×118°.77E, h0km, mb3.6/2, mb1 3.6/5, mb1mx3.5/31, mbtmp3.5/5, ML3.3/3, Error ellipse: s-maj=72.5km s-min=24.4km az=45.0*
*AUST **11** 17:01:54.4±8.4, 10°.80S×118°.73E, h6km, Error ellipse: s-maj=1.4km s-min=1.1km az=41.0*
*ISCJB **11** 17:01:55.8±0.6, 10°.68S±0°.04×118°.84E±0°.05, h41km, mb3.8/3, Error ellipse: s-maj=6.8km s-min=5.8km az=12.2*
*DJA **11** 17:02:00.3±0.5, 11°S±3°×11°9E±°, h64km±12km, M3.9/12, mb4.2/2, mB4.5/1, MLv3.8/12, Mw(mB)3.7/1*
**ISC 11 17:01:57.6**±0.8**, 10°.69S**±0°.07×**118°.91E**±0°.05**, h41**km**, n22,**
**σ1.s37**/26**, mb3.8**/3**, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WSI** | **Waingapu** | **1.70** | **53** | P | **Pn** | **17 02 25.3** | **+0.5** |
| WSI | | | | S | **Sn** | **17 02 47.0** | **+1.6** |
| **BASI** | **Baing, Sumba** | **1.71** | **74** | P | **Pn** | **17 02 26.0** | **+1.1** |
| BASI | | | | S | **Sn** | **17 02 48.1** | **+2.6** |
| **TWSI** | **Taliwang, Sumb** | **2.79** | **314** | P | **Pn** | **17 02 41.3** | **+1.5** |
| **MMRI** | **Maumere** | **3.86** | **58** | P | **Pn** | **17 02 54.4** | **-0.2** |
| **SRBI** | **Singaraja** | **4.47** | **305** | P | **Pn** | **17 03 06.1** | **+3.1** |
| **BATI** | **Baumata** | **4.70** | **85** | Pn | **Pn** | **17 03 07.0** | **+0.9** |
| | 2.2nm,0.3s,baz=218,slow=0.3,SNR=4.8 | | | | | | |
| BATI | | | | Sn | **Sn** | **17 03 58.4** | **-1.0** |
| | 3.1nm,0.3s,baz=34,slow=21,SNR=8.5 | | | | | | |
| **BATI** | **Baumata** | **4.70** | **85** | P | **Pn** | **17 03 07.1** | **+1.0** |
| BATI | | | | S | **Sn** | **17 03 59.1** | **-0.3** |
| **BSSI** | **Bau Bau, Buton** | **4.78** | **19** | P | **Pn** | **17 03 07.0** | **-0.2** |
| BSSI | | | | S | **Sn** | **17 04 01.6** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **5.19** | **295** | P | **Pn** | **17 03 12.2** | **-0.6** |
| | baz=5.1,SNR=4.2 | | | | | | |
| **SOEI** | **Soe** | **5.35** | **80** | P | **Pn** | **17 03 17.5** | **+2.3** |
| | baz=5.5,SNR=3.6 | | | | | | |
| **SOEI** | **Soe** | **5.35** | **80** | P | **Pn** | **17 03 17.4** | **+2.2** |
| | 18nm,1.0s,0.1nm | | | | | | |
| **BKSI** | **Bulukumba** | **5.47** | **13** | P | **Pn** | **17 03 17.4** | **+0.8** |
| BKSI | | | | S | **Sn** | **17 04 18.1** | **-0.2** |
| **KNRA** | **Kununurra** | **10.80** | **118** | P | **Pn** | **17 04 30.7** | **+1.0** |
| | baz=11,SNR=3.2 | | | | | | |
| **MEEK** | **Meekatharra** | **15.87** | **181** | P | **Pn** | **17 05 37.4** | **-0.7** |
| | baz=16,SNR=5.5 | | | | | | |
| **WRKA** | **Warakurna** | **16.82** | **149** | P | **P** | **17 05 51.4** | **-0.6** |
| | baz=17,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.48** | **124** | P | **Pn** | **17 05 57.0** | **-1.5** |
| | 0.1nm,0.3s,baz=297,slow=13,SNR=8.9 | | | | | | |
| **MORW** | **Morawa** | **18.48** | **188** | P | **Pn** | **17 06 11.1** | **+0.5** |
| | baz=18,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **19.25** | **134** | P | **Pn** | **17 06 20.3** | **+0.2** |
| | 0.1nm,0.3s,baz=317,slow=11,SNR=16 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.18** | **184** | P | P | 17 06 56.1 | +5.8 |
| | 2.3nm,0.4s,baz=118,slow=0.4,SNR=6.7 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.18** | **184** | P | P | 17 07 00.1 | +10 |
| | baz=22,SNR=5.0 | | | | | | |
| **SONM** | **Songino Array** | **59.32** | **350** | P | **P** | **17 11 54.4** | **-1.1** |
| | 0.4nm,0.5s,baz=161,slow=9.2,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.92** | **333** | P | **P** | **17 12 38.5** | **-0.8** |
| | 0.4nm,0.6s,baz=159,slow=6.7,SNR=3.8 | | | | | | |

*ISCJB **11** 17:15:29.8±0.4, 1°.96N±0°.04×96°.56E±0°.04, h28km, mb4.3/20, MS3.8/1, Error ellipse: s-maj=7.2km s-min=4.1km az=141.0*
*DJA **11** 17:15:31.0±1.3, 2°N±3°×9°7E±°, h26km±15km, M4.4/15, mb4.6/6, mB4.8/1, MLv4.3/7, MLv4.3/15, Mw(mB)4.1/1*
*NEIC **11** 17:15:33.7±1.4, 2°.07N×96°.72E, h42km±11km, mb4.3/4, Error ellipse: s-maj=16.3km s-min=7.0km az=57.0*
*KLM **11** 17:15:34.0, 2°.12N×96°.66E, h120km, mb4.2, ML3.8, MS5.0*
*AUST **11** 17:15:35.5, 2°.00N×97°.00E, h60km*
*IDC **11** 17:15:35.9±4.2, 2°.16N×96°.80E, h59km±35km, mb4.1/16, mb1 4.1/18, mb1mx3.8/51, mbtmp4.3/18, ML3.9/2, MS3.1/4, Ms1 3.2/4, ms1mx2.8/32, Error ellipse: s-maj=35.3km s-min=12.6km az=52.0*
**ISC 11 17:15:31.7**±0.6**, 2°.01N**±0°.05×**96°.62E**±0°.07**, h28**km**, n76,**
**σ0.s85**/66**, mb4.3**/20**, 3C-3D, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **1.18** | **126** | P | **Pn** | **17 15 52.7** | **+0.2** |
| GSI | | | | S | **Sn** | **17 16 07.8** | **+0.1** |
| **GSI** | **Gunungsitoli** | **1.18** | **126** | *e*Pn | **Pn** | **17 15 52.6** | **+0.1** |
| **KCSI** | **Kotacane, Aceh** | **1.89** | **37** | P | **Pn** | **17 16 02.3** | **+0.1** |
| KCSI | | | | S | **Sb** | **17 16 27.2** | **-1.5** |
| **MLSI** | **Meulaboh, Aceh** | **2.25** | **354** | P | **Pn** | **17 16 06.2** | **-0.9** |
| MLSI | | | | S | **Sn** | **17 16 34.1** | **+0.1** |
| **PSI** | **Prapat** | **2.43** | **71** | P | **Pn** | **17 16 09.8** | **+0.2** |
| | 7.9nm,0.3s,baz=257,slow=8.2,SNR=14 | | | | | | |
| PSI | | | | LR | LR | 17 16 59.1 | |
| | comp=Z,216nm,19.8s,baz=310,slow=38 | | | | | | |
| **PSI** | **Prapat** | **2.43** | **71** | P | **Pn** | **17 16 09.9** | **+0.2** |
| | baz=2.0,SNR=9.0 | | | | | | |
| **TSI** | **Tuntungan** | **2.44** | **53** | P | **Pn** | **17 16 10.9** | **+1.2** |
| **MNSI** | **Mandailing Nat** | **3.19** | **112** | P | **Pn** | **17 16 21.0** | **+0.9** |
| **LHMI** | **Lhok Sumawe** | **3.21** | **6** | P | **Pn** | **17 16 20.7** | **+0.4** |
| | baz=3.2,SNR=6.7 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **3.21** | **6** | P | **Pn** | **17 16 20.4** | **0.0** |
| **LHMI** | **Lhok Sumawe** | **3.21** | **6** | *e*Pn | **Pn** | **17 16 19.6** | **-0.8** |
| **SISI** | **Saibi** | **4.13** | **143** | P | **Pn** | **17 16 33.6** | **+0.6** |
| **PPI** | **Padang Panjang** | **4.50** | **123** | P | **Pn** | **17 16 40.1** | **+2.0** |
| | baz=4.2,SNR=7.5 | | | | | | |
| **PPI** | **Padang Panjang** | **4.50** | **123** | P | **Pn** | **17 16 39.9** | **+1.8** |
| **IPM** | **Ipoh** | **5.03** | **61** | ⇑P | **Pn** | **17 16 46.5** | **+1.0** |
| **IPM** | **Ipoh** | **5.03** | **61** | *e*Pn | **Pn** | **17 16 46.0** | **+0.5** |
| **FRIM** | **Kepong** | **5.14** | **76** | ⇓P | **Pn** | **17 16 48.1** | **+1.2** |
| **KULM** | **Kulim** | **5.17** | **51** | ⇑P | **Pn** | **17 16 47.9** | **+0.6** |
| **KULM** | **Kulim** | **5.17** | **51** | *e*Pn | **Pn** | **17 16 47.3** | **0.0** |
| | 67nm,0.6s | | | | | | |
| **PPSI** | **Pulau Pagai** | **5.83** | **144** | P | **Pn** | **17 16 56.4** | **0.0** |
| | 62nm,1.2s,0.4nm0.4nm | | | | | | |
| **KGM** | **Kluang** | **6.69** | **90** | ⇓P | **Pn** | **17 17 09.3** | **+1.0** |
| **MYKOM** | **Kota Tinggi** | **7.23** | **92** | ⇓P | **Pn** | **17 17 17.0** | **+1.5** |
| **KTGM** | **Kuala Trenggan** | **7.28** | **63** | ⇑P | **Pn** | **17 17 16.5** | **+0.1** |
| **MNAI** | **Manna** | **8.95** | **135** | P | **Pn** | **17 17 39.2** | **-0.1** |
| | baz=8.7,SNR=5.0 | | | | | | |
| **MNAI** | **Manna** | **8.95** | **135** | P | **Pn** | **17 17 39.0** | **-0.3** |
| | 153nm,1.3s | | | | | | |
| **KASI** | **Kota Agung** | **10.86** | **134** | P | **Pn** | **17 18 04.5** | **-0.9** |
| **LEM** | **Lembang** | **14.05** | **129** | LR | LR | 17 24 31.6 | |
| | comp=Z,58nm,18.8s,baz=238,slow=38 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **16.50** | **8** | P | **P** | **17 19 23.1** | **-0.7** |
| | baz=17,SNR=6.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **16.50** | **8** | P | **Pn** | **17 19 22.4** | **+1.1** |
| | 0.4nm,0.3s,baz=197,slow=12,SNR=50 | | | | | | |
| CMAR | | | | LR | LR | 17 25 56.0 | |
| | comp=Z,61nm,19.0s,baz=202,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.91** | **248** | T | T | 17 47 58.2 | |
| | baz=68,slow=75,SNR=254 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.92** | **248** | T | T | 17 47 56.9 | |
| | baz=68,slow=75,SNR=165 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.93** | **248** | T | T | 17 47 58.1 | |
| | baz=68,slow=75,SNR=246 | | | | | | |
| **ODAN** | **Odare** | **26.25** | **341** | *e*P | **P** | **17 21 05.6** | **+0.7** |
| **RAMN** | **Ramite** | **26.59** | **340** | *e*P | **P** | **17 21 09.2** | **+1.1** |
| | 15nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **26.60** | **342** | *e*P | **P** | **17 21 08.5** | **+0.3** |
| | 31nm,0.8s | | | | | | |
| **H08N1** | **Diego Carcia H** | **26.88** | **252** | T | T | 17 48 20.8 | |
| | baz=238,slow=75,SNR=81 | | | | | | |
| **H08N2** | **Diego Garcia H** | **26.89** | **252** | T | T | 17 48 21.3 | |
| | baz=238,slow=75,SNR=126 | | | | | | |
| **H08N3** | **Diego Garcia H** | **26.90** | **252** | T | T | 17 48 18.1 | |
| | baz=238,slow=75,SNR=78 | | | | | | |
| **PKI** | **Pulchoki** | **27.59** | **338** | *e*P | **P** | **17 21 17.7** | **+0.6** |
| **PKIN** | **Phulchoki** | **27.60** | **338** | *e*P | **P** | **17 21 17.8** | **+0.7** |
| | 3.1nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **27.73** | **339** | *e*P | **P** | **17 21 19.1** | **+0.8** |
| | 22nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **27.84** | **338** | *e*P | **P** | **17 21 19.6** | **+0.4** |
| **LSA** | **Lhasa** | **28.02** | **350** | *e*P | **P** | **17 21 21.2** | **+0.1** |
| | 4.5nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **28.27** | **337** | *e*P | **P** | **17 21 23.6** | **+0.6** |
| | 11nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **28.48** | **335** | *e*P | **P** | **17 21 25.7** | **+0.8** |
| | 15nm,0.6s | | | | | | |
| **BATI** | **Baumata** | **29.53** | **115** | P | **P** | **17 21 35.4** | **+1.2** |
| | 11nm,0.5s,baz=61,slow=13,SNR=2.4 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.21** | **157** | T | T | 18 05 58.3 | |
| | baz=334,slow=76,SNR=13 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.22** | **157** | T | T | 18 05 56.6 | |
| | baz=334,slow=76,SNR=13 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.23** | **157** | T | T | 18 05 59.5 | |
| | baz=334,slow=76,SNR=10 | | | | | | |
| **WRKA** | **Warakurna** | **40.81** | **133** | P | P | 17 23 16.3 | +5.2 |
| | baz=41,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.95** | **122** | P | **P** | **17 23 28.5** | **-0.2** |
| | 3.8nm,0.6s,baz=301,slow=9.2,SNR=46 | | | | | | |
| **JAY** | **Jayapura** | **44.30** | **96** | P | **P** | **17 23 38.1** | **-1.5** |
| | 5.1nm,0.7s,baz=172,slow=9.8,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **44.34** | **127** | P | **P** | **17 23 40.5** | **+0.6** |
| | 0.8nm,0.6s,baz=302,slow=7.7,SNR=10 | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.49** | **35** | P | **P** | **17 23 48.4** | **-0.3** |
| **KSRS** | **Korea Array** | **45.52** | **35** | P | **P** | **17 23 48.4** | **-0.5** |
| | 2.2nm,0.4s,baz=228,slow=8.0,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.32** | **346** | P | **P** | **17 23 55.1** | **-0.1** |
| | 6.6nm,0.7s,baz=162,slow=7.3,SNR=42 | | | | | | |
| **SONM** | **Songino Array** | **46.42** | **9** | P | **P** | **17 23 55.5** | **-0.5** |
| | 1.8nm,0.4s,baz=188,slow=9.4,SNR=21 | | | | | | |
| **KKAR** | **Karatay Array** | **47.08** | **334** | *e*P | **P** | **17 24 01.7** | **+0.6** |
| | 1.9nm,0.6s | | | | | | |
| **GEYT** | **Alibeck** | **50.22** | **320** | P | **P** | **17 24 25.9** | **+0.4** |
| | 1.7nm,0.7s,baz=210,slow=12,SNR=3.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **50.80** | **345** | P | **P** | **17 24 29.4** | **-0.1** |
| | 2.2nm,0.6s,baz=164,slow=6.8,SNR=9.0 | | | | | | |
| **KURK** | **Kurchatov** | **50.86** | **345** | P | **P** | **17 24 29.4** | **-0.6** |
| **PMG** | **Port Moresby** | **51.60** | **104** | P | **P** | **17 24 35.1** | **-1.0** |
| | 4.2nm,0.5s,baz=259,slow=16,SNR=4.7 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **52.67** | **351** | P | **P** | **17 24 43.4** | **0.0** |
| | baz=53,SNR=6.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.67** | **351** | P | **P** | **17 24 43.4** | **0.0** |
| | 8.1nm,0.5s,baz=180,slow=7.2,SNR=53 | | | | | | |
| **QLP** | **Quilpie** | **54.00** | **125** | P | P | 17 24 49.6 | -4.1 |
| | baz=54,SNR=3.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **55.30** | **341** | P | **P** | **17 25 02.2** | **-0.5** |
| | 2.2nm,0.7s,baz=139,slow=9.2,SNR=17 | | | | | | |
| **ABKAR** | **Akbulak array** | **56.53** | **332** | *e*P | **P** | **17 25 11.3** | **-0.2** |
| | 2.6nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **58.25** | **332** | P | **P** | **17 25 26.3** | **+2.6** |
| | 1.5nm,0.8s,baz=147,slow=11,SNR=3.7 | | | | | | |
| **YAK** | **Yakutsk** | **64.81** | **17** | P | **P** | **17 26 06.8** | **-0.9** |
| | 2.1nm,0.3s,baz=54,slow=0.7,SNR=2.1 | | | | | | |
| **YAK** | **Yakutsk** | **64.81** | **17** | *e*P | **P** | **17 26 06.7** | **-0.9** |
| | 14nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **79.02** | **333** | P | **P** | **17 27 32.9** | **-0.1** |
| | 2.4nm,0.7s,baz=90,slow=1.9,SNR=6.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **81.58** | **340** | P | **P** | **17 27 46.7** | **0.0** |
| | 1.5nm,0.5s,baz=93,slow=4.9,SNR=11 | | | | | | |
| **GERES** | **GERESS Array B** | **83.83** | **319** | P | **P** | **17 27 59.5** | **+0.6** |
| | 0.2nm,0.4s,baz=107,slow=4.5,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **94.34** | **283** | LR | LR | 18 08 54.3 | |
| | comp=Z,31nm,18.4s,baz=265,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.27** | **30** | PKP | **PKPdf** | **17 35 03.0** | **-1.3** |
| | 0.3nm,0.7s,baz=300,slow=1.0,SNR=3.5 | | | | | | |
| **CPUP** | **Villa Florida** | **145.20** | **224** | PKPbc | **PKPdf** | **17 35 07.8** | **+0.3** |
| | 1.2nm,0.5s,baz=222,slow=2.8,SNR=3.3 | | | | | | |

*AUST **11** 17:24:14.5, 6°.00N×127°.01E, h100km*
*ISCJB **11** 17:24:14.2±0.4, 5°.83N±0°.02×126°.72E±0°.04, h101km±3km, mb4.2/22, Error ellipse: s-maj=7.2km s-min=3.6km az=168.5*
*NEIC **11** 17:24:15.6±0.9, 5°.84N×126°.71E, h99km±8km, mb4.5/5, Error ellipse: s-maj=14.3km s-min=5.7km az=74.0*
*MAN **11** 17:24:15, 5°.67N×126°.32E, h12km, mb5.2, ML4.2, MS4.4*
*IDC **11** 17:24:15.3±1.5, 5°.83N×126°.61E, h93km±13km, mb3.9/19, mb1 4.1/22, mb1mx3.8/43, mbtmp4.3/22, MS3.0/6, Ms1 3.0/6, ms1mx2.8/28, Error ellipse: s-maj=27.5km s-min=10.1km az=69.0*
*DJA **11** 17:24:17.9±0.4, 6°N±3°×12°7E±°, h67km±7km, M4.6/23, mb4.7/23, mB5.1/14, MLv4.7/7, MLv4.9/12, Mw(mB)4.5/14*
**ISC 11 17:24:15.3**±0.9**, 5°.84N**±0°.04×**126°.73E**±0°.07**, h92**km±8km**,**
**n98, σ1.s16**/108**, mb4.2**/22**, 1C-2D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **1.20** | **337** | *e*P | **Pn** | **17 24 37.0** | **-0.5** |
| **DAV** | **Davao City (W)** | **1.68** | **317** | P | **Pn** | **17 24 44.0** | **+0.6** |
| | 57nm,0.3s,baz=198,slow=2.3,SNR=6.5 | | | | | | |
| DAV | | | | S | **Sn** | **17 25 07.1** | **+2.4** |
| | 104nm,0.3s,baz=246,slow=15,SNR=11 | | | | | | |
| **DMPH** | **Davao City--Mi** | **1.73** | **316** | ⇓*e*P | **Pn** | **17 24 44.1** | **0.0** |
| DMPH | | | | *e*S | Sn | 17 25 20.3 | +14 |
| **KCP** | **Kidapawan** | **2.00** | **306** | ⇓*e*P | **Pn** | **17 24 46.4** | **-1.3** |
| KCP | | | | *i* S | **Sn** | **17 25 09.9** | **-2.5** |
| **BIPH** | **Bislig** | **2.36** | **351** | ⇑*e*P | Pn | 17 24 57.6 | +5.2 |
| BIPH | | | | *i* S | **Sn** | **17 25 21.2** | **+0.5** |
| **SGSI** | **Sangihe** | **2.45** | **209** | P | **Pn** | **17 24 52.9** | **-0.6** |
| SGSI | | | | S | **Sn** | **17 25 22.2** | **-0.6** |
| **BUKP** | **Musuan** | **2.62** | **321** | *e*P | **Pn** | **17 24 56.5** | **+0.6** |
| BUKP | | | | *e*S | **Sn** | **17 25 28.2** | **+1.2** |
| **PAGZ** | **Pagadian** | **3.88** | **301** | *e*P | **Pn** | **17 25 12.3** | **-0.5** |
| **TNTI** | **Ternate** | **5.07** | **173** | P | **Pn** | **17 25 28.8** | **-0.1** |
| TNTI | | | | S | **Sn** | **17 26 23.6** | **-2.7** |
| **TNTI** | **Ternate** | **5.07** | **173** | *e*P | **Pn** | **17 25 28.9** | **-0.1** |
| | 106nm,0.5s | | | | | | |
| **KMSI** | **Cibinong** | **5.90** | **208** | P | **Pn** | **17 25 41.1** | **+0.8** |
| | 350nm,0.9s,3μm1.1nm | | | | | | |
| **GTOI** | **Gorontalo** | **6.36** | **216** | P | **Pn** | **17 25 45.4** | **-1.1** |
| | 227nm,0.7s,32μm0.7nm | | | | | | |
| **LBMI** | **Labuha** | **6.48** | **173** | P | **Pn** | **17 25 47.9** | **-0.2** |
| | 74nm,0.9s,1μm0.5nm | | | | | | |
| LBMI | | | | S | **Sn** | **17 26 59.5** | **-1.1** |
| | 74nm,0.9s,1μm0.5nm | | | | | | |
| **MRSI** | **Marisa** | **7.16** | **222** | P | **Pn** | **17 25 57.4** | **+0.1** |
| | 226nm,0.6s,8μm0.8nm | | | | | | |
| **PALU** | **Palau** | **7.84** | **79** | P | **Pn** | **17 26 06.0** | **-0.7** |
| | baz=7.5,SNR=29 | | | | | | |
| **SANI** | **Sanana** | **7.87** | **185** | P | **Pn** | **17 26 04.2** | **-2.9** |
| | 52nm,0.7s,2μm0.3nm | | | | | | |
| **LUWI** | **Luwuk** | **7.89** | **210** | P | **Pn** | **17 26 10.5** | **+3.1** |
| | baz=8.2,SNR=10 | | | | | | |
| **LUWI** | **Luwuk** | **7.89** | **210** | P | **Pn** | **17 26 09.6** | **+2.2** |
| | 188nm,0.8s,2μm0.6nm | | | | | | |
| LUWI | | | | S | **Sn** | **17 27 37.2** | **+2.0** |
| | 188nm,0.8s,2μm0.6nm | | | | | | |
| **LUWI** | **Luwuk** | **7.89** | **210** | *e*P | **Pn** | **17 26 09.3** | **+1.9** |
| | 108nm,0.6s | | | | | | |
| **SWI** | **Sorong** | **8.04** | **146** | P | **Pn** | **17 26 10.9** | **+1.4** |
| | baz=8.1,SNR=4.5 | | | | | | |
| **SWI** | **Sorong** | **8.04** | **146** | P | **Pn** | **17 26 09.1** | **-0.4** |
| | 29nm,1.3s,562nm0.1nm0.1nm | | | | | | |
| **SIJI** | **Sorong** | **8.05** | **146** | P | **Pn** | **17 26 09.9** | **+0.3** |
| | 2.9nm,0.3s,baz=357,slow=11,SNR=11 | | | | | | |
| **APSI** | **Ampana** | **8.41** | **217** | P | **Pn** | **17 26 16.4** | **+2.0** |
| | 131nm,1.2s,2μm | | | | | | |
| APSI | | | | S | **Sn** | **17 27 48.7** | **+1.0** |
| | 131nm,1.2s,2μm | | | | | | |
| **MPSI** | **Mapaga** | **8.74** | **232** | P | **Pn** | **17 26 18.9** | **0.0** |
| | 18nm,0.7s,629nm | | | | | | |
| **NLAI** | **Namlea** | **9.02** | **178** | P | **Pn** | **17 26 20.6** | **-2.2** |
| | 49nm,0.9s,2μm | | | | | | |
| **AAI** | **Ambon** | **9.57** | **171** | P | **Pn** | **17 26 31.9** | **+1.6** |
| | baz=9.8,SNR=6.0 | | | | | | |
| **TTSI** | **Tana Toraja** | **11.20** | **218** | P | **Pn** | **17 26 53.3** | **+0.8** |
| | 59nm,1.1s,709nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **11.96** | **216** | P | **Pn** | **17 27 02.3** | **-0.4** |
| | 16nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **12.83** | **213** | P | **Pn** | **17 27 13.7** | **-0.7** |
| | 1.7nm,0.3s,baz=217,slow=1.5,SNR=10 | | | | | | |
| KAPI | | | | LR | LR | 17 32 06.3 | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,92nm,20.4s,baz=97,slow=37 | | | | | | |
| **KAPI** | **Kappang** | **12.83** | **213** | *e*P | **Pn** | **17 27 13.8** | **-0.6** |
| | 22nm,0.9s | | | | | | |
| **BBKI** | **Banjar Baru** | **15.04** | **232** | P | **P** | **17 27 47.9** | **+1.6** |
| **SOEI** | **Soe** | **15.68** | **189** | P | **P** | **17 27 54.8** | **+1.3** |
| | baz=16,SNR=8.2 | | | | | | |
| **SOEI** | **Soe** | **15.68** | **189** | P | **Pn** | **17 27 49.9** | **-1.4** |
| | 41nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **15.68** | **189** | *e*P | **Pn** | **17 27 50.2** | **-1.1** |
| | 37nm,0.9s | | | | | | |
| **BATI** | **Baumata** | **16.23** | **191** | P | **Pn** | **17 27 57.8** | **-0.2** |
| | 4.2nm,0.3s,baz=134,slow=3.8,SNR=11 | | | | | | |
| **BATI** | **Baumata** | **16.23** | **191** | P | **P** | **17 28 00.8** | **+1.4** |
| **KSM** | **Kuching** | **16.95** | **256** | P | **P** | **17 28 07.9** | **+0.5** |
| | baz=17,SNR=8.0 | | | | | | |
| **KSM** | **Kuching** | **16.95** | **256** | *e*P | **P** | **17 28 07.3** | **0.0** |
| | 16nm,0.9s | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **17.49** | **214** | P | **P** | **17 28 13.1** | **-0.3** |
| | 29nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **18.95** | **222** | P | **P** | **17 28 29.4** | **-0.1** |
| | baz=19,SNR=4.7 | | | | | | |
| **MTN** | **Manton Dam** | **19.07** | **167** | P | **P** | **17 28 30.5** | **-0.1** |
| | baz=19,SNR=17 | | | | | | |
| **KDU** | **Kakadu** | **19.27** | **163** | P | **P** | **17 28 33.5** | **+0.7** |
| | baz=20,SNR=12 | | | | | | |
| **GUMO** | **Guam** | **19.45** | **65** | LR | LR | 17 36 18.1 | |
| | comp=Z,10nm,20.4s,baz=258,slow=37 | | | | | | |
| **KNRA** | **Kununurra** | **21.47** | **175** | P | **P** | **17 28 56.5** | **0.0** |
| | baz=22,SNR=27 | | | | | | |
| **COEN** | **Coen** | **25.55** | **140** | P | **P** | **17 29 36.3** | **+0.5** |
| | baz=26,SNR=15 | | | | | | |
| **WRAB** | **Tennant Creek** | **26.68** | **164** | *e*P | **P** | **17 29 45.5** | **-0.4** |
| | 14nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **26.69** | **164** | P | **P** | **17 29 45.1** | **-0.9** |
| | 1.9nm,0.3s,baz=342,slow=10,SNR=56 | | | | | | |
| WRA | | | | ScP | **ScP** | **17 36 40.5** | **+0.9** |
| | 0.4nm,0.8s,baz=343,slow=3.3,SNR=4.5 | | | | | | |
| WRA | | | | LR | LR | 17 40 53.7 | |
| | comp=Z,45nm,21.4s,baz=50,slow=37 | | | | | | |
| **MBWA** | **Marble Bar** | **27.69** | **194** | *e*P | **P** | **17 29 53.6** | **-1.4** |
| **QIS** | **Mount Isa** | **29.12** | **155** | P | **P** | **17 30 08.3** | **+0.6** |
| | baz=29,SNR=20 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.86** | **297** | P | **P** | **17 30 13.5** | **-0.8** |
| | 0.6nm,0.8s,baz=110,slow=7.6,SNR=4.9 | | | | | | |
| CMAR | | | | LR | LR | 17 44 18.4 | |
| | comp=Z,18nm,18.1s,baz=149,slow=40 | | | | | | |
| **ASAR** | **Alice Springs** | **30.15** | **167** | P | **P** | **17 30 16.5** | **-0.3** |
| | 1.2nm,0.4s,baz=333,slow=6.3,SNR=32 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 33 16.6** | **+0.4** |
| | 1.2nm,0.7s,baz=348,slow=2.2,SNR=6.6 | | | | | | |
| ASAR | | | | ScP | **ScP** | **17 36 50.9** | **+0.5** |
| | 0.3nm,0.7s,baz=338,slow=3.4,SNR=5.1 | | | | | | |
| **WRKA** | **Warakurna** | **30.72** | **177** | P | **P** | **17 30 21.7** | **-0.2** |
| | baz=31,SNR=14 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **32.32** | **17** | LR | LR | 17 42 14.7 | |
| | comp=Z,12nm,21.4s,baz=215,slow=33 | | | | | | |
| **MEEK** | **Meekatharra** | **33.23** | **193** | P | **P** | **17 30 43.0** | **-0.7** |
| | baz=34,SNR=13 | | | | | | |
| **MORW** | **Morawa** | **36.20** | **196** | P | **P** | **17 31 08.7** | **-0.6** |
| | baz=37,SNR=5.1 | | | | | | |
| **QLP** | **Quilpie** | **36.42** | **153** | P | **P** | **17 31 12.8** | **+1.6** |
| | baz=37,SNR=6.3 | | | | | | |
| **FORT** | **Forrest** | **36.43** | **178** | P | **P** | **17 31 11.4** | **+0.2** |
| | baz=37,SNR=11 | | | | | | |
| **KMBL** | **Kambalda** | **37.28** | **187** | P | **P** | **17 31 18.5** | **+0.1** |
| | baz=38,SNR=5.2 | | | | | | |
| **BLDU** | **Ballidu** | **37.49** | **194** | P | **P** | **17 31 19.6** | **-0.6** |
| | baz=38,SNR=13 | | | | | | |
| **KLBR** | **Kellerberrin** | **38.19** | **192** | P | **P** | **17 31 25.8** | **-0.3** |
| | baz=39,SNR=8.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **38.49** | **6** | P | **P** | **17 31 29.6** | **+1.1** |
| | 1.3nm,0.5s,baz=199,slow=11,SNR=4.3 | | | | | | |
| **BBOO** | **Buckleboo** | **39.44** | **168** | P | **P** | **17 31 36.8** | **+0.2** |
| | baz=40,SNR=5.6 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **39.59** | **193** | P | **P** | **17 31 37.8** | **0.0** |
| | baz=40,SNR=16 | | | | | | |
| **RKGY** | **Rocky Gully** | **41.27** | **192** | P | **P** | **17 31 52.7** | **+1.1** |
| | baz=42,SNR=5.0 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **41.34** | **155** | P | **P** | **17 31 54.2** | **+2.0** |
| | baz=42,SNR=8.7 | | | | | | |
| **TAPN** | **Taplejung** | **42.80** | **304** | *e*P | **P** | **17 32 03.7** | **-1.0** |
| **ODAN** | **Odare** | **42.88** | **304** | *e*P | **P** | **17 32 04.8** | **-0.4** |
| | 5.8nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **43.57** | **303** | *e*P | **P** | **17 32 10.1** | **-0.7** |
| | 6.5nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **44.52** | **304** | *e*P | **P** | **17 32 17.5** | **-1.0** |
| **ARPS** | **Mount Arapiles** | **44.68** | **163** | P | **P** | **17 32 20.3** | **+1.2** |
| | baz=45,SNR=12 | | | | | | |
| **PKIN** | **Phulchoki** | **44.80** | **304** | *e*P | **P** | **17 32 18.9** | **-1.7** |
| **KKN** | **Kakani** | **44.97** | **304** | *e*P | **P** | **17 32 20.5** | **-1.4** |
| **DMN** | **Daman** | **45.05** | **304** | *e*P | **P** | **17 32 22.2** | **-0.4** |
| **SONM** | **Songino Array** | **45.32** | **341** | P | **P** | **17 32 24.8** | **+0.6** |
| | 0.7nm,0.7s,baz=162,slow=8.8,SNR=4.7 | | | | | | |
| SONM | | | | PcP | **PcP** | **17 34 02.1** | **-0.3** |
| | 0.3nm,0.5s,baz=166,slow=3.7,SNR=3.5 | | | | | | |
| **GKN** | **Gorkha** | **45.58** | **304** | *e*P | **P** | **17 32 25.3** | **-1.3** |
| **KOLN** | **Koldanda** | **46.35** | **303** | *e*P | **P** | **17 32 31.7** | **-1.1** |
| | 14nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **55.84** | **324** | P | **P** | **17 33 42.9** | **-0.5** |
| | 2.2nm,0.6s,baz=119,slow=8.0,SNR=17 | | | | | | |
| MKAR | | | | PcP | **PcP** | **17 34 41.1** | **-0.1** |
| | 2.2nm,0.7s,baz=112,slow=4.2,SNR=7.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.73** | **332** | P | **P** | **17 34 02.8** | **-0.6** |
| | 2.2nm,0.6s,baz=116,slow=6.3,SNR=10.0 | | | | | | |
| **AAK** | **Ala-Archa** | **58.82** | **317** | P | **P** | **17 34 03.8** | **-0.7** |
| | 0.8nm,0.4s,baz=176,slow=16,SNR=2.8 | | | | | | |
| **KURK** | **Kurchatov** | **59.98** | **327** | *e*P | **P** | **17 34 11.2** | **-0.9** |
| | 10nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **59.98** | **327** | P | **P** | **17 34 11.5** | **-0.7** |
| | 2.9nm,0.8s,baz=125,slow=6.3,SNR=30 | | | | | | |
| **BVAR** | **Borovoye Array** | **65.57** | **326** | P | **P** | **17 34 47.8** | **-1.4** |
| | 2.7nm,0.7s,baz=119,slow=4.4,SNR=8.9 | | | | | | |
| **GEYT** | **Alibeck** | **69.59** | **308** | P | **P** | **17 35 14.0** | **-0.9** |
| | 1.3nm,0.7s,baz=132,slow=8.6,SNR=3.5 | | | | | | |
| **ABKAR** | **Akbulak array** | **70.54** | **320** | *e*P | **P** | **17 35 19.2** | **-1.2** |
| | 1.7nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **72.02** | **321** | P | **P** | **17 35 28.1** | **-1.3** |
| | 1.4nm,0.5s,baz=96,slow=11,SNR=6.7 | | | | | | |
| **ILAR** | **Eielson Array** | **83.22** | **26** | P | **P** | **17 36 30.4** | **-0.8** |
| | 1.4nm,0.6s,baz=216,slow=4.5,SNR=7.6 | | | | | | |
| **VNDA** | **Vanda** | **85.50** | **173** | P | **P** | **17 36 42.9** | **+0.4** |
| | 1.4nm,0.6s,baz=324,slow=8.0,SNR=9.2 | | | | | | |
| **MAW** | **Mawson** | **85.72** | **200** | P | **P** | **17 36 43.6** | **-0.1** |
| | 1.2nm,0.7s,baz=49,slow=9.3,SNR=4.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.48** | **340** | P | **P** | **17 36 56.7** | **-0.5** |
| | 2.5nm,0.6s,baz=84,slow=6.4,SNR=12 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **89.59** | **269** | LR | LR | 18 15 42.6 | |
| | comp=Z,40nm,19.3s,baz=91,slow=34 | | | | | | |
| **FINES** | **FINESS Array B** | **89.99** | **332** | P | **P** | **17 37 03.6** | **-0.7** |
| | 1.8nm,0.5s,baz=74,slow=5.4,SNR=21 | | | | | | |
| **HFS** | **Hagfors** | **96.17** | **332** | P | **P** | **17 37 31.5** | **-1.4** |
| | 0.9nm,0.4s,baz=81,slow=4.7,SNR=6.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **96.91** | **334** | P | **P** | **17 37 35.0** | **-1.3** |
| | 1.1nm,0.7s,baz=65,slow=4.6,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **120.30** | **51** | PKP | **PKPdf** | **17 42 58.0** | **+1.3** |
| | 0.4nm,0.7s,baz=270,slow=1.3,SNR=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.25** | **289** | PKP | **PKPdf** | **17 43 00.1** | **-0.5** |
| | 0.7nm,0.4s,baz=67,slow=1.7,SNR=7.7 | | | | | | |
| **CFAA** | **Coronel Fontan** | **150.78** | **153** | PKPbc | **PKPbc** | **17 43 58.2** | **+0.4** |
| | 0.5nm,0.6s,baz=256,slow=3.1,SNR=12 | | | | | | |
| **CPUP** | **Villa Florida** | **159.25** | **170** | PKPab | **PKPab** | **17 44 41.8** | **+0.7** |
| | 1.9nm,0.8s,baz=124,slow=3.6,SNR=3.6 | | | | | | |
| **LPAZ** | **La Paz** | **162.11** | **127** | PKPab | **PKPab** | **17 44 58.0** | **+3.2** |
| | 1.5nm,0.8s,baz=180,slow=1.2,SNR=6.0 | | | | | | |

**KRSC 11 17:37:00.9**±1.8**, 49°.91N×156°.68E, h42**km±24km**, ML3.8, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **0.85** | **335** | *e*P | Pn | 17 37 17.1 | +0.6 |
| SKR | | | | *e*S | Sn | 17 37 28.6 | +0.8 |
| **PAU** | **Pauzhetka** | **1.56** | **3** | *e*P | Pn | 17 37 28.7 | +2.5 |
| PAU | | | | *e*S | Sn | 17 37 47.6 | +2.4 |
| **MTVR** | **Mutnovka** | **2.75** | **20** | *e*S | Sn | 17 38 19.3 | +4.6 |
| **RUS** | **Russkaya** | **2.78** | **24** | *e*P | Pn | 17 37 45.3 | +2.4 |
| RUS | | | | S | Sn | 17 38 17.7 | +2.6 |
| **UGLR** | **Uglovaya** | **3.56** | **21** | P | Pn | 17 37 58.7 | +4.9 |
| **AVH** | **Avacha** | **3.60** | **20** | *e*P | Pn | 17 37 59.0 | +4.8 |
| **SDLR** | **Sedlovina** | **3.64** | **21** | *e*P | Pn | 17 37 58.0 | +3.1 |
| **KRX** | **Arik** | **3.67** | **19** | P | Pn | 17 37 59.9 | +4.6 |
| **SPN** | **Mys Shipunski** | **3.82** | **32** | *e*P | Pn | 17 38 00.8 | +3.7 |
| **GNL** | **Ganaly** | **3.87** | **11** | P | Pn | 17 38 00.8 | +2.8 |

**MEX 11 17:42:44.7**±0.5**, 15°.25N×93°.57W, h27**km±417km**, MD3.6,**

**Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.57** | **37** | *e*P | Pb | 17 42 54.0 | -2.1 |
| PCIG | | | | *e*S | Sb | 17 43 02.0 | -1.9 |

**BJI 11 17:54:33.7, 32°.94N×106°.21E, h7**km**, ML3.7**/16**, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **XAN** | **Xi'an** | **2.52** | **63** | Pn | Pn | 17 55 14.5 | -0.6 |
| XAN | | | | Pg | Pb | 17 55 18.0 | -1.3 |
| XAN | | | | Sn | Sn | 17 55 43.9 | -2.2 |
| XAN | | | | Sg | Sb | 17 55 50.4 | -0.2 |
| XAN | | | | SMN | | | |
| | 330nm,0.7s | | | | | | |
| XAN | | | | SME | | | |
| | 420nm,0.7s | | | | | | |
| **CD2** | **Chengdu** | **2.91** | **227** | Pn | Pn | 17 55 18.0 | -2.5 |
| CD2 | | | | Pg | Pb | 17 55 26.7 | +0.8 |
| CD2 | | | | Sn | Sn | 17 55 55.1 | -0.6 |
| CD2 | | | | Sg | Sb | 17 56 02.7 | +0.9 |
| CD2 | | | | SMN | | | |
| | 440nm,0.6s | | | | | | |
| CD2 | | | | SME | | | |
| | 300nm,0.6s | | | | | | |
| **LZH** | **Lanzhou** | **3.70** | **329** | Pg | Pb | 17 55 38.9 | -0.7 |
| LZH | | | | Sg | Sb | 17 56 25.8 | +1.0 |
| LZH | | | | SMN | | | |
| | 180nm,0.8s | | | | | | |
| LZH | | | | SME | | | |
| | 280nm,1.0s | | | | | | |
| **GYA** | **Guiyang** | **6.47** | **176** | Pn | Pn | 17 56 00.9 | -8.7 |
| GYA | | | | Pg | Pg | 17 56 34.7 | -3.2 |
| GYA | | | | Sn | Sn | 17 57 19.7 | -4.1 |
| GYA | | | | Sg | Sg | 17 57 54.1 | -7.7 |
| GYA | | | | smax | smax | | |
| | comp=N,30nm,0.8s | | | | | | |
| GYA | | | | smax | smax | | |
| | comp=E,50nm,0.8s | | | | | | |
| **GTA** | **Gaotai** | **8.27** | **323** | *e*P | Pb | 17 56 54.4 | -3.0 |
| GTA | | | | pP | Pg | 17 56 58.8 | -13 |
| GTA | | | | sP | | 17 57 01.8 | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KMI** | **Kunming** | **8.36** | **202** | Pg | Pg | 17 57 25.6 | +11 |
| KMI | | | | Sg | Sn | 17 58 08.1 | -2.4 |
| KMI | | | | smax | smax | | |
| | comp=N,6.0nm,0.5s | | | | | | |
| KMI | | | | smax | smax | | |
| | comp=E,11nm,0.7s | | | | | | |

*ATH **11** 18:03:55.6, 37°.94N×27°.41E, h15km±1km, MD3.5/14*
*DDA **11** 18:03:57.7, 37°.89N×27°.29E, h7km, Ml3.7*
*THE **11** 18:03:57.6, 37°.90N×27°.26E, h0km±1km, ML3.7/4, Error ellipse: s-maj=1.8km s-min=0.8km az=79.0*
*ISK **11** 18:03:57.9, 37°.94N×27°.36E, h8km, ML3.2*
*ISCJB **11** 18:03:57.7±0.4, 37°.91N±0°.02×27°.29E±0°.02, h8km±3km, Error ellipse: s-maj=3.1km s-min=2.5km az=156.8*
*CSEM **11** 18:03:58.0±0.1, 37°.90N×27°.30E, h10km, ML3.7, Error ellipse: s-maj=2.5km s-min=2.1km az=79.0*
**ISC 11 18:03:57.8**±0.9**, 37°.90N**±0°.02×**27°.31E**±0°.02**, h12**km±7km**, n122,** σ**0s.80**/159**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GCAM** | **G?zelcaml?** | **0.21** | **198** | *i* P | **Pg** | **18 04 02.0** | **-0.3** |
| GCAM | | | | *i* S | **Sg** | **18 04 05.2** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **0.21** | **198** | P | **Pg** | **18 04 02.0** | **-0.3** |
| GCAM | | | | S | **Sg** | **18 04 05.2** | **-0.1** |
| **SMG** | **Samos** | **0.42** | **244** | *e*PN | **Pg** | **18 04 05.9** | **-0.3** |
| SMG | | | | *e*SN | **Sg** | **18 04 12.6** | **+0.8** |
| **SMG** | **Samos** | **0.42** | **244** | P | **Pg** | **18 04 05.6** | **-0.6** |
| SMG | | | | S | **Sg** | **18 04 12.0** | **+0.2** |
| **SMG** | **Samos** | **0.42** | **244** | P | **Pg** | **18 04 05.6** | **-0.6** |
| **SMG** | **Samos** | **0.42** | **244** | *e*Pn | **Pg** | **18 04 05.9** | **-0.3** |
| SMG | | | | S | **Sg** | **18 04 12.0** | **+0.2** |
| SMG | | | | *e*Sn | **Sg** | **18 04 12.6** | **+0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.46** | **84** | PG | **Pg** | **18 04 06.9** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.46** | **84** | *i* Pg | **Pg** | **18 04 06.9** | **0.0** |
| **IZM** | **Izmir** | **0.50** | **355** | *e*PG | **Pg** | **18 04 07.5** | **-0.2** |
| IZM | | | | *e*SG | **Sg** | **18 04 14.3** | **0.0** |
| **IZM** | **Izmir** | **0.50** | **355** | *e*Pg | **Pg** | **18 04 07.5** | **-0.2** |
| IZM | | | | *e*Sg | **Sg** | **18 04 14.4** | **0.0** |
| **AYDN** | **Tasoluk** | **0.51** | **118** | *i* P | **Pb** | **18 04 09.7** | **+1.0** |
| AYDN | | | | *i* S | **Sb** | **18 04 16.5** | **+0.4** |
| **AYDN** | **Tasoluk** | **0.51** | **118** | P | **Pb** | **18 04 09.7** | **+1.0** |
| AYDN | | | | S | **Sb** | **18 04 16.5** | **+0.4** |
| **ZEY** | **˜zmir** | **0.72** | **298** | P | **Pg** | **18 04 11.5** | **-0.4** |
| ZEY | | | | S | **Sg** | **18 04 21.8** | **+0.4** |
| **URLA** | **Izmir** | **0.73** | **309** | *i* P | **Pg** | **18 04 11.9** | **-0.1** |
| URLA | | | | *i* S | **Sb** | **18 04 22.4** | **-0.2** |
| **URLA** | **Izmir** | **0.73** | **309** | P | **Pg** | **18 04 11.9** | **-0.1** |
| URLA | | | | S | **Sb** | **18 04 22.4** | **-0.2** |
| **BODT** | **Bodrum** | **0.83** | **180** | *e*PG | **Pb** | **18 04 14.7** | **+0.4** |
| BODT | | | | *e*SG | **Sn** | **18 04 27.1** | **-0.6** |
| **BODT** | **Bodrum** | **0.83** | **180** | *e*Pg | **Pb** | **18 04 14.7** | **+0.4** |
| BODT | | | | *e*Sg | **Sn** | **18 04 27.1** | **-0.6** |
| **BDRM** | **Kayabasi** | **0.84** | **173** | *i* P | **Pg** | **18 04 13.5** | **-0.5** |
| BDRM | | | | *i* S | **Sb** | **18 04 25.9** | **+0.3** |
| **BDRM** | **Kayabasi** | **0.84** | **173** | P | **Pg** | **18 04 13.5** | **-0.5** |
| BDRM | | | | S | **Sb** | **18 04 25.9** | **+0.3** |
| **AKS** | **Akhisar** | **1.06** | **22** | *e*PG | **Pb** | **18 04 17.6** | **-0.5** |
| **AKS** | **Akhisar** | **1.06** | **22** | *e*Pg | **Pb** | **18 04 17.6** | **-0.5** |
| **YER** | **Yerkesik** | **1.08** | **134** | *e*PN | **Pn** | **18 04 19.1** | **+0.2** |
| **YER** | **Yerkesik** | **1.08** | **134** | *e*Pn | **Pn** | **18 04 19.1** | **+0.2** |
| **CHOS** | **Chios island** | **1.11** | **297** | *e*PN | **Pn** | **18 04 20.2** | **+1.0** |
| **CHOS** | **Chios island** | **1.11** | **297** | *e*PN | **Pb** | **18 04 17.2** | **-1.8** |
| CHOS | | | | *e*SN | **Sn** | **18 04 34.6** | **+0.1** |
| **CHOS** | **Chios island** | **1.11** | **297** | P | **Pb** | **18 04 18.3** | **-0.7** |
| CHOS | | | | S | **Sb** | **18 04 33.4** | **0.0** |
| **CHOS** | **Chios island** | **1.11** | **297** | P | **Pb** | **18 04 18.3** | **-0.7** |
| **CHOS** | **Chios island** | **1.11** | **297** | *e*Pn | **Pn** | **18 04 20.2** | **+1.0** |
| CHOS | | | | S | **Sb** | **18 04 33.4** | **0.0** |
| CHOS | | | | *e*Sn | **Sn** | **18 04 34.6** | **+0.1** |
| **DKL** | **Dikili** | **1.22** | **345** | *e*PN | **Pb** | **18 04 20.9** | **+0.1** |
| **DKL** | **Dikili** | **1.22** | **345** | *e*Pn | **Pb** | **18 04 20.9** | **+0.1** |
| **KULA** | **Kula-Manisa** | **1.23** | **59** | *e*PN | **Pn** | **18 04 20.8** | **-0.1** |
| **KULA** | **Kula-Manisa** | **1.23** | **59** | *e*Pn | **Pn** | **18 04 20.8** | **-0.1** |
| **NISR** | **Nisiros** | **1.29** | **187** | *e*PN | **Pn** | **18 04 21.1** | **-0.6** |
| **NISR** | **Nisiros** | **1.29** | **187** | P | **Pb** | **18 04 22.0** | **-0.1** |
| **NISR** | **Nisiros** | **1.29** | **187** | *e*Pn | **Pn** | **18 04 21.1** | **-0.6** |
| **NISR** | **Nisiros** | **1.29** | **187** | P | **Pb** | **18 04 22.0** | **-0.1** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **185** | *e*PN | **Pg** | **18 04 24.4** | **+1.7** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **185** | *e*PN | **Pn** | **18 04 21.0** | **-0.7** |
| NIS1 | | | | *e*SN | **Sg** | **18 04 39.8** | **+0.2** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **185** | P | **Pn** | **18 04 21.1** | **-0.7** |
| NIS1 | | | | S | **Sg** | **18 04 40.9** | **+1.3** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **185** | P | **Pn** | **18 04 21.1** | **-0.7** |
| NIS1 | | | | *e*Sn | **Sg** | **18 04 39.8** | **+0.2** |
| NIS1 | | | | S | **Sg** | **18 04 40.9** | **+1.3** |
| **DENT** | **Denizli** | **1.37** | **95** | *e*PN | **Pb** | **18 04 23.7** | **+0.2** |
| **DENT** | **Denizli** | **1.37** | **95** | *e*Pn | **Pb** | **18 04 23.7** | **+0.2** |
| **DNZL** | **Cakiroluk** | **1.39** | **98** | *i* P | **Pb** | **18 04 24.1** | **+0.2** |
| DNZL | | | | *i* S | **Sg** | **18 04 43.8** | **+1.2** |
| **DNZL** | **Cakiroluk** | **1.39** | **98** | P | **Pb** | **18 04 24.1** | **+0.2** |
| DNZL | | | | S | **Sg** | **18 04 43.8** | **+1.2** |
| **TURN** | **Turunc** | **1.45** | **134** | *i* P | **Pn** | **18 04 22.3** | **-1.5** |
| **TURN** | **Turunc** | **1.45** | **134** | P | **Pn** | **18 04 22.3** | **-1.5** |
| TURN | | | | S | **Sn** | **18 04 37.4** | **-5.4** |
| **DALY** | **Dalyan (Mu˜la** | **1.52** | **135** | *e*PN | **Pb** | **18 04 26.3** | **+0.4** |
| **DALY** | **Dalyan (Mu˜la** | **1.52** | **135** | *e*Pn | **Pb** | **18 04 26.3** | **+0.4** |
| **PRK** | **Paraskevi** | **1.57** | **329** | *e*PN | **Pn** | **18 04 24.9** | **-0.7** |
| PRK | | | | *e*SN | **Sn** | **18 04 45.9** | **-0.1** |
| **PRK** | **Paraskevi** | **1.57** | **329** | P | **Pn** | **18 04 25.4** | **-0.2** |
| PRK | | | | S | **Sb** | **18 04 47.0** | **+0.2** |
| **PRK** | **Paraskevi** | **1.57** | **329** | *e*Pn | **Pn** | **18 04 24.9** | **-0.7** |
| **PRK** | **Paraskevi** | **1.57** | **329** | P | **Pn** | **18 04 25.4** | **-0.2** |
| PRK | | | | *e*Sn | **Sn** | **18 04 45.9** | **-0.1** |
| PRK | | | | S | **Sb** | **18 04 47.0** | **+0.2** |
| **DEMI** | **Demirci** | **1.59** | **43** | *i* P | **Pn** | **18 04 25.7** | **-0.2** |
| DEMI | | | | *i* S | **Sb** | **18 04 47.5** | **+0.2** |
| **DEMI** | **Demirci** | **1.59** | **43** | P | **Pn** | **18 04 25.7** | **-0.2** |
| DEMI | | | | S | **Sb** | **18 04 47.5** | **+0.2** |
| **APE** | **Apeiranthos** | **1.64** | **240** | *e*PN | **Pg** | **18 04 29.4** | **+0.1** |
| **APE** | **Apeiranthos** | **1.64** | **240** | *e*PN | **Pn** | **18 04 27.4** | **+0.8** |
| APE | | | | *e*SN | **Sg** | **18 04 51.2** | **+0.5** |
| **APE** | **Apeiranthos** | **1.64** | **240** | P | **Pn** | **18 04 25.4** | **-1.2** |
| **APE** | **Apeiranthos** | **1.64** | **240** | P | **Pn** | **18 04 25.4** | **-1.2** |
| **APE** | **Apeiranthos** | **1.64** | **240** | *e*Pn | **Pn** | **18 04 27.4** | **+0.8** |
| APE | | | | *e*Sn | **Sg** | **18 04 51.2** | **+0.5** |
| **KHAL** | **Karahalli** | **1.78** | **74** | *i* P | **Pn** | **18 04 29.3** | **+0.7** |
| **KHAL** | **Karahalli** | **1.78** | **74** | P | **Pn** | **18 04 29.4** | **+0.7** |
| KHAL | | | | S | **Sg** | **18 04 54.8** | **-0.4** |
| **KHL** | **Karahalli** | **1.79** | **76** | *e*PN | **Pn** | **18 04 29.2** | **+0.5** |
| **KHL** | **Karahalli** | **1.79** | **76** | *e*Pn | **Pn** | **18 04 29.2** | **+0.5** |
| **BALB** | **Balikesir** | **1.80** | **14** | *e*PN | **Pn** | **18 04 28.8** | **+0.1** |
| **BALB** | **Balikesir** | **1.80** | **14** | *e*Pn | **Pn** | **18 04 28.8** | **+0.1** |
| **ARG** | **Arkhangelos** | **1.80** | **159** | *e*PN | **Pn** | **18 04 28.7** | **+0.1** |
| **ARG** | **Arkhangelos** | **1.80** | **159** | P | **Pn** | **18 04 28.8** | **+0.1** |
| **ARG** | **Arkhangelos** | **1.80** | **159** | P | **Pn** | **18 04 28.8** | **+0.1** |
| **FETY** | **Fethiye** | **1.89** | **131** | *e*PN | **Pb** | **18 04 31.6** | **-0.7** |
| **FETY** | **Fethiye** | **1.89** | **131** | *e*Pn | **Pb** | **18 04 31.6** | **-0.7** |
| **DST** | **Dursunbey** | **1.99** | **31** | *e*PN | **Pn** | **18 04 32.3** | **+1.0** |
| **DST** | **Dursunbey** | **1.99** | **31** | *e*Pn | **Pn** | **18 04 32.3** | **+1.0** |
| **EZN** | **Ezine** | **2.08** | **338** | *e*PN | **Pn** | **18 04 33.8** | **+1.3** |
| **EZN** | **Ezine** | **2.08** | **338** | *e*Pn | **Pn** | **18 04 33.8** | **+1.3** |
| **SANT** | **Santorini** | **2.12** | **225** | *e*PN | **Pn** | **18 04 34.2** | **+1.0** |
| **SANT** | **Santorini** | **2.12** | **225** | P | **Pn** | **18 04 32.5** | **-0.7** |
| **SANT** | **Santorini** | **2.12** | **225** | P | **Pn** | **18 04 32.5** | **-0.7** |
| **SANT** | **Santorini** | **2.12** | **225** | *e*Pn | **Pn** | **18 04 34.2** | **+1.0** |
| **THR3** | **Thira Island,** | **2.13** | **226** | P | **Pn** | **18 04 34.0** | **+0.7** |
| **THR3** | **Thira Island,** | **2.13** | **226** | P | **Pn** | **18 04 34.0** | **+0.7** |
| **KARY** | **Karystos** | **2.28** | **274** | P | **Pn** | **18 04 35.1** | **-0.2** |
| **KARP** | **Karpathos** | **2.35** | **183** | *e*PN | **Pn** | **18 04 36.9** | **+0.6** |
| **KARP** | **Karpathos** | **2.35** | **183** | P | **Pn** | **18 04 35.9** | **-0.4** |
| **KARP** | **Karpathos** | **2.35** | **183** | P | **Pn** | **18 04 35.9** | **-0.4** |
| **KARP** | **Karpathos** | **2.35** | **183** | *e*Pn | **Pn** | **18 04 36.9** | **+0.6** |
| **ORLT** | **Orhaneli** | **2.48** | **29** | *e*PN | **Pn** | **18 04 38.1** | **0.0** |
| **ORLT** | **Orhaneli** | **2.48** | **29** | *e*Pn | **Pn** | **18 04 38.1** | **0.0** |
| **EDC** | **Edincik** | **2.48** | **10** | *e*PN | **Pn** | **18 04 38.7** | **+0.6** |
| **EDC** | **Edincik** | **2.48** | **10** | *e*Pn | **Pn** | **18 04 38.7** | **+0.6** |
| **KRBG** | **Karabiga-Canak** | **2.49** | **360** | *e*PN | **Pn** | **18 04 39.0** | **+0.7** |
| **KRBG** | **Karabiga-Canak** | **2.49** | **360** | *e*Pn | **Pn** | **18 04 39.0** | **+0.7** |
| **BNT** | **Bandirma** | **2.50** | **11** | *e*PN | **Pn** | **18 04 38.8** | **+0.4** |
| **BNT** | **Bandirma** | **2.50** | **11** | *e*Pn | **Pn** | **18 04 38.8** | **+0.4** |
| **KCTX** | **Karacabey (Bur** | **2.50** | **19** | *e*PN | **Pn** | **18 04 39.0** | **+0.6** |
| **KCTX** | **Karacabey (Bur** | **2.50** | **19** | *e*Pn | **Pn** | **18 04 39.0** | **+0.6** |
| **LPK** | **Lapseki** | **2.51** | **350** | *e*PN | **Pn** | **18 04 39.5** | **+1.0** |
| **LPK** | **Lapseki** | **2.51** | **350** | *e*Pn | **Pn** | **18 04 39.5** | **+1.0** |
| **GADA** | **Gvkgeada** | **2.54** | **335** | *e*PN | **Pn** | **18 04 39.8** | **+0.9** |
| **GADA** | **Gvkgeada** | **2.54** | **335** | *e*Pn | **Pn** | **18 04 39.8** | **+0.9** |
| **GELI** | **Tayfur-Gelibol** | **2.58** | **346** | *e*PN | **Pn** | **18 04 40.4** | **+0.9** |
| **GELI** | **Tayfur-Gelibol** | **2.58** | **346** | *e*Pn | **Pn** | **18 04 40.4** | **+0.9** |
| **LIA** | **Limnos Island** | **2.60** | **321** | *e*PB | **Pn** | **18 04 40.5** | **+0.8** |
| **LIA** | **Limnos Island** | **2.60** | **321** | P | **Pn** | **18 04 39.8** | **+0.1** |
| **LIA** | **Limnos Island** | **2.60** | **321** | P | **Pn** | **18 04 39.8** | **+0.1** |
| **LIA** | **Limnos Island** | **2.60** | **321** | *e*Pb | **Pn** | **18 04 40.5** | **+0.8** |
| **EREA** | **Eretria** | **2.72** | **282** | *e*PN | **Pn** | **18 04 42.3** | **+0.9** |
| **EREA** | **Eretria** | **2.72** | **282** | *e*Pn | **Pn** | **18 04 42.3** | **+0.9** |
| **VLY** | **Voula,Athens** | **2.79** | **270** | *e*PN | **Pn** | **18 04 43.4** | **+1.1** |
| **VLY** | **Voula,Athens** | **2.79** | **270** | P | **Pn** | **18 04 42.8** | **+0.5** |
| **VLY** | **Voula,Athens** | **2.79** | **270** | P | **Pn** | **18 04 42.8** | **+0.5** |
| **VLY** | **Voula,Athens** | **2.79** | **270** | *e*Pn | **Pn** | **18 04 43.4** | **+1.1** |
| **SMTH** | **Samothraki Isl** | **2.92** | **332** | *e*PN | **Pn** | **18 04 44.3** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **2.92** | **332** | P | **Pn** | **18 04 44.1** | **0.0** |
| **SMTH** | **Samothraki Isl** | **2.92** | **332** | *e*Pn | **Pn** | **18 04 44.3** | **+0.2** |
| **ALN** | **Alexandroupoli** | **3.15** | **342** | *e*PN | **Pn** | **18 04 47.4** | **+0.1** |
| **ALN** | **Alexandroupoli** | **3.15** | **342** | *e*Pn | **Pn** | **18 04 47.4** | **+0.1** |
| **VILL** | **Villia** | **3.17** | **276** | *e*Pn | **Pn** | **18 04 49.1** | **+1.5** |
| **VIL2** | **Platees** | **3.21** | **277** | *e*PN | **Pn** | **18 04 49.1** | **+1.0** |
| **IDI** | **Anoyia** | **3.25** | **218** | *e*PN | **Pn** | **18 04 50.0** | **+1.2** |
| **IDI** | **Anoyia** | **3.25** | **218** | *e*Pn | **Pn** | **18 04 50.0** | **+1.2** |
| **KAVA** | **Kavala** | **3.78** | **326** | P | **Pn** | **18 04 55.7** | **-0.2** |
| **KAVA** | **Kavala** | **3.78** | **326** | P | **Pn** | **18 04 55.7** | **-0.2** |

**IDC 11 18:04:07.6**±3.4**, 5°.85S×149°.99E, h0**km**, mb3.3**/2**, mb1 3.7**/2**, mb1mx3.3**/18**, mbtmp3.4**/2**, Error ellipse: s-maj=130.7km s-min=44.5km az=116.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.68** | **226** | P | P | 18 08 49.2 | -0.2 |
| | 1.1nm,0.4s,baz=51,slow=11,SNR=19 | | | | | | |
| **ASAR** | **Alice Springs** | **23.53** | **220** | P | P | 18 09 19.4 | -0.2 |
| | 0.3nm,0.5s,baz=55,slow=9.2,SNR=6.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.93** | **285** | PKPbc | PKPbc | 18 23 55.5 | -0.5 |
| | 0.4nm,0.3s,baz=62,slow=2.4,SNR=15 | | | | | | |

*ISCJB **11** 18:09:13.0±0.5, 24°.42N±0°.03×122°.35E±0°.02, h62km±7km, Error ellipse: s-maj=5.7km s-min=2.7km az=169.3*
*TAP **11** 18:09:12.4, 24°.47N×122°.36E, h63km±1km, ML3.2, D*
*JMA **11** 18:09:12.2±0.2, 24°.36N×122°.30E, h70km±3km, M1.9*
**ISC 11 18:09:13.5**±1.3**, 24°.40N**±0°.04×**122°.35E**±0°.02**, h58**km±12km**, n44,** σ**1s.10**/78**, 1C-1D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWC** | **Suao** | **0.50** | **295** | P | **Pn** | **18 09 25.0** | **-0.3** |
| | baz=286 | | | | | | |
| TWC | | | | S | **Sn** | **18 09 33.8** | **0.0** |
| | baz=286 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.55** | **85** | P | **Pn** | **18 09 26.2** | **+0.4** |
| JYNG | | | | *e*S | **Sn** | **18 09 36.2** | **+1.5** |
| **ENA** | **Nanau** | **0.55** | **273** | P | **Pn** | **18 09 25.9** | **0.0** |
| | baz=265 | | | | | | |
| ENA | | | | S | **Sn** | **18 09 36.0** | **+1.2** |
| | baz=265 | | | | | | |
| **EGS** | | **0.58** | **319** | P | **Pn** | **18 09 25.5** | **-0.7** |
| | baz=314 | | | | | | |
| EGS | | | | *e*S | **Sn** | **18 09 34.2** | **-1.2** |
| | baz=314 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.61** | **84** | P | **Pn** | **18 09 26.8** | **+0.3** |
| YOJ | | | | *e*S | **Sn** | **18 09 37.1** | **+1.2** |
| **ILA** | **Ilan** | **0.66** | **304** | *e*P | **Pn** | **18 09 26.9** | **-0.2** |
| | baz=298 | | | | | | |
| ILA | | | | *e*S | **Sn** | **18 09 37.2** | **+0.2** |
| | baz=298 | | | | | | |
| **TWE** | **Neicheng** | **0.70** | **297** | *e*P | **Pn** | **18 09 27.1** | **-0.5** |
| | baz=291 | | | | | | |
| TWE | | | | S | **Sn** | **18 09 37.6** | **-0.3** |
| | baz=291 | | | | | | |
| **ENTT** | **Nioudou** | **0.75** | **289** | P | **Pn** | **18 09 28.2** | **0.0** |
| | baz=283 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **18 09 39.8** | **+0.7** |
| | baz=283 | | | | | | |
| **TWD** | **Chiawan** | **0.76** | **245** | *i* P | **Pn** | **18 09 28.1** | **-0.3** |
| | baz=240 | | | | | | |
| TWD | | | | S | **Sn** | **18 09 39.8** | **+0.6** |
| | baz=240 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.84** | **322** | P | **Pn** | **18 09 28.5** | **-1.0** |
| | baz=318 | | | | | | |
| NWF | | | | S | **Sn** | **18 09 39.8** | **-1.5** |
| | baz=318 | | | | | | |
| **NNS** | **Nan Shan** | **0.89** | **273** | *e*P | **Pn** | **18 09 29.6** | **-0.6** |
| | baz=267 | | | | | | |
| NNS | | | | *e*S | **Sn** | **18 09 42.7** | **+0.3** |
| | baz=267 | | | | | | |
| **TWA** | **Mucha** | **0.90** | **310** | ⇑*i*P | **Pn** | **18 09 29.3** | **-0.9** |
| | baz=306 | | | | | | |
| TWA | | | | S | **Sn** | **18 09 41.5** | **-1.1** |
| | baz=306 | | | | | | |
| **NSK** | **Sanguang** | **0.94** | **287** | P | **Pn** | **18 09 30.4** | **-0.3** |
| | baz=282 | | | | | | |
| NSK | | | | S | **Sn** | **18 09 43.2** | **-0.3** |
| | baz=282 | | | | | | |
| **ESL** | **Shilin** | **1.02** | **235** | ⇓*i*P | **Pn** | **18 09 31.1** | **-0.6** |
| | baz=231 | | | | | | |
| ESL | | | | S | **Sn** | **18 09 44.8** | **-0.4** |
| | baz=231 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.02** | **256** | P | **Pn** | **18 09 31.8** | **-0.3** |
| | baz=251 | | | | | | |
| WHF | | | | S | **Sn** | **18 09 45.8** | **-0.1** |
| | baz=251 | | | | | | |
| **TWT** | **Tachien** | **1.08** | **262** | P | **Pn** | **18 09 32.9** | **+0.2** |
| | baz=258 | | | | | | |
| TWT | | | | S | **Sn** | **18 09 47.4** | **+0.5** |
| | baz=258 | | | | | | |
| **NSTT** | **Nanjuang** | **1.25** | **281** | *e*P | **Pn** | **18 09 34.8** | **0.0** |
| | baz=277 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **18 09 50.5** | **-0.1** |
| | baz=277 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.26** | **93** | P | **Pn** | **18 09 34.6** | **-0.3** |
| IRIF | | | | *e*S | **Sn** | **18 09 51.7** | **+0.8** |
| **EHY** | **Hungye** | **1.29** | **227** | *e*P | **Pn** | **18 09 34.5** | **-0.9** |
| | baz=224 | | | | | | |
| EHY | | | | *e*S | **Sn** | **18 09 50.5** | **-1.2** |
| | baz=224 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SMLT | Sun Moon Lake | 1.42 | 249 | eP | Pn | 18 09 37.4 | +0.2 |
| | baz=246 | | | | | | |
| SMLT | | | | eS | Sn | 18 09 55.6 | +0.7 |
| | baz=246 | | | | | | |
| TWF1 | Yuli | 1.42 | 223 | eP | Pn | 18 09 36.3 | -0.8 |
| | baz=220 | | | | | | |
| TWF1 | | | | eS | Sn | 18 09 53.6 | -1.1 |
| | baz=220 | | | | | | |
| TWQ1 | Liyutan | 1.44 | 268 | eS | Sn | 18 09 55.7 | +0.5 |
| | baz=265 | | | | | | |
| TYC | Yuchr | 1.45 | 250 | eP | Pn | 18 09 38.3 | +0.8 |
| | baz=247 | | | | | | |
| TYC | | | | S | Sn | 18 09 56.5 | +1.1 |
| | baz=247 | | | | | | |
| JKRS | Kuro-shima | 1.52 | 96 | P | Pn | 18 09 38.7 | +0.3 |
| JKRS | | | | eS | Sn | 18 09 58.2 | +1.0 |
| YUS | Yu-Shan | 1.57 | 235 | eP | Pn | 18 09 39.8 | +0.2 |
| | baz=232 | | | | | | |
| YUS | | | | eS | Sn | 18 09 58.5 | -0.5 |
| | baz=232 | | | | | | |
| CHKT | Chengkung | 1.58 | 215 | eP | Pn | 18 09 38.3 | -0.9 |
| | baz=213 | | | | | | |
| CHKT | | | | eS | Sn | 18 09 56.7 | -1.9 |
| | baz=213 | | | | | | |
| JIJ | Ishigaki jima | 1.64 | 91 | P | Pn | 18 09 39.1 | -0.9 |
| JIJ | | | | eS | Sn | 18 09 59.3 | -0.7 |
| ALS | Alishan | 1.67 | 238 | eP | Pn | 18 09 41.4 | +0.7 |
| | baz=235 | | | | | | |
| ALS | | | | eS | Sn | 18 10 01.9 | +0.7 |
| | baz=235 | | | | | | |
| ELDTW | Lidau | 1.72 | 226 | P | Pn | 18 09 40.4 | -0.8 |
| | baz=223 | | | | | | |
| ELDTW | | | | S | Sn | 18 10 01.1 | -1.0 |
| | baz=223 | | | | | | |
| CHN5 | Tsauling | 1.73 | 243 | P | Pn | 18 09 41.8 | +0.5 |
| | baz=240 | | | | | | |
| CHN5 | | | | S | Sn | 18 10 04.2 | +1.9 |
| | baz=240 | | | | | | |
| WGK | Gukeng | 1.78 | 247 | eS | Sn | 18 10 06.1 | +2.5 |
| | baz=244 | | | | | | |
| JISG | Ishigakijimahi | 1.80 | 84 | eS | Sn | 18 10 03.4 | -0.5 |
| STYT | Tauyuan | 1.91 | 230 | eS | Sn | 18 10 07.7 | +1.0 |
| | baz=228 | | | | | | |
| CHN4 | Tsaushan | 1.92 | 237 | eP | Pn | 18 09 44.9 | +1.1 |
| | baz=235 | | | | | | |
| CHN4 | | | | eS | Sn | 18 10 09.1 | +2.3 |
| | baz=235 | | | | | | |
| TWG | Pinlang | 1.96 | 217 | eS | Sn | 18 10 06.1 | -1.9 |
| | baz=215 | | | | | | |
| WTP | Ta-pu | 1.96 | 234 | eP | Pn | 18 09 45.6 | +1.1 |
| | baz=232 | | | | | | |
| WTP | | | | eS | Sn | 18 10 09.9 | +1.9 |
| | baz=232 | | | | | | |
| TWK | Hsinying | 2.04 | 237 | eS | Sn | 18 10 12.3 | +2.3 |
| | baz=234 | | | | | | |
| CHN1 | Nanshi | 2.06 | 234 | eP | Pn | 18 09 47.0 | +1.2 |
| | baz=232 | | | | | | |
| CHN1 | | | | eS | Sn | 18 10 12.2 | +1.8 |
| | baz=232 | | | | | | |
| SGST | Jiashian | 2.08 | 231 | eS | Sn | 18 10 12.4 | +1.4 |
| | baz=229 | | | | | | |
| JTJ | Tarama | 2.16 | 83 | eS | Sn | 18 10 13.6 | +0.9 |
| ECL | Taimali | 2.21 | 216 | eS | Sn | 18 10 12.0 | -1.9 |
| | baz=214 | | | | | | |
| SSD | Sandimen | 2.28 | 224 | eP | Pn | 18 09 48.1 | -0.6 |
| | baz=222 | | | | | | |
| SSD | | | | eS | Sn | 18 10 17.0 | +1.3 |
| | baz=222 | | | | | | |
| EAST | Anshuo | 2.44 | 215 | eS | Sn | 18 10 19.4 | -0.2 |
| | baz=213 | | | | | | |
| LAY | Lan-yu | 2.46 | 197 | eP | Pn | 18 09 51.2 | -0.1 |
| | baz=196 | | | | | | |
| LAY | | | | eS | Sn | 18 10 16.7 | -3.6 |
| | baz=196 | | | | | | |

*ATH **11** 18:22:45.1,36°.27N×27°.63E,h29km,MD3.1/10*
*ISCJB **11** 18:22:45.5±0.5,36°.20N±0°.02×27°.54E±0°.03,h6km±4km, Error ellipse: s-maj=4.3km s-min=3.3km az=135.9*
*THE **11** 18:22:45.3,36°.19N×27°.61E,h0km±1km,ML3.0/2,Error ellipse: s-maj=1.4km s-min=1.0km az=55.0*
*ISK **11** 18:22:46.5,36°.28N×27°.61E,h20km,MD2.9*
*CSEM **11** 18:22:46.2±0.2,36°.19N×27°.54E,h10km,MD3.1,Error ellipse: s-maj=5.1km s-min=3.9km az=141.0*
*DDA **11** 18:22:46.2,36°.21N×27°.62E,h8km,Md2.9*
**ISC 11 18:22:45.9**±1.0,**36°.21N**±0°.02×**27°.59E**±0°.02,**h12**km±8km, **n70,**σ**0s.71**/105,**Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARG | Arkhangelos | 0.43 | 88 | ePB | Pg | 18 22 54.5 | 0.0 |
| ARG | | | | eSB | Sg | 18 23 00.8 | +0.6 |
| ARG | Arkhangelos | 0.43 | 88 | P | Pg | 18 22 54.5 | 0.0 |
| ARG | | | | S | Sg | 18 23 00.8 | +0.6 |
| ARG | Arkhangelos | 0.43 | 88 | P | Pg | 18 22 54.5 | 0.0 |
| ARG | | | | S | Sg | 18 23 00.8 | +0.6 |
| NIS1 | Nisyros Isl. | 0.52 | 320 | ePG | Pg | 18 22 56.6 | +0.5 |
| NIS1 | | | | eSG | Sb | 18 23 04.2 | -0.3 |
| NIS1 | Nisyros Isl. | 0.52 | 320 | ePB | Pg | 18 22 55.7 | -0.4 |
| NIS1 | | | | eSB | Sg | 18 23 03.5 | +0.5 |
| NIS1 | Nisyros Isl. | 0.52 | 320 | P | Pg | 18 22 55.9 | -0.2 |
| NIS1 | | | | S | Sb | 18 23 06.2 | +1.7 |
| NIS1 | Nisyros Isl. | 0.52 | 320 | ePb | Pg | 18 22 55.7 | -0.4 |
| NIS1 | Nisyros Isl. | 0.52 | 320 | ePg | Pg | 18 22 56.6 | +0.5 |
| NIS1 | | | | eSb | Sg | 18 23 03.5 | +0.5 |
| NIS1 | | | | eSg | Sb | 18 23 04.2 | -0.3 |
| NIS1 | | | | S | Sb | 18 23 06.2 | +1.7 |
| NISR | Nisiros | 0.55 | 317 | ePN | Pg | 18 22 56.6 | -0.2 |
| NISR | | | | eSN | Sg | 18 23 03.9 | -0.2 |
| NISR | Nisiros | 0.55 | 317 | P | Pg | 18 22 56.9 | +0.1 |
| NISR | | | | S | Sb | 18 23 06.7 | +1.3 |
| NISR | Nisiros | 0.55 | 317 | ePn | Pg | 18 22 56.6 | -0.2 |
| NISR | Nisiros | 0.55 | 317 | P | Pg | 18 22 56.9 | +0.1 |
| NISR | | | | eSn | Sg | 18 23 03.9 | -0.2 |
| NISR | | | | S | Sb | 18 23 06.7 | +1.3 |
| KARP | Karpathos | 0.74 | 208 | ePN | Pb | 18 23 01.4 | +0.6 |
| KARP | | | | eSN | Sn | 18 23 12.6 | -0.9 |
| KARP | Karpathos | 0.74 | 208 | P | Pg | 18 23 00.0 | -0.4 |
| KARP | | | | S | Sb | 18 23 11.5 | +0.6 |
| KARP | Karpathos | 0.74 | 208 | P | Pg | 18 23 00.0 | -0.4 |
| KARP | Karpathos | 0.74 | 208 | ePn | Pb | 18 23 01.4 | +0.6 |
| KARP | | | | S | Sb | 18 23 11.5 | +0.6 |
| BDRM | Kayabasi | 0.87 | 352 | iP | Pg | 18 23 02.7 | 0.0 |
| BDRM | | | | iS | Sb | 18 23 15.8 | +1.2 |
| BDRM | Kayabasi | 0.87 | 352 | P | Pg | 18 23 02.7 | 0.0 |
| BDRM | | | | S | Sb | 18 23 15.8 | +1.2 |
| BODT | Bodrum | 0.89 | 345 | ePG | Pg | 18 23 02.5 | -0.6 |
| BODT | | | | eSG | Sg | 18 23 15.0 | +0.4 |
| BODT | Bodrum | 0.89 | 345 | ePg | Pg | 18 23 02.5 | -0.6 |
| BODT | | | | eSg | Sg | 18 23 15.0 | +0.4 |
| DALY | Dalyan (Mu˜la | 1.05 | 54 | ePG | Pg | 18 23 06.0 | -0.2 |
| DALY | Dalyan (Mu˜la | 1.05 | 54 | ePg | Pg | 18 23 06.0 | -0.2 |
| TURN | Turunc | 1.05 | 50 | P | Pg | 18 23 01.2 | -5.0 |
| TURN | | | | S | Sg | 18 23 12.0 | -7.9 |
| YER | Yerkesik | 1.08 | 31 | ePG | Pb | 18 23 06.2 | -0.4 |
| YER | Yerkesik | 1.08 | 31 | ePg | Pb | 18 23 06.2 | -0.4 |
| FETY | Fethiye | 1.28 | 70 | ePN | Pn | 18 23 09.6 | 0.0 |
| FETY | Fethiye | 1.28 | 70 | ePn | Pn | 18 23 09.6 | 0.0 |
| ZKR | Zakros | 1.56 | 226 | ePN | Pn | 18 23 14.0 | +0.5 |
| ZKR | | | | eSN | Sg | 18 23 35.2 | -1.0 |
| ZKR | Zakros | 1.56 | 226 | P | Pn | 18 23 13.8 | +0.3 |
| ZKR | | | | S | Sb | 18 23 35.1 | +0.6 |
| ZKR | Zakros | 1.56 | 226 | P | Pn | 18 23 13.8 | +0.3 |
| ZKR | | | | eSn | Sg | 18 23 35.2 | -1.0 |
| SMG | Samos | 1.62 | 338 | ePN | Pn | 18 23 13.1 | -1.2 |
| SMG | Samos | 1.62 | 338 | P | Pn | 18 23 13.2 | -1.1 |
| SMG | Samos | 1.62 | 338 | P | Pn | 18 23 13.2 | -1.1 |
| SANT | Santorini | 1.73 | 276 | ePB | Pn | 18 23 14.7 | -1.2 |
| SANT | | | | eSN | Sn | 18 23 37.5 | -0.4 |
| AYDB | Zeytinkoy-Aydi | 1.75 | 8 | ePN | Pn | 18 23 15.0 | -1.3 |
| AYDB | Zeytinkoy-Aydi | 1.75 | 8 | ePn | Pn | 18 23 15.0 | -1.3 |
| THR6 | Thira Island, | 1.78 | 276 | P | Pn | 18 23 16.1 | -0.4 |
| THR6 | Thira Island, | 1.78 | 276 | P | Pn | 18 23 16.1 | -0.4 |
| THR3 | Thira Island, | 1.78 | 277 | P | Pn | 18 23 15.9 | -0.6 |
| THR3 | Thira Island, | 1.78 | 277 | P | Pn | 18 23 15.9 | -0.6 |
| THR5 | Thira Island, | 1.82 | 277 | P | Pn | 18 23 17.0 | -0.1 |
| THR5 | Thira Island, | 1.82 | 277 | P | Pn | 18 23 17.0 | -0.1 |
| NPS | Neapolis | 1.86 | 240 | ePN | Pn | 18 23 16.8 | -0.9 |
| NPS | | | | eSN | Sn | 18 23 41.2 | 0.0 |
| NPS | Neapolis | 1.86 | 240 | ePn | Pn | 18 23 16.8 | -0.9 |
| NPS | | | | eSn | Sn | 18 23 41.2 | 0.0 |
| APE | Apeiranthos | 1.87 | 298 | ePN | Pn | 18 23 17.5 | -0.3 |
| APE | Apeiranthos | 1.87 | 298 | ePn | Pn | 18 23 17.5 | -0.3 |
| DNZL | Cakiroluk | 1.89 | 38 | iP | Pg | 18 23 21.4 | -0.7 |
| DNZL | | | | iS | Sg | 18 23 47.8 | +1.2 |
| DNZL | Cakiroluk | 1.89 | 38 | P | Pg | 18 23 21.4 | -0.7 |
| DNZL | | | | S | Sg | 18 23 47.8 | +1.2 |
| GOLH | Golhisar | 1.89 | 56 | iP | Pg | 18 23 21.9 | -0.2 |
| GOLH | | | | iS | Sg | 18 23 46.6 | -0.1 |
| GOLH | Golhisar | 1.89 | 56 | P | Pg | 18 23 21.9 | -0.2 |
| GOLH | | | | S | Sg | 18 23 46.6 | -0.1 |
| ELL | Elmali | 1.94 | 73 | ePN | Pn | 18 23 19.4 | +0.5 |
| ELL | Elmali | 1.94 | 73 | ePn | Pn | 18 23 19.4 | +0.5 |
| LAST | Lasithi | 2.01 | 239 | ePN | Pn | 18 23 19.1 | -0.7 |
| LAST | Lasithi | 2.01 | 239 | P | Pn | 18 23 19.5 | -0.3 |
| LAST | | | | S | Sn | 18 23 44.8 | -0.1 |
| LAST | Lasithi | 2.01 | 239 | ePn | Pn | 18 23 19.1 | -0.7 |
| LAST | Lasithi | 2.01 | 239 | P | Pn | 18 23 19.5 | -0.3 |
| LAST | | | | S | Sn | 18 23 44.8 | -0.1 |
| KORT | Korkueli | 2.36 | 69 | iP | Pb | 18 23 27.8 | -0.6 |
| KORT | | | | iS | Sb | 18 23 56.6 | -0.9 |
| KORT | Korkueli | 2.36 | 69 | P | Pb | 18 23 27.8 | -0.6 |
| KORT | | | | S | Sb | 18 23 56.6 | -0.9 |
| IDI | Anoyia | 2.38 | 248 | ePN | Pn | 18 23 25.0 | +0.2 |
| IDI | Anoyia | 2.38 | 248 | P | Pn | 18 23 24.4 | -0.4 |
| IDI | Anoyia | 2.38 | 248 | P | Pn | 18 23 24.4 | -0.4 |
| IDI | Anoyia | 2.38 | 248 | ePn | Pn | 18 23 25.0 | +0.2 |
| CHOS | Chios island | 2.50 | 331 | ePN | Pn | 18 23 26.3 | -0.2 |
| CHOS | Chios island | 2.50 | 331 | ePn | Pn | 18 23 26.3 | -0.2 |
| KHAL | Karahalli | 2.64 | 34 | iP | Pb | 18 23 31.9 | -1.3 |
| KHAL | | | | iS | Sn | 18 24 02.0 | +1.6 |
| KHAL | Karahalli | 2.64 | 34 | P | Pb | 18 23 31.9 | -1.3 |
| KHAL | | | | S | Sn | 18 24 02.0 | +1.6 |
| KYTH | Kithira | 3.68 | 273 | ePN | Pn | 18 23 43.3 | +0.6 |
| KYTH | Kithira | 3.68 | 273 | ePn | Pn | 18 23 43.3 | +0.6 |
| VLI | Veliai | 3.79 | 279 | ePN | Pn | 18 23 44.5 | +0.4 |
| VLI | Veliai | 3.79 | 279 | ePn | Pn | 18 23 44.5 | +0.4 |

**IDC 11 18:44:18.9**±5.1,**4°.21S**×**151°.24E,h92**km±48km,**mb2.9**/3, **mb1 3.2**/4,**mb1mx2.9**/34,**mbtmp3.3**/4,**Error ellipse: s-maj=185.2km s-min=30.1km az=127.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 6.56 | 218 | P | Pn | 18 45 53.2 | +0.4 |
| | 0.6nm,0.3s,baz=23,slow=13,SNR=2.9 | | | | | | |
| PMG | | | | S | Sn | 18 47 08.0 | +1.8 |
| | 0.1nm,0.3s,baz=317,slow=18,SNR=3.3 | | | | | | |
| WRA | Warramunga Arr | 22.71 | 225 | P | P | 18 49 13.7 | +0.4 |
| | 0.3nm,0.7s,baz=50,slow=10,SNR=3.2 | | | | | | |
| ASAR | Alice Springs | 25.57 | 219 | P | P | 18 49 38.4 | -1.2 |
| | 0.4nm,0.9s,baz=54,slow=8.8,SNR=4.6 | | | | | | |
| ILAR | Eielson Array | 82.21 | 22 | P | P | 18 56 29.8 | +0.3 |
| | 0.6nm,0.7s,baz=254,slow=5.5,SNR=5.1 | | | | | | |

*MOS **11** 18:50:19.6±2.2,40°.15N×48°.99E,h23km,mb4.1/9,Error ellipse: s-maj=10.7km s-min=6.2km az=118.9*
*TEH **11** 18:50:19.2,40°.58N×48°.88E,h9km,ML3.9*
*CSEM **11** 18:50:22.7±0.1,40°.25N×48°.97E,h15km,mb4.0/11,Error ellipse: s-maj=4.4km s-min=3.5km az=77.0*
*AZER **11** 18:50:23.6±0.0,40°.20N×48°.82E,h37km,Error ellipse: s-maj=2.4km s-min=0.2km az=251.0*
*IDC **11** 18:50:23.8±1.1,40°.32N×48°.71E,h31km±6km,mb3.7/13, mb1 3.7/21,mb1mx3.6/52,mbtmp3.8/21,ML2.9/7,MS3.2/12, Ms1 3.2/12,ms1mx2.9/42,Error ellipse: s-maj=17.2km s-min=9.5km az=171.0*
*NNC **11** 18:50:30.4±4.6,40°.50N×50°.33E,h0km,mb3.9,Error ellipse: s-maj=71.3km s-min=32.2km az=94.0*
**ISC 11 18:50:23.9**±0.5,**40°.24N**±0°.02×**48°.88E**±0°.02,**h31**km±3km, **n156,**σ**1s.73**/194,**mb3.9**/15,**MS3.2**/7,**18C-27D,Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ALIB | Äli-Bayra | 0.30 | 162 | ⇓P | Pb | 18 50 31.8 | +0.4 |
| ALIB | | | | ⇓S | Sn | 18 50 39.7 | +2.2 |
| ALIB | Äli-Bayra | 0.30 | 162 | P | Pb | 18 50 31.8 | +0.4 |
| SAAT | Saatly | 0.52 | 223 | ⇑P | Pb | 18 50 33.8 | -0.8 |
| SAAT | | | | ⇓S | Sb | 18 50 43.8 | +1.8 |
| SAAT | Saatly | 0.52 | 223 | P | Pb | 18 50 33.8 | -0.8 |
| SAAT | | | | S | Sb | 18 50 43.8 | +1.8 |
| PQL | Pirkuli | 0.59 | 338 | ⇓P | Pb | 18 50 35.3 | -0.6 |
| PQL | | | | ⇓S | Sn | 18 50 44.7 | -0.2 |
| PQL | Pirkuli | 0.59 | 338 | P | Pb | 18 50 35.3 | -0.6 |
| PQL | | | | S | Sn | 18 50 44.7 | -0.2 |
| ATGJ | Altiaghaj | 0.62 | 4 | ⇑P | Pn | 18 50 37.3 | +0.6 |
| ATGJ | | | | ⇓S | Sn | 18 50 49.6 | +4.0 |
| ATGJ | Altiaghaj | 0.62 | 4 | P | Pn | 18 50 37.3 | +0.6 |
| IML | Ismayilli | 0.77 | 316 | ⇑P | Pb | 18 50 37.1 | -1.7 |
| IML | Ismayilli | 0.77 | 316 | P | Pb | 18 50 37.1 | -1.7 |
| SIZA | Siyzn | 0.83 | 1 | ⇓P | Pn | 18 50 41.0 | +1.5 |
| SIZA | | | | ⇑S | Sn | 18 50 56.8 | +6.0 |
| SIZA | Siyzn | 0.83 | 1 | P | Pn | 18 50 41.0 | +1.5 |
| GALA | Gala | 0.99 | 80 | ⇓P | Pn | 18 50 45.2 | +3.6 |
| GLBA | Clilabad | 1.07 | 201 | ⇓P | Pn | 18 50 41.5 | -1.2 |
| GLBA | | | | ⇓S | Sn | 18 50 58.6 | +2.2 |
| GLBA | Clilabad | 1.07 | 201 | P | Pn | 18 50 41.5 | -1.2 |
| GLBA | | | | S | Sn | 18 50 58.6 | +2.2 |
| QUBA | Quba, Azerbaij | 1.15 | 345 | ⇑P | Pb | 18 50 46.1 | +0.9 |
| QUBA | | | | ⇓S | Sn | 18 51 03.6 | +5.0 |
| QUBA | Quba, Azerbaij | 1.15 | 345 | P | Pb | 18 50 46.1 | +0.9 |
| BRDA | Brd | 1.30 | 271 | ⇑P | Pn | 18 50 45.9 | 0.0 |
| BRDA | | | | ⇓S | Sb | 18 51 05.3 | +1.2 |
| BRDA | Brd | 1.30 | 271 | P | Pn | 18 50 45.9 | 0.0 |
| BRDA | | | | S | Sb | 18 51 05.3 | +1.2 |
| MNGR | Mingechevir, A | 1.47 | 292 | ⇓Pn | Pn | 18 50 48.6 | +0.4 |
| MNGR | | | | ⇑Sn | Sn | 18 51 08.9 | +2.5 |
| MNGR | Mingechevir, A | 1.47 | 292 | Pn | Pn | 18 50 48.6 | +0.4 |
| MNGR | | | | Sn | Sn | 18 51 08.9 | +2.5 |
| KSMR | Kasumkent | 1.48 | 337 | ePG | Pb | 18 50 51.5 | +0.8 |
| KSMR | | | | iS | Sb | 18 51 13.0 | +3.9 |
| KSMR | | | | pmax | pmax | | |
| | comp=Z,624nm,0.3s | | | | | | |
| KSMR | Kasumkent | 1.48 | 337 | ePg | Pb | 18 50 51.5 | +0.8 |
| | comp=Z,624nm,0.3s | | | | | | |
| KSMR | | | | iSg | Sb | 18 51 13.0 | +3.9 |
| AKT | Akhty | 1.51 | 325 | ⇓iPN | Pb | 18 50 51.0 | -0.4 |
| AKT | | | | S | Sb | 18 51 13.2 | +2.9 |
| AKT | | | | pmax | pmax | | |
| | comp=Z,485nm,0.3s | | | | | | |
| AKT | Akhty | 1.51 | 325 | iPn | Pb | 18 50 51.0 | -0.4 |
| | comp=Z,485nm,0.3s | | | | | | |
| AKT | | | | Sg | Sb | 18 51 13.2 | +2.9 |
| LKRN | Lenkeran, Azer | 1.53 | 183 | ⇓Pn | Pn | 18 50 48.6 | -0.4 |
| LKRN | | | | ⇑Sn | Sn | 18 51 09.8 | +1.9 |
| LKRN | Lenkeran, Azer | 1.53 | 183 | Pn | Pn | 18 50 48.6 | -0.4 |
| LKRN | | | | Sn | Sn | 18 51 09.8 | +1.9 |
| SEKA | Sheki | 1.60 | 308 | ⇓Pn | Pn | 18 50 50.1 | -0.1 |
| SEKA | | | | ⇓Sn | Sb | 18 51 12.4 | -0.4 |
| SEKA | Sheki | 1.60 | 308 | Pn | Pn | 18 50 50.1 | -0.1 |
| SEKA | | | | Sn | Sb | 18 51 12.4 | -0.4 |
| LRK | Lerik | 1.65 | 195 | ⇓Pn | Pn | 18 50 50.3 | -0.6 |
| LRK | | | | ⇓Sn | Sn | 18 51 12.9 | +1.8 |
| LRK | Lerik | 1.65 | 195 | Pn | Pn | 18 50 50.3 | -0.6 |
| LRK | | | | Sn | Sn | 18 51 12.9 | +1.8 |
| GANJ | Ganja | 2.00 | 282 | ⇓Pn | Pn | 18 50 55.2 | -0.3 |
| GANJ | | | | ⇑Sn | Sn | 18 51 20.4 | +1.0 |
| GANJ | Ganja | 2.00 | 282 | Pn | Pn | 18 50 55.2 | -0.3 |
| GANJ | | | | Sn | Sn | 18 51 20.4 | +1.0 |
| URKR | Urkarakh | 2.14 | 334 | ePN | Pn | 18 50 59.0 | +1.4 |
| URKR | | | | iS | Sb | 18 51 27.0 | -1.2 |
| URKR | | | | pmax | pmax | | |
| | comp=Z,211nm,0.3s | | | | | | |
| URKR | Urkarakh | 2.14 | 334 | ePn | Pn | 18 50 59.0 | +1.4 |
| | comp=Z,211nm,0.3s | | | | | | |
| URKR | | | | iSn | Sb | 18 51 27.0 | -1.2 |
| ZKTA | Zakatala | 2.21 | 310 | ⇓Pn | Pn | 18 50 60.0 | +1.6 |
| KMKR | Kumukh | 2.32 | 325 | ⇓iPN | Pb | 18 51 03.0 | -2.1 |
| KMKR | | | | eS | Sb | 18 51 34.0 | +0.6 |
| KMKR | Kumukh | 2.32 | 325 | iPn | Pb | 18 51 03.0 | -2.1 |
| KMKR | | | | eSn | Sb | 18 51 34.0 | +0.6 |
| IHRS | Heris | 2.39 | 217 | ePn | Pn | 18 51 01.3 | +0.1 |
| IHRS | | | | e | | 18 51 34.9 | |
| | comp=Z,16μm,0.2s | | | | | | |
| IHRS | Heris | 2.39 | 217 | ePn | Pn | 18 51 01.3 | +0.1 |
| GNBR | Gunib | 2.59 | 327 | ⇑iPN | Pn | 18 51 06.6 | +3.0 |
| GNBR | | | | iS | Sb | 18 51 46.0 | +5.0 |
| GNBR | | | | pmax | pmax | | |
| | comp=Z,135nm,0.5s | | | | | | |
| GNBR | Gunib | 2.59 | 327 | iPn | Pn | 18 51 06.6 | +3.0 |
| | comp=Z,135nm,0.5s | | | | | | |
| GNBR | | | | iSb | Sb | 18 51 46.0 | +5.0 |
| ISRB | Sarab | 2.59 | 202 | e | | 18 51 23.0 | |
| | comp=Z,4μm,0.2s | | | | | | |
| ISRB | | | | ePn | Pn | 18 51 04.4 | +0.5 |
| QZX | Qazax, Azerbai | 2.79 | 288 | ⇑Pn | Pn | 18 51 07.8 | +1.4 |
| QZX | Qazax, Azerbai | 2.79 | 288 | Pn | Pn | 18 51 07.8 | +1.4 |
| NAX | Nakhchivan | 2.82 | 249 | ⇓Pn | Pn | 18 51 08.6 | +1.7 |
| NAX | Nakhchivan | 2.82 | 249 | Pn | Pn | 18 51 08.6 | +1.7 |
| IMRD | Marand | 2.90 | 239 | e | | 18 51 53.1 | |
| | comp=Z,12μm,0.3s | | | | | | |
| IMRD | | | | ePn | Pn | 18 51 08.2 | +0.2 |
| ITBZ | Tabriz | 2.92 | 228 | e | | 18 51 48.2 | |
| | comp=Z,2μm,0.2s | | | | | | |
| ITBZ | | | | ePn | Pn | 18 51 09.0 | +0.7 |
| DGRG | David-gareji | 2.92 | 296 | P | Pn | 18 51 09.6 | +1.3 |
| DGRG | | | | S | Sn | 18 51 44.5 | +2.2 |
| DGRG | David-gareji | 2.92 | 296 | ePN | Pn | 18 51 09.5 | +1.3 |
| DGRG | David-gareji | 2.92 | 296 | P | Pn | 18 51 09.6 | +1.3 |
| DGRG | | | | S | Sn | 18 51 44.5 | +2.2 |
| IFTB | Fath-abad | 2.95 | 222 | eSn | Sn | 18 51 46.4 | +3.2 |
| IFTB | | | | ePn | Pn | 18 51 09.6 | +0.8 |
| IFTB | Fath-abad | 2.95 | 222 | ePn | Pn | 18 51 09.6 | +0.8 |
| IFTB | | | | eSn | Sn | 18 51 46.4 | +3.2 |
| IBST | Bostanabad | 2.98 | 212 | ePn | Pn | 18 51 10.8 | +1.6 |
| IBST | | | | e | | 18 51 22.8 | |
| | comp=Z,3μm,0.2s | | | | | | |
| IBST | | | | eSn | Sn | 18 51 48.2 | +4.3 |
| IBST | Bostanabad | 2.98 | 212 | ePn | Pn | 18 51 10.8 | +1.6 |
| IBST | | | | eSn | Sn | 18 51 48.2 | +4.3 |
| DBC | Dubki | 3.17 | 332 | ⇓iPN | Pn | 18 51 14.3 | +2.6 |
| DBC | | | | iS | Sn | 18 51 53.0 | +4.5 |
| DBC | Dubki | 3.17 | 332 | iPn | Pn | 18 51 14.3 | +2.6 |
| DBC | | | | iSn | Sn | 18 51 53.0 | +4.5 |
| ISHB | Shabestar | 3.20 | 233 | ePn | Pn | 18 51 12.9 | +0.6 |
| ISHB | | | | e | | 18 51 28.8 | |
| | comp=Z,3μm,0.3s | | | | | | |
| IAZR | Azarshahr | 3.42 | 222 | ePn | Pn | 18 51 15.8 | +0.6 |
| IAZR | | | | e | | 18 51 43.4 | |
| | comp=Z,4μm,0.2s | | | | | | |
| IAZR | | | | eSg | Sb | 18 52 13.8 | +8.8 |
| IAZR | Azarshahr | 3.42 | 222 | ePn | Pn | 18 51 15.8 | +0.6 |
| IAZR | | | | eSg | Sb | 18 52 13.8 | +8.8 |
| TBLG | Delisi | 3.47 | 297 | P | Pn | 18 51 17.5 | +1.7 |
| TBLG | | | | S | Sn | 18 51 57.6 | +1.8 |
| TBLG | Delisi | 3.47 | 297 | ePN | Pn | 18 51 17.4 | +1.7 |
| TBLG | Delisi | 3.47 | 297 | ePn | Pn | 18 51 17.4 | +1.7 |
| TBLG | | | | S | Sn | 18 51 57.6 | +1.8 |
| DUS | Dusheti | 3.66 | 302 | P | Pn | 18 51 20.1 | +1.7 |
| DUS | Dusheti | 3.66 | 302 | P | Pn | 18 51 20.1 | +1.7 |
| IGZV | Ghazvin | 3.99 | 164 | ePn | Pn | 18 51 22.6 | -0.5 |
| IGZV | | | | e | | 18 52 19.3 | |
| | comp=Z,630nm,0.1s | | | | | | |
| IGZV | Ghazvin | 3.99 | 164 | ePn | Pn | 18 51 22.6 | -0.5 |
| AKH | Akhalkalaki | 4.25 | 288 | P | Pn | 18 51 30.0 | +3.4 |
| AKH | Akhalkalaki | 4.25 | 288 | ePN | Pn | 18 51 30.0 | +3.4 |
| AKH | Akhalkalaki | 4.25 | 288 | P | Pn | 18 51 30.0 | +3.4 |
| ONI | Oni | 4.71 | 302 | P | Pn | 18 51 34.5 | +1.6 |
| ONI | Oni | 4.71 | 302 | ePN | Pn | 18 51 34.4 | +1.6 |
| ONI | Oni | 4.71 | 302 | ePn | Pn | 18 51 34.4 | +1.6 |
| IPRN | Peran | 4.83 | 145 | ePn | Pn | 18 51 34.2 | -0.4 |
| IPRN | | | | e | | 18 52 32.0 | |
| | comp=Z,3μm,0.2s | | | | | | |
| IRAZ | Razeghan | 4.90 | 170 | ePn | Pn | 18 51 36.4 | +0.8 |
| IRAZ | | | | e | | 18 51 55.6 | |
| | comp=Z,361nm,0.2s | | | | | | |
| IRAZ | Razeghan | 4.90 | 170 | ePn | Pn | 18 51 36.4 | +0.8 |
| IR3 | Iran Long-Peri | 5.05 | 160 | ePn | Pn | 18 51 38.4 | +0.8 |
| IR3 | Iran Long-Peri | 5.05 | 160 | ePn | Pn | 18 51 38.3 | +0.8 |
| IDMV | Damavand | 5.28 | 151 | ePn | Pn | 18 51 42.0 | +1.1 |
| IDMV | | | | e | | 18 51 45.1 | |
| | comp=Z,425nm,0.1s | | | | | | |
| IDMV | Damavand | 5.28 | 151 | ePn | Pn | 18 51 42.0 | +1.1 |
| IGLO | Ghaloghah | 5.39 | 132 | ePn | Pn | 18 51 41.7 | -0.6 |
| IGLO | | | | eSn | Sn | 18 52 43.4 | 0.0 |
| IGLO | | | | e | | 18 53 04.9 | |
| | comp=Z,803nm,0.2s | | | | | | |
| IFIR | Firoozkooh | 5.52 | 145 | ePn | Pn | 18 51 45.4 | +1.3 |
| IFIR | | | | e | | 18 51 47.5 | |
| | comp=Z,627nm,0.1s | | | | | | |
| IFIR | Firoozkooh | 5.52 | 145 | ePn | Pn | 18 51 45.4 | +1.3 |
| ISHM | Shahmirzad | 5.63 | 140 | ePn | Pn | 18 51 46.2 | +0.5 |
| ISHM | | | | e | | 18 52 55.9 | |
| | comp=Z,823nm,0.2s | | | | | | |
| KBZ | Khabaz | 5.66 | 310 | Pn | Pn | 18 51 45.9 | +0.2 |
| | comp=Z,0.3nm,0.3s,baz=72,slow=10,SNR=5.5 | | | | | | |
| ILAS | Lasjerd | 5.83 | 145 | ePn | Pn | 18 51 49.4 | +1.1 |
| ILAS | | | | e | | 18 53 06.6 | |
| | comp=Z,348nm,0.2s | | | | | | |
| ILAS | Lasjerd | 5.83 | 145 | ePn | Pn | 18 51 49.4 | +1.1 |
| IDHR | Dehrash | 5.88 | 201 | ePn | Pn | 18 51 52.5 | +3.5 |
| IDHR | | | | e | | 18 52 20.9 | |
| | comp=Z,334nm,0.3s | | | | | | |
| IDHR | Dehrash | 5.88 | 201 | ePn | Pn | 18 51 52.5 | +3.5 |
| IVIS | Veis | 5.93 | 196 | e | | 18 50 05.6 | |
| | comp=Z,141nm,0.1s | | | | | | |
| IVIS | | | | ePn | Pn | 18 51 53.7 | +4.1 |
| IKOM | Komasi | 6.16 | 191 | ePn | Pn | 18 51 53.8 | +1.0 |
| IKOM | | | | e | | 18 52 20.7 | |
| | comp=Z,150nm,0.2s | | | | | | |
| IKOM | Komasi | 6.16 | 191 | ePn | Pn | 18 51 53.8 | +1.0 |
| IANJ | Anjilo | 6.21 | 139 | ePn | Pn | 18 51 53.9 | +0.3 |
| IANJ | | | | e | | 18 52 14.5 | |
| | comp=Z,257nm,0.2s | | | | | | |
| IANJ | Anjilo | 6.21 | 139 | ePn | Pn | 18 51 53.9 | +0.3 |
| GEYT | Alibeck | 7.54 | 105 | Pn | Pn | 18 52 11.7 | -0.1 |
| | comp=Z,1.4nm,0.3s,baz=285,slow=16,SNR=19 | | | | | | |
| BRTR | Keskin Array B | 11.71 | 272 | Pn | Pn | 18 53 09.4 | +0.5 |
| | comp=Z,0.1nm,0.3s,baz=46,slow=10,SNR=2.5 | | | | | | |
| AB31 | Akbulak array | 11.95 | 37 | ⇑P | Pn | 18 53 10.8 | -1.1 |
| | comp=Z,0.7nm,0.5s,baz=211,slow=12,SNR=6.9 | | | | | | |
| AB31 | | | | ⇑S | Sn | 18 55 17.3 | -6.7 |
| | comp=Z,1.2nm,0.6s,baz=216,slow=22,SNR=3.7 | | | | | | |
| AB31 | Akbulak array | 11.95 | 37 | P | Pn | 18 53 10.8 | -1.1 |
| | comp=Z,0.7nm,0.5s,SNR=6.9 | | | | | | |
| AKTK | Aktyubinsk | 12.04 | 29 | P | Pn | 18 53 10.7 | -2.5 |
| | comp=Z,88nm,19.6s | | | | | | |
| AKTO | Aktyubinsk | 12.04 | 29 | ⇑P | Pn | 18 53 11.4 | -1.8 |
| | comp=Z,4.9nm,1.1s | | | | | | |
| AKTO | | | | ⇑S | Sn | 18 55 21.2 | -5.1 |
| | comp=Z,5.7nm,1.1s | | | | | | |
| AKTO | Aktyubinsk | 12.04 | 29 | Pn | Pn | 18 53 10.7 | -2.5 |
| | comp=Z,0.1nm,0.3s,baz=208,slow=17,SNR=3.0 | | | | | | |
| AKTO | | | | Sn | Sn | 18 55 19.3 | -7.0 |
| | comp=Z,0.1nm,0.3s,baz=328,slow=19,SNR=3.6 | | | | | | |
| AKTO | | | | LR | LR | 18 59 25.9 | |
| | comp=Z,88nm,19.6s,baz=227,slow=45 | | | | | | |
| AKTO | Aktyubinsk | 12.04 | 29 | P | Pn | 18 53 11.4 | -1.8 |
| | comp=Z,4.9nm,1.1s | | | | | | |
| MMAI | Mount Meron Ar | 13.00 | 241 | LR | LR | 18 59 24.7 | |
| | comp=Z,118nm,18.3s,baz=120,slow=42 | | | | | | |
| KK31 | Karatay Array | 16.41 | 73 | P | Pn | 18 54 08.0 | -3.7 |
| | comp=Z,1.5nm,0.6s,baz=274,slow=13,SNR=15 | | | | | | |
| OBN | Obninsk | 16.99 | 335 | Pn | Pn | 18 54 17.5 | -1.5 |
| | comp=Z,2.1nm,0.3s,baz=151,slow=19,SNR=3.0 | | | | | | |
| OBN | | | | LR | LR | 19 00 55.1 | |
| | comp=Z,28nm,18.8s,baz=90,slow=37 | | | | | | |
| AKASG | Malin Array Be | 17.25 | 314 | P | Pn | 18 54 20.3 | -1.9 |
| | comp=Z,0.6nm,0.3s,baz=123,slow=11,SNR=9.4 | | | | | | |
| AKASG | Malin Array Be | 17.25 | 314 | P | Pn | 18 54 20.3 | -1.9 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ARU | Arti | 17.40 | 18 | P | Pn | 18 54 22.0 | -2.0 |
| | comp=Z,0.0nm,0.3s,baz=52,slow=19,SNR=2.2 | | | | | | |
| ARU | Arti | 17.40 | 18 | P | Pn | 18 54 21.6 | -2.4 |
| ARU | | | | SS | S | 18 57 40.5 | -3.8 |
| OTUK | Ortayu | 18.56 | 57 | ⇑P | Pn | 18 54 38.0 | -0.4 |
| | comp=Z,4.3nm,1.1s | | | | | | |
| OTUK | Ortayu | 18.56 | 57 | P | Pn | 18 54 38.0 | -0.4 |
| | comp=Z,4.3nm,1.1s | | | | | | |
| ZRNK | Zerenda | 18.70 | 40 | ⇓P | Pn | 18 54 39.4 | -0.6 |
| | comp=Z,3.2nm,0.9s | | | | | | |
| ZRNK | Zerenda | 18.70 | 40 | P | Pn | 18 54 39.4 | -0.6 |
| | comp=Z,3.2nm,0.9s | | | | | | |
| AAK | Ala-Archa | 19.33 | 75 | P | P | 18 54 46.1 | -0.6 |
| | comp=Z,0.1nm,0.3s,baz=180,slow=20,SNR=3.4 | | | | | | |
| AAK | | | | LR | LR | 19 03 50.1 | |
| | comp=Z,71nm,20.5s,baz=256,slow=42 | | | | | | |
| BRVK | Borovoye | 19.40 | 42 | ⇑P | P | 18 54 46.6 | -0.5 |
| | comp=Z,7.5nm,0.9s | | | | | | |
| BRVK | Borovoye | 19.40 | 42 | P | P | 18 54 46.6 | -0.5 |
| | comp=Z,7.5nm,0.9s | | | | | | |
| BVA0 | Borovoye Array | 19.44 | 42 | ⇓P | P | 18 54 47.6 | +0.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,5.0nm,1.0s,baz=227,slow=10,SNR=14 | | | | | | |
| BVA0 | Borovoye Array | 19.44 | 42 | P | P | 18 54 47.6 | +0.1 |
| | comp=Z,5.0nm,1.0s,SNR=14 | | | | | | |
| BVAR | Borovoye Array | 19.44 | 42 | P | Pn | 18 54 48.2 | -0.7 |
| | comp=Z,0.2nm,0.3s,baz=224,slow=12,SNR=11 | | | | | | |
| IDI | Anoyia | 19.58 | 263 | LR | LR | 19 04 01.2 | |
| | comp=Z,55nm,18.1s,baz=60,slow=42 | | | | | | |
| VOSK | Vostochnaya | 19.58 | 43 | ⇑P | P | 18 54 48.6 | -0.6 |
| | comp=Z,3.9nm,1.1s | | | | | | |
| CHKZ | Chkalovo | 19.91 | 40 | ⇓P | P | 18 54 51.8 | -0.8 |
| | comp=Z,3.3nm,1.1s | | | | | | |
| CHKZ | Chkalovo | 19.91 | 40 | P | P | 18 54 51.8 | -0.8 |
| | comp=Z,3.3nm,1.1s | | | | | | |
| KURBB | Kurchatov Arra | 23.10 | 53 | P | P | 18 55 28.5 | +1.6 |
| | comp=Z,2.5nm,0.8s,baz=259,slow=9.2,SNR=16 | | | | | | |
| KURK | Kurchatov | 23.18 | 53 | P | P | 18 55 28.5 | +0.8 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| KURK | Kurchatov | 23.18 | 53 | P | P | 18 55 28.5 | +0.8 |
| | comp=Z,3.0nm,0.8s | | | | | | |
| VRAC | Vranov | 24.49 | 302 | LR | LR | 19 07 49.0 | |
| | comp=Z,22nm,18.2s,baz=152,slow=43 | | | | | | |
| MK31 | Makanchi Array | 24.96 | 64 | P | P | 18 55 46.1 | +1.7 |
| | comp=Z,2.9nm,0.7s,baz=271,slow=7.0,SNR=17 | | | | | | |
| MK31 | Makanchi Array | 24.96 | 64 | P | P | 18 55 46.1 | +1.7 |
| | comp=Z,2.9nm,0.7s,SNR=17 | | | | | | |
| MKAR | Makanchi Array | 24.96 | 64 | P | P | 18 55 45.8 | +1.4 |
| | comp=Z,3.6nm,0.7s,baz=262,slow=8.1,SNR=17 | | | | | | |
| MKAR | | | | LR | LR | 19 07 39.2 | |
| | comp=Z,53nm,19.2s,baz=272,slow=41 | | | | | | |
| MKAR | Makanchi Array | 24.96 | 64 | P | P | 18 55 45.8 | +1.4 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| MKAR | | | | MLR | MLR | | |
| | comp=Z,53nm,19.2s | | | | | | |
| FINES | FINESS Array B | 25.39 | 334 | P | P | 18 55 47.4 | -0.7 |
| | comp=Z,1.9nm,0.3s,baz=133,slow=16,SNR=24 | | | | | | |
| FINES | | | | LR | LR | 19 06 54.1 | |
| | comp=Z,61nm,18.1s,baz=208,slow=39 | | | | | | |
| FINES | FINESS Array B | 25.39 | 334 | P | P | 18 55 47.4 | -0.7 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,61nm,18.1s | | | | | | |
| GERES | GERESS Array B | 26.31 | 301 | P | P | 18 55 57.0 | +0.2 |
| | comp=Z,1.3nm,0.8s,baz=94,slow=9.5,SNR=6.2 | | | | | | |
| GERES | GERESS Array B | 26.31 | 301 | P | P | 18 55 57.0 | +0.2 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| GERES | GERESS Array B | 26.31 | 301 | P | P | 18 55 57.0 | +0.2 |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 27.70 | 48 | P | P | 18 56 09.8 | +0.8 |
| | comp=Z,0.4nm,0.3s,baz=254,slow=10,SNR=3.3 | | | | | | |
| ZALV | | | | LR | LR | 19 09 31.1 | |
| | comp=Z,63nm,18.6s,baz=250,slow=41 | | | | | | |
| HFS | Hagfors | 29.52 | 324 | P | P | 18 56 24.5 | -0.6 |
| | comp=Z,3.5nm,0.6s,baz=106,slow=11,SNR=10 | | | | | | |
| HFS | | | | pP | pP | 18 56 33.3 | -0.8 |
| | comp=Z,2.9nm,0.4s,baz=121,slow=11,SNR=4.4 | | | | | | |
| HFS | Hagfors | 29.52 | 324 | P | P | 18 56 24.5 | -0.6 |
| HFS | | | | *PP | pP | 18 56 33.3 | -0.8 |
| HFS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| NB2 | NORSAR Subarra | 31.02 | 325 | P | P | 18 56 37.5 | -0.9 |
| | comp=Z,1.9nm,0.5s,baz=114,slow=8.6 | | | | | | |
| NB2 | NORSAR Subarra | 31.02 | 325 | P | P | 18 56 37.5 | -0.9 |
| | comp=Z,1.9nm,0.5s,SNR=1.8 | | | | | | |
| NOA | NORSAR Array B | 31.02 | 325 | P | P | 18 56 37.3 | -1.1 |
| | comp=Z,2.2nm,0.7s,baz=118,slow=8.5,SNR=7.5 | | | | | | |
| NOA | | | | pP | pP | 18 56 46.1 | -1.3 |
| | comp=Z,1.9nm,0.5s,baz=117,slow=8.4,SNR=7.5 | | | | | | |
| NOA | NORSAR Array B | 31.02 | 325 | P | P | 18 56 37.3 | -1.1 |
| NOA | | | | *PP | pP | 18 56 46.1 | -1.3 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ARCES | ARCESS Array B | 31.84 | 345 | LR | LR | 19 11 44.1 | |
| | comp=Z,74nm,18.2s,baz=94,slow=40 | | | | | | |
| EKA | Eskdalemuir Ar | 37.14 | 312 | P | P | 18 57 30.5 | -1.0 |
| | comp=Z,0.7nm,0.7s,baz=99,slow=8.7,SNR=3.2 | | | | | | |
| EKA | | | | pP | pP | 18 57 40.3 | -0.3 |
| | comp=Z,0.4nm,0.4s,baz=95,slow=8.0,SNR=3.6 | | | | | | |
| EKA | Eskdalemuir Ar | 37.14 | 312 | P | P | 18 57 30.5 | -1.0 |
| EKA | | | | *PP | pP | 18 57 40.3 | -0.3 |
| EKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| ESDC | Sonseca Array | 40.01 | 287 | P | P | 18 57 54.5 | -1.3 |
| | comp=Z,1.8nm,0.6s,baz=68,slow=8.5,SNR=18 | | | | | | |
| SONM | Songino Array | 41.19 | 60 | P | P | 18 58 06.3 | +0.7 |
| | comp=Z,0.3nm,0.4s,baz=261,slow=8.6,SNR=3.9 | | | | | | |
| SONM | | | | LR | LR | 19 17 33.7 | |
| | comp=Z,52nm,18.1s,baz=298,slow=40 | | | | | | |
| CMAR | Chiang Mai Arr | 48.01 | 102 | P | P | 18 59 01.0 | +0.8 |
| | comp=Z,0.8nm,0.7s,baz=304,slow=8.7,SNR=5.8 | | | | | | |
| CMAR | Chiang Mai Arr | 48.01 | 102 | P | P | 18 59 01.0 | +0.8 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| CMAR | Chiang Mai Arr | 48.01 | 102 | P | P | 18 59 01.0 | +0.8 |
| | comp=Z,1.0nm,0.7s | | | | | | |
| TORD | Torodi Ar. Bea | 49.29 | 251 | P | P | 18 59 07.8 | -2.3 |
| | comp=Z,0.8nm,0.8s,baz=70,slow=7.8,SNR=5.4 | | | | | | |
| TORD | | | | PcP | PcP | 19 00 32.1 | -0.4 |
| | comp=Z,0.5nm,0.7s,baz=65,slow=3.7,SNR=2.9 | | | | | | |
| TORD | | | | pPcP | | 19 00 41.1 | |
| | comp=Z,0.9nm,0.8s,baz=1.9,slow=2.6,SNR=4.1 | | | | | | |
| KSRS | Korea Array | 59.64 | 65 | P | P | 19 00 25.3 | +0.4 |
| | comp=Z,1.1nm,0.6s,baz=290,slow=7.2,SNR=4.8 | | | | | | |
| KSRS | Korea Array | 59.64 | 65 | P | P | 19 00 25.3 | +0.4 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| PETK | Petropavlovsk- | 68.62 | 38 | LR | LR | 19 35 38.0 | |
| | comp=Z,23nm,18.1s,baz=23,slow=40 | | | | | | |

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*IDC 11 19:12:29.9±1.5, 9˚.16S×108˚.33W, h0$^{km}$, mb3.7/4, mb1 4.1/4, mb1mx3.8/25, mbtmp3.7/4, MS3.9/16, Ms1 3.9/16, ms1mx3.8/23, Error ellipse: s-maj=56.2km s-min=28.2km az=46.0*

**ISC 11 19:12:32.1±1.7, 9˚.2S±0˚.3×108˚.3W±0˚.4, h15$^{km}$, n32, σ0$^{s}$.74/7, mb3.8/4, MS3.9/16, Central East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H06S1 | SOCORRO T | 27.83 | 355 | T | T | 19 47 19.3 | |
| | SNR=29 | | | | | | |
| H06E1 | SOCORRO T-PHAS | 27.87 | 355 | T | T | 19 47 22.8 | |
| | SNR=9.0 | | | | | | |
| RKT | Rikitea | 29.06 | 238 | eLR | LR | 19 26 04.1 | |
| | 505nm,30.2s | | | | | | |
| RKT | Rikitea | 29.06 | 238 | eT | T | 19 48 30.5 | |
| | 2.9nm,0.3s | | | | | | |
| ATAH | Atahualpa | 29.68 | 88 | LR | LR | 19 27 54.3 | |
| | comp=Z,106nm,21.9s,baz=265,slow=31 | | | | | | |
| JTS | JuntasAbangare | 30.22 | 51 | LR | LR | 19 27 32.3 | |
| | comp=Z,321nm,21.8s,baz=213,slow=30 | | | | | | |
| TXAR | Lajitas Array | 38.52 | 7 | P | P | 19 19 53.5 | -0.6 |
| | 0.4nm,0.7s,baz=185,slow=9.1,SNR=4.5 | | | | | | |
| TXAR | | | | LR | LR | 19 32 42.3 | |
| | comp=Z,57nm,20.3s,baz=0.0,slow=32 | | | | | | |
| LPAZ | La Paz | 39.78 | 104 | P | P | 19 20 06.4 | +0.8 |
| | 1.8nm,1.0s,baz=308,slow=3.0,SNR=3.9 | | | | | | |
| LPAZ | | | | LR | LR | 19 33 18.5 | |
| | comp=Z,82nm,20.6s,baz=262,slow=31 | | | | | | |
| PPT | Papeete | 40.94 | 254 | LR | LR | 19 32 33.6 | |
| | comp=Z,110nm,20.6s,baz=106,slow=29 | | | | | | |
| PPT2 | Papeete2 | 40.94 | 254 | eLR | LR | 19 31 20.1 | |
| | 360nm,26.2s,baz=81 | | | | | | |
| TBI | Tubuai | 41.79 | 245 | eLR | LR | 19 31 51.1 | |
| | 338nm,29.5s | | | | | | |
| SIV | San Ignacio | 46.52 | 103 | P | P | 19 20 59.0 | -0.5 |
| | 1.3nm,0.7s,baz=291,slow=3.0,SNR=3.6 | | | | | | |
| NVAR | Mina Array Bea | 48.24 | 349 | P | P | 19 21 13.5 | +0.8 |
| | 0.6nm,0.6s,baz=174,slow=9.1,SNR=3.4 | | | | | | |
| NVAR | | | | LR | LR | 19 37 09.0 | |
| | comp=Z,251nm,19.0s,baz=158,slow=31 | | | | | | |
| RAR | Rarotonga | 50.89 | 250 | LR | LR | 19 36 38.3 | |
| | comp=Z,96nm,21.0s,baz=300,slow=28 | | | | | | |
| CPUP | Villa Florida | 51.13 | 116 | LR | LR | 19 38 54.4 | |
| | comp=Z,153nm,21.3s,baz=280,slow=31 | | | | | | |
| ULM | Lac du Bonnet | 60.14 | 9 | LR | LR | 19 45 33.6 | |
| | comp=Z,56nm,19.7s,baz=324,slow=33 | | | | | | |
| AFI | Afiamalu | 62.22 | 259 | LR | LR | 19 44 26.5 | |
| | comp=Z,90nm,20.7s,baz=172,slow=31 | | | | | | |
| URZ | Urewera | 72.29 | 233 | LR | LR | 19 47 39.6 | |
| | comp=Z,100nm,18.8s,baz=110,slow=29 | | | | | | |
| SCHQ | Schefferville | 72.59 | 24 | LR | LR | 19 54 02.0 | |
| | comp=Z,67nm,21.6s,baz=147,slow=34 | | | | | | |
| KDAK | Kodiak Island | 75.80 | 337 | LR | LR | 19 49 18.4 | |
| | comp=Z,177nm,20.4s,baz=124,slow=29 | | | | | | |
| RPZ | Rata Peaks | 76.98 | 227 | LR | LR | 19 49 38.7 | |
| | comp=Z,155nm,19.4s,baz=69,slow=29 | | | | | | |
| ILAR | Eielson Array | 79.16 | 344 | LR | LR | 19 51 10.3 | |
| | comp=Z,94nm,21.8s,baz=130,slow=29 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 88.16 | 289 | T | T | 21 02 24.9 | |
| | baz=100,slow=75,SNR=351 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 88.16 | 289 | T | T | 21 02 25.5 | |
| | baz=100,slow=75,SNR=226 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 88.17 | 289 | T | T | 21 02 32.1 | |
| | baz=100,slow=75,SNR=199 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 88.18 | 290 | T | T | 21 02 38.5 | |
| | baz=101,slow=75,SNR=66 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 88.20 | 290 | T | T | 21 02 30.7 | |
| | baz=101,slow=75,SNR=74 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 88.20 | 290 | T | T | 21 02 39.7 | |
| | baz=101,slow=75,SNR=56 | | | | | | |
| PETK | Petropavlovsk- | 99.64 | 322 | LR | LR | 20 02 00.5 | |
| | comp=Z,42nm,21.0s,baz=90,slow=30 | | | | | | |
| KMBO | Kilima Mbogo | 144.21 | 105 | PKP | PKPdf | 19 32 08.5 | -0.5 |
| | 1.0nm,0.8s,baz=344,slow=7.4,SNR=2.3 | | | | | | |
| GEYT | Alibeck | 148.84 | 21 | PKPbc | PKPbc | 19 32 19.6 | -0.1 |
| | 1.5nm,0.7s,baz=14,slow=1.8,SNR=3.3 | | | | | | |
| CMAR | Chiang Mai Arr | 152.00 | 292 | PKPbc | PKPbc | 19 32 27.7 | 0.0 |
| | 2.0nm,0.8s,baz=39,slow=0.6,SNR=11 | | | | | | |

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*CSEM 11 19:22:58.7±0.3, 38˚.55N×26˚.62E, h8$^{km}$, MD2.7, Error ellipse: s-maj=8.2km s-min=5.8km az=70.0*
*ISCJB 11 19:22:59.2±0.9, 38˚.55N±0˚.05×26˚.67E±0˚.05, h12$^{km}$, Error ellipse: s-maj=7.7km s-min=5.6km az=153.7*
*DDA 11 19:22:59.1, 38˚.51N×26˚.72E, h7$^{km}$, Md2.8*
*ISK 11 19:22:59.7, 38˚.59N×26˚.77E, h6$^{km}$, MD2.7*

**ISC 11 19:22:58.5±1.1, 38˚.55N±0˚.04×26˚.66E±0˚.04, h12$^{km}$, n14, σ0$^{s}$.69/21, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URLA | Izmir | 0.20 | 196 | i P | Pg | 19 23 03.0 | +0.2 |
| URLA | | | | i S | Sg | 19 23 05.6 | -0.2 |
| URLA | Izmir | 0.20 | 196 | P | Pg | 19 23 03.0 | +0.2 |
| URLA | | | | S | Sg | 19 23 05.6 | -0.2 |
| ZEY | ˜zmir | 0.34 | 202 | P | Pg | 19 23 05.4 | +0.2 |
| ZEY | | | | S | Sg | 19 23 11.0 | +1.3 |
| BLCB | Balcova | 0.34 | 119 | ePG | Pb | 19 23 06.0 | -0.4 |
| BLCB | | | | eSG | Sb | 19 23 10.6 | -1.2 |
| BLCB | Balcova | 0.34 | 119 | ePg | Pb | 19 23 06.0 | -0.4 |
| BLCB | | | | eSg | Sb | 19 23 10.6 | -1.2 |
| IZM | Izmir | 0.49 | 108 | ePG | Pb | 19 23 08.7 | -0.4 |
| IZM | Izmir | 0.49 | 108 | ePg | Pb | 19 23 08.7 | -0.4 |
| CHOS | Chios island | 0.51 | 251 | ePG | Pn | 19 23 11.7 | +0.1 |
| DKL | Dikili | 0.55 | 20 | ePG | Pg | 19 23 09.7 | +0.4 |
| DKL | Dikili | 0.55 | 20 | ePg | Pg | 19 23 09.7 | +0.4 |
| AYDB | Zeytinkoy-Aydi | 1.14 | 122 | ePN | Pn | 19 23 21.0 | +0.7 |
| AYDB | Zeytinkoy-Aydi | 1.14 | 122 | ePn | Pn | 19 23 21.0 | +0.7 |
| AYDN | Tasoluk | 1.31 | 132 | i P | Pg | 19 23 24.5 | +0.9 |
| AYDN | | | | i S | Sg | 19 23 40.3 | -0.3 |
| AYDN | Tasoluk | 1.31 | 132 | P | Pg | 19 23 24.5 | +0.9 |
| AYDN | | | | S | Sg | 19 23 40.2 | -0.3 |

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**IDC 11 19:34:59.8±6.8, 6˚.15S×148˚.35E, h98$^{km}$±56$^{km}$, mb3.3/1, mb1 3.5/3, mb1mx3.0/37, mbtmp3.7/3, Error ellipse: s-maj=110.0km s-min=52.5km az=116.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 3.44 | 200 | P | Pn | 19 35 52.0 | +0.5 |
| | 4.2nm,0.3s,baz=37,slow=16,SNR=12 | | | | | | |
| PMG | | | | S | Sn | 19 36 31.7 | +0.3 |
| | 4.1nm,0.3s,baz=230,slow=22,SNR=5.8 | | | | | | |
| WRA | Warramunga Arr | 19.32 | 223 | P | P | 19 39 17.0 | -0.4 |
| | 0.3nm,0.3s,baz=49,slow=11,SNR=24 | | | | | | |
| ASAR | Alice Springs | 22.28 | 217 | P | P | 19 39 49.9 | +0.7 |
| | 1.1nm,0.5s,baz=51,slow=9.1,SNR=39 | | | | | | |
| TORD | Torodi Ar. Bea | 146.42 | 284 | PKPbc | PKPdf | 19 54 29.4 | +0.3 |
| | 0.2nm,0.8s,baz=55,slow=4.0,SNR=2.5 | | | | | | |

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*NIED 11 19:42:00, 33˚.90N×132˚.20E, h59$^{km}$, Mw3.8 Best double couple: M0 6.29000×10$^{14}$ NP1:φs209.00000°, δ63.00000°, λ-13.00000°. NP2:φs305.00000°, δ78.00000°, λ-153.00000°.*
*ISCJB 11 19:42:40.5±0.3, 33˚.94N±0˚.03×132˚.15E±0˚.03, h66$^{km}$±4$^{km}$, mb3.6/4, Error ellipse: s-maj=5.0km s-min=4.1km az=38.4*
*IDC 11 19:42:41.7±1.3, 33˚.94N×132˚.12E, h59$^{km}$±14$^{km}$, mb3.4/4, mb1 3.6/8, mb1mx3.4/50, mbtmp3.8/8, MS2.0/2, Ms1 2.0/2, ms1mx2.0/24, Error ellipse: s-maj=14.7km s-min=10.5km az=109.0*
*JMA 11 19:42:41.7, 33˚.94N×132˚.17E, h55$^{km}$, M3.7 Broadband fault plane solution: P waves. NP1:φs334.00000°, δ63.00000°, λ-91.00000°. NP2:φs157.00000°, δ27.00000°, λ-87.00000°. Principal axes: T Plg18.0000°, Azm65.0000°; N Plg1.0000°, Azm335.0000°; P Plg72.0000°, Azm241.0000°;*
*JMA Felt II J1.*

**ISC 11 19:42:41.6±0.8, 33˚.93N±0˚.03×132˚.16E±0˚.04, h57$^{km}$±6$^{km}$, n32, σ0$^{s}$.51/48, mb3.9/4, 5C-6D, Shikoku**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JKD | Kudamatsu | 0.27 | 297 | ⇑P | Pn | 19 42 51.2 | 0.0 |
| JKD | | | | S | Sn | 19 42 57.9 | -0.2 |
| JHM | Kurahashi | 0.37 | 56 | ⇓P | Pn | 19 42 51.7 | -0.3 |
| JHM | | | | S | Sn | 19 42 59.2 | -0.3 |
| JNA | Nagahama | 0.46 | 145 | ⇓P | Pn | 19 42 52.8 | -0.1 |
| JNA | | | | S | Sn | 19 43 01.1 | +0.1 |
| JET | Tanbara | 0.76 | 101 | ⇑P | Pn | 19 42 56.4 | 0.0 |
| JET | | | | S | Sn | 19 43 07.9 | +0.7 |
| JHT | Toyohira | 0.76 | 16 | ⇓P | Pn | 19 42 56.6 | +0.1 |
| JHT | | | | S | Sn | 19 43 07.4 | 0.0 |
| UWA2 | Uwa jima 2 | 0.81 | 151 | ⇓P | Pn | 19 42 57.3 | +0.1 |
| UWA2 | | | | S | Sn | 19 43 09.1 | +0.5 |
| JKU | Kubokawa | 0.98 | 129 | ⇓P | Pn | 19 42 59.2 | -0.1 |
| JKU | | | | S | Sn | 19 43 12.6 | +0.3 |
| JGT | Gotsu | 1.10 | 7 | ⇑P | Pn | 19 43 01.1 | +0.2 |
| JGT | | | | S | Sn | 19 43 15.6 | +0.4 |
| JTO | Tosashimizu | 1.20 | 153 | ⇓P | Pn | 19 43 02.3 | +0.1 |
| JTO | | | | eS | Sn | 19 43 18.1 | +0.7 |
| JHS | Saijyo | 1.32 | 36 | ⇑P | Pn | 19 43 04.0 | +0.1 |
| JHS | | | | S | Sn | 19 43 20.4 | -0.2 |
| JNU | Nakatsue | 1.34 | 233 | P | Pn | 19 43 04.5 | +0.3 |
| | 72nm,0.3s,baz=125,slow=3.7,SNR=1175 | | | | | | |
| JNU | | | | S | Sn | 19 43 20.5 | -0.5 |
| | 58nm,0.3s,baz=154,slow=18,SNR=38 | | | | | | |
| JNU | | | | LR | LR | 19 43 50.3 | |
| | comp=Z,66nm,20.0s,baz=103,slow=52 | | | | | | |
| JMN | Monobe | 1.45 | 98 | ⇑P | Pn | 19 43 05.1 | -0.4 |
| JMN | | | | S | Sn | 19 43 22.9 | -0.6 |
| KSTOY | TONGYEONG | 3.21 | 288 | P | Pn | 19 43 29.7 | +0.1 |
| | SNR=8.6 | | | | | | |
| KSDAG | Daegu | 3.25 | 305 | P | Pn | 19 43 30.1 | 0.0 |
| | SNR=5.6 | | | | | | |
| KSULJ | Uljin | 3.56 | 322 | P | Pn | 19 43 34.2 | -0.2 |
| | SNR=16 | | | | | | |
| KSNAH | Namhae | 3.61 | 285 | P | Pn | 19 43 35.3 | +0.3 |
| | SNR=10 | | | | | | |
| KSTBA | Taebaek | 4.12 | 322 | P | Pn | 19 43 42.4 | +0.3 |
| | SNR=5.9 | | | | | | |
| KSKWJ | Gwangju | 4.44 | 287 | P | Pn | 19 43 46.7 | +0.3 |
| | SNR=19 | | | | | | |
| KSGWJ | Gwangju-acc | 4.52 | 287 | P | Pn | 19 43 48.1 | +0.6 |
| | SNR=7.0 | | | | | | |
| KSJEU | Jeongeup | 4.58 | 291 | P | Pn | 19 43 48.9 | +0.6 |
| | SNR=33 | | | | | | |
| KSDGY | Daegwallycong | 4.70 | 324 | P | Pn | 19 43 50.8 | +0.8 |
| | SNR=18 | | | | | | |
| KSJMJ | Jumunjin | 4.81 | 326 | P | Pn | 19 43 51.6 | +0.1 |
| | SNR=20 | | | | | | |
| KSRS | Korea Array | 4.92 | 317 | P | Pn | 19 43 54.4 | +1.4 |
| | 0.4nm,0.3s,baz=126,slow=14,SNR=5.7 | | | | | | |
| KSRS | | | | S | Sn | 19 44 48.1 | -0.5 |
| | 3.9nm,0.3s,baz=138,slow=23,SNR=6.9 | | | | | | |
| KSRS | | | | LR | LR | 19 46 13.6 | |
| | comp=Z,20nm,19.1s,baz=114,slow=43 | | | | | | |
| SEHB | SEOHWA | 5.36 | 325 | P | Pn | 19 43 59.9 | +0.8 |
| | SNR=30 | | | | | | |
| MAT | Matsushiro | 5.59 | 61 | P | Pn | 19 44 03.2 | +1.0 |
| MAT | | | | S | Sn | 19 45 05.9 | +0.8 |
| MJAR | Matsushiro Arr | 5.59 | 61 | P | Pn | 19 44 03.3 | +1.0 |
| | 2.1nm,0.3s,baz=247,slow=14,SNR=31 | | | | | | |
| MJAR | | | | LR | LR | 19 45 53.1 | |
| | comp=Z,9.8nm,18.2s,baz=250,slow=34 | | | | | | |
| JHJ | Hachijo jima 2 | 6.42 | 95 | P | Pn | 19 44 13.4 | -0.1 |
| | 10nm,0.3s,baz=49,slow=20,SNR=9.8 | | | | | | |
| ASAJ | Asahikawa | 13.00 | 35 | P | Pn | 19 45 43.4 | 0.0 |
| | 0.2nm,0.3s,baz=194,slow=12,SNR=4.7 | | | | | | |
| SONM | Songino Array | 23.79 | 313 | P | P | 19 47 49.4 | +0.3 |
| | 0.2nm,0.6s,baz=124,slow=11,SNR=2.0 | | | | | | |
| SONM | | | | pP | pP | 19 48 03.7 | +0.8 |
| | 1.7nm,0.8s,baz=122,slow=10,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 53.61 | 177 | P | P | 19 51 56.9 | -0.3 |
| | 1.1nm,0.6s,baz=354,slow=8.1,SNR=19 | | | | | | |
| ASAR | Alice Springs | 57.30 | 178 | P | P | 19 52 23.6 | 0.0 |
| | 0.6nm,0.7s,baz=11,slow=13,SNR=17 | | | | | | |
| FINES | FINESS Array B | 67.88 | 330 | P | P | 19 53 32.8 | -0.9 |
| | 2.9nm,1.1s,baz=354,slow=12,SNR=3.0 | | | | | | |
| FINES | | | | pP | pP | 19 53 48.8 | -0.6 |
| | 1.6nm,0.8s,baz=112,slow=5.1,SNR=3.5 | | | | | | |

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**GUC 11 19:56:52.7±0.5, 37˚.15S×73˚.54W, h19$^{km}$±3$^{km}$, ML3.5, 2C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| COCH | Cobquecura | 1.19 | 31 | ⇑iP | Pb | 19 57 14.6 | 0.0 |
| COCH | | | | AML | AML | 19 57 40.2 | |
| | comp=E,1μm,0.4s | | | | | | |
| CCHI | Chillan | 1.30 | 65 | ⇓iP | Pn | 19 57 16.0 | +0.2 |
| CCHI | | | | i S | Sg | 19 57 34.7 | -0.1 |
| CCHI | | | | AML | AML | 19 57 40.9 | |
| | comp=E,2μm,0.5s | | | | | | |
| PSCH | Puerto Saavedr | 1.65 | 176 | eP | Pb | 19 57 22.2 | -0.3 |
| PSCH | | | | eS | Sn | 19 57 38.4 | -3.0 |
| TALC | Talca | 2.33 | 42 | ⇑iP | Pb | 19 57 32.6 | -1.6 |
| TALC | | | | eS | Sg | 19 58 05.7 | -2.1 |

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*IDC 11 20:06:42.0±0.9, 34˚.36N×80˚.92E, h0$^{km}$, mb3.6/8, mb1 3.7/12, mb1mx3.5/46, mbtmp3.6/12, ML2.8/3, MS3.0/3, Ms1 3.1/3, ms1mx2.6/30, Error ellipse: s-maj=28.6km s-min=16.8km az=57.0*
*ISCJB 11 20:06:45.6±0.8, 34˚.5N±0˚.1×81˚.0E±0˚.2, h33$^{km}$, mb3.5/8, MS2.6/1, Error ellipse: s-maj=22.7km s-min=11.6km az=153.0*

**ISC 11 20:06:47.7±1.0, 34˚.5N±0˚.1×81˚.1E±0˚.2, h35$^{km}$, n13, σ1$^{s}$.16/12, mb3.6/8, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAK | Ala-Archa | 9.67 | 329 | Pn | Pn | 20 09 06.4 | +1.9 |
| | 0.1nm,0.3s,baz=210,slow=14,SNR=2.8 | | | | | | |
| AAK | | | | Lg | Lg | 20 11 53.7 | |
| | 0.1nm,0.3s,baz=305,slow=15,SNR=5.5 | | | | | | |
| AAK | | | | LR | LR | 20 13 15.4 | |
| | comp=Z,79nm,18.6s,baz=114,slow=41 | | | | | | |
| MKAR | Makanchi Array | 12.34 | 4 | Pn | Pn | 20 09 40.0 | -0.9 |
| | 0.1nm,0.3s,baz=186,slow=12,SNR=4.2 | | | | | | |
| KURBB | Kurchatov Arra | 16.26 | 354 | Pn | Pn | 20 10 32.2 | -1.0 |
| | baz=179,slow=10,SNR=4.1 | | | | | | |
| GEYT | Alibeck | 18.89 | 287 | LR | LR | 20 19 35.5 | |
| | comp=Z,79nm,19.3s,baz=75,slow=41 | | | | | | |
| ZALV | Zalesovo Beam | 19.65 | 6 | P | P | 20 11 13.6 | +0.3 |
| | 0.1nm,0.3s,baz=192,slow=14,SNR=5.9 | | | | | | |
| CMAR | Chiang Mai Arr | 22.49 | 131 | P | P | 20 11 44.6 | +0.4 |
| | 1.3nm,0.7s,baz=309,slow=9.8,SNR=7.4 | | | | | | |
| CMAR | | | | LR | LR | 20 21 53.2 | |
| | comp=Z,21nm,19.0s,baz=90,slow=40 | | | | | | |
| SONM | Songino Array | 23.11 | 47 | P | P | 20 11 52.6 | +2.0 |
| | 0.3nm,0.9s,baz=238,slow=8.3,SNR=2.6 | | | | | | |
| FINES | FINESS Array B | 43.83 | 325 | P | P | 20 14 49.4 | -0.6 |
| | 3.6nm,1.0s,baz=76,slow=8.0,SNR=3.5 | | | | | | |
| NOA | NORSAR Array B | 50.94 | 324 | P | P | 20 15 44.5 | -0.8 |
| | 0.7nm,0.7s,baz=89,slow=7.5,SNR=3.3 | | | | | | |
| TORD | Torodi Ar. Bea | 74.05 | 275 | P | P | 20 18 19.4 | -1.0 |
| | 0.4nm,0.6s,baz=55,slow=4.2,SNR=5.6 | | | | | | |
| WRA | Warramunga Arr | 74.06 | 128 | P | P | 20 18 20.3 | 0.0 |
| | 0.6nm,0.7s,baz=324,slow=6.1,SNR=9.1 | | | | | | |
| ILAR | Eielson Array | 74.21 | 19 | P | P | 20 18 20.2 | -0.4 |
| | 0.2nm,0.7s,baz=323,slow=5.7,SNR=2.7 | | | | | | |
| ASAR | Alice Springs | 76.50 | 131 | P | P | 20 18 34.4 | +0.2 |
| | 0.4nm,0.6s,baz=314,slow=5.3,SNR=5.5 | | | | | | |

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**MEX 11 20:07:21.8±0.7, 19˚.06N×104˚.24W, h13$^{km}$±5$^{km}$, MD3.5, Near coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| R15V | | 0.27 | 65 | eP | Pg | 20 07 26.5 | -1.0 |
| R15V | | | | eS | Sg | 20 07 31.2 | -0.2 |
| EZ5V | | 0.73 | 55 | i P | Pg | 20 07 34.5 | -1.9 |
| EZ5V | | | | i S | Sg | 20 07 43.4 | -2.9 |
| CJM | Chamela | 0.88 | 300 | i P | Pg | 20 07 34.2 | -4.6 |
| CJM | | | | i S | Sg | 20 07 44.5 | -5.8 |
| MMIG | Aquila | 1.14 | 132 | i P | Pb | 20 07 39.9 | -3.5 |
| MMIG | | | | i S | Sb | 20 07 53.3 | -4.9 |

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*ISCJB 11 20:14:59.7±0.7, 3˚.30N±0˚.09×122˚.62E±0˚.10, h552$^{km}$, mb3.6/4, Error ellipse: s-maj=14.7km s-min=9.7km az=135.6*
*AUST 11 20:15:00.2±1.0, 3˚.20N×122˚.55E, h548$^{km}$, Error ellipse: s-maj=2.3km s-min=1.4km az=17.0*
*IDC 11 20:15:01.6±1.8, 3˚.22N×122˚.64E, h565$^{km}$±23$^{km}$, mb2.9/4, mb1 3.4/7, mb1mx2.8/40, mbtmp4.3/7, Error ellipse: s-maj=30.0km s-min=12.1km az=64.0*

**ISC 11 20:15:00.5±0.8, 3˚.2N±0˚.1×122˚.6E±0˚.1, h552$^{km}$, n19, σ0$^{s}$.76/21, mb3.6/4, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LUWI | Luwuk | 4.26 | 177 | P | P | 20 16 23.7 | -0.8 |
| | baz=4.2,SNR=3.4 | | | | | | |
| KKM | Kota Kinabalu | 6.93 | 294 | P | P | 20 16 47.7 | -0.4 |
| | baz=6.9,SNR=5.8 | | | | | | |
| FAKI | Fak Fak | 11.43 | 122 | P | P | 20 17 33.3 | 0.0 |
| | baz=12,SNR=5.3 | | | | | | |
| SOEI | Soe | 13.02 | 173 | P | P | 20 17 49.7 | 0.0 |
| | baz=13,SNR=9.9 | | | | | | |
| BATI | Baumata | 13.40 | 175 | P | P | 20 17 54.1 | +0.5 |
| | 8.7nm,0.3s,baz=16,slow=1.5,SNR=16 | | | | | | |
| JAGI | Jajag, Banyuwa | 14.35 | 216 | P | P | 20 18 03.9 | +0.5 |
| | baz=14,SNR=7.8 | | | | | | |
| LEM | Lembang | 17.98 | 236 | P | P | 20 18 39.9 | +1.5 |
| | 1.2nm,0.3s,baz=157,slow=23,SNR=4.1 | | | | | | |
| MTN | Manton Dam | 18.09 | 152 | P | P | 20 18 40.3 | +1.1 |
| | baz=18,SNR=7.8 | | | | | | |
| CISI | Cisompet, Garu | 18.23 | 234 | P | P | 20 18 39.8 | -0.7 |
| | baz=18,SNR=4.5 | | | | | | |
| KDU | Kakadu | 18.62 | 148 | P | P | 20 18 43.8 | -0.3 |
| | baz=19,SNR=6.8 | | | | | | |
| JAY | Jayapura | 18.99 | 107 | P | P | 20 18 48.6 | +1.1 |
| | 0.7nm,0.3s,baz=56,slow=11,SNR=6.2 | | | | | | |
| KNRA | Kununurra | 19.76 | 162 | P | P | 20 18 55.0 | +0.6 |
| | baz=20,SNR=13 | | | | | | |
| WRA | Warramunga Arr | 25.77 | 154 | P | P | 20 19 47.7 | -0.3 |
| | 3.3nm,0.3s,baz=337,slow=9.5,SNR=114 | | | | | | |
| WRA | | | | ScP | ScP | 20 25 46.2 | -0.6 |
| | 0.2nm,0.8s,baz=339,slow=3.2,SNR=5.9 | | | | | | |
| WRKA | Warakurna | 28.65 | 169 | P | P | 20 20 13.9 | +0.6 |
| | baz=29,SNR=14 | | | | | | |
| ASAR | Alice Springs | 28.93 | 158 | P | P | 20 20 15.9 | +0.3 |
| | 1.7nm,0.5s,baz=338,slow=7.4,SNR=43 | | | | | | |
| ASAR | | | | S | S | 20 24 26.9 | -1.2 |
| | 0.6nm,0.8s,baz=336,slow=15,SNR=4.6 | | | | | | |
| QIS | Mount Isa | 28.95 | 145 | P | P | 20 20 16.4 | +0.5 |
| | baz=29,SNR=11 | | | | | | |
| SONM | Songino Array | 46.57 | 345 | P | P | 20 22 38.8 | -0.2 |
| | 0.5nm,0.6s,baz=163,slow=8.4,SNR=5.4 | | | | | | |
| MKAR | Makanchi Array | 55.67 | 327 | P | P | 20 23 45.3 | +0.5 |
| | 0.4nm,0.4s,baz=127,slow=8.1,SNR=4.2 | | | | | | |
| TORD | Torodi Ar. Bea | 119.12 | 287 | PKP | PKPdf | 20 32 47.1 | -0.9 |
| | 0.1nm,0.4s,baz=68,slow=0.6,SNR=6.1 | | | | | | |

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*SKHL 11 20:18:52.7±0.6, 44˚.72N×150˚.43E, h41$^{km}$±6$^{km}$, mb4.2/2*
*JMA 11 20:18:53.9±0.4, 44˚.88N×150˚.13E, h134$^{km}$, M3.5*

**ISC 11 20:18:54.1±4.3, 44˚.7N±0˚.1×150˚.3E±0˚.2, h39$^{km}$, n19, σ1$^{s}$.99/28, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KUR | Kuril'sk | 1.79 | 288 | eP | Pn | 20 19 21.8 | -0.7 |
| KUR | | | | AMB | AMB | 20 19 22.6 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 35nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 20 19 22.6 | |
| | 27nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 20 19 22.6 | |
| | 84nm,0.4s | | | | | | |
| KUR | | | | *e*S | **Sn** | **20 19 43.5** | **-0.6** |
| KUR | | | | A | A | 20 19 45.4 | |
| | 351nm,0.4s | | | | | | |
| KUR | | | | A | A | 20 19 45.4 | |
| | 364nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.61** | **253** | *e*P | **Pn** | **20 19 35.0** | **+1.3** |
| SHO | | | | *e*S | **Sn** | **20 20 07.3** | **+3.2** |
| SHO | | | | A | A | 20 20 10.0 | |
| | 200nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.24** | **260** | *e*P | **Pn** | **20 19 44.0** | **+1.7** |
| YUK | | | | AMB | AMB | 20 19 49.5 | |
| | 17nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 20 19 49.5 | |
| | 18nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 20 19 49.5 | |
| | 39nm,0.4s | | | | | | |
| YUK | | | | *e*S | **Sn** | **20 20 22.0** | **+2.4** |
| YUK | | | | A | A | 20 20 28.5 | |
| | 116nm,0.6s | | | | | | |
| YUK | | | | A | A | 20 20 28.5 | |
| | 64nm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **3.53** | **249** | P | **Pn** | **20 19 47.7** | **+1.3** |
| NEM2 | | | | *e*S | **Sn** | **20 20 29.1** | **+2.3** |
| **JRA** | **Rausu** | **3.78** | **260** | P | **Pn** | **20 19 50.8** | **+1.0** |
| **JNK** | **Nakash** | **4.15** | **256** | P | **Pn** | **20 19 55.9** | **+1.0** |
| **JAK** | **Akkeshi** | **4.38** | **249** | P | **Pn** | **20 19 58.9** | **+0.9** |
| JAK | | | | *e*S | **Sn** | **20 20 49.1** | **+1.3** |
| **JAR** | **Ashorobuto** | **4.90** | **256** | P | **Pn** | **20 20 06.2** | **+1.0** |
| **JOB** | **Onbets** | **5.00** | **251** | P | **Pn** | **20 20 07.6** | **+1.1** |
| JOB | | | | *e*S | **Sn** | **20 21 04.5** | **+1.6** |
| **JCH** | **Churui** | **5.43** | **250** | P | **Pn** | **20 20 12.9** | **+0.4** |
| JCH | | | | *e*S | **Sn** | **20 21 13.5** | **-0.2** |
| **MYR** | **Moyori** | **5.63** | **247** | *e*P | **Pn** | **20 20 15.8** | **+0.6** |
| MYR | | | | *e*S | **Sn** | **20 21 18.4** | **-0.1** |
| **YSS** | **Yuzh-Sakhalins** | **5.72** | **296** | *e*rx | rx | 20 20 09.0 | |
| **JNBK** | **Urakawa-nobuka** | **5.98** | **249** | P | **Pn** | **20 20 20.6** | **+0.6** |
| JNBK | | | | *e*S | **Sn** | **20 21 26.4** | **-0.9** |
| **JNB** | **Noboribetsu** | **7.07** | **255** | *e*S | **Sn** | **20 21 51.3** | **-2.7** |
| **JKB** | **Kayabe** | **7.30** | **251** | P | **Pn** | **20 20 37.4** | **-0.8** |
| JKB | | | | *e*S | **Sn** | **20 21 55.9** | **-3.9** |
| **JANG** | **Nango** | **7.78** | **239** | *e*S | **Sn** | **20 22 08.9** | **-2.5** |
| **JTM** | **Tenmabayashi** | **7.82** | **243** | *e*S | **Sn** | **20 22 09.0** | **-3.5** |
| **JTH** | **Tanohata** | **7.84** | **236** | *e*S | **Sn** | **20 22 11.1** | **-1.8** |
| **JSR** | **Shiriuchi** | **7.88** | **250** | *e*S | **Sn** | **20 22 10.0** | **-3.8** |

**MEX 11 20:48:48.9±0.4, 15°.35N×92°.37W, h155km±4km, MD3.8, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.90** | **294** | *e*P | Pn | 20 49 11.9 | -1.3 |
| PCIG | | | | *e*S | Sn | 20 49 29.8 | -2.1 |
| **CCIG** | **Comitan** | **0.96** | **13** | *e*P | Pn | 20 49 12.8 | -1.2 |
| CCIG | | | | *i* S | Sn | 20 49 30.9 | -2.5 |

**IDC 11 21:04:23.8±3.1, 33°.83S×178°.73W, h0km, mb3.7/2, mb1 4.0/3, mb1mx3.6/23, mbtmp3.8/3, ML3.8/1, Error ellipse: s-maj=71.8km s-min=36.7km az=119.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **5.55** | **216** | Pn | Pn | 21 05 48.8 | +1.1 |
| | 3.2nm,0.3s,baz=44,slow=0.8,SNR=8.3 | | | | | | |
| URZ | | | | Sn | Sn | 21 06 51.5 | -0.7 |
| | 4.7nm,0.3s,baz=152,slow=22,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **42.43** | **271** | P | P | 21 12 20.1 | -0.4 |
| | 0.6nm,0.6s,baz=112,slow=7.7,SNR=6.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.73** | **276** | P | P | 21 12 30.9 | -0.1 |
| | 0.9nm,0.7s,baz=118,slow=7.4,SNR=12 | | | | | | |
| **FINES** | **FINESS Array B** | **148.11** | **338** | PKPbc | PKPbc | 21 24 10.0 | -0.7 |
| | 4.3nm,1.1s,baz=134,slow=4.0,SNR=5.0 | | | | | | |

*ISCJB **11** 21:08:41.0±0.6, 27°.27N±0°.06×66°.83E±0°.06, h8km, mb3.8/16, MS3.1/4, Error ellipse: s-maj=8.8km s-min=6.7km az=27.4*

*IDC **11** 21:08:41.4±0.9, 27°.19N×66°.58E, h0km, mb3.9/16, mb1 4.0/17, mb1mx3.7/47, mbtmp3.8/17, ML2.9/1, MS3.1/5, Ms1 3.2/5, ms1mx2.7/50, Error ellipse: s-maj=21.9km s-min=15.6km az=32.0*

**ISC 11 21:08:42.8±0.8, 27°.27N±0°.09×66°.75E±0°.08, h8km, n34, σ1s.48/35, mb3.8/16, MS3.0/4, 1C, Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THW** | **Thamme Wali** | **7.00** | **37** | ⇑P | **Pn** | **21 10 27.1** | **+1.4** |
| **CEP** | **Cherat** | **7.90** | **33** | P | **Pn** | **21 10 39.5** | **+1.4** |
| CEP | | | | S | **Sn** | **21 12 07.0** | **-0.8** |
| **CHCP** | **Chirah Chowk** | **8.49** | **40** | P | **Pn** | **21 10 47.2** | **+1.1** |
| **GEYT** | **Alibeck** | **12.87** | **328** | Pn | **Pn** | **21 11 47.3** | **+1.1** |
| | 0.1nm,0.3s,baz=147,slow=8.6,SNR=2.0 | | | | | | |
| **KOLN** | **Koldanda** | **14.96** | **84** | *e*P | **Pn** | **21 12 12.6** | **-2.2** |
| **DANN** | **Dangsing** | **15.09** | **82** | *e*P | **Pn** | **21 12 15.4** | **-1.3** |
| **GKN** | **Gorkha** | **15.87** | **83** | *e*P | **Pn** | **21 12 25.7** | **-1.1** |
| | 17nm,0.7s | | | | | | |
| **DMN** | **Daman** | **16.30** | **85** | *e*P | **Pn** | **21 12 29.9** | **-2.5** |
| **KKN** | **Kakani** | **16.44** | **84** | *e*P | **Pn** | **21 12 32.3** | **-1.9** |
| **PKIN** | **Phulchoki** | **16.56** | **85** | *e*P | **Pn** | **21 12 33.2** | **-2.5** |
| | 29nm,1.2s | | | | | | |
| **PKI** | **Pulchoki** | **16.57** | **85** | *e*P | **Pn** | **21 12 33.4** | **-2.5** |
| | 11nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **16.57** | **20** | Pn | **Pn** | **21 12 33.8** | **-2.0** |
| | 0.2nm,0.3s,baz=181,slow=8.7,SNR=3.4 | | | | | | |
| AAK | | | | Sn | **Sn** | **21 15 38.2** | **-1.7** |
| | 0.1nm,0.3s,baz=335,slow=19,SNR=2.1 | | | | | | |
| AAK | | | | LR | LR | 21 20 04.7 | |
| | comp=Z,56nm,21.6s,baz=210,slow=41 | | | | | | |
| **GUN** | **Gumba** | **16.97** | **83** | *e*P | **Pn** | **21 12 38.9** | **-2.1** |
| | 76nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **17.67** | **86** | *e*P | **Pn** | **21 12 48.0** | **-1.7** |
| | 22nm,0.6s | | | | | | |
| **ODAN** | **Odare** | **18.39** | **87** | *e*P | **P** | **21 12 57.8** | **-0.7** |
| **TAPN** | **Taplejung** | **18.62** | **85** | *e*P | **Pn** | **21 13 00.7** | **-0.8** |
| | 13nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **23.02** | **28** | P | **P** | **21 13 47.8** | **-0.5** |
| | 2.2nm,0.5s,baz=214,slow=9.2,SNR=21 | | | | | | |
| **AKTO** | **Aktyubinsk** | **24.07** | **346** | P | **P** | **21 13 59.8** | **+1.2** |
| | 0.5nm,0.5s,baz=156,slow=12,SNR=2.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.99** | **18** | P | **P** | **21 14 07.5** | **+0.7** |
| | 2.5nm,0.2s,baz=212,slow=8.7,SNR=9.0 | | | | | | |
| **KBZ** | **Khabaz** | **25.30** | **317** | P | **P** | **21 14 09.9** | **+0.2** |
| | 3.3nm,1.1s,baz=127,slow=14,SNR=2.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **25.87** | **5** | P | **P** | **21 14 15.5** | **+0.6** |
| | 0.6nm,0.5s,baz=183,slow=8.2,SNR=6.1 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **27.65** | **290** | LR | LR | 21 27 48.3 | |
| | comp=Z,35nm,19.1s,baz=195,slow=42 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.79** | **22** | P | **P** | **21 14 50.4** | **+0.4** |
| | 1.0nm,0.4s,baz=239,slow=9.6,SNR=7.1 | | | | | | |
| ZALV | | | | LR | LR | 21 28 28.5 | |
| | comp=Z,56nm,18.6s,baz=252,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.86** | **100** | P | **P** | **21 15 01.8** | **+2.0** |
| | 0.7nm,0.8s,baz=290,slow=11,SNR=3.9 | | | | | | |
| CMAR | | | | LR | LR | 21 30 41.7 | |
| | comp=Z,27nm,18.0s,baz=255,slow=43 | | | | | | |
| **SONM** | **Songino Array** | **37.00** | **46** | P | **P** | **21 15 55.2** | **+2.2** |
| | 0.8nm,0.7s,baz=252,slow=8.3,SNR=8.6 | | | | | | |
| SONM | | | | LR | LR | 21 34 36.5 | |
| | comp=Z,32nm,19.6s,baz=318,slow=42 | | | | | | |
| **FINES** | **FINESS Array B** | **43.61** | **333** | P | **P** | **21 16 46.9** | **-0.4** |
| | 4.5nm,1.1s,baz=123,slow=7.0,SNR=9.3 | | | | | | |
| **GERES** | **GERESS Array B** | **45.92** | **313** | P | **P** | **21 17 05.1** | **-1.1** |
| | 0.4nm,0.5s,baz=92,slow=11,SNR=3.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **48.54** | **342** | P | **P** | **21 17 25.6** | **-0.5** |
| | 4.0nm,0.9s,baz=129,slow=5.4,SNR=5.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **49.96** | **328** | P | **P** | **21 17 36.6** | **-0.6** |
| | 0.6nm,0.8s,baz=116,slow=7.4,SNR=2.8 | | | | | | |
| **KSRS** | **Korea Array** | **51.86** | **62** | P | **P** | **21 17 52.8** | **+1.0** |
| | 2.0nm,0.8s,baz=270,slow=7.4,SNR=7.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **62.05** | **271** | P | **P** | **21 19 02.8** | **-1.5** |
| | 0.3nm,0.6s,baz=58,slow=6.2,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.52** | **118** | P | **P** | **21 20 55.8** | **-0.2** |
| | 1.3nm,0.9s,baz=314,slow=4.6,SNR=8.6 | | | | | | |
| **ASAR** | **Alice Springs** | **82.24** | **121** | P | **P** | **21 21 05.3** | **+0.3** |
| | 0.3nm,0.6s,baz=306,slow=5.2,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **122.97** | **350** | PKP | **PKPdf** | **21 27 40.4** | **0.0** |
| | 0.2nm,0.7s,baz=120,slow=3.6,SNR=3.1 | | | | | | |

*DDA **11** 21:16:13.9, 37°.89N×27°.28E, h7km, Md3.0*

*ISK **11** 21:16:14.2, 37°.92N×27°.31E, h8km, MD3.0*

*CSEM **11** 21:16:14.3±0.1, 37°.92N×27°.31E, h2km, MD3.0, Error ellipse: s-maj=3.8km s-min=3.2km az=67.0*

*ATH **11** 21:16:15.2, 37°.90N×27°.27E, h9km±7km, MD3.4/7*

*THE **11** 21:16:17.1, 37°.87N×27°.09E, h0km±1km, ML2.8/3, Error ellipse: s-maj=2.1km s-min=1.1km az=93.0*

**ISC 11 21:16:14.3±0.9, 37°.90N±0°.02×27°.29E±0°.02, h8km±8km, n64, σ0s.78/91, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GCAM** | **G?zelcaml?** | **0.21** | **193** | *i* P | **Pg** | **21 16 18.4** | **-0.2** |
| GCAM | | | | *i* S | **Sg** | **21 16 21.4** | **0.0** |
| **GCAM** | **G?zelcaml?** | **0.21** | **193** | P | **Pg** | **21 16 18.4** | **-0.2** |
| GCAM | | | | S | **Sg** | **21 16 21.4** | **0.0** |
| **SMG** | **Samos** | **0.41** | **242** | *e*PG | **Pg** | **21 16 22.1** | **-0.2** |
| SMG | | | | *e*SB | **Sg** | **21 16 28.8** | **+1.1** |
| **SMG** | **Samos** | **0.41** | **242** | P | **Pg** | **21 16 22.0** | **-0.2** |
| SMG | | | | S | **Sg** | **21 16 26.5** | **-1.2** |
| **SMG** | **Samos** | **0.41** | **242** | *e*Pg | **Pg** | **21 16 22.1** | **-0.2** |
| SMG | | | | S | **Sg** | **21 16 26.5** | **-1.2** |
| SMG | | | | *e*Sb | **Sg** | **21 16 28.8** | **+1.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.48** | **85** | PG | **Pg** | **21 16 23.5** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.48** | **85** | *i* Pg | **Pg** | **21 16 23.5** | **-0.1** |
| **IZM** | **Izmir** | **0.49** | **357** | *e*PG | **Pg** | **21 16 24.0** | **0.0** |
| IZM | | | | *e*SG | **Sg** | **21 16 31.1** | **+0.6** |
| **IZM** | **Izmir** | **0.49** | **357** | *e*Pg | **Pg** | **21 16 24.0** | **0.0** |
| IZM | | | | *e*Sg | **Sg** | **21 16 31.1** | **+0.6** |
| **BLCB** | **Balcova** | **0.52** | **338** | *e*PG | **Pg** | **21 16 24.6** | **+0.2** |
| **BLCB** | **Balcova** | **0.52** | **338** | *e*Pg | **Pg** | **21 16 24.6** | **+0.2** |
| **AYDN** | **Tasoluk** | **0.53** | **117** | *i* P | **Pb** | **21 16 26.2** | **+0.4** |
| AYDN | | | | *i* S | **Sb** | **21 16 32.9** | **-0.7** |
| **AYDN** | **Tasoluk** | **0.53** | **117** | P | **Pb** | **21 16 26.2** | **+0.4** |
| AYDN | | | | S | **Sb** | **21 16 32.9** | **-0.7** |
| **URLA** | **Izmir** | **0.71** | **310** | *i* P | **Pg** | **21 16 28.2** | **+0.1** |
| URLA | | | | *i* S | **Sb** | **21 16 38.5** | **-0.5** |
| **URLA** | **Izmir** | **0.71** | **310** | P | **Pg** | **21 16 28.2** | **+0.1** |
| URLA | | | | S | **Sb** | **21 16 38.5** | **-0.5** |
| **BODT** | **Bodrum** | **0.84** | **179** | *e*PG | **Pb** | **21 16 30.9** | **-0.2** |
| **BODT** | **Bodrum** | **0.84** | **179** | *e*Pg | **Pb** | **21 16 30.9** | **-0.2** |
| **BDRM** | **Kayabasi** | **0.84** | **172** | *i* P | **Pg** | **21 16 29.7** | **-0.9** |
| BDRM | | | | *i* S | **Sb** | **21 16 42.5** | **-0.3** |
| **BDRM** | **Kayabasi** | **0.84** | **172** | P | **Pg** | **21 16 29.6** | **-0.9** |
| BDRM | | | | S | **Sb** | **21 16 42.5** | **-0.3** |
| **AKS** | **Akhisar** | **1.06** | **23** | *e*PG | **Pg** | **21 16 34.6** | **-0.1** |
| **AKS** | **Akhisar** | **1.06** | **23** | *e*Pg | **Pg** | **21 16 34.6** | **-0.1** |
| **CHOS** | **Chios island** | **1.09** | **297** | *e*PN | **Pn** | **21 16 35.9** | **0.0** |
| **CHOS** | **Chios island** | **1.09** | **297** | *e*PG | **Pg** | **21 16 35.2** | **0.0** |
| CHOS | | | | *e*SB | **Sn** | **21 16 51.0** | **-0.2** |
| **CHOS** | **Chios island** | **1.09** | **297** | P | **Pg** | **21 16 35.2** | **0.0** |
| CHOS | | | | S | **Sn** | **21 16 51.0** | **-0.2** |
| **CHOS** | **Chios island** | **1.09** | **297** | P | **Pg** | **21 16 35.2** | **0.0** |
| **CHOS** | **Chios island** | **1.09** | **297** | *e*Pn | **Pn** | **21 16 35.9** | **0.0** |
| CHOS | | | | S | **Sn** | **21 16 51.0** | **-0.2** |
| **YER** | **Yerkesik** | **1.10** | **134** | *e*PN | **Pn** | **21 16 36.2** | **+0.1** |
| **YER** | **Yerkesik** | **1.10** | **134** | *e*Pn | **Pn** | **21 16 36.2** | **+0.1** |
| **DKL** | **Dikili** | **1.21** | **346** | *e*PN | **Pb** | **21 16 36.9** | **-0.5** |
| **DKL** | **Dikili** | **1.21** | **346** | *e*Pn | **Pb** | **21 16 36.9** | **-0.5** |
| **KULA** | **Kula-Manisa** | **1.24** | **60** | *e*PN | **Pn** | **21 16 37.7** | **-0.3** |
| **KULA** | **Kula-Manisa** | **1.24** | **60** | *e*Pn | **Pn** | **21 16 37.7** | **-0.3** |
| **NISR** | **Nisiros** | **1.29** | **186** | *e*PB | **Pg** | **21 16 40.4** | **+1.2** |
| **NISR** | **Nisiros** | **1.29** | **186** | P | **Pg** | **21 16 40.5** | **+1.2** |
| **NISR** | **Nisiros** | **1.29** | **186** | *e*Pb | **Pg** | **21 16 40.4** | **+1.2** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **184** | *e*PN | **Pg** | **21 16 39.5** | **+0.2** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **184** | *e*PB | **Pg** | **21 16 39.7** | **+0.4** |
| NIS1 | | | | *e*SB | **Sn** | **21 16 58.1** | **+1.7** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **184** | P | **Pg** | **21 16 40.1** | **+0.8** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **184** | *e*Pn | **Pg** | **21 16 39.5** | **+0.2** |
| **NIS1** | **Nisyros Isl.** | **1.30** | **184** | P | **Pg** | **21 16 40.1** | **+0.8** |
| NIS1 | | | | *e*Sb | **Sn** | **21 16 58.1** | **+1.7** |
| **DENT** | **Denizli** | **1.39** | **96** | *e*PN | **Pg** | **21 16 41.2** | **+0.2** |
| **DENT** | **Denizli** | **1.39** | **96** | *e*Pn | **Pg** | **21 16 41.2** | **+0.2** |
| **TURN** | **Turunc** | **1.47** | **134** | *i* P | **Pn** | **21 16 38.9** | **-2.1** |
| **TURN** | **Turunc** | **1.47** | **134** | P | **Pn** | **21 16 38.9** | **-2.1** |
| TURN | | | | S | **Sn** | **21 16 56.9** | **-3.5** |
| **DALY** | **Dalyan (Mu˜la** | **1.53** | **135** | *e*PN | **Pn** | **21 16 42.4** | **+0.4** |
| **DALY** | **Dalyan (Mu˜la** | **1.53** | **135** | *e*Pn | **Pn** | **21 16 42.4** | **+0.4** |
| **PRK** | **Paraskevi** | **1.56** | **330** | *e*PB | **Pg** | **21 16 44.4** | **+0.1** |
| **PRK** | **Paraskevi** | **1.56** | **330** | P | **Pg** | **21 16 44.2** | **-0.1** |
| PRK | | | | S | **Sg** | **21 17 05.1** | **+0.6** |
| **PRK** | **Paraskevi** | **1.56** | **330** | *e*Pb | **Pg** | **21 16 44.4** | **+0.1** |
| PRK | | | | S | **Sg** | **21 17 05.1** | **+0.6** |
| **APE** | **Apeiranthos** | **1.63** | **240** | *e*PG | **Pg** | **21 16 45.2** | **-0.4** |
| APE | | | | *e*SB | **Sg** | **21 17 07.5** | **+0.8** |
| **APE** | **Apeiranthos** | **1.63** | **240** | P | **Pb** | **21 16 44.7** | **+0.1** |
| **APE** | **Apeiranthos** | **1.63** | **240** | P | **Pb** | **21 16 44.7** | **+0.1** |
| **APE** | **Apeiranthos** | **1.63** | **240** | *e*Pg | **Pg** | **21 16 45.2** | **-0.4** |
| APE | | | | *e*Sb | **Sg** | **21 17 07.5** | **+0.8** |
| **BALB** | **Balikesir** | **1.79** | **15** | *e*PN | **Pn** | **21 16 45.9** | **+0.3** |
| **BALB** | **Balikesir** | **1.79** | **15** | *e*Pn | **Pn** | **21 16 45.9** | **+0.3** |
| **KHAL** | **Karahalli** | **1.80** | **74** | *i* P | **Pn** | **21 16 45.9** | **+0.2** |
| **KHAL** | **Karahalli** | **1.80** | **74** | P | **Pn** | **21 16 45.9** | **+0.2** |
| KHAL | | | | S | **Sg** | **21 17 12.2** | **+0.1** |
| **ARG** | **Arkhangelos** | **1.81** | **158** | *e*PN | **Pg** | **21 16 48.9** | **-0.2** |
| **ARG** | **Arkhangelos** | **1.81** | **158** | P | **Pg** | **21 16 48.9** | **-0.2** |
| ARG | | | | S | **Sg** | **21 17 14.1** | **+1.6** |
| **ARG** | **Arkhangelos** | **1.81** | **158** | P | **Pg** | **21 16 48.9** | **-0.2** |
| ARG | | | | S | **Sg** | **21 17 14.1** | **+1.6** |
| **FETY** | **Fethiye** | **1.91** | **131** | *e*PN | **Pn** | **21 16 47.5** | **+0.3** |
| **FETY** | **Fethiye** | **1.91** | **131** | *e*Pn | **Pn** | **21 16 47.5** | **+0.3** |
| **DST** | **Dursunbey** | **1.99** | **31** | *e*PN | **Pn** | **21 16 48.9** | **+0.6** |
| **DST** | **Dursunbey** | **1.99** | **31** | *e*Pn | **Pn** | **21 16 48.9** | **+0.6** |

**NNC 11 21:22:20.9±3.3, 37°.28N×71°.14E, h0km, mb3.5, mpv3.1, 6C-3D, Error ellipse: s-maj=27.9km s-min=10.7km az=170.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.38** | **310** | ⇑P | Pn | 21 23 01.9 | +0.6 |
| | 4.7nm,0.3s | | | | | | |
| DZET | | | | ⇑S | Sn | 21 23 32.8 | +1.5 |
| | 15nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.29** | **33** | ⇑P | Pn | 21 23 13.8 | -0.2 |
| | 2.2nm,0.3s | | | | | | |
| SFK | | | | ⇑S | Sn | 21 23 57.2 | +3.0 |
| | 5.3nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **5.30** | **11** | ⇑P | Pn | 21 23 40.6 | -0.9 |
| | 0.9nm,0.5s | | | | | | |
| MNAS | | | | ⇓S | Sn | 21 24 43.7 | +0.3 |
| | 9.4nm,1.0s | | | | | | |
| **KK31** | **Karatay Array** | **5.83** | **355** | P | Pn | 21 23 46.8 | -1.9 |
| | 0.6nm,0.4s,baz=174,slow=11,SNR=28 | | | | | | |
| KK31 | | | | ⇓S | Sn | 21 24 55.6 | -0.7 |
| | 1.4nm,0.3s,baz=182,slow=20,SNR=25 | | | | | | |
| **AAK** | **Ala-Archa** | **5.93** | **25** | ⇓P | Pn | 21 23 47.6 | -2.6 |
| | 1.7nm,0.4s | | | | | | |
| AAK | | | | ⇑S | Sn | 21 24 59.1 | 0.0 |
| | 3.8nm,0.9s | | | | | | |
| **AB31** | **Akbulak array** | **14.46** | **329** | P | Pn | 21 25 43.1 | -3.6 |
| | 0.2nm,0.3s,baz=153,slow=13,SNR=5.1 | | | | | | |

*ISCJB **11** 21:28:34.6±0.5, 35°.24N±0°.04×140°.21E±0°.05, h64km±4km, mb3.5/4, Error ellipse: s-maj=7.8km s-min=5.5km az=44.7*

*JMA **11** 21:28:34.8±0.1, 35°.32N×140°.26E, h58km±2km, M2.6*

*IDC **11** 21:28:35.0±0.6, 35°.17N×140°.19E, h45km±7km, mb3.3/4, mb1 3.4/6, mb1mx3.1/53, mbtmp3.4/6, ML2.8/2, Error ellipse: s-maj=10.4km s-min=5.9km az=83.0*

**ISC 11 21:28:35.9±0.9, 35°.24N±0°.05×140°.19E±0°.05, h58km±6km, n23, σ0s.94/30, mb3.5/4, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I30JP** | **ISUMI INFRASON** | **0.12** | **57** | P | **Pn** | **21 28 43.5** | **-1.1** |
| | baz=240,slow=109 | | | | | | |
| I30JP | | | | S | **Sn** | **21 28 50.3** | **-0.7** |
| | baz=158,slow=48 | | | | | | |
| **KTR** | **Katsuura** | **0.14** | **134** | P | **Pn** | **21 28 43.9** | **-0.9** |
| KTR | | | | S | **Sn** | **21 28 50.4** | **-0.7** |
| **JCN** | **Nagara** | **0.17** | **2** | P | **Pn** | **21 28 44.4** | **-0.5** |
| JCN | | | | *e*S | **Sn** | **21 28 50.7** | **-0.8** |
| **BSO4** | **Boso 4** | **0.28** | **155** | P | **Pn** | **21 28 45.3** | **-0.2** |
| BSO4 | | | | S | **Sn** | **21 28 53.5** | **+1.1** |
| **TATJ** | **Tateyama 2** | **0.33** | **230** | P | **Pn** | **21 28 46.5** | **+0.6** |
| TATJ | | | | S | **Sn** | **21 28 54.8** | **+1.6** |
| **BSO3** | **Boso 3** | **0.51** | **149** | P | **Pn** | **21 28 47.3** | **-0.2** |
| BSO3 | | | | S | **Sn** | **21 28 57.3** | **+1.3** |
| **JIM2** | **Oshima 3** | **0.82** | **230** | P | **Pn** | **21 28 51.0** | **-0.5** |
| JIM2 | | | | S | **Sn** | **21 29 02.7** | **-0.2** |
| **BSO1** | **Boso 1** | **0.87** | **132** | P | **Pn** | **21 28 51.1** | **-0.5** |
| BSO1 | | | | S | **Sn** | **21 29 03.3** | **0.0** |
| **JOD2** | **Odawara 2** | **0.90** | **272** | P | **Pn** | **21 28 51.9** | **-0.7** |
| JOD2 | | | | S | **Sn** | **21 29 04.0** | **-0.9** |
| **JIZS** | **Izushimoda** | **1.20** | **244** | P | **Pn** | **21 28 56.3** | **-0.2** |
| JIZS | | | | S | **Sn** | **21 29 11.7** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **2.07** | **309** | P | **Pn** | **21 29 07.7** | **-0.5** |
| | 2.1nm,0.3s,baz=142,slow=17,SNR=16 | | | | | | |
| MJAR | | | | S | **Sn** | **21 29 32.7** | **-0.2** |
| | 4.8nm,0.3s,baz=168,slow=28,SNR=10 | | | | | | |
| **MAT** | **Matsushiro** | **2.07** | **309** | P | **Pn** | **21 29 08.5** | **+0.3** |
| MAT | | | | S | **Sn** | **21 29 31.9** | **-1.0** |
| **JHJ** | **Hachijo jima 2** | **2.15** | **189** | P | **Pn** | **21 29 08.1** | **-1.2** |
| | 10nm,0.3s,baz=36,slow=17,SNR=10.0 | | | | | | |
| JHJ | | | | S | **Sn** | **21 29 32.5** | **-2.2** |
| | 33nm,0.3s,baz=35,slow=22,SNR=15 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.16** | **116** | T | T | 22 03 41.3 | |
| | baz=309,slow=75,SNR=9.0 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.17** | **116** | T | T | 22 03 40.7 | |
| | baz=309,slow=75,SNR=8.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.18** | **116** | T | T | 22 03 40.0 | |
| | baz=309,slow=75,SNR=7.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.80** | **118** | T | T | 22 04 30.7 | |
| | baz=311,slow=75,SNR=4.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.80** | **118** | T | T | 22 04 24.8 | |
| | baz=311,slow=75,SNR=5.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.81** | **118** | T | T | 22 04 29.0 | |
| | baz=311,slow=75,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.26** | **303** | P | **P** | **21 36 39.3** | **-0.2** |
| | 0.3nm,0.6s,baz=97,slow=6.8,SNR=3.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.34** | **309** | P | **P** | **21 36 55.6** | **-0.3** |
| | 0.1nm,0.4s,baz=87,slow=7.3,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.16** | **187** | P | **P** | **21 38 02.2** | **-0.3** |
| | 0.4nm,0.5s,baz=3.8,slow=7.5,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **69.93** | **332** | P | **P** | **21 39 42.3** | **+1.8** |
| | 2.4nm,0.9s,baz=76,slow=5.9,SNR=7.3 | | | | | | |

**WEL 11 21:59:51.2±0.8, 46°.07S×165°.74E, h12km, ML3.5/9, 1D, Error ellipse: s-maj=8.6km s-min=3.7km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **0.66** | **99** | ⇓P* | Pg | 22 00 04.0 | -0.1 |
| PYZ | | | | S* | Sg | 22 00 13.1 | +0.2 |
| **DCZ** | **Deep Cove** | **1.16** | **60** | P* | Pb | 22 00 12.0 | -1.1 |
| DCZ | | | | S* | Sb | 22 00 27.2 | -0.8 |
| DCZ | | | | AML | AML | 22 00 32.7 | |
| **WHZ** | **Wether Hill Ro** | **1.55** | **84** | PN | Pn | 22 00 18.0 | -0.6 |
| WHZ | | | | AML | AML | 22 00 43.4 | |
| WHZ | | | | AML | AML | 22 00 44.5 | |
| **APZ** | **The Paps** | **1.73** | **117** | PN | Pn | 22 00 19.7 | -1.5 |
| APZ | | | | SN | Sn | 22 00 41.2 | -2.1 |
| APZ | | | | AML | AML | 22 00 41.4 | |
| **MLZ** | **Mavora Lakes** | **1.85** | **68** | PN | Pn | 22 00 23.3 | +0.4 |
| MLZ | | | | AML | AML | 22 00 52.2 | |
| MLZ | | | | AML | AML | 22 00 53.4 | |
| **MSZ** | **Milford Sound** | **2.08** | **49** | PN | Pg | 22 00 31.5 | +0.3 |
| MSZ | | | | AML | AML | 22 01 07.4 | |
| MSZ | | | | AML | AML | 22 01 09.8 | |
| **SYZ** | **Scrubby Hill** | **2.40** | **102** | PN | Pn | 22 00 30.4 | +0.1 |
| SYZ | | | | AML | AML | 22 01 01.7 | |
| **WKZ** | **Wanaka** | **2.62** | **63** | PN | Pn | 22 00 35.5 | +2.1 |
| **EAZ** | **Earnscleugh** | **2.64** | **73** | PN | Pn | 22 00 35.2 | +1.5 |
| EAZ | | | | AML | AML | 22 01 16.3 | |
| EAZ | | | | AML | AML | 22 01 23.0 | |
| **TUZ** | **Tuapeka** | **2.72** | **89** | PN | Pn | 22 00 35.1 | +0.4 |
| TUZ | | | | SN | Sn | 22 01 07.0 | -0.4 |
| TUZ | | | | AML | AML | 22 01 10.1 | |
| **JCZ** | **Jackson Bay** | **2.93** | **48** | PN | Pn | 22 00 39.8 | +2.0 |
| JCZ | | | | AML | AML | 22 01 30.1 | |
| **ODZ** | **Otahua Downs** | **3.60** | **75** | PN | Pn | 22 00 46.3 | -0.5 |

*ISCJB **11** 22:14:27.5±0.8, 34°.61N±0°.05×140°.66E±0°.08, h54km±6km, mb3.4/2, Error ellipse: s-maj=12.0km s-min=6.7km az=152.0*

*JMA **11** 22:14:27.7±0.1, 34°.64N×140°.69E, h53km±1km, M2.8*

*IDC **11** 22:14:29.4±1.3, 34°.01N×138°.64E, h0km, mb3.3/2, mb1 3.5/3, mb1mx3.3/38, mbtmp3.2/3, ML2.8/1, Error ellipse: s-maj=35.6km s-min=16.7km az=55.0*

**ISC 11 22:14:28.8±1.1, 34°.61N±0°.05×140°.63E±0°.07, h48km±9km, n16, σ0s.66/21, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BSO2** | **Boso 2** | **0.17** | **36** | S | **Sn** | **22 14 42.4** | **+0.6** |
| **BSO3** | **Boso 3** | **0.21** | **332** | P | **Pn** | **22 14 36.4** | **-0.4** |
| BSO3 | | | | S | **Sn** | **22 14 42.8** | **+0.4** |
| **BSO1** | **Boso 1** | **0.29** | **82** | P | **Pn** | **22 14 36.5** | **-0.5** |
| BSO1 | | | | S | **Sn** | **22 14 43.0** | **+0.1** |
| **BSO4** | **Boso 4** | **0.45** | **327** | P | **Pn** | **22 14 39.1** | **-0.2** |
| **KTR** | **Katsuura** | **0.59** | **334** | P | **Pn** | **22 14 40.5** | **-0.6** |
| KTR | | | | S | **Sn** | **22 14 49.3** | **-0.7** |
| **TATJ** | **Tateyama 2** | **0.74** | **305** | P | **Pn** | **22 14 43.2** | **+0.2** |
| TATJ | | | | *e*S | **Sn** | **22 14 54.2** | **+0.9** |
| **JCN** | **Nagara** | **0.88** | **336** | P | **Pn** | **22 14 44.6** | **-0.3** |
| JCN | | | | S | **Sn** | **22 14 56.8** | **+0.2** |
| **JIM2** | **Oshima 3** | **1.00** | **276** | P | **Pn** | **22 14 46.0** | **-0.5** |
| **JHJ** | **Hachijo jima 2** | **1.65** | **206** | Pn | **Pn** | **22 14 55.9** | **+0.5** |
| | 9.1nm,0.3s,baz=340,slow=23,SNR=11 | | | | | | |
| JHJ | | | | Sn | **Sn** | **22 15 13.9** | **-1.5** |
| | 31nm,0.3s,baz=126,slow=23,SNR=10 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **2.76** | **315** | Pn | **Pn** | **22 15 10.8** | **+0.2** |
| | 1.8nm,0.3s,baz=175,slow=14,SNR=24 | | | | | | |
| MJAR | | | | Sn | **Sn** | **22 15 42.9** | **+0.2** |
| | 2.1nm,0.3s,baz=171,slow=16,SNR=8.3 | | | | | | |
| **MAT** | **Matsushiro** | **2.76** | **315** | P | **Pn** | **22 15 10.5** | **-0.1** |
| MAT | | | | S | **Sn** | **22 15 41.5** | **-1.2** |
| **H11N2** | **WAKE ISLAND Hy** | **27.56** | **116** | T | T | 22 49 28.5 | |
| | baz=309,slow=75,SNR=3.6 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.57** | **116** | T | T | 22 49 31.1 | |
| | baz=309,slow=75,SNR=3.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.58** | **116** | T | T | 22 49 26.9 | |
| | baz=309,slow=75,SNR=3.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.91** | **304** | P | **P** | **22 22 38.5** | **-0.2** |
| | 0.2nm,0.6s,baz=102,slow=6.2,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **54.58** | **187** | P | **P** | **22 23 53.0** | **+0.6** |
| | 0.2nm,0.3s,baz=1.1,slow=7.5,SNR=9.8 | | | | | | |

*ISCJB **11** 22:30:28.7±0.4, 20°.89S±0°.03×69°.20W±0°.07, h124km±4km, mb4.0/4, Error ellipse: s-maj=11.3km s-min=4.7km az=176.4*

*NEIC **11** 22:30:29.0, 20°.86S×69°.31W, h113km, mb4.4/4, After GUC.*

*GUC **11** 22:30:29.3±0.5, 20°.86S×69°.31W, h113km±3km, ML4.7*

*IDC **11** 22:30:30.4±0.9, 20°.84S×68°.83W, h115km±5km, mb3.8/5, mb1 3.8/8, mb1mx3.6/30, mbtmp4.2/8, Error ellipse: s-maj=27.7km s-min=16.5km az=111.0*

**ISC 11 22:30:29.0±0.6, 20°.88S±0°.03×69°.23W±0°.06, h115km±5km, n43, σ1s.42/50, mb4.0/4, 5C-3D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **0.29** | **237** | ⇑*i*P | **Pn** | **22 30 45.6** | **+0.1** |
| PB01 | | | | *i* S | **Sn** | **22 30 58.0** | **+0.2** |
| PB01 | | | | AML | AML | 22 30 58.6 | |
| | comp=N,83μm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **0.91** | **181** | ⇑*i*P | **Pn** | **22 30 50.8** | **+0.8** |
| PB09 | | | | *i* S | **Sn** | **22 31 06.9** | **+1.2** |
| PB09 | | | | AML | AML | 22 31 08.3 | |
| | comp=E,31μm,0.4s | | | | | | |
| **PB07** | **IPOC Station P** | **1.04** | **216** | ⇑*i*P | **Pn** | **22 30 52.4** | **+1.1** |
| PB07 | | | | *i* S | **Sn** | **22 31 09.1** | **+1.0** |
| PB07 | | | | AML | AML | 22 31 09.4 | |
| | comp=N,13μm,0.4s | | | | | | |
| **PB11** | **IPOC Station P** | **1.19** | **340** | ⇓*i*P | **Pn** | **22 30 52.9** | **+0.1** |
| PB11 | | | | *i* S | **Sn** | **22 31 10.9** | **+0.2** |
| **PB04** | **IPOC Station P** | **1.68** | **210** | ⇑*i*P | **Pn** | **22 30 59.5** | **+1.0** |
| PB04 | | | | *i* S | **Sn** | **22 31 21.7** | **+0.9** |
| **LVC** | **Limon Verde** | **1.75** | **170** | P | **Pn** | **22 31 00.7** | **+1.4** |
| | comp=N,1μm,0.3s,baz=49,slow=6.7,SNR=169 | | | | | | |
| LVC | | | | S | **Sn** | **22 31 23.9** | **+1.4** |
| | comp=N,9μm,0.3s,baz=105,slow=24,SNR=66 | | | | | | |
| **LVC** | **Limon Verde** | **1.75** | **170** | *e*Pn | **Pn** | **22 31 00.8** | **+1.4** |
| LVC | | | | *e*Sn | **Sn** | **22 31 21.1** | **-1.4** |
| **LVC** | **Limon Verde** | **1.75** | **170** | *e*P | **Pn** | **22 31 00.3** | **+0.9** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| LVC | | | | eS | Sn | 22 31 24.8 | +2.4 |
| MNMC | Minimini | 1.78 | 349 | ⇑iP | Pn | 22 31 00.2 | +0.4 |
| MNMC | | | | iS | Sn | 22 31 24.1 | +0.9 |
| MNMC | | | | AML | AML | 22 31 28.2 | |
| | comp=E,7µm,0.2s | | | | | | |
| PB06 | IPOC Station P | 1.84 | 190 | ⇓iP | Pn | 22 31 01.5 | +1.0 |
| PB06 | | | | iS | Sn | 22 31 25.0 | +0.6 |
| PB13 | IPOC Station P | 2.55 | 354 | eP | Pn | 22 31 11.3 | +1.4 |
| PB13 | | | | eS | Sn | 22 31 42.7 | +1.6 |
| PB10 | IPOC Station P | 2.89 | 205 | ⇓iP | Pn | 22 31 14.0 | +0.3 |
| YJA | Yavi | 3.69 | 111 | eP | Pn | 22 31 24.9 | +0.2 |
| HJA | Humahuaca | 4.23 | 124 | eP | Pn | 22 31 33.4 | +1.4 |
| LPAZ | La Paz | 4.69 | 13 | P | Pn | 22 31 40.0 | +1.6 |
| | comp=E,4.6nm,0.3s,baz=200,slow=5.6,SNR=99 | | | | | | |
| LPAZ | | | | S | Sn | 22 32 22.1 | -10 |
| | comp=E,4.5nm,0.3s,baz=210,slow=5.9,SNR=10.0 | | | | | | |
| LPAZ | La Paz | 4.69 | 13 | ePn | Pn | 22 31 39.8 | +1.4 |
| LPAZ | | | | eSn | Sn | 22 32 22.3 | -10 |
| ARE | Arequipa | 4.89 | 334 | eP | Pn | 22 31 40.0 | -0.8 |
| ARE | | | | eS | Sn | 22 32 32.0 | -4.6 |
| AZAP | Zapla | 5.09 | 132 | eP | Pn | 22 31 43.4 | +0.1 |
| ASTB | Santa Barbara | 5.35 | 126 | eP | Pn | 22 31 46.6 | -0.2 |
| LCO | Las Campanas | 8.20 | 189 | ePn | Pn | 22 32 21.0 | -4.4 |
| LCO | | | | eSn | Sn | 22 33 52.9 | -3.7 |
| SIV | San Ignacio | 9.14 | 59 | P | Pn | 22 32 33.9 | -4.2 |
| | comp=E,3.7nm,0.3s,baz=260,slow=10,SNR=34 | | | | | | |
| SIV | | | | S | Sn | 22 34 09.6 | -10 |
| | baz=288,slow=20,SNR=3.3 | | | | | | |
| CFAA | Coronel Fontan | 10.71 | 175 | P | Pn | 22 32 57.1 | -2.2 |
| | comp=E,0.1nm,0.3s,baz=355,slow=12,SNR=19 | | | | | | |
| CFAA | | | | S | Sn | 22 34 48.1 | -9.2 |
| | comp=E,0.1nm,0.3s,baz=264,slow=18,SNR=6.0 | | | | | | |
| CPUP | Villa Florida | 12.18 | 119 | P | Pn | 22 33 14.3 | -4.4 |
| | comp=E,0.2nm,0.3s,baz=307,slow=14,SNR=3.5 | | | | | | |
| TRQA | Tornquist | 18.23 | 161 | eP | Pn | 22 34 34.4 | -0.2 |
| | comp=E,9.4nm,1.1s | | | | | | |
| PLCA | Paso Flores | 19.82 | 183 | eP | Pn | 22 34 53.2 | -0.1 |
| | comp=E,129nm,2.6s | | | | | | |
| BDFB | Brasilia | 20.80 | 79 | P | P | 22 34 59.6 | -1.9 |
| | comp=E,8.6nm,0.3s,baz=248,slow=5.4,SNR=18 | | | | | | |
| BDFB | Brasilia | 20.80 | 79 | eP | P | 22 35 01.0 | -0.5 |
| PTGA | Pitinga | 21.98 | 25 | P | P | 22 35 11.6 | -2.3 |
| | comp=E,2.0nm,0.3s,baz=201,slow=16,SNR=8.0 | | | | | | |
| PTGA | Pitinga | 21.98 | 25 | eP | P | 22 35 14.2 | +0.3 |
| | comp=E,3.2nm,0.8s | | | | | | |
| DBIC | Dimbokro | 68.85 | 74 | P | P | 22 41 21.2 | -0.4 |
| | comp=E,3.3nm,0.7s,baz=225,slow=6.8,SNR=4.8 | | | | | | |
| DBIC | Dimbokro | 68.85 | 74 | eP | P | 22 41 21.2 | -0.4 |
| | comp=E,104nm,2.5s | | | | | | |
| VNDA | Vanda | 77.40 | 190 | P | P | 22 42 13.2 | +2.3 |
| | comp=E,0.3nm,0.5s,baz=135,slow=2.9,SNR=4.5 | | | | | | |
| TOA0 | Torodi Ar. Sit | 77.43 | 71 | eP | P | 22 42 11.8 | -0.3 |
| TORD | Torodi Ar. Bea | 77.43 | 71 | P | P | 22 42 11.5 | -0.6 |
| | comp=E,1.2nm,0.3s,baz=254,slow=5.6,SNR=43 | | | | | | |
| TORD | | | | pP | pP | 22 42 41.0 | -0.2 |
| | comp=E,1.8nm,0.5s,baz=252,slow=5.4,SNR=4.2 | | | | | | |
| TORD | | | | sP | sP | 22 42 52.8 | -0.8 |
| | comp=E,3.0nm,0.7s,baz=250,slow=5.3,SNR=5.1 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 127.50 | 278 | T | T | 01 09 21.6 | |
| | baz=102,slow=74,SNR=74 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 127.51 | 278 | T | T | 01 09 24.2 | |
| | baz=102,slow=74,SNR=52 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 127.52 | 278 | T | T | 01 09 19.8 | |
| | baz=102,slow=74,SNR=54 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 127.57 | 279 | T | T | 01 09 28.0 | |
| | baz=102,slow=74,SNR=21 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 127.58 | 279 | T | T | 01 09 28.6 | |
| | baz=102,slow=74,SNR=20 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 127.58 | 279 | T | T | 01 09 27.0 | |
| | baz=102,slow=74,SNR=13 | | | | | | |
| WRA | Warramunga Arr | 133.33 | 211 | PKP | PKPdf | 22 49 33.9 | +1.6 |
| | comp=E,0.4nm,1.1s,baz=160,slow=1.6,SNR=2.8 | | | | | | |
| MKAR | Makanchi Array | 145.31 | 35 | PKPbc | PKPab | 22 49 53.6 | +0.1 |
| | comp=E,0.3nm,0.4s,baz=323,slow=2.2,SNR=4.3 | | | | | | |
| MKAR | | | | pPKPbc | pPKPbc | 22 50 25.0 | +0.9 |
| | comp=E,0.4nm,0.6s,baz=319,slow=3.4,SNR=2.3 | | | | | | |
| SONM | Songino Array | 152.88 | 6 | PKPbc | PKPbc | 22 50 12.3 | -0.5 |
| | comp=E,0.2nm,0.6s,baz=341,slow=3.1,SNR=3.0 | | | | | | |
| SONM | | | | pPKPbc | pPKPbc | 22 50 44.0 | +0.1 |
| | comp=E,0.3nm,0.5s,baz=321,slow=0.7,SNR=2.7 | | | | | | |

**IDC 11 22:30:40.9**±3.8**, 5°.93S**×**149°.50E, h0km, mb2.9**/2**, mb1 3.3**/3**, mb1mx3.1**/35**, mbtmp3.2**/3**, ML1.4**/1**, Error ellipse: s-maj=135.7km s-min=41.6km az=113.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.16 | 214 | Pn | Pn | 22 31 45.8 | +0.1 |
| | 1.8nm,0.3s,baz=349,slow=16,SNR=3.2 | | | | | | |
| PMG | | | | Sn | Sn | 22 32 33.8 | -1.2 |
| | 2.4nm,0.3s,baz=45,slow=21,SNR=3.6 | | | | | | |
| WRA | Warramunga Arr | 20.28 | 225 | P | Pn | 22 35 19.4 | -0.8 |
| | 0.4nm,0.5s,baz=51,slow=11,SNR=10 | | | | | | |
| ASAR | Alice Springs | 23.16 | 219 | P | P | 22 35 48.3 | -0.9 |
| | 0.2nm,0.6s,baz=35,slow=10,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 147.48 | 285 | PKPbc | PKPbc | 22 50 27.3 | -0.7 |
| | 0.1nm,0.4s,baz=98,slow=2.7,SNR=3.7 | | | | | | |

*BJI 11 22:48:23.1, 76°.61N×64°.05E, h18km, mb4.6/24, mB4.9/13, Ms4.2/4, Ms7 4.2/4*
*CSEM 11 22:48:25.5±0.1, 76°.30N×64°.52E, h2km, mb4.6/71, Error ellipse: s-maj=3.9km s-min=3.5km az=20.0*
*ISCJB 11 22:48:25.6±0.1, 76°.30N±0°.02×64°.34E±0°.09, h10km, mb4.6/120, MS3.5/18, Error ellipse: s-maj=3.5km s-min=3.1km az=25.4*
*MOS 11 22:48:25.4±1.1, 76°.29N×64°.59E, h10km, mb4.8/47, Error ellipse: s-maj=19.5km s-min=4.6km az=86.4*
*IDC 11 22:48:25.6±0.4, 76°.26N×64°.76E, h0km, mb4.3/35, mb1 4.4/37, mb1mx4.3/54, mbtmp4.3/37, ML4.0/2, MS3.5/18, Ms1 3.5/18, ms1mx3.2/56, Error ellipse: s-maj=10.6km s-min=8.6km az=160.0*
*NEIC 11 22:48:27.6±0.2, 76°.24N×64°.63E, h10km, mb4.8/59, Error ellipse: s-maj=4.1km s-min=3.7km az=107.0*
**ISC 11 22:48:28.8**±0.6**, 76°.30N**±0°.04×**64°.27E**±0°.04**, h19km**±2km**, n513,** σ1.23/477**, mb4.7**/121**, MS3.5**/18**, 25C-25D, Novaya Zemlya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HOPEN | Hopen | 9.12 | 290 | Pn | Pn | 22 50 39.4 | +0.4 |
| HOPEN | | | | Sn | Sn | 22 52 13.8 | -7.1 |
| HOPEN | Hopen | 9.12 | 290 | Pn | Pn | 22 50 39.4 | +0.4 |
| HOPEN | | | | Sn | Sn | 22 52 13.8 | -7.1 |
| HOPEN | Hopen | 9.12 | 290 | Pn | Pn | 22 50 39.4 | +0.4 |
| SPB1 | Spitsbergen Ar | 10.49 | 303 | ePn | Pn | 22 50 55.8 | -2.1 |
| SPB1 | | | | eSn | Sn | 22 52 48.0 | -6.7 |
| SPB1 | Spitsbergen Ar | 10.49 | 303 | ePn | Pn | 22 50 55.8 | -2.1 |
| SPA1 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.5 | -1.4 |
| SPA1 | | | | eSn | Sn | 22 52 49.2 | -5.5 |
| SPA1 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.5 | -1.4 |
| SPB2 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.5 | -1.4 |
| SPB2 | | | | eSn | Sn | 22 52 51.1 | -3.5 |
| SPB2 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.5 | -1.4 |
| SPA2 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.6 | -1.3 |
| SPA2 | | | | eSn | Sn | 22 52 48.4 | -6.3 |
| SPA2 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.6 | -1.3 |
| SPB5 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.6 | -1.2 |
| SPB5 | | | | eSn | Sn | 22 52 49.6 | -5.1 |
| SPB5 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.7 | -1.2 |
| SPA0 | Spitsbergen Ar | 10.50 | 303 | Pn | Pn | 22 50 56.1 | -1.8 |
| | baz=77,slow=12 | | | | | | |
| SPA0 | | | | Sn | Sn | 22 52 48.2 | -6.5 |
| | baz=76,slow=18 | | | | | | |
| SPA0 | Spitsbergen Ar | 10.50 | 303 | Pn | Pn | 22 50 56.1 | -1.8 |
| | baz=77,slow=12 | | | | | | |
| SPA0 | | | | Sn | Sn | 22 52 48.2 | -6.5 |
| | baz=76,slow=18 | | | | | | |
| SPA0 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.6 | -1.3 |
| SPA0 | | | | eSn | Sn | 22 52 48.0 | -6.7 |
| SPA0 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.6 | -1.3 |
| SPA3 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.7 | -1.3 |
| SPA3 | | | | eSn | Sn | 22 52 50.7 | -4.1 |
| SPA3 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.7 | -1.3 |
| SPB3 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.7 | -1.3 |
| SPB3 | | | | eSn | Sn | 22 52 51.2 | -3.6 |
| SPB3 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.7 | -1.3 |
| SPB4 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.7 | -1.3 |
| SPB4 | Spitsbergen Ar | 10.50 | 303 | ePn | Pn | 22 50 56.7 | -1.3 |
| HSP | Hornsund | 11.02 | 297 | Pn | Pn | 22 51 01.4 | -3.6 |
| HSP | | | | Sn | Sn | 22 52 58.2 | -9.1 |
| HSPB | Hornsund (broa | 11.02 | 297 | ePn | Pn | 22 51 01.4 | -3.6 |
| HSPB | | | | eSn | Sn | 22 53 00.0 | -7.5 |
| HSPB | | | | IAML | | 22 53 05.3 | |
| | comp=Z,19nm,0.5s | | | | | | |
| KBS | Kingsbay | 11.18 | 308 | ePn | Pn | 22 51 05.4 | -1.8 |
| KBS | | | | IAML | | 22 53 22.1 | |
| | comp=Z,60nm,0.7s | | | | | | |
| KBS | Kingsbay | 11.18 | 308 | eP | Pn | 22 51 05.8 | -1.4 |
| KBS | Kingsbay | 11.18 | 308 | ePn | Pn | 22 51 05.8 | -1.4 |
| KBS | | | | eSn | Sn | 22 53 05.7 | -5.7 |
| KBS | Kingsbay | 11.18 | 308 | ePn | Pn | 22 51 05.8 | -1.4 |
| LVZ | Lovozero | 12.21 | 242 | deP | Pn | 22 51 18.0 | -3.4 |
| LVZ | Lovozero | 12.21 | 242 | ePn | Pn | 22 51 18.1 | -3.3 |
| LVZ | | | | eSn | Sn | 22 53 28.4 | -8.4 |
| KEV | Kevo | 12.45 | 258 | Pn | Pn | 22 51 21.1 | -3.4 |
| KEV | | | | Sn | Sn | 22 53 33.5 | -9.0 |
| KEV | Kevo | 12.45 | 258 | ePn | Pn | 22 51 21.8 | -2.8 |
| KEV | Kevo | 12.45 | 258 | eP | Pn | 22 51 21.5 | -3.1 |
| KEV | | | | e | | 22 53 39.1 | |
| KEV | Kevo | 12.45 | 258 | ePn | Pn | 22 51 21.5 | -3.1 |
| KEV | | | | eSn | Sn | 22 53 39.1 | -3.4 |
| HAMF | Hammerfest | 12.59 | 264 | ePn | Pn | 22 51 24.8 | -1.7 |
| HAMF | | | | eSn | Sn | 22 53 36.9 | -8.9 |
| HAMF | | | | IAML | | 22 53 44.1 | |
| | comp=Z,28nm,0.6s | | | | | | |
| HAMF | Hammerfest | 12.59 | 264 | ePn | Pn | 22 51 24.8 | -1.7 |
| | SNR=50 | | | | | | |
| APA0 | Apatity Array | 12.81 | 244 | Pn | Pn | 22 51 27.9 | -1.5 |
| | baz=27,slow=5.1 | | | | | | |
| APA0 | | | | Sn | Sn | 22 53 43.0 | -8.2 |
| | baz=40,slow=18 | | | | | | |
| APA0 | Apatity Array | 12.81 | 244 | Pn | Pn | 22 51 27.9 | -1.5 |
| | baz=27,slow=5.1 | | | | | | |
| APA0 | | | | Sn | Sn | 22 53 43.0 | -8.2 |
| | baz=40,slow=18 | | | | | | |
| APA0 | Apatity Array | 12.81 | 244 | Pn | Pn | 22 51 28.0 | -1.5 |
| | SNR=8.3 | | | | | | |
| ARA0 | ARCESS Array S | 12.97 | 259 | Pn | Pn | 22 51 27.8 | -3.9 |
| | baz=42,slow=12 | | | | | | |
| ARA0 | | | | Sn | Sn | 22 53 44.5 | -11 |
| | baz=49,slow=22 | | | | | | |
| ARA0 | ARCESS Array S | 12.97 | 259 | Pn | Pn | 22 51 27.8 | -3.9 |
| | baz=42,slow=12 | | | | | | |
| ARA0 | | | | Sn | Sn | 22 53 44.5 | -11 |
| | baz=49,slow=22 | | | | | | |
| ARA0 | ARCESS Array S | 12.97 | 259 | ePn | Pn | 22 51 28.8 | -2.9 |
| ARA0 | | | | eSn | Sn | 22 53 44.5 | -11 |
| ARA0 | ARCESS Array S | 12.97 | 259 | ePn | Pn | 22 51 28.8 | -2.9 |
| ARCES | ARCESS Array B | 12.97 | 259 | Pn | Pn | 22 51 28.0 | -3.6 |
| | comp=Z,1.5nm,0.3s,baz=51,slow=12,SNR=44 | | | | | | |
| ARCES | | | | Sn | Sn | 22 53 44.6 | -11 |
| | comp=Z,1.3nm,0.3s,baz=44,slow=21,SNR=3.8 | | | | | | |
| ARCES | | | | LR | LR | 22 58 29.6 | |
| | comp=Z,81nm,18.1s,baz=31,slow=46 | | | | | | |
| ARCES | ARCESS Array B | 12.97 | 259 | eP | Pn | 22 51 28.5 | -3.2 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| KTK1 | Kautokeino | 13.89 | 260 | ePn | Pn | 22 51 41.2 | -3.1 |
| HEF | Hetta | 14.26 | 258 | ePn | Pn | 22 51 45.7 | -3.6 |
| TRO | Tromso | 14.45 | 266 | ePn | Pn | 22 51 51.0 | -0.8 |
| TRO | | | | eSn | Sn | 22 54 20.1 | -11 |
| TRO | | | | IAML | | 22 54 26.5 | |
| | comp=Z,14nm,0.6s | | | | | | |
| TRO | Tromso | 14.45 | 266 | ePn | Pn | 22 51 51.0 | -0.8 |
| | SNR=50 | | | | | | |
| KIF | Kilpisjarvi | 14.47 | 263 | Pn | Pn | 22 51 48.5 | -3.7 |
| KIF | | | | Sn | Sn | 22 54 19.7 | -12 |
| KIF | Kilpisjarvi | 14.47 | 263 | Pn | Pn | 22 51 48.5 | -3.7 |
| KIF | | | | Sn | Sn | 22 54 19.7 | -12 |
| TMCR | Tamitsa | 14.84 | 229 | eP | Pn | 22 51 54.0 | -3.1 |
| TMCR | | | | e | | 22 54 37.3 | |
| TMCR | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | |
| SOKR | Solikamsk | 16.99 | 193 | eP | Pn | 22 52 23.0 | -1.9 |
| SOKR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| SOKR | | | | MLR | MLR | | |
| | comp=Z,260nm,18.0s | | | | | | |
| SOKR | Solikamsk | 16.99 | 193 | eP | Pn | 22 52 23.0 | -1.9 |
| | comp=Z,260nm,18.0s | | | | | | |
| KLMR | Klimovskoe | 17.67 | 222 | d iP | Pn | 22 52 29.1 | -4.3 |
| KLMR | | | | pmax | pmax | | |
| | comp=Z,81nm,1.1s | | | | | | |
| DAG | Danmarks Havn | 17.85 | 312 | P | Pn | 22 52 34.3 | -1.2 |
| DAG | | | | pmax | pmax | | |
| | comp=Z,13nm,1.9s | | | | | | |
| SVE | Sverdlovsk | 19.61 | 186 | eP | P | 22 52 55.8 | +0.3 |
| SVE | | | | eS | S | 22 56 22.8 | -13 |
| SVE | | | | pmax | pmax | | |
| | comp=Z,42nm,0.9s | | | | | | |
| SVE | | | | MLR | MLR | | |
| | comp=Z,348nm,16.0s | | | | | | |
| SVE | Sverdlovsk | 19.61 | 186 | eP | P | 22 52 55.8 | +0.3 |
| | comp=Z,42nm,0.9s | | | | | | |
| FIA0 | FINESS Array S | 19.66 | 242 | P | P | 22 52 55.4 | -0.6 |
| | baz=32,slow=14 | | | | | | |
| FIA0 | FINESS Array S | 19.66 | 242 | Pn | P | 22 52 55.4 | -0.6 |
| | baz=32,slow=14 | | | | | | |
| FIA0 | FINESS Array S | 19.66 | 242 | eP | P | 22 52 55.3 | -0.6 |
| FIA0 | | | | eS | S | 22 56 27.7 | -8.8 |
| FIA0 | FINESS Array S | 19.66 | 242 | eP | P | 22 52 55.3 | -0.6 |
| FIA0 | | | | eS | S | 22 56 27.6 | -8.8 |
| FIA0 | FINESS Array S | 19.66 | 242 | P | P | 22 52 55.3 | -0.6 |
| | SNR=5.0 | | | | | | |
| FINES | FINESS Array B | 19.66 | 242 | P | P | 22 52 55.3 | -0.6 |
| | comp=Z,0.9nm,0.3s,baz=32,slow=12,SNR=28 | | | | | | |
| FINES | | | | S | S | 22 56 27.6 | -8.8 |
| | comp=Z,0.2nm,0.3s,baz=26,slow=24,SNR=3.6 | | | | | | |
| FINES | | | | LR | LR | 23 02 50.6 | |
| | comp=Z,95nm,18.5s,baz=18,slow=44 | | | | | | |
| FINES | FINESS Array B | 19.66 | 242 | eP | P | 22 52 56.0 | 0.0 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| FINES | FINESS Array B | 19.66 | 242 | eP | P | 22 52 56.0 | 0.0 |
| | comp=Z,1.0nm,0.3s | | | | | | |
| JMIC | Jan Mayen | 19.84 | 293 | LR | LR | 23 00 07.4 | |
| | comp=Z,133nm,21.9s,baz=65,slow=35 | | | | | | |
| ARU | Arti | 20.07 | 189 | P | P | 22 53 00.5 | -0.1 |
| | comp=Z,0.2nm,0.2s,baz=18,slow=19,SNR=3.7 | | | | | | |
| ARU | | | | LR | LR | 23 01 47.6 | |
| | comp=Z,225nm,18.8s,baz=359,slow=40 | | | | | | |
| ARU | Arti | 20.07 | 189 | c iP | P | 22 53 00.2 | -0.3 |
| ARU | | | | | | 22 53 18.2 | |
| ARU | | | | S | Sn | 22 56 49.6 | +2.3 |
| ARU | | | | SS | SnSn | 22 57 06.6 | +5.3 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| ARU | Arti | 20.07 | 189 | eP | P | 22 52 59.7 | -0.9 |
| | comp=Z,33nm,1.0s | | | | | | |
| ARU | Arti | 20.07 | 189 | iP | P | 22 53 00.2 | -0.3 |
| | comp=Z,10.0nm,1.0s | | | | | | |
| NSS | Namsos | 20.16 | 263 | ePn | P | 22 53 03.0 | +1.6 |
| NSS | Namsos | 20.16 | 263 | ePn | P | 22 53 03.0 | +1.6 |
| | SNR=50 | | | | | | |
| VSU | Vasula | 22.25 | 238 | ⇓iP | P | 22 53 22.9 | -1.1 |
| VSU | | | | pmax | pmax | | |
| | comp=Z,300nm,2.5s | | | | | | |
| VSU | Vasula | 22.25 | 238 | iP | P | 22 53 22.9 | -1.1 |
| | comp=Z,300nm,2.5s | | | | | | |
| NVS | Novosibirsk | 22.69 | 151 | ⇑iP | P | 22 53 27.3 | -1.4 |
| NVS | | | | eS | S | 22 57 35.3 | -0.4 |
| NVS | | | | pmax | pmax | | |
| | comp=N,14nm,1.2s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,3.0nm,1.0s | | | | | | |
| NVS | | | | smax | smax | | |
| | comp=N,6.0nm,1.3s | | | | | | |
| NVS | | | | smax | smax | | |
| | comp=E,13nm,1.3s | | | | | | |
| NVS | Novosibirsk | 22.69 | 151 | iP | P | 22 53 27.3 | -1.4 |
| NVS | | | | eS | S | 22 57 35.3 | -0.4 |
| NB2 | NORSAR Subarra | 23.35 | 259 | P | P | 22 53 36.5 | +1.0 |
| | baz=30,slow=10 | | | | | | |
| NB2 | NORSAR Subarra | 23.35 | 259 | P | P | 22 53 35.5 | 0.0 |
| | comp=Z,5.9nm,1.0s,baz=29,slow=11 | | | | | | |
| NB2 | NORSAR Subarra | 23.35 | 259 | P | P | 22 53 36.5 | +1.0 |
| | baz=30,slow=10 | | | | | | |
| NB2 | NORSAR Subarra | 23.35 | 259 | P | P | 22 53 36.5 | +1.0 |
| | SNR=8.6 | | | | | | |
| NB200 | NORSAR Array S | 23.35 | 259 | eP | P | 22 53 35.8 | +0.3 |
| NB200 | NORSAR Array S | 23.35 | 259 | eP | P | 22 53 35.8 | +0.3 |
| NOA | NORSAR Array B | 23.35 | 259 | P | P | 22 53 35.8 | +0.3 |
| | comp=Z,3.7nm,0.7s,baz=29,slow=9.0,SNR=12 | | | | | | |
| NOA | | | | LR | LR | 23 03 15.8 | |
| | comp=Z,39nm,20.0s,baz=30,slow=38 | | | | | | |
| NOA | NORSAR Array B | 23.35 | 259 | eP | P | 22 53 36.3 | +0.8 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| NBO02 | NORSAR Array S | 23.42 | 259 | eP | P | 22 53 37.2 | +1.0 |
| NBO02 | NORSAR Array S | 23.42 | 259 | eP | P | 22 53 37.2 | +1.0 |
| BRVK | Borovoye | 23.45 | 171 | ⇑iP | P | 22 53 36.7 | +0.2 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| BRVK | Borovoye | 23.45 | 171 | eP | P | 22 53 37.1 | +0.6 |
| | comp=Z,22nm,1.2s | | | | | | |
| BRVK | Borovoye | 23.45 | 171 | iP | P | 22 53 36.7 | +0.2 |
| | comp=Z,13nm,1.0s | | | | | | |
| BVAR | Borovoye Array | 23.49 | 171 | P | P | 22 53 35.5 | -1.4 |
| | comp=Z,9.3nm,0.7s,baz=352,slow=9.0,SNR=38 | | | | | | |
| BVAR | Borovoye Array | 23.49 | 171 | P | P | 22 53 35.5 | -1.4 |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | |
| HFS | Hagfors | 23.57 | 255 | P | P | 22 53 38.0 | +0.4 |
| | baz=37,slow=10 | | | | | | |
| HFS | Hagfors | 23.57 | 255 | P | P | 22 53 38.0 | +0.4 |
| | baz=37,slow=10 | | | | | | |
| HFS | Hagfors | 23.57 | 255 | P | P | 22 53 38.1 | +0.4 |
| | comp=Z,2.3nm,0.5s,baz=20,slow=9.8,SNR=12 | | | | | | |
| HFS | | | | LR | LR | 23 03 13.7 | |
| | comp=Z,40nm,21.6s,baz=74,slow=38 | | | | | | |
| OBN | Obninsk | 23.63 | 222 | P | P | 22 53 39.3 | +1.1 |
| | comp=Z,8.3nm,0.5s,baz=0.0,slow=20,SNR=4.6 | | | | | | |
| OBN | | | | LR | LR | 23 02 40.7 | |
| | comp=Z,36nm,20.6s,baz=340,slow=36 | | | | | | |
| OBN | Obninsk | 23.63 | 222 | d iP | P | 22 53 38.7 | +0.5 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,27nm,1.2s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,81nm,16.0s | | | | | | |
| OBN | Obninsk | 23.63 | 222 | iP | P | 22 53 38.7 | +0.5 |
| | comp=Z,81nm,16.0s | | | | | | |
| ZAA1 | Zalesovo Array | 23.75 | 149 | eP | P | 22 53 38.0 | -1.4 |
| ZAA1 | | | | eS | S | 22 57 55.8 | +2.4 |
| ZAA1 | Zalesovo Array | 23.75 | 149 | eP | P | 22 53 38.0 | -1.4 |
| ZAA1 | | | | eS | S | 22 57 55.8 | +2.4 |
| ZAA0 | Zalesovo Array | 23.76 | 149 | eP | P | 22 53 38.1 | -1.3 |
| ZAA0 | Zalesovo Array | 23.76 | 149 | eP | P | 22 53 38.1 | -1.3 |
| ZALV | Zalesovo Beam | 23.76 | 149 | P | P | 22 53 38.0 | -1.4 |
| | comp=Z,4.1nm,0.8s,baz=350,slow=8.0,SNR=17 | | | | | | |
| ZALV | | | | S | S | 22 57 55.8 | +2.3 |
| | comp=Z,2.9nm,0.6s,baz=349,slow=22,SNR=5.5 | | | | | | |
| ZALV | | | | LR | LR | 23 05 40.8 | |
| | comp=Z,186nm,18.0s,baz=66,slow=44 | | | | | | |
| ZALV | Zalesovo Beam | 23.76 | 149 | eP | P | 22 53 38.6 | -0.8 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 23.76 | 149 | eP | P | 22 53 38.6 | -0.8 |
| | comp=Z,4.0nm,0.8s | | | | | | |
| VOSK | Vostochnaya | 23.82 | 170 | c eP | P | 22 53 38.4 | -1.6 |
| VOSK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| VOSK | Vostochnaya | 23.82 | 170 | eP | P | 22 53 38.4 | -1.6 |
| | comp=Z,7.0nm,0.9s | | | | | | |
| SUMG | Summit | 24.46 | 315 | eP | P | 22 53 46.4 | +0.1 |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,180nm,2.4s | | | | | | |
| SUMG | Summit | 24.46 | 315 | eP | P | 22 53 46.4 | +0.1 |
| | comp=Z,180nm,2.4s | | | | | | |
| SUMG | Summit | 24.46 | 315 | eP | P | 22 53 46.4 | +0.1 |
| | comp=Z,180nm,2.4s | | | | | | |
| KONO | Kongsberg | 24.96 | 259 | eP | P | 22 53 49.9 | -0.5 |
| KONO | | | | pmax | pmax | | |
| | comp=Z,42nm,1.7s | | | | | | |
| KONO | Kongsberg | 24.96 | 259 | eP | P | 22 53 49.9 | -0.5 |
| | comp=Z,42nm,1.7s | | | | | | |
| KONO | Kongsberg | 24.96 | 259 | eP | P | 22 53 49.9 | -0.5 |
| | comp=Z,42nm,1.7s | | | | | | |
| YAK | Yakutsk | 25.41 | 87 | P | P | 22 53 52.0 | -2.5 |
| | comp=Z,3.1nm,0.3s,baz=257,slow=14,SNR=3.4 | | | | | | |
| YAK | Yakutsk | 25.41 | 87 | eP | P | 22 53 53.7 | -0.8 |
| YAK | | | | pmax | pmax | | |
| | comp=N,17nm,1.4s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,16nm,1.4s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,35nm,0.9s | | | | | | |
| YAK | Yakutsk | 25.41 | 87 | eP | P | 22 53 52.0 | -2.5 |
| YAK | Yakutsk | 25.41 | 87 | eP | P | 22 53 53.7 | -0.8 |
| | comp=Z,35nm,0.9s | | | | | | |
| BOD | Bodaibo | 25.47 | 108 | eP | P | 22 53 52.4 | -2.6 |
| BOD | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| BOD | Bodaibo | 25.47 | 108 | eP | P | 22 53 52.4 | -2.6 |
| | comp=Z,9.0nm,1.1s | | | | | | |
| LPSR | Galich'ya Gora | 25.71 | 217 | eP | P | 22 53 56.8 | -0.5 |
| LPSR | | | | pmax | pmax | | |
| | comp=N,20nm,1.3s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,40nm,1.3s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.1s | | | | | | |
| LPSR | Galich'ya Gora | 25.71 | 217 | eP | P | 22 53 56.8 | -0.5 |
| AKTK | Aktyubinsk | 26.08 | 189 | P | P | 22 54 01.2 | +0.5 |
| | comp=E,133nm,19.1s | | | | | | |
| AKTO | Aktyubinsk | 26.08 | 189 | P | P | 22 54 01.1 | +0.5 |
| | comp=E,5.4nm,0.8s,baz=358,slow=7.7,SNR=14 | | | | | | |
| AKTO | | | | LR | LR | 23 05 27.3 | |
| | comp=E,133nm,19.1s,baz=9.2,slow=39 | | | | | | |
| AKTO | Aktyubinsk | 26.08 | 189 | P | P | 22 54 01.2 | +0.5 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| AKTO | | | | MLR | MLR | | |
| | comp=Z,133nm,19.1s | | | | | | |
| KURK | Kurchatov | 26.30 | 159 | P | P | 22 54 02.4 | -0.3 |
| KURK | | | | | | 22 57 27.8 | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| KURK | Kurchatov | 26.30 | 159 | eP | P | 22 54 02.1 | -0.6 |
| | comp=Z,47nm,1.3s | | | | | | |
| KURK | | | | ePcP | PcP | 22 57 27.8 | -0.3 |
| KURK | Kurchatov | 26.30 | 159 | P | P | 22 54 02.4 | -0.3 |
| | comp=Z,6.0nm,0.6s | | | | | | |
| KURBB | Kurchatov Arra | 26.39 | 159 | P | P | 22 54 02.4 | -1.0 |
| | comp=Z,5.9nm,0.6s,baz=356,slow=8.6,SNR=53 | | | | | | |
| KURBB | | | | PcP | PcP | 22 57 27.8 | -0.5 |
| | comp=Z,0.6nm,0.2s,baz=349,slow=2.6,SNR=4.6 | | | | | | |
| VRH | Novokhopyorsk | 26.70 | 212 | eP | P | 22 54 05.4 | -0.8 |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.7s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.7s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| VRH | Novokhopyorsk | 26.70 | 212 | eP | P | 22 54 05.4 | -0.8 |
| VSR | Storozhevoye | 27.03 | 216 | eP | P | 22 54 07.3 | -1.9 |
| VSR | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,3.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| VSR | Storozhevoye | 27.03 | 216 | eP | P | 22 54 07.3 | -1.9 |
| SUW | Suwalki | 27.12 | 238 | eP | P | 22 54 25.5 | +15 |
| AB31 | Akbulak array | 27.20 | 186 | ⇑eP | P | 22 54 09.3 | -1.5 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| AB31 | Akbulak array | 27.20 | 186 | eP | P | 22 54 09.3 | -1.5 |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ABKAR | Akbulak array | 27.20 | 186 | eP | P | 22 54 11.2 | +0.4 |
| ABKAR | Akbulak array | 27.20 | 186 | eP | P | 22 54 11.2 | +0.4 |
| VORD | Divnogorie | 27.25 | 216 | eP | P | 22 54 08.1 | -3.1 |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.6s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| BORG | Borgarnes | 27.73 | 293 | eP | P | 22 54 14.6 | -0.8 |
| BORG | Borgarnes | 27.73 | 293 | eP | P | 22 54 14.6 | -0.8 |
| | comp=Z,468nm,2.5s | | | | | | |
| BORG | Borgarnes | 27.73 | 293 | eP | P | 22 54 14.6 | -0.8 |
| | comp=Z,468nm,2.5s | | | | | | |
| HVS | Khovu-Aksy | 27.75 | 138 | ⇓eP | P | 22 54 14.7 | -1.1 |
| HVS | Khovu-Aksy | 27.75 | 138 | eP | P | 22 54 14.7 | -1.1 |
| BILL | Bilibino | 28.21 | 51 | P | P | 22 54 18.3 | -1.4 |
| BILL | | | | e | | 22 55 08.8 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| BILL | Bilibino | 28.21 | 51 | P | P | 22 54 18.3 | -1.4 |

comp=Z,5.0nm,1.1s
**OTUK Ortayu 28.35 169 P P 22 54 21.2 +0.1**
OTUK pmax pmax
comp=Z,39nm,0.9s
**OTUK Ortayu 28.35 169 P P 22 54 21.2 +0.1**
comp=Z,39nm,0.9s
**MOY Mondy 28.50 129** *e*P **P 22 54 23.9 +1.4**
**MOY Mondy 28.50 129** *e*P **P 22 54 23.9 +1.4**
**TLY Talaya 28.99 125** *e*P **P 22 54 25.8 -1.0**
TLY pmax pmax
comp=Z,5.0nm,0.9s
TLY MLR MLR
comp=Z,109nm,11.0s
**TLY Talaya 28.99 125** *e*P **P 22 54 25.8 -1.0**
comp=Z,109nm,11.0s
**AKASG Malin Array Be 29.12 229** P **P 22 54 26.9 -0.9**
comp=Z,0.9nm,0.4s,baz=17,slow=9.3,SNR=5.7
**AKASG Malin Array Be 29.12 229** *e*P **P 22 54 27.7 -0.1**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKASG Malin Array Be 29.12 229** *e*P **P 22 54 27.7 -0.1**
comp=Z,1.0nm,0.4s
**AKBB Malin Array Si 29.12 229** *e*P **P 22 54 26.9 -0.9**
**AKBB Malin Array Si 29.12 229** *e*P **P 22 54 26.9 -0.9**
**AKBB Malin Array Si 29.12 229** *e*P **P 22 54 26.9 -0.9**
**KIEV Kiev 29.13 229**⇑ *e*P **P 22 54 28.5 +0.6**
KIEV pmax pmax
comp=Z,16nm,2.5s
**KIEV Kiev 29.13 229** *e*P **P 22 54 28.5 +0.6**
comp=Z,16nm,2.5s
**SEY Seymchan 29.87 67** P **P 22 54 34.4 0.0**
comp=Z,7.6nm,0.6s,baz=354,slow=23,SNR=9.1
SEY PcP **PcP 22 57 36.2 -0.4**
comp=Z,3.4nm,0.7s,baz=252,slow=1.0,SNR=4.9
**SEY Seymchan 29.87 67**⇓ *e*P **P 22 54 35.7 +1.3**
**BSEG Bad Segeberg 29.98 253** *e*P **P 22 54 36.7 +1.2**
comp=Z,5.6nm,0.8s,baz=22,slow=9.1
**ZAK Zakamensk 30.16 127** *e*P P 22 54 50.7 +13
ZAK pmax pmax
comp=Z,3.0nm,1.4s
**MAKZ Makanchi 30.48 156** *e*P **P 22 54 39.1 -0.9**
comp=Z,8.7nm,1.0s
**MAKZ Makanchi 30.48 156** *e*P **P 22 54 39.1 -0.9**
comp=Z,8.7nm,1.0s
**MK31 Makanchi Array 30.53 155**⇑ *e*P **P 22 54 38.6 -1.8**
MK31 pmax pmax
comp=Z,1.0nm,0.5s
**MK31 Makanchi Array 30.53 155** *e*P **P 22 54 38.6 -1.8**
comp=Z,1.0nm,0.5s
**MK32 Makanchi Array 30.53 155** *e*P **P 22 54 39.1 -1.2**
**MK32 Makanchi Array 30.53 155** *e*P **P 22 54 39.2 -1.2**
**MKAR Makanchi Array 30.53 155** P **P 22 54 39.1 -1.3**
comp=Z,2.0nm,0.7s,baz=351,slow=7.9,SNR=12
MKAR LR LR 23 09 36.4
comp=Z,107nm,19.4s,baz=346,slow=42
**MKAR Makanchi Array 30.53 155** *e*P **P 22 54 39.6 -0.8**
MKAR pmax pmax
comp=Z,2.0nm,0.7s
**MKAR Makanchi Array 30.53 155** *e*P **P 22 54 38.6 -1.8**
**MKAR Makanchi Array 30.53 155** *e*P **P 22 54 39.6 -0.8**
comp=Z,2.0nm,0.7s
**MK01 Makanchi Array 30.55 155** *e*P **P 22 54 39.5 -1.1**
**MK01 Makanchi Array 30.55 155** *e*P **P 22 54 39.5 -1.1**
**NRDL Niedersach Rie 31.37 252** *e*P **P 22 54 48.8 +1.2**
comp=Z,5.0nm,1.0s,baz=22,slow=9.1
**CLL Collm 31.83 248** *e*P **P 22 54 52.0 +0.3**
CLL pmax pmax
comp=Z,12nm,1.4s
**CLL Collm 31.83 248** *e*P **P 22 54 52.1 +0.4**
comp=Z,12nm,1.4s,baz=22,slow=9.1
**CLL Collm 31.83 248** *e*P **P 22 54 52.0 +0.3**
comp=Z,12nm,1.4s
**CLL Collm 31.83 248** *e*P **P 22 54 52.0 +0.3**
comp=Z,12nm,1.4s
**EKA Eskdalemuir Ar 31.86 268** P **P 22 54 52.8 +0.8**
comp=Z,2.8nm,0.7s,baz=23,slow=8.2,SNR=11
EKA PcP **PcP 22 57 42.0 -0.1**
comp=Z,1.0nm,0.6s,baz=350,slow=2.5,SNR=5.8
**EKA Eskdalemuir Ar 31.86 268** P **P 22 54 52.8 +0.8**
EKA 22 57 42.0
EKA pmax pmax
comp=Z,3.0nm,0.7s
**EKA Eskdalemuir Ar 31.86 268** *e*PcP **PcP 22 57 42.0 -0.1**
**CLZ Clausthal 31.92 251** *e*P **P 22 54 54.0 +1.4**
comp=Z,6.9nm,1.0s,baz=22,slow=9.1
**UPC Upice 31.92 244** *e*P **P 22 54 53.6 +1.0**
**UPC Upice 31.92 244** *e*P **P 22 54 53.6 +1.0**
UPC *ex* x 22 55 43.3
**UPC Upice 31.92 244** *e*P **P 22 54 53.6 +1.0**
**DPC Dobruska-Polom 32.01 244** *e*P **P 22 54 54.5 +1.1**
DPC *e* 22 54 59.9
**DPC Dobruska-Polom 32.01 244** *e*P **P 22 54 54.5 +1.1**
DPC *ep*P **pP 22 54 59.9 +0.6**
DPC *ex* x 22 55 02.8
**DPC Dobruska-Polom 32.01 244** *e*P **P 22 54 54.5 +1.1**
**BRG Berggiesshubel 32.03 247** *e*P **P 22 54 53.8 +0.2**
comp=Z,7.7nm,1.1s
**BRG Berggiesshubel 32.03 247** P **P 22 54 55.0 +1.5**
BRG pmax pmax
comp=Z,47nm,1.0s
**BRG Berggiesshubel 32.03 247** *e*P **P 22 54 54.1 +0.6**
comp=Z,7.7nm,1.1s,baz=22,slow=9.1
**BRG Berggiesshubel 32.03 247** P **P 22 54 55.0 +1.5**
comp=Z,47nm,1.0s
**NIE Niedzica 32.06 239** *e*P **P 22 54 55.6 +1.7**
**NIE Niedzica 32.06 239** P **P 22 54 55.5 +1.7**
NIE pmax pmax
comp=Z,48nm,1.4s
**NIE Niedzica 32.06 239** P **P 22 54 55.5 +1.7**
comp=Z,48nm,1.4s
**IBBN Ibbenburen 32.08 255** *e*P **P 22 54 54.9 +1.0**
comp=Z,28nm,1.5s,baz=22,slow=9.1
**OKC Ostrava-Krasne 32.10 241** *e*P **P 22 54 55.2 +1.0**
OKC *e* 22 55 00.7
**OKC Ostrava-Krasne 32.10 241** *e*P **P 22 54 55.2 +1.0**
OKC *ep*P **pP 22 55 00.7 +0.6**
**OKC Ostrava-Krasne 32.10 241** *e*P **P 22 54 55.2 +1.0**
**KRLC Kraliky 32.17 243** *e*P **P 22 54 55.8 +1.0**
KRLC *e* 22 55 00.7
**KRLC Kraliky 32.17 243** *e*P **P 22 54 55.8 +1.0**
KRLC *ep*P **pP 22 55 00.7 0.0**
**KRLC Kraliky 32.17 243** *e*P **P 22 54 55.8 +1.0**
**MORC Moravsky Berou 32.29 242** *e*P **P 22 54 57.1 +1.2**
MORC pmax pmax
comp=Z,108nm,1.9s
**MORC Moravsky Berou 32.29 242**⇓ *i*P **P 22 54 57.2 +1.3**
**MORC Moravsky Berou 32.29 242** *e*P **P 22 54 57.1 +1.2**
comp=Z,108nm,1.9s
**MORC Moravsky Berou 32.29 242** *e*P **P 22 54 56.1 +0.2**
**PRA Prague 32.68 246** *e*P **P 22 55 00.5 +1.3**
**PRA Prague 32.68 246** *e*P **P 22 55 00.5 +1.3**
**PRA Prague 32.68 246** P **P 22 55 00.5 +1.3**
**PRU Pruhonice 32.73 246** *e*P **P 22 55 00.9 +1.2**
PRU *e* 22 55 06.4
**PRU Pruhonice 32.73 246** *e*P **P 22 55 00.9 +1.2**
PRU *ep*P **pP 22 55 06.4 +0.8**
**PRU Pruhonice 32.73 246** P **P 22 55 00.9 +1.2**
**GOPC GO Pecny, Ondr 32.75 245** *e*P **P 22 55 01.5 +1.6**
GOPC *e* 22 55 06.4
**GOPC GO Pecny, Ondr 32.75 245** *e*P **P 22 55 01.5 +1.6**
GOPC *ep*P **pP 22 55 06.4 +0.6**
**GOPC GO Pecny, Ondr 32.75 245** P **P 22 55 01.5 +1.6**
**BUR04 Bucovina Ar. S 32.82 232** *e*P **P 22 55 01.0 +0.4**
**BUR04 Bucovina Ar. S 32.82 232** *e*P **P 22 55 01.0 +0.4**
**BURAR Bucovina Array 32.82 232**⇓ *i*P **P 22 55 01.0 +0.4**
**BURAR Bucovina Array 32.82 232**⇓ *i*P **P 22 55 01.0 +0.4**
**VRAC Vranov 32.93 243** P **P 22 55 02.7 +1.2**
comp=Z,2.9nm,0.3s,baz=302,slow=9.5,SNR=3.9
**VRAC Vranov 32.93 243** P **P 22 55 02.7 +1.2**
VRAC pmax pmax
comp=Z,3.0nm,0.3s
**NKC Novy Kostel 32.96 248** *e*P **P 22 55 02.7 +1.0**
NKC *e* 22 55 08.3
NKC *e* 22 55 10.2
**NKC Novy Kostel 32.96 248** *e*P **P 22 55 02.7 +1.0**
NKC *ep*P **pP 22 55 08.3 +0.7**
NKC *ex* x 22 55 10.2
**NKC Novy Kostel 32.96 248** P **P 22 55 02.7 +1.0**
**BUG Bochum--Univer 33.00 255** *e*P **P 22 55 03.3 +1.3**
comp=Z,20nm,0.9s,baz=22,slow=9.1
**SONA1 Songino Array 33.19 124** *e*P **P 22 55 03.6 -0.3**
**SONA1 Songino Array 33.19 124** *e*P **P 22 55 03.6 -0.3**
**SONA0 Songino Array 33.20 124** *e*P **P 22 55 03.5 -0.5**
**SONA0 Songino Array 33.20 124** *e*P **P 22 55 03.5 -0.5**
**SONM Songino Array 33.20 124** P **P 22 55 03.5 -0.5**
comp=Z,2.7nm,0.8s,baz=336,slow=8.7,SNR=16
SONM LR LR 23 09 53.3
comp=Z,79nm,20.3s,baz=342,slow=39
**SONM Songino Array 33.20 124** *e*P **P 22 55 03.9 -0.1**
SONM pmax pmax
comp=Z,3.0nm,0.9s
**SONM Songino Array 33.20 124** *e*P **P 22 55 03.9 -0.1**
comp=Z,3.0nm,0.9s
**ULN Ulaanbaatar 33.30 124***c i*P **P 22 55 04.2 -0.7**
ULN pmax pmax
comp=Z,10.0nm,1.0s
**ULN Ulaanbaatar 33.30 124** *e*P **P 22 55 04.4 -0.5**
comp=Z,9.8nm,1.1s
**ULN Ulaanbaatar 33.30 124** *e*P **P 22 55 04.4 -0.5**
comp=Z,9.8nm,1.1s
**KK31 Karatay Array 33.41 172**⇑ *e*P **P 22 55 05.8 +0.1**
KK31 pmax pmax
comp=Z,7.0nm,0.7s
**KK31 Karatay Array 33.41 172** *e*P **P 22 55 05.8 +0.1**
comp=Z,7.0nm,0.7s
**KKAR Karatay Array 33.41 172** *e*P **P 22 55 06.5 +0.8**
**KKAR Karatay Array 33.41 172** *e*P **P 22 55 06.5 +0.8**
**KKAR Karatay Array 33.41 172** *e*P **P 22 55 06.4 +0.8**
**USP Ospenovka 33.43 166** P **P 22 55 06.5 +0.7**
SNR=7.1
**ROTZ Rotzenmuhle 33.45 248** *e*P **P 22 55 07.6 +1.6**
comp=Z,10nm,1.1s,baz=22,slow=9.1
**ARCR ARCALIA 33.49 233**⇑ *i*P **P 22 55 07.6 +1.2**
**PSZ Piszkesteto 33.57 238**⇓ *i*P **P 22 55 08.6 +1.5**
**PSZ Piszkesteto 33.57 238**⇓ *i*P **P 22 55 08.6 +1.5**
**PSZ Piszkesteto 33.57 238** P **P 22 55 08.6 +1.5**
**TESR Tescani 33.62 230**⇓ *i*P **P 22 55 08.1 +0.6**
**CHMS Chumysh 33.71 166** P **P 22 55 09.5 +1.2**
SNR=7.8
**KIV Kislovodsk 33.72 209**⇓ *e*P **P 22 55 08.1 -0.3**
KIV *e* 22 56 17.8
KIV *e*S **S 23 00 28.8 -1.6**
KIV pmax pmax
comp=Z,13nm,1.0s
KIV MLR MLR
comp=Z,53nm,16.0s
**KIV Kislovodsk 33.72 209** *e*P **P 22 55 08.1 -0.3**
comp=Z,13nm,1.0s
**GRF Grafenberg Arr 33.74 249** *e*P **P 22 55 09.9 +1.4**
comp=Z,14nm,0.9s,baz=22,slow=9.1
**GRFO Grafenberg 33.74 249** *e*P **P 22 55 10.4 +1.9**
GRFO pmax pmax
comp=Z,11nm,0.8s
**GRFO Grafenberg 33.74 249** *e*P **P 22 55 10.4 +1.9**
comp=Z,11nm,0.8s
**GRFO Grafenberg 33.74 249** *e*P **P 22 55 10.4 +1.9**
comp=Z,11nm,0.8s
**KHC Kasperske Hory 33.75 246** *e*P **P 22 55 10.4 +1.8**
KHC pmax pmax
comp=Z,3.0nm,1.1s
**KHC Kasperske Hory 33.75 246** *e*P **P 22 55 10.1 +1.5**
KHC *ep*P **pP 22 55 13.2 -1.4**
KHC *ex* x 22 55 17.1
**KHC Kasperske Hory 33.75 246** *e*P **P 22 55 10.4 +1.8**
comp=Z,3.5nm,1.1s
**KHC Kasperske Hory 33.75 246** P **P 22 55 10.1 +1.5**
**TKM2 Tokmak 2 33.84 165** *e*P **P 22 55 10.9 +1.2**
TKM2 pmax pmax
comp=Z,5.0nm,1.0s
**TKM2 Tokmak 2 33.84 165** *e*P **P 22 55 10.9 +1.2**
comp=Z,4.9nm,1.0s
**TKM2 Tokmak 2 33.84 165** *e*P **P 22 55 10.9 +1.2**
comp=Z,4.9nm,1.0s
**FRU Bishkek 33.86 166** *i*P **P 22 55 09.0 -0.7**
FRU pmax pmax
comp=Z,40nm,1.6s
**FRU Bishkek 33.86 166** *i*P **P 22 55 09.0 -0.7**
comp=Z,40nm,1.6s
**WET Wettzell 33.89 247** *e*P **P 22 55 11.4 +1.6**
comp=Z,8.5nm,1.2s,baz=22,slow=9.1
**KBZ Khabaz 33.91 208** P **P 22 55 10.9 +1.0**
comp=Z,8.6nm,0.9s,baz=293,slow=6.1,SNR=9.0
**KBZ Khabaz 33.91 208** P **P 22 55 11.0 +1.0**
KBZ pmax pmax
comp=Z,9.0nm,0.9s
**EKS2 Erkin-Say 33.99 167** *e*P **P 22 55 11.7 +0.8**
EKS2 pmax pmax
comp=Z,4.0nm,0.9s
**EKS2 Erkin-Say 33.99 167** P **P 22 55 09.8 -1.1**
SNR=7.1
**EKS2 Erkin-Say 33.99 167** *e*P **P 22 55 11.7 +0.8**
comp=Z,4.1nm,0.9s
**EKS2 Erkin-Say 33.99 167** *e*P **P 22 55 11.7 +0.8**
comp=Z,4.1nm,0.9s
**GEC2 GERESS Array S 33.99 246** *e*P **P 22 55 12.0 +1.2**
**GEC2 GERESS Array S 33.99 246** *e*P **P 22 55 12.1 +1.3**
comp=Z,6.7nm,1.1s,baz=22,slow=9.1
**GEC2 GERESS Array S 33.99 246** *e*P **P 22 55 12.0 +1.2**
**GEC2 GERESS Array S 33.99 246** *e*P **P 22 55 12.0 +1.2**
**GERES GERESS Array B 33.99 246** P **P 22 55 11.8 +1.0**
comp=Z,3.2nm,0.8s,baz=27,slow=9.0,SNR=20
GERES LR LR 23 11 12.3
comp=Z,86nm,18.6s,baz=0.5,slow=40
**GERES GERESS Array B 33.99 246** *e*P **P 22 55 12.3 +1.5**
GERES pmax pmax
comp=Z,3.0nm,0.8s
**AAK Ala-Archa 34.06 166** P **P 22 55 12.4 +0.9**
comp=Z,8.1nm,0.8s,baz=336,slow=1.4,SNR=23
**AAK Ala-Archa 34.06 166**⇑ *i*P **P 22 55 12.6 +1.1**
AAK pmax pmax
comp=Z,7.0nm,0.8s
**AAK Ala-Archa 34.06 166** P **P 22 55 12.8 +1.2**
SNR=9.9
**NCK Nalchik 34.07 207**⇓ *e*P **P 22 55 11.8 +0.4**
**NCK Nalchik 34.07 207** *e*P **P 22 55 11.8 +0.4**
**VRI Vrincioaia 34.23 229**⇑ P **P 22 55 13.6 +0.8**
**VRI Vrincioaia 34.23 229**⇑ *i*P **P 22 55 13.6 +0.8**
**VRI Vrincioaia 34.23 229** P **P 22 55 13.6 +0.8**
**PLOR Plostina 34.26 229**⇓ *i*P **P 22 55 14.3 +1.2**
**PLOR Plostina 34.26 229**⇓ *i*P **P 22 55 14.3 +1.2**
**PLOR Plostina 34.26 229** P **P 22 55 14.3 +1.2**
**UCH Uchtor 34.46 166** P **P 22 55 17.0 +1.7**
SNR=14
**AML Almayashu 34.51 168** P **P 22 55 18.0 +2.2**
SNR=20
**CFR Carcaliu 34.64 227**⇑ P **P 22 55 16.7 +0.4**
**CFR Carcaliu 34.64 227**⇑ *i*P **P 22 55 16.7 +0.4**
**CFR Carcaliu 34.64 227** P **P 22 55 16.7 +0.4**
**MLR Muntele Rosu 34.73 230**⇑ P **P 22 55 18.4 +1.1**
**MLR Muntele Rosu 34.73 230**⇑ *i*P **P 22 55 18.4 +1.1**
**MLR Muntele Rosu 34.73 230** P **P 22 55 18.4 +1.1**
**VOIR 34.95 231**⇑ P **P 22 55 20.5 +1.4**
**VOIR 34.95 231**⇑ *i*P **P 22 55 20.5 +1.4**
**VOIR 34.95 231** P **P 22 55 20.5 +1.4**
**ISR Istrita 34.98 229**⇑ P **P 22 55 19.9 +0.5**
**ISR Istrita 34.98 229**⇑ *i*P **P 22 55 19.9 +0.5**
**ISR Istrita 34.98 229** P **P 22 55 19.9 +0.5**
**COLD Coldfoot 35.11 23** *e*P **P 22 55 20.7 +0.5**
comp=Z,4.7nm,0.8s
**COLD Coldfoot 35.11 23** *e*P **P 22 55 20.7 +0.5**
comp=Z,4.7nm,0.8s
**INK Inuvik 35.20 11** P **P 22 55 20.4 -0.4**
comp=Z,6.8nm,0.9s,baz=356,slow=6.0,SNR=5.7
**INK Inuvik 35.20 11** P **P 22 55 20.4 -0.4**
INK pmax pmax
comp=Z,7.0nm,0.9s
**INK Inuvik 35.20 11** *e*P **P 22 55 20.4 -0.4**
comp=Z,185nm,2.8s
**INK Inuvik 35.20 11** *e*P **P 22 55 20.4 -0.4**
comp=Z,185nm,2.8s
**TLB Topalu 35.23 227**⇑ P **P 22 55 22.5 +1.1**
**TLB Topalu 35.23 227**⇑ *i*P **P 22 55 22.5 +1.1**
**TLB Topalu 35.23 227** P **P 22 55 22.5 +1.1**
**TIRR Tirgusor 35.29 227**⇓ P **P 22 55 22.8 +0.9**
**TIRR Tirgusor 35.29 227**⇓ *i*P **P 22 55 22.8 +0.9**
**TIRR Tirgusor 35.29 227** P **P 22 55 22.8 +0.9**
**GZR Gura Zlata 35.42 234**⇑ P **P 22 55 24.8 +1.7**
**GZR Gura Zlata 35.42 234**⇑ *i*P **P 22 55 24.8 +1.7**
**GZR Gura Zlata 35.42 234** P **P 22 55 24.8 +1.7**
**BZS Buzias 35.43 235**⇓ P **P 22 55 24.1 +1.0**
**BZS Buzias 35.43 235**⇓ *i*P **P 22 55 24.1 +1.0**
**BZS Buzias 35.43 235** P **P 22 55 24.1 +1.0**
**MSAB Monastry St. A 35.75 227**⇓ *i*P **P 22 55 27.3 +1.4**
**FUORN Ofenpass-Fuorn 36.85 248** *e*P **P 22 55 37.6 +2.0**
comp=Z,16nm,1.3s
**FUORN Ofenpass-Fuorn 36.85 248** *e*P **P 22 55 37.6 +2.0**
comp=Z,16nm,1.3s
**TUE Stuetta 37.20 249** *e*P **P 22 55 40.4 +1.9**
comp=Z,12nm,1.0s
**TUE Stuetta 37.20 249** *e*P **P 22 55 40.4 +1.9**
comp=Z,12nm,1.0s
**DIVS Divibare 37.21 236**⇓ *i*P **P 22 55 39.4 +1.0**
**KSH Kashi 37.25 165** P P 22 55 42.6 +3.7
KSH PMZ
comp=Z,8.0nm,1.2s
**IL1 Eielson Array 37.81 21** *e*P **P 22 55 44.0 +0.8**
**IL1 Eielson Array 37.81 21** *e*P **P 22 55 44.0 +0.8**
**ILAR Eielson Array 37.81 21** P **P 22 55 43.3 +0.1**
comp=Z,2.4nm,0.7s,baz=342,slow=8.1,SNR=17
ILAR LR LR 23 11 07.9
comp=Z,40nm,18.0s,baz=332,slow=36
**ILAR Eielson Array 37.81 21** *e*P **P 22 55 44.4 +1.2**
ILAR pmax pmax
comp=Z,4.0nm,0.9s
**ILAR Eielson Array 37.81 21** *e*P **P 22 55 44.4 +1.2**
comp=Z,4.0nm,0.9s
**ILB Eielson Array 37.81 21** *e*P **P 22 55 43.3 +0.1**
**ILB Eielson Array 37.81 21** *e*P **P 22 55 43.3 +0.1**
**CCB Clear Creek Bu 37.85 22** *e*P **P 22 55 44.8 +1.2**
comp=Z,38nm,2.2s
**CCB Clear Creek Bu 37.85 22** *e*P **P 22 55 44.8 +1.2**
comp=Z,38nm,2.2s
**HDA Harding Lake 38.16 21** *e*P **P 22 55 47.2 +1.0**
comp=Z,6.1nm,0.9s
**HDA Harding Lake 38.16 21** *e*P **P 22 55 47.2 +1.0**
comp=Z,6.1nm,0.9s
**GEYT Alibeck 38.57 188** P **P 22 55 49.6 -0.3**
comp=Z,4.2nm,0.8s,baz=312,slow=7.6,SNR=7.5
GEYT LR LR 23 12 00.1
comp=Z,54nm,18.5s,baz=355,slow=37
**CAST Castle Rocks 38.65 25** *e*P P 22 55 56.6 +6.3
comp=Z,82nm,2.8s
**HABR Khabarovsk 39.00 93** *e*P P 22 55 51.2 -2.2
HABR *e**PP pP 22 55 52.8 -6.5
HABR *e**SP sP 22 55 53.4 -8.3
HABR 22 57 21.1
HABR *e* 22 58 01.2
HABR *e*S **ScP 23 01 51.9 +2.1**
HABR *e*SSS SSS 23 05 01.9
HABR *e* 23 06 01.8
HABR pmax pmax
comp=Z,54nm,2.0s
HABR MLR MLR
comp=Z,335nm,20.0s
**HABR Khabarovsk 39.00 93** *e*P P 22 55 51.2 -2.2
comp=Z,54nm,2.0s
**HABR Khabarovsk 39.00 93** *e*PcP **PcP 22 58 01.2 -1.9**
**BR101 Keskin Array S 39.07 219** *e*P **P 22 55 55.0 +0.8**
**BR101 Keskin Array S 39.07 219** *e*P **P 22 55 55.0 +0.8**
**BRTR Keskin Array B 39.07 219** P **P 22 55 55.0 +0.8**
comp=Z,2.9nm,0.8s,baz=12,slow=5.4,SNR=11
**BRTR Keskin Array B 39.07 219** *e*P **P 22 55 55.6 +1.4**
BRTR pmax pmax
comp=Z,3.0nm,0.8s
**DAWY Dawson 39.08 16** *e*P **P 22 55 54.4 +0.5**
**DAWY Dawson 39.08 16** *e*P **P 22 55 54.4 +0.5**
**BR231 Keskin MP Arra 39.08 220** *e*P **P 22 55 55.9 +1.6**
**BR231 Keskin MP Arra 39.08 220** *e*P **P 22 55 55.9 +1.6**
**PAX Paxson 39.70 21** *e*P **P 22 56 00.3 +1.1**
PAX pmax pmax
comp=Z,14nm,1.3s
**PAX Paxson 39.70 21** *e*P **P 22 56 00.3 +1.1**
comp=Z,14nm,1.3s
**PAX Paxson 39.70 21** *e*P **P 22 56 00.3 +1.1**
comp=Z,14nm,1.3s
**MALT Malatya 39.79 212**⇓ P **P 22 56 02.3 +2.1**
**MALT Malatya 39.79 212**⇓ *i*P **P 22 56 02.3 +2.1**
**MALT Malatya 39.79 212** P **P 22 56 02.3 +2.1**
**PETK Petropavlovsk- 39.98 69** P **P 22 56 00.8 -0.7**
comp=Z,12nm,0.7s,baz=26,slow=5.3,SNR=12
**PETK Petropavlovsk- 39.98 69** P **P 22 56 00.8 -0.7**
PETK pmax pmax
comp=Z,12nm,0.7s
**PEA2 Petropavlovsk- 39.98 69** *e*P **P 22 56 00.8 -0.8**
**PEA2 Petropavlovsk- 39.98 69** *e*P **P 22 56 00.8 -0.8**
**GTA Gaotai 40.15 136** *e*P **P 22 56 03.3 +0.1**
GTA pP **pP 22 56 07.6 -1.6**
GTA sP **sP 22 56 10.7 -0.9**
GTA PMZ
comp=Z,5.0nm,1.1s
**HHC Hu-ho-hao-te 40.94 122** *e*P **P 22 56 08.0 -1.7**
HHC PP **PP 22 57 46.1 +2.2**
HHC S **S 23 02 17.8 -2.4**
HHC PMZ
comp=Z,18nm,0.7s
HHC PMZ
comp=Z,100nm,4.1s
HHC LN
comp=Z,99nm,12.3s
HHC LE
comp=Z,160nm,13.6s
HHC LZ
comp=Z,220nm,13.6s
**USRK Ussuriysk Ar. 42.29 98** P **P 22 56 18.7 -1.8**
comp=Z,2.2nm,0.7s,baz=343,slow=4.5,SNR=4.1
**BJT Baijiatuau 42.70 117** *e*P **P 22 56 24.0 +0.1**
BJT pmax pmax
comp=Z,15nm,0.7s
**BJT Baijiatuau 42.70 117** *e*P **P 22 56 24.0 +0.1**
comp=Z,15nm,0.7s
**BJT Baijiatuau 42.70 117** *e*P **P 22 56 24.0 +0.1**
comp=Z,15nm,0.7s
**ASAJ Asahikawa 44.89 88** P P 22 56 38.3 -3.2
comp=Z,2.1nm,0.2s,baz=356,slow=16,SNR=2.9
**ASAJ Asahikawa 44.89 88** P P 22 56 38.3 -3.2
ASAJ pmax pmax
comp=Z,2.0nm,0.2s
**ASAJ Asahikawa 44.89 88** *e*P P 22 56 38.3 -3.2
comp=Z,20nm,1.2s
**ASAJ Asahikawa 44.89 88** *e*P P 22 56 38.3 -3.2
comp=Z,20nm,1.2s
**JKA Kamikawa-asahi 44.89 88** P P 22 56 38.3 -3.2
comp=Z,2.0nm,0.2s
**DLBC Dease Lake 45.21 11** P P **22 56 44.8 +0.9**
comp=Z,7.9nm,0.9s,baz=331,slow=6.0,SNR=9.5
**DLBC Dease Lake 45.21 11** *e*P **P 22 56 45.4 +1.4**
comp=Z,11nm,0.9s
**DLBC Dease Lake 45.21 11** *e*P **P 22 56 45.4 +1.4**
comp=Z,11nm,0.9s
**SCHQ Schefferville 45.45 322** P **P 22 56 47.1 +1.2**
comp=Z,4.0nm,0.9s,baz=357,slow=19,SNR=3.6
**SCHQ Schefferville 45.45 322** *e*P **P 22 56 47.1 +1.2**
comp=Z,414nm,2.8s
**SCHQ Schefferville 45.45 322** *e*P **P 22 56 47.1 +1.2**
comp=Z,414nm,2.8s
**GSTR Great Sitkin T 46.25 48** *e*P **P 22 56 54.8 +2.6**
**GSTR Great Sitkin T 46.25 48** *e*P **P 22 56 54.8 +2.6**
**ESDC Sonseca Array 46.70 260** P **P 22 56 56.8 +0.9**
comp=Z,2.5nm,0.9s,baz=11,slow=9.5,SNR=9.1
ESDC PcP **PcP 22 58 29.6 +0.5**
comp=Z,0.7nm,0.7s,baz=12,slow=1.9,SNR=4.6
**XAN Xi'an 47.01 127** P **P 22 56 57.6 -0.7**
XAN pP **pP 22 57 05.3 +0.9**
XAN PMZ
comp=Z,6.0nm,0.8s
**KEST Kesra 47.46 245** P **P 22 57 03.3 +1.4**
comp=Z,6.8nm,0.8s,baz=344,slow=8.9,SNR=7.6
KEST LR LR 23 21 05.3
comp=Z,50nm,18.2s,baz=250,slow=41
**KSRS Korea Array 47.76 106** P **P 22 57 03.1 -1.0**
comp=Z,0.9nm,0.6s,baz=344,slow=8.0,SNR=3.4
**KSRS Korea Array 47.76 106** P **P 22 57 03.1 -1.0**
KSRS pmax pmax
comp=Z,1.0nm,0.6s
**KS15 Wonju Array Si 47.76 106** *e*P **P 22 57 03.1 -1.0**
**KS15 Wonju Array Si 47.76 106** *e*P **P 22 57 03.1 -1.0**
**KSAR Wonju Array Be 47.76 106** P **P 22 57 03.1 -1.0**
**KSAR Wonju Array Be 47.76 106** P **P 22 57 03.1 -1.0**
**KSAR Wonju Array Be 47.76 106** P **P 22 57 03.1 -1.0**
**LSA Lhasa 48.42 148** *e*P **P 22 57 11.2 +1.4**
LSA pmax pmax
comp=Z,5.0nm,0.8s
**LSA Lhasa 48.42 148** *e*P **P 22 57 11.2 +1.4**
comp=Z,4.9nm,0.8s
**LSA Lhasa 48.42 148** *e*P **P 22 57 11.2 +1.4**
comp=Z,4.9nm,0.8s
**DANN Dangsing 48.94 157** *e*P **P 22 57 14.0 +0.3**
**GKN Gorkha 49.37 156** *e*P **P 22 57 16.7 -0.1**
**KOLN Koldanda 49.50 157** *e*P **P 22 57 17.7 -0.1**
**GUN Gumba 49.59 155** *e*P **P 22 57 18.6 0.0**
**KKN Kakani 49.64 155** *e*P **P 22 57 19.1 +0.2**
comp=Z,70nm,0.6s
**DMN Daman 49.81 156** *e*P **P 22 57 20.4 +0.2**
comp=Z,34nm,0.6s

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| PKIN | Phulchoki | 49.87 | 155 | eP | P | 22 57 20.6 | -0.1 |
| PKI | Pulchoki | 49.87 | 155 | eP | P | 22 57 20.8 | 0.0 |
| TAPN | Taplejung | 50.33 | 153 | eP | P | 22 57 24.0 | -0.3 |
| | comp=Z,30nm,1.1s | | | | | | |
| RAMN | Ramite | 50.61 | 154 | eP | P | 22 57 25.8 | -0.5 |
| | comp=Z,20nm,0.7s | | | | | | |
| ODAN | Odare | 50.78 | 153 | eP | P | 22 57 27.6 | 0.0 |
| | comp=Z,58nm,1.1s | | | | | | |
| MAJO | Matsushiro | 51.03 | 96 | eP | P | 22 57 27.1 | -2.0 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,20nm,1.6s | | | | | | |
| MAJO | Matsushiro | 51.03 | 96 | eP | P | 22 57 27.1 | -2.0 |
| | comp=Z,20nm,1.6s | | | | | | |
| MAJO | Matsushiro | 51.03 | 96 | eP | P | 22 57 27.1 | -2.0 |
| | comp=Z,20nm,1.6s | | | | | | |
| MJAR | Matsushiro Arr | 51.04 | 96 | P | P | 22 57 27.1 | -2.0 |
| | comp=Z,1.1nm,0.7s,baz=336,slow=8.9,SNR=5.9 | | | | | | |
| MJAR | Matsushiro Arr | 51.04 | 96 | P | P | 22 57 27.1 | -2.0 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| MJA0 | Matsu Arr-Jizo | 51.04 | 95 | eP | P | 22 57 28.8 | -0.4 |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| MJA0 | Matsu Arr-Jizo | 51.04 | 95 | eP | P | 22 57 28.8 | -0.4 |
| | comp=Z,1.0nm,0.5s | | | | | | |
| BBB | Bella Bella | 51.54 | 10 | LR | LR | 23 22 34.3 | |
| | comp=Z,142nm,18.7s,baz=242,slow=40 | | | | | | |
| ULM | Lac du Bonnet | 53.08 | 344 | LR | LR | 23 21 20.6 | |
| | comp=Z,32nm,18.8s,baz=128,slow=37 | | | | | | |
| RAYN | Ar Rayn | 53.66 | 202 | eP | P | 22 57 49.7 | +1.0 |
| | comp=Z,5.5nm,1.4s | | | | | | |
| RAYN | Ar Rayn | 53.66 | 202 | eP | P | 22 57 49.7 | +1.0 |
| | comp=Z,5.5nm,1.4s | | | | | | |
| WALA | Waterton Lakes | 54.91 | 359 | eP | P | 22 58 02.4 | +4.7 |
| | comp=Z,125nm,2.5s | | | | | | |
| NEW | Newport | 55.71 | 1 | eP | P | 22 58 04.5 | +1.1 |
| NEW | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| NEW | Newport | 55.71 | 1 | eP | P | 22 58 04.5 | +1.1 |
| | comp=Z,12nm,0.8s | | | | | | |
| NEW | Newport | 55.71 | 1 | eP | P | 22 58 04.5 | +1.1 |
| | comp=Z,12nm,0.8s | | | | | | |
| BSMT | Bassoo Peak | 56.13 | 359 | eP | P | 22 58 11.5 | +5.0 |
| SWMT | Swartz Lake | 56.47 | 359 | eP | P | 22 58 09.0 | +0.1 |
| | comp=Z,9.2nm,1.1s | | | | | | |
| SWMT | Swartz Lake | 56.47 | 359 | eP | P | 22 58 09.0 | +0.1 |
| | comp=Z,9.2nm,1.1s | | | | | | |
| LTY | Liberty | 56.68 | 4 | eP | P | 22 58 14.5 | +4.1 |
| | comp=Z,5.6nm,0.8s | | | | | | |
| SLMT | Seeley Lake | 56.73 | 358 | eP | P | 22 58 12.6 | +1.8 |
| SLMT | Seeley Lake | 56.73 | 358 | eP | P | 22 58 12.6 | +1.8 |
| CHMT | Chamberlain Mo | 57.06 | 358 | eP | P | 22 58 17.2 | +4.1 |
| LON | Longmire | 57.17 | 5 | eP | P | 22 58 18.6 | +4.8 |
| LON | | | | pmax | pmax | | |
| | comp=Z,31nm,2.0s | | | | | | |
| LON | Longmire | 57.17 | 5 | eP | P | 22 58 18.6 | +4.8 |
| | comp=Z,31nm,2.0s | | | | | | |
| BOZ | Bozeman (W) | 58.30 | 357 | eP | P | 22 58 26.9 | +5.0 |
| BOZ | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| BOZ | Bozeman (W) | 58.30 | 357 | eP | P | 22 58 26.9 | +5.0 |
| | comp=Z,8.9nm,1.1s | | | | | | |
| G08A | Pilot Rock | 58.67 | 3 | eP | P | 22 58 25.4 | +1.0 |
| | comp=Z,4.2nm,0.8s | | | | | | |
| G08A | Pilot Rock | 58.67 | 3 | eP | P | 22 58 25.4 | +1.0 |
| | comp=Z,4.2nm,0.8s | | | | | | |
| SSLB | Suanglung | 59.37 | 117 | eP | P | 22 58 28.8 | -0.6 |
| | comp=Z,8.6nm,0.9s | | | | | | |
| SSLB | Suanglung | 59.37 | 117 | eP | P | 22 58 28.8 | -0.6 |
| | comp=Z,8.6nm,0.9s | | | | | | |
| ECSD | EROS Data Cent | 59.62 | 344 | eP | P | 22 58 31.5 | +0.7 |
| | comp=Z,16nm,1.0s | | | | | | |
| ECSD | EROS Data Cent | 59.62 | 344 | eP | P | 22 58 31.5 | +0.7 |
| | comp=Z,16nm,1.0s | | | | | | |
| RSSD | Black Hills | 59.62 | 350 | eP | P | 22 58 36.1 | +5.0 |
| RSSD | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| RSSD | Black Hills | 59.62 | 350 | eP | P | 22 58 36.1 | +5.0 |
| | comp=Z,11nm,1.1s | | | | | | |
| IMW | Indian Meadow | 60.04 | 356 | eP | P | 22 58 39.8 | +5.6 |
| | comp=Z,23nm,2.0s | | | | | | |
| MOOW | Moose Ponds | 60.19 | 356 | eP | P | 22 58 40.3 | +5.3 |
| | comp=Z,5.2nm,1.2s | | | | | | |
| CHTO | Chiang Mai | 60.20 | 142 | eP | P | 22 58 34.0 | -1.1 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| CHTO | Chiang Mai | 60.20 | 142 | eP | P | 22 58 34.0 | -1.1 |
| | comp=Z,5.2nm,1.0s | | | | | | |
| CHTO | Chiang Mai | 60.20 | 142 | eP | P | 22 58 34.0 | -1.1 |
| | comp=Z,5.2nm,1.0s | | | | | | |
| FXWY | Fox Creek | 60.30 | 356 | eP | P | 22 58 41.2 | +5.3 |
| | comp=Z,3.6nm,1.0s | | | | | | |
| CM31 | Chiang Mai Arr | 60.55 | 142 | eP | P | 22 58 36.3 | -1.2 |
| CM31 | Chiang Mai Arr | 60.55 | 142 | eP | P | 22 58 36.3 | -1.2 |
| CMAR | Chiang Mai Arr | 60.55 | 142 | P | P | 22 58 36.3 | -1.2 |
| | comp=Z,2.8nm,0.6s,baz=348,slow=7.7,SNR=14 | | | | | | |
| CMAR | Chiang Mai Arr | 60.55 | 142 | eP | P | 22 58 36.6 | -0.9 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| CMAR | Chiang Mai Arr | 60.55 | 142 | eP | P | 22 58 36.6 | -0.9 |
| | comp=Z,3.0nm,0.6s | | | | | | |
| CM01 | Chiang Mai Arr | 60.59 | 142 | eP | P | 22 58 36.4 | -1.3 |
| CM01 | Chiang Mai Arr | 60.59 | 142 | eP | P | 22 58 36.4 | -1.3 |
| J08A | Circle Bar Ran | 60.61 | 2 | eP | P | 22 58 43.2 | +5.5 |
| | comp=Z,62nm,2.5s | | | | | | |
| BW06 | Boulder Array | 61.15 | 355 | eP | P | 22 58 42.5 | +0.9 |
| BW06 | Boulder Array | 61.15 | 355 | eP | P | 22 58 42.5 | +0.9 |
| HVU | Hansel Valley | 62.19 | 357 | eP | P | 22 58 53.4 | +4.9 |
| HVU | | | | pmax | pmax | | |
| | comp=Z,36nm,2.4s | | | | | | |
| HVU | Hansel Valley | 62.19 | 357 | eP | P | 22 58 53.4 | +4.9 |
| | comp=Z,36nm,2.4s | | | | | | |
| PHWY | Pilot Hill | 62.49 | 351 | eP | P | 22 58 54.6 | +3.9 |
| | comp=Z,5.5nm,0.9s | | | | | | |
| BGU | Big Grassy Mou | 63.04 | 358 | eP | P | 22 58 59.8 | +5.6 |
| | comp=Z,35nm,2.5s | | | | | | |
| O16A | Springville | 63.74 | 356 | eP | P | 22 59 13.6 | +15 |
| DUG | Dugway | 63.77 | 358 | eP | P | 22 58 59.8 | +0.8 |
| DUG | | | | pmax | pmax | | |
| | comp=Z,18nm,1.7s | | | | | | |
| DUG | Dugway | 63.77 | 358 | eP | P | 22 58 59.8 | +0.8 |
| | comp=Z,18nm,1.7s | | | | | | |
| DUG | Dugway | 63.77 | 358 | eP | P | 22 58 59.8 | +0.8 |
| | comp=Z,18nm,1.7s | | | | | | |
| P18A | Preston Nutter | 64.30 | 355 | eP | P | 22 59 08.1 | +5.4 |
| | comp=Z,10nm,1.2s | | | | | | |
| PV09 | Paradox Valley | 65.40 | 354 | eP | P | 22 59 15.4 | +5.6 |
| PV10 | Paradox Valley | 65.52 | 354 | eP | P | 22 59 15.5 | +4.9 |
| NV01 | Mina Array Sit | 65.53 | 2 | eP | P | 22 59 11.5 | +0.8 |
| NV01 | Mina Array Sit | 65.53 | 2 | eP | P | 22 59 11.5 | +0.8 |
| NVAR | Mina Array Bea | 65.53 | 2 | P | P | 22 59 11.5 | +0.8 |
| | comp=Z,1.5nm,0.8s,baz=340,slow=2.6,SNR=4.2 | | | | | | |
| TZTN | Tazewell | 65.59 | 332 | eP | P | 22 59 11.4 | +0.6 |
| | comp=Z,22nm,1.4s | | | | | | |
| TZTN | Tazewell | 65.59 | 332 | eP | P | 22 59 11.4 | +0.6 |
| | comp=Z,22nm,1.4s | | | | | | |
| R11A | Troy Canyon, C | 65.63 | 360 | eP | P | 22 59 11.7 | +0.5 |
| | comp=Z,3.4nm,0.9s | | | | | | |
| R11A | Troy Canyon, C | 65.63 | 360 | eP | P | 22 59 11.7 | +0.5 |
| | comp=Z,3.4nm,0.9s | | | | | | |
| PV01 | Paradox Valley | 65.75 | 354 | eP | P | 22 59 15.3 | +3.3 |
| PV05 | Paradox Valley | 65.82 | 354 | eP | P | 22 59 17.6 | +5.1 |
| SDCO | Great Sand Dun | 66.04 | 351 | eP | P | 22 59 15.2 | +1.1 |
| | comp=Z,3.0nm,0.8s | | | | | | |
| SDCO | Great Sand Dun | 66.04 | 351 | eP | P | 22 59 15.1 | +1.1 |
| | comp=Z,3.0nm,0.8s | | | | | | |
| PBMO | Poplar Bluff | 66.05 | 338 | eP | P | 22 59 18.3 | +4.6 |
| | comp=Z,9.3nm,1.0s | | | | | | |
| S22A | 4UR Ranch, Cre | 66.09 | 352 | eP | P | 22 59 15.7 | +1.3 |
| | comp=Z,9.3nm,1.4s | | | | | | |
| S22A | 4UR Ranch, Cre | 66.09 | 352 | eP | P | 22 59 15.6 | +1.3 |
| | comp=Z,9.3nm,1.4s | | | | | | |
| MVCO | Mesa Verde | 66.67 | 354 | eP | P | 22 59 23.1 | +5.1 |
| | comp=Z,5.5nm,0.9s | | | | | | |
| JSC | Jenkinsville | 67.55 | 330 | eP | P | 22 59 24.4 | +1.1 |
| JSC | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| JSC | Jenkinsville | 67.55 | 330 | eP | P | 22 59 24.4 | +1.1 |
| | comp=Z,8.4nm,0.8s | | | | | | |
| JSC | Jenkinsville | 67.55 | 330 | eP | P | 22 59 24.4 | +1.1 |
| | comp=Z,8.4nm,0.8s | | | | | | |
| GOGA | Godfrey | 68.67 | 331 | eP | P | 22 59 35.1 | +4.7 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,113nm,3.0s | | | | | | |
| GOGA | Godfrey | 68.67 | 331 | eP | P | 22 59 35.0 | +4.7 |
| | comp=Z,113nm,3.0s | | | | | | |
| WMOK | Wichita Mounta | 68.71 | 345 | eP | P | 22 59 31.7 | +1.1 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| WMOK | Wichita Mounta | 68.71 | 345 | eP | P | 22 59 31.7 | +1.1 |
| | comp=Z,8.3nm,1.0s | | | | | | |
| WMOK | Wichita Mounta | 68.71 | 345 | eP | P | 22 59 31.7 | +1.1 |
| | comp=Z,8.3nm,1.0s | | | | | | |
| ANMO | Albuquerque | 68.87 | 352 | ⇓iP | P | 22 59 30.9 | -0.9 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| ANMO | Albuquerque | 68.87 | 352 | eP | P | 22 59 38.3 | +6.5 |
| | comp=Z,40nm,2.8s | | | | | | |
| ANMO | Albuquerque | 68.87 | 352 | iP | P | 22 59 30.9 | -0.9 |
| | comp=Z,1.0nm,1.0s | | | | | | |
| BBRC | Big Bear Solar | 69.70 | 1 | eP | P | 22 59 43.6 | +6.6 |
| TOA0 | Torodi Ar. Sit | 70.95 | 246 | eP | P | 22 59 44.4 | -0.1 |
| TOA0 | Torodi Ar. Sit | 70.95 | 246 | eP | P | 22 59 44.4 | -0.1 |
| TORD | Torodi Ar. Bea | 70.95 | 246 | P | P | 22 59 44.2 | -0.3 |
| | comp=Z,3.4nm,0.9s,baz=3.5,slow=6.1,SNR=28 | | | | | | |
| TX31 | Lajitas Ar. Si | 74.34 | 349 | eP | P | 23 00 05.2 | +0.4 |
| TX31 | Lajitas Ar. Si | 74.34 | 349 | eP | P | 23 00 05.2 | +0.4 |
| TXAR | Lajitas Array | 74.35 | 349 | P | P | 23 00 04.9 | +0.2 |
| | comp=Z,1.2nm,0.7s,baz=1.0,slow=3.0,SNR=12 | | | | | | |
| TXAR | | | | LR | LR | 23 34 32.7 | |
| | comp=Z,56nm,19.3s,baz=0.0,slow=37 | | | | | | |
| TXAR | Lajitas Array | 74.35 | 349 | P | P | 23 00 04.9 | +0.2 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| TXAR | | | | MLR | MLR | | |
| | comp=Z,56nm,19.3s | | | | | | |
| MYLDM | Lahad Datu | 76.95 | 124 | eP | P | 23 00 20.5 | +0.9 |
| | comp=Z,77nm,2.0s | | | | | | |
| MYLDM | Lahad Datu | 76.95 | 124 | eP | P | 23 00 20.5 | +0.9 |
| | comp=Z,77nm,2.0s | | | | | | |
| DBIC | Dimbokro | 78.67 | 251 | P | P | 23 00 29.0 | -0.2 |
| | comp=Z,7.4nm,0.8s,baz=347,slow=11,SNR=6.6 | | | | | | |
| DBIC | Dimbokro | 78.67 | 251 | P | P | 23 00 29.0 | -0.2 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| DBIC | Dimbokro | 78.67 | 251 | eP | P | 23 00 29.0 | -0.2 |
| | comp=Z,12nm,0.9s | | | | | | |
| DBIC | Dimbokro | 78.67 | 251 | eP | P | 23 00 29.0 | -0.2 |
| | comp=Z,12nm,0.9s | | | | | | |
| ICMP | Isla Caja de M | 81.48 | 313 | eP | P | 23 00 44.6 | +0.3 |
| ICMP | Isla Caja de M | 81.48 | 313 | eP | P | 23 00 44.7 | +0.3 |
| MAW | Mawson | 143.68 | 181 | PKP | PKPab | 23 07 57.5 | +0.5 |
| | comp=Z,1.2nm,0.5s,baz=310,slow=1.5,SNR=5.7 | | | | | | |
| MAW | Mawson | 143.68 | 181 | PKIKP | PKPab | 23 07 57.5 | +0.5 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| SNAA | Sanae | 153.12 | 220 | PKPbc | PKPbc | 23 08 22.2 | -0.7 |
| | comp=Z,0.8nm,0.9s,baz=63,slow=8.1,SNR=6.0 | | | | | | |
| SNAA | Sanae | 153.12 | 220 | PKIKP | PKPbc | 23 08 22.2 | -0.7 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |

*ISCJB **11** 22:50:08.5±0.5, 37.°15N±0.°02×117.°43W±0.°03, h5km±4km, Error ellipse: s-maj=3.8km s-min=3.5km az=33.7*
*NEIC **11** 22:50:09.1, 37.°15N×117.°39W, h12km, ML3.4(REN), After REN.*
**ISC 11 22:50:09.1**±0.9**, 37.°15N**±0.°02×**117.°40W**±0.°02**, h15**km±6km**, n34,** σ**1.s50**/50**, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GRAC | Grapevine Rang | 0.15 | 170 | P | Pg | 22 50 13.0 | -0.1 |
| | baz=0.1 | | | | | | |
| GRAC | | | | S | Sg | 22 50 15.4 | -0.3 |
| | baz=0.1 | | | | | | |
| TIN | Tinemaha | 0.67 | 262 | P | Pg | 22 50 22.4 | +0.2 |
| | baz=0.7 | | | | | | |
| TIN | | | | S | Sb | 22 50 31.5 | 0.0 |
| | baz=0.7 | | | | | | |
| TIN | Tinemaha | 0.67 | 262 | ePg | Pb | 22 50 22.7 | +0.2 |
| FURC | Furnace Creek, | 0.80 | 147 | P | Pg | 22 50 24.5 | -0.2 |
| | baz=0.8 | | | | | | |
| DAC | Darwin (Calif) | 0.88 | 190 | ePg | Pg | 22 50 26.0 | -0.3 |
| DAC | | | | eSg | Sg | 22 50 37.0 | -0.9 |
| CWC | Cottonwood Cre | 0.89 | 218 | P | Pg | 22 50 26.1 | -0.3 |
| | baz=0.9 | | | | | | |
| CWC | | | | S | Sb | 22 50 37.8 | -0.2 |
| | baz=0.9 | | | | | | |
| TPNV | Topopah Spring | 0.94 | 102 | P | Pb | 22 50 26.8 | -0.4 |
| | baz=0.9 | | | | | | |
| TPNV | Topopah Spring | 0.94 | 102 | ePg | Pb | 22 50 26.8 | -0.4 |
| TPNV | | | | eSg | Sb | 22 50 39.8 | +0.2 |
| MTUM | Tungsten Hills | 0.95 | 283 | ePg | Pb | 22 50 27.5 | +0.2 |
| MTUM | | | | eSg | Sb | 22 50 38.5 | -1.3 |
| MPMC | Manual Prospec | 1.09 | 184 | Pg | Pb | 22 50 29.6 | -0.1 |
| | baz=1.1 | | | | | | |
| MPMC | | | | S | Sg | 22 50 44.1 | -0.3 |
| | baz=1.1 | | | | | | |
| RCWM | Renegade Canyo | 1.21 | 189 | ePn | Pg | 22 50 32.6 | +0.2 |
| WLHM | Little Horse | 1.23 | 217 | ePn | Pg | 22 50 33.3 | +0.3 |
| NV01 | Mina Array Sit | 1.47 | 331 | ePn | Pn | 22 50 34.8 | -0.4 |
| NV01 | | | | eSg | Sn | 22 50 54.9 | +0.7 |
| WWPM | Walker Pass | 1.51 | 202 | ePn | Pb | 22 50 37.0 | +0.1 |
| LRMC | Laurel Mountai | 1.68 | 188 | Pb | Pn | 22 50 38.6 | +0.6 |
| | baz=1.7 | | | | | | |
| ISA | Isabella | 1.72 | 211 | ePn | Pn | 22 50 35.4 | -3.1 |
| ISA | | | | eSn | Sn | 22 50 58.8 | -1.3 |
| R11A | Troy Canyon, C | 1.87 | 50 | Pb | Pb | 22 50 43.3 | +0.2 |
| | baz=1.9 | | | | | | |
| R11A | | | | Sb | Sb | 22 51 07.9 | +1.5 |
| | baz=1.9 | | | | | | |
| R11A | Troy Canyon, C | 1.87 | 50 | ePn | Pb | 22 50 43.4 | +0.3 |
| R11A | | | | eSn | Sb | 22 51 07.6 | +1.2 |
| VES | Vestal, Richgr | 1.88 | 227 | Pg | Pg | 22 50 44.5 | -0.7 |
| | baz=1.9 | | | | | | |
| GSC | Goldstone | 1.90 | 165 | ePn | Pn | 22 50 41.0 | -0.1 |
| GSC | | | | eSn | Sn | 22 51 05.0 | +0.2 |
| SHPR | Sheep Range | 1.91 | 109 | ePn | Pb | 22 50 42.8 | -0.9 |
| SHPR | | | | eSn | Sb | 22 51 06.6 | -0.8 |
| TUQ | Turquoise Moun | 2.08 | 145 | S | Sn | 22 51 10.0 | +0.7 |
| | baz=2.1 | | | | | | |
| DSCC | Desert Studies | 2.26 | 152 | eSn | Sb | 22 51 18.5 | +1.2 |
| HEC | Hector,Ludlow | 2.47 | 159 | Sb | Sb | 22 51 25.6 | +2.1 |
| | baz=2.5 | | | | | | |
| CMB | Columbia Colle | 2.53 | 291 | ePn | Pn | 22 50 51.4 | +1.8 |
| CMB | | | | eSn | Sn | 22 51 21.6 | +1.4 |
| LDFC | Landfair | 2.78 | 137 | ePn | Pb | 22 50 59.6 | +1.1 |
| CCUT | Cedar City | 3.24 | 82 | ePn | Pb | 22 51 07.9 | +1.4 |
| RPV | Rancho Palos V | 3.49 | 194 | ePn | Pn | 22 51 05.1 | +2.2 |
| RPV | | | | ePg | Pb | 22 51 12.4 | +1.8 |
| SBI | Santa Barbara | 3.89 | 200 | ePn | Pn | 22 51 10.7 | +2.4 |
| SBI | | | | ePg | Pb | 22 51 18.1 | +0.7 |
| SBI | | | | eSn | Sn | 22 51 48.7 | -5.0 |
| SBI | | | | eSg | Sb | 22 51 59.1 | -5.2 |
| SBI | | | | eLg | Lg | 22 52 17.3 | |
| ELK | Elko | 3.97 | 24 | ePg | Pg | 22 51 23.0 | -2.1 |
| CLIC | Calipatria | 4.28 | 158 | ePg | Pg | 22 51 27.7 | -3.4 |
| MSU | Marysvale | 4.36 | 70 | ePg | Pg | 22 51 30.5 | -2.0 |
| GLA | Glamis | 4.60 | 152 | ePn | Pn | 22 51 19.3 | +1.2 |
| DUG | Dugway | 4.71 | 48 | ePg | Pg | 22 51 39.1 | -0.1 |

*IDC **11** 22:51:06.1±5.4, 22.°15S×171.°03E, h106km±39km, mb3.9/5, mb1 4.0/6, mb1mx3.6/35, mbtmp4.2/6, Error ellipse: s-maj=43.0km s-min=37.6km az=180.0*
**ISC 11 22:51:06.5**±1.0**, 22.°2S**±0.°3×**171.°0E**±0.°1**, h112**km**, n17,** σ**0.s73**/19**, mb3.9**/5**, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac | 4.26 | 270 | P | Pn | 22 52 10.1 | +0.5 |
| | 16nm,0.3s,baz=180,slow=9.2,SNR=92 | | | | | | |
| DZM | | | | S | Sn | 22 52 57.3 | -1.2 |
| | 24nm,0.3s,baz=360,slow=21,SNR=14 | | | | | | |
| CTA | Charters Tower | 23.21 | 271 | P | P | 22 56 05.8 | +1.9 |
| | 4.4nm,0.7s,baz=122,slow=9.5,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 34.18 | 260 | P | P | 22 57 41.2 | -0.2 |
| | 5.6nm,0.8s,baz=85,slow=9.1,SNR=42 | | | | | | |
| WRA | Warramunga Arr | 34.27 | 267 | P | P | 22 57 41.1 | -1.1 |
| | 0.5nm,0.4s,baz=97,slow=8.4,SNR=18 | | | | | | |
| NWAO | Narrogin (SRO) | 48.45 | 245 | P | P | 22 59 38.3 | +0.5 |
| | 9.7nm,1.0s,baz=82,slow=0.4,SNR=3.0 | | | | | | |
| SNAA | Sanae | 86.32 | 182 | P | P | 23 03 35.2 | -0.4 |
| | 0.6nm,0.6s,baz=197,slow=11,SNR=6.8 | | | | | | |
| ARCES | ARCESS Array B | 128.31 | 345 | PKP | PKPdf | 23 09 58.8 | -0.3 |
| | 6.7nm,1.1s,baz=19,slow=3.1,SNR=5.0 | | | | | | |
| KRLC | Kraliky | 145.57 | 330 | ePKP | PKPbc | 23 10 32.0 | +0.1 |
| DPC | Dobruska-Polom | 145.59 | 331 | ePKP | PKPab | 23 10 32.4 | +0.1 |
| DPC | | | | ex | x | 23 10 34.2 | |
| UPC | Upice | 145.61 | 331 | ePKP | PKPab | 23 10 32.3 | 0.0 |
| BRG | Berggiesshubel | 146.22 | 334 | eP | PKPbc | 23 10 33.8 | +0.1 |
| | 6.3nm,1.0s | | | | | | |
| GOPC | GO Pecny, Ondr | 146.58 | 332 | ePKP | PKPbc | 23 10 35.1 | +0.2 |
| PRU | Pruhonice | 146.63 | 332 | ePKP | PKPbc | 23 10 34.1 | -0.9 |
| NKC | Novy Kostel | 147.32 | 334 | ePKP | PKPbc | 23 10 37.3 | +0.4 |
| NKC | | | | ex | x | 23 10 39.4 | |
| KHC | Kasperske Hory | 147.69 | 332 | ePKP | PKPbc | 23 10 38.0 | 0.0 |
| KHC | | | | ex | x | 23 10 41.1 | |
| GERES | GERESS Array B | 147.85 | 331 | PKPbc | PKPbc | 23 10 38.5 | 0.0 |
| | 2.5nm,0.8s,baz=47,slow=2.7,SNR=14 | | | | | | |
| TORD | Torodi Ar. Bea | 166.46 | 230 | PKP | PKPdf | 23 10 58.8 | -0.7 |
| | 0.5nm,0.8s,baz=108,slow=0.5,SNR=2.9 | | | | | | |
| TORD | | | | PKPab | PKPab | 23 12 02.1 | +0.3 |
| | 0.7nm,1.1s,baz=114,slow=5.7,SNR=2.5 | | | | | | |

*IDC **11** 22:55:28.1±1.6, 5.°12S×133.°67E, h0km, mb3.6/1, mb1 4.0/5, mb1mx3.6/36, mbtmp3.9/5, ML3.9/4, MS3.0/2, Ms1 3.0/2, ms1mx2.6/29, Error ellipse: s-maj=42.4km s-min=26.9km az=73.0*
*ISCJB **11** 22:55:29.6±0.6, 4.°99S±0.°05×133.°78E±0.°04, h25km, mb3.5/1, Error ellipse: s-maj=7.5km s-min=6.2km az=13.7*
*AUST **11** 22:55:34.6±20.0, 5.°05S×132.°93E, h20km, Error ellipse: s-maj=1.9km s-min=1.1km az=279.0*
*DJA **11** 22:55:36.2±1.1, 5°S±7°×13°4E±1°1, h18km±19km, M4.1/8, mb4.6/2, mB5.0/1, MLv4.0/6, MLv4.0/8, Mw(mB)4.4/1*
**ISC 11 22:55:31.6**±0.9**, 4.°87S**±0.°06×**133.°73E**±0.°06**, h25**km**, n20,** σ**1.s97**/21**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KMPI | Kaimana, Papua | 1.20 | 359 | P | Pb | 22 55 53.7 | 0.0 |
| FAKI | Fak Fak | 2.44 | 323 | P | Pn | 22 56 10.4 | +0.5 |
| | baz=2.2,SNR=25 | | | | | | |
| FAKI | Fak Fak | 2.44 | 323 | P | Pn | 22 56 10.4 | +0.5 |
| FAKI | | | | S | Sn | 22 56 37.9 | -1.0 |
| BNDI | Bandanaira | 3.83 | 275 | P | Pn | 22 56 30.8 | +1.8 |
| BNDI | | | | S | Sn | 22 57 15.5 | +2.3 |
| SAUI | Saumlaki | 3.92 | 218 | P | Pn | 22 56 34.4 | +4.1 |
| SIJI | Sorong | 4.68 | 328 | Pn | Pn | 22 56 41.7 | +1.1 |
| | 3.2nm,0.3s,baz=230,slow=22,SNR=11 | | | | | | |
| SIJI | | | | Sn | Sn | 22 57 31.1 | -3.1 |
| | 5.2nm,0.3s,baz=255,slow=23,SNR=7.2 | | | | | | |
| SWI | Sorong | 4.69 | 328 | P | Pn | 22 56 33.8 | -7.0 |
| | baz=4.5,SNR=3.6 | | | | | | |
| SWI | Sorong | 4.69 | 328 | P | Pn | 22 56 41.6 | +0.8 |
| SWI | | | | S | Sn | 22 57 32.4 | -2.0 |
| MSAI | Masohi | 5.02 | 287 | P | Pn | 22 56 46.7 | +1.3 |
| MSAI | | | | S | Sn | 22 57 42.0 | -0.7 |
| AAI | Ambon | 5.64 | 282 | P | Pn | 22 56 56.5 | +2.5 |
| NLAI | Namlea | 6.81 | 284 | P | Pn | 22 57 13.1 | +3.1 |
| JAY | Jayapura | 7.34 | 72 | Pn | Pn | 22 57 18.8 | +1.4 |
| | 0.5nm,0.3s,baz=258,slow=19,SNR=3.3 | | | | | | |
| JAY | | | | Sn | Sn | 22 58 41.2 | +1.2 |
| | 0.2nm,0.3s,baz=122,slow=19,SNR=1.7 | | | | | | |
| JAY | Jayapura | 7.34 | 72 | P | Pb | 22 57 31.9 | -6.6 |
| | baz=8.2,SNR=3.1 | | | | | | |
| KDU | Kakadu | 7.86 | 189 | P | Pn | 22 57 24.2 | -0.3 |
| | baz=7.7,SNR=39 | | | | | | |
| MTN | Manton Dam | 8.32 | 198 | P | Pn | 22 57 30.3 | -0.5 |
| | baz=8.0,SNR=21 | | | | | | |
| BATI | Baumata | 11.30 | 241 | Sn | Sn | 23 00 13.7 | -3.4 |
| | 3.5nm,0.3s,baz=37,slow=23,SNR=5.6 | | | | | | |
| PMG | Port Moresby | 14.06 | 109 | LR | LR | 23 05 49.7 | |
| | comp=Z,80nm,18.1s,baz=3.0,slow=44 | | | | | | |
| WRA | Warramunga Arr | 14.99 | 178 | Pn | Pn | 22 58 57.1 | -4.9 |
| | 0.9nm,0.3s,baz=358,slow=13,SNR=33 | | | | | | |
| WRA | | | | Sn | Sn | 23 01 32.4 | -15 |
| | 0.5nm,0.3s,baz=358,slow=23,SNR=8.3 | | | | | | |
| WRA | | | | LR | LR | 23 04 55.4 | |
| | comp=Z,41nm,19.2s,baz=115,slow=38 | | | | | | |
| ASAR | Alice Springs | 18.69 | 180 | P | P | 22 59 45.5 | -2.7 |
| | 0.9nm,0.3s,baz=6.1,slow=12,SNR=29 | | | | | | |
| ASAR | | | | S | Sn | 23 03 01.6 | -16 |
| | 0.1nm,0.3s,baz=360,slow=28,SNR=3.3 | | | | | | |
| MKAR | Makanchi Array | 68.56 | 325 | P | P | 23 06 34.1 | +1.8 |
| | 0.5nm,0.8s,baz=119,slow=7.2,SNR=3.4 | | | | | | |

*ISCJB **11** 23:09:16.0±0.6, 26.°2S±0.°1×70.°9E±0.°2, h11km, mb3.9/13, MS4.1/3, Error ellipse: s-maj=22.8km s-min=16.1km az=178.8*
*IDC **11** 23:09:16.1±0.7, 26.°19S×70.°85E, h0km, mb3.8/12, mb1 3.9/12, mb1mx3.7/57, mbtmp3.8/12, MS3.9/2, Ms1 3.9/2, ms1mx3.1/34, Error ellipse: s-maj=25.5km s-min=17.7km az=85.0*
**ISC 11 23:09:17.9**±0.7**, 26.°2S**±0.°1×**70.°9E**±0.°2**, h11**km**, n21,** σ**0.s44**/12**, mb3.8**/13**, MS4.0**/3**, Indian Ocean Triple Junction**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S1 | Diego Carcia H | 18.51 | 5 | T | T | 23 32 33.5 | |
| | baz=185,slow=76,SNR=71 | | | | | | |
| H08S2 | Diego Garcia H | 18.51 | 5 | T | T | 23 32 33.6 | |
| | baz=185,slow=76,SNR=70 | | | | | | |
| H08S3 | Diego Garcia H | 18.53 | 5 | T | T | 23 32 35.0 | |
| | baz=185,slow=76,SNR=77 | | | | | | |
| PALK | Pallekele | 34.61 | 17 | LR | LR | 23 26 59.7 | |
| | comp=Z,167nm,19.7s,baz=116,slow=31 | | | | | | |
| H01W2 | Cape Leeuwin H | 38.02 | 114 | T | T | 23 56 49.6 | |
| | baz=272,slow=75,SNR=18 | | | | | | |
| H01W3 | Cape Leeuwin H | 38.02 | 114 | T | T | 23 56 49.4 | |
| | baz=272,slow=75,SNR=21 | | | | | | |
| H01W1 | Cape Leeuwin H | 38.04 | 114 | T | T | 23 56 50.9 | |
| | baz=272,slow=75,SNR=22 | | | | | | |
| CMAR | Chiang Mai Arr | 52.10 | 34 | P | P | 23 18 28.9 | +0.6 |
| | 2.1nm,1.0s,baz=226,slow=6.7,SNR=8.7 | | | | | | |
| BATI | Baumata | 52.26 | 83 | LR | LR | 23 36 42.9 | |
| | comp=Z,172nm,21.9s,baz=324,slow=32 | | | | | | |
| ASAR | Alice Springs | 56.72 | 102 | P | P | 23 19 02.0 | 0.0 |
| | 0.3nm,0.5s,baz=262,slow=5.5,SNR=4.1 | | | | | | |
| WRA | Warramunga Arr | 58.24 | 98 | P | P | 23 19 12.3 | -0.5 |
| | 0.7nm,0.9s,baz=249,slow=7.3,SNR=3.9 | | | | | | |
| SNAA | Sanae | 60.25 | 200 | P | P | 23 19 26.5 | +0.5 |
| | 0.4nm,0.7s,baz=129,slow=8.9,SNR=3.7 | | | | | | |
| QSPA | South Pole Qui | 63.94 | 180 | P | P | 23 19 50.3 | -0.6 |
| | 2.2nm,0.9s,baz=278,slow=0.3,SNR=7.9 | | | | | | |
| VNDA | Vanda | 64.84 | 166 | P | P | 23 19 56.7 | +0.3 |
| | 2.1nm,0.9s,baz=275,slow=6.6,SNR=13 | | | | | | |
| XAN | Xi'an | 69.95 | 33 | P | P | 23 20 37.0 | +7.6 |
| XAN | | | | pP | PcP | 23 20 46.1 | -5.6 |
| XAN | | | | pmax | pmax | | |
| | comp=Z,17nm,1.5s | | | | | | |
| XAN | | | | pmax | pmax | | |
| | comp=Z,120nm,8.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=E,130nm,19.4s | | | | | | |
| XAN | | | | LR | LR | | |
| | comp=Z,190nm,18.4s | | | | | | |
| MKAR | Makanchi Array | 73.38 | 8 | P | P | 23 20 49.2 | -0.5 |
| | comp=Z,1.3nm,0.9s,baz=194,slow=9.9,SNR=5.7 | | | | | | |
| BRTR | Keskin Array B | 74.20 | 331 | P | P | 23 20 54.7 | -0.2 |
| | comp=Z,0.6nm,0.7s,baz=104,slow=4.9,SNR=3.2 | | | | | | |
| KURBB | Kurchatov Arra | 76.78 | 5 | P | P | 23 21 09.1 | 0.0 |
| | comp=Z,0.7nm,0.4s,baz=200,slow=7.1,SNR=5.0 | | | | | | |
| TORD | Torodi Ar. Bea | 77.76 | 291 | P | P | 23 21 15.5 | 0.0 |
| | comp=Z,0.7nm,0.9s,baz=111,slow=3.2,SNR=3.4 | | | | | | |
| SONM | Songino Array | 80.31 | 23 | P | P | 23 21 29.2 | +0.2 |
| | comp=Z,0.8nm,1.0s,baz=200,slow=7.4,SNR=5.7 | | | | | | |
| ZALV | Zalesovo Beam | 80.72 | 8 | P | P | 23 21 30.4 | -0.4 |
| | comp=Z,0.6nm,0.6s,baz=220,slow=3.8,SNR=3.4 | | | | | | |

*IDC **11** 23:15:31.9±0.6, 26.°15S×70.°94E, h0km, mb4.2/17, mb1 4.3/17, mb1mx4.1/56, mbtmp4.2/17, MS4.1/16, Ms1 4.1/16, ms1mx3.9/26, Error ellipse: s-maj=19.6km s-min=15.7km az=105.0*
*ISCJB **11** 23:15:32.2±0.4, 26.°15S±0.°07×71.°00E±0.°09, h11km, mb4.5/25, MS4.2/16, Error ellipse: s-maj=11.7km s-min=10.1km az=39.3*
*NEIC **11** 23:15:34.0±0.3, 26.°09S×71.°01E, h10km, mb4.9/12, Error ellipse: s-maj=10.9km s-min=9.9km az=139.0*
**ISC 11 23:15:33.9**±0.5**, 26.°1S**±0.°1×**71.°0E**±0.°1**, h11**km**, n70,** σ**0.s95**/55**, mb4.4**/25**, MS4.2**/16**, 6C-3D, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S1 | Diego Carcia H | 18.44 | 5 | T | T | 23 38 47.3 | |
| | baz=185,slow=76,SNR=195 | | | | | | |
| H08S2 | Diego Garcia H | 18.44 | 5 | T | T | 23 38 47.4 | |
| | baz=185,slow=76,SNR=216 | | | | | | |
| H08S3 | Diego Garcia H | 18.46 | 5 | T | T | 23 38 48.7 | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=185,slow=76,SNR=188 | | | | | | |
| H01W2 | Cape Leeuwin H | 37.93 | 114 | T | T | 00 03 10.9 | |
| | baz=272,slow=75,SNR=66 | | | | | | |
| H01W3 | Cape Leeuwin H | 37.94 | 114 | T | T | 00 03 09.4 | |
| | baz=272,slow=75,SNR=85 | | | | | | |
| H01W1 | Cape Leeuwin H | 37.95 | 114 | T | T | 00 03 10.5 | |
| | baz=272,slow=75,SNR=100 | | | | | | |
| MATP | Matopo | 39.33 | 269 | P | P | 23 23 02.9 | -0.6 |
| | 2.4nm,1.0s,baz=96,slow=11,SNR=2.3 | | | | | | |
| PSI | Prapat | 39.46 | 47 | LR | LR | 23 35 23.0 | |
| | comp=Z,445nm,20.8s,baz=216,slow=30 | | | | | | |
| BOSA | Boshof | 40.51 | 256 | LR | LR | 23 35 59.0 | |
| | comp=Z,622nm,19.4s,baz=104,slow=30 | | | | | | |
| KMBO | Kilima Mbogo | 40.90 | 302 | P | P | 23 23 15.9 | -0.8 |
| | 1.7nm,1.0s,baz=87,slow=9.9,SNR=5.4 | | | | | | |
| KMBO | Kilima Mbogo | 40.90 | 302 | eP | P | 23 23 17.9 | +1.1 |
| | 12nm,1.6s | | | | | | |
| LSZ | Lusaka | 41.31 | 277 | P | P | 23 23 19.9 | -0.1 |
| | 1.0nm,0.6s,baz=83,slow=12,SNR=2.9 | | | | | | |
| LSZ | Lusaka | 41.31 | 277 | eP | P | 23 23 19.9 | -0.1 |
| | 52nm,2.0s | | | | | | |
| UGM | Wanagama | 41.68 | 71 | eP | P | 23 23 23.5 | +0.5 |
| | 282nm,1.8s | | | | | | |
| MAW | Mawson | 41.79 | 185 | LR | LR | 23 36 59.1 | |
| | comp=Z,748nm,19.6s,baz=50,slow=31 | | | | | | |
| SYO | Syowa Base | 46.76 | 195⇑ | eP | P | 23 24 02.6 | -0.3 |
| KAPI | Kappang | 51.06 | 74 | eP | P | 23 24 34.3 | -2.4 |
| | 38nm,1.7s | | | | | | |
| CM01 | Chiang Mai Arr | 51.96 | 34 | eP | P | 23 24 43.8 | +0.6 |
| CM31 | Chiang Mai Arr | 51.98 | 34 | eP | P | 23 24 44.6 | +1.2 |
| CMAR | Chiang Mai Arr | 51.98 | 34 | P | P | 23 24 44.6 | +1.2 |
| | 6.5nm,0.9s,baz=224,slow=6.8,SNR=20 | | | | | | |
| CMAR | | | | LR | LR | 23 44 41.0 | |
| | comp=Z,179nm,18.6s,baz=216,slow=34 | | | | | | |
| CHTO | Chiang Mai | 52.28 | 34 | eP | P | 23 24 47.0 | +1.4 |
| | 15nm,1.1s | | | | | | |
| RAYN | Ar Rayn | 55.19 | 331 | eP | P | 23 25 07.1 | +0.2 |
| | 22nm,2.0s | | | | | | |
| SNAA | Sanae | 60.35 | 200 | P | P | 23 25 42.6 | -0.1 |
| | 0.7nm,0.7s,baz=89,slow=8.2,SNR=7.3 | | | | | | |
| SNAA | Sanae | 60.35 | 200 | eP | P | 23 25 43.7 | +1.1 |
| | 2.6nm,1.1s | | | | | | |
| SIJI | Sorong | 63.10 | 77 | P | P | 23 26 02.6 | +0.6 |
| | 6.5nm,0.6s,baz=336,slow=4.0,SNR=3.7 | | | | | | |
| QSPA | South Pole Qui | 64.00 | 180 | P | P | 23 26 06.6 | -0.7 |
| | 5.1nm,0.9s,baz=244,slow=1.6,SNR=15 | | | | | | |
| QSPA | | | | LR | LR | 23 49 50.8 | |
| | comp=Z,157nm,22.0s,baz=295,slow=32 | | | | | | |
| QSPA | South Pole Qui | 64.00 | 180 | eP | P | 23 26 07.5 | +0.2 |
| GEYT | Alibeck | 64.86 | 349 | LR | LR | 23 50 27.8 | |
| | comp=Z,116nm,20.0s,baz=135,slow=32 | | | | | | |
| VNDA | Vanda | 64.87 | 166 | P | P | 23 26 12.2 | -0.4 |
| | 7.6nm,0.9s,baz=269,slow=7.2,SNR=39 | | | | | | |
| VNDA | | | | LR | LR | 23 51 31.2 | |
| | comp=Z,154nm,19.5s,baz=269,slow=33 | | | | | | |
| VNDA | Vanda | 64.87 | 166 | eP | P | 23 26 12.6 | 0.0 |
| | 12nm,1.0s | | | | | | |
| SBA | Scott Base | 65.86 | 167 | eP | P | 23 26 20.9 | +1.8 |
| | 63nm,2.0s | | | | | | |
| AAK | Ala-Archa | 68.50 | 3 | P | P | 23 26 35.4 | -0.9 |
| | 1.2nm,0.7s,baz=130,slow=11,SNR=4.8 | | | | | | |
| EKS2 | Erkin-Say | 68.50 | 2 | eP | P | 23 26 37.3 | +1.0 |
| | 11nm,1.1s | | | | | | |
| MK32 | Makanchi Array | 73.30 | 8 | eP | P | 23 27 04.6 | -0.6 |
| MKAR | Makanchi Array | 73.30 | 8 | P | P | 23 27 04.6 | -0.6 |
| | 2.8nm,0.8s,baz=188,slow=6.1,SNR=4.9 | | | | | | |
| MKAR | | | | LR | LR | 23 58 24.7 | |
| | comp=Z,122nm,18.5s,baz=167,slow=35 | | | | | | |
| BRTR | Keskin Array B | 74.20 | 331 | P | P | 23 27 10.6 | -0.3 |
| | 1.6nm,0.8s,baz=141,slow=6.1,SNR=7.1 | | | | | | |
| BRTR | | | | LR | LR | 23 58 07.7 | |
| | comp=Z,60nm,19.2s,baz=90,slow=34 | | | | | | |
| BR101 | Keskin Array S | 74.21 | 331 | eP | P | 23 27 10.6 | -0.3 |
| BR231 | Keskin MP Arra | 74.68 | 330 | eP | P | 23 27 11.7 | -1.9 |
| KURBB | Kurchatov Arra | 76.70 | 5 | P | P | 23 27 24.9 | +0.1 |
| | 3.6nm,0.9s,baz=200,slow=6.0,SNR=12 | | | | | | |
| KURK | Kurchatov | 76.80 | 5 | eP | P | 23 27 26.0 | +0.7 |
| | 39nm,1.3s | | | | | | |
| AKTO | Aktyubinsk | 77.09 | 352 | P | P | 23 27 27.3 | +0.3 |
| | 2.9nm,0.8s,baz=158,slow=6.5,SNR=3.6 | | | | | | |
| TOA0 | Torodi Ar. Sit | 77.85 | 291 | eP | P | 23 27 31.6 | -0.5 |
| TORD | Torodi Ar. Bea | 77.85 | 291 | P | P | 23 27 31.1 | -1.0 |
| | 1.8nm,1.0s,baz=116,slow=6.8,SNR=7.7 | | | | | | |
| TORD | | | | LR | LR | 00 01 05.1 | |
| | comp=Z,49nm,18.0s,baz=150,slow=35 | | | | | | |
| SONA0 | Songino Array | 80.21 | 23 | eP | P | 23 27 44.6 | +0.1 |
| SONM | Songino Array | 80.21 | 23 | P | P | 23 27 44.6 | +0.1 |
| | 2.1nm,1.0s,baz=210,slow=4.9,SNR=9.7 | | | | | | |
| SONM | | | | LR | LR | 00 01 58.6 | |
| | comp=Z,70nm,20.8s,baz=203,slow=35 | | | | | | |
| SONA1 | Songino Array | 80.22 | 23 | eP | P | 23 27 44.7 | +0.2 |
| DBIC | Dimbokro | 80.35 | 282 | LR | LR | 00 01 32.8 | |
| | comp=Z,98nm,19.9s,baz=102,slow=34 | | | | | | |
| ULN | Ulaanbaatar | 80.47 | 24 | eP | P | 23 27 46.4 | +0.5 |
| | 8.8nm,1.2s | | | | | | |
| ZAA0 | Zalesovo Array | 80.64 | 8 | eP | P | 23 27 45.7 | -0.7 |
| ZALV | Zalesovo Beam | 80.64 | 8 | P | P | 23 27 45.8 | -0.5 |
| | 1.8nm,0.8s,baz=193,slow=4.7,SNR=4.5 | | | | | | |
| ZALV | | | | LR | LR | 00 03 36.8 | |
| | comp=Z,63nm,18.7s,baz=248,slow=36 | | | | | | |
| ZAA1 | Zalesovo Array | 80.64 | 8 | eP | P | 23 27 45.8 | -0.6 |
| CFR | Carcaliu | 81.00 | 331⇓ | iP | P | 23 27 49.9 | +1.4 |
| VRI | Vrincioaia | 82.16 | 331⇓ | iP | P | 23 27 55.1 | +0.4 |
| PLOR | Plostina | 82.18 | 330⇑ | iP | P | 23 27 54.3 | -0.5 |
| MLR | Muntele Rosu | 82.22 | 330⇓ | iP | P | 23 27 56.3 | +1.1 |
| VOIR | | 82.59 | 329⇑ | iP | P | 23 27 55.2 | -1.8 |
| TESR | Tescani | 82.70 | 331⇑ | iP | P | 23 28 07.2 | +10 |
| KS15 | Wonju Array Si | 82.78 | 42 | eP | P | 23 27 57.1 | -1.0 |
| KSAR | Wonju Array Be | 82.78 | 42 | P | P | 23 27 57.1 | -1.0 |
| KS01 | Wonju Array Si | 82.81 | 42 | eP | P | 23 27 58.0 | -0.2 |
| KSRS | Korea Array | 82.81 | 42 | P | P | 23 27 57.1 | -1.1 |
| | 1.0nm,0.6s,baz=235,slow=5.7,SNR=4.5 | | | | | | |
| KSRS | | | | LR | LR | 00 02 31.5 | |
| | comp=Z,116nm,20.9s,baz=231,slow=34 | | | | | | |
| DOPR | Dopca | 82.84 | 330⇑ | iP | P | 23 28 05.2 | +7.0 |
| DIVS | Divibare | 84.05 | 326⇑ | iP | P | 23 28 06.0 | +1.4 |
| BUR04 | Bucovina Ar. S | 84.17 | 331 | eP | P | 23 28 06.0 | +0.8 |
| MJAR | Matsushiro Arr | 88.81 | 48 | LR | LR | 00 07 25.2 | |
| | comp=Z,57nm,19.8s,baz=275,slow=35 | | | | | | |
| USRK | Ussuriysk Ar. | 89.47 | 39 | LR | LR | 00 08 52.0 | |
| | comp=Z,117nm,18.5s,baz=263,slow=36 | | | | | | |
| BRNJ | Basking Ridge | 148.03 | 306 | ePKPdf | PKPbc | 23 35 18.7 | -0.9 |
| BW06 | Boulder Array | 163.40 | 1 | ePKPdf | PKPdf | 23 35 36.7 | -0.4 |
| MNTX | Cornudas Mount | 173.61 | 331 | ePKPdf | PKPdf | 23 35 45.2 | +1.3 |
| TX31 | Lajitas Ar. Si | 174.30 | 305 | ePKPdf | PKPdf | 23 35 45.9 | +1.6 |

*NIED* **11** *23:16:00, 25°.40N×124°.90E, h95$^{km}$, Mw5.1 Best double couple: $M_0$5.06000×$10^{16}$ NP1:$\phi_s$143.00000°, δ39.00000°, λ152.00000°. NP2:$\phi_s$255.00000°, δ73.00000°, λ54.00000°.*

*BJI* **11** *23:16:32.9, 25°.18N×125°.17E, h99$^{km}$, mb4.8/69, mB4.8/53*

*ISCJB* **11** *23:16:35.7±0.2, 25°.30N±0°.02×124°.90E±0°.02, h102$^{km}$±1$^{km}$, mb5.0/162, Error ellipse: s-maj=3.1km s-min=2.2km az=42.8*

*JMA* **11** *23:16:35.9±0.1, 25°.39N×124°.86E, h92$^{km}$±4$^{km}$, M5.0*

*JMA Felt I J1.*

*SZGRF* **11** *23:16:36.3, 26°.53N×124°.91E, h33$^{km}$, mb5.2/14(BGR), Ms4.2/2(BGR)*

*MOS* **11** *23:16:36.7±1.1, 25°.39N×124°.84E, h115$^{km}$, mb4.9/61, Error ellipse: s-maj=7.2km s-min=4.4km az=105.3*

*IDC* **11** *23:16:36.1±0.6, 25°.41N×124°.92E, h96$^{km}$±4$^{km}$, mb4.5/40, mb1 4.6/43, mb1mx4.5/52, mbtmp4.8/43, MS3.7/19, Ms1 3.7/19, ms1mx3.6/35, Error ellipse: s-maj=10.1km s-min=6.9km az=70.0*

*NEIC* **11** *23:16:37.0±0.4, 25°.36N×124°.83E, h99$^{km}$±4$^{km}$, mb5.2/78, Error ellipse: s-maj=4.6km s-min=3.5km az=117.0*

*NEIC Felt at Taipei. Recorded [1 JMA] on Ishigaki-jima, Miyako-jima and Tarama-shima, Ryukyu Islands.*

*GCMT* **11** *23:16:37.0±0.2, 25°.32N×124°.91E, h92$^{km}$±2$^{km}$, MW5.1/89, Moment Tensor Solution. s62,c75; s89,c159; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$2.73±.15; $M_{\theta\theta}$-4.73±.14; $M_{\phi\phi}$1.99±.15; $M_{r\theta}$-2.76±.09; $M_{\theta\phi}$1.95±.13; $M_{\phi r}$-1.77±.09; Best double couple: $M_0$5.58700×$10^{16}$ NP1:$\phi_s$252.00000°, δ70.00000°, λ50.00000°. NP2: $\phi_s$140.00000°, δ44.00000°, λ151.00000°. Principal axes: T 5.3030, Plg48.0000°, Azm119.0000°; N 0.5580, Plg38.0000°, Azm268.0000°; P -5.8700, Plg16.0000°, Azm10.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 11 23:16:37.0**±0.3**, 25°.33N**±0°.03**×124°.91E**±0°.03**, h103**$^{km}$±2$^{km}$**, h103**$^{km}$**:pP-P, n543, σ1.55**/618**, mb5.0**/170**, 24C-18D,**

## Northeast of Taiwan

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JIKM | Ikemajima | 0.50 | 142 | P | Pn | 23 16 51.8 | -1.3 |
| JIKM | | | | S | Sn | 23 17 03.7 | -1.5 |
| JIRB | Irabujima | 0.55 | 154 | P | Pn | 23 16 51.8 | -1.7 |
| JIRB | | | | S | Sn | 23 17 03.5 | -2.3 |
| JMJ | Miyako jima 2 | 0.62 | 146 | P | Pn | 23 16 52.8 | -1.2 |
| JMJ | | | | S | Sn | 23 17 05.1 | -1.6 |
| JTJ | Tarama | 0.71 | 195 | P | Pn | 23 16 53.4 | -1.4 |
| JTJ | | | | S | Sn | 23 17 06.5 | -1.5 |
| JOGS | Gusukube | 0.72 | 141 | P | Pn | 23 16 53.9 | -1.0 |
| JOGS | | | | S | Sn | 23 17 07.2 | -1.1 |
| JISG | Ishigakijimahi | 0.91 | 217 | P | Pn | 23 16 55.5 | -1.3 |
| JISG | | | | S | Sn | 23 17 09.9 | -1.7 |
| JIJ | Ishigaki jima | 1.18 | 216 | P | Pn | 23 16 58.3 | -1.4 |
| JIJ | | | | S | Sn | 23 17 14.5 | -2.3 |
| JKRS | Kuro-shima | 1.36 | 217 | P | Pn | 23 17 00.5 | -1.2 |
| JKRS | | | | eS | Sn | 23 17 19.2 | -1.2 |
| IRIF | Iriomote-Funau | 1.46 | 228 | P | Pn | 23 17 01.7 | -1.2 |
| IRIF | | | | S | Sn | 23 17 21.0 | -1.5 |
| HATJ | Hateruma jima | 1.61 | 219 | P | Pn | 23 17 03.5 | -1.3 |
| YOJ | Yonaguni jima | 1.93 | 244 | P | Pn | 23 17 08.1 | -0.7 |
| YOJ | | | | eS | Sn | 23 17 31.0 | -2.0 |
| YOJ | Yonaguni jima | 1.93 | 244 | eP | Pn | 23 17 08.2 | -0.5 |
| YOJ | | | | e | | 23 17 32.0 | |
| YOJ | Yonaguni jima | 1.93 | 244 | ePn | Pn | 23 17 08.2 | -0.5 |
| YOJ | | | | eSn | Sn | 23 17 32.0 | -1.0 |
| JKE | Kume jima 2 | 1.96 | 59 | P | Pn | 23 17 07.9 | -1.3 |
| JKE | | | | eS | Sn | 23 17 31.6 | -2.2 |
| JYNG | Yonagunijimaku | 1.98 | 244 | P | Pn | 23 17 09.0 | -0.5 |
| JYNG | | | | eS | Sn | 23 17 33.8 | -0.5 |
| JAGN | Aguni-jima | 2.45 | 59 | P | Pn | 23 17 14.4 | -1.1 |
| JAGN | | | | eS | Sn | 23 17 43.1 | -1.9 |
| JJT2 | Tamagusuku 2 | 2.69 | 72 | P | Pn | 23 17 18.2 | -0.5 |
| JNTH | Nagotoyohara | 3.04 | 66 | P | Pn | 23 17 21.8 | -1.6 |
| TATO | Taipei | 3.12 | 264 | ePn | Pn | 23 17 25.4 | +1.0 |
| TATO | | | | eSn | Sn | 23 17 59.8 | -1.2 |
| NACB | Ninganchiao | 3.22 | 250 | ePn | Pn | 23 17 25.0 | -0.9 |
| NACB | | | | eSn | Sn | 23 18 01.2 | -2.3 |
| JIH | Iheya | 3.23 | 58 | P | Pn | 23 17 24.2 | -1.7 |
| YHNB | Yeheng | 3.27 | 259 | ePn | Pn | 23 17 27.6 | +1.0 |
| YHNB | | | | eSn | Sn | 23 18 03.4 | -1.4 |
| JOW | Kunigami | 3.38 | 63 | P | Pn | 23 17 25.7 | -2.2 |
| JOW | Kunigami | 3.38 | 63 | P | Pn | 23 17 26.1 | -1.8 |
| | 4.8nm,0.3s,baz=99,slow=22,SNR=96 | | | | | | |
| JOW | | | | S | Sn | 23 18 01.8 | -5.4 |
| | 6.9nm,0.3s,baz=303,slow=29,SNR=5.8 | | | | | | |
| JOW | Kunigami | 3.38 | 63 | ePn | Pn | 23 17 25.9 | -2.0 |
| JOW | | | | eSn | Sn | 23 18 03.5 | -3.7 |
| YULB | Yu-li | 3.81 | 240 | ePn | Pn | 23 17 31.1 | -2.7 |
| YULB | | | | eSn | Sn | 23 18 09.6 | -8.2 |
| JOKE | Okinoerabujima | 3.86 | 58 | P | Pn | 23 17 31.8 | -2.6 |
| SSLB | Suanglung | 3.91 | 248 | ePn | Pn | 23 17 33.9 | -1.2 |
| TWG | Pinlang | 4.30 | 235 | ePn | Pn | 23 17 37.1 | -3.2 |
| JTK | Tokunoshima | 4.37 | 55 | P | Pn | 23 17 38.5 | -2.7 |
| TPUB | Ta-pu | 4.39 | 244 | ePn | Pn | 23 17 41.0 | -0.6 |
| JAMN | Amaminishikomi | 4.79 | 52 | P | Pn | 23 17 44.0 | -2.9 |
| JAM | Amami Oshima | 5.20 | 53 | P | Pn | 23 17 49.3 | -3.1 |
| JAM | | | | eS | Sn | 23 18 45.6 | -5.6 |
| JTAJ | Takarajima | 5.40 | 44 | P | Pn | 23 17 53.0 | -2.1 |
| JZK | Kikaishima | 5.42 | 56 | P | Pn | 23 17 52.9 | -2.5 |
| JMZ | Minamidaito 2 | 5.72 | 84 | P | Pn | 23 17 55.3 | -4.2 |
| QZH | Quanzhou | 5.74 | 268⇓ | iP | Pn | 23 18 01.2 | +1.4 |
| QZH | | | | S | Sn | 23 19 02.0 | -2.3 |
| QZH | | | | SMN | | | |
| | 280nm,1.0s | | | | | | |
| QZH | | | | SME | | | |
| | 200nm,0.9s | | | | | | |
| QZH | | | | LN | | | |
| | 2μm,11.0s | | | | | | |
| QZH | | | | LE | | | |
| | 1μm,10.9s | | | | | | |
| QZH | | | | LZ | | | |
| | 2μm,12.6s | | | | | | |
| SSE | Sheshan | 6.62 | 331 | P | Pn | 23 18 13.4 | +1.7 |
| SSE | | | | PMZ | | | |
| | 68nm,0.8s | | | | | | |
| SSE | | | | PMZ | | | |
| | 230nm,7.9s | | | | | | |
| SSE | | | | LN | | | |
| | 830nm,11.2s | | | | | | |
| SSE | | | | LZ | | | |
| | 1μm,11.2s | | | | | | |
| JFU | Fukue jima 2 | 8.04 | 24 | P | Pn | 23 18 32.2 | +1.2 |
| KSJJU | Jeju | 8.20 | 10 | P | Pn | 23 18 34.9 | +1.7 |
| | SNR=8.2 | | | | | | |
| KSJJU | Jeju | 8.20 | 10 | P | Pn | 23 18 34.9 | +1.7 |
| | SNR=8.2 | | | | | | |
| JTZ | Takazaki | 8.51 | 38 | P | Pn | 23 18 34.4 | -3.0 |
| NJ2 | Nanjing | 8.55 | 323 | eP | Pn | 23 18 37.9 | -0.1 |
| NJ2 | | | | S | Sn | 23 20 12.4 | -0.3 |
| NJ2 | | | | PMZ | | | |
| | 50nm,0.6s | | | | | | |
| NJ2 | | | | SMN | | | |
| | 2μm,1.1s | | | | | | |
| NJ2 | | | | SME | | | |
| | 2μm,1.1s | | | | | | |
| NJ2 | | | | LN | | | |
| | 2μm,16.5s | | | | | | |
| NJ2 | | | | LE | | | |
| | 1μm,12.3s | | | | | | |
| NJ2 | | | | LZ | | | |
| | 2μm,16.9s | | | | | | |
| SZP | Santa | 8.78 | 209 | ePn | Pn | 23 18 41.4 | +0.2 |
| KSWAN | Wando | 9.16 | 9 | P | Pn | 23 18 49.1 | +2.8 |
| | SNR=5.6 | | | | | | |
| KSWAN | Wando | 9.16 | 9 | P | Pn | 23 18 49.1 | +2.8 |
| | SNR=5.6 | | | | | | |
| KSJDO | Jindo | 9.20 | 7 | P | Pn | 23 18 48.3 | +1.6 |
| | SNR=7.8 | | | | | | |
| KSJDO | Jindo | 9.20 | 7 | P | Pn | 23 18 48.3 | +1.6 |
| | SNR=7.8 | | | | | | |
| KSHUK | Heuksando | 9.34 | 3 | P | Pn | 23 18 50.2 | +1.6 |
| | SNR=19 | | | | | | |
| KSHUK | Heuksando | 9.34 | 3 | P | Pn | 23 18 50.2 | +1.6 |
| | SNR=19 | | | | | | |
| JNU | Nakatsue | 9.35 | 32 | P | Pn | 23 18 47.4 | -1.5 |
| | 4.0nm,0.3s,baz=228,slow=6.3,SNR=23 | | | | | | |
| JNU | Nakatsue | 9.35 | 32 | ePn | Pn | 23 18 47.9 | -1.0 |
| KSKOH | Goheung | 9.48 | 12 | P | Pn | 23 18 52.7 | +2.2 |
| | SNR=15 | | | | | | |
| KSKOH | Goheung | 9.48 | 12 | P | Pn | 23 18 52.7 | +2.2 |
| | SNR=15 | | | | | | |
| KSNAH | Namhae | 9.81 | 15 | P | Pn | 23 18 57.0 | +1.9 |
| | SNR=11 | | | | | | |
| KSNAH | Namhae | 9.81 | 15 | P | Pn | 23 18 57.7 | +2.7 |
| | SNR=9.1 | | | | | | |
| KSGWJ | Gwangju-acc | 9.96 | 9 | P | Pn | 23 19 00.2 | +3.1 |
| | SNR=6.7 | | | | | | |
| KSGWJ | Gwangju-acc | 9.96 | 9 | P | Pn | 23 19 00.2 | +3.1 |
| | SNR=6.7 | | | | | | |
| KSKWJ | Gwangju | 9.96 | 10 | P | Pn | 23 18 59.3 | +2.1 |
| | SNR=17 | | | | | | |
| KSKWJ | Gwangju | 9.96 | 10 | P | Pn | 23 18 59.3 | +2.1 |
| | SNR=17 | | | | | | |
| KSTOY | TONGYEONG | 9.97 | 17 | P | Pn | 23 18 59.1 | +1.9 |
| | SNR=6.6 | | | | | | |
| KSTOY | TONGYEONG | 9.97 | 17 | P | Pn | 23 18 59.1 | +1.9 |
| | SNR=6.6 | | | | | | |
| KSJIN | Jinju | 10.17 | 15 | P | Pn | 23 19 02.1 | +2.2 |
| | SNR=5.9 | | | | | | |
| KSJIN | Jinju | 10.17 | 15 | P | Pn | 23 19 02.1 | +2.2 |
| | SNR=5.9 | | | | | | |
| KSJEU | Jeongeup | 10.28 | 9 | P | Pn | 23 19 04.3 | +2.8 |
| | SNR=32 | | | | | | |
| KSJEU | Jeongeup | 10.28 | 9 | P | Pn | 23 19 04.3 | +2.8 |
| | SNR=32 | | | | | | |
| WHN | Wuhan | 10.68 | 301 | ⇓P | Pn | 23 19 07.8 | +0.8 |
| WHN | | | | LN | | | |
| | 5μm,4.8s | | | | | | |
| WHN | | | | LE | | | |
| | 3μm,4.9s | | | | | | |
| WHN | | | | LZ | | | |
| | 1μm,12.3s | | | | | | |
| KSJEO | Jeonju | 10.77 | 10 | P | Pn | 23 19 11.4 | +3.2 |
| | SNR=10 | | | | | | |
| GZH | Guangzhou | 10.79 | 260 | P | Pn | 23 19 02.8 | -5.6 |
| GZH | | | | S | Sn | 23 21 00.3 | -6.9 |
| GZH | | | | LR | LR | | |
| | comp=N,2μm,9.0s | | | | | | |
| GZH | | | | LR | LR | | |
| | comp=E,920nm,8.1s | | | | | | |
| KSGUS | GUNSAN | 10.80 | 8 | P | Pn | 23 19 12.0 | +3.5 |
| | SNR=5.7 | | | | | | |
| KSGUS | GUNSAN | 10.80 | 8 | P | Pn | 23 19 12.0 | +3.5 |
| | SNR=5.7 | | | | | | |
| KSDAG | Daegu | 10.96 | 17 | P | Pn | 23 19 12.7 | +2.1 |
| | SNR=7.5 | | | | | | |
| KSDAG | Daegu | 10.96 | 17 | P | Pn | 23 19 12.7 | +2.1 |
| | SNR=7.5 | | | | | | |
| TJN | Taejon | 11.21 | 10 | diP | Pn | 23 19 16.1 | +2.0 |
| KSBON | Boeun | 11.41 | 12 | P | Pn | 23 19 19.3 | +2.5 |
| | SNR=32 | | | | | | |
| KSBON | Boeun | 11.41 | 12 | P | Pn | 23 19 19.3 | +2.5 |
| | SNR=32 | | | | | | |
| KSCEA | Cheonan | 11.64 | 9 | P | Pn | 23 19 21.7 | +2.0 |
| | SNR=6.9 | | | | | | |
| KSCEA | Cheonan | 11.64 | 9 | P | Pn | 23 19 21.7 | +2.0 |
| | SNR=6.9 | | | | | | |
| KSCHJ | Chungju | 11.81 | 12 | P | Pn | 23 19 23.6 | +1.6 |
| | SNR=24 | | | | | | |
| KSCHJ | Chungju | 11.81 | 12 | P | Pn | 23 19 23.6 | +1.6 |
| | SNR=24 | | | | | | |
| KSULJ | Uljin | 11.98 | 18 | P | Pn | 23 19 25.4 | +1.2 |
| | SNR=6.1 | | | | | | |
| KSULJ | Uljin | 11.98 | 18 | P | Pn | 23 19 25.4 | +1.2 |
| | SNR=6.1 | | | | | | |
| KSICN | Icheon | 12.12 | 10 | P | Pn | 23 19 27.9 | +1.7 |
| | SNR=7.7 | | | | | | |
| KSICN | Icheon | 12.12 | 10 | P | Pn | 23 19 27.7 | +1.6 |
| | SNR=8.2 | | | | | | |
| KSYOW | Yeongwol | 12.19 | 14 | P | Pn | 23 19 29.0 | +1.9 |
| | SNR=6.8 | | | | | | |
| KSYOW | Yeongwol | 12.19 | 14 | P | Pn | 23 19 29.0 | +1.9 |
| | SNR=6.8 | | | | | | |
| INCN | Inchon | 12.21 | 6 | ePn | Pn | 23 19 28.4 | +1.0 |
| KSWJU | Wonju | 12.34 | 12 | P | Pn | 23 19 30.5 | +1.5 |
| | SNR=6.2 | | | | | | |
| KSWJU | Wonju | 12.34 | 12 | P | Pn | 23 19 30.5 | +1.5 |
| | SNR=6.2 | | | | | | |
| KSAR | Wonju Array Be | 12.34 | 11 | P | Pn | 23 19 30.1 | +1.0 |
| KSAR | Wonju Array Be | 12.34 | 11 | P | Pn | 23 19 30.1 | +1.0 |
| KSRS | Korea Array | 12.36 | 11 | P | Pn | 23 19 30.1 | +0.8 |
| | comp=E,1.5nm,0.3s,baz=192,slow=12,SNR=114 | | | | | | |
| KSRS | | | | LR | LR | 23 24 01.3 | |
| | comp=E,425nm,18.5s,baz=177,slow=36 | | | | | | |
| KSRS | Korea Array | 12.36 | 11 | P | Pn | 23 19 30.1 | +0.8 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,425nm,18.5s | | | | | | |
| KS01 | Wonju Array Si | 12.38 | 11 | ePn | Pn | 23 19 29.8 | +0.2 |
| KSGAH | Ganghwa | 12.41 | 6 | P | Pn | 23 19 32.6 | +2.6 |
| | SNR=10.0 | | | | | | |
| KSGAH | Ganghwa | 12.41 | 6 | P | Pn | 23 19 32.6 | +2.6 |
| | SNR=10.0 | | | | | | |
| KSJES | JEONGSEON | 12.48 | 14 | P | Pn | 23 19 33.6 | +2.5 |
| | SNR=6.1 | | | | | | |
| KSMUS | Musan | 12.62 | 7 | P | Pn | 23 19 36.0 | +3.2 |
| | SNR=7.9 | | | | | | |
| KSMUS | Musan | 12.62 | 7 | P | Pn | 23 19 34.5 | +1.7 |
| | SNR=8.1 | | | | | | |
| KSCHC | Chuncheon | 12.66 | 11 | P | Pn | 23 19 34.6 | +1.3 |
| | SNR=19 | | | | | | |
| KSCHC | Chuncheon | 12.66 | 11 | P | Pn | 23 19 34.6 | +1.3 |
| | SNR=19 | | | | | | |
| KSDGY | Daegwallycong | 12.74 | 14 | P | Pn | 23 19 35.3 | +0.9 |
| | SNR=14 | | | | | | |
| KSDGY | Daegwallycong | 12.74 | 14 | P | Pn | 23 19 35.8 | +1.4 |
| | SNR=6.1 | | | | | | |
| TIA | Tai'an | 12.74 | 330 | eP | Pn | 23 19 35.4 | +1.0 |
| TIA | | | | S | Sn | 23 21 59.6 | +5.1 |
| TIA | | | | PMZ | | | |
| | comp=Z,40nm,1.4s | | | | | | |
| TIA | | | | PMZ | | | |
| | comp=Z,380nm,6.0s | | | | | | |
| TIA | | | | LN | | | |
| | comp=Z,1μm,13.1s | | | | | | |
| TIA | | | | LE | | | |
| | comp=Z,730nm,13.1s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=Z,1μm,12.0s | | | | | | |
| YNCB | YEONCHEON | 12.79 | 7 | P | Pn | 23 19 36.5 | +1.5 |
| | SNR=12 | | | | | | |
| YNCB | YEONCHEON | 12.79 | 7 | P | Pn | 23 19 36.5 | +1.5 |
| | SNR=12 | | | | | | |
| KSCWO | Cheorwon | 12.91 | 9 | P | Pn | 23 19 38.0 | +1.4 |
| | SNR=11 | | | | | | |
| KSCWO | Cheorwon | 12.91 | 9 | P | Pn | 23 19 38.0 | +1.4 |
| | SNR=11 | | | | | | |
| KSJMJ | Jumunjin | 12.94 | 14 | P | Pn | 23 19 38.3 | +1.4 |
| | SNR=6.6 | | | | | | |
| KSSKC | Sokcho | 13.28 | 12 | P | Pn | 23 19 43.0 | +1.6 |
| | SNR=8.2 | | | | | | |
| DL2 | Dalian | 13.82 | 349 | P | P | 23 19 54.3 | +0.9 |
| DL2 | | | | S | S | 23 22 30.6 | -5.0 |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,230nm,1.2s | | | | | | |
| DL2 | | | | pmax | pmax | | |
| | comp=Z,310nm,3.5s | | | | | | |
| DL2 | | | | LR | LR | | |
| | comp=Z,370nm,9.0s | | | | | | |
| JHJ | Hachijo jima 2 | 15.12 | 56 | LR | LR | 23 25 16.1 | |
| | comp=Z,193nm,19.3s,baz=358,slow=34 | | | | | | |
| QIZ | Qiongzhong | 15.29 | 249 | P | Pn | 23 20 07.1 | -0.3 |
| QIZ | | | | S | Sn | 23 22 53.7 | -2.7 |
| QIZ | | | | PMZ | | | |
| | comp=Z,10.0nm,1.3s | | | | | | |
| QIZ | | | | PMZ | | | |
| | comp=Z,140nm,9.6s | | | | | | |
| QIZ | | | | LN | | | |
| | comp=Z,510nm,17.7s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,310nm,14.2s | | | | | | |
| CBIJ | Chichi jima | 15.61 | 80 | ePn | P | 23 20 14.7 | +1.4 |
| | comp=Z,285nm,1.4s | | | | | | |
| MAJO | Matsushiro | 15.96 | 42 | eP | P | 23 20 17.4 | +0.3 |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,94nm,1.4s | | | | | | |
| MAJO | Matsushiro | 15.96 | 42 | ePn | P | 23 20 17.4 | +0.3 |
| | comp=Z,94nm,1.4s | | | | | | |
| MAT | Matsushiro | 15.96 | 42 | P | Pn | 23 20 16.0 | +0.4 |
| MAT | | | | S | S | 23 23 19.8 | +0.5 |
| MJAR | Matsushiro Arr | 15.96 | 42 | P | Pn | 23 20 16.1 | +0.5 |
| | comp=Z,4.1nm,0.3s,baz=231,slow=10,SNR=58 | | | | | | |
| MJAR | | | | LR | LR | 23 26 37.4 | |
| | comp=Z,270nm,21.3s,baz=225,slow=38 | | | | | | |
| MJAR | Matsushiro Arr | 15.96 | 42 | P | Pn | 23 20 16.1 | +0.5 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,270nm,21.3s | | | | | | |
| JRY | Ryogami san | 16.06 | 45 | P | P | 23 20 18.7 | +0.4 |
| TIY | Taiyuan | 16.28 | 322 | eP | P | 23 20 21.7 | +0.9 |
| TIY | | | | S | S | 23 23 27.9 | +2.0 |
| TIY | | | | PMZ | | | |
| | comp=Z,460nm,4.3s | | | | | | |
| TIY | | | | LN | | | |
| | comp=Z,750nm,8.4s | | | | | | |
| TIY | | | | LE | | | |
| | comp=Z,470nm,11.1s | | | | | | |
| TIY | | | | LZ | | | |
| | comp=Z,500nm,9.5s | | | | | | |
| XAN | Xi'an | 16.37 | 306 | P | P | 23 20 23.9 | +2.1 |
| XAN | | | | S | S | 23 23 25.4 | -2.4 |
| XAN | | | | LN | | | |
| | comp=Z,510nm,5.3s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,500nm,5.8s | | | | | | |
| BJT | Baijiatuau | 16.38 | 336 | eP | P | 23 20 21.8 | 0.0 |
| BJT | | | | pmax | pmax | | |
| | comp=Z,46nm,0.9s | | | | | | |
| BJT | Baijiatuau | 16.38 | 336 | ePn | P | 23 20 21.8 | 0.0 |
| | comp=Z,46nm,0.9s | | | | | | |
| BJI | Beijing | 16.40 | 336 | P | Pn | 23 20 20.9 | -0.1 |
| BJI | | | | pP | pP | 23 20 41.3 | +0.4 |
| BJI | | | | sP | sP | 23 20 54.0 | 0.0 |
| BJI | | | | S | Sn | 23 23 23.2 | +0.5 |
| BJI | | | | PcP | PcP | 23 25 08.1 | +0.7 |
| BJI | | | | PMZ | | | |
| | comp=Z,42nm,2.4s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,680nm,14.9s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,1μm,16.8s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,700nm,35.0s | | | | | | |
| GYA | Guiyang | 16.46 | 278⇑ | iP | P | 23 20 24.4 | +1.5 |
| GYA | | | | pP | pP | 23 20 36.8 | -5.1 |
| GYA | | | | sP | sP | 23 20 54.0 | -0.9 |

GYA S **Sn** **23 23 18.8 -5.9**
GYA SS S 23 23 43.2 +13
GYA PcP **PcP** **23 25 09.4 +1.5**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,140nm,6.9s
GYA LN
comp=Z,720nm,10.9s
GYA LE
comp=Z,340nm,8.8s
GYA LZ
comp=Z,430nm,9.0s
**SNY Shenyang 16.50 356** ⇓P **Pn** **23 20 22.1 -0.1**
SNY S **S** **23 23 28.1 -2.0**
SNY PMZ
comp=Z,83nm,1.2s
SNY PMZ
comp=Z,1μm,4.7s
SNY LN
comp=Z,540nm,12.1s
SNY LE
comp=Z,500nm,11.8s
SNY LZ
comp=Z,580nm,14.1s
**JAG Ashikaga 16.66 45** P **Pn** **23 20 23.8 -0.5**
**JHO Hitachi 17.49 46** P **P** **23 20 31.6 -2.5**
**DAV Davao City (W) 18.16 178** LR LR 23 27 22.8
comp=Z,300nm,21.4s,baz=18,slow=35
**CN2 Changchun 18.44 1** *e*P **P** **23 20 44.5 +0.1**
CN2 *e*S **S** **23 24 08.8 -0.7**
CN2 PMZ
comp=Z,140nm,1.1s
CN2 PMZ
comp=Z,300nm,3.0s
CN2 LN
comp=Z,500nm,10.0s
CN2 LE
comp=Z,400nm,10.0s
CN2 LZ
comp=Z,400nm,11.0s
**HHC Hu-ho-hao-te 19.06 328** *e*P **Pn** **23 20 52.6 -0.6**
HHC pP **pP** **23 21 12.3 +1.7**
HHC sP **sP** **23 21 25.2 +1.6**
HHC S **S** **23 24 16.3 -5.9**
HHC ScP **ScP** **23 28 34.4 -4.0**
HHC PMZ
comp=Z,56nm,1.1s
HHC PMZ
comp=Z,390nm,4.1s
HHC LN
comp=Z,510nm,9.3s
HHC LE
comp=Z,140nm,8.3s
HHC LZ
comp=Z,280nm,12.2s
**CD2 Chengdu 19.46 291** *e*P **P** **23 20 55.1 -0.6**
CD2 pP **pP** **23 21 15.2 +0.2**
CD2 sP **sP** **23 21 29.2 +1.2**
CD2 S **S** **23 24 29.7 -0.5**
CD2 sS **sS** **23 25 02.5 +0.4**
CD2 PMZ
comp=Z,40nm,0.7s
CD2 PMZ
comp=Z,380nm,5.2s
CD2 LN
comp=Z,1μm,6.7s
CD2 LE
comp=Z,1μm,7.8s
CD2 LZ
comp=Z,1μm,7.3s
**USRK Ussuriysk Ar. 19.69 15** P **P** **23 20 57.0 -1.1**
comp=Z,4.3nm,0.3s,baz=189,slow=9.1,SNR=50
**KMI Kunming 20.06 274** P Pn 23 21 04.2 -1.0
KMI pP pP 23 21 24.9 +3.0
KMI sP sP 23 21 38.5 +3.7
KMI S S 23 24 34.1 -8.4
KMI sS sS 23 25 11.2 -3.4
KMI PMZ
comp=Z,22nm,0.9s
KMI PMZ
comp=Z,260nm,5.8s
KMI LN
comp=Z,360nm,9.6s
KMI LE
comp=Z,480nm,8.6s
KMI LZ
comp=Z,390nm,9.8s
**UBPT Khong Chiam 20.77 245** P Pn 23 21 12.5 -0.7
comp=Z,28nm,0.9s,comp=Z,1μm
**KKM Kota Kinabalu 20.90 205** *e*P **P** **23 21 12.5 +1.0**
comp=Z,119nm,0.8s
**SDKM Sandakan 20.92 202** ⇑P **P** **23 21 12.5 +0.9**
**MYLDM Lahad Datu 20.95 198** *e*P Pn 23 21 14.2 -1.2
comp=Z,67nm,1.1s
**LZH Lanzhou 21.01 306** *e*P **P** **23 21 13.4 +0.9**
LZH pP **pP** **23 21 34.2 +2.1**
LZH sP **sP** **23 21 49.1 +4.1**
LZH S **S** **23 24 59.6 -1.2**
LZH sS **sS** **23 25 30.7 -2.8**
LZH PMZ
comp=Z,18nm,1.1s
LZH PMZ
comp=Z,150nm,5.8s
LZH LN
comp=Z,710nm,12.0s
LZH LE
comp=Z,450nm,12.6s
LZH LZ
comp=Z,580nm,14.2s
**NONG Nongkai 21.46 255** P **P** **23 21 20.8 +3.5**
comp=Z,68nm,1.2s
**SGSI Sangihe 21.52 178** P **P** **23 21 22.1 +4.1**
**TSM Tawau 21.98 199** ⇓P **P** **23 21 23.6 +0.9**
**GUMO Guam 22.11 118** P **P** **23 21 25.5 +1.3**
comp=Z,483nm,1.0s,baz=231,slow=5.3,SNR=15
GUMO LR LR 23 28 14.0
comp=Z,89nm,20.5s,baz=310,slow=32
**ERM Erimo 22.46 38** ⇓*i*P **P** **23 21 25.5 -2.0**
ERM pmax pmax
comp=Z,43nm,0.9s
**ERM Erimo 22.46 38** P **P** **23 21 26.2 -1.3**
comp=Z,275nm,0.5s,SNR=8.0
**ERM Erimo 22.46 38** *e*P **P** **23 21 25.9 -1.6**
comp=Z,43nm,0.9s
**CRAI Chiangrai 23.17 262** P **P** **23 21 31.3 -3.5**
**LOEI Loei 23.32 255** P **P** **23 21 37.2 +1.0**
comp=Z,34nm,0.7s,comp=Z,4μm
**ASAJ Asahikawa 23.63 33** P **P** **23 21 35.5 -3.3**
comp=Z,19nm,0.4s,baz=243,slow=6.6
ASAJ LR LR 23 32 23.4
comp=Z,444nm,18.7s,baz=333,slow=40
**ASAJ Asahikawa 23.63 33** P **P** **23 21 35.5 -3.3**
ASAJ pmax pmax
comp=Z,19nm,0.4s
ASAJ MLR MLR
comp=Z,444nm,18.7s
**ASAJ Asahikawa 23.63 33** *e*P **P** **23 21 35.6 -3.2**
comp=Z,28nm,0.5s
**HIA Hailar 24.24 352** *e*P **P** **23 21 43.0 -1.2**
HIA pmax pmax
comp=Z,82nm,1.3s
**HIA Hailar 24.24 352** *e*P **P** **23 21 43.0 -1.2**
comp=Z,82nm,1.3s
**CMAI Chiengmai2 24.45 263** P **P** **23 21 51.0 +4.4**
comp=Z,49nm,0.8s,comp=Z,5μm
**KLR Kul'dur 24.45 11** *e*P P 23 21 40.4 -5.7
KLR *e* 23 22 06.5
KLR pmax pmax
comp=Z,57nm,1.6s
KLR MLR MLR
comp=Z,1μm,11.0s
**TNTI Ternate 24.53 174** P **P** **23 21 48.3 +1.2**
comp=Z,219nm,1.2s
**TNTI Ternate 24.53 174** *e*P **P** **23 21 48.9 +1.8**
comp=Z,187nm,1.0s
**GTOI Gorontalo 24.61 185** P **P** **23 21 47.8 -0.1**
comp=Z,87nm,1.9s,comp=Z,40μm
**BTM Bintulu 24.77 209** ⇓P **P** **23 21 50.0 +0.7**
**MRSI Marisa 24.87 187** P **P** **23 21 52.6 +2.4**
comp=Z,53nm,1.6s
**CHTO Chiang Mai 24.89 260** *e*pP pP 23 22 16.0 +3.0
**CM01 Chiang Mai Arr 25.02 259** *e*P **P** **23 21 52.3 +0.7**
CM01 *e*pP **pP** **23 22 14.6 +0.4**
**CMAR Chiang Mai Arr 25.02 259** P **P** **23 21 52.7 +1.1**
comp=Z,2.4nm,0.3s,baz=56,slow=8.1,SNR=5.4

CMAR pP **pP** **23 22 13.2 -0.9**
comp=Z,2.4nm,0.4s,baz=61,slow=8.0,SNR=3.8
CMAR ScP **ScP** **23 28 55.2 +1.3**
comp=Z,0.5nm,0.4s,baz=48,slow=1.3,SNR=5.6
CMAR LR LR 23 31 33.7
comp=Z,135nm,20.1s,baz=200,slow=36
**YUK Yuzh-Kuril'sk 25.28 37** *c i*P P 23 21 45.2 -8.5
YUK *i* 23 22 34.0
YUK *i* S S 23 25 59.7 -12
**MPSI Mapaga 25.31 192** P **P** **23 21 55.1 +0.9**
comp=Z,34nm,1.9s,comp=Z,869nm
**GTA Gaotai 25.32 310** *e*P **P** **23 21 53.1 -1.2**
GTA ScP **ScP** **23 28 55.8 +1.3**
GTA PMZ
comp=Z,15nm,1.5s
GTA PMZ
comp=Z,140nm,5.9s
GTA LN
comp=Z,170nm,18.3s
GTA LE
comp=Z,180nm,20.2s
GTA LZ
comp=Z,200nm,17.8s
**SBUM Sibu 25.82 210** *e*P **P** **23 21 59.5 +0.7**
comp=Z,62nm,0.7s
**YSS Yuzh-Sakhalins 25.84 29** ⇑*e*P **P** **23 21 56.5 -2.2**
YSS *e* 23 22 21.6
YSS *e*S **S** **23 26 17.0 -3.7**
YSS MLR MLR
comp=N,200nm,16.0s
YSS MLR MLR
comp=Z,200nm,16.0s
**YSS Yuzh-Sakhalins 25.84 29** *e*P **P** **23 21 59.6 +0.9**
comp=Z,48nm,1.2s
**LBMI Labuha 25.93 174** P P 23 22 07.2 +7.3
**LUWI Luwuk 26.29 185** P **P** **23 22 04.2 +1.1**
comp=Z,54nm,2.0s,comp=Z,2μm
**PCI Palu 26.54 191** P P 23 22 10.7 +5.4
**ULN Ulaanbaatar 26.55 332** ⇑*i*P **P** **23 22 04.4 -0.9**
ULN pmax pmax
comp=Z,58nm,1.7s
**ULN Ulaanbaatar 26.55 332** *e*P **P** **23 22 04.6 -0.8**
comp=Z,50nm,1.3s
**SIJI Sorong 26.76 166** P **P** **23 22 06.8 -0.5**
comp=Z,12nm,0.5s,baz=213,slow=24,SNR=6.7
**SONM Songino Array 26.80 332** P **P** **23 22 06.3 -1.3**
comp=Z,6.6nm,0.7s,baz=149,slow=9.5,SNR=37
SONM PcP **PcP** **23 25 27.8 -0.1**
comp=Z,0.7nm,0.5s,baz=149,slow=1.9,SNR=4.8
SONM pPcP 23 25 54.0
comp=Z,2.6nm,1.0s,baz=132,slow=2.2,SNR=4.2
SONM ScP **ScP** **23 28 58.8 +0.1**
comp=Z,4.3nm,1.2s,baz=164,slow=2.2,SNR=5.9
SONM LR LR 23 33 32.0
comp=Z,180nm,21.8s,baz=138,slow=38
**SONA1 Songino Array 26.81 332** *e*P **P** **23 22 05.7 -2.0**
**SANI Sanana 27.23 178** P **P** **23 22 11.5 0.0**
comp=Z,123nm,1.0s,comp=Z,1μm
**KSM Kuching 27.58 213** *e*P **P** **23 22 17.5 +2.8**
comp=Z,15nm,0.8s
**MSAI Masohi 28.77 172** P **P** **23 22 27.6 +2.4**
**FAKI Fak Fak 28.97 165** P **P** **23 22 27.4 +0.4**
comp=Z,89nm,1.0s,comp=Z,884nm
**FAKI Fak Fak 28.97 165** *e*P **P** **23 22 27.1 +0.1**
comp=Z,73nm,0.9s
**AAI Ambon 29.02 173** P **P** **23 22 28.5 +1.1**
**ZAK Zakamensk 30.07 332** *e*P **P** **23 22 33.7 -2.9**
ZAK pmax pmax
comp=Z,5.0nm,2.0s
**LSA Lhasa 30.19 286** P **P** **23 22 41.2 +2.9**
LSA S **S** **23 27 31.0 +0.4**
LSA PMZ
comp=Z,6.0nm,0.6s
LSA PMZ
comp=Z,41nm,5.7s
LSA LN
comp=Z,55nm,12.0s
LSA LE
comp=Z,140nm,15.0s
LSA LZ
comp=Z,180nm,12.0s
**LSA Lhasa 30.19 286** *e*P **P** **23 22 41.1 +2.8**
LSA *e**PP **pP** **23 23 04.0 +2.8**
**LSA Lhasa 30.19 286** *e*P **P** **23 22 41.1 +2.8**
LSA *e*pP **pP** **23 23 04.0 +2.8**
**BBKI Banjar Baru 30.24 200** P **P** **23 22 39.4 +1.2**
comp=Z,66nm,1.0s
**SMPI Sarmi 30.27 152** P **P** **23 22 38.9 +0.4**
comp=Z,45nm,1.2s,comp=Z,12μm
**KAPI Kappang 30.57 190** P **P** **23 22 40.3 -0.8**
comp=Z,3.1nm,0.6s,baz=284,slow=22,SNR=3.6
**IPM Ipoh 30.91 232** *e*P **P** **23 22 44.2 0.0**
comp=Z,26nm,0.9s
**TLY Talaya 30.91 334** P **P** **23 22 43.2 -0.6**
comp=Z,5.7nm,0.5s,baz=165,slow=7.2,SNR=12
**TLY Talaya 30.91 334** *e*P **P** **23 22 42.3 -1.5**
TLY *e*S **S** **23 27 43.4 +3.0**
TLY pmax pmax
comp=Z,15nm,1.3s
TLY MLR MLR
comp=Z,154nm,18.0s
**TLY Talaya 30.91 334** *e*P **P** **23 22 43.0 -0.8**
comp=Z,8.4nm,0.7s
**GENI Genyem 31.45 150** P **P** **23 22 50.2 +1.3**
**JAY Jayapura 31.63 149** P **P** **23 22 50.4 -0.1**
comp=Z,22nm,0.9s,baz=310,slow=7.2,SNR=6.3
**JAY Jayapura 31.63 149** P **P** **23 22 50.4 -0.1**
JAY pmax pmax
comp=Z,22nm,0.9s
**MOY Mondy 32.00 332** *e*P **P** **23 22 52.5 -1.0**
MOY pmax pmax
comp=Z,48nm,1.6s
**TPI Tanjungpandan 32.55 213** P **P** **23 22 59.9 +1.4**
comp=Z,23nm,1.5s
**TAPN Taplejung 33.32 282** *e*P **P** **23 23 06.5 +0.9**
**PSI Prapat 33.57 232** P **P** **23 23 07.8 +0.3**
comp=Z,12nm,0.8s,baz=253,slow=1.4,SNR=6.1
**PSI Prapat 33.57 232** P **P** **23 23 07.9 +0.3**
PSI pmax pmax
comp=Z,12nm,0.8s
**PSI Prapat 33.57 232** P **P** **23 23 07.8 +0.3**
PSI *e*pP **pP** **23 23 31.0 +0.3**
**ODAN Odare 33.65 281** *e*P **P** **23 23 09.4 +1.0**
comp=Z,19nm,0.5s
**MMRI Maumere 33.86 185** P **P** **23 23 10.4 +0.5**
**MMRI Maumere 33.86 185** *e*P **P** **23 23 09.6 -0.3**
comp=Z,55nm,0.8s
**RAMN Ramite 34.34 281** *e*P **P** **23 23 15.3 +0.9**
**MNSI Mandailing Nat 34.53 229** P **P** **23 23 16.0 +0.2**
**SOEI Soe 34.87 181** P **P** **23 23 16.8 -2.0**
**SOEI Soe 34.87 181** *e*P **P** **23 23 17.1 -1.7**
comp=Z,25nm,0.8s
**GUN Gumba 34.89 283** *e*P **P** **23 23 19.9 +0.7**
comp=Z,17nm,0.4s
**HVS Khovu-Aksy 35.11 325** ⇑*i*P **P** **23 23 19.9 -0.6**
HVS pmax pmax
comp=Z,13nm,1.0s
**PKI Pulchoki 35.34 283** *e*P **P** **23 23 23.3 +0.3**
comp=Z,9.7nm,0.5s
**BATI Baumata 35.34 182** P **P** **23 23 21.1 -1.5**
comp=Z,80nm,0.7s,baz=317,slow=2.7,SNR=14
**BATI Baumata 35.34 182** P **P** **23 23 21.0 -1.7**
**PKIN Phulchoki 35.35 283** *e*P **P** **23 23 23.3 +0.3**
comp=Z,14nm,0.5s
**WMQ Urumqi 35.39 311** P **P** **23 23 23.0 0.0**
WMQ pP **pP** **23 23 48.0 +1.8**
WMQ sP **sP** **23 24 02.0 +3.9**
WMQ PP **PP** **23 24 46.0 +0.8**
WMQ S **S** **23 28 46.0 -4.1**
WMQ SS **SnSn** **23 31 14.0 -5.9**
WMQ PMZ
comp=Z,16nm,1.0s
WMQ PMZ
comp=Z,23nm,3.5s
WMQ LN
comp=Z,200nm,13.0s
WMQ LE
comp=Z,160nm,14.0s
WMQ LZ
comp=Z,170nm,14.0s
**KKN Kakani 35.43 283** *e*P **P** **23 23 24.2 +0.5**
comp=Z,16nm,0.6s
**PWJI Pagerwojo 35.52 203** P **P** **23 23 24.7 +0.5**
comp=Z,45nm,0.9s
**DMN Daman 35.60 283** *e*P **P** **23 23 25.7 +0.5**
comp=Z,9.5nm,0.5s

**MDSI Maura Dua 35.83 217** P **P** **23 23 28.2 +1.4**
comp=Z,9.9nm,0.9s
**GKN Gorkha 35.98 283** *e*P **P** **23 23 28.6 +0.3**
comp=Z,13nm,0.4s
**LEM Lembang 36.12 210** P **P** **23 23 31.1 +1.6**
comp=Z,55nm,0.8s,baz=1.4,slow=3.9,SNR=11
**LEM Lembang 36.12 210** P **P** **23 23 31.1 +1.6**
LEM pmax pmax
comp=Z,55nm,0.8s
**LEM Lembang 36.12 210** P **P** **23 23 31.8 +2.3**
**DANN Dangsing 36.72 284** *e*P **P** **23 23 35.6 +0.9**
comp=Z,4.6nm,0.5s
**YAK Yakutsk 36.84 4** ⇑*i*P **P** **23 23 32.7 -2.2**
YAK pmax pmax
comp=Z,13nm,0.7s
**KOLN Koldanda 36.91 283** *e*P **P** **23 23 36.9 +0.6**
comp=Z,5.2nm,0.3s
**PEA0 Petropavlovsk- 37.05 33** *e*P **P** **23 23 36.9 0.0**
**PETK Petropavlovsk- 37.05 33** P **P** **23 23 35.9 -1.0**
comp=Z,5.2nm,0.5s,baz=194,slow=4.5,SNR=29
PETK LR LR 23 41 10.4
comp=Z,36nm,18.5s,baz=227,slow=40
**PETK Petropavlovsk- 37.05 33** P **P** **23 23 35.9 -1.0**
PETK pmax pmax
comp=Z,5.0nm,0.5s
PETK MLR MLR
comp=Z,36nm,18.5s
**PET Petropavlovsk 37.48 33** *e*P **P** **23 23 39.2 -1.2**
PET *e*S **S** **23 29 19.4 -2.0**
PET pmax pmax
comp=Z,36nm,0.8s
PET MLR MLR
comp=Z,300nm,21.0s
PET MLR MLR
comp=Z,300nm,19.0s
**PET Petropavlovsk 37.48 33** *e*P **P** **23 23 39.3 -1.1**
comp=Z,86nm,1.4s
**CHLP Challavanipeta 38.39 268** *e*P **P** **23 23 50.3 +1.7**
CHLP IAmb IAmb 23 23 52.2
comp=Z,16nm,0.9s
**MTN Manton Dam 38.42 170** *e*P **P** **23 23 48.1 -0.6**
comp=Z,88nm,0.9s
**MK01 Makanchi Array 39.93 314** *e*P **P** **23 23 59.8 -1.3**
**MKAR Makanchi Array 39.94 314** P **P** **23 24 00.1 -1.1**
comp=Z,15nm,0.4s,baz=99,slow=10,SNR=163
MKAR PcP **PcP** **23 26 06.2 +1.6**
comp=Z,1.9nm,0.6s,baz=81,slow=4.6,SNR=3.5
MKAR ScP **ScP** **23 29 44.8 +0.4**
comp=Z,1.2nm,1.0s,baz=110,slow=5.2,SNR=5.5
MKAR LR LR 23 41 10.8
comp=Z,69nm,18.9s,baz=111,slow=37
**MAKZ Makanchi 40.15 313** *e*P **P** **23 24 02.3 -0.7**
**PMG Port Moresby 40.76 145** P **P** **23 24 08.4 +0.2**
comp=Z,44nm,1.0s,baz=319,slow=13,SNR=8.0
**PMG Port Moresby 40.76 145** ⇑*i*P **P** **23 24 09.0 +0.8**
PMG pmax pmax
comp=Z,198nm,1.0s
**PMG Port Moresby 40.76 145** *e*P **P** **23 24 09.1 +0.8**
comp=Z,52nm,1.0s
**PVM Polavaram 40.98 267** *e*P **P** **23 24 12.1 +2.0**
PVM IAmb IAmb 23 24 13.2
comp=Z,6.1nm,0.8s
**ZAA0 Zalesovo Array 41.20 325** *e*P **P** **23 24 09.2 -2.3**
**ZALV Zalesovo Beam 41.20 325** P **P** **23 24 09.5 -1.9**
comp=Z,11nm,0.5s,baz=115,slow=8.4,SNR=41
ZALV pP **pP** **23 24 33.4 -1.8**
comp=Z,4.0nm,0.5s,baz=118,slow=8.8,SNR=4.0
ZALV PcP **PcP** **23 26 08.1 -0.4**
comp=Z,1.7nm,0.5s,baz=112,slow=5.3,SNR=3.3
ZALV ScP **ScP** **23 29 48.4 -0.7**
comp=Z,1.1nm,0.5s,baz=130,slow=3.7,SNR=4.6
ZALV LR LR 23 41 46.7
comp=Z,92nm,20.4s,baz=69,slow=37
**SEY Seymchan 41.79 18** P **P** **23 24 14.7 -1.3**
comp=Z,4.6nm,0.5s,baz=203,slow=6.7,SNR=7.5
**SEY Seymchan 41.79 18** P **P** **23 24 14.7 -1.3**
SEY pmax pmax
comp=Z,5.0nm,0.5s
**NVS Novosibirsk 42.44 325** ⇑*i*P **P** **23 24 19.9 -1.5**
NVS *i* *PP **pP** **23 24 41.8 -3.5**
NVS *e* 23 26 04.0
NVS *e*S S 23 30 26.6 -8.7
NVS pmax pmax
comp=N,10.0nm,1.6s
NVS pmax pmax
comp=Z,24nm,1.6s
NVS pmax pmax
comp=E,13nm,1.4s
NVS smax smax
comp=N,21nm,2.8s
NVS smax smax
comp=E,42nm,3.5s
**RPR Rampur 42.60 271** *e*P **P** **23 24 24.6 +1.4**
RPR IAmb IAmb 23 24 25.5
comp=Z,9.9nm,0.8s
**COEN Coen 42.91 153** *e*P **P** **23 24 26.6 +0.9**
comp=Z,86nm,0.9s
**ADKI Addanki 42.95 266** *e*P **P** **23 24 27.3 +1.2**
ADKI IAmb IAmb 23 24 30.2
comp=Z,6.6nm,0.9s
**KSH Kashi 43.16 301** P P 23 24 31.0 +3.3
KSH *e*pP pP 23 24 56.6 +5.0
KSH *e*PP **PcP** **23 26 15.9 +0.4**
KSH PcS **PcS** **23 30 09.6 +1.4**
KSH S **S** **23 30 50.6 +3.9**
KSH ScS **ScS** **23 34 18.6 +0.9**
KSH PMZ
comp=Z,86nm,3.1s
KSH LN
comp=Z,160nm,5.8s
KSH LE
comp=Z,130nm,6.7s
KSH LZ
comp=Z,190nm,7.0s
**ULHL Ulahol 43.22 305** P **P** **23 24 29.4 +1.2**
SNR=6.6
**NJS Nagarjunasagar 43.31 268** *e*P **P** **23 24 30.8 +1.8**
NJS IAmb IAmb 23 24 31.7
comp=Z,5.9nm,0.7s
**KURK Kurchatov 43.45 318** P **P** **23 24 28.8 -0.9**
KURK *PP **pP** **23 24 51.4 -2.2**
KURK pmax pmax
comp=Z,3.0nm,0.4s
KURK pmax pmax
comp=Z,13nm,1.0s
**KURK Kurchatov 43.45 318** P **P** **23 24 28.9 -0.8**
comp=Z,110nm,0.4s,SNR=11
**KURK Kurchatov 43.45 318** P **P** **23 24 28.8 -0.9**
KURK pP **pP** **23 24 51.4 -2.2**
**KURBB Kurchatov Arra 43.48 318** P **P** **23 24 28.8 -1.2**
comp=Z,2.6nm,0.4s,baz=108,slow=7.7,SNR=26
KURBB pP **pP** **23 24 51.4 -2.4**
comp=Z,12nm,1.0s,baz=107,slow=8.0,SNR=8.6
**HYBB Hyderabad (bro 43.71 269** *e*P **P** **23 24 34.2 +2.0**
HYBB IAmb IAmb 23 24 34.7
comp=Z,6.0nm,0.7s
**TKM2 Tokmak 2 43.78 306** *i* P **P** **23 24 32.2 -0.5**
TKM2 pmax pmax
comp=Z,18nm,0.5s
**TKM2 Tokmak 2 43.78 306** P **P** **23 24 33.2 +0.5**
SNR=34
**TKM2 Tokmak 2 43.78 306** *e*P **P** **23 24 33.1 +0.5**
comp=Z,26nm,0.6s
**KZA Kyzart 43.93 305** P **P** **23 24 35.0 +0.8**
SNR=11
**KBK Karagaybulak 44.22 306** P **P** **23 24 36.9 +0.7**
SNR=7.8
**CHMS Chumysh 44.40 306** P **P** **23 24 37.7 +0.3**
SNR=5.2
**FRU Bishkek 44.48 306** *e*P **P** **23 24 37.0 -1.1**
FRU *e* 23 25 04.0
FRU pmax pmax
comp=Z,30nm,1.6s
**UCH Uchtor 44.49 305** P **P** **23 24 39.9 +1.2**
SNR=32
**AAK Ala-Archa 44.55 306** P **P** **23 24 39.1 +0.2**
comp=Z,3.1nm,0.4s,baz=121,slow=5.7,SNR=13
**AAK Ala-Archa 44.55 306** ⇑*i*P **P** **23 24 39.4 +0.6**
AAK pmax pmax
comp=Z,9.0nm,1.5s
**AAK Ala-Archa 44.55 306** P **P** **23 24 39.0 +0.2**
comp=Z,44nm,0.6s,SNR=5.3
**AAK Ala-Archa 44.55 306** P **P** **23 24 39.2 +0.3**
SNR=7.1
**AAK Ala-Archa 44.55 306** *e*P **P** **23 24 39.4 +0.6**
comp=Z,1.1nm,1.2s

**USP Ospenovka** 44.62 307 P **P** 23 24 39.6 +0.5
SNR=12
**EKS2 Erkin-Say** 45.08 306 *e*P **P** 23 24 43.0 0.0
EKS2 pmax pmax
comp=Z,9.0nm,1.3s
**EKS2 Erkin-Say** 45.08 306 P **P** 23 24 42.8 -0.2
SNR=6.7
**EKS2 Erkin-Say** 45.08 306 *e*P **P** 23 24 43.0 0.0
comp=Z,9.3nm,1.3s
**AML Almayashu** 45.09 305 P **P** 23 24 44.2 +0.8
SNR=16
**URV Uravakonda** 45.71 266 *e*P **P** 23 24 49.7 +1.6
**SMY Shemya** 45.78 40 *e*P **P** 23 24 48.8 +0.7
SMY pmax pmax
comp=Z,282nm,1.4s
**SMY Shemya** 45.78 40 *e*P **P** 23 24 48.8 +0.7
comp=Z,282nm,1.4s
**PALK Pallekele** 45.81 255 P **P** 23 24 48.6 -0.3
comp=Z,7.6nm,0.8s,baz=90,slow=10,SNR=3.2
**PALK Pallekele** 45.81 255 P **P** 23 24 48.6 -0.3
PALK pmax pmax
comp=Z,8.0nm,0.8s
**WRAB Tennant Creek** 45.91 168 *c i*P **P** 23 24 49.9 +0.3
WRAB pmax pmax
comp=Z,153nm,0.9s
**WRAB Tennant Creek** 45.91 168 P **P** 23 24 49.0 -0.6
comp=Z,352nm,0.8s,SNR=60
**WRA Warramunga Arr** 45.92 168 P **P** 23 24 49.8 +0.2
comp=Z,28nm,0.6s,baz=349,slow=9.1,SNR=237
WRA pP **pP** 23 25 12.8 -1.0
comp=Z,9.5nm,0.8s,baz=351,slow=8.0,SNR=3.8
WRA LR LR 23 48 02.7
comp=Z,57nm,18.1s,baz=325,slow=41
**WRA Warramunga Arr** 45.92 168 P **P** 23 24 49.8 +0.2
WRA *PP **pP** 23 25 12.8 -1.0
WRA pmax pmax
comp=Z,29nm,0.6s
WRA pmax pmax
comp=Z,10.0nm,0.8s
WRA MLR MLR
comp=Z,57nm,18.1s
**MBWA Marble Bar** 46.48 187 *e*P **P** 23 24 53.8 -0.1
comp=Z,31nm,0.8s
**KKAR Karatay Array** 47.51 306 *e*P **P** 23 25 02.5 +0.7
**KKAR Karatay Array** 47.51 306 *e*P **P** 23 25 02.5 +0.7
**VOSK Vostochnaya** 48.56 319 *ce*P **P** 23 25 08.2 -1.6
VOSK pmax pmax
comp=Z,2.0nm,0.5s
**KBL Kabul** 48.75 295 *e*P **P** 23 25 12.4 +0.6
KBL pmax pmax
comp=Z,28nm,0.9s
**KBL Kabul** 48.75 295 *e*P **P** 23 25 12.4 +0.6
comp=Z,28nm,0.9s
**BVAR Borovoye Array** 48.98 319 P **P** 23 25 12.1 -0.9
comp=Z,3.2nm,0.5s,baz=102,slow=8.8,SNR=27
BVAR PcP **PcP** 23 26 35.5 0.0
comp=Z,7.0nm,0.5s,baz=111,slow=3.3,SNR=15
BVAR ScP **ScP** 23 30 21.4 +0.1
comp=Z,1.5nm,0.8s,baz=97,slow=4.6,SNR=3.9
**CHKZ Chkalovo** 48.99 320 *i* P **P** 23 25 11.0 -2.0
CHKZ pmax pmax
comp=Z,3.0nm,0.5s
**BRVK Borovoye** 49.05 319 ⇑*i*P **P** 23 25 13.0 -0.5
BRVK pmax pmax
comp=Z,24nm,2.5s
**BRVK Borovoye** 49.05 319 P **P** 23 25 13.2 -0.3
comp=Z,65nm,0.4s,SNR=8.0
**BRVK Borovoye** 49.05 319 *e*P **P** 23 25 12.7 -0.8
comp=Z,31nm,1.3s
**ASAR Alice Springs** 49.48 169 P **P** 23 25 17.6 +0.6
comp=Z,19nm,0.5s,baz=352,slow=8.2,SNR=204
ASAR PcP **PcP** 23 26 37.9 +0.2
comp=Z,8.1nm,0.9s,baz=3.4,slow=3.8,SNR=9.7
**ASAR Alice Springs** 49.48 169 P **P** 23 25 17.7 +0.6
ASAR 23 26 37.9
ASAR pmax pmax
comp=Z,19nm,0.5s
**AS01 Alice Springs** 49.48 169 *e*P **P** 23 25 16.5 -0.6
**AS01 Alice Springs** 49.48 169 *e*P **P** 23 25 16.5 -0.6
**BILL Bilibino** 49.48 19 *e*P **P** 23 25 16.6 0.0
BILL *e* 23 27 18.1
BILL pmax pmax
comp=Z,6.0nm,1.1s
**CTA Charters Tower** 49.68 153 P **P** 23 25 18.3 -0.3
comp=Z,15nm,1.0s,baz=318,slow=10,SNR=7.5
**CTA Charters Tower** 49.68 153 P **P** 23 25 18.3 -0.3
CTA pmax pmax
comp=Z,15nm,1.0s
**CTAO Charters Tower** 49.68 153 *e*P **P** 23 25 18.9 +0.2
CTAO pmax pmax
comp=Z,28nm,1.1s
**CTAO Charters Tower** 49.68 153 *e*P **P** 23 25 18.9 +0.2
comp=Z,28nm,1.1s
**ZRNK Zerenda** 49.78 319 *i* P **P** 23 25 16.9 -2.2
ZRNK pmax pmax
comp=Z,14nm,1.1s
**GSTR Great Sitkin T** 51.53 43 *e*P **P** 23 25 29.6 -2.7
**ABKAR Akbulak array** 55.09 314 *e*P **P** 23 25 58.0 -0.3
**SVE Sverdlovsk** 55.16 323 ⇓*i*P **P** 23 25 58.1 -0.6
SVE pmax pmax
comp=Z,45nm,1.2s
**IMYA Miami** 55.80 298 *e*P **P** 23 26 01.4 -2.5
**FORT Forrest** 55.87 177 *e*P **P** 23 26 05.3 +1.4
comp=Z,38nm,1.0s
**ARU Arti** 56.26 322 P **P** 23 26 05.0 -1.6
comp=Z,0.5nm,0.3s,baz=90,slow=20,SNR=8.5
**ARU Arti** 56.26 322 *d i*P **P** 23 26 05.8 -0.7
ARU *PP **pP** 23 26 29.7 -1.8
ARU 23 27 02.2
ARU S **S** 23 33 49.0 +0.7
ARU SS **SS** 23 37 34.3 -1.8
ARU pmax pmax
comp=Z,48nm,1.7s
**ARU Arti** 56.26 322 P **P** 23 26 05.4 -1.1
comp=Z,180nm,0.5s,SNR=14.3
**ARU Arti** 56.26 322 *e*P **P** 23 26 05.1 -1.4
comp=Z,47nm,1.3s
**AKTO Aktyubinsk** 56.34 315 P **P** 23 26 07.0 -0.3
comp=Z,1.8nm,0.3s,baz=76,slow=5.1,SNR=10
**AKTO Aktyubinsk** 56.34 315 P **P** 23 26 07.0 -0.3
AKTO pmax pmax
comp=Z,2.0nm,0.3s
**ABKT Ailbek** 57.15 300 P **P** 23 26 14.0 +0.7
comp=Z,256nm,0.5s,SNR=9.4
**GEYT Ailbeck** 57.15 300 P **P** 23 26 14.2 +1.0
comp=Z,17nm,0.6s,baz=71,slow=3.2,SNR=36
**SOKR Solikamsk** 57.46 326 *e*P **P** 23 26 14.9 0.0
SOKR *PP **pP** 23 26 39.8 -0.2
SOKR pmax pmax
comp=Z,20nm,1.3s
SOKR MLR MLR
comp=Z,200nm,18.0s
**NWAO Narrogin (SRO)** 58.39 188 P **P** 23 26 22.0 +0.3
comp=Z,32nm,1.0s,baz=260,slow=0.1,SNR=7.8
**NWAO Narrogin (SRO)** 58.39 188 P **P** 23 26 22.0 +0.3
NWAO pmax pmax
comp=Z,32nm,1.0s
**DZM Mont Dzumac** 62.00 136 *e*LR LR 23 45 17.5
comp=Z,327nm,30.6s
**IZEF Zefreh** 62.75 295 *e*P **P** 23 26 52.1 +0.2
**IRAM Rameshed** 62.97 294 *e*P **P** 23 26 52.6 -0.7
**SVW2 Sparrevohn** 63.13 32 *e*P **P** 23 26 54.5 +0.9
comp=Z,18nm,0.6s
**IPIR Pirpir** 63.97 296 *e*P **P** 23 26 59.5 -0.5
**PPLA Purkeypile** 64.57 30 *e*P **P** 23 27 04.3 +1.1
comp=Z,398nm,2.2s
**RSO Redoubt South** 64.58 33 *e*P **P** 23 27 04.3 +1.0
**SPU Mount Spurr** 64.83 32 *e*P **P** 23 27 05.3 +0.5
**COLD Coldfoot** 64.96 25 *e*P **P** 23 27 06.3 +0.8
**BPAW Bear Paw Mtn.** 64.97 29 *e*P **P** 23 27 06.3 +0.6
comp=Z,63nm,0.5s
**MLY Manley** 64.98 28 *e*P **P** 23 27 06.5 +0.9
comp=Z,39nm,0.6s
**KDAK Kodiak Island** 65.01 36 *e*P **P** 23 27 06.3 +0.4
KDAK pmax pmax
comp=Z,46nm,1.3s
**KDAK Kodiak Island** 65.01 36 P **P** 23 27 06.0 +0.1
comp=Z,159nm,0.5s,SNR=22
**KDAK Kodiak Island** 65.01 36 *e*P **P** 23 27 06.3 +0.4
comp=Z,46nm,1.3s
**TRF Thorofare Moun** 65.36 29 *e*P **P** 23 27 08.5 +0.2
comp=Z,25nm,1.1s
**SUA Susitna One** 65.42 32 *e*P **P** 23 27 09.4 +0.8
comp=Z,36nm,0.6s
**CNPM China Poot** 65.46 34 *e*P **P** 23 27 09.6 +0.8
comp=Z,62nm,1.5s

**BRLK Bradley Lake** 65.60 34 *e*P **P** 23 27 10.5 +0.8
comp=Z,32nm,1.4s
**BWN Browne** 65.63 29 *e*P **P** 23 27 11.4 +1.6
comp=Z,101nm,0.4s
BWN *e*PP PP 23 29 41.5 +6.5
**MCK McKinley** 65.92 29 *e*P **P** 23 27 12.0 +0.2
MCK pmax pmax
comp=Z,161nm,1.6s
**MCK McKinley** 65.92 29 *e*P **P** 23 27 12.0 +0.2
comp=Z,161nm,1.6s
**RC01 Rabbit Creek A** 65.96 32 *e*P **P** 23 27 12.8 +0.8
comp=Z,46nm,1.5s
**RND Reindeer** 66.01 29 *e*P **P** 23 27 12.0 -0.4
**RND Reindeer** 66.01 29 *e*P **P** 23 27 12.0 -0.4
comp=Z,101nm,0.5s
**KLMR Klimovskoe** 66.01 328 *e*P **P** 23 27 10.3 -2.0
KLMR *e*PP **pP** 23 27 34.4 -3.5
KLMR pmax pmax
comp=Z,33nm,1.2s
**MDM Murphy Dome** 66.04 28 *e*P **P** 23 27 12.9 +0.4
comp=Z,199nm,1.5s
**PMR Palmer** 66.16 31 *e*P **P** 23 27 13.2 -0.1
PMR pmax pmax
comp=Z,21nm,1.0s
**PMR Palmer** 66.16 31 *e*P **P** 23 27 13.2 -0.1
comp=Z,21nm,1.0s
**TMCR Tamitsa** 66.17 331 *e*P **P** 23 27 12.6 -0.6
TMCR pmax pmax
comp=Z,28nm,0.6s
**WRH Wood River Hil** 66.18 28 *e*P **P** 23 27 13.1 -0.3
comp=Z,36nm,1.3s
**COLA College** 66.22 28⇑*e*P **P** 23 27 15.3 +1.8
COLA pmax pmax
comp=Z,8.0nm,0.9s
**COLA College** 66.22 28 *e*P **P** 23 27 14.4 +0.9
comp=Z,28nm,0.8s
**SEW Seward** 66.26 33 *e*P **P** 23 27 14.4 +0.5
comp=Z,48nm,1.2s
**CCB Clear Creek Bu** 66.27 28 *e*P **P** 23 27 13.4 -0.5
comp=Z,15nm,0.6s
**SML Sawmill** 66.50 31 *e*P **P** 23 27 15.7 +0.2
SML pmax pmax
comp=Z,42nm,1.4s
**SML Sawmill** 66.50 31 *e*P **P** 23 27 15.7 +0.2
comp=Z,42nm,1.4s
**VRH Novokhopyorsk** 66.53 317 *e*P **P** 23 27 14.3 -1.5
VRH pmax pmax
comp=N,10.0nm,0.8s
VRH pmax pmax
comp=E,10.0nm,0.8s
VRH pmax pmax
comp=Z,10.0nm,0.8s
**IL1 Eielson Array** 66.64 28 *e*P **P** 23 27 15.1 -1.1
**ILAR Eielson Array** 66.64 28 P **P** 23 27 15.5 -0.8
comp=Z,9.2nm,0.5s,baz=270,slow=4.2,SNR=81
ILAR LR LR 23 59 52.3
comp=Z,32nm,18.1s,baz=296,slow=39
**ILAR Eielson Array** 66.64 28 P **P** 23 27 15.5 -0.8
ILAR pmax pmax
comp=Z,9.0nm,0.5s
ILAR MLR MLR
comp=Z,32nm,18.1s
**HDA Harding Lake** 66.67 28 *e*P **P** 23 27 15.8 -0.7
comp=Z,42nm,1.1s
**IVIS Veis** 66.76 298 *e*P **P** 23 27 15.1 -2.6
**SCM Sheep Creek Mo** 66.97 31 *e*P **P** 23 27 18.6 +0.1
SCM pmax pmax
comp=Z,96nm,1.3s
**SCM Sheep Creek Mo** 66.97 31 *e*P **P** 23 27 18.6 +0.1
comp=Z,96nm,1.3s
**FYU Fort Yukon** 67.00 26 *e*P **P** 23 27 20.1 +1.7
**IDHR Dehrash** 67.08 299 *e*P **P** 23 27 18.9 -0.9
**MSVF Nonsavu** 67.13 124 *e*P **P** 23 27 21.3 +1.1
MSVF pmax pmax
comp=Z,60nm,1.0s
**MSVF Nonsavu** 67.13 124 P **P** 23 27 22.3 +2.1
comp=Z,325nm,1.1s,SNR=10.0
**MSVF Nonsavu** 67.13 124 *e*P **P** 23 27 21.3 +1.1
comp=Z,60nm,1.0s
**KBZ Khabaz** 67.41 309 P **P** 23 27 21.7 +0.2
comp=Z,6.1nm,0.7s,baz=277,slow=1.7,SNR=14
**KBZ Khabaz** 67.41 309 P **P** 23 27 21.7 +0.2
KBZ pmax pmax
comp=Z,6.0nm,0.7s
**APA Apatity** 67.44 335 ⇓*i*P **P** 23 27 20.6 -0.6
APA *i* *PP **PcP** 23 27 48.8 +0.8
APA MLR MLR
comp=Z,800nm,24.0s
**KIV Kislovodsk** 67.50 309 *d i*P **P** 23 27 22.2 0.0
KIV *e* 23 27 46.7
KIV *e*PP PcP 23 27 54.3 +5.5
KIV pmax pmax
comp=Z,31nm,1.0s
**KIV Kislovodsk** 67.50 309 *e*P **P** 23 27 22.9 +0.7
comp=Z,28nm,0.8s
KIV *ep*P **PcP** 23 27 49.7 +0.9
**PAX Paxson** 67.59 30 *e*P **P** 23 27 22.4 -0.1
PAX pmax pmax
comp=Z,29nm,1.1s
**PAX Paxson** 67.59 30 *e*P **P** 23 27 22.4 -0.1
comp=Z,29nm,1.1s
**KLU Klutina** 67.69 31 *e*P **P** 23 27 23.7 +0.6
comp=Z,37nm,1.2s
**DIV Divide** 67.84 32 *e*P **P** 23 27 24.7 +0.7
comp=Z,46nm,1.2s
**HARP HAARP** 67.85 30 *e*P **P** 23 27 25.1 +1.1
comp=Z,37nm,0.4s
**LPSR Galich'ya Gora** 67.93 319 *e*P **P** 23 27 23.8 -0.8
LPSR pmax pmax
comp=N,3.0nm,0.8s
LPSR pmax pmax
comp=E,10.0nm,0.8s
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**MOS Moscow** 67.97 322 *e*P **P** 23 27 23.6 -1.2
MOS *e* 23 27 51.1
MOS pmax pmax
comp=Z,41nm,1.1s
**VORD Divnogorie** 68.08 317 *e*P **P** 23 27 24.6 -1.0
VORD pmax pmax
comp=N,10.0nm,0.6s
VORD pmax pmax
comp=E,10.0nm,0.6s
VORD pmax pmax
comp=Z,6.0nm,0.6s
**VSR Storozhevoye** 68.10 317 *e*P **P** 23 27 24.8 -0.9
VSR pmax pmax
comp=N,1.0nm,0.4s
VSR pmax pmax
comp=E,4.0nm,0.4s
VSR pmax pmax
comp=Z,9.0nm,0.4s
**BMRM Bremner River** 68.43 32 *e*P **P** 23 27 28.4 +0.7
comp=Z,37nm,1.3s
**OBN Obninsk** 68.70 322 P **P** 23 27 27.9 -1.5
comp=Z,9.9nm,0.4s,baz=93,slow=14,SNR=4.3
**OBN Obninsk** 68.70 322 *ce*P **P** 23 27 28.3 -1.0
OBN *e* 23 27 54.2
OBN pmax pmax
comp=Z,25nm,1.2s
OBN MLR MLR
comp=Z,117nm,20.0s
**EGAK Eagle** 69.03 27 *e*P **P** 23 27 31.4 +0.1
comp=Z,20nm,0.8s
**ARCES ARCESS Array B** 69.74 338 P **P** 23 27 34.3 -1.3
comp=Z,2.2nm,0.4s,baz=67,slow=7.3,SNR=31
ARCES LR LR 00 02 44.0
comp=Z,50nm,18.1s,baz=86,slow=40
**ARCES ARCESS Array B** 69.74 338 P **P** 23 27 34.3 -1.3
ARCES pmax pmax
comp=Z,2.0nm,0.4s
ARCES MLR MLR
comp=Z,50nm,18.1s
**DAWY Dawson** 69.97 28 *e*P **P** 23 27 33.9 -3.2
**PCA Pinnacle** 70.73 32 *e*P **P** 23 27 43.4 +1.5
comp=Z,189nm,1.9s
**RAYN Ar Rayn** 71.24 288 P **P** 23 27 45.0 -0.6
comp=Z,28nm,0.8s,SNR=7.7
**RAYN Ar Rayn** 71.24 288 *e*P **P** 23 27 44.7 -0.9
comp=Z,15nm,1.4s
RAYN *ep*P **pP** 23 28 12.2 +0.6
**MALT Malatya** 72.16 304 ⇓P **P** 23 27 52.4 +1.5
**MALT Malatya** 72.16 304 ⇓*i*P **P** 23 27 52.4 +1.5
**FINES FINESS Array B** 72.16 330 P **P** 23 27 49.4 -0.9
comp=Z,9.3nm,0.6s,baz=80,slow=4.9,SNR=42
FINES LR LR 00 02 42.6

comp=Z,76nm,19.8s,baz=77,slow=38
**FINES FINESS Array B** 72.16 330 P **P** 23 27 49.4 -0.9
FINES pmax pmax
comp=Z,9.0nm,0.6s
FINES MLR MLR
comp=Z,76nm,19.8s
**AFI Afiamalu** 72.96 115 LR LR 23 53 25.7
comp=Z,32nm,19.6s,baz=58,slow=30
**AKASG Malin Array Be** 74.26 319 P **P** 23 28 01.8 -1.0
comp=Z,1.7nm,0.4s,baz=56,slow=5.9,SNR=18
AKASG pP **pP** 23 28 27.3 -1.7
comp=Z,4.7nm,0.8s,baz=57,slow=5.6,SNR=2.8
AKASG LR LR 00 04 46.8
comp=Z,41nm,19.4s,baz=145,slow=39
**AKASG Malin Array Be** 74.26 319 P **P** 23 28 01.8 -1.0
AKASG *PP **pP** 23 28 27.3 -1.7
AKASG pmax pmax
comp=Z,2.0nm,0.4s
AKASG pmax pmax
comp=Z,5.0nm,0.9s
AKASG MLR MLR
comp=Z,41nm,19.4s
**KIEV Kiev** 74.27 319 *e*P **P** 23 28 02.4 -0.5
KIEV pmax pmax
comp=Z,28nm,1.6s
**KIEV Kiev** 74.27 319 *e*P **P** 23 28 02.4 -0.5
comp=Z,28nm,1.6s
**BRTR Keskin Array B** 75.21 307 P **P** 23 28 08.8 0.0
comp=Z,3.4nm,0.5s,baz=111,slow=2.7,SNR=18
BRTR pP **pP** 23 28 33.5 -1.5
comp=Z,10nm,1.2s,baz=85,slow=3.1,SNR=4.3
**BRTR Keskin Array B** 75.21 307 P **P** 23 28 08.8 0.0
BRTR *PP **pP** 23 28 33.5 -1.5
BRTR pmax pmax
comp=Z,3.0nm,0.5s
BRTR pmax pmax
comp=Z,10.0nm,1.2s
**ANTO Ankara** 75.76 307 *e*P **P** 23 28 12.9 +1.1
**ANTO Ankara** 75.76 307 ⇓*i*P **P** 23 28 09.0 -2.8
**ANTO Ankara** 75.76 307 *e*P **P** 23 28 12.9 +1.1
**BR231 Keskin MP Arra** 75.79 307 *e*P **P** 23 28 09.4 -2.6
BR231 *ep*P **pP** 23 28 36.2 -2.0
**DLBC Dease Lake** 76.22 32 *e*P **P** 23 28 16.2 +2.1
comp=Z,35nm,1.4s
**SUW Suwalki** 76.42 324 *e*P **P** 23 28 14.9 -0.2
**SUW Suwalki** 76.42 324 *e*P **P** 23 28 15.0 -0.2
**HARR Harsova** 77.31 313 ⇑*i*P **P** 23 28 20.3 0.0
**HARR Harsova** 77.31 313 ⇑*i*P **P** 23 28 20.3 0.0
**LVV L'vov** 77.67 319 *e*P **P** 23 28 15.2 -7.1
**BURAR Bucovina Array** 77.87 317 ⇓*i*P **P** 23 28 13.7 -10
**BUR04 Bucovina Ar. S** 77.87 317 *e*P **P** 23 28 23.4 -0.1
**HFS Hagfors** 78.21 332 P **P** 23 28 24.1 -0.9
comp=Z,6.0nm,0.5s,baz=79,slow=7.7,SNR=36
**HFS Hagfors** 78.21 332 P **P** 23 28 24.1 -0.9
HFS pmax pmax
comp=Z,6.0nm,0.5s
**KWP Kalwaria Pacla** 78.53 320 *e*P **P** 23 28 27.6 +0.6
**KWP Kalwaria Pacla** 78.53 320 *e*P **P** 23 28 27.6 +0.6
**NB2 NORSAR Subarra** 78.78 333 P **P** 23 28 27.8 -0.4
comp=Z,5.2nm,0.6s,baz=52,slow=5.9
**NOA NORSAR Array B** 78.78 333 P **P** 23 28 27.2 -0.9
comp=Z,4.9nm,0.6s,baz=53,slow=5.6,SNR=20
NOA LR LR 00 07 42.7
comp=Z,63nm,19.2s,baz=65,slow=39
**NOA NORSAR Array B** 78.78 333 P **P** 23 28 27.3 -0.9
NOA pmax pmax
comp=Z,5.0nm,0.6s
NOA MLR MLR
comp=Z,63nm,19.2s
**KOLS Kolonicke sedl** 79.09 319 *e*P **P** 23 28 30.0 -0.1
KOLS pmax pmax
comp=Z,15nm,2.0s
**KOLS Kolonicke sedl** 79.09 319 *e*P **P** 23 28 30.0 -0.1
**UZH Uzhgorod** 79.21 319 *e*P P 23 28 26.8 -3.9
UZH *e* 23 28 33.4
**TRPA Tarpa** 79.28 318 ⇓*i*P **P** 23 28 31.9 +0.8
**STHS Stebnicka Huta** 79.48 320 *e*P **P** 23 28 31.4 -0.9
STHS pmax pmax
comp=Z,3.0nm,0.5s
**STHS Stebnicka Huta** 79.48 320 *e*P **P** 23 28 31.4 -0.9
**LOT Lotru** 79.68 315 ⇑*i*P **P** 23 28 34.2 +0.6
**OJC Ojcow** 79.95 321 *e*P **P** 23 28 34.8 0.0
**OJC Ojcow** 79.95 321 *e*P **P** 23 28 34.2 -0.6
OJC pmax pmax
comp=Z,35nm,1.4s
**OJC Ojcow** 79.95 321 *e*P **P** 23 28 34.2 -0.6
comp=Z,35nm,1.4s
**NIE Niedzica** 80.03 320 *e*P **P** 23 28 35.8 +0.6
**NIE Niedzica** 80.03 320 *e*P **P** 23 28 35.8 +0.6
**YKA Yellowknife Ar** 80.58 24 P **P** 23 28 37.8 0.0
comp=Z,11nm,0.5s,baz=301,slow=5.4,SNR=31
**YKA Yellowknife Ar** 80.58 24 P **P** 23 28 37.8 0.0
YKA pmax pmax
comp=Z,11nm,0.5s
**RPZ Rata Peaks** 80.70 148 *e*P **P** 23 28 39.4 +0.7
comp=Z,63nm,1.0s
**OKC Ostrava-Krasne** 81.07 321 *e*P **P** 23 28 40.2 -0.5
OKC *e* 23 29 06.4
**OKC Ostrava-Krasne** 81.07 321 *e*P **P** 23 28 40.2 -0.5
OKC *ep*P **pP** 23 29 06.4 -0.9
**VYHS Vyhne** 81.32 320 *e*P **P** 23 28 42.2 +0.1
VYHS pmax pmax
comp=Z,12nm,1.6s
**VYHS Vyhne** 81.32 320 *e*P **P** 23 28 42.2 +0.1
**MORC Moravsky Berou** 81.44 321 ⇑*i*P **P** 23 28 40.9 -1.9
**MORC Moravsky Berou** 81.44 321 ⇑*i*P **P** 23 28 40.9 -1.9
**SUMG Summit** 81.70 355 *e*P **P** 23 28 43.6 -0.5
**SUMG Summit** 81.70 355 *e*P **P** 23 28 43.6 -0.5
comp=Z,381nm,3.0s
**DPC Dobruska-Polom** 81.84 322 *e*P **P** 23 28 42.1 -2.8
DPC *e* 23 29 10.2
**DPC Dobruska-Polom** 81.84 322 *e*P **P** 23 28 42.1 -2.8
DPC *ex* x 23 28 52.7
DPC *ep*P **pP** 23 29 10.2 -1.2
**VRAC Vranov** 82.21 321 P **P** 23 28 46.9 +0.1
comp=Z,2.3nm,0.4s,baz=350,slow=0.7,SNR=5.7
**VRAC Vranov** 82.21 321 P **P** 23 28 46.9 +0.1
VRAC pmax pmax
comp=Z,2.0nm,0.4s
**VRAC Vranov** 82.21 321 ⇓*i*P **P** 23 28 47.1 +0.3
**PVCC Panska Ves** 82.72 323 *e*P **P** 23 28 50.2 +0.8
**PVCC Panska Ves** 82.72 323 *e*P **P** 23 28 50.2 +0.8
**BRG Berggiesshubel** 82.88 323 *e*P **P** 23 28 50.3 +0.1
comp=Z,5.7nm,1.1s
**BRG Berggiesshubel** 82.88 323 *e*P **P** 23 28 51.2 +1.0
comp=Z,15nm,1.7s,baz=56,slow=5.1
**GOPC GO Pecny, Ondr** 82.92 322 *e*P **P** 23 28 48.7 -1.7
**GOPC GO Pecny, Ondr** 82.92 322 *e*P **P** 23 28 48.7 -1.7
**LAST Lasithi** 82.97 305 *e*P **P** 23 28 51.8 +0.7
**PRU Pruhonice** 83.02 322 *e*P **P** 23 28 50.6 -0.3
**PRU Pruhonice** 83.02 322 *e*P **P** 23 28 50.6 -0.3
PRU *ex* x 23 29 01.6
**CLL Collm** 83.15 324 ⇑*i*P **P** 23 28 51.7 +0.2
CLL *i* *PP **pP** 23 29 18.4 +0.2
CLL *eS* **S** 23 39 04.0 +1.0
CLL pmax pmax
comp=Z,15nm,1.4s
**CLL Collm** 83.15 324 *e*P **P** 23 28 52.3 +0.8
comp=Z,14nm,1.4s,baz=56,slow=5.1
**CLL Collm** 83.15 324 ⇑*i*P **P** 23 28 51.7 +0.2
comp=Z,15nm,1.4s
CLL *i* pP **pP** 23 29 18.4 +0.2
CLL *ePP* **PP** 23 32 08.0 +4.5
CLL *ep*PP 23 32 28.0
CLL *eS* **S** 23 39 04.0 +1.0
CLL *e*(SSSS) 23 50 00.0
**CLL Collm** 83.15 324 *e*P **P** 23 28 51.8 +0.2
comp=Z,8.2nm,0.9s
**TANN Tannenbergstha** 83.92 324 *e*P **P** 23 28 56.8 +1.1
comp=Z,9.1nm,1.4s,baz=56,slow=5.1
**KHC Kasperske Hory** 84.00 322 *e*P **P** 23 28 53.3 -2.7
**KHC Kasperske Hory** 84.00 322 *e*P **P** 23 28 53.3 -2.7
KHC *ex* x 23 29 17.2
**NRDL Niedersach Rie** 84.00 326 *e*P **P** 23 28 57.4 +1.6
comp=Z,50nm,1.9s,baz=56,slow=5.1
**NKC Novy Kostel** 84.03 323 *e*P P 23 28 48.1 -8.0
**NKC Novy Kostel** 84.03 323 *e*P P 23 28 48.1 -8.0
NKC *ex* x 23 28 53.9
**GERES GERESS Array B** 84.08 322 P **P** 23 28 56.5 0.0
comp=Z,1.7nm,0.6s,baz=49,slow=6.1,SNR=12
**GERES GERESS Array B** 84.08 322 P **P** 23 28 56.5 0.0
GERES pmax pmax
comp=Z,2.0nm,0.6s
**CLZ Clausthal** 84.23 325 *e*P **P** 23 28 58.8 +1.7

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,43nm,1.7s,baz=56,slow=5.1 | | | | | | |
| MOX | Moxa | 84.25 | 324 | eP | P | 23 28 58.8 | +1.6 |
| | comp=Z,20nm,1.7s,baz=56,slow=5.1 | | | | | | |
| MOX | | | | eL | L | 00 08 19.2 | |
| | comp=Z,151nm,18.8s | | | | | | |
| ROTZ | Rotzenmuhle | 84.41 | 323 | eP | P | 23 29 00.2 | +2.1 |
| | comp=Z,19nm,1.8s,baz=56,slow=5.1 | | | | | | |
| SOKA | Soboth | 84.45 | 319 | ⇑iP | P | 23 28 58.7 | +0.3 |
| | comp=Z,3.2nm,0.5s | | | | | | |
| GTTG | Gvttingen | 84.61 | 325 | eP | P | 23 29 00.6 | +1.6 |
| | comp=Z,36nm,1.6s,baz=56,slow=5.1 | | | | | | |
| GRF | Grafenberg Arr | 84.99 | 323 | eP | P | 23 29 02.7 | +1.8 |
| | comp=Z,30nm,1.4s,baz=56,slow=5.1 | | | | | | |
| GRF | | | | eL | L | 00 06 03.9 | |
| | comp=Z,92nm,20.8s | | | | | | |
| IBBN | Ibbenburen | 85.28 | 327 | eP | P | 23 29 03.8 | +1.5 |
| | comp=Z,32nm,1.2s,baz=56,slow=5.1 | | | | | | |
| BUG | Bochum--Univer | 86.04 | 326 | eP | P | 23 29 07.4 | +1.3 |
| | comp=Z,29nm,1.4s,baz=56,slow=5.1 | | | | | | |
| TNS | Taunus Mts | 86.16 | 325 | eP | P | 23 29 08.3 | +1.5 |
| | comp=Z,13nm,1.4s,baz=56,slow=5.1 | | | | | | |
| FETA | Feichten | 86.75 | 321 | ⇓iPcP | P | 23 29 10.6 | +0.6 |
| | comp=Z,7.8nm,1.2s | | | | | | |
| EDM | Edmonton | 86.92 | 31 | eP | P | 23 29 11.9 | +1.5 |
| EDM | | | | pmax | pmax | | |
| | comp=Z,81nm,1.4s | | | | | | |
| EDM | Edmonton | 86.92 | 31 | eP | P | 23 29 11.9 | +1.5 |
| | comp=Z,81nm,1.4s | | | | | | |
| FUORN | Ofenpass-Fuorn | 87.24 | 321 | eP | P | 23 29 13.6 | +1.2 |
| | comp=Z,20nm,1.3s | | | | | | |
| DAVOX | Davos/Dischmat | 87.37 | 321 | P | P | 23 29 13.0 | +0.1 |
| | comp=Z,4.1nm,0.6s,baz=353,slow=4.1,SNR=9.1 | | | | | | |
| DAVOX | Davos/Dischmat | 87.37 | 321 | P | P | 23 29 13.0 | +0.1 |
| DAVOX | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| ABPO | Ambohimpanom | 87.43 | 248 | eP | P | 23 29 14.4 | +0.8 |
| ABPO | | | | pmax | pmax | | |
| | comp=Z,39nm,1.1s | | | | | | |
| ABPO | Ambohimpanom | 87.43 | 248 | eP | P | 23 29 14.4 | +0.8 |
| | comp=Z,39nm,1.1s | | | | | | |
| I04A | Tendick Farm, | 87.67 | 42 | P | P | 23 29 14.9 | +0.6 |
| | baz=88 | | | | | | |
| WLF | Walferdange | 87.68 | 325 | eP | P | 23 29 15.7 | +1.7 |
| | comp=Z,40nm,1.5s,baz=56,slow=5.1 | | | | | | |
| TUE | Stuetta | 87.85 | 321 | eP | P | 23 29 16.0 | +0.8 |
| | comp=Z,40nm,1.6s | | | | | | |
| NEW | Newport | 88.11 | 36 | P | P | 23 29 17.1 | +0.9 |
| | baz=88 | | | | | | |
| J04D | Umpqua Nationa | 88.16 | 42 | P | P | 23 29 17.7 | +1.0 |
| | baz=88 | | | | | | |
| EKA | Eskdalemuir Ar | 88.27 | 333 | P | P | 23 29 15.5 | -1.2 |
| | comp=Z,0.8nm,0.5s,baz=18,slow=4.5,SNR=9.6 | | | | | | |
| EKA | Eskdalemuir Ar | 88.27 | 333 | P | P | 23 29 15.5 | -1.2 |
| EKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| KMBO | Kilima Mbogo | 88.36 | 268 | P | P | 23 29 18.3 | 0.0 |
| | comp=Z,1.1nm,0.7s,baz=48,slow=8.8,SNR=4.4 | | | | | | |
| KMBO | Kilima Mbogo | 88.36 | 268 | ceP | P | 23 29 18.2 | 0.0 |
| KMBO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| WALA | Waterton Lakes | 89.30 | 34 | eP | P | 23 29 23.6 | +1.7 |
| WALA | | | | epP | pP | 23 29 51.5 | +2.7 |
| JTMT | Jette | 89.94 | 35 | eP | P | 23 29 27.8 | +2.9 |
| SWMT | Swartz Lake | 90.23 | 35 | eP | P | 23 29 27.9 | +1.5 |
| J08A | Circle Bar Ran | 90.27 | 41 | eP | P | 23 29 28.9 | +2.4 |
| | comp=Z,6.1nm,1.1s | | | | | | |
| SLMT | Seeley Lake | 90.67 | 35 | eP | P | 23 29 29.8 | +1.4 |
| MSO | Missoula | 90.70 | 36 | P | P | 23 29 28.7 | +0.3 |
| | baz=90 | | | | | | |
| MSO | Missoula | 90.70 | 36 | eP | P | 23 29 29.8 | +1.3 |
| MSO | | | | epP | pP | 23 29 56.7 | +1.2 |
| FFC | Flin Flon | 90.70 | 25 | eP | P | 23 29 28.9 | +0.7 |
| FFC | Flin Flon | 90.70 | 25 | eP | P | 23 29 28.9 | +0.7 |
| | comp=Z,198nm,2.1s | | | | | | |
| MFID | Camas Ranch | 91.78 | 39 | eP | P | 23 29 35.2 | +1.6 |
| | comp=Z,14nm,1.3s | | | | | | |
| HRY | Holter Researc | 91.88 | 35 | eP | P | 23 29 36.7 | +2.8 |
| CASY | Casey | 91.97 | 186 | eP | P | 23 29 34.0 | +0.6 |
| | comp=Z,11nm,1.1s | | | | | | |
| EGMT | Eagleton | 92.07 | 33 | P | P | 23 29 35.1 | +0.3 |
| | baz=92 | | | | | | |
| CMB | Columbia Colle | 92.16 | 46 | eP | P | 23 29 36.7 | +1.4 |
| CMB | | | | pmax | pmax | | |
| | comp=Z,79nm,2.9s | | | | | | |
| CMB | Columbia Colle | 92.16 | 46 | eP | P | 23 29 36.7 | +1.4 |
| | comp=Z,79nm,2.9s | | | | | | |
| DLMT | Dillon | 92.35 | 37 | eP | P | 23 29 37.8 | +1.6 |
| DLMT | | | | epP | pP | 23 30 04.6 | +1.4 |
| HLID | Hailey | 92.49 | 39 | P | P | 23 29 38.5 | +1.6 |
| | baz=92 | | | | | | |
| NV01 | Mina Array Sit | 93.27 | 45 | eP | P | 23 29 41.9 | +1.2 |
| NVAR | Mina Array Bea | 93.27 | 45 | P | P | 23 29 41.2 | +0.5 |
| | comp=Z,0.7nm,0.5s,baz=302,slow=5.2,SNR=5.4 | | | | | | |
| PPT2 | Papeete2 | 93.45 | 108 | eLR | LR | 23 59 43.3 | |
| | comp=Z,333nm,33.2s | | | | | | |
| RLMT | Red Lodge | 94.28 | 35 | P | P | 23 29 46.3 | +1.2 |
| | baz=94 | | | | | | |
| FXWY | Fox Creek | 94.33 | 37 | ePKKPdf | PKKPdf | 23 46 48.7 | +5.1 |
| R11A | Troy Canyon, C | 95.03 | 43 | P | P | 23 29 49.6 | +0.9 |
| | baz=95 | | | | | | |
| MPMC | Manual Prospec | 95.19 | 46 | P | P | 23 29 49.9 | +0.4 |
| | baz=95 | | | | | | |
| EDW2 | Edwards Air Fo | 95.55 | 47 | P | P | 23 29 51.8 | +0.8 |
| | baz=95 | | | | | | |
| RPV | Rancho Palos V | 95.94 | 48 | eP | P | 23 29 53.8 | +1.1 |
| WESC | Westside Schoo | 98.32 | 48 | eP | P | 23 30 02.5 | -1.0 |
| SCHQ | Schefferville | 99.53 | 7 | LR | LR | 00 18 27.8 | |
| | comp=Z,47nm,18.4s,baz=328,slow=37 | | | | | | |
| TXAR | Lajitas Array | 108.39 | 44 | PKiKP | PKiKP | 23 34 54.0 | 0.0 |
| | comp=Z,1.0nm,1.1s,baz=0.0,slow=0.9,SNR=3.4 | | | | | | |
| TORD | Torodi Ar. Bea | 112.75 | 298 | PKiKP | PKiKP | 23 35 01.4 | -1.1 |
| | comp=Z,0.4nm,0.4s,baz=54,slow=1.2,SNR=25 | | | | | | |
| TORD | | | | PKKPab | PKKPab | 23 45 59.5 | -0.6 |
| | comp=Z,2.0nm,1.1s,baz=247,slow=4.0,SNR=5.7 | | | | | | |
| DBIC | Dimbokro | 121.73 | 296 | PKP | PKPdf | 23 35 19.2 | -0.6 |
| | comp=Z,2.0nm,0.8s,baz=351,slow=4.2,SNR=5.6 | | | | | | |
| DBIC | Dimbokro | 121.73 | 296 | PKIKP | PKPdf | 23 35 19.2 | -0.6 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| OTAV | Otavalo | 146.00 | 45 | ePKPdf | PKPab | 23 36 07.6 | +0.6 |
| ATAH | Atahualpa | 151.32 | 55 | PKPbc | PKPbc | 23 36 20.5 | +0.5 |
| | comp=Z,18nm,1.1s,baz=320,slow=3.6,SNR=7.7 | | | | | | |
| PTGA | Pitinga | 155.10 | 12 | PKPab | PKPab | 23 36 42.8 | -0.8 |
| | comp=Z,2.1nm,0.5s,baz=300,slow=9.9,SNR=5.3 | | | | | | |
| LPAZ | La Paz | 164.86 | 56 | PKP | PKPdf | 23 36 30.8 | +0.3 |
| | comp=Z,2.6nm,1.1s,baz=359,slow=6.0,SNR=6.6 | | | | | | |
| LPAZ | | | | PKPab | PKPab | 23 37 25.2 | -1.7 |
| | comp=Z,2.9nm,1.1s,baz=270,slow=5.1,SNR=2.8 | | | | | | |
| LPAZ | La Paz | 164.86 | 56 | PKIKP | PKPdf | 23 36 30.8 | +0.3 |
| LPAZ | | | | | | 23 37 25.2 | |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| CFAA | Coronel Fontan | 166.86 | 121 | PKPab | PKPab | 23 37 35.6 | +0.9 |
| | comp=Z,0.9nm,1.0s,baz=273,slow=2.8,SNR=9.2 | | | | | | |
| BDFB | Brasilia | 168.31 | 324 | PKPab | PKPab | 23 37 41.1 | -0.3 |
| | comp=Z,1.2nm,0.5s,baz=345,slow=6.2,SNR=3.5 | | | | | | |
| BDFB | Brasilia | 168.31 | 324 | PKP2 | PKPab | 23 37 41.1 | -0.3 |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| CPUP | Villa Florida | 177.75 | 117 | PKPab | PKPab | 23 38 21.5 | -1.7 |
| | comp=Z,4.1nm,1.1s,baz=242,slow=10,SNR=3.6 | | | | | | |
| CPUP | Villa Florida | 177.75 | 117 | PKP2 | PKPab | 23 38 21.5 | -1.7 |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |

*ISCJB 11 23:32:33.1±0.6, 38°.78N±0°.03×26°.47E±0°.06, h12km±5km, Error ellipse: s-maj=7.6km s-min=5.0km az=4.2*
*DDA 11 23:32:33.2, 38°.74N×26°.38E, h7km, Md2.4*
*ISK 11 23:32:33.1, 38°.76N×26°.48E, h13km, MD2.4*
*CSEM 11 23:32:34.0±0.2, 38°.74N×26°.51E, h10km, MD2.7, Error ellipse: s-maj=4.8km s-min=3.5km az=89.0*
*ATH 11 23:32:34.2, 38°.72N×26°.31E, h31km±16km, MD2.7/3*
**ISC 11 23:32:33.9±1.1, 38°.76N±0°.03×26°.49E±0°.04, h10km±10km, n20, σ0.53/30, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| URLA | Izmir | 0.40 | 168 | i P | Pg | 23 32 41.5 | -0.3 |
| URLA | | | | i S | Sg | 23 32 47.9 | +0.8 |
| URLA | Izmir | 0.40 | 168 | P | Pg | 23 32 41.5 | -0.3 |
| URLA | | | | S | Sg | 23 32 47.9 | +0.8 |
| DKL | Dikili | 0.45 | 46 | ePG | Pg | 23 32 42.0 | -0.7 |
| DKL | Dikili | 0.45 | 46 | ePg | Pg | 23 32 42.0 | -0.7 |
| CHOS | Chios island | 0.50 | 223 | ePG | Pg | 23 32 43.6 | -0.1 |
| CHOS | | | | eSG | Sg | 23 32 51.0 | +0.6 |
| CHOS | Chios island | 0.50 | 223 | ePB | Pg | 23 32 43.7 | 0.0 |
| CHOS | | | | eSB | Sg | 23 32 49.7 | -0.7 |
| CHOS | Chios island | 0.50 | 223 | ePb | Pg | 23 32 43.7 | 0.0 |
| CHOS | | | | eSb | Sg | 23 32 49.7 | -0.7 |
| CHOS | | | | eSg | Sg | 23 32 51.0 | +0.6 |
| ZEY | ˜zmir | 0.52 | 179 | P | Pg | 23 32 43.5 | -0.5 |
| ZEY | | | | S | Sb | 23 32 52.2 | -0.4 |
| PRK | Paraskevi | 0.52 | 341 | ePN | Pb | 23 32 45.3 | +0.2 |
| PRK | | | | eSN | Sb | 23 32 53.9 | +1.2 |
| PRK | Paraskevi | 0.52 | 341 | ePn | Pb | 23 32 45.3 | +0.2 |
| BLCB | Balcova | 0.57 | 131 | ePG | Pg | 23 32 45.1 | +0.2 |
| BLCB | Balcova | 0.57 | 131 | ePg | Pg | 23 32 45.1 | +0.2 |
| IZM | Izmir | 0.70 | 120 | ePG | Pg | 23 32 47.8 | +0.3 |
| IZM | Izmir | 0.70 | 120 | ePg | Pg | 23 32 47.8 | +0.3 |
| EZN | Ezine | 1.08 | 353 | ePG | Pn | 23 32 54.9 | -0.2 |
| EZN | Ezine | 1.08 | 353 | ePg | Pn | 23 32 54.9 | -0.2 |
| SMG | Samos | 1.08 | 165 | ePN | Pg | 23 32 54.6 | -0.1 |
| SMG | | | | eSN | Sn | 23 33 10.2 | 0.0 |
| SMG | Samos | 1.08 | 165 | ePn | Pg | 23 32 54.6 | -0.1 |
| SMG | | | | eSn | Sn | 23 33 10.2 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 1.36 | 126 | ePN | Pn | 23 32 58.5 | -0.7 |
| AYDB | Zeytinkoy-Aydi | 1.36 | 126 | ePn | Pn | 23 32 58.5 | -0.7 |

**IDC 11 23:35:51.8±3.2, 30°.17S×178°.35W, h75km±31km, mb3.6/2, mb1 3.9/2, mb1mx3.5/24, mbtmp3.9/2, Error ellipse: s-maj=52.5km s-min=34.0km az=170.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 0.99 | 23 | P | Pn | 23 36 11.1 | +0.6 |
| | 242nm,0.3s,baz=153,slow=18,SNR=8.6 | | | | | | |
| RAO | | | | S | Sn | 23 36 24.8 | +0.4 |
| | 564nm,0.3s,baz=263,slow=24,SNR=12 | | | | | | |
| URZ | Urewera | 8.90 | 204 | S | Sn | 23 39 24.6 | -12 |
| | 0.3nm,0.3s,baz=180,slow=20,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 42.81 | 267 | P | P | 23 43 41.9 | -0.6 |
| | 0.4nm,0.3s,baz=102,slow=7.3,SNR=6.8 | | | | | | |
| WRA | Warramunga Arr | 43.78 | 272 | P | P | 23 43 50.3 | 0.0 |
| | 1.0nm,0.3s,baz=111,slow=8.1,SNR=69 | | | | | | |
| FINES | FINESS Array B | 144.83 | 340 | PKP | PKPab | 23 55 17.1 | -1.4 |
| | 1.2nm,0.5s,baz=65,slow=2.8,SNR=12 | | | | | | |
| BRTR | Keskin Array B | 152.22 | 299 | PKPbc | PKPbc | 23 55 40.1 | +1.0 |
| | 0.4nm,0.7s,baz=98,slow=2.9,SNR=2.6 | | | | | | |
| TORD | Torodi Ar. Bea | 163.06 | 180 | PKPab | PKPab | 23 56 35.3 | -0.7 |
| | 0.9nm,1.1s,baz=165,slow=6.0,SNR=2.8 | | | | | | |

*NIED 12 00:09:00, 25°.40N×124°.80E, h107km, Mw4.0 Best double couple: $M_0$1.31000×10^15 NP1: $\phi_s$134.00000°, δ32.00000°, λ165.00000°. NP2: $\phi_s$237.00000°, δ82.00000°, λ59.00000°.*
*ISCJB 12 00:09:50.9±0.2, 25°.35N±0°.04×124°.90E±0°.03, h100km±3km, mb4.2/27, Error ellipse: s-maj=8.1km s-min=3.5km az=150.6*
*NEIC 12 00:09:51.4±1.8, 25°.31N×124°.89E, h90km±7km, mb4.8/1, Error ellipse: s-maj=16.1km s-min=10.9km az=158.0*
*JMA 12 00:09:52.3±0.1, 25°.42N×124°.84E, h82km±4km, M4.0*
*IDC 12 00:09:52.7±2.7, 25°.37N×124°.95E, h102km±25km, mb3.8/17, mb1 3.9/20, mb1mx3.8/49, mbtmp4.1/20, MS3.0/1, Ms1 3.0/1, ms1mx2.2/35, Error ellipse: s-maj=21.1km s-min=11.6km az=73.0*
**ISC 12 00:09:52.2±0.7, 25°.37N±0°.06×124°.90E±0°.04, h95km±7km, n82, σ0.92/101, mb4.3/27, Northeast of Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JIKM | Ikemajima | 0.55 | 145 | P | Pn | 00 10 07.3 | -0.5 |
| JIKM | | | | S | Sn | 00 10 19.3 | -0.1 |
| JIRB | Irabujima | 0.59 | 155 | P | Pn | 00 10 07.8 | -0.4 |
| JIRB | | | | S | Sn | 00 10 19.1 | -1.0 |
| JMJ | Miyako jima 2 | 0.66 | 147 | P | Pn | 00 10 08.7 | 0.0 |
| JMJ | | | | S | Sn | 00 10 20.9 | -0.2 |
| JTJ | Tarama | 0.75 | 194 | P | Pn | 00 10 09.3 | -0.3 |
| JTJ | | | | S | Sn | 00 10 21.7 | -0.9 |
| JOGS | Gusukube | 0.76 | 143 | P | Pn | 00 10 09.9 | +0.2 |
| JOGS | | | | S | Sn | 00 10 22.9 | +0.1 |
| JISG | Ishigakijimahi | 0.94 | 215 | P | Pn | 00 10 11.5 | -0.1 |
| JISG | | | | S | Sn | 00 10 25.3 | -0.9 |
| JIJ | Ishigaki jima | 1.22 | 215 | P | Pn | 00 10 14.3 | -0.4 |
| JIJ | | | | S | Sn | 00 10 30.2 | -1.5 |
| JKRS | Kuro-shima | 1.39 | 216 | P | Pn | 00 10 16.5 | -0.3 |
| JKRS | | | | S | Sn | 00 10 34.8 | -0.6 |
| IRIF | Iriomote-Funau | 1.48 | 226 | P | Pn | 00 10 17.7 | -0.2 |
| IRIF | | | | S | Sn | 00 10 36.5 | -0.9 |
| HATJ | Hateruma jima | 1.64 | 218 | P | Pn | 00 10 19.7 | -0.3 |
| HATJ | | | | eS | Sn | 00 10 40.3 | -0.8 |
| YOJ | Yonaguni jima | 1.94 | 243 | P | Pn | 00 10 24.2 | +0.5 |
| YOJ | | | | eS | Sn | 00 10 46.9 | -0.9 |
| YOJ | Yonaguni jima | 1.94 | 243 | ePn | Pn | 00 10 24.3 | +0.5 |
| YOJ | | | | eSn | Sn | 00 10 45.8 | -2.0 |
| JKE | Kume jima 2 | 1.95 | 60 | P | Pn | 00 10 24.0 | +0.2 |
| JYNG | Yonagunijimaku | 2.00 | 243 | P | Pn | 00 10 25.0 | +0.5 |
| JYNG | | | | eS | Sn | 00 10 48.9 | -0.3 |
| JAGN | Aguni-jima | 2.43 | 60 | P | Pn | 00 10 30.4 | +0.2 |
| JAGN | | | | eS | Sn | 00 10 58.6 | -0.8 |
| JIH | Iheya | 3.21 | 58 | P | Pn | 00 10 40.9 | +0.2 |
| NACB | Ninganchiao | 3.23 | 249 | ePn | Pn | 00 10 41.1 | +0.2 |
| NACB | | | | eSn | Sn | 00 11 16.8 | -1.7 |
| YHNB | Yeheng | 3.27 | 258 | ePn | Pn | 00 10 39.8 | -1.8 |
| JOW | Kunigami | 3.37 | 64 | P | Pn | 00 10 42.2 | -0.5 |
| JOW | | | | eS | Sn | 00 11 22.5 | +0.7 |
| JOW | Kunigami | 3.37 | 64 | P | Pn | 00 10 42.4 | -0.3 |
| | 0.3nm,0.3s,baz=100,slow=28,SNR=32 | | | | | | |
| JOW | | | | S | Sn | 00 11 20.1 | -1.7 |
| | 2.1nm,0.3s,baz=114,slow=19,SNR=7.2 | | | | | | |
| YULB | Yu-li | 3.83 | 240 | ePn | Pn | 00 10 47.6 | -1.4 |
| YULB | | | | eSn | Sn | 00 11 24.5 | -8.5 |
| JOKE | Okinoerabujima | 3.84 | 58 | P | Pn | 00 10 48.1 | -1.1 |
| SSLB | Suanglung | 3.92 | 247 | ePn | Pn | 00 10 50.1 | -0.1 |
| SSLB | | | | eSn | Sn | 00 11 23.5 | -12 |
| TWG | Pinlang | 4.32 | 235 | ePn | Pn | 00 10 53.8 | -1.8 |
| JTK | Tokunoshima | 4.35 | 56 | P | Pn | 00 10 54.8 | -1.2 |
| TPUB | Ta-pu | 4.41 | 243 | ePn | Pn | 00 10 57.0 | +0.2 |
| JAMN | Amaminishikomi | 4.77 | 52 | P | Pn | 00 11 00.5 | -1.2 |
| JAM | Amami Oshima | 5.18 | 53 | P | Pn | 00 11 05.8 | -1.4 |
| JAM | | | | eS | Sn | 00 12 02.4 | -3.3 |
| JTAJ | Takarajima | 5.37 | 45 | P | Pn | 00 11 09.3 | -0.6 |
| JMZ | Minamidaito 2 | 5.72 | 84 | P | Pn | 00 11 11.2 | -3.5 |
| KS15 | Wonju Array Si | 12.30 | 11 | ePn | Pn | 00 12 46.0 | +2.1 |
| KSRS | Korea Array | 12.32 | 11 | P | Pn | 00 12 46.0 | +1.9 |
| | 0.2nm,0.3s,baz=195,slow=14,SNR=11 | | | | | | |
| MAJO | Matsushiro | 15.93 | 42 | ePn | P | 00 13 32.5 | 0.0 |
| | 46nm,2.3s | | | | | | |
| MJAR | Matsushiro Arr | 15.93 | 42 | P | P | 00 13 32.5 | 0.0 |
| | 0.5nm,0.3s,baz=224,slow=10,SNR=4.8 | | | | | | |
| USRK | Ussuriysk Ar. | 19.65 | 15 | P | P | 00 14 13.0 | -0.3 |
| | 0.4nm,0.3s,baz=192,slow=7.9,SNR=4.8 | | | | | | |
| SONA0 | Songino Array | 26.76 | 332 | eP | P | 00 15 22.7 | -0.4 |
| SONM | Songino Array | 26.76 | 332 | P | P | 00 15 22.7 | -0.4 |
| | 0.8nm,0.6s,baz=147,slow=8.8,SNR=5.5 | | | | | | |
| SONM | | | | LR | LR | 00 26 46.3 | |
| | comp=Z,29nm,19.7s,baz=98,slow=38 | | | | | | |
| SONA1 | Songino Array | 26.77 | 332 | eP | P | 00 15 22.7 | -0.4 |
| PEA0 | Petropavlovsk- | 37.02 | 33 | eP | P | 00 16 52.8 | +0.3 |
| MTN | Manton Dam | 38.47 | 170 | eP | P | 00 17 03.8 | -1.2 |
| | 41nm,1.6s | | | | | | |
| MK01 | Makanchi Array | 39.90 | 313 | eP | P | 00 17 16.1 | -0.7 |
| MK32 | Makanchi Array | 39.91 | 314 | eP | P | 00 17 16.2 | -0.6 |
| MKAR | Makanchi Array | 39.91 | 314 | P | P | 00 17 16.2 | -0.6 |
| | 2.1nm,0.4s,baz=100,slow=9.6,SNR=36 | | | | | | |
| MKAR | Makanchi Array | 39.91 | 314 | eP | P | 00 17 16.4 | -0.4 |
| MAKZ | Makanchi | 40.12 | 313 | eP | P | 00 17 18.3 | -0.3 |
| | 3.8nm,1.1s | | | | | | |
| ZAA0 | Zalesovo Array | 41.16 | 325 | eP | P | 00 17 25.5 | -1.5 |
| ZALV | Zalesovo Beam | 41.16 | 325 | P | P | 00 17 25.7 | -1.2 |
| | 1.2nm,0.4s,baz=109,slow=8.4,SNR=6.5 | | | | | | |
| ZAA1 | Zalesovo Array | 41.16 | 325 | eP | P | 00 17 25.7 | -1.3 |
| FITZ | Fitzroy Crossi | 43.22 | 179 | P | P | 00 17 43.2 | -0.7 |
| | 3.4nm,0.7s,baz=1.3,slow=10,SNR=12 | | | | | | |
| KURK | Kurchatov | 43.41 | 318 | eP | P | 00 17 46.1 | +0.8 |
| KURBB | Kurchatov Arra | 43.44 | 318 | P | P | 00 17 46.1 | +0.6 |
| | 0.8nm,0.3s,baz=102,slow=8.8,SNR=4.6 | | | | | | |
| WRA | Warramunga Arr | 45.97 | 168 | P | P | 00 18 05.4 | -0.5 |
| | 3.0nm,0.7s,baz=348,slow=8.9,SNR=29 | | | | | | |
| KBL | Kabul | 48.73 | 295 | eP | P | 00 18 28.8 | +1.3 |
| | 3.4nm,0.9s | | | | | | |
| AS12 | Alice Springs | 49.52 | 169 | eP | P | 00 18 33.2 | -0.1 |
| AS12 | | | | ePcP | PcP | 00 19 54.0 | +0.2 |
| ASAR | Alice Springs | 49.52 | 169 | P | P | 00 18 33.2 | -0.1 |
| | 2.5nm,0.5s,baz=357,slow=7.8,SNR=34 | | | | | | |
| ASAR | | | | PcP | PcP | 00 19 54.0 | +0.2 |
| | 0.7nm,0.9s,baz=353,slow=3.7,SNR=4.1 | | | | | | |
| AS01 | Alice Springs | 49.53 | 169 | eP | P | 00 18 32.6 | -0.8 |
| ABKAR | Akbulak array | 55.05 | 314 | eP | P | 00 19 14.1 | +0.1 |
| ARU | Arti | 56.22 | 322 | eP | P | 00 19 20.4 | -1.8 |
| | 11nm,1.5s | | | | | | |
| GEYT | Alibeck | 57.12 | 300 | P | P | 00 19 30.4 | +1.4 |
| | 2.4nm,0.6s,baz=94,slow=5.8,SNR=5.5 | | | | | | |
| CAST | Castle Rocks | 64.53 | 30 | eP | P | 00 20 20.1 | +1.3 |
| | 6.8nm,1.1s | | | | | | |
| BPAW | Bear Paw Mtn. | 64.94 | 29 | eP | P | 00 20 22.6 | +1.2 |
| | 5.8nm,0.5s | | | | | | |
| MLY | Manley | 64.94 | 28 | eP | P | 00 20 22.6 | +1.2 |
| | 5.2nm,0.6s | | | | | | |
| RND | Reindeer | 65.97 | 29 | eP | P | 00 20 28.5 | +0.4 |
| | 13nm,0.5s | | | | | | |
| MDM | Murphy Dome | 66.01 | 28 | eP | P | 00 20 29.5 | +1.2 |
| | 7.2nm,0.7s | | | | | | |
| SML | Sawmill | 66.47 | 31 | eP | P | 00 20 30.8 | -0.5 |
| | 66nm,1.9s | | | | | | |
| ILAR | Eielson Array | 66.60 | 28 | P | P | 00 20 31.5 | -0.6 |
| | 1.2nm,0.4s,baz=251,slow=5.6,SNR=13 | | | | | | |
| ILB | Eielson Array | 66.60 | 28 | eP | P | 00 20 31.5 | -0.6 |
| KBZ | Khabaz | 67.37 | 309 | P | P | 00 20 37.4 | +0.2 |
| | 2.5nm,0.9s,baz=150,slow=8.1,SNR=3.4 | | | | | | |
| ARA0 | ARCESS Array S | 69.70 | 338 | eP | P | 00 20 50.8 | -0.5 |
| ARCES | ARCESS Array B | 69.70 | 338 | P | P | 00 20 50.8 | -0.5 |
| | 3.6nm,0.9s,baz=65,slow=7.1,SNR=5.3 | | | | | | |
| INK | Inuvik | 70.85 | 23 | P | P | 00 20 57.8 | -0.5 |
| | 2.8nm,1.0s,baz=287,slow=6.7,SNR=3.3 | | | | | | |
| INK | Inuvik | 70.85 | 23 | eP | P | 00 20 57.8 | -0.5 |
| | 148nm,2.8s | | | | | | |
| FIA0 | FINESS Array S | 72.12 | 330 | eP | P | 00 21 05.5 | -0.5 |
| FINES | FINESS Array B | 72.12 | 330 | P | P | 00 21 05.5 | -0.5 |
| | 4.3nm,1.1s,baz=70,slow=6.3,SNR=9.2 | | | | | | |
| BR101 | Keskin Array S | 75.17 | 307 | eP | P | 00 21 25.1 | +0.6 |
| BRTR | Keskin Array B | 75.17 | 307 | P | P | 00 21 25.1 | +0.6 |
| | 0.6nm,0.8s,baz=115,slow=6.5,SNR=4.1 | | | | | | |
| NB200 | NORSAR Array S | 78.73 | 333 | eP | P | 00 21 43.9 | -0.1 |
| NOA | NORSAR Array B | 78.73 | 333 | P | P | 00 21 43.9 | -0.1 |
| | 1.2nm,0.8s,baz=55,slow=5.9,SNR=3.5 | | | | | | |
| YKA | Yellowknife Ar | 80.55 | 24 | P | P | 00 21 54.0 | +0.3 |
| | 1.0nm,0.5s,baz=302,slow=5.3,SNR=3.7 | | | | | | |
| CLL | Collm | 83.11 | 324 | eP | P | 00 22 08.0 | +0.6 |
| GEC2 | GERESS Array S | 84.04 | 322 | eP | P | 00 22 12.6 | +0.2 |
| GERES | GERESS Array B | 84.04 | 322 | P | P | 00 22 12.6 | +0.2 |
| | 0.2nm,0.5s,baz=41,slow=6.5,SNR=2.5 | | | | | | |

**JMA 12 00:21:46.3±0.5, 31°.61N×141°.43E, h61km, M3.7, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHJ2 | Mitsune | 2.03 | 318 | P | Pn | 00 22 19.5 | +1.4 |
| JHJ2 | | | | S | Sn | 00 22 43.2 | +0.8 |
| BSO1 | Boso 1 | 3.06 | 353 | P | Pn | 00 22 33.5 | +2.0 |
| BSO1 | | | | S | Sn | 00 23 08.7 | +2.3 |
| BSO3 | Boso 3 | 3.27 | 347 | S | Sn | 00 23 15.1 | +2.8 |
| BSO4 | Boso 4 | 3.49 | 345 | P | Pn | 00 22 40.1 | +2.1 |
| CBIJ | Chichi jima | 4.55 | 171 | S | Sn | 00 23 36.5 | -7.7 |
| JFK | Kawauchi | 5.76 | 356 | S | Sn | 00 24 12.6 | -1.4 |
| JMK | Ichinoseki | 7.33 | 359 | S | Sn | 00 24 50.5 | -1.8 |

**IDC 12 00:33:10.8±2.6, 19°.85S×178°.47E, h0km, mb3.9/3, mb1 4.2/3, mb1mx3.8/18, mbtmp3.9/3, MS3.4/11, Ms1 3.4/11, ms1mx3.2/25, Error ellipse: s-maj=190.9km s-min=33.4km az=159.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 11.04 | 59 | LR | LR | 00 39 13.5 | |
| | comp=Z,135nm,19.4s,baz=66,slow=33 | | | | | | |
| DZM | Mont Dzumac | 11.45 | 257 | ePn | Pn | 00 36 19.5 | +24 |
| | 3.9nm,0.2s | | | | | | |
| DZM | | | | eLR | LR | 00 39 04.1 | |
| | 526nm,24.6s | | | | | | |
| DZM | Mont Dzumac | 11.45 | 257 | LR | LR | 00 39 42.2 | |
| | comp=Z,464nm,19.4s,baz=348,slow=34 | | | | | | |
| RAR | Rarotonga | 20.42 | 98 | LR | LR | 00 46 27.2 | |
| | comp=Z,82nm,18.1s,baz=300,slow=39 | | | | | | |
| HNR | Honiara | 20.67 | 297 | LR | LR | 00 44 14.4 | |
| | comp=Z,75nm,20.8s,baz=148,slow=32 | | | | | | |
| RPZ | Rata Peaks | 24.60 | 193 | LR | LR | 00 46 34.1 | |
| | comp=Z,117nm,19.9s,baz=28,slow=33 | | | | | | |
| PPT2 | Papeete2 | 30.32 | 91 | eLR | LR | 00 47 23.8 | |
| | 259nm,27.5s | | | | | | |
| PPT | Papeete | 30.33 | 91 | LR | LR | 00 48 18.4 | |
| | comp=Z,94nm,21.1s,baz=306,slow=30 | | | | | | |
| WRA | Warramunga Arr | 41.41 | 262 | P | P | 00 40 59.4 | 0.0 |
| | 2.7nm,1.1s,baz=98,slow=7.9,SNR=6.5 | | | | | | |
| WRA | | | | LR | LR | 00 57 51.5 | |
| | comp=Z,60nm,18.3s,baz=220,slow=36 | | | | | | |
| ASAR | Alice Springs | 41.44 | 256 | P | P | 00 40 59.6 | 0.0 |
| | 0.9nm,0.7s,baz=94,slow=9.0,SNR=5.2 | | | | | | |
| ASAR | | | | LR | LR | 00 57 42.7 | |
| | comp=Z,58nm,18.9s,baz=111,slow=36 | | | | | | |
| MJAR | Matsushiro Arr | 67.76 | 326 | LR | LR | 01 08 36.1 | |
| | comp=Z,7.9nm,21.4s,baz=345,slow=31 | | | | | | |
| PETK | Petropavlovsk- | 74.85 | 347 | LR | LR | 01 11 51.8 | |
| | comp=Z,6.7nm,21.1s,baz=85,slow=31 | | | | | | |
| ILAR | Eielson Array | 88.45 | 14 | LR | LR | 01 19 07.7 | |
| | comp=Z,28nm,20.8s,baz=180,slow=31 | | | | | | |
| TXAR | Lajitas Array | 89.52 | 59 | P | P | 00 46 10.9 | +0.4 |
| | 0.3nm,0.8s,baz=233,slow=4.4,SNR=3.8 | | | | | | |
| GERES | GERESS Array B | 148.58 | 341 | PKPbc | PKPbc | 00 52 58.6 | -1.2 |
| | 0.1nm,0.3s,baz=359,slow=3.9,SNR=2.9 | | | | | | |

*CSEM 12 00:59:33.3±0.5, 79°.17N×4°.33E, h10km, ML4.1, Error ellipse: s-maj=22.6km s-min=7.2km az=6.0*
*BER 12 00:59:36.3±3.3, 79°.55N×5°.64E, h10km, MD2.3, ML2.7, ML4.1(NAO)*
*NAO 12 00:59:37.4±4.4, 79°.47N×6°.30E, ML4.1*
**ISC 12 00:59:36.3±3.6, 79°.2N±0°.2×5°.5E±0°.1, h10km, n16, σ0.85/28, 2C, Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KBS | Kingsbay | 1.27 | 101 | Pg | Pn | 00 59 59.5 | -0.6 |
| KBS | | | | Lg | Lg | 01 00 17.2 | |
| KBS | Kingsbay | 1.27 | 101 | ⇑iP | Pn | 00 59 59.4 | -0.6 |
| KBS | | | | eSg | Sn | 01 00 16.9 | -0.3 |
| KBS | Kingsbay | 1.27 | 101 | ⇑iP | Pn | 00 59 59.5 | -0.6 |
| | SNR=97 | | | | | | |
| KBS | | | | eSg | Sn | 01 00 16.9 | -0.3 |
| | SNR=94 | | | | | | |
| KBS | | | | Lg | Lg | 01 00 17.2 | |
| KBS | | | | i S | Sg | 01 00 17.4 | +0.2 |
| | SNR=97 | | | | | | |
| SPA0 | Spitsbergen Ar | 2.39 | 111 | Pn | Pn | 01 00 16.1 | +0.6 |
| | baz=311,slow=8.6 | | | | | | |
| SPA0 | | | | Sn | Sn | 01 00 45.9 | +1.1 |
| | baz=326,slow=14 | | | | | | |
| SPA0 | Spitsbergen Ar | 2.39 | 111 | Pn | Pn | 01 00 16.1 | +0.6 |
| | baz=311,slow=8.6 | | | | | | |
| SPA0 | | | | Sn | Sn | 01 00 45.9 | +1.1 |
| | baz=326,slow=14 | | | | | | |
| SPA0 | Spitsbergen Ar | 2.39 | 111 | Pn | Pn | 01 00 16.1 | +0.6 |
| | baz=311,slow=8.3,SNR=9.9 | | | | | | |
| SPA0 | | | | Sn | Sn | 01 00 45.9 | +1.1 |
| | baz=326,slow=13 | | | | | | |
| HSP | Hornsund | 3.06 | 132 | Pn | Pn | 01 00 24.0 | -0.6 |
| HSP | | | | Sn | Sn | 01 01 00.7 | -0.4 |
| HSP | Hornsund | 3.06 | 132 | Pn | Pn | 01 00 24.0 | -0.6 |
| HSP | | | | Sn | Sn | 01 01 00.7 | -0.4 |
| HSPB | Hornsund (broa | 3.06 | 132 | Pn | Pn | 01 00 24.0 | -0.6 |
| HSPB | | | | Sn | Sn | 01 01 00.7 | -0.5 |
| HSPB | | | | IAML | | 01 01 05.9 | |
| | comp=Z,54nm,0.3s | | | | | | |
| HSPB | Hornsund (broa | 3.06 | 132 | Pn | Pn | 01 00 24.0 | -0.6 |
| | SNR=50 | | | | | | |
| HSPB | | | | Sn | Sn | 01 01 00.7 | -0.5 |
| | SNR=50 | | | | | | |
| HOPEN | Hopen | 4.92 | 114 | Pn | Pn | 01 00 50.2 | 0.0 |
| HOPEN | | | | Sn | Sn | 01 01 46.0 | -1.1 |
| HOPEN | Hopen | 4.92 | 114 | Pn | Pn | 01 00 50.2 | 0.0 |
| HOPEN | | | | Sn | Sn | 01 01 46.0 | -1.1 |
| HOPEN | Hopen | 4.92 | 114 | Pn | Pn | 01 00 50.2 | 0.0 |
| HOPEN | | | | Sn | Sn | 01 01 46.0 | -1.1 |
| DAG | Danmarks Havn | 5.57 | 256 | i P | Pn | 01 00 52.6 | -6.4 |
| DAG | | | | i S | Sn | 01 01 49.8 | -13 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARA0** | **ARCESS Array S** | **11.03** | **141** | Pn | **Pn** | **01 02 15.7** | **+1.8** |
| | baz=344,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **11.03** | **141** | Pn | **Pn** | **01 02 15.7** | **+1.8** |
| | baz=344,slow=12 | | | | | | |

*ATH **12** 01:09:49.7, 37°.72N×27°.30E, h30km±4km, MD2.9/3*
*ISCJB **12** 01:09:50.6±0.6, 37°.86N±0°.03×27°.30E±0°.03, h11km±5km, Error ellipse: s-maj=4.7km s-min=4.2km az=16.8*
*DDA **12** 01:09:50.1, 37°.93N×27°.34E, h25km, Md2.9*
*CSEM **12** 01:09:50.3±0.2, 37°.89N×27°.31E, h5km, MD2.9, Error ellipse: s-maj=5.2km s-min=4.7km az=53.0*
**ISC 12 01:09:49.9**±1.0, **37°.86N**±0°.02×**27°.32E**±0°.02, **h13**km±9km, **n28**, σ**0°.61**/54, **Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GCAM** | **G?zelcaml?** | **0.17** | **203** | *i* P | **Pg** | **01 09 54.1** | **+0.2** |
| GCAM | | | | *i* S | **Sb** | **01 09 57.2** | **-1.2** |
| **GCAM** | **G?zelcaml?** | **0.17** | **203** | P | **Pg** | **01 09 54.1** | **+0.2** |
| GCAM | | | | S | **Sb** | **01 09 57.2** | **-1.2** |
| **SMG** | **Samos** | **0.41** | **248** | *e*PB | **Pg** | **01 09 58.2** | **+0.1** |
| SMG | | | | *e*SB | **Sb** | **01 10 04.8** | **-0.5** |
| **SMG** | **Samos** | **0.41** | **248** | *e*Pb | **Pg** | **01 09 58.2** | **+0.1** |
| SMG | | | | *e*Sb | **Sb** | **01 10 04.8** | **-0.5** |
| **AYDN** | **Tasoluk** | **0.49** | **114** | *i* P | **Pn** | **01 10 01.8** | **-0.9** |
| AYDN | | | | *i* S | **Sb** | **01 10 08.5** | **+1.0** |
| **AYDN** | **Tasoluk** | **0.49** | **114** | P | **Pn** | **01 10 01.8** | **-0.9** |
| AYDN | | | | S | **Sb** | **01 10 08.5** | **+1.0** |
| **URLA** | **Izmir** | **0.76** | **311** | *i* P | **Pg** | **01 10 03.8** | **-0.8** |
| URLA | | | | *i* S | **Sb** | **01 10 15.0** | **-0.3** |
| **URLA** | **Izmir** | **0.76** | **311** | P | **Pg** | **01 10 03.8** | **-0.8** |
| URLA | | | | S | **Sb** | **01 10 15.0** | **-0.3** |
| **BDRM** | **Kayabasi** | **0.80** | **173** | *i* P | **Pn** | **01 10 07.2** | **+0.2** |
| BDRM | | | | *i* S | **Sb** | **01 10 16.9** | **+0.4** |
| **BDRM** | **Kayabasi** | **0.80** | **173** | P | **Pn** | **01 10 07.2** | **+0.2** |
| BDRM | | | | S | **Sb** | **01 10 16.9** | **+0.4** |
| **AKHS** | **Akhisar** | **1.09** | **21** | *i* P | **Pb** | **01 10 10.1** | **-0.5** |
| AKHS | | | | *i* S | **Sb** | **01 10 24.8** | **0.0** |
| **AKHS** | **Akhisar** | **1.09** | **21** | P | **Pb** | **01 10 10.1** | **-0.5** |
| AKHS | | | | S | **Sb** | **01 10 24.8** | **0.0** |
| **CHOS** | **Chios island** | **1.13** | **298** | *e*PN | **Pg** | **01 10 12.1** | **+0.4** |
| CHOS | | | | *e*SN | **Sn** | **01 10 27.8** | **+0.8** |
| **CHOS** | **Chios island** | **1.13** | **298** | *e*Pn | **Pg** | **01 10 12.1** | **+0.4** |
| CHOS | | | | *e*Sn | **Sn** | **01 10 27.8** | **+0.8** |
| **MANT** | **Manisa** | **1.16** | **57** | *i* P | **Pn** | **01 10 12.1** | **0.0** |
| MANT | | | | *i* S | **Sb** | **01 10 26.0** | **-1.1** |
| **MANT** | **Manisa** | **1.16** | **57** | P | **Pn** | **01 10 12.1** | **0.0** |
| MANT | | | | S | **Sb** | **01 10 26.0** | **-1.1** |
| **TURN** | **Turunc** | **1.42** | **134** | *i* P | **Pn** | **01 10 14.8** | **-0.7** |
| TURN | | | | *i* S | **Sb** | **01 10 34.5** | **+0.2** |
| **TURN** | **Turunc** | **1.42** | **134** | P | **Pn** | **01 10 14.8** | **-0.7** |
| TURN | | | | S | **Sb** | **01 10 34.5** | **+0.2** |
| **AYVA** | **Ayvalik** | **1.53** | **341** | *i* P | **Pb** | **01 10 18.2** | **+0.1** |
| AYVA | | | | *i* S | **Sb** | **01 10 38.2** | **+0.8** |
| **AYVA** | **Ayvalik** | **1.53** | **341** | P | **Pb** | **01 10 18.2** | **+0.1** |
| AYVA | | | | S | **Sb** | **01 10 38.2** | **+0.8** |
| **PRK** | **Paraskevi** | **1.61** | **330** | *e*PN | **Pb** | **01 10 19.7** | **+0.2** |
| PRK | | | | *e*SN | **Sg** | **01 10 41.7** | **0.0** |
| **PRK** | **Paraskevi** | **1.61** | **330** | *e*Pn | **Pb** | **01 10 19.7** | **+0.2** |
| PRK | | | | *e*Sn | **Sg** | **01 10 41.7** | **0.0** |
| **DEMI** | **Demirci** | **1.61** | **42** | *i* P | **Pn** | **01 10 18.7** | **+0.5** |
| **DEMI** | **Demirci** | **1.61** | **42** | P | **Pn** | **01 10 18.7** | **+0.5** |
| **KHAL** | **Karahalli** | **1.79** | **73** | *i* P | **Pg** | **01 10 23.9** | **-0.3** |
| KHAL | | | | *i* S | **Sb** | **01 10 45.6** | **+0.6** |
| **KHAL** | **Karahalli** | **1.79** | **73** | P | **Pg** | **01 10 23.9** | **-0.3** |
| KHAL | | | | S | **Sb** | **01 10 45.6** | **+0.6** |
| **BALY** | **Balya** | **1.89** | **7** | *i* P | **Pn** | **01 10 21.4** | **-0.6** |
| BALY | | | | *i* S | **Sb** | **01 10 48.1** | **+0.2** |
| **BALY** | **Balya** | **1.89** | **7** | P | **Pn** | **01 10 21.4** | **-0.6** |
| BALY | | | | S | **Sb** | **01 10 48.1** | **+0.2** |

**DJA 12 01:17:23.7**±0.7, **10°S**±4°×**11°4E**±°, **h26**km±8km, **M3.6**/13, **MLv3.6**/13, **South of Bali**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IGBI** | **Denpasar** | **1.13** | **45** | P | Pn | 01 17 42.7 | -1.2 |
| **JAGI** | **Jajag, Banyuwa** | **1.16** | **351** | P | Pn | 01 17 43.3 | -0.9 |
| **DNP** | **Denpasar** | **1.28** | **43** | P | Pn | 01 17 45.8 | -0.1 |
| DNP | | | | S | Sn | 01 18 02.5 | +0.3 |
| **GMJI** | **Gumukmas** | **1.60** | **327** | P | Pn | 01 17 49.6 | -0.7 |
| GMJI | | | | S | Sn | 01 18 09.7 | -0.4 |
| **SRBI** | **Singaraja** | **1.76** | **30** | P | Pn | 01 17 52.5 | 0.0 |
| **ABJI** | **Asem Bagus** | **1.81** | **357** | P | Pn | 01 17 54.5 | +1.2 |
| **BLJI** | **Banyuglugur** | **2.00** | **339** | P | Pn | 01 17 56.9 | +1.1 |
| BLJI | | | | S | Sn | 01 18 21.6 | +1.6 |
| **TWSI** | **Taliwang, Sumb** | **2.67** | **71** | P | Pn | 01 18 04.9 | -0.1 |
| **PCJI** | **Pacitan** | **3.42** | **294** | P | Pn | 01 18 15.3 | -0.1 |
| **UGM** | **Wanagama** | **4.13** | **294** | P | Pn | 01 18 26.3 | +1.1 |

*ISCJB **12** 01:42:18.2±0.5, 20°.33S±0°.03×69°.25W±0°.07, h138km±6km, mb3.9/4, Error ellipse: s-maj=11.4km s-min=4.8km az=169.4*
*GUC **12** 01:42:19.0±0.8, 20°.31S×69°.15W, h116km±7km, ML4.3*
*IDC **12** 01:42:20.7±1.6, 20°.34S×68°.71W, h116km±13km, mb3.7/4, mb1 3.8/8, mb1mx3.6/23, mbtmp4.2/8, Error ellipse: s-maj=29.3km s-min=13.2km az=114.0*
*SJA **12** 01:43:12.7±0.6, 23°.83S×65°.21W, h174km±7km, ML1.9, MW2.6*
**ISC 12 01:42:19.5**±0.8, **20°.29S**±0°.04×**69°.12W**±0°.07, **h116**km±7km, **n39**, σ**1°.45**/42, **mb4.1**/4, **2D**, **Northern Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **0.83** | **205** | *e*P | **Pn** | **01 42 39.2** | **-0.4** |
| PB01 | | | | *e*S | **Sn** | **01 42 54.8** | **-0.1** |
| PB01 | | | | AML | AML | 01 42 55.7 | |
| | comp=N,7μm,0.3s | | | | | | |
| **MNMC** | **Minimini** | **1.24** | **339** | *e*P | **Pn** | **01 42 44.0** | **0.0** |
| MNMC | | | | *e*S | **Sn** | **01 43 03.2** | **+0.7** |
| MNMC | | | | AML | AML | 01 43 04.7 | |
| | comp=N,15μm,0.6s | | | | | | |
| **PB07** | **IPOC Station P** | **1.60** | **206** | *e*P | **Pn** | **01 42 47.9** | **-0.2** |
| PB07 | | | | *e*S | **Sn** | **01 43 09.7** | **0.0** |
| PB07 | | | | AML | AML | 01 43 15.0 | |
| | comp=E,2μm,0.4s | | | | | | |
| **PB13** | **IPOC Station P** | **1.98** | **349** | *e*P | **Pn** | **01 42 54.0** | **+1.0** |
| PB13 | | | | *e*S | **Sn** | **01 43 20.5** | **+1.9** |
| PB13 | | | | AML | AML | 01 43 26.4 | |
| | comp=E,9μm,0.5s | | | | | | |
| **ARCH** | **Arica** | **2.11** | **328** | *e*P | **Pn** | **01 42 54.3** | **+0.3** |
| ARCH | | | | *e*S | **Sn** | **01 43 21.2** | **+0.7** |
| **PB04** | **IPOC Station P** | **2.25** | **205** | *e*P | **Pn** | **01 42 56.4** | **+0.3** |
| PB04 | | | | AML | AML | 01 43 32.2 | |
| | comp=E,949nm,0.6s | | | | | | |
| **LVC** | **Limon Verde** | **2.32** | **175** | P | **Pn** | **01 42 57.7** | **+0.6** |
| | comp=E,3μm,0.3s,baz=5.5,slow=12,SNR=204 | | | | | | |
| LVC | | | | S | **Sn** | **01 43 26.4** | **+0.6** |
| | comp=E,5μm,0.3s,baz=259,slow=22,SNR=28 | | | | | | |
| **LVC** | **Limon Verde** | **2.32** | **175** | *e*P | **Pn** | **01 42 58.1** | **+1.0** |
| LVC | | | | *e*S | **Sn** | **01 43 25.3** | **-0.6** |
| **LVC** | **Limon Verde** | **2.32** | **175** | *e*P | **Pn** | **01 42 59.2** | **+2.1** |
| LVC | | | | ⇓*e*S | **Sn** | **01 43 26.4** | **+0.6** |
| **PB06** | **IPOC Station P** | **2.44** | **190** | *e*P | **Pn** | **01 42 58.1** | **-0.4** |
| PB06 | | | | *e*S | **Sn** | **01 43 27.3** | **-1.1** |
| **YJA** | **Yavi** | **3.85** | **120** | *e*P | **Pn** | **01 43 19.2** | **+1.9** |
| YJA | | | | IAML | | 01 43 23.9 | |
| | comp=E,14nm,0.7s | | | | | | |
| YJA | | | | *e*S | **Sn** | **01 44 04.3** | **+2.2** |
| **LPAZ** | **La Paz** | **4.09** | **13** | P | **Pn** | **01 43 22.4** | **+1.7** |
| | comp=E,11nm,0.3s,baz=197,slow=9.2,SNR=288 | | | | | | |
| **LPAZ** | **La Paz** | **4.09** | **13** | *e*P | **Pn** | **01 43 22.4** | **+1.6** |
| **LPAZ** | **La Paz** | **4.09** | **13** | ⇓*e*P | **Pn** | **01 43 22.5** | **+1.7** |
| **HJA** | **Humahuaca** | **4.51** | **131** | *e*P | **Pn** | **01 43 27.4** | **+1.2** |
| HJA | | | | IAML | | 01 43 27.6 | |
| **AZAP** | **Zapla** | **5.42** | **137** | *e*P | **Pn** | **01 43 37.8** | **-0.6** |
| AZAP | | | | IAML | | 01 43 38.5 | |
| | comp=Z,19nm,0.4s | | | | | | |
| **SLA** | **San Lorenzo** | **5.53** | **144** | *e*P | **Pn** | **01 43 40.4** | **+0.7** |
| SLA | | | | IAML | | 01 43 42.3 | |
| | comp=Z,15nm,0.6s | | | | | | |
| SLA | | | | *e*S | Sn | 01 44 00.2 | -42 |
| **SLA** | **San Lorenzo** | **5.53** | **144** | *e*P | **Pn** | **01 43 40.4** | **+0.7** |
| SLA | | | | *e*S | Sn | 01 44 00.5 | -42 |
| **FSA** | **Cafayete** | **6.44** | **154** | *e*P | **Pn** | **01 43 54.4** | **+2.3** |
| FSA | | | | *e*S | Sn | 01 44 25.9 | -39 |
| FSA | | | | IAML | | 01 44 28.7 | |
| | comp=Z,2.1nm,0.6s | | | | | | |
| **FSA** | **Cafayete** | **6.44** | **154** | *e*P | **Pn** | **01 43 54.5** | **+2.5** |
| FSA | | | | *e*S | Sn | 01 44 25.4 | -39 |
| **AHML** | **Horco Molle** | **7.34** | **152** | *e*P | **Pn** | **01 44 06.0** | **+1.9** |
| AHML | | | | *e*S | Sn | 01 44 37.0 | -49 |
| AHML | | | | IAML | | 01 44 40.1 | |
| | comp=Z,4.2nm,0.7s | | | | | | |
| **AHML** | **Horco Molle** | **7.34** | **152** | *e*P | **Pn** | **01 44 05.5** | **+1.4** |
| AHML | | | | *e*S | Sn | 01 44 36.8 | -49 |
| **SIV** | **San Ignacio** | **8.76** | **62** | P | Pn | 01 44 19.4 | -4.0 |
| | comp=Z,7.9nm,0.3s,baz=261,slow=14,SNR=64 | | | | | | |
| **CFAA** | **Coronel Fontan** | **11.30** | **176** | P | Pn | 01 44 54.0 | -3.5 |
| | comp=Z,0.0nm,0.3s,baz=339,slow=16,SNR=9.1 | | | | | | |
| CFAA | | | | S | Sn | 01 46 50.9 | -11 |
| | comp=Z,0.1nm,0.3s,baz=230,slow=17,SNR=3.7 | | | | | | |
| **CPUP** | **Villa Florida** | **12.39** | **121** | P | **Pn** | **01 45 09.3** | **-2.5** |
| | comp=Z,0.1nm,0.3s,baz=316,slow=12,SNR=9.0 | | | | | | |
| **BDFB** | **Brasilia** | **20.60** | **80** | P | **P** | **01 46 47.6** | **-2.0** |
| | comp=Z,3.1nm,0.5s,baz=258,slow=10,SNR=8.4 | | | | | | |
| **PTGA** | **Pitinga** | **21.40** | **26** | P | **P** | **01 46 55.3** | **-2.8** |
| | comp=Z,4.3nm,0.3s,baz=304,slow=23,SNR=9.8 | | | | | | |
| **DBIC** | **Dimbokro** | **68.58** | **74** | P | **P** | **01 53 09.3** | **-1.0** |
| | comp=Z,1.4nm,0.4s,baz=236,slow=7.3,SNR=16 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.14** | **71** | P | **P** | **01 53 60.0** | **-0.9** |
| | comp=Z,0.9nm,0.3s,baz=255,slow=5.5,SNR=69 | | | | | | |
| TORD | | | | pP | **pP** | **01 54 28.9** | **-1.2** |
| | comp=Z,3.9nm,0.8s,baz=253,slow=5.6,SNR=12 | | | | | | |
| **VNDA** | **Vanda** | **78.00** | **190** | P | **P** | **01 54 06.5** | **+2.0** |
| | comp=Z,0.6nm,0.8s,baz=156,slow=4.4,SNR=3.1 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **127.52** | **278** | T | T | 04 21 01.4 | |
| | baz=101,slow=75,SNR=28 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **127.53** | **278** | T | T | 04 21 06.6 | |
| | baz=101,slow=75,SNR=25 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **127.54** | **278** | T | T | 04 21 08.0 | |
| | baz=101,slow=75,SNR=20 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **127.57** | **280** | T | T | 04 21 11.7 | |
| | baz=101,slow=74,SNR=6.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **127.59** | **280** | T | T | 04 21 13.3 | |
| | baz=101,slow=74,SNR=5.9 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **127.59** | **280** | T | T | 04 21 15.0 | |
| | baz=101,slow=74,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **130.88** | **208** | PKP | **PKPdf** | **02 01 18.8** | **+0.8** |
| | comp=Z,0.4nm,0.5s,baz=144,slow=1.9,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **133.89** | **211** | PKP | **PKPdf** | **02 01 25.1** | **+1.3** |
| | comp=Z,0.5nm,0.6s,baz=163,slow=1.8,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **152.28** | **7** | PKPbc | **PKPbc** | **02 02 02.9** | **+1.2** |
| | comp=Z,0.5nm,0.4s,baz=317,slow=2.2,SNR=4.0 | | | | | | |

*IDC **12** 01:48:34.6±1.8, 37°.36N×75°.12E, h0km, mb3.9/5, mb1 3.8/9, mb1mx3.5/38, mbtmp3.7/9, ML3.1/4, Error ellipse: s-maj=34.2km s-min=22.6km az=133.0*
*ISCJB **12** 01:48:38.9±0.7, 37°.58N±0°.05×75°.33E±0°.08, h10km, mb3.8/5, Error ellipse: s-maj=9.2km s-min=6.6km az=6.6*
*NNC **12** 01:48:41.3±3.2, 37°.56N×75°.08E, h0km, mb3.8, mpv3.4, Error ellipse: s-maj=26.2km s-min=15.2km az=138.0*
**ISC 12 01:48:40.1**±1.1, **37°.52N**±0°.06×**75°.24E**±0°.09, **h10**km, **n19**, σ**2°.49**/22, **mb3.8**/5, **11C-4D**, **Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **2.83** | **332** | ⇑Pn | **Pb** | **01 49 31.8** | **+0.8** |
| | 14nm,0.6s | | | | | | |
| SFK | | | | ⇑Sn | **Sg** | **01 50 08.5** | **-2.7** |
| | 54nm,0.7s | | | | | | |
| **CHCP** | **Chirah Chowk** | **4.18** | **203** | ⇓P | **Pn** | **01 49 46.6** | **+2.6** |
| **CEP** | **Cherat** | **4.58** | **217** | ⇑P | **Pn** | **01 49 51.1** | **+1.5** |
| **AAK** | **Ala-Archa** | **5.14** | **354** | ⇓Pn | **Pn** | **01 49 58.8** | **+1.6** |
| | 1.8nm,0.5s | | | | | | |
| AAK | | | | ⇑Sn | **Sn** | **01 51 00.9** | **+4.2** |
| | 6.4nm,0.7s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 01 51 20.4 | |
| | 16nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **5.14** | **354** | Pn | **Pn** | **01 49 58.9** | **+1.6** |
| | 0.9nm,0.3s,baz=112,slow=6.3,SNR=8.1 | | | | | | |
| AAK | | | | Sn | **Sn** | **01 51 02.2** | **+5.5** |
| | 0.3nm,0.3s,baz=151,slow=19,SNR=3.1 | | | | | | |
| **DZET** | **Dzherino** | **5.21** | **286** | ⇑Pn | **Pn** | **01 49 59.7** | **+1.5** |
| | 5.1nm,0.5s | | | | | | |
| DZET | | | | ⇑Sn | **Sn** | **01 50 59.9** | **+1.4** |
| | 42nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **5.39** | **338** | ⇓Pn | **Pn** | **01 50 00.9** | **+0.2** |
| | 3.8nm,0.5s | | | | | | |
| MNAS | | | | ⇑Sn | **Sn** | **01 51 04.5** | **+1.7** |
| | 14nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **5.40** | **3** | ⇑Pn | **Pn** | **01 50 02.2** | **+1.3** |
| | 2.3nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 01 51 23.7 | |
| | 13nm,0.8s | | | | | | |
| **THW** | **Thamme Wali** | **5.52** | **212** | P | **Pn** | **01 50 04.6** | **+2.2** |
| **KK31** | **Karatay Array** | **6.64** | **329** | ⇑Pn | **Pn** | **01 50 18.2** | **+0.4** |
| | 0.6nm,0.3s,baz=151,slow=12,SNR=6.2 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **01 51 34.8** | **+1.2** |
| | 4.8nm,0.7s,baz=152,slow=19,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.64** | **27** | Pn | **Pn** | **01 51 11.2** | **-1.4** |
| | 0.1nm,0.3s,baz=203,slow=13,SNR=2.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.87** | **349** | Pn | **Pn** | **01 52 25.7** | **+2.2** |
| | 0.2nm,0.3s,baz=164,slow=11,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.71** | **19** | P | **Pn** | **01 52 45.8** | **-0.8** |
| | 0.2nm,0.3s,baz=199,slow=12,SNR=4.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.84** | **322** | P | **Pn** | **01 52 44.5** | **-3.8** |
| | 0.1nm,0.3s,baz=139,slow=14,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **24.96** | **56** | P | **P** | **01 54 01.6** | **-2.3** |
| | 1.2nm,0.8s,baz=250,slow=10,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **38.58** | **324** | P | P | 01 55 59.6 | -3.3 |
| | 6.6nm,1.1s,baz=105,slow=8.8,SNR=5.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.54** | **336** | P | **P** | **01 56 24.9** | **-2.4** |
| | 4.4nm,0.9s,baz=95,slow=7.8,SNR=6.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **59.96** | **299** | P | P | 01 58 42.6 | -4.1 |
| | 0.2nm,0.5s,baz=53,slow=6.4,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.11** | **271** | P | P | 01 59 42.1 | -4.7 |
| | 0.4nm,0.6s,baz=49,slow=5.2,SNR=11 | | | | | | |

*ISN **12** 01:48:50.3±0.3, 37°.75N×45°.40E, h62km*
*DDA **12** 01:48:53.2, 34°.76N×42°.34E, h4km, Md3.7*
*CSEM **12** 01:48:58.0±1.3, 35°.08N×42°.31E, h5km, MD3.7, Error ellipse: s-maj=31.2km s-min=13.6km az=18.0*
**ISC 12 01:48:54.4**±2.7, **34°.8N**±0°.1×**42°.24E**±0°.07, **h10**km, **n16**, σ**1°.92**/20, **Iraq**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSL** | **Mosul** | **1.75** | **24** | *e*Pg | x | 01 49 25.8 | |
| MSL | | | | *e*Sg | x | 01 49 50.9 | |
| **MSL** | **Mosul** | **1.75** | **24** | *e*Pg | **Pb** | **01 49 25.8** | **-0.9** |
| | SNR=9.0 | | | | | | |
| MSL | | | | *e*Sg | **Sg** | **01 49 50.9** | **+0.1** |
| | SNR=9.0 | | | | | | |
| **IKRK** | **Kirkuk** | **1.82** | **70** | *e*Pg | x | 01 49 29.0 | |
| IKRK | | | | *e*Sg | x | 01 49 55.9 | |
| **BHD** | **Baghdad** | **2.33** | **130** | *e*Pn | x | 01 49 25.8 | |
| BHD | | | | *i* Sn | x | 01 50 18.1 | |
| **BHD** | **Baghdad** | **2.33** | **130** | *e*Pn | Pn | 01 49 25.8 | -7.0 |
| BHD | | | | *i* Sn | Sg | 01 50 18.1 | +8.7 |
| **SIRN** | **S˜–rnak** | **2.70** | **3** | *i* P | **Pn** | **01 49 36.9** | **-1.1** |
| SIRN | | | | *i* S | **Sn** | **01 50 10.4** | **-0.4** |
| **SIRN** | **S˜–rnak** | **2.70** | **3** | P | **Pn** | **01 49 36.9** | **-1.1** |
| SIRN | | | | S | **Sn** | **01 50 10.4** | **-0.4** |
| **MARD** | **Mardin** | **2.78** | **335** | P | **Pn** | **01 49 38.2** | **-0.9** |
| MARD | | | | S | **Sn** | **01 50 12.8** | **-0.1** |
| **HAKT** | **HAKKARI** | **3.01** | **23** | *i* P | **Pn** | **01 49 43.2** | **+0.9** |
| **HAKT** | **HAKKARI** | **3.01** | **23** | P | **Pn** | **01 49 43.2** | **+0.9** |
| **BEST** | **Besiri** | **3.19** | **346** | P | **Pb** | **01 49 49.8** | **-1.5** |
| BEST | | | | S | **Sb** | **01 50 29.2** | **-1.1** |
| **BNGL** | **BINGOL** | **4.25** | **348** | P | **Pb** | **01 50 10.6** | **+1.3** |
| BNGL | | | | S | **Sb** | **01 51 03.6** | **+3.0** |
| **KUZU** | **Kuzuini** | **4.64** | **297** | *i* P | Pb | 01 50 11.8 | -4.1 |
| KUZU | | | | *i* S | **Sn** | **01 51 02.0** | **+3.4** |
| **KUZU** | **Kuzuini** | **4.64** | **297** | P | Pb | 01 50 11.8 | -4.1 |
| KUZU | | | | S | **Sn** | **01 51 02.0** | **+3.4** |
| **AKCD** | **Akcadag** | **4.93** | **316** | *i* P | **Pn** | **01 50 05.7** | **-3.0** |
| AKCD | | | | *i* S | **Sn** | **01 51 06.8** | **+0.9** |
| **AKCD** | **Akcadag** | **4.93** | **316** | P | **Pn** | **01 50 05.7** | **-3.0** |
| AKCD | | | | S | **Sn** | **01 51 06.8** | **+0.9** |

*ECX **12** 03:00:35.5±0.4, 32°.21N×115°.29W, h6km, MD4.1, ML4.3*
*NEIC **12** 03:00:35.6, 32°.21N×115°.29W, h6km, MD4.0(MEX), ML4.1(ECX), ML4.3(PAS), After ECX.*
*NEIC Felt at Descanso, El Cajon, El Centro, Poway and Santee, California.*
*MEX **12** 03:00:36.6±0.6, 32°.30N×115°.23W, h16km±286km, MD4.0*
*IDC **12** 03:00:38.5±2.2, 32°.15N×114°.85W, h0km, mb3.4/1, mb1 3.8/5, mb1mx3.5/32, mbtmp3.4/5, ML3.6/4, MS3.0/7, Ms1 3.0/7, ms1mx2.9/22, Error ellipse: s-maj=39.0km s-min=11.9km az=38.0*
**ISC 12 03:00:34.7**±0.9, **32°.19N**±0°.02×**115°.28W**±0°.02, **h9**km±6km, **n133**, σ**1°.58**/181, **11C-10D**, **California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPBX** | **Cerro Prieto** | **0.23** | **355** | ⇓*e*P | **Pg** | **03 00 39.2** | **-0.2** |
| CPBX | | | | *e*S | **Sg** | **03 00 42.7** | **+0.2** |
| CPBX | | | | IAML | | 03 00 45.9 | |
| | comp=E,159μm,0.3s | | | | | | |
| CPBX | | | | ⇑*e* | | 03 00 45.9 | |
| **CPBX** | **Cerro Prieto** | **0.23** | **355** | *i* P | **Pg** | **03 00 39.1** | **-0.2** |
| CPBX | | | | *i* S | **Sg** | **03 00 41.4** | **-1.1** |
| **MBIG** | **Mexicali** | **0.23** | **18** | *e*P | **Pg** | **03 00 39.5** | **+0.2** |
| MBIG | | | | *i* S | **Sg** | **03 00 41.9** | **-0.7** |
| **MBIG** | **Mexicali** | **0.23** | **18** | ⇓*e*P | **Pg** | **03 00 39.7** | **+0.3** |
| **SGL** | **Mount Signal** | **0.59** | **321** | ⇓*i*P | **Pg** | **03 00 45.5** | **-0.6** |
| **EMSC** | **East Mesa** | **0.60** | **25** | ⇓*i*P | **Pg** | **03 00 46.0** | **-0.4** |
| **EMSC** | **East Mesa** | **0.60** | **25** | *e*Pg | **Pg** | **03 00 45.9** | **-0.4** |
| **RDX** | **Rancho Dawling** | **0.62** | **245** | ⇑*e*P | **Pg** | **03 00 46.6** | **0.0** |
| RDX | | | | *e*S | **Sg** | **03 00 55.3** | **+0.4** |
| RDX | | | | IAML | | 03 00 58.2 | |
| | comp=N,9μm,0.2s | | | | | | |
| **DREC** | **Desert Rsrch C** | **0.63** | **347** | ⇓*i*P | **Pg** | **03 00 46.6** | **-0.2** |
| **ERPC** | **Ernies Place** | **0.64** | **330** | *e*Pg | **Pg** | **03 00 46.2** | **-0.9** |
| **WESC** | **Westside Schoo** | **0.68** | **326** | ⇓*i*P | **Pg** | **03 00 47.2** | **-0.7** |
| **WESC** | **Westside Schoo** | **0.68** | **326** | *e*Pg | **Pg** | **03 00 46.7** | **-1.2** |
| **COA** | **Coachella** | **0.69** | **11** | *e*Pg | **Pg** | **03 00 47.0** | **-0.9** |
| **YUH** | **Yuha Desert** | **0.71** | **310** | ⇑*i*P | **Pg** | **03 00 47.5** | **-0.9** |
| **YUH** | **Yuha Desert** | **0.71** | **310** | *e*Pg | **Pg** | **03 00 47.4** | **-0.9** |
| **YMD** | **Yuma Desert** | **0.72** | **60** | ⇑*i*P | **Pg** | **03 00 47.8** | **-0.9** |
| **ECBX** | **El Chinero** | **0.74** | **165** | ⇓*e*P | **Pg** | **03 00 48.7** | **-0.3** |
| ECBX | | | | *e*S | **Sg** | **03 00 59.3** | **+0.6** |
| ECBX | | | | IAML | | 03 01 00.6 | |
| | comp=E,14μm,0.4s | | | | | | |
| ECBX | | | | *e* | | 03 01 00.6 | |
| **RMX** | **La Rumorosa** | **0.79** | **302** | ⇑*e*P | **Pg** | **03 00 48.7** | **-1.2** |
| RMX | | | | *e*S | **Sg** | **03 00 58.8** | **-1.4** |
| RMX | | | | IAML | | 03 00 59.9 | |
| | comp=N,16μm,0.4s | | | | | | |
| **IBP** | **Imperial Bould** | **0.83** | **305** | P | **Pg** | **03 00 49.8** | **-0.9** |
| | baz=0.8 | | | | | | |
| IBP | | | | S | **Sg** | **03 01 00.5** | **-1.1** |
| | baz=0.8 | | | | | | |
| **IBP** | **Imperial Bould** | **0.83** | **305** | ⇑*e*P | **Pg** | **03 00 49.9** | **-0.8** |
| IBP | | | | *e*S | **Sg** | **03 01 01.0** | **-0.5** |
| **IBP** | **Imperial Bould** | **0.83** | **305** | *e*Pg | **Pg** | **03 00 49.9** | **-0.8** |
| **SWSC** | **Sam W. Stewart** | **0.86** | **330** | P | **Pg** | **03 00 49.4** | **-2.0** |
| | baz=0.9 | | | | | | |
| SWSC | | | | S | **Sg** | **03 01 00.5** | **-2.1** |
| | baz=0.9 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **0.86** | **330** | *e*Pg | **Pg** | **03 00 49.9** | **-1.4** |
| **CRR** | **Carrizo Plain** | **0.91** | **320** | *e*Pg | **Pg** | **03 00 50.7** | **-1.4** |
| **GLA** | **Glamis** | **0.94** | **24** | P | **Pg** | **03 00 50.6** | **-2.2** |
| | baz=0.9 | | | | | | |
| GLA | | | | S | **Sg** | **03 01 01.8** | **-3.3** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.94** | **24** | *e*Pg | **Pg** | **03 00 50.6** | **-2.2** |
| GLA | | | | *e*Sg | **Sg** | **03 01 01.9** | **-3.2** |
| **CLIC** | **Calipatria** | **0.97** | **348** | *e*Pg | **Pg** | **03 00 52.3** | **-1.1** |
| **ERRC** | **Elmore Ranch** | **1.03** | **334** | *e*Pn | **Pg** | **03 00 52.8** | **-1.7** |
| **CBKC** | **Canebrake** | **1.08** | **311** | *e*Pn | **Pg** | **03 00 54.2** | **-1.3** |
| **SPIG** | **San Pedro Mart** | **1.15** | **188** | *i* P | **Pg** | **03 00 56.0** | **-0.8** |
| SPIG | | | | *i* S | **Sg** | **03 01 11.4** | **-0.4** |
| **SPIG** | **San Pedro Mart** | **1.15** | **188** | ⇓*i*P | **Pg** | **03 00 56.1** | **-0.8** |
| **SPIG** | **San Pedro Mart** | **1.15** | **188** | *i* P | **Pg** | **03 00 56.0** | **-0.8** |
| SPIG | | | | *i* S | **Sg** | **03 01 11.4** | **-0.4** |
| **SPX** | **San Pedro Mart** | **1.15** | **188** | ⇓*i*P | **Pg** | **03 00 56.1** | **-0.8** |
| SPX | | | | ⇓*e* | | 03 01 16.4 | |
| **SPX** | **San Pedro Mart** | **1.15** | **188** | *i* P | **Pg** | **03 00 56.0** | **-0.8** |
| SPX | | | | *i* S | **Sg** | **03 01 10.8** | **-1.1** |
| **CBX** | **Cerro Bola** | **1.18** | **276** | *i* P | **Pb** | **03 00 55.7** | **-1.5** |
| CBX | | | | *i* S | **Sg** | **03 01 09.0** | **-3.6** |
| **CBX** | **Cerro Bola** | **1.18** | **276** | ⇑*e*P | **Pb** | **03 00 55.8** | **-1.5** |
| CBX | | | | *e*S | **Sg** | **03 01 11.5** | **-1.1** |
| CBX | | | | ⇑*e* | | 03 01 13.0 | |
| CBX | | | | IAML | | 03 01 19.6 | |
| | comp=N,6μm,0.8s | | | | | | |
| CBX | | | | ⇑*e* | | 03 01 19.6 | |
| **CBX** | **Cerro Bola** | **1.18** | **276** | *i* P | **Pb** | **03 00 55.7** | **-1.5** |
| CBX | | | | *i* S | **Sg** | **03 01 09.0** | **-3.6** |
| **MONP** | **Monument Peak** | **1.19** | **306** | P | **Pb** | **03 00 55.1** | **-2.4** |
| | baz=1.2 | | | | | | |
| MONP | | | | S | **Sg** | **03 01 10.2** | **-2.8** |
| | baz=1.2 | | | | | | |
| **ECNX** | **Esteban Cantu** | **1.24** | **245** | ⇑*e*P | **Pn** | **03 00 56.9** | **-1.3** |
| ECNX | | | | *e*S | **Sb** | **03 01 13.5** | **-0.8** |
| **FRK** | **Frink** | **1.25** | **346** | *e*Pn | **Pn** | **03 00 56.0** | **-2.2** |
| **BAR** | **Barrett** | **1.27** | **293** | ⇑*e*P | **Pn** | **03 00 56.7** | **-1.9** |
| BAR | | | | *e*S | **Sb** | **03 01 14.1** | **-1.1** |
| **BAR** | **Barrett** | **1.27** | **293** | *e*Pn | **Pn** | **03 00 56.6** | **-2.0** |
| BAR | | | | *e*S | **Sb** | **03 01 13.7** | **-1.6** |
| **BORC** | **Borrego Spring** | **1.44** | **319** | *e*Pn | **Pn** | **03 00 59.9** | **-1.0** |
| BORC | | | | *e*Sn | **Sn** | **03 01 18.6** | **-1.3** |
| **HWB** | **Hans Werner Br** | **1.64** | **301** | *e*Pn | **Pn** | **03 01 03.4** | **-0.3** |
| **Y12C** | **Blythe** | **1.68** | **22** | P | **Pn** | **03 01 01.5** | **-2.7** |
| | baz=1.7 | | | | | | |
| **109C** | **Camp Elliot, M** | **1.69** | **295** | P | **Pn** | **03 01 02.6** | **-1.7** |
| | baz=1.7 | | | | | | |
| 109C | | | | Sb | **Sn** | **03 01 25.8** | **-0.3** |
| | baz=1.7 | | | | | | |
| **CPE** | **Camp Elliot** | **1.69** | **295** | *e*Pn | **Pn** | **03 01 02.8** | **-1.6** |
| **FRD** | **Ford Ranch** | **1.71** | **320** | *e*Pn | **Pn** | **03 01 04.0** | **-0.7** |
| **PFO** | **Pinyon Flat Ob** | **1.73** | **325** | P | **Pn** | **03 01 02.1** | **-2.9** |
| | baz=1.7 | | | | | | |
| PFO | | | | Sb | **Sn** | **03 01 27.1** | **-0.1** |
| | baz=1.7 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.73** | **325** | *e*Pn | **Pn** | **03 01 02.0** | **-2.9** |
| PFO | | | | *e*S | **Sn** | **03 01 27.5** | **+0.4** |
| **SNDA** | **J Saunders Pla** | **1.76** | **321** | *e*Pn | **Pn** | **03 01 04.7** | **-0.7** |
| **PLM** | **Palomar** | **1.77** | **312** | *e*Pn | **Pn** | **03 01 05.2** | **-0.4** |
| PLM | | | | *e*Pg | **Pb** | **03 01 07.1** | **-0.2** |
| PLM | | | | *e*Sn | **Sb** | **03 01 29.4** | **-0.2** |
| **CRY** | **Cary Ranch** | **1.84** | **319** | *e*Pn | **Pn** | **03 01 05.8** | **-0.6** |
| **BELC** | **Belle Mtn. Jos** | **1.90** | **342** | P | **Pn** | **03 01 04.4** | **-3.0** |
| | baz=1.9 | | | | | | |
| **IRM** | **Iron Mountain** | **1.97** | **3** | P | **Pn** | **03 01 05.5** | **-2.7** |
| | baz=2.0 | | | | | | |
| **IRM** | **Iron Mountain** | **1.97** | **3** | *e*Pn | **Pn** | **03 01 07.6** | **-0.6** |
| **BACC** | **Bachelor Mtn.** | **2.05** | **314** | *e*Pn | **Pn** | **03 01 08.9** | **-0.4** |
| BACC | | | | *e*Pg | **Pb** | **03 01 12.2** | **+0.1** |
| **DGR** | **Domenigoni Val** | **2.06** | **316** | *e*Pn | **Pn** | **03 01 09.0** | **-0.4** |
| **HMTC** | **Hemet** | **2.10** | **317** | *e*Pn | **Pn** | **03 01 09.5** | **-0.4** |
| **214A** | **Organ Pipe Nat** | **2.11** | **96** | P | **Pn** | **03 01 07.8** | **-2.4** |
| | baz=2.1 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.11** | **96** | *e*Pn | **Pn** | **03 01 07.7** | **-2.4** |
| 214A | | | | *e*Pg | **Pb** | **03 01 13.6** | **+0.5** |
| 214A | | | | *e*S | **Sb** | **03 01 40.1** | **+0.7** |
| **MURC** | **Murrieta** | **2.14** | **312** | Pb | **Pn** | **03 01 10.9** | **+0.4** |
| | baz=2.1 | | | | | | |
| MURC | | | | Sb | **Sb** | **03 01 40.2** | **0.0** |
| | baz=2.1 | | | | | | |
| **BBRC** | **Big Bear Solar** | **2.48** | **327** | Sb | **Sb** | **03 01 50.4** | **+0.1** |
| | baz=2.5 | | | | | | |
| **GMRC** | **Granite Mounta** | **2.60** | **353** | P | **Pn** | **03 01 14.6** | **-2.4** |
| | baz=2.6 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **2.85** | **316** | P | **Pn** | **03 01 18.7** | **-1.7** |
| | baz=2.8 | | | | | | |
| BFSC | | | | Sb | **Sb** | **03 02 00.5** | **-0.4** |
| | baz=2.8 | | | | | | |
| **SCI** | **San Clemente I** | **2.87** | **287** | P | **Pn** | **03 01 18.8** | **-1.8** |
| | baz=2.9 | | | | | | |
| **LDFC** | **Landfair** | **2.88** | **3** | *e*Pn | **Pn** | **03 01 19.7** | **-1.2** |
| LDFC | | | | *e*Pg | **Pg** | **03 01 30.3** | **+0.3** |
| LDFC | | | | *e*S | Sg | 03 02 13.6 | +6.3 |
| **FMP** | **Fort Macarthur** | **2.95** | **302** | Sb | **Sb** | **03 02 03.7** | **+0.1** |
| | baz=2.9 | | | | | | |
| **MWC** | **Mount Wilson** | **3.09** | **312** | *e*Pn | **Pn** | **03 01 25.2** | **+1.5** |
| MWC | | | | *e*S | **Sb** | **03 02 08.4** | **+0.7** |
| **PASC** | **Pasadena Art C** | **3.13** | **310** | *e*Pn | **Pn** | **03 01 23.4** | **-0.9** |
| PASC | | | | *e*S | **Sb** | **03 02 09.1** | **+0.2** |
| **DECC** | **Green Verdugo** | **3.28** | **310** | Sb | **Sb** | **03 02 13.7** | **+0.7** |
| | baz=3.3 | | | | | | |
| **TUQ** | **Turquoise Moun** | **3.28** | **351** | P | **Pn** | **03 01 23.9** | **-2.5** |
| | baz=3.3 | | | | | | |
| **GSC** | **Goldstone** | **3.35** | **338** | *e*Pn | **Pn** | **03 01 26.9** | **-0.4** |
| GSC | | | | *e*S | **Sg** | **03 02 21.9** | **-0.5** |
| **IR2C** | **Iron Canyon** | **3.41** | **311** | *e*Pn | **Pn** | **03 01 28.3** | **+0.3** |
| IR2C | | | | *e*Pg | **Pb** | **03 01 34.8** | **-0.4** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| EDW2 | Edwards Air Fo | 3.51 | 321 | Sb | Sb | 03 02 22.1 | +2.4 |
| | baz=3.5 | | | | | | |
| SNCC | San Nicolas Is | 3.73 | 288 | ePn | Pn | 03 01 32.1 | -0.2 |
| OSI | Osito Adit | 3.76 | 311 | Sb | Sb | 03 02 27.3 | +0.4 |
| | baz=3.7 | | | | | | |
| OSI | Osito Adit | 3.76 | 311 | ePn | Pn | 03 01 33.0 | +0.2 |
| OSI | | | | eS | Sb | 03 02 27.0 | +0.2 |
| TUC | Tucson | 3.81 | 87 | ePn | Pn | 03 01 31.1 | -2.5 |
| TUC | | | | ePg | Pg | 03 01 46.3 | -1.4 |
| TUC | | | | eS | Sg | 03 02 33.7 | -3.5 |
| SHPR | Sheep Range | 4.31 | 1 | ePn | Pn | 03 01 39.6 | -0.9 |
| SHPR | | | | ePg | Pg | 03 01 56.8 | -0.4 |
| SHPR | | | | eS | Sg | 03 02 52.9 | -0.1 |
| ISA | Isabella | 4.36 | 323 | ePn | Pn | 03 01 41.9 | +0.7 |
| ISA | | | | ePg | Pb | 03 01 52.5 | +1.0 |
| DAC | Darwin (Calif) | 4.50 | 335 | ePn | Pn | 03 01 42.7 | -0.5 |
| DAC | | | | ePg | Pg | 03 01 58.8 | -2.1 |
| WUAZ | Wupatki | 4.65 | 43 | P | Pn | 03 01 45.0 | -0.1 |
| | baz=4.6 | | | | | | |
| WUAZ | Wupatki | 4.65 | 43 | ePn | Pn | 03 01 45.1 | -0.1 |
| TPNV | Topopah Spring | 4.81 | 351 | P | Pn | 03 01 46.8 | -0.6 |
| | baz=4.8 | | | | | | |
| TPNV | Topopah Spring | 4.81 | 351 | ePn | Pn | 03 01 47.7 | +0.2 |
| EKU | East Kanab | 5.39 | 24 | ePn | Pn | 03 01 55.5 | +0.2 |
| W18A | Petrified Fore | 5.47 | 56 | P | Pn | 03 01 56.6 | +0.1 |
| | baz=5.5 | | | | | | |
| W18A | Petrified Fore | 5.47 | 56 | ePn | Pn | 03 01 55.9 | -0.6 |
| W18A | | | | eS | Sg | 03 03 25.4 | -4.9 |
| CCUT | Cedar City | 5.58 | 16 | ePn | Pn | 03 01 57.9 | 0.0 |
| CCUT | | | | ePg | Pg | 03 02 17.5 | -3.9 |
| CCUT | | | | eS | Sg | 03 03 32.4 | -1.3 |
| MTUM | Tungsten Hills | 5.81 | 333 | ePn | Pn | 03 02 03.6 | +2.4 |
| MTUM | | | | ePg | Pg | 03 02 24.4 | -1.6 |
| R11A | Troy Canyon, C | 6.15 | 358 | P | Pn | 03 02 05.0 | -0.8 |
| | baz=6.1 | | | | | | |
| R11A | Troy Canyon, C | 6.15 | 358 | ePn | Pn | 03 02 05.0 | -0.8 |
| R11A | | | | ePg | Pg | 03 02 32.2 | -0.3 |
| R11A | | | | eS | Sg | 03 03 53.8 | +1.7 |
| BTU | Barney Top | 6.22 | 26 | ePn | Pn | 03 02 08.2 | +1.3 |
| 121A | Cookes Peak, D | 6.35 | 85 | P | Pn | 03 02 07.3 | -1.4 |
| | baz=6.3 | | | | | | |
| 121A | Cookes Peak, D | 6.35 | 85 | ePn | Pn | 03 02 07.2 | -1.4 |
| 121A | | | | eS | Sg | 03 03 56.2 | -2.5 |
| NV01 | Mina Array Sit | 6.70 | 339 | ePn | Pn | 03 02 18.6 | +5.2 |
| NVAR | Mina Array Bea | 6.70 | 339 | Pn | Pn | 03 02 21.3 | +7.9 |
| | comp=N,0.1nm,0.3s,baz=164,slow=14,SNR=2.7 | | | | | | |
| NVAR | | | | Lg | Lg | 03 04 15.8 | |
| | baz=183,slow=33,SNR=2.1 | | | | | | |
| NVAR | | | | LR | LR | 03 04 48.3 | |
| | comp=N,133nm,21.3s,baz=326,slow=37 | | | | | | |
| MSU | Marysvale | 6.80 | 21 | ePn | Pn | 03 02 15.6 | +0.8 |
| MSU | | | | eS | Sb | 03 03 50.4 | -4.1 |
| LAZ | Ladron | 7.17 | 70 | ePn | Pn | 03 02 19.5 | -0.3 |
| LAZ | | | | eS | Sg | 03 04 25.8 | +1.0 |
| CMB | Columbia Colle | 7.17 | 326 | ePn | Pn | 03 02 20.5 | +0.7 |
| CMB | | | | ePg | Pg | 03 02 46.9 | -5.2 |
| CMB | | | | eS | Sb | 03 04 12.9 | +7.8 |
| Y22D | IRIS PASSCAL I | 7.26 | 73 | P | Pn | 03 02 20.9 | -0.1 |
| | baz=7.2 | | | | | | |
| MVCO | Mesa Verde | 7.50 | 46 | ePn | Pn | 03 02 26.6 | +2.1 |
| BNM | Barren Site | 7.51 | 73 | ePn | Pn | 03 02 24.4 | -0.2 |
| LPM | Los Pinos Moun | 7.55 | 71 | ePn | Pn | 03 02 24.6 | -0.5 |
| PV05 | Paradox Valley | 7.75 | 39 | ePn | Pn | 03 02 28.4 | +0.5 |
| PV05 | | | | ePg | Pb | 03 02 37.5 | -12 |
| TMUT | Trail Mountain | 7.83 | 24 | ePn | Pn | 03 02 27.5 | -1.4 |
| TMUT | | | | ePg | Pg | 03 02 60.0 | -4.5 |
| TMUT | | | | eS | Sg | 03 04 48.9 | +3.0 |
| ANMO | Albuquerque | 7.86 | 67 | Pn | Pn | 03 02 29.2 | -0.1 |
| | comp=N,0.2nm,0.3s,baz=257,slow=14,SNR=5.0 | | | | | | |
| ANMO | | | | Lg | Lg | 03 04 36.8 | |
| | comp=N,0.0nm,0.3s,baz=150,slow=20,SNR=2.8 | | | | | | |
| ANMO | | | | LR | LR | 03 04 56.4 | |
| | comp=N,64nm,21.6s,baz=251,slow=34 | | | | | | |
| ANMO | Albuquerque | 7.86 | 67 | ePn | Pn | 03 02 29.6 | +0.2 |
| ANMO | | | | Lg | Lg | 03 04 36.8 | |
| ANMO | | | | eS | Sg | 03 04 43.9 | -3.1 |
| SRU | San Rafael | 7.92 | 28 | ePn | Pn | 03 02 31.6 | +1.5 |
| SRU | | | | eS | Sg | 03 04 40.5 | -8.2 |
| PV10 | Paradox Valley | 8.01 | 38 | ePn | Pn | 03 02 34.0 | +2.6 |
| PV01 | Paradox Valley | 8.08 | 41 | ePn | Pn | 03 02 34.1 | +1.6 |
| PV01 | | | | eS | Sg | 03 04 44.2 | -11 |
| PV04 | Paradox Valley | 8.09 | 38 | ePn | Pn | 03 02 34.1 | +1.7 |
| PV04 | | | | eS | Sb | 03 04 43.0 | +11 |
| MNTX | Cornudas Mount | 8.43 | 91 | P | Pn | 03 02 36.1 | -0.9 |
| | baz=8.4 | | | | | | |
| MNTX | Cornudas Mount | 8.43 | 91 | ePn | Pn | 03 02 36.3 | -0.6 |
| MNTX | | | | eS | Sn | 03 04 11.9 | -0.3 |
| P18A | Preston Nutter | 8.47 | 27 | ePn | Pn | 03 02 39.4 | +1.7 |
| LPIG | La Paz | 9.18 | 150 | LR | LR | 03 06 02.4 | |
| | comp=N,73nm,20.9s,baz=24,slow=36 | | | | | | |
| TX31 | Lajitas Ar. Si | 10.39 | 103 | ePn | Pn | 03 03 05.8 | +1.9 |
| TXAR | Lajitas Array | 10.39 | 103 | Pn | Pn | 03 03 05.2 | +1.3 |
| | comp=N,0.8nm,0.3s,baz=288,slow=13,SNR=54 | | | | | | |
| TXAR | | | | Lg | Lg | 03 05 54.4 | |
| | comp=N,0.1nm,0.3s,baz=295,slow=28,SNR=3.6 | | | | | | |
| TXAR | | | | LR | LR | 03 07 18.9 | |
| | comp=N,101nm,19.1s,baz=0.0,slow=40 | | | | | | |
| MSTX | Muleshoe | 10.64 | 77 | Pn | Pn | 03 03 09.8 | +2.4 |
| YBH | Yreka Blue Hor | 11.22 | 330 | LR | LR | 03 07 05.7 | |
| | comp=N,64nm,19.5s,baz=292,slow=34 | | | | | | |
| 332A | Millersview | 13.25 | 89 | P | Pn | 03 03 45.4 | +2.4 |
| | baz=13 | | | | | | |
| 432A | Menard | 13.28 | 92 | P | Pn | 03 03 46.3 | +2.9 |
| | baz=13 | | | | | | |
| 532A | Rocksprings | 13.33 | 95 | P | Pn | 03 03 48.1 | +4.0 |
| | baz=13 | | | | | | |
| JCT | Junction City | 13.34 | 93 | P | Pn | 03 03 47.7 | +3.4 |
| | baz=13 | | | | | | |
| 433A | Art | 13.90 | 92 | P | Pn | 03 03 54.3 | +2.5 |
| | baz=14 | | | | | | |
| NEW | Newport | 16.12 | 356 | Pn | P | 03 04 29.4 | +4.7 |
| | comp=N,0.1nm,0.3s,baz=153,slow=16,SNR=5.5 | | | | | | |
| NEW | | | | LR | LR | 03 11 05.8 | |
| | comp=N,46nm,19.4s,baz=156,slow=39 | | | | | | |
| TKL | Tuckaleechee C | 26.32 | 74 | LR | LR | 03 16 56.9 | |
| | comp=N,65nm,18.2s,baz=246,slow=38 | | | | | | |
| ILAR | Eielson Array | 37.95 | 339 | P | P | 03 07 58.0 | +5.8 |
| | comp=N,0.4nm,0.8s,baz=146,slow=8.0,SNR=7.2 | | | | | | |
| HHC | Hu-ho-hao-te | 95.42 | 326 | eP | P | 03 13 58.2 | -1.6 |
| HHC | | | | PP | PP | 03 17 50.7 | +1.2 |
| HHC | Hu-ho-hao-te | 95.42 | 326 | S | S | 03 25 14.6 | -1.8 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,26nm,1.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,110nm,6.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,100nm,21.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,120nm,18.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,61nm,18.7s | | | | | | |
| WMQ | Urumqi | 101.49 | 343 | eP | Pdif | 03 14 29.0 | +2.0 |
| LZH | Lanzhou | 102.82 | 328 | eP | Pdif | 03 14 31.5 | -1.6 |
| LZH | | | | pP | | 03 14 34.0 | |
| LZH | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |

*IDC **12** 03:36:34.2±3.2, 29.°69S×179.°23W, h354km±31km, mb3.3/2, mb1 3.6/3, mb1mx3.2/19, mbtmp4.2/3, Error ellipse: s-maj=41.2km s-min=21.8km az=177.0*

**ISC 12 03:36:33.4**±1.3**, 29.°7S**±0.°2×**179.°2W**±0.°2**, h350**km**, n10, σ0.s52**/10**, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 1.21 | 69 | S | S | 03 37 47.2 | -10 |
| | 403nm,0.3s,baz=97,slow=23,SNR=5.6 | | | | | | |
| URZ | Urewera | 9.07 | 199 | P | Pn | 03 38 39.8 | -0.3 |
| | 2.7nm,0.3s,baz=279,slow=4.6,SNR=10 | | | | | | |
| URZ | | | | S | S | 03 40 17.8 | -6.0 |
| | 13nm,0.3s,baz=95,slow=22,SNR=11 | | | | | | |
| ASAR | Alice Springs | 42.10 | 267 | P | P | 03 43 53.1 | +0.5 |
| | 0.8nm,0.8s,baz=107,slow=7.9,SNR=7.0 | | | | | | |
| WRA | Warramunga Arr | 43.02 | 272 | P | P | 03 44 00.5 | +0.5 |
| | 3.2nm,0.5s,baz=110,slow=7.4,SNR=65 | | | | | | |
| WRA | | | | S | S | 03 49 58.5 | -0.5 |
| | 0.5nm,0.8s,baz=109,slow=14,SNR=4.7 | | | | | | |
| FINES | FINESS Array B | 144.13 | 339 | PKP | PKPab | 03 55 25.6 | -0.2 |
| | 3.5nm,0.4s,baz=59,slow=3.7,SNR=42 | | | | | | |
| NB2 | NORSAR Subarra | 147.90 | 350 | PKP | PKPbc | 03 55 36.6 | -0.5 |
| | comp=Z,1.2nm,0.6s,baz=16,slow=2.8 | | | | | | |
| NOA | NORSAR Array B | 147.90 | 350 | PKPbc | PKPbc | 03 55 36.5 | -0.5 |
| | comp=Z,1.3nm,0.6s,baz=17,slow=4.3,SNR=5.3 | | | | | | |
| AKASG | Malin Array Be | 150.11 | 323 | PKPbc | PKPbc | 03 55 42.7 | 0.0 |
| | comp=Z,1.7nm,0.4s,baz=47,slow=2.4,SNR=7.0 | | | | | | |
| BRTR | Keskin Array B | 151.34 | 299 | PKPbc | PKPbc | 03 55 46.2 | +0.1 |
| | comp=Z,0.5nm,0.5s,baz=140,slow=3.8,SNR=3.9 | | | | | | |
| TORD | Torodi Ar. Bea | 163.51 | 183 | PKPab | PKPab | 03 56 49.3 | +0.8 |
| | comp=Z,0.4nm,0.7s,baz=174,slow=3.6,SNR=7.3 | | | | | | |

*CSEM **12** 03:55:11.8±0.8, 35.°99N×35.°79E, h26km±4km, ML2.8, Error ellipse: s-maj=20.0km s-min=11.0km az=94.0*
*NSSC **12** 03:55:12.6±1.3, 36.°02N×35.°89E, h39km±8km, ML2.8*
*DDA **12** 03:55:12.3, 36.°21N×35.°86E, h7km, Md3.1*
*ISCJB **12** 03:55:13.2±1.2, 36.°13N±0.°05×35.°9E±0.°1, h20km±9km, Error ellipse: s-maj=15.0km s-min=6.7km az=19.0*

**ISC 12 03:55:12.8**±1.2**, 36.°00N**±0.°03×**35.°88E**±0.°08**, h28**km±6km**, n19, σ1.s37**/35**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARNB | Al Arnab | 0.16 | 153 | iP | Pn | 03 55 19.8 | +0.3 |
| ARNB | | | | eS | Sb | 03 55 24.7 | +2.5 |
| ARNB | | | | AML | AML | 03 55 25.5 | |
| | comp=N,595nm,0.3s | | | | | | |
| ARNB | | | | AML | AML | 03 55 26.2 | |
| | comp=E,260nm,0.2s | | | | | | |
| ARNB | Al Arnab | 0.16 | 153 | iP | Pn | 03 55 19.8 | +0.3 |
| ARNB | | | | eS | Sb | 03 55 24.7 | +2.5 |
| | comp=E,260nm,0.2s | | | | | | |
| YAYL | Yayladag | 0.18 | 80 | iP | Pb | 03 55 18.0 | -0.7 |
| YAYL | | | | iS | Sb | 03 55 21.9 | -0.8 |
| YAYL | Yayladag | 0.18 | 80 | P | Pb | 03 55 18.0 | -0.7 |
| YAYL | | | | S | Sb | 03 55 21.9 | -0.8 |
| BTCH | Batrach | 0.47 | 86 | iP | Pn | 03 55 23.1 | -0.6 |
| BTCH | | | | eS | Sb | 03 55 29.7 | +0.4 |
| BTCH | | | | AML | AML | 03 55 32.3 | |
| | comp=N,608nm,0.2s | | | | | | |
| BTCH | | | | AML | AML | 03 55 34.5 | |
| | comp=E,494nm,0.2s | | | | | | |
| BTCH | Batrach | 0.47 | 86 | iP | Pn | 03 55 23.1 | -0.6 |
| BTCH | | | | eS | Sb | 03 55 29.7 | +0.4 |
| | comp=E,494nm,0.2s | | | | | | |
| BIDA | Albida | 1.05 | 160 | iP | Pn | 03 55 29.8 | -1.9 |
| BIDA | | | | eS | Sn | 03 55 44.2 | -1.3 |
| BIDA | | | | AML | AML | 03 55 48.0 | |
| | comp=E,720nm,0.3s | | | | | | |
| BIDA | | | | AML | AML | 03 55 48.4 | |
| | comp=N,686nm,0.4s | | | | | | |
| BIDA | Albida | 1.05 | 160 | iP | Pn | 03 55 29.8 | -1.9 |
| BIDA | | | | eS | Sn | 03 55 44.2 | -1.3 |
| | comp=N,687nm,0.4s | | | | | | |
| KUZU | Kuzuini | 1.23 | 51 | iP | Pn | 03 55 34.6 | +0.4 |
| KUZU | | | | iS | Sb | 03 55 50.5 | -0.4 |
| KUZU | Kuzuini | 1.23 | 51 | P | Pn | 03 55 34.6 | +0.4 |
| KUZU | | | | S | Sb | 03 55 50.5 | -0.4 |
| KAMA | Osmaniye | 1.34 | 28 | P | Pn | 03 55 35.4 | -0.3 |
| KAMA | | | | S | Sn | 03 55 50.9 | -1.8 |
| AYKD | Aykdinkavak | 1.59 | 27 | P | Pn | 03 55 39.1 | 0.0 |
| AYKD | | | | S | Sn | 03 55 58.0 | -0.9 |
| ANDN | Andirin | 1.62 | 13 | iP | Pn | 03 55 39.0 | -0.6 |
| ANDN | | | | iS | Sn | 03 55 59.2 | -0.4 |
| ANDN | Andirin | 1.62 | 13 | P | Pn | 03 55 39.0 | -0.6 |
| ANDN | | | | S | Sn | 03 55 59.2 | -0.4 |
| HWQ | Hawqa | 1.72 | 178 | eP | Pb | 03 55 44.8 | +0.9 |
| KSRV | Kasrt alli | 2.53 | 92 | iP | Pn | 03 55 54.0 | +1.9 |
| KSRV | Kasrt alli | 2.53 | 92 | iP | Pn | 03 55 54.0 | +1.9 |
| AKCD | Akcadag | 2.81 | 35 | iP | Pn | 03 55 56.1 | +0.1 |
| AKCD | | | | iS | Sb | 03 56 39.3 | +3.0 |
| AKCD | Akcadag | 2.81 | 35 | P | Pn | 03 55 56.1 | +0.1 |
| AKCD | | | | S | Sb | 03 56 39.3 | +3.0 |

*BJI **12** 04:20:30.7, 2.°39N×122.°35E, h540km, mb4.4/34, mB4.5/20*
*ISCJB **12** 04:20:33.6±0.2, 2.°68N±0.°03×122.°19E±0.°03, h545km±3km, mb4.4/51, Error ellipse: s-maj=5.2km s-min=3.5km az=135.8*
*NEIC **12** 04:20:34.4±0.3, 2.°64N×122.°16E, h540km±4km, mb4.8/23, Error ellipse: s-maj=7.2km s-min=4.4km az=223.0*
*KLM **12** 04:20:34.3, 2.°66N×122.°27E, h535km, mb4.9, ML4.6, MS5.8*
*DJA **12** 04:20:34.7±0.5, 3°N±6°×12°2E±°, h527km±4km, M4.5/13, mb4.8/13, mB5.0/13, MLv4.9/12, Mw(mB)4.3/13*
*IDC **12** 04:20:35.1±0.7, 2.°63N×122.°18E, h551km±7km, mb3.7/28, mb1 3.8/32, mb1mx3.7/44, mbtmp4.6/32, Error ellipse: s-maj=10.0km s-min=5.9km az=68.0*
*AUST **12** 04:20:35.0±0.5, 2.°47N×122.°09E, h543km±6km, Error ellipse: s-maj=9.8km s-min=5.8km az=24.0*

**ISC 12 04:20:34.7**±0.3**, 2.°63N**±0.°04×**122.°16E**±0.°05**, h543**km±3km**, h544**km**:pP-P, n195, σ1.s24**/252**, mb4.5**/61**, 7C-2D, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MRSI | Marisa | 2.15 | 186 | P | P | 04 21 43.9 | -0.5 |
| MRSI | | | | S | S | 04 22 39.4 | -1.6 |
| GTOI | Gorontalo | 2.16 | 157 | P | P | 04 21 43.1 | -1.4 |
| KMSI | Cibinong | 2.74 | 138 | P | P | 04 21 47.2 | -0.3 |
| KMSI | | | | S | S | 04 22 45.7 | -1.0 |
| MPSI | Mapaga | 3.21 | 225 | P | P | 04 21 50.2 | -0.3 |
| MPSI | | | | S | S | 04 22 52.5 | +0.4 |
| APSI | Ampana | 3.56 | 188 | P | P | 04 21 52.8 | 0.0 |
| APSI | | | | S | S | 04 22 54.7 | -1.7 |
| LUWI | Luwuk | 3.70 | 170 | P | P | 04 21 52.5 | -1.4 |
| | baz=3.6,SNR=16 | | | | | | |
| LUWI | Luwuk | 3.70 | 170 | P | P | 04 21 52.7 | -1.1 |
| LUWI | | | | S | S | 04 22 56.2 | -2.0 |
| LUWI | Luwuk | 3.70 | 170 | eP | P | 04 21 52.4 | -1.4 |
| LUWI | | | | eS | S | 04 22 55.9 | -2.4 |
| PCI | Palu | 4.21 | 214 | P | P | 04 21 56.8 | -0.9 |
| PCI | | | | S | S | 04 23 02.7 | -2.6 |
| MYLDM | Lahad Datu | 4.44 | 305 | ⇑P | P | 04 22 00.8 | +1.3 |
| MYLDM | Lahad Datu | 4.44 | 305 | eP | P | 04 22 00.7 | +1.2 |
| TSM | Tawau | 4.59 | 291 | ⇑P | P | 04 22 00.5 | -0.2 |
| TNTI | Ternate | 5.52 | 109 | P | P | 04 22 07.8 | -0.8 |
| | 1μm,1.1s,12μm4.3nm | | | | | | |
| TNTI | | | | S | S | 04 23 21.4 | -4.0 |
| | 1μm,1.1s,12μm4.3nm | | | | | | |
| TNTI | Ternate | 5.52 | 109 | eP | P | 04 22 07.9 | -0.8 |
| TNTI | | | | eS | S | 04 23 22.5 | -2.9 |
| DAV | Davao City (W) | 5.57 | 38 | P | P | 04 22 10.5 | +1.4 |
| | 10nm,0.3s,baz=110,slow=0.4,SNR=8.3 | | | | | | |
| DAV | | | | S | S | 04 23 27.6 | +1.4 |
| | 22nm,0.3s,baz=35,slow=16,SNR=4.5 | | | | | | |
| SDKM | Sandakan | 5.79 | 301 | ⇓P | P | 04 22 10.6 | -0.4 |
| SANI | Sanana | 6.02 | 141 | P | P | 04 22 12.4 | -0.8 |
| | 166nm,0.7s,3μm0.8nm | | | | | | |
| SANI | | | | S | S | 04 23 30.2 | -3.4 |
| | 166nm,0.7s,3μm0.8nm | | | | | | |
| TTSI | Tana Toraja | 6.10 | 203 | P | P | 04 22 15.8 | +1.9 |
| | 31nm,0.8s,2μm0.2nm | | | | | | |
| LBMI | Labuha | 6.25 | 121 | P | P | 04 22 14.9 | -0.4 |
| | 539nm,1.0s,8μm3.0nm | | | | | | |
| KKM | Kota Kinabalu | 6.83 | 300 | P | P | 04 22 20.6 | -0.3 |
| | baz=6.9,SNR=16 | | | | | | |
| KKM | Kota Kinabalu | 6.83 | 300 | ⇑P | P | 04 22 20.7 | -0.2 |
| KKM | Kota Kinabalu | 6.83 | 300 | eP | P | 04 22 20.4 | -0.4 |
| KKM | | | | eS | S | 04 23 42.1 | -5.7 |
| SPSI | Sidrap Palu | 6.97 | 200 | P | P | 04 22 22.8 | +0.6 |
| NLAI | Namlea | 7.64 | 140 | P | P | 04 22 30.6 | +1.9 |
| | 631nm,0.8s,5μm2.2nm | | | | | | |
| KAPI | Kappang | 7.97 | 198 | P | P | 04 22 34.4 | +2.5 |
| | 0.6nm,0.3s,baz=84,slow=14,SNR=4.9 | | | | | | |
| KAPI | | | | S | S | 04 24 07.6 | -0.4 |
| | 0.2nm,0.3s,baz=12,slow=20,SNR=4.7 | | | | | | |
| KAPI | Kappang | 7.97 | 198 | eP | P | 04 22 31.2 | -0.7 |
| KBKI | Kotabaru | 8.40 | 226 | P | P | 04 22 36.2 | -0.1 |
| | 48nm,1.4s,2μm | | | | | | |
| KBKI | | | | S | S | 04 24 16.9 | +0.9 |
| | 48nm,1.4s,2μm | | | | | | |
| AAI | Ambon | 8.70 | 136 | P | P | 04 22 41.0 | +1.7 |
| MSAI | Masohi | 9.00 | 131 | P | P | 04 22 42.8 | +0.5 |
| | 63nm,0.7s,1μm | | | | | | |
| BBKI | Banjar Baru | 9.49 | 230 | P | P | 04 22 47.4 | 0.0 |
| SWI | Sorong | 9.74 | 111 | P | P | 04 22 50.6 | +0.8 |
| | baz=9.8,SNR=5.0 | | | | | | |
| SWI | Sorong | 9.74 | 111 | P | P | 04 22 49.7 | -0.2 |
| | 105nm,1.0s,1μm | | | | | | |
| SIJI | Sorong | 9.74 | 111 | P | P | 04 22 50.3 | +0.4 |
| | 10nm,0.3s,baz=312,slow=7.3,SNR=28 | | | | | | |
| SIJI | | | | S | S | 04 24 41.3 | +0.2 |
| | 1.3nm,0.3s,baz=288,slow=20,SNR=2.5 | | | | | | |
| SBUM | Sibu | 9.93 | 269 | ⇑P | P | 04 22 53.1 | +1.3 |
| SBUM | Sibu | 9.93 | 269 | eP | P | 04 22 52.8 | +0.9 |
| BNDI | Bandanaira | 10.51 | 133 | P | P | 04 22 58.5 | +0.7 |
| | 375nm,0.7s,4μm | | | | | | |
| BNDI | | | | S | S | 04 24 56.7 | +1.3 |
| | 375nm,0.7s,4μm | | | | | | |
| FAKI | Fak Fak | 11.49 | 119 | P | P | 04 23 08.6 | +0.6 |
| | baz=12,SNR=11 | | | | | | |
| FAKI | Fak Fak | 11.49 | 119 | P | P | 04 23 08.6 | +0.6 |
| FAKI | Fak Fak | 11.49 | 119 | eP | P | 04 23 07.2 | -0.9 |
| FAKI | | | | eS | S | 04 25 14.7 | +0.5 |
| PBKI | Pangkalan Bun | 11.75 | 243 | P | P | 04 23 11.1 | +0.4 |
| KSM | Kuching | 11.90 | 265 | P | P | 04 23 12.4 | +0.2 |
| | baz=12,SNR=13 | | | | | | |
| KSM | Kuching | 11.90 | 265 | ⇑P | P | 04 23 12.7 | +0.5 |
| KSM | Kuching | 11.90 | 265 | eP | P | 04 23 11.8 | -0.5 |
| TWSI | Taliwang, Sumb | 12.46 | 205 | P | P | 04 23 21.3 | +3.3 |
| SOEI | Soe | 12.48 | 170 | P | P | 04 23 19.3 | +0.9 |
| | baz=12,SNR=4.2 | | | | | | |
| SOEI | Soe | 12.48 | 170 | P | P | 04 23 28.1 | +10 |
| SOEI | Soe | 12.48 | 170 | eP | P | 04 23 19.4 | +1.0 |
| KMMI | Kalianget | 12.62 | 220 | P | P | 04 23 20.1 | +0.4 |
| SRBI | Singaraja | 12.70 | 213 | P | P | 04 23 22.0 | +1.5 |
| BATI | Baumata | 12.84 | 173 | P | P | 04 23 22.6 | +0.6 |
| | 28nm,0.3s,baz=334,slow=1.0,SNR=12 | | | | | | |
| BATI | | | | S | S | 04 25 42.3 | +2.5 |
| | 6.2nm,0.3s,baz=84,slow=21,SNR=12 | | | | | | |
| BATI | Baumata | 12.84 | 173 | P | P | 04 23 25.3 | +3.3 |
| JAGI | Jajag, Banyuwa | 13.62 | 216 | P | P | 04 23 29.3 | -0.8 |
| | baz=14,SNR=3.9 | | | | | | |
| JAGI | Jajag, Banyuwa | 13.62 | 216 | P | P | 04 23 31.5 | +1.5 |
| JAGI | Jajag, Banyuwa | 13.62 | 216 | eP | P | 04 23 29.3 | -0.8 |
| DLV | T Lat | 16.41 | 305 | eP | P | 04 23 58.2 | -0.4 |
| | 49nm,1.0s | | | | | | |
| LEM | Lembang | 17.29 | 237 | P | P | 04 24 07.9 | +1.2 |
| | 5.4nm,0.3s,baz=44,slow=8.1,SNR=14 | | | | | | |
| CISI | Cisompet, Garu | 17.53 | 235 | eP | P | 04 24 07.3 | -1.5 |
| | 66nm,0.8s | | | | | | |
| MTN | Manton Dam | 17.77 | 150 | P | P | 04 24 11.1 | +0.2 |
| | baz=18,SNR=19 | | | | | | |
| MTN | Manton Dam | 17.77 | 150 | eP | P | 04 24 11.1 | +0.2 |
| | 30nm,0.5s | | | | | | |
| MYKOM | Kota Tinggi | 18.32 | 268 | ⇑P | P | 04 24 17.3 | +1.4 |
| MYKOM | Kota Tinggi | 18.32 | 268 | eP | P | 04 24 16.2 | +0.3 |
| | 102nm,0.9s | | | | | | |
| KDU | Kakadu | 18.34 | 146 | P | P | 04 24 16.2 | +0.1 |
| | baz=18,SNR=21 | | | | | | |
| BTDF | Bukit Timah Da | 18.42 | 266 | P | P | 04 24 17.4 | +0.5 |
| | baz=18,SNR=7.4 | | | | | | |
| FRIM | Kepong | 20.52 | 272 | ⇓P | P | 04 24 36.9 | +0.9 |
| FITZ | Fitzroy Crossi | 20.89 | 171 | P | P | 04 24 39.1 | -0.1 |
| | 22nm,0.8s,baz=355,slow=6.2,SNR=59 | | | | | | |
| IPM | Ipoh | 21.17 | 276 | eP | P | 04 24 41.8 | -0.1 |
| | 28nm,0.8s | | | | | | |
| BKNI | Bangkinang | 21.24 | 264 | eP | P | 04 24 42.3 | -0.2 |
| KULM | Kulim | 21.62 | 278 | eP | P | 04 24 45.5 | -0.4 |
| | 14nm,0.7s | | | | | | |
| PSI | Prapat | 23.21 | 271 | P | P | 04 24 59.9 | -0.4 |
| | 20nm,0.8s,baz=64,slow=4.4,SNR=9.4 | | | | | | |
| PSI | Prapat | 23.21 | 271 | P | P | 04 24 59.8 | -0.4 |
| | baz=23,SNR=6.6 | | | | | | |
| PSI | Prapat | 23.21 | 271 | eP | P | 04 25 00.2 | -0.1 |
| | 28nm,0.9s | | | | | | |
| NONG | Nongkai | 24.14 | 311 | P | P | 04 25 07.9 | -0.4 |
| | 46nm,1.3s,6μm | | | | | | |
| GSI | Gunungsitoli | 24.61 | 267 | eP | P | 04 25 11.4 | -1.2 |
| | 62nm,0.6s | | | | | | |
| LOEI | Loei | 25.29 | 307 | P | P | 04 25 15.6 | -2.9 |
| | 26nm,1.0s | | | | | | |
| WRAB | Tennant Creek | 25.42 | 152 | eP | P | 04 25 18.9 | -0.7 |
| | 24nm,0.7s | | | | | | |
| WRA | Warramunga Arr | 25.42 | 152 | P | P | 04 25 18.8 | -0.9 |
| | 21nm,0.3s,baz=336,slow=9.6,SNR=363 | | | | | | |
| WRA | | | | PcP | PcP | 04 28 33.1 | -0.4 |
| | 1.7nm,0.5s,baz=325,slow=2.1,SNR=7.1 | | | | | | |
| WRA | | | | S | S | 04 29 04.5 | -4.1 |
| | 4.7nm,0.7s,baz=335,slow=16,SNR=9.7 | | | | | | |
| WRA | | | | ScP | ScP | 04 31 20.6 | -1.1 |
| | 3.3nm,0.7s,baz=340,slow=3.2,SNR=14 | | | | | | |
| UTHA | Uthaitani | 25.80 | 301 | P | P | 04 25 23.2 | +0.1 |
| | 11nm,0.7s,162nm | | | | | | |
| UTTA | Uttaradit | 25.98 | 307 | P | P | 04 25 24.8 | +0.2 |
| | 8.3nm,0.8s,76nm | | | | | | |
| COEN | Coen | 26.57 | 129 | P | P | 04 25 27.9 | -1.9 |
| | baz=27,SNR=4.1 | | | | | | |
| PHRA | Phrae | 26.65 | 308 | P | P | 04 25 31.3 | +0.8 |
| | 141nm,1.1s | | | | | | |
| LAMP | Lampang | 27.14 | 307 | P | P | 04 25 35.7 | +0.9 |
| | 8.6nm,0.8s | | | | | | |
| CM01 | Chiang Mai Arr | 27.62 | 306 | eP | P | 04 25 38.9 | -0.2 |
| PMG | Port Moresby | 27.63 | 116 | P | P | 04 25 39.1 | 0.0 |
| | 20nm,0.8s,baz=322,slow=6.7,SNR=7.6 | | | | | | |
| PMG | Port Moresby | 27.63 | 116 | eP | P | 04 25 38.8 | -0.4 |
| | 15nm,0.8s | | | | | | |
| CMAR | Chiang Mai Arr | 27.65 | 306 | P | P | 04 25 39.8 | +0.5 |
| | 5.4nm,0.6s,baz=136,slow=7.9,SNR=22 | | | | | | |
| CHTO | Chiang Mai | 27.84 | 307 | P | P | 04 25 41.2 | +0.2 |
| | 154nm,1.1s | | | | | | |
| CHTO | Chiang Mai | 27.84 | 307 | eP | P | 04 25 41.4 | +0.4 |
| | 24nm,0.8s | | | | | | |
| GYA | Guiyang | 27.97 | 329 | eP | P | 04 25 43.0 | +0.9 |
| GYA | | | | sP | sP | 04 28 12.8 | -1.7 |
| GYA | | | | PcP | PcP | 04 28 41.0 | +1.3 |
| GYA | | | | S | S | 04 29 50.6 | +2.1 |
| GYA | | | | ScP | ScP | 04 31 31.8 | +2.3 |
| GYA | | | | PcS | PcS | 04 32 23.0 | +0.2 |
| GYA | | | | ScS | ScS | 04 35 24.2 | +0.8 |
| GYA | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| WRKA | Warakurna | 28.14 | 168 | P | P | 04 25 43.6 | +0.1 |
| | baz=28,SNR=80 | | | | | | |
| CMAI | Chiengmai2 | 28.38 | 309 | P | P | 04 25 46.2 | +0.4 |
| | 20nm,0.9s,2μm | | | | | | |
| ASAR | Alice Springs | 28.53 | 157 | P | P | 04 25 46.9 | 0.0 |
| | 11nm,0.5s,baz=334,slow=7.4,SNR=141 | | | | | | |
| ASAR | | | | PcP | PcP | 04 28 40.8 | -0.3 |
| | 1.4nm,0.3s,baz=356,slow=2.9,SNR=5.7 | | | | | | |
| ASAR | | | | S | S | 04 29 54.8 | -2.3 |
| | 4.2nm,0.8s,baz=347,slow=22,SNR=14 | | | | | | |
| ASAR | | | | ScP | ScP | 04 31 30.2 | -1.0 |
| | 1.3nm,0.3s,baz=338,slow=2.5,SNR=12 | | | | | | |
| AS01 | Alice Springs | 28.55 | 157 | eP | P | 04 25 46.9 | -0.2 |
| AS01 | | | | eScP | ScP | 04 31 29.9 | -1.4 |
| QIS | Mount Isa | 28.70 | 144 | P | P | 04 25 48.7 | +0.3 |
| | baz=29,SNR=60 | | | | | | |
| WHN | Wuhan | 28.73 | 346 | eP | P | 04 25 45.9 | -2.6 |
| KMI | Kunming | 29.16 | 322 | P | P | 04 25 53.7 | +1.1 |
| KMI | | | | sP | sP | 04 28 22.7 | -2.7 |
| KMI | | | | PcP | PcP | 04 28 44.3 | +1.4 |
| KMI | | | | S | S | 04 30 09.4 | +2.3 |
| KMI | | | | ScP | ScP | 04 31 35.8 | +2.4 |
| KMI | | | | PcS | PcS | 04 32 27.0 | +0.1 |
| KMI | | | | PMZ | | | |
| | 10.0nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | 89nm,4.8s | | | | | | |
| MEEK | Meekatharra | 29.30 | 186 | P | P | 04 25 53.2 | -0.3 |
| | baz=29,SNR=6.1 | | | | | | |
| NJ2 | Nanjing | 29.43 | 354 | eP | P | 04 25 53.0 | -1.6 |
| NJ2 | | | | PMZ | | | |
| | 20nm,0.6s | | | | | | |
| CBIJ | Chichi jima | 30.98 | 36 | eP | P | 04 26 06.4 | -1.6 |
| MORW | Morawa | 32.06 | 190 | P | P | 04 26 17.1 | -0.1 |
| | baz=32,SNR=8.3 | | | | | | |
| CTA | Charters Tower | 32.70 | 135 | P | P | 04 26 23.8 | +1.1 |
| | 4.5nm,0.5s,baz=342,slow=8.1,SNR=6.9 | | | | | | |
| CTA | | | | PcP | PcP | 04 28 53.4 | +1.0 |
| | 1.9nm,0.5s,baz=281,slow=5.2,SNR=3.1 | | | | | | |
| CTAO | Charters Tower | 32.70 | 135 | eP | P | 04 26 23.0 | +0.2 |
| CD2 | Chengdu | 33.07 | 330 | eP | P | 04 26 26.5 | +0.7 |
| CD2 | | | | pP | pP | 04 27 56.7 | -0.6 |
| CD2 | | | | PP | PP | 04 28 07.9 | +0.2 |
| CD2 | | | | sP | sP | 04 28 58.2 | -1.8 |
| CD2 | | | | S | S | 04 31 08.8 | +2.2 |
| CD2 | | | | sS | sS | 04 33 56.9 | +0.5 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| BLDU | Ballidu | 33.47 | 189 | P | P | 04 26 28.8 | -0.3 |
| | baz=34,SNR=11 | | | | | | |
| XAN | Xi'an | 33.60 | 340 | P | P | 04 26 29.7 | -0.6 |
| XAN | | | | PMZ | | | |
| | 6.0nm,0.9s | | | | | | |
| FORT | Forrest | 33.70 | 171 | P | P | 04 26 31.1 | +0.1 |
| | baz=34,SNR=55 | | | | | | |
| FORT | Forrest | 33.70 | 171 | eP | P | 04 26 31.1 | +0.1 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 77nm,0.6s | | | | | | |
| KMBL | Kambalda | 33.81 | 180 | P | P | 04 26 32.0 | 0.0 |
| | baz=34,SNR=17 | | | | | | |
| KLBR | Kellerberrin | 34.29 | 187 | P | P | 04 26 35.8 | -0.2 |
| | baz=34,SNR=12 | | | | | | |
| KSRS | Korea Array | 35.06 | 8 | P | P | 04 26 41.0 | -1.3 |
| | 1.6nm,0.6s,baz=186,slow=10,SNR=6.5 | | | | | | |
| NWAO | Narrogin (SRO) | 35.67 | 187 | P | P | 04 26 47.8 | +0.4 |
| | baz=36,SNR=14 | | | | | | |
| NWAO | Narrogin (SRO) | 35.67 | 187 | eP | P | 04 26 47.7 | +0.2 |
| | 15nm,0.6s | | | | | | |
| MJAR | Matsushiro Arr | 36.85 | 22 | P | P | 04 26 55.8 | -1.4 |
| | 2.3nm,0.4s,baz=191,slow=9.3,SNR=11 | | | | | | |
| MJAR | | | | ScP | ScP | 04 31 59.2 | -0.8 |
| | 2.9nm,0.8s,baz=194,slow=3.4,SNR=6.8 | | | | | | |
| LZH | Lanzhou | 37.35 | 335 | eP | P | 04 27 02.5 | +1.0 |
| LZH | | | | pP | pP | 04 28 36.1 | +0.7 |
| LZH | | | | PMZ | | | |
| | 17nm,1.0s | | | | | | |
| RKGY | Rocky Gully | 37.36 | 187 | P | P | 04 27 01.7 | +0.4 |
| | baz=37,SNR=13 | | | | | | |
| BBOO | Buckleboo | 37.62 | 161 | P | P | 04 27 04.0 | +0.4 |
| | baz=38,SNR=38 | | | | | | |
| BJI | Beijing | 37.63 | 352 | P | P | 04 27 03.8 | +0.3 |
| BJI | | | | PcP | PcP | 04 29 07.1 | +0.4 |
| BJI | | | | ScP | ScP | 04 32 04.1 | +1.3 |
| BJI | | | | S | S | 04 32 13.3 | -1.2 |
| BJI | | | | PMZ | | | |
| | 5.0nm,0.7s | | | | | | |
| EIDS | Eidsvold | 39.50 | 137 | P | P | 04 27 19.7 | +0.8 |
| | baz=40,SNR=3.4 | | | | | | |
| LSA | Lhasa | 39.88 | 316 | eP | P | 04 27 23.0 | +0.6 |
| | 8.7nm,0.6s | | | | | | |
| CHLP | Challavanipeta | 40.51 | 296 | eP | P | 04 27 26.9 | -0.1 |
| CHLP | | | | IAmb | IAmb | 04 27 28.3 | |
| | comp=Z,18nm,1.1s | | | | | | |
| CMSA | Cobar Meteorol | 40.69 | 148 | P | P | 04 27 29.8 | +1.5 |
| | baz=41,SNR=13 | | | | | | |
| CN2 | Changchun | 41.10 | 4 | eP | P | 04 27 26.7 | -4.6 |
| ODAN | Odare | 41.10 | 309 | eP | P | 04 27 32.0 | +0.1 |
| | comp=Z,37nm,0.8s | | | | | | |
| TAPN | Taplejung | 41.10 | 310 | eP | P | 04 27 32.1 | +0.1 |
| PALK | Pallekele | 41.54 | 278 | P | P | 04 27 34.4 | -1.0 |
| | comp=Z,8.4nm,0.6s,baz=116,slow=7.6,SNR=4.8 | | | | | | |
| RAMN | Ramite | 41.76 | 309 | eP | P | 04 27 37.4 | +0.2 |
| | comp=Z,68nm,0.8s | | | | | | |
| GTA | Gaotai | 41.87 | 334 | eP | P | 04 27 38.6 | +0.9 |
| GTA | | | | pP | pP | 04 29 15.6 | +1.1 |
| GTA | | | | sP | sP | 04 30 16.2 | +0.5 |
| GTA | | | | PMZ | | | |
| | comp=Z,15nm,0.9s | | | | | | |
| USRK | Ussuriysk Ar. | 42.30 | 11 | P | P | 04 27 40.1 | -0.7 |
| | comp=Z,11nm,0.7s,baz=197,slow=6.2,SNR=18 | | | | | | |
| MDJ | Mudanjiang | 42.32 | 8 | P | P | 04 27 41.4 | +0.4 |
| MDJ | | | | PMZ | | | |
| | comp=Z,13nm,0.6s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,43nm,5.3s | | | | | | |
| PVM | Polavaram | 42.36 | 293 | eP | P | 04 27 41.2 | -0.5 |
| PVM | | | | IAmb | IAmb | 04 27 42.6 | |
| | comp=Z,14nm,0.8s | | | | | | |
| GUN | Gumba | 42.79 | 310 | eP | P | 04 27 45.3 | 0.0 |
| | comp=Z,57nm,0.6s | | | | | | |
| PKI | Pulchoki | 42.99 | 309 | eP | P | 04 27 46.4 | -0.5 |
| PKIN | Phulchoki | 43.00 | 309 | eP | P | 04 27 46.4 | -0.5 |
| KKN | Kakani | 43.19 | 309 | eP | P | 04 27 48.2 | -0.1 |
| DMN | Daman | 43.24 | 309 | eP | P | 04 27 48.6 | -0.2 |
| | comp=Z,53nm,0.9s | | | | | | |
| ARMA | Armidale | 43.26 | 142 | P | P | 04 27 51.1 | +2.5 |
| | baz=43,SNR=15 | | | | | | |
| ARMA | Armidale | 43.26 | 142 | eP | P | 04 27 51.2 | +2.5 |
| | comp=Z,38nm,0.8s | | | | | | |
| ARPS | Mount Arapiles | 43.27 | 157 | P | P | 04 27 49.6 | +1.1 |
| | baz=43,SNR=48 | | | | | | |
| SKHT | Srikalahasti | 43.36 | 287 | eP | P | 04 27 49.4 | -0.1 |
| SKHT | | | | IAmb | IAmb | 04 27 50.2 | |
| | comp=Z,24nm,1.0s | | | | | | |
| ADKI | Addanki | 43.55 | 290 | eP | P | 04 27 51.0 | 0.0 |
| ADKI | | | | IAmb | IAmb | 04 27 51.8 | |
| | comp=Z,17nm,1.0s | | | | | | |
| GKN | Gorkha | 43.79 | 309 | eP | P | 04 27 52.7 | -0.2 |
| | comp=Z,72nm,0.9s | | | | | | |
| NJS | Nagarjunasagar | 44.34 | 291 | eP | P | 04 27 56.8 | -0.4 |
| NJS | | | | IAmb | IAmb | 04 27 57.0 | |
| | comp=Z,14nm,0.7s | | | | | | |
| KOLN | Koldanda | 44.49 | 308 | eP | P | 04 27 58.3 | -0.1 |
| | comp=Z,118nm,0.7s | | | | | | |
| DANN | Dangsing | 44.64 | 309 | eP | P | 04 27 59.6 | 0.0 |
| RPR | Rampur | 44.93 | 294 | eP | P | 04 28 01.5 | -0.1 |
| RPR | | | | IAmb | IAmb | 04 28 02.0 | |
| | comp=Z,26nm,0.8s | | | | | | |
| HYB | Hyderabad | 45.24 | 292 | i P | P | 04 28 03.0 | -1.1 |
| HYBB | Hyderabad (bro | 45.24 | 292 | eP | P | 04 28 03.6 | -0.5 |
| HYBB | | | | IAmb | IAmb | 04 28 04.4 | |
| | comp=Z,37nm,0.8s | | | | | | |
| CAN | Canberra | 45.36 | 149 | eP | P | 04 28 06.2 | +1.5 |
| | comp=Z,36nm,0.5s | | | | | | |
| CNB | Canberra Magne | 45.54 | 148 | P | P | 04 28 07.7 | +1.6 |
| | baz=46,SNR=9.3 | | | | | | |
| URV | Uravakonda | 45.92 | 288 | eP | P | 04 28 08.3 | -1.0 |
| URV | | | | IAmb | IAmb | 04 28 09.1 | |
| | comp=Z,24nm,0.8s | | | | | | |
| SONM | Songino Array | 47.05 | 346 | P | P | 04 28 17.3 | -0.1 |
| | comp=Z,1.5nm,0.4s,baz=166,slow=9.1,SNR=13 | | | | | | |
| SONM | | | | PcP | PcP | 04 29 37.8 | -0.9 |
| | comp=Z,0.6nm,0.5s,baz=160,slow=2.9,SNR=3.0 | | | | | | |
| SONM | | | | pP | pP | 04 30 01.9 | +4.5 |
| | comp=Z,0.6nm,0.8s,baz=157,slow=8.0,SNR=3.7 | | | | | | |
| SONM | | | | ScP | ScP | 04 32 40.0 | -0.9 |
| | comp=Z,1.9nm,0.6s,baz=154,slow=4.2,SNR=8.1 | | | | | | |
| SONA1 | Songino Array | 47.05 | 346 | eP | P | 04 28 17.6 | +0.1 |
| SONA1 | | | | eScP | ScP | 04 32 39.7 | -1.2 |
| DZM | Mont Dzumac | 49.73 | 122 | P | P | 04 28 39.0 | +1.2 |
| | comp=Z,18nm,1.0s,baz=180,slow=19,SNR=4.2 | | | | | | |
| WMQ | Urumqi | 51.13 | 328 | P | P | 04 28 48.0 | +0.4 |
| WMQ | | | | PMZ | | | |
| | comp=Z,21nm,1.0s | | | | | | |
| KSH | Kashi | 55.68 | 317 | P | P | 04 29 21.3 | +1.3 |
| KSH | | | | esP | sP | 04 32 03.7 | 0.0 |
| KSH | | | | PcS | PcS | 04 34 11.9 | -0.7 |
| KSH | | | | S | S | 04 36 26.8 | +1.3 |
| KSH | | | | PMZ | | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| MKAR | Makanchi Array | 55.95 | 328 | P | P | 04 29 21.6 | -0.1 |
| | comp=Z,4.4nm,0.3s,baz=130,slow=8.2,SNR=30 | | | | | | |
| MKAR | | | | ScP | ScP | 04 33 18.0 | -1.4 |
| | comp=Z,1.2nm,0.7s,baz=125,slow=4.7,SNR=5.2 | | | | | | |
| TKM2 | Tokmak 2 | 57.62 | 321 | eP | P | 04 29 34.0 | +0.5 |
| | comp=Z,6.3nm,0.9s | | | | | | |
| AAK | Ala-Archa | 58.18 | 320 | P | P | 04 29 37.7 | +0.6 |
| | comp=Z,1.5nm,0.4s,baz=147,slow=4.9,SNR=5.7 | | | | | | |
| AAK | Ala-Archa | 58.18 | 320 | eP | P | 04 29 37.8 | +0.6 |
| | comp=Z,4.3nm,0.6s | | | | | | |
| PETK | Petropavlovsk- | 58.23 | 24 | P | P | 04 29 37.5 | +0.4 |
| | comp=Z,6.4nm,0.9s,baz=203,slow=4.2,SNR=7.4 | | | | | | |
| PETK | | | | PcP | PcP | 04 30 20.0 | -1.1 |
| | comp=Z,1.1nm,0.6s,baz=217,slow=6.9,SNR=5.3 | | | | | | |
| KBL | Kabul | 58.62 | 309 | eP | P | 04 29 40.2 | -0.1 |
| | comp=Z,14nm,0.8s | | | | | | |
| EKS2 | Erkin-Say | 58.66 | 320 | eP | P | 04 29 40.6 | +0.3 |
| | comp=Z,5.4nm,1.0s | | | | | | |
| ZALV | Zalesovo Beam | 59.59 | 335 | P | P | 04 29 45.2 | -0.9 |
| | comp=Z,1.6nm,0.3s,baz=132,slow=6.4,SNR=3.4 | | | | | | |
| KURK | Kurchatov | 60.29 | 330 | eP | P | 04 29 50.4 | -0.4 |
| | comp=Z,17nm,0.7s | | | | | | |
| KKAR | Karatay Array | 60.99 | 319 | eP | P | 04 29 55.7 | +0.1 |
| RPZ | Rata Peaks | 63.59 | 142 | eP | P | 04 30 13.3 | +0.8 |
| | comp=Z,9.4nm,0.5s | | | | | | |
| URZ | Urewera | 64.94 | 135 | P | P | 04 30 21.2 | +0.1 |
| | comp=Z,4.3nm,0.3s,baz=114,slow=2.1,SNR=7.8 | | | | | | |
| BVAR | Borovoye Array | 65.81 | 329 | P | P | 04 30 25.5 | -0.8 |
| | comp=Z,1.3nm,0.3s,baz=122,slow=7.2,SNR=8.2 | | | | | | |
| BRVK | Borovoye | 65.88 | 329 | eP | P | 04 30 25.6 | -1.1 |
| GEYT | Alibeck | 68.06 | 310 | P | P | 04 30 40.6 | +0.1 |
| | comp=Z,2.6nm,0.4s,baz=88,slow=3.3,SNR=2.1 | | | | | | |
| CASY | Casey | 69.26 | 185 | eP | P | 04 30 46.5 | -0.6 |
| | comp=Z,8.1nm,0.7s | | | | | | |
| ABKAR | Akbulak array | 70.15 | 322 | eP | P | 04 30 52.2 | -0.6 |
| ABPO | Ambohimpanom | 76.65 | 250 | eP | P | 04 31 30.2 | -0.5 |
| RAYN | Ar Rayn | 76.72 | 293 | eP | P | 04 31 29.8 | -1.1 |
| | comp=Z,1.8nm,0.5s | | | | | | |
| MAW | Mawson | 81.18 | 199 | P | P | 04 31 53.4 | 0.0 |
| | comp=Z,2.5nm,0.6s,baz=76,slow=7.6,SNR=4.8 | | | | | | |
| VNDA | Vanda | 82.95 | 172 | P | P | 04 32 02.2 | -0.1 |
| | comp=Z,2.1nm,0.6s,baz=317,slow=7.1,SNR=17 | | | | | | |
| VNDA | Vanda | 82.95 | 172 | eP | P | 04 32 02.5 | +0.2 |
| KMBO | Kilima Mbogo | 84.97 | 269 | P | P | 04 32 14.1 | +0.2 |
| | comp=Z,4.7nm,0.7s,baz=73,slow=6.3,SNR=14 | | | | | | |
| KMBO | Kilima Mbogo | 84.97 | 269 | eP | P | 04 32 14.5 | +0.6 |
| CAST | Castle Rocks | 85.76 | 27 | eP | P | 04 32 16.9 | +0.5 |
| BPAW | Bear Paw Mtn. | 86.27 | 26 | eP | P | 04 32 18.1 | -0.7 |
| MLY | Manley | 86.40 | 25 | eP | P | 04 32 19.6 | +0.1 |
| BRTR | Keskin Array B | 87.20 | 309 | P | P | 04 32 22.0 | -1.9 |
| | comp=Z,0.5nm,0.3s,baz=90,slow=0.7,SNR=6.4 | | | | | | |
| BRTR | | | | pP | pP | 04 34 26.7 | +4.2 |
| | comp=Z,1.6nm,0.9s,baz=98,slow=2.9,SNR=5.2 | | | | | | |
| ILAR | Eielson Array | 88.05 | 25 | P | P | 04 32 25.1 | -1.9 |
| | comp=Z,0.8nm,0.7s,baz=276,slow=4.0,SNR=16 | | | | | | |
| SYO | Syowa Base | 89.77 | 201 | ⇑eP | P | 04 32 33.6 | -1.3 |
| AKASG | Malin Array Be | 89.85 | 321 | P | P | 04 32 33.8 | -2.0 |
| | comp=Z,0.4nm,0.3s,baz=75,slow=5.7,SNR=3.7 | | | | | | |
| FINES | FINESS Array B | 90.62 | 331 | P | P | 04 32 37.2 | -1.9 |
| | comp=Z,2.6nm,0.9s,baz=90,slow=3.8,SNR=4.2 | | | | | | |
| QSPA | South Pole Qui | 92.55 | 180 | eP | P | 04 32 48.2 | +0.2 |
| INK | Inuvik | 92.84 | 21 | P | P | 04 32 48.2 | -0.9 |
| | comp=Z,3.0nm,0.9s,baz=313,slow=2.3,SNR=5.6 | | | | | | |
| STHS | Stebnicka Huta | 95.11 | 320 | eP | P | 04 33 00.3 | +0.4 |
| NVAR | Mina Array Bea | 111.01 | 47 | PKiKP | PKiKP | 04 38 07.6 | +0.4 |
| | comp=Z,0.6nm,0.6s,baz=241,slow=1.5,SNR=4.4 | | | | | | |
| TORD | Torodi Ar. Bea | 118.89 | 286 | PKP | PKPdf | 04 38 21.6 | -1.1 |
| | comp=Z,1.0nm,0.7s,baz=73,slow=1.8,SNR=10 | | | | | | |
| TORD | | | | SKP | | 04 41 05.7 | |
| | comp=Z,0.9nm,0.7s,baz=47,slow=2.3,SNR=6.2 | | | | | | |
| TORD | | | | PKKPbc | PKKPbc | 04 48 40.1 | +0.7 |
| | comp=Z,0.5nm,0.8s,baz=266,slow=2.7,SNR=6.0 | | | | | | |
| SCHQ | Schefferville | 122.25 | 6 | PKP | PKPdf | 04 38 27.9 | -0.2 |
| | comp=Z,1.5nm,0.4s,baz=288,slow=3.2,SNR=4.2 | | | | | | |
| TXAR | Lajitas Array | 125.84 | 51 | PKP | PKPdf | 04 38 36.0 | +0.2 |
| | comp=Z,0.6nm,0.7s,baz=192,slow=1.3,SNR=8.9 | | | | | | |
| TRQA | Tornquist | 144.54 | 174 | ePKPdf | PKPdf | 04 39 10.1 | +0.1 |
| LPAZ | La Paz | 163.07 | 144 | PKP | PKPdf | 04 39 37.6 | +0.9 |
| | comp=Z,1.7nm,0.8s,baz=325,slow=1.9,SNR=4.4 | | | | | | |
| LPAZ | | | | PKPab | PKPab | 04 40 31.8 | +1.6 |
| | comp=Z,2.0nm,0.7s,baz=230,slow=2.4,SNR=5.6 | | | | | | |

**IDC 12 04:40:53.0±1.7, 26°.28S×70°.76E, h0km, mb3.7/5, mb1 3.8/5, mb1mx3.5/30, mbtmp3.7/5, Error ellipse: s-maj=58.9km s-min=31.0km az=73.0, Indian Ocean Triple Junction**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S1 | Diego Carcia H | 18.60 | 5 | T | T | 05 04 08.6 | |
| | baz=186,slow=76,SNR=12 | | | | | | |
| H08S2 | Diego Garcia H | 18.60 | 5 | T | T | 05 04 09.0 | |
| | baz=186,slow=76,SNR=15 | | | | | | |
| H08S3 | Diego Garcia H | 18.62 | 5 | T | T | 05 04 09.9 | |
| | baz=186,slow=76,SNR=16 | | | | | | |
| H01W2 | Cape Leeuwin H | 38.07 | 114 | T | T | 05 28 29.3 | |
| | baz=272,slow=75,SNR=10 | | | | | | |
| H01W3 | Cape Leeuwin H | 38.07 | 114 | T | T | 05 28 33.7 | |
| | baz=272,slow=75,SNR=11 | | | | | | |
| H01W1 | Cape Leeuwin H | 38.09 | 114 | T | T | 05 28 31.5 | |
| | baz=272,slow=75,SNR=10 | | | | | | |
| ASAR | Alice Springs | 56.79 | 102 | P | P | 04 50 39.2 | -0.3 |
| | 0.2nm,0.4s,baz=258,slow=6.3,SNR=4.1 | | | | | | |
| WRA | Warramunga Arr | 58.32 | 98 | P | P | 04 50 50.4 | +0.2 |
| | 0.3nm,0.7s,baz=259,slow=9.3,SNR=3.7 | | | | | | |
| VNDA | Vanda | 64.78 | 166 | P | P | 04 51 32.9 | -0.1 |
| | 1.2nm,0.9s,baz=246,slow=7.4,SNR=5.9 | | | | | | |
| MKAR | Makanchi Array | 73.47 | 8 | P | P | 04 52 26.0 | -1.1 |
| | 0.3nm,0.3s,baz=180,slow=7.1,SNR=2.2 | | | | | | |
| KURBB | Kurchatov Arra | 76.86 | 5 | P | P | 04 52 47.6 | +1.0 |
| | 0.6nm,0.8s,baz=184,slow=5.9,SNR=4.5 | | | | | | |

*ISCJB 12 04:50:57.9±0.4, 23°.09N±0°.02×121°.58E±0°.03, h23km±7km, Error ellipse: s-maj=5.4km s-min=4.0km az=7.4*
*TAP 12 04:50:58.1, 23°.08N×121°.53E, h23km, ML2.9, C*
*JMA 12 04:50:58.3±0.1, 23°.15N×121°.47E, h34km±2km, M3.0*
**ISC 12 04:50:58.3±1.0, 23°.09N±0°.03×121°.55E±0°.03, h26km±7km, n32, σ0s.72/53, 1C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHKT | Chengkung | 0.17 | 275 | P | Pb | 04 51 03.9 | +0.3 |
| | baz=276 | | | | | | |
| CHKT | | | | S | Sb | 04 51 07.3 | 0.0 |
| | baz=276 | | | | | | |
| TWF1 | Yuli | 0.35 | 319 | P | Pb | 04 51 06.2 | 0.0 |
| | baz=322 | | | | | | |
| TWF1 | | | | eS | Sb | 04 51 11.4 | -0.1 |
| | baz=322 | | | | | | |
| EHY | Hungye | 0.47 | 334 | P | Pb | 04 51 07.8 | -0.1 |
| | baz=336 | | | | | | |
| EHY | | | | eS | Sb | 04 51 14.1 | -0.5 |
| | baz=336 | | | | | | |
| ELDTW | Lidau | 0.50 | 282 | P | Pb | 04 51 07.8 | -0.8 |
| | baz=282 | | | | | | |
| ELDTW | | | | eS | Sb | 04 51 13.7 | -1.8 |
| | baz=282 | | | | | | |
| TWG | Pinlang | 0.51 | 239 | P | Pb | 04 51 08.7 | 0.0 |
| | baz=237 | | | | | | |
| TWG | | | | eS | Sb | 04 51 15.6 | -0.1 |
| | baz=237 | | | | | | |
| YUS | Yu-Shan | 0.68 | 307 | P | Pb | 04 51 11.4 | -0.4 |
| | baz=307 | | | | | | |
| STYT | Tauyuan | 0.73 | 276 | P | Pb | 04 51 11.8 | -0.6 |
| | baz=276 | | | | | | |
| STYT | | | | eS | Sb | 04 51 20.9 | -1.1 |
| | baz=276 | | | | | | |
| ECL | Taimali | 0.73 | 228 | P | Pb | 04 51 11.8 | -0.5 |
| | baz=227 | | | | | | |
| ECL | | | | eS | Sb | 04 51 21.2 | -0.8 |
| | baz=227 | | | | | | |
| ESL | Shilin | 0.73 | 352 | eP | Pb | 04 51 12.0 | -0.5 |
| | baz=353 | | | | | | |
| WDT | Danda | 0.77 | 331 | eP | Pb | 04 51 12.7 | -0.5 |
| | baz=331 | | | | | | |
| WDT | | | | eS | Sb | 04 51 21.7 | -1.8 |
| | baz=331 | | | | | | |
| ALS | Alishan | 0.80 | 302 | P | Pb | 04 51 13.6 | -0.2 |
| | baz=302 | | | | | | |
| ALS | | | | eS | Sb | 04 51 24.4 | 0.0 |
| | baz=302 | | | | | | |
| SGST | Jiashian | 0.89 | 270 | P | Pn | 04 51 15.4 | +0.4 |
| | baz=269 | | | | | | |
| SGST | | | | eS | Sn | 04 51 27.0 | -0.1 |
| | baz=269 | | | | | | |
| SSD | Sandimen | 0.91 | 248 | eP | Pb | 04 51 15.2 | -0.1 |
| | baz=247 | | | | | | |
| CHN4 | Tsaushan | 0.92 | 287 | ⇑iP | Pn | 04 51 15.9 | +0.4 |
| | baz=287 | | | | | | |
| CHN4 | | | | eS | Sn | 04 51 28.5 | +0.7 |
| | baz=287 | | | | | | |
| CHN1 | Nanshi | 0.94 | 276 | i P | Pn | 04 51 16.4 | +0.6 |
| | baz=276 | | | | | | |
| CHN1 | | | | eS | Sn | 04 51 29.0 | +0.5 |
| | baz=276 | | | | | | |
| CHN5 | Tsauling | 0.95 | 303 | P | Pn | 04 51 16.4 | +0.4 |
| | baz=303 | | | | | | |
| CHN5 | | | | eS | Sb | 04 51 28.5 | +0.2 |
| | baz=303 | | | | | | |
| EAST | Anshuo | 0.95 | 223 | eP | Pb | 04 51 15.8 | -0.3 |
| | baz=221 | | | | | | |
| TWK | Hsinying | 0.99 | 281 | eP | Pn | 04 51 17.5 | +1.0 |
| | baz=280 | | | | | | |
| TWK | | | | eS | Sn | 04 51 30.6 | +0.9 |
| | baz=280 | | | | | | |
| SMLT | Sun Moon Lake | 0.99 | 323 | eP | Pb | 04 51 16.6 | -0.3 |
| | baz=324 | | | | | | |
| SMLT | | | | eS | Sb | 04 51 28.7 | -0.9 |
| | baz=324 | | | | | | |
| TWD | Chiawan | 0.99 | 3 | eP | Pb | 04 51 16.4 | -0.4 |
| | baz=3.0 | | | | | | |
| TYC | Yuchr | 1.03 | 322 | P | Pb | 04 51 17.9 | +0.4 |
| | baz=323 | | | | | | |
| TYC | | | | eS | Sn | 04 51 31.7 | +1.0 |
| | baz=323 | | | | | | |
| LAY | Lan-yu | 1.04 | 180 | eP | Pn | 04 51 17.0 | -0.3 |
| | baz=178 | | | | | | |
| LAY | | | | eS | Sn | 04 51 31.1 | +0.2 |
| | baz=178 | | | | | | |
| WHF | Hehuan Shan | 1.09 | 346 | eP | Pn | 04 51 18.1 | -0.2 |
| | baz=347 | | | | | | |
| SCZT | Fangliau | 1.11 | 230 | eP | Pb | 04 51 19.3 | +0.5 |
| | baz=229 | | | | | | |
| ENA | Nanau | 1.35 | 8 | eP | Pn | 04 51 22.0 | +0.6 |
| | baz=8.0 | | | | | | |
| ENTT | Nioudou | 1.55 | 1 | eP | Pn | 04 51 24.4 | +0.2 |
| | baz=1.0 | | | | | | |
| JYNG | Yonagunijimaku | 1.87 | 43 | P | Pn | 04 51 29.9 | +1.3 |
| JYNG | | | | eS | Sn | 04 51 51.5 | +0.1 |
| HATJ | Hateruma jima | 2.29 | 65 | eS | Sn | 04 52 01.6 | -0.1 |
| IRIF | Iriomote-Funau | 2.36 | 58 | P | Pn | 04 51 36.5 | +1.2 |
| IRIF | | | | eS | Sn | 04 52 04.5 | +1.1 |
| JKRS | Kuro-shima | 2.53 | 63 | P | Pn | 04 51 38.2 | +0.5 |
| JKRS | | | | eS | Sn | 04 52 08.2 | +0.4 |
| JIJ | Ishigaki jima | 2.70 | 61 | eS | Sn | 04 52 11.3 | -0.6 |
| JISG | Ishigakijimahi | 2.94 | 59 | P | Pn | 04 51 44.2 | +0.9 |
| JISG | | | | eS | Sn | 04 52 16.2 | -1.6 |

**NNC 12 04:52:39.6±1.9, 42°.16N×80°.88E, h0km, mb3.5, mpv3.2, 8C-7D, Error ellipse: s-maj=12.6km s-min=11.0km az=175.0, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PDGK | Podgornoye | 1.55 | 319 | ⇑P | Pn | 04 53 07.3 | -1.1 |
| | 16nm,0.3s | | | | | | |
| PDGK | | | | ⇓S | Sg | 04 53 29.6 | +0.1 |
| | 61nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 3.98 | 283 | ⇓Pn | Pn | 04 53 44.5 | +2.4 |
| | 2.8nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 04 54 42.8 | |
| | 12nm,0.5s | | | | | | |
| MK31 | Makanchi Array | 4.74 | 12 | ⇑Pn | Pn | 04 53 53.3 | +0.9 |
| | 0.4nm,0.2s | | | | | | |
| MK31 | | | | ⇓Sn | Sn | 04 54 48.4 | +0.4 |
| | 6.6nm,0.6s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 04 55 09.3 | |
| | 8.3nm,0.6s | | | | | | |
| AAK | Ala-Archa | 4.75 | 278 | ⇑Pg | Pb | 04 54 05.2 | +1.3 |
| | 4.9nm,0.8s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 04 55 07.8 | |
| | 15nm,0.7s | | | | | | |
| MNAS | Manas | 6.22 | 276 | ⇑Pg | Pb | 04 54 31.8 | +2.9 |
| | 1.4nm,0.6s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 04 55 55.5 | |
| | 2.6nm,0.5s | | | | | | |
| KK31 | Karatay Array | 7.70 | 281 | ⇑Pg | Pb | 04 54 59.0 | +5.0 |
| | 0.8nm,0.7s,baz=90,slow=16,SNR=3.9 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 04 56 42.6 | |
| | 2.0nm,0.5s,baz=88,slow=28,SNR=7.2 | | | | | | |
| KURBB | Kurchatov Arra | 8.62 | 350 | ⇓Lg | Lg | 04 57 07.3 | |
| | 6.6nm,0.6s | | | | | | |
| KURK | Kurchatov | 8.70 | 350 | ⇓Lg | Lg | 04 57 04.4 | |
| | 19nm,1.0s | | | | | | |

*ISCJB 12 04:59:01.8±0.3, 26°.21S±0°.07×70°.91E±0°.08, h10km, mb4.5/34, MS4.2/19, Error ellipse: s-maj=9.9km s-min=9.6km az=169.7*
*IDC 12 04:59:01.8±0.5, 26°.17S×70°.87E, h0km, mb4.3/21, mb1 4.4/21, mb1mx4.3/49, mbtmp4.3/21, MS4.2/19, Ms1 4.2/19, ms1mx4.0/31, Error ellipse: s-maj=14.5km s-min=13.4km az=180.0*
*BJI 12 04:59:02.0, 26°.10S×70°.90E, h20km, mb4.7/15, mB5.0/8, Ms4.7/8, Ms7 4.4/8*
*NEIC 12 04:59:03.5±0.2, 26°.19S×70°.87E, h10km, mb4.9/14, Error ellipse: s-maj=6.5km s-min=6.0km az=65.0*
*GCMT 12 04:59:03.5±0.3, 25°.99S×70°.78E, h16km±1km, MW5.0/73, Moment Tensor Solution. s26,c28; s73,c100; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-3.46±.25; Mθθ1.76±.15; Mφφ1.70±.16; Mrθ0.90±.42; Mθφ-1.54±.10; Mφr1.87±.51; Best double couple: M0 3.85800×10^16 NP1:φs158.00000°, δ56.00000°, λ-62.00000°. NP2: φs295.00000°, δ43.00000°, λ-124.00000°. Principal axes: T 3.3490, Plg7.0000°, Azm229.0000°; N 1.0180, Plg23.0000°, Azm322.0000°; P -4.3670, Plg66.0000°, Azm123.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
**ISC 12 04:59:03.8±0.4, 26°.27S±0°.09×70°.78E±0°.09, h10km, n65, σ1s.29/52, mb4.5/34, MS4.2/19, Indian Ocean Triple Junction**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S1 | Diego Carcia H | 18.60 | 5 | T | T | 05 22 19.2 | |
| | baz=186,slow=76,SNR=183 | | | | | | |
| H08S2 | Diego Garcia H | 18.60 | 5 | T | T | 05 22 19.3 | |
| | baz=186,slow=76,SNR=295 | | | | | | |
| H08S3 | Diego Garcia H | 18.61 | 5 | T | T | 05 22 20.6 | |
| | baz=186,slow=76,SNR=234 | | | | | | |
| OPO | Ambohidratompo | 23.09 | 285 | P | P | 05 04 11.7 | +1.5 |
| | 2.8nm,0.7s,baz=96,slow=10,SNR=6.6 | | | | | | |
| OPO | | | | LR | LR | 05 10 40.5 | |
| | comp=Z,586nm,21.0s,slow=30 | | | | | | |
| PALK | Pallekele | 34.71 | 17 | LR | LR | 05 16 35.6 | |
| | comp=Z,833nm,20.0s,baz=116,slow=30 | | | | | | |
| H01W2 | Cape Leeuwin H | 38.06 | 114 | T | T | 05 46 42.0 | |
| | baz=272,slow=75,SNR=83 | | | | | | |
| H01W3 | Cape Leeuwin H | 38.06 | 114 | T | T | 05 46 45.4 | |
| | baz=272,slow=75,SNR=85 | | | | | | |
| H01W1 | Cape Leeuwin H | 38.07 | 114 | T | T | 05 46 43.1 | |
| | baz=272,slow=75,SNR=83 | | | | | | |
| MATP | Matopo | 39.12 | 269 | P | P | 05 06 32.6 | +0.7 |
| | 4.3nm,0.7s,baz=101,slow=9.3,SNR=9.6 | | | | | | |
| PSI | Prapat | 39.70 | 48 | LR | LR | 05 19 05.0 | |
| | comp=Z,470nm,20.9s,baz=232,slow=30 | | | | | | |
| LEM | Lembang | 40.04 | 68 | LR | LR | 05 19 33.0 | |
| | comp=Z,358nm,20.3s,baz=235,slow=31 | | | | | | |
| BOSA | Boshof | 40.29 | 256 | P | P | 05 06 42.0 | +0.5 |
| | 6.9nm,1.1s,baz=82,slow=6.4,SNR=5.7 | | | | | | |
| BOSA | | | | LR | LR | 05 19 50.6 | |
| | comp=Z,877nm,19.9s,baz=103,slow=31 | | | | | | |
| KMBO | Kilima Mbogo | 40.81 | 302 | P | P | 05 06 45.5 | -0.5 |
| | 1.0nm,0.3s,baz=117,slow=8.7,SNR=7.8 | | | | | | |
| LSZ | Lusaka | 41.13 | 277 | P | P | 05 06 48.0 | -0.6 |
| | 2.1nm,0.6s,baz=93,slow=8.6,SNR=6.4 | | | | | | |
| LSZ | Lusaka | 41.13 | 277 | eP | P | 05 06 48.1 | -0.5 |
| | 136nm,2.5s | | | | | | |
| MAW | Mawson | 41.63 | 185 | P | P | 05 06 51.5 | -0.3 |
| | 3.5nm,0.8s,baz=26,slow=12,SNR=7.6 | | | | | | |
| MAW | | | | LR | LR | 05 20 28.3 | |
| | comp=Z,833nm,19.7s,baz=36,slow=31 | | | | | | |
| CASY | Casey | 47.01 | 159 | eP | P | 05 07 35.1 | +0.2 |
| | 7.1nm,1.7s | | | | | | |
| KAPI | Kappang | 51.29 | 74 | P | P | 05 08 07.1 | -1.3 |
| | 4.6nm,1.0s,baz=242,slow=16,SNR=4.0 | | | | | | |
| CMAR | Chiang Mai Arr | 52.21 | 35 | P | P | 05 08 13.5 | -1.6 |
| | 2.7nm,0.5s,baz=221,slow=7.7,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 05 28 11.1 | |
| | comp=Z,210nm,18.5s,baz=215,slow=34 | | | | | | |
| UTTA | Uttaradit | 52.46 | 37 | P | P | 05 08 17.5 | +0.6 |
| | 3.6nm,0.7s,56nm | | | | | | |
| RAYN | Ar Rayn | 55.22 | 331 | eP | P | 05 08 36.8 | -0.3 |
| | 9.1nm,1.3s | | | | | | |
| ASAR | Alice Springs | 56.78 | 102 | P | P | 05 08 47.2 | -1.3 |
| | 2.7nm,0.6s,baz=249,slow=6.3,SNR=34 | | | | | | |
| WRA | Warramunga Arr | 58.30 | 98 | P | P | 05 08 58.1 | -1.2 |
| | 3.8nm,0.8s,baz=253,slow=7.1,SNR=34 | | | | | | |
| WRA | | | | LR | LR | 05 33 00.2 | |
| | comp=Z,193nm,18.4s,baz=255,slow=35 | | | | | | |
| WRAB | Tennant Creek | 58.32 | 98 | eP | P | 05 08 59.2 | -0.2 |
| | 6.1nm,0.8s | | | | | | |
| SNAA | Sanae | 60.15 | 200 | P | P | 05 09 11.5 | +0.1 |
| | 0.8nm,0.7s,baz=99,slow=8.6,SNR=11 | | | | | | |
| SIJI | Sorong | 63.33 | 77 | P | P | 05 09 33.8 | +0.2 |
| | 16nm,0.9s,baz=330,slow=4.0,SNR=3.6 | | | | | | |
| QSPA | South Pole Qui | 63.86 | 180 | P | P | 05 09 36.5 | +0.1 |
| | 5.4nm,1.0s,baz=259,slow=1.0,SNR=18 | | | | | | |
| QSPA | South Pole Qui | 63.86 | 180 | eP | P | 05 09 36.2 | -0.2 |
| | 8.9nm,1.0s | | | | | | |
| VNDA | Vanda | 64.78 | 166 | P | P | 05 09 43.0 | +0.9 |
| | 9.1nm,0.8s,baz=275,slow=6.9,SNR=27 | | | | | | |
| GEYT | Alibeck | 64.96 | 349 | LR | LR | 05 33 46.7 | |
| | comp=Z,106nm,20.8s,baz=170,slow=32 | | | | | | |
| KSH | Kashi | 65.63 | 4 | P | P | 05 09 44.1 | -4.1 |
| KSH | | | | PMZ | | | |
| | 11nm,0.9s | | | | | | |
| KSH | | | | PMZ | | | |
| | 110nm,4.5s | | | | | | |
| SBA | Scott Base | 65.77 | 167 | eP | P | 05 09 49.6 | +1.1 |
| | 23nm,1.4s | | | | | | |
| EKS2 | Erkin-Say | 68.65 | 2 | eP | P | 05 10 06.9 | -0.4 |
| | 17nm,1.4s | | | | | | |
| AAK | Ala-Archa | 68.65 | 3 | eP | P | 05 10 07.1 | -0.3 |
| | 8.4nm,1.1s | | | | | | |
| TKM2 | Tokmak 2 | 68.99 | 4 | eP | P | 05 10 08.7 | -0.8 |
| | 11nm,0.8s | | | | | | |
| KKAR | Karatay Array | 69.03 | 360 | eP | P | 05 10 09.2 | -0.3 |
| | 7.1nm,0.9s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| XAN | Xi'an | 70.06 | 33 | P | P | 05 10 14.6 | -1.5 |
| XAN | | | | pP | pP | 05 10 23.0 | +3.6 |
| XAN | | | | PMZ | | | |
| | 7.0nm,0.8s | | | | | | |
| XAN | | | | LE | | | |
| | 81nm,15.3s | | | | | | |
| XAN | | | | LZ | | | |
| | 100nm,15.3s | | | | | | |
| GTA | Gaotai | 70.74 | 23 | eP | P | 05 10 20.9 | +0.6 |
| GTA | | | | pP | pP | 05 10 26.0 | +2.4 |
| GTA | | | | sP | sP | 05 10 29.4 | +4.6 |
| GTA | | | | PMZ | | | |
| | 6.0nm,1.4s | | | | | | |
| MKAR | Makanchi Array | 73.47 | 8 | P | P | 05 10 34.9 | -1.4 |
| | 6.3nm,0.7s,baz=182,slow=4.6,SNR=42 | | | | | | |
| MKAR | | | | LR | LR | 05 42 04.0 | |
| | comp=Z,127nm,18.8s,baz=186,slow=35 | | | | | | |
| BRTR | Keskin Array B | 74.23 | 331 | P | P | 05 10 40.5 | -0.6 |
| | 2.1nm,0.7s,baz=153,slow=6.1,SNR=12 | | | | | | |
| BRTR | | | | LR | LR | 05 41 26.5 | |
| | comp=Z,64nm,18.9s,baz=110,slow=34 | | | | | | |
| ABKAR | Akbulak array | 75.81 | 353 | eP | P | 05 10 48.8 | -1.0 |
| | 10nm,0.9s | | | | | | |
| HHC | Hu-ho-hao-te | 76.77 | 31 | eP | P | 05 10 58.2 | +2.6 |
| HHC | | | | S | S | 05 20 43.5 | +0.6 |
| HHC | | | | PMZ | | | |
| | 11nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | 90nm,4.0s | | | | | | |
| HHC | | | | LN | | | |
| | 110nm,12.3s | | | | | | |
| HHC | | | | LE | | | |
| | 140nm,11.1s | | | | | | |
| HHC | | | | LZ | | | |
| | 140nm,14.8s | | | | | | |
| KURK | Kurchatov | 76.96 | 5 | eP | P | 05 10 55.3 | -1.0 |
| | 28nm,1.0s | | | | | | |
| AKTO | Aktyubinsk | 77.20 | 352 | LR | LR | 05 43 43.6 | |
| | comp=Z,56nm,18.5s,slow=35 | | | | | | |
| TORD | Torodi Ar. Bea | 77.72 | 291 | P | P | 05 11 00.5 | -0.9 |
| | 2.8nm,1.1s,baz=111,slow=5.1,SNR=7.9 | | | | | | |
| TORD | | | | LR | LR | 05 43 27.1 | |
| | comp=Z,74nm,20.2s,baz=115,slow=34 | | | | | | |
| BVAR | Borovoye Array | 78.96 | 360 | LR | LR | 05 43 40.9 | |
| | comp=Z,215nm,21.9s,baz=242,slow=34 | | | | | | |
| DBIC | Dimbokro | 80.19 | 282 | LR | LR | 05 45 00.5 | |
| | comp=Z,137nm,20.1s,baz=105,slow=34 | | | | | | |
| SONM | Songino Array | 80.42 | 23 | P | P | 05 11 14.8 | -0.8 |
| | 2.8nm,1.1s,baz=207,slow=5.6,SNR=14 | | | | | | |
| SONM | | | | LR | LR | 05 46 40.6 | |
| | comp=Z,79nm,20.8s,baz=194,slow=36 | | | | | | |
| ULN | Ulaanbaatar | 80.68 | 24 | eP | P | 05 11 16.1 | -0.9 |
| | 1.9nm,0.8s | | | | | | |
| ZALV | Zalesovo Beam | 80.81 | 8 | P | P | 05 11 15.9 | -1.4 |
| | 5.0nm,0.8s,baz=190,slow=4.8,SNR=13 | | | | | | |
| TLY | Talaya | 82.82 | 20 | LR | LR | 05 49 59.1 | |
| | comp=Z,78nm,18.2s,baz=189,slow=37 | | | | | | |
| KSAR | Wonju Array Be | 83.01 | 42 | P | P | 05 11 28.6 | -0.7 |
| ARU | Arti | 83.03 | 353 | eP | P | 05 11 28.2 | -0.8 |
| | 10nm,1.0s | | | | | | |
| KSRS | Korea Array | 83.05 | 42 | P | P | 05 11 28.6 | -0.9 |
| | 1.3nm,0.7s,baz=257,slow=5.3,SNR=3.9 | | | | | | |
| KSRS | | | | LR | LR | 05 46 22.6 | |
| | comp=Z,147nm,20.4s,baz=227,slow=34 | | | | | | |
| AKASG | Malin Array Be | 84.98 | 335 | P | P | 05 11 37.9 | -1.2 |
| | 1.3nm,0.6s,baz=146,slow=4.1,SNR=9.0 | | | | | | |
| CN2 | Changchun | 85.85 | 36 | eP | P | 05 11 48.7 | +5.1 |
| CN2 | | | | esP | sP | 05 11 55.7 | +7.6 |
| KOLS | Kolonicke sedl | 86.48 | 330 | eP | P | 05 11 47.1 | +0.5 |
| VYHS | Vyhne | 87.74 | 328 | eP | P | 05 11 53.5 | +0.8 |
| FINES | FINESS Array B | 94.56 | 340 | LR | LR | 05 54 45.7 | |
| | comp=Z,55nm,18.2s,baz=170,slow=35 | | | | | | |
| FRNY | Flat Rock | 145.96 | 312 | ePKPdf | PKPdf | 05 18 42.2 | -0.7 |
| NCB | Newcomb | 146.69 | 311 | ePKPdf | PKPdf | 05 18 44.1 | -0.2 |
| SSPA | Standing Stone | 150.37 | 307 | ePKPbc | PKPbc | 05 18 55.2 | -0.4 |
| BLA | Blacksburg | 153.29 | 301 | ePKPbc | PKPbc | 05 19 00.9 | -1.5 |
| MNTX | Cornudas Mount | 173.63 | 329 | ePKPdf | PKPdf | 05 19 14.2 | +0.3 |
| TXAR | Lajitas Array | 174.22 | 303 | PKP | PKPdf | 05 19 14.9 | +0.6 |
| | 1.3nm,1.1s,baz=132,slow=1.3,SNR=7.4 | | | | | | |

*ISCJB **12** 05:05:13.3±0.5, 26°.17S±0°.09×70°.91E±0°.09, h11$^{km}$, mb4.0/19, Error ellipse: s-maj=13.7km s-min=11.2km az=30.0*

*IDC **12** 05:05:13.4±0.6, 26°.17S×70°.86E, h0$^{km}$, mb4.0/15, mb1 4.1/15, mb1mx3.9/51, mbtmp4.0/15, Error ellipse: s-maj=21.2km s-min=16.5km az=77.0*

*NEIC **12** 05:05:15.0±0.3, 26°.16S×70°.87E, h10$^{km}$, mb4.4/4, Error ellipse: s-maj=10.5km s-min=8.3km az=26.0*

**ISC 12 05:05:15.1**±0.6, **26°.2S**±0°.1×**70°.9E**±0°.1, **h11**$^{km}$, **n28**, σ**0s.81**/22, **mb4.1**/19, **Indian Ocean Triple Junction**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RER | Riviere de l'E | 14.71 | 287 | Pn | Pn | 05 08 43.4 | +0.1 |
| H08S1 | Diego Carcia H | 18.48 | 5 | T | T | 05 29 00.1 | |
| | baz=186,slow=76,SNR=58 | | | | | | |
| H08S2 | Diego Garcia H | 18.48 | 5 | T | T | 05 28 58.8 | |
| | baz=186,slow=76,SNR=81 | | | | | | |
| H08S3 | Diego Garcia H | 18.50 | 5 | T | T | 05 29 00.1 | |
| | baz=186,slow=76,SNR=70 | | | | | | |
| ABPO | Ambohimpanom | 22.92 | 283 | P | P | 05 10 19.3 | -0.2 |
| OPO | Ambohidratompo | 23.13 | 284 | P | P | 05 10 23.3 | +1.7 |
| | 1.4nm,0.6s,baz=86,slow=13,SNR=2.1 | | | | | | |
| H01W2 | Cape Leeuwin H | 38.04 | 114 | T | T | 05 53 20.7 | |
| | baz=272,slow=75,SNR=109 | | | | | | |
| H01W3 | Cape Leeuwin H | 38.04 | 114 | T | T | 05 53 21.0 | |
| | baz=272,slow=75,SNR=104 | | | | | | |
| H01W1 | Cape Leeuwin H | 38.06 | 114 | T | T | 05 53 22.1 | |
| | baz=272,slow=75,SNR=98 | | | | | | |
| KMBO | Kilima Mbogo | 40.81 | 302 | P | P | 05 12 58.3 | +1.2 |
| | 0.9nm,0.3s,baz=156,slow=20,SNR=3.2 | | | | | | |
| MAW | Mawson | 41.74 | 185 | P | P | 05 13 03.8 | -0.1 |
| | 0.8nm,0.2s,baz=0.7,slow=14,SNR=3.4 | | | | | | |
| CMAR | Chiang Mai Arr | 52.08 | 35 | P | P | 05 14 26.5 | +1.2 |
| | 4.0nm,1.1s,baz=222,slow=7.0,SNR=7.2 | | | | | | |
| ASAR | Alice Springs | 56.73 | 102 | P | P | 05 14 58.8 | -0.5 |
| | 1.0nm,0.5s,baz=249,slow=6.5,SNR=8.6 | | | | | | |
| WRA | Warramunga Arr | 58.25 | 98 | P | P | 05 15 10.8 | +0.8 |
| | 0.9nm,0.6s,baz=253,slow=7.3,SNR=4.9 | | | | | | |
| WRAB | Tennant Creek | 58.27 | 98 | P | P | 05 15 10.6 | +0.4 |
| | 2.1nm,0.9s | | | | | | |
| SNAA | Sanae | 60.27 | 200 | P | P | 05 15 23.4 | +0.1 |
| | 0.6nm,0.8s,baz=129,slow=4.4,SNR=4.7 | | | | | | |
| QSPA | South Pole Qui | 63.97 | 180 | P | P | 05 15 48.2 | -0.1 |
| | 3.1nm,0.9s,baz=305,slow=5.0,SNR=7.2 | | | | | | |
| VNDA | Vanda | 64.87 | 166 | P | P | 05 15 53.7 | -0.1 |
| | 4.5nm,0.9s,baz=274,slow=8.0,SNR=19 | | | | | | |
| KKAR | Karatay Array | 68.93 | 360 | eP | P | 05 16 20.4 | +0.4 |
| | 4.6nm,1.0s | | | | | | |
| MKAR | Makanchi Array | 73.35 | 8 | P | P | 05 16 45.8 | -0.9 |
| | 1.8nm,0.6s,baz=183,slow=4.9,SNR=9.3 | | | | | | |
| BRTR | Keskin Array B | 74.17 | 331 | P | P | 05 16 50.6 | -1.3 |
| | 0.6nm,0.6s,baz=151,slow=3.3,SNR=3.3 | | | | | | |
| ABKAR | Akbulak array | 75.71 | 353 | eP | P | 05 16 59.3 | -1.1 |
| | 2.7nm,0.8s | | | | | | |
| KURK | Kurchatov | 76.85 | 5 | eP | P | 05 17 06.6 | -0.1 |
| | 3.0nm,0.7s | | | | | | |
| TORD | Torodi Ar. Bea | 77.74 | 291 | P | P | 05 17 11.8 | -0.8 |
| | 0.9nm,1.0s,baz=134,slow=3.2,SNR=4.1 | | | | | | |
| SONM | Songino Array | 80.29 | 23 | P | P | 05 17 26.0 | 0.0 |
| | 0.4nm,0.8s,baz=228,slow=5.6,SNR=3.9 | | | | | | |
| ZALV | Zalesovo Beam | 80.69 | 8 | P | P | 05 17 28.5 | +0.7 |
| | 1.4nm,0.7s,baz=191,slow=4.5,SNR=4.3 | | | | | | |
| AKASG | Malin Array Be | 84.91 | 335 | P | P | 05 17 49.2 | -0.7 |
| | 0.4nm,0.5s,baz=136,slow=4.2,SNR=3.2 | | | | | | |
| TXAR | Lajitas Array | 174.21 | 304 | PKP | PKPdf | 05 25 25.9 | +0.5 |
| | 0.3nm,0.8s,baz=342,slow=5.7,SNR=2.5 | | | | | | |

*IDC **12** 05:05:12.4±1.2, 15°.15N×122°.78E, h0$^{km}$, mb4.0/7, mb1 4.2/7, mb1mx3.8/51, mbtmp4.0/7, MS3.4/2, Ms1 3.4/2, ms1mx2.6/33, Error ellipse: s-maj=57.5km s-min=19.8km az=61.0*

*ISCJB **12** 05:05:16.0±1.2, 15°.24N±0°.04×122°.46E±0°.06, h17$^{km}$±10$^{km}$, mb4.0/7, MS3.4/2, Error ellipse: s-maj=9.9km s-min=5.2km az=157.7*

*MAN **12** 05:05:18, 15°.26N×122°.34E, h17$^{km}$, mb4.7, ML3.5, MS3.4*

**ISC 12 05:05:15.0**±1.4, **15°.20N**±0°.03×**122°.41E**±0°.04, **h9**$^{km}$±10$^{km}$, **n31**, σ**1s.48**/34, **mb4.0**/7, **6C-2D**, **Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BALP | Baler | 0.97 | 304 | eP | Pb | 05 05 34.1 | +0.1 |
| BALP | | | | eS | Sg | 05 05 46.2 | -0.1 |
| GQP | Guinayangan | 1.29 | 179 | ⇑eP | Pn | 05 05 38.9 | -0.4 |
| GQP | | | | iS | Sb | 05 05 56.1 | -0.1 |
| PCPH | Palayan | 1.32 | 286 | ⇓iP | Pn | 05 05 39.4 | -0.3 |
| PCPH | | | | iS | Sn | 05 05 57.3 | -0.1 |
| LQP | Lukban | 1.38 | 218 | ⇑eP | Pn | 05 05 39.2 | -1.5 |
| TGY | Tagaytay City | 1.80 | 233 | ⇑iP | Pb | 05 05 48.8 | +0.5 |
| TGY | | | | iS | Sg | 05 06 14.1 | +1.1 |
| CAUP | Cauayan | 1.82 | 342 | eP | Pn | 05 05 46.8 | +0.2 |
| PALP | Palanan | 1.85 | 0 | eP | Pn | 05 05 46.2 | -0.8 |
| AUQP | San Andres | 1.89 | 172 | eP | Pg | 05 05 51.0 | -0.2 |
| BCPH | Baguio City Da | 2.12 | 304 | ⇑iP | Pb | 05 05 53.1 | -0.6 |
| BCPH | | | | iS | Sn | 05 06 18.2 | +0.9 |
| PVCP | Virac | 2.32 | 133 | ⇓eP | Pn | 05 05 54.5 | +1.1 |
| PVCP | | | | iS | Sg | 05 06 30.4 | +0.7 |
| SCZP | Santa Cruz | 2.48 | 284 | eP | Pn | 05 05 54.5 | -1.2 |
| CVP | Callao Caves | 2.55 | 347 | eP | Pn | 05 05 57.1 | +0.5 |
| CVP | | | | eS | Sn | 05 06 27.4 | -0.4 |
| LUBP | Lubang | 2.56 | 235 | eP | Pn | 05 05 57.5 | +0.7 |
| BOLP | Bolinao | 2.68 | 296 | eP | Pn | 05 05 59.6 | +1.2 |
| APYP | Conner | 2.87 | 337 | eP | Pb | 05 06 04.1 | -2.4 |
| ABRA | Dolores | 2.93 | 326 | eP | Pn | 05 06 04.2 | +2.4 |
| SJMP | San Jose | 3.00 | 205 | eP | Pb | 05 06 06.5 | -2.2 |
| PIP | Pasuquin | 3.55 | 331 | ⇑eP | Sn | 05 06 56.0 | +3.5 |
| RCP | Roxas | 3.64 | 175 | ⇑eP | Pb | 05 06 21.7 | +2.2 |
| GUMO | Guam | 21.81 | 91 | LR | LR | 05 17 48.7 | |
| | comp=Z,48nm,20.1s,baz=274,slow=35 | | | | | | |
| CMAR | Chiang Mai Arr | 22.69 | 281 | P | P | 05 10 19.6 | +2.4 |
| | 1.6nm,0.3s,baz=92,slow=7.3,SNR=8.8 | | | | | | |
| WRA | Warramunga Arr | 36.84 | 161 | P | P | 05 12 21.0 | -2.9 |
| | 0.7nm,0.4s,baz=344,slow=9.0,SNR=8.2 | | | | | | |
| ASAR | Alice Springs | 40.23 | 164 | P | P | 05 12 50.0 | -2.3 |
| | 0.6nm,0.4s,baz=342,slow=7.5,SNR=5.9 | | | | | | |
| ASAR | | | | LR | LR | 05 30 34.4 | |
| | comp=Z,139nm,20.5s,baz=276,slow=38 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 42.42 | 79 | T | T | 05 58 21.4 | |
| | baz=265,slow=74 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 42.43 | 79 | T | T | 05 58 25.3 | |
| | baz=265 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 42.44 | 79 | T | T | 05 58 23.3 | |
| | baz=265,slow=74 | | | | | | |
| MKAR | Makanchi Array | 45.85 | 322 | P | P | 05 13 38.6 | +1.1 |
| | 1.2nm,0.7s,baz=122,slow=9.3,SNR=5.7 | | | | | | |
| ZALV | Zalesovo Beam | 48.52 | 331 | P | P | 05 13 58.7 | +0.4 |
| | 0.7nm,0.3s,baz=128,slow=6.1,SNR=3.8 | | | | | | |
| FINES | FINESS Array B | 79.78 | 331 | P | P | 05 17 23.2 | -0.2 |
| | 6.4nm,1.1s,baz=45,slow=4.5,SNR=4.5 | | | | | | |
| NB2 | NORSAR Subarra | 86.69 | 333 | P | P | 05 17 58.6 | -0.6 |
| | comp=Z,1.9nm,0.8s,baz=66,slow=4.6 | | | | | | |
| NOA | NORSAR Array B | 86.69 | 333 | P | P | 05 17 59.1 | -0.1 |
| | comp=Z,0.6nm,0.6s,baz=67,slow=4.5,SNR=3.3 | | | | | | |

*ISCJB **12** 05:05:40.4±0.5, 26°.13S±0°.10×70°.8E±0°.1, h10$^{km}$, mb4.2/17, Error ellipse: s-maj=19.3km s-min=13.7km az=176.6*

*IDC **12** 05:05:40.8±0.6, 26°.12S×70°.72E, h0$^{km}$, mb4.1/13, mb1 4.3/13, mb1mx4.0/50, mbtmp4.1/13, Error ellipse: s-maj=23.5km s-min=17.2km az=94.0*

*GCMT **12** 05:05:42.5±0.5, 26°.13S×70°.89E, h30$^{km}$±1$^{km}$, MW5.1/69, Moment Tensor Solution. s17,c19; s69,c93; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-5.35±.46; $M_{\theta\theta}$2.42±.27; $M_{\phi\phi}$2.93±.29; $M_{r\theta}$0.02±.33; $M_{\theta\phi}$-1.59±.11; $M_{\phi r}$0.57±.32; Best double couple: $M_0$4.84800×$10^{16}$ NP1:$\phi_s$143.00000°, δ48.00000°, λ-85.00000°. NP2: $\phi_s$316.00000°, δ43.00000°, λ-95.00000°. Principal axes: T 4.3040, Plg3.0000°, Azm230.0000°; N 1.0880, Plg3.0000°, Azm320.0000°; P -5.3920, Plg86.0000°, Azm103.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **12** 05:05:42.4±0.4, 26°.12S×70°.79E, h10$^{km}$, mb4.6/4 Error ellipse: s-maj=14.9km s-min=9.8km az=87.0*

**ISC 12 05:05:42.5**±0.6, **26°.1S**±0°.1×**70°.7E**±0°.2, **h10**$^{km}$, **n18**, σ**0s.74**/18, **mb4.3**/17, **Indian Ocean Triple Junction**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MAW | Mawson | 41.78 | 185 | P | P | 05 13 33.0 | +1.3 |
| | 0.9nm,0.6s,baz=22,slow=11,SNR=3.6 | | | | | | |
| CMAR | Chiang Mai Arr | 52.12 | 35 | P | P | 05 14 53.2 | +0.1 |
| | 4.4nm,1.0s,baz=222,slow=7.5,SNR=3.3 | | | | | | |
| ASAR | Alice Springs | 56.87 | 102 | P | P | 05 15 26.9 | -0.9 |
| | 1.9nm,0.8s,baz=249,slow=6.5,SNR=7.5 | | | | | | |
| WRA | Warramunga Arr | 58.38 | 98 | P | P | 05 15 37.4 | -1.2 |
| | 1.9nm,0.7s,baz=255,slow=7.0,SNR=5.8 | | | | | | |
| WRAB | Tennant Creek | 58.40 | 98 | P | P | 05 15 37.9 | -0.7 |
| | 1.8nm,0.6s | | | | | | |
| SNAA | Sanae | 60.27 | 200 | P | P | 05 15 50.1 | -0.7 |
| | 0.5nm,0.7s,baz=127,slow=8.7,SNR=6.0 | | | | | | |
| SIJI | Sorong | 63.35 | 77 | P | P | 05 16 13.0 | +0.7 |
| | 12nm,0.6s,baz=129,slow=23,SNR=5.0 | | | | | | |
| QSPA | South Pole Qui | 64.01 | 180 | P | P | 05 16 15.7 | -0.4 |
| | 3.0nm,0.8s,baz=151,slow=3.5,SNR=7.6 | | | | | | |
| VNDA | Vanda | 64.94 | 166 | P | P | 05 16 21.7 | -0.1 |
| | 4.2nm,0.8s,baz=279,slow=6.3,SNR=7.0 | | | | | | |
| KKAR | Karatay Array | 68.88 | 360 | eP | P | 05 16 47.5 | +0.3 |
| | 5.8nm,1.0s | | | | | | |
| MKAR | Makanchi Array | 73.33 | 8 | P | P | 05 17 13.6 | -0.5 |
| | 2.9nm,0.9s,baz=196,slow=7.1,SNR=6.0 | | | | | | |
| BRTR | Keskin Array B | 74.07 | 331 | P | P | 05 17 18.5 | -0.3 |
| | 0.7nm,0.7s,baz=131,slow=4.0,SNR=2.6 | | | | | | |
| ABKAR | Akbulak array | 75.65 | 353 | eP | P | 05 17 27.3 | -0.2 |
| | 4.5nm,0.9s | | | | | | |
| KURK | Kurchatov | 76.82 | 5 | eP | P | 05 17 34.0 | -0.1 |
| | 7.5nm,1.0s | | | | | | |
| TORD | Torodi Ar. Bea | 77.61 | 291 | P | P | 05 17 39.1 | -0.3 |
| | 1.1nm,1.0s,baz=111,slow=4.8,SNR=7.9 | | | | | | |
| SONM | Songino Array | 80.30 | 23 | P | P | 05 17 54.6 | +0.9 |
| | 0.7nm,0.8s,baz=222,slow=3.9,SNR=2.2 | | | | | | |
| ZALV | Zalesovo Beam | 80.67 | 8 | P | P | 05 17 54.6 | -0.6 |
| | 1.9nm,0.8s,baz=259,slow=1.5,SNR=4.5 | | | | | | |
| TXAR | Lajitas Array | 174.08 | 304 | PKP | PKPdf | 05 25 54.0 | +1.0 |
| | 1.7nm,1.3s,baz=297,slow=0.2,SNR=4.3 | | | | | | |

*NEIC **12** 05:07:56.0, 45°.04S×167°.47E, h114$^{km}$, mb3.9/1, After WEL.*

*NEIC Felt at Queenstown and Te Anau.*

**WEL 12 05:07:56.0**±0.2, **45°.04S**×**167°.40E**, **h112**$^{km}$±1$^{km}$, **ML4.7**/20, **4C-6D**, **Error ellipse: s-maj=1.6km s-min=1.0km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DCZ | Deep Cove | 0.47 | 202 | PN | Pn | 05 08 12.5 | -0.3 |
| DCZ | | | | AML | AML | 05 08 13.3 | |
| DCZ | | | | SN | Sn | 05 08 24.4 | -1.1 |
| DCZ | | | | AML | AML | 05 08 25.8 | |
| DCZ | | | | AML | AML | 05 08 26.0 | |
| DCZ | Deep Cove | 0.47 | 202 | Pn | Pn | 05 08 11.9 | -0.9 |
| DCZ | | | | Sn | Sn | 05 08 24.4 | -1.1 |
| MSZ | Milford Sound | 0.53 | 46 | ⇓PN | Pn | 05 08 13.3 | 0.0 |
| MSZ | | | | SN | Sn | 05 08 25.6 | -0.5 |
| MSZ | | | | AML | AML | 05 08 26.7 | |
| MSZ | | | | AML | AML | 05 08 26.8 | |
| MSZ | | | | AML | AML | 05 08 26.8 | |
| MSZ | Milford Sound | 0.53 | 46 | Pn | Pn | 05 08 13.3 | 0.0 |
| MSZ | | | | Sn | Sn | 05 08 25.6 | -0.5 |
| MLZ | Mavora Lakes | 0.62 | 119 | ⇑PN | Pn | 05 08 13.7 | -0.3 |
| MLZ | | | | SN | Sn | 05 08 26.8 | -0.8 |
| MLZ | | | | AML | AML | 05 08 28.0 | |
| MLZ | Mavora Lakes | 0.62 | 119 | Pn | Pn | 05 08 13.7 | -0.3 |
| MLZ | | | | Sn | Sn | 05 08 26.8 | -0.8 |
| WHZ | Wether Hill Ro | 0.93 | 156 | PN | Pn | 05 08 16.6 | -0.1 |
| WHZ | | | | SN | Sn | 05 08 31.5 | -0.9 |
| WHZ | | | | AML | AML | 05 08 32.3 | |
| WHZ | Wether Hill Ro | 0.93 | 156 | Pn | Pn | 05 08 16.6 | -0.1 |
| WHZ | | | | Sn | Sn | 05 08 31.5 | -0.8 |
| WKZ | Wanaka | 1.17 | 80 | ⇑PN | Pn | 05 08 19.0 | -0.2 |
| WKZ | | | | AML | AML | 05 08 37.4 | |
| WKZ | | | | AML | AML | 05 08 37.5 | |
| WKZ | | | | AML | AML | 05 08 38.4 | |
| WKZ | | | | AML | AML | 05 08 40.1 | |
| WKZ | Wanaka | 1.17 | 80 | Pn | Pn | 05 08 18.7 | -0.5 |
| PYZ | Puysegur Point | 1.23 | 204 | ⇑PN | Pn | 05 08 19.8 | 0.0 |
| PYZ | Puysegur Point | 1.23 | 204 | Pn | Pn | 05 08 19.8 | 0.0 |
| EAZ | Earnscleugh | 1.36 | 99 | ⇓PN | Pn | 05 08 21.0 | -0.3 |
| EAZ | | | | AML | AML | 05 08 39.4 | |
| EAZ | | | | AML | AML | 05 08 39.4 | |
| EAZ | | | | AML | AML | 05 08 39.6 | |
| EAZ | | | | AML | AML | 05 08 39.7 | |
| EAZ | Earnscleugh | 1.36 | 99 | Pn | Pn | 05 08 20.6 | -0.7 |
| EAZ | | | | Sn | Sn | 05 08 38.3 | -2.2 |
| JCZ | Jackson Bay | 1.37 | 46 | PN | Pn | 05 08 20.7 | -0.8 |
| JCZ | | | | AML | AML | 05 08 39.1 | |
| JCZ | | | | AML | AML | 05 08 45.1 | |
| JCZ | Jackson Bay | 1.37 | 46 | Pn | Pn | 05 08 20.7 | -0.8 |
| TUZ | Tuapeka | 1.81 | 121 | PN | Pn | 05 08 26.4 | -0.3 |
| TUZ | | | | AML | AML | 05 08 47.7 | |
| TUZ | | | | AML | AML | 05 08 47.8 | |
| TUZ | | | | AML | AML | 05 08 48.2 | |
| TUZ | | | | AML | AML | 05 08 48.2 | |
| TUZ | Tuapeka | 1.81 | 121 | Pn | Pn | 05 08 26.1 | -0.7 |
| APZ | The Paps | 1.84 | 167 | PN | Pn | 05 08 26.9 | -0.2 |
| APZ | | | | AML | AML | 05 08 50.6 | |
| APZ | | | | AML | AML | 05 08 52.7 | |
| APZ | The Paps | 1.84 | 167 | Pn | Pn | 05 08 26.9 | -0.2 |
| SYZ | Scrubby Hill | 1.93 | 142 | PN | Pn | 05 08 27.9 | -0.2 |
| SYZ | | | | AML | AML | 05 08 51.8 | |
| SYZ | | | | AML | AML | 05 08 51.8 | |
| SYZ | | | | AML | AML | 05 08 51.9 | |
| SYZ | | | | AML | AML | 05 08 52.0 | |
| SYZ | Scrubby Hill | 1.93 | 142 | Pn | Pn | 05 08 27.9 | -0.2 |
| LBZ | Lake Benmore | 2.09 | 73 | PN | Pn | 05 08 28.5 | -1.7 |
| LBZ | | | | AML | AML | 05 08 53.7 | |
| LBZ | | | | AML | AML | 05 08 54.1 | |
| LBZ | | | | AML | AML | 05 08 54.1 | |
| LBZ | | | | AML | AML | 05 08 54.2 | |
| LBZ | Lake Benmore | 2.09 | 73 | Pn | Pn | 05 08 28.1 | -2.1 |
| FOZ | Fox Glacier | 2.21 | 49 | ⇓PN | Pn | 05 08 30.9 | -0.8 |
| FOZ | | | | AML | AML | 05 08 59.9 | |
| FOZ | | | | AML | AML | 05 08 59.9 | |
| FOZ | | | | AML | AML | 05 09 01.8 | |
| FOZ | | | | AML | AML | 05 09 01.9 | |
| FOZ | Fox Glacier | 2.21 | 49 | Pn | Pn | 05 08 30.9 | -0.8 |
| ODZ | Otahua Downs | 2.30 | 91 | PN | Pn | 05 08 31.6 | -1.2 |
| ODZ | | | | AML | AML | 05 08 32.4 | |
| ODZ | | | | AML | AML | 05 08 32.8 | |
| ODZ | | | | AML | AML | 05 08 58.4 | |
| ODZ | | | | AML | AML | 05 08 59.0 | |
| ODZ | Otahua Downs | 2.30 | 91 | Pn | Pn | 05 08 31.2 | -1.7 |
| HHSZ | Highcliff Hill | 2.40 | 112 | ⇓PN | Pn | 05 08 33.7 | -0.5 |
| HHSZ | Highcliff Hill | 2.40 | 112 | Pn | Pn | 05 08 33.7 | -0.5 |
| RPZ | Rata Peaks | 2.94 | 64 | PN | Pn | 05 08 38.7 | -2.6 |
| RPZ | | | | AML | AML | 05 09 13.0 | |
| RPZ | | | | AML | AML | 05 09 13.5 | |
| RPZ | Rata Peaks | 2.94 | 64 | Pn | Pn | 05 08 38.7 | -2.6 |
| WVZ | Waitaha Valley | 3.11 | 52 | ⇓PN | Pn | 05 08 40.6 | -2.9 |
| WVZ | | | | AML | AML | 05 09 18.8 | |
| WVZ | | | | AML | AML | 05 09 19.1 | |
| WVZ | Waitaha Valley | 3.11 | 52 | Pn | Pn | 05 08 40.5 | -2.9 |
| OXZ | Oxford | 3.75 | 64 | PN | Pn | 05 08 48.6 | -3.5 |
| MQZ | McQueen's Vall | 3.99 | 72 | ⇑PN | Pn | 05 08 52.5 | -2.7 |
| MQZ | | | | AML | AML | 05 09 37.3 | |
| MQZ | | | | AML | AML | 05 09 38.5 | |
| CRLZ | Canterbury Las | 4.02 | 70 | PN | Pn | 05 08 53.2 | -2.5 |
| LTZ | Lake Taylor | 4.18 | 59 | PN | Pn | 05 08 54.5 | -3.4 |
| LTZ | | | | AML | AML | 05 09 43.3 | |
| LTZ | | | | AML | AML | 05 09 43.6 | |
| DSZ | Denniston Nort | 4.60 | 46 | PN | Pn | 05 09 00.6 | -2.9 |
| DSZ | | | | AML | AML | 05 09 54.0 | |
| DSZ | | | | AML | AML | 05 09 54.9 | |
| DSZ | | | | AML | AML | 05 09 55.3 | |
| DSZ | | | | AML | AML | 05 09 55.3 | |
| KHZ | Kahutara | 5.16 | 62 | PN | Pn | 05 09 07.7 | -3.4 |
| THZ | Tophouse | 5.18 | 53 | ⇓PN | Pn | 05 09 07.8 | -3.5 |
| THZ | | | | AML | AML | 05 10 08.6 | |
| THZ | | | | AML | AML | 05 10 08.6 | |
| QRZ | Quartz Range | 5.65 | 44 | PN | Pn | 05 09 14.8 | -2.8 |
| QRZ | | | | AML | AML | 05 10 32.0 | |
| QRZ | | | | AML | AML | 05 10 32.0 | |
| QRZ | | | | AML | AML | 05 10 34.1 | |
| QRZ | | | | AML | AML | 05 10 34.4 | |
| NNZ | Nelson | 5.81 | 51 | PN | Pn | 05 09 17.2 | -2.5 |
| TUWZ | Tuamarina | 5.99 | 55 | PN | Pn | 05 09 19.4 | -2.8 |
| TCW | Tory Channel | 6.32 | 55 | PN | Pn | 05 09 24.0 | -2.6 |
| CAW | Cannon Point | 6.85 | 58 | PN | Pn | 05 09 28.9 | -5.0 |
| KIW | Kapiti Island | 6.91 | 55 | PN | Pn | 05 09 29.8 | -4.9 |
| MTW | Mount Morrison | 7.08 | 60 | PN | Pn | 05 09 31.2 | -5.9 |
| MRZ | Mangatainoka R | 7.43 | 57 | PN | Pn | 05 09 36.8 | -5.0 |
| BFZ | Birch Farm | 7.82 | 59 | PN | Pn | 05 09 43.1 | -4.0 |
| WRAB | Tennant Creek | 37.05 | 302 | P | P | 05 14 53.5 | -1.7 |
| | 1.6nm,0.8s | | | | | | |

*CSEM **12** 05:13:50.1±0.4, 75°.86N×7°.11E, h10$^{km}$, ML3.3, Error ellipse: s-maj=11.7km s-min=8.5km az=153.0*

*BER **12** 05:13:53.2±2.1, 75°.84N×7°.74E, h10$^{km}$, MD2.0, ML3.3(NAO)*

*NAO **12** 05:13:55.0±2.9, 75°.85N×9°.14E, ML3.3*

**ISC 12 05:13:52.1**±2.6, **75°.9N**±0°.1×**8°.0E**±0°.1, **h10**$^{km}$, **n20**, σ**1s.25**/28, **Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HSPB | Hornsund (broa | 2.09 | 55 | Pn | Pn | 05 14 27.2 | +0.2 |
| HSPB | | | | Sn | Sn | 05 14 51.5 | -1.6 |
| HSPB | Hornsund (broa | 2.09 | 55 | Pn | Pn | 05 14 27.2 | +0.2 |
| | SNR=50 | | | | | | |
| HSPB | | | | Sn | Sn | 05 14 51.5 | -1.6 |
| | SNR=50 | | | | | | |
| HSP | Hornsund | 2.10 | 55 | Pn | Pn | 05 14 27.2 | +0.1 |
| HSP | | | | Sn | Sn | 05 14 51.5 | -1.7 |
| HSP | Hornsund | 2.10 | 55 | Pn | Pn | 05 14 27.2 | +0.1 |
| SPA0 | Spitsbergen Ar | 2.96 | 36 | Pn | Pn | 05 14 40.7 | +1.7 |
| | baz=224,slow=12 | | | | | | |
| SPA0 | | | | Sn | Sn | 05 15 15.1 | +0.7 |
| | baz=233,slow=28 | | | | | | |
| SPA0 | Spitsbergen Ar | 2.96 | 36 | Pn | Pn | 05 14 40.7 | +1.7 |
| | baz=224,slow=12 | | | | | | |
| SPA0 | | | | Sn | Sn | 05 15 15.1 | +0.7 |
| | baz=233,slow=28 | | | | | | |
| SPA0 | Spitsbergen Ar | 2.96 | 36 | Pn | Pn | 05 14 40.7 | +1.7 |
| | baz=224,slow=12,SNR=136 | | | | | | |
| SPA0 | | | | Sn | Sn | 05 15 15.1 | +0.7 |
| | baz=233,slow=24,SNR=3.8 | | | | | | |
| KBS | Kingsbay | 3.15 | 14 | Pn | Pn | 05 14 42.6 | +1.0 |
| KBS | Kingsbay | 3.15 | 14 | eP | Pn | 05 14 42.3 | +0.7 |
| KBS | | | | eS | Sn | 05 15 17.4 | -1.7 |
| KBS | Kingsbay | 3.15 | 14 | eP | Pn | 05 14 42.3 | +0.7 |
| | SNR=50 | | | | | | |
| KBS | Kingsbay | 3.15 | 14 | Pn | Pn | 05 14 42.6 | +1.0 |
| KBS | | | | eS | Sn | 05 15 17.4 | -1.7 |
| | SNR=50 | | | | | | |
| HOPEN | Hopen | 4.12 | 73 | Pn | Pn | 05 14 56.6 | +1.7 |
| HOPEN | | | | Sn | Sn | 05 15 42.0 | -1.0 |
| HOPEN | Hopen | 4.12 | 73 | Pn | Pn | 05 14 56.6 | +1.7 |
| HOPEN | | | | Sn | Sn | 05 15 42.0 | -1.0 |
| HOPEN | Hopen | 4.12 | 73 | Pn | Pn | 05 14 56.6 | +1.7 |
| HOPEN | | | | Sn | Sn | 05 15 42.0 | -1.0 |
| | SNR=50 | | | | | | |
| DAG | Danmarks Havn | 6.32 | 291 | iP | Pn | 05 15 20.0 | -5.1 |
| DAG | | | | iS | Sn | 05 16 22.7 | -15 |
| ARA0 | ARCESS Array S | 8.22 | 132 | Pn | Pn | 05 15 50.8 | -0.4 |
| | baz=324,slow=12 | | | | | | |
| ARA0 | | | | Sn | Sn | 05 17 17.1 | -6.9 |
| | baz=328,slow=22 | | | | | | |
| ARA0 | ARCESS Array S | 8.22 | 132 | Pn | Pn | 05 15 50.8 | -0.4 |
| | baz=324,slow=12 | | | | | | |
| ARA0 | | | | Sn | Sn | 05 17 17.1 | -6.9 |
| | baz=328,slow=22 | | | | | | |
| ARA0 | ARCESS Array S | 8.22 | 132 | Pn | Pn | 05 15 50.8 | -0.4 |
| | baz=324,slow=12,SNR=0.5 | | | | | | |
| SCO | Scoresbysund | 10.10 | 253 | iP | Pn | 05 16 12.8 | -4.0 |
| SCO | | | | iS | Sn | 05 17 52.2 | -18 |
| SCO | Scoresbysund | 10.10 | 253 | iP | Pn | 05 16 12.8 | -4.0 |

*ISCJB **12** 05:40:57.6±0.4, 36°.97N±0°.02×29°.45E±0°.03, h3$^{km}$±4$^{km}$, Error ellipse: s-maj=3.9km s-min=3.6km az=155.9*

*DDA **12** 05:40:57.9, 37°.02N×29°.44E, h7$^{km}$, Md3.4*

*CSEM **12** 05:40:57.9±0.1, 36°.98N×29°.48E, h2$^{km}$, MD3.4, Error ellipse: s-maj=3.2km s-min=2.6km az=177.0*

*ISK **12** 05:40:57.2, 36°.97N×29°.46E, h4$^{km}$, ML3.3*

**ISC 12 05:40:58.0**±1.1, **36°.98N**±0°.02×**29°.46E**±0°.02, **h4**$^{km}$±10$^{km}$, **n103**, σ**0s.84**/118, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GOLH | Golhisar | 0.27 | 17 | iP | Pg | 05 41 03.8 | +0.5 |
| GOLH | | | | iS | Sb | 05 41 09.2 | -1.3 |
| GOLH | Golhisar | 0.27 | 17 | P | Pg | 05 41 03.8 | +0.5 |
| GOLH | | | | S | Sb | 05 41 09.2 | -1.3 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ELL | Elmali | 0.43 | 123 | ePG | Pg | 05 41 06.1 | -0.2 |
| ELL | Elmali | 0.43 | 123 | ePg | Pg | 05 41 06.1 | -0.2 |
| FETY | Fethiye | 0.46 | 221 | ePG | Pg | 05 41 06.4 | -0.4 |
| FETY | | | | eSG | Sg | 05 41 13.5 | +0.7 |
| FETY | Fethiye | 0.46 | 221 | ePg | Pg | 05 41 06.4 | -0.4 |
| FETY | | | | eSg | Sg | 05 41 13.5 | +0.7 |
| DALY | Dalyan (Mu˜la | 0.67 | 256 | ePG | Pg | 05 41 10.5 | -0.3 |
| DALY | Dalyan (Mu˜la | 0.67 | 256 | ePg | Pg | 05 41 10.5 | -0.3 |
| TURN | Turunc | 0.69 | 261 | P | Pn | 05 41 16.1 | +1.5 |
| TURN | | | | S | Sn | 05 41 30.1 | +4.3 |
| KORT | Korkueli | 0.71 | 88 | i P | Pg | 05 41 11.1 | -0.6 |
| KORT | Korkueli | 0.71 | 88 | P | Pg | 05 41 11.1 | -0.6 |
| KORT | | | | S | Sb | 05 41 23.4 | +0.1 |
| AKAS | Kas | 0.75 | 171 | i P | Pg | 05 41 12.2 | -0.3 |
| AKAS | Kas | 0.75 | 171 | P | Pg | 05 41 12.2 | -0.3 |
| AKAS | | | | S | Sn | 05 41 26.3 | -1.2 |
| DNZL | Cakiroluk | 0.78 | 335 | i P | Pg | 05 41 12.0 | -1.1 |
| DNZL | | | | i S | Sg | 05 41 23.5 | +0.3 |
| DNZL | Cakiroluk | 0.78 | 335 | P | Pg | 05 41 12.0 | -1.1 |
| DNZL | | | | S | Sg | 05 41 23.5 | +0.3 |
| KSL | Kastellorizon | 0.83 | 173 | eP | Pg | 05 41 13.8 | -0.2 |
| KSL | Kastellorizon | 0.83 | 173 | eP | Pg | 05 41 13.5 | -0.5 |
| KSL | Kastellorizon | 0.83 | 173 | eP | Pg | 05 41 13.8 | -0.2 |
| KSL | Kastellorizon | 0.83 | 173 | eP | Pg | 05 41 13.5 | -0.5 |
| DENT | Denizli | 0.84 | 336 | ePG | Pg | 05 41 14.2 | 0.0 |
| DENT | Denizli | 0.84 | 336 | ePg | Pg | 05 41 14.2 | 0.0 |
| YER | Yerkesik | 0.95 | 280 | ePG | Pg | 05 41 16.6 | +0.2 |
| YER | Yerkesik | 0.95 | 280 | ePg | Pg | 05 41 16.6 | +0.2 |
| ANTB | Antalya | 0.96 | 94 | ePG | Pg | 05 41 16.3 | -0.1 |
| ANTB | Antalya | 0.96 | 94 | ePg | Pg | 05 41 16.3 | -0.1 |
| BCK | Bucak | 1.02 | 62 | ePG | Pg | 05 41 17.4 | -0.2 |
| BCK | Bucak | 1.02 | 62 | ePg | Pg | 05 41 17.4 | -0.2 |
| ARG | Arkhangelos | 1.32 | 235 | eP | Pn | 05 41 22.0 | -1.1 |
| ARG | Arkhangelos | 1.32 | 235 | eP | Pn | 05 41 22.1 | -1.1 |
| ARG | Arkhangelos | 1.32 | 235 | eP | Pn | 05 41 22.0 | -1.1 |
| ARG | Arkhangelos | 1.32 | 235 | eP | Pn | 05 41 22.1 | -1.1 |
| SUTC | Sutluce-Ispart | 1.32 | 68 | ePN | Pn | 05 41 23.3 | -0.1 |
| SUTC | Sutluce-Ispart | 1.32 | 68 | ePn | Pn | 05 41 23.3 | -0.1 |
| KHL | Karahalli | 1.34 | 2 | ePN | Pn | 05 41 23.0 | -0.6 |
| KHL | Karahalli | 1.34 | 2 | ePn | Pn | 05 41 23.0 | -0.6 |
| KHAL | Karahalli | 1.39 | 1 | i P | Pn | 05 41 23.4 | -0.9 |
| KHAL | | | | i S | Sb | 05 41 41.4 | -1.3 |
| KHAL | Karahalli | 1.39 | 1 | P | Pn | 05 41 23.4 | -0.9 |
| KHAL | | | | S | Sb | 05 41 41.4 | -1.3 |
| AYDN | Tasoluk | 1.43 | 299 | i P | Pg | 05 41 26.5 | +1.0 |
| AYDN | | | | i S | Sg | 05 41 45.0 | +0.9 |
| AYDN | Tasoluk | 1.43 | 299 | P | Pg | 05 41 26.5 | +1.0 |
| AYDN | | | | S | Sg | 05 41 45.0 | +0.9 |
| AYDB | Zeytinkoy-Aydi | 1.58 | 308 | ePN | Pn | 05 41 26.8 | -0.1 |
| AYDB | Zeytinkoy-Aydi | 1.58 | 308 | ePn | Pn | 05 41 26.8 | -0.1 |
| BDRM | Kayabasi | 1.62 | 274 | i P | Pb | 05 41 28.0 | -0.4 |
| BDRM | | | | i S | Sg | 05 41 50.0 | +0.1 |
| BDRM | Kayabasi | 1.62 | 274 | P | Pb | 05 41 28.0 | -0.4 |
| BDRM | | | | S | Sg | 05 41 50.0 | +0.1 |
| KULA | Kula-Manisa | 1.66 | 338 | ePN | Pn | 05 41 27.7 | -0.3 |
| KULA | Kula-Manisa | 1.66 | 338 | ePn | Pn | 05 41 27.7 | -0.3 |
| BODT | Bodrum | 1.72 | 273 | ePN | Pn | 05 41 29.1 | +0.3 |
| BODT | Bodrum | 1.72 | 273 | ePn | Pn | 05 41 29.1 | +0.3 |
| SHUT | Suhut-Afyon | 1.79 | 28 | ePN | Pn | 05 41 29.9 | 0.0 |
| SHUT | Suhut-Afyon | 1.79 | 28 | ePn | Pn | 05 41 29.9 | 0.0 |
| NIS1 | Nisyros Isl. | 1.87 | 259 | ePN | Pn | 05 41 31.2 | +0.5 |
| NIS1 | Nisyros Isl. | 1.87 | 259 | eP | Pn | 05 41 30.4 | -0.4 |
| NIS1 | Nisyros Isl. | 1.87 | 259 | eP | Pn | 05 41 31.4 | +0.6 |
| NIS1 | Nisyros Isl. | 1.87 | 259 | eP | Pn | 05 41 30.4 | -0.4 |
| NIS1 | Nisyros Isl. | 1.87 | 259 | eP | Pn | 05 41 31.4 | +0.6 |
| NIS1 | Nisyros Isl. | 1.87 | 259 | ePn | Pn | 05 41 31.3 | +0.5 |
| NISR | Nisiros | 1.91 | 260 | eP | Pn | 05 41 30.4 | -0.9 |
| NISR | Nisiros | 1.91 | 260 | eP | Pn | 05 41 31.5 | +0.2 |
| NISR | Nisiros | 1.91 | 260 | eP | Pn | 05 41 30.4 | -0.9 |
| NISR | Nisiros | 1.91 | 260 | eP | Pn | 05 41 31.5 | +0.2 |
| SMG | Samos | 2.21 | 290 | eP | Pn | 05 41 33.5 | -2.0 |
| SMG | Samos | 2.21 | 290 | eP | Pn | 05 41 35.5 | 0.0 |
| SMG | Samos | 2.21 | 290 | eP | Pn | 05 41 33.5 | -2.0 |
| SMG | Samos | 2.21 | 290 | eP | Pn | 05 41 35.5 | 0.0 |
| IZM | Izmir | 2.25 | 310 | ePN | Pn | 05 41 36.4 | +0.4 |
| IZM | Izmir | 2.25 | 310 | ePn | Pn | 05 41 36.4 | +0.4 |
| AKS | Akhisar | 2.30 | 326 | ePN | Pn | 05 41 37.1 | +0.4 |
| AKS | Akhisar | 2.30 | 326 | ePn | Pn | 05 41 37.1 | +0.4 |
| KARP | Karpathos | 2.34 | 233 | eP | Pn | 05 41 36.6 | -0.7 |
| KARP | Karpathos | 2.34 | 233 | eP | Pn | 05 41 37.5 | +0.2 |
| KARP | Karpathos | 2.34 | 233 | eP | Pn | 05 41 36.6 | -0.7 |
| KARP | Karpathos | 2.34 | 233 | eP | Pn | 05 41 37.5 | +0.2 |
| BLCB | Balcova | 2.38 | 307 | ePN | Pn | 05 41 38.3 | +0.5 |
| BLCB | Balcova | 2.38 | 307 | ePn | Pn | 05 41 38.3 | +0.5 |
| KONT | Konya--Tatoy | 2.50 | 66 | ePN | Pn | 05 41 40.2 | +0.7 |
| KONT | Konya--Tatoy | 2.50 | 66 | ePn | Pn | 05 41 40.2 | +0.7 |
| KIZT | Kizilcal | 2.69 | 45 | ePN | Pn | 05 41 42.8 | +0.6 |
| KIZT | Kizilcal | 2.69 | 45 | ePn | Pn | 05 41 42.8 | +0.6 |
| SVRH | Sivrihisar-ESK | 2.95 | 33 | ePN | Pn | 05 41 46.7 | +1.0 |
| SVRH | Sivrihisar-ESK | 2.95 | 33 | ePn | Pn | 05 41 46.7 | +1.0 |
| AKMC | Akamas | 3.04 | 129 | P | Pn | 05 41 47.1 | +0.3 |
| CHOS | Chios island | 3.04 | 299 | eP | Pn | 05 41 45.6 | -1.4 |
| CHOS | Chios island | 3.04 | 299 | eP | Pn | 05 41 47.4 | +0.4 |
| CHOS | Chios island | 3.04 | 299 | eP | Pn | 05 41 45.6 | -1.4 |
| CHOS | Chios island | 3.04 | 299 | eP | Pn | 05 41 47.4 | +0.4 |
| ALFC | Alevga | 3.13 | 125 | P | Pn | 05 41 49.3 | +1.2 |
| PPCY | Paphos | 3.14 | 131 | P | Pn | 05 41 49.3 | +1.1 |
| APE | Apeiranthos | 3.15 | 273 | eP | Pn | 05 41 48.3 | -0.1 |
| APE | Apeiranthos | 3.15 | 273 | eP | Pn | 05 41 48.2 | -0.1 |
| APE | Apeiranthos | 3.15 | 273 | eP | Pn | 05 41 48.3 | -0.1 |
| APE | Apeiranthos | 3.15 | 273 | eP | Pn | 05 41 48.2 | -0.1 |
| NPS | Neapolis | 3.56 | 242 | eP | Pn | 05 41 53.6 | -0.4 |
| NPS | Neapolis | 3.56 | 242 | eP | Pn | 05 41 53.7 | -0.3 |
| NPS | Neapolis | 3.56 | 242 | eP | Pn | 05 41 53.6 | -0.4 |
| NPS | Neapolis | 3.56 | 242 | eP | Pn | 05 41 53.7 | -0.3 |
| SZAC | Souni-Zanaja | 3.56 | 128 | P | Pn | 05 41 55.0 | +1.0 |
| LAST | Lasithi | 3.70 | 242 | eP | Pn | 05 41 56.3 | +0.3 |
| LAST | Lasithi | 3.70 | 242 | eP | Pn | 05 41 56.3 | +0.3 |
| IDI | Anoyia | 4.07 | 247 | eP | Pn | 05 42 00.6 | -0.4 |
| IDI | Anoyia | 4.07 | 247 | eP | Pn | 05 42 00.3 | -0.7 |
| IDI | Anoyia | 4.07 | 247 | eP | Pn | 05 42 00.6 | -0.4 |
| IDI | Anoyia | 4.07 | 247 | eP | Pn | 05 42 00.3 | -0.7 |
| SMTH | Samothraki Isl | 4.65 | 320 | eP | Pn | 05 42 07.1 | -1.9 |
| SMTH | Samothraki Isl | 4.65 | 320 | eP | Pn | 05 42 07.1 | -1.9 |

*NNC **12** 05:58:50.7±5.2, 38.°01N×72.°18E, h133km±53km, mb2.9, mpv3.6, Error ellipse: s-maj=44.3km s-min=15.3km az=154.0*

**ISC 12 05:58:51.2**±2.9**, 38.°0N**±0.°2×**72.°17E**±0.°10**, h113**km**, n11, σ0.s74**/16**, 6C-2D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 2.28 | 27 | ⇑P | Pn | 05 59 28.5 | +0.4 |
| | 27nm,0.3s | | | | | | |
| SFK | | | | ⇓S | Sn | 05 59 57.7 | +1.3 |
| | 23nm,0.2s | | | | | | |
| DZET | Dzherino | 2.75 | 288 | ⇓P | Pn | 05 59 33.4 | -0.7 |
| | 0.9nm,0.2s | | | | | | |
| DZET | | | | ⇑S | Sn | 06 00 08.3 | +1.2 |
| | 25nm,0.3s | | | | | | |
| AML | Almayashu | 4.31 | 15 | P | Pn | 05 59 54.6 | -0.4 |
| | SNR=32 | | | | | | |
| MNAS | Manas | 4.51 | 3 | ⇑P | Pn | 05 59 57.9 | +0.3 |
| | 4.4nm,0.2s | | | | | | |
| MNAS | | | | ⇑S | Sn | 06 00 48.7 | -0.4 |
| | 8.2nm,0.7s | | | | | | |
| UCH | Uchtor | 4.61 | 22 | P | Pn | 05 59 58.3 | -0.8 |
| | SNR=30 | | | | | | |
| EKS2 | Erkin-Say | 4.83 | 14 | P | Pn | 06 00 01.9 | +0.1 |
| | SNR=5.0 | | | | | | |
| AAK | Ala-Archa | 4.98 | 20 | ⇑P | Pn | 06 00 03.5 | -0.2 |
| | 8.3nm,0.5s | | | | | | |
| AAK | | | | ⇑S | Sn | 06 01 00.4 | +0.1 |
| | 3.7nm,1.0s | | | | | | |
| AAK | Ala-Archa | 4.98 | 20 | P | Pn | 06 00 03.6 | -0.2 |
| | SNR=8.0 | | | | | | |
| KK31 | Karatay Array | 5.27 | 347 | P | Pn | 06 00 07.8 | +0.2 |
| | 2.5nm,0.3s,baz=156,slow=11,SNR=65 | | | | | | |
| KK31 | | | | S | Sn | 06 01 06.8 | -0.5 |
| | 1.8nm,0.3s,baz=152,slow=21,SNR=7.4 | | | | | | |
| CHMS | Chumysh | 5.38 | 21 | P | Pn | 06 00 08.6 | -0.6 |
| | SNR=6.3 | | | | | | |
| USP | Ospenovka | 5.57 | 18 | P | Pn | 06 00 10.6 | -1.2 |
| | SNR=5.6 | | | | | | |

*ISCJB **12** 06:06:41.6±0.5, 24.°79N±0.°03×122.°05E±0.°02, h0km±5km, Error ellipse: s-maj=4.4km s-min=3.3km az=0.3*
*TAP **12** 06:06:41.2, 24.°80N×121.°99E, h3km±1km, ML3.0, D*
*JMA **12** 06:06:41.7, 24.°81N×122.°02E, h4km, M2.5*

**ISC 12 06:06:41.8**±1.0**, 24.°80N**±0.°03×**122.°02E**±0.°02**, h7**km±8km**, n29, σ0.s56**/39**, 2D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EGS | | 0.09 | 301 | eS | Sg | 06 06 44.3 | -1.0 |
| | baz=317 | | | | | | |
| TWB1 | Santiao Chiao | 0.21 | 353 | ⇓iP | Pg | 06 06 46.4 | +0.3 |
| | baz=1.0 | | | | | | |
| TWB1 | | | | eS | Sg | 06 06 49.3 | +0.4 |
| | baz=1.0 | | | | | | |
| TWC | Suao | 0.24 | 219 | P | Pg | 06 06 46.8 | +0.1 |
| | baz=212 | | | | | | |
| TWC | | | | eS | Sg | 06 06 49.8 | 0.0 |
| | baz=212 | | | | | | |
| TWE | Neicheng | 0.33 | 256 | eP | Pg | 06 06 48.3 | +0.1 |
| | baz=254 | | | | | | |
| TWE | | | | eS | Sg | 06 06 53.5 | +1.0 |
| | baz=254 | | | | | | |
| NWF | Wu-fen Shan | 0.35 | 322 | ⇓iP | Pg | 06 06 49.3 | +0.6 |
| | baz=325 | | | | | | |
| TWA | Mucha | 0.43 | 295 | eP | Pg | 06 06 50.8 | +0.5 |
| | baz=296 | | | | | | |
| TWA | | | | eS | Sg | 06 06 56.5 | +0.5 |
| | baz=296 | | | | | | |
| ENTT | Nioudou | 0.44 | 249 | P | Pg | 06 06 50.7 | +0.3 |
| | baz=247 | | | | | | |
| ENA | Nanau | 0.45 | 214 | eP | Pg | 06 06 51.1 | +0.6 |
| | baz=210 | | | | | | |
| NSK | Sanguang | 0.61 | 259 | eP | Pg | 06 06 53.9 | +0.2 |
| | baz=257 | | | | | | |
| TWS1 | Kuangyinshan | 0.62 | 299 | eP | Pb | 06 06 54.5 | -0.5 |
| | baz=300 | | | | | | |
| NNS | Nan Shan | 0.69 | 239 | eP | Pb | 06 06 55.8 | -0.4 |
| | baz=237 | | | | | | |
| TWD | Chiawan | 0.81 | 208 | eP | Pg | 06 06 57.7 | +0.2 |
| | baz=206 | | | | | | |
| TWD | | | | eS | Sg | 06 07 08.4 | +0.4 |
| | baz=206 | | | | | | |
| PCYT | Pengchaiyu | 0.83 | 3 | eP | Pb | 06 06 58.6 | 0.0 |
| | baz=5.0 | | | | | | |
| JYNG | Yonagunijimaku | 0.91 | 112 | P | Pg | 06 06 59.3 | -0.1 |
| JYNG | | | | eS | Sg | 06 07 11.9 | +0.7 |
| NSTT | Nanjuang | 0.94 | 260 | eP | Pn | 06 07 00.9 | -0.6 |
| | baz=259 | | | | | | |
| NSTT | | | | eS | Sn | 06 07 14.2 | -1.0 |
| | baz=259 | | | | | | |
| TWT | Tachien | 0.94 | 235 | eP | Pb | 06 07 00.9 | +0.3 |
| | baz=234 | | | | | | |
| WHF | Hehuan Shan | 0.94 | 227 | eP | Pb | 06 07 00.9 | +0.1 |
| | baz=225 | | | | | | |
| WHF | | | | eS | Sb | 06 07 14.0 | +0.3 |
| | baz=225 | | | | | | |
| YOJ | Yonaguni jima | 0.96 | 110 | P | Pg | 06 07 00.3 | -0.1 |
| YOJ | | | | eS | Sg | 06 07 13.4 | +0.5 |
| ESL | Shilin | 1.12 | 209 | eP | Pg | 06 07 03.3 | 0.0 |
| | baz=207 | | | | | | |
| TWQ1 | Liyutan | 1.22 | 249 | eP | Pn | 06 07 05.1 | -0.2 |
| | baz=247 | | | | | | |
| TWQ1 | | | | eS | Sn | 06 07 22.7 | +0.5 |
| | baz=247 | | | | | | |
| WDT | Danda | 1.31 | 218 | eP | Pb | 06 07 06.9 | -0.2 |
| | baz=216 | | | | | | |
| TYC | Yuchr | 1.38 | 230 | eP | Pn | 06 07 07.5 | -0.1 |
| | baz=229 | | | | | | |
| TWF1 | Yuli | 1.58 | 205 | eP | Pb | 06 07 11.2 | -0.3 |
| | baz=203 | | | | | | |
| IRIF | Iriomote-Funau | 1.63 | 106 | eS | Sn | 06 07 30.6 | -1.6 |
| CHN5 | Tsauling | 1.71 | 226 | eP | Pg | 06 07 14.7 | 0.0 |
| | baz=225 | | | | | | |
| HATJ | Hateruma jima | 1.79 | 114 | eS | Sn | 06 07 36.5 | +0.3 |
| JKRS | Kuro-shima | 1.90 | 107 | eS | Sn | 06 07 39.8 | +0.9 |
| CHN4 | Tsaushan | 1.94 | 222 | eP | Pb | 06 07 17.7 | +0.1 |
| | baz=221 | | | | | | |
| CHN1 | Nanshi | 2.11 | 221 | eP | Pb | 06 07 19.9 | -0.5 |
| | baz=219 | | | | | | |

*ISCJB **12** 06:08:05.8±0.8, 15.°1S±0.°2×177.°9W±0.°1, h372km, mb3.8/6, Error ellipse: s-maj=33.1km s-min=10.9km az=163.4*
*IDC **12** 06:08:07.4±1.8, 15.°08S×177.°67W, h380km±21km, mb3.3/5, mb1 3.6/6, mb1mx3.2/25, mbtmp4.0/6, Error ellipse: s-maj=29.5km s-min=17.8km az=154.0*

**ISC 12 06:08:06.8**±0.9**, 15.°1S**±0.°2×**177.°8W**±0.°1**, h372**km**, n8, σ0.s59**/8**, mb3.6**/6**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 5.90 | 79 | P | Pn | 06 09 37.0 | -0.4 |
| | 10nm,0.3s,baz=221,slow=0.9,SNR=11 | | | | | | |
| AFI | | | | S | S | 06 10 51.6 | +0.6 |
| | 0.2nm,0.3s,baz=202,slow=19,SNR=2.2 | | | | | | |
| WRA | Warramunga Arr | 45.83 | 257 | P | P | 06 15 53.8 | +0.2 |
| | 1.8nm,0.3s,baz=96,slow=8.3,SNR=78 | | | | | | |
| ASAR | Alice Springs | 46.22 | 252 | P | P | 06 15 57.3 | +0.7 |
| | 49nm,0.5s,baz=85,slow=8.5,SNR=517 | | | | | | |
| VNDA | Vanda | 63.30 | 185 | P | P | 06 17 56.5 | -0.2 |
| | 0.7nm,0.8s,baz=360,slow=8.2,SNR=8.2 | | | | | | |
| ILAR | Eielson Array | 83.01 | 13 | P | P | 06 19 50.3 | -0.6 |
| | 0.4nm,0.6s,baz=218,slow=5.7,SNR=5.2 | | | | | | |
| TXAR | Lajitas Array | 83.95 | 58 | P | P | 06 19 57.1 | +0.5 |
| | 0.2nm,0.6s,baz=223,slow=5.5,SNR=4.2 | | | | | | |
| MAW | Mawson | 86.72 | 200 | P | P | 06 20 09.0 | -0.2 |
| | 2.7nm,0.6s,baz=149,slow=3.0,SNR=5.6 | | | | | | |
| BRTR | Keskin Array B | 143.18 | 318 | PKP | PKPbc | 06 26 55.8 | +0.3 |
| | 0.8nm,0.5s,baz=86,slow=4.1,SNR=5.2 | | | | | | |

*ISCJB **12** 06:17:38.1±0.5, 42.°47N±0.°02×19.°93E±0.°02, h15km±5km, Error ellipse: s-maj=3.5km s-min=2.8km az=153.0*
*CSEM **12** 06:17:38.5±0.2, 42.°46N×19.°93E, h10km, ML2.0, Error ellipse: s-maj=3.4km s-min=2.8km az=155.0*
*TIR **12** 06:17:38.2±1.8, 42.°46N×19.°88E, h6km±145km, ML2.6*
*PDG **12** 06:17:38.9±0.2, 42.°45N×19.°92E, h11km±1km, MD2.1/1, ML2.0/10, Error ellipse: s-maj=0.4km s-min=0.4km az=0.0*
*BEO **12** 06:17:39.4±0.5, 42.°49N×19.°87E, h0km, ML1.8/4*

**ISC 12 06:17:38.6**±0.8**, 42.°46N**±0.°02×**19.°92E**±0.°02**, h12**km±5km**, n42, σ0.s66**/76**, 19C-2D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PVY | Plav | 0.14 | 12 | ⇑iPg | Pg | 06 17 42.2 | +0.1 |
| PVY | | | | eSg | Sg | 06 17 44.9 | +0.4 |
| PVY | Plav | 0.14 | 12 | ⇑iPg | Pg | 06 17 42.2 | +0.1 |
| PVY | | | | eSg | Sg | 06 17 44.9 | +0.4 |
| BCI | Bajram Curri | 0.14 | 130 | i PG | Pg | 06 17 41.9 | -0.1 |
| BCI | | | | i SG | Sg | 06 17 44.5 | +0.1 |
| BCI | Bajram Curri | 0.14 | 130 | i Pg | Pg | 06 17 41.9 | -0.1 |
| | SNR=93 | | | | | | |
| BCI | | | | i Sg | Sg | 06 17 44.5 | +0.1 |
| | SNR=93 | | | | | | |
| PEJK | Peje | 0.32 | 55 | P | Pg | 06 17 45.5 | +0.3 |
| PEJK | | | | S | Sb | 06 17 50.9 | -0.7 |
| BEY | Berane | 0.41 | 357 | ⇑iPg | Pg | 06 17 47.2 | +0.4 |
| BEY | | | | eSg | Sb | 06 17 53.4 | -0.9 |
| IVA | Berane | 0.41 | 357 | ⇑iPg | Pg | 06 17 47.2 | +0.4 |
| IVA | | | | eSg | Sb | 06 17 53.4 | -0.9 |
| PUK | Puka | 0.42 | 183 | i PG | Pg | 06 17 46.8 | 0.0 |
| PUK | | | | i SG | Sb | 06 17 53.3 | -1.0 |
| PUK | Puka | 0.42 | 183 | i Pg | Pg | 06 17 46.8 | 0.0 |
| | SNR=91 | | | | | | |
| PUK | | | | i Sg | Sb | 06 17 53.3 | -1.0 |
| | SNR=91 | | | | | | |
| PDG | Podgorica | 0.49 | 267 | ⇑iPg | Pg | 06 17 47.3 | -0.9 |
| PDG | | | | i Sg | Sg | 06 17 53.7 | -1.1 |
| PDG | Podgorica | 0.49 | 267 | ⇓iPg | Pg | 06 17 47.5 | -0.7 |
| PDG | | | | eSg | Sg | 06 17 55.1 | +0.3 |
| TTG | Podgorica | 0.49 | 267 | ⇓iPg | Pg | 06 17 47.5 | -0.7 |
| TTG | | | | eSg | Sg | 06 17 55.1 | +0.3 |
| DRME | Dracevica, Mon | 0.61 | 244 | ⇑iPg | Pg | 06 17 50.1 | -0.3 |
| DRME | | | | eSg | Sb | 06 17 59.8 | 0.0 |
| DRME | Dracevica, Mon | 0.61 | 244 | ⇑iPg | Pg | 06 17 50.1 | -0.3 |
| DRME | | | | eSg | Sb | 06 17 59.8 | 0.0 |
| ULC | Ulcinj | 0.70 | 226 | ⇑iPg | Pg | 06 17 52.3 | +0.1 |
| ULC | | | | eSg | Sb | 06 18 02.8 | +0.3 |
| ULC | Ulcinj | 0.70 | 226 | ⇑iPg | Pg | 06 17 52.3 | +0.1 |
| ULC | | | | eSg | Sb | 06 18 02.8 | +0.3 |
| NKY | Niksic | 0.77 | 298 | ⇑iPg | Pg | 06 17 53.4 | -0.1 |
| NKY | | | | eSg | Sb | 06 18 04.9 | +0.4 |
| NKY | Niksic | 0.77 | 298 | ⇑iPg | Pg | 06 17 53.4 | -0.1 |
| NKY | | | | eSg | Sb | 06 18 04.9 | +0.4 |
| BUM | Brajici-Budva | 0.78 | 259 | ⇑iPg | Pg | 06 17 53.4 | -0.2 |
| BUM | | | | eSg | Sb | 06 18 05.1 | +0.4 |
| BUM | Brajici-Budva | 0.78 | 259 | ⇑iPg | Pg | 06 17 53.4 | -0.2 |
| BUM | | | | eSg | Sb | 06 18 05.1 | +0.4 |
| NKME | Niksic | 0.78 | 294 | ⇑iPg | Pg | 06 17 53.4 | -0.2 |
| NKME | | | | eSg | Sb | 06 18 05.1 | +0.4 |
| NKME | Niksic | 0.78 | 294 | ⇑iPg | Pg | 06 17 53.4 | -0.2 |
| NKME | | | | eSg | Sb | 06 18 05.1 | +0.4 |
| SJES | Sjenica | 0.80 | 3 | ePg | Pg | 06 17 53.6 | -0.6 |
| SJES | | | | eSg | Sg | 06 18 04.3 | -0.4 |
| SJES | Sjenica | 0.80 | 3 | ePg | Pg | 06 17 53.6 | -0.6 |
| SJES | | | | eSg | Sg | 06 18 04.3 | -0.4 |
| SMRK | Smrekonice | 0.86 | 61 | P | Pb | 06 17 55.4 | -0.1 |
| PHP | Peshkopia | 0.86 | 153 | i PG | Pg | 06 17 54.3 | -1.0 |
| PHP | | | | i SG | Sn | 06 18 10.3 | +1.0 |
| PHP | Peshkopia | 0.86 | 153 | i Pg | Pg | 06 17 54.3 | -1.0 |
| | SNR=90 | | | | | | |
| PHP | | | | i Sg | Sn | 06 18 10.3 | +1.0 |
| | SNR=90 | | | | | | |
| UPM | Unac-Piva | 1.05 | 315 | ePg | Pg | 06 17 59.0 | +0.1 |
| UPM | | | | eSg | Sn | 06 18 15.3 | +1.1 |
| UPM | Unac-Piva | 1.05 | 315 | ePg | Pg | 06 17 59.0 | +0.1 |
| UPM | Unac-Piva | 1.05 | 315 | P | Pn | 06 17 59.5 | +0.1 |
| UPM | | | | eSg | Sn | 06 18 15.3 | +1.1 |
| HCY | Herceg Novi | 1.05 | 270 | ⇑iPg | Pb | 06 17 58.4 | -0.4 |
| HCY | | | | eSg | Sn | 06 18 14.8 | +0.9 |
| HCY | Herceg Novi | 1.05 | 270 | ⇑iPg | Pb | 06 17 58.4 | -0.4 |
| HCY | | | | eSg | Sn | 06 18 14.8 | +0.9 |
| BRY | Bratogost | 1.11 | 294 | ⇑iPg | Pb | 06 17 59.5 | -0.4 |
| BRY | Bratogost | 1.11 | 294 | ⇑iPg | Pb | 06 17 59.5 | -0.4 |
| IVAS | Ivanjica | 1.13 | 9 | ePg | Pb | 06 17 58.1 | -2.1 |
| IVAS | | | | eSg | Sb | 06 18 14.1 | -0.8 |
| IVAS | Ivanjica | 1.13 | 9 | ePg | Pb | 06 17 58.1 | -2.1 |
| IVAS | | | | eSg | Sb | 06 18 14.1 | -0.8 |
| SELS | Selova | 1.17 | 49 | ePg | Pb | 06 18 00.2 | -0.5 |
| SELS | | | | eSg | Sg | 06 18 16.3 | +0.1 |
| TREB | Trebinje | 1.19 | 283 | i Sg | Sb | 06 18 16.5 | +0.1 |
| TREB | Trebinje | 1.19 | 283 | i Sg | Sb | 06 18 16.5 | +0.1 |
| BARS | Barje | 1.44 | 75 | ePg | Pb | 06 18 05.9 | +0.4 |
| BARS | | | | eSg | Sg | 06 18 26.3 | +1.2 |
| GRUS | Gruza | 1.54 | 22 | ePn | Pg | 06 18 08.6 | +0.4 |
| GRUS | Gruza | 1.54 | 22 | ePn | Pg | 06 18 08.6 | +0.4 |

*IDC **12** 06:30:39.7±5.0, 55.°20N×156.°28W, h0km, mb3.5/2, mb1 4.2/3, mb1mx3.5/34, mbtmp3.8/3, ML4.7/1, MS3.4/2, Ms1 3.4/2, ms1mx2.7/26, Error ellipse: s-maj=108.0km s-min=31.5km az=82.0*
*NEIC **12** 06:30:47.0, 55.°36N×155.°38W, h6km, ML3.5(AEIC), After AEIC.*

**ISC 12 06:30:43.1**±1.0**, 55.°41N**±0.°06×**155.°41W**±0.°05**, h10**km**, n103, σ1.s05**/105**, South of Alaska**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHIR | Chirikof Islan | 0.43 | 344 | P | Pn | 06 30 55.0 | -0.4 |
| CHIR | | | | S | Sb | 06 31 02.4 | +3.0 |
| SII | Sitkinak Islan | 1.34 | 30 | P | Pn | 06 31 08.0 | +0.1 |
| SII | | | | S | Sb | 06 31 24.4 | -1.2 |
| CHGN | Chignik | 1.92 | 299 | P | Pn | 06 31 15.5 | -0.3 |
| ANNE | Aniakchak Nort | 2.11 | 317 | P | Pn | 06 31 18.3 | -0.2 |
| ANON | Aniakchak | 2.16 | 316 | P | Pn | 06 31 18.5 | -0.7 |
| OHAK | Old Harbor | 2.17 | 32 | P | Pn | 06 31 19.1 | -0.1 |
| OHAK | | | | S | Sn | 06 31 43.4 | -2.6 |
| VNHG | Veniaminof 1 | 2.27 | 293 | P | Pn | 06 31 21.5 | +0.8 |
| PLK4 | Peulik 4 | 2.29 | 347 | P | Pn | 06 31 21.7 | +0.7 |
| PLK3 | Peulik 3 | 2.33 | 349 | P | Pn | 06 31 22.1 | +0.6 |
| PLK3 | | | | S | Sn | 06 31 49.5 | -0.8 |
| PLK2 | Peulik 2 | 2.41 | 348 | P | Pn | 06 31 23.6 | +1.0 |
| VNWF | Veniaminof 8 | 2.46 | 289 | P | Pn | 06 31 24.0 | +0.7 |
| PLK1 | Peulik 1 | 2.49 | 345 | P | Pn | 06 31 24.3 | +0.7 |
| CAHL | Cahill | 2.65 | 1 | P | Pn | 06 31 26.3 | +0.4 |
| KABR | Katmai Barrier | 2.74 | 5 | P | Pn | 06 31 27.4 | +0.3 |
| KDAK | Kodiak Island | 2.84 | 32 | Pn | Pn | 06 31 28.1 | -0.4 |
| CNTC | Contact Creek | 2.87 | 355 | P | Pn | 06 31 29.1 | +0.1 |
| SDPT | Sand Point | 2.89 | 271 | P | Pn | 06 31 28.3 | -0.8 |
| SDPT | | | | S | Sn | 06 32 01.2 | -2.7 |
| KAKN | Katmai Knife C | 2.90 | 4 | P | Pn | 06 31 29.8 | +0.4 |
| KELA | Mount Kelaz | 3.04 | 357 | P | Pn | 06 31 31.2 | -0.1 |
| KAHG | Katmai Hook Gl | 3.13 | 8 | P | Pn | 06 31 33.4 | +1.0 |
| KAPH | Katmai Pasha | 3.25 | 10 | P | Pn | 06 31 34.7 | +0.6 |
| KAPH | | | | S | Sn | 06 32 12.2 | -0.6 |
| KAHC | Katmai Hardscr | 3.25 | 4 | P | Pn | 06 31 34.5 | +0.2 |
| FOPK | Fourpeaked Vol | 3.52 | 17 | P | Pn | 06 31 38.0 | +0.3 |
| CDD | Cape Douglas | 3.66 | 14 | P | Pn | 06 31 40.3 | +0.6 |
| MCNL | McNeil River | 3.83 | 8 | P | Pn | 06 31 42.3 | +0.3 |
| DT1 | Dutton Round H | 3.94 | 268 | P | Pn | 06 31 42.6 | -1.0 |
| AUP | Augustine Pinn | 4.11 | 14 | P | Pn | 06 31 47.0 | +1.1 |
| OPT | Oil Point | 4.41 | 15 | P | Pn | 06 31 50.9 | +0.8 |
| FALS | False Pass | 4.63 | 266 | P | Pn | 06 31 52.1 | -0.9 |
| FALS | | | | S | Sn | 06 32 43.6 | -3.1 |
| CNPM | China Poot | 4.70 | 27 | P | Pn | 06 31 54.2 | +0.2 |
| CNPM | | | | S | Sn | 06 32 45.7 | -2.9 |
| HOM | Homer | 4.72 | 24 | P | Pn | 06 31 54.8 | +0.6 |
| IVE | Iliamna Volcan | 4.79 | 15 | P | Pn | 06 31 56.3 | +1.0 |
| ILW | Iliamna West | 4.82 | 14 | P | Pn | 06 31 56.3 | +0.6 |
| ISLZ | Isanotski Laza | 4.82 | 265 | P | Pn | 06 31 55.1 | -0.6 |
| INE | Iliamna NE | 4.83 | 14 | P | Pn | 06 31 56.2 | +0.3 |
| SSLN | Shishaldin Nor | 4.97 | 267 | P | Pn | 06 31 57.6 | -0.1 |
| BRLK | Bradley Lake | 5.00 | 27 | P | Pn | 06 31 57.5 | -0.5 |
| RSO | Redoubt South | 5.26 | 14 | ePn | Pn | 06 32 02.9 | +1.1 |
| | 27nm,0.3s | | | | | | |
| RDN | Redoubt North | 5.31 | 14 | P | Pn | 06 32 03.3 | +0.9 |
| NCT | North Crescent | 5.33 | 13 | P | Pn | 06 32 03.4 | +0.7 |
| SLKM | Skilak Lake | 5.81 | 26 | P | Pn | 06 32 09.2 | 0.0 |
| CKL | Chakachamna La | 6.02 | 14 | P | Pn | 06 32 12.6 | +0.4 |
| BGL | Barrier Glacie | 6.08 | 14 | P | Pn | 06 32 13.8 | +0.8 |
| STLK | Strandline Lak | 6.39 | 16 | P | Pn | 06 32 17.6 | +0.5 |
| RC01 | Rabbit Creek A | 6.43 | 25 | P | Pn | 06 32 17.3 | -0.4 |
| SUA | Susitna One | 6.54 | 20 | P | Pn | 06 32 19.6 | +0.2 |
| PWL | Port Wells | 6.62 | 32 | P | Pn | 06 32 19.3 | -1.0 |
| UNV | Unalaska Valle | 6.63 | 261 | P | Pn | 06 32 19.2 | -1.2 |
| HIN | Hinchinbrook I | 6.89 | 40 | P | Pn | 06 32 23.5 | -0.5 |
| SKT | Skwentna | 6.89 | 15 | P | Pn | 06 32 23.6 | -0.5 |
| PMR | Palmer | 7.01 | 25 | P | Pn | 06 32 24.9 | -0.7 |
| GLI | Glacier Island | 7.03 | 35 | P | Pn | 06 32 24.5 | -1.4 |
| FID | Port Fidalgo | 7.14 | 38 | P | Pn | 06 32 25.7 | -1.7 |
| EYAK | Cordova Ski Ar | 7.27 | 41 | P | Pn | 06 32 28.3 | -0.9 |
| JPK | Jack Peak | 7.32 | 36 | P | Pn | 06 32 28.9 | -1.1 |
| SML | Sawmill | 7.40 | 27 | P | Pn | 06 32 30.6 | -0.4 |
| SGAM | Sherman Glacie | 7.44 | 43 | P | Pn | 06 32 31.1 | -0.6 |
| VLZ | Valdez | 7.46 | 36 | P | Pn | 06 32 31.0 | -0.9 |
| TT01 | Tatalina | 7.53 | 358 | P | Pn | 06 32 32.6 | -0.1 |
| PPLA | Purkeypile | 7.69 | 11 | P | Pn | 06 32 35.0 | -0.1 |
| SCM | Sheep Creek Mo | 7.69 | 30 | P | Pn | 06 32 34.6 | -0.5 |
| NICHA | Nichawak Mount | 7.79 | 47 | P | Pn | 06 32 37.0 | +0.7 |
| KLU | Klutina | 7.86 | 35 | P | Pn | 06 32 36.9 | -0.6 |
| BMRM | Bremner River | 7.97 | 41 | P | Pn | 06 32 37.7 | -1.2 |
| BERG | Berg Lake | 7.98 | 47 | P | Pn | 06 32 38.1 | -0.9 |
| KHIT | Khitrov Hills | 8.20 | 47 | P | Pn | 06 32 41.2 | -0.8 |
| TRF | Thorofare Moun | 8.47 | 16 | P | Pn | 06 32 45.0 | -0.8 |
| BARK | Barkley Ridge | 8.50 | 49 | P | Pn | 06 32 45.8 | -0.4 |
| RND | Reindeer | 8.68 | 20 | P | Pn | 06 32 48.0 | -0.6 |
| DHY | Denali Highway | 8.71 | 25 | P | Pn | 06 32 48.8 | -0.3 |
| BAGL | Bagley Icefiel | 8.71 | 49 | P | Pn | 06 32 48.1 | -0.9 |
| HARP | HAARP | 8.79 | 33 | P | Pn | 06 32 49.5 | -0.5 |
| KIAG | Kiagna River | 8.83 | 46 | P | Pn | 06 32 50.5 | -0.2 |
| MCARA | McCarthy VSAT | 8.83 | 42 | P | Pn | 06 32 50.1 | -0.5 |
| BALM | Baldy | 8.89 | 45 | P | Pn | 06 32 51.0 | -0.7 |
| PTPK | Patty Peak | 8.93 | 44 | P | Pn | 06 32 51.2 | -1.0 |
| RKAV | Rock Avalanche | 8.95 | 51 | P | Pn | 06 32 51.5 | -0.9 |
| MCK | McKinley | 8.96 | 19 | P | Pn | 06 32 52.1 | -0.3 |
| BPAW | Bear Paw Mtn. | 9.00 | 13 | P | Pn | 06 32 51.9 | -1.0 |
| PAX | Paxson | 9.13 | 30 | P | Pn | 06 32 53.6 | -1.1 |
| BARN | Barnard Glacie | 9.19 | 46 | P | Pn | 06 32 54.8 | -0.9 |
| LOGN | Logan Glacier | 9.35 | 49 | P | Pn | 06 32 57.0 | -0.8 |
| PCA | Pinnacle | 9.35 | 54 | P | Pn | 06 32 56.4 | -1.5 |
| PNL | Peninsula | 9.60 | 57 | P | Pn | 06 33 01.3 | +0.2 |
| WRH | Wood River Hil | 9.79 | 19 | P | Pn | 06 33 02.0 | -1.8 |
| HDA | Harding Lake | 9.96 | 22 | P | Pn | 06 33 05.1 | -0.9 |
| CCB | Clear Creek Bu | 10.01 | 19 | P | Pn | 06 33 04.7 | -2.0 |
| MDM | Murphy Dome | 10.21 | 17 | P | Pn | 06 33 08.5 | -1.0 |
| IL1 | Eielson Array | 10.30 | 21 | P | Pn | 06 33 09.1 | -1.6 |
| ILAR | Eielson Array | 10.30 | 21 | Pn | Pn | 06 33 09.1 | -1.6 |
| | 2.2nm,0.3s,baz=218,slow=14,SNR=79 | | | | | | |
| ILAR | | | | Sn | Sn | 06 34 57.4 | -8.6 |
| | 0.1nm,0.3s,baz=254,slow=17,SNR=3.4 | | | | | | |
| ILAR | | | | LR | LR | 06 37 42.7 | |
| | comp=Z,60nm,18.5s,baz=250,slow=40 | | | | | | |
| ILB | Eielson Array | 10.30 | 21 | P | Pn | 06 33 09.1 | -1.6 |
| BCA3 | Beaver Creek A | 10.35 | 37 | P | Pn | 06 33 11.6 | +0.2 |
| IM3 | Indian Mountai | 10.64 | 4 | P | Pn | 06 33 14.7 | -0.7 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| EGAK | Eagle | 11.75 | 31 | P | Pn | 06 33 30.7 | +0.2 |
| NVAR | Mina Array Bea | 30.04 | 109 | P | P | 06 36 54.4 | +2.2 |
| | 0.4nm,0.6s,baz=311,slow=8.2,SNR=2.4 | | | | | | |
| TXAR | Lajitas Array | 44.87 | 104 | P | P | 06 38 58.8 | +1.2 |
| | 0.5nm,0.6s,baz=299,slow=6.3,SNR=11 | | | | | | |
| TXAR | | | | PcP | PcP | 06 40 38.7 | -0.4 |
| | 0.4nm,0.8s,baz=270,slow=0.9,SNR=3.6 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 45.51 | 234 | T | T | 07 27 55.8 | |
| | baz=30 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 45.52 | 234 | T | T | 07 27 38.5 | |
| | baz=30 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 45.53 | 234 | T | T | 07 27 50.7 | |
| | baz=30 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 46.67 | 233 | T | T | 07 29 15.4 | |
| | baz=23 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 46.68 | 233 | T | T | 07 29 16.5 | |
| | baz=23 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 46.68 | 233 | T | T | 07 29 05.5 | |
| | baz=23 | | | | | | |
| TEIG | Tepich | 60.63 | 97 | LR | LR | 07 09 19.5 | |
| | comp=Z,86nm,18.4s,baz=34,slow=38 | | | | | | |

*NIED **12** 06:43:00, 24°.80N×122°.00E, h116km, Mw3.9 Best double couple: M0 6.83000×10^14 NP1:φs72.00000°, δ25.00000°, λ83.00000°. NP2:φs259.00000°, δ66.00000°, λ93.00000°.*
*ISCJB **12** 06:43:25.1±0.3, 24°.90N±0°.03×122°.09E±0°.02, h124km±2km, mb3.7/5, Error ellipse: s-maj=4.7km s-min=2.8km az=160.1*
*JMA **12** 06:43:25.6±0.2, 24°.85N×122°.03E, h120km±2km, M3.5*
*TAP **12** 06:43:26.0, 24°.90N×122°.07E, h119km, ML4.5, B*
*IDC **12** 06:43:27.0±10.0, 24°.87N×121°.89E, h136km±100km, mb3.4/5, mb1 3.6/5, mb1mx3.2/43, mbtmp3.8/5, Error ellipse: s-maj=122.2km s-min=16.9km az=63.0*
**ISC 12 06:43:25.6**±0.8**, 24°.89N**±0°.04×**122°.08E**±0°.03**, h123**km±5km**, n75, σ0.86**/132**, mb3.5**/5**, 11C-11D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TWB1 | Santiao Chiao | 0.14 | 324 | ⇓iP | Pn | 06 43 42.6 | +0.1 |
| | baz=328 | | | | | | |
| TWB1 | | | | S | Sn | 06 43 54.0 | -1.2 |
| | baz=328 | | | | | | |
| EGS | | 0.14 | 250 | ⇓iP | Pn | 06 43 42.5 | 0.0 |
| | baz=232 | | | | | | |
| EGS | | | | S | Sn | 06 43 54.2 | -0.9 |
| | baz=232 | | | | | | |
| NWF | Wu-fen Shan | 0.32 | 303 | ⇓iP | Pn | 06 43 43.2 | 0.0 |
| | baz=297 | | | | | | |
| NWF | | | | S | Sn | 06 43 55.5 | -0.8 |
| | baz=297 | | | | | | |
| ILA | Ilan | 0.33 | 247 | P | Pn | 06 43 43.0 | -0.1 |
| | baz=234 | | | | | | |
| ILA | | | | S | Sn | 06 43 55.4 | -0.7 |
| | baz=234 | | | | | | |
| TWC | Suao | 0.35 | 217 | ⇓iP | Pn | 06 43 43.4 | +0.2 |
| | baz=207 | | | | | | |
| TWC | | | | S | Sn | 06 43 55.4 | -0.9 |
| | baz=207 | | | | | | |
| TWE | Neicheng | 0.41 | 246 | iP | Pn | 06 43 43.6 | +0.2 |
| | baz=237 | | | | | | |
| TWE | | | | eS | Sn | 06 43 57.9 | +1.1 |
| | baz=237 | | | | | | |
| TWA | Mucha | 0.46 | 281 | ⇓P | Pn | 06 43 43.5 | -0.2 |
| | baz=277 | | | | | | |
| TWA | | | | S | Sn | 06 43 56.0 | -1.3 |
| | baz=277 | | | | | | |
| TAP1 | Taipei | 0.53 | 286 | P | Pn | 06 43 43.6 | -0.4 |
| | baz=282 | | | | | | |
| TAP1 | | | | S | Sn | 06 43 57.4 | -0.5 |
| | baz=282 | | | | | | |
| ENTT | Nioudou | 0.53 | 242 | ⇓iP | Pn | 06 43 44.7 | +0.6 |
| | baz=235 | | | | | | |
| ENTT | | | | S | Sn | 06 43 58.5 | +0.4 |
| | baz=235 | | | | | | |
| TAP | Taipei | 0.54 | 286 | eP | Pn | 06 43 43.6 | -0.6 |
| | baz=283 | | | | | | |
| TAP | | | | eS | Sn | 06 43 58.5 | +0.4 |
| | baz=283 | | | | | | |
| ENA | Nanau | 0.56 | 214 | P | Pn | 06 43 45.0 | +0.7 |
| | baz=201 | | | | | | |
| ENA | | | | S | Sn | 06 43 58.8 | +0.5 |
| | baz=201 | | | | | | |
| TWY | Chenhua | 0.58 | 311 | ⇓iP | Pn | 06 43 44.4 | 0.0 |
| | baz=311 | | | | | | |
| TWY | | | | eS | Sn | 06 44 00.1 | +1.5 |
| | baz=311 | | | | | | |
| TWS1 | Kuangyinshan | 0.64 | 289 | eP | Pn | 06 43 44.8 | +0.1 |
| | baz=287 | | | | | | |
| TWS1 | | | | eS | Sn | 06 43 59.7 | +0.4 |
| | baz=287 | | | | | | |
| EHP | Heping Village | 0.66 | 208 | eP | Pn | 06 43 45.8 | +0.8 |
| | baz=198 | | | | | | |
| NSK | Sanguang | 0.69 | 252 | ⇓iP | Pn | 06 43 45.4 | +0.1 |
| | baz=239 | | | | | | |
| NSK | | | | S | Sn | 06 43 58.9 | -1.2 |
| | baz=239 | | | | | | |
| PCYT | Pengchaiyu | 0.73 | 359 | ⇓iP | Pn | 06 43 46.1 | +0.5 |
| | baz=2.0 | | | | | | |
| NNS | Nan Shan | 0.79 | 235 | ⇓eP | Pn | 06 43 46.6 | +0.5 |
| | baz=230 | | | | | | |
| NNS | | | | eS | Sn | 06 44 01.3 | -0.3 |
| | baz=230 | | | | | | |
| NCU | National Centr | 0.81 | 276 | P | Pn | 06 43 46.7 | +0.5 |
| | baz=264 | | | | | | |
| NCU | | | | S | Sn | 06 44 01.8 | 0.0 |
| | baz=264 | | | | | | |
| JYNG | Yonagunijimaku | 0.90 | 119 | P | Pn | 06 43 47.3 | +0.3 |
| JYNG | | | | eS | Sn | 06 44 02.9 | -0.2 |
| TWD | Chiawan | 0.92 | 209 | eP | Pn | 06 43 47.1 | -0.1 |
| | baz=216 | | | | | | |
| TWD | | | | eS | Sn | 06 44 02.6 | -0.8 |
| | baz=216 | | | | | | |
| YOJ | Yonaguni jima | 0.95 | 117 | P | Pn | 06 43 47.8 | +0.4 |
| YOJ | | | | eS | Sn | 06 44 03.7 | -0.2 |
| YOJ | Yonaguni jima | 0.95 | 117 | iP | Pn | 06 43 47.8 | +0.4 |
| | baz=125 | | | | | | |
| YOJ | | | | iS | Sn | 06 44 02.9 | -1.0 |
| | baz=125 | | | | | | |
| HWA | Hwalien | 1.01 | 205 | eP | Pn | 06 43 48.5 | +0.5 |
| | baz=195 | | | | | | |
| HWA | | | | eS | Sn | 06 44 05.0 | +0.1 |
| | baz=195 | | | | | | |
| HSN | Hsinchu | 1.01 | 265 | P | Pn | 06 43 47.7 | -0.3 |
| | baz=263 | | | | | | |
| HSN | | | | S | Sn | 06 44 04.2 | -0.7 |
| | baz=263 | | | | | | |
| NSTT | Nanjuang | 1.01 | 255 | ⇓iP | Pn | 06 43 48.3 | +0.3 |
| | baz=245 | | | | | | |
| NSTT | | | | S | Sn | 06 44 04.1 | -0.9 |
| | baz=245 | | | | | | |
| TWT | Tachien | 1.04 | 232 | P | Pn | 06 43 49.6 | +1.1 |
| | baz=228 | | | | | | |
| TWT | | | | S | Sn | 06 44 06.0 | +0.2 |
| | baz=228 | | | | | | |
| WHF | Hehuan Shan | 1.05 | 225 | ⇑iP | Pn | 06 43 49.5 | +0.6 |
| | baz=216 | | | | | | |
| WHF | | | | S | Sn | 06 44 06.0 | -0.5 |
| | baz=216 | | | | | | |
| ESL | Shilin | 1.23 | 209 | ⇑P | Pn | 06 43 49.6 | -0.6 |
| | baz=208 | | | | | | |
| ESL | | | | eS | Sn | 06 44 07.8 | -1.1 |
| | baz=208 | | | | | | |
| TEGC | Jichi Village | 1.28 | 203 | eP | Pn | 06 43 51.9 | +1.1 |
| | baz=201 | | | | | | |
| NSY | Sanyi | 1.29 | 249 | P | Pn | 06 43 51.6 | +0.6 |
| | baz=245 | | | | | | |
| NSY | | | | S | Sn | 06 44 10.1 | -0.1 |
| | baz=245 | | | | | | |
| TWQ1 | Liyutan | 1.31 | 246 | P | Pn | 06 43 51.4 | +0.3 |
| | baz=242 | | | | | | |
| TWQ1 | | | | eS | Sn | 06 44 09.6 | -0.9 |
| | baz=242 | | | | | | |
| WDT | Danda | 1.42 | 218 | ⇑iP | Pn | 06 43 53.5 | +0.8 |
| | baz=208 | | | | | | |
| WDT | | | | S | Sn | 06 44 13.0 | -0.2 |
| | baz=208 | | | | | | |
| SMLT | Sun Moon Lake | 1.47 | 227 | ⇑P | Pn | 06 43 54.0 | +0.9 |
| | baz=230 | | | | | | |
| SMLT | | | | iS | Sn | 06 44 14.7 | +0.8 |
| | baz=230 | | | | | | |
| TCU | Taichung | 1.48 | 240 | eP | Pn | 06 43 53.4 | +0.4 |
| | baz=236 | | | | | | |
| TCU | | | | eS | Sn | 06 44 14.0 | +0.2 |
| | baz=236 | | | | | | |
| TYC | Yuchr | 1.49 | 229 | ⇑iP | Pn | 06 43 53.9 | +0.8 |
| | baz=232 | | | | | | |
| TYC | | | | S | Sn | 06 44 14.4 | +0.4 |
| | baz=232 | | | | | | |
| EHY | Hungye | 1.54 | 207 | eP | Pn | 06 43 52.7 | -1.1 |
| | baz=197 | | | | | | |
| EHY | | | | eS | Sn | 06 44 13.0 | -2.3 |
| | baz=197 | | | | | | |
| IRIF | Iriomote-Funau | 1.60 | 110 | P | Pn | 06 43 54.5 | +0.1 |
| IRIF | | | | eS | Sn | 06 44 16.2 | -0.2 |
| WNT | Mingjian | 1.62 | 232 | P | Pn | 06 43 55.4 | +0.7 |
| | baz=235 | | | | | | |
| WNT | | | | S | Sn | 06 44 17.5 | +0.6 |
| | baz=235 | | | | | | |
| TWF1 | Yuli | 1.69 | 205 | P | Pn | 06 43 54.8 | -0.7 |
| | baz=200 | | | | | | |
| TWF1 | | | | eS | Sn | 06 44 17.0 | -1.3 |
| | baz=200 | | | | | | |
| YUS | Yu-Shan | 1.73 | 217 | ⇑iP | Pn | 06 43 57.9 | +1.4 |
| | baz=204 | | | | | | |
| YUS | | | | S | Sn | 06 44 21.6 | +1.6 |
| | baz=204 | | | | | | |
| HATJ | Hateruma jima | 1.78 | 118 | P | Pn | 06 43 57.2 | +0.7 |
| HATJ | | | | eS | Sn | 06 44 20.7 | +0.6 |
| ALS | Alishan | 1.80 | 220 | ⇑P | Pn | 06 43 58.1 | +0.9 |
| | baz=225 | | | | | | |
| ALS | | | | eS | Sn | 06 44 23.6 | +2.5 |
| | baz=225 | | | | | | |
| CHN5 | Tsauling | 1.82 | 225 | ⇑P | Pn | 06 43 57.8 | +0.7 |
| | baz=220 | | | | | | |
| CHN5 | | | | S | Sn | 06 44 22.2 | +1.1 |
| | baz=220 | | | | | | |
| JKRS | Kuro-shima | 1.88 | 110 | P | Pn | 06 43 58.2 | +0.5 |
| JKRS | | | | eS | Sn | 06 44 22.1 | -0.1 |
| CHKT | Chengkung | 1.90 | 200 | eP | Pn | 06 43 58.0 | 0.0 |
| | baz=196 | | | | | | |
| CHKT | | | | eS | Sn | 06 44 21.5 | -1.3 |
| | baz=196 | | | | | | |
| JIJ | Ishigaki jima | 1.95 | 105 | P | Pn | 06 43 58.8 | +0.2 |
| JIJ | | | | eS | Sn | 06 44 23.0 | -0.8 |
| ELDTW | Lidau | 1.95 | 210 | eP | Pn | 06 43 58.8 | 0.0 |
| | baz=201 | | | | | | |
| CHN2 | Minshiung | 2.00 | 228 | eP | Pn | 06 43 59.9 | +0.7 |
| | baz=226 | | | | | | |
| CHN4 | Tsaushan | 2.05 | 222 | ⇑P | Pn | 06 44 00.6 | +0.7 |
| | baz=217 | | | | | | |
| CHN4 | | | | eS | Sn | 06 44 27.5 | +1.5 |
| | baz=217 | | | | | | |
| CHY | Chiayi | 2.05 | 228 | eP | Pn | 06 43 60.0 | +0.1 |
| | baz=223 | | | | | | |
| CHY | | | | eS | Sn | 06 44 26.1 | 0.0 |
| | baz=223 | | | | | | |
| JISG | Ishigakijimahi | 2.05 | 98 | P | Pn | 06 44 00.4 | +0.5 |
| JISG | | | | eS | Sn | 06 44 26.0 | -0.1 |
| STYT | Tauyuan | 2.10 | 215 | ⇑iP | Pn | 06 44 01.5 | +0.9 |
| | baz=203 | | | | | | |
| STYT | | | | eS | Sn | 06 44 28.0 | +0.6 |
| | baz=203 | | | | | | |
| WTP | Ta-pu | 2.12 | 220 | eP | Pn | 06 44 01.0 | +0.3 |
| | baz=214 | | | | | | |
| WTP | | | | eS | Sn | 06 44 27.3 | -0.3 |
| | baz=214 | | | | | | |
| CHN1 | Nanshi | 2.21 | 220 | P | Pn | 06 44 02.2 | +0.2 |
| | baz=215 | | | | | | |
| CHN1 | | | | eS | Sn | 06 44 29.8 | +0.1 |
| | baz=215 | | | | | | |
| TWG | Pinlang | 2.26 | 204 | eP | Pn | 06 44 01.7 | -0.8 |
| | baz=196 | | | | | | |
| TWG | | | | eS | Sn | 06 44 28.7 | -2.1 |
| | baz=196 | | | | | | |
| SGST | Jiashian | 2.26 | 217 | eP | Pn | 06 44 03.0 | +0.4 |
| | baz=220 | | | | | | |
| SGST | | | | eS | Sn | 06 44 31.2 | +0.3 |
| | baz=220 | | | | | | |
| JTJ | Tarama | 2.40 | 95 | P | Pn | 06 44 05.4 | +1.2 |
| JTJ | | | | eS | Sn | 06 44 34.1 | +0.3 |
| TWM1 | Shoushan | 2.56 | 217 | eP | Pn | 06 44 07.2 | +0.8 |
| | baz=215 | | | | | | |
| EAST | Anshuo | 2.74 | 205 | eP | Pn | 06 44 08.1 | -0.7 |
| | baz=199 | | | | | | |
| WDGT | Dungji | 2.74 | 234 | eP | Pn | 06 44 07.8 | -0.9 |
| | baz=229 | | | | | | |
| WDGT | | | | eS | Sn | 06 44 39.8 | -2.0 |
| | baz=229 | | | | | | |
| TAW | Tawu | 2.75 | 203 | eP | Pn | 06 44 11.5 | +2.8 |
| | baz=199 | | | | | | |
| JIRB | Irabujima | 2.81 | 91 | P | Pn | 06 44 10.5 | +1.0 |
| JIRB | | | | eS | Sn | 06 44 43.8 | +0.4 |
| SCZT | Fangliau | 2.84 | 208 | eP | Pn | 06 44 10.2 | +0.2 |
| | baz=215 | | | | | | |
| LAY | Lan-yu | 2.88 | 190 | ⇑iP | Pn | 06 44 10.2 | -0.3 |
| | baz=194 | | | | | | |
| TWK1 | Hengchun | 3.16 | 202 | eP | Pn | 06 44 14.2 | 0.0 |
| | baz=209 | | | | | | |
| TSEB | Hengchuen, Pin | 3.17 | 200 | eP | Pn | 06 44 15.2 | +0.9 |
| | baz=209 | | | | | | |
| KNM | Kinmen | 3.35 | 263 | eP | Pn | 06 44 18.1 | +1.4 |
| | baz=261 | | | | | | |
| JIH | Iheya | 5.71 | 67 | P | Pn | 06 44 48.6 | +0.4 |
| JOW | Kunigami | 5.91 | 70 | P | Pn | 06 44 50.0 | -0.8 |
| JAMN | Amaminishikomi | 7.18 | 61 | P | Pn | 06 45 06.0 | -1.9 |
| SONM | Songino Array | 26.05 | 335 | P | P | 06 48 47.2 | -0.3 |
| | 0.7nm,0.7s,baz=145,slow=8.5,SNR=4.2 | | | | | | |
| SONM | | | | pP | pP | 06 49 16.0 | +2.1 |
| | 0.8nm,0.7s,baz=148,slow=8.4,SNR=4.3 | | | | | | |
| MKAR | Makanchi Array | 38.41 | 315 | P | P | 06 50 34.7 | -0.4 |
| | 0.3nm,0.4s,baz=100,slow=9.5,SNR=5.9 | | | | | | |
| KURBB | Kurchatov Arra | 42.10 | 319 | P | P | 06 51 04.1 | -1.3 |
| | 0.3nm,0.5s,baz=111,slow=10.0,SNR=2.5 | | | | | | |
| WRA | Warramunga Arr | 46.13 | 164 | P | P | 06 51 37.8 | -0.1 |
| | 3.4nm,0.6s,baz=346,slow=8.4,SNR=23 | | | | | | |
| WRA | | | | PcP | PcP | 06 53 11.4 | -0.5 |
| | 0.2nm,0.6s,baz=346,slow=3.4,SNR=4.6 | | | | | | |
| ASAR | Alice Springs | 49.61 | 166 | P | P | 06 52 05.0 | +0.4 |
| | 1.9nm,0.6s,baz=341,slow=6.8,SNR=24 | | | | | | |
| ASAR | | | | PcP | PcP | 06 53 23.9 | -0.4 |
| | 0.7nm,0.7s,baz=354,slow=3.7,SNR=5.2 | | | | | | |

**IDC 12 06:47:09.4**±2.6**, 54°.11N**×**86°.40E, h0**km**, mb1 3.1**/2**, mb1mx2.9**/50**, mbtmp3.1**/2**, ML3.0**/2**, Error ellipse: s-maj=20.8km s-min=13.8km az=47.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I46RU | ZALESOVO INFRA | 0.94 | 261 | i | | 06 53 40.0 | |
| | baz=82,slow=326,SNR=1.6 | | | | | | |
| ZALV | Zalesovo Beam | 0.94 | 261 | Pg | Pg | 06 47 26.2 | -1.3 |
| | 2.3nm,0.3s,baz=78,slow=16,SNR=14 | | | | | | |
| ZALV | | | | Lg | Lg | 06 47 40.6 | |
| | 3.0nm,0.3s,baz=82,slow=22,SNR=14 | | | | | | |
| KURBB | Kurchatov Arra | 5.95 | 237 | Pn | Pn | 06 48 39.6 | +0.9 |
| | 0.2nm,0.3s,baz=55,slow=14,SNR=9.1 | | | | | | |
| KURBB | | | | Sn | Sn | 06 49 48.1 | +0.7 |
| | baz=59,slow=5.6,SNR=3.0 | | | | | | |
| KURBB | | | | Lg | Lg | 06 50 23.9 | |
| | 0.0nm,0.3s,baz=56,slow=31,SNR=7.0 | | | | | | |
| MKAR | Makanchi Array | 7.78 | 201 | Pn | Pn | 06 49 04.8 | +0.9 |
| | 0.3nm,0.3s,baz=22,slow=12,SNR=8.9 | | | | | | |

**IDC 12 06:53:17.6**±5.3**, 22°.98N**×**94°.14E, h97**km±42km**, mb3.2**/3**, mb1 3.3**/4**, mb1mx2.9**/44**, mbtmp3.4**/4**, Error ellipse: s-maj=147.3km s-min=22.3km az=59.0, Myanmar**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 6.35 | 134 | P | Pn | 06 54 48.8 | 0.0 |
| | 0.3nm,0.3s,baz=309,slow=13,SNR=6.1 | | | | | | |
| MKAR | Makanchi Array | 25.62 | 341 | P | P | 06 58 37.9 | 0.0 |
| | 0.6nm,0.6s,baz=148,slow=10.0,SNR=5.1 | | | | | | |
| WRA | Warramunga Arr | 57.95 | 134 | P | P | 07 02 59.7 | -0.5 |
| | 0.3nm,0.6s,baz=323,slow=7.5,SNR=3.3 | | | | | | |
| ASAR | Alice Springs | 60.35 | 138 | P | P | 07 03 17.3 | +0.6 |
| | 0.4nm,0.8s,baz=316,slow=6.9,SNR=4.2 | | | | | | |

*IDC **12** 06:57:30.1±1.4, 52°.39N×169°.90W, h0km, mb3.8/2, mb1 3.9/5, mb1mx3.5/50, mbtmp3.7/5, ML3.3/3, MS2.9/1, Ms1 2.9/1, ms1mx2.3/25, Error ellipse: s-maj=51.8km s-min=24.8km az=161.0*
*NEIC **12** 06:57:36.9, 52°.24N×169°.83W, h24km, ML3.5(AEIC), After AEIC.*
**ISC 12 06:57:34.7**±1.8**, 52°.4N**±0°.2×**169°.84W**±0°.09**, h19**km±4km**, n36, σ1.11**/33**, Fox Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIKH | Nikolski High | 0.84 | 45 | P | Pn | 06 57 52.1 | +0.6 |
| NIKH | | | | S | Sn | 06 58 04.4 | +1.0 |
| OKSO | Okmok South | 1.41 | 46 | P | Pg | 06 58 01.4 | -0.5 |
| OKSO | | | | S | Sg | 06 58 21.8 | +1.5 |
| OKCE | Okmok Cone E | 1.46 | 44 | P | Pg | 06 58 02.0 | -0.8 |
| OKTU | Okmok Mt. Tuli | 1.48 | 47 | P | Pg | 06 58 02.6 | -0.6 |
| OKAK | Okmok | 1.50 | 36 | P | Pn | 06 58 00.6 | +0.1 |
| OKRE | Okmok R'deer P | 1.52 | 41 | P | Pb | 06 58 02.9 | +0.6 |
| OKFG | Magazine Ridge | 1.56 | 48 | P | Pb | 06 58 02.9 | 0.0 |
| OKFG | | | | S | Sg | 06 58 24.6 | -0.3 |
| MSOM | Makushin Julie | 2.26 | 49 | P | Pn | 06 58 12.7 | +1.8 |
| MSW | Makushin Switc | 2.40 | 49 | P | Pn | 06 58 14.8 | +1.9 |
| UNV | Unalaska Valle | 2.49 | 53 | P | Pn | 06 58 15.7 | +1.6 |
| UNV | | | | S | Sb | 06 58 47.5 | -1.5 |
| KOFP | Korovin Flat P | 2.61 | 269 | P | Pn | 06 58 17.4 | +1.6 |
| KOKL | Mount Kliuchef | 2.67 | 270 | P | Pn | 06 58 18.0 | +1.3 |
| ATKA | Atka Island | 2.68 | 268 | P | Pn | 06 58 17.5 | +0.8 |
| ATKA | | | | S | Sn | 06 58 49.6 | +1.1 |
| KOWE | Korovin West | 2.70 | 271 | P | Pn | 06 58 17.8 | +0.7 |
| ZRO | Akutan Zero | 2.88 | 52 | P | Pn | 06 58 21.5 | +1.9 |
| GSMY | Great Sitkin M | 3.84 | 267 | P | Pn | 06 58 32.9 | +0.3 |
| GSTD | Great Sitkin T | 3.89 | 268 | P | Pn | 06 58 34.2 | +0.8 |
| GSCK | Great Sitkin C | 3.91 | 267 | P | Pn | 06 58 34.2 | +0.6 |
| ADAG | Mount Adagdak | 4.18 | 267 | P | Pn | 06 58 38.1 | +0.8 |
| KIKV | Kanaga Island | 4.54 | 266 | P | Pn | 06 58 42.9 | +0.5 |
| TAFP | Tanaga Falls P | 5.04 | 268 | P | Pn | 06 58 50.3 | +1.2 |
| GANE | Gareloi Northe | 5.54 | 268 | P | Pn | 06 58 57.1 | +1.1 |
| CERAA | Semis' Rag'd T | 6.46 | 270 | P | Pn | 06 59 09.8 | +1.0 |
| AMKA | Amchitka | 6.80 | 266 | P | Pn | 06 59 13.4 | +0.2 |
| KDAK | Kodiak Island | 11.26 | 55 | Pn | Pn | 07 00 14.6 | +0.3 |
| | 0.2nm,0.3s,baz=250,slow=12,SNR=2.5 | | | | | | |
| ILAR | Eielson Array | 17.10 | 35 | P | Pn | 07 01 31.4 | -0.9 |
| | 0.0nm,0.3s,baz=228,slow=12,SNR=3.5 | | | | | | |
| PETK | Petropavlovsk- | 19.58 | 285 | P | P | 07 01 59.8 | -1.4 |
| | 0.7nm,0.3s,baz=97,slow=12,SNR=4.4 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 37.28 | 218 | T | T | 07 44 19.4 | |
| | baz=24,slow=76,SNR=8.8 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 37.29 | 218 | T | T | 07 44 13.4 | |
| | baz=24,slow=76,SNR=12 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 37.30 | 218 | T | T | 07 44 23.7 | |
| | baz=24,slow=76,SNR=9.5 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 38.48 | 217 | T | T | 07 45 49.2 | |
| | baz=23,slow=76,SNR=126 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 38.49 | 217 | T | T | 07 45 46.4 | |
| | baz=23,slow=76,SNR=153 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 38.49 | 217 | T | T | 07 45 46.6 | |
| | baz=23,slow=76,SNR=88 | | | | | | |
| KSRS | Korea Array | 45.11 | 276 | LR | LR | 07 23 12.4 | |
| | comp=Z,13nm,20.1s,baz=69,slow=34 | | | | | | |
| TXAR | Lajitas Array | 53.04 | 89 | P | P | 07 06 49.9 | -0.5 |
| | 0.9nm,0.8s,baz=304,slow=5.4,SNR=12 | | | | | | |
| ASAR | Alice Springs | 90.18 | 230 | P | P | 07 10 31.1 | -2.4 |
| | 0.2nm,0.4s,baz=35,slow=5.1,SNR=4.5 | | | | | | |

*ISCJB **12** 07:01:04.7±0.3, 21°.16S±0°.03×68°.66W±0°.05, h122km±3km, mb4.2/18, Error ellipse: s-maj=8.3km s-min=4.3km az=172.9*
*BJI **12** 07:01:04.7, 21°.10S×68°.50W, h97km, mB4.9/5*
*NEIC **12** 07:01:04.0, 21°.16S×68°.57W, h100km, mb4.4/15, After GUC.*
*GUC **12** 07:01:04.4±0.4, 21°.16S×68°.57W, h100km, ML4.0*
*IDC **12** 07:01:05.2±1.1, 21°.10S×68°.47W, h109km±12km, mb3.8/8, mb1 3.8/10, mb1mx3.7/27, mbtmp4.1/10, Error ellipse: s-maj=18.9km s-min=14.5km az=102.0*
**ISC 12 07:01:04.6**±0.6**, 21°.15S**±0°.04×**68°.59W**±0°.07**, h105**km±5km**, n67, σ1.48**/81**, mb4.4**/18**, 1C-1D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB01 | IPOC Station P | 0.84 | 277 | iP | Pn | 07 01 23.8 | -0.1 |
| PB01 | | | | iS | Sn | 07 01 38.5 | +0.1 |
| PB07 | IPOC Station P | 1.34 | 244 | iP | Pn | 07 01 29.5 | +0.2 |
| PB07 | | | | iS | Sn | 07 01 49.0 | +0.9 |
| PB07 | | | | AML | AML | 07 01 50.8 | |
| | comp=E,4μm,0.4s | | | | | | |
| LVC | Limon Verde | 1.49 | 192 | P | Pn | 07 01 32.8 | +1.5 |
| | comp=E,12μm,0.3s,baz=12,slow=8.6,SNR=1584 | | | | | | |
| LVC | | | | S | Sn | 07 01 54.0 | +2.6 |
| | comp=E,11μm,0.3s,baz=90,slow=20,SNR=23 | | | | | | |
| LVC | | | | LR | LR | 07 02 26.0 | |
| | comp=E,409nm,20.7s,baz=270,slow=52 | | | | | | |
| LVC | Limon Verde | 1.49 | 192 | eP | Pn | 07 01 32.7 | +1.5 |
| LVC | | | | eS | Sn | 07 01 54.8 | +3.4 |
| PB06 | IPOC Station P | 1.80 | 210 | iP | Pn | 07 01 35.6 | +0.6 |
| PB06 | | | | iS | Sn | 07 01 58.8 | +0.7 |
| PB06 | | | | AML | AML | 07 02 04.6 | |
| | comp=E,2μm,0.7s | | | | | | |
| PB04 | IPOC Station P | 1.87 | 231 | iP | Pn | 07 01 36.5 | +0.6 |
| PB04 | | | | iS | Sn | 07 02 01.1 | +1.4 |
| PB04 | | | | AML | AML | 07 02 10.9 | |
| | comp=N,2μm,0.5s | | | | | | |
| MNMC | Minimini | 2.22 | 335 | iP | Pn | 07 01 41.5 | +1.0 |
| MNMC | | | | iS | Sn | 07 02 09.6 | +1.8 |
| MNMC | | | | AML | AML | 07 02 15.3 | |
| | comp=E,2μm,0.3s | | | | | | |
| PB13 | IPOC Station P | 2.93 | 343 | ⇑eP | Pn | 07 01 51.5 | +1.4 |
| PB13 | | | | eS | Sn | 07 02 27.5 | +2.5 |
| PB13 | | | | AML | AML | 07 02 38.2 | |
| | comp=N,4μm,0.7s | | | | | | |
| PB10 | IPOC Station P | 2.98 | 217 | iP | Pn | 07 01 51.1 | +1.0 |
| PB10 | | | | eS | Sn | 07 02 26.4 | +1.2 |
| PB10 | | | | AML | AML | 07 02 37.8 | |
| | comp=N,3μm,0.4s | | | | | | |
| ARCH | Arica | 3.09 | 328 | eP | Pn | 07 01 52.5 | +0.8 |
| HJA | Humahuaca | 3.59 | 125 | eP | Pn | 07 02 02.5 | +3.8 |
| SLA | San Lorenzo | 4.55 | 142 | eP | Pn | 07 02 15.0 | +3.6 |
| LPAZ | La Paz | 4.85 | 5 | P | Pn | 07 02 17.9 | +1.9 |
| | comp=N,6.2nm,0.3s,baz=182,slow=8.1,SNR=230 | | | | | | |
| LPAZ | | | | S | Sn | 07 03 13.5 | +2.1 |
| | comp=N,0.9nm,0.3s,baz=68,slow=19,SNR=2.1 | | | | | | |
| ARE | Arequipa | 5.41 | 329 | eP | Pn | 07 02 28.0 | +4.8 |
| ARE | | | | eS | Sn | 07 03 23.0 | -1.4 |
| AHML | Horco Molle | 6.35 | 153 | eP | Pn | 07 02 37.6 | +1.8 |
| LCO | Las Campanas | 8.06 | 193 | ePn | Pn | 07 02 55.4 | -3.7 |
| ACLC | CERRO LA CRUZ | 8.37 | 170 | eP | Pn | 07 03 02.8 | -0.5 |
| CFAA | Coronel Fontan | 10.42 | 178 | P | Pn | 07 03 27.4 | -3.5 |
| | comp=N,0.1nm,0.3s,baz=347,slow=12,SNR=19 | | | | | | |
| CFAA | | | | S | Sn | 07 05 18.2 | -7.6 |
| | comp=N,0.1nm,0.3s,baz=277,slow=18,SNR=4.9 | | | | | | |
| CFAA | Coronel Fontan | 10.42 | 178 | eP | Pn | 07 03 27.9 | -3.0 |
| CPUP | Villa Florida | 11.53 | 119 | P | Pn | 07 03 45.7 | -0.2 |
| | comp=N,0.1nm,0.3s,baz=321,slow=8.0,SNR=3.2 | | | | | | |
| SAML | Samuel | 13.20 | 24 | ePn | Pn | 07 04 04.6 | -3.5 |
| TRQA | Tornquist | 17.79 | 163 | eP | Pn | 07 05 05.7 | +0.1 |
| | comp=N,2.4nm,0.8s | | | | | | |
| PLCA | Paso Flores | 19.59 | 184 | eP | Pn | 07 05 26.0 | -0.9 |
| | comp=N,99nm,2.5s | | | | | | |
| BDFB | Brasilia | 20.27 | 78 | P | P | 07 05 30.9 | -1.2 |
| | comp=N,4.7nm,0.5s,baz=252,slow=9.5,SNR=15 | | | | | | |
| BDFB | Brasilia | 20.27 | 78 | eP | P | 07 05 31.6 | -0.6 |
| | comp=N,29nm,1.5s | | | | | | |
| PTGA | Pitinga | 21.97 | 24 | P | P | 07 05 47.8 | -2.3 |
| | comp=N,6.7nm,0.4s,baz=199,slow=17,SNR=9.2 | | | | | | |
| CMIG | Matias Romero | 45.92 | 324 | P | P | 07 09 17.3 | +0.2 |
| | comp=N,0.9nm,0.7s,baz=139,slow=5.2,SNR=3.7 | | | | | | |
| SWET | Sewanee | 58.42 | 343 | eP | P | 07 10 47.8 | -1.6 |
| | comp=N,1.1nm,0.4s | | | | | | |
| MIAR | Mount Ida | 60.27 | 336 | eP | P | 07 11 01.3 | -0.7 |
| | comp=N,2.2nm,0.6s | | | | | | |
| TX31 | Lajitas Ar. Si | 60.51 | 325 | eP | P | 07 11 03.6 | -0.4 |
| TXAR | Lajitas Array | 60.51 | 325 | P | P | 07 11 03.7 | -0.3 |
| | comp=N,0.2nm,0.5s,baz=156,slow=9.9,SNR=5.0 | | | | | | |
| SNAA | Sanae | 62.51 | 161 | P | P | 07 11 17.5 | +0.7 |
| SNAA | Sanae | 62.51 | 161 | eP | P | 07 11 17.2 | +0.4 |
| | comp=N,5.9nm,1.2s | | | | | | |
| CCM | Cathedral Cave | 62.62 | 340 | eP | P | 07 11 16.6 | -1.1 |
| | comp=N,5.5nm,0.9s | | | | | | |
| BGNE | Belgrade | 68.01 | 336 | eP | P | 07 11 52.3 | -0.3 |
| | comp=N,5.8nm,0.3s | | | | | | |
| SDCO | Great Sand Dun | 68.10 | 329 | eP | P | 07 11 54.1 | +0.6 |
| | comp=N,1.0nm,0.8s | | | | | | |
| DBIC | Dimbokro | 68.35 | 73 | P | P | 07 11 54.9 | -0.3 |
| | comp=N,5.2nm,0.7s,baz=233,slow=5.4,SNR=5.4 | | | | | | |
| DBIC | Dimbokro | 68.35 | 73 | eP | P | 07 11 55.0 | -0.3 |
| ECSD | EROS Data Cent | 69.50 | 339 | eP | P | 07 12 01.2 | -0.6 |
| | comp=N,4.7nm,1.3s | | | | | | |
| SRU | San Rafael | 71.64 | 327 | eP | P | 07 12 15.0 | -0.1 |
| | comp=N,10nm,0.9s | | | | | | |
| CCUT | Cedar City | 72.00 | 324 | eP | P | 07 12 19.1 | +1.7 |

comp=N,7.9nm,1.2s
NVAR Mina Array Bea 75.40 322 P P 07 12 37.4 +0.2
comp=N,0.2nm,0.6s,baz=151,slow=6.9,SNR=4.4
RLMT Red Lodge 75.65 332 eP P 07 12 39.2 +0.8
comp=N,16nm,1.9s
SYO Syowa Base 76.72 159⇓eP P 07 12 43.6 -0.4
TOA0 Torodi Ar. Sit 76.96 70 eP P 07 12 45.6 -0.6
TORD Torodi Ar. Bea 76.96 70 P P 07 12 45.4 -0.8
comp=N,3.7nm,0.6s,baz=254,slow=5.8,SNR=47
K05A Summer Lake 79.74 324 eP P 07 13 02.9 +1.7
G08A Pilot Rock 80.43 327 eP P 07 13 05.3 +0.5
WALA Waterton Lakes 80.70 332 eP P 07 13 06.5 +0.4
comp=N,7.6nm,0.7s
H04A Detroit Lake 81.73 325 eP P 07 13 05.3 -6.2
MAW Mawson 84.58 163 P P 07 13 25.9 0.0
comp=N,1.7nm,0.5s,baz=210,slow=3.0,SNR=6.4
MAW Mawson 84.58 163 eP P 07 13 26.9 +1.0
comp=N,5.5nm,2.1s
ATKA Atka Island 115.93 319 ePKPdf PKPdf 07 19 35.7 +1.0
AS01 Alice Springs 130.34 207 ePKPdf PKPdf 07 20 03.3 -0.2
ASAR Alice Springs 130.36 207 PKP PKPdf 07 20 03.3 -0.3
comp=N,0.5nm,0.6s,baz=146,slow=2.5,SNR=5.5
WRA Warramunga Arr 133.41 210 PKP PKPdf 07 20 09.4 +0.1
comp=N,0.7nm,0.6s,baz=159,slow=1.7,SNR=10
WRAB Tennant Creek 133.41 210 ePKPdf PKPdf 07 20 10.2 +0.9
KSH Kashi 144.65 51 ePKP PKPbc 07 20 28.8 +0.4
KSH epPKP pPKPdf 07 20 55.3 -2.7
KSH esPKP 07 21 06.0
KSH ePP PP 07 23 47.4 +0.4
KSH SKKS 07 30 27.6
KSH PPMZ
comp=N,44nm,5.8s
KSH LN
comp=N,130nm,5.1s
KSH LE
comp=N,61nm,4.7s
KSH LZ
comp=N,130nm,5.2s
MAKZ Makanchi 144.99 36 ePKPbc PKPab 07 20 29.3 +0.1
MKAR Makanchi Array 145.18 36 PKPbc PKPdf 07 20 30.1 +0.2
comp=N,2.4nm,0.7s,baz=333,slow=3.7,SNR=16
MK01 Makanchi Array 145.19 36 ePKPbc PKPab 07 20 29.9 0.0
WMQ Urumqi 150.01 36 ePKPbc PKPdf 07 20 38.0 0.0
HHC Hu-ho-hao-te 160.36 360 ePKP PKPdf 07 20 52.3 +0.2
HHC PP PP 07 25 18.8 +4.1
HHC SKS SKSdf 07 27 44.3 -3.7
HHC SS SS 07 45 21.1 +4.6
HHC PPMZ
comp=N,21nm,6.2s
HHC LN
comp=N,160nm,17.4s
HHC LE
comp=N,140nm,17.4s
HHC LZ
comp=N,93nm,17.4s
LZH Lanzhou 163.71 22 ePKP PKPdf 07 20 54.1 -1.7
LZH pPKP pPKPdf 07 21 21.6 -3.0
LZH sPKP 07 21 32.5
CD2 Chengdu 168.10 34 PKP PKPdf 07 20 57.9 -1.4
CD2 pPKP pPKPdf 07 21 25.7 -2.4
CD2 sPKP 07 21 36.4
CD2 PP PP 07 25 55.0 -0.9
CD2 SKKS 07 32 32.2
CD2 SS SS 07 46 36.8 -0.2
CD2 PPMZ
comp=N,120nm,5.0s
KMI Kunming 171.09 62 PKP PKPdf 07 21 00.1 -1.4
GYA Guiyang 173.16 38 ePKP PKPdf 07 21 01.2 -1.0
GYA pPKP pPKPdf 07 21 29.8 -1.3
GYA sPKP 07 21 40.4
GYA PKPab PKPab 07 22 31.0 +0.8
GYA PP PP 07 26 22.8 +1.4
GYA PPMZ
comp=N,90nm,8.2s

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*ISCJB **12** 07:20:49.6±0.4, 36.°94N±0.°02×2.°81W±0.°02, h6km±2km, Error ellipse: s-maj=3.5km s-min=2.2km az=168.8*
*INMG **12** 07:20:50.8±1.9, 36.°69N×2.°62W, h16km±4km, ML3.2, Error ellipse: s-maj=3.4km s-min=2.7km az=138.0*
*MDD **12** 07:20:50.4±0.3, 36.°69N×2.°68W, h6km±2km, mbLg3.2/37, Error ellipse: s-maj=2.8km s-min=2.3km az=154.0, PRXIMO*
*MDD EMS: III INTENSIDAD MAXIMA.*
*LDG **12** 07:20:50.7±0.1, 36.°69N×2.°66W, h2km, Ml3.5/5, Error ellipse: s-maj=2.8km s-min=2.0km az=156.0*
*SFS **12** 07:20:50.0, 36.°69N×2.°66W, h5km, ML3.5*
*CSEM **12** 07:20:51.4±0.2, 36.°86N×2.°74W, h10km, ML3.6/41, Error ellipse: s-maj=4.0km s-min=2.5km az=161.0*
*CNRM **12** 07:20:55.4, 36.°47N×2.°47W, h10km, MD3.4*
**ISC 12 07:20:49.3**±0.7, **36.°77N**±0.°02×**2.°70W**±0.°02, **h11**km±3km, **n187**, σ1.s60/316, **4C-5D, Strait of Gibraltar**

Code Station Name Δ° AZ° Phase ID Op ISC Time h m s Res ISC
EBER Berja 0.20 309 ⇓Pg Pg 07 20 55.4 +1.8
770nm,0.2s,SNR=18
EBER Lg Lg 07 20 59.3
10μm,0.3s,SNR=5.0
EBER Berja 0.20 309 Pg Pg 07 20 55.4 +1.8
770nm,0.2s,SNR=18
EBER Lg Lg 07 20 59.3
10μm,0.3s,SNR=5.0
ENIJ Nijar 0.44 63 ⇑Pg Pg 07 20 59.3 +1.3
2μm,0.2s,SNR=18
ENIJ Lg Lg 07 21 05.1
4μm,0.2s,SNR=7.9
ENIJ Nijar 0.44 63 Pg Pg 07 20 59.3 +1.3
2μm,0.2s,SNR=18
ENIJ Lg Lg 07 21 05.1
4μm,0.2s,SNR=7.9
EGUA Guajares 0.70 275 ⇑Pg Pg 07 21 03.4 +0.6
296nm,0.2s,SNR=18
EGUA Lg Lg 07 21 13.8
312nm,0.1s,SNR=7.9
EGUA Guajares 0.70 275 Pg Pg 07 21 03.4 +0.6
296nm,0.2s,SNR=18
EGUA Lg Lg 07 21 13.8
312nm,0.1s,SNR=7.9
EQUE Quentar 0.73 306 ⇓Pg Pb 07 21 05.1 +0.9
98nm,0.2s,SNR=18
EQUE Lg Lg 07 21 15.7
700nm,0.3s,SNR=15
EQUE Quentar 0.73 306 Pg Pb 07 21 05.1 +0.9
98nm,0.2s,SNR=18
EQUE Lg Lg 07 21 15.7
700nm,0.3s,SNR=15
GORA Gorafe 0.76 339 ⇓Pg Pb 07 21 05.8 +1.2
362nm,0.2s,SNR=18
GORA Lg Lg 07 21 16.8
1μm,0.2s,SNR=7.9
GORA Gorafe 0.76 339 Pg Pb 07 21 05.8 +1.2
362nm,0.2s,SNR=18
GORA Lg Lg 07 21 16.8
1μm,0.2s,SNR=7.9
EALB Alboran 0.88 198 ⇓Pg Pb 07 21 05.5 -1.0
78nm,0.1s,SNR=18
EALB Lg Lg 07 21 16.4
4μm,0.3s,SNR=16
SELV Sierra Elvira 0.95 300 ⇑Pg Pn 07 21 09.1 +0.5
30nm,0.2s,SNR=18
SELV Lg Lg 07 21 22.2
232nm,0.4s,SNR=7.9
SELV Sierra Elvira 0.95 300 Pg Pn 07 21 09.1 +0.5
30nm,0.2s,SNR=18
SELV Lg Lg 07 21 22.2
232nm,0.4s,SNR=7.9
EHUE Huescar 1.04 5 Pg Pn 07 21 11.1 +1.1
34nm,0.2s,SNR=7.9
EHUE Lg Lg 07 21 26.7
108nm,0.3s,SNR=7.9
EHUE Huescar 1.04 5 Pg Pn 07 21 11.1 +1.1
34nm,0.2s,SNR=7.9
EHUE Lg Lg 07 21 26.7
108nm,0.3s,SNR=7.9
EQES Quesada 1.07 344 ⇓Pg Pn 07 21 11.9 +1.5
18nm,0.4s,SNR=18
EQES Lg Lg 07 21 27.6
161nm,0.2s,SNR=5.3
EQES Quesada 1.07 344 Pg Pn 07 21 11.9 +1.5
18nm,0.4s,SNR=18
EQES Lg Lg 07 21 27.6
161nm,0.2s,SNR=5.3
SESP Santiago Espad 1.35 5 Pg Pg 07 21 16.7 +1.5
224nm,0.2s,SNR=7.9
SESP Lg Lg 07 21 35.6
514nm,0.3s,SNR=7.9
SESP Santiago Espad 1.35 5 Pg Pg 07 21 16.7 +1.5
224nm,0.2s,SNR=7.9
SESP Lg Lg 07 21 35.6
514nm,0.3s,SNR=7.9
EMAL Malaga-Limoner 1.39 270 Pn Pn 07 21 14.7 0.0
EMAL Malaga-Limoner 1.39 270 eP Pn 07 21 14.7 0.0
EMLI Melilla 1.48 188 Lg Lg 07 21 34.5
234nm,1.4s,SNR=8.1
EMEL Melilla 1.48 188 Pn Pn 07 21 14.4 -1.5
80nm,0.1s,SNR=7.9
EMEL Pg Pb 07 21 16.1 -0.8
279nm,0.5s,SNR=7.9
EMEL Sn Sn 07 21 32.8 -2.5
24nm,0.3s,SNR=7.9
EMEL Lg Lg 07 21 34.5
234nm,1.4s,SNR=8.1
EMUR La Murta 1.58 47 ⇑Pn Pn 07 21 17.3 0.0
66nm,0.3s,SNR=18
EMUR Pg Pb 07 21 20.7 +2.1
60nm,1.5s,SNR=7.9
EMUR Sn Sn 07 21 37.8 0.0
149nm,0.3s,SNR=5.0
EMUR Lg Lg 07 21 42.7
272nm,0.6s,SNR=9.0
EMUR La Murta 1.58 47 Pn Pn 07 21 17.3 0.0
66nm,0.3s,SNR=18
CART Cartagena 1.58 59 iP Pn 07 21 15.9 -1.3
EMIJ Mijas 1.68 264 Pn Pn 07 21 17.9 -0.9
2.8nm,0.1s,SNR=39
EMIJ Sn Sn 07 21 39.9 -0.4
56nm,1.4s,SNR=7.9
EADA Adamuz 2.04 313 Pn Pn 07 21 25.5 +1.8
0.6nm,0.1s,SNR=44
EADA Pg Pg 07 21 29.0 +0.6
28nm,0.3s,SNR=9.7
EADA Lg Lg 07 21 56.9
119nm,0.3s,SNR=7.7
EADA Adamuz 2.04 313 Pn Pn 07 21 25.5 +1.8
0.6nm,0.1s,SNR=44
ETOB Tobarra 2.08 26 Pn Pn 07 21 26.0 +1.8
43nm,0.2s,SNR=156
ETOB Sn Sn 07 21 51.8 +1.7
163nm,0.3s,SNR=4.8
ETOB Tobarra 2.08 26 Pn Pn 07 21 26.0 +1.8
43nm,0.2s,SNR=156
ETOB Sn Sn 07 21 51.8 +1.7
163nm,0.3s,SNR=4.8
LIJA Lijar 2.17 274 Pg Pb 07 21 29.5 +0.8
LIJA Lijar 2.17 274 iP Pb 07 21 29.5 +0.8
ECEU Ceuta 2.33 249 Pn Pn 07 21 27.0 -0.7
6.3nm,0.1s,SNR=6.6
ECEU Sn Sn 07 21 55.9 -0.4
6.2nm,0.1s,SNR=5.0
ALJ Aljibe 2.39 265 eP Pb 07 21 32.0 -0.3
ECAB El Cabril 2.53 302 Pn Pn 07 21 31.8 +1.5
4.0nm,0.1s,SNR=54
ECAB Pg Pg 07 21 38.0 +0.3
36nm,0.3s,SNR=18
ECAB Sn Sn 07 22 01.6 +0.5
59nm,2.6s,SNR=7.9
ECAB Lg Lg 07 22 12.8
34nm,0.3s,SNR=5.8
ECAB El Cabril 2.53 302 Pn Pn 07 21 31.8 +1.5
4.0nm,0.1s,SNR=54
ECAB El Cabril 2.53 302 Pg Pg 07 21 38.0 +0.3
36nm,0.3s,SNR=18
ECAB Sn Sn 07 22 01.6 +0.5
59nm,2.6s,SNR=7.9
ECAB Lg Lg 07 22 12.8
34nm,0.3s,SNR=5.8
ESPR Espera 2.54 273 Pg Pb 07 21 37.1 +2.3
1.3nm,0.1s,SNR=10.0
ESPR Lg Lg 07 22 11.8
41nm,0.3s,SNR=5.6
ESPR Espera 2.54 273 Pg Pb 07 21 37.1 +2.3
1.3nm,0.1s,SNR=10.0
ESPR Lg Lg 07 22 11.8
41nm,0.3s,SNR=5.6
EBEN Beniarda 2.75 45 Pn Pn 07 21 33.1 -0.3
1.4nm,0.2s,SNR=24
EBEN Sn Sn 07 22 06.4 -0.3
28nm,0.4s,SNR=5.0
EBEN Beniarda 2.75 45 Pn Pn 07 21 33.1 -0.3
1.4nm,0.2s,SNR=24
EBEN Sn Sn 07 22 06.4 -0.3
28nm,0.4s,SNR=5.0
OKGL Djebel Kef Gue 2.79 104 Pn Pn 07 21 34.1 +0.2
44nm,0.2s,SNR=7.9
OKGL Sn Sn 07 22 06.2 -1.5
19nm,0.2s,SNR=7.9
TZK Tazeka 2.94 205 eP Pn 07 21 38.0 +1.8
ESDC Sonseca Array 3.06 341 Pn Pn 07 21 39.5 +1.8
2.9nm,0.1s,baz=162,slow=12,SNR=14
ESDC Pg Pg 07 21 48.6 +0.6
2.5nm,0.1s,baz=160,slow=18,SNR=7.3
ESDC Sn Sn 07 22 16.5 +2.1
SNR=7.9
ESDC Lg Lg 07 22 31.6
44nm,0.5s,baz=155,slow=29,SNR=7.5
ESDC Sonseca Array 3.06 341 Pn Pn 07 21 39.5 +1.8
2.9nm,0.1s,SNR=14
ESDC Sonseca Array 3.06 341 Pg Pg 07 21 48.6 +0.6
2.5nm,0.1s,SNR=7.3
ESDC Lg Lg 07 22 31.6
44nm,0.5s,SNR=7.5
EMIN Mina Concepcio 3.32 289 Pn Pn 07 21 42.6 +1.4
0.9nm,0.1s,SNR=24
EMIN Pg Pb 07 21 51.5 +3.2
14nm,0.4s,SNR=7.9
EMIN Sn Sn 07 22 20.4 -0.3
23nm,2.0s,SNR=7.9
EMIN Lg Lg 07 22 37.9
26nm,0.4s,SNR=6.0
EMIN Mina Concepcio 3.32 289 Pn Pn 07 21 42.6 +1.4
0.9nm,0.1s,SNR=24
PBAR Barrancos 3.73 293 ePn Pn 07 21 48.5 +1.7
PBAR eSg Sg 07 22 47.8 -1.2
PBAR A A 07 22 54.9
88nm,0.6s
PBAR Barrancos 3.73 293 Pn Pn 07 21 48.5 +1.7
PBAR Barrancos 3.73 293 Pn Pn 07 21 48.5 +1.7
PBAR eSg Sg 07 22 47.8 -1.2
88nm,0.6s
EGRO El Granado 3.90 283 Pn Pn 07 21 49.9 +0.8
0.7nm,0.1s,SNR=12
EGRO Sn Sn 07 22 35.1 +0.2
8.8nm,0.3s,SNR=5.0
EGRO Lg Lg 07 22 54.8
10nm,0.3s,SNR=5.0
EGRO El Granado 3.90 283 Pn Pn 07 21 49.9 +0.8
0.7nm,0.1s,SNR=12
EGRO Sn Sn 07 22 35.1 +0.2
8.8nm,0.3s,SNR=5.0
EGRO Lg Lg 07 22 54.8
10nm,0.3s,SNR=5.0
EIBI Ibiza 3.91 54 Pn Pn 07 21 49.6 +0.3
7.1nm,0.1s,SNR=7.9
EIBI Sn Sn 07 22 34.2 -1.0
34nm,0.3s,SNR=7.9
EIBI Ibiza 3.91 54 Pn Pn 07 21 49.6 +0.3
7.1nm,0.1s,SNR=7.9
MIF Mishlifen 3.95 212 eP Pn 07 21 53.0 +3.0
EBAD Badajoz 3.95 301 Pn Pn 07 21 51.1 +1.2
1.8nm,0.1s,SNR=13
EBAD Pg Pg 07 22 03.9 -1.1
2.8nm,0.1s,SNR=15
EBAD Sn Sn 07 22 36.0 -0.2
14nm,0.2s,SNR=6.0
EBAD Badajoz 3.95 301 Pn Pn 07 21 51.1 +1.2
1.8nm,0.1s,SNR=13
EBAD Badajoz 3.95 301 Pg Pg 07 22 03.8 -1.1
2.8nm,0.1s,SNR=15
EBAD Sn Sn 07 22 36.0 -0.2
14nm,0.2s,SNR=6.0
EMOS Mosqueruela 3.99 25 Pn Pn 07 21 52.9 +2.3
27nm,0.7s,SNR=12
EMOS Pg Pb 07 22 03.9 +4.2
2.0nm,0.2s,SNR=15
EMOS Sn Sn 07 22 37.4 0.0
2.7nm,1.7s,SNR=7.9
EMOS Lg Lg 07 23 00.6
10nm,0.5s,SNR=5.0
EMOS Mosqueruela 3.99 25 Pn Pn 07 21 52.9 +2.3
27nm,0.7s,SNR=12
EMOS Sn Sn 07 22 37.4 0.0
2.7nm,1.7s,SNR=7.9
EMOS Lg Lg 07 23 00.6
10nm,0.5s,SNR=5.0
GUD Guadarrama 4.03 344 Pn Pn 07 21 53.8 +2.7
0.0nm,0.1s,SNR=11
GUD Pg Pg 07 22 05.4 -1.1
0.0nm,0.1s,SNR=25
GUD Sn Sn 07 22 38.4 +0.1
1.4nm,0.9s,SNR=7.9
GUD Lg Lg 07 23 01.2
26nm,0.4s,SNR=7.5
GUD Guadarrama 4.03 344 Pn Pn 07 21 53.8 +2.7
SNR=11
PVAQ Vaqueiros 4.06 280 ePn Pn 07 21 52.1 +0.7
PVAQ eSn Sn 07 22 37.6 -1.4
PVAQ A A 07 23 19.9
21nm,0.6s
PVAQ Vaqueiros 4.06 280 Pn Pn 07 21 52.1 +0.7
PVAQ Sn Sn 07 22 37.6 -1.4
21nm,0.6s
PVAQ Vaqueiros 4.06 280 Pn Pn 07 21 52.1 +0.7
PVAQ eSn Sn 07 22 37.6 -1.4
21nm,0.6s
ETOR Torete 4.07 7 Pn Pn 07 21 53.9 +2.3
45nm,0.3s,SNR=33
ETOR Pg Pg 07 22 06.1 -1.1
74nm,0.3s,SNR=15
ETOR Sn Sn 07 22 39.1 -0.2
13nm,3.0s,SNR=7.9
ETOR Lg Lg 07 23 01.4
159nm,0.4s,SNR=5.0
ETOR Torete 4.07 7 Pn Pn 07 21 53.9 +2.3
45nm,0.3s,SNR=33
CZD Col de Zad 4.20 208 iP Pn 07 21 56.0 +2.4
PBDV Barranco-do-Ve 4.22 278 ePn Pn 07 21 55.8 +2.3
PBDV eSn Sn 07 22 41.2 -1.6
PBDV A A 07 23 18.9
28nm,0.6s
PBDV Barranco-do-Ve 4.22 278 Pn Pn 07 21 55.8 +2.3
PBDV Sn Sn 07 22 41.2 -1.6
28nm,0.6s
PBDV Barranco-do-Ve 4.22 278 Pn Pn 07 21 55.8 +2.3
PBDV Sn Sn 07 22 41.2 -1.6
28nm,0.6s
EPLA Plasencia 4.22 322 Pn Pn 07 21 56.4 +2.7
3.5nm,0.2s,SNR=23
EPLA Pg Pg 07 22 09.1 -1.1
5.7nm,1.5s,SNR=7.9
EPLA Sn Sn 07 22 43.3 +0.2
1.9nm,0.1s,SNR=7.1
EPLA Lg Lg 07 23 07.0
12nm,0.3s,SNR=9.0
EPLA Plasencia 4.22 322 Pn Pn 07 21 56.4 +2.7
3.5nm,0.2s,SNR=23
PBEJ Beja 4.30 288 ePn Pn 07 21 57.9 +3.2
PBEJ eSn Sn 07 22 43.8 -1.1
PBEJ A A 07 23 13.4
23nm,0.4s
PBEJ Beja 4.30 288 Sn Sn 07 22 43.8 -1.1
11nm,0.4s
PBEJ Beja 4.30 288 ePn Pn 07 21 57.9 +3.2
PBEJ eSn Sn 07 22 43.8 -1.1
23nm,0.4s
PCVE Castro Verde 4.35 283 ePn Pn 07 21 56.4 +1.0
PCVE eSn Sn 07 22 44.6 -1.5
PCVE eSg Sg 07 23 08.6 -0.4
PCVE A A 07 23 14.0
22nm,0.5s
PCVE Castro Verde 4.35 283 Pn Pn 07 21 56.4 +1.0
PCVE Sn Sn 07 22 44.6 -1.5
PCVE Lg Lg 07 23 08.6
22nm,0.5s
PCVE Castro Verde 4.35 283 Pn Pn 07 21 56.4 +1.0
PCVE Sn Sn 07 22 44.6 -1.5
PCVE eSg Sg 07 23 08.6 -0.4
22nm,0.5s
MESJ Messejana 4.53 285 ePn Pn 07 21 59.3 +1.5
MESJ eSn Sn 07 22 49.6 -0.9
MESJ eSg Sg 07 23 16.3 +1.6
MESJ A A 07 23 29.8
22nm,0.5s
MESJ Messejana 4.53 285 Pn Pn 07 21 59.3 +1.5
MESJ Sn Sn 07 22 49.6 -0.9
MESJ Lg Lg 07 23 16.3
22nm,0.5s
MESJ Messejana 4.53 285 Pn Pn 07 21 59.3 +1.5
MESJ Sn Sn 07 22 49.6 -0.9
MESJ eSg Sg 07 23 16.3 +1.6
22nm,0.5s
PMRV Marv??o 4.55 307 ePn Pn 07 22 00.2 +2.0
PMRV eSn Sn 07 22 51.1 0.0
PMRV eSg Sg 07 23 14.5 -1.0
PMRV Marv??o 4.55 307 Pn Pn 07 22 00.2 +2.0
PMRV Sn Sn 07 22 51.1 0.0
PMRV Marv??o 4.55 307 Pn Pn 07 22 00.2 +2.0
PMRV Sn Sn 07 22 51.1 0.0
PMRV eSg Sg 07 23 14.5 -1.0
EVO Evora 4.57 294 ePn Pn 07 22 00.5 +2.1
EVO eSg Sg 07 23 18.3 +2.3
76nm,0.6s
EVO Evora 4.57 294 ePn Pn 07 21 59.9 +1.5
EVO eSn Sn 07 22 50.7 -0.8
EVO eSg Sg 07 23 14.4 -1.6
EVO A A 07 23 28.1
23nm,0.6s
EVO Evora 4.57 294 Pn Pn 07 21 59.9 +1.5
EVO Sn Sn 07 22 50.7 -0.8
EVO Evora 4.57 294 Pn Pn 07 21 59.9 +1.5
EVO Sn Sn 07 22 50.7 -0.8
EVO eSg Sg 07 23 14.4 -1.6
23nm,0.6s
EVOP Sao Brissos 4.65 294 ePn Pn 07 22 00.5 +1.0
EVOP eSg Sg 07 23 18.3 -0.2
38nm,0.6s
MORF Marmelete 4.79 278 ePn Pn 07 22 04.1 +2.6
MORF Marmelete 4.79 278 Pn Pn 07 22 04.1 +2.6
MORF Marmelete 4.79 278 Pn Pn 07 22 04.1 +2.6
ERTA Horta de San J 4.80 29 Pn Pn 07 22 03.7 +2.1
12nm,0.3s,SNR=20
ERTA Sn Sn 07 22 56.1 -1.1
7.7nm,0.3s,SNR=5.0
ERTA Lg Lg 07 23 26.0
7.8nm,0.4s,SNR=7.9
ERTA Horta de San J 4.80 29 Pn Pn 07 22 03.7 +2.1
12nm,0.3s,SNR=20
ERTA Sn Sn 07 22 56.1 -1.1
7.7nm,0.3s,SNR=5.0
ERTA Lg Lg 07 23 26.0
7.8nm,0.4s,SNR=7.9
PNCL Nicolau / Gran 4.83 288 ePn Pn 07 22 03.5 +1.6
PNCL eSg Sg 07 23 22.0 -2.3
PNCL A A 07 23 32.9
19nm,0.6s
PNCL Nicolau / Gran 4.83 288 ePn Pn 07 22 03.5 +1.6
PNCL eSg Sg 07 23 22.0 -2.3
19nm,0.6s
PCBR Castelo Branco 4.85 311 ePn Pn 07 22 04.7 +2.5
PCBR eSn Sn 07 22 59.1 +0.7
PCBR eSg Sg 07 23 25.1 +0.2
PCBR A A 07 23 31.9
34nm,0.7s
PCBR Castelo Branco 4.85 311 Pn Pn 07 22 04.7 +2.5
PCBR Sn Sn 07 22 59.1 +0.7
PCBR Castelo Branco 4.85 311 Pn Pn 07 22 04.7 +2.5
PCBR Sn Sn 07 22 59.1 +0.7
PCBR eSg Sg 07 23 25.1 +0.2
34nm,0.7s
PTEO Sao Teotonio 4.88 281 ePn Pn 07 22 04.6 +2.0
PTEO eSn Sn 07 22 57.5 -1.5
PTEO A A 07 23 31.2
31nm,0.7s
PTEO Sao Teotonio 4.88 281 Pn Pn 07 22 04.6 +2.0
PTEO Sn Sn 07 22 57.5 -1.5
16nm,0.7s
PTEO Sao Teotonio 4.88 281 Pn Pn 07 22 04.6 +2.0
PTEO eSn Sn 07 22 57.5 -1.5
31nm,0.7s
PFVI Vila Bisbo 4.92 276 ePn Pn 07 22 04.0 +0.8
PFVI eSn Sn 07 22 58.3 -1.9
PFVI A A 07 23 45.7
18nm,0.6s
PFVI Vila Bisbo 4.92 276 Pn Pn 07 22 05.0 +1.8
2.9nm,0.2s,SNR=13
PFVI Sn Sn 07 22 58.3 -1.9
7.2nm,0.3s,SNR=5.7

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **4.92** | **276** | Pn | **Pn** | **07 22 05.0** | **+1.8** |
| | 2.9nm,0.2s,SNR=13 | | | | | | |
| PFVI | | | | *e*Sn | **Sn** | **07 22 58.3** | **-1.9** |
| | 18nm,0.6s | | | | | | |
| **ESAC** | **San Caprasio** | **5.24** | **19** | Pn | **Pn** | **07 22 08.4** | **+0.8** |
| | 3.4nm,0.2s,SNR=7.9 | | | | | | |
| ESAC | | | | Pg | Pg | 07 22 27.7 | -1.8 |
| | 42nm,1.6s,SNR=7.9 | | | | | | |
| ESAC | | | | Lg | Lg | 07 23 39.7 | |
| | 82nm,0.4s,SNR=6.4 | | | | | | |
| **ESAC** | **San Caprasio** | **5.24** | **19** | Pn | **Pn** | **07 22 08.4** | **+0.8** |
| | 3.4nm,0.2s,SNR=7.9 | | | | | | |
| ESAC | | | | Lg | Lg | 07 23 39.7 | |
| | 82nm,0.4s,SNR=6.4 | | | | | | |
| **MTE** | **Manteigas** | **5.25** | **315** | *e*Pn | **Pn** | **07 22 10.3** | **+2.6** |
| MTE | | | | *e*Sn | **Sn** | **07 23 08.0** | **-0.3** |
| MTE | | | | *e*Sg | **Sg** | **07 23 36.2** | **-1.5** |
| MTE | | | | A | A | 07 23 43.5 | |
| | 46nm,0.7s | | | | | | |
| **MTE** | **Manteigas** | **5.25** | **315** | Pn | **Pn** | **07 22 10.3** | **+2.6** |
| MTE | | | | Sn | **Sn** | **07 23 08.0** | **-0.3** |
| **MTE** | **Manteigas** | **5.25** | **315** | Pn | **Pn** | **07 22 10.3** | **+2.6** |
| MTE | | | | Sn | **Sn** | **07 23 08.0** | **-0.3** |
| MTE | | | | *e*Sg | **Sg** | **07 23 36.2** | **-1.5** |
| | 46nm,0.7s | | | | | | |
| **PACT** | **Alcochete** | **5.25** | **294** | *e*Pn | Pn | 07 22 05.0 | -2.7 |
| PACT | | | | *e*Sn | **Sn** | **07 23 04.3** | **-4.0** |
| PACT | | | | A | A | 07 23 47.0 | |
| | 55nm,0.6s | | | | | | |
| **PACT** | **Alcochete** | **5.25** | **294** | *e*Pn | Pn | 07 22 05.0 | -2.7 |
| PACT | | | | *e*Sn | **Sn** | **07 23 04.3** | **-4.0** |
| | 55nm,0.6s | | | | | | |
| **ETOS** | **Mallorca** | **5.27** | **54** | Pn | **Pn** | **07 22 08.7** | **+0.7** |
| | 130nm,1.0s,SNR=8.7 | | | | | | |
| ETOS | | | | Sn | **Sn** | **07 23 06.3** | **-2.4** |
| | 421nm,2.0s,SNR=5.0 | | | | | | |
| **ETOS** | **Mallorca** | **5.27** | **54** | Pn | **Pn** | **07 22 08.7** | **+0.7** |
| | 130nm,1.0s,SNR=8.7 | | | | | | |
| **PTOM** | **Tomar** | **5.32** | **304** | *e*Sg | **Sg** | **07 23 36.6** | **-3.5** |
| PTOM | | | | A | A | 07 23 47.9 | |
| | 43nm,0.5s | | | | | | |
| **PTOM** | **Tomar** | **5.32** | **304** | *e*Sg | **Sg** | **07 23 36.6** | **-3.5** |
| | 43nm,0.5s | | | | | | |
| **EPOB** | **Poblet** | **5.43** | **32** | Pn | **Pn** | **07 22 11.7** | **+1.4** |
| | 7.0nm,0.4s,SNR=6.6 | | | | | | |
| EPOB | | | | Sn | **Sn** | **07 23 11.9** | **-1.0** |
| | 5.4nm,2.0s,SNR=7.9 | | | | | | |
| **EPOB** | **Poblet** | **5.43** | **32** | Pn | **Pn** | **07 22 11.7** | **+1.4** |
| | 7.0nm,0.4s,SNR=6.6 | | | | | | |
| EPOB | | | | Sn | **Sn** | **07 23 11.9** | **-1.0** |
| | 5.4nm,2.0s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **5.53** | **324** | *e*Pn | **Pn** | **07 22 14.4** | **+2.7** |
| MVO | | | | *e*Sn | **Sn** | **07 23 15.0** | **-0.3** |
| MVO | | | | *e*Sg | **Sg** | **07 23 47.3** | **+0.4** |
| MVO | | | | A | A | 07 23 53.2 | |
| | 28nm,0.6s | | | | | | |
| **MVO** | **Moncorvo** | **5.53** | **324** | Pn | **Pn** | **07 22 13.7** | **+2.0** |
| | 1.1nm,0.3s,SNR=7.9 | | | | | | |
| MVO | | | | Sn | **Sn** | **07 23 14.6** | **-0.7** |
| | 7.8nm,0.4s,SNR=5.7 | | | | | | |
| MVO | | | | Lg | Lg | 07 23 49.1 | |
| | 12nm,0.4s,SNR=6.2 | | | | | | |
| **MVO** | **Moncorvo** | **5.53** | **324** | Pn | **Pn** | **07 22 13.7** | **+2.0** |
| | 1.1nm,0.3s,SNR=7.9 | | | | | | |
| MVO | | | | Sn | **Sn** | **07 23 14.6** | **-0.7** |
| | 7.8nm,0.4s,SNR=5.7 | | | | | | |
| MVO | | | | *e*Sg | **Sg** | **07 23 47.3** | **+0.4** |
| | 28nm,0.6s | | | | | | |
| MVO | | | | Lg | Lg | 07 23 49.1 | |
| | 12nm,0.4s,SNR=6.2 | | | | | | |
| **PCAS** | **Casmilo, Conde** | **5.61** | **307** | *e*Pn | **Pn** | **07 22 14.7** | **+2.0** |
| PCAS | | | | *e*Sn | **Sn** | **07 23 15.6** | **-1.5** |
| PCAS | | | | *e*Sg | **Sg** | **07 23 46.7** | **-2.6** |
| PCAS | | | | A | A | 07 23 56.8 | |
| | 38nm,0.7s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **5.61** | **307** | *e*Pn | **Pn** | **07 22 14.7** | **+2.0** |
| PCAS | | | | *e*Sn | **Sn** | **07 23 15.6** | **-1.5** |
| PCAS | | | | *e*Sg | **Sg** | **07 23 46.7** | **-2.6** |
| | 38nm,0.7s | | | | | | |
| **PMAFR** | **Mafra** | **5.65** | **295** | *e*Sn | **Sn** | **07 23 16.9** | **-1.2** |
| PMAFR | | | | A | A | 07 24 01.4 | |
| | 34nm,0.6s | | | | | | |
| **PMAFR** | **Mafra** | **5.65** | **295** | Pn | **Pn** | **07 22 14.6** | **+1.4** |
| | 31nm,2.5s,SNR=7.9 | | | | | | |
| PMAFR | | | | Pg | Pb | 07 22 33.4 | +5.5 |
| | 26nm,1.6s,SNR=7.9 | | | | | | |
| PMAFR | | | | Sn | **Sn** | **07 23 16.0** | **-2.0** |
| | 12nm,0.3s,SNR=7.9 | | | | | | |
| PMAFR | | | | Lg | Lg | 07 23 51.6 | |
| | 29nm,0.4s,SNR=7.9 | | | | | | |
| **PMAFR** | **Mafra** | **5.65** | **295** | Pn | **Pn** | **07 22 14.6** | **+1.4** |
| | 31nm,2.5s,SNR=7.9 | | | | | | |
| PMAFR | | | | *e*Sn | **Sn** | **07 23 16.9** | **-1.2** |
| | 34nm,0.6s | | | | | | |
| PMAFR | | | | Lg | Lg | 07 23 51.6 | |
| | 29nm,0.4s,SNR=7.9 | | | | | | |
| **PVIS** | **Viseu** | **5.66** | **316** | *e*Pn | **Pn** | **07 22 15.9** | **+2.5** |
| PVIS | | | | *e*Sn | **Sn** | **07 23 17.6** | **-0.7** |
| PVIS | | | | *e*Sg | **Sg** | **07 23 49.1** | **-1.7** |
| PVIS | | | | A | A | 07 24 04.8 | |
| | 18nm,0.5s | | | | | | |
| **PVIS** | **Viseu** | **5.66** | **316** | Pn | **Pn** | **07 22 15.9** | **+2.5** |
| PVIS | | | | Sn | **Sn** | **07 23 17.6** | **-0.7** |
| **PVIS** | **Viseu** | **5.66** | **316** | Pn | **Pn** | **07 22 15.9** | **+2.5** |
| PVIS | | | | Sn | **Sn** | **07 23 17.6** | **-0.7** |
| PVIS | | | | *e*Sg | **Sg** | **07 23 49.1** | **-1.7** |
| | 18nm,0.5s | | | | | | |
| **PBRG** | **Braganca** | **5.92** | **329** | *e*Pn | Pn | 07 22 20.1 | +3.1 |
| PBRG | | | | *e*Sg | **Sg** | **07 24 01.3** | **+1.9** |
| PBRG | | | | A | A | 07 24 09.9 | |
| | 20nm,0.7s | | | | | | |
| **PBRG** | **Braganca** | **5.92** | **329** | Pn | Pn | 07 22 20.1 | +3.1 |
| PBRG | | | | Lg | Lg | 07 24 01.3 | |
| | 9.8nm,0.7s | | | | | | |
| **PBRG** | **Braganca** | **5.92** | **329** | Pn | Pn | 07 22 20.1 | +3.1 |
| PBRG | | | | Lg | Lg | 07 24 01.3 | |
| | 9.8nm,0.7s | | | | | | |
| **PVRL** | **Vila Real** | **5.96** | **321** | *e*Pn | Pn | 07 22 20.4 | +2.9 |
| PVRL | | | | *e*Sn | **Sn** | **07 23 25.3** | **-0.4** |
| PVRL | | | | *e*Sg | **Sg** | **07 24 00.7** | **+0.3** |
| PVRL | | | | A | A | 07 24 09.0 | |
| | 22nm,0.5s | | | | | | |
| **PVRL** | **Vila Real** | **5.96** | **321** | Pn | Pn | 07 22 20.4 | +2.9 |
| PVRL | | | | Sn | **Sn** | **07 23 25.3** | **-0.4** |
| **PVRL** | **Vila Real** | **5.96** | **321** | Pn | Pn | 07 22 20.4 | +2.9 |
| PVRL | | | | Sn | **Sn** | **07 23 25.3** | **-0.4** |
| PVRL | | | | *e*Sg | **Sg** | **07 24 00.7** | **+0.3** |
| | 22nm,0.5s | | | | | | |
| **ECAL** | **Calabor** | **6.04** | **330** | Pn | **Pn** | **07 22 20.3** | **+1.7** |
| | 1.1nm,0.4s,SNR=5.4 | | | | | | |
| ECAL | | | | Pg | Pg | 07 22 42.4 | -2.4 |
| | 2.3nm,0.8s,SNR=7.9 | | | | | | |
| ECAL | | | | Sn | **Sn** | **07 23 26.2** | **-1.5** |
| | 3.7nm,0.3s,SNR=4.7 | | | | | | |
| ECAL | | | | Lg | Lg | 07 24 05.4 | |
| | 12nm,0.5s,SNR=5.0 | | | | | | |
| **ECAL** | **Calabor** | **6.04** | **330** | Pn | **Pn** | **07 22 20.3** | **+1.7** |
| | 1.1nm,0.4s,SNR=5.4 | | | | | | |
| ECAL | | | | Sn | **Sn** | **07 23 26.2** | **-1.5** |
| | 3.7nm,0.3s,SNR=4.7 | | | | | | |
| ECAL | | | | Lg | Lg | 07 24 05.4 | |
| | 12nm,0.5s,SNR=5.0 | | | | | | |
| **EARA** | **Aranguren** | **6.05** | **8** | Lg | Lg | 07 24 06.8 | |
| | 5.1nm,2.7s,SNR=7.9 | | | | | | |
| **EARA** | **Aranguren** | **6.05** | **8** | Lg | Lg | 07 24 06.8 | |
| | 5.1nm,2.7s,SNR=7.9 | | | | | | |
| **POLO** | **Lamas de Olo** | **6.07** | **321** | *e*Pn | **Pn** | **07 22 21.6** | **+2.5** |
| POLO | | | | *e*Sn | **Sn** | **07 23 26.2** | **-2.3** |
| POLO | | | | *e*Sg | **Sg** | **07 24 01.4** | **-2.6** |
| POLO | | | | A | A | 07 24 08.2 | |
| | 11nm,0.6s | | | | | | |
| **POLO** | **Lamas de Olo** | **6.07** | **321** | *e*Pn | **Pn** | **07 22 21.6** | **+2.5** |
| POLO | | | | *e*Sn | **Sn** | **07 23 26.2** | **-2.3** |
| POLO | | | | *e*Sg | **Sg** | **07 24 01.4** | **-2.6** |
| | 11nm,0.6s | | | | | | |
| **EMIR** | **Miracle** | **6.09** | **31** | Pn | **Pn** | **07 22 21.3** | **+2.0** |
| | 2.8nm,2.1s,SNR=7.9 | | | | | | |
| EMIR | | | | Pg | Pg | 07 22 42.9 | -2.9 |
| | 5.9nm,2.1s,SNR=7.9 | | | | | | |
| EMIR | | | | Sn | **Sn** | **07 23 26.6** | **-2.4** |
| | 0.6nm,1.6s,SNR=7.9 | | | | | | |
| **EMIR** | **Miracle** | **6.09** | **31** | Pn | **Pn** | **07 22 21.3** | **+2.0** |
| | 2.8nm,2.1s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **6.17** | **10** | Pn | **Pn** | **07 22 22.8** | **+2.4** |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| IELO | | | | Pg | Pg | 07 22 43.9 | -3.4 |
| | 0.9nm,0.6s,SNR=7.9 | | | | | | |
| IELO | | | | Lg | Lg | 07 24 10.8 | |
| | 5.3nm,4.1s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **6.17** | **10** | Pn | **Pn** | **07 22 22.8** | **+2.4** |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| IELO | | | | Lg | Lg | 07 24 10.8 | |
| | 5.3nm,4.1s,SNR=7.9 | | | | | | |
| **CSOR** | **Sort** | **6.33** | **27** | Pn | **Pn** | **07 22 23.8** | **+1.2** |
| | 4.2nm,0.2s,SNR=16 | | | | | | |
| CSOR | | | | Sn | **Sn** | **07 23 32.8** | **-2.2** |
| | 0.7nm,0.6s,SNR=7.9 | | | | | | |
| **CSOR** | **Sort** | **6.33** | **27** | Pn | **Pn** | **07 22 23.8** | **+1.2** |
| | 4.2nm,0.2s,SNR=16 | | | | | | |
| **ETSF** | **Etsaut** | **6.33** | **14** | *e*Pn | **Pn** | **07 22 23.8** | **+1.1** |
| ETSF | | | | *e*Sg | **Sg** | **07 24 11.3** | **-1.3** |
| | 3.5nm,0.4s | | | | | | |
| **ETSF** | **Etsaut** | **6.33** | **14** | Pn | **Pn** | **07 22 23.8** | **+1.1** |
| **ETSF** | **Etsaut** | **6.33** | **14** | Pn | **Pn** | **07 22 23.8** | **+1.1** |
| ETSF | | | | *e*Sg | **Sg** | **07 24 11.3** | **-1.3** |
| | 1.8nm,0.4s | | | | | | |
| **SJPF** | **Ste Jean** | **6.43** | **10** | *e*Pn | **Pn** | **07 22 25.5** | **+1.5** |
| SJPF | | | | *e*Sg | **Sg** | **07 24 14.3** | **-1.4** |
| | 22nm,0.7s | | | | | | |
| **SJPF** | **Ste Jean** | **6.43** | **10** | Pn | **Pn** | **07 22 25.5** | **+1.5** |
| **SJPF** | **Ste Jean** | **6.43** | **10** | Pn | **Pn** | **07 22 25.5** | **+1.5** |
| SJPF | | | | *e*Sg | **Sg** | **07 24 14.3** | **-1.4** |
| | 11nm,0.7s | | | | | | |
| **PCAB** | **Cabril** | **6.43** | **322** | *e*Pn | **Pn** | **07 22 26.6** | **+2.6** |
| PCAB | | | | *e*Sn | **Sn** | **07 23 36.5** | **-1.0** |
| PCAB | | | | *e*Sg | **Sg** | **07 24 14.0** | **-1.8** |
| PCAB | | | | A | A | 07 24 26.2 | |
| | 22nm,0.7s | | | | | | |
| **PCAB** | **Cabril** | **6.43** | **322** | Pn | **Pn** | **07 22 26.6** | **+2.6** |
| PCAB | | | | Sn | **Sn** | **07 23 36.5** | **-1.0** |
| **PCAB** | **Cabril** | **6.43** | **322** | Pn | **Pn** | **07 22 26.6** | **+2.6** |
| PCAB | | | | Sn | **Sn** | **07 23 36.5** | **-1.0** |
| PCAB | | | | *e*Sg | **Sg** | **07 24 14.0** | **-1.8** |
| | 22nm,0.7s | | | | | | |
| **ELIZ** | **Elizondo** | **6.45** | **8** | Pn | **Pn** | **07 22 25.8** | **+1.6** |
| | 2.5nm,0.4s,SNR=14 | | | | | | |
| ELIZ | | | | Sn | **Sn** | **07 23 35.9** | **-1.9** |
| | 1.6nm,0.8s,SNR=7.9 | | | | | | |
| ELIZ | | | | Lg | Lg | 07 24 18.2 | |
| | 22nm,1.4s,SNR=7.9 | | | | | | |
| **ELIZ** | **Elizondo** | **6.45** | **8** | Pn | **Pn** | **07 22 25.8** | **+1.6** |
| | 2.5nm,0.4s,SNR=14 | | | | | | |
| ELIZ | | | | Sn | **Sn** | **07 23 35.9** | **-1.9** |
| | 1.6nm,0.8s,SNR=7.9 | | | | | | |
| ELIZ | | | | Lg | Lg | 07 24 18.2 | |
| | 22nm,1.4s,SNR=7.9 | | | | | | |
| **ELAN** | **Lanestosa** | **6.48** | **355** | Pn | **Pn** | **07 22 25.8** | **+1.3** |
| | 1.4nm,0.3s,SNR=7.9 | | | | | | |
| ELAN | | | | Pg | Pg | 07 22 50.1 | -3.1 |
| | 5.3nm,2.5s,SNR=7.9 | | | | | | |
| ELAN | | | | Sn | **Sn** | **07 23 36.3** | **-2.1** |
| | 3.3nm,0.4s,SNR=7.9 | | | | | | |
| ELAN | | | | Lg | Lg | 07 24 19.6 | |
| | 17nm,0.6s,SNR=4.0 | | | | | | |
| **ELAN** | **Lanestosa** | **6.48** | **355** | Pn | **Pn** | **07 22 25.8** | **+1.3** |
| | 1.4nm,0.3s,SNR=7.9 | | | | | | |
| ELAN | | | | Sn | **Sn** | **07 23 36.3** | **-2.1** |
| | 3.3nm,0.4s,SNR=7.9 | | | | | | |
| ELAN | | | | Lg | Lg | 07 24 19.6 | |
| | 17nm,0.6s,SNR=4.0 | | | | | | |
| **EALK** | **Alkurruntz** | **6.50** | **8** | Pn | **Pn** | **07 22 26.5** | **+1.6** |
| | 19nm,0.6s,SNR=7.9 | | | | | | |
| EALK | | | | Sn | **Sn** | **07 23 37.9** | **-1.2** |
| | 26nm,0.6s,SNR=7.9 | | | | | | |
| EALK | | | | Lg | Lg | 07 24 21.2 | |
| | 18nm,0.5s,SNR=7.9 | | | | | | |
| **EALK** | **Alkurruntz** | **6.50** | **8** | Pn | **Pn** | **07 22 26.5** | **+1.6** |
| | 19nm,0.6s,SNR=7.9 | | | | | | |
| EALK | | | | Sn | **Sn** | **07 23 37.9** | **-1.2** |
| | 26nm,0.6s,SNR=7.9 | | | | | | |
| EALK | | | | Lg | Lg | 07 24 21.2 | |
| | 18nm,0.5s,SNR=7.9 | | | | | | |
| **ELOB** | **Lobios** | **6.57** | **322** | Pn | **Pn** | **07 22 27.2** | **+1.3** |
| | 0.5nm,0.2s,SNR=5.2 | | | | | | |
| ELOB | | | | Sn | **Sn** | **07 23 38.2** | **-2.7** |
| | 6.7nm,0.8s,SNR=4.5 | | | | | | |
| ELOB | | | | Lg | Lg | 07 24 22.0 | |
| | 9.4nm,0.6s,SNR=5.3 | | | | | | |
| **ELOB** | **Lobios** | **6.57** | **322** | Pn | **Pn** | **07 22 27.2** | **+1.3** |
| | 0.5nm,0.2s,SNR=5.2 | | | | | | |
| ELOB | | | | Sn | **Sn** | **07 23 38.2** | **-2.7** |
| | 6.7nm,0.8s,SNR=4.5 | | | | | | |
| ELOB | | | | Lg | Lg | 07 24 22.0 | |
| | 9.4nm,0.6s,SNR=5.3 | | | | | | |
| **EPF** | **Esparros** | **6.67** | **20** | *e*Pn | **Pn** | **07 22 28.4** | **+1.1** |
| EPF | | | | *e*Sg | **Sg** | **07 24 21.6** | **-1.8** |
| | 6.2nm,0.6s | | | | | | |
| **EPF** | **Esparros** | **6.67** | **20** | Pn | **Pn** | **07 22 28.4** | **+1.1** |
| **EPF** | **Esparros** | **6.67** | **20** | Pn | **Pn** | **07 22 28.4** | **+1.1** |
| EPF | | | | *e*Sg | **Sg** | **07 24 21.6** | **-1.8** |
| | 3.1nm,0.6s | | | | | | |
| **CLLI** | **Llivia** | **6.74** | **31** | Pn | **Pn** | **07 22 29.8** | **+1.4** |
| | 2.4nm,1.1s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **6.74** | **31** | Pn | **Pn** | **07 22 29.8** | **+1.4** |
| | 2.4nm,1.1s,SNR=7.9 | | | | | | |
| **PGAV** | **Gavieira, Arco** | **6.75** | **322** | *e*Pn | **Pn** | **07 22 30.9** | **+2.5** |
| PGAV | | | | *e*Sn | **Sn** | **07 23 45.4** | **+0.2** |
| PGAV | | | | *e*Sg | **Sg** | **07 24 23.5** | **-2.3** |
| PGAV | | | | A | A | 07 24 38.2 | |
| | 17nm,0.6s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **6.75** | **322** | *e*Pn | **Pn** | **07 22 30.9** | **+2.5** |
| PGAV | | | | *e*Sn | **Sn** | **07 23 45.4** | **+0.2** |
| PGAV | | | | *e*Sg | **Sg** | **07 24 23.5** | **-2.3** |
| | 17nm,0.6s | | | | | | |
| **EARI** | **Arriondas** | **6.80** | **344** | Pn | **Pn** | **07 22 30.9** | **+1.9** |
| | 0.7nm,2.7s,SNR=7.9 | | | | | | |
| EARI | | | | Sn | **Sn** | **07 23 44.8** | **-1.7** |
| | 0.1nm,4.6s,SNR=7.9 | | | | | | |
| EARI | | | | Lg | Lg | 07 24 30.3 | |
| | 60nm,1.8s,SNR=7.9 | | | | | | |
| **EARI** | **Arriondas** | **6.80** | **344** | Pn | **Pn** | **07 22 30.9** | **+1.9** |
| | 0.7nm,2.7s,SNR=7.9 | | | | | | |
| EARI | | | | Sn | **Sn** | **07 23 44.8** | **-1.7** |
| | 0.1nm,4.6s,SNR=7.9 | | | | | | |
| EARI | | | | Lg | Lg | 07 24 30.3 | |
| | 60nm,1.8s,SNR=7.9 | | | | | | |
| **MTLF** | **Montolieu** | **7.56** | **28** | *e*Pn | **Pn** | **07 22 40.4** | **+0.9** |
| MTLF | | | | *e*Sg | **Sg** | **07 24 49.1** | **-2.8** |
| | 2.1nm,0.2s | | | | | | |
| **MTLF** | **Montolieu** | **7.56** | **28** | Pn | **Pn** | **07 22 40.4** | **+0.9** |
| **MTLF** | **Montolieu** | **7.56** | **28** | Pn | **Pn** | **07 22 40.4** | **+0.9** |
| **EMAZ** | **Mazaricos** | **7.83** | **324** | Pn | **Pn** | **07 22 44.8** | **+1.7** |
| | 1.8nm,0.6s,SNR=7.9 | | | | | | |
| **EMAZ** | **Mazaricos** | **7.83** | **324** | Pn | **Pn** | **07 22 44.8** | **+1.7** |
| | 1.8nm,0.6s,SNR=7.9 | | | | | | |
| **LFF** | **La Frestale** | **8.56** | **17** | *e*Pn | **Pn** | **07 22 53.7** | **+0.5** |
| **LFF** | **La Frestale** | **8.56** | **17** | Pn | **Pn** | **07 22 53.7** | **+0.5** |
| **LFF** | **La Frestale** | **8.56** | **17** | Pn | **Pn** | **07 22 53.7** | **+0.5** |
| **CAF** | **Calviac** | **8.90** | **22** | *e*Pn | **Pn** | **07 22 58.4** | **+0.5** |
| **CAF** | **Calviac** | **8.90** | **22** | Pn | **Pn** | **07 22 58.4** | **+0.5** |
| **CAF** | **Calviac** | **8.90** | **22** | Pn | **Pn** | **07 22 58.4** | **+0.5** |

**IDC 12 07:23:24.8**±1.9**, 26°.12S×70°.86E, h0km, mb3.8**/4**, mb1 4.0**/4**, mb1mx3.6**/26**, mbtmp3.8**/4**, MS3.2**/2**, Ms1 3.3**/2**, ms1mx2.7**/38**, Error ellipse: s-maj=56.4km s-min=36.7km az=85.0, Indian Ocean Triple Junction**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **18.44** | **5** | T | T | 07 46 31.8 | |
| | baz=185,slow=76,SNR=16 | | | | | | |
| **H08S2** | **Diego Garcia H** | **18.44** | **5** | T | T | 07 46 32.1 | |
| | baz=185,slow=76,SNR=22 | | | | | | |
| **H08S3** | **Diego Garcia H** | **18.46** | **5** | T | T | 07 46 33.2 | |
| | baz=185,slow=76,SNR=26 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **38.05** | **114** | T | T | 08 11 02.2 | |
| | baz=272,slow=75,SNR=9.9 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **38.06** | **114** | T | T | 08 10 58.0 | |
| | baz=272,slow=75,SNR=16 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **38.07** | **114** | T | T | 08 10 59.4 | |
| | baz=272,slow=75,SNR=10.0 | | | | | | |
| **MAW** | **Mawson** | **41.79** | **185** | LR | LR | 07 46 03.7 | |
| | comp=Z,58nm,19.2s,baz=71,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.04** | **35** | LR | LR | 07 52 06.1 | |
| | comp=Z,13nm,20.6s,baz=200,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **56.74** | **102** | P | P | 07 33 10.7 | -0.1 |
| | 0.3nm,0.3s,baz=248,slow=6.4,SNR=7.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **58.26** | **98** | P | P | 07 33 21.5 | 0.0 |
| | 0.6nm,0.7s,baz=253,slow=7.0,SNR=5.1 | | | | | | |
| **VNDA** | **Vanda** | **64.91** | **166** | P | P | 07 34 05.5 | 0.0 |
| | 1.6nm,0.9s,baz=260,slow=6.6,SNR=8.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **73.30** | **8** | P | P | 07 34 58.0 | +0.1 |
| | 0.6nm,0.5s,baz=192,slow=4.6,SNR=3.8 | | | | | | |

*TIR **12** 07:31:39.8±1.9, 41°.25N×20°.14E, h4km±22km, ML3.1*
*BEO **12** 07:31:39.5±0.9, 41°.09N×20°.05E, h0km, ML2.7/6*
*PDG **12** 07:31:40.3±0.3, 41°.24N×20°.12E, h3km±1km, ML2.9/9, Error ellipse: s-maj=0.4km s-min=0.7km az=0.0*
*CSEM **12** 07:31:40.3±0.3, 41°.19N×20°.11E, h2km, ML3.1, Error ellipse: s-maj=6.8km s-min=3.8km az=40.0*
*THE **12** 07:31:40.2, 41°.26N×20°.17E, h4km±1km, ML2.7/3, Error ellipse: s-maj=1.9km s-min=0.8km az=4.0*
*SKO **12** 07:31:41.2, 41°.22N×20°.09E, h0km, M2.2, ML2.8*
**ISC 12 07:31:40.3**±1.1**, 41°.21N**±0°.02×**20°.13E**±0°.02**, h1km**±10km**, n66, σ1.08**/119**, 10C-9D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.24** | **304** | *i* PG | **Pg** | **07 31 44.6** | **-0.4** |
| TIR | | | | *i* SG | **Sg** | **07 31 49.2** | **+1.1** |
| **TIR** | **Tirane** | **0.24** | **304** | *e*Pg | **Pg** | **07 31 44.5** | **-0.4** |
| TIR | | | | *e*Sg | **Sg** | **07 31 47.9** | **-0.2** |
| **TIR** | **Tirane** | **0.24** | **304** | P | **Pg** | **07 31 44.5** | **-0.4** |
| TIR | | | | S | **Sg** | **07 31 48.4** | **+0.3** |
| **TIR** | **Tirane** | **0.24** | **304** | *i* Pg | **Pg** | **07 31 44.6** | **-0.4** |
| | SNR=112 | | | | | | |
| TIR | | | | *e*Sg | **Sg** | **07 31 47.9** | **-0.2** |
| TIR | | | | S | **Sg** | **07 31 48.4** | **+0.3** |
| **OHR** | **Ohrid** | **0.51** | **101** | *i* Pg | **Pg** | **07 31 50.2** | **0.0** |
| OHR | | | | *i* Sg | **Sg** | **07 31 58.5** | **+1.6** |
| OHR | | | | *e*Lg | Lg | 07 31 59.9 | |
| | comp=N,394nm,0.5s | | | | | | |
| OHR | | | | *e*Lg | Lg | 07 32 01.1 | |
| | comp=E,410nm,0.4s | | | | | | |
| **OHR** | **Ohrid** | **0.51** | **101** | *i* Pg | **Pg** | **07 31 50.2** | **0.0** |
| OHR | | | | *i* Sg | **Sg** | **07 31 58.4** | **+1.6** |
| OHR | | | | *e*Lg | Lg | 07 31 59.8 | |
| | comp=E,394nm,0.5s | | | | | | |
| **PHP** | **Peshkopia** | **0.53** | **26** | *i* PG | **Pg** | **07 31 49.5** | **-1.0** |
| PHP | | | | *i* SG | **Sg** | **07 31 57.6** | **+0.4** |
| **PHP** | **Peshkopia** | **0.53** | **26** | P | **Pg** | **07 31 49.4** | **-1.0** |
| PHP | | | | S | **Sg** | **07 31 56.5** | **-0.7** |
| **PHP** | **Peshkopia** | **0.53** | **26** | *i* Pg | **Pg** | **07 31 49.5** | **-1.0** |
| | SNR=91 | | | | | | |
| PHP | | | | S | **Sg** | **07 31 56.5** | **-0.7** |
| PHP | | | | *i* Sg | **Sg** | **07 31 57.6** | **+0.4** |
| | SNR=91 | | | | | | |
| **KBN** | **Korca** | **0.77** | **140** | *i* PG | **Pb** | **07 31 57.0** | **+0.4** |
| KBN | | | | *i* SG | **Sb** | **07 32 08.1** | **+0.5** |
| **PUK** | **Puka** | **0.85** | **348** | *i* PG | **Pg** | **07 31 55.8** | **-0.8** |
| PUK | | | | *i* SG | **Sb** | **07 32 09.4** | **-0.5** |
| **PUK** | **Puka** | **0.85** | **348** | *i* Pg | **Pg** | **07 31 55.8** | **-0.8** |
| | SNR=90 | | | | | | |
| PUK | | | | *i* Sg | **Sb** | **07 32 09.4** | **-0.5** |
| | SNR=90 | | | | | | |
| **ULC** | **Ulcinj** | **1.00** | **319** | ⇓*i*Pg | **Pg** | **07 31 58.0** | **-1.5** |
| ULC | | | | *e*Sg | **Sb** | **07 32 13.5** | **-0.8** |
| **ULC** | **Ulcinj** | **1.00** | **319** | P | **Pg** | **07 31 58.0** | **-1.5** |
| ULC | | | | *e*Sg | **Sb** | **07 32 13.5** | **-0.8** |
| **FNA** | **Florina** | **1.03** | **114** | P | **Pg** | **07 31 59.2** | **-1.0** |
| FNA | | | | S | **Sb** | **07 32 14.6** | **-0.6** |
| **FNA** | **Florina** | **1.03** | **114** | P | **Pg** | **07 31 59.2** | **-1.0** |
| FNA | | | | S | **Sb** | **07 32 14.6** | **-0.6** |
| **NEST** | **Nestorio** | **1.06** | **139** | P | **Pg** | **07 32 00.1** | **-0.5** |
| NEST | | | | S | **Sb** | **07 32 16.5** | **+0.6** |
| **NEST** | **Nestorio** | **1.06** | **139** | P | **Pg** | **07 32 00.1** | **-0.5** |
| NEST | | | | S | **Sb** | **07 32 16.5** | **+0.6** |
| **DRME** | **Dracevica, Mon** | **1.20** | **324** | ⇑*i*Pg | **Pg** | **07 32 01.8** | **-1.6** |
| DRME | | | | *e*Sg | **Sb** | **07 32 20.4** | **+0.3** |
| **DRME** | **Dracevica, Mon** | **1.20** | **324** | ⇑*i*Pg | **Pg** | **07 32 01.8** | **-1.6** |
| DRME | | | | *e*Sg | **Sb** | **07 32 20.4** | **+0.3** |
| **SKO** | **Skopje** | **1.24** | **52** | *i* Pg | **Pn** | **07 32 04.8** | **-0.1** |
| SKO | | | | *i* Sg | **Sn** | **07 32 21.6** | **-0.7** |
| **SKO** | **Skopje** | **1.24** | **52** | *i* Pg | **Pn** | **07 32 04.7** | **-0.1** |
| SKO | | | | *i* Sg | **Sn** | **07 32 21.5** | **-0.7** |
| **PDG** | **Podgorica** | **1.38** | **332** | *e*Pg | **Pn** | **07 32 04.7** | **-2.1** |
| PDG | | | | *e*Sg | **Sn** | **07 32 25.5** | **-0.2** |
| **PDG** | **Podgorica** | **1.38** | **332** | ⇑*i*Pg | **Pn** | **07 32 05.1** | **-1.7** |
| PDG | | | | *e*Sg | **Sn** | **07 32 25.5** | **-0.2** |
| **TTG** | **Podgorica** | **1.38** | **332** | ⇑*i*Pg | **Pn** | **07 32 05.1** | **-1.7** |
| TTG | | | | *e*Sg | **Sn** | **07 32 26.7** | **+1.0** |
| **PVY** | **Plav** | **1.39** | **355** | *e*Pg | **Pn** | **07 32 05.0** | **-2.0** |
| PVY | | | | *e*Sg | **Sn** | **07 32 26.7** | **+0.6** |
| **PVY** | **Plav** | **1.39** | **355** | *e*Pg | **Pn** | **07 32 05.0** | **-2.0** |
| PVY | | | | *e*Sg | **Sn** | **07 32 26.7** | **+0.6** |
| **BUM** | **Brajici-Budva** | **1.43** | **320** | ⇑*i*Pg | **Pn** | **07 32 05.9** | **-1.6** |
| BUM | | | | *e*Sg | **Sn** | **07 32 28.5** | **+1.5** |
| **BUM** | **Brajici-Budva** | **1.43** | **320** | ⇑*i*Pg | **Pn** | **07 32 05.9** | **-1.6** |
| BUM | | | | *e*Sg | **Sn** | **07 32 28.5** | **+1.5** |
| **PEJK** | **Peje** | **1.43** | **4** | P | **Pb** | **07 32 10.0** | **+2.1** |
| **KEK** | **Kerkira** | **1.52** | **190** | P | **Pn** | **07 32 08.5** | **-0.2** |
| KEK | | | | S | **Sg** | **07 32 30.2** | **+1.1** |
| **KEK** | **Kerkira** | **1.52** | **190** | P | **Pn** | **07 32 08.5** | **-0.2** |
| KEK | | | | S | **Sg** | **07 32 30.2** | **+1.1** |
| **GJIK** | **Gjilan** | **1.58** | **38** | P | **Pn** | **07 32 09.5** | **-0.1** |
| **BEY** | **Berane** | **1.67** | **354** | ⇓*i*Pn | **Pn** | **07 32 10.8** | **0.0** |
| **BEY** | **Berane** | **1.67** | **354** | P | **Pg** | **07 32 12.8** | **+0.5** |
| BEY | | | | *e*Sn | **Sg** | **07 32 36.5** | **+2.6** |
| **IVA** | **Berane** | **1.67** | **354** | ⇓*i*Pn | **Pn** | **07 32 10.8** | **0.0** |
| IVA | | | | *e*Sn | **Sg** | **07 32 36.5** | **+2.6** |
| **GRG** | **Griva** | **1.73** | **98** | P | **Pn** | **07 32 10.6** | **-1.1** |
| GRG | | | | S | **Sn** | **07 32 32.5** | **-2.0** |
| **GRG** | **Griva** | **1.73** | **98** | P | **Pn** | **07 32 10.6** | **-1.1** |
| GRG | | | | S | **Sn** | **07 32 32.5** | **-2.0** |
| **HCY** | **Herceg Novi** | **1.74** | **316** | ⇓*i*Pn | **Pn** | **07 32 11.2** | **-0.5** |
| HCY | | | | *e*Sn | **Sg** | **07 32 37.7** | **+1.6** |
| **HCY** | **Herceg Novi** | **1.74** | **316** | ⇓*i*Pn | **Pn** | **07 32 11.2** | **-0.5** |
| HCY | | | | *e*Sn | **Sg** | **07 32 37.7** | **+1.6** |
| **NKME** | **Niksic** | **1.78** | **331** | ⇑*i*Pn | **Pn** | **07 32 12.1** | **-0.3** |
| NKME | | | | *e*Sn | **Sg** | **07 32 38.9** | **+1.2** |
| **NKME** | **Niksic** | **1.78** | **331** | ⇑*i*Pn | **Pn** | **07 32 12.1** | **-0.3** |
| NKME | | | | *e*Sn | **Sg** | **07 32 38.9** | **+1.2** |
| **NKY** | **Niksic** | **1.81** | **332** | ⇑*i*Pn | **Pn** | **07 32 13.0** | **+0.2** |
| NKY | | | | *e*Sn | **Sg** | **07 32 39.5** | **+1.0** |
| **NKY** | **Niksic** | **1.81** | **332** | ⇑*i*Pn | **Pn** | **07 32 13.0** | **+0.2** |
| NKY | | | | *e*Sn | **Sg** | **07 32 39.5** | **+1.0** |
| **VAY** | **Valandovo** | **1.84** | **86** | *i* Pn | **Pb** | **07 32 14.4** | **-0.4** |
| VAY | | | | *i* Sn | **Sg** | **07 32 40.5** | **+1.0** |
| VAY | | | | *e*Lg | Lg | 07 32 42.2 | |
| | comp=E,32nm,0.5s | | | | | | |
| VAY | | | | *e*Lg | Lg | 07 32 45.5 | |
| | comp=N,47nm,0.7s | | | | | | |
| **VAY** | **Valandovo** | **1.84** | **86** | *e*Pn | **Pn** | **07 32 13.0** | **-0.1** |
| VAY | | | | *e*Sg | **Sb** | **07 32 38.3** | **-0.1** |
| **VAY** | **Valandovo** | **1.84** | **86** | *e*Pn | **Pn** | **07 32 13.0** | **-0.1** |
| VAY | | | | *e*Sg | **Sb** | **07 32 38.3** | **-0.1** |
| VAY | | | | *i* Sn | **Sg** | **07 32 40.5** | **+1.0** |
| VAY | | | | *e*Lg | Lg | 07 32 42.2 | |
| | comp=N,32nm,0.5s | | | | | | |
| **TREB** | **Trebinje** | **2.01** | **319** | *e*Pn | **Pn** | **07 32 14.9** | **-0.5** |
| TREB | | | | *e*Sg | **Sb** | **07 32 43.5** | **+0.4** |
| **TREB** | **Trebinje** | **2.01** | **319** | *e*Pn | **Pn** | **07 32 14.9** | **-0.5** |
| TREB | | | | *e*Sg | **Sb** | **07 32 43.5** | **+0.4** |
| **SJES** | **Sjenica** | **2.05** | **357** | *e*Pn | **Pn** | **07 32 16.7** | **+0.6** |
| **BRY** | **Bratogost** | **2.06** | **325** | ⇓*i*Pn | **Pn** | **07 32 16.7** | **+0.4** |
| BRY | | | | *e*Sn | **Sb** | **07 32 45.7** | **+0.8** |
| **BRY** | **Bratogost** | **2.06** | **325** | ⇓*i*Pn | **Pn** | **07 32 16.7** | **+0.4** |
| BRY | | | | *e*Sn | **Sb** | **07 32 45.7** | **+0.8** |
| **SELS** | **Selova** | **2.13** | **20** | *e*Pn | **Pb** | **07 32 18.4** | **-1.5** |
| **UPM** | **Unac-Piva** | **2.19** | **336** | ⇓*i*Pn | **Pn** | **07 32 18.8** | **+0.7** |
| UPM | | | | *e*Sn | **Sb** | **07 32 48.5** | **0.0** |
| **UPM** | **Unac-Piva** | **2.19** | **336** | ⇓*i*Pn | **Pn** | **07 32 18.8** | **+0.7** |
| **UPM** | **Unac-Piva** | **2.19** | **336** | P | **Pn** | **07 32 19.2** | **+1.1** |
| UPM | | | | *e*Sn | **Sb** | **07 32 48.5** | **0.0** |
| **IVAS** | **Ivanjica** | **2.36** | **0** | *e*Pn | **Pb** | **07 32 22.2** | **-1.5** |
| **IVAS** | **Ivanjica** | **2.36** | **0** | *e*Pn | **Pb** | **07 32 22.2** | **-1.5** |
| **BBLS** | **Lazići** | **2.71** | **349** | *e*Pn | **Pn** | **07 32 26.2** | **+1.1** |
| **BBLS** | **Lazići** | **2.71** | **349** | *e*Pn | **Pn** | **07 32 26.2** | **+1.1** |
| **GRUS** | **Gruza** | **2.71** | **9** | *e*Pn | **Pn** | **07 32 26.4** | **+1.4** |
| **GRUS** | **Gruza** | **2.71** | **9** | *e*Pn | **Pn** | **07 32 26.4** | **+1.4** |
| **ZAPS** | **Zavoj** | **2.77** | **41** | *e*Pn | **Pn** | **07 32 28.1** | **+2.1** |
| **ZAPS** | **Zavoj** | **2.77** | **41** | *e*Pn | **Pn** | **07 32 28.1** | **+2.1** |
| **DIVS** | **Divibare** | **2.89** | **358** | *e*Pn | **Pn** | **07 32 28.9** | **+1.3** |
| **DIVS** | **Divibare** | **2.89** | **358** | *e*Pn | **Pn** | **07 32 28.9** | **+1.3** |

**IDC 12 07:44:26.7**±1.7**, 8°.86S×155°.79E, h0km, mb3.7**/4**, mb1 4.1**/4**, mb1mx3.6**/30**, mbtmp3.7**/4**, MS3.1**/3**, Ms1 3.1**/3**, ms1mx2.6**/26**, Error ellipse: s-maj=129.0km s-min=26.6km az=139.0, Bougainville - Solomon**

**Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.48** | **240** | P | P | 07 49 37.5 | -0.9 |
| | 2.4nm,1.0s,baz=66,slow=9.6,SNR=6.3 | | | | | | |
| WRA | | | | LR | LR | 07 57 39.7 | |
| | comp=Z,46nm,20.9s,baz=85,slow=34 | | | | | | |
| **GUMO** | **Guam** | **24.80** | **334** | LR | LR | 07 58 04.4 | |
| | comp=Z,34nm,21.8s,baz=160,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **25.60** | **232** | P | P | 07 49 58.3 | +0.3 |
| | 0.6nm,0.5s,baz=64,slow=10.0,SNR=6.5 | | | | | | |
| **LEM** | **Lembang** | **47.74** | **269** | LR | LR | 08 14 52.8 | |
| | comp=Z,24nm,18.3s,baz=178,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **84.81** | **21** | P | P | 07 57 02.5 | -0.3 |
| | 0.5nm,0.9s,baz=235,slow=3.2,SNR=4.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.25** | **52** | P | P | 07 57 40.0 | +0.7 |
| | 0.7nm,0.8s,baz=236,slow=4.0,SNR=4.0 | | | | | | |

**IDC 12 08:02:56.8**±1.9**,2°.35N×96°.47E,h0km,mb3.3**/3**,mb1 3.4**/4**, mb1mx3.3**/44**,mbtmp3.2**/4**,ML2.5**/1**,MS2.3**/1**,Ms1 2.3**/1**, ms1mx2.1**/26**,Error ellipse: s-maj=44.8km s-min=27.7km az=41.0,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **2.50** | **80** | Pn | Pn | 08 03 39.5 | +0.6 |
| | 0.9nm,0.3s,baz=309,slow=17,SNR=4.4 | | | | | | |
| PSI | | | | Sn | Sn | 08 04 09.5 | -0.7 |
| | 2.2nm,0.3s,baz=291,slow=18,SNR=5.0 | | | | | | |
| PSI | | | | LR | LR | 08 04 57.3 | |
| | comp=Z,63nm,19.1s,baz=244,slow=49 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.89** | **247** | T | T | 08 35 11.4 | |
| | baz=68,slow=75,SNR=16 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.90** | **247** | T | T | 08 35 12.4 | |
| | baz=68,slow=75,SNR=13 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.91** | **247** | T | T | 08 35 10.4 | |
| | baz=68,slow=75,SNR=9.1 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.58** | **157** | T | T | 08 53 59.7 | |
| | baz=333,slow=76,SNR=4.8 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.59** | **157** | T | T | 08 54 00.8 | |
| | baz=333,slow=76,SNR=7.0 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.59** | **157** | T | T | 08 53 54.2 | |
| | baz=333,slow=76,SNR=6.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.26** | **123** | P | P | 08 11 00.4 | -0.1 |
| | 0.2nm,0.3s,baz=302,slow=9.0,SNR=7.6 | | | | | | |
| **ASAR** | **Alice Springs** | **44.67** | **128** | P | P | 08 11 11.5 | -0.3 |
| | 0.4nm,1.0s,baz=297,slow=8.1,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.96** | **346** | P | P | 08 11 21.5 | -0.2 |
| | 0.4nm,0.4s,baz=157,slow=8.2,SNR=5.1 | | | | | | |

**KRSC 12 08:22:12.9**±1.0**,55°.18N×161°.82E,h92km**±11km**,ML3.5, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **0.63** | **185** | *i* P | Pn | 08 22 30.5 | +1.6 |
| MKZ | | | | *i* S | Sn | 08 22 43.0 | +2.1 |
| **KZV** | **Kizimen** | **0.88** | **266** | *i* P | Pn | 08 22 32.4 | +0.8 |
| **TUMR** | **Tumrok** | **0.97** | **277** | *i* P | Pn | 08 22 33.8 | +1.3 |
| **KMNR** | **Kamenistaya** | **1.07** | **303** | *i* P | Pn | 08 22 34.6 | +0.9 |
| KMNR | | | | *e*S | Sn | 08 22 50.3 | +1.0 |
| **KBTR** | **Krutoberegovo** | **1.17** | **28** | *e*P | Pn | 08 22 35.9 | +1.2 |
| KBTR | | | | *e*S | Sn | 08 22 52.3 | +1.2 |
| **SRDR** | **Sredinnyy** | **1.65** | **315** | *e*P | Pn | 08 22 42.8 | +2.1 |
| **SPN** | **Mys Shipunski** | **2.34** | **208** | *e*P | Pn | 08 22 50.5 | +0.8 |
| SPN | | | | *e*S | Sn | 08 23 17.1 | -0.7 |
| **NLC** | **Nalytchevo** | **2.49** | **217** | *e*P | Pn | 08 22 53.1 | +1.6 |
| NLC | | | | *e*S | Sn | 08 23 22.5 | +1.3 |
| **SDLR** | **Sedlovina** | **2.57** | **223** | *e*P | Pn | 08 22 55.3 | +2.4 |
| SDLR | | | | *e*S | Sn | 08 23 26.0 | +2.4 |
| **KRX** | **Arik** | **2.61** | **227** | *e*P | Pn | 08 22 56.0 | +2.6 |
| **SMAR** | **Somma** | **2.62** | **224** | *e*P | Pn | 08 22 55.7 | +2.1 |
| **AVH** | **Avacha** | **2.64** | **225** | *e*P | Pn | 08 22 56.5 | +2.8 |
| AVH | | | | *e*S | Sn | 08 23 27.9 | +2.8 |
| **KOK** | **Koryaka** | **2.66** | **226** | *e*P | Pn | 08 22 56.8 | +2.7 |
| **GNL** | **Ganaly** | **2.71** | **238** | *e*P | Pn | 08 22 56.9 | +2.2 |
| **RUS** | **Russkaya** | **3.38** | **217** | *e*P | Pn | 08 23 05.3 | +1.8 |

*TAP **12** 08:25:54.9,24°.79N×121°.88E,h10km,ML3.2,B*
*JMA **12** 08:25:55.3±0.2,24°.76N×121°.75E,h35km,M3.0*
**ISC 12 08:25:55.0**±0.9**,24°.79N**±0°.02×**121°.90E**±0°.02**,h18km**±1km**, n40,σ0°.68**/68**,1C-8D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | | **0.06** | **28** | ⇑*i*P | **Pg** | **08 25 57.7** | **-0.7** |
| | baz=46 | | | | | | |
| EGS | | | | *i* S | **Sg** | **08 25 59.5** | **-1.1** |
| | baz=46 | | | | | | |
| **ILA** | **Ilan** | **0.14** | **259** | *i* P | **Pb** | **08 25 58.3** | **+0.5** |
| | baz=259 | | | | | | |
| ILA | | | | *i* S | **Sg** | **08 26 01.0** | **-1.0** |
| | baz=259 | | | | | | |
| **TWC** | **Suao** | **0.19** | **195** | ⇓*i*P | **Pb** | **08 25 59.1** | **-0.2** |
| | baz=180 | | | | | | |
| TWC | | | | S | **Sb** | **08 26 01.5** | **-0.5** |
| | baz=180 | | | | | | |
| **TWE** | **Neicheng** | **0.22** | **252** | ⇓*i*P | **Pb** | **08 25 59.6** | **-0.6** |
| | baz=249 | | | | | | |
| TWE | | | | *e*S | **Sb** | **08 26 02.5** | **-1.0** |
| | baz=249 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.23** | **20** | ⇓*i*P | **Pb** | **08 26 00.3** | **-0.1** |
| | baz=20 | | | | | | |
| TWB1 | | | | *i* S | **Sb** | **08 26 03.5** | **-0.3** |
| | baz=20 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.30** | **339** | ⇓*i*P | **Pb** | **08 26 01.9** | **+0.1** |
| | baz=329 | | | | | | |
| NWF | | | | *i* S | **Sg** | **08 26 06.0** | **-0.1** |
| | baz=329 | | | | | | |
| **ENTT** | **Nioudou** | **0.34** | **244** | ⇓P | **Pg** | **08 26 01.5** | **-0.7** |
| | baz=242 | | | | | | |
| ENTT | | | | S | **Sg** | **08 26 06.7** | **-0.6** |
| | baz=242 | | | | | | |
| **TWA** | **Mucha** | **0.34** | **303** | ⇓*i*P | **Pg** | **08 26 02.3** | **0.0** |
| | baz=306 | | | | | | |
| TWA | | | | S | **Sg** | **08 26 06.9** | **-0.4** |
| | baz=306 | | | | | | |
| **ENA** | **Nanau** | **0.39** | **202** | *e*P | **Pg** | **08 26 02.6** | **-0.5** |
| | baz=202 | | | | | | |
| ENA | | | | *e*S | **Sg** | **08 26 07.4** | **-1.2** |
| | baz=202 | | | | | | |
| **TAP1** | **Taipei** | **0.42** | **306** | P | **Pb** | **08 26 04.1** | **+0.1** |
| | baz=306 | | | | | | |
| **TAP** | **Taipei** | **0.43** | **305** | P | **Pb** | **08 26 04.3** | **+0.1** |
| | baz=306 | | | | | | |
| **NSK** | **Sanguang** | **0.51** | **257** | ⇓*i*P | **Pg** | **08 26 04.5** | **-0.8** |
| | baz=268 | | | | | | |
| NSK | | | | S | **Sg** | **08 26 10.2** | **-1.9** |
| | baz=268 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.54** | **305** | P | **Pg** | **08 26 06.6** | **+0.8** |
| | baz=306 | | | | | | |
| **NNS** | **Nan Shan** | **0.59** | **234** | *e*P | **Pb** | **08 26 06.9** | **+0.1** |
| | baz=232 | | | | | | |
| **NCU** | **National Centr** | **0.67** | **285** | *e*P | **Pn** | **08 26 09.5** | **0.0** |
| | baz=286 | | | | | | |
| NCU | | | | *e*S | **Sn** | **08 26 19.0** | **-0.6** |
| | baz=286 | | | | | | |
| **TWD** | **Chiawan** | **0.76** | **201** | P | **Pb** | **08 26 09.3** | **-0.4** |
| | baz=200 | | | | | | |
| TWD | | | | *e*S | **Sb** | **08 26 19.2** | **-0.5** |
| | baz=200 | | | | | | |
| **NSTT** | **Nanjuang** | **0.83** | **259** | *e*P | **Pn** | **08 26 11.9** | **+0.1** |
| | baz=259 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **08 26 23.4** | **-0.2** |
| | baz=259 | | | | | | |
| **HSN** | **Hsinchu** | **0.85** | **271** | *e*P | **Pn** | **08 26 12.2** | **+0.3** |
| | baz=287 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.85** | **10** | ⇓*e*P | **Pg** | **08 26 11.9** | **+0.3** |
| | baz=13 | | | | | | |
| PCYT | | | | *e*S | **Sn** | **08 26 23.6** | **-0.4** |
| | baz=13 | | | | | | |
| **TWT** | **Tachien** | **0.85** | **231** | *e*P | **Pb** | **08 26 11.8** | **+0.5** |
| | baz=223 | | | | | | |
| **HWA** | **Hwalien** | **0.85** | **198** | *e*P | **Pn** | **08 26 12.4** | **+0.3** |
| | baz=196 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.87** | **222** | *e*P | **Pb** | **08 26 11.7** | **-0.1** |
| | baz=211 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.01** | **109** | P | **Pb** | **08 26 13.8** | **-0.1** |
| JYNG | | | | S | **Sb** | **08 26 27.9** | **+1.1** |
| **YOJ** | **Yonaguni jima** | **1.06** | **108** | P | **Pn** | **08 26 15.5** | **+0.5** |
| YOJ | | | | S | **Sn** | **08 26 29.5** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **1.06** | **108** | *e*P | **Pn** | **08 26 15.4** | **+0.5** |
| | baz=106 | | | | | | |
| YOJ | | | | *e*S | **Sn** | **08 26 29.5** | **+0.3** |
| | baz=106 | | | | | | |
| **ESL** | **Shilin** | **1.06** | **204** | *e*P | **Pb** | **08 26 14.6** | **-0.3** |
| | baz=202 | | | | | | |
| ESL | | | | *e*S | **Sb** | **08 26 28.9** | **+0.5** |
| | baz=202 | | | | | | |
| **NSY** | **Sanyi** | **1.10** | **250** | *e*P | **Pg** | **08 26 16.5** | **+0.1** |
| | baz=260 | | | | | | |
| NSY | | | | *e*S | **Sg** | **08 26 32.2** | **+1.3** |
| | baz=260 | | | | | | |
| **TWQ1** | **Liyutan** | **1.12** | **247** | *e*P | **Pg** | **08 26 16.5** | **-0.2** |
| | baz=246 | | | | | | |
| TWQ1 | | | | *e*S | **Sg** | **08 26 32.3** | **+0.9** |
| | baz=246 | | | | | | |
| **WDT** | **Danda** | **1.25** | **214** | *e*P | **Pn** | **08 26 18.1** | **+0.3** |
| | baz=213 | | | | | | |
| WDT | | | | *e*S | **Sn** | **08 26 34.4** | **+0.1** |
| | baz=213 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.29** | **225** | *e*P | **Pb** | **08 26 19.1** | **+0.4** |
| | baz=212 | | | | | | |
| **TYC** | **Yuchr** | **1.30** | **227** | *e*P | **Pb** | **08 26 19.7** | **+0.8** |
| | baz=214 | | | | | | |
| **EHY** | **Hungye** | **1.39** | **203** | *e*P | **Pn** | **08 26 19.9** | **+0.5** |
| | baz=199 | | | | | | |
| **TWF1** | **Yuli** | **1.54** | **201** | *e*P | **Pn** | **08 26 22.2** | **+0.8** |
| | baz=209 | | | | | | |
| TWF1 | | | | *e*S | **Sg** | **08 26 44.0** | **-0.7** |
| | baz=209 | | | | | | |
| **YUS** | **Yu-Shan** | **1.56** | **214** | *e*P | **Pb** | **08 26 24.0** | **+0.4** |
| | baz=213 | | | | | | |
| YUS | | | | *e*S | **Sg** | **08 26 46.8** | **+1.2** |
| | baz=213 | | | | | | |
| **ALS** | **Alishan** | **1.62** | **218** | *e*P | **Pg** | **08 26 26.4** | **+0.1** |
| | baz=208 | | | | | | |
| **CHN5** | **Tsauling** | **1.63** | **223** | *e*P | **Pg** | **08 26 26.7** | **+0.3** |
| | baz=223 | | | | | | |
| CHN5 | | | | *e*S | **Sg** | **08 26 49.0** | **+1.3** |
| | baz=223 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.73** | **105** | P | **Pn** | **08 26 24.0** | **-0.1** |
| IRIF | | | | S | **Sn** | **08 26 45.5** | **-0.1** |
| **CHN4** | **Tsaushan** | **1.87** | **220** | *e*P | **Pb** | **08 26 29.0** | **+0.4** |
| | baz=219 | | | | | | |
| CHN4 | | | | *e*S | **Sg** | **08 26 56.4** | **+1.2** |
| | baz=219 | | | | | | |
| **JKRS** | **Kuro-shima** | **2.00** | **106** | P | **Pn** | **08 26 28.3** | **+0.5** |
| JKRS | | | | *e*S | **Sn** | **08 26 51.3** | **-1.0** |
| **CHN1** | **Nanshi** | **2.03** | **218** | *e*P | **Pb** | **08 26 32.1** | **+0.7** |
| | baz=217 | | | | | | |
| CHN1 | | | | *e*S | **Sg** | **08 26 59.2** | **-1.4** |
| | baz=217 | | | | | | |

**TAP 12 08:28:31.5,24°.79N×121°.88E,h10km,ML2.8,2C-4D,B, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | | **0.07** | **37** | ⇑*i*P | Pg | 08 28 34.3 | +0.5 |
| | baz=45 | | | | | | |
| EGS | | | | *i* S | Sg | 08 28 36.1 | +0.7 |
| | baz=45 | | | | | | |
| **ILA** | **Ilan** | **0.12** | **261** | *e*P | Pb | 08 28 35.4 | -0.6 |
| | baz=260 | | | | | | |
| ILA | | | | *e*S | Sg | 08 28 37.5 | +1.1 |
| | baz=260 | | | | | | |
| **TWC** | **Suao** | **0.18** | **190** | ⇓*i*P | Pg | 08 28 35.7 | +0.4 |
| | baz=180 | | | | | | |
| TWC | | | | *i* S | Sg | 08 28 38.0 | +0.1 |
| | baz=180 | | | | | | |
| **TWE** | **Neicheng** | **0.21** | **252** | ⇓*i*P | Pg | 08 28 36.1 | +0.3 |
| | baz=250 | | | | | | |
| TWE | | | | S | Sg | 08 28 39.1 | +0.4 |
| | baz=250 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.24** | **23** | ⇓*i*P | Pg | 08 28 36.8 | +0.3 |
| | baz=16 | | | | | | |
| TWB1 | | | | *i* S | Sg | 08 28 40.0 | +0.1 |
| | baz=16 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.30** | **342** | ⇓*i*P | Pb | 08 28 38.4 | -0.7 |
| | baz=330 | | | | | | |
| NWF | | | | S | Sg | 08 28 42.5 | +0.7 |
| | baz=330 | | | | | | |
| **ENTT** | **Nioudou** | **0.32** | **243** | ⇑*i*P | Pg | 08 28 38.4 | +0.4 |
| | baz=242 | | | | | | |
| **TWA** | **Mucha** | **0.33** | **306** | P | Pg | 08 28 38.8 | +0.6 |
| | baz=306 | | | | | | |
| TWA | | | | S | Sg | 08 28 43.4 | +0.7 |
| | baz=306 | | | | | | |
| **ENA** | **Nanau** | **0.38** | **200** | *e*P | Pg | 08 28 39.2 | +0.2 |
| | baz=203 | | | | | | |
| ENA | | | | *e*S | Sg | 08 28 44.2 | +0.2 |
| | baz=203 | | | | | | |
| **NSK** | **Sanguang** | **0.49** | **257** | P | Pg | 08 28 41.1 | 0.0 |
| | baz=265 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.53** | **307** | *e*P | Pb | 08 28 43.3 | +0.4 |
| | baz=307 | | | | | | |
| **TWD** | **Chiawan** | **0.75** | **200** | *e*P | Pg | 08 28 45.8 | -0.2 |
| | baz=199 | | | | | | |

*NIED **12** 08:28:00,24°.80N×121°.80E,h8km,Mw3.9 Best double couple: M0 9.18000×10^14 NP1:φs59.00000°,δ42.00000°, λ-78.00000°. NP2:φs222.00000°,δ49.00000°, λ-101.00000°.*
*IDC **12** 08:28:37.9±1.1,24°.33N×120°.83E,h0km,mb3.5/3, mb1 3.7/4,mb1mx3.5/32,mbtmp3.6/4,ML3.6/1,MS2.9/5, Ms1 2.9/5,ms1mx2.6/32,Error ellipse: s-maj=91.8km s-min=23.7km az=76.0*
*TAP **12** 08:28:38.9,24°.79N×121°.88E,h9km,ML4.0,B*
*BJI **12** 08:28:38.9,24°.86N×121°.88E,h11km,mb4.0/2,mB4.1/1, ML3.8/6,Ms3.5/3,Ms7 3.5/3*
*JMA **12** 08:28:39.2±0.1,24°.77N×121°.82E,h30km±5km,M4.0*
**ISC 12 08:28:39.0**±0.8**,24°.77N**±0°.02×**121°.92E**±0°.02**,h10km**±5km**, n73,σ0°.79**/110**,mb3.7**/3**,MS2.7**/5**,3C-8D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | | **0.07** | **6** | ⇑*i*P | **Pg** | **08 28 41.6** | **+0.3** |
| | baz=46 | | | | | | |
| **ILA** | **Ilan** | **0.16** | **268** | P | **Pg** | **08 28 42.4** | **-0.1** |
| | baz=258 | | | | | | |
| ILA | | | | *i* S | **Sg** | **08 28 44.9** | **0.0** |
| | baz=258 | | | | | | |
| **TWC** | **Suao** | **0.17** | **203** | *i* P | **Pg** | **08 28 43.0** | **+0.3** |
| | baz=179 | | | | | | |
| TWC | | | | *e*S | **Sg** | **08 28 45.2** | **-0.1** |
| | baz=179 | | | | | | |
| **TWE** | **Neicheng** | **0.24** | **258** | ⇓*i*P | **Pg** | **08 28 43.5** | **-0.3** |
| | baz=248 | | | | | | |
| TWE | | | | S | **Sg** | **08 28 46.6** | **-0.6** |
| | baz=248 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.24** | **14** | ⇓*i*P | **Pg** | **08 28 44.2** | **+0.2** |
| | baz=16 | | | | | | |
| TWB1 | | | | *i* S | **Sg** | **08 28 47.2** | **-0.2** |
| | baz=16 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.33** | **337** | ⇓*i*P | **Pg** | **08 28 45.8** | **+0.3** |
| | baz=330 | | | | | | |
| NWF | | | | *i* S | **Sg** | **08 28 49.8** | **-0.1** |
| | baz=330 | | | | | | |
| **ENTT** | **Nioudou** | **0.35** | **248** | ⇑P | **Pg** | **08 28 45.7** | **-0.2** |
| | baz=242 | | | | | | |
| **TWA** | **Mucha** | **0.37** | **304** | ⇓*i*P | **Pg** | **08 28 46.3** | **-0.1** |
| | baz=306 | | | | | | |
| TWA | | | | *i* S | **Sg** | **08 28 50.9** | **-0.4** |
| | baz=306 | | | | | | |
| **ENA** | **Nanau** | **0.38** | **206** | *e*P | **Pg** | **08 28 46.7** | **+0.2** |
| | baz=191 | | | | | | |
| **TAP1** | **Taipei** | **0.45** | **306** | ⇓*i*P | **Pb** | **08 28 48.2** | **-0.8** |
| | baz=294 | | | | | | |
| TAP1 | | | | S | **Sg** | **08 28 53.5** | **-0.3** |
| | baz=294 | | | | | | |
| **TAP** | **Taipei** | **0.47** | **305** | *i* P | **Pg** | **08 28 48.2** | **+0.2** |
| | baz=294 | | | | | | |
| TAP | | | | *i* S | **Sg** | **08 28 54.2** | **0.0** |
| | baz=294 | | | | | | |
| **NSK** | **Sanguang** | **0.52** | **260** | P | **Pg** | **08 28 48.4** | **-0.7** |
| | baz=267 | | | | | | |
| NSK | | | | S | **Sg** | **08 28 54.2** | **-1.9** |
| | baz=267 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.56** | **306** | ⇓*i*P | **Pb** | **08 28 50.7** | **-0.2** |
| | baz=307 | | | | | | |
| **TWY** | **Chenhua** | **0.58** | **330** | ⇓*i*P | **Pb** | **08 28 50.6** | **-0.6** |
| | baz=332 | | | | | | |
| **NNS** | **Nan Shan** | **0.60** | **237** | *e*P | **Pg** | **08 28 50.4** | **-0.3** |
| | baz=233 | | | | | | |
| **NCU** | **National Centr** | **0.70** | **287** | ⇓*i*P | **Pb** | **08 28 53.1** | **-0.1** |
| | baz=286 | | | | | | |
| NCU | | | | S | **Sb** | **08 29 02.9** | **0.0** |
| | baz=286 | | | | | | |
| **TWD** | **Chiawan** | **0.75** | **204** | P | **Pg** | **08 28 53.3** | **-0.1** |
| | baz=200 | | | | | | |
| TWD | | | | *e*S | **Sg** | **08 29 03.1** | **-0.2** |
| | baz=200 | | | | | | |
| **HWA** | **Hwalien** | **0.84** | **200** | *e*P | **Pg** | **08 28 55.4** | **+0.2** |
| | baz=208 | | | | | | |
| HWA | | | | *e*S | **Sg** | **08 29 06.6** | **+0.5** |
| | baz=208 | | | | | | |
| **NSTT** | **Nanjuang** | **0.85** | **261** | *e*P | **Pb** | **08 28 55.6** | **-0.2** |
| | baz=259 | | | | | | |
| NSTT | | | | *e*S | **Sb** | **08 29 07.7** | **+0.4** |
| | baz=259 | | | | | | |
| **TWT** | **Tachien** | **0.85** | **233** | *e*P | **Pg** | **08 28 55.7** | **+0.2** |
| | baz=222 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.86** | **224** | *e*P | **Pg** | **08 28 55.4** | **-0.3** |
| | baz=212 | | | | | | |
| WHF | | | | *e*S | **Sb** | **08 29 08.2** | **+0.2** |
| | baz=212 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.87** | **9** | *i* P | **Pb** | **08 28 56.0** | **0.0** |
| | baz=12 | | | | | | |
| PCYT | | | | *e*S | **Sb** | **08 29 07.4** | **-0.3** |
| | baz=12 | | | | | | |
| **HSN** | **Hsinchu** | **0.87** | **272** | *e*P | **Pg** | **08 28 55.3** | **-0.4** |
| | baz=293 | | | | | | |
| HSN | | | | *e*S | **Sb** | **08 29 07.7** | **-0.1** |
| | baz=293 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.98** | **109** | P | **Pg** | **08 28 58.1** | **+0.2** |
| JYNG | | | | S | **Sb** | **08 29 11.7** | **+0.7** |
| **YOJ** | **Yonaguni jima** | **1.04** | **107** | P | **Pn** | **08 28 59.5** | **0.0** |
| YOJ | | | | S | **Sb** | **08 29 13.3** | **+0.7** |
| **YOJ** | **Yonaguni jima** | **1.04** | **107** | *e*P | **Pn** | **08 28 59.6** | **0.0** |
| | baz=107 | | | | | | |
| YOJ | | | | *e*S | **Sb** | **08 29 13.1** | **+0.5** |
| | baz=107 | | | | | | |
| **ESL** | **Shilin** | **1.05** | **205** | *e*P | **Pb** | **08 28 58.5** | **-0.8** |
| | baz=202 | | | | | | |
| **NSY** | **Sanyi** | **1.12** | **252** | *e*P | **Pn** | **08 29 01.2** | **+0.5** |
| | baz=250 | | | | | | |
| NSY | | | | *e*S | **Sn** | **08 29 16.4** | **+0.4** |
| | baz=250 | | | | | | |
| **TWQ1** | **Liyutan** | **1.13** | **248** | *e*P | **Pn** | **08 29 01.1** | **+0.3** |
| | baz=246 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **08 29 16.7** | **+0.3** |
| | baz=246 | | | | | | |
| **WDT** | **Danda** | **1.24** | **216** | *e*P | **Pn** | **08 29 02.5** | **-0.1** |
| | baz=213 | | | | | | |
| WDT | | | | *e*S | **Sn** | **08 29 19.6** | **+0.1** |
| | baz=213 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.28** | **227** | *e*P | **Pb** | **08 29 03.3** | **0.0** |
| | baz=213 | | | | | | |
| **TCU** | **Taichung** | **1.29** | **242** | *e*P | **Pg** | **08 29 04.2** | **+0.4** |
| | baz=239 | | | | | | |
| TCU | | | | *e*S | **Sg** | **08 29 21.9** | **+1.2** |
| | baz=239 | | | | | | |
| **TYC** | **Yuchr** | **1.30** | **229** | *e*P | **Pg** | **08 29 04.0** | **+0.1** |
| | baz=215 | | | | | | |
| **EHY** | **Hungye** | **1.37** | **204** | *e*P | **Pn** | **08 29 03.9** | **-0.3** |
| | baz=200 | | | | | | |
| **WNT** | **Mingjian** | **1.44** | **232** | *e*P | **Pg** | **08 29 07.2** | **+0.6** |
| | baz=226 | | | | | | |
| **TWF1** | **Yuli** | **1.52** | **202** | *e*P | **Pn** | **08 29 06.5** | **+0.2** |
| | baz=209 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **08 29 27.3** | **+0.7** |
| | baz=209 | | | | | | |
| **YUS** | **Yu-Shan** | **1.55** | **215** | *e*P | **Pb** | **08 29 08.5** | **+0.4** |
| | baz=213 | | | | | | |
| YUS | | | | *e*S | **Sg** | **08 29 31.4** | **+2.4** |
| | baz=213 | | | | | | |
| **ALS** | **Alishan** | **1.62** | **219** | *e*P | **Pg** | **08 29 10.0** | **-0.1** |
| | baz=211 | | | | | | |
| ALS | | | | *e*S | **Sg** | **08 29 32.5** | **+1.4** |
| | baz=211 | | | | | | |
| **CHN5** | **Tsauling** | **1.63** | **225** | *e*P | **Pg** | **08 29 10.2** | **-0.1** |
| | baz=223 | | | | | | |
| CHN5 | | | | *e*S | **Sg** | **08 29 32.5** | **+1.1** |
| | baz=223 | | | | | | |
| **WGK** | **Gukeng** | **1.65** | **229** | *e*P | **Pg** | **08 29 11.0** | **+0.4** |
| | baz=249 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.70** | **104** | P | **Pn** | **08 29 08.1** | **-0.5** |
| **CHKT** | **Chengkung** | **1.74** | **197** | *e*P | **Pb** | **08 29 10.9** | **-0.1** |
| | baz=210 | | | | | | |
| CHKT | | | | *e*S | **Sg** | **08 29 34.1** | **-0.8** |
| | baz=210 | | | | | | |
| **ELDTW** | **Lidau** | **1.78** | **208** | *e*P | **Pn** | **08 29 10.6** | **+0.7** |
| | baz=190 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.86** | **112** | P | **Pn** | **08 29 10.6** | **-0.2** |
| **CHN4** | **Tsaushan** | **1.86** | **221** | *e*P | **Pb** | **08 29 13.7** | **+0.6** |
| | baz=219 | | | | | | |
| CHN4 | | | | *e*S | **Sg** | **08 29 39.3** | **+0.4** |
| | baz=219 | | | | | | |
| **CHY** | **Chiayi** | **1.87** | **228** | *e*P | **Pg** | **08 29 13.9** | **-0.8** |
| | baz=247 | | | | | | |
| **STYT** | **Tauyuan** | **1.92** | **214** | *e*P | **Pb** | **08 29 14.5** | **+0.3** |
| | baz=197 | | | | | | |
| STYT | | | | *e*S | **Sg** | **08 29 40.0** | **-0.8** |
| | baz=197 | | | | | | |
| **WTP** | **Ta-pu** | **1.93** | **219** | *e*P | **Pb** | **08 29 14.1** | **-0.2** |
| | baz=202 | | | | | | |
| WTP | | | | *e*S | **Sg** | **08 29 40.8** | **-0.3** |
| | baz=202 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.97** | **105** | P | **Pn** | **08 29 12.4** | **0.0** |
| JKRS | | | | S | **Sn** | **08 29 36.6** | **-0.5** |
| **TWK** | **Hsinying** | **1.99** | **222** | *e*P | **Pb** | **08 29 15.8** | **+0.5** |
| | baz=219 | | | | | | |
| **CHN1** | **Nanshi** | **2.03** | **219** | *e*P | **Pb** | **08 29 15.4** | **-0.5** |
| | baz=217 | | | | | | |
| CHN1 | | | | *e*S | **Sg** | **08 29 43.0** | **-1.2** |
| | baz=217 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.06** | **101** | P | **Pn** | **08 29 13.0** | **-0.6** |
| JIJ | | | | S | **Sn** | **08 29 37.4** | **-1.9** |
| **SGST** | **Jiashian** | **2.08** | **216** | *e*P | **Pb** | **08 29 16.2** | **-0.6** |
| | baz=215 | | | | | | |
| SGST | | | | *e*S | **Sg** | **08 29 45.2** | **-0.7** |
| | baz=215 | | | | | | |
| **TWG** | **Pinlang** | **2.09** | **202** | *e*P | **Pb** | **08 29 15.8** | **-1.2** |
| | baz=182 | | | | | | |
| **CHN8** | **Yiju** | **2.11** | **228** | *e*P | **Pb** | **08 29 17.8** | **+0.5** |
| | baz=245 | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.18** | **94** | P | **Pn** | **08 29 15.5** | **+0.3** |
| **PNG** | **Penghu** | **2.47** | **242** | *e*P | **Pn** | **08 29 20.1** | **+0.8** |
| | baz=241 | | | | | | |
| **WDGT** | **Dungji** | **2.56** | **234** | *e*P | **Pn** | **08 29 21.1** | **+0.7** |
| | baz=233 | | | | | | |
| **EAST** | **Anshuo** | **2.57** | **203** | *e*P | **Pn** | **08 29 21.9** | **+1.2** |
| | baz=190 | | | | | | |
| EAST | | | | *e*S | **Sb** | **08 29 55.5** | **-1.4** |
| | baz=190 | | | | | | |
| **SCZT** | **Fangliau** | **2.67** | **207** | *e*P | **Pb** | **08 29 24.6** | **-2.2** |
| | baz=205 | | | | | | |
| SCZT | | | | *e*S | **Sb** | **08 29 57.6** | **-2.0** |
| | baz=205 | | | | | | |
| **LAY** | **Lan-yu** | **2.74** | **187** | *e*P | **Pn** | **08 29 22.2** | **-0.8** |
| | baz=175 | | | | | | |
| LAY | | | | *e*S | **Sn** | **08 29 55.9** | **-0.2** |
| | baz=175 | | | | | | |
| **TWK1** | **Hengchun** | **3.00** | **200** | *e*P | **Pn** | **08 29 29.0** | **+2.5** |
| | baz=188 | | | | | | |
| **QZH** | **Quanzhou** | **3.03** | **274** | ⇑*i*Pn | **Pn** | **08 29 26.7** | **-0.3** |
| QZH | | | | Sn | **Sn** | **08 30 01.8** | **-1.5** |
| QZH | | | | SMN | | | |
| | 490nm,0.8s | | | | | | |
| QZH | | | | SME | | | |
| | 190nm,0.7s | | | | | | |
| **KNM** | **Kinmen** | **3.20** | **264** | *e*P | **Pn** | **08 29 30.4** | **+1.1** |
| | baz=266 | | | | | | |
| **KSRS** | **Korea Array** | **13.64** | **21** | Pn | **P** | **08 32 03.7** | **+2.3** |
| | 0.2nm,0.3s,baz=196,slow=13,SNR=5.0 | | | | | | |
| **CD2** | **Chengdu** | **17.18** | **295** | *e*P | **Pn** | **08 32 38.2** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **22.25** | **258** | LR | LR | 08 42 58.3 | |
| | comp=Z,23nm,19.2s,baz=40,slow=41 | | | | | | |
| **SONM** | **Songino Array** | **26.10** | **336** | P | **P** | **08 34 13.4** | **+0.4** |
| | 1.5nm,0.8s,baz=153,slow=11,SNR=8.0 | | | | | | |
| SONM | | | | LR | LR | 08 45 50.3 | |
| | comp=Z,44nm,21.2s,baz=67,slow=40 | | | | | | |
| **TLY** | **Talaya** | **30.29** | **337** | LR | LR | 08 47 16.9 | |
| | comp=Z,18nm,21.3s,baz=116,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **38.39** | **315** | LR | LR | 08 52 09.4 | |
| | comp=Z,13nm,20.8s,baz=338,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.13** | **326** | LR | LR | 08 55 08.2 | |
| | comp=Z,18nm,18.4s,baz=70,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.06** | **164** | P | **P** | **08 37 01.9** | **-1.2** |
| | 0.6nm,0.7s,baz=346,slow=8.7,SNR=12 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 38 39.4** | **-0.1** |
| | 0.3nm,0.7s,baz=351,slow=3.4,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **49.53** | **166** | P | **P** | **08 37 30.4** | **+0.4** |
| | 0.1nm,0.3s,baz=347,slow=7.8,SNR=5.2 | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ASAR | | | | PcP | **PcP** | **08 38 51.3** | **-0.6** |
| | 0.2nm,0.5s,baz=345,slow=3.2,SNR=3.3 | | | | | | |

*ISCJB **12** 08:29:59.3±0.4, 24.°76N±0.°02×121.°89E±0.°03, h7km±4km, Error ellipse: s-maj=4.4km s-min=3.5km az=43.7*
*TAP **12** 08:29:59.0, 24.°78N×121.°88E, h10km, ML2.8, C*
*JMA **12** 08:29:59.7±0.1, 24.°75N×121.°81E, h26km, M2.6*
**ISC 12 08:29:59.0**±0.8**, 24.°78N**±0.°03×**121.°88E**±0.°03**, h14**km±5km**, n17, σ0.s41**/31**, 2C-4D, Taiwan**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EGS** | | **0.08** | **37** | ⇑*i*P | **Pg** | **08 30 01.9** | **-0.1** |
| | baz=44 | | | | | | |
| EGS | | | | *i* S | **Sg** | **08 30 03.6** | **-0.3** |
| | baz=44 | | | | | | |
| **ILA** | **Ilan** | **0.12** | **264** | P | **Pg** | **08 30 02.4** | **0.0** |
| | baz=260 | | | | | | |
| ILA | | | | S | **Sg** | **08 30 05.0** | **+0.4** |
| | baz=260 | | | | | | |
| **TWC** | **Suao** | **0.17** | **189** | ⇓*i*P | **Pg** | **08 30 03.2** | **+0.1** |
| | baz=179 | | | | | | |
| TWC | | | | *i* S | **Sg** | **08 30 05.4** | **-0.4** |
| | baz=179 | | | | | | |
| **TWE** | **Neicheng** | **0.20** | **254** | ⇓*i*P | **Pg** | **08 30 03.7** | **+0.2** |
| | baz=250 | | | | | | |
| TWE | | | | S | **Sg** | **08 30 06.6** | **0.0** |
| | baz=250 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.25** | **24** | ⇓*i*P | **Pg** | **08 30 04.3** | **0.0** |
| | baz=16 | | | | | | |
| TWB1 | | | | *i* S | **Sg** | **08 30 07.5** | **-0.6** |
| | baz=16 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.30** | **343** | ⇓*i*P | **Pb** | **08 30 06.0** | **-0.3** |
| | baz=330 | | | | | | |
| NWF | | | | *i* S | **Sg** | **08 30 10.3** | **+0.6** |
| | baz=330 | | | | | | |
| **ENTT** | **Nioudou** | **0.32** | **244** | P | **Pg** | **08 30 05.8** | **+0.3** |
| | baz=243 | | | | | | |
| ENTT | | | | S | **Sb** | **08 30 10.6** | **-0.8** |
| | baz=243 | | | | | | |
| **TWA** | **Mucha** | **0.33** | **307** | *i* P | **Pb** | **08 30 06.4** | **-0.3** |
| | baz=306 | | | | | | |
| TWA | | | | S | **Sg** | **08 30 11.1** | **+0.6** |
| | baz=306 | | | | | | |
| **ENA** | **Nanau** | **0.37** | **200** | P | **Pg** | **08 30 06.6** | **+0.1** |
| | baz=203 | | | | | | |
| ENA | | | | S | **Sg** | **08 30 11.4** | **-0.1** |
| | baz=203 | | | | | | |
| **NSK** | **Sanguang** | **0.48** | **258** | P | **Pg** | **08 30 08.4** | **-0.2** |
| | baz=268 | | | | | | |
| NSK | | | | *e*S | **Sg** | **08 30 14.0** | **-1.0** |
| | baz=268 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.53** | **308** | P | **Pb** | **08 30 10.7** | **+0.7** |
| | baz=307 | | | | | | |
| **NNS** | **Nan Shan** | **0.57** | **234** | *e*P | **Pg** | **08 30 10.3** | **+0.1** |
| | baz=233 | | | | | | |
| **TWD** | **Chiawan** | **0.74** | **200** | ⇑P | **Pg** | **08 30 13.5** | **+0.1** |
| | baz=200 | | | | | | |
| TWD | | | | *e*S | **Sg** | **08 30 23.3** | **+0.1** |
| | baz=200 | | | | | | |
| **NSTT** | **Nanjuang** | **0.81** | **260** | *e*P | **Pn** | **08 30 15.9** | **-0.1** |
| | baz=259 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **08 30 27.6** | **-0.2** |
| | baz=259 | | | | | | |
| **TWT** | **Tachien** | **0.82** | **231** | *e*P | **Pn** | **08 30 16.8** | **+0.5** |
| | baz=223 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.02** | **108** | P | **Pb** | **08 30 18.3** | **-0.2** |
| JYNG | | | | S | **Sb** | **08 30 31.9** | **+0.1** |
| **YOJ** | **Yonaguni jima** | **1.08** | **107** | P | **Pn** | **08 30 20.0** | **+0.4** |
| YOJ | | | | S | **Sb** | **08 30 33.5** | **+0.1** |

**ROM 12 08:32:50.3**±0.1**, 42.°54N**×**13.°21E, h6**km**, Md1.4**/6**, Ml1.4**/3**, Error ellipse: s-maj=0.7km s-min=0.4km az=2.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RM29** | **Verrico (Monte** | **0.03** | **347** | Pg | Pg | 08 32 51.7 | -0.1 |
| RM29 | | | | Sg | Sg | 08 32 52.7 | -0.1 |
| | 199nm,0.2s | | | | | | |
| **RM29** | **Verrico (Monte** | **0.03** | **347** | Pg | Pg | 08 32 51.7 | -0.1 |
| RM29 | | | | Sg | Sg | 08 32 52.7 | -0.1 |
| | 199nm,0.2s | | | | | | |
| **RM33** | **Pellescritta (** | **0.03** | **173** | Pg | Pg | 08 32 51.8 | +0.1 |
| RM33 | | | | Sg | Sg | 08 32 52.8 | +0.1 |
| | 467nm,0.1s | | | | | | |
| **RM33** | **Pellescritta (** | **0.03** | **173** | Pg | Pg | 08 32 51.8 | +0.1 |
| RM33 | | | | Sg | Sg | 08 32 52.8 | +0.1 |
| | 467nm,0.1s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.07** | **61** | Pg | Pg | 08 32 52.3 | 0.0 |
| RM32 | | | | Sg | Sg | 08 32 53.7 | 0.0 |
| | 237nm,0.2s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.07** | **61** | Pg | Pg | 08 32 52.3 | 0.0 |
| RM32 | | | | Sg | Sg | 08 32 53.7 | 0.0 |
| | 237nm,0.2s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.13** | **44** | Pg | Pg | 08 32 53.5 | +0.2 |
| SMA1 | | | | Sg | Sg | 08 32 55.9 | +0.6 |
| | 99nm,0.1s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.13** | **44** | Pg | Pg | 08 32 53.5 | +0.2 |
| SMA1 | | | | Sg | Sg | 08 32 55.9 | +0.6 |
| | 99nm,0.1s | | | | | | |
| **LNSS** | **Leonessa** | **0.14** | **298** | Pg | Pg | 08 32 53.7 | +0.3 |
| LNSS | | | | Sg | Sg | 08 32 56.3 | +0.7 |
| | 166nm,0.4s | | | | | | |
| **LNSS** | **Leonessa** | **0.14** | **298** | Pg | Pg | 08 32 53.7 | +0.3 |
| LNSS | | | | Sg | Sg | 08 32 56.3 | +0.7 |
| | 166nm,0.4s | | | | | | |
| **CAMP** | **Campotosto** | **0.15** | **90** | Pg | Pg | 08 32 53.6 | +0.1 |
| CAMP | | | | Sg | Sg | 08 32 56.7 | +1.0 |
| | 37nm,0.8s | | | | | | |
| **CAMP** | **Campotosto** | **0.15** | **90** | Pg | Pg | 08 32 53.6 | +0.1 |
| CAMP | | | | Sg | Sg | 08 32 56.7 | +1.0 |
| | 37nm,0.8s | | | | | | |

*ISCJB **12** 08:35:16.8±1.2, 34.°10S±0.°04×72.°37W±0.°09, h19km, Error ellipse: s-maj=10.9km s-min=5.7km az=6.3*
*GUC **12** 08:35:17.8±0.4, 34.°19S×72.°14W, h101km±18km, ML3.5*
**ISC 12 08:35:17.4**±1.8**, 34.°11S**±0.°05×**72.°2W**±0.°1**, h19**km**, n17, σ2.s23**/25**, 1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NICH** | **Los Niches** | **1.21** | **138** | *e*P | **Pg** | **08 35 39.9** | **-1.0** |
| NICH | | | | *e*S | **Sg** | **08 35 57.1** | **+0.3** |
| **CHCH** | **Chadas Angostu** | **1.32** | **83** | *e*P | **Pg** | **08 35 42.0** | **-0.9** |
| CHCH | | | | *e*S | **Sg** | **08 36 00.6** | **+0.5** |
| **TALC** | **Talca** | **1.37** | **159** | *e*P | **Pg** | **08 35 42.1** | **-1.9** |
| TALC | | | | *e*S | **Sg** | **08 36 00.3** | **-1.6** |
| **ANTU** | **Antumapu** | **1.43** | **68** | *e*P | **Pb** | **08 35 43.6** | **+0.1** |
| ANTU | | | | *e*S | **Sg** | **08 36 03.0** | **-0.7** |
| ANTU | | | | AML | AML | 08 36 11.8 | |
| | comp=N,831nm,0.7s | | | | | | |
| **PCH** | **Pirque** | **1.50** | **72** | *e*P | **Pb** | **08 35 44.6** | **-0.2** |
| PCH | | | | *e*S | **Sg** | **08 36 04.9** | **-1.2** |
| **CLCH** | **Cerro Calan** | **1.57** | **64** | *e*P | **Pb** | **08 35 45.5** | **-0.4** |
| CLCH | | | | *e*S | **Sg** | **08 36 06.8** | **-1.5** |
| CLCH | | | | AML | AML | 08 36 19.8 | |
| | comp=N,743nm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **1.60** | **54** | *e*P | **Pb** | **08 35 46.4** | **-0.1** |
| PEL | | | | *e*S | **Sb** | **08 36 07.8** | **+1.4** |
| PEL | | | | AML | AML | 08 36 17.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **3.03** | **52** | *e*S | **Sg** | **08 36 55.5** | **+0.6** |
| **RTLS** | **Leoncito** | **3.37** | **48** | *e*S | **Sg** | **08 37 04.1** | **-1.6** |
| **RTCV** | **Cerro Valdivia** | **3.82** | **55** | *e*S | **Sg** | **08 37 20.5** | **+0.3** |
| **CFAA** | **Coronel Fontan** | **4.18** | **54** | *e*P | **Pn** | **08 36 23.4** | **+3.1** |
| CFAA | | | | *e*S | **Sg** | **08 37 28.0** | **-3.7** |
| **RTLL** | **Cerro Villicun** | **4.20** | **50** | *e*S | **Sb** | **08 37 25.0** | **+3.8** |
| **AMOG** | **MOGNA** | **4.46** | **46** | *e*P | **Pn** | **08 36 26.3** | **+2.2** |
| AMOG | | | | *e*S | **Sg** | **08 37 35.7** | **-5.0** |
| **AVFE** | **Valle Fertil** | **5.30** | **51** | *e*P | Pn | 08 36 42.4 | +6.7 |
| AVFE | | | | *e*S | **Sb** | **08 37 48.8** | **-4.0** |
| **AGUA** | **GUANDACOL** | **5.60** | **36** | *e*P | **Pn** | **08 36 41.9** | **+2.2** |
| **VCA** | **Vinchina** | **6.36** | **34** | ⇓*e*P | **Pn** | **08 36 52.0** | **+1.7** |
| **ACLC** | **CERRO LA CRUZ** | **6.48** | **45** | *e*P | Pn | 08 36 58.6 | +6.7 |

*ISCJB **12** 08:43:46.1±0.8, 14.°07N±0.°09×144.°9E±0.°3, h200km, mb3.8/7, Error ellipse: s-maj=41.8km s-min=11.7km az=173.5*
*IDC **12** 08:43:47.1±0.6, 14.°06N×144.°87E, h194km±3km, mb3.5/7, mb1 3.7/7, mb1mx3.3/36, mbtmp4.0/7, MS2.8/1, Ms1 2.8/1, ms1mx2.2/25, Error ellipse: s-maj=36.0km s-min=12.4km az=88.0*
**ISC 12 08:43:47.4**±0.9**, 14.°1N**±0.°1×**144.°9E**±0.°3**, h200**km**, n10, σ0.s72**/13**, mb3.9**/7**, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.49** | **188** | P | **Pn** | **08 44 15.1** | **+0.5** |
| | 70nm,0.3s,baz=226,slow=4.7,SNR=55 | | | | | | |
| GUMO | | | | S | **Sn** | **08 44 34.9** | **-0.7** |
| | 359nm,0.3s,baz=337,slow=23,SNR=62 | | | | | | |
| **JNU** | **Nakatsue** | **22.87** | **328** | P | **P** | **08 48 33.2** | **-0.5** |
| | 7.3nm,0.8s,baz=139,slow=11,SNR=6.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **23.17** | **346** | P | **P** | **08 48 36.2** | **-0.1** |
| | 3.7nm,0.9s,baz=170,slow=9.8,SNR=9.0 | | | | | | |
| **MAT** | **Matsushiro** | **23.17** | **346** | P | **P** | **08 48 36.2** | **-0.1** |
| **PMG** | **Port Moresby** | **23.44** | **174** | P | **P** | **08 48 39.7** | **+0.8** |
| | 7.9nm,0.5s,baz=16,slow=12,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.38** | **197** | P | **P** | **08 50 23.4** | **-0.9** |
| | 1.5nm,0.4s,baz=14,slow=8.9,SNR=46 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 52 50.5** | **+0.7** |
| | 0.2nm,0.5s,baz=18,slow=3.6,SNR=3.0 | | | | | | |
| WRA | | | | ScP | **ScP** | **08 56 17.0** | **+0.3** |
| | 0.4nm,0.8s,baz=20,slow=4.5,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **39.03** | **196** | P | **P** | **08 50 54.0** | **-0.9** |
| | 0.6nm,0.4s,baz=16,slow=9.3,SNR=21 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 53 01.8** | **+0.8** |
| | 0.3nm,0.6s,baz=40,slow=3.8,SNR=3.0 | | | | | | |
| **TLY** | **Talaya** | **49.98** | **328** | LR | LR | 09 12 10.4 | |
| | comp=Z,9.2nm,19.6s,baz=344,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.19** | **316** | P | **P** | **08 53 41.6** | **+0.6** |
| | 0.3nm,0.4s,baz=91,slow=7.2,SNR=2.8 | | | | | | |
| **ILAR** | **Eielson Array** | **68.10** | **25** | P | **P** | **08 54 24.8** | **-0.6** |
| | 0.3nm,0.4s,baz=250,slow=5.8,SNR=7.4 | | | | | | |

*ISCJB **12** 08:47:19.4±0.3, 6.°79N±0.°04×72.°99W±0.°03, h170km±3km, mb4.3/77, Error ellipse: s-maj=6.1km s-min=5.1km az=146.9*
*FUNV **12** 08:47:20.4, 6.°78N×73.°11W, h170km, MW4.0*
*NEIC **12** 08:47:20.9±0.5, 6.°71N×72.°95W, h172km±4km, mb4.4/72, Error ellipse: s-maj=7.5km s-min=5.5km az=93.0*
*IDC **12** 08:47:20.0±1.1, 6.°73N×72.°98W, h162km±11km, mb3.6/9, mb1 3.8/13, mb1mx3.5/32, mbtmp4.1/13, Error ellipse: s-maj=14.3km s-min=12.2km az=14.0*
*BJI **12** 08:47:21.3, 6.°70N×73.°00W, h172km, mB4.5/1*
**ISC 12 08:47:20.2**±0.7**, 6.°77N**±0.°04×**72.°97W**±0.°05**, h164**km±6km**, n401, σ0.s66**/411**, mb4.3**/78**, 14C-1D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAPV** | **Capacho** | **1.27** | **31** | ⇑*i*P | **Pn** | **08 47 49.5** | **+0.6** |
| CAPV | | | | *e*S | **Sn** | **08 48 10.8** | **-0.2** |
| **ROSC** | **El Rosal** | **2.33** | **215** | P | **Pn** | **08 48 01.5** | **+1.0** |
| | 142nm,0.3s,baz=90,slow=17,SNR=488 | | | | | | |
| ROSC | | | | S | **Sn** | **08 48 30.3** | **-1.3** |
| | 263nm,0.3s,baz=86,slow=19,SNR=15 | | | | | | |
| **ROSC** | **El Rosal** | **2.33** | **215** | *e*Pn | **Pn** | **08 48 00.9** | **+0.5** |
| ROSC | | | | *e*Sn | **Sn** | **08 48 30.1** | **-1.5** |
| **SOCV** | **Socops** | **2.58** | **54** | ⇑*i*P | **Pn** | **08 48 04.0** | **+1.0** |
| SOCV | | | | *e*S | **Sn** | **08 48 36.3** | **+0.1** |
| **VIGV** | **El Vigia** | **2.60** | **38** | ⇑*i*P | **Pn** | **08 48 04.0** | **+0.7** |
| VIGV | | | | *e*S | **Sn** | **08 48 35.1** | **-1.6** |
| **SDV** | **Santo Domingo** | **3.13** | **48** | *e*Pn | **Pn** | **08 48 10.9** | **+1.0** |
| SDV | | | | *e*Sn | **Sn** | **08 48 48.6** | **+0.1** |
| **ELOV** | **Elorza** | **3.47** | **86** | ⇓*i*P | **Pn** | **08 48 15.4** | **+1.3** |
| **VIRV** | **Villa del Rosa** | **3.75** | **9** | ⇑*i*P | **Pn** | **08 48 16.2** | **-1.4** |
| VIRV | | | | *e*S | **Sn** | **08 48 59.2** | **-3.2** |
| **QARV** | **Quebrada Arrib** | **4.18** | **35** | ⇑*i*P | **Pn** | **08 48 23.7** | **+0.4** |
| **SANV** | **Sanarito** | **4.35** | **51** | ⇑*i*P | **Pn** | **08 48 25.6** | **+0.1** |
| **CURV** | **Curarigua** | **4.39** | **43** | ⇑*i*P | **Pn** | **08 48 26.0** | **0.0** |
| **DABV** | **Dabajuro** | **4.72** | **29** | ⇑*i*P | **Pn** | **08 48 30.2** | **-0.1** |
| **TEPV** | **Terepaima** | **4.90** | **49** | ⇑*i*P | **Pn** | **08 48 32.8** | **+0.1** |
| **SIQV** | **Siquisique** | **4.96** | **39** | ⇑*i*P | **Pn** | **08 48 33.2** | **-0.3** |
| **BAUV** | **El Baul** | **5.34** | **66** | ⇑*i*P | **Pn** | **08 48 37.6** | **-0.8** |
| **MAPV** | **Macapo** | **5.40** | **55** | ⇑*i*P | **Pn** | **08 48 39.3** | **0.0** |
| **JACV** | **Jacura** | **5.93** | **43** | ⇑*e*P | **Pn** | **08 48 45.9** | **-0.2** |
| **MONV** | **Montecano** | **5.94** | **30** | *e*P | **Pn** | **08 48 45.2** | **-1.1** |
| **TURV** | **Turiamo** | **6.25** | **54** | *e*P | **Pn** | **08 48 50.0** | **-0.5** |
| **MERV** | **Las Mercedes** | **7.05** | **69** | *e*P | **Pn** | **08 49 00.3** | **-0.8** |
| **BCIP** | **Isla Barro Col** | **7.20** | **290** | *e*Pn | Pn | 08 48 59.2 | -3.8 |
| **BIRV** | **Birongo** | **7.58** | **61** | ⇑*e*P | **Pn** | **08 49 06.8** | **-1.2** |
| **CUPV** | **Cœpira** | **7.82** | **65** | *e*P | **Pn** | **08 49 10.4** | **-0.9** |
| **OTAV** | **Otavalo** | **8.49** | **220** | *e*Pn | **Pn** | **08 49 19.2** | **-1.2** |
| **PCRV** | **Puerto La Cruz** | **8.91** | **67** | P | **Pn** | **08 49 27.1** | **+1.3** |
| | 1.1nm,0.3s,baz=197,slow=8.2,SNR=7.6 | | | | | | |
| PCRV | | | | S | **Sn** | **08 51 07.0** | **+2.0** |
| | 1.6nm,0.3s,baz=252,slow=20,SNR=3.9 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **8.91** | **67** | *e*P | **Pn** | **08 49 26.1** | **+0.4** |
| **MTDJ** | **Mount Denham** | **12.22** | **339** | *e*Pn | **Pn** | **08 50 10.9** | **+1.9** |
| MTDJ | | | | *e*Sn | **Sn** | **08 52 22.3** | **-2.3** |
| **SDDR** | **Presa de Saban** | **12.25** | **8** | *e*Pn | **Pn** | **08 50 10.1** | **+0.7** |
| **JTS** | **JuntasAbangare** | **12.35** | **287** | P | **Pn** | **08 50 11.1** | **+0.4** |
| | 0.3nm,0.3s,baz=128,slow=17,SNR=3.1 | | | | | | |
| **JTS** | **JuntasAbangare** | **12.35** | **287** | *e*Pn | **Pn** | **08 50 12.5** | **+1.8** |
| | 19nm,0.8s | | | | | | |
| JTS | | | | *e*P | **P** | **08 50 17.2** | **+1.0** |
| **GTBY** | **Guantanamo Bay** | **13.24** | **351** | *e*Pn | **P** | **08 50 24.6** | **-1.4** |
| **PTGA** | **Pitinga** | **14.97** | **119** | P | **P** | **08 50 44.5** | **-0.7** |
| | 0.2nm,0.3s,baz=255,slow=11,SNR=5.0 | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **15.81** | **298** | *e*Pn | **P** | **08 50 56.6** | **+2.1** |
| | 50nm,1.4s | | | | | | |
| **SAML** | **Samuel** | **18.42** | **148** | *e*P | **Pn** | **08 51 23.7** | **-1.5** |
| | 6.1nm,0.8s | | | | | | |
| SAML | | | | *e* | | 08 51 49.4 | |
| **LPAZ** | **La Paz** | **23.41** | **168** | P | **P** | **08 52 15.3** | **+0.1** |
| | 1.8nm,0.8s,baz=344,slow=7.8,SNR=9.5 | | | | | | |
| **LPAZ** | **La Paz** | **23.41** | **168** | *e*P | **P** | **08 52 15.5** | **+0.2** |
| | 4.0nm,0.9s | | | | | | |
| **GOGA** | **Godfrey** | **28.24** | **341** | *e*P | **P** | **08 52 59.0** | **+1.1** |
| | 3.3nm,0.8s | | | | | | |
| **KMSC** | **Kings Mountain** | **29.26** | **346** | P | **P** | **08 53 08.2** | **+1.3** |
| | baz=30 | | | | | | |
| **VBMS** | **Vicksburg** | **30.14** | **329** | P | **P** | **08 53 16.1** | **+1.4** |
| | baz=30 | | | | | | |
| **034A** | **Hebbronville** | **31.69** | **313** | P | **P** | **08 53 28.9** | **+0.6** |
| | baz=32 | | | | | | |
| **736A** | **Circle Diamond** | **31.69** | **317** | P | **P** | **08 53 29.1** | **+0.7** |
| | baz=32 | | | | | | |
| **934A** | **Benavides** | **31.88** | **314** | P | **P** | **08 53 30.8** | **+0.7** |
| | baz=32 | | | | | | |
| **338A** | **Crockett** | **32.16** | **322** | P | **P** | **08 53 33.4** | **+0.9** |
| | baz=32 | | | | | | |
| **933A** | **Laredo** | **32.43** | **313** | P | **P** | **08 53 34.6** | **-0.3** |
| | baz=32 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **32.69** | **320** | P | **P** | **08 53 37.5** | **+0.4** |
| | baz=33 | | | | | | |
| **833A** | **Chaparral WMA,** | **32.92** | **314** | P | **P** | **08 53 38.8** | **-0.4** |
| | baz=33 | | | | | | |
| **138A** | **Matatall Enter** | **32.96** | **324** | P | **P** | **08 53 39.8** | **+0.3** |
| | baz=33 | | | | | | |
| **137A** | **Heron Place, G** | **33.31** | **323** | P | **P** | **08 53 42.5** | **0.0** |
| | baz=34 | | | | | | |
| **534A** | **Blanco** | **33.31** | **317** | P | **P** | **08 53 42.5** | **-0.1** |
| | baz=33 | | | | | | |
| **832A** | **Faith Ranch, C** | **33.32** | **313** | P | **P** | **08 53 42.2** | **-0.5** |
| | baz=33 | | | | | | |
| **Y39A** | **Lockesburg** | **33.35** | **327** | P | **P** | **08 53 43.1** | **+0.3** |
| | baz=34 | | | | | | |
| **236A** | **Katherine and** | **33.36** | **322** | P | **P** | **08 53 42.7** | **-0.1** |
| | baz=34 | | | | | | |
| **335A** | **Moody** | **33.43** | **320** | P | **P** | **08 53 43.5** | **-0.1** |
| | baz=34 | | | | | | |
| **MIAR** | **Mount Ida** | **33.54** | **328** | P | **P** | **08 53 44.1** | **-0.3** |
| | baz=34 | | | | | | |
| **MIAR** | **Mount Ida** | **33.54** | **328** | *e*P | **P** | **08 53 43.7** | **-0.7** |
| | 38nm,2.5s | | | | | | |
| **732A** | **Laxson Ranch,** | **33.57** | **314** | P | **P** | **08 53 43.9** | **-0.9** |
| | baz=34 | | | | | | |
| **434A** | **Burnet** | **33.67** | **318** | P | **P** | **08 53 44.6** | **-1.1** |
| | baz=34 | | | | | | |
| **Y38A** | **Idabel** | **33.69** | **326** | P | **P** | **08 53 46.1** | **+0.4** |
| | baz=34 | | | | | | |
| **632A** | **Uvalde** | **33.90** | **315** | P | **P** | **08 53 47.8** | **+0.2** |
| | baz=34 | | | | | | |
| **WHTX** | **Lake Whitney** | **33.92** | **321** | P | **P** | **08 53 48.1** | **+0.3** |
| | baz=34 | | | | | | |
| **334A** | **Lometa** | **33.99** | **319** | P | **P** | **08 53 48.1** | **-0.3** |
| | baz=34 | | | | | | |
| **SIUC** | **Southern Illin** | **34.16** | **337** | *e*P | **P** | **08 53 50.3** | **+0.7** |
| | 9.4nm,0.5s | | | | | | |
| **433A** | **Art** | **34.18** | **318** | P | **P** | **08 53 49.6** | **-0.5** |
| | baz=34,SNR=12 | | | | | | |
| **135A** | **Vickery Place,** | **34.28** | **322** | P | **P** | **08 53 51.2** | **+0.3** |
| | baz=34 | | | | | | |
| **X38A** | **Whitesboro** | **34.30** | **327** | P | **P** | **08 53 51.5** | **+0.5** |
| | baz=34 | | | | | | |
| **532A** | **Rocksprings** | **34.35** | **316** | P | **P** | **08 53 51.6** | **0.0** |
| | baz=34,SNR=6.4 | | | | | | |
| **631A** | **Perdido Creek** | **34.40** | **314** | P | **P** | **08 53 51.6** | **-0.3** |
| | baz=34 | | | | | | |
| **W38A** | **Poteau** | **34.44** | **328** | P | **P** | **08 53 52.5** | **+0.3** |
| | baz=35 | | | | | | |
| **333A** | **Richland Sprin** | **34.47** | **318** | P | **P** | **08 53 52.1** | **-0.4** |
| | baz=35,SNR=5.4 | | | | | | |
| **BLO** | **Bloomington** | **34.49** | **341** | *e*P | **P** | **08 53 53.5** | **+0.9** |
| | 10nm,0.6s | | | | | | |
| **X37A** | **Clayton** | **34.54** | **326** | P | **P** | **08 53 53.3** | **+0.2** |
| | baz=35 | | | | | | |
| **Y36A** | **Durant** | **34.55** | **325** | P | **P** | **08 53 54.3** | **+1.2** |
| | baz=35 | | | | | | |
| **OLIL** | **Olney** | **34.63** | **339** | *e*P | **P** | **08 53 54.3** | **+0.5** |
| | 8.2nm,0.4s | | | | | | |
| **134A** | **White-Moore Ra** | **34.71** | **321** | P | **P** | **08 53 54.6** | **0.0** |
| | baz=35 | | | | | | |
| **KSPA** | **Keystone Colle** | **34.73** | **356** | *e*P | **P** | **08 53 56.7** | **+2.1** |
| | 55nm,1.8s | | | | | | |
| **432A** | **Menard** | **34.73** | **317** | P | **P** | **08 53 55.0** | **+0.2** |
| | baz=35 | | | | | | |
| **531A** | **Rocksprings** | **34.82** | **315** | P | **P** | **08 53 55.1** | **-0.5** |
| | baz=35 | | | | | | |
| **233A** | **Rising Star** | **34.86** | **319** | P | **P** | **08 53 55.6** | **-0.3** |
| | baz=35 | | | | | | |
| **V38A** | **Canehill** | **34.99** | **329** | P | **P** | **08 53 56.7** | **-0.2** |
| | baz=35,SNR=9.1 | | | | | | |
| **Y35A** | **Marietta** | **34.99** | **324** | P | **P** | **08 53 57.3** | **+0.4** |
| | baz=35 | | | | | | |
| **332A** | **Millersview** | **35.01** | **318** | P | **P** | **08 53 56.7** | **-0.5** |
| | baz=35 | | | | | | |
| **X36A** | **Centrahoma** | **35.07** | **325** | P | **P** | **08 53 57.3** | **-0.3** |
| | baz=35 | | | | | | |
| **431A** | **Sonora** | **35.17** | **316** | P | **P** | **08 53 58.4** | **-0.2** |
| | baz=35 | | | | | | |
| **133A** | **Hamilton Ranch** | **35.26** | **320** | P | **P** | **08 53 59.5** | **+0.2** |
| | baz=35 | | | | | | |
| **232A** | **Coleman** | **35.26** | **319** | P | **P** | **08 53 58.9** | **-0.5** |
| | baz=35,SNR=7.3 | | | | | | |
| **CCM** | **Cathedral Cave** | **35.28** | **335** | *e*P | **P** | **08 53 59.6** | **+0.3** |
| | 15nm,0.7s | | | | | | |
| **X35A** | **Drake** | **35.31** | **324** | P | **P** | **08 53 59.0** | **-0.6** |
| | baz=36 | | | | | | |
| **530A** | **J-C Ranch, Com** | **35.36** | **315** | P | **P** | **08 54 00.2** | **0.0** |
| | baz=36,SNR=8.2 | | | | | | |
| **V37A** | **Hulbert** | **35.39** | **328** | P | **P** | **08 54 00.2** | **-0.1** |
| | baz=36 | | | | | | |
| **W36A** | **Wetumka** | **35.42** | **326** | P | **P** | **08 54 00.2** | **-0.4** |
| | baz=36 | | | | | | |
| **331A** | **San Angelo** | **35.42** | **317** | P | **P** | **08 54 00.8** | **+0.1** |
| | baz=36 | | | | | | |
| **U38A** | **Gravette** | **35.43** | **329** | P | **P** | **08 53 59.6** | **-1.1** |
| | baz=36 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **35.45** | **323** | P | **P** | **08 54 01.0** | **+0.1** |
| | baz=36 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **35.61** | **321** | P | **P** | **08 54 02.3** | **0.0** |
| | baz=36 | | | | | | |
| **430A** | **Baggett Ranch,** | **35.66** | **316** | P | **P** | **08 54 02.3** | **-0.5** |
| | baz=36 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **35.73** | **320** | P | **P** | **08 54 03.5** | **+0.2** |
| | baz=36 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **35.73** | **320** | *e*P | **P** | **08 54 03.3** | **0.0** |
| | 5.6nm,0.9s | | | | | | |
| **231A** | **Bronte** | **35.74** | **318** | P | **P** | **08 54 03.3** | **-0.1** |
| | baz=36 | | | | | | |
| **V36A** | **Jenks** | **35.74** | **327** | P | **P** | **08 54 02.7** | **-0.6** |
| | baz=36 | | | | | | |
| **TUL1** | **Tulsa** | **35.76** | **327** | P | **P** | **08 54 03.1** | **-0.4** |
| | baz=36 | | | | | | |
| **TUL1** | **Tulsa** | **35.76** | **327** | *e*P | **P** | **08 54 03.0** | **-0.4** |
| | 6.4nm,0.7s | | | | | | |
| **SFIN** | **Scholer Farm** | **35.77** | **341** | P | **P** | **08 54 04.2** | **+0.7** |
| | baz=36,SNR=7.7 | | | | | | |
| **SFIN** | **Scholer Farm** | **35.77** | **341** | *e*P | **P** | **08 54 03.9** | **+0.4** |
| | 19nm,0.5s | | | | | | |
| **U37A** | **Salina** | **35.77** | **329** | P | **P** | **08 54 03.5** | **-0.1** |
| | baz=36 | | | | | | |
| **W35A** | **Tecumseh** | **35.79** | **325** | P | **P** | **08 54 03.6** | **-0.2** |
| | baz=36 | | | | | | |
| **X34A** | **Smith Ranch, M** | **35.95** | **324** | P | **P** | **08 54 05.4** | **+0.2** |
| | baz=36 | | | | | | |
| **529A** | **Stev Forest Ra** | **35.98** | **314** | P | **P** | **08 54 05.1** | **-0.4** |
| | baz=36 | | | | | | |
| **330A** | **Mertzon** | **35.99** | **317** | P | **P** | **08 54 05.0** | **-0.6** |
| | baz=36 | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **36.01** | **322** | P | **P** | **08 54 05.4** | **-0.3** |
| | baz=36 | | | | | | |
| **429A** | **Davenport Ranc** | **36.03** | **315** | P | **P** | **08 54 05.4** | **-0.5** |
| | baz=36 | | | | | | |
| **Z32A** | **Haskell** | **36.07** | **321** | P | **P** | **08 54 06.3** | **+0.1** |
| | baz=36,SNR=5.5 | | | | | | |
| **U36A** | **Oologah** | **36.09** | **328** | P | **P** | **08 54 06.0** | **-0.2** |
| | baz=36 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **36.21** | **326** | P | **P** | **08 54 07.4** | **+0.1** |
| | baz=36 | | | | | | |
| **T37A** | **Cheneyville 18** | **36.23** | **330** | P | **P** | **08 54 07.1** | **-0.3** |
| | baz=36,SNR=8.9 | | | | | | |
| **230A** | **Sterling City** | **36.24** | **317** | P | **P** | **08 54 07.6** | **-0.1** |
| | baz=36 | | | | | | |
| **131A** | **Roby** | **36.25** | **319** | P | **P** | **08 54 07.4** | **-0.3** |
| | baz=36 | | | | | | |
| **X33A** | **Lawton** | **36.30** | **323** | P | **P** | **08 54 07.5** | **-0.7** |
| | baz=36,SNR=6.9 | | | | | | |
| **W34A** | **Bridge Creek,** | **36.36** | **325** | P | **P** | **08 54 08.5** | **-0.1** |
| | baz=36 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **36.50** | **320** | P | **P** | **08 54 10.2** | **+0.3** |
| | baz=37 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **36.51** | **322** | P | **P** | **08 54 10.0** | **+0.1** |
| | baz=37 | | | | | | |
| **130A** | **Snyder** | **36.58** | **318** | P | **P** | **08 54 10.3** | **-0.3** |
| | baz=37 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **36.59** | **316** | P | **P** | **08 54 10.5** | **-0.2** |
| | baz=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **36.60** | **312** | P | **P** | **08 54 10.8** | **0.0** |
| | 2.1nm,0.6s,baz=125,slow=9.0,SNR=38 | | | | | | |
| TXAR | | | | PcP | **PcP** | **08 56 31.9** | **+1.3** |
| | 0.3nm,0.6s,baz=128,slow=5.3,SNR=3.8 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **36.60** | **312** | *e*P | **P** | **08 54 10.7** | **-0.2** |
| **WMOK** | **Wichita Mounta** | **36.60** | **323** | *e*P | **P** | **08 54 09.7** | **-1.0** |
| | 2.8nm,0.7s | | | | | | |
| **V34A** | **Guthrie** | **36.65** | **326** | P | **P** | **08 54 10.6** | **-0.4** |
| | baz=37 | | | | | | |
| **V34A** | **Guthrie** | **36.65** | **326** | *e*P | **P** | **08 54 11.7** | **+0.7** |
| | 4.3nm,0.5s | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **36.67** | **329** | P | **P** | **08 54 10.7** | **-0.5** |
| | baz=37 | | | | | | |
| **HDIL** | **Hopedale** | **36.67** | **339** | P | **P** | **08 54 10.7** | **-0.4** |
| | baz=37 | | | | | | |
| **HDIL** | **Hopedale** | **36.67** | **339** | *e*P | **P** | **08 54 10.6** | **-0.5** |
| | 12nm,0.7s | | | | | | |
| **S37A** | **Fort Scott** | **36.68** | **330** | P | **P** | **08 54 10.7** | **-0.5** |
| | baz=37 | | | | | | |
| **X32A** | **Elmer** | **36.69** | **322** | P | **P** | **08 54 11.1** | **-0.3** |
| | baz=37 | | | | | | |
| **229A** | **Bryant Ranch,** | **36.76** | **317** | P | **P** | **08 54 12.1** | **0.0** |
| | baz=37 | | | | | | |
| **T35A** | **Sooner Cattle** | **36.89** | **328** | P | **P** | **08 54 12.6** | **-0.5** |
| | baz=37 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **36.99** | **321** | P | **P** | **08 54 14.5** | **+0.5** |
| | baz=37,SNR=7.5 | | | | | | |
| **V33A** | **Lossen Ranch,** | **37.07** | **325** | P | **P** | **08 54 14.2** | **-0.4** |
| | baz=37 | | | | | | |
| **U34A** | **Anderson Ranch** | **37.09** | **326** | P | **P** | **08 54 14.5** | **-0.3** |
| | baz=37 | | | | | | |
| **U34A** | **Anderson Ranch** | **37.09** | **326** | *e*P | **P** | **08 54 14.3** | **-0.4** |
| | 8.0nm,0.5s | | | | | | |
| **Z30A** | **Sanderson Ranc** | **37.12** | **319** | P | **P** | **08 54 15.2** | **+0.1** |
| | baz=37,SNR=5.4 | | | | | | |
| **W32A** | **Sentinel** | **37.15** | **323** | P | **P** | **08 54 14.6** | **-0.7** |
| | baz=37 | | | | | | |
| **129A** | **Stewart Farms,** | **37.20** | **318** | P | **P** | **08 54 16.4** | **+0.5** |
| | baz=37,SNR=5.5 | | | | | | |
| **X31A** | **McDonald Ranch** | **37.26** | **322** | P | **P** | **08 54 16.4** | **+0.1** |
| | baz=37 | | | | | | |
| **T34A** | **McClaskey Farm** | **37.33** | **327** | P | **P** | **08 54 16.6** | **-0.2** |
| | baz=38 | | | | | | |
| **Y30A** | **Stafford Cattl** | **37.34** | **320** | P | **P** | **08 54 17.3** | **+0.3** |
| | baz=38,SNR=9.3 | | | | | | |
| **S35A** | **Otter Creek Ra** | **37.37** | **329** | P | **P** | **08 54 16.7** | **-0.3** |
| | baz=38 | | | | | | |
| **228A** | **UT Block 9, Go** | **37.38** | **316** | P | **P** | **08 54 17.6** | **+0.2** |
| | baz=38 | | | | | | |
| **Q37A** | **Longview Farm,** | **37.38** | **332** | P | **P** | **08 54 17.1** | **-0.1** |
| | baz=38 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| V32A | Arapaho<br>baz=38 | 37.44 | 324 | P | P | 08 | 54 | 17.6 -0.2 |
| Z29A | Hungry Hill Ra<br>baz=38,SNR=8.9 | 37.48 | 319 | P | P | 08 | 54 | 18.1 -0.1 |
| 128A | Castleberry Fa<br>baz=38,SNR=9.4 | 37.61 | 317 | P | P | 08 | 54 | 19.3 0.0 |
| W31A | Holland Ranch,<br>baz=38 | 37.61 | 323 | P | P | 08 | 54 | 18.8 -0.4 |
| X30A | Coker Ranch, T<br>baz=38 | 37.69 | 321 | P | P | 08 | 54 | 20.0 +0.1 |
| R35A | Emporia Munici<br>baz=38 | 37.80 | 330 | P | P | 08 | 54 | 20.5 -0.2 |
| Y29A | Porterfield Fa<br>baz=38,SNR=8.7 | 37.83 | 319 | P | P | 08 | 54 | 21.1 0.0 |
| U32A | Winter Ranch,<br>baz=38 | 37.88 | 325 | P | P | 08 | 54 | 20.9 -0.5 |
| Z28A | Tucker Farm, M<br>baz=38 | 37.94 | 318 | P | P | 08 | 54 | 21.8 -0.3 |
| Q35A | Mercer Eighty,<br>baz=38 | 38.13 | 330 | P | P | 08 | 54 | 22.5 -0.9 |
| X29A | Tulia<br>baz=38 | 38.22 | 320 | P | P | 08 | 54 | 24.5 +0.1 |
| SADO | Sadowa<br>72nm,2.2s | 38.23 | 353 | eP | P | 08 | 54 | 25.2 +1.1 |
| Y28A | McKinney Farm,<br>baz=38 | 38.23 | 319 | P | P | 08 | 54 | 24.3 -0.2 |
| P36A | Good Intent, A<br>baz=38 | 38.33 | 332 | P | P | 08 | 54 | 24.9 -0.3 |
| AMTX | Amarillo<br>baz=39 | 38.48 | 321 | P | P | 08 | 54 | 27.1 +0.5 |
| AMTX | Amarillo<br>3.2nm,0.5s | 38.48 | 321 | eP | P | 08 | 54 | 26.8 +0.2 |
| X28A | Dimmitt<br>baz=39,SNR=7.6 | 38.58 | 320 | P | P | 08 | 54 | 27.4 -0.1 |
| KSU1 | Kansas State U<br>baz=39 | 38.60 | 330 | P | P | 08 | 54 | 26.7 -0.7 |
| MSTX | Muleshoe<br>baz=39 | 38.61 | 319 | P | P | 08 | 54 | 27.5 -0.3 |
| MSTX | Muleshoe<br>5.6nm,0.8s | 38.61 | 319 | eP | P | 08 | 54 | 27.4 -0.3 |
| O36A | Bolckow<br>baz=39,SNR=5.0 | 38.63 | 333 | P | P | 08 | 54 | 26.7 -0.9 |
| Q34A | Chapman<br>baz=39 | 38.63 | 329 | P | P | 08 | 54 | 26.7 -1.0 |
| P35A | Duane Minner,<br>baz=39 | 38.64 | 331 | P | P | 08 | 54 | 26.7 -1.0 |
| T31A | Randall Ranch,<br>baz=39 | 38.77 | 325 | P | P | 08 | 54 | 28.7 -0.1 |
| S32A | Newby Ranch, P<br>baz=39 | 38.78 | 326 | P | P | 08 | 54 | 28.7 -0.2 |
| U30A | WK&E Inc. Balk<br>baz=39 | 38.94 | 323 | P | P | 08 | 54 | 30.3 0.0 |
| V29A | Stinnett<br>baz=39 | 39.02 | 322 | P | P | 08 | 54 | 31.6 +0.5 |
| P34A | Walnut Farm, R<br>baz=39 | 39.05 | 330 | P | P | 08 | 54 | 30.7 -0.5 |
| RCBR | Riachuelo<br>5.0nm,1.0s,baz=341,slow=8.0,SNR=2.8 | 39.06 | 108 | P | P | 08 | 54 | 31.1 -0.5 |
| JFWS | Jewell Farm<br>12nm,0.6s | 39.09 | 340 | eP | P | 08 | 54 | 31.3 -0.1 |
| MNTX | Cornudas Mount<br>baz=39,SNR=10.0 | 39.11 | 314 | P | P | 08 | 54 | 31.9 +0.2 |
| MNTX | Cornudas Mount<br>4.5nm,0.8s | 39.11 | 314 | eP | P | 08 | 54 | 32.1 +0.4 |
| Q33A | Connelly Farm,<br>baz=39 | 39.14 | 329 | P | P | 08 | 54 | 31.6 -0.3 |
| SCIA | State Center<br>13nm,0.5s | 39.33 | 336 | eP | P | 08 | 54 | 33.6 +0.2 |
| O34A | Beatrice<br>baz=40 | 39.48 | 331 | P | P | 08 | 54 | 34.2 -0.4 |
| Q32A | Meitler Ranch,<br>baz=40 | 39.51 | 328 | P | P | 08 | 54 | 34.2 -0.8 |
| N35A | Tabor<br>baz=40 | 39.52 | 333 | P | P | 08 | 54 | 34.6 -0.4 |
| R31A | Burdett<br>baz=40 | 39.52 | 326 | P | P | 08 | 54 | 34.1 -1.0 |
| U28A | Mallet<br>baz=40 | 39.79 | 322 | P | P | 08 | 54 | 37.0 -0.4 |
| O33A | Hebron<br>baz=40 | 39.83 | 330 | P | P | 08 | 54 | 37.4 -0.2 |
| N34A | Lincoln<br>baz=40 | 39.90 | 332 | P | P | 08 | 54 | 37.7 -0.4 |
| R30A | Dighton<br>baz=40 | 39.94 | 326 | P | P | 08 | 54 | 38.6 +0.1 |
| S29A | Ulysses<br>baz=40 | 39.95 | 324 | P | P | 08 | 54 | 39.1 +0.4 |
| M35A | Neola<br>baz=40,SNR=7.9 | 40.03 | 333 | P | P | 08 | 54 | 39.2 0.0 |
| U27A | Thompson Grove<br>baz=40 | 40.18 | 322 | P | P | 08 | 54 | 41.0 +0.3 |
| T28A | Walsh<br>baz=40 | 40.20 | 323 | P | P | 08 | 54 | 40.9 0.0 |
| O32A | Brockman Farm,<br>baz=40 | 40.32 | 330 | P | P | 08 | 54 | 41.2 -0.4 |
| S28A | Manter<br>baz=40,SNR=11 | 40.39 | 324 | P | P | 08 | 54 | 42.7 +0.3 |
| Q30A | Quinter<br>baz=41 | 40.40 | 327 | P | P | 08 | 54 | 41.9 -0.4 |
| L35A | Bielow Farm, R<br>baz=41 | 40.48 | 334 | P | P | 08 | 54 | 42.9 0.0 |
| T27A | Campo<br>baz=41 | 40.53 | 322 | P | P | 08 | 54 | 42.8 -0.8 |
| L34A | Svendsen Farm,<br>baz=41 | 40.73 | 333 | P | P | 08 | 54 | 44.6 -0.4 |
| P30A | Selden<br>baz=41 | 40.81 | 327 | P | P | 08 | 54 | 45.6 -0.1 |
| K35A | Storm Lake<br>baz=41 | 40.84 | 335 | P | P | 08 | 54 | 45.9 0.0 |
| R28A | Tribune<br>baz=41,SNR=5.9 | 40.85 | 325 | P | P | 08 | 54 | 46.4 +0.4 |
| S27A | Las Animas<br>baz=41 | 41.05 | 323 | P | P | 08 | 54 | 47.7 0.0 |
| BGNE | Belgrade<br>baz=41 | 41.13 | 331 | P | P | 08 | 54 | 48.2 0.0 |
| T26A | Comanche Natio<br>baz=41 | 41.14 | 322 | P | P | 08 | 54 | 49.5 +0.9 |
| K34A | Le Mars<br>baz=41 | 41.19 | 334 | P | P | 08 | 54 | 48.4 -0.2 |
| Q28A | Sharon Springs<br>baz=42 | 41.35 | 325 | P | P | 08 | 54 | 50.3 +0.1 |
| S26A | Kim<br>baz=42 | 41.35 | 322 | P | P | 08 | 54 | 51.2 +1.0 |
| J35A | Milford<br>baz=42,SNR=7.8 | 41.36 | 335 | P | P | 08 | 54 | 49.7 -0.3 |
| R27A | Eads<br>baz=42,SNR=11 | 41.38 | 324 | P | P | 08 | 54 | 50.6 +0.2 |
| M31A | Lambtecht Ranc<br>baz=42 | 41.48 | 330 | P | P | 08 | 54 | 51.0 -0.1 |
| K33A | Hardington<br>baz=42 | 41.52 | 333 | P | P | 08 | 54 | 51.4 0.0 |
| J34A | George<br>baz=42,SNR=6.9 | 41.61 | 335 | P | P | 08 | 54 | 51.6 -0.5 |
| T25A | Trinidad<br>baz=42 | 41.62 | 321 | P | P | 08 | 54 | 53.2 +0.7 |
| ANMO | Albuquerque<br>2.9nm,1.2s | 41.65 | 317 | eP | P | 08 | 54 | 54.4 +1.7 |
| P28A | Saint Francis<br>baz=42 | 41.66 | 326 | P | P | 08 | 54 | 52.5 -0.2 |
| KSCO | Kaye Shedlock'<br>baz=42 | 41.77 | 325 | P | P | 08 | 54 | 53.7 +0.1 |
| R26A | Arlington<br>baz=42 | 41.78 | 323 | P | P | 08 | 54 | 53.7 0.0 |
| LAZ | Ladron | 41.81 | 316 | eP | P | 08 | 54 | 55.1 +1.0 |
| SPMN | St. Paul<br>baz=42 | 42.00 | 339 | P | P | 08 | 54 | 56.0 +0.8 |
| SPMN | St. Paul<br>3.8nm,0.4s | 42.00 | 339 | eP | P | 08 | 54 | 56.0 +0.8 |
| K32A | Verdigre<br>baz=42 | 42.01 | 332 | P | P | 08 | 54 | 54.4 -0.9 |
| L31A | Butterfield Fa<br>baz=42 | 42.04 | 331 | P | P | 08 | 54 | 55.3 -0.4 |
| O28A | Krutsinger Ran<br>baz=42 | 42.06 | 327 | P | P | 08 | 54 | 55.8 -0.1 |
| J33A | Davis<br>baz=42 | 42.07 | 334 | P | P | 08 | 54 | 55.2 -0.6 |
| P27A | Ficken Ranch,<br>baz=42 | 42.11 | 325 | P | P | 08 | 54 | 55.6 -0.8 |
| I34A | Hadley<br>baz=42 | 42.18 | 335 | P | P | 08 | 54 | 56.9 +0.2 |
| Q26A | Hugo<br>baz=42 | 42.23 | 324 | P | P | 08 | 54 | 57.7 +0.4 |
| ECSD | EROS Data Cent<br>baz=42 | 42.25 | 334 | P | P | 08 | 54 | 56.8 -0.5 |
| ECSD | EROS Data Cent<br>91nm,2.8s | 42.25 | 334 | eP | P | 08 | 54 | 56.6 -0.7 |
| K31A | O'Neill<br>baz=42 | 42.35 | 332 | P | P | 08 | 54 | 58.0 -0.1 |
| J32A | Parkston<br>baz=43,SNR=13 | 42.51 | 333 | P | P | 08 | 54 | 59.1 -0.3 |
| I33A | Coleman<br>baz=43 | 42.59 | 335 | P | P | 08 | 54 | 59.5 -0.5 |
| G35A | Watkins<br>baz=43 | 42.62 | 337 | P | P | 08 | 54 | 60.0 -0.3 |
| H34A | Spellman Lake,<br>baz=43 | 42.66 | 336 | P | P | 08 | 54 | 59.8 -0.8 |
| SDCO | Great Sand Dun<br>baz=43,SNR=10 | 42.68 | 321 | P | P | 08 | 55 | 01.8 +0.6 |
| SDCO | Great Sand Dun<br>2.8nm,0.9s | 42.68 | 321 | eP | P | 08 | 55 | 01.9 +0.7 |
| K30A | Basset<br>baz=43,SNR=7.2 | 42.80 | 331 | P | P | 08 | 55 | 01.5 -0.3 |
| F36A | Milaca<br>baz=43 | 42.81 | 339 | P | P | 08 | 55 | 01.4 -0.3 |
| J31A | Geddes<br>baz=43 | 42.85 | 332 | P | P | 08 | 55 | 01.9 -0.3 |
| I32A | Karley and Nic<br>baz=43 | 42.86 | 334 | P | P | 08 | 55 | 02.0 -0.1 |
| N27A | Anderson Farm,<br>baz=43 | 42.95 | 327 | P | P | 08 | 55 | 03.1 0.0 |
| H33A | Prehn Over Nor<br>baz=43 | 43.07 | 335 | P | P | 08 | 55 | 03.8 -0.1 |
| F35A | Swanville<br>baz=43 | 43.19 | 338 | P | P | 08 | 55 | 04.8 0.0 |
| K29A | Lazy Trails An<br>baz=43 | 43.20 | 330 | P | P | 08 | 55 | 05.0 -0.1 |
| H32A | Carlson Farm,<br>baz=43 | 43.23 | 334 | P | P | 08 | 55 | 04.8 -0.4 |
| J30A | Dallas<br>baz=43 | 43.23 | 332 | P | P | 08 | 55 | 04.7 -0.5 |
| I31A | Royce, Wessing<br>baz=44 | 43.33 | 333 | P | P | 08 | 55 | 05.8 -0.2 |
| TUC | Tucson<br>2.9nm,0.9s | 43.39 | 311 | eP | P | 08 | 55 | 07.5 +0.7 |
| S22A | 4UR Ranch, Cre<br>baz=44 | 43.52 | 320 | P | P | 08 | 55 | 08.7 +0.8 |
| S22A | 4UR Ranch, Cre<br>6.8nm,1.4s | 43.52 | 320 | eP | P | 08 | 55 | 09.2 +1.3 |
| D37A | Cotton<br>baz=44 | 43.56 | 341 | P | P | 08 | 55 | 08.2 +0.4 |
| I30A | Oacoma<br>baz=44 | 43.65 | 332 | P | P | 08 | 55 | 09.0 +0.4 |
| C38A | Sawbill Land.<br>baz=44 | 43.69 | 342 | P | P | 08 | 55 | 08.9 +0.1 |
| J29A | Okreek<br>baz=44,SNR=6.5 | 43.69 | 331 | P | P | 08 | 55 | 08.1 -0.7 |
| K28A | Ten Mile Ranch<br>baz=44 | 43.69 | 330 | P | P | 08 | 55 | 09.0 0.0 |
| E35A | Pequot Lakes<br>baz=44 | 43.72 | 339 | P | P | 08 | 55 | 09.3 +0.3 |
| D36A | Goodland<br>baz=44 | 43.82 | 340 | P | P | 08 | 55 | 09.6 -0.2 |
| F33A | 5 Mile Ranch,<br>baz=44 | 43.84 | 336 | P | P | 08 | 55 | 09.8 -0.2 |
| SUSD | South Dakota S<br>baz=44 | 43.84 | 333 | P | P | 08 | 55 | 09.7 -0.4 |
| EYMN | Ely<br>baz=44 | 43.96 | 342 | P | P | 08 | 55 | 10.9 0.0 |
| EYMN | Ely<br>10nm,0.6s | 43.96 | 342 | eP | P | 08 | 55 | 10.7 -0.3 |
| C37A | Embarrass<br>baz=44 | 43.98 | 341 | P | P | 08 | 55 | 11.2 +0.1 |
| W18A | Petrified Fore<br>baz=44 | 44.00 | 315 | P | P | 08 | 55 | 12.4 +0.7 |
| ISCO | Idaho Springs<br>baz=44 | 44.03 | 323 | P | P | 08 | 55 | 12.7 +0.6 |
| ISCO | Idaho Springs<br>3.1nm,0.9s | 44.03 | 323 | eP | P | 08 | 55 | 12.7 +0.6 |
| D35A | Remer<br>baz=44 | 44.04 | 339 | P | P | 08 | 55 | 11.0 -0.6 |
| G31A | Conde<br>baz=44 | 44.13 | 334 | P | P | 08 | 55 | 12.0 -0.4 |
| I29A | Vivian Onida<br>baz=44 | 44.14 | 332 | P | P | 08 | 55 | 11.9 -0.6 |
| J28A | Allard Ranch,<br>baz=44,SNR=5.5 | 44.15 | 330 | P | P | 08 | 55 | 11.9 -0.7 |
| C36A | Pine Crest Far<br>baz=44 | 44.22 | 341 | P | P | 08 | 55 | 13.3 +0.3 |
| MVCO | Mesa Verde<br>baz=44 | 44.29 | 318 | P | P | 08 | 55 | 14.2 +0.2 |
| MVCO | Mesa Verde<br>1.0nm,0.5s | 44.29 | 318 | eP | P | 08 | 55 | 14.6 +0.6 |
| J27A | Elkhorn Farm,<br>baz=45 | 44.41 | 330 | P | P | 08 | 55 | 14.3 -0.4 |
| D34A | Park Rapids<br>baz=45 | 44.46 | 338 | P | P | 08 | 55 | 14.9 0.0 |
| SMCO | Snowmass<br>2.0nm,0.7s | 44.47 | 322 | eP | P | 08 | 55 | 16.4 +0.8 |
| I28A | Midland<br>baz=45 | 44.54 | 331 | P | P | 08 | 55 | 15.1 -0.5 |
| C35A | Jirik Farms, M<br>baz=45 | 44.55 | 340 | P | P | 08 | 55 | 15.6 0.0 |
| H29A | Onida<br>baz=45 | 44.56 | 332 | P | P | 08 | 55 | 14.9 -0.8 |
| D33A | AnnSam, Waubun<br>baz=45,SNR=12 | 44.74 | 338 | P | P | 08 | 55 | 17.1 0.0 |
| 214A | Organ Pipe Nat<br>baz=45 | 44.77 | 309 | P | P | 08 | 55 | 18.0 +0.3 |
| PV01 | Paradox Valley<br>263nm,0.9s | 44.86 | 319 | eP | P | 08 | 55 | 19.5 +1.0 |
| I27A | Quinn<br>baz=45 | 45.02 | 330 | P | P | 08 | 55 | 19.0 -0.4 |
| PV05 | Paradox Valley | 45.17 | 319 | eP | P | 08 | 55 | 21.1 +0.1 |
| G28A | Parade<br>baz=45 | 45.23 | 332 | P | P | 08 | 55 | 20.6 -0.5 |
| C33A | Trail<br>baz=45 | 45.23 | 338 | P | P | 08 | 55 | 21.1 +0.1 |
| WUAZ | Wupatki<br>baz=46,SNR=6.7 | 45.36 | 315 | P | P | 08 | 55 | 23.3 +0.9 |
| WUAZ | Wupatki<br>6.7nm,0.8s | 45.36 | 315 | eP | P | 08 | 55 | 23.6 +1.2 |
| I26A | New Underwood<br>baz=46 | 45.40 | 330 | P | P | 08 | 55 | 22.3 -0.1 |
| J25A | Sunshine Ranch<br>baz=46 | 45.42 | 328 | P | P | 08 | 55 | 22.5 -0.2 |
| H27A | Howes<br>baz=46 | 45.45 | 331 | P | P | 08 | 55 | 22.4 -0.4 |
| B34A | Aery, Baudette<br>baz=46,SNR=6.5 | 45.46 | 340 | P | P | 08 | 55 | 22.7 -0.1 |
| AGMN | Agassiz Nation<br>baz=46 | 45.72 | 339 | P | P | 08 | 55 | 24.7 -0.1 |
| AGMN | Agassiz Nation<br>4.6nm,0.5s | 45.72 | 339 | eP | P | 08 | 55 | 24.7 -0.1 |
| H26A | Fairpoint<br>baz=46 | 45.77 | 330 | P | P | 08 | 55 | 25.0 -0.5 |
| O20A | White River Ci<br>baz=46 | 45.83 | 322 | P | P | 08 | 55 | 26.5 +0.5 |
| I25A | Rochford<br>baz=46 | 45.83 | 329 | P | P | 08 | 55 | 26.3 +0.3 |
| D30A | Buchanan<br>baz=46 | 45.86 | 336 | P | P | 08 | 55 | 25.6 -0.4 |
| G27A | Dupree<br>baz=46 | 45.93 | 332 | P | P | 08 | 55 | 26.1 -0.5 |
| C31A | Landman Farms,<br>baz=46 | 46.00 | 337 | P | P | 08 | 55 | 27.4 +0.3 |
| B32A | Ahles, Strandq<br>baz=46 | 46.05 | 338 | P | P | 08 | 55 | 27.5 +0.1 |
| G26A | Maurine<br>baz=46 | 46.18 | 331 | P | P | 08 | 55 | 27.5 -1.0 |
| H25A | Fruitdale<br>baz=46 | 46.19 | 330 | P | P | 08 | 55 | 28.5 -0.1 |
| C30A | Mose, Pekin<br>baz=46 | 46.23 | 336 | P | P | 08 | 55 | 28.6 -0.2 |
| E28A | Huff<br>baz=46 | 46.27 | 334 | P | P | 08 | 55 | 29.5 +0.3 |
| F27A | Lemmon<br>baz=46,SNR=5.2 | 46.34 | 332 | P | P | 08 | 55 | 29.5 -0.3 |
| B31A | Greenbush Farm<br>baz=47 | 46.49 | 337 | P | P | 08 | 55 | 31.0 +0.2 |
| G25A | Newell<br>baz=47 | 46.51 | 330 | P | P | 08 | 55 | 30.9 -0.2 |
| E27A | Carson<br>baz=47 | 46.55 | 333 | P | P | 08 | 55 | 31.9 +0.5 |
| F26A | Lodgepole<br>baz=47 | 46.63 | 332 | P | P | 08 | 55 | 32.1 +0.1 |
| SRU | San Rafael<br>4.1nm,1.0s | 46.67 | 319 | eP | P | 08 | 55 | 33.1 +0.5 |
| B30A | Myrvik Farm, E<br>baz=47 | 46.77 | 337 | P | P | 08 | 55 | 33.0 -0.1 |
| E26A | Carlson Angus<br>baz=47 | 46.99 | 332 | P | P | 08 | 55 | 34.8 0.0 |
| F25A | Bowman<br>baz=47 | 47.06 | 331 | P | P | 08 | 55 | 35.1 -0.3 |
| A30A | Hoffart Farm,<br>baz=47 | 47.16 | 337 | P | P | 08 | 55 | 36.4 +0.3 |
| B29A | Wagenman Farm,<br>baz=47 | 47.19 | 336 | P | P | 08 | 55 | 36.7 +0.4 |
| ULM | Lac du Bonnet<br>4.6nm,0.4s,baz=136,slow=7.5,SNR=8.1 | 47.38 | 340 | P | P | 08 | 55 | 37.1 -0.6 |
| ULM | Lac du Bonnet<br>89nm,2.5s | 47.38 | 340 | eP | P | 08 | 55 | 36.9 -0.8 |
| D26A | Manning<br>baz=48 | 47.39 | 333 | P | P | 08 | 55 | 38.2 +0.3 |
| E25A | Miller Ranch,<br>baz=48 | 47.45 | 332 | P | P | 08 | 55 | 38.2 -0.2 |
| SWSC | Sam W. Stewart<br>baz=48 | 47.47 | 309 | P | P | 08 | 55 | 39.2 +0.5 |
| A29A | Manning Farm,<br>baz=48 | 47.51 | 337 | P | P | 08 | 55 | 38.5 -0.2 |
| B28A | Dugan Ranch, T<br>baz=48 | 47.59 | 335 | P | P | 08 | 55 | 40.1 +0.8 |
| NLU | North Lily Min<br>1.3nm,0.5s | 48.14 | 319 | eP | P | 08 | 55 | 44.8 +0.8 |
| BW06 | Boulder Array<br>2.9nm,0.9s | 48.20 | 324 | eP | P | 08 | 55 | 44.3 -0.1 |
| C25A | Freed Ranch, W<br>baz=48 | 48.27 | 333 | P | P | 08 | 55 | 45.2 +0.5 |
| B26A | Jensen Ranch,<br>baz=48 | 48.32 | 334 | P | P | 08 | 55 | 45.4 +0.4 |
| A27A | Ledoux Ranch,<br>baz=48 | 48.34 | 335 | P | P | 08 | 55 | 45.9 +0.7 |
| TCUT | Toone Canyon<br>13nm,0.6s | 48.36 | 321 | eP | P | 08 | 55 | 46.5 +0.8 |
| B25A | Knox Farm, Ray<br>baz=49 | 48.65 | 333 | P | P | 08 | 55 | 48.4 +0.9 |
| HWUT | Hardware Ranch<br>50nm,2.7s | 48.73 | 322 | eP | P | 08 | 55 | 48.6 +0.2 |
| DUG | Dugway<br>baz=49 | 48.74 | 319 | P | P | 08 | 55 | 49.6 +1.0 |
| DUG | Dugway<br>29nm,2.3s | 48.74 | 319 | eP | P | 08 | 55 | 50.3 +1.8 |
| MURC | Murrieta<br>baz=49 | 48.81 | 309 | P | P | 08 | 55 | 49.5 +0.4 |
| BBRC | Big Bear Solar<br>baz=49 | 48.86 | 310 | P | P | 08 | 55 | 50.1 +0.5 |
| AHID | Auburn Hatcher<br>3.6nm,0.7s | 49.11 | 323 | eP | P | 08 | 55 | 51.5 +0.2 |
| A25A | Svangstu Ranch<br>baz=49 | 49.13 | 334 | P | P | 08 | 55 | 51.9 +0.8 |
| GSC | Goldstone<br>baz=49 | 49.20 | 312 | P | P | 08 | 55 | 52.6 +0.6 |
| GSC | Goldstone<br>69nm,2.8s | 49.20 | 312 | eP | P | 08 | 55 | 53.0 +1.0 |
| DGMT | Dagmar<br>baz=49,SNR=5.6 | 49.26 | 333 | P | P | 08 | 55 | 52.8 +0.7 |
| DGMT | Dagmar<br>40nm,1.0s | 49.26 | 333 | eP | P | 08 | 55 | 52.9 +0.7 |
| REDW | Red Top Meadow<br>4.9nm,0.6s | 49.32 | 324 | eP | P | 08 | 55 | 53.2 +0.3 |
| SNOW | Snow King Moun<br>2.4nm,0.5s | 49.32 | 324 | eP | P | 08 | 55 | 53.5 +0.5 |
| LOHW | Long Hollow<br>2.8nm,0.6s | 49.32 | 324 | eP | P | 08 | 55 | 53.4 +0.4 |
| BFSC | Mount Baldy Ra<br>baz=50 | 49.41 | 310 | P | P | 08 | 55 | 54.2 +0.4 |
| TPAW | Teton Pass<br>5.2nm,1.1s | 49.45 | 324 | eP | P | 08 | 55 | 54.5 +0.5 |
| RLMT | Red Lodge<br>baz=50 | 49.50 | 327 | P | P | 08 | 55 | 54.6 +0.3 |
| RLMT | Red Lodge<br>2.1nm,0.7s | 49.50 | 327 | eP | P | 08 | 55 | 54.4 +0.1 |
| TPNV | Topopah Spring<br>baz=50 | 49.51 | 314 | P | P | 08 | 55 | 55.1 +0.7 |
| FXWY | Fox Creek<br>31nm,2.5s | 49.58 | 324 | eP | P | 08 | 55 | 55.4 +0.4 |
| R11A | Troy Canyon, C<br>baz=50 | 49.68 | 316 | P | P | 08 | 55 | 56.2 +0.5 |
| R11A | Troy Canyon, C<br>2.8nm,1.0s | 49.68 | 316 | eP | P | 08 | 55 | 56.2 +0.5 |
| IMW | Indian Meadow<br>2.8nm,0.6s | 49.69 | 324 | eP | P | 08 | 55 | 55.9 +0.1 |
| FURC | Furnace Creek,<br>baz=50 | 49.74 | 313 | P | P | 08 | 55 | 56.4 +0.5 |
| EDW2 | Edwards Air Fo<br>baz=50 | 49.92 | 311 | P | P | 08 | 55 | 57.5 +0.1 |
| DAC | Darwin (Calif)<br>2.1nm,0.6s | 50.19 | 312 | eP | P | 08 | 55 | 60.0 +0.3 |
| CWC | Cottonwood Cre<br>baz=51 | 50.62 | 312 | P | P | 08 | 56 | 02.6 -0.1 |
| BOZ | Bozeman (W)<br>baz=51 | 51.13 | 326 | P | P | 08 | 56 | 06.4 0.0 |
| BOZ | Bozeman (W)<br>1.8nm,0.5s | 51.13 | 326 | eP | P | 08 | 56 | 06.6 +0.2 |
| MCMT | McKenzie Canyo<br>1.2nm,0.7s | 51.34 | 324 | eP | P | 08 | 56 | 09.0 +0.9 |
| HLID | Hailey<br>baz=52 | 51.56 | 322 | P | P | 08 | 56 | 10.0 +0.3 |
| HLID | Hailey<br>2.4nm,0.9s | 51.56 | 322 | eP | P | 08 | 56 | 10.2 +0.5 |
| NV01 | Mina Array Sit | 51.62 | 315 | eP | P | 08 | 56 | 11.2 +0.9 |
| NVAR | Mina Array Bea<br>0.9nm,0.6s,baz=123,slow=6.9,SNR=9.4 | 51.62 | 315 | P | P | 08 | 56 | 11.0 +0.7 |
| EGMT | Eagleton<br>baz=52 | 51.63 | 329 | P | P | 08 | 56 | 10.2 +0.2 |
| MLAC | Mammoth Lakes<br>baz=52 | 51.66 | 313 | P | P | 08 | 56 | 09.2 -1.4 |
| SLMT | Seeley Lake | 53.12 | 326 | eP | P | 08 | 56 | 22.1 +1.0 |
| WVOR | Wild Horse Val<br>4.3nm,1.1s | 53.66 | 319 | eP | P | 08 | 56 | 25.4 +0.3 |
| F10A | Beach Ranch, E<br>92nm,2.6s | 54.55 | 323 | eP | P | 08 | 56 | 31.2 -0.2 |
| I07A | Izee<br>31nm,2.1s | 55.00 | 320 | eP | P | 08 | 56 | 35.6 +0.9 |
| G08A | Pilot Rock<br>4.1nm,0.7s | 55.24 | 322 | eP | P | 08 | 56 | 37.0 +0.6 |
| M04C | Macdoel<br>baz=56 | 55.50 | 317 | P | P | 08 | 56 | 38.5 +0.1 |
| NEW | Newport<br>baz=56 | 55.72 | 326 | P | P | 08 | 56 | 39.5 -0.2 |
| J05D | Fort Rock, OR<br>baz=56 | 55.75 | 319 | P | P | 08 | 56 | 40.1 -0.1 |
| M02C | Callahan<br>baz=56 | 56.04 | 316 | P | P | 08 | 56 | 41.2 -1.0 |
| YBH | Yreka Blue Hor<br>141nm,2.9s | 56.08 | 317 | eP | P | 08 | 56 | 41.4 -1.0 |
| G06A | Carlson Farm,<br>186nm,3.0s | 56.25 | 321 | eP | P | 08 | 56 | 44.5 +0.9 |
| I05D | Terrebonne, OR<br>baz=56 | 56.29 | 320 | P | P | 08 | 56 | 44.4 +0.6 |
| J04D | Umpqua Nationa<br>baz=56 | 56.30 | 318 | P | P | 08 | 56 | 44.6 +0.5 |
| EDM | Edmonton<br>11nm,0.8s | 56.73 | 332 | eP | P | 08 | 56 | 46.3 -0.5 |
| H04A | Detroit Lake<br>97nm,2.6s | 56.98 | 320 | eP | P | 08 | 56 | 48.9 +0.2 |
| LTY | Liberty<br>46nm,2.5s | 57.24 | 323 | eP | P | 08 | 56 | 50.9 +0.4 |
| YKA | Yellowknife Ar<br>3.6nm,0.6s,baz=133,slow=6.7,SNR=12 | 63.36 | 340 | P | P | 08 | 57 | 31.5 -0.1 |
| SUMG | Summit<br>5.9nm,0.9s | 69.01 | 11 | eP | P | 08 | 58 | 08.8 +0.8 |
| INK | Inuvik<br>1.9nm,0.8s,baz=66,slow=4.4,SNR=3.6 | 73.12 | 340 | P | P | 08 | 58 | 33.4 +1.1 |
| TORD | Tordi Ar. Bea<br>0.1nm,0.3s,baz=280,slow=7.3,SNR=2.8 | 73.60 | 78 | P | P | 08 | 58 | 35.5 -0.6 |
| RAGM | Ragged Mountai<br>341nm,2.8s | 75.14 | 331 | eP | P | 08 | 58 | 43.3 -0.9 |
| BMRM | Bremner River<br>6.7nm,0.8s | 75.23 | 331 | eP | P | 08 | 58 | 43.3 -1.4 |
| ILAR | Eielson Array<br>0.3nm,0.5s,baz=110,slow=4.8,SNR=8.2 | 77.07 | 335 | P | P | 08 | 58 | 55.0 0.0 |
| RND | Reindeer<br>68nm,2.5s | 77.66 | 333 | eP | P | 08 | 58 | 59.7 +1.3 |
| SUA | Susitna One<br>13nm,1.0s | 78.24 | 331 | eP | P | 08 | 59 | 02.4 +0.7 |
| PPLA | Purkeypile<br>109nm,2.5s | 79.09 | 333 | eP | P | 08 | 59 | 06.7 +0.4 |
| WMQ | Urumqi | 126.69 | 17 | ePKP | PKPdf | 09 | 06 | 05.0 +0.5 |
| HHC | Hu-ho-hao-te | 132.43 | 355 | ePKP | PKPdf | 09 | 06 | 15.6 0.0 |
| HHC | | | | PP | PP | 09 | 08 | 46.7 +7.5 |
| HHC | | | | SS | SS | 09 | 26 | 13.5 +9.2 |
| HHC | | | | PPMZ | | | | |
| HHC | 29nm,6.2s | | | LN | | | | |
| HHC | 130nm,14.9s | | | LE | | | | |
| HHC | 170nm,14.9s | | | LZ | | | | |
| LZH | 98nm,14.9s<br>Lanzhou | 137.26 | 4 | ePKP | PKPdf | 09 | 06 | 23.7 -1.1 |
| LZH | | | | sPKP | | 09 | 07 | 23.9 |
| LZH | | | | LN | | | | |
| LZH | 130nm,19.0s | | | LE | | | | |
| | 130nm,19.9s | | | | | | | |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| LZH | | | | LZ | | | |
| | 170nm,20.1s | | | | | | |
| **WHN** | **Wuhan** | **142.24** | **350** | PKP | **PKPdf** | **09 06 33.1** | **-0.7** |
| **CD2** | **Chengdu** | **142.40** | **5** | PKP | **PKPdf** | **09 06 32.4** | **-1.7** |
| **KMI** | **Kunming** | **148.02** | **7** | PKPbc | **PKPdf** | **09 06 42.4** | **-1.8** |
| **ASAR** | **Alice Springs** | **149.20** | **234** | PKPbc | **PKPbc** | **09 06 49.6** | **-0.6** |
| | 0.6nm,0.6s,baz=120,slow=3.3,SNR=15 | | | | | | |
| **WRAB** | **Tennant Creek** | **150.44** | **241** | *e*PKPbc | **PKPbc** | **09 06 52.7** | **-0.5** |
| **WRA** | **Warramunga Arr** | **150.44** | **241** | PKPbc | **PKPbc** | **09 06 52.9** | **-0.4** |
| | 0.7nm,0.3s,baz=107,slow=2.8,SNR=22 | | | | | | |

*IDC **12** 08:47:42.8±1.9, 46°.82N×146°.37E, h354km±21km, mb2.8/6, mb1 3.1/8, mb1mx2.8/38, mbtmp3.6/8, Error ellipse: s-maj=26.4km s-min=15.2km az=123.0*
*JMA **12** 08:47:43.0±0.5, 46°.28N×146°.52E, h377km, M3.4*
*ISCJB **12** 08:47:44.0±0.8, 46°.30N±0°.08×146°.3E±0°.2, h361km, mb3.0/6, Error ellipse: s-maj=15.7km s-min=8.7km az=29.2*
**ISC 12 08:47:43.8**±1.2**, 46°.3N**±0°.1**×146°.3E**±0°.1**, h361**km**, n21,** σ**1ˢ54**/26**, mb3.0**/6**, Northwest of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JRA** | **Rausu** | **2.49** | **200** | P | **Pn** | **08 48 41.1** | **+1.4** |
| **JTKR** | **Abashiri--Toko** | **2.86** | **217** | P | **Pn** | **08 48 44.7** | **+1.9** |
| **JSE** | **Soyaes** | **2.92** | **244** | P | **Pn** | **08 48 44.6** | **+1.4** |
| **NEM2** | **Nemuro 2** | **2.95** | **188** | P | **Pn** | **08 48 43.2** | **-0.3** |
| NEM2 | | | | *e*S | **S** | **08 49 30.9** | **-0.8** |
| **JWK2** | **Keihoku** | **3.22** | **254** | P | **Pn** | **08 48 47.8** | **+1.9** |
| **ASAJ** | **Asahikawa** | **3.40** | **232** | P | **Pn** | **08 48 49.9** | **+2.3** |
| | baz=69,slow=8.9 | | | | | | |
| **JAK** | **Akkeshi** | **3.48** | **200** | P | **Pn** | **08 48 48.8** | **+0.4** |
| JAK | | | | *e*S | **S** | **08 49 40.8** | **+0.3** |
| **JAR** | **Ashorobuto** | **3.49** | **212** | P | **Pn** | **08 48 50.4** | **+1.9** |
| JAR | | | | *e*S | **S** | **08 49 43.3** | **+2.7** |
| **JCH** | **Churui** | **4.23** | **211** | P | **Pn** | **08 48 56.3** | **+0.5** |
| JCH | | | | *e*S | **S** | **08 49 53.3** | **-0.6** |
| **JNBK** | **Urakawa-nobuka** | **4.74** | **214** | P | **Pn** | **08 49 01.6** | **+0.4** |
| JNBK | | | | *e*S | **S** | **08 50 03.3** | **-0.5** |
| **JKB** | **Kayabe** | **5.80** | **223** | P | **Pn** | **08 49 13.8** | **+1.1** |
| JKB | | | | *e*S | **S** | **08 50 23.4** | **-1.5** |
| **JOT** | **Ohata** | **6.20** | **220** | P | **Pn** | **08 49 18.2** | **+1.0** |
| JOT | | | | *e*S | **S** | **08 50 31.0** | **-2.1** |
| **JANG** | **Nango** | **6.86** | **212** | P | **Pn** | **08 49 25.8** | **+1.0** |
| JANG | | | | *e*S | **S** | **08 50 45.5** | **-1.5** |
| **JOM** | **Ohasama** | **7.73** | **210** | *e*S | **S** | **08 51 04.2** | **-1.5** |
| **USRK** | **Ussuriysk Ar.** | **10.30** | **263** | P | **Pn** | **08 50 06.1** | **+0.9** |
| | 0.4nm,0.3s,baz=67,slow=11,SNR=6.1 | | | | | | |
| **ILAR** | **Eielson Array** | **39.83** | **38** | P | P | 08 54 38.6 | -4.4 |
| | 0.4nm,0.7s,baz=264,slow=6.5,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.92** | **295** | P | **P** | **08 55 06.1** | **-2.0** |
| | 0.2nm,0.4s,baz=81,slow=8.9,SNR=2.1 | | | | | | |
| **INK** | **Inuvik** | **44.54** | **31** | P | P | 08 55 15.9 | -4.6 |
| | 3.1nm,0.9s,baz=298,slow=7.8,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.80** | **192** | P | **P** | **08 57 59.6** | **+2.1** |
| | 0.2nm,0.5s,baz=8.3,slow=6.6,SNR=6.7 | | | | | | |
| **ASAR** | **Alice Springs** | **70.52** | **192** | P | P | 08 58 23.8 | +3.5 |
| | 0.1nm,0.3s,baz=15,slow=8.5,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **81.74** | **56** | P | **P** | **08 59 21.8** | **-1.4** |
| | 0.2nm,0.4s,baz=292,slow=4.9,SNR=5.2 | | | | | | |

**MEX 12 08:55:15.9**±0.7**, 17°.20N×101°.13W, h14**km±30km**, MD4.2, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAIG** | **El Cayaco** | **0.84** | **100** | *e*P | Pg | 08 55 28.7 | -3.5 |
| CAIG | | | | *e*S | Sg | 08 55 39.6 | -3.6 |
| **ARIG** | **Puente Sto Nin** | **1.31** | **35** | *i* P | Pn | 08 55 36.2 | -3.6 |
| ARIG | | | | *i* S | Sb | 08 55 51.2 | -5.8 |
| **MEIG** | **Mezcala** | **1.61** | **63** | *e*P | Pn | 08 55 41.1 | -2.9 |
| MEIG | | | | *i* S | Sn | 08 55 60.0 | -4.7 |
| **PLIG** | **Platanillo** | **1.95** | **52** | *e*P | Pn | 08 55 45.6 | -3.1 |
| PLIG | | | | *i* S | Sn | 08 56 08.2 | -5.0 |
| **TLIG** | **Tlapa** | **2.48** | **81** | *e*P | Pn | 08 55 53.3 | -2.7 |
| TLIG | | | | *i* S | Sn | 08 56 21.8 | -4.3 |
| **PNIG** | **Pinotepa** | **2.99** | **105** | *i* P | Pn | 08 56 00.6 | -2.2 |
| PNIG | | | | *i* S | Sn | 08 56 35.3 | -3.2 |

*ISCJB **12** 09:07:04.7±0.5, 44°.37N±0°.07×139°.56E±0°.06, h250km, mb3.6/8, Error ellipse: s-maj=9.7km s-min=5.8km az=18.6*
*JMA **12** 09:07:05.5±0.2, 44°.32N×139°.76E, h268km, M3.4*
*IDC **12** 09:07:05.7±1.3, 44°.44N×139°.74E, h263km±13km, mb3.3/8, mb1 3.3/11, mb1mx3.1/35, mbtmp3.8/11, Error ellipse: s-maj=20.2km s-min=14.8km az=63.0*
**ISC 12 09:07:04.7**±0.7**, 44°.32N**±0°.07**×139°.67E**±0°.06**, h250**km**, n27,** σ**1ˢ89**/33**, mb3.6**/8**, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JSK** | **Shakotan** | **1.13** | **149** | P | **Pn** | **09 07 42.9** | **+2.4** |
| **JHR** | **Hokuryu** | **1.59** | **110** | P | **Pn** | **09 07 46.1** | **+2.4** |
| **JWK2** | **Keihoku** | **1.88** | **57** | P | **Pn** | **09 07 48.4** | **+2.4** |
| **JEW** | **Eniwo** | **1.96** | **138** | P | **Pn** | **09 07 49.4** | **+2.5** |
| **ASAJ** | **Asahikawa** | **2.12** | **94** | P | **Pn** | **09 07 50.1** | **+1.9** |
| | baz=285,slow=16 | | | | | | |
| **JSE** | **Soyaes** | **2.18** | **72** | P | **Pn** | **09 07 50.2** | **+1.5** |
| **JOSM** | **Okushiri--Mats** | **2.24** | **184** | P | **Pn** | **09 07 51.8** | **+2.4** |
| **JKK2** | **Kamakawa 2** | **2.26** | **100** | P | **Pn** | **09 07 51.5** | **+1.9** |
| JKK2 | | | | *e*S | **S** | **09 08 27.6** | **+2.6** |
| **JFR** | **Furan** | **2.41** | **118** | P | **Pn** | **09 07 52.6** | **+1.5** |
| **JKB** | **Kayabe** | **2.62** | **157** | P | **Pn** | **09 07 54.8** | **+1.6** |
| **JNBK** | **Urakawa-nobuka** | **3.04** | **131** | P | **Pn** | **09 07 59.0** | **+1.4** |
| JNBK | | | | *e*S | **S** | **09 08 41.6** | **+2.2** |
| **JTKR** | **Abashiri--Toko** | **3.07** | **95** | P | **Pn** | **09 07 59.4** | **+1.5** |
| JTKR | | | | *e*S | **S** | **09 08 41.6** | **+1.6** |
| **JAR** | **Ashorobuto** | **3.14** | **108** | P | **Pn** | **09 08 00.3** | **+1.6** |
| JAR | | | | *e*S | **S** | **09 08 43.6** | **+2.2** |
| **JCH** | **Churui** | **3.18** | **121** | P | **Pn** | **09 07 59.0** | **-0.2** |
| JCH | | | | *e*S | **S** | **09 08 40.9** | **-1.3** |
| **JAK** | **Akkeshi** | **3.88** | **108** | *e*S | **S** | **09 08 55.3** | **-1.2** |
| **JANG** | **Nango** | **4.17** | **160** | P | **Pn** | **09 08 10.4** | **-0.2** |
| JANG | | | | *e*S | **S** | **09 09 00.7** | **-2.2** |
| **NEM2** | **Nemuro 2** | **4.50** | **100** | *e*S | **S** | **09 09 05.7** | **-4.0** |
| **USRK** | **Ussuriysk Ar.** | **5.52** | **271** | P | **Pn** | **09 08 28.6** | **+1.8** |
| | 0.5nm,0.3s,baz=85,slow=12,SNR=10.0 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.85** | **189** | P | **Pn** | **09 08 58.0** | **+1.9** |
| | 0.4nm,0.3s,baz=3.4,slow=14,SNR=4.0 | | | | | | |
| **SONM** | **Songino Array** | **23.25** | **291** | P | **P** | **09 11 50.5** | **+0.6** |
| | 0.9nm,0.7s,baz=80,slow=9.1,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **36.31** | **305** | P | **P** | **09 13 44.2** | **-0.2** |
| | 1.7nm,0.3s,baz=94,slow=7.9,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.49** | **294** | P | **P** | **09 14 10.7** | **-0.3** |
| | 1.0nm,0.5s,baz=84,slow=10,SNR=9.0 | | | | | | |
| **INK** | **Inuvik** | **48.61** | **30** | P | **P** | **09 15 21.7** | **-1.0** |
| | 4.0nm,0.9s,baz=278,slow=7.1,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **61.80** | **330** | P | **P** | **09 16 55.0** | **-1.7** |
| | 8.6nm,1.1s,baz=76,slow=8.0,SNR=5.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.13** | **186** | P | **P** | **09 17 12.7** | **+0.2** |
| | 0.2nm,0.5s,baz=5.9,slow=6.9,SNR=8.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **67.80** | **320** | P | **P** | **09 17 34.4** | **-1.1** |
| | 0.6nm,0.4s,baz=42,slow=5.6,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **67.86** | **186** | P | **P** | **09 17 37.0** | **+1.0** |
| | 0.3nm,0.6s,baz=360,slow=4.8,SNR=6.1 | | | | | | |

**IDC 12 09:20:46.1**±1.6**, 14°.72S×176°.81W, h0**km**, mb3.6**/3**, mb1 4.0**/4**, mb1mx3.6**/33**, mbtmp3.8**/4**, ML4.6**/1**, Error ellipse: s-maj=81.1km s-min=26.5km az=156.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.95** | **81** | Pn | Pn | 09 22 02.8 | +1.0 |
| | 23nm,0.3s,baz=203,slow=18,SNR=139 | | | | | | |
| AFI | | | | Sn | Sn | 09 22 50.2 | -10 |
| | 60nm,0.3s,baz=75,slow=19,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.80** | **256** | P | P | 09 29 18.9 | +0.9 |
| | 0.2nm,0.6s,baz=96,slow=7.2,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **47.20** | **251** | P | P | 09 29 20.3 | -0.7 |
| | 0.6nm,0.6s,baz=88,slow=8.3,SNR=9.6 | | | | | | |
| **ILAR** | **Eielson Array** | **82.45** | **12** | P | P | 09 33 09.5 | -0.5 |
| | 0.5nm,0.5s,baz=227,slow=6.1,SNR=4.1 | | | | | | |

*ISCJB **12** 09:21:08.0±0.6, 36°.74S±0°.05×73°.90W±0°.07, h14km, mb4.0/9, MS4.0/7, Error ellipse: s-maj=9.0km s-min=5.9km az=42.0*
*IDC **12** 09:21:08.4±0.9, 36°.81S×73°.57W, h0km, mb4.1/8, mb1 4.2/11, mb1mx4.0/31, mbtmp4.1/11, ML4.1/3, MS3.9/10, Ms1 3.9/10, ms1mx3.7/21, Error ellipse: s-maj=34.2km s-min=18.1km az=98.0*
*GUC **12** 09:21:10.0±1.2, 36°.80S×73°.72W, h26km±8km, ML4.8*
*NEIC **12** 09:21:10.0, 36°.80S×73°.71W, h26km, ML4.8(GUC), After GUC.*
*NEIC Felt [IV] at Concepcion and Laraquete; [III] at Arauco, Chiguayante, Contulmo, Coronel, Lebu, Penco, San Pedro, Talcahuano, Tirua and Tome; [II] at Bulnes, Chillan and Coelemu.*
**ISC 12 09:21:10.2**±0.7**, 36°.76S**±0°.06**×73°.67W**±0°.06**, h14**km**, n44,** σ**1ˢ01**/40**, mb4.2**/8**, MS4.0**/7**, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **COCH** | **Cobquecura** | **0.95** | **49** | *e*P | **Pb** | **09 21 28.4** | **0.0** |
| COCH | | | | *e*S | **Sn** | **09 21 42.8** | **+0.4** |
| COCH | | | | AML | AML | 09 21 46.9 | |
| | comp=E,33µm,0.3s | | | | | | |
| **CCHI** | **Chillan** | **1.29** | **83** | *e*P | **Pn** | **09 21 34.0** | **+0.2** |
| CCHI | | | | *e*S | **Sg** | **09 21 52.5** | **+0.7** |
| CCHI | | | | AML | AML | 09 21 57.8 | |
| | comp=E,21µm,0.5s | | | | | | |
| **PSCH** | **Puerto Saavedr** | **2.05** | **174** | *e*P | **Pn** | **09 21 44.6** | **+0.4** |
| PSCH | | | | AML | AML | 09 22 26.1 | |
| | comp=E,18µm,0.5s | | | | | | |
| **TALC** | **Talca** | **2.14** | **51** | *e*P | **Pn** | **09 21 47.2** | **+1.7** |
| TALC | | | | *e*S | **Sb** | **09 22 15.8** | **+0.7** |
| **NICH** | **Los Niches** | **2.65** | **49** | *e*P | **Pn** | **09 21 54.6** | **+2.1** |
| NICH | | | | *e*S | **Sb** | **09 22 28.2** | **-1.5** |
| NICH | | | | AML | AML | 09 22 41.1 | |
| | comp=N,8µm,0.0s | | | | | | |
| **ROC1** | **El Roble** | **4.36** | **31** | *e*P | **Pn** | **09 22 16.4** | **+0.1** |
| ROC1 | | | | *e*S | **Sg** | **09 23 28.6** | **-1.7** |
| **AUSP** | **Uspallata** | **5.74** | **39** | *e*P | **Pn** | **09 22 37.0** | **+1.7** |
| **RTLS** | **Leoncito** | **6.13** | **37** | *e*P | **Pn** | **09 22 42.2** | **+1.6** |
| **CFAA** | **Coronel Fontan** | **6.83** | **43** | Pn | **Pn** | **09 22 49.8** | **-0.3** |
| | comp=N,0.5nm,0.3s,baz=212,slow=13,SNR=33 | | | | | | |
| CFAA | | | | LR | LR | 09 25 46.2 | |
| | comp=N,111nm,18.2s,baz=226,slow=41 | | | | | | |
| **RTLL** | **Cerro Villicun** | **6.92** | **40** | *e*P | **Pn** | **09 22 51.3** | **0.0** |
| **ACAN** | **Cantantal** | **6.97** | **52** | *e*P | **Pn** | **09 22 52.4** | **+0.4** |
| **AMOG** | **MOGNA** | **7.23** | **38** | *e*P | **Pn** | **09 22 55.8** | **+0.3** |
| **LCO** | **Las Campanas** | **8.12** | **19** | *e*Pn | **Pn** | **09 23 07.0** | **-0.9** |
| | comp=N,14nm,0.4s | | | | | | |
| LCO | | | | *e*Sn | Sn | 09 24 33.3 | -6.4 |
| **AGUA** | **GUANDACOL** | **8.45** | **32** | *e*P | **Pn** | **09 23 12.8** | **+0.4** |
| **TRQA** | **Tornquist** | **9.39** | **101** | *e*Pn | **Pn** | **09 23 26.3** | **+1.2** |
| | comp=N,8.6nm,0.6s | | | | | | |
| TRQA | | | | *e*Sn | **Sn** | **09 25 09.1** | **-1.5** |
| **CYA** | **Choya** | **10.62** | **41** | *e*P | Pn | 09 23 38.0 | -3.9 |
| **LVC** | **Limon Verde** | **14.69** | **18** | Pn | **Pn** | **09 24 38.4** | **+0.5** |
| | comp=N,6.1nm,0.3s,baz=234,slow=4.8,SNR=3.6 | | | | | | |
| LVC | | | | LR | LR | 09 30 44.4 | |
| | comp=N,1µm,21.0s,baz=194,slow=39 | | | | | | |
| **CPUP** | **Villa Florida** | **17.36** | **58** | P | **Pn** | **09 25 11.7** | **-0.3** |
| | comp=N,0.2nm,0.3s,baz=230,slow=6.2,SNR=3.9 | | | | | | |
| **USHA** | **Ushuaia** | **18.43** | **170** | LR | LR | 09 33 37.2 | |
| | comp=N,687nm,18.9s,baz=328,slow=41 | | | | | | |
| **LPAZ** | **La Paz** | **20.98** | **15** | P | **P** | **09 25 54.3** | **+0.6** |
| | comp=N,2.4nm,0.6s,baz=183,slow=5.0,SNR=14 | | | | | | |
| **PMSA** | **Palmer Station** | **28.63** | **171** | LR | LR | 09 38 37.9 | |
| | comp=N,182nm,18.3s,baz=4.5,slow=37 | | | | | | |
| **BDFB** | **Brasilia** | **31.01** | **54** | LR | LR | 09 41 10.4 | |
| | comp=N,381nm,18.3s,baz=224,slow=39 | | | | | | |
| **SNAA** | **Sanae** | **49.55** | **157** | P | **P** | **09 30 00.1** | **-0.2** |
| | comp=N,1.0nm,1.0s,baz=271,slow=7.0,SNR=6.8 | | | | | | |
| **SNAA** | **Sanae** | **49.55** | **157** | *e*P | **P** | **09 29 58.0** | **-2.3** |
| | comp=N,1.3nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **53.48** | **180** | P | **P** | **09 30 30.0** | **+0.2** |
| | comp=N,4.0nm,0.7s,baz=148,slow=2.9,SNR=15 | | | | | | |
| **QSPA** | **South Pole Qui** | **53.48** | **180** | *e*P | **P** | **09 30 30.7** | **+0.9** |
| **RKT** | **Rikitea** | **54.01** | **266** | *e*T | T | 10 28 35.5 | |
| | comp=N,1.6nm,0.2s | | | | | | |
| **MEH** | **Mehetia** | **67.20** | **264** | *e*T | T | 10 45 04.5 | |
| | comp=N,25nm,0.2s | | | | | | |
| **TVO** | **Taravao** | **68.20** | **264** | *e*T | T | 10 46 19.5 | |
| | comp=N,0.6nm,0.2s | | | | | | |
| **PPT2** | **Papeete2** | **68.56** | **264** | *e*LR | LR | 09 53 08.3 | |
| | comp=N,135nm,24.5s | | | | | | |
| **PPT** | **Papeete** | **68.57** | **264** | LR | LR | 09 53 37.1 | |
| | comp=N,90nm,18.3s,baz=121,slow=28 | | | | | | |
| **MAW** | **Mawson** | **70.91** | **164** | P | **P** | **09 32 26.7** | **+0.3** |
| | comp=N,0.9nm,0.4s,baz=187,slow=8.1,SNR=4.1 | | | | | | |
| MAW | | | | LR | LR | 10 03 39.5 | |
| | comp=N,118nm,18.5s,baz=242,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.53** | **333** | P | **P** | **09 32 32.1** | **+1.4** |
| | comp=N,0.4nm,0.6s,baz=154,slow=8.4,SNR=8.3 | | | | | | |
| **SWET** | **Sewanee** | **72.52** | **349** | *e*P | **P** | **09 32 35.9** | **-0.5** |
| | comp=N,1.1nm,0.4s | | | | | | |
| **DBIC** | **Dimbokro** | **77.32** | **72** | P | **P** | **09 33 04.6** | **-0.1** |
| | comp=N,3.9nm,0.7s,baz=159,slow=7.6,SNR=4.8 | | | | | | |
| DBIC | | | | LR | LR | 10 05 35.7 | |
| | comp=N,56nm,18.1s,baz=210,slow=34 | | | | | | |
| **BOSA** | **Boshof** | **79.96** | **118** | P | **P** | **09 33 20.2** | **+0.9** |
| | comp=N,2.5nm,0.8s,baz=237,slow=4.9,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.39** | **71** | P | **P** | **09 33 52.3** | **-0.1** |
| | comp=N,0.9nm,0.7s,baz=223,slow=5.4,SNR=7.2 | | | | | | |
| TORD | | | | LR | LR | 10 10 44.1 | |
| | comp=N,44nm,18.3s,baz=245,slow=34 | | | | | | |
| **MDT** | **Midelt** | **94.57** | **52** | LR | LR | 10 18 31.1 | |
| | comp=N,105nm,18.0s,baz=162,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **117.71** | **210** | PKP | **PKPdf** | **09 39 55.3** | **-1.2** |
| | comp=N,0.2nm,0.7s,baz=167,slow=2.0,SNR=3.4 | | | | | | |
| **ABKAR** | **Akbulak array** | **144.40** | **55** | *e*PKPdf | **PKPab** | **09 40 43.9** | **+0.3** |
| **AAK** | **Ala-Archa** | **154.91** | **67** | PKPab | **PKPab** | **09 41 26.7** | **+0.1** |
| | comp=N,1.7nm,0.6s,baz=233,slow=5.7,SNR=5.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **155.76** | **46** | PKPbc | PKPdf | 09 41 12.8 | +10 |
| | comp=N,0.3nm,0.4s,baz=292,slow=2.9,SNR=5.7 | | | | | | |
| KURBB | | | | PKPab | **PKPab** | **09 41 28.9** | **-0.9** |
| | comp=N,0.4nm,0.4s,baz=291,slow=4.2,SNR=4.7 | | | | | | |
| **KURK** | **Kurchatov** | **155.78** | **46** | PKPbc | PKPdf | 09 41 12.8 | +10 |
| KURK | | | | PKPab | **PKPab** | **09 41 28.9** | **-0.9** |
| **MKAR** | **Makanchi Array** | **159.53** | **53** | PKPab | **PKPab** | **09 41 46.1** | **-0.1** |
| | comp=N,0.7nm,0.6s,baz=298,slow=2.6,SNR=5.3 | | | | | | |

*CSEM **12** 09:22:16.6, 37°.49N×25°.00W, h2km, ML2.6, After PDA*
**PDA 12 09:22:16.6**±0.4**, 37°.49N×25°.00W, h2**km±6km**, MD3.6, ML2.6, Error ellipse: s-maj=12.1km s-min=1.2km az=70.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSMN** | **Pico do Norte,** | **0.48** | **186** | *e*P | Pg | 09 22 25.3 | -0.6 |
| PSMN | | | | *e*S | Sg | 09 22 31.7 | -0.5 |
| PSMN | | | | A | A | 09 22 35.2 | |
| | 63nm,0.3s | | | | | | |
| **PSMN** | **Pico do Norte,** | **0.48** | **186** | *e*P | Pg | 09 22 25.3 | -0.6 |
| PSMN | | | | *e*S | Sg | 09 22 31.7 | -0.5 |
| **PSMA** | **Santa Maria** | **0.50** | **192** | *e*P | Pg | 09 22 25.5 | -0.7 |
| PSMA | | | | *e*S | Sg | 09 22 32.2 | -0.5 |
| PSMA | | | | A | A | 09 22 33.3 | |
| | 205nm,0.1s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.58** | **297** | *e*P | Pg | 09 22 26.8 | -1.0 |
| PDA | | | | *e*S | Sg | 09 22 34.4 | -1.0 |
| PDA | | | | A | A | 09 22 34.7 | |
| | 176nm,0.1s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.58** | **297** | *e*P | Pg | 09 22 26.8 | -1.0 |
| PDA | | | | *e*S | Sg | 09 22 34.4 | -1.0 |
| **PSET** | **Sete Cidades** | **0.66** | **301** | *e*S | Sg | 09 22 36.6 | -1.4 |
| PSET | | | | A | A | 09 22 41.1 | |
| | 160nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **0.66** | **301** | *e*S | Sg | 09 22 36.6 | -1.4 |

*ISCJB **12** 09:27:09.8±0.2, 58°.40N±0°.02×152°.84W±0°.04, h66km±3km, mb3.9/16, Error ellipse: s-maj=4.3km s-min=2.8km az=141.7*
*IDC **12** 09:27:09.6±1.2, 58°.44N×153°.17W, h44km±16km, mb3.6/11, mb1 4.0/15, mb1mx3.8/37, mbtmp4.0/15, ML4.3/4, MS3.0/1, Ms1 3.0/1, ms1mx2.4/53, Error ellipse: s-maj=19.8km s-min=16.1km az=47.0*
*NEIC **12** 09:27:11.1±0.2, 58°.41N×152°.91W, h53km±3km, mb4.5/5, ML3.7(AEIC), Error ellipse: s-maj=3.0km s-min=1.9km az=150.0*
**ISC 12 09:27:11.4**±0.7**, 58°.39N**±0°.04**×152°.92W**±0°.04**, h60**km±6km**, n122,** σ**0ˢ95**/137**, mb3.9**/16**, Kodiak Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KDAK** | **Kodiak Island** | **0.64** | **164** | P | **Pn** | **09 27 24.4** | **-0.4** |
| | 836nm,0.3s,baz=5.8,slow=6.2,SNR=6980 | | | | | | |
| KDAK | | | | S | **Sn** | **09 27 34.5** | **-0.1** |
| | 747nm,0.3s,baz=17,slow=19,SNR=40 | | | | | | |
| **KAPH** | **Katmai Pasha** | **0.78** | **286** | P | **Pn** | **09 27 26.1** | **-0.5** |
| KAPH | | | | S | **Sn** | **09 27 36.6** | **-1.3** |
| **KAHG** | **Katmai Hook Gl** | **0.86** | **277** | P | **Pn** | **09 27 27.2** | **-0.5** |
| **KAWH** | **Katmai** | **0.99** | **270** | P | **Pn** | **09 27 28.8** | **-0.5** |
| KAWH | | | | S | **Sn** | **09 27 42.7** | **+0.1** |
| **AUL** | **Augustine Lava** | **1.03** | **345** | P | **Pn** | **09 27 29.7** | **0.0** |
| AUL | | | | S | **Sn** | **09 27 44.0** | **+0.7** |
| **MCNL** | **McNeil River** | **1.08** | **318** | P | **Pn** | **09 27 29.9** | **-0.6** |
| **KABR** | **Katmai Barrier** | **1.12** | **257** | P | **Pn** | **09 27 30.3** | **-0.6** |
| **KAHC** | **Katmai Hardscr** | **1.13** | **284** | P | **Pn** | **09 27 30.2** | **-0.9** |
| **KAKN** | **Katmai Knife C** | **1.14** | **266** | P | **Pn** | **09 27 30.4** | **-0.8** |
| KAKN | | | | S | **Sn** | **09 27 45.5** | **-0.5** |
| **OHAK** | **Old Harbor** | **1.19** | **190** | P | **Pn** | **09 27 31.2** | **-0.7** |
| OHAK | | | | S | **Sn** | **09 27 46.3** | **-0.9** |
| **KABU** | **Katmai Buttres** | **1.25** | **265** | P | **Pn** | **09 27 32.5** | **-0.3** |
| **OPT** | **Oil Point** | **1.27** | **353** | P | **Pn** | **09 27 33.1** | **+0.1** |
| **HOM** | **Homer** | **1.43** | **27** | P | **Pn** | **09 27 35.4** | **+0.3** |
| **CNPM** | **China Poot** | **1.43** | **37** | P | **Pn** | **09 27 35.3** | **+0.2** |
| CNPM | | | | S | **Sn** | **09 27 53.4** | **+0.5** |
| **KELA** | **Mount Kelaz** | **1.49** | **273** | P | **Pn** | **09 27 35.1** | **-0.8** |
| **PDB** | **Pedro Bay** | **1.55** | **335** | P | **Pn** | **09 27 35.9** | **-0.7** |
| **CNTC** | **Contact Creek** | **1.57** | **267** | P | **Pn** | **09 27 36.6** | **-0.5** |
| **IVE** | **Iliamna Volcan** | **1.63** | **358** | P | **Pn** | **09 27 37.6** | **-0.3** |
| **ILW** | **Iliamna West** | **1.68** | **356** | P | **Pn** | **09 27 38.1** | **-0.4** |
| **BRLK** | **Bradley Lake** | **1.73** | **36** | P | **Pn** | **09 27 38.8** | **-0.3** |
| **PLK2** | **Peulik 2** | **1.92** | **252** | P | **Pn** | **09 27 41.5** | **-0.1** |
| **PLK3** | **Peulik 3** | **1.92** | **250** | P | **Pn** | **09 27 41.7** | **0.0** |
| PLK3 | | | | S | **Sn** | **09 28 05.8** | **+1.1** |
| **SII** | **Sitkinak Islan** | **1.96** | **201** | P | **Pn** | **09 27 41.7** | **-0.6** |
| **PLK1** | **Peulik 1** | **2.05** | **255** | P | **Pn** | **09 27 43.4** | **0.0** |
| **RSO** | **Redoubt South** | **2.08** | **2** | *e*Pn | **Pn** | **09 27 44.3** | **+0.3** |
| RSO | | | | *e*Sn | **Sn** | **09 28 10.1** | **+1.3** |
| **RDN** | **Redoubt North** | **2.13** | **2** | P | **Pn** | **09 27 45.0** | **+0.4** |
| **NCT** | **North Crescent** | **2.17** | **360** | P | **Pn** | **09 27 45.3** | **+0.1** |
| **BGRM** | **Barrier Glacie** | **2.38** | **6** | P | **Pn** | **09 27 48.5** | **+0.4** |
| **SEW** | **Seward** | **2.47** | **45** | P | **Pn** | **09 27 48.3** | **-0.8** |
| **SLKM** | **Skilak Lake** | **2.53** | **32** | P | **Pn** | **09 27 49.6** | **-0.4** |
| **CKL** | **Chakachamna La** | **2.83** | **6** | P | **Pn** | **09 27 54.3** | **+0.1** |
| **CKN** | **Chakachatna No** | **2.86** | **7** | P | **Pn** | **09 27 55.3** | **+0.7** |
| **BGL** | **Barrier Glacie** | **2.89** | **5** | P | **Pn** | **09 27 55.2** | **+0.3** |
| **VOGL** | **Vogel Lake** | **2.90** | **25** | P | **Pn** | **09 27 56.1** | **+1.1** |
| **CHIR** | **Chirikof Islan** | **2.97** | **211** | P | **Pn** | **09 27 54.7** | **-1.3** |
| **SVW2** | **Sparrevohn** | **3.03** | **335** | P | **Pn** | **09 27 56.0** | **-0.8** |
| **FIB** | **Fire Island** | **3.11** | **25** | P | **Pn** | **09 27 58.5** | **+0.7** |
| **RC01** | **Rabbit Creek A** | **3.15** | **29** | P | **Pn** | **09 27 58.1** | **-0.3** |
| **STLK** | **Strandline Lak** | **3.16** | **9** | P | **Pn** | **09 27 58.9** | **+0.2** |
| **PTE** | **Portage** | **3.17** | **37** | P | **Pn** | **09 27 58.5** | **-0.2** |
| **SUA** | **Susitna One** | **3.27** | **19** | P | **Pn** | **09 28 00.3** | **+0.2** |
| **PWL** | **Port Wells** | **3.40** | **41** | P | **Pn** | **09 28 01.1** | **-0.7** |
| **CHGN** | **Chignik** | **3.64** | **237** | *e*Pn | **Pn** | **09 28 05.8** | **+0.6** |
| CHGN | | | | *e*Sn | **Sn** | **09 28 48.1** | **+1.3** |
| **SKT** | **Skwentna** | **3.66** | **10** | P | **Pn** | **09 28 05.4** | **0.0** |
| **PMR** | **Palmer** | **3.73** | **29** | P | **Pn** | **09 28 05.4** | **-0.9** |
| **HIN** | **Hinchinbrook I** | **3.84** | **56** | P | **Pn** | **09 28 07.7** | **-0.3** |
| **GLI** | **Glacier Island** | **3.87** | **47** | P | **Pn** | **09 28 07.1** | **-1.1** |
| **FID** | **Port Fidalgo** | **4.04** | **51** | P | **Pn** | **09 28 09.0** | **-1.6** |
| **SML** | **Sawmill** | **4.12** | **32** | P | **Pn** | **09 28 11.5** | **-0.3** |
| **JPK** | **Jack Peak** | **4.17** | **47** | P | **Pn** | **09 28 11.5** | **-0.9** |
| **EYAK** | **Cordova Ski Ar** | **4.25** | **56** | P | **Pn** | **09 28 12.8** | **-0.6** |
| **VLZ** | **Valdez** | **4.31** | **48** | P | **Pn** | **09 28 13.9** | **-0.4** |
| **SCM** | **Sheep Creek Mo** | **4.44** | **37** | P | **Pn** | **09 28 15.8** | **-0.4** |
| **SGAM** | **Sherman Glacie** | **4.46** | **58** | P | **Pn** | **09 28 16.0** | **-0.4** |
| **DIV** | **Divide** | **4.54** | **50** | P | **Pn** | **09 28 16.9** | **-0.5** |
| **KLU** | **Klutina** | **4.69** | **46** | P | **Pn** | **09 28 19.1** | **-0.5** |
| **TT01** | **Tatalina** | **4.78** | **343** | P | **Pn** | **09 28 20.4** | **-0.2** |
| **HUR** | **Hurricane** | **4.87** | **18** | P | **Pn** | **09 28 22.2** | **+0.2** |
| **BMRM** | **Bremner River** | **4.94** | **55** | P | **Pn** | **09 28 22.4** | **-0.5** |
| **NICHA** | **Nichawak Mount** | **4.94** | **64** | P | **Pn** | **09 28 23.1** | **+0.1** |
| **BERG** | **Berg Lake** | **5.12** | **63** | P | **Pn** | **09 28 25.0** | **-0.3** |
| **TRF** | **Thorofare Moun** | **5.23** | **13** | P | **Pn** | **09 28 26.9** | **-0.2** |
| **GRIN** | **Grindle Hills** | **5.26** | **65** | P | **Pn** | **09 28 26.5** | **-0.9** |
| **KTH** | **Kantishna Hill** | **5.27** | **10** | *e*Pn | **Pn** | **09 28 28.0** | **+0.5** |
| | 41nm,0.7s | | | | | | |
| KTH | | | | *e*Sn | **Sn** | **09 29 27.8** | **+1.0** |
| **KHIT** | **Khitrov Hills** | **5.35** | **63** | P | **Pn** | **09 28 28.4** | **-0.1** |
| **RND** | **Reindeer** | **5.41** | **20** | P | **Pn** | **09 28 29.2** | **-0.1** |
| **DHY** | **Denali Highway** | **5.43** | **28** | P | **Pn** | **09 28 29.5** | **-0.2** |
| **GLB** | **Gilahina Butte** | **5.50** | **52** | P | **Pn** | **09 28 30.1** | **-0.5** |
| **KULT** | **Kultieth River** | **5.54** | **66** | P | **Pn** | **09 28 31.2** | **0.0** |
| **VRDI** | **Verde Repeater** | **5.56** | **55** | P | **Pn** | **09 28 31.5** | **0.0** |
| **HARP** | **HAARP** | **5.57** | **40** | P | **Pn** | **09 28 30.9** | **-0.6** |
| **ISLE** | **Juniper Island** | **5.82** | **63** | P | **Pn** | **09 28 33.4** | **-1.8** |
| **PAX** | **Paxson** | **5.87** | **35** | P | **Pn** | **09 28 35.5** | **-0.2** |
| **MESA** | **MESA** | **5.90** | **68** | P | **Pn** | **09 28 35.2** | **-1.0** |
| **BAGL** | **Bagley Icefiel** | **5.91** | **65** | P | **Pn** | **09 28 35.5** | **-0.6** |
| **KIAG** | **Kiagna River** | **5.92** | **60** | P | **Pn** | **09 28 35.4** | **-1.1** |
| **BALM** | **Baldy** | **5.97** | **59** | P | **Pn** | **09 28 36.5** | **-0.6** |
| **PTPK** | **Patty Peak** | **5.97** | **58** | P | **Pn** | **09 28 36.4** | **-0.9** |
| **BARN** | **Barnard Glacie** | **6.29** | **60** | P | **Pn** | **09 28 40.4** | **-1.1** |
| **TABL** | **Table Mountain** | **6.35** | **66** | P | **Pn** | **09 28 41.2** | **-1.2** |
| **CTGM** | **Chitina Glacie** | **6.41** | **61** | P | **Pn** | **09 28 42.5** | **-0.6** |
| **MENT** | **Mentasta** | **6.42** | **41** | *e*Pn | **Pn** | **09 28 43.9** | **+0.8** |
| **LOGN** | **Logan Glacier** | **6.52** | **63** | P | **Pn** | **09 28 43.1** | **-1.5** |
| **WRH** | **Wood River Hil** | **6.52** | **19** | P | **Pn** | **09 28 43.6** | **-0.9** |
| **HDA** | **Harding Lake** | **6.67** | **23** | P | **Pn** | **09 28 45.6** | **-1.0** |
| **PCA** | **Pinnacle** | **6.71** | **70** | P | **Pn** | **09 28 46.7** | **-0.6** |
| **CCB** | **Clear Creek Bu** | **6.73** | **19** | P | **Pn** | **09 28 46.5** | **-0.9** |
| **MLY** | **Manley** | **6.74** | **8** | P | **Pn** | **09 28 46.3** | **-1.3** |
| **COLA** | **College** | **6.93** | **18** | P | **Pn** | **09 28 49.6** | **-0.5** |
| **MDM** | **Murphy Dome** | **6.95** | **17** | P | **Pn** | **09 28 49.5** | **-1.0** |
| **ILAR** | **Eielson Array** | **7.01** | **22** | P | **Pn** | **09 28 49.9** | **-1.3** |
| | 1.3nm,0.3s,baz=209,slow=14,SNR=50 | | | | | | |
| ILAR | | | | S | Sn | 09 30 02.7 | -6.7 |
| | 4.6nm,0.3s,baz=206,slow=22,SNR=10 | | | | | | |
| **ILB** | **Eielson Array** | **7.01** | **22** | P | **Pn** | **09 28 50.4** | **-0.9** |
| **BCA3** | **Beaver Creek A** | **7.19** | **45** | P | **Pn** | **09 28 53.3** | **-0.4** |
| **IM3** | **Indian Mountai** | **7.63** | **357** | P | **Pn** | **09 28 59.3** | **-0.3** |
| **DHAK** | **Deception Hill** | **7.68** | **79** | P | **Pn** | **09 28 59.4** | **-1.0** |
| **EGAK** | **Eagle** | **8.50** | **36** | P | **Pn** | **09 29 09.8** | **-1.8** |
| **DAWY** | **Dawson** | **8.64** | **43** | P | **Pn** | **09 29 11.6** | **-1.9** |
| **UNV** | **Unalaska Valle** | **8.85** | **245** | *e*Pn | **Pn** | **09 29 16.7** | **+0.3** |
| **COLD** | **Coldfoot** | **8.95** | **7** | P | **Pn** | **09 29 16.7** | **-1.0** |
| **WHY** | **Whitehorse** | **9.44** | **68** | P | **Pn** | **09 29 22.9** | **-1.6** |
| **BM3** | **Burnt Mountain** | **9.81** | **19** | P | **Pn** | **09 29 27.8** | **-1.6** |
| **DLBC** | **Dease Lake** | **11.99** | **80** | P | **Pn** | **09 29 59.5** | **+0.2** |
| | 2.1nm,0.3s,baz=269,slow=10.0,SNR=40 | | | | | | |
| DLBC | | | | S | **Sn** | **09 32 07.2** | **-4.0** |
| | 0.3nm,0.3s,baz=192,slow=20,SNR=5.3 | | | | | | |
| DLBC | | | | LR | LR | 09 34 35.1 | |
| | comp=Z,72nm,18.4s,baz=189,slow=37 | | | | | | |
| **INK** | **Inuvik** | **13.13** | **33** | P | **Pn** | **09 30 14.2** | **-0.5** |
| | 0.2nm,0.3s,baz=219,slow=12,SNR=3.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.13** | **61** | P | **P** | **09 31 29.7** | **+0.5** |
| | 2.6nm,0.3s,baz=274,slow=9.9,SNR=60 | | | | | | |
| **EDM** | **Edmonton** | **22.58** | **86** | *e*P | **P** | **09 32 08.0** | **+1.5** |
| | 6.0nm,0.6s | | | | | | |
| **NEW** | **Newport** | **23.38** | **100** | P | **P** | **09 32 16.2** | **+1.7** |
| | 0.8nm,0.6s,baz=289,slow=3.9,SNR=6.3 | | | | | | |
| **SWMT** | **Swartz Lake** | **25.48** | **98** | *e*P | **P** | **09 32 35.5** | **+1.7** |
| | 4.9nm,1.2s | | | | | | |
| **SEY** | **Seymchan** | **26.48** | **303** | P | **P** | **09 32 42.1** | **-0.3** |
| | 1.2nm,0.5s,baz=72,slow=22,SNR=6.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **29.93** | **117** | P | **P** | **09 33 15.5** | **+1.8** |
| | 0.4nm,0.5s,baz=309,slow=7.3,SNR=4.1 | | | | | | |
| NVAR | | | | pP | **pP** | **09 33 31.3** | **+2.8** |
| | 0.9nm,0.8s,baz=297,slow=9.0,SNR=4.7 | | | | | | |
| **RSSD** | **Black Hills** | **32.94** | **94** | *e*P | **P** | **09 33 41.9** | **+1.8** |
| | 4.3nm,0.5s | | | | | | |
| RSSD | | | | *e*PcP | **PcP** | **09 36 22.7** | **-0.2** |
| **SRU** | **San Rafael** | **33.21** | **107** | *e*P | **P** | **09 33 43.3** | **+0.9** |
| **GLA** | **Glamis** | **35.95** | **118** | *e*P | **P** | **09 34 07.0** | **+1.1** |
| | 7.6nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **44.40** | **109** | P | **P** | **09 35 17.2** | **+1.3** |
| | 0.2nm,0.6s,baz=325,slow=8.0,SNR=3.5 | | | | | | |
| **SCHQ** | **Schefferville** | **44.42** | **56** | P | **P** | **09 35 16.0** | **+0.3** |
| | 2.8nm,0.5s,baz=321,slow=8.0,SNR=6.9 | | | | | | |
| **JCT** | **Junction City** | **45.42** | **104** | *e*P | **P** | **09 35 25.4** | **+1.5** |
| | 9.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **55.78** | **307** | P | **P** | **09 36 41.6** | **-0.3** |
| | 1.1nm,0.6s,baz=54,slow=7.1,SNR=4.9 | | | | | | |
| SONM | | | | pP | **pP** | **09 36 56.6** | **-1.1** |
| | 1.1nm,0.7s,baz=42,slow=6.3,SNR=5.1 | | | | | | |
| **FINES** | **FINESS Array B** | **60.49** | **1** | P | **P** | **09 37 13.2** | **-1.2** |
| | 0.9nm,0.3s,baz=345,slow=6.7,SNR=6.3 | | | | | | |
| **KURK** | **Kurchatov** | **63.39** | **326** | P | **P** | **09 37 32.7** | **-1.2** |
| **KURBB** | **Kurchatov Arra** | **63.50** | **326** | P | **P** | **09 37 32.7** | **-1.9** |
| | 0.2nm,0.4s,baz=343,slow=7.6,SNR=2.9 | | | | | | |
| **GERES** | **GERESS Array B** | **72.56** | **9** | P | **P** | **09 38 31.1** | **-0.6** |
| | 0.4nm,0.2s,baz=339,slow=2.5,SNR=3.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **78.91** | **24** | P | **P** | **09 39 07.5** | **-0.5** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | 0.4nm,0.5s,baz=337,slow=5.3,SNR=4.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **82.09** | **355** | P | **P** | **09 39 24.7** | **-0.5** |
| | 0.9nm,0.9s,baz=42,slow=4.5,SNR=3.1 | | | | | | |

*CSEM **12** 09:29:08.4±0.7, 51°.29N×18°.97E, h2km, ML2.8/6, Error ellipse: s-maj=11.4km s-min=5.6km az=16.0*
*PRU **12** 09:29:10.4, 51°.21N×19°.02E, h0km, Belchatow*
**ISC 12 09:29:10.0**±2.4**, 51°.2N**±0°.1×**19°.01E**±0°.06**, h7km**±17km**, n20,** σ**0$^s$83**/33**, Poland**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **1.12** | **153** | *e*Pg | **Pg** | **09 29 31.2** | **-0.4** |
| OJC | | | | *e*Sg | **Sg** | **09 29 46.4** | **+0.2** |
| **OJC** | **Ojcow** | **1.12** | **153** | *e*Pg | **Pg** | **09 29 31.2** | **-0.4** |
| OJC | | | | *e*Sg | **Sg** | **09 29 46.4** | **+0.2** |
| **OKC** | **Ostrava-Krasne** | **1.49** | **202** | *e*PG | **Pn** | **09 29 37.6** | **+0.3** |
| OKC | | | | *e*SG | **Sg** | **09 29 58.0** | **0.0** |
| | comp=Z,14nm,0.6s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **1.49** | **202** | Pg | **Pn** | **09 29 37.6** | **+0.3** |
| OKC | | | | Sg | **Sg** | **09 29 58.0** | **0.0** |
| | 14nm,0.6s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.73** | **213** | *e*Pn | **Pb** | **09 29 41.9** | **-0.2** |
| MORC | | | | *e*Sg | **Sg** | **09 30 06.5** | **+1.1** |
| **KSP** | **Ksiaz** | **1.76** | **258** | *e*Pg | **Pg** | **09 29 45.7** | **+2.0** |
| KSP | | | | *e*Sg | Sg | 09 30 12.8 | +6.4 |
| **KRLC** | **Kraliky** | **1.83** | **232** | *e*PG | **Pb** | **09 29 43.3** | **-0.5** |
| KRLC | | | | *e*SG | **Sg** | **09 30 08.2** | **-0.4** |
| **KRLC** | **Kraliky** | **1.83** | **232** | Pg | **Pb** | **09 29 43.3** | **-0.5** |
| KRLC | | | | Sg | **Sg** | **09 30 08.2** | **-0.4** |
| **DPC** | **Dobruska-Polom** | **1.92** | **244** | *e*PG | **Pb** | **09 29 45.0** | **-0.3** |
| DPC | | | | *e*SG | **Sg** | **09 30 10.5** | **-1.1** |
| | comp=Z,5.3nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.92** | **244** | Pg | **Pb** | **09 29 45.0** | **-0.3** |
| DPC | | | | Sg | **Sg** | **09 30 10.5** | **-1.1** |
| | 5.3nm,0.4s | | | | | | |
| **UPC** | **Upice** | **2.03** | **250** | *e*PG | **Pb** | **09 29 46.7** | **-0.5** |
| UPC | | | | *e*SG | **Sg** | **09 30 14.0** | **-1.2** |
| | comp=Z,13nm,0.6s | | | | | | |
| **UPC** | **Upice** | **2.03** | **250** | Pg | **Pb** | **09 29 46.7** | **-0.5** |
| UPC | | | | Sg | **Sg** | **09 30 14.0** | **-1.2** |
| | 13nm,0.6s | | | | | | |
| **PVCC** | **Panska Ves** | **2.90** | **258** | *e*SG | **Sg** | **09 30 42.0** | **-1.0** |
| | comp=Z,11nm,0.4s | | | | | | |
| PVCC | | | | *e*x | x | 09 30 47.8 | |
| **PVCC** | **Panska Ves** | **2.90** | **258** | Sg | **Sg** | **09 30 42.0** | **-1.0** |
| | 11nm,0.4s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.99** | **246** | *e*PN | **Pn** | **09 29 57.9** | **0.0** |
| GOPC | | | | *e*PG | **Pb** | **09 30 05.1** | **+1.4** |
| GOPC | | | | *e*SG | **Sg** | **09 30 45.4** | **-0.7** |
| GOPC | | | | *e*x | x | 09 30 51.2 | |
| **GOPC** | **GO Pecny, Ondr** | **2.99** | **246** | Pn | **Pn** | **09 29 57.9** | **0.0** |
| **PRU** | **Pruhonice** | **3.10** | **248** | *e*SG | **Sg** | **09 30 48.9** | **-0.7** |
| | comp=Z,2.5nm,0.4s | | | | | | |
| PRU | | | | *e*x | x | 09 30 56.7 | |
| **PRU** | **Pruhonice** | **3.10** | **248** | Sg | **Sg** | **09 30 48.9** | **-0.7** |
| | 2.5nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **4.07** | **241** | *e*SG | **Sg** | **09 31 19.7** | **-1.0** |
| | comp=Z,3.5nm,0.5s | | | | | | |
| KHC | | | | *e*x | x | 09 31 24.5 | |
| **KHC** | **Kasperske Hory** | **4.07** | **241** | Sg | **Sg** | **09 31 19.7** | **-1.0** |
| | 3.5nm,0.5s | | | | | | |

**WEL 12 09:42:18.6**±0.6**, 38°.45S**×**175°.88E, h172km**±4km**, ML3.6**/13**, 1C-7D, Error ellipse: s-maj=3.9km s-min=2.6km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HIZ** | **Hauiti** | **0.81** | **265** | PN | Pn | 09 42 43.9 | -0.2 |
| **BKZ** | **Black Stump Fm** | **0.86** | **147** | PN | Pn | 09 42 44.7 | +0.2 |
| BKZ | | | | SN | Sn | 09 43 03.8 | -0.8 |
| BKZ | | | | AML | AML | 09 43 07.9 | |
| **WNVZ** | **Wahianoa** | **0.91** | **194** | ⇓PN | Pn | 09 42 45.0 | 0.0 |
| WNVZ | | | | SN | Sn | 09 43 04.4 | -1.1 |
| **MOVZ** | **Moawhango** | **0.97** | **186** | PN | Pn | 09 42 44.9 | -0.4 |
| **URZ** | **Urewera** | **0.98** | **80** | PN | Pn | 09 42 45.4 | +0.1 |
| URZ | | | | SN | Sn | 09 43 05.1 | -0.7 |
| **KWHZ** | **Kaweka Forest** | **1.06** | **157** | PN | Pn | 09 42 46.6 | +0.5 |
| **MCHZ** | **McNeill Hill** | **1.18** | **148** | PN | Pn | 09 42 47.1 | +0.2 |
| **KRHZ** | **Kereru** | **1.26** | **163** | ⇓PN | Pn | 09 42 47.7 | +0.1 |
| **MWZ** | **Matawai** | **1.30** | **86** | AML | AML | 09 42 38.5 | |
| MWZ | | | | PN | Pn | 09 42 48.2 | +0.3 |
| **PNHZ** | **Pukenui** | **1.49** | **171** | PN | Pn | 09 42 49.4 | -0.3 |
| **RIGZ** | **Rimuhau** | **1.50** | **101** | PN | Pn | 09 42 50.4 | +0.5 |
| **KNZ** | **Kokohu** | **1.51** | **113** | AML | AML | 09 44 56.0 | |
| **KAHZ** | **Kahuranaki** | **1.55** | **151** | ⇑PN | Pn | 09 42 50.9 | +0.6 |
| **TSZ** | **Takapari Road** | **1.61** | **178** | ⇓PN | Pn | 09 42 50.4 | -0.6 |
| TSZ | | | | AML | AML | 09 43 16.0 | |
| TSZ | | | | AML | AML | 09 43 16.2 | |
| **HAZ** | **Te Kaha** | **1.65** | **66** | PN | Pn | 09 42 50.8 | -0.5 |
| **WPHZ** | **Waipukurau** | **1.68** | **165** | ⇓PN | Pn | 09 42 51.3 | -0.3 |
| **PXZ** | **Pawanui** | **1.76** | **155** | PN | Pn | 09 42 52.1 | -0.2 |
| PXZ | | | | AML | AML | 09 43 19.2 | |
| **DVHZ** | **Dannevirke** | **1.87** | **173** | ⇓PN | Pn | 09 42 52.6 | -1.0 |
| **PRHZ** | **Porangahau** | **1.91** | **162** | PN | Pn | 09 42 53.4 | -0.6 |
| **POWZ** | **Post Office Ro** | **1.95** | **183** | PN | Pn | 09 42 53.2 | -1.3 |
| **ANWZ** | **Angora Road** | **2.06** | **167** | PN | Pn | 09 42 55.0 | -0.7 |
| **PRWZ** | **Pori Road** | **2.11** | **178** | PN | Pn | 09 42 55.2 | -1.1 |
| **MRZ** | **Mangatainoka R** | **2.23** | **186** | ⇓PN | Pn | 09 42 55.8 | -1.8 |
| MRZ | | | | AML | AML | 09 43 26.2 | |
| MRZ | | | | AML | AML | 09 43 26.6 | |
| **BFZ** | **Birch Farm** | **2.25** | **173** | PN | Pn | 09 42 56.3 | -1.5 |
| BFZ | | | | AML | AML | 09 43 27.9 | |
| **TIWZ** | **Tintock** | **2.33** | **180** | AML | AML | 09 43 29.7 | |
| TIWZ | | | | AML | AML | 09 43 29.9 | |
| **OGWZ** | **Otaki Gorge** | **2.43** | **193** | PN | Pn | 09 42 58.1 | -1.8 |
| **HOWZ** | **Holdsworth Sta** | **2.47** | **187** | PN | Pn | 09 42 58.2 | -2.1 |
| **KIW** | **Kapiti Island** | **2.53** | **197** | PN | Pn | 09 42 58.7 | -2.3 |
| **TMWZ** | **Te Maipa** | **2.66** | **180** | PN | Pn | 09 43 00.4 | -2.3 |
| **MTW** | **Mount Morrison** | **2.73** | **186** | PN | Pn | 09 43 00.8 | -2.6 |
| MTW | | | | AML | AML | 09 43 35.7 | |
| MTW | | | | AML | AML | 09 43 35.8 | |
| **CAW** | **Cannon Point** | **2.73** | **193** | AML | AML | 09 43 36.0 | |
| CAW | | | | AML | AML | 09 43 36.0 | |
| **TRWZ** | **Traveller** | **2.96** | **183** | PN | Pn | 09 43 03.5 | -2.7 |
| **MSWZ** | **Moikau Station** | **3.01** | **189** | PN | Pn | 09 43 03.9 | -3.0 |
| MSWZ | | | | AML | AML | 09 43 40.5 | |
| MSWZ | | | | AML | AML | 09 43 41.3 | |
| **TCW** | **Tory Channel** | **3.03** | **204** | PN | Pn | 09 43 04.4 | -2.7 |
| TCW | | | | AML | AML | 09 43 41.7 | |
| TCW | | | | AML | AML | 09 43 42.8 | |
| **PLWZ** | **Palliser** | **3.16** | **189** | PN | Pn | 09 43 05.5 | -3.3 |
| **TUWZ** | **Tuamarina** | **3.33** | **206** | PN | Pn | 09 43 08.0 | -2.8 |
| TUWZ | | | | AML | AML | 09 43 47.3 | |
| TUWZ | | | | AML | AML | 09 43 48.0 | |
| **NNZ** | **Nelson** | **3.38** | **214** | PN | Pn | 09 43 08.1 | -3.3 |
| **QRZ** | **Quartz Range** | **3.52** | **226** | PN | Pn | 09 43 08.8 | -4.4 |
| **BSWZ** | **Blackbirch Sta** | **3.61** | **205** | PN | Pn | 09 43 11.3 | -3.1 |
| **THZ** | **Tophouse** | **4.03** | **214** | PN | Pn | 09 43 16.3 | -3.5 |
| **KHZ** | **Kahutara** | **4.35** | **204** | ⇓PN | Pn | 09 43 20.4 | -3.5 |
| **DSZ** | **Denniston Nort** | **4.55** | **222** | PN | Pn | 09 43 22.4 | -4.0 |
| **LTZ** | **Lake Taylor** | **5.13** | **211** | PN | Pn | 09 43 29.4 | -4.7 |
| **OXZ** | **Oxford** | **5.68** | **210** | PN | Pn | 09 43 35.5 | -5.6 |
| **CRLZ** | **Canterbury Las** | **5.69** | **205** | PN | Pn | 09 43 35.9 | -5.3 |
| **MQZ** | **McQueen's Vall** | **5.80** | **204** | PN | Pn | 09 43 36.7 | -5.9 |
| **ODZ** | **Otahua Downs** | **7.67** | **209** | PN | Pn | 09 44 02.5 | -4.9 |

**DJA 12 09:44:40.1**±1.3**, 1°N**±5°×**12°4E**±°**, h10km, M3.5**/5**, MLv3.5**/5**, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.61** | **193** | P | Pg | 09 44 50.4 | -1.5 |
| KMSI | | | | S | Sb | 09 45 00.8 | -0.7 |
| **GTOI** | **Gorontalo** | **1.23** | **244** | P | Pn | 09 45 00.8 | -2.6 |
| **MRSI** | **Marisa** | **2.29** | **252** | P | Pn | 09 45 18.6 | +0.7 |
| **LUWI** | **Luwuk** | **2.58** | **212** | P | Pn | 09 45 23.0 | +1.1 |
| LUWI | | | | S | Sn | 09 45 54.3 | +0.9 |
| **APSI** | **Ampana** | **3.22** | **230** | P | Pn | 09 45 32.0 | +1.2 |
| APSI | | | | S | Sn | 09 46 11.3 | +2.0 |

*ISCJB **12** 09:54:07.0±0.8, 4°.0N±0°.1×77°.0W±0°.1, h33km, mb3.9/9, MS4.0/2, Error ellipse: s-maj=22.7km s-min=11.7km az=29.2*
*IDC **12** 09:54:09.8±0.7, 3°.94N×76°.92W, h45km±7km, mb3.7/9, mb1 3.9/11, mb1mx3.8/36, mbtmp4.0/11, ML3.9/2, MS3.4/5, Ms1 3.4/5, ms1mx3.2/28, Error ellipse: s-maj=29.4km s-min=16.5km az=38.0*
**ISC 12 09:54:09.1**±0.8**, 3°.9N**±0°.2×**76°.83W**±0°.10**, h33km, n18,** σ**2$^s$08**/17**, mb3.8**/9**, Colombia**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ROSC** | **El Rosal** | **2.65** | **70** | P | **Pb** | **09 54 56.1** | **-0.2** |
| | 99nm,0.3s,baz=314,slow=3.1,SNR=81 | | | | | | |
| ROSC | | | | LR | LR | 09 56 10.6 | |
| | comp=Z,202nm,19.2s,baz=132,slow=44 | | | | | | |
| **JTS** | **JuntasAbangare** | **10.24** | **309** | LR | LR | 10 00 18.2 | |
| | comp=Z,101nm,18.7s,baz=130,slow=36 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **13.59** | **62** | P | Pn | 09 57 23.0 | +3.2 |
| | 0.8nm,0.3s,baz=189,slow=13,SNR=3.9 | | | | | | |
| **NNA** | **Nana** | **15.81** | **180** | LR | LR | 10 05 21.2 | |
| | comp=Z,102nm,21.1s,baz=344,slow=42 | | | | | | |
| **PTGA** | **Pitinga** | **17.47** | **105** | P | **P** | **09 58 13.2** | **+1.8** |
| | 0.3nm,0.3s,baz=294,slow=14,SNR=5.1 | | | | | | |
| **LPAZ** | **La Paz** | **21.85** | **157** | P | **P** | **09 58 59.9** | **+0.1** |
| | 0.9nm,0.5s,baz=355,slow=11,SNR=3.1 | | | | | | |
| **CMIG** | **Matias Romero** | **22.02** | **308** | P | **P** | **09 58 58.7** | **-2.2** |
| | 1.5nm,0.6s,baz=107,slow=14,SNR=3.6 | | | | | | |
| **BDFB** | **Brasilia** | **34.52** | **125** | LR | LR | 10 17 33.9 | |
| | comp=Z,215nm,18.8s,baz=235,slow=41 | | | | | | |
| **TXAR** | **Lajitas Array** | **35.86** | **318** | P | **P** | **10 01 05.8** | **-0.4** |
| | 0.4nm,0.8s,baz=147,slow=9.5,SNR=5.6 | | | | | | |
| TXAR | | | | pP | **pP** | **10 01 19.4** | **+3.6** |
| | 0.3nm,0.8s,baz=123,slow=9.1,SNR=3.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **51.01** | **318** | P | **P** | **10 03 08.4** | **+0.1** |
| | 0.7nm,0.7s,baz=126,slow=6.9,SNR=5.7 | | | | | | |
| NVAR | | | | pP | **pP** | **10 03 23.0** | **+4.7** |
| | 0.5nm,0.6s,baz=125,slow=5.9,SNR=3.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **64.76** | **342** | P | **P** | **10 04 41.7** | **-2.3** |
| | 2.3nm,0.8s,baz=133,slow=6.1,SNR=4.3 | | | | | | |
| **DBIC** | **Dimbokro** | **71.66** | **84** | P | **P** | **10 05 28.0** | **-0.3** |
| | 2.4nm,0.6s,baz=256,slow=6.8,SNR=4.3 | | | | | | |
| **INK** | **Inuvik** | **74.52** | **341** | P | **P** | **10 05 43.2** | **-0.9** |
| | 4.6nm,1.0s,baz=151,slow=2.9,SNR=4.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.95** | **77** | P | **P** | **10 06 04.1** | **-0.6** |
| | 1.1nm,0.5s,baz=282,slow=6.7,SNR=16 | | | | | | |
| **ILAR** | **Eielson Array** | **78.03** | **336** | P | **P** | **10 06 02.6** | **-1.6** |
| | 0.5nm,0.5s,baz=119,slow=4.2,SNR=14 | | | | | | |
| ILAR | | | | pP | **pP** | **10 06 17.0** | **+2.4** |
| | 0.4nm,0.7s,baz=100,slow=3.7,SNR=4.3 | | | | | | |
| **JMIC** | **Jan Mayen** | **79.33** | **18** | LR | LR | 10 36 23.2 | |
| | comp=Z,88nm,20.0s,baz=180,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **144.44** | **234** | PKP | **PKPab** | **10 13 40.1** | **-1.1** |
| | 0.8nm,0.7s,baz=118,slow=3.7,SNR=9.1 | | | | | | |
| ASAR | | | | pPKP | **pPKPdf** | **10 13 53.8** | **-0.1** |
| | 1.3nm,0.6s,baz=117,slow=3.8,SNR=7.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **145.71** | **240** | PKPbc | **PKPdf** | **10 13 44.5** | **-0.7** |
| | 0.4nm,0.5s,baz=105,slow=3.1,SNR=5.9 | | | | | | |
| WRA | | | | pPKPbc | pPKPbc | 10 13 57.7 | +1.2 |
| | 1.6nm,0.6s,baz=110,slow=3.0,SNR=10 | | | | | | |

**MAN 12 09:55:32, 10°.22N**×**125°.90E, h15km, mb4.3, ML3.2, MS3.0, 1D, Leyte**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCPH** | **Surigao** | **0.60** | **223** | ⇓*e*P | Pb | 09 55 44.7 | +0.5 |
| SCPH | | | | *e*S | Sn | 09 55 56.6 | +1.2 |
| **MSLP** | **Maasin** | **1.03** | **265** | *e*P | Pb | 09 55 51.3 | -0.3 |
| **BUTP** | **Butuan** | **1.28** | **193** | *e*P | Pn | 09 55 54.8 | -0.6 |
| BUTP | | | | *e*S | Sg | 09 56 13.7 | +0.3 |
| **OCLP** | **Ormoc** | **1.51** | **303** | *e*P | Pn | 09 55 58.6 | +0.1 |
| **BUKP** | **Musuan** | **2.47** | **200** | *e*P | Pn | 09 56 12.8 | +0.9 |
| **PAGZ** | **Pagadian** | **3.43** | **227** | *e*P | Pn | 09 56 26.4 | +1.4 |

*GUC **12** 09:57:22.2±0.5, 37°.10S×74°.09W, h17km±3km, ML4.2*
*NEIC **12** 09:57:22.0, 37°.10S×74°.09W, h17km, mb4.3/2, ML4.2(GUC), After GUC.*
*NEIC Felt [III] at Arauco, Concepcion, Coronel, Lebu, Penco, San Pedro and Talcahuano; [II] at Chiguayante, Coelemu and Tome.*
*IDC **12** 09:57:24.6±1.0, 36°.99S×73°.74W, h0km, mb3.9/5, mb1 4.1/7, mb1mx3.9/29, mbtmp3.9/7, ML2.8/1, MS3.8/4, Ms1 3.8/4, ms1mx3.4/25, Error ellipse: s-maj=39.9km s-min=19.7km az=96.0*
**ISC 12 09:57:22.2**±1.8**, 37°.14S**±0°.05×**74°.01W**±0°.08**, h10km**±10km**, n32,** σ**2$^s$18**/33**, mb4.1**/6**, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **COCH** | **Cobquecura** | **1.41** | **45** | *e*P | **Pn** | **09 57 47.9** | **0.0** |
| COCH | | | | *e*S | **Sg** | **09 58 07.9** | **+0.4** |
| COCH | | | | AML | AML | 09 58 13.2 | |
| | comp=N,7μm,0.5s | | | | | | |
| **CCHI** | **Chillan** | **1.64** | **72** | *e*P | **Pn** | **09 57 52.5** | **+1.4** |
| CCHI | | | | *e*S | **Sb** | **09 58 15.5** | **+2.2** |
| **PSCH** | **Puerto Saavedr** | **1.73** | **164** | *e*P | **Pg** | **09 57 56.0** | **+0.5** |
| PSCH | | | | *e*S | Sg | 09 58 27.1 | +9.3 |
| **LNCH** | **Linares** | **2.33** | **57** | *e*P | **Pn** | **09 58 01.6** | **+1.0** |
| LNCH | | | | *e*S | **Sn** | **09 58 32.0** | **+2.7** |
| **TALC** | **Talca** | **2.59** | **49** | *e*P | **Pn** | **09 58 06.5** | **+2.3** |
| **VLCH** | **Valdivia** | **2.73** | **168** | *e*P | **Pn** | **09 58 08.5** | **+2.3** |
| VLCH | | | | *e*S | **Sb** | **09 58 43.7** | **-1.0** |
| **NICH** | **Los Niches** | **3.10** | **47** | *e*P | **Pn** | **09 58 13.3** | **+2.1** |
| **CLCH** | **Cerro Calan** | **4.69** | **38** | *e*P | Pn | 09 58 29.5 | -3.6 |
| CLCH | | | | *e*S | **Sn** | **09 59 25.1** | **-2.6** |
| **ROC1** | **El Roble** | **4.83** | **32** | *e*P | **Pn** | **09 58 34.8** | **-0.4** |
| ROC1 | | | | *e*S | **Sg** | **09 59 58.8** | **+1.6** |
| **ROCH** | **El Roble** | **4.83** | **32** | *e*P | **Pn** | **09 58 32.0** | **-3.2** |
| ROCH | | | | *e*S | **Sn** | **09 59 29.5** | **-1.8** |
| **AAGR** | **Agrelo** | **5.86** | **48** | *e*P | Pn | 09 58 54.4 | +5.1 |
| **AUSP** | **Uspallata** | **6.21** | **39** | *e*P | **Pn** | **09 58 55.6** | **+1.4** |
| **RTLS** | **Leoncito** | **6.60** | **38** | *e*P | **Pn** | **09 59 01.4** | **+1.9** |
| RTLS | | | | *e*S | **Sg** | **10 00 48.7** | **-5.3** |
| **CFAA** | **Coronel Fontan** | **7.30** | **43** | Pn | **Pn** | **09 59 08.7** | **-0.2** |
| | comp=N,0.2nm,0.3s,baz=212,slow=12,SNR=17 | | | | | | |
| CFAA | | | | Sn | **Sn** | **10 00 29.1** | **-2.8** |
| | comp=N,0.3nm,0.3s,baz=213,slow=17,SNR=2.3 | | | | | | |
| CFAA | | | | LR | LR | 10 01 29.7 | |
| | comp=N,7.2nm,18.6s,baz=226,slow=35 | | | | | | |
| **CFAA** | **Coronel Fontan** | **7.30** | **43** | *e*P | **Pn** | **09 59 08.7** | **-0.2** |
| **RTLL** | **Cerro Villicun** | **7.39** | **40** | *e*P | **Pn** | **09 59 10.3** | **+0.2** |
| **AMOG** | **MOGNA** | **7.69** | **38** | *e*P | **Pn** | **09 59 14.5** | **+0.1** |
| **TRQA** | **Tornquist** | **9.60** | **99** | *e*Pn | **Pn** | **09 59 38.5** | **-1.9** |
| | comp=N,7.1nm,0.8s | | | | | | |
| TRQA | | | | *e*Sn | **Sn** | **10 01 25.9** | **-2.4** |
| **TCA** | **Tanti** | **9.71** | **56** | *e*P | **Pn** | **09 59 41.6** | **-0.4** |
| **LVC** | **Limon Verde** | **15.13** | **18** | Pn | **P** | **10 00 59.2** | **-2.3** |
| | comp=N,7.6nm,0.3s,baz=196,slow=18,SNR=1.8 | | | | | | |
| **CPUP** | **Villa Florida** | **17.79** | **57** | LR | LR | 10 08 52.2 | |
| | comp=N,294nm,18.4s,baz=234,slow=39 | | | | | | |
| **USHA** | **Ushuaia** | **18.11** | **170** | LR | LR | 10 09 10.5 | |
| | comp=N,384nm,19.7s,baz=324,slow=39 | | | | | | |
| **LPAZ** | **La Paz** | **21.41** | **16** | P | **P** | **10 02 13.0** | **+2.1** |
| | comp=N,3.0nm,0.8s,baz=197,slow=10,SNR=7.8 | | | | | | |
| **ATAH** | **Atahualpa** | **30.13** | **351** | LR | LR | 10 13 19.7 | |
| | comp=N,60nm,19.6s,baz=175,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **49.32** | **157** | P | P | 10 06 15.6 | +4.5 |
| | comp=N,1.4nm,0.9s,baz=269,slow=7.4,SNR=11 | | | | | | |
| **SNAA** | **Sanae** | **49.32** | **157** | *e*P | **P** | **10 06 08.7** | **-2.4** |
| | comp=N,4.0nm,1.4s | | | | | | |
| **QSPA** | **South Pole Qui** | **53.10** | **180** | P | P | 10 06 44.6 | +4.9 |
| | comp=N,3.1nm,0.9s,baz=143,slow=4.0,SNR=9.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.74** | **333** | P | P | 10 08 48.2 | +3.6 |
| | comp=N,1.8nm,1.0s,baz=154,slow=7.5,SNR=12 | | | | | | |
| **GLA** | **Glamis** | **79.53** | **326** | *e*P | **P** | **10 09 28.4** | **-0.8** |
| | comp=N,1.1nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.77** | **71** | P | **P** | **10 10 09.4** | **+2.4** |
| | comp=N,0.6nm,0.8s,baz=224,slow=4.0,SNR=3.6 | | | | | | |
| **MATP** | **Matopo** | **87.35** | **114** | LR | LR | 10 43 34.3 | |
| | comp=N,126nm,20.3s,baz=184,slow=32 | | | | | | |
| **BVAR** | **Borovoye Array** | **150.64** | **46** | PKPbc | **PKPbc** | **10 17 17.0** | **+3.2** |
| | comp=N,0.7nm,0.7s,baz=282,slow=2.9,SNR=3.9 | | | | | | |

*NIED **12** 09:58:00, 38°.40N×143°.50E, h11km, Mw3.8 Best double couple: M₀6.64000×10^14 NP1:φs218.00000°, δ35.00000°, λ105.00000°. NP2:φs19.00000°, δ57.00000°, λ80.00000°.*
*IDC **12** 09:58:21.0±1.7, 38°.36N×143°.74E, h0km, mb3.9/5, mb1 3.9/9, mb1mx3.7/57, mbtmp3.9/9, ML3.9/2, MS2.8/2, Ms1 2.8/2, ms1mx2.4/59, Error ellipse: s-maj=43.6km s-min=18.2km az=77.0*
*ISCJB **12** 09:58:22.1±0.7, 38°.37N±0°.04×143°.57E±0°.06, h15km, mb4.0/8, Error ellipse: s-maj=7.3km s-min=5.4km az=22.8*
*NEIC **12** 09:58:22.9±0.7, 38°.35N×143°.66E, h10km, mb4.3/3, Error ellipse: s-maj=14.1km s-min=8.8km az=92.0*
*JMA **12** 09:58:24.3±0.2, 38°.37N×143°.49E, h37km, M3.8*
**ISC 12 09:58:24.3**±1.3**, 38°.39N**±0°.06×**143°.49E**±0°.10**, h15km, n36,** σ**1$^s$27**/36**, mb4.0**/8**, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OFUJ** | **Ofunato** | **1.58** | **297** | P | **Pn** | **09 58 51.0** | **-0.8** |
| OFUJ | | | | *e*S | **Sn** | **09 59 11.1** | **-0.9** |
| **JIO** | **Ouri** | **1.68** | **273** | P | **Pn** | **09 58 52.4** | **-0.8** |
| JIO | | | | *e*S | **Sn** | **09 59 12.7** | **-1.7** |
| **JMK** | **Ichinoseki** | **1.86** | **288** | P | **Pn** | **09 58 55.2** | **-0.5** |
| **JOM** | **Ohasama** | **2.03** | **303** | P | **Pn** | **09 58 57.5** | **-0.4** |
| **JMM** | **Marumori** | **2.19** | **257** | P | **Pn** | **09 58 59.2** | **-0.9** |
| JMM | | | | *e*S | **Sn** | **09 59 24.4** | **-2.5** |
| **JOU** | **Okura** | **2.22** | **270** | P | **Pn** | **09 59 00.5** | **-0.1** |
| **JFK** | **Kawauchi** | **2.31** | **245** | P | **Pn** | **09 59 00.2** | **-1.6** |
| JFK | | | | *e*S | **Sn** | **09 59 26.6** | **-3.3** |
| **JRG** | **Rokugo** | **2.45** | **295** | P | **Pn** | **09 59 04.0** | **+0.3** |
| **JANG** | **Nango** | **2.51** | **323** | P | **Pn** | **09 59 03.7** | **-0.8** |
| **JYK** | **Kaneyama** | **2.51** | **283** | P | **Pn** | **09 59 04.9** | **+0.4** |
| **JFT** | **Otama** | **2.64** | **252** | P | **Pn** | **09 59 06.4** | **+0.1** |
| JFT | | | | *e*S | **Sn** | **09 59 37.5** | **-0.6** |
| **JAH** | **Hinai** | **2.85** | **310** | P | **Pn** | **09 59 09.6** | **+0.3** |
| **JTM** | **Tenmabayashi** | **3.04** | **323** | S | **Sn** | **09 59 47.8** | **-0.2** |
| **JAW** | **Awa shima** | **3.33** | **273** | P | **Pn** | **09 59 16.4** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **4.59** | **248** | Pn | **Pn** | **09 59 33.9** | **+0.8** |
| | 4.1nm,0.3s,baz=94,slow=16,SNR=46 | | | | | | |
| **MAJO** | **Matsushiro** | **4.59** | **248** | *e*Pn | **Pn** | **09 59 33.6** | **+0.4** |
| MAJO | | | | *e*Sn | **Sn** | **10 00 28.0** | **+1.8** |
| **MAT** | **Matsushiro** | **4.59** | **248** | P | **Pn** | **09 59 34.2** | **+1.1** |
| MAT | | | | *e*S | **Sn** | **10 00 29.8** | **+3.6** |
| **ASAJ** | **Asahikawa** | **5.76** | **354** | Pn | **Pn** | **09 59 48.9** | **-0.3** |
| | baz=243,slow=4.5 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **10 00 54.6** | **-0.5** |
| | 1.1nm,0.3s,baz=270,slow=20,SNR=2.9 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **6.06** | **211** | Pn | **Pn** | **09 59 52.2** | **-1.1** |
| | 9.6nm,0.3s,baz=36,slow=18,SNR=9.5 | | | | | | |
| JHJ | | | | Sn | Sn | 10 00 54.3 | -8.1 |
| | 18nm,0.3s,baz=267,slow=23,SNR=7.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.42** | **308** | Pn | **Pn** | **10 00 54.5** | **+1.4** |
| | 0.2nm,0.3s,baz=120,slow=14,SNR=4.6 | | | | | | |
| **JNU** | **Nakatsue** | **11.51** | **247** | LR | LR | 10 06 14.1 | |
| | comp=Z,48nm,19.9s,baz=308,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **12.33** | **270** | LR | LR | 10 05 26.3 | |
| | comp=Z,36nm,18.1s,baz=70,slow=34 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.51** | **126** | T | T | 10 33 22.7 | |
| | baz=318,slow=75,SNR=35 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.52** | **126** | T | T | 10 33 20.9 | |
| | baz=318,slow=75,SNR=19 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.53** | **126** | T | T | 10 33 16.2 | |
| | baz=318,slow=75,SNR=21 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.30** | **128** | T | T | 10 34 11.6 | |
| | baz=312,slow=74,SNR=4.6 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.30** | **128** | T | T | 10 34 12.8 | |
| | baz=312,slow=74,SNR=4.4 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.32** | **128** | T | T | 10 34 11.6 | |
| | baz=312 | | | | | | |
| **SONM** | **Songino Array** | **28.44** | **301** | P | **P** | **10 04 19.0** | **+0.5** |
| | 1.4nm,0.6s,baz=92,slow=9.9,SNR=2.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.24** | **311** | P | **P** | **10 06 17.2** | **+0.5** |
| | 0.6nm,0.3s,baz=103,slow=6.2,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.81** | **301** | P | **P** | **10 06 37.8** | **+0.3** |
| | 0.4nm,0.4s,baz=79,slow=11,SNR=3.6 | | | | | | |
| **KURK** | **Kurchatov** | **46.41** | **307** | *e*P | **P** | **10 06 50.3** | **+0.3** |
| | 4.2nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **50.44** | **298** | *e*P | **P** | **10 07 22.6** | **+1.1** |
| | 2.6nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **58.64** | **190** | *e*P | **P** | **10 08 20.5** | **-0.4** |
| | 1.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.65** | **190** | P | **P** | **10 08 20.2** | **-0.8** |
| | 1.8nm,0.7s,baz=9.9,slow=7.4,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **62.38** | **190** | P | **P** | **10 08 45.6** | **-0.8** |
| | 0.3nm,0.7s,baz=13,slow=7.8,SNR=5.3 | | | | | | |

*SKHL **12** 10:04:13.9±1.6, 54°.70N×142°.20E, h10km, mb4.1/5*
*ISCJB **12** 10:04:14.4±0.5, 54°.68N±0°.03×142°.30E±0°.06, h10km, mb3.5/9, MS2.7/1, Error ellipse: s-maj=5.0km s-min=4.3km az=152.0*
*IDC **12** 10:04:15.3±0.8, 54°.72N×142°.70E, h0km, mb3.7/8, mb1 3.9/10, mb1mx3.6/62, mbtmp3.7/10, ML3.2/2, MS2.7/2, Ms1 2.7/2, ms1mx2.3/59, Error ellipse: s-maj=21.9km s-min=14.5km az=141.0*
*MOS **12** 10:04:15.7±0.8, 54°.70N×142°.79E, h11km, mb4.1/1, Error ellipse: s-maj=25.7km s-min=10.0km az=84.0*
**ISC 12 10:04:16.4**±0.6**, 54°.70N**±0°.04×**142°.48E**±0°.04**, h10km, n28,** σ**1$^s$91**/35**, mb3.5**/9**, Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKH** | **Okha** | **1.19** | **167** | *e*PN | **Pb** | **10 04 36.9** | **-2.0** |
| OKH | | | | *i* S | **Sb** | **10 04 53.0** | **-1.3** |
| OKH | | | | smax | smax | | |
| | comp=E,2.0nm,0.5s | | | | | | |
| OKH | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| **OKH** | **Okha** | **1.19** | **167** | *e*Pg | **Pb** | **10 04 36.2** | **-2.7** |
| OKH | | | | AMB | AMB | 10 04 37.1 | |
| | comp=N,400nm,0.5s | | | | | | |
| OKH | | | | *i* Sg | **Sb** | **10 04 52.5** | **-1.8** |
| OKH | | | | A | A | 10 04 53.1 | |
| | comp=N,1μm,0.5s | | | | | | |
| OKH | | | | A | A | 10 04 53.1 | |
| | comp=N,2μm,0.5s | | | | | | |
| OKH | | | | A | A | 10 04 53.2 | |
| | comp=N,416nm,1.0s | | | | | | |
| **NKL** | **Nikolayevsk** | **1.88** | **215** | *i* PN | **Pb** | **10 04 48.6** | **-2.2** |
| NKL | | | | pmax | pmax | | |
| | comp=Z,190nm,0.2s | | | | | | |
| NKL | | | | pmax | pmax | | |
| | comp=N,110nm,0.2s | | | | | | |
| NKL | | | | pmax | pmax | | |
| | comp=E,70nm,0.2s | | | | | | |
| **NKL** | **Nikolayevsk** | **1.88** | **215** | *i* Pg | **Pb** | **10 04 48.0** | **-2.8** |
| NKL | | | | AMB | AMB | 10 04 49.0 | |
| | comp=E,223nm,0.8s | | | | | | |
| NKL | | | | *e*Sg | **Sb** | **10 05 12.5** | **-1.8** |
| NKL | | | | A | A | 10 05 19.0 | |
| | comp=E,900nm,1.5s | | | | | | |
| **TYV** | **Tymovskoe** | **3.85** | **178** | *e*PN | **Pn** | **10 05 16.0** | **+0.4** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,50nm,0.6s | | | | | | |
| **TYV** | **Tymovskoe** | **3.85** | **178** | *e*Pg | **Pg** | **10 05 30.0** | **0.0** |
| TYV | | | | *e*Sg | **Sg** | **10 06 22.0** | **+2.1** |
| TYV | | | | A | A | 10 06 24.0 | |
| | comp=Z,22nm,0.8s | | | | | | |
| **GRNR** | **Gornyy** | **5.39** | **225** | *e*Pg | **Pg** | **10 05 59.0** | **-0.5** |
| GRNR | | | | AMB | AMB | 10 06 03.0 | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| GRNR | | | | *e*Sg | Sg | 10 07 13.0 | +3.8 |
| GRNR | | | | A | A | 10 07 13.8 | |
| | comp=Z,220nm,0.8s | | | | | | |
| **UGL** | **Uglegorsk** | **5.64** | **183** | *e*PN | **Pn** | **10 05 40.6** | **+0.4** |
| **EKMR** | **Ekimchan** | **5.87** | **258** | *e*Pg | **Pg** | **10 06 07.5** | **-1.1** |
| EKMR | | | | AMB | AMB | 10 06 08.5 | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| EKMR | | | | *e*Sg | **Sg** | **10 07 26.0** | **+1.5** |
| EKMR | | | | A | A | 10 07 38.9 | |
| | comp=Z,47nm,0.6s | | | | | | |
| EKMR | | | | A | A | 10 07 38.9 | |
| | comp=Z,33nm,0.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.76** | **179** | *e*PN | **Pn** | **10 06 10.5** | **+1.2** |
| YSS | | | | *e*S | **Sn** | **10 07 42.0** | **+4.8** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.1s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,30nm,0.3s | | | | | | |
| **BMKR** | **Bomnak** | **7.90** | **276** | *e*P | **Pn** | **10 06 10.0** | **-1.2** |
| BMKR | | | | *e*S | **Sn** | **10 07 39.0** | **-1.5** |
| BMKR | | | | A | A | 10 07 44.3 | |
| | comp=N,2.0nm,0.5s | | | | | | |
| **KLR** | **Kul'dur** | **8.59** | **235** | *e*Pg | **Pg** | **10 06 59.0** | **-1.7** |
| **YASR** | **Yasnyy** | **8.66** | **267** | *e*P | **Pn** | **10 06 19.5** | **-2.1** |
| YASR | | | | AMB | AMB | 10 06 20.0 | |
| | comp=N,2.0nm,0.3s | | | | | | |
| YASR | | | | *e*Sg | **Sg** | **10 08 54.8** | **+0.9** |
| YASR | | | | A | A | 10 08 55.3 | |
| | comp=N,10.0nm,0.7s | | | | | | |
| YASR | | | | A | A | 10 08 55.3 | |
| | comp=N,4.0nm,0.7s | | | | | | |
| YASR | | | | A | A | 10 08 55.3 | |
| | comp=N,5.0nm,0.7s | | | | | | |
| **ZEA** | **Zeya** | **8.97** | **270** | *e*Sg | Sg | 10 09 23.5 | +19 |
| ZEA | | | | A | A | 10 09 24.0 | |
| | comp=N,21nm,0.8s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PETK | Petropavlovsk- | 9.13 | 94 | Pn | Pn | 10 06 26.5 | -1.5 |
| | comp=N,0.6nm,0.3s,baz=295,slow=11,SNR=11 | | | | | | |
| PETK | | | | Sn | Sn | 10 08 07.4 | -3.3 |
| | comp=N,0.4nm,0.3s,baz=299,slow=13,SNR=4.3 | | | | | | |
| PETK | | | | LR | LR | 10 09 33.1 | |
| | comp=N,34nm,21.1s,baz=262,slow=35 | | | | | | |
| SEY | Seymchan | 9.71 | 28 | Pn | Pn | 10 06 36.6 | +0.8 |
| | comp=N,0.5nm,0.3s,baz=226,slow=13,SNR=7.8 | | | | | | |
| SEY | | | | Sn | Sn | 10 08 24.2 | -0.6 |
| | comp=N,3.2nm,0.3s,baz=343,slow=19,SNR=17 | | | | | | |
| BILL | Bilibino | 17.39 | 31 | i P | P | 10 08 23.7 | +3.6 |
| BILL | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| SONM | Songino Array | 23.39 | 268 | P | P | 10 09 27.6 | +2.4 |
| | comp=Z,0.9nm,0.7s,baz=60,slow=9.5,SNR=4.4 | | | | | | |
| SONM | | | | LR | LR | 10 18 04.4 | |
| | comp=Z,27nm,19.9s,baz=78,slow=35 | | | | | | |
| ILAR | Eielson Array | 35.09 | 45 | P | P | 10 11 08.7 | -0.5 |
| | comp=Z,0.5nm,0.6s,baz=277,slow=6.7,SNR=8.8 | | | | | | |
| KURK | Kurchatov | 37.70 | 291 | P | P | 10 11 33.5 | +1.9 |
| KURBB | Kurchatov Arra | 37.80 | 291 | P | P | 10 11 33.5 | +1.0 |
| | comp=Z,0.5nm,0.6s,baz=65,slow=9.2 | | | | | | |
| MKAR | Makanchi Array | 37.82 | 284 | P | P | 10 11 33.8 | +1.1 |
| | comp=Z,1.0nm,0.6s,baz=56,slow=7.4,SNR=7.1 | | | | | | |
| MKAR | Makanchi Array | 37.82 | 284 | P | P | 10 11 33.8 | +1.1 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 64.47 | 59 | P | P | 10 14 53.3 | +0.2 |
| | comp=Z,1.5nm,0.7s,baz=305,slow=6.0,SNR=11 | | | | | | |
| FITZ | Fitzroy Crossi | 73.93 | 197 | P | P | 10 15 52.9 | +1.5 |
| | comp=Z,1.2nm,0.6s,baz=14,slow=8.3,SNR=4.0 | | | | | | |
| WRA | Warramunga Arr | 74.67 | 188 | P | P | 10 15 55.9 | +0.2 |
| | comp=Z,0.3nm,0.9s,baz=7.9,slow=6.6,SNR=2.6 | | | | | | |
| ASAR | Alice Springs | 78.39 | 188 | P | P | 10 16 17.4 | +0.5 |
| | comp=Z,0.4nm,0.7s,baz=6.1,slow=6.3,SNR=5.2 | | | | | | |
| TXAR | Lajitas Array | 78.94 | 54 | P | P | 10 16 22.6 | +2.5 |
| | comp=Z,0.2nm,0.8s,baz=308,slow=4.5,SNR=2.6 | | | | | | |

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**IDC 12 10:10:00.7**±3.2**, 30°.08S×177°.56W, h0km, mb3.6**/2**, mb1 3.8**/2**, mb1mx3.4**/29**, mbtmp3.6**/2**, Error ellipse: s-maj=66.0km s-min=24.1km az=91.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 0.88 | 339 | Pn | Pn | 10 10 20.7 | +0.4 |
| | 229nm,0.3s,baz=198,slow=19,SNR=7.8 | | | | | | |
| RAO | | | | Sn | Sn | 10 10 33.9 | +0.1 |
| | 842nm,0.3s,baz=360,slow=23,SNR=14 | | | | | | |
| URZ | Urewera | 9.28 | 207 | Sn | Sn | 10 13 57.7 | -3.2 |
| | 0.9nm,0.3s,baz=349,slow=23,SNR=6.7 | | | | | | |
| ASAR | Alice Springs | 43.51 | 266 | P | P | 10 18 06.0 | -0.3 |
| | 0.2nm,0.4s,baz=108,slow=7.6,SNR=4.3 | | | | | | |
| WRA | Warramunga Arr | 44.47 | 272 | P | P | 10 18 13.9 | -0.1 |
| | 0.7nm,0.5s,baz=110,slow=8.0,SNR=8.8 | | | | | | |
| FINES | FINESS Array B | 144.97 | 340 | PKP | PKPab | 10 29 38.2 | -0.2 |
| | 20nm,1.3s,baz=58,slow=3.4,SNR=5.7 | | | | | | |

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*BJI **12** 10:13:52.8, 37°.07N×70°.87E, h10km, mb4.3/5, mB4.7/3, ML4.4/3, Ms3.7/3*
*ISCJB **12** 10:14:05.2±0.3, 36°.96N±0°.03×71°.60E±0°.04, h106km, mb4.0/16, Error ellipse: s-maj=4.7km s-min=3.3km az=153.0*
*IDC **12** 10:14:05.8±3.0, 36°.91N×71°.63E, h94km±24km, mb3.8/14, mb1 3.9/21, mb1mx3.7/64, mbtmp4.2/21, Error ellipse: s-maj=24.0km s-min=15.5km az=170.0*
*NEIC **12** 10:14:07.6±1.9, 37°.04N×71°.59E, h106km±14km, mb4.4/4, Error ellipse: s-maj=19.4km s-min=10.3km az=184.0*
*MOS **12** 10:14:07.4±1.0, 37°.11N×71°.58E, h117km, mb4.2/12, Error ellipse: s-maj=13.5km s-min=5.8km az=88.3*
*NNC **12** 10:14:11.8±1.2, 37°.44N×71°.39E, h135km±13km, mb3.6, mpv4.4, Error ellipse: s-maj=11.9km s-min=4.9km az=161.0*
**ISC 12 10:14:06.5**±0.5**, 36°.96N**±0°.05×**71°.54E**±0°.05**, h106km, n106, σ1s.73**/114**, mb4.0**/16**, 9C-7D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.83 | 312 | ⇑P | Pn | 10 14 51.2 | +0.9 |
| | 284nm,0.4s | | | | | | |
| DZET | | | | ⇑S | Sn | 10 15 22.6 | -1.3 |
| | 306nm,0.3s | | | | | | |
| DZET | Dzherino | 2.83 | 312 | PN | Pn | 10 14 51.1 | +0.9 |
| DZET | | | | pmax | pmax | | |
| | comp=Z,284nm,0.4s | | | | | | |
| CEP | Cherat | 3.14 | 174 | P | Pn | 10 15 02.3 | +7.9 |
| CEP | | | | S | Sn | 10 15 41.0 | +10 |
| SFK | Sufi-Kurgan | 3.42 | 26 | ⇑P | Pn | 10 14 59.9 | +1.7 |
| | comp=Z,19nm,0.2s | | | | | | |
| SFK | | | | ⇓S | Sn | 10 15 37.1 | -1.0 |
| | comp=Z,57nm,0.2s | | | | | | |
| SFK | Sufi-Kurgan | 3.42 | 26 | PN | Pn | 10 14 59.9 | +1.7 |
| SFK | | | | S | Sn | 10 15 37.1 | -1.0 |
| SFK | | | | pmax | pmax | | |
| | comp=Z,19nm,0.2s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,57nm,0.2s | | | | | | |
| THW | Thamme Wali | 4.16 | 178 | P | Pn | 10 15 13.4 | +5.5 |
| KSH | Kashi | 4.33 | 52 | Pg | Pn | 10 15 06.7 | -3.6 |
| KSH | | | | Sn | Sn | 10 15 48.6 | -11 |
| KSH | | | | SME | | | |
| | comp=N,650nm,0.2s | | | | | | |
| SARP | Sargodha | 5.11 | 169 | P | Pn | 10 15 25.4 | +4.7 |
| AML | Almayashu | 5.43 | 17 | P | Pn | 10 15 25.7 | +0.3 |
| | SNR=138 | | | | | | |
| MNAS | Manas | 5.57 | 7 | ⇑P | Pn | 10 15 27.4 | +0.3 |
| | comp=N,20nm,0.4s | | | | | | |
| MNAS | | | | ⇑S | Sn | 10 16 25.2 | -4.8 |
| | comp=N,84nm,0.4s | | | | | | |
| MNAS | Manas | 5.57 | 7 | PN | Pn | 10 15 27.4 | +0.3 |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.4s | | | | | | |
| UCH | Uchtor | 5.74 | 23 | P | Pn | 10 15 30.2 | +0.5 |
| | SNR=37 | | | | | | |
| KZA | Kyzart | 5.86 | 28 | P | Pn | 10 15 31.9 | +0.6 |
| | SNR=11 | | | | | | |
| EKS2 | Erkin-Say | 5.95 | 16 | ePN | Pn | 10 15 32.9 | +0.7 |
| EKS2 | | | | e | | 10 16 37.9 | |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,14nm,0.4s | | | | | | |
| EKS2 | Erkin-Say | 5.95 | 16 | P | Pn | 10 15 33.1 | +0.9 |
| | SNR=17 | | | | | | |
| EKS2 | Erkin-Say | 5.95 | 16 | ePn | Pn | 10 15 32.9 | +0.7 |
| | comp=Z,14nm,0.4s | | | | | | |
| EKS2 | | | | eSn | Sn | 10 16 37.9 | -1.2 |
| AAK | Ala-Archa | 6.11 | 21 | ⇓P | Pn | 10 15 35.2 | +0.9 |
| | comp=Z,9.1nm,0.3s | | | | | | |
| AAK | | | | ⇓S | Sn | 10 16 39.1 | -3.8 |
| | comp=Z,59nm,0.7s | | | | | | |
| AAK | Ala-Archa | 6.11 | 21 | P | Pn | 10 15 34.9 | +0.5 |
| | comp=Z,8.8nm,0.3s,baz=198,slow=2.8,SNR=58 | | | | | | |
| AAK | | | | S | Sn | 10 16 39.1 | -3.8 |
| | comp=Z,5.9nm,0.3s,baz=338,slow=24,SNR=11 | | | | | | |
| AAK | Ala-Archa | 6.11 | 21 | P | Pn | 10 15 35.3 | +0.9 |
| | SNR=20 | | | | | | |
| AAK | Ala-Archa | 6.11 | 21 | ePn | Pn | 10 15 35.2 | +0.9 |
| AAK | | | | eSn | Sn | 10 16 43.2 | +0.3 |
| DHRM | DHARAMSHALA | 6.12 | 139 | eP | Pn | 10 15 37.3 | +2.7 |
| DHRM | | | | eS | Sn | 10 16 41.1 | -2.3 |
| DHRM | | | | AML | AML | 10 16 49.5 | |
| | comp=E,1μm,0.5s | | | | | | |
| DHRM | | | | AML | AML | 10 16 49.6 | |
| | comp=N,772nm,0.3s | | | | | | |
| KK31 | Karatay Array | 6.19 | 353 | ⇑P | Pn | 10 15 35.4 | 0.0 |
| | comp=N,30nm,0.3s,baz=172,slow=12,SNR=686 | | | | | | |
| KK31 | | | | ⇓S | Sn | 10 16 39.3 | -5.5 |
| | comp=N,21nm,0.3s,baz=171,slow=21,SNR=9.8 | | | | | | |
| KK31 | Karatay Array | 6.19 | 353 | ePN | Pn | 10 15 35.3 | 0.0 |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,30nm,0.3s | | | | | | |
| KKAR | Karatay Array | 6.19 | 353 | ePN | Pn | 10 15 35.2 | -0.2 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,96nm,0.3s | | | | | | |
| KKAR | Karatay Array | 6.19 | 353 | ePn | Pn | 10 15 35.1 | -0.2 |
| | comp=Z,96nm,0.3s | | | | | | |
| KKAR | | | | eSn | Sn | 10 16 39.5 | -5.2 |
| ULHL | Ulahol | 6.41 | 33 | P | Pn | 10 15 38.6 | +0.1 |
| | SNR=21 | | | | | | |
| CHMS | Chumysh | 6.52 | 21 | P | Pn | 10 15 40.5 | +0.7 |
| | SNR=6.3 | | | | | | |
| USP | Ospenovka | 6.70 | 19 | P | Pn | 10 15 42.8 | +0.5 |
| | SNR=8.0 | | | | | | |
| TKM2 | Tokmak 2 | 6.72 | 26 | ⇑P | Pn | 10 15 43.2 | +0.5 |
| | comp=Z,11nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 6.72 | 26 | ePN | Pn | 10 15 43.2 | +0.5 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,16nm,0.5s | | | | | | |
| TKM2 | Tokmak 2 | 6.72 | 26 | P | Pn | 10 15 43.6 | +0.8 |
| | SNR=14 | | | | | | |
| TKM2 | Tokmak 2 | 6.72 | 26 | ePn | Pn | 10 15 43.2 | +0.5 |
| | comp=Z,16nm,0.5s | | | | | | |
| TKM2 | | | | eSn | Sn | 10 16 56.8 | -1.1 |
| SMLA | Simla | 7.46 | 140 | eP | Pn | 10 15 54.2 | +1.7 |
| SMLA | | | | eS | Sn | 10 17 12.6 | -2.9 |
| SMLA | | | | AML | AML | 10 17 19.7 | |
| | comp=E,302nm,0.2s | | | | | | |
| SMLA | | | | AML | AML | 10 17 21.5 | |
| | comp=N,350nm,0.7s | | | | | | |
| DDI | Dehra Dun | 8.56 | 139 | eP | Pn | 10 16 08.7 | +1.1 |
| DDI | | | | eS | Sn | 10 17 39.0 | -3.4 |
| DDI | | | | AML | AML | 10 17 45.5 | |
| | comp=N,321nm,0.5s | | | | | | |
| DDI | | | | AML | AML | 10 17 46.5 | |
| | comp=E,273nm,0.4s | | | | | | |
| PDGK | Podgornoye | 8.80 | 41 | ⇓P | Pn | 10 16 10.3 | -0.4 |
| | comp=E,6.0nm,0.6s | | | | | | |
| PDGK | Podgornoye | 8.80 | 41 | PN | Pn | 10 16 10.3 | -0.4 |
| PDGK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| IMYA | Miami | 9.21 | 270 | eP | Pn | 10 16 17.4 | +0.9 |
| NDI | New Delhi | 9.53 | 148 | eP | Pn | 10 16 22.5 | +1.8 |
| NDI | | | | eS | Sn | 10 18 02.0 | -4.0 |
| IMOG | Moghan | 9.86 | 269 | eP | Pn | 10 16 25.7 | +0.3 |
| IEMG | Emamgholi | 10.29 | 276 | eP | Pn | 10 16 28.9 | -2.5 |
| IKRD | Kardeh | 10.44 | 273 | eP | Pn | 10 16 22.8 | -11 |
| GEYT | Alibeck | 10.72 | 279 | P | Pn | 10 16 36.1 | -0.7 |
| | comp=Z,9.0nm,0.3s,baz=110,slow=7.5,SNR=14 | | | | | | |
| GEYT | | | | S | Sn | 10 18 30.2 | -4.7 |
| | comp=Z,3.9nm,0.3s,baz=95,slow=15,SNR=4.9 | | | | | | |
| ISFR | Sfrayin | 10.83 | 275 | eP | Pn | 10 16 35.5 | -3.1 |
| OTUK | Ortayu | 11.30 | 3 | ⇑P | Pn | 10 16 42.4 | -2.2 |
| | comp=Z,1.7nm,0.5s | | | | | | |
| OTUK | Ortayu | 11.30 | 3 | P | Pn | 10 16 42.3 | -2.2 |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| MKAR | Makanchi Array | 12.67 | 36 | P | Pn | 10 17 02.1 | -0.6 |
| | comp=Z,0.1nm,0.3s,baz=221,slow=13,SNR=6.5 | | | | | | |
| DANN | Dangsing | 13.39 | 126 | eP | Pn | 10 17 11.4 | -1.2 |
| KOLN | Koldanda | 13.69 | 129 | eP | Pn | 10 17 14.8 | -1.6 |
| | comp=Z,42nm,0.4s | | | | | | |
| GKN | Gorkha | 14.20 | 125 | eP | Pn | 10 17 21.5 | -1.4 |
| | comp=Z,45nm,0.3s | | | | | | |
| KURBB | Kurchatov Arra | 14.55 | 18 | P | Pn | 10 17 27.7 | +0.6 |
| | comp=Z,0.2nm,0.3s,baz=206,slow=10,SNR=14 | | | | | | |
| BHPL | Bhopal | 14.58 | 158 | eP | P | 10 17 30.3 | -0.9 |
| BHPL | | | | AMB | AMB | 10 17 31.1 | |
| | comp=Z,10nm,0.9s | | | | | | |
| BHPL | | | | ex | x | 10 19 57.9 | |
| KURK | Kurchatov | 14.66 | 18 | P | Pn | 10 17 27.7 | -0.7 |
| KURK | Kurchatov | 14.66 | 18 | P | Pn | 10 17 27.7 | -0.7 |
| KKN | Kakani | 14.76 | 124 | eP | Pn | 10 17 28.2 | -1.9 |
| | comp=Z,62nm,0.6s | | | | | | |
| DMN | Daman | 14.77 | 125 | eP | Pn | 10 17 28.7 | -1.6 |
| AB31 | Akbulak array | 14.90 | 329 | ⇓P | Pn | 10 17 29.4 | -2.1 |
| | comp=Z,3.4nm,0.3s | | | | | | |
| AB31 | | | | S | Sn | 10 20 01.7 | -14 |
| | comp=Z,3.1nm,0.4s,baz=150,slow=23,SNR=8.9 | | | | | | |
| AB31 | Akbulak array | 14.90 | 329 | P | Pn | 10 17 29.4 | -2.1 |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.3s | | | | | | |
| ABKAR | Akbulak array | 14.90 | 329 | ePn | Pn | 10 17 29.3 | -2.2 |
| | comp=Z,7.9nm,0.3s | | | | | | |
| ABKAR | | | | eSn | Sn | 10 20 01.9 | -14 |
| PKIN | Phulchoki | 14.98 | 125 | eP | Pn | 10 17 31.1 | -1.9 |
| PKI | Pulchoki | 14.99 | 125 | eP | Pn | 10 17 31.4 | -1.8 |
| | comp=Z,37nm,0.4s | | | | | | |
| GUN | Gumba | 15.08 | 123 | eP | Pn | 10 17 32.0 | -2.3 |
| | comp=Z,56nm,0.4s | | | | | | |
| BVAR | Borovoye Array | 16.09 | 357 | P | Pn | 10 17 46.9 | +0.6 |
| | comp=Z,0.7nm,0.3s,baz=163,slow=10,SNR=5.9 | | | | | | |
| BVAR | | | | S | Sn | 10 20 32.7 | -12 |
| | comp=Z,0.3nm,0.3s,baz=166,slow=20,SNR=4.9 | | | | | | |
| BVAR | Borovoye Array | 16.09 | 357 | P | Pn | 10 17 46.9 | +0.6 |
| BVAR | | | | S | Sn | 10 20 32.7 | -12 |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| RAMN | Ramite | 16.20 | 124 | eP | Pn | 10 17 46.3 | -1.8 |
| | comp=Z,60nm,0.6s | | | | | | |
| AKTO | Aktyubinsk | 16.61 | 328 | ⇓P | Pn | 10 17 52.0 | -0.8 |
| | comp=Z,5.5nm,0.5s | | | | | | |
| AKTO | | | | ⇑S | Sn | 10 20 40.5 | -17 |
| | comp=Z,11nm,0.8s | | | | | | |
| AKTO | Aktyubinsk | 16.61 | 328 | P | Pn | 10 17 52.4 | -0.4 |
| | comp=Z,1.5nm,0.3s,baz=137,slow=13,SNR=24 | | | | | | |
| AKTO | | | | S | Sn | 10 20 44.1 | -13 |
| | comp=Z,0.4nm,0.3s,baz=196,slow=19,SNR=3.6 | | | | | | |
| AKTO | Aktyubinsk | 16.61 | 328 | P | Pn | 10 17 51.9 | -0.8 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | |
| TAPN | Taplejung | 16.69 | 120 | eP | Pn | 10 17 52.5 | -1.8 |
| | comp=Z,15nm,0.3s | | | | | | |
| ODAN | Odare | 16.79 | 122 | eP | Pn | 10 17 54.0 | -1.4 |
| ZALV | Zalesovo Beam | 19.32 | 24 | P | P | 10 18 22.6 | -0.5 |
| | comp=Z,2.1nm,0.3s,baz=230,slow=11,SNR=12 | | | | | | |
| ZALV | Zalesovo Beam | 19.32 | 24 | P | P | 10 18 22.6 | -0.5 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| NVS | Novosibirsk | 19.60 | 20 | eP | P | 10 18 25.6 | -0.5 |
| SHL | Shillong | 20.72 | 117 | ex | x | 10 18 24.6 | |
| ARU | Arti | 21.35 | 340 | P | P | 10 18 45.0 | +0.1 |
| | comp=Z,1.7nm,0.2s,baz=108,slow=19,SNR=1.9 | | | | | | |
| ARU | Arti | 21.35 | 340 | P | P | 10 18 45.0 | +0.1 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.2s | | | | | | |
| GTA | Gaotai | 22.33 | 75 | eP | P | 10 18 58.0 | +2.5 |
| GTA | | | | pP | pP | 10 19 03.2 | -13 |
| GTA | | | | sP | sP | 10 19 06.2 | -23 |
| GTA | | | | PMZ | | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| KBZ | Khabaz | 22.78 | 296 | P | P | 10 19 01.2 | +1.3 |
| | comp=Z,1.8nm,0.9s,baz=120,slow=10,SNR=2.1 | | | | | | |
| KBZ | Khabaz | 22.78 | 296 | P | P | 10 19 01.2 | +1.3 |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| SONM | Songino Array | 27.72 | 56 | P | P | 10 19 46.0 | +1.1 |
| | comp=Z,1.3nm,0.6s,baz=264,slow=9.3,SNR=7.6 | | | | | | |
| SONM | Songino Array | 27.72 | 56 | P | P | 10 19 46.0 | +1.1 |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| SONM | Songino Array | 27.72 | 56 | P | P | 10 19 46.0 | +1.1 |
| BRTR | Keskin Array B | 29.71 | 287 | P | P | 10 20 07.7 | +5.0 |
| | comp=Z,0.8nm,0.6s,baz=79,slow=7.6,SNR=1.9 | | | | | | |
| BRTR | Keskin Array B | 29.71 | 287 | P | P | 10 20 07.7 | +5.0 |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| AKASG | Malin Array Be | 33.00 | 308 | P | P | 10 20 33.2 | +2.0 |
| | comp=Z,0.5nm,0.3s,baz=82,slow=6.4,SNR=3.2 | | | | | | |
| AKASG | Malin Array Be | 33.00 | 308 | P | P | 10 20 33.2 | +2.0 |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| FINES | FINESS Array B | 37.35 | 326 | P | P | 10 21 09.8 | +1.5 |
| | comp=Z,1.3nm,0.4s,baz=126,slow=11,SNR=19 | | | | | | |
| FINES | FINESS Array B | 37.35 | 326 | P | P | 10 21 09.8 | +1.5 |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ARCES | ARCESS Array B | 40.89 | 337 | P | P | 10 21 38.9 | +1.2 |
| | comp=Z,1.6nm,0.4s,baz=115,slow=7.9,SNR=18 | | | | | | |
| ARCES | ARCESS Array B | 40.89 | 337 | P | P | 10 21 38.9 | +1.2 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| HFS | Hagfors | 42.98 | 322 | P | P | 10 21 55.7 | +0.9 |
| | comp=Z,4.4nm,0.5s,baz=83,slow=12,SNR=20 | | | | | | |
| HFS | Hagfors | 42.98 | 322 | P | P | 10 21 55.7 | +0.9 |
| HFS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| KHC | Kasperske Hory | 43.07 | 305 | eP | P | 10 21 57.7 | +1.9 |
| KHC | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| KHC | Kasperske Hory | 43.07 | 305 | eP | P | 10 21 57.7 | +1.9 |
| | comp=Z,2.8nm,1.0s | | | | | | |
| NB2 | NORSAR Subarra | 44.28 | 323 | P | P | 10 22 06.3 | +1.0 |
| | comp=Z,1.7nm,0.6s,baz=93,slow=7.9 | | | | | | |
| NOA | NORSAR Array B | 44.28 | 323 | P | P | 10 22 06.2 | +1.0 |
| | comp=Z,2.5nm,0.7s,baz=95,slow=7.8,SNR=9.1 | | | | | | |
| NOA | NORSAR Array B | 44.28 | 323 | P | P | 10 22 06.2 | +1.0 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| ESDC | Sonseca Array | 57.63 | 298 | P | P | 10 23 47.2 | +1.6 |
| | comp=Z,0.6nm,0.4s,baz=57,slow=7.4,SNR=8.7 | | | | | | |
| TORD | Torodi Ar. Bea | 66.16 | 269 | P | P | 10 24 43.9 | +1.0 |
| | comp=Z,0.9nm,0.4s,baz=52,slow=6.1,SNR=29 | | | | | | |
| INK | Inuvik | 73.39 | 9 | P | P | 10 25 26.9 | +0.5 |
| | comp=Z,7.1nm,1.1s,baz=335,slow=4.5,SNR=10.0 | | | | | | |
| INK | Inuvik | 73.39 | 9 | P | P | 10 25 26.9 | +0.5 |
| INK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| ILAR | Eielson Array | 74.22 | 16 | P | P | 10 25 30.7 | -0.6 |
| | comp=Z,0.5nm,0.7s,baz=320,slow=5.1,SNR=4.1 | | | | | | |
| ILAR | Eielson Array | 74.22 | 16 | P | P | 10 25 30.7 | -0.6 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| YKA | Yellowknife Ar | 80.77 | 3 | P | P | 10 26 08.4 | +0.6 |
| | comp=Z,2.6nm,0.6s,baz=353,slow=5.5,SNR=6.8 | | | | | | |
| YKA | Yellowknife Ar | 80.77 | 3 | P | P | 10 26 08.4 | +0.6 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| NWAO | Narrogin (SRO) | 81.56 | 143 | P | P | 10 26 12.4 | +0.1 |
| | comp=Z,1.6nm,0.5s,baz=68,slow=0.3,SNR=4.5 | | | | | | |
| NWAO | Narrogin (SRO) | 81.56 | 143 | P | P | 10 26 12.4 | +0.1 |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |

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*SOF **12** 10:17:19.9, 42°.82N×23°.03E, h8km, MD3.2*
*CSEM **12** 10:17:19.7±0.1, 42°.86N×23°.04E, h2km, MD3.2, Error ellipse: s-maj=3.2km s-min=1.7km az=61.0*
*SKO **12** 10:17:20.9, 42°.86N×22°.96E, h3km, M2.3, ML3.2*
*BEO **12** 10:17:21.1±0.5, 42°.85N×22°.99E, h10km±3km, ML3.1/1*
*THE **12** 10:17:22.3, 42°.85N×23°.03E, h20km±2km, ML3.3/8, Error ellipse: s-maj=2.8km s-min=0.7km az=42.0*
**ISC 12 10:17:19.2**±1.1**, 42°.86N**±0°.01×**23°.04E**±0°.02**, h3km**±9km**, n156, σ1s.04**/192**, 14C-8D, Bulgaria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| VTS | Vitosha | 0.29 | 155 | Pg | Pg | 10 17 25.0 | +0.1 |
| VTS | Vitosha | 0.29 | 155 | Pg | Pg | 10 17 25.0 | +0.1 |
| ZAPS | Zavoj | 0.51 | 325 | ⇓iPg | Pb | 10 17 30.7 | -0.1 |
| MPEP | Malo Peshtene | 0.72 | 46 | P | Pb | 10 17 34.5 | +0.2 |
| PGB | Panagyurishte | 0.89 | 110 | P | Pg | 10 17 37.0 | +0.8 |
| PGB | Panagyurishte | 0.89 | 110 | P | Pg | 10 17 37.0 | +0.8 |
| BARS | Barje | 0.90 | 268 | ⇓iPg | Pg | 10 17 36.5 | +0.1 |
| BARS | | | | eSg | Sg | 10 17 48.5 | +0.4 |
| BARS | Barje | 0.90 | 268 | ⇓iPg | Pg | 10 17 36.5 | +0.1 |
| KKB | Krupnik | 0.99 | 178 | P | Pg | 10 17 38.4 | +0.2 |
| KKB | Krupnik | 0.99 | 178 | P | Pg | 10 17 38.4 | +0.2 |
| BOVS | Bovan | 1.25 | 309 | ePg | Pg | 10 17 43.7 | +0.6 |
| BOVS | | | | eSg | Sn | 10 18 01.5 | +0.7 |
| BOVS | Bovan | 1.25 | 309 | ePg | Pg | 10 17 43.7 | +0.6 |
| BOVS | | | | eSg | Sn | 10 18 01.5 | +0.7 |
| BOLS | Boljevac | 1.25 | 321 | ePg | Pn | 10 17 42.7 | -0.9 |
| BOLS | | | | eSg | Sn | 10 18 01.0 | 0.0 |
| BOLS | Boljevac | 1.25 | 321 | ePg | Pn | 10 17 42.7 | -0.9 |
| MMB | Musomiste | 1.37 | 158 | P | Pg | 10 17 46.3 | +0.9 |
| MMB | Musomiste | 1.37 | 158 | P | Pg | 10 17 46.3 | +0.9 |
| SELS | Selova | 1.45 | 285 | ePg | Pn | 10 17 46.4 | 0.0 |
| SELS | | | | eSg | Sb | 10 18 06.1 | +0.3 |
| SELS | Selova | 1.45 | 285 | ePg | Pn | 10 17 46.4 | 0.0 |
| SELS | | | | eSg | Sb | 10 18 06.1 | +0.3 |
| SKO | Skopje | 1.48 | 234 | i Pn | Pg | 10 17 48.3 | +0.8 |
| SKO | | | | i Sn | Sg | 10 18 06.9 | +0.2 |
| SKO | | | | eLg | Lg | 10 18 10.9 | |
| | comp=E,5.0nm,0.3s | | | | | | |
| SKO | | | | eLg | Lg | 10 18 15.1 | |
| | comp=N,16nm,0.8s | | | | | | |
| SKO | Skopje | 1.48 | 234 | i Pn | Pg | 10 17 48.3 | +0.8 |
| SKO | | | | i Sn | Sg | 10 18 06.9 | +0.2 |
| SKO | | | | eLg | Lg | 10 18 10.9 | |
| | comp=N,5.0nm,0.3s | | | | | | |
| CRAR | CRAIOVA | 1.57 | 20 | ⇑iP | Pn | 10 17 48.1 | +0.2 |
| CRAR | CRAIOVA | 1.57 | 20 | S | Sg | 10 18 11.3 | +1.7 |
| VAY | Valandovo | 1.57 | 193 | i Pn | Pb | 10 17 49.3 | +0.4 |
| VAY | | | | i Sn | Sg | 10 18 11.7 | +1.9 |
| VAY | | | | eLg | Lg | 10 18 14.5 | |
| | comp=N,424nm,0.5s | | | | | | |
| VAY | | | | eLg | Lg | 10 18 15.2 | |
| | comp=E,280nm,0.6s | | | | | | |
| VAY | Valandovo | 1.57 | 193 | ePn | Pb | 10 17 48.7 | -0.2 |
| VAY | | | | eSg | Sg | 10 18 10.7 | +0.9 |
| VAY | Valandovo | 1.57 | 193 | P | Pb | 10 17 48.5 | -0.4 |
| VAY | | | | S | Sn | 10 18 08.4 | -0.5 |
| VAY | Valandovo | 1.57 | 193 | ePn | Pb | 10 17 48.7 | -0.2 |
| VAY | | | | S | Sn | 10 18 08.4 | -0.5 |
| VAY | | | | eSg | Sg | 10 18 10.7 | +0.9 |
| VAY | | | | i Sn | Sg | 10 18 11.6 | +1.9 |
| VAY | | | | eLg | Lg | 10 18 14.4 | |
| | comp=E,424nm,0.5s | | | | | | |
| NVR | Nevrokopi | 1.63 | 158 | eP | Pb | 10 17 49.8 | 0.0 |
| NVR | Nevrokopi | 1.63 | 158 | eP | Pb | 10 17 49.8 | 0.0 |
| NVR | Nevrokopi | 1.63 | 158 | P | Pb | 10 17 49.6 | -0.2 |
| NVR | | | | S | Sn | 10 18 09.8 | -0.4 |
| NVR | Nevrokopi | 1.63 | 158 | P | Pb | 10 17 49.6 | -0.2 |
| NVR | | | | S | Sn | 10 18 09.8 | -0.4 |
| KNT | Kendrikon | 1.70 | 184 | ePN | Pb | 10 17 51.0 | 0.0 |
| KNT | | | | eSN | Sg | 10 18 13.6 | -0.1 |
| KNT | Kendrikon | 1.70 | 184 | P | Pn | 10 17 50.2 | +0.5 |
| KNT | | | | S | Sb | 10 18 12.1 | -0.7 |
| KNT | Kendrikon | 1.70 | 184 | P | Pn | 10 17 50.2 | +0.5 |
| KNT | Kendrikon | 1.70 | 184 | ePn | Pb | 10 17 51.0 | 0.0 |
| KNT | | | | S | Sb | 10 18 12.1 | -0.7 |
| KNT | | | | eSn | Sg | 10 18 13.6 | -0.1 |
| RZN | Rozhen | 1.71 | 133 | P | Pb | 10 17 51.3 | 0.0 |
| RZN | Rozhen | 1.71 | 133 | P | Pb | 10 17 51.3 | 0.0 |
| PVL | Pavlikeni | 1.72 | 77 | P | Pn | 10 17 50.0 | 0.0 |
| PVL | Pavlikeni | 1.72 | 77 | P | Pn | 10 17 50.0 | 0.0 |
| SRS | Serrai | 1.79 | 166 | eP | Pn | 10 17 50.8 | -0.2 |
| SRS | Serrai | 1.79 | 166 | eP | Pn | 10 17 50.8 | -0.2 |
| SRS | Serrai | 1.79 | 166 | P | Pb | 10 17 51.8 | -0.8 |
| SRS | | | | S | Sb | 10 18 14.4 | -1.0 |
| SRS | Serrai | 1.79 | 166 | P | Pb | 10 17 51.8 | -0.8 |
| SRS | | | | S | Sb | 10 18 14.4 | -1.0 |
| SRE | Strehaia | 1.81 | 4 | ⇑iP | Pb | 10 17 52.2 | -0.7 |
| SRE | Strehaia | 1.81 | 4 | S | Sg | 10 18 17.0 | -0.3 |
| RMGR | Halanga-Turnu | 1.82 | 352 | S | Sg | 10 18 17.8 | +0.1 |
| KUBS | Kucevo | 1.84 | 328 | ePn | Pb | 10 17 52.7 | -0.8 |
| KUBS | | | | eSg | Sg | 10 18 18.3 | -0.1 |
| KUBS | Kucevo | 1.84 | 328 | ePn | Pb | 10 17 52.7 | -0.8 |
| KUBS | | | | eSg | Sg | 10 18 18.3 | -0.1 |
| DJES | Djerdap | 1.85 | 348 | ePn | Pb | 10 17 52.9 | -0.7 |
| ZIMR | | 1.88 | 64 | ⇑iP | Pb | 10 17 54.4 | +0.3 |
| ZIMR | | 1.88 | 64 | S | Sg | 10 18 18.8 | -0.7 |
| SVIS | Svilajnac | 1.93 | 317 | ePn | Pb | 10 17 54.2 | -0.8 |
| SVIS | | | | eSg | Sg | 10 18 22.2 | +0.9 |
| GRG | Griva | 1.96 | 194 | eP | Pn | 10 17 54.1 | +0.8 |
| GRG | Griva | 1.96 | 194 | eP | Pn | 10 17 54.1 | +0.8 |
| GRG | Griva | 1.96 | 194 | P | Pn | 10 17 53.6 | +0.3 |
| GRG | | | | S | Sn | 10 18 18.0 | -0.4 |
| GRG | Griva | 1.96 | 194 | P | Pn | 10 17 53.6 | +0.3 |
| GRG | | | | S | Sn | 10 18 18.0 | -0.4 |
| GRUS | Gruza | 1.98 | 302 | ePn | Pn | 10 17 54.4 | +0.8 |
| GRUS | | | | eSg | Sg | 10 18 22.4 | -0.5 |
| GRUS | Gruza | 1.98 | 302 | ePn | Pn | 10 17 54.4 | +0.8 |
| GRUS | | | | eSg | Sg | 10 18 22.4 | -0.5 |
| SOH | Sokhos | 2.05 | 173 | eP | Pn | 10 17 55.0 | +0.4 |
| SOH | Sokhos | 2.05 | 173 | eP | Pn | 10 17 55.0 | +0.4 |
| SOH | Sokhos | 2.05 | 173 | P | Pn | 10 17 55.0 | +0.4 |
| SOH | | | | S | Sn | 10 18 20.1 | -0.5 |
| SOH | Sokhos | 2.05 | 173 | P | Pn | 10 17 55.0 | +0.4 |
| SOH | | | | S | Sn | 10 18 20.1 | -0.5 |
| KAVA | Kavala | 2.16 | 149 | P | Pn | 10 17 57.0 | +0.9 |
| KAVA | | | | S | Sn | 10 18 23.6 | +0.3 |
| KAVA | Kavala | 2.16 | 149 | P | Pn | 10 17 57.0 | +0.9 |
| KAVA | | | | S | Sn | 10 18 23.6 | +0.3 |
| HUMR | Humele | 2.19 | 39 | ⇑iP | Pb | 10 17 58.6 | -0.7 |
| HUMR | Humele | 2.19 | 39 | S | Sb | 10 18 27.4 | +0.6 |
| THE | Thessaloniki | 2.22 | 181 | eP | Pb | 10 18 00.9 | +0.9 |
| THE | Thessaloniki | 2.22 | 181 | eP | Pb | 10 18 00.9 | +0.9 |
| THE | Thessaloniki | 2.22 | 181 | P | Pn | 10 17 57.7 | +0.8 |
| THE | Thessaloniki | 2.22 | 181 | P | Pn | 10 17 57.7 | +0.8 |
| IVAS | Ivanjica | 2.23 | 290 | ePn | Pn | 10 17 57.6 | +0.5 |
| IVAS | Ivanjica | 2.23 | 290 | ePn | Pn | 10 17 57.6 | +0.5 |
| HORT | Hortiatis | 2.26 | 179 | ePN | Pn | 10 17 59.0 | +1.5 |
| HORT | | | | eSN | Sb | 10 18 27.1 | -1.9 |
| HORT | Hortiatis | 2.26 | 179 | eP | Pn | 10 17 58.6 | +1.1 |
| HORT | Hortiatis | 2.26 | 179 | eP | Pn | 10 17 58.6 | +1.1 |
| HORT | Hortiatis | 2.26 | 179 | P | Pn | 10 17 58.0 | +0.5 |
| HORT | | | | S | Sn | 10 18 25.7 | -0.2 |
| HORT | Hortiatis | 2.26 | 179 | P | Pn | 10 17 58.0 | +0.5 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| HORT | Hortiatis | 2.26 | 179 | ePn | Pn | 10 17 59.0 | +1.5 |
| HORT | | | | S | Sn | 10 18 25.7 | -0.2 |
| HORT | | | | eSn | Sb | 10 18 27.1 | -1.9 |
| SJES | Sjenica | 2.28 | 281 | ePn | Pn | 10 17 58.7 | +0.9 |
| OHR | Ohrid | 2.42 | 224 | i Pn | Pb | 10 18 02.2 | -1.2 |
| OHR | | | | i Sn | Sb | 10 18 31.8 | -1.7 |
| OHR | | | | eLg | Lg | 10 18 38.4 | |
| | comp=E,68nm,0.7s | | | | | | |
| OHR | | | | eLg | Lg | 10 18 40.0 | |
| | comp=N,72nm,0.8s | | | | | | |
| OHR | Ohrid | 2.42 | 224 | i Pn | Pb | 10 18 02.1 | -1.2 |
| OHR | | | | i Sn | Sb | 10 18 31.7 | -1.7 |
| OHR | | | | eLg | Lg | 10 18 38.4 | |
| | comp=N,68nm,0.7s | | | | | | |
| FNA | Florina | 2.42 | 211 | eP | Pn | 10 17 59.8 | +0.2 |
| FNA | Florina | 2.42 | 211 | eP | Pn | 10 17 59.8 | +0.2 |
| FNA | Florina | 2.42 | 211 | P | Pn | 10 18 00.1 | +0.5 |
| FNA | | | | S | Sn | 10 18 29.8 | +0.1 |
| FNA | Florina | 2.42 | 211 | P | Pn | 10 18 00.1 | +0.5 |
| FNA | | | | S | Sn | 10 18 29.8 | +0.1 |
| PLG | Polygyros | 2.50 | 173 | eP | Pn | 10 18 01.5 | +0.7 |
| PLG | Polygyros | 2.50 | 173 | eP | Pn | 10 18 01.5 | +0.7 |
| PLG | Polygyros | 2.50 | 173 | P | Pn | 10 18 01.3 | +0.5 |
| PLG | Polygyros | 2.50 | 173 | P | Pn | 10 18 01.3 | +0.5 |
| DIVS | Divibare | 2.54 | 300 | i Pn | Pn | 10 18 01.8 | +0.4 |
| DIVS | Divibare | 2.54 | 300 | ⇑iP | Pn | 10 18 01.9 | +0.5 |
| DIVS | Divibare | 2.54 | 300 | P | Pn | 10 18 01.4 | 0.0 |
| DIVS | | | | S | Sn | 10 18 33.5 | +0.6 |
| DIVS | Divibare | 2.54 | 300 | P | Pn | 10 18 01.4 | 0.0 |
| DIVS | Divibare | 2.54 | 300 | i Pn | Pn | 10 18 01.8 | +0.4 |
| DIVS | | | | S | Sn | 10 18 33.5 | +0.6 |
| GZR | Gura Zlata | 2.54 | 356 | ePn | Pn | 10 18 01.7 | +0.3 |
| GZR | Gura Zlata | 2.54 | 356 | ⇑iP | Pn | 10 18 01.9 | +0.5 |
| GZR | Gura Zlata | 2.54 | 356 | S | Sb | 10 18 35.2 | -2.0 |
| GZR | Gura Zlata | 2.54 | 356 | ePn | Pn | 10 18 01.7 | +0.3 |
| OUR | Ouranopolis | 2.62 | 164 | ePN | Pn | 10 18 01.6 | -0.8 |
| OUR | Ouranopolis | 2.62 | 164 | eP | Pn | 10 18 02.6 | +0.3 |
| OUR | Ouranopolis | 2.62 | 164 | eP | Pn | 10 18 02.6 | +0.3 |
| OUR | Ouranopolis | 2.62 | 164 | P | Pn | 10 18 02.7 | +0.4 |
| OUR | Ouranopolis | 2.62 | 164 | ePn | Pn | 10 18 01.6 | -0.7 |
| OUR | Ouranopolis | 2.62 | 164 | P | Pn | 10 18 02.7 | +0.4 |
| LOT | Lotru | 2.64 | 11 | ⇑iP | Pn | 10 18 04.1 | +1.3 |
| LOT | Lotru | 2.64 | 11 | S | Sn | 10 18 36.7 | +1.3 |
| MTUR | Matau | 2.78 | 31 | ⇑iP | Pb | 10 18 07.1 | -2.5 |
| BBLS | Lazići | 2.83 | 292 | ePn | Pn | 10 18 06.2 | +0.8 |
| BBLS | Lazići | 2.83 | 292 | ePn | Pn | 10 18 06.2 | +0.8 |
| NEST | Nestorio | 2.86 | 212 | eP | Pn | 10 18 07.2 | +1.4 |
| NEST | Nestorio | 2.86 | 212 | eP | Pn | 10 18 07.2 | +1.4 |
| BZS | Buzias | 2.94 | 340 | ePn | Pn | 10 18 07.7 | +0.9 |
| BZS | Buzias | 2.94 | 340 | ⇑iP | Pn | 10 18 07.4 | +0.6 |
| BZS | Buzias | 2.94 | 340 | S | Sn | 10 18 45.0 | +2.4 |
| BZS | Buzias | 2.94 | 340 | ePn | Pn | 10 18 07.7 | +0.9 |
| VOIR | | 2.96 | 29 | ⇑iP | Pn | 10 18 08.8 | +1.7 |
| VOIR | | 2.96 | 29 | S | Sb | 10 18 46.5 | -2.6 |
| PAIG | Paliouri | 2.97 | 170 | eP | Pn | 10 18 07.2 | +0.1 |
| PAIG | Paliouri | 2.97 | 170 | eP | Pn | 10 18 07.2 | +0.1 |
| PAIG | Paliouri | 2.97 | 170 | P | Pn | 10 18 07.4 | +0.3 |
| PAIG | Paliouri | 2.97 | 170 | P | Pn | 10 18 07.4 | +0.3 |
| DEV | Deva | 3.03 | 358 | S | Sn | 10 18 46.7 | +2.0 |
| SMTH | Samothraki Isl | 3.03 | 141 | eP | Pn | 10 18 07.0 | -1.0 |
| SMTH | Samothraki Isl | 3.03 | 141 | eP | Pn | 10 18 07.0 | -1.0 |
| SMTH | Samothraki Isl | 3.03 | 141 | P | Pn | 10 18 08.6 | +0.6 |
| SMTH | Samothraki Isl | 3.03 | 141 | P | Pn | 10 18 08.6 | +0.6 |
| ENEZ | Enez | 3.15 | 131 | ePN | Pn | 10 18 04.7 | -4.9 |
| MLR | Muntele Rosu | 3.36 | 37 | ⇓iP | Pn | 10 18 15.8 | +3.1 |
| MLR | Muntele Rosu | 3.36 | 37 | S | Sn | 10 18 55.0 | +1.8 |
| ERIK | Erikli-Kesan | 3.40 | 129 | ePN | Pn | 10 18 08.6 | -4.4 |
| GADA | Gvkgeada | 3.42 | 140 | ePN | Pn | 10 18 09.8 | -3.6 |
| GADA | Gvkgeada | 3.42 | 140 | ePn | Pn | 10 18 09.8 | -3.6 |
| XOR | Xorichti | 3.49 | 178 | eP | Pn | 10 18 14.8 | +0.4 |
| XOR | Xorichti | 3.49 | 178 | eP | Pn | 10 18 14.8 | +0.4 |
| DOPR | Dopca | 3.54 | 28 | ⇓iP | Pn | 10 18 15.6 | +0.6 |
| GELI | Tayfur-Gelibol | 3.56 | 133 | eP | Pn | 10 18 10.6 | -4.7 |
| MSAB | Monastry St. A | 3.70 | 69 | ⇓iP | Pn | 10 18 18.9 | +1.7 |
| RKY | Sarkoy-Tekirda | 3.78 | 124 | eP | Pn | 10 18 13.7 | -4.7 |
| DRGR | | 3.94 | 357 | ePn | Pn | 10 18 21.5 | +0.9 |
| DRGR | | 3.94 | 357 | ⇑iP | Pn | 10 18 22.9 | +2.3 |
| DRGR | | 3.94 | 357 | S | Sg | 10 19 25.9 | +0.2 |
| DRGR | | 3.94 | 357 | ePn | Pn | 10 18 21.5 | +0.9 |
| PLOR | Plostina | 3.96 | 40 | ⇓iP | Pn | 10 18 23.4 | +2.6 |
| PLOR | Plostina | 3.96 | 40 | S | Sb | 10 19 12.9 | -5.0 |
| VRI | Vrincioaia | 4.01 | 40 | ⇑iP | Pn | 10 18 22.7 | +1.2 |
| VRI | Vrincioaia | 4.01 | 40 | S | Sn | 10 19 12.1 | +3.2 |
| TIRR | Tirgusor | 4.21 | 66 | ⇑iP | Pn | 10 18 25.3 | +1.0 |
| TIRR | Tirgusor | 4.21 | 66 | S | Sg | 10 19 32.3 | -2.2 |
| CFR | Carcaliu | 4.35 | 56 | ⇑iP | Pn | 10 18 27.3 | +1.2 |
| CFR | Carcaliu | 4.35 | 56 | S | Sg | 10 19 37.4 | -1.4 |
| BURAR | Bucovina Array | 5.00 | 17 | ⇓iP | Pn | 10 18 37.6 | +2.4 |
| BURAR | Bucovina Array | 5.00 | 17 | S | Sn | 10 19 35.6 | +2.1 |
| CHOS | Chios island | 5.02 | 152 | eP | Pn | 10 18 36.9 | +1.4 |
| CHOS | Chios island | 5.02 | 152 | eP | Pn | 10 18 36.9 | +1.4 |
| KOLS | Kolonicke sedl | 6.10 | 355 | eSG | Sg | 10 20 34.1 | -0.9 |
| KOLS | Kolonicke sedl | 6.10 | 355 | eSg | Sg | 10 20 34.1 | -0.9 |
| VYHS | Vyhne | 6.36 | 334 | eSG | Sg | 10 20 40.7 | -2.6 |

*CSEM **12** 10:17:28.0, 38°.50N×23°.30E, h16km, MD2.8, After ATH*

**ATH 12 10:17:28.2, 38°.50N×23°.30E, h13km±8km, MD2.8/4, Greece**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LKR | Lokris | 0.28 | 303 | ePG | Pg | 10 17 33.5 | -0.6 |
| LKR | | | | eSG | Sg | 10 17 38.0 | 0.0 |
| LKR | Lokris | 0.28 | 303 | ePb | Pg | 10 17 33.5 | -0.6 |
| LKR | | | | eSb | Sg | 10 17 38.0 | 0.0 |
| VIL2 | Platees | 0.29 | 185 | ePG | Pg | 10 17 34.7 | +0.5 |
| VIL2 | | | | eSB | Sb | 10 17 40.2 | +0.2 |
| MRKA | Markates | 0.30 | 48 | ePG | Pg | 10 17 33.7 | -0.8 |
| MRKA | | | | eSB | Sb | 10 17 39.7 | -0.9 |
| MRKA | Markates | 0.30 | 48 | ePb | Pg | 10 17 33.7 | -0.8 |
| MRKA | | | | eSb | Sb | 10 17 39.7 | -0.9 |
| VILL | Villia | 0.34 | 178 | ePb | Pg | 10 17 34.7 | -0.4 |
| VILL | | | | eSb | Sg | 10 17 40.2 | +0.5 |
| DESF | Desfina | 0.61 | 262 | ePB | Pg | 10 17 40.4 | +0.2 |
| DESF | | | | eSB | Sg | 10 17 48.6 | +0.2 |
| DESF | Desfina | 0.61 | 262 | ePn | Pg | 10 17 40.4 | +0.2 |
| DESF | | | | eSn | Sg | 10 17 48.6 | +0.2 |
| SKIA | Skiathos | 0.68 | 11 | ePB | Pg | 10 17 41.6 | +0.1 |
| SKIA | Skiathos | 0.68 | 11 | ePn | Pg | 10 17 41.6 | +0.1 |

*ISCJB **12** 10:21:26.4±0.9, 5°.89S±0°.10×130°.4E±0°.2, h10km, mb4.2/4, Error ellipse: s-maj=33.6km s-min=8.6km az=160.1*

*IDC **12** 10:21:27.3±1.4, 5°.77S×130°.61E, h0km, mb4.4/3, mb1 4.9/7, mb1mx4.5/35, mbtmp4.8/7, ML5.0/4, Error ellipse: s-maj=48.8km s-min=22.1km az=83.0*

**ISC 12 10:21:28.7±1.0, 5°.9S±0°.1×130°.5E±0°.2, h10km, n21, σ0s.94/20, mb4.3/4, Banda Sea**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| BATI | Baumata | 7.98 | 237 | Pn | Pn | 10 23 29.4 | +4.5 |
| | 23nm,0.3s,baz=85,slow=3.9,SNR=24 | | | | | | |
| FITZ | Fitzroy Crossi | 13.02 | 201 | Pn | Pn | 10 24 33.9 | -0.1 |
| | 6.9nm,0.3s,baz=32,slow=10,SNR=110 | | | | | | |
| WRAB | Tennant Creek | 14.46 | 165 | Pn | Pn | 10 24 53.0 | -0.7 |
| | 3μm,0.8s,SNR=94 | | | | | | |
| WRA | Warramunga Arr | 14.47 | 165 | Pn | Pn | 10 24 52.9 | -0.9 |
| | 4.3nm,0.3s,baz=343,slow=13,SNR=107 | | | | | | |
| ASAR | Alice Springs | 17.98 | 170 | P | P | 10 25 40.1 | +0.5 |
| | 6.5nm,0.3s,baz=352,slow=13,SNR=432 | | | | | | |
| CMAR | Chiang Mai Arr | 39.39 | 309 | P | P | 10 28 58.2 | -0.7 |
| | 2.9nm,0.7s,baz=138,slow=7.5,SNR=12 | | | | | | |
| ODAN | Odare | 52.89 | 310 | eP | P | 10 30 44.9 | -0.6 |
| | 10nm,0.5s | | | | | | |
| TAPN | Taplejung | 52.90 | 311 | eP | P | 10 30 45.2 | -0.5 |
| | 15nm,0.4s | | | | | | |
| RAMN | Ramite | 53.54 | 310 | eP | P | 10 30 50.0 | -0.3 |
| | 21nm,0.4s | | | | | | |
| GUN | Gumba | 54.58 | 310 | eP | P | 10 30 57.3 | -0.7 |
| | 15nm,0.3s | | | | | | |
| PKI | Pulchoki | 54.76 | 310 | eP | P | 10 30 58.3 | -1.0 |
| PKIN | Phulchoki | 54.78 | 310 | eP | P | 10 30 58.1 | -1.2 |
| KKN | Kakani | 54.97 | 310 | eP | P | 10 30 59.8 | -0.9 |
| DMN | Daman | 55.01 | 310 | eP | P | 10 31 00.4 | -0.7 |
| GKN | Gorkha | 55.57 | 310 | eP | P | 10 31 04.3 | -0.6 |
| | 13nm,0.3s | | | | | | |
| KOLN | Koldanda | 56.25 | 309 | eP | P | 10 31 09.3 | -0.6 |
| SONM | Songino Array | 57.54 | 341 | P | P | 10 31 19.1 | +0.6 |
| | 0.5nm,0.5s,baz=159,slow=6.7,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 67.56 | 326 | P | P | 10 32 25.5 | +0.1 |
| | 2.5nm,0.5s,baz=126,slow=7.9,SNR=22 | | | | | | |
| ZALV | Zalesovo Beam | 70.80 | 333 | P | P | 10 32 44.8 | -0.6 |
| | 1.7nm,0.4s,baz=135,slow=5.5,SNR=5.0 | | | | | | |
| TORD | Torodi Ar. Bea | 129.03 | 282 | PKP | PKPdf | 10 40 38.5 | +0.5 |
| | 1.6nm,0.7s,baz=71,slow=2.3,SNR=7.6 | | | | | | |
| DBIC | Dimbokro | 135.59 | 274 | PKP | PKPdf | 10 40 53.0 | +2.5 |
| | 3.3nm,0.7s,baz=108,slow=3.2,SNR=2.6 | | | | | | |

*ISCJB **12** 10:21:32.7±0.6, 4°.92S±0°.02×133°.71E±0°.02, h3km±3km, mb5.8/188, MS5.9/388, Error ellipse: s-maj=3.2km s-min=2.8km az=32.9*

*BJI **12** 10:21:32.9, 4°.90S×133°.82E, h9km, mb5.5/86, mB5.7/65, Ms5.8/93, Ms7 5.7/84*

*IDC **12** 10:21:33.9±0.3, 4°.86S×133°.77E, h0km, mb5.5/26, mb1 5.4/32, mb1mx5.4/33, mbtmp5.5/32, ML5.2/5, MS5.8/20, Ms1 5.8/20, ms1mx5.7/28, Error ellipse: s-maj=10.5km s-min=7.5km az=64.0*

*AUST **12** 10:21:34.2±2.5, 4°.92S×133°.74E, h5km±16km, Error ellipse: s-maj=5.7km s-min=4.4km az=31.0*

*NEIC **12** 10:21:35.0±0.0, 4°.94S×133°.72E, h15km Best double couple: NP1:φs247.00000°, δ81.00000°, λ-39.00000°. NP2:φs343.00000°, δ51.00000°, λ-169.00000°. Principal axes: T 0.9500, Plg20.0000°, Azm301.0000°; N 0.1100, Plg50.0000°, Azm57.0000°; P -1.0700, Plg33.0000°, Azm198.0000°;*

*GCMT **12** 10:21:36.2±0.1, 4°.89S×133°.66E, h12km, MW5.9/125, Moment Tensor Solution. s122,c244; s125,c407; Duration: 2s.1 Moment tensor: Scale $10^{18}$Nm; Mrr-0.06±.01; Mθθ-0.56±.01; Mφφ0.62±.01; Mrθ0.26±.01; Mθφ0.53±.01; Mφr-0.12±.01; Best double couple: M0 0.85000×$10^{18}$ NP1:φs338.00000°, δ77.00000°, λ-165.00000°. NP2:φs244.00000°, δ75.00000°, λ-13.00000°. Principal axes: T 0.8320, Plg1.0000°, Azm111.0000°; N 0.0360, Plg71.0000°, Azm17.0000°; P -0.8670, Plg19.0000°, Azm201.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*NEIC **12** 10:21:36.2±0.1, 4°.92S×133°.71E, h13km, mb6.0/104, ME6.0, MS5.9/300, MW5.9, MW5.8, MW5.9 Error ellipse: s-maj=3.5km s-min=3.2km az=39.0, Moment Tensor Solution. s45 Moment tensor: Scale $10^{17}$Nm; Mrr0.89; Mθθ-4.63; Mφφ3.74; Mrθ4.31; Mθφ2.78; Mφr-1.78; Best double couple: M0 6.90000×$10^{17}$ NP1:φs236.00000°, δ59.00000°, λ-10.00000°. NP2:φs331.00000°, δ82.00000°, λ-149.00000°. Principal axes: T 4.7000, Plg15.0000°, Azm100.0000°; N 3.2200, Plg58.0000°, Azm345.0000°; P -7.9200, Plg28.0000°, Azm198.0000°; Broadband fault plane solution: P waves. NP1:φs275.00000°, δ81.00000°, λ-150.00000°. NP2:φs180.00000°, δ60.00000°, λ-10.00000°. Principal axes: T Plg14.0000°, Azm44.0000°; N Plg0.0000°, Azm0.0000°; P Plg27.0000°, Azm142.0000°; Depth from synthetics of broadband displacement seismograms. Energy computed from BB mechanism.*

*NEIC Felt [III] at Kaimana.*

*MOS **12** 10:21:38.2±1.1, 4°.76S×133°.66E, h33km, mb6.0/75, MS5.8/50 Error ellipse: s-maj=8.5km s-min=5.2km az=108.6*

*DJA **12** 10:21:38.6±0.3, 5°S±2°×13°4E±°, h42km±7km, M6.0/53, mb6.0/53, mB6.3/53, MLv6.3/16, Mw(mB)6.0/53, Mwp6.0/26*

*NEIC **12** 10:21:49.2±0.0, 4°.68S×133°.87E, h10km, Moment Tensor Solution. s87 Moment tensor: Scale $10^{17}$Nm; Mrr-1.07; Mθθ-4.95; Mφφ6.01; Mrθ4.30; Mθφ5.36; Mφr0.11; Best double couple: M0 8.80000×$10^{17}$ NP1:φs340.00000°, δ63.00000°, λ-168.00000°. NP2:φs245.00000°, δ80.00000°, λ-28.00000°. Principal axes: T 8.5400, Plg11.0000°, Azm295.0000°; N 0.5600, Plg61.0000°, Azm46.0000°; P -9.1100, Plg27.0000°, Azm199.0000°;*

**ISC 12 10:21:36.9±0.3, 4°.89S±0°.03×133°.70E±0°.03, h19km:pP-P, n1309, σ1s.60/1153, mb5.9/193, MS5.9/390, 41C-23D, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.43 | 323 | ePn | Pn | 10 22 14.5 | -1.1 |
| FAKI | | | | eSn | Sn | 10 22 42.5 | -2.4 |
| RKPI | Ransiki, Papua | 3.39 | 8 | P | Pn | 10 22 29.7 | +0.9 |
| RKPI | | | | S | Sn | 10 23 07.8 | -0.7 |
| BNDI | Bandanaira | 3.80 | 275 | P | Pn | 10 22 35.9 | +1.5 |
| BNDI | | | | S | Sn | 10 23 19.9 | +1.3 |
| SAUI | Saumlaki | 3.89 | 218 | P | Pn | 10 22 37.7 | +2.0 |
| SAUI | Saumlaki | 3.89 | 218 | ePn | Pn | 10 22 37.6 | +1.9 |
| SAUI | | | | eSn | Sn | 10 23 22.5 | +1.7 |
| SIJI | Sorong | 4.67 | 329 | Pn | Pn | 10 22 44.4 | -2.1 |
| | 81nm,0.3s,baz=148,slow=6.4,SNR=328 | | | | | | |
| SIJI | | | | Sn | Sn | 10 23 34.0 | -6.2 |
| | 224nm,0.3s,baz=120,slow=20,SNR=6.7 | | | | | | |
| SIJI | | | | LR | LR | 10 25 12.0 | |
| | comp=Z,108μm,21.1s,baz=148,slow=46 | | | | | | |
| SWI | Sorong | 4.68 | 329 | P | Pn | 10 22 44.8 | -1.7 |
| | baz=4.8,SNR=157 | | | | | | |
| SWI | Sorong | 4.68 | 329 | P | Pn | 10 22 46.2 | -0.4 |
| MSAI | Masohi | 5.00 | 288 | P | Pn | 10 22 52.0 | +1.1 |
| | 1μm,1.0s,14μm43μm5.9nm | | | | | | |
| AAI | Ambon | 5.62 | 282 | P | Pn | 10 22 59.7 | +0.2 |
| | baz=5.7,SNR=96 | | | | | | |
| AAI | Ambon | 5.62 | 282 | P | Pn | 10 22 59.6 | +0.2 |
| | 6μm,0.6s,74μm200μm25nm | | | | | | |
| SMPI | Sarmi | 5.77 | 60 | P | Pn | 10 23 00.4 | -1.2 |
| | 320nm,1.3s,23μm2.6nm | | | | | | |
| NLAI | Namlea | 6.78 | 284 | P | Pn | 10 23 17.3 | +1.9 |
| | 3μm,1.0s,37μm103μm12nm | | | | | | |
| GENI | Genyem | 6.85 | 71 | P | Pn | 10 23 15.6 | -0.7 |
| | 1μm,0.9s,21μm96μm8.7nm | | | | | | |
| JAY | Jayapura | 7.38 | 72 | Pn | Pn | 10 23 21.5 | -2.2 |
| | 18nm,0.3s,baz=268,slow=8.9,SNR=100 | | | | | | |
| JAY | | | | Sn | Sn | 10 24 43.1 | -3.9 |
| | 9.6nm,0.3s,baz=94,slow=19,SNR=2.5 | | | | | | |
| JAY | | | | LR | LR | 10 27 06.6 | |
| | comp=Z,57μm,18.7s,baz=270,slow=46 | | | | | | |
| JAY | Jayapura | 7.38 | 72 | P | Pn | 10 23 21.5 | -2.2 |
| JAY | | | | | | 10 24 43.1 | |
| JAY | | | | pmax | pmax | | |
| | comp=Z,18nm,0.3s | | | | | | |
| JAY | | | | smax | smax | | |
| | comp=N,10.0nm,0.3s | | | | | | |
| JAY | | | | MLR | MLR | | |
| | comp=Z,57μm,18.7s | | | | | | |
| JAY | Jayapura | 7.38 | 72 | P | Pn | 10 23 21.6 | -2.1 |
| | baz=7.3,SNR=70 | | | | | | |
| JAY | Jayapura | 7.38 | 72 | P | Pn | 10 23 21.6 | -2.1 |
| | comp=Z,4μm,1.4s,comp=Z,84μmcomp=Z,622μmcomp=Z,22nm | | | | | | |
| JAY | Jayapura | 7.38 | 72 | ePn | Pn | 10 23 21.5 | -2.2 |
| JAY | | | | eSn | Sn | 10 24 43.1 | -3.9 |
| LBMI | Labuha | 7.49 | 304 | P | Pn | 10 23 26.0 | +0.8 |
| | comp=Z,3μm,1.6s,comp=Z,39μmcomp=Z,59μmcomp=Z,11nm | | | | | | |
| MMPI | Merauke | 7.53 | 119 | P | Pn | 10 23 25.0 | -0.7 |
| | comp=Z,2μm,0.9s,comp=Z,64μmcomp=Z,107nm | | | | | | |
| SANI | Sanana | 8.20 | 290 | P | Pn | 10 23 33.8 | -1.1 |
| | comp=Z,1μm,0.7s,comp=Z,18μmcomp=Z,95μm | | | | | | |
| MTN | Manton Dam | 8.30 | 198 | ePn | Pn | 10 23 35.8 | -0.5 |
| MTN | | | | eSn | Sn | 10 25 07.0 | -2.6 |
| TNTI | Ternate | 8.46 | 311 | P | Pn | 10 23 40.3 | +1.8 |
| | comp=Z,1μm,1.1s,comp=Z,17μmcomp=Z,83μm | | | | | | |
| TNTI | Ternate | 8.46 | 311 | ePn | Pn | 10 23 40.0 | +1.4 |
| SOEI | Soe | 10.53 | 242 | P | Pn | 10 24 06.3 | -0.7 |
| | comp=Z,4μm,0.9s,comp=Z,26μm | | | | | | |
| KMSI | Cibinong | 11.12 | 299 | P | Pn | 10 24 14.2 | -0.8 |
| | comp=Z,3μm,1.3s,comp=Z,43μmcomp=Z,40μm | | | | | | |
| BATI | Baumata | 11.26 | 241 | Pn | Pn | 10 24 16.4 | -0.6 |
| | comp=Z,151nm,0.3s,baz=113,slow=3.2,SNR=45 | | | | | | |
| BATI | | | | Sn | Sn | 10 26 17.8 | -4.6 |
| | comp=Z,169nm,0.3s,baz=307,slow=20,SNR=6.9 | | | | | | |
| BATI | Baumata | 11.26 | 241 | P | Pn | 10 24 17.1 | +0.2 |
| | comp=Z,1μm,0.6s,comp=Z,12μmcomp=Z,864nm | | | | | | |
| BATI | Baumata | 11.26 | 241 | ePn | Pn | 10 24 16.4 | -0.6 |
| BATI | | | | eSn | Sn | 10 26 17.8 | -4.6 |
| LUWI | Luwuk | 11.56 | 289 | P | Pn | 10 24 19.1 | -1.9 |
| | comp=Z,3μm,1.5s,comp=Z,34μmcomp=Z,73μm | | | | | | |
| LUWI | Luwuk | 11.56 | 289 | ePn | Pn | 10 24 19.6 | -1.4 |
| MMRI | Maumere | 11.97 | 251 | P | Pn | 10 24 28.5 | +1.8 |
| | comp=Z,928nm,1.3s,comp=Z,13μmcomp=Z,29μm | | | | | | |
| MMRI | Maumere | 11.97 | 251 | ePn | Pn | 10 24 27.2 | +0.6 |
| MMRI | | | | eSn | Sn | 10 26 42.1 | +2.3 |
| GTOI | Gorontalo | 12.00 | 297 | P | Pn | 10 24 28.6 | +1.5 |
| | comp=Z,2μm,1.4s,comp=Z,97μm | | | | | | |
| PALU | Palau | 12.18 | 4 | P | Pn | 10 24 29.3 | -0.2 |
| | baz=12,SNR=6.4 | | | | | | |
| APSI | Ampana | 12.66 | 288 | P | Pn | 10 24 36.7 | +0.6 |
| | comp=Z,3μm,1.1s,comp=Z,25μmcomp=Z,40μm | | | | | | |
| MRSI | Marisa | 12.90 | 294 | P | Pn | 10 24 36.9 | -2.4 |
| | comp=Z,458nm,1.5s,comp=Z,8μm | | | | | | |
| COEN | Coen | 12.98 | 135 | P | Pn | 10 24 37.6 | -2.8 |
| | baz=13,SNR=29 | | | | | | |
| COEN | Coen | 12.98 | 135 | ePn | Pn | 10 24 35.9 | -4.5 |
| COEN | | | | eSn | Sn | 10 26 51.5 | -13 |
| BSSI | Bau Bau, Buton | 13.21 | 264 | P | Pn | 10 24 45.5 | +2.0 |
| | comp=Z,983nm,1.2s,comp=Z,13μm | | | | | | |
| BKSI | Bulukumba | 13.53 | 268 | P | Pn | 10 24 48.2 | +0.3 |
| | comp=Z,440nm,1.7s,comp=Z,10μmcomp=Z,187μm | | | | | | |
| KAPI | Kappang | 13.89 | 269 | Pn | Pn | 10 24 53.4 | +0.5 |
| | comp=Z,3.6nm,0.3s,baz=97,slow=14,SNR=22 | | | | | | |
| KAPI | | | | LR | LR | 10 31 43.0 | |
| | comp=Z,46μm,19.6s,baz=102,slow=44 | | | | | | |
| KAPI | Kappang | 13.89 | 269 | Pn | Pn | 10 24 54.0 | +1.1 |
| | comp=Z,1μm,0.8s,SNR=29 | | | | | | |
| KAPI | Kappang | 13.89 | 269 | P | Pn | 10 24 54.1 | +1.1 |
| | SNR=61 | | | | | | |
| KAPI | Kappang | 13.89 | 269 | ePn | Pn | 10 24 53.8 | +0.8 |
| MATI | Mati | 13.91 | 328 | eP | Pn | 10 24 55.2 | +2.1 |
| SPSI | Sidrap Palu | 13.92 | 273 | P | Pn | 10 24 53.4 | +0.2 |
| | comp=Z,636nm,1.5s,comp=Z,11μm | | | | | | |
| TTSI | Tana Toraja | 13.97 | 277 | P | Pn | 10 24 55.6 | +1.7 |
| | comp=Z,288nm,1.3s,comp=Z,7μm | | | | | | |
| BASI | Baing, Sumba | 14.04 | 247 | P | Pn | 10 24 54.2 | -0.7 |
| | comp=Z,1μm,0.8s,comp=Z,12μm | | | | | | |
| PMG | Port Moresby | 14.09 | 109 | Pn | Pn | 10 24 53.1 | -2.5 |
| | comp=Z,4.8nm,0.3s,baz=291,slow=12,SNR=26 | | | | | | |
| PMG | | | | Sn | Sn | 10 27 19.6 | -12 |
| | comp=Z,5.2nm,0.3s,baz=274,slow=19,SNR=3.7 | | | | | | |
| PMG | | | | Lg | Lg | 10 28 53.4 | |
| | baz=216,slow=19,SNR=1.7 | | | | | | |
| PMG | | | | LR | LR | 10 32 05.9 | |
| | comp=Z,99μm,18.5s,baz=321,slow=45 | | | | | | |
| PMG | Port Moresby | 14.09 | 109 | c iP | Pn | 10 24 51.5 | -4.1 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,502nm,0.8s | | | | | | |
| PMG | Port Moresby | 14.09 | 109 | P | Pn | 10 24 53.2 | -2.4 |
| | baz=14,SNR=15 | | | | | | |
| PMG | Port Moresby | 14.09 | 109 | ePn | Pn | 10 24 53.7 | -1.9 |
| PMG | | | | eSn | Sn | 10 27 19.6 | -12 |
| WSI | Waingapu | 14.11 | 250 | P | Pn | 10 24 54.2 | -1.7 |
| | comp=Z,3μm,0.6s,comp=Z,30μm | | | | | | |
| DAV | Davao City (W) | 14.38 | 326 | Pn | Pn | 10 24 59.5 | -0.1 |
| | comp=Z,27nm,0.3s,baz=104,slow=3.9,SNR=5.6 | | | | | | |
| DAV | Davao City (W) | 14.38 | 326 | P | Pn | 10 25 00.7 | +1.1 |
| | SNR=12 | | | | | | |
| DAV | Davao City (W) | 14.38 | 326 | ⇑eP | Pn | 10 24 56.4 | -3.2 |
| DAV | Davao City (W) | 14.38 | 326 | ePn | Pn | 10 24 59.5 | -0.1 |
| PCI | Palu | 14.39 | 286 | P | Pn | 10 24 59.9 | +0.1 |
| | comp=Z,1μm,1.4s,comp=Z,21μm | | | | | | |
| MPSI | Mapaga | 14.73 | 290 | P | Pn | 10 25 03.9 | -0.4 |
| | comp=Z,296nm,2.4s,comp=Z,7μm | | | | | | |
| WRAB | Tennant Creek | 14.97 | 178 | d iP | Pn | 10 25 01.6 | -6.0 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,1μm,0.8s | | | | | | |
| WRA | Warramunga Arr | 14.98 | 178 | Pn | Pn | 10 25 02.2 | -5.5 |
| | comp=Z,29nm,0.3s,baz=359,slow=13,SNR=213 | | | | | | |
| WRA | | | | Sn | Sn | 10 27 39.9 | -13 |
| | comp=Z,38nm,0.3s,baz=355,slow=24,SNR=7.2 | | | | | | |
| WRA | | | | Lg | Lg | 10 29 34.0 | |
| | baz=21,slow=28,SNR=5.1 | | | | | | |
| WRA | | | | LR | LR | 10 31 24.2 | |
| | comp=Z,43μm,20.9s,baz=350,slow=39 | | | | | | |
| WRA | Warramunga Arr | 14.98 | 178 | P | Pn | 10 25 02.2 | -5.5 |
| WRA | | | | pmax | pmax | | |
| | comp=Z,29nm,0.3s | | | | | | |
| WRA | | | | MLR | MLR | | |
| | comp=Z,43μm,20.9s | | | | | | |
| WRA | Warramunga Arr | 14.98 | 178 | ePn | Pn | 10 25 02.2 | -5.5 |
| WRA | | | | eSn | Sn | 10 27 39.9 | -13 |
| FITZ | Fitzroy Crossi | 15.31 | 210 | Pn | Pn | 10 25 06.7 | -5.4 |
| | comp=Z,29nm,0.3s,baz=36,slow=13,SNR=34 | | | | | | |
| FITZ | | | | Sn | Sn | 10 27 48.9 | -13 |
| | comp=Z,34nm,0.3s,baz=225,slow=19,SNR=4.5 | | | | | | |
| FITZ | | | | LR | LR | 10 32 32.3 | |
| | comp=Z,41μm,19.8s,baz=30,slow=43 | | | | | | |
| FITZ | Fitzroy Crossi | 15.31 | 210 | ePn | Pn | 10 25 06.7 | -5.4 |
| FITZ | | | | eSn | Sn | 10 27 53.8 | -7.6 |
| BUKP | Musuan | 15.33 | 326 | eP | Pn | 10 25 10.3 | -2.1 |
| BUTP | Butuan | 15.95 | 330 | eP | Pn | 10 25 21.1 | +0.7 |
| PAGZ | Pagadian | 16.31 | 321 | eP | Pn | 10 25 23.2 | -1.8 |
| IPIL | Ipil | 16.79 | 319 | eP | Pn | 10 25 28.0 | -3.1 |
| DCPH | Dipolog City | 16.90 | 322 | eP | P | 10 25 36.9 | +2.5 |
| TWSI | Taliwang, Sumb | 17.13 | 256 | P | Pn | 10 25 33.7 | -1.7 |
| | comp=Z,240nm,0.8s,comp=Z,3μm | | | | | | |
| BKB | Balikpapan | 17.16 | 282 | P | P | 10 25 36.7 | -0.6 |
| | comp=Z,636nm,1.6s,comp=Z,13μmcomp=Z,61μm | | | | | | |
| MSLP | Maasin | 17.33 | 329 | eP | P | 10 25 39.1 | 0.0 |
| KBKI | Kotabaru | 17.56 | 274 | P | Pn | 10 25 39.7 | -1.0 |
| | comp=Z,151nm,1.6s,comp=Z,5μmcomp=Z,21μm | | | | | | |
| SNPH | Sibulan | 17.57 | 324 | eP | P | 10 25 45.4 | +3.5 |
| MYLDM | Lahad Datu | 18.18 | 303 | ⇓P | P | 10 25 50.1 | +1.5 |
| MYLDM | Lahad Datu | 18.18 | 303 | ePn | P | 10 25 48.7 | +0.1 |
| | comp=Z,4μm,1.4s | | | | | | |
| TSM | Tawau | 18.25 | 300 | ⇑P | Pn | 10 25 48.5 | -0.8 |
| RABL | Rabaul | 18.42 | 89 | P | Pn | 10 25 53.2 | +1.8 |
| | baz=18,SNR=5.0 | | | | | | |
| SRBI | Singaraja | 18.64 | 259 | P | P | 10 25 50.8 | -2.8 |
| | comp=Z,595nm,1.0s,comp=Z,8μm | | | | | | |
| AS12 | Alice Springs | 18.67 | 179 | eP | P | 10 25 51.0 | -3.0 |
| AS12 | | | | eSn | Sn | 10 29 12.6 | -10 |
| ASAR | Alice Springs | 18.67 | 179 | P | P | 10 25 51.0 | -3.0 |
| | comp=Z,22nm,0.3s,baz=360,slow=13,SNR=112 | | | | | | |
| ASAR | | | | S | Sn | 10 29 12.6 | -10 |
| | comp=Z,11nm,0.3s,baz=3.2,slow=27,SNR=5.0 | | | | | | |
| ASAR | | | | Lg | Lg | 10 31 29.1 | |
| | baz=357,slow=34,SNR=2.9 | | | | | | |
| ASAR | | | | LR | LR | 10 34 23.2 | |
| | comp=Z,51μm,19.3s,baz=358,slow=41 | | | | | | |
| ASAR | Alice Springs | 18.67 | 179 | P | P | 10 25 51.0 | -3.0 |
| ASAR | | | | S | Sn | 10 29 12.6 | -10 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,22nm,0.3s | | | | | | |
| ASAR | | | | smax | smax | | |
| | comp=N,11nm,0.3s | | | | | | |
| ASAR | | | | MLR | MLR | | |
| | comp=Z,51μm,19.3s | | | | | | |
| IGBI | Denpasar | 18.82 | 257 | P | P | 10 25 53.3 | -2.4 |
| | comp=Z,410nm,0.8s,comp=Z,6μmcomp=Z,9μm | | | | | | |
| BBKI | Banjar Baru | 18.86 | 274 | P | Pn | 10 25 56.5 | -0.2 |
| | comp=Z,815nm,1.9s,comp=Z,22μm | | | | | | |
| GUIM | Jordan | 18.97 | 324 | eP | P | 10 25 56.9 | -0.4 |
| CTA | Charters Tower | 19.43 | 142 | P | P | 10 26 01.8 | -0.5 |
| | comp=Z,12nm,0.3s,baz=317,slow=12,SNR=68 | | | | | | |
| CTA | | | | S | Sn | 10 29 41.2 | -0.1 |
| | comp=Z,1.1nm,0.3s,baz=44,slow=23,SNR=5.8 | | | | | | |
| CTA | | | | Lg | Lg | 10 31 46.2 | |
| | comp=Z,1.1nm,0.3s,baz=59,slow=22,SNR=3.1 | | | | | | |
| CTA | | | | LR | LR | 10 33 58.6 | |
| | comp=Z,32μm,19.4s,baz=324,slow=38 | | | | | | |
| CTA | Charters Tower | 19.43 | 142 | P | P | 10 26 01.8 | -0.5 |
| CTA | | | | S | Sn | 10 29 41.2 | -0.1 |
| CTA | | | | pmax | pmax | | |
| | comp=Z,13nm,0.3s | | | | | | |
| CTA | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| CTA | | | | MLR | MLR | | |
| | comp=Z,32μm,19.4s | | | | | | |
| CTA | Charters Tower | 19.43 | 142 | eP | P | 10 26 01.8 | -0.5 |
| CTA | | | | eS | Sn | 10 29 41.2 | -0.1 |
| CTA | | | | eScP | ScP | 10 33 58.6 | -0.3 |
| CTAO | Charters Tower | 19.43 | 142 | eP | P | 10 26 01.8 | -0.5 |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,1μm,1.6s | | | | | | |
| CTAO | Charters Tower | 19.43 | 142 | eP | P | 10 26 01.8 | -0.5 |
| | comp=Z,1μm,1.6s | | | | | | |
| SDKM | Sandakan | 19.52 | 302 | ⇑P | Pn | 10 26 05.0 | +0.3 |
| ABJI | Asem Bagus | 19.56 | 261 | P | P | 10 26 03.0 | -0.7 |
| | comp=Z,837nm,1.2s,comp=Z,24μm | | | | | | |
| RCP | Roxas | 19.64 | 326 | ⇑eP | Pn | 10 26 05.8 | -0.2 |
| JAGI | Jajag, Banyuwa | 19.73 | 259 | P | P | 10 26 05.3 | -0.4 |
| | baz=20,SNR=11 | | | | | | |
| JAGI | Jajag, Banyuwa | 19.73 | 259 | P | P | 10 26 04.6 | -1.1 |
| | comp=Z,385nm,1.0s,comp=Z,6μmcomp=Z,19μm | | | | | | |
| JAGI | Jajag, Banyuwa | 19.73 | 259 | eP | P | 10 26 04.7 | -1.1 |
| | comp=Z,258nm,0.8s | | | | | | |
| KMMI | Kalianget | 19.74 | 263 | P | Pn | 10 26 06.8 | -0.5 |
| | comp=Z,1μm,1.3s,comp=Z,30μm | | | | | | |
| CUYO | Cuyo Island | 20.09 | 321 | eP | P | 10 26 09.9 | +0.3 |
| GMJI | Gumukmas | 20.40 | 259 | P | P | 10 26 13.1 | +0.2 |

KDM **Kudat** 20.51 305 ⇑P Pn 10 26 15.7 -0.7
KKM **Kota Kinabalu** 20.56 302 P **P** **10 26 15.9 +1.1**
baz=21,SNR=14
KKM **Kota Kinabalu** 20.56 302 ⇑P **P** **10 26 15.6 +0.8**
KKM **Kota Kinabalu** 20.56 302 *e*P **P** **10 26 15.5 +0.8**
comp=Z,1μm,1.2s
PVCP **Virac** 20.66 333⇓*e*P **P** **10 26 14.7 -1.0**
PPR **Puerto Princes** 20.85 314⇓*e*P Pn 10 26 23.7 +3.4
MBWA **Marble Bar** 21.10 219 P **P** **10 26 20.9 +0.5**
SNR=93
MBWA **Marble Bar** 21.10 219 *e*P **P** **10 26 20.6 +0.1**
comp=Z,963nm,0.9s
MBWA LR LR
comp=Z,28μm,21.0s
AUQP **San Andres** 21.15 329 *e*P **P** **10 26 22.9 +1.9**
ENPP **El Nido** 21.39 318 *e*P **P** **10 26 24.0 +0.5**
GUMO **Guam** 21.45 31 P **P** **10 26 24.0 -0.2**
comp=Z,671nm,1.1s,baz=188,slow=4.5,SNR=19
GUMO S **S** **10 30 23.4 +1.8**
comp=Z,118nm,1.3s,baz=225,slow=20,SNR=2.1
GUMO LR LR 10 34 48.1
comp=Z,10μm,18.3s,baz=215,slow=37
GUMO **Guam** 21.45 31 P **P** **10 26 24.0 -0.2**
GUMO *e*S **S** **10 30 23.4 +1.8**
GUMO pmax pmax
comp=Z,671nm,1.1s
GUMO smax smax
comp=N,118nm,1.3s
GUMO MLR MLR
comp=Z,10μm,18.3s
GUMO **Guam** 21.45 31 *e*P **P** **10 26 24.8 +0.6**
GUMO *e*S **S** **10 30 23.4 +1.8**
GUMO LR LR
comp=Z,20μm,18.0s
GQP **Guinayangan** 21.76 329⇑*e*P **P** **10 26 27.2 -0.3**
BTM **Bintulu** 22.11 291 ⇑P **P** **10 26 31.7 +0.4**
LQP **Lukban** 22.40 328 *e*P **P** **10 26 35.5 +0.8**
SBUM **Sibu** 22.66 288 ⇑P **P** **10 26 38.5 +1.2**
SBUM **Sibu** 22.66 288 *e*P **P** **10 26 37.4 +0.1**
comp=Z,4μm,2.4s
UGM **Wanagama** 23.22 261 P **P** **10 26 41.9 -1.3**
baz=23,SNR=7.7
UGM **Wanagama** 23.22 261 ⇑P **P** **10 26 41.1 -2.1**
UGM **Wanagama** 23.22 261 *e*P **P** **10 26 40.7 -2.5**
comp=Z,337nm,1.0s
UGM *e*S **S** **10 30 50.1 -4.3**
UGM LR LR
comp=Z,5μm,19.0s
SMRI **Semarang** 23.23 264 P **P** **10 26 42.2 -1.0**
baz=23,SNR=3.9
SMRI **Semarang** 23.23 264 *e*P **P** **10 26 43.5 +0.3**
comp=Z,3μm,2.3s
SMRI *e*Sn Sn 10 31 05.2 -7.5
BALP **Baler** 23.75 330 *e*P **P** **10 26 47.1 -1.1**
QLP **Quilpie** 23.81 156 P **P** **10 26 47.9 -0.8**
baz=24,SNR=381
PCPH **Palayan** 23.85 329⇑*e*P P 10 26 54.4 +5.3
KSM **Kuching** 24.21 285 P **P** **10 26 53.4 +0.7**
baz=24,SNR=44
KSM **Kuching** 24.21 285 ⇑P **P** **10 26 53.6 +1.0**
KSM **Kuching** 24.21 285 *e*P **P** **10 26 53.3 +0.7**
comp=Z,2μm,1.5s
KSM *e*S S 10 31 19.3 +9.0
ANA2 **Anatahan** 24.21 29 *e*P **P** **10 26 54.0 +1.4**
SARN **Sarigan** 24.55 29 *e*P **P** **10 26 56.7 +1.0**
BCPH **Baguio City Da** 24.80 329⇓*i*P **P** **10 26 54.5 -3.6**
GIRL **Giralia** 25.80 225 P **P** **10 27 08.1 +1.2**
baz=26,SNR=21
RMQ **Roma** 25.86 148 P **P** **10 27 07.5 +0.1**
baz=26,SNR=43
CISI **Cisompet, Garu** 25.86 263 P **P** **10 27 06.9 -0.8**
baz=26,SNR=4.5
CISI **Cisompet, Garu** 25.86 263 *e*P **P** **10 27 07.6 -0.1**
comp=Z,2μm,2.0s
CISI LR LR
comp=Z,17μm,22.0s
LEM **Lembang** 26.01 264 P **P** **10 27 09.9 +0.7**
comp=Z,78nm,0.8s,baz=63,slow=8.1,SNR=9.0
LEM S **S** **10 31 39.1 -0.4**
comp=Z,13nm,0.4s,baz=323,slow=20,SNR=1.8
LEM **Lembang** 26.01 264 P **P** **10 27 09.9 +0.7**
LEM S **S** **10 31 39.1 -0.4**
LEM pmax pmax
comp=Z,78nm,0.8s
LEM smax smax
comp=N,13nm,0.4s
LEM **Lembang** 26.01 264 *e*P **P** **10 27 09.9 +0.7**
LEM *e*S **S** **10 31 39.1 -0.4**
FORT **Forrest** 26.30 191 P **P** **10 27 11.0 -0.3**
baz=26,SNR=45
FORT **Forrest** 26.30 191 PFAKE 10 27 20.0 +8.7
FORT LR LR
comp=Z,59μm,19.0s
EIDS **Eidsvold** 26.32 142 P **P** **10 27 11.3 -0.3**
baz=26,SNR=18
EIDS **Eidsvold** 26.32 142 *e*P **P** **10 27 11.4 -0.3**
comp=Z,593nm,1.5s
EIDS LR LR
comp=Z,49μm,20.0s
HNR **Honiara** 26.43 101 P **P** **10 27 12.9 +0.1**
comp=Z,335nm,0.8s,baz=270,slow=2.9,SNR=17
HNR LR LR 10 38 56.4
comp=Z,27μm,20.7s,baz=274,slow=40
HNR **Honiara** 26.43 101 P **P** **10 27 12.9 +0.1**
HNR pmax pmax
comp=Z,335nm,0.8s
HNR MLR MLR
comp=Z,27μm,20.7s
HNR **Honiara** 26.43 101 *e*P **P** **10 27 11.0 -1.7**
HNR **Honiara** 26.43 101 *e*P **P** **10 27 12.8 +0.1**
comp=Z,622nm,0.9s
PATS **Pohnpei** 27.19 65 P **P** **10 27 19.9 +0.3**
baz=27,SNR=4.4
BBOO **Buckleboo** 27.87 176 P **P** **10 27 24.7 -0.7**
baz=28,SNR=42
BBOO **Buckleboo** 27.87 176 *e*P **P** **10 27 25.4 -0.1**
comp=Z,776nm,1.4s
BBOO LR LR
comp=Z,47μm,19.0s
XMIS **Christmas Isla** 28.33 257 PFAKE 10 27 40.0 +10
XMIS LR LR
comp=Z,6μm,22.0s
KMBL **Kambalda** 28.58 201 P **P** **10 27 31.3 -0.6**
baz=29,SNR=19
MORW **Morawa** 29.30 213 P **P** **10 27 38.8 +0.5**
baz=29,SNR=14
DLV **T Lat** 30.14 304 *e*P **P** **10 27 47.8 +1.7**
comp=Z,219nm,1.7s
TWG **Pinlang** 30.18 336 PFAKE 10 28 00.0 +14
TWG LR LR
comp=Z,37μm,21.0s
BLDU **Ballidu** 30.18 210 P **P** **10 27 46.0 0.0**
baz=30,SNR=33
KLBR **Kellerberrin** 30.49 208 P **P** **10 27 48.9 +0.1**
baz=31,SNR=27
ARMA **Armidale** 30.51 148 P **P** **10 27 48.5 -0.5**
baz=31,SNR=41
ARMA **Armidale** 30.51 148 *e*P **P** **10 27 48.8 -0.3**
comp=Z,152nm,0.8s
ARMA LR LR
comp=Z,30μm,19.0s
MYKOM **Kota Tinggi** 30.55 282 ⇑P **P** **10 27 50.3 +0.8**
MYKOM **Kota Tinggi** 30.55 282 *e*P **P** **10 27 50.1 +0.6**
comp=Z,526nm,1.6s
MYKOM LR LR
comp=Z,7μm,21.0s
YULB **Yu-li** 30.61 337 PFAKE 10 28 00.0 +10
YULB LR LR
comp=Z,8μm,20.0s
MNAI **Manna** 30.64 270 PFAKE 10 28 00.0 +10
MNAI LR LR
comp=Z,21μm,22.0s
TPUB **Ta-pu** 30.79 336 PFAKE 10 28 00.0 +8.5
TPUB LR LR
comp=Z,12μm,19.0s
YOJ **Yonaguni jima** 30.97 341 PFAKE 10 28 10.0 +17
YOJ LR LR
comp=Z,14μm,20.0s
SSLB **Suanglung** 31.09 337 PFAKE 10 28 10.0 +16
SSLB LR LR
comp=Z,11μm,19.0s
NACB **Ninganchiao** 31.20 338 PFAKE 10 28 10.0 +15
NACB LR LR
comp=Z,12μm,20.0s
YHNB **Yeheng** 31.73 338 PFAKE 10 28 10.0 +10
YHNB LR LR
comp=Z,12μm,21.0s
NWAO **Narrogin (SRO)** 31.85 207 P **P** **10 28 01.7 +0.9**
comp=Z,113nm,1.1s,baz=132,slow=0.0,SNR=35
NWAO **Narrogin (SRO)** 31.85 207 *e*P **P** **10 28 01.1 +0.3**
NWAO pmax pmax
comp=Z,189nm,1.3s
NWAO **Narrogin (SRO)** 31.85 207 P **P** **10 28 01.6 +0.8**
baz=32,SNR=28
NWAO **Narrogin (SRO)** 31.85 207 P **P** **10 28 01.0 +0.3**
SNR=18
NWAO **Narrogin (SRO)** 31.85 207 *e*P **P** **10 28 01.1 +0.3**
comp=Z,189nm,1.3s
JOW **Kunigami** 31.97 351 PFAKE 10 28 10.0 +8.2
JOW LR LR
comp=Z,16μm,21.0s
TATO **Taipei** 31.97 339 PFAKE 10 28 10.0 +8.1
TATO LR LR
comp=Z,9μm,18.0s
KTGM **Kuala Trenggan** 32.17 288 ⇑P **P** **10 28 04.2 +0.4**
ARPS **Mount Arapiles** 32.60 168 P **P** **10 28 07.8 +0.5**
baz=33,SNR=59
CBIJ **Chichi jima** 32.84 14 PFAKE 10 28 20.0 +11
CBIJ LR LR
comp=Z,13μm,20.0s
BKNI **Bangkinang** 33.03 278 PFAKE 10 28 20.0 +8.6
BKNI LR LR
comp=Z,16μm,22.0s
FRIM **Kepong** 33.04 284 ⇑P **P** **10 28 12.0 +0.5**
QZH **Quanzhou** 33.09 334 P **P** **10 28 11.0 -0.7**
QZH S **S** **10 33 26.5 -3.5**
QZH PMZ
comp=Z,110nm,0.8s
QZH PMZ
comp=Z,2μm,10.7s
QZH LN
comp=Z,6μm,15.8s
QZH LE
comp=Z,5μm,12.0s
QZH LZ
comp=Z,17μm,17.4s
HKC **Hong Kong Obse** 33.09 325⇓*i*P P 10 28 18.0 +6.2
RKGY **Rocky Gully** 33.39 206 P **P** **10 28 15.4 +1.2**
baz=34,SNR=22
CAN **Canberra** 33.42 157 *e*P **P** **10 28 15.2 +0.7**
CAN pmax pmax
comp=Z,104nm,1.2s
CAN MLR MLR
comp=Z,32μm,18.0s
CAN **Canberra** 33.42 157 *e*P **P** **10 28 15.2 +0.7**
comp=Z,104nm,1.2s
CAN LR LR
comp=Z,32μm,18.0s
QIZ **Qiongzhong** 33.42 316 P **P** **10 28 17.3 +2.6**
QIZ pP **pP** **10 28 21.0 +0.5**
QIZ S S 10 33 41.9 +6.6
QIZ PMZ
comp=Z,36nm,2.0s
QIZ PMZ
comp=Z,980nm,9.3s
QIZ LN
comp=Z,6μm,20.0s
QIZ LE
comp=Z,4μm,18.9s
QIZ LZ
comp=Z,7μm,17.5s
QIZ **Qiongzhong** 33.42 316 *e*P **P** **10 28 14.9 +0.3**
comp=Z,299nm,1.7s
QIZ LR LR
comp=Z,8μm,18.0s
CNB **Canberra Magne** 33.56 156 P **P** **10 28 16.0 +0.2**
baz=34,SNR=6.5
IPM **Ipoh** 33.94 285 ⇑P **P** **10 28 19.9 +0.6**
IPM **Ipoh** 33.94 285 *e*P **P** **10 28 19.0 -0.3**
comp=Z,2μm,2.4s
IPM LR LR
comp=Z,9μm,22.0s
GZH **Guangzhou** 34.18 325 P **P** **10 28 22.9 +1.7**
GZH S S 10 33 53.7 +6.8
GZH LN
comp=Z,13μm,18.5s
GZH LE
comp=Z,8μm,18.9s
TOO **Toolangi** 34.27 163 P **P** **10 28 22.6 +0.7**
baz=34,SNR=29
UBPT **Khong Chiam** 34.40 306 P **P** **10 28 23.6 +0.4**
comp=Z,136nm,1.4s,comp=Z,3μm
KULM **Kulim** 34.52 287 ⇑P **P** **10 28 25.2 +0.9**
KULM **Kulim** 34.52 287 *e*P **P** **10 28 22.6 -1.8**
comp=Z,670nm,1.8s
KULM LR LR
comp=Z,9μm,21.0s
H01W1 **Cape Leeuwin H** 34.91 209 P **P** **10 28 29.8 +2.7**
baz=34,slow=18,SNR=14
H01W3 **Cape Leeuwin H** 34.91 209 P **P** **10 28 29.4 +2.3**
baz=34,slow=18,SNR=14
H01W2 **Cape Leeuwin H** 34.92 209 P P 10 28 31.0 +3.8
baz=34,slow=18,SNR=10
SKLT **Songkhla** 35.12 290 P **P** **10 28 31.7 +2.2**
comp=Z,118nm,1.7s,comp=Z,2μm
PSI **Prapat** 35.57 282 P **P** **10 28 33.7 +0.2**
comp=Z,74nm,1.0s,baz=123,slow=4.4,SNR=13
PSI PcP **PcP** **10 31 02.7 +0.2**
comp=Z,27nm,0.9s,baz=294,slow=1.3,SNR=4.2
PSI S **S** **10 34 04.4 -4.5**
comp=Z,2.4nm,0.5s,baz=81,slow=19,SNR=2.8
PSI **Prapat** 35.57 282 P **P** **10 28 33.7 +0.2**
PSI 10 31 02.7
PSI S **S** **10 34 04.4 -4.5**
PSI pmax pmax
comp=Z,74nm,1.0s
PSI smax smax
comp=N,2.0nm,0.5s
PSI **Prapat** 35.57 282 P **P** **10 28 33.9 +0.3**
baz=36,SNR=9.7
PSI **Prapat** 35.57 282 *e*P **P** **10 28 33.7 +0.2**
comp=N,246nm,1.2s
PSI *e*PcP **PcP** **10 31 02.7 +0.2**
PSI *e*S **S** **10 34 04.4 -4.5**
PSI LR LR
comp=Z,8μm,19.0s
LHI **Lord Howe Isla** 35.61 141 PFAKE 10 28 50.0 +16
LHI LR LR
comp=Z,32μm,19.0s
DZM **Mont Dzumac** 36.00 121 *e*P **P** **10 28 36.6 -0.5**
comp=Z,183nm,1.1s
DZM *e*S **S** **10 34 10.6 -4.7**
comp=Z,7μm,26.7s
DZM *e*LR LR 10 38 14.7
comp=Z,29μm,23.6s
DZM **Mont Dzumac** 36.00 121 P **P** **10 28 36.2 -0.9**
comp=Z,57nm,1.1s,baz=176,slow=9.7,SNR=7.2
DZM S **S** **10 34 17.2 +2.0**
comp=Z,12nm,0.9s,baz=180,slow=20,SNR=2.2
DZM LR LR 10 43 27.0
comp=Z,16μm,19.9s,baz=356,slow=36
DZM **Mont Dzumac** 36.00 121 *e*P **P** **10 28 36.4 -0.7**
comp=Z,294nm,1.7s
DZM LR LR
comp=Z,24μm,22.0s
TRTT **Trang** 36.20 290 P **P** **10 28 40.4 +1.6**
comp=Z,148nm,1.4s,comp=Z,3μm
KWAJ **Kwajalein Atol** 36.45 68 *e*P **P** **10 28 40.8 -0.1**
KWAJ pmax pmax
comp=Z,162nm,0.9s
KWAJ MLR MLR
comp=Z,5μm,18.0s
KWAJ **Kwajalein Atol** 36.45 68 *e*P **P** **10 28 40.8 -0.1**
comp=Z,162nm,0.9s
KWAJ LR LR
comp=Z,5μm,18.0s
SKNT **Sakolnakorn** 36.53 307 P **P** **10 28 41.1 -0.4**
comp=Z,172nm,1.9s,comp=Z,4μm
GSI **Gunungsitoli** 36.61 279 *e*P **P** **10 28 43.0 +0.7**
comp=Z,3μm,2.5s
GSI LR LR
comp=Z,20μm,22.0s
SURA **Surathani** 36.72 292 P **P** **10 28 45.5 +2.3**
comp=Z,84nm,1.5s,comp=Z,5μm
KRAB **Krabi** 36.79 291 P **P** **10 28 46.2 +2.4**
comp=Z,113nm,1.0s,comp=Z,4μm
COCO **West Island** 37.13 256 PFAKE 10 29 00.0 +13
COCO LR LR
comp=Z,6μm,21.0s
PKDT **Phuket** 37.49 290 P **P** **10 28 51.6 +1.8**
comp=Z,167nm,1.7s,comp=Z,3μm
SSE **Sheshan** 37.73 342 P P 10 28 54.8 +3.3
SSE sP sP 10 28 59.2 -0.5
SSE S **S** **10 34 45.4 +4.4**
SSE PMZ
comp=Z,63nm,1.0s
SSE PMZ
comp=Z,1μm,8.7s
SSE LN
comp=Z,8μm,18.0s
SSE LZ
comp=Z,10μm,17.6s
NONG **Nongkai** 37.79 308 P **P** **10 28 51.6 -0.7**
comp=Z,115nm,1.9s
JNU **Nakatsue** 37.90 356 P **P** **10 28 52.5 -0.4**
comp=Z,75nm,1.1s,baz=171,slow=6.5,SNR=23
JNU S **S** **10 34 45.2 +1.5**
comp=Z,3.6nm,1.0s,baz=197,slow=20,SNR=2.1
JNU LR LR 10 44 33.9
comp=Z,12μm,18.7s,baz=172,slow=36
JNU **Nakatsue** 37.90 356 *e*P **P** **10 28 52.2 -0.7**
comp=Z,799nm,1.6s
JNU *e*S **S** **10 34 45.2 +1.5**
JNU LR LR
comp=Z,14μm,19.0s
LHMI **Lhok Sumawe** 38.05 285 PFAKE 10 29 10.0 +15
LHMI LR LR
comp=Z,11μm,20.0s
PHET **Kaeng Krachan** 38.19 298 P P 10 29 00.4 +4.8
comp=Z,23nm,1.1s,comp=Z,278nm
JHJ2 **Mitsune** 38.24 8 PFAKE 10 29 10.0 +14
JHJ2 LR LR
comp=Z,22μm,19.0s
JHJ **Hachijo jima 2** 38.24 8 LR LR 10 44 31.6
comp=Z,21μm,18.9s,baz=205,slow=36
PBKT **Sadao Pong** 38.75 304 P **P** **10 29 01.0 +0.7**
comp=Z,54nm,1.9s,comp=Z,2μm
LOEI **Loei** 39.00 306 P **P** **10 28 59.3 -3.1**
comp=Z,178nm,1.2s,comp=Z,3μm
SLVN **Son La** 39.15 313 *e*P **P** **10 29 04.2 +0.6**
MOO **Moorlands** 39.27 164 P **P** **10 29 05.4 +1.0**
baz=39,SNR=11
NJ2 **Nanjing** 39.36 340 *e*P **P** **10 29 07.7 +2.5**
NJ2 pP **pP** **10 29 12.8 +1.7**
NJ2 sP **sP** **10 29 16.5 +3.0**
NJ2 S **S** **10 35 10.0 +4.3**
NJ2 PMZ
comp=Z,130nm,0.8s
NJ2 PMZ
comp=Z,110nm,6.6s
NJ2 LN
comp=Z,8μm,20.0s
NJ2 LE
comp=Z,14μm,21.6s
NJ2 LZ
comp=Z,13μm,18.6s
UTHA **Uthaitani** 39.53 302 P **P** **10 29 08.9 +2.0**
comp=Z,28nm,1.2s,comp=Z,263nm
TARA **Tarawa** 39.67 82 *e*P P 10 29 04.8 -3.3
comp=Z,792nm,1.5s
TARA LR LR
comp=Z,12μm,18.0s
UTTA **Uttaradit** 39.70 305 P **P** **10 29 08.9 +0.7**
comp=Z,28nm,1.1s,comp=Z,254nm
TAU **Tasmania Unive** 39.74 164 P **P** **10 29 09.0 +0.7**
comp=Z,711nm,1.2s,SNR=6.5
TAU **Tasmania Unive** 39.74 164 PFAKE 10 29 20.0 +12
TAU LR LR
comp=Z,31μm,18.0s
KSKOH **Goheung** 39.75 352 P P 10 29 15.1 +6.7
SNR=7.5
KSKOH **Goheung** 39.75 352 P P 10 29 15.1 +6.7
SNR=7.5
WHN **Wuhan** 39.80 333⇑*i*P **P** **10 29 09.0 +0.1**
WHN sP **sP** **10 29 16.7 -0.5**
WHN S **S** **10 35 13.4 +1.0**
WHN PMZ
comp=Z,180nm,1.1s
WHN LN
comp=Z,3μm,15.1s
WHN LE
comp=Z,9μm,15.8s
WHN LZ
comp=Z,17μm,21.4s
KSTOY **TONGYEONG** 39.83 353 P P 10 29 14.4 +5.3
SNR=6.0
KSTOY **TONGYEONG** 39.83 353 P P 10 29 14.4 +5.3
SNR=6.0
KSHUK **Heuksando** 40.12 349 P P 10 29 18.5 +7.0
SNR=7.2
KSHUK **Heuksando** 40.12 349 P P 10 29 18.5 +7.0
SNR=7.2
NANT **Nan** 40.13 307 P **P** **10 29 13.2 +1.3**
comp=Z,30nm,1.3s,comp=Z,1μm
KSBUS **Busan** 40.16 354 P P 10 29 18.5 +6.7
SNR=6.5
KSBUS **Busan** 40.16 354 P P 10 29 18.5 +6.7
SNR=6.5
KSJIN **Jinju** 40.19 353 P P 10 29 17.3 +5.3
SNR=6.0
KSJIN **Jinju** 40.19 353 P P 10 29 17.3 +5.3
SNR=6.0
KSKWJ **Gwangju** 40.33 351 P P 10 29 19.5 +6.3
SNR=9.5
KSKWJ **Gwangju** 40.33 351 P P 10 29 19.5 +6.3
SNR=9.5
UMPA **Umpang Tak** 40.34 302 P **P** **10 29 15.3 +1.7**
comp=Z,27nm,1.5s,comp=Z,1μm
PHRA **Phrae** 40.35 306 P **P** **10 29 13.9 +0.2**
comp=Z,1μm,1.2s,comp=Z,18μm
KSGWJ **Gwangju-acc** 40.36 351 P P 10 29 19.3 +5.9
SNR=10.0
KSGWJ **Gwangju-acc** 40.36 351 P P 10 29 19.3 +5.9
SNR=10.0
WAKE **Wake Island** 40.36 53 PFAKE 10 29 30.0 +16
WAKE LR LR
comp=Z,8μm,20.0s
KSJEU **Jeongeup** 40.67 352 P P 10 29 22.6 +6.5
SNR=5.7
KSJEU **Jeongeup** 40.67 352 P P 10 29 22.6 +6.5
SNR=5.7
KSDAG **Daegu** 40.69 354 P P 10 29 22.7 +6.5
SNR=7.5
KSDAG **Daegu** 40.69 354 P P 10 29 22.7 +6.5
SNR=7.5
GYA **Guiyang** 40.70 321⇑*i*P **P** **10 29 16.4 -0.2**
GYA PP **PnPn** **10 30 58.0 +3.3**
GYA PcP **PcP** **10 31 20.8 +2.7**
GYA ScP **ScP** **10 35 09.2 +2.3**
GYA S **S** **10 35 31.0 +4.8**
GYA SS **SS** **10 38 26.6 -0.6**
GYA PMZ
comp=Z,90nm,1.0s
GYA PMZ
comp=Z,1μm,7.8s
GYA LN
comp=Z,6μm,18.6s
GYA LE
comp=Z,5μm,17.7s
GYA LZ
comp=Z,5μm,16.4s
LAMP **Lampang** 40.85 306 P **P** **10 29 19.0 +1.2**
comp=Z,42nm,1.0s,comp=Z,330nm
KSYOC **YEONGCHEON** 40.89 354 P P 10 29 24.6 +6.8
SNR=8.6
KSYOC **YEONGCHEON** 40.89 354 P P 10 29 24.6 +6.8
SNR=8.6
KSJEO **Jeonju** 41.05 352 P P 10 29 24.8 +5.6
SNR=5.9
KSCPR **CHUPUNGNYEONG** 41.24 353 P P 10 29 26.9 +6.1
SNR=7.2
KSEUS **ULSEONG** 41.29 354 P P 10 29 27.9 +6.8
SNR=13
CM01 **Chiang Mai Arr** 41.34 305 *e*P **P** **10 29 22.0 +0.2**
CM31 **Chiang Mai Arr** 41.37 305 *e*P **P** **10 29 22.2 +0.1**
CM31 *e*PcP **PcP** **10 31 21.5 +1.2**
CM31 *e*ScP **ScP** **10 35 11.4 +1.8**
CMAR **Chiang Mai Arr** 41.37 305 P **P** **10 29 22.2 +0.1**
comp=Z,25nm,1.1s,baz=136,slow=7.5,SNR=24
CMAR PcP **PcP** **10 31 21.5 +1.2**
comp=Z,16nm,0.8s,baz=152,slow=2.5,SNR=7.1
CMAR ScP **ScP** **10 35 11.4 +1.8**
comp=Z,1.5nm,0.4s,baz=148,slow=3.1,SNR=4.6
CMAR **Chiang Mai Arr** 41.37 305 P **P** **10 29 22.2 +0.1**
CMAR 10 31 21.5
CMAR pmax pmax
comp=Z,25nm,1.1s
KSSAJ **Sangju** 41.41 353 P P 10 29 28.6 +6.5
SNR=6.4
MJAR **Matsushiro Arr** 41.43 5 P **P** **10 29 20.2 -2.1**

comp=Z,3.6nm,0.7s,baz=186,slow=9.8,SNR=11
MJAR PcP **PcP 10 31 20.7 +0.5**
comp=Z,6.6nm,0.8s,baz=188,slow=3.0,SNR=5.5
MJAR LR LR 10 44 45.7
comp=Z,17μm,19.1s,baz=185,slow=34
**MJAR Matsushiro Arr 41.43 5** P **P 10 29 20.2 -2.1**
MJAR 10 31 20.7
**MAJO Matsushiro 41.43 5** *e*P **P 10 29 21.6 -0.7**
MAJO *e* 10 31 20.7
MAJO pmax pmax
comp=Z,420nm,2.5s
MAJO MLR MLR
comp=Z,19μm,20.0s
**MAJO Matsushiro 41.43 5** *e*P **P 10 29 21.6 -0.7**
comp=Z,420nm,2.5s
MAJO *e*PcP **PcP 10 31 20.7 +0.5**
MAJO LR LR
comp=Z,19μm,20.0s
**MAT Matsushiro 41.43 5** P **P 10 29 20.0 -2.3**
MAT S **S 10 35 34.4 -2.2**
**TJN Taejon 41.48 352** *d* iP **P 10 29 22.4 -0.2**
**KSBON Boeun 41.54 353** P P 10 29 30.1 +6.9
SNR=6.1
**CHTO Chiang Mai 41.55 306** P **P 10 29 24.0 +0.4**
comp=Z,605nm,1.4s,comp=Z,13μm
**CHTO Chiang Mai 41.55 306** *e*P **P 10 29 23.6 0.0**
CHTO pmax pmax
comp=Z,201nm,1.3s
CHTO MLR MLR
comp=Z,3μm,19.0s
**CHTO Chiang Mai 41.55 306** P **P 10 29 24.4 +0.7**
SNR=39
**CHTO Chiang Mai 41.55 306** *e*P **P 10 29 23.6 0.0**
comp=Z,200nm,1.3s
CHTO LR LR
comp=Z,3μm,19.0s
**KSULJ Uljin 41.57 355** P P 10 29 30.1 +6.7
SNR=10
**KSKOJ Gongju 41.60 352** P P 10 29 30.5 +6.9
SNR=12
**KSCHJ Chungju 41.89 353** P P 10 29 32.2 +6.2
SNR=7.8
**KSCEA Cheonan 41.93 352** P P 10 29 33.3 +6.9
SNR=13
**ENH Enshi 41.95 328** *e*P **P 10 29 26.7 0.0**
comp=Z,141nm,1.4s
ENH LR LR
comp=Z,8μm,18.0s
**CMAI Chiengmai2 42.06 307** P **P 10 29 28.1 +0.2**
comp=Z,74nm,1.9s,comp=Z,4μm
**MHMT Maesarieng 42.06 304** P **P 10 29 29.5 +1.7**
comp=Z,55nm,1.4s
**KSYOW Yeongwol 42.13 354** P P 10 29 35.2 +7.2
SNR=7.5
**KSULL Ulleungdo 42.23 357** P P 10 29 36.6 +7.8
SNR=7.3
**KMI Kunming 42.37 316** P **P 10 29 31.4 +1.0**
KMI pP **pP 10 29 35.7 -0.7**
KMI sP **sP 10 29 37.0 -1.8**
KMI PP PP 10 31 14.9 +6.1
KMI PcP **PcP 10 31 24.5 +0.7**
KMI S **S 10 35 52.2 +1.0**
KMI sS **sS 10 36 02.0 +1.0**
KMI SS **SS 10 38 56.9 -3.6**
KMI ScS **ScS 10 39 33.1 +0.9**
KMI PMZ
comp=Z,94nm,1.3s
KMI PMZ
comp=Z,870nm,4.8s
KMI LN
comp=Z,5μm,16.6s
KMI LE
comp=Z,5μm,16.6s
KMI LZ
comp=Z,6μm,17.4s
**KSICN Icheon 42.37 353** P P 10 29 37.0 +7.0
SNR=8.1
**KSWJU Wonju 42.40 353** P P 10 29 37.4 +7.2
SNR=6.1
**KSSWO Suwon 42.41 352** P P 10 29 37.4 +7.2
SNR=9.6
**KS15 Wonju Array Si 42.46 353** *e*P **P 10 29 30.9 +0.2**
KS15 *e*PcP **PcP 10 31 24.4 +0.9**
**KSRS Korea Array 42.47 353** P **P 10 29 30.9 +0.2**
comp=Z,11nm,0.9s,baz=177,slow=9.9,SNR=21
KSRS PcP **PcP 10 31 24.4 +0.9**
comp=Z,3.1nm,0.9s,baz=190,slow=5.9,SNR=3.8
**KSRS Korea Array 42.47 353** P **P 10 29 30.9 +0.2**
KSRS 10 31 24.4
KSRS pmax pmax
comp=Z,11nm,0.9s
**INCN Inchon 42.66 352** P **P 10 29 34.9 +2.5**
SNR=8.8
**INCN Inchon 42.66 352** *e*P **P 10 29 33.5 +1.1**
comp=Z,658nm,2.2s
INCN LR LR
comp=Z,10μm,21.0s
**KSCHC Chuncheon 42.80 353** P P 10 29 40.6 +7.1
SNR=6.9
**KSGAH Ganghwa 42.91 352** P P 10 29 42.3 +8.0
SNR=5.8
**KSIJA INJE 42.97 354** P P 10 29 42.7 +7.8
SNR=7.3
**KSMUS Musan 43.05 352** P P 10 29 42.8 +7.3
SNR=15
**KSCWO Cheorwon 43.14 353** P P 10 29 44.0 +7.8
SNR=10.0
**YNCB YEONCHEON 43.17 352** P P 10 29 43.7 +7.2
SNR=6.0
**KSSKC Sokcho 43.23 354** P P 10 29 44.4 +7.5
SNR=13
**SEHB SEOHWA 43.23 354** P P 10 29 44.5 +7.5
SNR=5.9
**TIA Tai'an 43.73 341** ⇑P P 10 29 47.0 +5.9
TIA PP **PcP 10 31 29.8 +2.0**
TIA S **S 10 36 08.4 -2.1**
**TIA Tai'an 43.73 341** SS SS 10 39 49.3 +23
**DGPR DIGLIPUR 44.29 294** *e*P **P 10 29 44.2 -1.6**
**DL2 Dalian 44.98 347** P **P 10 29 51.0 0.0**
DL2 S **S 10 36 30.4 +1.8**
DL2 PMZ
comp=Z,130nm,1.5s
DL2 PMZ
comp=Z,1μm,6.5s
DL2 LN
comp=Z,3μm,20.8s
DL2 LE
comp=Z,5μm,21.2s
DL2 LZ
comp=Z,6μm,16.5s
**MSVF Nonsavu 45.20 110** *e*P **P 10 29 53.3 +0.1**
MSVF pmax pmax
comp=Z,486nm,1.7s
MSVF MLR MLR
comp=Z,15μm,20.0s
**MSVF Nonsavu 45.20 110** P **P 10 29 54.0 +0.8**
comp=Z,640nm,1.8s,SNR=6.3
**MSVF Nonsavu 45.20 110** *e*P **P 10 29 53.3 +0.1**
comp=Z,486nm,1.7s
MSVF LR LR
comp=Z,15μm,20.0s
**XAN Xi'an 45.24 331** P **P 10 29 52.0 -1.2**
XAN pP **pP 10 29 55.7 -3.5**
XAN PP **PP 10 31 40.5 +1.2**
XAN S **S 10 36 29.3 -3.3**
XAN PMZ
comp=Z,60nm,1.2s
XAN PMZ
comp=Z,870nm,5.4s
XAN LN
comp=Z,3μm,18.4s
XAN LE
comp=Z,5μm,19.4s
XAN LZ
comp=Z,6μm,19.4s
**CD2 Chengdu 45.67 323** P **P 10 29 56.2 -0.4**
CD2 pP **pP 10 29 58.3 -4.3**
CD2 PP **PP 10 31 43.3 -0.5**
CD2 PcS **PcS 10 35 28.1 -0.8**
CD2 S **S 10 36 41.7 +2.9**
CD2 sS **sS 10 36 47.0 -1.7**
CD2 PMZ
comp=Z,230nm,1.2s
CD2 PMZ
comp=Z,1μm,7.4s
CD2 LN
comp=Z,6μm,18.1s
CD2 LE
comp=Z,6μm,16.6s
CD2 LZ
comp=Z,8μm,16.2s
**TIY Taiyuan 46.78 337** *e*P **P 10 30 04.7 -0.6**
TIY PcS **PcS 10 35 35.3 +1.9**
TIY S **S 10 36 53.1 -1.5**
TIY PMZ
comp=Z,130nm,1.0s
TIY PMZ
comp=Z,1μm,6.1s
TIY LN
comp=Z,3μm,13.7s
TIY LE
comp=Z,1μm,13.6s
TIY LZ
comp=Z,6μm,22.0s
**MSHR Mys Shultsa 47.30 357** *d* iP **P 10 30 09.9 +0.7**
**SNY Shenyang 47.40 350** ⇓P **P 10 30 10.2 +0.3**
SNY S **S 10 37 00.1 -3.1**
SNY PMZ
comp=Z,36nm,2.0s
SNY LN
comp=Z,11μm,19.8s
SNY LE
comp=Z,6μm,19.2s
SNY LZ
comp=Z,11μm,20.4s
**ERM Erimo 47.47 10**⇑ *e*P **P 10 30 12.0 +1.5**
ERM pmax pmax
comp=Z,64nm,2.5s
ERM MLR MLR
comp=Z,8μm,18.0s
**BJT Baijiatuau 47.51 342** *e*P **P 10 30 11.2 +0.3**
BJT pmax pmax
comp=Z,569nm,1.5s
BJT MLR MLR
comp=Z,10μm,20.0s
**BJT Baijiatuau 47.51 342** *e*P **P 10 30 11.2 +0.3**
comp=Z,569nm,1.5s
BJT LR LR
comp=Z,10μm,20.0s
**BJI Beijing 47.53 342** P **P 10 30 10.9 -0.1**
BJI S **S 10 37 02.3 -2.7**
BJI PMZ
comp=Z,85nm,2.0s
BJI PMZ
comp=Z,3μm,6.0s
BJI LN
comp=Z,8μm,20.2s
BJI LE
comp=Z,6μm,19.4s
BJI LZ
comp=Z,7μm,26.3s
**VLA Vladivostok 47.81 358** *d* iP **P 10 30 14.1 +1.0**
VLA pmax pmax
comp=Z,211nm,1.1s
VLA MLR MLR
comp=Z,11μm,18.0s
**USRK Ussuriysk Ar. 48.89 358** P **P 10 30 21.9 +0.5**
comp=Z,56nm,0.7s,baz=183,slow=7.1,SNR=64
USRK LR LR 10 50 38.5
comp=Z,8μm,18.8s,baz=164,slow=36
**CN2 Changchun 49.03 352** *e*P **P 10 30 20.9 -1.7**
CN2 *e*PP **PP 10 32 15.4 -0.9**
CN2 PcS **PcS 10 35 39.7 -2.8**
CN2 *e*S **S 10 37 22.5 -3.8**
CN2 *e*SS **SS 10 40 53.6 -4.0**
CN2 PMZ
comp=Z,30nm,1.0s
CN2 PMZ
comp=Z,200nm,3.0s
CN2 LN
comp=Z,4μm,19.0s
CN2 LE
comp=Z,7μm,19.0s
CN2 LZ
comp=Z,9μm,21.0s
**MDJ Mudanjiang 49.42 356** P **P 10 30 26.3 +0.8**
MDJ PcP **PcP 10 31 49.1 +1.5**
MDJ PP **PP 10 32 18.2 -1.6**
MDJ ScP **ScP 10 35 45.2 +3.0**
MDJ S **S 10 37 34.5 +2.9**
MDJ ScS **ScS 10 40 17.6 +1.1**
MDJ PMZ
comp=Z,390nm,0.9s
MDJ PMZ
comp=Z,1μm,5.4s
MDJ LN
comp=Z,3μm,19.9s
MDJ LE
comp=Z,8μm,24.4s
MDJ LZ
comp=Z,5μm,22.9s
**MDJ Mudanjiang 49.42 356** *e*P **P 10 30 25.9 +0.4**
comp=Z,842nm,1.4s
MDJ LR LR
comp=Z,6μm,21.0s
**LZH Lanzhou 49.43 328** *e*P **P 10 30 26.6 +0.6**
LZH pP **pP 10 30 29.4 -2.6**
LZH sP **sP 10 30 31.5 -2.8**
LZH S **S 10 37 28.3 -4.2**
LZH sS **sS 10 37 43.1 +0.7**
LZH SS **SS 10 41 01.3 -3.3**
LZH PMZ
comp=Z,80nm,1.1s
LZH PMZ
comp=Z,430nm,4.0s
LZH LN
comp=Z,4μm,15.5s
LZH LE
comp=Z,5μm,15.7s
LZH LZ
comp=Z,5μm,16.4s
**ASAJ Asahikawa 49.44 8** *e*P **P 10 30 26.4 +0.8**
comp=Z,554nm,1.8s
ASAJ LR LR
comp=Z,8μm,21.0s
**MSZ Milford Sound 49.68 148** PN **P 10 30 27.8 +0.3**
**JCZ Jackson Bay 49.72 147** PN **P 10 30 28.4 +0.4**
JCZ *e*SN S 10 37 25.7 -11
JCZ PKIKP PKiKP 10 38 29.9 -5.8
**DCZ Deep Cove 49.83 149** *e*P **P 10 30 28.8 +0.1**
comp=Z,171nm,0.9s
**HHC Hu-ho-hao-te 49.83 338** ⇑P **P 10 30 29.5 +0.6**
HHC pP **pP 10 30 35.1 +0.2**
HHC S **S 10 37 39.1 +1.3**
HHC sS **sS 10 37 46.6 -1.2**
HHC ScS **ScS 10 40 16.0 -3.7**
HHC PMZ
comp=Z,49nm,1.4s
HHC PMZ
comp=Z,2μm,5.0s
HHC LN
comp=Z,6μm,19.9s
HHC LE
comp=Z,4μm,21.1s
HHC LZ
comp=Z,6μm,18.7s
**QRZ Quartz Range 49.90 142** PN **P 10 30 30.4 +1.1**
**YUK Yuzh-Kuril'sk 49.92 11** *c* iP **P 10 30 29.8 +0.5**
YUK *i* 10 32 24.3
YUK *i* S **S 10 37 42.2 +3.6**
YUK *i* 10 40 19.4
YUK *i* SSS SSS 10 42 35.8
YUK pmax pmax
comp=Z,963nm,7.0s
YUK pmax pmax
comp=N,238nm,1.8s
YUK pmax pmax
comp=E,114nm,1.8s
YUK pmax pmax
comp=Z,328nm,1.8s
YUK MLR MLR
comp=N,704nm,22.0s
YUK MLR MLR
comp=E,1μm,22.0s
YUK MLR MLR
comp=Z,4μm,22.0s
**HIZ Hauiti 50.13 138** PFAKE 10 30 40.0 +8.9
HIZ LR LR
comp=Z,15μm,19.0s
**WVZ Waitaha Valley 50.18 145** PN **P 10 30 31.1 -0.3**
**BTO Baotou 50.22 337** *e*P P 10 30 25.5 -6.3
**WKZ Wanaka 50.36 148** PN **P 10 30 32.4 -0.4**
**WKZ Wanaka 50.36 148** *e*P **P 10 30 32.8 +0.1**
comp=Z,225nm,1.0s
**WHZ Wether Hill Ro 50.52 149** PN **P 10 30 32.6 -1.3**
WHZ PKIKP **PKiKP 10 38 34.4 -2.0**
**WHZ Wether Hill Ro 50.52 149** *e*P **P 10 30 33.1 -0.8**
comp=Z,232nm,1.3s
WHZ LR LR
comp=Z,26μm,19.0s
**SHL Shillong 50.62 309** *e*P **P 10 30 36.3 +1.1**
SHL AMB AMB 10 30 50.3
comp=Z,182nm,0.5s
**THZ Tophouse 50.67 142** *e*P **P 10 30 34.4 -0.8**
comp=Z,90nm,1.0s
**LBZ Lake Benmore 50.70 147** PN **P 10 30 34.4 -0.9**
**RPZ Rata Peaks 50.76 145** P **P 10 30 35.8 0.0**
comp=Z,219nm,0.9s,baz=343,slow=0.4,SNR=29
**RPZ Rata Peaks 50.76 145** PN **P 10 30 35.4 -0.4**
**RPZ Rata Peaks 50.76 145** *e*P **P 10 30 35.8 0.0**
comp=Z,212nm,0.8s
**LTZ Lake Taylor 50.89 144** PN **P 10 30 36.6 -0.2**
**OXZ Oxford 51.08 144** PN **P 10 30 37.0 -1.2**
**OXZ Oxford 51.08 144** *e*P **P 10 30 37.2 -1.0**
comp=Z,74nm,0.6s
**ODZ Otahua Downs 51.37 147** PN **P 10 30 39.2 -1.2**
**ODZ Otahua Downs 51.37 147** *e*P **P 10 30 39.1 -1.2**
comp=Z,122nm,0.8s
ODZ LR LR
comp=Z,15μm,20.0s
**TUZ Tuapeka 51.43 148** PN **P 10 30 39.9 -0.8**
**KHZ Kahutara 51.43 143** PN **P 10 30 39.3 -1.5**
**KHZ Kahutara 51.43 143** *e*P **P 10 30 40.2 -0.6**
comp=Z,713nm,2.2s
**KUR Kuril'sk 51.48 13** *c* iP **P 10 30 41.6 +0.5**
KUR *i* 10 31 55.6
KUR *i* 10 32 35.8
KUR *i* PPP PPP 10 33 35.3
KUR *i* S **S 10 38 03.0 +2.7**
KUR pmax pmax
comp=Z,1μm,5.0s
KUR pmax pmax
comp=Z,323nm,1.6s
KUR pmax pmax
comp=N,119nm,1.5s
KUR pmax pmax
comp=E,44nm,1.5s
**URZ Urewera 51.54 136** PFAKE 10 30 50.0 +8.3
URZ LR LR
comp=Z,21μm,19.0s
**BKZ Black Stump Fm 51.56 138** *e*P **P 10 30 40.2 -1.8**
comp=Z,74nm,1.1s
BKZ LR LR
comp=Z,18μm,18.0s
**CRLZ Canterbury Las 51.57 144** PN **P 10 30 41.3 -0.5**
**MQZ McQueen's Vall 51.67 144** *e*PN **P 10 30 41.9 -0.6**
**MQZ McQueen's Vall 51.67 144** *e*P **P 10 30 42.5 0.0**
comp=Z,118nm,0.9s
MQZ LR LR
comp=Z,21μm,19.0s
**MRZ Mangatainoka R 51.73 140** PN **P 10 30 41.5 -1.6**
**YSS Yuzh-Sakhalins 52.24 8**⇓ *e*P **P 10 30 46.8 +0.2**
YSS *e**SP **sP 10 30 52.5 -2.6**
YSS *e*S **S 10 38 14.0 +3.4**
YSS pmax pmax
comp=Z,270nm,1.8s
YSS MLR MLR
comp=N,5μm,18.0s
YSS MLR MLR
comp=E,2μm,18.0s
YSS MLR MLR
comp=Z,8μm,18.0s
**YSS Yuzh-Sakhalins 52.24 8** *e*P **P 10 30 46.9 +0.2**
comp=Z,576nm,1.7s
YSS LR LR
comp=Z,5μm,20.0s
**HABR Khabarovsk 53.15 1** *d* eP **P 10 30 54.0 +0.6**
HABR *e* 10 31 59.0
HABR 10 32 51.7
HABR *e*PPP PPP 10 33 57.6
HABR *e*S **S 10 38 24.2 +1.2**
HABR *e**SS **sS 10 38 29.5 -3.5**
HABR *e* 10 40 41.2
HABR *e*SS **SS 10 42 05.3 +2.4**
HABR pmax pmax
comp=Z,209nm,1.8s
HABR pmax pmax
comp=Z,749nm,2.7s
HABR MLR MLR
comp=Z,5μm,16.0s
**LSA Lhasa 53.35 313** P **P 10 30 57.0 +1.2**
LSA pP **pP 10 31 03.3 +1.4**
LSA S **S 10 38 25.9 -1.5**
LSA PMZ
comp=Z,37nm,0.7s
LSA PMZ
comp=Z,1μm,8.2s
LSA LN
comp=Z,740nm,29.5s
LSA LE
comp=Z,2μm,17.2s
LSA LZ
comp=Z,2μm,19.7s
**LSA Lhasa 53.35 313** *e*P **P 10 30 56.8 +1.0**
LSA pmax pmax
comp=Z,604nm,2.3s
LSA MLR MLR
comp=Z,5μm,21.0s
**LSA Lhasa 53.35 313** *e*P **P 10 30 56.8 +1.0**
comp=Z,604nm,2.3s
LSA LR LR
comp=Z,5μm,21.0s
**MCQ Macquarie Isla 53.53 162** PFAKE 10 31 10.0 +14
MCQ LR LR
comp=Z,17μm,18.0s
**KLR Kul'dur 53.92 358** *e*P P 10 30 55.8 -3.3
KLR *e*S **S 10 38 29.5 -4.0**
KLR pmax pmax
comp=N,92nm,1.8s
KLR pmax pmax
comp=Z,370nm,1.8s
KLR pmax pmax
comp=Z,4μm,5.5s
KLR MLR MLR
comp=E,5μm,17.5s
**GTA Gaotai 54.03 328** P **P 10 31 01.0 +0.7**
GTA pP **pP 10 31 05.1 -1.3**
GTA sP **sP 10 31 08.8 +0.1**
GTA S **S 10 38 36.4 +0.7**
GTA sS **sS 10 38 42.6 -3.1**
GTA SS **SS 10 42 17.8 +0.3**
GTA PMZ
comp=E,50nm,1.0s
GTA PMZ
comp=E,590nm,5.9s
GTA LN
comp=E,3μm,20.9s
GTA LE
comp=E,3μm,18.5s
GTA LZ
comp=E,4μm,19.7s
**CHLP Challavanipeta 54.16 297** *e*P **P 10 31 00.6 -0.7**
CHLP IAmb IAmb 10 31 09.4
comp=Z,200nm,1.5s
CHLP *e*S **S 10 38 36.1 -1.6**
CHLP IVMs_BB IVMs_BB 10 56 20.9
comp=Z,1μm,19.8s
**PALK Pallekele 54.25 283** S **S 10 38 37.2 -2.0**
comp=Z,1.9nm,0.4s,baz=114,slow=18,SNR=2.4
**PALK Pallekele 54.25 283** *e*P **P 10 31 03.5 +1.3**
PALK pmax pmax
comp=Z,461nm,1.8s
PALK MLR MLR
comp=Z,7μm,20.0s
**PALK Pallekele 54.25 283** *e*P **P 10 31 03.5 +1.3**
comp=Z,462nm,1.8s
PALK LR LR
comp=Z,7μm,20.0s
**AFI Afiamalu 54.43 104** PFAKE 10 31 20.0 +17
AFI LR LR
comp=Z,7μm,21.0s
**VIS Vishakhapatnam 54.54 296** *e*P **P 10 31 04.8 +0.7**
**BOK Bokaro 54.62 304** *e*P **P 10 31 03.1 -1.6**
**TAPN Taplejung 54.75 308** *e*P **P 10 31 05.7 -0.2**
comp=Z,368nm,1.3s
**ODAN Odare 54.77 308** *e*P **P 10 31 06.2 +0.2**
**HIA Hailar 55.29 349** *e*P **P 10 31 10.0 +1.0**

HIA pmax pmax
comp=Z,168nm,1.5s
HIA MLR MLR
comp=Z,12μm,21.0s
**HIA Hailar 55.29 349** *e*P **P 10 31 10.0 +1.0**
comp=Z,168nm,1.5s
HIA LR LR
comp=Z,12μm,21.0s
**RAMN Ramite 55.44 307** *e*P **P 10 31 10.5 -0.3**
**PVM Polavaram 55.92 294** *e*P **P 10 31 15.2 +1.1**
PVM IAmb IAmb 10 31 16.9
comp=Z,48nm,0.9s
PVM *e*S **S 10 39 00.6 -0.9**
PVM IVMs_BB IVMs_BB 10 52 27.5
comp=Z,1μm,24.3s
**MDRS Chennai 56.00 289** *e*P **P 10 31 15.1 +0.4**
**GUN Gumba 56.45 308** *e*P **P 10 31 17.8 -0.4**
**PKI Pulchoki 56.66 308** *e*P **P 10 31 19.6 -0.1**
**PKIN Phulchoki 56.68 308** *e*P **P 10 31 19.7 0.0**
comp=Z,158nm,1.4s
**SKHT Srikalahasti 56.68 290** *e*P **P 10 31 20.6 +1.0**
SKHT IAmb IAmb 10 31 27.2
comp=Z,108nm,1.5s
SKHT *e*S **S 10 39 09.0 -2.6**
SKHT IVMs_BB IVMs_BB 10 57 42.9
comp=Z,2μm,19.9s
**KKN Kakani 56.86 308** *e*P **P 10 31 21.8 +0.8**
**DMN Daman 56.92 307** *e*P **P 10 31 21.2 -0.2**
comp=Z,420nm,1.3s
**ADKI Addanki 57.02 292** *e*P **P 10 31 22.9 +1.0**
ADKI IAmb IAmb 10 31 24.1
comp=Z,51nm,0.9s
ADKI *e*S **S 10 39 14.0 -1.9**
ADKI IVMs_BB IVMs_BB 10 55 31.3
comp=Z,1μm,26.2s
**MIDW Midway 57.46 52** PFAKE 10 31 40.0 +15
MIDW LR LR
comp=Z,6μm,20.0s
**GKN Gorkha 57.47 308** *e*P **P 10 31 24.6 -0.6**
comp=Z,549nm,1.4s
**ULN Ulaanbaatar 57.51 339** *ce*P **P 10 31 25.7 +0.6**
ULN pmax pmax
comp=Z,90nm,1.7s
ULN MLR MLR
comp=Z,4μm,18.0s
**ULN Ulaanbaatar 57.51 339** P **P 10 31 26.0 +0.9**
SNR=112
**ULN Ulaanbaatar 57.51 339** *e*P **P 10 31 25.2 +0.1**
comp=Z,262nm,1.4s
ULN LR LR
comp=Z,5μm,21.0s
**SONA0 Songino Array 57.73 339** ⇑*e*P **P 10 31 27.1 +0.5**
SONA0 11 01 20.2
**SONM Songino Array 57.73 339** P **P 10 31 27.1 +0.5**
comp=Z,16nm,1.0s,baz=147,slow=7.7,SNR=40
SONM PKP2bc 11 01 20.2
comp=Z,0.6nm,0.5s,baz=318,slow=2.0,SNR=5.5
**SONM Songino Array 57.73 339** P **P 10 31 27.1 +0.5**
SONM pmax pmax
comp=Z,16nm,1.0s
**NJS Nagarjunasagar 57.83 293** *e*P **P 10 31 28.2 +0.5**
NJS IAmb IAmb 10 31 29.3
comp=Z,51nm,1.0s
NJS *e*S **S 10 39 23.8 -2.8**
NJS IVMs_BB IVMs_BB 10 51 45.0
comp=Z,1μm,39.5s
**TRD Trivandrum 58.12 283** *e*P **P 10 31 30.8 +1.0**
**KOLN Koldanda 58.19 307** *e*P **P 10 31 29.9 -0.4**
comp=Z,171nm,1.1s
**DANN Dangsing 58.31 308** *e*P **P 10 31 31.8 +0.5**
**RPR Rampur 58.53 295** *e*P **P 10 31 32.9 +0.3**
RPR IAmb IAmb 10 31 39.8
comp=Z,252nm,1.7s
RPR *e*S **S 10 39 32.0 -3.7**
RPR IVMs_BB IVMs_BB 10 57 39.6
comp=Z,2μm,21.9s
**SKR Severo-Kuril's 58.62 17** *e*P P 10 31 20.0 -13
SKR *e* 10 33 48.0
SKR *e*S **S 10 39 37.0 +1.2**
SKR pmax pmax
comp=N,2μm,4.0s
SKR pmax pmax
comp=Z,2μm,4.0s
SKR pmax pmax
comp=N,80nm,1.5s
SKR pmax pmax
comp=E,80nm,1.5s
SKR pmax pmax
comp=Z,80nm,1.5s
SKR smax smax
comp=N,2μm,14.0s
SKR MLR MLR
comp=N,1μm,18.0s
SKR MLR MLR
comp=E,4μm,18.0s
SKR MLR MLR
comp=Z,4μm,18.0s
**HYB Hyderabad 58.77 294** *i* P **P 10 31 33.0 -1.3**
HYB *e*PcP **PcP 10 32 25.0 +1.0**
HYB *e*S **S 10 39 36.0 -3.0**
**HYB Hyderabad 58.77 294** *e*P **P 10 31 35.4 +1.1**
HYB AMB AMB 10 31 41.7
comp=Z,84nm,0.3s
**HYBB Hyderabad (bro 58.77 294** *e*P **P 10 31 34.6 +0.3**
HYBB IAmb IAmb 10 31 36.2
comp=Z,164nm,1.6s
HYBB *e*S **S 10 39 35.4 -3.6**
HYBB IVMs_BB IVMs_BB 10 52 13.8
comp=Z,1μm,41.3s
**CIT Chita 59.24 346** *e*P **P 10 31 38.2 +1.3**
CIT *e* 10 31 48.3
CIT *e* 10 31 54.2
CIT pmax pmax
comp=Z,439nm,1.9s
**URV Uravakonda 59.29 290** *e*P **P 10 31 38.6 +0.7**
URV IAmb IAmb 10 31 38.9
comp=Z,45nm,1.3s
URV IVMs_BB IVMs_BB 10 59 09.7
comp=Z,2μm,21.3s
**NGP Nagpur 59.48 298** *e*P **P 10 31 39.9 +0.7**
NGP *ex* x 10 39 44.0
**DGAR Diego Garcia 60.91 264** PFAKE 10 32 00.0 +11
DGAR LR LR
comp=Z,6μm,22.0s
**ZAK Zakamensk 60.98 338** *e*P **P 10 31 49.1 +0.1**
ZAK pmax pmax
comp=Z,105nm,1.7s
**PEA0 Petropavlovsk- 61.23 16** *e*P **P 10 31 50.9 +0.4**
**PETK Petropavlovsk- 61.23 16** P **P 10 31 51.0 +0.6**
comp=Z,7.3nm,0.6s,baz=180,slow=3.2,SNR=17
**PETK Petropavlovsk- 61.23 16** P **P 10 31 51.1 +0.6**
PETK pmax pmax
comp=Z,7.0nm,0.6s
**PEA2 Petropavlovsk- 61.23 16** *e*P **P 10 31 51.0 +0.5**
**PET Petropavlovsk 61.43 17** *c i*P **P 10 31 53.8 +2.0**
PET *e*S **S 10 40 12.4 +0.6**
PET pmax pmax
comp=Z,2μm,2.7s
PET pmax pmax
comp=Z,130nm,1.4s
PET pmax pmax
comp=Z,1μm,6.4s
PET MLR MLR
comp=Z,3μm,19.0s
PET MLR MLR
comp=Z,3μm,21.0s
**PET Petropavlovsk 61.43 17** *e*P **P 10 31 52.0 +0.2**
comp=Z,431nm,1.7s
PET LR LR
comp=Z,3μm,20.0s
**BHPL Bhopal 61.60 300** *e*P **P 10 31 53.5 -0.1**
**DRV Dumont d'Urvil 61.83 177** P **P 10 31 52.0 -2.3**
DRV S S 10 39 58.0 -18
DRV L L 10 46 00.0
DRV R 10 51 00.0
**TLY Talaya 61.92 339** *e*P **P 10 31 56.0 +0.8**
TLY *e* 10 32 39.8
TLY *e* 10 34 11.1
TLY *e*S **S 10 40 14.1 -4.1**
TLY *e* 10 41 48.7
TLY pmax pmax
comp=Z,130nm,2.0s
TLY MLR MLR
comp=Z,6μm,20.0s
**TLY Talaya 61.92 339** P **P 10 31 57.8 +2.6**
comp=Z,232nm,1.6s,SNR=15
**TLY Talaya 61.92 339** P **P 10 31 56.7 +1.5**
SNR=29
**TLY Talaya 61.92 339** *e*P **P 10 31 54.8 -0.5**
comp=Z,130nm,1.5s
TLY LR LR
comp=Z,6μm,18.0s
**CLNS Chul'man 61.94 355** *e*P **P 10 31 56.1 +0.9**
CLNS *e**PP **pP 10 32 03.7 +2.3**
CLNS *e* 10 32 36.0
CLNS *e* 10 34 11.2
CLNS *e*S **S 10 40 16.3 -2.0**
CLNS *e*SS **SS 10 44 18.8 -2.2**
CLNS pmax pmax
comp=Z,28nm,1.2s
CLNS pmax pmax
comp=N,22nm,1.1s
CLNS pmax pmax
comp=E,13nm,0.9s
CLNS pmax pmax
comp=N,14nm,1.2s
CLNS pmax pmax
comp=Z,14nm,1.2s
CLNS pmax pmax
comp=E,12nm,1.3s
CLNS smax smax
comp=N,932nm,10.7s
CLNS smax smax
comp=E,873nm,11.4s
CLNS MLR MLR
comp=E,4μm,19.0s
CLNS MLR MLR
comp=Z,4μm,18.0s
CLNS MLR MLR
comp=N,4μm,20.0s
**IRK Irkutsk 62.17 340** *e*P **P 10 31 57.1 +0.3**
IRK *e* 10 32 14.4
IRK *e*S **S 10 40 25.8 +4.5**
IRK pmax pmax
comp=Z,333nm,1.8s
**GOA Goa 62.63 290** *e*P **P 10 32 00.3 -0.3**
**MOY Mondy 62.87 338** *e*P **P 10 32 03.0 +1.3**
MOY pmax pmax
comp=Z,415nm,2.0s
**POO Poona 63.38 293** *e*P **P 10 32 04.7 -0.9**
**CASY Casey 63.38 190** *e*P **P 10 32 04.7 0.0**
comp=Z,146nm,1.2s
CASY LR LR
comp=Z,17μm,19.0s
**DDI Dehra Dun 63.66 307** *e*P **P 10 32 08.8 +1.6**
**NDI New Delhi 63.70 305** *e*P **P 10 32 06.0 -1.5**
**WMQ Urumqi 63.73 325** P **P 10 32 08.5 +1.0**
WMQ sP **sP 10 32 16.7 +0.7**
WMQ PP **PP 10 34 32.0 +4.1**
WMQ ScP 10 36 48.0
WMQ S **S 10 40 42.0 +0.6**
WMQ ScS **SKSac 10 41 56.6 -3.7**
WMQ SS **SS 10 44 52.0 +2.4**
WMQ PMZ
comp=Z,320nm,1.1s
WMQ PMZ
comp=Z,2μm,6.0s
WMQ LN
comp=Z,4μm,20.0s
WMQ LE
comp=Z,3μm,20.0s
WMQ LZ
comp=Z,3μm,20.0s
**BOD Bodaibo 64.50 348** *e*P **P 10 32 11.7 -0.4**
BOD pmax pmax
comp=Z,143nm,1.6s
**SMLA Simla 64.68 308** *e*P **P 10 32 14.1 +0.2**
SMLA AMB AMB 10 32 21.5
comp=Z,203nm,1.7s
**BHK Bhakra 65.38 308** *e*P **P 10 32 17.6 -0.9**
**HVS Khovu-Aksy 65.47 334** *ce*P **P 10 32 19.9 +1.2**
HVS pmax pmax
comp=Z,56nm,0.7s
HVS MLR MLR
comp=Z,12μm,17.0s
**MA2 Magadan 65.68 9** *e*P **P 10 32 20.3 +0.5**
**DHRM DHARAMSHALA 65.80 308** *e*P **P 10 32 21.2 -0.2**
**RAR Rarotonga 66.38 111** PFAKE 10 32 40.0 +15
RAR LR LR
comp=Z,4μm,20.0s
**SMY Shemya 66.78 25** PFAKE 10 32 40.0 +13
SMY LR LR
comp=Z,5μm,22.0s
**YAK Yakutsk 66.80 358** S **S 10 41 13.9 -4.2**
comp=Z,2.2nm,0.3s,baz=196,slow=7.4,SNR=2.5
**YAK Yakutsk 66.80 358** *e*P **P 10 32 27.0 +0.1**
YAK *e**PP **pP 10 32 33.5 +0.4**
YAK *e* 10 32 53.7
YAK *e* 10 34 50.1
YAK *e*PPP PPP 10 36 26.9
YAK *e*S **S 10 41 16.7 -1.4**
YAK *e* 10 42 22.2
YAK pmax pmax
comp=Z,210nm,1.0s
YAK pmax pmax
comp=N,43nm,0.8s
YAK pmax pmax
comp=E,16nm,0.8s
YAK pmax pmax
comp=N,118nm,2.2s
YAK pmax pmax
comp=Z,393nm,4.6s
YAK pmax pmax
comp=E,122nm,2.3s
YAK smax smax
comp=E,605nm,4.8s
YAK smax smax
comp=N,2μm,9.3s
YAK MLR MLR
comp=Z,6μm,19.0s
YAK MLR MLR
comp=N,4μm,18.0s
YAK MLR MLR
comp=E,2μm,19.0s
**YAK Yakutsk 66.80 358** *e*P **P 10 32 26.9 +0.1**
comp=E,582nm,1.4s
YAK *e*S **S 10 41 13.9 -4.2**
YAK LR LR
comp=Z,6μm,20.0s
**MIR Mirnyy 67.67 196** ⇑*i*P P 10 32 42.0 +10
MIR pmax pmax
comp=Z,280nm,1.5s
**AMKA Amchitka 68.23 29** *e*P **P 10 32 37.5 +1.4**
**BHJ Bhuj 68.42 297** *ex* P 10 32 34.6 -3.3
**PDGK Podgornoye 68.45 320** P **P 10 32 38.5 +0.8**
PDGK pmax pmax
comp=Z,297nm,1.6s
**MK01 Makanchi Array 68.54 325** *e*P **P 10 32 38.2 -0.1**
**MK31 Makanchi Array 68.56 325** *i* P **P 10 32 38.4 0.0**
MK31 pmax pmax
comp=Z,624nm,1.5s
**MK32 Makanchi Array 68.56 325** *e*P **P 10 32 39.3 +0.9**
MK32 *e*S **S 10 41 37.6 -2.4**
MK32 *e*P'P'df P'P'df 11 00 47.1 -6.2
**MKAR Makanchi Array 68.56 325** P **P 10 32 39.3 +0.9**
comp=Z,37nm,0.7s,baz=116,slow=8.2,SNR=95
MKAR S **S 10 41 37.6 -2.3**
comp=Z,3.9nm,0.8s,baz=153,slow=4.7,SNR=5.5
MKAR PKP2bc 11 00 47.1
comp=Z,0.3nm,0.4s,baz=299,slow=1.5,SNR=3.5
**MKAR Makanchi Array 68.56 325** P **P 10 32 39.3 +0.9**
MKAR S **S 10 41 37.6 -2.3**
MKAR pmax pmax
comp=Z,37nm,0.7s
MKAR smax smax
comp=N,4.0nm,0.8s
**MKAR Makanchi Array 68.56 325** *e*P **P 10 32 38.6 +0.2**
**MAKZ Makanchi 68.75 325** *e*P **P 10 32 39.7 +0.1**
comp=N,313nm,1.2s
MAKZ LR LR
comp=Z,4μm,22.0s
**KSH Kashi 69.03 316** P **P 10 32 43.2 +1.6**
KSH *e*pP **pP 10 32 48.1 +0.3**
KSH *e*sP **sP 10 32 50.3 +0.2**
KSH *e*ScP 10 37 08.1
KSH PcS 10 37 12.3
KSH S **S 10 41 42.9 -3.1**
KSH ScS **SKSac 10 42 39.8 -1.0**
KSH SS **SS 10 46 13.9 +1.8**
KSH PMZ
comp=Z,310nm,1.8s
KSH LN
comp=Z,3μm,19.2s
KSH LE
comp=Z,2μm,15.9s
KSH LZ
comp=Z,3μm,20.8s
**SEY Seymchan 69.11 9** ‖*e*P **P 10 32 42.5 +1.1**
**XMAS Kiritimati 69.14 86** PFAKE 10 32 50.0 +7.4
XMAS LR LR
comp=Z,10μm,20.0s
**KRAR Krasnoyarsk 69.31 337** ⇑*e*P **P 10 32 45.7 +2.9**
KRAR pmax pmax
comp=Z,28nm,0.5s
KRAR MLR MLR
comp=Z,3μm,20.0s
**ULHL Ulahol 70.04 318** P **P 10 32 47.2 -0.7**
SNR=8.2
**AAA Alma-Ata 70.05 319** *e*P P 10 32 54.7 +6.9
AAA *e*S **S 10 41 57.7 0.0**
AAA pmax pmax
comp=Z,2μm,5.6s
AAA smax smax
comp=E,2μm,10.5s
**KZA Kyzart 70.63 318** P **P 10 32 54.1 +2.3**
SNR=21
**TKM2 Tokmak 2 70.77 319** P **P 10 32 53.0 +0.6**
SNR=18
**TKM2 Tokmak 2 70.77 319** PFAKE 10 33 00.0 +7.6
TKM2 LR LR
comp=Z,5μm,22.0s
**SFK Sufi-Kurgan 70.96 315** P **P 10 32 54.3 +0.7**
SFK pmax pmax
comp=Z,104nm,1.3s
**UCH Uchtor 71.19 318** P **P 10 32 55.5 +0.2**
SNR=34
**AAK Ala-Archa 71.38 318** S **S 10 42 09.4 -4.1**
comp=Z,0.7nm,0.3s,baz=156,slow=19,SNR=1.8
**AAK Ala-Archa 71.38 318** *de*P **P 10 32 57.2 +1.2**
AAK pmax pmax
comp=Z,108nm,1.3s
AAK MLR MLR
comp=Z,8μm,21.0s
**AAK Ala-Archa 71.38 318** P **P 10 32 58.0 +2.0**
comp=Z,306nm,1.6s,SNR=23
**AAK Ala-Archa 71.38 318** P **P 10 32 58.4 +2.4**
SNR=58
**AAK Ala-Archa 71.38 318** P P 10 32 59.7 +3.7
SNR=13
**AAK Ala-Archa 71.38 318** *e*P **P 10 32 57.0 +1.0**
comp=Z,260nm,1.8s
AAK *e*S **S 10 42 09.4 -4.1**
AAK LR LR
comp=Z,4μm,20.0s
**FRU Bishkek 71.38 318** ⇑*i*P **P 10 32 56.0 +0.1**
FRU *i* 10 33 13.0
FRU *e*S **S 10 42 14.0 +0.8**
FRU *i* 10 43 00.0
FRU pmax pmax
comp=Z,210nm,1.8s
**ZAA0 Zalesovo Array 71.39 332** *e*P **P 10 32 54.5 -1.1**
**ZALV Zalesovo Beam 71.39 332** P **P 10 32 55.2 -0.4**
comp=Z,44nm,0.7s,baz=120,slow=5.8,SNR=70
ZALV S **S 10 42 09.1 -3.7**
comp=Z,0.3nm,0.3s,baz=253,slow=24,SNR=2.0
ZALV PKPPKP **P'P'df 11 00 49.9 +2.1**
comp=Z,0.4nm,0.4s,baz=338,slow=3.1,SNR=2.5
**ZALV Zalesovo Beam 71.39 332** P **P 10 32 55.2 -0.4**
ZALV S **S 10 42 09.1 -3.7**
ZALV pmax pmax
comp=Z,44nm,0.7s
**ZAA1 Zalesovo Array 71.40 332** *e*P **P 10 32 55.2 -0.4**
ZAA1 *e*S **S 10 42 09.1 -3.7**
ZAA1 *e*P'P'df **P'P'df 11 00 49.9 +2.1**
**USP Ospenovka 71.65 319** P P 10 33 00.7 +3.3
SNR=25
**AML Almayashu 71.70 317** P **P 10 32 59.3 +1.0**
SNR=34
**HON Honolulu 71.77 66** *e*P **P 10 32 59.1 +0.6**
HON pmax pmax
comp=Z,808nm,1.5s
**HON Honolulu 71.77 66** *e*P **P 10 32 59.1 +0.6**
comp=Z,808nm,1.5s
**EKS2 Erkin-Say 71.87 318** P **P 10 32 59.5 +0.6**
SNR=14
**EKS2 Erkin-Say 71.87 318** PFAKE 10 33 10.0 +11
EKS2 LR LR
comp=Z,4μm,22.0s
**ATKA Atka Island 71.95 31** *e*P **P 10 33 00.7 +1.8**
comp=Z,234nm,1.4s
ATKA LR LR
comp=Z,5μm,22.0s
**KBL Kabul 72.28 308** *e*P **P 10 33 02.9 +1.2**
KBL pmax pmax
comp=Z,154nm,1.6s
KBL MLR MLR
comp=Z,2μm,20.0s
**KBL Kabul 72.28 308** *e*P **P 10 33 02.9 +1.2**
comp=Z,154nm,1.6s
KBL LR LR
comp=Z,2μm,20.0s
**MNAS Manas 72.65 317** P **P 10 33 03.3 -0.3**
MNAS pmax pmax
comp=Z,191nm,1.6s
**NVS Novosibirsk 72.67 332** ⇑*i*P **P 10 33 02.6 -0.6**
NVS *e*S **S 10 42 22.3 -5.1**
NVS pmax pmax
comp=E,181nm,1.5s
NVS pmax pmax
comp=Z,360nm,1.5s
NVS pmax pmax
comp=N,120nm,1.3s
NVS smax smax
comp=N,5.0nm,0.6s
NVS smax smax
comp=E,9.0nm,0.6s
**KURK Kurchatov 72.71 327** *e*P **P 10 33 03.5 0.0**
KURK *e*S S 10 42 22.0 -6.0
KURK pmax pmax
comp=Z,534nm,1.1s
KURK MLR MLR
comp=Z,7μm,19.0s
**KURK Kurchatov 72.71 327** P **P 10 33 03.5 0.0**
SNR=131
**KURK Kurchatov 72.71 327** P **P 10 33 03.3 -0.2**
comp=Z,1μm,1.2s,SNR=54
**KURK Kurchatov 72.71 327** *e*P **P 10 33 03.5 0.0**
comp=Z,534nm,1.1s
KURK *e*S S 10 42 22.0 -6.0
KURK LR LR
comp=Z,7μm,19.0s
**KURBB Kurchatov Arra 72.71 327** S S 10 42 22.0 -6.0
comp=Z,0.7nm,0.9s,baz=118,slow=14,SNR=4.3
**POHA Pohakuloa 73.70 68** PFAKE 10 33 20.0 +10
POHA LR LR
comp=Z,7μm,20.0s
**DZET Dzherino 73.87 313** P **P 10 33 11.8 +0.9**
DZET pmax pmax
comp=Z,84nm,1.2s
**VNDA Vanda 74.11 174** P **P 10 33 11.3 -0.1**
comp=Z,36nm,0.9s,baz=325,slow=6.4,SNR=91
VNDA S **S 10 42 44.6 +1.4**
comp=Z,1.3nm,1.1s,baz=121,slow=12,SNR=3.2
VNDA LR LR 11 06 53.7
comp=Z,13μm,18.1s,baz=352,slow=37
**VNDA Vanda 74.11 174** P **P 10 33 11.3 -0.1**
VNDA S **S 10 42 44.6 +1.4**
VNDA pmax pmax
comp=Z,36nm,0.9s
VNDA smax smax
comp=N,1.0nm,1.1s
VNDA MLR MLR
comp=Z,13μm,18.1s
**VNDA Vanda 74.11 174** *e*P **P 10 33 11.2 -0.2**
comp=Z,57nm,1.0s
**KK31 Karatay Array 74.24 317** *i* P **P 10 33 12.7 -0.1**
KK31 pmax pmax
comp=Z,116nm,1.4s
**KKAR Karatay Array 74.24 317** *e*P **P 10 33 13.0 +0.2**
**KKAR Karatay Array 74.24 317** *e*P **P 10 33 13.0 +0.2**
**SBA Scott Base 74.95 173** *e*P **P 10 33 17.2 +0.9**
SBA pmax pmax
comp=Z,239nm,1.7s
SBA MLR MLR
comp=Z,9μm,19.0s
**SBA Scott Base 74.95 173** *e*P **P 10 33 17.2 +0.9**

SBA — comp=Z,239nm,1.7s — LR LR
**NIKH Nikolski High 75.12 32** PFAKE 10 33 30.0 +12
NIKH — comp=Z,9µm,19.0s — LR LR
**OTUK Ortayu 75.15 323** P **P** **10 33 17.8 -0.2**
OTUK — comp=Z,5µm,21.0s — pmax pmax
**MRIV Mauritius Mete 75.39 250** *e*P **P** **10 33 21.4 +1.4**
**PAE Paea 75.89 107** *e*P **P** **10 33 20.2 -2.6**
comp=Z,266nm,1.6s
comp=Z,16nm,1.1s
**PPT2 Papeete2 75.90 107** *e*P **P** **10 33 20.9 -2.0**
comp=Z,109nm,1.3s
PPT2 — *e*S S 10 42 58.0 -7.2
comp=Z,2µm,26.8s
PPT2 — *e*SS **SS** **10 47 52.2 -5.7**
comp=Z,2µm,24.0s
PPT2 — *e*LR LR 10 56 44.4
comp=Z,7µm,22.8s
**PPT Papeete 75.90 107** P **P** **10 33 23.6 +0.7**
comp=Z,56nm,0.8s,baz=176,slow=0.6,SNR=5.3
**PPT Papeete 75.90 107** P **P** **10 33 23.6 +0.7**
PPT — comp=Z,56nm,0.9s — pmax pmax
**TBI Tubuai 76.00 113** *e*S **S** **10 43 01.6 -4.5**
comp=Z,2µm,26.8s
**TBI Tubuai 76.00 113** *e*LR LR 10 56 46.5
comp=Z,10µm,25.2s,baz=282
**BILL Bilibino 76.27 12** *c i*P **P** **10 33 25.4 +1.5**
BILL — *e* 10 33 38.7
BILL — *e* 10 36 16.4
BILL — *e*S S 10 43 00.8 -6.4
BILL — *e*SS **SS** **10 48 01.8 +0.4**
BILL — comp=Z,58nm,1.3s — pmax pmax
BILL — comp=Z,3µm,18.0s — MLR MLR
**BILL Bilibino 76.27 12** *e*P **P** **10 33 25.1 +1.2**
comp=Z,254nm,2.0s
**UNV Unalaska Valle 76.77 32** *e*P **P** **10 33 28.8 +1.8**
comp=Z,158nm,1.4s
UNV — LR LR
**WBK Wadi Bani Khal 77.87 294** P **P** **10 33 37.0 +3.1**
comp=Z,5µm,21.0s
SNR=7.9
**MAW Mawson 78.25 202** P **P** **10 33 36.1 +1.0**
comp=Z,102nm,1.1s,baz=72,slow=7.2,SNR=72
MAW — S S 10 43 21.7 -7.1
comp=Z,0.6nm,0.3s,baz=326,slow=7.3,SNR=1.7
MAW — LR LR 11 05 31.4
comp=Z,11µm,20.4s,baz=67,slow=34
**MAW Mawson 78.25 202** P **P** **10 33 36.1 +1.0**
MAW — S S 10 43 21.7 -7.1
MAW — pmax pmax
comp=Z,103nm,1.1s
MAW — smax smax
comp=N,1.0nm,0.3s
**MAW Mawson 78.25 202** *e*P **P** **10 33 35.9 +0.9**
comp=N,56nm,1.4s
MAW — *e*S S 10 43 21.7 -7.1
MAW — LR LR
comp=Z,2µm,20.0s
**BVA0 Borovoye Array 78.30 327** *i* P **P** **10 33 35.4 -0.2**
BVA0 — pmax pmax
comp=Z,197nm,1.2s
**BVAR Borovoye Array 78.30 327** S **S** **10 43 27.9 -1.9**
comp=Z,0.4nm,0.4s,baz=116,slow=5.0,SNR=2.8
**BRVK Borovoye 78.37 327** *d i*P **P** **10 33 35.3 -0.7**
BRVK — pmax pmax
comp=Z,75nm,0.8s
**BRVK Borovoye 78.37 327** P **P** **10 33 36.0 0.0**
comp=Z,762nm,1.3s,SNR=32
**BRVK Borovoye 78.37 327** P **P** **10 33 35.9 -0.1**
SNR=93
**BRVK Borovoye 78.37 327** PFAKE 10 33 50.0 +14
BRVK — LR LR
comp=Z,3µm,19.0s
**CHKZ Chkalovo 78.44 327** *i* P **P** **10 33 35.7 -0.7**
CHKZ — pmax pmax
comp=Z,277nm,1.6s
**JMDO Jabal Madar 78.61 294** P **P** **10 33 38.5 +0.5**
SNR=11
**SMDO Samad 78.78 295** P **P** **10 33 39.5 +0.4**
SNR=15
**FALS False Pass 78.84 32** PFAKE 10 33 50.0 +11
FALS — LR LR
comp=Z,6µm,19.0s
**ZRNK Zerenda 79.03 326** *i* P **P** **10 33 38.4 -1.2**
ZRNK — pmax pmax
comp=Z,315nm,1.6s
**HOQ Hoqain 79.54 295** P **P** **10 33 44.4 +1.3**
SNR=16
**IMYA Miami 79.79 308** *e*P **P** **10 33 44.8 +0.4**
**ARQ Araqi 80.22 295** P **P** **10 33 48.0 +1.2**
SNR=19
**SDPT Sand Point 80.59 32** *e*P **P** **10 33 48.9 +1.0**
comp=Z,1µm,1.9s
SDPT — LR LR
comp=Z,6µm,21.0s
**IPAY Payeh 80.68 308** *e*P **P** **10 33 49.2 -0.1**
**UOSS Wadi Hilu 80.77 296** P **P** **10 33 51.2 +1.5**
comp=Z,215nm,1.5s,SNR=7.7
**UOSS Wadi Hilu 80.77 296** PFAKE 10 34 00.0 +10
UOSS — LR LR
comp=Z,1µm,21.0s
**HATD Hatta, Dubai 80.82 296**⇑ *i*P **P** **10 33 50.1 +0.2**
SNR=9.2
**BANOM Banah 80.85 297** P P 10 33 53.5 +3.3
SNR=8.3
**BANOM Banah 80.85 297**⇑ *i*P **P** **10 33 50.3 +0.2**
SNR=14
**ASHO Ashiyiah 80.86 296** P **P** **10 33 51.1 +0.9**
SNR=13
**ASHO Ashiyiah 80.86 296**⇑ *i*P **P** **10 33 49.9 -0.3**
SNR=8.9
**NAZ Nazwa, Dubai 81.26 296**⇓ *i*P **P** **10 33 52.2 -0.1**
SNR=8.3
**FAQ Al Faqa, Dubai 81.29 296**⇓ *i*P **P** **10 33 52.1 -0.3**
SNR=10
**RBK Rabkut 81.48 288** P **P** **10 33 54.5 +0.8**
SNR=7.0
**ASUD Al Ashush, Dub 81.50 296**⇓ *i*P **P** **10 33 53.8 +0.2**
SNR=5.2
**ABKT Ailbek 81.70 309** P **P** **10 33 57.1 +2.7**
comp=Z,553nm,1.2s,SNR=17
**GEYT Ailbeck 81.70 309** P **P** **10 33 55.1 +0.7**
comp=Z,59nm,1.1s,baz=116,slow=3.4,SNR=18
GEYT — S **S** **10 44 04.0 -2.4**
comp=Z,2.0nm,0.4s,baz=234,slow=29,SNR=4.1
GEYT — LR LR 11 15 36.0
comp=Z,2µm,19.8s,baz=75,slow=40
**TNA Tin City 81.93 21** PFAKE 10 34 10.0 +15
TNA — LR LR
comp=Z,2µm,20.0s
**CHGN Chignik 82.02 31** *e*P **P** **10 33 54.6 -1.0**
**ABTO Aybut 82.32 288** P **P** **10 33 59.1 +1.0**
SNR=7.8
**ABKAR Akbulak array 83.18 321** *e*P **P** **10 34 01.2 -0.7**
**SII Sitkinak Islan 84.33 32** PFAKE 10 34 20.0 +12
SII — LR LR
comp=Z,4µm,20.0s
**AKTO Aktyubinsk 84.69 322** S **S** **10 44 32.3 -3.9**
comp=Z,0.4nm,0.4s,baz=216,slow=14,SNR=4.3
**AKTO Aktyubinsk 84.69 322** P **P** **10 34 10.1 +0.6**
AKTO — pmax pmax
comp=Z,517nm,1.6s
**AKTO Aktyubinsk 84.69 322** *e*SKSac **S** **10 44 32.3 -3.9**
**SVE Sverdlovsk 84.90 328** *de*P **P** **10 34 10.8 +0.4**
SVE — *e* 10 37 24.0
SVE — *e*PPP PPP 10 39 27.7
SVE — *e*S **S** **10 44 34.0 -4.0**
SVE — comp=Z,198nm,1.6s — pmax pmax
SVE — comp=Z,626nm,8.9s — pmax pmax
SVE — comp=Z,2µm,19.0s — MLR MLR
**OHAK Old Harbor 84.99 31** *e*P **P** **10 34 11.7 +0.9**
comp=Z,148nm,1.3s
OHAK — LR LR
comp=Z,7µm,20.0s
**SVW2 Sparrevohn 85.08 27** PFAKE 10 34 20.0 +8.8
SVW2 — LR LR
comp=Z,4µm,22.0s
**ABPO Ambohimpanom 85.10 251** *e*P **P** **10 34 13.2 +0.7**
ABPO — pmax pmax
comp=Z,224nm,1.4s
ABPO — MLR MLR
**ABPO Ambohimpanom 85.10 251** P **P** **10 34 13.0 +0.5**
comp=Z,8µm,20.0s
comp=Z,424nm,1.1s,SNR=9.6
**ABPO Ambohimpanom 85.10 251** *e*P **P** **10 34 13.2 +0.7**
comp=Z,224nm,1.4s
ABPO — LR LR
comp=Z,8µm,20.0s
**OPO Ambohidratompo 85.16 252** P **P** **10 34 13.9 +1.1**
comp=Z,49nm,1.0s,baz=88,slow=3.4,SNR=39
**OPO Ambohidratompo 85.16 252** *e*P **P** **10 34 13.9 +1.1**
**IZEF Zefreh 85.41 303** *e*P **P** **10 34 14.1 +0.2**
**KDAK Kodiak Island 85.52 31** *e*P **P** **10 34 13.4 0.0**
KDAK — comp=Z,65nm,0.8s — pmax pmax
KDAK — comp=Z,10µm,21.0s — MLR MLR
**KDAK Kodiak Island 85.52 31** P **P** **10 34 13.0 -0.4**
comp=Z,514nm,0.8s,SNR=15
**KDAK Kodiak Island 85.52 31** *e*P **P** **10 34 13.4 0.0**
comp=Z,65nm,0.8s
KDAK — comp=Z,10µm,21.0s — LR LR
**IGAR Gharneh 85.57 303** *e*P **P** **10 34 13.9 -0.7**
**ARU Arti 85.89 327** S **S** **10 44 42.6 -5.2**
comp=Z,0.2nm,0.4s,baz=73,slow=19,SNR=1.9
ARU — comp=Z,1µm,18.7s,baz=102,slow=38 — LR LR 11 16 40.1
**ARU Arti 85.89 327** *d i*P **P** **10 34 14.8 -0.5**
ARU — 10 37 29.0
ARU — PPP PPP 10 39 32.0
ARU — S S 10 44 40.4 -7.4
ARU — comp=Z,57nm,2.5s — pmax pmax
**ARU Arti 85.89 327** *e*P **P** **10 34 14.9 -0.5**
comp=Z,45nm,1.1s
**RSO Redoubt South 86.20 28** *e*P **P** **10 34 17.6 +0.5**
**HOM Homer 86.51 29** PFAKE 10 34 30.0 +12
HOM — LR LR
comp=Z,7µm,21.0s
**IPIR Pirpir 86.58 303** *e*P **P** **10 34 18.2 -1.5**
**CNPM China Poot 86.67 30** *e*P **P** **10 34 21.0 +1.8**
comp=Z,227nm,1.5s
CNPM — LR LR
comp=Z,9µm,22.0s
**SPU Mount Spurr 86.73 28** *e*P **P** **10 34 17.4 -2.1**
**IR3 Iran Long-Peri 86.86 306** *e*P **P** **10 34 21.1 +0.3**
**BRLK Bradley Lake 86.91 29** *e*P **P** **10 34 21.8 +1.5**
comp=Z,63nm,1.1s
BRLK — LR LR
comp=Z,8µm,21.0s
**SYO Syowa Base 86.95 201**⇑ *i*P **P** **10 34 19.0 -1.3**
**SYO Syowa Base 86.95 201** *e*SH **SKSac** **10 44 42.6 -3.6**
**PPLA Purkeypile 87.15 26** *e*P **P** **10 34 21.9 +0.3**
comp=Z,545nm,2.0s
PPLA — LR LR
comp=Z,5µm,21.0s
**CAST Castle Rocks 87.35 26** *e*P **P** **10 34 22.5 +0.1**
comp=Z,450nm,2.4s
CAST — LR LR
comp=Z,6µm,21.0s
**SUA Susitna One 87.42 28** *e*P **P** **10 34 22.4 -0.5**
comp=Z,173nm,1.4s
SUA — LR LR
comp=Z,4µm,21.0s
**SOKR Solikamsk 87.60 330** *e*P **P** **10 34 24.3 +0.7**
SOKR — 10 37 47.8
SOKR — S S 10 44 53.9 -10
SOKR — pmax pmax
comp=Z,60nm,1.5s
**IGZV Ghazvin 87.63 307** *e*P **P** **10 34 24.9 +0.3**
**SEW Seward 87.69 29** *e*P **P** **10 34 24.3 +0.3**
comp=Z,90nm,1.0s
SEW — LR LR
comp=Z,10µm,21.0s
**IRAZ Razeghan 87.73 306** *e*P **P** **10 34 25.2 +0.1**
**RC01 Rabbit Creek A 87.79 28** *e*P **P** **10 34 23.9 -0.6**
comp=Z,131nm,1.0s
RC01 — LR LR
comp=Z,5µm,22.0s
**BPAW Bear Paw Mtn. 88.00 25** *e*P **P** **10 34 26.0 +0.5**
comp=Z,329nm,2.2s
BPAW — LR LR
comp=Z,3µm,20.0s
**TRF Thorofare Moun 88.13 26** *e*P **P** **10 34 26.6 +0.2**
comp=Z,378nm,2.2s
TRF — LR LR
comp=Z,6µm,21.0s
**PMR Palmer 88.20 28** *e*P **P** **10 34 25.8 -0.6**
PMR — pmax pmax
comp=Z,74nm,1.0s
PMR — MLR MLR
comp=Z,5µm,21.0s
**PMR Palmer 88.20 28** *e*P **P** **10 34 25.8 -0.6**
comp=Z,74nm,1.0s
PMR — LR LR
comp=Z,5µm,21.0s
**MLY Manley 88.35 24** *e*P **P** **10 34 27.4 +0.2**
comp=Z,28nm,0.8s
MLY — LR LR
comp=Z,3µm,19.0s
**SML Sawmill 88.62 28** *e*P **P** **10 34 28.2 -0.3**
SML — pmax pmax
comp=Z,181nm,1.3s
SML — MLR MLR
comp=Z,6µm,21.0s
**SML Sawmill 88.62 28** *e*P **P** **10 34 28.2 -0.3**
comp=Z,181nm,1.3s
SML — LR LR
comp=Z,6µm,21.0s
**BWN Browne 88.67 25** *e*P **P** **10 34 29.3 +0.7**
comp=Z,75nm,1.0s
BWN — LR LR
comp=Z,2µm,21.0s
**RND Reindeer 88.75 26** *e*P **P** **10 34 29.1 -0.1**
RND — pmax pmax
comp=Z,52nm,1.0s
**RND Reindeer 88.75 26** *e*P **P** **10 34 29.1 -0.1**
comp=Z,52nm,1.0s
**MCK McKinley 88.79 26** *e*P **P** **10 34 29.3 0.0**
MCK — pmax pmax
comp=Z,105nm,1.3s
MCK — MLR MLR
comp=Z,5µm,22.0s
**MCK McKinley 88.79 26** *e*P **P** **10 34 29.2 0.0**
comp=Z,105nm,1.3s
MCK — LR LR
comp=Z,5µm,22.0s
**SCM Sheep Creek Mo 89.09 28** *e*P **P** **10 34 31.4 +0.6**
SCM — pmax pmax
comp=Z,119nm,1.2s
SCM — MLR MLR
comp=Z,5µm,21.0s
**SCM Sheep Creek Mo 89.09 28** *e*P **P** **10 34 31.4 +0.6**
comp=Z,119nm,1.2s
SCM — LR LR
comp=Z,5µm,21.0s
**COLD Coldfoot 89.13 22** *e*P **P** **10 34 31.7 +1.0**
comp=Z,28nm,1.1s
COLD — LR LR
comp=Z,3µm,22.0s
**WRH Wood River Hil 89.32 25** *e*P **P** **10 34 31.1 -0.5**
comp=Z,30nm,1.0s
WRH — LR LR
comp=Z,3µm,20.0s
**RKT Rikitea 89.33 113** *e*S S 10 45 15.9 -6.2
comp=Z,1µm,26.5s
RKT — *e*SS SS 10 51 07.8 -9.1
comp=Z,1µm,27.2s
**RKT Rikitea 89.33 113** *e*LR LR 11 02 57.5
comp=Z,5µm,24.8s
**MDM Murphy Dome 89.37 25** *e*P **P** **10 34 32.2 +0.2**
comp=Z,46nm,1.7s
MDM — LR LR
comp=Z,3µm,20.0s
**CCB Clear Creek Bu 89.48 25** *e*P **P** **10 34 31.3 -1.1**
comp=Z,30nm,0.9s
CCB — LR LR
comp=Z,3µm,20.0s
**COLA College 89.51 25** *d i*P **P** **10 34 33.1 +0.6**
COLA — pmax pmax
comp=Z,16nm,0.9s
COLA — MLR MLR
comp=Z,3µm,20.0s
**COLA College 89.51 25** *e*P **P** **10 34 33.8 +1.2**
comp=Z,14nm,0.8s
COLA — LR LR
comp=Z,3µm,20.0s
**EYAK Cordova Ski Ar 89.59 29** *e*P **P** **10 34 34.8 +1.8**
comp=Z,164nm,1.9s
EYAK — LR LR
comp=Z,8µm,21.0s
**KLU Klutina 89.68 28** *e*P **P** **10 34 35.2 +1.6**
comp=Z,141nm,1.7s
KLU — LR LR
comp=Z,4µm,21.0s
**DIV Divide 89.68 29** *e*P **P** **10 34 34.7 +1.1**
comp=Z,62nm,0.9s
DIV — LR LR
comp=Z,11µm,22.0s
**HDA Harding Lake 89.79 25** *e*P **P** **10 34 33.5 -0.4**
comp=Z,18nm,0.9s
HDA — LR LR
comp=Z,3µm,19.0s
**ILAR Eielson Array 89.89 25** P **P** **10 34 33.0 -1.4**
comp=Z,5.8nm,0.9s,baz=268,slow=4.3,SNR=36
ILAR — S **SKSac** **10 45 03.8 -0.1**
comp=Z,0.2nm,0.8s,baz=201,slow=12,SNR=2.7
ILAR — PKKP **PKKPdf** **10 52 05.3 +0.4**
comp=Z,0.8nm,0.7s,baz=358,slow=1.7,SNR=7.9
**ILAR Eielson Array 89.89 25** P **P** **10 34 33.0 -1.4**
ILAR — S **SKSac** **10 45 03.8 -0.1**
ILAR — pmax pmax
comp=Z,6.0nm,0.9s
**ILB Eielson Array 89.89 25** *e*P **P** **10 34 33.0 -1.4**
ILB — *e*SKSac **SKSac** **10 45 03.8 -0.1**
ILB — *e*PKKPdf **PKKPdf** **10 52 05.3 +0.4**
**IL1 Eielson Array 89.89 25** *e*P **P** **10 34 31.5 -2.9**
**RAGM Ragged Mountai 90.08 29** PFAKE 10 34 50.0 +15
RAGM — LR LR
comp=Z,8µm,21.0s
**PAX Paxson 90.16 27** *e*P **P** **10 34 37.8 +2.0**
PAX — pmax pmax
comp=Z,145nm,1.9s
**PAX Paxson 90.16 27** *e*P **P** **10 34 37.8 +2.0**
comp=Z,145nm,1.9s
**HARP HAARP 90.20 27** PFAKE 10 34 50.0 +14
HARP — LR LR
comp=Z,4µm,22.0s
**BMRM Bremner River 90.21 29** *e*P **P** **10 34 37.4 +1.3**
comp=Z,134nm,1.6s
BMRM — LR LR
comp=Z,9µm,21.0s
**RAYN Ar Rayn 90.27 293** P **P** **10 34 37.5 +0.4**
comp=Z,193nm,1.3s,SNR=14
**RAYN Ar Rayn 90.27 293** *e*P **P** **10 34 37.2 +0.1**
comp=Z,79nm,1.4s
RAYN — LR LR
comp=Z,5µm,20.0s
**MAK Makhachkala 90.51 313** *e*P **P** **10 34 35.0 -2.7**
MAK — *e* 10 38 13.3
MAK — *e*PPP PPP 10 40 11.7
MAK — *e*S **SKSac** **10 45 05.1 -3.3**
MAK — *e* 10 45 26.4
MAK — *e*PS **PnS** **10 46 46.0 +4.4**
MAK — comp=Z,28nm,0.3s — pmax pmax
**IDHR Dehrash 90.54 305** *e*P **P** **10 34 36.1 -2.3**
**DAMY Dhamar 90.54 284** PFAKE 10 34 50.0 +11
DAMY — LR LR
comp=Z,2µm,20.0s
**FYU Fort Yukon 90.90 23** *e*P **P** **10 34 41.3 +2.3**
comp=Z,236nm,1.6s
FYU — LR LR
comp=Z,3µm,22.0s
**MENT Mentasta 90.94 27** *e*P **P** **10 34 41.1 +1.8**
**IAZR Azarshahr 91.15 308** *e*P **P** **10 34 40.7 -0.5**
**ATD Arta Tunnel 91.79 281** P **P** **10 34 45.5 +1.1**
comp=Z,5.0nm,0.3s,baz=80,slow=6.5,SNR=5.6
ATD — S **SKSac** **10 45 23.0 +6.0**
comp=Z,2.6nm,0.3s,baz=253,slow=19,SNR=2.9
**ATD Arta Tunnel 91.79 281** *e*P **P** **10 34 45.5 +1.1**
ATD — *e*SKSac **SKSac** **10 45 23.0 +6.0**
**DGRG David-gareji 91.94 311** P **P** **10 34 47.0 +2.5**
**DGRG David-gareji 91.94 311** *e*P **P** **10 34 47.0 +2.5**
**PCA Pinnacle 92.23 30** PFAKE 10 35 00.0 +15
PCA — LR LR
comp=Z,9µm,21.0s
**EGAK Eagle 92.31 25** *e*P **P** **10 34 46.4 +0.8**
comp=Z,18nm,1.1s
EGAK — LR LR
comp=Z,3µm,20.0s
**TBLG Delisi 92.44 311** P **P** **10 34 45.4 -1.4**
**TBLG Delisi 92.44 311** *e*P **P** **10 34 45.4 -1.4**
**YKU2 Yakutat 92.46 31** PFAKE 10 35 00.0 +14
YKU2 — LR LR
comp=Z,4µm,21.0s
**DAWY Dawson 93.00 26** *e*P **P** **10 34 49.2 +0.3**
comp=Z,53nm,1.5s
**DHAK Deception Hill 93.17 31** PFAKE 10 35 00.0 +10
DHAK — LR LR
comp=Z,3µm,21.0s
**ONI Oni 93.45 312** P **P** **10 34 49.3 -2.2**
**ONI Oni 93.45 312** *e*P **P** **10 34 49.3 -2.2**
**KBZ Khabaz 93.92 313** P **P** **10 34 52.7 -0.8**
comp=Z,2.6nm,0.7s,baz=100,slow=4.4,SNR=3.7
KBZ — S **SKSac** **10 45 27.8 +0.3**
comp=Z,1.5nm,0.8s,baz=120,slow=18,SNR=1.9
**KBZ Khabaz 93.92 313** P **P** **10 34 52.7 -0.8**
KBZ — S **SKSac** **10 45 27.8 +0.3**
KBZ — pmax pmax
comp=Z,3.0nm,0.7s
KBZ — smax smax
comp=N,2.0nm,0.8s
**KBZ Khabaz 93.92 313** *e*P **P** **10 34 52.7 -0.8**
KBZ — *e*SKSac **SKSac** **10 45 27.8 +0.3**
**KIV Kislovodsk 94.09 314** *e*P **P** **10 34 53.9 -0.5**
KIV — *e* 10 38 40.8
KIV — *i* S **S** **10 46 08.9 +4.4**
KIV — *e*SS SS 10 52 34.0 +9.1
KIV — pmax pmax
comp=Z,12nm,1.0s
**VRH Novokhopyorsk 95.02 321** *e*P **P** **10 34 57.8 -0.5**
VRH — pmax pmax
comp=N,20nm,0.6s
VRH — pmax pmax
comp=E,10.0nm,0.6s
VRH — pmax pmax
comp=Z,10.0nm,0.6s
**NVL N'lazarevskaya 95.42 196**⇓ *i*P **P** **10 35 02.1 +2.3**
NVL — *e* 10 38 48.5
NVL — *e*PPP PPP 10 41 00.8
NVL — *e*S **SKSac** **10 45 27.5 -7.1**
NVL — *e* 10 46 05.2
NVL — pmax pmax
comp=Z,15nm,0.8s
NVL — MLR MLR
comp=Z,15µm,19.0s
**INK Inuvik 95.54 22** *e*P **P** **10 35 00.7 +0.4**
INK — pmax pmax
comp=Z,58nm,1.6s
INK — MLR MLR
comp=Z,2µm,20.0s
**INK Inuvik 95.54 22** *e*P **P** **10 35 00.7 +0.4**
comp=Z,58nm,1.6s
INK — LR LR
comp=Z,2µm,20.0s
**FURI Furi 95.69 278** PFAKE 10 35 10.0 +7.3
FURI — LR LR
comp=Z,4µm,22.0s
**SOC Sochi 96.22 313** *e*P P 10 34 53.4 -11
SOC — *e* 10 38 54.3
SOC — *e*PPP PPP 10 40 59.7
SOC — *e*S **SKSac** **10 45 37.7 -2.1**
SOC — *e*SS **SS** **10 52 56.7 +1.6**
SOC — *e*SSS SSS 10 56 42.4
**KLMR Klimovskoe 96.28 331** *e*P **P** **10 35 02.6 -1.3**
KLMR — *e* 10 38 53.0
KLMR — pmax pmax
comp=Z,90nm,1.4s
**KMBO Kilima Mbogo 96.33 268** P **P** **10 35 06.0 +0.5**
comp=Z,3.8nm,1.0s,baz=99,slow=2.6,SNR=8.3
KMBO — LR LR 11 15 52.6
comp=Z,4µm,21.9s,baz=95,slow=34
**KMBO Kilima Mbogo 96.33 268** P **P** **10 35 06.0 +0.5**
KMBO — pmax pmax
comp=Z,4.0nm,1.0s
**KMBO Kilima Mbogo 96.33 268** P **P** **10 35 06.8 +1.3**
SNR=9.1
**KMBO Kilima Mbogo 96.33 268** *e*P **P** **10 35 06.5 +1.0**
comp=Z,21nm,1.4s

KMBO LR LR
comp=Z,4µm,21.0s
**VORD Divnogorie 96.54 321** *e*P **P 10 35 04.4 -0.9**
VORD pmax pmax
comp=Z,20nm,1.3s
VORD pmax pmax
comp=N,10.0nm,0.6s
VORD pmax pmax
comp=E,10.0nm,0.8s
**VSR Storozhevoye 96.62 321** *e*P **P 10 35 05.0 -0.6**
VSR pmax pmax
comp=Z,10.0nm,0.7s
VSR pmax pmax
comp=N,10.0nm,1.0s
VSR pmax pmax
comp=E,10.0nm,0.9s
**LPSR Galich'ya Gora 96.75 322** *e*P **P 10 35 05.4 -0.8**
LPSR pmax pmax
comp=Z,30nm,1.3s
LPSR pmax pmax
comp=N,7.0nm,1.1s
LPSR pmax pmax
comp=E,10.0nm,1.2s
**DLBC Dease Lake 97.43 32** PFAKE 10 35 20.0 +11
DLBC LR LR
comp=Z,5µm,22.0s
**MOS Moscow 97.44 325** *e*P Pdif 10 35 11.1 +1.8
MOS *e* 10 35 23.0
MOS *e* 10 39 14.2
**ANN Anapa 97.87 314** *e*P P 10 35 07.6 -3.8
ANN *e*S **SKSac 10 45 44.7 -3.5**
ANN *e*SS SS 10 53 10.6 -7.5
ANN pmax pmax
comp=N,37nm,1.0s
ANN pmax pmax
comp=E,23nm,1.0s
ANN pmax pmax
comp=Z,43nm,1.0s
**LVZ Lovozero 97.91 338** P Pdif 10 35 28.7 +17
comp=Z,599nm,0.7s,SNR=5.0
**LVZ Lovozero 97.91 338** PFAKE 10 35 20.0 +8.8
LVZ LR LR
comp=Z,6µm,20.0s
**OBN Obninsk 98.07 325** P **P 10 35 11.3 -0.7**
comp=Z,21nm,0.4s,baz=75,slow=21,SNR=3.5
**OBN Obninsk 98.07 325** *ce*P **P 10 35 10.1 -1.9**
OBN *e*SS SS 10 53 28.2 +7.9
OBN pmax pmax
comp=Z,14nm,0.5s
OBN MLR MLR
comp=Z,2µm,19.0s
**OBN Obninsk 98.07 325** *e*P **P 10 35 11.3 -0.7**
OBN LR LR
comp=Z,4µm,20.0s
**ASF Jabal al Asfar 98.33 302** P Pdif 10 35 14.1 +0.1
comp=Z,4.0nm,0.8s,baz=152,slow=5.6,SNR=6.0
**ASF Jabal al Asfar 98.33 302** P Pdif 10 35 14.1 +0.1
ASF pmax pmax
comp=Z,4.0nm,0.8s
**ASF Jabal al Asfar 98.33 302** *e*P Pdif 10 35 14.1 +0.1
**APA Apatity 98.42 338** *i*P Pdif 10 35 27.2 +14
APA *i* 10 45 53.0
APA *i* 10 46 29.0
APA *i* PPS PPS 10 48 50.0
APA *i* SS SS 10 53 37.0 +12
APA pmax pmax
comp=Z,8.0nm,0.8s
APA MLR MLR
comp=Z,5µm,28.0s
**SNAA Sanae 98.54 193** P **P 10 35 13.9 -0.1**
**SNAA Sanae 98.54 193** *e*P **P 10 35 13.6 -0.4**
SNAA pmax pmax
comp=Z,11nm,1.4s
SNAA MLR MLR
comp=Z,7µm,20.0s
**SNAA Sanae 98.54 193** *e*P Pdif 10 35 14.1 +0.1
comp=Z,10nm,1.2s
SNAA LR LR
comp=Z,7µm,20.0s
**SIM Simferopol' 100.22 315** *e*P Pdif 10 35 33.0 +11
**KEV Kevo 100.31 340** PFAKE 10 35 30.0 +8.2
KEV LR LR
comp=Z,5µm,21.0s
**KBS Kingsbay 100.63 350** PFAKE 10 35 30.0 +6.9
KBS LR LR
comp=Z,6µm,20.0s
**BR101 Keskin Array S 100.84 309** *e*Pdif **Pdif 10 35 23.6 -1.4**
**BRTR Keskin Array B 100.84 309** P **Pdif 10 35 23.6 -1.4**
comp=Z,1.3nm,0.9s,baz=63,slow=5.7,SNR=4.0
**BRTR Keskin Array B 100.84 309** P **Pdif 10 35 23.6 -1.4**
BRTR pmax pmax
comp=Z,1.0nm,0.9s
**ARA0 ARCESS Array S 100.87 340** *e*Pdif **Pdif 10 35 24.9 +0.6**
**ARCES ARCESS Array B 100.87 340** P **Pdif 10 35 24.9 +0.6**
comp=Z,7.5nm,1.0s,baz=94,slow=5.4,SNR=3.7
**ARCES ARCESS Array B 100.87 340** P **Pdif 10 35 24.9 +0.6**
ARCES pmax pmax
comp=Z,8.0nm,1.0s
**CSS Prodhromos 101.28 305** PFAKE 10 35 40.0 +13
CSS LR LR
comp=Z,600nm,22.0s
**ANTO Ankara 101.48 310** PFAKE 10 35 40.0 +12
ANTO LR LR
comp=Z,1µm,22.0s
**BR231 Keskin MP Arra 101.50 310** *e*Pdif **Pdif 10 35 25.5 -2.4**
**NLWA Neilton Lookou 102.00 43** PFAKE 10 35 40.0 +10
NLWA LR LR
comp=Z,3µm,21.0s
**KEBM Edson Butte 102.08 47** PFAKE 10 35 40.0 +10
KEBM LR LR
comp=Z,3µm,20.0s
**PGC Sidney 102.14 41** PFAKE 10 35 40.0 +10
PGC LR LR
comp=Z,4µm,21.0s
**KBO Bosley Butte 102.21 48** PFAKE 10 35 40.0 +9.0
KBO LR LR
comp=Z,3µm,20.0s
**E03A Lebam 102.29 44** PFAKE 10 35 40.0 +8.9
E03A LR LR
comp=Z,4µm,21.0s
**F03A Seaside 102.36 44** PFAKE 10 35 40.0 +8.5
F03A LR LR
comp=Z,5µm,21.0s
**MATP Matopo 102.45 248** P **Pdif 10 35 31.2 -1.4**
comp=Z,3.2nm,1.1s,baz=112,slow=5.4,SNR=3.0
MATP PP **PP 10 39 43.3 -2.2**
comp=Z,13nm,1.1s,baz=95,slow=8.6,SNR=7.2
**MATP Matopo 102.45 248** *e*Pdif **Pdif 10 35 31.2 -1.4**
MATP *e*PP **PP 10 39 43.3 -2.2**
**FIA0 FINESS Array S 102.66 332** *e*P **Pdif 10 35 32.6 +0.2**
**FIA0 FINESS Array S 102.66 332** *e*Pdif **Pdif 10 35 32.6 +0.2**
**FINES FINESS Array B 102.66 332** Pdiff **Pdif 10 35 32.6 +0.2**
comp=Z,5.3nm,0.9s,baz=132,slow=4.1,SNR=3.2
**FINES FINESS Array B 102.66 332** P **Pdif 10 35 32.6 +0.2**
FINES pmax pmax
comp=Z,5.0nm,0.9s
**COR Corvallis 102.67 46** PFAKE 10 35 40.0 +7.1
COR LR LR
comp=Z,6µm,19.0s
**KHMM Horse Mountain 102.69 49** PFAKE 10 35 40.0 +6.7
KHMM LR LR
comp=Z,6µm,19.0s
**KMRM Mail Ridge 102.76 50** PFAKE 10 35 50.0 +17
KMRM LR LR
comp=Z,6µm,19.0s
**AKASG Malin Array Be 102.93 321** Pdiff **Pdif 10 35 33.0 -0.8**
comp=Z,0.2nm,0.3s,baz=65,slow=4.2,SNR=5.3
AKASG PP **PP 10 39 48.1 +0.1**
comp=Z,0.5nm,0.4s,baz=63,slow=7.2,SNR=5.9
**AKASG Malin Array Be 102.93 321** P **Pdif 10 35 33.1 -0.8**
AKASG 10 39 48.1
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKBB Malin Array Si 102.93 321** *e*P **Pdif 10 35 33.1 -0.8**
AKBB *e* 10 39 48.1
**AKBB Malin Array Si 102.93 321** *e*Pdif **Pdif 10 35 33.0 -0.8**
AKBB *e*PP **PP 10 39 48.1 +0.1**
**KIEV Kiev 102.94 321** PFAKE 10 35 50.0 +16
KIEV LR LR
comp=Z,2µm,22.0s
**F04A Amboy 103.15 44** PFAKE 10 35 50.0 +15
F04A LR LR
comp=Z,4µm,21.0s
**D05A Enumclaw 103.29 43** PFAKE 10 35 50.0 +14
D05A LR LR
comp=Z,2µm,21.0s
**YBH Yreka Blue Hor 103.38 48** PFAKE 10 35 50.0 +14
YBH LR LR
comp=Z,4µm,20.0s
**H04A Detroit Lake 103.45 45** PFAKE 10 35 50.0 +14
H04A LR LR
comp=Z,4µm,19.0s
**LON Longmire 103.47 43** PFAKE 10 35 50.0 +14
LON LR LR
comp=Z,3µm,22.0s
**LSZ Lusaka 103.59 253** Pdiff **Pdif 10 35 38.1 +0.4**
comp=Z,1.9nm,0.4s,baz=75,slow=9.9,SNR=5.8
**LSZ Lusaka 103.59 253** P **Pdif 10 35 38.1 +0.4**
LSZ pmax pmax
comp=Z,2.0nm,0.4s
**LSZ Lusaka 103.59 253** *e*Pdif **Pdif 10 35 38.1 +0.4**
LSZ LR LR
comp=Z,2µm,22.0s
**WDC Whiskeytown Da 103.61 50** PFAKE 10 35 50.0 +13
WDC LR LR
comp=Z,6µm,18.0s
**BOSA Boshof 103.70 239** Pdiff **Pdif 10 35 38.2 +0.2**
comp=Z,3.1nm,0.7s,baz=120,slow=3.5,SNR=3.2
**BOSA Boshof 103.70 239** P **Pdif 10 35 38.2 +0.2**
BOSA pmax pmax
comp=Z,3.0nm,0.7s
**BOSA Boshof 103.70 239** *e*Pdif **Pdif 10 35 38.2 +0.2**
**KIS Kishinev 103.70 317** *e*PKP PKiKP 10 40 02.0 +6.4
**KIS Kishinev 103.70 317** *e*PPS PPS 10 53 08.0
KIS *e*L L 11 12 55.0
KIS LRM MLR 11 32 35.0
comp=Z,1µm,19.0s
**LTY Liberty 104.17 43** PFAKE 10 35 50.0 +10
LTY LR LR
comp=Z,5µm,21.0s
**LBTB Lobatse 104.20 243** Pdiff **Pdif 10 35 40.3 0.0**
comp=Z,3.8nm,0.8s,baz=173,slow=4.9,SNR=3.8
**LBTB Lobatse 104.20 243** P **Pdif 10 35 40.3 0.0**
LBTB pmax pmax
comp=Z,4.0nm,0.9s
**LBTB Lobatse 104.20 243** *e*Pdif **Pdif 10 35 40.3 0.0**
**YKA Yellowknife Ar 104.24 26** Pdiff **Pdif 10 35 39.6 +0.2**
comp=Z,1.8nm,0.7s,baz=289,slow=5.8,SNR=2.5
**YKA Yellowknife Ar 104.24 26** P **Pdif 10 35 39.6 +0.2**
YKA pmax pmax
comp=Z,2.0nm,0.7s
**G06A Carlson Farm, 104.48 45** PFAKE 10 35 50.0 +9.0
G06A LR LR
comp=Z,4µm,21.0s
**K05A Summer Lake 104.61 47** PFAKE 10 35 50.0 +8.2
K05A LR LR
comp=Z,4µm,19.0s
**SAO San Andreas Ge 104.81 53** PFAKE 10 35 50.0 +7.4
SAO LR LR
comp=Z,4µm,19.0s
**E07A Sunnyside 104.83 43** PFAKE 10 35 50.0 +7.5
E07A LR LR
comp=Z,4µm,20.0s
**HAWA Hanford 105.08 43** PFAKE 10 40 10.0
HAWA LR LR
comp=Z,4µm,21.0s
**MOD Modoc 105.15 48** *e*PKKPbc PKKPbc 10 51 27.6 +1.2
MOD LR LR
comp=Z,5µm,20.0s
**D08A Wollman Farm, 105.38 43** PFAKE 10 40 10.0
D08A LR LR
comp=Z,4µm,20.0s
**I07A Izee 105.44 46** *e*Pdif **Pdif 10 35 54.6 +9.3**
I07A LR LR
comp=Z,4µm,19.0s
**CMB Columbia Colle 105.53 52** PFAKE 10 40 10.0
CMB LR LR
comp=Z,4µm,19.0s
**G08A Pilot Rock 105.64 44** PFAKE 10 40 10.0
G08A LR LR
comp=Z,3µm,20.0s
**C09A Chrisman Ranch 105.69 42** PFAKE 10 40 10.0
C09A LR LR
comp=Z,3µm,21.0s
**J08A Circle Bar Ran 106.28 46** *e*Pdif **Pdif 10 35 58.7 +10**
J08A LR LR
comp=Z,3µm,20.0s
**WVOR Wild Horse Val 106.31 47** *e*P **Pdif 10 35 52.6 +3.3**
WVOR MLR MLR
comp=Z,4µm,20.0s
**WVOR Wild Horse Val 106.31 47** *e*Pdif **Pdif 10 35 52.6 +3.3**
WVOR LR LR
comp=Z,4µm,20.0s
**NEW Newport 106.36 41** PFAKE 10 40 10.0
NEW LR LR
comp=Z,3µm,22.0s
**F10A Beach Ranch, E 106.72 43** PFAKE 10 40 10.0
F10A LR LR
comp=Z,3µm,21.0s
**BMO Blue Mountains 106.87 45** PFAKE 10 40 10.0
BMO LR LR
comp=Z,3µm,21.0s
**NV01 Mina Array Sit 107.11 51** *e*Pdif **Pdif 10 35 55.6 +2.5**
NV01 *e*PKKPdf **PKKPab 10 51 35.6 +1.4**
**NVAR Mina Array Bea 107.11 51** Pdiff **Pdif 10 35 52.5 -0.6**
comp=Z,1.7nm,0.8s,baz=263,slow=5.7,SNR=9.4
NVAR PKiKP **PKiKP 10 40 03.0 +0.6**
comp=Z,0.6nm,0.9s,baz=261,slow=1.7,SNR=2.9
NVAR PKKPbc **PKKPbc 10 51 21.1 +0.8**
comp=Z,0.7nm,0.9s,baz=144,slow=5.3,SNR=3.7
NVAR PKKPab **PKKPab 10 51 35.8 +1.5**
comp=Z,3.7nm,1.0s,baz=111,slow=5.2,SNR=9.4
**OSI Osito Adit 107.22 55** PFAKE 10 40 10.0
OSI LR LR
comp=Z,5µm,21.0s
**ISA Isabella 107.31 54** PFAKE 10 40 10.0
ISA LR LR
comp=Z,5µm,20.0s
**EDM Edmonton 107.53 35** *e*P **Pdif 10 35 49.8 -4.6**
EDM MLR MLR
comp=Z,6µm,21.0s
**EDM Edmonton 107.53 35** *e*Pdif **Pdif 10 35 49.8 -4.6**
EDM LR LR
comp=Z,6µm,21.0s
**BMN Battle Mountai 107.66 49** PFAKE 10 40 20.0
BMN LR LR
comp=Z,6µm,19.0s
**KOLS Kolonicke sedl 107.68 320** *e*PKP **PKiKP 10 40 03.8 +0.9**
**PASC Pasadena Art C 107.71 56** PFAKE 10 40 20.0
PASC LR LR
comp=Z,4µm,22.0s
**UZH Uzhgorod 107.73 320** *e*P **Pdif 10 35 49.6 -5.7**
**MWC Mount Wilson 107.81 56** PFAKE 10 40 20.0
MWC LR LR
comp=Z,4µm,22.0s
**DAC Darwin (Calif) 107.95 54** PFAKE 10 40 20.0
DAC LR LR
comp=Z,5µm,19.0s
**IDI Anoyia 108.15 305** PFAKE 10 40 20.0
IDI LR LR
comp=Z,1µm,21.0s
**MFID Camas Ranch 108.18 46** *e*Pdif **Pdif 10 36 00.9 +3.3**
MFID LR LR
comp=Z,4µm,21.0s
**WALA Waterton Lakes 108.27 40** PFAKE 10 40 20.0
WALA LR LR
comp=Z,4µm,18.0s
**GSC Goldstone 108.71 54** PFAKE 10 40 20.0
GSC LR LR
comp=Z,6µm,19.0s
**MSO Missoula 108.77 42** PFAKE 10 40 20.0
MSO LR LR
comp=Z,3µm,20.0s
**HFS Hagfors 108.82 333** PKiKP **PKiKP 10 40 06.7 +2.0**
comp=Z,3.3nm,0.8s,baz=58,slow=8.7,SNR=2.4
**TPNV Topopah Spring 108.93 53** PFAKE 10 40 20.0
TPNV LR LR
comp=Z,4µm,20.0s
**ELK Elko 109.09 49** *e*P **Pdif 10 36 05.3 +3.4**
**ELK Elko 109.09 49** *e*Pdif **Pdif 10 36 05.2 +3.4**
**BAR Barrett 109.14 57** PFAKE 10 40 20.0
BAR LR LR
comp=Z,4µm,19.0s
**HLID Hailey 109.16 46** P **PKiKP 10 40 07.7 +1.6**
baz=109
**HLID Hailey 109.16 46** *e*Pdif **Pdif 10 36 05.8 +3.8**
HLID LR LR
comp=Z,5µm,19.0s
**PFO Pinyon Flat Ob 109.21 56** PFAKE 10 40 20.0
PFO LR LR
comp=Z,4µm,20.0s
**R11A Troy Canyon, C 109.24 51** *e*PP PP 10 40 38.0 +2.7
R11A *e*PKKPab **PKKPab 10 51 25.8 +1.0**
R11A LR LR
comp=Z,4µm,18.0s
**PSZ Piszkesteto 109.46 319** PFAKE 10 40 20.0
PSZ LR LR
comp=Z,2µm,20.0s
**NB200 NORSAR Array S 109.54 334** *e*PKiKP **PKiKP 10 40 07.1 +1.1**
NB200 *e*PP **PP 10 40 35.7 -0.7**
**NOA NORSAR Array B 109.54 334** PKiKP **PKiKP 10 40 07.1 +1.1**
comp=Z,1.3nm,0.8s,baz=56,slow=2.1,SNR=3.3
NOA PP **PP 10 40 35.7 -0.7**
comp=Z,2.1nm,0.8s,baz=60,slow=6.2,SNR=3.9
**AGG Agios Georgios 109.63 310** PFAKE 10 40 20.0
AGG LR LR
comp=Z,1µm,22.0s
**DLMT Dillon 110.03 43** PFAKE 10 40 20.0
DLMT LR LR
comp=Z,4µm,21.0s
**OKC Ostrava-Krasne 110.05 322** *e*PP PP 10 40 42.2 +1.8
OKC *e*SP SP 10 50 07.8 +1.0
OKC AMS AMS 11 38 20.0
comp=Z,3µm,16.6s
**LDFC Landfair 110.11 55** PFAKE 10 40 20.0
LDFC LR LR
comp=Z,5µm,19.0s
**BSD Bornholm Skovb 110.18 328** *i* P PP 10 40 46.8 +5.7
comp=Z,4µm,18.0s
**BOZ Bozeman (W) 110.62 43** PFAKE 10 40 20.0
BOZ LR LR
comp=Z,3µm,20.0s
**GLA Glamis 110.63 57** PFAKE 10 40 20.0
GLA LR LR
comp=Z,4µm,20.0s
**BGU Big Grassy Mou 110.70 48** PFAKE 10 40 20.0
BGU LR LR
comp=Z,3µm,19.0s
**HVU Hansel Valley 110.71 47** PFAKE 10 40 20.0
HVU LR LR
comp=Z,3µm,20.0s
**KRLC Kraliky 110.82 322** *e*PKIKP **PKiKP 10 40 11.1 +2.3**
KRLC *e* 10 40 47.7
**KRLC Kraliky 110.82 322** *e*PKP **PKiKP 10 40 11.1 +2.3**
KRLC *ep*PKP **pPKiKP 10 40 15.1 -0.3**
KRLC *e*PP **PP 10 40 47.7 +1.7**
**KONO Kongsberg 110.89 333** PFAKE 10 40 20.0
KONO LR LR
comp=Z,5µm,20.0s
**DPC Dobruska-Polom 111.01 322** *e*PKIKP **PKiKP 10 40 11.3 +2.1**
DPC *e* 10 40 51.6
DPC *e* 10 50 12.4
DPC MLR MLR
comp=Z,2µm,18.2s
**DPC Dobruska-Polom 111.01 322** *e*PKP **PKiKP 10 40 11.3 +2.1**
DPC *e*PP **PP 10 40 51.6 +4.2**
DPC *e*SDIF 10 48 27.1
DPC *e*SP **SP 10 50 12.4 -3.4**
DPC AMS AMS 11 38 40.0
comp=Z,2µm,18.2s
**DUG Dugway 111.02 49** *e*PKKPab PKKPab 10 51 17.9 +1.1
DUG LR LR
comp=Z,6µm,19.0s
**TIR Tirane 111.03 312** PFAKE 10 40 20.0
TIR LR LR
comp=Z,2µm,21.0s
**SPUT South Promonto 111.05 48** PFAKE 10 40 20.0
SPUT LR LR
comp=Z,3µm,18.0s
**CCUT Cedar City 111.10 52** PFAKE 10 40 20.0
CCUT LR LR
comp=Z,5µm,20.0s
**UPC Upice 111.15 323** *e*SDIF **Sdif 10 48 27.5 -0.2**
UPC *e*SP **SP 10 50 13.0 -4.0**
UPC AMS AMS 11 39 10.0
comp=Z,3µm,18.0s
**EGMT Eagleton 111.20 40** P **PKiKP 10 40 10.8 +1.1**
baz=111
**EGMT Eagleton 111.20 40** *e*PKiKP **PKiKP 10 40 11.8 +2.1**
EGMT LR LR
comp=Z,3µm,19.0s
**RGN Rugen 111.25 327** PFAKE 10 40 20.0
RGN LR LR
comp=Z,4µm,22.0s
**COP Copenhagen 111.26 329** *i* P PP 10 40 55.9 +7.0
comp=Z,2µm,17.0s
**YMR Madison River 111.32 44** PFAKE 10 40 20.0
YMR LR LR
comp=Z,5µm,21.0s
**YFT Old Faithful 111.47 44** PFAKE 10 40 20.0
YFT LR LR
comp=Z,5µm,19.0s
**YNR Norris Junctio 111.50 44** PFAKE 10 40 20.0
YNR LR LR
comp=Z,4µm,20.0s
**IMW Indian Meadow 111.53 45** PFAKE 10 40 20.0
IMW LR LR
comp=Z,3µm,20.0s
**FXWY Fox Creek 111.54 45** *e*PKiKP **PKiKP 10 40 12.1 +1.5**
FXWY *e*PKKPbc **PKKPbc 10 51 06.4 +0.1**
FXWY *e*PKKPab **PKKPab 10 51 15.3 +0.8**
FXWY LR LR
comp=Z,3µm,19.0s
**NLU North Lily Min 111.62 49** PFAKE 10 40 20.0
NLU LR LR
comp=Z,5µm,19.0s
**TPAW Teton Pass 111.63 45** *e*PKiKP **PKiKP 10 40 12.2 +1.3**
TPAW *e*PKKPbc **PKKPbc 10 51 06.1 0.0**
TPAW *e*PKKPab **PKKPab 10 51 15.0 +0.8**
TPAW LR LR
comp=Z,4µm,19.0s
**HWUT Hardware Ranch 111.64 47** PFAKE 10 40 20.0
HWUT LR LR
comp=Z,4µm,20.0s
**FLWY Flagg Ranch 111.65 44** PFAKE 10 40 20.0
FLWY LR LR
comp=Z,3µm,21.0s
**H17A Grant Village 111.66 44** PFAKE 10 40 20.0
H17A LR LR
comp=Z,5µm,20.0s
**AHID Auburn Hatcher 111.70 46** *e*PKKPab PKKPab 10 51 14.1 +0.3
AHID LR LR
comp=Z,4µm,20.0s
**CTU Camp Tracy 111.70 48** PFAKE 10 40 20.0
CTU LR LR
comp=Z,5µm,21.0s
**MOOW Moose Ponds 111.71 45** PFAKE 10 40 20.0
MOOW LR LR
comp=Z,3µm,22.0s
**REDW Red Top Meadow 111.73 45** PFAKE 10 40 20.0
REDW LR LR
comp=Z,4µm,21.0s
**LKWY Lake 111.74 44** PFAKE 10 40 20.0
LKWY LR LR
comp=Z,6µm,21.0s
**SNOW Snow King Moun 111.77 45** *e*PKKPbc PKKPbc 10 51 05.9 +0.4
SNOW *e*PKKPab **PKKPab 10 51 13.9 +0.4**
SNOW LR LR
comp=Z,4µm,20.0s
**LOHW Long Hollow 111.84 45** *e*Pdif **Pdif 10 36 04.2 -10**
LOHW *e*PKKPbc **PKKPbc 10 51 05.5 +0.2**
LOHW LR LR
comp=Z,3µm,20.0s
**TREC Trest 111.86 322** AMS AMS 11 38 30.0
comp=Z,2µm,17.1s
**MPU Maple Canyon 111.94 49** *e*Pdif **Pdif 10 36 09.6 -4.9**
MPU *e*PP **PP 10 40 54.4 -0.3**
MPU LR LR
comp=Z,5µm,19.0s
**O16A Springville 112.00 49** *e*Pdif **Pdif 10 36 16.5 +1.8**
O16A LR LR
comp=Z,4µm,18.0s
**PVCC Panska Ves 112.01 323** *e*PP PP 10 40 56.8 +2.3
PVCC AMS AMS 11 40 20.0
comp=Z,3µm,18.9s
**GOPC GO Pecny, Ondr 112.09 322** *e*PP PP 10 40 56.5 +1.4
GOPC *e*SKS **SKSac 10 46 50.9 -1.8**
GOPC *e*SDIF **Sdif 10 48 36.4 +0.8**
GOPC *ex* x 10 50 15.3
GOPC AMS AMS 11 37 40.0
comp=Z,3µm,18.9s
**PRU Pruhonice 112.21 322** *e*PP PP 10 40 57.0 +1.1
PRU *e*SKS **SKSac 10 46 49.7 -3.4**
PRU *e*SDIF **Sdif 10 48 36.4 -0.2**

PRU ex x 10 50 17.3
PRU AMS AMS 11 40 20.0
comp=Z,4µm,18.5s
**SUMG Summit 112.22 357** PFAKE 10 40 20.0
SUMG LR LR
comp=Z,4µm,19.0s
**PRA Prague 112.25 323** *e*PP PP 10 41 00.3 +4.1
PRA AMS AMS 11 40 00.0
comp=Z,4µm,16.5s
**RLMT Red Lodge 112.36 43** PFAKE 10 40 20.0
RLMT LR LR
comp=Z,4µm,22.0s
**MUD Monsted U'grnd 112.58 330** *i* P PP 10 41 05.1 +6.9
comp=Z,5µm,17.0s
**CLL Collm 112.65 324** *e*PP PP 10 41 00.0 +1.0
CLL *e*PPP PPP 10 43 18.0
CLL *e*Sdif Sdif 10 48 42.0 +1.8
CLL *e*PS **PS 10 50 30.0 -3.9**
CLL *e*PPS PPS 10 51 48.0
CLL *e*SS **SS 10 56 42.0 +2.4**
CLL *e* 10 59 06.0
CLL *e*SSS SSS 11 00 42.0
CLL LmV 11 34 00.0
comp=N,2µm,20.7s
CLL LmV 11 34 00.0
comp=E,2µm,22.0s
CLL LmV 11 34 00.0
comp=Z,4µm,19.4s
**CLL Collm 112.65 324** PFAKE 10 40 20.0
CLL LR LR
comp=Z,4µm,19.0s
**P17A Butcher Ranch, 112.73 49** PFAKE 10 40 20.0
P17A LR LR
comp=Z,4µm,18.0s
**BW06 Boulder Array 112.80 46** *e*Pdif Pdif 10 36 03.3 -15
BW06 *e*PKKPbc **PKKPbc 10 51 00.9 -1.2**
BW06 *e*PKKPbc PKKPab 10 51 01.6 -7.3
BW06 *e*PKKPab PKKPdf 10 51 09.1 -14
BW06 *e*PKKPdf PKKPdf 10 51 24.1 +1.4
BW06 LR LR
comp=Z,4µm,20.0s
**SRU San Rafael 112.97 50** *e*Pdif Pdif 10 36 06.5 -13
SRU *e*PKKPbc **PKKPbc 10 51 02.0 +0.7**
SRU LR LR
comp=Z,3µm,18.0s
**WUAZ Wupatki 113.05 54** P **PKiKP 10 40 14.4 +0.7**
baz=113
**WUAZ Wupatki 113.05 54** PFAKE 10 40 30.0
WUAZ LR LR
comp=Z,5µm,19.0s
**P18A Preston Nutter 113.07 49** PFAKE 10 40 30.0
P18A LR LR
comp=Z,5µm,19.0s
**KHC Kasperske Hory 113.09 322** *e*PKIKP **PKiKP 10 40 14.6 +1.4**
KHC *e* 10 41 07.1
KHC *e* 10 50 34.7
KHC MLR MLR
comp=Z,5µm,18.9s
**KHC Kasperske Hory 113.09 322** *e*PKP **PKiKP 10 40 14.6 +1.4**
KHC *e*PP **PP 10 41 07.1 +4.8**
KHC *e*SDIF 10 48 46.5
KHC *e*SP **SP 10 50 34.7 -0.3**
KHC AMS AMS 11 38 10.0
comp=Z,5µm,18.9s
**KHC Kasperske Hory 113.09 322** PFAKE 10 40 30.0
KHC LR LR
comp=Z,2µm,19.0s
**GEC2 GERESS Array S 113.12 322** *e*PKIKP **PKiKP 10 40 14.2 +0.9**
**GEC2 GERESS Array S 113.12 322** *e*PKiKP **PKiKP 10 40 14.2 +0.9**
**GERES GERESS Array B 113.12 322** PKiKP **PKiKP 10 40 14.2 +0.9**
comp=Z,1.4nm,0.6s,baz=72,slow=1.7,SNR=7.5
**GERES GERESS Array B 113.12 322** *i* PKIKP **PKiKP 10 40 14.2 +0.9**
GERES pmax pmax
comp=Z,1.0nm,0.6s
**FFC Flin Flon 113.26 31** PFAKE 10 40 30.0
FFC LR LR
comp=Z,3µm,20.0s
**NKC Novy Kostel 113.38 323** *e*PP PP 10 41 02.0 -2.3
NKC AMS AMS 11 36 10.0
comp=Z,3µm,18.8s
**MOX Moxa 113.72 324** *e*L L 11 39 04.7
comp=Z,3µm,20.1s
**LAO LASA Array 113.90 41** P **PKiKP 10 40 16.2 +1.4**
baz=114
**LAO LASA Array 113.90 41** PFAKE 10 40 30.0
LAO LR LR
comp=Z,2µm,21.0s
**TUC Tucson 114.11 57** PFAKE 10 40 30.0 +14
TUC LR LR
comp=Z,4µm,20.0s
**TRI Trieste 114.13 318** PFAKE 10 40 30.0 +15
TRI LR LR
comp=Z,3µm,19.0s
**PV09 Paradox Valley 114.17 50** *e*PKKPab PKKPab 10 51 05.0 +1.9
**PV10 Paradox Valley 114.27 50** *e*PKKPab PKKPab 10 51 04.5 +2.0
**GRF Grafenberg Arr 114.32 323** *e*PP PP 10 41 00.6 -10
GRF *e*L L 11 37 01.3
comp=Z,3µm,20.4s
**GRFO Grafenberg 114.32 323** PFAKE 10 40 30.0 +15
GRFO LR LR
comp=Z,3µm,20.0s
**CUC Castrocucco 114.34 312** PFAKE 10 40 30.0 +14
CUC LR LR
comp=Z,1µm,21.0s
**O20A White River Ci 114.44 48** P PKPdf 10 40 17.6 +1.4
baz=114
**O20A White River Ci 114.44 48** PFAKE 10 40 30.0 +14
O20A LR LR
comp=Z,5µm,19.0s
**W18A Petrified Fore 114.44 54** PFAKE 10 40 30.0 +14
W18A LR LR
comp=Z,5µm,19.0s
**DGMT Dagmar 114.56 38** PFAKE 10 40 30.0 +14
DGMT LR LR
comp=Z,3µm,21.0s
**FCC Fort Churchill 114.91 25** PFAKE 10 40 30.0 +14
FCC LR LR
comp=Z,5µm,22.0s
**MVCO Mesa Verde 114.96 51** P PKPdf 10 40 18.9 +1.5
baz=115
**WTTA Wattenberg 114.97 320** ⇑ *i* PKiKP PKPdf 10 40 18.4 +1.4
comp=Z,20nm,1.5s
**K22A Casper 114.98 45** PFAKE 10 40 30.0 +13
K22A LR LR
comp=Z,3µm,21.0s
**SMCO Snowmass 115.63 49** *e*PKPdf **PKPdf 10 40 19.3 +0.4**
SMCO LR LR
comp=Z,5µm,20.0s
**STU Stuttgart 115.91 323** PFAKE 10 40 30.0 +11
STU LR LR
comp=Z,3µm,19.0s
**N23A Red Feather La 115.91 47** *e*PKKPab PKKPab 10 50 56.6 +1.3
N23A LR LR
comp=Z,3µm,18.0s
**SLBS Sierra La Lagu 116.06 66** PFAKE 10 40 30.0 +10
SLBS LR LR
comp=Z,3µm,19.0s
**FUORN Ofenpass-Fuorn 116.09 320** *e*PP PP 10 41 35.6 +12
FUORN LR LR
comp=Z,4µm,19.0s
**S22A 4UR Ranch, Cre 116.12 50** P **PKPdf 10 40 21.1 +1.5**
baz=116
**S22A 4UR Ranch, Cre 116.12 50** *e*PKKPab PKKPab 10 50 55.2 +0.8
S22A LR LR
comp=Z,4µm,19.0s
**RSSD Black Hills 116.22 43** *e*PKIKP **PKPdf 10 40 19.5 -0.1**
RSSD *e* 10 50 54.7
RSSD MLR MLR
comp=Z,2µm,20.0s
**RSSD Black Hills 116.22 43** *e*PKPdf **PKPdf 10 40 19.5 -0.1**
RSSD *e*PKKPbc **PKKPab 10 50 54.7 +0.9**
RSSD LR LR
comp=Z,2µm,20.0s
**G25A Newell 116.26 41** P **PKPdf 10 40 18.9 -0.5**
baz=116
**DAVOX Davos/Dischmat 116.27 320** PKP **PKPdf 10 40 19.9 +0.3**
comp=Z,2.5nm,0.5s,baz=145,slow=4.6,SNR=5.3
**DAVOX Davos/Dischmat 116.27 320** PKIKP **PKPdf 10 40 19.9 +0.3**
DAVOX pmax pmax
comp=Z,3.0nm,0.5s
**DAVOX Davos/Dischmat 116.27 320** *e*PKPdf **PKPdf 10 40 19.9 +0.3**
**E26A Carlson Angus 116.40 40** P **PKPdf 10 40 20.5 +0.8**
baz=116
**I25A Rochford 116.46 43** P **PKPdf 10 40 20.2 +0.2**
baz=116

**ISCO Idaho Springs 116.47 48** P **PKPdf 10 40 20.7 +0.4**
baz=116
**ISCO Idaho Springs 116.47 48** PFAKE 10 40 30.0 +10
ISCO LR LR
comp=Z,5µm,19.0s
**F26A Lodgepole 116.50 41** P **PKPdf 10 40 21.1 +1.2**
baz=116
**BFO Black Forest 116.61 323** PFAKE 10 40 30.0 +10
BFO LR LR
comp=Z,2µm,18.0s
**J25A Sunshine Ranch 116.63 43** P **PKPdf 10 40 20.6 +0.4**
baz=117
**TUE Stuetta 116.73 320** PFAKE 10 40 30.0 +10
TUE LR LR
comp=Z,2µm,20.0s
**G26A Maurine 116.76 41** P **PKPdf 10 40 21.2 +0.8**
baz=117
**H26A Fairpoint 116.89 42** P **PKPdf 10 40 20.6 -0.1**
baz=117
**VLC Villacollemand 116.91 318** PFAKE 10 40 30.0 +9.4
VLC LR LR
comp=Z,4µm,20.0s
**F27A Lemmon 116.92 40** P **PKPdf 10 40 21.0 +0.4**
baz=117
**E27A Carson 116.99 40** P **PKPdf 10 40 21.2 +0.4**
baz=117
**Q24A Divide 117.06 49** PFAKE 10 40 30.0 +8.5
Q24A LR LR
comp=Z,5µm,19.0s
**ANMO Albuquerque 117.11 53** *i* PKIKP **PKPdf 10 40 23.0 +1.5**
**ANMO Albuquerque 117.11 53** PFAKE 10 40 30.0 +8.5
ANMO LR LR
comp=Z,4µm,19.0s
**SDCO Great Sand Dun 117.13 50** P **PKPdf 10 40 22.0 +0.4**
baz=117
**SDCO Great Sand Dun 117.13 50** *e*PKPdf **PKPdf 10 40 24.1 +2.5**
SDCO *e*PKKPbc **PKKPbc 10 50 48.2 +1.2**
SDCO LR LR
comp=Z,4µm,18.0s
**G27A Dupree 117.16 41** P **PKPdf 10 40 20.9 -0.2**
baz=117
**WLF Walferdange 117.32 325** PFAKE 10 40 30.0 +8.8
WLF LR LR
comp=Z,4µm,19.0s
**H27A Howes 117.35 42** P **PKPdf 10 40 21.9 +0.4**
baz=117
**E28A Huff 117.48 39** P **PKPdf 10 40 22.3 +0.7**
baz=117
**I27A Quinn 117.58 42** P **PKPdf 10 40 22.0 +0.1**
baz=118
**MDND Maddock 117.62 38** PFAKE 10 40 30.0 +8.1
MDND LR LR
comp=Z,5µm,22.0s
**F28A McLaughlin 117.71 40** P **PKPdf 10 40 22.7 +0.6**
baz=118
**J27A Elkhorn Farm, 117.91 43** P **PKPdf 10 40 23.0 +0.3**
baz=118
**SFJD Kangerlussuaq 117.93 2** *i* P PP 10 41 41.7 +6.4
**G28A Parade 117.94 41** P **PKPdf 10 40 23.2 +0.6**
baz=118
**SENIN Lac Senin/Sane 118.07 321** PFAKE 10 40 30.0 +7.0
SENIN LR LR
comp=Z,2µm,20.0s
**T25A Trinidad 118.14 50** P **PKPdf 10 40 24.1 +0.6**
baz=118
**T25A Trinidad 118.14 50** *e*PKPdf **PKPdf 10 40 23.7 +0.2**
T25A *e*PKKPbc **PKKPab 10 50 46.8 +1.3**
T25A LR LR
comp=Z,3µm,20.0s
**I28A Midland 118.19 42** P **PKPdf 10 40 23.8 +0.6**
baz=118
**J28A Allard Ranch, 118.36 43** P **PKPdf 10 40 23.9 +0.4**
baz=118
**N27A Anderson Farm, 118.39 46** P **PKPdf 10 40 24.2 +0.5**
baz=118
**R26A Arlington 118.53 49** P **PKPdf 10 40 24.9 +0.8**
baz=118
**K28A Ten Mile Ranch 118.54 43** P **PKPdf 10 40 23.5 -0.4**
baz=118
**E30A Jud 118.63 39** P **PKPdf 10 40 24.2 +0.3**
baz=119
**O27A Beecher Island 118.64 46** P **PKPdf 10 40 24.8 +0.6**
baz=119
**ULM Lac du Bonnet 118.67 34** PFAKE 10 40 40.0 +16
ULM LR LR
comp=Z,5µm,22.0s
**OGNE Ogallala 118.70 46** PFAKE 10 40 40.0 +16
OGNE LR LR
comp=Z,3µm,20.0s
**S26A Kim 118.71 50** P **PKPdf 10 40 24.7 +0.3**
baz=119
**MNTX Cornudas Mount 118.73 57** P **PKPdf 10 40 25.0 +0.5**
baz=119
**MNTX Cornudas Mount 118.73 57** *e*PKPdf **PKPdf 10 40 25.0 +0.5**
MNTX *e*PKKPbc **PKKPab 10 50 43.6 +0.9**
MNTX LR LR
comp=Z,3µm,20.0s
**T26A Comanche Natio 118.75 50** P **PKPdf 10 40 24.8 +0.2**
baz=119
**I29A Vivian Onida 118.76 42** P **PKPdf 10 40 24.3 +0.1**
baz=119
**P27A Ficken Ranch, 118.78 47** P **PKPdf 10 40 25.0 +0.5**
baz=119
**C31A Landman Farms, 118.78 37** P **PKPdf 10 40 24.6 +0.6**
baz=119
**KSCO Kaye Shedlock' 118.92 48** PFAKE 10 40 40.0 +15
KSCO LR LR
comp=Z,5µm,19.0s
**J29A Okreek 118.98 42** P **PKPdf 10 40 24.5 -0.2**
baz=119
**EKA Eskdalemuir Ar 119.01 333** PKP **PKPdf 10 40 24.7 +0.5**
comp=Z,2.2nm,0.8s,baz=29,slow=3.8,SNR=6.2
EKA PKKPbc **PKKPbc 10 50 38.3 -2.1**
comp=Z,1.1nm,0.6s,baz=226,slow=3.2,SNR=4.1
**EKA Eskdalemuir Ar 119.01 333** PKIKP **PKPdf 10 40 24.7 +0.5**
EKA pmax pmax
comp=Z,2.0nm,0.8s
**EKA Eskdalemuir Ar 119.01 333** *e*PKPdf **PKPdf 10 40 24.7 +0.5**
EKA *e*PKKPbc **PKKPbc 10 50 38.3 -2.1**
**BNI Bardonecchia 119.01 320** PFAKE 10 40 40.0 +15
BNI LR LR
comp=Z,3µm,20.0s
**R27A Eads 119.02 49** P **PKPdf 10 40 25.3 +0.3**
baz=119
**ESK Eskdalemuir 119.04 333** PFAKE 10 40 40.0 +16
ESK LR LR
comp=Z,5µm,20.0s
**N28A Pribbeno Ranch 119.14 46** P **PKPdf 10 40 25.6 +0.5**
baz=119
**B32A Ashes, Strandq 119.20 36** P **PKPdf 10 40 23.9 -0.9**
baz=119
**E31A Nome 119.24 38** P **PKPdf 10 40 24.7 -0.3**
baz=119
**P28A Saint Francis 119.37 47** P **PKPdf 10 40 26.0 +0.4**
baz=119
**T27A Campo 119.45 50** P **PKPdf 10 40 27.2 +1.3**
baz=119
**Q28A Sharon Springs 119.48 48** P **PKPdf 10 40 26.7 +0.8**
baz=120
**U27A Thompson Grove 119.56 51** P **PKPdf 10 40 26.5 +0.4**
baz=120
**J30A Dallas 119.58 42** P **PKPdf 10 40 26.0 +0.3**
baz=120
**AGMN Agassiz Nation 119.64 36** PFAKE 10 40 40.0 +14
AGMN LR LR
comp=Z,5µm,20.0s
**CWF Charnwood Fore 119.71 330** PFAKE 10 40 40.0 +14
CWF LR LR
comp=Z,3µm,22.0s
**R28A Tribune 119.74 48** P **PKPdf 10 40 27.0 +0.6**
baz=120
**K30A Basset 119.75 43** P **PKPdf 10 40 26.5 +0.3**
baz=120
**H31A Wolsey 119.77 41** P **PKPdf 10 40 26.6 +0.5**
baz=120
**O29A 4D Ranch, Culb 119.87 46** P **PKPdf 10 40 26.8 +0.3**
baz=120
**T28A Walsh 119.89 50** P **PKPdf 10 40 27.0 +0.3**
baz=120
**S28A Manter 119.91 49** P **PKPdf 10 40 27.5 +0.8**
baz=120
**P29A Atwood 119.96 47** P **PKPdf 10 40 27.1 +0.4**
baz=120
**Q29A Oakley 120.17 47** P **PKPdf 10 40 27.8 +0.7**
baz=120
**V28A Channing 120.22 51** P **PKPdf 10 40 28.0 +0.6**
baz=120

**B34A Aery, Baudette 120.25 35** P **PKPdf 10 40 27.3 +0.4**
baz=120
**SSB Saint Sauveur 120.28 321** PFAKE 10 40 40.0 +13
SSB LR LR
comp=Z,2µm,19.0s
**MSTX Muleshoe 120.30 53** P **PKPdf 10 40 27.4 -0.2**
baz=120
**MSTX Muleshoe 120.30 53** *e*PKPdf **PKPdf 10 40 28.1 +0.6**
MSTX *e*PKKPbc **PKKPbc 10 50 35.6 +0.4**
MSTX LR LR
comp=Z,4µm,21.0s
**K31A O'Neill 120.35 43** P **PKPdf 10 40 27.7 +0.4**
baz=120
**L31A Butterfield Fa 120.47 43** P **PKPdf 10 40 26.2 -1.3**
baz=120
**P30A Selden 120.47 46** P **PKPdf 10 40 28.1 +0.4**
baz=120
**S29A Ulysses 120.49 49** P **PKPdf 10 40 27.7 -0.1**
baz=120
**F33A 5 Mile Ranch, 120.56 38** P **PKPdf 10 40 27.4 -0.1**
baz=120
**X28A Dimmitt 120.60 53** P **PKPdf 10 40 28.9 +0.7**
baz=121
**D34A Park Rapids 120.63 37** P **PKPdf 10 40 28.2 +0.5**
baz=121
**TX31 Lajitas Ar. Si 120.69 59** *e*PKPdf **PKPdf 10 40 28.2 -0.3**
TX31 *e*PKKPbc **PKKPbc 10 50 33.5 -0.2**
**TXAR Lajitas Array 120.69 59** PKP **PKPdf 10 40 28.1 -0.4**
comp=Z,2.5nm,0.9s,baz=238,slow=0.6,SNR=15
TXAR PKKPbc **PKKPbc 10 50 33.0 -0.6**
comp=Z,2.5nm,0.8s,baz=122,slow=5.4,SNR=13
**TXAR Lajitas Array 120.69 59** PKIKP **PKPdf 10 40 28.1 -0.4**
**M31A Lambtecht Ranc 120.70 44** P **PKPdf 10 40 28.1 +0.1**
baz=121
**Y28A McKinney Farm, 120.73 53** P **PKPdf 10 40 28.9 +0.5**
baz=121
**G33A Ortonville 120.76 39** P **PKPdf 10 40 27.2 -0.8**
baz=121
**K32A Verdigre 120.86 42** P **PKPdf 10 40 28.3 0.0**
baz=121
**R30A Dighton 120.89 48** P **PKPdf 10 40 28.4 -0.1**
baz=121
**AMTX Amarillo 120.90 52** PFAKE 10 40 40.0 +11
AMTX LR LR
comp=Z,4µm,19.0s
**C35A Jirik Farms, M 121.04 36** P **PKPdf 10 40 28.1 -0.3**
baz=121
**I33A Coleman 121.05 40** P **PKPdf 10 40 29.1 +0.5**
baz=121
**CBKS Cedar Bluff 121.10 47** PFAKE 10 40 40.0 +11
CBKS LR LR
comp=Z,4µm,19.0s
**P31A Stockton 121.11 46** P **PKPdf 10 40 29.2 +0.3**
baz=121
**U30A WK&E Inc. Balk 121.19 50** P **PKPdf 10 40 29.9 +0.8**
baz=121
**BGNE Belgrade 121.25 44** *e*PKPdf **PKPdf 10 40 29.5 +0.4**
BGNE LR LR
comp=Z,2µm,21.0s
**J33A Davis 121.25 41** P **PKPdf 10 40 28.6 -0.4**
baz=121
**ECSD EROS Data Cent 121.30 41** P **PKPdf 10 40 29.3 +0.3**
baz=121
**ECSD EROS Data Cent 121.30 41** *e*PKPdf **PKPdf 10 40 28.8 -0.3**
ECSD *e*PKKPbc **PKKPab 10 50 30.7 -0.6**
ECSD LR LR
comp=Z,3µm,21.0s
**D35A Remer 121.31 36** P **PKPdf 10 40 28.2 -0.8**
baz=121
**Z29A Hungry Hill Ra 121.35 54** P **PKPdf 10 40 29.1 -0.5**
baz=121
**E35A Pequot Lakes 121.36 37** P **PKPdf 10 40 29.2 +0.1**
baz=121
**V30A Spur Ranch, Mi 121.41 51** P **PKPdf 10 40 30.0 +0.4**
baz=121
**H34A Spellman Lake, 121.42 39** P **PKPdf 10 40 29.0 -0.2**
baz=121
**R31A Burdett 121.44 48** P **PKPdf 10 40 29.5 -0.1**
baz=121
**329A Wagon Wheel Ra 121.60 56** P **PKPdf 10 40 30.0 -0.1**
baz=122
**F35A Swanville 121.60 38** P **PKPdf 10 40 29.6 0.0**
baz=122
**O32A Brockman Farm, 121.61 45** P **PKPdf 10 40 29.3 -0.5**
baz=122
**P32A Huiting Farm, 121.63 46** P **PKPdf 10 40 29.8 0.0**
baz=122
**C36A Pine Crest Far 121.67 35** P **PKPdf 10 40 30.2 +0.6**
baz=122
**X30A Coker Ranch, T 121.67 52** P **PKPdf 10 40 29.8 -0.3**
baz=122
**529A Stev Forest Ra 121.74 58** P **PKPdf 10 40 30.5 +0.1**
baz=122
**D36A Goodland 121.78 36** P **PKPdf 10 40 30.3 +0.4**
baz=122
**DSB Dublin 121.80 333** PFAKE 10 40 40.0 +10
DSB LR LR
comp=Z,3µm,21.0s
**Z30A Sanderson Ranc 121.81 54** P **PKPdf 10 40 30.3 -0.1**
baz=122
**Y30A Stafford Cattl 121.82 53** P **PKPdf 10 40 30.6 +0.2**
baz=122
**M33A Taylor Creek F 121.84 43** P **PKPdf 10 40 29.3 -0.9**
baz=122
**429A Davenport Ranc 121.89 57** P **PKPdf 10 40 30.5 -0.2**
baz=122
**Q32A Meitler Ranch, 121.89 47** P **PKPdf 10 40 30.6 +0.2**
baz=122
**J34A George 121.93 41** P **PKPdf 10 40 29.9 -0.4**
baz=122
**G35A Watkins 121.97 38** P **PKPdf 10 40 30.9 +0.6**
baz=122
**R32A Long Quarter, 121.99 47** P **PKPdf 10 40 31.2 +0.6**
baz=122
**H35A Sunnyside Ranc 122.00 39** P **PKPdf 10 40 30.0 -0.3**
baz=122
**S32A Newby Ranch, P 122.09 48** P **PKPdf 10 40 31.3 +0.5**
baz=122
**K34A Le Mars 122.11 42** P **PKPdf 10 40 30.7 +0.1**
baz=122
**W31A Holland Ranch, 122.17 51** P **PKPdf 10 40 31.4 +0.4**
baz=122
**O33A Hebron 122.18 45** P **PKPdf 10 40 30.7 -0.2**
baz=122
**D37A Cotton 122.22 36** P **PKPdf 10 40 30.9 +0.2**
baz=122
**F36A Milaca 122.24 37** P **PKPdf 10 40 30.8 0.0**
baz=122
**T32A Huddler Ranch, 122.28 49** P **PKPdf 10 40 32.5 +1.3**
baz=122
**330A Mertzon 122.28 56** P **PKPdf 10 40 31.3 -0.1**
baz=122
**Y31A Rekieta Farm, 122.30 53** P **PKPdf 10 40 31.8 +0.4**
baz=122
**I35A Creekview Farm 122.30 40** P **PKPdf 10 40 31.0 0.0**
baz=122
**X31A McDonald Ranch 122.32 52** P **PKPdf 10 40 31.6 +0.3**
baz=122
**P33A Williams Farm, 122.35 46** P **PKPdf 10 40 31.8 +0.5**
baz=122
**J35A Milford 122.38 41** P **PKPdf 10 40 31.0 -0.2**
baz=122
**430A Baggett Ranch, 122.40 57** P **PKPdf 10 40 32.1 +0.5**
baz=122
**Q33A Connelly Farm, 122.42 46** P **PKPdf 10 40 31.9 +0.5**
baz=122
**530A J-C Ranch, Com 122.47 57** P **PKPdf 10 40 32.2 +0.4**
baz=122
**R33A Olander Ranch, 122.57 47** P **PKPdf 10 40 31.8 +0.1**
baz=122
**131A Roby 122.58 54** P **PKPdf 10 40 31.8 -0.1**
baz=122
**Z31A Sharp Cattle R 122.58 53** P **PKPdf 10 40 32.0 +0.1**
baz=123
**H36A Jessenland, He 122.62 39** P **PKPdf 10 40 32.2 +0.6**
baz=123
**K35A Storm Lake 122.66 41** P **PKPdf 10 40 31.9 +0.1**
baz=123
**L35A Bielow Farm, R 122.72 42** P **PKPdf 10 40 32.0 +0.1**
baz=123
**O34A Beatrice 122.76 45** P **PKPdf 10 40 30.9 -1.0**
baz=123
**EFI East Falkland 122.76 171** PFAKE 10 40 40.0 +8.4
EFI LR LR
comp=Z,4µm,19.0s
**T33A Patterson Ranc 122.82 49** P **PKPdf 10 40 32.3 +0.1**
baz=123
**I36A Fitzsimmons Fa 122.84 39** P **PKPdf 10 40 31.4 -0.6**

baz=123
**231A Bronte** 122.84 55 P PKPdf 10 40 31.8 -0.6
baz=123
**P34A Walnut Farm, R** 122.92 45 P PKPdf 10 40 31.3 -1.1
baz=123
**331A San Angelo** 122.93 56 P PKPdf 10 40 32.9 +0.3
baz=123
**Y32A R-V Farms, Ver** 122.93 52 P PKPdf 10 40 31.4 -1.1
baz=123
**431A Sonora** 122.94 56 P PKPdf 10 40 32.0 -0.6
baz=123
**J36A Seneca 1, Swea** 122.96 40 P PKPdf 10 40 31.7 -0.6
baz=123
**SPMN St. Paul** 123.00 38 PFAKE 10 40 40.0 +7.7
SPMN LR LR
comp=Z,4µm,21.0s
**Q34A Chapman** 123.09 46 P PKPdf 10 40 31.5 -1.1
baz=123
**R34A Isabella, Hill** 123.11 47 P PKPdf 10 40 32.4 -0.3
baz=123
**Z32A Haskell** 123.12 53 P PKPdf 10 40 33.3 +0.4
baz=123
**531A Rocksprings** 123.13 57 P PKPdf 10 40 33.7 +0.7
baz=123
**ABTX Abilene, Hawle** 123.19 54 P PKPdf 10 40 33.2 +0.1
baz=123
**ABTX Abilene, Hawle** 123.19 54 *e*PKPdf PKPdf 10 40 33.1 +0.1
ABTX LR LR
comp=Z,4µm,20.0s
**N35A Tabor** 123.20 43 P PKPdf 10 40 33.4 +0.6
baz=123
**WMOK Wichita Mounta** 123.22 51 *e*PKIKP PKPdf 10 40 33.5 +0.4
WMOK MLR MLR
comp=Z,3µm,20.0s
**WMOK Wichita Mounta** 123.22 51 *e*PKPdf PKPdf 10 40 33.5 +0.4
WMOK LR LR
comp=Z,3µm,20.0s
**I37A Lemond, Waseca** 123.23 39 P PKPdf 10 40 32.9 +0.2
baz=123
**V33A Lossen Ranch,** 123.23 50 P PKPdf 10 40 33.4 +0.4
baz=123
**H37A Dierke Farm, C** 123.25 38 P PKPdf 10 40 33.2 +0.4
baz=123
**KSU1 Kansas State U** 123.25 46 *e*PKPdf PKPdf 10 40 33.4 +0.4
KSU1 LR LR
comp=Z,4µm,21.0s
**631A Perdido Creek** 123.30 58 P PKPdf 10 40 34.0 +0.6
baz=123
**232A Coleman** 123.40 55 P PKPdf 10 40 33.9 +0.4
baz=123
**332A Millersview** 123.47 55 P PKPdf 10 40 34.3 +0.7
baz=123
**J37A Redenius Farm,** 123.47 40 P PKPdf 10 40 33.2 -0.1
baz=123
**P35A Duane Minner,** 123.50 45 P PKPdf 10 40 33.3 -0.1
baz=124
**X33A Lawton** 123.50 51 P PKPdf 10 40 33.4 -0.2
baz=124
**432A Menard** 123.57 56 P PKPdf 10 40 34.1 +0.3
baz=124
**U34A Anderson Ranch** 123.59 49 P PKPdf 10 40 34.6 +0.9
baz=124
**U34A Anderson Ranch** 123.59 49 *e*PKPdf PKPdf 10 40 35.8 +2.1
U34A *e*PKKPbc PKKPbc 10 50 23.0 +0.4
U34A LR LR
comp=Z,3µm,20.0s
**T34A McClaskey Farm** 123.63 48 P PKPdf 10 40 33.6 -0.2
baz=124
**JCT Junction City** 123.67 56 *e*PKIKP PKPdf 10 40 34.6 +0.6
JCT MLR MLR
comp=Z,3µm,20.0s
**JCT Junction City** 123.67 56 P PKPdf 10 40 34.4 +0.4
baz=124
**JCT Junction City** 123.67 56 *e*PKPdf PKPdf 10 40 34.6 +0.6
JCT *e*PKKPbc PKKPbc 10 50 23.0 +0.9
JCT LR LR
comp=Z,3µm,20.0s
**532A Rocksprings** 123.68 57 P PKPdf 10 40 34.1 0.0
baz=124
**K37A Belmond** 123.68 41 P PKPdf 10 40 33.0 -0.6
baz=124
**Z33A Whitaker Ranch** 123.69 53 P PKPdf 10 40 34.6 +0.6
baz=124
**Q35A Mercer Eighty,** 123.76 46 P PKPdf 10 40 34.4 +0.5
baz=124
**V34A Guthrie** 123.81 50 P PKPdf 10 40 34.5 +0.4
baz=124
**V34A Guthrie** 123.81 50 PFAKE 10 40 50.0 +16
V34A LR LR
comp=Z,5µm,20.0s
**W34A Bridge Creek,** 123.83 50 PFAKE 10 40 50.0 +16
W34A LR LR
comp=Z,6µm,20.0s
**I38A Scanlan Farm,** 123.89 39 P PKPdf 10 40 34.0 -0.1
baz=124
**632A Uvalde** 123.94 58 P PKPdf 10 40 35.2 +0.7
baz=124
**233A Rising Star** 123.97 54 P PKPdf 10 40 35.0 +0.4
baz=124
**O36A Bolckow** 123.98 44 P PKPdf 10 40 34.7 +0.3
baz=124
**732A Laxson Ranch,** 123.98 59 P PKPdf 10 40 35.2 +0.6
baz=124
**X34A Smith Ranch, M** 124.00 51 P PKPdf 10 40 35.5 +0.9
baz=124
**S35A Otter Creek Ra** 124.02 47 P PKPdf 10 40 34.9 +0.4
baz=124
**832A Faith Ranch, C** 124.09 59 P PKPdf 10 40 35.0 +0.1
baz=124
**333A Richland Sprin** 124.11 55 P PKPdf 10 40 34.9 0.0
baz=124
**Q36A Arnold C. Orve** 124.13 45 P PKPdf 10 40 34.6 0.0
baz=124
**J38A Wedel Dairy, R** 124.16 40 P PKPdf 10 40 33.4 -1.2
baz=124
**T35A Sooner Cattle** 124.17 48 P PKPdf 10 40 34.3 -0.5
baz=124
**433A Art** 124.18 56 P PKPdf 10 40 34.4 -0.6
baz=124
**U35A Pawnee** 124.21 49 P PKPdf 10 40 34.8 -0.1
baz=124
**K38A Parkersburg** 124.30 40 P PKPdf 10 40 35.7 +0.8
baz=124
**R36A Gordon, Harris** 124.36 46 P PKPdf 10 40 35.2 +0.1
baz=124
**SCIA State Center** 124.36 41 *e*PKPdf PKPdf 10 40 35.4 +0.4
SCIA LR LR
comp=Z,4µm,20.0s
**VAL Valentia** 124.41 334 *e*PP PP 10 42 21.9 +1.9
**134A White-Moore Ra** 124.47 54 P PKPdf 10 40 35.6 +0.1
baz=124
**S36A Lake Cedric, C** 124.53 47 P PKPdf 10 40 35.7 +0.3
baz=124
**W35A Tecumseh** 124.55 50 P PKPdf 10 40 35.7 +0.1
baz=124
**833A Chaparral WMA,** 124.58 59 P PKPdf 10 40 36.2 +0.4
baz=125
**T36A Boggs Farm, Ca** 124.59 48 P PKPdf 10 40 36.1 +0.5
baz=124
**234A Clairette** 124.59 54 P PKPdf 10 40 35.9 +0.2
baz=125
**MOIG Morelia** 124.64 70 *e*PKPdf PKPdf 10 40 35.4 -1.1
**334A Lometa** 124.72 55 P PKPdf 10 40 35.7 -0.3
baz=125
**434A Burnet** 124.84 56 P PKPdf 10 40 36.3 +0.1
baz=125
**534A Blanco** 124.90 57 P PKPdf 10 40 36.4 0.0
baz=125
**U36A Oologah** 124.95 48 P PKPdf 10 40 36.4 +0.2
baz=125
**V36A Jenks** 125.02 49 P PKPdf 10 40 36.5 +0.1
baz=125
**W36A Wetumka** 125.05 50 P PKPdf 10 40 36.8 +0.3
baz=125
**S37A Fort Scott** 125.08 47 P PKPdf 10 40 36.4 -0.1
baz=125
**TUL1 Tulsa** 125.09 49 P PKPdf 10 40 36.6 +0.1
baz=125
**TUL1 Tulsa** 125.09 49 *e*PKPdf PKPdf 10 40 37.2 +0.7
TUL1 LR LR
comp=Z,3µm,20.0s
**WHTX Lake Whitney** 125.15 54 P PKPdf 10 40 37.3 +0.5
baz=125
**WHTX Lake Whitney** 125.15 54 *e*PKPdf PKPdf 10 40 37.7 +0.9
WHTX LR LR
comp=Z,3µm,21.0s
**734A La Parita Cree** 125.15 58 P PKPdf 10 40 37.8 +0.9
baz=125

**X36A Centrahoma** 125.16 51 P PKPdf 10 40 36.7 0.0
baz=125
**T37A Cheneyville 18** 125.27 47 P PKPdf 10 40 37.1 +0.2
baz=125
**834A Tilden** 125.34 59 P PKPdf 10 40 38.3 +1.0
baz=125
**335A Moody** 125.39 55 P PKPdf 10 40 37.9 +0.6
baz=125
**U37A Salina** 125.41 48 P PKPdf 10 40 37.6 +0.4
baz=125
**435B Jarrell** 125.41 55 P PKPdf 10 40 38.0 +0.7
baz=125
**Y36A Durant** 125.44 51 P PKPdf 10 40 38.3 +1.0
baz=125
**034A Hebbronville** 125.50 60 P PKPdf 10 40 37.9 +0.4
baz=126
**934A Benavides** 125.51 59 P PKPdf 10 40 38.3 +0.7
baz=126
**Z36A Blue Ridge** 125.54 52 P PKPdf 10 40 37.9 +0.4
baz=126
**V37A Hulbert** 125.59 49 P PKPdf 10 40 37.8 +0.3
baz=126
**535A Dale** 125.65 56 P PKPdf 10 40 38.3 +0.5
baz=126
**W37A Quinton** 125.66 50 P PKPdf 10 40 37.7 0.0
baz=126
**JFWS Jewell Farm** 125.77 39 *e*PKIKP PKPdf 10 40 37.3 -0.3
JFWS MLR MLR
comp=Z,3µm,21.0s
**JFWS Jewell Farm** 125.77 39 *e*PKPdf PKPdf 10 40 37.3 -0.3
JFWS LR LR
comp=Z,3µm,21.0s
**735A Kenedy** 125.78 58 P PKPdf 10 40 39.2 +1.1
baz=126
**336A Riesel** 125.83 55 P PKPdf 10 40 38.6 +0.5
baz=126
**236A Katherine and** 125.89 54 P PKPdf 10 40 38.7 +0.5
baz=126
**X37A Clayton** 125.90 50 P PKPdf 10 40 38.2 0.0
baz=126
**835A Beeville** 125.92 58 P PKPdf 10 40 37.2 -1.1
baz=126
**Y37A Hugo** 125.93 51 P PKPdf 10 40 38.5 +0.2
baz=126
**U38A Gravette** 125.93 48 P PKPdf 10 40 38.2 0.0
baz=126
**536A Bastrop** 126.05 56 P PKPdf 10 40 40.2 +1.7
baz=126
**KVTX Kingsville** 126.06 59 PFAKE 10 40 50.0 +11
KVTX LR LR
comp=Z,2µm,21.0s
**V38A Canehill** 126.15 48 P PKPdf 10 40 37.9 -0.7
baz=126
**636A Smothers Creek** 126.23 57 P PKPdf 10 40 39.8 +0.9
baz=126
**X38A Whitesboro** 126.29 50 P PKPdf 10 40 39.7 +0.8
baz=126
**W38A Poteau** 126.37 49 P PKPdf 10 40 39.7 +0.7
baz=126
**237A Washetta, Mont** 126.47 53 P PKPdf 10 40 40.1 +0.8
baz=126
**Y38A Idabel** 126.64 51 P PKPdf 10 40 40.3 +0.8
baz=127
**537A Green Hill Far** 126.67 56 P PKPdf 10 40 40.7 +0.9
baz=127
**138A Matatall Enter** 126.82 52 P PKPdf 10 40 41.5 +1.5
baz=127
**637A Eagle Lake** 126.85 57 P PKPdf 10 40 41.2 +1.1
baz=127
**TAM Tamanrasset** 126.94 295 *e*PKIKP PKPdf 10 40 42.6 +1.9
TAM MLR MLR
comp=Z,2µm,22.0s
**TAM Tamanrasset** 126.94 295 *e*PKPdf PKPdf 10 40 42.6 +1.9
TAM LR LR
comp=Z,2µm,22.0s
**HKT Hockley** 127.11 56 PFAKE 10 40 50.0 +10
HKT LR LR
comp=Z,5µm,19.0s
**MIAR Mount Ida** 127.29 50 *e*PKIKP PKPdf 10 40 41.5 +0.7
MIAR MLR MLR
comp=Z,4µm,21.0s
**MIAR Mount Ida** 127.29 50 P PKPdf 10 40 41.2 +0.4
baz=127
**MIAR Mount Ida** 127.29 50 *e*PKPdf PKPdf 10 40 41.5 +0.7
MIAR LR LR
comp=Z,4µm,21.0s
**NATX Nacogdoches** 127.47 53 PFAKE 10 40 50.0 +8.8
NATX LR LR
comp=Z,2µm,22.0s
**CCM Cathedral Cave** 127.50 45 *e*PKIKP PKPdf 10 40 41.3 +0.2
**CCM Cathedral Cave** 127.50 45 *e*PKPdf PKPdf 10 40 41.3 +0.2
**SCHQ Schefferville** 127.51 15 PKP PKPdf 10 40 40.7 +0.1
comp=Z,8.2nm,0.8s,baz=24,slow=2.1,SNR=6.0
**SCHQ Schefferville** 127.51 15 *e*PKPdf PKPdf 10 40 40.7 +0.1
SCHQ LR LR
comp=Z,2µm,20.0s
**HDIL Hopedale** 127.60 41 PFAKE 10 40 50.0 +8.8
HDIL LR LR
comp=Z,3µm,20.0s
**SLM Saint Louis** 127.92 44 PFAKE 10 40 50.0 +8.1
SLM LR LR
comp=Z,4µm,21.0s
**ES19 SONSECA Array** 128.43 318 *e*PKPdf PKPdf 10 40 44.4 +1.5
ES19 *e*PP PP 10 42 53.6 +6.3
**ESDC Sonseca Array** 128.48 318 PKP PKPdf 10 40 43.4 +0.4
comp=Z,0.1nm,0.3s,baz=56,slow=2.8,SNR=5.4
ESDC PP PP 10 42 40.2 -7.5
comp=Z,0.2nm,0.3s,baz=38,slow=7.9,SNR=5.0
**ESDC Sonseca Array** 128.48 318 *e*PKPdf PKPdf 10 40 43.4 +0.4
ESDC *e*PP PP 10 42 40.2 -7.5
**PBMO Poplar Bluff** 128.66 46 *e*PKPdf PKPdf 10 40 44.0 +0.7
PBMO LR LR
comp=Z,3µm,20.0s
**PAB San Pablo** 128.80 318 PFAKE 10 41 00.0 +16
PAB LR LR
comp=Z,3µm,19.0s
**SIUC Southern Illin** 129.07 44 PFAKE 10 41 00.0 +16
SIUC LR LR
comp=Z,3µm,20.0s
**PBRG Braganca** 129.09 322 *e*PP PP 10 42 57.5 +6.0
**SFIN Scholer Farm** 129.12 40 *e*PKPdf PKPdf 10 40 44.7 +0.6
SFIN LR LR
comp=Z,3µm,19.0s
**OLIL Olney** 129.33 42 *e*PKPdf PKPdf 10 40 44.7 +0.1
OLIL LR LR
comp=Z,4µm,22.0s
**PLCA Paso Flores** 129.45 156 *e*PKIKP PKPdf 10 40 45.7 +0.8
**PLCA Paso Flores** 129.45 156 *e*PKPdf PKPdf 10 40 45.7 +0.8
**MVO Moncorvo** 129.63 322 *e*PKP PKPdf 10 40 52.7 +7.5
**MVO Moncorvo** 129.63 322 *e*PP PP 10 43 05.2 +10
**MVO Moncorvo** 129.63 322 *e*LR LR 11 26 52.7
comp=Z,3µm,18.0s
**MET Memphis--Engin** 129.77 47 PFAKE 10 41 00.0 +15
MET LR LR
comp=Z,4µm,20.0s
**PGAV Gavieira, Arco** 129.92 323 *e*PKP PKPdf 10 40 54.4 +8.7
**PGAV Gavieira, Arco** 129.92 323 *e*PP PP 10 43 02.9 +5.9
**PGAV Gavieira, Arco** 129.92 323 *e*SS SS 11 00 20.1 -0.6
**PGAV Gavieira, Arco** 129.92 323 *e*LR LR 11 26 34.8
comp=Z,3µm,18.0s
**POLO Lamas de Olo** 129.98 322 *e*PKP PKPdf 10 40 53.3 +7.4
**POLO Lamas de Olo** 129.98 322 *e*PP PP 10 43 02.9 +5.5
**PVRL Vila Real** 129.99 322 *e*PKP PKPdf 10 41 01.4 +16
**USIN University of** 130.01 43 PFAKE 10 41 00.0 +14
USIN LR LR
comp=Z,3µm,20.0s
**AAM Ann Arbor** 130.12 36 PFAKE 10 41 00.0 +14
AAM LR LR
comp=Z,6µm,22.0s
**BLO Bloomington** 130.14 41 PFAKE 10 41 00.0 +14
BLO LR LR
comp=Z,3µm,21.0s
**MTE Manteigas** 130.39 321 *e*PKP PKPdf 10 40 53.7 +7.1
**MTE Manteigas** 130.39 321 *e*PP PP 10 43 13.3 +13
**MTE Manteigas** 130.39 321 *e*SS SS 11 00 35.3 +8.7
**MTE Manteigas** 130.39 321 *e*LR LR 11 27 27.5
comp=Z,4µm,18.0s
**MTE Manteigas** 130.39 321 PFAKE 10 41 00.0 +13
MTE LR LR
comp=Z,4µm,18.0s
**OXF Oxford** 130.43 48 PFAKE 10 41 00.0 +13
OXF LR LR
comp=Z,5µm,19.0s
**PVIS Viseu** 130.43 322 *e*PP PP 10 43 14.8 +15
**VBMS Vicksburg** 130.56 51 PFAKE 10 41 00.0 +13
VBMS LR LR

comp=Z,5µm,20.0s
**PCBR Castelo Branco** 130.67 320 *e*PKP PKPdf 10 40 49.9 +2.8
**PCBR Castelo Branco** 130.67 320 *e*PP PP 10 43 13.9 +12
**WCI Wyandotte Cave** 130.80 42 PFAKE 10 41 00.0 +13
WCI LR LR
comp=Z,3µm,19.0s
**PMRV Marv??o** 130.85 320 *e*PKP PKPdf 10 40 55.9 +8.4
**PMRV Marv??o** 130.85 320 *e*PP PP 10 43 13.4 +10
**PMRV Marv??o** 130.85 320 *e*SS SS 11 00 41.5 +9.4
**PMRV Marv??o** 130.85 320 *e*LR LR 11 27 56.1
comp=Z,3µm,18.0s
**SADO Sadowa** 130.98 31 *e*PKPdf PKPdf 10 40 48.2 +0.7
SADO LR LR
comp=Z,4µm,19.0s
**PCAS Casmilo, Conde** 131.19 321 *e*PKP PKPdf 10 40 55.6 +7.5
**PCAS Casmilo, Conde** 131.19 321 *e*PP PP 10 43 17.4 +12
**PBAR Barrancos** 131.31 318 *e*PKP PKPdf 10 41 02.0 +14
**PBAR Barrancos** 131.31 318 *e*PP PP 10 43 15.1 +9.1
**PTOM Tomar** 131.39 321 *e*PP PP 10 43 21.4 +15
**EVO Evora** 131.75 319 *e*PKP PKPdf 10 40 52.1 +2.9
**EVO Evora** 131.75 319 *e*PP PP 10 43 08.0 -0.8
**ACSO Alum Creek Sta** 131.78 38 PFAKE 10 41 00.0 +11
ACSO LR LR
comp=Z,4µm,22.0s
**TOA0 Torodi Ar. Sit** 131.96 283 *e*P PKPdf 10 40 51.1 +0.9
**TOA0 Torodi Ar. Sit** 131.96 283 *e*PKPdf PKPdf 10 40 50.6 +0.4
TOA0 *e*PP PP 10 43 08.2 -3.3
TOA0 *e*SKPbc SKPbc 10 44 15.6 +0.1
**TORD Torodi Ar. Bea** 131.96 283 PKP PKPdf 10 40 50.6 +0.4
comp=Z,14nm,0.7s,baz=60,slow=1.7,SNR=43
TORD PP PP 10 43 08.2 -3.3
comp=Z,2.6nm,1.1s,baz=103,slow=2.6,SNR=4.1
TORD SKPbc SKPbc 10 44 15.6 +0.1
comp=Z,6.4nm,1.0s,baz=82,slow=1.7,SNR=6.6
**PACT Alcochete** 132.15 320 *e*PP PP 10 43 12.1 +0.8
**PVAQ Vaqueiros** 132.18 318 *e*PKP PKPdf 10 40 54.4 +4.4
**PVAQ Vaqueiros** 132.18 318 *e*PP PP 10 43 17.4 +5.8
**PVAQ Vaqueiros** 132.18 318 *e*SS SS 11 00 57.7 +9.2
**PVAQ Vaqueiros** 132.18 318 *e*LR LR 11 27 06.1
comp=Z,2µm,18.0s
**PCVE Castro Verde** 132.27 318 *e*PKP PKPdf 10 40 59.0 +8.8
**PCVE Castro Verde** 132.27 318 *e*PP PP 10 43 20.3 +8.1
**MESJ Messejana** 132.27 319 *e*P PKPdf 10 40 50.1 -0.1
MESJ *e*PP PP 10 43 13.3 +1.1
MESJ *e*SS SS 11 00 53.4 +3.8
MESJ AMS AMS 11 48 39.3
comp=Z,2µm,16.4s
**MESJ Messejana** 132.27 319 *e*PKP PKPdf 10 40 57.3 +7.1
**MESJ Messejana** 132.27 319 *e*PP PP 10 43 19.8 +7.6
**MESJ Messejana** 132.27 319 *e*PKIKP PKPdf 10 40 50.0 -0.1
MESJ *e* 10 43 13.3
MESJ *e*SS SS 11 00 53.3 +3.8
**PMAFR Mafra** 132.32 321 *e*PKP PKPdf 10 40 57.8 +7.5
**PMAFR Mafra** 132.32 321 *e*PP PP 10 43 17.3 +4.8
**PNCL Nicolau / Gran** 132.32 319 *e*PKP PKPdf 10 40 59.9 +10
**PNCL Nicolau / Gran** 132.32 319 *e*PP PP 10 43 20.5 +8.0
**LIS Lisbon** 132.38 320 *e*P PKPdf 10 40 50.4 +0.1
LIS AMS AMS 11 47 10.0
comp=N,2µm,27.4s
**LIS Lisbon** 132.38 320 *e*PKIKP PKPdf 10 40 50.4 +0.1
**PBDV Barranco-do-Ve** 132.41 318 *e*PKP PKPdf 10 40 59.6 +9.1
**PBDV Barranco-do-Ve** 132.41 318 *e*PP PP 10 43 20.9 +7.7
**ALLY Alegheny Colle** 132.55 35 PFAKE 10 41 00.0 +9.4
ALLY LR LR
comp=Z,6µm,22.0s
**SWET Sewanee** 132.61 45 *e*PKPdf PKPdf 10 40 50.1 -0.9
SWET LR LR
comp=Z,5µm,20.0s
**MORF Marmelete** 132.85 318 *e*P PKPdf 10 40 51.4 0.0
MORF *e*SS SS 11 01 00.4 +3.7
MORF AMS AMS 11 52 52.4
comp=Z,2µm,16.4s
**MORF Marmelete** 132.85 318 *e*PKP PKPdf 10 40 59.6 +8.2
**MORF Marmelete** 132.85 318 *e*PP PP 10 43 28.5 +12
**MORF Marmelete** 132.85 318 *e*PKIKP PKPdf 10 40 51.3 0.0
MORF *e*SS SS 11 01 00.4 +3.6
**MMNY Mt. Morris Dam** 133.04 32 *e*PKPdf PKPdf 10 40 52.2 +0.8
MMNY LR LR
comp=Z,3µm,19.0s
**PFVI Vila Bisbo** 133.07 318 *e*PKP PKPdf 10 40 56.8 +5.1
**PFVI Vila Bisbo** 133.07 318 *e*PP PP 10 43 27.3 +10
**PFVI Vila Bisbo** 133.07 318 PFAKE 10 41 00.0 +8.3
PFVI LR LR
comp=Z,3µm,18.0s
**RTC Rabat Centre** 133.35 313 PFAKE 10 41 00.0 +7.7
RTC LR LR
comp=Z,5µm,21.0s
**BRAL Brewton** 133.75 51 PFAKE 10 41 10.0 +17
BRAL LR LR
comp=Z,3µm,21.0s
**NCB Newcomb** 133.97 28 PFAKE 10 41 10.0 +17
NCB LR LR
comp=Z,3µm,20.0s
**MCWV Mont Chateau** 134.02 36 PFAKE 10 41 10.0 +17
MCWV LR LR
comp=Z,3µm,22.0s
**BINY Binghamton** 134.42 31 PFAKE 10 41 10.0 +16
BINY LR LR
comp=Z,3µm,20.0s
**ACCN Adirondack Com** 134.68 28 PFAKE 10 41 10.0 +15
ACCN LR LR
comp=Z,2µm,22.0s
**TRQA Tornquist** 134.86 162 *e*PKPdf PKPdf 10 40 54.4 -0.8
**KSPA Keystone Colle** 134.99 31 PFAKE 10 41 10.0 +15
KSPA LR LR
comp=Z,4µm,20.0s
**PKME Peaks-Kenny Pk** 135.05 23 PFAKE 10 41 10.0 +15
PKME LR LR
comp=Z,2µm,20.0s
**TRY Troy** 135.17 29 PFAKE 10 41 10.0 +15
TRY LR LR
comp=Z,4µm,20.0s
**BLA Blacksburg** 135.20 39 PFAKE 10 41 10.0 +14
BLA LR LR
comp=Z,2µm,20.0s
**GOGA Godfrey** 135.28 46 PFAKE 10 41 10.0 +14
GOGA LR LR
comp=Z,4µm,22.0s
**KMSC Kings Mountain** 135.82 42 PFAKE 10 41 10.0 +13
KMSC LR LR
comp=Z,4µm,20.0s
**LUPA Lehigh Univers** 135.89 32 PFAKE 10 41 10.0 +13
LUPA LR LR
comp=Z,4µm,20.0s
**ODNJ Ogdensburg** 135.94 31 PFAKE 10 41 10.0 +13
ODNJ LR LR
comp=Z,3µm,20.0s
**TIGA Tifton** 136.18 48 PFAKE 10 41 10.0 +12
TIGA LR LR
comp=Z,4µm,19.0s
**EMMW East Machias** 136.22 22 PFAKE 10 41 10.0 +13
EMMW LR LR
comp=Z,4µm,22.0s
**BRNJ Basking Ridge** 136.25 31 PFAKE 10 41 10.0 +12
BRNJ LR LR
comp=Z,4µm,19.0s
**HRV Adam Dziewonsk** 136.33 27 PFAKE 10 41 10.0 +12
HRV LR LR
comp=Z,3µm,19.0s
**PAL Palisades** 136.35 31 PFAKE 10 41 10.0 +12
PAL LR LR
comp=Z,4µm,20.0s
**JSC Jenkinsville** 136.36 43 PFAKE 10 41 10.0 +12
JSC LR LR
comp=Z,4µm,19.0s
**TEIG Tepich** 136.45 66 PFAKE 10 41 10.0 +12
TEIG LR LR
comp=Z,2µm,20.0s
**YLE Yale** 136.60 29 PFAKE 10 41 10.0 +12
YLE LR LR
comp=Z,4µm,19.0s
**BRYW Bryant College** 136.80 28 PFAKE 10 41 10.0 +11
BRYW LR LR
comp=Z,5µm,20.0s
**SNET Serv Nac Est T** 136.80 75 PFAKE 10 41 10.0 +11
SNET LR LR
comp=Z,4µm,20.0s
**NHSC New Hope** 137.76 44 PFAKE 10 41 10.0 +9.5
NHSC LR LR
comp=Z,3µm,20.0s
**CNNC Cliffs of the** 138.02 40 PFAKE 10 41 10.0 +9.0
CNNC LR LR
comp=Z,3µm,20.0s
**KIC Kosan Boka** 138.62 274 *e*P PKPpre 10 40 55.6

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | comp=Z,121nm,1.3s | | | | | | |
| TGUH | Tegucigalpa,Un | 138.64 | 74 | PFAKE | | 10 41 10.0 | +7.4 |
| TGUH | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| DBIC | Dimbokro | 138.74 | 275 | PKP | PKPdf | 10 41 02.5 | -0.4 |
| | comp=Z,13nm,0.7s,baz=41,slow=3.0,SNR=7.0 | | | | | | |
| DBIC | Dimbokro | 138.74 | 275 | PKIKP | PKPdf | 10 41 02.5 | -0.4 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| TIC | Toumodi | 138.90 | 274 | eP | PKPpre | 10 40 52.7 | |
| LCO | Las Campanas | 138.94 | 147 | ePKPdf | PKPdf | 10 41 05.7 | +2.5 |
| PMOZ | Porto Moniz, M | 141.14 | 319 | ePKP | PKPdf | 10 41 12.5 | +5.6 |
| JTS | JuntasAbangare | 141.34 | 80 | PFAKE | | 10 41 20.0 | +12 |
| JTS | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| LVC | Limon Verde | 144.84 | 142 | ePKPdf | PKPdf | 10 41 14.1 | +0.1 |
| NNA | Nana | 145.31 | 119 | ePKIKP | PKPdf | 10 41 16.0 | +1.4 |
| NNA | Nana | 145.31 | 119 | ePKPbc | PKPdf | 10 41 16.0 | +1.4 |
| BCIP | Isla Barro Col | 146.46 | 81 | PFAKE | | 10 41 30.0 | +11 |
| BCIP | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| MTDJ | Mount Denham | 146.73 | 64 | PFAKE | | 10 41 30.0 | +10 |
| MTDJ | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| CPUP | Villa Florida | 147.18 | 162 | PKPbc | PKPbc | 10 41 18.6 | -1.0 |
| | comp=Z,74nm,0.8s,baz=212,slow=1.6,SNR=72 | | | | | | |
| CPUP | Villa Florida | 147.18 | 162 | PKIKP | PKPbc | 10 41 18.6 | -1.0 |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,74nm,0.8s | | | | | | |
| CPUP | Villa Florida | 147.18 | 162 | ePKPdf | PKPdf | 10 41 18.3 | +0.8 |
| OTAV | Otavalo | 147.56 | 97 | ePKPbc | PKPbc | 10 41 22.4 | +0.8 |
| BBSR | BB Station | 147.69 | 30 | PFAKE | | 10 41 30.0 | +6.9 |
| BBSR | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| GTBY | Guantanamo Bay | 148.23 | 59 | PFAKE | | 10 41 30.0 | +4.4 |
| GTBY | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| LPAZ | La Paz | 149.85 | 135 | PKP | PKPdf | 10 41 23.8 | +1.0 |
| | comp=Z,6.1nm,0.8s,baz=231,slow=2.3,SNR=17 | | | | | | |
| LPAZ | | | | PKPbc | PKiKP | 10 41 29.0 | +0.5 |
| | comp=Z,30nm,0.8s,baz=198,slow=2.4,SNR=45 | | | | | | |
| LPAZ | La Paz | 149.85 | 135 | ePKPdf | PKPdf | 10 41 23.4 | +0.6 |
| LPAZ | | | | ePKPbc | PKiKP | 10 41 29.0 | +0.5 |
| GRTK | Grand Turk | 150.80 | 53 | PFAKE | | 10 41 30.0 | +1.0 |
| GRTK | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| LGNH | LØogne | 150.96 | 60 | PFAKE | | 10 41 40.0 | +3.2 |
| LGNH | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| PAPH | Port-au-Prince | 151.22 | 60 | PFAKE | | 10 41 40.0 | +2.1 |
| PAPH | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| SDDR | Presa de Saban | 151.89 | 58 | PFAKE | | 10 41 40.0 | -0.7 |
| SDDR | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| ROSC | El Rosal | 152.07 | 89 | PKPbc | PKPbc | 10 41 32.4 | -0.2 |
| | comp=Z,3.8nm,0.5s,baz=213,slow=1.4,SNR=3.6 | | | | | | |
| ROSC | El Rosal | 152.07 | 89 | ePKPbc | PKPbc | 10 41 32.6 | -0.1 |
| BANI | BANI | 152.94 | 58 | ePKPbc | PKPbc | 10 41 35.6 | +1.6 |
| SDV | Santo Domingo | 155.53 | 79 | PFAKE | | 10 41 40.0 | +9.3 |
| SDV | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| CRPR | Cabo Rojo, PR | 155.84 | 56 | ePKPdf | PKPdf | 10 41 31.9 | +1.2 |
| CRPR | | | | ePKPab | PKPab | 10 41 55.2 | -2.2 |
| CRPR | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| LRS | Lares | 155.91 | 55 | ePKPdf | PKPdf | 10 41 31.4 | +0.6 |
| AOPR | Arecibo Observ | 155.96 | 55 | PFAKE | | 10 41 40.0 | +9.1 |
| AOPR | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| SJG | San Juan | 156.57 | 54 | PFAKE | | 10 41 40.0 | +8.3 |
| SJG | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| HUMP | Col San Antoni | 156.79 | 54 | ePKPdf | PKPdf | 10 41 32.2 | +0.3 |
| HUMP | | | | ePKPab | PKPab | 10 42 04.1 | +2.6 |
| HUMP | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| CPD | Cerro la Pandu | 156.79 | 54 | ePKIKP | PKPdf | 10 41 32.2 | +0.2 |
| CPD | Cerro la Pandu | 156.79 | 54 | ePKPdf | PKPdf | 10 41 32.2 | +0.2 |
| CPD | | | | ePKPab | PKPab | 10 42 04.1 | +2.5 |
| STVI | Saint Thomas | 157.39 | 52 | ePKPdf | PKPdf | 10 41 31.7 | -1.0 |
| STVI | | | | ePKPab | PKPab | 10 42 12.3 | +8.3 |
| SAML | Samuel | 158.27 | 129 | ePKPdf | PKPdf | 10 41 34.3 | +0.4 |
| SAML | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| SABA | Saba | 159.15 | 51 | PFAKE | | 10 41 50.0 | +15 |
| SABA | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| SEUS | St. Eustatius | 159.42 | 51 | PFAKE | | 10 41 50.0 | +15 |
| SEUS | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| BDFB | Brasilia | 159.53 | 175 | PKP | PKPdf | 10 41 35.9 | +0.4 |
| | comp=Z,2.1nm,0.6s,baz=154,slow=8.8,SNR=3.3 | | | | | | |
| BDFB | | | | PKPab | PKPab | 10 42 13.6 | +0.3 |
| | comp=Z,6.2nm,0.7s,baz=334,slow=0.6,SNR=6.1 | | | | | | |
| BDFB | Brasilia | 159.53 | 175 | PKIKP | PKPdf | 10 41 35.9 | +0.4 |
| BDFB | | | | | | 10 42 13.6 | |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| BDFB | Brasilia | 159.53 | 175 | ePKPdf | PKPdf | 10 41 35.9 | +0.4 |
| BDFB | | | | ePKPab | PKPab | 10 42 13.6 | +0.3 |
| BDFB | | | | ePKPab | PKPab | 10 42 14.3 | +1.0 |
| RCBR | Riachuelo | 165.13 | 224 | PKPab | PKPab | 10 42 38.9 | +1.0 |
| | comp=Z,12nm,0.8s,baz=107,slow=6.8,SNR=5.9 | | | | | | |
| RCBR | Riachuelo | 165.13 | 224 | ePKPab | PKPab | 10 42 38.9 | +1.0 |
| PTGA | Pitinga | 165.25 | 112 | ePKPdf | PKPdf | 10 41 41.8 | +0.6 |
| PTGA | | | | ePKPab | PKPab | 10 42 38.4 | -0.2 |

*IDC* ***12*** *10:28:31.2±0.7, 4.°92S×133.°59E, h0km, mb4.4/9, mb1 4.5/14, mb1mx4.2/44, mbtmp4.5/14, ML4.3/5, Error ellipse: s-maj=25.7km s-min=16.7km az=84.0*
*ISCJB* ***12*** *10:28:32.5±0.4, 4.°97S±0.°04×133.°64E±0.°05, h25km, mb4.3/10, Error ellipse: s-maj=7.1km s-min=5.4km az=142.2*
*NEIC* ***12*** *10:28:32.5±0.3, 4.°93S×133.°63E, h10km, mb4.1/1, Error ellipse: s-maj=6.5km s-min=6.1km az=137.0*
*DJA* ***12*** *10:28:39.5±2.1, 5°S±15°×13°4E±1°4, h69km±37km, M5.2/12, mb5.0/6, MLv5.2/12*
**ISC 12 10:28:34.6**±0.5**, 4.°90S**±0.°06×**133.°63E**±0.°07**, h25**km**, n33, σ1.°23**/34**, mb4.4**/10**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.40 | 325 | P | Pn | 10 29 12.9 | +0.6 |
| RKPI | Ransiki, Papua | 3.41 | 9 | P | Pn | 10 29 26.6 | +0.4 |
| BNDI | Bandanaira | 3.73 | 276 | P | Pn | 10 29 33.0 | +2.4 |
| SIJI | Sorong | 4.65 | 329 | Pn | Pn | 10 29 43.3 | 0.0 |
| | 17nm,0.3s,baz=309,slow=19,SNR=10 | | | | | | |
| SIJI | | | | Sn | Sn | 10 30 32.5 | -4.0 |
| | 8.2nm,0.3s,baz=270,slow=20,SNR=6.2 | | | | | | |
| SWI | Sorong | 4.66 | 329 | P | Pn | 10 29 43.3 | 0.0 |
| MSAI | Masohi | 4.94 | 288 | P | Pn | 10 29 48.6 | +1.4 |
| AAI | Ambon | 5.55 | 282 | P | Pn | 10 29 57.5 | +1.8 |
| | 305nm,0.7s,2.8nm | | | | | | |
| NLAI | Namlea | 6.72 | 284 | P | Pn | 10 30 16.8 | +5.1 |
| | 113nm,0.4s,1.5nm | | | | | | |
| LBMI | Labuha | 7.44 | 304 | P | Pn | 10 30 22.0 | +0.3 |
| | 96nm,1.6s,1.2nm | | | | | | |
| JAY | Jayapura | 7.45 | 72 | Pn | Pn | 10 30 20.9 | -0.8 |
| | 3.6nm,0.3s,baz=238,slow=12,SNR=7.8 | | | | | | |
| SANI | Sanana | 8.14 | 290 | P | Pn | 10 30 30.0 | -1.2 |
| BATI | Baumata | 11.20 | 241 | Pn | Pn | 10 31 12.2 | -1.0 |
| | 7.6nm,0.3s,baz=131,slow=5.6,SNR=7.5 | | | | | | |
| KAPI | Kappang | 13.83 | 269 | Pn | Pn | 10 31 48.1 | -1.0 |
| | 0.2nm,0.3s,baz=49,slow=20,SNR=2.1 | | | | | | |
| PMG | Port Moresby | 14.15 | 109 | ePn | Pn | 10 31 52.3 | -1.3 |
| PMG | | | | eSn | Sn | 10 34 30.9 | +1.0 |
| WRAB | Tennant Creek | 14.96 | 177 | Pn | Pn | 10 32 04.3 | -0.2 |
| WRAB | | | | eSn | Sn | 10 34 47.4 | -2.3 |
| WRA | Warramunga Arr | 14.97 | 177 | Pn | Pn | 10 31 59.7 | -5.0 |
| | 0.2nm,0.3s,baz=357,slow=13,SNR=3.1 | | | | | | |
| FITZ | Fitzroy Crossi | 15.27 | 210 | Pn | Pn | 10 32 08.0 | -0.7 |
| ASAR | Alice Springs | 18.66 | 179 | P | Pn | 10 32 50.2 | -1.2 |
| | 1.9nm,0.3s,baz=2.0,slow=10,SNR=3.3 | | | | | | |
| USRK | Ussuriysk Ar. | 48.90 | 358 | P | P | 10 37 19.0 | +0.6 |
| | 5.1nm,0.7s,baz=174,slow=5.4,SNR=8.8 | | | | | | |
| YAK | Yakutsk | 66.81 | 358 | P | P | 10 39 24.5 | +0.8 |
| | 3.1nm,0.3s,baz=179,slow=2.3,SNR=2.2 | | | | | | |
| MKAR | Makanchi Array | 68.53 | 325 | P | P | 10 39 35.5 | +0.5 |
| | 2.5nm,0.7s,baz=127,slow=7.0,SNR=4.5 | | | | | | |
| SEY | Seymchan | 69.13 | 9 | P | P | 10 39 39.2 | +0.8 |
| | 3.2nm,0.8s,baz=73,slow=19,SNR=3.6 | | | | | | |
| ZALV | Zalesovo Beam | 71.37 | 332 | P | P | 10 39 52.0 | -0.3 |
| | 0.9nm,0.4s,baz=119,slow=1.9,SNR=3.8 | | | | | | |
| KURK | Kurchatov | 72.68 | 327 | P | P | 10 40 00.8 | +0.6 |
| KURBB | Kurchatov Arra | 72.68 | 327 | P | P | 10 40 00.8 | +0.6 |
| | 2.5nm,0.8s,baz=116,slow=4.2,SNR=3.2 | | | | | | |
| VNDA | Vanda | 74.11 | 174 | P | P | 10 40 08.2 | 0.0 |
| | 2.3nm,0.9s,baz=318,slow=6.1,SNR=4.1 | | | | | | |
| MAW | Mawson | 78.22 | 202 | P | P | 10 40 32.4 | +0.6 |
| | 4.4nm,0.9s,baz=68,slow=6.1,SNR=3.1 | | | | | | |
| BVAR | Borovoye Array | 78.27 | 327 | P | P | 10 40 33.0 | +0.7 |
| | 2.9nm,0.9s,baz=116,slow=9.8,SNR=2.3 | | | | | | |
| ABKAR | Akbulak array | 83.15 | 321 | eP | P | 10 40 59.4 | +0.9 |
| | 0.6nm,0.4s | | | | | | |
| TORD | Torodi Ar. Bea | 131.90 | 283 | PKP | PKPdf | 10 47 47.4 | +0.6 |
| | 1.2nm,0.9s,baz=72,slow=2.5,SNR=3.2 | | | | | | |
| ATAH | Atahualpa | 145.88 | 110 | PKPbc | PKPab | 10 48 14.8 | +0.9 |
| | 8.6nm,0.8s,baz=162,slow=3.3,SNR=4.6 | | | | | | |
| CPUP | Villa Florida | 147.19 | 162 | PKPbc | PKPbc | 10 48 16.6 | +0.2 |
| | 4.1nm,0.8s,baz=208,slow=3.4,SNR=6.1 | | | | | | |
| LPAZ | La Paz | 149.89 | 135 | PKPbc | PKPbc | 10 48 25.1 | +0.6 |
| | 2.6nm,0.8s,baz=137,slow=2.1,SNR=4.6 | | | | | | |

*IDC* ***12*** *10:29:34.9±0.5, 4.°92S×133.°75E, h0km, mb4.4/18, mb1 4.6/26, mb1mx4.4/48, mbtmp4.6/26, ML4.8/7, Error ellipse: s-maj=17.0km s-min=12.5km az=74.0*
*ISCJB* ***12*** *10:29:36.0±0.3, 5.°01S±0.°04×133.°75E±0.°03, h25km, mb4.4/20, Error ellipse: s-maj=5.9km s-min=4.3km az=17.7*
*NEIC* ***12*** *10:29:36.2±0.3, 4.°99S×133.°75E, h10km, mb4.4/2, Error ellipse: s-maj=6.5km s-min=5.5km az=64.0*
**ISC 12 10:29:38.4**±0.4**, 4.°99S**±0.°05×**133.°76E**±0.°05**, h25**km**, n41, σ1.°13**/48**, mb4.5**/20**, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 4.79 | 329 | Pn | Pn | 10 30 47.9 | -1.1 |
| | 52nm,0.3s,baz=162,slow=5.9,SNR=7.0 | | | | | | |
| SIJI | | | | Sn | Sn | 10 31 34.1 | -10 |
| | 78nm,0.3s,baz=189,slow=23,SNR=9.8 | | | | | | |
| JAY | Jayapura | 7.35 | 71 | Pn | Pn | 10 31 23.9 | -0.3 |
| | 8.1nm,0.3s,baz=225,slow=11,SNR=11 | | | | | | |
| JAY | | | | Sn | Sn | 10 32 47.8 | +0.9 |
| | 5.2nm,0.3s,baz=108,slow=19,SNR=3.5 | | | | | | |
| TNTI | Ternate | 8.57 | 312 | ePn | Pn | 10 31 40.8 | -0.2 |
| TNTI | | | | eSn | Sn | 10 33 19.0 | +2.0 |
| BATI | Baumata | 11.27 | 242 | Pn | Pn | 10 32 17.4 | -0.7 |
| | 21nm,0.3s,baz=96,slow=3.7,SNR=5.7 | | | | | | |
| BATI | | | | Sn | Sn | 10 34 21.2 | -2.2 |
| | 12nm,0.3s,baz=107,slow=19,SNR=4.3 | | | | | | |
| LUWI | Luwuk | 11.65 | 289 | ePn | Pn | 10 32 21.2 | -2.0 |
| LUWI | | | | eSn | Sn | 10 34 33.3 | +0.7 |
| KAPI | Kappang | 13.96 | 269 | Pn | Pn | 10 32 54.4 | -0.4 |
| | 0.7nm,0.3s,baz=100,slow=11,SNR=2.2 | | | | | | |
| KAPI | Kappang | 13.96 | 269 | ePn | Pn | 10 32 55.2 | +0.4 |
| KAPI | | | | eSn | Sn | 10 35 29.6 | +0.6 |
| PMG | Port Moresby | 13.99 | 109 | Pn | Pn | 10 32 53.3 | -1.9 |
| | 1.1nm,0.3s,baz=315,slow=13,SNR=3.1 | | | | | | |
| PMG | Port Moresby | 13.99 | 109 | ePn | Pn | 10 32 53.8 | -1.4 |
| PMG | | | | Sn | Sn | 10 35 29.8 | -0.1 |
| WRAB | Tennant Creek | 14.87 | 178 | Pn | Pn | 10 33 06.5 | -0.6 |
| WRAB | | | | eSn | Sn | 10 35 53.9 | +2.7 |
| WRA | Warramunga Arr | 14.88 | 178 | Pn | Pn | 10 33 04.8 | -2.4 |
| | 3.6nm,0.3s,baz=357,slow=13,SNR=4.9 | | | | | | |
| WRA | | | | Sn | Sn | 10 35 39.4 | -12 |
| | 7.7nm,0.3s,baz=357,slow=23,SNR=5.6 | | | | | | |
| FITZ | Fitzroy Crossi | 15.27 | 211 | Pn | Pn | 10 33 10.3 | -2.1 |
| | 6.5nm,0.3s,baz=42,slow=14,SNR=6.6 | | | | | | |
| FITZ | | | | Sn | Sn | 10 35 50.2 | -11 |
| | 15nm,0.3s,baz=188,slow=18,SNR=8.0 | | | | | | |
| FITZ | Fitzroy Crossi | 15.27 | 211 | ePn | Pn | 10 33 11.1 | -1.3 |
| FITZ | | | | Sn | Sn | 10 35 50.2 | -11 |
| ASAR | Alice Springs | 18.57 | 180 | P | Pn | 10 33 54.0 | 0.0 |
| | 3.5nm,0.3s,baz=2.4,slow=9.2,SNR=4.8 | | | | | | |
| ASAR | | | | S | Sn | 10 37 08.3 | -13 |
| | 1.4nm,0.3s,baz=4.4,slow=29,SNR=3.4 | | | | | | |
| CTA | Charters Tower | 19.32 | 142 | P | Pn | 10 34 02.8 | -0.3 |
| | 1.3nm,0.3s,baz=329,slow=15,SNR=2.0 | | | | | | |
| GUMO | Guam | 21.50 | 31 | P | P | 10 34 25.7 | +0.2 |
| | 43nm,0.8s,baz=162,slow=19,SNR=2.7 | | | | | | |
| DZM | Mont Dzumac | 35.90 | 121 | P | P | 10 36 37.2 | +0.3 |
| | 36nm,1.2s,baz=359,slow=4.2,SNR=2.7 | | | | | | |
| JNU | Nakatsue | 38.00 | 356 | P | P | 10 36 54.8 | +0.3 |
| | 3.5nm,0.6s,baz=144,slow=8.7,SNR=4.2 | | | | | | |
| CMAR | Chiang Mai Arr | 41.48 | 305 | P | P | 10 37 22.9 | -0.8 |
| | 0.9nm,0.3s,baz=138,slow=8.6,SNR=3.4 | | | | | | |
| KSAR | Wonju Array Be | 42.56 | 353 | P | P | 10 37 32.8 | +0.6 |
| KSRS | Korea Array | 42.57 | 353 | P | P | 10 37 32.8 | +0.6 |
| | 1.6nm,0.8s,baz=164,slow=7.3,SNR=3.3 | | | | | | |
| USRK | Ussuriysk Ar. | 48.99 | 358 | P | P | 10 38 22.4 | -0.4 |
| | 7.5nm,0.7s,baz=175,slow=7.2,SNR=9.1 | | | | | | |
| KHZ | Kahutara | 51.32 | 143 | eP | P | 10 38 40.8 | +0.2 |
| | 4.0nm,0.4s | | | | | | |
| SONM | Songino Array | 57.84 | 339 | P | P | 10 39 28.1 | 0.0 |
| | 1.4nm,0.8s,baz=160,slow=6.1,SNR=2.8 | | | | | | |
| PETK | Petropavlovsk- | 61.31 | 16 | P | P | 10 39 51.7 | 0.0 |
| | 3.6nm,0.9s,baz=186,slow=5.8,SNR=4.0 | | | | | | |
| YAK | Yakutsk | 66.90 | 358 | P | P | 10 40 27.7 | -0.5 |
| | 4.7nm,0.4s,baz=190,slow=3.0,SNR=2.1 | | | | | | |
| MKAR | Makanchi Array | 68.68 | 325 | P | P | 10 40 39.9 | +0.1 |
| | 9.0nm,0.9s,baz=116,slow=7.9,SNR=6.6 | | | | | | |
| SEY | Seymchan | 69.20 | 9 | P | P | 10 40 41.5 | -1.1 |
| | 5.9nm,0.9s,baz=297,slow=6.8,SNR=5.4 | | | | | | |
| ZALV | Zalesovo Beam | 71.51 | 332 | P | P | 10 40 56.8 | -0.1 |
| | 4.7nm,0.8s,baz=128,slow=4.9,SNR=6.5 | | | | | | |
| KURK | Kurchatov | 72.82 | 327 | eP | P | 10 41 05.2 | +0.4 |
| KURBB | Kurchatov Arra | 72.82 | 327 | P | P | 10 41 05.2 | +0.3 |
| | 3.4nm,0.9s,baz=123,slow=5.1,SNR=4.3 | | | | | | |
| VNDA | Vanda | 74.01 | 174 | P | P | 10 41 12.4 | +1.0 |
| | 1.7nm,0.8s,baz=343,slow=5.9,SNR=3.2 | | | | | | |
| MAW | Mawson | 78.19 | 202 | P | P | 10 41 36.4 | +1.1 |
| | 1.5nm,0.6s,baz=36,slow=8.7,SNR=2.2 | | | | | | |
| BVAR | Borovoye Array | 78.41 | 327 | P | P | 10 41 36.6 | -0.3 |
| | 4.2nm,0.8s,baz=116,slow=6.8,SNR=4.4 | | | | | | |
| GEYT | Alibeck | 81.81 | 309 | P | P | 10 41 56.1 | +0.5 |
| | 1.5nm,0.3s,baz=28,slow=17,SNR=3.6 | | | | | | |
| ABKAR | Akbulak array | 83.30 | 321 | eP | P | 10 42 03.7 | +0.6 |
| | 0.9nm,0.6s | | | | | | |
| ILAR | Eielson Array | 89.95 | 25 | P | P | 10 42 34.6 | -0.7 |
| | 0.5nm,0.6s,baz=258,slow=4.2,SNR=6.1 | | | | | | |
| TORD | Torodi Ar. Bea | 132.05 | 283 | PKP | PKPdf | 10 48 51.5 | +0.6 |
| | 1.0nm,0.7s,baz=21,slow=3.0,SNR=3.4 | | | | | | |
| ATAH | Atahualpa | 145.72 | 110 | PKPbc | PKPab | 10 49 19.6 | +2.5 |
| | 19nm,0.9s,baz=203,slow=2.9,SNR=5.9 | | | | | | |
| CPUP | Villa Florida | 147.06 | 161 | PKPbc | PKPab | 10 49 20.6 | -0.7 |
| | 3.7nm,0.9s,baz=236,slow=4.5,SNR=5.1 | | | | | | |
| LPAZ | La Paz | 149.74 | 135 | PKPbc | PKPbc | 10 49 29.2 | +1.3 |
| | 1.6nm,0.6s,baz=207,slow=2.3,SNR=2.7 | | | | | | |

*IDC* ***12*** *10:35:45.5±1.1, 5.°06S×133.°73E, h0km, mb3.9/4, mb1 4.4/10, mb1mx3.9/40, mbtmp4.2/10, ML4.2/6, Error ellipse: s-maj=29.5km s-min=21.8km az=80.0*
*ISCJB* ***12*** *10:35:46.2±0.5, 5.°02S±0.°04×133.°77E±0.°04, h28km, mb4.0/7, Error ellipse: s-maj=6.7km s-min=5.2km az=135.7*
*NEIC* ***12*** *10:35:46.4±0.5, 5.°12S×133.°77E, h10km, mb4.5/3, Error ellipse: s-maj=9.8km s-min=8.7km az=81.0*
*DJA* ***12*** *10:35:54.3±0.9, 5°S±4°×13°4E±°, h101km±17km, M4.6/8, mb4.6/5, MLv4.7/8*
**ISC 12 10:35:48.6**±0.6**, 5.°05S**±0.°06×**133.°78E**±0.°06**, h28**km**, n24, σ1.°57**/31**, mb3.8**/7**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| FAKI | Fak Fak | 2.61 | 324 | P | Pn | 10 36 28.2 | -0.7 |
| FAKI | | | | S | Pn | 10 36 28.4 | -0.5 |
| FAKI | Fak Fak | 2.61 | 324 | ePn | Pn | 10 36 27.7 | -1.3 |
| FAKI | | | | eSn | Sn | 10 36 56.4 | -3.3 |
| SAUI | Saumlaki | 3.82 | 220 | P | Pb | 10 36 52.9 | -2.4 |
| BNDI | Bandanaira | 3.90 | 278 | P | Pn | 10 36 47.3 | +0.7 |
| BNDI | | | | S | Sn | 10 37 32.0 | +0.5 |
| SIJI | Sorong | 4.85 | 329 | Pn | Pn | 10 36 58.5 | -1.2 |
| | 6.5nm,0.3s,baz=156,slow=19,SNR=11 | | | | | | |
| SIJI | | | | Sn | Sn | 10 37 47.2 | -7.8 |
| | 6.7nm,0.3s,baz=252,slow=23,SNR=6.6 | | | | | | |
| SWI | Sorong | 4.86 | 329 | P | Pn | 10 36 57.4 | -2.5 |
| SWI | | | | S | Sn | 10 37 47.9 | -7.3 |
| AAI | Ambon | 5.73 | 283 | P | Pn | 10 37 10.8 | -1.1 |
| | 102nm,0.8s,0.6nm | | | | | | |
| NLAI | Namlea | 6.90 | 285 | P | Pn | 10 37 27.2 | -0.7 |
| | 43nm,1.2s,0.5nm | | | | | | |
| JAY | Jayapura | 7.36 | 70 | Pn | Pn | 10 37 34.9 | +0.7 |
| | 2.6nm,0.3s,baz=216,slow=12,SNR=9.4 | | | | | | |
| JAY | | | | Sn | Sn | 10 38 54.6 | -2.3 |
| | 0.5nm,0.3s,baz=133,slow=18,SNR=1.9 | | | | | | |
| LBMI | Labuha | 7.65 | 305 | P | Pn | 10 37 38.3 | +0.1 |
| BATI | Baumata | 11.26 | 242 | Pn | Pn | 10 38 27.0 | -0.8 |
| | 2.4nm,0.3s,baz=124,slow=3.6,SNR=3.5 | | | | | | |
| BATI | | | | Sn | Sn | 10 40 31.1 | -1.6 |
| | 8.2nm,0.3s,baz=196,slow=20,SNR=4.4 | | | | | | |
| KAPI | Kappang | 13.97 | 270 | ePn | Pn | 10 39 03.7 | -1.2 |
| KAPI | | | | eSn | Sn | 10 41 40.3 | +1.1 |
| WRAB | Tennant Creek | 14.81 | 178 | ePn | Pn | 10 39 13.7 | -2.5 |
| WRAB | | | | Sn | Sn | 10 42 01.4 | +1.9 |
| WRA | Warramunga Arr | 14.81 | 178 | Pn | Pn | 10 39 15.0 | -1.4 |
| | 1.0nm,0.3s,baz=2.7,slow=13,SNR=5.8 | | | | | | |
| WRA | | | | Sn | Sn | 10 41 51.6 | -8.1 |
| | 0.9nm,0.3s,baz=3.8,slow=23,SNR=6.6 | | | | | | |
| FITZ | Fitzroy Crossi | 15.22 | 211 | Pn | Pn | 10 39 21.2 | -0.5 |
| | 1.0nm,0.3s,baz=34,slow=13,SNR=8.9 | | | | | | |
| FITZ | | | | Sn | Sn | 10 41 59.9 | -10 |
| | 1.9nm,0.3s,baz=187,slow=19,SNR=7.1 | | | | | | |
| ASAR | Alice Springs | 18.51 | 180 | P | Pn | 10 40 02.8 | -0.4 |
| | 0.7nm,0.3s,baz=6.7,slow=11,SNR=3.4 | | | | | | |
| ASAR | | | | S | Sn | 10 43 18.8 | -11 |
| | 0.2nm,0.3s,baz=358,slow=28,SNR=3.8 | | | | | | |
| HNR | Honiara | 26.32 | 101 | eP | P | 10 41 20.7 | -1.5 |
| | 64nm,1.0s | | | | | | |
| CMAR | Chiang Mai Arr | 41.53 | 305 | P | P | 10 43 35.2 | +1.3 |
| | 1.1nm,0.4s,baz=128,slow=6.9,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 68.73 | 325 | P | P | 10 46 50.6 | +0.7 |
| | 0.3nm,0.4s,baz=114,slow=6.8,SNR=3.6 | | | | | | |
| VNDA | Vanda | 73.95 | 174 | P | P | 10 47 22.4 | +1.5 |
| | 0.9nm,0.8s,baz=324,slow=4.2,SNR=4.9 | | | | | | |
| ABKAR | Akbulak array | 83.36 | 321 | eP | P | 10 48 14.6 | +1.5 |
| | 0.3nm,0.4s | | | | | | |
| QSPA | South Pole Qui | 84.91 | 180 | eP | P | 10 48 20.9 | 0.0 |
| | 3.5nm,1.1s | | | | | | |
| ILAR | Eielson Array | 90.00 | 25 | P | P | 10 48 46.9 | +1.6 |
| | 0.3nm,0.7s,baz=232,slow=5.6,SNR=3.0 | | | | | | |
| TORD | Torodi Ar. Bea | 132.08 | 283 | PKP | PKPdf | 10 55 02.9 | +2.1 |
| | 0.4nm,0.8s,baz=90,slow=2.9,SNR=3.1 | | | | | | |

**IDC 12 10:58:21.6**±3.2**, 5.°33S×133.°74E, h0**km**, mb3.6**/1**, mb1 4.0**/4**, mb1mx3.6**/36**, mbtmp3.8**/4**, ML3.5**/3**, Error ellipse: s-maj=128.3km s-min=31.2km az=82.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 14.53 | 178 | Pn | Pn | 11 01 48.4 | -0.3 |
| | 0.2nm,0.3s,baz=358,slow=13,SNR=5.2 | | | | | | |
| FITZ | Fitzroy Crossi | 14.96 | 211 | Pn | Pn | 11 01 54.0 | -0.4 |
| | 0.2nm,0.3s,baz=76,slow=12,SNR=2.2 | | | | | | |
| ASAR | Alice Springs | 18.23 | 180 | P | P | 11 02 36.5 | -0.1 |
| | 0.1nm,0.3s,baz=2.2,slow=12,SNR=6.6 | | | | | | |
| MKAR | Makanchi Array | 68.94 | 325 | P | P | 11 09 28.6 | 0.0 |
| | 0.2nm,0.4s,baz=122,slow=5.4,SNR=4.0 | | | | | | |

*DDA* ***12*** *11:01:00.8, 38.°21N×38.°27E, h8km, Md2.7*
*ISCJB* ***12*** *11:01:01.6±0.5, 38.°21N±0.°03×38.°29E±0.°03, h5km±5km, Error ellipse: s-maj=5.1km s-min=4.1km az=149.1*
*CSEM* ***12*** *11:01:01.4±0.3, 38.°21N×38.°28E, h10km, MD2.6, Error ellipse: s-maj=5.9km s-min=5.1km az=172.0*
*ISK* ***12*** *11:01:01.2, 38.°17N×38.°27E, h7km, MD2.6*
**ISC 12 11:01:01.5**±0.9**, 38.°20N**±0.°03×**38.°27E**±0.°02**, h12**km±7km**, n21, σ0.°83**/37**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MALT | Malatya | 0.17 | 49 | ePG | Pg | 11 01 05.5 | 0.0 |
| MALT | | | | eSG | Sg | 11 01 09.1 | +0.8 |
| MALT | Malatya | 0.17 | 49 | ePg | Pg | 11 01 05.5 | 0.0 |
| MALT | | | | eSg | Sg | 11 01 09.1 | +0.8 |
| AKCD | Akcadag | 0.29 | 289 | i P | Pg | 11 01 07.3 | -0.2 |
| AKCD | | | | i S | Sg | 11 01 11.4 | -0.1 |
| AKCD | Akcadag | 0.29 | 289 | P | Pg | 11 01 07.3 | -0.2 |
| AKCD | | | | S | Sg | 11 01 11.4 | -0.1 |
| ELZG | Elazig | 0.64 | 62 | i P | Pg | 11 01 13.6 | -0.4 |
| ELZG | | | | i S | Sg | 11 01 22.7 | +0.3 |
| ELZG | Elazig | 0.64 | 62 | P | Pg | 11 01 13.6 | -0.4 |
| ELZG | | | | S | Sg | 11 01 22.7 | +0.3 |
| DARE | Darende-Malaty | 0.72 | 301 | ePG | Pg | 11 01 15.3 | -0.2 |
| DARE | | | | eSG | Sb | 11 01 26.8 | +0.9 |
| DARE | Darende-Malaty | 0.72 | 301 | ePg | Pg | 11 01 15.3 | -0.2 |
| DARE | | | | eSg | Sb | 11 01 26.8 | +0.9 |
| URFA | Urfa | 0.88 | 150 | ePG | Pg | 11 01 17.9 | -0.5 |
| URFA | | | | eSG | Sg | 11 01 30.3 | +0.4 |
| URFA | Urfa | 0.88 | 150 | ePg | Pg | 11 01 18.0 | -0.5 |
| URFA | | | | eSg | Sg | 11 01 30.3 | +0.4 |
| GZT | Gaziantep | 1.01 | 214 | P | Pg | 11 01 19.6 | -1.5 |
| GZT | | | | S | Sn | 11 01 36.9 | +1.0 |
| KEMA | Kemaliye | 1.08 | 9 | i P | Pb | 11 01 20.4 | -1.8 |
| KEMA | | | | i S | Sg | 11 01 36.7 | +0.2 |
| KEMA | Kemaliye | 1.08 | 9 | P | Pb | 11 01 20.4 | -1.8 |
| KEMA | | | | S | Sg | 11 01 36.7 | +0.2 |
| PTK | Pertek | 1.12 | 52 | ePN | Pb | 11 01 22.9 | -0.1 |
| PTK | | | | eSN | Sn | 11 01 39.9 | +1.2 |
| PTK | Pertek | 1.12 | 52 | ePn | Pb | 11 01 22.9 | -0.1 |
| PTK | | | | eSn | Sn | 11 01 39.9 | +1.2 |
| ILIC | ilic-Erzincan | 1.27 | 11 | ePN | Pg | 11 01 26.2 | +0.2 |
| ILIC | ilic-Erzincan | 1.27 | 11 | ePn | Pg | 11 01 26.2 | +0.2 |
| CUKAN | kangal_SIVAS | 1.28 | 331 | P | Pn | 11 01 24.4 | -0.9 |
| KMRS | Kahramanmaras | 1.28 | 238 | ePN | Pg | 11 01 26.4 | +0.2 |
| KMRS | Kahramanmaras | 1.28 | 238 | ePn | Pg | 11 01 26.4 | +0.2 |
| AYKD | Aykdinkavak | 1.40 | 236 | P | Pg | 11 01 28.6 | +0.3 |
| AYKD | | | | S | Sg | 11 01 48.6 | +2.1 |

*MAN* ***12*** *11:04:42, 4.°45N×125.°92E, h131km, mb4.9, ML3.9, MS3.9*
*ISCJB* ***12*** *11:04:49.7±0.6, 4.°91N±0.°03×125.°69E±0.°08, h100km, Error ellipse: s-maj=11.3km s-min=4.8km az=178.9*
*DJA* ***12*** *11:04:54.4±1.4, 5°N±12°×12°6E±°, h120km±6km, M4.5/9, mb4.6/6, mB5.1/4, MLv4.6/9, Mw(mB)4.4/4*
**ISC 12 11:04:49.5**±1.3**, 4.°97N**±0.°05×**125.°80E**±0.°09**, h100**km**, n16, σ1.°71**/17**, 2C, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SGSI | Sangihe | 1.30 | 192 | P | Pn | 11 05 15.0 | +1.5 |
| SGSI | | | | S | Sn | 11 05 33.1 | +1.6 |
| GSPH | General Santos | 1.40 | 323⇑ | i P | Pn | 11 05 14.7 | 0.0 |
| GSPH | | | | i S | Sn | 11 05 32.9 | -0.9 |
| MATI | Mati | 2.01 | 13 | eP | Pn | 11 05 23.4 | +1.0 |
| MATI | | | | eS | Sn | 11 05 43.5 | -3.9 |
| DMPH | Davao City--Mi | 2.12 | 352⇑ | eP | Pn | 11 05 26.2 | +2.5 |
| DMPH | | | | eS | Sn | 11 05 52.4 | +2.6 |
| BUKP | Musuan | 2.98 | 346 | eP | Pn | 11 05 36.5 | +1.3 |
| PAGZ | Pagadian | 3.74 | 320 | eP | Pn | 11 05 46.4 | +1.2 |
| IPIL | Ipil | 4.26 | 311 | eP | Pn | 11 05 52.3 | +0.1 |
| TNTI | Ternate | 4.45 | 159 | P | Pn | 11 05 55.7 | +0.8 |
| GTOI | Gorontalo | 5.13 | 213 | P | Pn | 11 06 04.3 | +0.3 |
| LBMI | Labuha | 5.82 | 163 | P | Pn | 11 06 14.6 | +1.1 |
| | 41nm,0.9s,2µm0.3nm | | | | | | |
| MRSI | Marisa | 5.90 | 221 | P | Pn | 11 06 14.1 | -0.4 |
| | 47nm,0.7s,0.3nm | | | | | | |
| MRSI | | | | S | Sn | 11 07 18.9 | -1.9 |
| | 47nm,0.7s,0.3nm | | | | | | |
| LUWI | Luwuk | 6.70 | 207 | P | Pn | 11 06 20.9 | -4.4 |
| | 98nm,0.7s,2µm0.4nm | | | | | | |
| SANI | Sanana | 6.97 | 178 | P | Pn | 11 06 27.0 | -2.1 |
| | 98nm,0.7s,2µm0.5nm | | | | | | |
| APSI | Ampana | 7.17 | 216 | P | Pn | 11 06 36.0 | +4.3 |
| MPSI | Mapaga | 7.48 | 232 | P | Pn | 11 06 37.0 | +1.0 |
| | 10nm,0.6s,0.1nm | | | | | | |
| NLAI | Namlea | 8.26 | 171 | P | Pn | 11 06 45.8 | -0.8 |

*DDA* ***12*** *11:08:34.5, 35.°60N×36.°72E, h12km, Md2.8*
*CSEM* ***12*** *11:08:35.9±0.2, 35.°68N×36.°70E, h2km, ML1.9, Error ellipse: s-maj=7.3km s-min=3.5km az=87.0*
*ISCJB* ***12*** *11:08:36.8±0.8, 35.°68N±0.°02×36.°62E±0.°08, h12km±6km, Error ellipse: s-maj=10.6km s-min=3.9km az=3.3*
*NSSC* ***12*** *11:08:37.1±1.4, 35.°71N×36.°38E, h22km±6km, ML1.9*
**ISC 12 11:08:35.9**±1.1**, 35.°69N**±0.°02×**36.°68E**±0.°06**, h12**km±10km**, n15, σ0.°57**/30**, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRDH | Warideh | 0.28 | 231 | eP | Pg | 11 08 41.7 | 0.0 |
| WRDH | | | | eS | Sg | 11 08 46.5 | +0.8 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRDH | | | | AML | AML | 11 08 49.5 | |
| | comp=N,175nm,0.5s | | | | | | |
| WRDH | Warideh | 0.28 | 231 | eP | Pg | 11 08 41.7 | 0.0 |
| WRDH | | | | eS | Sg | 11 08 46.5 | +0.8 |
| BTCH | Batrach | 0.39 | 332 | eP | Pg | 11 08 43.9 | +0.1 |
| BTCH | | | | eS | Sb | 11 08 50.5 | -0.4 |
| BTCH | Batrach | 0.39 | 332 | eP | Pg | 11 08 43.8 | +0.1 |
| BTCH | | | | eS | Sb | 11 08 50.5 | -0.4 |
| YAYL | Yayladag | 0.58 | 307 | i P | Pg | 11 08 47.0 | -0.2 |
| YAYL | | | | i S | Sb | 11 08 55.9 | -0.4 |
| YAYL | Yayladag | 0.58 | 307 | P | Pg | 11 08 47.0 | -0.2 |
| YAYL | | | | S | Sb | 11 08 55.9 | -0.4 |
| BIDA | Albida | 0.74 | 204 | eP | Pg | 11 08 49.5 | -0.6 |
| BIDA | | | | eS | Sg | 11 08 59.0 | -0.8 |
| BIDA | | | | AML | AML | 11 09 07.7 | |
| | comp=E,58nm,0.3s | | | | | | |
| BIDA | | | | AML | AML | 11 09 09.2 | |
| | comp=N,62nm,0.8s | | | | | | |
| BIDA | Albida | 0.74 | 204 | eP | Pg | 11 08 49.5 | -0.6 |
| BIDA | | | | eS | Sg | 11 08 59.0 | -0.8 |
| KUZU | Kuzuini | 1.13 | 16 | i P | Pb | 11 08 56.7 | -0.7 |
| KUZU | | | | i S | Sn | 11 09 13.9 | +0.8 |
| KUZU | Kuzuini | 1.13 | 16 | P | Pb | 11 08 56.7 | -0.7 |
| KUZU | | | | S | Sn | 11 09 13.9 | +0.8 |
| HAWK | Haweek | 1.19 | 191 | eP | Pg | 11 08 59.2 | +0.5 |
| HAWK | | | | eS | Sb | 11 09 13.2 | -0.6 |
| HAWK | | | | AML | AML | 11 09 18.2 | |
| | comp=N,34nm,0.6s | | | | | | |
| HAWK | | | | AML | AML | 11 09 18.4 | |
| | comp=E,16nm,0.2s | | | | | | |
| HAWK | Haweek | 1.19 | 191 | eP | Pg | 11 08 59.2 | +0.5 |
| HAWK | | | | eS | Sb | 11 09 13.2 | -0.6 |
| KAMA | Osmaniye | 1.49 | 360 | P | Pn | 11 09 03.2 | +0.5 |
| KAMA | | | | S | Sg | 11 09 23.7 | -0.2 |
| ROOS | tl_alroos | 1.60 | 162 | eP | Pb | 11 09 05.6 | +0.2 |
| ROOS | | | | eS | Sg | 11 09 26.8 | -0.4 |
| ROOS | | | | AML | AML | 11 09 32.7 | |
| | comp=E,26nm,0.7s | | | | | | |
| ROOS | tl_alroos | 1.60 | 162 | eP | Pb | 11 09 05.6 | +0.2 |
| ROOS | | | | eS | Sg | 11 09 26.8 | -0.4 |

*CSEM **12** 11:10:30.0, 45°.73N×26°.70E, h117km, MD3.6/3, After BUC*

**BUC 12 11:10:30.0**±0.9**, 45°.73N×26°.70E, h117**km±8km**, MD3.6**/3**, 30C-27D, Error ellipse: s-maj=7.1km s-min=4.9km az=64.0, Romania**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PLOR | Plostina | 0.13 | 344 | ⇓iP | Pn | 11 10 46.1 | -0.1 |
| PLOR | | | | i S | Sn | 11 10 57.8 | -0.6 |
| PLOR | Plostina | 0.13 | 344 | ⇓iP | Pn | 11 10 46.1 | -0.1 |
| PLOR | Plostina | 0.13 | 344 | ⇓iP | Pn | 11 10 46.1 | -0.1 |
| PLOR | | | | i S | Sn | 11 10 57.8 | -0.6 |
| VRI | Vrincioaia | 0.14 | 8 | ⇑iP | Pn | 11 10 46.2 | 0.0 |
| VRI | | | | i S | Sn | 11 10 57.8 | -0.6 |
| VRI | Vrincioaia | 0.14 | 8 | ⇑iP | Pn | 11 10 46.2 | 0.0 |
| VRI | Vrincioaia | 0.14 | 8 | S | Sn | 11 10 57.8 | -0.6 |
| VRI | Vrincioaia | 0.14 | 8 | ⇑iP | Pn | 11 10 46.2 | 0.0 |
| VRI | | | | i S | Sn | 11 10 57.8 | -0.6 |
| ODBI | Odobesti | 0.25 | 81 | ⇑iP | Pn | 11 10 47.3 | +0.9 |
| ODBI | | | | i S | Sn | 11 11 00.1 | +1.4 |
| ODBI | Odobesti | 0.25 | 81 | ⇑iP | Pn | 11 10 47.3 | +0.9 |
| ODBI | Odobesti | 0.25 | 81 | ⇑iP | Pn | 11 10 47.3 | +0.9 |
| ODBI | | | | i S | Sn | 11 11 00.1 | +1.4 |
| PETR | Petresti | 0.37 | 90 | ⇑iP | Pn | 11 10 47.4 | +0.5 |
| PETR | | | | i S | Sn | 11 11 00.1 | +0.5 |
| PETR | Petresti | 0.37 | 90 | ⇑iP | Pn | 11 10 47.4 | +0.5 |
| PETR | Petresti | 0.37 | 90 | S | Sn | 11 11 00.1 | +0.5 |
| PETR | Petresti | 0.37 | 90 | ⇑iP | Pn | 11 10 47.4 | +0.5 |
| PETR | | | | i S | Sn | 11 11 00.1 | +0.5 |
| GRER | | 0.40 | 151 | ⇑iP | Pn | 11 10 48.1 | +1.1 |
| GRER | | 0.40 | 151 | ⇑iP | Pn | 11 10 48.1 | +1.1 |
| GRER | | 0.40 | 151 | ⇑iP | Pn | 11 10 48.1 | +1.1 |
| MLR | Muntele Rosu | 0.58 | 246 | ⇓iP | Pn | 11 10 48.5 | +0.2 |
| MLR | | | | i S | Sn | 11 11 01.3 | -0.8 |
| MLR | Muntele Rosu | 0.58 | 246 | ⇓iP | Pn | 11 10 48.5 | +0.2 |
| MLR | Muntele Rosu | 0.58 | 246 | S | Sn | 11 11 01.3 | -0.8 |
| MLR | Muntele Rosu | 0.58 | 246 | ⇓iP | Pn | 11 10 48.5 | +0.2 |
| MLR | | | | i S | Sn | 11 11 01.3 | -0.8 |
| ISR | Istrita | 0.62 | 190 | ⇑iP | Pn | 11 10 49.0 | +0.5 |
| ISR | | | | i S | Sn | 11 11 03.0 | +0.6 |
| ISR | Istrita | 0.62 | 190 | ⇑iP | Pn | 11 10 49.0 | +0.5 |
| ISR | Istrita | 0.62 | 190 | ⇑iP | Pn | 11 10 49.0 | +0.5 |
| ISR | | | | i S | Sn | 11 11 03.0 | +0.6 |
| TESR | Tescani | 0.79 | 357 | ⇓iP | Pn | 11 10 49.7 | -0.1 |
| TESR | | | | i S | Sn | 11 11 03.3 | -1.5 |
| TESR | Tescani | 0.79 | 357 | ⇓iP | Pn | 11 10 49.7 | -0.1 |
| TESR | Tescani | 0.79 | 357 | ⇓iP | Pn | 11 10 49.7 | -0.1 |
| TESR | | | | i S | Sn | 11 11 03.3 | -1.5 |
| SECR | | 0.82 | 213 | ⇑iP | Pn | 11 10 50.5 | +0.4 |
| SECR | | | | i S | Sn | 11 11 05.6 | +0.3 |
| SECR | | 0.82 | 213 | ⇑iP | Pn | 11 10 50.5 | +0.4 |
| SECR | | 0.82 | 213 | S | Sn | 11 11 05.6 | +0.3 |
| SECR | | 0.82 | 213 | ⇑iP | Pn | 11 10 50.5 | +0.4 |
| SECR | | | | i S | Sn | 11 11 05.6 | +0.3 |
| PGOR | Pogoanele | 0.84 | 166 | ⇓iP | Pn | 11 10 50.5 | +0.2 |
| PGOR | | | | i S | Sn | 11 11 06.1 | +0.6 |
| PGOR | Pogoanele | 0.84 | 166 | ⇓iP | Pn | 11 10 50.5 | +0.2 |
| PGOR | Pogoanele | 0.84 | 166 | ⇓iP | Pn | 11 10 50.5 | +0.2 |
| PGOR | | | | i S | Sn | 11 11 06.1 | +0.6 |
| DOPR | Dopca | 0.95 | 285 | ⇓iP | Pn | 11 10 51.1 | -0.2 |
| DOPR | | | | i S | Sn | 11 11 06.1 | -1.3 |
| DOPR | Dopca | 0.95 | 285 | ⇓iP | Pn | 11 10 51.1 | -0.2 |
| DOPR | Dopca | 0.95 | 285 | S | Sn | 11 11 06.1 | -1.3 |
| DOPR | Dopca | 0.95 | 285 | ⇓iP | Pn | 11 10 51.1 | -0.2 |
| DOPR | | | | i S | Sn | 11 11 06.1 | -1.3 |
| SULR | | 1.09 | 197 | i S | Sn | 11 11 09.8 | -0.1 |
| SULR | | 1.09 | 197 | S | Sn | 11 11 09.8 | -0.1 |
| SULR | | 1.09 | 197 | i S | Sn | 11 11 09.8 | -0.1 |
| CFR | Carcaliu | 1.15 | 118 | ⇑iP | Pn | 11 10 53.2 | -0.1 |
| CFR | | | | i S | Sn | 11 11 09.6 | -1.3 |
| CFR | Carcaliu | 1.15 | 118 | ⇑iP | Pn | 11 10 53.2 | -0.1 |
| CFR | Carcaliu | 1.15 | 118 | ⇑iP | Pn | 11 10 53.2 | -0.1 |
| CFR | | | | i S | Sn | 11 11 09.6 | -1.3 |
| VOIR | | 1.20 | 257 | ⇑iP | Pn | 11 10 53.0 | -0.9 |
| VOIR | | | | i S | Sn | 11 11 10.4 | -1.6 |
| VOIR | | 1.20 | 257 | ⇑iP | Pn | 11 10 53.0 | -0.9 |
| VOIR | | 1.20 | 257 | S | Sn | 11 11 10.4 | -1.6 |
| VOIR | | 1.20 | 257 | ⇑iP | Pn | 11 10 53.0 | -0.9 |
| VOIR | | | | i S | Sn | 11 11 10.4 | -1.6 |
| HARR | Harsova | 1.35 | 140 | ⇑iP | Pn | 11 10 55.4 | -0.1 |
| HARR | | | | i S | Sn | 11 11 12.9 | -2.0 |
| HARR | Harsova | 1.35 | 140 | ⇑iP | Pn | 11 10 55.4 | -0.1 |
| HARR | Harsova | 1.35 | 140 | S | Sn | 11 11 12.9 | -2.0 |
| HARR | Harsova | 1.35 | 140 | ⇑iP | Pn | 11 10 55.4 | -0.1 |
| HARR | | | | i S | Sn | 11 11 12.9 | -2.0 |
| BTMR | Bucharest-Geot | 1.36 | 198 | i S | Sn | 11 11 13.6 | -1.3 |
| BTMR | Bucharest-Geot | 1.36 | 198 | S | Sn | 11 11 13.6 | -1.3 |
| BTMR | Bucharest-Geot | 1.36 | 198 | i S | Sn | 11 11 13.6 | -1.3 |
| BUC | Bucharest | 1.38 | 198 | i S | Sn | 11 11 14.8 | -0.6 |
| BUC | Bucharest | 1.38 | 198 | S | Sn | 11 11 14.8 | -0.6 |
| CIOR | Ciorogarla | 1.40 | 205 | i S | Sn | 11 11 15.0 | -0.9 |
| CIOR | Ciorogarla | 1.40 | 205 | S | Sn | 11 11 15.0 | -0.9 |
| CIOR | Ciorogarla | 1.40 | 205 | i S | Sn | 11 11 15.0 | -0.9 |
| BUC1 | Bucharest | 1.46 | 199 | ⇓iP | Pn | 11 10 57.1 | +0.4 |
| BUC1 | Bucharest | 1.46 | 199 | ⇓iP | Pn | 11 10 57.1 | +0.4 |
| BUC1 | Bucharest | 1.46 | 199 | ⇓iP | Pn | 11 10 57.1 | +0.4 |
| BUC1 | | | | i S | Sn | 11 11 14.8 | -2.2 |
| HUMR | Humele | 1.71 | 226 | i S | Sn | 11 11 20.0 | -2.3 |
| HUMR | Humele | 1.71 | 226 | S | Sn | 11 11 20.0 | -2.3 |
| HUMR | Humele | 1.71 | 226 | i S | Sn | 11 11 20.0 | -2.3 |
| TIRR | Tirgusor | 1.75 | 136 | ⇑iP | Pn | 11 11 00.3 | +0.1 |
| TIRR | | | | i S | Sn | 11 11 21.1 | -2.2 |
| TIRR | Tirgusor | 1.75 | 136 | ⇑iP | Pn | 11 11 00.3 | +0.1 |
| TIRR | Tirgusor | 1.75 | 136 | ⇑iP | Pn | 11 11 00.3 | +0.1 |
| TIRR | | | | i S | Sn | 11 11 21.1 | -2.2 |
| MSAB | Monastry St. A | 1.82 | 154 | ⇓iP | Pn | 11 11 01.4 | +0.3 |
| MSAB | | | | i S | Sn | 11 11 23.3 | -1.4 |
| MSAB | Monastry St. A | 1.82 | 154 | ⇓iP | Pn | 11 11 01.4 | +0.3 |
| MSAB | | | | S | Sn | 11 11 23.3 | -1.4 |
| MSAB | Monastry St. A | 1.82 | 154 | ⇓iP | Pn | 11 11 01.4 | +0.3 |
| MSAB | | | | i S | Sn | 11 11 23.3 | -1.4 |
| BURAR | Bucovina Array | 2.15 | 332 | ⇓iP | Pn | 11 11 07.1 | +1.8 |
| BURAR | | | | i S | Sn | 11 11 32.3 | 0.0 |
| BURAR | Bucovina Array | 2.15 | 332 | ⇓iP | Pn | 11 11 07.1 | +1.8 |
| BURAR | | | | S | Sn | 11 11 32.3 | 0.0 |
| BURAR | Bucovina Array | 2.15 | 332 | ⇓iP | Pn | 11 11 07.1 | +1.8 |
| BURAR | | | | i S | Sn | 11 11 32.3 | 0.0 |
| MANR | Mangalia | 2.33 | 144 | i S | Sn | 11 11 34.9 | -1.4 |
| MANR | Mangalia | 2.33 | 144 | S | Sn | 11 11 34.9 | -1.4 |
| MANR | Mangalia | 2.33 | 144 | i S | Sn | 11 11 34.9 | -1.4 |
| SORM | Soroca | 2.66 | 25 | ⇓iP | Pn | 11 11 11.7 | 0.0 |
| SORM | | | | i S | Sn | 11 11 41.7 | -2.1 |
| SORM | Soroca | 2.66 | 25 | ⇓iP | Pn | 11 11 11.7 | 0.0 |
| SORM | Soroca | 2.66 | 25 | ⇓iP | Pn | 11 11 11.7 | 0.0 |
| SORM | | | | i S | Sn | 11 11 41.7 | -2.1 |

*ISCJB **12** 11:10:33.6±0.3, 20°.04S±0°.06×177°.46W±0°.05, h300km, mb4.4/32, Error ellipse: s-maj=8.7km s-min=5.7km az=141.4*

*IDC **12** 11:10:34.3±2.3, 19°.99S×177°.41W, h297km±23km, mb4.1/15, mb1 4.2/18, mb1mx4.0/33, mbtmp4.8/18, Error ellipse: s-maj=14.6km s-min=12.3km az=144.0*

*BJI **12** 11:10:34.8, 19°.99S×177°.82W, h290km, mb4.5/11, mB5.0/6*

*NEIC **12** 11:10:36.7±1.1, 20°.09S×177°.37W, h324km±11km, mb4.8/20, Error ellipse: s-maj=13.2km s-min=11.0km az=144.0*

*AUST **12** 11:10:38.4±3.1, 19°.82S×177°.13W, h361km, Error ellipse: s-maj=2.5km s-min=1.8km az=288.0*

**ISC 12 11:10:34.6**±0.4**, 20°.04S**±0°.06×**177°.35W**±0°.06**, h300**km**, n82,** σ**1**s**30**/99**, mb4.5**/32**, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MSVF | Nonsavu | 4.92 | 297 | ePn | Pn | 11 11 58.8 | +7.5 |
| MSVF | | | | eS | S | 11 12 53.6 | +0.7 |
| NIUE | Niue | 7.07 | 83 | P | Pn | 11 12 18.9 | +2.1 |
| | baz=6.8,SNR=29 | | | | | | |
| AFI | Afiamalu | 8.10 | 42 | P | Pn | 11 12 28.4 | -1.1 |
| | 11nm,0.3s,baz=183,slow=2.3,SNR=24 | | | | | | |
| AFI | | | | S | S | 11 13 59.9 | -2.9 |
| | 17nm,0.3s,baz=200,slow=24,SNR=9.3 | | | | | | |
| AFI | Afiamalu | 8.10 | 42 | ePn | Pn | 11 12 29.4 | -0.1 |
| AFI | | | | eS | S | 11 14 00.4 | -2.4 |
| RAO | Raoul Island | 9.19 | 183 | ePn | Pn | 11 12 42.5 | -0.1 |
| DZM | Mont Dzumac | 15.26 | 260 | P | Pn | 11 13 55.7 | -0.5 |
| | 13nm,0.3s,baz=178,slow=1.2,SNR=70 | | | | | | |
| DZM | Mont Dzumac | 15.26 | 260 | eP | Pn | 11 13 54.7 | -1.5 |
| | 162nm,0.7s | | | | | | |
| URZ | Urewera | 18.78 | 194 | P | P | 11 14 30.7 | -1.8 |
| | 5.3nm,0.3s,baz=294,slow=3.2,SNR=22 | | | | | | |
| URZ | | | | S | S | 11 17 47.7 | -2.3 |
| | 3.5nm,0.3s,baz=104,slow=22,SNR=7.1 | | | | | | |
| URZ | Urewera | 18.78 | 194 | eP | P | 11 14 30.9 | -1.6 |
| | 187nm,1.9s | | | | | | |
| URZ | | | | eS | S | 11 17 51.7 | +1.8 |
| OXZ | Oxford | 24.87 | 199 | eP | P | 11 15 30.7 | +0.3 |
| | 277nm,2.4s | | | | | | |
| RPZ | Rata Peaks | 25.53 | 200 | P | P | 11 15 37.7 | +1.3 |
| | 8.0nm,0.6s,baz=180,slow=1.3,SNR=8.0 | | | | | | |
| EIDS | Eidsvold | 29.56 | 254 | P | P | 11 16 12.9 | +0.6 |
| | baz=30,SNR=6.3 | | | | | | |
| EIDS | Eidsvold | 29.56 | 254 | eP | P | 11 16 13.0 | +0.7 |
| | 8.3nm,0.6s | | | | | | |
| ARMA | Armidale | 29.81 | 244 | P | P | 11 16 15.6 | +1.0 |
| | baz=30,SNR=30 | | | | | | |
| MGCD | Mangrove Creek | 30.96 | 238 | P | P | 11 16 25.7 | +1.2 |
| | baz=31,SNR=8.9 | | | | | | |
| RMQ | Roma | 31.72 | 252 | P | P | 11 16 32.5 | +1.3 |
| | baz=32,SNR=17 | | | | | | |
| CNB | Canberra Magne | 32.99 | 236 | P | P | 11 16 42.5 | +0.3 |
| | baz=33,SNR=24 | | | | | | |
| CTA | Charters Tower | 34.14 | 264 | P | P | 11 16 51.9 | -0.3 |
| | 17nm,0.7s,baz=93,slow=11,SNR=20 | | | | | | |
| CTAO | Charters Tower | 34.14 | 264 | eP | P | 11 16 52.2 | 0.0 |
| | 22nm,0.9s | | | | | | |
| CMSA | Cobar Meteorol | 35.03 | 243 | P | P | 11 16 59.6 | 0.0 |
| | baz=35,SNR=33 | | | | | | |
| QLP | Quilpie | 35.77 | 252 | P | P | 11 17 05.7 | -0.2 |
| | baz=36,SNR=54 | | | | | | |
| TOO | Toolangi | 36.66 | 233 | P | P | 11 17 12.8 | -0.5 |
| | baz=37,SNR=23 | | | | | | |
| COEN | Coen | 38.16 | 273 | P | P | 11 17 26.7 | +0.6 |
| | baz=38,SNR=6.0 | | | | | | |
| COEN | Coen | 38.16 | 273 | eP | P | 11 17 25.4 | -0.7 |
| | 12nm,0.8s | | | | | | |
| HTT | Hallett | 40.98 | 242 | P | P | 11 17 45.0 | -4.0 |
| | baz=41,SNR=8.7 | | | | | | |
| BBOO | Buckleboo | 43.30 | 243 | P | P | 11 18 06.6 | -0.9 |
| | baz=44,SNR=14 | | | | | | |
| JAY | Jayapura | 44.48 | 288 | P | P | 11 18 16.7 | -0.5 |
| | 8.8nm,0.6s,baz=247,slow=2.4,SNR=5.9 | | | | | | |
| AS01 | Alice Springs | 45.17 | 256 | eP | P | 11 18 21.6 | -0.9 |
| ASAR | Alice Springs | 45.22 | 256 | P | P | 11 18 22.4 | -0.4 |
| | 18nm,0.5s,baz=98,slow=8.3,SNR=427 | | | | | | |
| ASAR | | | | PcP | PcP | 11 19 56.5 | -0.9 |
| | 2.1nm,0.8s,baz=95,slow=3.6,SNR=5.8 | | | | | | |
| WRAB | Tennant Creek | 45.26 | 261 | eP | P | 11 18 22.3 | -0.9 |
| | 11nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 45.27 | 261 | P | P | 11 18 22.6 | -0.7 |
| | 6.3nm,0.5s,baz=96,slow=7.5,SNR=89 | | | | | | |
| KDU | Kakadu | 48.55 | 271 | P | P | 11 18 48.0 | -0.5 |
| | baz=49,SNR=5.1 | | | | | | |
| MTN | Manton Dam | 49.77 | 270 | eP | P | 11 18 57.1 | -0.6 |
| | 15nm,0.7s | | | | | | |
| FORT | Forrest | 50.03 | 246 | P | P | 11 18 58.5 | -1.0 |
| | baz=50,SNR=8.4 | | | | | | |
| FORT | Forrest | 50.03 | 246 | eP | P | 11 18 58.3 | -1.1 |
| | 49nm,0.6s | | | | | | |
| WRKA | Warakurna | 50.17 | 254 | P | P | 11 19 00.1 | -0.6 |
| | baz=50,SNR=57 | | | | | | |
| FITZ | Fitzroy Crossi | 53.69 | 262 | P | P | 11 19 26.2 | -0.2 |
| | 5.4nm,0.4s,baz=118,slow=4.9,SNR=29 | | | | | | |
| FITZ | Fitzroy Crossi | 53.69 | 262 | eP | P | 11 19 26.5 | 0.0 |
| SIJI | Sorong | 53.71 | 284 | P | P | 11 19 26.6 | -0.1 |
| | 15nm,0.9s,baz=55,slow=9.8,SNR=6.8 | | | | | | |
| SOEI | Soe | 57.09 | 271 | P | P | 11 19 52.3 | +1.6 |
| | baz=57,SNR=12 | | | | | | |
| SOEI | Soe | 57.09 | 271 | eP | P | 11 19 52.4 | +1.6 |
| | 64nm,0.7s | | | | | | |
| BATI | Baumata | 57.53 | 270 | P | P | 11 19 53.7 | 0.0 |
| | 28nm,0.7s,baz=199,slow=2.8,SNR=6.7 | | | | | | |
| SBA | Scott Base | 58.37 | 184 | eP | P | 11 20 00.5 | +2.1 |
| | 7.4nm,0.8s | | | | | | |
| VNDA | Vanda | 58.42 | 185 | P | P | 11 19 59.5 | +0.7 |
| | 2.0nm,0.7s,baz=353,slow=8.1,SNR=15 | | | | | | |
| VNDA | Vanda | 58.42 | 185 | eP | P | 11 19 59.9 | +1.1 |
| | 73nm,3.0s | | | | | | |
| MBWA | Marble Bar | 58.55 | 257 | eP | P | 11 19 59.6 | -1.0 |
| | 34nm,0.6s | | | | | | |
| MEEK | Meekatharra | 58.64 | 250 | P | P | 11 19 60.0 | -1.3 |
| | baz=59,SNR=14 | | | | | | |
| KLBR | Kellerberrin | 58.80 | 245 | P | P | 11 20 01.3 | -0.9 |
| | baz=59,SNR=5.2 | | | | | | |
| NWAO | Narrogin (SRO) | 59.12 | 243 | P | P | 11 20 03.6 | -0.8 |
| | 22nm,1.0s,baz=348,slow=0.0,SNR=7.8 | | | | | | |
| NWAO | Narrogin (SRO) | 59.12 | 243 | P | P | 11 20 04.5 | +0.2 |
| | baz=59,SNR=4.3 | | | | | | |
| NWAO | Narrogin (SRO) | 59.12 | 243 | eP | P | 11 20 04.4 | +0.1 |
| | 18nm,1.0s | | | | | | |
| BLDU | Ballidu | 59.80 | 246 | P | P | 11 20 08.0 | -1.0 |
| | baz=60,SNR=13 | | | | | | |
| MORW | Morawa | 60.56 | 247 | P | P | 11 20 13.3 | -0.9 |
| | baz=61,SNR=4.8 | | | | | | |
| LUWI | Luwuk | 61.45 | 280 | eP | P | 11 20 21.0 | +0.7 |
| | 34nm,0.9s | | | | | | |
| KAPI | Kappang | 62.85 | 275 | P | P | 11 20 28.1 | -1.4 |
| | 5.4nm,0.5s,baz=109,slow=8.9,SNR=5.8 | | | | | | |
| JAGI | Jajag, Banyuwa | 67.00 | 269 | eP | P | 11 20 54.8 | -1.3 |
| | 41nm,1.0s | | | | | | |
| QSPA | South Pole Qui | 70.03 | 180 | eP | P | 11 21 14.2 | +0.1 |
| | 13nm,0.8s | | | | | | |
| MJAR | Matsushiro Arr | 70.20 | 323 | P | P | 11 21 14.7 | -0.7 |
| | 1.5nm,0.6s,baz=152,slow=6.1,SNR=5.4 | | | | | | |
| LEM | Lembang | 73.66 | 269 | P | P | 11 21 35.7 | -0.8 |
| | 32nm,0.7s,baz=155,slow=17,SNR=5.9 | | | | | | |
| KSM | Kuching | 73.95 | 278 | P | P | 11 21 39.3 | +1.3 |
| | baz=74,SNR=5.1 | | | | | | |
| KSM | Kuching | 73.95 | 278 | eP | P | 11 21 38.5 | +0.5 |
| | 18nm,0.8s | | | | | | |
| YUH | Yuha Desert | 78.67 | 49 | eP | P | 11 22 06.4 | +2.5 |
| NJ2 | Nanjing | 80.05 | 309 | eP | P | 11 22 11.5 | +0.1 |
| NJ2 | | | | PMZ | | | |
| | 20nm,0.8s | | | | | | |
| NVAR | Mina Array Bea | 80.27 | 43 | P | P | 11 22 14.2 | +1.5 |
| | 1.2nm,0.7s,baz=227,slow=8.4,SNR=11 | | | | | | |
| TUC | Tucson | 82.22 | 52 | eP | P | 11 22 25.4 | +2.5 |
| | 32nm,2.5s | | | | | | |
| BJI | Beijing | 85.99 | 315 | P | P | 11 22 42.9 | +1.5 |
| BJI | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| P18A | Preston Nutter | 86.21 | 45 | eP | P | 11 22 41.3 | -1.6 |
| | 71nm,2.9s | | | | | | |
| P18A | | | | eS | S | 11 32 55.8 | +3.5 |
| TXAR | Lajitas Array | 86.30 | 57 | P | P | 11 22 44.2 | +0.9 |
| | 0.4nm,0.8s,baz=216,slow=6.0,SNR=5.0 | | | | | | |
| GYA | Guiyang | 86.95 | 299 | eP | P | 11 22 47.0 | +0.4 |
| GYA | | | | pP | pP | 11 23 58.8 | +1.2 |
| GYA | | | | sP | sP | 11 24 29.2 | +0.3 |
| GYA | | | | PP | PP | 11 26 17.6 | +3.0 |
| GYA | | | | SKS | SKSac | 11 32 43.0 | -1.9 |
| GYA | | | | S | S | 11 32 59.4 | 0.0 |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| ILAR | Eielson Array | 87.73 | 13 | P | P | 11 22 47.1 | -2.0 |
| | 0.2nm,0.6s,baz=263,slow=5.2,SNR=4.6 | | | | | | |
| SNAA | Sanae | 88.45 | 178 | P | P | 11 22 50.3 | -2.5 |
| VNA2 | Neumayer--Watz | 89.01 | 177 | P | P | 11 22 54.5 | -0.8 |
| | baz=197,slow=3.0 | | | | | | |
| VNA1 | Neumayer--Stat | 89.23 | 176 | P | P | 11 22 55.1 | -1.2 |
| HHC | Hu-ho-hao-te | 89.47 | 314 | eP | P | 11 23 02.5 | +4.5 |
| HHC | | | | PMZ | | | |
| | 17nm,1.2s | | | | | | |
| HHC | | | | PMZ | | | |
| | 75nm,3.7s | | | | | | |
| KMI | Kunming | 89.68 | 297 | P | P | 11 23 00.9 | +1.4 |
| KMI | | | | PMZ | | | |
| | 9.0nm,1.2s | | | | | | |
| KMI | | | | PMZ | | | |
| | 440nm,7.1s | | | | | | |
| CMAR | Chiang Mai Arr | 90.53 | 289 | P | P | 11 23 03.2 | -0.1 |
| | 0.2nm,0.3s,baz=119,slow=1.8,SNR=4.2 | | | | | | |
| CD2 | Chengdu | 91.05 | 302 | eP | P | 11 23 06.6 | +1.0 |
| CD2 | | | | pP | pP | 11 24 17.3 | +0.2 |
| CD2 | | | | sP | sP | 11 24 48.5 | +0.2 |
| CD2 | | | | SKS | SKSac | 11 33 08.9 | +0.3 |
| CD2 | | | | S | ScS | 11 33 38.1 | -1.4 |
| CD2 | | | | SS | SS | 11 39 51.2 | +1.9 |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| LZH | Lanzhou | 92.97 | 307 | eP | P | 11 23 17.2 | +2.8 |
| LZH | | | | pP | pP | 11 24 27.5 | +1.5 |
| LZH | | | | sP | sP | 11 24 56.4 | -0.8 |
| LZH | | | | PMZ | | | |
| | 13nm,1.0s | | | | | | |
| KSH | Kashi | 115.12 | 305 | ePKP | PKPdf | 11 28 41.8 | +1.2 |
| KSH | | | | ePP | PP | 11 29 48.4 | +2.8 |
| KSH | | | | esPKP | | 11 30 23.7 | |
| KSH | | | | SKS | SKSdf | 11 35 24.2 | +0.4 |
| KSH | | | | SKKS | SKKSac | 11 36 14.3 | -1.1 |
| KSH | | | | SS | SS | 11 45 20.2 | +1.4 |
| KSH | | | | PPMZ | | | |
| | 190nm,6.2s | | | | | | |
| KSH | | | | LN | | | |
| | 130nm,8.1s | | | | | | |
| KSH | | | | LE | | | |
| | 120nm,5.0s | | | | | | |
| KSH | | | | LZ | | | |
| | 160nm,8.4s | | | | | | |
| BRTR | Keskin Array B | 146.97 | 313 | PKPbc | PKPbc | 11 29 41.5 | -1.0 |
| | 1.4nm,0.6s,baz=133,slow=5.2,SNR=6.1 | | | | | | |
| GERES | GERESS Array B | 149.91 | 345 | PKPbc | PKPbc | 11 29 48.1 | -1.4 |
| | 1.1nm,0.6s,baz=31,slow=3.1,SNR=6.4 | | | | | | |
| TORD | Torodi Ar. Bea | 173.09 | 172 | PKPab | PKPab | 11 31 36.1 | -1.4 |
| | 0.7nm,0.6s,baz=186,slow=4.5,SNR=4.5 | | | | | | |

*IDC **12** 11:38:11.3±3.0, 5°.43S×133°.67E, h0km, mb3.6/1, mb1 3.9/4, mb1mx3.6/29, mbtmp3.8/4, ML3.8/3, Error ellipse: s-maj=125.2km s-min=29.2km az=82.0*

*ISCJB **12** 11:38:12.8±1.6, 5°.62S±0°.09×133°.4E±0°.2, h10km, mb3.5/1, Error ellipse: s-maj=23.9km s-min=13.1km az=176.0*

*AUST **12** 11:38:38.3, 6°.95S×133°.56E, h60km*

**ISC 12 11:38:13.7**±1.7**, 5°.6S**±0°.1×**133°.5E**±0°.2**, h10**km**, n7,** σ**1**s**89**/8**, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KDU | Kakadu | 7.13 | 188 | P | Pn | 11 40 03.8 | +5.7 |
| | baz=5.8,SNR=12 | | | | | | |
| MTN | Manton Dam | 7.58 | 198 | P | Pn | 11 40 10.0 | +5.7 |
| | baz=6.4,SNR=11 | | | | | | |
| WRA | Warramunga Arr | 14.29 | 177 | Pn | Pn | 11 41 36.5 | +0.2 |
| | 0.3nm,0.3s,baz=357,slow=13,SNR=9.6 | | | | | | |
| WRA | | | | Sn | Sn | 11 44 15.3 | +0.3 |
| | 0.2nm,0.3s,baz=358,slow=23,SNR=7.3 | | | | | | |
| FITZ | Fitzroy Crossi | 14.62 | 211 | Pn | Pn | 11 41 42.2 | +1.4 |
| | 0.5nm,0.3s,baz=27,slow=8.9,SNR=11 | | | | | | |
| FITZ | | | | Sn | Sn | 11 44 21.8 | -1.2 |
| | 0.5nm,0.3s,baz=189,slow=18,SNR=11 | | | | | | |
| ASAR | Alice Springs | 17.98 | 179 | P | P | 11 42 25.1 | +0.7 |
| | 0.3nm,0.3s,baz=5.3,slow=12,SNR=17 | | | | | | |
| ASAR | | | | S | Sn | 11 45 42.1 | -2.5 |
| | 0.0nm,0.3s,baz=0.6,slow=29,SNR=3.3 | | | | | | |
| WRKA | Warakurna | 19.97 | 194 | P | Pn | 11 42 50.6 | +2.6 |
| | baz=19,SNR=4.4 | | | | | | |
| MKAR | Makanchi Array | 69.02 | 325 | P | P | 11 49 18.6 | -1.0 |
| | 0.4nm,0.6s,baz=107,slow=8.4,SNR=3.3 | | | | | | |

**IDC 12 11:53:54.0**±3.1**, 5°.25S**×**133°.81E, h0**km**, mb3.6**/1**, mb1 4.0**/4**, mb1mx3.6**/31**, mbtmp3.8**/4**, ML3.8**/3**, Error ellipse: s-maj=128.2km s-min=29.4km az=83.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 14.61 | 178 | Pn | Pn | 11 57 22.9 | +0.7 |
| | 0.4nm,0.3s,baz=356,slow=14,SNR=9.0 | | | | | | |
| WRA | | | | Sn | Sn | 11 59 59.9 | -5.2 |
| | 0.1nm,0.3s,baz=358,slow=23,SNR=3.6 | | | | | | |
| FITZ | Fitzroy Crossi | 15.06 | 211 | Pn | Pn | 11 57 28.9 | +0.6 |
| | 0.8nm,0.3s,baz=48,slow=11,SNR=11 | | | | | | |
| ASAR | Alice Springs | 18.31 | 180 | P | Pn | 11 58 08.8 | -0.8 |
| | 0.1nm,0.3s,baz=358,slow=12,SNR=11 | | | | | | |
| ASAR | | | | S | Sn | 12 01 28.8 | -6.1 |
| | 0.0nm,0.3s,baz=360,slow=30,SNR=2.8 | | | | | | |
| MKAR | Makanchi Array | 68.92 | 325 | P | P | 12 05 00.9 | 0.0 |
| | 0.3nm,0.5s,baz=109,slow=6.7,SNR=3.3 | | | | | | |

*IDC **12** 12:01:06.3±0.5, 20°.39S×174°.13W, h0km, mb4.9/22, mb1 5.0/24, mb1mx4.8/37, mbtmp4.9/24, ML5.0/2, MS5.7/1, Ms1 5.7/1, ms1mx4.4/24, Error ellipse: s-maj=19.5km s-min=14.1km az=127.0*

*AUST **12** 12:01:07.2±0.7, 20°.32S×174°.19W, h0km, Error ellipse: s-maj=14.9km s-min=10.8km az=93.0*

*BJI **12** 12:01:07.6, 20°.07S×174°.02W, h8km, mb5.3/41, mB5.8/44, Ms5.6/45, Ms7 5.4/42*

*NEIC **12** 12:01:07.9±0.2, 20°.46S×174°.21W, h10km, mb5.9/149, MS5.8/299, Error ellipse: s-maj=9.1km s-min=4.5km az=150.0*

*ISCJB **12** 12:01:10.4±0.1, 20°.49S±0°.04×174°.23W±0°.03, h33km, mb5.7/179, MS5.8/373, Error ellipse: s-maj=6.0km s-min=2.7km az=152.3*

*MOS **12** 12:01:10.3±1.1, 20°.36S×174°.28W, h33km, mb5.9/45, MS5.7/37, Error ellipse: s-maj=11.9km s-min=8.6km az=49.0*

**ISC 12 12:01:10.7**±0.4**, 20°.38S**±0°.06×**174°.22W**±0°.06**, h25**km±1km**, h25**km**:pP-P, n1134,** σ**1**s**12**/936**, mb5.8**/178**, MS5.8**/373**, 31C-28D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 6.85 | 20 | Pn | Pn | 12 02 41.7 | -8.0 |
| | 9.3nm,0.3s,baz=178,slow=2.5,SNR=20 | | | | | | |
| AFI | | | | Sn | Sn | 12 03 56.0 | -11 |
| | 30nm,0.3s,baz=20,slow=24,SNR=6.5 | | | | | | |
| AFI | Afiamalu | 6.85 | 20 | ePn | Pn | 12 02 42.5 | -7.2 |
| MSVF | Nonsavu | 7.77 | 289 | eP | Pn | 12 02 59.7 | -2.7 |
| MSVF | Nonsavu | 7.77 | 289 | ePn | Pn | 12 02 59.7 | -2.7 |
| RAR | Rarotonga | 13.54 | 96 | Pn | Pn | 12 04 05.3 | -16 |
| | 5.8nm,0.3s,baz=262,slow=7.6,SNR=16 | | | | | | |
| DZM | Mont Dzumac | 18.11 | 261 | eP | P | 12 05 23.8 | +2.9 |
| | 219nm,1.0s | | | | | | |
| DZM | Mont Dzumac | 18.11 | 261 | P | P | 12 05 21.3 | +0.3 |
| | 6.8nm,0.3s,baz=353,slow=2.9,SNR=24 | | | | | | |
| DZM | Mont Dzumac | 18.11 | 261 | ePn | Pn | 12 05 19.8 | -0.9 |
| | 170nm,1.2s | | | | | | |
| URZ | Urewera | 19.34 | 201 | P | P | 12 05 33.2 | -1.0 |
| | 3.5nm,0.3s,baz=66,slow=4.2,SNR=14 | | | | | | |
| URZ | Urewera | 19.34 | 201 | eP | P | 12 05 30.6 | -3.6 |

45nm,0.9s
**BKZ Black Stump Fm 20.36 201** *e*P **P 12 05 44.0 -1.4**
463nm,2.5s
BKZ *es*P **sP 12 05 58.9 +3.3**
BKZ LR LR
comp=Z,8µm,19.0s
**HIZ Hauiti 20.39 205** PFAKE 12 06 00.0 +12
HIZ LR LR
comp=Z,13µm,18.0s
**BHHZ Black Hill Sta 20.80 202** P* **P 12 05 48.1 -2.0**
BHHZ SN S 12 09 33.1 -7.9
**BFZ Birch Farm 21.81 200** PFAKE 12 06 10.0 +9.0
BFZ LR LR
comp=Z,16µm,18.0s
**SNZO South Karori 22.89 202** PFAKE 12 06 20.0 +7.6
SNZO LR LR
comp=Z,9µm,19.0s
**NNZ Nelson 23.29 204** P* **P 12 06 13.8 -2.8**
**QRZ Quartz Range 23.30 206** *e*P* **P 12 06 18.9 +2.2**
**PPT2 Papeete2 23.46 87** *e*P P 12 06 05.4 -13
comp=Z,128nm,1.5s
**PPT Papeete 23.47 87** *e*P P 12 06 13.2 -5.4
**PPT Papeete 23.47 87** *e*P P 12 06 13.2 -5.4
**TVO Taravao 23.73 88** *e*P P 12 06 08.4 -13
comp=Z,28nm,1.1s
**THZ Tophouse 23.94 204** P* **P 12 06 24.7 +1.7**
**THZ Tophouse 23.94 204** PFAKE 12 06 30.0 +7.0
THZ LR LR
comp=Z,17µm,18.0s
**KHZ Kahutara 24.27 202** P* **P 12 06 24.2 -1.7**
**KHZ Kahutara 24.27 202** *e*P **P 12 06 24.3 -1.6**
comp=Z,512nm,2.4s
KHZ LR LR
comp=Z,14µm,18.0s
**DSZ Denniston Nort 24.37 206** P* **P 12 06 28.0 +1.1**
**TARA Tarawa 25.01 328** PFAKE 12 06 40.0 +7.2
TARA LR LR
comp=Z,18µm,18.0s
**LTZ Lake Taylor 25.06 204** P* **P 12 06 36.6 +3.4**
**OXZ Oxford 25.61 204** P* **P 12 06 35.2 -2.9**
**OXZ Oxford 25.61 204** *e*P **P 12 06 36.6 -1.5**
comp=Z,105nm,1.3s
**PMOR Pomariorio Ree 25.63 82** *e*P P 12 06 25.8 -13
comp=Z,119nm,1.2s
**MQZ McQueen's Vall 25.72 202** P* **P 12 06 43.3 +4.3**
**MQZ McQueen's Vall 25.72 202** PFAKE 12 06 50.0 +11
MQZ LR LR
comp=Z,10µm,18.0s
**WVZ Waitaha Valley 25.91 206** P* **P 12 06 39.0 -1.8**
**RPZ Rata Peaks 26.32 205** P **P 12 06 44.6 +0.1**
comp=Z,19nm,0.7s,baz=220,slow=4.4,SNR=5.9
**RPZ Rata Peaks 26.32 205** P* **P 12 06 45.5 +1.0**
**RPZ Rata Peaks 26.32 205** *e*P **P 12 06 42.5 -2.0**
comp=Z,84nm,1.3s
RPZ LR LR
comp=Z,17µm,20.0s
**LHI Lord Howe Isla 26.39 240** PFAKE 12 07 00.0 +15
LHI LR LR
comp=Z,19µm,18.0s
**FOZ Fox Glacier 26.75 207** P* **P 12 06 48.2 -0.1**
**HNR Honiara 27.19 290** PFAKE 12 07 00.0 +7.4
HNR LR LR
comp=Z,9µm,18.0s
**JCZ Jackson Bay 27.56 207** P* **P 12 06 56.4 +0.7**
**ODZ Otahua Downs 27.60 204** PFAKE 12 07 10.0 +14
ODZ LR LR
comp=Z,14µm,18.0s
**XMAS Kiritimati 27.70 38** PFAKE 12 07 10.0 +13
XMAS LR LR
comp=Z,17µm,20.0s
**WKZ Wanaka 28.06 206** PFAKE 12 07 10.0 +10
WKZ LR LR
comp=Z,16µm,19.0s
**DCZ Deep Cove 29.36 207** PFAKE 12 07 20.0 +8.4
DCZ LR LR
comp=Z,11µm,20.0s
**WHZ Wether Hill Ro 29.36 206** *e*P **P 12 07 14.8 +3.1**
comp=Z,45nm,1.1s
WHZ LR LR
comp=Z,13µm,18.0s
**EIDS Eidsvold 32.29 255** P **P 12 07 37.9 +0.1**
baz=32,SNR=5.1
**EIDS Eidsvold 32.29 255** PFAKE 12 07 50.0 +12
EIDS LR LR
comp=Z,6µm,19.0s
**ARMA Armidale 32.32 245** P **P 12 07 39.1 +1.1**
baz=32,SNR=6.3
**ARMA Armidale 32.32 245** *e*P **P 12 07 38.6 +0.6**
comp=Z,135nm,2.1s
ARMA LR LR
comp=Z,6µm,18.0s
**MGCD Mangrove Creek 33.32 240** P **P 12 07 47.8 +1.1**
baz=33,SNR=5.3
**KWAJ Kwajalein Atol 34.06 327** PFAKE 12 08 10.0 +17
KWAJ LR LR
comp=Z,13µm,18.0s
**RMQ Roma 34.42 253** P **P 12 07 56.2 -0.2**
baz=34,SNR=12
**CNB Canberra Magne 35.25 237** P **P 12 08 03.5 +0.1**
baz=35,SNR=8.2
**CAN Canberra 35.54 237** *e*P **P 12 08 05.2 -0.8**
CAN pmax pmax
comp=Z,80nm,1.1s
CAN MLR MLR
comp=Z,7µm,19.0s
**CAN Canberra 35.54 237** *e*P **P 12 08 05.2 -0.8**
comp=Z,80nm,1.1s
CAN LR LR
comp=Z,7µm,19.0s
**CTA Charters Tower 37.03 263** P **P 12 08 18.4 -0.4**
comp=Z,18nm,0.5s,baz=92,slow=10,SNR=39
**CTA Charters Tower 37.03 263** P **P 12 08 18.4 -0.4**
CTA pmax pmax
comp=Z,18nm,0.5s
**CTAO Charters Tower 37.03 263** *e*P **P 12 08 17.8 -1.0**
CTAO pmax pmax
comp=Z,50nm,1.2s
CTAO MLR MLR
comp=Z,8µm,18.0s
**CTAO Charters Tower 37.03 263** *e*P **P 12 08 17.8 -1.0**
comp=Z,50nm,1.2s
CTAO LR LR
comp=Z,8µm,18.0s
**JOHN Johnston Islan 37.17 7** PFAKE 12 08 30.0 +10
JOHN LR LR
comp=Z,8µm,20.0s
**CMSA Cobar Meteorol 37.53 245** P **P 12 08 22.3 -0.6**
baz=38,SNR=20
**QLP Quilpie 38.48 253** P **P 12 08 30.6 -0.4**
baz=38,SNR=19
**PMG Port Moresby 38.79 281** P **P 12 08 32.9 -0.8**
comp=Z,46nm,0.8s,baz=91,slow=4.7,SNR=16
**PMG Port Moresby 38.79 281** *c i*P **P 12 08 33.7 0.0**
PMG pmax pmax
comp=Z,238nm,0.9s
**PMG Port Moresby 38.79 281** P **P 12 08 34.2 +0.5**
baz=39,SNR=9.5
**PMG Port Moresby 38.79 281** *e*P **P 12 08 33.9 +0.2**
comp=Z,58nm,0.9s
PMG LR LR
comp=Z,12µm,18.0s
**TOO Toolangi 38.85 235** P **P 12 08 33.5 -0.5**
baz=39,SNR=21
**MOO Moorlands 39.14 227** P **P 12 08 36.8 +0.5**
baz=39,SNR=4.5
**TAU Tasmania Unive 39.23 226** PFAKE 12 08 50.0 +13
TAU LR LR
comp=Z,13µm,18.0s
**COEN Coen 41.12 272** P **P 12 08 52.0 -1.0**
baz=41,SNR=17
**COEN Coen 41.12 272** *e*P **P 12 08 52.8 -0.2**
comp=Z,55nm,0.8s
COEN LR LR
comp=Z,9µm,19.0s
**ARPS Mount Arapiles 41.52 237** P **P 12 08 55.6 -0.4**
baz=42,SNR=15
**MANU Manus Island 41.68 291** PFAKE 12 21 20.0
MANU LR LR
comp=Z,7µm,18.0s
**WAKE Wake Island 43.65 333** PFAKE 12 09 30.0 +17
WAKE LR LR
comp=Z,5µm,20.0s
**BBOO Buckleboo 45.77 244** P **P 12 09 29.3 -1.2**
baz=46,SNR=17
**BBOO Buckleboo 45.77 244** *e*P **P 12 09 28.7 -1.7**
comp=Z,36nm,1.0s
BBOO LR LR
comp=Z,3µm,21.0s
**JAY Jayapura 47.39 286** P **P 12 09 44.0 +0.6**
baz=47,SNR=15
**JAY Jayapura 47.39 286** P **P 12 09 44.0 +0.6**
**AS01 Alice Springs 47.95 256** *e*P **P 12 09 46.2 -1.4**
**AS31 Alice Springs 47.99 256** PFAKE 12 10 00.0 +12
AS31 LR LR
comp=Z,200nm,18.0s
**AS12 Alice Springs 47.99 256** *e*P **P 12 09 46.9 -1.1**
AS12 *e*PcP **PcP 12 11 16.1 +0.2**
**ASAR Alice Springs 47.99 256** P **P 12 09 46.9 -1.1**
comp=Z,38nm,0.9s,baz=87,slow=8.4,SNR=159
ASAR PcP **PcP 12 11 16.1 +0.2**
comp=Z,7.0nm,0.9s,baz=104,slow=3.5,SNR=7.0
**ASAR Alice Springs 47.99 256** P **P 12 09 46.9 -1.1**
ASAR 12 11 16.1
ASAR pmax pmax
comp=Z,39nm,0.9s
**WRAB Tennant Creek 48.12 261** *c i*P **P 12 09 47.2 -1.7**
WRAB pmax pmax
comp=Z,84nm,1.0s
**WRAB Tennant Creek 48.12 261** P **P 12 09 47.8 -1.1**
comp=Z,174nm,0.9s,SNR=19
**WRAB Tennant Creek 48.12 261** PFAKE 12 10 00.0 +11
WRAB LR LR
comp=Z,9µm,19.0s
**WRA Warramunga Arr 48.12 261** P **P 12 09 47.3 -1.7**
comp=Z,19nm,0.9s,baz=96,slow=7.1,SNR=108
WRA PcP **PcP 12 11 16.7 +0.3**
comp=Z,4.9nm,0.8s,baz=102,slow=3.0,SNR=4.7
**WRA Warramunga Arr 48.12 261** P **P 12 09 47.3 -1.7**
WRA 12 11 16.7
WRA pmax pmax
comp=Z,19nm,0.9s
**MIDW Midway 48.41 356** PFAKE 12 10 00.0 +9.2
MIDW LR LR
comp=Z,6µm,20.0s
**SMPI Sarmi 49.42 286** P **P 12 10 00.2 +1.3**
**KDU Kakadu 51.49 270** P **P 12 10 14.3 -0.3**
baz=52,SNR=9.4
**GUMO Guam 52.51 307** PFAKE 12 10 30.0 +7.9
GUMO LR LR
comp=Z,3µm,18.0s
**FORT Forrest 52.59 246** P **P 12 10 21.6 -1.0**
baz=53,SNR=21
**FORT Forrest 52.59 246** *e*P **P 12 10 21.7 -1.0**
comp=Z,65nm,0.7s
FORT LR LR
comp=Z,10µm,19.0s
**MTN Manton Dam 52.71 269** P **P 12 10 22.8 -0.8**
baz=53,SNR=10
**MTN Manton Dam 52.71 269** *e*P **P 12 10 22.3 -1.4**
comp=Z,42nm,0.6s
MTN LR LR
comp=Z,4µm,19.0s
**WRKA Warakurna 52.90 254** P **P 12 10 24.0 -1.1**
baz=53,SNR=97
**SAUI Saumlaki 54.01 275** PFAKE 12 10 40.0 +6.7
SAUI LR LR
comp=Z,6µm,19.0s
**FAKI Fak Fak 54.94 281** *e*P **P 12 10 39.5 -0.5**
comp=Z,100nm,1.5s
FAKI LR LR
comp=Z,6µm,19.0s
**FITZ Fitzroy Crossi 56.55 261** P **P 12 10 51.0 -0.5**
baz=56,SNR=9.4
**FITZ Fitzroy Crossi 56.55 261** *e*P **P 12 10 51.0 -0.5**
comp=Z,41nm,1.3s
**SIJI Sorong 56.65 283** LR LR 12 36 27.8
comp=Z,6µm,18.5s,baz=124,slow=37
**SWI Sorong 56.66 283** P **P 12 10 53.5 +1.2**
baz=57,SNR=9.1
**KMBL Kambalda 57.83 245** P **P 12 10 59.6 -0.9**
baz=58,SNR=7.3
**SBA Scott Base 58.25 185** *e*P **P 12 11 05.3 +2.7**
SBA pmax pmax
comp=Z,743nm,2.8s
SBA MLR MLR
comp=Z,6µm,18.0s
**SBA Scott Base 58.25 185** *e*P **P 12 11 05.3 +2.7**
comp=Z,743nm,2.8s
SBA LR LR
comp=Z,6µm,18.0s
**VNDA Vanda 58.37 186** P **P 12 11 03.8 +0.4**
comp=Z,2.9nm,1.0s,baz=3.3,slow=7.1,SNR=13
**VNDA Vanda 58.37 186** *e*P **P 12 11 05.2 +1.7**
comp=Z,72nm,1.5s
**SOEI Soe 60.04 270** P **P 12 11 17.6 +1.5**
baz=60,SNR=11
**SOEI Soe 60.04 270** *e*P **P 12 11 17.6 +1.5**
comp=Z,220nm,1.0s
SOEI LR LR
comp=Z,4µm,18.0s
**BATI Baumata 60.47 270** P **P 12 11 20.9 +1.9**
**TNTI Ternate 60.87 283** *e*P **P 12 11 22.2 +0.5**
comp=Z,209nm,1.1s
**SANI Sanana 61.05 279** P **P 12 11 23.7 +0.8**
**MEEK Meekatharra 61.30 250** P **P 12 11 23.5 -1.0**
baz=61,SNR=9.7
**KLBR Kellerberrin 61.31 244** P **P 12 11 24.3 -0.1**
baz=61,SNR=20
**MBWA Marble Bar 61.33 256** *e*P **P 12 11 23.5 -1.2**
comp=Z,38nm,0.8s
MBWA LR LR
comp=Z,10µm,18.0s
**NWAO Narrogin (SRO) 61.58 243** P **P 12 11 26.4 +0.1**
comp=Z,7.6nm,0.8s,baz=93,slow=0.2,SNR=5.1
**NWAO Narrogin (SRO) 61.58 243** P **P 12 11 26.4 +0.1**
NWAO pmax pmax
comp=Z,8.0nm,0.8s
**NWAO Narrogin (SRO) 61.58 243** P **P 12 11 26.5 +0.3**
baz=62,SNR=3.5
**RKGY Rocky Gully 61.60 241** P **P 12 11 27.3 +0.9**
baz=62,SNR=5.8
**MMRI Maumere 62.29 271** *e*P **P 12 11 31.0 -0.3**
comp=Z,450nm,2.1s
MMRI LR LR
comp=Z,2µm,18.0s
**BLDU Ballidu 62.33 245** P **P 12 11 31.0 -0.3**
baz=62,SNR=9.1
**MORW Morawa 63.14 247** P **P 12 11 36.7 -0.1**
baz=63,SNR=8.7
**CBIJ Chichi jima 63.33 317** *e*P **P 12 11 38.6 +0.7**
comp=Z,390nm,1.7s
CBIJ LR LR
comp=Z,4µm,20.0s
**H01W1 Cape Leeuwin H 63.88 240** P **P 12 11 43.3 +2.1**
baz=112,slow=8.6,SNR=4.1
**H01W2 Cape Leeuwin H 63.90 240** P **P 12 11 42.5 +1.1**
baz=112,slow=8.6,SNR=3.0
**H01W3 Cape Leeuwin H 63.90 240** P **P 12 11 43.0 +1.7**
baz=112,slow=8.6,SNR=3.4
**LUWI Luwuk 64.41 279** P **P 12 11 45.5 +0.2**
baz=64,SNR=4.0
**LUWI Luwuk 64.41 279** P **P 12 11 46.2 +0.9**
**LUWI Luwuk 64.41 279** *e*P **P 12 11 45.8 +0.5**
comp=Z,154nm,1.3s
**BSSI Bau Bau, Buton 64.74 273** P **P 12 11 49.4 +1.9**
**DAV Davao City (W) 65.14 288** PFAKE 12 12 00.0 +10
DAV LR LR
comp=Z,3µm,18.0s
**BKSI Bulukumba 65.36 274** P **P 12 11 51.6 +0.1**
**APSI Ampana 65.50 279** P **P 12 11 53.8 +1.4**
**CASY Casey 65.59 205** *e*P **P 12 11 51.8 -0.3**
comp=Z,364nm,2.5s
CASY LR LR
comp=Z,3µm,19.0s
**KAPI Kappang 65.81 274** *e*P **P 12 11 54.6 +0.2**
comp=Z,47nm,1.3s
KAPI LR LR
comp=Z,2µm,18.0s
**GIRL Giralia 65.99 254** P **P 12 11 55.6 +0.1**
baz=66,SNR=3.3
**PCI Palu 67.18 278** P **P 12 12 05.1 +1.9**
**MPSI Mapaga 67.58 279** P **P 12 12 05.9 +0.2**
**JHJ2 Mitsune 68.96 320** PFAKE 12 12 30.0 +16
JHJ2 LR LR
comp=Z,4µm,19.0s
**JHJ Hachijo jima 2 68.98 320** P **P 12 12 14.3 +0.3**
comp=Z,53nm,0.6s,baz=204,slow=4.5,SNR=4.1
**KMMI Kalianget 70.56 270** P **P 12 12 25.5 +1.3**
**MYLDM Lahad Datu 70.74 283** *e*P **P 12 12 27.1 +1.8**
comp=Z,116nm,1.4s
**BBKI Banjar Baru 70.94 273** P P 12 12 29.8 +3.3
**ATKA Atka Island 72.27 0** PFAKE 12 12 50.0 +16
ATKA LR LR
comp=Z,2µm,20.0s
**MJAR Matsushiro Arr 72.27 321** P **P 12 12 34.5 +0.4**
comp=Z,19nm,0.9s,baz=159,slow=6.0,SNR=33
**MJAR Matsushiro Arr 72.27 321** P **P 12 12 34.5 +0.4**
MJAR pmax pmax
comp=Z,19nm,0.9s
**PWJI Pagerwojo 72.27 268** P P 12 12 37.8 +3.2
**MAJO Matsushiro 72.27 321** *c i*P **P 12 12 34.4 +0.3**
MAJO pmax pmax
comp=Z,146nm,1.0s
**MAJO Matsushiro 72.27 321** *e*P **P 12 12 34.9 +0.8**
comp=Z,368nm,2.3s
MAJO LR LR
comp=Z,2µm,19.0s
**PCJI Pacitan 72.81 267** P **P 12 12 39.2 +1.5**
**JOW Kunigami 72.85 308** PFAKE 12 12 50.0 +12
JOW LR LR
comp=Z,3µm,21.0s
**SMY Shemya 73.51 353** PFAKE 12 12 50.0 +9.1
SMY LR LR
comp=Z,5µm,19.0s
**UGM Wanagama 73.51 268** P **P 12 12 41.4 -0.6**
baz=74,SNR=4.5
**ERM Erimo 73.53 328** PFAKE 12 12 50.0 +8.7
ERM LR LR
comp=Z,4µm,18.0s
**UNV Unalaska Valle 74.22 5** PFAKE 12 13 00.0 +15
UNV LR LR
comp=Z,3µm,21.0s
**SZP Santa 74.34 296** PFAKE 12 13 00.0 +13
SZP LR LR
comp=Z,3µm,18.0s
**JNU Nakatsue 74.67 315** P **P 12 12 48.7 +0.4**
comp=Z,12nm,0.8s,baz=77,slow=2.9,SNR=12
**JNU Nakatsue 74.67 315** *e*P **P 12 12 49.6 +1.3**
comp=Z,105nm,1.3s
JNU LR LR
comp=Z,2µm,19.0s
**BSC Santa Cruz Isl 74.99 45** P **P 12 12 50.9 +0.8**
baz=75
**SCI San Clemente I 75.10 46** P **P 12 12 51.5 +0.8**
baz=75
**SBC Santa Barbara 75.21 44** P **P 12 12 52.5 +1.2**
baz=76
**ASAJ Asahikawa 75.37 329** PFAKE 12 13 00.0 +8.0
ASAJ LR LR
comp=Z,4µm,19.0s
**PKM Peak Mountain 75.42 44** P **P 12 12 53.2 +0.4**
baz=76
**BLG Laguna Peak 75.44 45** P **P 12 12 52.9 +0.2**
baz=76
**FALS False Pass 75.50 6** *e*P **P 12 12 52.3 -0.2**
comp=Z,249nm,1.1s
FALS LR LR
comp=Z,4µm,20.0s
**SAO San Andreas Ge 75.56 41** PFAKE 12 13 00.0 +6.7
SAO LR LR
comp=Z,7µm,19.0s
**SMMC Simmler 75.56 43** P **P 12 12 54.4 +1.0**
baz=76
**YOJ Yonaguni jima 75.60 303** *e*P **P 12 12 55.0 +1.2**
YOJ pmax pmax
comp=Z,252nm,1.3s
**YOJ Yonaguni jima 75.60 303** *e*P **P 12 12 55.0 +1.2**
comp=Z,252nm,1.3s
**FMP Fort Macarthur 75.71 45** P **P 12 12 55.1 +0.9**
baz=76
**OSI Osito Adit 75.97 44** P **P 12 12 56.5 +0.8**
baz=76
**OSI Osito Adit 75.97 44** PFAKE 12 13 10.0 +14
OSI LR LR
comp=Z,5µm,19.0s
**DECC Green Verdugo 76.01 45** P **P 12 12 56.1 +0.2**
baz=76
**HOPS Hopland 76.02 39** PFAKE 12 13 10.0 +14
HOPS LR LR
comp=Z,6µm,19.0s
**109C Camp Elliot, M 76.03 47** P **P 12 12 56.3 +0.2**
baz=76
**PASC Pasadena Art C 76.06 45** PFAKE 12 13 10.0 +14
PASC LR LR
comp=Z,4µm,20.0s
**CISI Cisompet, Garu 76.16 267** *e*P **P 12 12 56.5 -0.9**
comp=Z,293nm,1.7s
**MWC Mount Wilson 76.17 45** PFAKE 12 13 10.0 +13
MWC LR LR
comp=Z,4µm,18.0s
**KCPM Cahto Peak 76.18 38** PFAKE 12 13 10.0 +13
KCPM LR LR
comp=Z,8µm,19.0s
**BAR Barrett 76.20 47** *e*P **P 12 12 57.8 +0.7**
comp=Z,192nm,1.8s
BAR LR LR
comp=Z,3µm,18.0s
**ARVC Arvin 76.20 44** P **P 12 12 58.0 +1.0**
baz=76
**TWG Pinlang 76.33 301** *e*P **P 12 12 57.0 -0.9**
comp=Z,188nm,0.5s
TWG LR LR
comp=Z,12µm,19.0s
**SDPT Sand Point 76.33 8** PFAKE 12 13 10.0 +13
SDPT LR LR
comp=Z,3µm,21.0s
**MURC Murrieta 76.38 46** P **P 12 12 58.7 +0.6**
baz=77
**SLBS Sierra La Lagu 76.41 58** PFAKE 12 13 10.0 +11
SLBS LR LR
comp=Z,7µm,19.0s
**YULB Yu-li 76.43 301** *e*P **P 12 12 57.5 -1.1**
comp=Z,97nm,1.6s
**BFSC Mount Baldy Ra 76.45 45** P **P 12 12 59.0 +0.4**
baz=77
**KMRM Mail Ridge 76.46 37** PFAKE 12 13 10.0 +12
KMRM LR LR
comp=Z,9µm,20.0s
**VES Vestal, Richgr 76.47 43** P **P 12 12 59.0 +0.5**
baz=77,SNR=8.4
**MONP Monument Peak 76.50 47** P **P 12 12 59.3 +0.3**
baz=77,SNR=11
**NACB Ninganchiao 76.58 302** *e*P **P 12 13 00.0 +0.7**
comp=Z,104nm,0.9s
NACB LR LR
comp=Z,2µm,19.0s
**IBP Imperial Bould 76.59 47** P **P 12 12 59.9 +0.6**
baz=77
**EDW2 Edwards Air Fo 76.61 45** P **P 12 13 00.1 +0.8**
baz=77,SNR=9.5
**RCTC Rector, Farmer 76.66 43** P **P 12 13 00.6 +1.1**
baz=77
**YUH Yuha Desert 76.70 48** *e*P **P 12 12 59.1 -0.8**
**ISA Isabella 76.76 44** *e*P **P 12 13 01.2 +1.0**
ISA pmax pmax
comp=Z,241nm,1.6s
ISA MLR MLR
comp=Z,5µm,19.0s
**ISA Isabella 76.76 44** P **P 12 13 01.7 +1.4**
baz=77,SNR=14
**ISA Isabella 76.76 44** *e*P **P 12 13 01.2 +1.0**
comp=Z,241nm,1.6s
ISA LR LR
comp=Z,5µm,19.0s
**PET Petropavlovsk 76.79 344** *e*P P 12 13 03.2 +3.3
**PET Petropavlovsk 76.79 344** PFAKE 12 13 10.0 +10
PET LR LR
comp=Z,3µm,19.0s
**KHMM Horse Mountain 76.88 37** PFAKE 12 13 10.0 +9.1
KHMM LR LR
comp=Z,8µm,19.0s
**PFO Pinyon Flat Ob 76.89 46** *e*P **P 12 13 02.0 +0.9**
PFO pmax pmax
comp=Z,210nm,1.6s
PFO MLR MLR
comp=Z,4µm,18.0s
**PFO Pinyon Flat Ob 76.89 46** P **P 12 13 01.8 +0.7**
baz=77,SNR=7.1
**PFO Pinyon Flat Ob 76.89 46** *e*P **P 12 13 02.0 +0.9**
comp=Z,210nm,1.6s
PFO LR LR
comp=Z,4µm,18.0s
**SSLB Suanglung 76.90 302** *e*P **P 12 13 01.1 -0.2**
comp=Z,31nm,0.6s
SSLB LR LR
comp=Z,2µm,18.0s
**KSM Kuching 76.91 277** P **P 12 13 02.8 +1.2**
baz=77,SNR=7.0
**KSM Kuching 76.91 277** *e*P **P 12 13 02.7 +1.1**
comp=Z,80nm,1.2s

TPUB **Ta-pu** 76.92 301 eP P 12 13 01.2 -0.1
comp=Z,76nm,0.7s
BBRC **Big Bear Solar** 76.95 46 P P 12 13 02.4 +0.9
baz=77
SWSC **Sam W. Stewart** 76.96 47 P P 12 13 02.0 +0.7
baz=77,SNR=7.5
YHNB **Yeheng** 77.00 303 eP P 12 13 02.5 +0.7
comp=Z,189nm,1.5s
YHNB LR LR
comp=Z,3µm,19.0s
CMB **Columbia Colle** 77.01 41 eP P 12 13 01.9 +0.3
CMB pmax pmax
comp=Z,80nm,1.4s
CMB MLR MLR
comp=Z,6µm,19.0s
CMB **Columbia Colle** 77.01 41 eP P 12 13 01.9 +0.3
comp=Z,80nm,1.4s
CMB LR LR
comp=Z,6µm,19.0s
TATO **Taipei** 77.06 303 PFAKE 12 13 10.0 +8.0
TATO LR LR
comp=Z,3µm,19.0s
PEA2 **Petropavlovsk-** 77.12 343 eP P 12 13 02.3 +0.5
PEA0 **Petropavlovsk-** 77.13 343 eP P 12 13 01.9 +0.2
PETK **Petropavlovsk-** 77.13 343 P P 12 13 02.3 +0.5
comp=Z,14nm,0.7s,baz=139,slow=8.7,SNR=18
PETK **Petropavlovsk-** 77.13 343 P P 12 13 02.3 +0.5
PETK pmax pmax
comp=Z,14nm,0.7s
LRMC **Laurel Mountai** 77.16 44 P P 12 13 03.4 +0.9
baz=77
OHCM **Honcut** 77.18 39 eP P 12 13 03.8 +1.4
XMIS **Christmas Isla** 77.25 263 PFAKE 12 13 10.0 +6.6
XMIS LR LR
comp=Z,5µm,19.0s
RRX **Edison Barstow** 77.26 45 P P 12 13 03.8 +0.8
baz=78
WDC **Whiskeytown Da** 77.37 38 eP P 12 13 02.0 -1.4
WDC pmax pmax
comp=Z,129nm,1.6s
WDC MLR MLR
comp=Z,7µm,20.0s
WDC **Whiskeytown Da** 77.37 38 eP P 12 13 02.0 -1.4
comp=Z,128nm,1.6s
WDC LR LR
comp=Z,7µm,20.0s
BELC **Belle Mtn. Jos** 77.42 46 P P 12 13 04.8 +0.7
baz=78,SNR=9.3
YSS **Yuzh-Sakhalins** 77.43 331⇑ eP P 12 13 04.8 +1.2
YSS pmax pmax
comp=Z,40nm,1.0s
YSS **Yuzh-Sakhalins** 77.43 331 eP P 12 13 05.0 +1.4
comp=Z,114nm,1.2s
YSS LR LR
comp=Z,2µm,19.0s
CWC **Cottonwood Cre** 77.48 43 P P 12 13 05.5 +1.1
baz=78
KBO **Bosley Butte** 77.51 36 PFAKE 12 13 20.0 +16
KBO LR LR
comp=Z,9µm,20.0s
N02D **Trinity Center** 77.53 37 P P 12 13 05.9 +1.5
baz=78
O03D **Paynes Creek** 77.61 38 P P 12 13 05.8 +0.9
baz=78
MPMC **Manual Prospec** 77.64 44 P P 12 13 06.2 +0.9
baz=78
GSC **Goldstone** 77.64 45 eP P 12 13 05.9 +0.7
GSC pmax pmax
comp=Z,161nm,1.5s
GSC MLR MLR
comp=Z,4µm,19.0s
GSC **Goldstone** 77.64 45 P P 12 13 05.9 +0.7
baz=78
GSC **Goldstone** 77.64 45 eP P 12 13 05.9 +0.7
comp=Z,161nm,1.5s
GSC LR LR
comp=Z,4µm,19.0s
HEC **Hector,Ludlow** 77.68 45 P P 12 13 05.5 0.0
baz=78,SNR=9.0
GLA **Glamis** 77.69 48 eP P 12 13 07.0 +1.5
GLA pmax pmax
comp=Z,204nm,1.5s
GLA MLR MLR
comp=Z,2µm,18.0s
GLA **Glamis** 77.69 48 P P 12 13 06.4 +1.0
baz=78
GLA **Glamis** 77.69 48 eP P 12 13 07.0 +1.5
comp=Z,204nm,1.5s
GLA LR LR
comp=Z,2µm,18.0s
DAC **Darwin (Calif)** 77.70 44 eP P 12 13 05.8 +0.1
DAC pmax pmax
comp=Z,158nm,1.6s
DAC MLR MLR
comp=Z,6µm,18.0s
DAC **Darwin (Calif)** 77.70 44 eP P 12 13 05.8 +0.1
comp=Z,158nm,1.6s
DAC LR LR
comp=Z,6µm,18.0s
M02C **Callahan** 77.72 37 P P 12 13 07.1 +1.6
baz=78
MLAC **Mammoth Lakes** 77.72 42 P P 12 13 06.8 +1.0
baz=78
MTUM **Tungsten Hills** 77.73 42 eP P 12 13 06.6 +0.8
TIN **Tinemaha** 77.76 43 P P 12 13 07.1 +1.2
baz=78
L02D **Cave Junction,** 77.81 36 P P 12 13 07.7 +1.8
baz=78
KEBM **Edson Butte** 77.90 35 PFAKE 12 13 20.0 +14
KEBM LR LR
comp=Z,10µm,20.0s
YBH **Yreka Blue Hor** 78.03 37 eP P 12 13 08.9 +1.7
YBH pmax pmax
comp=Z,82nm,1.6s
YBH MLR MLR
comp=Z,6µm,20.0s
YBH **Yreka Blue Hor** 78.03 37 eP P 12 13 08.9 +1.7
comp=Z,82nm,1.6s
YBH LR LR
comp=Z,6µm,20.0s
IRM **Iron Mountain** 78.09 47 P P 12 13 08.6 +0.9
baz=78,SNR=9.6
GMRC **Granite Mounta** 78.10 46 P P 12 13 08.2 +0.4
baz=78,SNR=12
GRAC **Grapevine Rang** 78.27 43 P P 12 13 09.9 +1.2
baz=78
FURC **Furnace Creek,** 78.29 44 P P 12 13 09.9 +1.3
baz=78
Y12C **Blythe** 78.29 47 P P 12 13 09.6 +0.8
baz=78
TUQ **Turquoise Moun** 78.30 45 P P 12 13 10.1 +1.1
baz=78
SII **Sitkinak Islan** 78.48 11 PFAKE 12 13 20.0 +11
SII LR LR
comp=Z,5µm,20.0s
214A **Organ Pipe Nat** 78.50 50 P P 12 13 10.9 +0.8
baz=79,SNR=8.4
NV01 **Mina Array Sit** 78.55 42 eP P 12 13 08.7 -1.6
NVAR **Mina Array Bea** 78.55 42 P P 12 13 08.9 -1.4
comp=Z,12nm,0.9s,baz=225,slow=8.7,SNR=41
M04C **Macdoel** 78.55 37 P P 12 13 11.8 +1.7
baz=79
LDFC **Landfair** 78.64 46 PFAKE 12 13 20.0 +9.2
LDFC LR LR
comp=Z,3µm,18.0s
TJN **Taejon** 78.92 316 P P 12 13 14.0 +1.8
TPNV **Topopah Spring** 78.97 44 eP P 12 13 11.6 -1.0
TPNV pmax pmax
comp=Z,185nm,1.6s
TPNV MLR MLR
comp=Z,6µm,19.0s
TPNV **Topopah Spring** 78.97 44 P P 12 13 13.6 +1.0
baz=79
TPNV **Topopah Spring** 78.97 44 eP P 12 13 11.6 -1.0
comp=Z,185nm,1.6s
TPNV LR LR
comp=Z,6µm,19.0s
I03D **Drain, OR** 78.98 35 P P 12 13 13.9 +1.6
baz=79
K04D **Chiloquin, OR** 79.15 37 P P 12 13 14.0 +0.6
baz=79
KSRS **Korea Array** 79.19 317 P P 12 13 13.5 -0.1
comp=Z,4.3nm,0.9s,baz=132,slow=5.7,SNR=9.2
KS15 **Wonju Array Si** 79.21 317 eP P 12 13 13.5 -0.2
KS01 **Wonju Array Si** 79.22 317 eP P 12 13 15.0 +1.2
OHAK **Old Harbor** 79.27 11 PFAKE 12 13 30.0 +16
OHAK LR LR
comp=Z,4µm,20.0s
QZH **Quanzhou** 79.34 302⇑ iP P 12 13 17.5 +2.8
QZH S S 12 23 17.0 +2.9
QZH PMZ
comp=Z,840nm,5.4s
QZH LN
comp=Z,2µm,14.5s
QZH LE
comp=Z,1µm,13.5s
QZH LZ
comp=Z,2µm,16.1s
J04D **Umpqua Nationa** 79.36 36 P P 12 13 16.5 +1.9
baz=80
SHPR **Sheep Range** 79.42 45 eP P 12 13 14.6 -0.6
MOD **Modoc** 79.51 38 eP P 12 13 16.8 +1.3
comp=Z,162nm,1.8s
MOD LR LR
comp=Z,6µm,19.0s
I04A **Tendick Farm,** 79.56 35 P P 12 13 16.4 +0.8
baz=80
COR **Corvallis** 79.61 34 PFAKE 12 13 30.0 +14
COR LR LR
comp=Z,15µm,19.0s
K05A **Summer Lake** 79.70 37 eP P 12 13 18.3 +1.8
comp=Z,226nm,1.8s
K05A LR LR
comp=Z,8µm,20.0s
J05D **Fort Rock, OR** 79.87 36 P P 12 13 19.3 +1.9
baz=80
KDAK **Kodiak Island** 79.93 12 PFAKE 12 13 30.0 +13
KDAK LR LR
comp=Z,4µm,21.0s
INCN **Inchon** 80.04 316 PFAKE 12 13 30.0 +12
INCN LR LR
comp=Z,2µm,19.0s
G03D **McMinnville, O** 80.05 34 P P 12 13 19.0 +1.0
baz=80
TUC **Tucson** 80.15 50 eP P 12 13 18.1 -1.0
TUC pmax pmax
comp=Z,236nm,1.5s
TUC MLR MLR
comp=Z,6µm,19.0s
TUC **Tucson** 80.15 50 eP P 12 13 18.1 -1.0
comp=Z,236nm,1.5s
TUC LR LR
comp=Z,6µm,19.0s
R11A **Troy Canyon, C** 80.21 43 P P 12 13 20.3 +1.0
baz=80
R11A **Troy Canyon, C** 80.21 43 eP P 12 13 19.4 0.0
comp=Z,120nm,1.6s
R11A LR LR
comp=Z,4µm,19.0s
H04A **Detroit Lake** 80.27 35 eP P 12 13 17.4 -1.9
comp=Z,98nm,1.7s
H04A LR LR
comp=Z,12µm,19.0s
F03A **Seaside** 80.38 33 PFAKE 12 13 30.0 +10
F03A LR LR
comp=Z,6µm,19.0s
BMN **Battle Mountai** 80.42 40 eP P 12 13 20.1 -0.4
BMN pmax pmax
comp=Z,137nm,1.5s
BMN MLR MLR
comp=Z,5µm,19.0s
BMN **Battle Mountai** 80.42 40 eP P 12 13 20.1 -0.4
comp=Z,138nm,1.5s
BMN LR LR
comp=Z,5µm,19.0s
F04D **Rainier, OR** 80.77 33 P P 12 13 24.1 +2.2
baz=81
E03A **Lebam** 80.80 33 PFAKE 12 13 30.0 +8.0
E03A LR LR
comp=Z,9µm,19.0s
WVOR **Wild Horse Val** 80.81 38 eP P 12 13 21.3 -1.1
WVOR pmax pmax
comp=Z,96nm,1.5s
WVOR MLR MLR
comp=Z,7µm,19.0s
WVOR **Wild Horse Val** 80.81 38 eP P 12 13 21.3 -1.1
comp=Z,96nm,1.5s
WVOR LR LR
comp=Z,7µm,19.0s
USRK **Ussuriysk Ar.** 80.91 324 P P 12 13 23.2 +0.5
comp=Z,3.5nm,0.8s,baz=119,slow=6.7,SNR=6.3
F04A **Amboy** 80.97 34 eP P 12 13 24.2 +1.1
comp=Z,145nm,1.8s
F04A LR LR
comp=Z,6µm,19.0s
G05D **Wamic, OR** 81.10 35 P P 12 13 25.1 +1.3
baz=81
CCUT **Cedar City** 81.20 45 eP P 12 13 24.8 +0.1
comp=Z,163nm,1.6s
CCUT LR LR
comp=Z,3µm,18.0s
NLWA **Neilton Lookou** 81.22 32 PFAKE 12 13 40.0 +16
NLWA LR LR
comp=Z,10µm,19.0s
I07A **Izee** 81.34 37 eP P 12 13 25.2 0.0
comp=Z,145nm,1.9s
I07A LR LR
comp=Z,8µm,19.0s
WUAZ **Wupatki** 81.43 47 P P 12 13 26.8 +0.8
baz=82
WUAZ **Wupatki** 81.43 47 eP P 12 13 26.8 +0.8
comp=Z,177nm,1.5s
WUAZ LR LR
comp=Z,2µm,18.0s
G06A **Carlson Farm,** 81.46 35 eP P 12 13 27.0 +1.3
comp=Z,190nm,1.8s
G06A LR LR
comp=Z,10µm,19.0s
J08A **Circle Bar Ran** 81.47 38 eP P 12 13 27.3 +1.4
comp=Z,164nm,1.8s
MNAI **Manna** 81.78 268 PFAKE 12 13 40.0 +12
MNAI LR LR
comp=Z,3µm,18.0s
CNPM **China Poot** 81.82 12 PFAKE 12 13 40.0 +13
CNPM LR LR
comp=Z,4µm,20.0s
ELK **Elko** 81.82 41 eP P 12 13 29.2 +1.2
ELK pmax pmax
comp=Z,141nm,1.8s
ELK **Elko** 81.82 41 eP P 12 13 29.1 +1.2
comp=Z,141nm,1.8s
LON **Longmire** 81.83 33 eP P 12 13 28.8 +1.2
LON pmax pmax
comp=Z,99nm,2.0s
LON MLR MLR
comp=Z,3µm,20.0s
LON **Longmire** 81.83 33 eP P 12 13 28.8 +1.2
comp=Z,99nm,2.0s
LON LR LR
comp=Z,3µm,20.0s
HOM **Homer** 81.86 11 PFAKE 12 13 40.0 +13
HOM LR LR
comp=Z,4µm,20.0s
D05A **Enumclaw** 82.03 33 eP P 12 13 30.3 +1.7
comp=Z,156nm,1.4s
D05A LR LR
comp=Z,5µm,19.0s
BRLK **Bradley Lake** 82.11 12 PFAKE 12 13 40.0 +11
BRLK LR LR
comp=Z,4µm,20.0s
HABR **Khabarovsk** 82.14 329 deP P 12 13 28.1 -1.0
HABR e*SP sP 12 13 37.3 -2.9
HABR e 12 16 36.3
HABR eS S 12 23 42.9 +0.6
HABR eSS SS 12 29 03.3 +0.5
HABR eSSS SSS 12 32 31.2
HABR pmax pmax
comp=Z,51nm,2.8s
HABR pmax pmax
comp=N,25nm,2.8s
HABR pmax pmax
comp=E,66nm,2.8s
HABR MLR MLR
comp=Z,4µm,20.0s
PGC **Sidney** 82.28 31 PFAKE 12 13 40.0 +10
PGC LR LR
comp=Z,5µm,20.0s
W18A **Petrified Fore** 82.36 48 P P 12 13 31.7 +0.8
baz=83
W18A **Petrified Fore** 82.36 48 PFAKE 12 13 40.0 +9.1
W18A LR LR
comp=Z,2µm,20.0s
G08A **Pilot Rock** 82.41 36 eP P 12 13 29.9 -0.9
comp=Z,270nm,2.0s
G08A LR LR
comp=Z,7µm,20.0s
121A **Cookes Peak, D** 82.44 51 P P 12 13 32.4 +1.0
baz=83
MDJ **Mudanjiang** 82.50 323 P P 12 13 32.7 +1.6
MDJ pP pP 12 13 39.2 -0.1
MDJ sP sP 12 13 42.4 +0.2
MDJ S SKKSac 12 23 54.9 +0.7
MDJ PMZ
comp=Z,24nm,1.0s
MDJ PMZ
comp=Z,390nm,6.4s
MDJ LN
comp=Z,2µm,20.4s
MDJ LE
comp=Z,960nm,25.5s
MDJ LZ
comp=Z,960nm,22.1s
MDJ **Mudanjiang** 82.50 323 eP P 12 13 32.4 +1.3
comp=Z,46nm,1.1s
MDJ LR LR
comp=Z,3µm,20.0s
NJ2 **Nanjing** 82.57 308 eP P 12 13 32.8 +1.1
NJ2 pP pP 12 13 40.4 +0.5
NJ2 sP sP 12 13 43.1 +0.2
NJ2 S SKSac 12 23 50.0 -1.5
NJ2 sS sS 12 24 00.0 -0.9
NJ2 PMZ
comp=Z,30nm,0.6s
NJ2 PMZ
comp=Z,1µm,6.6s
NJ2 LN
comp=Z,3µm,16.2s
NJ2 LE
comp=Z,3µm,16.0s
NJ2 LZ
comp=Z,3µm,14.0s
SVW2 **Sparrevohn** 82.57 9 PFAKE 12 13 40.0 +8.9
SVW2 LR LR
comp=Z,2µm,22.0s
B05A **Bryant** 82.69 32 P P 12 13 33.5 +1.5
baz=83
A04D **Lummi Island** 82.69 32 P P 12 13 33.9 +1.9
baz=83
SEW **Seward** 82.70 12 PFAKE 12 13 40.0 +8.3
SEW LR LR
comp=Z,4µm,19.0s
E07A **Sunnyside** 82.73 34 eP P 12 13 32.0 -0.3
comp=Z,193nm,1.8s
E07A LR LR
comp=Z,15µm,19.0s
LTY **Liberty** 82.75 34 eP P 12 13 33.6 +1.1
comp=Z,113nm,1.7s
LTY LR LR
comp=Z,5µm,19.0s
HAWA **Hanford** 82.79 35 eP P 12 13 32.6 0.0
comp=Z,167nm,1.6s
HAWA LR LR
comp=Z,14µm,19.0s
MAW **Mawson** 82.85 199 P P 12 13 32.4 -0.2
comp=Z,4.4nm,0.7s,baz=95,slow=3.0,SNR=3.6
MAW **Mawson** 82.85 199 P P 12 13 32.4 -0.2
MAW pmax pmax
comp=Z,4.0nm,0.7s
MAW **Mawson** 82.85 199 eP P 12 13 32.5 -0.2
comp=Z,8.2nm,1.1s
DUG **Dugway** 83.03 43 eP P 12 13 34.0 -0.2
DUG pmax pmax
comp=Z,95nm,1.5s
DUG MLR MLR
comp=Z,4µm,19.0s
DUG **Dugway** 83.03 43 P P 12 13 34.8 +0.6
baz=83
DUG **Dugway** 83.03 43 eP P 12 13 34.0 -0.2
comp=Z,95nm,1.5s
DUG LR LR
comp=Z,4µm,19.0s
MFID **Camas Ranch** 83.04 39 eP P 12 13 33.0 -1.1
comp=Z,166nm,1.8s
MFID LR LR
comp=Z,3µm,19.0s
BMO **Blue Mountains** 83.06 37 PFAKE 12 13 50.0 +16
BMO LR LR
comp=Z,7µm,19.0s
MYKOM **Kota Tinggi** 83.06 274 eP P 12 13 35.6 +0.9
comp=Z,116nm,1.6s
MYKOM LR LR
comp=Z,1µm,20.0s
C06D **Leavenworth** 83.07 33 P P 12 13 35.2 +1.1
baz=83
BGU **Big Grassy Mou** 83.30 42 eP P 12 13 37.3 +1.7
comp=Z,203nm,1.9s
BGU LR LR
comp=Z,6µm,19.0s
NLU **North Lily Min** 83.37 43 eP P 12 13 37.0 +1.0
comp=Z,164nm,1.8s
NLU LR LR
comp=Z,6µm,19.0s
D08A **Wollman Farm,** 83.54 34 eP P 12 13 38.2 +1.7
comp=Z,274nm,1.8s
D08A LR LR
comp=Z,14µm,19.0s
RC01 **Rabbit Creek A** 83.55 12 eP P 12 13 35.3 -0.9
comp=Z,50nm,1.2s
RC01 LR LR
comp=Z,2µm,21.0s
MPU **Maple Canyon** 83.69 43 eP P 12 13 39.3 +1.6
comp=Z,208nm,1.9s
MPU LR LR
comp=Z,6µm,19.0s
SUA **Susitna One** 83.71 11 eP P 12 13 36.0 -1.2
comp=Z,31nm,0.9s
SUA LR LR
comp=Z,4µm,20.0s
F10A **Beach Ranch, E** 83.78 36 eP P 12 13 36.2 -1.6
comp=Z,202nm,1.6s
MNTX **Cornudas Mount** 83.82 53 P P 12 13 38.8 +0.5
baz=84
MNTX **Cornudas Mount** 83.82 53 eP P 12 13 37.5 -0.8
comp=Z,174nm,1.6s
MNTX LR LR
comp=Z,4µm,19.0s
Y22D **IRIS PASSCAL I** 83.83 50 P P 12 13 39.8 +1.4
baz=84
LAZ **Ladron** 83.84 50 eP P 12 13 39.7 +1.1
O16A **Springville** 83.88 43 eP P 12 13 37.8 -0.8
comp=Z,539nm,2.0s
O16A LR LR
comp=Z,3µm,18.0s
SPUT **South Promonto** 83.88 42 PFAKE 12 13 50.0 +11
SPUT LR LR
comp=Z,6µm,19.0s
EYAK **Cordova Ski Ar** 83.88 14 PFAKE 12 13 50.0 +12
EYAK LR LR
comp=Z,5µm,18.0s
GAMB **Gambell** 83.90 1 PFAKE 12 13 50.0 +12
GAMB LR LR
comp=Z,2µm,21.0s
SRU **San Rafael** 83.92 45 eP P 12 13 38.2 -0.7
SRU pmax pmax
comp=Z,341nm,1.5s
SRU MLR MLR
comp=Z,2µm,19.0s
SRU **San Rafael** 83.92 45 eP P 12 13 38.2 -0.7
comp=Z,341nm,1.5s
SRU LR LR
comp=Z,2µm,19.0s
HVU **Hansel Valley** 83.94 41 eP P 12 13 37.8 -1.1
HVU pmax pmax
comp=Z,251nm,1.8s
HVU MLR MLR
comp=Z,6µm,19.0s
HVU **Hansel Valley** 83.94 41 eP P 12 13 37.8 -1.1
comp=Z,251nm,1.8s
HVU LR LR
comp=Z,6µm,19.0s
HLID **Hailey** 83.96 39 P P 12 13 40.2 +1.3
baz=84
HLID **Hailey** 83.96 39 eP P 12 13 38.1 -0.8
comp=Z,163nm,1.5s
HLID LR LR
comp=Z,2µm,21.0s
P17A **Butcher Ranch,** 83.97 44 eP P 12 13 39.2 +0.1
comp=Z,386nm,1.6s
CTU **Camp Tracy** 83.98 43 eP P 12 13 39.9 +0.8
comp=Z,124nm,1.4s
RAGM **Ragged Mountai** 83.98 14 PFAKE 12 13 50.0 +12

RAGM LR LR
comp=Z,7µm,18.0s
**TX31 Lajitas Ar. Si 84.03 56** *e*P **P 12 13 37.8 -1.7**
**TXAR Lajitas Array 84.03 56** P **P 12 13 38.1 -1.4**
comp=Z,6.3nm,1.1s,baz=217,slow=8.8,SNR=26
**QIZ Qiongzhong 84.06 293** PFAKE 12 13 50.0 +10
QIZ LR LR
comp=Z,2µm,18.0s
**PAYG Puerto Ayora 84.08 89** PFAKE 12 13 50.0 +10
PAYG LR LR
comp=Z,6µm,20.0s
**DL2 Dalian 84.11 315** P **P 12 13 42.1 +2.6**
DL2 S **S 12 24 08.6 +5.8**
DL2 PMZ
comp=Z,53nm,1.7s
DL2 PMZ
comp=Z,360nm,3.6s
DL2 LN
comp=Z,900nm,15.7s
DL2 LE
comp=Z,430nm,17.8s
DL2 LZ
comp=Z,680nm,17.3s
**PMR Palmer 84.13 12** *e*P **P 12 13 38.3 -0.8**
PMR pmax pmax
comp=Z,193nm,2.1s
PMR MLR MLR
comp=Z,2µm,20.0s
**PMR Palmer 84.13 12** *e*P **P 12 13 38.3 -0.8**
comp=Z,193nm,2.1s
PMR LR LR
comp=Z,2µm,20.0s
**LPM Los Pinos Moun 84.16 50** *e*P **P 12 13 41.2 +1.0**
**WRAK Wrangell Islan 84.24 22** PFAKE 12 13 50.0 +10
WRAK LR LR
comp=Z,2µm,21.0s
**KLR Kul'dur 84.27 328** *e*P **P 12 13 37.2 -2.9**
KLR *e*S **S 12 24 06.0 +2.0**
**MVCO Mesa Verde 84.29 47** P **P 12 13 41.4 +0.6**
baz=84
**MVCO Mesa Verde 84.29 47** *e*P **P 12 13 42.2 +1.3**
comp=Z,128nm,1.6s
MVCO LR LR
comp=Z,2µm,19.0s
**PV05 Paradox Valley 84.33 46** *e*P **P 12 13 39.2 -1.8**
**C09A Chrisman Ranch 84.35 34** *e*P **P 12 13 38.5 -2.0**
comp=Z,189nm,1.8s
C09A LR LR
comp=Z,12µm,19.0s
**P18A Preston Nutter 84.38 44** *e*P **P 12 13 39.7 -1.6**
comp=Z,250nm,1.7s
P18A LR LR
comp=Z,4µm,19.0s
**DIV Divide 84.40 13** *e*P **P 12 13 39.6 -1.0**
comp=Z,76nm,1.3s
DIV LR LR
comp=Z,4µm,19.0s
**CN2 Changchun 84.41 321** *e*P **P 12 13 42.0 +1.0**
CN2 *e*PP **PP 12 16 56.8 +0.3**
CN2 SKS **S 12 24 02.1 -3.5**
CN2 *e*S **SKKSac 12 24 07.4 -1.2**
CN2 sS **ScS 12 24 15.3 -1.9**
CN2 PMZ
comp=Z,10.0nm,1.5s
CN2 PMZ
comp=Z,400nm,4.0s
CN2 LN
comp=Z,500nm,21.0s
CN2 LE
comp=Z,800nm,21.0s
CN2 LZ
comp=Z,1µm,21.0s
**TCUT Toone Canyon 84.43 42** *e*P **P 12 13 40.4 -1.0**
comp=Z,780nm,1.6s
TCUT LR LR
comp=Z,6µm,19.0s
**SNY Shenyang 84.44 318** ⇑P **P 12 13 42.1 +1.0**
SNY PMZ
comp=Z,370nm,10.0s
SNY LN
comp=Z,910nm,19.8s
SNY LE
comp=Z,1µm,17.7s
SNY LZ
comp=Z,2µm,19.1s
**SML Sawmill 84.48 12** PFAKE 12 13 50.0 +9.0
SML LR LR
comp=Z,2µm,20.0s
**BMRM Bremner River 84.51 14** PFAKE 12 13 50.0 +8.8
BMRM LR LR
comp=Z,4µm,18.0s
**PV09 Paradox Valley 84.52 46** *e*P **P 12 13 41.4 -0.7**
**PV10 Paradox Valley 84.52 46** *e*P **P 12 13 38.9 -3.2**
**DHAK Deception Hill 84.53 18** PFAKE 12 13 50.0 +8.7
DHAK LR LR
comp=Z,2µm,19.0s
**ANMO Albuquerque 84.59 50** *d i*P **P 12 13 43.2 +0.8**
ANMO pmax pmax
comp=Z,59nm,1.7s
**ANMO Albuquerque 84.59 50** *e*P **P 12 13 42.8 +0.4**
comp=Z,287nm,1.6s
ANMO LR LR
comp=Z,3µm,20.0s
**HWUT Hardware Ranch 84.60 42** *e*P **P 12 13 42.5 +0.3**
comp=Z,170nm,1.8s
HWUT LR LR
comp=Z,6µm,19.0s
**KLU Klutina 84.69 13** PFAKE 12 13 50.0 +7.9
KLU LR LR
comp=Z,3µm,18.0s
**SCM Sheep Creek Mo 84.71 12** *e*P **P 12 13 39.3 -2.8**
SCM pmax pmax
comp=Z,46nm,1.0s
SCM MLR MLR
comp=Z,2µm,19.0s
**SCM Sheep Creek Mo 84.71 12** *e*P **P 12 13 39.3 -2.8**
comp=Z,46nm,1.0s
SCM LR LR
comp=Z,2µm,19.0s
**PV01 Paradox Valley 84.72 46** *e*P **P 12 13 42.8 -0.1**
**PCA Pinnacle 84.82 16** PFAKE 12 13 50.0 +7.2
PCA LR LR
comp=Z,4µm,18.0s
**COCO West Island 84.86 259** PFAKE 12 13 50.0 +6.1
COCO LR LR
comp=Z,5µm,18.0s
**BKNI Bangkinang 85.18 272** PFAKE 12 14 00.0 +14
BKNI LR LR
comp=Z,2µm,18.0s
**NEW Newport 85.24 34** P **P 12 13 45.0 -0.1**
comp=Z,1.2nm,0.7s,baz=233,slow=8.1,SNR=4.5
**NEW Newport 85.24 34** P **P 12 13 45.0 -0.1**
**NEW Newport 85.24 34** P **P 12 13 46.6 +1.5**
baz=86
**NEW Newport 85.24 34** *e*P **P 12 13 45.0 -0.1**
comp=Z,84nm,1.8s
NEW LR LR
comp=Z,15µm,19.0s
**WHN Wuhan 85.26 305** ⇑ *i*P **P 12 13 47.3 +1.8**
WHN sP **sP 12 13 59.0 +2.3**
WHN S **S 12 24 14.2 -0.3**
WHN PMZ
comp=Z,1µm,5.6s
WHN LZ
comp=Z,4µm,18.1s
**CAST Castle Rocks 85.31 10** *e*P **P 12 13 43.2 -1.9**
comp=Z,24nm,1.0s
CAST LR LR
comp=Z,4µm,21.0s
**529A Stev Forest Ra 85.51 56** P **P 12 13 47.2 +0.3**
baz=86
**AHID Auburn Hatcher 85.52 41** *e*P **P 12 13 48.1 +1.3**
comp=Z,151nm,1.4s
AHID LR LR
comp=Z,5µm,19.0s
**MCMT McKenzie Canyo 85.61 39** *e*P **P 12 13 44.5 -2.8**
**TRF Thorofare Moun 85.64 11** *e*P **P 12 13 45.5 -1.4**
comp=Z,63nm,0.9s
TRF LR LR
comp=Z,6µm,20.0s
**HARP HAARP 85.67 13** PFAKE 12 14 00.0 +13
HARP LR LR
comp=Z,3µm,21.0s
**S22A 4UR Ranch, Cre 85.71 47** P **P 12 13 48.4 +0.4**
baz=86
**S22A 4UR Ranch, Cre 85.71 47** *e*P **P 12 13 47.4 -0.6**
comp=Z,238nm,1.6s
S22A LR LR
comp=Z,2µm,19.0s
**TNA Tin City 85.81 3** PFAKE 12 14 00.0 +13
TNA LR LR
comp=Z,3µm,21.0s
**TIA Tai'an 85.84 311** ⇓P **P 12 13 50.1 +1.8**
TIA PMZ
comp=Z,20nm,1.2s
**RND Reindeer 85.85 11** *e*P **P 12 13 47.4 -0.4**
RND pmax pmax
comp=Z,119nm,1.1s
RND MLR MLR
comp=Z,4µm,20.0s
**RND Reindeer 85.85 11** *e*P **P 12 13 47.4 -0.4**
comp=Z,119nm,1.1s
RND LR LR
comp=Z,4µm,20.0s
**O20A White River Ci 85.96 45** P **P 12 13 49.4 +0.3**
baz=86
**O20A White River Ci 85.96 45** *e*P **P 12 13 51.0 +1.9**
comp=Z,176nm,1.8s
**429A Davenport Ranc 85.98 55** P **P 12 13 49.2 -0.1**
baz=86
**REDW Red Top Meadow 86.00 41** *e*P **P 12 13 49.7 +0.5**
comp=Z,166nm,1.6s
REDW LR LR
comp=Z,5µm,19.0s
**TPAW Teton Pass 86.00 41** *e*P **P 12 13 49.9 +0.6**
comp=Z,166nm,1.8s
TPAW LR LR
comp=Z,5µm,18.0s
**FXWY Fox Creek 86.04 41** *e*P **P 12 13 50.9 +1.4**
comp=Z,104nm,1.6s
FXWY LR LR
comp=Z,4µm,19.0s
**DLMT Dillon 86.06 38** *e*P **P 12 13 49.1 -0.3**
comp=Z,108nm,1.4s
DLMT LR LR
comp=Z,5µm,20.0s
**SNOW Snow King Moun 86.11 41** *e*P **P 12 13 48.4 -1.5**
comp=Z,268nm,1.9s
**PAX Paxson 86.11 13** *e*P **P 12 13 48.4 -0.8**
PAX pmax pmax
comp=Z,47nm,1.3s
**PAX Paxson 86.11 13** *e*P **P 12 13 48.4 -0.8**
comp=Z,47nm,1.3s
**228A UT Block 9, Go 86.12 54** P **P 12 13 49.8 -0.1**
baz=86
**MSO Missoula 86.12 37** P **P 12 13 49.8 +0.2**
baz=86
**MSO Missoula 86.12 37** *e*P **P 12 13 47.4 -2.2**
comp=Z,166nm,2.0s
MSO LR LR
comp=Z,8µm,20.0s
**BPAW Bear Paw Mtn. 86.13 10** *e*P **P 12 13 47.6 -1.5**
comp=Z,88nm,1.9s
BPAW LR LR
comp=Z,4µm,21.0s
**MCK McKinley 86.14 11** *e*P **P 12 13 48.6 -0.6**
MCK pmax pmax
comp=Z,76nm,1.0s
MCK MLR MLR
comp=Z,4µm,20.0s
**MCK McKinley 86.14 11** *e*P **P 12 13 48.6 -0.6**
comp=Z,76nm,1.0s
MCK LR LR
comp=Z,4µm,20.0s
**530A J-C Ranch, Com 86.21 56** P **P 12 13 50.1 -0.2**
baz=86
**IMW Indian Meadow 86.23 40** *e*P **P 12 13 51.3 +0.8**
comp=Z,105nm,1.6s
**BSMT Bassoo Peak 86.25 36** *e*P **P 12 13 49.8 -0.6**
**MOOW Moose Ponds 86.27 41** *e*P **P 12 13 51.7 +1.2**
comp=Z,96nm,1.8s
MOOW LR LR
comp=Z,5µm,19.0s
**LOHW Long Hollow 86.28 41** *e*P **P 12 13 51.0 +0.4**
comp=Z,144nm,1.8s
LOHW LR LR
comp=Z,5µm,18.0s
**329A Wagon Wheel Ra 86.30 55** P **P 12 13 50.7 -0.2**
baz=86
**SMCO Snowmass 86.32 46** *e*P **P 12 13 51.3 +0.1**
comp=Z,58nm,1.3s
SMCO LR LR
comp=Z,3µm,20.0s
**LRM Limekiln Ridge 86.40 38** *e*P **P 12 13 49.9 -1.3**
**128A Castleberry Fa 86.42 53** P **P 12 13 51.3 -0.1**
baz=87
**QLMT Earthquake Lak 86.45 39** *e*P **P 12 13 51.4 0.0**
**BWN Browne 86.45 11** PFAKE 12 14 00.0 +9.3
BWN LR LR
comp=Z,6µm,20.0s
**832A Faith Ranch, C 86.48 58** P **P 12 13 51.4 -0.3**
baz=87
**BW06 Boulder Array 86.48 42** *e*P **P 12 13 51.3 -0.4**
BW06 LR LR
comp=Z,4µm,19.0s
**FLWY Flagg Ranch 86.48 40** *e*P **P 12 13 53.0 +1.4**
comp=Z,162nm,1.8s
FLWY LR LR
comp=Z,4µm,19.0s
**631A Perdido Creek 86.48 57** P **P 12 13 51.3 -0.4**
baz=87
**CHMT Chamberlain Mo 86.56 37** *e*P **P 12 13 49.5 -2.4**
**430A Baggett Ranch, 86.56 56** P **P 12 13 52.3 +0.2**
baz=87
**YFT Old Faithful 86.60 40** PFAKE 12 14 00.0 +7.8
YFT LR LR
comp=Z,3µm,18.0s
**DLBC Dease Lake 86.60 22** PFAKE 12 14 00.0 +8.4
DLBC LR LR
comp=Z,3µm,20.0s
**SDCO Great Sand Dun 86.63 48** P **P 12 13 53.5 +1.0**
baz=87
**SDCO Great Sand Dun 86.63 48** *e*P **P 12 13 51.7 -0.9**
comp=Z,82nm,1.7s
SDCO LR LR
comp=Z,2µm,18.0s
**IPM Ipoh 86.64 276** *e*P **P 12 13 54.0 +1.1**
comp=Z,139nm,1.7s
IPM LR LR
comp=Z,2µm,18.0s
**229A Bryant Ranch, 86.64 54** P **P 12 13 52.7 +0.2**
baz=87
**732A Laxson Ranch, 86.67 58** P **P 12 13 52.6 0.0**
baz=87
**H17A Grant Village 86.72 40** P **P 12 13 53.4 +0.6**
baz=87
**H17A Grant Village 86.72 40** *e*P **P 12 13 54.7 +1.9**
comp=Z,76nm,1.8s
H17A LR LR
comp=Z,4µm,20.0s
**933A Laredo 86.76 59** P **P 12 13 53.0 -0.1**
baz=87
**BOZ Bozeman (W) 86.78 39** *e*P **P 12 13 54.0 +1.1**
BOZ pmax pmax
comp=Z,162nm,1.8s
BOZ MLR MLR
comp=Z,5µm,20.0s
**BOZ Bozeman (W) 86.78 39** P **P 12 13 53.9 +0.9**
baz=87
**BOZ Bozeman (W) 86.78 39** *e*P **P 12 13 54.0 +1.1**
comp=Z,162nm,1.8s
BOZ LR LR
comp=Z,5µm,20.0s
**Z28A Tucker Farm, M 86.80 53** P **P 12 13 53.0 -0.2**
baz=87
**MSTX Muleshoe 86.82 52** P **P 12 13 53.5 +0.2**
baz=87
**MSTX Muleshoe 86.82 52** *e*P **P 12 13 52.2 -1.2**
comp=Z,412nm,1.7s
MSTX LR LR
comp=Z,7µm,19.0s
**531A Rocksprings 86.83 56** P **P 12 13 53.1 -0.4**
baz=87
**330A Mertzon 86.88 55** P **P 12 13 53.5 -0.2**
baz=87
**129A Stewart Farms, 86.89 54** P **P 12 13 53.9 +0.1**
baz=87
**LKWY Lake 86.92 40** PFAKE 12 14 00.0 +6.2
LKWY LR LR
comp=Z,5µm,19.0s
**833A Chaparral WMA, 86.96 58** P **P 12 13 53.7 -0.3**
baz=87
**WRH Wood River Hil 86.97 11** *e*P **P 12 13 52.1 -1.1**
comp=Z,116nm,1.1s
WRH LR LR
comp=Z,3µm,20.0s
**034A Hebbronville 87.00 60** P **P 12 13 53.9 -0.4**
baz=87
**431A Sonora 87.01 56** P **P 12 13 53.8 -0.5**
baz=87
**MLY Manley 87.03 10** *e*P **P 12 13 52.2 -1.4**
comp=Z,413nm,2.8s
MLY LR LR
comp=Z,3µm,21.0s
**T25A Trinidad 87.10 49** P **P 12 13 55.3 +0.5**
baz=87
**T25A Trinidad 87.10 49** *e*P **P 12 13 55.6 +0.8**
comp=Z,92nm,1.7s
T25A LR LR
comp=Z,3µm,19.0s
**SEY Seymchan 87.11 345** P **P 12 13 53.5 -0.4**
comp=Z,19nm,0.8s,baz=154,slow=6.8
**SEY Seymchan 87.11 345** P **P 12 13 53.5 -0.4**
SEY pmax pmax
comp=Z,19nm,0.8s
**HDA Harding Lake 87.11 11** *e*P **P 12 13 53.1 -0.8**
comp=Z,485nm,2.6s
**230A Sterling City 87.14 55** P **P 12 13 55.0 +0.1**
baz=87
**632A Uvalde 87.15 57** P **P 12 13 54.7 -0.2**
baz=87
**CCB Clear Creek Bu 87.18 11** *e*P **P 12 13 53.1 -1.1**
comp=Z,70nm,1.1s
CCB LR LR
comp=Z,3µm,20.0s
**Y28A McKinney Farm, 87.18 52** P **P 12 13 55.3 +0.2**
baz=87
**733A Divot King Ran 87.20 58** P **P 12 13 55.2 0.0**
baz=87
**HRY Holter Researc 87.25 38** *e*P **P 12 13 53.0 -2.1**
**035Z Hargill 87.26 61** P **P 12 13 54.2 -1.3**
baz=87
**KULM Kulim 87.27 277** PFAKE 12 14 10.0 +14
KULM LR LR
comp=Z,1µm,22.0s
**Z29A Hungry Hill Ra 87.30 53** P **P 12 13 55.4 -0.2**
baz=88
**532A Rocksprings 87.32 57** P **P 12 13 55.8 0.0**
baz=88
**934A Benavides 87.36 59** P **P 12 13 56.3 +0.3**
baz=88
**COLA College 87.38 11** *c i*P **P 12 13 53.9 -1.2**
COLA pmax pmax
comp=Z,18nm,0.9s
**COLA College 87.38 11** *e*P **P 12 13 54.2 -0.9**
comp=Z,90nm,1.1s
COLA LR LR
comp=Z,4µm,20.0s
**MDM Murphy Dome 87.39 11** *e*P **P 12 13 54.0 -1.3**
comp=Z,148nm,1.5s
MDM LR LR
comp=Z,5µm,20.0s
**331A San Angelo 87.42 55** P **P 12 13 56.1 -0.2**
baz=88
**035A Encino 87.42 60** P **P 12 13 57.0 +0.8**
baz=88
**WALA Waterton Lakes 87.43 35** *e*P **P 12 13 53.6 -2.3**
comp=Z,180nm,1.8s
WALA LR LR
comp=Z,9µm,19.0s
**Q24A Divide 87.45 47** P **P 12 13 56.8 +0.2**
baz=88
**Q24A Divide 87.45 47** *e*P **P 12 13 56.5 -0.1**
comp=Z,170nm,2.2s
Q24A LR LR
comp=Z,3µm,18.0s
**IL1 Eielson Array 87.46 11** *e*P **P 12 13 53.4 -2.2**
**ILAR Eielson Array 87.46 11** P **P 12 13 54.3 -1.3**
comp=Z,3.0nm,0.8s,baz=219,slow=4.9,SNR=46
**ILB Eielson Array 87.46 11** *e*P **P 12 13 54.3 -1.3**
**X28A Dimmitt 87.49 52** P **P 12 13 56.8 +0.2**
baz=88
**ISCO Idaho Springs 87.54 46** *e*P **P 12 13 59.3 +2.3**
ISCO pmax pmax
comp=Z,66nm,2.3s
ISCO MLR MLR
comp=Z,2µm,18.0s
**ISCO Idaho Springs 87.54 46** P **P 12 13 56.9 -0.1**
baz=88
**ISCO Idaho Springs 87.54 46** *e*P **P 12 13 59.3 +2.3**
comp=Z,66nm,2.3s
ISCO LR LR
comp=Z,2µm,18.0s
**JCT Junction City 87.55 56** *e*P **P 12 13 56.8 -0.1**
JCT pmax pmax
comp=Z,169nm,1.8s
JCT MLR MLR
comp=Z,5µm,19.0s
**JCT Junction City 87.55 56** P **P 12 13 56.6 -0.2**
baz=88
**JCT Junction City 87.55 56** *e*P **P 12 13 56.8 -0.1**
comp=Z,169nm,1.8s
JCT LR LR
comp=Z,5µm,19.0s
**834A Tilden 87.55 59** P **P 12 13 57.1 +0.2**
baz=88
**130A Snyder 87.56 54** P **P 12 13 57.1 +0.1**
baz=88
**V27A Dan Oppiter Fa 87.58 50** P **P 12 13 57.2 +0.1**
baz=88
**Y29A Porterfield Fa 87.59 53** P **P 12 13 57.2 +0.2**
baz=88
**633A Saathoff Ranch 87.61 57** P **P 12 13 57.3 +0.1**
baz=88
**T26A Comanche Natio 87.69 49** P **P 12 13 58.0 +0.4**
baz=88
**432A Menard 87.72 56** P **P 12 13 57.5 -0.2**
baz=88
**Z30A Sanderson Ranc 87.74 53** P **P 12 13 57.8 0.0**
baz=88
**231A Bronte 87.77 55** P **P 12 13 57.8 -0.1**
baz=88
**W28A Vega 87.82 51** P **P 12 13 58.2 +0.1**
baz=88
**X29A Tulia 87.83 52** P **P 12 13 58.5 +0.3**
baz=88
**734A La Parita Cree 87.84 58** P **P 12 13 58.5 +0.2**
baz=88
**KVTX Kingsville 87.84 60** PFAKE 12 14 10.0 +12
KVTX LR LR
comp=Z,2µm,20.0s
**N23A Red Feather La 87.85 45** PFAKE 12 14 10.0 +12
N23A LR LR
comp=Z,2µm,18.0s
**U27A Thompson Grove 87.89 50** P **P 12 13 58.7 +0.1**
baz=88
**RLMT Red Lodge 87.90 40** P **P 12 13 57.6 -0.9**
baz=88
**RLMT Red Lodge 87.90 40** PFAKE 12 14 10.0 +12
RLMT LR LR
comp=Z,4µm,18.0s
**533A Kerrville 87.98 57** P **P 12 13 58.9 0.0**
baz=88
**332A Millersview 87.98 56** P **P 12 13 58.8 -0.1**
baz=88
**S26A Kim 87.99 49** P **P 12 13 58.9 0.0**
baz=88
**SNAA Sanae 88.00 177** P **P 12 13 55.7 -2.7**
**SNAA Sanae 88.00 177** P **P 12 13 58.0 -0.4**
**SNAA Sanae 88.00 177** *e*P **P 12 13 57.2 -1.2**
comp=Z,93nm,2.8s
SNAA LR LR
comp=Z,2µm,19.0s
**GCMT Greycliff 88.01 39** *e*P **P 12 13 59.4 +0.5**
**PSI Prapat 88.02 274** *e*P **P 12 13 59.6 0.0**
PSI pmax pmax
comp=Z,166nm,1.9s
PSI MLR MLR
comp=Z,3µm,18.0s
**PSI Prapat 88.02 274** P **P 12 13 59.9 +0.3**
baz=88,SNR=3.8
**PSI Prapat 88.02 274** *e*P **P 12 13 59.6 0.0**
comp=Z,166nm,1.9s
PSI LR LR
comp=Z,3µm,18.0s
**V28A Channing 88.02 51** P **P 12 13 59.5 +0.4**
baz=88
**131A Roby 88.03 54** P **P 12 13 58.9 -0.2**
baz=88
**AMTX Amarillo 88.03 52** P **P 12 13 59.6 +0.5**
baz=88
**AMTX Amarillo 88.03 52** *e*P **P 12 13 59.2 0.0**

comp=Z,203nm,1.5s
AMTX LR LR
comp=Z,8µm,19.0s
**W29A Amraillo 88.16 51 P P 12 13 60.0 +0.2**
baz=88
**Y30A Stafford Cattl 88.17 53 P P 12 13 59.7 -0.1**
baz=88
**835A Beeville 88.20 59 P P 12 13 58.9 -1.0**
baz=88
**433A Art 88.22 56 P P 12 13 59.8 -0.2**
baz=88
**634A China Grove, S 88.23 58 P P 12 14 00.3 +0.2**
baz=88
**T27A Campo 88.26 49 P P 12 14 00.4 +0.2**
baz=88
**232A Coleman 88.27 55 P P 12 14 00.3 +0.1**
baz=88
**U28A Mallet 88.31 50 P P 12 14 01.0 +0.5**
baz=88
**R26A Arlington 88.32 48 P P 12 14 01.0 +0.5**
baz=88
**BJT Baijiatuau 88.32 314** PFAKE 12 14 10.0 +10
BJT LR LR
comp=Z,3µm,19.0s
**BJI Beijing 88.33 314 P P 12 14 00.1 -0.2**
BJI PP **PP 12 17 31.1 +2.8**
BJI PMZ
comp=Z,16nm,1.7s
BJI PMZ
comp=Z,650nm,4.5s
BJI LN
comp=Z,1µm,17.8s
BJI LE
comp=Z,740nm,15.7s
BJI LZ
comp=Z,920nm,24.6s
**K22A Casper 88.34 43 P P 12 14 00.9 +0.4**
baz=89
**534A Blanco 88.40 57 P P 12 14 00.5 -0.4**
baz=89
**DAWY Dawson 88.41 15** *e*P **P 12 14 00.3 +0.1**
comp=Z,139nm,1.7s
DAWY LR LR
comp=Z,3µm,20.0s
**SKNT Sakolnakorn 88.42 289 P P 12 14 03.1 +1.9**
comp=Z,58nm,1.1s
**S27A Las Animas 88.42 49 P P 12 14 00.9 -0.1**
baz=89
**X30A Coker Ranch, T 88.44 52 P P 12 14 00.9 -0.2**
baz=89
**735A Kenedy 88.45 59 P P 12 14 01.3 +0.2**
baz=89
**Z31A Sharp Cattle R 88.50 54 P P 12 14 01.4 +0.1**
baz=89
**333A Richland Sprin 88.54 56 P P 12 14 01.5 -0.1**
baz=89
**Q26A Hugo 88.56 47 P P 12 14 01.7 0.0**
baz=89
**ABTX Abilene, Hawle 88.58 54 P P 12 14 01.5 -0.2**
baz=89
**ABTX Abilene, Hawle 88.58 54** *e*P **P 12 14 00.9 -0.8**
comp=Z,255nm,1.6s
ABTX LR LR
comp=Z,7µm,19.0s
**V29A Stinnett 88.59 51 P P 12 14 01.8 0.0**
baz=89
**EGAK Eagle 88.62 14** *e*P **P 12 13 58.6 -2.5**
comp=Z,52nm,1.1s
EGAK LR LR
comp=Z,3µm,18.0s
**VNA1 Neumayer--Stat 88.68 175 P P 12 14 04.0 +2.5**
**Y31A Rekieta Farm, 88.69 53 P P 12 14 01.9 -0.3**
baz=89
**635A Leesville 88.69 58 P P 12 14 02.7 +0.5**
baz=89
**T28A Walsh 88.72 50 P P 12 14 02.3 -0.1**
baz=89
**GSI Gunungsitoli 88.76 272** PFAKE 12 14 10.0 +7.0
GSI LR LR
comp=Z,3µm,20.0s
**R27A Eads 88.76 48 P P 12 14 02.9 +0.3**
baz=89
**434A Burnet 88.89 57 P P 12 14 02.8 -0.4**
baz=89
**233A Rising Star 88.90 55 P P 12 14 03.1 -0.1**
baz=89
**ENH Enshi 88.93 303** *e*P **P 12 14 03.5 +0.1**
comp=Z,63nm,1.5s
ENH LR LR
comp=Z,2µm,19.0s
**W30A Crocket Farms 88.98 52 P P 12 14 03.6 0.0**
baz=89
**Z32A Haskell 89.00 54 P P 12 14 03.9 +0.2**
baz=89
**U29A Oasis Ranch, S 89.03 50 P P 12 14 04.1 +0.3**
baz=89
**736A Circle Diamond 89.08 59 P P 12 14 04.7 +0.6**
baz=89
**535A Dale 89.11 58 P P 12 14 04.5 +0.2**
baz=89
**334A Lometa 89.12 56 P P 12 14 03.8 -0.5**
baz=89
**133A Hamilton Ranch 89.13 55 P P 12 14 04.6 +0.3**
baz=89
**EGMT Eagleton 89.15 37 P P 12 14 04.7 +0.6**
baz=89
**EGMT Eagleton 89.15 37** PFAKE 12 14 20.0 +16
EGMT LR LR
comp=Z,7µm,19.0s
**V30A Spur Ranch, Mi 89.15 51 P P 12 14 04.8 +0.4**
baz=89
**COLD Coldfoot 89.16 9** *e*P **P 12 14 04.1 +0.5**
comp=Z,174nm,2.4s
COLD LR LR
comp=Z,2µm,19.0s
**X31A McDonald Ranch 89.18 53 P P 12 14 04.5 0.0**
baz=89
**KSCO Kaye Shedlock' 89.21 48 P P 12 14 05.0 +0.3**
baz=89
**KSCO Kaye Shedlock' 89.21 48** PFAKE 12 14 20.0 +15
KSCO LR LR
comp=Z,2µm,19.0s
**636A Smothers Creek 89.30 58 P P 12 14 05.7 +0.6**
baz=90
**O26A Horse Wrangler 89.31 46 P P 12 14 05.2 +0.1**
baz=90
**Y32A R-V Farms, Ver 89.32 53 P P 12 14 05.4 +0.2**
baz=90
**BILL Bilibino 89.32 353 P P 12 14 04.8 +0.5**
BILL *e* 12 17 36.9
BILL pmax pmax
comp=Z,21nm,1.8s
BILL MLR MLR
comp=Z,3µm,19.0s
**BILL Bilibino 89.32 353** PFAKE 12 14 20.0 +16
BILL LR LR
comp=Z,4µm,20.0s
**T29A Hugoton 89.32 50 P P 12 14 05.1 -0.1**
baz=90
**FYU Fort Yukon 89.38 11** PFAKE 12 14 20.0 +15
FYU LR LR
comp=Z,2µm,21.0s
**435B Jarrell 89.41 57 P P 12 14 05.4 -0.2**
baz=90
**W31A Holland Ranch, 89.45 52 P P 12 14 05.6 -0.1**
baz=90
**234A Clairette 89.48 56 P P 12 14 05.9 -0.1**
baz=90
**R28A Tribune 89.48 49 P P 12 14 05.6 -0.3**
baz=90
**P27A Ficken Ranch, 89.49 47 P P 12 14 05.4 -0.5**
baz=90
**737A Port Lavaca 89.51 59 P P 12 14 06.1 0.0**
baz=90
**U30A WK&E Inc. Balk 89.51 51 P P 12 14 05.8 -0.2**
baz=90
**Z33A Whitaker Ranch 89.53 54 P P 12 14 06.0 -0.2**
baz=90
**NONG Nongkai 89.56 289 P P 12 14 08.8 +2.2**
comp=Z,27nm,1.0s,comp=Z,5µm
**X32A Elmer 89.61 53 P P 12 14 06.5 0.0**
baz=90
**S29A Ulysses 89.65 49 P P 12 14 06.9 +0.2**
baz=90
**GYA Guiyang 89.69 298 P P 12 14 08.9 +1.7**
GYA PP **PP 12 17 43.0 +3.3**
GYA SKS **SKSac 12 24 36.3 -0.3**
GYA S **S 12 24 57.6 0.0**
GYA SS **SS 12 30 58.4 +3.4**
GYA PMZ
comp=Z,30nm,1.0s
GYA PMZ
comp=Z,140nm,5.4s
GYA LN
comp=Z,890nm,20.6s
GYA LE
comp=Z,720nm,21.0s
GYA LZ
comp=Z,860nm,20.4s
**335A Moody 89.74 56 P P 12 14 06.8 -0.3**
baz=90
**134A White-Moore Ra 89.76 55 P P 12 14 07.4 +0.2**
baz=90
**V31A Spring Creek L 89.78 52 P P 12 14 07.8 +0.5**
baz=90
**Q28A Sharon Springs 89.79 48 P P 12 14 07.4 +0.1**
baz=90
**T30A Plains 89.83 50 P P 12 14 07.3 -0.2**
baz=90
**O27A Beecher Island 89.85 47 P P 12 14 08.0 +0.4**
baz=90
**TIY Taiyuan 89.86 311** *e*P **P 12 14 09.0 +1.3**
TIY S **S 12 24 57.6 -1.1**
TIY PMZ
comp=Z,290nm,5.7s
TIY LN
comp=Z,860nm,15.8s
TIY LE
comp=Z,660nm,14.5s
TIY LZ
comp=Z,1µm,20.2s
**Y33A Hilltop Ranch, 89.94 54 P P 12 14 08.3 +0.2**
baz=90
**W32A Sentinel 89.94 52 P P 12 14 08.5 +0.5**
baz=90
**WHTX Lake Whitney 90.00 56 P P 12 14 08.3 -0.1**
baz=90
**WHTX Lake Whitney 90.00 56** PFAKE 12 14 20.0 +12
WHTX LR LR
comp=Z,8µm,19.0s
**U31A Nine Bar Ranch 90.02 51 P P 12 14 08.5 0.0**
baz=90
**P28A Saint Francis 90.07 47 P P 12 14 09.0 +0.3**
baz=90
**N27A Anderson Farm, 90.09 46 P P 12 14 08.9 +0.1**
baz=90
**SNET Serv Nac Est T 90.10 76** PFAKE 12 14 20.0 +11
SNET LR LR
comp=Z,5µm,18.0s
**EDM Edmonton 90.12 32** *e*P **P 12 14 07.4 -1.0**
EDM pmax pmax
comp=Z,295nm,1.8s
EDM MLR MLR
comp=Z,7µm,19.0s
**EDM Edmonton 90.12 32** *e*P **P 12 14 07.4 -1.0**
comp=Z,295nm,1.8s
EDM LR LR
comp=Z,7µm,19.0s
**WMOK Wichita Mounta 90.12 53** *e*P **P 12 14 09.9 +1.0**
WMOK pmax pmax
comp=Z,43nm,1.5s
WMOK MLR MLR
comp=Z,3µm,19.0s
**WMOK Wichita Mounta 90.12 53** *e*P **P 12 14 09.9 +1.0**
comp=Z,43nm,1.5s
WMOK LR LR
comp=Z,3µm,19.0s
**S30A Montezuma 90.13 50 P P 12 14 09.5 +0.6**
baz=90
**537A Green Hill Far 90.13 58 P P 12 14 09.8 +0.9**
baz=90
**PAF Port-aux-Franc 90.16 216** PFAKE 12 14 20.0 +11
PAF LR LR
comp=Z,4µm,20.0s
**Z34A Collier Ranch, 90.21 54 P P 12 14 09.5 +0.2**
baz=90
**336A Riesel 90.23 57 P P 12 14 09.0 -0.5**
baz=90
**X33A Lawton 90.25 53 P P 12 14 09.6 +0.1**
baz=90
**135A Vickery Place, 90.27 55 P P 12 14 09.8 +0.2**
baz=90
**O28A Krutsinger Ran 90.30 47 P P 12 14 09.8 +0.1**
baz=90
**Q29A Oakley 90.31 48 P P 12 14 09.3 -0.4**
baz=90
**V32A Arapaho 90.34 52 P P 12 14 09.8 -0.1**
baz=90
**J25A Sunshine Ranch 90.45 43 P P 12 14 09.7 -0.6**
baz=91
**T31A Randall Ranch, 90.46 50 P P 12 14 10.3 -0.2**
baz=91
**HKT Hockley 90.46 58** PFAKE 12 14 20.0 +10
HKT LR LR
comp=Z,4µm,19.0s
**OGNE Ogallala 90.49 46 P P 12 14 11.0 +0.4**
baz=91
**OGNE Ogallala 90.49 46** PFAKE 12 14 20.0 +9.4
OGNE LR LR
comp=Z,3µm,20.0s
**LAO LASA Array 90.53 40 P P 12 14 11.9 +1.4**
baz=91
**LAO LASA Array 90.53 40** *e*P **P 12 14 08.3 -2.2**
comp=Z,417nm,2.1s
LAO LR LR
comp=Z,2µm,18.0s
**W33A Caddo, Fort Co 90.53 53 P P 12 14 11.5 +0.8**
baz=91
**R30A Dighton 90.54 49 P P 12 14 11.3 +0.5**
baz=91
**437A Phantom Ranch, 90.57 57 P P 12 14 11.1 +0.1**
baz=91
**Y34A Reagan Ranch, 90.57 54 P P 12 14 11.0 0.0**
baz=91
**RSSD Black Hills 90.64 43** *e*P **P 12 14 09.1 -2.2**
RSSD pmax pmax
comp=Z,73nm,1.5s
RSSD MLR MLR
comp=Z,3µm,19.0s
**RSSD Black Hills 90.64 43** *e*P **P 12 14 09.1 -2.2**
comp=Z,73nm,1.5s
RSSD LR LR
comp=Z,3µm,19.0s
**U32A Winter Ranch, 90.65 51 P P 12 14 11.4 0.0**
baz=91
**P29A Atwood 90.65 48 P P 12 14 11.6 +0.2**
baz=91
**HIA Hailar 90.69 323** PFAKE 12 14 20.0 +8.8
HIA LR LR
comp=Z,4µm,20.0s
**Z35A Perchaven, San 90.70 55 P P 12 14 11.7 +0.1**
baz=91
**N28A Pribbeno Ranch 90.71 47 P P 12 14 11.5 -0.1**
baz=91
**236A Katherine and 90.72 56 P P 12 14 11.4 -0.3**
baz=91
**X34A Smith Ranch, M 90.78 53 P P 12 14 11.7 -0.3**
baz=91
**I25A Rochford 90.78 43 P P 12 14 12.2 +0.3**
baz=91
**S31A Mullinville 90.82 50 P P 12 14 12.7 +0.6**
baz=91
**538A Harpers Horsep 90.84 58 P P 12 14 13.0 +0.7**
baz=91
**Q30A Quinter 90.88 49 P P 12 14 13.3 +1.0**
baz=91
**XAN Xi'an 90.90 306 P P 12 14 14.2 +1.6**
XAN pP **pP 12 14 20.4 -0.4**
XAN PMZ
comp=Z,15nm,1.0s
XAN PMZ
comp=Z,170nm,4.8s
**136A Ennis 90.91 56 P P 12 14 12.8 +0.2**
baz=91
**PBKT Sadao Pong 90.96 287 P P 12 14 15.5 +2.4**
comp=Z,22nm,1.7s,comp=Z,791nm
**O29A 4D Ranch, Culb 90.97 47 P P 12 14 13.1 +0.3**
baz=91
**LOEI Loei 91.03 288 P P 12 14 14.7 +1.2**
comp=Z,9.6nm,1.4s,comp=Z,3µm
**T32A Huddler Ranch, 91.04 51 P P 12 14 13.3 +0.2**
baz=91
**R31A Burdett 91.08 49 P P 12 14 12.9 -0.4**
baz=91
**W34A Bridge Creek, 91.08 53 P P 12 14 13.5 +0.1**
baz=91
**W34A Bridge Creek, 91.08 53** PFAKE 12 14 20.0 +6.6
W34A LR LR
comp=Z,4µm,19.0s
**Y35A Marietta 91.10 54 P P 12 14 13.6 +0.2**
baz=91
**P30A Selden 91.11 48 P P 12 14 13.8 +0.4**
baz=91
**CBKS Cedar Bluff 91.15 49** PFAKE 12 14 20.0 +6.4
CBKS LR LR
comp=Z,2µm,20.0s
**S32A Newby Ranch, P 91.25 50 P P 12 14 14.3 +0.2**
baz=91
**237A Washetta, Mont 91.29 56 P P 12 14 13.7 -0.6**
baz=92
**U33A Lingo Farm, Me 91.32 52 P P 12 14 14.7 +0.3**
baz=92
**X35A Drake 91.34 54 P P 12 14 14.4 -0.2**
baz=92
**N29A Votaw Ranch, W 91.39 47 P P 12 14 15.2 +0.5**
baz=92
**338A Crockett 91.43 57 P P 12 14 15.5 +0.5**
baz=92
**LCO Las Campanas 91.44 122** PFAKE 12 14 30.0 +14
LCO LR LR
comp=Z,8µm,18.0s
**Q31A Ellis 91.47 49 P P 12 14 15.3 +0.2**
baz=92
**O30A MW Ranch, Wils 91.51 48 P P 12 14 15.4 +0.1**
baz=92
**V34A Guthrie 91.52 52** PFAKE 12 14 30.0 +15
V34A LR LR
comp=Z,6µm,19.0s
**G25A Newell 91.53 42 P P 12 14 16.2 +0.9**
baz=92
**J27A Elkhorn Farm, 91.55 44 P P 12 14 16.2 +0.8**
baz=92
**M29A Burnside Ranch 91.62 46 P P 12 14 16.4 +0.6**
baz=92
**439A Center Grove, 91.64 58 P P 12 14 16.1 +0.1**
baz=92
**Y36A Durant 91.67 54 P P 12 14 16.4 +0.3**
baz=92
**H26A Fairpoint 91.67 43 P P 12 14 15.6 -0.3**
baz=92
**P31A Stockton 91.70 48 P P 12 14 16.5 +0.4**
baz=92
**R32A Long Quarter, 91.71 50 P P 12 14 16.7 +0.5**
baz=92
**W35A Tecumseh 91.72 53 P P 12 14 16.8 +0.5**
baz=92
**K28A Ten Mile Ranch 91.73 45 P P 12 14 15.9 -0.3**
baz=92
**UTTA Uttaradit 91.75 288 P P** 12 14 25.0 +8.3
comp=Z,3.4nm,0.9s
**U34A Anderson Ranch 91.75 52 P P 12 14 16.1 -0.3**
baz=92
**U34A Anderson Ranch 91.75 52** PFAKE 12 14 30.0 +14
U34A LR LR
comp=Z,6µm,19.0s
**238A Jacksonville 91.83 57 P P 12 14 16.7 -0.1**
baz=92
**F25A Bowman 91.84 41 P P 12 14 17.3 +0.6**
baz=92
**X36A Centrahoma 91.88 54 P P 12 14 16.4 -0.6**
baz=92
**I27A Quinn 91.88 43 P P 12 14 17.3 +0.4**
baz=92
**Z37A Pogue Cattle C 91.90 55 P P 12 14 17.2 +0.1**
baz=92
**NANT Nan 91.99 289 P P** 12 14 25.8 +7.9
comp=Z,4.2nm,1.0s
**TGUH Tegucigalpa,Un 92.01 76** PFAKE 12 14 30.0 +12
TGUH LR LR
comp=Z,3µm,19.0s
**L29A Maesberg Ranch 92.04 46 P P 12 14 17.8 +0.2**
baz=92
**540A Vidor 92.05 59 P P 12 14 18.2 +0.3**
baz=92
**Q32A Meitler Ranch, 92.06 49 P P 12 14 18.3 +0.5**
baz=92
**G26A Maurine 92.09 42 P P 12 14 18.1 +0.3**
baz=92
**NATX Nacogdoches 92.09 57** PFAKE 12 14 30.0 +12
NATX LR LR
comp=Z,2µm,18.0s
**138A Matatall Enter 92.11 56 P P 12 14 18.0 -0.1**
baz=92
**H27A Howes 92.12 43 P P 12 14 18.8 +0.8**
baz=92
**J28A Allard Ranch, 92.13 44 P P 12 14 18.9 +0.9**
baz=92
**W36A Wetumka 92.20 53 P P 12 14 18.6 +0.1**
baz=92
**Y37A Hugo 92.21 55 P P 12 14 18.1 -0.4**
baz=92
**T34A McClaskey Farm 92.24 51 P P 12 14 19.1 +0.4**
baz=92
**PHRA Phrae 92.30 289 P P** 12 14 27.8 +8.5
comp=Z,129nm,0.7s,comp=Z,29µm
**U35A Pawnee 92.31 52 P P 12 14 19.2 +0.1**
baz=92
**239A Gary 92.34 57 P P 12 14 19.0 -0.2**
baz=92
**I28A Midland 92.42 44 P P 12 14 19.5 +0.1**
baz=93
**K29A Lazy Trails An 92.44 45 P P 12 14 20.2 +0.7**
baz=93
**KMI Kunming 92.47 296 P P 12 14 21.7 +1.4**
KMI pP **pP 12 14 31.0 +2.5**
KMI sP **sP 12 14 32.3 +0.8**
KMI PP **PP 12 18 01.3 -0.5**
KMI S **S 12 25 21.5 -1.7**
KMI sS **sS 12 25 32.4 -4.5**
KMI SS **SS 12 31 34.3 -1.0**
KMI PMZ
comp=Z,16nm,1.1s
KMI PMZ
comp=Z,330nm,4.2s
KMI LN
comp=Z,1µm,17.3s
KMI LE
comp=Z,2µm,17.3s
KMI LZ
comp=Z,3µm,17.0s
**D25A Fairfield 92.49 40 P P 12 14 20.6 +1.0**
baz=93
**L30A Spencer Herefo 92.50 46 P P 12 14 20.2 +0.4**
baz=93
**N31A Bailey Ranch, 92.54 47 P P 12 14 19.9 -0.1**
baz=93
**G27A Dupree 92.55 42 P P 12 14 20.1 +0.2**
baz=93
**S34A Willow Spring 92.57 51 P P 12 14 19.9 -0.3**
baz=93
**340A Bronson 92.57 58 P P 12 14 20.0 -0.3**
baz=93
**DGMT Dagmar 92.59 39 P P 12 14 20.2 +0.2**
baz=93
**DGMT Dagmar 92.59 39** *e*P **P 12 14 19.9 -0.1**
comp=Z,266nm,1.5s
DGMT LR LR
comp=Z,5µm,20.0s
**X37A Clayton 92.64 54 P P 12 14 20.4 -0.2**
baz=93
**139A Bunkhouse Ranc 92.66 56 P P 12 14 20.8 +0.2**
baz=93
**NNA Nana 92.66 104** PFAKE 12 14 30.0 +8.8
NNA LR LR
comp=Z,4µm,18.0s
**V36A Jenks 92.67 53 P P 12 14 20.5 -0.1**
baz=93
**T35A Sooner Cattle 92.69 52 P P 12 14 20.9 +0.1**
baz=93
**E26A Carlson Angus 92.71 41 P P 12 14 20.2 -0.4**
baz=93
**R34A Isabella, Hill 92.71 50 P P 12 14 21.0 +0.2**
baz=93
**F27A Lemmon 92.71 42 P P 12 14 20.5 -0.2**
baz=93
**J29A Okreek 92.72 45 P P 12 14 20.9 +0.1**
baz=93
**C25A Freed Ranch, W 92.79 40 P P 12 14 21.3 +0.3**
baz=93
**W37A Quinton 92.81 54 P P 12 14 21.1 -0.2**
baz=93
**H28A Mission Ridge 92.82 43 P P 12 14 21.2 0.0**
baz=93
**TUL1 Tulsa 92.83 53 P P 12 14 21.0 -0.4**

baz=93
**TUL1 Tulsa 92.83 53** PFAKE 12 14 30.0 +8.6
TUL1 LR LR
comp=Z,6µm,19.0s
**LAMP Lampang 92.84 289** P P 12 14 25.9 +4.1
comp=Z,8.8nm,0.9s,comp=Z,71nm
**JTS JuntasAbangare 92.85 80**‖ *eP* **P 12 14 21.6 -0.4**
JTS pmax pmax
comp=Z,48nm,1.4s
**JTS JuntasAbangare 92.85 80** PFAKE 12 14 30.0 +8.0
JTS LR LR
comp=Z,3µm,18.0s
**P33A Williams Farm, 92.85 49** P **P 12 14 21.3 -0.1**
baz=93
**K30A Basset 92.88 45** P **P 12 14 21.3 -0.2**
baz=93
**D26A Manning 92.98 41** P **P 12 14 22.0 +0.1**
baz=93
**I29A Vivian Onida 93.00 44** P **P 12 14 22.5 +0.5**
baz=93
**G28A Parade 93.06 43** P **P 12 14 21.9 -0.3**
baz=93
**U36A Oologah 93.06 52** P **P 12 14 22.0 -0.5**
baz=93
**X38A Whitesboro 93.08 54** P **P 12 14 22.3 -0.3**
baz=93
**S35A Otter Creek Ra 93.14 51** P **P 12 14 22.5 -0.3**
baz=93
**Q34A Chapman 93.18 50** P **P 12 14 22.7 -0.3**
baz=93
**L31A Butterfield Fa 93.19 46** P **P 12 14 22.9 -0.1**
baz=93
**O33A Hebron 93.19 48** P **P 12 14 23.0 0.0**
baz=93
**T36A Boggs Farm, Ca 93.22 52** P **P 12 14 22.7 -0.5**
baz=93
**J30A Dallas 93.23 45** P **P 12 14 22.7 -0.4**
baz=93
**E27A Carson 93.25 41** P **P 12 14 23.4 +0.3**
baz=94
**TEIG Tepich 93.25 70** PFAKE 12 14 30.0 +6.3
TEIG LR LR
comp=Z,3µm,18.0s
**V37A Hulbert 93.31 53** P **P 12 14 23.7 +0.1**
baz=94
**H29A Onida 93.31 43** P **P 12 14 23.7 +0.3**
baz=94
**BGNE Belgrade 93.34 47** PFAKE 12 14 30.0 +6.3
BGNE LR LR
comp=Z,2µm,20.0s
**YAK Yakutsk 93.36 337** P **P 12 14 22.7 -0.4**
comp=Z,2.8nm,0.3s,baz=329,slow=1.5
**YAK Yakutsk 93.36 337**‖ *iP* **P 12 14 22.6 -0.6**
YAK pmax pmax
comp=Z,11nm,0.8s
**CM01 Chiang Mai Arr 93.40 288** *eP* P 12 14 19.5 -4.9
**CM31 Chiang Mai Arr 93.43 288** *eP* **P 12 14 25.8 +1.2**
**CMAR Chiang Mai Arr 93.43 288** P **P 12 14 25.8 +1.2**
comp=Z,3.0nm,0.9s,baz=113,slow=2.8,SNR=13
**CMAR Chiang Mai Arr 93.43 288** P **P 12 14 25.8 +1.2**
CMAR pmax pmax
comp=Z,3.0nm,0.9s
**K31A O'Neill 93.43 46** P **P 12 14 24.9 +0.8**
baz=94
**A25A Svangstu Ranch 93.44 39** P **P 12 14 24.4 +0.4**
baz=94
**F28A McLaughlin 93.47 42** P **P 12 14 24.6 +0.4**
baz=94
**KSU1 Kansas State U 93.49 50** PFAKE 12 14 40.0 +16
KSU1 LR LR
comp=Z,4µm,19.0s
**P34A Walnut Farm, R 93.51 49** P **P 12 14 24.7 +0.2**
baz=94
**C26A Wahner Farm, P 93.54 40** P **P 12 14 25.1 +0.6**
baz=94
**CHTO Chiang Mai 93.55 289** P P 12 14 28.7 +3.6
comp=Z,52nm,1.9s
**CHTO Chiang Mai 93.55 289** *eP* **P 12 14 25.7 +0.6**
CHTO pmax pmax
comp=Z,25nm,1.1s
**CHTO Chiang Mai 93.55 289** *eP* **P 12 14 25.7 +0.6**
comp=Z,25nm,1.1s
**D27A Center 93.57 41** P **P 12 14 25.3 +0.7**
baz=94
**J31A Geddes 93.72 45** P **P 12 14 25.7 +0.3**
baz=94
**CD2 Chengdu 93.73 301** *eP* **P 12 14 26.0 +0.3**
CD2 pP **pP 12 14 33.7 -0.3**
CD2 PP **PP 12 18 11.5 +0.1**
CD2 SKS **SKSac 12 24 58.8 -0.3**
CD2 S **S 12 25 34.4 +0.6**
CD2 sS **sS 12 25 47.5 0.0**
CD2 SS **SS 12 31 54.9 +2.1**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,140nm,5.0s
CD2 LE
comp=Z,890nm,16.6s
CD2 LZ
comp=Z,1µm,13.5s
**CMAI Chiengmai2 93.84 290** P P 12 14 31.8 +5.2
comp=Z,16nm,1.1s
**E28A Huff 93.85 42** P **P 12 14 26.3 +0.5**
baz=94
**TRQA Tornquist 93.89 133** PFAKE 12 14 40.0 +14
TRQA LR LR
comp=Z,4µm,19.0s
**MIAR Mount Ida 93.99 55** PFAKE 12 14 40.0 +13
MIAR LR LR
comp=Z,4µm,19.0s
**SUSD South Dakota S 94.05 44** P **P 12 14 26.9 0.0**
baz=94
**M33A Taylor Creek F 94.06 47** P **P 12 14 27.0 0.0**
baz=94
**P35A Duane Minner, 94.08 49** P **P 12 14 27.4 +0.3**
baz=94
**CMBY CAMPBELL BAY 94.13 276** *eP* **P 12 14 27.5 -0.4**
CMBY AMS AMS 13 05 38.4
comp=Z,1µm,13.2s
**I31A Royce, Wessing 94.16 44** P **P 12 14 27.8 +0.5**
baz=94
**N34A Lincoln 94.25 48** P **P 12 14 27.3 -0.5**
baz=94
**Q36A Arnold C. Orve 94.26 50** P **P 12 14 27.3 -0.6**
baz=94
**B27A Peters Farms, 94.30 40** P **P 12 14 27.7 -0.2**
baz=94
**A27A Ledoux Ranch, 94.55 39** P **P 12 14 29.2 +0.2**
baz=95
**L34A Svendsen Farm, 94.78 47** P **P 12 14 30.3 0.0**
baz=95
**MDND Maddock 95.06 41** P **P 12 14 31.4 0.0**
baz=95
**MDND Maddock 95.06 41** PFAKE 12 14 40.0 +8.6
MDND LR LR
comp=Z,5µm,19.0s
**H32A Carlson Farm, 95.07 44** P **P 12 14 31.6 +0.1**
baz=95
**F31A Hecla 95.09 43** P **P 12 14 31.4 -0.1**
baz=95
**A28A Rude Farm, Bot 95.11 40** P **P 12 14 31.2 -0.4**
baz=95
**K34A Le Mars 95.25 46** P **P 12 14 32.1 -0.2**
baz=96
**D30A Buchanan 95.28 42** P **P 12 14 32.5 0.0**
baz=96
**ECSD EROS Data Cent 95.31 45** P **P 12 14 32.3 -0.3**
baz=96
**ECSD EROS Data Cent 95.31 45** *eP* **P 12 14 32.7 +0.1**
comp=Z,223nm,1.7s
ECSD LR LR
comp=Z,2µm,18.0s
**OTAV Otavalo 95.49 92** PFAKE 12 14 50.0 +15
OTAV LR LR
comp=Z,4µm,19.0s
**LZH Lanzhou 95.53 306** *eP* **P 12 14 34.9 +0.9**
LZH pP **pP 12 14 42.6 +0.3**
LZH sP **sP 12 14 45.3 +0.1**
LZH SKS **SKSac 12 25 08.0 -0.8**
LZH S **ScS 12 25 51.0 +0.7**
LZH sS **sS 12 26 01.1 -2.1**
LZH PMZ
comp=Z,15nm,1.0s
LZH PMZ
comp=Z,160nm,5.4s
**VBMS Vicksburg 95.54 58** PFAKE 12 14 40.0 +6.1
VBMS LR LR
comp=Z,4µm,20.0s
**LVC Limon Verde 95.54 116** PFAKE 12 14 50.0 +15
LVC LR LR
comp=Z,6µm,18.0s
**J34A George 95.58 46** P **P 12 14 33.7 -0.1**
baz=96
**H33A Prehn Over Nor 95.60 44** P **P 12 14 33.7 -0.2**
baz=96
**E31A Nome 95.60 42** P **P 12 14 33.8 -0.1**
baz=96
**C30A Mose, Pekin 95.69 41** P **P 12 14 34.0 -0.3**
baz=96
**A29A Manning Farm, 95.74 40** P **P 12 14 33.4 -1.0**
baz=96
**K35A Storm Lake 95.85 47** P **P 12 14 34.7 -0.4**
baz=96
**B30A Myrvik Farm, E 96.09 40** P **P 12 14 35.6 -0.4**
baz=96
**E32A Braaten, Kindr 96.13 43** P **P 12 14 35.8 -0.5**
baz=96
**C31A Landman Farms, 96.19 41** P **P 12 14 36.4 -0.1**
baz=96
**F33A 5 Mile Ranch, 96.34 43** P **P 12 14 36.7 -0.5**
baz=96
**FFC Flin Flon 96.66 34** PFAKE 12 14 50.0 +12
FFC LR LR
comp=Z,8µm,19.0s
**PBA Port Blair 96.79 280** *eP* P 12 14 39.7 -0.3
**SCIA State Center 96.94 48** PFAKE 12 14 50.0 +10
SCIA LR LR
comp=Z,2µm,19.0s
**DGPR DIGLIPUR 97.11 281** *eP* **P 12 14 40.4 -1.0**
**B32A Ashes, Strandq 97.17 41** P **P 12 14 39.6 -1.4**
baz=97
**PBMO Poplar Bluff 97.18 54** PFAKE 12 14 50.0 +8.7
PBMO LR LR
comp=Z,5µm,19.0s
**OXF Oxford 97.19 56** PFAKE 12 14 50.0 +8.5
OXF LR LR
comp=Z,8µm,19.0s
**BCIP Isla Barro Col 97.22 83** PFAKE 12 14 50.0 +8.0
BCIP LR LR
comp=Z,2µm,18.0s
**HOPE Hope Point 97.28 157** PFAKE 12 14 50.0 +8.5
HOPE LR LR
comp=Z,7µm,20.0s
**AGMN Agassiz Nation 97.55 41** PFAKE 12 14 50.0 +7.3
AGMN LR LR
comp=Z,2µm,19.0s
**ULN Ulaanbaatar 97.61 318**‖ *eP* Pdif 12 14 45.5 +2.3
ULN pmax pmax
comp=Z,3.0nm,1.1s
**ULN Ulaanbaatar 97.61 318** PFAKE 12 14 50.0 +6.8
ULN LR LR
comp=Z,1µm,18.0s
**BRAL Brewton 97.91 60** PFAKE 12 15 00.0 +15
BRAL LR LR
comp=Z,3µm,19.0s
**SLM Saint Louis 97.95 52** PFAKE 12 15 00.0 +15
SLM LR LR
comp=Z,5µm,19.0s
**SONA1 Songino Array 98.01 318** *eP* Pdif 12 14 46.4 +1.4
**SONA0 Songino Array 98.01 318** *eP* Pdif 12 14 45.8 +0.8
**SONM Songino Array 98.01 318** P Pdif 12 14 45.8 +0.8
comp=Z,1.5nm,0.9s,baz=127,slow=3.8,SNR=5.4
**SONM Songino Array 98.01 318** P Pdif 12 14 45.8 +0.8
SONM pmax pmax
comp=Z,2.0nm,0.9s
**ULM Lac du Bonnet 98.27 39** PFAKE 12 15 00.0 +14
ULM LR LR
comp=Z,6µm,19.0s
**B34A Aery, Baudette 98.37 41** Pdiff Pdif 12 14 47.5 +1.1
baz=99
**SPMN St. Paul 98.39 45** PFAKE 12 15 00.0 +13
SPMN LR LR
comp=Z,3µm,18.0s
**SIUC Southern Illin 98.40 53** PFAKE 12 15 00.0 +13
SIUC LR LR
comp=Z,3µm,20.0s
**C35A Jirik Farms, M 98.51 42** Pdiff Pdif 12 14 48.6 +1.6
**C36A Pine Crest Far 99.25 43** Pdiff **Pdif 12 14 51.1 +0.8**
baz=100
**HDIL Hopedale 99.27 50** PFAKE 12 15 00.0 +9.5
HDIL LR LR
comp=Z,6µm,19.0s
**D37A Cotton 99.31 43** Pdiff **Pdif 12 14 51.1 +0.6**
baz=100
**JFWS Jewell Farm 99.35 48** PFAKE 12 15 00.0 +9.1
JFWS LR LR
comp=Z,3µm,18.0s
**OLIL Olney 99.56 52** PFAKE 12 15 00.0 +8.1
OLIL LR LR
comp=Z,5µm,18.0s
**USIN University of 99.64 53** PFAKE 12 15 00.0 +7.7
USIN LR LR
comp=Z,5µm,19.0s
**SWET Sewanee 100.13 56** PFAKE 12 15 10.0 +15
SWET LR LR
comp=Z,4µm,20.0s
**EYMN Ely 100.16 43** PFAKE 12 15 10.0 +16
EYMN LR LR
comp=Z,4µm,19.0s
**WCI Wyandotte Cave 100.76 53** PFAKE 12 15 10.0 +13
WCI LR LR
comp=Z,5µm,19.0s
**SFIN Scholer Farm 100.81 51** PFAKE 12 15 10.0 +13
SFIN LR LR
comp=Z,4µm,18.0s
**BLO Bloomington 100.87 52** PFAKE 12 15 10.0 +12
BLO LR LR
comp=Z,5µm,19.0s
**TLY Talaya 101.01 321** PFAKE 12 15 10.0 +12
TLY LR LR
comp=Z,2µm,19.0s
**COWI Conover 101.11 45** PFAKE 12 15 10.0 +11
COWI LR LR
comp=Z,3µm,19.0s
**GOGA Godfrey 101.54 59** PFAKE 12 15 10.0 +9.2
GOGA LR LR
comp=Z,4µm,19.0s
**SHL Shillong 101.90 293** *eP* **Pdif 12 15 02.6 -0.3**
**MTDJ Mount Denham 102.21 75** PFAKE 12 15 20.0 +16
MTDJ LR LR
comp=Z,2µm,20.0s
**JSC Jenkinsville 103.55 58** PFAKE 12 15 20.0 +10
JSC LR LR
comp=Z,2µm,18.0s
**LSA Lhasa 103.68 297** PFAKE 12 15 20.0 +8.9
LSA LR LR
comp=Z,999nm,19.0s
**KMSC Kings Mountain 103.72 57** PFAKE 12 15 20.0 +10
KMSC LR LR
comp=Z,3µm,19.0s
**ACSO Alum Creek Sta 103.78 52** PFAKE 12 15 20.0 +9.3
ACSO LR LR
comp=Z,4µm,19.0s
**AAM Ann Arbor 103.83 50** PFAKE 12 15 20.0 +9.2
AAM LR LR
comp=Z,5µm,19.0s
**NHSC New Hope 104.11 60** PFAKE 12 15 20.0 +7.8
NHSC LR LR
comp=Z,3µm,19.0s
**GTBY Guantanamo Bay 104.89 74** PFAKE 12 15 30.0 +14
GTBY LR LR
comp=Z,1µm,19.0s
**BLA Blacksburg 104.96 56** PFAKE 12 15 30.0 +14
BLA LR LR
comp=Z,4µm,19.0s
**SDV Santo Domingo 105.72 86** PFAKE 12 19 40.0
SDV LR LR
comp=Z,1µm,19.0s
**MCWV Mont Chateau 105.98 53** PFAKE 12 19 40.0
MCWV LR LR
comp=Z,3µm,19.0s
**ALLY Alegheny Colle 106.21 51** PFAKE 12 19 40.0
ALLY LR LR
comp=Z,4µm,19.0s
**SAML Samuel 106.21 106** PFAKE 12 19 40.0
SAML LR LR
comp=Z,1µm,20.0s
**CNNC Cliffs of the 106.47 58** PFAKE 12 19 40.0
CNNC LR LR
comp=Z,3µm,18.0s
**PALK Pallekele 106.60 272** PFAKE 12 19 50.0
PALK LR LR
comp=Z,3µm,19.0s
**BOK Bokaro 106.65 290** *eP* **Pdif 12 15 23.2 -0.6**
**LGNH LØogne 106.77 76** PFAKE 12 19 50.0
LGNH LR LR
comp=Z,4µm,21.0s
**PAPH Port-au-Prince 107.05 76** PFAKE 12 19 50.0
PAPH LR LR
comp=Z,3µm,20.0s
**VIS Vishakhapatnam 107.31 283** *eP* **Pdif 12 15 25.6 -1.2**
**CBN Corbin 107.54 55** PFAKE 12 19 50.0
CBN LR LR
comp=Z,4µm,19.0s
**SADO Sadowa 107.59 48** PFAKE 12 19 50.0
SADO LR LR
comp=Z,2µm,20.0s
**MMNY Mt. Morris Dam 108.06 50** PFAKE 12 19 50.0
MMNY LR LR
comp=Z,4µm,19.0s
**SDDR Presa de Saban 108.10 76** PFAKE 12 19 50.0
SDDR LR LR
comp=Z,3µm,21.0s
**SDMD Soldier's Deli 108.20 54** PFAKE 12 19 50.0
SDMD LR LR
comp=Z,4µm,20.0s
**MDRS Chennai 108.82 277** *eP* **Pdif 12 15 32.6 -0.9**
**DGAR Diego Garcia 108.91 254** PFAKE 12 19 50.0
DGAR LR LR
comp=Z,3µm,18.0s
**GRTK Grand Turk 108.91 73** PFAKE 12 19 50.0
GRTK LR LR
comp=Z,2µm,18.0s
**BINY Binghamton 109.36 51** PFAKE 12 19 50.0
BINY LR LR
comp=Z,4µm,19.0s
**LUPA Lehigh Univers 109.53 53** PFAKE 12 19 50.0
LUPA LR LR
comp=Z,5µm,19.0s
**WMQ Urumqi 109.53 310** *e*Pdif **Pdif 12 15 35.0 -1.2**
WMQ PP **PP 12 20 14.0 +3.7**
WMQ S **Sdif 12 27 43.0 -3.6**
WMQ PPMZ
comp=Z,120nm,10.0s
WMQ LN
comp=Z,720nm,22.0s
WMQ LE
comp=Z,960nm,22.0s
WMQ LZ
comp=Z,880nm,22.0s
**BRNJ Basking Ridge 110.15 53** PFAKE 12 19 50.0
BRNJ LR LR
comp=Z,9µm,19.0s
**ODNJ Ogdensburg 110.19 53** PFAKE 12 19 50.0
ODNJ LR LR
comp=Z,4µm,19.0s
**TRD Trivandrum 110.50 272** *eP* **PKiKP 12 19 39.5 -2.3**
**CPNY Central Park 110.62 53** PFAKE 12 19 50.0
CPNY LR LR
comp=Z,9µm,20.0s
**PAL Palisades 110.70 53** PFAKE 12 19 50.0
PAL LR LR
comp=Z,7µm,19.0s
**LONY Lake Ozonia 110.76 49** PFAKE 12 19 50.0
LONY LR LR
comp=Z,3µm,19.0s
**NCB Newcomb 110.92 50** PFAKE 12 19 50.0
NCB LR LR
comp=Z,4µm,20.0s
**TRY Troy 111.14 51** PFAKE 12 19 50.0
TRY LR LR
comp=Z,6µm,20.0s
**ACCN Adirondack Com 111.24 50** PFAKE 12 19 50.0
ACCN LR LR
comp=Z,2µm,19.0s
**YLE Yale 111.47 53** PFAKE 12 19 50.0
YLE LR LR
comp=Z,7µm,19.0s
**HYB Hyderabad 111.61 281** *eP* **PKiKP 12 19 41.6 -2.3**
**CRPR Cabo Rojo, PR 111.66 78** PFAKE 12 20 00.0
CRPR LR LR
comp=Z,2µm,20.0s
**AOPR Arecibo Observ 112.07 78** PFAKE 12 20 00.0
AOPR LR LR
comp=Z,4µm,21.0s
**PTGA Pitinga 112.39 100** PFAKE 12 20 00.0
PTGA LR LR
comp=Z,4µm,19.0s
**SJG San Juan 112.57 78** PFAKE 12 20 00.0
SJG LR LR
comp=Z,1µm,18.0s
**BRYW Bryant College 112.59 52** PFAKE 12 20 00.0
BRYW LR LR
comp=Z,6µm,20.0s
**LBNH Lisbon 112.60 50** PFAKE 12 20 00.0
LBNH LR LR
comp=Z,5µm,19.0s
**HRV Adam Dziewonsk 112.65 51** PFAKE 12 20 00.0
HRV LR LR
comp=Z,5µm,19.0s
**CPD Cerro la Pandu 112.76 78** PFAKE 12 20 00.0
CPD LR LR
comp=Z,7µm,18.0s
**HUMP Col San Antoni 112.85 78** PFAKE 12 20 00.0
HUMP LR LR
comp=Z,2µm,18.0s
**MK32 Makanchi Array 113.70 313** *e*PKiKP **PKiKP 12 19 45.8 -1.2**
**MKAR Makanchi Array 113.70 313** PKiKP **PKiKP 12 19 45.8 -1.2**
comp=Z,0.4nm,0.4s,baz=64,slow=2.8,SNR=3.8
**MAKZ Makanchi 113.91 313** PFAKE 12 20 00.0
MAKZ LR LR
comp=Z,1µm,19.0s
**BHPL Bhopal 114.05 287** *eP* PKPdf 12 19 47.8 -0.6
BHPL AMB AMB 12 20 12.2
comp=Z,26nm,2.5s
BHPL AMS AMS 12 57 55.3
comp=Z,6µm,23.3s
**WVL Waterville 114.25 49** PFAKE 12 20 00.0 +12
WVL LR LR
comp=Z,5µm,19.0s
**PKME Peaks-Kenny Pk 114.57 49** PFAKE 12 20 00.0 +11
PKME LR LR
comp=Z,4µm,19.0s
**DDI Dehra Dun 114.89 295** *eP* PKPdf 12 19 47.9 -2.0
**GRGR Grenville 115.11 86** PFAKE 12 20 00.0 +9.4
GRGR LR LR
comp=Z,1µm,18.0s
**GOA Goa 115.47 278** *eP* **PKPdf 12 19 49.4 -1.8**
**SMLA Simla 115.78 296** *eP* **PKPdf 12 19 50.7 -0.7**
**BDFB Brasilia 116.18 120** PFAKE 12 20 00.0 +7.2
BDFB LR LR
comp=Z,8µm,19.0s
**POO Poona 116.22 281** *eP* **PKPdf 12 19 52.1 -0.6**
POO AMS AMS 13 15 54.6
comp=Z,996nm,13.5s
**FDF Fort de France 116.31 83** PFAKE 12 20 00.0 +7.1
FDF LR LR
comp=Z,2µm,18.0s
**KURK Kurchatov 116.31 317** PKIKP **PKPdf 12 19 49.5 -2.3**
KURK 12 20 55.6
KURK pmax pmax
comp=Z,1.0nm,0.8s
KURK pmax pmax
comp=Z,1.0nm,0.8s
**KURK Kurchatov 116.31 317** *e*PKPdf **PKPdf 12 19 49.5 -2.3**
KURK *e*PP **PP 12 20 55.6 -2.5**
KURK LR LR
comp=Z,2µm,19.0s
**KURBB Kurchatov Arra 116.36 317** PKP **PKPdf 12 19 49.5 -2.5**
comp=Z,1.0nm,0.8s,baz=103,slow=2.0,SNR=9.2
KURBB PP **PP 12 20 55.6 -2.9**
comp=Z,0.9nm,0.8s,baz=96,slow=7.5,SNR=10
**ANWB Willy Bob 116.47 80** PFAKE 12 20 00.0 +6.9
ANWB LR LR
comp=Z,1µm,20.0s
**DHRM DHARAMSHALA 116.68 297** *eP* **PKPdf 12 19 52.6 -0.9**
**BBSR BB Station 116.73 63** PFAKE 12 20 00.0 +6.8
BBSR LR LR
comp=Z,1µm,19.0s
**KSH Kashi 117.73 305** *e*PKP **PKPdf 12 19 57.8 +2.7**
KSH PKS **PKSdf 12 23 27.9 -4.0**
KSH SKS **SKSdf 12 27 04.3 -1.5**
KSH PPMZ
comp=Z,120nm,5.3s
KSH LN
comp=Z,670nm,16.0s

KSH LE
comp=Z,620nm,14.5s
KSH LZ
comp=Z,910nm,18.1s
**AAK Ala-Archa 119.01 308** *i* PKIKP **PKPdf** 12 19 55.7 **-1.9**
**AAK Ala-Archa 119.01 308** PFAKE 12 20 10.0 +12
AAK LR LR
comp=Z,1μm,20.0s
**EKS2 Erkin-Say 119.54 308** PFAKE 12 20 10.0 +11
EKS2 LR LR
comp=Z,1μm,18.0s
**BHJ Bhuj 121.05 285** *e*P **PKPdf** **12 20 01.3 -0.5**
**BVAR Borovoye Array 121.26 320** PKP **PKPdf** **12 20 00.5 -0.8**
comp=Z,1.4nm,0.5s,baz=70,slow=1.7,SNR=8.8
BVAR PP **PP** **12 21 30.1 -2.2**
comp=Z,2.0nm,0.8s,baz=79,slow=7.7,SNR=4.4
**BVAR Borovoye Array 121.26 320** PKIKP **PKPdf** **12 20 00.5 -0.8**
BVAR 12 21 30.1
BVAR pmax pmax
comp=Z,1.0nm,0.5s
BVAR pmax pmax
comp=Z,2.0nm,0.8s
**BRVK Borovoye 121.32 320** *i* PKIKP **PKPdf** **12 20 00.0 -1.4**
BRVK pmax pmax
comp=Z,10.0nm,2.5s
**SFJD Kangerlussuaq 121.49 23** PFAKE 12 20 10.0 +8.7
SFJD LR LR
comp=Z,4μm,20.0s
**SUMG Summit 122.18 14** PFAKE 12 20 10.0 +6.9
SUMG LR LR
comp=Z,3μm,19.0s
**KBL Kabul 122.94 299**⇑ *e*PKIKP **PKPdf** **12 20 05.4 0.0**
**ARU Arti 127.09 326** *i* PKIKP **PKPdf** **12 20 11.1 -1.3**
ARU 12 22 09.4
ARU 12 27 15.0
**ARA0 ARCESS Array S 129.40 351** *e*PKPdf **PKPdf** **12 20 16.8 +0.3**
**ARCES ARCESS Array B 129.40 351** PKP **PKPdf** **12 20 16.8 +0.3**
comp=Z,3.3nm,0.9s,baz=1.0,slow=7.3,SNR=3.9
**ARCES ARCESS Array B 129.40 351** PKIKP **PKPdf** **12 20 16.8 +0.3**
ARCES pmax pmax
comp=Z,3.0nm,0.9s
**APA Apatity 129.69 347**⇓ *i* PKIKP PKPdf 12 20 33.0 +16
APA MLR MLR
comp=Z,2μm,18.0s
**RCBR Riachuelo 131.47 118** PFAKE 12 20 30.0 +7.9
RCBR LR LR
comp=Z,5μm,18.0s
**GEYT Alibeck 131.70 303** PKP **PKPdf** **12 20 21.7 -0.1**
comp=Z,2.2nm,0.3s,baz=258,slow=2.7,SNR=5.4
**FIA0 FINESS Array S 136.59 346** *e*PKIKP **PKPdf** **12 20 31.5 +1.3**
**FIA0 FINESS Array S 136.59 346** *e*PKPdf **PKPdf** **12 20 31.4 +1.3**
**FINES FINESS Array B 136.59 346** PKP **PKPdf** **12 20 31.4 +1.3**
comp=Z,14nm,1.1s,baz=194,slow=2.9,SNR=4.2
**FINES FINESS Array B 136.59 346** PKIKP **PKPdf** **12 20 31.5 +1.3**
FINES pmax pmax
comp=Z,14nm,1.1s
**LSZ Lusaka 138.28 214** PFAKE 12 20 50.0 +15
LSZ LR LR
comp=Z,2μm,18.0s
**KONO Kongsberg 140.68 357** PFAKE 12 20 50.0 +12
KONO LR LR
comp=Z,1μm,20.0s
**KIV Kislovodsk 141.37 316** *e*PKIKP **PKPdf** **12 20 36.8 -2.8**
KIV pmax pmax
comp=Z,6.0nm,0.9s
**KIV Kislovodsk 141.37 316** PFAKE 12 20 50.0 +10
KIV LR LR
comp=Z,2μm,19.0s
**KMBO Kilima Mbogo 142.49 239** PKP **PKPdf** **12 20 39.8 -2.9**
comp=Z,1.2nm,0.3s,baz=50,slow=2.1,SNR=4.7
**KMBO Kilima Mbogo 142.49 239** *e*PKPdf **PKPdf** **12 20 40.4 -2.3**
KMBO LR LR
comp=Z,2μm,18.0s
**DAMY Dhamar 142.78 267** PFAKE 12 20 50.0 +6.8
DAMY LR LR
comp=Z,2μm,18.0s
**HAKT HAKKARI 142.96 306** P **PKPdf** **12 20 38.9 -4.0**
**RAYN Ar Rayn 143.10 282** *e*PKPpre PKPpre 12 20 38.4
RAYN LR LR
comp=Z,1μm,18.0s
**EKAR Karacoban 143.64 309** P PKPbc 12 20 41.5 0.0
**ANN Anapa 144.26 320** *i* PKIKP **PKPdf** **12 20 46.0 +1.5**
ANN *e*SS SS 12 42 44.6 +1.2
ANN pmax pmax
comp=Z,68nm,1.6s
**BNGL BINGOL 144.42 309** P PKPbc 12 20 43.7 -0.1
**ESK Eskdalemuir 144.47 9** PFAKE 12 21 00.0 +15
ESK LR LR
comp=Z,2μm,18.0s
**AKASG Malin Array Be 144.54 334** PKP **PKPab** **12 20 42.6 -0.7**
comp=Z,11nm,0.5s,baz=40,slow=4.3,SNR=59
**AKASG Malin Array Be 144.54 334** PKIKP **PKPab** **12 20 42.6 -0.7**
AKASG pmax pmax
comp=Z,11nm,0.5s
**AKBB Malin Array Si 144.54 334** *e*PKIKP **PKPab** **12 20 42.6 -0.7**
**AKBB Malin Array Si 144.54 334** *e*PKPdf **PKPab** **12 20 42.6 -0.7**
**KIEV Kiev 144.55 334** *e*PKIKP **PKPab** **12 20 42.9 -0.4**
KIEV MLR MLR
comp=Z,1μm,20.0s
**KIEV Kiev 144.55 334** *e*PKPdf **PKPab** **12 20 42.9 -0.4**
KIEV LR LR
comp=Z,1μm,20.0s
**AK11 Malin Array Si 144.58 334** *e*PKPdf **PKPab** **12 20 42.8 -0.7**
**MARD Mardin 145.25 307** P **PKPdf** **12 20 46.6 -0.1**
**KELT Kelkit 145.30 312** P **PKPbc** **12 20 46.6 0.0**
**RGN Rugen 145.41 352** PFAKE 12 21 00.0 +14
RGN LR LR
comp=Z,2μm,18.0s
**DSB Dublin 145.88 13** PFAKE 12 21 00.0 +12
DSB LR LR
comp=Z,2μm,18.0s
**SUSE Susehri 146.01 313** P **PKPdf** **12 20 47.0 -1.0**
**SIM Simferopol' 146.11 323** *e*PKP2 **PKPab** **12 20 49.6 +0.3**
SIM pmax pmax
comp=Z,25nm,0.8s
**ELZG Elazig 146.16 310** P **PKPab** **12 20 50.8 +0.8**
**KEMA Kemaliye 146.20 311** P **PKPab** **12 20 50.1 +0.1**
**FURI Furi 146.26 255** PFAKE 12 21 00.0 +8.8
FURI LR LR
comp=Z,2μm,19.0s
**BSEG Bad Segeberg 146.32 355** *e*PKPbc **PKPdf** **12 20 48.3 +0.5**
baz=11,slow=2.6
**BEL Belsk 146.49 343** *e*PKP **PKPab** **12 20 50.3 -0.2**
**BEL Belsk 146.49 343** *e*PKP2 **PKPab** **12 20 50.4 -0.1**
**SCER sogukcermik 146.90 313** P **PKPab** **12 20 52.4 -0.3**
**CUKAN kangal_SIVAS 146.90 312** P **PKPdf** **12 20 48.1 -1.4**
**CWF Charnwood Fore 147.24 8** PFAKE 12 21 00.0 +6.6
CWF LR LR
comp=Z,2μm,19.0s
**HAVZ Havza 147.27 316** P **PKPdf** **12 20 48.8 -1.1**
**KIS Kishinev 147.49 330** *e*PKP **PKPdf** **12 20 51.0 +1.0**
comp=Z,100nm,1.8s
**KIS Kishinev 147.49 330** *e*PKP2 **PKPdf** **12 20 51.0 +1.0**
KIS pmax pmax
comp=Z,100nm,1.8s
**BOYT Boyabat 147.62 317** P **PKPbc** **12 20 53.8 +0.6**
**CUSAR Sarkisla-SIVAS 147.71 313** P **PKPbc** **12 20 52.7 -1.0**
**NRDL Niedersach Rie 147.77 355** *e*PKPbc **PKPbc** **12 20 52.3 -0.8**
baz=11,slow=2.6
**KWP Kalwaria Pacla 147.84 339** *e*PKP **PKPbc** **12 20 53.5 +0.1**
**KWP Kalwaria Pacla 147.84 339** *e*PKP2 **PKPbc** **12 20 53.6 +0.1**
**MBAR Mbarara 147.87 233** *e*PKP2 **PKPbc** **12 20 53.9 -0.9**
MBAR MLR MLR
comp=Z,3μm,18.0s
**MBAR Mbarara 147.87 233** *e*PKPbc **PKPbc** **12 20 53.9 -0.9**
MBAR LR LR
comp=Z,3μm,18.0s
**PINB Pinarbasi 147.93 311** P **PKPbc** **12 20 54.0 -0.4**
**IBBN Ibbenburen 148.10 358** *e*PKPbc **PKPbc** **12 20 53.3 -0.7**
baz=11,slow=2.6
**AYKD Aykdinkavak 148.16 309** P **PKPbc** **12 20 54.0 -0.8**
**OJC Ojcow 148.22 343** *e*PKP **PKPbc** **12 20 54.6 +0.2**
**OJC Ojcow 148.22 343** *e*PKP2 **PKPbc** **12 20 54.0 -0.4**
**OJC Ojcow 148.22 343** *e*PKPbc **PKPbc** **12 20 54.0 -0.4**
**CLZ Clausthal 148.40 355** *e*PKPbc **PKPbc** **12 20 54.1 -0.8**
baz=11,slow=2.6
**ANDN Andirin 148.43 309** P **PKPbc** **12 20 55.1 -0.5**
**KSP Ksiaz 148.49 347** *e*PKP **PKPbc** **12 20 55.6 +0.5**
**KSP Ksiaz 148.49 347** *e*PKP2 **PKPbc** **12 20 55.7 +0.6**
**STHS Stebnicka Huta 148.50 341** *e*PKP2 **PKPbc** **12 20 55.2 0.0**
**STHS Stebnicka Huta 148.50 341** *e*PKP **PKPbc** **12 20 55.1 -0.1**
STHS *e* 12 20 59.8
**KOLS Kolonicke sedl 148.59 339** *e*PKP2 **PKPbc** **12 20 55.2 -0.3**
**KOLS Kolonicke sedl 148.59 339** *e*PKP **PKPbc** **12 20 55.2 -0.3**
KOLS *e* 12 21 04.0
**BUR04 Bucovina Ar. S 148.59 334** *e*PKPbc **PKPbc** **12 20 56.0 +0.3**
**BURAR Bucovina Array 148.59 334** ⇓PKP2 **PKPbc** **12 20 56.3 +0.7**
**BURAR Bucovina Array 148.59 334** ⇓*i*P **PKPbc** **12 20 56.3 +0.7**
**CLL Collm 148.62 351** *e*PKP2 **PKPbc** **12 20 55.0 -0.4**
**CLL Collm 148.62 351** *e*PKPbc **PKPbc** **12 20 54.4 -1.0**
baz=11,slow=2.6
**CLL Collm 148.62 351** *e*PKPbc **PKPbc** **12 20 55.0 -0.4**
CLL *e*PKPab **PKPab** **12 20 58.0 -0.9**
comp=Z,14nm,0.8s
CLL *e* 12 21 11.0
**CLL Collm 148.62 351** *e*PKPbc **PKPbc** **12 20 54.0 -1.4**
CLL LR LR
comp=Z,3μm,19.0s
**GTTG Gvttingen 148.73 355** *e*PKPbc **PKPbc** **12 20 55.1 -0.6**
baz=11,slow=2.6
**NIE Niedzica 148.79 342** *e*PKP **PKPbc** **12 20 56.7 +0.8**
**NIE Niedzica 148.79 342** *e*PKP2 **PKPbc** **12 20 56.8 +0.8**
**TLCR 148.80 328**⇑ PKP2 **PKPbc** **12 20 56.4 +0.4**
**TLCR 148.80 328**⇑ *i*P **PKPbc** **12 20 56.4 +0.4**
**UZH Uzhgorod 148.84 339** ⇓*i*PKP2 **PKPbc** **12 20 55.2 -0.9**
**TESR Tescani 148.85 332**⇑ *i*P **PKPbc** **12 20 56.2 0.0**
**UPC Upice 148.87 347** *e*PKP2 **PKPbc** **12 20 56.5 +0.4**
**UPC Upice 148.87 347**⇑ *e*PKP **PKPbc** **12 20 56.5 +0.4**
**CDAG Cicekdag 148.88 314** P **PKPdf** **12 20 54.5 +1.8**
**BRG Berggiesshubel 148.90 350** *e*PKP **PKPbc** **12 20 56.2 0.0**
comp=Z,20nm,1.2s
**BRG Berggiesshubel 148.90 350** *e*PKP2 **PKPbc** **12 20 56.2 0.0**
BRG pmax pmax
comp=Z,20nm,1.2s
**BRG Berggiesshubel 148.90 350** *e*PKPbc **PKPbc** **12 20 55.2 -0.9**
baz=11,slow=2.6
**DPC Dobruska-Polom 148.95 347** *e*PKP2 **PKPbc** **12 20 56.6 +0.2**
**DPC Dobruska-Polom 148.95 347**⇑ *e*PKP **PKPbc** **12 20 56.6 +0.2**
DPC *e*PKPAB **PKPab** **12 21 00.9 +0.5**
DPC *ex* x 12 21 10.7
**OKC Ostrava-Krasne 149.00 344** *e*PKP2 **PKPbc** **12 20 56.9 +0.5**
**OKC Ostrava-Krasne 149.00 344**⇑ *e*PKP **PKPbc** **12 20 56.9 +0.5**
**KRLC Kraliky 149.11 346** *e*PKP2 **PKPbc** **12 20 56.4 -0.4**
**KRLC Kraliky 149.11 346**⇑ *e*PKP **PKPbc** **12 20 56.4 -0.4**
KRLC *ex* x 12 21 08.0
**PVCC Panska Ves 149.12 349** *e*PKP2 **PKPbc** **12 20 56.5 -0.2**
**PVCC Panska Ves 149.12 349**⇑ *e*PKP **PKPbc** **12 20 56.5 -0.2**
PVCC *ex* x 12 21 09.0
**CFR Carcaliu 149.14 328**⇑ PKP2 **PKPbc** **12 20 56.8 -0.1**
**CFR Carcaliu 149.14 328**⇑ *i*P **PKPbc** **12 20 56.8 -0.1**
**TRPA Tarpa 149.19 338** ⇓*i*P **PKPbc** **12 20 57.3 +0.4**
**MORC Moravsky Berou 149.21 345** *e*PKP2 **PKPbc** **12 20 56.9 -0.1**
MORC MLR MLR
comp=Z,8μm,19.0s
**MORC Moravsky Berou 149.21 345** ⇓*i*P **PKPbc** **12 20 57.3 +0.3**
**MORC Moravsky Berou 149.21 345** *e*PKPbc **PKPbc** **12 20 56.9 -0.1**
MORC LR LR
comp=Z,8μm,19.0s
**YAYL Yayladag 149.22 307** P **PKPbc** **12 20 56.2 -1.4**
**LANS Liptovska Anna 149.27 342** *e*PKP2 **PKPbc** **12 20 58.5 +1.3**
**LANS Liptovska Anna 149.27 342** *e*PKP **PKPbc** **12 20 58.5 +1.3**
**BR101 Keskin Array S 149.32 315** *e*PKPdf **PKPdf** **12 20 52.7 -0.7**
BR101 *e*PKPbc **PKPbc** **12 20 57.5 -0.3**
**BRTR Keskin Array B 149.32 315** PKP **PKPdf** **12 20 52.7 -0.7**
comp=Z,4.4nm,0.9s,baz=258,slow=3.4,SNR=3.6
BRTR PKPbc **PKPbc** **12 20 57.5 -0.3**
comp=Z,3.4nm,0.6s,baz=111,slow=3.2,SNR=19
**ARCR ARCALIA 149.37 335**⇑ *i*P **PKPbc** **12 20 57.7 +0.2**
**MOX Moxa 149.45 353** *e*PKPbc **PKPbc** **12 20 57.0 -0.5**
baz=11,slow=2.6
**TIRR Tirgusor 149.51 327** ⇓PKP2 **PKPbc** **12 20 58.1 +0.2**
**TIRR Tirgusor 149.51 327** ⇓*i*P **PKPbc** **12 20 58.1 +0.2**
**TIRR Tirgusor 149.51 327** PFAKE 12 21 00.0 +2.1
TIRR LR LR
comp=Z,3μm,20.0s
**TANN Tannenbergstha 149.57 352** *e*PKPbc **PKPbc** **12 20 57.5 -0.4**
baz=11,slow=2.6
**PRA Prague 149.59 349** *e*PKP2 **PKPbc** **12 20 57.0 -0.9**
**PRA Prague 149.59 349**⇑ *e*PKP **PKPbc** **12 20 57.0 -0.9**
**TLB Topalu 149.61 328** ⇓PKP2 **PKPbc** **12 20 58.0 -0.1**
**TLB Topalu 149.61 328** ⇓*i*P **PKPbc** **12 20 58.0 -0.1**
**PRU Pruhonice 149.65 349** *e*PKP2 **PKPbc** **12 20 57.4 -0.6**
**PRU Pruhonice 149.65 349**⇑ *e*PKP **PKPbc** **12 20 57.4 -0.6**
PRU *ex* x 12 21 09.2
**GOPC GO Pecny, Ondr 149.67 348** *e*PKP2 **PKPbc** **12 20 57.4 -0.7**
**GOPC GO Pecny, Ondr 149.67 348**⇑ *e*PKP **PKPbc** **12 20 57.4 -0.7**
**NKC Novy Kostel 149.75 351** *e*PKP2 **PKPbc** **12 20 57.9 -0.4**
**NKC Novy Kostel 149.75 351**⇑ *e*PKP **PKPbc** **12 20 57.9 -0.4**
**BCAM Yenicaga 149.75 318** P **PKPbc** **12 20 58.2 -0.6**
**ANTO Ankara 149.80 316** PFAKE 12 21 10.0 +5.7
ANTO LR LR
comp=Z,1μm,19.0s
**BR231 Keskin MP Arra 149.83 316** *e*PKPdf **PKPdf** **12 20 53.2 -1.0**
BR231 *e*PKPbc **PKPbc** **12 20 57.7 -1.3**
BR231 *e*PKPab **PKPab** **12 21 03.3 -1.1**
**ASF Jabal al Asfar 149.84 299** PKPbc **PKPbc** **12 20 59.6 +0.4**
comp=Z,7.3nm,0.7s,baz=65,slow=1.0,SNR=15
**ASF Jabal al Asfar 149.84 299** PKP2 **PKPbc** **12 20 59.6 +0.4**
ASF pmax pmax
comp=Z,7.0nm,0.7s
**VRAC Vranov 149.87 346** PKPbc **PKPbc** **12 20 57.7 -0.9**
comp=Z,2.6nm,0.4s,baz=130,slow=2.5,SNR=6.8
**VRAC Vranov 149.87 346** PKP2 **PKPbc** **12 20 57.7 -0.9**
VRAC pmax pmax
comp=Z,3.0nm,0.4s
**VRAC Vranov 149.87 346** ⇓*i*P **PKPbc** **12 20 59.2 +0.6**
**MLR Muntele Rosu 149.94 331** ⇓PKP2 **PKPbc** **12 20 58.9 -0.2**
**MLR Muntele Rosu 149.94 331** ⇓*i*P **PKPbc** **12 20 58.9 -0.2**
**VYHS Vyhne 150.05 342** *e*PKIKP **PKPbc** **12 20 58.6 -0.5**
**VYHS Vyhne 150.05 342** *e*PKP **PKPbc** **12 20 58.6 -0.5**
**ROTZ Rotzenmuhle 150.24 352** *e*PKPbc **PKPbc** **12 20 59.0 -0.5**
baz=11,slow=2.6
**PSZ Piszkesteto 150.25 341** *e*PKIKP **PKPbc** **12 20 59.0 -0.7**
PSZ MLR MLR
comp=Z,2μm,19.0s
**PSZ Piszkesteto 150.25 341** ⇓*i*P **PKPbc** **12 20 59.1 -0.7**
**PSZ Piszkesteto 150.25 341** ⇓*e*PKPdf **PKPbc** **12 20 59.4 -0.3**
**PSZ Piszkesteto 150.25 341** *e*PKPbc **PKPbc** **12 20 59.0 -0.7**
PSZ LR LR
comp=Z,2μm,19.0s
**DRGR 150.25 336** ⇓PKIKP **PKPbc** **12 20 59.8 +0.1**
**DRGR 150.25 336** ⇓*i*P **PKPbc** **12 20 59.8 +0.1**
**DOU Dourbes 150.34 2** PKPbc **PKPbc** **12 21 00.3 +0.6**
**VOIR 150.39 332** ⇓PKIKP **PKPbc** **12 21 00.7 +0.6**
**VOIR 150.39 332** ⇓*i*P **PKPbc** **12 21 00.7 +0.6**
**GRF Grafenberg Arr 150.43 353** *e*PKPbc **PKPbc** **12 20 59.5 -0.5**
baz=11,slow=2.6
**GRFO Grafenberg 150.44 353** PFAKE 12 21 10.0 +3.6
GRFO LR LR
comp=Z,2μm,20.0s
**KHC Kasperske Hory 150.64 350** *e*PKIKP **PKPbc** **12 20 58.6 -1.9**
KHC *e* 12 21 00.7
KHC *e* 12 21 07.1
**KHC Kasperske Hory 150.64 350**⇑ *e*PKP **PKPbc** **12 20 58.6 -1.9**
KHC *ex* x 12 21 00.7
KHC *e*PKPAB **PKPab** **12 21 07.1 -0.2**
**KHC Kasperske Hory 150.64 350** *e*PKPbc **PKPbc** **12 21 00.1 -0.4**
KHC LR LR
comp=Z,600nm,20.0s
**AUMIH MIHALICIK 150.65 317** P **PKPbc** **12 21 01.0 0.0**
**WET Wettzell 150.74 350** *e*PKPbc **PKPbc** **12 20 60.0 -0.8**
baz=11,slow=2.6
**WLF Walferdange 150.78 360** PFAKE 12 21 10.0 +2.2
WLF LR LR
comp=Z,2μm,20.0s
**MMAI Mount Meron Ar 150.80 302** PKPbc **PKPbc** **12 21 01.4 -0.1**
comp=Z,14nm,0.8s,baz=44,slow=4.9,SNR=11
**GEC2 GERESS Array S 150.90 349** *e*PKIKP **PKPbc** **12 21 00.5 -0.7**
GEC2 *e* 12 21 13.0
**GEC2 GERESS Array S 150.90 349** *e*PKPbc **PKPbc** **12 21 00.3 -0.9**
baz=11,slow=2.6
**GEC2 GERESS Array S 150.90 349** *e*PKPbc **PKPbc** **12 21 00.5 -0.7**
GEC2 *e*PKPab **PKPab** **12 21 12.9 +4.5**
**GERES GERESS Array B 150.90 349** PKPbc **PKPbc** **12 21 00.6 -0.6**
comp=Z,2.7nm,0.8s,baz=40,slow=2.3,SNR=14
**GERES GERESS Array B 150.90 349** PKIKP **PKPbc** **12 21 00.6 -0.7**
GERES pmax pmax
comp=Z,3.0nm,0.8s
**KDHN Kadinhani 150.96 314** P **PKPbc** **12 21 00.5 -1.2**
**BORA Eskisehir 151.29 318** P **PKPbc** **12 21 01.6 -0.9**
**CONA Conrad Observa 151.33 346** ⇓*i*PKiKP **PKiKP** **12 21 02.6 -0.2**
comp=Z,14nm,1.1s
**GZR Gura Zlata 151.38 335** ⇓PKIKP **PKPbc** **12 21 01.5 -0.9**
**GZR Gura Zlata 151.38 335** ⇓*i*P **PKPbc** **12 21 01.5 -0.9**
**STU Stuttgart 151.54 355** PFAKE 12 21 10.0 -1.0
STU LR LR
comp=Z,2μm,20.0s
**BOLV Bolvadin 151.63 316** P **PKPdf** **12 20 59.3 +2.3**
**BZS Buzias 151.65 336**⇑ PKIKP **PKPbc** **12 21 02.3 -0.6**
**BZS Buzias 151.65 336**⇑ *i*P **PKPbc** **12 21 02.3 -0.6**
**CSS Prodhromos 151.72 307** PFAKE 12 21 10.0 -2.3
CSS LR LR
comp=Z,500nm,18.0s
**GAZI Gazipasa 151.93 310** P **PKPbc** **12 21 01.8 -2.1**
**BFO Black Forest 152.04 356** *c* PKIKP **PKPbc** **12 21 00.8 -3.0**
BFO pmax pmax
comp=Z,6.0nm,1.0s
**BFO Black Forest 152.04 356** *e*PKPbc **PKPbc** **12 21 01.2 -2.6**
BFO *e*PKPab **PKPab** **12 21 15.3 +2.2**
BFO LR LR
comp=Z,1μm,19.0s
**EIL Elat 152.06 295** PKPbc **PKPbc** **12 21 03.8 -0.6**
comp=Z,9.1nm,0.8s,baz=2.5,slow=4.7,SNR=6.5
**RJOB Jochberg 152.12 350** *e*PKPbc **PKPbc** **12 21 02.8 -1.2**
baz=11,slow=2.6
**DAVA Damuels 152.95 354** ⇓*i*PKiKP **PKPbc** **12 21 05.9 -0.1**
comp=Z,8.4nm,1.0s
**ABTA Abfaltersbach 153.13 350**⇑ *i*PKPbc **PKPbc** **12 21 05.1 -1.3**
comp=Z,8.1nm,1.0s
**DAVOX Davos/Dischmat 153.46 354** PKPbc **PKPbc** **12 21 06.8 -0.4**
comp=Z,2.8nm,0.5s,baz=147,slow=2.3,SNR=3.6
**DAVOX Davos/Dischmat 153.46 354** PKIKP **PKPbc** **12 21 06.8 -0.4**
DAVOX pmax pmax
comp=Z,3.0nm,0.5s
**AKHS Akhisar 153.53 319** P **PKPdf** **12 21 01.2 +1.6**
**DIVS Divibare 153.55 337**⇑ *i*P **PKPbc** **12 21 06.3 -1.0**
**VISS Visnje 153.57 346** *e*PKPbc **PKPab** **12 21 18.6 -1.1**
**FUORN Ofenpass-Fuorn 153.57 353** PFAKE 12 21 10.0 +2.5
FUORN LR LR
comp=Z,2μm,19.0s
**JAVS Javornik 153.66 347** *i* PKPbc **PKPab** **12 21 20.3 +0.1**
**BOJS Bojanci 153.75 345** *e*PKPdf **PKPbc** **12 21 07.3 -0.3**
BOJS *e*PKPbc **PKPab** **12 21 19.5 -0.9**
**TUE Stuetta 153.81 354** PFAKE 12 21 10.0 +2.0
TUE LR LR
comp=Z,2μm,19.0s
**TRI Trieste 153.90 347** PFAKE 12 21 10.0 +2.1
TRI LR LR
comp=Z,2μm,20.0s
**SENIN Lac Senin/Sane 154.06 358** PFAKE 12 21 10.0 +1.5
SENIN LR LR
comp=Z,2μm,20.0s
**SSB Saint Sauveur 155.15 2** PFAKE 12 21 10.0 +8.2
SSB LR LR
comp=Z,2μm,20.0s
**BNI Bardonecchia 155.38 358** PFAKE 12 21 10.0 +7.8
BNI LR LR
comp=Z,2μm,19.0s
**TIR Tirane 155.92 333** PFAKE 12 21 10.0 +7.1
TIR LR LR
comp=Z,3μm,20.0s
**VLC Villacollemand 155.98 352** PFAKE 12 21 10.0 +7.1
VLC LR LR
comp=Z,2μm,20.0s
**MTE Manteigas 157.03 27** PFAKE 12 21 20.0 -15
MTE LR LR
comp=Z,2μm,20.0s
**CUC Castrocucco 158.64 338** PFAKE 12 21 20.0 +14
CUC LR LR
comp=Z,900nm,19.0s
**PFVI Vila Bisbo 159.01 34** PFAKE 12 21 20.0 +13
PFVI LR LR
comp=Z,3μm,19.0s
**PAB San Pablo 159.01 22** PFAKE 12 21 20.0 +13
PAB LR LR
comp=Z,2μm,20.0s
**TIP Timpagrande 159.01 336** PFAKE 12 21 20.0 +13
TIP LR LR
comp=Z,1μm,20.0s
**TOA0 Torodi Ar. Sit 171.81 151** *e*PKPdf **PKPdf** **12 21 18.2 +0.1**
TOA0 *ep*PKPdf **pPKPdf** **12 21 29.4 +2.8**
**TORD Torodi Ar. Bea 171.81 151** PKP **PKPdf** **12 21 18.2 +0.1**
comp=Z,1.2nm,1.1s,baz=355,slow=0.4,SNR=4.7

*SZGRF* ***12*** *12:02:51.1,20.˚00S×174.˚78W,h33km*
*ISCJB* ***12*** *12:02:53.5±0.1,20.˚51S±0.˚03×173.˚93W±0.˚03,h10km, mb5.7/236,MS5.8/418, Error ellipse: s-maj=5.0km s-min=2.7km az=148.3*
*IDC* ***12*** *12:02:53.6±0.4,20.˚43S×174.˚04W,h0km,mb5.1/27, mb1 5.2/28,mb1mx5.1/34,mbtmp5.0/28,ML5.4/1,MS5.5/17, Ms1 5.5/17,ms1mx5.2/25,Error ellipse: s-maj=16.7km s-min=13.1km az=134.0*
*AUST* ***12*** *12:02:53.8±0.4,20.˚45S×173.˚94W,h0km,Error ellipse: s-maj=8.6km s-min=8.2km az=40.0*
*GCMT* ***12*** *12:02:55.6±0.1,20.˚69S×173.˚25W,h17km,MW5.8/127, Moment Tensor Solution. s103,c200; s127,c338; Duration: 1s9 Moment tensor: Scale 1017Nm; Mrr3.23±.05; Mθθ-0.32±.03; Mϕϕ-2.91±.04; Mrθ 1.55±.10; Mθϕ-1.18±.02; Mrϕ4.19±.13; Best double couple: M◎5.55300×1017 NP1:ϕs20.00000°,δ72.00000°, λ90.00000°. NP2:ϕs202.00000°,δ18.00000°,λ91.00000°. Principal axes: T 5.4850, Plg63.0000°, Azm290.0000°; N 0.1390, Plg0.0000°, Azm21.0000°; P -5.6210, Plg27.0000°, Azm111.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*NEIC* ***12*** *12:02:55.6±0.1,20.˚43S×174.˚07W,h12km,mb5.9/192, ME5.9,MS5.8/299,MW5.9 Error ellipse: s-maj=6.6km s-min=3.8km az=143.0,Moment Tensor Solution. s36 Moment tensor: Scale 1017Nm; Mrr5.20; Mθθ-0.65; Mϕϕ-4.55; Mrθ3.01; Mθϕ-3.42; Mϕr6.07; Best double couple: M◎9.00000×1017 NP1:ϕs215.00000°,δ21.00000°, λ98.00000°. NP2:ϕs27.00000°,δ70.00000°,λ87.00000°. Principal axes: T 8.3100, Plg65.0000°, Azm292.0000°; N 1.3100, Plg3.0000°, Azm28.0000°; P -9.6200, Plg25.0000°, Azm119.0000°; Broadband fault plane solution: P waves. NP1:ϕs195.00000°,δ5.00000°,λ90.00000°. NP2: ϕs15.00000°,δ85.00000°,λ90.00000°. Principal axes: T Plg50.0000°, Azm285.0000°; N Plg0.0000°, Azm0.0000°; P Plg40.0000°, Azm105.0000°; Depth from synthetics of broadband displacement seismograms. Energy computed from BB mechanism.*
*MOS* ***12*** *12:02:57.6±1.0,20.˚35S×174.˚16W,h33km,mb5.9/74, MS5.7/74 Error ellipse: s-maj=10.5km s-min=7.8km az=53.2*
*BJI* ***12*** *12:02:57.1,19.˚98S×173.˚62W,h23km,mb5.4/49, mB5.9/61,Ms5.8/69,Ms7 5.6/63*
**ISC 12 12:02:56.4±0.4, 20˚53S±0˚04×173˚85W±0˚04, h19km±1km, h19km:pP-P, n1290, σ1935/1138, mb5.8/233, MS5.8/418, 26C-9D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.88** | **17** | Pn | Pn | 12 04 32.7 | -3.7 |
| | 55nm,0.3s,baz=65,slow=18,SNR=4.1 | | | | | | |
| AFI | | | | Sn | Sn | 12 05 45.9 | -8.3 |
| | 71nm,0.3s,baz=116,slow=23,SNR=4.1 | | | | | | |
| AFI | | | | LR | LR | 12 06 58.4 | |
| | comp=Z,15μm,18.9s,baz=198,slow=36 | | | | | | |
| **AFI** | **Afiamalu** | **6.88** | **17** | P | Pn | 12 04 32.7 | -3.7 |
| AFI | | | | | | 12 05 45.9 | |
| AFI | | | | pmax | pmax | | |
| | comp=Z,55nm,0.3s | | | | | | |
| AFI | | | | smax | smax | | |
| | comp=N,71nm,0.3s | | | | | | |
| **AFI** | **Afiamalu** | **6.88** | **17** | *e*Pn | **Pn** | **12 04 34.1** | **-2.3** |
| AFI | | | | *e*Sn | **Sn** | **12 05 48.6** | **-5.6** |
| **MSVF** | **Nonsavu** | **8.14** | **289** | Pn | Pn | 12 05 01.0 | +7.2 |
| | comp=N,3μm,1.3s,SNR=14 | | | | | | |
| **RAO** | **Raoul Island** | **9.43** | **202** | Pn | Pn | 12 05 04.2 | -7.1 |
| | comp=N,166nm,0.3s,baz=294,slow=19,SNR=5.3 | | | | | | |
| RAO | | | | Sn | **Sn** | **12 06 53.6** | **-3.3** |
| | comp=N,212nm,0.3s,baz=258,slow=21,SNR=4.9 | | | | | | |
| RAO | | | | LR | LR | 12 08 16.8 | |
| | comp=N,12μm,18.7s,baz=48,slow=34 | | | | | | |
| **RAO** | **Raoul Island** | **9.43** | **202** | *e*P | **Pn** | **12 05 10.6** | **-0.8** |
| RAO | | | | *e*S | **Sn** | **12 06 55.7** | **-1.2** |
| **RAO** | **Raoul Island** | **9.43** | **202** | Pn | **Pn** | **12 05 10.6** | **-0.8** |
| RAO | | | | *e*Sn | **Sn** | **12 06 55.7** | **-1.2** |
| **RAR** | **Rarotonga** | **13.18** | **95** | Pn | Pn | 12 05 53.7 | -9.0 |
| | comp=N,12nm,0.3s,baz=244,slow=8.6,SNR=15 | | | | | | |
| RAR | | | | LR | LR | 12 10 39.8 | |
| | comp=N,27μm,18.8s,baz=258,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.42** | **262** | *e*P | **Pn** | **12 07 12.0** | **+1.0** |
| | comp=N,714nm,1.4s | | | | | | |
| DZM | | | | *e*LR | LR | 12 11 30.5 | |

comp=N,15µm,20.4s
**DZM Mont Dzumac 18.42 262** *e*Pn **P** **12 07 08.3 -2.6**
comp=N,288nm,1.1s
**URZ Urewera 19.32 202** P **Pn** **12 07 22.0 +0.3**
comp=N,11nm,0.3s,baz=42,slow=2.2,SNR=19
URZ S Sn 12 10 47.5 -10
comp=N,3.0nm,0.3s,baz=356,slow=23,SNR=5.5
**URZ Urewera 19.32 202** *e*P **P** **12 07 20.7 +0.2**
comp=N,184nm,1.2s
URZ *e*S **Sn** **12 10 57.5 -0.3**
**BKZ Black Stump Fm 20.35 202** *e*P **P** **12 07 32.6 +0.8**
comp=N,68nm,0.9s
BKZ LR LR
comp=Z,10µm,18.0s
**HIZ Hauiti 20.41 206** *e*P Pn 12 07 34.9 +0.4
comp=Z,210nm,1.0s
HIZ LR LR
comp=Z,14µm,18.0s
**BHHZ Black Hill Sta 20.79 202** P* **P** **12 07 37.9 +1.4**
BHHZ SN S 12 11 20.0 -7.9
**BFZ Birch Farm 21.79 201** *e*P **P** **12 07 48.3 +1.1**
comp=Z,200nm,1.2s
BFZ LR LR
comp=Z,13µm,18.0s
**TBI Tubuai 22.79 102** *e*P **P** **12 07 55.3 -2.8**
comp=Z,1µm,1.3s
TBI *e*LQ LQ 12 12 17.6
comp=Z,8µm,26.0s
TBI *e*LR LR 12 13 19.6
comp=Z,14µm,22.2s,baz=274
**TBI Tubuai 22.79 102** *e*T T 12 31 03.5
comp=Z,10nm,0.3s
**SNZO South Karori 22.88 203** PFAKE 12 08 10.0 +11
SNZO LR LR
comp=Z,9µm,19.0s
**PAE Paea 23.11 87** *e*P **P** **12 07 59.5 -1.9**
comp=Z,47nm,1.3s
**PAE Paea 23.11 87** *e*T T 12 31 31.8
comp=Z,3.1nm,0.3s
**PPT2 Papeete2 23.13 87** *e*P **P** **12 08 00.0 -1.7**
comp=Z,246nm,1.3s
PPT2 *e*LQ LQ 12 12 17.8
comp=Z,18µm,25.5s
PPT2 *e*LR LR 12 13 37.8
comp=Z,15µm,21.5s,baz=256
**PPT2 Papeete2 23.13 87** *e*T T 12 31 34.2
comp=Z,21nm,0.2s
**PPT Papeete 23.13 87** P **P** **12 08 00.8 -0.9**
comp=Z,184nm,1.1s,baz=294,slow=0.3,SNR=6.7
PPT LR LR 12 15 15.4
comp=Z,17µm,19.2s,baz=258,slow=32
**PPT Papeete 23.13 87** P **P** **12 08 00.8 -0.9**
PPT pmax pmax
comp=Z,184nm,1.1s
PPT MLR MLR
comp=Z,17µm,19.2s
**PPT Papeete 23.13 87** *e*P **P** **12 08 00.4 -1.3**
**NNZ Nelson 23.30 205** *e*P* **P** **12 08 01.0 -2.1**
NNZ S* **S** **12 12 11.1 -3.6**
**QRZ Quartz Range 23.32 207** P* **P** **12 08 03.4 +0.1**
**TIAR Tiarei 23.35 87** *e*P **P** **12 08 01.8 -2.1**
comp=Z,56nm,1.0s
**TVO Taravao 23.39 87** *e*P **P** **12 08 02.0 -2.4**
comp=Z,74nm,1.4s
**THZ Tophouse 23.95 205** P* **P** **12 08 08.1 -1.5**
THZ S* **S** **12 12 22.9 -2.5**
**THZ Tophouse 23.95 205** *e*P **P** **12 08 08.3 -1.2**
comp=Z,97nm,1.1s
THZ LR LR
comp=Z,17µm,18.0s
**KHZ Kahutara 24.27 203** P* **P** **12 08 12.7 +0.3**
KHZ S* **S** **12 12 29.9 -0.3**
**KHZ Kahutara 24.27 203** *e*P **P** **12 08 12.8 +0.3**
comp=Z,107nm,1.2s
KHZ LR LR
comp=Z,14µm,18.0s
**MEH Mehetia 24.49 88** *e*P **P** **12 08 12.6 -2.1**
comp=Z,71nm,1.3s
**MEH Mehetia 24.49 88** *e*T T 12 33 14.6
comp=Z,20nm,0.3s
**PMOR Pomariorio Ree 25.31 82** *e*P **P** **12 08 20.4 -1.7**
comp=Z,306nm,1.5s
**TARA Tarawa 25.32 328** PFAKE 12 08 30.0 +7.9
TARA LR LR
comp=Z,18µm,18.0s
**VAH Vaihoa 25.49 82** *e*P **P** **12 08 21.8 -1.9**
comp=Z,101nm,1.1s
**CRLZ Canterbury Las 25.61 203** P* P 12 08 29.9 +5.3
**OXZ Oxford 25.62 204** *e*P **P** **12 08 23.1 -1.5**
comp=Z,124nm,0.9s
OXZ LR LR
comp=Z,14µm,18.0s
**MQZ McQueen's Vall 25.71 203** P* P 12 08 31.2 +5.7
MQZ S* **S** **12 12 57.2 +3.9**
**MQZ McQueen's Vall 25.71 203** PFAKE 12 08 40.0 +15
MQZ LR LR
comp=Z,11µm,18.0s
**WVZ Waitaha Valley 25.93 206** P* **P** **12 08 28.0 +0.5**
**RPZ Rata Peaks 26.33 205** P **P** **12 08 31.1 0.0**
comp=Z,12nm,0.6s,baz=68,slow=13,SNR=4.2
RPZ LR LR 12 18 51.9
comp=Z,19µm,18.1s,baz=32,slow=36
**RPZ Rata Peaks 26.33 205** P* **P** **12 08 32.3 +1.2**
**RPZ Rata Peaks 26.33 205** *e*P **P** **12 08 31.8 +0.7**
RPZ LR LR
comp=Z,17µm,20.0s
**LHI Lord Howe Isla 26.61 240** PFAKE 12 08 40.0 +6.2
LHI LR LR
comp=Z,19µm,18.0s
**FOZ Fox Glacier 26.77 207** *e*P* **P** **12 08 35.3 +0.3**
FOZ S* **S** **12 13 15.0 +5.0**
**HNR Honiara 27.56 290** LR LR 12 17 53.6
comp=Z,3µm,19.5s,baz=116,slow=33
**HNR Honiara 27.56 290** PFAKE 12 08 50.0 +7.5
HNR LR LR
comp=Z,9µm,18.0s
**JCZ Jackson Bay 27.58 208** *e*P* **P** **12 08 44.7 +2.2**
**XMAS Kiritimati 27.61 38** PFAKE 12 09 00.0 +17
XMAS LR LR
comp=Z,17µm,20.0s
**ODZ Otahua Downs 27.61 204** PFAKE 12 08 50.0 +7.4
ODZ LR LR
comp=Z,16µm,18.0s
**WKZ Wanaka 28.08 206** *e*P P 12 08 50.4 +3.6
comp=Z,411nm,1.9s
WKZ LR LR
comp=Z,16µm,19.0s
**WHZ Wether Hill Ro 29.38 206** PFAKE 12 09 10.0 +12
WHZ LR LR
comp=Z,13µm,19.0s
**DCZ Deep Cove 29.39 208** PFAKE 12 09 10.0 +12
DCZ LR LR
comp=Z,11µm,20.0s
**ARMA Armidale 32.57 245** P **P** **12 09 28.0 +1.1**
baz=32,SNR=8.1
**ARMA Armidale 32.57 245** PFAKE 12 09 40.0 +13
ARMA LR LR
comp=Z,7µm,18.0s
**EIDS Eidsvold 32.59 255** P **P** **12 09 26.0 -0.9**
baz=32,SNR=12
**EIDS Eidsvold 32.59 255** PFAKE 12 09 40.0 +13
EIDS LR LR
comp=Z,6µm,19.0s
**MGCD Mangrove Creek 33.55 241** P **P** **12 09 35.7 +0.5**
baz=34,SNR=12
**KWAJ Kwajalein Atol 34.38 326** PFAKE 12 09 50.0 +7.5
KWAJ LR LR
comp=Z,13µm,18.0s
**RMQ Roma 34.71 253** P **P** **12 09 44.4 -1.0**
baz=35,SNR=8.3
**CNB Canberra Magne 35.46 238** P **P** **12 09 51.4 -0.4**
baz=35,SNR=12
**CAN Canberra 35.75 238** *e*P **P** **12 09 52.8 -1.5**
CAN pmax pmax
comp=Z,64nm,1.1s
CAN MLR MLR
comp=Z,7µm,19.0s
**CAN Canberra 35.75 238** *e*P **P** **12 09 52.8 -1.5**
comp=Z,64nm,1.1s
CAN LR LR
comp=Z,7µm,19.0s
**MILA Mila 36.09 235** P **P** **12 09 57.0 -0.3**
baz=36,SNR=15
**RKT Rikitea 36.12 101** *e*S **S** **12 15 31.9 -4.4**
comp=Z,1µm,27.8s
RKT *e*LR LR 12 19 27.6
comp=Z,9µm,21.8s,baz=274

**JOHN Johnston Islan 37.27 7** PFAKE 12 10 20.0 +13
JOHN LR LR
comp=Z,8µm,20.0s
**CTA Charters Tower 37.35 264** P **P** **12 10 05.4 -2.7**
comp=Z,19nm,0.4s,baz=91,slow=11,SNR=31
CTA LR LR 12 23 50.8
comp=Z,7µm,18.2s,baz=91,slow=34
**CTAO Charters Tower 37.35 264** *e*P **P** **12 10 07.0 -1.1**
CTAO pmax pmax
comp=Z,31nm,0.6s
CTAO MLR MLR
comp=Z,8µm,18.0s
**CTAO Charters Tower 37.35 264** *e*P **P** **12 10 07.0 -1.1**
comp=Z,31nm,0.6s
CTAO LR LR
comp=Z,8µm,18.0s
**CMSA Cobar Meteorol 37.78 245** P **P** **12 10 10.2 -1.4**
baz=38,SNR=14
**QLP Quilpie 38.76 253** P **P** **12 10 18.1 -1.8**
baz=39,SNR=8.6
**TOO Toolangi 39.05 235** P **P** **12 10 21.6 -0.6**
baz=39,SNR=9.8
**PMG Port Moresby 39.15 281** P **P** **12 10 20.6 -2.7**
comp=Z,23nm,0.8s,baz=139,slow=7.6,SNR=4.6
PMG LR LR 12 25 25.1
comp=Z,11µm,18.3s,baz=110,slow=35
**PMG Port Moresby 39.15 281** P **P** **12 10 21.0 -2.3**
PMG pmax pmax
comp=Z,409nm,1.2s
**PMG Port Moresby 39.15 281** P **P** **12 10 22.4 -0.9**
baz=39,SNR=4.1
**PMG Port Moresby 39.15 281** *e*P **P** **12 10 20.4 -2.9**
comp=Z,92nm,1.1s
PMG LR LR
comp=Z,12µm,18.0s
**MOO Moorlands 39.29 227** P **P** **12 10 25.1 +1.0**
baz=39,SNR=5.2
**TAU Tasmania Unive 39.38 227** P **P** **12 10 25.9 +1.1**
comp=Z,308nm,0.9s,SNR=8.6
**TAU Tasmania Unive 39.38 227** PFAKE 12 10 40.0 +15
TAU LR LR
comp=Z,13µm,18.0s
**MCQ Macquarie Isla 39.69 205** PFAKE 12 10 40.0 +13
MCQ LR LR
comp=Z,14µm,18.0s
**COEN Coen 41.47 272** P **P** **12 10 42.1 -0.3**
baz=41,SNR=4.5
**COEN Coen 41.47 272** *e*P **P** **12 10 42.3 -0.2**
comp=Z,49nm,0.8s
COEN LR LR
comp=Z,9µm,19.0s
**ARPS Mount Arapiles 41.73 237** P **P** **12 10 43.6 -0.7**
baz=42,SNR=8.1
**MANU Manus Island 42.05 291** P **P** **12 10 46.7 -0.5**
baz=42,SNR=3.8
**QIS Mount Isa 43.46 261** P **P** **12 10 57.7 -1.0**
baz=43,SNR=4.0
**WAKE Wake Island 43.94 333** *e*P **P** **12 11 01.5 -0.8**
comp=Z,185nm,0.9s
WAKE LR LR
comp=Z,5µm,20.0s
**BBOO Buckleboo 46.02 244** P **P** **12 11 16.5 -2.4**
baz=46,SNR=8.4
**BBOO Buckleboo 46.02 244** PFAKE 12 11 30.0 +11
BBOO LR LR
comp=Z,3µm,21.0s
**JAY Jayapura 47.77 286** LR LR 12 30 25.7
comp=Z,5µm,18.2s,baz=146,slow=35
**JAY Jayapura 47.77 286** P **P** **12 11 31.6 -1.2**
baz=48,SNR=12
**AS31 Alice Springs 48.29 256** PFAKE 12 11 50.0 +13
AS31 LR LR
comp=Z,200nm,18.0s
**AS12 Alice Springs 48.29 256** *e*P **P** **12 11 35.0 -1.9**
AS12 *e*PcP **PcP** **12 13 04.3 +0.7**
AS12 *e*S **S** **12 18 31.4 -4.7**
**ASAR Alice Springs 48.29 256** P **P** **12 11 35.0 -1.9**
comp=Z,19nm,0.7s,baz=99,slow=7.6,SNR=23
ASAR PcP **PcP** **12 13 04.3 +0.7**
comp=Z,6.9nm,0.7s,baz=90,slow=5.5,SNR=3.6
ASAR S **S** **12 18 31.4 -4.7**
comp=Z,3.4nm,0.9s,baz=92,slow=15,SNR=7.8
ASAR LR LR 12 32 16.1
comp=Z,6µm,18.0s,baz=98,slow=37
**ASAR Alice Springs 48.29 256** P **P** **12 11 35.0 -1.9**
ASAR 12 13 04.4
ASAR **12 18 31.4 -4.7**
ASAR pmax pmax
comp=Z,19nm,0.7s
ASAR smax smax
comp=N,3.0nm,0.9s
ASAR MLR MLR
comp=Z,6µm,18.0s
**WRAB Tennant Creek 48.43 261**⇑ *e*P **P** **12 11 37.4 -0.5**
WRAB pmax pmax
comp=Z,55nm,0.7s
**WRAB Tennant Creek 48.43 261** P **P** **12 11 35.5 -2.4**
comp=Z,209nm,0.7s,SNR=10
**WRAB Tennant Creek 48.43 261** PFAKE 12 11 50.0 +12
WRAB LR LR
comp=Z,9µm,19.0s
**WRA Warramunga Arr 48.44 261** P **P** **12 11 35.1 -2.8**
comp=Z,9.9nm,0.4s,baz=96,slow=7.7,SNR=60
WRA S **S** **12 18 34.4 -3.8**
comp=Z,1.9nm,1.0s,baz=92,slow=14,SNR=5.1
WRA LR LR 12 32 29.1
comp=Z,9µm,18.1s,baz=95,slow=37
**WRA Warramunga Arr 48.44 261** P **P** **12 11 35.2 -2.8**
WRA S **S** **12 18 34.4 -3.8**
WRA pmax pmax
comp=Z,10.0nm,0.4s
WRA smax smax
comp=N,2.0nm,1.0s
WRA MLR MLR
comp=Z,9µm,18.1s
**MIDW Midway 48.58 356** PFAKE 12 11 50.0 +11
MIDW LR LR
comp=Z,6µm,20.0s
**KDU Kakadu 51.84 270** P **P** **12 12 02.5 -1.2**
baz=52,SNR=13
**FORT Forrest 52.85 246** *e*P **P** **12 12 09.8 -1.3**
comp=Z,87nm,0.7s
FORT LR LR
comp=Z,10µm,19.0s
**GUMO Guam 52.88 306** P **P** **12 12 10.0 -1.4**
comp=Z,88nm,0.7s,baz=142,slow=5.2
GUMO LR LR 12 35 17.7
comp=Z,2µm,18.0s,baz=128,slow=37
**GUMO Guam 52.88 306** P **P** **12 12 10.0 -1.4**
GUMO pmax pmax
comp=Z,88nm,0.7s
GUMO MLR MLR
comp=Z,2µm,18.0s
**GUMO Guam 52.88 306** *e*P **P** **12 12 10.8 -0.7**
GUMO LR LR
comp=Z,3µm,18.0s
**MTN Manton Dam 53.05 269** P **P** **12 12 10.9 -1.9**
baz=53,SNR=10
**MTN Manton Dam 53.05 269** *e*P **P** **12 12 09.9 -2.8**
comp=Z,42nm,0.6s
MTN LR LR
comp=Z,4µm,19.0s
**WRKA Warakurna 53.19 254** P **P** **12 12 11.4 -2.4**
baz=53,SNR=14
**SAUI Saumlaki 54.37 275** PFAKE 12 12 30.0 +7.5
SAUI LR LR
comp=Z,6µm,19.0s
**FAKI Fak Fak 55.31 281** P **P** **12 12 28.9 -0.4**
baz=55,SNR=5.2
**FAKI Fak Fak 55.31 281** *e*P **P** **12 12 29.0 -0.2**
comp=Z,140nm,1.5s
FAKI LR LR
comp=Z,6µm,19.0s
**FITZ Fitzroy Crossi 56.87 261** P **P** **12 12 39.1 -1.2**
baz=57,SNR=11
**FITZ Fitzroy Crossi 56.87 261** *e*P **P** **12 12 39.3 -1.1**
comp=Z,138nm,1.9s
**SWI Sorong 57.03 283** P **P** **12 12 41.0 -0.6**
baz=57,SNR=8.4
**SBA Scott Base 58.13 185** *e*P P 12 12 52.0 +3.7
SBA pmax pmax
comp=Z,743nm,2.8s
SBA MLR MLR
comp=Z,6µm,18.0s
**SBA Scott Base 58.13 185** *e*P P 12 12 52.0 +3.7
comp=Z,743nm,2.8s
SBA LR LR

comp=Z,6µm,18.0s
**VNDA Vanda 58.26 186** P **P** **12 12 51.1 +1.9**
comp=Z,18nm,1.2s,baz=11,slow=5.7,SNR=11
**VNDA Vanda 58.26 186** P **P** **12 12 51.1 +1.9**
VNDA pmax pmax
comp=Z,18nm,1.2s
**SOEI Soe 60.39 270** P **P** **12 13 05.5 +0.4**
baz=60,SNR=6.9
**SOEI Soe 60.39 270** *e*P **P** **12 13 05.0 -0.2**
comp=Z,220nm,1.0s
SOEI LR LR
comp=Z,4µm,18.0s
**TNTI Ternate 61.24 283** *e*P **P** **12 13 09.9 -0.9**
comp=Z,209nm,1.1s
TNTI LR LR
comp=Z,3µm,18.0s
**KLBR Kellerberrin 61.56 244** P **P** **12 13 12.2 -0.5**
baz=61,SNR=17
**MEEK Meekatharra 61.57 250** P **P** **12 13 11.7 -1.2**
baz=62,SNR=7.1
**MBWA Marble Bar 61.63 256** *e*P **P** **12 13 11.4 -1.9**
comp=Z,38nm,0.8s
MBWA LR LR
comp=Z,10µm,18.0s
**NWAO Narrogin (SRO) 61.82 243** *e*P **P** **12 13 15.5 +1.0**
NWAO pmax pmax
comp=Z,90nm,1.8s
**NWAO Narrogin (SRO) 61.82 243** *e*P **P** **12 13 15.5 +1.0**
comp=Z,90nm,1.8s
**BLDU Ballidu 62.58 245** P **P** **12 13 19.1 -0.5**
baz=62,SNR=15
**MMRI Maumere 62.64 271** PFAKE 12 13 30.0 +10
MMRI LR LR
comp=Z,2µm,18.0s
**MORW Morawa 63.40 247** P **P** **12 13 24.8 -0.3**
baz=63,SNR=18
**CBIJ Chichi jima 63.67 316** *e*P **P** **12 13 26.0 -0.7**
comp=Z,390nm,1.7s
CBIJ LR LR
comp=Z,4µm,20.0s
**DAV Davao City (W) 65.51 288** LR LR 12 41 56.4
comp=Z,2µm,18.2s,baz=93,slow=36
**DAV Davao City (W) 65.51 288** PFAKE 12 13 50.0 +11
DAV LR LR
comp=Z,3µm,18.0s
**CASY Casey 65.60 205** *e*P **P** **12 13 40.0 +1.2**
comp=Z,364nm,2.5s
CASY LR LR
comp=Z,3µm,20.0s
**KAPI Kappang 66.16 274** PFAKE 12 13 50.0 +6.7
KAPI LR LR
comp=Z,2µm,18.0s
**GIRL Giralia 66.28 254** P **P** **12 13 43.4 -0.5**
baz=66,SNR=5.9
**JHJ2 Mitsune 69.29 320** PFAKE 12 14 10.0 +7.5
JHJ2 LR LR
comp=Z,4µm,19.0s
**ATKA Atka Island 72.42 360** *e*P **P** **12 14 21.1 0.0**
comp=Z,215nm,1.2s
ATKA LR LR
comp=Z,2µm,20.0s
**MIR Mirnyy 72.60 205**⇑ *i*P P 12 14 36.0 +14
MIR pmax pmax
comp=Z,70nm,2.0s
**MJAR Matsushiro Arr 72.60 321** P **P** **12 14 22.3 -0.3**
comp=Z,11nm,0.7s,baz=139,slow=0.6,SNR=19
**MJAR Matsushiro Arr 72.60 321** P **P** **12 14 22.3 -0.3**
MJAR pmax pmax
comp=Z,11nm,0.7s
**MAJO Matsushiro 72.61 321** *c i*P **P** **12 14 21.7 -1.0**
MAJO pmax pmax
comp=Z,92nm,0.8s
**MAJO Matsushiro 72.61 321** *e*P **P** **12 14 21.6 -1.0**
comp=Z,368nm,2.3s
MAJO LR LR
comp=Z,2µm,19.0s
**MAT Matsushiro 72.61 321** P **P** **12 14 21.5 -1.2**
MAT S **S** **12 23 45.6 -1.1**
**JOW Kunigami 73.21 308** P **P** **12 14 26.3 -0.2**
comp=Z,1.6nm,0.9s,baz=64,slow=15,SNR=5.3
**JOW Kunigami 73.21 308** *e*P **P** **12 14 26.3 -0.2**
comp=Z,84nm,0.7s
JOW LR LR
comp=Z,3µm,21.0s
**KKM Kota Kinabalu 73.54 283** PFAKE 12 14 40.0 +11
KKM LR LR
comp=Z,1µm,21.0s
**SMY Shemya 73.70 352** PFAKE 12 14 40.0 +11
SMY LR LR
comp=Z,5µm,19.0s
**ERM Erimo 73.83 328** PFAKE 12 14 40.0 +10
ERM LR LR
comp=Z,4µm,18.0s
**UGM Wanagama 73.85 267** P **P** **12 14 30.5 0.0**
baz=74,SNR=4.0
**UGM Wanagama 73.85 267** PFAKE 12 14 40.0 +9.4
UGM LR LR
comp=Z,2µm,18.0s
**YUK Yuzh-Kuril'sk 74.09 331**⇑ *i*P **P** **12 14 29.1 -2.0**
YUK *i* 12 17 13.8
YUK *e*PPP PPP 12 18 55.0
YUK *e*S **SKiKP** **12 23 58.1 -0.4**
YUK pmax pmax
comp=Z,430nm,6.5s
YUK pmax pmax
comp=N,133nm,1.9s
YUK pmax pmax
comp=E,284nm,1.9s
YUK pmax pmax
comp=Z,302nm,1.9s
**KUR Kuril'sk 74.15 333** *c i*P **P** **12 14 29.8 -1.7**
KUR *i* S **S** **12 24 06.1 +2.4**
KUR pmax pmax
comp=N,17nm,1.4s
KUR pmax pmax
comp=E,19nm,1.4s
KUR pmax pmax
comp=Z,96nm,1.4s
KUR pmax pmax
comp=Z,690nm,6.9s
**UNV Unalaska Valle 74.34 5** PFAKE 12 14 40.0 +7.6
UNV LR LR
comp=Z,3µm,21.0s
**SNCC San Nicolas Is 74.47 45** PFAKE 12 14 50.0 +16
SNCC LR LR
comp=Z,4µm,18.0s
**SZP Santa 74.72 296** PFAKE 12 14 50.0 +15
SZP LR LR
comp=Z,3µm,18.0s
**BSC Santa Cruz Isl 74.86 44** P **P** **12 14 36.9 +1.0**
baz=75
**SBI Santa Barbara 74.94 45** *e*P **P** **12 14 37.1 +0.7**
**SCI San Clemente I 74.96 46** P **P** **12 14 37.1 +0.6**
baz=75
**JNU Nakatsue 75.02 314** P **P** **12 14 37.0 +0.1**
comp=Z,30nm,1.0s,baz=242,slow=4.0,SNR=5.0
JNU LR LR 12 44 55.1
comp=Z,1µm,19.3s,baz=111,slow=34
**JNU Nakatsue 75.02 314** *e*P **P** **12 14 38.0 +1.1**
comp=Z,105nm,1.3s
JNU LR LR
comp=Z,2µm,18.0s
**SBC Santa Barbara 75.08 44** P **P** **12 14 37.7 +0.5**
baz=75
**PKM Peak Mountain 75.29 43** P **P** **12 14 39.2 +0.5**
baz=76
**BLG Laguna Peak 75.30 44** P **P** **12 14 39.1 +0.6**
baz=76
**SMMC Simmler 75.43 43** P **P** **12 14 40.3 +1.0**
baz=76
**SAO San Andreas Ge 75.44 41** *e*P **P** **12 14 40.4 +1.2**
SAO pmax pmax
comp=Z,160nm,1.7s
SAO MLR MLR
comp=Z,7µm,19.0s
**SAO San Andreas Ge 75.44 41** *e*P **P** **12 14 40.4 +1.2**
comp=Z,160nm,1.7s
SAO LR LR
comp=Z,7µm,19.0s
**LRV Little Rabbit 75.49 42** *e*P **P** **12 14 39.0 -0.6**
**FMP Fort Macarthur 75.57 45** P **P** **12 14 41.1 +1.1**
baz=76
**ASAJ Asahikawa 75.67 329** LR LR 12 46 08.5
comp=Z,3µm,18.4s,baz=145,slow=34
**ASAJ Asahikawa 75.67 329** PFAKE 12 14 50.0 +10
ASAJ LR LR
comp=Z,4µm,19.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **75.69** | **341** | *e*P | | **P** | | **12 14 38.0** | **-2.2** |
| SKR | | | | *e* | | | | 12 14 50.0 | |
| SKR | | | | *e*S | | **S** | | **12 24 24.0** | **+3.4** |
| SKR | | | | *e*PS | | **PnS** | | **12 24 50.0** | **-8.4** |
| SKR | | | | *e*SSS | | SSS | | 12 32 28.0 | |
| SKR | | | | | pmax | pmax | | | |
| | comp=Z,1µm,6.0s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=N,3µm,14.0s | | | | | | | | |
| SKR | | | | | smax | smax | | | |
| | comp=E,4µm,14.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=N,2µm,18.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=E,1µm,18.0s | | | | | | | | |
| SKR | | | | | MLR | MLR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **OSI** | **Osito Adit** | **75.83** | **44** | P | | **P** | | **12 14 42.4** | **+0.8** |
| | baz=76 | | | | | | | | |
| **OSI** | **Osito Adit** | **75.83** | **44** | *e*P | | **P** | | **12 14 42.8** | **+1.3** |
| | comp=Z,218nm,1.6s | | | | | | | | |
| OSI | | | | | LR | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **DECC** | **Green Verdugo** | **75.87** | **45** | P | | **P** | | **12 14 41.9** | **+0.2** |
| | baz=76 | | | | | | | | |
| **109C** | **Camp Elliot, M** | **75.88** | **47** | P | | **P** | | **12 14 42.2** | **+0.4** |
| | baz=76 | | | | | | | | |
| **NSHM** | **Saint Helena R** | **75.88** | **39** | *e*P | | **P** | | **12 14 39.8** | **-1.9** |
| **PASC** | **Pasadena Art C** | **75.92** | **45** | *e*P | | **P** | | **12 14 42.7** | **+0.7** |
| | comp=Z,150nm,1.6s | | | | | | | | |
| PASC | | | | | LR | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **HOPS** | **Hopland** | **75.92** | **38** | *e*P | | **P** | | **12 14 41.0** | **-0.9** |
| | comp=Z,156nm,1.5s | | | | | | | | |
| HOPS | | | | | LR | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **75.97** | **303** | *e*P | | **P** | | **12 14 41.6** | **-0.9** |
| YOJ | | | | | pmax | pmax | | | |
| | comp=Z,252nm,1.3s | | | | | | | | |
| YOJ | | | | | MLR | MLR | | | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **75.97** | **303** | *e*P | | **P** | | **12 14 41.6** | **-0.9** |
| | comp=Z,252nm,1.3s | | | | | | | | |
| YOJ | | | | | LR | LR | | | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **MWC** | **Mount Wilson** | **76.03** | **45** | PFAKE | | | | 12 15 00.0 | +17 |
| MWC | | | | LR | | LR | | | |
| | comp=Z,4µm,18.0s | | | | | | | | |
| **BAR** | **Barrett** | **76.05** | **47** | *e*P | | **P** | | **12 14 43.0** | **+0.2** |
| | comp=Z,192nm,1.8s | | | | | | | | |
| BAR | | | | | LR | LR | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **ARVC** | **Arvin** | **76.07** | **44** | P | | **P** | | **12 14 43.4** | **+0.5** |
| | baz=76 | | | | | | | | |
| **KCPM** | **Cahto Peak** | **76.08** | **38** | PFAKE | | | | 12 15 00.0 | +17 |
| KCPM | | | | LR | | LR | | | |
| | comp=Z,8µm,19.0s | | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **76.19** | **58** | *e*P | | **P** | | **12 14 44.9** | **+1.0** |
| | comp=Z,137nm,1.5s | | | | | | | | |
| SLBS | | | | | LR | LR | | | |
| | comp=Z,7µm,19.0s | | | | | | | | |
| **MURC** | **Murrieta** | **76.23** | **46** | P | | **P** | | **12 14 44.3** | **+0.4** |
| | baz=76 | | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **76.31** | **45** | P | | **P** | | **12 14 44.7** | **+0.3** |
| | baz=77 | | | | | | | | |
| **VES** | **Vestal, Richgr** | **76.34** | **43** | P | | **P** | | **12 14 44.7** | **+0.3** |
| | baz=77 | | | | | | | | |
| **MONP** | **Monument Peak** | **76.35** | **47** | P | | **P** | | **12 14 45.0** | **+0.2** |
| | baz=77 | | | | | | | | |
| **KMRM** | **Mail Ridge** | **76.37** | **37** | *e*P | | **P** | | **12 14 45.6** | **+1.1** |
| | comp=Z,337nm,1.9s | | | | | | | | |
| KMRM | | | | | LR | LR | | | |
| | comp=Z,9µm,20.0s | | | | | | | | |
| **SDPT** | **Sand Point** | **76.43** | **8** | PFAKE | | | | 12 15 00.0 | +16 |
| SDPT | | | | LR | | LR | | | |
| | comp=Z,3µm,21.0s | | | | | | | | |
| **IBP** | **Imperial Bould** | **76.44** | **47** | P | | **P** | | **12 14 45.6** | **+0.5** |
| | baz=77 | | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **76.47** | **44** | P | | **P** | | **12 14 46.0** | **+0.8** |
| | baz=77 | | | | | | | | |
| **CISI** | **Cisompet, Garu** | **76.50** | **267** | PFAKE | | | | 12 15 00.0 | +14 |
| CISI | | | | LR | | LR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **RCTC** | **Rector, Farmer** | **76.53** | **43** | P | | **P** | | **12 14 45.6** | **+0.2** |
| | baz=77 | | | | | | | | |
| **ISA** | **Isabella** | **76.63** | **44** | *e*P | | **P** | | **12 14 46.8** | **+0.7** |
| ISA | | | | | pmax | pmax | | | |
| | comp=Z,241nm,1.6s | | | | | | | | |
| ISA | | | | | MLR | MLR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **ISA** | **Isabella** | **76.63** | **44** | P | | **P** | | **12 14 46.6** | **+0.5** |
| | baz=77 | | | | | | | | |
| ISA | | | | S | | **S** | | **12 24 35.6** | **+3.7** |
| | baz=77 | | | | | | | | |
| **ISA** | **Isabella** | **76.63** | **44** | *e*P | | **P** | | **12 14 46.8** | **+0.7** |
| | comp=Z,241nm,1.6s | | | | | | | | |
| ISA | | | | | LR | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **TWG** | **Pinlang** | **76.70** | **301** | PFAKE | | | | 12 15 00.0 | +13 |
| TWG | | | | LR | | LR | | | |
| | comp=Z,12µm,19.0s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.74** | **46** | *e*P | | **P** | | **12 14 47.4** | **+0.5** |
| PFO | | | | | pmax | pmax | | | |
| | comp=Z,210nm,1.6s | | | | | | | | |
| PFO | | | | | MLR | MLR | | | |
| | comp=Z,4µm,18.0s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.74** | **46** | P | | **P** | | **12 14 47.9** | **+1.0** |
| | comp=Z,320nm,1.3s,SNR=14 | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.74** | **46** | P | | **P** | | **12 14 47.4** | **+0.5** |
| | baz=77 | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.74** | **46** | *e*P | | **P** | | **12 14 47.4** | **+0.5** |
| | comp=Z,210nm,1.6s | | | | | | | | |
| PFO | | | | | LR | LR | | | |
| | comp=Z,4µm,18.0s | | | | | | | | |
| **KHMM** | **Horse Mountain** | **76.80** | **37** | PFAKE | | | | 12 15 00.0 | +13 |
| KHMM | | | | LR | | LR | | | |
| | comp=Z,8µm,19.0s | | | | | | | | |
| **YULB** | **Yu-li** | **76.80** | **301** | *e*P | | **P** | | **12 14 45.2** | **-2.1** |
| | comp=Z,97nm,1.6s | | | | | | | | |
| YULB | | | | | LR | LR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **76.80** | **47** | P | | **P** | | **12 14 47.3** | **+0.3** |
| | baz=77 | | | | | | | | |
| **BBRC** | **Big Bear Solar** | **76.81** | **45** | P | | **P** | | **12 14 47.6** | **+0.3** |
| | baz=77 | | | | | | | | |
| **CMB** | **Columbia Colle** | **76.90** | **41** | *e*P | | **P** | | **12 14 47.9** | **+0.4** |
| CMB | | | | | pmax | pmax | | | |
| | comp=Z,80nm,1.4s | | | | | | | | |
| CMB | | | | | MLR | MLR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **CMB** | **Columbia Colle** | **76.90** | **41** | *e*P | | **P** | | **12 14 47.9** | **+0.4** |
| | comp=Z,80nm,1.4s | | | | | | | | |
| CMB | | | | | LR | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **NACB** | **Ninganchiao** | **76.95** | **302** | *e*P | | **P** | | **12 14 46.6** | **-1.5** |
| | comp=Z,104nm,0.9s | | | | | | | | |
| **LRMC** | **Laurel Mountai** | **77.03** | **44** | P | | **P** | | **12 14 48.8** | **+0.4** |
| | baz=77 | | | | | | | | |
| **PET** | **Petropavlovsk** | **77.03** | **343** | *e*P | | **P** | | **12 14 46.3** | **-1.5** |
| PET | | | | *e*S | | **S** | | **12 24 33.6** | **-1.7** |
| PET | | | | *e*PS | | **PnS** | | **12 25 09.4** | **-6.2** |
| PET | | | | *e*SS | | **SS** | | **12 29 36.0** | **+2.8** |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,1µm,11.1s | | | | | | | | |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,800nm,10.1s | | | | | | | | |
| PET | | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.9s | | | | | | | | |
| **PET** | **Petropavlovsk** | **77.03** | **343** | PFAKE | | | | 12 15 00.0 | +12 |
| PET | | | | LR | | LR | | | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **OHCM** | **Honcut** | **77.07** | **39** | *e*P | | **P** | | **12 14 49.1** | **+0.7** |
| **RRX** | **Edison Barstow** | **77.12** | **45** | P | | **P** | | **12 14 49.0** | **+0.2** |
| | baz=77 | | | | | | | | |
| **SSLB** | **Suanglung** | **77.27** | **302** | *e*P | | **P** | | **12 14 47.4** | **-2.5** |
| | comp=Z,31nm,0.6s | | | | | | | | |
| SSLB | | | | | LR | LR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **KSM** | **Kuching** | **77.27** | **276** | P | | **P** | | **12 14 51.0** | **+0.9** |
| | baz=77,SNR=4.7 | | | | | | | | |
| **KSM** | **Kuching** | **77.27** | **276** | *e*P | | **P** | | **12 14 51.0** | **+0.9** |
| | comp=Z,80nm,1.2s | | | | | | | | |
| KSM | | | | | LR | LR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **WDC** | **Whiskeytown Da** | **77.27** | **38** | *e*P | | **P** | | **12 14 50.6** | **+1.1** |
| WDC | | | | | pmax | pmax | | | |
| | comp=Z,129nm,1.6s | | | | | | | | |
| WDC | | | | | MLR | MLR | | | |
| | comp=Z,7µm,20.0s | | | | | | | | |
| **WDC** | **Whiskeytown Da** | **77.27** | **38** | *e*P | | **P** | | **12 14 50.6** | **+1.1** |
| | comp=Z,128nm,1.6s | | | | | | | | |
| WDC | | | | | LR | LR | | | |
| | comp=Z,7µm,20.0s | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **77.28** | **46** | P | | **P** | | **12 14 50.3** | **+0.4** |
| | baz=78 | | | | | | | | |
| **TPUB** | **Ta-pu** | **77.29** | **301** | *e*P | | **P** | | **12 14 47.6** | **-2.4** |
| | comp=Z,76nm,0.7s | | | | | | | | |
| TPUB | | | | | LR | LR | | | |
| | comp=Z,3µm,20.0s | | | | | | | | |
| **CWC** | **Cottonwood Cre** | **77.35** | **43** | P | | **P** | | **12 14 51.0** | **+0.7** |
| | baz=78 | | | | | | | | |
| **YHNB** | **Yeheng** | **77.36** | **302** | *e*P | | **P** | | **12 14 50.7** | **+0.2** |
| | comp=Z,189nm,1.5s | | | | | | | | |
| YHNB | | | | | LR | LR | | | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **PEA2** | **Petropavlovsk-** | **77.37** | **343** | *e*P | | **P** | | **12 14 49.3** | **-0.5** |
| **PEA0** | **Petropavlovsk-** | **77.37** | **343** | *e*P | | **P** | | **12 14 50.6** | **+0.9** |
| **PETK** | **Petropavlovsk-** | **77.37** | **343** | P | | **P** | | **12 14 49.3** | **-0.5** |
| | comp=Z,27nm,0.9s,baz=121,slow=8.4,SNR=15 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **77.37** | **343** | P | | **P** | | **12 14 49.3** | **-0.5** |
| PETK | | | | | pmax | pmax | | | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| **TATO** | **Taipei** | **77.43** | **303** | *e*P | | P | | 12 14 47.4 | -3.4 |
| | comp=Z,396nm,1.6s | | | | | | | | |
| TATO | | | | | LR | LR | | | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **KBO** | **Bosley Butte** | **77.43** | **35** | PFAKE | | | | 12 15 00.0 | +10 |
| KBO | | | | | LR | LR | | | |
| | comp=Z,9µm,20.0s | | | | | | | | |
| **N02D** | **Trinity Center** | **77.44** | **37** | P | | **P** | | **12 14 51.5** | **+1.0** |
| | baz=78 | | | | | | | | |
| **GSC** | **Goldstone** | **77.50** | **45** | *e*P | | **P** | | **12 14 51.6** | **+0.5** |
| GSC | | | | | pmax | pmax | | | |
| | comp=Z,161nm,1.5s | | | | | | | | |
| GSC | | | | | MLR | MLR | | | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **GSC** | **Goldstone** | **77.50** | **45** | P | | **P** | | **12 14 51.5** | **+0.5** |
| | baz=78 | | | | | | | | |
| **GSC** | **Goldstone** | **77.50** | **45** | *e*P | | **P** | | **12 14 51.6** | **+0.5** |
| | comp=Z,161nm,1.5s | | | | | | | | |
| GSC | | | | | LR | LR | | | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **MPMC** | **Manual Prospec** | **77.50** | **44** | P | | **P** | | **12 14 51.8** | **+0.6** |
| | baz=78 | | | | | | | | |
| **O03D** | **Paynes Creek** | **77.51** | **38** | P | | **P** | | **12 14 51.0** | **+0.1** |
| | baz=78,SNR=6.9 | | | | | | | | |
| **GLA** | **Glamis** | **77.53** | **48** | *e*P | | **P** | | **12 14 52.7** | **+1.5** |
| GLA | | | | | pmax | pmax | | | |
| | comp=Z,204nm,1.5s | | | | | | | | |
| GLA | | | | | MLR | MLR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **GLA** | **Glamis** | **77.53** | **48** | P | | **P** | | **12 14 51.7** | **+0.4** |
| | baz=78 | | | | | | | | |
| **GLA** | **Glamis** | **77.53** | **48** | *e*P | | **P** | | **12 14 52.7** | **+1.5** |
| | comp=Z,204nm,1.5s | | | | | | | | |
| GLA | | | | | LR | LR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **77.54** | **45** | P | | **P** | | **12 14 51.7** | **+0.4** |
| | baz=78 | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **77.57** | **43** | *e*P | | **P** | | **12 14 52.1** | **+0.5** |
| DAC | | | | | pmax | pmax | | | |
| | comp=Z,158nm,1.6s | | | | | | | | |
| DAC | | | | | MLR | MLR | | | |
| | comp=Z,6µm,18.0s | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **77.57** | **43** | *e*P | | **P** | | **12 14 52.0** | **+0.5** |
| | comp=Z,158nm,1.6s | | | | | | | | |
| DAC | | | | | LR | LR | | | |
| | comp=Z,6µm,18.0s | | | | | | | | |
| **XMIS** | **Christmas Isla** | **77.57** | **263** | PFAKE | | | | 12 15 00.0 | +8.2 |
| XMIS | | | | | LR | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **MLAC** | **Mammoth Lakes** | **77.60** | **42** | P | | **P** | | **12 14 52.8** | **+1.0** |
| | baz=78 | | | | | | | | |
| **MTUM** | **Tungsten Hills** | **77.60** | **42** | *e*P | | **P** | | **12 14 52.6** | **+0.8** |
| **M02C** | **Callahan** | **77.63** | **37** | P | | **P** | | **12 14 52.6** | **+1.0** |
| | baz=78 | | | | | | | | |
| **TIN** | **Tinemaha** | **77.63** | **43** | P | | **P** | | **12 14 52.7** | **+0.9** |
| | baz=78 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **77.73** | **331** | *c e*P | | **P** | | **12 14 52.0** | **+0.1** |
| YSS | | | | | *e**SP | **sP** | | **12 14 58.0** | **-2.3** |
| YSS | | | | | *e*S | **S** | | **12 24 44.0** | **+0.9** |
| YSS | | | | | *e*PPS | PPS | | 12 25 25.0 | |
| YSS | | | | | pmax | pmax | | | |
| | comp=Z,800nm,6.0s | | | | | | | | |
| YSS | | | | | pmax | pmax | | | |
| | comp=Z,70nm,1.0s | | | | | | | | |
| YSS | | | | | MLR | MLR | | | |
| | comp=N,900nm,18.0s | | | | | | | | |
| YSS | | | | | MLR | MLR | | | |
| | comp=E,2µm,18.0s | | | | | | | | |
| YSS | | | | | MLR | MLR | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **77.73** | **331** | *e*P | | **P** | | **12 14 54.0** | **+2.1** |
| | comp=Z,114nm,1.2s | | | | | | | | |
| YSS | | | | | LR | LR | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **L02D** | **Cave Junction,** | **77.73** | **36** | P | | **P** | | **12 14 53.5** | **+1.4** |
| | baz=78 | | | | | | | | |
| **KEBM** | **Edson Butte** | **77.82** | **35** | PFAKE | | | | 12 15 00.0 | +7.4 |
| KEBM | | | | LR | | LR | | | |
| | comp=Z,10µm,20.0s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **77.94** | **37** | P | | **P** | | **12 14 53.7** | **+0.3** |
| | comp=Z,13nm,1.1s,baz=190,slow=6.0,SNR=8.3 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **77.94** | **37** | *e*P | | **P** | | **12 14 54.6** | **+1.2** |
| YBH | | | | | pmax | pmax | | | |
| | comp=Z,82nm,1.6s | | | | | | | | |
| YBH | | | | | MLR | MLR | | | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **77.94** | **37** | *e*P | | **P** | | **12 14 54.6** | **+1.2** |
| | comp=Z,82nm,1.6s | | | | | | | | |
| YBH | | | | | LR | LR | | | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **IRM** | **Iron Mountain** | **77.94** | **46** | P | | **P** | | **12 14 53.6** | **+0.1** |
| | baz=78 | | | | | | | | |
| **GMRC** | **Granite Mounta** | **77.96** | **46** | P | | **P** | | **12 14 54.1** | **+0.4** |
| | baz=78 | | | | | | | | |
| **Y12C** | **Blythe** | **78.14** | **47** | P | | **P** | | **12 14 55.3** | **+0.8** |
| | baz=78 | | | | | | | | |
| **GRAC** | **Grapevine Rang** | **78.15** | **43** | P | | **P** | | **12 14 55.4** | **+0.8** |
| | baz=78 | | | | | | | | |
| **FURC** | **Furnace Creek,** | **78.16** | **44** | P | | **P** | | **12 14 55.4** | **+0.9** |
| | baz=78 | | | | | | | | |
| **TUQ** | **Turquoise Moun** | **78.16** | **45** | P | | **P** | | **12 14 55.6** | **+0.8** |
| | baz=78 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **78.34** | **49** | P | | **P** | | **12 14 56.2** | **+0.5** |
| | baz=79 | | | | | | | | |
| **NV01** | **Mina Array Sit** | **78.43** | **41** | *e*P | | **P** | | **12 14 56.2** | **-0.1** |
| **NVAR** | **Mina Array Bea** | **78.43** | **41** | P | | **P** | | **12 14 56.8** | **+0.5** |
| | comp=Z,37nm,1.0s,baz=223,slow=8.6,SNR=22 | | | | | | | | |
| **M04C** | **Macdoel** | **78.46** | **37** | P | | **P** | | **12 14 56.9** | **+0.6** |
| | baz=79 | | | | | | | | |
| **LDFC** | **Landfair** | **78.50** | **46** | *e*P | | **P** | | **12 14 58.1** | **+1.5** |
| | comp=Z,433nm,1.6s | | | | | | | | |
| LDFC | | | | | LR | LR | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **SII** | **Sitkinak Islan** | **78.56** | **11** | PFAKE | | | | 12 15 10.0 | +14 |
| SII | | | | | LR | LR | | | |
| | comp=Z,5µm,20.0s | | | | | | | | |
| **TPNV** | **Topopah Spring** | **78.84** | **44** | *e*P | | **P** | | **12 14 59.2** | **+0.7** |
| TPNV | | | | | pmax | pmax | | | |
| | comp=Z,185nm,1.6s | | | | | | | | |
| TPNV | | | | | MLR | MLR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **TPNV** | **Topopah Spring** | **78.84** | **44** | P | | **P** | | **12 14 58.9** | **+0.4** |
| | baz=79 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **78.84** | **44** | *e*P | | **P** | | **12 14 59.2** | **+0.7** |
| | comp=Z,185nm,1.6s | | | | | | | | |
| TPNV | | | | | LR | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **I03D** | **Drain, OR** | **78.91** | **35** | P | | **P** | | **12 14 58.9** | **+0.4** |
| | baz=79 | | | | | | | | |
| **K04D** | **Chiloquin, OR** | **79.06** | **36** | P | | **P** | | **12 14 59.6** | **0.0** |
| | baz=79 | | | | | | | | |
| **J04D** | **Umpqua Nationa** | **79.28** | **36** | P | | **P** | | **12 14 59.6** | **-1.2** |
| | baz=80 | | | | | | | | |
| **SHPR** | **Sheep Range** | **79.29** | **44** | *e*P | | **P** | | **12 15 01.9** | **+0.9** |
| **OHAK** | **Old Harbor** | **79.35** | **11** | PFAKE | | | | 12 15 10.0 | +9.4 |
| OHAK | | | | | LR | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **MOD** | **Modoc** | **79.41** | **38** | *e*P | | **P** | | **12 15 01.9** | **+0.3** |
| | comp=Z,162nm,1.8s | | | | | | | | |
| MOD | | | | | LR | LR | | | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **I04A** | **Tendick Farm,** | **79.48** | **35** | P | | **P** | | **12 15 02.1** | **+0.4** |
| | baz=80 | | | | | | | | |
| **KSRS** | **Korea Array** | **79.53** | **317** | P | | **P** | | **12 15 02.6** | **+0.6** |
| | comp=Z,35nm,1.2s,baz=128,slow=6.0,SNR=12 | | | | | | | | |
| **KSRS** | **Korea Array** | **79.53** | **317** | P | | **P** | | **12 15 02.7** | **+0.6** |
| KSRS | | | | | pmax | pmax | | | |
| | comp=Z,35nm,1.2s | | | | | | | | |
| **COR** | **Corvallis** | **79.53** | **34** | *e*P | | P | | 12 15 05.0 | +3.1 |
| COR | | | | | pmax | pmax | | | |
| | comp=Z,279nm,2.0s | | | | | | | | |
| COR | | | | | MLR | MLR | | | |
| | comp=Z,15µm,19.0s | | | | | | | | |
| **COR** | **Corvallis** | **79.53** | **34** | *e*P | | P | | 12 15 05.0 | +3.1 |
| | comp=Z,278nm,2.0s | | | | | | | | |
| COR | | | | | LR | LR | | | |
| | comp=Z,15µm,19.0s | | | | | | | | |
| **KS15** | **Wonju Array Si** | **79.55** | **317** | *e*P | | **P** | | **12 15 02.6** | **+0.5** |
| **KS01** | **Wonju Array Si** | **79.56** | **317** | *e*P | | **P** | | **12 15 02.6** | **+0.3** |
| **K05A** | **Summer Lake** | **79.61** | **37** | *e*P | | **P** | | **12 15 03.9** | **+1.2** |
| | comp=Z,226nm,1.8s | | | | | | | | |
| K05A | | | | | LR | LR | | | |
| | comp=Z,8µm,20.0s | | | | | | | | |
| **PMSA** | **Palmer Station** | **79.69** | **156** | PFAKE | | | | 12 15 20.0 | +17 |
| PMSA | | | | LR | | LR | | | |
| | comp=Z,5µm,20.0s | | | | | | | | |
| **QZH** | **Quanzhou** | **79.71** | **301** | ⇑ *i*P | | **P** | | **12 15 04.4** | **+1.1** |
| QZH | | | | | S | **S** | | **12 25 06.0** | **+0.8** |
| QZH | | | | | PMZ | | | | |
| | comp=Z,130nm,0.8s | | | | | | | | |
| QZH | | | | | PMZ | | | | |
| | comp=Z,1µm,5.0s | | | | | | | | |
| QZH | | | | | LN | | | | |
| | comp=Z,3µm,16.5s | | | | | | | | |
| QZH | | | | | LE | | | | |
| | comp=Z,4µm,20.5s | | | | | | | | |
| QZH | | | | | LZ | | | | |
| | comp=Z,3µm,19.3s | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **79.78** | **36** | P | | **P** | | **12 15 03.6** | **+0.1** |
| | baz=80 | | | | | | | | |
| **G03D** | **McMinnville, O** | **79.98** | **34** | P | | **P** | | **12 15 04.3** | **0.0** |
| | baz=80 | | | | | | | | |
| **TUC** | **Tucson** | **79.98** | **50** | *e*P | | **P** | | **12 15 05.9** | **+1.2** |
| TUC | | | | | pmax | pmax | | | |
| | comp=Z,236nm,1.5s | | | | | | | | |
| TUC | | | | | MLR | MLR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **TUC** | **Tucson** | **79.98** | **50** | *e*P | | **P** | | **12 15 05.9** | **+1.2** |
| | comp=Z,236nm,1.5s | | | | | | | | |
| TUC | | | | | LR | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **80.01** | **11** | *i* P | | P | | 12 15 07.8 | +3.7 |
| **KDAK** | **Kodiak Island** | **80.01** | **11** | PFAKE | | | | 12 15 20.0 | +16 |
| KDAK | | | | | LR | LR | | | |
| | comp=Z,4µm,21.0s | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **80.09** | **43** | P | | **P** | | **12 15 05.6** | **+0.2** |
| | baz=80,SNR=27 | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **80.09** | **43** | *e*P | | **P** | | **12 15 05.8** | **+0.4** |
| | comp=Z,120nm,1.6s | | | | | | | | |
| R11A | | | | | LR | LR | | | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **H04A** | **Detroit Lake** | **80.19** | **35** | *e*P | | **P** | | **12 15 05.8** | **+0.3** |
| | comp=Z,98nm,1.7s | | | | | | | | |
| H04A | | | | | LR | LR | | | |
| | comp=Z,12µm,19.0s | | | | | | | | |
| **BMN** | **Battle Mountai** | **80.31** | **40** | *e*P | | **P** | | **12 15 07.4** | **+0.9** |
| BMN | | | | | pmax | pmax | | | |
| | comp=Z,137nm,1.5s | | | | | | | | |
| BMN | | | | | MLR | MLR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **BMN** | **Battle Mountai** | **80.31** | **40** | *e*P | | **P** | | **12 15 07.4** | **+0.9** |
| | comp=Z,138nm,1.5s | | | | | | | | |
| BMN | | | | | LR | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **F03A** | **Seaside** | **80.32** | **33** | PFAKE | | | | 12 15 20.0 | +14 |
| F03A | | | | LR | | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **INCN** | **Inchon** | **80.39** | **316** | PFAKE | | | | 12 15 20.0 | +13 |
| INCN | | | | LR | | LR | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **I05D** | **Terrebonne, OR** | **80.42** | **35** | P | | **P** | | **12 15 06.8** | **0.0** |
| | baz=81 | | | | | | | | |
| **VLA** | **Vladivostok** | **80.60** | **323** | *c i*P | | **P** | | **12 15 08.1** | **+0.4** |
| VLA | | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.5s | | | | | | | | |
| **MSHR** | **Mys Shultsa** | **80.67** | **322** | *c i*P | | **P** | | **12 15 10.9** | **+2.8** |
| **F04D** | **Rainier, OR** | **80.70** | **33** | P | | **P** | | **12 15 08.9** | **+0.8** |
| | baz=81 | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **80.71** | **38** | *e*P | | **P** | | **12 15 08.9** | **+0.4** |
| WVOR | | | | | pmax | pmax | | | |
| | comp=Z,96nm,1.5s | | | | | | | | |
| WVOR | | | | | MLR | MLR | | | |
| | comp=Z,7µm,19.0s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **80.71** | **38** | *e*P | | **P** | | **12 15 08.9** | **+0.4** |
| | comp=Z,96nm,1.5s | | | | | | | | |
| WVOR | | | | | LR | LR | | | |
| | comp=Z,7µm,19.0s | | | | | | | | |
| **SSE** | **Sheshan** | **80.73** | **308** | P | | **P** | | **12 15 09.8** | **+1.1** |
| SSE | | | | S | | **S** | | **12 25 19.8** | **+4.1** |
| SSE | | | | sS | | **sS** | | **12 25 25.7** | **-0.3** |
| SSE | | | | PMZ | | | | | |
| | comp=Z,37nm,0.8s | | | | | | | | |
| SSE | | | | PMZ | | | | | |
| | comp=Z,850nm,9.2s | | | | | | | | |
| SSE | | | | LN | | | | | |
| | comp=Z,870nm,15.7s | | | | | | | | |
| SSE | | | | LZ | | | | | |
| | comp=Z,1µm,17.1s | | | | | | | | |
| **E03A** | **Lebam** | **80.73** | **33** | PFAKE | | | | 12 15 20.0 | +12 |
| E03A | | | | LR | | LR | | | |
| | comp=Z,9µm,19.0s | | | | | | | | |
| **F04A** | **Amboy** | **80.90** | **34** | *e*P | | **P** | | **12 15 09.1** | **-0.1** |
| | comp=Z,145nm,1.8s | | | | | | | | |
| F04A | | | | | LR | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **CCUT** | **Cedar City** | **81.06** | **44** | *e*P | | **P** | | **12 15 11.9** | **+1.3** |
| | comp=Z,163nm,1.6s | | | | | | | | |
| CCUT | | | | | LR | LR | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **NLWA** | **Neilton Lookou** | **81.16** | **32** | PFAKE | | | | 12 15 20.0 | +9.3 |
| NLWA | | | | LR | | LR | | | |
| | comp=Z,10µm,19.0s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **81.23** | **324** | P | | **P** | | **12 15 12.3** | **+1.2** |
| | comp=Z,4.9nm,0.7s,baz=101,slow=3.9,SNR=9.3 | | | | | | | | |
| USRK | | | | | LR | LR | | 12 47 12.5 | |
| | comp=Z,5µm,19.9s,baz=118,slow=33 | | | | | | | | |
| **I07A** | **Izee** | **81.26** | **36** | *e*P | | **P** | | **12 15 11.8** | **+0.4** |
| | comp=Z,145nm,1.9s | | | | | | | | |
| I07A | | | | | LR | LR | | | |
| | comp=Z,8µm,19.0s | | | | | | | | |
| **WUAZ** | **Wupatki** | **81.28** | **47** | P | | **P** | | **12 15 12.5** | **+0.7** |
| | baz=82 | | | | | | | | |
| **WUAZ** | **Wupatki** | **81.28** | **47** | *e*P | | **P** | | **12 15 12.9** | **+1.2** |
| | comp=Z,177nm,1.5s | | | | | | | | |
| WUAZ | | | | | LR | LR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **EKU** | **East Kanab** | **81.37** | **45** | *e*P | | **P** | | **12 15 13.4** | **+1.1** |
| **J08A** | **Circle Bar Ran** | **81.38** | **37** | *e*P | | **P** | | **12 15 12.3** | **+0.3** |
| | comp=Z,164nm,1.8s | | | | | | | | |
| J08A | | | | | LR | LR | | | |
| | comp=Z,7µm,20.0s | | | | | | | | |
| **G06A** | **Carlson Farm,** | **81.38** | **35** | *e*P | | **P** | | **12 15 11.4** | **-0.5** |
| | comp=Z,190nm,1.8s | | | | | | | | |
| G06A | | | | | LR | LR | | | |
| | comp=Z,10µm,19.0s | | | | | | | | |
| **ELK** | **Elko** | **81.71** | **41** | *e*P | | **P** | | **12 15 14.9** | **+0.9** |
| ELK | | | | | pmax | pmax | | | |
| | comp=Z,141nm,1.8s | | | | | | | | |
| **ELK** | **Elko** | **81.71** | **41** | *e*P | | **P** | | **12 15 14.8** | **+0.9** |
| | comp=Z,141nm,1.8s | | | | | | | | |
| **LON** | **Longmire** | **81.76** | **33** | *e*P

**MNAI Manna** 82.12 268 PFAKE 12 15 30.0 +13
MNAI LR LR
comp=Z,3µm,18.0s
**BRLK Bradley Lake** 82.18 11 eP P 12 15 14.7 -1.0
comp=Z,64nm,1.3s
BRLK LR LR
comp=Z,4µm,20.0s
**W18A Petrified Fore** 82.20 48 P P 12 15 16.9 +0.3
baz=82
**W18A Petrified Fore** 82.20 48 eP P 12 15 16.8 +0.1
comp=Z,270nm,1.8s
W18A LR LR
comp=Z,2µm,20.0s
**PGC Sidney** 82.23 31 eP P 12 15 15.0 -1.2
comp=Z,450nm,2.8s
PGC LR LR
comp=Z,5µm,20.0s
**121A Cookes Peak, D** 82.27 51 P P 12 15 17.1 +0.1
baz=82
**G08A Pilot Rock** 82.33 36 eP P 12 15 17.3 +0.3
comp=Z,270nm,2.0s
G08A LR LR
comp=Z,7µm,20.0s
**HABR Khabarovsk** 82.44 329 deP P 12 15 17.0 -0.3
HABR e 12 15 22.1
HABR 12 18 25.2
HABR ePPP PPP 12 20 16.0
HABR S S 12 25 33.0 +0.3
HABR eS SKSac 12 25 37.3 +0.1
HABR eSS SS 12 30 54.0 -0.5
HABR pmax pmax
comp=Z,425nm,3.3s
HABR MLR MLR
comp=Z,2µm,19.0s
**B05A Bryant** 82.63 32 P P 12 15 19.4 +1.1
baz=83
**A04D Lummi Island** 82.64 31 P P 12 15 19.1 +0.8
baz=83
**E07A Sunnyside** 82.66 34 eP P 12 15 19.2 +0.7
comp=Z,193nm,1.8s
E07A LR LR
comp=Z,15µm,19.0s
**SVW2 Sparrevohn** 82.67 9 PFAKE 12 15 30.0 +12
SVW2 LR LR
comp=Z,2µm,20.0s
**LTY Liberty** 82.69 33 eP P 12 15 19.2 +0.4
comp=Z,113nm,1.7s
LTY LR LR
comp=Z,5µm,19.0s
**HAWA Hanford** 82.72 35 eP P 12 15 19.8 +0.9
comp=Z,167nm,1.6s
HAWA LR LR
comp=Z,14µm,19.0s
**SEW Seward** 82.77 12 PFAKE 12 15 30.0 +11
SEW LR LR
comp=Z,4µm,19.0s
**MAW Mawson** 82.82 199 P P 12 15 20.0 +0.9
comp=Z,8.7nm,0.7s,baz=129,slow=16,SNR=6.8
MAW PKP2ab 12 41 35.0
comp=Z,5.3nm,0.7s,baz=70,slow=3.7,SNR=3.7
**MAW Mawson** 82.82 199 P P 12 15 19.5 +0.4
baz=83,SNR=9.5
**MAW Mawson** 82.82 199 eP P 12 15 20.3 +1.2
comp=Z,8.2nm,1.1s
**MDJ Mudanjiang** 82.83 323 P P 12 15 22.3 +2.9
MDJ S S 12 25 41.8 +5.0
MDJ SS SS 12 31 00.5 +0.2
MDJ PMZ
comp=Z,32nm,1.0s
MDJ PMZ
comp=Z,1µm,7.6s
MDJ LN
comp=Z,2µm,21.2s
MDJ LE
comp=Z,2µm,21.2s
MDJ LZ
comp=Z,3µm,19.6s
**MDJ Mudanjiang** 82.83 323 eP P 12 15 20.6 +1.2
comp=Z,46nm,1.1s
MDJ LR LR
comp=Z,3µm,20.0s
**DUG Dugway** 82.91 42 eP P 12 15 21.0 +0.9
DUG pmax pmax
comp=Z,95nm,1.5s
DUG MLR MLR
comp=Z,4µm,19.0s
**DUG Dugway** 82.91 42 P P 12 15 20.7 +0.5
baz=83,SNR=15
**DUG Dugway** 82.91 42 eP P 12 15 21.0 +0.9
comp=Z,95nm,1.5s
DUG LR LR
comp=Z,4µm,19.0s
**NJ2 Nanjing** 82.93 308 eP P 12 15 22.0 +1.8
NJ2 pP pP 12 15 26.4 -0.1
NJ2 sP sP 12 15 30.1 +1.4
NJ2 S SKSac 12 25 42.0 +0.8
NJ2 sS sS 12 25 50.0 +1.3
NJ2 PMZ
comp=Z,20nm,0.9s
NJ2 PMZ
comp=Z,1µm,6.0s
NJ2 LN
comp=Z,2µm,18.2s
NJ2 LE
comp=Z,3µm,19.4s
NJ2 LZ
comp=Z,2µm,15.0s
**MFID Camas Ranch** 82.94 39 eP P 12 15 21.0 +0.8
comp=Z,166nm,1.8s
MFID LR LR
comp=Z,3µm,19.0s
**BMO Blue Mountains** 82.97 37 PFAKE 12 15 30.0 +10
BMO LR LR
comp=Z,7µm,19.0s
**C06D Leavenworth** 83.01 33 P P 12 15 21.3 +0.9
baz=83
**GZH Guangzhou** 83.15 298 P P 12 15 22.2 +0.6
GZH PP PP 12 18 37.4 +4.2
GZH S S 12 25 46.2 +5.2
GZH PMZ
comp=Z,2µm,8.2s
GZH LN
comp=Z,2µm,18.7s
GZH LE
comp=Z,3µm,19.0s
**BGU Big Grassy Mou** 83.18 42 eP P 12 15 22.5 +0.9
comp=Z,203nm,1.9s
BGU LR LR
comp=Z,6µm,19.0s
**NLU North Lily Min** 83.24 43 eP P 12 15 23.3 +1.3
comp=Z,164nm,1.8s
NLU LR LR
comp=Z,6µm,19.0s
**SPU Mount Spurr** 83.30 10 eP P 12 15 20.6 -1.0
**MYKOM Kota Tinggi** 83.41 274 eP P 12 15 23.6 +0.4
comp=Z,116nm,1.6s
**D08A Wollman Farm,** 83.47 34 eP P 12 15 23.1 +0.4
comp=Z,274nm,1.8s
D08A LR LR
comp=Z,14µm,19.0s
**MPU Maple Canyon** 83.56 43 eP P 12 15 24.9 +1.3
comp=Z,208nm,1.9s
MPU LR LR
comp=Z,6µm,19.0s
**RC01 Rabbit Creek A** 83.63 12 eP P 12 15 23.6 +0.4
comp=Z,50nm,1.2s
RC01 LR LR
comp=Z,3µm,18.0s
**MNTX Cornudas Mount** 83.63 53 P P 12 15 24.3 +0.3
baz=84
**MNTX Cornudas Mount** 83.63 53 eP P 12 15 24.4 +0.4
comp=Z,174nm,1.6s
MNTX LR LR
comp=Z,4µm,19.0s
**Y22D IRIS PASSCAL I** 83.66 50 P P 12 15 24.2 0.0
baz=84
**LAZ Ladron** 83.67 50 eP P 12 15 25.6 +1.3
**F10A Beach Ranch, E** 83.70 36 eP P 12 15 23.9 -0.2
comp=Z,202nm,1.6s
F10A LR LR
comp=Z,7µm,19.0s
**PAYG Puerto Ayora** 83.74 88 PFAKE 12 15 40.0 +15
PAYG LR LR
comp=Z,6µm,20.0s
**O16A Springville** 83.75 43 eP P 12 15 23.9 -0.6
comp=Z,539nm,2.0s
O16A LR LR
comp=Z,3µm,18.0s
**SPUT South Promonto** 83.76 42 eP P 12 15 25.3 +0.7
comp=Z,239nm,1.6s
SPUT LR LR
comp=Z,6µm,19.0s
**SRU San Rafael** 83.78 44 eP P 12 15 25.9 +1.1
SRU pmax pmax
comp=Z,341nm,1.5s
SRU MLR MLR
comp=Z,2µm,19.0s
**SRU San Rafael** 83.78 44 eP P 12 15 25.9 +1.1
comp=Z,341nm,1.5s
SRU LR LR
comp=Z,2µm,19.0s
**SUA Susitna One** 83.79 11 eP P 12 15 23.7 -0.4
comp=Z,31nm,0.9s
**HVU Hansel Valley** 83.82 41 eP P 12 15 25.5 +0.6
HVU pmax pmax
comp=Z,251nm,1.8s
HVU MLR MLR
comp=Z,6µm,19.0s
**HVU Hansel Valley** 83.82 41 eP P 12 15 25.5 +0.6
comp=Z,251nm,1.8s
HVU LR LR
comp=Z,6µm,19.0s
**TX31 Lajitas Ar. Si** 83.83 56 eP P 12 15 25.8 +0.6
**TXAR Lajitas Array** 83.83 56 P P 12 15 25.8 +0.7
comp=Z,12nm,0.9s,baz=218,slow=8.9,SNR=26
**TXAR Lajitas Array** 83.83 56 P P 12 15 25.8 +0.7
TXAR pmax pmax
comp=Z,12nm,0.9s
**P17A Butcher Ranch,** 83.84 44 eP P 12 15 26.6 +1.5
comp=Z,386nm,1.6s
P17A LR LR
comp=Z,5µm,19.0s
**CTU Camp Tracy** 83.86 43 eP P 12 15 25.4 +0.3
comp=Z,124nm,1.4s
CTU LR LR
comp=Z,5µm,21.0s
**HLID Hailey** 83.86 39 P P 12 15 25.2 +0.1
baz=84
**HLID Hailey** 83.86 39 eP P 12 15 25.7 +0.7
comp=Z,163nm,1.5s
HLID LR LR
comp=Z,2µm,21.0s
**BNM Barren Site** 83.91 50 eP P 12 15 26.6 +1.0
**EYAK Cordova Ski Ar** 83.95 14 PFAKE 12 15 40.0 +15
EYAK LR LR
comp=Z,5µm,18.0s
**LPM Los Pinos Moun** 83.99 50 eP P 12 15 26.9 +1.0
**RAGM Ragged Mountai** 84.04 14 PFAKE 12 15 40.0 +15
RAGM LR LR
comp=Z,7µm,18.0s
**GAMB Gambell** 84.05 1 eP P 12 15 25.4 +0.2
comp=Z,108nm,1.4s
GAMB LR LR
comp=Z,2µm,21.0s
**MVCO Mesa Verde** 84.14 47 P P 12 15 26.5 -0.2
baz=84
**MVCO Mesa Verde** 84.14 47 eP P 12 15 24.1 -2.6
comp=Z,128nm,1.6s
MVCO LR LR
comp=Z,2µm,19.0s
**PV05 Paradox Valley** 84.18 46 eP P 12 15 28.6 +1.7
**PMR Palmer** 84.21 12 eP P 12 15 25.1 -1.0
PMR pmax pmax
comp=Z,193nm,2.1s
PMR MLR MLR
comp=Z,4µm,18.0s
**PMR Palmer** 84.21 12 eP P 12 15 25.1 -1.0
comp=Z,193nm,2.1s
PMR LR LR
comp=Z,4µm,18.0s
**P18A Preston Nutter** 84.24 44 eP P 12 15 28.6 +1.3
comp=Z,250nm,1.7s
P18A LR LR
comp=Z,4µm,19.0s
**C09A Chrisman Ranch** 84.28 34 eP P 12 15 26.9 +0.1
comp=Z,189nm,1.8s
C09A LR LR
comp=Z,12µm,19.0s
**TCUT Toone Canyon** 84.31 42 eP P 12 15 28.1 +0.7
comp=Z,780nm,1.6s
TCUT LR LR
comp=Z,6µm,19.0s
**PV10 Paradox Valley** 84.38 46 eP P 12 15 28.1 +0.2
**PV09 Paradox Valley** 84.38 45 eP P 12 15 29.3 +1.4
**ANMO Albuquerque** 84.43 50 P P 12 15 28.4 +0.3
comp=Z,32nm,1.1s,baz=219,slow=5.7,SNR=16
**ANMO Albuquerque** 84.43 50 dP P 12 15 28.9 +0.7
ANMO pmax pmax
comp=Z,280nm,2.5s
**ANMO Albuquerque** 84.43 50 eP P 12 15 29.1 +1.0
comp=Z,287nm,1.6s
ANMO LR LR
comp=Z,3µm,20.0s
**MCU Monte Cristo P** 84.44 42 eP P 12 15 28.3 +0.1
**QIZ Qiongzhong** 84.44 293 P P 12 15 30.4 +2.1
QIZ S S 12 25 57.6 +3.5
QIZ SS SS 12 31 29.4 +4.3
QIZ PMZ
comp=Z,15nm,1.9s
QIZ PMZ
comp=Z,950nm,14.0s
QIZ LN
comp=Z,820nm,17.3s
QIZ LE
comp=Z,600nm,17.5s
QIZ LZ
comp=Z,2µm,17.7s
**QIZ Qiongzhong** 84.44 293 PFAKE 12 15 40.0 +12
QIZ LR LR
comp=Z,2µm,18.0s
**DL2 Dalian** 84.46 315 P P 12 15 28.6 +0.7
DL2 S S 12 25 53.7 +0.2
DL2 PMZ
comp=Z,240nm,1.6s
DL2 PMZ
comp=Z,740nm,7.3s
DL2 LN
comp=Z,630nm,17.7s
DL2 LE
comp=Z,850nm,16.9s
DL2 LZ
comp=Z,1µm,17.1s
**DIV Divide** 84.46 13 eP P 12 15 27.0 -0.6
comp=Z,76nm,1.3s
DIV LR LR
comp=Z,4µm,19.0s
**HWUT Hardware Ranch** 84.48 42 eP P 12 15 28.8 +0.5
comp=Z,170nm,1.8s
HWUT LR LR
comp=Z,6µm,19.0s
**SML Sawmill** 84.56 12 eP P 12 15 27.3 -0.7
SML pmax pmax
comp=Z,92nm,1.6s
SML MLR MLR
comp=Z,3µm,18.0s
**SML Sawmill** 84.56 12 eP P 12 15 27.3 -0.7
comp=Z,92nm,1.6s
SML LR LR
comp=Z,3µm,18.0s
**PV01 Paradox Valley** 84.57 46 eP P 12 15 29.9 +1.0
**DHAK Deception Hill** 84.57 18 PFAKE 12 15 40.0 +12
DHAK LR LR
comp=Z,2µm,19.0s
**BMRM Bremner River** 84.58 14 eP P 12 15 28.7 +0.6
comp=Z,123nm,1.6s
BMRM LR LR
comp=Z,4µm,18.0s
**CN2 Changchun** 84.74 321 eP P 12 15 28.7 -0.6
CN2 ePP PP 12 18 46.1 +0.3
CN2 SKS S 12 25 49.0 -7.1
CN2 PMZ
comp=Z,20nm,1.5s
CN2 PMZ
comp=Z,900nm,4.0s
CN2 LN
comp=Z,700nm,18.0s
CN2 LE
comp=Z,1µm,18.0s
CN2 LZ
comp=Z,1µm,19.0s
**KLU Klutina** 84.76 13 eP P 12 15 29.4 +0.4
comp=Z,56nm,1.4s
KLU LR LR
comp=Z,3µm,18.0s
**SNY Shenyang** 84.78 318 ⇑P P 12 15 30.0 +0.6
SNY S S 12 25 58.2 +1.7
SNY PMZ
comp=Z,1µm,9.9s
SNY LN
comp=Z,1µm,16.5s
SNY LE
comp=Z,1µm,17.1s
SNY LZ
comp=Z,3µm,16.8s
**SCM Sheep Creek Mo** 84.78 12 eP P 12 15 29.7 +0.6
SCM pmax pmax
comp=Z,46nm,1.0s
SCM MLR MLR
comp=Z,2µm,19.0s
**SCM Sheep Creek Mo** 84.78 12 eP P 12 15 29.7 +0.6
comp=Z,46nm,1.0s
SCM LR LR
comp=Z,2µm,19.0s
**PCA Pinnacle** 84.87 16 PFAKE 12 15 40.0 +10
PCA LR LR
comp=Z,4µm,18.0s
**PPLA Purkeypile** 84.89 10 PFAKE 12 15 40.0 +10
PPLA LR LR
comp=Z,4µm,21.0s
**NEW Newport** 85.17 34 P P 12 15 30.8 -0.6
comp=Z,4.4nm,1.0s,baz=224,slow=8.3,SNR=8.7
**NEW Newport** 85.17 34 eP P 12 15 31.5 +0.1
NEW pmax pmax
comp=Z,84nm,1.8s
NEW MLR MLR
comp=Z,15µm,19.0s
**NEW Newport** 85.17 34 P P 12 15 32.1 +0.7
baz=85
**NEW Newport** 85.17 34 eP P 12 15 31.5 +0.1
comp=Z,84nm,1.8s
NEW LR LR
comp=Z,15µm,19.0s
**COCO West Island** 85.17 259 PFAKE 12 15 40.0 +7.9
COCO LR LR
comp=Z,5µm,18.0s
**CAST Castle Rocks** 85.40 10 eP P 12 15 30.9 -1.3
comp=Z,24nm,1.0s
**AHID Auburn Hatcher** 85.40 41 eP P 12 15 33.3 +0.4
comp=Z,151nm,1.4s
AHID LR LR
comp=Z,5µm,19.0s
**MCMT McKenzie Canyo** 85.51 39 eP P 12 15 34.0 +0.6
**BKNI Bangkinang** 85.53 272 PFAKE 12 15 40.0 +6.1
BKNI LR LR
comp=Z,2µm,18.0s
**S22A 4UR Ranch, Cre** 85.56 47 P P 12 15 34.7 +0.8
baz=86,SNR=38
**S22A 4UR Ranch, Cre** 85.56 47 eP P 12 15 35.3 +1.4
comp=Z,238nm,1.6s
S22A LR LR
comp=Z,2µm,19.0s
**WHN Wuhan** 85.62 305 ⇑P P 12 15 34.7 +0.7
WHN S S 12 26 03.4 -2.0
WHN PMZ
comp=Z,2µm,10.6s
WHN LN
comp=Z,5µm,18.4s
WHN LE
comp=Z,1µm,13.8s
WHN LZ
comp=Z,4µm,18.1s
**TRF Thorofare Moun** 85.72 10 eP P 12 15 34.0 +0.1
comp=Z,63nm,0.9s
TRF LR LR
comp=Z,6µm,20.0s
**HARP HAARP** 85.74 13 PFAKE 12 15 50.0 +16
HARP LR LR
comp=Z,3µm,21.0s
**429A Davenport Ranc** 85.79 55 P P 12 15 34.2 -0.7
baz=86,SNR=50
**O20A White River Ci** 85.82 44 P P 12 15 35.3 +0.3
baz=86,SNR=5.4
**O20A White River Ci** 85.82 44 eP P 12 15 35.2 +0.2
comp=Z,176nm,1.8s
**REDW Red Top Meadow** 85.88 41 eP P 12 15 36.0 +0.7
comp=Z,166nm,1.6s
REDW LR LR
comp=Z,5µm,19.0s
**TPAW Teton Pass** 85.89 41 eP P 12 15 35.9 +0.5
comp=Z,166nm,1.8s
TPAW LR LR
comp=Z,5µm,18.0s
**228A UT Block 9, Go** 85.93 54 P P 12 15 35.7 +0.1
baz=86,SNR=8.2
**FXWY Fox Creek** 85.93 40 eP P 12 15 36.3 +0.8
comp=Z,104nm,1.6s
FXWY LR LR
comp=Z,4µm,19.0s
**RND Reindeer** 85.93 11 eP P 12 15 34.7 -0.1
RND pmax pmax
comp=Z,119nm,1.1s
RND MLR MLR
comp=Z,4µm,20.0s
**RND Reindeer** 85.93 11 eP P 12 15 34.7 -0.1
comp=Z,119nm,1.1s
RND LR LR
comp=Z,4µm,20.0s
**TNA Tin City** 85.94 2 eP P 12 15 35.3 +0.6
comp=Z,46nm,0.9s
TNA LR LR
comp=Z,3µm,21.0s
**DLMT Dillon** 85.96 38 eP P 12 15 36.4 +0.9
comp=Z,108nm,1.4s
DLMT LR LR
comp=Z,5µm,20.0s
**SNOW Snow King Moun** 86.00 41 eP P 12 15 36.9 +1.0
comp=Z,268nm,1.9s
SNOW LR LR
comp=Z,5µm,19.0s
**530A J-C Ranch, Com** 86.00 56 P P 12 15 36.0 0.0
baz=86,SNR=31
**MSO Missoula** 86.03 37 P P 12 15 35.7 -0.1
baz=86,SNR=7.0
**MSO Missoula** 86.03 37 eP P 12 15 35.1 -0.7
comp=Z,166nm,2.0s
MSO LR LR
comp=Z,8µm,20.0s
**329A Wagon Wheel Ra** 86.11 54 P P 12 15 36.2 -0.2
baz=86,SNR=14
**IMW Indian Meadow** 86.12 40 eP P 12 15 36.9 +0.3
comp=Z,105nm,1.6s
IMW LR LR
comp=Z,4µm,19.0s
**MOOW Moose Ponds** 86.16 40 eP P 12 15 37.3 +0.6
comp=Z,96nm,1.8s
MOOW LR LR
comp=Z,5µm,19.0s
**BSMT Bassoo Peak** 86.17 35 eP P 12 15 37.6 +1.1
**LOHW Long Hollow** 86.17 41 eP P 12 15 36.9 +0.2
comp=Z,144nm,1.8s
LOHW LR LR
comp=Z,5µm,18.0s
**SMCO Snowmass** 86.17 46 eP P 12 15 37.4 +0.3
comp=Z,58nm,1.3s
**PAX Paxson** 86.18 13 PFAKE 12 15 50.0 +14
PAX LR LR
comp=Z,4µm,18.0s
**TIA Tai'an** 86.20 311 ⇓P P 12 15 38.3 +1.6
TIA S S 12 26 06.5 -4.4
TIA PMZ
comp=Z,30nm,1.3s
TIA PMZ
comp=Z,1µm,9.5s
TIA LN
comp=Z,1µm,27.0s
TIA LE
comp=Z,1µm,22.6s
TIA LZ
comp=Z,2µm,19.0s
**BPAW Bear Paw Mtn.** 86.21 10 eP P 12 15 35.0 -1.2
comp=Z,88nm,1.9s
BPAW LR LR
comp=Z,4µm,21.0s
**MCK McKinley** 86.22 11 eP P 12 15 35.9 -0.3
MCK pmax pmax
comp=Z,76nm,1.0s
MCK MLR MLR
comp=Z,4µm,20.0s
**MCK McKinley** 86.22 11 eP P 12 15 35.9 -0.3
comp=Z,76nm,1.0s
MCK LR LR

comp=Z,4µm,20.0s
**128A Castleberry Fa** 86.24 53 P P 12 15 37.3 +0.2
baz=86,SNR=30
**832A Faith Ranch, C** 86.26 58 P P 12 15 37.0 -0.3
baz=86,SNR=39
**631A Perdido Creek** 86.28 57 P P 12 15 37.3 0.0
baz=86,SNR=39
**LRM Limekiln Ridge** 86.30 38 eP P 12 15 38.2 +0.8
**QLMT Earthquake Lak** 86.34 39 eP P 12 15 38.7 +1.1
**BW06 Boulder Array** 86.36 42 eP P 12 15 37.5 -0.2
BW06 LR LR
comp=Z,4µm,19.0s
**430A Baggett Ranch,** 86.36 55 P P 12 15 37.4 -0.4
baz=87
**FLWY Flagg Ranch** 86.37 40 eP P 12 15 38.4 +0.8
comp=Z,162nm,1.8s
FLWY LR LR
comp=Z,4µm,19.0s
**JTMT Jette** 86.38 36 eP P 12 15 41.1 +3.5
**SWMT Swartz Lake** 86.40 36 eP P 12 15 39.0 +1.4
**PLCA Paso Flores** 86.40 132 eP P 12 15 38.4 +0.5
PLCA pmax pmax
comp=Z,75nm,2.0s
**PLCA Paso Flores** 86.40 132 P P 12 15 38.4 +0.5
baz=86,SNR=4.1
**PLCA Paso Flores** 86.40 132 eP P 12 15 38.4 +0.5
comp=Z,75nm,2.0s
**229A Bryant Ranch,** 86.45 54 P P 12 15 38.4 +0.3
baz=87
**732A Laxson Ranch,** 86.46 58 P P 12 15 37.9 -0.2
baz=87,SNR=23
**CHMT Chamberlain Mo** 86.47 37 eP P 12 15 37.8 -0.3
**SDCO Great Sand Dun** 86.47 48 P P 12 15 38.6 +0.2
baz=87,SNR=20
**SDCO Great Sand Dun** 86.47 48 eP P 12 15 39.1 +0.7
comp=Z,82nm,1.7s
SDCO LR LR
comp=Z,2µm,18.0s
**YFT Old Faithful** 86.49 40 PFAKE 12 15 50.0 +12
YFT LR LR
comp=Z,3µm,18.0s
**MENT Mentasta** 86.52 13 eP P 12 15 38.1 +0.4
**SLMT Seeley Lake** 86.52 36 eP P 12 15 37.4 -0.9
**BWN Browne** 86.53 10 PFAKE 12 15 50.0 +12
BWN LR LR
comp=Z,6µm,20.0s
**YMR Madison River** 86.53 40 PFAKE 12 15 50.0 +12
YMR LR LR
comp=Z,2µm,19.0s
**933A Laredo** 86.54 59 P P 12 15 38.7 +0.1
baz=87,SNR=21
**DLBC Dease Lake** 86.61 21 P P 12 15 38.1 -0.2
comp=Z,7.6nm,1.2s,baz=273,slow=8.3,SNR=3.1
**DLBC Dease Lake** 86.61 21 eP P 12 15 39.5 +1.1
comp=Z,113nm,2.2s
DLBC LR LR
comp=Z,3µm,20.0s
**Z28A Tucker Farm, M** 86.61 53 P P 12 15 39.0 0.0
baz=87,SNR=28
**H17A Grant Village** 86.61 40 P P 12 15 38.0 -0.9
baz=87
**H17A Grant Village** 86.61 40 eP P 12 15 40.8 +1.9
comp=Z,76nm,1.8s
H17A LR LR
comp=Z,4µm,20.0s
**531A Rocksprings** 86.63 56 P P 12 15 39.1 +0.1
baz=87,SNR=40
**MSTX Muleshoe** 86.64 52 P P 12 15 39.2 +0.2
baz=87,SNR=30
**MSTX Muleshoe** 86.64 52 eP P 12 15 39.5 +0.4
comp=Z,412nm,1.7s
MSTX LR LR
comp=Z,7µm,19.0s
**BOZ Bozeman (W)** 86.68 38 eP P 12 15 39.3 +0.2
BOZ pmax pmax
comp=Z,162nm,1.8s
BOZ MLR MLR
comp=Z,5µm,20.0s
**BOZ Bozeman (W)** 86.68 38 P P 12 15 39.4 +0.4
baz=87,SNR=28
**BOZ Bozeman (W)** 86.68 38 eP P 12 15 39.3 +0.2
comp=Z,162nm,1.8s
BOZ LR LR
comp=Z,5µm,20.0s
**330A Mertzon** 86.69 55 P P 12 15 38.7 -0.6
baz=87,SNR=13
**129A Stewart Farms,** 86.71 53 P P 12 15 39.3 -0.1
baz=87,SNR=14
**YNR Norris Junctio** 86.73 40 PFAKE 12 15 50.0 +11
YNR LR LR
comp=Z,3µm,18.0s
**833A Chaparral WMA,** 86.74 58 P P 12 15 39.2 -0.4
baz=87,SNR=17
**034A Hebbronville** 86.78 60 P P 12 15 40.1 +0.3
baz=87,SNR=22
**431A Sonora** 86.80 56 P P 12 15 39.5 -0.4
baz=87,SNR=7.3
**LKWY Lake** 86.81 40 eP P 12 15 41.6 +1.7
LKWY pmax pmax
comp=Z,131nm,2.0s
LKWY MLR MLR
comp=Z,5µm,19.0s
**LKWY Lake** 86.81 40 eP P 12 15 41.6 +1.7
comp=Z,131nm,2.0s
LKWY LR LR
comp=Z,5µm,19.0s
**UBPT Khong Chiam** 86.83 287 P P 12 15 49.0 +8.7
comp=Z,34nm,1.2s
**632A Uvalde** 86.94 57 P P 12 15 40.6 +0.1
baz=87,SNR=33
**T25A Trinidad** 86.94 49 P P 12 15 40.2 -0.4
baz=87
**T25A Trinidad** 86.94 49 eP P 12 15 41.3 +0.6
comp=Z,92nm,1.7s
T25A LR LR
comp=Z,3µm,19.0s
**230A Sterling City** 86.95 54 P P 12 15 40.1 -0.5
baz=87,SNR=15
**733A Divot King Ran** 86.99 58 P P 12 15 40.8 0.0
baz=87
**IPM Ipoh** 87.00 276 eP P 12 15 40.7 -0.5
comp=Z,139nm,1.7s
IPM LR LR
comp=Z,2µm,18.0s
**Y28A McKinney Farm,** 87.00 52 P P 12 15 40.6 -0.2
baz=87,SNR=12
**035Z Hargill** 87.03 60 P P 12 15 40.1 -0.9
baz=87
**WRH Wood River Hil** 87.05 11 eP P 12 15 40.1 -0.1
comp=Z,116nm,1.1s
WRH LR LR
comp=Z,3µm,20.0s
**Z29A Hungry Hill Ra** 87.11 53 P P 12 15 41.5 +0.1
baz=87,SNR=24
**532A Rocksprings** 87.11 56 P P 12 15 41.2 -0.2
baz=87,SNR=43
**MLY Manley** 87.12 10 eP P 12 15 40.1 -0.5
comp=Z,413nm,2.8s
MLY LR LR
comp=Z,3µm,21.0s
**934A Benavides** 87.14 59 P P 12 15 41.8 +0.3
baz=87
**HRY Holter Researc** 87.16 37 eP P 12 15 42.0 +0.6
**HDA Harding Lake** 87.19 11 eP P 12 15 41.0 +0.1
comp=Z,485nm,2.6s
HDA LR LR
comp=Z,4µm,18.0s
**035A Encino** 87.20 60 P P 12 15 42.5 +0.7
baz=87,SNR=11
**331A San Angelo** 87.22 55 P P 12 15 41.5 -0.4
baz=88,SNR=16
**CCB Clear Creek Bu** 87.26 11 eP P 12 15 41.0 -0.2
comp=Z,70nm,1.1s
CCB LR LR
comp=Z,3µm,20.0s
**Q24A Divide** 87.30 47 P P 12 15 41.9 -0.6
baz=88
**Q24A Divide** 87.30 47 eP P 12 15 43.4 +0.9
comp=Z,170nm,2.2s
Q24A LR LR
comp=Z,3µm,18.0s
**X28A Dimmitt** 87.31 52 P P 12 15 42.0 -0.4
baz=88,SNR=14
**834A Tilden** 87.33 59 P P 12 15 42.4 0.0
baz=88,SNR=17
**SEY Seymchan** 87.34 345 P P 12 15 41.1 -0.5
comp=Z,34nm,0.9s,baz=152,slow=5.1,SNR=11
**SEY Seymchan** 87.34 345 P P 12 15 41.1 -0.5
SEY pmax pmax
comp=Z,34nm,0.9s
**JCT Junction City** 87.34 56 eP P 12 15 42.5 0.0
JCT pmax pmax
comp=Z,169nm,1.8s
JCT MLR MLR
comp=Z,5µm,19.0s
**JCT Junction City** 87.34 56 P P 12 15 41.7 -0.8
baz=88,SNR=12
**JCT Junction City** 87.34 56 eP P 12 15 42.5 0.0
comp=Z,169nm,1.8s
JCT LR LR
comp=Z,5µm,19.0s
**WALA Waterton Lakes** 87.35 35 eP P 12 15 41.4 -0.8
comp=Z,180nm,1.8s
WALA LR LR
comp=Z,9µm,19.0s
**130A Snyder** 87.37 54 P P 12 15 42.1 -0.5
baz=88,SNR=12
**633A Saathoff Ranch** 87.40 57 P P 12 15 42.9 +0.1
baz=88,SNR=8.4
**ISCO Idaho Springs** 87.40 46 eP P 12 15 43.5 +0.6
ISCO MLR MLR
comp=Z,2µm,18.0s
**ISCO Idaho Springs** 87.40 46 P P 12 15 42.2 -0.7
baz=88
**ISCO Idaho Springs** 87.40 46 eP P 12 15 43.5 +0.6
ISCO LR LR
comp=Z,2µm,18.0s
**Y29A Porterfield Fa** 87.40 52 P P 12 15 42.6 -0.2
baz=88,SNR=29
**V27A Dan Oppiter Fa** 87.41 50 P P 12 15 43.0 +0.2
baz=88
**COLA College** 87.45 11 eP P 12 15 41.8 -0.3
COLA pmax pmax
comp=Z,131nm,1.7s
**COLA College** 87.45 11 eP P 12 15 41.8 -0.3
comp=Z,90nm,1.1s
COLA LR LR
comp=Z,4µm,20.0s
**MDM Murphy Dome** 87.47 11 eP P 12 15 42.5 +0.2
comp=Z,148nm,1.5s
MDM LR LR
comp=Z,5µm,20.0s
**432A Menard** 87.52 56 P P 12 15 42.5 -0.9
baz=88,SNR=16
**T26A Comanche Natio** 87.53 49 P P 12 15 43.2 -0.3
baz=88
**IL1 Eielson Array** 87.53 11 eP P 12 15 41.5 -1.0
**ILAR Eielson Array** 87.53 11 P P 12 15 42.0 -0.5
comp=Z,4.6nm,0.7s,baz=220,slow=5.3,SNR=26
ILAR LR LR 12 53 56.7
comp=Z,1µm,18.1s,baz=198,slow=35
**ILAR Eielson Array** 87.53 11 P P 12 15 42.1 -0.5
ILAR pmax pmax
comp=Z,5.0nm,0.7s
ILAR MLR MLR
comp=Z,1µm,18.1s
**ILB Eielson Array** 87.53 11 eP P 12 15 42.0 -0.5
**Z30A Sanderson Ranc** 87.55 53 P P 12 15 43.1 -0.3
baz=88,SNR=24
**231A Bronte** 87.58 55 P P 12 15 43.0 -0.6
baz=88,SNR=20
**KVTX Kingsville** 87.62 60 PFAKE 12 16 00.0 +16
KVTX LR LR
comp=Z,2µm,20.0s
**734A La Parita Cree** 87.63 58 P P 12 15 43.8 0.0
baz=88
**KULM Kulim** 87.63 276 eP P 12 15 43.1 -1.1
comp=Z,129nm,1.7s
KULM LR LR
comp=Z,1µm,22.0s
**W28A Vega** 87.64 51 P P 12 15 43.3 -0.6
baz=88
**X29A Tulia** 87.64 52 P P 12 15 43.5 -0.5
baz=88,SNR=15
**N23A Red Feather La** 87.72 45 eP P 12 15 44.9 +0.5
comp=Z,117nm,2.1s
N23A LR LR
comp=Z,2µm,18.0s
**U27A Thompson Grove** 87.73 50 P P 12 15 44.0 -0.3
baz=88,SNR=6.9
**533A Kerrville** 87.77 57 P P 12 15 44.4 -0.2
baz=88,SNR=20
**332A Millersview** 87.78 55 P P 12 15 43.9 -0.6
baz=88,SNR=24
**RLMT Red Lodge** 87.79 40 P P 12 15 44.9 +0.3
baz=88
**RLMT Red Lodge** 87.79 40 eP P 12 15 44.8 +0.3
comp=Z,58nm,1.9s
RLMT LR LR
comp=Z,4µm,18.0s
**S26A Kim** 87.83 48 P P 12 15 44.0 -0.8
baz=88,SNR=13
**SNAA Sanae** 87.83 177 P P 12 15 44.6 +0.4
**SNAA Sanae** 87.83 177 *d iP* P 12 15 45.9 +1.7
SNAA pmax pmax
comp=Z,15nm,2.0s
**SNAA Sanae** 87.83 177 eP P 12 15 44.1 -0.1
comp=Z,93nm,2.8s
SNAA LR LR
comp=Z,2µm,19.0s
**131A Roby** 87.84 54 P P 12 15 44.6 -0.2
baz=88,SNR=12
**V28A Channing** 87.85 51 P P 12 15 44.7 -0.2
baz=88
**AMTX Amarillo** 87.86 52 P P 12 15 44.7 -0.2
baz=88
**AMTX Amarillo** 87.86 52 eP P 12 15 45.4 +0.5
comp=Z,203nm,1.5s
AMTX LR LR
comp=Z,8µm,19.0s
**GCMT Greycliff** 87.91 39 eP P 12 15 48.4 +3.4
**835A Beeville** 87.98 59 P P 12 15 44.2 -1.3
baz=88
**W29A Amraillo** 87.99 51 P P 12 15 45.6 0.0
baz=88,SNR=19
**Y30A Stafford Cattl** 87.99 53 P P 12 15 44.7 -0.9
baz=88
**433A Art** 88.01 56 P P 12 15 45.2 -0.5
baz=88,SNR=42
**634A China Grove, S** 88.02 58 P P 12 15 45.4 -0.3
baz=88
**232A Coleman** 88.07 55 P P 12 15 45.6 -0.4
baz=88,SNR=27
**T27A Campo** 88.09 49 P P 12 15 46.1 0.0
baz=88
**U28A Mallet** 88.14 50 P P 12 15 45.6 -0.7
baz=88
**R26A Arlington** 88.16 48 P P 12 15 46.4 +0.1
baz=88,SNR=16
**534A Blanco** 88.19 57 P P 12 15 46.1 -0.4
baz=88,SNR=24
**K22A Casper** 88.21 43 P P 12 15 46.4 -0.2
baz=88
**K22A Casper** 88.21 43 eP P 12 15 46.5 -0.1
comp=Z,80nm,1.7s
K22A LR LR
comp=Z,7µm,19.0s
**735A Kenedy** 88.23 58 P P 12 15 46.7 -0.1
baz=88
**PHWY Pilot Hill** 88.24 44 eP P 12 15 50.8 +4.0
comp=Z,118nm,2.2s
**X30A Coker Ranch, T** 88.26 52 P P 12 15 46.4 -0.5
baz=88
**S27A Las Animas** 88.26 49 P P 12 15 46.9 0.0
baz=88
**VNA2 Neumayer--Watz** 88.30 176 P P 12 15 47.8 +1.4
baz=203,slow=2.5
**Z31A Sharp Cattle R** 88.31 54 P P 12 15 46.7 -0.3
baz=88,SNR=23
**333A Richland Sprin** 88.34 56 P P 12 15 46.8 -0.4
baz=89,SNR=16
**PSI Prapat** 88.37 274 eP P 12 15 48.6 +0.7
PSI pmax pmax
comp=Z,166nm,1.9s
PSI MLR MLR
comp=Z,3µm,18.0s
**PSI Prapat** 88.37 274 eP P 12 15 48.5 +0.7
comp=Z,166nm,1.9s
PSI LR LR
comp=Z,3µm,18.0s
**ABTX Abilene, Hawle** 88.39 54 P P 12 15 47.4 0.0
baz=89,SNR=20
**ABTX Abilene, Hawle** 88.39 54 eP P 12 15 48.0 +0.6
comp=Z,255nm,1.6s
ABTX LR LR
comp=Z,7µm,19.0s
**Q26A Hugo** 88.40 47 P P 12 15 47.6 +0.1
baz=89
**V29A Stinnett** 88.42 51 P P 12 15 47.7 +0.2
baz=89
**DAWY Dawson** 88.47 14 eP P 12 15 47.4 +0.3
comp=Z,139nm,1.7s
DAWY LR LR
comp=Z,3µm,20.0s
**635A Leesville** 88.48 58 P P 12 15 48.0 +0.1
baz=89
**Y31A Rekieta Farm,** 88.50 53 P P 12 15 47.5 -0.4
baz=89,SNR=22
**VNA1 Neumayer--Stat** 88.50 175 P P 12 15 51.6 +4.4
**T28A Walsh** 88.55 49 P P 12 15 47.9 -0.3
baz=89,SNR=7.4
**R27A Eads** 88.61 48 P P 12 15 48.3 -0.2
baz=89,SNR=9.1
**BJT Baijiatuau** 88.67 314 PFAKE 12 16 00.0 +11
BJT LR LR
comp=Z,3µm,19.0s
**434A Burnet** 88.68 56 P P 12 15 48.4 -0.4
baz=89,SNR=22
**BJI Beijing** 88.68 314 P P 12 15 49.1 +0.5
BJI PP PP 12 19 17.1 -0.6
BJI SS SS 12 32 28.2 +1.6
BJI PMZ
comp=Z,46nm,2.2s
BJI PMZ
comp=Z,1µm,10.0s
BJI LN
comp=Z,1µm,20.2s
BJI LE
comp=Z,2µm,18.1s
BJI LZ
comp=Z,2µm,19.8s
**EGAK Eagle** 88.69 13 eP P 12 15 48.3 +0.3
comp=Z,52nm,1.1s
EGAK LR LR
comp=Z,3µm,18.0s
**233A Rising Star** 88.70 55 P P 12 15 48.6 -0.3
baz=89,SNR=12
**SKNT Sakolnakorn** 88.79 289 P P 12 15 55.4 +5.8
comp=Z,44nm,1.9s
**W30A Crocket Farms** 88.80 52 P P 12 15 49.4 0.0
baz=89
**Z32A Haskell** 88.81 54 P P 12 15 49.8 +0.4
baz=89,SNR=41
**U29A Oasis Ranch, S** 88.86 50 P P 12 15 49.2 -0.4
baz=89
**736A Circle Diamond** 88.86 59 P P 12 15 48.4 -1.3
baz=89
**535A Dale** 88.90 57 P P 12 15 49.0 -0.9
baz=89
**334A Lometa** 88.92 56 P P 12 15 49.8 -0.2
baz=89,SNR=22
**S28A Manter** 88.92 49 P P 12 15 49.4 -0.5
baz=89
**133A Hamilton Ranch** 88.93 55 P P 12 15 49.8 -0.2
baz=89,SNR=17
**V30A Spur Ranch, Mi** 88.97 51 P P 12 15 50.8 +0.7
baz=89,SNR=5.1
**X31A McDonald Ranch** 89.00 52 P P 12 15 50.1 -0.2
baz=89,SNR=5.2
**EGMT Eagleton** 89.06 37 P P 12 15 51.1 +0.8
baz=89
**EGMT Eagleton** 89.06 37 eP P 12 15 53.1 +2.8
comp=Z,102nm,1.8s
EGMT LR LR
comp=Z,7µm,19.0s
**KSCO Kaye Shedlock'** 89.06 48 P P 12 15 50.7 +0.1
baz=89
**KSCO Kaye Shedlock'** 89.06 48 eP P 12 15 51.9 +1.3
comp=Z,77nm,1.5s
KSCO LR LR
comp=Z,2µm,19.0s
**636A Smothers Creek** 89.09 58 P P 12 15 51.1 +0.3
baz=89
**GSI Gunungsitoli** 89.11 272 PFAKE 12 16 00.0 +8.7
GSI LR LR
comp=Z,3µm,20.0s
**Y32A R-V Farms, Ver** 89.13 53 P P 12 15 51.1 +0.2
baz=89,SNR=18
**T29A Hugoton** 89.15 50 P P 12 15 51.3 +0.3
baz=89
**O26A Horse Wrangler** 89.16 46 P P 12 15 51.5 +0.5
baz=89
**435B Jarrell** 89.20 57 P P 12 15 51.2 0.0
baz=89
**COLD Coldfoot** 89.25 9 eP P 12 15 54.5 +3.8
comp=Z,174nm,2.4s
COLD LR LR
comp=Z,2µm,19.0s
**W31A Holland Ranch,** 89.27 52 P P 12 15 51.2 -0.3
baz=90,SNR=6.3
**234A Clairette** 89.28 55 P P 12 15 51.4 -0.3
baz=90,SNR=16
**737A Port Lavaca** 89.29 59 P P 12 15 50.9 -0.8
baz=90
**ENH Enshi** 89.30 303 PFAKE 12 16 00.0 +8.2
ENH LR LR
comp=Z,2µm,19.0s
**R28A Tribune** 89.32 48 P P 12 15 51.5 -0.3
baz=90,SNR=9.3
**Z33A Whitaker Ranch** 89.34 54 P P 12 15 51.8 -0.1
baz=90,SNR=16
**U30A WK&E Inc. Balk** 89.34 50 P P 12 15 51.7 -0.2
baz=90
**P27A Ficken Ranch,** 89.34 47 P P 12 15 51.4 -0.5
baz=90
**X32A Elmer** 89.43 53 P P 12 15 51.7 -0.6
baz=90,SNR=16
**FYU Fort Yukon** 89.45 11 PFAKE 12 16 00.0 +8.4
FYU LR LR
comp=Z,2µm,21.0s
**S29A Ulysses** 89.49 49 P P 12 15 52.3 -0.3
baz=90
**BILL Bilibino** 89.51 353 P P 12 15 55.6 +3.8
BILL pmax pmax
comp=Z,63nm,2.5s
BILL MLR MLR
comp=Z,2µm,19.0s
**BILL Bilibino** 89.51 353 eP P 12 15 49.5 -2.3
comp=Z,33nm,1.2s
BILL LR LR
comp=Z,4µm,20.0s
**335A Moody** 89.53 56 P P 12 15 52.8 0.0
baz=90
**134A White-Moore Ra** 89.56 55 P P 12 15 52.9 0.0
baz=90
**V31A Spring Creek L** 89.60 51 P P 12 15 53.3 +0.2
baz=90
**Q28A Sharon Springs** 89.63 48 P P 12 15 53.3 +0.1
baz=90
**T30A Plains** 89.66 50 P P 12 15 53.3 0.0
baz=90
**O27A Beecher Island** 89.70 47 P P 12 15 53.5 0.0
baz=90
**Y33A Hilltop Ranch,** 89.75 53 P P 12 15 53.9 +0.2
baz=90
**W32A Sentinel** 89.76 52 P P 12 15 53.9 +0.1
baz=90,SNR=16
**WHTX Lake Whitney** 89.80 56 P P 12 15 53.9 -0.1
baz=90
**WHTX Lake Whitney** 89.80 56 eP P 12 15 52.1 -1.9
comp=Z,270nm,2.0s
WHTX LR LR
comp=Z,8µm,19.0s
**SNET Serv Nac Est T** 89.80 75 PFAKE 12 16 10.0 +15
SNET LR LR
comp=Z,5µm,18.0s
**436A Wall Ranch, Ga** 89.82 57 P P 12 15 54.5 +0.3
baz=90
**R29A Marienthal** 89.83 49 P P 12 15 54.1 0.0
baz=90
**U31A Nine Bar Ranch** 89.85 51 P P 12 15 54.4 +0.2
baz=90
**537A Green Hill Far** 89.92 58 P P 12 15 55.6 +0.9
baz=90
**P28A Saint Francis** 89.92 47 P P 12 15 54.8 +0.2
baz=90
**NONG Nongkai** 89.93 289 P P 12 16 02.0 +7.1
comp=Z,38nm,2.8s
**WMOK Wichita Mounta** 89.94 53 eP P 12 15 54.8 +0.1
WMOK pmax pmax
comp=Z,43nm,1.5s
WMOK MLR MLR
comp=Z,3µm,19.0s
**WMOK Wichita Mounta** 89.94 53 eP P 12 15 54.8 +0.1

comp=Z,43nm,1.5s
WMOK LR LR
comp=Z,3µm,19.0s
SURA Surathani 89.94 280 P P 12 16 04.1 +9.0
comp=Z,57nm,1.2s
N27A Anderson Farm, 89.95 46 P P 12 15 54.7 0.0
baz=90
738A Farr-Stevens R 89.96 59 P P 12 15 55.5 +0.7
baz=90
S30A Montezuma 89.96 50 P P 12 15 54.7 0.0
baz=90
Z34A Collier Ranch, 90.02 54 P P 12 15 54.9 -0.1
baz=90
336A Riesel 90.03 56 P P 12 15 55.2 +0.1
baz=90
EDM Edmonton 90.06 32 eP P 12 15 54.9 +0.1
EDM pmax pmax
comp=Z,295nm,1.8s
EDM MLR MLR
comp=Z,7µm,19.0s
EDM Edmonton 90.06 32 eP P 12 15 54.9 +0.1
comp=Z,295nm,1.8s
EDM LR LR
comp=Z,7µm,19.0s
GYA Guiyang 90.06 298⇑iP P 12 15 56.0 +0.4
GYA PP PP 12 19 32.2 +3.0
GYA SKS SKSac 12 26 26.0 -0.1
GYA S S 12 26 48.6 +0.3
GYA SS SS 12 32 50.4 +2.9
GYA PMZ
comp=Z,50nm,1.0s
GYA PMZ
comp=Z,650nm,9.3s
GYA LN
comp=Z,820nm,20.3s
GYA LE
comp=Z,980nm,19.9s
GYA LZ
comp=Z,1µm,20.3s
X33A Lawton 90.06 53 P P 12 15 54.9 -0.3
baz=90
135A Vickery Place, 90.07 55 P P 12 15 55.2 -0.1
baz=90
Q29A Oakley 90.15 48 P P 12 15 55.6 0.0
baz=90
O28A Krutsinger Ran 90.15 47 P P 12 15 55.5 -0.1
baz=90
V32A Arapaho 90.16 52 P P 12 15 55.8 +0.1
baz=90
TIY Taiyuan 90.22 310 eP P 12 15 57.1 +1.1
TIY PMZ
comp=Z,540nm,5.9s
TIY LN
comp=Z,1µm,17.9s
TIY LE
comp=Z,460nm,16.0s
TIY LZ
comp=Z,1µm,19.1s
PAF Port-aux-Franc 90.25 216 PFAKE 12 16 10.0 +14
PAF LR LR
comp=Z,4µm,20.0s
HKT Hockley 90.25 58 eP P 12 15 56.9 +0.8
HKT pmax pmax
comp=Z,145nm,1.7s
HKT MLR MLR
comp=Z,4µm,19.0s
HKT Hockley 90.25 58 eP P 12 15 56.9 +0.8
comp=Z,145nm,1.7s
HKT LR LR
comp=Z,4µm,19.0s
T31A Randall Ranch, 90.29 50 P P 12 15 56.1 -0.1
baz=90
J25A Sunshine Ranch 90.32 43 P P 12 15 56.0 -0.3
baz=91
W33A Caddo, Fort Co 90.34 52 P P 12 15 56.5 -0.1
baz=91
OGNE Ogallala 90.35 46 P P 12 15 56.3 -0.2
baz=91
OGNE Ogallala 90.35 46 PFAKE 12 16 10.0 +13
OGNE LR LR
comp=Z,3µm,20.0s
437A Phantom Ranch, 90.36 57 P P 12 15 56.5 -0.2
baz=91
R30A Dighton 90.38 49 P P 12 15 56.4 -0.3
baz=91,SNR=5.6
Y34A Reagan Ranch, 90.38 54 P P 12 15 56.9 +0.2
baz=91
LAO LASA Array 90.42 40 P P 12 15 56.2 -0.5
baz=91,SNR=5.7
LAO LASA Array 90.42 40 eP P 12 15 58.2 +1.5
comp=Z,417nm,2.1s
LAO LR LR
comp=Z,2µm,18.0s
U32A Winter Ranch, 90.47 51 P P 12 15 57.2 +0.1
baz=91
P29A Atwood 90.50 48 P P 12 15 57.1 -0.1
baz=91
Z35A Perchaven, San 90.51 55 P P 12 15 57.2 -0.1
baz=91
RSSD Black Hills 90.52 43 eP P 12 15 57.0 -0.4
RSSD pmax pmax
comp=Z,73nm,1.5s
RSSD MLR MLR
comp=Z,3µm,19.0s
RSSD Black Hills 90.52 43 eP P 12 15 57.0 -0.4
comp=Z,73nm,1.5s
RSSD LR LR
comp=Z,3µm,19.0s
236A Katherine and 90.52 56 P P 12 15 57.1 -0.3
baz=91
N28A Pribbeno Ranch 90.56 46 P P 12 15 57.3 -0.2
baz=91
X34A Smith Ranch, M 90.59 53 P P 12 15 56.6 -1.1
baz=91,SNR=9.2
538A Harpers Horsep 90.63 58 P P 12 15 57.6 -0.3
baz=91
S31A Mullinville 90.65 50 P P 12 15 57.9 0.0
baz=91
I25A Rochford 90.66 43 P P 12 15 57.5 -0.5
baz=91,SNR=16
136A Ennis 90.71 56 P P 12 15 58.2 -0.1
baz=91
Q30A Quinter 90.72 48 P P 12 15 58.2 0.0
baz=91
J26A Sides Ranch, S 90.75 44 P P 12 15 58.7 +0.4
baz=91
337A Centerville 90.75 57 P P 12 15 58.3 -0.2
baz=91
V33A Lossen Ranch, 90.76 52 P P 12 15 58.4 -0.1
baz=91
O29A 4D Ranch, Culb 90.82 47 P P 12 15 58.7 0.0
baz=91
438A Sam Houston St 90.85 57 P P 12 15 58.7 -0.3
baz=91
T32A Huddler Ranch, 90.87 50 P P 12 15 59.0 +0.1
baz=91
W34A Bridge Creek, 90.90 53 P P 12 15 59.7 +0.5
baz=91
W34A Bridge Creek, 90.90 53 eP P 12 15 59.6 +0.5
comp=Z,248nm,2.0s
W34A LR LR
comp=Z,4µm,19.0s
Y35A Marietta 90.91 54 P P 12 15 59.7 +0.5
baz=91
R31A Burdett 90.91 49 P P 12 15 59.4 +0.2
baz=91
P30A Selden 90.95 48 P P 12 15 59.3 0.0
baz=91
CBKS Cedar Bluff 90.99 49 eP P 12 15 59.6 +0.1
CBKS pmax pmax
comp=Z,86nm,1.5s
CBKS MLR MLR
comp=Z,2µm,20.0s
CBKS Cedar Bluff 90.99 49 P P 12 15 59.6 +0.1
baz=91
CBKS Cedar Bluff 90.99 49 eP P 12 15 59.6 +0.1
comp=Z,86nm,1.5s
CBKS LR LR
comp=Z,2µm,20.0s
M28A Bar X Bar Ranc 91.00 46 P P 12 15 59.3 -0.2
baz=91
HIA Hailar 91.01 323 PFAKE 12 16 10.0 +11
HIA LR LR
comp=Z,4µm,20.0s
H25A Fruitdale 91.03 42 P P 12 15 59.5 -0.1
baz=91
LCO Las Campanas 91.06 121 PFAKE 12 16 10.0 +9.5
LCO LR LR
comp=Z,8µm,18.0s
S32A Newby Ranch, P 91.08 50 P P 12 15 59.8 -0.1
baz=91
237A Washetta, Mont 91.08 56 P P 12 15 59.6 -0.4
baz=91
Z36A Blue Ridge 91.11 55 P P 12 15 60.0 -0.1
baz=91
U33A Lingo Farm, Me 91.14 51 P P 12 15 59.9 -0.3
baz=91
X35A Drake 91.16 54 P P 12 16 00.5 +0.2
baz=91
L28A Connealy Angus 91.17 45 P P 12 15 59.2 -1.1
baz=91
539A Cross D Ranch, 91.19 58 P P 12 16 00.9 +0.3
baz=91
338A Crockett 91.22 57 P P 12 16 00.6 0.0
baz=92
I26A New Underwood 91.22 43 P P 12 16 00.7 +0.2
baz=92
N29A Votaw Ranch, W 91.25 47 P P 12 16 00.7 0.0
baz=92
PHET Kaeng Krachan 91.25 283 P P 12 16 11.0 +10
comp=Z,15nm,0.9s
XAN Xi'an 91.27 306 P P 12 16 02.9 +2.0
XAN pP pP 12 16 06.9 -0.3
XAN SS SS 12 33 07.0 +2.5
XAN PMZ
comp=Z,660nm,8.4s
XAN LE
comp=Z,1µm,18.4s
XAN LZ
comp=Z,1µm,19.4s
Q31A Ellis 91.31 49 P P 12 16 01.0 0.0
baz=92
T33A Patterson Ranc 91.32 51 P P 12 16 01.0 0.0
baz=92
PBKT Sadao Pong 91.33 287 P P 12 16 10.2 +8.7
comp=Z,45nm,0.8s
V34A Guthrie 91.33 52 P P 12 16 01.1 -0.1
baz=92
V34A Guthrie 91.33 52 PFAKE 12 16 10.0 +8.9
V34A LR LR
comp=Z,6µm,19.0s
O30A MW Ranch, Wils 91.36 47 P P 12 16 01.2 0.0
baz=92
137A Heron Place, G 91.36 56 P P 12 16 01.5 +0.2
baz=92
LOEI Loei 91.40 288 P P 12 16 06.4 +4.6
comp=Z,21nm,1.4s
G25A Newell 91.41 42 P P 12 16 01.1 -0.2
baz=92,SNR=6.4
J27A Elkhorn Farm, 91.41 44 P P 12 16 01.5 +0.1
baz=92
439A Center Grove, 91.43 58 P P 12 16 01.1 -0.6
baz=92
Y36A Durant 91.47 54 P P 12 16 01.4 -0.3
baz=92,SNR=7.8
M29A Burnside Ranch 91.48 46 P P 12 16 01.6 -0.1
baz=92
W35A Tecumseh 91.53 53 P P 12 16 02.1 0.0
baz=92,SNR=6.0
P31A Stockton 91.54 48 P P 12 16 01.8 -0.2
baz=92
H26A Fairpoint 91.55 43 P P 12 16 02.1 +0.1
baz=92
R32A Long Quarter, 91.55 49 P P 12 16 02.1 0.0
baz=92,SNR=10.0
U34A Anderson Ranch 91.57 52 P P 12 16 02.0 -0.2
baz=92
U34A Anderson Ranch 91.57 52 eP P 12 16 02.7 +0.5
comp=Z,81nm,1.6s
U34A LR LR
comp=Z,6µm,19.0s
K28A Ten Mile Ranch 91.59 45 P P 12 16 02.0 -0.2
baz=92
N30A Hueftle Ranch, 91.59 47 P P 12 16 01.3 -1.0
baz=92
238A Jacksonville 91.62 56 P P 12 16 02.8 +0.3
baz=92
X36A Centrahoma 91.69 54 P P 12 16 02.7 -0.1
baz=92,SNR=8.2
Z37A Pogue Cattle C 91.70 55 P P 12 16 02.9 0.0
baz=92
S33A Kaszmaul Farm, 91.71 50 P P 12 16 02.8 0.0
baz=92
TGUH Tegucigalpa,Un 91.71 76 eP P 12 16 04.4 +1.1
comp=Z,270nm,1.8s
TGUH LR LR
comp=Z,3µm,19.0s
F25A Bowman 91.73 41 P P 12 16 03.1 +0.3
baz=92
I27A Quinn 91.76 43 P P 12 16 03.1 +0.1
baz=92
V35A Meyer Ranch, C 91.81 52 P P 12 16 03.4 +0.1
baz=92
540A Vidor 91.83 58 P P 12 16 03.2 -0.3
baz=92
O31A Woolen Ranch, 91.85 48 P P 12 16 03.1 -0.3
baz=92
NATX Nacogdoches 91.89 57 PFAKE 12 16 20.0 +16
NATX LR LR
comp=Z,2µm,18.0s
L29A Maesberg Ranch 91.89 46 P P 12 16 04.4 +0.8
baz=92
Q32A Meitler Ranch, 91.89 49 P P 12 16 03.9 +0.3
baz=92,SNR=5.4
138A Matatall Enter 91.90 56 P P 12 16 04.0 +0.2
baz=92
G26A Maurine 91.97 42 P P 12 16 04.2 +0.3
baz=92,SNR=6.2
J28A Allard Ranch, 91.99 44 P P 12 16 04.2 +0.1
baz=92
H27A Howes 92.00 43 P P 12 16 04.2 +0.1
baz=92
Y37A Hugo 92.01 54 P P 12 16 04.4 +0.1
baz=92
W36A Wetumka 92.02 53 P P 12 16 04.1 -0.2
baz=92,SNR=9.7
R33A Olander Ranch, 92.02 50 P P 12 16 04.4 +0.1
baz=92,SNR=12
E25A Miller Ranch, 92.03 41 P P 12 16 04.5 +0.3
baz=92
T34A McClaskey Farm 92.06 51 P P 12 16 04.6 +0.1
baz=92,SNR=16
M30A Dale-Ortello V 92.07 46 P P 12 16 04.4 -0.1
baz=92
UTTA Uttaradit 92.12 288 P P 12 16 14.4 +9.3
comp=Z,8.0nm,1.3s
P32A Huiting Farm, 92.13 48 P P 12 16 04.6 -0.1
baz=92
U35A Pawnee 92.13 52 P P 12 16 05.0 +0.2
baz=92
239A Gary 92.14 57 P P 12 16 04.8 0.0
baz=92
F26A Lodgepole 92.18 41 P P 12 16 04.7 -0.2
baz=92
HHC Hu-ho-hao-te 92.19 313 eP P 12 16 06.6 +1.5
HHC PP PP 12 19 44.5 -1.2
HHC S S 12 27 07.7 +0.7
HHC PMZ
comp=Z,29nm,1.4s
HHC PMZ
comp=Z,120nm,3.7s
HHC LN
comp=Z,1µm,17.4s
HHC LE
comp=Z,1µm,16.2s
HHC LZ
comp=Z,1µm,16.2s
Z38A Mt. Pleasant 92.21 55 P P 12 16 04.7 -0.5
baz=92
NNA Nana 92.29 104 PFAKE 12 16 20.0 +14
NNA LR LR
comp=Z,4µm,18.0s
I28A Midland 92.29 44 P P 12 16 05.4 0.0
baz=92,SNR=5.7
K29A Lazy Trails An 92.31 45 P P 12 16 05.1 -0.4
baz=93
UTHA Uthaitani 92.35 286 P P 12 16 15.6 +9.4
comp=Z,7.0nm,0.8s
L30A Spencer Herefo 92.35 46 P P 12 16 05.7 -0.1
baz=93
340A Bronson 92.36 57 P P 12 16 06.1 +0.2
baz=93
NANT Nan 92.36 289 P P 12 16 14.2 +8.0
comp=Z,6.5nm,1.1s
D25A Fairfield 92.39 40 P P 12 16 06.2 +0.4
baz=93
N31A Bailey Ranch, 92.39 47 P P 12 16 06.1 +0.1
baz=93
S34A Willow Spring 92.40 51 P P 12 16 05.7 -0.3
baz=93
Q33A Connelly Farm, 92.41 49 P P 12 16 06.0 0.0
baz=93
G27A Dupree 92.43 42 P P 12 16 06.0 0.0
baz=93,SNR=17
X37A Clayton 92.44 54 P P 12 16 05.9 -0.4
baz=93
139A Bunkhouse Ranc 92.45 56 P P 12 16 06.5 +0.2
baz=93
V36A Jenks 92.49 53 P P 12 16 06.2 -0.2
baz=93,SNR=5.9
DGMT Dagmar 92.49 39 P P 12 16 06.9 +0.8
baz=93
DGMT Dagmar 92.49 39 eP P 12 16 07.3 +1.1
comp=Z,266nm,1.5s
DGMT LR LR
comp=Z,5µm,20.0s
CLNS Chul'man 92.50 331 eP P 12 16 02.3 -3.7
CLNS pmax pmax
comp=Z,24nm,1.2s
CLNS pmax pmax
comp=N,6.0nm,1.0s
CLNS pmax pmax
comp=E,15nm,1.1s
T35A Sooner Cattle 92.52 52 P P 12 16 06.6 +0.1
baz=93,SNR=17
JTS JuntasAbangare 92.53 80c iP P 12 16 08.9 +1.8
JTS pmax pmax
comp=Z,198nm,1.6s
JTS JuntasAbangare 92.53 80 P P 12 16 09.0 +1.8
comp=Z,291nm,1.8s,SNR=6.2
JTS JuntasAbangare 92.53 80 eP P 12 16 08.6 +1.4
comp=Z,180nm,1.6s
JTS LR LR
comp=Z,3µm,18.0s
R34A Isabella, Hill 92.54 50 P P 12 16 06.6 0.0
baz=93
J29A Okreek 92.58 44 P P 12 16 07.1 +0.4
baz=93
E26A Carlson Angus 92.59 41 P P 12 16 06.6 -0.2
baz=93,SNR=12
F27A Lemmon 92.59 42 P P 12 16 07.0 +0.3
baz=93,SNR=6.5
M31A Lambtecht Ranc 92.60 47 P P 12 16 07.3 +0.4
baz=93
W37A Quinton 92.62 53 P P 12 16 07.2 +0.1
baz=93
TUL1 Tulsa 92.65 53 P P 12 16 07.0 -0.2
baz=93
TUL1 Tulsa 92.65 53 eP P 12 16 07.4 +0.2
comp=Z,128nm,1.9s
TUL1 LR LR
comp=Z,6µm,19.0s
Y38A Idabel 92.67 55 P P 12 16 07.2 -0.1
baz=93
PHRA Phrae 92.67 289 P P 12 16 17.1 +9.4
comp=Z,178nm,1.0s
C25A Freed Ranch, W 92.69 40 P P 12 16 07.4 +0.2
baz=93
H28A Mission Ridge 92.69 43 P P 12 16 07.5 +0.3
baz=93
P33A Williams Farm, 92.69 49 P P 12 16 07.3 0.0
baz=93
K30A Basset 92.73 45 P P 12 16 07.6 +0.1
baz=93
N32A Stulken Farm, 92.82 47 P P 12 16 08.1 +0.1
baz=93
Z39A Irene McRaven, 92.83 56 P P 12 16 08.0 0.0
baz=93
KMI Kunming 92.85 296 P P 12 16 10.0 +1.4
KMI pP pP 12 16 13.6 -1.3
KMI PP PP 12 19 54.1 +2.8
KMI SKS SKSac 12 26 41.4 -0.7
KMI S S 12 27 13.0 -0.8
KMI SS SS 12 33 30.2 +2.3
KMI PMZ
comp=Z,29nm,1.2s
KMI PMZ
comp=Z,500nm,4.8s
KMI LN
comp=Z,1µm,14.5s
KMI LE
comp=Z,2µm,15.5s
KMI LZ
comp=Z,3µm,16.3s
I29A Vivian Onida 92.86 44 P P 12 16 08.0 0.0
baz=93
D26A Manning 92.87 40 P P 12 16 08.5 +0.6
baz=93,SNR=12
U36A Oologah 92.88 52 P P 12 16 08.2 -0.1
baz=93
X38A Whitesboro 92.89 54 P P 12 16 08.1 -0.2
baz=93,SNR=16
G28A Parade 92.93 43 P P 12 16 08.3 0.0
baz=93
S35A Otter Creek Ra 92.96 51 P P 12 16 08.4 -0.2
baz=93,SNR=8.5
TEIG Tepich 92.98 70 PFAKE 12 16 20.0 +11
TEIG LR LR
comp=Z,3µm,18.0s
B25A Knox Farm, Ray 93.00 39 P P 12 16 09.1 +0.5
baz=93
Q34A Chapman 93.01 50 P P 12 16 08.4 -0.4
baz=93,SNR=11
O33A Hebron 93.03 48 P P 12 16 08.9 0.0
baz=93,SNR=9.6
T36A Boggs Farm, Ca 93.04 52 P P 12 16 09.3 +0.3
baz=93,SNR=10
L31A Butterfield Fa 93.04 46 P P 12 16 09.0 0.0
baz=93
J30A Dallas 93.09 45 P P 12 16 09.4 +0.3
baz=93,SNR=5.0
V37A Hulbert 93.12 53 P P 12 16 09.7 +0.3
baz=93,SNR=12
E27A Carson 93.13 41 P P 12 16 09.6 +0.4
baz=93
CRAI Chiangrai 93.15 290 P P 12 16 17.8 +7.9
comp=Z,23nm,0.9s
Y39A Lockesburg 93.17 55 P P 12 16 09.3 -0.3
baz=93
H29A Onida 93.19 43 P P 12 16 09.6 +0.1
baz=93
BGNE Belgrade 93.19 47 P P 12 16 09.2 -0.3
baz=93
BGNE Belgrade 93.19 47 eP P 12 16 10.6 +1.0
comp=Z,134nm,1.4s
BGNE LR LR
comp=Z,2µm,20.0s
LAMP Lampang 93.21 288 P P 12 16 16.0 +5.8
comp=Z,13nm,0.9s
W38A Poteau 93.28 54 P P 12 16 09.7 -0.4
baz=94
K31A O'Neill 93.29 46 P P 12 16 10.3 +0.3
baz=94
R35A Emporia Munici 93.31 50 P P 12 16 10.3 +0.1
baz=94
KSU1 Kansas State U 93.32 49 P P 12 16 10.1 -0.1
baz=94
KSU1 Kansas State U 93.32 49 eP P 12 16 10.6 +0.3
comp=Z,82nm,1.5s
KSU1 LR LR
comp=Z,4µm,19.0s
INK Inuvik 93.33 14 P P 12 16 09.8 +0.3
comp=Z,9.0nm,0.9s,baz=222,slow=4.7,SNR=5.7
INK Inuvik 93.33 14 P P 12 16 09.8 +0.3
INK pmax pmax
comp=Z,9.0nm,0.9s
INK Inuvik 93.33 14 eP P 12 16 09.8 +0.3
comp=Z,63nm,1.5s
A25A Svangstu Ranch 93.34 39 P P 12 16 10.5 +0.4
baz=94
U37A Salina 93.34 52 P P 12 16 10.2 -0.2
baz=94,SNR=9.6
F28A McLaughlin 93.35 42 P P 12 16 10.0 -0.2
baz=94,SNR=5.5
P34A Walnut Farm, R 93.35 49 P P 12 16 10.6 +0.2
baz=94
I30A Oacoma 93.39 44 P P 12 16 10.7 +0.2
baz=94
N33A J Bar K, Exete 93.39 48 P P 12 16 10.8 +0.3
baz=94
C26A Wahner Farm, P 93.43 40 P P 12 16 11.0 +0.5
baz=94
D27A Center 93.46 41 P P 12 16 11.1 +0.4
baz=94

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **S36A** | **Lake Cedric, C** | **93.51** | **51** | P | **P** | 12 16 11.1 | -0.1 |
| | baz=94 | | | | | | |
| **L32A** | **Elgin** | **93.53** | **46** | P | **P** | 12 16 11.3 | +0.2 |
| | baz=94 | | | | | | |
| **TRQA** | **Tornquist** | **93.53** | **133** | PFAKE | | 12 16 20.0 | +8.6 |
| TRQA | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **J31A** | **Geddes** | **93.58** | **45** | P | **P** | 12 16 11.4 | +0.1 |
| | baz=94 | | | | | | |
| **B26A** | **Jensen Ranch,** | **93.60** | **39** | P | **P** | 12 16 11.5 | +0.2 |
| | baz=94 | | | | | | |
| **G29A** | **Hoven** | **93.62** | **43** | P | **P** | 12 16 11.2 | -0.2 |
| | baz=94 | | | | | | |
| **YAK** | **Yakutsk** | **93.63** | **337** | *e*P | **P** | 12 16 12.2 | +1.2 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,8.0nm,1.4s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,8.0nm,1.1s | | | | | | |
| **YAK** | **Yakutsk** | **93.63** | **337** | *e*P | **P** | 12 16 10.8 | -0.2 |
| | comp=N,23nm,0.4s | | | | | | |
| YAK | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| **Q35A** | **Mercer Eighty,** | **93.64** | **50** | P | **P** | 12 16 11.5 | -0.2 |
| | baz=94 | | | | | | |
| **V38A** | **Canehill** | **93.66** | **53** | P | **P** | 12 16 11.5 | -0.4 |
| | baz=94 | | | | | | |
| **O34A** | **Beatrice** | **93.70** | **48** | P | **P** | 12 16 11.4 | -0.5 |
| | baz=94 | | | | | | |
| **E28A** | **Huff** | **93.73** | **41** | P | **P** | 12 16 11.6 | -0.3 |
| | baz=94 | | | | | | |
| **C27A** | **Sayler Ranch,** | **93.74** | **40** | P | **P** | 12 16 11.1 | -0.9 |
| | baz=94 | | | | | | |
| **T37A** | **Cheneyville 18** | **93.77** | **52** | P | **P** | 12 16 12.4 | 0.0 |
| | baz=94,SNR=8.4 | | | | | | |
| **CM01** | **Chiang Mai Arr** | **93.78** | **288** | *e*P | **P** | 12 16 13.9 | +1.2 |
| **MIAR** | **Mount Ida** | **93.80** | **55** | *e*P | **P** | 12 16 15.2 | +2.7 |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,66nm,1.8s | | | | | | |
| MIAR | | | | MLR | MLR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **MIAR** | **Mount Ida** | **93.80** | **55** | P | **P** | 12 16 12.3 | -0.2 |
| | baz=94,SNR=5.6 | | | | | | |
| **MIAR** | **Mount Ida** | **93.80** | **55** | *e*P | **P** | 12 16 15.2 | +2.7 |
| | comp=Z,66nm,1.8s | | | | | | |
| MIAR | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **93.80** | **288** | *e*P | **P** | 12 16 13.2 | +0.3 |
| **CMAR** | **Chiang Mai Arr** | **93.80** | **288** | P | **P** | 12 16 13.2 | +0.4 |
| | comp=Z,2.0nm,0.7s,baz=77,slow=3.1,SNR=3.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.80** | **288** | P | **P** | 12 16 13.3 | +0.4 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **R36A** | **Gordon, Harris** | **93.81** | **51** | P | **P** | 12 16 12.2 | -0.3 |
| | baz=94 | | | | | | |
| **K32A** | **Verdigre** | **93.83** | **46** | P | **P** | 12 16 12.0 | -0.4 |
| | baz=94 | | | | | | |
| **U38A** | **Gravette** | **93.90** | **53** | P | **P** | 12 16 12.5 | -0.5 |
| | baz=94 | | | | | | |
| **M33A** | **Taylor Creek F** | **93.91** | **47** | P | **P** | 12 16 13.0 | +0.1 |
| | baz=94 | | | | | | |
| **P35A** | **Duane Minner,** | **93.91** | **49** | P | **P** | 12 16 13.4 | +0.5 |
| | baz=94 | | | | | | |
| **SUSD** | **South Dakota S** | **93.92** | **44** | P | **P** | 12 16 12.6 | -0.3 |
| | baz=94 | | | | | | |
| **CHTO** | **Chiang Mai** | **93.92** | **288** | P | P | 12 16 21.8 | +8.3 |
| **CHTO** | **Chiang Mai** | **93.92** | **288** | *e*P | **P** | 12 16 14.5 | +1.0 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,25nm,1.1s | | | | | | |
| CHTO | | | | MLR | MLR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **93.92** | **288** | *e*P | **P** | 12 16 14.5 | +1.0 |
| | comp=Z,25nm,1.1s | | | | | | |
| CHTO | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **A26A** | **Wade Farm, Ken** | **93.95** | **39** | P | **P** | 12 16 13.5 | +0.6 |
| | baz=94 | | | | | | |
| **F29A** | **Eureka** | **93.95** | **42** | P | **P** | 12 16 12.8 | -0.2 |
| | baz=94 | | | | | | |
| **I31A** | **Royce, Wessing** | **94.02** | **44** | P | **P** | 12 16 13.4 | +0.1 |
| | baz=94 | | | | | | |
| **D28A** | **Regan** | **94.08** | **41** | P | **P** | 12 16 13.7 | +0.2 |
| | baz=94 | | | | | | |
| **S37A** | **Fort Scott** | **94.08** | **51** | P | **P** | 12 16 13.8 | +0.1 |
| | baz=94 | | | | | | |
| **Q36A** | **Arnold C. Orve** | **94.09** | **50** | P | **P** | 12 16 13.5 | -0.3 |
| | baz=94 | | | | | | |
| **N34A** | **Lincoln** | **94.09** | **48** | P | **P** | 12 16 13.1 | -0.6 |
| | baz=94 | | | | | | |
| **L33A** | **Hoskins** | **94.10** | **46** | P | **P** | 12 16 12.9 | -0.8 |
| | baz=94 | | | | | | |
| **CD2** | **Chengdu** | **94.10** | **301** | ⇑P | **P** | 12 16 14.0 | -0.1 |
| CD2 | | | | PP | **PP** | 12 20 00.3 | -0.6 |
| CD2 | | | | SKS | **SKSac** | 12 26 48.7 | +0.3 |
| CD2 | | | | S | **S** | 12 27 25.1 | +0.8 |
| CD2 | | | | SS | **SS** | 12 33 46.8 | +1.5 |
| CD2 | | | | PMZ | | | |
| | comp=Z,50nm,0.6s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,840nm,8.4s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,2µm,19.1s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,2µm,18.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,1µm,19.1s | | | | | | |
| **B27A** | **Peters Farms,** | **94.19** | **40** | P | **P** | 12 16 13.6 | -0.4 |
| | baz=94 | | | | | | |
| **J32A** | **Parkston** | **94.20** | **45** | P | **P** | 12 16 13.6 | -0.5 |
| | baz=94 | | | | | | |
| **O35A** | **Humboldt** | **94.28** | **49** | P | **P** | 12 16 14.7 | +0.1 |
| | baz=94 | | | | | | |
| **M34A** | **Aspy Farms, Fr** | **94.30** | **47** | P | **P** | 12 16 14.2 | -0.5 |
| | baz=94 | | | | | | |
| **E29A** | **Napoleon** | **94.38** | **42** | P | **P** | 12 16 14.1 | -0.9 |
| | baz=95 | | | | | | |
| **C28A** | **Hausauer Farms** | **94.42** | **40** | P | **P** | 12 16 14.1 | -0.9 |
| | baz=95 | | | | | | |
| **A27A** | **Ledoux Ranch,** | **94.45** | **39** | P | **P** | 12 16 14.5 | -0.6 |
| | baz=95 | | | | | | |
| **K33A** | **Hardington** | **94.46** | **46** | P | **P** | 12 16 15.2 | -0.2 |
| | baz=95 | | | | | | |
| **F30A** | **Leola** | **94.46** | **43** | P | **P** | 12 16 15.3 | 0.0 |
| | baz=95 | | | | | | |
| **P36A** | **Good Intent, A** | **94.53** | **49** | P | **P** | 12 16 15.5 | -0.3 |
| | baz=95 | | | | | | |
| **D29A** | **Pettibone, Tap** | **94.62** | **41** | P | **P** | 12 16 15.4 | -0.6 |
| | baz=95 | | | | | | |
| **L34A** | **Svendsen Farm,** | **94.63** | **47** | P | **P** | 12 16 15.8 | -0.4 |
| | baz=95 | | | | | | |
| **N35A** | **Tabor** | **94.70** | **48** | P | **P** | 12 16 15.9 | -0.6 |
| | baz=95 | | | | | | |
| **I32A** | **Karley and Nic** | **94.72** | **45** | P | **P** | 12 16 16.0 | -0.6 |
| | baz=95 | | | | | | |
| **B28A** | **Dugan Ranch, T** | **94.75** | **40** | P | **P** | 12 16 16.5 | 0.0 |
| | baz=95 | | | | | | |
| **J33A** | **Davis** | **94.77** | **46** | P | **P** | 12 16 16.2 | -0.6 |
| | baz=95 | | | | | | |
| **Q37A** | **Longview Farm,** | **94.78** | **50** | P | **P** | 12 16 16.5 | -0.4 |
| | baz=95 | | | | | | |
| **E30A** | **Jud** | **94.81** | **42** | P | **P** | 12 16 16.4 | -0.5 |
| | baz=95 | | | | | | |
| **O36A** | **Bolckow** | **94.90** | **49** | P | **P** | 12 16 17.0 | -0.4 |
| | baz=95 | | | | | | |
| **H32A** | **Carlson Farm,** | **94.94** | **44** | P | **P** | 12 16 17.0 | -0.6 |
| | baz=95 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.95** | **24** | P | **P** | 12 16 16.6 | -0.5 |
| | comp=Z,2.9nm,0.8s,baz=238,slow=4.3,SNR=5.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.95** | **24** | P | **P** | 12 16 16.6 | -0.5 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **MDND** | **Maddock** | **94.95** | **41** | P | **P** | 12 16 16.7 | -0.8 |
| | baz=95 | | | | | | |
| **MDND** | **Maddock** | **94.95** | **41** | *e*P | **P** | 12 16 17.8 | +0.2 |
| | comp=Z,148nm,1.4s | | | | | | |
| MDND | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **F31A** | **Hecla** | **94.96** | **43** | P | **P** | 12 16 16.9 | -0.7 |
| | baz=95 | | | | | | |
| **A28A** | **Rude Farm, Bot** | **95.01** | **39** | P | **P** | 12 16 17.3 | -0.5 |
| | baz=95 | | | | | | |
| **K34A** | **Le Mars** | **95.10** | **46** | P | **P** | 12 16 17.7 | -0.6 |
| | baz=95 | | | | | | |
| **OTAV** | **Otavalo** | **95.14** | **92** | PFAKE | | 12 16 30.0 | +10 |
| OTAV | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **D30A** | **Buchanan** | **95.16** | **42** | P | **P** | 12 16 17.9 | -0.6 |
| | baz=95 | | | | | | |
| **LVC** | **Limon Verde** | **95.17** | **116** | *e*P | **P** | 12 16 21.7 | +2.2 |
| | comp=Z,48nm,1.7s | | | | | | |
| **ECSD** | **EROS Data Cent** | **95.17** | **45** | P | **P** | 12 16 18.4 | -0.2 |
| | baz=95 | | | | | | |
| **ECSD** | **EROS Data Cent** | **95.17** | **45** | *e*P | **P** | 12 16 18.7 | +0.1 |
| | comp=Z,223nm,1.7s | | | | | | |
| ECSD | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| **I33A** | **Coleman** | **95.17** | **45** | P | **P** | 12 16 18.3 | -0.3 |
| | baz=95 | | | | | | |
| **G32A** | **Webster** | **95.20** | **44** | P | **P** | 12 16 18.4 | -0.3 |
| | baz=95 | | | | | | |
| **L35A** | **Bielow Farm, R** | **95.26** | **47** | P | **P** | 12 16 18.7 | -0.4 |
| | baz=96 | | | | | | |
| **VBMS** | **Vicksburg** | **95.32** | **58** | P | **P** | 12 16 19.2 | -0.4 |
| | baz=96 | | | | | | |
| **VBMS** | **Vicksburg** | **95.32** | **58** | PFAKE | | 12 16 30.0 | +10 |
| VBMS | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| **B29A** | **Wagenman Farm,** | **95.36** | **40** | P | **P** | 12 16 19.5 | +0.2 |
| | baz=96 | | | | | | |
| **J34A** | **George** | **95.43** | **46** | P | **P** | 12 16 19.1 | -0.7 |
| | baz=96 | | | | | | |
| **H33A** | **Prehn Over Nor** | **95.46** | **44** | P | **P** | 12 16 19.3 | -0.6 |
| | baz=96 | | | | | | |
| **E31A** | **Nome** | **95.48** | **42** | P | **P** | 12 16 19.6 | -0.4 |
| | baz=96 | | | | | | |
| **C30A** | **Mose, Pekin** | **95.58** | **41** | P | **P** | 12 16 19.3 | -1.1 |
| | baz=96 | | | | | | |
| **A29A** | **Manning Farm,** | **95.63** | **40** | P | **P** | 12 16 19.1 | -1.4 |
| | baz=96 | | | | | | |
| **K35A** | **Storm Lake** | **95.70** | **47** | P | **P** | 12 16 19.8 | -1.3 |
| | baz=96 | | | | | | |
| **D31A** | **Mcclaflin, Tow** | **95.78** | **42** | P | **P** | 12 16 20.3 | -1.0 |
| | baz=96 | | | | | | |
| **I34A** | **Hadley** | **95.79** | **45** | P | **P** | 12 16 20.5 | -1.0 |
| | baz=96 | | | | | | |
| **LZH** | **Lanzhou** | **95.90** | **306** | *e*P | **P** | 12 16 24.2 | +1.9 |
| LZH | | | | *e*SKS | **SKSac** | 12 26 56.2 | -1.8 |
| LZH | | | | S | **S** | 12 27 39.4 | -0.6 |
| LZH | | | | sS | **sS** | 12 27 47.0 | -3.4 |
| LZH | | | | PMZ | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,81nm,4.9s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,980nm,16.4s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,2µm,18.6s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,2µm,17.7s | | | | | | |
| **J35A** | **Milford** | **95.97** | **46** | P | **P** | 12 16 21.3 | -1.0 |
| | baz=96 | | | | | | |
| **B30A** | **Myrvik Farm, E** | **95.98** | **40** | P | **P** | 12 16 21.3 | -0.9 |
| | baz=96 | | | | | | |
| **E32A** | **Braaten, Kindr** | **96.01** | **42** | P | **P** | 12 16 21.3 | -1.0 |
| | baz=96 | | | | | | |
| **C31A** | **Landman Farms,** | **96.08** | **41** | P | **P** | 12 16 21.9 | -0.7 |
| | baz=96 | | | | | | |
| **H34A** | **Spellman Lake,** | **96.09** | **45** | P | **P** | 12 16 21.9 | -0.8 |
| | baz=96 | | | | | | |
| **A30A** | **Hoffart Farm,** | **96.20** | **40** | P | **P** | 12 16 22.7 | -0.5 |
| | baz=96 | | | | | | |
| **F33A** | **5 Mile Ranch,** | **96.21** | **43** | P | **P** | 12 16 23.0 | -0.3 |
| | baz=96 | | | | | | |
| **D32A** | **Dogwood Acres,** | **96.26** | **42** | P | **P** | 12 16 23.0 | -0.5 |
| | baz=96 | | | | | | |
| **I35A** | **Creekview Farm** | **96.31** | **46** | P | **P** | 12 16 22.9 | -0.9 |
| | baz=96 | | | | | | |
| **B31A** | **Greenbush Farm** | **96.38** | **41** | P | **P** | 12 16 23.4 | -0.6 |
| | baz=97 | | | | | | |
| **G34A** | **Benson** | **96.40** | **44** | P | **P** | 12 16 23.1 | -1.1 |
| | baz=97 | | | | | | |
| **FFC** | **Flin Flon** | **96.59** | **34** | *e*P | **P** | 12 16 26.3 | +1.5 |
| FFC | | | | pmax | pmax | | |
| | comp=Z,78nm,1.9s | | | | | | |
| FFC | | | | MLR | MLR | | |
| | comp=Z,8µm,19.0s | | | | | | |
| **FFC** | **Flin Flon** | **96.59** | **34** | *e*P | **P** | 12 16 26.3 | +1.5 |
| | comp=Z,78nm,1.9s | | | | | | |
| FFC | | | | LR | LR | | |
| | comp=Z,8µm,19.0s | | | | | | |
| **E33A** | **Westby DABS, E** | **96.65** | **43** | P | **P** | 12 16 24.5 | -0.8 |
| | baz=97 | | | | | | |
| **SCIA** | **State Center** | **96.79** | **48** | PFAKE | | 12 16 40.0 | +14 |
| SCIA | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **MET** | **Memphis--Engin** | **96.79** | **55** | PFAKE | | 12 16 40.0 | +14 |
| MET | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **CCM** | **Cathedral Cave** | **96.83** | **52** | PFAKE | | 12 16 40.0 | +14 |
| CCM | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **96.89** | **83** | PFAKE | | 12 16 40.0 | +13 |
| BCIP | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| **PBMO** | **Poplar Bluff** | **96.99** | **53** | PFAKE | | 12 16 40.0 | +13 |
| PBMO | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **OXF** | **Oxford** | **96.99** | **56** | PFAKE | | 12 16 40.0 | +13 |
| OXF | | | | LR | LR | | |
| | comp=Z,8µm,19.0s | | | | | | |
| **D33A** | **AnnSam, Waubun** | **97.00** | **42** | P | **P** | 12 16 25.6 | -1.2 |
| | baz=97 | | | | | | |
| **I36A** | **Fitzsimmons Fa** | **97.02** | **46** | P | **P** | 12 16 25.5 | -1.5 |
| | baz=97 | | | | | | |
| **B32A** | **Ashes, Strandq** | **97.05** | **41** | P | **P** | 12 16 26.4 | -0.7 |
| | baz=97 | | | | | | |
| **G35A** | **Watkins** | **97.15** | **44** | P | **P** | 12 16 27.4 | -0.1 |
| | baz=97 | | | | | | |
| **E34A** | **Wadena** | **97.19** | **43** | P | **P** | 12 16 27.5 | -0.2 |
| | baz=97 | | | | | | |
| **C33A** | **Trail** | **97.28** | **42** | P | **P** | 12 16 27.5 | -0.6 |
| | baz=98 | | | | | | |
| **F35A** | **Swanville** | **97.33** | **44** | P | Pdif | 12 16 28.5 | 0.0 |
| | baz=98 | | | | | | |
| **AGMN** | **Agassiz Nation** | **97.43** | **41** | P | **P** | 12 16 28.1 | -0.7 |
| | baz=98 | | | | | | |
| **AGMN** | **Agassiz Nation** | **97.43** | **41** | *e*P | **P** | 12 16 28.4 | -0.4 |
| | comp=Z,97nm,1.8s | | | | | | |
| AGMN | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **G36A** | **St. Michael** | **97.64** | **45** | P | **P** | 12 16 29.1 | -0.7 |
| | baz=98 | | | | | | |
| **BRAL** | **Brewton** | **97.69** | **60** | PFAKE | | 12 16 40.0 | +10 |
| BRAL | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **SLM** | **Saint Louis** | **97.77** | **52** | PFAKE | | 12 16 40.0 | +9.4 |
| SLM | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **97.95** | **318** | *e*P | **P** | 12 16 28.3 | -3.0 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,12nm,1.3s | | | | | | |
| ULN | | | | MLR | MLR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **97.95** | **318** | *e*P | **P** | 12 16 28.3 | -3.0 |
| | comp=Z,12nm,1.3s | | | | | | |
| ULN | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| **F36A** | **Milaca** | **98.01** | **44** | P | **P** | 12 16 31.1 | -0.3 |
| | baz=98 | | | | | | |
| **D35A** | **Remer** | **98.11** | **43** | P | **P** | 12 16 31.3 | -0.5 |
| | baz=98 | | | | | | |
| **ULM** | **Lac du Bonnet** | **98.16** | **39** | P | Pdif | 12 16 32.3 | +0.3 |
| | comp=Z,8.4nm,1.1s,baz=273,slow=2.3,SNR=8.1 | | | | | | |
| **ULM** | **Lac du Bonnet** | **98.16** | **39** | P | Pdif | 12 16 32.3 | +0.3 |
| ULM | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | |
| **ULM** | **Lac du Bonnet** | **98.16** | **39** | *e*P | Pdif | 12 16 35.2 | +3.2 |
| | comp=Z,172nm,2.0s | | | | | | |
| ULM | | | | LR | LR | | |
| | comp=Z,6µm,19.0s | | | | | | |
| **SIUC** | **Southern Illin** | **98.22** | **53** | PFAKE | | 12 16 40.0 | +7.4 |
| SIUC | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| **B34A** | **Aery, Baudette** | **98.25** | **41** | Pdiff | Pdif | 12 16 33.6 | +1.1 |
| | baz=98 | | | | | | |
| **SPMN** | **St. Paul** | **98.26** | **45** | Pdiff | Pdif | 12 16 33.6 | +1.0 |
| | baz=98 | | | | | | |
| **SPMN** | **St. Paul** | **98.26** | **45** | *e*P | Pdif | 12 16 32.7 | +0.1 |
| | comp=Z,95nm,1.8s | | | | | | |
| SPMN | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| **SONA0** | **Songino Array** | **98.35** | **318** | *e*P | **P** | 12 16 31.4 | -1.7 |
| SONA0 | | | | *e*PP | **PP** | 12 20 30.7 | -2.8 |
| **SONM** | **Songino Array** | **98.35** | **318** | P | **P** | 12 16 31.4 | -1.7 |
| | comp=Z,0.6nm,0.6s,baz=83,slow=4.9,SNR=2.5 | | | | | | |
| SONM | | | | PP | **PP** | 12 20 30.7 | -2.8 |
| | comp=Z,1.5nm,1.0s,baz=108,slow=9.8,SNR=3.5 | | | | | | |
| **C35A** | **Jirik Farms, M** | **98.38** | **42** | Pdiff | Pdif | 12 16 33.7 | +0.6 |
| | baz=99 | | | | | | |
| **LPAZ** | **La Paz** | **98.44** | **111** | P | Pdif | 12 16 36.3 | +1.4 |
| | comp=Z,2.8nm,0.9s,baz=247,slow=7.1,SNR=6.6 | | | | | | |
| **LPAZ** | **La Paz** | **98.44** | **111** | P | Pdif | 12 16 36.3 | +1.4 |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **LPAZ** | **La Paz** | **98.44** | **111** | P | **P** | 12 16 34.4 | -0.4 |
| | baz=98,SNR=3.8 | | | | | | |
| **D36A** | **Goodland** | **98.71** | **43** | Pdiff | Pdif | 12 16 35.7 | +1.2 |
| | baz=99 | | | | | | |
| **HDIL** | **Hopedale** | **99.10** | **50** | Pdiff | **Pdif** | 12 16 37.5 | +1.1 |
| | baz=99 | | | | | | |
| **HDIL** | **Hopedale** | **99.10** | **50** | PFAKE | | 12 16 50.0 | +14 |
| HDIL | | | | LR | LR | | |
| | comp=Z,6µm,19.0s | | | | | | |
| **C36A** | **Pine Crest Far** | **99.12** | **42** | Pdiff | **Pdif** | 12 16 38.0 | +1.7 |
| | baz=99 | | | | | | |
| **D37A** | **Cotton** | **99.18** | **43** | Pdiff | **Pdif** | 12 16 38.3 | +1.7 |
| | baz=99 | | | | | | |
| **JFWS** | **Jewell Farm** | **99.20** | **48** | PFAKE | | 12 16 50.0 | +13 |
| JFWS | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| **OLIL** | **Olney** | **99.38** | **52** | PFAKE | | 12 16 50.0 | +12 |
| OLIL | | | | LR | LR | | |
| | comp=Z,5µm,18.0s | | | | | | |
| **USIN** | **University of** | **99.46** | **53** | PFAKE | | 12 16 50.0 | +12 |
| USIN | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **C37A** | **Embarrass** | **99.53** | **43** | Pdiff | **Pdif** | 12 16 39.6 | +1.4 |
| | baz=100 | | | | | | |
| **SWET** | **Sewanee** | **99.92** | **56** | PFAKE | | 12 16 50.0 | +10 |
| SWET | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| **GTA** | **Gaotai** | **100.02** | **308** | ⇑P | **Pdif** | 12 16 43.6 | +2.9 |
| GTA | | | | pP | pP | 12 16 47.8 | +0.7 |
| GTA | | | | sP | sP | 12 16 51.1 | +1.8 |
| GTA | | | | PP | **PP** | 12 20 51.3 | +4.9 |
| GTA | | | | SKS | **SKSac** | 12 27 19.6 | +0.8 |
| GTA | | | | S | **Sdif** | 12 28 13.7 | -1.1 |
| GTA | | | | PMZ | | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,290nm,9.0s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,760nm,15.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,590nm,18.8s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,1µm,18.5s | | | | | | |
| **EYMN** | **Ely** | **100.04** | **43** | Pdiff | **Pdif** | 12 16 41.7 | +1.3 |
| | baz=100 | | | | | | |
| **EYMN** | **Ely** | **100.04** | **43** | *e*Pdif | **Pdif** | 12 16 42.0 | +1.5 |
| EYMN | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **C38A** | **Sawbill Land.** | **100.10** | **43** | Pdiff | **Pdif** | 12 16 41.5 | +0.8 |
| | baz=100 | | | | | | |
| **WCI** | **Wyandotte Cave** | **100.57** | **53** | PFAKE | | 12 17 00.0 | +17 |
| WCI | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **SFIN** | **Scholer Farm** | **100.63** | **51** | Pdiff | **Pdif** | 12 16 44.2 | +1.0 |
| | baz=101 | | | | | | |
| **SFIN** | **Scholer Farm** | **100.63** | **51** | PFAKE | | 12 17 00.0 | +17 |
| SFIN | | | | LR | LR | | |
| | comp=Z,4µm,18.0s | | | | | | |
| **TIGA** | **Tifton** | **100.64** | **60** | PFAKE | | 12 17 00.0 | +16 |
| TIGA | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **BLO** | **Bloomington** | **100.69** | **52** | PFAKE | | 12 17 00.0 | +16 |
| BLO | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **COWI** | **Conover** | **100.97** | **45** | PFAKE | | 12 17 00.0 | +15 |
| COWI | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **ZAK** | **Zakamensk** | **101.15** | **320** | *e*P | **Pdif** | 12 16 47.9 | +2.5 |
| ZAK | | | | *e* | | 12 20 51.5 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,2.1s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.4s | | | | | | |
| **GOGA** | **Godfrey** | **101.33** | **59** | PFAKE | | 12 17 00.0 | +13 |
| GOGA | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **TLY** | **Talaya** | **101.34** | **321** | PFAKE | | 12 17 00.0 | +14 |
| TLY | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **MTDJ** | **Mount Denham** | **101.91** | **75** | PFAKE | | 12 17 00.0 | +10 |
| MTDJ | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **FCC** | **Fort Churchill** | **102.17** | **32** | PFAKE | | 12 17 00.0 | +10 |
| FCC | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| **JSC** | **Jenkinsville** | **103.33** | **58** | PFAKE | | 12 17 10.0 | +15 |
| JSC | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| **KMSC** | **Kings Mountain** | **103.51** | **57** | PFAKE | | 12 17 10.0 | +14 |
| KMSC | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **103.60** | **52** | PFAKE | | 12 17 10.0 | +14 |
| ACSO | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **AAM** | **Ann Arbor** | **103.66** | **50** | PFAKE | | 12 17 10.0 | +13 |
| AAM | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| **NHSC** | **New Hope** | **103.88** | **60** | PFAKE | | 12 17 10.0 | +12 |
| NHSC | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **LSA** | **Lhasa** | **104.06** | **297** | PFAKE | | 12 17 10.0 | +11 |
| LSA | | | | LR | LR | | |
| | comp=Z,999nm,19.0s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **104.61** | **74** | PFAKE | | 12 17 10.0 | +8.6 |
| GTBY | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **BLA** | **Blacksburg** | **104.76** | **55** | PFAKE | | 12 17 10.0 | +8.2 |
| BLA | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **SDV** | **Santo Domingo** | **105.39** | **86** | PFAKE | | 12 21 30.0 | |
| SDV | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **MCWV** | **Mont Chateau** | **105.79** | **53** | PFAKE | | 12 21 30.0 | |
| MCWV | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **SAML** | **Samuel** | **105.84** | **106** | PFAKE | | 12 21 30.0 | |
| SAML | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **ALLY** | **Alegheny Colle** | **106.04** | **51** | PFAKE | | 12 21 30.0 | |
| ALLY | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **CNNC** | **Cliffs of the** | **106.26** | **58** | PFAKE | | 12 21 30.0 | |
| CNNC | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| **LGNH** | **LØogne** | **106.47** | **76** | PFAKE | | 12 21 30.0 | |
| LGNH | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| **PAPH** | **Port-au-Prince** | **106.75** | **76** | PFAKE | | 12 21 30.0 | |
| PAPH | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| **PALK** | **Pallekele** | **106.94** | **272** | PFAKE | | 12 21 30.0 | |
| PALK | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **CBN** | **Corbin** | **107.34** | **55** | PFAKE | | 12 21 30.0 | |
| CBN | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **SADO** | **Sadowa** | **107.43** | **48** | PFAKE | | 12 21 30.0 | |
| SADO | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **SDDR** | **Presa de Saban** | **107.80** | **76** | PFAKE | | 12 21 40.0 | |
| SDDR | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| **MMNY** | **Mt. Morris Dam** | **107.89** | **50** | PFAKE | | 12 21 30.0 | |
| MMNY | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **SDMD** | **Soldier's Deli** | **108.00** | **54** | PFAKE | | 12 21 40.0 | |
| SDMD | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| **MVL** | **Millersville** | **108.50** | **53** | PFAKE | | 12 21 40.0 | |
| MVL | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| **GRTK** | **Grand Turk** | **108.62** | **73** | PFAKE | | 12 21 40.0 | |
| GRTK | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| **BINY** | **Binghamton** | **109.19** | **51** | PFAKE | | 12 21 40.0 | |
| BINY | | | | LR | LR | | |

comp=Z,4µm,19.0s
**DGAR Diego Garcia 109.20 254** PFAKE 12 21 40.0
DGAR LR LR
comp=Z,3µm,18.0s
**LUPA Lehigh Univers 109.34 53** PFAKE 12 21 40.0
LUPA LR LR
comp=Z,5µm,19.0s
**WMQ Urumqi 109.89 310** Pdif **Pdif** **12 17 27.0 +2.5**
WMQ PP **PP** **12 22 04.0 +4.6**
WMQ S **Sdif** **12 29 41.0 +4.2**
WMQ SS **SS** **12 37 26.0 +2.5**
WMQ PPMZ
comp=Z,210nm,10.0s
WMQ LN
comp=Z,870nm,22.0s
WMQ LE
comp=Z,1µm,22.0s
WMQ LZ
comp=Z,980nm,22.0s
**BRNJ Basking Ridge 109.96 53** PFAKE 12 21 40.0
BRNJ LR LR
comp=Z,9µm,19.0s
**ODNJ Ogdensburg 110.00 53** PFAKE 12 21 40.0
ODNJ LR LR
comp=Z,4µm,19.0s
**CPNY Central Park 110.44 53** PFAKE 12 21 40.0
CPNY LR LR
comp=Z,9µm,20.0s
**PAL Palisades 110.51 53** PFAKE 12 21 40.0
PAL LR LR
comp=Z,7µm,19.0s
**LONY Lake Ozonia 110.60 49** PFAKE 12 21 40.0
LONY LR LR
comp=Z,3µm,19.0s
**NCB Newcomb 110.76 50** PFAKE 12 21 40.0
NCB LR LR
comp=Z,4µm,20.0s
**TRY Troy 110.97 51** PFAKE 12 21 40.0
TRY LR LR
comp=Z,6µm,20.0s
**ACCN Adirondack Com 111.07 50** PFAKE 12 21 40.0
ACCN LR LR
comp=Z,2µm,19.0s
**YLE Yale 111.28 53** PFAKE 12 21 40.0
YLE LR LR
comp=Z,7µm,19.0s
**CRPR Cabo Rojo, PR 111.35 78** PFAKE 12 21 40.0
CRPR LR LR
comp=Z,2µm,20.0s
**AGP Aguadilla 111.43 78** PFAKE 12 21 40.0
AGP LR LR
comp=Z,2µm,20.0s
**PTGA Pitinga 112.03 100** PFAKE 12 21 40.0
PTGA LR LR
comp=Z,4µm,19.0s
**SJG San Juan 112.26 78** PFAKE 12 21 40.0
SJG LR LR
comp=Z,1µm,18.0s
**LBNH Lisbon 112.43 50** PFAKE 12 21 40.0
LBNH LR LR
comp=Z,5µm,19.0s
**CPD Cerro la Pandu 112.45 78** PFAKE 12 21 40.0
CPD LR LR
comp=Z,7µm,18.0s
**HRV Adam Dziewonsk 112.48 51** PFAKE 12 21 40.0
HRV LR LR
comp=Z,5µm,19.0s
**HUMP Col San Antoni 112.54 78** PFAKE 12 21 40.0
HUMP LR LR
comp=Z,2µm,18.0s
**ZALV Zalesovo Beam 112.96 321** PP PP 12 22 22.7 +1.7
comp=Z,3.2nm,0.8s,baz=73,slow=5.0,SNR=5.9
**ZAA1 Zalesovo Array 112.96 321** *e*PP PP 12 22 22.7 +1.7
**STVI Saint Thomas 113.42 78** PFAKE 12 21 50.0
STVI LR LR
comp=Z,2µm,20.0s
**MK32 Makanchi Array 114.05 313** *e*PKiKP PKPdf 12 21 34.0 -0.4
MK32 *e*PP **PP** **12 22 32.1 +3.0**
**MKAR Makanchi Array 114.05 313** PKiKP PKPdf 12 21 34.0 -0.4
comp=Z,1.9nm,0.7s,baz=89,slow=1.1,SNR=6.1
MKAR PP **PP** **12 22 32.1 +3.0**
comp=Z,1.4nm,0.9s,baz=100,slow=6.3,SNR=3.9
**MKAR Makanchi Array 114.05 313** *i* PKIKP PKPdf 12 21 34.0 -0.4
MKAR 12 22 32.1
MKAR pmax pmax
comp=Z,2.0nm,0.7s
MKAR pmax pmax
comp=Z,1.0nm,0.9s
**WVL Waterville 114.09 49** PFAKE 12 21 50.0 +16
WVL LR LR
comp=Z,5µm,19.0s
**MAKZ Makanchi 114.27 313** PFAKE 12 21 50.0 +15
MAKZ LR LR
comp=Z,3µm,19.0s
**PKME Peaks-Kenny Pk 114.41 49** PFAKE 12 21 50.0 +15
PKME LR LR
comp=Z,4µm,19.0s
**GRGR Grenville 114.78 86** PFAKE 12 21 50.0 +13
GRGR LR LR
comp=Z,1µm,18.0s
**SABA Saba 114.81 80** PFAKE 12 21 50.0 +13
SABA LR LR
comp=Z,2µm,19.0s
**BDFB Brasilia 115.80 120** PFAKE 12 21 50.0 +11
BDFB LR LR
comp=Z,8µm,19.0s
**FDF Fort de France 115.98 83** PFAKE 12 21 50.0 +11
FDF LR LR
comp=Z,2µm,18.0s
**ANWB Willy Bob 116.16 80** PFAKE 12 21 50.0 +11
ANWB LR LR
comp=Z,1µm,20.0s
**RER Riviere de l'E 116.22 232** PFAKE 12 21 50.0 +11
RER LR LR
comp=Z,5µm,18.0s
**SCHQ Schefferville 116.30 38** PFAKE 12 21 50.0 +12
SCHQ LR LR
comp=Z,3µm,20.0s
**BBSR BB Station 116.49 63** PFAKE 12 21 50.0 +11
BBSR LR LR
comp=Z,1µm,19.0s
**KURK Kurchatov 116.65 317** PKIKP **PKPdf** **12 21 38.7 -0.5**
KURK 12 22 49.9
KURK pmax pmax
comp=Z,2.0nm,0.9s
KURK pmax pmax
comp=Z,3.0nm,0.9s
**KURK Kurchatov 116.65 317** *e*PKPdf **PKPdf** **12 21 38.7 -0.5**
KURK *e*PP **PP** **12 22 49.9 +2.7**
KURK LR LR
comp=Z,2µm,19.0s
**KURBB Kurchatov Arra 116.71 317** PKP **PKPdf** **12 21 38.7 -0.6**
comp=Z,2.4nm,0.9s,baz=91,slow=1.8,SNR=7.1
KURBB PP **PP** **12 22 49.9 +2.3**
comp=Z,3.1nm,0.8s,baz=91,slow=7.2,SNR=4.3
**BBGH Gun Hill 117.03 85** PFAKE 12 21 50.0 +9.1
BBGH LR LR
comp=Z,2µm,22.0s
**KSH Kashi 118.10 305** *e*PKP **PKPdf** **12 21 43.6 +1.1**
KSH PP **PP** **12 22 59.8 +2.0**
KSH SKS **SKSdf** **12 28 53.6 -0.3**
KSH PPMZ
comp=Z,440nm,9.3s
KSH LN
comp=Z,790nm,17.3s
KSH LE
comp=Z,530nm,13.5s
KSH LZ
comp=Z,910nm,18.1s
**TKM2 Tokmak 2 118.57 308** *e*PKIKP **PKPdf** **12 21 42.0 -1.4**
**TKM2 Tokmak 2 118.57 308** *e*PKPdf **PKPdf** **12 21 42.0 -1.4**
**FRU Bishkek 119.29 308** *e*PKIKP PKPdf 12 21 53.0 +8.4
FRU *e* 12 23 10.0
FRU *e* 12 28 51.0
FRU *e* 12 32 50.0
**AAK Ala-Archa 119.37 308** *e*PKIKP **PKPdf** **12 21 42.5 -2.4**
AAK MLR MLR
comp=Z,1µm,20.0s
**AAK Ala-Archa 119.37 308** *e*PKPdf **PKPdf** **12 21 42.5 -2.4**
AAK LR LR
comp=Z,1µm,20.0s
**EKS2 Erkin-Say 119.90 308** PFAKE 12 22 00.0 +14
EKS2 LR LR
comp=Z,1µm,18.0s
**TRIS Tristan da Cun 120.12 163** *e*PKPdf **PKPdf** **12 21 43.7 -2.7**

**SFJD Kangerlussuaq 121.50 23** PFAKE 12 22 00.0 +12
SFJD LR LR
comp=Z,3µm,19.0s
**BVAR Borovoye Array 121.59 320** PKP **PKPdf** **12 21 47.9 -0.7**
comp=Z,3.1nm,0.6s,baz=126,slow=2.5,SNR=7.1
**BVAR Borovoye Array 121.59 320** PKIKP **PKPdf** **12 21 47.9 -0.7**
BVAR pmax pmax
comp=Z,3.0nm,0.6s
**BRVK Borovoye 121.65 320** *i* PKIKP **PKPdf** **12 21 49.2 +0.5**
BRVK pmax pmax
comp=Z,8.0nm,1.4s
**BRVK Borovoye 121.65 320** *e*PKPdf **PKPdf** **12 21 52.1 +3.3**
BRVK LR LR
comp=Z,2µm,19.0s
**SUMG Summit 122.24 14** PFAKE 12 22 00.0 +10
SUMG LR LR
comp=Z,3µm,19.0s
**DRLN Deer Lake 122.41 44** PFAKE 12 22 00.0 +10
DRLN LR LR
comp=Z,7µm,19.0s
**KBL Kabul 123.32 298** *e*PKIKP **PKPdf** **12 21 49.6 -3.2**
**KBL Kabul 123.32 298** *e*PKPdf **PKPdf** **12 21 49.6 -3.2**
**SVE Sverdlovsk 126.19 326** *i* PKIKP **PKPdf** **12 21 58.2 +0.9**
SVE pmax pmax
comp=Z,22nm,1.5s
SVE MLR MLR
comp=Z,3µm,20.0s
**SOKR Solikamsk 127.05 330** *i* PKIKP **PKPdf** **12 22 00.4 +1.6**
SOKR pmax pmax
comp=Z,10.0nm,0.9s
SOKR MLR MLR
comp=Z,2µm,20.0s
**ARU Arti 127.41 326** *i* PKIKP **PKPdf** **12 21 59.0 -0.6**
ARU 12 23 56.9
ARU 12 29 03.9
ARU SP SP 12 33 56.0 -6.0
ARU PS **PS** **12 33 59.5 -6.0**
ARU SS **SS** **12 41 09.0 +0.2**
ARU MLR MLR
comp=Z,2µm,20.0s
**ARU Arti 127.41 326** *e*PKPdf **PKPdf** **12 21 58.4 -1.2**
**BOSA Boshof 127.77 201** PKP **PKPdf** **12 22 02.6 +1.2**
comp=Z,5.1nm,0.9s,baz=209,slow=4.0,SNR=4.6
**BOSA Boshof 127.77 201** PKIKP **PKPdf** **12 22 02.7 +1.2**
BOSA pmax pmax
comp=Z,5.0nm,1.0s
**ABKAR Akbulak array 128.76 317** *e*PKPdf **PKPdf** **12 22 00.1 -2.4**
**ARA0 ARCESS Array S 129.59 351** *e*PKPdf **PKPdf** **12 22 03.4 -0.1**
**ARCES ARCESS Array B 129.59 351** PKP **PKPdf** **12 22 03.4 -0.1**
comp=Z,5.1nm,0.8s,baz=2.9,slow=2.4,SNR=8.3
**ARCES ARCESS Array B 129.59 351** PKIKP **PKPdf** **12 22 03.4 -0.1**
ARCES pmax pmax
comp=Z,5.0nm,0.8s
**APA Apatity 129.92 347** ǁ *i* PKIKP PKPdf 12 22 17.6 +13
APA MLR MLR
comp=Z,3µm,16.0s
**RCBR Riachuelo 131.09 118** PFAKE 12 22 20.0 +12
RCBR LR LR
comp=Z,5µm,18.0s
**GEYT Alibeck 132.07 303** PKP **PKPdf** **12 22 07.9 -1.2**
comp=Z,1.7nm,0.5s,baz=280,slow=3.5,SNR=2.6
**KLMR Klimovskoe 133.41 338** *e*PKIKP PKPdf 12 22 03.3 -7.6
KLMR pmax pmax
comp=Z,44nm,1.9s
**FIA0 FINESS Array S 136.81 346** *e*PKIKP **PKPdf** **12 22 17.4 +0.2**
**FIA0 FINESS Array S 136.81 346** *e*PKPdf **PKPdf** **12 22 17.4 +0.2**
**FINES FINESS Array B 136.81 346** PKP **PKPdf** **12 22 17.4 +0.2**
comp=Z,4.9nm,0.9s,baz=93,slow=4.2,SNR=4.1
**FINES FINESS Array B 136.81 346** PKIKP **PKPdf** **12 22 17.4 +0.2**
FINES pmax pmax
comp=Z,5.0nm,0.9s
**MOS Moscow 137.70 334** *e*PKIKP PKPdf 12 22 26.9 +7.9
**LSZ Lusaka 138.34 213** PFAKE 12 22 30.0 +8.3
LSZ LR LR
comp=Z,2µm,18.0s
**OBN Obninsk 138.56 334** *i* PKIKP **PKPdf** **12 22 21.3 +0.7**
OBN *e* 12 25 10.1
OBN pmax pmax
comp=Z,5.0nm,0.7s
**MAK Makhachkala 138.87 312** *e*PKIKP **PKPdf** **12 22 23.9 +2.3**
MAK *e*PPP PPP 12 28 21.3
MAK pmax pmax
comp=Z,167nm,1.0s
**HFS Hagfors 140.07 354** PKhKP PKPpre 12 22 16.9
comp=Z,1.6nm,0.5s,baz=82,slow=3.1,SNR=5.2
HFS PKP **PKPdf** **12 22 23.4 +0.1**
comp=Z,2.8nm,0.7s,baz=74,slow=5.3,SNR=4.6
**KONO Kongsberg 140.84 357** PFAKE 12 22 40.0 +15
KONO LR LR
comp=Z,1µm,20.0s
**KIV Kislovodsk 141.72 316** *e*PKIKP **PKPdf** **12 22 25.8 -1.1**
KIV pmax pmax
comp=Z,6.0nm,1.0s
**KIV Kislovodsk 141.72 316** PFAKE 12 22 40.0 +13
KIV LR LR
comp=Z,2µm,19.0s
**MICGM Minsk 142.28 339** *e*P **PKPdf** **12 22 27.0 -0.4**
**MNK Minsk 142.30 339** *e*PKIKP **PKPdf** **12 22 27.0 -0.4**
**KMBO Kilima Mbogo 142.71 238** PKP **PKPdf** **12 22 27.5 -2.2**
comp=Z,1.3nm,0.3s,baz=121,slow=2.6,SNR=4.4
**KMBO Kilima Mbogo 142.71 238** *e*PKPdf **PKPdf** **12 22 30.3 +0.5**
KMBO LR LR
comp=Z,2µm,18.0s
**DAMY Dhamar 143.12 267** PFAKE 12 22 40.0 +10
DAMY LR LR
comp=Z,2µm,18.0s
**RAYN Ar Rayn 143.47 282** *e*PKPpre PKPpre 12 22 27.8
RAYN LR LR
comp=Z,1µm,18.0s
**SOC Sochi 143.80 317** *e*PKHKP PKPpre 12 22 25.6
SOC *e*SSS SSS 12 49 39.2
**SUW Suwalki 144.13 343** *e*PKP PKPbc 12 22 28.5 -0.2
**SUW Suwalki 144.13 343** *e*PKIKP PKPbc 12 22 28.6 -0.1
**ESK Eskdalemuir 144.56 9** *e*PKIKP PKPbc 12 22 30.1 +0.1
ESK MLR MLR
comp=Z,2µm,18.0s
**ESK Eskdalemuir 144.56 9** *e*PKPdf PKPbc 12 22 30.1 0.0
ESK LR LR
comp=Z,2µm,18.0s
**COP Copenhagen 144.58 354** *e*PKIKP **PKPdf** **12 22 34.5 +3.1**
**COP Copenhagen 144.58 354** *i* P **PKPdf** **12 22 34.5 +3.1**
**ANN Anapa 144.59 320** *i* PKIKP **PKPdf** **12 22 34.9 +3.1**
ANN *e* 12 25 42.1
ANN *e*PPP PPP 12 29 00.5
ANN *e*SS SS 12 44 37.3 +2.8
ANN *e*SSS SSS 12 49 59.3
ANN pmax pmax
comp=N,21nm,1.3s
ANN pmax pmax
comp=E,21nm,1.3s
ANN pmax pmax
comp=Z,72nm,1.2s
**AKASG Malin Array Be 144.82 334** PKP **PKPab** **12 22 30.4 -0.6**
comp=Z,16nm,0.8s,baz=38,slow=4.0,SNR=19
**AKASG Malin Array Be 144.82 334** PKIKP **PKPab** **12 22 30.4 -0.6**
AKASG pmax pmax
comp=Z,16nm,0.8s
**AKBB Malin Array Si 144.82 334** *e*PKIKP **PKPab** **12 22 30.4 -0.6**
**AKBB Malin Array Si 144.82 334** *e*PKPdf **PKPab** **12 22 30.4 -0.6**
**KIEV Kiev 144.84 334** *e*PKIKP **PKPab** **12 22 30.0 -1.0**
KIEV MLR MLR
comp=Z,1µm,20.0s
**KIEV Kiev 144.84 334** *e*PKPdf **PKPab** **12 22 29.9 -1.0**
KIEV LR LR
comp=Z,1µm,20.0s
**BSD Bornholm Skovb 144.84 351** *e*PKIKP PKPbc 12 22 31.0 +0.1
BSD pmax pmax
comp=Z,53nm,0.9s
**BSD Bornholm Skovb 144.84 351** *i* P PKPbc 12 22 31.0 +0.1
comp=Z,53nm,0.9s
**AK11 Malin Array Si 144.86 334** *e*PKPdf **PKPab** **12 22 30.1 -1.0**
**RGN Rugen 145.60 353** PFAKE 12 22 40.0 +6.3
RGN LR LR
comp=Z,2µm,18.0s
**DSB Dublin 145.95 13** *e*PKPdf **PKPdf** **12 22 31.4 -2.5**
DSB LR LR
comp=Z,2µm,18.0s
**VAL Valentia 146.14 18** *e*P **PKPab** **12 22 36.9 +1.1**
**GKP Gorka Klasztor 146.22 348** *e*PKP **PKPab** **12 22 35.9 -0.1**
**GKP Gorka Klasztor 146.22 348** *e*PKP2 **PKPab** **12 22 35.9 -0.1**
**SIM Simferopol' 146.44 323** *e*PKP2 **PKPab** **12 22 37.0 -0.2**
SIM *e* 12 25 55.0
SIM *e*SS SS 12 44 51.0 -4.4
SIM pmax pmax
comp=Z,29nm,0.6s
SIM pmax pmax
comp=Z,350nm,9.7s
**BSEG Bad Segeberg 146.50 356** *e*PKP **PKPab** **12 22 36.9 -0.2**
**FURI Furi 146.55 255** PFAKE 12 22 50.0 +11
FURI LR LR
comp=Z,2µm,19.0s
**BEL Belsk 146.73 343** *e*PKP **PKPab** **12 22 37.7 -0.3**
**BEL Belsk 146.73 343** *e*PKP2 **PKPab** **12 22 37.8 -0.3**
**CWF Charnwood Fore 147.34 8** *e*PKPbc **PKPbc** **12 22 38.4 -0.2**
CWF LR LR
comp=Z,2µm,19.0s
**LVV L'vov 147.50 338** *e*PKP2 **PKPbc** **12 22 38.0 -1.1**
**KIS Kishinev 147.79 330** *e*PKP **PKPdf** **12 22 38.0 +0.9**
comp=Z,400nm,2.2s
KIS LRM MLR 13 29 05.0
comp=Z,2µm,20.0s
**KIS Kishinev 147.79 330** *e*PKP2 **PKPdf** **12 22 38.0 +0.9**
KIS MLR MLR
comp=Z,2µm,20.0s
KIS MLR MLR
comp=Z,2µm,20.0s
KIS MLR MLR
comp=N,2µm,21.0s
**NRDL Niedersach Rie 147.95 355** *e*PKP **PKPbc** **12 22 40.8 +0.7**
**MBAR Mbarara 148.06 232** *e*PKP2 **PKPbc** **12 22 40.9 -1.1**
MBAR MLR MLR
comp=Z,3µm,18.0s
**MBAR Mbarara 148.06 232** *e*PKPbc **PKPbc** **12 22 40.9 -1.1**
MBAR LR LR
comp=Z,3µm,18.0s
**KWP Kalwaria Pacla 148.11 339** *e*PKP **PKPbc** **12 22 40.6 -0.2**
**KWP Kalwaria Pacla 148.11 339** *e*PKP2 **PKPbc** **12 22 40.6 -0.2**
**IBBN Ibbenburen 148.26 358** *e*PKP **PKPbc** **12 22 41.7 +0.6**
**OJC Ojcow 148.46 343** *e*PKP **PKPbc** **12 22 41.3 -0.4**
**OJC Ojcow 148.46 343** *e*PKP2 **PKPbc** **12 22 40.8 -0.9**
**OJC Ojcow 148.46 343** *e*PKPbc **PKPbc** **12 22 40.8 -0.9**
**CLZ Clausthal 148.57 355** *e*PKP **PKPbc** **12 22 42.9 +0.9**
**WTSB Winterswijk 148.62 359** *e*PKP **PKPbc** **12 22 41.3 -0.7**
comp=Z,349nm,2.3s
**KSP Ksiaz 148.71 348** *e*PKP **PKPbc** **12 22 43.2 +0.9**
**KSP Ksiaz 148.71 348** *e*PKP2 **PKPbc** **12 22 43.2 +0.9**
**STHS Stebnicka Huta 148.76 341** *e*PKP2 **PKPbc** **12 22 44.0 +1.5**
**STHS Stebnicka Huta 148.76 341** *e*PKP **PKPbc** **12 22 44.0 +1.5**
STHS *e* 12 22 48.7
**CLL Collm 148.82 352** *e*PKP2 **PKPbc** **12 22 42.0 -0.6**
CLL pmax pmax
comp=Z,52nm,1.5s
CLL MLR MLR
comp=Z,2µm,19.1s
**CLL Collm 148.82 352** *e*PKP **PKPbc** **12 22 43.1 +0.6**
**CLL Collm 148.82 352** *e*PKPbc **PKPbc** **12 22 42.0 -0.6**
comp=Z,52nm,1.5s
CLL *i* PKPab **PKPab** **12 22 47.0 +0.6**
comp=Z,60nm,1.1s
CLL Lm MLR 13 33 00.0
comp=N,1µm,18.4s
CLL Lm MLR 13 33 00.0
comp=E,1µm,19.6s
CLL Lm MLR 13 33 00.0
comp=Z,2µm,19.1s
**CLL Collm 148.82 352** *e*pPKPdf **PKPbc** **12 22 42.0 -0.6**
CLL LR LR
comp=Z,3µm,19.0s
**KOLS Kolonicke sedl 148.85 339** *e*PKP2 **PKPbc** **12 22 43.1 +0.3**
**KOLS Kolonicke sedl 148.85 339** *e*PKP **PKPbc** **12 22 43.1 +0.3**
**BUR04 Bucovina Ar. S 148.88 335** *e*PKPbc **PKPbc** **12 22 44.4 +1.4**
**GTTG Gvttingen 148.90 355** *e*PKP **PKPbc** **12 22 43.3 +0.6**
**NIE Niedzica 149.04 342** *e*PKP **PKPbc** **12 22 44.2 +0.9**
**NIE Niedzica 149.04 342** *e*PKP2 **PKPbc** **12 22 44.2 +0.9**
**UPC Upice 149.08 348** *e*PKIKP **PKPdf** **12 22 39.0 -0.2**
UPC *e* 12 22 44.0
UPC *e* 12 22 48.0
UPC *e* 12 22 51.6
UPC *e*SS SS 12 45 25.7 +1.8
UPC MLR MLR
comp=Z,2µm,17.4s
**UPC Upice 149.08 348** *e*PKPDF **PKPdf** **12 22 39.0 -0.2**
UPC ⇑ *e*PKP **PKiKP** **12 22 44.0 -0.6**
UPC *e*PKPAB **PKPab** **12 22 48.0 +0.5**
UPC *e*pPKP **pPKPdf** **12 22 51.6 +6.0**
UPC *ex* x 12 22 55.8
UPC *e*SS SS 12 45 25.7 +1.8
UPC AMS AMS 13 38 00.0
comp=Z,2µm,17.4s
**BRG Berggiesshubel 149.10 350** *i* PKP **PKPbc** **12 22 42.8 -0.5**
comp=Z,84nm,1.8s
BRG *i* 12 22 48.1
comp=Z,211nm,1.9s
BRG *e*PP **PP** **12 26 09.7 -4.1**
comp=Z,29nm,1.9s
comp=N,2µm,17.9s
comp=E,2µm,19.8s
comp=Z,2µm,18.1s
**BRG Berggiesshubel 149.10 350** *i* PKP2 **PKPbc** **12 22 42.8 -0.5**
BRG *e* 12 26 09.7
BRG pmax pmax
comp=Z,84nm,1.8s
BRG pmax pmax
comp=Z,29nm,1.9s
BRG MLR MLR
comp=N,2µm,17.9s
BRG MLR MLR
comp=E,2µm,19.8s
BRG MLR MLR
comp=Z,2µm,18.1s
**BRG Berggiesshubel 149.10 350** *e*PKP **PKPbc** **12 22 44.0 +0.7**
**UZH Uzhgorod 149.11 339** ǁ *i* PKP2 **PKPbc** **12 22 42.8 -0.6**
**BUG Bochum--Univer 149.14 359** *e*PKP **PKPbc** **12 22 43.5 +0.2**
**DPC Dobruska-Polom 149.17 347** *e*PKP2 **PKPbc** **12 22 44.3 +0.7**
DPC MLR MLR
comp=Z,2µm,18.5s
**DPC Dobruska-Polom 149.17 347** ⇑ *e*PKP **PKPbc** **12 22 44.3 +0.7**
DPC *e*PKPAB **PKPab** **12 22 48.0 +0.1**
DPC *ex* x 12 22 57.1
DPC AMS AMS 13 38 20.0
comp=Z,2µm,18.5s
**OKC Ostrava-Krasne 149.24 345** *e*PKP2 **PKPbc** **12 22 43.8 +0.1**
OKC *e*SS SS 12 45 26.3 +0.6
OKC MLR MLR
comp=Z,2µm,18.3s
**OKC Ostrava-Krasne 149.24 345** ⇑ *e*PKP **PKPbc** **12 22 43.8 +0.1**
OKC *e*PKPAB **PKPab** **12 22 47.9 -0.2**
OKC *e*pPKP **pPKPdf** **12 22 51.6 +5.7**
OKC *ex* x 12 22 59.1
OKC *e*SS SS 12 45 26.3 +0.6
OKC AMS AMS 13 34 50.0
comp=Z,2µm,18.3s
**KRLC Kraliky 149.33 347** *e*PKIKP **PKPdf** **12 22 39.8 +0.2**
KRLC *e* 12 22 44.2
KRLC *e* 12 22 47.9
KRLC *e* 12 22 51.9
**KRLC Kraliky 149.33 347** *e*PKPDF **PKPdf** **12 22 39.8 +0.2**
KRLC ⇑ *e*PKP **PKPbc** **12 22 44.2 +0.2**
KRLC *e*PKPAB **PKPab** **12 22 47.9 -0.7**
KRLC *e*pPKP **pPKPdf** **12 22 51.9 +5.8**
KRLC *ex* x 12 22 59.2
**PVCC Panska Ves 149.33 349** *e*PKP2 **PKPbc** **12 22 44.7 +0.8**
PVCC MLR MLR
comp=Z,2µm,17.9s
**PVCC Panska Ves 149.33 349** ⇑ *e*PKP **PKPbc** **12 22 44.7 +0.8**
PVCC *e*PKPAB **PKPab** **12 22 49.0 +0.5**
PVCC *e*pPKP pPKPdf 12 22 53.0 +7.0
PVCC *ex* x 12 22 59.1
PVCC AMS AMS 13 40 00.0
comp=Z,2µm,17.9s
**MORC Moravsky Berou 149.44 345** *e*PKP2 **PKPbc** **12 22 44.5 +0.2**
MORC MLR MLR
comp=Z,8µm,19.0s
**MORC Moravsky Berou 149.44 345** *e*PKPbc **PKPbc** **12 22 44.5 +0.2**
MORC LR LR
comp=Z,8µm,19.0s
**MOX Moxa 149.64 353** *e*PKP **PKPbc** **12 22 45.2 +0.5**
MOX *e*L L 13 37 06.1
comp=Z,2µm,18.7s
**BR101 Keskin Array S 149.67 315** *e*pPKPdf **PKPbc** **12 22 44.0 -1.2**
**BRTR Keskin Array B 149.67 315** PKPbc **PKPbc** **12 22 44.0 -1.2**
comp=Z,4.8nm,0.8s,baz=90,slow=4.3,SNR=6.7
**BRTR Keskin Array B 149.67 315** PKP2 **PKPbc** **12 22 44.1 -1.2**
BRTR pmax pmax
comp=Z,5.0nm,0.8s
**TANN Tannenbergstha 149.76 352** *e*PKP **PKPbc** **12 22 45.7 +0.7**
**BEBN Eben Emael 149.79 1** PKPbc **PKPbc** **12 22 46.8 +1.8**
**PRA Prague 149.80 349** *e*PKP2 **PKPbc** **12 22 46.1 +1.1**

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|---|---|---|---|---|---|---|---|---|
| PRA | | | | *e*SS | SS | 12 45 34.6 | +2.8 | |
| PRA | | | | MLR | MLR | | | |
| | comp=Z,2μm,17.8s | | | | | | | |
| **PRA** | **Prague** | **149.80** | **349** | ⇑*e*PKP | **PKPbc** | **12 22 46.1** | **+1.1** | |
| PRA | | | | *e*PKPAB | **PKPab** | **12 22 50.1** | **-0.3** | |
| PRA | | | | *ep*PKP | pPKPdf | 12 22 54.0 | +7.2 | |
| PRA | | | | *ex* | x | 12 22 58.6 | | |
| PRA | | | | *e*SS | SS | 12 45 34.6 | +2.8 | |
| PRA | | | | AMS | AMS | 13 38 40.0 | | |
| | comp=Z,2μm,17.8s | | | | | | | |
| **TIRR** | **Tirgusor** | **149.82** | **327** | PFAKE | | 12 22 50.0 | -0.7 | |
| TIRR | | | | LR | LR | | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **HGN** | **Heimansgroeve** | **149.83** | **0** | *e*PKP | **PKPbc** | **12 22 44.0** | **-1.1** | |
| | comp=Z,411nm,2.6s | | | | | | | |
| **PRU** | **Pruhonice** | **149.86** | **349** | *e*PKPDF | **PKPdf** | **12 22 41.2** | **+0.8** | |
| PRU | | | | ⇑*e*PKP | **PKPbc** | **12 22 45.2** | **0.0** | |
| PRU | | | | *e*PKPAB | **PKPab** | **12 22 48.8** | **-1.8** | |
| PRU | | | | *ep*PKP | pPKPdf | 12 22 54.3 | +7.4 | |
| PRU | | | | *ex* | x | 12 22 59.0 | | |
| PRU | | | | *e*SS | SS | 12 45 32.4 | -0.1 | |
| PRU | | | | AMS | AMS | 13 38 00.0 | | |
| | comp=Z,2μm,18.7s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **149.88** | **349** | *e*PKP2 | **PKPbc** | **12 22 45.4** | **+0.1** | |
| GOPC | | | | *e*SS | SS | 12 45 36.5 | +3.6 | |
| GOPC | | | | MLR | MLR | | | |
| | comp=Z,2μm,18.2s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **149.88** | **349** | ⇑*e*PKP | **PKPbc** | **12 22 45.4** | **+0.1** | |
| GOPC | | | | *e*PKPAB | **PKPab** | **12 22 50.4** | **-0.4** | |
| GOPC | | | | *ep*PKP | pPKPdf | 12 22 54.0 | +7.0 | |
| GOPC | | | | *ex* | x | 12 22 59.2 | | |
| GOPC | | | | *e*SS | SS | 12 45 36.5 | +3.6 | |
| GOPC | | | | AMS | AMS | 13 36 50.0 | | |
| | comp=Z,2μm,18.2s | | | | | | | |
| **NKC** | **Novy Kostel** | **149.94** | **352** | *e*PKP2 | **PKPbc** | **12 22 45.2** | **-0.2** | |
| NKC | | | | MLR | MLR | | | |
| | comp=Z,2μm,18.6s | | | | | | | |
| **NKC** | **Novy Kostel** | **149.94** | **352** | ⇑*e*PKP | **PKPbc** | **12 22 45.2** | **-0.2** | |
| NKC | | | | AMS | AMS | 13 37 30.0 | | |
| | comp=Z,2μm,18.6s | | | | | | | |
| **MEM** | **Membach** | **149.98** | **0** | PKPbc | **PKPbc** | **12 22 46.4** | **+0.9** | |
| **SNF** | **Seneffe** | **150.05** | **2** | PKPbc | **PKPbc** | **12 22 46.4** | **+0.8** | |
| **VRAC** | **Vranov** | **150.10** | **346** | PKPbc | **PKPbc** | **12 22 44.6** | **-1.2** | |
| | comp=Z,3.3nm,0.3s,baz=342,slow=2.7,SNR=3.8 | | | | | | | |
| **VRAC** | **Vranov** | **150.10** | **346** | PKP2 | **PKPbc** | **12 22 44.6** | **-1.2** | |
| VRAC | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.3s | | | | | | | |
| **ANTO** | **Ankara** | **150.15** | **316** | *ep*PKPdf | **PKPbc** | **12 22 44.5** | **-1.8** | |
| ANTO | | | | *e*PKPab | **PKPab** | **12 22 51.5** | **-0.8** | |
| ANTO | | | | LR | LR | | | |
| | comp=Z,1μm,19.0s | | | | | | | |
| **BCLA** | **Clavier** | **150.17** | **1** | PKPbc | **PKPbc** | **12 22 47.0** | **+1.1** | |
| **BR231** | **Keskin MP Arra** | **150.18** | **316** | *e*PKPbc | **PKPab** | **12 22 51.1** | **-1.4** | |
| **ASF** | **Jabal al Asfar** | **150.21** | **299** | PKPbc | **PKPbc** | **12 22 47.1** | **+0.3** | |
| | comp=Z,11nm,1.0s,baz=110,slow=4.4,SNR=5.8 | | | | | | | |
| **ASF** | **Jabal al Asfar** | **150.21** | **299** | PKP2 | **PKPbc** | **12 22 47.1** | **+0.3** | |
| ASF | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **VYHS** | **Vyhne** | **150.29** | **343** | *e*PKIKP | **PKPbc** | **12 22 46.1** | **-0.2** | |
| **VYHS** | **Vyhne** | **150.29** | **343** | *e*PKP | **PKPbc** | **12 22 46.1** | **-0.2** | |
| **TNS** | **Taunus Mts** | **150.31** | **357** | *e*PKP | **PKPbc** | **12 22 46.9** | **+0.5** | |
| **TREC** | **Trest** | **150.34** | **348** | AMS | AMS | 13 39 20.0 | | |
| | comp=Z,2μm,18.0s | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **150.43** | **352** | *e*PKP | **PKPbc** | **12 22 45.9** | **-0.7** | |
| **DOU** | **Dourbes** | **150.47** | **2** | PKPbc | **PKPbc** | **12 22 47.5** | **+0.9** | |
| **PSZ** | **Piszkesteto** | **150.50** | **341** | *e*PKIKP | **PKPbc** | **12 22 49.7** | **+2.7** | |
| PSZ | | | | MLR | MLR | | | |
| | comp=Z,2μm,19.0s | | | | | | | |
| **PSZ** | **Piszkesteto** | **150.50** | **341** | *e*PKPbc | **PKPbc** | **12 22 49.6** | **+2.7** | |
| PSZ | | | | LR | LR | | | |
| | comp=Z,2μm,19.0s | | | | | | | |
| **GRF** | **Grafenberg Arr** | **150.62** | **353** | *e*PKP | **PKPbc** | **12 22 47.2** | **+0.2** | |
| GRF | | | | *e*L | L | 13 35 37.9 | | |
| | comp=Z,2μm,19.6s | | | | | | | |
| **GRFO** | **Grafenberg** | **150.62** | **353** | PFAKE | | 12 22 50.0 | +2.9 | |
| GRFO | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **SMOL** | **Smolenice** | **150.64** | **345** | *e*PKIKP | **PKPbc** | **12 22 48.5** | **+1.3** | |
| SMOL | | | | *e* | | 12 22 56.6 | | |
| **SMOL** | **Smolenice** | **150.64** | **345** | *e*PKP | **PKPbc** | **12 22 48.5** | **+1.3** | |
| SMOL | | | | *e* | | 12 22 56.6 | | |
| **KHC** | **Kasperske Hory** | **150.85** | **350** | *e*PKIKP | **PKPdf** | **12 22 42.7** | **+0.6** | |
| KHC | | | | *e* | | 12 22 47.3 | | |
| KHC | | | | *e* | | 12 22 52.8 | | |
| KHC | | | | *e* | | 12 22 56.5 | | |
| KHC | | | | MLR | MLR | | | |
| | comp=Z,2μm,16.3s | | | | | | | |
| **KHC** | **Kasperske Hory** | **150.85** | **350** | *e*PKPDF | **PKPdf** | **12 22 42.7** | **+0.6** | |
| KHC | | | | ⇑*e*PKP | **PKPbc** | **12 22 47.3** | **-0.4** | |
| KHC | | | | *e*PKPAB | **PKPab** | **12 22 52.8** | **-2.0** | |
| KHC | | | | *ep*PKP | PKiKP | 12 22 56.5 | +8.2 | |
| KHC | | | | *ex* | x | 12 23 02.8 | | |
| KHC | | | | AMS | AMS | 13 43 40.0 | | |
| | comp=Z,2μm,16.3s | | | | | | | |
| **KHC** | **Kasperske Hory** | **150.85** | **350** | *e*PKPbc | **PKPbc** | **12 22 49.1** | **+1.5** | |
| KHC | | | | LR | LR | | | |
| | comp=Z,600nm,20.0s | | | | | | | |
| **WLF** | **Walferdange** | **150.93** | **360** | *e*PKIKP | **PKPbc** | **12 22 45.0** | **-2.8** | |
| WLF | | | | *e* | | 12 22 51.5 | | |
| WLF | | | | *e* | | 12 22 59.9 | | |
| WLF | | | | MLR | MLR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **WLF** | **Walferdange** | **150.93** | **360** | *e*PKP | **PKPbc** | **12 22 47.2** | **-0.5** | |
| **WLF** | **Walferdange** | **150.93** | **360** | *e*PKPdf | **PKPbc** | **12 22 45.0** | **-2.8** | |
| WLF | | | | *e*PKPbc | **PKiKP** | **12 22 51.5** | **+3.1** | |
| WLF | | | | *e*PKPab | **PKPab** | **12 22 59.9** | **+4.8** | |
| WLF | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **WET** | **Wettzell** | **150.95** | **351** | *e*PKP | **PKPbc** | **12 22 46.5** | **-1.4** | |
| **GEC2** | **GERESS Array S** | **151.11** | **350** | *e*PKIKP | **PKPdf** | **12 22 45.4** | **+2.9** | |
| GEC2 | | | | *e* | | 12 22 45.4 | | |
| GEC2 | | | | *e* | | 12 22 52.6 | | |
| GEC2 | | | | *e* | | 12 22 53.2 | | |
| GEC2 | | | | *e* | | 12 23 00.4 | | |
| **GEC2** | **GERESS Array S** | **151.11** | **350** | *e*PKP | **PKPbc** | **12 22 46.9** | **-1.5** | |
| **GEC2** | **GERESS Array S** | **151.11** | **350** | *e*PKPdf | **PKPdf** | **12 22 45.4** | **+2.9** | |
| GEC2 | | | | *e*PKPdf | **PKPdf** | **12 22 45.4** | **+2.9** | |
| GEC2 | | | | *e*PKPbc | **PKPbc** | **12 22 52.6** | **+4.3** | |
| GEC2 | | | | *e*PKPbc | **PKPbc** | **12 22 53.2** | **+4.8** | |
| GEC2 | | | | *e*PKPab | **PKPab** | **12 23 00.4** | **+4.4** | |
| **GERES** | **GERESS Array B** | **151.11** | **350** | PKPbc | **PKPbc** | **12 22 48.7** | **+0.3** | |
| | comp=Z,4.6nm,0.8s,baz=45,slow=2.1,SNR=6.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **151.11** | **350** | PKIKP | **PKPbc** | **12 22 48.7** | **+0.3** | |
| GERES | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **151.17** | **302** | PKPbc | **PKPbc** | **12 22 49.4** | **+0.3** | |
| | comp=Z,36nm,1.0s,baz=46,slow=4.8,SNR=7.2 | | | | | | | |
| **CONA** | **Conrad Observa** | **151.56** | **346** | ⇓*i*sPKPdf | **PKPbc** | **12 22 47.9** | **-1.5** | |
| | comp=Z,62nm,1.9s | | | | | | | |
| **STU** | **Stuttgart** | **151.72** | **356** | PFAKE | | 12 22 50.0 | +0.4 | |
| STU | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **CSS** | **Prodhromos** | **152.09** | **307** | *e*PKPdf | **PKPdf** | **12 22 43.1** | **-1.3** | |
| CSS | | | | *e*PKPbc | **PKiKP** | **12 22 53.6** | **+2.3** | |
| CSS | | | | *e*PKPab | **PKPab** | **12 23 03.2** | **+2.7** | |
| CSS | | | | LR | LR | | | |
| | comp=Z,500nm,18.0s | | | | | | | |
| **BFO** | **Black Forest** | **152.21** | **357** | *i* PKIKP | **PKPbc** | **12 22 52.6** | **+1.8** | |
| **BFO** | **Black Forest** | **152.21** | **357** | *e*PKPbc | **PKPbc** | **12 22 54.7** | **+3.9** | |
| BFO | | | | *e*PKPab | **PKPab** | **12 23 04.2** | **+3.7** | |
| BFO | | | | LR | LR | | | |
| | comp=Z,1μm,19.0s | | | | | | | |
| **EIL** | **Elat** | **152.44** | **295** | PKPbc | **PKPbc** | **12 22 52.8** | **+0.9** | |
| | comp=Z,12nm,0.8s,baz=36,slow=5.0,SNR=4.5 | | | | | | | |
| **PERS** | **Pernice** | **152.95** | **346** | *i* PKPbc | PKPbc | 12 22 58.0 | +5.4 | |
| **DAVA** | **Damuels** | **153.14** | **354** | ⇑*i*PKiKP | **PKiKP** | **12 22 53.9** | **+0.6** | |
| | comp=Z,38nm,1.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **153.34** | **350** | ⇓*i*PKiKP | **PKPbc** | **12 22 53.5** | **+0.1** | |
| | comp=Z,37nm,1.3s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **153.64** | **354** | PKPbc | **PKPbc** | **12 22 54.6** | **+0.3** | |
| | comp=Z,2.7nm,0.3s,baz=82,slow=22,SNR=3.2 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **153.64** | **354** | PKIKP | **PKPbc** | **12 22 54.6** | **+0.3** | |
| DAVOX | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **153.76** | **354** | *e*PKPdf | **PKPdf** | **12 22 47.1** | **+0.4** | |
| FUORN | | | | *e*PKPbc | **PKiKP** | **12 22 59.4** | **+4.7** | |
| FUORN | | | | *e*PKPab | **PKPab** | **12 23 11.3** | **+3.9** | |
| FUORN | | | | LR | LR | | | |
| | comp=Z,2μm,19.0s | | | | | | | |
| **VISS** | **Visnje** | **153.80** | **346** | *i* PKPbc | PKPbc | 12 22 59.7 | +5.3 | |
| **JAVS** | **Javornik** | **153.88** | **347** | *i* PKPbc | **PKPbc** | **12 22 59.8** | **+5.1** | |
| **BOJS** | **Bojanci** | **153.99** | **345** | *i* PKPbc | **PKPbc** | **12 22 59.6** | **+4.8** | |
| **TUE** | **Stuetta** | **153.99** | **355** | PFAKE | | 12 23 00.0 | +5.0 | |
| TUE | | | | LR | LR | | | |
| | comp=Z,2μm,19.0s | | | | | | | |
| **TRI** | **Trieste** | **154.12** | **348** | PFAKE | | 12 23 00.0 | +5.0 | |
| TRI | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **154.22** | **358** | PFAKE | | 12 23 00.0 | +4.5 | |
| SENIN | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **SSB** | **Saint Sauveur** | **155.28** | **3** | PFAKE | | 12 23 00.0 | +11 | |
| SSB | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **BNI** | **Bardonecchia** | **155.54** | **359** | *e*PKP2 | **PKPab** | **12 23 18.7** | **+3.9** | |
| BNI | | | | MLR | MLR | | | |
| | comp=Z,2μm,19.0s | | | | | | | |
| **BNI** | **Bardonecchia** | **155.54** | **359** | *e*PKPab | **PKPab** | **12 23 18.7** | **+3.9** | |
| BNI | | | | LR | LR | | | |
| | comp=Z,2μm,19.0s | | | | | | | |
| **VLC** | **Villacollemand** | **156.17** | **352** | PFAKE | | 12 23 00.0 | +10 | |
| VLC | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **TIR** | **Tirane** | **156.20** | **334** | PFAKE | | 12 23 00.0 | +10 | |
| TIR | | | | LR | LR | | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **SANT** | **Santorini** | **156.89** | **317** | PFAKE | | 12 23 00.0 | +9.0 | |
| SANT | | | | LR | LR | | | |
| | comp=Z,900nm,20.0s | | | | | | | |
| **MTE** | **Manteigas** | **157.00** | **28** | PFAKE | | 12 23 00.0 | +8.9 | |
| MTE | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **LAST** | **Lasithi** | **157.59** | **315** | *e*PKPab | **PKPab** | **12 23 27.6** | **+3.6** | |
| **CUC** | **Castrocucco** | **158.91** | **339** | PFAKE | | 12 23 00.0 | +6.6 | |
| CUC | | | | LR | LR | | | |
| | comp=Z,900nm,19.0s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **158.93** | **35** | PFAKE | | 12 23 00.0 | +6.6 | |
| PFVI | | | | LR | LR | | | |
| | comp=Z,3μm,19.0s | | | | | | | |
| **PAB** | **San Pablo** | **159.01** | **23** | PFAKE | | 12 23 00.0 | +6.4 | |
| PAB | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **ESDC** | **Sonseca Array** | **159.04** | **22** | PKPab | **PKPab** | **12 23 29.8** | **-0.2** | |
| | comp=Z,3.2nm,1.1s,baz=308,slow=3.8,SNR=5.6 | | | | | | | |
| **TIP** | **Timpagrande** | **159.29** | **336** | PFAKE | | 12 23 00.0 | +6.1 | |
| TIP | | | | LR | LR | | | |
| | comp=Z,1μm,19.0s | | | | | | | |
| **DBIC** | **Dimbokro** | **162.57** | **141** | PKP | **PKPdf** | **12 22 57.5** | **-0.6** | |
| | comp=Z,6.7nm,1.1s,baz=170,slow=6.5,SNR=3.7 | | | | | | | |
| **DBIC** | **Dimbokro** | **162.57** | **141** | PKIKP | **PKPdf** | **12 22 57.5** | **-0.6** | |
| DBIC | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **DBIC** | **Dimbokro** | **162.57** | **141** | *e*PKPdf | **PKPdf** | **12 22 57.5** | **-0.6** | |
| DBIC | | | | *e*PKPab | PKPab | 12 23 39.3 | -6.7 | |
| **TOA0** | **Torodi Ar. Sit** | **171.51** | **149** | *e*PKPdf | **PKPdf** | **12 23 03.4** | **-1.3** | |
| TOA0 | | | | *e*PKPdf | PKPdf | 12 23 04.0 | -0.6 | |
| TOA0 | | | | *e*PKPab | **PKPab** | **12 24 24.9** | **-0.4** | |
| TOA0 | | | | *e*PKPab | PKPab | 12 24 24.9 | -0.4 | |
| **TORD** | **Torodi Ar. Bea** | **171.51** | **149** | PKP | **PKPdf** | **12 23 03.4** | **-1.3** | |
| | comp=Z,3.2nm,1.1s,baz=204,slow=1.4,SNR=7.4 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **12 24 24.9** | **-0.4** | |
| | comp=Z,5.4nm,1.2s,baz=249,slow=4.2,SNR=4.7 | | | | | | | |
| **TAM** | **Tamanrasset** | **177.68** | **14** | *e*PKIKP | **PKPdf** | **12 23 07.2** | **+0.7** | |
| **TAM** | **Tamanrasset** | **177.68** | **14** | *e*PKPdf | **PKPdf** | **12 23 07.2** | **+0.7** | |

*ISCJB **12** 12:03:36.0±0.4, 46°.40N±0°.02×7°.26E±0°.04, h14km±3km, Error ellipse: s-maj=5.1km s-min=3.4km az=1.4*
*CSEM **12** 12:03:36.9±0.2, 46°.36N×7°.27E, h5km, ML1.9/8, Error ellipse: s-maj=3.5km s-min=3.0km az=102.0*
*ZUR **12** 12:03:37.7, 46°.31N×7°.28E, h5km±2km, ML1.3/11*
*LDG **12** 12:03:37.4±0.1, 46°.37N×7°.24E, h5km, Ml1.8/5, Error ellipse: s-maj=2.3km s-min=1.4km az=110.0*
*GEN **12** 12:03:37.7, 46°.29N×7°.27E, h8km, ML1.1*

**ISC 12 12:03:37.3±0.8, 46°.33N±0°.02×7°.29E±0°.02, h9km±5km, n42, σ0838/59, 16C, Switzerland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SENIN** | **Lac Senin/Sane** | **0.04** | **9** | ⇑*i*Pg | | **Pg** | | **12 03 39.4** | **0.0** |
| SENIN | | | | *i* | | Sg | | **Sg** | **12 03 40.7** | **-0.2** |
| **SENIN** | **Lac Senin/Sane** | **0.04** | **9** | ⇑*i*Pg | | **Pg** | | **12 03 39.4** | **0.0** |
| SENIN | | | | *i* | | Sg | | **Sg** | **12 03 40.7** | **-0.2** |
| **SIOO** | **Sion-Ophtalmol** | **0.11** | **145** | ⇑*i*Pg | | **Pg** | | **12 03 40.2** | **+0.2** |
| **SIOO** | **Sion-Ophtalmol** | **0.11** | **145** | ⇑*i*Pg | | **Pg** | | **12 03 40.2** | **+0.2** |
| **GRYON** | **Gryon** | **0.14** | **239** | *e*Pg | | **Pg** | | **12 03 40.5** | **-0.1** |
| | 183nm,0.2s | | | | | | | | |
| GRYON | | | | *i* | | Sg | | **Sg** | **12 03 42.5** | **-0.4** |
| | 183nm,0.2s | | | | | | | | |
| **GRYON** | **Gryon** | **0.14** | **239** | *e*Pg | | **Pg** | | **12 03 40.5** | **-0.1** |
| | 183nm,0.2s | | | | | | | | |
| GRYON | | | | *i* | | Sg | | **Sg** | **12 03 42.5** | **-0.4** |
| | 183nm,0.2s | | | | | | | | |
| **AIGLE** | **Aigle** | **0.23** | **274** | ⇑*i*Pg | | **Pg** | | **12 03 42.5** | **+0.4** |
| | 89nm,0.6s | | | | | | | | |
| **AIGLE** | **Aigle** | **0.23** | **274** | ⇑*i*Pg | | **Pg** | | **12 03 42.5** | **+0.4** |
| | 89nm,0.6s | | | | | | | | |
| **VANNI** | **Vissoie, Val d** | **0.24** | **118** | *e*Pg | | **Pg** | | **12 03 42.7** | **+0.4** |
| | 75nm,0.4s | | | | | | | | |
| **VANNI** | **Vissoie, Val d** | **0.24** | **118** | *e*Pg | | **Pg** | | **12 03 42.7** | **+0.4** |
| | 75nm,0.4s | | | | | | | | |
| **LKBD2** | **Leukerbad 2** | **0.25** | **78** | ⇑*i*Pg | | **Pg** | | **12 03 43.0** | **+0.5** |
| | 36nm,0.1s | | | | | | | | |
| **LKBD2** | **Leukerbad 2** | **0.25** | **78** | ⇑*i*Pg | | **Pg** | | **12 03 43.0** | **+0.5** |
| | 36nm,0.1s | | | | | | | | |
| **DIX** | **Grande Dixence** | **0.26** | **161** | ⇑*i*Pg | | **Pg** | | **12 03 42.7** | **+0.1** |
| | 103nm,0.3s | | | | | | | | |
| **DIX** | **Grande Dixence** | **0.26** | **161** | ⇑*i*Pg | | **Pg** | | **12 03 42.7** | **+0.1** |
| | 103nm,0.3s | | | | | | | | |
| **SALAN** | **Lac Salanfe** | **0.28** | **231** | ⇑*i*Pg | | **Pg** | | **12 03 43.1** | **0.0** |
| | 58nm,0.1s | | | | | | | | |
| SALAN | | | | *i* | | Sg | | **Sg** | **12 03 46.9** | **0.0** |
| | 58nm,0.1s | | | | | | | | |
| **SALAN** | **Lac Salanfe** | **0.28** | **231** | ⇑*i*Pg | | **Pg** | | **12 03 43.1** | **0.0** |
| | 58nm,0.1s | | | | | | | | |
| SALAN | | | | *i* | | Sg | | **Sg** | **12 03 46.9** | **0.0** |
| | 58nm,0.1s | | | | | | | | |
| **EMV** | **Vieux Emosson** | **0.38** | **226** | ⇑*i*Pg | | **Pg** | | **12 03 44.7** | **-0.1** |
| | 76nm,0.5s | | | | | | | | |
| **EMV** | **Vieux Emosson** | **0.38** | **226** | ⇑*i*Pg | | **Pg** | | **12 03 44.7** | **-0.1** |
| | 76nm,0.5s | | | | | | | | |
| **EMBD** | **Embd, Matterta** | **0.39** | **106** | ⇑*i*Pg | | **Pg** | | **12 03 45.3** | **+0.3** |
| | 42nm,0.3s | | | | | | | | |
| **EMBD** | **Embd, Matterta** | **0.39** | **106** | ⇑*i*Pg | | **Pg** | | **12 03 45.3** | **+0.3** |
| | 42nm,0.3s | | | | | | | | |
| **WIMIS** | **Wimmis** | **0.41** | **34** | *e*Pg | | **Pb** | | **12 03 46.3** | **-0.5** |
| | 31nm,0.5s | | | | | | | | |
| **WIMIS** | **Wimmis** | **0.41** | **34** | *e*Pg | | **Pb** | | **12 03 46.3** | **-0.5** |
| | 31nm,0.5s | | | | | | | | |
| **MRGE** | **Morge** | **0.58** | **196** | *e*Pg | | **Pg** | | **12 03 48.6** | **+0.1** |
| | 50nm,0.2s | | | | | | | | |
| **MRGE** | **Morge** | **0.58** | **196** | *e*Pg | | **Pg** | | **12 03 48.6** | **+0.1** |
| | 50nm,0.2s | | | | | | | | |
| **SATI** | **Passo dei Sala** | **0.60** | **138** | P | | **Pg** | | **12 03 48.6** | **-0.5** |
| SATI | | | | S | | **Sg** | | **12 03 56.4** | **-0.6** |
| **CIRO** | **Champorcher** | **0.75** | **165** | P | | **Pg** | | **12 03 51.9** | **+0.1** |
| **LSD** | **Lago del Serru** | **0.87** | **187** | P | | **Pg** | | **12 03 53.6** | **-0.5** |
| **TRAV** | **Traversella** | **0.87** | **158** | P | | **Pg** | | **12 03 53.5** | **-0.6** |
| **CABF** | **La Chapelle** | **0.88** | **289** | *e*Pn | | **Pb** | | **12 03 54.8** | **0.0** |
| CABF | | | | *e*Sn | | **Sb** | | **12 04 06.7** | **0.0** |
| | 2.6nm,0.2s | | | | | | | | |
| **CABF** | **La Chapelle** | **0.88** | **289** | *e*Pn | | **Pb** | | **12 03 54.8** | **0.0** |
| CABF | | | | *e*Sn | | **Sb** | | **12 04 06.7** | **0.0** |
| | 1.3nm,0.2s | | | | | | | | |
| **LPL** | **La Plagne** | **0.90** | **206** | *e*Pg | | **Pb** | | **12 03 55.3** | **+0.1** |
| LPL | | | | *e*Sg | | **Sb** | | **12 04 07.9** | **+0.6** |
| | 1.6nm,0.2s | | | | | | | | |
| **LPL** | **La Plagne** | **0.90** | **206** | *e*Pg | | **Pb** | | **12 03 55.3** | **+0.1** |
| LPL | | | | *e*Sg | | **Sb** | | **12 04 07.9** | **+0.6** |
| | 0.8nm,0.2s | | | | | | | | |
| **LPG** | **La Plagne** | **0.91** | **205** | *e*Pg | | **Pb** | | **12 03 55.7** | **+0.3** |
| LPG | | | | *e*Sg | | **Sb** | | **12 04 07.9** | **+0.2** |
| | 1.3nm,0.2s | | | | | | | | |
| **LPG** | **La Plagne** | **0.91** | **205** | *e*Pg | | **Pb** | | **12 03 55.7** | **+0.3** |
| LPG | | | | *e*Sg | | **Sb** | | **12 04 07.9** | **+0.2** |
| | 0.6nm,0.2s | | | | | | | | |
| **FUSIO** | **Fusio** | **0.96** | **82** | *e*Pg | | **Pg** | | **12 03 55.9** | **+0.1** |
| | 13nm,0.7s | | | | | | | | |
| **FUSIO** | **Fusio** | **0.96** | **82** | *e*Pg | | **Pg** | | **12 03 55.9** | **+0.1** |
| | 13nm,0.7s | | | | | | | | |
| **HINF** | **Hinteralfeld** | **1.52** | **349** | *e*Pg | | **Pn** | | **12 04 05.0** | **+0.3** |
| HINF | | | | *e*Sg | | **Sn** | | **12 04 23.5** | **-1.2** |
| | 1.1nm,0.2s | | | | | | | | |
| **HINF** | **Hinteralfeld** | **1.52** | **349** | *e*Pg | | **Pn** | | **12 04 05.0** | **+0.3** |
| HINF | | | | *e*Sg | | **Sn** | | **12 04 23.5** | **-1.2** |
| | 0.6nm,0.2s | | | | | | | | |
| **HAU** | **Haudompre** | **1.80** | **339** | *e*Sg | | **Sn** | | **12 04 32.0** | **+0.5** |
| | 1.2nm,0.2s | | | | | | | | |
| **HAU** | **Haudompre** | **1.80** | **339** | *e*Sg | | **Sn** | | **12 04 32.0** | **+0.5** |
| | 0.6nm,0.2s | | | | | | | | |
| **CDF** | **Champ du Feu** | **2.09** | **360** | *e*Pg | | **Pb** | | **12 04 15.5** | **+0.1** |
| CDF | | | | *e*Sg | | **Sb** | | **12 04 41.5** | **0.0** |
| | 2.7nm,0.3s | | | | | | | | |
| **CDF** | **Champ du Feu** | **2.09** | **360** | *e*Pg | | **Pb** | | **12 04 15.5** | **+0.1** |
| CDF | | | | *e*Sg | | **Sb** | | **12 04 41.5** | **0.0** |
| | 1.4nm,0.3s | | | | | | | | |

*CSEM **12** 12:05:59.3±0.1, 38°.39N×22°.07E, h10km, ML1.6, Error ellipse: s-maj=1.4km s-min=1.3km az=96.0*
*THE **12** 12:05:59.5, 38°.41N×22°.07E, h12km, ML1.6/4, Error ellipse: s-maj=0.6km s-min=0.4km az=318.0*

**ATH 12 12:05:59.8, 38°.39N×22°.07E, h10km±1km, MD2.7/13, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SERG** | **Sergoula** | **0.03** | **336** | P | | Pg | | 12 06 01.4 | -0.3 |
| SERG | | | | S | | Sg | | 12 06 02.9 | -0.1 |
| **SERG** | **Sergoula** | **0.03** | **336** | P | | Pg | | 12 06 01.4 | -0.3 |
| SERG | | | | S | | Sg | | 12 06 02.9 | -0.1 |
| **KALE** | **Kalithea** | **0.06** | **89** | *e*PG | | Pg | | 12 06 01.9 | -0.1 |
| KALE | | | | *e*SG | | Sg | | 12 06 03.6 | +0.1 |
| **KALE** | **Kalithea** | **0.06** | **89** | P | | Pg | | 12 06 01.8 | -0.2 |
| KALE | | | | S | | Sg | | 12 06 03.6 | +0.1 |
| **KALE** | **Kalithea** | **0.06** | **89** | *e*Pg | | Pg | | 12 06 01.9 | -0.1 |
| KALE | | | | S | | Sg | | 12 06 03.6 | +0.1 |
| **EFP** | **Efpalio** | **0.13** | **286** | *e*PG | | Pg | | 12 06 02.5 | -0.4 |
| EFP | | | | *e*SG | | Sg | | 12 06 04.8 | -0.3 |
| **EFP** | **Efpalio** | **0.13** | **286** | P | | Pg | | 12 06 02.5 | -0.4 |
| EFP | | | | S | | Sg | | 12 06 05.1 | 0.0 |
| **EFP** | **Efpalio** | **0.13** | **286** | P | | Pg | | 12 06 02.5 | -0.4 |
| EFP | | | | *e*Sg | | Sg | | 12 06 04.8 | -0.3 |
| EFP | | | | S | | Sg | | 12 06 05.1 | 0.0 |
| **LAKA** | **Lakka** | **0.17** | **206** | *e*PG | | Pg | | 12 06 03.5 | 0.0 |
| LAKA | | | | *e*SG | | Sg | | 12 06 06.8 | +0.8 |
| **LAKA** | **Lakka** | **0.17** | **206** | P | | Pg | | 12 06 03.5 | 0.0 |
| LAKA | | | | S | | Sg | | 12 06 06.7 | +0.7 |
| **LAKA** | **Lakka** | **0.17** | **206** | P | | Pg | | 12 06 03.5 | 0.0 |
| LAKA | | | | S | | Sg | | 12 06 06.7 | +0.7 |
| **KLV** | **Kalavryta, Ach** | **0.35** | **170** | *e*PB | | Pg | | 12 06 06.6 | -0.3 |
| KLV | | | | *e*SB | | Sg | | 12 06 11.9 | +0.3 |
| **KLV** | **Kalavryta, Ach** | **0.35** | **170** | P | | Pg | | 12 06 06.6 | -0.3 |
| **KLV** | **Kalavryta, Ach** | **0.35** | **170** | P | | Pg | | 12 06 06.6 | -0.3 |
| KLV | | | | *e*Sb | | Sg | | 12 06 11.9 | +0.3 |
| **DSF** | **Desfina** | **0.36** | **86** | *e*PG | | Pg | | 12 06 02.2 | -0.8 |
| DSF | | | | *e*SB | | Sg | | 12 06 12.1 | +0.2 |
| **DSF** | **Desfina** | **0.36** | **86** | P | | Pg | | 12 06 06.5 | -0.5 |
| DSF | | | | S | | Sg | | 12 06 12.1 | +0.2 |
| **DSF** | **Desfina** | **0.36** | **86** | *e*Pg | | Pg | | 12 06 06.2 | -0.8 |
| **DSF** | **Desfina** | **0.36** | **86** | P | | Pg | | 12 06 06.5 | -0.5 |
| DSF | | | | S | | Sg | | 12 06 12.1 | +0.2 |
| **DESF** | **Desfina** | **0.36** | **86** | *e*PB | | Pg | | 12 06 06.8 | -0.3 |
| DESF | | | | *e*SB | | Sg | | 12 06 12.4 | +0.4 |
| **DESF** | **Desfina** | **0.36** | **86** | *e*Pg | | Pg | | 12 06 06.8 | -0.3 |
| DESF | | | | *e*Sb | | Sg | | 12 06 12.4 | +0.4 |
| **GUR** | **Goura** | **0.50** | **155** | *e*PB | | Pg | | 12 06 08.8 | -0.9 |
| GUR | | | | *e*SG | | Sg | | 12 06 16.2 | -0.3 |
| **GUR** | **Goura** | **0.50** | **155** | P | | Pg | | 12 06 09.3 | -0.4 |
| **GUR** | **Goura** | **0.50** | **155** | *e*Pb | | Pg | | 12 06 08.8 | -0.9 |
| **GUR** | **Goura** | **0.50** | **155** | P | | Pg | | 12 06 09.3 | -0.4 |
| GUR | | | | *e*Sg | | Sg | | 12 06 16.2 | -0.3 |
| **DRO** | **Drossia** | **0.52** | **213** | *e*PB | | Pg | | 12 06 09.5 | -0.5 |
| DRO | | | | *e*SB | | Sg | | 12 06 17.7 | +0.8 |
| **DRO** | **Drossia** | **0.52** | **213** | P | | Pg | | 12

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BVA0** | **Borovoye Array** | **3.42 294** | ⇑Pg | | **Pb** | **12 27 28.0** | **-1.5** |
| | 2.2nm,0.7s,baz=116,slow=17,SNR=7.9 | | | | | | |
| BVA0 | | | ⇑Lg | Lg | | 12 28 13.2 | |
| | 9.4nm,0.7s,baz=117,slow=28,SNR=9.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **3.42 294** | Pn | | **Pn** | **12 27 22.3** | **+0.2** |
| | 0.5nm,0.3s,baz=101,slow=11,SNR=4.0 | | | | | | |
| BVAR | | | Pg | | **Pb** | **12 27 28.1** | **-1.4** |
| | 0.7nm,0.3s,baz=118,slow=18,SNR=6.3 | | | | | | |
| BVAR | | | Lg | Lg | | 12 28 11.6 | |
| | 2.3nm,0.3s,baz=118,slow=22,SNR=7.7 | | | | | | |
| **BRVK** | **Borovoye** | **3.50 295** | ⇑Pg | | **Pb** | **12 27 31.7** | **+1.0** |
| | 2.9nm,0.5s | | | | | | |
| BRVK | | | ⇑Lg | Lg | | 12 28 13.5 | |
| | 9.8nm,0.6s | | | | | | |
| **CHKZ** | **Chkalovo** | **3.59 305** | ⇑Pg | | **Pb** | **12 27 30.6** | **-1.6** |
| | 2.9nm,1.1s | | | | | | |
| CHKZ | | | ⇓Lg | Lg | | 12 28 19.1 | |
| | 6.2nm,0.6s | | | | | | |
| **OTUK** | **Ortayu** | **4.05 212** | ⇑Pg | | **Pb** | **12 27 40.3** | **+0.2** |
| | 1.4nm,0.9s | | | | | | |
| OTUK | | | ⇑Lg | Lg | | 12 28 34.1 | |
| | 3.2nm,0.6s | | | | | | |
| **ZRNK** | **Zerenda** | **4.20 290** | ⇓Pg | | **Pb** | **12 27 42.8** | **+0.1** |
| | 1.0nm,0.5s | | | | | | |
| ZRNK | | | ⇑Lg | Lg | | 12 28 33.9 | |
| | 8.9nm,0.7s | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **6.04 65** | *i* | | | 13 01 50.0 | |
| | baz=251,slow=304,SNR=1.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.04 65** | Pn | | **Pn** | **12 28 00.7** | **+2.6** |
| | 0.8nm,0.3s,baz=254,slow=14,SNR=4.5 | | | | | | |
| **MK31** | **Makanchi Array** | **6.61 136** | ⇑Sn | | **Sn** | **12 29 21.0** | **-0.4** |
| | 0.3nm,0.3s | | | | | | |
| MK31 | | | ⇑Lg | Lg | | 12 29 55.2 | |
| | 1.9nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **6.61 136** | Pn | | **Pn** | **12 28 05.9** | **-0.1** |
| | 0.1nm,0.3s,baz=308,slow=14,SNR=2.6 | | | | | | |
| MKAR | | | Lg | Lg | | 12 29 58.0 | |
| | 0.5nm,0.3s,baz=319,slow=26,SNR=7.2 | | | | | | |

**IDC 12 12:27:07.8±410.0, 51°43N×47°00E, h0km, Error ellipse: s-maj=158.8km s-min=133.9km az=94.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **7.05** | **94** | *i* | | 13 15 10.0 | |
| | baz=283,slow=312,SNR=2.6 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **7.82** | **317** | *i* | | 13 15 20.0 | |
| | baz=128,slow=328,SNR=1.1 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **22.89** | **69** | *i* | | 14 45 50.0 | |
| | baz=276,slow=322,SNR=2.3 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **37.75** | **71** | *i* | | 16 17 50.0 | |
| | baz=295,slow=325,SNR=0.8 | | | | | | |

*IDC **12** 12:41:27.9±1.1, 33°50N×141°66E, h0km, mb3.5/5, mb1 3.6/6, mb1mx3.5/29, mbtmp3.5/6, ML3.2/1, Error ellipse: s-maj=22.8km s-min=20.8km az=73.0*
*ISCJB **12** 12:41:31.1±0.9, 33°63N±0°05×141°70E±0°09, h41km, mb3.5/5, Error ellipse: s-maj=10.7km s-min=7.3km az=166.8*
*JMA **12** 12:41:31.1±0.3, 33°68N×141°69E, h79km, M2.9*
**ISC 12 12:41:33.6±1.2, 33°62N±0°06×141°6E±0°1, h41km, n18, σ1§09/22, mb3.5/5, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BSO1** | **Boso 1** | **1.15** | **333** | P | **Pn** | **12 41 51.9** | **-0.8** |
| **BSO3** | **Boso 3** | **1.49** | **323** | P | **Pn** | **12 41 56.8** | **-0.8** |
| **JHJ2** | **Mitsune** | **1.58** | **252** | P | **Pn** | **12 41 59.0** | **-0.1** |
| **JHJ** | **Hachijo jima 2** | **1.61** | **252** | Pn | **Pn** | **12 41 59.0** | **-0.4** |
| | 25nm,0.3s,baz=302,slow=17,SNR=82 | | | | | | |
| JHJ | | | | Sn | **Sn** | **12 42 19.6** | **+0.5** |
| | 62nm,0.3s,baz=118,slow=23,SNR=7.0 | | | | | | |
| **JHCJ** | **Hachijojimakas** | **1.61** | **251** | P | **Pn** | **12 41 59.6** | **+0.1** |
| **BSO4** | **Boso 4** | **1.72** | **323** | P | **Pn** | **12 42 00.3** | **-0.7** |
| **JIM2** | **Oshima 3** | **2.11** | **302** | P | **Pn** | **12 42 04.5** | **-1.9** |
| **JIZS** | **Izushimoda** | **2.51** | **296** | P | **Pn** | **12 42 11.1** | **-0.8** |
| **JOD2** | **Odawara 2** | **2.65** | **309** | P | **Pn** | **12 42 12.3** | **-1.5** |
| **JYN** | **Shimob** | **3.15** | **307** | P | **Pn** | **12 42 19.6** | **-1.1** |
| **JRY** | **Ryogami san** | **3.27** | **318** | P | **Pn** | **12 42 20.8** | **-1.5** |
| JRY | | | | S | **Sn** | **12 43 01.0** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **4.03** | **317** | Pn | **Pn** | **12 42 32.1** | **-0.7** |
| | 1.4nm,0.3s,baz=123,slow=8.8,SNR=16 | | | | | | |
| MJAR | | | | Sn | **Sn** | **12 43 19.5** | **+0.8** |
| | 1.2nm,0.3s,baz=262,slow=12,SNR=9.0 | | | | | | |
| **MAT** | **Matsushiro** | **4.03** | **317** | P | **Pn** | **12 42 32.5** | **-0.3** |
| MAT | | | | S | **Sn** | **12 43 19.7** | **+0.9** |
| **SONM** | **Songino Array** | **29.94** | **309** | P | **P** | **12 47 38.2** | **+0.4** |
| | 0.5nm,0.5s,baz=111,slow=7.9,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.13** | **305** | P | **P** | **12 49 54.0** | **+0.1** |
| | 0.7nm,0.7s,baz=88,slow=9.1,SNR=6.5 | | | | | | |
| **ILAR** | **Eielson Array** | **52.31** | **31** | P | **P** | **12 50 42.3** | **+1.6** |
| | 0.2nm,0.5s,baz=262,slow=6.2,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.72** | **188** | P | **P** | **12 50 49.4** | **-2.2** |
| | 0.4nm,0.7s,baz=3.7,slow=7.5,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **57.44** | **188** | P | **P** | **12 51 18.1** | **-0.2** |
| | 0.1nm,0.4s,baz=20,slow=11,SNR=4.1 | | | | | | |

*ISCJB **12** 13:06:42.9±0.6, 50°98N±0°03×101°79W±0°06, h0km, mb3.0/1, Error ellipse: s-maj=6.1km s-min=3.9km az=38.8*
*OTT **12** 13:06:46.4±0.7, 50°97N×101°74W, h1km, MN3.2/6, Probable Esterhazy event, Sk 14km northeast from Langenburg, Sk Induced.*
*IDC **12** 13:06:47.0±1.6, 50°73N×101°74W, h0km, mb2.9/1, mb1 3.6/3, mb1mx3.3/38, mbtmp3.3/3, ML1.4/1, Error ellipse: s-maj=27.4km s-min=12.6km az=19.0*
**ISC 12 13:06:43.3±0.9, 51°01N±0°05×101°82W±0°05, h0km, n38, σ1§93/55, Manitoba**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **A27A** | **Ledoux Ranch,** | **2.09** | **170** | P | **Pn** | **13 07 19.2** | **-0.4** |
| | baz=2.0 | | | | | | |
| A27A | | | | S | **Sn** | **13 07 43.8** | **-2.5** |
| | baz=2.0 | | | | | | |
| **A26A** | **Wade Farm, Ken** | **2.12** | **184** | P | **Pn** | **13 07 20.5** | **+0.5** |
| | baz=2.1 | | | | | | |
| A26A | | | | S | **Sn** | **13 07 45.4** | **-1.7** |
| | baz=2.1 | | | | | | |
| **A25A** | **Svangstu Ranch** | **2.24** | **202** | P | **Pn** | **13 07 22.3** | **+0.7** |
| | baz=2.2 | | | | | | |
| A25A | | | | S | **Sn** | **13 07 48.5** | **-1.4** |
| | baz=2.2 | | | | | | |
| **A28A** | **Rude Farm, Bot** | **2.33** | **154** | P | **Pb** | **13 07 24.8** | **-1.4** |
| | baz=2.3 | | | | | | |
| A28A | | | | S | **Sn** | **13 07 52.9** | **+0.7** |
| | baz=2.3 | | | | | | |
| **B27A** | **Peters Farms,** | **2.63** | **172** | P | **Pn** | **13 07 27.7** | **+0.7** |
| | baz=2.6 | | | | | | |
| B27A | | | | S | **Sn** | **13 07 57.9** | **-1.8** |
| | baz=2.6 | | | | | | |
| **A29A** | **Manning Farm,** | **2.67** | **140** | P | **Pb** | **13 07 30.2** | **-1.8** |
| | baz=2.6 | | | | | | |
| A29A | | | | S | **Sn** | **13 08 02.4** | **+1.7** |
| | baz=2.6 | | | | | | |
| **B28A** | **Dugan Ranch, T** | **2.73** | **159** | P | **Pn** | **13 07 29.8** | **+1.4** |
| | baz=2.7 | | | | | | |
| B28A | | | | Sb | **Sn** | **13 08 03.4** | **+1.3** |
| | baz=2.7 | | | | | | |
| **B25A** | **Knox Farm, Ray** | **2.88** | **198** | P | **Pn** | **13 07 31.0** | **+0.6** |
| | baz=2.9 | | | | | | |
| B25A | | | | S | **Sn** | **13 08 04.4** | **-1.4** |
| | baz=2.9 | | | | | | |
| **DGMT** | **Dagmar** | **2.98** | **212** | P | **Pn** | **13 07 32.6** | **+0.9** |
| | baz=3.0 | | | | | | |
| DGMT | | | | S | **Sn** | **13 08 07.0** | **-1.1** |
| | baz=3.0 | | | | | | |
| **A30A** | **Hoffart Farm,** | **3.07** | **131** | P | **Pb** | **13 07 35.8** | **-3.0** |
| | baz=3.0 | | | | | | |
| A30A | | | | S | **Sn** | **13 08 13.1** | **+2.6** |
| | baz=3.0 | | | | | | |
| **C27A** | **Sayler Ranch,** | **3.31** | **176** | P | **Pn** | **13 07 37.0** | **+0.7** |
| | baz=3.3 | | | | | | |
| **ULM** | **Lac du Bonnet** | **3.86** | **99** | Pn | **Pn** | **13 07 46.2** | **+2.4** |
| | 0.5nm,0.3s,baz=282,slow=11,SNR=3.0 | | | | | | |
| ULM | | | | Pg | **Pb** | **13 07 53.7** | **+1.5** |
| | 3.3nm,0.3s,baz=278,slow=16,SNR=15 | | | | | | |
| ULM | | | | Lg | Lg | 13 08 44.4 | |
| | 8.0nm,0.3s,baz=216,slow=21,SNR=5.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **3.86** | **99** | PN | **Pn** | **13 07 46.0** | **+2.2** |
| ULM | | | | SN | **Sn** | **13 08 31.4** | **+1.6** |
| ULM | | | | LG | Lg | 13 08 44.2 | |
| ULM | | | | Trac | | 13 08 46.0 | |
| | comp=Z,90nm,0.7s | | | | | | |
| **D28A** | **Regan** | **3.91** | **167** | P | **Pn** | **13 07 45.7** | **+1.1** |
| | baz=3.9 | | | | | | |
| **D27A** | **Center** | **3.91** | **177** | P | **Pn** | **13 07 45.3** | **+0.7** |
| | baz=3.9 | | | | | | |
| **C30A** | **Mose, Pekin** | **3.96** | **145** | Pb | **Pb** | **13 07 55.3** | **+1.3** |
| | baz=3.9 | | | | | | |
| **D26A** | **Manning** | **4.00** | **186** | Pb | **Pb** | **13 07 53.7** | **-1.0** |
| | baz=4.0 | | | | | | |
| **C31A** | **Landman Farms,** | **4.18** | **139** | Pb | **Pb** | **13 07 58.3** | **+0.7** |
| | baz=4.1 | | | | | | |
| **B32A** | **Ashes, Strandq** | **4.31** | **125** | Pb | **Pb** | **13 08 02.0** | **+2.1** |
| | baz=4.2 | | | | | | |
| **D30A** | **Buchanan** | **4.39** | **152** | Pb | **Pb** | **13 08 01.3** | **0.0** |
| | baz=4.3 | | | | | | |
| **E28A** | **Huff** | **4.50** | **170** | Pb | **Pb** | **13 08 02.7** | **-0.5** |
| | baz=4.4 | | | | | | |
| **E26A** | **Carlson Angus** | **4.56** | **186** | Pb | **Pb** | **13 08 03.3** | **-0.9** |
| | baz=4.5 | | | | | | |
| **E27A** | **Carson** | **4.59** | **178** | P | **Pn** | **13 07 54.3** | **+0.3** |
| | baz=4.5 | | | | | | |
| **E29A** | **Napoleon** | **4.67** | **161** | Pb | **Pb** | **13 08 05.9** | **-0.2** |
| | baz=4.6 | | | | | | |
| **EPLO** | **Experimental L** | **5.35** | **101** | PN | **Pn** | **13 08 05.7** | **+1.3** |
| EPLO | | | | SN | **Sn** | **13 09 04.8** | **-1.8** |
| EPLO | | | | LG | Lg | 13 09 27.0 | |
| EPLO | | | | Trac | | 13 09 37.7 | |
| | comp=Z,802nm,0.4s | | | | | | |
| **SOLO** | **Sioux Lookout** | **6.29** | **95** | PN | **Pn** | **13 08 17.8** | **+0.6** |
| SOLO | | | | SN | **Sn** | **13 09 26.9** | **-2.8** |
| SOLO | | | | LG | Lg | 13 09 56.5 | |
| SOLO | | | | Trac | | 13 10 09.5 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **ATKO** | **Atikokan Iron** | **6.95** | **104** | PN | **Pn** | **13 08 26.8** | **+0.5** |
| ATKO | | | | SN | **Sn** | **13 09 42.9** | **-3.1** |
| ATKO | | | | LG | Lg | 13 10 15.2 | |
| ATKO | | | | Trac | | 13 10 30.6 | |
| | comp=Z,13nm,0.5s | | | | | | |
| **PKLO** | **Pickle Lake** | **7.21** | **82** | PN | **Pn** | **13 08 31.8** | **+1.9** |
| PKLO | | | | SN | **Sn** | **13 09 47.9** | **-4.6** |
| PKLO | | | | LG | Lg | 13 10 18.2 | |
| PKLO | | | | Trac | | 13 10 35.0 | |
| | comp=Z,26nm,0.5s | | | | | | |
| **EYMN** | **Ely** | **7.39** | **111** | PN | **Pn** | **13 08 33.0** | **+0.7** |
| EYMN | | | | SN | **Sn** | **13 09 52.1** | **-4.7** |
| EYMN | | | | LG | Lg | 13 10 27.3 | |
| **PRDA** | **Priddis** | **7.89** | **274** | SN | **Sn** | **13 10 06.5** | **-2.7** |
| **TBO** | **Thunder Bay** | **8.36** | **102** | PN | **Pn** | **13 08 46.0** | **+0.3** |
| TBO | | | | SN | **Sn** | **13 10 15.7** | **-5.1** |
| TBO | | | | Trac | | 13 10 19.3 | |
| | comp=Z,13nm,0.4s | | | | | | |
| TBO | | | | LG | Lg | 13 11 00.1 | |
| **FCC** | **Fort Churchill** | **8.95** | **27** | PN | **Pn** | **13 08 57.7** | **+4.1** |
| FCC | | | | SN | **Sn** | **13 10 33.5** | **-1.5** |
| **GTO** | **Geraldton** | **9.58** | **92** | PN | **Pn** | **13 09 01.6** | **-0.8** |
| GTO | | | | SN | Sn | 13 10 43.5 | -7.0 |
| GTO | | | | Trac | | 13 10 46.2 | |
| | comp=Z,3.0nm,0.2s | | | | | | |
| GTO | | | | LG | Lg | 13 11 38.6 | |
| **NEW** | **Newport** | **10.30** | **260** | Lg | Lg | 13 12 06.7 | |
| | 0.3nm,0.3s,baz=127,slow=21,SNR=3.6 | | | | | | |
| **PNPO** | **Pukaskwa Natio** | **10.33** | **97** | PN | **Pn** | **13 09 14.6** | **+2.0** |
| PNPO | | | | SN | Sn | 13 11 01.5 | -7.5 |
| PNPO | | | | LG | Lg | 13 12 04.5 | |
| **VIMO** | **Victor Mine** | **11.31** | **74** | PN | **Pn** | **13 09 27.4** | **+1.5** |
| VIMO | | | | SN | Sn | 13 11 26.3 | -6.6 |
| VIMO | | | | LG | Lg | 13 12 32.8 | |
| **YKA** | **Yellowknife Ar** | **13.44** | **334** | Pn | **Pn** | **13 09 57.5** | **+2.5** |
| | 0.3nm,0.3s,baz=142,slow=12,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **21.70** | **184** | P | **P** | **13 11 36.6** | **+0.9** |
| | 0.3nm,0.5s,baz=6.8,slow=10.0,SNR=6.2 | | | | | | |

*IDC **12** 13:10:15.4±1.1, 5°10S×133°66E, h0km, mb3.8/3, mb1 4.3/9, mb1mx4.0/35, mbtmp4.1/9, ML4.3/6, MS4.2/1, Ms1 4.2/1, ms1mx3.3/29, Error ellipse: s-maj=32.7km s-min=20.4km az=90.0*
*ISCJB **12** 13:10:16.3±0.4, 5°01S±0°03×133°71E±0°04, h25km, mb3.8/3, Error ellipse: s-maj=5.4km s-min=4.9km az=157.0*
*AUST **12** 13:10:20.3, 4°96S×133°53E, h100km*
*DJA **12** 13:10:21.3±0.5, 5°S±2°×13°4E±°, h105km±13km, M4.5/10, mb4.7/6, mB5.0/3, MLv4.4/10, Mw(mB)4.3/3*
**ISC 12 13:10:18.8±0.7, 4°90S±0°05×133°69E±0°06, h25km, n30, σ1§81/35, mb3.9/3, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.44** | **324** | P | **Pn** | **13 10 56.7** | **-0.5** |
| | baz=2.4,SNR=48 | | | | | | |
| **FAKI** | **Fak Fak** | **2.44** | **324** | P | **Pn** | **13 10 57.5** | **+0.4** |
| **RKPI** | **Ransiki, Papua** | **3.40** | **8** | P | **Pn** | **13 11 12.0** | **+1.6** |
| RKPI | | | | S | **Sn** | **13 11 51.3** | **+1.3** |
| **SAUI** | **Saumlaki** | **3.88** | **218** | P | **Pn** | **13 11 18.4** | **+1.6** |
| SAUI | | | | S | **Sn** | **13 12 05.5** | **+3.9** |
| **SIJI** | **Sorong** | **4.68** | **329** | Pn | **Pn** | **13 11 28.7** | **+0.7** |
| | 5.5nm,0.3s,baz=8.4,slow=21,SNR=23 | | | | | | |
| SIJI | | | | Sn | **Sn** | **13 12 17.8** | **-3.8** |
| | 10nm,0.3s,baz=323,slow=23,SNR=16 | | | | | | |
| **SWI** | **Sorong** | **4.69** | **329** | P | **Pn** | **13 11 29.1** | **+1.0** |
| | baz=4.7,SNR=8.1 | | | | | | |
| **SWI** | **Sorong** | **4.69** | **329** | P | **Pn** | **13 11 29.7** | **+1.6** |
| SWI | | | | S | **Sn** | **13 12 21.8** | **+0.1** |
| **MSAI** | **Masohi** | **5.00** | **288** | P | **Pn** | **13 11 34.4** | **+2.1** |
| MSAI | | | | S | **Sn** | **13 12 29.9** | **+0.6** |
| **AAI** | **Ambon** | **5.62** | **282** | P | **Pn** | **13 11 41.4** | **+0.7** |
| | baz=5.5,SNR=5.6 | | | | | | |
| **AAI** | **Ambon** | **5.62** | **282** | P | **Pn** | **13 11 41.5** | **+0.7** |
| | 95nm,0.8s,1μm0.3nm | | | | | | |
| **GENI** | **Genyem** | **6.86** | **71** | P | **Pn** | **13 11 58.1** | **+0.3** |
| **JAY** | **Jayapura** | **7.39** | **72** | Pn | **Pn** | **13 12 06.0** | **+0.9** |
| | 1.2nm,0.3s,baz=74,slow=11,SNR=6.1 | | | | | | |
| JAY | | | | Sn | **Sn** | **13 13 28.5** | **+0.1** |
| | 0.5nm,0.3s,baz=90,slow=20,SNR=3.6 | | | | | | |
| **KDU** | **Kakadu** | **7.83** | **189** | P | **Pn** | **13 12 10.2** | **-0.9** |
| | baz=7.8,SNR=31 | | | | | | |
| **SANI** | **Sanana** | **8.20** | **290** | P | **Pn** | **13 12 15.8** | **-0.4** |
| | 26nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **8.29** | **198** | P | **Pn** | **13 12 16.2** | **-1.3** |
| | baz=8.2,SNR=20 | | | | | | |
| **SOEI** | **Soe** | **10.52** | **242** | P | **Pn** | **13 12 49.6** | **+1.4** |
| | baz=10,SNR=4.4 | | | | | | |
| **SOEI** | **Soe** | **10.52** | **242** | P | **Pn** | **13 12 48.4** | **+0.2** |
| **BATI** | **Baumata** | **11.25** | **241** | Pn | **Pn** | **13 12 56.7** | **-1.5** |
| | 2.7nm,0.3s,baz=59,slow=1.3,SNR=6.5 | | | | | | |
| **APSI** | **Ampana** | **12.66** | **288** | P | **Pn** | **13 13 18.7** | **+1.2** |
| **COEN** | **Coen** | **12.97** | **135** | P | **Pn** | **13 13 20.3** | **-1.4** |
| | baz=13,SNR=4.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.96** | **178** | Pn | **Pn** | 13 13 43.8 | -5.0 |
| | 1.5nm,0.3s,baz=356,slow=13,SNR=39 | | | | | | |
| WRA | | | | Sn | Sn | 13 16 20.8 | -13 |
| | 1.1nm,0.3s,baz=355,slow=24,SNR=5.9 | | | | | | |
| WRA | | | | LR | LR | 13 19 42.8 | |
| | comp=Z,935nm,18.3s,baz=260,slow=38 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.30** | **210** | Pn | **Pn** | **13 13 48.8** | **-4.5** |
| | 1.3nm,0.3s,baz=41,slow=12,SNR=32 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.30** | **210** | P | **Pn** | **13 13 50.1** | **-3.2** |
| | baz=15,SNR=11 | | | | | | |
| **QIS** | **Mount Isa** | **16.59** | **160** | P | **Pn** | **13 14 08.0** | **-1.8** |
| | baz=17,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **18.66** | **179** | P | **P** | **13 14 32.2** | **-2.8** |
| | 1.7nm,0.3s,baz=2.3,slow=12,SNR=71 | | | | | | |
| ASAR | | | | S | Sn | 13 17 48.3 | -15 |
| | 0.3nm,0.3s,baz=2.1,slow=28,SNR=5.0 | | | | | | |
| **WRKA** | **Warakurna** | **20.68** | **194** | P | **P** | **13 14 56.7** | **-0.4** |
| | baz=21,SNR=13 | | | | | | |
| **QLP** | **Quilpie** | **23.80** | **156** | P | **P** | **13 15 30.2** | **+0.4** |
| | baz=24,SNR=7.5 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **48.90** | **358** | P | **P** | **13 19 04.0** | **+1.3** |
| | 1.4nm,0.6s,baz=198,slow=4.2,SNR=2.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.57** | **325** | P | **P** | **13 21 21.5** | **+1.9** |
| | 0.6nm,0.6s,baz=121,slow=8.0,SNR=5.4 | | | | | | |
| **VNDA** | **Vanda** | **74.10** | **174** | P | **P** | **13 21 52.8** | **+0.4** |
| | 0.8nm,0.9s,baz=336,slow=5.2,SNR=3.6 | | | | | | |

*ISCJB **12** 13:13:56.9±1.2, 4°84S±0°07×133°7E±0°2, h25km, mb3.8/3, Error ellipse: s-maj=29.0km s-min=7.8km az=164.9*
*IDC **12** 13:13:57.6±1.7, 5°11S×132°65E, h0km, mb3.8/3, mb1 4.0/6, mb1mx3.8/33, mbtmp3.9/6, ML3.9/2, Error ellipse: s-maj=108.3km s-min=25.5km az=80.0*
*AUST **12** 13:13:58.9±99.0, 4°75S×133°80E, h38km±2km, Error ellipse: s-maj=4.3km s-min=2.1km az=241.0*
**ISC 12 13:13:58.7±1.4, 4°75S±0°08×133°7E±0°2, h25km, n12, σ1§40/12, mb3.9/3, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.34** | **321** | P | **Pn** | **13 14 35.0** | **-0.5** |
| | baz=2.4,SNR=11 | | | | | | |
| **SIJI** | **Sorong** | **4.57** | **327** | Pn | **Pn** | **13 15 06.4** | **+0.2** |
| | 3.7nm,0.3s,baz=186,slow=14,SNR=5.0 | | | | | | |
| SIJI | | | | Sn | **Sn** | **13 15 56.2** | **-2.4** |
| | 2.4nm,0.3s,baz=197,slow=19,SNR=4.3 | | | | | | |
| **SWI** | **Sorong** | **4.58** | **327** | P | **Pn** | **13 15 07.8** | **+1.5** |
| | baz=4.6,SNR=4.0 | | | | | | |
| **AAI** | **Ambon** | **5.61** | **281** | P | **Pn** | **13 15 21.2** | **+0.6** |
| | baz=5.7,SNR=4.1 | | | | | | |
| **KDU** | **Kakadu** | **7.99** | **189** | P | **Pn** | **13 15 53.0** | **-0.2** |
| | baz=8.0,SNR=6.1 | | | | | | |
| **MTN** | **Manton Dam** | **8.44** | **197** | P | **Pn** | **13 15 59.5** | **+0.1** |
| | baz=8.5,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.12** | **178** | Pn | **Pn** | **13 17 29.1** | **-1.6** |
| | baz=353,slow=14,SNR=2.5 | | | | | | |
| WRA | | | | Sn | Sn | 13 20 03.2 | -14 |
| | 0.4nm,0.3s,baz=357,slow=24,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **18.81** | **179** | P | **P** | **13 18 15.1** | **-1.5** |
| | 0.6nm,0.3s,baz=2.0,slow=14,SNR=8.6 | | | | | | |
| **WRKA** | **Warakurna** | **20.84** | **194** | P | **P** | **13 18 39.4** | **+0.7** |
| | baz=21,SNR=6.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **48.75** | **358** | P | P | 13 22 46.7 | +5.3 |
| | 2.3nm,0.6s,baz=159,slow=8.9,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.46** | **325** | P | **P** | **13 24 59.5** | **+0.8** |
| | 0.2nm,0.5s,baz=123,slow=7.1,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.28** | **332** | P | **P** | **13 25 17.6** | **+1.8** |
| | 0.5nm,0.5s,baz=138,slow=6.8,SNR=2.2 | | | | | | |

**NNC 12 13:29:22.7±5.0, 36°70N×70°98E, h0km, mb3.7, mpv3.2, 3C-2D, Error ellipse: s-maj=39.3km s-min=25.6km az=176.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.71** | **322** | ⇑Pn | Pn | 13 30 06.6 | -1.0 |
| | 1.0nm,0.2s | | | | | | |
| DZET | | | | ⇓Sn | Sn | 13 30 42.6 | +1.3 |
| | 8.4nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **5.90** | **11** | ⇑Pn | Pn | 13 30 54.0 | +2.4 |
| | 0.9nm,0.4s | | | | | | |
| MNAS | | | | ⇓Sn | Sn | 13 32 00.6 | +0.5 |
| | 3.2nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **6.41** | **357** | Pn | Pn | 13 30 58.7 | +0.3 |
| | 1.5nm,0.3s,baz=186,slow=14,SNR=18 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 13 32 12.3 | +0.1 |
| | 2.3nm,0.5s,baz=189,slow=25,SNR=7.6 | | | | | | |

*CSEM **12** 13:31:31.6±0.1, 47°41N×11°73E, h2km, ML2.8/12, Error ellipse: s-maj=2.7km s-min=1.8km az=128.0*
*ROM **12** 13:31:32.1±0.5, 47°34N×11°71E, h7km, Md2.3/4, Ml2.1/3, Error ellipse: s-maj=4.8km s-min=2.8km az=174.0*
*VIE **12** 13:31:32.2±0.2, 47°34N×11°67E, h10km±1km, mb1.6/7, ml2.5/14, Error ellipse: s-maj=1.7km s-min=1.0km az=3.0*
*PRU **12** 13:31:33.1, 47°43N×11°78E, h8km*
*BGR **12** 13:31:33.5±0.2, 47°36N×11°72E, h10km, ML2.2/10, Error ellipse: s-maj=4.4km s-min=3.3km az=176.0*
**ISC 12 13:31:32.2±0.8, 47°39N±0°02×11°72E±0°02, h10km±5km, n79, σ0§97/132, 10C-6D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATA** | **Walderalm** | **0.11** | **242** | ⇑*e*Pg | **Pg** | **13 31 34.8** | **-0.3** |
| | 63nm,0.1s,SNR=297 | | | | | | |
| WATA | | | | ⇑*i*Sg | **Sg** | **13 31 36.9** | **-0.3** |
| | 435nm,0.1s | | | | | | |
| **WATA** | **Walderalm** | **0.11** | **242** | Pg | **Pg** | **13 31 34.8** | **-0.3** |
| | 63nm,0.1s,SNR=297 | | | | | | |
| WATA | | | | Sg | **Sg** | **13 31 36.9** | **-0.3** |
| | 435nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.14** | **205** | *e*Pg | **Pg** | **13 31 35.4** | **-0.1** |
| WTTA | | | | *e*Sg | **Sg** | **13 31 37.8** | **0.0** |
| **WTTA** | **Wattenberg** | **0.14** | **205** | ⇓*e*Pg | **Pg** | **13 31 35.4** | **-0.1** |
| | 126nm,0.1s,SNR=98 | | | | | | |
| **WTTA** | **Wattenberg** | **0.14** | **205** | Pg | **Pg** | **13 31 35.4** | **-0.1** |
| | 126nm,0.1s,SNR=98 | | | | | | |
| WTTA | | | | Sg | **Sg** | **13 31 37.8** | **0.0** |
| **SQTA** | **Sankt Quirin** | **0.39** | **245** | ⇑*e*Pg | **Pg** | **13 31 39.2** | **-0.7** |
| **SQTA** | **Sankt Quirin** | **0.39** | **245** | Pg | **Pg** | **13 31 39.2** | **-0.7** |
| **MOTA** | **Moosalm** | **0.42** | **264** | ⇓*e*Pg | **Pg** | **13 31 39.7** | **-0.8** |
| | 5.2nm,0.1s,SNR=9.8 | | | | | | |
| MOTA | | | | ⇑*e*Sg | **Sg** | **13 31 45.0** | **-1.1** |
| | 19nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **0.42** | **264** | Pg | **Pg** | **13 31 39.7** | **-0.8** |
| | 5.2nm,0.1s,SNR=9.8 | | | | | | |
| MOTA | | | | Sg | **Sg** | **13 31 45.0** | **-1.1** |
| | 19nm,0.1s | | | | | | |
| **RISI** | **Rein** | **0.50** | **151** | Pg | **Pg** | **13 31 42.1** | **+0.1** |
| RISI | | | | Sg | **Sg** | **13 31 49.1** | **+0.4** |
| **RISI** | **Rein** | **0.50** | **151** | Pg | **Pg** | **13 31 42.1** | **+0.1** |
| RISI | | | | Sg | **Sg** | **13 31 49.1** | **+0.4** |
| **ROSI** | **Rosskopf** | **0.51** | **205** | Pg | **Pg** | **13 31 41.5** | **-0.6** |
| ROSI | | | | Sg | **Sg** | **13 31 48.7** | **-0.1** |
| **ROSI** | **Rosskopf** | **0.51** | **205** | Pg | **Pg** | **13 31 41.5** | **-0.6** |
| ROSI | | | | Sg | **Sg** | **13 31 48.7** | **-0.1** |
| **RETA** | **Reutte** | **0.66** | **279** | ⇓*e*Sg | **Sg** | **13 31 53.1** | **-0.5** |
| | 12nm,0.2s | | | | | | |
| **RETA** | **Reutte** | **0.66** | **279** | Sg | **Sg** | **13 31 53.1** | **-0.5** |
| | 12nm,0.2s | | | | | | |
| **FETA** | **Feichten** | **0.77** | **242** | ⇑*e*Pg | **Pg** | **13 31 46.1** | **-1.0** |
| | 1.8nm,0.1s,SNR=6.7 | | | | | | |
| FETA | | | | ⇑*e*Sg | **Sg** | **13 31 56.1** | **-1.0** |
| | 5.9nm,0.2s,SNR=7.8 | | | | | | |
| **FETA** | **Feichten** | **0.77** | **242** | Pg | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GRC3 | | | | *e*Sg | | **Sg** | 13 32 21.3 | +0.6 |
| **GRC3** | **Grafenberg Arr** | **1.51** | **357** | Pn | | **Pg** | 13 32 00.8 | -0.3 |
| GRC3 | | | | Sn | | **Sn** | 13 32 18.7 | -0.3 |
| GRC3 | | | | Sg | | **Sg** | 13 32 21.3 | +0.6 |
| **PLONS** | **Plons/SG** | **1.63** | **259** | *e*Sg | | **Sg** | 13 32 25.6 | +0.9 |
| **PLONS** | **Plons/SG** | **1.63** | **259** | Sg | | **Sg** | 13 32 25.6 | +0.9 |
| **GRC4** | **Grafenberg Arr** | **1.71** | **356** | *e*Sn | | **Sn** | 13 32 23.3 | -0.5 |
| GRC4 | | | | *e*Sg | | **Sg** | 13 32 27.4 | +0.4 |
| **GRC4** | **Grafenberg Arr** | **1.71** | **356** | Sn | | **Sn** | 13 32 23.3 | -0.5 |
| GRC4 | | | | Sg | | **Sg** | 13 32 27.4 | +0.4 |
| **GRB5** | **Grafenberg Arr** | **1.73** | **359** | *e*Sg | | **Sg** | 13 32 27.8 | +0.2 |
| **GRB5** | **Grafenberg Arr** | **1.73** | **359** | Sg | | **Sg** | 13 32 27.8 | +0.2 |
| **MOA** | **Molln** | **1.78** | **74** | *e*Pg | | **Pg** | 13 32 06.0 | -0.4 |
| MOA | | | | *e*Sn | | **Sb** | 13 32 27.9 | +0.6 |
| MOA | | | | *e*Sg | | **Sg** | 13 32 30.4 | +1.0 |
| **MOA** | **Molln** | **1.78** | **74** | ⇑*e*Pn | | **Pb** | 13 32 04.4 | -0.6 |
| | 1.2nm,0.1s | | | | | | | |
| MOA | | | | ⇓*e*Sn | | **Sb** | 13 32 28.0 | +0.6 |
| | 18nm,0.3s | | | | | | | |
| **MOA** | **Molln** | **1.78** | **74** | Pn | | **Pb** | 13 32 04.4 | -0.6 |
| | 1.2nm,0.1s | | | | | | | |
| **MOA** | **Molln** | **1.78** | **74** | Pg | | **Pg** | 13 32 06.0 | -0.4 |
| MOA | | | | Sn | | **Sb** | 13 32 27.9 | +0.6 |
| MOA | | | | Sg | | **Sg** | 13 32 30.4 | +1.0 |
| **GRB2** | **Grafenberg Arr** | **1.89** | **359** | *e*Sg | | **Sg** | 13 32 32.9 | +0.1 |
| **GRB2** | **Grafenberg Arr** | **1.89** | **359** | Sg | | **Sg** | 13 32 32.9 | +0.1 |
| **WILA** | **Wila** | **1.91** | **272** | *e*Sg | | **Sg** | 13 32 33.3 | -0.3 |
| **WILA** | **Wila** | **1.91** | **272** | Sg | | **Sg** | 13 32 33.3 | -0.3 |
| **WET** | **Wettzell** | **1.92** | **23** | *e*Pn | | **Pn** | 13 32 05.0 | +0.1 |
| WET | | | | *e*Pg | | **Pg** | 13 32 08.9 | -0.1 |
| WET | | | | *e*Sn | | **Sn** | 13 32 28.7 | -0.5 |
| **WET** | **Wettzell** | **1.92** | **23** | Pn | | **Pn** | 13 32 05.0 | +0.1 |
| **WET** | **Wettzell** | **1.92** | **23** | Pg | | **Pg** | 13 32 08.9 | -0.1 |
| WET | | | | Sn | | **Sn** | 13 32 28.7 | -0.5 |
| **GEC2** | **GERESS Array S** | **1.97** | **42** | *e*Pg | | **Pg** | 13 32 09.3 | -0.7 |
| GEC2 | | | | *e*Sn | | **Sn** | 13 32 31.4 | +0.9 |
| GEC2 | | | | *e*Sg | | **Sg** | 13 32 35.7 | +0.2 |
| **GEC2** | **GERESS Array S** | **1.97** | **42** | Pg | | **Pg** | 13 32 09.3 | -0.7 |
| GEC2 | | | | Sn | | **Sn** | 13 32 31.4 | +0.9 |
| GEC2 | | | | Sg | | **Sg** | 13 32 35.7 | +0.2 |
| **OBKA** | **Obir** | **2.13** | **113** | *e*Sg | | **Sg** | 13 32 40.3 | -0.2 |
| **OBKA** | **Obir** | **2.13** | **113** | Sg | | **Sg** | 13 32 40.3 | -0.2 |
| **KHC** | **Kasperske Hory** | **2.14** | **35** | *e*PN | | **Pn** | 13 32 07.6 | -0.4 |
| KHC | | | | *e*PG | | **Pb** | 13 32 11.4 | +0.3 |
| KHC | | | | *e*x | | x | 13 32 15.2 | |
| KHC | | | | *e*SN | | **Sn** | 13 32 34.6 | 0.0 |
| KHC | | | | *e*SG | | **Sb** | 13 32 38.6 | +0.9 |
| | comp=Z,6.7nm,0.3s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.14** | **35** | Pn | | **Pn** | 13 32 07.6 | -0.4 |
| **KHC** | **Kasperske Hory** | **2.14** | **35** | Pg | | **Pb** | 13 32 11.4 | +0.3 |
| KHC | | | | Sn | | **Sn** | 13 32 34.6 | 0.0 |
| KHC | | | | Sg | | **Sb** | 13 32 38.6 | +0.9 |
| | 6.7nm,0.3s | | | | | | | |
| **BFO** | **Black Forest** | **2.47** | **294** | *e*Pn | | **Pn** | 13 32 14.1 | +1.6 |
| **BFO** | **Black Forest** | **2.47** | **294** | Pn | | **Pn** | 13 32 14.1 | +1.6 |
| **NKC** | **Novy Kostel** | **2.89** | **9** | *e*PG | | **Pb** | 13 32 25.1 | +1.3 |
| NKC | | | | *e*SN | | **Sn** | 13 32 52.9 | -0.1 |
| NKC | | | | *e*SG | | **Sg** | 13 33 03.2 | -1.7 |
| | comp=Z,6.4nm,0.3s | | | | | | | |
| **NKC** | **Novy Kostel** | **2.89** | **9** | Pg | | **Pb** | 13 32 25.1 | +1.3 |
| NKC | | | | Sn | | **Sn** | 13 32 52.9 | -0.1 |
| NKC | | | | Sg | | **Sg** | 13 33 03.2 | -1.7 |
| | 6.4nm,0.3s | | | | | | | |
| **PRU** | **Pruhonice** | **3.20** | **35** | *e*SG | | **Sg** | 13 33 12.9 | -2.1 |
| | comp=Z,3.4nm,0.4s | | | | | | | |
| **PRU** | **Pruhonice** | **3.20** | **35** | Sg | | **Sg** | 13 33 12.9 | -2.1 |
| | 3.4nm,0.4s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **3.24** | **38** | *e*SG | | **Sg** | 13 33 14.5 | -1.8 |
| | comp=Z,4.1nm,0.3s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **3.24** | **38** | Sg | | **Sg** | 13 33 14.5 | -1.8 |
| | 4.1nm,0.3s | | | | | | | |
| **PVCC** | **Panska Ves** | **3.66** | **30** | *e*SG | | **Sg** | 13 33 27.5 | -2.2 |
| **PVCC** | **Panska Ves** | **3.66** | **30** | Sg | | **Sg** | 13 33 27.5 | -2.2 |
| **UPC** | **Upice** | **4.21** | **41** | *e*SG | | **Sg** | 13 33 44.9 | -2.5 |
| **UPC** | **Upice** | **4.21** | **41** | Sg | | **Sg** | 13 33 44.9 | -2.5 |
| **DPC** | **Dobruska-Polom** | **4.24** | **44** | *e*SG | | **Sg** | 13 33 45.4 | -3.0 |
| **DPC** | **Dobruska-Polom** | **4.24** | **44** | Sg | | **Sg** | 13 33 45.4 | -3.0 |
| **KRLC** | **Kraliky** | **4.29** | **49** | *e*SG | | **Sg** | 13 33 48.0 | -2.0 |
| **KRLC** | **Kraliky** | **4.29** | **49** | Sg | | **Sg** | 13 33 48.0 | -2.0 |

*CSEM* ***12*** *13:31:37.4±0.6,47.°51N×11.°81E,h10km,mb1.3,Error ellipse: s-maj=14.8km s-min=10.8km az=132.0*

**VIE 12 13:31:40.9±0.7,47.°34N×11.°67E,h10km±3km,mb1.3/1, ml1.8/2,1C-1D,Error ellipse: s-maj=4.5km s-min=1.8km az=163.0,Austria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WATA** | **Walderalm** | **0.07** | **267** | ⇓*i*Pg | Pg | 13 31 43.5 | +0.2 |
| | 57nm,0.2s | | | | | | |
| WATA | | | | ⇑*i*Sg | Sg | 13 31 45.5 | +0.4 |
| | 53nm,0.1s | | | | | | |
| **WATA** | **Walderalm** | **0.07** | **267** | Pg | Pg | 13 31 43.5 | +0.1 |
| | 57nm,0.2s | | | | | | |
| WATA | | | | Sg | Sg | 13 31 45.5 | +0.3 |
| | 53nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.08** | **199** | *i* Sg | Sg | 13 31 45.8 | +0.3 |
| | 24nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.08** | **199** | Sg | Sg | 13 31 45.8 | +0.3 |
| | 24nm,0.1s | | | | | | |

*ISCJB* ***12*** *13:38:20.7±0.8,4.°84S±0.°05×133.°73E±0.°08,h28km,Error ellipse: s-maj=12.3km s-min=6.2km az=165.6*
*AUST* ***12*** *13:38:22.9±1.4,4.°87S×133.°74E,h35km,Error ellipse: s-maj=1.8km s-min=0.8km az=244.0*
*DJA* ***12*** *13:38:24.6±0.7,5.°5S±4.°4×13.°4E±.°,h53km±26km,M4.4/9, mb4.8/6,mB5.1/4,MLv4.3/9,Mw(mB)4.4/4*

**ISC 12 13:38:22.1±0.9,4.°81S±0.°07×133.°79E±0.°10,h28km,n17, σ1§26/19,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.42** | **321** | P | **Pn** | 13 38 59.9 | 0.0 |
| | baz=2.5,SNR=42 | | | | | | |
| **FAKI** | **Fak Fak** | **2.42** | **321** | P | **Pn** | 13 38 59.8 | 0.0 |
| FAKI | | | | S | **Sn** | 13 39 27.0 | -1.6 |
| **RKPI** | **Ransiki, Papua** | **3.29** | **7** | S | **Sn** | 13 39 52.0 | +1.8 |
| **BNDI** | **Bandanaira** | **3.88** | **274** | P | **Pn** | 13 39 21.1 | +1.2 |
| **SWI** | **Sorong** | **4.66** | **327** | P | **Pn** | 13 39 31.4 | +0.8 |
| | baz=4.7,SNR=6.7 | | | | | | |
| **SWI** | **Sorong** | **4.66** | **327** | P | **Pn** | 13 39 30.8 | +0.2 |
| SWI | | | | S | **Sn** | 13 40 22.1 | -1.7 |
| **MSAI** | **Masohi** | **5.06** | **286** | P | **Pn** | 13 39 37.0 | +0.8 |
| **AAI** | **Ambon** | **5.69** | **281** | P | **Pn** | 13 39 46.0 | +1.2 |
| | baz=5.7,SNR=9.1 | | | | | | |
| **AAI** | **Ambon** | **5.69** | **281** | P | **Pn** | 13 39 46.1 | +1.3 |
| | 75nm,0.8s,2μm0.3nm | | | | | | |
| **LBMI** | **Labuha** | **7.52** | **303** | P | **Pn** | 13 40 11.8 | +1.8 |
| | 30nm,0.4s,0.1nm | | | | | | |
| **KDU** | **Kakadu** | **7.94** | **189** | P | **Pn** | 13 40 15.7 | -0.1 |
| | baz=7.9,SNR=43 | | | | | | |
| **SANI** | **Sanana** | **8.25** | **289** | P | **Pn** | 13 40 19.7 | -0.3 |
| | 18nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **8.41** | **198** | P | **Pn** | 13 40 21.7 | -0.5 |
| | baz=8.4,SNR=216 | | | | | | |
| **COEN** | **Coen** | **12.97** | **135** | P | **Pn** | 13 41 22.8 | -2.0 |
| | baz=13,SNR=7.6 | | | | | | |
| **QIS** | **Mount Isa** | **16.65** | **161** | P | **P** | 13 42 17.3 | +1.4 |
| | baz=17,SNR=3.1 | | | | | | |
| **WRKA** | **Warakurna** | **20.80** | **194** | P | **P** | 13 43 01.6 | +0.3 |
| | baz=21,SNR=6.6 | | | | | | |
| **QLP** | **Quilpie** | **23.85** | **156** | P | **P** | 13 43 34.1 | +1.0 |
| | baz=24,SNR=3.9 | | | | | | |

*NIED* ***12*** *13:40:00,35.°10N×138.°00E,h20km,Mw3.6 Best double couple: M₀2.97000×10¹⁴ NP1:φs243.00000°,δ68.00000°, λ-167.00000°. NP2:φs148.00000°,δ78.00000°, λ-22.00000°.*

**JMA 12 13:40:25.8,35.°08N×138.°04E,h13km±1km,M3.8,1C-2D Broadband fault plane solution: P waves. NP1:** φs260.00000°,δ75.00000°,λ-145.00000°. **NP2:** φs160.00000°,δ56.00000°,λ-18.00000°. **Principal axes:** T Plg12.0000°, Azm26.0000°; N Plg52.0000°, Azm280.0000°; P Plg35.0000°, Azm125.0000°; **Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHZ3** | **Shizuoka 3** | **0.14** | **96** | ⇓P | Pg | 13 40 29.3 | -0.1 |
| SHZ3 | | | | S | Sg | 13 40 31.8 | -0.2 |
| **JNY** | **Yasuok** | **0.31** | **332** | ⇓P | Pg | 13 40 32.3 | -0.1 |
| JNY | | | | S | Sg | 13 40 36.9 | +0.1 |
| **JYN** | **Shimob** | **0.59** | **45** | ⇑P | Pg | 13 40 37.0 | -0.4 |
| JYN | | | | S | Sb | 13 40 45.9 | -0.5 |
| **MAT** | **Matsushiro** | **1.47** | **5** | P | Pn | 13 40 51.4 | -0.6 |
| MAT | | | | S | Sn | 13 41 10.8 | -0.3 |

*PRE* ***12*** *13:40:48.9±0.6,26.°18S×29.°02E,h0km,ML2.3,Explosion*
*BUL* ***12*** *13:41:24.8±1.1,25.°14S×24.°68E,h80km±863km,MD3.1*

**ISC 12 13:40:46.6±2.9,26.°0S±0.°1×29.°1E±0.°2,h0km,n7,σ1§46/11, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNON** | **Benoni** | **0.70** | **258** | *e*P | **Pg** | **13 41 00.9** | **+0.8** |
| BNON | | | | *e*S | **Sg** | **13 41 09.9** | **+0.6** |
| BNON | | | | AML | AML | 13 41 14.8 | |
| | comp=Z,43nm,0.3s | | | | | | |
| **ERPM** | **east rand prop** | **0.83** | **246** | *e*P | **Pg** | **13 41 02.2** | **-0.3** |
| ERPM | | | | *e*S | **Sg** | **13 41 11.8** | **-1.5** |
| ERPM | | | | AML | AML | 13 41 24.3 | |
| | comp=Z,35nm,0.5s | | | | | | |
| **PRYS** | **Parys** | **1.79** | **239** | *e*P | **Pn** | **13 41 19.7** | **+0.6** |
| PRYS | | | | *e*S | **Sn** | **13 41 42.8** | **+0.2** |
| PRYS | | | | AML | AML | 13 41 46.1 | |
| | comp=Z,29nm,0.5s | | | | | | |
| **SWZ** | **Schweizer** | **3.56** | **250** | *e*P | **Pn** | **13 41 45.1** | **+1.8** |
| SWZ | | | | *e*S | **Sn** | **13 42 25.8** | **-0.3** |
| SWZ | | | | AML | AML | 13 42 40.7 | |
| | comp=Z,28nm,0.4s | | | | | | |
| **BOSA** | **Boshof** | **4.28** | **232** | *i* P | Pg | 13 42 14.8 | +6.1 |
| BOSA | | | | *i* S | **Sb** | **13 42 53.1** | **-2.0** |
| **MATP** | **Matopo** | **5.59** | **354** | *i* P | Pg | 13 42 46.3 | +12 |
| MATP | | | | *i* S | **Sg** | **13 43 46.9** | **+0.6** |
| **BLWY** | **Bulawayo** | **5.86** | **356** | *i* P | Pg | 13 42 50.8 | +11 |
| BLWY | | | | *i* S | **Sg** | **13 43 52.8** | **-2.3** |

*ISK* ***12*** *13:42:06.6,37.°63N×36.°19E,h5km,MD2.9*
*DDA* ***12*** *13:42:08.0,37.°62N×36.°15E,h6km,Md2.9*
*CSEM* ***12*** *13:42:08.0±0.2,37.°64N×36.°16E,h2km,MD2.9,Error ellipse: s-maj=4.6km s-min=3.6km az=160.0*

**ISC 12 13:42:08.5±1.0,37.°63N±0.°03×36.°18E±0.°02,h6km±9km, n29,σ0§73/44,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANDN** | **Andirin** | **0.14** | **110** | *i* P | **Pg** | **13 42 11.2** | **-0.3** |
| ANDN | | | | *i* S | **Sg** | **13 42 14.2** | **+0.7** |
| **ANDN** | **Andirin** | **0.14** | **110** | P | **Pg** | **13 42 11.2** | **-0.3** |
| ANDN | | | | S | **Sg** | **13 42 14.2** | **+0.7** |
| **KOZT** | **Kozan** | **0.32** | **242** | *e*PG | **Pg** | **13 42 13.8** | **-0.9** |
| KOZT | | | | *e*SG | **Sg** | **13 42 19.8** | **+0.9** |
| **KOZT** | **Kozan** | **0.32** | **242** | *e*Pg | **Pg** | **13 42 13.8** | **-0.9** |
| KOZT | | | | *e*Sg | **Sg** | **13 42 19.8** | **+0.9** |
| **AYKD** | **Aykdinkavak** | **0.55** | **113** | P | **Pg** | **13 42 18.3** | **-0.7** |
| AYKD | | | | S | **Sg** | **13 42 26.2** | **0.0** |
| **KMRS** | **Kahramanmaras** | **0.59** | **102** | *e*PG | **Pg** | **13 42 18.6** | **-1.3** |
| KMRS | | | | *e*SG | **Sg** | **13 42 28.3** | **+0.8** |
| **KMRS** | **Kahramanmaras** | **0.59** | **102** | *e*Pg | **Pg** | **13 42 18.6** | **-1.3** |
| KMRS | | | | *e*Sg | **Sg** | **13 42 28.3** | **+0.8** |
| **CEYT** | **Ceyhan** | **0.71** | **209** | *e*PG | **Pg** | **13 42 21.9** | **-0.2** |
| **CEYT** | **Ceyhan** | **0.71** | **209** | *e*Pg | **Pg** | **13 42 21.9** | **-0.2** |
| **SARI** | **SarD1z-Kayseri** | **0.80** | **14** | *e*PG | **Pg** | **13 42 23.3** | **-0.7** |
| **KARA** | **Karaisali** | **0.96** | **248** | *e*PG | **Pg** | **13 42 26.4** | **-0.7** |
| **KARA** | **Karaisali** | **0.96** | **248** | *e*Pg | **Pg** | **13 42 26.4** | **-0.7** |
| **PINB** | **Pinarbasi** | **1.06** | **10** | *i* P | **Pg** | **13 42 28.8** | **-0.1** |
| PINB | | | | *i* S | **Sb** | **13 42 44.3** | **+0.5** |
| **PINB** | **Pinarbasi** | **1.06** | **10** | P | **Pg** | **13 42 28.8** | **-0.1** |
| PINB | | | | S | **Sb** | **13 42 44.3** | **+0.5** |
| **KUZU** | **Kuzuini** | **1.12** | **140** | *i* P | **Pg** | **13 42 30.0** | **0.0** |
| KUZU | | | | *i* S | **Sb** | **13 42 45.3** | **+0.2** |
| **KUZU** | **Kuzuini** | **1.12** | **140** | P | **Pg** | **13 42 30.0** | **0.0** |
| KUZU | | | | S | **Sb** | **13 42 45.2** | **+0.2** |
| **GZT** | **Gaziantep** | **1.14** | **104** | P | **Pg** | **13 42 30.4** | **+0.1** |
| GZT | | | | S | **Sn** | **13 42 46.8** | **-0.4** |
| **GULE** | **Gulek** | **1.17** | **253** | *i* P | **Pg** | **13 42 30.5** | **-0.4** |
| **GULE** | **Gulek** | **1.17** | **253** | P | **Pg** | **13 42 30.5** | **-0.4** |
| GULE | | | | S | **Sn** | **13 42 49.1** | **+1.2** |
| **BNN** | **Bunyan** | **1.25** | **348** | *e*PN | **Pn** | **13 42 31.7** | **-1.0** |
| **BNN** | **Bunyan** | **1.25** | **348** | *e*Pn | **Pn** | **13 42 31.7** | **-1.0** |
| **NIG** | **Nigde** | **1.33** | **292** | *e*PN | **Pn** | **13 42 32.9** | **-1.0** |
| **NIG** | **Nigde** | **1.33** | **292** | *e*Pn | **Pn** | **13 42 32.9** | **-1.0** |
| **DARE** | **Darende-Malaty** | **1.40** | **47** | *e*PN | **Pn** | **13 42 34.2** | **-0.5** |
| **DARE** | **Darende-Malaty** | **1.40** | **47** | *e*Pn | **Pn** | **13 42 34.2** | **-0.5** |
| **AKCD** | **Akcadag** | **1.53** | **64** | *i* P | **Pb** | **13 42 37.3** | **-0.1** |
| AKCD | | | | *i* S | **Sg** | **13 42 59.1** | **+1.3** |
| **AKCD** | **Akcadag** | **1.53** | **64** | P | **Pb** | **13 42 37.3** | **-0.1** |
| AKCD | | | | S | **Sg** | **13 42 59.1** | **+1.3** |
| **GULA** | **Gulagac** | **1.69** | **296** | *e*PN | **Pn** | **13 42 38.8** | **+0.1** |
| **GULA** | **Gulagac** | **1.69** | **296** | *e*Pn | **Pn** | **13 42 38.8** | **+0.1** |

*ISK* ***12*** *13:54:41.4,39.°54N×32.°03E,h14km,MD3.0*
*CSEM* ***12*** *13:54:42.2±0.2,39.°51N×32.°03E,h10km,MD3.0,Error ellipse: s-maj=5.8km s-min=4.4km az=179.0*
*DDA* ***12*** *13:54:42.1,39.°54N×32.°03E,h7km,Md2.9*

**ISC 12 13:54:42.0±1.2,39.°53N±0.°03×32.°04E±0.°03,h4km±10km, n29,σ0§71/41,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVRH** | **Sivrihisar-ESK** | **0.41** | **258** | *e*PG | **Pg** | **13 54 50.0** | **0.0** |
| SVRH | | | | *e*SG | **Sg** | **13 54 56.1** | **+0.7** |
| **SVRH** | **Sivrihisar-ESK** | **0.41** | **258** | *e*Pg | **Pg** | **13 54 50.0** | **0.0** |
| SVRH | | | | *e*Sg | **Sg** | **13 54 56.1** | **+0.7** |
| **AUMIH** | **MIHALICIK** | **0.55** | **308** | P | **Pg** | **13 54 52.3** | **-0.3** |
| AUMIH | | | | S | **Sg** | **13 55 00.1** | **+0.4** |
| **KIZT** | **Kizilcal** | **0.66** | **191** | *e*PG | **Pg** | **13 54 54.8** | **0.0** |
| **KIZT** | **Kizilcal** | **0.66** | **191** | *e*Pg | **Pg** | **13 54 54.8** | **0.0** |
| **AFSR** | **Af˙ar-Bala (A** | **0.80** | **96** | *e*PG | **Pg** | **13 54 57.5** | **+0.1** |
| **AFSR** | **Af˙ar-Bala (A** | **0.80** | **96** | *e*Pg | **Pg** | **13 54 57.5** | **+0.1** |
| **ESKT** | **Eskisehir** | **0.92** | **270** | *e*PG | **Pg** | **13 55 00.0** | **+0.2** |
| **ESKT** | **Eskisehir** | **0.92** | **270** | *e*Pg | **Pg** | **13 55 00.0** | **+0.2** |
| **ESKT** | **Eskisehir** | **0.92** | **270** | P | **Pg** | **13 54 59.9** | **+0.1** |
| ESKT | | | | S | **Sb** | **13 55 14.2** | **+0.9** |
| **SEYT** | **Eskypehyr** | **0.92** | **270** | *i* P | **Pg** | **13 54 59.9** | **+0.2** |
| SEYT | | | | *i* S | **Sb** | **13 55 14.2** | **+0.9** |
| **KDHN** | **Kadinhani** | **1.01** | **177** | *i* P | **Pg** | **13 55 01.4** | **0.0** |
| KDHN | | | | *i* S | **Sn** | **13 55 17.5** | **-0.4** |
| **KDHN** | **Kadinhani** | **1.01** | **177** | P | **Pg** | **13 55 01.4** | **0.0** |
| KDHN | | | | S | **Sn** | **13 55 17.5** | **-0.4** |
| **MDUB** | **Mudurnu** | **1.14** | **326** | *e*PN | **Pg** | **13 55 03.5** | **-0.4** |
| **MDUB** | **Mudurnu** | **1.14** | **326** | *e*Pn | **Pg** | **13 55 03.5** | **-0.4** |
| **BOLV** | **Bolvadin** | **1.18** | **227** | *i* P | **Pg** | **13 55 03.9** | **-0.7** |
| **BOLV** | **Bolvadin** | **1.18** | **227** | P | **Pg** | **13 55 03.9** | **-0.7** |
| BOLV | | | | S | **Sn** | **13 55 24.2** | **+2.2** |
| **BORA** | **Eskisehir** | **1.27** | **286** | *i* P | **Pg** | **13 55 05.7** | **-0.8** |
| BORA | | | | *i* S | **Sn** | **13 55 24.6** | **+0.2** |
| **BORA** | **Eskisehir** | **1.27** | **286** | P | **Pg** | **13 55 05.7** | **-0.8** |
| BORA | | | | S | **Sn** | **13 55 24.6** | **+0.2** |
| **BCAM** | **Yenicaga** | **1.28** | **1** | *i* P | **Pn** | **13 55 06.6** | **-0.3** |
| BCAM | | | | *i* S | **Sn** | **13 55 25.3** | **+0.7** |
| **BCAM** | **Yenicaga** | **1.28** | **1** | P | **Pn** | **13 55 06.5** | **-0.3** |
| BCAM | | | | S | **Sn** | **13 55 25.3** | **+0.7** |
| **ELDT** | **Eldivan** | **1.43** | **48** | *i* P | **Pn** | **13 55 08.9** | **-0.1** |
| **ELDT** | **Eldivan** | **1.43** | **48** | P | **Pn** | **13 55 08.9** | **-0.1** |
| **GULT** | **Gulveren** | **1.48** | **308** | *e*PN | **Pn** | **13 55 08.1** | **-1.4** |
| **GULT** | **Gulveren** | **1.48** | **308** | *e*Pn | **Pn** | **13 55 08.1** | **-1.4** |
| **YAYX** | **Yaylak** | **1.50** | **113** | *e*PN | **Pn** | **13 55 08.7** | **-1.1** |
| **YAYX** | **Yaylak** | **1.50** | **113** | *e*Pn | **Pn** | **13 55 08.7** | **-1.1** |
| **CDAG** | **Cicekdag** | **1.80** | **86** | *i* P | **Pb** | **13 55 15.4** | **-0.3** |
| **CDAG** | **Cicekdag** | **1.80** | **86** | P | **Pb** | **13 55 15.4** | **-0.3** |

*JMA* ***12*** *14:23:23.7±0.1,24.°42N×121.°81E,h33km±3km,M3.0*
*ISCJB* ***12*** *14:23:24.0±0.4,24.°47N±0.°02×121.°94E±0.°02,h13km±2km, Error ellipse: s-maj=2.9km s-min=2.3km az=159.2*
*TAP* ***12*** *14:23:24.1,24.°47N×121.°86E,h20km,ML3.5,B*

**ISC 12 14:23:24.0±0.9,24.°46N±0.°02×121.°91E±0.°02,h16km±7km, n61,σ0§75/99,7C-7D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ENA** | **Nanau** | **0.15** | **257** | ⇑*i*P | **Pg** | **14 23 28.4** | **+0.4** |
| | baz=249 | | | | | | |
| **TWC** | **Suao** | **0.16** | **341** | ⇑*i*P | **Pb** | **14 23 28.8** | **+0.3** |
| | baz=360 | | | | | | |
| TWC | | | | *i* S | **Sb** | **14 23 31.5** | **-0.1** |
| | baz=360 | | | | | | |
| **EHP** | **Heping Village** | **0.21** | **225** | *e*P | **Pb** | **14 23 29.7** | **+0.2** |
| | baz=206 | | | | | | |
| **ILA** | **Ilan** | **0.34** | **335** | P | **Pb** | **14 23 31.6** | **0.0** |
| | baz=338 | | | | | | |
| ILA | | | | *i* S | **Sb** | **14 23 36.6** | **-0.1** |
| | baz=338 | | | | | | |
| **TWE** | **Neicheng** | **0.34** | **320** | ⇓*i*P | **Pg** | **14 23 31.3** | **+0.3** |
| | baz=327 | | | | | | |
| TWE | | | | *i* S | **Sg** | **14 23 35.9** | **+0.1** |
| | baz=327 | | | | | | |
| **ENTT** | **Nioudou** | **0.36** | **300** | ⇓*i*P | **Pg** | **14 23 31.4** | **+0.1** |
| | baz=303 | | | | | | |
| ENTT | | | | *e*S | **Sg** | **14 23 36.0** | **-0.4** |
| | baz=303 | | | | | | |
| **EGS** | | **0.38** | **4** | ⇑*i*P | **Pb** | **14 23 32.7** | **+0.3** |
| | baz=15 | | | | | | |
| EGS | | | | *e*S | **Sb** | **14 23 37.8** | **-0.4** |
| | baz=15 | | | | | | |
| **TWD** | **Chiawan** | **0.47** | **217** | ⇓*i*P | **Pg** | **14 23 33.2** | **-0.2** |
| | baz=215 | | | | | | |
| TWD | | | | *e*S | **Sg** | **14 23 39.6** | **-0.2** |
| | baz=215 | | | | | | |
| **NNS** | **Nan Shan** | **0.49** | **268** | ⇓*i*P | **Pg** | **14 23 33.5** | **-0.2** |
| | baz=267 | | | | | | |
| NNS | | | | *i* S | **Sg** | **14 23 39.4** | **-0.9** |
| | baz=267 | | | | | | |
| **NSK** | **Sanguang** | **0.54** | **293** | ⇓*i*P | **Pg** | **14 23 34.5** | **-0.3** |
| | baz=295 | | | | | | |
| NSK | | | | *i* S | **Sg** | **14 23 41.1** | **-0.9** |
| | baz=295 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.55** | **8** | ⇑*i*P | **Pb** | **14 23 35.3** | **+0.1** |
| | baz=7.0 | | | | | | |
| TWB1 | | | | *i* S | **Sg** | **14 23 42.4** | **+0.2** |
| | baz=7.0 | | | | | | |
| **HWA** | **Hwalien** | **0.56** | **210** | *e*P | **Pg** | **14 23 35.3** | **+0.3** |
| | baz=210 | | | | | | |
| **TWA** | **Mucha** | **0.59** | **331** | P | **Pg** | **14 23 35.7** | **0.0** |
| | baz=324 | | | | | | |
| TWA | | | | S | **Sg** | **14 23 43.4** | **-0.3** |
| | baz=324 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.62** | **349** | ⇑*i*P | **Pb** | **14 23 36.7** | **+0.3** |
| | baz=345 | | | | | | |
| NWF | | | | S | **Sg** | **14 23 44.3** | **-0.1** |
| | baz=345 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.66** | **242** | ⇑P | **Pg** | **14 23 36.5** | **-0.7** |
| | baz=247 | | | | | | |
| WHF | | | | S | **Sg** | **14 23 45.3** | **-0.7** |
| | baz=247 | | | | | | |
| **TAP1** | **Taipei** | **0.67** | **329** | P | **Pb** | **14 23 37.6** | **+0.3** |
| | baz=324 | | | | | | |
| TAP1 | | | | S | **Sg** | **14 23 46.0** | **-0.1** |
| | baz=324 | | | | | | |
| **TAP** | **Taipei** | **0.68** | **328** | *e*P | **Pb** | **14 23 37.6** | **+0.1** |
| | baz=322 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.69** | **212** | *e*P | **Pb** | **14 23 38.0** | **+0.3** |
| | baz=219 | | | | | | |
| **TWT** | **Tachien** | **0.70** | **253** | P | **Pg** | **14 23 37.5** | **-0.1** |
| | baz=248 | | | | | | |
| TWT | | | | S | **Sg** | **14 23 46.7** | **-0.3** |
| | baz=248 | | | | | | |
| **ESL** | **Shilin** | **0.78** | **214** | *e*P | **Pb** | **14 23 38.4** | **-0.7** |
| | baz=216 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.78** | **325** | ⇓*i*P | **Pg** | **14 23 39.7** | **+0.6** |
| | baz=322 | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **14 23 50.8** | **-0.8** |
| | baz=322 | | | | | | |
| **NCU** | **National Centr** | **0.83** | **308** | *e*P | **Pg** | **14 23 40.5** | **+0.4** |
| | baz=315 | | | | | | |
| NCU | | | | *e*S | **Sn** | **14 23 52.5** | **-0.4** |
| | baz=315 | | | | | | |
| **NSTT** | **Nanjuang** | **0.84** | **282** | *e*P | **Pb** | **14 23 39.8** | **-0.4** |
| | baz=275 | | | | | | |
| NSTT | | | | S | **Sb** | **14 23 50.1** | **-1.2** |
| | baz=275 | | | | | | |
| **HSN** | **Hsinchu** | **0.92** | **292** | *e*P | **Pb** | **14 23 41.7** | **+0.2** |
| | baz=296 | | | | | | |
| HSN | | | | *e*S | **Sg** | **14 23 54.0** | **+0.2** |
| | baz=296 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.95** | **90** | P | **Pb** | **14 23 41.7** | **-0.3** |
| JYNG | | | | S | **Sg** | **14 23 55.2** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **1.01** | **90** | P | **Pb** | **14 23 43.1** | **0.0** |
| YOJ | | | | S | **Sb** | **14 23 56.7** | **+0.6** |
| **YOJ** | **Yonaguni jima** | **1.01** | **90** | P | **Pb** | **14 23 42.7** | **-0.3** |
| | baz=88 | | | | | | |
| YOJ | | | | *e*S | **Sg** | **14 23 56.9** | **+0.3** |
| | baz=88 | | | | | | |
| **TWQ1** | **Liyutan** | **1.04** | **264** | *e*P | **Pg** | **14 23 44.7** | **+0.6** |
| | baz=264 | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **14 23 57.0** | **-0.1** |
| | baz=264 | | | | | | |
| **NSY** | **Sanyi** | **1.04** | **268** | *e*P | **Pg** | **14 23 45.0** | **+0.8** |
| | baz=267 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.08** | **238** | *e*P | **Pb** | **14 23 44.4** | **-0.1** |
| | baz=242 | | | | | | |
| **EHY** | **Hungye** | **1.09** | **209** | *e*P | **Pb** | **14 23 42.9** | **-1.6** |
| |

baz=214
**JISG Ishigakijimahi 2.19 86** P Pn **14 23 59.4 -0.4**
JISG S Sn **14 24 25.9 -0.7**
**EAST Anshuo 2.29 205** *e*P Pb **14 24 03.7 -1.2**
baz=194
**SCZT Fangliau 2.39 210** *e*P Pn **14 24 04.9 +2.4**
baz=196
**LAY Lan-yu 2.43 188** *e*P Pn **14 24 01.7 -1.4**
baz=175
**JTJ Tarama 2.55 85** P Pn **14 24 05.2 +0.5**
JTJ S Sn **14 24 35.5 0.0**

*GRAL* ***12*** *14:36:47.5±0.3,34˚.64N×36˚.39E, h0km±86km, MD2.9*
*ISCJB* ***12*** *14:36:49.9±0.5,34˚.51N±0˚.02×36˚.27E±0˚.04, h7km±4km, Error ellipse: s-maj=4.9km s-min=3.5km az=5.5*
*CSEM* ***12*** *14:36:49.5±0.2,34˚.50N×36˚.25E, h2km, ML1.9, Error ellipse: s-maj=5.2km s-min=3.5km az=96.0*
*NSSC* ***12*** *14:36:49.0±1.7,34˚.50N×36˚.24E, h0km±5km, ML1.9*
**ISC 12 14:36:49.2±1.1,34˚.52N±0˚.02×36˚.25E±0˚.02, h3km±9km, n26, σ0s56/50, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HAWK** | **Haweek** | **0.13** | **91** | *e*P | | **Pg** | **Pg** | **14 36 51.5** | **-0.2** |
| HAWK | | | | *e*S | | **Sg** | **Sg** | **14 36 53.5** | **+0.1** |
| HAWK | | | | AML | | AML | AML | 14 36 55.8 | |
| | comp=N,3μm,0.4s | | | | | | | | |
| HAWK | | | | AML | | AML | AML | 14 36 56.1 | |
| | comp=E,2μm,0.3s | | | | | | | | |
| **HAWK** | **Haweek** | **0.13** | **91** | *e*P | | **Pg** | **Pg** | **14 36 51.5** | **-0.2** |
| HAWK | | | | *e*S | | **Sg** | **Sg** | **14 36 53.5** | **+0.1** |
| | comp=E,2μm,0.3s | | | | | | | | |
| **FKH** | **Fakeheh** | **0.31** | **155** | *e*P | | **Pg** | **Pg** | **14 36 54.4** | **-0.7** |
| FKH | | | | *e*S | | **Sg** | **Sg** | **14 36 59.8** | **+0.7** |
| **FKH** | **Fakeheh** | **0.31** | **155** | *e*P | | **Pg** | **Pg** | **14 36 54.4** | **-0.7** |
| FKH | | | | *e*S | | **Sg** | **Sg** | **14 36 59.8** | **+0.7** |
| **HWQ** | **Hawqa** | **0.35** | **226** | *e*P | | **Pg** | **Pg** | **14 36 56.7** | **+0.7** |
| HWQ | | | | *e*S | | **Sb** | **Sb** | **14 37 03.3** | **-0.8** |
| **HWQ** | **Hawqa** | **0.35** | **226** | *e*P | | **Pg** | **Pg** | **14 36 56.7** | **+0.7** |
| HWQ | | | | *e*S | | **Sb** | **Sb** | **14 37 03.3** | **-0.8** |
| **BIDA** | **Albida** | **0.49** | **7** | *e*P | | **Pb** | **Pb** | **14 36 60.0** | **-0.6** |
| BIDA | | | | *e*S | | **Sb** | **Sb** | **14 37 08.6** | **+0.4** |
| BIDA | | | | AML | | AML | AML | 14 37 12.6 | |
| | comp=E,119nm,0.4s | | | | | | | | |
| BIDA | | | | AML | | AML | AML | 14 37 15.7 | |
| | comp=N,146nm,0.4s | | | | | | | | |
| **BIDA** | **Albida** | **0.49** | **7** | *e*P | | **Pb** | **Pb** | **14 37 00.0** | **-0.6** |
| BIDA | | | | *e*S | | **Sb** | **Sb** | **14 37 08.6** | **+0.4** |
| | comp=N,146nm,0.4s | | | | | | | | |
| **RABH** | **Abou Rabah** | **0.79** | **96** | *e*P | | **Pb** | **Pb** | **14 37 05.4** | **-0.2** |
| RABH | | | | *e*S | | **Sb** | **Sb** | **14 37 16.7** | **0.0** |
| **RABH** | **Abou Rabah** | **0.79** | **96** | *e*P | | **Pb** | **Pb** | **14 37 05.4** | **-0.2** |
| RABH | | | | *e*S | | **Sb** | **Sb** | **14 37 16.7** | **0.0** |
| **ROOS** | **tl_alroos** | **0.93** | **112** | *e*P | | **Pg** | **Pg** | **14 37 07.3** | **+0.3** |
| ROOS | | | | *e*S | | **Sb** | **Sb** | **14 37 20.6** | **-0.1** |
| ROOS | | | | AML | | AML | AML | 14 37 26.4 | |
| | comp=E,55nm,0.4s | | | | | | | | |
| ROOS | | | | AML | | AML | AML | 14 37 33.2 | |
| | comp=N,52nm,0.4s | | | | | | | | |
| **ROOS** | **tl_alroos** | **0.93** | **112** | *e*P | | **Pg** | **Pg** | **14 37 07.3** | **+0.3** |
| ROOS | | | | *e*S | | **Sb** | **Sb** | **14 37 20.6** | **-0.1** |
| | comp=N,53nm,0.4s | | | | | | | | |
| **WRDH** | **Warideh** | **0.99** | **8** | *e*P | | **Pb** | **Pb** | **14 37 09.5** | **+0.5** |
| **WRDH** | **Warideh** | **0.99** | **8** | *e*P | | **Pb** | **Pb** | **14 37 09.5** | **+0.5** |
| **DQRL** | **Deir Qamar** | **0.99** | **215** | *e*P | | **Pg** | **Pg** | **14 37 08.1** | **-0.1** |
| DQRL | | | | *e*S | | **Sb** | **Sb** | **14 37 23.3** | **+0.8** |
| **DQRL** | **Deir Qamar** | **0.99** | **215** | *e*P | | **Pg** | **Pg** | **14 37 08.1** | **-0.1** |
| DQRL | | | | *e*S | | **Sb** | **Sb** | **14 37 23.3** | **+0.8** |
| **BRBR** | **Barbar** | **1.14** | **193** | *e*P | | **Pg** | **Pg** | **14 37 09.9** | **-1.1** |
| BRBR | | | | *e*S | | **Sb** | **Sb** | **14 37 26.7** | **-0.1** |
| BRBR | | | | AML | | AML | AML | 14 37 35.2 | |
| | comp=E,13nm,0.4s | | | | | | | | |
| BRBR | | | | AML | | AML | AML | 14 37 39.5 | |
| | comp=N,18nm,0.4s | | | | | | | | |
| **BRBR** | **Barbar** | **1.14** | **193** | *e*P | | **Pg** | **Pg** | **14 37 09.9** | **-1.1** |
| BRBR | | | | *e*S | | **Sb** | **Sb** | **14 37 26.7** | **-0.1** |
| | comp=N,18nm,0.4s | | | | | | | | |
| **ARNB** | **Al Arnab** | **1.35** | **350** | *e*P | | **Pb** | **Pb** | **14 37 15.2** | **0.0** |
| ARNB | | | | *e*S | | **Sg** | **Sg** | **14 37 31.8** | **-0.9** |
| ARNB | | | | AML | | AML | AML | 14 37 39.7 | |
| | comp=E,17nm,0.4s | | | | | | | | |
| ARNB | | | | AML | | AML | AML | 14 37 40.2 | |
| | comp=N,36nm,0.2s | | | | | | | | |
| **ARNB** | **Al Arnab** | **1.35** | **350** | *e*P | | **Pb** | **Pb** | **14 37 15.2** | **0.0** |
| ARNB | | | | *e*S | | **Sg** | **Sg** | **14 37 31.8** | **-0.9** |
| | comp=N,36nm,0.2s | | | | | | | | |
| **BTCH** | **Batrach** | **1.52** | **6** | *e*P | | **Pn** | **Pn** | **14 37 17.6** | **+0.3** |
| BTCH | | | | *e*S | | **Sn** | **Sn** | **14 37 37.7** | **0.0** |
| BTCH | | | | AML | | AML | AML | 14 37 45.3 | |
| | comp=E,47nm,0.4s | | | | | | | | |
| BTCH | | | | AML | | AML | AML | 14 37 50.4 | |
| | comp=N,29nm,0.4s | | | | | | | | |
| **BTCH** | **Batrach** | **1.52** | **6** | *e*P | | **Pn** | **Pn** | **14 37 17.6** | **+0.3** |
| BTCH | | | | *e*S | | **Sn** | **Sn** | **14 37 37.7** | **0.0** |
| | comp=N,29nm,0.4s | | | | | | | | |
| **ZALF** | **Zalf** | **1.83** | **150** | *e*P | | **Pn** | **Pn** | **14 37 21.6** | **0.0** |
| ZALF | | | | *e*S | | **Sn** | **Sn** | **14 37 46.0** | **+0.7** |
| ZALF | | | | AML | | AML | AML | 14 37 50.9 | |
| | comp=N,22nm,0.4s | | | | | | | | |
| ZALF | | | | AML | | AML | AML | 14 37 51.2 | |
| | comp=E,12nm,0.4s | | | | | | | | |
| **ZALF** | **Zalf** | **1.83** | **150** | *e*P | | **Pn** | **Pn** | **14 37 21.6** | **0.0** |
| ZALF | | | | *e*S | | **Sn** | **Sn** | **14 37 46.0** | **+0.7** |
| | comp=E,12nm,0.4s | | | | | | | | |
| **SALA** | **Sala** | **1.85** | **167** | *e*P | | **Pn** | **Pn** | **14 37 22.6** | **+0.7** |
| SALA | | | | *e*S | | **Sn** | **Sn** | **14 37 45.1** | **-0.8** |
| SALA | | | | AML | | AML | AML | 14 37 52.9 | |
| | comp=E,2.4nm,0.3s | | | | | | | | |
| SALA | | | | AML | | AML | AML | 14 37 58.1 | |
| | comp=N,18nm,0.4s | | | | | | | | |
| **SALA** | **Sala** | **1.85** | **167** | *e*P | | **Pn** | **Pn** | **14 37 22.6** | **+0.7** |
| SALA | | | | *e*S | | **Sn** | **Sn** | **14 37 45.1** | **-0.8** |
| | comp=N,18nm,0.4s | | | | | | | | |

*IDC* ***12*** *15:09:25.9±0.9,2˚.14N×124˚.20E, h0km, mb3.7/6, mb1 3.9/7, mb1mx3.5/40, mbtmp3.8/7, ML5.1/1, MS3.3/3, Ms1 3.4/3, ms1mx2.8/37, Error ellipse: s-maj=54.4km s-min=18.6km az=69.0*
*ISCJB* ***12*** *15:10:02.7±1.3,9˚.37N±0˚.04×125˚.75E±0˚.09, h13km±7km, mb3.7/4, MS3.3/3, Error ellipse: s-maj=15.2km s-min=6.5km az=174.3*
*MAN* ***12*** *15:10:03,9˚.35N×125˚.59E, h6km, mb5.3, ML4.3, MS4.5*
**ISC 12 15:10:04.1±1.3,9˚.34N±0˚.03×125˚.66E±0˚.08, h15km±9km, n23, σ0s99/26, mb3.8/4, MS3.2/3, 3C-3D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BUTP** | **Butuan** | **0.37** | **186** | *e*P | | **Pg** | **Pg** | **15 10 11.1** | **-0.7** |
| **SCPH** | **Surigao** | **0.47** | **339** | ⇓*e*P | | **Pg** | **Pg** | **15 10 13.4** | **0.0** |
| SCPH | | | | *e*S | | **Sn** | **Sn** | **15 10 23.4** | **-0.9** |
| **MSLP** | **Maasin** | **1.11** | **315** | *e*P | | **Pb** | **Pb** | **15 10 23.7** | **-1.3** |
| MSLP | | | | *e*S | | **Sb** | **Sb** | **15 10 39.7** | **+0.3** |
| **BUKP** | **Musuan** | **1.57** | **202** | *e*P | | **Pn** | **Pn** | **15 10 31.6** | **+0.1** |
| BUKP | | | | *e*S | | **Sb** | **Sb** | **15 10 53.3** | **+0.7** |
| **PLP** | **Palo** | **1.93** | **340** | ⇓*e*P | | **Pn** | **Pn** | **15 10 37.1** | **+0.7** |
| PLP | | | | *i* S | | **Sg** | **Sg** | **15 11 07.2** | **+0.9** |
| **OCLP** | **Ormoc** | **1.99** | **329** | *e*P | | **Pn** | **Pn** | **15 10 37.9** | **+0.7** |
| **DMPH** | **Davao City--Mi** | **2.25** | **184** | ⇑*e*P | | **Pb** | **Pb** | **15 10 45.3** | **+0.8** |
| DMPH | | | | *e*S | | **Sb** | **Sb** | **15 11 12.7** | **+0.5** |
| **DAV** | **Davao City (W)** | **2.26** | **182** | Pn | | **Pb** | **Pb** | **15 10 45.3** | **+0.7** |
| | 72nm,0.3s,baz=26,slow=2.7,SNR=6.2 | | | | | | | | |
| **SNPH** | **Sibulan** | **2.39** | **270** | ⇓*i* P | | **Pn** | **Pn** | **15 10 45.0** | **+2.1** |
| SNPH | | | | *i* S | | **Sg** | **Sg** | **15 11 22.6** | **+1.4** |
| **DCPH** | **Dipolog City** | **2.40** | **252** | ⇑*e*P | | **Pn** | **Pn** | **15 10 43.1** | **+0.2** |
| **CTBH** | **Cotabato--PC H** | **2.53** | **214** | *e*P | | **Pn** | **Pn** | **15 10 44.7** | **0.0** |
| CTBH | | | | *i* S | | **Sg** | **Sg** | **15 11 23.9** | **-1.7** |
| **PAGZ** | **Pagadian** | **2.70** | **237** | *e*P | | **Pn** | **Pn** | **15 10 47.0** | **+0.1** |
| **GUIM** | **Jordan** | **3.28** | **293** | *e*P | | **Pn** | **Pn** | **15 10 54.5** | **-0.6** |
| **IPIL** | **Ipil** | **3.42** | **243** | *e*P | | **Pn** | **Pn** | **15 10 58.0** | **+1.0** |
| **RCP** | **Roxas** | **3.62** | **308** | ⇑*e*P | | **Pn** | **Pn** | **15 11 00.3** | **+0.7** |
| **PVCP** | **Virac** | **4.48** | **341** | *e*P | | Pn | Pn | 15 11 16.3 | +4.9 |
| **CMAR** | **Chiang Mai Arr** | **27.44** | **292** | LR | | LR | LR | 15 26 51.8 | |
| | comp=Z,73nm,19.9s,baz=106,slow=35 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.40** | **323** | P | | **P** | **P** | **15 19 16.5** | **+0.6** |
| | 0.9nm,0.7s,baz=125,slow=8.8,SNR=5.1 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.49** | **326** | P | | **P** | **P** | **15 19 45.3** | **-0.2** |
| | 0.5nm,0.6s,baz=126,slow=6.3,SNR=2.7 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **62.09** | **326** | P | | **P** | **P** | **15 20 22.5** | **-1.7** |
| | 0.4nm,0.6s,baz=101,slow=7.8,SNR=3.2 | | | | | | | | |
| **ILAR** | **Eielson Array** | **80.53** | **26** | P | | **P** | **P** | **15 22 15.9** | **+0.4** |
| | 0.4nm,0.8s,baz=251,slow=5.4,SNR=5.7 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **85.65** | **309** | LR | | LR | LR | 16 11 30.7 | |
| | comp=Z,9.4nm,18.1s,baz=38,slow=42 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **93.32** | **334** | LR | | LR | LR | 16 09 38.2 | |
| | comp=Z,12nm,19.1s,baz=75,slow=36 | | | | | | | | |

**MAN 12 15:14:58,9˚.37N×125˚.78E, h10km, mb4.5, ML3.4, MS3.3, 1C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BUTP** | **Butuan** | **0.43** | **202** | *e*P | | Pg | Pg | 15 15 06.8 | +0.5 |
| BUTP | | | | *e*S | | Sb | Sb | 15 15 15.6 | +1.4 |
| **SCPH** | **Surigao** | **0.51** | **325** | ⇑*e*P | | Pb | Pb | 15 15 08.8 | -0.2 |
| **MSLP** | **Maasin** | **1.19** | **310** | *e*P | | Pb | Pb | 15 15 19.0 | -1.7 |
| **BUKP** | **Musuan** | **1.64** | **206** | *e*P | | Pn | Pn | 15 15 26.8 | -0.2 |
| BUKP | | | | *e*S | | Sb | Sb | 15 15 49.2 | -0.1 |

*ISCJB* ***12*** *15:21:57.7±0.8,36˚.52N±0˚.07×70˚.94E±0˚.08, h188km, mb3.0/3, Error ellipse: s-maj=10.9km s-min=7.6km az=136.7*
*IDC* ***12*** *15:21:57.5±3.9,36˚.39N×70˚.94E, h187km±39km, mb2.9/4, mb1 3.0/9, mb1mx2.8/37, mbtmp3.5/9, Error ellipse: s-maj=37.5km s-min=19.4km az=170.0*
*NNC* ***12*** *15:22:04.0±1.2,36˚.95N×70˚.84E, h191km±12km, mb2.5, mpv3.5, Error ellipse: s-maj=11.9km s-min=5.7km az=156.0*
**ISC 12 15:21:58.6±1.2,36˚.6N±0˚.1×70˚.91E±0˚.08, h188km, n22, σ1s53/27, mb3.0/3, 4C-7D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.77** | **324** | ⇑P | | **Pn** | | **15 22 46.7** | **+1.8** |
| | 2.2nm,0.2s | | | | | | | | |
| DZET | | | | ⇓S | | **Sn** | | **15 23 20.6** | **-0.6** |
| | 61nm,0.4s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.99** | **30** | ⇑P | | **Pn** | | **15 23 01.4** | **+1.4** |
| | 8.8nm,0.3s | | | | | | | | |
| SFK | | | | ⇑S | | **Sn** | | **15 23 47.8** | **-0.4** |
| | 26nm,0.4s | | | | | | | | |
| **AML** | **Almayashu** | **5.95** | **20** | P | | **Pn** | | **15 23 26.5** | **+1.2** |
| | SNR=35 | | | | | | | | |
| **MNAS** | **Manas** | **6.03** | **11** | ⇑P | | **Pn** | | **15 23 27.4** | **+1.3** |
| | 2.8nm,0.4s | | | | | | | | |
| MNAS | | | | ⇓S | | **Sn** | | **15 24 33.2** | **-2.0** |
| | 23nm,0.5s | | | | | | | | |
| **UCH** | **Uchtor** | **6.29** | **25** | P | | **Pn** | | **15 23 31.0** | **+1.2** |
| | SNR=15 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.47** | **19** | P | | **Pn** | | **15 23 33.3** | **+1.5** |
| | SNR=20 | | | | | | | | |
| **KK31** | **Karatay Array** | **6.53** | **357** | ⇓P | | **Pn** | | **15 23 33.7** | **+1.3** |
| | 0.5nm,0.3s,baz=177,slow=12,SNR=12 | | | | | | | | |
| KK31 | | | | S | | **Sn** | | **15 24 42.8** | **-3.9** |
| | 3.5nm,0.4s,baz=179,slow=20,SNR=17 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.65** | **23** | ⇓P | | **Pn** | | **15 23 35.6** | **+1.4** |
| | 2.2nm,0.4s | | | | | | | | |
| AAK | | | | ⇓S | | **Sn** | | **15 24 49.2** | **-0.7** |
| | 3.8nm,0.5s | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.65** | **23** | P | | **Pn** | | **15 23 35.0** | **+0.8** |
| | 1.9nm,0.3s,baz=192,slow=3.1,SNR=19 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.65** | **23** | P | | **Pn** | | **15 23 35.5** | **+1.2** |
| | SNR=7.7 | | | | | | | | |
| **KBK** | **Karagaybulak** | **6.82** | **26** | P | | **Pn** | | **15 23 38.6** | **+2.1** |
| | SNR=7.2 | | | | | | | | |
| **USP** | **Ospenovka** | **7.23** | **21** | P | | **Pn** | | **15 23 42.8** | **+1.1** |
| | SNR=5.9 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.29** | **28** | ⇓P | | **Pn** | | **15 23 43.9** | **+1.3** |
| | 11nm,0.6s | | | | | | | | |
| TKM2 | | | | ⇓S | | **Sn** | | **15 25 03.4** | **-1.7** |
| | 1.3nm,0.5s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.29** | **28** | P | | **Pn** | | **15 23 43.8** | **+1.1** |
| | SNR=11 | | | | | | | | |
| **GEYT** | **Alibeck** | **10.29** | **281** | P | | **Pn** | | **15 24 21.9** | **+0.2** |
| | 0.6nm,0.3s,baz=89,slow=13,SNR=3.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.27** | **36** | P | | **Pn** | | **15 24 59.6** | **-0.2** |
| | 0.1nm,0.3s,baz=229,slow=13,SNR=4.3 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.07** | **19** | P | | **P** | | **15 25 23.8** | **+1.0** |
| | 0.0nm,0.3s,baz=202,slow=10.0,SNR=3.7 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.68** | **330** | P | | **Pn** | | **15 25 43.0** | **+1.7** |
| | 0.5nm,0.3s,baz=146,slow=8.9,SNR=5.4 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **19.88** | **25** | P | | **P** | | **15 26 15.8** | **+0.6** |
| | 0.8nm,0.4s,baz=225,slow=11,SNR=6.5 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.64** | **269** | P | | **P** | | **15 32 21.6** | **-1.3** |
| | 0.2nm,0.5s,baz=76,slow=5.4,SNR=3.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **82.09** | **122** | P | | **P** | | **15 33 57.1** | **-1.1** |
| | 0.2nm,0.6s,baz=325,slow=4.9,SNR=3.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **84.36** | **125** | P | | P | | 15 34 08.1 | -1.7 |
| | 0.2nm,0.6s,baz=314,slow=4.9,SNR=5.9 | | | | | | | | |

**DJA 12 15:24:46.3±0.3,0˚.S±2˚.×12˚.0E±˚, h10km, M3.7/11, mb3.7/11, MLv3.7/11, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCI** | **Palu** | **0.55** | **190** | P | | Pg | | 15 24 55.5 | -1.5 |
| PCI | | | | S | | Sg | | 15 25 03.9 | -0.4 |
| **MPSI** | **Mapaga** | **0.69** | **357** | P | | Pg | | 15 24 59.0 | -0.7 |
| MPSI | | | | S | | Sb | | 15 25 10.0 | -0.1 |
| **APSI** | **Ampana** | **1.80** | **108** | P | | Pn | | 15 25 18.0 | +0.5 |
| **MRSI** | **Marisa** | **2.18** | **68** | P | | Pn | | 15 25 20.5 | -2.1 |
| MRSI | | | | S | | Sn | | 15 25 46.4 | -3.2 |
| **TTSI** | **Tana Toraja** | **2.67** | **182** | P | | Pn | | 15 25 31.7 | +2.3 |
| **LUWI** | **Luwuk** | **2.92** | **103** | P | | Pn | | 15 25 31.9 | -1.0 |
| LUWI | | | | S | | Sg | | 15 26 18.3 | -1.9 |
| **GTOI** | **Gorontalo** | **3.23** | **72** | P | | Pn | | 15 25 35.9 | -1.3 |
| **SPSI** | **Sidrap Palu** | **3.58** | **183** | P | | Pn | | 15 25 43.7 | +1.7 |
| **KBKI** | **Kotabaru** | **4.76** | **232** | P | | Pn | | 15 25 56.8 | -1.4 |
| **SANI** | **Sanana** | **6.29** | **106** | P | | Pn | | 15 26 19.0 | -0.1 |

*ISCJB* ***12*** *15:47:22.4±0.6,33˚.78N±0˚.03×35˚.80E±0˚.06, h2km±7km, Error ellipse: s-maj=8.2km s-min=4.1km az=166.4*
*GRAL* ***12*** *15:47:22.8±0.3,33˚.79N×35˚.78E, h0km±26km, MD2.7*
*CSEM* ***12*** *15:47:22.4±0.2,33˚.77N×35˚.78E, h2km, ML2.7, Error ellipse: s-maj=7.5km s-min=3.6km az=89.0*
*NSSC* ***12*** *15:47:23.6±1.5,33˚.77N×35˚.88E, h5km±7km, ML1.6*
**ISC 12 15:47:22.7±1.1,33.78N±0˚.02×35˚.80E±0˚.04, h4km±11km, n17, σ0s92/30, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BHL** | **Bhannes** | **0.17** | **315** | *e*P | | **Pg** | | **15 47 25.7** | **-0.4** |
| BHL | | | | *e*S | | **Sg** | | **15 47 27.8** | **-0.6** |
| **BHL** | **Bhannes** | **0.17** | **315** | *e*P | | **Pg** | | **15 47 25.7** | **-0.4** |
| BHL | | | | *e*S | | **Sg** | | **15 47 27.8** | **-0.6** |
| **DQRL** | **Deir Qamar** | **0.20** | **248** | *e*P | | **Pg** | | **15 47 26.3** | **-0.4** |
| **DQRL** | **Deir Qamar** | **0.20** | **248** | *e*P | | **Pg** | | **15 47 26.3** | **-0.4** |
| **RCY** | **Rachaya** | **0.29** | **174** | *e*P | | **Pg** | | **15 47 28.2** | **-0.1** |
| RCY | | | | *e*S | | **Sg** | | **15 47 32.0** | **-0.1** |
| **BRBR** | **Barbar** | **0.39** | **161** | *e*P | | **Pg** | | **15 47 30.2** | **-0.1** |
| BRBR | | | | *e*S | | **Sg** | | **15 47 36.6** | **+1.1** |
| **BRBR** | **Barbar** | **0.39** | **161** | *e*P | | **Pg** | | **15 47 30.2** | **-0.1** |
| BRBR | | | | *e*S | | **Sg** | | **15 47 36.6** | **+1.1** |
| **HWQ** | **Hawqa** | **0.51** | **14** | *e*P | | **Pg** | | **15 47 31.9** | **-0.6** |
| **HWQ** | **Hawqa** | **0.51** | **14** | *e*P | | **Pg** | | **15 47 32.0** | **-0.6** |
| **HAWK** | **Haweek** | **0.89** | **34** | *e*P | | **Pg** | | **15 47 40.0** | **+0.1** |
| HAWK | | | | *e*S | | **Sb** | | **15 47 52.7** | **-0.5** |
| HAWK | | | | AML | | AML | | 15 47 59.9 | |
| | comp=N,14nm,0.3s | | | | | | | | |
| HAWK | | | | AML | | AML | | 15 47 60.0 | |
| | comp=E,11nm,0.5s | | | | | | | | |
| **HAWK** | **Haweek** | **0.89** | **34** | *e*P | | **Pg** | | **15 47 40.0** | **+0.1** |
| HAWK | | | | *e*S | | **Sb** | | **15 47 52.7** | **-0.5** |
| | comp=E,11nm,0.5s | | | | | | | | |
| **BIDA** | **Albida** | **1.30** | **19** | *e*P | | **Pg** | | **15 47 46.8** | **-0.9** |
| BIDA | | | | *e*S | | **Sb** | | **15 48 05.7** | **+0.7** |
| BIDA | | | | AML | | AML | | 15 48 10.4 | |
| | comp=N,42nm,0.3s | | | | | | | | |
| **BIDA** | **Albida** | **1.30** | **19** | *e*P | | **Pg** | | **15 47 46.8** | **-0.9** |
| BIDA | | | | *e*S | | **Sb** | | **15 48 05.7** | **+0.7** |
| | comp=N,42nm,0.3s | | | | | | | | |
| **ZALF** | **Zalf** | **1.55** | **123** | *e*P | | **Pn** | | **15 47 51.5** | **+0.4** |
| ZALF | | | | *e*S | | **Sn** | | **15 48 09.4** | **-2.3** |
| ZALF | | | | AML | | AML | | 15 48 15.6 | |
| | comp=N,10.0nm,0.4s | | | | | | | | |
| ZALF | | | | AML | | AML | | 15 48 16.7 | |
| | comp=E,9.0nm,0.5s | | | | | | | | |
| **ZALF** | **Zalf** | **1.55** | **123** | *e*P | | **Pn** | | **15 47 51.5** | **+0.4** |
| ZALF | | | | *e*S | | **Sn** | | **15 48 09.4** | **-2.3** |
| | comp=E,9.0nm,0.5s | | | | | | | | |
| **ARNB** | **Al Arnab** | **2.08** | **4** | *e*P | | **Pn** | | **15 47 59.7** | **+1.2** |
| ARNB | | | | *e*S | | **Sn** | | **15 48 25.6** | **+0.7** |
| ARNB | | | | AML | | AML | | 15 48 35.5 | |
| | comp=N,13nm,0.3s | | | | | | | | |
| **ARNB** | **Al Arnab** | **2.08** | **4** | *e*P | | **Pn** | | **15 47 59.7** | **+1.2** |
| ARNB | | | | *e*S | | **Sn** | | **15 48 25.6** | **+0.7** |
| | comp=N,13nm,0.3s | | | | | | | | |

*CSEM* ***12*** *15:47:25.3±1.0,50˚.09N×18˚.44E, h1km, Error ellipse: s-maj=16.4km s-min=8.8km az=65.0*
**PRU 12 15:47:26.8,50˚.04N×18˚.38E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OKC** | **Ostrava-Krasne** | **0.25** | **217** | *e*PG | | Pg | Pg | 15 47 31.3 | -0.4 |
| OKC | | | | *e*SG | | Sg | Sg | 15 47 34.6 | -0.3 |
| | comp=Z,7.2nm,0.5s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.25** | **217** | Pg | | Pg | Pg | 15 47 31.3 | -0.4 |
| OKC | | | | Sg | | Sg | Sg | 15 47 34.6 | -0.3 |
| | 7.2nm,0.5s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **0.60** | **244** | *e*Pg | | Pg | Pg | 15 47 38.8 | +0.4 |
| MORC | | | | *e*Sg | | Sg | Sg | 15 47 46.3 | 0.0 |
| **KRLC** | **Kraliky** | **1.03** | **273** | *e*SG | | Sg | Sg | 15 47 59.8 | -0.3 |
| **KRLC** | **Kraliky** | **1.03** | **273** | Sg | | Sg | Sg | 15 47 59.8 | -0.3 |
| **DPC** | **Dobruska-Polom** | **1.36** | **284** | *e*PG | | Pg | Pg | 15 47 51.5 | -1.4 |
| DPC | | | | *e*SG | | Sg | Sg | 15 48 10.3 | -0.3 |
| | comp=Z,1.2nm,0.3s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.36** | **284** | Pg | | Pg | Pg | 15 47 51.5 | -1.4 |
| DPC | | | | Sg | | Sg | Sg | 15 48 10.3 | -0.3 |
| | 1.2nm,0.3s | | | | | | | | |

*IDC* ***12*** *15:53:19.8±3.1,39˚.41N×103˚.43E, h0km, mb3.5/2, mb1 3.6/5, mb1mx3.2/57, mbtmp3.5/5, ML3.3/3, MS2.8/1, Ms1 2.8/1, ms1mx2.3/34, Error ellipse: s-maj=48.3km s-min=35.0km az=161.0*
*ISCJB* ***12*** *15:53:20.1±0.7,39˚.54N±0˚.05×103˚.56E±0˚.08, h10km, mb3.7/1, Error ellipse: s-maj=9.8km s-min=6.2km az=152.0*
*BJI* ***12*** *15:53:22.5,39˚.61N×103˚.41E, h10km, ML4.2/17, Ms3.8/2, Ms7 3.6/2*
**ISC 12 15:53:22.7±0.7,39˚.60N±0˚.05×103˚.48E±0˚.04, h10km, n11, σ2s19/18, Western Nei Mongol**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GTA** | **Gaotai** | **2.84** | **267** | Pn | | **Pn** | | **15 54 08.8** | **+0.5** |
| GTA | | | | Pg | | **Pb** | | **15 54 11.9** | **-1.7** |
| GTA | | | | Sn | | **Sn** | | **15 54 42.6** | **0.0** |
| GTA | | | | Sg | | **Sb** | | **15 54 48.3** | **-0.2** |
| GTA | | | | SMN | | | | | |
| | 710nm,1.1s | | | | | | | | |
| GTA | | | | SME | | | | | |
| | 420nm,0.7s | | | | | | | | |
| **LZH** | **Lanzhou** | **3.52** | **175** | Pn | | **Pn** | | **15 54 16.6** | **-1.0** |
| LZH | | | | Pg | | **Pb** | | **15 54 26.8** | **+1.6** |
| LZH | | | | Sn | | **Sn** | | **15 54 57.0** | **-2.4** |
| LZH | | | | Sg | | **Sb** | | **15 55 08.4** | **+0.3** |
| LZH | | | | SMN | | | | | |
| | 600nm,0.8s | | | | | | | | |
| LZH | | | | SME | | | | | |
| | 1μm,1.0s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | 820nm,4.2s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | 960nm,4.0s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | 680nm,5.6s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **6.31** | **76** | *e*Pn | | Pb | | 15 55 07.6 | -5.1 |
| HHC | | | | Pg | | Pg | | 15 55 19.0 | -4.5 |
| HHC | | | | Sn | | **Sb** | | **15 56 32.0** | **+3.8** |
| HHC | | | | Sg | | **Sg** | | **15 56 40.9** | **-4.3** |
| HHC | | | | smax | | smax | | | |
| | comp=N,190nm,0.5s | | | | | | | | |
| HHC | | | | smax | | smax | | | |
| | comp=E,140nm,0.4s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **6.31** | **76** | Pg | | Pg | | 15 55 19.0 | -4.5 |
| HHC | | | | Sg | | **Sg** | | **15 56 40.9** | **-4.3** |
| HHC | | | | SMN | | | | | |
| | comp=E,190nm,0.5s | | | | | | | | |
| HHC | | | | SME | | | | | |
| | comp=E,140nm,0.4s | | | | | | | | |
| **XAN** | **Xi'an** | **7.06** | **140** | Pg | | **Pg** | | **15 55 38.7** | **+0.8** |
| XAN | | | | Sg | | Sb | | 15 56 59.7 | +10 |
| XAN | | | | smax | | smax | | | |
| | comp=N,44nm,0.8s | | | | | | | | |
| XAN | | | | smax | | smax | | | |
| | comp=E,43nm,0.9s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=N,170nm,5.4s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=E,190nm,6.4s | | | | | | | | |
| XAN | | | | LR | | LR | | | |
| | comp=Z,120nm,5.1s | | | | | | | | |
| **SONM** | **Songino Array** | **8.49**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 43nm,0.9s,0.1nm | | | | | | | |
| **APSI** | **Ampana** | **7.55** | **8** | P | | Pn | 15 58 51.2 | +11 |
| **PWJI** | **Pagerwojo** | **8.69** | **272** | P | | **Pn** | **15 58 55.0** | **+0.1** |
| | 48nm,0.8s,0.4nm | | | | | | | |
| **PCJI** | **Pacitan** | **9.31** | **271** | P | | **Pn** | **15 59 02.2** | **-0.6** |
| | 129nm,0.9s | | | | | | | |
| **UGM** | **Wanagama** | **9.97** | **272** | P | | **Pn** | **15 59 10.2** | **-1.2** |
| | baz=9.9,SNR=3.7 | | | | | | | |
| **SMRI** | **Semarang** | **10.14** | **277** | P | | **Pn** | **15 59 14.4** | **+0.8** |
| | 158nm,0.8s | | | | | | | |
| **MTN** | **Manton Dam** | **11.26** | **114** | P | | **Pn** | **15 59 27.3** | **-0.8** |
| | baz=11,SNR=169 | | | | | | | |
| **KDU** | **Kakadu** | **12.43** | **111** | P | | **Pn** | **15 59 42.1** | **-0.8** |
| | baz=12,SNR=27 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **12.67** | **273** | P | | **Pn** | **15 59 44.8** | **-1.2** |
| | baz=13,SNR=5.6 | | | | | | | |
| **LEM** | **Lembang** | **12.95** | **276** | P | | **Pn** | **15 59 49.2** | **-0.4** |
| | baz=180,slow=0.0 | | | | | | | |
| **SIJI** | **Sorong** | **13.03** | **55** | P | | **Pn** | **15 59 48.5** | **-2.0** |
| | baz=0.0,slow=0.0 | | | | | | | |
| **GIRL** | **Giralia** | **15.39** | **203** | P | | P | 16 00 29.7 | +10 |
| | baz=16,SNR=7.4 | | | | | | | |
| **MDSI** | **Maura Dua** | **16.76** | **283** | P | | **Pn** | **16 00 37.2** | **+1.1** |
| | 11nm,1.1s,379nm | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.56** | **132** | P | | **Pn** | **16 00 44.7** | **-0.8** |
| | 2.0nm,0.3s,baz=309,slow=12,SNR=72 | | | | | | | |
| WRA | | | | S | | **S** | **16 03 55.6** | **-0.2** |
| | 1.9nm,0.3s,baz=303,slow=24,SNR=8.4 | | | | | | | |
| **WRKA** | **Warakurna** | **18.08** | **157** | P | | **Pn** | **16 00 51.8** | **+0.3** |
| | baz=18,SNR=128 | | | | | | | |
| **MEEK** | **Meekatharra** | **18.20** | **186** | P | | **Pn** | **16 00 53.1** | **+0.2** |
| | baz=18,SNR=17 | | | | | | | |
| **ASAR** | **Alice Springs** | **19.81** | **141** | P | | **Pn** | **16 01 10.0** | **-2.1** |
| | 1.7nm,0.3s,baz=327,slow=13,SNR=74 | | | | | | | |
| ASAR | | | | S | | **S** | **16 04 39.6** | **-0.6** |
| | 0.1nm,0.3s,baz=316,slow=19,SNR=12 | | | | | | | |
| **MORW** | **Morawa** | **20.97** | **191** | P | | Pn | 16 01 22.8 | -3.7 |
| | baz=21,SNR=4.7 | | | | | | | |
| **QIS** | **Mount Isa** | **21.98** | **125** | P | | **P** | **16 01 32.1** | **+1.4** |
| | baz=22,SNR=36 | | | | | | | |
| **BLDU** | **Ballidu** | **22.36** | **189** | P | | **P** | **16 01 35.7** | **+1.6** |
| | baz=22,SNR=16 | | | | | | | |
| **COEN** | **Coen** | **22.83** | **106** | P | | **P** | **16 01 40.4** | **+1.9** |
| | baz=23,SNR=27 | | | | | | | |
| **KMBL** | **Kambalda** | **22.85** | **177** | P | | **P** | **16 01 40.2** | **+1.7** |
| | baz=23,SNR=6.7 | | | | | | | |
| **KLBR** | **Kellerberrin** | **23.19** | **186** | P | | **P** | **16 01 43.8** | **+2.2** |
| | baz=23,SNR=18 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **24.57** | **187** | P | | **P** | **16 01 56.0** | **+1.9** |
| | 6.1nm,0.7s,baz=202,slow=0.3,SNR=5.8 | | | | | | | |
| **BBOO** | **Buckleboo** | **28.18** | **152** | P | | **P** | **16 02 28.3** | **+1.9** |
| | baz=28,SNR=42 | | | | | | | |
| **QLP** | **Quilpie** | **28.80** | **132** | P | | P | 16 02 35.3 | +3.3 |
| | baz=29,SNR=5.6 | | | | | | | |
| **HTT** | **Hallett** | **30.10** | **148** | P | | **P** | **16 02 42.8** | **-0.7** |
| | baz=30,SNR=7.4 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **32.78** | **138** | P | | P | 16 03 10.2 | +3.3 |
| | baz=33,SNR=6.7 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **34.19** | **149** | P | | P | 16 03 21.8 | +2.8 |
| | baz=34,SNR=13 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **34.20** | **321** | P | | **P** | **16 03 20.1** | **+0.7** |
| | 0.5nm,0.6s,baz=159,slow=6.9,SNR=4.6 | | | | | | | |
| **TAPN** | **Taplejung** | **47.74** | **319** | *eP* | | **P** | **16 05 10.3** | **+0.4** |
| **RAMN** | **Ramite** | **48.19** | **318** | *eP* | | **P** | **16 05 14.1** | **+0.8** |
| **PKI** | **Pulchoki** | **49.40** | **318** | *eP* | | **P** | **16 05 22.2** | **-0.4** |
| **PKIN** | **Phulchoki** | **49.41** | **318** | *eP* | | **P** | **16 05 22.1** | **-0.5** |
| | 3.2nm,0.4s | | | | | | | |
| **GKN** | **Gorkha** | **50.19** | **318** | *eP* | | **P** | **16 05 28.0** | **-0.4** |
| | 4.1nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **50.74** | **316** | *eP* | | **P** | **16 05 32.6** | **0.0** |
| | 3.1nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **57.41** | **349** | P | | **P** | **16 06 20.0** | **-0.3** |
| | 1.6nm,0.5s,baz=166,slow=9.7,SNR=13 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.68** | **332** | P | | **P** | **16 07 07.7** | **-1.3** |
| | 1.5nm,0.5s,baz=142,slow=7.3,SNR=14 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **68.94** | **23** | P | | **P** | **16 07 35.0** | **-0.7** |
| | 5.1nm,0.8s,baz=215,slow=1.8,SNR=9.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.08** | **338** | P | | **P** | **16 07 34.7** | **-1.9** |
| | 2.8nm,0.4s,baz=144,slow=4.4,SNR=16 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.17** | **333** | P | | **P** | **16 07 35.3** | **-1.9** |
| | 0.6nm,0.4s,baz=140,slow=5.3,SNR=13 | | | | | | | |
| **MAW** | **Mawson** | **70.30** | **200** | P | | **P** | **16 07 45.4** | **+1.6** |
| | 2.4nm,0.6s,baz=153,slow=1.1,SNR=3.6 | | | | | | | |
| **VNDA** | **Vanda** | **72.31** | **171** | P | | **P** | **16 07 57.3** | **+1.6** |
| | 1.4nm,0.6s,baz=308,slow=7.1,SNR=17 | | | | | | | |
| **BVAR** | **Borovoye Array** | **74.54** | **331** | P | | **P** | **16 08 08.9** | **-0.2** |
| | 0.4nm,0.4s,baz=132,slow=4.3,SNR=3.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.90** | **280** | PKP | | **PKPdf** | **16 15 20.6** | **+0.5** |
| | 0.9nm,0.6s,baz=68,slow=1.6,SNR=7.2 | | | | | | | |
| **CPUP** | **Villa Florida** | **145.38** | **183** | PKPbc | | **PKPab** | **16 16 09.4** | **+1.5** |
| | 0.5nm,0.4s,baz=216,slow=2.2,SNR=5.5 | | | | | | | |
| **LPAZ** | **La Paz** | **153.97** | **161** | PKPbc | | **PKPbc** | **16 16 31.8** | **+1.8** |
| | 0.9nm,0.6s,baz=146,slow=5.6,SNR=2.4 | | | | | | | |
| LPAZ | | | | PKPab | | **PKPab** | **16 16 45.1** | **+1.2** |
| | 1.9nm,0.7s,baz=170,slow=5.9,SNR=7.5 | | | | | | | |

*ISCJB* **12** *16:02:11.3±0.2,51.55N±0.01×16.08E±0.02, h0km, mb3.9/10, MS3.2/1, Error ellipse: s-maj=1.8km s-min=1.5km az=14.6*

*CSEM* **12** *16:02:12.9±0.1,51.57N×16.12E, h0km, mb4.0/4, ML4.1/13, Error ellipse: s-maj=2.1km s-min=1.9km az=15.0*

*BNS* **12** *16:02:12.5±0.5,51.29N×16.45E, h10km, ML3.4*

*MOS* **12** *16:02:12.5±1.4,51.61N×16.05E, h10km, mb4.2/6, Error ellipse: s-maj=8.0km s-min=4.6km az=90.4*

*LDG* **12** *16:02:12.9±0.1,51.57N×16.06E, h1km, Ml4.2/18, Error ellipse: s-maj=2.9km s-min=1.6km az=178.0, Suspected Mining induced.*

*PRU* **12** *16:02:14.8,51.49N×16.12E, h0km*

*BGR* **12** *16:02:14.3±0.2,51.57N×16.12E, h1km, ML3.8/38, Error ellipse: s-maj=3.3km s-min=2.2km az=25.0*

*IDC* **12** *16:02:14.2±0.7,51.52N×16.03E, h0km, mb3.7/4, mb1 3.7/11, mb1mx3.5/40, mbtmp3.7/11, ML3.5/6, MS3.2/1, Ms1 3.2/1, ms1mx2.2/45, Error ellipse: s-maj=12.4km s-min=6.6km az=119.0*

*VIE* **12** *16:02:15.5±0.6,51.36N×16.07E, h0km, mb3.4/8, ml3.2/9, Error ellipse: s-maj=3.8km s-min=2.6km az=21.0, Suspected Mining induced.*

*UPP* **12** *16:02:18.2,51.86N×15.71E, h0km, ML2.8, Suspected Mining explosion.*

**ISC 12 16:02:12.7±0.5,51.58N±0.02×16.11E±0.02, h0km, n254, σ183/30/375, mb3.9/10, 13C-11D, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.75** | **171** | *e*Pg | | **Pg** | **16 02 27.9** | **+0.9** |
| KSP | | | | *e*Sg | | **Sg** | **16 02 38.1** | **+1.4** |
| **KSP** | **Ksiaz** | **0.75** | **171** | *e*Pg | | **Pg** | **16 02 27.7** | **+0.7** |
| KSP | | | | *i* Sg | | **Sg** | **16 02 37.9** | **+1.2** |
| KSP | | | | *e* | | | 16 02 41.2 | |
| **KSP** | **Ksiaz** | **0.75** | **171** | ⇑*e*P | | **Pg** | **16 02 27.7** | **+0.7** |
| KSP | | | | *e* | | | 16 02 41.2 | |
| **KSP** | **Ksiaz** | **0.75** | **171** | *e*P | | **Pg** | **16 02 27.7** | **+0.7** |
| KSP | | | | Sg | | **Sg** | **16 02 38.1** | **+1.4** |
| KSP | | | | *e*S | | **Sn** | **16 02 41.2** | **-1.3** |
| **UPC** | **Upice** | **1.08** | **183** | *e*P | | **Pg** | **16 02 33.4** | **+0.1** |
| UPC | | | | *e* | | | 16 02 45.7 | |
| UPC | | | | smax | | smax | | |
| | comp=N,373nm,0.6s | | | | | | | |
| UPC | | | | MLR | | MLR | | |
| | comp=Z,1μm,2.1s | | | | | | | |
| **UPC** | **Upice** | **1.08** | **183** | *e*PG | | **Pg** | **16 02 33.4** | **+0.1** |
| UPC | | | | *e*SG | | **Sg** | **16 02 45.7** | **-1.5** |
| | comp=Z,373nm,0.6s | | | | | | | |
| UPC | | | | AMS | | AMS | 16 03 20.0 | |
| | comp=Z,1μm,2.1s | | | | | | | |
| **UPC** | **Upice** | **1.08** | **183** | Pg | | **Pg** | **16 02 33.4** | **+0.1** |
| UPC | | | | Sg | | **Sg** | **16 02 45.7** | **-1.5** |
| | comp=Z,373nm,0.6s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.24** | **174** | *e*Pg | | **Pg** | **16 02 36.6** | **+0.2** |
| DPC | | | | *e*Sg | | **Sb** | **16 02 53.4** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **1.24** | **174** | *e*P | | **Pg** | **16 02 36.4** | **0.0** |
| DPC | | | | *e* | | | 16 02 51.0 | |
| DPC | | | | smax | | smax | | |
| | comp=N,252nm,0.7s | | | | | | | |
| DPC | | | | MLR | | MLR | | |
| | comp=Z,2μm,2.4s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.24** | **174** | *e*PG | | **Pg** | **16 02 36.4** | **0.0** |
| DPC | | | | *e*SG | | **Sg** | **16 02 51.0** | **-1.4** |
| | comp=Z,252nm,0.7s | | | | | | | |
| DPC | | | | AMS | | AMS | 16 03 10.0 | |
| | comp=Z,2μm,2.4s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.24** | **174** | Pg | | **Pg** | **16 02 36.6** | **+0.2** |
| DPC | | | | Sg | | **Sb** | **16 02 53.4** | **-0.1** |
| **PVCC** | **Panska Ves** | **1.43** | **223** | *e*Pn | | **Pg** | **16 02 40.1** | **0.0** |
| PVCC | | | | *e*Sg | | **Sn** | **16 03 00.2** | **+0.8** |
| **PVCC** | **Panska Ves** | **1.43** | **223** | *e*P | | **Pn** | **16 02 40.0** | **+0.1** |
| PVCC | | | | *e* | | | 16 02 58.6 | |
| PVCC | | | | smax | | smax | | |
| | comp=N,590nm,0.4s | | | | | | | |
| PVCC | | | | MLR | | MLR | | |
| | comp=Z,600nm,2.8s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.43** | **223** | *e*PG | | **Pn** | **16 02 40.0** | **+0.1** |
| PVCC | | | | *e*SG | | **Sg** | **16 02 58.6** | **-0.1** |
| | comp=Z,590nm,0.4s | | | | | | | |
| PVCC | | | | AMS | | AMS | 16 03 30.0 | |
| | comp=Z,600nm,2.8s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.43** | **223** | Pn | | **Pg** | **16 02 40.1** | **0.0** |
| PVCC | | | | Sg | | **Sg** | **16 02 58.6** | **-0.1** |
| | comp=Z,590nm,0.4s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.54** | **243** | PN | | **Pn** | **16 02 40.7** | **-0.6** |
| BRG | | | | PG | | **Pg** | **16 02 42.7** | **+0.7** |
| BRG | | | | SG | | **Sg** | **16 03 02.7** | **+0.8** |
| | comp=Z,267nm,0.5s | | | | | | | |
| | comp=N,805nm,3.2s | | | | | | | |
| | comp=E,795nm,4.7s | | | | | | | |
| | comp=Z,1μm,5.1s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.54** | **243** | *e*Pn | | **Pn** | **16 02 41.0** | **-0.3** |
| BRG | | | | *e*Pg | | **Pg** | **16 02 42.8** | **+0.7** |
| BRG | | | | *e*Sg | | **Sg** | **16 03 02.9** | **+0.9** |
| **BRG** | **Berggiesshubel** | **1.54** | **243** | P | | **Pn** | **16 02 40.7** | **-0.6** |
| BRG | | | | | | | 16 03 02.7 | |
| BRG | | | | smax | | smax | | |
| | comp=N,267nm,0.5s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.54** | **243** | P | | **Pn** | **16 02 40.7** | **-0.6** |
| **BRG** | **Berggiesshubel** | **1.54** | **243** | Pn | | **Pn** | **16 02 41.0** | **-0.3** |
| **KRLC** | **Kraliky** | **1.57** | **164** | *e*P | | **Pn** | **16 02 41.7** | **-0.1** |
| KRLC | | | | *e* | | | 16 03 01.4 | |
| **KRLC** | **Kraliky** | **1.57** | **164** | *e*PG | | **Pn** | **16 02 41.7** | **-0.1** |
| KRLC | | | | *e*SG | | **Sn** | **16 03 01.4** | **-1.4** |
| **KRLC** | **Kraliky** | **1.57** | **164** | Pg | | **Pn** | **16 02 41.7** | **-0.1** |
| KRLC | | | | Sg | | **Sn** | **16 03 01.4** | **-1.4** |
| **RUE** | **Ruedersdorf** | **1.70** | **303** | *e*Pg | | **Pn** | **16 02 43.6** | **+0.1** |
| RUE | | | | *e*Sg | | **Sg** | **16 03 08.7** | **+1.6** |
| **RUE** | **Ruedersdorf** | **1.70** | **303** | Pg | | **Pn** | **16 02 43.6** | **+0.1** |
| RUE | | | | Sg | | **Sg** | **16 03 08.7** | **+1.6** |
| **PRA** | **Prague** | **1.85** | **216** | *e*P | | **Pn** | **16 02 45.4** | **-0.2** |
| PRA | | | | *e* | | | 16 03 11.2 | |
| PRA | | | | smax | | smax | | |
| | comp=N,188nm,0.5s | | | | | | | |
| PRA | | | | MLR | | MLR | | |
| | comp=Z,2μm,2.8s | | | | | | | |
| **PRA** | **Prague** | **1.85** | **216** | *e*PN | | **Pn** | **16 02 45.4** | **-0.2** |
| PRA | | | | *e*PG | | **Pb** | **16 02 47.7** | **+0.4** |
| PRA | | | | *e*SG | | **Sb** | **16 03 11.2** | **+0.3** |
| | comp=Z,188nm,0.5s | | | | | | | |
| PRA | | | | AMS | | AMS | 16 03 40.0 | |
| | comp=Z,2μm,2.8s | | | | | | | |
| **PRA** | **Prague** | **1.85** | **216** | Pn | | **Pn** | **16 02 45.4** | **-0.2** |
| **FBE** | **Freiberg** | **1.85** | **250** | *e*Pn | | **Pn** | **16 02 45.6** | **-0.1** |
| FBE | | | | *e*Pg | | **Pg** | **16 02 48.8** | **+0.6** |
| FBE | | | | *e*Sg | | **Sg** | **16 03 12.9** | **+0.7** |
| **FBE** | **Freiberg** | **1.85** | **250** | Pn | | **Pn** | **16 02 45.6** | **-0.1** |
| **GOPC** | **GO Pecny, Ondr** | **1.87** | **207** | *e*P | | **Pn** | **16 02 45.5** | **-0.4** |
| GOPC | | | | *e* | | | 16 03 11.4 | |
| GOPC | | | | smax | | smax | | |
| | comp=N,186nm,0.6s | | | | | | | |
| GOPC | | | | MLR | | MLR | | |
| | comp=Z,700nm,3.9s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.87** | **207** | *e*PN | | **Pn** | **16 02 45.5** | **-0.4** |
| GOPC | | | | *e*PG | | **Pb** | **16 02 47.6** | **-0.1** |
| GOPC | | | | *e*SG | | **Sb** | **16 03 11.4** | **-0.2** |
| | comp=Z,186nm,0.6s | | | | | | | |
| GOPC | | | | AMS | | AMS | 16 03 40.0 | |
| | comp=Z,700nm,3.9s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.87** | **207** | Pn | | **Pn** | **16 02 45.5** | **-0.4** |
| **PRU** | **Pruhonice** | **1.88** | **213** | *e*Pn | | **Pn** | **16 02 46.0** | **0.0** |
| **PRU** | **Pruhonice** | **1.88** | **213** | *e*P | | **Pn** | **16 02 45.8** | **-0.2** |
| PRU | | | | *e* | | | 16 03 12.0 | |
| PRU | | | | smax | | smax | | |
| | comp=N,161nm,0.5s | | | | | | | |
| PRU | | | | MLR | | MLR | | |
| | comp=Z,1μm,3.7s | | | | | | | |
| **PRU** | **Pruhonice** | **1.88** | **213** | *e*PN | | **Pn** | **16 02 45.8** | **-0.2** |
| PRU | | | | *e*PG | | **Pb** | **16 02 48.1** | **+0.3** |
| PRU | | | | *ex* | | **x** | **16 03 05.3** | |
| PRU | | | | *e*SG | | **Sb** | **16 03 12.0** | **+0.2** |
| | comp=Z,161nm,0.5s | | | | | | | |
| PRU | | | | AMS | | AMS | 16 03 40.0 | |
| | comp=Z,1μm,3.7s | | | | | | | |
| **PRU** | **Pruhonice** | **1.88** | **213** | Pn | | **Pn** | **16 02 46.0** | **0.0** |
| **CLL** | **Collm** | **1.96** | **263** | *e*Pn | | **Pn** | **16 02 46.9** | **-0.2** |
| CLL | | | | *e*Pg | | **Pg** | **16 02 50.2** | **-0.1** |
| CLL | | | | *e*Sg | | **Sg** | **16 03 16.6** | **+0.9** |
| **CLL** | **Collm** | **1.96** | **263** | *e*P | | **Pn** | **16 02 47.0** | **-0.2** |
| CLL | | | | *i* | | | 16 03 16.0 | |
| **CLL** | **Collm** | **1.96** | **263** | *e*Pn | | **Pn** | **16 02 47.0** | **-0.2** |
| CLL | | | | *e*Pg | | **Pg** | **16 02 50.0** | **-0.2** |
| CLL | | | | *i* | | | 16 02 54.3 | |
| CLL | | | | *i* Sg | | **Sg** | **16 03 16.0** | **+0.3** |
| | comp=Z,118nm,0.7s | | | | | | | |
| **CLL** | **Collm** | **1.96** | **263** | *e*P | | **Pn** | **16 02 47.0** | **-0.2** |
| **CLL** | **Collm** | **1.96** | **263** | Pg | | **Pg** | **16 02 50.2** | **-0.1** |
| CLL | | | | *i* S | | **Sg** | **16 03 16.0** | **+0.3** |
| CLL | | | | Sg | | **Sg** | **16 03 16.6** | **+0.9** |
| **RAC** | **Raciborz** | **2.00** | **138** | *e*P | | **Pg** | **16 02 51.4** | **+0.4** |
| RAC | | | | *e* | | | 16 03 17.4 | |
| **RAC** | **Raciborz** | **2.00** | **138** | *e*P | | **Pg** | **16 02 51.4** | **+0.4** |
| RAC | | | | *e*S | | **Sg** | **16 03 17.4** | **+0.6** |
| **MORC** | **Moravsky Berou** | **2.02** | **153** | *e*Pn | | **Pn** | **16 02 48.1** | **0.0** |
| MORC | | | | *e*Sg | | **Sg** | **16 03 18.1** | **+0.5** |
| **MORC** | **Moravsky Berou** | **2.02** | **153** | ⇑P | | **Pn** | **16 02 47.9** | **-0.2** |
| **MORC** | **Moravsky Berou** | **2.02** | **153** | ⇑*i*P | | **Pn** | **16 02 47.9** | **-0.2** |
| **MORC** | **Moravsky Berou** | **2.02** | **153** | S | | **Sb** | **16 03 16.4** | **+0.3** |
| **MORC** | **Moravsky Berou** | **2.02** | **153** | Pn | | **Pn** | **16 02 48.1** | **0.0** |
| MORC | | | | Sg | | **Sg** | **16 03 18.1** | **+0.5** |
| **OKC** | **Ostrava-Krasne** | **2.17** | **143** | *e*Pn | | **Pn** | **16 02 49.8** | **-0.3** |
| OKC | | | | *e*Pg | | **Pg** | **16 02 54.5** | **+0.2** |
| OKC | | | | *e*Sg | | **Sb** | **16 03 21.6** | **+1.3** |
| **OKC** | **Ostrava-Krasne** | **2.17** | **143** | *e*P | | **Pn** | **16 02 49.5** | **-0.6** |
| OKC | | | | *e* | | | 16 03 21.6 | |
| OKC | | | | smax | | smax | | |
| | comp=N,204nm,0.5s | | | | | | | |
| OKC | | | | MLR | | MLR | | |
| | comp=Z,800nm,3.6s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.17** | **143** | *e*PN | | **Pn** | **16 02 49.5** | **-0.6** |
| OKC | | | | *e*PG | | **Pb** | **16 02 53.3** | **+0.4** |
| OKC | | | | *e*SG | | **Sb** | **16 03 21.6** | **+1.3** |
| | comp=Z,204nm,0.5s | | | | | | | |
| OKC | | | | AMS | | AMS | 16 04 20.0 | |
| | comp=Z,800nm,3.6s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.17** | **143** | Pn | | **Pn** | **16 02 49.8** | **-0.3** |
| **OKC** | **Ostrava-Krasne** | **2.17** | **143** | Pg | | **Pg** | **16 02 54.5** | **+0.2** |
| OKC | | | | Sg | | **Sb** | **16 03 21.6** | **+1.3** |
| | comp=Z,204nm,0.5s | | | | | | | |
| **VRAC** | **Vranov** | **2.30** | **172** | *e*Pn | | **Pn** | **16 02 52.4** | **+0.7** |
| VRAC | | | | *e*Pg | | **Pg** | **16 02 57.0** | **+0.3** |
| VRAC | | | | *e*Sg | | **Sg** | **16 03 26.1** | **-0.3** |
| **VRAC** | **Vranov** | **2.30** | **172** | Pn | | **Pn** | **16 02 52.5** | **+0.7** |
| | comp=Z,8.9nm,0.3s,baz=329,slow=15,SNR=47 | | | | | | | |
| VRAC | | | | Lg | | Lg | 16 03 26.4 | |
| | comp=Z,15nm,0.3s,baz=75,slow=23,SNR=4.2 | | | | | | | |
| **VRAC** | **Vranov** | **2.30** | **172** | ⇑*i*P | | **Pn** | **16 02 52.7** | **+0.9** |
| **VRAC** | **Vranov** | **2.30** | **172** | S | | **Sb** | **16 03 24.9** | **+1.0** |
| **VRAC** | **Vranov** | **2.30** | **172** | Pg | | **Pg** | **16 02 57.0** | **+0.3** |
| VRAC | | | | Sg | | **Sg** | **16 03 26.1** | **-0.3** |
| **KRUC** | **Moravsky** | **2.53** | **176** | *e*Pn | | **Pn** | **16 02 56.1** | **+1.1** |
| KRUC | | | | *e*Pg | | **Pg** | **16 03 00.6** | **-0.5** |
| KRUC | | | | *e*Sg | | **Sg** | **16 03 33.9** | **0.0** |
| **KRUC** | **Moravsky** | **2.53** | **176** | Pn | | **Pn** | **16 02 56.1** | **+1.1** |
| **TANN** | **Tannenbergstha** | **2.58** | **245** | *e*Pn | | **Pn** | **16 02 56.3** | **+0.5** |
| TANN | | | | *e*Pg | | **Pg** | **16 03 02.6** | **+0.5** |
| TANN | | | | *e*Sg | | **Sg** | **16 03 35.8** | **+0.2** |
| **TANN** | **Tannenbergstha** | **2.58** | **245** | Pn | | **Pn** | **16 02 56.3** | **+0.5** |
| **WERD** | **Werda** | **2.66** | **246** | *e*Pn | | **Pn** | **16 02 57.0** | **+0.2** |
| WERD | | | | *e*Pg | | **Pg** | **16 03 03.6** | **0.0** |
| WERD | | | | *e*Sg | | **Sg** | **16 03 37.9** | **0.0** |
| **WERD** | **Werda** | **2.66** | **246** | Pn | | **Pn** | **16 02 57.0** | **+0.2** |
| **GUNZ** | **Gunzen** | **2.68** | **244** | *e*Pn | | **Pn** | **16 02 57.5** | **+0.4** |
| GUNZ | | | | *e*Sg | | **Sg** | **16 03 39.7** | **+1.0** |
| **GUNZ** | **Gunzen** | **2.68** | **244** | Pn | | **Pn** | **16 02 57.5** | **+0.4** |
| GUNZ | | | | Sg | | **Sg** | **16 03 39.7** | **+1.0** |
| **NKC** | **Novy Kostel** | **2.68** | **241** | *e*Pn | | **Pn** | **16 02 57.8** | **+0.7** |
| NKC | | | | *e*Pg | | **Pg** | **16 03 05.0** | **+0.9** |
| NKC | | | | *e*Sg | | **Sg** | **16 03 39.8** | **+1.1** |
| **NKC** | **Novy Kostel** | **2.68** | **241** | *e*P | | **Pn** | **16 02 57.3** | **+0.2** |
| NKC | | | | *e* | | | 16 03 32.3 | |
| NKC | | | | smax | | smax | | |
| | comp=N,360nm,0.8s | | | | | | | |
| NKC | | | | MLR | | MLR | | |
| | comp=Z,600nm,2.9s | | | | | | | |
| **NKC** | **Novy Kostel** | **2.68** | **241** | *e*PN | | **Pn** | **16 02 57.3** | **+0.2** |
| NKC | | | | *e*PG | | **Pg** | **16 03 03.7** | **-0.3** |
| NKC | | | | *ex* | | **x** | **16 03 32.3** | |
| NKC | | | | *e*SG | | **Sg** | **16 03 39.6** | **+0.8** |
| | comp=N,360nm,0.8s | | | | | | | |
| NKC | | | | AMS | | AMS | 16 04 20.0 | |
| | comp=Z,600nm,2.9s | | | | | | | |
| **NKC** | **Novy Kostel** | **2.68** | **241** | Pn | | **Pn** | **16 02 57.3** | **+0.2** |
| **NKC** | **Novy Kostel** | **2.68** | **241** | Pg | | **Pg** | **16 03 03.7** | **-0.3** |
| NKC | | | | *e*S | | **Sn** | **16 03 32.3** | **+2.0** |
| | comp=Z,600nm,2.9s | | | | | | | |
| NKC | | | | Sg | | **Sg** | **16 03 39.6** | **+0.8** |
| | comp=Z,360nm,0.8s | | | | | | | |
| **WERN** | **Wernitzgruen** | **2.69** | **243** | *e*Pn | | **Pn** | **16 02 58.2** | **+1.0** |
| WERN | | | | *e*Pg | | **Pg** | **16 03 04.5** | **+0.3** |
| WERN | | | | *e*Sg | | **Sg** | **16 03 39.5** | **+0.4** |
| **WERN** | **Wernitzgruen** | **2.69** | **243** | Pn | | **Pn** | **16 02 58.2** | **+1.0** |
| **OJC** | **Ojcow** | **2.71** | **119** | *e*Pn | | **Pn** | **16 02 56.7** | **-0.7** |
| OJC | | | | *e*Pg | | **Pg** | **16 03 05.1** | **+0.7** |
| OJC | | | | *e*Sg | | **Sg** | **16 03 40.3** | **+0.8** |
| **OJC** | **Ojcow** | **2.71** | **119** | *e*Pn | | **Pn** | **16 02 56.5** | **-0.9** |
| OJC | | | | *e*Pg | | **Pg** | **16 03 05.0** | **+0.5** |
| OJC | | | | *e*Sg | | **Sg** | **16 03 40.0** | **+0.5** |
| **OJC** | **Ojcow** | **2.71** | **119** | *e*P | | **Pn** | **16 02 56.5** | **-0.9** |
| OJC | | | | *e* | | | 16 03 40.0 | |
| **OJC** | **Ojcow** | **2.71** | **119** | Pn | | **Pn** | **16 02 56.7** | **-0.7** |
| **PLN** | **Plauen** | **2.73** | **248** | *e*Pn | | **Pn** | **16 02 58.1** | **+0.4** |
| PLN | | | | *e*Pg | | **Pg** | **16 03 05.8** | **+1.0** |
| PLN | | | | *e*Sg | | **Sg** | **16 03 40.9** | **+0.7** |
| **PLN** | **Plauen** | **2.73** | **248** | Pn | | **Pn** | **16 02 58.1** | **+0.4** |
| **NEUB** | **Neuenburg** | **2.74** | **264** | *e*Pg | | **Pg** | **16 03 05.9** | **+0.7** |
| NEUB | | | | *e*Sg | | **Sg** | **16 03 42.1** | **+1.5** |
| **NEUB** | **Neuenburg** | **2.74** | **264** | Pg | | **Pg** | **16 03 05.9** | **+0.7** |
| NEUB | | | | Sg | | **Sg** | **16 03 42.1** | **+1.5** |
| **JAVC** | **Velka Javorina** | **2.90** | **159** | *e*Pn | | **Pn** | **16 03 01.9** | **+1.7** |
| JAVC | | | | *e*Sg | | **Sg** | **16 03 48.4** | **+2.5** |
| **JAVC** | **Velka Javorina** | **2.90** | **159** | Pn | | **Pn** | **16 03 01.9** | **+1.7** |
| JAVC | | | | Sg | | **Sg** | **16 03 48.4** | **+2.5** |
| **KHC** | **Kasperske Hory** | **2.94** | **214** | *e*Pn | | **Pn** | **16 03 01.2** | **+0.6** |
| KHC | | | | *e*Pg | | **Pg** | **16 03 09.2** | **+0.2** |
| KHC | | | | *e*Sg | | **Sg** | **16 03 46.9** | **-0.2** |
| **KHC** | **Kasperske Hory** | **2.94** | **214** | *e*P | | **Pn** | **16 03 00.5** | **-0.1** |
| KHC | | | | *e* | | | 16 03 35.1 | |
| KHC | | | | smax | | smax | | |
| | comp=N,69nm,0.7s | | | | | | | |
| KHC | | | | MLR | | MLR | | |
| | comp=Z,400nm,3.7s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.94** | **214** | *e*PN | | **Pn** | **16 03 00.5** | **-0.1** |
| KHC | | | | *e*PG | | **Pb** | **16 03 07.1** | **+1.2** |
| KHC | | | | *e*SN | | **Sn** | **16 03 35.1** | **-1.5** |
| KHC | | | | *e*SG | | **Sg** | **16 03 45.6** | **-1.4** |
| | comp=Z,69nm,0.7s | | | | | | | |
| KHC | | | | AMS | | AMS | 16 04 40.0 | |
| | comp=Z,400nm,3.7s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.94** | **214** | Pn | | **Pn** | **16 03 00.5** | **-0.1** |
| **KHC** | **Kasperske Hory** | **2.94** | **214** | Pg | | **Pg** | **16 03 09.2** | **+0.2** |
| KHC | | | | Sn | | **Sn** | **16 03 35.1** | **-1.5** |
| KHC | | | | Sg | | **Sg** | **16 03 46.9** | **-0.2** |
| **MOX** | **Moxa** | **2.98** | **253** | *e*Pn | | **Pn** | **16 03 01.4** | **+0.2** |
| MOX | | | | *e*Pg | | **Pg** | **16 03 09.0** | **0.0** |
| MOX | | | | *e*Sg | | **Sg** | **16 03 49.9** | **+1.5** |
| **MOX** | **Moxa** | **2.98** | **253** | Pn | | **Pn** | **16 03 01.4** | **+0.2** |
| **MANZ** | **Manzenberg** | **3.00** | **239** | *e*Pn | | **Pn** | **16 03 02.5** | **+1.0** |
| MANZ | | | | *e*Pg | | **Pg** | **16 03 10.3** | **+0.2** |
| **MANZ** | **Manzenberg** | **3.00** | **239** | Pn | | **Pn** | **16 03 02.5** | **+1.0** |
| **ROTZ** | **Rotzenmuhle** | **3.08** | **235** | *e*Pn | | **Pn** | **16 03 03.3** | **+0.8** |
| ROTZ | | | | *e*Pg | | **Pg** | **16 03 10.9** | **-0.6** |
| ROTZ | | | | *e*Sg | | **Sg** | **16 03 50.8** | **-0.6** |
| **ROTZ** | **Rotzenmuhle** | **3.08** | **235** | Pn | | **Pn** | **16 03 03.3** | **+0.8** |
| **GEC2** | **GERESS

SNR=9.2
ARSA Sg **Sg** **16 04 31.7 -0.7**
comp=N,57nm,0.9s
**LUNU Lund 4.36 340** P **Pn** **16 03 19.3 -0.7**
LUNU S **Sn** **16 04 09.4 -2.1**
**RJOB Jochberg 4.41 210** *e*Pn **Pn** **16 03 22.7 +1.9**
RJOB *e*Pg **Pg** **16 03 37.5 +0.4**
**RJOB Jochberg 4.41 210** Pn **Pn** **16 03 22.7 +1.9**
**PSZ Piszkesteto 4.41 145** ⇓P **Pn** **16 03 19.6 -1.3**
**PSZ Piszkesteto 4.41 145** ⇓*i*P **Pn** **16 03 19.6 -1.3**
**PSZ Piszkesteto 4.41 145** P **Pn** **16 03 19.6 -1.3**
**BLEU Blekinge 4.74 358** P **Pn** **16 03 25.3 +0.1**
BLEU S **Sn** **16 04 17.7 -3.1**
**KOLS Kolonicke sedl 4.76 121** *e*P **Pn** **16 03 26.2 +0.6**
KOLS pmax pmax
comp=N,85nm,1.1s
**KOLS Kolonicke sedl 4.76 121** *e*PN **Pn** **16 03 26.2 +0.6**
KOLS *e*SG **Sg** **16 04 45.1 -0.4**
KOLS *e* 16 05 00.3
**KOLS Kolonicke sedl 4.76 121** *e*P **Pn** **16 03 26.2 +0.6**
comp=N,85nm,1.1s
KOLS *e*Sg **Sg** **16 04 45.1 -0.4**
**KBA Koelnbreinsper 4.86 203** ⇑*i*Pn **Pn** **16 03 28.1 +1.0**
SNR=12
KBA ⇓*i*Sg **Sg** **16 04 49.2 +0.6**
comp=N,82nm,0.6s
**KBA Koelnbreinsper 4.86 203** Pn **Pn** **16 03 28.1 +1.0**
SNR=12
KBA Sg **Sg** **16 04 49.2 +0.6**
comp=N,82nm,0.6s
**UZH Uzhgorod 4.96 124** *e*P Pn 16 03 33.0 +4.7
UZH *e*S **Sn** **16 04 32.0 +5.8**
UZH smax smax
comp=N,50nm,1.0s
UZH smax smax
comp=E,100nm,1.0s
UZH MLR MLR
comp=N,60nm,1.2s
UZH MLR MLR
comp=E,60nm,1.2s
UZH MLR MLR
comp=Z,60nm,1.2s
**UZH Uzhgorod 4.96 124** *e*P Pn 16 03 33.0 +4.7
**TNS Taunus Mts 5.04 257** *e*Pn **Pn** **16 03 30.3 +0.8**
TNS *e*Sg **Sg** **16 04 54.4 +0.1**
**TNS Taunus Mts 5.04 257** Pn **Pn** **16 03 30.3 +0.8**
TNS Sg **Sg** **16 04 54.4 +0.1**
**DEL Delary 5.07 346** P **Pn** **16 03 29.3 -0.6**
DEL S **Sn** **16 04 25.1 -4.0**
**WTTA Wattenberg 5.21 216** ⇑*i*Pn **Pn** **16 03 32.9 +0.9**
SNR=6.3
**WTTA Wattenberg 5.21 216** Pn **Pn** **16 03 32.9 +0.9**
SNR=6.3
**STU Stuttgart 5.26 240** *e*Sg **Sg** **16 05 02.8 +1.4**
**STU Stuttgart 5.26 240** Sg **Sg** **16 05 02.8 +1.4**
**LVV L'vov 5.33 106** *e*P Pn 16 03 37.0 +3.5
LVV *e*S **Sn** **16 04 35.0 -0.6**
**LVV L'vov 5.33 106** *e*P Pn 16 03 37.0 +3.5
LVV *e*S **Sn** **16 04 35.0 -0.6**
**MOTA Moosalm 5.35 220** ⇓*i*Pn **Pn** **16 03 34.9 +1.0**
**MOTA Moosalm 5.35 220** Pn **Pn** **16 03 34.9 +1.0**
**ABTA Abfaltersbach 5.38 207** ⇑*i*Pn **Pn** **16 03 34.6 +0.4**
SNR=7.9
**ABTA Abfaltersbach 5.38 207** Pn **Pn** **16 03 34.6 +0.4**
SNR=7.9
**TRPA Tarpa 5.41 127** ⇓*i*P **Pn** **16 03 35.1 +0.6**
**KOE Koeppel 5.41 261** *e*Pn **Pn** **16 03 34.5 -0.1**
KOE *e*Sn **Sn** **16 04 36.9 -0.7**
comp=Z,24nm,1.1s
**KOE Koeppel 5.41 261** Pn **Pn** **16 03 34.5 -0.1**
KOE Sn **Sn** **16 04 36.9 -0.7**
comp=Z,24nm,1.1s
**VNDS Vrh nad Dolski 5.56 190** *e*Pn **Pn** **16 03 37.9 +1.3**
**PDKS Podkum 5.57 188** *e*Pn **Pn** **16 03 38.0 +1.2**
**PDKS Podkum 5.57 188** *e*Pn **Pn** **16 03 38.0 +1.2**
**GOLS Golise 5.58 183** *e*Pn **Pn** **16 03 38.2 +1.3**
**GOLS Golise 5.58 183** *e*Pn **Pn** **16 03 38.2 +1.3**
**BGG Burgeitz 5.72 260** *e*Pn **Pn** **16 03 38.6 -0.2**
**BGG Burgeitz 5.72 260** Pn **Pn** **16 03 38.6 -0.2**
**LAUG Laupendahl 5.73 271** *e*Pn **Pn** **16 03 39.8 +0.8**
**LAUG Laupendahl 5.73 271** Pn **Pn** **16 03 39.8 +0.8**
**GNOU Gnosjoe 5.88 347** P **Pn** **16 03 40.9 -0.1**
**STB Steinbach 5.92 264** *e*Pn **Pn** **16 03 41.8 +0.2**
**STB Steinbach 5.92 264** Pn **Pn** **16 03 41.8 +0.2**
**BFO Black Forest 5.98 240** *e*Pn **Pn** **16 03 41.7 -0.7**
BFO *e*Pg **Pg** **16 04 08.9 +1.7**
BFO *e*Sg **Sg** **16 05 26.4 +1.7**
**BFO Black Forest 5.98 240** *i*P **Pn** **16 03 43.3 +0.9**
**BFO Black Forest 5.98 240** Pn **Pn** **16 03 41.7 -0.7**
**BFO Black Forest 5.98 240** *i*P **Pn** **16 03 43.3 +0.9**
**KLL Kalltalsperre 6.24 265** *e*Pn **Pn** **16 03 46.1 +0.1**
**KLL Kalltalsperre 6.24 265** Pn **Pn** **16 03 46.1 +0.1**
**DAVOX Davos/Dischmat 6.30 223** Pn **Pn** **16 03 46.8 -0.2**
comp=Z,0.9nm,0.3s,baz=22,slow=16,SNR=6.6
DAVOX Lg Lg 16 05 33.5
comp=Z,1.7nm,0.3s,baz=195,slow=2.2,SNR=5.2
**BORU Boraas 6.37 344** P **Pn** **16 03 47.6 0.0**
**MEM Membach 6.44 265** PN **Pn** **16 03 50.0 +1.4**
**MEM Membach 6.44 265** Pn **Pn** **16 03 50.0 +1.4**
**CDF Champ du Feu 6.52 244** *e*Pn **Pn** **16 03 47.3 -2.5**
CDF *e*Sg **Sg** **16 05 36.2 -5.7**
comp=Z,121nm,1.1s
**WLF Walferdange 6.62 257** *e*Sg **Sg** **16 05 41.2 -3.9**
**FKPU Falk 6.73 349** P **Pn** **16 03 53.2 +0.5**
**BCLA Clavier 6.92 265** PN **Pn** **16 03 56.5 +1.2**
**BCLA Clavier 6.92 265** Pn **Pn** **16 03 56.4 +1.2**
**VIKU Vikbolandet 6.95 3** P **Pn** **16 03 56.3 +0.8**
**HINF Hinteralfeld 7.09 241** *e*Pn **Pn** **16 03 54.9 -2.7**
HINF *e*Sg Sg 16 05 53.8 -6.3
comp=Z,126nm,1.3s
**BURAR Bucovina Array 7.13 120** ⇓P **Pn** **16 03 58.1 -0.1**
**BURAR Bucovina Array 7.13 120** ⇓*i*P **Pn** **16 03 58.1 -0.1**
**HAU Haudompre 7.26 244** *e*Pn **Pn** **16 03 57.4 -2.6**
HAU *e*Sg Sg 16 05 59.2 -6.5
comp=Z,37nm,0.7s
**GIVF Givet 7.30 263** *e*Pn **Pn** **16 03 57.9 -2.5**
GIVF *e*Sg Sg 16 06 00.7 -6.2
comp=Z,132nm,1.5s
**VANU Vaenersborg 7.30 343** P **Pn** **16 04 02.4 +2.0**
**PAGF Fort de Pagny 7.34 250** *e*Pn **Pn** **16 03 58.5 -2.5**
PAGF *e*Sg Sg 16 06 01.6 -6.5
comp=Z,45nm,1.2s
**DOU Dourbes 7.44 263** PN **Pn** **16 04 04.5 +2.1**
**DOU Dourbes 7.44 263** Pn **Pn** **16 04 04.5 +2.1**
**NYNU Nynaeshamn 7.52 8** P **Pn** **16 04 03.8 +0.4**
**NASU Vaermlandsnaes 7.55 348** P **Pn** **16 04 04.3 +0.5**
**GZR Gura Zlata 7.61 142** ⇑P **Pn** **16 04 03.0 -1.8**
**GZR Gura Zlata 7.61 142** ⇑*i*P **Pn** **16 04 03.0 -1.8**
**GZR Gura Zlata 7.61 142** P **Pn** **16 04 03.0 -1.8**
**MICGM Minsk 7.68 63** *e* **Pg** **16 04 40.0 +0.4**
**BAIF Baives 7.69 263** *e*Pn **Pn** **16 04 03.1 -2.7**
BAIF *e*Sg Sg 16 06 12.9 -6.6
comp=Z,118nm,1.3s
**MEZF Maizieres J'vi 7.76 251** *e*Pn **Pn** **16 04 04.1 -2.6**
baz=72
MEZF *e*Sg Sg 16 06 14.7 -6.9
comp=Z,118nm,1.3s
**SFTF Sexfontaines 7.91 249** *e*Pn **Pn** **16 04 06.0 -2.8**
SFTF *e*Sg Sg 16 06 19.0 -7.4
comp=Z,95nm,1.2s
**CABF La Chapelle 8.24 237** *e*Pn **Pn** **16 04 10.4 -3.1**
CABF *e*Sg Sg 16 06 30.1 -7.1
comp=Z,166nm,1.2s
**KIEV Kiev 8.29 91** ⇑*i*P **Pn** **16 04 13.7 -0.3**
**KIEV Kiev 8.29 91** *i*P **Pn** **16 04 13.7 -0.3**
**AKASG Malin Array Be 8.30 91** Pn **Pn** **16 04 12.8 -1.4**
comp=Z,2.4nm,0.3s,baz=280,slow=12,SNR=12
AKASG Sn **Sn** **16 05 43.7 -4.8**
comp=Z,0.8nm,0.3s,baz=272,slow=23,SNR=4.2
AKASG Lg Lg 16 06 45.8
comp=Z,1.2nm,0.3s,baz=268,slow=26,SNR=4.8
**AKASG Malin Array Be 8.30 91** *i*P **Pn** **16 04 13.6 -0.5**
AKASG pmax pmax
comp=Z,3.0nm,0.4s
**AKASG Malin Array Be 8.30 91** *i*P **Pn** **16 04 13.6 -0.5**
comp=Z,3.0nm,0.4s
**HFS Hagfors 8.68 352** Pn **Pn** **16 04 19.0 -0.3**
comp=Z,0.1nm,0.3s,baz=159,slow=13,SNR=5.1
**LPL La Plagne 8.69 229** *e*Pn **Pn** **16 04 17.2 -2.5**
LPL *e*Sg Sg 16 06 44.4 -7.0
comp=Z,66nm,1.4s
**LPG La Plagne 8.69 229** *e*Pn **Pn** **16 04 17.1 -2.7**
LPG *e*Sg Sg 16 06 44.4 -7.1
comp=Z,81nm,1.4s
**LOR Lormes 9.07 246** *e*Pn **Pn** **16 04 22.0 -2.8**
baz=70
LOR *e*Sg Sn 16 06 55.9 +48
comp=Z,44nm,1.2s
**SSF Saint Saulge 9.39 246** *e*Pn **Pn** **16 04 26.4 -2.7**
SSF *e*Sg Sn 16 07 06.2 +51
comp=Z,52nm,1.4s
**AVF Avril sur Loir 9.63 245** *e*Pn **Pn** **16 04 29.2 -3.2**
AVF *e*Sg Sn 16 07 12.9 +52
comp=Z,27nm,1.1s
**NOA NORSAR Array B 9.86 346** Lg Lg 16 07 31.4
comp=Z,0.2nm,0.3s,baz=290,slow=17,SNR=3.6
**TCF Toulx Ste Croi 10.56 245** *e*Pn **Pn** **16 04 42.3 -2.9**
TCF *e*Sg Sn 16 07 42.5 +58
comp=Z,9.9nm,0.9s
**FINES FINESS Array B 11.30 25** Pn **Pn** **16 04 54.7 -0.5**
comp=Z,0.4nm,0.3s,baz=204,slow=12,SNR=9.4
FINES Sn Sn 16 06 52.7 -9.3
comp=Z,0.6nm,0.3s,baz=213,slow=23,SNR=5.6
**EKA Eskdalemuir Ar 12.07 296** Pn Pn 16 05 02.3 -3.5
baz=102,slow=15,SNR=4.0
**OBN Obninsk 12.71 66** *e*P **Pn** **16 05 12.3 -2.2**
OBN pmax pmax
comp=Z,4.0nm,0.8s
**OBN Obninsk 12.71 66** *e*P **Pn** **16 05 12.3 -2.2**
comp=Z,4.0nm,0.8s
**ARCES ARCESS Array B 18.55 10** Pn **P** **16 06 29.0 -1.6**
comp=Z,0.2nm,0.3s,baz=197,slow=12,SNR=5.2
**ARCES ARCESS Array B 18.55 10** P **P** **16 06 29.0 -1.6**
**ARCES ARCESS Array B 18.55 10** P **P** **16 06 29.0 -1.6**
**KIV Kislovodsk 19.35 103** P **Pn** **16 06 41.0 +0.4**
KIV pmax pmax
comp=Z,5.0nm,0.9s
KIV MLR MLR
comp=Z,23nm,14.0s
**KIV Kislovodsk 19.35 103** P **Pn** **16 06 41.0 +0.4**
comp=Z,23nm,14.0s
**ARU Arti 25.11 62** ⇓*e*P **P** **16 07 41.3 +2.6**
ARU pmax pmax
comp=Z,6.0nm,1.2s
**ARU Arti 25.11 62** *e*P **P** **16 07 41.3 +2.6**
comp=Z,6.0nm,1.2s
**AKTK Aktyubinsk 26.14 76** P **P** **16 07 49.8 +1.6**
comp=Z,1.0nm,0.6s
**AKTO Aktyubinsk 26.14 76** P **P** **16 07 49.8 +1.6**
comp=Z,1.3nm,0.6s,baz=278,slow=9.1,SNR=4.3
**AKTO Aktyubinsk 26.14 76** P **P** **16 07 49.8 +1.6**
AKTO pmax pmax
comp=Z,1.0nm,0.6s
**BRVK Borovoye 32.49 66** *e*P **P** **16 08 46.7 +2.1**
BRVK pmax pmax
comp=Z,4.0nm,1.2s
**BRVK Borovoye 32.49 66** *e*P **P** **16 08 46.7 +2.1**
comp=Z,4.0nm,1.2s
**AAK Ala-Archa 39.76 79** P **P** **16 09 50.0 +2.9**
AAK pmax pmax
comp=Z,12nm,1.7s
**TORD Torodi Ar. Bea 40.06 202** P **P** **16 09 48.8 -0.8**
comp=Z,0.6nm,0.9s,baz=29,slow=6.4,SNR=3.6
**SONM Songino Array 54.88 55** P **P** **16 11 47.0 +2.3**
comp=Z,0.3nm,0.2s,baz=285,slow=7.5,SNR=6.6
**YAK Yakutsk 55.14 32** LR LR 16 37 17.2
comp=Z,21nm,18.9s,baz=35,slow=38
**ULN Ulaanbaatar 55.19 55** ⇓*e*P **P** **16 11 48.8 +1.8**
ULN pmax pmax
comp=Z,1.0nm,0.8s
**ULN Ulaanbaatar 55.19 55** *e*P **P** **16 11 48.8 +1.8**
comp=Z,1.0nm,0.8s
**BILL Bilibino 58.64 13** *e*P P 16 12 15.3 +4.4
BILL *e* 16 14 22.7
BILL pmax pmax
comp=Z,7.0nm,1.1s
**PALK Pallekele 68.66 106** *i*P **P** **16 13 16.0 -1.9**
**PALK Pallekele 68.66 106** *i*P **P** **16 13 16.0 -1.9**
**SHEL Horse Pasture 69.91 202** *i*P **P** **16 13 23.1 -2.3**
**SHEL Horse Pasture 69.91 202** *i*P **P** **16 13 23.1 -2.3**
**CMAR Chiang Mai Arr 71.35 84** P **P** **16 13 35.0 +0.6**
comp=Z,0.3nm,0.5s,baz=316,slow=6.0,SNR=4.2
**CMAR Chiang Mai Arr 71.35 84** *i*P **P** **16 13 37.5 +3.1**

*JMA **12** 16:05:16.2,24°.42N×121°.82E,h32km*
*TAP **12** 16:05:16.2,24°.47N×121°.83E,h26km,ML2.6,D*
*ISCJB **12** 16:05:17.0±0.4,24°.46N±0°.03×121°.88E±0°.03,h21km±5km, Error ellipse: s-maj=5.2km s-min=3.7km az=140.4*
**ISC 12 16:05:16.8±0.9,24°48N±0°.03×121°85E±0°03,h24km±6km, n27,σ0°72/40,4C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ENA** | **Nanau** | **0.11** | **244** | *i* P | | **Pb** | **16 05 21.2** | **-0.2** |
| | baz=242 | | | | | | | |
| ENA | | | | S | | **Sb** | **16 05 24.7** | **+0.2** |
| | baz=242 | | | | | | | |
| **TWC** | **Suao** | **0.13** | **360** | ⇑*i*P | | **Pb** | **16 05 21.6** | **0.0** |
| | baz=9.0 | | | | | | | |
| TWC | | | | S | | **Sb** | **16 05 25.5** | **+0.6** |
| | baz=9.0 | | | | | | | |
| **TWE** | **Neicheng** | **0.29** | **326** | ⇑*i*P | | **Pb** | **16 05 23.7** | **0.0** |
| | baz=331 | | | | | | | |
| TWE | | | | *e*S | | **Sb** | **16 05 29.1** | **+0.7** |
| | baz=331 | | | | | | | |
| **ILA** | **Ilan** | **0.30** | **342** | *e*P | | **Pb** | **16 05 23.8** | **0.0** |
| | baz=346 | | | | | | | |
| ILA | | | | *e*S | | **Sb** | **16 05 29.8** | **+1.2** |
| | baz=346 | | | | | | | |
| **ENTT** | **Nioudou** | **0.30** | **302** | ⇑*i*P | | **Pb** | **16 05 23.7** | **-0.1** |
| | baz=306 | | | | | | | |
| ENTT | | | | S | | **Sb** | **16 05 29.1** | **+0.4** |
| | baz=306 | | | | | | | |
| **EGS** | | **0.38** | **12** | *e*P | | **Pb** | **16 05 25.5** | **+0.6** |
| | baz=15 | | | | | | | |
| EGS | | | | *e*S | | **Sb** | **16 05 31.5** | **+1.0** |
| | baz=15 | | | | | | | |
| **NNS** | **Nan Shan** | **0.43** | **265** | P | | **Pb** | **16 05 25.5** | **-0.5** |
| | baz=266 | | | | | | | |
| NNS | | | | S | | **Sb** | **16 05 32.5** | **+0.2** |
| | baz=266 | | | | | | | |
| **TWD** | **Chiawan** | **0.46** | **210** | *e*P | | **Pb** | **16 05 25.8** | **-0.4** |
| | baz=208 | | | | | | | |
| TWD | | | | *e*S | | **Sb** | **16 05 33.0** | **+0.3** |
| | baz=208 | | | | | | | |
| **NSK** | **Sanguang** | **0.49** | **294** | ⇑P | | **Pb** | **16 05 26.6** | **-0.3** |
| | baz=296 | | | | | | | |
| NSK | | | | *e*S | | **Sb** | **16 05 34.0** | **+0.3** |
| | baz=296 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.55** | **13** | *e*P | | **Pb** | **16 05 27.3** | **-0.4** |
| | baz=15 | | | | | | | |
| TWB1 | | | | *e*S | | **Sn** | **16 05 36.6** | **-0.8** |
| | baz=15 | | | | | | | |
| **TWA** | **Mucha** | **0.56** | **334** | *e*P | | **Pn** | **16 05 29.1** | **-0.2** |
| | baz=336 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.59** | **354** | *e*P | | **Pb** | **16 05 28.9** | **+0.2** |
| | baz=355 | | | | | | | |
| NWF | | | | *e*S | | **Sb** | **16 05 37.8** | **+1.1** |
| | baz=355 | | | | | | | |
| **TWT** | **Tachien** | **0.65** | **250** | *e*P | | **Pb** | **16 05 30.0** | **+0.3** |
| | baz=250 | | | | | | | |
| TWT | | | | *e*S | | **Sn** | **16 05 39.4** | **-1.0** |
| | baz=250 | | | | | | | |
| **ESL** | **Shilin** | **0.76** | **210** | *e*P | | **Pn** | **16 05 31.4** | **-0.6** |
| | baz=208 | | | | | | | |
| **NSTT** | **Nanjuang** | **0.79** | **281** | *e*P | | **Pn** | **16 05 32.1** | **-0.2** |
| | baz=282 | | | | | | | |
| **TWQ1** | **Liyutan** | **0.99** | **263** | *e*P | | **Pb** | **16 05 35.7** | **+0.4** |
| | baz=262 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.00** | **91** | P | | **Pn** | **16 05 34.3** | **-1.0** |
| JYNG | | | | *e*S | | **Sn** | **16 05 48.7** | **+0.1** |
| **SMLT** | **Sun Moon Lake** | **1.05** | **236** | *e*P | | **Pb** | **16 05 37.2** | **+0.8** |
| | baz=235 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.06** | **91** | P | | **Pn** | **16 05 35.6** | **-0.5** |
| **TYC** | **Yuchr** | **1.07** | **238** | *e*P | | **Pn** | **16 05 36.0** | **-0.2** |
| | baz=237 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.28** | **220** | *e*P | | **Pb** | **16 05 42.3** | **+1.8** |
| | baz=219 | | | | | | | |
| **ALS** | **Alishan** | **1.35** | **225** | *e*P | | **Pb** | **16 05 43.6** | **+1.9** |
| | baz=224 | | | | | | | |
| **CHN5** | **Tsauling** | **1.38** | **231** | *e*P | | **Pb** | **16 05 42.3** | **+0.3** |
| | baz=230 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.60** | **226** | *e*P | | **Pb** | **16 05 45.1** | **-0.7** |
| | baz=225 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.72** | **94** | P | | **Pn** | **16 05 44.5** | **-0.7** |
| **JKRS** | **Kuro-shima** | **1.98** | **96** | *e*S | | **Sn** | **16 06 12.8** | **-0.1** |
| **JISG** | **Ishigakijimahi** | **2.25** | **87** | P | | **Pn** | **16 05 52.4** | **0.0** |

**IDC 12 16:13:47.5±999.0,51°16N×45°22E,h0km,Error ellipse: s-maj=1224.0km s-min=165.8km az=87.0,Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **8.16** | **90** | *i* | | | 17 05 50.0 | |
| | baz=280,slow=323,SNR=1.9 | | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **24.02** | **68** | *i* | | | 18 40 00.0 | |
| | baz=279,slow=328,SNR=2.2 | | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **38.89** | **70** | *i* | | | 20 12 10.0 | |
| | baz=298,slow=328,SNR=0.8 | | | | | | | |

*ISK **12** 16:52:51.0,37°.02N×28°.30E,h5km,MD2.4*
*CSEM **12** 16:52:52.3±0.3,37°.01N×28°.28E,h2km,MD2.4,Error ellipse: s-maj=7.7km s-min=4.6km az=36.0*
*DDA **12** 16:52:52.1,37°.04N×28°.35E,h7km,Md2.8*
**ISC 12 16:52:52.0±1.2,37°04N±0°.04×28°34E±0°.03,h4km±10km, n18,σ0°59/31,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.10** | **336** | *e*PG | | **Pg** | **16 52 53.9** | **-0.2** |
| YER | | | | *e*SG | | **Sg** | **16 52 55.6** | **0.0** |
| **YER** | **Yerkesik** | **0.10** | **336** | *e*Pg | | **Pg** | **16 52 53.9** | **-0.2** |
| **TURN** | **Turunc** | **0.27** | **128** | *i* P | | **Pg** | **16 52 57.6** | **+0.4** |
| TURN | | | | *i* S | | **Sb** | **16 53 03.1** | **-1.3** |
| **TURN** | **Turunc** | **0.27** | **128** | P | | **Pg** | **16 52 57.6** | **+0.4** |
| TURN | | | | S | | **Sb** | **16 53 03.1** | **-1.3** |
| **DALY** | **Dalyan (Mu˘la** | **0.34** | **131** | *e*PG | | **Pg** | **16 52 58.9** | **+0.4** |
| DALY | | | | *e*SG | | **Sb** | **16 53 05.3** | **-1.0** |
| **DALY** | **Dalyan (Mu˘la** | **0.34** | **131** | *e*Pg | | **Pg** | **16 52 58.9** | **+0.4** |
| DALY | | | | *e*Sg | | **Sb** | **16 53 05.3** | **-1.0** |
| **BDRM** | **Kayabasi** | **0.71** | **272** | *i* P | | **Pg** | **16 53 05.1** | **-0.5** |
| BDRM | | | | *i* S | | **Sb** | **16 53 17.7** | **+0.6** |
| **BDRM** | **Kayabasi** | **0.71** | **272** | P | | **Pg** | **16 53 05.1** | **-0.5** |
| BDRM | | | | S | | **Sb** | **16 53 17.7** | **+0.6** |
| **AYDN** | **Tasoluk** | **0.72** | **330** | *i* P | | **Pb** | **16 53 07.5** | **+0.4** |
| AYDN | | | | *i* S | | **Sb** | **16 53 16.9** | **-0.4** |
| **AYDN** | **Tasoluk** | **0.72** | **330** | P | | **Pb** | **16 53 07.5** | **+0.4** |
| AYDN | | | | S | | **Sb** | **16 53 16.9** | **-0.4** |
| **FETY** | **Fethiye** | **0.72** | **124** | *e*PG | | **Pg** | **16 53 06.0** | **+0.2** |
| FETY | | | | *e*SG | | **Sb** | **16 53 17.9** | **+0.5** |
| **FETY** | **Fethiye** | **0.72** | **124** | *e*Pg | | **Pg** | **16 53 06.0** | **+0.2** |
| FETY | | | | *e*Sg | | **Sb** | **16 53 18.0** | **+0.5** |
| **BODT** | **Bodrum** | **0.82** | **272** | *e*PG | | **Pg** | **16 53 07.6** | **-0.1** |
| **BODT** | **Bodrum** | **0.82** | **272** | *e*Pg | | **Pg** | **16 53 07.6** | **-0.1** |
| **DNZL** | **Cakiroluk** | **0.86** | **41** | *i* P | | **Pb** | **16 53 09.3** | **-0.3** |
| DNZL | | | | *i* S | | **Sn** | **16 53 24.4** | **+0.2** |
| **DNZL** | **Cakiroluk** | **0.86** | **41** | P | | **Pb** | **16 53 09.3** | **-0.3** |
| DNZL | | | | S | | **Sn** | **16 53 24.4** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **339** | *e*PG | | **Pg** | **16 53 11.0** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **339** | *e*Pg | | **Pg** | **16 53 11.0** | **+0.4** |

*ISCJB **12** 16:53:04.3±0.2,47°.413N±0°.010×11°.70E±0°.02,h9km±1km, Error ellipse: s-maj=1.9km s-min=1.5km az=25.4*
*VIE **12** 16:53:05.9±0.2,47°.35N×11°.67E,h12km±1km,mb2.2/11, ml3.1/15,Error ellipse: s-maj=1.4km s-min=0.9km az=177.0,felt 4 ems98 at Schwaz / Tyrol*
*CSEM **12** 16:53:05.4±0.1,47°.39N×11°.70E,h10km,ML3.3/27,Error ellipse: s-maj=1.6km s-min=1.3km az=123.0*
*BGR **12** 16:53:06.5±0.2,47°.37N×11°.72E,h10km,ML2.8/27,Error ellipse: s-maj=2.2km s-min=2.2km az=149.0*
*BGR Felt IV EMS.*
*ROM **12** 16:53:07.6±0.4,47°.30N×11°.67E,h9km±1km,Ml2.7/15, Error ellipse: s-maj=5.6km s-min=2.6km az=176.0*
*LDG **12** 16:53:07.2±0.1,47°.31N×11°.63E,h2km,Ml2.8/19,Error ellipse: s-maj=1.9km s-min=1.6km az=3.0*
*STR **12** 16:53:09.9±0.5,47°.50N×11°.41E,h5km,Ml2.8,Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*PRU **12** 16:53:11.1,47°.55N×11°.86E,h23km*
**ISC 12 16:53:05.8±0.6,47°36N±0°.01×11°64E±0°.01,h18km±2km, n189,σ1°51/334,15C-12D,Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WATA** | **Walderalm** | **0.05** | **241** | ⇑*e*Pg | | **Pg** | **16 53 08.7** | **-0.6** |
| | 397nm,0.1s,SNR=2132 | | | | | | | |
| WATA | | | | ⇑*i*Sg | | **Sg** | **16 53 10.8** | **-0.8** |
| | 989nm,0.1s | | | | | | | |
| **WATA** | **Walderalm** | **0.05** | **241** | Pg | | **Pg** | **16 53 08.7** | **-0.6** |
| | SNR=1000 | | | | | | | |
| WATA | | | | Sg | | **Sg** | **16 53 10.8** | **-0.8** |
| | 989nm,0.1s | | | | | | | |
| **WTTA** | **Wattenberg** | **0.10** | **182** | *e*Pg | | **Pg** | **16 53 09.3** | **-0.4** |
| WTTA | | | | *e*Sg | | **Sg** | **16 53 11.7** | **-0.6** |
| **WTTA** | **Wattenberg** | **0.10** | **182** | ⇓*e*Pg | | **Pg** | **16 53 09.3** | **-0.4** |
| | 362nm,0.1s,SNR=2115 | | | | | | | |
| WTTA | | | | ⇑*e*Sg | | **Sg** | **16 53 11.6** | **-0.6** |
| | 3μm,0.2s,SNR=1250 | | | | | | | |
| **WTTA** | **Wattenberg** | **0.10** | **182** | Pg | | **Pg** | **16 53 09.3** | **-0.4** |
| WTTA | | | | Sg | | **Sg** | **16 53 11.6** | **-0.6** |
| | 3μm,0.3s | | | | | | | |
| **WTTA** | **Wattenberg** | **0.10** | **182** | Pg | | **Pg** | **16 53 09.3** | **-0.4** |
| | 361nm,0.1s,SNR=1000 | | | | | | | |
| WTTA | | | | Sg | | **Sg** | **16 53 11.6** | **-0.6** |
| | 3μm,0.2s,SNR=1000 | | | | | | | |
| **SQTA** | **Sankt Quirin** | **0.33** | **245** | ⇓*i*Pg | | **Pg** | **16 53 12.8** | **-0.1** |
| SQTA | | | | ⇓*i*Sg | | **Sb** | **16 53 18.9** | **+0.7** |
| **SQTA** | **Sankt Quirin** | **0.33** | **245** | Pg | | **Pg** | **16 53 12.8** | **-0.1** |
| SQTA | | | | Sg | | **Sb** | **16 53 18.9** | **+0.7** |
| **MOTA** | **Moosalm** | **0.37** | **268** | ⇓*e*Pg | | **Pg** | **16 53 13.3** | **-0.3** |
| | 11nm,0.1s,SNR=50 | | | | | | | |
| MOTA | | | | ⇑*i*Sg | | **Sg** | **16 53 18.7** | **-0.1** |
| | 70nm,0.1s | | | | | | | |
| **MOTA** | **Moosalm** | **0.37** | **268** | Pg | | **Pg** | **16 53 13.3** | **-0.3** |
| | 11nm,0.1s,SNR=50 | | | | | | | |
| MOTA | | | | Sg | | **Sg** | **16 53 18.7** | **-0.1** |
| | 70nm,0.1s | | | | | | | |
| **ROSI** | **Rosskopf** | **0.46** | **200** | Pg | | **Pg** | **16 53 15.2** | **-0.1** |
| ROSI | | | | Sg | | **Sg** | **16 53 22.5** | **+0.9** |
| | 403nm,0.5s | | | | | | | |
| **ROSI** | **Rosskopf** | **0.46** | **200** | Pg | | **Pg** | **16 53 15.2** | **-0.1** |
| ROSI | | | | Sg | | **Sg** | **16 53 22.5** | **+0.9** |
| | 403nm,0.5s | | | | | | | |
| **RISI** | **Rein** | **0.51** | **144** | Pg | | **Pg** | **16 53 16.0** | **-0.1** |
| RISI | | | | Sg | | **Sg** | **16 53 22.9** | **-0.2** |
| | 1μm,0.5s | | | | | | | |
| **RISI** | **Rein** | **0.51** | **144** | Pg | | **Pg** | **16 53 16.0** | **-0.1** |
| RISI | | | | Sg | | **Sg** | **16 53 22.9** | **-0.2** |
| | 1μm,0.5s | | | | | | | |
| **RETA** | **Reutte** | **0.61** | **282** | ⇑*e*Pg | | **Pg** | **16 53 17.9** | **-0.1** |
| | 1.7nm,0.1s,SNR=12 | | | | | | | |
| RETA | | | | ⇓*e*Sg | | **Sg** | **16 53 26.3** | **+0.2** |
| | 38nm,0.2s | | | | | | | |
| **RETA** | **Reutte** | **0.61** | **282** | Pg | | **Pg** | **16 53 17.9** | **-0.1** |
| | 1.7nm,0.1s,SNR=12 | | | | | | | |
| RETA | | | | Sg | | **Sg** | **16 53 26.3** | **+0.2** |
| | 38nm,0.2s | | | | | | | |
| **FETA** | **Feichten** | **0.71** | **242** | ⇑*e*Pg | | **Pg** | **16 53 19.7** | **-0.1** |
| | 7.4nm,0.2s,SNR=27 | | | | | | | |
| FETA | | | | ⇑*i*Sg | | **Sg** | **16 53 30.0** | **+0.8** |
| | 47nm,0.3s | | | | | | | |
| **FETA** | **Feichten** | **0.71** | **242** | Pg | | **Pg** | **16 53 19.7** | **-0.1** |
| | 7.4nm,0.2s,SNR=27 | | | | | | | |
| FETA | | | | Sg | | **Sg** | **16 53 30.0** | **+0.8** |
| | 47nm,0.3s | | | | | | | |
| **FUR** | **Furstenfeldbru** | **0.84** | **343** | *e*Pg | | **Pb** | **16 53 23.4** | **+1.4** |
| FUR | | | | *e*Sg | | **Sb** | **16 53 34.5** | **+1.5** |
| **FUR** | **Furstenfeldbru** | **0.84** | **343** | Pg | | **Pb** | **16 53 23.4** | **+1.4** |
| FUR | | | | Sg | | **Sb** | **16 53 34.5** | **+1.5** |
| **ABTA** | **Abfaltersbach** | **0.85** | **135** | ⇓*i*Pg | | **Pg** | **16 53 21.9** | **-0.5** |
| | 5.0nm,0.2s | | | | | | | |
| ABTA | | | | ⇓*i*Sg | | **Sg** | **16 53 33.1** | **-0.8** |
| | 112nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.85** | **135** | Pg | | **Pg** | **16 53 22.0** | **-0.5** |
| | 5.0nm,0.2s | | | | | | | |
| ABTA | | | | Sg

202nm,0.2s
**APPI Appiano 0.93 198** Pg **Pg** **16 53 24.2 +0.3**
APPI Sg **Sg** **16 53 36.6 +0.5**
202nm,0.2s
**MOSI Grossmontoni 1.05 226** Pg **Pb** **16 53 26.2 +0.5**
MOSI Sg **Sn** **16 53 41.8 +1.5**
287nm,0.7s
**MOSI Grossmontoni 1.05 226** Pg **Pb** **16 53 26.2 +0.5**
MOSI Sg **Sn** **16 53 41.8 +1.5**
287nm,0.7s
**FVI Forni Avoltri 1.09 134** Pg **Pb** **16 53 26.8 +0.6**
FVI Sg **Sb** **16 53 40.5 +0.3**
73nm,0.5s
**FVI Forni Avoltri 1.09 134** Pg **Pb** **16 53 26.8 +0.6**
FVI Sg **Sb** **16 53 40.5 +0.3**
73nm,0.5s
**AGOR Agordo 1.11 165** Pg **Pb** **16 53 27.7 +1.1**
AGOR Sg **Sb** **16 53 41.8 +1.1**
193nm,0.4s
**KBA Koelnbreinsper 1.20 103** *e*Pg **Pn** **16 53 28.5 +0.7**
KBA *e*Sg **Sb** **16 53 43.1 -0.1**
**KBA Koelnbreinsper 1.20 103**⇑ *i*Pg **Pn** **16 53 28.3 +0.5**
7.0nm,0.1s
KBA ⇓ *i*Sn **Sb** **16 53 43.3 0.0**
16nm,0.3s
KBA ⇓ *i*Sg **Sn** **16 53 48.7 +5.0**
35nm,0.2s
**KBA Koelnbreinsper 1.20 103** Pg **Pn** **16 53 28.3 +0.5**
7.0nm,0.1s
KBA Sg **Sb** **16 53 43.1 -0.1**
**FUORN Ofenpass-Fuorn 1.20 232** Pg **Pn** **16 53 29.0 +1.1**
**FUORN Ofenpass-Fuorn 1.20 232** Pg **Pn** **16 53 29.0 +1.1**
**DAVA Damuels 1.20 267** *e*Pg **Pg** **16 53 30.4 +1.3**
DAVA *e*Sg **Sn** **16 53 47.4 +3.6**
**DAVA Damuels 1.20 267**⇑ *e*Pn **Pg** **16 53 30.2 +1.1**
SNR=15
DAVA ⇑ *i*Sg **Sn** **16 53 47.8 +4.0**
54nm,0.2s
**DAVA Damuels 1.20 267** Pg **Pg** **16 53 30.4 +1.3**
DAVA Sg **Sn** **16 53 47.4 +3.6**
**BRMO Bormio 1.24 225** Pg **Pg** **16 53 30.7 +0.9**
BRMO Sg **Sg** **16 53 46.8 +0.8**
88nm,0.6s
**BRMO Bormio 1.24 225** Pg **Pg** **16 53 30.7 +0.9**
BRMO Sg **Sg** **16 53 46.8 +0.8**
88nm,0.6s
**DAVOX Davos/Dischmat 1.34 245** Pg **Pn** **16 53 31.2 +1.4**
**DAVOX Davos/Dischmat 1.34 245** Pg **Pn** **16 53 31.2 +1.4**
**BERNI Berninapass 1.46 230** Pg **Pg** **16 53 35.3 +1.3**
**BERNI Berninapass 1.46 230** Pg **Pg** **16 53 35.3 +1.3**
**CGRP Cima Grappa 1.48 176** Pg **Pb** **16 53 34.3 +1.3**
160nm,0.4s
**CGRP Cima Grappa 1.48 176** Pg **Pb** **16 53 34.3 +1.3**
160nm,0.4s
**PTCC Patocco-Chiusa 1.51 128** Pg **Pg** **16 53 35.3 +0.3**
39nm,0.6s
**PTCC Patocco-Chiusa 1.51 128** Pg **Pg** **16 53 35.3 +0.3**
39nm,0.6s
**ACOM Acomizza, Ital 1.52 122** Pg **Pg** **16 53 35.5 +0.4**
91nm,0.3s
**ACOM Acomizza, Ital 1.52 122** Pg **Pg** **16 53 35.5 +0.4**
91nm,0.3s
**MABI Malga Bissina 1.52 211** Pg **Pb** **16 53 34.9 +1.3**
43nm,0.5s
**MABI Malga Bissina 1.52 211** Pg **Pb** **16 53 34.9 +1.3**
43nm,0.5s
**GRC2 Grafenberg Arr 1.52 353** *e*Sn **Sn** **16 53 52.6 +1.1**
GRC2 *e*Sg **Sg** **16 53 54.7 -0.2**
**GRC2 Grafenberg Arr 1.52 353** Sn **Sn** **16 53 52.6 +1.1**
GRC2 Sg **Sg** **16 53 54.7 -0.2**
**GRC3 Grafenberg Arr 1.53 359** *e*Pn **Pn** **16 53 32.6 +0.3**
GRC3 *e*Pg **Pb** **16 53 34.8 +1.1**
GRC3 *e*Sn **Sn** **16 53 52.4 +0.6**
GRC3 *e*Sg **Sb** **16 53 54.9 +2.1**
**GRC3 Grafenberg Arr 1.53 359** Pn **Pn** **16 53 32.6 +0.3**
**MYKA Terra Mystica 1.55 117**⇓ *i*Pg **Pg** **16 53 36.1 +0.4**
24nm,0.4s,SNR=12
MYKA ⇓ *i*Sg **Sg** **16 53 56.3 +0.4**
39nm,0.4s
**MYKA Terra Mystica 1.55 117** Pg **Pg** **16 53 36.1 +0.4**
24nm,0.4s,SNR=12
MYKA Sg **Sg** **16 53 56.3 +0.4**
39nm,0.4s
**PLONS Plons/SG 1.57 259** *e*Pg **Pg** **16 53 36.5 +0.4**
PLONS *e*Sg **Sg** **16 53 58.7 +2.1**
**PLONS Plons/SG 1.57 259** Pg **Pg** **16 53 36.5 +0.4**
PLONS Sg **Sg** **16 53 58.7 +2.1**
**VINO Villanova 1.58 134** Pg **Pb** **16 53 35.9 +1.4**
92nm,0.5s
**VINO Villanova 1.58 134** Pg **Pb** **16 53 35.9 +1.4**
92nm,0.5s
**GRC1 Grafenberg Arr 1.64 357** *e*Pn **Pn** **16 53 34.0 +0.2**
GRC1 *e*Pg **Pb** **16 53 36.6 +1.0**
GRC1 *e*Sn **Sn** **16 53 54.6 +0.2**
GRC1 *e*Sg **Sb** **16 53 57.7 +1.9**
**GRC1 Grafenberg Arr 1.64 357** Pn **Pn** **16 53 34.0 +0.2**
**GRC4 Grafenberg Arr 1.73 358** *e*Pn **Pn** **16 53 35.2 +0.2**
GRC4 *e*Pg **Pb** **16 53 38.4 +1.3**
GRC4 *e*Sn **Sn** **16 53 57.1 +0.5**
GRC4 *e*Sg **Sb** **16 54 00.9 +2.4**
**GRC4 Grafenberg Arr 1.73 358** Pn **Pn** **16 53 35.2 +0.2**
**MAGA Magasa 1.73 204** Pg **Pb** **16 53 38.3 +1.1**
233nm,0.4s
**MAGA Magasa 1.73 204** Pg **Pb** **16 53 38.3 +1.1**
233nm,0.4s
**GRB5 Grafenberg Arr 1.75 1** *e*Pn **Pn** **16 53 35.4 0.0**
GRB5 *e*Pg **Pb** **16 53 38.7 +1.2**
GRB5 *e*Sn **Sn** **16 53 57.6 +0.3**
GRB5 *e*Sg **Sb** **16 54 01.5 +2.3**
**GRB5 Grafenberg Arr 1.75 1** Pn **Pn** **16 53 35.4 0.0**
**MOA Molln 1.84 74** *e*Pg **Pb** **16 53 39.5 +0.5**
MOA *e*Sg **Sn** **16 54 01.9 +2.4**
**MOA Molln 1.84 74**⇓⇓ *e*Pn **Pb** **16 53 39.3 +0.3**
6.4nm,0.2s,SNR=22
MOA ⇑ *i*Sg **Sb** **16 54 04.3 +2.6**
35nm,0.2s
**MOA Molln 1.84 74** Pg **Pb** **16 53 39.5 +0.5**
MOA Sg **Sb** **16 54 04.3 +2.6**
35nm,0.2s
**WILA Wila 1.86 273** *e*Pg **Pg** **16 53 41.9 +0.4**
WILA *e*Sg **Sg** **16 54 06.7 +1.0**
**WILA Wila 1.86 273** Pg **Pg** **16 53 41.9 +0.4**
WILA Sg **Sg** **16 54 06.7 +1.0**
**GRB2 Grafenberg Arr 1.91 1** *e*Pn **Pn** **16 53 37.5 0.0**
GRB2 *e*Pg **Pb** **16 53 42.0 +1.8**
GRB2 *e*Sn **Sn** **16 54 01.4 +0.2**
GRB2 *e*Sg **Sb** **16 54 06.4 +2.6**
**GRB2 Grafenberg Arr 1.91 1** Pn **Pn** **16 53 37.5 0.0**
**WET Wettzell 1.97 24** *e*Pn **Pn** **16 53 38.8 +0.5**
WET *e*Pg **Pb** **16 53 42.6 +1.5**
WET *e*Sn **Sn** **16 54 02.7 +0.1**
**WET Wettzell 1.97 24** Pn **Pn** **16 53 38.8 +0.5**
**GEC2 GERESS Array S 2.03 42** *e*Pn **Pn** **16 53 39.8 +0.6**
GEC2 *e*Pg **Pb** **16 53 42.7 +0.5**
GEC2 *e*Sn **Sn** **16 54 05.2 +1.1**
GEC2 *e*Sg **Sb** **16 54 09.4 +2.3**
**GEC2 GERESS Array S 2.03 42** Pn **Pn** **16 53 39.8 +0.6**
**GRB4 Grafenberg Arr 2.11 359** *e*Pn **Pn** **16 53 40.1 -0.2**
GRB4 *e*Sn **Sn** **16 54 05.9 -0.2**
GRB4 *e*Sg **Sg** **16 54 12.9 -0.9**
**GRB4 Grafenberg Arr 2.11 359** Pn **Pn** **16 53 40.1 -0.2**
GRB4 Sn **Sn** **16 54 05.9 -0.2**
GRB4 Sg **Sg** **16 54 12.9 -0.9**
**OBKA Obir 2.17 112** *e*Pg **Pb** **16 53 44.8 +0.2**
OBKA *e*Sg **Sb** **16 54 14.1 +3.0**
**OBKA Obir 2.17 112**⇑ *i*Pn **Pb** **16 53 44.6 0.0**
1.1nm,0.1s
OBKA ⇑ *i*Pg **Pg** **16 53 46.6 -0.9**
4.9nm,0.3s
OBKA ⇑ *i*Sn **Sn** **16 54 08.8 +1.2**
OBKA ⇑ *i*Sg **Sb** **16 54 14.1 +3.0**
18nm,0.4s
**OBKA Obir 2.17 112** Pn **Pb** **16 53 44.6 0.0**
1.1nm,0.1s
**SLE Schleitheim 2.17 282** *e*Pg **Pg** **16 53 47.9 +0.4**
SLE *e*Sg **Sg** **16 54 15.8 +0.2**
**SLE Schleitheim 2.17 282** Pg **Pg** **16 53 47.9 +0.4**
SLE Sg **Sg** **16 54 15.8 +0.2**
**KHC Kasperske Hory 2.19 35** *e*PG **Pb** **16 53 45.9 +0.9**
KHC *e*SN **Sn** **16 54 08.0 -0.2**
KHC *e*SG **Sb** **16 54 14.2 +2.3**
comp=Z,26nm,0.4s
**KHC Kasperske Hory 2.19 35** Pg **Pb** **16 53 45.9 +0.9**
KHC Sn **Sn** **16 54 08.0 -0.2**
KHC Sg **Sb** **16 54 14.2 +2.3**
26nm,0.4s
**GRA4 Grafenberg Arr 2.21 357** *e*Pn **Pn** **16 53 41.5 -0.2**
GRA4 *e*Pg **Pb** **16 53 47.2 +1.9**
GRA4 *e*Sn **Sn** **16 54 08.6 0.0**
GRA4 *e*Sg **Sg** **16 54 15.8 -1.2**
**GRA4 Grafenberg Arr 2.21 357** Pn **Pn** **16 53 41.5 -0.2**
**GRA1 Grafenberg Arr 2.35 353** Pn **Pn** **16 53 45.5 +2.0**
**GRA1 Grafenberg Arr 2.35 353** Pg **Pg** **16 53 50.8 -0.1**
GRA1 Sg **Sg** **16 54 20.8 -0.6**
**GRF Grafenberg Arr 2.35 353** *e*Pn **Pn** **16 53 45.5 +2.0**
GRF *e*Pg **Pg** **16 53 50.8 -0.1**
GRF *e*Sg **Sg** **16 54 20.8 -0.6**
**BFO Black Forest 2.43 295** *e*Pn **Pn** **16 53 47.1 +2.4**
**BFO Black Forest 2.43 295** Pn **Pn** **16 53 47.1 +2.4**
**ROTZ Rotzenmuhle 2.44 9** *e*Pn **Pn** **16 53 44.5 -0.2**
ROTZ *e*Pg **Pg** **16 53 52.4 -0.2**
ROTZ *e*Sg **Sg** **16 54 22.8 -1.4**
**ROTZ Rotzenmuhle 2.44 9** Pn **Pn** **16 53 44.5 -0.2**
**FELD Feldberg im Sc 2.51 283** Pn **Pn** **16 53 46.8 +0.9**
FELD Sg **Sg** **16 54 26.2 -0.5**
**MANZ Manzenberg 2.65 7** *e*Pg **Pg** **16 53 56.1 -0.5**
MANZ *e*Sn **Sn** **16 54 18.7 -0.6**
**MANZ Manzenberg 2.65 7** Pg **Pg** **16 53 56.1 -0.5**
MANZ Sn **Sn** **16 54 18.7 -0.6**
**BALST Balsthal 2.68 271** *e*Pn Pn 16 53 51.3 +3.1
**BALST Balsthal 2.68 271** Pn Pn 16 53 51.3 +3.1
**NKC Novy Kostel 2.92 10** *e*PG **Pg** **16 54 00.9 -1.0**
NKC *e*SN **Sn** **16 54 25.9 -0.2**
NKC *e*SG **Sg** **16 54 37.8 -2.0**
comp=Z,23nm,0.3s
**NKC Novy Kostel 2.92 10** Pg **Pg** **16 54 00.9 -1.0**
NKC Sn **Sn** **16 54 25.9 -0.2**
NKC Sg **Sg** **16 54 37.8 -2.0**
23nm,0.3s
**TOD Tromm 2.94 321** Pn **Pn** **16 53 53.0 +1.4**
TOD Sg **Sg** **16 54 39.2 -0.9**
**TANN Tannenbergstha 3.10 10** *e*Pg **Pg** **16 54 04.1 -1.3**
**TANN Tannenbergstha 3.10 10** Pg **Pg** **16 54 04.1 -1.3**
**CDF Champ du Feu 3.12 291** *e*Pn **Pn** **16 53 55.9 +1.7**
CDF *e*Sn **Sn** **16 54 30.6 -0.5**
CDF *e*Sg **Sg** **16 54 44.9 -1.2**
9.2nm,0.3s
**CDF Champ du Feu 3.12 291** *e*Pn **Pn** **16 53 55.9 +1.7**
CDF *e*Sn **Sn** **16 54 30.6 -0.5**
CDF *e*Sg **Sg** **16 54 44.9 -1.2**
4.6nm,0.3s
**ECH Echery 3.14 287** Pn **Pn** **16 53 55.7 +1.3**
ECH Sg **Sg** **16 54 46.9 +0.2**
**ECH Echery 3.14 287** Pn **Pn** **16 53 55.7 +1.3**
ECH Sg **Sg** **16 54 46.9 +0.2**
**PLN Plauen 3.15 6** *e*Pg **Pg** **16 54 05.4 -0.7**
PLN *e*Sg **Sg** **16 54 46.3 -0.5**
**PLN Plauen 3.15 6** Pg **Pg** **16 54 05.4 -0.7**
PLN Sg **Sg** **16 54 46.3 -0.5**
**PRU Pruhonice 3.26 35** *e*PG **Pb** **16 54 05.5 +2.4**
PRU *e*SN **Sn** **16 54 32.0 -2.3**
PRU *e*SG **Sb** **16 54 46.8 +4.4**
comp=Z,4.0nm,0.6s
**PRU Pruhonice 3.26 35** Pg **Pb** **16 54 05.5 +2.4**
PRU Sn **Sn** **16 54 32.0 -2.3**
PRU Sg **Sb** **16 54 46.8 +4.4**
4.0nm,0.6s
**HINF Hinteralfeld 3.27 280** *e*Pn **Pn** **16 53 57.7 +1.4**
**HINF Hinteralfeld 3.27 280** *e*P Pn 16 54 00.9 +4.6
HINF *e*Sn **Sn** **16 54 34.4 -0.3**
HINF *e*Sg **Sg** **16 54 49.1 -1.8**
10nm,0.3s
**HINF Hinteralfeld 3.27 280** *e*Pn **Pn** **16 53 57.7 +1.4**
**HINF Hinteralfeld 3.27 280** *e*P Pn 16 54 00.9 +4.6
HINF *e*Sn **Sn** **16 54 34.4 -0.3**
HINF *e*Sg **Sg** **16 54 49.1 -1.8**
5.1nm,0.3s
**MOX Moxa 3.29 360** *e*Pg **Pg** **16 54 09.0 +0.2**
MOX *e*Sn **Sn** **16 54 34.3 -0.7**
**MOX Moxa 3.29 360** Pg **Pg** **16 54 09.0 +0.2**
MOX Sn **Sn** **16 54 34.3 -0.7**
**GOPC GO Pecny, Ondr 3.30 38** *e*PG **Pb** **16 54 06.2 +2.4**
GOPC *e*SN **Sn** **16 54 35.3 -0.1**
GOPC *e*SG **Sb** **16 54 47.7 +4.1**
comp=Z,18nm,0.5s
**GOPC GO Pecny, Ondr 3.30 38** Pg **Pb** **16 54 06.2 +2.4**
GOPC Sn **Sn** **16 54 35.3 -0.1**
GOPC Sg **Sb** **16 54 47.7 +4.1**
18nm,0.5s
**TNS Taunus Mts 3.56 325** *e*Pn **Pn** **16 54 01.4 +1.2**
**TNS Taunus Mts 3.56 325** Pn **Pn** **16 54 01.4 +1.2**
**HAU Haudompre 3.63 282** *e*Pn **Pn** **16 54 02.8 +1.6**
HAU *e*Sg **Sg** **16 55 00.2 -2.3**
11nm,0.3s
**HAU Haudompre 3.63 282** *e*Pn **Pn** **16 54 02.8 +1.6**
HAU *e*Sg **Sg** **16 55 00.2 -2.3**
5.3nm,0.3s
**LSD Lago del Serru 3.65 240** P Pn 16 54 05.7 +4.0
**PVCC Panska Ves 3.71 30** *e*SG **Sg** **16 55 01.4 -3.6**
comp=Z,16nm,0.3s
**PVCC Panska Ves 3.71 30** Sg **Sg** **16 55 01.4 -3.6**
16nm,0.3s
**BRG Berggiesshubel 3.83 22** PG **Pb** **16 54 14.2 +1.4**
BRG *e* 16 54 48.4
**BRG Berggiesshubel 3.83 22** SG **Sg** **16 55 07.0 -1.7**
8.5nm,0.7s
**VRAC Vranov 3.84 58** *e*Sn **Sn** **16 54 47.6 -1.0**
VRAC *e*Sg **Sg** **16 55 05.4 -3.6**
**RUP Ruppelstein 3.84 309** Pn **Pn** **16 54 05.7 +1.6**
RUP Sg **Sg** **16 55 08.0 -1.1**
**LPG La Plagne 3.86 243** *e*Pn **Pn** **16 54 05.7 +1.1**
LPG *e*Sn **Sn** **16 54 47.5 -2.1**
2.7nm,0.4s
**LPG La Plagne 3.86 243** *e*Pn **Pn** **16 54 05.7 +1.1**
LPG *e*Sn **Sn** **16 54 47.5 -2.1**
1.4nm,0.4s
**LPL La Plagne 3.86 243** *e*Pn **Pn** **16 54 04.9 +0.4**
LPL *e*Sn **Sn** **16 54 47.4 -2.1**
3.0nm,0.4s
**LPL La Plagne 3.86 243** *e*Pn **Pn** **16 54 04.9 +0.4**
LPL *e*Sn **Sn** **16 54 47.4 -2.1**
1.5nm,0.4s
**CABF La Chapelle 3.87 261** *e*Pn **Pn** **16 54 06.2 +1.6**
CABF *e*Sn **Sn** **16 54 48.2 -1.5**
CABF *e*Sg **Sg** **16 55 08.0 -2.2**
18nm,0.8s
**CABF La Chapelle 3.87 261** *e*Pn **Pn** **16 54 06.2 +1.6**
CABF *e*Sn **Sn** **16 54 48.2 -1.5**
CABF *e*Sg **Sg** **16 55 08.0 -2.2**
9.1nm,0.8s
**CLL Collm 4.05 12** *e*Pg **Pg** **16 54 22.0 -1.4**
CLL *i* Sg **Sg** **16 55 14.7 -1.1**
comp=Z,9.0nm,0.7s
**PAGF Fort de Pagny 4.15 289** *e*Pn **Pn** **16 54 10.2 +1.9**
baz=109
PAGF *e*Sg **Sg** **16 55 16.9 -2.2**
comp=Z,1.8nm,0.4s
**PAGF Fort de Pagny 4.15 289** *e*Pn **Pn** **16 54 10.2 +1.9**
PAGF *e*Sg **Sg** **16 55 16.9 -2.2**
comp=Z,0.9nm,0.4s
**UPC Upice 4.27 41** *e*PG Pb 16 54 24.1 +3.8
UPC *e*SG Sb 16 55 18.0 +6.5
comp=Z,7.2nm,0.4s
**UPC Upice 4.27 41** Pg Pb 16 54 24.1 +3.8
UPC Sg Sb 16 55 18.0 +6.5
comp=Z,7.2nm,0.4s
**MBDF Montbardon 4.29 234** *e*Pn **Pn** **16 54 11.6 +1.2**
MBDF *e*Sn **Sn** **16 54 57.2 -2.9**
comp=Z,3.1nm,0.4s
**MBDF Montbardon 4.29 234** *e*Pn **Pn** **16 54 11.6 +1.2**
MBDF *e*Sn **Sn** **16 54 57.2 -2.9**
comp=Z,1.5nm,0.4s
**DPC Dobruska-Polom 4.30 44** *e*SG **Sg** **16 55 19.7 -4.2**
comp=Z,8.1nm,0.4s
**DPC Dobruska-Polom 4.30 44** Sg **Sg** **16 55 19.7 -4.2**
comp=Z,8.1nm,0.4s
**SFTF Sexfontaines 4.53 283** *e*Pn **Pn** **16 54 14.1 +0.6**
baz=109
SFTF *e*Sg **Sg** **16 55 31.1 -0.1**
comp=Z,7.5nm,0.4s
**SFTF Sexfontaines 4.53 283** *e*Pn **Pn** **16 54 14.1 +0.6**
SFTF *e*Sg **Sg** **16 55 31.1 -0.1**
comp=Z,3.8nm,0.4s
**MEZF Maizieres J'vi 4.57 287** *e*Pn **Pn** **16 54 15.4 +1.3**
baz=115
MEZF *e*Sg **Sg** **16 55 30.0 -2.6**
comp=Z,4.1nm,0.3s,baz=105
**MEZF Maizieres J'vi 4.57 287** *e*Pn **Pn** **16 54 15.4 +1.3**
MEZF *e*Sg **Sg** **16 55 30.0 -2.6**
comp=Z,2.0nm,0.3s
**SBF Sospel 4.58 222** *e*Pn **Pn** **16 54 14.9 +0.7**
**SBF Sospel 4.58 222** *e*Pn **Pn** **16 54 14.9 +0.7**
**MORC Moravsky Berou 4.60 56** *e*Sn **Sn** **16 55 04.9 -2.7**
MORC *e*Sg Sb 16 55 28.2 +7.0
**ORIF Oris-en-Rattie 4.69 241** *e*Pn **Pn** **16 54 16.1 +0.3**
**ORIF Oris-en-Rattie 4.69 241** *e*P Pn 16 54 20.1 +4.3
ORIF *e*Sn **Sn** **16 55 07.4 -2.4**
comp=Z,2.5nm,0.4s
**ORIF Oris-en-Rattie 4.69 241** *e*Pn **Pn** **16 54 16.1 +0.3**
**ORIF Oris-en-Rattie 4.69 241** *e*P Pn 16 54 20.1 +4.3
ORIF *e*Sn **Sn** **16 55 07.4 -2.4**
comp=Z,1.2nm,0.4s
**VYHS Vyhne 4.97 74** *e*SN **Sn** **16 55 15.0 -1.5**
VYHS *e*SG **Sg** **16 55 45.4 +0.2**
**VYHS Vyhne 4.97 74** *e*Sn **Sn** **16 55 15.0 -1.5**
VYHS *e*Sg **Sg** **16 55 45.4 +0.2**
**OKC Ostrava-Krasne 4.98 58** *e*SG **Sg** **16 55 41.6 -3.9**
**OKC Ostrava-Krasne 4.98 58** Sg **Sg** **16 55 41.6 -3.9**
**LOR Lormes 5.29 272** *e*Pn **Pn** **16 54 25.1 +1.1**
baz=85
LOR *e*Sg **Sg** **16 55 51.8 -3.9**
comp=Z,4.6nm,0.5s,baz=95
**LOR Lormes 5.29 272** *e*Pn **Pn** **16 54 25.1 +1.1**
LOR *e*Sg **Sg** **16 55 51.8 -3.9**
comp=Z,2.3nm,0.5s
**VIVF Saint-Julien-l 5.45 245** *e*Pn **Pn** **16 54 27.7 +1.5**
VIVF *e*Sn **Sn** **16 55 25.9 -2.6**
comp=Z,1.5nm,0.2s
**VIVF Saint-Julien-l 5.45 245** *e*Pn **Pn** **16 54 27.7 +1.5**
**SSF Saint Saulge 5.55 270** *e*Pn **Pn** **16 54 28.0 +0.5**
**SSF Saint Saulge 5.55 270** *e*Pn **Pn** **16 54 28.0 +0.5**
**BAIF Baives 5.61 302** *e*Pn **Pn** **16 54 29.8 +1.5**
BAIF *e*Sg **Sg** **16 56 02.8 -3.0**
comp=Z,0.9nm,0.3s
**BAIF Baives 5.61 302** *e*Pn **Pn** **16 54 29.8 +1.5**
**AVF Avril sur Loir 5.69 267** *e*Pn **Pn** **16 54 30.4 +1.0**
**AVF Avril sur Loir 5.69 267** *e*Pn **Pn** **16 54 30.4 +1.0**
**BGF Bois d'Agland 6.07 266** *e*Pn **Pn** **16 54 36.3 +1.6**
BGF *e*Sn **Sn** **16 55 40.9 -2.8**
comp=Z,2.8nm,0.3s
**BGF Bois d'Agland 6.07 266** *e*Pn **Pn** **16 54 36.3 +1.6**
**TCF Toulx Ste Croi 6.56 264** *e*Pn **Pn** **16 54 42.3 +0.9**
TCF *e*Sg **Sg** **16 56 34.0 -2.2**
comp=Z,1.9nm,0.5s
**TCF Toulx Ste Croi 6.56 264** *e*Pn **Pn** **16 54 42.3 +0.9**
**CAF Calviac 7.08 253** *e*Pn **Pn** **16 54 49.4 +0.8**
**CAF Calviac 7.08 253** *e*Pn **Pn** **16 54 49.4 +0.8**
**RJF Les Rejaudoux 7.30 257** *e*Pn **Pn** **16 54 51.7 +0.1**
**RJF Les Rejaudoux 7.30 257** *e*Pn **Pn** **16 54 51.7 +0.1**
**MFF Saint Martin d 8.10 269** *e*Pn **Pn** **16 55 03.2 +0.7**
**MFF Saint Martin d 8.10 269** *e*Pn **Pn** **16 55 03.2 +0.7**

*ISCJB **12** 16:59:38.6±0.2, 47°.421N±0°.010×11°.73E±0°.02, h3$^{km}$±3$^{km}$, Error ellipse: s-maj=2.3km s-min=1.6km az=3.2*
*CSEM **12** 16:59:39.8±0.1, 47°.38N×11°.68E, h12$^{km}$, ML2.6/10, Error ellipse: s-maj=1.9km s-min=1.3km az=98.0*
*VIE **12** 16:59:39.7±0.1, 47°.38N×11°.67E, h13$^{km}$, mb1.5/8, ml2.4/14, Error ellipse: s-maj=1.2km s-min=0.7km az=10.0, felt 3 ems98 at Schwaz / Tyrol*
*PRU **12** 16:59:41.4, 47°.42N×11°.77E, h25$^{km}$*
*BGR **12** 16:59:42.0±0.3, 47°.42N×11°.67E, h10$^{km}$, ML2.4/24, Error ellipse: s-maj=2.2km s-min=2.2km az=152.0*

**ISC 12 16:59:40.2**±0.8, **47°.39N**±0°.01×**11°.69E**±0°.01, **h12**$^{km}$±5$^{km}$, **n99**, σ**0**$^{s}$**75**/180, **22C-5D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATA** | **Walderalm** | **0.10** | **233** | ⇑ *i*Pg | **Pg** | **16 59 42.9** | **-0.1** |
| | 297nm,0.1s | | | | | | |
| WATA | | | | ⇓ *i*Sg | **Sg** | **16 59 45.1** | **-0.1** |
| | 286nm,0.1s | | | | | | |
| **WATA** | **Walderalm** | **0.10** | **233** | Pg | **Pg** | **16 59 42.9** | **-0.1** |
| | 297nm,0.1s | | | | | | |
| WATA | | | | Sg | **Sg** | **16 59 45.1** | **-0.1** |
| | 286nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.13** | **195** | ⇑ *i*Pg | **Pg** | **16 59 43.5** | **-0.1** |
| | 46nm,0.1s | | | | | | |
| WTTA | | | | ⇑ *i*Sg | **Sg** | **16 59 46.0** | **-0.1** |
| | 878nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.13** | **195** | Pg | **Pg** | **16 59 43.5** | **-0.1** |
| | 46nm,0.1s | | | | | | |
| WTTA | | | | Sg | **Sg** | **16 59 46.0** | **-0.1** |
| | 878nm,0.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **0.37** | **242** | ⇑ *i*Pg | **Pg** | **16 59 47.3** | **-0.3** |
| **SQTA** | **Sankt Quirin** | **0.37** | **242** | Pg | **Pg** | **16 59 47.3** | **-0.3** |
| **MOTA** | **Moosalm** | **0.40** | **263** | ⇑⇑ *e*Pg | **Pg** | **16 59 47.5** | **-0.6** |
| | 11nm,0.1s,SNR=25 | | | | | | |
| MOTA | | | | ⇓ *i*Sg | **Sg** | **16 59 53.2** | **-0.3** |
| | 26nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **0.40** | **263** | Pg | **Pg** | **16 59 47.5** | **-0.6** |
| | 11nm,0.1s,SNR=25 | | | | | | |
| MOTA | | | | Sg | **Sg** | **16 59 53.2** | **-0.3** |
| | 26nm,0.1s | | | | | | |
| **ROSI** | **Rosskopf** | **0.50** | **202** | ⇑ *e*Pg | **Pg** | **16 59 49.6** | **-0.4** |
| ROSI | | | | *e*Sg | **Sg** | **16 59 56.3** | **-0.4** |
| **RISI** | **Rein** | **0.52** | **149** | ⇑ *e*Pg | **Pg** | **16 59 50.2** | **-0.2** |
| RISI | | | | *e*Sg | **Sg** | **16 59 57.1** | **-0.2** |
| **RETA** | **Reutte** | **0.64** | **279** | ⇑ *e*Pg | **Pg** | **16 59 51.9** | **-0.6** |
| | 0.7nm,0.1s,SNR=4.4 | | | | | | |
| RETA | | | | ⇑ *e*Sg | **Sg** | **17 00 00.8** | **-0.1** |
| | 18nm,0.4s,SNR=11 | | | | | | |
| **RETA** | **Reutte** | **0.64** | **279** | Pg | **Pg** | **16 59 51.9** | **-0.6** |
| | 0.7nm,0.1s,SNR=4.4 | | | | | | |
| RETA | | | | Sg | **Sg** | **17 00 00.8** | **-0.1** |
| | 18nm,0.4s,SNR=11 | | | | | | |
| **ABSI** | **Aberstueckl** | **0.71** | **201** | ⇑ *e*Pg | **Pg** | **16 59 53.5** | **-0.5** |
| ABSI | | | | *e*Sg | **Sg** | **17 00 02.9** | **-0.4** |
| **FETA** | **Feichten** | **0.75** | **241** | ⇓⇓ *e*Pg | **Pg** | **16 59 54.0** | **-0.7** |
| | 2.4nm,0.1s,SNR=8.2 | | | | | | |
| FETA | | | | ⇓ *e*Sg | **Sg** | **17 00 04.3** | **-0.3** |
| | 3.8nm,0.1s,SNR=9.5 | | | | | | |
| **FETA** | **Feichten** | **0.75** | **241** | Pg | **Pg** | **16 59 54.0** | **-0.7** |
| | 2.4nm,0.1s,SNR=8.2 | | | | | | |
| FETA | | | | Sg | **Sg** | **17 00 04.3** | **-0.3** |
| | 3.8nm,0.1s,SNR=9.5 | | | | | | |
| **FUR** | **Furstenfeldbru** | **0.82** | **340** | *e*Pg | **Pn** | **16 59 57.4** | **-0.3** |
| **FUR** | **Furstenfeldbru** | **0.82** | **340** | Pg | **Pn** | **16 59 57.4** | **-0.3** |
| **RJOB** | **Jochberg** | **0.83** | **65** | *e*Pg | **Pn** | **16 59 58.2** | **+0.5** |
| RJOB | | | | *e*Sg | **Sb** | **17 00 08.9** | **+1.3** |
| **RJOB** | **Jochberg** | **0.83** | **65** | Pg | **Pn** | **16 59 58.2** | **+0.5** |
| RJOB | | | | Sg | **Sb** | **17 00 08.9** | **+1.3** |
| **ABTA** | **Abfaltersbach** | **0.86** | **139** | ⇑ *i*Pg | **Pg** | **16 59 56.5** | **-0.2** |
| | 0.4nm,0.1s | | | | | | |
| ABTA | | | | ⇑ *e*Sg | **Sg** | **17 00 07.0** | **-0.9** |
| | 22nm,0.3s,SNR=18 | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.86** | **139** | Pg | **Pg** | **16 59 56.5** | **-0.2** |
| | 0.4nm,0.1s | | | | | | |
| ABTA | | | | Sg | **Sg** | **17 00 07.1** | **-0.9** |
| | 22nm,0.3s,SNR=18 | | | | | | |
| **KOSI** | **Kohlern** | **0.95** | **193** | ⇓⇓ *e*Pg | **Pg** | **16 59 58.1** | **-0.5** |
| KOSI | | | | *e*Sg | **Sg** | **17 00 10.9** | **-0.1** |
| **MOSI** | **Grossmontoni** | **1.10** | **225** | *e*Pg | **Pg** | **17 00 00.7** | **-0.7** |
| **MOSI** | **Grossmontoni** | **1.10** | **225** | *e*Pg | **Pg** | **17 00 00.7** | **-0.7** |
| **AGOR** | **Agordo** | **1.14** | **167** | *e*Pg | **Pb** | **17 00 01.1** | **-0.8** |
| AGOR | | | | *e*Sg | **Sb** | **17 00 16.1** | **-0.4** |
| **KBA** | **Koelnbreinsper** | **1.17** | **105** | *e*Pn | **Pg** | **17 00 04.0** | **+1.3** |
| KBA | | | | *e*Sn | **Sb** | **17 00 17.6** | **-0.1** |
| **KBA** | **Koelnbreinsper** | **1.17** | **105** | ⇑ *i*Pn | **Pb** | **17 00 02.0** | **-0.5** |
| **KBA** | **Koelnbreinsper** | **1.17** | **105** | Pn | **Pb** | **17 00 02.0** | **-0.5** |
| KBA | | | | Sn | **Sb** | **17 00 17.6** | **-0.1** |
| **CIMO** | **Cimolais** | **1.20** | **154** | *e*Pg | **Pn** | **17 00 03.2** | **+0.3** |
| CIMO | | | | *e*Sg | **Sb** | **17 00 18.3** | **-0.1** |
| **CIMO** | **Cimolais** | **1.20** | **154** | *e*Pg | **Pn** | **17 00 03.2** | **+0.3** |
| CIMO | | | | *e*Sg | **Sb** | **17 00 18.3** | **-0.1** |
| **ZOU** | **Zoufplan** | **1.22** | **133** | ⇑⇑ *e*Pg | **Pn** | **17 00 02.9** | **-0.3** |
| ZOU | | | | *e*Sg | **Sb** | **17 00 18.5** | **-0.4** |
| **DAVA** | **Damuels** | **1.23** | **266** | *e*Pn | **Pg** | **17 00 04.7** | **+0.8** |
| DAVA | | | | *e*Pg | **Pb** | **17 00 05.6** | **+2.1** |
| DAVA | | | | *e*Sg | **Sn** | **17 00 21.8** | **+1.7** |
| **DAVA** | **Damuels** | **1.23** | **266** | ⇑ *i*Pn | **Pb** | **17 00 02.7** | **-0.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GRC2** | **Grafenberg Arr** | **1.49** | **352** | Sn | | **Sn** | 17 00 26.7 | +0.4 |
| GRC2 | | | | Sg | | **Sg** | 17 00 29.3 | +1.2 |
| **GRC3** | **Grafenberg Arr** | **1.50** | **357** | *e*Pg | | **Pg** | 17 00 09.0 | +0.1 |
| GRC3 | | | | *e*Sn | | **Sn** | 17 00 26.6 | +0.1 |
| GRC3 | | | | *e*Sg | | **Sg** | 17 00 29.4 | +1.0 |
| **GRC3** | **Grafenberg Arr** | **1.50** | **357** | Pg | | **Pg** | 17 00 09.0 | +0.1 |
| GRC3 | | | | Sn | | **Sn** | 17 00 26.6 | +0.1 |
| GRC3 | | | | Sg | | **Sg** | 17 00 29.4 | +1.0 |
| **ACOM** | **Acomizza, Ital** | **1.51** | **123** | *e*Pg | | **Pg** | 17 00 09.4 | +0.3 |
| ACOM | | | | *e*Sg | | **Sg** | 17 00 29.0 | +0.3 |
| **ACOM** | **Acomizza, Ital** | **1.51** | **123** | *e*Pg | | **Pg** | 17 00 09.4 | +0.3 |
| ACOM | | | | *e*Sg | | **Sg** | 17 00 29.0 | +0.3 |
| **PTCC** | **Patocco-Chiusa** | **1.51** | **130** | *e*Pg | | **Pg** | 17 00 09.5 | +0.3 |
| PTCC | | | | *e*Sg | | **Sg** | 17 00 28.6 | -0.2 |
| **CGRP** | **Cima Grappa** | **1.52** | **177** | *e*Pg | | **Pb** | 17 00 08.4 | +0.1 |
| **CGRP** | **Cima Grappa** | **1.52** | **177** | *e*Pg | | **Pb** | 17 00 08.4 | +0.1 |
| **MYKA** | **Terra Mystica** | **1.54** | **119** | *e*Sg | | **Sg** | 17 00 30.5 | +0.8 |
| | 4.4nm,0.3s,SNR=5.8 | | | | | | | |
| **MYKA** | **Terra Mystica** | **1.54** | **119** | Sg | | **Sg** | 17 00 30.5 | +0.8 |
| | 4.4nm,0.3s,SNR=5.8 | | | | | | | |
| **DDS** | **Dosso del Somm** | **1.55** | **193** | *e*Pg | | **Pn** | 17 00 08.6 | +0.8 |
| DDS | | | | *e*Sg | | **Sn** | 17 00 28.7 | +0.7 |
| **DDS** | **Dosso del Somm** | **1.55** | **193** | *e*Pg | | **Pn** | 17 00 08.6 | +0.8 |
| DDS | | | | *e*Sg | | **Sn** | 17 00 28.7 | +0.7 |
| **RNI** | **Roncone** | **1.58** | **207** | *e*Pg | | **Pb** | 17 00 09.2 | -0.3 |
| **RNI** | **Roncone** | **1.58** | **207** | *e*Pg | | **Pb** | 17 00 09.2 | -0.3 |
| **GRC1** | **Grafenberg Arr** | **1.61** | **356** | *e*Pg | | **Pg** | 17 00 10.8 | -0.2 |
| GRC1 | | | | *e*Sn | | **Sn** | 17 00 29.0 | -0.2 |
| GRC1 | | | | *e*Sg | | **Sg** | 17 00 32.3 | +0.4 |
| **GRC1** | **Grafenberg Arr** | **1.61** | **356** | Pg | | **Pg** | 17 00 10.8 | -0.2 |
| GRC1 | | | | Sn | | **Sn** | 17 00 29.0 | -0.2 |
| GRC1 | | | | Sg | | **Sg** | 17 00 32.3 | +0.4 |
| **PLONS** | **Plons/SG** | **1.61** | **258** | *e*Sg | | **Sg** | 17 00 32.8 | +0.9 |
| **PLONS** | **Plons/SG** | **1.61** | **258** | Sg | | **Sg** | 17 00 32.8 | +0.9 |
| **GRC4** | **Grafenberg Arr** | **1.70** | **356** | *e*Pg | | **Pg** | 17 00 12.5 | -0.2 |
| GRC4 | | | | *e*Sn | | **Sn** | 17 00 31.3 | -0.1 |
| GRC4 | | | | *e*Sg | | **Sg** | 17 00 35.0 | +0.2 |
| **GRC4** | **Grafenberg Arr** | **1.70** | **356** | Pg | | **Pg** | 17 00 12.5 | -0.2 |
| GRC4 | | | | Sn | | **Sn** | 17 00 31.3 | -0.1 |
| GRC4 | | | | Sg | | **Sg** | 17 00 35.0 | +0.2 |
| **GRB5** | **Grafenberg Arr** | **1.72** | **360** | *e*Pg | | **Pg** | 17 00 12.9 | -0.3 |
| GRB5 | | | | *e*Sg | | **Sg** | 17 00 35.6 | +0.2 |
| **GRB5** | **Grafenberg Arr** | **1.72** | **360** | Pg | | **Pg** | 17 00 12.9 | -0.3 |
| GRB5 | | | | Sg | | **Sg** | 17 00 35.6 | +0.2 |
| **MOA** | **Molln** | **1.80** | **74** | *e*Pn | | **Pb** | 17 00 13.6 | +0.5 |
| MOA | | | | *e*Sg | | **Sg** | 17 00 38.4 | +0.5 |
| **MOA** | **Molln** | **1.80** | **74** | Pn | | **Pb** | 17 00 13.6 | +0.5 |
| MOA | | | | Sg | | **Sg** | 17 00 38.4 | +0.5 |
| **GRB2** | **Grafenberg Arr** | **1.88** | **360** | *e*Sn | | **Sn** | 17 00 37.0 | +1.1 |
| GRB2 | | | | *e*Sg | | **Sg** | 17 00 40.6 | 0.0 |
| **GRB2** | **Grafenberg Arr** | **1.88** | **360** | Sn | | **Sn** | 17 00 37.0 | +1.1 |
| GRB2 | | | | Sg | | **Sg** | 17 00 40.6 | 0.0 |
| **WILA** | **Wila** | **1.89** | **272** | *e*Sg | | **Sg** | 17 00 40.9 | +0.1 |
| **WILA** | **Wila** | **1.89** | **272** | Sg | | **Sg** | 17 00 40.9 | +0.1 |
| **WET** | **Wettzell** | **1.92** | **24** | *e*Pn | | **Pn** | 17 00 13.2 | +0.4 |
| WET | | | | *e*Sn | | **Sn** | 17 00 36.8 | -0.2 |
| WET | | | | *e*Sg | | **Sg** | 17 00 41.6 | -0.4 |
| **WET** | **Wettzell** | **1.92** | **24** | Pn | | **Pn** | 17 00 13.2 | +0.4 |
| WET | | | | Sn | | **Sn** | 17 00 36.8 | -0.2 |
| WET | | | | Sg | | **Sg** | 17 00 41.6 | -0.4 |
| **GEC2** | **GERESS Array S** | **1.98** | **42** | *e*Pn | | **Pn** | 17 00 14.1 | +0.4 |
| GEC2 | | | | *e*Sn | | **Sn** | 17 00 39.4 | +0.9 |
| GEC2 | | | | *e*Sg | | **Sg** | 17 00 44.2 | +0.3 |
| **GEC2** | **GERESS Array S** | **1.98** | **42** | Pn | | **Pn** | 17 00 14.1 | +0.4 |
| GEC2 | | | | Sn | | **Sn** | 17 00 39.4 | +0.9 |
| GEC2 | | | | Sg | | **Sg** | 17 00 44.2 | +0.3 |
| **GRB4** | **Grafenberg Arr** | **2.08** | **358** | *e*Sn | | **Sn** | 17 00 40.4 | -0.4 |
| GRB4 | | | | *e*Sg | | **Sg** | 17 00 46.3 | -0.7 |
| **GRB4** | **Grafenberg Arr** | **2.08** | **358** | Sn | | **Sn** | 17 00 40.4 | -0.4 |
| GRB4 | | | | Sg | | **Sg** | 17 00 46.3 | -0.7 |
| **KHC** | **Kasperske Hory** | **2.15** | **35** | *e*PN | | **Pn** | 17 00 13.0 | -2.9 |
| KHC | | | | *e*PG | | **Pb** | 17 00 19.9 | +0.8 |
| KHC | | | | *e*SG | | **Sg** | 17 00 47.9 | -1.3 |
| | comp=Z,8.7nm,0.3s | | | | | | | |
| **GRA4** | **Grafenberg Arr** | **2.18** | **356** | *e*Pg | | **Pg** | 17 00 22.1 | +0.1 |
| GRA4 | | | | *e*Sn | | **Sn** | 17 00 42.7 | -0.5 |
| GRA4 | | | | *e*Sg | | **Sg** | 17 00 49.8 | -0.4 |
| **GRA4** | **Grafenberg Arr** | **2.18** | **356** | Pg | | **Pg** | 17 00 22.1 | +0.1 |
| GRA4 | | | | Sn | | **Sn** | 17 00 42.7 | -0.5 |
| GRA4 | | | | Sg | | **Sg** | 17 00 49.8 | -0.4 |
| **SLE** | **Schleitheim** | **2.19** | **281** | *e*Sg | | **Sg** | 17 00 50.4 | -0.3 |
| **SLE** | **Schleitheim** | **2.19** | **281** | Sg | | **Sg** | 17 00 50.4 | -0.3 |
| **GRA1** | **Grafenberg Arr** | **2.32** | **353** | Sg | | **Sg** | 17 00 54.4 | -0.3 |
| **GRF** | **Grafenberg Arr** | **2.32** | **353** | *e*Sg | | **Sg** | 17 00 54.4 | -0.3 |
| **ROTZ** | **Rotzenmuhle** | **2.40** | **8** | *e*Pg | | **Pg** | 17 00 26.6 | +0.5 |
| ROTZ | | | | *e*Sg | | **Sg** | 17 00 56.3 | -1.0 |
| **ROTZ** | **Rotzenmuhle** | **2.40** | **8** | Pg | | **Pg** | 17 00 26.6 | +0.5 |
| ROTZ | | | | Sg | | **Sg** | 17 00 56.3 | -1.0 |
| **MANZ** | **Manzenberg** | **2.61** | **6** | *e*Pg | | **Pg** | 17 00 30.9 | +0.8 |
| MANZ | | | | *e*Sn | | **Sn** | 17 00 52.9 | -1.0 |
| MANZ | | | | *e*Sg | | **Sg** | 17 01 03.6 | -0.4 |
| **MANZ** | **Manzenberg** | **2.61** | **6** | Pg | | **Pg** | 17 00 30.9 | +0.8 |
| MANZ | | | | Sn | | **Sn** | 17 00 52.9 | -1.0 |
| MANZ | | | | Sg | | **Sg** | 17 01 03.6 | -0.4 |
| **NKC** | **Novy Kostel** | **2.89** | **10** | *e*SG | | **Sg** | 17 01 11.7 | -1.1 |
| | comp=Z,8.7nm,0.4s | | | | | | | |
| **NKC** | **Novy Kostel** | **2.89** | **10** | Sg | | **Sg** | 17 01 11.7 | -1.1 |
| | 8.7nm,0.4s | | | | | | | |
| **WERN** | **Wernitzgruen** | **2.93** | **9** | *e*Pg | | **Pg** | 17 00 36.3 | 0.0 |
| **WERN** | **Wernitzgruen** | **2.93** | **9** | Pg | | **Pg** | 17 00 36.3 | 0.0 |
| **TANN** | **Tannenbergstha** | **3.07** | **9** | *e*Pg | | **Pg** | 17 00 38.7 | -0.2 |
| TANN | | | | *e*Sg | | **Sg** | 17 01 18.5 | -0.1 |
| **TANN** | **Tannenbergstha** | **3.07** | **9** | Pg | | **Pg** | 17 00 38.7 | -0.2 |
| TANN | | | | Sg | | **Sg** | 17 01 18.5 | -0.1 |
| **PRU** | **Pruhonice** | **3.21** | **35** | *e*SG | | **Sg** | 17 01 22.0 | -1.3 |
| | comp=Z,1.6nm,0.5s | | | | | | | |
| **PRU** | **Pruhonice** | **3.21** | **35** | Sg | | **Sg** | 17 01 22.0 | -1.3 |
| | 1.6nm,0.5s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **3.25** | **38** | *e*SG | | **Sg** | 17 01 23.1 | -1.5 |
| **GOPC** | **GO Pecny, Ondr** | **3.25** | **38** | Sg | | **Sg** | 17 01 23.1 | -1.5 |
| **MOX** | **Moxa** | **3.25** | **359** | *e*Pg | | **Pg** | 17 00 43.3 | +0.8 |
| MOX | | | | *e*Sn | | **Sn** | 17 01 08.6 | -1.2 |
| MOX | | | | *e*Sg | | **Sg** | 17 01 23.1 | -1.5 |
| **MOX** | **Moxa** | **3.25** | **359** | Pg | | **Pg** | 17 00 43.3 | +0.8 |
| MOX | | | | Sn | | **Sn** | 17 01 08.6 | -1.2 |
| MOX | | | | Sg | | **Sg** | 17 01 23.1 | -1.5 |
| **BRG** | **Berggiesshubel** | **3.79** | **22** | SG | | **Sg** | 17 01 39.9 | -1.7 |
| | 2.4nm,0.4s | | | | | | | |
| **CLL** | **Collm** | **4.01** | **12** | *e*Pn | | Pn | 17 00 46.0 | +4.6 |
| CLL | | | | *e*Sg | | **Sg** | 17 01 48.0 | -0.9 |
| **UPC** | **Upice** | **4.22** | **41** | *e*SG | | **Sg** | 17 01 52.6 | -3.1 |
| | comp=Z,3.0nm,0.4s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **4.26** | **44** | *e*SG | | **Sg** | 17 01 54.2 | -2.5 |
| | comp=Z,2.1nm,0.4s | | | | | | | |
| **MORC** | **Moravsky Berou** | **4.56** | **56** | *e*Sg | | **Sg** | 17 02 05.9 | -0.6 |

*AUST* **12** *17:03:04.5,4.°46S×134.°53E,h60km*
*ISCJB* **12** *17:03:08.5±2.3,4.°7S±0.°1×133.°9E±0.°2,h21km, Error ellipse: s-maj=34.9km s-min=9.3km az=160.2*
*DJA* **12** *17:03:09.9±1.2,5.°5S±5.°×13.°4E±1.°2,h10km,M4.3/6, mb4.7/4,MLv4.0/6*

**ISC 12 17:03:11.1±2.6,4.°63S±0.°10×133.°9E±0.°2,h21km,n8, σ0°57/9,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.33** | **317** | P | **Pn** | **17 03 48.8** | **+0.5** |
| | baz=2.7,SNR=12 | | | | | | |
| **FAKI** | **Fak Fak** | **2.33** | **317** | P | **Pn** | 17 03 48.7 | +0.4 |
| FAKI | | | | S | **Sn** | 17 04 15.8 | -0.5 |
| **BNDI** | **Bandanaira** | **3.93** | **271** | P | **Pn** | 17 04 10.9 | +0.6 |
| **SWI** | **Sorong** | **4.55** | **325** | P | **Pn** | 17 04 18.6 | -0.2 |
| **AAI** | **Ambon** | **5.72** | **279** | P | **Pn** | 17 04 35.5 | +0.6 |
| | baz=6.4,SNR=4.9 | | | | | | |
| **AAI** | **Ambon** | **5.72** | **279** | P | **Pn** | 17 04 34.6 | -0.2 |
| | 34nm,0.5s,0.1nm | | | | | | |
| **KDU** | **Kakadu** | **8.12** | **190** | P | **Pn** | 17 05 07.8 | -0.1 |
| | baz=8.5,SNR=8.0 | | | | | | |
| **MTN** | **Manton Dam** | **8.59** | **198** | P | **Pn** | 17 05 13.7 | -0.6 |
| | baz=9.0,SNR=38 | | | | | | |

**NNC 12 17:15:43.8±4.6,37.°19N×70.°43E,h0km,mb3.5,mpv3.1, 4C-3D,Error ellipse: s-maj=35.1km s-min=28.8km az=0.0,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.05** | **322** | ⇑Pn | Pg | 17 16 29.0 | +5.7 |
| | 4.0nm,0.4s | | | | | | |
| DZET | | | | ⇑Sn | Sg | 17 17 05.3 | +15 |
| | 11nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.71** | **40** | ⇓Pn | Pn | 17 16 41.6 | -1.1 |
| | 3.9nm,0.3s | | | | | | |
| SFK | | | | ⇓Sn | Sn | 17 17 29.1 | +1.8 |
| | 3.8nm,0.2s | | | | | | |
| **MNAS** | **Manas** | **5.53** | **16** | ⇑Pn | Pn | 17 17 08.4 | +0.9 |
| | 1.2nm,0.4s | | | | | | |
| MNAS | | | | ⇓Sn | Sn | 17 18 12.3 | +0.4 |
| | 2.2nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **5.91** | **1** | ⇑Pn | Pn | 17 17 13.1 | +0.5 |
| | 0.4nm,0.4s,baz=178,slow=12,SNR=7.3 | | | | | | |
| KK31 | | | | Sn | Sn | 17 18 21.5 | +0.5 |
| | 1.4nm,0.5s,baz=178,slow=20,SNR=8.1 | | | | | | |

*ISCJB* **12** *17:16:32.4±2.8,4.°7S±0.°1×134.°0E±0.°3,h21km,Error ellipse: s-maj=38.4km s-min=14.1km az=167.1*
*AUST* **12** *17:16:34.7,4.°63S×133.°98E,h20km*
*DJA* **12** *17:16:51.7±0.7,4.°5S±5.°×13.°3E±.°,h78km±29km,M4.0/11, mb4.0/3,MLv4.0/11*

**ISC 12 17:16:35.9±2.9,4.°6S±0.°1×133.°9E±0.°3,h21km,n12, σ1°43/11,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.34** | **316** | P | **Pn** | **17 17 13.3** | **0.0** |
| | baz=2.4,SNR=12 | | | | | | |
| **FAKI** | **Fak Fak** | **2.34** | **316** | P | **Pn** | **17 17 12.9** | **-0.3** |
| **BNDI** | **Bandanaira** | **3.97** | **271** | P | **Pn** | **17 17 37.9** | **+2.3** |
| **SAUI** | **Saumlaki** | **4.22** | **217** | P | Pb | 17 17 59.1 | +10 |
| **SWI** | **Sorong** | **4.55** | **325** | P | **Pn** | **17 17 45.2** | **+1.6** |
| | baz=4.6,SNR=6.4 | | | | | | |
| **SWI** | **Sorong** | **4.55** | **325** | P | **Pn** | 17 17 41.8 | -1.8 |
| **AAI** | **Ambon** | **5.75** | **279** | P | **Pn** | **17 17 59.9** | **-0.2** |
| | baz=5.8,SNR=4.7 | | | | | | |
| **AAI** | **Ambon** | **5.75** | **279** | P | **Pn** | **17 17 59.4** | **-0.7** |
| **NLAI** | **Namlea** | **6.91** | **281** | P | **Pn** | **17 18 17.0** | **+1.0** |
| | 25nm,0.7s,0.1nm | | | | | | |
| **LBMI** | **Labuha** | **7.50** | **302** | P | **Pn** | **17 18 24.0** | **-0.1** |
| | 20nm,1.7s,0.1nm | | | | | | |
| **SANI** | **Sanana** | **8.29** | **288** | P | **Pn** | **17 18 33.7** | **-1.2** |
| **MTN** | **Manton Dam** | **8.62** | **198** | P | **Pn** | **17 18 38.1** | **-1.4** |
| | baz=8.7,SNR=8.7 | | | | | | |

**NNC 12 17:18:15.8±4.5,38.°54N×72.°50E,h0km,mb3.6,mpv3.0, 3C-4D,Error ellipse: s-maj=45.4km s-min=13.1km az=148.0,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.67** | **28** | ⇑P | Pn | 17 18 45.7 | -0.9 |
| | 1.2nm,0.1s | | | | | | |
| SFK | | | | ⇑S | Sg | 17 19 09.9 | -0.1 |
| | 18nm,0.3s | | | | | | |
| **DZET** | **Dzherino** | **2.88** | **276** | ⇑Pn | Pn | 17 19 02.7 | -0.5 |
| | 0.4nm,0.1s | | | | | | |
| DZET | | | | ⇓Sn | Sn | 17 19 40.3 | +1.6 |
| | 6.1nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **3.94** | **0** | ⇓Pn | Pn | 17 19 16.3 | -1.5 |
| | 1.2nm,0.4s | | | | | | |
| MNAS | | | | ⇓Sn | Sn | 17 20 04.1 | -0.7 |
| | 1.3nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **4.80** | **342** | Pn | Pn | 17 19 29.2 | -0.1 |
| | 3.5nm,0.6s,baz=151,slow=12,SNR=26 | | | | | | |
| KK31 | | | | ⇓Sn | Sn | 17 20 25.7 | -0.1 |
| | 1.3nm,0.4s,baz=153,slow=25,SNR=8.6 | | | | | | |

*IDC* **12** *17:19:47.2±1.9,13.°18N×120.°14E,h0km,mb3.5/3, mb1 3.7/3,mb1mx3.3/42,mbtmp3.5/3,Error ellipse: s-maj=386.7km s-min=26.3km az=71.0*
*ISCJB* **12** *17:19:50.5±0.9,13.°21N±0.°05×120.°1E±0.°1,h31km, mb3.5/3,Error ellipse: s-maj=17.4km s-min=6.2km az=13.3*
*MAN* **12** *17:19:51,13.°20N×120.°17E,h17km,mb4.5,ML3.4,MS3.3*

**ISC 12 17:19:50.4±1.0,13.°19N±0.°05×120.°10E±0.°10,h31km,n9, σ1°62/12,mb3.5/3,1D,Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LUBP** | **Lubang** | **0.56** | **15** | *e*P | **Pn** | **17 20 02.0** | **-0.3** |
| LUBP | | | | *e*S | **Sb** | 17 20 08.3 | -1.4 |
| **BUSP** | **Coron** | **1.18** | **175** | *e*P | **Pb** | **17 20 12.8** | **+0.5** |
| BUSP | | | | *e*S | **Sn** | 17 20 22.5 | -3.3 |
| **TGY** | **Tagaytay City** | **1.22** | **42** | *i*P | **Pb** | **17 20 12.3** | **-0.6** |
| TGY | | | | *i*S | **Sb** | 17 20 28.8 | +0.4 |
| **SJMP** | **San Jose** | **1.23** | **126** | *e*P | **Pb** | **17 20 11.9** | **-1.1** |
| **ENPP** | **El Nido** | **2.08** | **199** | *e*P | **Pb** | **17 20 25.9** | **-1.5** |
| **CUYO** | **Cuyo Island** | **2.49** | **159** | *e*P | **Pn** | **17 20 29.9** | **+1.1** |
| **WRA** | **Warramunga Arr** | **35.78** | **157** | P | **P** | **17 26 47.5** | **+0.5** |
| | 0.3nm,0.4s,baz=335,slow=9.8,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **36.38** | **344** | P | **P** | **17 26 53.4** | **+1.4** |
| | 0.7nm,0.8s,baz=151,slow=9.2,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **39.04** | **160** | P | **P** | **17 27 16.1** | **+1.5** |
| | 0.4nm,0.6s,baz=337,slow=6.9,SNR=9.7 | | | | | | |

*ISCJB* **12** *17:20:24.1±0.5,50.°09N±0.°04×18.°36E±0.°03,h0km,Error ellipse: s-maj=5.3km s-min=2.8km az=8.0*
*IPEC* **12** *17:20:24.9±0.2,50.°07N×18.°44E,h0km,2km,ML1.9/3, Error ellipse: s-maj=2.0km s-min=1.1km az=160.0*
*CSEM* **12** *17:20:25.1±0.2,50.°07N×18.°40E,h1km,ML2.8/8,Error ellipse: s-maj=5.3km s-min=2.6km az=7.0*
*PRU* **12** *17:20:26.8,50.°04N×18.°33E,h0km*

**ISC 12 17:20:25.3±0.9,50.°06N±0.°04×18.°40E±0.°02,h0km,n29, σ0°93/46,Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAC** | **Raciborz** | **0.13** | **279** | *e*Pg | **Pg** | **17 20 28.9** | **+1.1** |
| RAC | | | | *e*Sg | **Sg** | 17 20 31.9 | +2.4 |
| **OKC** | **Ostrava-Krasne** | **0.28** | **215** | *e*PG | **Pg** | 17 20 31.3 | +0.7 |
| OKC | | | | *e*SG | **Sg** | **17 20 35.3** | **+1.1** |
| | comp=Z,55nm,0.6s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.28** | **215** | Pg | **Pg** | 17 20 31.3 | +0.7 |
| OKC | | | | Sg | **Sg** | 17 20 35.3 | +1.1 |
| | 55nm,0.6s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.62** | **243** | *e*Pg | **Pg** | 17 20 37.3 | +0.1 |
| MORC | | | | *e*Sg | **Sg** | 17 20 45.2 | 0.0 |
| | 16nm,0.2s,baz=63 | | | | | | |
| **OJC** | **Ojcow** | **0.92** | **80** | *e*Pg | **Pg** | 17 20 42.1 | -0.7 |
| OJC | | | | *e*Sg | **Sg** | 17 20 55.4 | +0.7 |
| **OJC** | **Ojcow** | **0.92** | **80** | *e*Pg | **Pg** | 17 20 42.1 | -0.7 |
| OJC | | | | *e*Sg | **Sg** | 17 20 54.7 | 0.0 |
| **KRLC** | **Kraliky** | **1.04** | **271** | *e*PG | **Pg** | 17 20 44.8 | -0.4 |
| KRLC | | | | *e*SG | **Sg** | 17 20 58.5 | -0.2 |
| **KRLC** | **Kraliky** | **1.04** | **271** | Pg | **Pg** | 17 20 44.8 | -0.4 |
| KRLC | | | | Sg | **Sg** | 17 20 58.5 | -0.2 |
| **LANS** | **Liptovska Anna** | **1.15** | **142** | *e*PG | **Pg** | 17 20 47.4 | +0.1 |
| **LANS** | **Liptovska Anna** | **1.15** | **142** | *e*Pg | **Pg** | 17 20 47.4 | +0.1 |
| **DPC** | **Dobruska-Polom** | **1.36** | **283** | *e*PG | **Pg** | 17 20 50.7 | -0.7 |
| DPC | | | | *e*SG | **Sg** | 17 21 09.5 | +0.4 |
| | comp=Z,31nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.36** | **283** | Pg | **Pg** | 17 20 50.7 | -0.7 |
| DPC | | | | Sg | **Sg** | 17 21 09.5 | +0.4 |
| | 31nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **1.39** | **238** | *e*Pg | **Pn** | 17 20 51.2 | -0.8 |
| VRAC | | | | *e*Sg | **Sg** | 17 21 09.3 | -0.7 |
| | 24nm,0.4s,baz=57 | | | | | | |
| **NIE** | **Niedzica** | **1.39** | **117** | *e*Pg | **Pn** | 17 20 52.0 | 0.0 |
| NIE | | | | *e*Sg | **Sn** | 17 21 11.9 | +0.7 |
| **NIE** | **Niedzica** | **1.39** | **117** | *e*Pg | **Pn** | 17 20 52.0 | 0.0 |
| NIE | | | | *e*Sg | **Sn** | 17 21 11.9 | +0.7 |
| **UPC** | **Upice** | **1.59** | **287** | *e*SG | **Sn** | 17 21 16.0 | 0.0 |
| | comp=Z,8.5nm,0.6s | | | | | | |
| **UPC** | **Upice** | **1.59** | **287** | Sg | **Sn** | **17 21 16.0** | **0.0** |
| | 8.5nm,0.6s | | | | | | |
| **VYHS** | **Vyhne** | **1.60** | **169** | *e*PN | **Pn** | 17 20 54.5 | -0.3 |
| VYHS | | | | *e*SN | **Sn** | 17 21 13.8 | -2.3 |
| **VYHS** | **Vyhne** | **1.60** | **169** | *e*Pn | **Pn** | 17 20 54.5 | -0.3 |
| VYHS | | | | *e*Sn | **Sn** | 17 21 13.8 | -2.3 |
| **KRUC** | **Moravsky** | **1.64** | **233** | *e*Pn | **Pn** | 17 20 55.3 | -0.1 |
| | baz=52 | | | | | | |
| KRUC | | | | *e*Sg | **Sn** | 17 21 17.2 | -0.1 |
| | 9.4nm,0.2s,baz=52 | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.96** | **108** | *e*PN | **Pg** | 17 21 02.7 | -0.1 |
| STHS | | | | *e*SN | **Sg** | 17 21 29.8 | +1.6 |
| **STHS** | **Stebnicka Huta** | **1.96** | **108** | *e*Pn | **Pg** | 17 21 02.7 | -0.1 |
| **PRU** | **Pruhonice** | **2.49** | **270** | *e*SG | **Sb** | 17 21 43.1 | +1.1 |
| | comp=Z,1.7nm,0.5s | | | | | | |
| **PRU** | **Pruhonice** | **2.49** | **270** | Sg | **Sb** | **17 21 43.1** | **+1.1** |
| | 1.7nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **2.50** | **282** | *e*SG | **Sg** | **17 21 45.5** | **0.0** |
| | comp=Z,15nm,0.6s | | | | | | |
| **PVCC** | **Panska Ves** | **2.50** | **282** | Sg | **Sg** | **17 21 45.5** | **0.0** |
| | 15nm,0.6s | | | | | | |
| **BRG** | **Berggiesshubel** | **2.96** | **288** | SG | **Sg** | **17 22 00.6** | **+0.3** |
| | 3.3nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.27** | **255** | *e*SG | **Sg** | **17 22 08.8** | **-1.5** |
| | comp=Z,5.8nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.27** | **255** | Sg | **Sg** | **17 22 08.8** | **-1.5** |
| | 5.8nm,0.4s | | | | | | |

*IDC* **12** *17:37:01.9±1.2,29.°64N×69.°65E,h0km,mb3.6/7, mb1 3.8/10,mb1mx3.5/49,mbtmp3.6/10,ML3.6/3,MS3.3/3, Ms1 3.3/3,ms1mx2.6/44,Error ellipse: s-maj=33.3km s-min=19.7km az=57.0*
*ISCJB* **12** *17:37:02.7±0.8,29.°83N±0.°05×69.°65E±0.°10,h12km, mb3.5/7,MS3.2/3,Error ellipse: s-maj=12.4km s-min=7.1km az=166.4*
*NNC* **12** *17:37:12.3±4.9,30.°33N×70.°55E,h0km,mb4.0,mpv3.9, Error ellipse: s-maj=67.8km s-min=37.0km az=73.0*

**ISC 12 17:37:04.0±0.9,29.°76N±0.°08×69.°83E±0.°07,h12km,n21, σ1°81/25,mb3.6/7,MS3.2/3,6C-2D,Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHET** | **Khetri** | **5.50** | **106** | *e*P | **Pb** | **17 38 39.7** | **-0.4** |
| KHET | | | | *e*S | Sg | 17 40 12.4 | +12 |
| KHET | | | | AML | AML | 17 40 15.8 | |
| | comp=N,19nm,0.3s | | | | | | |
| KHET | | | | AML | AML | 17 40 18.9 | |
| | comp=E,20nm,0.4s | | | | | | |
| **KUDL** | **Kundal** | **6.06** | **104** | *e*P | Pn | 17 38 39.0 | +5.6 |
| KUDL | | | | *e*S | **Sg** | **17 40 17.3** | **-1.2** |
| KUDL | | | | AML | AML | 17 40 30.8 | |
| | comp=E,14nm,0.8s | | | | | | |
| KUDL | | | | AML | AML | 17 40 32.6 | |
| | comp=N,18nm,0.5s | | | | | | |
| **KKR** | **Kurukshetra** | **6.08** | **86** | *e*S | **Sn** | **17 39 39.7** | **-3.5** |
| **NDI** | **New Delhi** | **6.55** | **98** | *e*P | **Pn** | **17 38 41.0** | **+0.8** |
| NDI | | | | *e*S | **Sg** | **17 40 35.0** | **+0.8** |
| **DZET** | **Dzherino** | **9.06** | **355** | ⇑Pn | Pn | 17 39 18.1 | +3.4 |
| | comp=N,1.1nm,0.2s | | | | | | |
| DZET | | | | ⇑Sn | **Sn** | **17 40 56.4** | **-0.3** |
| | comp=N,7.9nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **10.66** | **15** | ⇓Pn | **Pn** | **17 39 39.4** | **+2.6** |
| | comp=N,1.1nm,0.3s | | | | | | |
| SFK | | | | ⇑Sn | **Sn** | **17 41 40.2** | **+4.1** |
| | comp=N,2.3nm,0.5s | | | | | | |
| **GEYT** | **Alibeck** | **12.68** | **313** | Pn | **Pn** | **17 40 03.6** | **-0.6** |
| | comp=N,0.2nm,0.3s,baz=132,slow=16,SNR=2.5 | | | | | | |
| **MNAS** | **Manas** | **12.88** | **9** | ⇑P | **Pn** | **17 40 05.7** | **-1.3** |
| | comp=N,1.7nm,0.7s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **17 42 25.9** | **-4.4** |
| | comp=N,2.7nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **13.32** | **2** | P | **Pn** | **17 40 13.6** | **+0.6** |
| | comp=N,0.6nm,0.4s,baz=180,slow=13,SNR=12 | | | | | | |
| KK31 | | | | S | **Sn** | **17 42 39.7** | **-1.3** |
| | comp=N,0.3nm,0.3s,baz=178,slow=21,SNR=5.3 | | | | | | |
| **AAK** | **Ala-Archa** | **13.38** | **15** | ⇓P | **Pn** | **17 40 13.5** | **-0.4** |
| | comp=N,1.0nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **17 42 43.7** | **+1.1** |
| | comp=N,4.0nm,1.2s | | | | | | |
| **AAK** | **Ala-Archa** | **13.38** | **15** | Pn | **Pn** | **17 40 15.1** | **+1.2** |
| | comp=N,0.5nm,0.3s,baz=180,slow=5.0,SNR=5.8 | | | | | | |
| AAK | | | | Sn | **Sn** | **17 42 41.4** | **-1.2** |
| | comp=N,0.2nm,0.3s,baz=315,slow=20,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **19.57** | **26** | P | **Pn** | **17 41 34.3** | **+1.2** |
| | comp=N,0.1nm,0.3s,baz=216,slow=12,SNR=4.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **21.84** | **15** | P | **P** | **17 41 57.7** | **+1.5** |
| | comp=N,2.7nm,0.9s,baz=208,slow=9.6,SNR=9.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **23.25** | **1** | P | **P** | **17 42 11.6** | **+0.5** |
| | comp=N,0.8nm,0.6s,baz=165,slow=7.4,SNR=5.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.78** | **106** | P | **P** | **17 43 02.9** | **+1.0** |
| | comp=N,0.8nm,0.7s,baz=297,slow=9.9,SNR=6.7 | | | | | | |
| CMAR | | | | LR | LR | 17 57 28.4 | |
| | comp=N,18nm,18.4s,baz=177,slow=42 | | | | | | |
| **BRTR** | **Keskin Array B** | **31.17** | **298** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BLCB | | | | *e*SG | **Sg** | **17 49 31.2** | **+0.4** |
| **BLCB** | **Balcova** | **0.58** | **325** | *e*Pg | **Pb** | **17 49 24.0** | **-0.3** |
| BLCB | | | | *e*Sg | **Sg** | **17 49 31.2** | **+0.4** |
| **URLA** | **Izmir** | **0.82** | **304** | *i* P | **Pb** | **17 49 28.4** | **0.0** |
| URLA | | | | *i* S | **Sb** | **17 49 39.5** | **-0.2** |
| **URLA** | **Izmir** | **0.82** | **304** | P | **Pb** | **17 49 28.4** | **0.0** |
| URLA | | | | S | **Sb** | **17 49 39.5** | **-0.2** |
| **ZEY** | **¨zmir** | **0.83** | **294** | P | **Pn** | **17 49 29.2** | **-0.6** |
| ZEY | | | | S | **Sb** | **17 49 39.5** | **-0.3** |
| **BDRM** | **Kayabasi** | **0.84** | **181** | *i* P | **Pg** | **17 49 27.8** | **-0.2** |
| BDRM | | | | *i* S | **Sb** | **17 49 39.7** | **-0.4** |
| **BDRM** | **Kayabasi** | **0.84** | **181** | P | **Pg** | **17 49 27.8** | **-0.2** |
| BDRM | | | | S | **Sb** | **17 49 39.7** | **-0.4** |
| **BODT** | **Bodrum** | **0.85** | **189** | *e*PG | **Pb** | **17 49 29.4** | **+0.6** |
| **BODT** | **Bodrum** | **0.85** | **189** | *e*Pg | **Pb** | **17 49 29.5** | **+0.6** |
| **YER** | **Yerkesik** | **1.01** | **140** | *e*PG | **Pb** | **17 49 31.5** | **0.0** |
| **YER** | **Yerkesik** | **1.01** | **140** | *e*Pg | **Pb** | **17 49 31.5** | **0.0** |
| **AKS** | **Akhisar** | **1.01** | **15** | *e*PG | **Pb** | **17 49 31.5** | **0.0** |
| **AKS** | **Akhisar** | **1.01** | **15** | *e*Pg | **Pb** | **17 49 31.5** | **0.0** |
| **MANT** | **Manisa** | **1.04** | **55** | *i* P | **Pn** | **17 49 33.2** | **+0.3** |
| MANT | | | | *i* S | **Sg** | **17 49 44.5** | **-0.8** |
| **MANT** | **Manisa** | **1.04** | **55** | P | **Pn** | **17 49 33.2** | **+0.3** |
| MANT | | | | S | **Sg** | **17 49 44.5** | **-0.8** |
| **KULA** | **Kula-Manisa** | **1.12** | **57** | *e*PN | **Pg** | **17 49 32.9** | **-0.4** |
| **KULA** | **Kula-Manisa** | **1.12** | **57** | *e*Pn | **Pg** | **17 49 32.9** | **-0.4** |
| **CHOS** | **Chios island** | **1.21** | **294** | *e*PN | **Pg** | **17 49 36.2** | **+1.1** |
| **CHOS** | **Chios island** | **1.21** | **294** | *e*Pn | **Pg** | **17 49 36.2** | **+1.1** |
| **DALY** | **Dalyan (Mu¨la** | **1.44** | **139** | *e*PN | **Pn** | **17 49 38.5** | **+0.4** |
| **DALY** | **Dalyan (Mu¨la** | **1.44** | **139** | *e*Pn | **Pn** | **17 49 38.5** | **+0.4** |

*DJA* ***12*** *18:05:26.9±0.9, 4°N±11′×12°7E±′, h265km±8km, M4.4/9, mb4.3/8, mB4.8/6, MLv4.7/9, Mw(mB)4.1/6*

*IDC* ***12*** *18:05:35.2±0.9, 2°34N×125°84E, h0km, mb3.9/7, mb1 4.1/7, mb1mx3.7/37, mbtmp3.9/7, Error ellipse: s-maj=60.3km s-min=18.1km az=75.0*

*ISCJB* ***12*** *18:05:40.9±0.5, 2°74N±0°06×126°39E±0°08, h55km, mb4.0/11, Error ellipse: s-maj=11.9km s-min=8.0km az=166.4*

*NEIC* ***12*** *18:05:40.5±0.8, 2°64N×126°30E, h35km, mb4.1/4, Error ellipse: s-maj=27.4km s-min=12.4km az=69.0*

**ISC 12 18:05:42.8±0.8, 2°6N±0°1×126°29E±0°09, h55km, n30, σ1§35/25, mb4.0/11, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **1.31** | **325** | P | | Pn | 18 06 08.6 | +3.7 |
| **TNTI** | **Ternate** | **2.12** | **149** | *e*Pn | | **Pn** | **18 06 16.3** | **+0.5** |
| **LBMI** | **Labuha** | **3.44** | **159** | P | | **Pn** | **18 06 36.5** | **+2.6** |
| **MRSI** | **Marisa** | **4.83** | **244** | P | | **Pn** | **18 06 54.9** | **+1.9** |
| | 70nm,0.8s,0.3nm | | | | | | | |
| **LUWI** | **Luwuk** | **5.04** | **224** | *e*Pn | | **Pn** | **18 06 54.6** | **-1.4** |
| | 33nm,0.6s | | | | | | | |
| **APSI** | **Ampana** | **5.80** | **233** | P | | Pn | 18 07 10.5 | +4.2 |
| | 48nm,1.0s,603nm0.4nm | | | | | | | |
| **MPSI** | **Mapaga** | **6.77** | **251** | P | | Pn | 18 07 23.1 | +3.5 |
| | 14nm,0.8s,447nm0.1nm | | | | | | | |
| **TTSI** | **Tana Toraja** | **8.56** | **229** | P | | **Pn** | **18 07 47.1** | **+3.0** |
| | 25nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.76** | **161** | P | | **P** | **18 10 48.4** | **-2.0** |
| | 4.8nm,0.7s,baz=338,slow=11,SNR=14 | | | | | | | |
| **ASAR** | **Alice Springs** | **27.14** | **165** | P | | **P** | **18 11 19.5** | **-1.6** |
| | 1.7nm,0.6s,baz=348,slow=12,SNR=13 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **34.70** | **2** | P | | P | 18 12 30.8 | +3.4 |
| **KSRS** | **Korea Array** | **34.72** | **2** | P | | P | 18 12 30.8 | +3.3 |
| | 2.0nm,0.8s,baz=185,slow=12,SNR=7.8 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.52** | **17** | P | | **P** | **18 12 36.0** | **+1.5** |
| | 0.5nm,0.5s,baz=199,slow=10,SNR=4.3 | | | | | | | |
| **LSA** | **Lhasa** | **42.86** | **313** | *e*P | | **P** | **18 13 36.8** | **+0.4** |
| | 1.9nm,0.6s | | | | | | | |
| **TAPN** | **Taplejung** | **44.34** | **307** | *e*P | | **P** | **18 13 47.4** | **-0.7** |
| **ODAN** | **Odare** | **44.37** | **307** | *e*P | | **P** | **18 13 47.9** | **-0.5** |
| **RAMN** | **Ramite** | **45.05** | **306** | *e*P | | **P** | **18 13 53.0** | **-0.7** |
| **GUN** | **Gumba** | **46.04** | **307** | *e*P | | **P** | **18 14 01.6** | **-0.1** |
| | 18nm,0.8s | | | | | | | |
| **PKIN** | **Phulchoki** | **46.28** | **306** | *e*P | | **P** | **18 14 03.2** | **-0.3** |
| **KKN** | **Kakani** | **46.46** | **307** | *e*P | | **P** | **18 14 03.7** | **-1.2** |
| **DMN** | **Daman** | **46.53** | **306** | *e*P | | **P** | **18 14 04.8** | **-0.6** |
| **GKN** | **Gorkha** | **47.07** | **307** | *e*P | | **P** | **18 14 08.9** | **-0.7** |
| **KOLN** | **Koldanda** | **47.81** | **306** | *e*P | | **P** | **18 14 14.9** | **-0.5** |
| | 15nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **48.22** | **342** | P | | **P** | **18 14 18.4** | **+0.3** |
| | 0.8nm,0.7s,baz=152,slow=8.2,SNR=5.1 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **18 15 45.4** | **+0.8** |
| | 0.3nm,0.6s,baz=127,slow=3.5,SNR=2.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.23** | **326** | P | | **P** | **18 15 31.6** | **0.0** |
| | 1.0nm,0.4s,baz=120,slow=7.4,SNR=13 | | | | | | | |
| **EKS2** | **Erkin-Say** | **61.38** | **318** | *e*P | | **P** | **18 15 54.4** | **+0.9** |
| | 1.4nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.39** | **334** | P | | **P** | **18 15 51.8** | **-1.3** |
| | 0.3nm,0.3s,baz=134,slow=6.2,SNR=2.2 | | | | | | | |
| **KURK** | **Kurchatov** | **62.45** | **328** | *e*P | | **P** | **18 15 59.5** | **-0.8** |
| | 4.6nm,0.6s | | | | | | | |
| **ABKAR** | **Akbulak array** | **72.74** | **321** | *e*P | | **P** | **18 17 03.6** | **-1.6** |
| | 1.0nm,0.8s | | | | | | | |
| **ARU** | **Arti** | **75.65** | **328** | P | | P | 18 17 18.4 | -3.6 |

*ISCJB* ***12*** *18:06:43.7±0.6, 5°21S±0°05×132°71E±0°10, h33km, mb4.0/3, MS3.4/1, Error ellipse: s-maj=13.9km s-min=6.4km az=172.1*

*IDC* ***12*** *18:06:43.3±3.6, 5°24S×133°75E, h0km, mb3.9/2, mb1 4.1/4, mb1mx3.6/31, mbtmp3.9/4, ML3.6/2, MS3.1/3, Ms1 3.1/3, ms1mx2.6/31, Error ellipse: s-maj=213.4km s-min=32.2km az=79.0*

*AUST* ***12*** *18:06:44.7, 4°83S×133°38E, h20km*

*NEIC* ***12*** *18:06:46.9±0.9, 5°43S×133°10E, h10km, mb4.3/1, Error ellipse: s-maj=26.9km s-min=14.0km az=81.0*

**ISC 12 18:06:44.8±1.0, 5°28S±0°07×132°6E±0°1, h35km, n20, σ1§92/13, mb4.0/3, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.37** | **351** | P | | **Pn** | **18 07 20.6** | **-0.6** |
| | baz=2.2,SNR=8.6 | | | | | | | |
| **FAKI** | **Fak Fak** | **2.37** | **351** | P | | Pn | 18 07 27.6 | +6.4 |
| | 83nm,0.6s,1µm0.3nm | | | | | | | |
| **FAKI** | **Fak Fak** | **2.37** | **351** | *e*Pn | | **Pn** | **18 07 20.4** | **-0.8** |
| **SIJI** | **Sorong** | **4.58** | **343** | Pn | | **Pn** | **18 07 52.1** | **+0.5** |
| | 2.0nm,0.3s,baz=180,slow=23,SNR=15 | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **18 08 41.8** | **-1.9** |
| | 2.4nm,0.3s,baz=255,slow=23,SNR=7.8 | | | | | | | |
| SIJI | | | | LR | | LR | 18 10 13.6 | |
| | comp=Z,151nm,20.2s,baz=71,slow=42 | | | | | | | |
| **SWI** | **Sorong** | **4.58** | **343** | P | | **Pn** | **18 07 53.0** | **+1.3** |
| | baz=4.5,SNR=4.1 | | | | | | | |
| **SMPI** | **Sarmi** | **6.91** | **62** | P | | **Pn** | **18 08 22.1** | **-1.6** |
| | 33nm,0.8s,3µm | | | | | | | |
| **KDU** | **Kakadu** | **7.37** | **181** | P | | Pn | 18 08 37.5 | +7.6 |
| | baz=7.9,SNR=18 | | | | | | | |
| **MTN** | **Manton Dam** | **7.66** | **191** | P | | Pn | 18 08 43.7 | +10 |
| | baz=8.3,SNR=17 | | | | | | | |
| **GENI** | **Genyem** | **8.00** | **71** | P | | **Pn** | **18 08 39.0** | **+0.4** |
| **KAPI** | **Kappang** | **12.81** | **271** | LR | | LR | 18 16 55.1 | |
| | comp=Z,57nm,18.5s,baz=102,slow=44 | | | | | | | |
| **WRAB** | **Tennant Creek** | **14.67** | **174** | *e*Pn | | **Pn** | **18 10 10.2** | **+0.2** |
| | 5.2nm,0.8s | | | | | | | |
| WRAB | | | | *e*Sn | | Sn | 18 12 39.5 | -12 |
| **WRA** | **Warramunga Arr** | **14.68** | **174** | Pn | | **Pn** | **18 10 10.8** | **+0.8** |
| | 0.2nm,0.3s,baz=356,slow=13,SNR=11 | | | | | | | |
| WRA | | | | | | **Sn** | **18 12 49.0** | **-2.6** |
| | 0.2nm,0.3s,baz=354,slow=23,SNR=6.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.33** | **176** | Pn | | **Pn** | **18 10 59.8** | **+3.4** |
| | 0.2nm,0.3s,baz=12,slow=14,SNR=20 | | | | | | | |
| ASAR | | | | Sn | | **Sn** | **18 14 18.3** | **-1.9** |
| | 0.1nm,0.3s,baz=3.4,slow=27,SNR=4.9 | | | | | | | |
| **MBWA** | **Marble Bar** | **20.14** | **217** | P | | Pn | 18 11 25.5 | +7.5 |
| **HNR** | **Honiara** | **27.42** | **100** | P | | **P** | **18 12 29.9** | **+2.4** |
| **MKAR** | **Makanchi Array** | **68.25** | **325** | P | | P | 18 17 49.8 | +7.7 |
| | 1.1nm,0.7s,baz=123,slow=9.0,SNR=5.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.23** | **332** | P | | P | 18 18 07.3 | +7.0 |
| | 0.7nm,0.7s,baz=123,slow=5.3,SNR=3.8 | | | | | | | |
| **SBA** | **Scott Base** | **74.70** | **173** | P | | P | 18 18 25.7 | +5.3 |
| **BRVK** | **Borovoye** | **78.09** | **327** | *e*P | | P | 18 18 48.0 | +7.9 |
| | 3.0nm,1.0s | | | | | | | |
| **DLBC** | **Dease Lake** | **98.33** | **32** | LR | | LR | 18 57 58.5 | |
| | comp=Z,12nm,20.7s,baz=120,slow=32 | | | | | | | |

*ISCJB* ***12*** *18:13:48.3±0.6, 49°50N±0°06×155°97E±0°08, h54km, mb3.9/18, MS3.5/1, Error ellipse: s-maj=10.5km s-min=4.0km az=136.0*

*KRSC* ***12*** *18:13:49.6±2.9, 49°50N×156°79E, h84km±29km, ML4.6*

*MOS* ***12*** *18:13:49.7±1.2, 49°56N×156°03E, h71km, mb4.2/10, Error ellipse: s-maj=14.2km s-min=5.4km az=77.8*

*IDC* ***12*** *18:13:53.7±3.9, 49°57N×156°02E, h89km±30km, mb3.5/15, mb1 3.6/17, mb1mx3.5/48, mbtmp3.8/17, MS2.7/1, Ms1 2.7/1, ms1mx2.2/33, Error ellipse: s-maj=28.6km s-min=17.6km az=177.0*

**ISC 12 18:13:49.0±0.7, 49°45N±0°06×156°18E±0°06, h54km, n78, σ1§80/90, mb3.8/18, 1C, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.23** | **358** | *e*P | | **Pn** | **18 14 12.1** | **+2.2** |
| SKR | | | | *e*S | | **Sn** | **18 14 27.1** | **+1.6** |
| **SKR** | **Severo-Kuril's** | **1.23** | **358** | *i* PN | | Pn | 18 14 07.3 | -2.6 |
| SKR | | | | *i* S | | **Sn** | **18 14 22.1** | **-3.4** |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,250nm,0.5s | | | | | | | |
| SKR | | | | | pmax | pmax | | |
| | comp=N,180nm,0.3s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=N,5µm,0.3s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=E,3µm,0.3s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=N,3µm,4.0s | | | | | | | |
| SKR | | | | | smax | smax | | |
| | comp=E,3µm,4.0s | | | | | | | |
| **PAU** | **Pauzhetka** | **2.06** | **11** | *i* P | | **Pn** | **18 14 23.3** | **+2.2** |
| PAU | | | | *i* S | | **Sn** | **18 14 46.6** | **+1.0** |
| **PAU** | **Pauzhetka** | **2.06** | **11** | PN | | **Pn** | **18 14 23.3** | **+2.2** |
| PAU | | | | S | | **Sn** | **18 14 46.6** | **+1.0** |
| **ASAK** | **Asacha** | **3.13** | **20** | *e*P | | **Pn** | **18 14 38.5** | **+2.6** |
| **MTVR** | **Mutnovka** | **3.29** | **22** | *i* P | | **Pn** | **18 14 40.1** | **+2.0** |
| MTVR | | | | *i* S | | **Sn** | **18 15 15.2** | **-0.8** |
| **RUS** | **Russkaya** | **3.33** | **25** | *i* P | | **Pn** | **18 14 39.4** | **+0.9** |
| RUS | | | | *e*S | | **Sn** | **18 15 14.4** | **-2.4** |
| **RUS** | **Russkaya** | **3.33** | **25** | PN | | **Pn** | **18 14 39.4** | **+0.9** |
| RUS | | | | S | | **Sn** | **18 15 14.4** | **-2.4** |
| **APC** | **Apacha** | **3.53** | **10** | *e*P | | **Pn** | **18 14 43.9** | **+2.6** |
| **APC** | **Apacha** | **3.53** | **10** | PN | | **Pn** | **18 14 43.9** | **+2.6** |
| **PETK** | **Petropavlovsk-** | **3.78** | **14** | P | | **Pn** | **18 14 47.6** | **+2.8** |
| | comp=E,10nm,0.3s,baz=178,slow=13,SNR=181 | | | | | | | |
| PETK | | | | S | | **Sn** | **18 15 32.7** | **+4.7** |
| | comp=E,1.8nm,0.3s,baz=185,slow=19,SNR=2.4 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.78** | **14** | PN | | **Pn** | **18 14 47.6** | **+2.8** |
| PETK | | | | S | | **Sn** | **18 15 32.7** | **+4.7** |
| PETK | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.3s | | | | | | | |
| PETK | | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | | |
| **PET** | **Petropavlovsk** | **3.90** | **23** | *e*P | | **Pn** | **18 14 48.2** | **+1.9** |
| PET | | | | *e*S | | **Sn** | **18 15 30.8** | **0.0** |
| **PET** | **Petropavlovsk** | **3.90** | **23** | *e*PN | | **Pn** | **18 14 47.8** | **+1.5** |
| PET | | | | *e*S | | **Sn** | **18 15 31.6** | **+0.8** |
| PET | | | | | pmax | pmax | | |
| | comp=Z,27nm,0.5s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=E,245nm,0.6s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=N,183nm,0.5s | | | | | | | |
| **UGLR** | **Uglovaya** | **4.11** | **23** | *i* P | | **Pn** | **18 14 51.7** | **+2.3** |
| **AVH** | **Avacha** | **4.14** | **22** | *e*P | | **Pn** | **18 14 52.6** | **+2.9** |
| AVH | | | | *e*S | | **Sn** | **18 15 37.9** | **+1.0** |
| **AVH** | **Avacha** | **4.14** | **22** | PN | | **Pn** | **18 14 52.6** | **+2.9** |
| AVH | | | | S | | **Sn** | **18 15 37.9** | **+1.0** |
| **KOK** | **Koryaka** | **4.14** | **21** | *e*P | | **Pn** | **18 14 52.7** | **+2.9** |
| **KOK** | **Koryaka** | **4.14** | **21** | PN | | **Pn** | **18 14 52.7** | **+2.9** |
| **SMAR** | **Somma** | **4.15** | **22** | *e*P | | **Pn** | **18 14 52.1** | **+2.0** |
| **SMAR** | **Somma** | **4.15** | **22** | PN | | **Pn** | **18 14 52.1** | **+2.0** |
| **SDLR** | **Sedlovina** | **4.19** | **23** | *i* P | | **Pn** | **18 14 52.1** | **+1.7** |
| SDLR | | | | *e*S | | **Sn** | **18 15 36.7** | **-1.4** |
| **SDLR** | **Sedlovina** | **4.19** | **23** | PN | | **Pn** | **18 14 52.1** | **+1.7** |
| SDLR | | | | S | | **Sn** | **18 15 36.7** | **-1.4** |
| **KRX** | **Arik** | **4.21** | **21** | *e*P | | **Pn** | **18 14 53.4** | **+2.7** |
| KRX | | | | *e*S | | **Sn** | **18 15 39.7** | **+1.1** |
| **SPN** | **Mys Shipunski** | **4.38** | **32** | *e*P | | **Pn** | **18 14 54.1** | **+1.2** |
| SPN | | | | *e*S | | **Sn** | **18 15 40.4** | **-2.1** |
| **SPN** | **Mys Shipunski** | **4.38** | **32** | PN | | **Pn** | **18 14 54.1** | **+1.2** |
| SPN | | | | S | | **Sn** | **18 15 40.4** | **-2.1** |
| **GNL** | **Ganaly** | **4.39** | **14** | *e*P | | **Pn** | **18 14 56.3** | **+3.1** |
| **GNL** | **Ganaly** | **4.39** | **14** | PN | | **Pn** | **18 14 56.3** | **+3.1** |
| **MKZ** | **Mys Kozlova** | **6.15** | **32** | *e*P | | **Pn** | **18 15 16.8** | **-0.4** |
| MKZ | | | | *e*S | | Sn | 18 16 20.4 | -5.7 |
| **MKZ** | **Mys Kozlova** | **6.15** | **32** | PN | | **Pn** | **18 15 16.8** | **-0.4** |
| **KZV** | **Kízimen** | **6.20** | **22** | *e*P | | **Pn** | **18 15 18.9** | **+0.8** |
| **TUMR** | **Tumrok** | **6.32** | **21** | *e*P | | **Pn** | **18 15 22.8** | **+3.1** |
| **TUMR** | **Tumrok** | **6.32** | **21** | PN | | **Pn** | **18 15 22.8** | **+3.1** |
| **KUR** | **Kuril'sk** | **7.05** | **236** | *e*PN | | Pn | 18 15 39.3 | +10 |
| KUR | | | | *e*S | | Sn | 18 16 54.8 | +6.6 |
| KUR | | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.0s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.5s | | | | | | | |
| **KBTR** | **Krutoberegovo** | **7.87** | **28** | *e*P | | **Pn** | **18 15 41.0** | **+0.3** |
| KBTR | | | | *e*S | | Sn | 18 17 02.4 | -5.8 |
| **KBTR** | **Krutoberegovo** | **7.87** | **28** | PN | | **Pn** | **18 15 41.0** | **+0.3** |
| **BKI** | **Bering** | **8.31** | **42** | *e*P | | **Pn** | **18 15 46.3** | **-0.4** |
| BKI | | | | *e*S | | Sn | 18 17 09.0 | -10 |
| **BKI** | **Bering** | **8.31** | **42** | PN | | **Pn** | **18 15 46.3** | **-0.4** |
| **SHO** | **Shikotan** | **8.51** | **233** | *e*PN | | Pn | 18 15 53.9 | +4.3 |
| **UGL** | **Uglegorsk** | **9.24** | **273** | *e*PN | | **Pn** | **18 15 59.0** | **-0.5** |
| **ASAJ** | **Asahikawa** | **10.73** | **245** | P | | Pn | 18 16 29.1 | +9.2 |
| | baz=357,slow=17 | | | | | | | |
| **HABR** | **Khabarovsk** | **13.91** | **274** | *e*P | | **Pn** | **18 17 02.3** | **-0.9** |
| HABR | | | | *e*S | | **Sn** | **18 19 34.0** | **-2.0** |
| HABR | | | | | pmax | pmax | | |
| | comp=E,22nm,2.0s | | | | | | | |
| HABR | | | | | pmax | pmax | | |
| | comp=Z,26nm,2.0s | | | | | | | |
| HABR | | | | | pmax | pmax | | |
| | comp=N,5.0nm,1.0s | | | | | | | |
| **BILL** | **Bilibino** | **19.31** | **11** | P | | **Pn** | **18 18 11.2** | **+0.4** |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **YAK** | **Yakutsk** | **19.34** | **321** | P | | **P** | **18 18 09.0** | **-0.6** |
| | comp=Z,0.0nm,0.3s,baz=129,slow=4.3,SNR=2.1 | | | | | | | |
| YAK | | | | | LR | LR | 18 26 08.1 | |
| | comp=Z,21nm,19.2s,baz=246,slow=38 | | | | | | | |
| **YAK** | **Yakutsk** | **19.34** | **321** | *e*P | | **P** | **18 18 09.4** | **-0.2** |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.3s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.87** | **160** | T | | T | 18 53 04.1 | |
| | baz=347,slow=74,SNR=9.2 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.89** | **160** | T | | T | 18 53 07.9 | |
| | baz=347,slow=74,SNR=12 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.89** | **160** | T | | T | 18 53 08.7 | |
| | baz=347,slow=74,SNR=29 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **32.01** | **161** | T | | T | 18 54 23.7 | |
| | baz=347,slow=76,SNR=190 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **32.02** | **161** | T | | T | 18 54 24.7 | |
| | baz=347,slow=76,SNR=222 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **32.03** | **161** | T | | T | 18 54 25.1 | |
| | baz=347,slow=76,SNR=129 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **32.21** | **272** | *e*P | | **P** | **18 20 10.6** | **-1.4** |
| HHC | | | | sP | | sP | 18 20 38.7 | +6.7 |
| HHC | | | | PP | | **PnPn** | **18 21 18.1** | **-1.4** |
| HHC | | | | S | | S | 18 25 14.9 | -6.3 |
| HHC | | | | sS | | **sS** | **18 25 44.5** | **+0.1** |
| HHC | | | | SS | | **SnSn** | **18 27 14.6** | **-1.5** |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,22nm,0.6s | | | | | | | |
| HHC | | | | | pmax | pmax | | |
| | comp=Z,73nm,4.2s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=N,92nm,12.3s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=E,110nm,11.1s | | | | | | | |
| HHC | | | | | LR | LR | | |
| | comp=Z,30nm,12.3s | | | | | | | |
| **SONM** | **Songino Array** | **32.46** | **287** | P | | **P** | **18 20 14.8** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=90,slow=7.6,SNR=2.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **33.15** | **41** | P | | **P** | **18 20 19.5** | **-0.3** |
| | comp=Z,0.4nm,0.8s,baz=259,slow=7.3,SNR=3.5 | | | | | | | |
| **KRAR** | **Krasnoyarsk** | **37.67** | **305** | *e*P | | **P** | **18 20 59.1** | **+0.5** |
| KRAR | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.74** | **304** | P | | **P** | **18 21 40.0** | **-0.5** |
| | comp=Z,1.9nm,0.3s,baz=56,slow=6.3,SNR=10 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.74** | **304** | *e*P | | **P** | **18 21 40.5** | **-0.1** |
| ZALV | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **47.55** | **297** | P | | **P** | **18 22 18.4** | **-0.4** |
| | comp=Z,0.8nm,0.7s,baz=45,slow=5.3,SNR=7.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.55** | **297** | P | | **P** | **18 22 18.5** | **-0.4** |
| MKAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **50.74** | **309** | P | | **P** | **18 22 43.0** | **-0.1** |
| | comp=Z,0.6nm,0.3s,baz=56,slow=9.1,SNR=8.2 | | | | | | | |
| **BVAR** | **Borovoye Array** | **50.74** | **309** | P | | **P** | **18 22 43.0** | **-0.1** |
| BVAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **55.96** | **341** | P | | **P** | **18 23 20.7** | **-0.5** |
| | comp=Z,3.4nm,0.8s,baz=37,slow=9.2,SNR=2.6 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **55.96** | **341** | P | | **P** | **18 23 20.7** | **-0.5** |
| ARCES | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **59.40** | **65** | P | | **P** | **18 23 47.0** | **+1.0** |
| | comp=Z,0.5nm,0.6s,baz=289,slow=9.4,SNR=4.1 | | | | | | | |
| **FINES** | **FINESS Array B** | **62.45** | **336** | P | | **P** | **18 24 04.8** | **-1.2** |
| | comp=Z,2.3nm,0.8s,baz=32,slow=8.2,SNR=4.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **62.45** | **336** | P | | **P** | **18 24 04.8** | **-1.2** |
| FINES | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **NOA** | **NORSAR Array B** | **66.31** | **342** | P | | **P** | **18 24 31.3** | **0.0** |
| | comp=Z,0.6nm,0.7s,baz=32,slow=6.5,SNR=2.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **66.31** | **342** | P | | **P** | **18 24 31.3** | **0.0** |
| NOA | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **GEYT** | **Alibeck** | **66.96** | **302** | P | | **P** | **18 24 35.7** | **-0.1** |
| | comp=Z,0.8nm,0.5s,baz=122,slow=1.9,SNR=2.7 | | | | | | | |
| **KIV** | **Kislovodsk** | **70.36** | **315** | P | | **P** | **18 24 56.5** | **-0.5** |
| KIV | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.41** | **327** | P | | **P** | **18 24 56.8** | **-0.3** |
| | comp=Z,0.6nm,0.5s,baz=28,slow=6.0,SNR=1.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.41** | **327** | P | | **P** | **18 24 56.8** | **-0.3** |
| AKASG | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **71.76** | **202** | P | | **P** | **18 25 06.9** | **+1.4** |
| | comp=Z,0.3nm,0.9s,baz=14,slow=6.1,SNR=2.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **74.40** | **63** | P | | **P** | **18 25 22.9** | **+1.6** |
| | comp=Z,0.5nm,0.5s,baz=290,slow=3.7,SNR=6.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **74.40** | **63** | P | | **P** | **18 25 22.9** | **+1.6** |
| TXAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **GERES** | **GERESS Array B** | **76.88** | **336** | P | | **P** | **18 25 35.7** | **+0.5** |
| | comp=Z,0.2nm,0.5s,baz=31,slow=6.3,SNR=2.3 | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.78** | **318** | P | | **P** | **18 25 41.5** | **+1.1** |
| | comp=Z,0.5nm,0.5s,baz=130,slow=1.9,SNR=4.0 | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.78** | **318** | *e*P | | **P** | **18 25 41.4** | **+1.0** |
| BRTR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |

**MEX 12 18:18:47.1±0.4, 15°33N×93°22W, h94km±6km, MD3.7, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.37** | **0** | *e*P | | Pn | 18 19 00.2 | -1.2 |
| PCIG | | | | *e*S | | Sn | 18 19 10.1 | -1.8 |
| **CCIG** | **Comitan** | **1.41** | **48** | *e*P | | Pn | 18 19 10.9 | -1.3 |
| CCIG | | | | *i* S | | Sn | 18 19 29.4 | -1.7 |

**IDC 12 18:41:21.5±6.3, 5°29S×134°27E, h0km, mb3.4/1, mb1 3.3/3, mb1mx3.1/33, mbtmp3.1/3, ML3.0/2, Error ellipse: s-maj=337.8km s-min=35.1km az=79.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **14.56** | **180** | P | | Pn | 18 44 50.7 | +1.6 |
| | 0.1nm,0.3s,baz=357,slow=13,SNR=2.2 | | | | | | | |
| WRA | | | | | | Sn | 18 47 23.9 | -7.5 |
| | 0.1nm,0.3s,baz=354,slow=23,SNR=2.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.27** | **181** | P | | Pn | 18 45 35.6 | -1.2 |
| | 0.0nm,0.3s,baz=9.9,slow=11,SNR=2.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.21** | **325** | P | | P | 18 52 30.3 | +0.1 |
| | 0.2nm,0.5s,baz=126,slow=6.6,SNR=1.5 | | | | | | | |

*GUC* ***12*** *18:48:15.5±0.5, 38°40S×74°70W, h6km±5km, ML4.9*

*ISCJB* ***12*** *18:48:24.4±0.6, 38°11S±0°04×74°0W±0°1, h18km, mb4.4/12, MS3.7/5, Error ellipse: s-maj=12.5km s-min=5.5km az=5.5*

*IDC* ***12*** *18:48:24.2±0.8, 38°24S×73°68W, h0km, mb4.3/9, mb1 4.4/11

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=E,106nm,25.0s | | | | | | | |
| **PPT** | **Papeete** | **68.19** | **264** | LR | LR | 19 23 07.4 | | |
| | comp=E,56nm,18.9s,baz=60,slow=30 | | | | | | | |
| **TXAR** | **Lajitas Array** | **72.69** | **333** | P | **P** | **18 59 54.1** | **+1.3** | |
| | comp=E,0.7nm,0.3s,baz=147,slow=7.0,SNR=7.9 | | | | | | | |
| **CCM** | **Cathedral Cave** | **77.52** | **346** | P | P | 19 00 17.1 | -3.3 | |
| | comp=E,8.6nm,1.1s | | | | | | | |
| **DBIC** | **Dimbokro** | **77.99** | **72** | P | **P** | **19 00 24.1** | **+0.5** | |
| | comp=E,13nm,1.1s,baz=187,slow=10,SNR=5.4 | | | | | | | |
| DBIC | | | | LR | LR | 19 33 17.0 | | |
| | comp=E,31nm,18.5s,baz=228,slow=35 | | | | | | | |
| **BOSA** | **Boshof** | **79.50** | **118** | P | **P** | **19 00 32.1** | **+0.2** | |
| | comp=E,6.6nm,0.9s,baz=233,slow=3.8,SNR=6.7 | | | | | | | |
| BOSA | | | | LR | LR | 19 30 59.6 | | |
| | comp=E,41nm,20.5s,baz=203,slow=32 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **87.08** | **71** | P | **P** | **19 01 11.0** | **+0.1** | |
| | comp=E,1.9nm,0.9s,baz=221,slow=5.7,SNR=9.7 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **24.08** | **267** | T | T | 21 23 34.1 | | |
| | baz=126 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **24.10** | **267** | T | T | 21 23 35.6 | | |
| | baz=126 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **24.10** | **267** | T | T | 21 23 35.6 | | |
| | baz=126 | | | | | | | |
| **BRTR** | **Keskin Array B** | **125.15** | **64** | PKP | **PKPdf** | **19 07 25.5** | **+0.1** | |
| | comp=E,1.1nm,1.0s,baz=151,slow=2.8,SNR=4.5 | | | | | | | |
| **GEYT** | **Alibeck** | **142.61** | **75** | PKHKP | PKPpre | 19 07 54.1 | | |
| | comp=E,1.0nm,0.6s,baz=251,slow=4.0,SNR=3.1 | | | | | | | |
| **ARU** | **Arti** | **143.88** | **44** | *e*PKPpre | PKPpre | 19 07 57.6 | | |
| **ABKAR** | **Akbulak array** | **145.40** | **56** | *e*PKP | **PKPab** | **19 08 02.7** | **+0.3** | |
| **ZALV** | **Zalesovo Beam** | **158.56** | **36** | PKP | **PKPdf** | **19 08 21.8** | **+0.1** | |
| | comp=E,0.4nm,0.5s,baz=292,slow=3.9,SNR=3.9 | | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **19 08 57.7** | **+0.9** | |
| | comp=E,2.4nm,0.9s,baz=288,slow=5.8,SNR=7.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **160.55** | **56** | PKPab | **PKPab** | **19 09 06.3** | **+0.5** | |
| | comp=E,1.9nm,0.8s,baz=289,slow=4.0,SNR=8.1 | | | | | | | |
| **SONM** | **Songino Array** | **170.35** | **359** | PKPab | **PKPab** | **19 09 50.8** | **+1.9** | |
| | comp=E,0.3nm,0.5s,baz=345,slow=5.1,SNR=5.0 | | | | | | | |

*ISCJB **12** 19:13:31.5±0.4, 66°.10N±0°.05×174°.8W±0°.1, h10km, mb3.9/17, MS3.2/7, Error ellipse: s-maj=8.7km s-min=4.6km az=32.0*
*IDC **12** 19:13:32.7±1.0, 66°.12N×174°.98W, h0km, mb3.8/13, mb1 4.0/14, mb1mx3.9/32, mbtmp3.8/14, ML3.2/1, MS3.2/7, Ms1 3.2/7, ms1mx2.8/55, Error ellipse: s-maj=29.3km s-min=20.4km az=3.0*
*NEIC **12** 19:13:33.6±0.5, 66°.10N×174°.95W, h10km, mb4.3/4, Error ellipse: s-maj=15.2km s-min=7.2km az=195.0*

**ISC 12 19:13:33.7±0.5, 66°.14N±0°.07×175°.02W±0°.05, h10km, n33, σ1§70/36, mb4.1/17, MS3.1/7, Near north coast of eastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GAMB** | **Gambell** | **2.77** | **148** | *e*Pn | **Pn** | **19 14 16.7** | **-1.3** |
| GAMB | | | | *e*Pg | **Pb** | **19 14 23.6** | **+0.4** |
| GAMB | | | | *e*Sg | **Sg** | **19 15 01.2** | **-1.3** |
| **TNA** | **Tin City** | **2.98** | **98** | *e*Pn | **Pn** | **19 14 18.6** | **-2.3** |
| TNA | | | | *e*Pg | **Pb** | **19 14 27.2** | **+0.4** |
| TNA | | | | *e*Sn | **Sn** | **19 14 55.0** | **-1.6** |
| TNA | | | | *e*Sg | **Sb** | **19 15 04.7** | **+1.6** |
| **BILL** | **Bilibino** | **7.53** | **293** | Pn | Pn | 19 15 18.3 | -5.2 |
| BILL | | | | *e*Sn | Sn | 19 16 37.6 | -11 |
| BILL | | | | *e*Sg | **Sg** | **19 17 30.0** | **-5.2** |
| **COLD** | **Coldfoot** | **9.87** | **72** | *e*Pn | **Pn** | **19 15 55.3** | **-0.2** |
| | 3.3nm,0.8s | | | | | | |
| **MCK** | **McKinley** | **11.28** | **90** | *e*Pn | Pn | 19 16 05.4 | -9.4 |
| **COLA** | **College** | **11.31** | **84** | Pn | **Pn** | **19 16 15.7** | **+0.6** |
| **ILAR** | **Eielson Array** | **11.73** | **84** | Pn | **Pn** | **19 16 19.9** | **-1.0** |
| | 0.3nm,0.3s,baz=286,slow=14,SNR=16 | | | | | | |
| ILAR | | | | | Sn | **Sn** | **19 18 27.6** | **-4.1** |
| | 0.1nm,0.3s,baz=282,slow=17,SNR=4.6 | | | | | | |
| **SML** | **Sawmill** | **12.44** | **98** | Pn | **Pn** | **19 16 30.8** | **+0.2** |
| **INK** | **Inuvik** | **15.99** | **63** | Pn | **Pn** | **19 17 17.4** | **-0.9** |
| | 0.1nm,0.3s,baz=254,slow=7.4,SNR=2.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **40.01** | **246** | P | **P** | **19 21 09.1** | **+0.7** |
| | 1.6nm,0.7s,baz=22,slow=7.1,SNR=4.6 | | | | | | |
| MJAR | | | | | LR | LR | 19 38 54.9 | |
| | comp=Z,14nm,19.7s,baz=60,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **42.20** | **102** | P | **P** | **19 21 26.6** | **-0.1** |
| | 0.1nm,0.3s,baz=311,slow=7.0,SNR=2.5 | | | | | | |
| **SONM** | **Songino Array** | **43.17** | **285** | P | **P** | **19 21 36.4** | **+2.1** |
| | 1.1nm,1.0s,baz=31,slow=9.6,SNR=4.4 | | | | | | |
| SONM | | | | | LR | LR | 19 40 38.8 | |
| | comp=Z,26nm,20.3s,baz=22,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.02** | **306** | P | **P** | **19 21 57.0** | **+0.3** |
| | 1.1nm,0.6s,baz=34,slow=7.5,SNR=6.7 | | | | | | |
| **KURK** | **Kurchatov** | **50.77** | **308** | *e*P | **P** | **19 22 33.0** | **-0.5** |
| | 12nm,1.1s | | | | | | |
| **BRVK** | **Borovoye** | **51.26** | **315** | P | **P** | **19 22 35.8** | **-1.2** |
| | 2.6nm,0.9s | | | | | | |
| **ARU** | **Arti** | **51.28** | **325** | *e*P | **P** | **19 22 34.9** | **-2.3** |
| | 3.3nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **51.77** | **347** | P | **P** | **19 22 43.3** | **+2.6** |
| | 2.7nm,0.9s,baz=27,slow=6.5,SNR=1.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.96** | **303** | P | **P** | **19 22 49.2** | **-0.6** |
| | 0.5nm,0.6s,baz=54,slow=7.3,SNR=2.9 | | | | | | |
| MKAR | | | | | LR | LR | 19 47 56.3 | |
| | comp=Z,18nm,18.8s,baz=353,slow=39 | | | | | | |
| **NB2** | **NORSAR Subarra** | **53.04** | **356** | P | **P** | **19 22 49.9** | **-0.4** |
| | comp=Z,2.6nm,0.8s,baz=360,slow=7.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **53.04** | **356** | P | **P** | **19 22 50.1** | **-0.1** |
| | comp=Z,2.1nm,0.8s,baz=0.0,slow=7.5,SNR=3.4 | | | | | | |
| NOA | | | | | LR | LR | 19 43 45.5 | |
| | comp=Z,10nm,21.1s,baz=270,slow=34 | | | | | | |
| **HFS** | **Hagfors** | **53.87** | **355** | LR | LR | 19 47 14.2 | | |
| | comp=Z,32nm,18.3s,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.03** | **94** | P | **P** | **19 23 12.9** | **+0.5** |
| | comp=Z,0.1nm,0.4s,baz=3.5,slow=5.9,SNR=2.9 | | | | | | |
| **ABKAR** | **Akbulak array** | **57.51** | **321** | *e*P | **P** | **19 23 21.8** | **-0.8** |
| | comp=Z,2.8nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **58.62** | **306** | *e*P | **P** | **19 23 31.6** | **+0.9** |
| **AAK** | **Ala-Archa** | **59.24** | **306** | *e*P | **P** | **19 23 34.3** | **-0.7** |
| **EKS2** | **Erkin-Say** | **59.45** | **307** | *e*P | **P** | **19 23 36.3** | **0.0** |
| **AKASG** | **Malin Array Be** | **62.02** | **343** | P | **P** | **19 23 52.9** | **-0.6** |
| | comp=Z,2.1nm,0.6s,baz=14,slow=6.5,SNR=7.7 | | | | | | |
| **MORC** | **Moravsky Berou** | **64.01** | **351** | P | **P** | **19 24 08.9** | **+2.0** |
| **GERES** | **GERESS Array B** | **65.15** | **354** | P | **P** | **19 24 16.9** | **+2.5** |
| | comp=Z,0.5nm,0.7s,baz=7.6,slow=8.1,SNR=3.1 | | | | | | |
| GERES | | | | | LR | LR | 19 53 46.0 | |
| | comp=Z,33nm,19.2s,baz=324,slow=37 | | | | | | |
| **GEYT** | **Alibeck** | **68.51** | **317** | P | **P** | **19 24 37.6** | **+1.7** |
| | comp=Z,2.0nm,0.8s,baz=22,slow=4.8,SNR=5.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **71.69** | **274** | P | **P** | **19 24 56.0** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=9.8,slow=6.3,SNR=6.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **72.16** | **337** | P | **P** | **19 24 58.3** | **0.0** |
| | comp=Z,1.2nm,0.7s,baz=44,slow=1.9,SNR=7.4 | | | | | | |
| **LEM** | **Lembang** | **91.12** | **256** | LR | LR | 20 11 19.6 | | |
| | comp=Z,25nm,18.3s,baz=201,slow=38 | | | | | | | |

*TIF **12** 19:46:14.6, 42°.47N×46°.10E, h9km±1km*
*CSEM **12** 19:46:15.5±0.2, 42°.42N×46°.19E, h2km, mb3.9, Error ellipse: s-maj=4.4km s-min=2.5km az=177.0*
*MOS **12** 19:46:15.2±1.2, 42°.45N×46°.26E, h13km, mb3.9/1, Error ellipse: s-maj=8.0km s-min=7.0km az=17.3*

**ISC 12 19:46:15.6±1.0, 42°.44N±0°.02×46°.20E±0°.02, h10km±9km, n49, σ0§77/93, 2C-2D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **XNZR** | **Khunzakh** | **0.39** | **75** | *i* Pg | **Pg** | **19 46 23.0** | **-0.3** |
| XNZR | | | | *e*S | **Sg** | **19 46 29.0** | **+0.5** |
| XNZR | | | | pmax | pmax | | |
| | comp=Z,54nm,0.1s | | | | | | |
| **XNZR** | **Khunzakh** | **0.39** | **75** | *i* Pg | **Pg** | **19 46 23.0** | **-0.3** |
| | comp=Z,54nm,0.1s | | | | | | |
| XNZR | | | | *e*Sg | **Sg** | **19 46 29.0** | **+0.5** |
| **UNCR** | **Uncukul** | **0.52** | **58** | *i* Pg | **Pg** | **19 46 25.2** | **-0.5** |
| UNCR | | | | *i* S | **Sb** | **19 46 33.8** | **-0.6** |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,33nm,0.2s | | | | | | |
| **UNCR** | **Uncukul** | **0.52** | **58** | *i* Pg | **Pg** | **19 46 25.2** | **-0.5** |
| | comp=Z,33nm,0.2s | | | | | | |
| UNCR | | | | *i* Sg | **Sb** | **19 46 33.8** | **-0.6** |
| **GNBR** | **Gunib** | **0.57** | **95** | *i* PG | **Pg** | **19 46 26.7** | **0.0** |
| GNBR | | | | *i* S | **Sg** | **19 46 34.2** | **0.0** |
| GNBR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.1s | | | | | | |
| **GNBR** | **Gunib** | **0.57** | **95** | *i* Pg | **Pg** | **19 46 26.7** | **0.0** |
| | comp=Z,10.0nm,0.1s | | | | | | |
| GNBR | | | | *i* Sg | **Sg** | **19 46 34.2** | **0.0** |
| **ARKR** | **Arakani** | **0.61** | **75** | *e*PG | **Pg** | **19 46 27.1** | **-0.3** |
| ARKR | | | | *e*S | **Sg** | **19 46 35.9** | **+0.4** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARKR** | **Arakani** | **0.61** | **75** | *e*Pg | **Pg** | **19 46 27.1** | **-0.3** |
| ARKR | | | | *e*Sg | **Sg** | **19 46 35.9** | **+0.4** |
| **KRNR** | **Karanay** | **0.65** | **54** | *e*PG | **Pg** | **19 46 27.5** | **-0.7** |
| KRNR | | | | *i* S | **Sg** | **19 46 37.2** | **+0.5** |
| KRNR | | | | pmax | pmax | | |
| | comp=Z,58nm,0.2s | | | | | | |
| **KRNR** | **Karanay** | **0.65** | **54** | *e*Pg | **Pg** | **19 46 27.5** | **-0.7** |
| | comp=Z,58nm,0.2s | | | | | | |
| KRNR | | | | *i* Sg | **Sg** | **19 46 37.2** | **+0.5** |
| **DLMR** | **Dylym** | **0.70** | **27** | *e*PG | **Pg** | **19 46 29.5** | **+0.3** |
| DLMR | | | | *e*S | **Sb** | **19 46 40.0** | **+0.3** |
| **DLMR** | **Dylym** | **0.70** | **27** | *e*Pg | **Pg** | **19 46 29.5** | **+0.3** |
| DLMR | | | | *e*Sg | **Sb** | **19 46 40.0** | **+0.3** |
| **KMKR** | **Kumukh** | **0.74** | **115** | *e*PG | **Pg** | **19 46 30.0** | **+0.1** |
| KMKR | | | | *i* S | **Sb** | **19 46 41.0** | **+0.1** |
| **KMKR** | **Kumukh** | **0.74** | **115** | *e*Pg | **Pg** | **19 46 30.0** | **+0.1** |
| KMKR | | | | *i* Sg | **Sb** | **19 46 41.0** | **+0.1** |
| **DBC** | **Dubki** | **0.74** | **39** | *i* PG | **Pg** | **19 46 30.0** | **+0.1** |
| DBC | | | | *i* S | **Sb** | **19 46 40.8** | **0.0** |
| DBC | | | | pmax | pmax | | |
| | comp=Z,26nm,0.2s | | | | | | |
| **DBC** | **Dubki** | **0.74** | **39** | *i* Pg | **Pg** | **19 46 30.0** | **+0.1** |
| | comp=Z,26nm,0.2s | | | | | | |
| DBC | | | | *i* Sg | **Sb** | **19 46 40.8** | **0.0** |
| **BUJR** | **Buynaksk** | **0.77** | **60** | *e*PG | **Pb** | **19 46 31.2** | **+0.1** |
| BUJR | | | | *e*S | **Sn** | **19 46 43.2** | **-1.1** |
| **BUJR** | **Buynaksk** | **0.77** | **60** | *e*Pg | **Pb** | **19 46 31.2** | **+0.1** |
| BUJR | | | | *e*Sg | **Sn** | **19 46 43.2** | **-1.1** |
| **GROC** | **Groznyy** | **0.81** | **339** | *e*PG | **Pg** | **19 46 30.9** | **-0.4** |
| GROC | | | | *e*S | **Sn** | **19 46 44.6** | **-0.7** |
| **GROC** | **Groznyy** | **0.81** | **339** | *e*Pg | **Pg** | **19 46 30.9** | **-0.4** |
| GROC | | | | *e*Sg | **Sn** | **19 46 44.6** | **-0.7** |
| **KMGR** | **Komgaron** | **1.16** | **302** | *i* PG | **Pb** | **19 46 36.8** | **-0.9** |
| KMGR | | | | *e*S | **Sn** | **19 46 54.2** | **+0.4** |
| **KMGR** | **Komgaron** | **1.16** | **302** | *i* Pg | **Pb** | **19 46 36.8** | **-0.9** |
| KMGR | | | | *e*Sg | **Sn** | **19 46 54.2** | **+0.4** |
| **DUS** | **Dusheti** | **1.17** | **253** | P | **Pb** | **19 46 36.1** | **-1.8** |
| DUS | | | | S | **Sb** | **19 46 52.6** | **-0.4** |
| **DUS** | **Dusheti** | **1.17** | **253** | *e*PG | **Pb** | **19 46 36.0** | **-1.8** |
| DUS | | | | *e*S | **Sb** | **19 46 52.6** | **-0.4** |
| **DUS** | **Dusheti** | **1.17** | **253** | P | **Pb** | **19 46 36.1** | **-1.8** |
| DUS | | | | S | **Sb** | **19 46 52.6** | **-0.4** |
| **DGRG** | **David-gareji** | **1.17** | **212** | P | **Pb** | **19 46 38.0** | **+0.1** |
| DGRG | | | | S | **Sn** | **19 46 55.2** | **+1.2** |
| **DGRG** | **David-gareji** | **1.17** | **212** | *e*PG | **Pb** | **19 46 37.9** | **+0.1** |
| DGRG | | | | *e*S | **Sn** | **19 46 55.2** | **+1.2** |
| **DGRG** | **David-gareji** | **1.17** | **212** | P | **Pb** | **19 46 38.0** | **+0.1** |
| DGRG | | | | S | **Sn** | **19 46 55.2** | **+1.2** |
| **SEAG** | **Tbilisi Sea** | **1.24** | **237** | P | **Sb** | **19 46 53.3** | **-1.8** |
| **VLKR** | **Vladikavkaz** | **1.27** | **299** | *e*PG | **Pn** | **19 46 39.0** | **-0.5** |
| VLKR | | | | *e*S | **Sn** | **19 46 57.9** | **+1.3** |
| **VLKR** | **Vladikavkaz** | **1.27** | **299** | *e*Pg | **Pn** | **19 46 39.0** | **-0.5** |
| VLKR | | | | *e*Sg | **Sn** | **19 46 57.9** | **+1.3** |
| **TBLG** | **Delisi** | **1.30** | **237** | P | **Sb** | **19 46 55.7** | **-1.2** |
| **LACR** | **Lac** | **1.45** | **286** | *i* PG | **Pn** | **19 46 40.9** | **-1.1** |
| LACR | | | | *e*S | **Sb** | **19 47 01.7** | **+0.3** |
| **LACR** | **Lac** | **1.45** | **286** | *e*Sg | **Sb** | **19 47 01.7** | **+0.3** |
| **BTKR** | **Batakoyurt** | **1.53** | **308** | *e*PG | **Pg** | **19 46 44.9** | **0.0** |
| BTKR | | | | *e*S | **Sg** | **19 47 07.0** | **+2.2** |
| **BTKR** | **Batakoyurt** | **1.53** | **308** | *e*Pg | **Pg** | **19 46 44.9** | **0.0** |
| BTKR | | | | *e*Sg | **Sg** | **19 47 07.0** | **+2.2** |
| **TRKR** | **Terskaya** | **1.67** | **320** | *e*PN | **Pg** | **19 46 45.5** | **+0.6** |
| TRKR | | | | *e*S | **Sg** | **19 47 09.8** | **+0.5** |
| **TRKR** | **Terskaya** | **1.67** | **320** | *e*Pn | **Pn** | **19 46 45.5** | **+0.6** |
| TRKR | | | | *e*Sg | **Sg** | **19 47 09.8** | **+0.5** |
| **KORR** | **Kora** | **1.69** | **293** | *e*PN | **Pb** | **19 46 46.6** | **-0.3** |
| KORR | | | | *e*S | **Sg** | **19 47 10.7** | **+0.6** |
| **KORR** | **Kora** | **1.69** | **293** | *e*Pn | **Pb** | **19 46 46.6** | **-0.3** |
| KORR | | | | *e*Sg | **Sg** | **19 47 10.7** | **+0.6** |
| **STDR** | **Stavd-Durt** | **1.82** | **301** | *e*PN | **Pg** | **19 46 50.1** | **-0.4** |
| STDR | | | | *e*S | **Sg** | **19 47 15.3** | **+1.2** |
| **STDR** | **Stavd-Durt** | **1.82** | **301** | *e*Pn | **Pg** | **19 46 50.1** | **-0.4** |
| STDR | | | | *e*Sg | **Sg** | **19 47 15.3** | **+1.2** |
| **LSNR** | **Lesken** | **1.93** | **296** | *e*PN | **Pb** | **19 46 50.3** | **-0.6** |
| LSNR | | | | *e*S | **Sg** | **19 47 17.1** | **-0.6** |
| **LSNR** | **Lesken** | **1.93** | **296** | *e*Pn | **Pb** | **19 46 50.3** | **-0.6** |
| LSNR | | | | *e*Sg | **Sg** | **19 47 17.1** | **-0.6** |
| **DIGR** | **Digorskoe uzhe** | **1.98** | **284** | *e*PN | **Pn** | **19 46 49.4** | **0.0** |
| **DIGR** | **Digorskoe uzhe** | **1.98** | **284** | *e*Pn | **Pn** | **19 46 49.4** | **0.0** |
| **ONI** | **Oni** | **2.04** | **275** | P | **Pn** | **19 46 50.8** | **+0.8** |
| ONI | | | | S | **Sb** | **19 47 18.2** | **+0.1** |
| **ONI** | **Oni** | **2.04** | **275** | *e*PN | **Pn** | **19 46 50.7** | **+0.8** |
| ONI | | | | *e*S | **Sb** | **19 47 18.1** | **+0.1** |
| **ONI** | **Oni** | **2.04** | **275** | P | **Pn** | **19 46 50.8** | **+0.8** |
| ONI | | | | S | **Sb** | **19 47 18.2** | **+0.1** |

*PRU **12** 19:47:35.8, 43°.56N×111°.81E, h3km*
*ISCJB **12** 19:47:45.9±0.3, 44°.35N±0°.03×111°.44E±0°.04, h31km±3km, Error ellipse: s-maj=5.5km s-min=3.8km az=136.4*
*CSEM **12** 19:47:46.5±0.2, 44°.33N×111°.49E, h20km, ML2.5/9, Error ellipse: s-maj=5.1km s-min=4.7km az=139.0*
*ROM **12** 19:47:46.8±0.2, 44°.31N×111°.50E, h17km±5km, MI2.3/8, Error ellipse: s-maj=2.2km s-min=2.0km az=116.0*
*LDG **12** 19:47:47.7±0.2, 44°.35N×111°.47E, h20km, MI2.7/10, Error ellipse: s-maj=3.9km s-min=3.2km az=110.0*

**ISC 12 19:47:45.9±0.9, 44°.33N±0°.02×111°.50E±0°.02, h23km±5km, n77, σ1§54/102, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MTRZ** | **Monterenzio** | **0.05** | **329** | Pg | **Pb** | **19 47 49.9** | **-0.1** |
| MTRZ | | | | Sg | **Sb** | **19 47 53.2** | **+0.3** |
| | 377nm,0.3s | | | | | | |
| **MTRZ** | **Monterenzio** | **0.05** | **329** | Pg | **Pb** | **19 47 49.9** | **-0.1** |
| MTRZ | | | | Sg | **Sb** | **19 47 53.2** | **+0.3** |
| | 377nm,0.3s | | | | | | |
| **IMOL** | **Imola, Italy** | **0.17** | **81** | Pg | **Pb** | **19 47 51.8** | **+0.8** |
| IMOL | | | | Sg | **Sb** | **19 47 55.4** | **+0.9** |
| | 61nm,0.8s | | | | | | |
| **IMOL** | **Imola, Italy** | **0.17** | **81** | Pg | **Pb** | **19 47 51.8** | **+0.8** |
| IMOL | | | | Sg | **Sb** | **19 47 55.4** | **+0.9** |
| | 61nm,0.8s | | | | | | |
| **SEI** | **Scarperia** | **0.30** | **201** | Pg | **Pb** | **19 47 52.5** | **-0.3** |
| **SEI** | **Scarperia** | **0.30** | **201** | Pg | **Pb** | **19 47 52.5** | **-0.3** |
| **FIU** | **Minerbio Fiu** | **0.31** | **359** | Pg | **Pb** | **19 47 53.8** | **+0.9** |
| FIU | | | | Sg | **Sb** | **19 47 59.0** | **+1.4** |
| | 1μm,0.7s | | | | | | |
| **FIU** | **Minerbio Fiu** | **0.31** | **359** | Pg | **Pb** | **19 47 53.8** | **+0.9** |
| FIU | | | | Sg | **Sb** | **19 47 59.0** | **+1.4** |
| | 1μm,0.7s | | | | | | |
| **FNVD** | **Fontana Vidola** | **0.32** | **239** | Pg | **Pb** | **19 47 52.8** | **-0.3** |
| FNVD | | | | Sg | **Sb** | **19 47 58.1** | **+0.1** |
| **FNVD** | **Fontana Vidola** | **0.32** | **239** | Pg | **Pb** | **19 47 52.8** | **-0.3** |
| FNVD | | | | Sg | **Sb** | **19 47 58.1** | **+0.1** |
| **CMPO** | **Campotto Po** | **0.33** | **41** | Pg | **Pn** | **19 47 54.5** | **-0.7** |
| CMPO | | | | Sg | **Sn** | **19 48 00.3** | **-1.0** |
| | 531nm,1.2s | | | | | | |
| **CMPO** | **Campotto Po** | **0.33** | **41** | Pg | **Pn** | **19 47 54.5** | **-0.7** |
| CMPO | | | | Sg | **Sn** | **19 48 00.3** | **-1.0** |
| | 531nm,1.2s | | | | | | |
| **VMG** | **Vicchio** | **0.37** | **175** | Pg | **Pb** | **19 47 54.2** | **+0.3** |
| VMG | | | | Sg | **Sb** | **19 48 00.6** | **+1.2** |
| **VMG** | **Vicchio** | **0.37** | **175** | Pg | **Pb** | **19 47 54.2** | **+0.3** |
| VMG | | | | Sg | **Sb** | **19 48 00.6** | **+1.2** |
| **ZCCA** | **Zocca** | **0.38** | **273** | Pg | **Pb** | **19 47 54.6** | **+0.6** |
| | 123nm,0.5s | | | | | | |
| **ZCCA** | **Zocca** | **0.38** | **273** | Pg | **Pb** | **19 47 54.6** | **+0.6** |
| | 123nm,0.5s | | | | | | |
| **SFI** | **Santa Sofia** | **0.50** | **150** | Pg | **Pb** | **19 47 56.2** | **+0.2** |
| | 16μm,7.2s | | | | | | |
| **SFI** | **Santa Sofia** | **0.50** | **150** | Pg | **Pb** | **19 47 56.2** | **+0.2** |
| | 16μm,7.2s | | | | | | |
| **ASQU** | **Asqua** | **0.58** | **159** | Pg | **Pb** | **19 47 57.4** | **0.0** |
| **ASQU** | **Asqua** | **0.58** | **159** | Pg | **Pb** | **19 47 57.4** | **0.0** |
| **GSCL** | **Gusciola** | **0.66** | **272** | Pg | **Pn** | **19 47 59.5** | **-0.3** |
| | 36nm,0.6s | | | | | | |
| **GSCL** | **Gusciola** | **0.66** | **272** | Pg | **Pn** | **19 47 59.5** | **-0.3** |
| | 36nm,0.6s | | | | | | |
| **CRMI** | **Carmignano** | **0.67** | **215** | Pg | **Pn** | **19 47 59.6** | **-0.3** |
| **CRMI** | **Carmignano** | **0.67** | **215** | Pg | **Pn** | **19 47 59.6** | **-0.3** |
| **BDI** | **Bagni Di Lucca** | **0.70** | **248** | Pg | **Pb** | **19 48 00.0** | **+0.5** |
| | 96nm,0.4s | | | | | | |
| **BDI** | **Bagni Di Lucca** | **0.70** | **248** | Pg | **Pb** | **19 48 00.0** | **+0.5** |
| | 96nm,0.4s | | | | | | |
| **NOVE** | **Novellara** | **0.73** | **310** | Pg | **Pn** | **19 48 02.6** | **+1.9** |
| **NOVE** | **Novellara** | **0.73** | **310** | Pg | **Pn** | **19 48 02.6** | **+1.9** |
| **CRE** | **Caprese Michel** | **0.78** | **155** | Pg | **Pn** | **19 48 01.8** | **+0.2** |
| | 76nm,0.7s | | | | | | |
| **CRE** | **Caprese Michel** | **0.78** | **155** | Pg | **Pn** | **19 48 01.8** | **+0.2** |
| | 76nm,0.7s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ERBM** | **Eremo** | **0.79** | **277** | Pg | **Pn** | **19 48 03.0** | **+1.4** |
| **ERBM** | **Eremo** | **0.79** | **277** | Pg | **Pn** | **19 48 03.0** | **+1.4** |
| **VLC** | **Villacollemand** | **0.82** | **258** | Pg | **Pn** | **19 48 02.9** | **+0.9** |
| **VLC** | **Villacollemand** | **0.82** | **258** | Pg | **Pn** | **19 48 02.9** | **+0.9** |
| **MAIM** | **Mastiano** | **0.84** | **240** | Pg | **Pn** | **19 48 02.8** | **+0.5** |
| **MAIM** | **Mastiano** | **0.84** | **240** | Pg | **Pn** | **19 48 02.8** | **+0.5** |
| **TEOL** | **Teolo** | **1.03** | **7** | Pg | **Pn** | **19 48 04.9** | **-0.1** |
| | 471nm,0.5s | | | | | | |
| **TEOL** | **Teolo** | **1.03** | **7** | Pg | **Pn** | **19 48 04.9** | **-0.1** |
| | 471nm,0.5s | | | | | | |
| **GRFL** | **Gerfalco** | **1.25** | **198** | Pg | **Pb** | **19 48 10.2** | **+1.5** |
| | 28nm,0.6s | | | | | | |
| **VOJS** | **Vojsko** | **2.39** | **44** | *i* Pn | **Pn** | **19 48 23.5** | **-0.2** |
| **VOJS** | **Vojsko** | **2.39** | **44** | Pn | **Pn** | **19 48 23.5** | **-0.2** |
| **PGF** | **Pioggiola** | **2.55** | **226** | *e*Pn | **Pn** | **19 48 26.4** | **+0.5** |
| PGF | | | | *e*Sn | **Sn** | **19 48 55.7** | **-0.6** |
| | 11nm,0.3s | | | | | | |
| **PGF** | **Pioggiola** | **2.55** | **226** | *e*Pn | **Pn** | **19 48 26.4** | **+0.5** |
| PGF | | | | *e*Sn | **Sn** | **19 48 55.7** | **-0.6** |
| | 5.3nm,0.3s | | | | | | |
| **CRNS** | **Crni Vrh** | **2.62** | **47** | *e*Pn | **Pn** | **19 48 26.7** | **-0.1** |
| **SBF** | **Sospel** | **2.97** | **262** | *e*P | **Pn** | **19 48 34.1** | **+2.5** |
| SBF | | | | *e*Sn | **Sn** | **19 49 05.2** | **-1.3** |
| | 9.6nm,0.3s | | | | | | |
| **SBF** | **Sospel** | **2.97** | **262** | *e*P | **Pn** | **19 48 34.1** | **+2.5** |
| SBF | | | | *e*Sn | **Sn** | **19 49 05.2** | **-1.3** |
| | 4.8nm,0.3s | | | | | | |
| **MBDF** | **Montbardon** | **3.41** | **278** | *e*P | **Pn** | **19 48 40.6** | **+2.9** |
| MBDF | | | | *e*Sn | **Sn** | **19 49 15.7** | **-1.7** |
| | 1.7nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** | **3.41** | **278** | *e*P | **Pn** | **19 48 40.6** | **+2.9** |
| MBDF | | | | *e*Sn | **Sn** | **19 49 15.7** | **-1.7** |
| | 0.9nm,0.2s | | | | | | |
| **LPG** | **La Plagne** | **3.57** | **291** | *e*Pn | **Pn** | **19 48 40.0** | **-0.1** |
| **LPG** | **La Plagne** | **3.57** | **291** | *e*Pn | **Pn** | **19 48 40.0** | **-0.1** |
| **LPL** | **La Plagne** | **3.59** | **291** | *e*Pn | **Pn** | **19 48 39.9** | **-0.4** |
| LPL | | | | *e*Sn | **Sn** | **19 49 19.9** | **-2.1** |
| | 2.1nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **3.59** | **291** | *e*Pn | **Pn** | **19 48 39.9** | **-0.4** |
| LPL | | | | *e*Sn | **Sn** | **19 49 19.9** | **-2.1** |
| | 1.0nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **3.59** | **259** | *e*Pn | **Pn** | **19 48 40.6** | **+0.5** |
| FRF | | | | *e*Sn | **Sn** | **19 49 20.0** | **-1.8** |
| | 5.4nm,0.4s | | | | | | |
| **FRF** | **La Foret Royal** | **3.59** | **259** | *e*Pn | **Pn** | **19 48 40.6** | **+0.5** |
| FRF | | | | *e*Sn | **Sn** | **19 49 20.0** | **-1.8** |
| | 2.7nm,0.4s | | | | | | |
| **LMR** | **La Mourre** | **3.75** | **256** | *e*Pn | **Pn** | **19 48 43.6** | **+1.4** |
| LMR | | | | *e*Sn | **Sn** | **19 49 23.9** | **-1.7** |
| | 1.3nm,0.2s | | | | | | |
| **LMR** | **La Mourre** | **3.75** | **256** | *e*Pn | **Pn** | **19 48 43.6** | **+1.4** |
| LMR | | | | *e*Sn | **Sn** | **19 49 23.9** | **-1.7** |
| | 0.6nm,0.2s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **4.05** | **280** | *e*Pn | **Pn** | **19 48 46.4** | **-0.2** |
| **ORIF** | **Oris-en-Rattie** | **4.05** | **280** | *e*P | Pn | 19 48 50.0 | +3.4 |
| **ORIF** | **Oris-en-Rattie** | **4.05** | **280** | *e*Pn | **Pn** | **19 48 46.4** | **-0.2** |
| **ORIF** | **Oris-en-Rattie** | **4.05** | **280** | *e*P | Pn | 19 48 50.0 | +3.4 |
| **HINF** | **Hinteralfeld** | **4.75** | **319** | *e*Sn | **Sn** | **19 49 47.1** | **-3.4** |
| | 1.

| | | | | | | |
|---|---|---|---|---|---|---|
| **GRAM** | **Graiana** | **1.04** | **277** | P | **Pb** | **19 48 17.3 +1.2** |
| **CODM** | **Codolo** | **1.19** | **272** | P | **Pb** | **19 48 21.5 +2.9** |
| **SC2M** | **Scurtabo** | **1.42** | **272** | P | **Pb** | **19 48 25.1 +2.7** |
| **MGAB** | **Montegabbione** | **1.52** | **163** | Pg | **Pb** | **19 48 25.4 +1.2** |
| **MGAB** | **Montegabbione** | **1.52** | **163** | Pg | Pb | **19 48 25.4 +1.2** |
| **MCIV** | **Monte Civitell** | **1.59** | **176** | Pg | **Pb** | **19 48 26.8 +1.3** |
| **MCIV** | **Monte Civitell** | **1.59** | **176** | Pg | Pb | **19 48 26.8 +1.3** |
| **PGF** | **Pioggiola** | **2.58** | **226** | *e*Pn | **Pn** | **19 48 38.4 +1.4** |
| PGF | | | | *e*Sn | **Sn** | **19 49 06.8 -0.9** |
| | 61nm,0.5s | | | | | |
| **PGF** | **Pioggiola** | **2.58** | **226** | *e*Pn | **Pn** | **19 48 38.4 +1.4** |
| PGF | | | | *e*Sn | **Sn** | **19 49 06.8 -0.9** |
| | 30nm,0.5s | | | | | |
| **VISS** | **Visnje** | **2.76** | **58** | *e*Pn | **Pn** | **19 48 40.0 +0.6** |
| **VISS** | **Visnje** | **2.76** | **58** | *e*Pn | **Pn** | **19 48 40.0 +0.6** |
| **SBF** | **Sospel** | **2.98** | **262** | *e*Pn | **Pn** | **19 48 44.3 +1.8** |
| SBF | | | | *e*Sn | **Sn** | **19 49 16.0 -1.5** |
| | 25nm,0.3s | | | | | |
| **SBF** | **Sospel** | **2.98** | **262** | *e*Pn | **Pn** | **19 48 44.3 +1.8** |
| SBF | | | | *e*Sn | **Sn** | **19 49 16.0 -1.5** |
| | 13nm,0.3s | | | | | |
| **MBDF** | **Montbardon** | **3.41** | **278** | *e*Pn | **Pn** | **19 48 49.4 +1.0** |
| MBDF | | | | *e*Sn | **Sn** | **19 49 26.7 -1.5** |
| | 25nm,0.8s | | | | | |
| **MBDF** | **Montbardon** | **3.41** | **278** | *e*Pn | **Pn** | **19 48 49.4 +1.0** |
| MBDF | | | | *e*Sn | **Sn** | **19 49 26.7 -1.5** |
| | 12nm,0.8s | | | | | |
| **LPG** | **La Plagne** | **3.56** | **290** | *e*Pn | **Pn** | **19 48 51.6 +0.9** |
| **LPG** | **La Plagne** | **3.56** | **290** | *e*Pn | **Pn** | **19 48 51.6 +0.9** |
| **LPL** | **La Plagne** | **3.58** | **290** | *e*Pn | **Pn** | **19 48 51.2 +0.3** |
| **LPL** | **La Plagne** | **3.58** | **290** | *e*Pn | **Pn** | **19 48 51.2 +0.3** |
| **FRF** | **La Foret Royal** | **3.60** | **259** | *e*Pn | **Pn** | **19 48 52.2 +1.2** |
| FRF | | | | *e*Sn | **Sn** | **19 49 30.9 -1.9** |
| | 17nm,0.2s | | | | | |
| **FRF** | **La Foret Royal** | **3.60** | **259** | *e*Pn | **Pn** | **19 48 52.2 +1.2** |
| FRF | | | | *e*Sn | **Sn** | **19 49 30.9 -1.9** |
| | 8.6nm,0.2s | | | | | |
| **LMR** | **La Mourre** | **3.76** | **256** | *e*Pn | **Pn** | **19 48 54.8 +1.6** |
| LMR | | | | *e*Sn | **Sn** | **19 49 35.0 -1.7** |
| | 19nm,0.5s | | | | | |
| **LMR** | **La Mourre** | **3.76** | **256** | *e*Pn | **Pn** | **19 48 54.8 +1.6** |
| LMR | | | | *e*Sn | **Sn** | **19 49 35.0 -1.7** |
| | 9.3nm,0.5s | | | | | |
| **ORIF** | **Oris-en-Rattie** | **4.05** | **280** | *e*Pn | **Pn** | **19 48 58.5 +1.2** |
| ORIF | | | | *e*Sn | **Sn** | **19 49 41.9 -2.2** |
| | 4.2nm,0.3s | | | | | |
| **ORIF** | **Oris-en-Rattie** | **4.05** | **280** | *e*Pn | **Pn** | **19 48 58.5 +1.2** |
| ORIF | | | | *e*Sn | **Sn** | **19 49 41.9 -2.2** |
| | 2.1nm,0.3s | | | | | |
| **CABF** | **La Chapelle** | **4.42** | **302** | *e*Pn | **Pn** | **19 49 03.5 +1.2** |
| **CABF** | **La Chapelle** | **4.42** | **302** | *e*Pn | **Pn** | **19 49 03.5 +1.2** |
| **HINF** | **Hinteralfeld** | **4.73** | **318** | *e*Pn | **Pn** | **19 49 06.6 +0.1** |
| HINF | | | | *e*Sn | **Sn** | **19 49 58.6 -2.0** |
| | 4.5nm,0.2s | | | | | |
| **HINF** | **Hinteralfeld** | **4.73** | **318** | *e*Pn | **Pn** | **19 49 06.6 +0.1** |
| HINF | | | | *e*Sn | **Sn** | **19 49 58.6 -2.0** |
| | 2.2nm,0.2s | | | | | |
| **VIVF** | **Saint-Julien-l** | **4.91** | **278** | *e*Pn | **Pn** | **19 49 09.6 +0.7** |
| **VIVF** | **Saint-Julien-l** | **4.91** | **278** | *e*Pn | **Pn** | **19 49 09.6 +0.7** |
| **KHC** | **Kasperske Hory** | **4.97** | **16** | Sn | **Sn** | **19 50 04.1 -2.4** |
| **KHC** | **Kasperske Hory** | **4.97** | **16** | *e*SN | **Sn** | **19 50 04.1 -2.4** |
| **CDF** | **Champ du Feu** | **4.99** | **326** | *e*Pn | **Pn** | **19 49 10.7 +0.5** |
| **CDF** | **Champ du Feu** | **4.99** | **326** | *e*Pn | **Pn** | **19 49 10.7 +0.5** |
| **HAU** | **Haudompre** | **5.11** | **317** | *e*Pn | **Pn** | **19 49 12.2 +0.5** |
| HAU | | | | *e*Sn | **Sn** | **19 50 07.5 -2.3** |
| | 24nm,0.4s | | | | | |
| **HAU** | **Haudompre** | **5.11** | **317** | *e*Pn | **Pn** | **19 49 12.2 +0.5** |
| HAU | | | | *e*Sn | **Sn** | **19 50 07.5 -2.3** |
| | 12nm,0.4s | | | | | |
| **SMF** | **Signal de Mont** | **5.85** | **296** | *e*Pn | **Pn** | **19 49 22.4 +0.5** |
| SMF | | | | *e*Sn | **Sn** | **19 50 24.7 -3.5** |
| | 9.8nm,0.3s | | | | | |
| **SMF** | **Signal de Mont** | **5.85** | **296** | *e*Pn | **Pn** | **19 49 22.4 +0.5** |
| **SFTF** | **Sexfontaines** baz=134 | **5.90** | **313** | *e*Pn | **Pn** | **19 49 23.4 +0.8** |
| **SFTF** | **Sexfontaines** | **5.90** | **313** | *e*Pn | **Pn** | **19 49 23.4 +0.8** |
| **MEZF** | **Maizieres J'vi** baz=138 | **6.08** | **315** | *e*Pn | **Pn** | **19 49 25.7 +0.7** |
| **MEZF** | **Maizieres J'vi** | **6.08** | **315** | *e*Pn | **Pn** | **19 49 25.7 +0.7** |
| **LOR** | **Lormes** baz=122 | **6.08** | **301** | *e*Pn | **Pn** | **19 49 25.5 +0.4** |
| LOR | | | | *e*Sn | **Sn** | **19 50 30.5 -3.4** |
| | 6.0nm,0.2s | | | | | |
| **LOR** | **Lormes** | **6.08** | **301** | *e*Pn | **Pn** | **19 49 25.5 +0.4** |
| **AVF** | **Avril sur Loir** | **6.22** | **296** | *e*Pn | **Pn** | **19 49 27.8 +0.9** |
| **AVF** | **Avril sur Loir** | **6.22** | **296** | *e*Pn | **Pn** | **19 49 27.8 +0.9** |
| **SSF** | **Saint Saulge** | **6.22** | **298** | *e*Pn | **Pn** | **19 49 27.2 +0.3** |
| SSF | | | | *e*Sn | **Sn** | **19 50 33.7 -3.5** |
| | 6.0nm,0.4s | | | | | |
| **SSF** | **Saint Saulge** | **6.22** | **298** | *e*Pn | **Pn** | **19 49 27.2 +0.3** |
| **BGF** | **Bois d'Agland** | **6.47** | **293** | *e*Pn | **Pn** | **19 49 30.9 +0.5** |
| **BGF** | **Bois d'Agland** | **6.47** | **293** | *e*Pn | **Pn** | **19 49 30.9 +0.5** |
| **BRG** | **Berggiesshubel** | **6.71** | **13** | *e*SN | **Sn** | **19 50 47.2 -2.1** |
| BRG | | | | *e* | | 19 51 35.1 |
| | 4.0nm,0.9s | | | | | |
| **CAF** | **Calviac** | **6.76** | **278** | *e*Pn | **Pn** | **19 49 35.1 +0.7** |
| **CAF** | **Calviac** | **6.76** | **278** | *e*Pn | **Pn** | **19 49 35.1 +0.7** |
| **TCF** | **Toulx Ste Croi** | **6.83** | **290** | *e*Sn | **Sn** | **19 50 48.3 -4.0** |
| | 3.8nm,0.4s | | | | | |

*ISCJB **12** 20:00:19.3±0.8,51°.41N±0°.08×175°.17W±0°.06,h55km, mb3.8/2,Error ellipse: s-maj=11.7km s-min=4.6km az=171.4*
*NEIC **12** 20:00:19.9,51°.45N×175°.21W,h36km,ML3.5(AEIC),After AEIC.*
*IDC **12** 20:00:23.1±74.0,52°.84N×176°.04W,h0km,mb3.7/2, mb1 3.7/3,mb1mx3.4/51,mbtmp3.6/3,ML4.1/1,Error ellipse: s-maj=1875.0km s-min=39.0km az=161.0*

**ISC 12 20:00:22.1±1.4,51°.6N±0°.1×175°.25W±0°.04,h55km,n31,**
**σ1s03/28,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.69** | **314** | P | **Pn** | **20 00 34.9** | **-1.0** |
| GSMY | | | | S | **Sn** | **20 00 45.4** | **-0.6** |
| **GSCK** | **Great Sitkin C** | **0.72** | **308** | P | **Pn** | **20 00 35.2** | **-1.1** |
| **GSTD** | **Great Sitkin T** | **0.74** | **312** | P | **Pn** | **20 00 35.7** | **-0.9** |
| GSTD | | | | S | **Sn** | **20 00 48.8** | **+1.7** |
| **ETKA** | **Kagalaska Isla** | **0.77** | **292** | P | **Pn** | **20 00 35.3** | **-1.7** |
| **ATKA** | **Atka Island** | **0.91** | **46** | P | **Pn** | **20 00 36.8** | **-1.9** |
| ATKA | | | | S | **Sn** | **20 00 52.1** | **+1.1** |
| **ADAG** | **Mount Adagdak** | **0.93** | **297** | P | **Pn** | **20 00 38.7** | **-0.3** |
| **KOKL** | **Mount Kliuchef** | **0.99** | **40** | P | **Pn** | **20 00 39.0** | **-0.9** |
| **KOFP** | **Korovin Flat P** | **1.00** | **45** | P | **Pn** | **20 00 38.9** | **-1.1** |
| **KOWE** | **Korovin West** | **1.01** | **38** | P | **Pn** | **20 00 39.3** | **-0.7** |
| **KIRH** | **Kanaga Island** | **1.19** | **287** | P | **Pn** | **20 00 41.6** | **-0.9** |
| **KIKV** | **Kanaga Island** | **1.23** | **285** | P | **Pn** | **20 00 41.7** | **-1.4** |
| **KICM** | **Kanaga Island** | **1.26** | **287** | P | **Pn** | **20 00 42.6** | **-0.7** |
| **TAPA** | **Tanaga Point A** | **1.61** | **280** | P | **Pn** | **20 00 47.6** | **-0.6** |
| **TAFP** | **Tanaga Falls P** | **1.73** | **282** | P | **Pn** | **20 00 49.6** | **-0.2** |
| TAFP | | | | S | **Sn** | **20 01 12.0** | **+1.3** |
| **TASE** | **Tanaga Southea** | **1.75** | **280** | P | **Pn** | **20 00 49.2** | **-0.9** |
| **GAEA** | **Gareloi East** | **2.19** | **277** | P | **Pn** | **20 00 55.2** | **-0.8** |
| **GANE** | **Gareloi Northe** | **2.21** | **278** | P | **Pn** | **20 00 55.1** | **-1.2** |
| **AMKA** | **Amchitka** | **3.41** | **269** | P | **Pn** | **20 01 11.7** | **-1.0** |
| **NIKH** | **Nikolski High** | **4.17** | **68** | P | **Pn** | **20 01 22.8** | **-0.3** |
| **MSOM** | **Makushin Julie** | **5.53** | **63** | P | **Pn** | **20 01 41.4** | **-0.3** |
| **UNV** | **Unalaska Valle** | **5.79** | **63** | P | **Pn** | **20 01 44.7** | **-0.5** |
| **ILAR** | **Eielson Array** 0.3nm,0.3s,baz=225,slow=8.6,SNR=17 | **19.73** | **37** | P | **P** | **20 04 46.5** | **-0.3** |
| **H11N2** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=10 | **34.73** | **210** | T | T | 20 44 03.4 | |
| **H11N3** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=9.9 | **34.74** | **210** | T | T | 20 44 02.7 | |
| **H11N1** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=12 | **34.75** | **210** | T | T | 20 43 57.1 | |
| **H11S1** | **WAKE ISLAND Hy** baz=16,slow=74 | **35.94** | **210** | T | T | 20 46 25.9 | |
| **H11S2** | **WAKE ISLAND Hy** baz=16,slow=74 | **35.96** | **210** | T | T | 20 46 36.5 | |
| **H11S3** | **WAKE ISLAND Hy** baz=16 | **35.96** | **210** | T | T | 20 46 31.7 | |
| **SONM** | **Songino Array** 0.3nm,0.6s,baz=72,slow=9.3,SNR=2.9 | **48.53** | **298** | P | **P** | **20 08 60.0** | **+0.6** |
| **MKAR** | **Makanchi Array** 0.5nm,0.4s,baz=47,slow=5.1,SNR=5.9 | **61.63** | **310** | P | **P** | **20 10 33.9** | **+0.1** |
| **MEH** | **Mehetia** 20nm,0.2s | **73.12** | **153** | *e*T | T | 20 11 51.0 | |

*IDC **12** 20:07:46.2±1.7,5°.12S×133°.62E,h0km,mb3.9/3, mb1 3.8/7,mb1mx3.6/31,mbtmp3.8/7,ML3.6/4,Error ellipse: s-maj=56.6km s-min=24.4km az=87.0*
*ISCJB **12** 20:07:47.6±0.8,5°.02S±0°.05×133°.79E±0°.08,h25km, mb3.9/3,Error ellipse: s-maj=11.7km s-min=6.6km az=167.8*
*AUST **12** 20:07:49.3±99.0,4°.88S×134°.03E,h35km±3km,Error ellipse: s-maj=4.6km s-min=1.8km az=243.0*
*DJA **12** 20:07:54.3±1.1,5°.8S×13°.4E±1°.1,h42km±54km,M4.2/10, mb4.7/6,mB4.9/3,MLv4.1/8,MLv4.2/10,Mw(mB)4.2/3*

**ISC 12 20:07:49.0±1.1,4°.95S±0°.07×133°.9E±0°.1,h25km,n22,**
**σ1s77/22,mb4.0/3,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** baz=2.6,SNR=23 | **2.58** | **321** | P | **Pn** | **20 08 29.4** | **+0.1** |
| **FAKI** | **Fak Fak** | **2.58** | **321** | P | **Pn** | **20 08 29.4** | **+0.1** |
| FAKI | | | | S | **Sn** | **20 08 58.2** | **-1.7** |
| **BNDI** | **Bandanaira** | **3.98** | **276** | P | **Pn** | **20 08 51.0** | **+2.6** |
| **SIJI** | **Sorong** 2.9nm,0.3s,baz=151,slow=16,SNR=13 | **4.81** | **327** | Pn | **Pn** | **20 08 59.7** | **-0.3** |
| SIJI | 1.8nm,0.3s,baz=162,slow=20,SNR=2.6 | | | Sn | **Sn** | **20 09 50.8** | **-4.2** |
| **SWI** | **Sorong** baz=4.9,SNR=5.4 | **4.82** | **327** | P | **Pn** | **20 09 00.8** | **+0.8** |
| **SWI** | **Sorong** | **4.82** | **327** | P | **Pn** | **20 09 01.1** | **+1.0** |
| **MSAI** | **Masohi** | **5.18** | **288** | P | **Pn** | **20 09 05.8** | **+0.8** |
| **AAI** | **Ambon** baz=5.9,SNR=8.6 | **5.80** | **282** | P | **Pn** | **20 09 15.4** | **+1.9** |
| **AAI** | **Ambon** 96nm,0.7s,1µm0.3nm0.3nm | **5.80** | **282** | P | **Pn** | **20 09 14.7** | **+1.2** |
| **LBMI** | **Labuha** 42nm,1.1s,0.2nm | **7.67** | **304** | P | **Pn** | **20 09 40.1** | **+0.9** |
| **KDU** | **Kakadu** baz=8.0,SNR=8.6 | **7.81** | **190** | P | **Pn** | **20 09 42.7** | **+1.5** |
| **MTN** | **Manton Dam** baz=8.5,SNR=8.7 | **8.30** | **199** | P | **Pn** | **20 09 48.8** | **+0.9** |
| **SANI** | **Sanana** 21nm,0.8s | **8.38** | **290** | P | **Pn** | **20 09 48.9** | **0.0** |
| **BATI** | **Baumata** 0.7nm,0.3s,baz=120,slow=3.7,SNR=2.1 | **11.39** | **242** | Pn | Pn | 20 10 26.6 | -3.6 |
| BATI | 0.6nm,0.3s,baz=331,slow=19,SNR=3.3 | | | Sn | **Sn** | **20 12 36.3** | **-0.5** |
| **LUWI** | **Luwuk** baz=12,SNR=3.5 | **11.74** | **289** | P | Pn | 20 10 40.6 | +5.6 |
| **APSI** | **Ampana** | **12.85** | **288** | P | **Pn** | **20 10 51.2** | **+1.0** |
| **WRA** | **Warramunga Arr** 0.2nm,0.3s,baz=353,slow=13,SNR=9.5 | **14.91** | **178** | Pn | **Pn** | **20 11 15.2** | **-3.2** |
| WRA | 0.2nm,0.3s,baz=353,slow=23,SNR=5.3 | | | Sn | Sn | 20 13 53.1 | -10 |
| **ASAR** | **Alice Springs** 0.2nm,0.3s,baz=2.3,slow=13,SNR=26 | **18.61** | **180** | P | **P** | **20 12 03.6** | **-1.1** |
| ASAR | 0.0nm,0.3s,baz=359,slow=27,SNR=4.0 | | | S | Sn | 20 15 21.9 | -11 |
| **WRKA** | **Warakurna** baz=21,SNR=5.2 | **20.68** | **194** | P | Pn | 20 12 34.4 | +4.7 |
| **USRK** | **Ussurisyk Ar.** 1.5nm,0.6s,baz=165,slow=4.9,SNR=5.0 | **48.95** | **358** | P | **P** | **20 16 35.5** | **+2.3** |
| **MKAR** | **Makanchi Array** 0.8nm,0.7s,baz=116,slow=7.9,SNR=5.5 | **68.71** | **325** | P | **P** | **20 18 52.0** | **+1.4** |
| **ZALV** | **Zalesovo Beam** 0.6nm,0.5s,baz=125,slow=6.0,SNR=2.8 | **71.53** | **332** | P | **P** | **20 19 08.5** | **+0.8** |

**SJA 12 20:17:06.1±0.9,31°.87S×70°.17W,h10km,ML2.6,**
**Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLS** | **Leoncito** | **0.74** | **85** | *i* P | Pg | 20 17 20.2 | -0.7 |
| RTLS | | | | *i* S | Sb | 20 17 32.7 | +0.8 |
| **AUSP** | **Uspallata** | **0.75** | **118** | *i* P | Pg | 20 17 20.6 | -0.4 |
| AUSP | | | | *i* S | Sb | 20 17 32.9 | +0.7 |
| **ROCH** | **El Roble** | **1.31** | **213** | *e*P | Pn | 20 17 24.2 | -6.6 |
| ROCH | | | | *e*S | Sn | 20 17 48.7 | +0.1 |
| ROCH | comp=E,101nm,0.6s | | | AML | AML | 20 17 59.2 | |
| **ROC1** | **El Roble** | **1.32** | **213** | *e*P | Pn | 20 17 24.1 | -6.8 |
| **ASAL** | **Salagasta** | **1.34** | **123** | *i* P | Pg | 20 17 31.9 | 0.0 |
| **PEL** | **Peldehue** | **1.34** | **199** | *e*P | Pn | 20 17 23.1 | -8.0 |
| PEL | | | | *e*S | Sb | 20 17 43.4 | -5.5 |
| PEL | comp=E,162nm,0.5s | | | AML | AML | 20 17 53.1 | |
| **ARCO** | **CERRO ARCO** | **1.42** | **133** | *e*P | Pg | 20 17 33.5 | -0.2 |
| ARCO | | | | *e*S | Sg | 20 17 57.7 | +5.4 |
| **AAGR** | **Agrelo** | **1.66** | **137** | *i* P | Pb | 20 17 37.0 | +0.1 |
| AAGR | | | | *e*P | Pg | 20 17 37.8 | -0.3 |
| **CFAA** | **Coronel Fontan** | **1.66** | **81** | *e*P | Pb | 20 17 36.7 | -0.2 |
| CFAA | | | | *e*S | Sg | 20 18 00.2 | +0.4 |
| **AMOG** | **MOGNA** | **1.70** | **57** | *e*P | Pn | 20 17 35.2 | -0.8 |
| **TLL** | **Tololo Astrono** | **1.78** | **342** | *e*P | Pn | 20 17 29.7 | -7.6 |
| TLL | | | | *e*S | Sn | 20 17 48.1 | -12 |
| TLL | comp=N,137nm,0.5s | | | AML | AML | 20 17 56.3 | |
| **ACAN** | **Cantantal** | **2.56** | **100** | *e*P | Pb | 20 17 52.2 | 0.0 |
| **AVFE** | **Valle Fertil** | **2.62** | **63** | *i* P | Pn | 20 17 50.8 | +2.3 |
| AVFE | | | | *e*S | Sb | 20 18 26.6 | +1.2 |
| AVFE | comp=Z,25nm,0.6s | | | AML | AML | 20 18 31.9 | |
| **AGUA** | **GUANDACOL** | **2.78** | **32** | *e*P | Pn | 20 17 52.2 | +1.4 |
| **VCA** | **Vinchina** | **3.55** | **29** | *e*P | Pn | 20 18 04.9 | +3.4 |

**MEX 12 20:17:09.6±0.3,18°.74N×103°.70W,h30km±12km,MD3.5,**
**Near coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **R15V** | | **0.51** | **328** | *i* P | Pb | 20 17 18.5 | -1.8 |
| R15V | | | | *e*S | Sb | 20 17 25.5 | -2.1 |
| **MMIG** | **Aquila** | **0.56** | **143** | *e*P | Pb | 20 17 18.9 | -2.0 |
| MMIG | | | | *e*S | Sb | 20 17 26.7 | -1.9 |
| **EZ5V** | | **0.75** | **7** | *e*P | Pb | 20 17 22.1 | -2.4 |
| EZ5V | | | | *i* S | Sb | 20 17 31.6 | -3.0 |
| **CJM** | **Chamela** | **1.48** | **301** | *e*P | Pn | 20 17 32.4 | -1.8 |
| CJM | | | | *i* S | Sn | 20 17 49.8 | -2.9 |

*AUST **12** 20:21:36.6±0.0,4°.76S×134°.13E,h117km±1km,Error ellipse: s-maj=2.4km s-min=1.3km az=253.0*
*DJA **12** 20:21:37.2±1.1,5°.5S±5°×13°.4E±1°.1,h10km,M4.3/9, mb4.8/8,mB4.9/6,MLv4.4/4,MLv4.2/9,Mw(mB)4.2/6*

**ISC 12 20:21:34.9±1.9,4°.9S±0°.1×134°.2E±0°.2,h25km,n14,**
**σ1s73/13,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** baz=2.6,SNR=8.6 | **2.80** | **316** | P | **Pn** | **20 22 17.7** | **-0.5** |
| **FAKI** | **Fak Fak** | **2.80** | **316** | P | **Pn** | **20 22 17.9** | **-0.2** |
| **BNDI** | **Bandanaira** | **4.31** | **275** | P | **Pn** | **20 22 39.7** | **+0.8** |
| **SWI** | **Sorong** baz=4.8,SNR=4.3 | **5.00** | **324** | P | **Pn** | **20 22 49.6** | **+1.2** |
| **SWI** | **Sorong** | **5.00** | **324** | P | **Pn** | **20 22 49.4** | **+1.0** |
| **MSAI** | **Masohi** 12nm,0.6s,281nm0.1nm | **5.50** | **286** | P | **Pn** | **20 22 54.6** | **-0.7** |
| **AAI** | **Ambon** baz=6.0,SNR=9.9 | **6.13** | **281** | P | **Pn** | **20 23 03.1** | **-0.8** |
| **AAI** | **Ambon** 92nm,0.8s,1µm0.3nm0.3nm | **6.13** | **281** | P | **Pn** | **20 23 02.8** | **-1.1** |
| **NLAI** | **Namlea** 34nm,0.5s,591nm0.1nm0.1nm | **7.29** | **283** | P | **Pn** | **20 23 21.3** | **+1.4** |
| **KDU** | **Kakadu** baz=8.1,SNR=25 | **7.89** | **192** | P | Pn | 20 23 32.3 | +4.2 |
| **MTN** | **Manton Dam** baz=8.6,SNR=14 | **8.43** | **201** | P | **Pn** | **20 23 38.7** | **+3.2** |
| **SANI** | **Sanana** 13nm,1.0s | **8.69** | **289** | P | **Pn** | **20 23 36.7** | **-2.4** |
| **SOEI** | **Soe** baz=11,SNR=6.2 | **10.96** | **244** | P | **Pn** | **20 24 10.1** | **-0.3** |
| **QIS** | **Mount Isa** baz=17,SNR=4.0 | **16.39** | **162** | P | **Pn** | **20 25 21.0** | **-2.5** |

**WEL 12 20:27:56.2±0.1,43°.58S×172°.41E,h5km,ML3.6/15,2C-3D,**
**Error ellipse: s-maj=0.7km s-min=0.6km az=90.0,South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.16** | **88** | PG | Pg | 20 27 59.4 | +0.1 |
| CRLZ | | | | AML | AML | 20 27 59.6 | |
| CRLZ | | | | AML | AML | 20 28 00.3 | |
| CRLZ | | | | SG | Sg | 20 28 01.5 | +0.1 |
| CRLZ | | | | AML | AML | 20 28 01.9 | |
| **MQZ** | **McQueen's Vall** | **0.22** | **125** | ⇓PG | Pg | 20 28 00.8 | +0.3 |
| MQZ | | | | SG | Sg | 20 28 03.6 | +0.3 |
| MQZ | | | | AML | AML | 20 28 04.2 | |
| **OXZ** | **Oxford** | **0.37** | **314** | ⇓PG | Pg | 20 28 03.6 | +0.2 |
| OXZ | | | | SG | Sg | 20 28 08.8 | +0.4 |
| **LTZ** | **Lake Taylor** | **0.81** | **353** | ⇑P* | Pg | 20 28 11.9 | +0.2 |
| LTZ | | | | S* | Sb | 20 28 23.2 | -0.8 |
| LTZ | | | | AML | AML | 20 28 27.8 | |
| **RPZ** | **Rata Peaks** | **0.99** | **262** | ⇓P* | Pg | 20 28 15.6 | +0.3 |
| RPZ | | | | AML | AML | 20 28 30.1 | |
| RPZ | | | | AML | AML | 20 28 31.3 | |
| **WVZ** | **Waitaha Valley** | **1.32** | **292** | *e*P* | Pn | 20 28 20.4 | -0.9 |
| WVZ | | | | AML | AML | 20 28 44.0 | |
| WVZ | | | | AML | AML | 20 28 48.7 | |
| **KHZ** | **Kahutara** | **1.43** | **36** | PN | Pn | 20 28 20.9 | -1.9 |
| **LBZ** | **Lake Benmore** | **1.79** | **243** | *e*PN | Pn | 20 28 27.0 | -0.8 |
| LBZ | | | | AML | AML | 20 28 58.2 | |
| LBZ | | | | AML | AML | 20 28 58.3 | |
| LBZ | | | | AML | AML | 20 29 02.4 | |
| LBZ | | | | AML | AML | 20 29 02.5 | |
| **THZ** | **Tophouse** | **1.86** | **12** | PN | Pn | 20 28 27.1 | -1.6 |
| THZ | | | | AML | AML | 20 29 01.8 | |
| THZ | | | | AML | AML | 20 29 07.8 | |
| **DSZ** | **Denniston Nort** | **1.89** | **346** | AML | AML | 20 28 59.2 | |
| DSZ | | | | AML | AML | 20 28 59.3 | |
| DSZ | | | | AML | AML | 20 29 00.6 | |
| **ODZ** | **Otahua Downs** | **1.93** | **220** | PN | Pn | 20 28 28.6 | -1.2 |
| ODZ | | | | AML | AML | 20 29 06.2 | |
| ODZ | | | | AML | AML | 20 29 06.2 | |
| ODZ | | | | AML | AML | 20 29 06.7 | |
| ODZ | | | | AML | AML | 20 29 06.7 | |
| **FOZ** | **Fox Glacier** | **1.98** | **270** | AML | AML | 20 28 53.8 | |
| **BSWZ** | **Blackbirch Sta** | **2.16** | **31** | PN | Pn | 20 28 32.0 | -0.8 |
| **JCZ** | **Jackson Bay** | **2.69** | **258** | PN | Pn | 20 28 39.9 | -0.3 |
| JCZ | | | | AML | AML | 20 29 27.3 | |
| **WKZ** | **Wanaka** | **2.74** | **242** | AML | AML | 20 29 28.6 | |
| **QRZ** | **Quartz Range** | **2.76** | **2** | PN | Pn | 20 28 40.1 | -0.9 |
| QRZ | | | | AML | AML | 20 31 11.7 | |
| QRZ | | | | AML | AML | 20 32 55.2 | |
| **EAZ** | **Earnscleugh** | **2.77** | **232** | ⇑PN | Pn | 20 28 39.9 | -1.2 |
| EAZ | | | | AML | AML | 20 29 27.5 | |
| EAZ | | | | AML | AML | 20 29 27.5 | |
| EAZ | | | | AML | AML | 20 29 29.5 | |
| EAZ | | | | AML | AML | 20 29 29.5 | |
| **PLWZ** | **Palliser** | **2.91** | **47** | PN | Pn | 20 28 41.0 | -2.2 |
| **TUZ** | **Tuapeka** | **3.09** | **219** | PN | Pn | 20 28 44.3 | -1.3 |
| TUZ | | | | AML | AML | 20 29 41.4 | |
| TUZ | | | | AML | AML | 20 29 43.6 | |
| **SYZ** | **Scrubby Hill** | **3.75** | **217** | PN | Pn | 20 28 53.8 | -0.9 |

**IDC 12 20:29:22.0±1.6,7°.45S×128°.38E,h160km±19km,mb3.1/1,**
**mb1 3.3/5,mb1mx3.0/25,mbtmp3.8/5,Error ellipse: s-maj=26.7km s-min=13.9km az=126.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** 14nm,0.3s,baz=267,slow=1.8,SNR=112 | **5.41** | **239** | P | Pn | 20 30 42.2 | +1.1 |
| BATI | 8.6nm,0.3s,baz=180,slow=13,SNR=5.8 | | | S | Sn | 20 31 42.8 | -0.1 |
| **SIJI** | **Sorong** 2.3nm,0.3s,baz=198,slow=20,SNR=12 | **7.14** | **24** | P | Pn | 20 31 04.6 | +0.6 |
| SIJI | 0.9nm,0.3s,baz=270,slow=20,SNR=2.4 | | | S | Sn | 20 32 23.9 | -0.4 |
| **WRA** | **Warramunga Arr** 0.3nm,0.3s,baz=330,slow=13,SNR=12 | **13.70** | **156** | P | Pn | 20 32 28.3 | -1.6 |
| WRA | 0.9nm,0.3s,baz=328,slow=24,SNR=8.9 | | | S | Sn | 20 34 50.2 | -12 |
| **ASAR** | **Alice Springs** 0.2nm,0.3s,baz=334,slow=10,SNR=7.1 | **16.98** | **162** | P | Pn | 20 33 10.3 | 0.0 |
| ASAR | 0.2nm,0.3s,baz=319,slow=15,SNR=4.9 | | | S | S | 20 36 11.3 | -7.2 |
| **MKAR** | **Makanchi Array** 0.3nm,0.5s,baz=118,slow=8.3,SNR=2.9 | **67.73** | **328** | P | P | 20 40 02.3 | 0.0 |

*CSEM **12** 20:31:25.0,40°.62N×22°.92E,h17km,After ATH*

**ATH 12 20:31:25.0,40°.62N×22°.92E,h17km±1km,Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THE** | **Thessaloniki** | **0.04** | **70** | *e*PB | Pg | 20 31 28.5 | +0.5 |
| THE | | | | *e*SB | Sg | 20 31 30.4 | +0.3 |
| **THE** | **Thessaloniki** | **0.04** | **70** | *e*Pb | Pg | 20 31 28.5 | +0.5 |
| THE | | | | *e*Sb | Sg | 20 31 30.4 | +0.3 |
| **HORT** | **Hortiatis** | **0.14** | **99** | *e*PB | Pg | 20 31 29.3 | 0.0 |
| HORT | | | | *e*SB | Sg | 20 31 31.7 | -0.2 |
| **HORT** | **Hortiatis** | **0.14** | **99** | *e*Pb | Pb | 20 31 29.3 | 0.0 |
| HORT | | | | *e*Sb | Sg | 20 31 31.7 | -0.2 |
| **SOH** | **Sokhos** | **0.39** | **58** | *e*PB | Pg | 20 31 33.1 | 0.0 |
| **SOH** | **Sokhos** | **0.39** | **58** | *e*Pb | Pg | 20 31 33.1 | 0.0 |
| **PLG** | **Polygyros** | **0.47** | **121** | *e*PB | Pg | 20 31 34.2 | -0.4 |
| **PLG** | **Polygyros** | **0.47** | **121** | *e*Pb | Pg | 20 31 34.2 | -0.4 |
| **KNT** | **Kendrikon** | **0.54** | **358** | *e*PN | Pb | 20 31 36.0 | -0.1 |
| **KNT** | **Kendrikon** | **0.54** | **358** | *e*Pn | Pb | 20 31 36.0 | -0.1 |
| **SRS** | **Serrai** | **0.71** | **46** | *e*PN | Pb | 20 31 38.6 | -0.4 |
| **SRS** | **Serrai** | **0.71** | **46** | *e*Pn | Pb | 20 31 38.6 | -0.4 |
| **THL** | **Klokotos Trika** | **1.26** | **214** | *e*PN | Pb | 20 31 48.8 | +0.5 |
| **THL** | **Klokotos Trika** | **1.26** | **214** | *e*Pn | Pb | 20 31 48.8 | +0.5 |

*CSEM **12** 20:31:30.7±0.2,40°.79N×23°.03E,h5km,ML2.3,Error ellipse: s-maj=3.3km s-min=3.1km az=169.0*
*SKO **12** 20:31:31.2,40°.57N×22°.99E,h6km,M1.8,ML2.2*
*THE **12** 20:31:32.2,40°.62N×22°.99E,h

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LIT** | **Litokhoron** | **0.80** | **211** | *e*PG | Pg | 20 31 45.7 | -0.5 |
| LIT | | | | *e*SB | Sg | 20 31 57.1 | +0.5 |
| **LIT** | **Litokhoron** | **0.80** | **211** | *e*Pg | Pg | 20 31 45.7 | -0.5 |
| LIT | | | | *e*Sb | Sg | 20 31 57.1 | +0.5 |
| **NVR** | **Nevrokopi** | **0.85** | **48** | *e*PG | Pg | 20 31 46.5 | -0.6 |
| **NVR** | **Nevrokopi** | **0.85** | **48** | P | Pn | 20 31 50.5 | +1.7 |
| **NVR** | **Nevrokopi** | **0.85** | **48** | *e*Pg | Pg | 20 31 46.5 | -0.6 |
| **OUR** | **Ouranopolis** | **0.86** | **122** | *e*PG | Pg | 20 31 46.7 | -0.6 |
| OUR | | | | *e*SB | Sb | 20 31 59.3 | -0.1 |
| **OUR** | **Ouranopolis** | **0.86** | **122** | *e*Pg | Pg | 20 31 46.7 | -0.6 |
| OUR | | | | *e*Sb | Sb | 20 31 59.3 | -0.1 |
| **PAIG** | **Paliouri** | **1.00** | **149** | *e*PB | Pg | 20 31 49.7 | -0.2 |
| **PAIG** | **Paliouri** | **1.00** | **149** | P | Pg | 20 31 48.5 | -1.4 |
| **PAIG** | **Paliouri** | **1.00** | **149** | P | Pg | 20 31 48.5 | -1.4 |
| **PAIG** | **Paliouri** | **1.00** | **149** | *e*Pb | Pg | 20 31 49.7 | -0.2 |
| **KZN** | **Kozani** | **1.07** | **244** | *e*PB | Pg | 20 31 50.8 | -0.6 |
| **KZN** | **Kozani** | **1.07** | **244** | *e*Pb | Pg | 20 31 50.8 | -0.6 |
| **FNA** | **Florina** | **1.25** | **270** | *e*PB | Pn | 20 31 54.3 | 0.0 |
| **FNA** | **Florina** | **1.25** | **270** | *e*Pb | Pn | 20 31 54.3 | 0.0 |
| **THL** | **Klokotos Trika** | **1.45** | **213** | *e*PB | Pb | 20 31 57.8 | +0.1 |
| **THL** | **Klokotos Trika** | **1.45** | **213** | *e*Pg | Pb | 20 31 57.8 | +0.1 |
| **NEST** | **Nestorio** | **1.55** | **257** | *e*PB | Pb | 20 31 59.9 | +0.3 |
| **NEST** | **Nestorio** | **1.55** | **257** | *e*Pb | Pb | 20 31 59.9 | +0.3 |
| **MAKR** | **Makrakomi, Fth** | **1.90** | **201** | *e*PN | Pb | 20 32 05.2 | -0.4 |
| **MAKR** | **Makrakomi, Fth** | **1.90** | **201** | *e*Pn | Pb | 20 32 05.2 | -0.4 |
| **EVR** | **Evrytania** | **2.09** | **207** | *e*PN | Pb | 20 32 07.9 | -1.0 |
| **EVR** | **Evrytania** | **2.09** | **207** | *e*Pn | Pb | 20 32 07.9 | -1.0 |
| **DSL** | **Palaion Diasel** | **2.22** | **222** | *e*PN | Pb | 20 32 09.7 | -1.3 |
| **DSL** | **Palaion Diasel** | **2.22** | **222** | *e*Pn | Pb | 20 32 09.7 | -1.3 |

*ISCJB* ***12*** *20:35:44.1±0.4,8°.52S±0°.07×123°.49E±0°.08,h133km, mb3.8/6, Error ellipse: s-maj=13.4km s-min=6.4km az=144.3*

*IDC* ***12*** *20:35:47.5±1.2,8°.59S×123°.63E,h157km±13km,mb3.5/6, mb1 3.6/8,mb1mx3.4/25,mbtmp4.0/8, Error ellipse: s-maj=39.4km s-min=18.3km az=76.0*

*AUST* ***12*** *20:36:00.5,9°.50S×124°.01E,h200km*

**ISC 12 20:35:45.8±0.6,8°.42S±0°.08×123°.6E±0°.1,h133km,n29, σ1s19/29,mb3.8/6,Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **1.78** | **179** | P | **Pn** | **20 36 19.3** | **+2.0** |
| | 234nm,0.3s,baz=266,slow=1.5,SNR=322 | | | | | | |
| BATI | | | | S | **Sn** | **20 36 42.8** | **+1.3** |
| | 186nm,0.3s,baz=47,slow=2.2,SNR=29 | | | | | | |
| **MTN** | **Manton Dam** | **8.59** | **121** | P | **Pn** | **20 37 47.9** | **+0.7** |
| | baz=7.7,SNR=42 | | | | | | |
| **KDU** | **Kakadu** | **9.67** | **117** | P | **Pn** | **20 38 02.2** | **+0.4** |
| | baz=8.9,SNR=6.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.45** | **139** | P | **Pn** | **20 39 14.9** | **-1.9** |
| | 1.6nm,0.3s,baz=318,slow=12,SNR=38 | | | | | | |
| WRA | | | | S | Sn | 20 41 55.0 | -13 |
| | 1.1nm,0.3s,baz=309,slow=24,SNR=11 | | | | | | |
| **WRKA** | **Warakurna** | **17.11** | **165** | P | **P** | **20 39 36.2** | **-0.5** |
| | baz=16,SNR=8.4 | | | | | | |
| **ASAR** | **Alice Springs** | **18.08** | **148** | P | **P** | **20 39 47.6** | **+0.3** |
| | 0.7nm,0.3s,baz=325,slow=12,SNR=42 | | | | | | |
| ASAR | | | | S | S | 20 42 56.7 | -11 |
| | 0.1nm,0.3s,baz=317,slow=20,SNR=7.1 | | | | | | |
| **MEEK** | **Meekatharra** | **18.73** | **194** | P | **P** | **20 39 53.2** | **-1.2** |
| | baz=18,SNR=17 | | | | | | |
| **QIS** | **Mount Isa** | **19.59** | **130** | P | **P** | **20 40 05.2** | **+1.4** |
| | baz=19,SNR=19 | | | | | | |
| **COEN** | **Coen** | **19.94** | **108** | P | **Pn** | **20 40 09.7** | **-0.9** |
| | baz=19,SNR=4.1 | | | | | | |
| **MORW** | **Morawa** | **21.75** | **198** | P | **P** | **20 40 24.5** | **-2.3** |
| | baz=21,SNR=3.6 | | | | | | |
| **BLDU** | **Ballidu** | **23.01** | **195** | P | **P** | **20 40 37.4** | **-1.9** |
| | baz=22,SNR=6.2 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **25.10** | **193** | P | **P** | **20 40 55.9** | **-2.4** |
| | 10nm,1.0s,baz=322,slow=0.1,SNR=6.8 | | | | | | |
| **HTT** | **Hallett** | **28.62** | **153** | P | P | 20 41 26.5 | -3.4 |
| | baz=28,SNR=7.9 | | | | | | |
| **ARPS** | **Mount Arapiles** | **32.72** | **152** | P | **P** | **20 42 06.7** | **+0.9** |
| | baz=32,SNR=5.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.15** | **318** | P | **P** | **20 42 37.1** | **+1.6** |
| | 0.8nm,0.6s,baz=156,slow=7.1,SNR=4.7 | | | | | | |
| **ODAN** | **Odare** | **49.65** | **316** | *e*P | **P** | **20 44 24.9** | **+0.4** |
| **TAPN** | **Taplejung** | **49.74** | **317** | *e*P | **P** | **20 44 25.4** | **+0.1** |
| **RAMN** | **Ramite** | **50.25** | **316** | *e*P | **P** | **20 44 29.5** | **+0.5** |
| | 16nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **51.35** | **316** | *e*P | **P** | **20 44 36.8** | **-0.6** |
| **PKI** | **Pulchoki** | **51.46** | **315** | *e*P | **P** | **20 44 37.7** | **-0.5** |
| **PKIN** | **Phulchoki** | **51.47** | **315** | *e*P | **P** | **20 44 37.8** | **-0.4** |
| | 6.5nm,0.5s | | | | | | |
| **KKN** | **Kakani** | **51.69** | **316** | *e*P | **P** | **20 44 40.1** | **+0.4** |
| **DMN** | **Daman** | **51.70** | **315** | *e*P | **P** | **20 44 39.7** | **-0.2** |
| **GKN** | **Gorkha** | **52.27** | **315** | *e*P | **P** | **20 44 43.7** | **-0.2** |
| **USRK** | **Ussuriysk Ar.** | **52.92** | **8** | P | **P** | **20 44 48.2** | **0.0** |
| | 0.5nm,0.4s,baz=198,slow=7.4,SNR=4.0 | | | | | | |
| **SONM** | **Songino Array** | **58.05** | **346** | P | **P** | **20 45 25.3** | **+0.3** |
| | 0.2nm,0.5s,baz=168,slow=7.4,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.13** | **330** | P | **P** | **20 46 19.0** | **+0.1** |
| | 2.5nm,0.6s,baz=132,slow=7.7,SNR=21 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.22** | **337** | P | **P** | **20 46 43.0** | **-1.2** |
| | 1.0nm,0.7s,baz=151,slow=5.1,SNR=5.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.86** | **280** | PKP | **PKPdf** | **20 54 25.8** | **-1.5** |
| | 0.5nm,1.1s,baz=81,slow=1.4,SNR=4.5 | | | | | | |

*ISCJB* ***12*** *20:50:15.3±1.0,4°.87S±0°.07×134°.0E±0°.1,h28km, Error ellipse: s-maj=16.9km s-min=7.4km az=149.3*

*AUST* ***12*** *20:50:16.9±3.2,4°.88S×133°.92E,h29km, Error ellipse: s-maj=1.6km s-min=0.7km az=244.0*

*DJA* ***12*** *20:50:18.6±0.8,5°.5S×13°.4E±1°.0,h124km±8km, M4.4/10, mb4.7/7,mB4.8/4,MLv4.4/10,Mw(mB)4.1/4*

**ISC 12 20:50:18.0±1.2,4.84S±0°.09×133.9E±0.1,h28km,n20, σ1s59/19,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.53** | **319** | P | **Pn** | **20 50 55.8** | **-1.5** |
| | baz=2.6,SNR=28 | | | | | | |
| **FAKI** | **Fak Fak** | **2.53** | **319** | P | **Pn** | **20 50 56.3** | **-1.0** |
| FAKI | | | | S | **Sn** | **20 51 24.7** | **-2.5** |
| **RKPI** | **Ransiki, Papua** | **3.32** | **5** | P | Pb | 20 51 28.7 | +12 |
| **BNDI** | **Bandanaira** | **4.01** | **274** | P | **Pn** | **20 51 17.7** | **+0.1** |
| **SAUI** | **Saumlaki** | **4.06** | **220** | P | **Pn** | **20 51 19.7** | **+1.4** |
| **SWI** | **Sorong** | **4.76** | **326** | P | **Pn** | **20 51 29.1** | **+1.1** |
| | baz=4.8,SNR=4.5 | | | | | | |
| **SWI** | **Sorong** | **4.76** | **326** | P | **Pn** | **20 51 28.6** | **+0.6** |
| **MSAI** | **Masohi** | **5.19** | **286** | P | **Pn** | **20 51 34.1** | **+0.2** |
| | 19nm,0.5s,392nm0.1nm | | | | | | |
| **AAI** | **Ambon** | **5.82** | **281** | P | **Pn** | **20 51 41.8** | **-0.7** |
| | baz=5.8,SNR=9.9 | | | | | | |
| **AAI** | **Ambon** | **5.82** | **281** | P | **Pn** | **20 51 42.2** | **-0.3** |
| | 91nm,0.5s,1μm0.4nm | | | | | | |
| **NLAI** | **Namlea** | **6.98** | **283** | P | **Pn** | **20 52 01.6** | **+3.1** |
| **KDU** | **Kakadu** | **7.92** | **190** | P | **Pn** | **20 52 10.8** | **-0.7** |
| | baz=7.9,SNR=43 | | | | | | |
| **SANI** | **Sanana** | **8.38** | **289** | P | **Pn** | **20 52 18.9** | **+1.1** |
| | 17nm,1.2s,0.1nm | | | | | | |
| **MTN** | **Manton Dam** | **8.41** | **199** | P | **Pn** | **20 52 16.7** | **-1.5** |
| | baz=8.4,SNR=184 | | | | | | |
| **SOEI** | **Soe** | **10.74** | **242** | P | **Pn** | **20 52 48.4** | **-1.8** |
| | baz=11,SNR=5.9 | | | | | | |
| **SOEI** | **Soe** | **10.74** | **242** | P | Pn | 20 52 58.5 | +8.3 |
| **COEN** | **Coen** | **12.86** | **135** | P | **Pn** | **20 53 18.3** | **-0.9** |
| | baz=13,SNR=7.4 | | | | | | |
| **WRKA** | **Warakurna** | **20.79** | **194** | P | **P** | **20 54 57.2** | **-0.1** |
| | baz=21,SNR=29 | | | | | | |
| **BKNI** | **Bangkinang** | **33.23** | **278** | P | **P** | **20 56 54.1** | **+0.9** |
| | baz=33,SNR=4.8 | | | | | | |
| **BKNI** | **Bangkinang** | **33.23** | **278** | P | **P** | **20 56 56.0** | **+2.9** |

*NIED* ***12*** *20:54:00,41°.70N×142°.80E,h29km,Mw4.0 Best double couple: M₀9.50000×10¹⁴ NP1:φs24.00000°,δ44.00000°, λ-108.00000°. NP2:φs228.00000°,δ48.00000°, λ-73.00000°.*

*ISCJB* ***12*** *20:54:37.3±0.5,41°.62N±0°.03×142°.89E±0°.05,h44km±4km, mb3.9/14,MS3.2/4, Error ellipse: s-maj=7.0km s-min=3.8km az=41.3*

*JMA* ***12*** *20:54:37.0±0.1,41°.62N×142°.88E,h34km±2km,M3.9*

*JMA Felt I J1.*

*MOS* ***12*** *20:54:38.0±1.2,41°.64N×142°.87E,h55km,mb4.1/12, Error ellipse: s-maj=17.8km s-min=11.0km az=67.4*

*IDC* ***12*** *20:54:41.2±1.9,41°.65N×142°.71E,h64km±16km,mb3.7/14, mb1 3.9/18,mb1mx3.7/36,mbtmp3.9/18,MS3.0/7,*

*Ms1 3.1/7,ms1mx2.9/32, Error ellipse: s-maj=19.0km s-min=11.5km az=115.0*

**ISC 12 20:54:37.5±1.2,41°.66N±0°.04×142°.84E±0°.05,h30km±8km, n59,σ1s19/65,mb4.0/14,MS3.1/4,5C-2D,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JEM** | **Erimo** | **0.43** | **34** | ⇓P | **Pb** | **20 54 46.6** | **-0.2** |
| JEM | | | | *e*S | **Sb** | **20 54 53.2** | **0.0** |
| **JNBK** | **Urakawa-nobuka** | **0.62** | **354** | ⇑P | **Pn** | **20 54 49.8** | **-0.5** |
| JNBK | | | | *e*S | **Sn** | **20 54 59.2** | **0.0** |
| **JCH** | **Churui** | **1.03** | **22** | ⇑P | **Pn** | **20 54 56.0** | **+0.1** |
| JCH | | | | *e*S | **Sn** | **20 55 09.8** | **+0.5** |
| **JBT2** | **Biratori 2** | **1.17** | **343** | ⇑P | **Pn** | **20 54 58.1** | **+0.2** |
| **JKB** | **Kayabe** | **1.37** | **280** | P | **Pn** | **20 55 00.3** | **-0.3** |
| JKB | | | | *e*S | **Sn** | **20 55 17.7** | **0.0** |
| **JOT** | **Ohata** | **1.38** | **259** | ⇑P | **Pn** | **20 55 00.5** | **-0.1** |
| JOT | | | | *e*S | **Sn** | **20 55 18.1** | **+0.3** |
| **JOB** | **Onbets** | **1.45** | **30** | P | **Pn** | **20 55 03.1** | **+1.5** |
| JOB | | | | *e*S | **Sb** | **20 55 22.5** | **+0.7** |
| **JFR** | **Furan** | **1.51** | **353** | P | **Pn** | **20 55 02.9** | **+0.3** |
| JFR | | | | *e*S | **Sn** | **20 55 23.2** | **+1.9** |
| **JNB** | **Noboribetsu** | **1.57** | **302** | P | **Pn** | **20 55 03.0** | **-0.3** |
| JNB | | | | *e*S | **Sn** | **20 55 24.0** | **+1.5** |
| **JEW** | **Eniwo** | **1.57** | **319** | P | **Pn** | **20 55 03.9** | **+0.6** |
| JEW | | | | *e*S | **Sn** | **20 55 25.0** | **+2.4** |
| **JTM** | **Tenmabayashi** | **1.60** | **237** | ⇑P | **Pn** | **20 55 04.3** | **+0.6** |
| JTM | | | | *e*S | **Sn** | **20 55 24.2** | **+0.9** |
| **JANG** | **Nango** | **1.63** | **218** | P | **Pn** | **20 55 04.1** | **-0.1** |
| JANG | | | | *e*S | **Sn** | **20 55 24.2** | **+0.1** |
| **ASAJ** | **Asahikawa** | **2.46** | **356** | P | **Pn** | **20 55 18.1** | **+2.6** |
| | baz=202,slow=15 | | | | | | |
| ASAJ | | | | S | **Sb** | **20 55 48.8** | **-2.2** |
| | baz=180,slow=20 | | | | | | |
| **SHO** | **Shikotan** | **3.67** | **52** | *d* P | **Pn** | **20 55 31.9** | **-0.3** |
| SHO | | | | *i* S | **Sn** | **20 56 11.9** | **-2.6** |
| **KUR** | **Kuril'sk** | **5.11** | **44** | *e*P | **Pn** | **20 55 54.4** | **+2.4** |
| KUR | | | | *e*S | **Sn** | **20 56 49.9** | **0.0** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,34nm,0.9s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,50nm,0.1s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,42nm,0.1s | | | | | | |
| **MAT** | **Matsushiro** | **6.25** | **217** | P | **Pn** | **20 56 09.8** | **+2.1** |
| MAT | | | | S | **Sn** | **20 57 21.0** | **+2.9** |
| **MJAR** | **Matsushiro Arr** | **6.25** | **217** | P | **Pn** | **20 56 10.4** | **+2.7** |
| | comp=E,1.7nm,0.3s,baz=28,slow=13,SNR=26 | | | | | | |
| MJAR | | | | LR | LR | 20 58 55.4 | |
| | comp=E,82nm,20.4s,baz=50,slow=41 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.36** | **291** | P | **Pn** | **20 56 38.8** | **+2.3** |
| | comp=E,0.3nm,0.3s,baz=91,slow=15,SNR=8.7 | | | | | | |
| **KSRS** | **Korea Array** | **12.25** | **255** | P | Pn | 20 57 33.3 | +3.4 |
| | comp=E,0.4nm,0.3s,baz=67,slow=16,SNR=8.4 | | | | | | |
| KSRS | | | | LR | LR | 21 01 53.4 | |
| | comp=E,51nm,18.7s,baz=56,slow=36 | | | | | | |
| **JNU** | **Nakatsue** | **12.76** | **232** | LR | LR | 21 02 29.6 | |
| | comp=E,46nm,19.6s,baz=120,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **26.43** | **296** | P | **P** | **21 00 09.6** | **-2.0** |
| | comp=E,0.5nm,0.5s,baz=75,slow=7.3,SNR=6.3 | | | | | | |
| SONM | | | | LR | LR | 21 11 07.0 | |
| | comp=E,48nm,20.0s,baz=68,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **26.43** | **296** | P | **P** | **21 00 09.6** | **-2.0** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,48nm,20.0s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.91** | **130** | T | T | 21 32 00.6 | |
| | baz=323,slow=75,SNR=326 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.92** | **130** | T | T | 21 32 01.7 | |
| | baz=323,slow=75,SNR=356 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.93** | **130** | T | T | 21 32 03.4 | |
| | baz=323,slow=75,SNR=284 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.77** | **131** | T | T | 21 33 07.0 | |
| | baz=324,slow=76,SNR=371 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.77** | **131** | T | T | 21 33 07.0 | |
| | baz=324,slow=76,SNR=314 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.79** | **131** | T | T | 21 33 07.7 | |
| | baz=324,slow=76,SNR=270 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.76** | **308** | P | **P** | **21 02 07.2** | **0.0** |
| | comp=Z,1.6nm,0.5s,baz=79,slow=8.0,SNR=7.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.76** | **308** | P | **P** | **21 02 07.3** | **0.0** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **42.75** | **298** | P | **P** | **21 02 31.7** | **-0.3** |
| | comp=Z,1.1nm,0.4s,baz=83,slow=9.3,SNR=7.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.75** | **298** | P | **P** | **21 02 31.7** | **-0.3** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.87** | **252** | P | **P** | **21 02 41.6** | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=39,slow=8.7,SNR=3.3 | | | | | | |
| CMAR | | | | LR | LR | 21 22 40.6 | |
| | comp=Z,11nm,18.1s,baz=200,slow=38 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.87** | **252** | P | **P** | **21 02 41.6** | **+0.3** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| CMAR | | | | MLR | MLR | | |
| | comp=Z,11nm,18.1s | | | | | | |
| **ILAR** | **Eielson Array** | **45.03** | **35** | P | **P** | **21 02 50.1** | **+0.2** |
| | comp=Z,1.6nm,0.9s,baz=256,slow=5.6,SNR=7.5 | | | | | | |
| **ILAR** | **Eielson Array** | **45.03** | **35** | P | **P** | **21 02 50.2** | **+0.2** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **TAPN** | **Taplejung** | **46.87** | **270** | *e*P | **P** | **21 03 06.1** | **+0.8** |
| **ODAN** | **Odare** | **47.37** | **270** | *e*P | **P** | **21 03 09.3** | **+0.1** |
| **RAMN** | **Ramite** | **47.92** | **271** | *e*P | **P** | **21 03 13.6** | **+0.2** |
| | comp=Z,15nm,1.0s | | | | | | |
| **GUN** | **Gumba** | **47.94** | **272** | *e*P | **P** | **21 03 13.9** | **+0.2** |
| | comp=Z,10nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **48.45** | **273** | *e*P | **P** | **21 03 17.3** | **-0.2** |
| **GKN** | **Gorkha** | **48.82** | **273** | *e*P | **P** | **21 03 19.5** | **-0.8** |
| **INK** | **Inuvik** | **49.79** | **29** | P | **P** | **21 03 26.9** | **+0.1** |
| | comp=Z,0.9nm,0.4s,baz=284,slow=6.0,SNR=4.5 | | | | | | |
| **INK** | **Inuvik** | **49.79** | **29** | P | **P** | **21 03 27.0** | **+0.1** |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **61.79** | **189** | P | **P** | **21 04 52.2** | **-1.1** |
| | comp=Z,1.8nm,1.0s,baz=7.9,slow=7.0,SNR=8.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **61.79** | **189** | P | **P** | **21 04 52.3** | **-1.1** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **65.25** | **332** | P | **P** | **21 05 15.1** | **-0.7** |
| | comp=Z,3.1nm,0.8s,baz=57,slow=7.0,SNR=6.6 | | | | | | |
| FINES | | | | LR | LR | 21 36 07.1 | |
| | comp=Z,42nm,18.7s,baz=48,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **65.25** | **332** | P | **P** | **21 05 15.1** | **-0.7** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,42nm,18.7s | | | | | | |
| **ASAR** | **Alice Springs** | **65.52** | **189** | P | **P** | **21 05 17.3** | **-0.6** |
| | comp=Z,0.6nm,0.8s,baz=27,slow=5.8,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **65.52** | **189** | P | **P** | **21 05 17.3** | **-0.6** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **68.76** | **310** | P | **P** | **21 05 38.8** | **+0.4** |
| | comp=Z,1.4nm,0.7s,baz=31,slow=5.9,SNR=3.8 | | | | | | |
| **KBZ** | **Khabaz** | **68.76** | **310** | P | **P** | **21 05 38.8** | **+0.4** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **70.35** | **337** | LR | LR | 21 40 19.2 | |
| | comp=Z,14nm,20.5s,baz=0.0,slow=39 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.33** | **322** | P | **P** | **21 05 53.0** | **-1.0** |
| | comp=Z,0.8nm,0.5s,baz=42,slow=5.8,SNR=5.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.33** | **322** | P | **P** | **21 05 53.0** | **-1.0** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **71.38** | **55** | P | **P** | **21 05 56.1** | **+1.3** |
| | comp=Z,1.1nm,0.7s,baz=285,slow=6.8,SNR=7.5 | | | | | | |
| **SCHQ** | **Schefferville** | **80.59** | **17** | P | **P** | **21 06 46.7** | **-0.1** |
| | comp=Z,3.7nm,0.9s,baz=302,slow=9.5,SNR=2.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.45** | **53** | P | **P** | **21 07 18.1** | **+0.7** |
| | comp=Z,0.6nm,0.6s,baz=316,slow=3.8,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.45** | **53** | P | **P** | **21 07 18.1** | **+0.7** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |

**DJA 12 21:03:16.4±2.4,3°.N±24°.×12°.3E±°.,h479km±23km,M4.2/10, mb4.3/6,mB4.4/5,MLv4.4/10,Mw(mB)3.6/5,Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **2.76** | **200** | P | P | 21 04 24.9 | +0.8 |
| **MPSI** | **Mapaga** | **4.04** | **228** | P | P | 21 04 34.1 | +0.3 |
| **LUWI** | **Luwuk** | **4.11** | **182** | P | P | 21 04 34.5 | +0.1 |
| **APSI** | **Ampana** | **4.16** | **197** | P | P | 21 04 34.7 | -0.1 |
| **PCI** | **Palu** | **5.00** | **218** | P | P | 21 04 41.5 | -0.8 |
| | 59nm,1.0s,966nm0.2nm | | | | | | |
| **TNTI** | **Ternate** | **5.04** | **117** | P | P | 21 04 43.0 | +0.3 |
| | 78nm,0.6s,1μm0.6nm | | | | | | |
| **LBMI** | **Labuha** | **5.92** | **129** | P | P | 21 04 51.3 | +0.2 |
| | 17nm,0.9s,0.4nm | | | | | | |
| **TTSI** | **Tana Toraja** | **6.82** | **207** | P | P | 21 05 02.0 | +1.9 |
| | 66nm,0.8s,592nm0.2nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **7.67** | **204** | P | P | 21 05 09.3 | +0.4 |

**MEX 12 21:06:45.9±0.7,15°.19N×93°.40W,h32km±13km,MD3.7, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.55** | **19** | *i* P | Pb | 21 06 54.6 | -2.5 |
| PCIG | | | | *e*S | Sb | 21 07 02.9 | -1.9 |
| **CCIG** | **Comitan** | **1.63** | **48** | *i* P | Pn | 21 07 10.8 | -2.0 |
| CCIG | | | | *i* S | Sn | 21 07 29.8 | -3.0 |

**MEX 12 21:21:04.6±0.4,15°.45N×92°.62W,h47km±24km,MD3.5, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.63** | **294** | *i* P | Pn | 21 21 16.0 | -1.3 |
| PCIG | | | | *i* S | Sn | 21 21 24.4 | -2.0 |

*ISCJB* ***12*** *21:30:28.6±1.1,3°.0N±0°.2×128°.7E±0°.3,h250km,mb3.5/5, Error ellipse: s-maj=50.3km s-min=13.9km az=152.6*

*IDC* ***12*** *21:30:29.9±8.1,2°.93N×128°.63E,h245km±85km,mb3.2/5, mb1 3.3/5,mb1mx2.9/32,mbtmp3.7/5,Error ellipse: s-maj=152.6km s-min=19.3km az=72.0*

**ISC 12 21:30:30.2±1.3,3°.0N±0°.2×128°.7E±0°.5,h250km,n12, σ0s45/12,mb3.4/5,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **23.42** | **167** | P | **P** | **21 35 16.9** | **-0.3** |
| | 0.4nm,0.3s,baz=344,slow=10,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **26.94** | **169** | P | **P** | **21 35 49.2** | **+0.3** |
| | 0.6nm,0.7s,baz=350,slow=8.3,SNR=7.7 | | | | | | |
| **ODAN** | **Odare** | **46.11** | **305** | *e*P | **P** | **21 38 30.3** | **+0.1** |
| | 5.2nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **46.80** | **305** | *e*P | **P** | **21 38 36.0** | **+0.5** |
| | 7.9nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **47.76** | **306** | *e*P | **P** | **21 38 43.0** | **-0.1** |
| **PKIN** | **Phulchoki** | **48.02** | **305** | *e*P | **P** | **21 38 44.4** | **-0.6** |
| | 2.1nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **48.20** | **305** | *e*P | **P** | **21 38 45.9** | **-0.4** |
| | 3.4nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **48.67** | **340** | P | **P** | **21 38 50.0** | **+0.5** |
| | 0.3nm,0.6s,baz=152,slow=6.4,SNR=2.9 | | | | | | |
| **KOLN** | **Koldanda** | **49.57** | **304** | *e*P | **P** | **21 38 56.8** | **+0.1** |
| | 6.0nm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **59.31** | **325** | P | **P** | **21 40 05.8** | **-0.2** |
| | 0.7nm,0.4s,baz=124,slow=7.3,SNR=8.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **91.85** | **340** | P | **P** | **21 43 09.0** | **-0.6** |
| | 2.4nm,0.8s,baz=70,slow=5.2,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **125.02** | **288** | PKP | **PKPdf** | **21 49 02.2** | **+0.5** |
| | 0.1nm,0.4s,baz=94,slow=1.7,SNR=5.2 | | | | | | |

**WEL 12 21:49:05.8±0.4,37°.50S×175°.93E,h216km±4km,ML4.1/17, 6C-6D,Error ellipse: s-maj=5.4km s-min=4.2km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **1.21** | **130** | PN | Pn | 21 49 38.7 | +0.2 |
| URZ | | | | SN | S | 21 50 04.0 | 0.0 |
| URZ | | | | AML | AML | 21 50 05.2 | |
| **HAZ** | **Te Kaha** | **1.49** | **101** | PN | Pn | 21 49 40.6 | -0.2 |
| HAZ | | | | SN | S | 21 50 07.9 | 0.0 |
| **MWZ** | **Matawai** | **1.52** | **124** | PN | Pn | 21 49 41.3 | +0.3 |
| MWZ | | | | SN | S | 21 50 08.1 | -0.3 |
| MWZ | | | | AML | AML | 21 50 10.7 | |
| **RAHZ** | **Arahi** | **1.69** | **148** | PN | Pn | 21 49 42.5 | 0.0 |
| **SNGZ** | **Shannon Statio** | **1.70** | **140** | PN | Pn | 21 49 42.7 | +0.1 |
| SNGZ | | | | SN | S | 21 50 10.4 | -0.9 |
| **BKZ** | **Black Stump Fm** | **1.73** | **165** | ⇑PN | Pn | 21 49 42.7 | -0.3 |
| BKZ | | | | AML | AML | 21 50 11.2 | |
| BKZ | | | | AML | AML | 21 50 12.1 | |
| **NMHZ** | **Naumai** | **1.74** | **157** | PN | Pn | 21 49 43.7 | +0.6 |
| **TWGZ** | **Tauwhareparae** | **1.76** | **113** | PN | Pn | 21 49 43.6 | +0.4 |
| **TUVZ** | **Tukino** | **1.78** | **187** | PN | Pn | 21 49 44.0 | +0.4 |
| **WNVZ** | **Wahianoa** | **1.85** | **188** | ⇓PN | Pn | 21 49 44.4 | +0.2 |
| **PKVZ** | **Pokaka** | **1.85** | **194** | PN | Pn | 21 49 44.5 | +0.4 

*ellipse: s-maj=5.3km s-min=4.9km az=22.3*
*CSEM **12** 21:58:02.2±0.3,37.74N×35.09E,h20km,MD2.6,Error ellipse: s-maj=8.7km s-min=7.0km az=51.0*
*ISK **12** 21:58:02.0,37.70N×35.09E,h29km,MD2.6*

**ISC 12 21:58:01.3±0.9,37.78N±0.04×35.12E±0.03,h13km,n22,σ0°48/29,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KARA** | **Karaisali** | **0.52** | **185** | *e*PG | **Pg** | **21 58 11.4** | **-0.1** |
| KARA | | | | *e*SG | **Sb** | **21 58 19.4** | **-0.2** |
| **KARA** | **Karaisali** | **0.52** | **185** | *e*Pg | **Pg** | **21 58 11.4** | **-0.1** |
| KARA | | | | *e*Sg | **Sb** | **21 58 19.4** | **-0.2** |
| **NIG** | **Nigde** | **0.52** | **310** | *e*PG | **Pn** | **21 58 14.9** | **+0.2** |
| **NIG** | **Nigde** | **0.52** | **310** | *e*Pg | **Pn** | **21 58 14.9** | **+0.2** |
| **GULE** | **Gulek** | **0.56** | **209** | *i* P | **Pg** | **21 58 12.3** | **-0.1** |
| GULE | | | | *i* S | **Sb** | **21 58 21.4** | **+0.3** |
| **GULE** | **Gulek** | **0.56** | **209** | P | **Pg** | **21 58 12.3** | **-0.1** |
| GULE | | | | S | **Sb** | **21 58 21.4** | **+0.3** |
| **KOZT** | **Kozan** | **0.64** | **117** | *e*PG | **Pn** | **21 58 16.1** | **0.0** |
| **KOZT** | **Kozan** | **0.64** | **117** | *e*Pg | **Pn** | **21 58 16.1** | **0.0** |
| **GULA** | **Gulagac** | **0.90** | **309** | *e*PG | **Pg** | **21 58 18.6** | **-0.1** |
| **GULA** | **Gulagac** | **0.90** | **309** | *e*Pg | **Pg** | **21 58 18.6** | **-0.1** |
| **ANDN** | **Andirin** | **0.99** | **101** | *i* P | **Pb** | **21 58 20.1** | **-0.4** |
| ANDN | | | | *i* S | **Sg** | **21 58 34.0** | **+0.5** |
| **ANDN** | **Andirin** | **0.99** | **101** | P | **Pb** | **21 58 20.1** | **-0.4** |
| ANDN | | | | S | **Sg** | **21 58 34.0** | **+0.5** |
| **YESY** | **Yesilyurt** | **1.09** | **271** | *e*PG | **Pb** | **21 58 21.3** | **-0.8** |
| **YESY** | **Yesilyurt** | **1.09** | **271** | *e*Pg | **Pb** | **21 58 21.3** | **-0.8** |
| **SARI** | **SarD1z-Kayseri** | **1.21** | **58** | *e*PN | **Pn** | **21 58 23.5** | **-0.5** |
| **BNN** | **Bunyan** | **1.22** | **28** | *e*PN | **Pn** | **21 58 23.9** | **-0.3** |
| **BNN** | **Bunyan** | **1.22** | **28** | *e*Pn | **Pn** | **21 58 23.9** | **-0.3** |
| **AYKD** | **Aykdinkavak** | **1.39** | **105** | P | **Pg** | **21 58 27.9** | **-0.1** |
| AYKD | | | | S | **Sg** | **21 58 47.7** | **+1.5** |
| **YAYX** | **Yaylak** | **1.55** | **319** | *e*PN | **Pb** | **21 58 29.6** | **-0.3** |
| **YAYX** | **Yaylak** | **1.55** | **319** | *e*Pn | **Pb** | **21 58 29.6** | **-0.3** |
| **KAMT** | **Kaman** | **1.93** | **326** | *e*PN | **Pn** | **21 58 34.6** | **+0.6** |
| **KAMT** | **Kaman** | **1.93** | **326** | *e*Pn | **Pn** | **21 58 34.6** | **+0.6** |

*BJI **12** 22:19:42.2,5.67S×129.95E,h182km,mb4.4/6,mB4.6/5*
*MOS **12** 22:19:44.8±0.8,4.99S×129.75E,h152km,mb5.0/10,Error ellipse: s-maj=18.6km s-min=7.8km az=113.6*
*ISCJB **12** 22:19:44.7±0.2,5.01S±0.03×129.66E±0.05,h150km,mb4.6/37,Error ellipse: s-maj=7.1km s-min=3.9km az=166.6*
*IDC **12** 22:19:47.4±1.6,4.93S×129.72E,h156km±15km,mb3.9/12,mb1 4.0/16,mb1mx3.8/35,mbtmp4.4/16,Error ellipse: s-maj=18.6km s-min=12.5km az=91.0*
*NEIC **12** 22:19:48.6±0.5,5.03S×129.71E,h176km±6km,mb4.7/18,Error ellipse: s-maj=7.5km s-min=4.5km az=78.0*
*AUST **12** 22:19:48.6,4.98S×130.02E,h200km*
*DJA **12** 22:19:50.4±0.3,5°S±3°×13°0E±°,h166km±3km,M4.7/17,mb4.6/12,mB5.4/3,MLv4.8/17,Mw(mB)4.9/3*

**ISC 12 22:19:46.0±0.4,5.06S±0.04×129.79E±0.07,h150km,n122,σ1°61/119,mb4.6/37,4C-2D,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **0.54** | **13** | P | Pn | 22 20 14.2 | +6.6 |
| BNDI | | | | S | Sn | 22 20 33.2 | +9.1 |
| **MSAI** | **Masohi** | **1.90** | **333** | P | Pn | 22 20 24.0 | +4.0 |
| MSAI | | | | S | **Sn** | **22 20 49.3** | **+3.1** |
| **AAI** | **Ambon** | **2.09** | **310** | P | Pn | 22 20 26.4 | +4.2 |
| | baz=2.2,SNR=32 | | | | | | |
| **AAI** | **Ambon** | **2.09** | **310** | P | Pn | 22 20 26.5 | +4.2 |
| **NLAI** | **Namlea** | **3.23** | **304** | P | Pn | 22 20 40.4 | +4.1 |
| **FAKI** | **Fak Fak** | **3.25** | **49** | P | Pn | 22 20 39.9 | +3.4 |
| | baz=3.0,SNR=19 | | | | | | |
| **FAKI** | **Fak Fak** | **3.25** | **49** | P | Pn | 22 20 40.8 | +4.3 |
| FAKI | | | | S | **Sn** | **22 21 17.8** | **+2.1** |
| **FAKI** | **Fak Fak** | **3.25** | **49** | *e*Pn | Pn | 22 20 39.9 | +3.4 |
| FAKI | | | | *e*Sn | **Sn** | **22 21 13.1** | **-2.5** |
| **SAUI** | **Saumlaki** | **3.27** | **153** | P | **Sn** | **22 21 16.7** | **+2.3** |
| **SAUI** | **Saumlaki** | **3.27** | **153** | *e*Pn | Pn | 22 20 42.0 | +5.1 |
| SAUI | | | | *e*Sn | **Sn** | **22 21 11.5** | **-4.8** |
| **SIJI** | **Sorong** | **4.41** | **20** | P | **Pn** | **22 20 53.8** | **+2.0** |
| | 25nm,0.3s,baz=211,slow=23,SNR=55 | | | | | | |
| SIJI | | | | S | **Sn** | **22 21 41.0** | **-1.9** |
| | 26nm,0.3s,baz=223,slow=12,SNR=5.9 | | | | | | |
| **SWI** | **Sorong** | **4.42** | **20** | P | **Pn** | **22 20 54.0** | **+2.3** |
| | baz=4.3,SNR=31 | | | | | | |
| **SWI** | **Sorong** | **4.42** | **20** | P | **Pn** | **22 20 54.9** | **+3.1** |
| **SANI** | **Sanana** | **4.83** | **308** | P | **Pn** | **22 21 00.1** | **+2.9** |
| **LBMI** | **Labuha** | **4.95** | **332** | P | **Pn** | **22 21 01.6** | **+2.8** |
| **TNTI** | **Ternate** | **6.27** | **337** | P | **Pn** | **22 21 19.6** | **+3.2** |
| | 146nm,0.7s,0.5nm | | | | | | |
| **TNTI** | **Ternate** | **6.27** | **337** | *e*Pn | **Pn** | **22 21 18.9** | **+2.5** |
| **MTN** | **Manton Dam** | **7.85** | **170** | P | **Pn** | **22 21 40.4** | **+2.9** |
| | baz=7.9,SNR=6.0 | | | | | | |
| **MTN** | **Manton Dam** | **7.85** | **170** | *e*Pn | **Pn** | **22 21 40.3** | **+2.8** |
| MTN | | | | *e*Sn | **Sn** | **22 23 03.5** | **-1.6** |
| **BATI** | **Baumata** | **7.94** | **229** | P | **Pn** | **22 21 40.6** | **+1.9** |
| | 4.7nm,0.3s,baz=108,slow=3.6,SNR=7.2 | | | | | | |
| **BATI** | **Baumata** | **7.94** | **229** | P | Pn | 22 21 46.1 | +7.4 |
| | 31nm,0.9s,0.1nm | | | | | | |
| **KDU** | **Kakadu** | **8.03** | **161** | P | **Pn** | **22 21 41.6** | **+1.7** |
| | baz=8.1,SNR=48 | | | | | | |
| **KMSI** | **Cibinong** | **8.06** | **314** | P | Pn | 22 21 43.6 | +3.4 |
| | 273nm,0.6s,5μm1.1nm | | | | | | |
| **LUWI** | **Luwuk** | **8.06** | **299** | P | **Pn** | **22 21 43.1** | **+2.8** |
| | 54nm,0.9s,3μm0.3nm | | | | | | |
| **LUWI** | **Luwuk** | **8.06** | **299** | *e*Pn | **Pn** | **22 21 37.6** | **-2.6** |
| **MRSI** | **Marisa** | **9.57** | **305** | P | **Pn** | **22 22 02.8** | **+2.4** |
| | 77nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.44** | **164** | *e*P | **Pn** | **22 23 16.8** | **+0.8** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,21nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.44** | **164** | *e*Pn | **Pn** | **22 23 16.8** | **+0.8** |
| | comp=Z,21nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.45** | **164** | P | **Pn** | **22 23 16.1** | **+0.1** |
| | comp=Z,2.4nm,0.3s,baz=333,slow=12,SNR=38 | | | | | | |
| WRA | | | | S | Sn | 22 25 57.5 | -11 |
| | comp=Z,2.1nm,0.3s,baz=334,slow=22,SNR=8.3 | | | | | | |
| **COEN** | **Coen** | **15.88** | **125** | P | **P** | **22 23 24.1** | **+2.0** |
| | baz=16,SNR=43 | | | | | | |
| **COEN** | **Coen** | **15.88** | **125** | *e*Pn | **P** | **22 23 24.3** | **+2.1** |
| | comp=Z,17nm,0.6s | | | | | | |
| **PMG** | **Port Moresby** | **17.77** | **105** | P | **Pn** | **22 23 45.1** | **+1.0** |
| | comp=Z,0.8nm,0.3s,baz=239,slow=12,SNR=3.1 | | | | | | |
| **MANU** | **Manus Island** | **17.80** | **81** | P | Pn | 22 23 55.6 | +11 |
| | baz=18,SNR=7.4 | | | | | | |
| **QIS** | **Mount Isa** | **18.13** | **149** | P | **Pn** | **22 23 49.3** | **+0.9** |
| | baz=18,SNR=32 | | | | | | |
| **MBWA** | **Marble Bar** | **18.75** | **210** | *e*P | **P** | **22 23 53.8** | **+0.2** |
| | comp=Z,43nm,1.9s | | | | | | |
| **AS12** | **Alice Springs** | **18.93** | **168** | *e*P | **Pn** | **22 23 58.0** | **+0.2** |
| AS12 | | | | *e*S | **S** | **22 27 18.8** | **-3.9** |
| **ASAR** | **Alice Springs** | **18.93** | **168** | P | **Pn** | **22 23 58.0** | **+0.2** |
| | comp=Z,12nm,0.3s,baz=347,slow=10,SNR=544 | | | | | | |
| ASAR | | | | S | **S** | **22 27 18.8** | **-3.9** |
| | comp=Z,0.4nm,0.3s,baz=348,slow=19,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **18.93** | **168** | P | **Pn** | **22 23 58.0** | **+0.2** |
| **AS01** | **Alice Springs** | **18.93** | **168** | *e*P | **Pn** | **22 23 57.7** | **-0.2** |
| **WRKA** | **Warakurna** | **19.92** | **184** | P | **P** | **22 24 08.1** | **+1.9** |
| | baz=20,SNR=26 | | | | | | |
| **CTA** | **Charters Tower** | **21.91** | **134** | P | **P** | **22 24 29.9** | **+2.4** |
| | comp=Z,7.3nm,0.9s,baz=297,slow=13,SNR=4.2 | | | | | | |
| **BBOO** | **Buckleboo** | **28.23** | **169** | P | **P** | **22 25 26.6** | **+1.7** |
| | baz=28,SNR=5.8 | | | | | | |
| **BBOO** | **Buckleboo** | **28.23** | **169** | *e*P | **P** | **22 25 24.9** | **0.0** |
| | comp=Z,79nm,1.9s | | | | | | |
| **YOJ** | **Yonaguni jima** | **30.07** | **348** | *e*P | **P** | **22 25 41.0** | **-0.3** |
| YOJ | | | | pmax | pmax | | |
| | comp=Z,58nm,1.3s | | | | | | |
| **YOJ** | **Yonaguni jima** | **30.07** | **348** | *e*P | **P** | **22 25 41.0** | **-0.3** |
| | comp=Z,58nm,1.3s | | | | | | |
| **CBIJ** | **Chichi jima** | **34.14** | **20** | *e*P | **P** | **22 26 15.1** | **-1.7** |
| | comp=Z,291nm,1.9s | | | | | | |
| **CAN** | **Canberra** | **34.95** | **152** | *e*P | **P** | **22 26 24.0** | **+0.2** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,71nm,1.7s | | | | | | |
| **CAN** | **Canberra** | **34.95** | **152** | *e*P | **P** | **22 26 23.9** | **+0.2** |
| | comp=Z,71nm,1.7s | | | | | | |
| **LHI** | **Lord Howe Isla** | **38.04** | **137** | *e*P | P | 22 26 47.4 | -2.5 |
| | comp=Z,720nm,2.3s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **38.35** | **308** | *e*P | **P** | **22 26 52.0** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** | **38.35** | **308** | P | **P** | **22 26 52.0** | **-0.7** |
| | comp=Z,1.0nm,0.6s,baz=136,slow=7.0,SNR=7.0 | | | | | | |
| **CHTO** | **Chiang Mai** | **38.55** | **309** | *e*P | **P** | **22 26 53.3** | **-1.0** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **CHTO** | **Chiang Mai** | **38.55** | **309** | *e*P | **P** | **22 26 53.3** | **-1.0** |
| | comp=Z,6.0nm,1.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **42.12** | **10** | P | **P** | **22 27 22.4** | **-1.1** |
| | comp=Z,4.1nm,0.8s,baz=187,slow=10.0,SNR=12 | | | | | | |
| **MAJO** | **Matsushiro** | **42.12** | **10** | *e*P | **P** | **22 27 22.9** | **-0.6** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,39nm,0.8s | | | | | | |
| **MAJO** | **Matsushiro** | **42.12** | **10** | *e*P | **P** | **22 27 22.4** | **-1.1** |
| | comp=Z,6.3nm,0.6s | | | | | | |
| **KS15** | **Wonju Array Si** | **42.31** | **358** | *e*P | **P** | **22 27 25.5** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **42.31** | **358** | P | **P** | **22 27 25.5** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **42.31** | **358** | P | **P** | **22 27 25.5** | **+0.5** |
| **KSRS** | **Korea Array** | **42.33** | **358** | P | **P** | **22 27 25.5** | **+0.4** |
| | comp=Z,1.5nm,0.7s,baz=168,slow=9.2,SNR=4.4 | | | | | | |
| **MSHR** | **Mys Shultsa** | **47.43** | **1** | P | **P** | **22 28 07.0** | **+1.7** |
| **HHC** | **Hu-ho-hao-te** | **48.64** | **342** | *e*P | **P** | **22 28 17.4** | **+2.5** |
| HHC | | | | S | **S** | **22 35 02.2** | **-3.4** |
| HHC | | | | SS | **SS** | **22 38 33.1** | **-5.0** |
| HHC | | | | PMZ | | | |
| | comp=Z,29nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,67nm,3.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.07** | **2** | P | **P** | **22 28 18.1** | **+0.1** |
| | comp=Z,3.9nm,0.5s,baz=189,slow=8.3,SNR=11 | | | | | | |
| **ASAJ** | **Asahikawa** | **50.29** | **12** | *e*P | **P** | **22 28 26.6** | **-0.6** |
| | comp=Z,219nm,2.4s | | | | | | |
| **LSA** | **Lhasa** | **50.66** | **315** | *e*P | **P** | **22 28 29.8** | **-1.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **LSA** | **Lhasa** | **50.66** | **315** | *e*P | **P** | **22 28 29.8** | **-1.0** |
| | comp=Z,2.6nm,0.6s | | | | | | |
| **ODAN** | **Odaejin** | **51.84** | **310** | *e*P | **P** | **22 28 38.6** | **-0.8** |
| **TAPN** | **Taplejung** | **51.85** | **311** | *e*P | **P** | **22 28 38.8** | **-0.7** |
| | comp=Z,7.8nm,0.4s | | | | | | |
| **GTA** | **Gaotai** | **52.18** | **331** | *e*P | **P** | **22 28 41.7** | **+0.2** |
| GTA | | | | PMZ | | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **52.49** | **310** | *e*P | **P** | **22 28 43.9** | **-0.3** |
| | comp=Z,22nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **53.53** | **310** | *e*P | **P** | **22 28 51.3** | **-0.6** |
| | comp=Z,16nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **53.72** | **310** | *e*P | **P** | **22 28 52.2** | **-1.1** |
| **PKIN** | **Phulchoki** | **53.73** | **310** | *e*P | **P** | **22 28 52.5** | **-0.8** |
| **KKN** | **Kakani** | **53.93** | **310** | *e*P | **P** | **22 28 53.4** | **-1.2** |
| | comp=Z,10nm,0.8s | | | | | | |
| **DMN** | **Daman** | **53.97** | **310** | *e*P | **P** | **22 28 54.1** | **-0.9** |
| | comp=Z,14nm,0.9s | | | | | | |
| **GKN** | **Gorkha** | **54.53** | **310** | *e*P | **P** | **22 28 58.1** | **-0.8** |
| | comp=Z,17nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **55.21** | **309** | *e*P | **P** | **22 29 03.2** | **-0.7** |
| | comp=Z,14nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.36** | **342** | *de*P | **P** | **22 29 12.1** | **+0.5** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **56.36** | **342** | *e*P | **P** | **22 29 11.9** | **+0.3** |
| | comp=Z,3.2nm,0.6s | | | | | | |
| **SONA0** | **Songino Array** | **56.54** | **341** | *e*P | **P** | **22 29 13.2** | **+0.4** |
| **SONM** | **Songino Array** | **56.54** | **341** | P | **P** | **22 29 13.2** | **+0.4** |
| | comp=Z,1.5nm,0.6s,baz=163,slow=7.8,SNR=16 | | | | | | |
| **SONA1** | **Songino Array** | **56.55** | **341** | *e*P | **P** | **22 29 13.2** | **+0.3** |
| **PEA0** | **Petropavlovsk-** | **62.56** | **19** | *e*P | **P** | **22 29 54.3** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **62.56** | **19** | P | **P** | **22 29 54.4** | **+0.5** |
| | comp=Z,8.6nm,0.6s,baz=174,slow=4.5,SNR=8.1 | | | | | | |
| **PEA2** | **Petropavlovsk-** | **62.56** | **19** | *e*P | **P** | **22 29 54.4** | **+0.5** |
| **CASY** | **Casey** | **62.58** | **189** | *e*P | **P** | **22 29 52.6** | **-1.2** |
| | comp=Z,76nm,2.5s | | | | | | |
| **PDGK** | **Podgornoye** | **66.14** | **322** | P | **P** | **22 30 17.7** | **+0.4** |
| **MK01** | **Makanchi Array** | **66.47** | **326** | *e*P | **P** | **22 30 19.4** | **0.0** |
| **MK32** | **Makanchi Array** | **66.50** | **326** | *e*P | **P** | **22 30 19.6** | **0.0** |
| **MKAR** | **Makanchi Array** | **66.50** | **326** | P | **P** | **22 30 19.6** | **0.0** |
| | comp=Z,4.1nm,0.5s,baz=114,slow=8.7,SNR=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.50** | **326** | *ce*P | **P** | **22 30 19.6** | **0.0** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **66.50** | **326** | *e*P | **P** | **22 30 19.7** | **+0.1** |
| **YAK** | **Yakutsk** | **66.89** | **360** | *e*P | **P** | **22 30 20.7** | **-1.0** |
| **YAK** | **Yakutsk** | **66.89** | **360** | *e*P | **P** | **22 30 20.7** | **-1.0** |
| | comp=Z,30nm,0.7s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **68.37** | **317** | P | **P** | **22 30 33.1** | **+1.3** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,35nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **68.93** | **319** | *i* P | **P** | **22 30 35.6** | **+0.5** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **KBL** | **Kabul** | **69.36** | **310** | P | **P** | **22 30 37.9** | **-0.1** |
| KBL | | | | pmax | pmax | | |
| | comp=Z,43nm,0.6s | | | | | | |
| **EKS2** | **Erkin-Say** | **69.41** | **319** | *e*P | **P** | **22 30 38.0** | **0.0** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **EKS2** | **Erkin-Say** | **69.41** | **319** | *e*P | **P** | **22 30 38.0** | **0.0** |
| | comp=Z,3.0nm,0.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **69.76** | **334** | *e*P | **P** | **22 30 38.7** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **69.76** | **334** | P | **P** | **22 30 38.7** | **-1.0** |
| | comp=Z,3.3nm,0.6s,baz=123,slow=4.9,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.76** | **334** | *i* P | **P** | **22 30 39.0** | **-0.7** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **ZAA1** | **Zalesovo Array** | **69.76** | **334** | *e*P | **P** | **22 30 38.7** | **-1.0** |
| **SEY** | **Seymchan** | **69.95** | **11** | P | **P** | **22 30 41.5** | **+0.9** |
| | comp=Z,5.6nm,0.6s,baz=229,slow=3.3,SNR=9.5 | | | | | | |
| **SEY** | **Seymchan** | **69.95** | **11** | *e*P | **P** | **22 30 41.7** | **+1.0** |
| **MNAS** | **Manas** | **70.16** | **319** | P | **P** | **22 30 43.7** | **+1.1** |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,32nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **70.76** | **328** | *e*P | **P** | **22 30 45.9** | **0.0** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **70.76** | **328** | *e*P | **P** | **22 30 45.9** | **0.0** |
| | comp=Z,19nm,0.9s | | | | | | |
| **DZET** | **Dzherino** | **71.14** | **314** | P | **P** | **22 30 50.2** | **+1.6** |
| DZET | | | | pmax | pmax | | |
| | comp=Z,39nm,0.9s | | | | | | |
| **OTUK** | **Ortayu** | **72.95** | **324** | P | **P** | **22 30 59.1** | **0.0** |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,74nm,0.8s | | | | | | |
| **BRVK** | **Borovoye** | **76.39** | **328** | *de*P | **P** | **22 31 18.3** | **-0.4** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **76.39** | **328** | *e*P | **P** | **22 31 18.1** | **-0.6** |
| | comp=Z,2.2nm,0.7s | | | | | | |
| **BILL** | **Bilibino** | **77.28** | **13** | *e*P | **P** | **22 31 26.2** | **+2.8** |
| BILL | | | | *e* | | 22 31 35.8 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.6s | | | | | | |
| **GEYT** | **Alibeck** | **78.80** | **310** | P | **P** | **22 31 32.8** | **+0.2** |
| | comp=Z,1.2nm,0.4s,baz=141,slow=5.0,SNR=4.1 | | | | | | |
| **RAYN** | **Ar Rayn** | **86.77** | **294** | *e*P | **P** | **22 32 13.8** | **-0.1** |
| | comp=Z,4.1nm,0.9s | | | | | | |
| **KIV** | **Kislovodsk** | **91.38** | **314** | *e*P | P | 22 32 31.8 | -3.4 |
| KIV | | | | *e* | | 22 36 11.7 | |
| KIV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **91.69** | **25** | P | **P** | **22 32 34.7** | **-1.4** |
| | comp=Z,0.2nm,0.6s,baz=261,slow=5.4,SNR=3.4 | | | | | | |
| **ILB** | **Eielson Array** | **91.69** | **25** | *e*P | **P** | **22 32 34.7** | **-1.4** |
| **OBN** | **Obninsk** | **95.96** | **325** | *i* P | **P** | **22 32 55.5** | **-0.3** |
| OBN | | | | *e*PP | **pP** | **22 33 35.1** | **+1.2** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **VYHS** | **Vyhne** | **107.59** | **319** | *e*P | **Pdif** | **22 33 48.0** | **0.0** |
| **VYHS** | **Vyhne** | **107.59** | **319** | PDIF | **Pdif** | **22 33 48.0** | **0.0** |
| **TORD** | **Torodi Ar. Bea** | **128.20** | **283** | PKP | **PKPdf** | **22 38 34.1** | **-1.4** |
| | comp=Z,0.4nm,0.8s,baz=105,slow=2.1,SNR=8.8 | | | | | | |
| **KOWE** | **Korovin West** | **1.98** | **281** | P | **Pn** | **22 23 26.6** | **+0.5** |
| **OKSO** | **Okmok South** | **2.23** | **52** | P | **Pn** | **22 23 29.4** | **-0.3** |
| OKSO | | | | S | **Sn** | **22 23 56.8** | **+0.7** |
| **OKCE** | **Okmok Cone E** | **2.27** | **50** | P | **Pn** | **22 23 30.5** | **+0.3** |
| OKCE | | | | S | **Sn** | **22 23 59.6** | **+2.6** |
| **OKFG** | **Magazine Ridge** | **2.39** | **53** | P | **Pn** | **22 23 32.0** | **+0.2** |
| **GSMY** | **Great Sitkin M** | **3.07** | **272** | P | **Pn** | **22 23 41.1** | **0.0** |
| **MSOM** | **Makushin Julie** | **3.09** | **53** | P | **Pn** | **22 23 41.5** | **+0.1** |
| **GSTD** | **Great Sitkin T** | **3.12** | **273** | P | **Pn** | **22 23 42.5** | **+0.5** |
| GSTD | | | | S | **Sn** | **22 24 19.1** | **+1.1** |
| **GSCK** | **Great Sitkin C** | **3.13** | **272** | P | **Pn** | **22 23 42.7** | **+0.6** |
| **ETKA** | **Kagalaska Isla** | **3.29** | **269** | P | **Pn** | **22 23 44.8** | **+0.6** |
| **UNV** | **Unalaska Valle** | **3.33** | **55** | P | **Pn** | **22 23 45.2** | **+0.5** |
| UNV | | | | S | **Sn** | **22 24 24.7** | **+1.8** |
| **ADAG** | **Mount Adagdak** | **3.41** | **272** | P | **Pn** | **22 23 46.5** | **+0.8** |
| **ILAR** | **Eielson Array** | **17.84** | **35** | P | **Pn** | **22 26 59.7** | **-0.3** |
| | 0.1nm,0.3s,baz=232,slow=10,SNR=4.9 | | | | | | |
| **INK** | **Inuvik** | **24.23** | **34** | P | **P** | **22 28 07.1** | **-0.5** |
| | 1.5nm,0.5s,baz=278,slow=14,SNR=3.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **36.53** | **216** | T | T | 23 09 18.7 | |
| | baz=49,slow=76,SNR=7.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **36.53** | **216** | T | T | 23 09 14.7 | |
| | baz=49,slow=76,SNR=5.9 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **36.55** | **216** | T | T | 23 09 15.6 | |
| | baz=49,slow=76,SNR=5.5 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **37.72** | **216** | T | T | 23 10 44.9 | |
| | baz=22,slow=76,SNR=16 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **37.74** | **216** | T | T | 23 10 44.6 | |
| | baz=22,slow=76,SNR=12 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **37.74** | **216** | T | T | 23 10 42.4 | |
| | baz=22,slow=76,SNR=15 | | | | | | |
| **SONM** | **Songino Array** | **50.56** | **300** | P | **P** | **22 31 48.4** | **-1.0** |
| | 0.2nm,0.3s,baz=50,slow=5.3,SNR=5.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.82** | **87** | P | **P** | **22 32 14.5** | **+0.8** |
| | 0.1nm,0.3s,baz=304,slow=6.4,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **63.27** | **313** | P | P | 22 33 16.1 | -3.1 |
| | 0.2nm,0.3s,baz=63,slow=5.1,SNR=2.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.66** | **282** | P | **P** | **22 34 36.1** | **+0.1** |
| | 0.8nm,0.3s,baz=25,slow=6.2,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **89.36** | **229** | P | **P** | **22 35 46.5** | **-0.5** |
| | 0.6nm,0.6s,baz=19,slow=4.8,SNR=5.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **114.81** | **8** | PKP | PKPdf | 22 41 30.7 | -0.7 |
| | 0.3nm,0.9s,baz=353,slow=1.8,SNR=2.3 | | | | | | |

*IDC **12** 22:22:49.0±1.1,52.10N×171.34W,h0km,mb3.8/6,mb1 3.9/7,mb1mx3.6/37,mbtmp3.7/7,ML3.5/1,Error ellipse: s-maj=41.0km s-min=24.2km az=169.0*
*ISCJB **12** 22:22:53.6±0.8,51.9N±0.1×171.04W±0.07,h42km,mb3.7/6,Error ellipse: s-maj=17.8km s-min=3.6km az=161.9*
*NEIC **12** 22:22:53.4,51.93N×171.03W,h26km,ML3.3(AEIC),After AEIC.*

**ISC 12 22:22:55.2±1.1,52.0N±0.2×171.09W±0.06,h42km,n29,σ0°97/27,mb3.8/6,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIKH** | **Nikolski High** | **1.67** | **54** | P | **Pn** | **22 23 21.4** | **-0.5** |
| NIKH | | | | S | **Sn** | **22 23 39.9** | **-2.2** |
| **KOFP** | **Korovin Flat P** | **1.87** | **279** | P | **Pn** | **22 23 24.8** | **0.0** |
| **ATKA** | **Atka Island** | **1.92** | **277** | P | **Pn** | **22 23 24.5** | **-0.9** |
| ATKA | | | | S | **Sn** | **22 23 48.5** | **+0.1** |
| **KOKL** | **Mount Kliuchef** | **1.94** | **280** | P | **Pn** | **22 23 25.8** | **+0.1** |

*NNC **12** 22:23:18.6±5.6,41.65N×46.25E,h0km,mb3.6,Error ellipse: s-maj=58.3km s-min=39.5km az=0.0*
*AZER **12** 22:23:26.8±0.9,42.25N×46.10E,h6km,Error ellipse: s-maj=2.1km s-min=1.1km az=308.0*
*CSEM **12** 22:23:27.4±0.1,42.44N×46.18E,h2km,mb4.3,Error ellipse: s-maj=3.1km s-min=2.4km az=10.0*
*TIF **12** 22:23:27.2,42.35N×46.16E,h11km±2km*
*MOS **12** 22:23:27.2±0.7,42.49N×46.21E,h13km,mb4.3/1,Error ellipse: s-maj=6.8km s-min=5.4km az=21.0*

**ISC 12 22:23:26.4±1.0,42.43N±0.02×46.18E±0.01,h2km±7km,n113,σ1°17/189,23C-30D,Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **XNZR** | **Khunzakh** | **0.41** | **74** | *i* PG | **Pg** | **22 23 35.5** | **+1.2** |
| XNZR | | | | *e*S | **Sg** | **22 23 40.5** | **+0.9** |
| **XNZR** | **Khunzakh** | **0.41** | **74** | *i* Pg | **Pg** | **22 23 35.5** | **+1.2** |
| XNZR | | | | *e*Sg | **Sg** | **22 23 40.5** | **+0.9** |
| **UNCR** | **Uncukul** | **0.54** | **58** | ⇓*i* PG | **Pg** | **22 23 37.5** | **+0.7** |
| UNCR | | | | *i* S | **Sg** | **22 23 45.5** | **+1.8** |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,392nm,0.2s | | | | | | |
| **UNCR** | **Uncukul** | **0.54** | **58** | *i* Pg | **Pg** | **22 23 37.5** | **+0.7** |
| | comp=Z,392nm,0.2s | | | | | | |
| UNCR | | | | *i* Sg | **Sg** | **22 23 45.5** | **+1.8** |
| **GNBR** | **Gunib** | **0.59** | **94** | ⇑*i* PG | **Pg** | **22 23 38.6** | **+1.0** |
| GNBR | | | | *i* S | **Sg** | **22 23 46.3** | **+1.1** |
| GNBR | | | | pmax | pmax | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TBLG** | **Delisi** | **1.28** | **237** | P | **Pg** | **22** | **23** | **50.7 -0.2** |
| TBLG | | | | S | **Sb** | **22** | **24** | **08.2 +0.1** |
| **TBLG** | **Delisi** | **1.28** | **237** | *e*PG | **Pg** | **22** | **23** | **50.6 -0.2** |
| TBLG | | | | *e*S | **Sb** | **22** | **24** | **08.2 +0.1** |
| **TBLG** | **Delisi** | **1.28** | **237** | P | **Pg** | **22** | **23** | **50.7 -0.2** |
| TBLG | | | | S | **Sb** | **22** | **24** | **08.2 +0.1** |
| **SEKA** | **Sheki** | **1.44** | **148** | ⇑P | **Pn** | **22** | **23** | **53.7 +0.1** |
| | SNR=7.9 | | | | | | | |
| SEKA | | | | ⇑S | **Sn** | **22** | **24** | **13.7 +0.6** |
| **SEKA** | **Sheki** | **1.44** | **148** | P | **Pn** | **22** | **23** | **53.7 +0.1** |
| | SNR=7.9 | | | | | | | |
| SEKA | | | | S | **Sn** | **22** | **24** | **13.7 +0.6** |
| **LACR** | **Lac** | **1.44** | **287** | ⇓*i*PG | **Pn** | **22** | **23** | **52.8 -0.9** |
| LACR | | | | *e*S | **Sn** | **22** | **24** | **14.3 +1.0** |
| **LACR** | **Lac** | **1.44** | **287** | *e*Sg | **Sn** | **22** | **24** | **14.3 +1.0** |
| **QZX** | **Qazax, Azerbai** | **1.50** | **204** | ⇓P | **Pn** | **22** | **23** | **54.4 +0.1** |
| | SNR=66 | | | | | | | |
| QZX | | | | ⇑S | **Sn** | **22** | **24** | **14.8 +0.3** |
| **QZX** | **Qazax, Azerbai** | **1.50** | **204** | P | **Pn** | **22** | **23** | **54.4 +0.1** |
| | SNR=66 | | | | | | | |
| QZX | | | | S | **Sn** | **22** | **24** | **14.8 +0.3** |
| **AKT** | **Akhty** | **1.50** | **129** | ⇑*i*PG | **Pb** | **22** | **23** | **55.0 0.0** |
| AKT | | | | S | **Sn** | **22** | **24** | **15.0 +0.4** |
| AKT | | | | pmax | pmax | | | |
| | comp=Z,202nm,0.2s | | | | | | | |
| **AKT** | **Akhty** | **1.50** | **129** | *i* Pg | **Pb** | **22** | **23** | **55.0 0.0** |
| | comp=Z,202nm,0.2s | | | | | | | |
| AKT | | | | Sg | **Sn** | **22** | **24** | **15.0 +0.4** |
| **BTKR** | **Batakoyurt** | **1.52** | **309** | ⇓*i*PG | **Pn** | **22** | **23** | **55.0 +0.2** |
| BTKR | | | | *e*S | **Sg** | **22** | **24** | **17.8 +2.4** |
| **BTKR** | **Batakoyurt** | **1.52** | **309** | *i* Pg | **Pn** | **22** | **23** | **55.0 +0.2** |
| BTKR | | | | *e*Sg | **Sg** | **22** | **24** | **17.8 +2.4** |
| **TRKR** | **Terskaya** | **1.67** | **321** | ⇓*i*PN | **Pn** | **22** | **23** | **57.3 +0.6** |
| TRKR | | | | *e*S | **Sg** | **22** | **24** | **21.7 +1.6** |
| **TRKR** | **Terskaya** | **1.67** | **321** | *i* Pn | **Pn** | **22** | **23** | **57.3 +0.6** |
| TRKR | | | | *e*Sg | **Sg** | **22** | **24** | **21.7 +1.6** |
| **KSMR** | **Kasumkent** | **1.67** | **119** | PN | **Pb** | **22** | **23** | **58.0 0.0** |
| KSMR | | | | *e*S | **Sg** | **22** | **24** | **24.0 +3.8** |
| KSMR | | | | pmax | pmax | | | |
| | comp=Z,328nm,0.2s | | | | | | | |
| **KSMR** | **Kasumkent** | **1.67** | **119** | Pn | **Pb** | **22** | **23** | **58.0 0.0** |
| | comp=Z,328nm,0.2s | | | | | | | |
| **KORR** | **Kora** | **1.69** | **294** | ⇓*i*PN | **Pn** | **22** | **23** | **57.6 +0.6** |
| KORR | | | | *e*S | **Sg** | **22** | **24** | **22.2 +1.6** |
| **KORR** | **Kora** | **1.69** | **294** | *i* Pn | **Pn** | **22** | **23** | **57.6 +0.6** |
| KORR | | | | *e*Sg | **Sg** | **22** | **24** | **22.2 +1.6** |
| **GANJ** | **Ganja** | **1.79** | **176** | ⇓P | **Pn** | **22** | **23** | **58.5 +0.2** |
| | SNR=31 | | | | | | | |
| GANJ | | | | ⇑S | **Sb** | **22** | **24** | **22.5 -0.2** |
| **GANJ** | **Ganja** | **1.79** | **176** | P | **Pn** | **22** | **23** | **58.5 +0.2** |
| | SNR=31 | | | | | | | |
| GANJ | | | | S | **Sb** | **22** | **24** | **22.5 -0.2** |
| **MNGR** | **Mingechevir, A** | **1.79** | **157** | ⇓P | **Pb** | **22** | **23** | **59.4 -0.5** |
| MNGR | | | | ⇓S | **Sg** | **22** | **24** | **25.1 +1.1** |
| **MNGR** | **Mingechevir, A** | **1.79** | **157** | P | **Pb** | **22** | **23** | **59.4 -0.5** |
| MNGR | | | | S | **Sg** | **22** | **24** | **25.1 +1.1** |
| **STDR** | **Stavd-Durt** | **1.81** | **302** | ⇓*i*PN | **Pb** | **22** | **24** | **00.1 -0.2** |
| STDR | | | | *e*S | **Sg** | **22** | **24** | **26.2 +1.5** |
| **STDR** | **Stavd-Durt** | **1.81** | **302** | *i* Pn | **Pb** | **22** | **24** | **00.1 -0.2** |
| STDR | | | | *e*Sg | **Sg** | **22** | **24** | **26.2 +1.5** |
| **PRTR** | **Priterechnaya** | **1.92** | **314** | *c i*PN | **Pb** | **22** | **24** | **01.7 -0.4** |
| **PRTR** | **Priterechnaya** | **1.92** | **314** | *i* Pn | **Pb** | **22** | **24** | **01.7 -0.4** |
| **LSNR** | **Lesken** | **1.92** | **297** | *e*PN | **Pn** | **22** | **24** | **00.6 +0.4** |
| LSNR | | | | *e*S | **Sg** | **22** | **24** | **28.0 -0.2** |
| **LSNR** | **Lesken** | **1.92** | **297** | *e*Pn | **Pn** | **22** | **24** | **00.6 +0.4** |
| LSNR | | | | *e*Sg | **Sg** | **22** | **24** | **28.0 -0.2** |
| **ONI** | **Oni** | **2.02** | **275** | P | **Pb** | **22** | **24** | **03.3 -0.6** |
| ONI | | | | S | **Sb** | **22** | **24** | **30.1 +0.6** |
| **ONI** | **Oni** | **2.02** | **275** | *e*PN | **Pb** | **22** | **24** | **03.3 -0.6** |
| **ONI** | **Oni** | **2.02** | **275** | P | **Pb** | **22** | **24** | **03.3 -0.6** |
| ONI | | | | S | **Sb** | **22** | **24** | **30.1 +0.6** |
| **QUBA** | **Quba, Azerbaij** | **2.04** | **121** | ⇓P | **Pb** | **22** | **24** | **04.7 +0.5** |
| | SNR=3.8 | | | | | | | |
| QUBA | | | | ⇓S | **Sg** | **22** | **24** | **35.0 +3.2** |
| **QUBA** | **Quba, Azerbaij** | **2.04** | **121** | P | **Pb** | **22** | **24** | **04.7 +0.5** |
| | SNR=3.8 | | | | | | | |
| **NCK** | **Nalchik** | **2.17** | **300** | ⇓*e*PN | **Pn** | **22** | **24** | **03.8 +0.2** |
| **NCK** | **Nalchik** | **2.17** | **300** | *e*Pn | **Pn** | **22** | **24** | **03.8 +0.2** |
| **IML** | **Ismayilli** | **2.22** | **137** | ⇓P | **Pb** | **22** | **24** | **07.0 -0.3** |
| IML | | | | ⇑S | **Sg** | **22** | **24** | **38.1 +0.3** |
| **IML** | **Ismayilli** | **2.22** | **137** | P | **Pb** | **22** | **24** | **07.0 -0.3** |
| **AKH** | **Akhalkalaki** | **2.25** | **244** | P | **Pn** | **22** | **24** | **06.1 +1.3** |
| AKH | | | | S | Sg | 22 | 25 | 35.1 +56 |
| **AKH** | **Akhalkalaki** | **2.25** | **244** | *e*PN | **Pn** | **22** | **24** | **06.1 +1.3** |
| **AKH** | **Akhalkalaki** | **2.25** | **244** | P | **Pn** | **22** | **24** | **06.1 +1.3** |
| AKH | | | | S | Sg | 22 | 25 | 35.1 +56 |
| **PQL** | **Pirkuli** | **2.44** | **131** | ⇑P | **Pb** | **22** | **24** | **10.3 -0.9** |
| | SNR=14 | | | | | | | |
| PQL | | | | ⇓S | **Sb** | **22** | **24** | **43.1 +1.3** |
| **PQL** | **Pirkuli** | **2.44** | **131** | P | **Pb** | **22** | **24** | **10.3 -0.9** |
| | SNR=14 | | | | | | | |
| PQL | | | | S | **Sb** | **22** | **24** | **43.1 +1.3** |
| **SIZA** | **Siyzn** | **2.45** | **123** | ⇑P | **Pb** | **22** | **24** | **10.4 -0.8** |
| | SNR=5.7 | | | | | | | |
| SIZA | | | | ⇓S | **Sg** | **22** | **24** | **45.1 +0.1** |
| **SIZA** | **Siyzn** | **2.45** | **123** | P | **Pb** | **22** | **24** | **10.4 -0.8** |
| | SNR=5.7 | | | | | | | |
| **ATGJ** | **Altiaghaj** | **2.60** | **126** | ⇓P | **Pb** | **22** | **24** | **12.0 -1.8** |
| | SNR=8.8 | | | | | | | |
| ATGJ | | | | ⇓S | **Sb** | **22** | **24** | **46.4 +0.2** |
| **ATGJ** | **Altiaghaj** | **2.60** | **126** | P | **Pb** | **22** | **24** | **12.0 -1.8** |
| | SNR=8.8 | | | | | | | |
| ATGJ | | | | S | **Sb** | **22** | **24** | **46.4 +0.2** |
| **EAK** | **Akyaka** | **2.60** | **229** | *i* P | **Pb** | **22** | **24** | **12.0 -1.8** |
| EAK | | | | *i* S | **Sb** | **22** | **24** | **46.4 +0.1** |
| **EAK** | **Akyaka** | **2.60** | **229** | P | **Pb** | **22** | **24** | **12.0 -1.8** |
| EAK | | | | S | **Sb** | **22** | **24** | **46.4 +0.1** |
| **DIGO** | **Kars** | **2.91** | **227** | *i* P | **Pb** | **22** | **24** | **18.8 -0.4** |
| DIGO | | | | *i* S | **Sb** | **22** | **24** | **53.2 -2.2** |
| **DIGO** | **Kars** | **2.91** | **227** | P | **Pb** | **22** | **24** | **18.8 -0.4** |
| DIGO | | | | S | **Sb** | **22** | **24** | **53.2 -2.2** |
| **BEYR** | **Belyy Ugol+** | **2.92** | **304** | *c i*PN | **Pn** | **22** | **24** | **12.6 -1.3** |
| **KIV** | **Kislovodsk** | **2.97** | **302** | ⇑*e*PN | **Pn** | **22** | **24** | **13.9 -0.8** |
| KIV | | | | *i* | | 22 | 24 | 58.7 |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.3s | | | | | | | |
| **KIV** | **Kislovodsk** | **2.97** | **302** | *e*Pn | **Pn** | **22** | **24** | **13.9 -0.8** |
| | comp=Z,6.0nm,0.3s | | | | | | | |
| **CHVG** | **Ch'k'valeri** | **3.04** | **277** | P | **Pb** | **22** | **24** | **22.6 +1.4** |
| **CHVG** | **Ch'k'valeri** | **3.04** | **277** | P | **Pb** | **22** | **24** | **22.6 +1.4** |
| **ARTV** | **Artvin** | **3.41** | **250** | *i* P | Pn | 22 | 24 | 24.1 +3.3 |
| ARTV | | | | *i* S | **Sn** | **22** | **25** | **03.3 +1.4** |
| **ARTV** | **Artvin** | **3.41** | **250** | P | Pn | 22 | 24 | 24.1 +3.3 |
| ARTV | | | | S | **Sn** | **22** | **25** | **03.3 +1.4** |
| **DBOC** | **Borcka** | **3.54** | **254** | *i* P | **Pb** | **22** | **24** | **27.5 -2.2** |
| **DBOC** | **Borcka** | **3.54** | **254** | P | **Pb** | **22** | **24** | **27.5 -2.2** |
| DBOC | | | | S | **Sb** | **22** | **25** | **12.8 -0.3** |
| **GLBA** | **Clilabad** | **3.60** | **151** | ⇓P | **Pn** | **22** | **24** | **24.7 +1.4** |
| **GLBA** | **Clilabad** | **3.60** | **151** | P | **Pn** | **22** | **24** | **24.7 +1.4** |
| **LRK** | **Lerik** | **4.13** | **156** | P | **Pn** | **22** | **24** | **32.0 +1.3** |
| | SNR=7.8 | | | | | | | |
| LRK | | | | ⇓S | **Sn** | **22** | **25** | **22.4 +2.8** |
| **LRK** | **Lerik** | **4.13** | **156** | P | **Pn** | **22** | **24** | **32.0 +1.3** |
| | SNR=7.8 | | | | | | | |
| LRK | | | | S | **Sn** | **22** | **25** | **22.4 +2.8** |
| **LKRN** | **Lenkeran, Azer** | **4.21** | **151** | ⇑P | **Pn** | **22** | **24** | **32.6 +1.0** |
| **LKRN** | **Lenkeran, Azer** | **4.21** | **151** | P | **Pn** | **22** | **24** | **32.6 +1.0** |
| **AKTO** | **Aktyubinsk** | **11.43** | **41** | ⇑P | **Pn** | **22** | **26** | **08.6 -2.0** |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| AKTO | | | | ⇑S | Sn | 22 | 28 | 06.4 -12 |
| | comp=Z,3.3nm,0.8s | | | | | | | |
| **AB31** | **Akbulak array** | **11.77** | **50** | P | **Pn** | **22** | **26** | **13.4 -1.9** |
| | comp=Z,0.5nm,0.3s,baz=246,slow=14,SNR=26 | | | | | | | |
| AB31 | | | | ⇑S | Sn | 22 | 28 | 20.9 -6.2 |
| | comp=Z,1.0nm,0.5s,baz=248,slow=25,SNR=3.6 | | | | | | | |
| **KK31** | **Karatay Array** | **17.87** | **80** | ⇑P | **Pn** | **22** | **27** | **33.9 -2.2** |
| | comp=Z,0.5nm,0.5s,baz=282,slow=12,SNR=9.9 | | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **22** | **30** | **51.3 -4.5** |
| | comp=Z,0.2nm,0.3s,baz=96,slow=6.8,SNR=8.8 | | | | | | | |
| **ZRNK** | **Zerenda** | **18.54** | **48** | ⇑P | **P** | **22** | **27** | **40.3 -3.9** |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| ZRNK | | | | ⇓S | **S** | **22** | **31** | **18.3 +2.1** |
| | comp=Z,1.9nm,1.4s | | | | | | | |
| **BRVK** | **Borovoye** | **19.29** | **48** | ⇓P | **P** | **22** | **27** | **50.4 -2.0** |
| | comp=Z,3.3nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **19.29** | **48** | ⇓*i*P | **P** | **22** | **27** | **51.3 -1.1** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **19.29** | **48** | *i* P | **P** | **22** | **27** | **51.3 -1.1** |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **BVA0** | **Borovoye Array** | **19.34** | **48** | ⇓P | **P** | **22** | **27** | **50.8 -2.0** |
| | comp=Z,1.0nm,0.6s,baz=259,slow=9.2,SNR=5.7 | | | | | | | |
| **AAK** | **Ala-Archa** | **20.84** | **80** | ⇑*e*P | **P** | **22** | **28** | **07.7 -1.8** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |

*CSEM* ***12*** *22:36:24.9±0.2, 37.91N×38.00E, h5km, MD2.9, Error ellipse: s-maj=4.4km s-min=3.8km az=130.0*
*DDA* ***12*** *22:36:24.9, 37.91N×37.97E, h7km, Md2.9*
*ISK* ***12*** *22:36:24.4, 37.85N×37.96E, h9km, MD2.6*
*ISCJB* ***12*** *22:36:25.0±0.6, 37.91N±0.03×38.00E±0.04, h6km±6km, Error ellipse: s-maj=5.6km s-min=4.2km az=38.6*

**ISC 12 22:36:24.9±1.0, 37.92N±0.02×37.98E±0.03, h8km±10km, n25, σ0.963/38, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKCD** | **Akcadag** | **0.38** | **353** | *i* P | **Pg** | **22 36 32.2** | **-0.2** |
| AKCD | | | | *i* S | **Sg** | **22 36 38.6** | **+1.2** |
| **AKCD** | **Akcadag** | **0.38** | **353** | P | **Pg** | **22 36 32.2** | **-0.2** |
| AKCD | | | | S | **Sg** | **22 36 38.6** | **+1.2** |
| **ATAB** | **Bozova** | **0.51** | **151** | *i* P | **Pg** | **22 36 35.0** | **+0.2** |
| ATAB | | | | *i* S | **Sg** | **22 36 42.2** | **+0.7** |
| **ATAB** | **Bozova** | **0.51** | **151** | P | **Pg** | **22 36 35.0** | **+0.2** |
| ATAB | | | | S | **Sg** | **22 36 42.2** | **+0.7** |
| **MALT** | **Malatya** | **0.53** | **42** | *e*PG | **Pb** | **22 36 35.9** | **-0.6** |
| MALT | | | | *e*SG | **Sb** | **22 36 45.0** | **+0.7** |
| **MALT** | **Malatya** | **0.53** | **42** | *e*Pg | **Pb** | **22 36 35.9** | **-0.6** |
| **DARE** | **Darende-Malaty** | **0.76** | **329** | *e*PG | **Pb** | **22 36 40.8** | **+0.3** |
| **DARE** | **Darende-Malaty** | **0.76** | **329** | *e*Pg | **Pb** | **22 36 40.8** | **+0.3** |
| **URFA** | **Urfa** | **0.82** | **125** | *e*PG | **Pg** | **22 36 40.4** | **-0.3** |
| **URFA** | **Urfa** | **0.82** | **125** | *e*Pg | **Pg** | **22 36 40.4** | **-0.3** |
| **KMRS** | **Kahramanmaras** | **0.95** | **245** | *e*PG | **Pg** | **22 36 42.2** | **-1.0** |
| **KMRS** | **Kahramanmaras** | **0.95** | **245** | *e*Pg | **Pg** | **22 36 42.2** | **-1.0** |
| **ELZG** | **Elazig** | **0.98** | **54** | *i* P | **Pg** | **22 36 43.2** | **-0.5** |
| ELZG | | | | *i* S | **Sg** | **22 36 55.9** | **-0.6** |
| **ELZG** | **Elazig** | **0.98** | **54** | P | **Pg** | **22 36 43.2** | **-0.5** |
| ELZG | | | | S | **Sg** | **22 36 55.9** | **-0.6** |
| **AYKD** | **Aykdinkavak** | **1.06** | **242** | P | **Pb** | **22 36 45.5** | **0.0** |
| AYKD | | | | S | **Sn** | **22 37 01.0** | **0.0** |
| **SVRC** | **Sivrice-ELAZID** | **1.14** | **66** | *e*PN | **Pb** | **22 36 46.8** | **-0.2** |
| **SVRC** | **Sivrice-ELAZID** | **1.14** | **66** | *e*Pn | **Pb** | **22 36 46.8** | **-0.2** |
| **KAMA** | **Osmaniye** | **1.27** | **235** | P | **Pn** | **22 36 48.6** | **-0.4** |
| KAMA | | | | S | **Sg** | **22 37 04.8** | **-1.1** |
| **SARI** | **SarD1z-Kayseri** | **1.32** | **292** | *e*PN | **Pn** | **22 36 49.5** | **-0.4** |
| **ANDN** | **Andirin** | **1.34** | **256** | *i* P | **Pg** | **22 36 50.6** | **0.0** |
| ANDN | | | | *i* S | **Sn** | **22 37 08.0** | **-0.1** |
| **ANDN** | **Andirin** | **1.34** | **256** | P | **Pg** | **22 36 50.6** | **0.0** |
| ANDN | | | | S | **Sn** | **22 37 08.0** | **-0.1** |
| **KUZU** | **Kuzuini** | **1.35** | **213** | *i* P | **Pn** | **22 36 49.8** | **-0.3** |
| KUZU | | | | *i* S | **Sn** | **22 37 09.5** | **+1.2** |
| **KUZU** | **Kuzuini** | **1.35** | **213** | P | **Pn** | **22 36 49.8** | **-0.3** |
| KUZU | | | | S | **Sn** | **22 37 09.4** | **+1.2** |
| **PTK** | **Pertek** | **1.47** | **48** | *e*PN | **Pg** | **22 36 53.0** | **-0.2** |
| **PTK** | **Pertek** | **1.47** | **48** | *e*Pn | **Pg** | **22 36 53.0** | **-0.2** |

**IDC 12 22:42:21.1±24.0, 13.74S×166.39E, h222km±203km, mb3.2/3, mb1 3.5/3, mb1mx3.1/17, mbtmp3.7/3, Error ellipse: s-maj=222.9km s-min=61.8km az=133.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **31.26** | **254** | P | P | 22 48 20.4 | 0.0 |
| | 0.7nm,0.9s,baz=85,slow=9.0,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **32.25** | **247** | P | P | 22 48 28.9 | -0.1 |
| | 0.8nm,0.4s,baz=74,slow=9.4,SNR=13 | | | | | | |
| **ILAR** | **Eielson Array** | **85.85** | **18** | P | P | 22 54 35.3 | 0.0 |
| | 0.4nm,0.7s,baz=198,slow=5.7,SNR=4.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **119.08** | **345** | PKP | PKPdf | 23 00 42.3 | -0.5 |
| | 11nm,1.0s,baz=49,slow=2.7,SNR=8.2 | | | | | | |
| **FINES** | **FINESS Array B** | **124.49** | **338** | PKP | PKPdf | 23 00 53.5 | +0.1 |
| | 7.4nm,1.1s,baz=119,slow=4.9,SNR=3.3 | | | | | | |

*ISCJB* ***12*** *23:31:46.3±0.5, 50.19N±0.04×19.03E±0.03, h0km, Error ellipse: s-maj=5.7km s-min=2.5km az=12.2*
*CSEM* ***12*** *23:31:46.9±0.3, 50.21N×19.08E, h2km, ML2.5/4, Error ellipse: s-maj=7.0km s-min=2.9km az=8.0*
*PRU* ***12*** *23:31:47.8, 50.19N×19.08E, h0km*

**ISC 12 23:31:47.3±0.8, 50.16N±0.04×19.07E±0.02, h0km, n30, σ0.971/49, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.47** | **83** | *e*Pg | **Pg** | **23 31 55.9** | **-0.4** |
| OJC | | | | *e*Sg | **Sg** | **23 32 01.6** | **-0.8** |
| **OJC** | **Ojcow** | **0.47** | **83** | *e*Pg | **Pg** | **23 31 55.9** | **-0.4** |
| OJC | | | | *e*Sg | **Sg** | **23 32 01.6** | **-0.8** |
| **OKC** | **Ostrava-Krasne** | **0.68** | **242** | *e*PG | **Pb** | **23 32 01.6** | **-0.4** |
| OKC | | | | *e*SG | **Sg** | **23 32 10.6** | **+1.5** |
| | comp=Z,8.7nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.68** | **242** | Pg | **Pb** | **23 32 01.6** | **-0.4** |
| OKC | | | | Sg | **Sg** | **23 32 10.6** | **+1.5** |
| | 8.7nm,0.4s | | | | | | |
| **LANS** | **Liptovska Anna** | **1.05** | **166** | *e*PG | **Pg** | **23 32 07.2** | **-0.1** |
| LANS | | | | *e*SG | **Sg** | **23 32 20.6** | **-0.2** |
| **LANS** | **Liptovska Anna** | **1.05** | **166** | *e*Pg | **Pg** | **23 32 07.2** | **-0.1** |
| LANS | | | | *e*Sg | **Sg** | **23 32 20.6** | **-0.2** |
| **MORC** | **Moravsky Berou** | **1.06** | **249** | *e*Pg | **Pb** | **23 32 08.5** | **-0.1** |
| MORC | | | | *e*Sg | **Sb** | **23 32 23.8** | **+0.8** |
| **NIE** | **Niedzica** | **1.09** | **133** | *e*Pg | **Pg** | **23 32 08.6** | **+0.4** |
| NIE | | | | *e*Sg | **Sg** | **23 32 23.6** | **+0.9** |
| **NIE** | **Niedzica** | **1.09** | **133** | *e*Pg | **Pg** | **23 32 08.6** | **+0.4** |
| NIE | | | | *e*Sg | **Sg** | **23 32 23.2** | **+0.9** |
| **KRLC** | **Kraliky** | **1.48** | **267** | *e*PG | **Pn** | **23 32 14.6** | **-0.6** |
| KRLC | | | | *e*SG | **Sn** | **23 32 35.3** | **0.0** |
| **KRLC** | **Kraliky** | **1.48** | **267** | Pg | **Pn** | **23 32 14.6** | **-0.6** |
| KRLC | | | | Sg | **Sn** | **23 32 35.3** | **0.0** |
| **STHS** | **Stebnicka Huta** | **1.59** | **117** | *e*PN | **Pn** | **23 32 17.0** | **+0.2** |
| STHS | | | | *e*SN | **Sg** | **23 32 39.8** | **+1.4** |
| **STHS** | **Stebnicka Huta** | **1.59** | **117** | *e*Pn | **Pn** | **23 32 17.0** | **+0.2** |
| STHS | | | | *e*Sn | **Sg** | **23 32 39.8** | **+1.4** |
| **VYHS** | **Vyhne** | **1.68** | **185** | *e*PN | **Pn** | **23 32 17.0** | **-0.9** |
| VYHS | | | | *e*SN | **Sn** | **23 32 39.1** | **-1.0** |
| **VYHS** | **Vyhne** | **1.68** | **185** | *e*Pn | **Pn** | **23 32 17.1** | **-0.9** |
| VYHS | | | | *e*Sn | **Sn** | **23 32 39.1** | **-1.0** |
| **DPC** | **Dobruska-Polom** | **1.78** | **277** | *e*PG | **Pn** | **23 32 19.9** | **+0.6** |
| DPC | | | | *e*SG | **Sg** | **23 32 44.6** | **+0.3** |
| | comp=Z,7.4nm,0.6s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.78** | **277** | Pg | **Pn** | **23 32 19.9** | **+0.6** |
| DPC | | | | Sg | **Sg** | **23 32 44.6** | **+0.3** |
| | 7.4nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **1.82** | **243** | *e*Pn | **Pn** | **23 32 20.0** | **+0.1** |
| VRAC | | | | *e*Sg | **Sg** | **23 32 46.6** | **+0.8** |
| **KSP** | **Ksiaz** | **1.90** | **292** | *e*Pg | **Pg** | **23 32 24.0** | **+0.3** |
| KSP | | | | *e*Sg | **Sg** | **23 32 49.6** | **+1.3** |
| **KOLS** | **Kolonicke sedl** | **2.42** | **119** | *e* | **Pn** | **23 32 29.5** | **+1.4** |
| **KOLS** | **Kolonicke sedl** | **2.42** | **119** | *e*SG | **Sb** | **23 33 02.0** | **-0.1** |
| **KOLS** | **Kolonicke sedl** | **2.42** | **119** | *e*Sg | **Sb** | **23 33 02.0** | **-0.1** |
| **GOPC** | **GO Pecny, Ondr** | **2.77** | **266** | *e*SG | **Sg** | **23 33 16.0** | **-0.4** |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.77** | **266** | Sg | **Sg** | **23 33 16.0** | **-0.4** |
| | 6.9nm,0.9s | | | | | | |
| **PVCC** | **Panska Ves** | **2.91** | **279** | *e*SG | **Sg** | **23 33 20.3** | **-0.4** |
| | comp=Z,5.8nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **2.91** | **279** | Sg | **Sg** | **23 33 20.3** | **-0.4** |
| | 5.8nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **2.92** | **268** | *e*SG | **Sg** | **23 33 20.8** | **-0.4** |
| **PRU** | **Pruhonice** | **2.92** | **268** | Sg | **Sg** | **23 33 20.8** | **-0.4** |
| **KHC** | **Kasperske Hory** | **3.72** | **256** | *e*SG | **Sg** | **23 33 46.6** | **-0.1** |
| **KHC** | **Kasperske Hory** | **3.72** | **256** | Sg | **Sg** | **23 33 46.6** | **-0.1** |

**JSN 12 23:33:00.5±1.1, 19.46N×77.90W, h11km±10km, MD3.6, Cuba region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBJ** | **Montego Bay** | **1.05** | **178** | *i* P | Pb | 23 33 18.8 | -2.0 |
| MBJ | | | | *i* S | Sg | 23 33 32.5 | -2.2 |
| **BBJ** | **Bamboo Saint A** | **1.23** | **151** | *i* P | Pn | 23 33 22.5 | -1.2 |
| **CVJ** | **Coleyville** | **1.28** | **164** | *i* P | Pn | 23 33 22.8 | -1.6 |
| **MCJ** | **Malvern** | **1.54** | **172** | *i* P | Pn | 23 33 26.7 | -1.4 |
| **STH** | **Stony Hill** | **1.73** | **143** | *i* P | Pn | 23 33 29.2 | -1.3 |
| STH | | | | *i* S | Sn | 23 33 50.3 | -2.3 |
| **HOJ** | **Hope** | **1.82** | **143** | *i* P | Pn | 23 33 29.3 | -2.4 |
| **CMJ** | **Castle Mountai** | **1.96** | **132** | *i* P | Pn | 23 33 32.6 | -1.2 |

*IDC* ***12*** *23:46:05.9±3.5, 0.70S×100.06E, h0km, mb3.7/5, mb1 3.8/5, mb1mx3.4/33, mbtmp3.7/5, MS3.1/1, Ms1 3.1/1, ms1mx2.2/32, Error ellipse: s-maj=151.7km s-min=22.1km az=57.0*
*ISCJB* ***12*** *23:46:13.8±1.0, 0.87S±0.07×99.61E±0.07, h50km, mb3.7/5, MS3.2/1, Error ellipse: s-maj=10.9km s-min=7.4km az=44.6*
*DJA* ***12*** *23:46:15.7±0.4, 1.3S±3.1×10.0E±.1, h47km±10km, M3.8/9, mb4.1/1, mB4.9/1, MLv3.7/9, Mw(mB)4.2/1*

**ISC 12 23:46:12.0±1.1, 0.95S±0.08×99.57E±0.08, h50km, n17, σ1.986/15, mb3.7/5, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SISI** | **Saibi** | **0.61** | **232** | P | Pn | 23 46 31.9 | +7.3 |
| **PDSI** | **Padang** | **0.89** | **88** | P | **Pn** | **23 46 30.5** | **+2.2** |
| PDSI | | | | S | **Sn** | **23 46 42.2** | **+2.0** |
| **PPI** | **Padang Panjang** | **0.96** | **59** | P | **Pn** | **23 46 30.5** | **+1.4** |
| PPI | | | | S | **Sn** | **23 46 41.5** | **-0.3** |
| **MNSI** | **Mandailing Nat** | **1.73** | **0** | P | **Pn** | **23 46 41.8** | **+2.1** |
| MNSI | | | | S | **Sn** | **23 47 01.5** | **+0.9** |
| **SDSI** | **Sungai Dareh** | **1.86** | **90** | P | **Pn** | **23 46 43.0** | **+1.6** |
| **PPSI** | **Pulau Pagai** | **1.86** | **166** | P | Pn | 23 46 46.7 | +5.3 |
| **BKNI** | **Bangkinang** | **1.94** | **49** | P | **Pn** | **23 46 43.7** | **+1.2** |
| **GSI** | **Gunungsitoli** | **3.00** | **318** | P | **Pn** | **23 46 59.4** | **+2.4** |
| **MDSI** | **Maura Dua** | **5.79** | **127** | P | **Pn** | **23 47 37.9** | **+2.5** |
| **H08S2** | **Diego Garcia H** | **27.80** | **255** | T | T | 00 20 03.4 | |
| | baz=80 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.80** | **255** | T | T | 00 20 02.7 | |
| | baz=80 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.81** | **255** | T | T | 00 20 05.5 | |
| | baz=80 | | | | | | |
| **WRA** | **Warramunga Arr** | **38.90** | **121** | P | **P** | **23 53 31.2** | **-1.9** |
| | 0.3nm,0.5s,baz=302,slow=9.0,SNR=5.9 | | | | | | |
| **ASAR** | **Alice Springs** | **40.22** | **127** | P | **P** | **23 53 42.1** | **-1.9** |
| | 0.2nm,0.3s,baz=305,slow=7.9,SNR=5.0 | | | | | | |
| **SONM** | **Songino Array** | **48.95** | **6** | P | **P** | **23 54 52.3** | **-1.1** |
| | 0.5nm,0.6s,baz=202,slow=5.8,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.91** | **345** | P | **P** | **23 55 00.5** | **-0.1** |
| | 0.7nm,0.3s,baz=147,slow=8.5,SNR=8.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.06** | **350** | P | **P** | **23 55 44.8** | **-1.0** |
| | 0.6nm,0.3s,baz=169,slow=6.6,SNR=6.2 | | | | | | |
| ZALV | | | | LR | LR | 00 22 43.6 | |
| | comp=Z,17nm,18.7s,baz=68,slow=39 | | | | | | |

**NNC 13 00:25:38.2±2.4, 38.37N×72.16E, h0km, mb3.7, mpv3.3, 3C-5D, Error ellipse: s-maj=23.4km s-min=7.2km az=154.0, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.95** | **32** | ⇓Pn | Pn | 00 26 12.1 | -0.7 |
| | 7.6nm,0.3s | | | | | | |
| SFK | | | | ⇓Sn | Sb | 00 26 40.1 | +0.2 |
| | 6.0nm,0.2s | | | | | | |
| **DZET** | **Dzherino** | **2.64** | **280** | Pn | Pn | 00 26 22.9 | +0.7 |
| DZET | | | | ⇑Sn | Sn | 00 26 56.2 | +1.0 |
| | 11nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **4.12** | **4** | ⇓Pn | Pn | 00 26 42.3 | -0.3 |
| MNAS | | | | ⇓Sn | Sn | 00 27 32.7 | +1.0 |
| | 2.8nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **4.62** | **22** | ⇓Pn | Pn | 00 26 47.7 | -1.7 |
| | 1.8nm,0.3s | | | | | | |
| AAK | | |

*IDC* ***13*** *00:28:18.6±9.5, 42.°32S×173.°68E, h0km, mb3.2/2, mb1 3.5/2, mb1mx3.4/17, mbtmp3.2/2, Error ellipse: s-maj=556.4km s-min=46.0km az=36.0*
*ISCJB* ***13*** *00:28:23.5±0.4, 43.°59S±0.°03×172.°50E±0.°04, h23km±3km, mb3.1/2, Error ellipse: s-maj=6.0km s-min=4.2km az=139.3*
*WEL* ***13*** *00:28:24.4±0.1, 43.°61S×172.°39E, h6km±1km, ML4.1/25, Error ellipse: s-maj=1.0km s-min=0.9km az=0.0*
*WEL Felt in the Canterbury region, maximum reported intensity MM 6.*
*NEIC* ***13*** *00:28:24.3, 43.°57S×172.°43E, h9km, ML4.1(WEL), After WEL.*
*NEIC Felt in the Christchurch area.*

**ISC 13 00:28:24.1±0.8, 43.°57S±0.°03×172.°45E±0.°03, h15km±6km, n70, σ0s62/76, 5C-1D, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.12** | **92** | PG | **Pb** | **00 28 27.9** | **-0.2** |
| CRLZ | | | | SG | **Sg** | **00 28 30.3** | **+0.4** |
| CRLZ | | | | AML | AML | 00 28 30.5 | |
| CRLZ | | | | AML | AML | 00 28 30.6 | |
| CRLZ | | | | AML | AML | 00 28 30.8 | |
| **CRLZ** | **Canterbury Las** | **0.12** | **92** | Pg | **Pg** | **00 28 27.5** | **-0.2** |
| CRLZ | | | | Sg | **Sg** | **00 28 30.1** | **+0.1** |
| **MQZ** | **McQueen's Vall** | **0.20** | **133** | PG | **Pb** | **00 28 29.0** | **-0.4** |
| MQZ | | | | SG | **Sg** | **00 28 32.3** | **+0.5** |
| MQZ | | | | AML | AML | 00 28 32.8 | |
| **MQZ** | **McQueen's Vall** | **0.20** | **133** | Pg | **Pb** | **00 28 29.0** | **-0.4** |
| MQZ | | | | Sg | **Sg** | **00 28 32.3** | **+0.5** |
| **OXZ** | **Oxford** | **0.39** | **309** | PG | **Pg** | **00 28 31.7** | **-0.3** |
| OXZ | | | | SG | **Sg** | **00 28 37.0** | **-0.4** |
| **OXZ** | **Oxford** | **0.39** | **309** | Pg | **Pg** | **00 28 31.4** | **-0.6** |
| OXZ | | | | Sg | **Sg** | **00 28 37.0** | **-0.4** |
| **LTZ** | **Lake Taylor** | **0.80** | **350** | ⇑P* | **Pn** | **00 28 40.2** | **-0.6** |
| LTZ | | | | S* | **Sb** | **00 28 51.1** | **+0.7** |
| LTZ | | | | AML | AML | 00 28 51.5 | |
| **LTZ** | **Lake Taylor** | **0.80** | **350** | P* | **Pb** | **00 28 39.5** | **-0.2** |
| LTZ | | | | S* | **Sb** | **00 28 51.1** | **+0.7** |
| **RPZ** | **Rata Peaks** | **1.02** | **261** | ⇓P* | **Pb** | **00 28 43.3** | **-0.2** |
| RPZ | | | | AML | AML | 00 29 00.4 | |
| RPZ | | | | AML | AML | 00 29 01.3 | |
| **RPZ** | **Rata Peaks** | **1.02** | **261** | P* | **Pb** | **00 28 43.3** | **-0.2** |
| RPZ | | | | S* | **Sg** | **00 28 57.0** | **-0.3** |
| **WVZ** | **Waitaha Valley** | **1.35** | **291** | ⇑P* | **Pb** | **00 28 48.3** | **0.0** |
| WVZ | | | | AML | AML | 00 29 13.1 | |
| WVZ | | | | AML | AML | 00 29 15.4 | |
| **WVZ** | **Waitaha Valley** | **1.35** | **291** | Pn | **Pn** | **00 28 48.3** | **0.0** |
| **KHZ** | **Kahutara** | **1.40** | **35** | PN | **Pn** | **00 28 48.7** | **-0.3** |
| KHZ | | | | AML | AML | 00 29 09.9 | |
| KHZ | | | | AML | AML | 00 29 18.4 | |
| **KHZ** | **Kahutara** | **1.40** | **35** | Pn | **Pn** | **00 28 48.7** | **-0.3** |
| **LBZ** | **Lake Benmore** | **1.83** | **243** | PN | **Pn** | **00 28 54.9** | **0.0** |
| LBZ | | | | AML | AML | 00 29 23.4 | |
| LBZ | | | | AML | AML | 00 29 23.5 | |
| LBZ | | | | AML | AML | 00 29 30.2 | |
| LBZ | | | | AML | AML | 00 29 30.3 | |
| **LBZ** | **Lake Benmore** | **1.83** | **243** | Pn | **Pn** | **00 28 54.9** | **0.0** |
| **THZ** | **Tophouse** | **1.84** | **11** | PN | **Pn** | **00 28 54.9** | **-0.2** |
| THZ | | | | AML | AML | 00 29 33.1 | |
| THZ | | | | AML | AML | 00 29 34.0 | |
| **THZ** | **Tophouse** | **1.84** | **11** | Pn | **Pn** | **00 28 54.9** | **-0.3** |
| **DSZ** | **Denniston Nort** | **1.89** | **345** | AML | AML | 00 29 28.3 | |
| DSZ | | | | AML | AML | 00 29 28.3 | |
| DSZ | | | | AML | AML | 00 29 28.5 | |
| DSZ | | | | AML | AML | 00 29 28.5 | |
| **ODZ** | **Otahua Downs** | **1.96** | **221** | PN | **Pn** | **00 28 56.3** | **-0.5** |
| ODZ | | | | AML | AML | 00 29 32.4 | |
| ODZ | | | | AML | AML | 00 29 32.4 | |
| ODZ | | | | AML | AML | 00 29 37.4 | |
| ODZ | | | | AML | AML | 00 29 37.4 | |
| **ODZ** | **Otahua Downs** | **1.96** | **221** | Pn | **Pn** | **00 28 56.3** | **-0.5** |
| **FOZ** | **Fox Glacier** | **2.01** | **269** | PN | **Pn** | **00 28 57.2** | **-0.1** |
| FOZ | | | | AML | AML | 00 29 29.6 | |
| FOZ | | | | AML | AML | 00 29 29.7 | |
| FOZ | | | | AML | AML | 00 29 34.8 | |
| FOZ | | | | AML | AML | 00 29 34.8 | |
| **FOZ** | **Fox Glacier** | **2.01** | **269** | Pn | **Pn** | **00 28 57.2** | **-0.1** |
| **BSWZ** | **Blackbirch Sta** | **2.13** | **30** | PN | **Pn** | **00 28 59.2** | **+0.1** |
| BSWZ | | | | AML | AML | 00 29 38.4 | |
| BSWZ | | | | AML | AML | 00 29 48.5 | |
| **BSWZ** | **Blackbirch Sta** | **2.13** | **30** | Pn | **Pn** | **00 28 59.2** | **+0.1** |
| **NNZ** | **Nelson** | **2.45** | **17** | ⇑PN | **Pn** | **00 29 03.9** | **+0.5** |
| NNZ | | | | AML | AML | 00 29 38.8 | |
| NNZ | | | | AML | AML | 00 29 41.2 | |
| **NNZ** | **Nelson** | **2.45** | **17** | Pn | **Pn** | **00 29 03.9** | **+0.5** |
| **HHSZ** | **Highcliff Hill** | **2.66** | **209** | PN | **Pn** | **00 29 07.1** | **+0.7** |
| **HHSZ** | **Highcliff Hill** | **2.66** | **209** | Pn | **Pn** | **00 29 07.1** | **+0.7** |
| **TCW** | **Tory Channel** | **2.72** | **30** | PN | **Pn** | **00 29 07.5** | **+0.3** |
| TCW | | | | AML | AML | 00 29 40.5 | |
| TCW | | | | AML | AML | 00 29 44.3 | |
| **TCW** | **Tory Channel** | **2.72** | **30** | Pn | **Pn** | **00 29 07.5** | **+0.3** |
| **JCZ** | **Jackson Bay** | **2.72** | **258** | PN | **Pn** | **00 29 07.1** | **-0.2** |
| JCZ | | | | AML | AML | 00 29 58.3 | |
| JCZ | | | | AML | AML | 00 29 59.0 | |
| **JCZ** | **Jackson Bay** | **2.72** | **258** | Pn | **Pn** | **00 29 07.1** | **-0.2** |
| **QRZ** | **Quartz Range** | **2.74** | **1** | PN | **Pn** | **00 29 07.3** | **-0.3** |
| QRZ | | | | AML | AML | 00 29 16.8 | |
| QRZ | | | | AML | AML | 00 29 56.3 | |
| **QRZ** | **Quartz Range** | **2.74** | **1** | Pn | **Pn** | **00 29 07.3** | **-0.3** |
| **WKZ** | **Wanaka** | **2.77** | **242** | AML | AML | 00 29 58.1 | |
| WKZ | | | | AML | AML | 00 30 01.0 | |
| **EAZ** | **Earnscleugh** | **2.80** | **233** | ⇑PN | **Pn** | **00 29 07.8** | **-0.5** |
| EAZ | | | | AML | AML | 00 29 55.5 | |
| EAZ | | | | AML | AML | 00 29 55.5 | |
| EAZ | | | | AML | AML | 00 29 59.4 | |
| EAZ | | | | AML | AML | 00 30 00.6 | |
| **EAZ** | **Earnscleugh** | **2.80** | **233** | Pn | **Pn** | **00 29 07.8** | **-0.5** |
| **BHW** | **Baring Head** | **2.81** | **40** | PN | **Pn** | **00 29 07.4** | **-1.0** |
| **BHW** | **Baring Head** | **2.81** | **40** | Pn | **Pn** | **00 29 07.4** | **-1.0** |
| **PLWZ** | **Palliser** | **2.88** | **47** | ⇑PN | **Pn** | **00 29 08.5** | **-0.9** |
| **PLWZ** | **Palliser** | **2.88** | **47** | Pn | **Pn** | **00 29 08.5** | **-0.9** |
| **DUWZ** | **D'Urville Isla** | **2.98** | **22** | Pn | **Pn** | **00 29 12.3** | **+1.5** |
| **DUWZ** | **D'Urville Isla** | **2.98** | **22** | Pn | **Pn** | **00 29 12.3** | **+1.5** |
| **MSWZ** | **Moikau Station** | **2.99** | **45** | PN | **Pn** | **00 29 09.6** | **-1.3** |
| MSWZ | | | | AML | AML | 00 29 47.5 | |
| MSWZ | | | | AML | AML | 00 29 47.6 | |
| **MSWZ** | **Moikau Station** | **2.99** | **45** | Pn | **Pn** | **00 29 09.7** | **-1.3** |
| **TUZ** | **Tuapeka** | **3.12** | **219** | PN | **Pn** | **00 29 12.3** | **-0.3** |
| TUZ | | | | AML | AML | 00 30 07.0 | |
| TUZ | | | | AML | AML | 00 30 07.0 | |
| TUZ | | | | AML | AML | 00 30 08.6 | |
| TUZ | | | | AML | AML | 00 30 08.7 | |
| **TUZ** | **Tuapeka** | **3.12** | **219** | Pn | **Pn** | **00 29 12.3** | **-0.3** |
| **CAW** | **Cannon Point** | **3.13** | **39** | PN | **Pn** | **00 29 11.9** | **-1.0** |
| CAW | | | | AML | AML | 00 29 50.1 | |
| CAW | | | | AML | AML | 00 29 51.0 | |
| **CAW** | **Cannon Point** | **3.13** | **39** | Pn | **Pn** | **00 29 11.9** | **-1.0** |
| **KIW** | **Kapiti Island** | **3.27** | **35** | PN | **Pn** | **00 29 14.5** | **-0.2** |
| **KIW** | **Kapiti Island** | **3.27** | **35** | Pn | **Pn** | **00 29 14.5** | **-0.2** |
| **MLZ** | **Mavora Lakes** | **3.54** | **238** | PN | **Pn** | **00 29 18.3** | **-0.2** |
| MLZ | | | | AML | AML | 00 30 26.0 | |
| MLZ | | | | AML | AML | 00 30 26.6 | |
| **MLZ** | **Mavora Lakes** | **3.54** | **238** | Pn | **Pn** | **00 29 18.3** | **-0.2** |
| **MRZ** | **Mangatainoka R** | **3.72** | **40** | PN | **Pn** | **00 29 19.7** | **-1.3** |
| MRZ | | | | AML | AML | 00 30 05.6 | |
| MRZ | | | | AML | AML | 00 30 05.9 | |
| **MRZ** | **Mangatainoka R** | **3.72** | **40** | Pn | **Pn** | **00 29 19.7** | **-1.3** |
| **SYZ** | **Scrubby Hill** | **3.78** | **217** | PN | **Pn** | **00 29 21.8** | **0.0** |
| SYZ | | | | AML | AML | 00 30 33.1 | |
| SYZ | | | | AML | AML | 00 30 33.2 | |
| **SYZ** | **Scrubby Hill** | **3.78** | **217** | Pn | **Pn** | **00 29 21.8** | **0.0** |
| **BFZ** | **Birch Farm** | **4.04** | **46** | PN | **Pn** | **00 29 24.8** | **-0.5** |
| **BFZ** | **Birch Farm** | **4.04** | **46** | Pn | **Pn** | **00 29 24.9** | **-0.5** |
| **DCZ** | **Deep Cove** | **4.24** | **241** | AML | AML | 00 30 41.8 | |
| DCZ | | | | AML | AML | 00 30 46.5 | |
| **KHEZ** | **Kahui Hut** | **4.43** | **16** | PN | **Pn** | **00 29 32.0** | **+1.1** |
| **KHEZ** | **Kahui Hut** | **4.43** | **16** | Pn | **Pn** | **00 29 32.0** | **+1.1** |
| **APZ** | **The Paps** | **4.54** | **222** | PN | **Pn** | **00 29 32.1** | **-0.1** |
| **APZ** | **The Paps** | **4.54** | **222** | Pn | **Pn** | **00 29 32.1** | **-0.1** |
| **HIZ** | **Hauiti** | **5.37** | **21** | PN | **Pn** | **00 29 43.6** | **0.0** |
| **HIZ** | **Hauiti** | **5.37** | **21** | Pn | **Pn** | **00 29 43.6** | **0.0** |
| **ASAR** | **Alice Springs** | **37.31** | **290** | P | **P** | **00 35 36.4** | **+0.7** |
| | 0.1nm,0.3s,baz=129,slow=7.3,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.57** | **294** | P | **P** | **00 35 54.4** | **-0.3** |
| | 0.4nm,0.9s,baz=134,slow=7.8,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.65** | **198** | PKPbc | **PKPbc** | **00 48 11.3** | **+0.4** |
| | 0.5nm,1.0s,baz=163,slow=1.9,SNR=7.0 | | | | | | |

*KRNET* ***13*** *00:34:04.8±0.1, 39.°14N×72.°67E, mb3.0*
*NNC* ***13*** *00:34:05.7±2.9, 39.°15N×72.°66E, h0km, mb3.5, mpv3.2, Error ellipse: s-maj=27.6km s-min=11.4km az=149.0*

**ISC 13 00:34:04.6±2.0, 39.°28N±0.°08×72.°41E±0.°06, h17km±11km, n13, σ1s69/22, 18C-9D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.12** | **48** | ⇑P | **Pn** | **00 34 26.1** | **+0.4** |
| | 7.0nm,0.3s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **00 34 41.7** | **+0.9** |
| | 25nm,0.2s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.12** | **48** | ⇑*eP* | **Pn** | **00 34 26.2** | **+0.5** |
| | baz=36 | | | | | | |
| SFK | | | | ⇑*iS* | **Sn** | **00 34 41.5** | **+0.7** |
| | baz=36 | | | | | | |
| **ARSB** | **Arslanbob** | **2.09** | **12** | ⇑*iP* | **Pg** | **00 34 44.7** | **0.0** |
| | baz=6.0 | | | | | | |
| ARSB | | | | ⇑*iS* | **Sg** | **00 35 14.3** | **+2.4** |
| | baz=6.0 | | | | | | |
| **ARK** | **Arkit** | **2.54** | **352** | ⇑*iP* | **Pb** | **00 34 51.6** | **+1.8** |
| | baz=349 | | | | | | |
| ARK | | | | ⇑*iS* | **Sg** | **00 35 25.9** | **-0.4** |
| | baz=349 | | | | | | |
| **DZET** | **Dzherino** | **2.83** | **262** | ⇓Pn | **Pb** | **00 34 54.5** | **-0.2** |
| | 12nm,0.5s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 00 35 38.2 | |
| | 42nm,0.6s | | | | | | |
| **ARLS** | **Aral** | **2.96** | **29** | ⇓*iP* | **Pb** | **00 34 56.5** | **-0.5** |
| | baz=24 | | | | | | |
| ARLS | | | | ⇓*iS* | **Sb** | **00 35 33.4** | **+0.3** |
| | baz=24 | | | | | | |
| **MNAS** | **Manas** | **3.21** | **1** | ⇑Pn | **Pb** | **00 35 00.2** | **-1.0** |
| | 9.2nm,0.5s | | | | | | |
| MNAS | | | | ⇑Sn | **Sb** | **00 35 42.1** | **+2.0** |
| | 44nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **3.21** | **1** | ⇑*iP* | **Pb** | **00 35 00.4** | **-0.8** |
| | baz=358 | | | | | | |
| MNAS | | | | ⇑*iS* | **Sb** | **00 35 42.1** | **+2.0** |
| | baz=358 | | | | | | |
| **AAK** | **Ala-Archa** | **3.71** | **24** | ⇑Pn | **Pb** | **00 35 07.8** | **-1.9** |
| | 2.3nm,0.3s | | | | | | |
| AAK | | | | ⇑Pg | **Pg** | **00 35 13.9** | **-1.6** |
| | 2.3nm,0.3s | | | | | | |
| AAK | | | | ⇑Sn | **Sb** | **00 35 52.3** | **-2.1** |
| | 18nm,1.0s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 00 36 02.2 | |
| | 11nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **4.08** | **340** | ⇑Pn | Pn | 00 35 12.1 | +5.8 |
| | 1.5nm,0.3s,baz=144,slow=12 | | | | | | |
| KK31 | | | | ⇓Sn | **Sb** | **00 36 01.6** | **-3.5** |
| | 3.2nm,0.4s,baz=143,slow=24 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 00 36 20.1 | |
| | 1.9nm,0.4s,baz=156,slow=29 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.37** | **32** | ⇑Pn | Pn | 00 35 15.0 | +4.7 |
| | 2.2nm,0.9s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 00 36 24.1 | |
| | 6.1nm,0.7s | | | | | | |
| **AB31** | **Akbulak array** | **13.38** | **322** | P | **Pn** | **00 37 14.6** | **+1.1** |
| | 0.2nm,0.3s,baz=130,slow=13,SNR=21 | | | | | | |
| AB31 | | | | ⇑S | **Sn** | **00 39 39.6** | **-2.1** |
| | 0.5nm,0.7s,baz=132,slow=25,SNR=2.8 | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.09** | **322** | ⇓P | **Pn** | **00 37 38.4** | **+1.5** |
| | 3.1nm,1.5s | | | | | | |

*DDA* ***13*** *00:49:07.0, 40.°16N×31.°57E, h7km, Md2.8*
*ISCJB* ***13*** *00:49:07.6±0.7, 40.°15N±0.°04×31.°58E±0.°07, h8km, Error ellipse: s-maj=7.4km s-min=5.6km az=19.3*

**ISC 13 00:49:07.3±0.9, 40.°17N±0.°04×31.°59E±0.°05, h8km, n6, σ0s81/10, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUMIH** | **MIHALICIK** | **0.31** | **196** | P | **Pg** | **00 49 13.0** | **-0.5** |
| AUMIH | | | | S | **Sg** | **00 49 17.8** | **+0.1** |
| **MDUB** | **Mudurnu** | **0.43** | **315** | *e*PG | **Pb** | **00 49 17.5** | **+0.3** |
| **BCAM** | **Yenicaga** | **0.74** | **29** | P | **Pg** | **00 49 21.1** | **-0.4** |
| BCAM | | | | S | **Sb** | **00 49 33.0** | **+0.2** |
| **ESKT** | **Eskisehir** | **0.86** | **222** | P | **Pg** | **00 49 23.7** | **-0.2** |
| ESKT | | | | S | **Sn** | **00 49 39.5** | **+0.8** |
| **GULT** | **Gulveren** | **0.86** | **288** | *e*PG | **Pn** | **00 49 25.3** | **-0.5** |
| **BBAL** | **Bala** | **1.33** | **117** | P | **Pn** | **00 49 31.3** | **-1.0** |
| BBAL | | | | S | **Sg** | **00 49 51.6** | **+1.4** |

**IDC 13 00:55:30.8±5.7, 22.°07S×179.°73W, h0km, mb3.9/2, mb1 4.1/2, mb1mx3.7/17, mbtmp3.9/2, Error ellipse: s-maj=252.2km s-min=63.1km az=150.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.61** | **259** | P | P | 01 03 27.5 | -1.6 |
| | 0.6nm,0.4s,baz=90,slow=7.1,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.81** | **264** | P | P | 01 03 31.9 | +1.1 |
| | 1.2nm,0.6s,baz=100,slow=7.7,SNR=14 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.64** | **310** | PKPbc | PKPbc | 01 15 14.1 | -0.7 |
| | 0.2nm,0.5s,baz=97,slow=6.0,SNR=3.0 | | | | | | |

*ISCJB* ***13*** *01:03:48.5±0.6, 16.°68S±0.°09×172.°8W±0.°1, h17km, mb4.3/12, MS3.5/5, Error ellipse: s-maj=21.6km s-min=8.0km az=28.1*
*IDC* ***13*** *01:03:48.0±0.7, 16.°88S×172.°71W, h0km, mb4.3/11, mb1 4.5/11, mb1mx4.3/26, mbtmp4.3/11, MS3.5/6, Ms1 3.6/6, ms1mx3.2/27, Error ellipse: s-maj=26.8km s-min=18.2km az=135.0*
*NEIC* ***13*** *01:03:49.4±0.6, 16.°82S×172.°78W, h10km, mb4.5/2, Error ellipse: s-maj=22.2km s-min=14.8km az=128.0*

**ISC 13 01:03:50.2±0.7, 16.°7S±0.°1×172.°7W±0.°2, h17km, n34, σ1s38/25, mb4.3/12, MS3.4/5, 1C, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.90** | **18** | Pn | **Pn** | **01 04 33.8** | **-1.9** |
| | 12nm,0.3s,baz=216,slow=3.8,SNR=5.6 | | | | | | |
| AFI | | | | Sn | **Sn** | **01 05 09.2** | **-1.1** |
| | 50nm,0.3s,baz=67,slow=20,SNR=6.5 | | | | | | |
| **MSVF** | **Nonsavu** | **8.91** | **262** | *e*Pn | Pn | 01 06 05.5 | +7.2 |
| | 81nm,1.4s | | | | | | |
| **RAR** | **Rarotonga** | **13.02** | **112** | LR | LR | 01 10 36.0 | |
| | comp=Z,145nm,18.1s,baz=281,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.39** | **251** | LR | LR | 01 15 00.4 | |
| | comp=Z,105nm,19.7s,baz=268,slow=33 | | | | | | |
| **PPT2** | **Papeete2** | **22.10** | **96** | *e*LR | LR | 01 13 49.7 | |
| | 51nm,20.5s | | | | | | |
| **URZ** | **Urewera** | **23.28** | **201** | P | **P** | **01 08 56.0** | **-1.0** |
| | 18nm,0.7s,baz=349,slow=5.1,SNR=9.2 | | | | | | |
| URZ | | | | LR | LR | 01 16 06.9 | |
| | comp=Z,49nm,20.8s,baz=88,slow=32 | | | | | | |
| **URZ** | **Urewera** | **23.28** | **201** | *e*P | **P** | **01 08 57.0** | **-0.1** |
| | 16nm,0.7s | | | | | | |
| **HNR** | **Honiara** | **27.59** | **282** | LR | LR | 01 18 56.7 | |
| | comp=Z,90nm,19.1s,baz=134,slow=33 | | | | | | |
| **RPZ** | **Rata Peaks** | **30.26** | **204** | P | **P** | **01 10 00.1** | **-0.2** |
| | 4.7nm,0.8s,baz=40,slow=18,SNR=1.8 | | | | | | |
| **CTA** | **Charters Tower** | **39.04** | **259** | P | **P** | **01 11 14.7** | **-1.8** |
| | 1.9nm,0.3s,baz=333,slow=9.0,SNR=2.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.42** | **329** | T | T | 01 55 36.7 | |
| | baz=150 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.43** | **329** | T | T | 01 55 40.4 | |
| | baz=150 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.44** | **329** | T | T | 01 55 38.7 | |
| | baz=150 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **41.37** | **330** | T | T | 01 56 51.0 | |
| | baz=149 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **41.37** | **330** | T | T | 01 56 45.0 | |
| | baz=149 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **41.38** | **330** | T | T | 01 56 37.7 | |
| | baz=149 | | | | | | |
| **WRAB** | **Tennant Creek** | **50.22** | **258** | *e*P | **P** | **01 12 43.7** | **-2.0** |
| | 1.3nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.23** | **258** | P | **P** | **01 12 44.3** | **-1.4** |
| | 2.6nm,0.7s,baz=95,slow=7.2,SNR=27 | | | | | | |
| WRA | | | | PcP | **PcP** | **01 14 06.1** | **+1.2** |
| | 1.5nm,0.4s,baz=82,slow=3.5,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **50.38** | **253** | P | **P** | **01 12 45.9** | **-1.0** |
| | 6.4nm,0.6s,baz=89,slow=8.6,SNR=83 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 14 05.9** | **+0.6** |
| | 1.7nm,0.8s,baz=90,slow=6.1,SNR=4.6 | | | | | | |
| **SIJI** | **Sorong** | **57.35** | **280** | P | **P** | **01 13 39.4** | **+1.4** |
| | 7.1nm,0.4s,baz=108,slow=20,SNR=4.0 | | | | | | |
| **VNDA** | **Vanda** | **62.17** | **186** | P | **P** | **01 14 09.3** | **-0.8** |
| | 3.0nm,0.8s,baz=12,slow=6.8,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.83** | **41** | P | **P** | **01 15 30.9** | **+0.9** |
| | 0.8nm,0.8s,baz=240,slow=9.5,SNR=5.7 | | | | | | |
| NVAR | | | | LR | LR | 01 43 33.9 | |
| | comp=Z,62nm,19.9s,baz=220,slow=32 | | | | | | |
| **KSRS** | **Korea Array** | **77.56** | **315** | P | **P** | **01 15 47.4** | **+2.1** |
| | 0.8nm,0.4s,baz=125,slow=6.4,SNR=2.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **77.58** | **315** | P | **P** | **01 15 47.4** | **+2.0** |
| **TXAR** | **Lajitas Array** | **80.76** | **56** | P | **P** | **01 16 04.7** | **+1.5** |
| | 1.3nm,1.1s,baz=209,slow=7.2,SNR=6.6 | | | | | | |
| **NEW** | **Newport** | **81.39** | **34** | LR | LR | 01 47 15.0 | |
| | comp=Z,86nm,18.6s,baz=282,slow=32 | | | | | | |
| **ILAR** | **Eielson Array** | **83.58** | **11** | P | **P** | **01 16 18.0** | **+1.0** |
| | 0.4nm,0.5s,baz=226,slow=6.6,SNR=6.7 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **145.56** | **242** | PKPbc | **PKPab** | **01 23 30.3** | **+1.0** |
| | 4.8nm,1.0s,baz=54,slow=4.4,SNR=10.0 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **145.56** | **242** | *e*PKPbc | **PKPab** | **01 23 31.1** | **+1.8** |
| **MORC** | **Moravsky Berou** | **145.97** | **348** | *e*PKPbc | **PKPab** | **01 23 29.7** | **+0.2** |
| **GERES** | **GERESS Array B** | **147.51** | **352** | PKPbc | **PKPab** | **01 23 34.9** | **-0.6** |
| | 0.2nm,0.4s,baz=116,slow=3.1,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.59** | **320** | PKPbc | **PKPab** | **01 23 35.5** | **-0.8** |
| | 3.4nm,0.8s,baz=113,slow=1.7,SNR=21 | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.72** | **353** | ⇑*i*PKiKP | **PKiKP** | **01 23 40.5** | **+0.2** |
| | 2.0nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **173.53** | **122** | PKPab | **PKPab** | **01 25 26.7** | **-2.0** |
| | 0.7nm,0.7s,baz=262,slow=4.5,SNR=5.7 | | | | | | |

*DDA* ***13*** *01:05:43.6, 41.°38N×44.°08E, h10km, Md3.5*
*TIF* ***13*** *01:05:43.4, 41.°33N×44.°17E, h19km±1km*
*ISCJB* ***13*** *01:05:44.4±0.5, 41.°33N±0.°03×44.°15E±0.°04, h2km±5km, Error ellipse: s-maj=5.4km s-min=3.6km az=137.5*
*CSEM* ***13*** *01:05:44.5±0.2, 41.°32N×44.°16E, h2km, ML1.2, Error ellipse: s-maj=4.8km s-min=2.6km az=145.0*
*ISK* ***13*** *01:05:44.1, 41.°33N×44.°17E, h6km, MD3.1*

**ISC 13 01:05:44.5±0.9, 41.°34N±0.°02×44.°15E±0.°02, h13km±7km, n41, σ0s59/74, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZR** | **Kazreti** | **0.20** | **78** | P | **Pg** | **01 05 48.9** | **-0.1** |
| KZR | | | | S | **Sg** | **01 05 52.0** | **-0.1** |
| **KZR** | **Kazreti** | **0.20** | **78** | P | **Pg** | **01 05 48.9** | **-0.1** |
| KZR | | | | S | **Sg** | **01 05 52.0** | **-0.1** |
| **AKH** | **Akhalkalaki** | **0.50** | **278** | *e*PG | **Pb** | **01 05 55.0** | **-0.2** |
| AKH | | | | *e*SG | **Sg** | **01 06 01.9** | **+0.7** |
| **AKH** | **Akhalkalaki** | **0.50** | **278** | P | **Pg** | **01 05 54.0** | **-0.4** |
| AKH | | | | S | **Sg** | **01 06 01.0** | **-0.2** |
| **AKH** | **Akhalkalaki** | **0.50** | **278** | P | **Pg** | **01 05 54.0** | **-0.4** |
| **AKH** | **Akhalkalaki** | **0.50** | **278** | *e*Pg | **Pb** | **01 05 55.1** | **-0.2** |
| AKH | | | | S | **Sg** | **01 06 01.0** | **-0.2** |
| AKH | | | | *e*Sg | **Sg** | **01 06 01.9** | **+0.7** |
| **TBLG** | **Delisi** | **0.59** | **48** | *e*PG | **Pb** | **01 05 56.4** | **-0.3** |
| TBLG | | | | *e*SG | **Sg** | **01 06 03.8** | **0.0** |
| **TBLG** | **Delisi** | **0.59** | **48** | P | **Pg** | **01 05 55.4** | **-0.5** |
| TBLG | | | | S | **Sg** | **01 06 03.8** | **0.0** |
| **TBLG** | **Delisi** | **0.59** | **48** | *i* P | **Pg** | **01 05 55.5** | **-0.5** |
| **TBLG** | **Delisi** | **0.59** | **48** | *e*Pg | **Pb** | **01 05 56.4** | **-0.3** |
| TBLG | | | | S | **Sg** | **01 06 03.8** | **0.0** |
| **SEAG** | **Tbilisi Sea** | **0.65** | **49** | P | **Pg** | **01 05 56.9** | **-0.2** |
| SEAG | | | | S | **Sg** | **01 06 06.0** | **+0.3** |
| **SEAG** | **Tbilisi Sea** | **0.65** | **49** | P | **Pg** | **01 05 56.9** | **-0.2** |
| SEAG | | | | S | **Sg** | **01 06 06.0** | **+0.3** |
| **EAK** | **Akyaka** | **0.77** | **213** | *i* P | **Pg** | **01 05 59.0** | **-0.5** |
| EAK | | | | *i* S | **Sb** | **01 06 09.9** | **-0.5** |
| **EAK** | **Akyaka** | **0.77** | **213** | P | **Pg** | **01 05 59.0** | **-0.5** |
| EAK | | | | S | **Sb** | **01 06 09.9** | **-0.5** |
| **DUS** | **Dusheti** | **0.85** | **28** | P | **Pb** | **01 06 01.2** | **-0.1** |
| DUS | | | | S | **Sn** | **01 06 14.1** | **-0.7** |
| **DUS** | **Dusheti** | **0.85** | **28** | P | **Pb** | **01 06 01.2** | **-0.1** |
| DUS | | | | S | **Sn** | **01 06 14.1** | **-0.7** |
| **DGRG** | **David-gareji** | **0.92** | **83** | P | **Pg** | **01 06 02.2** | **-0.2** |
| DGRG | | | | S | **Sn** | **01 06 16.7** | **+0.3** |
| **DGRG** | **David-gareji** | **0.92** | **83** | P | **Pg** | **01 06 02.2** | **-0.2** |
| DGRG | | | | *i* S | **Sg** | **01 06 14.3** | **-0.1** |
| **KARS** | **Kars** | **1.08** | **229** | *e*PN | **Pb** | **01 06 05.1** | **0.0** |
| KARS | | | | *e*SN | **Sn** | **01 06 20.3** | **-0.1** |
| **KARS** | **Kars** | **1.08** | **229** | *e*Pn | **Pb** | **01 06 05.1** | **0.0** |
| KARS | | | | *e*Sn | **Sn** | **01 06 20.3** | **-0.1** |
| **DIGO** | **Kars** | **1.10** | **213** | *i* P | **Pb** | **01 06 04.9** | **-0.5** |
| DIGO | | | | *i* S | **Sg** | **01 06 20.0** | **0.0** |
| **DIGO** | **Kars** | **1.10** | **213** | P | **Pb** | **01 06 04.9** | **-0.5** |
| DIGO | | | | S | **Sg** | **01 06 20.0** | **0.0** |
| **ONI** | **Oni** | **1.35** | **338** | P | **Pn** | **01 06 08.8** | **-0.4** |
| ONI | | | | S | **Sn** | **01 06 27.0** | **-0.1** |
| **ONI** | **Oni** | **1.35** | **338** | P | **Pn** | **01 06 08.8** | **-0.4** |
| ONI | | | | S | **Sn** | **01 06 27.0** | **-0.1** |
| **ARTV** | **Artvin** | **1.69** | **265** | *i* P | **Pb** | **01 06 15.1** | **-0.4** |
| ARTV | | | | *i* S | **Sb** | **01 06 36.6** | **-0.1** |
| **ARTV** | **Artvin** | **1.69** | **265** | P | **P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SIGR | | | | eSN | | Sg | 01 26 15.5 | -0.7 |
| **SIGR** | **SIGRI** | **0.70** | **231** | ePn | | Pg | 01 26 06.2 | -0.8 |
| SIGR | | | | eSn | | Sg | 01 26 15.5 | -0.7 |
| **LPK** | **Lapseki** | **0.73** | **12** | ePG | | Pg | 01 26 07.0 | -0.5 |
| LPK | | | | eSG | | Sb | 01 26 17.6 | -0.5 |
| **LPK** | **Lapseki** | **0.73** | **12** | ePg | | Pg | 01 26 07.0 | -0.5 |
| LPK | | | | eSg | | Sb | 01 26 17.6 | -0.5 |
| **GADA** | **Gvkgeada** | **0.74** | **316** | ePG | | Pg | 01 26 07.8 | +0.2 |
| **GADA** | **Gvkgeada** | **0.74** | **316** | ePg | | Pg | 01 26 07.8 | +0.2 |
| **GELI** | **Tayfur-Gelibol** | **0.74** | **355** | ePG | | Pg | 01 26 07.0 | -0.7 |
| GELI | | | | eSG | | Sb | 01 26 18.3 | -0.1 |
| **GELI** | **Tayfur-Gelibol** | **0.74** | **355** | ePg | | Pg | 01 26 07.0 | -0.7 |
| GELI | | | | eSg | | Sb | 01 26 18.3 | -0.1 |
| **BALY** | **Balya** | **0.82** | **84** | *i* P | | Pg | 01 26 08.8 | -0.3 |
| BALY | | | | *i* S | | Sb | 01 26 20.1 | -0.5 |
| **BALY** | **Balya** | **0.82** | **84** | P | | Pg | 01 26 08.8 | -0.3 |
| BALY | | | | S | | Sb | 01 26 20.1 | -0.5 |
| **KRBG** | **Karabiga-Canak** | **0.93** | **37** | ePG | | Pg | 01 26 10.6 | -0.6 |
| **KRBG** | **Karabiga-Canak** | **0.93** | **37** | ePg | | Pg | 01 26 10.6 | -0.6 |
| **GONE** | **Gonen-Balikesi** | **0.95** | **65** | ePG | | Pg | 01 26 10.9 | -0.6 |
| **GONE** | **Gonen-Balikesi** | **0.95** | **65** | ePg | | Pg | 01 26 10.9 | -0.6 |
| **ERIK** | **Erikli-Kesan** | **1.01** | **358** | ePG | | Pg | 01 26 12.5 | -0.4 |
| **ERIK** | **Erikli-Kesan** | **1.01** | **358** | ePg | | Pg | 01 26 12.5 | -0.4 |
| **BALB** | **Balikesir** | **1.02** | **90** | ePG | | Pn | 01 26 13.3 | -0.1 |
| **BALB** | **Balikesir** | **1.02** | **90** | ePg | | Pn | 01 26 13.3 | -0.1 |
| **LIA** | **Limnos Island** | **1.09** | **283** | ePN | | Pg | 01 26 13.3 | -1.0 |
| LIA | | | | eSN | | Sg | 01 26 28.0 | -0.5 |
| **LIA** | **Limnos Island** | **1.09** | **283** | ePn | | Pg | 01 26 13.3 | -1.0 |
| LIA | | | | eSn | | Sg | 01 26 28.0 | -0.5 |
| **ENEZ** | **Enez** | **1.12** | **344** | ePG | | Pb | 01 26 14.9 | +0.2 |
| **ENEZ** | **Enez** | **1.12** | **344** | ePg | | Pb | 01 26 14.9 | +0.2 |
| **RKY** | **Sarkoy-Tekirda** | **1.13** | **24** | ePG | | Pg | 01 26 14.5 | -0.6 |
| **RKY** | **Sarkoy-Tekirda** | **1.13** | **24** | ePg | | Pg | 01 26 14.5 | -0.6 |
| **SART** | **Tekirdag** | **1.14** | **24** | *i* P | | Pg | 01 26 14.8 | -0.4 |
| SART | | | | *i* S | | Sn | 01 26 30.7 | 0.0 |
| **SART** | **Tekirdag** | **1.14** | **24** | P | | Pg | 01 26 14.8 | -0.4 |
| SART | | | | S | | Sn | 01 26 30.7 | 0.0 |
| **SMTH** | **Samothraki Isl** | **1.14** | **316** | ePN | | Pb | 01 26 15.2 | +0.2 |
| SMTH | | | | eSN | | Sn | 01 26 30.8 | +0.1 |
| **SMTH** | **Samothraki Isl** | **1.14** | **316** | ePn | | Pb | 01 26 15.2 | +0.2 |
| SMTH | | | | eSn | | Sn | 01 26 30.8 | +0.1 |
| **EDC** | **Edincik** | **1.21** | **55** | ePN | | Pn | 01 26 16.4 | +0.2 |
| **EDC** | **Edincik** | **1.21** | **55** | ePn | | Pn | 01 26 16.4 | +0.2 |
| **MRMT** | **Marmara Adasi** | **1.23** | **40** | ePN | | Pg | 01 26 16.7 | -0.3 |
| **MRMT** | **Marmara Adasi** | **1.23** | **40** | ePn | | Pg | 01 26 16.7 | -0.3 |
| **URLA** | **Izmir** | **1.29** | **179** | *i* P | | Pn | 01 26 17.4 | +0.1 |
| URLA | | | | *i* S | | Sn | 01 26 35.4 | +0.8 |
| **URLA** | **Izmir** | **1.29** | **179** | P | | Pn | 01 26 17.4 | +0.1 |
| URLA | | | | S | | Sn | 01 26 35.4 | +0.8 |
| **ALN** | **Alexandroupoli** | **1.30** | **342** | ePN | | Pn | 01 26 17.4 | 0.0 |
| **ALN** | **Alexandroupoli** | **1.30** | **342** | ePN | | Sn | 01 26 18.1 | -0.2 |
| ALN | | | | eSN | | Sn | 01 26 36.1 | +1.4 |
| **ALN** | **Alexandroupoli** | **1.30** | **342** | ePn | | Pg | 01 26 18.1 | -0.2 |
| ALN | | | | eSn | | Sn | 01 26 36.1 | +1.4 |
| **CHOS** | **Chios island** | **1.33** | **198** | ePN | | Pn | 01 26 17.8 | 0.0 |
| CHOS | | | | eSN | | Sb | 01 26 35.4 | +0.2 |
| **CHOS** | **Chios island** | **1.33** | **198** | ePn | | Pn | 01 26 17.8 | 0.0 |
| CHOS | | | | eSn | | Sb | 01 26 35.4 | +0.2 |
| **KCTX** | **Karacabey (Bur** | **1.51** | **66** | ePN | | Pb | 01 26 21.2 | -0.1 |
| **KCTX** | **Karacabey (Bur** | **1.51** | **66** | ePn | | Pb | 01 26 21.2 | -0.1 |
| **TKR** | **Tekirdag** | **1.53** | **29** | ePN | | Pb | 01 26 21.8 | +0.2 |
| **TKR** | **Tekirdag** | **1.53** | **29** | ePn | | Pb | 01 26 21.8 | +0.2 |
| **DST** | **Dursunbey** | **1.59** | **91** | ePN | | Pb | 01 26 22.7 | +0.1 |
| **DST** | **Dursunbey** | **1.59** | **91** | ePn | | Pb | 01 26 22.7 | +0.1 |
| **DEMI** | **Demirci** | **1.78** | **109** | *i* P | | Pg | 01 26 27.3 | -0.1 |
| DEMI | | | | *i* S | | Sg | 01 26 50.7 | +0.3 |
| **DEMI** | **Demirci** | **1.78** | **109** | P | | Pg | 01 26 27.3 | -0.1 |
| DEMI | | | | S | | Sg | 01 26 50.7 | +0.3 |
| **ARMT** | **Armutlu** | **1.98** | **62** | ePN | | Pb | 01 26 28.8 | -0.6 |
| **ARMT** | **Armutlu** | **1.98** | **62** | ePn | | Pb | 01 26 28.8 | -0.6 |
| **CTKS** | **Kestanelik-??a** | **2.17** | **43** | ePN | | Pn | 01 26 30.8 | +1.5 |
| **CTKS** | **Kestanelik-??a** | **2.17** | **43** | ePn | | Pn | 01 26 30.8 | +1.5 |
| **EDRB** | **Edirne** | **2.19** | **4** | ePN | | Pb | 01 26 31.5 | -1.4 |
| **EDRB** | **Edirne** | **2.19** | **4** | ePn | | Pb | 01 26 31.5 | -1.4 |

*ISCJB **13** 01:28:26.6±0.6, 36°.62N±0°.04×71°.34E±0°.05, h150km, mb3.4/7, Error ellipse: s-maj=6.2km s-min=5.8km az=22.0*
*IDC **13** 01:28:26.2±3.3, 36°.51N×71°.43E, h158km±27km, mb3.2/7, mb1 3.3/14, mb1mx3.1/58, mbtmp3.7/14, Error ellipse: s-maj=28.2km s-min=15.3km az=164.0*
*NNC **13** 01:28:33.9±1.5, 37°.09N×71°.22E, h173km±12km, mb2.8, mpv3.7, Error ellipse: s-maj=15.0km s-min=6.4km az=161.0*

**ISC 13 01:28:26.5±0.8, 36°.60N±0°.07×71°.39E±0°.06, h150km, n33, σ1§55/40, mb3.4/7, 5C-12D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **3.00** | **318** | ⇑P | **Pn** | **01 29 16.3** | **+2.4** |
| DZET | 34nm,0.5s | | | ⇑S | **Sn** | **01 29 50.9** | **+0.3** |
| **SFK** | 282nm,0.6s **Sufi-Kurgan** | **3.79** | **25** | ⇓P | Pn | 01 29 27.7 | +3.4 |
| SFK | 8.4nm,0.2s | | | ⇑S | **Sn** | **01 30 10.0** | **+1.0** |
| **AML** | 94nm,0.5s **Almayashu** | **5.80** | **17** | P | **Pn** | **01 29 52.7** | **+1.8** |
| **MNAS** | SNR=84 **Manas** | **5.94** | **8** | ⇓P | **Pn** | **01 29 54.5** | **+2.0** |
| MNAS | 3.4nm,0.5s 27nm,0.5s | | | ⇓S | **Sn** | **01 30 57.0** | **-2.8** |
| **UCH** | **Uchtor** | **6.12** | **22** | P | **Pn** | **01 29 57.3** | **+2.1** |
| **KZA** | SNR=14 **Kyzart** | **6.23** | **27** | P | **Pn** | **01 29 58.0** | **+1.4** |
| **EKS2** | SNR=5.9 **Erkin-Say** | **6.33** | **16** | P | **Pn** | **01 30 00.3** | **+2.7** |
| **AAK** | SNR=11 **Ala-Archa** | **6.48** | **21** | ⇓P | **Pn** | **01 30 02.4** | **+2.7** |
| AAK | 2.6nm,0.3s 12nm,0.5s | | | ⇓S | **Sn** | **01 31 12.2** | **-0.5** |
| **AAK** | **Ala-Archa** | **6.48** | **21** | P | **Pn** | **01 30 01.6** | **+1.8** |
| AAK | 2.4nm,0.3s,baz=161,slow=4.7,SNR=20 1.5nm,0.3s,baz=134,slow=20,SNR=16 | | | S | **Sn** | **01 31 12.3** | **-0.5** |
| **AAK** | **Ala-Archa** SNR=7.6 | **6.48** | **21** | P | **Pn** | **01 30 02.0** | **+2.2** |
| **KK31** | **Karatay Array** | **6.53** | **354** | ⇓P | **Pn** | **01 30 01.3** | **+1.1** |
| KK31 | 2.9nm,0.3s,baz=170,slow=11,SNR=136 25nm,0.8s,baz=185,slow=32,SNR=5.6 | | | ⇓S | **Sn** | **01 31 11.4** | **-2.3** |
| **ULHL** | **Ulahol** SNR=6.1 | **6.77** | **32** | P | **Pn** | **01 30 05.5** | **+1.8** |
| **TKM2** | **Tokmak 2** 0.9nm,0.3s | **7.09** | **26** | ⇓P | **Pn** | **01 30 10.0** | **+2.1** |
| TKM2 | 5.4nm,0.8s | | | ⇓S | **Sn** | **01 31 25.4** | **-2.1** |
| **SMLA** | **Simla** | **7.27** | **137** | *i* P | Pn | 01 30 13.0 | +2.9 |
| SMLA | | | | *i* S | **Sn** | **01 31 32.7** | **+1.3** |
| SMLA | comp=E,601nm,0.3s | | | AML | AML | 01 31 35.2 | |
| SMLA | comp=N,718nm,0.3s | | | AML | AML | 01 31 35.7 | |
| **GEYT** | **Alibeck** | **10.66** | **281** | P | **Pn** | **01 30 56.6** | **+1.3** |
| GEYT | comp=N,0.4nm,0.3s,baz=119,slow=12,SNR=4.6 comp=N,0.8nm,0.3s,baz=137,slow=14,SNR=5.3 | | | S | **Sn** | **01 32 52.7** | **-0.5** |
| **MK31** | **Makanchi Array** | **13.03** | **35** | ⇑P | **P** | **01 31 30.8** | **+0.1** |
| **MKAR** | comp=N,1.1nm,0.6s,baz=211,slow=11,SNR=8.4 **Makanchi Array** | **13.03** | **35** | P | **Pn** | **01 31 26.6** | **+0.6** |
| **KURBB** | comp=N,0.1nm,0.3s,baz=219,slow=11,SNR=3.4 **Kurchatov Arra** | **14.93** | **18** | ⇓P | **P** | **01 31 52.3** | **+0.6** |
| **KURBB** | comp=N,2.1nm,0.6s **Kurchatov Arra** | **14.93** | **18** | P | **Pn** | **01 31 50.4** | **+0.5** |
| **AB31** | comp=N,0.1nm,0.3s,baz=206,slow=10,SNR=5.8 **Akbulak array** | **15.15** | **330** | P | **Pn** | **01 31 51.9** | **-0.7** |
| AB31 | comp=N,0.6nm,0.3s,baz=146,slow=12,SNR=34 comp=N,0.4nm,0.5s,baz=155,slow=23,SNR=5.3 | | | ⇑S | Sn | 01 34 32.0 | -8.9 |
| **BVA0** | **Borovoye Array** | **16.44** | **358** | ⇓P | **Pn** | **01 32 09.7** | **+1.3** |
| **BVAR** | comp=N,1.0nm,0.6s,baz=271,slow=42,SNR=5.6 **Borovoye Array** | **16.44** | **358** | P | **P** | **01 32 09.1** | **+0.7** |
| **AKTO** | comp=N,0.4nm,0.3s,baz=153,slow=7.8,SNR=6.5 **Aktyubinsk** | **16.85** | **329** | ⇓P | **P** | **01 32 12.6** | **-0.4** |
| **AKTO** | comp=N,2.3nm,0.5s **Aktyubinsk** | **16.85** | **329** | P | **P** | **01 32 13.5** | **+0.5** |
| **ZALV** | comp=N,0.8nm,0.3s,baz=133,slow=10,SNR=13 **Zalesovo Beam** | **19.69** | **24** | P | **P** | **01 32 43.9** | **0.0** |
| **SONM** | comp=N,0.5nm,0.3s,baz=220,slow=12,SNR=11 **Songino Array** | **28.02** | **55** | P | **P** | **01 34 03.4** | **-0.1** |

comp=N,0.4nm,0.7s,baz=289,slow=9.0,SNR=3.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BRTR** | **Keskin Array B** | **29.70** | **288** | P | | **P** | **01 34 19.9** | **+1.4** |
| | comp=N,0.3nm,0.6s,baz=79,slow=7.5,SNR=2.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **37.58** | **326** | P | | **P** | **01 35 25.8** | **-0.3** |
| | comp=N,2.4nm,0.8s,baz=131,slow=10,SNR=6.6 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.17** | **337** | P | | **P** | **01 35 55.7** | **-0.1** |
| | comp=N,5.4nm,1.1s,baz=108,slow=8.6,SNR=3.6 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.49** | **323** | P | | **P** | **01 36 22.3** | **-0.3** |
| | comp=Z,0.7nm,0.4s,baz=96,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.49** | **323** | P | | **P** | **01 36 21.9** | **-0.6** |
| | comp=Z,0.2nm,0.4s,baz=105,slow=7.1,SNR=5.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.03** | **269** | P | | **P** | **01 38 55.2** | **-2.2** |
| | comp=Z,0.2nm,0.4s,baz=53,slow=5.7,SNR=12 | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.78** | **122** | P | | **P** | **01 40 27.0** | **-1.8** |
| | comp=Z,0.3nm,1.1s,baz=324,slow=4.6,SNR=3.0 | | | | | | | |

**IDC 13 01:33:50.4±3.5, 23°.97S×179°.96E, h578km±40km, mb3.3/4, mb1 3.7/4, mb1mx3.1/25, mbtmp4.2/4, Error ellipse: s-maj=45.3km s-min=16.2km az=167.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **41.99** | **261** | P | P | 01 40 52.2 | 0.0 |
| | 3.5nm,0.7s,baz=93,slow=7.9,SNR=27 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.36** | **266** | P | P | 01 40 54.6 | -0.5 |
| | 7.4nm,0.7s,baz=102,slow=8.4,SNR=104 | | | | | | |
| WRA | | | | S | S | 01 46 35.7 | +0.1 |
| | 0.3nm,0.7s,baz=98,slow=14,SNR=2.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.83** | **44** | P | P | 01 45 24.4 | -0.6 |
| | 0.5nm,0.6s,baz=234,slow=7.7,SNR=4.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **90.50** | **58** | P | P | 01 45 51.4 | -0.3 |
| | 0.9nm,0.7s,baz=214,slow=6.4,SNR=14 | | | | | | |
| **FINES** | **FINESS Array B** | **138.50** | **341** | PKP | PKPdf | 01 52 11.6 | +1.2 |
| | 2.5nm,0.8s,baz=26,slow=3.5,SNR=3.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.01** | **327** | PKPbc | PKPdf | 01 52 22.2 | 0.0 |
| | 0.6nm,0.3s,baz=41,slow=3.8,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.59** | **307** | PKPbc | PKPbc | 01 52 30.8 | 0.0 |
| | 0.4nm,0.6s,baz=134,slow=4.2,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.11** | **189** | PKPab | PKPab | 01 54 07.9 | -0.4 |
| | 0.4nm,0.7s,baz=167,slow=5.2,SNR=3.0 | | | | | | |

*CSEM **13** 02:04:23.7, 39°.51N×29°.77W, h10km, ML2.7, After PDA*
**PDA 13 02:04:23.7±0.6, 39°.51N×29°.77W, h10km, MD3.6, ML2.7, Error ellipse: s-maj=15.2km s-min=5.6km az=55.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CALA** | **Caldeira** | **1.24** | **138** | eS | Sb | 02 04 56.9 | -6.6 |
| **CALA** | **Caldeira** | **1.24** | **138** | eS | Sb | 02 04 56.9 | -6.6 |
| **ROSA** | **Rosais** | **1.43** | **123** | eP | Pn | 02 04 44.7 | -5.0 |
| ROSA | | | | eS | Sn | 02 05 01.0 | -7.5 |
| ROSA | 31nm,0.3s | | | A | A | 02 05 01.2 | |
| **ROSA** | **Rosais** | **1.43** | **123** | eP | Pn | 02 04 44.7 | -5.0 |
| ROSA | | | | eS | Sn | 02 05 01.0 | -7.5 |
| **PCAN** | **Candelaria** | **1.44** | **136** | eP | Pn | 02 04 45.3 | -4.6 |
| PCAN | | | | eS | Sn | 02 05 01.3 | -7.7 |
| PCAN | 62nm,0.3s | | | A | A | 02 05 08.8 | |
| **PCAN** | **Candelaria** | **1.44** | **136** | eP | Pn | 02 04 45.3 | -4.6 |
| PCAN | | | | eS | Sn | 02 05 01.3 | -7.7 |
| **PICO** | **Pico** | **1.45** | **133** | eP | Pn | 02 04 45.5 | -4.6 |
| PICO | | | | eS | Sn | 02 05 01.4 | -7.8 |
| **PICO** | **Pico** | **1.45** | **133** | eP | Pn | 02 04 45.5 | -4.6 |
| PICO | | | | eS | Sn | 02 05 01.4 | -7.8 |

*ISK **13** 02:08:35.8, 40°.33N×32°.13E, h5km, MD2.7*
*DDA **13** 02:08:41.4, 40°.22N×31°.64E, h7km, Md2.7*
*CSEM **13** 02:08:41.6±0.4, 40°.20N×31°.72E, h2km, MD2.7, Error ellipse: s-maj=10.3km s-min=9.6km az=163.0*
**ISC 13 02:08:42.7±1.2, 40°.17N±0°.03×31°.69E±0°.04, h6km±10km, n15, σ1§42/25, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUMIH** | **MIHALICIK** | **0.34** | **208** | P | **Pg** | **02 08 48.4** | **-1.0** |
| AUMIH | | | | S | **Sg** | **02 08 54.7** | **+0.8** |
| **MDUB** | **Mudurnu** | **0.48** | **309** | ePG | **Pg** | **02 08 51.0** | **-1.1** |
| MDUB | | | | eSG | **Sb** | **02 09 02.1** | **+0.9** |
| **MDUB** | **Mudurnu** | **0.48** | **309** | ePg | **Pg** | **02 08 51.0** | **-1.1** |
| **BCAM** | **Yenicaga** | **0.71** | **24** | *i* P | **Pg** | **02 08 54.7** | **-1.6** |
| **BCAM** | **Yenicaga** | **0.71** | **24** | P | **Pg** | **02 08 54.7** | **-1.6** |
| BCAM | | | | S | **Sb** | **02 09 08.0** | **+0.3** |
| **SVRH** | **Sivrihisar-ESK** | **0.73** | **190** | ePG | **Pg** | **02 08 55.9** | **-0.9** |
| SVRH | | | | eSG | **Sn** | **02 09 11.1** | **-0.2** |
| **SVRH** | **Sivrihisar-ESK** | **0.73** | **190** | ePg | **Pg** | **02 08 55.9** | **-0.9** |
| **ESKT** | **Eskisehir** | **0.92** | **225** | P | **Pg** | **02 08 59.2** | **-1.1** |
| ESKT | | | | S | **Sn** | **02 09 15.6** | **-0.4** |
| **SEYT** | **Eskypehyr** | **0.92** | **225** | *i* P | **Pg** | **02 08 59.2** | **-1.1** |
| **GULT** | **Gulveren** | **0.94** | **287** | ePN | **Pg** | **02 09 00.6** | **-0.2** |
| GULT | | | | eSN | **Sn** | **02 09 18.2** | **+1.8** |
| **GULT** | **Gulveren** | **0.94** | **287** | ePn | **Pg** | **02 09 00.6** | **-0.2** |
| GULT | | | | eSn | **Sn** | **02 09 18.2** | **+1.8** |
| **BORA** | **Eskisehir** | **0.99** | **254** | *i* P | **Pb** | **02 09 02.4** | **-0.1** |
| BORA | | | | *i* S | **Sn** | **02 09 16.4** | **-1.4** |
| **BORA** | **Eskisehir** | **0.99** | **254** | P | **Pb** | **02 09 02.4** | **-0.1** |
| BORA | | | | S | **Sn** | **02 09 16.4** | **-1.4** |
| **BBAL** | **Bala** | **1.27** | **119** | *i* P | **Pn** | **02 09 06.5** | **-0.6** |
| **BBAL** | **Bala** | **1.27** | **119** | P | **Pn** | **02 09 06.5** | **-0.6** |
| BBAL | | | | S | **Sg** | **02 09 27.4** | **+4.0** |

*ISCJB **13** 02:17:50.7±0.4, 4°.39N±0°.08×32°.47W±0°.07, h11km, mb4.0/28, MS3.9/22, Error ellipse: s-maj=13.2km s-min=8.2km az=142.5*
*IDC **13** 02:17:50.7±0.6, 4°.45N×32°.50W, h0km, mb4.0/16, mb1 4.1/16, mb1mx4.0/33, mbtmp4.0/16, MS3.8/23, Ms1 3.8/23, ms1mx3.7/32, Error ellipse: s-maj=26.2km s-min=12.5km az=146.0*
*NEIC **13** 02:17:52.5±0.3, 4°.44N×32°.52W, h10km, mb4.2/12, Error ellipse: s-maj=10.5km s-min=6.7km az=142.0*
**ISC 13 02:17:52.6±0.5, 4°.4N±0°.1×32°.5W±0°.1, h11km, n48, σ0§90/30, mb4.2/28, MS3.9/22, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RCBR** | **Riachuelo** | **10.75** | **198** | LR | LR | 02 23 49.5 | |
| | comp=Z,486nm,20.7s,baz=8.5,slow=33 | | | | | | |
| **RCBR** | **Riachuelo** | **10.75** | **198** | ePn | **Pn** | **02 20 25.9** | **-0.7** |
| **H10N3** | **ASCENSION HYDR** | **21.73** | **124** | T | T | 02 45 28.4 | |
| | baz=304,slow=75,SNR=128 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **21.74** | **124** | T | T | 02 45 28.7 | |
| | baz=304,slow=75,SNR=140 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **21.75** | **124** | T | T | 02 45 30.0 | |
| | baz=304,slow=75,SNR=105 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **22.23** | **127** | T | T | 02 45 52.4 | |
| | baz=306,slow=74,SNR=143 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **22.24** | **127** | T | T | 02 46 03.8 | |
| | baz=306,slow=74,SNR=144 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **22.25** | **127** | T | T | 02 45 53.7 | |
| | baz=306,slow=74,SNR=89 | | | | | | |
| **BDFB** | **Brasilia** | **25.17** | **217** | P | **P** | **02 23 17.3** | **-1.1** |
| | 2.2nm,0.7s,baz=59,slow=12,SNR=4.3 | | | | | | |
| BDFB | | | | LR | LR | 02 32 19.6 | |
| | comp=Z,428nm,19.0s,baz=44,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **27.62** | **84** | P | **P** | **02 23 38.7** | **-1.8** |
| | 6.1nm,1.1s,baz=228,slow=5.9,SNR=3.2 | | | | | | |
| DBIC | | | | LR | LR | 02 32 48.3 | |
| | comp=Z,261nm,18.2s,baz=256,slow=32 | | | | | | |
| **PTGA** | **Pitinga** | **27.90** | **260** | P | **P** | **02 23 41.9** | **-1.1** |
| | 2.9nm,0.8s,baz=86,slow=10,SNR=7.5 | | | | | | |
| PTGA | | | | LR | LR | 02 33 43.9 | |
| | comp=Z,396nm,19.7s,baz=72,slow=34 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **29.60** | **292** | T | T | 02 54 47.6 | |
| | SNR=50 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **30.39** | **295** | T | T | 02 55 53.4 | |
| | SNR=16 | | | | | | |
| **SAML** | **Samuel** | **33.34** | **246** | eP | **P** | **02 24 30.6** | **-0.5** |
| | 12nm,1.5s | | | | | | |
| **SIV** | **San Ignacio** | **34.79** | **234** | P | **P** | **02 24 43.6** | **-0.1** |
| | 2.3nm,0.8s,baz=96,slow=7.5,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.87** | **73** | P | **P** | **02 24 44.2** | **-0.1** |
| | 5.2nm,1.1s,baz=268,slow=6.8,SNR=17 | | | | | | |
| TORD | | | | PcP | **PcP** | **02 27 16.2** | **-1.2** |
| | 0.4nm,0.8s,baz=243,slow=3.5,SNR=2.8 | | | | | | |
| TORD | | | | LR | LR | 02 37 05.8 | |
| | comp=Z,332nm,19.5s,baz=260,slow=33 | | | | | | |
| **CPUP** | **Villa Florida** | **38.90** | **217** | P | **P** | **02 25 19.1** | **+0.6** |
| | 4.6nm,1.1s,baz=359,slow=3.2,SNR=3.9 | | | | | | |
| CPUP | | | | LR | LR | 02 41 05.6 | |
| | comp=Z,292nm,18.8s,baz=46,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **40.80** | **239** | P | **P** | **02 25 35.5** | **+0.4** |
| | 1.6nm,0.9s,baz=70,slow=12,SNR=4.9 | | | | | | |
| LPAZ | | | | LR | LR | 02 41 36.9 | |
| | comp=Z,183nm,19.7s,baz=68,slow=35 | | | | | | |
| **TAM** | **Tamanrasset** | **41.04** | **60** | eP | **P** | **02 25 38.0** | **+1.4** |
| | 8.0nm,1.3s | | | | | | |
| **ROSC** | **El Rosal** | **41.66** | **272** | P | **P** | **02 25 41.9** | **-0.2** |
| | 2.8nm,0.4s,baz=203,slow=3.2,SNR=4.2 | | | | | | |
| ROSC | | | | LR | LR | 02 43 44.8 | |
| | comp=Z,212nm,18.2s,baz=104,slow=37 | | | | | | |
| **ESDC** | **Sonseca Array** | **43.55** | **32** | P | **P** | **02 25 56.5** | **-0.2** |
| | 0.9nm,0.7s,baz=227,slow=9.0,SNR=5.6 | | | | | | |
| ESDC | | | | LR | LR | 02 42 31.2 | |
| | comp=Z,73nm,18.2s,baz=275,slow=34 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **45.41** | **157** | T | T | 03 15 13.7 | |
| | SNR=16 | | | | | | |
| **OTAV** | **Otavalo** | **46.07** | **266** | eP | **P** | **02 26 17.6** | **0.0** |
| | 3.5nm,1.1s | | | | | | |
| **CFAA** | **Coronel Fontan** | **49.41** | **221** | P | **P** | **02 26 42.8** | **-0.1** |
| | 0.2nm,0.3s,baz=354,slow=10,SNR=8.0 | | | | | | |
| **KEST** | **Kesra** | **49.55** | **46** | LR | LR | 02 47 52.0 | |
| | comp=Z,373nm,19.2s,baz=220,slow=36 | | | | | | |
| **GERES** | **ERESS Array B** | **59.11** | **34** | P | **P** | **02 27 52.6** | **-0.7** |
| | 2.6nm,1.1s,baz=224,slow=6.7,SNR=8.1 | | | | | | |
| GERES | | | | LR | LR | 02 50 27.1 | |
| | comp=Z,78nm,20.3s,baz=253,slow=33 | | | | | | |
| **CLL** | **Collm** | **60.11** | **31** | eS | S | 02 36 20.0 | +6.9 |
| **PSZ** | **Piszkesteto** | **62.23** | **37** | eP | **P** | **02 28 14.5** | **-0.1** |
| | 8.5nm,1.2s | | | | | | |
| **BOSA** | **Boshof** | **64.49** | **124** | P | **P** | **02 28 30.4** | **+0.5** |
| | 3.5nm,0.9s,baz=287,slow=7.7,SNR=5.3 | | | | | | |
| BOSA | | | | LR | LR | 02 50 45.4 | |
| | comp=Z,79nm,21.3s,baz=269,slow=31 | | | | | | |
| **NOA** | **NORSAR Array B** | **65.30** | **22** | P | **P** | **02 28 34.5** | **-0.1** |
| | 2.9nm,1.1s,baz=229,slow=6.4,SNR=2.8 | | | | | | |
| NOA | | | | LR | LR | 02 54 51.7 | |
| | comp=Z,71nm,18.5s,baz=235,slow=34 | | | | | | |
| **WMOK** | **Wichita Mounta** | **68.02** | **306** | eP | **P** | **02 28 51.9** | **-0.5** |
| | 1.3nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **68.92** | **49** | P | **P** | **02 28 57.8** | **-0.3** |
| | 2.5nm,0.9s,baz=243,slow=5.4,SNR=14 | | | | | | |
| BRTR | | | | LR | LR | 03 01 13.1 | |
| | comp=Z,26nm,18.1s,baz=254,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.93** | **37** | P | **P** | **02 28 57.2** | **-0.5** |
| | 0.3nm,0.3s,baz=249,slow=6.2,SNR=6.9 | | | | | | |
| AKASG | | | | LR | LR | 02 59 00.2 | |
| | comp=Z,43nm,18.9s,baz=260,slow=36 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **69.94** | **93** | LR | LR | 02 57 16.6 | |
| | comp=Z,136nm,18.8s,baz=272,slow=34 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.40** | **299** | P | **P** | **02 29 14.6** | **+1.1** |
| | 0.1nm,0.6s,baz=96,slow=8.3,SNR=3.2 | | | | | | |
| TXAR | | | | LR | LR | 03 03 28.8 | |
| | comp=Z,15nm,18.0s,baz=0.0,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **71.51** | **26** | LR | LR | 03 01 12.9 | |
| | comp=Z,21nm,18.1s,baz=236,slow=36 | | | | | | |
| **SDCO** | **Great Sand Dun** | **73.84** | **308** | eP | **P** | **02 29 27.9** | **-0.2** |
| | 0.9nm,0.7s | | | | | | |
| **ANMO** | **Albuquerque** | **74.30** | **305** | eP | **P** | **02 29 30.5** | **-0.2** |
| | 0.7nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **75.06** | **18** | LR | LR | 02 56 22.6 | |
| | comp=Z,57nm,21.6s,baz=262,slow=31 | | | | | | |
| **KBZ** | **Khabaz** | **76.41** | **46** | LR | LR | 03 08 04.5 | |
| | comp=Z,16nm,18.5s,baz=265,slow=40 | | | | | | |
| **TUC** | **Tucson** | **77.72** | **302** | eP | **P** | **02 29 50.0** | **-0.1** |
| | 1.6nm,1.0s | | | | | | |
| **LOHW** | **Long Hollow** | **78.32** | **313** | eP | **P** | **02 29 54.5** | **+1.1** |
| | 1.9nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **78.40** | **171** | eP | **P** | **02 29 55.0** | **+2.0** |
| | 2.0nm,1.3s | | | | | | |
| **TPAW** | **Teton Pass** | **78.56** | **313** | eP | **P** | **02 29 56.7** | **+1.9** |
| | 10nm,1.5s | | | | | | |
| **HWUT** | **Hardware Ranch** | **78.87** | **311** | eP | **P** | **02 29 55.8** | **-0.6** |
| | 2.8nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.96** | **308** | LR | LR | 03 05 05.0 | |
| | comp=Z,40nm,20.0s,baz=70,slow=34 | | | | | | |
| **GEYT** | **Alibeck** | **87.81** | **52** | LR | LR | 03 12 33.4 | |
| | comp=Z,38nm,21.3s,baz=100,slow=37 | | | | | | |
| **BVAR** | **Borovoye Array** | **94.20** | **36** | LR | LR | 03 11 08.6 | |
| | comp=Z,67nm,21.4s,slow=34 | | | | | | |

*IDC **13** 02:47:06.9±1.1, 65°.56S×175°.16W, h0km, mb3.5/4, mb1 3.7/5, mb1mx3.6/24, mbtmp3.5/5, ML2.9/1, MS3.4/2, Ms1 3.5/2, ms1mx3.1/19, Error ellipse: s-maj=45.8km s-min=26.0km az=49.0*
*ISCJB **13** 02:47:07.0±1.2, 65°.6S±0°.1×175°.7W±0°.5,

0.2nm,0.5s,baz=124,slow=9.3,SNR=5.3
TXAR PcP **PcP** **03 04 33.0 +1.7**
0.1nm,0.4s,baz=123,slow=3.3,SNR=3.9
**ULM Lac du Bonnet 47.24 340** P **P** **03 03 38.1 +0.4**
3.8nm,0.5s,baz=149,slow=6.5,SNR=5.1
**SCHQ Schefferville 48.04 5** P **P** **03 03 45.5 +1.7**
2.5nm,0.6s,baz=250,slow=8.3,SNR=4.8
**NVAR Mina Array Bea 51.50 314** P **P** **03 04 11.6 +1.1**
0.1nm,0.3s,baz=107,slow=7.6,SNR=3.6
**YKA Yellowknife Ar 63.22 340** P **P** **03 05 32.5 +0.7**
1.8nm,0.5s,baz=136,slow=6.7,SNR=11
**ILAR Eielson Array 76.93 335** P **P** **03 06 55.1 -0.2**
0.2nm,0.6s,baz=101,slow=4.3,SNR=4.2
**ASAR Alice Springs 149.26 234** PKPbc **PKPbc** **03 14 50.9 -0.6**
0.9nm,0.6s,baz=117,slow=3.7,SNR=13
**WRA Warramunga Arr 150.48 241** PKPbc **PKPbc** **03 14 53.9 -0.6**
1.1nm,0.4s,baz=106,slow=2.8,SNR=35
WRA pPKPbc **pPKPbc** **03 15 34.1 -3.8**
0.5nm,0.6s,baz=110,slow=2.5,SNR=5.0

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*IDC **13** 03:20:13.2±3.0,5.°40S×133.°62E,h0km,mb3.7/1, mb1 3.8/4,mb1mx3.6/28,mbtmp3.7/4,ML3.6/3,Error ellipse: s-maj=125.2km s-min=29.1km az=82.0*
*ISCJB **13** 03:20:14.0±1.6,5.°5S±0.°1×133.°5E±0.°2,h10km,mb3.6/1, Error ellipse: s-maj=29.0km s-min=16.0km az=14.6*
*AUST **13** 03:21:40.4, 11.°93S×132.°65E,h60km*
**ISC 13 03:20:14.2±1.7,5.°5S±0.°1×133.°6E±0.°2,h10km,n8,σ1°96/7, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **7.67** | **199** | P | P | | Pn | 03 22 13.5 | +7.4 |
| | baz=1.7,SNR=12 | | | | | | | | |
| **KNRA** | **Kununurra** | **11.16** | **205** | P | P | | Pn | 03 22 58.2 | +4.3 |
| | baz=5.3,SNR=6.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.34** | **177** | Pn | P | | **Pn** | **03 23 38.2** | **+0.8** |
| | 0.2nm,0.3s,baz=353,slow=14,SNR=11 | | | | | | | | |
| WRA | | | | Sn | S | | **Sn** | **03 26 15.5** | **-1.1** |
| | 0.1nm,0.3s,baz=354,slow=24,SNR=3.3 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.73** | **211** | Pn | P | | **Pn** | **03 23 44.5** | **+1.7** |
| | 0.4nm,0.3s,baz=37,slow=13,SNR=9.9 | | | | | | | | |
| FITZ | | | | Sn | S | | **Sn** | **03 26 26.3** | **+0.1** |
| | 0.1nm,0.3s,baz=204,slow=20,SNR=2.4 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **14.73** | **211** | P | P | | **P** | **03 23 46.4** | **-2.5** |
| | baz=9.2,SNR=6.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **18.03** | **179** | P | P | | **P** | **03 24 27.6** | **+2.0** |
| | 0.4nm,0.3s,baz=6.9,slow=11,SNR=26 | | | | | | | | |
| **WRKA** | **Warakurna** | **20.06** | **194** | P | P | | Pn | 03 24 51.3 | +1.8 |
| | baz=14,SNR=6.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **69.05** | **325** | P | P | | **P** | **03 31 20.2** | **-0.1** |
| | 0.5nm,0.6s,baz=125,slow=7.2,SNR=3.1 | | | | | | | | |

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*CSEM **13** 03:23:26.9,37.°38N×24.°90W,h5km,ML2.5,After PDA*
**PDA 13 03:23:26.9±0.8,37.°38N×24.°90W,h5km,MD3.6,ML2.5, Error ellipse: s-maj=12.1km s-min=2.0km az=77.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PSMN** | **Pico do Norte,** | **0.40** | **200** | *e*P | P | g | | 03 23 34.0 | -0.6 |
| PSMN | | | | *e*S | S | g | | 03 23 39.3 | -0.5 |
| PSMN | | | | A | A | | | 03 23 41.6 | |
| | 79nm,0.2s | | | | | | | | |
| **PSMN** | **Pico do Norte,** | **0.40** | **200** | *e*P | P | g | | 03 23 34.0 | -0.6 |
| PSMN | | | | *e*S | S | g | | 03 23 39.3 | -0.5 |
| **PSMA** | **Santa Maria** | **0.42** | **206** | *e*P | P | g | | 03 23 34.3 | -0.8 |
| PSMA | | | | *e*S | S | g | | 03 23 39.9 | -0.7 |
| PSMA | | | | A | A | | | 03 23 40.8 | |
| | 362nm,0.2s | | | | | | | | |
| **PDA** | **Ponta Delgada** | **0.71** | **302** | *e*P | P | g | | 03 23 38.6 | -2.0 |
| PDA | | | | *e*S | S | g | | 03 23 47.2 | -2.6 |
| PDA | | | | A | A | | | 03 23 48.3 | |
| | 151nm,0.1s | | | | | | | | |
| **PDA** | **Ponta Delgada** | **0.71** | **302** | *e*P | P | g | | 03 23 38.6 | -2.0 |
| PDA | | | | *e*S | S | g | | 03 23 47.2 | -2.6 |
| **PSET** | **Sete Cidades** | **0.79** | **305** | *e*S | S | g | | 03 23 49.9 | -2.6 |
| PSET | | | | A | A | | | 03 23 54.5 | |
| | 120nm,0.1s | | | | | | | | |
| **PSET** | **Sete Cidades** | **0.79** | **305** | *e*S | S | g | | 03 23 49.9 | -2.6 |

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*CSEM **13** 03:31:45.7±0.1,40.°69N×35.°31E,h2km,MD3.1,Error ellipse: s-maj=2.9km s-min=2.5km az=111.0*
*DDA **13** 03:31:45.4,40.°67N×35.°30E,h8km,Md3.1*
*ISK **13** 03:31:45.1,40.°69N×35.°31E,h5km,MD2.9*
**ISC 13 03:31:45.8±1.0,40.°69N±0.°02×35.°30E±0.°02,h10km±10km, n43,σ0°66/62,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HAVZ** | **Havza** | **0.50** | **39** | *i* P | **P** | g | **Pg** | **03 31 55.0** | **-0.5** |
| HAVZ | | | | *i* S | **Sg** | g | **Sg** | **03 32 02.8** | **+0.7** |
| **HAVZ** | **Havza** | **0.50** | **39** | P | **P** | g | **Pg** | **03 31 55.0** | **-0.5** |
| HAVZ | | | | S | **Sg** | g | **Sg** | **03 32 02.8** | **+0.7** |
| **KVT** | **Kavak** | **0.69** | **55** | *e*PG | **Pg** | g | **Pg** | **03 31 58.4** | **-0.7** |
| KVT | | | | *e*SG | **Sg** | g | **Sg** | **03 32 08.5** | **+0.3** |
| **KVT** | **Kavak** | **0.69** | **55** | *e*Pg | **Pg** | g | **Pg** | **03 31 58.4** | **-0.7** |
| KVT | | | | *e*Sg | **Sg** | g | **Sg** | **03 32 08.5** | **+0.3** |
| **CORM** | **Corum** | **0.72** | **225** | *e*PG | **Pg** | g | **Pg** | **03 31 59.5** | **-0.3** |
| CORM | | | | *e*SG | **Sb** | g | **Sb** | **03 32 10.2** | **-0.4** |
| **CORM** | **Corum** | **0.72** | **225** | *e*Pg | **Pg** | g | **Pg** | **03 31 59.5** | **-0.3** |
| CORM | | | | *e*Sg | **Sb** | g | **Sb** | **03 32 10.2** | **-0.4** |
| **BOYT** | **Boyabat** | **0.79** | **338** | *i* P | **Pg** | g | **Pg** | **03 32 00.7** | **-0.4** |
| BOYT | | | | *i* S | **Sb** | g | **Sb** | **03 32 12.6** | **+0.1** |
| **BOYT** | **Boyabat** | **0.79** | **338** | P | **Pg** | g | **Pg** | **03 32 00.7** | **-0.4** |
| BOYT | | | | S | **Sb** | g | **Sb** | **03 32 12.6** | **+0.1** |
| **BYBT** | **Boyabat** | **0.88** | **333** | *e*PG | **Pg** | g | **Pg** | **03 32 02.3** | **-0.4** |
| BYBT | | | | *e*SG | **Sb** | g | **Sb** | **03 32 15.2** | **+0.2** |
| **BYBT** | **Boyabat** | **0.88** | **333** | *e*Pg | **Pg** | g | **Pg** | **03 32 02.3** | **-0.4** |
| BYBT | | | | *e*Sg | **Sb** | g | **Sb** | **03 32 15.2** | **+0.2** |
| **DIKM** | **Dikmen** | **0.96** | **358** | *e*PG | **Pb** | g | **Pb** | **03 32 04.5** | **-0.1** |
| **DIKM** | **Dikmen** | **0.96** | **358** | *e*Pg | **Pb** | g | **Pb** | **03 32 04.5** | **-0.1** |
| **TOKT** | **Tokat** | **1.02** | **111** | *e*PG | **Pg** | g | **Pg** | **03 32 04.9** | **-0.5** |
| **TOKT** | **Tokat** | **1.02** | **111** | *e*Pg | **Pg** | g | **Pg** | **03 32 04.9** | **-0.5** |
| **TOS** | **Tosya** | **1.03** | **290** | *e*PG | **Pg** | g | **Pg** | **03 32 05.3** | **-0.3** |
| **TOS** | **Tosya** | **1.03** | **290** | *e*Pg | **Pg** | g | **Pg** | **03 32 05.3** | **-0.3** |
| **YOZ** | **Yozgat** | **1.05** | **179** | *e*PG | **Pg** | g | **Pg** | **03 32 05.8** | **-0.1** |
| **YOZ** | **Yozgat** | **1.05** | **179** | *e*Pg | **Pg** | g | **Pg** | **03 32 05.8** | **-0.1** |
| **ILGA** | **Ilgaz** | **1.26** | **287** | *i* P | **Pn** | g | **Pn** | **03 32 09.4** | **-0.3** |
| ILGA | | | | *i* S | **Sn** | g | **Sn** | **03 32 27.3** | **+0.5** |
| **ILGA** | **Ilgaz** | **1.26** | **287** | P | **Pn** | g | **Pn** | **03 32 09.4** | **-0.3** |
| ILGA | | | | S | **Sn** | g | **Sn** | **03 32 27.3** | **+0.5** |
| **CDAG** | **Cicekdag** | **1.28** | **214** | *i* P | **Pn** | g | **Pn** | **03 32 09.2** | **-0.7** |
| CDAG | | | | *i* S | **Sg** | g | **Sg** | **03 32 27.2** | **+0.2** |
| **CDAG** | **Cicekdag** | **1.28** | **214** | P | **Pn** | g | **Pn** | **03 32 09.2** | **-0.7** |
| CDAG | | | | S | **Sg** | g | **Sg** | **03 32 27.2** | **+0.2** |
| **CANT** | **Cankiri** | **1.28** | **267** | *e*PN | **Pb** | g | **Pb** | **03 32 10.2** | **0.0** |
| **SNOP** | **Sinop** | **1.33** | **357** | *e*PN | **Pg** | g | **Pg** | **03 32 11.3** | **-0.1** |
| **SNOP** | **Sinop** | **1.33** | **357** | *e*Pn | **Pg** | g | **Pg** | **03 32 11.3** | **-0.1** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.46** | **150** | P | **Pn** | g | **Pn** | **03 32 12.9** | **+0.5** |
| CUSAR | | | | S | **Sg** | g | **Sg** | **03 32 33.6** | **+0.8** |
| **SVSK** | **Karacayir** | **1.51** | **120** | *e*PN | **Pn** | g | **Pn** | **03 32 13.2** | **+0.4** |
| **SVSK** | **Karacayir** | **1.51** | **120** | *e*Pn | **Pn** | g | **Pn** | **03 32 13.3** | **+0.4** |
| **SCER** | **sogukcermik** | **1.62** | **120** | *i* P | **Pb** | g | **Pb** | **03 32 16.0** | **0.0** |
| SCER | | | | *i* S | **Sg** | g | **Sg** | **03 32 38.2** | **+0.2** |
| **SCER** | **sogukcermik** | **1.62** | **120** | P | **Pb** | g | **Pb** | **03 32 16.0** | **0.0** |
| SCER | | | | S | **Sg** | g | **Sg** | **03 32 38.2** | **+0.2** |
| **KAMT** | **Kaman** | **1.79** | **223** | *e*PN | **Pn** | g | **Pn** | **03 32 17.7** | **+0.7** |
| **KAMT** | **Kaman** | **1.79** | **223** | *e*Pn | **Pn** | g | **Pn** | **03 32 17.7** | **+0.7** |
| **BNN** | **Bunyan** | **1.88** | **167** | *e*PN | **Pn** | g | **Pn** | **03 32 19.0** | **+0.8** |
| **BNN** | **Bunyan** | **1.88** | **167** | *e*Pn | **Pn** | g | **Pn** | **03 32 19.0** | **+0.8** |
| **BBAL** | **Bala** | **2.02** | **236** | *i* P | **Pb** | g | **Pb** | **03 32 22.6** | **-0.2** |
| **BBAL** | **Bala** | **2.02** | **236** | P | **Pb** | g | **Pb** | **03 32 22.6** | **-0.2** |
| BBAL | | | | S | **Sg** | g | **Sg** | **03 32 49.8** | **-1.1** |
| **YAYX** | **Yaylak** | **2.09** | **214** | *e*PN | **Pn** | g | **Pn** | **03 32 21.7** | **+0.6** |
| **YAYX** | **Yaylak** | **2.09** | **214** | *e*Pn | **Pn** | g | **Pn** | **03 32 21.7** | **+0.6** |
| **AFSR** | **Af˙ar-Bala (A** | **2.11** | **235** | *e*PN | **Pn** | g | **Pn** | **03 32 22.0** | **+0.6** |
| **AFSR** | **Af˙ar-Bala (A** | **2.11** | **235** | *e*Pn | **Pn** | g | **Pn** | **03 32 22.0** | **+0.6** |
| **CUKAN** | **kangal_SIVAS** | **2.15** | **129** | P | **Pb** | g | **Pb** | **03 32 25.2** | **+0.1** |
| CUKAN | | | | S | **Sn** | g | **Sn** | **03 32 46.6** | **-2.2** |
| **GULA** | **Gulagac** | **2.48** | **200** | *e*PN | **Pn** | g | **Pn** | **03 32 28.3** | **+1.9** |
| **GULA** | **Gulagac** | **2.48** | **200** | *e*Pn | **Pn** | g | **Pn** | **03 32 28.3** | **+1.9** |

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*ISCJB **13** 03:33:44.2±0.6, 14.°44N±0.°08×120.°31E±0.°09,h126km, mb3.9/6,Error ellipse: s-maj=12.9km s-min=10.9km az=175.9*
*MAN **13** 03:33:44, 14.°36N×120.°42E,h117km,mb4.3,ML3.1, MS2.9*

*IDC **13** 03:33:45.4±9.2, 14.°27N×120.°73E,h163km±89km,mb3.6/7, mb1 3.8/7,mb1mx3.4/54,mbtmp4.0/7,Error ellipse: s-maj=59.6km s-min=14.2km az=61.0*
**ISC 13 03:33:43.7±0.9,14.°40N±0.°08×120.°5E±0.°1,h126km,n20, σ1°63/19,mb3.9/7,2C,Luzon**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TGY** | **Tagaytay City** | **0.55** | **122** | ⇑*i*P | **Pn** | | **Pn** | **03 34 04.5** | **+1.8** |
| **LUBP** | **Lubang** | **0.69** | **197** | *e*P | **Pn** | | **Pn** | **03 34 04.4** | **+0.8** |
| LUBP | | | | *e*S | **Sn** | | **Sn** | **03 34 20.1** | **+1.4** |
| **PCPH** | **Palayan** | **1.31** | **28** | ⇑*e*P | **Pn** | | **Pn** | **03 34 10.7** | **+1.2** |
| **SCZP** | **Santa Cruz** | **1.47** | **339** | *e*P | **Pn** | | **Pn** | **03 34 12.1** | **+0.9** |
| **BALP** | **Baler** | **1.72** | **39** | *e*P | **Pn** | | **Pn** | **03 34 16.1** | **+2.1** |
| **BOLP** | **Bolinao** | **2.04** | **345** | *e*P | **Pn** | | **Pn** | **03 34 19.9** | **+1.9** |
| **CMAR** | **Chiang Mai Arr** | **21.03** | **284** | P | **P** | | **P** | **03 38 19.6** | **+2.1** |
| | 3.2nm,0.6s,baz=89,slow=7.0,SNR=14 | | | | | | | | |
| **RAMN** | **Ramite** | **33.94** | **297** | *e*P | **P** | | **P** | **03 40 16.5** | **+1.1** |
| | 19nm,0.6s | | | | | | | | |
| **GUN** | **Gumba** | **34.81** | **298** | *e*P | **P** | | **P** | **03 40 23.7** | **+0.7** |
| | 18nm,0.4s | | | | | | | | |
| **PKI** | **Pulchoki** | **35.12** | **298** | *e*P | **P** | | **P** | **03 40 25.9** | **+0.3** |
| | 15nm,0.5s | | | | | | | | |
| **PKIN** | **Phulchoki** | **35.13** | **298** | *e*P | **P** | | **P** | **03 40 25.7** | **0.0** |
| | 2.3nm,0.2s | | | | | | | | |
| **SONM** | **Songino Array** | **35.33** | **344** | P | **P** | | **P** | **03 40 26.7** | **-0.2** |
| | 0.7nm,0.5s,baz=153,slow=9.7,SNR=6.9 | | | | | | | | |
| **DMN** | **Daman** | **35.39** | **298** | *e*P | **P** | | **P** | **03 40 28.2** | **+0.3** |
| | 7.6nm,0.4s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **36.75** | **158** | P | P | | | 03 40 34.9 | -4.3 |
| | 0.8nm,0.5s,baz=334,slow=9.5,SNR=11 | | | | | | | | |
| **ASAR** | **Alice Springs** | **40.05** | **161** | P | P | | | 03 41 03.5 | -3.3 |
| | 1.3nm,0.4s,baz=336,slow=6.6,SNR=24 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.34** | **323** | P | **P** | | **P** | **03 41 49.8** | **+0.7** |
| | 0.6nm,0.6s,baz=124,slow=7.7,SNR=3.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.36** | **339** | P | **P** | | **P** | **03 45 28.3** | **-1.5** |
| | 6.9nm,1.0s,baz=99,slow=5.7,SNR=4.1 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **86.54** | **333** | P | **P** | | **P** | **03 46 10.1** | **-2.4** |
| | comp=Z,0.8nm,0.7s,baz=67,slow=4.6 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **86.54** | **333** | P | **P** | | **P** | **03 46 09.6** | **-2.9** |
| | comp=Z,1.5nm,0.9s,baz=67,slow=4.6,SNR=4.2 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **119.14** | **44** | PKP | **PKPdf** | | | **03 52 16.6** | **-1.9** |
| | comp=Z,0.2nm,0.5s,baz=193,slow=0.6,SNR=5.1 | | | | | | | | |

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*AUST **13** 03:42:28.9±0.8,44.°12S×173.°39E,h42km,Error ellipse: s-maj=2.0km s-min=0.9km az=307.0*
*IDC **13** 03:42:28.5±1.0,43.°41S×172.°44E,h0km,mb4.0/3, mb1 4.2/4,mb1mx3.9/22,mbtmp4.0/4,ML3.7/1,MS3.5/7, Ms1 3.6/7,ms1mx3.3/25,Error ellipse: s-maj=28.1km s-min=12.5km az=161.0*
*ISCJB **13** 03:42:29.2±0.4,43.°59S±0.°03×172.°50E±0.°05,h23km±3km, mb4.3/7,MS3.5/6,Error ellipse: s-maj=6.4km s-min=4.2km az=42.3*
*WEL **13** 03:42:30.3±0.1,43.°61S×172.°40E,h7km±1km,ML5.1/22, Error ellipse: s-maj=1.1km s-min=1.0km az=0.0*
*WEL Felt from Wairarapa to Otago, maximum reported intensity MM 7.*
*NEIC **13** 03:42:30.2,43.°59S×172.°41E,h11km,mb4.6/5, ML5.0(WEL),After WEL.*
*NEIC Felt [VI] at Rolleston. Felt throughout Canterbury.*
**ISC 13 03:42:30.0±0.9,43.°60S±0.°03×172.°45E±0.°03,h13km±5km, n59,σ1°25/65,mb4.4/7,MS3.5/6,2C-4D,South Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.13** | **79** | ⇓*e*PG | **Pg** | | **Pg** | **03 42 33.8** | **+0.4** |
| CRLZ | | | | | SG | | **Sg** | **03 42 36.2** | **+0.5** |
| CRLZ | | | | | AML | | AML | 03 42 36.5 | |
| CRLZ | | | | | AML | | AML | 03 42 36.6 | |
| CRLZ | | | | | AML | | AML | 03 42 36.6 | |
| **MQZ** | **McQueen's Vall** | **0.18** | **126** | ⇓*i*PG | **Pb** | | **Pb** | **03 42 34.9** | **-0.3** |
| MQZ | | | | | SG | | **Sb** | **03 42 38.1** | **-0.6** |
| MQZ | | | | | AML | | AML | 03 42 38.4 | |
| **OXZ** | **Oxford** | **0.41** | **313** | ⇓PG | **Pg** | | **Pg** | **03 42 37.6** | **-0.5** |
| OXZ | | | | | SG | | **Sg** | **03 42 43.1** | **-0.5** |
| **LTZ** | **Lake Taylor** | **0.83** | **351** | ⇑P* | **Pb** | | **Pb** | **03 42 46.1** | **-0.2** |
| LTZ | | | | | AML | | AML | 03 42 58.1 | |
| LTZ | | | | | AML | | AML | 03 42 59.9 | |
| **RPZ** | **Rata Peaks** | **1.02** | **263** | P* | **Pb** | | **Pb** | **03 42 49.1** | **-0.4** |
| RPZ | | | | | AML | | AML | 03 43 06.4 | |
| RPZ | | | | | AML | | AML | 03 43 12.3 | |
| **RPZ** | **Rata Peaks** | **1.02** | **263** | Pg | **Pb** | | **Pb** | **03 42 49.3** | **-0.2** |
| | 2µm,0.3s,baz=117,slow=4.1,SNR=2179 | | | | | | | | |
| RPZ | | | | Lg | Lg | | | 03 43 02.6 | |
| | 3µm,0.3s,baz=216,slow=19,SNR=31 | | | | | | | | |
| **WVZ** | **Waitaha Valley** | **1.35** | **292** | PN | **Pn** | | **Pn** | **03 42 53.7** | **-0.8** |
| WVZ | | | | | AML | | AML | 03 43 18.8 | |
| WVZ | | | | | AML | | AML | 03 43 19.3 | |
| **KHZ** | **Kahutara** | **1.43** | **34** | ⇓PN | **Pn** | | **Pn** | **03 42 54.6** | **-1.0** |
| KHZ | | | | | AML | | AML | 03 43 24.5 | |
| KHZ | | | | | AML | | AML | 03 43 25.8 | |
| **KHZ** | **Kahutara** | **1.43** | **34** | *e*Pn | **Pn** | | **Pn** | **03 42 54.3** | **-1.3** |
| **LBZ** | **Lake Benmore** | **1.81** | **244** | PN | **Pn** | | **Pn** | **03 43 00.5** | **-0.4** |
| LBZ | | | | | AML | | AML | 03 43 29.4 | |
| LBZ | | | | | AML | | AML | 03 43 29.5 | |
| LBZ | | | | | AML | | AML | 03 43 36.0 | |
| LBZ | | | | | AML | | AML | 03 43 36.2 | |
| **THZ** | **Tophouse** | **1.87** | **11** | ⇑PN | **Pn** | | **Pn** | **03 43 00.8** | **-0.9** |
| THZ | | | | | AML | | AML | 03 43 34.6 | |
| THZ | | | | | AML | | AML | 03 43 39.7 | |
| **DSZ** | **Denniston Nort** | **1.91** | **345** | PN | **Pn** | | **Pn** | **03 43 01.7** | **-0.6** |
| DSZ | | | | | AML | | AML | 03 43 34.8 | |
| DSZ | | | | | AML | | AML | 03 43 34.9 | |
| DSZ | | | | | AML | | AML | 03 43 39.1 | |
| DSZ | | | | | AML | | AML | 03 43 39.2 | |
| **ODZ** | **Otahua Downs** | **1.94** | **221** | PN | **Pn** | | **Pn** | **03 43 02.0** | **-0.6** |
| ODZ | | | | | AML | | AML | 03 43 39.7 | |
| ODZ | | | | | AML | | AML | 03 43 39.7 | |
| ODZ | | | | | AML | | AML | 03 43 41.6 | |
| ODZ | | | | | AML | | AML | 03 43 41.6 | |
| **ODZ** | **Otahua Downs** | **1.94** | **221** | *e*Pn | **Pn** | | **Pn** | **03 43 01.9** | **-0.8** |
| ODZ | | | | *e*Pg | **Pg** | | **Pg** | **03 43 07.1** | **-0.1** |
| ODZ | | | | *e*Sn | **Sn** | | **Sn** | **03 43 26.5** | **-0.4** |
| ODZ | | | | *e*Sg | **Sg** | | **Sg** | **03 43 32.2** | **-0.1** |
| **FOZ** | **Fox Glacier** | **2.01** | **270** | PN | **Pn** | | **Pn** | **03 43 02.4** | **-1.1** |
| FOZ | | | | | AML | | AML | 03 43 35.6 | |
| FOZ | | | | | AML | | AML | 03 43 35.7 | |
| FOZ | | | | | AML | | AML | 03 43 40.9 | |
| FOZ | | | | | AML | | AML | 03 43 40.9 | |
| **BSWZ** | **Blackbirch Sta** | **2.16** | **30** | PN | **Pn** | | **Pn** | **03 43 04.9** | **-0.8** |
| **TUWZ** | **Tuamarina** | **2.43** | **27** | PN | **Pn** | | **Pn** | **03 43 08.3** | **-1.1** |
| **NNZ** | **Nelson** | **2.48** | **16** | PN | **Pn** | | **Pn** | **03 43 09.5** | **-0.5** |
| **HHSZ** | **Highcliff Hill** | **2.64** | **209** | PN | **Pn** | | **Pn** | **03 43 11.4** | **-0.8** |
| **JCZ** | **Jackson Bay** | **2.71** | **259** | PN | **Pn** | | **Pn** | **03 43 12.5** | **-0.8** |
| JCZ | | | | | AML | | AML | 03 44 04.3 | |
| JCZ | | | | | AML | | AML | 03 44 06.1 | |
| **WKZ** | **Wanaka** | **2.75** | **242** | PN | **Pn** | | **Pn** | **03 43 13.1** | **-0.8** |
| WKZ | | | | | AML | | AML | 03 44 04.0 | |
| WKZ | | | | | AML | | AML | 03 44 04.1 | |
| WKZ | | | | | AML | | AML | 03 44 07.0 | |
| WKZ | | | | | AML | | AML | 03 44 07.0 | |
| **QRZ** | **Quartz Range** | **2.77** | **1** | PN | **Pn** | | **Pn** | **03 43 13.0** | **-1.1** |
| QRZ | | | | | AML | | AML | 03 43 25.3 | |
| QRZ | | | | | AML | | AML | 03 43 25.3 | |
| QRZ | | | | | AML | | AML | 03 44 01.2 | |
| QRZ | | | | | AML | | AML | 03 44 01.2 | |
| **EAZ** | **Earnscleugh** | **2.78** | **233** | PN | **Pn** | | **Pn** | **03 43 13.6** | **-0.6** |
| EAZ | | | | | AML | | AML | 03 44 01.5 | |
| EAZ | | | | | AML | | AML | 03 44 01.5 | |
| EAZ | | | | | AML | | AML | 03 44 02.2 | |
| EAZ | | | | | AML | | AML | 03 44 02.3 | |
| **SNZO** | **South Karori** | **2.83** | **37** | *e*Pn | **Pn** | | **Pn** | **03 43 13.3** | **-1.6** |
| SNZO | | | | *e*Pg | **Pg** | | **Pg** | **03 43 24.3** | **0.0** |
| **PLWZ** | **Palliser** | **2.90** | **47** | PN | **Pn** | | **Pn** | **03 43 14.2** | **-1.6** |
| **MSWZ** | **Moikau Station** | **3.01** | **44** | PN | **Pn** | | **Pn** | **03 43 15.4** | **-1.9** |
| MSWZ | | | | | SN | | **Sn** | **03 43 49.2** | **-4.1** |
| **TUZ** | **Tuapeka** | **3.09** | **219** | PN | **Pn** | | **Pn** | **03 43 17.8** | **-0.7** |
| TUZ | | | | | AML | | AML | 03 44 12.9 | |
| TUZ | | | | | AML | | AML | 03 44 13.0 | |
| TUZ | | | | | AML | | AML | 03 44 14.6 | |
| TUZ | | | | | AML | | AML | 03 44 14.6 | |
| **MSZ** | **Milford Sound** | **3.43** | **250** | PN | **Pn** | | **Pn** | **03 43 22.3** | **-0.7** |
| MSZ | | | | | AML | | AML | 03 44 19.5 | |
| MSZ | | | | | AML | | AML | 03 44 19.5 | |
| MSZ | | | | | AML | | AML | 03 44 22.2 | |
| MSZ | | | | | AML | | AML | 03 44 22.2 | |
| **MLZ** | **Mavora Lakes** | **3.52** | **239** | PN | **Pn** | | **Pn** | **03 43 24.0** | **-0.4** |
| MLZ | | | | | AML | | AML | 03 44 31.0 | |
| MLZ | | | | | AML | | AML | 03 44 32.6 | |
| **SYZ** | **Scrubby Hill** | **3.76** | **217** | PN | **Pn** | | **Pn** | **03 43 27.2** | **-0.4** |
| SYZ | | | | | AML | | AML | 03 44 38.8 | |
| SYZ | | | | | AML | | AML | 03 44 38.8 | |
| SYZ | | | | | AML | | AML | 03 44 39.2 | |
| SYZ | | | | | AML | | AML | 03 44 39.3 | |
| **WHZ** | **Wether Hill Ro** | **3.94** | **233** | PN | **Pn** | | **Pn** | **03 43 28.6** | **-1.6** |
| WHZ | | | | | AML | | AML | 03 44 49.0 | |
| WHZ | | | | | AML | | AML | 03 44 49.4 | |
| **WHZ** | **Wether Hill Ro** | **3.94** | **233** | *e*Pn | **Pn** | | **Pn** | **03 43 28.5** | **-1.6** |
| WHZ | | | | *e*Pg | **Pg** | | **Pg** | **03 43 42.9** | **-2.6** |
| WHZ | | | | *e*Sg | **Sg** | | **Sg** | **03 44 34.7** | **-1.8** |
| **DCZ** | **Deep Cove** | **4.22** | **242** | PN | **Pn** | | **Pn** | **03 43 32.9** | **-1.1** |
| DCZ | | | | | AML | | AML | 03 44 48.7 | |
| DCZ | | | | | AML | | AML | 03 44 48.7 | |
| DCZ | | | | | AML | | AML | 03 44 52.5 | |
| DCZ | | | | | AML | | AML | 03 44 52.6 | |
| **APZ** | **The Paps** | **4.51** | **223** | | AML | | AML | 03 45 03.4 | |
| APZ | | | | | AML | | AML | 03 45 05.1 | |
| **HIZ** | **Hauiti** | **5.40** | **20** | PN | **Pn** | | **Pn** | **03 43 49.1** | **-1.0** |
| **URZ** | **Urewera** | **6.40** | **35** | PN | **Pn** | | **Pn** | **03 44 01.2** | **-2.7** |
| | 1.7nm,0.3s,baz=227,slow=12,SNR=6.2 | | | | | | | | |
| URZ | | | | | Sn | | Sn | 03 45 09.9 | -6.8 |
| | 6.8nm,0.3s,baz=67,slow=17,SNR=5.6 | | | | | | | | |
| URZ | | | | | LR | | LR | 03 47 04.6 | |
| | comp=Z,585nm,18.8s,baz=256,slow=44 | | | | | | | | |
| **URZ** | **Urewera** | **6.40** | **35** | *e*Pn | **Pn** | | **Pn** | **03 44 04.8** | **+1.0** |
| | 38nm,0.6s | | | | | | | | |
| URZ | | | | | *e*Sn | | **Sn** | **03 45 14.2** | **-2.5** |
| **MKAZ** | **Moumakai** | **6.81** | **19** | *e*PN | **Pn** | | **Pn** | **03 44 08.4** | **-1.1** |
| **CTZ** | **Chatham Island** | **7.93** | **95** | *e*PN | **Pn** | | **Pn** | **03 44 22.6** | **-2.3** |
| **OUZ** | **Omahuta** | **8.42** | **6** | *e*Pn | **Pn** | | **Pn** | **03 44 32.4** | **+0.9** |
| **DZM** | **Mont Dzumac** | **22.04** | **345** | *e*P | **P** | | **P** | **03 47 23.9** | **-0.5** |
| | 32nm,1.2s | | | | | | | | |
| **CTAO** | **Charters Tower** | **32.08** | **309** | *e*P | **P** | | **P** | **03 48 58.2** | **+1.5** |
| | 53nm,1.7s | | | | | | | | |
| **VNDA** | **Vanda** | **34.30** | **184** | LR | LR | | | 04 00 27.0 | |
| | comp=Z,45nm,18.9s,baz=354,slow=31 | | | | | | | | |
| **ASAR** | **Alice Springs** | **37.32** | **290** | P | **P** | | **P** | **03 49 41.8** | **-0.2** |
| | 1.5nm,0.7s,baz=130,slow=8.6,SNR=15 | | | | | | | | |
| ASAR | | | | | LR | | LR | 04 04 10.8 | |
| | comp=Z,67nm,19.1s,baz=190,slow=35 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **39.58** | **294** | *e*P | **P** | | **P** | **03 50 00.7** | **-0.3** |
| | 4.0nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **39.58** | **294** | P | **P** | | **P** | **03 50 00.9** | **-0.1** |
| | 1.1nm,0.6s,baz=134,slow=7.6,SNR=18 | | | | | | | | |
| WRA | | | | | LR | | LR | 04 06 27.5 | |
| | comp=Z,88nm,18.3s,baz=310,slow=36 | | | | | | | | |
| **WRKA** | **Warakurna** | **40.35** | **283** | P | **P** | | **P** | **03 50 07.6** | **+0.2** |
| | baz=41,SNR=4.4 | | | | | | | | |
| **MEEK** | **Meekatharra** | **46.36** | **273** | P | **P** | | **P** | **03 50 56.8** | **+0.9** |
| | baz=47,SNR=6.1 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **46.53** | **180** | P | **P** | | **P** | **03 50 58.8** | **+1.9** |
| | 3.8nm,1.0s,baz=48,slow=5.6,SNR=7.5 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **46.53** | **180** | *e*P | **P** | | **P** | **03 50 58.0** | **+1.1** |
| | 12nm,1.4s | | | | | | | | |
| **LUWI** | **Luwuk** | **61.16** | **300** | P | **P** | | **P** | **03 52 46.5** | **+2.2** |
| | baz=62,SNR=3.1 | | | | | | | | |
| **SNAA** | **Sanae** | **64.99** | **182** | *e*P | **P** | | **P** | **03 53 09.7** | **+0.7** |
| | 4.7nm,1.8s | | | | | | | | |
| **DAV** | **Davao City (W)** | **65.86** | **307** | LR | LR | | | 04 22 26.6 | |
| | comp=Z,52nm,18.0s,baz=214,slow=36 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.17** | **294** | LR | LR | | | 04 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NIZ** | **Nizh Angarsk** | **0.60** | **297** | *e*PG | | **Pg** | **03 52 55.1** | **0.0** |
| NIZ | | | | *e* | | | 03 53 02.9 | |
| NIZ | | | | pmax | pmax | | | |
| | comp=Z,236nm,0.4s | | | | | | | |
| NIZ | | | | smax | smax | | | |
| | comp=N,2μm,0.3s | | | | | | | |
| **NIZ** | **Nizh Angarsk** | **0.60** | **297** | ⇑*i*Pg | | **Pg** | **03 52 55.1** | **0.0** |
| NIZ | | | | Pmax | | | 03 52 57.3 | |
| | comp=N,265nm,0.7s | | | | | | | |
| NIZ | | | | *i* Sg | | **Sg** | **03 53 02.4** | **-0.5** |
| NIZ | | | | Smax | | | 03 53 04.8 | |
| | comp=N,3μm,0.3s | | | | | | | |
| **YLYR** | **Ulyunkhan** | **0.74** | **148** | *e*PG | | **Pg** | **03 52 57.6** | **-0.3** |
| YLYR | | | | *e* | | | 03 53 06.4 | |
| YLYR | | | | pmax | pmax | | | |
| | comp=Z,343nm,0.5s | | | | | | | |
| YLYR | | | | smax | smax | | | |
| | comp=E,965nm,0.5s | | | | | | | |
| **YLYR** | **Ulyunkhan** | **0.74** | **148** | ⇓*i*Pg | | **Pg** | **03 52 57.6** | **-0.3** |
| | comp=E,328nm,0.7s | | | | | | | |
| YLYR | | | | ⇑*i*Pg | | **Pg** | **03 52 57.6** | **-0.3** |
| | comp=E,177nm,0.7s | | | | | | | |
| YLYR | | | | ⇑*i*Pg | | **Pg** | **03 52 57.6** | **-0.3** |
| | comp=E,404nm,0.7s | | | | | | | |
| YLYR | | | | Pmax | | | 03 52 58.1 | |
| | comp=E,341nm,0.7s | | | | | | | |
| YLYR | | | | *e*Sg | | **Sg** | **03 53 07.6** | **+0.1** |
| YLYR | | | | Smax | | | 03 53 08.1 | |
| | comp=E,960nm,0.5s | | | | | | | |
| YLYR | | | | *e*Sb | | **Sn** | **03 53 13.1** | **+0.4** |
| **YOA** | **Uoyan** | **0.94** | **48** | *e*PG | | **Pg** | **03 53 01.6** | **0.0** |
| YOA | | | | *e* | | | 03 53 14.8 | |
| YOA | | | | pmax | pmax | | | |
| | comp=Z,550nm,0.3s | | | | | | | |
| YOA | | | | smax | smax | | | |
| | comp=N,5μm,0.6s | | | | | | | |
| **YOA** | **Uoyan** | **0.94** | **48** | *e*Pg | | **Pg** | **03 53 01.8** | **+0.2** |
| YOA | | | | Pmax | | | 03 53 03.0 | |
| | comp=N,518nm,0.4s | | | | | | | |
| YOA | | | | *i* Sg | | **Sb** | **03 53 15.0** | **-0.3** |
| YOA | | | | *e*Sb | | **Sn** | **03 53 17.9** | **+0.4** |
| YOA | | | | max | | | 03 53 18.6 | |
| | comp=N,4μm,0.3s | | | | | | | |
| **UKT** | **Uakit** | **1.79** | **89** | *e*PN | | **Pn** | **03 53 15.8** | **+0.5** |
| UKT | | | | *e* | | | 03 53 38.1 | |
| UKT | | | | pmax | pmax | | | |
| | comp=Z,475nm,0.5s | | | | | | | |
| UKT | | | | smax | smax | | | |
| | comp=N,1μm,0.3s | | | | | | | |
| **UKT** | **Uakit** | **1.79** | **89** | ⇓*i*Pg | | **Pb** | **03 53 16.3** | **-0.7** |
| | comp=N,80nm,0.8s | | | | | | | |
| UKT | | | | ⇑*i*Pg | | **Pb** | **03 53 16.3** | **-0.7** |
| | comp=N,440nm,0.8s | | | | | | | |
| UKT | | | | ⇑*i*Pg | | **Pb** | **03 53 16.3** | **-0.7** |
| | comp=N,330nm,0.8s | | | | | | | |
| UKT | | | | Pmax | | | 03 53 17.4 | |
| | comp=N,484nm,0.9s | | | | | | | |
| UKT | | | | *e*Sg | | **Sg** | **03 53 40.3** | **-0.7** |
| UKT | | | | Smax | | | 03 53 43.8 | |
| | comp=N,1μm,0.3s | | | | | | | |
| **SVKR** | **Severomuysk** | **1.84** | **69** | ⇓*i*Pg | | **Pb** | **03 53 17.5** | **-0.3** |
| SVKR | | | | Pmax | | | 03 53 21.3 | |
| | comp=N,402nm,0.4s | | | | | | | |
| SVKR | | | | *e*Sg | | **Sg** | **03 53 42.8** | **+0.2** |
| SVKR | | | | Smax | | | 03 53 44.8 | |
| | comp=N,5μm,0.7s | | | | | | | |
| **SYVR** | **Suvo** | **1.88** | **189** | *e*PN | | **Pb** | **03 53 17.8** | **-0.7** |
| SYVR | | | | *e* | | | 03 53 43.8 | |
| SYVR | | | | pmax | pmax | | | |
| | comp=Z,188nm,0.8s | | | | | | | |
| SYVR | | | | smax | smax | | | |
| | comp=E,2μm,1.0s | | | | | | | |
| **SYVR** | **Suvo** | **1.88** | **189** | ⇓*i*Pg | | **Pb** | **03 53 17.7** | **-0.7** |
| SYVR | | | | *e* | | | 03 53 20.4 | |
| SYVR | | | | max | | | 03 53 22.0 | |
| | comp=E,185nm,1.2s | | | | | | | |
| SYVR | | | | *i* Sg | | **Sg** | **03 53 42.8** | **-1.0** |
| SYVR | | | | Smax | | | 03 53 46.0 | |
| | comp=E,2μm,1.0s | | | | | | | |
| **OGRR** | **Ongureny** | **2.52** | **223** | *e*PN | | **Pn** | **03 53 26.4** | **+1.1** |
| OGRR | | | | *e* | | | 03 53 29.9 | |
| OGRR | | | | *e* | | | 03 54 01.3 | |
| OGRR | | | | pmax | pmax | | | |
| | comp=Z,84nm,0.5s | | | | | | | |
| OGRR | | | | smax | smax | | | |
| | comp=N,553nm,1.4s | | | | | | | |
| **OGRR** | **Ongureny** | **2.52** | **223** | *e*Pn | | **Pn** | **03 53 26.4** | **+1.1** |
| OGRR | | | | *e*Pg | | **Pb** | **03 53 28.9** | **-0.4** |
| OGRR | | | | Pmax | | | 03 53 34.3 | |
| | comp=N,84nm,0.5s | | | | | | | |
| OGRR | | | | *e* | | | 03 53 48.0 | |
| OGRR | | | | *e*Sg | | **Sb** | **03 54 01.6** | **+1.0** |
| OGRR | | | | Smax | | | 03 54 10.3 | |
| | comp=N,558nm,1.2s | | | | | | | |
| **BOD** | **Bodaibo** | **3.02** | **39** | *e*PN | | **Pn** | **03 53 32.3** | **+0.1** |
| BOD | | | | *e* | | | 03 53 37.8 | |
| BOD | | | | *e* | | | 03 54 16.9 | |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,34nm,0.3s | | | | | | | |
| BOD | | | | smax | smax | | | |
| | comp=E,521nm,1.0s | | | | | | | |
| **BOD** | **Bodaibo** | **3.02** | **39** | *e*Pn | | **Pn** | **03 53 32.7** | **+0.5** |
| BOD | | | | *e*Pg | | **Pb** | **03 53 38.0** | **+0.1** |
| BOD | | | | Pmax | | | 03 53 39.0 | |
| | comp=E,30nm,0.3s | | | | | | | |
| BOD | | | | *e* | | | 03 54 10.7 | |
| BOD | | | | *i* Sg | | **Sb** | **03 54 17.3** | **+2.1** |
| BOD | | | | Smax | | | 03 54 19.9 | |
| | comp=E,524nm,1.3s | | | | | | | |
| **NLYR** | **Nelyaty** | **3.09** | **69** | *e*PN | | **Pn** | **03 53 33.9** | **+0.7** |
| NLYR | | | | *e* | | | 03 53 40.6 | |
| NLYR | | | | *e*S | | **Sn** | **03 54 11.9** | **+1.3** |
| NLYR | | | | *e* | | | 03 54 20.0 | |
| NLYR | | | | pmax | pmax | | | |
| | comp=Z,102nm,0.7s | | | | | | | |
| NLYR | | | | smax | smax | | | |
| | comp=N,645nm,1.5s | | | | | | | |
| **NLYR** | **Nelyaty** | **3.09** | **69** | *e*Pn | | **Pn** | **03 53 34.1** | **+0.9** |
| NLYR | | | | *e*Pg | | **Pb** | **03 53 39.2** | **+0.1** |
| NLYR | | | | *e*PgPg | | **Pg** | **03 53 42.7** | **-0.1** |
| NLYR | | | | max | | | 03 53 48.4 | |
| | comp=N,102nm,0.6s | | | | | | | |
| NLYR | | | | *e* | | | 03 54 06.5 | |
| NLYR | | | | *e* | | | 03 54 12.8 | |
| NLYR | | | | *i* Sg | | **Sb** | **03 54 19.9** | **+2.7** |
| NLYR | | | | Smax | | | 03 54 29.4 | |
| | comp=N,614nm,0.8s | | | | | | | |
| **ZRHB** | **Zarechye** | **3.55** | **215** | *e*Pg | | **Pb** | **03 53 47.2** | **+0.2** |
| ZRHB | | | | Pmax | | | 03 53 49.2 | |
| | comp=N,311nm,0.9s | | | | | | | |
| ZRHB | | | | *e*Sg | | **Sb** | **03 54 33.6** | **+3.1** |
| ZRHB | | | | Smax | | | 03 54 44.1 | |
| | comp=N,978nm,0.8s | | | | | | | |
| **TRG** | **Tyrgan** | **3.67** | **223** | *e*PN | | **Pn** | **03 53 43.1** | **+1.9** |
| TRG | | | | *e* | | | 03 53 50.9 | |
| TRG | | | | *e*S | | **Sn** | **03 54 24.3** | **-0.7** |
| TRG | | | | *e* | | | 03 54 36.0 | |
| TRG | | | | pmax | pmax | | | |
| | comp=Z,64nm,0.6s | | | | | | | |
| TRG | | | | smax | smax | | | |
| | comp=E,319nm,0.4s | | | | | | | |
| **TRG** | **Tyrgan** | **3.67** | **223** | *e*Pn | | **Pn** | **03 53 42.0** | **+0.8** |
| TRG | | | | Pg | | **Pb** | **03 53 48.8** | **-0.3** |
| TRG | | | | *e* | | | 03 53 53.8 | |
| TRG | | | | max | | | 03 53 54.0 | |
| | comp=E,67nm,1.3s | | | | | | | |
| TRG | | | | *e*Sg | | **Sb** | **03 54 36.1** | **+2.1** |
| TRG | | | | Smax | | | 03 54 42.1 | |
| | comp=E,318nm,1.1s | | | | | | | |
| **CIT** | **Chita** | **3.94** | **151** | *e*PN | | **Pb** | **03 53 54.9** | **+1.3** |
| CIT | | | | *e*S | | **Sn** | **03 54 30.7** | **-0.8** |
| CIT | | | | *e* | | | 03 54 44.5 | |
| CIT | | | | pmax | pmax | | | |
| | comp=Z,167nm,0.9s | | | | | | | |
| CIT | | | | smax | smax | | | |
| | comp=N,441nm,1.4s | | | | | | | |
| **CIT** | **Chita** | **3.94** | **151** | *e*Sg | | **Sb** | **03 54 45.1** | **+3.5** |
| CIT | | | | Smax | | | 03 54 45.6 | |
| | comp=N,439nm,1.4s | | | | | | | |
| **UUDB** | **Ulan-Yde** | **4.02** | **206** | *e* | | **Pb** | **03 53 52.5** | **-2.4** |
| UUDB | | | | *e*Pg | | Pg | 03 53 55.9 | -4.6 |
| UUDB | | | | Pmax | | | 03 53 58.3 | |
| | comp=N,91nm,0.8s | | | | | | | |
| UUDB | | | | *i* Sg | | **Sg** | **03 54 48.4** | **-4.1** |
| UUDB | | | | Smax | | | 03 54 58.0 | |
| | comp=N,454nm,1.7s | | | | | | | |
| **KAB** | **Kabansk** | **4.14** | **215** | *e*Sg | | **Sg** | **03 54 52.5** | **-4.1** |
| KAB | | | | Smax | | | 03 54 57.9 | |
| | comp=N,589nm,1.6s | | | | | | | |
| **HRMR** | **Khuramsha** | **4.42** | **210** | *e* | | Pg | 03 54 28.7 | +20 |
| HRMR | | | | *e*Sg | | **Sb** | **03 55 00.5** | **+5.1** |
| HRMR | | | | *e* | | | 03 55 05.5 | |
| HRMR | | | | max | | | 03 55 07.8 | |
| | comp=N,676nm,0.8s | | | | | | | |
| **CRS** | **Chara** | **4.56** | **69** | *e*PN | | **Pg** | **03 54 08.0** | **-3.0** |
| CRS | | | | *e* | | | 03 55 05.6 | |
| CRS | | | | pmax | pmax | | | |
| | comp=Z,55nm,0.6s | | | | | | | |
| CRS | | | | smax | smax | | | |
| | comp=N,207nm,0.6s | | | | | | | |
| **CRS** | **Chara** | **4.56** | **69** | ⇓*i*Pn | | **Pn** | **03 53 54.5** | **+1.1** |
| CRS | | | | *e*Pg | | **Pb** | **03 54 05.9** | **+1.7** |
| CRS | | | | Pmax | | | 03 54 12.3 | |
| | comp=N,93nm,1.0s | | | | | | | |
| CRS | | | | *e* | | | 03 54 39.3 | |
| CRS | | | | *i* Sg | | **Sg** | **03 55 06.0** | **-4.1** |
| CRS | | | | Smax | | | 03 55 10.7 | |
| | comp=N,643nm,1.7s | | | | | | | |
| **IRK** | **Irkutsk** | **4.92** | **231** | *e*PN | | **Pb** | **03 54 12.4** | **+2.1** |
| IRK | | | | *e* | | | 03 55 15.4 | |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,133nm,0.1s | | | | | | | |
| IRK | | | | smax | smax | | | |
| | comp=E,733nm,1.1s | | | | | | | |
| **IRK** | **Irkutsk** | **4.92** | **231** | *e* | | Pg | 03 54 55.2 | +37 |
| IRK | | | | *e*Sg | | **Sg** | **03 55 16.4** | **-5.2** |
| IRK | | | | Smax | | | 03 55 23.1 | |
| | comp=E,685nm,1.2s | | | | | | | |
| **LSTR** | **Listvyanka** | **4.96** | **225** | *e* | | Pn | 03 53 55.7 | -3.1 |
| LSTR | | | | *e* | | | 03 54 00.6 | |
| LSTR | | | | *e*Pg | | **Pb** | **03 54 13.1** | **+2.1** |
| LSTR | | | | Pmax | | | 03 54 18.1 | |
| | comp=E,10.0nm,0.6s | | | | | | | |
| LSTR | | | | *e* | | | 03 54 59.6 | |
| LSTR | | | | *e*Sg | | **Sb** | **03 55 16.2** | **+5.3** |
| LSTR | | | | Smax | | | 03 55 18.8 | |
| | comp=E,208nm,0.6s | | | | | | | |
| **TUP** | **Tupik** | **5.56** | **97** | *e*PN | | **Pn** | **03 54 07.6** | **+0.5** |
| TUP | | | | *e* | | | 03 54 25.3 | |
| TUP | | | | *e*S | | **Sn** | **03 55 10.3** | **-1.2** |
| TUP | | | | *e* | | | 03 55 37.5 | |
| TUP | | | | pmax | pmax | | | |
| | comp=Z,25nm,0.6s | | | | | | | |
| TUP | | | | smax | smax | | | |
| | comp=N,288nm,0.9s | | | | | | | |
| **TUP** | **Tupik** | **5.56** | **97** | *e*Pn | | **Pn** | **03 54 07.3** | **+0.2** |
| TUP | | | | max | | | 03 54 08.1 | |
| | comp=N,38nm,0.6s | | | | | | | |
| TUP | | | | Pg | | **Pb** | **03 54 23.0** | **+1.8** |
| TUP | | | | ⇑*i* | | | 03 54 26.4 | |
| TUP | | | | *e*Sn | | **Sn** | **03 55 10.4** | **-1.1** |
| TUP | | | | *e*Sg | | **Sg** | **03 55 37.5** | **-4.6** |
| TUP | | | | Smax | | | 03 55 42.3 | |
| | comp=N,297nm,1.1s | | | | | | | |
| **TLY** | **Talaya** | **5.59** | **230** | Pn | | **Pn** | **03 54 07.9** | **+0.4** |
| | comp=N,0.0nm,0.3s,baz=48,slow=14,SNR=6.4 | | | | | | | |
| TLY | | | | Pg | | **Pb** | **03 54 24.0** | **+2.2** |
| | comp=N,0.0nm,0.3s,baz=29,slow=8.9,SNR=16 | | | | | | | |
| TLY | | | | Sn | | **Sn** | **03 55 11.3** | **-0.9** |
| | comp=N,0.0nm,0.3s,baz=225,slow=20,SNR=9.0 | | | | | | | |
| TLY | | | | Lg | | Lg | 03 55 35.9 | |
| | comp=N,0.1nm,0.3s,baz=235,slow=16,SNR=14 | | | | | | | |
| TLY | | | | LR | | LR | 03 56 08.4 | |
| | comp=N,16nm,19.1s,baz=62,slow=37 | | | | | | | |
| **TLY** | **Talaya** | **5.59** | **230** | *e*PN | | **Pn** | **03 54 08.1** | **+0.5** |
| TLY | | | | *e* | | | 03 54 25.5 | |
| TLY | | | | *e*S | | **Sn** | **03 55 10.8** | **-1.5** |
| TLY | | | | *e* | | | 03 55 35.8 | |
| TLY | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| TLY | | | | smax | smax | | | |
| | comp=E,61nm,0.6s | | | | | | | |
| **TLY** | **Talaya** | **5.59** | **230** | *e* | | **Pb** | **03 54 21.8** | **0.0** |
| TLY | | | | Pg | | Pg | 03 54 23.9 | -6.8 |
| TLY | | | | *e* | | | 03 54 26.2 | |
| TLY | | | | max | | | 03 54 27.0 | |
| | comp=E,37nm,0.9s | | | | | | | |
| TLY | | | | *e* | | | 03 55 12.4 | |
| TLY | | | | *e*Sg | | Sb | 03 55 36.0 | +6.8 |
| TLY | | | | Smax | | | 03 55 44.0 | |
| | comp=E,200nm,1.3s | | | | | | | |
| **ARS** | **Arshan** | **5.99** | **236** | *e*Pn | | **Pn** | **03 54 13.2** | **+0.2** |
| ARS | | | | *e* | | | 03 54 17.4 | |
| ARS | | | | Pg | | Pb | 03 54 32.3 | +3.8 |
| ARS | | | | *e* | | | 03 54 35.2 | |
| ARS | | | | max | | | 03 54 37.9 | |
| | comp=E,57nm,0.7s | | | | | | | |
| ARS | | | | *e* | | | 03 55 21.4 | |
| ARS | | | | *e*Sg | | Sg | 03 55 49.0 | -6.7 |
| ARS | | | | *e* | | | 03 55 51.8 | |
| ARS | | | | max | | | 03 55 53.0 | |
| | comp=E,603nm,0.6s | | | | | | | |
| **ZAK** | **Zakamensk** | **6.73** | **223** | *e*PN | | **Pn** | **03 54 25.1** | **+1.9** |
| ZAK | | | | *e* | | | 03 54 46.8 | |
| ZAK | | | | *e* | | | 03 56 11.6 | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| ZAK | | | | smax | smax | | | |
| | comp=E,118nm,1.0s | | | | | | | |
| **ZAK** | **Zakamensk** | **6.73** | **223** | *e* | | Pb | 03 54 33.3 | -7.9 |
| ZAK | | | | Pg | | Pg | 03 54 45.3 | -7.2 |
| ZAK | | | | Pmax | | | 03 54 59.3 | |
| | comp=E,9.0nm,1.1s | | | | | | | |
| ZAK | | | | *e* | | | 03 56 02.9 | |
| ZAK | | | | *e*Sg | | Sg | 03 56 12.0 | -7.6 |
| ZAK | | | | Smax | | | 03 56 21.4 | |
| | comp=E,118nm,1.0s | | | | | | | |
| **MOY** | **Mondy** | **6.84** | **240** | *e*PN | | **Pn** | **03 54 26.0** | **+1.3** |
| MOY | | | | *e* | | | 03 54 46.9 | |
| MOY | | | | *e* | | | 03 56 12.4 | |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.3s | | | | | | | |
| MOY | | | | smax | smax | | | |
| | comp=N,154nm,1.2s | | | | | | | |
| **MOY** | **Mondy** | **6.84** | **240** | *e*Pn | | **Pn** | **03 54 25.6** | **+0.9** |
| MOY | | | | *e* | | | 03 54 34.2 | |
| MOY | | | | max | | | 03 54 35.2 | |
| | comp=N,56nm,0.7s | | | | | | | |
| MOY | | | | *e* | | | 03 54 42.6 | |
| MOY | | | | *e* | | | 03 55 44.2 | |
| MOY | | | | *i* Sg | | Sb | 03 56 12.8 | +7.9 |
| MOY | | | | Smax | | | 03 56 25.3 | |
| | comp=N,155nm,1.1s | | | | | | | |
| **ORL** | **Orlik** | **6.96** | **249** | *e*PN | | **Pn** | **03 54 27.5** | **+1.2** |
| ORL | | | | *e* | | | 03 54 49.3 | |
| ORL | | | | *e* | | | 03 56 19.1 | |
| ORL | | | | pmax | pmax | | | |
| | comp=Z,84nm,1.4s | | | | | | | |
| ORL | | | | smax | smax | | | |
| | comp=N,264nm,1.4s | | | | | | | |
| **ORL** | **Orlik** | **6.96** | **249** | ⇑*i*Pn | | **Pn** | **03 54 27.6** | **+1.2** |
| ORL | | | | max | | | 03 54 28.8 | |
| | comp=N,84nm,1.2s | | | | | | | |
| ORL | | | | Pg | | Pb | 03 54 49.3 | +4.3 |
| ORL | | | | *e* | | | 03 54 57.4 | |
| ORL | | | | *e* | | | 03 55 46.1 | |
| ORL | | | | *e*Sg | | Sg | 03 56 19.2 | -7.7 |
| ORL | | | | Smax | | | 03 56 25.7 | |
| | comp=N,263nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **8.09** | **200** | Pn | | **Pn** | **03 54 43.4** | **+1.4** |
| | comp=N,0.4nm,0.3s,baz=9.6,slow=12,SNR=6.0 | | | | | | | |
| SONM | | | | Pg | | Pg | 03 55 15.2 | -3.3 |
| | comp=N,0.6nm,0.3s,baz=9.3,slow=16,SNR=6.9 | | | | | | | |
| SONM | | | | Lg | | Lg | 03 56 58.1 | |
| | comp=N,1.2nm,0.3s,baz=14,slow=25,SNR=15 | | | | | | | |
| **YAK** | **Yakutsk** | **11.88** | **49** | Lg | | Lg | 03 58 49.8 | |
| | comp=N,0.0nm,0.3s,baz=156,slow=23,SNR=7.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **14.88** | **275** | Pn | | **Pn** | **03 56 13.8** | **-0.9** |
| | comp=N,0.2nm,0.3s,baz=70,slow=12,SNR=21 | | | | | | | |
| ZALV | | | | Lg | | Lg | 04 00 27.0 | |
| | comp=N,0.5nm,0.3s,baz=70,slow=37,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **19.60** | **255** | P | | **P** | **03 57 13.7** | **+1.0** |
| | comp=N,0.3nm,0.3s,baz=46,slow=8.7,SNR=5.3 | | | | | | | |
| **KURK** | **Kurchatov** | **19.61** | **269** | P | | **P** | **03 57 13.2** | **+0.5** |
| **KURBB** | **Kurchatov Arra** | **19.70** | **269** | P | | **P** | **03 57 13.2** | **-0.5** |
| | comp=N,0.1nm,0.3s,baz=66,slow=11,SNR=18 | | | | | | | |
| KURBB | | | | Lg | | Lg | 04 03 00.3 | |
| | comp=N,0.0nm,0.3s,baz=69,slow=29,SNR=3.7 | | | | | | | |
| **FINES** | **FINESS Array B** | **41.59** | **314** | P | | **P** | **04 00 30.9** | **-1.2** |
| | comp=N,0.9nm,0.4s,baz=60,slow=8.3,SNR=5.7 | | | | | | | |
| **FINES** | **FINESS Array B** | **41.59** | **314** | P | | **P** | **04 00 30.9** | **-1.2** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **ILAR** | **Eielson Array** | **46.39** | **35** | P | | **P** | **04 01 12.2** | **+1.7** |
| | comp=Z,0.5nm,0.9s,baz=300,slow=7.1,SNR=6.1 | | | | | | | |
| **NOA** | **NORSAR Array B** | **47.64** | **319** | P | | **P** | **04 01 18.8** | **-1.6** |
| | comp=Z,0.5nm,0.7s,baz=52,slow=7.9,SNR=2.3 | | | | | | | |
| **GUMO** | **Guam** | **49.57** | **134** | LR | | LR | 04 22 52.2 | |
| | comp=Z,21nm,18.9s,baz=149,slow=36 | | | | | | | |

*ISK* ***13*** *04:02:18.9,40.˚44N×25.˚87E,h5km,MD2.6*
*ISCJB* ***13*** *04:02:20.0±0.7,40.˚42N±0.˚03×25.˚92E±0.˚06,h4km±6km, Error ellipse: s-maj=8.1km s-min=4.5km az=9.9*
*DDA* ***13*** *04:02:20.2,40.˚39N×26.˚00E,h7km,Md2.7*
*CSEM* ***13*** *04:02:20.2±0.3,40.˚43N×25.˚92E,h5km,MD2.6,Error ellipse: s-maj=6.5km s-min=4.6km az=109.0*

**ISC 13 04:02:20.6±1.0, 40.˚42N±0.˚02×25.˚92E±0.˚04, h10km±9km, n33, σ0s72/42, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **GADA** | **Gvkgeada** | **0.23** | **185** | *e*PG | | **Pg** | **04 02 25.0** | **-0.3** |
| GADA | | | | *e*SG | | **Sg** | **04 02 29.2** | **+0.7** |
| **GADA** | **Gvkgeada** | **0.23** | **185** | *e*Pg | | **Pg** | **04 02 25.0** | **-0.3** |
| GADA | | | | *e*Sg | | **Sg** | **04 02 29.2** | **+0.7** |
| **ENEZ** | **Enez** | **0.36** | **29** | *e*PG | | **Pg** | **04 02 26.9** | **-0.8** |
| **ENEZ** | **Enez** | **0.36** | **29** | *e*Pg | | **Pg** | **04 02 26.9** | **-0.8** |
| **GELI** | **Tayfur-Gelibol** | **0.42** | **93** | *e*PG | | **Pg** | **04 02 29.0** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.42** | **93** | *e*Pg | | **Pg** | **04 02 29.0** | **+0.2** |
| **ALN** | **Alexandroupoli** | **0.48** | **11** | *e*PG | | **Pg** | **04 02 29.1** | **-0.9** |
| ALN | | | | *e*SG | | **Sg** | **04 02 37.0** | **+0.5** |
| **ALN** | **Alexandroupoli** | **0.48** | **11** | *e*Pg | | **Pg** | **04 02 29.1** | **-0.9** |
| ALN | | | | *e*Sg | | **Sg** | **04 02 37.0** | **+0.5** |
| **ERIK** | **Erikli-Kesan** | **0.51** | **61** | *e*PG | | **Pg** | **04 02 29.5** | **-1.1** |
| **ERIK** | **Erikli-Kesan** | **0.51** | **61** | *e*Pg | | **Pg** | **04 02 29.5** | **-1.1** |
| **BOZC** | **Bozcaada** | **0.59** | **170** | P | | **Pg** | **04 02 30.9** | **-1.1** |
| BOZC | | | | S | | **Sg** | **04 02 39.5** | **-0.2** |
| **EZN** | **Ezine** | **0.67** | **153** | *e*PG | | **Pg** | **04 02 33.4** | **-0.1** |
| **EZN** | **Ezine** | **0.67** | **153** | *e*Pg | | **Pg** | **04 02 33.4** | **-0.1** |
| **RKY** | **Sarkoy-Tekirda** | **0.99** | **74** | *e*PG | | **Pb** | **04 02 39.9** | **0.0** |
| **RKY** | **Sarkoy-Tekirda** | **0.99** | **74** | *e*Pg | | **Pb** | **04 02 39.9** | **0.0** |
| **SART** | **Tekirdag** | **0.99** | **74** | *i* P | | **Pg** | **04 02 38.3** | **-1.4** |
| SART | | | | *i* S | | **Sb** | **04 02 53.9** | **+0.9** |
| **SART** | **Tekirdag** | **0.99** | **74** | P | | **Pg** | **04 02 38.3** | **-1.4** |
| SART | | | | S | | **Sb** | **04 02 54.0** | **+0.9** |
| **KRBG** | **Karabiga-Canak** | **1.05** | **91** | *e*PN | | **Pn** | **04 02 41.4** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **1.05** | **91** | *e*Pn | | **Pn** | **04 02 41.4** | **+0.1** |
| **SIGR** | **SIGRI** | **1.21** | **183** | *e*PN | | **Pg** | **04 02 43.0** | **-0.8** |
| **SIGR** | **SIGRI** | **1.21** | **183** | *e*Pn | | **Pg** | **04 02 43.0** | **-0.8** |
| **MRMT** | **Marmara Adasi** | **1.29** | **81** | *e*PN | | **Pg** | **04 02 45.3** | **0.0** |
| **MRMT** | **Marmara Adasi** | **1.29** | **81** | *e*Pn | | **Pg** | **04 02 45.3** | **0.0** |
| **TKR** | **Tekirdag** | **1.35** | **65** | *e*PN | | **Pg** | **04 02 46.9** | **+0.4** |
| **TKR** | **Tekirdag** | **1.35** | **65** | *e*Pn | | **Pg** | **04 02 46.9** | **+0.4** |
| **GONE** | **Gonen-Balikesi** | **1.40** | **105** | *e*PN | | **Pg** | **04 02 47.6** | **+0.2** |
| **GONE** | **Gonen-Balikesi** | **1.40** | **105** | *e*Pn | | **Pg** | **04 02 47.6** | **+0.2** |
| **BALY** | **Balya** | **1.47** | **117** | *i* P | | **Pn** | **04 02 45.7** | **-1.4** |
| BALY | | | | *i* S | | **Sn** | **04 03 06.1** | **-0.3** |
| **BALY** | **Balya** | **1.47** | **117** | P | | **Pn** | **04 02 45.7** | **-1.4** |
| BALY | | | | S | | **Sn** | **04 03 06.1** | **-0.3** |
| **OUR** | **Ouranopolis** | **1.49** | **267** | *e*PN | | **Pn** | **04 02 47.8** | **+0.5** |
| **OUR** | **Ouranopolis** | **1.49** | **267** | *e*Pn | | **Pn** | **04 02 47.8** | **+0.5** |
| **EDRB** | **Edirne** | **1.55** | **23** | *e*PN | | **Pn** | **04 02 48.4** | **+0.2** |
| **EDRB** | **Edirne** | **1.55** | **23** | *e*Pn | | **Pn** | **04 02 48.4** | **+0.2** |

*ISCJB* ***13*** *04:09:27.0±0.6,5.˚02S±0.˚04×133.˚79E±0.˚06,h25km, mb4.1/3,MS2.9/1,Error ellipse: s-maj=9.3km s-min=5.1km az=166.2*
*IDC* ***13*** *04:09:26.1±0.2,5.˚15S×133.˚62E,h0km,mb4.1/3, mb1 4.2/7,mb1mx3.9/33,mbtmp4.1/7,ML3.9/4,MS3.0/2, Ms1 3.0/2,ms1mx2.6/24,Error ellipse: s-maj=4.8km s-min=1.9km az=79.0*
*DJA* ***13*** *04:09:30.7±1.2,5.˚5S±3.˚3×13.˚4E±.˚, h29km±19km,M4.4/9, mb4.7/5,mB5.1/3,MLv4.3/9,Mw(mB)4.5/3*
*AUST* ***13*** *04:09:31.2±0.6,5.˚07S×133.˚41E,h66km,Error ellipse: s-maj=1.4km s-min=0.8km az=250.0*

**ISC 13 04:09:29.6±0.7, 5.˚00S±0.˚05×133.˚59E±0.˚07, h25km, n27, σ1s86/24, mb4.2/3, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KMPI** | **Kaimana, Papua** | **1.34** | **5** | P | | **Pn** | **04 09 50.5** | **-2.2** |
| KMPI | | | | S | | **Sn** | **04 10 07.3** | **-2.4** |
| **FAKI** | **Fak Fak** | **2.47** | **327** | P | | **Pn** | **04 10 08.6** | **+0.3** |
| | baz=2.4,SNR=127 | | | | | | | |
| **FAKI** | **Fak Fak** | **2.47** | **327** | P | | **Pn** | **04 10 08.5** | **+0.2** |
| FAKI | | | | S | | **Sn** | **04 10 37.4** | **-0.2** |
| **BNDI** | **Bandanaira** | **3.71** | **277** | P | | **Pn** | **04 10 27.4** | **+2.1** |
| BNDI | | | | S | | **Sb** | **04 11 14.1** | **-4.8** |
| **SIJI** | **Sorong** | **4.72** | **330** | Pn | | **Pn** | **04 10 40.1** | **+0.9** |
| | 2.2nm,0.3s,baz=132,slow=8.3,SNR=15 | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **04 11 31.8** | **-1.5** |
| | 6.3nm,0.3s,baz=245,slow=23,SNR=5.7 | | | | | | | |
| SIJI | | | | LR | | LR | 04 13 24.2 | |
| | comp=Z,184nm,19.1s,baz=206,slow=49 | | | | | | | |
| **SWI** | **Sorong** | **4.73** | **330** | P | | **Pn** | **04 10 39.8** | **+0.4** |
| **MSAI** | **Masohi** | **4.93** | **289** | P | | **Pn** | **04 10 43.6** | **+1.4** |
| | 18nm,0.5s,759nm0.2nm | | | | | | | |
| **AAI** | **Ambon** | **5.54** | **283** | P | | Pn | 04 10 53.8 | +3.3 |
| | 78nm,1.1s,3μm0.3nm | | | | | | | |
| **KDU** | **Kakadu** | **7.71** | **188** | P | | **Pn** | **04 11 21.8** | **+1.4** |
| | baz=7.7,SNR=16 | | | | | | | |
| **MTN** | **Manton Dam** | **8.16** | **197** | P | | **Pn** | **04 11 27.6** | **+1.1** |
| | baz=8.1,SNR=64 | | | | | | | |
| **SOEI** | **Soe** | **10.38** | **242** | P | | Pn | 04 11 49.7 | -7.4 |
| | baz=10,SNR=3.7 | | | | | | | |
| **KNRA** | **Kununurra** | **11.62** | **204** | P | | **Pn** | **04 12 14.4** | **+0.5** |
| | baz=12,SNR=38 | | | | | | | |
| **COEN** | **Coen** | **12.97** | **134** | P | | **Pn** | **04 12 31.0** | **-1.6** |
| | baz=13,SNR=4.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.87** | **177** | Pn | | Pn | 04 12 54.8 | -3.6 |
| | 0.4nm,0.3s,baz=3.3,slow=13,SNR=27 | | | | | | | |
| WRA | | | | Sn | | Sn | 04 15 32.7 | -10 |
| | 0.4nm,0.3s,baz=353,slow=24,SNR=5.5 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.16** | **210** | Pn | | **Pn** | **04 13 00.2** | **-2.1** |
| | 0.9nm,0.3s,baz=39,slow=14,SNR=18 | | | | | | | |
| FITZ | | | | Sn | | Sn | 04 15 40.4 | -9.2 |
| | 0.7nm,0.3s,baz=174,slow=15,SNR=7.7 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.16** | **210** | P | | **Pn** | **04 13 00.6** | **-1.7** |
| | baz=15,SNR=15 | | | | | | | |
| **ASAR** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **23.75 338** | P | | **P** | 04 21 27.3 | **+0.3** |
| | 4.1nm,0.5s,baz=152,slow=7.9,SNR=21 | | | | | | | |
| **AAK** | **Ala-Archa** | **24.16 321** | P | | **P** | 04 21 32.9 | **+1.9** |
| | 1.4nm,0.6s,baz=149,slow=5.9,SNR=4.4 | | | | | | | |
| **SONM** | **Songino Array** | **24.26 19** | P | | **P** | 04 21 31.7 | **-0.1** |
| | 1.2nm,0.5s,baz=193,slow=9.9,SNR=8.4 | | | | | | | |
| **KURBB** | **Kurchatov Array** | **28.31 338** | P | | **P** | 04 22 08.4 | **+0.4** |
| | 0.8nm,0.5s,baz=146,slow=9.2,SNR=7.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.63 348** | P | | **P** | 04 22 19.9 | **+0.3** |
| | 0.7nm,0.4s,baz=172,slow=4.4,SNR=2.0 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **37.91 321** | P | | **P** | 04 23 31.2 | **-0.2** |
| | 0.7nm,0.4s,baz=111,slow=8.6,SNR=3.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **52.77 302** | P | | **P** | 04 25 28.2 | **-0.8** |
| | 0.3nm,0.5s,baz=130,slow=8.5,SNR=2.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **55.67 315** | P | | **P** | 04 25 49.1 | **-0.5** |
| | 0.7nm,0.4s,baz=78,slow=6.7,SNR=3.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **58.07 328** | P | | **P** | 04 26 06.4 | **0.0** |
| | 1.8nm,0.8s,baz=92,slow=9.7,SNR=4.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **59.02 136** | P | | **P** | 04 26 12.9 | **-0.7** |
| | 0.3nm,0.7s,baz=324,slow=7.3,SNR=5.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.40 338** | P | | **P** | 04 26 15.9 | **+0.3** |
| | 2.8nm,0.9s,baz=107,slow=5.8,SNR=3.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **61.55 139** | P | | **P** | 04 26 30.6 | **-0.2** |
| | 0.4nm,0.9s,baz=322,slow=5.9,SNR=4.3 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **65.25 328** | P | | **P** | 04 26 54.2 | **-0.5** |
| | comp=Z,0.6nm,0.4s,baz=83,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **65.25 328** | P | | **P** | 04 26 54.5 | **-0.3** |
| | comp=Z,0.7nm,0.5s,baz=84,slow=6.4,SNR=4.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **65.84 314** | P | | **P** | 04 26 58.9 | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=82,slow=7.0,SNR=2.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **87.40 283** | P | | **P** | 04 29 01.0 | **+0.4** |
| | comp=Z,0.1nm,0.4s,baz=55,slow=4.2,SNR=3.4 | | | | | | | |

**DJA 13 04:17:44.8±0.8,1°S±17°×13°3E±°,h22km±24km,M3.3/5,**
**MLv3.3/5,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RKPI** | **Ransiki, Papua** | **1.31** | **134** | P | Pn | 04 18 07.5 | -0.3 |
| RKPI | | | | S | Sn | 04 18 24.8 | +0.2 |
| **SWI** | **Sorong** | **1.99** | **262** | P | Pn | 04 18 16.9 | -0.2 |
| SWI | | | | S | Sb | 04 18 43.3 | -1.3 |
| **FAKI** | **Fak Fak** | **2.50** | **203** | P | Pn | 04 18 23.7 | -0.6 |

*ISCJB **13** 04:21:43.4±0.9,20°1S±0°2×174°2W±0°2,h10km,mb3.6/5,*
*MS3.2/5, Error ellipse: s-maj=36.8km s-min=13.9km*
*az=31.7*
*IDC **13** 04:21:44.3±1.1,20°13S×174°18W,h0km,mb3.6/5,*
*mb1 4.1/7,mb1mx3.8/35,mbtmp3.8/7,ML4.3/2,MS3.3/7,*
*Ms1 3.3/7,ms1mx3.1/21, Error ellipse: s-maj=49.8km*
*s-min=21.3km az=139.0*
**ISC 13 04:21:45.1±1.0,20°1S±0°2×174°3W±0°3,h10km,n17,**
**σ1§52/9,mb3.6/5,MS3.2/5,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.58** | **22** | Pn | **Pn** | **04 23 20.7** | **-1.3** |
| | 6.2nm,0.3s,baz=180,slow=10,SNR=4.2 | | | | | | |
| AFI | | | | Sn | Sn | 04 24 29.7 | -7.4 |
| | 7.4nm,0.3s,baz=184,slow=19,SNR=3.5 | | | | | | |
| AFI | | | | LR | LR | 04 26 02.2 | |
| | comp=Z,214nm,18.2s,baz=192,slow=39 | | | | | | |
| **RAO** | **Raoul Island** | **9.72** | **199** | LR | LR | 04 26 50.5 | |
| | comp=Z,132nm,19.5s,baz=3.5,slow=32 | | | | | | |
| **RAR** | **Rarotonga** | **13.61** | **97** | Pn | Pn | 04 24 45.6 | -13 |
| | 1.1nm,0.3s,baz=277,slow=17,SNR=5.9 | | | | | | |
| **URZ** | **Urewera** | **19.61** | **201** | P | **Pn** | **04 26 13.4** | **-1.4** |
| | 0.9nm,0.3s,baz=337,slow=7.7,SNR=4.1 | | | | | | |
| **PPT2** | **Papeete2** | **23.49** | **88** | eLQ | LQ | 04 31 10.1 | |
| | 310nm,26.0s | | | | | | |
| PPT2 | | | | eLR | LR | 04 32 18.4 | |
| | 123nm,26.5s | | | | | | |
| **PPT** | **Papeete** | **23.49** | **88** | LR | LR | 04 33 00.7 | |
| | comp=Z,47nm,20.2s,baz=282,slow=29 | | | | | | |
| **RPZ** | **Rata Peaks** | **26.58** | **204** | LR | LR | 04 38 11.3 | |
| | comp=Z,135nm,18.2s,baz=19,slow=37 | | | | | | |
| **HNR** | **Honiara** | **27.05** | **289** | LR | LR | 04 36 40.1 | |
| | comp=Z,70nm,19.3s,baz=124,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **48.03** | **256** | P | **P** | **04 30 25.9** | **+1.0** |
| | 0.6nm,0.4s,baz=97,slow=8.4,SNR=9.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.13** | **261** | P | **P** | **04 30 26.5** | **+0.8** |
| | 0.2nm,0.4s,baz=96,slow=7.3,SNR=13 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.83** | **343** | LR | LR | 05 00 09.5 | |
| | comp=Z,16nm,21.5s,baz=124,slow=30 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.34** | **42** | P | **P** | **04 33 47.0** | **+1.0** |
| | 0.2nm,0.3s,baz=227,slow=8.2,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **83.89** | **56** | P | **P** | **04 34 16.1** | **+0.5** |
| | 0.4nm,1.0s,baz=234,slow=7.7,SNR=3.3 | | | | | | |
| **ILAR** | **Eielson Array** | **87.17** | **11** | P | **P** | **04 34 32.3** | **+1.4** |
| | 0.3nm,0.6s,baz=218,slow=5.9,SNR=5.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.30** | **288** | LR | LR | 05 18 04.9 | |
| | comp=Z,8.1nm,18.3s,baz=90,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.25** | **334** | PKP | **PKPdf** | **04 41 20.7** | **-0.5** |
| | 0.7nm,0.7s,baz=38,slow=4.3,SNR=5.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.08** | **315** | PKPbc | **PKPab** | **04 41 36.0** | **-2.2** |
| | 0.2nm,0.4s,baz=113,slow=3.3,SNR=2.6 | | | | | | |

*SOF **13** 04:33:41.7,40°.99N×24°.26E,h2km,MD2.6*
*DDA **13** 04:33:41.1,40°.81N×24°.21E,h2km,Md3.2*
*ATH **13** 04:33:42.9,41°.09N×24°.22E,h28km±1km,MD3.2/9*
*CSEM **13** 04:33:43.3±0.1,41°.07N×24°.23E,h2km,ML2.5, Error*
*ellipse: s-maj=3.7km s-min=2.7km az=12.0*
*ISCJB **13** 04:33:43.6±0.4,41°.06N±0°.02×24°.21E±0°.02,h11km±3km,*
*Error ellipse: s-maj=3.6km s-min=2.3km az=13.8*
*THE **13** 04:33:43.6,41°.07N×24°.27E,h10km,ML2.5/9, Error*
*ellipse: s-maj=0.5km s-min=0.2km az=342.0*
**ISC 13 04:33:43.4±1.0,41°03N±0°.02×24°22E±0°.01,h6km±9km,**
**n110,σ0§89/155,Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAVA** | **Kavala** | **0.22** | **99** | P | **Pg** | **04 33 48.0** | **+0.2** |
| KAVA | | | | S | **Sg** | **04 33 50.9** | **+0.1** |
| **KAVA** | **Kavala** | **0.22** | **99** | P | **Pg** | 04 33 48.0 | +0.2 |
| KAVA | | | | S | **Sg** | **04 33 50.9** | **+0.1** |
| **NVR** | **Nevrokopi** | **0.42** | **320** | ePB | **Pg** | **04 33 51.6** | **+0.1** |
| NVR | | | | eSB | **Sg** | **04 33 57.4** | **+0.4** |
| **NVR** | **Nevrokopi** | **0.42** | **320** | P | **Pg** | **04 33 51.7** | **+0.2** |
| NVR | | | | S | **Sg** | **04 33 57.5** | **+0.4** |
| **NVR** | **Nevrokopi** | **0.42** | **320** | ePb | **Pg** | **04 33 51.6** | **+0.1** |
| NVR | | | | eSb | **Sg** | **04 33 57.4** | **+0.4** |
| **SRS** | **Serrai** | **0.48** | **280** | ePB | **Pb** | 04 33 53.6 | -0.8 |
| SRS | | | | eSB | **Sg** | **04 33 59.2** | **+0.2** |
| **SRS** | **Serrai** | **0.48** | **280** | P | **Pb** | **04 33 53.5** | **-0.8** |
| SRS | | | | S | **Sb** | **04 34 00.9** | **-0.8** |
| **SRS** | **Serrai** | **0.48** | **280** | P | **Pb** | 04 33 53.5 | -0.8 |
| SRS | | | | eSb | **Sg** | 04 33 59.2 | +0.2 |
| SRS | | | | S | **Sb** | 04 34 00.9 | -0.8 |
| **MMB** | **Musomiste** | **0.67** | **326** | Pg | **Pg** | 04 33 55.6 | -0.7 |
| **MMB** | **Musomiste** | **0.67** | **326** | Pg | **Pg** | 04 33 55.6 | -0.7 |
| **SOH** | **Sokhos** | **0.69** | **253** | ePN | **Pb** | 04 33 57.6 | -0.3 |
| SOH | | | | eSN | **Sb** | 04 34 07.6 | -0.1 |
| **SOH** | **Sokhos** | **0.69** | **253** | P | **Pb** | 04 33 57.6 | -0.3 |
| SOH | | | | S | **Sb** | 04 34 08.2 | +0.5 |
| **SOH** | **Sokhos** | **0.69** | **253** | P | **Pb** | 04 33 57.6 | -0.3 |
| SOH | | | | eSn | **Sb** | 04 34 07.6 | -0.1 |
| SOH | | | | S | **Sb** | 04 34 08.2 | +0.5 |
| **OUR** | **Ouranopolis** | **0.72** | **195** | ePG | **Pb** | 04 33 59.2 | +0.8 |
| **OUR** | **Ouranopolis** | **0.72** | **195** | ePN | **Pb** | 04 33 58.8 | +0.4 |
| OUR | | | | eSN | **Sb** | 04 34 09.0 | +0.5 |
| **OUR** | **Ouranopolis** | **0.72** | **195** | P | **Pb** | 04 33 57.9 | -0.5 |
| OUR | | | | S | **Sb** | 04 34 09.2 | +0.7 |
| **OUR** | **Ouranopolis** | **0.72** | **195** | P | **Pb** | 04 33 57.9 | -0.5 |
| **OUR** | **Ouranopolis** | **0.72** | **195** | ePn | **Pb** | 04 33 58.8 | +0.4 |
| **OUR** | **Ouranopolis** | **0.72** | **195** | ePg | **Pb** | 04 33 59.2 | +0.8 |
| OUR | | | | eSn | **Sb** | 04 34 09.0 | +0.5 |
| **RZN** | **Rozhen** | **0.75** | **29** | P | **Pg** | 04 33 57.6 | -0.3 |
| **RZN** | **Rozhen** | **0.75** | **29** | P | **Pg** | 04 33 57.6 | -0.3 |
| **PLG** | **Polygyros** | **0.88** | **222** | ePN | **Pb** | 04 34 01.6 | +0.4 |
| PLG | | | | eSN | **Sb** | 04 34 13.2 | -0.1 |
| **PLG** | **Polygyros** | **0.88** | **222** | P | **Pb** | 04 34 01.3 | +0.1 |
| PLG | | | | S | **Sn** | 04 34 14.9 | -0.7 |
| **PLG** | **Polygyros** | **0.88** | **222** | P | **Pb** | 04 34 01.3 | +0.1 |
| **PLG** | **Polygyros** | **0.88** | **222** | ePn | **Pb** | 04 34 01.6 | +0.4 |
| PLG | | | | eSn | **Sb** | 04 34 13.2 | -0.1 |
| PLG | | | | S | **Sn** | 04 34 14.9 | -0.7 |
| **HORT** | **Hortiatis** | **0.96** | **243** | ePN | **Pb** | 04 34 02.5 | +0.1 |
| HORT | | | | eSN | **Sb** | 04 34 15.2 | -0.2 |
| **HORT** | **Hortiatis** | **0.96** | **243** | P | **Pb** | 04 34 02.5 | +0.1 |
| **HORT** | **Hortiatis** | **0.96** | **243** | P | **Pb** | 04 34 02.5 | +0.1 |
| HORT | | | | eSn | **Sb** | 04 34 15.2 | -0.2 |
| **KNT** | **Kendrikon** | **1.01** | **278** | ePN | **Pg** | 04 34 02.6 | -0.2 |
| KNT | | | | eSN | **Sg** | 04 34 16.1 | +0.3 |
| **KNT** | **Kendrikon** | **1.01** | **278** | P | **Pg** | 04 34 03.0 | +0.2 |
| KNT | | | | S | **Sn** | 04 34 18.2 | -0.5 |
| **KNT** | **Kendrikon** | **1.01** | **278** | ePn | **Pg** | 04 34 02.6 | -0.2 |
| **KNT** | **Kendrikon** | **1.01** | **278** | P | **Pg** | 04 34 03.0 | +0.2 |
| KNT | | | | eSn | **Sg** | 04 34 16.1 | +0.3 |
| KNT | | | | S | **Sn** | 04 34 18.2 | -0.5 |
| **THE** | **Thessaloniki** | **1.03** | **248** | ePN | **Pn** | 04 34 04.5 | 0.0 |
| THE | | | | eSN | **Sb** | 04 34 18.1 | +0.6 |
| **THE** | **Thessaloniki** | **1.03** | **248** | ePn | **Pn** | 04 34 04.5 | 0.0 |
| THE | | | | eSn | **Sb** | 04 34 18.1 | +0.6 |
| **KDZ** | **Kurdzhali** | **1.09** | **55** | Pg | **Pg** | 04 34 01.8 | -2.5 |
| **KDZ** | **Kurdzhali** | **1.09** | **55** | Pg | **Pg** | 04 34 01.8 | -2.5 |
| **PLD** | **Plovdiv** | **1.13** | **18** | P | **Pb** | 04 34 05.5 | +0.1 |
| **PLD** | **Plovdiv** | **1.13** | **18** | P | **Pb** | 04 34 05.5 | +0.1 |
| **SMTH** | **Samothraki Isl** | **1.14** | **119** | ePN | **Pb** | 04 34 05.7 | +0.1 |
| **SMTH** | **Samothraki Isl** | **1.14** | **119** | P | **Pg** | 04 34 04.5 | -0.8 |
| SMTH | | | | S | **Sg** | 04 34 20.5 | +0.4 |
| **SMTH** | **Samothraki Isl** | **1.14** | **119** | P | **Pg** | 04 34 04.5 | -0.8 |
| **SMTH** | **Samothraki Isl** | **1.14** | **119** | ePn | **Pb** | 04 34 05.7 | +0.1 |
| SMTH | | | | S | **Sg** | 04 34 20.5 | +0.4 |
| **PAIG** | **Paliouri** | **1.18** | **201** | ePN | **Pg** | 04 34 05.7 | -0.3 |
| **PAIG** | **Paliouri** | **1.18** | **201** | P | **Pg** | 04 34 05.6 | -0.4 |
| PAIG | | | | S | **Sn** | 04 34 22.9 | +0.1 |
| **PAIG** | **Paliouri** | **1.18** | **201** | P | **Pg** | 04 34 05.6 | -0.4 |
| PAIG | | | | S | **Sn** | 04 34 22.9 | +0.1 |
| **KKB** | **Krupnik** | **1.20** | **315** | Pg | **Pg** | 04 34 05.3 | -1.0 |
| **KKB** | **Krupnik** | **1.20** | **315** | Pg | **Pg** | 04 34 05.3 | -1.0 |
| **VAY** | **Valandovo** | **1.28** | **284** | *i* Pn | **Pb** | 04 34 10.1 | +2.1 |
| VAY | | | | *i* Sn | **Sn** | 04 34 27.9 | +2.6 |
| **VAY** | **Valandovo** | **1.28** | **284** | *i* Pn | **Pb** | 04 34 10.0 | +2.1 |
| VAY | | | | *i* Sn | **Sn** | 04 34 27.9 | +2.6 |
| **LIA** | **Limnos Island** | **1.35** | **147** | ePN | **Pn** | 04 34 08.4 | -0.4 |
| **LIA** | **Limnos Island** | **1.35** | **147** | P | **Pn** | 04 34 07.9 | -0.9 |
| LIA | | | | S | **Sb** | 04 34 26.7 | +0.1 |
| **LIA** | **Limnos Island** | **1.35** | **147** | P | **Pn** | 04 34 07.9 | -0.9 |
| **LIA** | **Limnos Island** | **1.35** | **147** | ePn | **Pn** | 04 34 08.4 | -0.4 |
| LIA | | | | S | **Sb** | 04 34 26.7 | +0.1 |
| **GRG** | **Griva** | **1.38** | **267** | ePN | **Pb** | 04 34 09.6 | -0.1 |
| **GRG** | **Griva** | **1.38** | **267** | P | **Pn** | 04 34 08.7 | -0.6 |
| GRG | | | | S | **Sn** | 04 34 28.1 | +0.2 |
| **GRG** | **Griva** | **1.38** | **267** | P | **Pn** | 04 34 08.7 | -0.6 |
| **GRG** | **Griva** | **1.38** | **267** | ePn | **Pb** | 04 34 09.6 | -0.1 |
| GRG | | | | S | **Sn** | 04 34 28.1 | +0.2 |
| **ALN** | **Alexandroupoli** | **1.39** | **95** | ePN | **Pn** | 04 34 09.5 | +0.2 |
| ALN | | | | eSN | **Sn** | 04 34 29.2 | +1.3 |
| **ALN** | **Alexandroupoli** | **1.39** | **95** | ePN | **Pn** | 04 34 08.4 | -0.9 |
| **ALN** | **Alexandroupoli** | **1.39** | **95** | P | **Pn** | 04 34 08.0 | -1.3 |
| ALN | | | | S | **Sb** | 04 34 26.8 | -0.9 |
| **ALN** | **Alexandroupoli** | **1.39** | **95** | P | **Pn** | 04 34 08.0 | -1.3 |
| **ALN** | **Alexandroupoli** | **1.39** | **95** | ePn | **Pn** | 04 34 08.4 | -0.9 |
| ALN | | | | S | **Sb** | 04 34 26.8 | -0.9 |
| ALN | | | | eSn | **Sn** | 04 34 29.3 | +1.3 |
| **ENEZ** | **Enez** | **1.49** | **101** | ePN | **Pg** | 04 34 12.3 | +0.2 |
| **ENEZ** | **Enez** | **1.49** | **101** | ePn | **Pg** | 04 34 12.3 | +0.2 |
| **PGB** | **Panagyurishte** | **1.52** | **358** | P | **Pn** | 04 34 10.9 | -0.3 |
| **PGB** | **Panagyurishte** | **1.52** | **358** | P | **Pn** | 04 34 10.9 | -0.3 |
| **GADA** | **Gvkgeada** | **1.53** | **123** | ePN | **Pg** | 04 34 12.7 | 0.0 |
| **GADA** | **Gvkgeada** | **1.53** | **123** | ePn | **Pg** | 04 34 12.7 | 0.0 |
| **VTS** | **Vitosha** | **1.73** | **334** | P | **Pn** | 04 34 14.4 | +0.2 |
| **VTS** | **Vitosha** | **1.73** | **334** | P | **Pn** | 04 34 14.4 | +0.2 |
| **ERIK** | **Erikli-Kesan** | **1.77** | **101** | ePN | **Pn** | 04 34 15.3 | +0.7 |
| **ERIK** | **Erikli-Kesan** | **1.77** | **101** | ePn | **Pn** | 04 34 15.4 | +0.7 |
| **GELI** | **Tayfur-Gelibol** | **1.82** | **110** | ePN | **Pb** | 04 34 16.6 | -0.6 |
| **GELI** | **Tayfur-Gelibol** | **1.82** | **110** | ePn | **Pb** | 04 34 16.6 | -0.6 |
| **BOZC** | **Bozcaada** | **1.83** | **130** | P | **Pn** | 04 34 15.0 | -0.5 |
| BOZC | | | | S | **Sn** | 04 34 37.2 | -1.9 |
| **XOR** | **Xorichti** | **1.84** | **206** | ePN | **Pn** | 04 34 14.9 | -0.7 |
| **XOR** | **Xorichti** | **1.84** | **206** | ePn | **Pn** | 04 34 14.9 | -0.7 |
| **EZN** | **Ezine** | **2.01** | **126** | ePN | **Pb** | 04 34 19.6 | -0.7 |
| **EZN** | **Ezine** | **2.01** | **126** | ePn | **Pb** | 04 34 19.6 | -0.7 |
| **LPK** | **Lapseki** | **2.04** | **108** | ePN | **Pn** | 04 34 19.6 | +1.3 |
| **LPK** | **Lapseki** | **2.04** | **108** | ePn | **Pn** | 04 34 19.6 | +1.3 |
| **EDRB** | **Edirne** | **2.06** | **66** | ePN | **Pn** | 04 34 19.6 | +1.0 |
| **EDRB** | **Edirne** | **2.06** | **66** | ePn | **Pn** | 04 34 19.6 | +1.0 |
| **FNA** | **Florina** | **2.17** | **264** | ePN | **Pn** | 04 34 19.0 | -1.2 |
| **FNA** | **Florina** | **2.17** | **264** | ePn | **Pn** | 04 34 19.0 | -1.2 |
| **SIGR** | **SIGRI** | **2.21** | **145** | ePN | **Pb** | 04 34 22.3 | -1.4 |
| **SIGR** | **SIGRI** | **2.21** | **145** | ePB | **Pn** | 04 34 21.2 | +0.6 |
| **SIGR** | **SIGRI** | **2.21** | **145** | ePb | **Pn** | 04 34 21.2 | +0.6 |
| **SIGR** | **SIGRI** | **2.21** | **145** | ePn | **Pb** | 04 34 22.3 | -1.4 |
| **RKY** | **Sarkoy-Tekirda** | **2.27** | **98** | ePN | **Pn** | 04 34 22.7 | +1.2 |
| **RKY** | **Sarkoy-Tekirda** | **2.27** | **98** | ePn | **Pn** | 04 34 22.7 | +1.2 |
| **SART** | **Tekirdag** | **2.27** | **98** | *i* P | **Pn** | 04 34 21.5 | 0.0 |
| **SART** | **Tekirdag** | **2.27** | **98** | P | **Pn** | 04 34 21.5 | 0.0 |
| **MPEP** | **Malo Peshtene** | **2.35** | **351** | P | **Pn** | 04 34 23.2 | +0.6 |
| **PRK** | **Paraskevi** | **2.38** | **138** | ePN | **Pn** | 04 34 22.2 | -0.7 |
| **PRK** | **Paraskevi** | **2.38** | **138** | ePn | **Pn** | 04 34 22.2 | -0.7 |
| **KRBG** | **Karabiga-Canak** | **2.42** | **104** | eP | **Pn** | 04 34 25.4 | +1.8 |
| **KRBG** | **Karabiga-Canak** | **2.42** | **104** | eP | **Pn** | 04 34 25.4 | +1.8 |
| **BARS** | **Barje** | **2.53** | **316** | ePn | **Pn** | 04 34 25.5 | +0.4 |
| **CRLT** | **Corlu** | **2.66** | **87** | eP | **Pn** | 04 34 28.3 | +1.5 |
| **CRLT** | **Corlu** | **2.66** | **87** | eP | **Pn** | 04 34 28.3 | +1.5 |
| **GONE** | **Gonen-Balikesi** | **2.82** | **109** | eP | **Pn** | 04 34 30.2 | +1.2 |
| **GONE** | **Gonen-Balikesi** | **2.82** | **109** | eP | **Pn** | 04 34 30.2 | +1.2 |
| **EDC** | **Edincik** | **2.85** | **103** | eP | **Pn** | 04 34 31.5 | +2.0 |
| **EDC** | **Edincik** | **2.85** | **103** | eP | **Pn** | 04 34 31.5 | +2.0 |
| **BALY** | **Balya** | **2.90** | **115** | *i* P | **Pn** | 04 34 31.2 | +1.1 |
| BALY | | | | *i* S | **Sn** | 04 35 06.4 | +1.1 |
| **BALY** | **Balya** | **2.90** | **115** | P | **Pn** | 04 34 31.2 | +1.1 |
| BALY | | | | S | **Sn** | 04 34 49.0 | +1.1 |
| **GRUS** | **Gruza** | **3.86** | **319** | ePn | **Pn** | 04 34 42.8 | -0.5 |
| **KUBS** | **Kucevo** | **3.86** | **332** | ePn | **Pn** | 04 34 41.9 | -1.5 |
| **DIVS** | **Divibare** | **4.38** | **316** | ePn | **Pn** | 04 34 49.0 | -1.5 |

*AUST **13** 05:10:36.2,6°.30S×144°.60E,h0km*
*IDC **13** 05:10:51.6±1.2,6°.80S×143°.45E,h0km,mb3.9/4,*
*mb1 4.2/6,mb1mx3.9/21,mbtmp4.0/6,ML3.5/2,MS3.1/6,*
*Ms1 3.1/6,ms1mx2.9/21,Error ellipse: s-maj=52.7km*
*s-min=20.4km az=112.0*
**ISC 13 05:10:52.7±1.1,6°7S±0°.1×143°4E±0°.2,h10km,n19,**
**σ2§01/13,mb4.0/3,MS2.9/4,New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **11.73** | **288** | P | Pn | 05 13 35.2 | -5.1 |
| | baz=13,SNR=3.4 | | | | | | |
| **KDU** | **Kakadu** | **12.34** | **240** | P | **Pn** | **05 13 46.6** | **-1.9** |
| | baz=14,SNR=7.1 | | | | | | |
| **SIJI** | **Sorong** | **13.42** | **295** | LR | LR | 05 20 10.3 | |
| | comp=Z,84nm,19.9s,baz=82,slow=41 | | | | | | |
| **MTN** | **Manton Dam** | **13.57** | **242** | P | **Pn** | **05 14 05.8** | **+0.3** |
| | baz=15,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.88** | **213** | Pn | **Pn** | **05 14 33.4** | **-3.0** |
| | 0.1nm,0.3s,baz=34,slow=13,SNR=11 | | | | | | |
| WRA | | | | Sn | **Sn** | **05 17 35.1** | **+2.5** |
| | 0.1nm,0.3s,baz=49,slow=16,SNR=4.8 | | | | | | |
| WRA | | | | Lg | Lg | 05 19 12.7 | |
| | 0.2nm,0.3s,baz=37,slow=31,SNR=7.2 | | | | | | |
| WRA | | | | LR | LR | 05 21 16.7 | |
| | comp=Z,143nm,18.7s,baz=55,slow=40 | | | | | | |
| **PALU** | **Palau** | **16.53** | **327** | P | Pn | 05 14 39.5 | -5.3 |
| | baz=17,SNR=5.3 | | | | | | |
| **KNRA** | **Kununurra** | **16.93** | **237** | P | **Pn** | **05 14 47.8** | **-2.1** |
| | baz=18,SNR=7.6 | | | | | | |
| **ASAR** | **Alice Springs** | **19.22** | **207** | P | **Pn** | **05 15 16.4** | **-1.7** |
| | 0.5nm,0.3s,baz=37,slow=11,SNR=47 | | | | | | |
| ASAR | | | | S | **S** | **05 18 58.0** | **+2.8** |
| | 0.1nm,0.3s,baz=18,slow=28,SNR=4.1 | | | | | | |
| ASAR | | | | Lg | Lg | 05 20 58.8 | |
| | baz=26,slow=30,SNR=6.1 | | | | | | |
| **GUMO** | **Guam** | **20.17** | **4** | LR | LR | 05 24 32.1 | |
| | comp=Z,40nm,18.0s,baz=168,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.73** | **235** | P | **P** | **05 15 32.9** | **-0.7** |
| | 2.8nm,0.7s,baz=65,slow=12,SNR=9.6 | | | | | | |
| FITZ | | | | Lg | Lg | 05 21 44.8 | |
| | 9.9nm,1.0s,baz=158,slow=16,SNR=2.8 | | | | | | |
| FITZ | | | | LR | LR | 05 24 17.5 | |
| | comp=Z,64nm,21.2s,baz=90,slow=39 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **20.73** | **235** | P | Pn | 05 15 36.0 | 0.0 |
| | baz=22,SNR=5.7 | | | | | | |
| **WRKA** | **Warakurna** | **23.31** | **217** | P | **P** | **05 16 01.5** | **+0.4** |
| | baz=24,SNR=14 | | | | | | |
| **UGM** | **Wanagama** | **32.65** | **266** | P | P | 05 17 17.6 | -7.7 |
| | baz=34,SNR=3.3 | | | | | | |
| **KSRS** | **Korea Array** | **46.21** | **343** | LR | LR | 05 37 40.8 | |
| | comp=Z,12nm,20.1s,baz=85,slow=35 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **50.47** | **300** | LR | LR | 05 43 26.8 | |
| | comp=Z,11nm,18.9s,baz=170,slow=39 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.67** | **350** | P | **P** | **05 20 01.2** | **+1.5** |
| | 1.3nm,0.6s,baz=156,slow=5.2,SNR=4.4 | | | | | | |
| **VNDA** | **Vanda** | **71.49** | **176** | P | **P** | **05 22 13.2** | **0.0** |
| | 1.0nm,0.9s,baz=336,slow=12,SNR=5.9 | | | | | | |
| **ILAR** | **Eielson Array** | **87.50** | **24** | P | **P** | **05 23 40.8** | **+0.4** |
| | 1.1nm,1.0s,baz=252,slow=4.9,SNR=7.2 | | | | | | |
| **DBIC** | **Dimbokro** | **148.49** | **272** | PKPbc | **PKPab** | **05 30 42.5** | **-1.8** |
| | 2.9nm,0.7s,baz=84,slow=3.5,SNR=3.7 | | | | | | |

*ISCJB **13** 05:16:28.3±0.6,5°.6N±0°.2×32°.8W±0°.1,h12km,mb3.9/11,*
*MS3.5/13, Error ellipse: s-maj=26.9km s-min=12.8km*
*az=148.8*
*IDC **13** 05:16:28.3±0.7,5°.63N×32°.86W,h0km,mb3.9/11,*
*mb1 4.0/11,mb1mx3.9/33,mbtmp3.9/11,MS3.5/14,*
*Ms1 3.5/14,ms1mx3.3/32, Error ellipse: s-maj=29.5km*
*s-min=15.7km az=150.0*
**ISC 13 05:16:30.2±0.8,5°.6N±0°.2×32°.9W±0°.1,h12km,n26,**
**σ0§70/12,mb4.0/11,MS3.5/13,Central Mid-Atlantic**
**Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RCBR** | **Riachuelo** | **11.76** | **195** | LR | LR | 05 22 42.4 | |
| | comp=Z,205nm,18.4s,baz=4.5,slow=32 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **22.67** | **126** | T | T | 05 45 10.8 | |
| | baz=305,slow=75,SNR=48 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **22.68** | **126** | T | T | 05 45 10.8 | |
| | baz=305,slow=75,SNR=45 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **22.69** | **126** | T | T | 05 45 10.8 | |
| | baz=305,slow=75,SNR=53 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **23.21** | **128** | T | T | 05 45 51.5 | |
| | baz=308,slow=75,SNR=27 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **23.21** | **128** | T | T | 05 45 48.8 | |
| | baz=308,slow=75,SNR=25 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **23.22** | **128** | T | T | 05 45 51.5 | |
| | baz=308,slow=75,SNR=27 | | | | | | |
| **BDFB** | **Brasilia** | **25.91** | **215** | LR | LR | 05 30 43.1 | |
| | comp=Z,148nm,20.9s,baz=48,slow=33 | | | | | | |
| **PTGA** | **Pitinga** | **27.79** | **258** | P | **P** | **05 22 18.9** | **-0.5** |
| | 1.0nm,0.5s,baz=14,slow=8.3,SNR=3.5 | | | | | | |
| PTGA | | | | LR | LR | 05 32 29.4 | |
| | comp=Z,146nm,21.8s,baz=75,slow=35 | | | | | | |
| **DBIC** | **Dimbokro** | **27.86** | **86** | LR | LR | 05 31 09.2 | |
| | comp=Z,50nm,20.0s,baz=244,slow=32 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **28.88** | **290** | T | T | 05 52 24.0 | |
| | SNR=23 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.87** | **75** | P | **P** | **05 23 21.6** | **-0.2** |
| | 3.2nm,1.0s,baz=262,slow=9.5,SNR=12 | | | | | | |
| TORD | | | | PcP | **PcP** | **05 25 55.6** | **+0.8** |
| | 0.8nm,0.9s,baz=301,slow=3.3,SNR=5.2 | | | | | | |
| TORD | | | | LR | LR | 05 35 13.2 | |
| | comp=Z,128nm,21.4s,baz=260,slow=32 | | | | | | |
| **SIV** | **San Ignacio** | **35.22** | **232** | P | **P** | **05 23 24.7** | **0.0** |
| | 1.3nm,0.6s,baz=82,slow=9.9,SNR=3.1 | | | | | | |
| **CPUP** | **Villa Florida** | **39.64** | **216** | LR | LR | 05 39 29.7 | |
| | comp=Z,81nm,18.3s,baz=26,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **41.12** | **237** | P | **P** | **05 24 15.8** | **+0.6** |
| | 1.4nm,0.9s,baz=80,slow=7.8,SNR=5.3 | | | | | | |
| LPAZ | | | | LR | LR | 05 40 57.8 | |

HOPEN **Hopen** 4.84 35 *e*P Pn 05 41 35.4 -2.6
SNR=53
HOPEN **Hopen** 4.84 35 Pn Pn 05 41 36.0 -2.0
STEI **Steigen** 5.03 170 *e*P Pn 05 41 39.5 -1.1
STEI *e*S Sn 05 42 32.3 -5.9
STEI IAML 05 42 35.2
comp=Z,42nm,0.5s
STEI **Steigen** 5.03 170 *e*P Pn 05 41 39.5 -1.1
SNR=53
STEI *e*S Sn 05 42 32.3 -5.9
SNR=53
KTK1 **Kautokeino** 5.13 134 *e*P Pn 05 41 40.8 -1.2
KTK1 *e*S Sn 05 42 38.8 -2.0
KTK1 IAML 05 42 42.0
comp=Z,33nm,0.3s
KTK1 **Kautokeino** 5.13 134 *e*P Pn 05 41 40.8 -1.2
SNR=53
KTK1 *e*S Sn 05 42 38.8 -2.0
SNR=53
ARA0 **ARCESS Array S** 5.25 123 Pn Pn 05 41 41.3 -2.4
baz=320,slow=14
ARA0 Sn Sn 05 42 39.7 -4.2
baz=324,slow=22
ARA0 **ARCESS Array S** 5.25 123 Pn Pn 05 41 41.3 -2.4
baz=320,slow=14
ARA0 Sn Sn 05 42 39.7 -4.2
baz=324,slow=22
ARA0 **ARCESS Array S** 5.25 123 *e*Pn Pn 05 41 43.6 -0.1
ARA0 **ARCESS Array S** 5.25 123 Pn Pn 05 41 41.3 -2.4
SNR=681
ARCES **ARCESS Array B** 5.25 123 Pn Pn 05 41 41.2 -2.5
comp=Z,5.0nm,0.3s,baz=317,slow=12,SNR=174
ARCES Sn Sn 05 42 39.8 -4.1
comp=Z,15nm,0.3s,baz=319,slow=22,SNR=11
ARCES LR LR 05 44 06.0
comp=Z,231nm,21.4s,baz=326,slow=42
ARCES **ARCESS Array B** 5.25 123 P Pn 05 41 41.2 -2.5
ARCES 05 42 39.8
ARCES pmax pmax
comp=Z,5.0nm,0.3s
ARCES smax smax
comp=N,15nm,0.3s
ARE0 **ARCESS Array S** 5.25 123 *e*P Pn 05 41 41.9 -1.8
ARE0 IAML 05 42 44.8
comp=Z,34nm,0.3s
ARE0 **ARCESS Array S** 5.25 123 *e*P Pn 05 41 41.9 -1.8
SNR=53
SPB3 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.1 -2.4
SPB3 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.2 -2.4
SPB2 **Spitsbergen Ar** 5.40 8 *e*Pn Pn 05 41 43.5 -2.1
SPB2 **Spitsbergen Ar** 5.40 8 *e*Pn Pn 05 41 43.5 -2.1
SPA2 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.6 -2.1
SPA2 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.6 -2.1
SPA3 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.2 -2.5
SPA3 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.2 -2.5
SPA0 **Spitsbergen Ar** 5.40 7 Pn Pn 05 41 43.1 -2.5
baz=183,slow=16
SPA0 Sn Sn 05 42 40.5 -6.9
baz=188,slow=14
SPA0 **Spitsbergen Ar** 5.40 7 Pn Pn 05 41 43.1 -2.5
baz=183,slow=16
SPA0 Sn Sn 05 42 40.5 -6.9
baz=188,slow=14
SPA0 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.2 -2.5
SPA0 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.2 -2.5
SPA0 Sn Sn 05 42 40.5 -6.9
SNR=55
SPB4 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.3 -2.4
SPB4 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.3 -2.4
SPITS **Spitsbergen Ar** 5.40 7 Pn Pn 05 41 43.1 -2.5
baz=171,slow=16,SNR=247
SPITS LR LR 05 43 48.7
comp=Z,214nm,18.8s,baz=165,slow=38
SPA1 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.6 -2.1
SPA1 **Spitsbergen Ar** 5.40 7 *e*Pn Pn 05 41 43.6 -2.1
SPB1 **Spitsbergen Ar** 5.40 8 *e*Pn Pn 05 41 43.2 -2.5
SPB1 **Spitsbergen Ar** 5.40 8 *e*Pn Pn 05 41 43.2 -2.5
SPB5 **Spitsbergen Ar** 5.41 7 *e*Pn Pn 05 41 43.6 -2.1
SPB5 **Spitsbergen Ar** 5.41 7 *e*Pn Pn 05 41 43.7 -2.1
NIKU **Nikkaluokta** 5.43 155 P Pn 05 41 45.3 -0.8
KEV **Kevo** 5.49 118 Pn Pn 05 41 43.9 -3.0
KEV Sn Sn 05 42 43.6 -5.9
KEV **Kevo** 5.49 118 Pn Pn 05 41 43.9 -3.0
KEV Sn Sn 05 42 43.6 -5.9
KEV **Kevo** 5.49 118 *e*P Pn 05 41 45.6 -1.2
KEV **Kevo** 5.49 118 *e*Pn Pn 05 41 45.6 -1.2
KEV **Kevo** 5.49 118 Pn Pn 05 41 43.9 -3.0
KEV **Kevo** 5.49 118 *e*P Pn 05 41 45.6 -1.2
KEV **Kevo** 5.49 118 *e*P Pn 05 41 45.6 -1.2
KUJ **Kurravaara** 5.53 150 P Pn 05 41 46.8 -0.6
LANU **Lannavaara** 5.71 144 P Pn 05 41 48.7 -1.3
KBS **Kingsbay** 6.09 358 Pn Pn 05 41 52.0 -3.1
KBS Sn Sn 05 42 57.8 -6.5
KBS **Kingsbay** 6.09 358 *e*P Pn 05 41 52.2 -2.9
KBS *e*S Sn 05 42 57.8 -6.5
KBS IAML 05 43 04.8
comp=Z,25nm,0.3s
KBS **Kingsbay** 6.09 358 *e*P Pn 05 41 54.5 -0.7
KBS **Kingsbay** 6.09 358 *e*Pn Pn 05 41 54.5 -0.7
KBS **Kingsbay** 6.09 358 *e*P Pn 05 41 52.2 -2.9
SNR=53
KBS **Kingsbay** 6.09 358 *e*P Pn 05 41 54.5 -0.7
MASU **Masugnsbyn** 6.24 146 P Pn 05 41 56.9 -0.4
DUNU **Dundret** 6.33 152 P Pn 05 41 57.5 -0.8
KONS **Konsvik** 6.41 179 *e*P Pn 05 41 56.4 -3.1
KONS *e*S Sn 05 43 03.9 -8.2
KONS IAML 05 43 10.6
comp=Z,44nm,0.2s
KONS **Konsvik** 6.41 179 *e*P Pn 05 41 56.4 -3.1
SNR=51
FLOS **Flostrand** 6.57 179 *e*P Pn 05 41 59.2 -2.6
FLOS *e*S Sn 05 43 09.0 -7.2
FLOS IAML 05 43 13.7
comp=Z,47nm,0.4s
FLOS **Flostrand** 6.57 179 *e*P Pn 05 41 59.2 -2.6
SNR=51
STOK **Stokkvaagen** 6.57 180 *e*P Pn 05 41 58.6 -3.2
STOK *e*S Sn 05 43 07.0 -9.3
STOK **Stokkvaagen** 6.57 180 *e*P Pn 05 41 58.6 -3.2
SNR=51
MOR8 **Moi Rana** 6.76 175 *e*P Pn 05 42 01.2 -3.1
MOR8 *e*S Sn 05 43 13.0 -7.8
MOR8 **Moi Rana** 6.76 175 *e*P Pn 05 42 01.2 -3.1
SNR=51
JMIC **Jan Mayen** 6.92 265 Pn Pn 05 42 02.9 -3.6
comp=Z,6.0nm,0.3s,baz=90,slow=6.1,SNR=5.9
JMIC LR LR 05 43 30.6
comp=Z,34nm,18.4s,baz=34,slow=27
ERTU **Ertsjaerv** 7.10 149 P Pn 05 42 08.5 -0.5
HARU **Harads** 7.30 154 P Pn 05 42 10.9 -0.8
KALU **Kalix** 7.93 147 P Pn 05 42 19.8 -0.5
SJUU **Sjulsmark** 8.00 153 P Pn 05 42 20.3 -1.1
LILU **Lilltraesk** 8.01 159 P Pn 05 42 20.1 -1.3
NSS **Namsos** 8.39 183 *e*Pn Pn 05 42 25.1 -1.6
NSS IAML 05 44 11.1
comp=Z,13nm,0.5s
NSS **Namsos** 8.39 183 *e*Pn Pn 05 42 25.1 -1.6
SNR=55
APA0 **Apatity Array** 8.56 118 Pn Pn 05 42 25.5 -3.5
baz=317,slow=12
APA0 Sn Sn 05 43 54.5 -11
baz=328,slow=22
APA0 **Apatity Array** 8.56 118 P Pn 05 42 25.5 -3.5
baz=317,slow=12
APA0 S Sn 05 43 54.5 -11
baz=328,slow=22
APA0 **Apatity Array** 8.56 118 P Pn 05 42 25.8 -3.2
APA0 S Sn 05 43 54.0 -11
APA0 **Apatity Array** 8.56 118 P Pn 05 42 25.5 -3.5
SNR=51
APA **Apatity** 8.69 118 *i*P Pn 05 42 29.6 -1.2
APA pmax pmax
comp=Z,20nm,0.6s
APA **Apatity** 8.69 118 P Pn 05 42 27.9 -2.9
APA S Sn 05 43 57.0 -11
APA **Apatity** 8.69 118 *i* P Pn 05 42 29.6 -1.2
comp=Z,20nm,0.6s
APA **Apatity** 8.69 118 *i* P Pn 05 42 29.6 -1.2
comp=Z,20nm,0.6s
BURU **Burvik** 8.86 156 P Pn 05 42 32.5 -0.6
UMAU **Umeaa** 9.46 159 P Pn 05 42 40.2 -1.1
SOLU **Sollefteaa** 9.80 169 P Pn 05 42 43.9 -2.1
HEMU **Hemsoen** 10.42 167 P Pn 05 42 52.2 -2.2
AKN **Aaknes** 10.97 195 Pn Pn 05 42 59.0 -3.1

AKN **Aaknes** 10.97 195 *e*Pn Pn 05 43 00.3 -1.8
AKN *e* 05 44 54.0
AKN IAML 05 44 59.6
comp=Z,7.6nm,0.4s
AKN **Aaknes** 10.97 195 *e*Pn Pn 05 43 00.3 -1.8
SNR=55
NB2 **NORSAR Subarra** 11.91 184 Pn Pn 05 43 14.1 -0.8
baz=3.4,slow=11
NB2 **NORSAR Subarra** 11.91 184 Pn Pn 05 43 14.1 -0.8
baz=3.4,slow=11
NB2 **NORSAR Subarra** 11.91 184 Pn Pn 05 43 14.1 -0.8
SNR=6.1
NOA **NORSAR Array B** 11.91 184 Pn Pn 05 43 12.9 -1.9
comp=Z,0.5nm,0.3s,baz=0.7,slow=13,SNR=6.2
NOA Sn Sn 05 45 21.6 -5.5
comp=Z,0.3nm,0.3s,baz=345,slow=18,SNR=3.2
FIA0 **FINESS Array S** 12.51 150 Pn Pn 05 43 21.0 -2.0
baz=349,slow=16
FIA0 Sn Sn 05 45 30.5 -11
baz=348,slow=22
FIA0 **FINESS Array S** 12.51 150 Pn Pn 05 43 21.0 -2.0
baz=349,slow=16
FIA0 Sn Sn 05 45 30.5 -11
baz=348,slow=22
FIA0 **FINESS Array S** 12.51 150 Pn Pn 05 43 21.0 -2.0
SNR=1.8
FINES **FINESS Array B** 12.51 150 Pn Pn 05 43 21.1 -1.8
comp=Z,1.4nm,0.3s,baz=354,slow=12,SNR=23
FINES Sn Sn 05 45 32.1 -10
comp=Z,0.7nm,0.3s,baz=345,slow=20,SNR=3.2
FINES LR LR 05 48 05.0
comp=Z,43nm,18.5s,baz=297,slow=37
HFS **Hagfors** 12.80 178 Pn Pn 05 43 24.9 -2.1
baz=356,slow=12
HFS Sn Sn 05 45 38.2 -11
baz=11,slow=22
HFS **Hagfors** 12.80 178 Pn Pn 05 43 24.9 -2.1
baz=356,slow=12
HFS Sn Sn 05 45 38.2 -11
baz=11,slow=22
HFS **Hagfors** 12.80 178 Pn Pn 05 43 24.5 -2.5
comp=Z,0.6nm,0.3s,baz=356,slow=11,SNR=12
HFS Sn Sn 05 45 37.2 -12
comp=Z,0.4nm,0.3s,baz=6.1,slow=20,SNR=3.0
HFS **Hagfors** 12.80 178 Pn Pn 05 43 24.9 -2.1
SNR=2.0
VSU **Vasula** 15.47 152 *e*P Pn 05 43 53.1 -10
VSU pmax pmax
comp=Z,51nm,1.1s
KLMR **Klimovskoe** 15.73 126 *e*P Pn 05 43 58.6 -7.8
KLMR pmax pmax
comp=Z,21nm,0.9s
EKA **Eskdalemuir Ar** 18.83 209 P P 05 44 42.9 -1.8
baz=17,slow=11,SNR=2.5
OBN **Obninsk** 20.33 139 P P 05 45 00.2 -0.7
comp=Z,19nm,0.4s,baz=3.6,slow=15,SNR=5.2
OBN LR LR 05 53 27.3
comp=Z,85nm,18.3s,baz=24,slow=38
OBN **Obninsk** 20.33 139 *ce*P P 05 45 01.4 +0.4
OBN pmax pmax
comp=Z,18nm,0.6s
OBN **Obninsk** 20.33 139 *e*P P 05 45 01.4 +0.4
comp=Z,18nm,0.6s
CLL **Collm** 21.65 180 *e*P P 05 45 19.0 +3.8
CLL *i* 05 45 23.3
CLL pmax pmax
comp=Z,8.0nm,1.4s
CLL **Collm** 21.65 180 *e*P P 05 45 19.0 +3.8
comp=Z,8.0nm,1.4s
CLL *i* sP **sP** 05 45 23.3 +1.5
comp=Z,17nm,1.3s
DPC **Dobruska-Polom** 22.65 174 *e*P P 05 45 29.6 +3.5
DPC *e* 05 45 34.8
DPC **Dobruska-Polom** 22.65 174 *e*P P 05 45 29.6 +3.5
DPC *ex* x 05 45 34.8
NKC **Novy Kostel** 22.72 181 *e*P P 05 45 35.6 +8.8
NKC **Novy Kostel** 22.72 181 *e*P P 05 45 35.6 +8.8
OJC **Ojcow** 22.93 169 *e*P P 05 45 34.3 +5.3
OJC pmax pmax
comp=Z,27nm,1.3s
OJC **Ojcow** 22.93 169 *e*P P 05 45 34.3 +5.3
comp=Z,27nm,1.3s
KRLC **Kraliky** 22.94 174 *e*P P 05 45 34.2 +5.1
KRLC **Kraliky** 22.94 174 *e*P P 05 45 34.2 +5.1
PRU **Pruhonice** 22.98 177 *e*P P 05 45 37.4 +8.0
PRU **Pruhonice** 22.98 177 *e*P P 05 45 37.4 +8.0
GOPC **GO Pecny, Ondr** 23.05 177 *e*P P 05 45 34.5 +4.3
GOPC *e* 05 45 39.3
GOPC **GO Pecny, Ondr** 23.05 177 *e*P P 05 45 34.5 +4.3
GOPC *ex* x 05 45 39.3
LPSR **Galich'ya Gora** 23.17 137 *e*P P 05 45 31.7 +0.4
LPSR pmax pmax
comp=Z,30nm,0.8s
LPSR pmax pmax
comp=N,10.0nm,0.7s
LPSR pmax pmax
comp=E,40nm,1.5s
LPSR **Galich'ya Gora** 23.17 137 *e*P P 05 45 31.7 +0.4
comp=E,10.0nm,0.7s
MORC **Moravsky Berou** 23.27 172 *e*P P 05 45 39.0 +6.6
MORC pmax pmax
comp=Z,40nm,1.2s
MORC **Moravsky Berou** 23.27 172 *i*P P 05 45 34.3 +1.9
MORC **Moravsky Berou** 23.27 172 *e*P P 05 45 39.0 +6.6
comp=Z,40nm,1.2s
GRF **Grafenberg Arr** 23.28 183 *e*P P 05 45 41.4 +8.9
comp=Z,21nm,1.9s,baz=1.3,slow=9.3
AKASG **Malin Array Be** 23.37 153 P P 05 45 31.6 -1.8
comp=Z,3.9nm,0.7s,baz=345,slow=9.2,SNR=6.2
AKASG **Malin Array Be** 23.37 153 *ce*P P 05 45 35.9 +2.6
AKASG pmax pmax
comp=Z,9.0nm,0.6s
AKASG **Malin Array Be** 23.37 153 *e*P P 05 45 35.9 +2.6
comp=Z,9.0nm,0.6s
KIEV **Kiev** 23.37 153 *e*P P 05 45 35.2 +1.8
KIEV pmax pmax
comp=Z,6.0nm,0.8s
KIEV **Kiev** 23.37 153 *e*P P 05 45 35.5 +2.2
comp=Z,14nm,0.6s
KIEV **Kiev** 23.37 153 *e*P P 05 45 35.2 +1.8
comp=Z,6.0nm,0.8s
AK11 **Malin Array Si** 23.38 153 *e*P P 05 45 36.7 +3.2
KHC **Kasperske Hory** 23.83 179 *e*P P 05 45 44.2 +6.3
KHC *e* 05 45 48.3
KHC **Kasperske Hory** 23.83 179 *e*P P 05 45 44.2 +6.3
KHC *ex* x 05 45 48.3
STHS **Stebnicka Huta** 23.83 167 *e*P P 05 45 40.0 +2.1
STHS **Stebnicka Huta** 23.83 167 *e*P P 05 45 40.0 +2.1
STHS **Stebnicka Huta** 23.83 167 *e*P P 05 45 40.0 +2.1
GERES **GERESS Array B** 24.11 179 P P 05 45 41.5 +0.8
comp=Z,0.5nm,0.2s,baz=10,slow=8.1,SNR=4.8
GERES **GERESS Array B** 24.11 179 P P 05 45 41.5 +0.8
GERES pmax pmax
comp=Z,1.0nm,0.2s
KOLS **Kolonicke sedl** 24.38 165 *e*P P 05 45 43.8 +0.8
KOLS **Kolonicke sedl** 24.38 165 *e*P P 05 45 43.8 +0.8
KOLS **Kolonicke sedl** 24.38 165 *e*P P 05 45 43.8 +0.8
VSR **Storozhevoye** 24.53 138 *e*P P 05 45 45.4 +1.1
VSR pmax pmax
comp=Z,10.0nm,0.5s
VSR pmax pmax
comp=N,40nm,1.2s
VSR pmax pmax
comp=E,20nm,0.8s
VSR **Storozhevoye** 24.53 138 *e*P P 05 45 45.4 +1.1
comp=E,40nm,1.2s
ARU **Arti** 24.59 107 P P 05 45 45.7 +0.8
comp=E,1.8nm,0.2s,baz=287,slow=20,SNR=2.5
ARU LR LR 05 56 28.1
comp=E,37nm,20.5s,baz=294,slow=39
ARU **Arti** 24.59 107 *d i*P P 05 45 45.3 +0.5
ARU S S 05 50 07.7 +2.9
ARU pmax pmax
comp=Z,10.0nm,1.2s
ARU **Arti** 24.59 107 *e*P P 05 45 44.8 -0.1
ARU **Arti** 24.59 107 *i* P P 05 45 45.3 +0.5
comp=Z,10.0nm,1.2s
ARU S S 05 50 07.7 +2.9
VYHS **Vyhne** 24.61 171 *e*P P 05 45 46.9 +1.8
VYHS **Vyhne** 24.61 171 *e*P P 05 45 46.9 +1.8
VYHS **Vyhne** 24.61 171 *e*P P 05 45 46.9 +1.8
UZH **Uzhgorod** 24.68 165 *e*P P 05 45 47.7 +2.0
UZH **Uzhgorod** 24.68 165 *e*P P 05 45 47.7 +2.0
BFO **Black Forest** 24.71 187 *e*P P 05 45 54.7 +8.6
BFO pmax pmax
comp=Z,33nm,1.8s

BFO **Black Forest** 24.71 187 *e*P P 05 45 54.7 +8.6
comp=Z,33nm,1.8s
VORD **Divnogorie** 24.79 138 *e*P P 05 45 47.1 +0.4
VORD pmax pmax
comp=Z,10.0nm,1.0s
VORD pmax pmax
comp=N,30nm,0.9s
VORD pmax pmax
comp=E,20nm,0.9s
VORD **Divnogorie** 24.79 138 *e*P P 05 45 47.1 +0.4
comp=E,10.0nm,1.0s
VRH **Novokhopyorsk** 25.07 134 *e*P P 05 45 49.6 +0.5
VRH pmax pmax
comp=Z,20nm,0.8s
VRH pmax pmax
comp=N,50nm,0.7s
VRH pmax pmax
comp=E,20nm,0.6s
VRH **Novokhopyorsk** 25.07 134 *e*P P 05 45 49.6 +0.5
comp=E,50nm,0.7s
BUR04 **Bucovina Ar. S** 25.94 161 *e*P P 05 45 57.9 +0.6
BURAR **Bucovina Array** 25.95 161 ⇑ *i*P P 05 45 58.4 +1.1
MLR **Muntele Rosu** 28.12 160 ⇓ *i*P P 05 46 20.9 +4.0
FRB **Frobisher Bay** 28.97 295 LR LR 05 56 41.4
comp=E,42nm,18.5s,baz=336,slow=34
AKTK **Aktyubinsk** 29.76 114 P P 05 46 31.9 +0.7
comp=E,133nm,18.0s
AKTO **Aktyubinsk** 29.76 114 P P 05 46 31.9 +0.7
comp=E,3.8nm,0.6s,baz=339,slow=8.2,SNR=13
AKTO LR LR 05 59 40.7
comp=E,133nm,18.0s,baz=354,slow=39
AKTO **Aktyubinsk** 29.76 114 P P 05 46 31.9 +0.7
AKTO pmax pmax
comp=Z,4.0nm,0.6s
AKTO MLR MLR
comp=Z,133nm,18.0s
BRVK **Borovoye** 30.90 98 ⇑ *e*P P 05 46 42.6 +1.3
BRVK pmax pmax
comp=Z,2.0nm,0.7s
BRVK **Borovoye** 30.90 98 *e*P P 05 46 42.6 +1.3
comp=Z,2.0nm,0.7s
ABKAR **Akbulak array** 31.35 113 *e*P P 05 46 45.9 +0.6
comp=Z,6.5nm,0.6s
KBZ **Khabaz** 32.43 138 P P 05 46 56.0 +1.2
comp=Z,1.0nm,0.5s,baz=320,slow=7.9,SNR=2.6
KBZ **Khabaz** 32.43 138 P P 05 46 56.0 +1.2
KBZ pmax pmax
comp=Z,1.0nm,0.5s
NVS **Novosibirsk** 33.18 84 *e*P P 05 47 09.9 +8.7
ESDC **Sonseca Array** 34.30 203 P P 05 47 11.2 0.0
comp=Z,0.3nm,0.3s,baz=348,slow=6.5,SNR=4.1
ZAA0 **Zalesovo Array** 34.42 84 *e*P P 05 47 13.6 +1.6
ZALV **Zalesovo Beam** 34.42 84 P P 05 47 12.8 +0.8
comp=Z,1.8nm,0.8s,baz=327,slow=11,SNR=5.5
ZALV LR LR 06 03 57.8
comp=Z,55nm,21.8s,baz=250,slow=41
ZALV **Zalesovo Beam** 34.42 84 P P 05 47 12.8 +0.8
ZALV pmax pmax
comp=Z,2.0nm,0.8s
ZALV MLR MLR
comp=Z,55nm,21.8s
BR231 **Keskin MP Arra** 34.50 153 *e*P P 05 47 15.9 +2.9
BRTR **Keskin Array B** 34.74 151 P P 05 47 16.5 +1.4
comp=Z,1.3nm,0.5s,baz=340,slow=7.0,SNR=4.5
BRTR **Keskin Array B** 34.74 151 *ce*P P 05 47 19.0 +3.9
BRTR pmax pmax
comp=Z,1.0nm,0.5s
SCHQ **Schefferville** 35.96 284 P P 05 47 23.8 -1.6
comp=Z,1.5nm,0.5s,baz=52,slow=15,SNR=3.4
SCHQ LR LR 06 00 15.5
comp=Z,62nm,19.2s,baz=288,slow=33
COLD **Coldfoot** 39.70 350 *e*P P 05 47 57.6 +0.9
comp=Z,9.2nm,1.2s
COLD **Coldfoot** 39.70 350 *e*P P 05 47 57.6 +0.9
comp=Z,9.2nm,1.2s
KKAR **Karatay Array** 39.94 106 *e*P P 05 48 01.1 +2.1
KKAR **Karatay Array** 39.94 106 *e*P P 05 48 01.1 +2.1
KKAR **Karatay Array** 39.94 106 *e*P P 05 48 01.1 +2.1
MKAR **Makanchi Array** 40.02 91 P P 05 48 01.1 +1.5
comp=Z,1.0nm,0.5s,baz=343,slow=7.0,SNR=7.6
MKAR LR LR 06 07 27.8
comp=Z,49nm,20.6s,baz=357,slow=40
MKAR **Makanchi Array** 40.02 91 P P 05 48 01.1 +1.5
MKAR pmax pmax
comp=Z,1.0nm,0.5s
MKAR MLR MLR
comp=Z,49nm,20.6s
YKA **Yellowknife Ar** 40.36 325 P P 05 48 01.6 -0.5
comp=Z,1.2nm,0.6s,baz=16,slow=8.8,SNR=4.3
YKA **Yellowknife Ar** 40.36 325 P P 05 48 01.6 -0.5
YKA pmax pmax
comp=Z,1.0nm,0.6s
MNAS **Manas** 41.08 104 P P 05 48 10.9 +2.4
MNAS pmax pmax
comp=Z,4.0nm,1.0s
MNAS **Manas** 41.08 104 P P 05 48 10.9 +2.4
comp=Z,4.0nm,1.0s
EKS2 **Erkin-Say** 41.28 103 *e*P P 05 48 11.9 +1.7
EKS2 pmax pmax
comp=Z,5.0nm,1.1s
EKS2 **Erkin-Say** 41.28 103 *e*P P 05 48 11.9 +1.7
comp=Z,5.2nm,1.1s
EKS2 **Erkin-Say** 41.28 103 *e*P P 05 48 11.9 +1.7
comp=Z,5.0nm,1.1s
GEYT **Alibeck** 41.42 122 P P 05 48 12.9 +1.6
comp=Z,11nm,0.5s,baz=322,slow=9.4,SNR=12
AAK **Ala-Archa** 41.52 102 ⇑ *i*P P 05 48 15.6 +3.4
AAK pmax pmax
comp=Z,21nm,3.9s
EGAK **Eagle** 41.52 344 *e*P P 05 48 12.3 +0.6
comp=Z,20nm,1.4s
EGAK **Eagle** 41.52 344 *e*P P 05 48 12.3 +0.6
comp=Z,20nm,1.4s
TKM2 **Tokmak 2** 41.57 101 *e*P P 05 48 14.5 +1.8
TKM2 pmax pmax
comp=Z,15nm,1.2s
TKM2 **Tokmak 2** 41.57 101 *e*P P 05 48 14.4 +1.8
comp=Z,14nm,1.2s
TKM2 **Tokmak 2** 41.57 101 *e*P P 05 48 14.5 +1.8
comp=Z,15nm,1.2s
COLA **College** 41.91 348 P P 05 48 15.5 +0.6
COLA pmax pmax
comp=Z,4.0nm,1.3s
COLA **College** 41.91 348 P P 05 48 15.5 +0.6
comp=Z,4.0nm,1.3s
COLA **College** 41.91 348 P P 05 48 15.5 +0.6
comp=Z,4.0nm,1.3s
IL1 **Eielson Array** 41.95 347 *e*P P 05 48 15.6 +0.4
ILAR **Eielson Array** 41.95 347 P P 05 48 16.0 +0.7
comp=Z,3.6nm,0.9s,baz=0.9,slow=7.0,SNR=38
ILAR **Eielson Array** 41.95 347 P P 05 48 16.0 +0.7
ILAR pmax pmax
comp=Z,4.0nm,0.9s
DOT **Dot Lake** 42.86 345 *e*P P 05 48 24.1 +1.4
comp=Z,21nm,1.0s
DZET **Dzherino** 43.45 110 P P 05 48 30.3 +2.5
DZET **Dzherino** 43.45 110 P P 05 48 30.3 +2.5
CAST **Castle Rocks** 43.60 350 *e*P P 05 48 30.2 +1.6
comp=Z,19nm,1.3s
WMQ **Urumqi** 44.32 88 P P 05 48 38.0 +3.3
WMQ sP sP 05 48 45.0 +3.4
WMQ PP **PcP** **05 50 23.0 +4.4**
WMQ S **S** **05 55 12.0 +4.2**
WMQ SS **SS** **05 58 21.0 -4.9**
WMQ PMZ
comp=Z,10.0nm,1.0s
WMQ PMZ
comp=Z,22nm,4.0s
WMQ LN
comp=Z,24nm,16.0s
WMQ LE
comp=Z,26nm,15.0s
WMQ LZ
comp=Z,38nm,14.0s
KSH **Kashi** 44.82 102 *e*P P 05 48 45.0 +6.1
KSH *ep*P pP 05 48 49.6 +5.8
KSH *e*ScP **ScP** **05 54 13.3 +1.7**
KSH PcS **PcS** **05 54 18.4 +4.3**
KSH S S 05 55 23.1 +7.8
KSH PMZ
comp=Z,60nm,4.9s
KSH LN
comp=Z,140nm,6.7s
KSH LE
comp=Z,78nm,4.9s
KSH LZ

comp=Z,95nm,5.9s
**FFC Flin Flon 45.13 312 P P 05 48 41.6 +0.6**
**FFC Flin Flon 45.13 312 P P 05 48 41.6 +0.6**
**SONA1 Songino Array 46.06 69 eP P 05 48 49.5 +0.9**
**SONM Songino Array 46.07 69 P P 05 48 50.2 +1.6**
comp=Z,1.2nm,0.6s,baz=327,slow=8.8,SNR=6.3
**SONM Songino Array 46.07 69 P P 05 48 50.2 +1.6**
SONM pmax pmax
comp=Z,1.0nm,0.6s
**ULN Ulaanbaatar 46.22 68↓ eP P 05 48 51.9 +2.0**
ULN pmax pmax
comp=Z,3.0nm,0.8s
**ULN Ulaanbaatar 46.22 68 eP P 05 48 51.8 +1.9**
comp=Z,4.2nm,1.0s
**ULN Ulaanbaatar 46.22 68 eP P 05 48 51.9 +2.0**
comp=Z,3.0nm,0.8s
**ULM Lac du Bonnet 47.87 305 LR LR 06 09 42.1**
comp=Z,42nm,18.7s,baz=334,slow=37
**GTA Gaotai 51.94 79 eP P 05 49 36.4 +2.7**
GTA pP **pP 05 49 40.9 +2.2**
GTA sP sP 05 49 43.5 +2.8
GTA PMZ
comp=Z,3.0nm,0.8s
**HHC Hu-ho-hao-te 53.94 68 eP P 05 49 49.6 +1.2**
HHC S **S 05 57 22.3 -0.6**
HHC sS **sS 05 57 32.1 +0.9**
HHC PMZ
comp=Z,32nm,1.0s
HHC PMZ
comp=Z,87nm,4.7s
HHC LN
comp=Z,88nm,13.7s
HHC LE
comp=Z,93nm,12.9s
HHC LZ
comp=Z,84nm,15.7s
**CN2 Changchun 54.78 55 eP P 05 49 55.8 +1.5**
CN2 PMZ
comp=Z,10.0nm,0.5s
**MSO Missoula 55.09 318 eP P 05 49 57.0 +0.2**
comp=Z,9.5nm,1.3s
**LZH Lanzhou 56.19 77 eP P 05 50 07.5 +2.7**
LZH pP **pP 05 50 11.6 +1.7**
LZH sP **sP 05 50 13.3 +1.5**
LZH PMZ
comp=Z,15nm,1.0s
**HAWA Hanford 56.58 322 eP P 05 50 07.5 +0.2**
comp=Z,8.2nm,1.1s
**IMW Indian Meadow 57.29 315 eP P 05 50 13.0 +0.3**
comp=Z,3.6nm,0.9s
**HLID Hailey 58.32 317 eP P 05 50 19.5 -0.3**
comp=Z,3.2nm,1.0s
**I07A Izee 58.80 322 eP P 05 50 24.1 +1.0**
comp=Z,55nm,2.6s
**TOA0 Torodi Ar. Sit 60.07 193 eP P 05 50 33.0 +1.0**
**TORD Torodi Ar. Bea 60.07 193 P P 05 50 32.5 +0.6**
comp=Z,1.2nm,1.1s,baz=336,slow=6.9,SNR=4.9
**CD2 Chengdu 61.01 79 eP P 05 50 38.1 -0.2**
CD2 pP **pP 05 50 42.5 -0.9**
CD2 PP **PP 05 52 52.1 -0.2**
CD2 PcS **PcS 05 55 24.4 +0.2**
CD2 S **S 05 58 55.8 -0.1**
CD2 sS **sS 05 59 03.8 -0.5**
CD2 SS **SS 06 02 56.1 +1.3**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**KSRS Korea Array 61.39 55 LR LR 06 20 44.9**
comp=Z,50nm,19.2s,baz=135,slow=39
**R11A Troy Canyon, C 63.58 317 eP P 05 50 55.6 +0.1**
comp=Z,11nm,2.0s
**NV01 Mina Array Sit 64.04 319 eP P 05 50 58.7 0.0**
**NVAR Mina Array Bea 64.04 319 P P 05 50 58.8 +0.1**
comp=Z,1.2nm,0.8s,baz=20,slow=5.5,SNR=8.9
**NJ2 Nanjing 64.18 65 eP P 05 51 03.3 +4.0**
NJ2 PMZ
comp=Z,20nm,0.6s
**WHN Wuhan 64.37 70 P P 05 51 01.6 +1.0**
**ANMO Albuquerque 64.85 308↓ eP P 05 51 03.8 -0.1**
ANMO pmax pmax
comp=Z,3.0nm,1.7s
**ANMO Albuquerque 64.85 308 eP P 05 51 03.8 -0.1**
comp=Z,3.0nm,1.7s
**TPNV Topopah Spring 65.06 317 eP P 05 51 04.8 -0.5**
TPNV pmax pmax
comp=Z,75nm,2.9s
**TPNV Topopah Spring 65.06 317 eP P 05 51 04.8 -0.5**
comp=Z,75nm,2.9s
**TPNV Topopah Spring 65.06 317 eP P 05 51 04.8 -0.5**
comp=Z,75nm,2.9s
**KMI Kunming 66.15 82 P P 05 51 14.8 +2.3**
KMI PMZ
comp=Z,12nm,1.0s
KMI PMZ
comp=Z,70nm,4.4s
**WLHM Little Horse 66.25 318 eP P 05 51 14.1 +1.0**
**RCWM Renegade Canyo 66.31 318 eP P 05 51 14.1 +0.9**
**ISA Isabella 66.75 318 eP P 05 51 16.6 +0.6**
ISA pmax pmax
comp=Z,3.0nm,0.8s
**ISA Isabella 66.75 318 eP P 05 51 16.6 +0.6**
comp=Z,2.6nm,0.8s
**ISA Isabella 66.75 318 eP P 05 51 16.6 +0.6**
comp=Z,3.0nm,0.8s
**DBIC Dimbokro 67.02 199 LR LR 06 26 26.8**
comp=Z,26nm,18.4s,baz=58,slow=41
**TXAR Lajitas Array 69.54 304 P P 05 51 32.1 -1.5**
comp=Z,0.7nm,0.8s,baz=56,slow=4.1,SNR=7.8
**TXAR Lajitas Array 69.54 304 P P 05 51 32.2 -1.5**
TXAR pmax pmax
comp=Z,1.0nm,0.9s
**WRA Warramunga Arr 117.97 65 PKP PKPdf 05 59 09.9 -1.3**
comp=Z,0.3nm,0.8s,baz=316,slow=2.2,SNR=3.4
**ASAR Alice Springs 121.39 67 PKP PKPdf 05 59 16.8 -1.0**
comp=Z,1.2nm,0.8s,baz=359,slow=2.4,SNR=13
**ASAR Alice Springs 121.39 67 PKIKP PKPdf 05 59 16.8 -1.0**
ASAR pmax pmax
comp=Z,1.0nm,0.8s
**VNA2 Neumayer--Watz 144.16 191 P PKPab 05 59 56.5 0.0**
baz=16,slow=4.4
**VNA3 Neumayer Olymp 144.62 192 P PKPab 05 59 57.8 -0.4**
**SNAA Sanae 144.67 189 P PKPab 05 59 58.1 -0.4**

*ISCJB **13** 05:52:49.4±1.2,27.˚50S±0.˚06×69.˚38W±0.˚06, h130km±12km, Error ellipse: s-maj=11.3km s-min=7.7km az=42.5*
*SJA **13** 05:52:50.5±0.8,27.˚59S×69.˚10W,h163km±7km, ML2.9*
*GUC **13** 05:52:50.5±0.6,27.˚50S×69.˚21W,h87km±17km, ML3.1*
**ISC 13 05:52:48.2±2.5,27.˚41S±0.˚08×69.˚36W±0.˚06, h138km±21km,n11,σ1§51/22,3D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPCH** | **Copiapo** | **0.89** | **273** | *i*↓P | **Pn** | **05 53 10.6** | **-0.3** |
| CPCH | | | | *i* S | **Sn** | **05 53 25.9** | **-2.2** |
| **CDCH** | **Caldera** | **1.35** | **284** | *e*P | **Pn** | **05 53 16.9** | **+1.6** |
| CDCH | | | | *i* S | **Sn** | **05 53 35.8** | **0.0** |
| **VCA** | **Vinchina** | **1.66** | **143** | *i* P | **Pn** | **05 53 20.5** | **+1.6** |
| VCA | | | | *i* S | **Sn** | **05 53 43.5** | **+1.2** |
| VCA | | | | AML | AML | 05 53 44.7 | |
| comp=Z,101nm,0.2s | | | | | | | |
| **VACH** | **Vallenar** | **1.70** | **227** | *i*↓P | **Pn** | **05 53 19.8** | **+0.7** |
| VACH | | | | *i* S | **Sn** | **05 53 42.0** | **-0.8** |
| **LCO** | **Las Campanas** | **1.99** | **216** | *i*↓P | **Pn** | **05 53 23.4** | **+0.7** |
| LCO | | | | *i* S | **Sn** | **05 53 48.9** | **-0.3** |
| LCO | | | | AML | AML | 05 53 49.7 | |
| comp=N,155nm,0.4s | | | | | | | |
| **AGUA** | **GUANDACOL** | **2.20** | **160** | *i* P | **Pn** | **05 53 26.8** | **+1.6** |
| AGUA | | | | *i* S | **Sn** | **05 53 53.6** | **-0.1** |
| **TLL** | **Tololo Astrono** | **3.02** | **205** | *e*P | **Pn** | **05 53 36.3** | **+0.7** |
| TLL | | | | *e*S | **Sn** | **05 54 11.9** | **-0.5** |
| TLL | | | | AML | AML | 05 54 14.6 | |
| comp=E,52nm,0.1s | | | | | | | |
| **CYA** | **Choya** | **3.31** | **109** | *i* P | **Pn** | **05 53 40.2** | **+1.0** |
| CYA | | | | AML | AML | 05 53 40.6 | |
| comp=Z,18nm,0.3s | | | | | | | |
| CYA | | | | *i* S | **Sn** | **05 54 15.7** | **-2.8** |
| **AMOG** | **MOGNA** | **3.59** | **168** | *i* P | **Pn** | **05 53 43.7** | **+0.8** |
| AMOG | | | | *i* S | **Sn** | **05 54 23.6** | **-1.7** |
| **AVFE** | **Valle Fertil** | **3.64** | **153** | *i* P | **Pn** | **05 53 44.6** | **+1.1** |
| AVFE | | | | *i* S | **Sn** | **05 54 24.1** | **-2.2** |
| AVFE | | | | AML | AML | 05 54 25.1 | |
| comp=Z,22nm,0.4s | | | | | | | |

**CFAA Coronel Fontan 4.29 167** *i* P **Pn 05 53 53.1 +1.1**
CFAA *i* S **Sn 05 54 39.5 -2.1**

*BJI **13** 05:58:56.0,13.˚86N×147.˚03E,h15km, mb4.7/41, mB4.9/30, Ms4.4/30, Ms7 4.1/31*
*ISCJB **13** 05:58:59.2±1.5,14.˚05N±0.˚04×146.˚86E±0.˚04, h21km±10km, mb4.7/56, MS3.9/25, Error ellipse: s-maj=7.3km s-min=6.6km az=39.9*
*MOS **13** 05:59:01.4±1.0,14.˚05N×146.˚83E, h38km, mb5.1/19, Error ellipse: s-maj=12.9km s-min=7.8km az=118.5*
*NEIC **13** 05:59:03.0±4.1,14.˚03N×146.˚83E, h35km±29km, mb4.9/22, Error ellipse: s-maj=9.4km s-min=5.8km az=85.0*
*IDC **13** 05:59:04.8±0.6,14.˚07N×146.˚79E,h53km±4km, mb4.3/18, mb1 4.4/19, mb1mx4.3/32, mbtmp4.6/19, MS3.8/21, Ms1 3.8/21, ms1mx3.7/26, Error ellipse: s-maj=12.8km s-min=6.8km az=154.0*
**ISC 13 05:59:02.2±0.5,14.˚01N±0.˚05×146.˚75E±0.˚06, h27km±2km, h27km:pP-P,n153,σ1§43/174,mb4.8/56,MS3.8/25,4C-2D, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.88** | **257** | P | **Pn** | **05 59 33.2** | **+0.7** |
| 1μm,0.3s,baz=117,slow=5.8,SNR=381 | | | | | | | |
| GUMO | | | | S | **Sb** | **05 59 58.5** | **-0.4** |
| 1μm,0.3s,baz=326,slow=22,SNR=37 | | | | | | | |
| GUMO | | | | LR | LR | 06 01 06.7 | |
| comp=Z,1μm,18.1s,baz=66,slow=63 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **19.65** | **74** | T | T | 06 23 49.1 | |
| baz=253,slow=75,SNR=4.4 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.66** | **74** | T | T | 06 23 46.7 | |
| baz=253,slow=75,SNR=3.0 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.66** | **74** | T | T | 06 23 50.8 | |
| baz=253,slow=75,SNR=7.3 | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **20.05** | **343** | P | **P** | **06 03 33.0** | **-0.2** |
| 10nm,0.3s,baz=70,slow=19,SNR=2.9 | | | | | | | |
| JHJ | | | | LR | LR | 06 10 28.8 | |
| comp=Z,374nm,18.8s,baz=256,slow=34 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **20.08** | **71** | T | T | 06 23 11.7 | |
| baz=256,slow=75,SNR=2.8 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **20.09** | **71** | T | T | 06 23 14.5 | |
| baz=256,slow=75,SNR=6.3 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **20.10** | **71** | T | T | 06 23 15.0 | |
| baz=256,slow=75,SNR=9.0 | | | | | | | |
| **SIJI** | **Sorong** | **21.31** | **227** | P | **P** | **06 03 48.9** | **+1.8** |
| 40nm,0.8s,baz=37,slow=10,SNR=29 | | | | | | | |
| **JOW** | **Kunigami** | **21.47** | **309** | P | **P** | **06 03 49.8** | **+1.0** |
| 1.0nm,0.4s,baz=101,slow=18,SNR=13 | | | | | | | |
| **FAKI** | **Fak Fak** | **22.13** | **222** | *e*P | **P** | **06 03 58.1** | **+2.2** |
| 49nm,1.0s | | | | | | | |
| **PMG** | **Port Moresby** | **23.27** | **179** | *e*P | **P** | **06 04 06.5** | **-1.3** |
| PMG | | | | pmax | pmax | | |
| comp=Z,353nm,0.9s | | | | | | | |
| **PMG** | **Port Moresby** | **23.27** | **179** | *e*P | **P** | **06 04 06.2** | **-1.6** |
| comp=Z,116nm,1.1s | | | | | | | |
| **MAJO** | **Matsushiro** | **23.70** | **343** | *e*P | **P** | **06 04 12.9** | **+1.0** |
| **MAJO** | **Matsushiro** | **23.70** | **343** | P | **P** | **06 04 10.8** | **-1.1** |
| **JNU** | **Nakatsue** | **23.89** | **325** | P | **P** | **06 04 13.2** | **-0.6** |
| comp=Z,26nm,0.8s,baz=116,slow=2.6,SNR=22 | | | | | | | |
| JNU | | | | LR | LR | 06 13 09.1 | |
| comp=Z,118nm,18.8s,baz=129,slow=35 | | | | | | | |
| **JNU** | **Nakatsue** | **23.89** | **325** | *e*P | **P** | **06 04 13.1** | **-0.6** |
| comp=Z,31nm,0.8s | | | | | | | |
| **YULB** | **Yu-li** | **25.82** | **295** | *e*P | **P** | **06 04 32.6** | **+1.2** |
| comp=Z,9.8nm,0.8s | | | | | | | |
| **SSLB** | **Suanglung** | **26.23** | **296** | *e*P | **P** | **06 04 37.5** | **+2.3** |
| comp=Z,19nm,0.9s | | | | | | | |
| **HNR** | **Honiara** | **26.72** | **150** | LR | LR | 06 14 14.0 | |
| comp=Z,205nm,19.0s,baz=322,slow=34 | | | | | | | |
| **COEN** | **Coen** | **28.02** | **187** | *e*P | **P** | **06 04 51.4** | **+0.2** |
| comp=Z,12nm,0.9s | | | | | | | |
| **TJN** | **Taejon** | **28.24** | **326** | *ce*P | **P** | **06 04 52.6** | **-0.4** |
| **KSRS** | **Korea Array** | **28.74** | **328** | P | **P** | **06 04 56.6** | **-0.8** |
| comp=Z,12nm,0.7s,baz=143,slow=9.5,SNR=18 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.75** | **328** | P | **P** | **06 04 56.6** | **-0.9** |
| **KSAR** | **Wonju Array Be** | **28.75** | **328** | P | **P** | **06 04 56.6** | **-0.9** |
| **KS01** | **Wonju Array Si** | **28.77** | **328** | *e*P | **P** | **06 04 59.3** | **+1.6** |
| **MTN** | **Manton Dam** | **30.85** | **211** | *e*P | **P** | **06 05 16.4** | **+0.2** |
| comp=Z,35nm,1.0s | | | | | | | |
| **NJ2** | **Nanjing** | **31.18** | **310** | *e*P | **P** | **06 05 19.1** | **0.0** |
| NJ2 | | | | PMZ | | | |
| comp=Z,40nm,0.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **32.62** | **340** | P | **P** | **06 05 30.0** | **-1.6** |
| comp=Z,1.6nm,0.8s,baz=182,slow=7.2,SNR=4.3 | | | | | | | |
| USRK | | | | LR | LR | 06 17 13.2 | |
| comp=Z,210nm,21.0s,baz=145,slow=33 | | | | | | | |
| **MDJ** | **Mudanjiang** | **33.82** | **338** | P | **P** | **06 05 43.4** | **+1.3** |
| MDJ | | | | pP | **pP** | **06 05 49.5** | **-0.7** |
| MDJ | | | | sP | **sP** | **06 05 52.3** | **-1.2** |
| MDJ | | | | PP | **PP** | **06 06 59.6** | **+0.7** |
| MDJ | | | | S | **S** | **06 11 06.0** | **+1.5** |
| MDJ | | | | sS | **sS** | **06 11 18.4** | **+0.6** |
| MDJ | | | | PMZ | | | |
| comp=Z,5.0nm,0.4s | | | | | | | |
| MDJ | | | | PMZ | | | |
| comp=Z,23nm,4.5s | | | | | | | |
| MDJ | | | | LN | | | |
| comp=Z,130nm,17.2s | | | | | | | |
| MDJ | | | | LE | | | |
| comp=Z,130nm,18.0s | | | | | | | |
| MDJ | | | | LZ | | | |
| comp=Z,220nm,16.7s | | | | | | | |
| **WHN** | **Wuhan** | **34.04** | **304** | P | P | 06 05 40.0 | -4.1 |
| WHN | | | | LN | | | |
| comp=Z,170nm,10.0s | | | | | | | |
| WHN | | | | LE | | | |
| comp=Z,220nm,10.4s | | | | | | | |
| WHN | | | | LZ | | | |
| comp=Z,360nm,14.4s | | | | | | | |
| **CN2** | **Changchun** | **34.84** | **333** | *e*P | P | 06 05 56.0 | +5.1 |
| CN2 | | | | *e*S | **S** | **06 11 24.4** | **+4.2** |
| CN2 | | | | PMZ | | | |
| comp=Z,10.0nm,0.5s | | | | | | | |
| CN2 | | | | PMZ | | | |
| comp=Z,100nm,4.0s | | | | | | | |
| CN2 | | | | LN | | | |
| comp=Z,300nm,21.0s | | | | | | | |
| CN2 | | | | LE | | | |
| comp=Z,200nm,21.0s | | | | | | | |
| CN2 | | | | LZ | | | |
| comp=Z,200nm,23.0s | | | | | | | |
| **QIZ** | **Qiongzhong** | **35.69** | **283** | P | **P** | **06 05 57.9** | **-0.7** |
| QIZ | | | | S | **S** | **06 11 33.6** | **-0.3** |
| QIZ | | | | PMZ | | | |
| comp=Z,23nm,1.6s | | | | | | | |
| QIZ | | | | LZ | | | |
| comp=Z,100nm,7.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **35.87** | **200** | *d* iP | **P** | **06 05 59.6** | **-0.4** |
| WRAB | | | | pmax | pmax | | |
| comp=Z,86nm,1.0s | | | | | | | |
| **WRAB** | **Tennant Creek** | **35.87** | **200** | *e*P | **P** | **06 05 59.7** | **-0.4** |
| comp=Z,50nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.88** | **200** | P | **P** | **06 05 59.9** | **-0.3** |
| comp=Z,19nm,0.8s,baz=22,slow=9.5,SNR=61 | | | | | | | |
| WRA | | | | PcP | **PcP** | **06 08 25.8** | **-1.3** |
| comp=Z,1.8nm,0.9s,baz=17,slow=3.3,SNR=4.6 | | | | | | | |
| WRA | | | | LR | LR | 06 21 07.5 | |
| comp=Z,103nm,20.4s,baz=10.0,slow=37 | | | | | | | |
| **SBUM** | **Sibu** | **35.99** | **255** | *e*P | **P** | **06 06 01.7** | **+0.5** |
| comp=Z,11nm,1.0s | | | | | | | |
| **KLR** | **Kul'dur** | **37.22** | **344** | *e*P | P | 06 06 05.6 | -5.6 |
| **FITZ** | **Fitzroy Crossi** | **38.10** | **214** | *e*P | **P** | **06 06 19.5** | **+0.5** |
| comp=Z,13nm,0.8s | | | | | | | |
| **GYA** | **Guiyang** | **39.44** | **295** | *e*P | **P** | **06 06 30.0** | **-0.4** |
| GYA | | | | pP | **pP** | **06 06 37.8** | **-0.7** |
| GYA | | | | ScP | **ScP** | **06 12 24.5** | **-0.7** |
| GYA | | | | S | **S** | **06 12 31.3** | **+0.4** |
| GYA | | | | SS | **SS** | **06 15 17.0** | **-8.6** |
| GYA | | | | PMZ | | | |
| comp=Z,10.0nm,1.0s | | | | | | | |
| GYA | | | | PMZ | | | |
| comp=Z,90nm,5.0s | | | | | | | |
| GYA | | | | LN | | | |
| comp=Z,420nm,17.6s | | | | | | | |
| GYA | | | | LE | | | |
| comp=Z,440nm,17.0s | | | | | | | |
| GYA | | | | LZ | | | |
| comp=Z,310nm,17.5s | | | | | | | |
| **AS01** | **Alice Springs** | **39.48** | **199** | *e*P | **P** | **06 06 30.3** | **-0.3** |
| **ASAR** | **Alice Springs** | **39.50** | **199** | P | **P** | **06 06 30.8** | **+0.1** |
| comp=Z,3.4nm,0.7s,baz=23,slow=8.5,SNR=37 | | | | | | | |
| ASAR | | | | PP | **PP** | **06 08 01.7** | **-0.1** |
| comp=Z,2.7nm,0.9s,baz=16,slow=10,SNR=4.6 | | | | | | | |

ASAR LR LR 06 24 38.9
comp=Z,92nm,20.1s,baz=14,slow=39
**XAN Xi'an 39.59 307 P P 06 06 31.3 -0.1**
XAN pP **pP 06 06 38.3 -1.3**
XAN S **S 06 12 31.4 -1.4**
XAN PMZ
comp=Z,7.0nm,0.9s
XAN PMZ
comp=Z,45nm,5.1s
XAN LN
comp=Z,98nm,15.4s
XAN LE
comp=Z,120nm,17.4s
XAN LZ
comp=Z,170nm,16.4s
**PETK Petropavlovsk- 39.96 10 LR LR 06 21 10.5**
comp=Z,87nm,21.6s,baz=195,slow=33
**HHC Hu-ho-hao-te 40.66 318 eP P 06 06 42.3 +1.9**
HHC pP **pP 06 06 46.6 -1.9**
HHC PP **PnPn 06 08 19.4 +1.0**
HHC S **S 06 12 50.1 +1.2**
HHC PMZ
comp=Z,18nm,1.0s
HHC PMZ
comp=Z,110nm,5.7s
HHC LN
comp=Z,140nm,17.8s
HHC LE
comp=Z,180nm,13.5s
HHC LZ
comp=Z,160nm,17.1s
**KMI Kunming 42.74 292 P P 06 06 59.1 +1.3**
KMI pP **pP 06 07 06.0 0.0**
KMI sP **sP 06 07 08.9 -0.4**
KMI PP **PP 06 08 41.8 +4.7**
KMI S **S 06 13 21.6 +1.3**
KMI sS **sS 06 13 31.9 -1.9**
KMI SS SS 06 16 23.5 -8.0
KMI PMZ
comp=Z,7.0nm,1.0s
KMI PMZ
comp=Z,62nm,4.4s
KMI LN
comp=Z,120nm,10.2s
KMI LE
comp=Z,160nm,10.7s
KMI LZ
comp=Z,160nm,11.5s
**CD2 Chengdu 42.85 300 eP P 06 06 58.0 -0.3**
CD2 pP **pP 06 07 05.4 -1.1**
CD2 PP **PP 06 08 37.5 -0.5**
CD2 PcS **PcS 06 12 41.3 -0.3**
CD2 S **S 06 13 21.3 0.0**
CD2 sS **sS 06 13 34.0 -0.8**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,140nm,5.2s
CD2 LE
comp=Z,200nm,18.6s
CD2 LZ
comp=Z,230nm,14.7s
**MBWA Marble Bar 43.88 218 eP P 06 07 06.4 -0.2**
**LZH Lanzhou 44.20 308 eP P 06 07 10.0 +0.8**
LZH pP **pP 06 07 17.4 -0.1**
LZH sP **sP 06 07 20.3 -0.5**
LZH PMZ
comp=Z,72nm,1.4s
LZH PMZ
comp=Z,78nm,4.1s
LZH LN
comp=Z,140nm,14.9s
LZH LE
comp=Z,190nm,14.8s
LZH LZ
comp=Z,190nm,15.6s
**ARMA Armidale 44.42 174 eP P 06 07 11.0 +0.1**
comp=Z,29nm,1.3s
**MA2 Magadan 45.58 3 eP P 06 07 22.8 +3.1**
**CM01 Chiang Mai Arr 46.00 282 eP P 06 07 24.2 +0.6**
**CMAR Chiang Mai Arr 46.02 282 P P 06 07 24.5 +0.8**
comp=Z,3.6nm,0.4s,baz=89,slow=6.6,SNR=13
**ULN Ulaanbaatar 47.10 324 eP P 06 07 31.8 -0.2**
ULN pmax pmax
comp=Z,7.0nm,0.8s
**ULN Ulaanbaatar 47.10 324 eP P 06 07 31.4 -0.6**
comp=Z,7.1nm,0.7s
**SONM Songino Array 47.46 324 P P 06 07 34.4 -0.4**
comp=Z,3.8nm,0.6s,baz=135,slow=8.8,SNR=21
SONM pP pP 06 07 49.9 +6.9
comp=Z,3.5nm,0.6s,baz=132,slow=7.7,SNR=5.2
SONM LR LR 06 28 10.2
comp=Z,152nm,18.8s,baz=114,slow=37
**SONA1 Songino Array 47.46 324 eP P 06 07 34.6 -0.2**
**BBOO Buckleboo 47.67 192 eP P 06 07 36.1 -0.2**
comp=Z,16nm,0.8s
**GTA Gaotai 48.27 311 eP P 06 07 42.0 +0.8**
GTA pP **pP 06 07 49.5 0.0**
GTA sP **sP 06 07 52.9 +0.1**
GTA PcP **PcP 06 09 09.3 +1.3**
GTA ScP **ScP 06 13 01.3 +0.4**
GTA S **S 06 14 40.5 +1.0**
GTA sS **sS 06 14 53.1 -0.1**
GTA SS **SS 06 18 04.8 -4.3**
GTA PMZ
comp=Z,7.0nm,1.1s
GTA PMZ
comp=Z,97nm,5.0s
GTA LN
comp=Z,160nm,19.0s
GTA LE
comp=Z,160nm,19.9s
GTA LZ
comp=Z,210nm,20.9s
**SEY Seymchan 49.02 3 P P 06 07 45.5 -0.8**
comp=Z,5.4nm,0.8s,baz=180,slow=7.9,SNR=9.6
**ZAK Zakamensk 50.52 325 eP P 06 07 57.8 -0.4**
ZAK pmax pmax
comp=Z,6.0nm,1.0s
**TLY Talaya 50.99 327 eP P 06 08 01.3 -0.3**
TLY *e* 06 10 00.3
TLY *e*S S 06 15 07.3 -10
TLY *e*SS **SS 06 18 52.2 +0.2**
TLY pmax pmax
comp=Z,8.0nm,0.9s
TLY MLR MLR
comp=Z,119nm,20.0s
**TLY Talaya 50.99 327** *e*P **P 06 08 00.7 -0.9**
comp=Z,35nm,0.7s
**LSA Lhasa 53.44 297 eP P 06 08 21.5 +0.8**
LSA pmax pmax
comp=Z,10.0nm,0.5s
**LSA Lhasa 53.44 297 eP P 06 08 21.5 +0.8**
comp=Z,9.8nm,0.5s
**BILL Bilibino 55.45 9 eP P 06 08 37.0 +2.9**
BILL *e* 06 09 39.3
BILL *e* 06 10 43.0
BILL pmax pmax
comp=Z,9.0nm,1.0s
BILL MLR MLR
comp=Z,96nm,23.0s
**TAPN Taplejung 56.35 294 eP P 06 08 42.0 +0.4**
comp=Z,15nm,0.5s
**ODAN Odare 56.63 293 eP P 06 08 43.8 +0.2**
comp=Z,9.7nm,0.6s
**RAMN Ramite 57.34 293 eP P 06 08 48.8 +0.2**
comp=Z,33nm,1.3s
**GUN Gumba 57.98 294 eP P 06 08 53.7 +0.5**
comp=Z,22nm,0.7s
**WMQ Urumqi 58.18 313 P P 06 08 54.0 0.0**
WMQ PMZ
comp=Z,9.0nm,1.0s
WMQ LN
comp=Z,210nm,20.0s
WMQ LE
comp=Z,120nm,20.0s
WMQ LZ
comp=Z,140nm,20.0s
**PKI Pulchoki 58.40 294 eP P 06 08 56.0 -0.1**
**PKIN Phulchoki 58.41 294 eP P 06 08 55.9 -0.2**
**KKN Kakani 58.52 294 eP P 06 08 56.8 0.0**
**DMN Daman 58.67 294 eP P 06 08 58.0 +0.1**
**GKN Gorkha 59.08 294 eP P 06 09 00.5 -0.2**
comp=Z,30nm,0.8s
**KOLN Koldanda 60.00 294 eP P 06 09 07.1 0.0**
comp=Z,18nm,0.8s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **62.35** | **324** | P | | **P** | | **06 09 21.7** | **-0.6** |
| | comp=Z,8.3nm,0.7s,baz=96,slow=6.4,SNR=20 | | | | | | | | |
| ZALV | | | | LR | | LR | | 06 37 17.1 | |
| | comp=Z,100nm,19.4s,baz=72,slow=37 | | | | | | | | |
| **MK01** | **Makanchi Array** | **62.45** | **316** | *eP* | | **P** | | **06 09 23.2** | **+0.1** |
| **MKAR** | **Makanchi Array** | **62.46** | **316** | P | | **P** | | **06 09 23.6** | **+0.4** |
| | comp=Z,6.1nm,0.5s,baz=90,slow=8.5,SNR=21 | | | | | | | | |
| MKAR | | | | LR | | LR | | 06 39 13.7 | |
| | comp=Z,62nm,19.0s,baz=38,slow=39 | | | | | | | | |
| **NVS** | **Novosibirsk** | **63.47** | **325** | ⇑*iP* | | **P** | | **06 09 28.9** | **-0.8** |
| NVS | | | | *i* | | | | 06 09 43.3 | |
| NVS | | | | pmax | pmax | | | | |
| | comp=Z,27nm,1.0s | | | | | | | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=N,5.0nm,0.8s | | | | | | | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=E,15nm,0.9s | | | | | | | | |
| **PDGK** | **Podgornoye** | **64.01** | **312** | P | | **P** | | **06 09 34.1** | **+0.7** |
| PDGK | | | | pmax | pmax | | | | |
| | comp=Z,78nm,0.9s | | | | | | | | |
| **PPLA** | **Purkeypile** | **64.59** | **26** | *eP* | | **P** | | **06 09 36.7** | **-0.4** |
| **CAST** | **Castle Rocks** | **64.82** | **26** | *eP* | | **P** | | **06 09 38.2** | **-0.3** |
| **KTH** | **Kantishna Hill** | **65.35** | **26** | *eP* | | **P** | | **06 09 41.1** | **-0.8** |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **KURK** | **Kurchatov** | **65.44** | **320** | *eP* | | **P** | | **06 09 42.0** | **-0.6** |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,82nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **65.44** | **320** | *eP* | | **P** | | **06 09 42.0** | **-0.6** |
| | comp=Z,82nm,0.8s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **65.51** | **25** | *eP* | | **P** | | **06 09 42.8** | **-0.1** |
| **TRF** | **Thorofare Moun** | **65.59** | **26** | *eP* | | **P** | | **06 09 43.0** | **-0.7** |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| **MLY** | **Manley** | **65.92** | **24** | *eP* | | **P** | | **06 09 45.3** | **-0.3** |
| **SML** | **Sawmill** | **65.97** | **28** | *eP* | | **P** | | **06 09 43.3** | **-2.6** |
| **SML** | **Sawmill** | **65.97** | **28** | *eP* | | **P** | | **06 09 43.3** | **-2.6** |
| **KSH** | **Kashi** | **66.44** | **307** | P | | **P** | | **06 09 52.4** | **+2.9** |
| KSH | | | | *es*P | | **sP** | | **06 10 02.9** | **+1.6** |
| KSH | | | | PcS | | | | 06 14 23.1 | |
| KSH | | | | S | | **S** | | **06 18 40.1** | **+1.7** |
| KSH | | | | ScS | | **SKSac** | | **06 19 44.0** | **-0.5** |
| KSH | | | | LN | | | | | |
| | comp=Z,400nm,15.9s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,91nm,5.5s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,140nm,6.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **66.82** | **311** | *eP* | | **P** | | **06 09 52.6** | **+0.6** |
| **TKM2** | **Tokmak 2** | **66.82** | **311** | *eP* | | **P** | | **06 09 52.5** | **+0.6** |
| **WRH** | **Wood River Hil** | **66.82** | **25** | *eP* | | **P** | | **06 09 50.0** | **-1.3** |
| **COLD** | **Coldfoot** | **66.86** | **22** | *eP* | | P | | 06 09 54.7 | +3.2 |
| **MDM** | **Murphy Dome** | **66.91** | **25** | *eP* | | **P** | | **06 09 52.3** | **+0.4** |
| **CCB** | **Clear Creek Bu** | **66.99** | **25** | *eP* | | **P** | | **06 09 54.6** | **+2.3** |
| **ILAR** | **Eielson Array** | **67.41** | **25** | P | | **P** | | **06 09 52.7** | **-2.3** |
| | comp=Z,1.6nm,0.6s,baz=251,slow=5.6,SNR=36 | | | | | | | | |
| ILAR | | | | pP | | **pP** | | **06 10 08.0** | **+4.4** |
| | comp=Z,3.3nm,0.5s,baz=251,slow=5.9,SNR=12 | | | | | | | | |
| ILAR | | | | LR | | LR | | 06 37 39.6 | |
| | comp=Z,45nm,21.1s,baz=276,slow=34 | | | | | | | | |
| **FYU** | **Fort Yukon** | **68.54** | **23** | *eP* | | P | | 06 10 06.8 | +4.8 |
| **OTUK** | **Ortayu** | **69.31** | **317** | P | | **P** | | **06 10 06.9** | **-0.4** |
| OTUK | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **PPT** | **Papeete** | **70.22** | **115** | LR | | LR | | 06 35 04.2 | |
| | comp=Z,114nm,20.9s,baz=310,slow=31 | | | | | | | | |
| **PPT2** | **Papeete2** | **70.22** | **115** | *e*LR | | LR | | 06 31 11.1 | |
| | comp=Z,133nm,21.0s,baz=281 | | | | | | | | |
| **VOSK** | **Vostochnaya** | **70.36** | **321** | *i* P | | **P** | | **06 10 10.6** | **-3.0** |
| VOSK | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| **KK31** | **Karatay Array** | **70.56** | **311** | *i* P | | **P** | | **06 10 15.1** | **+0.1** |
| KK31 | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **KKAR** | **Karatay Array** | **70.56** | **311** | *eP* | | **P** | | **06 10 15.5** | **+0.5** |
| **KKAR** | **Karatay Array** | **70.56** | **311** | *eP* | | **P** | | **06 10 15.5** | **+0.5** |
| **CHKZ** | **Chkalovo** | **70.62** | **322** | *i* P | | **P** | | **06 10 13.8** | **-1.3** |
| CHKZ | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **70.73** | **322** | *i* P | | **P** | | **06 10 15.5** | **-0.3** |
| BVA0 | | | | pmax | pmax | | | | |
| | comp=Z,19nm,0.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **70.80** | **322** | *eP* | | **P** | | **06 10 16.1** | **-0.1** |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| **BRVK** | **Borovoye** | **70.80** | **322** | *eP* | | **P** | | **06 10 15.9** | **-0.3** |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **ZRNK** | **Zerenda** | **71.57** | **321** | *i* P | | **P** | | **06 10 20.2** | **-0.7** |
| ZRNK | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **DZET** | **Dzherino** | **72.01** | **307** | P | | **P** | | **06 10 24.1** | **+0.1** |
| DZET | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **SVE** | **Sverdlovsk** | **76.28** | **326** | ⇓*eP* | | **P** | | **06 10 48.9** | **+0.5** |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **77.46** | **318** | *eP* | | **P** | | **06 10 54.6** | **-0.6** |
| | comp=Z,5.3nm,0.4s | | | | | | | | |
| **ARU** | **Arti** | **77.46** | **325** | *c iP* | | **P** | | **06 10 54.2** | **-0.8** |
| ARU | | | | S | | **S** | | **06 20 44.1** | **0.0** |
| ARU | | | | SS | | **SS** | | **06 25 40.2** | **-2.6** |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **ARU** | **Arti** | **77.46** | **325** | *eP* | | **P** | | **06 10 54.7** | **-0.3** |
| **AKTO** | **Aktyubinsk** | **78.54** | **319** | P | | **P** | | **06 11 00.5** | **-0.7** |
| AKTO | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **GEYT** | **Alibeck** | **80.47** | **307** | P | | **P** | | **06 11 12.1** | **+0.1** |
| | comp=Z,3.2nm,0.5s,baz=48,slow=4.5,SNR=3.6 | | | | | | | | |
| GEYT | | | | LR | | LR | | 06 49 48.7 | |
| | comp=Z,52nm,20.6s,baz=250,slow=38 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.64** | **28** | P | | **P** | | **06 11 16.4** | **-1.2** |
| | comp=Z,1.7nm,0.6s,baz=284,slow=5.1,SNR=6.6 | | | | | | | | |
| YKA | | | | pP | | pP | | 06 11 32.1 | +5.8 |
| | comp=Z,5.5nm,0.6s,baz=282,slow=5.0,SNR=14 | | | | | | | | |
| **CMB** | **Columbia Colle** | **83.72** | **53** | *eP* | | **P** | | **06 11 29.7** | **+0.6** |
| **CMB** | **Columbia Colle** | **83.72** | **53** | *eP* | | **P** | | **06 11 29.7** | **+0.6** |
| **NV01** | **Mina Array Sit** | **85.22** | **52** | *eP* | | **P** | | **06 11 36.4** | **-0.6** |
| **NVAR** | **Mina Array Bea** | **85.22** | **52** | P | | **P** | | **06 11 36.0** | **-0.9** |
| | comp=Z,1.3nm,0.7s,baz=262,slow=5.9,SNR=10.0 | | | | | | | | |
| NVAR | | | | pP | | pP | | 06 11 51.9 | +6.1 |
| | comp=Z,1.8nm,0.7s,baz=266,slow=6.1,SNR=7.3 | | | | | | | | |
| **APA** | **Apatity** | **85.72** | **339** | ⇑*iP* | | **P** | | **06 11 36.8** | **-1.7** |
| APA | | | | MLR | | MLR | | | |
| | comp=Z,1μm,12.0s | | | | | | | | |
| **MFID** | **Camas Ranch** | **85.79** | **46** | *eP* | | **P** | | **06 11 40.6** | **+1.2** |
| **HLID** | **Hailey** | **86.74** | **46** | *eP* | | **P** | | **06 11 43.4** | **-0.9** |
| | comp=Z,3.5nm,1.1s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.24** | **342** | P | | **P** | | **06 11 44.4** | **-1.5** |
| | comp=Z,1.8nm,0.7s,baz=79,slow=7.0,SNR=7.0 | | | | | | | | |
| ARCES | | | | LR | | LR | | 06 55 40.7 | |
| | comp=Z,118nm,18.7s,baz=61,slow=39 | | | | | | | | |
| **DUG** | **Dugway** | **88.85** | **49** | *eP* | | **P** | | **06 11 54.5** | **+0.1** |
| **DUG** | **Dugway** | **88.85** | **49** | *eP* | | **P** | | **06 11 54.5** | **+0.1** |
| **DAG** | **Danmarks Havn** | **88.98** | **357** | P | | P | | 06 11 58.2 | +4.2 |
| DAG | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.8s | | | | | | | | |
| **IMW** | **Indian Meadow** | **89.05** | **45** | *eP* | | **P** | | **06 11 52.3** | **-3.1** |
| **FXWY** | **Fox Creek** | **89.07** | **45** | *eP* | | P | | 06 12 00.0 | +4.6 |
| **FLWY** | **Flagg Ranch** | **89.15** | **45** | *eP* | | P | | 06 11 59.8 | +4.0 |
| **HWUT** | **Hardware Ranch** | **89.33** | **47** | *eP* | | P | | 06 11 59.9 | +3.3 |
| **OBN** | **Obninsk** | **89.74** | **327** | *eP* | | **P** | | **06 11 58.3** | **+0.3** |
| OBN | | | | *e* | | | | 06 15 32.2 | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| OBN | | | | MLR | | MLR | | | |
| | comp=Z,124nm,18.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **90.16** | **315** | LR | | LR | | 06 57 42.6 | |
| | comp=Z,43nm,18.6s,baz=62,slow=39 | | | | | | | | |
| **WUAZ** | **Wupatki** | **91.36** | **53** | *eP* | | **P** | | **06 12 08.1** | **+1.9** |
| **FINES** | **FINESS Array B** | **91.54** | **336** | P | | **P** | | **06 12 04.2** | **-2.1** |
| | comp=Z,7.1nm,0.9s,baz=78,slow=5.5,SNR=16 | | | | | | | | |
| FINES | | | | LR | | LR | | 06 55 28.3 | |
| | comp=Z,62nm,19.9s,baz=48,slow=37 | | | | | | | | |
| **FINES** | **FINESS Array B** | **91.54** | **336** | *i* P | | **P** | | **06 12 03.7** | **-2.5** |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **VNDA** | **Vanda** | **91.78** | **177** | P | | **P** | | **06 12 06.8** | **-0.1** |
| | comp=Z,1.0nm,0.9s,baz=314,slow=8.2,SNR=4.9 | | | | | | | | |
| VNDA | | | | pP | | pP | | 06 12 21.9 | +6.2 |
| | comp=Z,1.1nm,1.0s,baz=326,slow=4.6,SNR=3.4 | | | | | | | | |
| VNDA | | | | LR | | LR | | 06 51 15.8 | |
| | comp=Z,34nm,19.6s,baz=338,slow=34 | | | | | | | | |
| **SMCO** | **Snowmass** | **93.44** | **48** | *eP* | | **P** | | **06 12 15.2** | **-0.9** |
| | comp=Z,6.3nm,1.1s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **95.71** | **325** | LR | | LR | | 06 58 07.0 | |
| | comp=Z,36nm,19.5s,baz=295,slow=37 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **95.86** | **35** | LR | | LR | | 06 58 46.8 | |
| | comp=Z,57nm,18.0s,baz=198,slow=37 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **97.29** | **340** | LR | | LR | | 06 59 02.6 | |
| | comp=Z,22nm,20.3s,baz=25,slow=37 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **98.09** | **314** | LR | | LR | | 07 01 41.2 | |
| | comp=Z,18nm,19.9s,baz=39,slow=38 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **136.11** | **306** | PKP | | **PKPdf** | | **06 18 20.5** | **-1.5** |
| | comp=Z,0.2nm,0.5s,baz=77,slow=1.1,SNR=4.1 | | | | | | | | |
| **DBIC** | **Dimbokro** | **145.12** | **304** | PKPbc | | **PKPbc** | | **06 18 37.6** | **-0.1** |
| | comp=Z,13nm,0.9s,baz=15,slow=5.7,SNR=10 | | | | | | | | |
| **KIC** | **Kosan Boka** | **145.21** | **304** | *eP* | | **PKPbc** | | **06 18 37.9** | **-0.1** |
| | comp=Z,48nm,1.1s | | | | | | | | |
| **TIC** | **Toumodi** | **145.27** | **304** | *eP* | | **PKPbc** | | **06 18 37.9** | **-0.3** |
| **LIC** | **Lamto** | **145.52** | **304** | *eP* | | **PKPab** | | **06 18 39.3** | **0.0** |
| | comp=Z,47nm,1.1s | | | | | | | | |
| **LPAZ** | **La Paz** | **146.28** | **98** | PKPbc | | **PKPbc** | | **06 18 41.5** | **-0.5** |
| | comp=Z,1.3nm,0.5s,baz=331,slow=1.4,SNR=14 | | | | | | | | |

*IDC* ***13*** *07:01:51.5±2.7,3˚.11S×100˚.21E,h0km,mb3.8/6, mb1 3.9/6,mb1mx3.6/48,mbtmp3.8/6,MS3.3/2,Ms1 3.3/2, ms1mx2.6/43,Error ellipse: s-maj=99.3km s-min=21.4km az=57.0*
*DJA* ***13*** *07:01:54.1±0.5,3˚.5S±7˚×10˚0E±1˚.0,h12km±8km,M3.9/8, MLv3.9/8*

**ISC 13 07:01:56.1±0.9,2˚.96S±0˚.07×100˚.42E±0˚.06,h28km,n21, σ1s31/16,mb4.0/6,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.45** | **295** | P | | **Pb** | **07 02 03.7** | **-1.9** |
| PPSI | | | | S | | **Sb** | **07 02 11.0** | **-1.2** |
| **PDSI** | **Padang** | **2.03** | **1** | P | | **Pn** | **07 02 29.4** | **+0.9** |
| **SISI** | **Saibi** | **2.10** | **321** | P | | **Pn** | **07 02 30.0** | **+0.7** |
| SISI | | | | S | | Sb | 07 03 09.6 | +11 |
| **SDSI** | **Sungai Dareh** | **2.25** | **27** | P | | **Pb** | **07 02 34.4** | **-1.6** |
| **KSI** | **Kapahiang** | **2.28** | **108** | P | | **Pn** | **07 02 29.9** | **-2.0** |
| **PPI** | **Padang Panjang** | **2.48** | **359** | P | | **Pn** | **07 02 35.5** | **+0.8** |
| PPI | | | | S | | **Sb** | **07 03 08.6** | **-1.6** |
| **MNAI** | **Manna** | **2.89** | **119** | P | | **Pn** | **07 02 41.8** | **+1.5** |
| **PSI** | **Prapat** | **5.91** | **345** | LR | | LR | 07 06 05.4 | |
| | comp=Z,114nm,18.1s,baz=179,slow=43 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.19** | **259** | T | | T | 07 36 46.6 | |
| | baz=82,slow=75,SNR=481 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.19** | **259** | T | | T | 07 36 47.2 | |
| | baz=82,slow=75,SNR=452 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.20** | **259** | T | | T | 07 36 47.7 | |
| | baz=82,slow=75,SNR=482 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.23** | **160** | T | | T | 07 44 33.6 | |
| | baz=336,slow=76,SNR=13 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.24** | **160** | T | | T | 07 44 34.7 | |
| | baz=336,slow=76,SNR=17 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.24** | **160** | T | | T | 07 44 33.6 | |
| | baz=336,slow=76,SNR=13 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.15** | **120** | P | | **P** | **07 09 05.4** | **+0.5** |
| | 0.3nm,0.7s,baz=306,slow=9.2,SNR=8.1 | | | | | | | |
| WRA | | | | LR | | LR | 07 24 31.3 | |
| | comp=Z,82nm,21.2s,baz=10.0,slow=36 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.36** | **125** | P | | **P** | **07 09 14.9** | **-0.2** |
| | 0.2nm,0.3s,baz=300,slow=7.6,SNR=2.8 | | | | | | | |
| **SONM** | **Songino Array** | **50.85** | **5** | P | | **P** | **07 10 56.0** | **+1.6** |
| | 1.3nm,0.6s,baz=188,slow=11,SNR=6.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.06** | **344** | P | | **P** | **07 11 03.4** | **0.0** |
| | 1.4nm,0.6s,baz=144,slow=8.5,SNR=10 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.80** | **27** | P | | **P** | **07 11 24.3** | **+0.8** |
| | 1.1nm,0.6s,baz=227,slow=2.8,SNR=5.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.18** | **349** | P | | **P** | **07 11 47.2** | **-0.2** |
| | 1.7nm,0.9s,baz=157,slow=4.8,SNR=4.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.19** | **39** | PKPbc | | **PKPdf** | **07 21 32.4** | **+0.4** |
| | 0.6nm,0.7s,baz=338,slow=1.0,SNR=9.0 | | | | | | | |

*ISCJB* ***13*** *07:04:54.8±0.7,36˚.82N±0˚.04×71˚.23E±0˚.08,h200km, Error ellipse: s-maj=9.0km s-min=4.9km az=156.7*
*NNC* ***13*** *07:04:59.5±1.2,37˚.13N×71˚.15E,h196km±9km,mb2.8, mpv3.9,Error ellipse: s-maj=11.2km s-min=5.0km az=160.0*

**ISC 13 07:04:56.1±1.4,36˚.93N±0˚.09×71˚.20E±0˚.07,h200km,n21, σ1s54/24,8C-6D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.65** | **316** | ⇑P | | **Pn** | **07 05 42.9** | **+1.2** |
| | 7.2nm,0.2s | | | | | | | |
| DZET | | | | ⇑S | | **Sn** | **07 06 17.5** | **0.0** |
| | 138nm,0.5s | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.58** | **30** | ⇑P | | **Pn** | **07 05 53.5** | **+0.7** |
| | 26nm,0.4s | | | | | | | |
| SFK | | | | ⇓S | | **Sn** | **07 06 37.4** | **0.0** |
| | 30nm,0.2s | | | | | | | |
| **AML** | **Almayashu** | **5.55** | **20** | P | | **Pn** | **07 06 18.9** | **+1.1** |
| | SNR=22 | | | | | | | |
| **MNAS** | **Manas** | **5.65** | **10** | ⇓P | | **Pn** | **07 06 20.3** | **+1.5** |
| | 14nm,0.4s | | | | | | | |
| MNAS | | | | ⇑S | | **Sn** | **07 07 23.4** | **-0.8** |
| | 20nm,0.5s | | | | | | | |
| **UCH** | **Uchtor** | **5.88** | **25** | P | | **Pn** | **07 06 23.1** | **+0.9** |
| | SNR=16 | | | | | | | |
| **KZA** | **Kyzart** | **6.03** | **30** | P | | **Pn** | **07 06 24.5** | **+0.5** |
| | SNR=6.7 | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.06** | **18** | P | | **Pn** | **07 06 26.2** | **+2.0** |
| | SNR=30 | | | | | | | |
| **KK31** | **Karatay Array** | **6.19** | **355** | ⇓P | | **Pn** | **07 06 27.4** | **+1.7** |
| | 3.1nm,0.5s,baz=163,slow=11,SNR=81 | | | | | | | |
| KK31 | | | | ⇓S | | **Sn** | **07 07 35.8** | **-1.1** |
| | 12nm,0.4s,baz=182,slow=18,SNR=23 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.24** | **23** | ⇑P | | **Pn** | **07 06 27.9** | **+1.4** |
| | 7.6nm,0.3s | | | | | | | |
| AAK | | | | ⇓S | | **Sn** | **07 07 37.9** | **-0.3** |
| | 18nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **6.24** | **23** | P | | **Pn** | **07 06 27.9** | **+1.4** |
| | SNR=12 | | | | | | | |
| **ULHL** | **Ulahol** | **6.59** | **35** | P | | **Pn** | **07 06 32.0** | **+0.9** |
| | SNR=6.2 | | | | | | | |
| **USP** | **Ospenovka** | **6.82** | **21** | P | | **Pn** | **07 06 35.2** | **+1.3** |
| | SNR=14 | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.88** | **28** | ⇓P | | **Pn** | **07 06 36.0** | **+1.2** |
| | 3.0nm,0.3s | | | | | | | |
| TKM2 | | | | ⇑S | | **Sn** | **07 07 53.6** | **+0.4** |
| | 9.8nm,0.8s | | | | | | | |
| **SMLA** | **Simla** | **7.61** | **138** | *i* P | | Pn | 07 06 40.4 | -3.8 |
| SMLA | | | | *i* S | | Sn | 07 07 57.8 | -13 |
| SMLA | | | | AML | | AML | 07 08 04.1 | |
| | comp=E,392nm,0.3s | | | | | | | |
| SMLA | | | | AML | | AML | 07 08 04.1 | |
| | comp=N,330nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **13.89** | **128** | *eP* | | Pn | 07 08 01.0 | -3.9 |
| **GKN** | **Gorkha** | **14.40** | **124** | *eP* | | Pn | 07 08 08.4 | -2.8 |
| **AB31** | **Akbulak array** | **14.79** | **330** | ⇑P | | **Pn** | **07 08 17.4** | **+1.9** |
| | comp=N,0.7nm,0.5s,baz=143,slow=12,SNR=12 | | | | | | | |
| AB31 | | | | ⇑S | | **S** | **07 10 55.4** | **-4.3** |
| | comp=N,1.5nm,0.6s,baz=147,slow=23,SNR=6.0 | | | | | | | |
| **DMN** | **Daman** | **14.98** | **124** | *eP* | | Pn | 07 08 17.0 | -1.3 |
| **PKIN** | **Phulchoki** | **15.19** | **124** | *eP* | | **Pn** | **07 08 19.5** | **-1.4** |
| **PKI** | **Pulchoki** | **15.20** | **124** | *eP* | | **Pn** | **07 08 19.6** | **-1.5** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GUN** | **Gumba** | **15.30** | **122** | *eP* | | **Pn** | | **07 08 21.7** | **-0.6** |

*ISCJB* ***13*** *07:08:40.0±0.7,77˚.00N±0˚.07×18˚.3E±0˚.2,h10km, Error ellipse: s-maj=9.9km s-min=4.2km az=19.9*
*CSEM* ***13*** *07:08:40.7±0.1,76˚.94N×18˚.29E,h8km,ML2.9, Error ellipse: s-maj=4.0km s-min=1.9km az=17.0*
*NAO* ***13*** *07:08:40.3±1.5,76˚.85N×18˚.19E,h9km±12km,ML4.1*
*BER* ***13*** *07:08:42.9±4.3,76˚.86N×18˚.11E,h19km±25km,ML2.9, ML4.1(NAO)*

**ISC 13 07:08:40.8±1.0,76˚.94N±0˚.05×18˚.27E±0˚.04,h10km,n16, σ0s28/23,Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HSP** | **Hornsund** | **0.62** | **277** | Pg | | **Pg** | **07 08 52.9** | **+0.2** |
| HSP | | | | Lg | | Lg | 07 09 00.9 | |
| **HSP** | **Hornsund** | **0.62** | **277** | Pg | | **Pg** | **07 08 52.9** | **+0.2** |
| HSP | | | | Lg | | Lg | 07 09 00.9 | |
| **HSPB** | **Hornsund (broa** | **0.62** | **277** | *eP* | | **Pg** | **07 08 52.7** | **-0.1** |
| HSPB | | | | *eS* | | **Sg** | **07 09 00.8** | **-0.1** |
| **HSPB** | **Hornsund (broa** | **0.62** | **277** | *eP* | | **Pg** | **07 08 52.7** | **-0.1** |
| | SNR=100 | | | | | | | |
| HSPB | | | | *eS* | | **Sg** | **07 09 00.8** | **-0.1** |
| | SNR=100 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.31** | **343** | Pn | | **Pg** | **07 09 05.9** | **+0.1** |
| | baz=152,slow=22 | | | | | | | |
| SPA0 | | | | Lg | | Lg | 07 09 23.1 | |
| | baz=148,slow=22 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.31** | **343** | Pn | | **Pg** | **07 09 05.9** | **+0.1** |
| | baz=152,slow=22 | | | | | | | |
| SPA0 | | | | Lg | | Lg | 07 09 23.1 | |
| | baz=148,slow=22 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.31** | **343** | Pn | | **Pg** | **07 09 05.9** | **+0.1** |
| | SNR=55 | | | | | | | |
| SPA0 | | | | Lg | | Lg | 07 09 23.1 | |
| **HOPEN** | **Hopen** | **1.62** | **102** | Sn | | **Sn** | **07 09 29.6** | **-0.6** |
| HOPEN | | | | Lg | | Lg | 07 09 32.7 | |
| **HOPEN** | **Hopen** | **1.62** | **102** | *eP* | | **Pn** | **07 09 09.5** | **+0.3** |
| HOPEN | | | | *eS*g | | **Sg** | **07 09 32.8** | **+0.1** |
| **HOPEN** | **Hopen** | **1.62** | **102** | *eP* | | **Pn** | **07 09 09.5** | **+0.3** |
| | SNR=55 | | | | | | | |
| HOPEN | | | | Sn | | **Sn** | **07 09 29.5** | **-0.6** |
| HOPEN | | | | Lg | | Lg | 07 09 32.7 | |
| HOPEN | | | | *eS*g | | **Sg** | **07 09 32.8** | **+0.1** |
| | SNR=93 | | | | | | | |
| **KBS** | **Kingsbay** | **2.40** | **329** | Pn | | **Pn** | **07 09 20.4** | **+0.4** |
| KBS | | | | Pg | | **Pg** | **07 09 26.3** | **-0.3** |
| KBS | | | | Lg | | Lg | 07 09 56.1 | |
| **KBS** | **Kingsbay** | **2.40** | **329** | *eP* | | **Pn** | **07 09 20.2** | **+0.3** |
| KBS | | | | *eP*g | | **Pg** | **07 09 26.6** | **-0.1** |
| KBS | | | | *eS*g | | **Sg** | **07 09 57.4** | **-0.2** |
| KBS | | | | IAML | | | 07 10 02.3 | |
| | comp=Z,118nm,0.2s | | | | | | | |
| **KBS** | **Kingsbay** | **2.40** | **329** | Pn | | **Pn** | **07 09 20.4** | **+0.4** |
| **KBS** | **Kingsbay** | **2.40** | **329** | *eP*g | | **Pg** | **07 09 26.5** | **-0.1** |
| | SNR=92 | | | | | | | |
| KBS | | | | Lg | | Lg | 07 09 56.1 | |
| KBS | | | | *eS*g | | **Sg** | **07 09 57.4** | **-0.2** |
| | SNR=92 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.73** | **161** | Sn | | Sn | 07 11 52.2 | -8.3 |
| | baz=357,slow=16 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.73** | **161** | Sn | | Sn | 07 11 52.2 | -8.3 |
| | baz=357,slow=16 | | | | | | | |

*GUC* ***13*** *07:16:24.6±0.5,35˚.33S×72˚.54W,h32km±3km,ML3.8*

**ISC 13 07:16:24.3±5.1,35˚.45S±0˚.1×72˚.5W±0˚.2,h28km±23km,n12, σ1s56/16,2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TALC** | **Talca** | **0.73** | **89** | ⇓*iP* | | **Pn** | **07 16 38.4** | **-0.4** |
| TALC | | | | *i* S | | **Sn** | **07 16 48.5** | **+0.6** |
| **CHPI** | **Pichilemu** | **1.11** | **23** | ⇓*iP* | | **Pn** | **07 16 42.9** | **-1.1** |
| CHPI | | | | *e*S | | **Sn** | **07 16 56.8** | **-1.7** |
| **NICH** | **Los Niches** | **1.15** | **69** | *eP* | | **Pn** | **07 16 44.6** | **+0.2** |
| NICH | | | | *i* S | | **Sb** | **07 16 59.8** | **-0.1** |
| **ANTU** | **Antumapu** | **2.42** | **41** | AML | | AML | 07 17 40.0 | |
| | comp=N,599nm,0.4s | | | | | | | |
| **CLCH** | **Cerro Calan** | **2.61** | **40** | *eP* | | **Pn** | **07 17 05.1** | **+0.5** |
| CLCH | | | | *e*S | | **Sn** | **07 17 36.1** | **+0.7** |
| CLCH | | | | AML | | AML | 07 17 47.6 | |
| | comp=E,572nm,0.3s | | | | | | | |
| **PEL** | **Peldehue** | **2.74** | **35** | *eP* | | **Pn** | **07 17 06.9** | **+0.5** |
| PEL | | | | *e*S | | **Sn** | **07 17 38.7** | **+0.1** |
| PEL | | | | AML | | AML | 07 17 56.6 | |
| | comp=N,396nm,0.6s | | | | | | | |
| **ROC1** | **El Roble** | **2.74** | **28** | *i* P | | **Pn** | **07 17 06.6** | **0.0** |
| ROC1 | | | | *i* S | | **Sb** | **07 17 47.5** | **+1.5** |
| **ARCO** | **CERRO ARCO** | **3.94** | **50** | *i* P | | Pn | 07 17 26.1 | +3.0 |
| ARCO | | | | AML | | AML | 07 17 34.6 | |
| | comp=Z,26nm,0.5s | | | | | | | |
| **AUSP** | **Uspallata** | **4.12** | **40** | *i* P | | **Pn** | **07 17 27.7** | **+2.0** |
| AUSP | | | | *i* S | | **Sb** | **07 18 27.0** | **+1.1** |
| **RTLS** | **Leoncito** | **4.51** | **38** | *i* P | | **Pn** | **07 17 32.7** | **+1.8** |
| RTLS | | | | *i* S | | **Sb** | **07 18 33.3** | **-3.6** |
| **AVFE** | **Valle Fertil** | **6.38** | **43** | AML | | AML | 07 19 25.8 | |
| | comp=Z,6.2nm,0.8s | | | | | | | |
| **TCA** | **Tanti** | **7.79** | **61** | AML | | AML | 07 18 22.6 | |
| | comp=Z,3.4nm,0.6s | | | | | | | |

*NEIC* ***13*** *07:30:17.8,51˚.20N×175˚.39W,h26km,mb3.7/1, ML3.8(AEIC),After AEIC.*
*IDC* ***13*** *07:30:17.2±1.0,52˚.15N×175˚.76W,h0km,mb3.8/10, mb1 4.0/13,mb1mx3.8/60,mbtmp3.8/13,ML3.7/3,MS3.2/3, Ms1 3.2/3,ms1mx2.6/48,Error ellipse: s-maj=27.3km s-min=13.7km az=161.0*

**ISC 13 07:30:21.5±1.6,51˚.5N±0˚.1×175˚.48W±0˚.04,h60km±11km, n49,σ1s47/47,mb3.8/11,Andreanof Islands**

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YAK** | **Yakutsk** | **30.91** | **311** | LR | LR | 07 49 16.3 | |
| | comp=Z,41nm,19.8s,baz=357,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.65** | **47** | P | **P** | **07 36 55.4** | **-0.6** |
| | 0.7nm,0.7s,baz=283,slow=7.7,SNR=3.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.58** | **210** | T | T | 08 13 51.8 | |
| | baz=18,slow=76,SNR=40 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.59** | **210** | T | T | 08 13 51.8 | |
| | baz=18,slow=76,SNR=28 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.60** | **210** | T | T | 08 13 52.4 | |
| | baz=18,slow=76,SNR=29 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.79** | **210** | T | T | 08 15 16.3 | |
| | baz=18,slow=76,SNR=37 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.81** | **210** | T | T | 08 15 16.9 | |
| | baz=18,slow=76,SNR=11 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.81** | **210** | T | T | 08 15 17.4 | |
| | baz=18,slow=76,SNR=9.1 | | | | | | |
| **NEW** | **Newport** | **36.89** | **71** | P | **P** | **07 37 26.4** | **+2.3** |
| | 1.2nm,0.5s,baz=310,slow=10.0,SNR=5.1 | | | | | | |
| **EDM** | **Edmonton** | **36.94** | **62** | *eP* | **P** | **07 37 24.9** | **+0.5** |
| | 7.7nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.47** | **85** | P | P | 07 38 06.7 | +4.1 |
| | 0.4nm,0.8s,baz=313,slow=8.5,SNR=6.2 | | | | | | |
| **KSRS** | **Korea Array** | **41.71** | **273** | P | **P** | **07 38 05.8** | **+1.6** |
| | 1.5nm,0.8s,baz=51,slow=9.6,SNR=4.1 | | | | | | |
| **KSAR** | **Wonju Array Be** | **41.74** | **273** | P | **P** | **07 38 05.8** | **+1.3** |
| **SONM** | **Songino Array** | **48.45** | **298** | P | **P** | **07 38 56.9** | **-0.8** |
| | 0.4nm,0.5s,baz=48,slow=6.4,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.58** | **84** | P | P | 07 40 03.5 | +5.5 |
| | 0.2nm,0.4s,baz=284,slow=7.3,SNR=4.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.32** | **351** | P | **P** | **07 40 09.8** | **+0.2** |
| | 13nm,1.2s,baz=6.7,slow=8.5,SNR=3.2 | | | | | | |
| ARCES | | | | PcP | **PcP** | **07 41 00.4** | **+0.4** |
| | 7.2nm,1.1s,baz=42,slow=2.8,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.58** | **310** | P | **P** | **07 40 32.4** | **+0.1** |
| | 1.0nm,0.3s,baz=47,slow=7.3,SNR=15 | | | | | | |
| **AKASG** | **Malin Array Be** | **76.06** | **344** | P | **P** | **07 42 01.2** | **-0.8** |
| | 0.3nm,0.3s,baz=16,slow=6.0,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.60** | **3** | PKP | **PKPdf** | **07 48 56.5** | **-0.4** |
| | 0.3nm,0.7s,baz=10,slow=3.4,SNR=2.9 | | | | | | |
| **BOSA** | **Boshof** | **152.37** | **318** | PKPbc | **PKPbc** | **07 50 13.3** | **+2.8** |
| | 1.3nm,0.6s,baz=207,slow=2.3,SNR=3.7 | | | | | | |

*CSEM* ***13*** *07:54:51.3±0.3, 76.93N×18.39E, h2km, ML2.9, Error ellipse: s-maj=10.6km s-min=5.5km az=59.0*
*NAO* ***13*** *07:54:52.6±1.9, 76.95N×18.87E, h8km±15km, ML4.0*
*ISCJB* ***13*** *07:54:53.2±0.7, 76.83N±0.08×18.5E±0.2, h16km, Error ellipse: s-maj=12.5km s-min=5.9km az=25.1*
*BER* ***13*** *07:54:54.4±3.9, 76.94N×18.63E, h15km±23km, MD2.0, ML2.9, ML4.0(NAO)*

**ISC 13 07:54:52.7±0.8, 76.86N±0.04×18.40E±0.05, h16km, n18, σ1s03/27, Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HSPB** | **Hornsund (broa** | **0.67** | **283** | *eP* | **Pg** | **07 55 04.0** | **-1.8** |
| HSPB | | | | *eSg* | **Sn** | **07 55 17.2** | **-0.4** |
| **HSPB** | **Hornsund (broa** | **0.67** | **283** | *eP* | **Pg** | **07 55 04.0** | **-1.8** |
| | SNR=62 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.39** | **342** | Pn | **Pn** | **07 55 17.4** | **-0.1** |
| | baz=153,slow=18 | | | | | | |
| SPA0 | | | | Lg | Lg | 07 55 34.5 | |
| | baz=152,slow=28 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.39** | **342** | Pn | **Pn** | **07 55 17.4** | **-0.1** |
| | baz=153,slow=18 | | | | | | |
| SPA0 | | | | Lg | Lg | 07 55 34.5 | |
| | baz=152,slow=28 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.39** | **342** | Pn | **Pn** | **07 55 17.4** | **-0.1** |
| | SNR=62 | | | | | | |
| SPA0 | | | | Lg | Lg | 07 55 34.5 | |
| | SNR=9.3 | | | | | | |
| **HOPEN** | **Hopen** | **1.57** | **100** | *eP* | **Pb** | **07 55 20.8** | **-0.5** |
| HOPEN | | | | *eSg* | **Sb** | **07 55 40.8** | **-0.1** |
| HOPEN | | | | IAML | | 07 55 47.6 | |
| | comp=Z,194nm,0.4s | | | | | | |
| **HOPEN** | **Hopen** | **1.57** | **100** | *eP* | **Pb** | **07 55 20.8** | **-0.5** |
| | SNR=62 | | | | | | |
| HOPEN | | | | *eSg* | **Sb** | **07 55 40.8** | **-0.1** |
| | SNR=94 | | | | | | |
| **BJO** | **Bjornoya** | **2.38** | **175** | Pn | **Pb** | **07 55 33.8** | **-1.3** |
| BJO | | | | Lg | Lg | 07 56 10.1 | |
| **BJO** | **Bjornoya** | **2.38** | **175** | *ePg* | **Pb** | **07 55 36.3** | **+1.2** |
| BJO | | | | *eSg* | **Sg** | **07 56 09.2** | **+0.1** |
| BJO | | | | IAML | | 07 56 14.1 | |
| | comp=Z,98nm,0.4s | | | | | | |
| **BJO** | **Bjornoya** | **2.38** | **175** | Pn | **Pb** | **07 55 33.8** | **-1.3** |
| **BJO** | **Bjornoya** | **2.38** | **175** | *ePg* | **Pb** | **07 55 36.3** | **+1.2** |
| | SNR=92 | | | | | | |
| BJO | | | | *eSg* | **Sg** | **07 56 09.2** | **+0.1** |
| | SNR=92 | | | | | | |
| BJO | | | | Lg | Lg | 07 56 10.1 | |
| **KBS** | **Kingsbay** | **2.48** | **330** | Pn | **Pn** | **07 55 31.9** | **-0.4** |
| KBS | | | | Pg | **Pb** | **07 55 37.4** | **+0.6** |
| KBS | | | | Lg | Lg | 07 56 07.8 | |
| **KBS** | **Kingsbay** | **2.48** | **330** | *eP* | **Pn** | **07 55 31.7** | **-0.6** |
| KBS | | | | *ePg* | **Pb** | **07 55 37.1** | **+0.4** |
| KBS | | | | *eSg* | **Sb** | **07 56 07.5** | **+0.6** |
| KBS | | | | IAML | | 07 56 16.9 | |
| | comp=Z,308nm,0.4s | | | | | | |
| **KBS** | **Kingsbay** | **2.48** | **330** | Pn | **Pn** | **07 55 31.9** | **-0.4** |
| **KBS** | **Kingsbay** | **2.48** | **330** | Pg | **Pb** | **07 55 37.4** | **+0.6** |
| KBS | | | | *eSg* | **Sb** | **07 56 07.6** | **+0.6** |
| | SNR=92 | | | | | | |
| KBS | | | | Lg | Lg | 07 56 07.8 | |
| **ARA0** | **ARCESS Array S** | **7.64** | **161** | Pn | **Pn** | **07 56 45.0** | **+1.8** |
| | baz=356,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 07 58 02.6 | -6.6 |
| | slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.64** | **161** | Pn | **Pn** | **07 56 45.0** | **+1.8** |
| | baz=356,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 07 58 02.6 | -6.6 |
| | slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.64** | **161** | Pn | **Pn** | **07 56 45.0** | **+1.8** |
| | SNR=62 | | | | | | |

*SKO* ***13*** *08:09:10.3, 42.04N×20.64E, h15km, M1.5, ML1.9*
*CSEM* ***13*** *08:09:11.6±0.1, 42.03N×20.72E, h5km, ML2.5, Error ellipse: s-maj=3.1km s-min=2.8km az=144.0*
*TIR* ***13*** *08:09:11.4±1.2, 41.96N×20.70E, h10km±25km, ML2.5*
*BEO* ***13*** *08:09:15.9±1.0, 42.19N×20.75E, h0km, ML1.7/4*

**ISC 13 08:09:11.4±1.0, 42.03N±0.03×20.72E±0.02, h11km±9km, n19, σ0s83/31, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PHP** | **Peshkopia** | **0.41** | **211** | *i* PG | **Pg** | **08 09 18.9** | **-0.5** |
| PHP | | | | *i* SG | **Sg** | **08 09 24.8** | **0.0** |
| **PHP** | **Peshkopia** | **0.41** | **211** | *i* Pg | **Pg** | **08 09 18.9** | **-0.5** |
| | SNR=114 | | | | | | |
| PHP | | | | *i* Sg | **Sg** | **08 09 24.8** | **0.0** |
| | SNR=114 | | | | | | |
| **SKO** | **Skopje** | **0.54** | **96** | *i* Pg | **Pg** | **08 09 22.1** | **+0.2** |
| SKO | | | | *i* Sg | **Sg** | **08 09 30.0** | **+0.9** |
| SKO | | | | *eLg* | Lg | 08 09 31.5 | |
| | comp=E,0.0nm,0.2s | | | | | | |
| SKO | | | | *eLg* | Lg | 08 09 32.4 | |
| | comp=N,0.0nm,0.2s | | | | | | |
| **SKO** | **Skopje** | **0.54** | **96** | *i* Pg | **Pg** | **08 09 22.1** | **+0.2** |
| SKO | | | | *i* Sg | **Sg** | **08 09 29.9** | **+0.9** |
| SKO | | | | *eLg* | Lg | 08 09 31.5 | |
| **BCI** | **Bajram Curri** | **0.59** | **305** | *i* PG | **Pg** | **08 09 23.4** | **+0.5** |
| BCI | | | | *i* SG | **Sn** | **08 09 34.3** | **-1.2** |
| **BCI** | **Bajram Curri** | **0.59** | **305** | *i* Pg | **Pg** | **08 09 23.4** | **+0.5** |
| | SNR=100 | | | | | | |
| **PUK** | **Puka** | **0.62** | **271** | *i* PG | **Pg** | **08 09 23.6** | **+0.1** |
| PUK | | | | *i* SG | **Sb** | **08 09 32.9** | **-0.1** |
| **PUK** | **Puka** | **0.62** | **271** | *i* Pg | **Pg** | **08 09 23.6** | **+0.1** |
| | SNR=101 | | | | | | |
| PUK | | | | *i* Sg | **Sb** | **08 09 32.9** | **-0.1** |
| | SNR=101 | | | | | | |
| **OHR** | **Ohrid** | **0.92** | **176** | *i* Pg | **Pg** | **08 09 28.8** | **-0.4** |
| OHR | | | | *i* Sg | **Sb** | **08 09 42.0** | **+0.3** |
| OHR | | | | *eLg* | Lg | 08 09 43.0 | |
| | comp=E,38nm,0.6s | | | | | | |
| OHR | | | | *eLg* | Lg | 08 09 43.3 | |
| | comp=N,19nm,0.3s | | | | | | |
| **OHR** | **Ohrid** | **0.92** | **176** | *i* Pg | **Pg** | **08 09 28.8** | **-0.4** |
| OHR | | | | *i* Sg | **Sb** | **08 09 42.0** | **+0.3** |
| OHR | | | | *eLg* | Lg | 08 09 43.0 | |
| | comp=N,38nm,0.6s | | | | | | |
| **BARS** | **Barje** | **1.13** | **46** | *ePg* | **Pg** | **08 09 33.5** | **+0.4** |
| BARS | | | | *eSg* | **Sn** | **08 09 48.5** | **-0.2** |
| **BARS** | **Barje** | **1.13** | **46** | *ePg* | **Pg** | **08 09 33.5** | **+0.4** |
| BARS | | | | *eSg* | **Sn** | **08 09 48.9** | **-0.2** |
| **PDG** | **Podgorica** | **1.16** | **291** | *eSg* | **Sn** | **08 09 51.7** | **+2.3** |
| **PDG** | **Podgorica** | **1.16** | **291** | *eSg* | **Sn** | **08 09 51.7** | **+2.3** |
| **SELS** | **Selova** | **1.22** | **14** | *ePg* | **Pn** | **08 09 33.9** | **-0.6** |
| SELS | | | | *eSg* | **Sb** | **08 09 48.9** | **-1.5** |
| **VAY** | **Valandovo** | **1.56** | **117** | *ePn* | **Pb** | **08 09 40.3** | **+0.1** |
| VAY | | | | *eLg* | Lg | 08 10 09.3 | |
| | comp=N,12nm,0.4s | | | | | | |
| VAY | | | | *eLg* | Lg | 08 10 09.8 | |
| | comp=E,7.7nm,0.8s | | | | | | |
| **VAY** | **Valandovo** | **1.56** | **117** | *ePn* | **Pb** | **08 09 40.3** | **+0.1** |
| VAY | | | | *eLg* | Lg | 08 10 09.3 | |
| | comp=E,12nm,0.4s | | | | | | |
| **IVAS** | **Ivanjica** | **1.60** | **345** | *eSg* | **Sg** | **08 10 02.3** | **-0.6** |
| **IVAS** | **Ivanjica** | **1.60** | **345** | *eSg* | **Sg** | **08 10 02.3** | **-0.6** |

**IDC 13 08:10:57.0±6.2, 2.30N×128.62E, h154km±74km, mb3.4/2, mb1 3.5/3, mb1mx3.0/36, mbtmp3.9/3, Error ellipse: s-maj=198.0km s-min=43.0km az=65.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **4.11** | **140** | P | Pn | 08 11 58.9 | 0.0 |
| | 11nm,0.3s,baz=336,slow=20,SNR=20 | | | | | | |
| SIJI | | | | S | Sn | 08 12 47.6 | +0.5 |
| | 4.6nm,0.3s,baz=232,slow=19,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **26.32** | **169** | PcP | PcP | 08 19 42.6 | +1.7 |
| | 0.2nm,0.4s,baz=352,slow=2.0,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **49.26** | **340** | P | P | 08 19 30.0 | -0.2 |
| | 0.6nm,0.7s,baz=157,slow=7.8,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.80** | **325** | P | P | 08 20 46.1 | 0.0 |
| | 0.9nm,0.3s,baz=124,slow=8.5,SNR=7.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **125.15** | **288** | PKP | PKPdf | 08 29 40.0 | -0.3 |
| | 0.2nm,0.6s,baz=96,slow=1.4,SNR=2.1 | | | | | | |

*SJA* ***13*** *08:14:08.5±0.5, 23.91S×66.59W, h235km±9km, ML3.7*
*ISCJB* ***13*** *08:14:10.5±0.8, 24.08S±0.05×66.84W±0.10, h200km, mb3.2/1, Error ellipse: s-maj=13.3km s-min=5.5km az=22.6*
*IDC* ***13*** *08:14:10.7±9.1, 23.77S×66.47W, h199km±79km, mb3.2/1, mb1 3.4/2, mb1mx3.1/20, mbtmp3.8/2, Error ellipse: s-maj=80.5km s-min=48.2km az=155.0*

**ISC 13 08:14:08.7±0.9, 23.98S±0.06×67.02W±0.09, h200km, n18, σ1s90/25, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HJA** | **Humahuaca** | **1.67** | **63** | *i* P | **Pn** | **08 14 44.9** | **+0.5** |
| HJA | | | | *i* S | **Sn** | **08 15 11.8** | **-0.2** |
| **AZAP** | **Zapla** | **1.81** | **98** | *i* P | **Pn** | **08 14 45.7** | **+0.2** |
| AZAP | | | | AML | AML | 08 14 46.0 | |
| | comp=Z,92nm,0.3s | | | | | | |
| AZAP | | | | *i* S | **Sn** | **08 15 13.0** | **-1.0** |
| **FSA** | **Cafayete** | **2.29** | **157** | *i* P | **Pn** | **08 14 52.9** | **+2.5** |
| **AHML** | **Horco Molle** | **3.18** | **152** | *i* P | **Pn** | **08 15 01.9** | **+1.4** |
| **CYA** | **Choya** | **4.57** | **166** | *i* P | **Pn** | **08 15 20.3** | **+2.6** |
| CYA | | | | *i* S | **Sn** | **08 16 09.5** | **-2.6** |
| **VCA** | **Vinchina** | **4.85** | **192** | *i* P | Pn | 08 15 25.4 | +4.1 |
| VCA | | | | AML | AML | 08 15 27.2 | |
| | comp=Z,38nm,0.6s | | | | | | |
| **AGUA** | **GUANDACOL** | **5.64** | **193** | *i* P | Pn | 08 15 35.0 | +3.7 |
| AGUA | | | | *i* S | **Sn** | **08 16 38.4** | **+1.7** |
| **AVFE** | **Valle Fertil** | **6.66** | **183** | *i* P | **Pn** | **08 15 46.4** | **+1.9** |
| AVFE | | | | AML | AML | 08 15 47.8 | |
| | comp=Z,20nm,0.6s | | | | | | |
| AVFE | | | | *i* S | **Sn** | **08 16 59.3** | **-1.3** |
| **AMOG** | **MOGNA** | **7.05** | **190** | *i* P | **Pn** | **08 15 51.5** | **+1.9** |
| AMOG | | | | *i* S | **Sn** | **08 17 09.4** | **-0.3** |
| **ACHE** | **Chepes** | **7.16** | **178** | *i* P | **Pn** | **08 15 52.2** | **+1.1** |
| ACHE | | | | *i* S | **Sn** | **08 17 09.1** | **-3.4** |
| **TCA** | **Tanti** | **7.63** | **164** | *i* P | **Pn** | **08 15 57.8** | **+0.6** |
| TCA | | | | AML | AML | 08 16 00.0 | |
| | comp=Z,11nm,0.3s | | | | | | |
| **CFAA** | **Coronel Fontan** | **7.67** | **188** | *i* P | **Pn** | **08 15 59.3** | **+1.7** |
| CFAA | | | | *i* S | **Sn** | **08 17 21.7** | **-2.5** |
| **LPAZ** | **La Paz** | **7.73** | **352** | P | **Pn** | **08 16 00.9** | **+1.9** |
| | comp=Z,1.3nm,0.3s,baz=161,slow=14,SNR=52 | | | | | | |
| LPAZ | | | | S | **Sn** | **08 17 23.9** | **-2.8** |
| | baz=246,slow=10.0,SNR=1.3 | | | | | | |
| **ACAN** | **Cantantal** | **8.26** | **181** | *eP* | **Pn** | **08 16 06.1** | **+0.8** |
| **TORD** | **Torodi Ar. Bea** | **76.58** | **69** | P | **P** | **08 25 36.2** | **-1.3** |
| | comp=Z,0.3nm,0.5s,baz=261,slow=5.3,SNR=7.5 | | | | | | |
| **ASAR** | **Alice Springs** | **128.46** | **205** | PKP | **PKPdf** | **08 32 54.4** | **+2.0** |
| | comp=Z,0.3nm,0.7s,baz=147,slow=1.4,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.63** | **207** | PKP | **PKPdf** | **08 33 00.4** | **+2.0** |
| | comp=Z,0.1nm,0.3s,baz=160,slow=1.3,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.53** | **39** | PKPbc | **PKPab** | **08 33 27.3** | **-0.5** |
| | comp=Z,0.5nm,0.6s,baz=291,slow=3.5,SNR=3.3 | | | | | | |

**WEL 13 08:15:41.4±0.6, 36.71S×177.45E, h147km±6km, ML3.6/5, 1C, Error ellipse: s-maj=5.6km s-min=5.5km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **1.07** | **166** | ⇑PN | Pn | 08 16 06.5 | +0.1 |
| HAZ | | | | SN | Sn | 08 16 25.9 | +0.2 |
| **MXZ** | **Matakaoa Point** | **1.09** | **141** | PN | Pn | 08 16 06.8 | +0.1 |
| MXZ | | | | AML | AML | 08 16 27.1 | |
| MXZ | | | | AML | AML | 08 16 47.9 | |
| **WMGZ** | **Waiomatatini S** | **1.34** | **145** | PN | Pn | 08 16 09.0 | -0.1 |
| **PUZ** | **Puketiti** | **1.50** | **155** | PN | Pn | 08 16 10.5 | -0.3 |
| PUZ | | | | SN | Sn | 08 16 32.2 | -1.1 |
| PUZ | | | | AML | AML | 08 16 47.2 | |
| **TWGZ** | **Tauwhareparae** | **1.52** | **164** | PN | Pn | 08 16 11.5 | +0.5 |
| TWGZ | | | | SN | Sn | 08 16 33.9 | +0.2 |
| **URZ** | **Urewera** | **1.57** | **190** | PN | Pn | 08 16 11.6 | +0.2 |
| URZ | | | | SN | Sn | 08 16 34.9 | +0.4 |
| URZ | | | | AML | AML | 08 16 36.2 | |
| **MWZ** | **Matawai** | **1.62** | **178** | PN | Pn | 08 16 11.9 | -0.1 |
| MWZ | | | | AML | AML | 08 16 40.6 | |
| MWZ | | | | AML | AML | 08 16 45.5 | |
| **SNGZ** | **Shannon Statio** | **2.07** | **182** | PN | Pn | 08 16 16.7 | -0.4 |
| **BKZ** | **Black Stump Fm** | **2.56** | **197** | PN | Pn | 08 16 24.0 | +0.8 |
| **BHHZ** | **Black Hill Sta** | **2.98** | **201** | PN | Pn | 08 16 27.6 | -0.8 |
| **KRHZ** | **Kereru** | **3.05** | **196** | PN | Pn | 08 16 27.7 | -1.5 |
| **PNHZ** | **Pukenui** | **3.34** | **197** | PN | Pn | 08 16 31.2 | -1.8 |
| **PXZ** | **Pawanui** | **3.34** | **188** | AML | AML | 08 16 20.4 | |
| PXZ | | | | PN | Pn | 08 16 31.0 | -1.9 |
| PXZ | | | | AML | AML | 08 16 45.0 | |
| **TSZ** | **Takapari Road** | **3.54** | **199** | PN | Pn | 08 16 34.7 | -0.9 |
| **BFZ** | **Birch Farm** | **4.07** | **193** | PN | Pn | 08 16 37.2 | -5.3 |
| **MRZ** | **Mangatainoka R** | **4.21** | **200** | PN | Pn | 08 16 41.7 | -2.5 |
| **HOWZ** | **Holsworth Sta** | **4.44** | **199** | PN | Pn | 08 16 43.9 | -3.5 |
| **KIW** | **Kapiti Island** | **4.59** | **205** | PN | Pn | 08 16 46.5 | -2.8 |
| **MTW** | **Mount Morrison** | **4.69** | **198** | PN | Pn | 08 16 46.9 | -3.7 |
| **CAW** | **Cannon Point** | **4.76** | **202** | PN | Pn | 08 16 47.8 | -3.8 |
| **TCW** | **Tory Channel** | **5.13** | **208** | PN | Pn | 08 16 53.0 | -3.4 |
| **PLWZ** | **Palliser** | **5.14** | **199** | PN | Pn | 08 16 52.2 | -4.4 |
| **TUWZ** | **Tuamarina** | **5.44** | **209** | PN | Pn | 08 16 57.5 | -3.0 |
| **KHZ** | **Kahutara** | **6.45** | **207** | PN | Pn | 08 17 10.0 | -3.9 |

*CSEM* ***13*** *08:19:47.0, 62.78N×17.80E, h11km, ML1.6, After UPP*

**UPP 13 08:19:47.0, 62.78N×17.80E, h11km, ML1.6, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HEMU** | **Hemsoen** | **0.15** | **132** | P | Pg | 08 19 49.9 | -0.5 |
| HEMU | | | | S | Sg | 08 19 51.9 | -0.9 |
| **SOLU** | **Sollefteaa** | **0.53** | **333** | P | Pg | 08 19 56.9 | -0.5 |
| SOLU | | | | S | Sg | 08 20 03.9 | -0.6 |
| **ARNU** | **Arnoeviken** | **1.10** | **190** | P | Pb | 08 20 07.2 | -0.9 |
| ARNU | | | | S | Sb | 08 20 21.1 | -1.3 |

*CSEM* ***13*** *08:19:48.9, 63.84N×20.46E, h0km, ML0.7, Mining explosion. After UPP*

**UPP 13 08:19:48.9, 63.84N×20.46E, h0km, ML0.7, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UMAU** | **Umeaa** | **0.11** | **64** | P | Pg | 08 19 51.2 | +0.2 |
| UMAU | | | | S | Sg | 08 19 52.9 | +0.5 |
| **HUSU** | **Husum** | **0.74** | **229** | P | Pg | 08 20 02.9 | -0.2 |
| **HUSU** | **Husum** | **0.74** | **229** | P | Pg | 08 20 02.9 | -0.2 |
| **BURU** | **Burvik** | **0.85** | **28** | P | Pg | 08 20 05.0 | -0.2 |
| **LILU** | **Lilltraesk** | **1.48** | **350** | P | Pn | 08 20 15.7 | -1.0 |
| **SOLU** | **Sollefteaa** | **1.55** | **249** | P | Pn | 08 20 17.2 | -0.5 |
| **SJUU** | **Sjulsmark** | **1.75** | **16** | P | Pn | 08 20 21.0 | +0.5 |

**GUC 13 08:39:58.9±0.5, 19.28S×69.27W, h103km±4km, ML3.5, 2C-2D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNMC** | **Minimini** | **0.34** | **296** | ⇑*i* P | Pn | 08 40 14.8 | +0.4 |
| MNMC | | | | *i* S | Sn | 08 40 26.8 | +0.8 |
| MNMC | | | | AML | AML | 08 40 31.0 | |
| | comp=N,3μm,0.2s | | | | | | |
| **PB13** | **IPOC Station P** | **0.96** | **347** | ⇑*i* P | Pn | 08 40 20.8 | +0.8 |
| PB13 | | | | *i* S | Sn | 08 40 37.2 | +1.5 |
| **ARCH** | **Arica** | **1.25** | **309** | ⇓*i* P | Pn | 08 40 22.5 | +0.2 |
| ARCH | | | | *i* S | Sn | 08 40 40.6 | +0.6 |
| **PB01** | **IPOC Station P** | **1.77** | **186** | *eP* | Pn | 08 40 29.7 | +0.9 |
| PB01 | | | | *i* S | Sn | 08 40 52.2 | +0.7 |
| PB01 | | | | AML | AML | 08 40 54.7 | |
| | comp=E,422nm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **2.50** | **193** | ⇓*i* P | Pn | 08 40 39.7 | +1.3 |
| PB07 | | | | AML | AML | 08 41 17.9 | |
| | comp=N,171nm,0.3s | | | | | | |
| **PB06** | **IPOC Station P** | **3.42** | **185** | AML | AML | 08 41 42.0 | |
| | comp=N,88nm,0.5s | | | | | | |

*ISCJB* ***13*** *08:43:49.2±0.9, 28.16S±0.04×68.94W±0.04, h114km±10km, Error ellipse: s-maj=8.3km s-min=5.2km az=38.4*
*GUC* ***13*** *08:43:49.7±0.6, 28.10S×69.07W, h115km±62km, ML3.1*
*SJA* ***13*** *08:43:50.5±0.9, 28.24S×68.81W, h121km±5km, ML3.2*

**ISC 13 08:43:49.3±1.7, 28.13S±0.06×68.95W±0.04, h118km±15km, n14, σ1s06/27, 3C, La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VCA** | **Vinchina** | **0.89** | **133** | *i* P | **Pn** | **08 44 11.2** | **+0.9** |
| VCA | | | | *i* S | **Sn** | **08 44 25.8** | **-0.2** |
| VCA | | | | AML | AML | 08 44 27.4 | |
| | comp=Z,521nm,0.3s | | | | | | |
| **AGUA** | **GUANDACOL** | **1.41** | **164** | *i* P | **Pn** | **08 44 16.2** | **+0.6** |
| AGUA | | | | *i* S | **Sn** | **08 44 35.9** | **+0.2** |
| **CPCH** | **Copiapo** | **1.47** | **301** | ⇑*i* P | **Pn** | **08 44 15.4** | **-0.7** |
| CPCH | | | | *i* S | **Sn** | **08 44 35.0** | **-1.6** |
| **VACH** | **Vallenar** | **1.66** | **254** | ⇑*i* P | **Pn** | **08 44 18.9** | **+0.5** |
| VACH | | | | *i* S | **Sn** | **08 44 40.5** | **-0.1** |
| **LCO** | **Las Campanas** | **1.77** | **240** | ⇑*i* P | **Pn** | **08 44 20.6** | **+0.5** |
| LCO | | | | *i* S | **Sn** | **08 44 43.1** | **-0.5** |
| LCO | | | | AML | AML | 08 44 43.9 | |
| | comp=N,142nm,0.4s | | | | | | |
| **CDCH** | **Caldera** | **1.97** | **302** | *eP* | **Pn** | **08 44 23.6** | **+1.3** |
| CDCH | | | | *i* S | **Sn** | **08 44 47.6** | **+0.2** |
| **TLL** | **Tololo Astrono** | **2.60** | **218** | *eP* | **Pn** | **08 44 30.8** | **+0.3** |
| TLL | | | | AML | AML | 08 45 08.3 | |
| | comp=N,105nm,0.3s | | | | | | |
| **CYA** | **Choya** | **2.79** | **97** | *i* P | **Pn** | **08 44 34.0** | **+1.2** |
| CYA | | | | *i* S | **Sn** | **08 45 05.1** | **-1.2** |
| **AVFE** | **Valle Fertil** | **2.84** | **153** | *i* P | **Pn** | **08 44 34.0** | **+0.6** |
| AVFE | | | | *i* S | **Sn** | **08 45 06.4** | **-1.0** |
| AVFE | | | | AML | AML | 08 45 07.7 | |
| | comp=Z,77nm,0.3s | | | | | | |
| **RTLL** | **Cerro Villicun** | **3.21** | **173** | *i* P | **Pn** | **08 44 39.0** | **+0.7** |
| RTLL | | | | *i* S | **Sn** | **08 45 14.8** | **-1.5** |
| **CFAA** | **Coronel Fontan** | **3.52** | **170** | *i* P | **Pn** | **08 44 43.0** | **+0.7** |
| CFAA | | | | *i* S | **Sn** | **08 45 22.3** | **-1.1** |
| **ACHE** | **Chepes** | **3.62** | **147** | *i* P | **Pn** | **08 44 44.4** | **+0.6** |
| ACHE | | | | *i* S | **Sn** | **08 45 23.6** | **-2.4** |
| **RTLS** | **Leoncito** | **3.67** | **185** | *i* P | **Pn** | **08 44 45.7** | **+1.2** |
| RTLS | | | | *i* S | **Sn** | **08 45 28.1** | **+0.8** |
| **RTCV** | **Cerro Valdivia** | **3.73** | **175** | *i* P | **Pn** | **08 44 46.0** | **+0.7** |
| RTCV | | | | *i* S | **Sn** | **08 45 27.3** | **-1.3** |

**IDC 13 08:44:23.2±2.0, 1.98S×126.17E, h0km, mb3.3/2, mb1 3.5/3, mb1mx3.3/35, mbtmp3.3/3, ML3.2/1, Error ellipse: s-maj=172.4km s-min=28.0km az=65.0, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **19.56** | **156** | P | P | 08 48 52.9 | +0.1 |
| | 0.1nm,0.3s,baz=335,slow=11,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **22.82** | **161** | P | P | 08 49 28.1 | 0.0 |
| | 0.4nm,0.9s,baz=347,slow=12,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.96** | **327** | P | | 08 54 45.0 | -0.1 |
| | 0.4nm,0.5s,baz=134,slow=6.6,SNR=3.7 | | | | | | |

*ISCJB* ***13*** *08:47:54.9±0.5, 43.16S±0.03×172.03E±0.05, h12km±4km, mb3.2/2, Error ellipse: s-maj=5.9km s-min=4.6km az=24.3*
*WEL* ***13*** *08:47:55.3±0.1, 43.17S×172.04E, h5km, ML3.7/21, Error ellipse: s-maj=0.6km s-min=0.4km az=90.0*
*WEL Felt in the Canterbury region, maximum reported intensity MM 4.*
*IDC* ***13*** *08:47:57.3±2.3, 42.99S×171.61E, h0km, mb3.4/2, mb1 3.6/2, mb1mx3.5/20, mbtmp3.4/2, Error ellipse: s-maj=47.9km s-min=12.3km az=106.0*

**ISC 13 08:47:55.0±1.0, 43.15S±0.04×172.05E±0.03, h13km±8km, n27, σ0s98/27, 5C, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OXZ** | **Oxford** | **0.17** | **183** | ⇑PG | **Pg** | **08 47 58.9** | **-0.1** |
| OXZ | | | | SG | **Sg** | **08 48 01.4** | **-0.4** |
| **LTZ** | **Lake Taylor** | **0.40** | **24** | PG | **Pb** | **08 48 03.8** | **-0.2** |
| LTZ | | | | AML | AML | 08 48 03.9 | |
| LTZ | | | | SG | **Sb** | **08 48 09.6** | **-0.5** |
| **CRLZ** | **Canterbury Las** | **0.59** | **136** | P* | **Pb** | **08 48 07.3** | **0.0** |
| CRLZ | | | | *eSG* | **Sg** | **08 48 14.8** | **+0.3** |
| CRLZ | | | | AML

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WKZ** | **Wanaka** | **2.75** | **232** | AML | AML | 08 49 27.2 | |
| WKZ | | | | AML | AML | 08 49 29.1 | |
| **EAZ** | **Earnscleugh** | **2.87** | **223** | PN | **Pn** | **08 48 39.4** | **-1.0** |
| EAZ | | | | AML | AML | 08 49 29.6 | |
| EAZ | | | | AML | AML | 08 49 31.5 | |
| **CAW** | **Cannon Point** | **3.04** | **49** | AML | AML | 08 49 52.7 | |
| **TUZ** | **Tuapeka** | **3.29** | **211** | PN | **Pn** | **08 48 45.6** | **-0.6** |
| TUZ | | | | AML | AML | 08 49 55.2 | |
| TUZ | | | | AML | AML | 08 49 55.3 | |
| **URZ** | **Urewera** | **6.22** | **40** | Pn | **Pn** | **08 49 26.4** | **0.0** |
| | 0.4nm,0.3s,baz=213,slow=4.2,SNR=3.7 | | | | | | |
| URZ | | | | Sn | **Sn** | **08 50 33.6** | **-3.8** |
| | 0.7nm,0.3s,baz=122,slow=19,SNR=2.0 | | | | | | |
| **ASAR** | **Alice Springs** | **36.90** | **289** | P | **P** | **08 55 04.9** | **+1.5** |
| | 0.2nm,0.5s,baz=127,slow=7.4,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.13** | **294** | P | **P** | **08 55 23.3** | **+1.0** |
| | 0.5nm,1.0s,baz=134,slow=7.9,SNR=7.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.96** | **198** | PKPbc | **PKPab** | **09 07 47.5** | **+0.6** |
| | 0.8nm,1.1s,baz=180,slow=3.7,SNR=2.5 | | | | | | |

**GUC 13 08:50:56.7±0.5, 22°56S×68°91W, h112km±4km, ML3.6, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **0.05** | **178** | *i* P | Pn | 08 51 13.3 | +0.8 |
| LVC | | | | *i* S | Sn | 08 51 25.0 | +0.7 |
| **PB06** | **IPOC Station P** | **0.62** | **257** | *i* P | Pn | 08 51 15.6 | +0.7 |
| PB06 | | | | *i* S | Sn | 08 51 29.8 | +1.2 |
| PB06 | comp=N,1μm,0.2s | | | AML | AML | 08 51 31.7 | |
| **PB04** | **IPOC Station P** | **1.17** | **281** | *i* P | Pn | 08 51 20.5 | +0.4 |
| PB04 | | | | *i* S | Sn | 08 51 38.5 | +0.7 |
| PB04 | comp=N,908nm,0.1s | | | AML | AML | 08 51 41.0 | |
| **PB07** | **IPOC Station P** | **1.23** | **312** | *i* P | Pn | 08 51 21.1 | +0.3 |
| PB07 | | | | *i* S | Sn | 08 51 39.6 | +0.7 |
| PB07 | comp=N,1μm,0.1s | | | AML | AML | 08 51 40.8 | |
| **PB01** | **IPOC Station P** | **1.60** | **340** | *i* P | Pn | 08 51 25.1 | +0.1 |
| PB01 | | | | *i* S | Sn | 08 51 47.4 | +0.9 |
| PB01 | comp=E,1μm,0.3s | | | AML | AML | 08 51 48.3 | |
| **ANCH** | **Antofagasta** | **1.77** | **231** | *i* P | Pn | 08 51 19.0 | -7.9 |
| ANCH | | | | *i* S | Sn | 08 51 42.5 | -7.5 |
| **PB10** | **IPOC Station P** | **1.78** | **238** | *i* P | Pn | 08 51 27.4 | +0.2 |
| PB10 | | | | *i* S | Sn | 08 51 50.6 | +0.3 |
| PB10 | comp=E,887nm,0.3s | | | AML | AML | 08 51 51.1 | |

*ISCJB **13** 09:01:29.1±0.6, 50°.36N±0°.04×18°.80E±0°.03, h0km, Error ellipse: s-maj=6.3km s-min=2.5km az=12.7*
*CSEM **13** 09:01:29.8±0.4, 50°.39N×18°.83E, h2km, ML2.7/5, Error ellipse: s-maj=8.4km s-min=3.2km az=6.0*
*PRU **13** 09:01:31.0, 50°.34N×18°.82E, h0km*
**ISC 13 09:01:29.8±0.9, 50°.34N±0°.05×18°.84E±0°.02, h0km, n28, σ0s53/46, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHZP** | **Chorzow** | **0.11** | **116** | *e*Pg | **Pg** | **09 01 32.3** | **+0.4** |
| CHZP | | | | *e*Sg | **Sg** | **09 01 34.2** | **+0.9** |
| **OJC** | **Ojcow** | **0.62** | **101** | *e*Pg | **Pg** | **09 01 41.3** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **09 01 49.7** | **-0.2** |
| **OJC** | **Ojcow** | **0.62** | **101** | *e*Pg | **Pg** | **09 01 41.3** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **09 01 49.7** | **-0.2** |
| **OKC** | **Ostrava-Krasne** | **0.67** | **222** | *e*PG | **Pb** | **09 01 44.0** | **-0.4** |
| OKC | comp=Z,24nm,0.2s | | | *e*SG | **Sb** | **09 01 54.3** | **0.0** |
| **OKC** | **Ostrava-Krasne** | **0.67** | **222** | Pg | **Pb** | **09 01 44.0** | **-0.4** |
| OKC | 24nm,0.2s | | | Sg | **Sb** | **09 01 54.3** | **0.0** |
| **MORC** | **Moravsky Berou** | **1.01** | **237** | *e*Pg | **Pg** | **09 01 49.9** | **+0.7** |
| MORC | | | | *e*Sg | **Sb** | **09 02 04.0** | **0.0** |
| **LANS** | **Liptovska Anna** | **1.26** | **161** | *e*SG | **Sg** | **09 02 10.9** | **+0.7** |
| **LANS** | **Liptovska Anna** | **1.26** | **161** | *e*Sg | **Sg** | **09 02 10.9** | **+0.7** |
| **NIE** | **Niedzica** | **1.32** | **134** | *e*Pg | **Pb** | **09 01 55.8** | **+0.3** |
| NIE | | | | *e*Sg | **Sn** | **09 02 14.4** | **+0.6** |
| **NIE** | **Niedzica** | **1.32** | **134** | *e*Pg | **Pb** | **09 01 55.8** | **+0.3** |
| NIE | | | | *e*Sg | **Sn** | **09 02 14.4** | **+0.6** |
| **KRLC** | **Kraliky** | **1.35** | **260** | *e*PG | **Pg** | **09 01 55.5** | **-0.2** |
| KRLC | | | | *e*SG | **Sb** | **09 02 14.1** | **+0.2** |
| **KRLC** | **Kraliky** | **1.35** | **260** | Pg | **Pg** | **09 01 55.5** | **-0.2** |
| KRLC | | | | Sg | **Sb** | **09 02 14.1** | **+0.2** |
| **DPC** | **Dobruska-Polom** | **1.61** | **271** | *e*PG | **Pb** | **09 02 00.2** | **-0.3** |
| DPC | comp=Z,7.6nm,0.2s | | | *e*SG | **Sg** | **09 02 21.8** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **1.61** | **271** | Pg | **Pb** | **09 02 00.2** | **-0.3** |
| DPC | 7.6nm,0.2s | | | Sg | **Sg** | **09 02 21.8** | **+0.1** |
| **KSP** | **Ksiaz** | **1.70** | **288** | *e*Pg | **Pg** | **09 02 03.1** | **+0.7** |
| KSP | | | | *e*Sg | **Sg** | **09 02 25.4** | **+0.9** |
| **VRAC** | **Vranov** | **1.78** | **236** | *e*Pn | **Pb** | **09 02 02.9** | **-0.5** |
| VRAC | | | | *e*Sg | **Sn** | **09 02 26.3** | **+1.0** |
| **STHS** | **Stebnicka Huta** | **1.81** | **120** | *e*PN | **Pg** | **09 02 04.2** | **-0.2** |
| STHS | | | | *e*SN | **Sb** | **09 02 26.5** | **-0.5** |
| **STHS** | **Stebnicka Huta** | **1.81** | **120** | *e*Pn | **Pg** | **09 02 04.2** | **-0.2** |
| STHS | | | | *e*Sn | **Sb** | **09 02 26.5** | **-0.5** |
| **UPC** | **Upice** | **1.82** | **276** | *e*SG | **Sg** | **09 02 28.7** | **+0.5** |
| | comp=Z,6.1nm,0.5s | | | | | | |
| **UPC** | **Upice** | **1.82** | **276** | Sg | **Sg** | **09 02 28.7** | **+0.5** |
| | 6.1nm,0.5s | | | | | | |
| **VYHS** | **Vyhne** | **1.85** | **180** | *e*PN | **Pn** | **09 02 02.8** | **0.0** |
| VYHS | | | | *e*SN | **Sn** | **09 02 26.1** | **-0.7** |
| **VYHS** | **Vyhne** | **1.85** | **180** | *e*Pn | **Pn** | **09 02 02.8** | **0.0** |
| VYHS | | | | *e*Sn | **Sn** | **09 02 26.1** | **-0.7** |
| **GOPC** | **GO Pecny, Ondr** | **2.64** | **262** | *e*SG | **Sg** | **09 02 54.0** | **-0.7** |
| **GOPC** | **GO Pecny, Ondr** | **2.64** | **262** | Sg | **Sg** | **09 02 54.0** | **-0.7** |
| **PRU** | **Pruhonice** | **2.79** | **264** | *e*SG | **Sg** | **09 02 59.3** | **0.0** |
| | comp=Z,3.9nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **2.79** | **264** | Sg | **Sg** | **09 02 59.3** | **0.0** |
| | 3.9nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.62** | **253** | *e*SG | **Sg** | **09 03 25.4** | **-0.7** |
| | comp=Z,5.2nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.62** | **253** | Sg | **Sg** | **09 03 25.4** | **-0.7** |
| | 5.2nm,0.6s | | | | | | |

*NAO **13** 09:07:43.7±1.1, 59°.30N×26°.96E, ML2.3*
*HEL **13** 09:07:43.5±0.3, 59°.33N×27°.16E, h0km, ML1.9, Explosion*
*BER **13** 09:07:44.1±3.3, 59°.32N×27°.15E, h0km, ML2.3(NAO), Suspected explosion*
**CSEM 13 09:07:43.7±0.3, 59°.31N×27°.11E, h2km, ML2.3, Error ellipse: s-maj=8.1km s-min=4.0km az=100.0, Mining explosion., Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VSU** | **Vasula** | **0.87** | **193** | Pg | Pg | 09 08 00.4 | 0.0 |
| VSU | | | | Lg | Lg | 09 08 10.8 | |
| **VSU** | **Vasula** | **0.87** | **193** | Pg | Pg | 09 08 00.4 | 0.0 |
| VSU | | | | Lg | Lg | 09 08 10.8 | |
| **VSU** | **Vasula** | **0.87** | **193** | *e*P | Pg | 09 08 00.0 | -0.4 |
| VSU | | | | *e*S | Sg | 09 08 10.5 | -1.2 |
| **VSU** | **Vasula** | **0.87** | **193** | P | Pg | 09 08 00.0 | -0.4 |
| **VSU** | **Vasula** | **0.87** | **193** | Pg | Pg | 09 08 00.4 | 0.0 |
| VSU | | | | S | Sg | 09 08 10.5 | -1.2 |
| VSU | | | | Lg | Lg | 09 08 10.8 | |
| | SNR=55 | | | | | | |
| **VJF** | **Virojoki** | **1.25** | **10** | *e*P | Pg | 09 08 07.1 | -0.6 |
| VJF | | | | *e*SB | Sg | 09 08 24.1 | +0.2 |
| **VJF** | **Virojoki** | **1.25** | **10** | P | Pg | 09 08 07.1 | -0.6 |
| VJF | | | | Sb | Sg | 09 08 24.0 | +0.1 |
| **PVF** | **Pernaja** | **1.39** | **334** | *e*P | Pn | 09 08 09.5 | -0.5 |
| PVF | comp=Z,10nm,0.2s | | | MSG | | 09 08 25.2 | |
| PVF | | | | *e*S | Sg | 09 08 27.4 | -0.9 |
| **PVF** | **Pernaja** | **1.39** | **334** | P | Pn | 09 08 09.5 | -0.5 |
| PVF | | | | S | Sg | 09 08 27.3 | -0.9 |
| **SRPE** | **Suurupi** | **1.40** | **277** | *e*P | Pn | 09 08 10.0 | -0.2 |
| SRPE | | | | *e*SB | Sg | 09 08 28.5 | -0.3 |
| **SRPE** | **Suurupi** | **1.40** | **277** | P | Pn | 09 08 10.0 | -0.3 |
| SRPE | | | | Sb | Sg | 09 08 28.4 | -0.4 |
| **MEF** | **Metsahovi** | **1.65** | **305** | *e*P | Pn | 09 08 14.0 | +0.4 |
| MEF | | | | *e*S | Sn | 09 08 35.1 | -0.2 |
| **MEF** | **Metsahovi** | **1.65** | **305** | P | Pn | 09 08 14.0 | +0.4 |
| MEF | | | | S | Sn | 09 08 35.1 | -0.2 |
| **MTSE** | **Matsula** | **1.81** | **252** | *e*PN | Pb | 09 08 16.6 | -0.8 |
| MTSE | | | | *e*S | Sn | 09 08 39.5 | +0.3 |
| **MTSE** | **Matsula** | **1.81** | **252** | Pn | Pb | 09 08 16.6 | -0.8 |
| MTSE | | | | S | Sn | 09 08 39.5 | +0.3 |
| **FIA0** | **FINESS Array S** | **2.20** | **347** | Pn | Pn | 09 08 21.9 | +0.7 |
| | baz=165,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 09 08 52.6 | |
| | baz=171,slow=37 | | | | | | |
| FIA0 | | | | Rg | Rg | 09 09 04.7 | |
| | baz=173,slow=37 | | | | | | |
| **FIA0** | **FINESS Array S** | **2.20** | **347** | Pn | Pn | 09 08 21.9 | +0.7 |
| | baz=165,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 09 08 52.6 | |
| | baz=171,slow=37 | | | | | | |
| FIA0 | | | | Rg | Rg | 09 09 04.7 | |
| | baz=173,slow=37 | | | | | | |
| **FIA0** | **FINESS Array S** | **2.20** | **347** | *e*P | Pn | 09 08 21.9 | +0.7 |
| FIA0 | | | | *e*PB | Pb | 09 08 23.3 | -0.8 |
| FIA0 | | | | *e*SB | Sb | 09 08 51.1 | -0.7 |
| FIA0 | | | | *e*SG | Sg | 09 08 52.5 | -1.8 |
| FIA0 | comp=Z,3.5nm,0.1s | | | MSG | | 09 08 54.5 | |
| **FIA0** | **FINESS Array S** | **2.20** | **347** | P | Pn | 09 08 21.8 | +0.6 |
| **FIA0** | **FINESS Array S** | **2.20** | **347** | Pb | Pb | 09 08 23.3 | -0.8 |
| FIA0 | | | | Sb | Sb | 09 08 51.1 | -0.7 |
| FIA0 | | | | Sg | Sg | 09 08 52.5 | -1.8 |
| FIA0 | | | | Lg | Lg | 09 08 52.6 | |
| | SNR=50 | | | | | | |
| **KAF** | **Kangasniemi** | **2.84** | **352** | *e*P | Pn | 09 08 31.7 | +1.7 |
| KAF | | | | *e*S | Sn | 09 09 05.8 | +1.1 |
| KAF | comp=Z,2.7nm,0.2s | | | MSG | | 09 09 06.7 | |
| **KAF** | **Kangasniemi** | **2.84** | **352** | P | Pn | 09 08 31.6 | +1.6 |
| KAF | | | | S | Sn | 09 09 05.8 | +1.1 |
| **KEF** | **Keuruu** | **3.07** | **340** | *e*P | Pn | 09 08 34.5 | +1.4 |
| KEF | comp=Z,2.2nm,0.2s | | | MSG | | 09 09 13.4 | |
| KEF | | | | *e*SG | Sb | 09 09 19.0 | +2.2 |
| **KEF** | **Keuruu** | **3.07** | **340** | Sg | Sb | 09 09 19.0 | +2.2 |
| **KEF** | **Keuruu** | **3.07** | **340** | P | Pn | 09 08 34.5 | +1.4 |
| **JOF** | **Joensuu** | **4.15** | **28** | *e*P | Pn | 09 08 49.0 | +0.9 |
| **JOF** | **Joensuu** | **4.15** | **28** | P | Pn | 09 08 48.9 | +0.9 |
| **HFS** | **Hagfors** | **6.83** | **283** | Sn | Sn | 09 10 38.3 | -4.8 |
| | baz=74,slow=37 | | | | | | |
| HFS | | | | Lg | Lg | 09 11 15.7 | |
| | baz=102,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **6.83** | **283** | Sn | Sn | 09 10 38.3 | -4.8 |
| | baz=74,slow=37 | | | | | | |
| HFS | | | | Lg | Lg | 09 11 15.7 | |
| | baz=102,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **6.83** | **283** | Lg | Lg | 09 11 15.7 | |
| | SNR=3.1 | | | | | | |
| **ARA0** | **ARCESS Array S** | **10.29** | **357** | Pn | Pn | 09 10 10.7 | -1.5 |
| | baz=168,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 09 11 58.0 | -10 |
| | baz=173,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **10.29** | **357** | Pn | Pn | 09 10 10.7 | -1.5 |
| | baz=168,slow=14 | | | | | | |
| ARA0 | | | | Sn | Sn | 09 11 58.0 | -10 |
| | baz=173,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **10.29** | **357** | Pn | Pn | 09 10 10.7 | -1.4 |
| | SNR=4.8 | | | | | | |

*CSEM **13** 09:08:28.9±0.7, 61°.51N×21°.76E, h1km, ML1.6, Error ellipse: s-maj=19.2km s-min=14.4km az=114.0, Suspected Mining explosion.*
**UPP 13 09:08:31.2, 61°.53N×21°.19E, h1km, ML1.6, Suspected Mining explosion., Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAL** | **Aland** | **1.48** | **204** | P | Pn | 09 08 58.2 | -0.6 |
| AAL | | | | S | Sn | 09 09 20.1 | +1.4 |
| **HEMU** | **Hemsoen** | **1.88** | **309** | P | Pn | 09 09 04.1 | -0.3 |
| HEMU | | | | S | Sb | 09 09 30.1 | -0.1 |
| **HUSU** | **Husum** | **2.04** | **334** | P | Pn | 09 09 06.8 | +0.2 |
| **UMAU** | **Umeaa** | **2.38** | **355** | P | Pn | 09 09 11.4 | +0.2 |
| **SOLU** | **Sollefteaa** | **2.52** | **315** | P | Pn | 09 09 14.0 | +0.9 |

**GUC 13 09:58:45.0±0.3, 19°68S×69°69W, h78km±4km, ML3.5, 1C-2D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNMC** | **Minimini** | **0.55** | **9** | *ij* P | Pn | 09 58 59.6 | +0.2 |
| MNMC | | | | *i* S | Sn | 09 59 10.7 | +0.6 |
| MNMC | comp=E,4μm,0.2s | | | AML | AML | 09 59 11.2 | |
| **ARCH** | **Arica** | **1.31** | **334** | ⇑*i* P | Pn | 09 59 08.0 | +0.1 |
| ARCH | | | | *i* S | Sn | 09 59 25.7 | +0.6 |
| **PB13** | **IPOC Station P** | **1.35** | **7** | *e*P | Pn | 09 59 10.1 | +1.0 |
| PB13 | | | | *e*S | Sn | 09 59 28.8 | +1.7 |
| PB13 | comp=N,3μm,0.2s | | | AML | AML | 09 59 31.0 | |
| **PB01** | **IPOC Station P** | **1.37** | **172** | ⇓*i* P | Pn | 09 59 09.1 | +0.4 |
| PB01 | | | | *i* S | Sn | 09 59 27.4 | +0.8 |
| PB01 | comp=N,417nm,0.3s | | | AML | AML | 09 59 32.6 | |
| **PB07** | **IPOC Station P** | **2.05** | **185** | *e*P | Pn | 09 59 17.9 | +0.2 |
| PB07 | comp=E,422nm,0.7s | | | AML | AML | 09 59 48.5 | |

**WEL 13 10:12:18.3±0.3, 37°.67S×176°.12E, h178km±3km, ML3.8/8, 6C-1D, Error ellipse: s-maj=4.9km s-min=3.0km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **0.98** | **127** | ⇑PN | Pn | 10 12 45.7 | +0.2 |
| URZ | | | | SN | Sn | 10 13 06.6 | -0.1 |
| **MWZ** | **Matawai** | **1.29** | **121** | PN | Pn | 10 12 48.2 | 0.0 |
| MWZ | | | | SN | Sn | 10 13 10.8 | -0.5 |
| **HAZ** | **Te Kaha** | **1.32** | **94** | ⇑PN | Pn | 10 12 48.0 | -0.3 |
| **RAHZ** | **Arahi** | **1.46** | **149** | PN | Pn | 10 12 49.9 | +0.2 |
| RAHZ | | | | SN | Sn | 10 13 13.8 | -0.3 |
| **SNGZ** | **Shannon Statio** | **1.47** | **139** | PN | Pn | 10 12 49.9 | +0.1 |
| SNGZ | | | | SN | Sn | 10 13 13.0 | -1.2 |
| **BKZ** | **Black Stump Fm** | **1.52** | **169** | ⇑PN | Pn | 10 12 50.0 | -0.4 |
| BKZ | | | | AML | AML | 10 13 14.0 | |
| BKZ | | | | AML | AML | 10 13 14.0 | |
| **TWGZ** | **Tauwhareparae** | **1.56** | **110** | PN | Pn | 10 12 50.7 | 0.0 |
| **RIGZ** | **Rimuhau** | **1.66** | **129** | PN | Pn | 10 12 51.6 | 0.0 |
| **WNVZ** | **Wahianoa** | **1.71** | **194** | PN | Pn | 10 12 52.3 | 0.0 |
| **ARHZ** | **Aropaoanui** | **1.73** | **157** | PN | Pn | 10 12 52.3 | 0.0 |
| **MOVZ** | **Moawhango** | **1.76** | **189** | PN | Pn | 10 12 52.2 | -0.5 |
| **BHHZ** | **Black Hill Sta** | **1.82** | **181** | PN | Pn | 10 12 52.6 | -0.7 |
| **KNZ** | **Kokohu** | **1.82** | **138** | ⇑PN | Pn | 10 12 52.7 | -0.5 |
| KNZ | | | | AML | AML | 10 13 25.7 | |
| **WMGZ** | **Waiomatatini S** | **1.82** | **95** | PN | Pn | 10 12 53.0 | -0.3 |
| **CNGZ** | **Carnagh Statio** | **1.84** | **117** | PN | Pn | 10 12 53.7 | +0.2 |
| **KRHZ** | **Kereru** | **1.98** | **174** | PN | Pn | 10 12 54.3 | -0.7 |
| **KAHZ** | **Kahuranaki** | **2.20** | **165** | PN | Pn | 10 12 56.7 | -0.8 |
| **PNHZ** | **Pukenui** | **2.24** | **178** | PN | Pn | 10 12 56.7 | -1.2 |
| **TSZ** | **Takapari Road** | **2.39** | **183** | PN | Pn | 10 12 58.1 | -1.5 |
| TSZ | | | | AML | AML | 10 13 30.6 | |
| TSZ | | | | AML | AML | 10 13 31.0 | |
| **PXZ** | **Pawanui** | **2.43** | **166** | PN | Pn | 10 12 58.5 | -1.5 |
| PXZ | | | | AML | AML | 10 13 32.0 | |
| PXZ | | | | AML | AML | 10 13 32.8 | |
| **POWZ** | **Post Office Ro** | **2.73** | **186** | PN | Pn | 10 13 01.4 | -2.1 |
| **MRZ** | **Mangatainoka R** | **3.02** | **188** | PN | Pn | 10 13 04.3 | -2.8 |
| MRZ | | | | AML | AML | 10 13 42.4 | |
| MRZ | | | | AML | AML | 10 13 43.9 | |
| **OGWZ** | **Otaki Gorge** | **3.23** | **193** | PN | Pn | 10 13 07.0 | -2.6 |
| **HOWZ** | **Holdsworth Sta** | **3.26** | **188** | PN | Pn | 10 13 06.8 | -3.2 |
| **KIW** | **Kapiti Island** | **3.32** | **196** | PN | Pn | 10 13 07.7 | -3.1 |
| **TMWZ** | **Te Maipa** | **3.44** | **183** | PN | Pn | 10 13 08.5 | -3.7 |
| **MTW** | **Mount Morrison** | **3.52** | **188** | PN | Pn | 10 13 09.5 | -3.7 |
| **CAW** | **Cannon Point** | **3.53** | **193** | PN | Pn | 10 13 10.0 | -3.4 |
| CAW | | | | AML | AML | 10 13 53.7 | |
| **TRWZ** | **Traveller** | **3.74** | **185** | PN | Pn | 10 13 12.2 | -3.8 |
| **PAWZ** | **Paruwai Farm** | **3.75** | **188** | PN | Pn | 10 13 12.4 | -3.7 |
| **WEL** | **Wellington** | **3.76** | **196** | PN | Pn | 10 13 12.5 | -3.7 |
| **MSWZ** | **Moikau Station** | **3.80** | **190** | PN | Pn | 10 13 12.8 | -4.0 |
| MSWZ | | | | AML | AML | 10 13 56.7 | |
| **TCW** | **Tory Channel** | **3.81** | **201** | PN | Pn | 10 13 13.5 | -3.4 |
| TCW | | | | AML | AML | 10 13 58.5 | |
| TCW | | | | AML | AML | 10 14 01.2 | |
| **PLWZ** | **Palliser** | **3.95** | **189** | ⇑PN | Pn | 10 13 14.6 | -4.2 |
| **TUWZ** | **Tuamarina** | **4.12** | **203** | PN | Pn | 10 13 17.0 | -3.7 |
| **NNZ** | **Nelson** | **4.13** | **210** | PN | Pn | 10 13 17.2 | -3.7 |
| **QRZ** | **Quartz Range** | **4.21** | **220** | PN | Pn | 10 13 18.8 | -3.2 |
| **BSWZ** | **Blackbirch Sta** | **4.39** | **202** | PN | Pn | 10 13 20.8 | -3.5 |
| **THZ** | **Tophouse** | **4.78** | **210** | PN | Pn | 10 13 25.7 | -3.7 |
| **KHZ** | **Kahutara** | **5.14** | **202** | ⇑PN | Pn | 10 13 29.7 | -4.2 |
| **DSZ** | **Denniston Nort** | **5.26** | **218** | PN | Pn | 10 13 31.2 | -4.4 |
| **OXZ** | **Oxford** | **6.45** | **208** | PN | Pn | 10 13 45.2 | -5.9 |
| **MQZ** | **McQueen's Vall** | **6.58** | **203** | ⇓PN | Pn | 10 13 46.5 | -6.3 |
| **ODZ** | **Otahua Downs** | **8.44** | **207** | PN | Pn | 10 14 12.0 | -5.3 |

*ISK **13** 10:19:30.1, 37°.57N×41°.84E, h26km, MD2.9*
*DDA **13** 10:19:32.0, 38°.10N×41°.63E, h17km, Md2.8*
*CSEM **13** 10:19:31.4±0.6, 37°.55N×41°.58E, h2km, MD2.9, Error ellipse: s-maj=17.9km s-min=8.1km az=173.0*
**ISC 13 10:19:33.4±1.2, 37°.68N±0°.06×41°.58E±0°.02, h20km±5km, n18, σ1s01/30, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BEST** | **Besiri** | **0.33** | **310** | P | **Pg** | **10 19 38.6** | **-1.9** |
| BEST | | | | S | **Sg** | **10 19 45.5** | **+0.1** |
| **BTMT** | **Batman** | **0.52** | **352** | *e*PG | **Pg** | **10 19 44.3** | **+0.4** |
| **BTMT** | **Batman** | **0.52** | **352** | *e*Pg | **Pg** | **10 19 44.3** | **+0.4** |
| **MARD** | **Mardin** | **0.74** | **240** | P | **Pb** | **10 19 46.4** | **-1.2** |
| MARD | | | | S | **Sb** | **10 19 57.4** | **0.0** |
| **MAZI** | **Mazidag** | **0.93** | **257** | *e*PN | **Pb** | **10 19 50.6** | **-0.3** |
| MAZI | | | | *e*SN | **Sn** | **10 20 05.3** | **+1.0** |
| **MAZI** | **Mazidag** | **0.93** | **257** | *e*Pn | **Pb** | **10 19 50.6** | **-0.3** |
| MAZI | | | | *e*Sn | **Sn** | **10 20 05.3** | **+1.0** |
| **DIY** | **Diyarbakir** | **1.10** | **282** | *e*Pn | **Pg** | **10 19 54.3** | **-0.4** |
| DIY | | | | *e*Sn | **Sg** | **10 20 12.2** | **+3.1** |
| **DYBB** | **Diyarbakir** | **1.18** | **284** | *e*PN | **Pn** | **10 19 54.3** | **-0.5** |
| DYBB | | | | *e*SN | **Sg** | **10 20 12.2** | **+0.6** |
| **GEVA** | **Gevas** | **1.32** | **61** | *i* P | **Pn** | **10 19 56.4** | **-0.5** |
| GEVA | | | | *i* S | **Sg** | **10 20 17.2** | **+0.9** |
| **GEVA** | **Gevas** | **1.32** | **61** | P | **Pn** | **10 19 56.5** | **-0.5** |
| GEVA | | | | S | **Sg** | **10 20 17.2** | **+0.9** |
| **HAKT** | **HAKKARI** | **1.69** | **94** | *i* P | **Pb** | **10 20 03.4** | **-0.5** |
| HAKT | | | | *i* S | **Sg** | **10 20 28.8** | **+0.8** |
| **HAKT** | **HAKKARI** | **1.69** | **94** | P | **Pb** | **10 20 03.4** | **-0.5** |
| HAKT | | | | S | **Sg** | **10 20 28.8** | **+0.8** |
| **SVRC** | **Sivrice-ELAZID** | **1.93** | **292** | *e*PN | **Pn** | **10 20 05.7** | **+0.5** |
| **SVRC** | **Sivrice-ELAZID** | **1.93** | **292** | *e*Pn | **Pn** | **10 20 05.7** | **+0.5** |
| **PTK** | **Pertek** | **2.11** | **306** | *e*PN | **Pn** | **10 20 07.6** | **-0.1** |
| **PTK** | **Pertek** | **2.11** | **306** | *e*Pn | **Pn** | **10 20 07.6** | **-0.1** |
| **ELZG** | **Elazig** | **2.21** | **292** | *i* P | **Pb** | **10 20 11.2** | **-1.5** |
| ELZG | | | | *i* S | **Sb** | **10 20 39.8** | **+0.1** |
| **ELZG** | **Elazig** | **2.21** | **292** | P | **Pb** | **10 20 11.2** | **-1.5** |
| ELZG | | | | S | **Sb** | **10 20 39.8** | **+0.1** |

**IDC 13 10:26:26.2±3.0, 54°.12N×87°.35E, h0km, mb1 3.2/2, mb1mx3.0/48, mbtmp3.2/2, ML3.0/2, Error ellipse: s-maj=23.5km s-min=16.7km az=61.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.50** | **264** | *i* | | 10 36 10.0 | |
| | baz=82,slow=319,SNR=1.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.50** | **264** | Pg | Pn | 10 26 52.8 | -1.5 |
| | 6.0nm,0.3s,baz=84,slow=16,SNR=37 | | | | | | |
| ZALV | | | | Lg | Lg | 10 27 13.9 | |
| | 6.7nm,0.3s,baz=84,slow=29,SNR=12 | | | | | | |
| ZALV | | | | Rg | Rg | 10 27 22.7 | |
| | 14nm,0.5s,baz=74,slow=32,SNR=6.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.43** | **241** | Pn | Pn | 10 28 03.5 | +1.4 |
| | 0.2nm,0.3s,baz=55,slow=14,SNR=11 | | | | | | |
| KURBB | | | | Sn | Sn | 10 29 14.4 | -1.8 |
| | 0.2nm,0.3s,baz=52,slow=21,SNR=6.3 | | | | | | |
| KURBB | | | | Lg | Lg | 10 29 51.0 | |
| | 0.1nm,0.3s,baz=49,slow=31,SNR=6.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **8.01** | **206** | Pn | Pn | 10 28 23.9 | +0.1 |
| | 0.3nm,0.3s,baz=20,slow=17,SNR=3.1 | | | | | | |
| MKAR | | | | Sn | Sn | 10 29 55.4 | +0.3 |
| | 0.3nm,0.3s,baz=30,slow=26,SNR=3.2 | | | | | | |
| MKAR | | | | Lg | Lg | 10 30 41.1 | |
| | 0.3nm,0.3s,baz=21,slow=23,SNR=4.3 | | | | | | |

*BJI **13** 10:36:11.8, 51°.82N×173°.16W, h16km, mb4.7/16, mB4.8/12, Ms4.4/8, Ms7 4.1/7*
*MOS **13** 10:36:12.2±1.0, 51°.59N×173°.16W, h21km, mb4.5/33, Error ellipse: s-maj=10.2km s-min=8.6km az=65.2*
*ISCJB **13** 10:36:14.6±0.7, 51°.66N±0°.05×173°.07W±0°.03, h38km±5km, mb4.3/76, MS3.4/10, Error ellipse: s-maj=8.9km s-min=3.2km az=4.5*
*NEIC **13** 10:36:15.0±2.0, 51°.63N×173°.17W, h28km±13km, mb4.5/64, Error ellipse: s-maj=9.4km s-min=3.9km az=188.0*
*IDC **13** 10:36:16.9±0.6, 51°.67N×173°.16W, h47km±6km, mb3.9/28, mb1 4.0/30, mb1mx3.9/51, mbtmp4.1/30, MS3.4/12, Ms1 3.4/12, ms1mx3.2/43, Error ellipse: s-maj=17.8km s-min=9.7km az=174.0*
**ISC 13 10:36:15.8±0.5, 51°.62N±0°.08×173°.10W±0°.03, h34km±1km, h34km:pP-P, n463, σ0s97/466, mb4.4/77, MS3.4/10, 2C, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOFP** | **Korovin Flat P** | **0.90** | **317** | P | **Pb** | **10 36 32.5** | **-0.6** |
| **KOKL** | **Mount Kliuchef** | **0.98** | **317** | P | **Pn** | **10 36 33.0** | **-0.2** |
| **KOWE** | **Korovin West** | **1.03** | **317** | P | **Pn** | **10 36 33.5** | **-0.4** |
| **GSMY** | **Great Sitkin M** | **1.88** | **284** | P | Pn | 10 36 39.1 | -6.4 |
| GSMY | | | | S | **Sn** | **10 37 05.7** | **-2.4** |
| **GSTR** | **Great Sitkin T** | **1.90** | **286** | *e*Pn | Pn | 10 36 40.7 | -5.1 |
| **GSTD** | **Great Sitkin T** | **1.94** | **284** | P | Pn | 10 36 40.0 | -6.4 |
| GSTD | | | | S | **Sn** | **10 37 08.1** | **-1.5** |
| **GSCK** | **Great Sitkin C** | **1.94** | **283** | P | Pn | 10 36 38.9 | -7.4 |
| **ETKA** | **Kagalaska Isla**

WRH **Wood River Hil** 18.30 36 eP P 10 40 25.6 -0.8
comp=Z,36nm,1.8s
HARP **HAARP** 18.49 43 eP Pn 10 40 28.6 -0.4
comp=Z,367nm,2.8s
CCB **Clear Creek Bu** 18.49 35 eP P 10 40 27.2 -1.4
comp=Z,35nm,2.0s
MDM **Murphy Dome** 18.52 34 eP P 10 40 27.8 -1.1
comp=Z,8.4nm,1.0s
COLA **College** 18.60 35 eP Pn 10 40 31.9 +1.7
HDA **Harding Lake** 18.68 37 eP P 10 40 29.6 -1.1
comp=Z,12nm,0.4s
ILAR **Eielson Array** 18.89 36 P P 10 40 31.0 -2.0
comp=Z,1.1nm,0.3s,baz=236,slow=9.5,SNR=57
ILAR LR LR 10 47 47.5
comp=Z,95nm,18.0s,baz=256,slow=37
ILAR **Eielson Array** 18.89 36 P P 10 40 31.0 -2.0
ILAR pmax pmax
comp=Z,1.0nm,0.3s
ILAR MLR MLR
comp=Z,95nm,18.0s
IL1 **Eielson Array** 18.89 36 eP P 10 40 31.7 -1.3
BILL **Bilibino** 19.28 336 eP Pn 10 40 38.0 -0.4
BILL pmax pmax
comp=Z,5.0nm,1.0s
BILL MLR MLR
comp=Z,104nm,18.0s
COLD **Coldfoot** 19.31 27 eP Pn 10 40 39.5 +0.7
comp=Z,7.4nm,1.0s
DOT **Dot Lake** 19.45 41 eP P 10 40 35.2 -4.0
comp=Z,153nm,2.0s
FYU **Fort Yukon** 20.44 32 eP Pn 10 40 51.5 -0.7
comp=Z,41nm,1.4s
EGAK **Eagle** 21.07 39 eP P 10 40 56.2 -0.5
comp=Z,22nm,0.7s
DAWY **Dawson** 21.53 42 eP P 10 41 00.9 -0.7
comp=Z,138nm,2.8s
SEY **Seymchan** 21.53 315 P P 10 41 02.5 +0.9
comp=Z,1.7nm,0.7s,baz=2.7,slow=20,SNR=6.5
SEY **Seymchan** 21.53 315 P P 10 41 02.5 +0.9
SEY pmax pmax
comp=Z,2.0nm,0.7s
DLBC **Dease Lake** 25.25 57 P P 10 41 38.5 +0.1
comp=Z,6.2nm,0.8s,baz=267,slow=6.4,SNR=12
DLBC **Dease Lake** 25.25 57 eP P 10 41 40.9 +2.5
comp=Z,231nm,2.7s
INK **Inuvik** 25.25 34 P P 10 41 37.2 -1.0
comp=Z,6.8nm,0.7s,baz=252,slow=6.3,SNR=30
INK **Inuvik** 25.25 34 eP P 10 41 37.9 -0.3
INK pmax pmax
comp=Z,14nm,1.1s
INK **Inuvik** 25.25 34 eP P 10 41 37.9 -0.3
comp=Z,14nm,1.1s
ASAJ **Asahikawa** 30.26 273 P P 10 42 22.8 -0.4
comp=Z,4.2nm,0.6s,baz=80,slow=6.8
ASAJ **Asahikawa** 30.26 273 P P 10 42 22.8 -0.4
ASAJ pmax pmax
comp=Z,4.0nm,0.6s
YAK **Yakutsk** 31.93 311 LR LR 10 55 50.7
comp=Z,107nm,18.6s,baz=99,slow=37
B05A **Bryant** 32.45 75 P P 10 42 43.6 +1.1
baz=32
YKA **Yellowknife Ar** 32.47 48 P P 10 42 41.1 -1.4
comp=Z,0.4nm,0.4s,baz=276,slow=7.3,SNR=6.6
F04D **Rainier, OR** 32.88 80 P P 10 42 47.7 +1.4
baz=33
LON **Longmire** 33.30 78 eP P 10 42 51.8 +1.7
LON pmax pmax
comp=Z,61nm,2.8s
LON **Longmire** 33.30 78 eP P 10 42 51.8 +1.7
comp=Z,61nm,2.8s
G05D **Wamic, OR** 34.33 80 P P 10 42 59.7 +0.7
baz=34
I04A **Tendick Farm,** 34.39 83 P P 10 43 00.7 +1.2
baz=34
I05D **Terrebonne, OR** 34.77 81 P P 10 43 04.0 +1.2
baz=35
HAWA **Hanford** 34.86 77 eP P 10 43 04.5 +1.1
comp=Z,5.7nm,0.7s
J04D **Umpqua Nationa** 34.87 83 P P 10 43 05.6 +1.8
baz=35
C09A **Chrisman Ranch** 34.96 74 eP P 10 43 05.2 +0.9
comp=Z,4.7nm,0.9s
YBH **Yreka Blue Hor** 35.31 86 P P 10 43 07.9 +0.4
comp=Z,3.6nm,0.8s,baz=327,slow=7.3,SNR=12
YBH **Yreka Blue Hor** 35.31 86 eP P 10 43 09.8 +2.2
YBH pmax pmax
comp=Z,81nm,2.7s
YBH **Yreka Blue Hor** 35.31 86 eP P 10 43 09.8 +2.2
comp=Z,80nm,2.7s
J05D **Fort Rock, OR** 35.39 83 P P 10 43 10.0 +1.8
baz=35,SNR=5.2
M02C **Callahan** 35.41 87 P P 10 43 10.0 +1.6
baz=35
NEW **Newport** 35.44 73 eP P 10 43 09.1 +0.6
NEW pmax pmax
comp=Z,5.0nm,0.8s
NEW **Newport** 35.44 73 P P 10 43 08.8 +0.4
baz=35,SNR=6.0
NEW **Newport** 35.44 73 eP P 10 43 09.1 +0.6
comp=Z,4.9nm,0.8s
H11N2 **WAKE ISLAND Hy** 35.48 214 T T 11 21 11.4
baz=21,slow=76,SNR=21
H11N3 **WAKE ISLAND Hy** 35.49 214 T T 11 21 12.3
baz=21,slow=76,SNR=23
H11N1 **WAKE ISLAND Hy** 35.50 214 T T 11 21 14.9
baz=21,slow=76,SNR=20
EDM **Edmonton** 35.55 63 eP P 10 43 10.3 +0.9
EDM pmax pmax
comp=Z,9.0nm,0.8s
EDM **Edmonton** 35.55 63 eP P 10 43 10.3 +0.9
comp=Z,8.5nm,0.8s
N02D **Trinity Center** 35.74 87 P P 10 43 12.7 +1.5
baz=36
M04C **Macdoel** 35.83 85 P P 10 43 13.4 +1.4
baz=36
K05A **Summer Lake** 35.90 83 eP P 10 43 14.3 +1.7
comp=Z,86nm,2.1s
I07A **Izee** 36.03 80 eP P 10 43 15.2 +1.4
comp=Z,8.2nm,1.3s
H11S1 **WAKE ISLAND Hy** 36.68 213 T T 11 22 39.9
baz=20,slow=76,SNR=46
O03D **Paynes Creek** 36.70 87 P P 10 43 20.5 +1.1
baz=37
H11S2 **WAKE ISLAND Hy** 36.70 213 T T 11 22 35.2
baz=20,slow=76,SNR=33
H11S3 **WAKE ISLAND Hy** 36.70 213 T T 11 22 42.4
baz=20,slow=76,SNR=18
MOD **Modoc** 36.72 84 eP P 10 43 21.2 +1.6
comp=Z,12nm,1.4s
USRK **Ussuriysk Ar.** 36.78 281 P P 10 43 19.1 -0.7
comp=Z,1.0nm,0.4s,baz=69,slow=9.7,SNR=4.2
BSMT **Basso Peak** 37.02 72 eP P 10 43 23.0 +0.9
J08A **Circle Bar Ran** 37.05 81 eP P 10 43 23.3 +0.9
comp=Z,4.1nm,0.6s
WVOR **Wild Horse Val** 37.45 82 eP P 10 43 26.8 +1.0
WVOR pmax pmax
comp=Z,4.0nm,0.8s
WVOR **Wild Horse Val** 37.45 82 eP P 10 43 26.8 +1.0
comp=Z,3.8nm,0.8s
MSO **Missoula** 38.01 73 P P 10 43 31.0 +0.5
baz=38
MDJ **Mudanjiang** 38.02 283 P P 10 43 30.9 +0.5
MDJ PMZ
comp=Z,3.0nm,0.6s
CHMT **Chamberlain Mo** 38.38 73 eP P 10 43 33.4 -0.3
comp=Z,1.2nm,0.5s
HRY **Holter Researc** 39.33 72 eP P 10 43 42.2 +0.6
HLID **Hailey** 39.43 78 P P 10 43 43.1 +0.7
baz=39,SNR=5.8
HLID **Hailey** 39.43 78 eP P 10 43 43.2 +0.8
comp=Z,46nm,2.8s
HLID ePcP PcP 10 45 45.8 -4.2
HLID eS S 10 49 42.4 +0.5
MCMT **McKenzie Canyo** 39.70 75 eP P 10 43 45.1 +0.3
EGMT **Eagleton** 39.89 69 P P 10 43 46.6 +0.4
baz=40,SNR=6.2
EGMT **Eagleton** 39.89 69 eP P 10 43 46.6 +0.4
comp=Z,7.2nm,0.6s
NV01 **Mina Array Sit** 39.98 87 eP P 10 43 47.8 +0.6
NVAR **Mina Array Bea** 39.98 87 P P 10 43 47.7 +0.5
comp=Z,2.4nm,0.8s,baz=288,slow=9.3,SNR=16
NVAR pP pP 10 44 01.1 +3.9
comp=Z,2.7nm,0.8s,baz=292,slow=8.0,SNR=8.6
BOZ **Bozeman (W)** 40.00 74 eP P 10 43 47.7 +0.5
BOZ pmax pmax
comp=Z,10.0nm,1.4s
BOZ **Bozeman (W)** 40.00 74 P P 10 43 47.5 +0.4
baz=40,SNR=5.3
BOZ **Bozeman (W)** 40.00 74 eP P 10 43 47.6 +0.5
comp=Z,10nm,1.4s
RCTC **Rector, Farmer** 40.72 90 P P 10 43 54.2 +1.2
baz=41
SMMC **Simmler** 40.88 92 P P 10 43 55.0 +0.6
baz=41
VES **Vestal, Richgr** 41.11 91 P P 10 43 56.8 +0.5
baz=41
H17A **Grant Village** 41.30 75 P P 10 43 59.4 +1.4
baz=41
IMW **Indian Meadow** 41.35 75 eP P 10 43 59.5 +0.9
comp=Z,3.3nm,0.9s
CWC **Cottonwood Cre** 41.36 89 P P 10 43 59.0 +0.5
baz=41
HVU **Hansel Valley** 41.43 79 eP P 10 43 59.5 +0.5
HVU pmax pmax
comp=Z,3.0nm,0.7s
HVU **Hansel Valley** 41.43 79 eP P 10 43 59.5 +0.5
comp=Z,2.6nm,0.7s
GRAC **Grapevine Rang** 41.45 88 P P 10 43 60.0 +0.9
baz=41
ISA **Isabella** 41.61 91 eP P 10 44 00.8 +0.4
ISA pmax pmax
comp=Z,3.0nm,0.8s
ISA **Isabella** 41.61 91 P P 10 44 00.3 -0.1
baz=42
ISA **Isabella** 41.61 91 eP P 10 44 00.8 +0.4
comp=Z,2.7nm,0.8s
SBC **Santa Barbara** 41.63 93 P P 10 44 01.0 +0.5
baz=42
RLMT **Red Lodge** 41.69 73 P P 10 44 01.6 +0.5
baz=42,SNR=7.0
RLMT **Red Lodge** 41.69 73 eP P 10 44 02.1 +0.9
comp=Z,20nm,1.5s
REDW **Red Top Meadow** 41.70 76 eP P 10 44 02.3 +1.0
comp=Z,7.7nm,1.3s
R11A **Troy Canyon, C** 41.72 85 P P 10 44 02.0 +0.5
baz=42,SNR=7.0
R11A **Troy Canyon, C** 41.72 85 eP P 10 44 01.8 +0.3
comp=Z,4.9nm,1.1s
DAC **Darwin (Calif)** 41.77 89 eP P 10 44 00.0 -1.8
DAC pmax pmax
comp=Z,3.0nm,0.8s
DAC **Darwin (Calif)** 41.77 89 eP P 10 44 00.0 -1.8
comp=Z,3.2nm,0.8s
MPMC **Manual Prospec** 41.97 89 P P 10 44 03.6 +0.1
baz=42
BSC **Santa Cruz Isl** 41.97 93 P P 10 44 04.0 +0.6
baz=42
FURC **Furnace Creek,** 42.10 88 P P 10 44 04.9 +0.6
baz=42,SNR=5.8
TPNV **Topopah Spring** 42.18 87 eP P 10 44 05.7 +0.5
TPNV pmax pmax
comp=Z,7.0nm,0.9s
TPNV **Topopah Spring** 42.18 87 P P 10 44 05.6 +0.5
baz=42,SNR=6.1
TPNV **Topopah Spring** 42.18 87 eP P 10 44 05.7 +0.5
comp=Z,7.4nm,0.9s
DUG **Dugway** 42.33 81 eP P 10 44 06.8 +0.4
DUG pmax pmax
comp=Z,10.0nm,1.3s
DUG **Dugway** 42.33 81 P P 10 44 06.8 +0.4
baz=42,SNR=7.1
DUG **Dugway** 42.33 81 eP P 10 44 06.8 +0.4
comp=Z,3.5nm,1.3s
EDW2 **Edwards Air Fo** 42.42 91 P P 10 44 07.1 +0.1
baz=42
LAO **LASA Array** 42.64 69 P P 10 44 09.1 +0.4
baz=42
BW06 **Boulder Array** 42.82 76 eP P 10 44 10.5 +0.1
comp=Z,4.1nm,0.6s
DGMT **Dagmar** 42.87 66 P P 10 44 10.8 +0.3
baz=43
GSC **Goldstone** 42.88 90 eP P 10 44 11.7 +0.9
GSC pmax pmax
comp=Z,8.0nm,0.8s
GSC **Goldstone** 42.88 90 P P 10 44 11.3 +0.5
baz=43,SNR=9.6
GSC **Goldstone** 42.88 90 eP P 10 44 11.7 +0.9
comp=Z,7.6nm,0.8s
NLU **North Lily Min** 42.92 81 eP P 10 44 11.9 +0.7
comp=Z,3.4nm,1.0s
BFSC **Mt Baldy Ra** 43.04 92 P P 10 44 12.8 +0.6
baz=43,SNR=6.0
O16A **Springville** 43.13 80 eP P 10 44 21.7 +8.8
comp=Z,10.0nm,1.2s
KSRS **Korea Array** 43.18 275 P P 10 44 13.3 +0.3
comp=Z,1.2nm,0.7s,baz=53,slow=7.7,SNR=4.1
KSRS LR LR 11 01 29.5
comp=Z,21nm,18.7s,baz=62,slow=35
KSRS **Korea Array** 43.18 275 P P 10 44 13.4 +0.3
KSRS pmax pmax
comp=Z,1.0nm,0.7s
KSRS MLR MLR
comp=Z,21nm,18.7s
KSAR **Wonju Array Be** 43.21 275 P P 10 44 13.4 0.0
KSAR **Wonju Array Be** 43.21 275 P P 10 44 13.3 0.0
HEC **Hector,Ludlow** 43.48 90 P P 10 44 15.9 +0.2
baz=43
BBRC **Big Bear Solar** 43.49 91 P P 10 44 16.2 +0.3
baz=43
CCUT **Cedar City** 43.60 85 eP P 10 44 17.7 +0.9
comp=Z,75nm,2.9s
GMRC **Granite Mounta** 43.93 89 P P 10 44 19.7 +0.4
baz=44,SNR=5.4
P17A **Butcher Ranch,** 44.04 81 eP P 10 44 21.0 +0.8
comp=Z,3.7nm,0.8s
JNU **Nakatsue** 44.14 268 P P 10 44 21.4 +0.5
comp=Z,2.0nm,0.5s,baz=0.3,slow=6.1,SNR=4.3
PFO **Pinyon Flat Ob** 44.21 91 P P 10 44 21.8 +0.2
comp=Z,1.8nm,0.5s,baz=318,slow=4.8,SNR=8.2
PFO **Pinyon Flat Ob** 44.21 91 P P 10 44 21.8 +0.2
PFO pmax pmax
comp=Z,2.0nm,0.5s
PFO **Pinyon Flat Ob** 44.21 91 P P 10 44 21.6 0.0
baz=44
PFO **Pinyon Flat Ob** 44.21 91 eP P 10 44 20.9 -0.7
comp=Z,92nm,3.0s
BELC **Belle Mtn. Jos** 44.23 90 P P 10 44 21.8 0.0
baz=44
P18A **Preston Nutter** 44.25 80 eP P 10 44 23.0 +1.0
comp=Z,5.0nm,0.9s
E25A **Miller Ranch,** 44.38 68 P P 10 44 23.6 +0.8
baz=44
IRM **Iron Mountain** 44.66 90 P P 10 44 25.5 +0.4
baz=45
F25A **Bowman** 44.66 69 P P 10 44 25.3 +0.4
baz=44
BAR **Barrett** 44.69 92 eP P 10 44 26.0 +0.7
comp=Z,111nm,3.0s
MONP **Monument Peak** 44.71 92 P P 10 44 26.0 +0.3
baz=45
K22A **Casper** 44.71 74 P P 10 44 25.6 +0.1
baz=45
BC3 **Big Chuckawall** 44.80 90 P P 10 44 26.5 +0.2
baz=45
A28A **Rude Farm, Bot** 44.85 63 P P 10 44 26.2 -0.2
baz=45
E26A **Carlson Angus** 44.94 67 P P 10 44 27.2 +0.1
baz=45
IBP **Imperial Bould** 45.07 92 P P 10 44 28.8 +0.4
baz=45
G25A **Newell** 45.10 69 P P 10 44 28.4 0.0
baz=45
F26A **Lodgepole** 45.16 68 P P 10 44 28.9 0.0
baz=45
O20A **White River Ci** 45.17 78 P P 10 44 29.3 +0.1
baz=45,SNR=8.4
O20A **White River Ci** 45.17 78 eP P 10 44 28.1 -1.1
comp=Z,4.4nm,0.6s
PDMCI **Parker Dam,Lak** 45.20 89 P P 10 44 29.5 +0.3
baz=45
H25A **Fruitdale** 45.32 70 P P 10 44 30.2 0.0
baz=45
Y12C **Blythe** 45.32 90 P P 10 44 30.7 +0.5
baz=45
RSSD **Black Hills** 45.34 71 eP P 10 44 30.6 0.0
RSSD pmax pmax
comp=Z,4.0nm,0.6s
RSSD **Black Hills** 45.34 71 eP P 10 44 30.6 0.0
comp=Z,3.6nm,0.6s
E27A **Carson** 45.48 67 P P 10 44 31.6 +0.2
baz=45
G26A **Maurine** 45.52 69 P P 10 44 31.4 -0.4
baz=45,SNR=5.5
F27A **Lemmon** 45.52 68 P P 10 44 31.6 -0.3
baz=45
I25A **Rochford** 45.58 71 P P 10 44 32.1 -0.4
baz=45
GLA **Glamis** 45.59 91 P P 10 44 32.7 +0.2
baz=46
PV09 **Paradox Valley** 45.62 81 eP P 10 44 33.3 +0.3
PV10 **Paradox Valley** 45.76 81 eP P 10 44 34.6 +0.6
H26A **Fairpoint** 45.80 70 P P 10 44 33.5 -0.5
baz=46
G27A **Dupree** 45.86 68 P P 10 44 34.4 0.0
baz=46
E28A **Huff** 45.89 66 P P 10 44 34.7 0.0
baz=46
J25A **Sunshine Ranch** 45.91 72 P P 10 44 34.5 -0.4
baz=46
A30A **Hoffart Farm,** 45.93 62 P P 10 44 34.7 -0.2
baz=46
N23A **Red Feather La** 46.10 76 P P 10 44 36.8 +0.1
baz=46
WUAZ **Wupatki** 46.12 85 P P 10 44 37.2 +0.4
baz=46
WUAZ **Wupatki** 46.12 85 eP P 10 44 37.6 +0.8
PV01 **Paradox Valley** 46.20 81 eP P 10 44 33.3 -4.1
H27A **Howes** 46.20 69 P P 10 44 37.0 -0.1
baz=46
I27A **Quinn** 46.54 70 P P 10 44 40.3 +0.5
baz=46
G28A **Parade** 46.62 68 P P 10 44 40.4 0.0
baz=46
H28A **Mission Ridge** 46.79 69 P P 10 44 42.3 +0.5
baz=47
MVCO **Mesa Verde** 46.82 82 P P 10 44 42.1 -0.3
baz=47
ISCO **Idaho Springs** 46.97 77 P P 10 44 44.0 +0.4
baz=47
J27A **Elkhorn Farm,** 47.05 71 P P 10 44 43.6 -0.3
baz=47
I28A **Midland** 47.10 69 P P 10 44 44.2 0.0
baz=47,SNR=6.2
B32A **Ashes, Strandq** 47.20 62 P P 10 44 45.0 +0.1
baz=47
H29A **Onida** 47.29 68 P P 10 44 45.6 0.0
baz=47
J28A **Allard Ranch,** 47.40 70 P P 10 44 46.3 -0.3
baz=47
S22A **4UR Ranch, Cre** 47.51 80 P P 10 44 48.4 +0.6
baz=47
S22A **4UR Ranch, Cre** 47.51 80 eP P 10 44 48.6 +0.9
comp=Z,30nm,2.6s
A33A **Warroad** 47.52 61 P P 10 44 47.9 +0.6
baz=47
214A **Organ Pipe Nat** 47.59 90 P P 10 44 47.8 -0.3
baz=48
I29A **Vivian Onida** 47.59 69 P P 10 44 47.9 -0.1
baz=47
AGMN **Agassiz Nation** 47.63 62 P P 10 44 48.0 -0.2
baz=48
J29A **Okreek** 47.94 70 P P 10 44 50.5 -0.2
baz=48
I30A **Oacoma** 48.16 69 P P 10 44 52.1 -0.4
baz=48
B34A **Aery, Baudette** 48.18 61 P P 10 44 52.4 -0.1
baz=48
D33A **AnnSam, Waubun** 48.30 63 P P 10 44 53.4 0.0
baz=48
SDCO **Great Sand Dun** 48.32 79 P P 10 44 54.4 +0.4
baz=48
SDCO **Great Sand Dun** 48.32 79 eP P 10 44 54.7 +0.7
K29A **Lazy Trails An** 48.33 70 P P 10 44 53.9 +0.1
baz=48
J30A **Dallas** 48.48 69 P P 10 44 54.5 -0.4
baz=48
P26A **Davis Ranch, A** 48.49 76 P P 10 44 56.1 +1.0
baz=48,SNR=6.6
M28A **Bar X Bar Ranc** 48.54 72 P P 10 44 55.4 0.0
baz=48
E33A **Westby DABS, E** 48.59 64 P P 10 44 55.8 +0.2
baz=48
I31A **Royce, Wessing** 48.61 68 P P 10 44 55.9 0.0
baz=48
TUC **Tucson** 48.61 88 eP P 10 44 56.6 +0.5
TUC pmax pmax
comp=Z,3.0nm,0.8s
TUC **Tucson** 48.61 88 eP P 10 44 56.6 +0.5
comp=Z,3.1nm,0.8s
O27A **Beecher Island** 48.62 74 P P 10 44 56.2 +0.1
baz=48
D34A **Park Rapids** 48.70 63 P P 10 44 56.2 -0.3
baz=48
Q26A **Hugo** 48.79 76 P P 10 44 57.8 +0.4
baz=49
K30A **Basset** 48.80 70 P P 10 44 57.6 +0.3
baz=49
F33A **5 Mile Ranch,** 48.81 65 P P 10 44 57.5 +0.1
baz=49
N28A **Pribbeno Ranch** 48.88 73 P P 10 44 58.4 +0.4
baz=49
TLY **Talaya** 48.90 305 LR LR 11 06 43.2
comp=Z,39nm,19.9s,baz=58,slow=37
M29A **Burnside Ranch** 48.92 72 P P 10 44 58.1 -0.2
baz=49
H32A **Carlson Farm,** 48.96 67 P P 10 44 57.6 -0.9
baz=49
P27A **Ficken Ranch,** 48.96 75 P P 10 44 59.5 +0.7
baz=49
C35A **Jirik Farms, M** 49.01 62 P P 10 44 58.5 -0.3
baz=49
O28A **Krutsinger Ran** 49.09 74 P P 10 44 59.5 -0.1
baz=49
R26A **Arlington** 49.22 77 P P 10 45 01.0 +0.3
baz=49
H33A **Prehn Over Nor** 49.25 66 P P 10 45 00.2 -0.5
baz=49
KSCO **Kaye Shedlock'** 49.27 76 P P 10 45 01.6 +0.5
baz=49
N29A **Votaw Ranch, W** 49.34 73 P P 10 45 01.4 -0.1
baz=49
T25A **Trinidad** 49.38 79 P P 10 45 02.9 +0.8
baz=49,SNR=7.1
T25A **Trinidad** 49.38 79 eP P 10 45 02.9 +0.8
comp=Z,8.8nm,1.0s
P28A **Saint Francis** 49.44 75 P P 10 45 02.7 +0.3
baz=49
LAZ **Ladron** 49.48 83 eP P 10 45 03.7 +0.9
comp=Z,1.1nm,0.9s
ANMO **Albuquerque** 49.54 82 eP P 10 45 04.3 +1.0
ANMO pmax pmax
comp=Z,2.0nm,1.2s
L31A **Butterfield Fa** 49.56 70 P P 10 45 03.3 +0.1
baz=49
C36A **Pine Crest Far** 49.60 61 P P 10 45 03.5 +0.2
baz=49
R27A **Eads** 49.63 77 P P 10 45 03.6 -0.2
baz=50
S26A **Kim** 49.64 78 P P 10 45 03.9 -0.1
baz=50,SNR=6.8
O29A **4D Ranch, Culb** 49.67 73 P P 10 45 04.2 +0.2
baz=50
SONM **Songino Array** 49.68 299 P P 10 45 03.4 -0.7
comp=Z,0.9nm,0.6s,baz=44,slow=9.4,SNR=3.7
SONM LR LR 11 07 12.4
comp=Z,85nm,18.8s,baz=63,slow=37
SONM **Songino Array** 49.68 299 P P 10 45 03.4 -0.7
SONM pmax pmax
comp=Z,1.0nm,0.6s
SONM MLR MLR
comp=Z,85nm,18.8s
K32A **Verdigre** 49.77 69 P P 10 45 04.2 -0.5
baz=50
Y22D **IRIS PASSCAL I** 49.83 84 P P 10 45 05.1 -0.3
baz=50
T26A **Comanche Natio** 49.85 78 P P 10 45 04.9 -0.8
baz=50
ECSD **EROS Data Cent** 49.90 67 P P 10 45 04.9 -0.7
baz=50
P29A **Atwood** 49.92 74 P P 10 45 06.0 0.0
baz=50
S27A **Las Animas** 49.95 77 P P 10 45 06.3 0.0
baz=50
M31A **Lambtecht Ranc** 49.99 71 P P 10 45 06.4 -0.1
baz=50
O30A **MW Ranch, Wils** 50.08 73 P P 10 45 07.2 0.0
baz=50
R28A **Tribune** 50.19 76 P P 10 45 08.1 0.0
baz=50
Q29A **Oakley** 50.34 75 P P 10 45 09.4 +0.2
baz=50
SPITS **Spitsbergen Ar** 50.34 357 LR LR 11 06 45.4
comp=Z,31nm,18.2s,baz=20,slow=36

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **P30A** | **Selden** | **50.37** | **74** | P | | **P** | **10 45 09.4** | **+0.1** |
| | baz=50 | | | | | | | | |
| **BGNE** | **Belgrade** | **50.44** | **70** | P | | **P** | **10 45 09.6** | **-0.2** |
| | baz=50 | | | | | | | | |
| **T27A** | **Campo** | **50.46** | **78** | P | | **P** | **10 45 10.6** | **+0.4** |
| | baz=50 | | | | | | | | |
| **R29A** | **Marienthal** | **50.54** | **75** | P | | **P** | **10 45 10.9** | **+0.2** |
| | baz=50 | | | | | | | | |
| **S28A** | **Manter** | **50.62** | **77** | P | | **P** | **10 45 11.4** | **+0.1** |
| | baz=50,SNR=5.9 | | | | | | | | |
| **Q30A** | **Quinter** | **50.74** | **74** | P | | **P** | **10 45 11.9** | **-0.3** |
| | baz=51 | | | | | | | | |
| **T28A** | **Walsh** | **50.79** | **77** | P | | **P** | **10 45 12.2** | **-0.4** |
| | baz=51 | | | | | | | | |
| **U27A** | **Thompson Grove** | **50.81** | **78** | P | | **P** | **10 45 12.5** | **-0.3** |
| | baz=51 | | | | | | | | |
| **K34A** | **Le Mars** | **50.84** | **68** | P | | **P** | **10 45 12.3** | **-0.5** |
| | baz=51 | | | | | | | | |
| **M33A** | **Taylor Creek F** | **50.89** | **70** | P | | **P** | **10 45 13.0** | **-0.2** |
| | baz=51 | | | | | | | | |
| **P31A** | **Stockton** | **50.90** | **73** | P | | **P** | **10 45 13.7** | **+0.3** |
| | baz=51 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **51.01** | **289** | *e*P | | **P** | **10 45 15.5** | **+1.2** |
| HHC | | | | PP | | **PP** | **10 47 09.1** | **-1.6** |
| HHC | | | | S | | **S** | **10 52 30.3** | **+1.3** |
| HHC | | | | sS | | sS | 10 52 39.3 | -6.6 |
| HHC | | | | PMZ | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,69nm,5.7s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | comp=Z,110nm,18.6s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | comp=Z,290nm,18.8s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | comp=Z,52nm,14.5s | | | | | | | | |
| **C39A** | **Grand Marais** | **51.02** | **59** | P | | **P** | **10 45 13.4** | **-0.7** |
| | baz=51 | | | | | | | | |
| **O32A** | **Brockman Farm,** | **51.08** | **72** | P | | **P** | **10 45 14.0** | **-0.7** |
| | baz=51 | | | | | | | | |
| **L34A** | **Svendsen Farm,** | **51.12** | **69** | P | | **P** | **10 45 14.5** | **-0.5** |
| | baz=51 | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **51.13** | **74** | P | | **P** | **10 45 14.8** | **-0.3** |
| | baz=51 | | | | | | | | |
| **R30A** | **Dighton** | **51.15** | **75** | P | | **P** | **10 45 15.5** | **+0.2** |
| | baz=51 | | | | | | | | |
| **U28A** | **Mallet** | **51.20** | **78** | P | | **P** | **10 45 15.6** | **-0.2** |
| | baz=51 | | | | | | | | |
| **Q31A** | **Ellis** | **51.22** | **74** | P | | **P** | **10 45 15.5** | **-0.3** |
| | baz=51 | | | | | | | | |
| **M34A** | **Aspy Farms, Fr** | **51.30** | **69** | P | | **P** | **10 45 16.3** | **0.0** |
| | baz=51 | | | | | | | | |
| **P32A** | **Huiting Farm,** | **51.30** | **72** | P | | **P** | **10 45 16.3** | **0.0** |
| | baz=51 | | | | | | | | |
| **S30A** | **Montezuma** | **51.45** | **76** | P | | **P** | **10 45 17.4** | **-0.2** |
| | baz=51 | | | | | | | | |
| **I37A** | **Lemond, Waseca** | **51.55** | **65** | P | | **P** | **10 45 18.1** | **0.0** |
| | baz=51 | | | | | | | | |
| **R31A** | **Burdett** | **51.60** | **74** | P | | **P** | **10 45 18.5** | **-0.2** |
| | baz=52 | | | | | | | | |
| **O33A** | **Hebron** | **51.61** | **71** | P | | **P** | **10 45 18.0** | **-0.7** |
| | baz=52 | | | | | | | | |
| **V28A** | **Channing** | **51.62** | **79** | P | | **P** | **10 45 19.1** | **+0.2** |
| | baz=52 | | | | | | | | |
| **Q32A** | **Meitler Ranch,** | **51.73** | **73** | P | | **P** | **10 45 19.5** | **0.0** |
| | baz=52 | | | | | | | | |
| **U29A** | **Oasis Ranch, S** | **51.74** | **77** | P | | **P** | **10 45 19.7** | **0.0** |
| | baz=52 | | | | | | | | |
| **R32A** | **Long Quarter,** | **52.00** | **74** | P | | **P** | **10 45 21.2** | **-0.4** |
| | baz=52 | | | | | | | | |
| **S31A** | **Mullinville** | **52.06** | **75** | P | | **P** | **10 45 21.5** | **-0.5** |
| | baz=52 | | | | | | | | |
| **U30A** | **WK&E Inc. Balk** | **52.06** | **77** | P | | **P** | **10 45 21.6** | **-0.5** |
| | baz=52 | | | | | | | | |
| **O34A** | **Beatrice** | **52.07** | **71** | P | | **P** | **10 45 21.5** | **-0.6** |
| | baz=52 | | | | | | | | |
| **I38A** | **Scanlan Farm,** | **52.14** | **64** | P | | **P** | **10 45 22.0** | **-0.5** |
| | baz=52 | | | | | | | | |
| **Q33A** | **Connelly Farm,** | **52.15** | **73** | P | | **P** | **10 45 22.3** | **-0.4** |
| | baz=52,SNR=5.5 | | | | | | | | |
| **N35A** | **Tabor** | **52.25** | **69** | P | | **P** | **10 45 23.2** | **-0.2** |
| | baz=52 | | | | | | | | |
| **T31A** | **Randall Ranch,** | **52.28** | **76** | P | | **P** | **10 45 23.6** | **-0.1** |
| | baz=52 | | | | | | | | |
| **S32A** | **Newby Ranch, P** | **52.34** | **75** | P | | **P** | **10 45 24.0** | **-0.1** |
| | baz=52 | | | | | | | | |
| **NJ2** | **Nanjing** | **52.35** | **276** | *e*P | | **P** | **10 45 24.3** | **+0.1** |
| NJ2 | | | | PMZ | | | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **52.39** | **85** | P | | **P** | **10 45 24.8** | **+0.2** |
| | baz=52 | | | | | | | | |
| **P34A** | **Walnut Farm, R** | **52.40** | **71** | P | | **P** | **10 45 24.5** | **0.0** |
| | baz=52 | | | | | | | | |
| **MSTX** | **Muleshoe** | **52.47** | **81** | P | | **P** | **10 45 24.8** | **-0.3** |
| | baz=52 | | | | | | | | |
| **R33A** | **Olander Ranch,** | **52.51** | **73** | P | | **P** | **10 45 25.5** | **+0.1** |
| | baz=52 | | | | | | | | |
| **AMTX** | **Amarillo** | **52.52** | **79** | P | | **P** | **10 45 25.5** | **-0.1** |
| | baz=52 | | | | | | | | |
| **V30A** | **Spur Ranch, Mi** | **52.55** | **78** | P | | **P** | **10 45 26.0** | **+0.2** |
| | baz=52 | | | | | | | | |
| **Q34A** | **Chapman** | **52.73** | **72** | P | | **P** | **10 45 26.3** | **-0.6** |
| | baz=53 | | | | | | | | |
| **X29A** | **Tulia** | **52.80** | **80** | P | | **P** | **10 45 27.5** | **-0.2** |
| | baz=53 | | | | | | | | |
| **KSU1** | **Kansas State U** | **52.81** | **72** | P | | **P** | **10 45 26.9** | **-0.6** |
| | baz=53 | | | | | | | | |
| **Y28A** | **McKinney Farm,** | **52.83** | **80** | P | | **P** | **10 45 27.4** | **-0.5** |
| | baz=53 | | | | | | | | |
| **P35A** | **Duane Minner,** | **52.89** | **71** | P | | **P** | **10 45 27.4** | **-0.7** |
| | baz=53 | | | | | | | | |
| **R34A** | **Isabella, Hill** | **52.95** | **73** | P | | **P** | **10 45 28.3** | **-0.4** |
| | baz=53 | | | | | | | | |
| **O36A** | **Bolckow** | **53.12** | **70** | P | | **P** | **10 45 28.9** | **-0.9** |
| | baz=53 | | | | | | | | |
| **Z28A** | **Tucker Farm, M** | **53.16** | **81** | P | | **P** | **10 45 30.0** | **-0.3** |
| | baz=53 | | | | | | | | |
| **P36A** | **Good Intent, A** | **53.30** | **70** | P | | **P** | **10 45 30.6** | **-0.5** |
| | baz=53 | | | | | | | | |
| **X30A** | **Coker Ranch, T** | **53.31** | **79** | P | | **P** | **10 45 31.0** | **-0.3** |
| | baz=53 | | | | | | | | |
| **W31A** | **Holland Ranch,** | **53.38** | **78** | P | | **P** | **10 45 31.8** | **-0.1** |
| | baz=53 | | | | | | | | |
| **128A** | **Castleberry Fa** | **53.55** | **82** | P | | **P** | **10 45 32.9** | **-0.3** |
| | baz=53 | | | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **53.60** | **81** | P | | **P** | **10 45 33.2** | **-0.3** |
| | baz=54 | | | | | | | | |
| **U33A** | **Lingo Farm, Me** | **53.66** | **75** | P | | **P** | **10 45 33.7** | **-0.2** |
| | baz=54 | | | | | | | | |
| **Y30A** | **Stafford Cattl** | **53.68** | **79** | P | | **P** | **10 45 33.9** | **-0.2** |
| | baz=54 | | | | | | | | |
| **X31A** | **McDonald Ranch** | **53.73** | **78** | P | | **P** | **10 45 34.4** | **0.0** |
| | baz=54 | | | | | | | | |
| **T34A** | **McClaskey Farm** | **53.83** | **74** | P | | **P** | **10 45 34.6** | **-0.5** |
| | baz=54,SNR=6.1 | | | | | | | | |
| **W32A** | **Sentinel** | **53.85** | **77** | P | | **P** | **10 45 35.0** | **-0.3** |
| | baz=54 | | | | | | | | |
| **S35A** | **Otter Creek Ra** | **53.91** | **73** | P | | **P** | **10 45 35.2** | **-0.5** |
| | baz=54 | | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **53.94** | **80** | P | | **P** | **10 45 35.6** | **-0.4** |
| | baz=54 | | | | | | | | |
| **V33A** | **Lossen Ranch,** | **53.97** | **76** | P | | **P** | **10 45 35.6** | **-0.4** |
| | baz=54 | | | | | | | | |
| **R36A** | **Gordon, Harris** | **53.98** | **72** | P | | **P** | **10 45 35.6** | **-0.5** |
| | baz=54,SNR=6.3 | | | | | | | | |
| **U34A** | **Anderson Ranch** | **54.01** | **75** | P | | **P** | **10 45 35.7** | **-0.7** |
| | baz=54 | | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **54.01** | **79** | P | | **P** | **10 45 35.9** | **-0.5** |
| | baz=54 | | | | | | | | |
| **X32A** | **Elmer** | **54.30** | **78** | P | | **P** | **10 45 38.2** | **-0.3** |
| | baz=54 | | | | | | | | |
| **T35A** | **Sooner Cattle** | **54.30** | **74** | P | | **P** | **10 45 37.6** | **-1.0** |
| | baz=54 | | | | | | | | |
| **V34A** | **Guthrie** | **54.42** | **75** | P | | **P** | **10 45 38.8** | **-0.6** |
| | baz=54 | | | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **54.48** | **78** | P | | **P** | **10 45 39.6** | **-0.3** |
| | baz=54 | | | | | | | | |
| **130A** | **Snyder** | **54.51** | **81** | P | | **P** | **10 45 39.7** | **-0.4** |
| | baz=54 | | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **54.52** | **79** | P | | **P** | **10 45 39.7** | **-0.5** |
| | baz=54 | | | | | | | | |
| **U35A** | **Pawnee** | **54.54** | **74** | P | | **P** | **10 45 39.6** | **-0.6** |
| | baz=54 | | | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **54.59** | **73** | P | | **P** | **10 45 40.0** | **-0.6** |
| | baz=54 | | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **54.64** | **82** | P | | **P** | **10 45 40.9** | **-0.2** |
| | baz=54 | | | | | | | | |
| **S37A** | **Fort Scott** | **54.75** | **72** | P | | **P** | **10 45 40.6** | **-1.1** |
| | baz=55,SNR=6.0 | | | | | | | | |
| **V35A** | **Meyer Ranch, C** | **54.88** | **75** | P | | **P** | **10 45 42.4** | **-0.3** |
| | baz=55 | | | | | | | | |
| **230A** | **Sterling City** | **54.90** | **81** | P | | **P** | **10 45 42.6** | **-0.4** |
| | baz=55 | | | | | | | | |
| **Z32A** | **Haskell** | **54.94** | **79** | P | | **P** | **10 45 42.8** | **-0.4** |
| | baz=55 | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **55.09** | **86** | *e*P | | **P** | **10 45 43.9** | **-0.5** |
| **TXAR** | **Lajitas Array** | **55.09** | **86** | P | | **P** | **10 45 44.1** | **-0.3** |
| | comp=Z,2.8nm,0.6s,baz=299,slow=5.3,SNR=38 | | | | | | | | |
| TXAR | | | | pP | | **pP** | **10 45 57.2** | **+2.4** |
| | comp=Z,3.1nm,0.7s,baz=296,slow=4.8,SNR=13 | | | | | | | | |
| TXAR | | | | LR | | LR | 11 05 15.8 | | |
| | comp=Z,82nm,21.0s,baz=0.0,slow=32 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **55.09** | **86** | P | | **P** | **10 45 44.1** | **-0.3** |
| TXAR | | | | *PP | | **pP** | **10 45 57.2** | **+2.4** |
| TXAR | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| TXAR | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **T37A** | **Cheneyville 18** | **55.12** | **72** | P | | **P** | **10 45 43.6** | **-0.8** |
| | baz=55,SNR=7.0 | | | | | | | | |
| **W35A** | **Tecumseh** | **55.27** | **76** | P | | **P** | **10 45 45.3** | **-0.2** |
| | baz=55 | | | | | | | | |
| **429A** | **Davenport Ranc** | **55.29** | **83** | P | | **P** | **10 45 45.0** | **-0.8** |
| | baz=55 | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **55.30** | **80** | P | | **P** | **10 45 45.8** | **0.0** |
| | baz=55 | | | | | | | | |
| **231A** | **Bronte** | **55.36** | **81** | P | | **P** | **10 45 46.2** | **-0.1** |
| | baz=55 | | | | | | | | |
| **V36A** | **Jenks** | **55.40** | **74** | P | | **P** | **10 45 46.0** | **-0.4** |
| | baz=55 | | | | | | | | |
| **TUL1** | **Tulsa** | **55.41** | **74** | P | | **P** | **10 45 46.4** | **-0.1** |
| | baz=55 | | | | | | | | |
| **529A** | **Stev Forest Ra** | **55.44** | **84** | P | | **P** | **10 45 46.6** | **-0.3** |
| | baz=55 | | | | | | | | |
| **U37A** | **Salina** | **55.48** | **73** | P | | **P** | **10 45 46.4** | **-0.6** |
| | baz=55,SNR=5.3 | | | | | | | | |
| **Y34A** | **Reagan Ranch,** | **55.54** | **77** | P | | **P** | **10 45 47.1** | **-0.4** |
| | baz=55 | | | | | | | | |
| **430A** | **Baggett Ranch,** | **55.59** | **82** | P | | **P** | **10 45 47.6** | **-0.3** |
| | baz=56 | | | | | | | | |
| **W36A** | **Wetumka** | **55.67** | **75** | P | | **P** | **10 45 48.0** | **-0.4** |
| | baz=56 | | | | | | | | |
| **X35A** | **Drake** | **55.72** | **76** | P | | **P** | **10 45 48.5** | **-0.3** |
| | baz=56,SNR=5.9 | | | | | | | | |
| **331A** | **San Angelo** | **55.72** | **81** | P | | **P** | **10 45 48.2** | **-0.7** |
| | baz=56 | | | | | | | | |
| **133A** | **Hamilton Ranch** | **55.76** | **79** | P | | **P** | **10 45 48.9** | **-0.2** |
| | baz=56 | | | | | | | | |
| **232A** | **Coleman** | **55.80** | **80** | P | | **P** | **10 45 48.9** | **-0.6** |
| | baz=56 | | | | | | | | |
| **V37A** | **Hulbert** | **55.82** | **74** | P | | **P** | **10 45 48.6** | **-0.8** |
| | baz=56,SNR=5.7 | | | | | | | | |
| **U38A** | **Gravette** | **55.89** | **73** | P | | **P** | **10 45 48.6** | **-1.4** |
| | baz=56 | | | | | | | | |
| **530A** | **J-C Ranch, Com** | **55.97** | **83** | P | | **P** | **10 45 50.1** | **-0.5** |
| | baz=56,SNR=8.4 | | | | | | | | |
| **X36A** | **Centrahoma** | **55.98** | **76** | P | | **P** | **10 45 50.5** | **-0.1** |
| | baz=56 | | | | | | | | |
| **Y35A** | **Marietta** | **56.01** | **77** | P | | **P** | **10 45 50.8** | **-0.1** |
| | baz=56 | | | | | | | | |
| **431A** | **Sonora** | **56.05** | **82** | P | | **P** | **10 45 50.8** | **-0.4** |
| | baz=56 | | | | | | | | |
| **332A** | **Millersview** | **56.09** | **81** | P | | **P** | **10 45 51.0** | **-0.6** |
| | baz=56,SNR=5.3 | | | | | | | | |
| **HDIL** | **Hopedale** | **56.11** | **66** | P | | **P** | **10 45 50.6** | **-0.8** |
| | baz=56 | | | | | | | | |
| **W37A** | **Quinton** | **56.15** | **75** | P | | **P** | **10 45 51.3** | **-0.6** |
| | baz=56 | | | | | | | | |
| **233A** | **Rising Star** | **56.17** | **80** | P | | **P** | **10 45 51.7** | **-0.4** |
| | baz=56 | | | | | | | | |
| **V38A** | **Canehill** | **56.27** | **73** | P | | **P** | **10 45 52.0** | **-0.7** |
| | baz=56,SNR=5.3 | | | | | | | | |
| **134A** | **White-Moore Ra** | **56.29** | **79** | P | | **P** | **10 45 52.9** | **0.0** |
| | baz=56 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.39** | **316** | P | | **P** | **10 45 52.5** | **-0.8** |
| | comp=Z,0.6nm,0.4s,baz=35,slow=7.8,SNR=2.4 | | | | | | | | |
| ZALV | | | | LR | | LR | 11 12 01.8 | | |
| | comp=Z,31nm,19.8s,baz=70,slow=38 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.39** | **316** | P | | **P** | **10 45 52.5** | **-0.8** |
| ZALV | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| ZALV | | | | MLR | | MLR | | | |
| | comp=Z,31nm,19.8s | | | | | | | | |
| **Y36A** | **Durant** | **56.48** | **76** | P | | **P** | **10 45 54.2** | **0.0** |
| | baz=56 | | | | | | | | |
| **X37A** | **Clayton** | **56.56** | **75** | P | | **P** | **10 45 54.2** | **-0.5** |
| | baz=56 | | | | | | | | |
| **333A** | **Richland Sprin** | **56.60** | **80** | P | | **P** | **10 45 54.7** | **-0.4** |
| | baz=56 | | | | | | | | |
| **234A** | **Clairette** | **56.65** | **79** | P | | **P** | **10 45 54.9** | **-0.6** |
| | baz=56 | | | | | | | | |
| **JCT** | **Junction City** | **56.68** | **82** | P | | **P** | **10 45 55.3** | **-0.4** |
| | baz=57 | | | | | | | | |
| **W38A** | **Poteau** | **56.74** | **74** | P | | **P** | **10 45 56.0** | **0.0** |
| | baz=57,SNR=5.5 | | | | | | | | |
| **Z36A** | **Blue Ridge** | **56.81** | **77** | P | | **P** | **10 45 56.4** | **-0.2** |
| | baz=57 | | | | | | | | |
| **X38A** | **Whitesboro** | **56.83** | **75** | P | | **P** | **10 45 55.8** | **-0.9** |
| | baz=57 | | | | | | | | |
| **532A** | **Rocksprings** | **56.87** | **82** | P | | **P** | **10 45 55.8** | **-1.3** |
| | baz=57 | | | | | | | | |
| **433A** | **Art** | **56.93** | **81** | P | | **P** | **10 45 56.8** | **-0.7** |
| | baz=57 | | | | | | | | |
| **334A** | **Lometa** | **57.05** | **80** | P | | **P** | **10 45 57.9** | **-0.4** |
| | baz=57,SNR=6.5 | | | | | | | | |
| **WHTX** | **Lake Whitney** | **57.08** | **79** | P | | **P** | **10 45 58.0** | **-0.4** |
| | baz=57 | | | | | | | | |
| **632A** | **Uvalde** | **57.37** | **83** | P | | **P** | **10 45 59.8** | **-0.9** |
| | baz=57 | | | | | | | | |
| **434A** | **Burnet** | **57.39** | **80** | P | | **P** | **10 46 00.3** | **-0.4** |
| | baz=57 | | | | | | | | |
| **SCHQ** | **Schefferville** | **57.55** | **41** | P | | **P** | **10 46 00.9** | **-0.5** |
| | comp=Z,3.3nm,0.8s,baz=258,slow=17,SNR=4.6 | | | | | | | | |
| **MIAR** | **Mount Ida** | **57.67** | **74** | *e*P | | **P** | **10 46 02.1** | **-0.5** |
| MIAR | | | | pmax | | pmax | | | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **MIAR** | **Mount Ida** | **57.67** | **74** | P | | **P** | **10 46 02.0** | **-0.5** |
| | baz=58,SNR=8.6 | | | | | | | | |
| **MIAR** | **Mount Ida** | **57.67** | **74** | *e*P | | **P** | **10 46 02.1** | **-0.5** |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **732A** | **Laxson Ranch,** | **57.81** | **83** | P | | **P** | **10 46 03.2** | **-0.4** |
| | baz=58 | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **58.00** | **70** | *e*P | | **P** | **10 46 04.3** | **-0.6** |
| | comp=Z,4.6nm,0.6s | | | | | | | | |
| **832A** | **Faith Ranch, C** | **58.12** | **84** | P | | **P** | **10 46 05.3** | **-0.5** |
| | baz=58 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.40** | **352** | P | | **P** | **10 46 07.4** | **+0.2** |
| | comp=Z,4.9nm,0.9s,baz=7.0,slow=8.2,SNR=4.4 | | | | | | | | |
| ARCES | | | | LR | | LR | 11 11 09.2 | | |
| | comp=Z,24nm,21.7s,baz=348,slow=36 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.40** | **352** | P | | **P** | **10 46 07.4** | **+0.2** |
| ARCES | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| ARCES | | | | MLR | | MLR | | | |
| | comp=Z,25nm,21.7s | | | | | | | | |
| **833A** | **Chaparral WMA,** | **58.45** | **83** | P | | **P** | **10 46 08.4** | **+0.2** |
| | baz=58 | | | | | | | | |
| **PARMO** | **Parma** | **58.47** | **70** | *e*P | | **P** | **10 46 07.0** | **-1.2** |
| **LZH** | **Lanzhou** | **58.70** | **290** | *e*P | | **P** | **10 46 10.9** | **+0.9** |
| LZH | | | | pP | | **pP** | **10 46 19.1** | **-1.3** |
| LZH | | | | sP | | **sP** | **10 46 22.3** | **-2.2** |
| LZH | | | | S | | **S** | **10 54 11.5** | **-0.8** |
| LZH | | | | sS | | sS | 10 54 21.0 | -8.5 |
| LZH | | | | SS | | **SS** | **10 58 02.0** | **-3.0** |
| LZH | | | | PMZ | | | | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,120nm,6.6s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | comp=Z,89nm,14.8s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | comp=Z,88nm,15.0s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | comp=Z,120nm,16.5s | | | | | | | | |
| **KURK** | **Kurchatov** | **61.37** | **317** | P | | **P** | **10 46 28.4** | **+0.6** |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **KURK** | **Kurchatov** | **61.37** | **317** | P | | **P** | **10 46 28.4** | **+0.6** |
| **KURBB** | **Kurchatov Arra** | **61.47** | **317** | P | | **P** | **10 46 28.4** | **-0.1** |
| | comp=Z,2.2nm,0.6s,baz=44,slow=6.3,SNR=16 | | | | | | | | |
| **BORG** | **Borgarnes** | **61.93** | **13** | *e*P | | **P** | **10 46 34.0** | **+2.6** |
| **BORG** | **Borgarnes** | **61.93** | **13** | *e*P | | **P** | **10 46 34.0** | **+2.6** |
| | comp=Z,665nm,2.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **62.14** | **306** | *e*P | | **P** | **10 46 36.0** | **+2.7** |
| WMQ | | | | sP | | **sP** | **10 46 48.0** | **+0.2** |
| WMQ | | | | PP | | PP | 10 48 55.0 | +5.2 |
| WMQ | | | | S | | **S** | **10 55 00.0** | **+4.0** |
| WMQ | | | | SS | | **SS** | **10 59 02.0** | **+3.6** |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,16nm,6.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,50nm,20.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,41nm,20.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,41nm,21.0s | | | | | | | | |
| **CD2** | **Chengdu** | **62.38** | **286** | *e*P | | **P** | **10 46 34.5** | **-0.5** |
| CD2 | | | | pP | | **pP** | **10 46 42.9** | **-2.6** |
| CD2 | | | | PP | | **PP** | **10 48 51.4** | **-0.7** |
| CD2 | | | | PcS | | **PcS** | **10 51 16.8** | **-1.0** |
| CD2 | | | | S | | **S** | **10 54 59.0** | **-0.2** |
| CD2 | | | | sS | | **sS** | **10 55 13.3** | **-3.3** |
| CD2 | | | | SS | | **SS** | **10 59 03.5** | **+0.9** |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.61** | **312** | P | | **P** | **10 46 35.3** | **-1.0** |
| | comp=Z,0.7nm,0.4s,baz=43,slow=6.5,SNR=6.4 | | | | | | | | |
| MKAR | | | | LR | | LR | 11 15 41.0 | | |
| | comp=Z,32nm,18.3s,baz=6.0,slow=38 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.61** | **312** | *ce*P | | P | 10 46 41.2 | +4.9 |
| MKAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **62.95** | **323** | *e*P | | **P** | **10 46 39.0** | **+0.6** |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **KMSC** | **Kings Mountain** | **64.39** | **65** | P | | **P** | **10 46 47.3** | **-0.9** |
| | baz=64 | | | | | | | | |
| **GOGA** | **Godfrey** | **64.42** | **68** | *e*P | | **P** | **10 46 47.6** | **-0.8** |
| GOGA | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **GOGA** | **Godfrey** | **64.42** | **68** | *e*P | | **P** | **10 46 47.6** | **-0.8** |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **66.25** | **350** | P | | **P** | **10 46 59.3** | **-0.5** |
| | comp=Z,3.2nm,1.0s,baz=21,slow=23,SNR=3.7 | | | | | | | | |
| **FINES** | **FINESS Array B** | **66.25** | **350** | *i* P | | **P** | **10 47 00.6** | **+0.8** |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **KMI** | **Kunming** | **67.19** | **282** | P | | **P** | **10 47 07.3** | **+0.7** |
| KMI | | | | PMZ | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,67nm,4.0s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **67.64** | **358** | P | | **P** | **10 47 08.7** | **-0.1** |
| | comp=Z,0.3nm,0.5s,baz=4.6,slow=6.7,SNR=2.4 | | | | | | | | |
| **HFS** | **Hagfors** | **68.47** | **356** | P | | **P** | **10 47 12.9** | **-1.0** |
| | comp=Z,0.8nm,0.4s,baz=44,slow=4.5,SNR=5.7 | | | | | | | | |
| **HFS** | **Hagfors** | **68.47** | **356** | P | | **P** | **10 47 12.9** | **-1.0** |
| HFS | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **AAK** | **Ala-Archa** | **69.38** | **313** | P | | **P** | **10 47 18.1** | **-1.9** |
| | comp=Z,2.6nm,0.6s,baz=102,slow=6.1,SNR=6.6 | | | | | | | | |
| **AAK** | **Ala-Archa** | **69.38** | **313** | *e*P | | **P** | **10 47 19.8** | **-0.2** |
| AAK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | **69.38** | **313** | *e*P | | **P** | **10 47 19.8** | **-0.2** |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **69.68** | **314** | *e*P | | **P** | **10 47 22.5** | **+0.7** |
| **EKS2** | **Erkin-Say** | **69.68** | **314** | *e*P | | **P** | **10 47 22.5** | **+0.7** |
| **LSA** | **Lhasa** | **70.67** | **293** | *e*P | | **P** | **10 47 28.9** | **+0.4** |
| LSA | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| **LSA** | **Lhasa** | **70.67** | **293** | *e*P | | **P** | **10 47 28.9** | **+0.4** |
| | comp=Z,9.2nm,0.6s | | | | | | | | |
| **OBN** | **Obninsk** | **70.81** | **342** | *e*P | | **P** | **10 47 30.7** | **+2.4** |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **KSH** | **Kashi** | **71.14** | **310** | *e*P | | P | 10 47 34.4 | +3.6 |
| KSH | | | | *es*P | | sP | 10 47 45.5 | 0.0 |
| KSH | | | | S | | **S** | **10 56 50.0** | **+4.9** |
| KSH | | | | PMZ | | | | | |
| | comp=Z,70nm,5.7s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,55nm,4.2s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,96nm,5.6s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,110nm,4.6s | | | | | | | | |
| **TAPN** | **Taplejung** | **74.41** | **294** | *e*P | | **P** | **10 47 51.2** | **+0.6** |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **74.50** | **280** | P | | **P** | **10 47 50.6** | **-0.2** |
| | comp=Z,0.7nm,0.5s,baz=20,slow=7.4,SNR=2.3 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **74.50** | **280** | P | | **P** | **10 47 50.7** | **-0.2** |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **GUN** | **Gumba** | **75.01** | **296** | *e*P | | **P** | **10 47 55.3** | **+1.2** |
| | comp=Z,14nm,0.6s | | | | | | | | |
| **RAMN** | **Ramite** | **75.35** | **295** | *e*P | | **P** | **10 47 56.9** | **+0.9** |
| | comp=Z,16nm,0.5s | | | | | | | | |
| **KKN** | **Kakani** | **75.44** | **296** | *e*P | | **P** | **10 47 58.1** | **+1.6** |
| **PKI** | **Pulchoki** | **75.54** | **296** | *e*P | | **P** | **10 47 58.5** | **+1.3** |
| **PKIN** | **Phulchoki** | **75.54** | **296** | *e*P | | **P** | **10 47 58.3** | **+1.2** |
| **GKN** | **Gorkha** | **75.64** | **297** | *e*P | | **P** | **10 47 58.4** | **+0.9** |
| | comp=Z,7.3nm,0.4s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.31** | **346** | P | | **P** | **10 47 59.5** | **-1.3** |
| | comp=Z,0.6nm,0.4s,baz=18,slow=6.1,SNR=3.4 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.31** | **346** | P | | **P** | **10 47 59.5** | **-1.3** |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **KIEV** | **Kiev** | **76.32** | **346** | *e*P | | **P** | **10 48 00.9** | **+0.1** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| **KOLN** | **Koldanda** | **76.39** | **297** | *e*P | | **P** | **10 48 02.7** | **+0.8** |
| | comp=Z,5.0nm,0.5s | | | | | | | | |
| **KIV** | **Kislovodsk** | **79.89** | **335** | *e*P | | P | 10 48 25.2 | +4.4 |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **84.75** | **229** | P | | **P** | **10 48 44.6** | **-1.7** |
| | comp=Z,0.6nm,0.7s,baz=32,slow=5.7,SNR=10 | | | | | | | | |
| WRA | | | | pP | | **pP** | **10 48 58.6** | **+1.5** |
| | comp=Z,2.0nm,1.0s,baz=33,slow=5.9,SNR=7.1 | | | | | | | | |
| **BRTR** | **Keskin

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KEBM** | **Edson Butte** | **2.19** | **62** | *e*Pn | | **Pn** | **10 50 57.6** | **-2.8** |
| **L02D** | **Cave Junction,** baz=2.6,SNR=74 | **2.52** | **82** | P | | Pn | 10 51 02.2 | -2.7 |
| L02D | baz=2.6 | | | S | | **Sn** | **10 51 30.6** | **-5.0** |
| **KHMM** | **Horse Mountain** | **2.63** | **111** | *e*Pn | | Pn | 10 51 03.9 | -2.6 |
| **KMRM** | **Mail Ridge** | **2.96** | **123** | *e*Pn | | Pn | 10 51 08.4 | -2.7 |
| **DBO** | **Dodson Butte** | **3.02** | **64** | P | | **Pn** | **10 51 10.0** | **-1.8** |
| **M02C** | **Callahan** baz=3.2,SNR=99 | **3.12** | **98** | P | | **Pn** | **10 51 11.1** | **-2.1** |
| **RNO** | **Roman Nose** | **3.12** | **48** | P | | **Pn** | **10 51 12.4** | **-0.9** |
| **YBH** | **Yreka Blue Hor** 10nm,0.3s,baz=276,slow=13,SNR=177 | **3.18** | **91** | Pn | | **Pn** | **10 51 12.7** | **-1.4** |
| YBH | comp=Z,1μm,21.0s,baz=289,slow=37 | | | LR | | LR | 10 52 16.3 | |
| **I03D** | **Drain, OR** baz=3.2,SNR=298 | **3.23** | **54** | P | | **Pn** | **10 51 12.3** | **-2.2** |
| I03D | baz=3.2 | | | S | | **Sn** | **10 51 49.8** | **-3.2** |
| **N02D** | **Trinity Center** baz=3.4,SNR=25 | **3.33** | **104** | P | | Pn | 10 51 13.6 | -2.4 |
| N02D | baz=3.4 | | | S | | **Sn** | **10 51 51.2** | **-4.4** |
| **KIPM** | **Iron Peak** | **3.35** | **127** | *e*Pn | | Pn | 10 51 13.4 | -3.0 |
| **KCPM** | **Cahto Peak** | **3.37** | **129** | *e*Pn | | Pn | 10 51 13.4 | -3.3 |
| KCPM | | | | *e*Sn | | **Sn** | **10 51 54.0** | **-2.8** |
| **LHEM** | **Herd Peak** | **3.56** | **92** | P | | **Pn** | **10 51 18.2** | **-1.2** |
| **WDC** | **Whiskeytown Da** | **3.58** | **110** | *e*Pn | | **Pn** | **10 51 17.3** | **-2.1** |
| **MPOR** | **Mary's Peak** | **3.63** | **42** | P | | **Pn** | **10 51 19.2** | **-0.9** |
| **COR** | **Corvallis** | **3.81** | **43** | *e*Pn | | **Pn** | **10 51 21.9** | **-0.7** |
| **M04C** | **Macdoel** baz=3.9,SNR=36 | **3.83** | **90** | P | | **Pn** | **10 51 22.1** | **-1.0** |
| **J04D** | **Umpqua Nationa** baz=3.9,SNR=30 | **3.84** | **68** | P | | **Pn** | **10 51 22.4** | **-0.7** |
| **I04A** | **Tendick Farm,** baz=3.9,SNR=39 | **3.86** | **59** | P | | **Pn** | **10 51 22.2** | **-1.2** |
| I04A | baz=3.9 | | | S | | **Sn** | **10 52 06.7** | **-2.1** |
| **IRO** | **Indian Ridge** | **4.06** | **57** | P | | **Pn** | **10 51 25.0** | **-1.2** |
| **O03D** | **Paynes Creek** baz=4.3,SNR=21 | **4.21** | **110** | P | | Pn | 10 51 25.6 | -2.6 |
| **G03D** | **McMinnville, O** baz=4.3,SNR=5.4 | **4.29** | **38** | P | | **Pn** | **10 51 28.3** | **-0.8** |
| **WIFE** | **Three Sisters-** | **4.36** | **58** | P | | **Pn** | **10 51 29.6** | **-0.8** |
| **J05D** | **Fort Rock, OR** baz=4.5,SNR=18 | **4.46** | **70** | P | | **Pn** | **10 51 30.0** | **-1.7** |
| **H04A** | **Detroit Lake** | **4.48** | **50** | *e*Pn | | **Pn** | **10 51 31.0** | **-0.9** |
| **G04A** | **Mulino** | **4.66** | **43** | P | | **Pn** | **10 51 34.6** | **+0.3** |
| **NSHM** | **Saint Helena R** | **4.73** | **134** | *e*Pn | | **Pn** | **10 51 34.1** | **-1.1** |
| **F03A** | **Seaside** | **4.74** | **30** | *e*Pn | | **Pn** | **10 51 33.1** | **-2.4** |
| **I05D** | **Terrebonne, OR** baz=4.8,SNR=21 | **4.80** | **57** | P | | **Pn** | **10 51 34.9** | **-1.3** |
| **OHCM** | **Honcut** | **4.88** | **119** | *e*Pn | | Pn | 10 51 34.1 | -3.2 |
| **MOD** | **Modoc** | **4.97** | **87** | *e*Pn | | **Pn** | **10 51 36.5** | **-2.3** |
| **F04D** | **Rainier, OR** baz=5.1,SNR=6.6 | **5.08** | **33** | P | | **Pn** | **10 51 40.1** | **0.0** |
| **F04A** | **Amboy** | **5.22** | **37** | *e*Pn | | **Pn** | **10 51 42.0** | **+0.1** |
| **E03A** | **Lebam** | **5.27** | **26** | *e*Pn | | **Pn** | **10 51 42.9** | **+0.2** |
| **G05D** | **Wamic, OR** baz=5.3,SNR=28 | **5.31** | **49** | P | | **Pn** | **10 51 42.7** | **-0.5** |
| **BMW** | **Boistfort Moun** | **5.33** | **29** | *e*Pg | | **Pb** | **10 51 59.0** | **+1.9** |
| **G06A** | **Carlson Farm,** | **5.70** | **52** | *e*Pn | | **Pn** | **10 51 48.1** | **-0.4** |
| **ASR** | **Mount Adams--S** | **5.77** | **40** | *e*Pn | | **Pn** | **10 51 48.8** | **-0.8** |
| **I07A** | **Izee** | **5.90** | **66** | *e*Pn | | **Pn** | **10 51 50.9** | **-0.5** |
| **LON** | **Longmire** | **6.12** | **35** | *e*Pn | | **Pn** | **10 51 55.2** | **+0.9** |
| **WVOR** | **Wild Horse Val** | **6.21** | **82** | *e*Pn | | **Pn** | **10 51 53.5** | **-2.3** |
| **CMB** | **Columbia Colle** | **6.34** | **125** | *e*Pn | | **Pn** | **10 52 00.4** | **+3.0** |
| **D05A** | **Enumclaw** | **6.39** | **92** | *e*Pn | | **Pn** | **10 51 59.3** | **+1.2** |
| **G08A** | **Pilot Rock** | **6.74** | **57** | *e*Pn | | **Pn** | **10 52 02.9** | **-0.1** |
| **E07A** | **Sunnyside** | **6.93** | **45** | *e*Pn | | **Pn** | **10 52 05.3** | **-0.1** |
| **HAWA** | **Hanford** | **7.00** | **47** | *e*Pn | | **Pn** | **10 52 05.5** | **-0.9** |
| **LTY** | **Liberty** | **7.01** | **38** | *e*Pn | | **Pn** | **10 52 07.1** | **+0.5** |
| **PGC** | **Sidney** 30nm,1.2s | **7.21** | **19** | *e*Pn | | **Pn** | **10 52 09.1** | **-0.2** |
| **B05A** | **Bryant** baz=7.2 | **7.26** | **27** | P | | **Pn** | **10 52 10.1** | **+0.2** |
| **C06D** | **Leavenworth** baz=7.4 | **7.42** | **33** | P | | **Pn** | **10 52 12.3** | **0.0** |
| **NV01** | **Mina Array Sit** | **7.47** | **115** | *e*Pn | | **Pn** | **10 52 14.2** | **+1.1** |
| **NVAR** | **Mina Array Bea** 0.2nm,0.3s,baz=285,slow=13,SNR=21 | **7.47** | **115** | Pn | | **Pn** | **10 52 12.7** | **-0.5** |
| NVAR | comp=Z,1μm,18.5s,baz=293,slow=40 | | | LR | | LR | 10 55 20.3 | |
| **BMN** | **Battle Mountai** | **7.49** | **98** | *e*Pn | | **Pn** | **10 52 15.6** | **+2.2** |
| **D08A** | **Wollman Farm,** | **7.74** | **45** | *e*Pn | | **Pn** | **10 52 16.2** | **-0.4** |
| **F10A** | **Beach Ranch, E** | **8.13** | **56** | *e*Pn | | **Pn** | **10 52 22.6** | **+0.5** |
| **MFID** | **Camas Ranch** | **8.35** | **76** | *e*Pn | | **Pn** | **10 52 25.4** | **+0.3** |
| **C09A** | **Chrisman Ranch** | **8.55** | **43** | *e*Pn | | **Pn** | **10 52 28.0** | **+0.3** |
| **VES** | **Vestal, Richgr** baz=8.7 | **8.60** | **132** | P | | **Pn** | **10 52 27.5** | **-0.9** |
| **ELK** | **Elko** | **8.90** | **93** | *e*Pn | | **Pn** | **10 52 34.2** | **+1.6** |
| **ISA** | **Isabella** baz=9.2 | **9.07** | **130** | P | | **Pn** | **10 52 33.8** | **-1.2** |
| **ISA** | **Isabella** | **9.07** | **130** | *e*Pn | | **Pn** | **10 52 34.6** | **-0.4** |
| **ARVC** | **Arvin** baz=9.4 | **9.27** | **134** | P | | **Pn** | **10 52 37.2** | **-0.4** |
| **HLID** | **Hailey** | **9.39** | **75** | *e*Pn | | **Pn** | **10 52 39.8** | **+0.4** |
| **R11A** | **Troy Canyon, C** | **9.40** | **108** | *e*Pn | | **Pn** | **10 52 40.6** | **+1.1** |
| **NEW** | **Newport** 0.1nm,0.3s,baz=222,slow=14,SNR=4.8 | **9.45** | **44** | Pn | | **Pn** | **10 52 38.6** | **-1.4** |
| NEW | comp=Z,939nm,18.8s,baz=230,slow=39 | | | LR | | LR | 10 56 23.5 | |
| **NEW** | **Newport** baz=9.4 | **9.45** | **44** | P | | **Pn** | **10 52 39.9** | **-0.1** |
| **TPNV** | **Topopah Spring** | **9.64** | **117** | *e*Pn | | Pn | 10 52 47.9 | +5.1 |
| **EDW2** | **Edwards Air Fo** baz=10.0 | **9.91** | **132** | P | | **Pn** | **10 52 46.5** | **0.0** |
| **GSC** | **Goldstone** | **10.30** | **126** | *e*Pn | | Pn | 10 52 56.4 | +4.6 |
| **BSMT** | **Bassoo Peak** | **10.50** | **51** | *e*Pn | | **Pn** | **10 52 55.0** | **+0.4** |
| **BGU** | **Big Grassy Mou** 23nm,1.3s | **10.51** | **91** | *e*Pn | | **Pn** | **10 52 56.2** | **+1.4** |
| **MSO** | **Missoula** baz=10 | **10.56** | **58** | P | | **Pn** | **10 52 54.3** | **-1.0** |
| **MSO** | **Missoula** | **10.56** | **58** | *e*Pn | | **Pn** | **10 52 55.7** | **+0.5** |
| **SHPR** | **Sheep Range** | **10.61** | **116** | *e*Pn | | Pn | 10 52 59.9 | +3.9 |
| **MCMT** | **McKenzie Canyo** | **10.70** | **69** | *e*Pn | | **Pn** | **10 52 56.9** | **-0.4** |
| **JTMT** | **Jette** | **10.75** | **53** | *e*Pn | | **Pn** | **10 52 58.8** | **+0.9** |
| **SWMT** | **Swartz Lake** | **10.81** | **54** | *e*Pn | | **Pn** | **10 52 59.1** | **+0.3** |
| **DUG** | **Dugway** | **10.82** | **94** | *e*Pn | | **Pn** | **10 53 00.4** | **+1.5** |
| **BLMT** | **Blacktail Moun** | **10.83** | **51** | *e*Pn | | **Pn** | **10 52 59.9** | **+0.8** |
| **YBMT** | **Yellow Bay** | **10.96** | **53** | *e*Pn | | **Pn** | **10 53 00.3** | **-0.6** |
| **DLMT** | **Dillon** 14nm,1.1s | **10.98** | **67** | *e*Pn | | **Pn** | **10 53 02.2** | **+1.0** |
| **SLMT** | **Seeley Lake** | **11.00** | **56** | *e*Pn | | **Pn** | **10 53 01.7** | **+0.2** |
| **CHMT** | **Chamberlain Mo** | **11.03** | **58** | *e*Pn | | **Pn** | **10 53 02.3** | **+0.5** |
| **IMU** | **Iron Mountain** | **11.04** | **102** | *e*Pn | | Pn | 10 52 52.3 | -10 |
| **LRM** | **Limekiln Ridge** | **11.20** | **64** | *e*Pn | | **Pn** | **10 53 04.8** | **+0.7** |
| **CCUT** | **Cedar City** | **11.33** | **108** | *e*Pn | | **Pn** | **10 53 08.3** | **+2.3** |
| **NLU** | **North Lily Min** | **11.43** | **95** | *e*Pn | | **Pn** | **10 53 09.1** | **+1.7** |
| **HWUT** | **Hardware Ranch** | **11.51** | **86** | *e*Pn | | **Pn** | **10 53 09.9** | **+1.5** |
| **TCUT** | **Toone Canyon** | **11.69** | **89** | *e*Pn | | **Pn** | **10 53 13.8** | **+2.8** |
| **PFO** | **Pinyon Flat Ob** comp=Z,318nm,18.6s,baz=308,slow=37 | **11.71** | **131** | LR | | LR | 10 57 35.3 | |
| **BOZ** | **Bozeman (W)** | **11.71** | **66** | *e*Pn | | **Pn** | **10 53 11.2** | **+0.1** |
| **FXWY** | **Fox Creek** | **11.85** | **76** | *e*Pn | | **Pn** | **10 53 14.5** | **+1.4** |
| **HRY** | **Holter Researc** | **11.87** | **61** | *e*Pn | | **Pn** | **10 53 15.3** | **+2.0** |
| **TPAW** | **Teton Pass** | **11.90** | **77** | *e*Pn | | **Pn** | **10 53 15.4** | **+1.6** |
| **IMW** | **Indian Meadow** | **11.93** | **75** | *e*Pn | | **Pn** | **10 53 16.2** | **+2.0** |
| **BORC** | **Borrego Spring** | **11.98** | **132** | *e*Pn | | **Pn** | **10 53 14.5** | **-0.2** |
| **YMR** | **Madison River** 9.7nm,1.3s | **11.99** | **71** | *e*Pn | | **Pn** | **10 53 16.0** | **+1.0** |
| **SNOW** | **Snow King Moun** | **12.04** | **77** | *e*Pn | | **Pn** | **10 53 18.6** | **+2.9** |
| **MOOW** | **Moose Ponds** | **12.06** | **76** | *e*Pn | | **Pn** | **10 53 17.4** | **+1.4** |
| **FLWY** | **Flagg Ranch** | **12.12** | **74** | *e*Pn | | **Pn** | **10 53 18.7** | **+2.0** |
| **P17A** | **Butcher Ranch,** | **12.55** | **96** | *e*Pn | | Pn | 10 53 27.7 | +5.1 |
| **P18A** | **Preston Nutter** | **12.88** | **94** | *e*Pn | | **Pn** | **10 53 29.5** | **+2.3** |
| **BW06** | **Boulder Array** | **12.92** | **80** | *e*Pn | | **Pn** | **10 53 26.6** | **-1.0** |
| **EGMT** | **Eagleton** | **13.64** | **57** | *e*Pn | | **Pn** | **10 53 37.9** | **+0.5** |
| **WUAZ** | **Wupatki** | **13.72** | **112** | *e*Pn | | Pn | 10 53 42.0 | +3.4 |
| **PV09** | **Paradox Valley** | **14.04** | **98** | *e*Pn | | **Pn** | **10 53 40.9** | **-2.2** |
| **PV05** | **Paradox Valley** | **14.21** | **100** | *e*P | | **P** | **10 53 51.4** | **-1.5** |
| **PV04** | **Paradox Valley** | **14.24** | **98** | *e*Pn | | Pn | 10 53 49.1 | +3.3 |
| **O20A** | **White River Ci** | **14.25** | **91** | *e*P | | **P** | **10 53 55.2** | **+2.0** |
| **EDM** | **Edmonton** | **14.58** | **34** | *e*P | | **P** | **10 53 58.3** | **+1.6** |
| **PV01** | **Paradox Valley** | **14.58** | **99** | *e*Pn | | **Pn** | **10 53 51.7** | **+1.3** |
| **MVCO** | **Mesa Verde** 24nm,1.3s | **14.98** | **102** | *e*Pn | | **Pn** | **10 53 58.8** | **+2.9** |
| **LAO** | **LASA Array** 60nm,1.4s | **15.60** | **65** | *e*Pn | | **P** | **10 54 10.7** | **+2.6** |
| **S22A** | **4UR Ranch, Cre** 20nm,1.5s | **16.01** | **98** | *e*Pn | | **Pn** | **10 54 11.9** | **+2.6** |
| **PHWY** | **Pilot Hill** 26nm,1.5s | **16.10** | **85** | *e*Pn | | **Pn** | **10 54 08.8** | **-1.8** |
| **ISCO** | **Idaho Springs** | **16.29** | **90** | *e*Pn | | **Pn** | **10 54 12.2** | **-0.8** |
| | 8.2nm,1.2s | | | | | | | |
| **DLBC** | **Dease Lake** 0.1nm,0.3s,baz=177,slow=19,SNR=2.7 | **16.70** | **354** | Pn | | **Pn** | **10 54 16.1** | **-1.7** |
| DLBC | comp=Z,134nm,19.1s,baz=132,slow=34 | | | LR | | LR | 10 59 40.6 | |
| **SDCO** | **Great Sand Dun** 40nm,1.4s | **16.99** | **97** | *e*Pn | | **Pn** | **10 54 23.4** | **+1.6** |
| **LAZ** | **Ladron** | **17.27** | **109** | *e*Pn | | **P** | **10 54 30.4** | **+3.7** |
| **DGMT** | **Dagmar** 41nm,1.2s | **17.32** | **60** | *e*Pn | | **Pn** | **10 54 26.3** | **+0.6** |
| **ANMO** | **Albuquerque** 0.1nm,0.3s,baz=312,slow=13,SNR=6.1 | **17.48** | **107** | Pn | | **Pn** | **10 54 28.0** | **+0.2** |
| ANMO | comp=Z,382nm,19.6s,baz=307,slow=39 | | | LR | | LR | 11 01 37.4 | |
| **LPM** | **Los Pinos Moun** 16nm,1.3s | **17.67** | **109** | *e*P | | **Pn** | **10 54 30.7** | **+0.5** |
| **BNM** | **Barren Site** | **17.76** | **109** | *e*Pn | | **P** | **10 54 33.9** | **+1.7** |
| **121A** | **Cookes Peak, D** 34nm,1.3s | **17.87** | **115** | *e*P | | **P** | **10 54 35.6** | **+2.2** |
| **T25A** | **Trinidad** 25nm,1.4s | **18.02** | **98** | *e*Pn | | **P** | **10 54 36.1** | **+1.0** |
| **MNTX** | **Cornudas Mount** 14nm,1.3s | **20.00** | **114** | *e*P | | Pn | 10 55 00.6 | +2.2 |
| **FFC** | **Flin Flon** 24nm,1.0s | **20.87** | **43** | *e*P | | **P** | **10 55 07.1** | **+1.2** |
| **AMTX** | **Amarillo** 31nm,1.4s | **20.97** | **101** | *e*P | | Pn | 10 55 09.5 | -0.2 |
| **YKA** | **Yellowknife Ar** 3.9nm,0.9s,baz=206,slow=10,SNR=5.3 | **21.92** | **15** | P | | **P** | **10 55 16.1** | **-0.9** |
| **TX31** | **Lajitas Ar. Si** | **22.62** | **116** | *e*P | | **P** | **10 55 27.4** | **+2.4** |
| **TXAR** | **Lajitas Array** 1.3nm,0.8s,baz=295,slow=4.9,SNR=12 | **22.62** | **116** | P | | **P** | **10 55 24.6** | **-0.4** |
| **KDAK** | **Kodiak Island** comp=Z,338nm,21.1s,baz=122,slow=30 | **22.74** | **323** | LR | | LR | 11 01 45.9 | |
| **AGMN** | **Agassiz Nation** 234nm,2.9s | **22.77** | **63** | *e*P | | **P** | **10 55 28.4** | **+2.1** |
| **ULM** | **Lac du Bonnet** 14nm,0.9s,baz=273,slow=10,SNR=8.3 | **23.01** | **58** | P | | **P** | **10 55 28.2** | **-0.6** |
| ULM | comp=Z,234nm,18.1s,baz=310,slow=37 | | | LR | | LR | 11 04 30.9 | |
| **DAWY** | **Dawson** 11nm,1.1s | **23.37** | **346** | *e*P | | **P** | **10 55 29.8** | **-2.5** |
| **W34A** | **Bridge Creek,** 41nm,1.3s | **23.70** | **97** | *e*P | | **P** | **10 55 38.0** | **+2.1** |
| **JCT** | **Junction City** 12nm,1.0s | **24.59** | **109** | *e*P | | **P** | **10 55 44.5** | **+0.3** |
| **CHGN** | **Chignik** | **24.87** | **316** | *e*P | | P | 10 55 42.3 | -4.1 |
| **MCK** | **McKinley** 17nm,1.3s | **25.35** | **337** | *e*P | | **P** | **10 55 53.5** | **+2.8** |
| **IL1** | **Eielson Array** | **25.61** | **340** | *e*P | | **P** | **10 55 53.4** | **+0.3** |
| **ILAR** | **Eielson Array** 3.1nm,0.9s,baz=157,slow=8.1,SNR=34 | **25.61** | **340** | P | | **P** | **10 55 54.0** | **+0.9** |
| ILAR | 1.2nm,1.0s,baz=178,slow=2.5,SNR=7.5 | | | PcP | | **PcP** | **10 59 23.1** | **-0.4** |
| ILAR | comp=Z,85nm,21.6s,baz=149,slow=33 | | | LR | | LR | 11 04 23.7 | |
| **EYMN** | **Ely** 27nm,1.3s | **25.68** | **64** | *e*P | | **P** | **10 55 58.2** | **+4.4** |
| **CCB** | **Clear Creek Bu** 5.8nm,1.0s | **25.75** | **339** | *e*P | | **P** | **10 55 55.2** | **+0.9** |
| **INK** | **Inuvik** comp=Z,84nm,18.1s,baz=116,slow=35 | **26.73** | **355** | LR | | LR | 11 05 46.2 | |
| **MLY** | **Manley** 12nm,1.2s | **26.85** | **338** | *e*P | | **P** | **10 56 05.1** | **+0.9** |
| **MIAR** | **Mount Ida** 10nm,1.3s | **27.11** | **95** | *e*P | | **P** | **10 56 07.2** | **+0.3** |
| **CCM** | **Cathedral Cave** 9.2nm,1.2s | **27.52** | **86** | *e*P | | **P** | **10 56 15.0** | **+4.5** |
| **PBMO** | **Poplar Bluff** 5.2nm,0.9s | **28.57** | **88** | *e*P | | P | 10 56 23.9 | +4.0 |
| **OXF** | **Oxford** 18nm,1.1s | **30.23** | **92** | *e*P | | P | 10 56 38.1 | +3.4 |
| **SCHQ** | **Schefferville** 9.1nm,1.1s,baz=280,slow=11,SNR=3.3 | **40.75** | **50** | P | | **P** | **10 58 04.5** | **-0.2** |
| SCHQ | comp=Z,200nm,18.4s,baz=304,slow=37 | | | LR | | LR | 11 15 10.8 | |
| **SEY** | **Seymchan** 3.3nm,0.9s,baz=357,slow=6.6,SNR=4.0 | **49.70** | **324** | P | | **P** | **10 59 15.4** | **-0.2** |
| **PETK** | **Petropavlovsk-** comp=Z,30nm,19.1s,baz=86,slow=34 | **49.87** | **310** | LR | | LR | 11 18 43.7 | |
| **TAOE** | **Nuku Hiva Isla** 80nm,0.3s | **51.91** | **197** | *e*T | | T | 11 55 10.5 | |
| **H11N3** | **WAKE ISLAND Hy** baz=52,slow=75,SNR=252 | **59.48** | **270** | T | | T | 12 04 51.5 | |
| **H11N2** | **WAKE ISLAND Hy** baz=52,slow=75,SNR=277 | **59.48** | **270** | T | | T | 12 04 58.3 | |
| **H11N1** | **WAKE ISLAND Hy** baz=52,slow=75,SNR=226 | **59.50** | **270** | T | | T | 12 04 52.8 | |
| **PMOR** | **Pomariorio Ree** 2.9nm,0.2s | **59.80** | **204** | *e*T | | T | 12 05 00.2 | |
| **H11S1** | **WAKE ISLAND Hy** baz=52,slow=75,SNR=888 | **60.38** | **269** | T | | T | 12 06 02.6 | |
| **H11S2** | **WAKE ISLAND Hy** baz=52,slow=75,SNR=626 | **60.38** | **269** | T | | T | 12 06 03.0 | |
| **H11S3** | **WAKE ISLAND Hy** baz=52,slow=75,SNR=444 | **60.40** | **269** | T | | T | 12 06 03.9 | |
| **TIAR** | **Tiarei** 3.1nm,0.3s | **62.65** | **204** | *e*T | | T | 12 08 33.6 | |
| **PPT** | **Papeete** comp=Z,29nm,21.5s,baz=27,slow=30 | **62.73** | **204** | LR | | LR | 11 21 26.2 | |
| **PPT2** | **Papeete2** 95nm,26.2s | **62.75** | **204** | *e*LR | | LR | 11 19 13.3 | |
| **ARCES** | **ARCESS Array B** comp=Z,24nm,18.7s,baz=20,slow=36 | **67.07** | **10** | LR | | LR | 11 30 43.4 | |
| **USRK** | **Ussuriysk Ar.** comp=Z,30nm,20.5s,baz=96,slow=34 | **68.96** | **311** | LR | | LR | 11 29 37.9 | |
| **NOA** | **NORSAR Array B** 1.5nm,0.8s,baz=330,slow=6.0,SNR=3.4 | **71.94** | **20** | P | | **P** | **11 01 45.8** | **-1.2** |
| NOA | comp=Z,18nm,20.9s,baz=320,slow=36 | | | LR | | LR | 11 33 21.1 | |
| **HFS** | **Hagfors** 3.8nm,0.9s,baz=53,slow=7.4,SNR=3.7 | **73.34** | **19** | P | | **P** | **11 01 55.6** | **+0.3** |
| **FINES** | **FINESS Array B** 3.6nm,0.9s,baz=146,slow=11,SNR=3.8 | **74.73** | **13** | P | | **P** | **11 02 03.1** | **-0.3** |
| FINES | comp=Z,23nm,19.9s,baz=30,slow=37 | | | LR | | LR | 11 36 32.5 | |
| **KSRS** | **Korea Array** comp=Z,20nm,20.5s,baz=66,slow=32 | **75.66** | **308** | LR | | LR | 11 30 39.7 | |
| **SONM** | **Songino Array** 1.7nm,0.9s,baz=47,slow=4.1,SNR=8.5 | **78.98** | **327** | P | | **P** | **11 02 27.3** | **-0.5** |
| SONM | comp=Z,65nm,19.8s,baz=54,slow=36 | | | LR | | LR | 11 37 17.4 | |
| **LPAZ** | **La Paz** 0.6nm,0.6s,baz=270,slow=5.1,SNR=3.5 | **79.29** | **123** | P | | **P** | **11 02 29.7** | **-0.7** |
| **ZALV** | **Zalesovo Beam** 1.2nm,0.3s,baz=21,slow=11,SNR=4.4 | **80.73** | **342** | P | | **P** | **11 02 36.2** | **-0.8** |
| ZALV | comp=Z,35nm,19.7s,baz=70,slow=37 | | | LR | | LR | 11 39 55.9 | |
| **GERES** | **GERESS Array B** 0.5nm,0.5s,baz=332,slow=5.5,SNR=5.3 | **83.24** | **25** | P | | **P** | **11 02 50.0** | **-0.5** |
| GERES | comp=Z,44nm,18.2s,baz=320,slow=37 | | | LR | | LR | 11 41 04.8 | |
| **ESDC** | **Sonseca Array** 0.5nm,0.3s,baz=317,slow=4.4,SNR=6.7 | **83.75** | **41** | P | | **P** | **11 02 53.1** | **0.0** |
| **KURK** | **Kurchatov** | **85.12** | **344** | P | | **P** | **11 02 59.7** | **-0.1** |
| **KURBB** | **Kurchatov Arra** 6.9nm,0.2s,baz=16,slow=4.6,SNR=5.8 | **85.22** | **344** | P | | **P** | **11 02 59.7** | **-0.6** |
| **AKASG** | **Malin Array Be** 1.2nm,0.5s,baz=342,slow=4.2,SNR=5.6 | **85.48** | **15** | P | | **P** | **11 03 00.4** | **-1.2** |
| **MKAR** | **Makanchi Array** comp=Z,30nm,18.2s,baz=3.0,slow=37 | **87.97** | **340** | LR | | LR | 11 44 50.1 | |
| **AKTO** | **Aktyubinsk** 2.1nm,0.9s,baz=278,slow=3.1,SNR=7.2 | **87.97** | **357** | P | | **P** | **11 03 13.1** | **-0.8** |
| **BDFB** | **Brasilia** comp=Z,36nm,19.7s,baz=320,slow=38 | **92.31** | **109** | LR | | LR | 11 48 00.9 | |
| **BRTR** | **Keskin Array B** 0.5nm,0.7s,baz=16,slow=7.5,SNR=2.3 | **96.89** | **15** | P | | **P** | **11 03 54.6** | **-0.9** |
| **VNDA** | **Vanda** 1.1nm,1.0s,baz=23,slow=7.6,SNR=3.7 | **126.63** | **195** | PKP | | **PKPdf** | **11 09 25.3** | **-0.7** |

*ISCJB **13** 10:57:39.6±0.4,24°.75N±0°.04×122°.58E±0°.02,h15km±8km, Error ellipse: s-maj=7.6km s-min=2.6km az=12.0*
*JMA **13** 10:57:39.8±0.1,24°.70N×122°.54E,h27km±2km,M2.5*
*TAP **13** 10:57:40.1,24°.75N×122°.52E,h22km±1km,ML3.0,C*

**ISC 13 10:57:39.8±1.4,24°.72N±0°.05×122°.55E±0°.02,h21km±4km, n24,σ0°.66/42,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.45** | **127** | P | | **Pb** | **10 57 48.9** | **0.0** |
| JYNG | | | | S | | **Sb** | **10 57 55.3** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **0.49** | **122** | P | | **Pb** | **10 57 49.8** | **+0.1** |
| YOJ | | | | S | | **Sb** | **10 57 56.5** | **0.0** |
| **EGS** | baz=280 | **0.58** | **282** | *e*P | | **Pb** | **10 57 51.2** | **-0.1** |
| EGS | | | | *e*S | | **Sb** | **10 57 56.9** | **-2.3** |
| **TWB1** | **Santiao Chiao** baz=298 | **0.59** | **299** | P | | **Pb** | **10 57 51.3** | **-0.2** |
| TWB1 | baz=298 | | | S | | **Sb** | **10 57 58.9** | **-0.5** |
| **TWC** | **Suao** baz=257 | **0.65** | **260** | *e*P | | **Pb** | **10 57 52.2** | **-0.3** |
| TWC | baz=257 | | | *e*S | | **Sb** | **10 58 01.2** | **0.0** |
| **NWF** | **Wu-fen Shan** baz=295 | **0.78** | **296** | P | | **Pn** | **10 57 55.1** | **-0.6** |
| NWF | baz=295 | | | S | | **Sb** | **10 58 05.1** | **+0.2** |
| **ENA** | **Nanau** baz=253 | **0.80** | **248** | P | | **Pb** | **10 57 54.7** | **-0.2** |
| ENA | baz=253 | | | *e*S | | **Sb** | **10 58 04.8** | **-0.4** |
| **TWE** | **Neicheng** baz=267 | **0.81** | **270** | P | | **Pb** | **10 57 54.8** | **-0.3** |
| TWE | baz=267 | | | *e*S | | **Sb** | **10 58 05.6** | **0.0** |
| **ENTT** | **Nioudou** baz=262 | **0.90** | **265** | P | | **Pb** | **10 57 56.8** | **0.0** |
| ENTT | baz=262 | | | *e*S | | **Sb** | **10 58 08.3** | **0.0** |
| **TWA** | **Mucha** baz=285 | **0.92** | **286** | *e*P | | **Pb** | **10 57 56.8** | **-0.3** |
| TWA | baz=285 | | | *e*S | | **Sb** | **10 58 08.7** | **0.0** |
| **PCYT** | **Pengchaiyu** baz=330 | **1.00** | **334** | *e*P | | **Pn** | **10 57 59.6** | **+0.9** |
| **NSK** | **Sanguang** baz=265 | **1.09** | **268** | *e*P | | **Pb** | **10 58 00.2** | **+0.2** |
| NSK | baz=265 | | | *e*S | | **Sb** | **10 58 13.1** | **-0.7** |
| **NNS** | **Nan Shan** baz=253 | **1.11** | **256** | *e*P | | **Pb** | **10 58 00.7** | **+0.3** |
| NNS | baz=253 | | | *e*S | | **Sn** | **10 58 14.9** | **-0.1** |
| **IRIF** | **Iriomote-Funau** | **1.14** | **110** | P | | **Pn** | **10 57 59.8** | **-0.7** |
| IRIF | | | | *e*S | | **Sb** | **10 58 14.5** | **-0.7** |
| **WHF** | **Hehuan Shan** baz=250 | **1.31** | **244** | *e*P | | **Pb** | **10 58 04.3** | **+0.4** |
| WHF | baz=250 | | | *e*S | | **Sb** | **10 58 20.9** | **+0.5** |
| **HATJ** | **Hateruma jima** | **1.32** | **120** | P | | **Pn** | **10 58 03.3** | **+0.3** |
| HATJ | | | | *e*S | | **Sn** | **10 58 20.0** | **0.0** |
| **ESL** | **Shilin** baz=211 | **1.36** | **229** | *e*P | | **Pn** | **10 58 03.8** | **+0.1** |
| **JKRS** | **Kuro-shima** | **1.41** | **110** | P | | **Pn** | **10 58 04.2** | **-0.1** |
| JKRS | | | | *e*S | | **Sn** | **10 58 22.7** | **+0.4** |
| **NSTT** | **Nanjuang** baz=264 | **1.41** | **267** | *e*P | | **Pb** | **10 58 07.6** | **+2.1** |
| NSTT | baz=264 | | | *e*S | | **Sb** | **10 58 23.4** | **+0.3** |
| **JIJ** | **Ishigaki jima** | **1.49** | **104** | P | | **Pn** | **10 58 04.9** | **-0.5** |
| JIJ | | | | *e*S | | **Sn** | **10 58 23.5** | **-0.7** |
| **JISG** | **Ishigakijimahi** | **1.61** | **94** | P | | **Pn** | **10 58 07.2** | **+0.2** |
| **TYC** | **Yuchr** baz=225 | **1.75** | **243** | *e*P | | **Pb** | **10 58 10.2** | **-0.9** |
| **JTJ** | **Tarama** | **1.96** | **92** | P | | **Pn** | **10 58 12.6** | **+0.8** |
| **CHN4** | **Tsaushan** baz=216 | **2.25** | **233** | *e*S | | **Sb** | **10 58 47.6** | **+0.4** |

*DDA **13** 10:57:52.8,39°.31N×36°.47E,h7km,Md3.1*
*ISK **13** 10:57:52.1,39°.28N×36°.45E,h18km,MD2.7*
*CSEM **13** 10:57:53.0±0.3,39°.28N×36°.47E,h2km,MD2.7,Error ellipse: s-maj=6.3km s-min=5.8km az=61.0*

**ISC 13 10:57:53.3±0.9,39°.29N±0°.03×36°.47E±0°.02,h15km±8km, n18,σ0°.80/33,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CUSAR** | **Sarkisla-SIVAS** | **0.22** | **307** | P | | **Pg** | **10 57 58.2** | **-0.2** |
| CUSAR | | | | S | | **Sg** | **10 58 02.7** | **+0.9** |
| **CUALT** | **Altinyayla-SIV** | **0.23** | **93** | P | | **Pg** | **10 57 57.7** | **-0.8** |
| CUALT | | | | S | | **Sg** | **10 58 02.2** | **+0.2** |
| **PINB** | **Pinarbasi** | **0.61** | **185** | *i* P | | **Pg** | **10 58 04.9** | **-0.5** |
| PINB | | | | *i* S | | **Sb** | **10 58 15.1** | **+0.6** |
| **PINB** | **Pinarbasi** | **0.61** | **185** | P | | **Pg** | **10 58 04.9** | **-0.5** |
| PINB | | | | S | | **Sb** | **10 58 15.1** | **+0.6** |
| **SVSK** | **Karacayir** | **0.75** | **33** | *e*PG | | **Pg** | **10 58 07.1** | **-0.9** |
| SVSK | | | | *e*SG | | **Sb** | **10 58 18.6** | **+0.4** |
| **SVSK** | **Karacayir** | **0.75** | **33** | *e*Pg | | **Pg** | **10 58 07.1** | **-0.9** |
| SVSK | | | | *e*Sg | | **Sb** | **10 58 18.6** | **+0.4** |
| **

0.6nm,0.3s,baz=342,slow=12,SNR=24
WRA S **Sn** **11 30 14.2 -4.4**
0.0nm,0.3s,baz=342,slow=22,SNR=1.5
**QIS** **Mount Isa** **20.17 152** P **P** **11 27 32.6 +1.3**
baz=20,SNR=9.0
**ASAR** **Alice Springs** **21.13 169** P **P** **11 27 41.8 +0.1**
7.7nm,0.6s,baz=351,slow=9.9,SNR=124
ASAR S **S** **11 31 31.9 -2.4**
1.2nm,1.1s,baz=352,slow=21,SNR=5.0
**WRKA** **Warakurna** **22.09 183** P **P** **11 27 51.3 -0.6**
baz=22,SNR=20
**PSI** **Prapat** **31.08 280** LR LR 11 41 42.9
comp=Z,44nm,19.0s,baz=178,slow=37
**MKAR** **Makanchi Array** **64.52 326** P **P** **11 33 33.5 +0.9**
0.3nm,0.4s,baz=131,slow=11,SNR=2.0

**GUC 13 11:30:17.3±0.4, 24°.12S×67°.72W, h236km±11km, ML3.9, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **2.21** | **309** | *e*P | | Pn | 11 31 01.9 | +1.0 |
| PB06 | | | | *e*S | | S | 11 31 35.6 | +0.5 |
| PB06 | | | | AML | | AML | 11 31 36.7 | |
| | comp=N,159nm,0.1s | | | | | | | |
| **PB10** | **IPOC Station P** | **2.67** | **283** | *e*P | | Pn | 11 31 07.6 | +2.3 |
| PB10 | | | | *e*S | | S | 11 31 44.6 | +1.5 |
| PB10 | | | | AML | | AML | 11 31 51.0 | |
| | comp=E,368nm,0.4s | | | | | | | |
| **PB09** | **IPOC Station P** | **2.71** | **328** | *e*P | | Pn | 11 31 07.2 | +1.2 |
| PB09 | | | | *e*S | | S | 11 31 45.0 | +0.7 |
| PB09 | | | | AML | | AML | 11 31 45.8 | |
| | comp=E,276nm,0.4s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.86** | **308** | *e*P | | Pn | 11 31 08.7 | +1.0 |
| PB04 | | | | *e*S | | S | 11 31 48.2 | +1.0 |
| PB04 | | | | AML | | AML | 11 31 51.0 | |
| | comp=E,91nm,0.4s | | | | | | | |
| **PB07** | **IPOC Station P** | **3.11** | **320** | *e*P | | Pn | 11 31 11.6 | +1.1 |
| PB07 | | | | *e*S | | S | 11 31 52.9 | +0.6 |
| PB07 | | | | AML | | AML | 11 31 54.5 | |
| | comp=E,125nm,0.4s | | | | | | | |
| **PB01** | **IPOC Station P** | **3.47** | **332** | *e*P | | Pn | 11 31 14.8 | +0.3 |
| PB01 | | | | *e*S | | S | 11 31 59.2 | -0.3 |
| PB01 | | | | AML | | AML | 11 31 59.6 | |
| | comp=E,81nm,0.2s | | | | | | | |

*DDA **13** 11:31:30.1,40°.76N×30°.58E,h4km,Md3.0*
*CSEM **13** 11:31:30.8±0.2,40°.74N×30°.58E,h8km,MD3.0,Error ellipse: s-maj=4.1km s-min=2.8km az=10.0*
*ISK **13** 11:31:30.4,40°.73N×30°.58E,h6km,MD3.0*
**ISC 13 11:31:30.6±1.0, 40°.75N±0°.03×30°.57E±0°.02, h11km±8km, n48, σ0s57/67, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SPNC** | **Sapanca-Adapaz** | **0.21** | **251** | *e*PG | | **Pg** | **11 31 35.5** | **+0.3** |
| **SPNC** | **Sapanca-Adapaz** | **0.21** | **251** | *e*Pg | | **Pg** | **11 31 35.5** | **+0.3** |
| **GULT** | **Gulveren** | **0.33** | **188** | *e*PG | | **Pg** | **11 31 36.7** | **-0.5** |
| **GULT** | **Gulveren** | **0.33** | **188** | *e*Pg | | **Pg** | **11 31 36.7** | **-0.5** |
| **BTAS** | **Taskesti** | **0.37** | **119** | *i* P | | **Pg** | **11 31 37.8** | **-0.3** |
| BTAS | | | | *i* S | | **Sg** | **11 31 43.0** | **-0.1** |
| **BTAS** | **Taskesti** | **0.37** | **119** | P | | **Pg** | **11 31 37.8** | **-0.3** |
| BTAS | | | | S | | **Sg** | **11 31 43.0** | **-0.1** |
| **GPA** | **Golpazari** | **0.51** | **203** | *e*PG | | **Pg** | **11 31 40.0** | **-0.5** |
| GPA | | | | *e*SG | | **Sg** | **11 31 47.7** | **+0.5** |
| **GPA** | **Golpazari** | **0.51** | **203** | *e*Pg | | **Pg** | **11 31 40.0** | **-0.5** |
| GPA | | | | *e*Sg | | **Sg** | **11 31 47.7** | **+0.5** |
| **MDUB** | **Mudurnu** | **0.55** | **121** | *e*PG | | **Pg** | **11 31 41.4** | **0.0** |
| MDUB | | | | *e*SG | | **Sg** | **11 31 48.9** | **+0.1** |
| **MDUB** | **Mudurnu** | **0.55** | **121** | *e*Pg | | **Pg** | **11 31 41.4** | **0.0** |
| MDUB | | | | *e*Sg | | **Sg** | **11 31 48.9** | **+0.1** |
| **ADVT** | **Abdulvahap** | **0.71** | **243** | *e*PG | | **Pg** | **11 31 43.9** | **-0.5** |
| **ADVT** | **Abdulvahap** | **0.71** | **243** | *e*Pg | | **Pg** | **11 31 43.9** | **-0.5** |
| **CAVI** | **Cavuskoy** | **0.78** | **226** | *e*PG | | **Pb** | **11 31 46.2** | **0.0** |
| **CAVI** | **Cavuskoy** | **0.78** | **226** | *e*Pg | | **Pb** | **11 31 46.2** | **0.0** |
| **SILT** | **Sile** | **0.81** | **300** | *e*PG | | **Pb** | **11 31 47.1** | **+0.4** |
| SILT | | | | *e*SG | | **Sb** | **11 31 58.8** | **+1.2** |
| **SILT** | **Sile** | **0.81** | **300** | *e*Pg | | **Pb** | **11 31 47.1** | **+0.4** |
| SILT | | | | *e*Sg | | **Sb** | **11 31 58.8** | **+1.2** |
| **KDZE** | **Karadeniz Ereo** | **0.86** | **49** | *e*PG | | **Pb** | **11 31 47.6** | **0.0** |
| **KDZE** | **Karadeniz Ereo** | **0.86** | **49** | *e*Pg | | **Pb** | **11 31 47.6** | **0.0** |
| **IZI** | **Iznik** | **0.94** | **244** | *e*PG | | **Pg** | **11 31 48.5** | **-0.2** |
| **IZI** | **Iznik** | **0.94** | **244** | *e*Pg | | **Pg** | **11 31 48.5** | **-0.2** |
| **GEMT** | **Gemlik** | **1.10** | **254** | *e*PN | | **Pg** | **11 31 51.3** | **-0.5** |
| **GEMT** | **Gemlik** | **1.10** | **254** | *e*Pn | | **Pg** | **11 31 51.3** | **-0.5** |
| **BUY** | **Buyukada** | **1.11** | **276** | *i* P | | **Pg** | **11 31 51.4** | **-0.5** |
| BUY | | | | *i* S | | **Sn** | **11 32 07.6** | **+0.3** |
| **BUY** | **Buyukada** | **1.11** | **276** | P | | **Pg** | **11 31 51.4** | **-0.5** |
| BUY | | | | S | | **Sn** | **11 32 07.5** | **+0.3** |
| **AUMIH** | **MIHALICIK** | **1.13** | **142** | P | | **Pg** | **11 31 51.9** | **-0.4** |
| AUMIH | | | | S | | **Sn** | **11 32 07.9** | **-0.1** |
| **BCAM** | **Yenicaga** | **1.14** | **86** | *i* P | | **Pg** | **11 31 51.8** | **-0.7** |
| BCAM | | | | *i* S | | **Sn** | **11 32 08.5** | **+0.4** |
| **BCAM** | **Yenicaga** | **1.14** | **86** | P | | **Pg** | **11 31 51.8** | **-0.7** |
| BCAM | | | | S | | **Sn** | **11 32 08.4** | **+0.4** |
| **IGD** | **Bursa** | **1.16** | **245** | P | | **Pg** | **11 31 51.8** | **-1.1** |
| IGD | | | | S | | **Sb** | **11 32 07.9** | **+0.4** |
| **ISK** | **Istanbul-Kandi** | **1.19** | **286** | *e*PN | | **Pb** | **11 31 53.3** | **+0.2** |
| **ISK** | **Istanbul-Kandi** | **1.19** | **286** | *e*Pn | | **Pb** | **11 31 53.3** | **+0.2** |
| **ESKT** | **Eskisehir** | **1.25** | **170** | *e*PN | | **Pg** | **11 31 55.0** | **+0.3** |
| **ESKT** | **Eskisehir** | **1.25** | **170** | *e*Pn | | **Pg** | **11 31 55.0** | **+0.3** |
| **ESKT** | **Eskisehir** | **1.25** | **170** | P | | **Pg** | **11 31 54.8** | **+0.1** |
| ESKT | | | | S | | **Sn** | **11 32 12.3** | **+1.3** |
| **SEYT** | **Eskypehyr** | **1.25** | **170** | *i* P | | **Pg** | **11 31 54.8** | **+0.1** |
| SEYT | | | | *i* S | | **Sn** | **11 32 12.3** | **+1.3** |
| **ULDT** | **Uludag** | **1.26** | **241** | *i* P | | **Pn** | **11 31 53.2** | **-1.1** |
| ULDT | | | | *i* S | | **Sn** | **11 32 11.8** | **+0.6** |
| **ULDT** | **Uludag** | **1.26** | **241** | P | | **Pn** | **11 31 53.2** | **-1.1** |
| ULDT | | | | S | | **Sn** | **11 32 11.8** | **+0.6** |
| **KLYT** | **Kilyos** | **1.26** | **294** | *e*PN | | **Pg** | **11 31 54.9** | **0.0** |
| **KLYT** | **Kilyos** | **1.26** | **294** | *e*Pn | | **Pg** | **11 31 54.9** | **0.0** |
| **MDNY** | **Mudanya-Bursa** | **1.34** | **254** | *e*PN | | **Pb** | **11 31 55.9** | **+0.1** |
| **MDNY** | **Mudanya-Bursa** | **1.34** | **254** | *e*Pn | | **Pb** | **11 31 55.9** | **+0.1** |
| **BGKT** | **Bogazkoy** | **1.43** | **288** | *e*PN | | **Pg** | **11 31 57.7** | **-0.4** |
| **BGKT** | **Bogazkoy** | **1.43** | **288** | *e*Pn | | **Pg** | **11 31 57.7** | **-0.4** |
| **CTKS** | **Kestanelik-??a** | **1.64** | **288** | *e*PN | | **Pb** | **11 32 01.1** | **+0.3** |
| **CTKS** | **Kestanelik-??a** | **1.64** | **288** | *e*Pn | | **Pb** | **11 32 01.1** | **+0.3** |
| **KCTX** | **Karacabey (Bur** | **1.76** | **255** | *e*PN | | **Pb** | **11 32 02.4** | **-0.5** |
| **KCTX** | **Karacabey (Bur** | **1.76** | **255** | *e*Pn | | **Pb** | **11 32 02.4** | **-0.5** |
| **DEMI** | **Demirci** | **2.23** | **220** | *i* P | | **Pb** | **11 32 11.5** | **+0.6** |
| **DEMI** | **Demirci** | **2.23** | **220** | P | | **Pb** | **11 32 11.5** | **+0.6** |
| DEMI | | | | S | | **Sg** | **11 32 40.6** | **-1.7** |

*NNC **13** 11:40:11.2±1.7,37°.64N×71°.75E,h201km±12km,mb2.7, mpv3.9,Error ellipse: s-maj=15.8km s-min=6.1km az=157.0*
**ISC 13 11:40:11.2±3.0, 37°.5N±0°.2×71°.93E±0°.09, h130km, n14, σ1s84/19, 13C-2D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.76** | **299** | ⇓P | | **Pn** | **11 40 55.9** | **+1.1** |
| | 34nm,0.3s | | | | | | | |
| DZET | | | | ⇑S | | **Sn** | **11 41 31.8** | **+3.5** |
| | 138nm,0.5s | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.77** | **26** | ⇑P | | **Pn** | **11 40 57.4** | **+2.3** |
| | 16nm,0.3s | | | | | | | |
| SFK | | | | ⇓S | | Sn | 11 41 35.6 | +6.8 |
| | 83nm,0.4s | | | | | | | |
| **AML** | **Almayashu** | **4.80** | **16** | P | | **Pn** | **11 41 22.7** | **+0.9** |
| | SNR=84 | | | | | | | |
| **MNAS** | **Manas** | **4.97** | **5** | ⇑P | | **Pn** | **11 41 24.8** | **+0.8** |
| | 26nm,0.3s | | | | | | | |
| MNAS | | | | ⇑S | | **Sn** | **11 42 21.9** | **+1.2** |
| | 15nm,0.5s | | | | | | | |
| **UCH** | **Uchtor** | **5.10** | **22** | P | | **Pn** | **11 41 26.3** | **+0.3** |
| | SNR=20 | | | | | | | |
| **EKS2** | **Erkin-Say** | **5.32** | **15** | P | | **Pn** | **11 41 29.5** | **+0.9** |
| | SNR=18 | | | | | | | |
| **AAK** | **Ala-Archa** | **5.47** | **20** | ⇑P | | **Pn** | **11 41 31.4** | **+0.7** |
| | 8.4nm,0.4s | | | | | | | |
| AAK | | | | ⇑S | | **Sn** | **11 42 35.3** | **+2.7** |
| | 15nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **5.47** | **20** | P | | **Pn** | **11 41 31.4** | **+0.7** |
| | SNR=19 | | | | | | | |
| **KK31** | **Karatay Array** | **5.67** | **349** | ⇑P | | **Pn** | **11 41 33.3** | **0.0** |
| | 1.9nm,0.3s,baz=188,slow=16,SNR=6.1 | | | | | | | |
| KK31 | | | | ⇑S | | **Sn** | **11 42 37.3** | **0.0** |
| | 4.7nm,0.5s,baz=171,slow=23,SNR=5.7 | | | | | | | |
| **USP** | **Ospenovka** | **6.06** | **18** | P | | **Pn** | **11 41 38.7** | **+0.2** |
| | SNR=6.7 | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.08** | **26** | ⇑P | | **Pn** | **11 41 38.8** | **0.0** |
| | 2.1nm,0.4s | | | | | | | |
| TKM2 | | | | ⇑S | | **Sn** | **11 42 47.9** | **+0.6** |
| | 1.3nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.08** | **26** | P | | **Pn** | **11 41 39.2** | **+0.3** |
| | SNR=6.2 | | | | | | | |
| **AB31** | **Akbulak array** | **14.58** | **327** | ⇑P | | **Pn** | **11 43 28.9** | **-2.2** |
| | 0.3nm,0.5s,baz=149,slow=9.3,SNR=10 | | | | | | | |
| AB31 | | | | ⇑S | | Sn | 11 46 01.8 | -11 |
| | 0.9nm,0.5s,baz=151,slow=22,SNR=3.3 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.30** | **327** | ⇑P | | **Pn** | **11 43 48.1** | **-4.3** |
| | 1.5nm,0.5s | | | | | | | |

*ISCJB **13** 11:45:46.6±0.7,6°.15S±0°.07×149°.9E±0°.1,h50km,mb3.9/7, MS3.2/2,Error ellipse: s-maj=17.0km s-min=9.6km az=11.4*
*IDC **13** 11:45:49.2±4.3,6°.45S×150°.38E,h80km±31km,mb3.7/8, mb1 3.9/8,mb1mx3.7/30,mbtmp4.1/8,MS3.1/3,Ms1 3.1/3, ms1mx2.8/26,Error ellipse: s-maj=61.3km s-min=20.0km az=112.0*
*AUST **13** 11:46:38.2±2.7,9°.22S×147°.95E,h286km,Error ellipse: s-maj=2.9km s-min=1.2km az=227.0*
**ISC 13 11:45:48.5±1.2, 6°.2S±0°.1×149°.9E±0°.2, h50km, n23, σ1s28/20, mb3.9/7, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **COEN** | **Coen** | **10.15** | **220** | P | | **Pn** | **11 48 11.6** | **0.0** |
| | baz=6.7,SNR=18 | | | | | | | |
| **HNR** | **Honiara** | **10.46** | **108** | LR | | LR | 11 51 21.6 | |
| | comp=Z,58nm,21.5s,baz=290,slow=34 | | | | | | | |
| **QIS** | **Mount Isa** | **17.41** | **214** | P | | **Pn** | **11 49 48.2** | **+0.2** |
| | baz=14,SNR=9.4 | | | | | | | |
| **KDU** | **Kakadu** | **18.34** | **248** | P | | **P** | **11 50 00.0** | **+1.0** |
| | baz=16,SNR=3.2 | | | | | | | |
| **EIDS** | **Eidsvold** | **19.08** | **177** | P | | **Pn** | **11 50 08.3** | **0.0** |
| | baz=16,SNR=4.5 | | | | | | | |
| **MTN** | **Manton Dam** | **19.63** | **249** | P | | **P** | **11 50 13.3** | **+0.1** |
| | baz=17,SNR=11 | | | | | | | |
| **RMQ** | **Roma** | **20.19** | **183** | P | | **Pn** | **11 50 20.6** | **-0.9** |
| | baz=17,SNR=16 | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.36** | **226** | P | | **P** | **11 50 21.2** | **+0.1** |
| | 26nm,0.7s,baz=52,slow=11,SNR=169 | | | | | | | |
| WRA | | | | LR | | LR | 11 57 43.5 | |
| | comp=Z,88nm,22.0s,baz=190,slow=35 | | | | | | | |
| **QLP** | **Quilpie** | **20.96** | **194** | P | | **P** | **11 50 28.5** | **+1.0** |
| | baz=18,SNR=6.6 | | | | | | | |
| **KNRA** | **Kununurra** | **22.76** | **244** | P | | **P** | **11 50 46.5** | **-0.3** |
| | baz=20,SNR=11 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.19** | **220** | P | | **P** | **11 50 50.6** | **-0.6** |
| | 2.4nm,0.5s,baz=53,slow=9.0,SNR=49 | | | | | | | |
| ASAR | | | | ScP | | ScP | 11 58 05.5 | -6.8 |
| | 0.2nm,0.8s,baz=39,slow=4.7,SNR=3.0 | | | | | | | |
| **ARMA** | **Armidale** | **24.13** | **176** | P | | **P** | **11 51 01.5** | **+1.5** |
| | baz=22,SNR=12 | | | | | | | |
| **LUWI** | **Luwuk** | **27.54** | **280** | P | | P | 11 51 37.5 | +6.5 |
| | baz=26,SNR=6.0 | | | | | | | |
| **WRKA** | **Warakurna** | **27.90** | **226** | P | | **P** | **11 51 33.4** | **-0.6** |
| | baz=24,SNR=4.3 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.29** | **193** | P | | **P** | **11 52 04.3** | **+0.4** |
| | baz=28,SNR=5.5 | | | | | | | |
| **MEEK** | **Meekatharra** | **36.05** | **232** | P | | **P** | **11 52 45.2** | **-0.4** |
| | baz=33,SNR=18 | | | | | | | |
| **KSRS** | **Korea Array** | **48.04** | **336** | P | | P | 11 54 22.5 | -0.4 |
| | 1.5nm,0.7s,baz=154,slow=8.5,SNR=6.6 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.47** | **5** | P | | P | 11 55 44.7 | -1.5 |
| | 1.3nm,0.5s,baz=168,slow=7.0,SNR=7.6 | | | | | | | |
| PETK | | | | LR | | LR | 12 16 51.5 | |
| | comp=Z,22nm,20.9s,baz=151,slow=31 | | | | | | | |
| **SONM** | **Songino Array** | **66.02** | **329** | P | | **P** | **11 56 31.2** | **+1.1** |
| | 0.6nm,0.5s,baz=134,slow=4.4,SNR=4.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **79.51** | **320** | P | | **P** | **11 57 50.6** | **+0.6** |
| | 0.3nm,0.4s,baz=109,slow=7.1,SNR=3.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.74** | **327** | P | | **P** | **11 57 56.5** | **0.0** |
| | 0.8nm,0.4s,baz=105,slow=3.3,SNR=2.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.56** | **23** | P | | P | 11 58 13.7 | -2.4 |
| | 0.4nm,0.6s,baz=244,slow=5.3,SNR=6.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.93** | **285** | PKP | | **PKPdf** | **12 05 22.8** | **-3.5** |
| | 1.5nm,0.5s,baz=91,slow=1.2,SNR=24 | | | | | | | |
| TORD | | | | PKPbc | | **PKPbc** | **12 05 27.9** | **-1.5** |
| | 1.5nm,0.5s,baz=88,slow=2.4,SNR=40 | | | | | | | |
| TORD | | | | pPKPbc | | **pPKPbc** | **12 05 46.9** | **+2.4** |
| | 1.2nm,0.6s,baz=79,slow=3.1,SNR=5.3 | | | | | | | |

*IDC **13** 11:50:13.7±0.7,55°.10N×160°.40E,h0km,mb4.0/12, mb1 4.2/14,mb1mx4.0/35,mbtmp4.0/14,ML3.4/3,MS3.5/18, Ms1 3.5/18,ms1mx3.3/37,Error ellipse: s-maj=20.6km s-min=17.4km az=158.0*
*KRSC **13** 11:50:13.9±0.4,55°.13N×160°.28E,h1km±2km,ML4.4*
*MOS **13** 11:50:13.8±0.9,55°.16N×160°.31E,h5km,mb4.2/10,Error ellipse: s-maj=11.0km s-min=4.4km az=82.7*
*ISCJB **13** 11:50:15.0±0.6,55°.19N±0°.02×160°.31E±0°.06,h10km±4km, mb4.0/16,MS3.5/18,Error ellipse: s-maj=5.5km s-min=3.3km az=9.0*
*BJI **13** 11:50:17.9,55°.68N×160°.39E,h42km,mb4.4/2,mB4.4/3*
*NEIC **13** 11:50:18.8±0.5,55°.04N×160°.46E,h35km,mb4.8/2,Error ellipse: s-maj=12.8km s-min=9.3km az=124.0*
**ISC 13 11:50:14.4±0.9, 55°.10N±0°.02×160°.32E±0°.03, h4km±6km, n105, σ1s20/110, mb4.1/16, MS3.4/18, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KZV** | **Kizimen** | **0.02** | **318** | *i* P | | **Pg** | **11 50 15.4** | **0.0** |
| **TUMR** | **Tumrok** | **0.21** | **332** | *i* P | | **Pg** | **11 50 18.4** | **-0.2** |
| **TUMR** | **Tumrok** | **0.21** | **332** | PN | | **Pg** | **11 50 18.4** | **-0.2** |
| **KMNR** | **Kamenistaya** | **0.67** | **356** | *i* P | | **Pg** | **11 50 27.0** | **-0.2** |
| **KMNR** | **Kamenistaya** | **0.67** | **356** | PN | | **Pg** | **11 50 27.0** | **-0.2** |
| **BZMR** | **Bezymyannaya** | **0.85** | **6** | *i* P | | **Pb** | **11 50 31.4** | **-0.4** |
| **KIRR** | **Kirishev** | **0.86** | **1** | *i* P | | **Pb** | **11 50 31.3** | **-0.7** |
| **KPT** | **Kopyto** | **0.88** | **356** | *i* P | | **Pb** | **11 50 31.7** | **-0.6** |
| **KPT** | **Kopyto** | **0.88** | **356** | PN | | **Pb** | **11 50 31.7** | **-0.6** |
| **BZWR** | **Bezymyannyi-We** | **0.88** | **6** | *e*P | | **Pb** | **11 50 31.6** | **-0.7** |
| **MKZ** | **Mys Kozlova** | **0.98** | **123** | *i* P | | **Pb** | **11 50 33.3** | **-0.6** |
| MKZ | | | | *i* S | | **Sn** | **11 50 48.7** | **-0.5** |
| **MKZ** | **Mys Kozlova** | **0.98** | **123** | PN | | **Pb** | **11 50 33.3** | **-0.6** |
| MKZ | | | | S | | **Sn** | **11 50 48.7** | **-0.5** |
| **KOZ** | **Kozyrevsk** | **1.00** | **345** | *i* P | | **Pg** | **11 50 33.0** | **-0.5** |
| **KOZ** | **Kozyrevsk** | **1.00** | **345** | PN | | **Pg** | **11 50 33.0** | **-0.5** |
| **KII** | **Karymskiy** | **1.18** | **206** | *i* P | | **Pn** | **11 50 37.8** | **0.0** |
| **KII** | **Karymskiy** | **1.18** | **206** | PN | | **Pn** | **11 50 37.8** | **0.0** |
| **KLY** | **Klyuchi** | **1.23** | **9** | *i* P | | **Pg** | **11 50 37.7** | **-0.4** |
| **ESO** | **Esso** | **1.24** | **313** | *i* P | | **Pg** | **11 50 36.3** | **-1.9** |
| ESO | | | | *i* S | | **Sg** | **11 50 54.0** | **-0.3** |
| **ESO** | **Esso** | **1.24** | **313** | PN | | **Pg** | **11 50 36.3** | **-1.9** |
| ESO | | | | S | | **Sg** | **11 50 54.0** | **-0.3** |
| **SRDR** | **Sredinnyy** | **1.27** | **345** | *i* P | | **Pg** | **11 50 37.4** | **-1.4** |
| **SRDR** | **Sredinnyy** | **1.27** | **345** | PN | | **Pg** | **11 50 37.4** | **-1.4** |
| **BDR** | **Baidarnaya** | **1.56** | **18** | *i* P | | **Pb** | **11 50 43.3** | **-0.6** |
| BDR | | | | *e*S | | **Sg** | **11 51 04.8** | **+0.3** |
| **SMKR** | **Semkarok** | **1.62** | **23** | *i* P | | **Pb** | **11 50 44.2** | **-0.8** |
| SMKR | | | | *e*S | | **Sg** | **11 51 07.2** | **+0.6** |
| **SMKR** | **Semkarok** | **1.62** | **23** | PN | | **Pb** | **11 50 44.2** | **-0.8** |
| SMKR | | | | S | | **Sg** | **11 51 07.2** | **+0.6** |
| **SRKR** | **Sorokina** | **1.63** | **17** | *i* P | | **Pn** | **11 50 44.1** | **0.0** |
| **SRKR** | **Sorokina** | **1.63** | **17** | PN | | **Pn** | **11 50 44.1** | **0.0** |
| **KBTR** | **Krutoberegovo** | **1.80** | **51** | *i* P | | **Pn** | **11 50 45.5** | **-0.8** |
| **KBTR** | **Krutoberegovo** | **1.80** | **51** | PN | | **Pn** | **11 50 45.5** | **-0.8** |
| **GNL** | **Ganaly** | **1.98** | **226** | *e*P | | **Pn** | **11 50 49.8** | **+1.0** |
| **GNL** | **Ganaly** | **1.98** | **226** | PN | | **Pn** | **11 50 49.8** | **+1.0** |
| **KRX** | **Arik** | **2.00** | **210** | *i* P | | **Pb** | **11 50 50.7** | **-0.7** |
| **SDLR** | **Sedlovina** | **2.01** | **205** | *e*P | | **Pb** | **11 50 50.9** | **-0.6** |
| SDLR | | | | *e*S | | **Sg** | **11 51 19.1** | **+0.3** |
| **SDLR** | **Sedlovina** | **2.01** | **205** | PN | | **Pb** | **11 50 50.9** | **-0.6** |
| SDLR | | | | S | | **Sg** | **11 51 19.1** | **+0.3** |
| **SPN** | **Mys Shipunski** | **2.01** | **185** | *e*P | | **Pn** | **11 50 49.4** | **+0.3** |
| SPN | | | | *e*S | | **Sb** | **11 51 16.3** | **-0.5** |
| **SPN** | **Mys Shipunski** | **2.01** | **185** | PN | | **Pn** | **11 50 49.4** | **+0.3** |
| SPN | | | | S | | **Sb** | **11 51 16.3** | **-0.5** |
| **NLC** | **Nalytchevo** | **2.01** | **197** | *e*P | | **Pb** | **11 50 50.7** | **-0.8** |
| NLC | | | | *e*S | | **Sg** | **11 51 18.9** | **-0.1** |
| **NLC** | **Nalytchevo** | **2.01** | **197** | PN | | **Pb** | **11 50 50.7** | **-0.8** |
| NLC | | | | S | | **Sg** | **11 51 18.9** | **-0.1** |
| **SMAR** | **Somma** | **2.04** | **207** | *e*P | | **Pb** | **11 50 51.4** | **-0.8** |
| **SMAR** | **Somma** | **2.04** | **207** | PN | | **Pb** | **11 50 51.4** | **-0.8** |
| **AVH** | **Avacha** | **2.06** | **208** | *e*P | | **Pb** | **11 50 52.1** | **-0.3** |
| **AVH** | **Avacha** | **2.06** | **208** | PN | | **Pb** | **11 50 52.1** | **-0.3** |
| **KOK** | **Koryaka** | **2.06** | **209** | *i* P | | **Pb** | **11 50 52.2** | **-0.2** |
| **KOK** | **Koryaka** | **2.06** | **209** | PN | | **Pb** | **11 50 52.2** | **-0.2** |
| **UGLR** | **Uglovaya** | **2.08** | **206** | *i* P | | **Pb** | **11 50 52.9** | **0.0** |
| **PET** | **Petropavlovsk** | **2.30** | **206** | *e*P | | **Pb** | **11 50 54.9** | **-1.5** |
| **PET** | **Petropavlovsk** | **2.30** | **206** | *e*PN | | **Pb** | **11 50 55.1** | **-1.3** |
| PET | | | | *e*S | | **Sb** | **11 51 25.6** | **+0.5** |
| PET | | | | pmax | pmax | | | |
| | comp=Z,432nm,0.7s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=N,474nm,0.8s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=E,343nm,0.9s | | | | | | | |
| PET | | | | MLR | MLR | | | |
| | comp=Z,2μm,9.0s | | | | | | | |
| **PET** | **Petropavlovsk** | **2.30** | **206** | *e*Pn | | **Pn** | **11 50 53.2** | **+0.1** |
| PET | | | | *e*Sn | | **Sg** | **11 51 27.1** | **-1.0** |
| **PETK** | **Petropavlovsk-** | **2.52** | **219** | Pn | | **Pn** | **11 50 57.1** | **+1.0** |
| | comp=Z,9.1nm,0.3s,baz=60,slow=14,SNR=70 | | | | | | | |
| PETK | | | | LR | | LR | 11 51 34.1 | |
| | comp=Z,85nm,20.1s,baz=38,slow=32 | | | | | | | |
| **APC** | **Apacha** | **2.87** | **222** | *i* P | | **Pn** | **11 51 02.6** | **+1.7** |
| APC | | | | *i* S | | **Sb** | **11 51 39.0** | **-2.5** |
| **APC** | **Apacha** | **2.87** | **222** | PN | | **Pn** | **11 51 02.6** | **+1.7** |
| APC | | | | S | | **Sb** | **11 51 39.0** | **-2.5** |
| **RUS** | **Russkaya** | **2.88** | **203** | *e*P | | **Pn** | **11 51 03.0** | **+2.0** |
| RUS | | | | *e*S | | **Sb** | **11 51 40.5** | **-1.2** |
| **RUS** | **Russkaya** | **2.88** | **203** | PN | | **Pn** | **11 51 03.0** | **+2.0** |
| RUS | | | | S | | **Sb** | **11 51 40.5** | **-1.2** |
| **MTVR** | **Mutnovka** | **2.91** | **207** | *e*P | | **Pb** | **11 51 04.8** | **-2.1** |
| **ASAK** | **Asacha** | **3.07** | **209** | *e*P | | **Pb** | **11 51 08.5** | **-1.2** |
| **PAU** | **Pauzhetka** | **4.20** | **212** | *e*P | | Pn | 11 51 23.3 | +4.1 |
| **PAU** | **Pauzhetka** | **4.20** | **212** | PN | | Pn | 11 51 23.3 | +4.1 |
| **SKR** | **Severo-Kuril's** | **5.10** | **212** | PN | | **Pn** | **11 51 28.8** | **-2.8** |
| SKR | | | | *e*S | | Sb | 11 52 39.4 | -6.3 |
| SKR | | | | pmax | pmax | | | |
| | comp=E,50nm,0.5s | | | | | | | |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,50nm,0.5s | | | | | | | |
| SKR | | | | pmax | pmax | | | |
| | comp=N,180nm,1.0s | | | | | | | |
| SKR | | | | smax | smax | | | |
| | comp=N,120nm,0.8s | | | | | | | |
| SKR | | | | smax | smax | | | |
| | comp=E,50nm,0.5s | | | | | | | |
| SKR | | | | MLR | MLR | | | |
| | comp=N,2μm,12.0s | | | | | | | |
| SKR | | | | MLR | MLR | | | |
| | comp=Z,2μm,12.0s | | | | | | | |
| **SEY** | **Seymchan** | **8.86** | **336** | *e*PN | | Pn | 11 52 30.8 | +7.8 |
| **UGL** | **Uglegorsk** | **12.72** | **249** | *e*PN | | **Pn** | **11 53 17.4** | **+1.4** |
| **BILL** | **Bilibino** | **13.29** | **10** | *e*PN | | **P** | **11 53 30.5** | **-3.0** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,119nm,15.0s | | | | | | | |
| **ASAJ** | **Asahikawa** | **15.84** | **233** | Pn | | **Pn** | **11 54 00.1** | **+1.9** |
| | comp=Z,0.3nm,0.3s,baz=54,slow=11,SNR=3.7 | | | | | | | |
| **HABR** | **Khabarovsk** | **16.92** | **257** | *e*P | | **Pn** | **11 54 12.9** | **+1.0** |
| HABR | | | | *e*S | | **Sn** | **11 57 19.9** | **-0.3** |
| HABR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| HABR | | | | MLR | MLR | | | |
| | comp=Z,179nm,17.0s | | | | | | | |
| **YAK** | **Yakutsk** | **17.29** | **306** | Pn | | **P** | **11 54 20.3** | **+2.4** |
| | comp=Z,0.0nm,0.3s,baz=63,slow=4.5,SNR=2.4 | | | | | | | |
| **YAK** | **Yakutsk** | **17.29** | **306** | *e*P | | **P** | **11 54 20.9** | **+3.0** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,4.0nm,0.9s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=E,111nm,25.0s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=N,149nm,18.0s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=Z,164nm,16.0s | | | | | | | |
| **KLR** | **Kul'dur** | **18.40** | **263** | *e*P | | **P** | **11 54 31.0** | **+0.7** |
| KLR | | | | MLR | MLR | | | |
| | comp=Z,1μm,11.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.19** | **251** | P | | **P** | **11 55 04.4** | **+3.8** |
| | comp=Z,4.7nm,0.9s,baz=20,slow=9.2,SNR=7.5 | | | | | | | |
| USRK | | | | LR | | LR | 12 03 54.7 | |
| | comp=Z,162nm,19.6s,baz=35,slow=39 | | | | | | | |
| **MAJO

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| KBZ | | | | | MLR | MLR | | | |
| | comp=Z,77nm,20.1s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **69.74** | **68** | | P | **P** | **12 01 25.2** | **-0.4** | |
| | comp=Z,0.9nm,0.7s,baz=307,slow=4.6,SNR=7.1 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **69.74** | **68** | | P | **P** | **12 01 25.2** | **-0.4** | |
| TXAR | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **GERES** | **GERESS Array B** | **72.71** | **338** | | LR | LR | 12 36 53.7 | | |
| | comp=Z,22nm,20.6s,baz=3.5,slow=38 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.16** | **320** | | P | **P** | **12 01 57.3** | **-0.6** | |
| | comp=Z,0.6nm,0.6s,baz=28,slow=5.6,SNR=3.3 | | | | | | | | |
| BRTR | | | | | LR | LR | 12 41 44.6 | | |
| | comp=Z,18nm,19.9s,baz=24,slow=41 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **77.96** | **205** | | P | **P** | **12 02 12.4** | **-1.1** | |
| | comp=Z,1.3nm,0.9s,baz=18,slow=6.0,SNR=8.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **77.96** | **205** | *eP* | | **P** | **12 02 13.2** | **-0.4** | |
| WRA | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **81.64** | **204** | | P | **P** | **12 02 33.6** | **+0.2** | |
| | comp=Z,1.5nm,0.9s,baz=12,slow=5.4,SNR=15 | | | | | | | | |
| **ASAR** | **Alice Springs** | **81.64** | **204** | | P | **P** | **12 02 33.7** | **+0.2** | |
| ASAR | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **PPT** | **Papeete** | **83.90** | **133** | | LR | LR | 12 30 29.8 | | |
| | comp=Z,29nm,21.4s,baz=110,slow=29 | | | | | | | | |

*IDC **13** 12:03:53.3±1.1,23°.26N×123°.97E, h0km, mb3.7/5, mb1 3.8/5, mb1mx3.6/31, mbtmp3.7/5, ML2.4/1, Error ellipse: s-maj=43.2km s-min=18.8km az=69.0*
*ISCJB **13** 12:03:55.7±1.5,23°.17N±0°.04×124°.02E±0°.05, h30km±11km, mb3.5/5, Error ellipse: s-maj=7.7km s-min=6.8km az=141.3*
*JMA **13** 12:03:55.4±0.3,23°.13N×124°.02E, h44km, M3.6*
**ISC 13 12:03:55.0±2.0, 23°.26N±0°.07×124°.06E±0°.05, h13km±11km, n20, σ0°73/32, mb3.6/5, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKRS** | **Kuro-shima** | **0.98** | **357** | P | **Pn** | **12 04 14.8** | **+0.3** |
| JKRS | | | | S | **Sn** | **12 04 29.3** | **+1.1** |
| **JIJ** | **Ishigaki jima** | **1.10** | **4** | P | **Pg** | **12 04 16.7** | **+0.4** |
| JIJ | | | | *eS* | **Sn** | **12 04 31.2** | **-0.2** |
| **IRIF** | **Iriomote-Funau** | **1.11** | **344** | P | **Pg** | **12 04 17.0** | **+0.5** |
| IRIF | | | | *eS* | **Sn** | **12 04 32.0** | **+0.4** |
| **JISG** | **Ishigakijimahi** | **1.34** | **10** | P | **Pb** | **12 04 20.0** | **-0.1** |
| JISG | | | | *eS* | **Sg** | **12 04 38.3** | **-0.1** |
| **JTJ** | **Tarama** | **1.50** | **23** | P | **Pb** | **12 04 22.5** | **-0.2** |
| JTJ | | | | *eS* | **Sg** | **12 04 42.7** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **1.54** | **322** | P | **Pb** | **12 04 22.6** | **-0.8** |
| YOJ | | | | *eS* | **Sn** | **12 04 41.7** | **-0.3** |
| **JYNG** | **Yonagunijimaku** | **1.56** | **320** | P | **Pn** | **12 04 22.8** | **+0.2** |
| JYNG | | | | *eS* | **Sn** | **12 04 42.2** | **-0.6** |
| **JIRB** | **Irabujima** | **1.87** | **33** | P | **Pn** | **12 04 27.5** | **+0.8** |
| JIRB | | | | *eS* | **Sb** | **12 04 51.6** | **-0.7** |
| **JMJ** | **Miyako jima 2** | **1.92** | **36** | P | **Pn** | **12 04 27.9** | **+0.5** |
| JMJ | | | | *eS* | **Sn** | **12 04 52.0** | **+0.5** |
| **JOGS** | **Gusukube** | **1.94** | **39** | P | **Pb** | **12 04 29.1** | **-1.2** |
| JOGS | | | | *eS* | **Sb** | **12 04 54.9** | **+0.5** |
| **JIKM** | **Ikemajima** | **1.98** | **33** | P | **Pn** | **12 04 29.2** | **+0.9** |
| JIKM | | | | *eS* | **Sb** | **12 04 55.1** | **-0.6** |
| **JKE** | **Kume jima 2** | **3.93** | **38** | *eS* | **Sn** | **12 05 42.1** | **+0.9** |
| **JNTH** | **Nagotoyohara** | **4.85** | **47** | P | **Pn** | **12 05 08.2** | **+0.5** |
| **JOW** | **Kunigami** | **5.22** | **46** | P | **Pn** | **12 05 13.2** | **+0.3** |
| **JOW** | **Kunigami** | **5.22** | **46** | P | **Pn** | **12 05 13.1** | **+0.2** |
| | 0.3nm,0.3s,baz=210,slow=16,SNR=17 | | | | | | |
| JOW | | | | | Sn | **Sn** | **12 06 10.9** | **-2.1** |
| | 0.2nm,0.3s,baz=308,slow=19,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **28.29** | **334** | P | | **P** | **12 09 49.1** | **+0.8** |
| | 0.4nm,0.5s,baz=145,slow=9.7,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.84** | **316** | P | | **P** | **12 11 35.6** | **-0.9** |
| | 0.3nm,0.4s,baz=108,slow=8.1,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.46** | **326** | P | | **P** | **12 11 49.3** | **-0.3** |
| | 0.9nm,0.5s,baz=110,slow=7.1,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.09** | **166** | P | | **P** | **12 12 03.5** | **+0.3** |
| | 0.7nm,0.6s,baz=347,slow=8.9,SNR=9.1 | | | | | | |
| **ASAR** | **Alice Springs** | **47.62** | **168** | P | | **P** | **12 12 31.3** | **+0.3** |
| | 0.4nm,0.5s,baz=354,slow=7.5,SNR=14 | | | | | | |

*ISCJB **13** 12:22:10.8±0.7,39°.91N±0°.06×29°.94E±0°.04, h12km, Error ellipse: s-maj=8.3km s-min=4.3km az=13.8*
*CSEM **13** 12:22:10.6±0.2,39°.90N×29°.98E, h10km, MD2.6, Error ellipse: s-maj=6.1km s-min=3.5km az=176.0*
*ISK **13** 12:22:10.7, 39°.93N×29°.95E, h12km, MD2.6*
**ISC 13 12:22:10.8±0.9, 39°.91N±0°.04×29°.97E±0°.03, h12km, n27, σ0°56/32, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAVI** | **Cavuskoy** | **0.31** | **342** | *e*PG | **Pg** | **12 22 16.5** | **-0.6** |
| CAVI | | | | *e*SG | **Sg** | **12 22 21.7** | **+0.4** |
| **CAVI** | **Cavuskoy** | **0.31** | **342** | *e*Pg | **Pg** | **12 22 16.5** | **-0.6** |
| CAVI | | | | *e*Sg | **Sg** | **12 22 21.7** | **+0.4** |
| **BORA** | **Eskisehir** | **0.38** | **94** | *i* P | **Pg** | **12 22 17.1** | **-1.3** |
| BORA | | | | *i* S | **Sg** | **12 22 24.2** | **+0.7** |
| **BORA** | **Eskisehir** | **0.38** | **94** | P | **Pg** | **12 22 17.1** | **-1.3** |
| BORA | | | | S | **Sg** | **12 22 24.1** | **+0.7** |
| **GPA** | **Golpazari** | **0.46** | **35** | *e*PG | **Pg** | **12 22 20.0** | **+0.1** |
| **GPA** | **Golpazari** | **0.46** | **35** | *e*Pg | **Pg** | **12 22 20.0** | **+0.1** |
| **IZI** | **Iznik** | **0.57** | **319** | *e*PG | **Pg** | **12 22 21.6** | **-0.4** |
| **IZI** | **Iznik** | **0.57** | **319** | *e*Pg | **Pg** | **12 22 21.6** | **-0.4** |
| **GULT** | **Gulveren** | **0.67** | **39** | *e*PG | **Pb** | **12 22 24.1** | **-0.4** |
| **GULT** | **Gulveren** | **0.67** | **39** | *e*Pg | **Pb** | **12 22 24.2** | **-0.4** |
| **ORLT** | **Orhaneli** | **0.83** | **280** | *e*PG | **Pb** | **12 22 27.4** | **+0.1** |
| **ORLT** | **Orhaneli** | **0.83** | **280** | *e*Pg | **Pb** | **12 22 27.4** | **+0.1** |
| **MDNY** | **Mudanya-Bursa** | **0.95** | **299** | *e*PG | **Pg** | **12 22 28.6** | **-0.5** |
| **MDNY** | **Mudanya-Bursa** | **0.95** | **299** | *e*Pg | **Pg** | **12 22 28.6** | **-0.5** |
| **DST** | **Dursunbey** | **1.08** | **254** | *e*PG | **Pn** | **12 22 32.0** | **+0.1** |
| **DST** | **Dursunbey** | **1.08** | **254** | *e*Pg | **Pn** | **12 22 32.0** | **+0.1** |
| **MDUB** | **Mudurnu** | **1.10** | **59** | *e*PN | **Pn** | **12 22 32.1** | **0.0** |
| **MDUB** | **Mudurnu** | **1.10** | **59** | *e*Pn | **Pn** | **12 22 32.1** | **0.0** |
| **AUMIH** | **MIHALICIK** | **1.17** | **92** | P | **Pg** | **12 22 33.2** | **-0.1** |
| AUMIH | | | | S | **Sn** | **12 22 50.4** | **+1.3** |
| **SILT** | **Sile** | **1.27** | **349** | *e*PN | **Pn** | **12 22 34.0** | **-0.3** |
| **SILT** | **Sile** | **1.27** | **349** | *e*Pn | **Pn** | **12 22 34.0** | **-0.3** |
| **KCTX** | **Karacabey (Bur** | **1.28** | **287** | *e*PN | **Pb** | **12 22 34.8** | **-0.2** |
| **KCTX** | **Karacabey (Bur** | **1.28** | **287** | *e*Pn | **Pb** | **12 22 34.8** | **-0.2** |
| **ISK** | **Istanbul-Kandi** | **1.34** | **329** | *e*PN | **Pb** | **12 22 35.6** | **-0.4** |
| **ISK** | **Istanbul-Kandi** | **1.34** | **329** | *e*Pn | **Pb** | **12 22 35.6** | **-0.4** |
| **KLYT** | **Kilyos** | **1.52** | **333** | *e*PN | **Pb** | **12 22 38.7** | **-0.2** |
| **KLYT** | **Kilyos** | **1.52** | **333** | *e*Pn | **Pb** | **12 22 38.7** | **-0.2** |

*AUST **13** 12:24:47.2, 6°.50N×126°.01E, h100km*
*ISCJB **13** 12:24:50.9±0.6, 5°.90N±0°.05×126°.01E±0°.08, h94km±6km, mb3.9/9, Error ellipse: s-maj=14.1km s-min=8.3km az=164.5*
*MAN **13** 12:24:50, 5°.72N×125°.94E, h30km, mb5.0, ML4.0, MS4.1*
*IDC **13** 12:24:51.7±1.2, 5°.89N×125°.93E, h90km±10km, mb3.7/9, mb1 3.9/10, mb1mx3.5/40, mbtmp4.1/10, MS2.9/3, Ms1 3.0/3, ms1mx2.6/30, Error ellipse: s-maj=45.8km s-min=13.7km az=78.0*
**ISC 13 12:24:51.8±0.9, 5°.88N±0°.07×125°.91E±0°.07, h86km±9km, n34, σ1°40/37, mb3.9/9, 4C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MATI** | **Mati** | **1.12** | **18** | *e*P | **Pn** | **12 25 11.2** | **-1.5** |
| MATI | | | | *e*S | **Sn** | **12 25 26.0** | **-2.2** |
| **DAV** | **Davao City (W)** | **1.23** | **345** | P | **Pn** | **12 25 13.9** | **-0.1** |
| | 149nm,0.3s,baz=235,slow=6.7,SNR=9.2 | | | | | | |
| DAV | | | | | S | **Sn** | **12 25 30.8** | **+0.1** |
| | 227nm,0.3s,baz=115,slow=20,SNR=7.4 | | | | | | |
| **DMPH** | **Davao City--Mi** | **1.26** | **342**‖ | *e*P | **Pn** | **12 25 14.5** | **+0.1** |
| DMPH | | | | *i* S | **Sn** | **12 25 31.5** | **+0.1** |
| **KCP** | **Kidapawan** | **1.39** | **324**‖ | *e*P | **Pn** | **12 25 16.1** | **+0.1** |
| KCP | | | | *i* S | **Sn** | **12 25 35.2** | **+0.9** |
| **CTBH** | **Cotabato--PC H** | **2.12** | **309** | *e*P | **Pn** | **12 25 26.5** | **+1.0** |
| CTBH | | | | *i* S | **Sn** | **12 25 48.5** | **-2.8** |
| **BUKP** | **Musuan** | **2.16** | **337** | *e*P | **Pn** | **12 25 26.8** | **+0.8** |
| BUKP | | | | *e*S | **Sn** | **12 25 54.1** | **+1.9** |
| **BIPH** | **Bislig** | **2.33** | **11**‖ | *e*P | **Pn** | **12 25 29.4** | **+1.1** |
| BIPH | | | | *i* S | **Sn** | **12 26 00.6** | **+4.3** |
| **BUTP** | **Butuan** | **3.08** | **355** | *e*P | **Pn** | **12 25 39.6** | **+1.2** |
| **PAGZ** | **Pagadian** | **3.18** | **308** | *e*P | **Pn** | **12 25 41.1** | **+1.4** |
| **SCPH** | **Surigao** | **3.90** | **354**‖ | *e*P | Pn | 12 25 53.2 | +3.7 |
| **MSLP** | **Maasin** | **4.36** | **346** | *e*P | **Pn** | **12 25 57.7** | **+2.0** |
| **LUWI** | **Luwuk** | **7.55** | **205** | P | Pn | 12 26 46.2 | +6.9 |
| | baz=8.2,SNR=3.9 | | | | | | |
| **SIJI** | **Sorong** | **8.57** | **141** | LR | LR | 12 30 16.5 | |
| | comp=Z,46nm,18.9s,baz=287,slow=38 | | | | | | |
| **BATI** | **Baumata** | **16.13** | **188** | P | **Pn** | **12 28 34.2** | **+0.6** |
| | 2.8nm,0.3s,baz=330,slow=1.7,SNR=5.7 | | | | | | |
| **MTN** | **Manton Dam** | **19.31** | **164** | P | **P** | **12 29 11.0** | **+0.9** |
| | baz=20,SNR=7.4 | | | | | | |
| **KDU** | **Kakadu** | **19.56** | **161** | P | **Pn** | **12 29 17.0** | **+2.0** |
| | baz=20,SNR=3.1 | | | | | | |
| **KNRA** | **Kununurra** | **21.60** | **173** | P | **P** | **12 29 35.0** | **+0.2** |
| | baz=22,SNR=14 | | | | | | |
| **COEN** | **Coen** | **26.11** | **139** | P | **P** | **12 30 17.7** | **-0.2** |
| | baz=27,SNR=7.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.96** | **162** | P | **P** | **12 30 24.8** | **-0.7** |
| | 0.7nm,0.5s,baz=342,slow=10.0,SNR=17 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.12** | **298** | LR | LR | 12 44 59.2 | |
| | comp=Z,13nm,18.7s,baz=172,slow=42 | | | | | | |
| **QIS** | **Mount Isa** | **29.52** | **153** | P | **P** | **12 30 48.9** | **+0.7** |
| | baz=30,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **30.38** | **165** | P | **P** | **12 30 55.8** | **-0.2** |
| | 0.6nm,0.6s,baz=343,slow=7.3,SNR=21 | | | | | | |
| ASAR | | | | | PcP | **PcP** | **12 33 53.4** | **-0.6** |
| | 0.3nm,0.6s,baz=357,slow=1.9,SNR=4.1 | | | | | | |
| **WRKA** | **Warakurna** | **30.82** | **176** | P | **P** | **12 31 00.3** | **+0.6** |
| | baz=32,SNR=5.7 | | | | | | |
| **KSRS** | **Korea Array** | **31.48** | **3** | P | **P** | **12 31 04.8** | **-0.5** |
| | 1.2nm,0.8s,baz=186,slow=8.5,SNR=3.4 | | | | | | |
| **MEEK** | **Meekatharra** | **33.09** | **192** | P | **P** | **12 31 19.6** | **0.0** |
| | baz=34,SNR=3.6 | | | | | | |
| **HNR** | **Honiara** | **37.17** | **114** | LR | LR | 12 45 45.5 | |
| | comp=Z,55nm,21.2s,baz=234,slow=34 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **38.54** | **7** | P | **P** | **12 32 06.2** | **+0.2** |
| | 1.5nm,0.6s,baz=182,slow=7.2,SNR=3.9 | | | | | | |
| **BBOO** | **Buckleboo** | **39.67** | **167** | P | **P** | **12 32 16.0** | **+0.5** |
| | baz=40,SNR=21 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.34** | **325** | P | **P** | **12 34 16.2** | **-0.6** |
| | 0.3nm,0.3s,baz=114,slow=7.9,SNR=2.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **71.48** | **321** | P | **P** | **12 36 03.8** | **+0.5** |
| | 0.6nm,0.3s,baz=77,slow=17,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **83.53** | **26** | P | **P** | **12 37 09.1** | **-0.9** |
| | 1.6nm,0.8s,baz=237,slow=5.8,SNR=16 | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.16** | **340** | P | **P** | **12 37 31.0** | **-1.9** |
| | 4.3nm,0.9s,baz=82,slow=6.5,SNR=3.0 | | | | | | |
| **FINES** | **FINESS Array B** | **89.56** | **332** | P | **P** | **12 37 37.8** | **-1.7** |
| | 1.6nm,0.8s,baz=86,slow=7.1,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.46** | **289** | PKP | **PKPdf** | **12 43 35.2** | **-1.2** |
| | 0.6nm,0.8s,baz=93,slow=1.5,SNR=4.9 | | | | | | |

**IDC 13 12:30:09.8±1.4, 51°.49N×82°.62E, h0km, mb1 2.7/2, mb1mx2.7/37, mbtmp2.7/2, ML2.1/2, Error ellipse: s-maj=16.6km s-min=11.7km az=128.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KURK** | **Kurchatov** | **2.64** | **254** | Pg | Pb | 12 30 58.0 | +0.1 |
| | 4.6nm,1.4s | | | | | | |
| KURK | | | | Lg | Lg | 12 31 31.9 | |
| | 18nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **2.72** | **253** | Pg | Pb | 12 30 59.5 | +0.1 |
| | 1.6nm,0.6s,baz=69,slow=16 | | | | | | |
| KURBB | | | | Lg | Lg | 12 31 35.0 | |
| | 5.5nm,0.5s,baz=74,slow=32 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **2.72** | **253** | Pg | Pb | 12 30 59.1 | -0.2 |
| | 0.1nm,0.3s,baz=71,slow=16,SNR=4.8 | | | | | | |
| KURBB | | | | Lg | Lg | 12 31 33.5 | |
| | 0.2nm,0.3s,baz=71,slow=33,SNR=12 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **2.80** | **28** | *i* | | 12 45 00.0 | |
| | baz=210,slow=332,SNR=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **2.80** | **28** | Pn | Pn | 12 30 56.0 | +0.3 |
| | 1.0nm,0.3s,baz=211,slow=17,SNR=10 | | | | | | |
| ZALV | | | | | Sn | Sn | 12 31 30.0 | -0.2 |
| | 0.2nm,0.3s,baz=214,slow=26,SNR=5.6 | | | | | | |
| ZALV | | | | Lg | Lg | 12 31 38.0 | |
| | 0.4nm,0.3s,baz=210,slow=27,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.71** | **183** | Pn | Pn | 12 31 23.1 | +1.0 |
| | 0.1nm,0.3s,baz=5.2,slow=12,SNR=4.8 | | | | | | |
| MKAR | | | | Lg | Lg | 12 32 37.9 | |
| | 0.1nm,0.3s,baz=7.0,slow=26,SNR=3.0 | | | | | | |

*ISCJB **13** 12:30:20.8±0.5, 33°.75N±0°.02×35°.93E±0°.04, h3km±7km, Error ellipse: s-maj=6.2km s-min=3.8km az=169.4*
*CSEM **13** 12:30:20.7±0.1, 33°.75N×35°.92E, h2km, ML2.8, Error ellipse: s-maj=3.5km s-min=2.7km az=87.0*
*GRAL **13** 12:30:20.5±0.3, 33°.76N×35°.97E, h11km±8km, MD2.8*
*NSSC **13** 12:30:20.8±1.1, 33°.74N×35°.94E, h0km±3km, MD1.1, ML1.5*
**ISC 13 12:30:20.7±1.1, 33°.76N±0°.02×35°.96E±0°.03, h5km±11km, n23, σ0°46/42, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCY** | **Rachaya** | **0.28** | **201** | *e*P | **Pg** | **12 30 26.0** | **-0.1** |
| RCY | | | | *e*S | **Sg** | **12 30 30.1** | **+0.3** |
| **BHL** | **Bhannes** | **0.29** | **301** | *e*P | **Pg** | **12 30 26.1** | **-0.2** |
| BHL | | | | *e*S | **Sg** | **12 30 30.5** | **+0.3** |
| **BHL** | **Bhannes** | **0.29** | **301** | *e*P | **Pg** | **12 30 26.1** | **-0.2** |
| BHL | | | | *e*S | **Sg** | **12 30 30.5** | **+0.3** |
| **DQRL** | **Deir Qamar** | **0.32** | **261** | *e*P | **Pg** | **12 30 26.9** | **-0.1** |
| **DQRL** | **Deir Qamar** | **0.32** | **261** | *e*P | **Pg** | **12 30 26.9** | **-0.1** |
| **BRBR** | **Barbar** | **0.34** | **181** | *e*P | **Pg** | **12 30 27.5** | **+0.1** |
| BRBR | | | | *e*S | **Sg** | **12 30 32.8** | **+0.8** |
| BRBR | | | | AML | AML | 12 30 36.4 | |
| | comp=N,94nm,0.3s | | | | | | |
| BRBR | | | | AML | AML | 12 30 36.5 | |
| | comp=E,98nm,0.3s | | | | | | |
| **BRBR** | **Barbar** | **0.34** | **181** | *e*P | **Pg** | **12 30 27.5** | **+0.1** |
| BRBR | | | | *e*S | **Sg** | **12 30 32.8** | **+0.8** |
| | comp=E,98nm,0.3s | | | | | | |
| **HWQ** | **Hawqa** | **0.52** | **359** | *e*P | **Pg** | **12 30 30.0** | **-0.7** |
| **HWQ** | **Hawqa** | **0.52** | **359** | *e*P | **Pg** | **12 30 30.0** | **-0.7** |
| **TOTH** | **TOTAH** | **0.56** | **135** | *e*P | **Pb** | **12 30 32.5** | **-0.5** |
| TOTH | | | | *e*S | **Sb** | **12 30 40.4** | **-1.0** |
| TOTH | | | | AML | AML | 12 30 42.8 | |
| | comp=N,38nm,0.7s | | | | | | |
| TOTH | | | | AML | AML | 12 30 51.1 | |
| | comp=E,38nm,0.6s | | | | | | |
| **TOTH** | **TOTAH** | **0.56** | **135** | *e*P | **Pb** | **12 30 32.5** | **-0.5** |
| TOTH | | | | *e*S | **Sb** | **12 30 40.3** | **-1.0** |
| | comp=E,39nm,0.6s | | | | | | |
| **HAWK** | **Haweek** | **0.85** | **26** | *e*P | **Pb** | **12 30 38.1** | **+0.1** |
| HAWK | | | | *e*S | **Sb** | **12 30 49.5** | **-0.3** |
| HAWK | | | | AML | AML | 12 30 52.1 | |
| | comp=E,19nm,0.5s | | | | | | |
| HAWK | | | | AML | AML | 12 30 55.0 | |
| | comp=N,21nm,0.5s | | | | | | |
| **HAWK** | **Haweek** | **0.85** | **26** | *e*P | **Pb** | **12 30 38.1** | **+0.1** |
| HAWK | | | | *e*S | **Sb** | **12 30 49.5** | **-0.3** |
| | comp=N,21nm,0.5s | | | | | | |
| **ROOS** | **tl_alroos** | **1.18** | **69** | *e*P | **Pg** | **12 30 43.2** | **-0.2** |
| ROOS | | | | *e*S | **Sb** | **12 30 59.8** | **+0.4** |
| ROOS | | | | AML | AML | 12 31 08.6 | |
| | comp=E,20nm,0.5s | | | | | | |
| ROOS | | | | AML | AML | 12 31 17.5 | |
| | comp=N,17nm,0.6s | | | | | | |
| **ROOS** | **tl_alroos** | **1.18** | **69** | *e*P | **Pg** | **12 30 43.2** | **-0.2** |
| ROOS | | | | *e*S | **Sb** | **12 30 59.8** | **+0.4** |
| | comp=N,17nm,0.6s | | | | | | |
| **SALA** | **Sala** | **1.23** | **148** | *e*P | **Pg** | **12 30 43.8** | **-0.5** |
| SALA | | | | *e*S | **Sb** | **12 31 00.7** | **-0.1** |
| SALA | | | | AML | AML | 12 31 02.9 | |
| | comp=N,17nm,0.4s | | | | | | |
| SALA | | | | AML | AML | 12 31 04.8 | |
| | comp=E,2.8nm,0.3s | | | | | | |
| **SALA** | **Sala** | **1.23** | **148** | *e*P | **Pg** | **12 30 43.8** | **-0.5** |
| SALA | | | | *e*S | **Sb** | **12 31 00.7** | **-0.1** |
| | comp=E,3.0nm,0.3s | | | | | | |
| **RABH** | **Abou Rabah** | **1.24** | **57** | *e*P | **Pg** | **12 30 44.6** | **+0.2** |
| RABH | | | | *e*S | **Sn** | **12 31 02.7** | **+0.7** |
| RABH | | | | AML | AML | 12 31 07.3 | |
| | comp=E,7.6nm,0.3s | | | | | | |
| **RABH** | **Abou Rabah** | **1.24** | **57** | *e*P | **Pg** | **12 30 44.7** | **+0.2** |
| RABH | | | | *e*S | **Sn** | **12 31 02.7** | **+0.7** |
| | comp=E,8.0nm,0.3s | | | | | | |
| **ZALF** | **Zalf** | **1.42** | **125** | *e*P | **Pn** | **12 30 47.4** | **+0.1** |
| ZALF | | | | *e*S | **Sg** | **12 31 06.5** | **+0.1** |
| ZALF | | | | AML | AML | 12 31 13.0 | |
| | comp=E,9.2nm,0.3s | | | | | | |
| ZALF | | | | AML | AML | 12 31 16.8 | |
| | comp=N,7.9nm,0.4s | | | | | | |
| **ZALF** | **Zalf** | **1.42** | **125** | *e*P | **Pn** | **12 30 47.4** | **+0.1** |
| ZALF | | | | *e*S | **Sg** | **12 31 06.5** | **+0.1** |
| | comp=N,8.0nm,0.4s | | | | | | |
| **WRDH** | **Warideh** | **1.79** | **12** | *e*P | **Pb** | **12 30 53.6** | **-0.4** |
| WRDH | | | | *e*S | **Sb** | **12 31 16.7** | **-0.1** |
| WRDH | | | | AML | AML | 12 31 20.9 | |
| | comp=N,13nm,0.5s | | | | | | |
| **WRDH** | **Warideh** | **1.79** | **12** | *e*P | **Pb** | **12 30 53.6** | **-0.4** |
| WRDH | | | | *e*S | **Sb** | **12 31 16.7** | **-0.1** |
| | comp=N,13nm,0.5s | | | | | | |

*IDC **13** 12:32:53.0±1.8, 3°.30S×148°.95E, h0km, mb3.5/5, mb1 3.7/5, mb1mx3.6/26, mbtmp3.5/5, Error ellipse: s-maj=71.9km s-min=24.6km az=107.0*
*ISCJB **13** 12:32:54.1±1.7, 3°.3S±0°.2×148°.9E±0°.4, h19km, mb3.5/5, Error ellipse: s-maj=65.8km s-min=19.5km az=20.0*
**ISC 13 12:32:55.8±1.7, 3°.3S±0°.2×148°.9E±0°.4, h19km, n12, σ0°63/7, mb3.5/5, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **21.81** | **220** | P | **P** | **12 37 46.4** | **-0.7** |
| | 1.2nm,0.8s,baz=43,slow=11,SNR=11 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 41 47.8** | **+0.7** |
| | 0.4nm,1.0s,baz=57,slow=2.3,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **24.90** | **214** | P | **P** | **12 38 18.2** | **+0.4** |
| | 1.0nm,0.8s,baz=46,slow=6.6,SNR=12 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.85** | **38** | T | T | 13 08 02.5 | |
| | baz=220,slow=76,SNR=72 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.86** | **38** | T | T | 13 08 02.5 | |
| | baz=220,slow=76,SNR=84 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.87** | **38** | T | T | 13 08 01.6 | |
| | baz=220,slow=76,SNR=60 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.90** | **37** | T | T | 13 09 21.4 | |
| | baz=219,slow=76,SNR=10 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.92** | **37** | T | T | 13 09 22.0 | |
| | baz=219,slow=76,SNR=12 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.92** | **37** | T | T | 13 09 21.8 | |
| | baz=219,slow=76,SNR=42 | | | | | | |
| **SONM** | **Songino Array** | **63.06** | **329** | P | **P** | **12 43 22.0** | **0.0** |
| | 0.4nm,0.6s,baz=152,slow=6.4,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **76.70** | **320** | P | **P** | **12 44 46.1** | **+0.3** |
| | 0.4nm,0.6s,baz=93,slow=6.1,SNR=3.2 | | | | | | |
| **ILAR** | **Eielson Array** | **82.28** | **23** | P | **P** | **12 45 15.3** | **-0.4** |
| | 0.2nm,0.6s,baz=245,slow=5.9,SNR=3.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.19** | **289** | PKPbc | **PKPab** | **12 52 36.4** | **-0.3** |
| | 0.4nm,0.8s,baz=84,slow=4.5,SNR=3.2 | | | | | | |

*ISCJB **13** 12:53:14.3±0.8, 7°.41N±0°.08×126°.62E±0°.1, h151km±6km, mb3.3/5, Error ellipse: s-maj=16.8km s-min=12.0km az=23.1*
*MAN **13** 12:53:16, 7°.45N×126°.62E, h124km, mb4.6, ML3.4, MS3.3*
*IDC **13** 12:53:24.2±1.9, 7°.38N×126°.61E, h229km±15km, mb3.0/5, mb1 3.1/5, mb1mx2.9/29, mbtmp3.6/5, Error ellipse: s-maj=55.3km s-min=15.3km az=67.0*
**ISC 13 12:53:15.1±0.9, 7°.41N±0°.08×126°.6E±0°.1, h146km±7km, n14, σ0°78/22, mb3.0/5, 3C-1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MATI** | **Mati** | **0.58** | **218** | *e*P | **Pn** | **12 53 36.9** | **+0.4** |
| **BIPH** | **Bislig** | **0.82** | **342**‖ | *e*P | **Pn** | **12 53 38.7** | **+0.6** |
| BIPH | | | | *i* S | **Sn** | **12 53 54.4** | **-1.2** |
| **DAV** | **Davao City (W)** | **1.09** | **252** | P | **Sn** | **12 53 58.0** | **-1.5** |
| | 109nm,0.3s,baz=42,slow=12,SNR=9.5 | | | | | | |
| **DMPH** | **Davao City--Mi** | **1.15** | **254**‖ | *e*P | **Pn** | **12 53 42.1** | **+1.2** |
| DMPH | | | | *e*S | **Sn** | **12 54 01.4** | **+0.8** |
| **KCP** | **Kidapawan** | **1.57** | **256**‖ | *e*P | **Pn** | **12 53 45.6** | **+0.4** |
| KCP | | | | *i* S | **Sn** | **12 54 07.9** | **-0.3** |
| **BUKP** | **Musuan** | **1.61** | **287** | *e*P | **Pn** | **12 53 46.4** | **+0.7** |
| BUKP | | | | *e*S | **Sn** | **12 54 08.7** | **-0.4** |
| **GSPH** | **General Santos** | **2.11** | **232**‖ | *i* P | **Pn** | **12 53 51.4** | **-0.2** |
| GSPH | | | | *i* S | **Sn** | **12 54 18.4** | **-1.1** |
| **PAGZ** | **Pagadian** | **3.24** | **278** | *e*P | **Pn** | **12 54 06.2** | **+0.8** |
| **WRA** | **Warramunga Arr** | **28.22** | **165** | P | **P** | **12 58 55.0** | **+0.7** |
| | 0.2nm,0.6s,baz=346,slow=9.4,SNR=3.1 | | | | | | |
| WRA | | | | PcP | **PcP** | **13 02 04.7** | **+0.2** |
| | 0.2nm,0.6s,baz=339,slow=2.7,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **31.69** | **167** | P | **P** | **12 59 25.5** | **+0.5** |
| | 0.2nm,0.7s,baz=345,slow=7.1,SNR=4.4 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 02 13.9** | **+0.5** |
| | 0.2nm,0.4s,baz=350,slow=2

*DJA **13** 13:01:19.1±0.8,5°S±4°×13°4E±°, h76km±30km, M4.6/7, mb4.9/5, mB5.8/3, MLv4.3/7, Mw(mB)5.4/3*

**ISC 13 13:01:12.6±2.7, 4°.6S±0°.1×134°.0E±0°.2, h21km, n11, σ1°50/14, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.44** | **314** | P | **Pb** | **13 01 56.1** | **+0.2** |
| | baz=2.7,SNR=24 | | | | | | |
| **FAKI** | **Fak Fak** | **2.44** | **314** | P | **Pb** | **13 01 55.4** | **-0.5** |
| FAKI | | | | S | **Sb** | **13 02 23.7** | **-1.9** |
| **BNDI** | **Bandanaira** | **4.11** | **271** | P | **Pn** | **13 02 15.6** | **+1.4** |
| BNDI | | | | S | **Sn** | **13 03 00.8** | **-0.8** |
| **MSAI** | **Masohi** | **5.24** | **284** | P | **Pn** | **13 02 31.6** | **+1.8** |
| MSAI | | | | S | **Sn** | **13 03 29.7** | **+0.1** |
| **AAI** | **Ambon** | **5.89** | **279** | P | **Pn** | **13 02 41.5** | **+2.8** |
| | baz=6.3,SNR=30 | | | | | | |
| **AAI** | **Ambon** | **5.89** | **279** | P | **Pn** | **13 02 40.7** | **+2.0** |
| | 214mm,0.2s,33µm2.6nm | | | | | | |
| **KDU** | **Kakadu** | **8.16** | **191** | P | **Pn** | **13 03 10.1** | **+0.1** |
| | baz=8.5,SNR=8.2 | | | | | | |
| **MTN** | **Manton Dam** | **8.66** | **199** | P | **Pn** | **13 03 16.8** | **+0.1** |
| | baz=9.0,SNR=24 | | | | | | |
| **SOEI** | **Soe** | **10.94** | **242** | P | **Pn** | **13 03 47.5** | **-0.7** |
| | baz=11,SNR=3.4 | | | | | | |
| **SOEI** | **Soe** | **10.94** | **242** | P | **Pn** | **13 03 49.1** | **+0.9** |
| **KNRA** | **Kununurra** | **12.15** | **205** | P | **Pn** | **13 04 03.4** | **-1.1** |
| | baz=13,SNR=18 | | | | | | |

*IDC **13** 13:40:23.2±3.0, 1°.03S×98°.75E, h0km, mb3.5/3, mb1 3.7/4, mb1mx3.4/27, mbtmp3.6/4, ML4.0/1, MS3.0/5, Ms1 3.0/5, ms1mx2.7/32, Error ellipse: s-maj=114.3km s-min=27.8km az=58.0*

*DJA **13** 13:40:33.1±0.3, 0°N±2°×10°0E±°, h10km, M4.2/5, mb4.5/1, MLv4.1/5*

*NEIC **13** 13:40:34.8±1.2, 0°.07N×100°.18E, h47km±12km, MG4.2(DJA), Error ellipse: s-maj=17.4km s-min=10.3km az=210.0*

*NEIC Felt [II] at Lubukbasung and Lubuksikaping.*

**ISC 13 13:40:31.9±1.5, 0°.11N±0°.04×100°.05E±0°.04, h9km±12km, n23, σ1°05/22, mb3.7/3, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPI** | **Padang Panjang** | **0.66** | **148** | P | **Pg** | **13 40 44.8** | **+0.3** |
| PPI | | | | S | **Sb** | **13 40 54.9** | **+0.2** |
| **MNSI** | **Mandailing Nat** | **0.83** | **325** | P | **Pg** | **13 40 47.5** | **-0.4** |
| MNSI | | | | S | **Sn** | **13 41 01.8** | **-0.4** |
| **BKNI** | **Bangkinang** | **1.01** | **77** | P | **Pg** | **13 40 51.5** | **+0.2** |
| BKNI | | | | S | **Sn** | **13 41 07.5** | **+0.9** |
| **BKNI** | **Bangkinang** | **1.01** | **77** | *e*Pn | **Pg** | **13 40 51.3** | **0.0** |
| BKNI | | | | *e*Sn | **Sb** | **13 41 05.6** | **+0.7** |
| **SDSI** | **Sungai Dareh** | **1.72** | **127** | P | **Pn** | **13 41 02.9** | **+0.9** |
| SDSI | | | | S | **Sb** | **13 41 15.4** | **+0.1** |
| **SISI** | **Saibi** | **1.72** | **214** | P | **Pn** | **13 41 02.2** | **+0.2** |
| **GSI** | **Gunungsitoli** | **2.75** | **296** | P | **Pn** | **13 41 16.9** | **+0.7** |
| GSI | | | | S | **Sn** | **13 41 51.1** | **+1.5** |
| **GSI** | **Gunungsitoli** | **2.75** | **296** | *e*Pn | **Pn** | **13 41 18.2** | **+2.0** |
| GSI | | | | *e*Sn | **Sb** | **13 41 56.5** | **+1.4** |
| **PPSI** | **Pulau Pagai** | **2.85** | **181** | P | **Pn** | **13 41 18.2** | **+0.6** |
| **PSI** | **Prapat** | **2.91** | **337** | Pn | **Pb** | **13 41 23.2** | **-0.8** |
| | 13nm,0.3s,baz=142,slow=8.2,SNR=20 | | | | | | |
| PSI | | | | Sn | **Sb** | **13 42 00.6** | **+0.8** |
| | 12nm,0.3s,baz=276,slow=17,SNR=6.8 | | | | | | |
| PSI | | | | LR | LR | 13 42 28.1 | |
| | comp=Z,66nm,21.3s,baz=160,slow=34 | | | | | | |
| **IPM** | **Ipoh** | **4.45** | **13** | *e*Pn | **Pn** | **13 41 40.8** | **+1.1** |
| **KULM** | **Kulim** | **5.18** | **7** | *e*Pn | **Pn** | **13 41 50.3** | **+0.6** |
| | 26nm,0.7s | | | | | | |
| **LEM** | **Lembang** | **10.21** | **133** | LR | LR | 13 47 32.3 | |
| | comp=Z,64nm,18.4s,baz=10,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.27** | **357** | LR | LR | 13 51 43.2 | |
| | comp=Z,19nm,19.7s,baz=185,slow=35 | | | | | | |
| **BATI** | **Baumata** | **25.62** | **114** | LR | LR | 13 58 43.0 | |
| | comp=Z,99nm,19.1s,baz=194,slow=42 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.54** | **254** | T | T | 14 14 22.3 | |
| | baz=75,slow=75,SNR=2.8 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.54** | **254** | T | T | 14 14 28.2 | |
| | baz=75,slow=75,SNR=2.3 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.56** | **254** | T | T | 14 14 26.7 | |
| | baz=75,slow=75,SNR=3.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.04** | **123** | P | P | 13 47 56.4 | -3.0 |
| | 0.2nm,0.6s,baz=304,slow=9.0,SNR=5.1 | | | | | | |
| **WRAB** | **Tennant Creek** | **39.05** | **123** | P | P | 13 47 56.0 | -3.4 |
| **MKAR** | **Makanchi Array** | **49.03** | **344** | P | **P** | **13 49 17.3** | **-1.9** |
| | 0.7nm,0.8s,baz=161,slow=8.6,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.12** | **349** | P | **P** | **13 50 03.1** | **-1.3** |
| | 0.6nm,0.4s,baz=146,slow=6.8,SNR=3.9 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **62.81** | **269** | LR | LR | 14 15 18.1 | |
| | comp=Z,35nm,18.2s,baz=88,slow=34 | | | | | | |

*ISCJB **13** 14:04:22.9±0.5, 47°.12N±0°.05×151°.62E±0°.08, h125km, mb3.8/10, Error ellipse: s-maj=10.3km s-min=4.0km az=42.7*

*MOS **13** 14:04:23.9±1.7, 47°.23N×151°.65E, h145km, mb4.1/6, Error ellipse: s-maj=13.7km s-min=9.0km az=64.0*

*SKHL **13** 14:04:24.4±0.6, 47°.05N×151°.69E, h144km±1km, mb4.7/6, msh5.0/5*

*IDC **13** 14:04:28.2±3.0, 47°.39N×151°.54E, h172km±30km, mb3.3/8, mb1 3.4/10, mb1mx3.2/48, mbtmp3.8/10, Error ellipse: s-maj=25.8km s-min=19.0km az=96.0*

**ISC 13 14:04:23.4±0.8, 47°.15N±0°.08×151°.63E±0°.09, h125km, n66, σ1°95/63, mb3.8/10, 1C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **3.24** | **235** | *c* iPN | Pn | 14 05 17.6 | +4.7 |
| KUR | | | | *i* S | Sn | 14 05 58.4 | +7.3 |
| KUR | | | | pmax | pmax | | |
| | comp=N,11nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,5.0nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,20nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,20nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,22nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **3.24** | **235** | *i* P | **Pn** | **14 05 16.0** | **+3.1** |
| KUR | | | | AMB | AMB | 14 05 25.3 | |
| | comp=E,12nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 14 05 25.3 | |
| | comp=E,10.0nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 14 05 25.3 | |
| | comp=E,24nm,0.5s | | | | | | |
| KUR | | | | *e*S | **Sn** | **14 05 54.0** | **+2.9** |
| KUR | | | | A | A | 14 06 05.0 | |
| | comp=E,31nm,0.4s | | | | | | |
| KUR | | | | A | A | 14 06 05.0 | |
| | comp=E,20nm,0.4s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.61** | **38** | *e*PN | **Pn** | **14 05 28.2** | **-2.9** |
| SKR | | | | *e*S | **Sn** | **14 06 20.7** | **-3.1** |
| SKR | | | | pmax | pmax | | |
| | comp=Z,70nm,0.4s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,80nm,0.5s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,80nm,0.5s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.61** | **38** | *e*P | **Pn** | **14 05 33.4** | **+2.3** |
| SKR | | | | AMB | AMB | 14 05 34.4 | |
| | comp=E,70nm,0.4s | | | | | | |
| SKR | | | | *e*S | **Sn** | **14 06 24.9** | **+1.1** |
| SKR | | | | A | A | 14 06 29.1 | |
| | comp=E,80nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **4.70** | **228** | *d* iPN | **Pn** | **14 05 33.1** | **+0.7** |
| SHO | | | | *i* S | **Sn** | **14 06 24.3** | **-1.7** |
| **SHO** | **Shikotan** | **4.70** | **228** | *i* P | **Pn** | **14 05 33.4** | **+1.0** |
| SHO | | | | AMB | AMB | 14 05 35.7 | |
| | comp=E,20nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sn** | **14 06 25.4** | **-0.6** |
| SHO | | | | A | A | 14 06 31.4 | |
| | comp=E,50nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.10** | **235** | *i* PN | **Pn** | **14 05 40.2** | **+2.4** |
| YUK | | | | *i* S | **Sn** | **14 06 41.1** | **+5.5** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,44nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,15nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,29nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,21nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,48nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.10** | **235** | *i* P | **Pn** | **14 05 39.9** | **+2.1** |
| YUK | | | | AMB | AMB | 14 05 42.7 | |
| | comp=E,15nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 14 05 42.7 | |
| | comp=E,29nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 14 05 42.7 | |
| | comp=E,44nm,0.4s | | | | | | |
| YUK | | | | *i* S | **Sn** | **14 06 36.5** | **+0.9** |
| YUK | | | | A | A | 14 06 41.5 | |
| | comp=E,21nm,0.6s | | | | | | |
| YUK | | | | A | A | 14 06 41.5 | |
| | comp=E,48nm,0.6s | | | | | | |
| **PAU** | **Pauzhetka** | **5.49** | **36** | *e*P | **Pn** | **14 05 45.0** | **+2.1** |
| PAU | | | | AMB | AMB | 14 05 46.3 | |
| | comp=E,20nm,0.4s | | | | | | |
| PAU | | | | *e*S | **Sn** | **14 06 46.0** | **+1.1** |
| PAU | | | | A | A | 14 06 47.4 | |
| | comp=E,20nm,0.5s | | | | | | |
| **JRA** | **Rausu** | **5.58** | **237** | P | **Pn** | **14 05 46.9** | **+2.7** |
| **NEM2** | **Nemuro 2** | **5.62** | **230** | P | **Pn** | **14 05 44.7** | **+0.1** |
| NEM2 | | | | *e*S | **Sn** | **14 06 45.0** | **-3.0** |
| **JNK** | **Nakash** | **6.03** | **236** | P | **Pn** | **14 05 52.5** | **+2.3** |
| **YSS** | **Yuzh-Sakhalins** | **6.07** | **271** | *e*PN | **Pn** | **14 05 53.3** | **+2.6** |
| **YSS** | **Yuzh-Sakhalins** | **6.07** | **271** | *e*P | Pn | 14 05 53.5 | +2.8 |
| YSS | | | | AMB | AMB | 14 05 56.6 | |
| | comp=E,43nm,0.5s | | | | | | |
| **JTKR** | **Abashiri--Toko** | **6.28** | **242** | P | **Pn** | **14 05 56.7** | **+3.1** |
| **JAK** | **Akkeshi** | **6.42** | **232** | P | **Pn** | **14 05 55.5** | **0.0** |
| JAK | | | | *e*S | **Sn** | **14 07 04.4** | **-3.1** |
| **JMP** | **Maruseppu** | **6.60** | **245** | P | Pn | 14 06 01.3 | +3.4 |
| **ASAJ** | **Asahikawa** | **7.02** | **248** | P | Pn | 14 06 08.0 | +4.5 |
| **JKK2** | **Kamakawa 2** | **7.04** | **246** | P | Pn | 14 06 07.7 | +3.8 |
| **PETK** | **Petropavlovsk-** | **7.13** | **31** | P | **Pn** | **14 06 07.7** | **+2.7** |
| | comp=E,0.9nm,0.3s,baz=203,slow=13,SNR=17 | | | | | | |
| **PETK** | **Petropavlovsk-** | **7.13** | **31** | PN | **Pn** | **14 06 07.7** | **+2.7** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **JCH** | **Churui** | **7.41** | **235** | P | **Pn** | **14 06 09.4** | **+0.5** |
| JCH | | | | *e*S | **Sn** | **14 07 27.6** | **-3.8** |
| **MYR** | **Moyori** | **7.67** | **234** | *e*P | **Pn** | **14 06 12.4** | **+0.1** |
| **ERM** | **Erimo** | **7.93** | **233** | *e*PN | **Pn** | **14 06 17.0** | **+1.2** |
| **ERM** | **Erimo** | **7.93** | **233** | *e*P | **Pn** | **14 06 17.0** | **+1.2** |
| **JNBK** | **Urakawa-nobuka** | **7.97** | **236** | P | **Pn** | **14 06 16.0** | **-0.4** |
| **JNB** | **Noboribetsu** | **8.86** | **242** | P | **Pn** | **14 06 29.6** | **+1.2** |
| JNB | | | | *e*S | **Sn** | **14 08 04.2** | **-2.2** |
| **JKB** | **Kayabe** | **9.21** | **239** | *e*S | Sn | 14 08 08.7 | -6.2 |
| **JANG** | **Nango** | **9.96** | **231** | P | Pn | 14 06 40.0 | -3.2 |
| JANG | | | | *e*S | Sn | 14 08 23.7 | -9.4 |
| **JRG** | **Rokugo** | **11.14** | **230** | P | **Pn** | **14 06 57.1** | **-1.9** |
| JRG | | | | *e*S | Sn | 14 08 54.5 | -7.1 |
| **HABR** | **Khabarovsk** | **11.23** | **283** | PN | **Pn** | **14 07 00.0** | **-0.1** |
| HABR | | | | *e*S | **Sn** | **14 09 03.7** | **0.0** |
| **HABR** | **Khabarovsk** | **11.23** | **283** | *e*P | **Pn** | **14 07 00.0** | **-0.1** |
| **EKMR** | **Ekimchan** | **13.36** | **303** | *e*rx | rx | 14 07 35.0 | |
| **USRK** | **Ussuriysk Ar.** | **14.04** | **265** | P | **P** | **14 07 39.0** | **-1.6** |
| | comp=Z,0.3nm,0.3s,baz=85,slow=11,SNR=5.1 | | | | | | |
| **MAJO** | **Matsushiro** | **14.55** | **228** | *e*P | **P** | **14 07 47.9** | **+1.6** |
| **SEY** | **Seymchan** | **15.83** | **1** | P | **P** | **14 08 01.1** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=79,slow=23,SNR=5.8 | | | | | | |
| **KROS** | **Kirovskiy** | **17.15** | **304** | *e*P | **Pn** | **14 08 15.5** | **+0.3** |
| KROS | | | | AMB | AMB | 14 08 17.0 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **19.44** | **328** | *e*P | **Pn** | **14 08 43.5** | **+1.3** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,8.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.2s | | | | | | |
| **KSRS** | **Korea Array** | **19.96** | **250** | P | **Pn** | **14 08 47.8** | **-0.8** |
| | comp=N,1.1nm,0.6s,baz=53,slow=12,SNR=5.0 | | | | | | |
| **KSRS** | **Korea Array** | **19.96** | **250** | *e*P | **Pn** | **14 08 47.7** | **-0.8** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **BILL** | **Bilibino** | **22.25** | **15** | *e*P | **P** | **14 09 08.8** | **-0.9** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **BILL** | **Bilibino** | **22.25** | **15** | *e*P | **P** | **14 09 08.8** | **-0.9** |
| **H11N2** | **WAKE ISLAND Hy** | **30.05** | **150** | T | T | 14 41 54.4 | |
| | baz=340,slow=76,SNR=42 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.07** | **150** | T | T | 14 41 57.6 | |
| | baz=340,slow=76,SNR=24 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.07** | **150** | T | T | 14 42 01.4 | |
| | baz=340,slow=76,SNR=22 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.13** | **151** | T | T | 14 43 26.9 | |
| | baz=340,slow=76,SNR=29 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.14** | **152** | T | T | 14 43 14.2 | |
| | baz=340,slow=76,SNR=26 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.15** | **151** | T | T | 14 43 16.3 | |
| | baz=340,slow=76,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.55** | **305** | P | **P** | **14 11 56.4** | **-1.8** |
| | comp=Z,0.5nm,0.4s,baz=95,slow=7.2,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.55** | **305** | P | **P** | **14 11 56.4** | **-1.8** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.85** | **296** | P | **P** | **14 12 30.9** | **-2.0** |
| | comp=Z,1.1nm,0.6s,baz=72,slow=6.5,SNR=9.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.85** | **296** | *e*P | **P** | **14 12 31.3** | **-1.5** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.85** | **296** | *e*P | **P** | **14 12 31.3** | **-1.5** |
| **KURK** | **Kurchatov** | **46.29** | **303** | *e*P | **P** | **14 12 34.5** | **-1.7** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **46.29** | **303** | *e*P | **P** | **14 12 34.4** | **-1.7** |
| **CMAR** | **Chiang Mai Arr** | **51.48** | **255** | P | **P** | **14 13 17.2** | **+1.1** |
| | comp=Z,0.7nm,0.7s,baz=35,slow=8.0,SNR=4.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **51.48** | **255** | P | **P** | **14 13 17.2** | **+1.1** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ARU** | **Arti** | **54.03** | **317** | *e*P | P | 14 13 29.8 | -4.5 |
| ARU | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **ARU** | **Arti** | **54.03** | **317** | *e*P | P | 14 13 29.8 | -4.5 |
| **ARCES** | **ARCESS Array B** | **57.14** | **340** | P | **P** | **14 13 55.0** | **-1.4** |
| | comp=Z,5.1nm,1.0s,baz=27,slow=8.2,SNR=3.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.14** | **340** | P | **P** | **14 13 55.0** | **-1.4** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **63.24** | **334** | P | **P** | **14 14 36.1** | **-1.9** |
| | comp=Z,3.3nm,0.9s,baz=66,slow=4.8,SNR=4.0 | | | | | | |
| **FINES** | **FINESS Array B** | **63.24** | **334** | *e*P | **P** | **14 14 38.5** | **+0.5** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **63.24** | **334** | *e*P | **P** | **14 14 38.5** | **+0.5** |
| **WRA** | **Warramunga Arr** | **68.57** | **197** | P | **P** | **14 15 12.7** | **+0.1** |
| | comp=Z,0.2nm,0.6s,baz=20,slow=6.9,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **72.28** | **197** | P | **P** | **14 15 36.5** | **+1.5** |
| | comp=Z,0.2nm,0.6s,baz=11,slow=5.5,SNR=4.7 | | | | | | |

*IDC **13** 14:06:28.7±0.6, 35°.27N×97°.36W, h0km, mb4.2/8, mb1 4.6/14, mb1mx4.2/40, mbtmp4.4/14, ML4.5/6, MS3.5/18, Ms1 3.5/18, ms1mx3.3/39, Error ellipse: s-maj=14.3km s-min=11.4km az=120.0*

*NEIC **13** 14:06:30.0, 35°.19N×97°.32W, h13km, mb4.3/25, MW4.3, MN4.7(TUL), Moment Tensor Solution. s29 Moment tensor: Scale $10^{15}$Nm; $M_{rr}$0.18; $M_{\theta\theta}$3.26; $M_{\phi\phi}$-3.44; $M_{r\theta}$0.79; $M_{\theta\phi}$2.04; $M_{r\theta}$0.76; Best double couple: $M_{o}$4.10000×$10^{15}$ NP1:$\phi_s$120.00000°, $\delta$75.00000°, $\lambda$5.00000°. NP2:$\phi_s$29.00000°, $\delta$85.00000°, $\lambda$165.00000°. Principal axes: T 4.0700, Plg14.0000°, Azm343.0000°; N 0.0000, Plg74.0000°, Azm191.0000°; P -4.0800, Plg7.0000°, Azm75.0000°; After TUL.*

*NEIC Two people injured at Norman. Felt [V] at Macomb, Sparks, Spencer and Washington; [IV] at Agra, Arcadia, Asher, Bethany, Byars, Cashion, Chandler, Choctaw, Coleman, Elmore City, Foster, Hennepin, Norman, Jones, Lexington, Lindsay, Maud, Maysville, McLoud, Minco, Newalla, Newcastle, Ninnekah, Noble, Oklahoma City, Purcell, Shawnee, Spencer, Stroud, Tecumseh, Tuttle, Tupelo, Wanette, Wapanucka and Wayne. Felt throughout central and eastern Oklahoma, in much of northern Texas and in many parts of western Arkansas, eastern Kansas and western Missouri. Isolated felt reports were received from Alabama, Illinois, Indiana, Kentucky, Louisiana, New Mexico and Tennessee.*

**ISC 13 14:06:28.5±1.1, 35°.22N±0°.02×97°.33W±0°.02, h5km±8km, n190, σ1°11/213, mb4.4/11, MS3.6/13, Oklahoma**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OK006** | **Choctaw High** | **0.26** | **9** | *i* P | **Pb** | **14 06 36.1** | **+0.4** |
| **OK008** | **Spencer City H** | **0.29** | **351** | *i* P | **Pb** | **14 06 36.7** | **+0.4** |
| OK008 | | | | *i* S | **Sb** | **14 06 41.8** | **+0.3** |
| **OK007** | **Harrah City Ha** | **0.30** | **27** | *i* P | **Pb** | **14 06 36.8** | **+0.4** |
| **OK004** | **Okla Sci Mus** | **0.33** | **338** | *i* P | **Pb** | **14 06 37.3** | **+0.4** |
| **OK003** | **Hefner Road** | **0.33** | **359** | *i* P | **Pb** | **14 06 37.9** | **+1.0** |
| **OK001** | **Jones High Sch** | **0.34** | **5** | *i* P | **Pb** | **14 06 37.5** | **+0.4** |
| OK001 | | | | *i* S | **Sb** | **14 06 43.3** | **+0.4** |
| **OK002** | **Wilshire Harra** | **0.35** | **18** | *i* P | **Pb** | **14 06 38.0** | **+0.8** |
| OK002 | | | | *i* S | **Sb** | **14 06 43.7** | **+0.7** |
| **W34A** | **Bridge Creek,** | **0.37** | **273** | P | **Pb** | **14 06 37.4** | **-0.2** |
| | baz=0.4,SNR=1000 | | | | | | |
| W34A | | | | S | **Sb** | **14 06 43.1** | **-0.5** |
| | baz=0.4 | | | | | | |
| **W34A** | **Bridge Creek,** | **0.37** | **273** | *e*Pg | **Pb** | **14 06 37.4** | **-0.2** |
| W34A | | | | *e*Sg | **Sb** | **14 06 43.3** | **-0.3** |
| **W35A** | **Tecumseh** | **0.38** | **100** | P | **Pb** | **14 06 37.3** | **-0.4** |
| | baz=0.4 | | | | | | |
| W35A | | | | S | **Sb** | **14 06 42.9** | **-0.9** |
| | baz=0.4 | | | | | | |
| **OK005** | **Luther M Schoo** | **0.45** | **14** | *i* P | **Pb** | **14 06 39.4** | **+0.4** |
| OK005 | | | | *i* S | **Sb** | **14 06 46.4** | **+0.4** |
| **V34A** | **Guthrie** | **0.63** | **346** | P | **Pb** | **14 06 42.5** | **+0.4** |
| | baz=0.7,SNR=1000 | | | | | | |
| V34A | | | | S | **Sb** | **14 06 51.8** | **+0.5** |
| | baz=0.7 | | | | | | |
| **V34A** | **Guthrie** | **0.63** | **346** | *e*Pg | **Pb** | **14 06 42.5** | **+0.4** |
| V34A | | | | *e*S | **Sb** | **14 06 51.5** | **+0.2** |
| **V35A** | **Meyer Ranch, C** | **0.67** | **36** | P | **Pb** | **14 06 43.0** | **+0.3** |
| | baz=0.7,SNR=1000 | | | | | | |
| V35A | | | | S | **Sb** | **14 06 52.9** | **+0.5** |
| | baz=0.7 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **0.67** | **36** | P | **Pb** | **14 06 43.1** | **+0.3** |
| V35A | | | | S | **Sb** | **14 06 53.0** | **+0.5** |
| **X34A** | **Smith Ranch, M** | **0.74** | **214** | P | **Pg** | **14 06 43.9** | **+1.1** |
| | baz=0.7,SNR=1000 | | | | | | |
| X34A | | | | S | **Sb** | **14 06 54.5** | **0.0** |
| | baz=0.7 | | | | | | |
| **X34A** | **Smith Ranch, M** | **0.74** | **214** | P | **Pg** | **14 06 43.9** | **+1.1** |
| X34A | | | | S | **Sb** | **14 06 54.5** | **0.0** |
| **X35A** | **Drake** | **0.87** | **160** | P | **Pg** | **14 06 45.1** | **-0.1** |
| | baz=0.8,SNR=1000 | | | | | | |
| X35A | | | | S | **Sg** | **14 06 56.6** | **+0.2** |
| | baz=0.8 | | | | | | |
| **X35A** | **Drake** | **0.87** | **160** | P | **Pg** | **14 06 45.1** | **-0.1** |
| X35A | | | | S | **Sg** | **14 06 56.6** | **+0.2** |
| **W36A** | **Wetumka** | **0.90** | **95** | P | **Pb** | **14 06 46.7** | **0.0** |
| | baz=0.9,SNR=1000 | | | | | | |
| W36A | | | | S | **Sb** | **14 06 59.2** | **+0.1** |
| | baz=0.9 | | | | | | |
| **W36A** | **Wetumka** | **0.90** | **95** | P | **Pb** | **14 06 46.7** | **0.0** |
| **W33A** | **Caddo, Fort Co** | **0.94** | **266** | P | **Pb** | **14 06 47.6** | **+0.4** |
| | baz=0.9,SNR=1000 | | | | | | |
| W33A | | | | S | **Sn** | **14 07 01.3** | **-1.0** |
| | baz=0.9 | | | | | | |
| **V33A** | **Lossen Ranch,** | **0.99** | **308** | P | **Pb** | **14 06 48.8** | **+0.6** |
| | baz=1.0,SNR=1000 | | | | | | |
| V33A | | | | S | **Sn** | **14 07 02.5** | **-0.9** |
| | baz=1.0 | | | | | | |
| **V33A** | **Lossen Ranch,** | **0.99** | **308** | P | **Pb** | **14 06 48.8** | **+0.6** |
| V33A | | | | S | **Sn** | **14 07 02.5** | **-0.9** |
| **X36A** | **Centrahoma** | **1.03** | **129** | P | **Pg** | **14 06 48.6** | **+0.3** |
| | baz=1.0 | | | | | | |
| X36A | | | | S | **Sb** | **14 07 02.5** | **-0.2** |
| | baz=1.0 | | | | | | |
| **X36A** | **Centrahoma** | **1.03** | **129** | P | **Pg** | **14 06 48.7** | **+0.4** |
| X36A | | | | S | **Sb** | **14 07 02.5** | **-0.2** |
| **X33A** | **Lawton** | **1.18** | **235** | P | **Pb** | **14 06 50.6** | **-0.8** |
| | baz=1.2,SNR=261 | | | | | | |
| X33A | | | | S | **Sb** | **14 07 06.7** | **-0.3** |
| | baz=1.2 | | | | | | |
| **X33A** | **Lawton** | **1.18** | **235** | P | **Pb** | **14 06 50.6** | **-0.8** |
| X33A | | | | S | **Sb** | **14 07 06.5** | **-0.4** |
| **U34A** | **Anderson Ranch** | **1.23** | **352** | P | **Pg** | **14 06 52.8** | **+0.7** |
| | baz=1.3 | | | | | | |
| U34A | | | | S | **Sn** | **14 07 09.9** | **+0.5** |
| | baz=1.3 | | | | | | |
| **U34A** | **Anderson Ranch** | **1.23** | **352** | *e*Pg | **Pb** | **14 06 52.5** | **+0.3** |
| **U35A** | **Pawnee** | **1.25** | **23** | P | **Pb** | **14 06 52.7** | **+0.2** |
| | baz=1.3,SNR=1000 | | | | | | |
| U35A | | | | S | **Sn** | **14 07 10.3** | **+0.5** |
| | baz=1.3 | | | | | | |
| **V36A** | **Jenks** | **1.26** | **63** | P | **Pn** | **14 06 52.8** | **0.0** |
| | baz=1.3,SNR=1000 | | | | | | |
| V36A | | | | S | **Sn** | **14 07 10.3** | **+0.1** |
| | baz=1.3 | | | | | | |
| **WMOK** | **Wichita Mounta** | **1.29** | **249** | *e*Pn | **Pn** | **14 06 52.2** | **-1.0** |
| **Y34A** | **Reagan Ranch,** | **1.31** | **196** | P | **Pn** | **14 06 52.6** | **-0.8** |
| | baz=1.3,SNR=1000 | | | | | | |
| Y34A | | | | S | **Sb** | **14 07 10.3** | **-0.4** |
| | baz=1.3 | | | | | | |
| **Y35A** | **Marietta** | **1.33** | **170** | P | **Pn** | **14 06 53.6** | **-0.2** |
| | baz=1.3,SNR=1000 | | | | | | |
| Y35A | | | | Sb | **Sg** | **14 07 12.0** | **+0.7** |
| | baz=1.3 | | | | | | |
| **U33A** | **Lingo Farm, Me** | **1.37** | **332** | P | **Pb** | **14 06 54.9** | **+0.2** |
| | baz=1.4 | | | | | | |
| U33A | | | | Sb | **Sg** | **14 07 14.5** | **+2.0** |
| | baz=1.4 | | | | | | |
| **TUL1** | **Tulsa** | **1.43** | **61** | P | **Pb** | **14 06 55.7** | **+0.1** |
| | baz=1.4,SNR=1000 | | | | | | |
| TUL1 | | | | Sb | **Sg** | **14 07 15.4** | **+1.0** |
| | baz=1.4 | | | | | | |
| **TUL1** | **Tulsa** | **1.43** | **61** | *e*Pn | **Pb** | **14 06 55.5** | **-0.1** |
| **V32A** | **Arapaho** | **1.49** | **290** | P | **Pb** | **14 06 57.2** | **+0.5** |
| | baz=1.5,SNR=139 | | | | | | |
| V32A | | | | Sb | **Sg** | **14 07 17.6** | **+1.3** |
| | baz=1.5 | | | | | | |
| **W37A** | **Quinton** | **1.56** | **92** | P | **Pb** | **14 06 57.9** | **0.0** |
| | baz=1.5,SNR=1000 | | | | | | |
| W37A | | | | Sb | **Sg** | **14 07 18.9** | **+0.3** |
| | baz=1.5 | | | | | | |
| **Y36A** | **Durant** | **1.57** | **147** | P | Pn | **14 06 57.4** | **+0.3** |
| | baz=1.5,SNR=656 | | | | | | |
| Y36A | | | | Sb | **Sb** | **14 07 18.9** | **+

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| WVT | Waverly | 7.78 | 81 | ePn | Pn | 14 08 20.5 | -1.9 |
| TXAR | Lajitas Array | 7.95 | 224 | Pn | Pn | 14 08 24.0 | -0.9 |
| | 3.6nm,0.3s,baz=42,slow=11,SNR=41 | | | | | | |
| TXAR | | | | Lg | Lg | 14 10 38.9 | |
| | 86nm,0.3s,baz=45,slow=27,SNR=13 | | | | | | |
| ISCO | Idaho Springs | 8.02 | 307 | ePn | Pn | 14 08 26.2 | +0.3 |
| LAZ | Ladron | 8.11 | 267 | ePn | Pn | 14 08 27.4 | +0.2 |
| OLIL | Olney | 8.17 | 62 | ePn | Pn | 14 08 26.9 | -0.9 |
| USIN | University of | 8.24 | 68 | ePn | Pn | 14 08 28.4 | -0.3 |
| HDIL | Hopedale | 8.29 | 48 | ePn | Pn | 14 08 29.7 | +0.4 |
| HDIL | | | | eSn | Sn | 14 10 00.7 | -2.6 |
| ECSD | EROS Data Cent | 8.52 | 3 | ePn | Pn | 14 08 31.2 | -1.3 |
| ECSD | | | | eSn | Sn | 14 10 04.8 | -4.3 |
| SMCO | Snowmass | 8.65 | 300 | ePn | Pn | 14 08 35.2 | +0.5 |
| PHWY | Pilot Hill | 8.82 | 316 | ePn | Pn | 14 08 37.2 | +0.3 |
| 121A | Cookes Peak, D | 9.10 | 256 | ePn | Pn | 14 08 39.2 | -1.4 |
| SWET | Sewanee | 9.32 | 87 | ePn | Pn | 14 08 43.1 | -0.6 |
| WCI | Wyandotte Cave | 9.35 | 68 | ePn | Pn | 14 08 43.9 | -0.1 |
| JFWS | Jewell Farm | 9.45 | 33 | ePn | Pn | 14 08 44.4 | -0.8 |
| BLO | Bloomington | 9.48 | 62 | ePn | Pn | 14 08 45.5 | -0.1 |
| PV01 | Paradox Valley | 9.49 | 291 | ePn | Pn | 14 08 47.1 | +1.0 |
| SFIN | Scholer Farm | 9.59 | 55 | ePn | Pn | 14 08 46.9 | -0.3 |
| PV04 | Paradox Valley | 9.81 | 292 | ePn | Pn | 14 08 51.7 | +1.3 |
| O20A | White River Ci | 9.94 | 303 | ePn | Pn | 14 08 53.9 | +1.6 |
| W18A | Petrified Fore | 10.16 | 273 | ePn | Pn | 14 08 58.3 | +3.1 |
| RSSD | Black Hills | 10.28 | 332 | ePn | Pn | 14 08 56.8 | -0.1 |
| CPCT | Cooper Cave | 10.46 | 85 | Pn | Pn | 14 08 59.2 | 0.0 |
| SPMN | St. Paul | 10.57 | 18 | ePn | Pn | 14 08 58.3 | -2.4 |
| TKL | Tuckaleechee C | 11.07 | 84 | Pn | Pn | 14 09 06.0 | -1.4 |
| | 3.7nm,0.3s,baz=187,slow=6.9,SNR=14 | | | | | | |
| TKL | | | | Lg | Lg | 14 12 16.4 | |
| | 21nm,0.3s,baz=141,slow=9.1,SNR=4.9 | | | | | | |
| SRU | San Rafael | 11.22 | 294 | ePn | Pn | 14 09 12.0 | +2.2 |
| WUAZ | Wupatki | 11.47 | 276 | ePn | Pn | 14 09 15.6 | +2.4 |
| TUC | Tucson | 11.57 | 259 | ePn | Pn | 14 09 16.1 | +1.6 |
| GOGA | Godfrey | 11.60 | 95 | ePn | Pn | 14 09 13.2 | -1.6 |
| TMUT | Trail Mountain | 11.79 | 294 | ePn | Pn | 14 09 19.4 | +1.8 |
| BW06 | Boulder Array | 12.13 | 312 | ePn | Pn | 14 09 21.9 | -0.3 |
| ACSO | Alum Creek Sta | 12.41 | 62 | ePn | Pn | 14 09 23.2 | -2.5 |
| COWI | Conover | 12.51 | 27 | ePn | Pn | 14 09 24.1 | -3.1 |
| COWI | | | | eSn | Sn | 14 11 38.8 | -8.2 |
| TCUT | Toone Canyon | 12.54 | 302 | ePn | Pn | 14 09 28.6 | +0.8 |
| HWUT | Hardware Ranch | 12.85 | 304 | ePn | Pn | 14 09 32.5 | +0.4 |
| AHID | Auburn Hatcher | 13.09 | 309 | ePn | Pn | 14 09 35.8 | +0.5 |
| AGMN | Agassiz Nation | 13.11 | 4 | ePn | Pn | 14 09 31.3 | -4.1 |
| LOHW | Long Hollow | 13.24 | 313 | ePn | Pn | 14 09 36.8 | -0.6 |
| SNOW | Snow King Moun | 13.25 | 312 | ePn | Pn | 14 09 38.3 | +0.8 |
| REDW | Red Top Meadow | 13.25 | 312 | ePn | Pn | 14 09 36.5 | -1.0 |
| LAO | LASA Array | 13.27 | 332 | ePn | Pn | 14 09 35.4 | -2.2 |
| TPAW | Teton Pass | 13.38 | 312 | ePn | Pn | 14 09 38.5 | -0.8 |
| MOOW | Moose Ponds | 13.40 | 313 | ePn | Pn | 14 09 38.8 | -0.8 |
| EYMN | Ely | 13.44 | 17 | ePn | Pn | 14 09 35.4 | -4.4 |
| EYMN | | | | eSn | Sn | 14 12 00.4 | -9.1 |
| RLMT | Red Lodge | 13.45 | 321 | ePn | Pn | 14 09 38.7 | -1.5 |
| FLWY | Flagg Ranch | 13.57 | 315 | ePn | Pn | 14 09 41.2 | -0.6 |
| IMW | Indian Meadow | 13.60 | 314 | ePn | Pn | 14 09 41.1 | -1.2 |
| LKWY | Lake | 13.69 | 317 | ePn | Pn | 14 09 44.3 | +0.8 |
| HVU | Hansel Valley | 13.75 | 303 | Pn | Pn | 14 09 43.3 | -1.0 |
| BLA | Blacksburg | 13.80 | 77 | ePn | Pn | 14 09 44.4 | -0.4 |
| YFT | Old Faithful | 13.87 | 316 | ePn | Pn | 14 09 45.8 | -0.1 |
| YNR | Norris Junctio | 13.94 | 317 | ePn | Pn | 14 09 47.4 | +0.5 |
| YMR | Madison River | 14.07 | 316 | eP | P | 14 09 56.2 | -0.5 |
| GCMT | Greycliff | 14.11 | 322 | ePn | Pn | 14 09 47.5 | -1.6 |
| DGMT | Dagmar | 14.19 | 341 | ePn | Pn | 14 09 46.6 | -3.4 |
| QLMT | Earthquake Lak | 14.43 | 316 | ePn | Pn | 14 09 53.8 | +0.2 |
| BOZ | Bozeman (W) | 15.05 | 318 | eP | Pn | 14 10 02.3 | +0.4 |
| ULM | Lac du Bonnet | 15.06 | 4 | Pn | Pn | 14 09 56.4 | -5.5 |
| | 10nm,0.3s,baz=185,slow=12,SNR=41 | | | | | | |
| ULM | | | | Sn | Sn | 14 12 35.3 | -14 |
| | 4.8nm,0.3s,baz=136,slow=15,SNR=4.0 | | | | | | |
| ULM | | | | Lg | Lg | 14 14 19.1 | |
| | 6.2nm,0.3s,baz=273,slow=18,SNR=5.7 | | | | | | |
| ULM | | | | LR | LR | 14 16 02.9 | |
| | comp=Z,165nm,20.9s,baz=170,slow=38 | | | | | | |
| MCMT | McKenzie Canyo | 15.26 | 314 | eP | Pn | 14 10 05.3 | +0.5 |
| | 12nm,0.9s | | | | | | |
| DLMT | Dillon | 15.41 | 316 | eP | Pn | 14 10 07.3 | +0.5 |
| | 77nm,0.9s | | | | | | |
| HLID | Hailey | 15.60 | 307 | eP | Pn | 14 10 09.4 | +0.2 |
| | 47nm,0.9s | | | | | | |
| LRM | Limekiln Ridge | 15.61 | 317 | eP | Pn | 14 10 10.4 | +1.0 |
| | 96nm,0.5s | | | | | | |
| LPIG | La Paz | 15.80 | 229 | LR | LR | 14 16 13.5 | |
| | comp=Z,169nm,18.8s,baz=47,slow=37 | | | | | | |
| HRY | Holter Researc | 15.84 | 321 | eP | Pn | 14 10 10.4 | -1.9 |
| | 28nm,0.7s | | | | | | |
| PFO | Pinyon Flat Ob | 15.87 | 270 | Lg | Lg | 14 14 57.5 | |
| | 0.2nm,0.3s,baz=147,slow=17,SNR=4.2 | | | | | | |
| PFO | | | | LR | LR | 14 16 54.3 | |
| | comp=Z,83nm,19.2s,baz=160,slow=40 | | | | | | |
| GSC | Goldstone | 15.92 | 276 | eP | P | 14 10 15.9 | -1.2 |
| | 9.3nm,0.9s | | | | | | |
| SSPA | Standing Stone | 16.25 | 65 | eP | Pn | 14 10 13.2 | -4.3 |
| | 31nm,0.6s | | | | | | |
| MFID | Camas Ranch | 16.47 | 305 | eP | P | 14 10 22.0 | -1.2 |
| | 10.0nm,0.9s | | | | | | |
| CHMT | Chamberlain Mo | 16.72 | 319 | eP | Pn | 14 10 22.1 | -1.5 |
| | 491nm,0.9s | | | | | | |
| SADO | Sadowa | 16.85 | 50 | Pn | Pn | 14 10 24.7 | -0.4 |
| | 0.9nm,0.3s,baz=259,slow=12,SNR=4.2 | | | | | | |
| SADO | | | | Lg | Lg | 14 15 13.3 | |
| | 2.9nm,0.3s,baz=144,slow=20,SNR=8.0 | | | | | | |
| SLMT | Seeley Lake | 17.05 | 320 | eP | Pn | 14 10 27.4 | -0.4 |
| | 7.5nm,0.7s | | | | | | |
| NVAR | Mina Array Bea | 17.09 | 287 | P | P | 14 10 31.9 | +1.7 |
| | 0.2nm,0.3s,baz=98,slow=9.7,SNR=9.5 | | | | | | |
| NVAR | | | | Lg | Lg | 14 15 32.0 | |
| | 0.1nm,0.3s,baz=92,slow=33,SNR=3.3 | | | | | | |
| NVAR | | | | LR | LR | 14 17 02.1 | |
| | comp=Z,207nm,19.4s,baz=100,slow=37 | | | | | | |
| SWMT | Swartz Lake | 17.49 | 320 | eP | Pn | 14 10 32.4 | -0.7 |
| | 5.3nm,0.7s | | | | | | |
| YBMT | Yellow Bay | 17.72 | 321 | eP | P | 14 10 37.5 | +0.5 |
| | 770nm,0.9s | | | | | | |
| JTMT | Jette | 17.79 | 320 | eP | P | 14 10 37.7 | 0.0 |
| | 3.2nm,0.7s | | | | | | |
| WVOR | Wild Horse Val | 18.07 | 300 | eP | P | 14 10 42.5 | +1.5 |
| | 8.5nm,1.1s | | | | | | |
| BSMT | Bassoo Peak | 18.12 | 319 | eP | P | 14 10 41.9 | +0.5 |
| | 114nm,0.5s | | | | | | |
| CMIG | Matias Romero | 18.19 | 172 | P | P | 14 10 43.8 | +1.7 |
| | 0.7nm,0.3s,baz=345,slow=14,SNR=6.6 | | | | | | |
| WALA | Waterton Lakes | 18.45 | 324 | eP | Pn | 14 10 46.5 | +1.5 |
| | 7.2nm,0.8s | | | | | | |
| MOD | Modoc | 19.14 | 297 | eP | Pn | 14 10 54.4 | +1.0 |
| | 6.5nm,0.7s | | | | | | |
| NEW | Newport | 19.63 | 318 | P | Pn | 14 10 59.3 | +0.1 |
| | 1.7nm,0.3s,baz=138,slow=9.3,SNR=35 | | | | | | |
| NEW | | | | LR | LR | 14 19 25.4 | |
| | comp=Z,103nm,19.8s,baz=118,slow=40 | | | | | | |
| NEW | Newport | 19.63 | 318 | eP | Pn | 14 10 58.9 | -0.3 |
| | 28nm,0.8s | | | | | | |
| LONY | Lake Ozonia | 19.76 | 55 | eP | P | 14 10 58.5 | -0.8 |
| | 7.5nm,0.6s | | | | | | |
| FFC | Flin Flon | 19.77 | 352 | eP | P | 14 10 57.4 | -1.9 |
| | 8.3nm,0.5s | | | | | | |
| NCB | Newcomb | 19.78 | 57 | eP | P | 14 10 57.8 | -1.7 |
| | 12nm,0.5s | | | | | | |
| ACCN | Adirondack Com | 20.00 | 59 | eP | P | 14 10 59.3 | -2.5 |
| | 12nm,0.5s | | | | | | |
| HAWA | Hanford | 20.11 | 310 | eP | P | 14 11 03.7 | +0.6 |
| | 22nm,0.6s | | | | | | |
| FHE | Frenchman Hill | 20.34 | 312 | P | Pn | 14 11 07.1 | -0.4 |
| SAW | Saint Andrews | 20.63 | 314 | P | Pn | 14 11 10.0 | -1.1 |
| YBH | Yreka Blue Hor | 20.87 | 296 | P | P | 14 11 11.0 | -0.5 |
| | 1.8nm,0.6s,baz=6.7,slow=13,SNR=4.4 | | | | | | |
| YBH | | | | LR | LR | 14 20 09.8 | |
| | comp=Z,99nm,20.4s,baz=102,slow=39 | | | | | | |
| YBH | Yreka Blue Hor | 20.87 | 296 | eP | P | 14 11 11.4 | -0.1 |
| | 6.1nm,0.8s | | | | | | |
| VBEM | Beaver Butte | 20.92 | 305 | P | Pn | 14 11 13.6 | -1.0 |
| IRO | Indian Ridge | 21.05 | 302 | P | P | 14 11 14.3 | +0.8 |
| NAC | Naches | 21.06 | 310 | P | P | 14 11 14.8 | +1.3 |
| TBM | Table Mountain | 21.11 | 312 | P | P | 14 11 15.2 | +1.3 |
| ETW | Entiat | 21.14 | 313 | P | P | 14 11 15.1 | +0.7 |
| EDM | Edmonton | 21.26 | 333 | eP | P | 14 11 16.4 | +0.9 |
| | 24nm,0.6s | | | | | | |
| FMW | Mount Fremont | 21.67 | 310 | P | P | 14 11 21.7 | +1.5 |
| LON | Longmire | 21.68 | 310 | eP | P | 14 11 21.3 | +1.1 |
| | 8.7nm,0.8s | | | | | | |
| TDL | Tradedollar La | 21.79 | 308 | P | P | 14 11 23.3 | +1.9 |
| JCW | Jim Creek | 22.37 | 313 | P | P | 14 11 28.0 | +0.5 |
| FCC | Fort Churchill | 23.65 | 4 | eP | P | 14 11 41.1 | +0.6 |
| | 14nm,0.8s | | | | | | |
| JTS | JuntasAbangare | 27.26 | 153 | LR | LR | 14 24 18.5 | |
| | comp=Z,38nm,18.0s,baz=345,slow=39 | | | | | | |
| YKA | Yellowknife Ar | 29.37 | 344 | P | P | 14 12 31.3 | -0.8 |
| | 2.0nm,0.5s,baz=147,slow=8.3,SNR=8.5 | | | | | | |
| INK | Inuvik | 38.86 | 340 | P | P | 14 13 54.5 | +0.2 |
| | 3.5nm,1.1s,baz=110,slow=8.4,SNR=3.2 | | | | | | |
| ILAR | Eielson Array | 41.73 | 331 | P | P | 14 14 19.1 | +0.9 |
| | 4.5nm,0.8s,baz=106,slow=7.4,SNR=58 | | | | | | |
| ILAR | | | | LR | LR | 14 33 11.3 | |
| | comp=Z,82nm,20.5s,baz=98,slow=38 | | | | | | |
| ARCES | ARCESS Array B | 67.58 | 19 | P | P | 14 17 26.4 | +0.8 |
| | 5.2nm,1.0s,baz=339,slow=6.5,SNR=4.8 | | | | | | |
| ARCES | | | | LR | LR | 14 46 33.6 | |
| | comp=Z,42nm,19.4s,baz=324,slow=36 | | | | | | |
| NOA | NORSAR Array B | 67.99 | 30 | LR | LR | 14 44 41.6 | |
| | comp=Z,22nm,21.8s,baz=290,slow=34 | | | | | | |
| PETK | Petropavlovsk- | 70.70 | 322 | LR | LR | 14 50 38.4 | |
| | comp=Z,18nm,18.4s,baz=89,slow=38 | | | | | | |
| CPUP | Villa Florida | 71.96 | 143 | P | P | 14 17 55.4 | +2.3 |
| | 2.7nm,0.9s,baz=327,slow=4.7,SNR=4.1 | | | | | | |
| FINES | FINESS Array B | 73.33 | 25 | P | P | 14 18 01.4 | +0.6 |
| | 2.0nm,0.8s,baz=289,slow=5.8,SNR=5.9 | | | | | | |
| GERES | GERESS Array B | 76.29 | 39 | LR | LR | 14 51 03.2 | |
| | comp=Z,23nm,18.7s,baz=348,slow=35 | | | | | | |
| AFI | Afiamalu | 85.64 | 250 | LR | LR | 14 48 31.2 | |
| | comp=Z,93nm,19.6s,baz=90,slow=30 | | | | | | |
| ZALV | Zalesovo Beam | 91.18 | 359 | P | P | 14 19 34.9 | +0.5 |
| | 0.8nm,0.4s,baz=354,slow=5.2,SNR=9.4 | | | | | | |
| TLY | Talaya | 91.53 | 347 | LR | LR | 15 04 04.7 | |
| | comp=Z,314nm,20.2s,baz=157,slow=38 | | | | | | |
| KBZ | Khabaz | 93.48 | 28 | LR | LR | 15 02 09.1 | |
| | comp=Z,27nm,18.5s,baz=90,slow=36 | | | | | | |
| JHJ | Hachijo jima 2 | 93.49 | 315 | LR | LR | 14 58 46.6 | |
| | comp=Z,40nm,22.0s,baz=298,slow=34 | | | | | | |
| KSRS | Korea Array | 96.38 | 325 | LR | LR | 15 07 58.8 | |
| | comp=Z,13nm,18.4s,baz=102,slow=38 | | | | | | |
| MKAR | Makanchi Array | 98.36 | 0 | LR | LR | 15 07 22.5 | |
| | comp=Z,18nm,18.2s,baz=358,slow=37 | | | | | | |
| HHC | Hu-ho-hao-te | 99.77 | 338 | eP | Pdif | 14 20 15.0 | +1.0 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,61nm,6.2s | | | | | | |
| WMQ | Urumqi | 101.20 | 356 | eP | Pdif | 14 20 23.0 | +2.8 |
| WRA | Warramunga Arr | 132.25 | 274 | PKP | PKPdf | 14 25 45.0 | +0.9 |
| | comp=Z,0.1nm,0.4s,baz=68,slow=2.6,SNR=3.5 | | | | | | |
| MAW | Mawson | 145.64 | 167 | PKPbc | PKPab | 14 26 08.5 | +0.9 |
| | comp=Z,6.6nm,0.7s,baz=176,slow=5.1,SNR=12 | | | | | | |

*ISCJB* ***13*** *14:08:18.1±0.6, 38.°12N±0.°05×73.°83E±0.°08, h150km, Error ellipse: s-maj=10.1km s-min=5.6km az=147.2*
*NNC* ***13*** *14:08:24.6±1.0, 38.°44N×73.°50E, h143km±6km, mb2.6, mpv3.5, Error ellipse: s-maj=10.0km s-min=4.6km az=142.0*
**ISC 13 14:08:17.9**±0.9, **38.°09N**±0.°07×**73.°87E**±0.°08, **h150**km, **n13**, σ**1.85**/17, **6C-4D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SFK | Sufi-Kurgan | 1.94 | 352 | ⇑P | Pn | 14 08 54.2 | +1.6 |
| | 51nm,0.4s | | | | | | |
| SFK | | | | ⇑S | Sn | 14 09 17.8 | -1.5 |
| | 48nm,0.3s | | | | | | |
| DZET | Dzherino | 4.03 | 282 | ⇑P | Pn | 14 09 20.1 | +1.5 |
| | 8.0nm,0.5s | | | | | | |
| DZET | | | | ⇓S | Sn | 14 10 04.4 | -1.3 |
| | 72nm,0.6s | | | | | | |
| MNAS | Manas | 4.51 | 347 | ⇓P | Pn | 14 09 26.8 | +1.8 |
| | 5.5nm,0.4s | | | | | | |
| MNAS | | | | ⇓S | Sn | 14 10 14.4 | -2.8 |
| | 13nm,0.8s | | | | | | |
| AAK | Ala-Archa | 4.56 | 6 | ⇑P | Pn | 14 09 27.8 | +2.2 |
| | 1.1nm,0.5s | | | | | | |
| AAK | | | | ⇓S | Sn | 14 10 17.5 | -0.9 |
| | 4.2nm,0.7s | | | | | | |
| TKM2 | Tokmak 2 | 5.00 | 15 | ⇑P | Pn | 14 09 36.2 | +4.7 |
| KK31 | Karatay Array | 5.62 | 334 | P | Pn | 14 09 41.0 | +1.5 |
| | 6.2nm,0.5s,baz=151,slow=12,SNR=51 | | | | | | |
| KK31 | | | | S | Sn | 14 10 40.0 | -3.3 |
| | 8.8nm,0.4s,baz=151,slow=24,SNR=8.6 | | | | | | |
| KOLN | Koldanda | 13.13 | 139 | eP | Pn | 14 11 19.5 | +0.6 |
| GKN | Gorkha | 13.50 | 135 | eP | Pn | 14 11 23.9 | +0.2 |
| | 7.4nm,0.3s | | | | | | |
| PKIN | Phulchoki | 14.26 | 134 | eP | P | 14 11 34.9 | -1.3 |
| PKI | Pulchoki | 14.27 | 134 | eP | P | 14 11 34.7 | -1.7 |
| GUN | Gumba | 14.29 | 132 | eP | P | 14 11 35.3 | -1.3 |
| AB31 | Akbulak array | 15.01 | 322 | P | Pn | 14 11 42.7 | +0.5 |
| | 0.5nm,0.5s,baz=149,slow=7.1,SNR=10 | | | | | | |
| AKTO | Aktyubinsk | 16.73 | 323 | ⇑P | Pn | 14 12 04.9 | +1.6 |
| | 2.9nm,0.9s | | | | | | |

**IDC 13 14:35:11.7**±2.5, **23.°32N**×**91.°36E**, **h0**km, **mb3.6**/4, **mb1 3.8**/4, **mb1mx3.3**/35, **mbtmp3.6**/4, **Error ellipse: s-maj=103.9km s-min=25.2km az=69.0, India-Bangladesh border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MKAR | Makanchi Array | 24.53 | 345 | P | P | 14 40 32.5 | -0.4 |
| | 0.9nm,0.6s,baz=150,slow=13,SNR=5.5 | | | | | | |
| SONM | Songino Array | 27.25 | 22 | P | P | 14 40 58.2 | +0.5 |
| | 0.2nm,0.4s,baz=196,slow=9.0,SNR=2.0 | | | | | | |
| WRA | Warramunga Arr | 60.05 | 132 | P | P | 14 45 20.3 | -0.5 |
| | 0.8nm,0.5s,baz=321,slow=7.5,SNR=25 | | | | | | |
| ASAR | Alice Springs | 62.37 | 136 | P | P | 14 45 37.0 | +0.6 |
| | 0.6nm,0.9s,baz=317,slow=8.0,SNR=5.3 | | | | | | |

**DJA 13 14:44:01.3**±1.1, **4°S**±9°×**12°7E**±°, **h10**km, **M2.8**/3, **MLv2.8**/3, **Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NLAI | Namlea | 0.49 | 337 | P | Pg | 14 44 11.3 | +0.5 |
| NLAI | | | | S | Sg | 14 44 18.1 | +0.9 |
| AAI | Ambon | 0.90 | 90 | P | Pg | 14 44 17.1 | -1.6 |
| AAI | | | | S | Sg | 14 44 30.7 | +0.2 |
| SANI | Sanana | 2.08 | 321 | P | Pn | 14 44 36.5 | +0.2 |

**GUC 13 15:00:11.4**±0.4, **24.°20S**×**68.°18W**, **h144**km±13km, **ML3.5**, **Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PB06 | IPOC Station P | 1.96 | 319 | eP | Pn | 15 00 46.7 | +0.7 |
| PB06 | | | | eS | Sn | 15 01 13.7 | +1.2 |
| PB06 | | | | AML | AML | 15 01 16.9 | |
| | comp=N,223nm,0.2s | | | | | | |
| PB10 | IPOC Station P | 2.28 | 287 | eP | Pn | 15 00 50.5 | +0.9 |
| PB10 | | | | eS | Sn | 15 01 20.3 | +1.4 |
| PB10 | | | | AML | AML | 15 01 26.7 | |
| | comp=N,514nm,0.4s | | | | | | |
| PB09 | IPOC Station P | 2.58 | 337 | eP | Pn | 15 00 55.0 | +1.5 |
| PB09 | | | | eS | Sn | 15 01 27.8 | +1.8 |
| PB04 | IPOC Station P | 2.59 | 315 | eP | Pn | 15 00 54.6 | +1.0 |
| PB04 | | | | eS | Sn | 15 01 27.8 | +1.6 |
| PB04 | | | | AML | AML | 15 01 32.5 | |
| | comp=N,114nm,0.2s | | | | | | |
| PB07 | IPOC Station P | 2.92 | 327 | eP | Pn | 15 00 59.0 | +1.2 |
| PB07 | | | | eS | Sn | 15 01 35.5 | +1.9 |
| PB07 | | | | AML | AML | 15 01 45.6 | |
| | comp=E,72nm,0.2s | | | | | | |
| PB01 | IPOC Station P | 3.36 | 339 | eP | Pn | 15 01 04.0 | +0.6 |
| PB01 | | | | eS | Sn | 15 01 44.5 | +0.9 |
| PB01 | | | | AML | AML | 15 01 53.6 | |
| | comp=E,55nm,0.2s | | | | | | |

*ISCJB* ***13*** *15:03:49.7±0.5, 34.°13N±0.°04×135.°04E±0.°04, h11km, mb3.4/2, Error ellipse: s-maj=5.8km s-min=3.9km az=37.7*
*IDC* ***13*** *15:03:49.9±1.7, 33.°92N×135.°18E, h0km, mb3.3/2, mb1 3.5/4, mb1mx3.2/43, mbtmp3.2/4, ML2.6/2, MS1.8/1, Ms1 1.8/1, ms1mx1.7/26, Error ellipse: s-maj=37.3km s-min=20.7km az=165.0*
*JMA* ***13*** *15:03:49.9, 34.°15N×135.°05E, h11km±1km, M3.1*
*JMA Felt III J1.*
**ISC 13 15:03:50.6**±0.8, **34.°11N**±0.°04×**135.°10E**±0.°03, **h11**km, **n14**, σ**1.42**/20, **Near south coast of western Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JWM | Minabe | 0.33 | 141 | P | Pb | 15 03 57.9 | -0.6 |
| JWM | | | | S | Sb | 15 04 03.0 | -0.8 |
| JAJ2 | Tsuna | 0.36 | 330 | P | Pg | 15 03 56.6 | -1.1 |
| JAJ2 | | | | S | Sg | 15 04 01.0 | -1.5 |
| JWY | Kouya | 0.42 | 75 | P | Pg | 15 03 58.5 | -0.4 |
| JWY | | | | S | Sb | 15 04 05.1 | -1.3 |
| JAI | Aioi | 0.63 | 240 | P | Pg | 15 04 01.7 | -1.1 |
| JHE | Heguri | 0.72 | 41 | P | Pg | 15 04 03.9 | -0.7 |
| JWZ | Kozaga | 0.77 | 138 | P | Pb | 15 04 05.7 | -0.3 |
| JKS | Kasai | 0.90 | 346 | P | Pg | 15 04 06.5 | -1.4 |
| JKS | | | | S | Sg | 15 04 17.9 | -1.7 |
| JKN2 | Miekihoku | 0.98 | 82 | P | Pb | 15 04 09.0 | -0.5 |
| JJS | Sakaide | 1.01 | 285 | P | Pg | 15 04 07.7 | -2.3 |
| MAT | Matsushiro | 3.51 | 45 | P | Pn | 15 04 46.7 | +1.6 |
| JNU | Nakatsue | 3.66 | 256 | Pn | Pn | 15 04 47.6 | +0.4 |
| | 0.5nm,0.3s,baz=15,slow=21,SNR=2.0 | | | | | | |
| JNU | | | | Pg | Pb | 15 04 57.3 | +2.0 |
| | 2.5nm,0.3s,baz=42,slow=10.0,SNR=14 | | | | | | |
| JNU | | | | LR | LR | 15 05 29.6 | |
| | comp=Z,16nm,21.0s,baz=103,slow=27 | | | | | | |
| JNU | | | | Lg | Lg | 15 05 48.1 | |
| | 0.7nm,0.3s,baz=191,slow=18,SNR=2.8 | | | | | | |
| KSRS | Korea Array | 6.72 | 302 | Pn | Pn | 15 05 30.8 | +1.6 |
| | 0.2nm,0.3s,baz=114,slow=15,SNR=2.8 | | | | | | |
| KSRS | | | | Sn | Sn | 15 06 45.7 | 0.0 |
| | 0.1nm,0.3s,baz=120,slow=23,SNR=2.3 | | | | | | |
| WRA | Warramunga Arr | 53.76 | 181 | P | P | 15 13 12.3 | -0.7 |
| | 0.3nm,0.6s,baz=356,slow=7.7,SNR=2.9 | | | | | | |
| ILAR | Eielson Array | 54.67 | 31 | P | P | 15 13 21.7 | +2.4 |
| | 0.5nm,1.1s,baz=251,slow=5.6,SNR=2.9 | | | | | | |

*IDC* ***13*** *15:07:40.1±1.2, 33.°37N×48.°99E, h0km, mb3.8/8, mb1 3.9/12, mb1mx3.7/43, mbtmp3.8/12, ML3.3/3, MS2.8/5, Ms1 2.7/5, ms1mx2.4/38, Error ellipse: s-maj=32.0km s-min=18.8km az=172.0*
*THR* ***13*** *15:07:43.5±1.4, 33.°56N×49.°08E, h14km±13km, ML3.8*
*NEIC* ***13*** *15:07:43.0±0.5, 33.°41N×48.°92E, h10km, mb4.3/1, ML3.8(THR), MN3.9(TEH), Error ellipse: s-maj=9.4km s-min=6.1km az=197.0*
*ISCJB* ***13*** *15:07:43.1±0.3, 33.°47N±0.°03×48.°93E±0.°03, h13km, mb3.6/8, MS2.9/3, Error ellipse: s-maj=4.7km s-min=3.3km az=11.2*
*CSEM* ***13*** *15:07:44.3±0.2, 33.°46N×48.°95E, h15km, ML3.9, Error ellipse: s-maj=7.1km s-min=4.4km az=12.0*
*TEH* ***13*** *15:07:46.1, 33.°44N×48.°95E, h23km, ML3.9*
*ISN* ***13*** *15:07:51.0±2.0, 33.°39N×48.°63E, h0km±6km*
**ISC 13 15:07:43.3**±0.5, **33.°45N**±0.°03×**48.°90E**±0.°04, **h13**km, **n104**, σ**1.20**/100, **mb3.9**/8, **MS3.0**/3, **Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| IKFM | Kafar-mosalman | 0.88 | 275 | ePg | Pg | 15 07 59.3 | -1.1 |
| IKFM | | | | eSg | Sn | 15 08 15.7 | +1.7 |
| IKFM | | | | e | | 15 08 23.9 | |
| | comp=Z,99nm,0.2s | | | | | | |
| SHGR | Shooshtar-Gavs | 1.33 | 183 | ePg | Pg | 15 08 10.5 | +1.5 |
| SHGR | | | | AML | AML | 15 08 34.9 | |
| | comp=N,2μm,0.4s | | | | | | |
| SHGR | | | | AML | AML | 15 08 43.9 | |
| | comp=E,1μm,0.7s | | | | | | |
| SHGR | Shooshtar-Gavs | 1.33 | 183 | eP | Pg | 15 08 10.0 | +1.0 |
| SHGR | Shooshtar-Gavs | 1.33 | 183 | eP | Pg | 15 08 10.0 | +1.0 |
| IBZA | Bozab | 1.34 | 320 | e | | 15 08 36.1 | |
| | comp=Z,14μm,0.3s | | | | | | |
| IBZA | | | | ePn | Pn | 15 08 06.7 | -1.2 |
| IKOM | Komasi | 1.36 | 303 | e | | 15 08 43.1 | |
| | comp=Z,21μm,0.4s | | | | | | |
| IKOM | | | | ePn | Pn | 15 08 07.3 | -0.9 |
| IPIR | Pirpir | 1.84 | 114 | ePn | Pn | 15 08 13.5 | -1.4 |
| IPIR | | | | e | | 15 08 44.6 | |
| | comp=Z,11μm,0.2s | | | | | | |
| IPIR | Pirpir | 1.84 | 114 | Pn | Pn | 15 08 13.4 | -1.4 |
| IPIR | Pirpir | 1.84 | 114 | ePn | Pn | 15 08 13.5 | -1.4 |
| IVIS | Veis | 2.01 | 303 | ePn | Pb | 15 08 19.1 | -0.7 |
| IVIS | | | | e | | 15 08 57.6 | |
| | comp=Z,4μm,0.2s | | | | | | |
| IVIS | Veis | 2.01 | 303 | Pn | Pb | 15 08 19.1 | -0.7 |
| IVIS | Veis | 2.01 | 303 | ePn | Pb | 15 08 19.1 | -0.7 |
| SNGE | Sanandaj | 2.08 | 322 | ePg | Pb | 15 08 21.1 | 0.0 |
| SNGE | | | | AML | AML | 15 08 59.5 | |
| | comp=N,768nm,0.5s | | | | | | |
| SNGE | | | | AML | AML | 15 09 00.0 | |
| | comp=E,554nm,0.5s | | | | | | |
| SNGE | Sanandaj | 2.08 | 322 | eP | Pb | 15 08 21.0 | -0.1 |
| SNGE | | | | eSg | Sg | 15 08 51.0 | +0.6 |
| SNGE | Sanandaj | 2.08 | 322 | eP | Pb | 15 08 21.0 | -0.1 |
| SNGE | | | | eSg | Sg | 15 08 51.0 | +0.6 |
| IGHG | Ghaleghazi | 2.13 | 295 | ePn | Pb | 15 08 20.9 | -1.0 |
| IGHG | | | | e | | 15 09 15.8 | |
| | comp=Z,11μm,0.3s | | | | | | |
| IGHG | Ghaleghazi | 2.13 | 295 | Pn | Pb | 15 08 20.8 | -1.0 |
| IGHG | Ghaleghazi | 2.13 | 295 | Pn | Pb | 15 08 20.8 | -1.0 |
| IRAZ | Razeghan | 2.13 | 23 | ePn | Pn | 15 08 18.5 | -0.4 |
| IRAZ | | | | e | | 15 08 59.2 | |
| | comp=Z,10μm,0.4s | | | | | | |
| IRAZ | Razeghan | 2.13 | 23 | Pn | Pn | 15 08 18.4 | -0.4 |
| IRAZ | Razeghan | 2.13 | 23 | ePn | Pn | 15 08 18.5 | -0.4 |
| QAM | Ghamsar | 2.15 | 81 | ePn | Pn | 15 08 17.7 | -1.3 |
| QAM | | | | e | | 15 08 55.3 | |
| | comp=Z,14μm,0.2s | | | | | | |
| ILIN | Lien | 2.17 | 313 | ePn | Pb | 15 08 21.3 | -1.4 |
| ILIN | | | | e | | 15 09 05.1 | |
| | comp=Z,5μm,0.3s | | | | | | |
| ILIN | Lien | 2.17 | 313 | Pn | Pb | 15 08 21.3 | -1.4 |
| ILIN | Lien | 2.17 | 313 | ePn | Pb | 15 08 21.3 | -1.4 |
| GHVR | GHOM | 2.25 | 62 | ePg | Pn | 15 08 20.1 | -0.1 |
| GHVR | | | | AML | AML | 15 08 57.1 | |
| | comp=E,714nm,0.5s | | | | | | |
| GHVR | | | | AML | AML | 15 09 06.1 | |
| | comp=N,550nm,0.5s | | | | | | |
| GHVR | GHOM | 2.25 | 62 | eP | Pn | 15 08 19.0 | -1.2 |
| GHVR | GHOM | 2.25 | 62 | eP | Pn | 15 08 19.6 | -0.6 |
| IKLH | Kolahrood | 2.25 | 92 | ePn | Pn | 15 08 20.4 | -0.1 |
| IKLH | | | | e | | 15 09 01.9 | |
| | comp=Z,8μm,0.3s | | | | | | |
| IKLH | Kolahrood | 2.25 | 92 | ePn | Pn | 15 08 20.4 | -0.1 |
| IDHR | Dehrash | 2.43 | 302 | ePn | Pb | 15 08 25.2 | -1.8 |
| IDHR | | | | e | | 15 09 16.7 | |
| | comp=N,11μm,0.3s | | | | | | |
| IDHR | Dehrash | 2.43 | 302 | Pn | Pn | 15 08 24.8 | +1.9 |
| IDHR | Dehrash | 2.43 | 302 | Pn | Pn | 15 08 24.8 | +1.9 |
| IBDR | Badra | 2.51 | 263 | ePG | x | 15 08 41.1 | |
| IBDR | | | | eSG | x | 15 09 16.4 | |
| IMHD | Mahdasht | 2.67 | 33 | ePn | Pn | 15 08 27.5 | +1.4 |
| IMHD | | | | e | | 15 09 02.6 | |
| | comp=Z,4μm,0.2s | | | | | | |
| IMHD | Mahdasht | 2.67 | 33 | Pn | Pn | 15 08 27.5 | +1.4 |
| IMHD | Mahdasht | 2.67 | 33 | ePn | Pn | 15 08 27.5 | +1.4 |
| IGAR | Gharneh | 2.84 | 111 | ePn | Pn | 15 08 29.4 | +0.8 |
| IGAR | | | | e | | 15 09 17.2 | |
| | comp=Z,4μm,0.4s | | | | | | |
| IZEF | Zefreh | 2.93 | 100 | ePn | Pn | 15 08 31.0 | +1.1 |
| IZEF | | | | e | | 15 09 18.1 | |
| | comp=Z,2μm,0.2s | | | | | | |
| IZEF | Zefreh | 2.93 | 100 | Pn | Pn | 15 08 30.9 | +1.1 |
| IZEF | Zefreh | 2.93 | 100 | Pn | Pn | 15 08 30.9 | +1.1 |
| IGZV | Ghazvin | 3.13 | 20 | ePn | Pn | 15 08 33.6 | +1.1 |
| IGZV | | | | e | | 15 09 27.8 | |
| | comp=Z,2μm,0.2s | | | | | | |
| IGZV | Ghazvin | 3.13 | 20 | ePn | Pn | 15 08 33.6 | +1.1 |
| ZNJK | Zanjan | 3.22 | 357 | ePn | Pn | 15 08 35.2 | +1.4 |
| ZNJK | Zanjan | 3.22 | 357 | eP | Pn | 15 08 35.0 | +1.2 |
| ZNJK | Zanjan | 3.22 | 357 | eP | Pn | 15 08 35.5 | +1.7 |
| NASN | Na'in | 3.34 | 100 | ePn | Pn | 15 08 36.1 | +0.5 |
| NASN | | | | eSg | Sb | 15 09 23.8 | +0.4 |
| NASN | Na'in | 3.34 | 100 | eP | Pn | 15 08 36.0 | +0.5 |
| NASN | | | | eSg | Sb | 15 09 23.0 | -0.4 |
| NASN | Na'in | 3.34 | 100 | eP | Pn | 15 08 36.1 | +0.5 |
| IDMV | Damavand | 3.35 | 50 | ePn | Pn | 15 08 36.7 | +1.0 |
| IDMV | | | | e | | 15 09 30.1 | |
| | comp=Z,2μm,0.2s | | | | | | |
| IDMV | Damavand | 3.35 | 50 | Pn | Pn | 15 08 36.6 | +1.0 |
| IDMV | Damavand | 3.35 | 50 | Pn | Pn | 15 08 36.6 | +1.0 |
| IRAM | Ramesheh | 3.36 | 118 | ePn | Pn | 15 08 36.2 | +0.4 |
| IRAM | | | | e | | 15 09 39.7 | |
| | comp=Z,2μm,0.5s | | | | | | |
| IRAM | Ramesheh | 3.36 | 118 | Pn | Pn | 15 08 36.1 | +0.4 |
| IRAM | Ramesheh | 3.36 | 118 | ePn | Pn | 15 08 36.2 | +0.4 |
| NSR | Nassriya | 3.37 | 225 | ePN | x | 15 08 41.7 | |
| NSR | | | | eSN | x | 15 09 18.1 | |
| NSR | Nassriya | 3.37 | 225 | ePn | Pb | 15 08 41.7 | -1.2 |
| | SNR=39 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NSR | | | | | *e*Sn | **Sn** | **15 09 18.1** | **+2.7** |
| | SNR=39 | | | | | | | | |
| **BHD** | **Baghdad** | **3.78** | **269** | *e*PN | x | 15 08 47.7 | | |
| BHD | | | | *e*SN | x | 15 09 27.4 | | |
| **BHD** | **Baghdad** | **3.78** | **269** | *e*Pn | **Pb** | **15 08 47.7** | **-2.2** |
| | SNR=39 | | | | | | | | |
| BHD | | | | *e*Sn | **Sn** | **15 09 27.4** | **+1.7** |
| | SNR=39 | | | | | | | | |
| **IFIR** | **Firoozkooh** | **3.87** | **54** | *e*Pn | **Pn** | **15 08 44.3** | **+1.5** |
| IFIR | | | | *e* | | 15 09 44.8 | | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| **IFIR** | **Firoozkooh** | **3.87** | **54** | Pn | **Pn** | **15 08 44.2** | **+1.5** |
| **IFIR** | **Firoozkooh** | **3.87** | **54** | Pn | **Pn** | **15 08 44.2** | **+1.5** |
| **ILAS** | **Lasjerd** | **3.88** | **59** | *e*Pn | **Pn** | **15 08 44.0** | **+1.1** |
| ILAS | | | | *e* | | 15 09 53.7 | | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **ILAS** | **Lasjerd** | **3.88** | **59** | Pn | **Pn** | **15 08 43.9** | **+1.1** |
| **ILAS** | **Lasjerd** | **3.88** | **59** | Pn | **Pn** | **15 08 43.9** | **+1.1** |
| **IALA** | **Alasht** | **4.16** | **50** | *e*Pn | **Pn** | **15 08 47.7** | **+0.9** |
| IALA | | | | *e* | | 15 09 58.1 | | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| **IALA** | **Alasht** | **4.16** | **50** | *e*PN | **Pn** | **15 08 47.7** | **+0.9** |
| **IKRK** | **Kirkuk** | **4.24** | **299** | *e*PN | x | 15 08 54.4 | | |
| IKRK | | | | *e*SN | x | 15 09 41.6 | | |
| **ISAD** | **Sadrabad** | **4.32** | **109** | *e*Pn | **Pn** | **15 08 49.4** | **+0.5** |
| ISAD | | | | *e* | | 15 10 05.7 | | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| **ISAD** | **Sadrabad** | **4.32** | **109** | *e*Pn | **Pn** | **15 08 49.4** | **+0.5** |
| **ISHM** | **Shahmirzad** | **4.32** | **56** | *e*Pn | **Pn** | **15 08 50.0** | **+1.0** |
| ISHM | | | | *e* | | 15 09 53.1 | | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **IKAZ** | **Kazeroun** | **4.43** | **145** | *e*Pn | **Pn** | **15 08 52.0** | **+1.4** |
| IKAZ | | | | *e* | | 15 10 32.8 | | |
| | comp=N,4μm,0.3s | | | | | | | | |
| **IKAZ** | **Kazeroun** | **4.43** | **145** | *e*Pn | **Pn** | **15 08 52.0** | **+1.4** |
| **IANJ** | **Anjilo** | **4.61** | **63** | *e*Pn | **Pn** | **15 08 53.3** | **+0.4** |
| IANJ | | | | *e* | | 15 10 19.7 | | |
| | comp=Z,736nm,0.4s | | | | | | | | |
| **IANJ** | **Anjilo** | **4.61** | **63** | Pn | **Pn** | **15 08 53.5** | **+0.6** |
| **IANJ** | **Anjilo** | **4.61** | **63** | Pn | **Pn** | **15 08 53.5** | **+0.6** |
| **ISRV** | **Sarvestan** | **5.42** | **137** | *e*Pn | **Pn** | **15 09 04.8** | **+0.6** |
| ISRV | | | | *e* | | 15 10 38.3 | | |
| | comp=Z,477nm,0.3s | | | | | | | | |
| **ISRV** | **Sarvestan** | **5.42** | **137** | Pn | **Pn** | **15 09 04.7** | **+0.6** |
| **ISRV** | **Sarvestan** | **5.42** | **137** | *e*Pn | **Pn** | **15 09 04.8** | **+0.6** |
| **MSL** | **Mosul** | **5.59** | **303** | *e*PN | x | 15 09 13.9 | | |
| MSL | | | | *e*SN | x | 15 10 14.4 | | |
| **RTB** | **Rutbah** | **7.21** | **269** | *e*PN | x | 15 09 36.1 | | |
| RTB | | | | *e*SN | x | 15 10 50.9 | | |
| **GEYT** | **Alibeck** | **8.73** | **57** | Pn | **Pn** | **15 09 47.4** | **-1.9** |
| | comp=Z,0.4nm,0.3s,baz=240,slow=20,SNR=1.7 | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **10.18** | **266** | Pn | **Pn** | **15 10 07.5** | **-1.7** |
| | comp=Z,0.7nm,0.3s,baz=86,slow=7.0,SNR=5.7 | | | | | | | | |
| **KBZ** | **Khabaz** | **11.29** | **337** | LR | LR | 15 15 38.8 | | |
| | comp=Z,6.6nm,20.5s,baz=171,slow=42 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **11.31** | **272** | LR | LR | 15 16 05.8 | | |
| | comp=Z,49nm,18.2s,baz=120,slow=44 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **13.76** | **301** | Pn | **Pn** | **15 10 60.0** | **+1.8** |
| | comp=Z,0.0nm,0.3s,baz=118,slow=13,SNR=6.9 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **13.76** | **301** | Pn | **Pn** | **15 11 00.0** | **+1.8** |
| **AKTO** | **Aktyubinsk** | **18.26** | **19** | Pn | **P** | **15 11 57.1** | **+0.8** |
| | comp=Z,0.1nm,0.3s,baz=54,slow=23,SNR=2.0 | | | | | | | | |
| **IDI** | **Anoyia** | **19.89** | **282** | P | **P** | **15 12 15.1** | **+0.5** |
| | comp=Z,1.9nm,0.3s,baz=72,slow=10,SNR=16 | | | | | | | | |
| **IDI** | **Anoyia** | **19.89** | **282** | *e*P | **P** | **15 12 14.4** | **-0.1** |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **IDI** | **Anoyia** | **19.89** | **282** | *e*P | **P** | **15 12 14.4** | **-0.1** |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **22.48** | **326** | P | **P** | **15 12 41.4** | **-0.8** |
| | comp=Z,3.5nm,0.7s,baz=135,slow=10.0,SNR=6.4 | | | | | | | | |
| **ATD** | **Arta Tunnel** | **22.51** | **196** | LR | LR | 15 21 36.8 | | |
| | comp=Z,48nm,18.2s,baz=74,slow=37 | | | | | | | | |
| **GRUS** | **Gruza** | **24.24** | **304** | *e*P | **P** | **15 12 59.9** | **0.0** |
| **DIVS** | **Divibare** | **24.80** | **304** | *e*P | **P** | **15 13 07.9** | **+2.8** |
| **MKAR** | **Makanchi Array** | **28.57** | **52** | P | **P** | **15 13 37.2** | **-1.7** |
| | comp=Z,0.2nm,0.2s,baz=238,slow=7.6,SNR=2.2 | | | | | | | | |
| **FINES** | **FINESS Array B** | **31.64** | **339** | P | **P** | **15 14 05.3** | **-0.5** |
| | comp=Z,0.7nm,0.4s,baz=157,slow=10,SNR=4.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **32.57** | **40** | P | **P** | **15 14 13.8** | **-0.3** |
| | comp=Z,0.7nm,0.5s,baz=243,slow=9.8,SNR=4.9 | | | | | | | | |
| **HFS** | **Hagfors** | **35.23** | **330** | LR | LR | 15 29 55.1 | | |
| | comp=Z,31nm,22.0s,baz=122,slow=38 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **36.75** | **330** | LR | LR | 15 30 51.3 | | |
| | comp=Z,15nm,21.5s,baz=130,slow=38 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **47.36** | **256** | P | **P** | **15 16 17.2** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=52,slow=7.0,SNR=7.0 | | | | | | | | |
| **ILAR** | **Eielson Array** | **81.33** | **7** | P | **P** | **15 19 58.9** | **-0.1** |
| | comp=Z,0.1nm,0.7s,baz=337,slow=5.9,SNR=2.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **97.09** | **109** | P | **P** | **15 21 13.2** | **-2.3** |
| | comp=Z,0.2nm,0.5s,baz=321,slow=4.1,SNR=2.9 | | | | | | | | |
| **ASAR** | **Alice Springs** | **98.76** | **112** | P | **P** | **15 21 20.3** | **-2.7** |
| | comp=Z,0.1nm,0.7s,baz=309,slow=5.2,SNR=1.1 | | | | | | | | |

*DDA* ***13*** *15:09:35.5,38.72N×35.70E,h7km,Md2.9*
*CSEM* ***13*** *15:09:36.7,38.75N×35.83E,h11km, MD2.4, After ISK*
*ISK* ***13*** *15:09:36.7,38.75N×35.83E,h11km, MD2.4*
**ISC 13 15:09:37.3±1.0,38.78N±0.03×35.77E±0.03,h12km±8km,**
**n20,σ0s65/26,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **BNN** | **Bunyan** | **0.10** | **39** | *e*PG | | **Pg** | **15 09 39.8** | **-0.5** |
| **BNN** | **Bunyan** | **0.10** | **39** | *e*Pg | | **Pg** | **15 09 39.8** | **-0.5** |
| **SARI** | **SarD1z-Kayseri** | **0.63** | **126** | *e*PG | | **Pg** | **15 09 48.5** | **-1.1** |
| **CUSAR** | **Sarkisla-SIVAS** | **0.74** | **30** | P | | **Pg** | **15 09 50.6** | **-1.1** |
| CUSAR | | | | S | | **Sg** | **15 10 01.5** | **0.0** |
| **YOZ** | **Yozgat** | **0.93** | **338** | *e*PG | | **Pg** | **15 09 55.4** | **+0.1** |
| **YOZ** | **Yozgat** | **0.93** | **338** | *e*Pg | | **Pg** | **15 09 55.4** | **+0.1** |
| **NIG** | **Nigde** | **1.12** | **234** | *e*PN | | **Pn** | **15 09 59.1** | **0.0** |
| **NIG** | **Nigde** | **1.12** | **234** | *e*Pn | | **Pn** | **15 09 59.1** | **0.0** |
| **KOZT** | **Kozan** | **1.29** | **178** | *e*PN | | **Pb** | **15 10 01.5** | **0.0** |
| KOZT | | | | *e*SN | | **Sn** | **15 10 18.3** | **-0.1** |
| **KOZT** | **Kozan** | **1.29** | **178** | *e*Pn | | **Pb** | **15 10 01.5** | **0.0** |
| KOZT | | | | *e*Sn | | **Sn** | **15 10 18.3** | **-0.1** |
| **CUKAN** | **kangal_SIVAS** | **1.43** | **67** | P | | **Pb** | **15 10 03.9** | **-0.1** |
| CUKAN | | | | S | | **Sg** | **15 10 25.4** | **+2.0** |
| **SVSK** | **Karacayir** | **1.49** | **40** | *e*PN | | **Pn** | **15 10 04.0** | **+0.2** |
| **SVSK** | **Karacayir** | **1.49** | **40** | *e*Pn | | **Pn** | **15 10 04.0** | **+0.2** |
| **YAYX** | **Yaylak** | **1.54** | **277** | *e*PN | | **Pb** | **15 10 05.8** | **0.0** |
| **YAYX** | **Yaylak** | **1.54** | **277** | *e*Pn | | **Pb** | **15 10 05.8** | **0.0** |
| **AYKD** | **Aykdinkavak** | **1.59** | **149** | P | | **Pb** | **15 10 06.8** | **+0.2** |
| AYKD | | | | S | | **Sn** | **15 10 25.8** | **+0.1** |
| **CORM** | **Corum** | **1.66** | **328** | *e*PN | | **Pb** | **15 10 07.2** | **-0.6** |
| **CORM** | **Corum** | **1.66** | **328** | *e*Pn | | **Pb** | **15 10 07.2** | **-0.6** |
| **AKCD** | **Akcadag** | **1.76** | **105** | *i* P | | **Pb** | **15 10 09.3** | **-0.2** |
| **AKCD** | **Akcadag** | **1.76** | **105** | P | | **Pb** | **15 10 09.3** | **-0.2** |
| AKCD | | | | S | | **Sg** | **15 10 35.0** | **+1.1** |

*ISCJB* ***13*** *15:12:56.7±0.7, 12.26N±0.07×88.38W±0.05,h59km±3km, mb4.4/17,MS3.4/7,Error ellipse: s-maj=14.0km s-min=3.6km az=31.3*
*INET* ***13*** *15:12:56.1,12.24N×88.50W,h26km,ML3.1*
*IDC* ***13*** *15:13:00.6±2.8, 12.83N×87.94W,h57km±28km,mb3.8/6, mb1 4.1/8,mb1mx3.7/41,mbtmp4.1/8,ML3.4/2,MS3.3/8, Ms1 3.3/8,ms1mx3.1/35,Error ellipse: s-maj=54.8km s-min=24.4km az=41.0*
*NEIC* ***13*** *15:13:00.6±1.3, 12.58N×88.14W,h66km±13km,mb4.5/11, Error ellipse: s-maj=22.7km s-min=11.4km az=48.0*
**ISC 13 15:12:57.7±1.5,12.25N±0.10×88.40W±0.06,h50km±13km,**
**n223,σ0s88/231,mb4.3/17,MS3.3/7,1C,Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CNCH** | **Conchagua** | **1.16** | **29** | *e*P | | **Pn** | **15 13 16.6** | **-1.1** |
| CNCH | | | | *i* P | | **Pn** | **15 13 17.4** | **-0.3** |
| **VSM** | **San Miguel** | **1.18** | **6** | *e*P | | **Pn** | **15 13 16.9** | **-1.1** |
| VSM | | | | *e*P | | **Pn** | **15 13 16.9** | **-1.1** |
| **SNVI** | **San Vicente** | **1.42** | **343** | *e*P | | **Pn** | **15 13 20.3** | **-0.9** |
| SNVI | | | | *e*S | | **Sn** | **15 13 40.4** | **+1.5** |
| **LFRS** | **El Faro** | **1.51** | **335** | *i* P | | **Pn** | **15 13 20.2** | **-2.2** |
| **CAHU** | **Cacacuatique** | **1.52** | **7** | *e*P | | **Pn** | **15 13 22.1** | **-0.6** |
| CAHU | | | | *i* P | | **Pn** | **15 13 22.6** | **-0.1** |
| **LBRS** | **Las Brisas** | **1.60** | **337** | *i* P | | **Pn** | **15 13 22.3** | **-1.4** |
| **SNET** | **Serv Nac Est T** | **1.64** | **331** | AML | | AML | 15 13 45.6 | |
| | comp=Z,807nm,0.3s | | | | | | | |
| **LFU** | **La Fuente** | **1.64** | **335** | *i* P | | **Pn** | **15 13 22.6** | **-1.6** |
| **BOQS** | **Boqueron** | **1.70** | **330** | *i* P | | **Pn** | **15 13 23.4** | **-1.8** |
| BOQS | | | | *e*S | | **Sn** | **15 13 46.2** | **+0.2** |
| **COPN** | **Copaltepe** | **1.77** | **92** | *e*P | | **Pn** | **15 13 25.5** | **-0.4** |
| COPN | | | | *i* P | | **Pn** | **15 13 25.8** | **-0.1** |
| COPN | | | | *e*S | | **Sn** | **15 13 47.9** | **+0.6** |
| **MOMN** | **Momotombo** | **1.83** | **85** | *e*P | | **Pn** | **15 13 26.0** | **-0.7** |
| **SBLS** | **San Blas** | **1.98** | **323** | *e*P | | **Pn** | **15 13 27.3** | **-1.6** |
| SBLS | | | | *e*S | | **Sn** | **15 13 53.7** | **+1.1** |
| **SNJE** | **San Jose** | **1.99** | **324** | *i* P | | **Pn** | **15 13 27.2** | **-1.8** |
| SNJE | | | | *e*S | | **Sn** | **15 13 53.6** | **+0.7** |
| **APYN** | **Apoyeque** | **2.01** | **90** | *e*P | | **Pn** | **15 13 29.2** | **+0.1** |
| **XAVN** | **Gruta Xavier** | **2.03** | **93** | *e*P | | **Pn** | **15 13 28.7** | **-0.7** |
| XAVN | | | | *e*S | | **Sn** | **15 13 54.4** | **+0.6** |
| **RTR** | **El Retiro** | **2.04** | **324** | *i* P | | **Pn** | **15 13 28.2** | **-1.4** |
| RTR | | | | *e*S | | **Sn** | **15 13 55.1** | **+1.1** |
| **TISN** | **Laguna Tiscapa** | **2.09** | **93** | *e*P | | **Pn** | **15 13 29.0** | **-1.2** |
| **TGUH** | **Tegucigalpa,Un** | **2.10** | **31** | *e*P | | **Pn** | **15 13 29.7** | **-0.8** |
| TGUH | | | | *i* P | | **Pn** | **15 13 31.0** | **+0.5** |
| **MGAN** | **Managua** | **2.11** | **93** | *e*P | | **Pn** | **15 13 30.1** | **-0.4** |
| MGAN | | | | *e*S | | **Sn** | **15 13 56.4** | **+0.8** |
| MGAN | | | | AML | | AML | 15 14 04.0 | |
| | comp=N,105nm,0.6s | | | | | | | |
| **RBDL** | **Robledal** | **2.23** | **326** | *i* P | | **Pn** | **15 13 31.3** | **-1.0** |
| RBDL | | | | *e*S | | **Sn** | **15 13 59.6** | **+0.7** |
| **MTO2** | **Montecristo 2** | **2.33** | **336** | *e*P | | **Pn** | **15 13 33.6** | **-0.2** |
| **MRL** | **Marmol** | **3.06** | **336** | *i* P | | **Pn** | **15 13 43.7** | **-0.1** |
| **JTS** | **JuntasAbangare** | **3.91** | **120** | P | | **Pn** | **15 13 57.8** | **+2.6** |
| | comp=N,2.8nm,0.3s,baz=268,slow=20,SNR=7.7 | | | | | | | |
| JTS | | | | S | | **Sn** | **15 14 38.6** | **-1.2** |
| | comp=N,4.1nm,0.3s,baz=267,slow=18,SNR=2.9 | | | | | | | |
| JTS | | | | LR | | LR | 15 15 41.7 | |
| | comp=N,246nm,21.0s,baz=304,slow=42 | | | | | | | |
| **CMIG** | **Matias Romero** | **7.90** | **308** | P | | **Pn** | **15 14 52.3** | **+2.2** |
| | comp=N,0.5nm,0.3s,baz=102,slow=11,SNR=5.2 | | | | | | | |
| **035A** | **Encino** | **17.22** | **329** | P | | **P** | **15 16 55.6** | **0.0** |
| | baz=17 | | | | | | | |
| **034A** | **Hebbronville** | **17.61** | **328** | P | | **P** | **15 17 01.4** | **+1.4** |
| | baz=18 | | | | | | | |
| **934A** | **Benavides** | **17.97** | **330** | P | | **Pn** | **15 17 04.8** | **+0.9** |
| | baz=18 | | | | | | | |
| **835A** | **Beeville** | **18.22** | **332** | P | | **P** | **15 17 06.8** | **+0.1** |
| | baz=18 | | | | | | | |
| **933A** | **Laredo** | **18.36** | **328** | P | | **Pn** | **15 17 08.8** | **0.0** |
| | baz=18 | | | | | | | |
| **834A** | **Tilden** | **18.42** | **330** | P | | **Pn** | **15 17 10.0** | **+0.6** |
| | baz=18 | | | | | | | |
| **636A** | **Smothers Creek** | **18.94** | **336** | P | | **P** | **15 17 14.3** | **-0.3** |
| | baz=19 | | | | | | | |
| **833A** | **Chaparral WMA,** | **19.00** | **329** | P | | **Pn** | **15 17 16.1** | **-0.3** |
| | baz=19,SNR=9.5 | | | | | | | |
| **734A** | **La Parita Cree** | **19.03** | **332** | P | | **P** | **15 17 15.7** | **+0.1** |
| | baz=19 | | | | | | | |
| **635A** | **Leesville** | **19.15** | **334** | P | | **Pn** | **15 17 17.6** | **-0.6** |
| | baz=19 | | | | | | | |
| **537A** | **Green Hill Far** | **19.20** | **339** | P | | **P** | **15 17 17.7** | **+0.3** |
| | baz=19 | | | | | | | |
| **832A** | **Faith Ranch, C** | **19.27** | **328** | P | | **P** | **15 17 18.6** | **+0.4** |
| | baz=19,SNR=5.9 | | | | | | | |
| **733A** | **Divot King Ran** | **19.28** | **330** | P | | **P** | **15 17 18.9** | **+0.7** |
| | baz=19,SNR=19 | | | | | | | |
| **732A** | **Laxson Ranch,** | **19.63** | **328** | P | | **P** | **15 17 22.0** | **-0.1** |
| | baz=20,SNR=5.3 | | | | | | | |
| **535A** | **Dale** | **19.63** | **336** | P | | **P** | **15 17 22.0** | **-0.1** |
| | baz=20 | | | | | | | |
| **340A** | **Bronson** | **19.73** | **346** | P | | **Pn** | **15 17 24.3** | **-0.8** |
| | baz=20 | | | | | | | |
| **633A** | **Saathoff Ranch** | **19.84** | **331** | P | | **P** | **15 17 24.2** | **-0.2** |
| | baz=20,SNR=6.6 | | | | | | | |
| **534A** | **Blanco** | **20.01** | **334** | P | | **P** | **15 17 25.7** | **-0.5** |
| | baz=20,SNR=9.3 | | | | | | | |
| **632A** | **Uvalde** | **20.17** | **330** | P | | **P** | **15 17 28.0** | **0.0** |
| | baz=20,SNR=6.7 | | | | | | | |
| **533A** | **Kerrville** | **20.29** | **333** | P | | **P** | **15 17 29.1** | **-0.2** |
| | baz=20,SNR=9.6 | | | | | | | |
| **631A** | **Perdido Creek** | **20.49** | **328** | P | | **P** | **15 17 31.2** | **-0.2** |
| | baz=20,SNR=7.1 | | | | | | | |
| **434A** | **Burnet** | **20.60** | **335** | P | | **P** | **15 17 32.3** | **-0.4** |
| | baz=20 | | | | | | | |
| **532A** | **Rocksprings** | **20.74** | **331** | P | | **P** | **15 17 34.5** | **+0.2** |
| | baz=21,SNR=19 | | | | | | | |
| **433A** | **Art** | **20.90** | **333** | P | | **P** | **15 17 35.0** | **-0.9** |
| | baz=21,SNR=13 | | | | | | | |
| **JCT** | **Junction City** | **20.99** | **332** | P | | **P** | **15 17 36.8** | **0.0** |
| | baz=21 | | | | | | | |
| **JCT** | **Junction City** | **20.99** | **332** | *e*P | | **P** | **15 17 36.9** | **0.0** |
| | comp=N,13nm,0.9s | | | | | | | |
| **334A** | **Lometa** | **21.05** | **336** | P | | **P** | **15 17 37.4** | **-0.1** |
| | baz=21 | | | | | | | |
| **531A** | **Rocksprings** | **21.08** | **330** | P | | **P** | **15 17 38.5** | **+0.6** |
| | baz=21 | | | | | | | |
| **432A** | **Menard** | **21.32** | **332** | P | | **P** | **15 17 40.1** | **-0.3** |
| | baz=21,SNR=9.4 | | | | | | | |
| **333A** | **Richland Sprin** | **21.35** | **334** | P | | **P** | **15 17 40.1** | **-0.6** |
| | baz=21,SNR=12 | | | | | | | |
| **530A** | **J-C Ranch, Com** | **21.47** | **328** | P | | **P** | **15 17 41.9** | **-0.2** |
| | baz=21 | | | | | | | |
| **431A** | **Sonora** | **21.54** | **330** | P | | **P** | **15 17 42.6** | **-0.2** |
| | baz=22,SNR=9.3 | | | | | | | |
| **234A** | **Clairette** | **21.60** | **337** | P | | **P** | **15 17 42.9** | **-0.5** |
| | baz=22 | | | | | | | |
| **ATAH** | **Atahualpa** | **21.68** | **152** | LR | | LR | 15 24 42.9 | |
| | comp=N,89nm,19.9s,baz=352,slow=32 | | | | | | | |
| **332A** | **Millersview** | **21.72** | **333** | P | | **P** | **15 17 44.4** | **-0.3** |
| | baz=22 | | | | | | | |
| **Z37A** | **Pogue Cattle C** | **21.87** | **344** | P | | **P** | **15 17 48.0** | **+1.8** |
| | baz=22 | | | | | | | |
| **233A** | **Rising Star** | **21.91** | **336** | P | | **P** | **15 17 46.1** | **-0.7** |
| | baz=22,SNR=6.8 | | | | | | | |
| **529A** | **Stev Forest Ra** | **21.92** | **326** | P | | **P** | **15 17 46.8** | **-0.1** |
| | baz=22 | | | | | | | |
| **430A** | **Baggett Ranch,** | **21.93** | **329** | P | | **P** | **15 17 47.4** | **+0.3** |
| | baz=22,SNR=9.4 | | | | | | | |
| **331A** | **San Angelo** | **21.97** | **332** | P | | **P** | **15 17 46.8** | **-0.6** |
| | baz=22,SNR=9.4 | | | | | | | |
| **134A** | **White-Moore Ra** | **22.09** | **338** | P | | **P** | **15 17 48.7** | **+0.1** |
| | baz=22 | | | | | | | |
| **232A** | **Coleman** | **22.11** | **334** | P | | **P** | **15 17 48.8** | **-0.1** |
| | baz=22,SNR=10 | | | | | | | |
| **429A** | **Davenport Ranc** | **22.14** | **328** | P | | **P** | **15 17 49.3** | **0.0** |
| | baz=22,SNR=9.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **22.15** | **322** | P | | **P** | **15 17 51.0** | **+1.6** |
| | comp=N,3.7nm,0.6s,baz=144,slow=12,SNR=31 | | | | | | | |
| **Z36A** | **Blue Ridge** | **22.17** | **342** | P | | **P** | **15 17 49.9** | **+0.4** |
| | baz=22 | | | | | | | |
| **330A** | **Mertzon** | **22.41** | **330** | P | | **P** | **15 17 51.3** | **-0.9** |
| | baz=22,SNR=5.9 | | | | | | | |
| **133A** | **Hamilton Ranch** | **22.44** | **336** | P | | **P** | **15 17 51.7** | **-0.7** |
| | baz=22 | | | | | | | |
| **231A** | **Bronte** | **22.45** | **333** | P | | **P** | **15 17 52.1** | **-0.5** |
| | baz=22 | | | | | | | |
| **Y37A** | **Hugo** | **22.61** | **344** | P | | **P** | **15 17 54.7** | **+0.6** |
| | baz=22 | | | | | | | |
| **MIAR** | **Mount Ida** | **22.69** | **349** | P | | **P** | **15 17 54.0** | **-1.0** |
| | baz=22,SNR=6.2 | | | | | | | |
| **MIAR** | **Mount Ida** | **22.69** | **349** | *e*P | | **P** | **15 17 52.9** | **-2.0** |
| | comp=N,7.3nm,0.8s | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **22.75** | **335** | P | | **P** | **15 17 54.9** | **-0.9** |
| | baz=23 | | | | | | | |
| **Y35A** | **Marietta** | **22.95** | **341** | P | | **P** | **15 17 57.0** | **-0.7** |
| | baz=23 | | | | | | | |
| **X38A** | **Whitesboro** | **23.07** | **346** | P | | **P** | **15 17 58.9** | **0.0** |
| | baz=23,SNR=6.1 | | | | | | | |
| **X37A** | **Clayton** | **23.12** | **345** | P | | **P** | **15 17 59.8** | **+0.4** |
| | baz=23 | | | | | | | |
| **Z32A** | **Haskell** | **23.28** | **336** | P | | **P** | **15 17 59.4** | **-1.6** |
| | baz=23,SNR=7.7 | | | | | | | |
| **130A** | **Snyder** | **23.30** | **332** | P | | **P** | **15 17 60.0** | **-1.3** |
| | baz=23 | | | | | | | |
| **X36A** | **Centrahoma** | **23.36** | **343** | P | | **P** | **15 18 02.2** | **+0.4** |
| | baz=23 | | | | | | | |
| **X35A** | **Drake** | **23.39** | **342** | P | | **P** | **15 18 02.3** | **+0.2** |
| | baz=23,SNR=5.3 | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **23.56** | **335** | P | | **P** | **15 18 02.6** | **-1.1** |
| | baz=24,SNR=9.5 | | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **23.58** | **338** | P | | **P** | **15 18 04.2** | **+0.3** |
| | baz=24 | | | | | | | |
| **W37A** | **Quinton** | **23.66** | **346** | P | | **P** | **15 18 04.7** | **+0.1** |
| | baz=24,SNR=8.8 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.68** | **9** | P | | **P** | **15 18 04.7** | **-0.1** |
| | comp=N,7.3nm,0.8s,baz=183,slow=10,SNR=6.2 | | | | | | | |
| TKL | | | | LR | | LR | 15 26 45.2 | |
| | comp=N,63nm,21.8s,baz=180,slow=36 | | | | | | | |
| **129A** | **Stewart Farms,** | **23.75** | **331** | P | | **P** | **15 18 04.3** | **-1.2** |
| | baz=24 | | | | | | | |
| **X34A** | **Smith Ranch, M** | **23.84** | **340** | P | | **P** | **15 18 07.6** | **+1.3** |
| | baz=24,SNR=10 | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **23.95** | **333** | P | | **P** | **15 18 06.5** | **-0.9** |
| | baz=24,SNR=7.6 | | | | | | | |
| **128A** | **Castleberry Fa** | **24.04** | **330** | P | | **P** | **15 18 07.6** | **-0.7** |
| | baz=24,SNR=7.1 | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **24.17** | **335** | P | | **P** | **15 18 09.1** | **-0.2** |
| | baz=24 | | | | | | | |
| **X32A** | **Elmer** | **24.19** | **338** | P | | **P** | **15 18 10.6** | **+1.1** |
| | baz=24,SNR=8.3 | | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **24.19** | **332** | P | | **P** | **15 18 09.7** | **+0.1** |
| | baz=24 | | | | | | | |
| **V37A** | **Hulbert** | **24.30** | **347** | P | | **P** | **15 18 10.3** | **-0.1** |
| | baz=24,SNR=7.7 | | | | | | | |
| **Y30A** | **Stafford Cattl** | **24.36** | **334** | P | | **P** | **15 18 11.4** | **+0.3** |
| | baz=24,SNR=5.9 | | | | | | | |
| **W34A** | **Bridge Creek,** | **24.41** | **341** | P | | **P** | **15 18 12.0** | **+0.5** |
| | baz=24,SNR=8.5 | | | | | | | |
| **W34A** | **Bridge Creek,** | **24.41** | **341** | *e*P | | **P** | **15 18 10.6** | **-0.8** |
| | comp=N,55nm,0.7s | | | | | | | |
| **TUL1** | **Tulsa** | **24.48** | **345** | P | | **P** | **15 18 11.6** | **-0.5** |
| | baz=24 | | | | | | | |
| **Z28A** | **Tucker Farm, M** | **24.54** | **331** | P | | **P** | **15 18 12.7** | **-0.1** |
| | baz=24 | | | | | | | |
| **U37A** | **Salina** | **24.80** | **347** | P | | **P** | **15 18 14.0** | **-1.0** |
| | baz=25,SNR=5.5 | | | | | | | |
| **W32A** | **Sentinel** | **24.80** | **338** | P | | **P** | **15 18 15.4** | **+0.4** |
| | baz=25,SNR=8.3 | | | | | | | |
| **V34A** | **Guthrie** | **24.88** | **342** | P | | **P** | **15 18 15.3** | **-0.4** |
| | baz=25,SNR=6.0 | | | | | | | |
| **V34A** | **Guthrie** | **24.88** | **342** | *e*P | | **P** | **15 18 12.8** | **-2.9** |
| | comp=N,25nm,0.6s | | | | | | | |
| **Y28A** | **McKinney Farm,** | **24.98** | **332** | P | | **P** | **15 18 16.8** | **-0.1** |
| | baz=25 | | | | | | | |
| **V33A** | **Lossen Ranch,** | **25.11** | **341** | P | | **P** | **15 18 16.9** | **-0.9** |
| | baz=25 | | | | | | | |
| **W31A** | **Holland Ranch,** | **25.11** | **337** | P | | **P** | **15 18 17.3** | **-0.7** |
| | baz=25 | | | | | | | |
| **U35A** | **Pawnee** | **25.16** | **344** | P | | **P** | **15 18 18.3** | **0.0** |
| | baz=25 | | | | | | | |
| **X29A** | **Tulia** | **25.19** | **333** | P | | **P** | **15 18 19.0** | **+0.3** |
| | baz=25 | | | | | | | |
| **V32A** | **Arapaho** | **25.27** | **339** | P | | **P** | **15 18 19.4** | **+0.1** |
| | baz=25 | | | | | | | |
| **MSTX** | **Muleshoe** | **25.28** | **331** | P | | **P** | **15 18 20.1** | **+0.6** |
| | baz=25 | | | | | | | |
| **T37A** | **Cheneyville 18** | **25.45** | **348** | P | | **P** | **15 18 20.0** | **-0.9** |
| | baz=25 | | | | | | | |
| **U34A** | **Anderson Ranch** | **25.45** | **343** | P | | **P** | **15 18 20.6** | **-0.3** |
| | baz=25 | | | | | | | |
| **U34A** | **Anderson Ranch** | **25.45** | **343** | *e*P | | **P** | **15 18 19.1** | **-1.7** |
| | comp=N,21nm,0.6s | | | | | | | |
| **X28A** | **Dimmitt** | **25.47** | **333** | P | | **P** | **15 18 21.5** | **+0.3** |
| | baz=25 | | | | | | | |
| **AMTX** | **Amarillo** | **25.55** | **334** | P | | **P** | **15 18 22.2** | **+0.2** |
| | baz=26 | | | | | | | |
| **AMTX** | **Amarillo** | **25.55** | **334** | *e*P | | **P** | **15 18 21.9** | **0.0** |
| | comp=N,11nm,0.6s | | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **25.60** | **346** | P | | **P** | **15 18 22.0** | **-0.2** |
| | baz=25 | | | | | | | |
| **V31A** | **Spring Creek L** | **25.60** | **338** | P | | **P** | **15 18 22.2** | **-0.2** |
| | baz=26 | | | | | | | |
| **T35A** | **Sooner Cattle** | **25.62** | **345** | P | | **P** | **15 18 22.8** | **+0.4** |
| | baz=26 | | | | | | | |
| **W29A** | **Amraillo** | **25.74** | **334** | P | | **P** | **15 18 23.6** | **-0.1** |
| | baz=26 | | | | | | | |
| **CCM** | **Cathedral Cave** | **25.82** | **355** | *e*P | | **P** | **15 18 23.9** | **-0.3** |
| | comp=N,7.7nm,0.8s | | | | | | | |
| **T34A** | **McClaskey Farm** | **25.90** | **344** | P | | **P** | **15 18 24.5** | **-0.4** |
| | baz=26 | | | | | | | |
| **S37A** | **Fort Scott** | **26.04** | **348** | P | | **P** | **15 18 26.3** | **0.0** |
| | baz=26 | | | | | | | |
| **S36A** | **Lake Cedric, C** | **26.17** | **347** | P | | **P** | **15 18 27.1** | **-0.3** |
| | baz=26 | | | | | | | |
| **T33A** | **Patterson Ranc** | **26.26** | **342** | P | | **P** | **15 18 27.9** | **-0.3** |
| | baz=26 | | | | | | | |
| **S35A** | **Otter Creek Ra** | **26.30** | **346** | P | | **P** | **15 18 28.6** | **0.0** |
| | baz=26 | | | | | | | |
| **V28A** | **Channing** | **26.52** | **334** | P | | **P** | **15 18 31.2** | **+0.5** |
| | baz=26 | | | | | | | |
| **T32A** | **Huddler Ranch,** | **26.56** | **341** | P | | **P** | **15 18 31.1** | **+0.1** |
| | baz=26 | | | | | | | |
| **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SPMN | **St. Paul** baz=33 | 33.07 | 354 | P | **P** | 15 19 28.0 | -0.6 |
| SPMN | **St. Paul** comp=N,6.5nm,0.4s | 33.07 | 354 | *e*P | **P** | 15 19 27.7 | -0.8 |
| J26A | **Sides Ranch, S** baz=33 | 33.45 | 340 | P | **P** | 15 19 32.7 | +0.8 |
| I28A | **Midland** baz=33 | 33.49 | 343 | P | **P** | 15 19 32.1 | -0.2 |
| F36A | **Milaca** baz=34 | 33.78 | 354 | P | **P** | 15 19 34.4 | -0.2 |
| H28A | **Mission Ridge** baz=34 | 34.07 | 344 | P | **P** | 15 19 36.9 | -0.4 |
| G29A | **Hoven** baz=34 | 34.27 | 345 | P | **P** | 15 19 38.4 | -0.6 |
| H27A | **Howes** baz=34 | 34.33 | 343 | P | **P** | 15 19 40.5 | +0.9 |
| SCI | **San Clemente I** baz=34 | 34.44 | 312 | P | **P** | 15 19 42.1 | +1.6 |
| D37A | **Cotton** baz=35 | 34.96 | 355 | P | **P** | 15 19 43.8 | -1.1 |
| EDW2 | **Edwards Air Fo** baz=35 | 35.02 | 315 | P | **P** | 15 19 47.9 | +2.3 |
| D35A | **Remer** baz=35 | 35.04 | 353 | P | **P** | 15 19 44.3 | -1.2 |
| D36A | **Goodland** baz=35 | 35.04 | 354 | P | **P** | 15 19 44.7 | -0.9 |
| C38A | **Sawbill Land.** baz=35 | 35.43 | 357 | P | **P** | 15 19 50.3 | +1.3 |
| C37A | **Embarrass** baz=35 | 35.51 | 356 | P | **P** | 15 19 50.8 | +1.2 |
| C36A | **Pine Crest Far** baz=35 | 35.59 | 355 | P | **P** | 15 19 50.7 | +0.4 |
| F26A | **Lodgepole** baz=36 | 35.62 | 343 | P | **P** | 15 19 51.3 | +0.7 |
| C35A | **Jirik Farms, M** baz=36 | 35.64 | 354 | P | **P** | 15 19 49.8 | -1.0 |
| EYMN | **Ely** baz=36 | 35.68 | 356 | P | **P** | 15 19 50.0 | -1.1 |
| D30A | **Buchanan** baz=36 | 35.82 | 348 | P | **P** | 15 19 52.0 | -0.3 |
| F25A | **Bowman** baz=36 | 35.91 | 342 | P | **P** | 15 19 53.5 | +0.3 |
| D29A | **Pettibone, Tap** baz=36 | 35.95 | 347 | P | **P** | 15 19 52.8 | -0.6 |
| E26A | **Carlson Angus** baz=36 | 36.12 | 343 | P | **P** | 15 19 54.9 | 0.0 |
| E25A | **Miller Ranch,** baz=36 | 36.42 | 342 | P | **P** | 15 19 57.6 | +0.1 |
| AGMN | **Agassiz Nation** baz=36 | 36.47 | 352 | P | **P** | 15 19 57.1 | -0.7 |
| AGMN | **Agassiz Nation** comp=N,13nm,0.8s | 36.47 | 352 | *e*P | **P** | 15 19 56.7 | -1.1 |
| B34A | **Aery, Baudette** baz=36,SNR=5.2 | 36.50 | 353 | P | **P** | 15 19 56.8 | -1.2 |
| B32A | **Ashes, Strandq** baz=36,SNR=5.8 | 36.66 | 351 | P | **P** | 15 19 58.5 | -0.9 |
| A33A | **Warroad** baz=37 | 37.03 | 352 | P | **P** | 15 20 02.2 | -0.4 |
| NVAR | **Mina Array Bea** comp=N,0.5nm,0.7s,baz=184,slow=5.7,SNR=4.3 | 37.24 | 320 | P | **P** | 15 20 06.2 | +1.5 |
| NVAR | comp=N,0.8nm,0.7s,baz=126,slow=3.8,SNR=7.2 | | | PcP | **PcP** | 15 22 26.0 | +2.3 |
| LAO | **LASA Array** baz=37 | 37.48 | 340 | P | **P** | 15 20 06.6 | +0.2 |
| A29A | **Manning Farm,** baz=38 | 37.65 | 348 | P | **P** | 15 20 08.0 | +0.2 |
| A26A | **Wade Farm, Ken** baz=38 | 38.25 | 345 | P | **P** | 15 20 12.9 | +0.1 |
| ULM | **Lac du Bonnet** comp=N,7.8nm,0.5s,baz=164,slow=8.6,SNR=9.2 | 38.38 | 352 | P | **P** | 15 20 12.3 | -1.6 |
| ULM | comp=N,73nm,18.1s,baz=97,slow=38 | | | LR | LR | 15 36 58.2 | |
| A25A | **Svangstu Ranch** baz=38 | 38.56 | 344 | P | **P** | 15 20 15.2 | -0.3 |
| MCMT | **McKenzie Canyo** comp=N,2.3nm,0.8s | 38.61 | 332 | *e*P | **P** | 15 20 18.9 | +2.6 |
| BOZ | **Bozeman (W)** baz=39 | 38.70 | 334 | P | **P** | 15 20 17.1 | +0.2 |
| EGMT | **Eagleton** baz=40 | 39.87 | 338 | P | **P** | 15 20 26.7 | +0.2 |
| YBH | **Yreka Blue Hor** comp=N,40nm,19.4s,baz=140,slow=39 | 41.91 | 321 | LR | LR | 15 39 57.0 | |
| BDFB | **Brasilia** comp=N,75nm,19.9s,baz=150,slow=38 | 48.64 | 124 | LR | LR | 15 43 58.5 | |
| FRB | **Frobisher Bay** comp=N,9.4nm,1.0s,baz=200,slow=10.0,SNR=4.3 | 53.29 | 11 | P | **P** | 15 22 08.7 | -2.4 |
| YKA | **Yellowknife Ar** comp=N,1.6nm,0.7s,baz=139,slow=7.7,SNR=4.8 | 53.56 | 345 | P | **P** | 15 22 11.7 | -1.4 |
| ILAR | **Eielson Array** comp=N,0.8nm,1.0s,baz=112,slow=4.8,SNR=7.1 | 65.83 | 336 | P | **P** | 15 23 36.6 | -0.9 |
| NOA | **NORSAR Array B** comp=N,9.7nm,18.0s,baz=275,slow=37 | 83.99 | 29 | LR | LR | 16 04 19.4 | |
| AKASG | **Malin Array Be** comp=N,20nm,19.3s,baz=280,slow=36 | 97.21 | 35 | LR | LR | 16 10 29.0 | |
| WRA | **Warramunga Arr** comp=N,0.4nm,1.0s,baz=89,slow=2.7,SNR=2.3 | 138.32 | 254 | PKhKP | PKPpre | 15 32 19.6 | |
| ASAR | **Alice Springs** comp=N,0.3nm,0.7s,baz=87,slow=1.4,SNR=2.8 | 138.33 | 248 | PKhKP | PKPpre | 15 32 20.1 | |
| CMAR | **Chiang Mai Arr** comp=N,0.8nm,1.0s,baz=5.3,slow=4.9,SNR=5.1 | 148.64 | 347 | PKPbc | **PKPbc** | 15 32 40.0 | -0.1 |

*IDC **13** 15:25:44.8±2.2,9°.63S×113°.51E,h0km,mb3.5/4, mb1 3.7/5,mb1mx3.5/30,mbtmp3.7/5,ML3.9/1,Error ellipse: s-maj=86.5km s-min=20.7km az=46.0*
*AUST **13** 15:25:50.9,9°.45S×113°.91E,h20km*
*ISCJB **13** 15:25:52.1±0.7,9°.60S±0°.06×113°.94E±0°.04,h58km±13km, mb3.6/4,Error ellipse: s-maj=10.3km s-min=6.2km az=11.6*
*DJA **13** 15:25:52.9±0.7,10°S±3°×11°4E±°,h25km±7km,M4.3/22, mb4.6/2,mB5.2/1,MLv4.1/22,Mw(mB)4.6/1*

**ISC 13 15:25:52.8±1.1,9°.58S±0°.07×113°.98E±0°.05,h50km±15km, n30,σ1$52/35,mb3.7/4,South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JAGI | **Jajag, Banyuwa** baz=1.0,SNR=622 | 1.11 | 9 | P | **Pn** | 15 26 10.8 | -1.3 |
| JAGI | **Jajag, Banyuwa** | 1.11 | 9 | P | **Pn** | 15 26 10.9 | -1.2 |
| JAGI | | | | S | **Sn** | 15 26 27.0 | +0.6 |
| IGBI | **Denpasar** | 1.38 | 57 | P | **Pn** | 15 26 15.3 | -0.3 |
| GMJI | **Gumukmas** | 1.40 | 338 | P | **Pn** | 15 26 15.4 | -0.6 |
| GMJI | | | | S | **Sn** | 15 26 34.2 | +0.9 |
| DNP | **Denpasar** | 1.51 | 54 | P | **Pn** | 15 26 17.9 | +0.5 |
| DNP | | | | S | **Sn** | 15 26 37.4 | +1.4 |
| ABJI | **Asem Bagus** | 1.79 | 8 | P | **Pn** | 15 26 22.2 | +0.9 |
| BLJI | **Banyuglugur** | 1.86 | 348 | P | **Pn** | 15 26 23.6 | +1.3 |
| BLJI | | | | S | **Sn** | 15 26 45.2 | +0.6 |
| SRBI | **Singaraja** | 1.92 | 39 | P | **Pn** | 15 26 23.4 | +0.3 |
| KMMI | **Kalianget** | 2.51 | 360 | P | **Pn** | 15 26 32.9 | +1.7 |
| PWJI | **Pagerwojo** | 2.65 | 306 | P | **Pn** | 15 26 32.9 | -0.2 |
| PWJI | | | | S | **Sn** | 15 27 02.6 | -1.4 |
| TWSI | **Taliwang, Sumb** | 2.98 | 74 | P | **Pn** | 15 26 38.2 | +0.5 |
| PCJI | **Pacitan** | 3.09 | 296 | P | **Pn** | 15 26 39.8 | +0.7 |
| NGJI | **Ngawi** | 3.32 | 311 | P | **Pn** | 15 26 45.0 | +2.7 |
| TBJI | **Tambak Boyo** | 3.46 | 322 | P | **Pn** | 15 26 45.8 | +1.6 |
| UGM | **Wanagama** baz=3.7,SNR=14 | 3.80 | 296 | P | **Pn** | 15 26 50.0 | +1.1 |
| UGM | **Wanagama** | 3.80 | 296 | P | **Pn** | 15 26 49.5 | +0.6 |
| UWJI | **Ujung Watu** | 4.34 | 316 | P | **Pn** | 15 26 57.5 | +1.2 |
| CISI | **Cisompet, Garu** baz=6.3,SNR=10 | 6.42 | 288 | P | **Pn** | 15 27 25.8 | +0.9 |
| CISI | **Cisompet, Garu** | 6.42 | 288 | P | **Pn** | 15 27 25.5 | +0.6 |
| BATI | **Baumata** 1.1nm,0.3s,baz=72,slow=19,SNR=2.0 | 9.56 | 95 | Pn | **Pn** | 15 28 09.8 | +1.8 |
| BATI | 1.1nm,0.3s,baz=29,slow=11,SNR=2.0 | | | Sn | **Sn** | 15 29 50.2 | -3.9 |
| GIRL | **Giralia** baz=13,SNR=6.3 | 12.99 | 179 | P | **Pn** | 15 28 53.6 | -1.2 |
| KNRA | **Kununurra** baz=16,SNR=8.4 | 15.64 | 114 | P | **P** | 15 29 35.7 | +2.3 |
| MTN | **Manton Dam** baz=17,SNR=3.5 | 17.13 | 103 | P | **P** | 15 29 52.6 | +2.6 |
| MEEK | **Meekatharra** baz=18,SNR=7.9 | 17.53 | 166 | P | **Pn** | 15 29 53.7 | 0.0 |
| FAKI | **Fak Fak** baz=19,SNR=3.3 | 19.32 | 71 | P | **P** | 15 30 14.3 | +0.2 |
| WRKA | **Warakurna** baz=21,SNR=3.5 | 20.54 | 140 | P | Pn | 15 30 33.4 | +3.5 |
| WRA | **Warramunga Arr** 0.2nm,0.3s,baz=293,slow=12,SNR=8.2 | 22.19 | 120 | P | **P** | 15 30 46.9 | +1.8 |
| ASAR | **Alice Springs** 0.6nm,0.5s,baz=303,slow=8.9,SNR=18 | 23.63 | 129 | P | **P** | 15 31 01.0 | +1.3 |
| SONM | **Songino Array** 0.7nm,0.4s,baz=177,slow=7.6,SNR=5.8 | 57.55 | 354 | P | **P** | 15 35 35.9 | -1.5 |
| MKAR | **Makanchi Array** | 62.84 | 336 | P | **P** | 15 36 11.9 | -1.5 |

0.8nm,0.4s,baz=150,slow=7.4,SNR=10

**MEX 13 16:09:07.2±0.6,18°.14N×99°.96W,h52km±5km,MD3.8, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ARIG | **Puente Sto Nin** | 0.39 | 291 | *e*P | Pn | 16 09 16.0 | -1.4 |
| ARIG | | | | *i* S | Sn | 16 09 23.4 | -1.3 |
| MEIG | **Mezcala** | 0.39 | 123 | *i* P | Pn | 16 09 15.7 | -1.8 |
| MEIG | | | | *e*S | Sn | 16 09 23.2 | -1.7 |
| PLIG | **Platanillo** | 0.50 | 60 | *e*P | Pn | 16 09 17.1 | -1.6 |
| PLIG | | | | *i* S | Sn | 16 09 24.9 | -2.1 |
| CAIG | **El Cayaco** | 1.13 | 195 | *i* P | Pn | 16 09 24.6 | -2.0 |
| CAIG | | | | *e*S | Sn | 16 09 38.5 | -2.6 |
| ACX | **Acapulco** | 1.27 | 175 | *e*P | Pn | 16 09 23.0 | -5.7 |
| ACX | | | | *e*S | Sn | 16 09 38.1 | -6.6 |
| TLIG | **Tlapa** | 1.45 | 113 | *i* P | Pn | 16 09 30.3 | -1.0 |
| TLIG | | | | *i* S | Sn | 16 09 47.5 | -1.8 |
| ZIIG | **Zihuatanejo** | 1.52 | 250 | *i* P | Pn | 16 09 31.3 | -0.8 |
| ZIIG | | | | *i* S | Sn | 16 09 48.2 | -2.6 |
| PNIG | **Pinotepa** | 2.47 | 134 | *e*P | Pn | 16 09 44.1 | -1.0 |
| PNIG | | | | *i* S | Sn | 16 10 12.5 | -1.6 |

**DJA 13 16:43:22.2±0.6,4°S±6°×12°8E±°,h10km,M3.5/2,MLv3.5/2, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AAI | **Ambon** | 0.16 | 9 | P | Pg | 16 43 25.4 | -0.4 |
| MSAI | **Masohi** | 0.91 | 57 | P | Pn | 16 43 40.6 | -0.4 |
| NLAI | **Namlea** | 1.23 | 300 | P | Pn | 16 43 44.5 | -0.9 |
| BNDI | **Bandanaira** | 1.85 | 111 | P | Pn | 16 43 53.0 | -1.1 |
| SANI | **Sanana** | 2.82 | 309 | P | Pn | 16 44 06.9 | -0.5 |
| LBMI | **Labuha** | 3.26 | 348 | P | Pn | 16 44 13.4 | 0.0 |
| FAKI | **Fak Fak** | 4.17 | 77 | P | Pn | 16 44 25.5 | -0.5 |
| SWI | **Sorong** | 4.28 | 46 | P | Pn | 16 44 27.5 | 0.0 |

**DJA 13 16:51:58.0±0.3,9°S±7°×11°1E±°,h87km±5km,M3.8/6, mb4.6/2,MLv3.4/6,Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCJI | **Pacitan** | 0.47 | 329 | P | Pn | 16 52 13.3 | +1.1 |
| PCJI | | | | S | Sn | 16 52 25.5 | +2.8 |
| UGM | **Wanagama** | 1.12 | 308 | P | Pn | 16 52 19.6 | +0.6 |
| NGJI | **Ngawi** | 1.23 | 2 | P | Pn | 16 52 20.4 | +0.2 |
| GMJI | **Gumukmas** | 2.03 | 81 | P | Pn | 16 52 30.5 | 0.0 |
| UWJI | **Ujung Watu** | 2.22 | 348 | P | Pn | 16 52 32.6 | -0.4 |
| BLJI | **Banyuglugur** | 2.31 | 69 | P | Pn | 16 52 34.0 | -0.3 |
| JAGI | **Jajag, Banyuwa** | 2.71 | 87 | P | Pn | 16 52 39.5 | 0.0 |
| ABJI | **Asem Bagus** | 2.90 | 74 | P | Pn | 16 52 42.4 | +0.3 |
| CMJI | **Cimerak** | 3.05 | 285 | P | Pn | 16 52 44.1 | -0.1 |
| CISI | **Cisompet, Garu** | 3.72 | 286 | P | Pn | 16 52 52.8 | -0.5 |
| SRBI | **Singaraja** | 3.79 | 83 | P | Pn | 16 52 52.7 | -1.4 |
| CNJI | **Cibinong** | 4.44 | 286 | P | Pn | 16 53 02.6 | -0.4 |
| TWSI | **Taliwang, Sumb** | 5.40 | 92 | P | Pn | 16 53 16.0 | -0.1 |
| CGJI | **Cibinong** | 6.01 | 289 | P | Pn | 16 53 24.1 | -0.3 |

*ISCJB **13** 16:58:35.3±0.5,37°.89N±0°.02×30°.40E±0°.03,h1km±5km, Error ellipse: s-maj=4.1km s-min=3.1km az=18.8*
*CSEM **13** 16:58:35.5±0.1,37°.86N×30°.39E,h2km,MD3.3,Error ellipse: s-maj=1.8km s-min=1.7km az=61.0*
*DDA **13** 16:58:35.2,37°.91N×30°.44E,h18km,Ml3.5*
*ISK **13** 16:58:35.2,37°.87N×30°.41E,h6km,MD3.3*

**ISC 13 16:58:36.0±0.9,37°.87N±0°.02×30°.44E±0°.02,h7km±6km, n104,σ0$65/129,2C-4D,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ISP | **Isparta** | 0.08 | 123 | PG | **Pg** | 16 59 37.8 | -0.3 |
| ISP | | | | *e*SG | **Sg** | 16 58 39.7 | +0.2 |
| ISP | **Isparta** | 0.08 | 123 | *i* Pg | **Pg** | 16 58 37.8 | -0.3 |
| ISP | | | | *e*Sg | **Sg** | 16 58 39.7 | +0.2 |
| BAGO | **Egridir - ISPA** | 0.30 | 66 | P | **Pg** | 16 58 41.6 | -0.4 |
| BAGO | | | | S | **Sg** | 16 58 46.2 | +0.1 |
| BCK | **Bucak** | 0.42 | 163 | *e*PG | **Pg** | 16 58 44.0 | -0.2 |
| BCK | | | | *e*SG | **Sg** | 16 58 50.5 | +0.7 |
| BCK | **Bucak** | 0.42 | 163 | *e*Pg | **Pg** | 16 58 44.0 | -0.2 |
| BCK | | | | *e*Sg | **Sg** | 16 58 50.5 | +0.7 |
| SUTC | **Sutluce-Ispart** | 0.59 | 131 | *e*PG | **Pg** | 16 58 46.9 | -0.6 |
| SUTC | **Sutluce-Ispart** | 0.59 | 131 | *e*Pg | **Pg** | 16 58 46.9 | -0.6 |
| SHUT | **Suhut-Afyon** | 0.69 | 8 | *e*PG | **Pg** | 16 58 48.6 | -0.7 |
| SHUT | | | | *e*SG | **Sb** | 16 59 00.1 | -0.2 |
| SHUT | **Suhut-Afyon** | 0.69 | 8 | *e*Pg | **Pg** | 16 58 48.6 | -0.7 |
| SHUT | | | | *e*Sg | **Sb** | 16 59 00.1 | -0.2 |
| KHL | **Karahalli** | 0.85 | 303 | *e*PG | **Pg** | 16 58 51.8 | -0.6 |
| KHL | **Karahalli** | 0.85 | 303 | *e*Pg | **Pg** | 16 58 51.8 | -0.6 |
| KORT | **Korkueli** | 0.87 | 185 | *i* P | **Pg** | 16 58 51.8 | -0.9 |
| KORT | | | | *i* S | **Sn** | 16 59 06.9 | -0.9 |
| KORT | **Korkueli** | 0.87 | 185 | P | **Pg** | 16 58 51.8 | -0.9 |
| KORT | | | | S | **Sn** | 16 59 06.9 | -0.9 |
| KHAL | **Karahalli** | 0.90 | 304 | *i* P | **Pg** | 16 58 52.9 | -0.4 |
| KHAL | | | | *i* S | **Sn** | 16 59 08.1 | -0.4 |
| KHAL | **Karahalli** | 0.90 | 304 | P | **Pg** | 16 58 52.9 | -0.4 |
| KHAL | | | | S | **Sn** | 16 59 08.1 | -0.4 |
| GOLH | **Golhisar** | 0.94 | 228 | *i* P | **Pg** | 16 58 53.0 | -1.0 |
| GOLH | | | | *i* S | **Sn** | 16 59 08.9 | -0.6 |
| GOLH | **Golhisar** | 0.94 | 228 | P | **Pg** | 16 58 53.0 | -1.0 |
| GOLH | | | | S | **Sn** | 16 59 08.9 | -0.6 |
| BOLV | **Bolvadin** | 0.94 | 25 | *i* P | **Pg** | 16 58 53.5 | -0.6 |
| BOLV | | | | *i* S | **Sn** | 16 59 09.4 | -0.2 |
| BOLV | **Bolvadin** | 0.94 | 25 | P | **Pg** | 16 58 53.5 | -0.6 |
| BOLV | | | | S | **Sn** | 16 59 09.4 | -0.2 |
| ANTB | **Antalya** | 0.98 | 170 | *e*PG | **Pg** | 16 58 54.6 | -0.2 |
| ANTB | **Antalya** | 0.98 | 170 | *e*Pg | **Pg** | 16 58 54.6 | -0.2 |
| DNZL | **Cakiroluk** | 1.11 | 261 | *i* P | **Pg** | 16 58 56.7 | -0.7 |
| DNZL | | | | *i* S | **Sn** | 16 59 14.6 | +0.6 |
| DNZL | **Cakiroluk** | 1.11 | 261 | P | **Pg** | 16 58 56.7 | -0.7 |
| DNZL | | | | S | **Sn** | 16 59 14.6 | +0.6 |
| DENT | **Denizli** | 1.12 | 265 | *e*PN | **Pg** | 16 58 56.8 | -0.7 |
| DENT | **Denizli** | 1.12 | 265 | *e*Pn | **Pg** | 16 58 56.8 | -0.7 |
| ELL | **Elmali** | 1.19 | 201 | *e*PN | **Pg** | 16 58 58.6 | -0.3 |
| ELL | **Elmali** | 1.19 | 201 | *e*Pn | **Pg** | 16 58 58.6 | -0.3 |
| KIZT | **Kizilcal** | 1.52 | 48 | *e*PN | **Pn** | 16 59 04.1 | +0.3 |
| KIZT | **Kizilcal** | 1.52 | 48 | *e*Pn | **Pn** | 16 59 04.1 | +0.3 |
| KONT | **Konya--Tatoy** | 1.52 | 86 | *e*PN | **Pn** | 16 59 04.3 | +0.6 |
| KONT | **Konya--Tatoy** | 1.52 | 86 | *e*Pn | **Pn** | 16 59 04.3 | +0.6 |
| KULA | **Kula-Manisa** | 1.54 | 295 | *e*PN | **Pn** | 16 59 03.3 | -0.7 |
| KULA | **Kula-Manisa** | 1.54 | 295 | *e*Pn | **Pn** | 16 59 03.3 | -0.7 |
| MANT | **Manisa** | 1.61 | 293 | *i* P | **Pn** | 16 59 04.5 | -0.5 |
| MANT | | | | *i* S | **Sg** | 16 59 29.0 | +1.4 |
| MANT | **Manisa** | 1.61 | 293 | P | **Pn** | 16 59 04.5 | -0.5 |
| MANT | | | | S | **Sg** | 16 59 29.0 | +1.4 |
| FETY | **Fethiye** | 1.64 | 222 | *e*PN | **Pn** | 16 59 05.4 | +0.1 |
| FETY | **Fethiye** | 1.64 | 222 | *e*Pn | **Pn** | 16 59 05.4 | +0.1 |
| ESKT | **Eskisehir** | 1.68 | 11 | *e*PN | **Pn** | 16 59 06.4 | +0.4 |
| ESKT | **Eskisehir** | 1.68 | 11 | *e*Pn | **Pn** | 16 59 06.4 | +0.4 |
| ESKT | **Eskisehir** | 1.68 | 11 | P | **Pn** | 16 59 05.8 | -0.2 |
| ESKT | | | | S | **Sg** | 16 59 29.9 | -0.2 |
| SEYT | **Eskypehyr** | 1.68 | 11 | *i* P | **Pn** | 16 59 05.8 | -0.2 |
| SEYT | | | | *i* S | **Sg** | 16 59 29.9 | -0.2 |
| AKAS | **Kas** | 1.76 | 202 | *i* P | **Pg** | 16 59 10.0 | +0.2 |
| AKAS | | | | *i* S | **Sg** | 16 59 33.3 | +0.7 |
| AKAS | **Kas** | 1.76 | 202 | P | **Pg** | 16 59 10.0 | +0.2 |
| AKAS | | | | S | **Sg** | 16 59 33.3 | +0.7 |
| DALY | **Dalyan (Mu˘la** | 1.77 | 234 | *e*PN | **Pn** | 16 59 07.1 | +0.1 |
| DALY | **Dalyan (Mu˘la** | 1.77 | 234 | *e*Pn | **Pn** | 16 59 07.1 | +0.1 |
| DEMI | **Demirci** | 1.79 | 312 | *i* P | **Pn** | 16 59 06.8 | -0.6 |
| DEMI | **Demirci** | 1.79 | 312 | P | **Pn** | 16 59 06.8 | -0.6 |
| DEMI | | | | S | **Sg** | 16 59 30.7 | +2.3 |
| SVRH | **Sivrihisar-ESK** | 1.79 | 28 | *e*PN | **Pn** | 16 59 07.7 | +0.2 |
| SVRH | **Sivrihisar-ESK** | 1.79 | 28 | *e*Pn | **Pn** | 16 59 07.7 | +0.2 |
| YER | **Yerkesik** | 1.86 | 248 | *e*PN | **Pn** | 16 59 08.2 | -0.2 |
| YER | **Yerkesik** | 1.86 | 248 | *e*Pn | **Pn** | 16 59 08.2 | -0.2 |
| HDMB | **Hadim** | 1.86 | 118 | *e*PN | **Pn** | 16 59 09.0 | +0.4 |
| HDMB | **Hadim** | 1.86 | 118 | *e*Pn | **Pn** | 16 59 09.0 | +0.4 |
| BORA | **Eskisehir** | 2.01 | 0 | *i* P | **Pn** | 16 59 10.5 | 0.0 |
| BORA | | | | *i* S | **Sn** | 16 59 35.8 | -0.1 |
| BORA | **Eskisehir** | 2.01 | 0 | P | **Pn** | 16 59 10.5 | 0.0 |
| BORA | | | | S | **Sn** | 16 59 35.9 | -0.1 |
| AYDB | **Zeytinkoy-Aydi** | 2.02 | 273 | *e*PN | **Pn** | 16 59 10.7 | +0.1 |
| AYDB | **Zeytinkoy-Aydi** | 2.02 | 273 | *e*Pn | **Pn** | 16 59 10.7 | +0.1 |
| AYDN | **Tasoluk** | 2.04 | 265 | *i* P | **Pn** | 16 59 11.3 | +0.5 |
| AYDN | **Tasoluk** | 2.04 | 265 | P | **Pn** | 16 59 11.3 | +0.5 |
| AYDN | | | | S | **Sg** | 16 59 44.3 | +2.8 |
| AUMIH | **MIHALICIK** | 2.16 | 22 | P | **Pb** | 16 59 15.1 | -0.4 |
| GAZI | **Gazipasa** | 2.22 | 137 | *i* P | **Pn** | 16 59 13.9 | +0.7 |
| GAZI | **Gazipasa** | 2.22 | 137 | P | **Pn** | 16 59 13.9 | +0.7 |
| GAZI | | | | S | **Sg** | 16 59 46.5 | -0.7 |
| DST | **Dursunbey** | 2.24 | 321 | *e*PN | **Pn** | 16 59 13.3 | -0.3 |
| DST | **Dursunbey** | 2.24 | 321 | *e*Pn | **Pn** | 16 59 13.3 | -0.3 |
| AKS | **Akhisar** | 2.30 | 297 | *e*PN | **Pn** | 16 59 13.7 | -0.6 |
| AKS | **Akhisar** | 2.30 | 297 | *e*Pn | **Pn** | 16 59 13.7 | -0.6 |
| CAVI | **Cavuskoy** | 2.38 | 349 | *e*PN | **Pn** | 16 59 15.7 | +0.2 |
| CAVI | **Cavuskoy** | 2.38 | 349 | *e*Pn | **Pn** | 16 59 15.7 | +0.2 |
| IZM | **Izmir** | 2.56 | 283 | *e*PN | **Pn** | 16 59 17.2 | -0.7 |
| IZM | **Izmir** | 2.56 | 283 | *e*Pn | **Pn** | 16 59 17.3 | -0.7 |
| GULT | **Gulveren** | 2.56 | 1 | *e*PN | **Pn** | 16 59 18.7 | +0.6 |
| GULT | **Gulveren** | 2.56 | 1 | *e*Pn | **Pn** | 16 59 18.7 | +0.6 |
| IZI | **Iznik** | 2.58 | 343 | *e*PN | **Pn** | 16 59 18.4 | +0.1 |
| IZI | **Iznik** | 2.58 | 343 | *e*Pn | **Pn** | 16 59 18.4 | +0.1 |
| AFSR | **Af˘ar-Bala (A** | 2.60 | 52 | *e*PN | **Pn** | 16 59 19.0 | +0.5 |
| AFSR | **Af˘ar-Bala (A** | 2.60 | 52 | *e*Pn | **Pn** | 16 59 19.0 | +0.5 |
| BODT | **Bodrum** | 2.61 | 253 | *e*PN | **Pn** | 16 59 18.3 | -0.4 |
| BODT | **Bodrum** | 2.61 | 253 | *e*Pn | **Pn** | 16 59 18.3 | -0.4 |
| ADVT | **Abdulvahap** | 2.62 | 348 | *e*PN | **Pn** | 16 59 19.2 | +0.4 |
| ADVT | **Abdulvahap** | 2.62 | 348 | *e*Pn | **Pn** | 16 59 19.2 | +0.4 |
| YESY | **Yesilyurt** | 2.62 | 91 | *e*PN | **Pn** | 16 59 20.1 | +1.2 |
| YESY | **Yesilyurt** | 2.62 | 91 | *e*Pn | **Pn** | 16 59 20.1 | +1.2 |
| BALB | **Balikesir** | 2.67 | 312 | *e*PN | **Pn** | 16 59 19.5 | +0.1 |
| BALB | **Balikesir** | 2.67 | 312 | *e*Pn | **Pn** | 16 59 19.5 | +0.1 |
| MDNY | **Mudanya-Bursa** | 2.77 | 335 | *e*PN | **Pn** | 16 59 20.5 | -0.4 |
| MDNY | **Mudanya-Bursa** | 2.77 | 335 | *e*Pn | **Pn** | 16 59 20.5 | -0.4 |
| YAYX | **Yaylak** | 2.86 | 67 | *e*PN | **Pn** | 16 59 22.9 | +0.7 |
| YAYX | **Yaylak** | 2.86 | 67 | *e*Pn | **Pn** | 16 59 22.9 | +0.7 |
| KCTX | **Karacabey (Bur** | 2.89 | 327 | *e*PN | **Pn** | 16 59 22.5 | 0.0 |
| KCTX | **Karacabey (Bur** | 2.89 | 327 | *e*Pn | **Pn** | 16 59 22.5 | 0.0 |
| ARMT | **Armutlu** | 2.96 | 336 | *e*PN | **Pn** | 16 59 23.4 | 0.0 |
| ARMT | **Armutlu** | 2.96 | 336 | *e*Pn | **Pn** | 16 59 23.4 | 0.0 |
| GULA | **Gulagac** | 3.04 | 80 | *e*PN | **Pn** | 16 59 25.4 | +0.8 |
| GULA | **Gulagac** | 3.04 | 80 | *e*Pn | **Pn** | 16 59 25.4 | +0.8 |
| CORM | **Corum** | 4.00 | 53 | *e*PN | **Pn** | 16 59 38.6 | +0.8 |
| CORM | **Corum** | 4.00 | 53 | *e*Pn | **Pn** | 16 59 38.6 | +0.8 |
| TIRR | **Tirgusor** | 6.76 | 348 | ↑ *i*P | **Pn** | 17 00 15.8 | +0.2 |
| TLB | **Topalu** | 6.95 | 346 | ↓ *i*P | **Pn** | 17 00 18.6 | +0.4 |
| CFR | **Carcaliu** | 7.50 | 347 | ↓ *i*P | **Pn** | 17 00 26.1 | +0.3 |
| MLR | **Muntele Rosu** | 8.32 | 338 | ↓ *i*P | Pn | 17 00 41.8 | +4.6 |
| VRI | **Vrincioaia** | 8.46 | 342 | ↑ *i*P | **Pn** | 17 00 40.1 | +1.2 |
| PLOR | **Plostina** | 8.46 | 342 | ↓ *i*P | **Pn** | 17 00 40.4 | +1.4 |
| KOLS | **Kolonicke sedl** | 12.54 | 334 | *e*PN | Pn | 17 01 29.9 | -4.9 |
| VYHS | **Vyhne** | 13.56 | 325 | *e*PN | Pn | 17 01 43.8 | -5.0 |

*IDC **13** 16:59:04.9±4.9,15°.04S×167°.31E,h105km±45km,mb3.6/5, mb1 3.8/6,mb1mx3.4/40,mbtmp4.1/6,Error ellipse: s-maj=37.0km s-min=24.7km az=164.0*
*ISCJB **13** 16:59:05.5±0.9,15°.14S±0°.09×167°.3E±0°.1,h129km, mb3.5/4,Error ellipse: s-maj=19.0km s-min=12.2km az=6.4*

**ISC 13 16:59:07.2±1.0,15°.2S±0°.1×167°.3E±0°.2,h129km,n9, σ0$61/10,mb3.6/4,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZM | **Mont Dzumac** 14nm,0.3s,baz=360,slow=12,SNR=16 | 6.94 | 187 | P | **Pn** | 17 00 45.9 | -0.5 |
| DZM | | | | S | **Sn** | 17 02 04.1 | +0.1 |
| AFI | 3.6nm,0.3s,baz=360,slow=23,SNR=2.5 **Afiamalu** 19nm,0.4s,baz=328,slow=16,SNR=3.8 | 20.25 | 89 | P | **P** | 17 03 32.3 | -0.3 |
| WRA | **Warramunga Arr** 0.3nm,0.5s,baz=84,slow=8.2,SNR=3.2 | 31.80 | 257 | P | **P** | 17 05 19.2 | -0.5 |
| ASAR | **Alice Springs** 0.7nm,0.5s,baz=76,slow=9.1,SNR=6.1 | 32.59 | 250 | P | **P** | 17 05 26.8 | +0.1 |
| VNDA | **Vanda** 0.6nm,0.7s,baz=0.6,slow=7.4,SNR=2.6 | 62.45 | 181 | P | **P** | 17 09 17.5 | +1.3 |
| SONM | **Songino Array** 0.3nm,0.4s,baz=136,slow=5.3,SNR=3.4 | 82.87 | 324 | P | **P** | 17 11 17.6 | +0.1 |
| VNA2 | **Neumayer--Watz** baz=187,slow=4.3 | 94.07 | 182 | P | **P** | 17 12 10.2 | -0.4 |
| ARCES | **ARCESS Array B** 4.3nm,1.0s,baz=46,slow=3.5,SNR=1.3 | 120.67 | 345 | PKP | **PKPdf** | 17 17 43.2 | 0.0 |
| TORD | **Torodi Ar. Bea** 0.3nm,0.5s,baz=148,slow=1.1,SNR=3.5 | 165.94 | 264 | PKP | **PKPdf** | 17 18 57.6 | -0.1 |

*ISCJB **13** 17:02:47.6±0.3,67°.05N±0°.02×21°.02E±0°.06,h0km,Error ellipse: s-maj=3.4km s-min=3.0km az=0.6*
*UPP **13** 17:02:48.4,67°.06N×20°.91E,h0km,ML1.8,Mining explosion.*
*CSEM **13** 17:02:48.7±0.2,67°.08N×21°.01E,h2km,ML2.2,Error ellipse: s-maj=4.8km s-min=4.2km az=93.0,Mining explosion.*
*NAO **13** 17:02:48.9±1.0,67°.13N×21°.40E,ML2.3*
*HEL **13** 17:02

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SGF** | **Sodankyl** | **2.19** | **78** | *e*PG | **Pb** | **17 03 28.6** | **-0.5** |
| SGF | | | | *e*SG | **Sg** | **17 03 58.3** | **-0.4** |
| **SGF** | **Sodankyl** | **2.19** | **78** | Pg | **Pb** | **17 03 28.5** | **-0.5** |
| SGF | | | | Sg | **Sg** | **17 03 58.3** | **-0.4** |
| **TRO** | **Tromso** | **2.69** | **344** | *e*P | **Pn** | **17 03 34.9** | **+1.8** |
| TRO | | | | *e*Sg | **Sb** | **17 04 12.6** | **+1.6** |
| **TRO** | **Tromso** | **2.69** | **344** | *e*P | **Pn** | **17 03 34.8** | **+1.8** |
| | SNR=50 | | | | | | |
| TRO | | | | *e*Sg | **Sb** | **17 04 12.6** | **+1.6** |
| | SNR=90 | | | | | | |
| **MOR8** | **Moi Rana** | **2.76** | **254** | *e*P | **Pn** | **17 03 34.6** | **+0.5** |
| MOR8 | | | | IAML | | 17 04 14.5 | |
| | comp=Z,7.6nm,0.2s | | | | | | |
| **MOR8** | **Moi Rana** | **2.76** | **254** | *e*P | **Pn** | **17 03 34.6** | **+0.5** |
| | SNR=50 | | | | | | |
| **OUL** | **Oulu** | **2.82** | **133** | *e*PB | **Pb** | **17 03 37.8** | **-2.0** |
| OUL | | | | *e*SB | **Sb** | **17 04 13.8** | **-1.1** |
| **ARA0** | **ARCESS Array S** | **2.99** | **32** | Pn | **Pn** | **17 03 37.3** | **0.0** |
| | baz=207,slow=16 | | | | | | |
| ARA0 | | | | Lg | Lg | 17 04 15.5 | |
| | baz=212,slow=28 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.99** | **32** | Pn | **Pn** | **17 03 37.3** | **0.0** |
| | baz=207,slow=16 | | | | | | |
| ARA0 | | | | Sg | **Sn** | **17 04 15.5** | **+1.7** |
| | baz=212,slow=28 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.99** | **32** | Pn | **Pn** | **17 03 37.3** | **0.0** |
| | SNR=50 | | | | | | |
| ARA0 | | | | Lg | Lg | 17 04 15.5 | |
| | SNR=7.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **2.99** | **32** | Pn | **Pn** | **17 03 37.5** | **+0.2** |
| | comp=Z,0.7nm,0.3s,baz=209,slow=14,SNR=52 | | | | | | |
| ARCES | | | | Sn | **Sn** | **17 04 15.2** | **+1.4** |
| | comp=Z,0.6nm,0.3s,baz=209,slow=22,SNR=3.3 | | | | | | |
| **ARE0** | **ARCESS Array S** | **2.99** | **32** | *e*P | **Pn** | **17 03 37.3** | **0.0** |
| | baz=213 | | | | | | |
| **ARE0** | **ARCESS Array S** | **2.99** | **32** | P | **Pn** | **17 03 37.3** | **0.0** |
| **UMAU** | **Umeaa** | **3.20** | **182** | *e*P | **Pn** | **17 03 41.0** | **+0.9** |
| UMAU | | | | *e*S | **Sn** | **17 04 20.2** | **+1.3** |
| **UMAU** | **Umeaa** | **3.20** | **182** | P | **Pn** | **17 03 41.0** | **+0.9** |
| UMAU | | | | S | **Sn** | **17 04 20.2** | **+1.3** |
| **STOK** | **Stokkvaagen** | **3.25** | **261** | *e*P | **Pn** | **17 03 42.9** | **+2.1** |
| **STOK** | **Stokkvaagen** | **3.25** | **261** | *e*P | **Pn** | **17 03 42.9** | **+2.1** |
| | SNR=50 | | | | | | |
| **VRF** | **Varrio** | **3.40** | **74** | *e*P | **Pn** | **17 03 44.4** | **+1.6** |
| | baz=261 | | | | | | |
| VRF | | | | *e*SG | **Sb** | **17 04 33.8** | **+2.4** |
| **VRF** | **Varrio** | **3.40** | **74** | P | **Pn** | **17 03 44.4** | **+1.6** |
| **KU6** | **Riekki** | **3.71** | **102** | *e*P | **Pn** | **17 03 49.8** | **+2.7** |
| **VAF** | **Ylistaro** | **4.11** | **169** | *e*P | **Pn** | **17 03 54.4** | **+1.8** |
| **VAF** | **Ylistaro** | **4.11** | **169** | P | **Pn** | **17 03 54.3** | **+1.8** |
| **APA0** | **Apatity Array** | **4.67** | **78** | Pn | **Pn** | **17 04 00.1** | **-0.3** |
| APA0 | | | | Sn | **Sn** | **17 04 53.8** | **-1.5** |
| | baz=284,slow=28 | | | | | | |
| APA0 | | | | Lg | Lg | 17 05 12.9 | |
| | baz=290,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **4.67** | **78** | Pn | **Pn** | **17 04 00.1** | **-0.3** |
| APA0 | | | | Sn | **Sn** | **17 04 53.8** | **-1.5** |
| | baz=284,slow=28 | | | | | | |
| APA0 | | | | Lg | Lg | 17 05 12.9 | |
| | baz=290,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **4.67** | **78** | Pn | **Pn** | **17 04 00.1** | **-0.3** |
| | SNR=50 | | | | | | |
| APA0 | | | | Sn | **Sn** | **17 04 53.8** | **-1.5** |
| | SNR=50 | | | | | | |
| APA0 | | | | Lg | Lg | 17 05 12.9 | |
| | baz=290,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.07** | **156** | Pn | **Pn** | **17 04 20.3** | **+0.9** |
| | baz=338,slow=12 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **17 05 29.1** | **-0.4** |
| | baz=344,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.07** | **156** | Pn | **Pn** | **17 04 20.3** | **+0.9** |
| | baz=338,slow=12 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **17 05 29.1** | **-0.4** |
| | baz=344,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.07** | **156** | Pn | **Pn** | **17 04 20.3** | **+0.9** |
| | SNR=50 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **17 05 29.0** | **-0.4** |
| | SNR=50 | | | | | | |
| **FINES** | **FINESS Array B** | **6.07** | **156** | Pn | **Pn** | **17 04 19.8** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=342,slow=12,SNR=5.9 | | | | | | |
| FINES | | | | Sn | **Sn** | **17 05 28.9** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=344,slow=22,SNR=1.6 | | | | | | |
| **NB2** | **NORSAR Subarra** | **7.41** | **220** | Pn | **Pn** | **17 04 37.6** | **-0.3** |
| NB2 | | | | Sn | **Sn** | **17 06 02.8** | **+0.3** |
| **NB2** | **NORSAR Subarra** | **7.41** | **220** | Pn | **Pn** | **17 04 37.6** | **-0.3** |
| NB2 | | | | Sn | **Sn** | **17 06 02.8** | **+0.3** |
| **NB2** | **NORSAR Subarra** | **7.41** | **220** | Pn | **Pn** | **17 04 37.6** | **-0.3** |
| | SNR=50 | | | | | | |
| NB2 | | | | Sn | **Sn** | **17 06 02.8** | **+0.3** |
| | SNR=50 | | | | | | |
| **NOA** | **NORSAR Array B** | **7.41** | **220** | Pn | **Pn** | **17 04 36.7** | **-1.2** |
| | comp=Z,0.1nm,0.3s,baz=41,slow=22,SNR=1.8 | | | | | | |
| NOA | | | | Sn | **Sn** | **17 06 03.1** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=299,slow=16,SNR=1.5 | | | | | | |
| **HFS** | **Hagfors** | **7.68** | **208** | Pn | **Pn** | **17 04 41.2** | **-0.4** |
| | baz=28,slow=12 | | | | | | |
| **HFS** | **Hagfors** | **7.68** | **208** | Pn | **Pn** | **17 04 41.2** | **-0.4** |
| | baz=28,slow=12 | | | | | | |
| **HFS** | **Hagfors** | **7.68** | **208** | Pn | **Pn** | **17 04 41.2** | **-0.4** |
| | SNR=50 | | | | | | |

**PRE 13 17:04:04.5±1.2, 26°.42S×27°.48E, h2km, ML2.4, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WDLM** | **Western Deep L** | **0.05** | **266** | *e*P | Pg | 17 04 06.0 | +0.2 |
| WDLM | | | | *e*S | Sg | 17 04 07.1 | +0.4 |
| WDLM | | | | AML | AML | 17 04 08.6 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **KLOF** | **Kloof** | **0.14** | **60** | *e*P | Pg | 17 04 07.2 | -0.2 |
| KLOF | | | | *e*S | Sg | 17 04 09.6 | +0.1 |
| KLOF | | | | AML | AML | 17 04 10.0 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **PRYS** | **Parys** | **0.51** | **192** | *e*P | Pb | 17 04 15.6 | -0.9 |
| PRYS | | | | *e*S | Sg | 17 04 22.1 | +0.6 |
| PRYS | | | | AML | AML | 17 04 25.9 | |
| | comp=Z,96nm,0.3s | | | | | | |
| **ERPM** | **east rand prop** | **0.69** | **84** | *e*P | Pg | 17 04 18.7 | +0.7 |
| ERPM | | | | *e*S | Sg | 17 04 27.2 | 0.0 |
| ERPM | | | | AML | AML | 17 04 27.5 | |
| | comp=Z,43nm,0.2s | | | | | | |
| **KSR** | **Koster** | **0.77** | **317** | *e*P | Pg | 17 04 19.4 | -0.1 |
| KSR | | | | *e*S | Sg | 17 04 30.1 | +0.5 |
| KSR | | | | AML | AML | 17 04 39.4 | |
| | comp=Z,19nm,0.1s | | | | | | |
| **MOAB** | **Moab Khotsong** | **0.83** | **227** | *e*P | Pg | 17 04 20.1 | -0.6 |
| MOAB | | | | *e*S | Sg | 17 04 31.9 | +0.3 |
| MOAB | | | | AML | AML | 17 04 38.5 | |
| | comp=Z,66nm,0.2s | | | | | | |
| **SWZ** | **Schweizer** | **2.06** | **248** | *e*P | Pn | 17 04 40.4 | 0.0 |
| SWZ | | | | *e*S | Sn | 17 05 06.6 | -0.2 |
| SWZ | | | | AML | AML | 17 05 09.0 | |
| | comp=Z,76nm,0.2s | | | | | | |
| **POGA** | **Pongola** | **3.81** | **105** | *e*P | Pn | 17 05 06.0 | +1.7 |
| POGA | | | | *e*S | Sn | 17 05 51.2 | +1.5 |
| POGA | | | | AML | AML | 17 06 07.1 | |
| | comp=Z,14nm,0.8s | | | | | | |
| **HVD** | **Gariep Dam** | **4.52** | **202** | *e*P | Pn | 17 05 14.6 | +0.4 |
| HVD | | | | *e*S | Sn | 17 06 06.2 | -1.3 |
| HVD | | | | AML | AML | 17 06 07.1 | |
| | comp=Z,2.7nm,0.7s | | | | | | |

*IDC* ***13*** *17:06:42.0±1.4, 27°.09N×125°.30E, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.4/40, mbtmp3.6/3, Error ellipse: s-maj=56.5km s-min=32.3km az=70.0*
*TAP* ***13*** *17:06:59.1, 23°.08N×120°.96E, h5km, ML2.8, C*
*ISCJB* ***13*** *17:07:00.3±0.3, 23°.08N±0°.01×120°.98E±0°.02, h5km±3km, mb3.1/1, Error ellipse: s-maj=3.1km s-min=2.2km az=4.2*
**ISC 13 17:06:59.7±0.9, 23°.08N±0°.02×120°.95E±0°.02, h9km±7km, n37, σ0°65/70, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ELDTW** | **Lidau** | **0.13** | **28** | *i* P | **Pg** | **17 07 03.0** | **+0.2** |
| | baz=30 | | | | | | |
| ELDTW | | | | S | **Sg** | **17 07 05.0** | **0.0** |
| | baz=30 | | | | | | |
| **STYT** | **Tauyuan** | **0.20** | **296** | *i* P | **Pg** | **17 07 04.0** | **0.0** |
| | baz=294 | | | | | | |
| STYT | | | | S | **Sg** | **17 07 07.0** | **+0.2** |
| | baz=294 | | | | | | |
| **TWG** | **Pinlang** | **0.28** | **156** | *i* P | **Pb** | **17 07 05.8** | **-1.1** |
| | baz=156 | | | | | | |
| TWG | | | | *i* S | **Sg** | **17 07 09.7** | **+0.6** |
| | baz=156 | | | | | | |
| **SGST** | **Jiashian** | **0.34** | **271** | P | **Pb** | **17 07 07.2** | **-0.7** |
| | baz=270 | | | | | | |
| SGST | | | | S | **Sb** | **17 07 12.3** | **-1.2** |
| | baz=270 | | | | | | |
| **WTP** | **Ta-pu** | **0.35** | **299** | P | **Pb** | **17 07 07.7** | **-0.5** |
| | baz=298 | | | | | | |
| WTP | | | | S | **Sb** | **17 07 13.2** | **-0.7** |
| | baz=298 | | | | | | |
| **TTN** | **Taitung** | **0.37** | **151** | *e*P | **Pb** | **17 07 07.9** | **-0.5** |
| | baz=150 | | | | | | |
| TTN | | | | S | **Sb** | **17 07 14.3** | **+0.1** |
| | baz=150 | | | | | | |
| **CHKT** | **Chengkung** | **0.38** | **86** | P | **Pb** | **17 07 09.0** | **+0.4** |
| | baz=87 | | | | | | |
| CHKT | | | | *i* S | **Sb** | **17 07 15.8** | **+1.1** |
| | baz=87 | | | | | | |
| **CHN1** | **Nanshi** | **0.41** | **286** | *e*P | **Pb** | **17 07 09.0** | **-0.1** |
| | baz=285 | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **17 07 15.1** | **-0.3** |
| | baz=285 | | | | | | |
| **YUS** | **Yu-Shan** | **0.41** | **0** | *i* P | **Pg** | **17 07 08.4** | **+0.3** |
| YUS | | | | S | **Sg** | **17 07 13.8** | **+0.3** |
| **TWF1** | **Yuli** | **0.42** | **49** | P | **Pb** | **17 07 08.4** | **-0.9** |
| | baz=49 | | | | | | |
| TWF1 | | | | S | **Sg** | **17 07 14.0** | **+0.4** |
| | baz=49 | | | | | | |
| **CHN4** | **Tsaushan** | **0.43** | **310** | P | **Pb** | **17 07 09.3** | **-0.2** |
| | baz=309 | | | | | | |
| CHN4 | | | | S | **Sb** | **17 07 16.0** | **-0.1** |
| | baz=309 | | | | | | |
| **ALS** | **Alishan** | **0.45** | **343** | *e*P | **Pb** | **17 07 09.2** | **-0.9** |
| | baz=342 | | | | | | |
| ALS | | | | *e*S | **Sb** | **17 07 16.0** | **-1.0** |
| | baz=342 | | | | | | |
| **ECL** | **Taimali** | **0.48** | **180** | *e*P | **Pg** | **17 07 08.8** | **-0.2** |
| | baz=179 | | | | | | |
| ECL | | | | *e*S | **Sg** | **17 07 14.9** | **-0.4** |
| | baz=179 | | | | | | |
| **CHN3** | **Shinhua** | **0.54** | **270** | *e*P | **Pn** | **17 07 13.0** | **-0.6** |
| | baz=269 | | | | | | |
| CHN3 | | | | *e*S | **Sn** | **17 07 23.5** | **+0.7** |
| | baz=269 | | | | | | |
| **EHY** | **Hungye** | **0.55** | **38** | P | **Pb** | **17 07 10.5** | **-1.0** |
| | baz=38 | | | | | | |
| EHY | | | | S | **Sg** | **17 07 17.4** | **-0.2** |
| | baz=38 | | | | | | |
| **TWM1** | **Shoushan** | **0.55** | **243** | *e*P | **Pb** | **17 07 11.0** | **-0.6** |
| | baz=242 | | | | | | |
| TWM1 | | | | *e*S | **Sb** | **17 07 20.2** | **+0.7** |
| | baz=242 | | | | | | |
| **CHN5** | **Tsauling** | **0.58** | **334** | *e*P | **Pb** | **17 07 11.8** | **-0.3** |
| | baz=333 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **17 07 21.0** | **+0.6** |
| | baz=333 | | | | | | |
| **CHY** | **Chiayi** | **0.64** | **311** | *e*P | **Pb** | **17 07 13.1** | **0.0** |
| | baz=310 | | | | | | |
| CHY | | | | *e*S | **Sb** | **17 07 23.1** | **+0.9** |
| | baz=310 | | | | | | |
| **EAST** | **Anshuo** | **0.70** | **188** | *e*P | **Pg** | **17 07 13.2** | **0.0** |
| | baz=187 | | | | | | |
| EAST | | | | *e*S | **Sb** | **17 07 23.4** | **-0.4** |
| | baz=187 | | | | | | |
| **WGK** | **Gukeng** | **0.70** | **330** | *e*P | **Pb** | **17 07 13.4** | **-0.8** |
| | baz=329 | | | | | | |
| WGK | | | | *e*S | **Sb** | **17 07 24.5** | **+0.5** |
| | baz=329 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.81** | **357** | *e*P | **Pb** | **17 07 15.6** | **-0.4** |
| | baz=356 | | | | | | |
| SMLT | | | | *e*S | **Sb** | **17 07 28.1** | **+1.1** |
| | baz=356 | | | | | | |
| **TYC** | **Yuchr** | **0.83** | **354** | *e*P | **Pb** | **17 07 16.5** | **+0.1** |
| | baz=354 | | | | | | |
| TYC | | | | *e*S | **Sb** | **17 07 28.8** | **+1.2** |
| | baz=354 | | | | | | |
| **ESL** | **Shilin** | **0.86** | **31** | *e*P | **Pb** | **17 07 16.1** | **-0.7** |
| | baz=31 | | | | | | |
| ESL | | | | S | **Sb** | **17 07 27.5** | **-0.9** |
| | baz=31 | | | | | | |
| **HEN** | **Hengchun** | **1.08** | **191** | *e*P | **Pb** | **17 07 20.3** | **-0.4** |
| | baz=190 | | | | | | |
| HEN | | | | *e*S | **Sn** | **17 07 37.2** | **+1.0** |
| | baz=190 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.10** | **15** | *e*P | **Pg** | **17 07 20.9** | **-0.1** |
| | baz=15 | | | | | | |
| WHF | | | | *e*S | **Sn** | **17 07 37.1** | **-0.2** |
| | baz=15 | | | | | | |
| **TWK1** | **Hengchun** | **1.14** | **187** | *e*P | **Pn** | **17 07 22.0** | **+0.2** |
| | baz=186 | | | | | | |
| TWK1 | | | | *e*S | **Sn** | **17 07 38.6** | **+1.2** |
| | baz=186 | | | | | | |
| **TWD** | **Chiawan** | **1.16** | **30** | *e*P | **Pb** | **17 07 21.8** | **-0.2** |
| | baz=30 | | | | | | |
| TWD | | | | *e*S | **Sb** | **17 07 38.6** | **+0.5** |
| | baz=30 | | | | | | |
| **TWQ1** | **Liyutan** | **1.28** | **353** | *e*P | **Pb** | **17 07 24.7** | **+0.7** |
| | baz=352 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **17 07 42.4** | **+1.4** |
| | baz=352 | | | | | | |
| **NNS** | **Nan Shan** | **1.41** | **16** | *e*P | **Pb** | **17 07 25.9** | **-0.4** |
| | baz=16 | | | | | | |
| NNS | | | | *e*S | **Sg** | **17 07 45.2** | **0.0** |
| | baz=16 | | | | | | |
| **ENA** | **Nanau** | **1.53** | **28** | *e*P | **Pg** | **17 07 28.2** | **-0.9** |
| | baz=28 | | | | | | |
| ENA | | | | *e*S | **Sb** | **17 07 47.5** | **-0.2** |
| | baz=28 | | | | | | |
| **NSTT** | **Nanjuang** | **1.55** | **2** | *e*P | **Pb** | **17 07 28.2** | **-0.4** |
| | baz=1.0 | | | | | | |
| NSTT | | | | *e*S | **Sg** | **17 07 49.4** | **-0.3** |
| | baz=1.0 | | | | | | |
| **NSK** | **Sanguang** | **1.64** | **13** | *e*P | **Pb** | **17 07 29.3** | **-0.9** |
| | baz=13 | | | | | | |
| NSK | | | | *e*S | **Sb** | **17 07 51.1** | **+0.2** |
| | baz=13 | | | | | | |
| **ENTT** | **Nioudou** | **1.66** | **20** | *e*P | **Pb** | **17 07 30.2** | **-0.2** |
| | baz=19 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **17 07 50.8** | **+0.4** |
| | baz=19 | | | | | | |
| **TWC** | **Suao** | **1.73** | **28** | *e*P | **Pb** | **17 07 31.0** | **-0.7** |
| | baz=28 | | | | | | |
| TWC | | | | *e*S | **Sb** | **17 07 53.8** | **+0.2** |
| | baz=28 | | | | | | |
| **TWE** | **Neicheng** | **1.76** | **22** | *e*P | **Pb** | **17 07 31.5** | **-0.8** |
| | baz=22 | | | | | | |
| TWE | | | | *e*S | **Sn** | **17 07 53.3** | **+0.3** |
| | baz=22 | | | | | | |
| **SONM** | **Songino Array** | **27.31** | **338** | pP | P | 17 12 37.4 | -7.4 |
| | 0.4nm,0.5s,baz=139,slow=7.1,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **48.14** | **164** | P | P | 17 15 46.7 | +6.4 |
| | 0.1nm,0.6s,baz=345,slow=9.7,SNR=4.7 | | | | | | |

*ISCJB* ***13*** *17:11:41.7±0.5, 38°.12N±0°.03×39°.07E±0°.04, h10km±6km, Error ellipse: s-maj=5.5km s-min=5.3km az=171.0*
*CSEM* ***13*** *17:11:41.8±0.2, 38°.13N×39°.07E, h10km, MD2.7, Error ellipse: s-maj=4.8km s-min=4.5km az=14.0*
*DDA* ***13*** *17:11:41.9, 38°.13N×39°.03E, h7km, Md2.7*
*ISK* ***13*** *17:11:41.6, 38°.12N×39°.07E, h8km, MD2.7*
**ISC 13 17:11:41.7±1.1, 38°.11N±0°.03×39°.04E±0°.03, h9km±11km, n21, σ0°53/32, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVRC** | **Sivrice-ELAZID** | **0.34** | **38** | PG | **Pg** | **17 11 48.5** | **0.0** |
| SVRC | | | | *e*SG | **Sg** | **17 11 53.7** | **+0.6** |
| **SVRC** | **Sivrice-ELAZID** | **0.34** | **38** | *i* Pg | **Pg** | **17 11 48.5** | **0.0** |
| SVRC | | | | *e*Sg | **Sg** | **17 11 53.7** | **+0.6** |
| **ELZG** | **Elazig** | **0.39** | **354** | *i* P | **Pg** | **17 11 49.6** | **+0.2** |
| ELZG | | | | *i* S | **Sg** | **17 11 54.9** | **+0.4** |
| **ELZG** | **Elazig** | **0.39** | **354** | P | **Pg** | **17 11 49.6** | **+0.2** |
| ELZG | | | | S | **Sg** | **17 11 54.9** | **+0.4** |
| **MALT** | **Malatya** | **0.52** | **293** | *e*PG | **Pb** | **17 11 52.9** | **-0.2** |
| MALT | | | | *e*SG | **Sb** | **17 12 00.3** | **-0.5** |
| **MALT** | **Malatya** | **0.52** | **293** | *e*Pg | **Pb** | **17 11 52.9** | **-0.2** |
| MALT | | | | *e*Sg | **Sb** | **17 12 00.3** | **-0.5** |
| **URFA** | **Urfa** | **0.69** | **194** | *e*PG | **Pb** | **17 11 56.0** | **+0.1** |
| URFA | | | | *e*SG | **Sb** | **17 12 05.6** | **0.0** |
| **URFA** | **Urfa** | **0.69** | **194** | *e*Pg | **Pb** | **17 11 56.0** | **+0.1** |
| URFA | | | | *e*Sg | **Sb** | **17 12 05.6** | **0.0** |
| **PTK** | **Pertek** | **0.83** | **20** | *e*PG | **Pg** | **17 11 57.3** | **-0.3** |
| **PTK** | **Pertek** | **0.83** | **20** | *e*Pg | **Pg** | **17 11 57.3** | **-0.3** |
| **DYBB** | **Diyarbakir** | **0.88** | **100** | *e*PG | **Pg** | **17 11 58.5** | **-0.2** |
| **AKCD** | **Akcadag** | **0.90** | **282** | *i* P | **Pg** | **17 11 59.1** | **+0.1** |
| AKCD | | | | *i* S | **Sg** | **17 12 09.7** | **-0.9** |
| **AKCD** | **Akcadag** | **0.90** | **282** | P | **Pg** | **17 11 59.1** | **+0.1** |
| AKCD | | | | S | **Sg** | **17 12 09.7** | **-0.9** |
| **DIY** | **Diyarbakir** | **0.96** | **103** | *e*Pg | **Pg** | **17 11 58.5** | **-1.7** |
| **MAZI** | **Mazidag** | **1.29** | **120** | *e*PN | **Pg** | **17 12 06.7** | **+0.2** |
| **MAZI** | **Mazidag** | **1.29** | **120** | *e*Pn | **Pg** | **17 12 06.7** | **+0.2** |
| **ILIC** | **ilic-Erzincan** | **1.39** | **345** | *e*PN | **Pb** | **17 12 07.7** | **-0.2** |
| **ILIC** | **ilic-Erzincan** | **1.39** | **345** | *e*Pn | **Pb** | **17 12 07.7** | **-0.2** |
| **AYKD** | **Aykdinkavak** | **1.90** | **249** | P | **Pg** | **17 12 18.4** | **+0.3** |
| AYKD | | | | S | **Sn** | **17 12 39.4** | **+0.9** |
| **BTMT** | **Batman** | **1.93** | **87** | *e*PN | **Pn** | **17 12 14.9** | **+0.1** |
| **BTMT** | **Batman** | **1.93** | **87** | *e*Pn | **Pn** | **17 12 14.9** | **+0.1** |

*ISK* ***13*** *17:20:45.8, 39°.85N×34°.84E, h6km, MD2.6*
*ISCJB* ***13*** *17:20:46.8±0.5, 39°.83N±0°.03×34°.81E±0°.04, h12km, Error ellipse: s-maj=5.2km s-min=4.6km az=32.2*
*CSEM* ***13*** *17:20:46.3±0.2, 39°.83N×34°.84E, h5km, MD2.6, Error ellipse: s-maj=5.8km s-min=5.5km az=100.0*
*DDA* ***13*** *17:20:46.1, 39°.88N×34°.82E, h7km, Md2.8*
**ISC 13 17:20:46.3±0.9, 39°.85N±0°.03×34°.86E±0°.03, h12km, n17, σ0°59/25, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CORM** | **Corum** | **0.38** | **332** | PG | **Pg** | **17 20 53.5** | **-0.3** |
| CORM | | | | *e*SG | **Sg** | **17 20 59.0** | **+0.1** |
| **CORM** | **Corum** | **0.38** | **332** | *i* Pg | **Pg** | **17 20 53.5** | **-0.3** |
| CORM | | | | *e*Sg | **Sg** | **17 20 59.0** | **+0.1** |
| **YOZ** | **Yozgat** | **0.41** | **120** | *e*PG | **Pg** | **17 20 54.0** | **-0.4** |
| YOZ | | | | *e*SG | **Sb** | **17 21 01.2** | **-0.6** |
| **YOZ** | **Yozgat** | **0.41** | **120** | *e*Pg | **Pg** | **17 20 54.0** | **-0.4** |
| YOZ | | | | *e*Sg | **Sb** | **17 21 01.2** | **-0.6** |
| **CDAG** | **Cicekdag** | **0.44** | **240** | *i* P | **Pg** | **17 20 54.7** | **-0.3** |
| CDAG | | | | *i* S | **Sg** | **17 21 00.7** | **-0.1** |
| **CDAG** | **Cicekdag** | **0.44** | **240** | P | **Pg** | **17 20 54.7** | **-0.3** |
| CDAG | | | | S | **Sg** | **17 21 00.7** | **-0.1** |
| **KAMT** | **Kaman** | **1.01** | **242** | *e*PG | **Pb** | **17 21 05.2** | **-0.5** |
| **KAMT** | **Kaman** | **1.01** | **242** | *e*Pg | **Pb** | **17 21 05.2** | **-0.5** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.15** | **111** | P | **Pg** | **17 21 08.1** | **-0.3** |
| CUSAR | | | | S | **Sn** | **17 21 26.4** | **+2.3** |
| **YAYX** | **Yaylak** | **1.22** | **222** | *e*PN | **Pb** | **17 21 09.2** | **-0.1** |
| **YAYX** | **Yaylak** | **1.22** | **222** | *e*Pn | **Pb** | **17 21 09.2** | **-0.1** |
| **TOS** | **Tosya** | **1.35** | **332** | *e*PN | **Pb** | **17 21 11.5** | **0.0** |
| **TOS** | **Tosya** | **1.35** | **332** | *e*Pn | **Pb** | **17 21 11.5** | **0.0** |
| **SERE** | **Sereflikochisa** | **1.35** | **229** | *e*PN | **Pg** | **17 21 12.4** | **+0.2** |
| **SERE** | **Sereflikochisa** | **1.35** | **229** | *e*Pn | **Pg** | **17 21 12.4** | **+0.2** |
| **BOYT** | **Boyabat** | **1.57** | **1** | *i* P | **Pg** | **17 21 16.2** | **-0.2** |
| **BOYT** | **Boyabat** | **1.57** | **1** | P | **Pg** | **17 21 16.2** | **-0.2** |
| BOYT | | | | S | **Sg** | **17 21 36.5** | **-0.3** |

*IDC* ***13*** *17:33:26.1±1.3, 51°.96N×170°.96W, h0km, mb3.6/7, mb1 3.9/9, mb1mx3.6/45, mbtmp3.7/9, ML3.1/2, Error ellipse: s-maj=40.4km s-min=20.0km az=168.0*
*ISCJB* ***13*** *17:33:29.5±0.9, 51°.7N±0°.1×171°.00W±0°.06, h42km, mb3.6/7, Error ellipse: s-maj=16.0km s-min=3.9km az=164.7*
*NEIC* ***13*** *17:33:32.3, 52°.15N×171°.17W, h27km, ML3.1(AEIC), After AEIC.*
**ISC 13 17:33:32.0±1.1, 51°.8N±0°.2×171°.08W±0°.06, h42km, n30, σ1°90/29, mb3.6/7, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKH** | **Nikolski High** | **1.78** | **49** | P | **Pn** | **17 33 59.3** | **-1.0** |
| **KOSE** | **Korovin Southe** | **1.91** | **287** | P | **Pn** | **17 34 02.3** | **+0.2** |
| **ATKA** | **Atka Island** | **1.96** | **282** | P | **Pn** | **17 34 01.7** | **-1.1** |
| ATKA | | | | S | **Sn** | **17 34 27.4** | **+1.2** |
| **KOKL** | **Mount Kliuchef** | **1.99** | **286** | P | **Pn** | **17 34 03.5** | **+0.3** |
| **KOWE** | **Korovin West** | **2.03** | **287** | P | **Pn** | **17 34 03.9** | **+0.1** |
| **OKSO** | **Okmok South** | **2.35** | **48** | P | **Pn** | **17 34 07.7** | **-0.4** |
| OKSO | | | | S | **Sn** | **17 34 37.2** | **+1.5** |
| **OKAK** | **Okmok** | **2.41** | **42** | P | **Pn** | **17 34 07.5** | **-1.4** |
| **OKTU** | **Okmok Mt. Tuli** | **2.42** | **49** | P | **Pn** | **17 34 09.6** | **+0.5** |
| **OKFG** | **Magazine Ridge** | **2.50** | **49** | P | **Pn** | **17 34 09.4** | **-0.7** |
| **GSTR** | **Great Sitkin T** | **3.09** | **277** | P | **Pn** | **17 34 18.0** | **-0.4** |
| **GSTD** | **Great Sitkin T** | **3.15** | **276** | P | **Pn** | **17 34 19.5** | **+0.4** |
| GSTD | | | | S | **Sn** | **17 34 56.4** | **+1.0** |
| **MSOM** | **Makushin Julie** | **3.20** | **50** | P | **Pn** | **17 34 20.1** | **+0.3** |
| **MSW** | **Makushin Switc** | **3.34** | **50** | P | **Pn** | **17 34 22.5** | **+0.8** |
| MSW | | | | S | **Sn** | **17 35 02.3** | **+2.3** |
| **UNV** | **Unalaska Valle** | **3.43** | **52** | P | **Pn** | **17 34 22.6** | **-0.3** |
| UNV | | | | S | **Sn** | **17 35 03.9** | **+1.6** |
| **ZRO** | **Akutan Zero** | **3.83** | **52** | P | **Pn** | **17 34 29.0** | **+0.6** |
| **KDAK** | **Kodiak Island** | **12.20** | **54** | Pn | **Pn** | **17 36 21.4** | **-1.6** |
| | 0.2nm,0.3s,baz=204,slow=14,SNR=1.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.00** | **286** | P | **P** | **17 37 49.8** | **0.0** |
| | 0.2nm,0.3s,baz=65,slow=17,SNR=1.9 | | | | | | |
| **SEY** | **Seymchan** | **22.28** | **314** | P | **P** | **17 38 25.2** | **0.0** |
| | 0.5nm,0.5s,baz=255,slow=22,SNR=1.2 | | | | | | |
| **INK** | **Inuvik** | **24.38** | **33** | P | **P** | **17 38 44.3** | **-1.5** |
| | 0.9nm,0.4s,baz=265,slow=6.7,SNR=1.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **31.39** | **48** | P | **P** | **17 39 48.1** | **-0.4** |
| | 0.9nm,0.8s,baz=275,slow=6.7,SNR=2.0 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **36.38** | **217** | T | T | 18 19 28.5 | |
| | baz=35,slow=79,SNR=11 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **36.39** | **217** | T | T | 18 19 40.4 | |
| | baz=35,slow=79,SNR=8.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **36.40** | **217** | T | T | 18 19 48.9 | |
| | baz=35,slow=79,SNR=6.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **37.57** | **216** | T | T | 18 21 23.1 | |
| | baz=22,slow=76,SNR=29 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **37.59** | **216** | T | T | 18 21 25.9 | |
| | baz=22,slow=76,SNR=27 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **37.59** | **216** | T | T | 18 21 25.5 | |
| | baz=22,slow=76,SNR=21 | | | | | | |
| **SONM** | **Songino Array** | **50.67** | **300** | P | **P** | **17 42 26.1** | **-0.9** |
| | 0.2nm,0.3s,baz=49,slow=4.8,SNR=2.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.82** | **87** | P | **P** | **17 42 50.5** | **0.0** |
| | 0.1nm,0.5s,baz=332,slow=7.1,SNR=1.9 | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZV** | **Kizimen** | **0.04** | **118** | *i* P | Pg | 18 16 58.3 | +0.6 |
| KZV | | | | *e*S | Sg | 18 17 00.1 | +1.6 |
| **TUMR** | **Tumrok** | **0.16** | **341** | *i* P | Pg | 18 17 00.4 | +0.5 |
| TUMR | | | | *i* S | Sg | 18 17 03.7 | +1.5 |
| **KMNR** | **Kamenistaya** | **0.63** | **360** | P | Pg | 18 17 09.2 | +0.4 |
| KMNR | | | | S | Sb | 18 17 18.9 | -0.6 |
| **KOZ** | **Kozyrevsk** | **0.95** | **348** | P | Pb | 18 17 15.5 | -0.2 |
| KOZ | | | | S | Sb | 18 17 29.2 | +0.5 |
| **MKZ** | **Mys Kozlova** | **1.04** | **123** | *e*P | Pg | 18 17 16.3 | 0.0 |
| MKZ | | | | *e*S | Sb | 18 17 31.1 | +0.2 |
| **ESO** | **Esso** | **1.18** | **313** | P | Pg | 18 17 17.7 | -1.6 |
| ESO | | | | S | Sg | 18 17 34.9 | +0.2 |
| **KII** | **Karymskiy** | **1.19** | **203** | *e*P | Pg | 18 17 19.0 | -0.4 |
| KII | | | | S | Sn | 18 17 36.3 | -0.4 |
| **SRDR** | **Sredinnyy** | **1.23** | **346** | *e*P | Pg | 18 17 20.1 | -0.1 |
| SRDR | | | | *e*S | Sn | 18 17 38.1 | +0.5 |
| **BDR** | **Baidarnaya** | **1.54** | **20** | P | Pg | 18 17 26.6 | +0.4 |
| **SMKR** | **Semkarok** | **1.61** | **25** | *e*P | Pg | 18 17 27.4 | -0.1 |
| **SRKR** | **Sorokina** | **1.61** | **18** | P | Pn | 18 17 25.8 | -0.1 |
| **KBTR** | **Krutoberegovo** | **1.82** | **52** | P | Pn | 18 17 28.9 | +0.4 |
| **GNL** | **Ganaly** | **1.97** | **224** | P | Pn | 18 17 30.9 | +0.1 |
| GNL | | | | S | Sb | 18 17 58.0 | 0.0 |
| **KRX** | **Arik** | **2.00** | **208** | *e*P | Pn | 18 17 31.8 | +0.5 |
| KRX | | | | S | Sn | 18 17 57.4 | +0.4 |
| **SDLR** | **Sedlovina** | **2.02** | **204** | *e*P | Pn | 18 17 32.2 | +0.7 |
| SDLR | | | | *e*S | Sb | 18 18 00.1 | +0.6 |
| **NLC** | **Nalytchevo** | **2.03** | **195** | S | Sb | 18 17 59.8 | +0.3 |
| **SPN** | **Mys Shipunski** | **2.04** | **184** | *e*P | Pn | 18 17 31.1 | -0.5 |
| SPN | | | | *e*S | Sn | 18 17 58.5 | +1.0 |
| **SMAR** | **Somma** | **2.05** | **205** | *e*P | Pn | 18 17 33.0 | +0.9 |
| SMAR | | | | *e*S | Sb | 18 18 00.9 | +0.2 |
| **AVH** | **Avacha** | **2.07** | **206** | *e*P | Pn | 18 17 32.9 | +0.8 |
| AVH | | | | *e*S | Sb | 18 18 01.7 | +0.9 |
| **KOK** | **Koryaka** | **2.07** | **208** | P | Pn | 18 17 33.2 | +1.1 |
| **UGLR** | **Uglovaya** | **2.10** | **204** | *e*P | Pn | 18 17 33.7 | +1.2 |
| **PET** | **Petropavlovsk** | **2.31** | **205** | *e*P | Pn | 18 17 36.8 | +1.5 |
| **APC** | **Apacha** | **2.86** | **221** | P | Pn | 18 17 43.6 | +0.7 |
| **RUS** | **Russkaya** | **2.89** | **201** | *e*P | Pn | 18 17 44.7 | +1.4 |
| **ASAK** | **Asacha** | **3.08** | **208** | P | Pb | 18 17 50.6 | -1.4 |

*ISCJB* ***13*** *18:20:45.6±1.2,31.58N±0.04×114.37W±0.04,h3km±9km, Error ellipse: s-maj=7.5km s-min=5.6km az=160.2*
*ECX* ***13*** *18:20:48.8±0.6,31.66N×114.51W,h7km,MD3.5,ML3.7*
*NEIC* ***13*** *18:20:48.5,31.68N×114.50W,h7km,MD3.7(MEX), ML3.5(ECX),ML3.5(PAS),After ECX.*
*NEIC Felt at Puerto Penasco, Sonora.*
*MEX* ***13*** *18:20:57.4±0.3,31.54N×115.73W,h12km±5km,MD3.7*

**ISC 13 18:20:44.2±1.7,31.47N±0.04×114.39W±0.04,h3km±12km, n27,σ1§31/34,2C-2D,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ECBX** | **El Chinero** | **0.57** | **271** | *e*P | **Pb** | **18 20 57.3** | **+0.4** |
| ECBX | | | | *e*S | **Sb** | **18 21 04.8** | **-0.6** |
| ECBX | | | | *e* | | 18 21 05.8 | |
| ECBX | | | | IAML | | 18 21 05.8 | |
| | comp=E,4μm,0.5s | | | | | | |
| **SPX** | **San Pedro Mart** | **1.01** | **246** | *e*P | **Pn** | **18 21 07.0** | **+1.3** |
| SPX | | | | *e*S | **Sn** | **18 21 20.9** | **+0.3** |
| **SPX** | **San Pedro Mart** | **1.01** | **246** | *i* P | **Pn** | **18 21 06.8** | **+1.1** |
| SPX | | | | *i* S | **Sg** | **18 21 14.2** | **-2.6** |
| **SPIG** | **San Pedro Mart** | **1.01** | **246** | *e*P | **Pn** | **18 21 07.0** | **+1.4** |
| SPIG | | | | *i* S | **Sg** | **18 21 14.5** | **-2.4** |
| **SPIG** | **San Pedro Mart** | **1.01** | **246** | *e*P | **Pn** | **18 21 06.7** | **+0.9** |
| SPIG | | | | *e*S | **Sn** | **18 21 20.7** | **0.0** |
| **SPIG** | **San Pedro Mart** | **1.01** | **246** | *e*P | **Pn** | **18 21 07.0** | **+1.4** |
| SPIG | | | | *i* S | **Sg** | **18 21 14.5** | **-2.4** |
| **CPBX** | **Cerro Prieto** | **1.23** | **321** | IAML | | 18 21 44.4 | |
| | comp=E,6μm,0.4s | | | | | | |
| CPBX | | | | ⇑*e* | | 18 21 44.4 | |
| **CPBX** | **Cerro Prieto** | **1.23** | **321** | *e*P | Pn | 18 21 13.1 | +4.8 |
| CPBX | | | | *i* S | **Sn** | **18 21 25.4** | **0.0** |
| **RDX** | **Rancho Dawling** | **1.40** | **290** | *e*P | **Pn** | **18 21 10.2** | **-0.7** |
| RDX | | | | *e*S | **Sg** | **18 21 27.0** | **-2.4** |
| RDX | | | | IAML | | 18 21 41.1 | |
| | comp=N,513nm,0.4s | | | | | | |
| **214A** | **Organ Pipe Nat** | **1.43** | **70** | P | **Pn** | **18 21 11.9** | **+0.8** |
| | baz=1.5 | | | | | | |
| 214A | | | | S | **Sb** | **18 21 29.2** | **-1.0** |
| | baz=1.5 | | | | | | |
| **ZAX** | **El Zacaton** | **1.61** | **272** | *e*P | **Pn** | **18 21 14.7** | **+1.0** |
| **GLA** | **Glamis** | **1.62** | **347** | P | **Pn** | **18 21 13.8** | **0.0** |
| | baz=1.4 | | | | | | |
| GLA | | | | S | **Sn** | **18 21 32.9** | **-2.3** |
| | baz=1.4 | | | | | | |
| **GLA** | **Glamis** | **1.62** | **347** | ⇓*i* P | **Pn** | **18 21 13.9** | **+0.1** |
| **YUH** | **Yuha Desert** | **1.76** | **312** | *e*P | **Pn** | **18 21 15.7** | **0.0** |
| **IBP** | **Imperial Bould** | **1.88** | **310** | Sg | **Sg** | **18 21 46.3** | **+1.8** |
| | baz=1.7 | | | | | | |
| **IBP** | **Imperial Bould** | **1.88** | **310** | *e*P | **Pn** | **18 21 17.5** | **+0.2** |
| **ECNX** | **Esteban Cantu** | **1.90** | **276** | *e*P | **Pg** | **18 21 21.8** | **+1.2** |
| **PBX** | **Punta Banda** | **2.01** | **278** | *e*P | **Pg** | **18 21 23.7** | **+0.9** |
| **CBX** | **Cerro Bola** | **2.11** | **294** | *e*P | Pn | 18 21 17.3 | -3.3 |
| CBX | | | | *i* S | Sn | 18 21 28.6 | -19 |
| **CBX** | **Cerro Bola** | **2.11** | **294** | *e*P | **Pn** | **18 21 21.2** | **+0.6** |
| CBX | | | | IAML | | 18 22 06.0 | |
| | comp=N,556nm,0.5s | | | | | | |
| CBX | | | | ⇓*e* | | 18 22 06.0 | |
| CBX | | | | IAML | | 18 22 08.0 | |
| | comp=E,679nm,0.8s | | | | | | |
| CBX | | | | ⇑*e* | | 18 22 08.0 | |
| **CBX** | **Cerro Bola** | **2.11** | **294** | *e*P | Pn | 18 21 17.3 | -3.3 |
| CBX | | | | *i* S | Sn | 18 21 28.6 | -19 |
| **MONP** | **Monument Peak** | **2.23** | **310** | Sb | **Sg** | **18 21 56.1** | **+0.1** |
| | baz=2.0 | | | | | | |
| **Y12C** | **Blythe** | **2.28** | **357** | P | **Pn** | **18 21 23.2** | **+0.4** |
| | baz=2.1 | | | | | | |
| **109C** | **Camp Elliot, M** | **2.71** | **302** | P | **Pn** | **18 21 29.4** | **+0.7** |
| | baz=2.5 | | | | | | |
| 109C | | | | Sb | **Sg** | **18 22 10.1** | **-1.1** |
| | baz=2.5 | | | | | | |
| **IRM** | **Iron Mountain** | **2.76** | **347** | P | **Pn** | **18 21 30.0** | **+0.5** |
| | baz=2.5 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **2.87** | **332** | P | **Pn** | **18 21 32.4** | **+1.4** |
| | baz=2.6 | | | | | | |
| **GMRC** | **Granite Mounta** | **3.47** | **342** | P | **Pn** | **18 21 40.2** | **+0.9** |
| | baz=3.3 | | | | | | |

*JMA* ***13*** *18:21:36.9±0.1,23.73N×121.59E,h27km±3km,M2.3*
*ISCJB* ***13*** *18:21:37.8±0.3,23.74N±0.02×121.65E±0.02,h18km±4km, Error ellipse: s-maj=4.1km s-min=2.1km az=37.5*
*TAP* ***13*** *18:21:38.0,23.79N×121.55E,h20km,ML3.1,C*

**ISC 13 18:21:38.2±0.9,23.75N±0.02×121.61E±0.02,h20km±2km, n52,σ1§03/97,4C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ESL** | **Shilin** | **0.17** | **293** | ⇑*i*P | **Pb** | **18 21 42.7** | **-0.8** |
| | baz=280 | | | | | | |
| ESL | | | | S | **Sb** | **18 21 45.8** | **-1.4** |
| | baz=280 | | | | | | |
| **HWA** | **Hwalien** | **0.23** | **360** | P | **Pb** | **18 21 43.9** | **-0.1** |
| | baz=16 | | | | | | |
| HWA | | | | *e*S | **Sb** | **18 21 50.3** | **+2.4** |
| | baz=16 | | | | | | |
| **TWD** | **Chiawan** | **0.33** | **359** | P | **Pb** | **18 21 45.1** | **-0.2** |
| | baz=9.0 | | | | | | |
| TWD | | | | S | **Sb** | **18 21 51.2** | **+0.9** |
| | baz=9.0 | | | | | | |
| **EHY** | **Hungye** | **0.35** | **227** | *e*P | **Pb** | **18 21 45.2** | **-0.5** |
| | baz=215 | | | | | | |
| EHY | | | | *e*S | **Sb** | **18 21 50.5** | **-0.3** |
| | baz=215 | | | | | | |
| **TWF1** | **Yuli** | **0.48** | **216** | P | **Pb** | **18 21 47.4** | **-0.6** |
| | baz=207 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.50** | **322** | ⇑*i*P | **Pb** | **18 21 47.4** | **-1.2** |
| | baz=323 | | | | | | |
| WHF | | | | *i* S | **Sb** | **18 21 54.4** | **-1.3** |
| | baz=323 | | | | | | |
| **TWT** | **Tachien** | **0.64** | **322** | P | **Pb** | **18 21 50.1** | **-0.7** |
| | baz=321 | | | | | | |
| TWT | | | | S | **Sb** | **18 21 58.6** | **-0.9** |
| | baz=321 | | | | | | |
| **YUS** | **Yu-Shan** | **0.65** | **247** | ⇑*i*P | **Pb** | **18 21 51.0** | **-0.2** |
| | baz=240 | | | | | | |
| YUS | | | | *i* S | **Sb** | **18 21 59.2** | **-0.9** |
| | baz=240 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.66** | **282** | ⇑*i*P | **Pb** | **18 21 50.1** | **-1.0** |
| | baz=278 | | | | | | |
| SMLT | | | | *i* S | **Sb** | **18 21 59.3** | **-0.6** |
| | baz=278 | | | | | | |
| **CHKT** | **Chengkung** | **0.68** | **199** | *e*P | **Pb** | **18 21 51.5** | **+0.1** |
| | baz=193 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **18 22 02.7** | **+0.1** |
| | baz=193 | | | | | | |
| **ENA** | **Nanau** | **0.69** | **10** | P | **Pb** | **18 21 50.9** | **-0.6** |
| | baz=15 | | | | | | |
| ENA | | | | *e*S | **Sb** | **18 22 00.5** | **-0.2** |
| | baz=15 | | | | | | |
| **TYC** | **Yuchr** | **0.70** | **283** | P | **Pb** | **18 21 50.8** | **-0.9** |
| | baz=280 | | | | | | |
| TYC | | | | S | **Sb** | **18 22 00.3** | **-0.7** |
| | baz=280 | | | | | | |
| **NNS** | **Nan Shan** | **0.72** | **343** | *e*P | **Pb** | **18 21 51.2** | **-1.0** |
| | baz=346 | | | | | | |
| NNS | | | | *i* S | **Sb** | **18 22 00.3** | **-1.4** |
| | baz=346 | | | | | | |
| **ALS** | **Alishan** | **0.77** | **252** | P | **Pb** | **18 21 52.9** | **-0.1** |
| | baz=247 | | | | | | |
| ALS | | | | S | **Sb** | **18 22 02.4** | **-0.8** |
| | baz=247 | | | | | | |
| **ELDTW** | **Lidau** | **0.77** | **224** | *e*P | **Pb** | **18 21 51.8** | **-1.2** |
| | baz=218 | | | | | | |
| **WNT** | **Mingjian** | **0.85** | **279** | *e*P | **Pn** | **18 21 54.5** | **-0.6** |
| | baz=275 | | | | | | |
| WNT | | | | S | **Sn** | **18 22 06.5** | **-0.5** |
| | baz=275 | | | | | | |
| **CHN5** | **Tsauling** | **0.86** | **260** | P | **Pb** | **18 21 54.3** | **-0.2** |
| | baz=256 | | | | | | |
| CHN5 | | | | S | **Sn** | **18 22 06.6** | **-0.7** |
| | baz=256 | | | | | | |
| **TWC** | **Suao** | **0.89** | **14** | *e*P | **Pb** | **18 21 54.6** | **-0.3** |
| | baz=18 | | | | | | |
| TWC | | | | *e*S | **Sb** | **18 22 05.9** | **-0.4** |
| | baz=18 | | | | | | |
| **ENTT** | **Nioudou** | **0.89** | **358** | *e*P | **Pb** | **18 21 54.0** | **-0.9** |
| | baz=1.0 | | | | | | |
| ENTT | | | | *e*S | **Sb** | **18 22 05.8** | **-0.6** |
| | baz=1.0 | | | | | | |
| **TCU** | **Taichung** | **0.94** | **295** | *e*P | **Pn** | **18 21 56.3** | **+0.1** |
| | baz=293 | | | | | | |
| TCU | | | | *e*S | **Sn** | **18 22 10.9** | **+1.8** |
| | baz=293 | | | | | | |
| **NSK** | **Sanguang** | **0.95** | **346** | *e*P | **Pb** | **18 21 55.4** | **-0.6** |
| | baz=348 | | | | | | |
| NSK | | | | *e*S | **Sb** | **18 22 06.9** | **-1.4** |
| | baz=348 | | | | | | |
| **WGK** | **Gukeng** | **0.96** | **267** | *e*P | **Pn** | **18 21 56.4** | **-0.1** |
| | baz=263 | | | | | | |
| WGK | | | | *e*S | **Sn** | **18 22 09.3** | **-0.2** |
| | baz=263 | | | | | | |
| **TWQ1** | **Liyutan** | **0.97** | **308** | *e*P | **Pn** | **18 21 56.7** | **+0.1** |
| | baz=307 | | | | | | |
| TWQ1 | | | | S | **Sn** | **18 22 09.1** | **-0.7** |
| | baz=307 | | | | | | |
| **STYT** | **Tauyuan** | **0.97** | **233** | *e*P | **Pb** | **18 21 56.1** | **-0.3** |
| | baz=228 | | | | | | |
| STYT | | | | *e*S | **Sb** | **18 22 08.9** | **+0.2** |
| | baz=228 | | | | | | |
| **TWE** | **Neicheng** | **0.97** | **3** | *e*P | **Pn** | **18 21 57.0** | **+0.3** |
| | baz=7.0 | | | | | | |
| TWE | | | | S | **Sb** | **18 22 08.6** | **-0.1** |
| | baz=7.0 | | | | | | |
| **CHN4** | **Tsaushan** | **1.01** | **247** | P | **Pn** | **18 21 56.9** | **-0.3** |
| | baz=243 | | | | | | |
| CHN4 | | | | S | **Sn** | **18 22 11.0** | **+0.2** |
| | baz=243 | | | | | | |
| **WTP** | **Ta-pu** | **1.04** | **242** | *e*P | **Pn** | **18 21 57.6** | **-0.1** |
| | baz=237 | | | | | | |
| WTP | | | | *e*S | **Sn** | **18 22 11.9** | **+0.3** |
| | baz=237 | | | | | | |
| **NSTT** | **Nanjuang** | **1.04** | **328** | *e*P | **Pn** | **18 21 57.4** | **-0.2** |
| | baz=329 | | | | | | |
| NSTT | | | | *e*S | **Sb** | **18 22 10.0** | **-0.7** |
| | baz=329 | | | | | | |
| **TWG** | **Pinlang** | **1.04** | **208** | *e*P | **Pb** | **18 21 55.4** | **-2.2** |
| | baz=204 | | | | | | |
| **CHN2** | **Minshiung** | **1.06** | **259** | *e*S | **Sn** | **18 22 12.7** | **+0.7** |
| | baz=255 | | | | | | |
| **CHY** | **Chiayi** | **1.11** | **257** | *e*P | **Pb** | **18 21 59.9** | **+1.2** |
| | baz=253 | | | | | | |
| CHY | | | | *e*S | **Sn** | **18 22 13.8** | **+0.6** |
| | baz=253 | | | | | | |
| **TWK** | **Hsinying** | **1.13** | **245** | *e*P | **Pb** | **18 21 59.6** | **+0.5** |
| | baz=241 | | | | | | |
| TWK | | | | *e*S | **Sn** | **18 22 14.6** | **+0.7** |
| | baz=241 | | | | | | |
| **EGS** | | **1.13** | **15** | *e*P | **Pb** | **18 22 01.5** | **+2.4** |
| | baz=18 | | | | | | |
| EGS | | | | *e*S | **Sn** | **18 22 15.0** | **+1.1** |
| | baz=18 | | | | | | |
| **CHN1** | **Nanshi** | **1.14** | **241** | *e*P | **Pb** | **18 21 59.2** | **+0.1** |
| | baz=237 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **18 22 15.2** | **+1.3** |
| | baz=237 | | | | | | |
| **SGST** | **Jiashian** | **1.15** | **235** | *e*P | **Pb** | **18 22 00.0** | **+0.7** |
| | baz=231 | | | | | | |
| SGST | | | | *e*S | **Sn** | **18 22 15.6** | **+1.4** |
| | baz=231 | | | | | | |
| **ECL** | **Taimali** | **1.29** | **208** | *e*P | **Pn** | **18 21 59.0** | **-2.0** |
| | baz=204 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.30** | **15** | *e*P | **Pb** | **18 22 02.4** | **+0.4** |
| | baz=18 | | | | | | |
| TWB1 | | | | *e*S | **Sb** | **18 22 19.1** | **+0.8** |
| | baz=18 | | | | | | |
| **CHN3** | **Shinhua** | **1.32** | **240** | *e*S | **Sb** | **18 22 22.6** | **+3.9** |
| | baz=236 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.33** | **7** | *e*P | **Pb** | **18 22 01.6** | **-0.8** |
| | baz=9.0 | | | | | | |
| NWF | | | | *e*S | **Sb** | **18 22 22.2** | **+3.1** |
| | baz=9.0 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.36** | **353** | *e*P | **Pb** | **18 22 02.9** | **-0.1** |
| | baz=354 | | | | | | |
| TWS1 | | | | *e*S | **Sb** | **18 22 21.0** | **+1.1** |
| | baz=354 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.41** | **60** | P | **Pn** | **18 22 02.3** | **-0.4** |
| JYNG | | | | S | **Sb** | **18 22 21.3** | **-0.1** |
| **TWM1** | **Shoushan** | **1.42** | **230** | *e*P | **Pb** | **18 22 05.6** | **+1.6** |
| | baz=226 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.47** | **61** | P | **Pn** | **18 22 03.3** | **-0.2** |
| YOJ | | | | S | **Sn** | **18 22 21.9** | **-0.2** |
| **EAST** | **Anshuo** | **1.53** | **207** | *e*P | **Pn** | **18 22 05.0** | **+0.7** |
| | baz=204 | | | | | | |
| EAST | | | | *e*S | **Sb** | **18 22 26.5** | **+1.8** |
| | baz=204 | | | | | | |
| **LAY** | **Lan-yu** | **1.70** | **182** | *e*P | **Pn** | **18 22 04.9** | **-1.8** |
| | baz=179 | | | | | | |
| LAY | | | | *e*S | **Sn** | **18 22 27.6** | **-0.3** |
| | baz=179 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **2.03** | **73** | P | **Pn** | **18 22 11.0** | **-0.2** |
| IRIF | | | | S | **Sn** | **18 22 36.3** | **+0.3** |
| **HATJ** | **Hateruma jima** | **2.04** | **81** | P | **Pn** | **18 22 11.0** | **-0.3** |
| HATJ | | | | S | **Sn** | **18 22 35.7** | **-0.5** |
| **JKRS** | **Kuro-shima** | **2.25** | **77** | P | **Pn** | **18 22 14.6** | **+0.3** |
| JKRS | | | | S | **Sn** | **18 22 42.1** | **+0.6** |
| **JIJ** | **Ishigaki jima** | **2.40** | **75** | P | **Pn** | **18 22 15.9** | **-0.4** |
| JIJ | | | | S | **Sn** | **18 22 44.2** | **-0.9** |
| **JISG** | | **2.61** | **71** | P | **Pn** | **18 22 18.7** | **-0.5** |
| JISG | | | | S | **Sn** | **18 22 49.0** | **-1.3** |
| **JTJ** | **Tarama** | **2.96** | **72** | P | **Pn** | **18 22 23.8** | **-0.3** |
| JTJ | | | | S | **Sn** | **18 22 59.7** | **+0.6** |
| **JIRB** | **Irabujima** | **3.43** | **71** | P | **Pn** | **18 22 31.0** | **+0.5** |
| JIRB | | | | S | **Sn** | **18 23 09.8** | **-0.7** |

**IDC 13 18:25:26.4±3.6,5.71S×150.15E,h0km,mb3.0/2, mb1 3.4/2,mb1mx3.1/28,mbtmp3.1/2,Error ellipse: s-maj=135.3km s-min=47.5km az=117.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.89** | **226** | P | P | 18 30 10.8 | +0.3 |
| | 0.6nm,0.5s,baz=51,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **23.73** | **220** | P | P | 18 30 40.1 | -0.4 |
| | 0.2nm,0.7s,baz=54,slow=9.3,SNR=8.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.04** | **286** | PKPbc | PKPbc | 18 45 14.5 | -0.6 |
| | 0.3nm,0.6s,baz=91,slow=2.2,SNR=5.3 | | | | | | |

**KMA 13 18:25:41.2±0.1,34.98N×127.40E,h4km±3km,19C-20D, Error ellipse: s-maj=1.3km s-min=1.1km az=154.0, South Korea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSYSU** | **YEOSU** | **0.20** | **52** | ⇓P | Pg | 18 25 46.0 | +0.8 |
| **KSYSU** | **YEOSU** | **0.20** | **52** | ⇓P | Pg | 18 25 46.0 | +0.8 |
| KSYSU | | | | ⇓S | Sg | 18 25 49.2 | +1.2 |
| **KOHB** | **KOHEUNG** | **0.37** | **196** | ⇓P | Pg | 18 25 48.7 | +0.3 |
| KOHB | | | | ⇓S | Sg | 18 25 53.7 | +0.4 |
| **KOHB** | **KOHEUNG** | **0.37** | **196** | ⇓P | Pg | 18 25 48.7 | +0.3 |
| KOHB | | | | ⇓S | Sg | 18 25 53.7 | +0.4 |
| **KSKWJ** | **Gwangju** | **0.38** | **298** | ⇑P | Pg | 18 25 48.8 | +0.2 |
| KSKWJ | | | | ⇓S | Sg | 18 25 53.7 | 0.0 |
| **KSKWJ** | **Gwangju** | **0.38** | **298** | ⇑P | Pg | 18 25 48.8 | +0.2 |
| KSKWJ | | | | ⇓S | Sg | 18 25 53.7 | 0.0 |
| **KSKOH** | **Goheung** SNR=556 | **0.38** | **196** | ⇓P | Pg | 18 25 48.8 | +0.2 |
| **KSKOH** | **Goheung** SNR=556 | **0.38** | **196** | ⇓P | Pg | 18 25 48.8 | +0.2 |
| **KSNAW** | **Namwon** SNR=40 | **0.42** | **353** | ⇑P | Pg | 18 25 49.8 | +0.4 |
| **KSNAW** | **Namwon** SNR=40 | **0.42** | **353** | ⇑P | Pg | 18 25 49.8 | +0.4 |
| **KSGWJ** | **Gwangju-acc** SNR=15 | **0.46** | **295** | ⇓P | Pg | 18 25 50.1 | +0.1 |
| KSGWJ | | | | ⇑S | Sg | 18 25 56.1 | 0.0 |
| **KSJAH** | **Jangheung** SNR=76 | **0.49** | **234** | ⇑P | Pg | 18 25 50.8 | +0.1 |
| **KSJIN** | **Jinju** SNR=6.7 | **0.55** | **70** | ⇑P | Pg | 18 25 52.0 | +0.3 |
| **KSMOK** | **Mokpo** | **0.59** | **249** | ⇑P | Pg | 18 25 52.5 | 0.0 |
| **KSMOK** | **Mokpo** | **0.59** | **249** | ⇑P | Pg | 18 25 52.5 | 0.0 |
| **KSIMS** | **Imsil** SNR=27 | **0.63** | **351** | P | Pg | 18 25 53.6 | +0.3 |
| KSIMS | | | | ⇓S | Sg | 18 26 01.9 | +0.3 |
| **KSIMS** | **Imsil** SNR=27 | **0.63** | **351** | P | Pg | 18 25 53.6 | +0.3 |
| KSIMS | | | | ⇓S | Sg | 18 26 01.9 | +0.3 |
| **KSJEU** | **Jeongeup** SNR=70 | **0.64** | **323** | ⇑P | Pg | 18 25 53.5 | -0.1 |
| **KSJEU** | **Jeongeup** SNR=70 | **0.64** | **323** | ⇑P | Pg | 18 25 53.5 | -0.1 |
| **KSKCH** | **Geochang** | **0.76** | **34** | ⇑P | Pg | 18 25 55.5 | -0.4 |
| **KSKCH** | **Geochang** | **0.76** | **34** | ⇑P | Pg | 18 25 55.5 | -0.4 |
| **KSWAN** | **Wando** | **0.82** | **225** | ⇓P | Pg | 18 25 56.7 | -0.3 |
| **KSTOY** | **TONGYEONG** | **0.86** | **99** | ⇓P | Pg | 18 25 57.7 | 0.0 |
| KSTOY | | | | ⇓S | Sg | 18 26 09.4 | +0.6 |
| **KSTOY** | **TONGYEONG** | **0.86** | **99** | ⇓P | Pg | 18 25 57.7 | 0.0 |
| KSTOY | | | | ⇓S | Sg | 18 26 09.4 | +0.6 |
| **KSJEO** | **Jeonju** | **0.96** | **355** | ⇑P | Pg | 18 25 59.5 | -0.2 |
| **KSMAS** | **Masan** | **0.98** | **78** | ⇑P | Pg | 18 25 59.7 | -0.3 |
| KSMAS | | | | ⇑S | Sg | 18 26 12.6 | -0.1 |
| **KSMAS** | **Masan** | **0.98** | **78** | ⇑P | Pg | 18 25 59.7 | -0.3 |
| KSMAS | | | | ⇑S | Sg | 18 26 12.6 | -0.1 |
| **KSJDO** | **Jindo** SNR=9.0 | **1.03** | **241** | ⇑P | Pg | 18 26 00.4 | -0.5 |
| **KSDAG** | **Daegu** SNR=12 | **1.45** | **57** | ⇓P | Pn | 18 26 08.0 | -0.2 |
| **KSBON** | **Boeun** SNR=20 | **1.55** | **12** | P | Pg | 18 26 10.8 | -0.2 |
| **KSJJU** | **Jeju** SNR=7.2 | **1.70** | **205** | P | Pn | 18 26 12.0 | +0.3 |

*IDC* ***13*** *18:47:27.8±0.7,38.79N×70.95E,h0km,mb3.9/16, mb1 4.1/22,mb1mx3.9/48,mbtmp4.0/22,ML3.7/6,MS2.9/7, Ms1 2.9/7,ms1mx2.7/41,Error ellipse: s-maj=14.8km s-min=9.5km az=152.0*
*ISCJB* ***13*** *18:47:28.3±0.3,38.78N±0.03×70.87E±0.03,h10km, mb3.9/25,MS2.9/4,Error ellipse: s-maj=4.5km s-min=3.1km az=155.7*
*BJI* ***13*** *18:47:28.0,39.19N×70.69E,h8km,mb4.2/7,mB4.4/6, ML3.8/4,Ms3.5/3,Ms7 3.3/3*
*NNC* ***13*** *18:47:31.6±0.9,39.01N×70.90E,h0km,mb4.5,mpv4.3, Error ellipse: s-maj=12.2km s-min=4.7km az=147.0*
*MOS* ***13*** *18:47:32.9±1.5,39.08N×70.90E,h33km,mb4.2/17,Error ellipse: s-maj=7.4km s-min=5.4km az=92.2*

**ISC 13 18:47:30.6±0.5,38.95N±0.05×70.90E±0.03,h10km,n138, σ1§86/138,mb4.0/25,MS2.9/4,29C-17D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **1.62** | **265** | ⇑Pn | **Pn** | **18 48 00.6** | **+1.2** |
| | 75nm,0.3s | | | | | | |
| DZET | | | | ⇓Pg | **Pb** | **18 48 02.4** | **+1.6** |
| | 1μm,0.4s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 18 48 25.3 | |
| | 2μm,0.5s | | | | | | |
| **DZET** | **Dzherino** | **1.62** | **265** | PN | **Pn** | **18 48 00.7** | **+1.3** |
| DZET | | | | S | **Sg** | **18 48 25.3** | **+2.4** |
| DZET | | | | pmax | pmax | | |
| | comp=Z,2μm,0.5s | | | | | | |
| DZET | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.27** | **61** | ⇑Pn | **Pn** | **18 48 09.6** | **+1.1** |
| | comp=N,32nm,0.7s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 18 48 44.0 | |
| | comp=N,426nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.27** | **61** | PN | **Pn** | **18 48 10.0** | **+1.5** |
| SFK | | | | S | **Sb** | **18 48 41.1** | **+0.9** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,167nm,0.8s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,321nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **3.73** | **19** | ⇓Pn | **Pn** | **18 48 29.9** | **+1.4** |
| | comp=N,29nm,0.5s | | | | | | |
| MNAS | | | | ⇑Pg | **Pb** | **18 48 36.7** | **0.0** |
| | comp=N,92nm,0.9s | | | | | | |
| MNAS | | | | ⇑Sn | **Sb** | **18 49 17.2** | **-4.9** |
| | comp=N,211nm,0.7s | | | | | | |
| MNAS | | | | Lg | Lg | 18 49 30.5 | |
| **MNAS** | **Manas** | **3.73** | **19** | PN | **Pn** | **18 48 31.3** | **+2.9** |
| MNAS | | | | S | **Sb** | **18 49 18.6** | **-3.5** |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,92nm,0.9s | | | | | | |
| MNAS | | | | smax | smax | | |
| | comp=N,211nm,0.7s | | | | | | |
| **AML** | **Almayashu** SNR=49 | **3.82** | **33** | P | **Pn** | **18 48 31.9** | **+2.0** |
| **KSH** | **Kashi** | **3.98** | **80** | Pn | **Pn** | **18 48 31.0** | **-0.8** |
| KSH | | | | SMN | | | |
| | comp=N,240nm,0.9s | | | | | | |
| KSH | | | | SME | | | |
| | comp=N,310nm,1.2s | | | | | | |
| **KK31** | **Karatay Array** | **4.16** | **356** | ⇓Pn | **Pn** | **18 48 35.2** | **+1.1** |
| | comp=N,12nm,0.3s,baz=170,slow=12,SNR=428 | | | | | | |
| KK31 | | | | ⇑Pg | **Pb** | **18 48 46.4** | **+2.6** |
| | comp=N,22nm,0.5s,baz=174,slow=14,SNR=4.9 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **18 49 24.3** | **+1.5** |
| | comp=N,30nm,0.5s,baz=167,slow=23,SNR=3.9 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 18 49 39.2 | |
| | comp=N,41nm,0.4s,baz=162,slow=24,SNR=4.5 | | | | | | |
| **KK31** | **Karatay Array** | **4.16** | **356** | PN | **Pn** | **18 48 35.8** | **+1.7** |
| KK31 | | | | S | **Sn** | **18 49 26.4** | **+3.6** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,16nm,0.2s | | | | | | |
| KK31 | | | | smax | smax | | |
| | comp=N,67nm,0.4s | | | | | | |
| **UCH** | **Uchtor** SNR=53 | **4.27** | **39** | P | **Pn** | **18 48 39.0** | **+2.8** |
| **EKS2** | **Erkin-Say** SNR=50 | **4.30** | **30** | P | **Pn** | **18 48 38.0** | **+1.8** |
| **KZA** | **Kyzart** SNR=55 | **4.55

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,140nm,1.8s | | | | | | | | |
| **KBK** | **Karagaybulak** | **4.81** | **38** | P | | Pn | 18 48 46.8 | +3.6 | |
| | SNR=87 | | | | | | | | |
| **CHMS** | **Chumysh** | **4.98** | **35** | P | | **Pn** | **18 48 48.1** | **+2.6** | |
| | SNR=48 | | | | | | | | |
| **USP** | **Ospenovka** | **5.09** | **31** | P | | **Pn** | **18 48 49.1** | **+2.0** | |
| | SNR=44 | | | | | | | | |
| **CEP** | **Cherat** | **5.18** | **171** | P | | Pn | 18 48 54.4 | +6.0 | |
| CEP | | | | S | | Sn | 18 49 58.0 | +10 | |
| **ULHL** | **Ulahol** | **5.23** | **49** | P | | Pn | 18 48 52.9 | +3.9 | |
| | SNR=11 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.32** | **40** | ⇑Pn | | **Pn** | **18 48 52.9** | **+2.5** | |
| | comp=Z,24nm,0.6s | | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sn** | **18 49 54.6** | **+2.8** | |
| | comp=Z,66nm,0.8s | | | | | | | | |
| TKM2 | | | | ⇓Lg | | Lg | 18 50 19.6 | | |
| | comp=Z,61nm,0.9s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.32** | **40** | *i* PN | | **Pn** | **18 48 52.8** | **+2.5** | |
| TKM2 | | | | pmax | | pmax | | | |
| | comp=Z,25nm,0.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **5.32** | **40** | P | | Pn | 18 48 54.0 | +3.6 | |
| | SNR=15 | | | | | | | | |
| **CHCP** | **Chirah Chowk** | **5.62** | **159** | P | | Pn | 18 48 59.4 | +5.1 | |
| **THW** | **Thamme Wali** | **6.18** | **173** | P | | Pn | 18 49 06.5 | +4.5 | |
| **AAA** | **Alma-Ata** | **6.28** | **45** | *i* P* | | **Pg** | **18 49 29.4** | **-1.4** | |
| AAA | | | | pmax | | pmax | | | |
| | comp=Z,43nm,0.6s | | | | | | | | |
| **PDGK** | **Podgornoye** | **7.81** | **53** | ⇑Pn | | **Pn** | **18 49 26.6** | **+2.4** | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| PDGK | | | | ⇑Lg | | Lg | 18 51 37.5 | | |
| | comp=Z,31nm,0.9s | | | | | | | | |
| **PDGK** | **Podgornoye** | **7.81** | **53** | P | | **Pn** | **18 49 27.0** | **+2.7** | |
| PDGK | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **IMYA** | **Miami** | **8.95** | **256** | *e*P | | **Pn** | **18 49 38.6** | **-1.6** | |
| **OTUK** | **Ortayu** | **9.35** | **6** | ⇑Pn | | **Pn** | **18 49 45.5** | **+0.1** | |
| | comp=Z,4.6nm,0.7s | | | | | | | | |
| OTUK | | | | ⇑Lg | | Lg | 18 52 27.9 | | |
| | comp=Z,8.2nm,0.6s | | | | | | | | |
| **OTUK** | **Ortayu** | **9.35** | **6** | P | | **Pn** | **18 49 44.2** | **-1.1** | |
| OTUK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| **ISRO** | **Mashad** | **9.44** | **257** | *e*P | | **Pn** | **18 49 45.5** | **-1.3** | |
| **IMOG** | **Moghan** | **9.61** | **256** | *e*P | | **Pn** | **18 49 48.8** | **-0.5** | |
| **IPAY** | **Payeh** | **9.76** | **259** | *e*P | | **Pn** | **18 49 50.5** | **-0.8** | |
| **IEMG** | **Emamgholi** | **9.77** | **265** | *e*P | | **Pn** | **18 49 49.2** | **-2.2** | |
| **IAKL** | **Akhelmad** | **9.90** | **260** | *e*P | | **Pn** | **18 49 52.2** | **-1.0** | |
| **GEYT** | **Alibeck** | **10.08** | **268** | Pn | | Pn | 18 49 53.2 | -2.3 | |
| | comp=Z,1.6nm,0.3s,baz=97,slow=9.5,SNR=14 | | | | | | | | |
| GEYT | | | | Sn | | **Sn** | **18 51 46.3** | **-2.4** | |
| | comp=Z,0.9nm,0.3s,baz=52,slow=12,SNR=3.2 | | | | | | | | |
| GEYT | | | | LR | | LR | 18 54 39.9 | | |
| | comp=Z,63nm,18.4s,baz=25,slow=43 | | | | | | | | |
| **ISFR** | **Sfrayin** | **10.36** | **263** | *e*P | | **Pn** | **18 49 58.4** | **-1.1** | |
| **IMON** | **Monand** | **10.75** | **241** | *e*P | | **Pn** | **18 50 06.3** | **+1.4** | |
| **IDAH** | **Dahanechah** | **10.89** | **239** | *e*P | | **Pn** | **18 50 07.6** | **+0.9** | |
| **MK31** | **Makanchi Array** | **11.45** | **43** | Pn | | **Pn** | **18 50 16.7** | **+2.6** | |
| | comp=Z,4.2nm,0.8s,baz=222,slow=11,SNR=11 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **11.45** | **43** | Pn | | **Pn** | **18 50 15.3** | **+1.2** | |
| | comp=Z,0.2nm,0.3s,baz=232,slow=14,SNR=14 | | | | | | | | |
| MKAR | | | | Lg | | Lg | 18 53 38.1 | | |
| | comp=Z,0.1nm,0.3s,baz=211,slow=25,SNR=3.6 | | | | | | | | |
| MKAR | | | | LR | | LR | 18 54 10.2 | | |
| | comp=Z,19nm,19.1s,baz=218,slow=35 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.85** | **22** | Pn | | **Pn** | **18 50 30.7** | **-2.5** | |
| **KURBB** | **Kurchatov Arra** | **12.85** | **22** | Pn | | **Pn** | **18 50 31.2** | **-2.1** | |
| | comp=Z,0.1nm,0.3s,baz=215,slow=12,SNR=12 | | | | | | | | |
| KURBB | | | | Lg | | Lg | 18 54 17.0 | | |
| | comp=Z,0.1nm,0.3s,baz=217,slow=29,SNR=5.0 | | | | | | | | |
| **AB31** | **Akbulak array** | **12.95** | **326** | ⇑Pn | | **Pn** | **18 50 32.3** | **-2.3** | |
| | comp=Z,6.3nm,0.5s,baz=131,slow=14,SNR=203 | | | | | | | | |
| AB31 | | | | ⇑Sn | | Sn | 18 52 51.9 | -6.7 | |
| | comp=Z,12nm,0.5s,baz=139,slow=24,SNR=21 | | | | | | | | |
| **AB31** | **Akbulak array** | **12.95** | **326** | P | | **Pn** | **18 50 34.0** | **-0.6** | |
| AB31 | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.3s | | | | | | | | |
| **KURK** | **Kurchatov** | **12.96** | **22** | Pn | | **Pn** | **18 50 34.1** | **-0.7** | |
| **KURK** | **Kurchatov** | **12.96** | **22** | P | | Pn | 18 50 31.2 | -3.6 | |
| **VOSK** | **Vostochnaya** | **13.77** | **0** | ⇑Pn | | **Pn** | **18 50 44.8** | **-1.1** | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| VOSK | | | | ⇑Sn | | Sn | 18 53 09.4 | -9.3 | |
| | comp=Z,3.6nm,1.0s | | | | | | | | |
| **VOSK** | **Vostochnaya** | **13.77** | **0** | *ce*P | | **Pn** | **18 50 45.2** | **-0.6** | |
| VOSK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **ZRNK** | **Zerenda** | **14.06** | **355** | ⇓Pn | | **Pn** | **18 50 47.7** | **-2.1** | |
| | comp=Z,6.2nm,1.1s | | | | | | | | |
| **ZRNK** | **Zerenda** | **14.06** | **355** | *i* P | | **Pn** | **18 50 47.6** | **-2.1** | |
| ZRNK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **14.08** | **359** | Pn | | **Pn** | **18 50 48.2** | **-1.8** | |
| | comp=Z,9.3nm,1.3s,baz=163,slow=12,SNR=10 | | | | | | | | |
| **BVA0** | **Borovoye Array** | **14.08** | **359** | P | | **Pn** | **18 50 48.2** | **-1.8** | |
| BVA0 | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.3s | | | | | | | | |
| **BRVK** | **Borovoye** | **14.11** | **358** | Pn | | **Pn** | **18 50 48.5** | **-1.9** | |
| BRVK | | | | ⇓Lg | | Lg | 18 54 52.7 | | |
| | comp=Z,24nm,1.4s | | | | | | | | |
| **BRVK** | **Borovoye** | **14.11** | **358** | *e*P | | **Pn** | **18 50 49.0** | **-1.5** | |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.7s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.66** | **326** | ⇑Pn | | **Pn** | **18 50 57.5** | **-0.5** | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| AKTO | | | | ⇓Sn | | **Sn** | **18 53 38.4** | **-2.0** | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.66** | **326** | Pn | | **Pn** | **18 50 56.5** | **-1.4** | |
| | comp=Z,0.9nm,0.3s,baz=144,slow=11,SNR=16 | | | | | | | | |
| AKTO | | | | Sn | | **Sn** | **18 53 35.4** | **-5.0** | |
| | comp=Z,0.6nm,0.3s,baz=153,slow=20,SNR=7.9 | | | | | | | | |
| AKTO | | | | LR | | LR | 18 57 04.1 | | |
| | comp=Z,78nm,21.2s,baz=144,slow=39 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.66** | **326** | P | | **Pn** | **18 50 58.3** | **+0.3** | |
| AKTO | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **GKN** | **Gorkha** | **15.81** | **130** | *e*P | | **Pn** | **18 51 10.6** | **-2.9** | |
| | comp=Z,5.3nm,0.3s | | | | | | | | |
| **KKN** | **Kakani** | **16.36** | **129** | *e*P | | Pn | 18 51 16.9 | -3.6 | |
| | comp=Z,4.6nm,0.4s | | | | | | | | |
| **PKIN** | **Phulchoki** | **16.58** | **129** | *e*P | | Pn | 18 51 19.7 | -3.8 | |
| **PKIN** | **Phulchoki** | **16.58** | **129** | *e*P | | **Pn** | **18 51 20.7** | **-2.8** | |
| | comp=Z,4.6nm,0.5s | | | | | | | | |
| **PKI** | **Pulchoki** | **16.59** | **129** | *e*P | | **Pn** | **18 51 20.6** | **-3.1** | |
| | comp=Z,6.8nm,0.4s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.75** | **28** | P | | **Pn** | **18 51 37.5** | **-0.2** | |
| | comp=Z,0.4nm,0.3s,baz=220,slow=12,SNR=14 | | | | | | | | |
| **RAMN** | **Ramite** | **17.77** | **128** | *e*P | | **Pn** | **18 51 36.5** | **-1.9** | |
| | comp=Z,4.2nm,0.4s | | | | | | | | |
| **NVS** | **Novosibirsk** | **17.94** | **24** | *e*P | | **Pn** | **18 51 40.3** | **+0.3** | |
| NVS | | | | *e* | | | 18 54 56.3 | | |
| **MAK** | **Makhachkala** | **18.10** | **290** | *e*P | | **P** | **18 51 43.8** | **+1.4** | |
| MAK | | | | MLR | | MLR | | | |
| | comp=Z,153nm,13.0s | | | | | | | | |
| **TAPN** | **Taplejung** | **18.19** | **125** | *e*P | | **Pn** | **18 51 42.2** | **-1.4** | |
| | comp=Z,5.7nm,0.6s | | | | | | | | |
| **ODAN** | **Odare** | **18.33** | **126** | *e*P | | **Pn** | **18 51 43.3** | **-1.9** | |
| | comp=Z,8.9nm,0.7s | | | | | | | | |
| **ARU** | **Arti** | **19.30** | **339** | P | | **P** | **18 51 55.7** | **+0.2** | |
| ARU | | | | S | | **Sn** | **18 55 29.3** | **-3.5** | |
| **DGRG** | **David-gareji** | **19.64** | **285** | P | | **Pn** | **18 52 01.3** | **+0.5** | |
| **DGRG** | **David-gareji** | **19.64** | **285** | *e*P | | **Pn** | **18 52 01.3** | **+0.5** | |
| **POO** | **Poona** | **20.51** | **172** | *e*P | | P | 18 52 04.0 | -5.0 | |
| **ONI** | **Oni** | **21.07** | **289** | P | | **P** | **18 52 17.9** | **+2.9** | |
| **ONI** | **Oni** | **21.07** | **289** | *e*P | | **P** | **18 52 17.8** | **+2.9** | |
| **KBZ** | **Khabaz** | **21.51** | **292** | P | | **P** | **18 52 18.9** | **-0.6** | |
| | comp=Z,3.2nm,0.8s,baz=128,slow=5.7,SNR=4.5 | | | | | | | | |
| **KBZ** | **Khabaz** | **21.51** | **292** | P | | **P** | **18 52 18.9** | **-0.6** | |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **KIV** | **Kislovodsk** | **21.68** | **292** | *e*P | | **P** | **18 52 21.3** | **-0.2** | |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| **GTA** | **Gaotai** | **22.38** | **80** | *e*P | | **P** | **18 52 29.1** | **0.0** | |
| GTA | | | | pP | | **pP** | **18 52 36.0** | **+4.0** | |
| GTA | | | | sP | | sP | 18 52 39.3 | +6.0 | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,69nm,5.2s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | comp=Z,80nm,15.7s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | comp=Z,79nm,15.2s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | comp=Z,91nm,15.7s | | | | | | | | |
| **VORD** | **Divnogorie** | **25.18** | **309** | *e*P | | **P** | **18 52 55.8** | **-0.2** | |
| VORD | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| VORD | | | | pmax | | pmax | | | |
| | comp=N,6.0nm,0.9s | | | | | | | | |
| VORD | | | | pmax | | pmax | | | |
| | comp=E,10.0nm,0.9s | | | | | | | | |
| **VSR** | **Storozhevoye** | **25.33** | **309** | *e*P | | **P** | **18 52 57.2** | **-0.2** | |
| VSR | | | | pmax | | pmax | | | |
| | comp=E,10.0nm,0.8s | | | | | | | | |
| VSR | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| VSR | | | | pmax | | pmax | | | |
| | comp=N,10.0nm,1.3s | | | | | | | | |
| **ANN** | **Anapa** | **25.48** | **294** | *e*P | | **P** | **18 52 59.7** | **+1.0** | |
| **ZAK** | **Zakamensk** | **25.50** | **53** | *e*P | | **P** | **18 52 57.9** | **-1.2** | |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | | |
| **TLY** | **Talaya** | **26.07** | **50** | LR | | LR | 19 04 48.9 | | |
| | comp=Z,18nm,18.6s,baz=256,slow=40 | | | | | | | | |
| **SONM** | **Songino Array** | **27.08** | **59** | P | | **P** | **18 53 13.3** | **-0.1** | |
| | comp=Z,2.8nm,1.2s,baz=263,slow=8.6,SNR=5.5 | | | | | | | | |
| SONM | | | | LR | | LR | 19 05 10.3 | | |
| | comp=Z,35nm,18.2s,baz=165,slow=39 | | | | | | | | |
| **SONM** | **Songino Array** | **27.08** | **59** | P | | **P** | **18 53 13.3** | **-0.1** | |
| SONM | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | | |
| SONM | | | | MLR | | MLR | | | |
| | comp=Z,35nm,18.2s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.52** | **59** | *e*P | | **P** | **18 53 17.8** | **+0.4** | |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **28.70** | **283** | P | | **P** | **18 53 28.8** | **+0.8** | |
| | comp=Z,1.0nm,0.7s,baz=91,slow=7.4,SNR=8.5 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **28.70** | **283** | *ce*P | | **P** | **18 53 29.5** | **+1.5** | |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **31.40** | **306** | P | | **P** | **18 53 51.2** | **-0.4** | |
| | comp=Z,0.9nm,0.5s,baz=83,slow=7.3,SNR=6.9 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **31.40** | **306** | P | | **P** | **18 53 51.2** | **-0.4** | |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **KIEV** | **Kiev** | **31.41** | **306** | *e*P | | **P** | **18 53 51.8** | **+0.2** | |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **VRI** | **Vrincioaia** | **33.00** | **297** | ⇑P | | **P** | **18 54 07.0** | **+1.2** | |
| **VRI** | **Vrincioaia** | **33.00** | **297** | ⇑*i* P | | **P** | **18 54 06.9** | **+1.2** | |
| **TESR** | **Tescani** | **33.01** | **298** | ⇓*i* P | | **P** | **18 54 07.1** | **+1.3** | |
| **PLOR** | **Plostina** | **33.05** | **297** | ⇓P | | **P** | **18 54 08.4** | **+2.2** | |
| **PLOR** | **Plostina** | **33.05** | **297** | ⇓*i* P | | **P** | **18 54 08.4** | **+2.2** | |
| **BOD** | **Bodaibo** | **33.53** | **41** | *e*P | | P | 18 54 07.5 | -2.7 | |
| BOD | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.4s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **33.57** | **296** | ⇓P | | **P** | **18 54 13.4** | **+2.5** | |
| **MLR** | **Muntele Rosu** | **33.57** | **296** | ⇓*i* P | | **P** | **18 54 13.4** | **+2.5** | |
| **BURAR** | **Bucovina Array** | **33.94** | **300** | ⇑P | | **P** | **18 54 15.6** | **+1.6** | |
| **BURAR** | **Bucovina Array** | **33.94** | **300** | ⇑*i* P | | **P** | **18 54 15.6** | **+1.6** | |
| **LOT** | **Lotru** | **35.10** | **296** | ⇑*i* P | | **P** | **18 54 26.0** | **+1.9** | |
| **FINES** | **FINESS Array B** | **35.43** | **324** | P | | **P** | **18 54 26.3** | **-0.2** | |
| | comp=Z,1.0nm,0.5s,baz=106,slow=8.6,SNR=7.2 | | | | | | | | |
| **FINES** | **FINESS Array B** | **35.43** | **324** | *ce*P | | **P** | **18 54 28.3** | **+1.8** | |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **TRPA** | **Tarpa** | **35.72** | **301** | ⇑*i* P | | **P** | **18 54 31.3** | **+2.1** | |
| **KOLS** | **Kolonicke sedl** | **35.85** | **302** | *e*P | | **P** | **18 54 31.6** | **+1.2** | |
| **KOLS** | **Kolonicke sedl** | **35.85** | **302** | *e*P | | **P** | **18 54 31.6** | **+1.2** | |
| **VYHS** | **Vyhne** | **38.15** | **302** | *e*P | | **P** | **18 54 50.9** | **+1.0** | |
| **VYHS** | **Vyhne** | **38.15** | **302** | *e*P | | **P** | **18 54 50.9** | **+1.0** | |
| **ARCES** | **ARCESS Array B** | **38.86** | **336** | P | | **P** | **18 54 55.4** | **-0.2** | |
| | comp=Z,2.9nm,0.8s,baz=116,slow=9.3,SNR=6.5 | | | | | | | | |
| ARCES | | | | LR | | LR | 19 10 25.2 | | |
| | comp=Z,23nm,19.7s,baz=144,slow=35 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.86** | **336** | P | | **P** | **18 54 55.4** | **-0.2** | |
| ARCES | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| ARCES | | | | MLR | | MLR | | | |
| | comp=Z,23nm,19.7s | | | | | | | | |
| **GERES** | **GERESS Array B** | **41.49** | **303** | P | | **P** | **18 55 17.6** | **-0.2** | |
| | comp=Z,0.4nm,0.5s,baz=59,slow=9.6,SNR=2.6 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **41.53** | **303** | *e*P | | **P** | **18 55 19.1** | **+1.1** | |
| **KHC** | **Kasperske Hory** | **41.53** | **303** | *e*P | | **P** | **18 55 19.1** | **+1.1** | |
| **YAK** | **Yakutsk** | **42.04** | **37** | ⇑*e*P | | **P** | **18 55 22.5** | **+0.6** | |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **42.39** | **321** | P | | **P** | **18 55 24.6** | **-0.4** | |
| | comp=Z,0.7nm,0.4s,baz=110,slow=7.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **42.39** | **321** | P | | **P** | **18 55 24.5** | **-0.4** | |
| | comp=Z,0.9nm,0.6s,baz=93,slow=8.0,SNR=4.4 | | | | | | | | |
| NOA | | | | LR | | LR | 19 14 15.0 | | |
| | comp=Z,17nm,19.9s,baz=100,slow=38 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **42.39** | **321** | P | | **P** | **18 55 24.5** | **-0.4** | |
| NOA | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| NOA | | | | MLR | | MLR | | | |
| | comp=Z,17nm,19.9s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **44.40** | **301** | P | | **P** | **18 55 41.4** | **-0.1** | |
| | comp=Z,2.3nm,0.3s,baz=76,slow=3.1,SNR=9.1 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **44.40** | **301** | P | | **P** | **18 55 41.4** | **-0.1** | |
| DAVOX | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **56.27** | **296** | P | | **P** | **18 57 11.2** | **-0.1** | |
| | comp=Z,0.3nm,0.4s,baz=54,slow=7.6,SNR=3.5 | | | | | | | | |
| **BILL** | **Bilibino** | **56.45** | **27** | *e*P | | **P** | **18 57 11.0** | **-1.1** | |
| BILL | | | | *e* | | | 18 59 26.2 | | |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.72** | **267** | P | | **P** | **18 58 14.9** | **-0.9** | |
| | comp=Z,0.5nm,0.5s,baz=48,slow=5.0,SNR=12 | | | | | | | | |
| **INK** | **Inuvik** | **71.50** | **9** | P | | **P** | **18 58 49.8** | **-1.2** | |
| | comp=Z,2.4nm,0.8s,baz=2.6,slow=2.5,SNR=4.5 | | | | | | | | |
| **INK** | **Inuvik** | **71.50** | **9** | P | | **P** | **18 58 49.8** | **-1.2** | |
| INK | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **72.44** | **16** | P | | **P** | **18 58 55.9** | **-0.9** | |
| | comp=Z,0.9nm,0.9s,baz=310,slow=4.1,SNR=7.0 | | | | | | | | |
| **ILAR** | **Eielson Array** | **72.44** | **16** | P | | **P** | **18 58 55.9** | **-0.9** | |
| ILAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **DBIC** | **Dimbokro** | **74.76** | **266** | P | | P | 18 59 08.6 | -2.6 | |
| | comp=Z,4.5nm,1.0s,baz=121,slow=7.8,SNR=2.2 | | | | | | | | |
| **DBIC** | **Dimbokro** | **74.76** | **266** | P | | P | 18 59 08.6 | -2.6 | |
| DBIC | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.36** | **122** | P | | **P** | **18 59 57.1** | **-1.0** | |
| | comp=Z,0.5nm,0.5s,baz=323,slow=4.9,SNR=24 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.36** | **122** | *i* P | | **P** | **18 59 57.2** | **-0.8** | |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **85.72** | **125** | P | | **P** | **19 00 08.5** | **-1.5** | |
| | comp=Z,0.6nm,0.8s,baz=313,slow=5.0,SNR=9.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **85.72** | **125** | P | | **P** | **19 00 08.5** | **-1.5** | |
| ASAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |

*CSEM* ***13*** *18:49:18.7±0.3, 37.73N×29.31E, h5km, MD2.6, Error ellipse: s-maj=7.0km s-min=3.7km az=120.0*
*ISK* ***13*** *18:49:18.0, 37.74N×29.33E, h8km, MD2.8*
*DDA* ***13*** *18:49:19.7, 37.81N×29.17E, h7km, Md2.6*
*ISCJB* ***13*** *18:49:20.2±0.6, 37.81N±0.03×29.20E±0.05, h3km±9km, Error ellipse: s-maj=6.9km s-min=4.7km az=20.7*

**ISC 13 18:49:18.8**±1.4, **37.74N**±0.03×**29.31E**±0.05, **h5**km±12km, **n21**, σ0**857/32, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **DNZL** | **Cakiroluk** | **0.21** | **256** | *i* P | | **Pg** | **18 49 23.1** | **0.0** |
| DNZL | | | | *i* S | | **Sg** | **18 49 25.8** | **-0.1** |
| **DNZL** | **Cakiroluk** | **0.21** | **256** | P | | **Pg** | **18 49 23.1** | **0.0** |
| DNZL | | | | S | | **Sg** | **18 49 25.8** | **-0.1** |
| **DENT** | **Denizli** | **0.22** | **273** | *e*PG | | **Pg** | **18 49 22.9** | **-0.3** |
| DENT | | | | *e*SG | | **Sg** | **18 49 27.4** | **+1.4** |
| **DENT** | **Denizli** | **0.22** | **273** | *e*Pg | | **Pg** | **18 49 22.9** | **-0.3** |
| DENT | | | | *e*Sg | | **Sg** | **18 49 27.4** | **+1.4** |
| **GOLH** | **Golhisar** | **0.54** | **158** | P | | **Pn** | **18 49 32.9** | **-0.5** |
| GOLH | | | | S | | **Sn** | **18 49 44.0** | **+1.1** |
| **KHL** | **Karahalli** | **0.60** | **16** | *e*PG | | **Pg** | **18 49 30.4** | **0.0** |
| **KHL** | **Karahalli** | **0.60** | **16** | *e*Pg | | **Pg** | **18 49 30.4** | **0.0** |
| **KHAL** | **Karahalli** | **0.64** | **13** | *i* P | | **Pg** | **18 49 31.5** | **+0.3** |
| KHAL | | | | *i* S | | **Sb** | **18 49 41.9** | **-0.1** |
| **KHAL** | **Karahalli** | **0.64** | **13** | P | | **Pg** | **18 49 31.5** | **+0.3** |
| KHAL | | | | S | | **Sb** | **18 49 41.9** | **-0.1** |
| **KULA** | **Kula-Manisa** | **0.92** | **327** | *e*PG | | **Pg** | **18 49 36.3** | **-0.3** |
| **KULA** | **Kula-Manisa** | **0.92** | **327** | *e*Pg | | **Pg** | **18 49 36.3** | **-0.3** |
| **MANT** | **Manisa** | **0.95** | **322** | *i* P | | **Pg** | **18 49 37.2** | **+0.1** |
| MANT | | | | *i* S | | **Sg** | **18 49 48.5** | **-1.0** |
| **MANT** | **Manisa** | **0.95** | **322** | P | | **Pg** | **18 49 37.2** | **+0.1** |
| MANT | | | | S | | **Sg** | **18 49 48.5** | **-1.0** |
| **YER** | **Yerkesik** | **1.02** | **234** | *e*PG | | **Pg** | **18 49 38.3** | **0.0** |
| **YER** | **Yerkesik** | **1.02** | **234** | *e*Pg | | **Pg** | **18 49 38.3** | **0.0** |
| **DALY** | **Dalyan (Mu˘la** | **1.06** | **210** | *e*PG | | **Pg** | **18 49 38.7** | **-0.5** |
| **DALY** | **Dalyan (Mu˘la** | **1.06** | **210** | *e*Pg | | **Pg** | **18 49 38.7** | **-0.5** |
| **AYDN** | **Tasoluk** | **1.14** | **266** | *i* P | | **Pn** | **18 49 41.6** | **+0.2** |
| AYDN | | | | *i* S | | **Sg** | **18 49 54.8** | **-0.6** |
| **AYDN** | **Tasoluk** | **1.14** | **266** | P | | **Pn** | **18 49 41.6** | **+0.2** |
| AYDN | | | | S | | **Sg** | **18 49 54.8** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.14** | **281** | *e*PN | | **Pn** | **18 49 41.4** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.14** | **281** | *e*Pn | | **Pn** | **18 49 41.4** | **-0.2** |

*IDC* ***13*** *19:09:55.5±1.4, 2.92S×129.36E, h0km, mb3.7/2, mb1 4.0/4, mb1mx3.5/40, mbtmp3.8/4, ML3.9/2, Error ellipse: s-maj=47.8km s-min=26.1km az=88.0*
*ISCJB* ***13*** *19:09:58.9±0.5, 2.85S±0.05×129.53E±0.05, h28km, mb3.7/2, Error ellipse: s-maj=7.6km s-min=5.7km az=140.1*
*DJA* ***13*** *19:09:59.7±0.8, 3˚S±5˚×12˚9E±˚, h11km±7km, M3.5/8, MLv3.5/8*
*AUST* ***13*** *19:10:01.9, 2.99S×129.51E, h35km*

**ISC 13 19:09:59.9**±0.7, **2.78S**±0.06×**129.45E**±0.05, **h28**km, **n19,** σ1**986/24, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MSAI** | **Masohi** | **0.77** | **223** | P | | **Pb** | **19 10 13.9** | **-0.8** |
| MSAI | | | | S | | **Sn** | **19 10 29.2** | **+3.7** |
| **AAI** | **Ambon** | **1.54** | **234** | P | | **Pb** | **19 10 27.4** | **-0.5** |
| | baz=1.5,SNR=59 | | | | | | | |
| **AAI** | **Ambon** | **1.54** | **234** | P | | **Pb** | **19 10 27.4** | **-0.5** |
| AAI | | | | S | | **Sb** | **19 10 49.0** | **+2.0** |
| **NLAI** | **Namlea** | **2.39** | **259** | P | | **Pn** | **19 10 38.2** | **+0.9** |
| NLAI | | | | S | | **Sb** | **19 11 09.0** | **-2.5** |
| **SIJI** | **Sorong** | **2.63** | **44** | Pn | | **Pn** | **19 10 41.0** | **+0.4** |
| | 38nm,0.3s,baz=290,slow=23,SNR=240 | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **19 11 12.6** | **+1.1** |
| | 29nm,0.3s,baz=67,slow=23,SNR=17 | | | | | | | |
| **SWI** | **Sorong** | **2.63** | **43** | P | | **Pn** | **19 10 41.2** | **+0.7** |
| | baz=2.8,SNR=136 | | | | | | | |
| **SWI** | **Sorong** | **2.63** | **43** | P | | **Pn** | **19 10 40.8** | **+0.3** |
| **FAKI** | **Fak Fak** | **2.80** | **93** | P | | **Pn** | **19 10 43.4** | **+0.5** |
| | baz=2.7,SNR=14 | | | | | | | |
| **LBMI** | **Labuha** | **2.89** | **317** | P | | **Pn** | **19 10 44.1** | **0.0** |
| **LUWI** | **Luwuk** | **6.90** | **284** | P | | **Pn** | **19 11 39.0** | **-0.2** |
| | baz=7.0,SNR=4.7 | | | | | | | |
| **MTN** | **Manton Dam** | **10.13** | **171** | P | | Pn | 19 12 27.1 | +3.5 |
| | baz=10.0,SNR=7.0 | | | | | | | |
| **KDU** | **Kakadu** | **10.28** | **163** | P | | **Pn** | **19 12 25.2** | **-0.5** |
| | baz=10,SNR=6.2 | | | | | | | |
| **MMPI** | **Merauke** | **12.25** | **118** | P | | **P** | **19 13 07.3** | **+2.6** |
| | baz=12,SNR=3.2 | | | | | | | |
| **KNRA** | **Kununurra** | **12.83** | **183** | P | | **Pn** | **19 13 01.9** | **+1.3** |
| | baz=13,SNR=4.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.71** | **165** | P | | **Pn** | **19 14 01.4** | **-3.3** |
| | 0.3nm,0.3s,baz=344,slow=12,SNR=15 | | | | | | | |
| WRA | | | | S | | Sn | 19 17 13.2 | -8.2 |
| | 0.1nm,0.3s,baz=338,slow=20,SNR=3.9 | | | | | | | |
| **QIS** | **Mount Isa** | **20.25** | **151** | P | | **P** | **19 14 33.2** | **-0.1** |
| | baz=20,SNR=4.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.20** | **169** | P | | **P** | **19 14 42.2** | **-1.3** |
| | 4.7nm,0.7s,baz=350,slow=9.8,SNR=67 | | | | | | | |
| ASA

*ISCJB* ***13*** *19:25:52.8±0.5,41°.05S±0°.08×91°.6W±0°.1, h10km, mb4.3/17, MS4.3/12, Error ellipse: s-maj=16.3km s-min=10.9km az=177.8*

*IDC* ***13*** *19:25:52.8±0.7,41°.06S×91°.70W, h0km, mb4.2/11, mb1 4.3/11, mb1mx4.2/36, mbtmp4.2/11, MS4.4/12, Ms1 4.4/12, ms1mx4.2/19, Error ellipse: s-maj=29.9km s-min=16.2km az=98.0*

*GCMT* ***13*** *19:25:54.2±0.2, 40°.87S×91°.81W, h12km, MW5.1/94, Moment Tensor Solution. s41,c55; s94,c135; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr-4.34±.12; Mθθ-0.49±.12; Mφφ4.83±.11; Mrθ2.72±.42; Mrφ-0.66±.11; Mθφ0.54±.33; Best double couple: M0 5.36100×10^16 NP1: φs198.00000°, δ53.00000°, λ-54.00000°. NP2: φs328.00000°, δ50.00000°, λ-128.00000°. Principal axes: T 4.9170, Plg1.0000°, Azm264.0000°; N 0.8890, Plg28.0000°, Azm355.0000°; P -5.8050, Plg62.0000°, Azm171.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC* ***13*** *19:25:54.2±0.4,41°.05S×91°.69W, h10km, mb4.9/6 Error ellipse: s-maj=15.7km s-min=9.9km az=97.0*

**ISC 13 19:25:54.5**±0.6,**41°.0S**±0°.1×**91°.7W**±0°.1,**h10**km,**n38,** σ0**°77**/28,**mb4.5**/17,**MS4.2**/12,**Southeast of Easter Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **RPN** | **Rapa Nui** | **20.08** | **308** | LR | | LR | 19 | 36 00.7 | |
| | comp=Z,2μm,19.0s,baz=118,slow=30 | | | | | | | | |
| **USHA** | **Ushuaia** | **20.70** | **140** | LR | | LR | 19 | 36 47.9 | |
| | comp=Z,1μm,21.4s,baz=274,slow=32 | | | | | | | | |
| **CFAA** | **Coronel Fontan** | **21.08** | **71** | P | | **P** | **19** | **30 38.5** | **-0.5** |
| | 0.7nm,0.8s,baz=238,slow=8.2,SNR=9.2 | | | | | | | | |
| CFAA | | | | LR | | LR | 19 | 36 58.6 | |
| | comp=Z,292nm,20.3s,baz=244,slow=32 | | | | | | | | |
| **LVC** | **Limon Verde** | **26.57** | **53** | LR | | LR | 19 | 39 15.3 | |
| | comp=Z,8μm,21.9s,baz=210,slow=30 | | | | | | | | |
| **PMSA** | **Palmer Station** | **28.59** | **155** | LR | | LR | 19 | 40 15.1 | |
| | comp=Z,372nm,21.8s,baz=319,slow=30 | | | | | | | | |
| **CPUP** | **Villa Florida** | **31.93** | **73** | LR | | LR | 19 | 43 35.1 | |
| | comp=Z,1μm,21.4s,baz=236,slow=33 | | | | | | | | |
| **LPAZ** | **La Paz** | **32.00** | **46** | P | | **P** | **19** | **32 22.4** | **+0.7** |
| | 1.6nm,0.9s,baz=166,slow=1.8,SNR=5.4 | | | | | | | | |
| LPAZ | | | | LR | | LR | 19 | 42 28.8 | |
| | comp=Z,621nm,20.4s,baz=202,slow=31 | | | | | | | | |
| **ATAH** | **Atahualpa** | **35.79** | **23** | P | | **P** | **19** | **32 53.8** | **-0.6** |
| | 3.7nm,0.5s,baz=135,slow=5.7,SNR=2.9 | | | | | | | | |
| **RKT** | **Rikitea** | **40.30** | **283** | *e*LR | | LR | 19 | 44 39.9 | |
| | 2μm,27.5s,baz=126 | | | | | | | | |
| **BDFB** | **Brasilia** | **45.41** | **69** | LR | | LR | 19 | 52 27.9 | |
| | comp=Z,1μm,18.1s,baz=208,slow=35 | | | | | | | | |
| **ROSC** | **El Rosal** | **48.37** | **23** | P | | **P** | **19** | **34 37.8** | **+0.8** |
| | 5.0nm,0.5s,baz=268,slow=8.7,SNR=2.9 | | | | | | | | |
| ROSC | | | | LR | | LR | 19 | 53 13.1 | |
| | comp=Z,186nm,19.0s,baz=191,slow=34 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **49.19** | **180** | P | | **P** | **19** | **34 43.0** | **+0.5** |
| | 1.4nm,0.6s,baz=172,slow=1.7,SNR=11 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **49.19** | **180** | *e*P | | **P** | **19** | **34 42.4** | **-0.1** |
| | 27nm,1.5s | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **49.25** | **155** | P | | P | 19 | 34 47.7 | +5.0 |
| **VNA1** | **Neumayer--Stat** | **49.81** | **154** | P | | **P** | **19** | **34 49.0** | **+2.1** |
| **VNA2** | **Neumayer--Watz** | **50.04** | **155** | P | | **P** | **19** | **34 48.4** | **-0.3** |
| | baz=284,slow=7.6 | | | | | | | | |
| **TBI** | **Tubuai** | **51.03** | **272** | *e*LR | | LR | 19 | 49 32.2 | |
| | 2μm,27.8s,baz=127 | | | | | | | | |
| **SNAA** | **Sanae** | **51.31** | **156** | P | | **P** | **19** | **34 57.8** | **-0.5** |
| **SNAA** | **Sanae** | **51.31** | **156** | P | | **P** | **19** | **34 57.8** | **-0.5** |
| | 1.3nm,1.1s,baz=284,slow=6.6,SNR=5.5 | | | | | | | | |
| **VNDA** | **Vanda** | **53.71** | **195** | P | | **P** | **19** | **35 16.8** | **+0.8** |
| | 1.2nm,0.9s,baz=106,slow=8.4,SNR=3.0 | | | | | | | | |
| VNDA | | | | LR | | LR | 19 | 53 39.0 | |
| | comp=Z,201nm,20.3s,baz=104,slow=31 | | | | | | | | |
| **PPT2** | **Papeete2** | **54.52** | **277** | *e*S | | **S** | **19** | **43 02.0** | **-0.1** |
| | 1μm,26.8s | | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 19 | 51 04.4 | |
| | 2μm,27.8s,baz=128 | | | | | | | | |
| **PPT** | **Papeete** | **54.54** | **277** | LR | | LR | 19 | 53 09.7 | |
| | comp=Z,110nm,19.7s,baz=136,slow=30 | | | | | | | | |
| **SJG** | **San Juan** | **63.46** | **27** | P | | **P** | **19** | **36 24.5** | **0.0** |
| | 3.8nm,0.3s,baz=31,slow=5.9,SNR=4.2 | | | | | | | | |
| **MAW** | **Mawson** | **69.98** | **170** | P | | **P** | **19** | **37 03.9** | **-1.7** |
| | 7.7nm,1.1s,baz=198,slow=4.7,SNR=8.6 | | | | | | | | |
| MAW | | | | LR | | LR | 20 | 07 30.4 | |
| | comp=Z,94nm,18.4s,baz=237,slow=36 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **70.89** | **349** | P | | **P** | **19** | **37 11.2** | **-0.4** |
| | 0.5nm,0.3s,baz=174,slow=10.0,SNR=8.2 | | | | | | | | |
| **ANMO** | **Albuquerque** | **76.82** | **348** | P | | **P** | **19** | **37 46.9** | **+0.5** |
| | 1.1nm,0.6s,baz=194,slow=4.6,SNR=3.4 | | | | | | | | |
| **TMUT** | **Trail Mountain** | **81.91** | **345** | *e*P | | **P** | **19** | **38 14.3** | **+0.1** |
| | 12nm,1.0s | | | | | | | | |
| **NLU** | **North Lily Min** | **82.72** | **344** | *e*P | | **P** | **19** | **38 18.1** | **-0.2** |
| | 16nm,1.4s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.73** | **339** | P | | **P** | **19** | **38 18.3** | **-0.1** |
| | 0.7nm,0.6s,baz=168,slow=6.3,SNR=4.6 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **84.23** | **246** | *e*LR | | LR | 20 | 04 49.8 | |
| | 606nm,26.7s | | | | | | | | |
| **REDW** | **Red Top Meadow** | **85.77** | **346** | *e*P | | **P** | **19** | **38 33.2** | **-0.6** |
| | 16nm,1.4s | | | | | | | | |
| **LOHW** | **Long Hollow** | **85.97** | **346** | *e*P | | **P** | **19** | **38 33.4** | **-1.4** |
| | 2.3nm,0.9s | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **86.44** | **346** | *e*P | | **P** | **19** | **38 36.8** | **-0.2** |
| | 3.8nm,1.0s | | | | | | | | |
| **YAK** | **Yakutsk** | **147.60** | **324** | PKPbc | | **PKPdf** | **19** | **45 35.4** | **+0.1** |
| | 3.2nm,0.4s,baz=0.0,slow=1.0,SNR=1.8 | | | | | | | | |
| **YAK** | **Yakutsk** | **147.60** | **324** | *e*P | | **PKPdf** | **19** | **45 34.8** | **-0.5** |
| YAK | | | | PKPbc | | **PKPdf** | **19** | **45 35.4** | **+0.1** |
| **USRK** | **Ussuriysk Ar.** | **147.96** | **290** | PKPbc | | **PKPbc** | **19** | **45 39.6** | **0.0** |
| | 1.3nm,0.7s,baz=240,slow=2.8,SNR=3.9 | | | | | | | | |
| **KSRS** | **Korea Array** | **149.27** | **276** | PKPbc | | **PKPbc** | **19** | **45 44.0** | **+0.9** |
| | 1.3nm,0.9s,baz=129,slow=5.3,SNR=2.6 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **149.30** | **276** | PKPbc | | **PKPbc** | **19** | **45 44.0** | **+0.8** |

**IDC 13 19:29:15.1**±1.4,**7°.67N**×**82°.60W, h0**km,**mb3.8**/3, **mb1 4.1**/4,**mb1mx3.6**/36,**mbtmp3.9**/4,**ML4.3**/1,**MS3.4**/2, **Ms1 3.4**/2,**ms1mx3.0**/23,**Error ellipse: s-maj=80.6km s-min=21.8km az=49.0,South of Panama**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **JTS** | **JuntasAbangare** | **3.49** | **318** | Pn | | Pn | 19 | 30 10.7 | 0.0 |
| | 25nm,0.3s,baz=144,slow=6.5,SNR=47 | | | | | | | | |
| JTS | | | | Sn | | Sn | 19 | 30 55.5 | +2.8 |
| | 4.9nm,0.3s,baz=320,slow=22,SNR=6.1 | | | | | | | | |
| **TEIG** | **Tepich** | **13.64** | **337** | LR | | LR | 19 | 36 33.1 | |
| | comp=Z,399nm,21.2s,baz=257,slow=32 | | | | | | | | |
| **CMIG** | **Matias Romero** | **15.21** | **309** | LR | | LR | 19 | 38 16.3 | |
| | comp=Z,54nm,18.6s,baz=182,slow=36 | | | | | | | | |
| **LPAZ** | **La Paz** | **27.78** | **149** | P | | P | 19 | 35 06.8 | +0.1 |
| | 1.2nm,0.9s,baz=312,slow=5.6,SNR=1.9 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **44.42** | **319** | P | | P | 19 | 37 27.6 | -0.5 |
| | 2.2nm,1.0s,baz=125,slow=7.8,SNR=8.5 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.77** | **78** | P | | P | 19 | 41 41.8 | 0.0 |
| | 0.4nm,0.8s,baz=289,slow=4.4,SNR=2.3 | | | | | | | | |

*DDA* ***13*** *19:39:23.9, 37°.23N×28°.04E, h7km, Md2.6*

*ISK* ***13*** *19:39:23.9, 37°.20N×28°.01E, h11km, MD2.6*

*ISCJB* ***13*** *19:39:24.4±0.8, 37°.18N±0°.04×28°.05E±0°.04, h19km±16km, Error ellipse: s-maj=6.9km s-min=4.8km az=35.3*

*CSEM* ***13*** *19:39:24.4±0.2, 37°.18N×28°.04E, h10km, MD2.6, Error ellipse: s-maj=6.3km s-min=3.8km az=30.0*

**ISC 13 19:39:23.8**±0.9,**37°.19N**±0°.03×**28°.03E**±0°.03,**h15**km±9km, **n16,** σ0**°79**/32,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **YER** | **Yerkesik** | **0.21** | **106** | *e*PG | | **Pb** | **19** | **39 29.1** | **-0.2** |
| YER | | | | *e*SG | | **Sg** | **19** | **39 32.9** | **+1.1** |
| **YER** | **Yerkesik** | **0.21** | **106** | *e*Pg | | **Pb** | **19** | **39 29.1** | **-0.2** |
| YER | | | | *e*Sg | | **Sg** | **19** | **39 32.9** | **+1.1** |
| **AYDN** | **Tasoluk** | **0.48** | **345** | *i* P | | **Pb** | **19** | **39 35.0** | **+0.9** |
| AYDN | | | | *i* S | | **Sb** | **19** | **39 40.7** | **-0.4** |
| **AYDN** | **Tasoluk** | **0.48** | **345** | P | | **Pb** | **19** | **39 35.0** | **+0.9** |
| AYDN | | | | S | | **Sb** | **19** | **39 40.7** | **-0.4** |
| **BDRM** | **Kayabasi** | **0.49** | **255** | *i* P | | **Pb** | **19** | **39 34.2** | **+0.1** |
| BDRM | | | | *i* S | | **Sb** | **19** | **39 41.2** | **+0.1** |
| **BDRM** | **Kayabasi** | **0.49** | **255** | P | | **Pb** | **19** | **39 34.2** | **+0.1** |
| BDRM | | | | S | | **Sb** | **19** | **39 41.2** | **+0.1** |
| **TURN** | **Turunc** | **0.56** | **125** | *i* P | | **Pg** | **19** | **39 33.7** | **-1.0** |
| TURN | | | | *i* S | | **Sg** | **19** | **39 40.7** | **-1.4** |
| **TURN** | **Turunc** | **0.56** | **125** | P | | **Pg** | **19** | **39 33.7** | **-1.0** |
| TURN | | | | S | | **Sg** | **19** | **39 40.7** | **-1.4** |
| **BODT** | **Bodrum** | **0.59** | **258** | *e*PG | | **Pg** | **19** | **39 35.2** | **-0.3** |
| BODT | | | | *e*SG | | **Sb** | **19** | **39 44.5** | **+0.4** |
| **BODT** | **Bodrum** | **0.59** | **258** | *e*Pg | | **Pg** | **19** | **39 35.2** | **-0.3** |
| BODT | | | | *e*Sg | | **Sb** | **19** | **39 44.5** | **+0.4** |
| **DALY** | **Dalyan (Mu˘la** | **0.62** | **127** | *e*PG | | **Pb** | **19** | **39 36.8** | **+0.5** |
| DALY | | | | *e*SG | | **Sb** | **19** | **39 46.4** | **+1.6** |
| **DALY** | **Dalyan (Mu˘la** | **0.62** | **127** | *e*Pg | | **Pb** | **19** | **39 36.8** | **+0.5** |
| DALY | | | | *e*Sg | | **Sb** | **19** | **39 46.4** | **+1.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.76** | **351** | *e*PG | | **Pb** | **19** | **39 38.7** | **-0.2** |
| AYDB | | | | *e*SG | | **Sb** | **19** | **39 49.7** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.76** | **351** | *e*Pg | | **Pb** | **19** | **39 38.7** | **-0.2** |
| AYDB | | | | *e*Sg | | **Sb** | **19** | **39 49.7** | **+0.6** |
| **GCAM** | **G?zelcaml?** | **0.81** | **309** | *i* P | | **Pn** | **19** | **39 40.9** | **+0.2** |
| GCAM | | | | *i* S | | **Sg** | **19** | **39 49.9** | **-0.5** |
| **GCAM** | **G?zelcaml?** | **0.81** | **309** | P | | **Pn** | **19** | **39 40.9** | **+0.2** |
| GCAM | | | | S | | **Sg** | **19** | **39 49.9** | **-0.5** |

*IDC* ***13*** *19:42:42.8±0.8,27°.12N×44°.40W, h0km, mb4.2/17, mb1 4.4/17, mb1mx4.2/42, mbtmp4.2/17, MS4.0/7, Ms1 4.0/7, ms1mx3.5/29, Error ellipse: s-maj=22.1km s-min=16.4km az=169.0*

*ISCJB* ***13*** *19:42:43.8±0.7,27°.2N±0°.1×44°.42W±0°.08, h16km, mb4.3/24, MS4.0/7, Error ellipse: s-maj=19.6km s-min=10.0km az=175.5*

*SZGRF* ***13*** *19:42:43.7,26°.60N×44°.83W, h33km, mb4.7/1(BGR)*

*NEIC* ***13*** *19:42:44.4±0.4,27°.11N×44°.38W, h10km, mb4.5/6, Error ellipse: s-maj=11.4km s-min=7.0km az=175.0*

**ISC 13 19:42:45.3**±0.7,**27°.1N**±0°.1×**44°.4W**±0°.1,**h16**km,**n49,** σ0**°98**/37,**mb4.4**/24,**MS4.0**/7,**1C-4D, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **H05S1** | **Guadeloupe/Mar** | **19.84** | **234** | T | | T | 20 | 07 23.2 | |
| | SNR=5.0 | | | | | | | | |
| **SCHQ** | **Schefferville** | **32.19** | **336** | LR | | LR | 20 | 00 46.4 | |
| | comp=Z,137nm,21.6s,baz=115,slow=34 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **35.75** | **59** | P | | **P** | **19** | **49 43.4** | **-0.1** |
| | 2.4nm,0.9s,baz=262,slow=8.7,SNR=7.6 | | | | | | | | |
| **FRB** | **Frobisher Bay** | **39.87** | **344** | P | | **P** | **19** | **50 18.0** | **+0.2** |
| | 4.9nm,0.7s,baz=154,slow=5.4,SNR=4.1 | | | | | | | | |
| **BDFB** | **Brasilia** | **42.62** | **185** | LR | | LR | 20 | 06 23.6 | |
| | comp=Z,169nm,18.8s,baz=26,slow=33 | | | | | | | | |
| **DBIC** | **Dimbokro** | **42.69** | **111** | LR | | LR | 20 | 06 05.0 | |
| | comp=Z,325nm,18.5s,baz=238,slow=33 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.22** | **98** | P | | **P** | **19** | **51 00.8** | **-1.2** |
| | 2.2nm,0.9s,baz=300,slow=7.7,SNR=9.3 | | | | | | | | |
| TORD | | | | PP | | **PcP** | **19** | **52 44.5** | **+2.4** |
| | 1.0nm,1.2s,baz=287,slow=10,SNR=3.2 | | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **45.23** | **136** | T | | T | 20 | 39 09.8 | |
| | baz=322,slow=75,SNR=587 | | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.23** | **136** | T | | T | 20 | 39 09.0 | |
| | baz=322,slow=75,SNR=645 | | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.25** | **136** | T | | T | 20 | 39 08.6 | |
| | baz=322,slow=75,SNR=626 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **45.26** | **315** | LR | | LR | 20 | 09 24.2 | |
| | comp=Z,94nm,18.8s,baz=75,slow=35 | | | | | | | | |
| **BFO** | **Black Forest** | **45.77** | **48** | P | | **P** | **19** | **51 05.7** | **-0.3** |
| | 7.0nm,0.9s | | | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **46.00** | **137** | T | | T | 20 | 40 01.9 | |
| | baz=322,slow=75,SNR=452 | | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **46.00** | **137** | T | | T | 20 | 39 59.7 | |
| | baz=322,slow=75,SNR=324 | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **46.02** | **137** | T | | T | 20 | 40 01.0 | |
| | baz=322,slow=75,SNR=261 | | | | | | | | |
| **KEST** | **Kesra** | **46.20** | **65** | P | | **P** | **19** | **51 10.9** | **+1.3** |
| | 5.0nm,1.0s,baz=253,slow=17,SNR=3.3 | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **47.84** | **46** | *e*P | | **P** | **19** | **51 22.6** | **+0.4** |
| | 5.8nm,0.9s,baz=261,slow=7.5 | | | | | | | | |
| **LPAZ** | **La Paz** | **48.88** | **211** | P | | **P** | **19** | **51 31.6** | **+0.4** |
| | 6.4nm,1.0s,baz=29,slow=7.3,SNR=12 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **49.31** | **47** | *e*P | | **P** | **19** | **51 33.5** | **-0.1** |
| KHC | | | | *ex* | | x | 19 | 51 40.5 | |
| **KHC** | **Kasperske Hory** | **49.31** | **47** | *e*P | | **P** | **19** | **51 33.6** | **0.0** |
| | 2.4nm,1.0s | | | | | | | | |
| **GERES** | **GERESS Array B** | **49.37** | **48** | P | | **P** | **19** | **51 33.7** | **-0.4** |
| | 1.6nm,1.0s,baz=280,slow=7.7,SNR=6.8 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **50.16** | **32** | P | | **P** | **19** | **51 40.2** | **+0.4** |
| | comp=Z,7.9nm,1.0s,baz=254,slow=7.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **50.16** | **32** | P | | **P** | **19** | **51 40.2** | **+0.4** |
| | comp=Z,2.8nm,1.1s,baz=255,slow=7.5,SNR=2.8 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **51.77** | **287** | P | | **P** | **19** | **51 52.7** | **+0.2** |
| | comp=Z,0.8nm,0.7s,baz=95,slow=7.3,SNR=6.5 | | | | | | | | |
| **RES** | **Resolute Bay** | **54.02** | **345** | P | | **P** | **19** | **52 08.5** | **+0.2** |
| | comp=Z,8.4nm,1.0s,baz=85,slow=3.6,SNR=3.5 | | | | | | | | |
| **BZS** | **Buzias** | **54.77** | **52** | *i* P | | **P** | **19** | **52 13.9** | **-0.3** |
| **REDW** | **Red Top Meadow** | **55.26** | **306** | *e*P | | **P** | **19** | **52 18.4** | **+0.3** |
| | comp=Z,6.7nm,1.1s | | | | | | | | |
| **MSU** | **Marysvale** | **56.93** | **300** | *e*P | | **P** | **19** | **52 31.4** | **+1.2** |
| | comp=Z,9.6nm,1.7s | | | | | | | | |
| **SWMT** | **Swartz Lake** | **57.05** | **311** | *e*P | | **P** | **19** | **52 30.7** | **0.0** |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **BURAR** | **Bucovina Array** | **57.08** | **49** | *i* P | | **P** | **19** | **52 31.9** | **+1.0** |
| **YKA** | **Yellowknife Ar** | **57.22** | **329** | P | | **P** | **19** | **52 30.4** | **-1.0** |
| | comp=Z,3.0nm,0.8s,baz=92,slow=7.9,SNR=6.4 | | | | | | | | |
| **FINES** | **FINESS Array B** | **57.30** | **33** | P | | **P** | **19** | **52 31.5** | **-0.5** |
| | comp=Z,3.6nm,0.9s,baz=196,slow=19,SNR=3.6 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **57.81** | **52** | *i* P | | **P** | **19** | **52 37.3** | **+1.2** |
| **ARCES** | **ARCESS Array B** | **57.88** | **23** | P | | **P** | **19** | **52 35.9** | **-0.2** |
| | comp=Z,5.9nm,0.8s,baz=258,slow=6.1,SNR=10 | | | | | | | | |
| **PLOR** | **Plostina** | **58.25** | **51** | *i* P | | **P** | **19** | **52 40.5** | **+1.4** |
| **VRI** | **Vrincioaia** | **58.31** | **51** | *i* P | | **P** | **19** | **52 40.6** | **+1.2** |
| **NEW** | **Newport** | **59.06** | **312** | *e*P | | **P** | **19** | **52 45.0** | **+0.3** |
| | comp=Z,5.6nm,1.1s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.38** | **45** | P | | **P** | **19** | **52 46.0** | **-0.8** |
| | comp=Z,1.8nm,0.7s,baz=275,slow=6.3,SNR=8.0 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.66** | **301** | P | | **P** | **19** | **53 02.9** | **0.0** |
| | comp=Z,0.5nm,0.7s,baz=78,slow=8.7,SNR=4.8 | | | | | | | | |
| NVAR | | | | LR | | LR | 20 | 18 42.2 | |
| | comp=Z,203nm,19.4s,baz=72,slow=35 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **64.49** | **57** | P | | **P** | **19** | **53 21.6** | **0.0** |
| | comp=Z,1.7nm,0.8s,baz=262,slow=3.6,SNR=9.2 | | | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **70.61** | **153** | T | | T | 21 | 10 58.0 | |
| | SNR=33 | | | | | | | | |
| **ILAR** | **Eielson Array** | **70.93** | **334** | P | | **P** | **19** | **54 01.6** | **+0.1** |
| | comp=Z,4.7nm,1.0s,baz=69,slow=4.4,SNR=26 | | | | | | | | |
| ILAR | | | | LR | | LR | 20 | 23 49.4 | |
| | comp=Z,97nm,21.3s,baz=104,slow=35 | | | | | | | | |
| **BRVK** | **Borovoye** | **82.17** | **34** | P | | **P** | **19** | **55 05.4** | **0.0** |
| **KMBO** | **Kilima Mbogo** | **83.09** | **95** | LR | | LR | 20 | 29 26.7 | |
| | comp=Z,224nm,21.8s,baz=101,slow=34 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **88.16** | **27** | P | | **P** | **19** | **55 35.7** | **+0.3** |
| | comp=Z,0.6nm,0.3s,baz=303,slow=6.7,SNR=4.4 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **122.44** | **42** | PKP | | **PKPdf** | **20** | **01 39.9** | **-0.7** |
| | comp=Z,1.1nm,0.7s,baz=292,slow=3.2,SNR=8.8 | | | | | | | | |
| **VNDA** | **Vanda** | **128.03** | **187** | PKP | | **PKPdf** | **20** | **01 50.1** | **+0.6** |
| | comp=Z,1.6nm,0.9s,baz=267,slow=4.0,SNR=5.2 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **172.79** | **9** | PKPab | | **PKPab** | **20** | **04 19.5** | **-0.6** |
| | comp=Z,0.8nm,0.9s,baz=357,slow=5.2,SNR=4.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **176.27** | **24** | PKP | | **PKPdf** | **20** | **02 52.0** | **-3.4** |
| | comp=Z,0.8nm,1.0s,baz=343,slow=1.0,SNR=3.3 | | | | | | | | |

*SOF* ***13*** *19:43:02.9, 42°.84N×22°.92E, h4km, MD3.0*

*ISCJB* ***13*** *19:43:03.8±0.7, 42°.85N±0°.01×22°.95E±0°.03, h7km±4km, Error ellipse: s-maj=4.3km s-min=2.3km az=8.6*

*CSEM* ***13*** *19:43:04.2±0.2, 42°.86N×22°.99E, h5km, MD3.0, Error ellipse: s-maj=3.9km s-min=3.7km az=128.0*

*THE* ***13*** *19:43:06.5, 42°.86N×22°.95E, h22km±3km, ML2.9/6, Error ellipse: s-maj=3.9km s-min=1.0km az=28.0*

**ISC 13 19:43:03.8**±1.2,**42°.83N**±0°.02×**22°.94E**±0°.03,**h2**km±10km, **n112,** σ0**°69**/132,**11C-6D, Bulgaria**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m s | ISC |
| **VTS** | **Vitosha** | **0.31** | **140** | *i* Pg | | **Pg** | **19** | **43 09.2** | **-0.6** |
| **VTS** | **Vitosha** | **0.31** | **140** | *i* Pg | | **Pg** | **19** | **43 09.2** | **-0.6** |
| **SOF** | **Sofiya** | **0.33** | **116** | *i* Pg | | **Pg** | **19** | **43 10.4** | **+0.3** |
| **SOF** | **Sofiya** | **0.33** | **116** | *i* Pg | | **Pg** | **19** | **43 10.4** | **+0.3** |
| **MPEP** | **Malo Peshtene** | **0.79** | **48** | *i* Pg | | **Pg** | **19** | **43 18.7** | **-0.2** |
| **KKB** | **Krupnik** | **0.97** | **173** | *i* P | | **Pg** | **19** | **43 22.3** | **0.0** |
| **KKB** | **Krupnik** | **0.97** | **173** | *i* P | | **Pg** | **19** | **43 22.3** | **0.0** |
| **MMB** | **Musomiste** | **1.37** | **154** | *i* P | | **Pg** | **19** | **43 30.7** | **+0.6** |
| **MMB** | **Musomiste** | **1.37** | **154** | *i* P | | **Pg** | **19** | **43 30.7** | **+0.6** |
| **PLD** | **Plovdiv** | **1.50** | **118** | P | | **Pn** | **19** | **43 30.0** | **-1.6** |
| **PLD** | **Plovdiv** | **1.50** | **118** | P | | **Pn** | **19** | **43 30.0** | **-1.6** |
| **VAY** | **Valandovo** | **1.53** | **190** | *i* Pn | | **Pb** | **19** | **43 32.6** | **-0.3** |
| VAY | | | | *e*Sn | | **Sg** | **19** | **43 53.7** | **+0.7** |
| **VAY** | **Valandovo** | **1.53** | **190** | P | | **Pn** | **19** | **43 31.8** | **-0.4** |
| VAY | | | | S | | **Sg** | **19** | **43 53.1** | **+0.1** |
| **VAY** | **Valandovo** | **1.53** | **190** | P | | **Pn** | **19** | **43 31.8** | **-0.4** |
| **VAY** | **Valandovo** | **1.53** | **190** | *i* Pn | | **Pb** | **19** | **43 32.6** | **-0.3** |
| VAY | | | | S | | **Sg** | **19** | **43 53.1** | **+0.1** |
| VAY | | | | *e*Sn | | **Sg** | **19** | **43 53.7** | **+0.7** |
| **NVR** | **Nevrokopi** | **1.63** | **155** | *e*P | | **Pn** | **19** | **43 33.5** | **-0.1** |
| **NVR** | **Nevrokopi** | **1.63** | **155** | *e*P | | **Pn** | **19** | **43 33.5** | **-0.1** |
| **NVR** | **Nevrokopi** | **1.63** | **155** | P | | **Pn** | **19** | **43 33.3** | **-0.3** |
| NVR | | | | S | | **Sn** | **19** | **43 55.0** | **-0.2** |
| **NVR** | **Nevrokopi** | **1.63** | **155** | P | | **Pn** | **19** | **43 33.3** | **-0.3** |
| **NVR** | **Nevrokopi** | **1.63** | **155** | *e*Pn | | **Pn** | **19** | **43 33.8** | **+0.2** |
| NVR | | | | *e*Sn | | **Sn** | **19** | **43 54.6** | **-0.6** |
| NVR | | | | S | | **Sn** | **19** | **43 55.0** | **-0.2** |
| **KNT** | **Kendrikon** | **1.67** | **181** | P | | **Pb** | **19** | **43 35.0** | **-0.2** |
| KNT | | | | S | | **Sb** | **19** | **43 56.7** | **0.0** |
| **KNT** | **Kendrikon** | **1.67** | **181** | P | | **Pb** | **19** | **43 35.0** | **-0.2** |
| KNT | | | | S | | **Sb** | **19** | **43 56.7** | **0.0** |
| **RZN** | **Rozhen** | **1.75** | **130** | P | | **Pn** | **19** | **43 35.5** | **+0.2** |
| **RZN** | **Rozhen** | **1.75** | **130** | P | | **Pn** | **19** | **43 35.5** | **+0.2** |
| **SRS** | **Serrai** | **1.78** | **164** | *e*Pn | | **Pn** | **19** | **43 36.3** | **+0.7** |
| SRS | | | | *e*Sn | | **Sn** | **19** | **43 57.7** | **-1.1** |
| **PVL** | **Pavlikeni** | **1.80** | **77** | P | | **Pn** | **19** | **43 34.0** | **-1.8** |
| **PVL** | **Pavlikeni** | **1.80** | **77** | P | | **Pn** | **19** | **43 34.0** | **-1.8** |
| **SRE** | **Strehaia** | **1.84** | **6** | *i* P | | **Pn** | **19** | **43 36.8** | **+0.4** |
| **SRE** | **Strehaia** | **1.84** | **6** | S | | **Sn** | **19** | **44 00.1** | **-0.2** |
| **GRG** | **Griva** | **1.92** | **192** | *e*P | | **Pn** | **19** | **43 37.9** | **+0.4** |
| **GRG** | **Griva** | **1.92** | **192** | *e*P | | **Pn** | **19** | **43 37.9** | **+0.4** |
| **GRG** | **Griva** | **1.92** | **192** | *e*Pn | | **Pn** | **19** | **43 38.2** | **+0.7** |
| GRG | | | | *e*Sn | | **Sn** | **19** | **44 01.5** | **-0.7** |
| **ZIMR** | | **1.96** | **64** | *i* P | | **Pn** | **19** | **43 38.8** | **+0.8** |
| **ZIMR** | | **1.96** | **64** | S | | **Sn** | **19** | **44 03.8** | **+0.7** |
| **SOH** | **Sokhos** | **2.03** | **171** | *e*P | | **Pn** | **19** | **43 38.4** | **-0.7** |
| **SOH** | **Sokhos** | **2.03** | **171** | *e*P | | **Pn** | **19** | **43 38.4** | **-0.7** |
| **SOH** | **Sokhos** | **2.03** | **171** | P | | **Pn** | **19** | **43 39.9** | **+0.8** |
| SOH | | | | S | | **Sn** | **19** | **44 04.6** | **-0.5** |
| **SOH** | **Sokhos** | **2.03** | **171** | *e*Pn | | **Pn** | **19** | **43 39.3** | **+0.2** |
| **SOH** | **Sokhos** | **2.03** | **171** | P | | **Pn** | **19** | **43 39.9** | **+0.8** |
| SOH | | | | S | | **Sn** | **19** | **44 04.6** | **-0.5** |
| **DIM** | **Dimitrovgrad** | **2.08** | **111** | P | | **Pn** | **19** | **43 39.5** | **-0.1** |
| **DIM** | **Dimitrovgrad** | **2.08** | **111** | P | | **Pn** | **19** | **43 39.5** | **-0.1** |
| **KAVA** | **Kavala** | **2.18** | **147** | P | | **Pn** | **19** | **43 41.4** | **+0.4** |
| KAVA | | | | S | | **Sn** | **19** | **44 08.2** | **-0.4** |
| **KAVA** | **Kavala** | **2.18** | **147** | P | | **Pn** | **19** | **43 41.4** | **+0.4** |
| KAVA | | | | S | | **Sn** | **19** | **44 08.2** | **-

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **8.52** | **198** | P | | **Pn** | **19 49 09.8** | **+0.5** |
| | baz=8.3,SNR=34 | | | | | | | |
| **BATI** | **Baumata** | **11.44** | **241** | P | | **Pn** | **19 49 49.9** | **+0.4** |
| **KNRA** | **Kununurra** | **11.98** | **204** | P | | **Pn** | **19 49 54.7** | **-2.1** |
| | baz=12,SNR=58 | | | | | | | |
| **COEN** | **Coen** | **13.04** | **136** | P | | **Pn** | **19 50 10.8** | **-0.5** |
| | baz=13,SNR=11 | | | | | | | |
| **KAPI** | **Kappang** | **14.00** | **268** | LR | | LR | 19 56 48.9 | |
| | comp=Z,58nm,18.3s,baz=105,slow=45 | | | | | | | |
| **WRA** | **Warramunga Arr** | **15.17** | **178** | Pn | | **Pn** | **19 50 36.3** | **-4.0** |
| | 0.6nm,0.3s,baz=6.8,slow=13,SNR=39 | | | | | | | |
| WRA | | | | Sn | | Sn | 19 53 15.3 | -12 |
| | 0.5nm,0.3s,baz=349,slow=24,SNR=5.7 | | | | | | | |
| **QIS** | **Mount Isa** | **16.75** | **161** | P | | **Pn** | **19 51 00.3** | **-0.4** |
| | baz=17,SNR=4.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.86** | **180** | P | | **P** | **19 51 24.1** | **-2.0** |
| | 0.5nm,0.3s,baz=356,slow=14,SNR=37 | | | | | | | |
| ASAR | | | | S | | Sn | 19 54 44.3 | -13 |
| | 0.1nm,0.3s,baz=0.9,slow=27,SNR=3.4 | | | | | | | |
| **WRKA** | **Warakurna** | **20.91** | **194** | P | | **P** | **19 51 48.9** | **+0.5** |
| | baz=21,SNR=15 | | | | | | | |
| **QLP** | **Quilpie** | **23.94** | **156** | P | | **P** | **19 52 21.5** | **+1.6** |
| | baz=24,SNR=7.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.46** | **325** | P | | **P** | **19 58 08.9** | **+1.1** |
| | 1.0nm,0.7s,baz=126,slow=9.2,SNR=7.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.27** | **332** | P | | **P** | **19 58 25.1** | **+0.2** |
| | 0.4nm,0.3s,baz=129,slow=4.7,SNR=3.6 | | | | | | | |
| **VNDA** | **Vanda** | **74.30** | **174** | P | | **P** | **19 58 44.0** | **+1.6** |
| | 0.7nm,0.9s,baz=312,slow=6.1,SNR=3.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.02** | **283** | PKP | | **PKPdf** | **20 06 21.1** | **+0.9** |
| | 0.6nm,0.9s,baz=89,slow=1.4,SNR=4.2 | | | | | | | |
| **CPUP** | **Villa Florida** | **147.33** | **161** | PKPbc | | **PKPab** | **20 06 51.9** | **+0.2** |
| | 2.7nm,0.9s,baz=135,slow=1.4,SNR=4.3 | | | | | | | |

*AUST* ***13*** *19:49:08.7,5.81S×101.41E,h5km*
*ISCJB* ***13*** *19:49:13.9±0.5,5.60S±0.05×101.82E±0.05,h29km, mb4.4/13, MS3.6/3, Error ellipse: s-maj=9.0km s-min=4.4km az=41.2*
*DJA* ***13*** *19:49:13.8±0.3,6°S±3'×10°2E±°,h10km,M5.2/21, mb5.2/15, mB5.7/9, MLv5.0/21, Mw(mB)5.2/9*
*NEIC* ***13*** *19:49:13.8±6.6,5.53S×101.82E,h11km±40km,mb4.3/2, Error ellipse: s-maj=28.0km s-min=7.5km az=51.0*
*IDC* ***13*** *19:49:17.9±1.4,5.46S×101.95E,h36km±6km,mb4.1/9, mb1 4.2/11,mb1mx3.9/37,mbtmp4.3/11,ML4.4/2,MS3.4/3, Ms1 3.4/3,ms1mx2.9/31, Error ellipse: s-maj=46.9km s-min=13.2km az=48.0*

**ISC 13 19:49:16.4±0.7,5.60S±0.08×101.91E±0.08,h29km, h29km:pP-P,n74,σ1s55/62,mb4.3/13,MS3.9/3,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNAI** | **Manna** | **1.61** | **40** | P | **Pn** | **19 49 42.1** | **-0.9** |
| | baz=2.1,SNR=85 | | | | | | |
| **MNAI** | **Manna** | **1.61** | **40** | P | **Pn** | **19 49 42.6** | **-0.4** |
| **MNAI** | **Manna** | **1.61** | **40** | *e*Pn | **Pn** | **19 49 41.7** | **-1.3** |
| **KSI** | **Kapahiang** | **2.05** | **19** | P | **Pn** | **19 49 48.1** | **-1.0** |
| KSI | | | | S | **Sn** | **19 50 11.5** | **-2.3** |
| **LWLI** | **Liwa** | **2.22** | **75** | P | **Pn** | **19 49 51.5** | **+0.1** |
| **MDSI** | **Maura Dua** | **2.52** | **64** | P | **Pn** | **19 49 55.7** | **+0.3** |
| **KASI** | **Kota Agung** | **2.58** | **88** | P | **Pn** | **19 49 56.7** | **+0.5** |
| **KLSI** | | **2.95** | **72** | P | **Pn** | **19 50 02.4** | **+1.0** |
| **KLI** | **Kotabumi** | **3.03** | **76** | P | **Pn** | **19 50 03.7** | **+1.3** |
| **PPSI** | **Pulau Pagai** | **3.39** | **326** | P | **Pn** | **19 50 06.7** | **-0.8** |
| **CGJI** | **Cibinong** | **3.90** | **105** | P | **Pn** | **19 50 14.9** | **+0.5** |
| **PMBI** | **Palembang** | **3.90** | **47** | P | **Pn** | **19 50 14.9** | **+0.5** |
| | baz=4.4,SNR=6.6 | | | | | | |
| **PMBI** | **Palembang** | **3.90** | **47** | P | **Pn** | **19 50 15.6** | **+1.2** |
| **PDSI** | **Padang** | **4.88** | **343** | P | **Pn** | **19 50 25.8** | **-2.1** |
| **CBJI** | **Citeko** | **4.98** | **100** | P | Pn | 19 50 33.3 | +4.0 |
| | 461nm,0.6s,11μm4.6nm | | | | | | |
| **SISI** | **Saibi** | **5.09** | **326** | P | **Pn** | **19 50 29.6** | **-1.2** |
| | 309nm,0.8s,7μm1.5nm | | | | | | |
| **PPI** | **Padang Panjang** | **5.33** | **344** | P | **Pn** | **19 50 32.5** | **-1.6** |
| | baz=5.5,SNR=53 | | | | | | |
| **PPI** | **Padang Panjang** | **5.33** | **344** | P | **Pn** | **19 50 32.1** | **-2.0** |
| | 209nm,0.7s,4μm0.9nm | | | | | | |
| **CNJI** | **Cibinong** | **5.46** | **108** | P | **Pn** | **19 50 35.5** | **-0.4** |
| | 170nm,0.7s,7μm2.0nm | | | | | | |
| **LEM** | **Lembang** | **5.81** | **102** | Pn | **Pn** | **19 50 43.1** | **+2.3** |
| | 14nm,0.3s,baz=340,slow=12,SNR=11 | | | | | | |
| LEM | | | | Sn | **Sn** | **19 51 43.6** | **-3.0** |
| | 12nm,0.3s,baz=335,slow=22,SNR=4.7 | | | | | | |
| LEM | | | | LR | LR | 19 52 28.3 | |
| | comp=Z,31nm,20.9s,baz=282,slow=33 | | | | | | |
| **LEM** | **Lembang** | **5.81** | **102** | P | Pn | 19 50 45.6 | +4.8 |
| | baz=6.2,SNR=6.4 | | | | | | |
| **LEM** | **Lembang** | **5.81** | **102** | P | **Pn** | **19 50 43.2** | **+2.4** |
| | 582nm,0.7s,5.4nm | | | | | | |
| **XMI** | **Christmas Isla** | **6.10** | **142** | P | Pn | 19 50 41.0 | -3.8 |
| | baz=6.3,SNR=7.5 | | | | | | |
| **XMIS** | **Christmas Isla** | **6.10** | **143** | P | Pn | 19 50 40.6 | -4.2 |
| | baz=6.3,SNR=33 | | | | | | |
| **CISI** | **Cisompet, Garu** | **6.18** | **109** | P | **Pn** | **19 50 45.6** | **-0.3** |
| | baz=6.6,SNR=66 | | | | | | |
| **CISI** | **Cisompet, Garu** | **6.18** | **109** | P | **Pn** | **19 50 45.9** | **0.0** |
| | 174nm,0.6s,10μm2.3nm | | | | | | |
| **CISI** | **Cisompet, Garu** | **6.18** | **109** | *e*Pn | **Pn** | **19 50 45.0** | **-0.9** |
| | 143nm,0.3s | | | | | | |
| **MNSI** | **Mandailing Nat** | **6.76** | **340** | P | **Pn** | **19 50 52.4** | **-1.4** |
| | 178nm,0.3s,5μm1.2nm | | | | | | |
| **CMJI** | **Cimerak** | **6.85** | **109** | P | **Pn** | **19 50 54.9** | **-0.1** |
| | 158nm,0.6s,3μm1.0nm | | | | | | |
| **GSI** | **Gunungsitoli** | **8.11** | **328** | P | **Pn** | **19 51 10.5** | **-1.8** |
| | 70nm,0.6s | | | | | | |
| **GSI** | **Gunungsitoli** | **8.11** | **328** | *e*Pn | **Pn** | **19 51 09.7** | **-2.6** |
| | 46nm,0.6s | | | | | | |
| **PSI** | **Prapat** | **8.86** | **340** | Pn | Pn | 19 51 18.8 | -4.0 |
| | 3.3nm,0.3s,baz=174,slow=9.2,SNR=6.5 | | | | | | |
| PSI | | | | LR | LR | 19 54 57.1 | |
| | comp=Z,109nm,18.6s,baz=217,slow=39 | | | | | | |
| **PSI** | **Prapat** | **8.86** | **340** | P | Pn | 19 51 18.9 | -3.9 |
| | baz=8.9,SNR=3.4 | | | | | | |
| **PCJI** | **Pacitan** | **9.56** | **106** | P | **Pn** | **19 51 33.0** | **+0.8** |
| | 86nm,1.1s | | | | | | |
| **PWJI** | **Pagerwojo** | **10.12** | **104** | P | **Pn** | **19 51 40.7** | **+0.8** |
| | 44nm,1.4s | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **11.24** | **331** | P | **Pn** | **19 51 52.3** | **-2.9** |
| **LHMI** | **Lhok Sumawe** | **11.84** | **335** | P | **Pn** | **19 52 01.1** | **-2.4** |
| | baz=12,SNR=4.6 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **12.48** | **104** | P | **Pn** | **19 52 12.7** | **+0.4** |
| | baz=13,SNR=7.5 | | | | | | |
| **BATI** | **Baumata** | **22.02** | **103** | P | **P** | **19 54 08.5** | **-0.3** |
| | 18nm,0.4s,baz=297,slow=4.5,SNR=12 | | | | | | |
| BATI | | | | S | S | 19 58 01.5 | -9.0 |
| | 9.2nm,0.6s,baz=326,slow=22,SNR=4.9 | | | | | | |
| **SOEI** | **Soe** | **22.54** | **102** | P | **P** | **19 54 12.9** | **-1.6** |
| | baz=23,SNR=7.7 | | | | | | |
| **MBWA** | **Marble Bar** | **23.19** | **133** | *e*P | **P** | **19 54 21.4** | **+0.4** |
| | 9.4nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **24.08** | **353** | P | **P** | **19 54 28.9** | **-0.7** |
| | 6.2nm,0.7s,baz=180,slow=9.8,SNR=33 | | | | | | |
| CMAR | | | | LR | LR | 20 04 33.6 | |
| | comp=Z,38nm,18.4s,baz=165,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.28** | **264** | T | T | 20 26 09.7 | |
| | baz=87,slow=76,SNR=186 | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.29** | **264** | T | T | 20 26 09.3 | |
| | baz=87,slow=76,SNR=191 | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.30** | **264** | T | T | 20 26 07.3 | |
| | baz=87,slow=76,SNR=132 | | | | | | |
| **MTN** | **Manton Dam** | **29.71** | **106** | P | P | 19 55 24.6 | +4.3 |
| | baz=30,SNR=5.3 | | | | | | |
| **H08N1** | **Diego Garcia H** | **30.73** | **267** | T | T | 20 28 16.2 | |
| | baz=64,slow=76,SNR=12 | | | | | | |
| **H08N2** | **Diego Garcia H** | **30.75** | **267** | T | T | 20 28 17.4 | |
| | baz=64,slow=76,SNR=11 | | | | | | |
| **H08N3** | **Diego Garcia H** | **30.75** | **267** | T | T | 20 28 16.6 | |
| | baz=64,slow=76,SNR=12 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **31.25** | **160** | T | T | 20 28 20.4 | |
| | baz=338,slow=76,SNR=15 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **31.27** | **160** | T | T | 20 28 21.5 | |
| | baz=338,slow=76,SNR=16 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **31.27** | **160** | T | T | 20 28 21.4 | |
| | baz=338,slow=76,SNR=11 | | | | | | |
| **WRKA** | **Warakurna** | **31.84** | **130** | P | P | 19 55 33.8 | -5.3 |
| | baz=32,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.60** | **117** | P | **P** | **19 56 03.9** | **+0.7** |
| | 2.1nm,0.7s,baz=291,slow=9.9,SNR=5.6 | | | | | | |
| WRA | | | | pP | **pP** | **19 56 13.2** | **+1.5** |
| | 1.2nm,0.4s,baz=287,slow=9.9,SNR=4.1 | | | | | | |
| **WRAB** | **Tennant Creek** | **34.60** | **117** | *e*P | **P** | **19 56 03.4** | **+0.2** |
| | 2.5nm,0.6s | | | | | | |
| **ODAN** | **Odare** | **35.20** | **337** | *e*P | P | 19 56 12.0 | +3.5 |
| | 5.0nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **35.52** | **338** | *e*P | **P** | **19 56 12.1** | **+0.8** |
| | 14nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **35.65** | **124** | P | **P** | **19 56 13.2** | **+1.0** |
| | 3.5nm,0.6s,baz=297,slow=7.8,SNR=22 | | | | | | |
| ASAR | | | | pP | **pP** | **19 56 24.1** | **+3.3** |
| | 1.6nm,0.5s,baz=298,slow=7.6,SNR=6.5 | | | | | | |
| **GUN** | **Gumba** | **36.73** | **336** | *e*P | **P** | **19 56 22.4** | **+0.7** |
| | 11nm,0.5s | | | | | | |
| **DMN** | **Daman** | **36.79** | **335** | *e*P | **P** | **19 56 24.9** | **+2.8** |
| | 35nm,1.4s | | | | | | |
| **GKN** | **Gorkha** | **37.33** | **334** | *e*P | **P** | **19 56 27.2** | **+0.6** |
| | 5.1nm,0.4s | | | | | | |
| **DANN** | **Dangsing** | **38.02** | **334** | *e*P | **P** | **19 56 33.4** | **+0.8** |
| | 1.0nm,0.5s | | | | | | |
| **XAN** | **Xi'an** | **39.98** | **9** | P | **P** | **19 56 47.4** | **-1.2** |
| XAN | | | | pP | **pP** | **19 56 59.5** | **+2.2** |
| XAN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **HTT** | **Hallett** | **44.13** | **134** | P | **P** | **19 57 20.4** | **-2.2** |
| | baz=44,SNR=4.0 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **47.06** | **10** | *e*P | P | 19 57 48.9 | +3.2 |
| HHC | | | | PP | **PP** | **19 59 39.5** | **+2.7** |
| HHC | | | | S | **S** | **20 04 39.3** | **+3.3** |
| **HHC** | **Hu-ho-hao-te** | **47.06** | **10** | SS | SS | 20 07 59.0 | -4.5 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,76nm,4.0s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,100nm,12.3s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,120nm,13.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,39nm,12.3s | | | | | | |
| **SONM** | **Songino Array** | **53.35** | **4** | P | **P** | **19 58 33.3** | **0.0** |
| | comp=Z,2.9nm,0.5s,baz=181,slow=9.7,SNR=17 | | | | | | |
| SONM | | | | pP | **pP** | **19 58 43.5** | **+1.4** |
| | comp=Z,1.6nm,0.6s,baz=185,slow=9.6,SNR=5.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **53.87** | **336** | *e*P | **P** | **19 58 37.2** | **0.0** |
| **MKAR** | **Makanchi Array** | **54.99** | **344** | P | **P** | **19 58 44.5** | **-0.6** |
| | comp=Z,0.4nm,0.4s,baz=151,slow=8.5,SNR=8.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **56.49** | **26** | P | **P** | **19 58 55.1** | **-0.7** |
| | comp=Z,3.7nm,0.6s,baz=203,slow=4.5,SNR=9.3 | | | | | | |
| **GEYT** | **Alibeck** | **59.41** | **321** | P | **P** | **19 59 16.2** | **-0.4** |
| | comp=Z,0.8nm,0.6s,baz=165,slow=7.4,SNR=3.5 | | | | | | |
| GEYT | | | | pP | **pP** | **19 59 27.9** | **+2.3** |
| | comp=Z,1.1nm,0.5s,baz=160,slow=4.7,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.04** | **349** | P | **P** | **19 59 26.5** | **-0.8** |
| | comp=Z,0.8nm,0.4s,baz=155,slow=5.4,SNR=3.0 | | | | | | |
| **ABKAR** | **Akbulak array** | **65.69** | **331** | *e*P | **P** | **19 59 57.7** | **-0.5** |
| **PETK** | **Petropavlovsk-** | **74.93** | **31** | LR | LR | 20 37 27.2 | |
| | comp=Z,81nm,18.4s,baz=118,slow=39 | | | | | | |

*SJA* ***13*** *19:59:29.2±0.6,35.97S×74.29W,h33km,ML3.9*
*IDC* ***13*** *19:59:31.2±1.4,36.28S×73.65W,h0km,mb3.7/4, mb1 3.9/5,mb1mx3.8/19,mbtmp3.7/5,ML3.9/1,MS3.5/2, Ms1 3.5/2,ms1mx3.1/19, Error ellipse: s-maj=54.0km s-min=29.6km az=103.0*
*ISCJB* ***13*** *19:59:34.5±0.7,36.05S±0.05×73.76W±0.07,h33km, mb3.9/3,MS3.8/1, Error ellipse: s-maj=8.7km s-min=6.6km az=18.0*

**ISC 13 19:59:36.5±1.1,36.14S±0.07×73.70W±0.10,h35km,n24, σ1s23/26,mb4.0/3,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **0.74** | **90** | *e*P | **Pn** | **19 59 48.4** | **-2.1** |
| COCH | | | | *e*S | **Sn** | **20 00 00.2** | **-0.2** |
| COCH | | | | AML | AML | 20 00 04.1 | |
| | comp=N,11μm,0.7s | | | | | | |
| **CCHI** | **Chillan** | **1.39** | **110** | *e*P | **Pn** | **19 59 58.6** | **-0.8** |
| CCHI | | | | *e*S | **Sn** | **20 00 18.0** | **+1.5** |
| CCHI | | | | AML | AML | 20 00 30.2 | |
| | comp=N,5μm,0.4s | | | | | | |
| **NICH** | **Los Niches** | **2.31** | **61** | *e*P | Pn | 20 00 16.2 | +4.1 |
| **ROC1** | **El Roble** | **3.86** | **36** | *e*P | **Pn** | **20 00 32.3** | **-1.3** |
| **AAGR** | **Agrelo** | **5.04** | **54** | *i* P | **Pn** | **20 00 50.8** | **+1.0** |
| **ARCO** | **CERRO ARCO** | **5.13** | **51** | AML | AML | 20 01 25.5 | |
| | comp=Z,42nm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **5.30** | **44** | *i* P | **Pn** | **20 00 53.5** | **+0.1** |
| AUSP | | | | *i* S | **Sn** | **20 01 56.0** | **+2.6** |
| **ASAL** | **Salagasta** | **5.36** | **50** | *i* P | **Pn** | **20 00 54.7** | **+0.6** |
| **RTLS** | **Leoncito** | **5.67** | **41** | *i* P | **Pn** | **20 00 58.4** | **0.0** |
| **RTCV** | **Cerro Valdivia** | **6.05** | **47** | *i* P | **Pn** | **20 01 02.9** | **-0.6** |
| **CFAA** | **Coronel Fontan** | **6.41** | **47** | *e*P | **Pn** | **20 01 07.4** | **-1.1** |
| CFAA | | | | *i* S | **Sn** | **20 02 21.1** | **+0.7** |
| **RTLL** | **Cerro Villicun** | **6.48** | **44** | *i* P | **Pn** | **20 01 08.1** | **-1.4** |
| RTLL | | | | *i* S | **Sn** | **20 02 21.4** | **-0.7** |
| **AMOG** | **MOGNA** | **6.77** | **41** | *e*P | **Pn** | **20 01 12.0** | **-1.4** |
| **MRA** | **San Martin** | **7.58** | **63** | *i* P | **Pn** | **20 01 24.8** | **+0.3** |
| MRA | | | | AML | AML | 20 02 16.0 | |
| | comp=Z,9.9nm,0.5s | | | | | | |
| **AGUA** | **GUANDACOL** | **7.95** | **35** | *e*P | **Pn** | **20 01 28.6** | **-1.1** |
| **TCA** | **Tanti** | **8.97** | **60** | *e*P | **Pn** | **20 01 41.2** | **-2.4** |
| TCA | | | | AML | AML | 20 01 50.3 | |
| | comp=Z,8.5nm,0.5s | | | | | | |
| **CPUP** | **Villa Florida** | **17.06** | **60** | Pn | **Pn** | **20 03 31.9** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=223,slow=19,SNR=2.7 | | | | | | |
| CPUP | | | | LR | LR | 20 09 27.0 | |
| | comp=Z,84nm,19.1s,baz=234,slow=35 | | | | | | |
| **LPAZ** | **La Paz** | **20.39** | **16** | P | Pn | 20 04 12.3 | -1.0 |
| | comp=Z,0.6nm,0.6s,baz=201,slow=9.3,SNR=2.6 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **47.91** | **157** | P | **P** | **20 08 12.0** | **+1.2** |
| **VNA2** | **Neumayer--Watz** | **48.59** | **156** | P | **P** | **20 08 16.9** | **+0.9** |
| | baz=289,slow=8.7 | | | | | | |
| **SNAA** | **Sanae** | **50.13** | **157** | P | **P** | **20 08 29.0** | **+1.0** |
| **QSPA** | **South Pole Qui** | **54.10** | **180** | P | **P** | **20 08 56.7** | **-0.9** |
| | comp=Z,2.8nm,1.0s,baz=149,slow=5.9,SNR=7.4 | | | | | | |
| QSPA | | | | LR | LR | 20 32 05.2 | |
| | comp=Z,74nm,18.8s,baz=38,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.88** | **326** | P | **P** | **20 12 08.4** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=142,slow=4.6,SNR=3.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.21** | **71** | P | **P** | **20 12 14.3** | **-0.3** |
| | comp=Z,1.0nm,1.0s,baz=230,slow=4.4,SNR=4.6 | | | | | | |

*IDC* ***13*** *20:20:10.9±1.3,5.06S×133.62E,h0km,mb3.9/3, mb1 4.2/7,mb1mx3.8/23,mbtmp4.1/7,ML4.1/4,MS3.8/6, Ms1 3.8/6,ms1mx3.3/30,Error ellipse: s-maj=51.6km s-min=22.8km az=83.0*
*ISCJB* ***13*** *20:20:11.8±0.6,5.01S±0.04×133.76E±0.07,h25km, mb3.8/3,MS3.8/4, Error ellipse: s-maj=10.2km s-min=5.6km az=159.2*
*DJA* ***13*** *20:20:12.8±0.4,5°S±3'×13'4E±°,h10km,M4.4/10, mb4.5/10,mB5.2/6,MLv4.3/6,Mw(mB)4.5/6*
*AUST* ***13*** *20:20:15.3,4.96S×133.53E,h60km*

**ISC 13 20:20:14.1±0.8,5.02S±0.06×133.66E±0.07,h25km,n36, σ1s87/30,mb3.9/3,MS3.9/4,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.51** | **326** | P | **Pn** | **20 20 52.3** | **-1.0** |
| | baz=2.4,SNR=41 | | | | | | |
| **FAKI** | **Fak Fak** | **2.51** | **326** | P | **Pn** | **20 20 52.7** | **-0.7** |
| FAKI | | | | S | **Sn** | **20 21 23.3** | **+0.1** |
| **SAUI** | **Saumlaki** | **3.76** | **218** | P | Pn | 20 21 15.0 | +4.5 |
| SAUI | | | | S | **Sb** | **20 22 03.6** | **-1.4** |
| **BNDI** | **Bandanaira** | **3.77** | **277** | P | **Pn** | **20 21 13.5** | **+2.8** |
| BNDI | | | | S | **Sb** | **20 22 00.3** | **-5.0** |
| **SIJI** | **Sorong** | **4.76** | **330** | Pn | **Pn** | **20 21 23.4** | **-1.0** |
| | 5.7nm,0.3s,baz=147,slow=8.6,SNR=20 | | | | | | |
| SIJI | | | | Sn | Sn | 20 22 12.1 | -6.7 |
| | 6.1nm,0.3s,baz=185,slow=22,SNR=2.8 | | | | | | |
| **SWI** | **Sorong** | **4.77** | **330** | P | **Pn** | **20 21 24.5** | **+0.1** |
| | baz=4.7,SNR=9.9 | | | | | | |
| **SWI** | **Sorong** | **4.77** | **330** | P | **Pn** | **20 21 24.0** | **-0.4** |
| **MSAI** | **Masohi** | **5.00** | **289** | P | **Pn** | **20 21 29.2** | **+1.6** |
| **AAI** | **Ambon** | **5.60** | **283** | P | **Pn** | **20 21 37.9** | **+2.0** |
| | baz=5.5,SNR=6.9 | | | | | | |
| **AAI** | **Ambon** | **5.60** | **283** | P | **Pn** | **20 21 37.7** | **+1.8** |
| | 55nm,0.5s,1μm0.3nm | | | | | | |
| **LBMI** | **Labuha** | **7.53** | **305** | P | **Pn** | **20 22 03.7** | **+1.3** |
| | 35nm,1.3s,538nm | | | | | | |
| **KDU** | **Kakadu** | **7.71** | **189** | P | **Pn** | **20 22 06.9** | **+2.1** |
| | baz=7.8,SNR=48 | | | | | | |
| **MTN** | **Manton Dam** | **8.16** | **198** | P | Pn | 20 22 14.8 | +3.7 |
| | baz=8.2,SNR=12 | | | | | | |
| **SANI** | **Sanana** | **8.20** | **291** | P | **Pn** | **20 22 12.2** | **+0.6** |
| | 13nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **10.43** | **243** | P | **Pn** | **20 22 44.1** | **+1.8** |
| | baz=10,SNR=7.4 | | | | | | |
| **SOEI** | **Soe** | **10.43** | **243** | P | Pn | **20 22 44.7** | **+2.4** |
| | 34nm,1.2s | | | | | | |
| **BATI** | **Baumata** | **11.16** | **242** | Pn | **Pn** | **20 22 53.2** | **+1.0** |
| | 3.2nm,0.3s,baz=27,slow=16,SNR=6.6 | | | | | | |
| BATI | | | | Sn | **Sn** | **20 24 57.7** | **+1.4** |
| | 5.3nm,0.3s,baz=34,slow=22,SNR=7.5 | | | | | | |
| **BATI** | **Baumata** | **11.16** | **242** | P | Pn | 20 22 56.8 | +4.6 |
| | 15nm,2.5s | | | | | | |
| **LUWI** | **Luwuk** | **11.56** | **290** | P | Pn | 20 22 51.7 | -5.9 |
| | baz=11,SNR=4.3 | | | | | | |
| **LUWI** | **Luwuk** | **11.56** | **290** | P | Pn | 20 23 03.5 | +5.8 |
| | 24nm,1.7s,2μm | | | | | | |
| **KNRA** | **Kununurra** | **11.63** | **204** | P | **Pn** | **20 22 59.4** | **+0.8** |
| | baz=12,SNR=40 | | | | | | |
| **COEN** | **Coen** | **12.92** | **134** | P | **Pn** | **20 23 14.5** | **-1.7** |
| | baz=13,SNR=6.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.85** | **177** | Pn | **Pn** | **20 23 39.9** | **-2.7** |
| | 0.8nm,0.3s,baz=0.4,slow=13,SNR=46 | | | | | | |
| WRA | | | | Sn | Sn | 20 26 17.4 | -9.1 |
| | 1.8nm,0.3s,baz=357,slow=24,SNR=11 | | | | | | |
| WRA | | | | LR | LR | 20 30 01.1 | |
| | comp=Z,417nm,20.9s,baz=40,slow=40 | | | | | | |
| **QIS** | **Mount Isa** | **16.49** | **160** | P | **P** | **20 24 06.5** | **+0.1** |
| | baz=17,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **18.54** | **179** | P | **P** | **20 24 26.9** | **-2.1** |
| | 0.7nm,0.3s,baz=2.9,slow=11,SNR=48 | | | | | | |
| ASAR | | | | S | Sn | 20 27 44.6 | -12 |
| | 0.3nm,0.3s,baz=0.2,slow=27,SNR=5.6 | | | | | | |
| ASAR | | | | LR | LR | 20 32 25.1 | |
| | comp=Z,542nm,18.8s,baz=349,slow=40 | | | | | | |
| **WRKA** | **Warakurna** | **20.56** | **194** | P | Pn | 20 24 53.2 | -0.2 |
| | baz=21,SNR=17 | | | | | | |
| **GUMO** | **Guam** | **21.58** | **31** | LR | LR | 20 33 22.1 | |
| | comp=Z,75nm,18.6s,baz=173,slow=37 | | | | | | |
| **QLP** | **Quilpie** | **23.71** | **156** | P | **P** | **20 25 27.2** | **+3.0** |
| | baz=24,SNR=4.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.02** | **358** | P | **P** | **20 29 00.1** | **+1.4** |
| | 1.4nm,0.6s,baz=174,slow=7.2,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.64** | **325** | P | **P** | **20 31 16.6** | **+1.3** |
| | 0.4nm,0.6s,baz=113,slow=8.0,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.49** | **332** | P | **P** | **20 31 32.0** | **-0.5** |
| | 0.3nm,0.3s,baz=123,slow=7.8,SNR=2.9 | | | | | | |
| **VNDA** | **Vanda** | **73.99** | **174** | LR | LR | 21 03 41.1 | |
| | comp=Z,103nm,18.5s,baz=347,slow=35 | | | | | | |
| **MAW** | **Mawson** | **78.12** | **202** | LR | LR | 21 04 17.2 | |
| | comp=Z,59nm,19.4s,baz=58,slow=34 | | | | | | |
| **BBB** | **Bella Bella** | **98.99** | **38** | LR | LR | 21 17 38.3 | |
| | comp=Z,30nm,18.1s,baz=299,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **131.95** | **283** | PKP | **PKPdf** | **20 39 26.6** | **+0.1** |
| | 0.1nm,0.3s,baz=24,slow=26,SNR=6.6 | | | | | | |
| **CPUP** | **Villa Florida** | **147.07** | **162** | PKPbc | **PKPab** | **20 39 57.8** | **+0.7** |
| | 2.0nm,0.8s,baz=225,slow=2.9,SNR=3.7 | | | | | | |

*ISCJB* ***13*** *20:23:53.1±0.6,34.72S±0.03×71.90W±0.07,h50km±5km, mb3.9/6, Error ellipse: s-maj=10.4km s-min=5.6km az=11.0*
*GUC* ***13*** *20:23:53.6±0.5,34.70S×71.81W,h41km±2km,ML4.3*
*IDC* ***13*** *20:23:54.1±0.9,34.66S×71.65W,h40km±7km,mb3.7/6, mb1 3.8/8,mb1mx3.7/27,mbtmp3.9/8,ML3.7/2,MS1.9/1, Ms1 1.9/1,ms1mx1.9/27, Error ellipse: s-maj=33.8km s-min=18.0km az=95.0*

**ISC 13 20:23:53.9±0.7,34.74S±0.04×71.88W±0.07,h40km±6km, n25,σ1s06/36,mb4.0/6,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.37** | **343** | *e*P | **Pn** | **20 24 02.6** | **-0.4** |
| CHPI | | | | *e*S | **Sn** | **20 24 09.0** | **-0.2** |
| **NICH** | **Los Niches** | **0.59** | **116** | *e*P | **Pn** | **20 24 05.5** | **-0.4** |
| NICH | | | | *e*S | **Sn** | **20 24 14.2** | **-0.2** |
| NICH | | | | AML | AML | 20 24 15.1 | |
| | comp=E,27μm,1.4s | | | | | | |
| **TALC** | **Talca** | **0.68** | **163** | *e*P | **Pn** | **20 24 07.7** | **+0.5** |
| TALC | | | | *e*S | **Sn** | **20 24 17.6** | **+1.0** |
| **RCDM** | **Rinconada Maip** | **1.53** | **36** | *e*P | **Pn** | **20 24 18.4** | **-0.5** |
| RCDM | | | | *e*S | **Sn** | **20 24 37.6** | **0.0** |
| RCDM | | | | AML | AML | 20 24 43.9 | |
| | comp=E,5μm,0.2s | | | | | | |
| **ANTU** | **Antumapu** | **1.56** | **42** | *e*P | **Pn** | **20 24 19.1** | **-0.1** |
| ANTU | | | | *e*S | **Sn** | **20 24 38.7** | **+0.5** |
| ANTU | | | | AML | AML | 20 24 41.3 | |
| | comp=N,8μm,0.7s | | | | | | |
| **SAN** | **Santiago** | **1.63** | **38** | *e*P | **Pn** | **20 24 20.1** | **-0.2** |
| SAN | | | | *e*S | **Sn** | **20 24 40.1** | **0.0** |
| **CLCH** | **Cerro Calan** | **1.74** | **40** | *e*P | **Pn** | **20 24 21.7** | **-0.1** |
| CLCH | | | | *e*S | **Sn** | **20 24 43.1** | **+0.3** |
| CLCH | | | | AML | AML | 20 24 46.8 | |
| | comp=N,5μm,0.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ANTU** | **Antumapu** | **4.62** | **32** | *e*S | | **Sn** | **20 44 56.2** | **+4.7** |
| **CLCH** | **Cerro Calan** | **4.81** | **32** | *e*S | | **Sn** | **20 45 01.1** | **+4.9** |
| **CPUP** | **Villa Florida** | **17.70** | **56** | P | | **P** | **20 46 56.0** | **+0.1** |
| | comp=E,0.1nm,0.3s,baz=250,slow=9.6,SNR=3.3 | | | | | | | |
| CPUP | | | | LR | LR | | 20 54 38.8 | |
| | comp=E,290nm,19.8s,baz=225,slow=40 | | | | | | | |
| **LPAZ** | **La Paz** | **21.70** | **14** | P | | **P** | **20 47 40.3** | **+0.2** |
| | comp=E,2.5nm,1.0s,baz=160,slow=8.1,SNR=6.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **72.25** | **333** | P | | **P** | **20 54 13.8** | **+0.2** |
| | comp=E,0.3nm,0.6s,baz=165,slow=8.4,SNR=3.3 | | | | | | | |
| **DBIC** | **Dimbokro** | **77.47** | **71** | P | | **P** | **20 54 43.8** | **-0.2** |
| | comp=E,2.7nm,0.6s,baz=220,slow=4.7,SNR=5.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.56** | **71** | P | | **P** | **20 55 30.2** | **-1.5** |
| | comp=E,0.4nm,0.6s,baz=219,slow=5.9,SNR=7.8 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **24.44** | **268** | T | | T | 23 18 22.4 | |
| | baz=125,slow=74,SNR=5.2 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **24.45** | **268** | T | | T | 23 18 23.2 | |
| | baz=125,slow=74,SNR=5.4 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **24.45** | **268** | T | | T | 23 18 23.3 | |
| | baz=125 | | | | | | | |
| **MKAR** | **Makanchi Array** | **159.91** | **55** | PKPab | | **PKPab** | **21 03 24.3** | **-2.1** |
| | comp=E,0.3nm,0.8s,baz=264,slow=2.9,SNR=3.6 | | | | | | | |

*ISCJB **13** 20:47:06.5±0.5,39.32N±0.02×28.25E±0.03,h0km±4km, Error ellipse: s-maj=3.5km s-min=3.4km az=15.2*
*CSEM **13** 20:47:06.8±0.1,39.32N×28.28E,h2km,MD3.0, Error ellipse: s-maj=3.2km s-min=2.8km az=98.0*
*DDA **13** 20:47:06.1,39.34N×28.25E,h7km,Md3.0*
*ISK **13** 20:47:06.5,39.31N×28.32E,h6km,MD2.8*

**ISC 13 20:47:06.7±1.0, 39.34N±0.02×28.24E±0.02, h7km±9km, n52, σ0 844/71, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DURS** | **Dursunbey** | **0.32** | **34** | *i* P | **Pg** | **20 47 12.7** | **-0.3** |
| DURS | | | | *i* S | **Sg** | **20 47 17.6** | **+0.4** |
| **DURS** | **Dursunbey** | **0.32** | **34** | P | **Pg** | **20 47 12.7** | **-0.3** |
| DURS | | | | S | **Sg** | **20 47 17.6** | **+0.4** |
| **DST** | **Dursunbey** | **0.40** | **47** | *e*PG | **Pg** | **20 47 14.4** | **+0.1** |
| DST | | | | *e*SG | **Sg** | **20 47 19.6** | **0.0** |
| **DST** | **Dursunbey** | **0.40** | **47** | *e*Pg | **Pg** | **20 47 14.5** | **+0.1** |
| DST | | | | *e*Sg | **Sg** | **20 47 19.7** | **0.0** |
| **BALB** | **Balikesir** | **0.41** | **317** | *e*PG | **Pb** | **20 47 15.5** | **-0.8** |
| BALB | | | | *e*SG | **Sb** | **20 47 22.8** | **0.0** |
| **BALB** | **Balikesir** | **0.41** | **317** | *e*Pg | **Pb** | **20 47 15.5** | **-0.8** |
| BALB | | | | *e*Sg | **Sb** | **20 47 22.8** | **0.0** |
| **DEMI** | **Demirci** | **0.47** | **128** | *i* P | **Pg** | **20 47 15.6** | **-0.2** |
| DEMI | | | | *i* S | **Sg** | **20 47 22.2** | **+0.2** |
| **DEMI** | **Demirci** | **0.47** | **128** | P | **Pg** | **20 47 15.6** | **-0.2** |
| DEMI | | | | S | **Sg** | **20 47 22.2** | **+0.2** |
| **AKHS** | **Akhisar** | **0.56** | **216** | *i* P | **Pg** | **20 47 16.9** | **-0.7** |
| AKHS | | | | *i* S | **Sg** | **20 47 25.6** | **+0.7** |
| **AKHS** | **Akhisar** | **0.56** | **216** | P | **Pg** | **20 47 16.9** | **-0.7** |
| AKHS | | | | S | **Sg** | **20 47 25.6** | **+0.7** |
| **AKS** | **Akhisar** | **0.56** | **216** | *e*PG | **Pg** | **20 47 17.7** | **+0.1** |
| **AKS** | **Akhisar** | **0.56** | **216** | *e*Pg | **Pg** | **20 47 17.7** | **+0.1** |
| **BALY** | **Balya** | **0.63** | **310** | *i* P | **Pg** | **20 47 18.7** | **-0.1** |
| BALY | | | | *i* S | **Sg** | **20 47 27.4** | **+0.4** |
| **BALY** | **Balya** | **0.63** | **310** | P | **Pg** | **20 47 18.8** | **-0.1** |
| BALY | | | | S | **Sg** | **20 47 27.4** | **+0.4** |
| **GONE** | **Gonen-Balikesi** | **0.83** | **329** | *e*PG | **Pn** | **20 47 24.7** | **-0.1** |
| **GONE** | **Gonen-Balikesi** | **0.83** | **329** | *e*Pg | **Pn** | **20 47 24.7** | **-0.1** |
| **ORLT** | **Orhaneli** | **0.87** | **35** | *e*PG | **Pg** | **20 47 23.5** | **+0.1** |
| **ORLT** | **Orhaneli** | **0.87** | **35** | *e*Pg | **Pg** | **20 47 23.5** | **+0.1** |
| **KULA** | **Kula-Manisa** | **0.88** | **158** | *e*PG | **Pg** | **20 47 23.4** | **-0.2** |
| KULA | | | | *e*SG | **Sg** | **20 47 34.6** | **-0.5** |
| **KULA** | **Kula-Manisa** | **0.88** | **158** | *e*Pg | **Pg** | **20 47 23.5** | **-0.2** |
| KULA | | | | *e*Sg | **Sg** | **20 47 34.6** | **-0.5** |
| **KCTX** | **Karacabey (Bur** | **0.93** | **5** | *e*PG | **Pn** | **20 47 25.9** | **-0.4** |
| **KCTX** | **Karacabey (Bur** | **0.93** | **5** | *e*Pg | **Pn** | **20 47 25.9** | **-0.4** |
| **EDC** | **Edincik** | **1.05** | **344** | *e*PN | **Pn** | **20 47 28.4** | **+0.5** |
| **EDC** | **Edincik** | **1.05** | **344** | *e*Pn | **Pn** | **20 47 28.4** | **+0.5** |
| **DKL** | **Dikili** | **1.07** | **256** | *e*PN | **Pn** | **20 47 28.8** | **+0.7** |
| **DKL** | **Dikili** | **1.07** | **256** | *e*Pn | **Pn** | **20 47 28.8** | **+0.7** |
| **MDNY** | **Mudanya-Bursa** | **1.14** | **25** | *e*PN | **Pb** | **20 47 28.9** | **+0.1** |
| **MDNY** | **Mudanya-Bursa** | **1.14** | **25** | *e*Pn | **Pb** | **20 47 28.9** | **+0.1** |
| **IGD** | **Bursa** | **1.19** | **38** | P | **Pg** | **20 47 29.1** | **-0.4** |
| IGD | | | | S | **Sn** | **20 47 46.0** | **-0.1** |
| **AYVA** | **Ayvalik** | **1.20** | **269** | *i* S | **Sn** | **20 47 46.8** | **+0.3** |
| **AYVA** | **Ayvalik** | **1.20** | **269** | P | Pg | 20 47 25.2 | -4.6 |
| AYVA | | | | S | **Sn** | **20 47 46.8** | **+0.3** |
| **ARMT** | **Armutlu** | **1.32** | **21** | *e*PN | **Pg** | **20 47 31.9** | **0.0** |
| **ARMT** | **Armutlu** | **1.32** | **21** | *e*Pn | **Pg** | **20 47 31.9** | **0.0** |
| **GEMT** | **Gemlik** | **1.32** | **33** | *e*PN | **Pn** | **20 47 31.2** | **-0.3** |
| **GEMT** | **Gemlik** | **1.32** | **33** | *e*Pn | **Pn** | **20 47 31.2** | **-0.3** |
| **BLCB** | **Balcova** | **1.33** | **225** | *e*PN | **Pg** | **20 47 33.2** | **+1.0** |
| **BLCB** | **Balcova** | **1.33** | **225** | *e*Pn | **Pg** | **20 47 33.3** | **+1.0** |
| **KHAL** | **Karahalli** | **1.37** | **134** | *i* P | **Pn** | **20 47 32.0** | **-0.4** |
| KHAL | | | | *i* S | **Sb** | **20 47 50.8** | **+0.2** |
| **KHAL** | **Karahalli** | **1.37** | **134** | P | **Pn** | **20 47 32.0** | **-0.4** |
| KHAL | | | | S | **Sb** | **20 47 50.8** | **+0.2** |
| **IZI** | **Iznik** | **1.38** | **43** | *e*PN | **Pg** | **20 47 33.2** | **+0.2** |
| **IZI** | **Iznik** | **1.38** | **43** | *e*Pn | **Pg** | **20 47 33.3** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.42** | **191** | *e*PN | **Pn** | **20 47 32.8** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.42** | **191** | *e*Pn | **Pn** | **20 47 32.8** | **-0.2** |
| **ADVT** | **Abdulvahap** | **1.59** | **46** | *e*PN | **Pn** | **20 47 35.6** | **+0.3** |
| **ADVT** | **Abdulvahap** | **1.59** | **46** | *e*Pn | **Pn** | **20 47 35.6** | **+0.3** |
| **BOZC** | **Bozcaada** | **1.77** | **287** | P | **Pn** | **20 47 36.5** | **-1.2** |
| BOZC | | | | S | **Sn** | **20 47 59.8** | **-0.6** |
| **BORA** | **Eskisehir** | **1.79** | **72** | *i* P | **Pb** | **20 47 40.1** | **+0.2** |
| **BORA** | **Eskisehir** | **1.79** | **72** | P | **Pb** | **20 47 40.1** | **+0.2** |
| BORA | | | | S | **Sg** | **20 48 05.2** | **+0.8** |
| **SIGR** | **SIGRI** | **1.86** | **267** | *e*PN | **Pb** | **20 47 40.5** | **-0.4** |
| **SIGR** | **SIGRI** | **1.86** | **267** | *e*Pn | **Pb** | **20 47 40.5** | **-0.4** |
| **GADA** | **Gvkgeada** | **2.00** | **296** | *e*PN | **Pb** | **20 47 43.0** | **-0.3** |
| **GADA** | **Gvkgeada** | **2.00** | **296** | *e*Pn | **Pb** | **20 47 43.0** | **-0.3** |

**MEX 13 20:58:00.0±0.3, 15.24N×96.29W, h20km±12km, MD3.9, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HUIG** | **Huatulco** | **0.56** | **18** | *i* P | Pb | 20 58 09.3 | -1.9 |
| HUIG | | | | *e*S | Sb | 20 58 16.7 | -2.1 |
| **PNIG** | **Pinotepa** | **2.11** | **303** | *e*P | Pn | 20 58 31.7 | -2.5 |
| PNIG | | | | *e*S | Sn | 20 58 56.2 | -3.7 |

*AUST **13** 21:06:19.1±4.0,0.17S×134.08E,h37km, Error ellipse: s-maj=2.6km s-min=1.1km az=281.0*
*DJA **13** 21:06:31.7±0.4,1.1S±5.5×13.3E±°,h10km,M4.0/5,mb4.2/1, mB5.8/1,MLv4.0/5,Mw(mB)5.3/1*
*ISCJB **13** 21:06:33.7±1.5,0.8S±0.1×133.18E±0.06,h33km, Error ellipse: s-maj=16.3km s-min=7.6km az=13.7*

**ISC 13 21:06:33.4±1.7, 0.9S±0.1×133.18E±0.06, h35km, n8, σ2 916/10, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RKPI** | **Ransiki, Papua** | **1.19** | **123** | P | **Pn** | **21 06 54.1** | **+0.5** |
| RKPI | | | | S | **Sn** | **21 07 10.9** | **+2.3** |
| **SWI** | **Sorong** | **1.92** | **270** | P | **Pn** | **21 07 03.9** | **+0.3** |
| | baz=2.9,SNR=61 | | | | | | |
| **SWI** | **Sorong** | **1.92** | **270** | P | **Pn** | **21 07 03.7** | **+0.1** |
| SWI | | | | S | **Sn** | **21 07 28.8** | **+2.3** |
| **FAKI** | **Fak Fak** | **2.25** | **204** | P | **Pn** | **21 07 08.6** | **+0.4** |
| | baz=3.3,SNR=22 | | | | | | |
| **FAKI** | **Fak Fak** | **2.25** | **204** | P | **Pn** | **21 07 08.6** | **+0.4** |
| FAKI | | | | S | **Sn** | **21 07 37.3** | **+2.6** |
| **KDU** | **Kakadu** | **11.78** | **183** | P | **Pn** | **21 09 16.9** | **-2.0** |
| | baz=13,SNR=5.2 | | | | | | |
| **MTN** | **Manton Dam** | **12.08** | **190** | P | Pn | 21 09 15.9 | -7.3 |
| | baz=13,SNR=5.0 | | | | | | |
| **KNRA** | **Kununurra** | **15.36** | **196** | P | **Pn** | **21 10 04.4** | **-3.3** |
| | baz=16,SNR=26 | | | | | | |

*IDC **13** 21:08:06.5±1.1,1.96N×96.51E,h0km,mb4.1/10, mb1 4.1/12,mb1mx3.9/39,mbtmp4.0/12,ML3.7/2,MS3.2/3, Ms1 3.2/3,ms1mx2.8/40,Error ellipse: s-maj=31.8km s-min=18.1km az=46.0*
*ISCJB **13** 21:08:09.4±0.5,2.05N±0.04×96.54E±0.04,h28km, mb4.2/15,MS4.1/1,Error ellipse: s-maj=6.8km s-min=5.5km az=43.3*
*NEIC **13** 21:08:09.9±3.1,2.01N×96.51E,h21km±21km,mb4.4/6, Error ellipse: s-maj=14.6km s-min=5.1km az=56.0*
*DJA **13** 21:08:12.3±2.3,2.1N±6×9.7E±°,h34km±33km,M4.2/10, mb4.5/2,MLv4.0/10*

**ISC 13 21:08:10.7±0.7, 2.01N±0.05×96.57E±0.06, h28km, n55, σ0 892/54, mb4.2/15, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **1.22** | **125** | P | **Pb** | **21 08 32.6** | **-0.6** |
| GSI | | | | S | **Sb** | **21 08 48.9** | **+0.4** |
| **GSI** | **Gunungsitoli** | **1.22** | **125** | *e*Pn | **Pb** | **21 08 32.6** | **-0.6** |
| GSI | | | | *e*Sn | **Sn** | **21 08 44.7** | **-2.8** |
| **KCSI** | **Kotacane, Aceh** | **1.92** | **38** | P | **Pn** | **21 08 43.1** | **+1.5** |
| KCSI | | | | S | **Sn** | **21 09 04.8** | **0.0** |
| **MLSI** | **Meulaboh, Aceh** | **2.25** | **356** | P | **Pn** | **21 08 45.9** | **-0.2** |
| **PSI** | **Prapat** | **2.48** | **71** | Pn | **Pn** | **21 08 48.8** | **-0.5** |
| | 4.7nm,0.3s,baz=273,slow=9.4,SNR=12 | | | | | | |
| PSI | | | | Sn | **Sb** | **21 09 24.4** | **-0.3** |
| | 5.4nm,0.3s,baz=217,slow=16,SNR=6.0 | | | | | | |
| PSI | | | | LR | LR | 21 09 27.7 | |
| | comp=Z,119nm,19.5s,baz=297,slow=32 | | | | | | |
| **PSI** | **Prapat** | **2.48** | **71** | *e*Pn | **Pn** | **21 08 49.8** | **+0.5** |
| PSI | | | | *e*Sn | **Sn** | **21 09 16.9** | **-1.8** |
| PSI | | | | *e*Sn | **Sb** | **21 09 24.4** | **-0.3** |
| **TSI** | **Tuntungan** | **2.48** | **53** | P | **Pn** | **21 08 50.3** | **+1.1** |
| **LHMI** | **Lhok Sumawe** | **3.22** | **7** | P | **Pn** | **21 09 00.1** | **+0.7** |
| **LHMI** | **Lhok Sumawe** | **3.22** | **7** | *e*Pn | **Pn** | **21 09 00.4** | **+0.9** |
| LHMI | | | | *e*Sn | **Sn** | **21 09 35.8** | **-1.1** |
| **MNSI** | **Mandailing Nat** | **3.24** | **112** | P | **Pn** | **21 09 01.4** | **+1.8** |
| **IPM** | **Ipoh** | **5.08** | **61** | *e*Pn | **Pn** | **21 09 26.0** | **+1.0** |
| IPM | | | | *e*Sn | **Sn** | **21 10 21.0** | **-1.7** |
| **KULM** | **Kulim** | **5.21** | **51** | *e*Pn | **Pn** | **21 09 27.3** | **+0.5** |
| KULM | | | | *e*Sn | **Sn** | **21 10 26.7** | **+0.7** |
| **MYKOM** | **Kota Tinggi** | **7.28** | **92** | *e*Pn | **Pn** | **21 09 56.7** | **+1.5** |
| **CM31** | **Chiang Mai Arr** | **16.51** | **8** | *e*Pn | **Pn** | **21 11 59.9** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **16.51** | **8** | Pn | **Pn** | **21 11 59.9** | **-0.6** |
| | 0.3nm,0.3s,baz=197,slow=12,SNR=34 | | | | | | |
| CMAR | | | | LR | LR | 21 18 46.2 | |
| | comp=Z,33nm,19.2s,baz=320,slow=39 | | | | | | |
| **CHTO** | **Chiang Mai** | **16.86** | **8** | *e*Pn | **Pn** | **21 12 04.3** | **-0.5** |
| | 39nm,2.3s | | | | | | |
| **MYLDM** | **Lahad Datu** | **22.11** | **81** | *e*P | **P** | **21 13 05.2** | **+1.2** |
| | 11nm,0.9s | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.87** | **248** | T | T | 21 40 28.1 | |
| | baz=69,slow=75,SNR=615 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.88** | **248** | T | T | 21 40 28.2 | |
| | baz=69,slow=75,SNR=544 | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.88** | **248** | T | T | 21 40 34.1 | |
| | baz=69,slow=75,SNR=656 | | | | | | |
| **H08N1** | **Diego Carcia H** | **26.83** | **252** | T | T | 21 42 37.5 | |
| | baz=126 | | | | | | |
| **H08N2** | **Diego Garcia H** | **26.84** | **252** | T | T | 21 42 34.5 | |
| | baz=126,slow=74 | | | | | | |
| **H08N3** | **Diego Garcia H** | **26.86** | **252** | T | T | 21 42 38.1 | |
| | baz=126,slow=74 | | | | | | |
| **LSA** | **Lhasa** | **28.02** | **350** | *e*P | **P** | **21 13 58.8** | **-1.2** |
| | 4.6nm,1.1s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.23** | **157** | T | T | 21 58 30.5 | |
| | baz=333,slow=76,SNR=23 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.24** | **157** | T | T | 21 58 32.9 | |
| | baz=333,slow=76,SNR=20 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.24** | **157** | T | T | 21 58 22.3 | |
| | baz=333,slow=76,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.99** | **122** | P | **P** | **21 16 08.5** | **+0.5** |
| | 2.2nm,0.6s,baz=301,slow=9.2,SNR=15 | | | | | | |
| **WRAB** | **Tennant Creek** | **43.00** | **122** | *e*P | **P** | **21 16 08.3** | **+0.4** |
| | 66nm,2.5s | | | | | | |
| **AS12** | **Alice Springs** | **44.38** | **127** | *e*P | **P** | **21 16 19.1** | **0.0** |
| **ASAR** | **Alice Springs** | **44.38** | **127** | P | **P** | **21 16 19.1** | **0.0** |
| | 0.4nm,0.6s,baz=303,slow=8.4,SNR=4.2 | | | | | | |
| **EKS2** | **Erkin-Say** | **45.32** | **336** | *e*P | **P** | **21 16 25.6** | **-0.8** |
| | 21nm,2.3s | | | | | | |
| **KS15** | **Wonju Array Si** | **45.52** | **35** | *e*P | **P** | **21 16 27.8** | **-0.1** |
| **KSAR** | **Wonju Array Be** | **45.52** | **35** | P | **P** | **21 16 27.8** | **-0.1** |
| **KSRS** | **Korea Array** | **45.55** | **35** | P | **P** | **21 16 27.8** | **-0.3** |
| | 1.4nm,0.6s,baz=238,slow=9.7,SNR=5.7 | | | | | | |
| **MK01** | **Makanchi Array** | **46.29** | **346** | *e*P | **P** | **21 16 34.4** | **+0.6** |
| **MK32** | **Makanchi Array** | **46.31** | **346** | *e*P | **P** | **21 16 34.8** | **+0.8** |
| **MKAR** | **Makanchi Array** | **46.31** | **346** | P | **P** | **21 16 34.8** | **+0.8** |
| | 3.6nm,0.7s,baz=157,slow=8.0,SNR=29 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.31** | **346** | *e*P | **P** | **21 16 35.1** | **+1.1** |
| **MAKZ** | **Makanchi** | **46.40** | **346** | *e*P | **P** | **21 16 35.6** | **+0.9** |
| | 3.3nm,0.6s | | | | | | |
| **SONA0** | **Songino Array** | **46.43** | **9** | *e*P | **P** | **21 16 36.0** | **+0.9** |
| **SONM** | **Songino Array** | **46.43** | **9** | P | **P** | **21 16 36.0** | **+0.9** |
| | 1.4nm,0.6s,baz=190,slow=9.7,SNR=15 | | | | | | |
| **SONA1** | **Songino Array** | **46.45** | **9** | *e*P | **P** | **21 16 34.4** | **-0.8** |
| **KKAR** | **Karatay Array** | **47.06** | **334** | *e*P | **P** | **21 16 39.7** | **-0.3** |
| **USRK** | **Ussuriysk Ar.** | **52.41** | **32** | P | **P** | **21 17 20.7** | **+0.1** |
| | 0.8nm,0.5s,baz=242,slow=7.8,SNR=3.8 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **52.67** | **351** | *e*P | **P** | **21 17 23.0** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **52.67** | **351** | P | **P** | **21 17 23.1** | **+0.7** |
| | 4.1nm,0.5s,baz=180,slow=7.3,SNR=19 | | | | | | |
| **ZAA1** | **Zalesovo Array** | **52.67** | **351** | *e*P | **P** | **21 17 23.1** | **+0.7** |
| **CTA** | **Charters Tower** | **53.42** | **117** | LR | LR | 21 42 21.7 | |
| | comp=Z,175nm,19.3s,slow=38 | | | | | | |
| **BR101** | **Keskin Array S** | **68.11** | **312** | *e*P | **P** | **21 19 07.9** | **-0.5** |
| **BRTR** | **Keskin Array B** | **68.11** | **312** | P | **P** | **21 19 07.9** | **-0.5** |
| | 0.3nm,0.4s,baz=134,slow=7.1,SNR=3.0 | | | | | | |
| **FIA0** | **FINESS Array S** | **79.00** | **333** | *e*P | **P** | **21 20 12.3** | **+0.6** |
| **FINES** | **FINESS Array B** | **79.00** | **333** | P | **P** | **21 20 12.3** | **+0.6** |
| | 3.7nm,1.1s,baz=100,slow=7.9,SNR=5.3 | | | | | | |
| **ARA0** | **ARCESS Array S** | **81.57** | **340** | *e*P | **P** | **21 20 26.0** | **+0.5** |
| **ARCES** | **ARCESS Array B** | **81.57** | **340** | P | **P** | **21 20 26.0** | **+0.5** |
| | 2.1nm,0.8s,baz=97,slow=5.0,SNR=8.9 | | | | | | |

**GUC 13 21:15:45.3±0.6, 21.55S×67.62W, h271km±10km, ML3.6, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB09** | **IPOC Station P** | **1.53** | **260** | *e*P | Pn | 21 16 27.0 | +0.9 |
| PB09 | | | | *e*S | S | 21 16 59.0 | +0.7 |
| PB09 | | | | AML | AML | 21 17 00.9 | |
| | comp=N,223nm,1.0s | | | | | | |
| **PB01** | **IPOC Station P** | **1.81** | **286** | *e*P | Pn | 21 16 28.8 | +0.7 |
| PB01 | | | | *e*S | S | 21 17 02.2 | +0.2 |
| PB01 | | | | AML | AML | 21 17 03.2 | |
| | comp=N,136nm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **2.11** | **265** | *e*P | Pn | 21 16 32.2 | +1.4 |
| PB07 | | | | *e*S | S | 21 17 07.5 | +0.7 |
| PB07 | | | | AML | AML | 21 17 08.7 | |
| | comp=N,172nm,0.5s | | | | | | |
| **PB06** | **IPOC Station P** | **2.14** | **237** | *e*P | Pn | 21 16 32.3 | +1.3 |
| PB06 | | | | *e*S | S | 21 17 07.6 | +0.3 |
| PB06 | | | | AML | AML | 21 17 10.1 | |
| | comp=N,90nm,1.9s | | | | | | |
| **PB04** | **IPOC Station P** | **2.47** | **251** | *e*S | S | 21 17 13.6 | +0.8 |
| PB04 | | | | AML | AML | 21 17 18.9 | |
| | comp=E,64nm,0.5s | | | | | | |

*IDC **13** 21:16:13.4±0.8,26.97N×44.28W,h0km,mb3.9/10, mb1 4.1/10,mb1mx3.8/41,mbtmp3.9/10,MS3.7/27, Ms1 3.7/27,ms1mx3.7/33,Error ellipse: s-maj=25.3km s-min=18.8km az=133.0*
*ISCJB **13** 21:16:14.1±0.7,27.0N±0.1×44.3W±0.1,h16km,mb3.9/10, MS3.7/27,Error ellipse: s-maj=21.3km s-min=15.0km az=42.5*
*GCMT **13** 21:16:16.0±0.6,27.14N×44.53W,h17km±1km,MW4.8/71, Moment Tensor Solution. s19,c22; s71,c94; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.98±.17; $M_{\theta\theta}$0.10±.11; $M_{\phi\phi}$1.89±.12; $M_{r\theta}$-0.44±.40; $M_{\theta\phi}$0.38±.07; $M_{r\phi}$0.15±.25; Best double couple: $M_o$2.02500×$10^{16}$ NP1:ϕs23.00000°,δ45.00000°,λ-72.00000°. NP2: ϕs23.00000°,δ45.00000°,λ-72.00000°. Principal axes: T 1.9670, Plg1.0000°, Azm281.0000°; N 0.1210, Plg12.0000°, Azm191.0000°; P -2.0820, Plg78.0000°, Azm15.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 13 21:16:15.8±0.8, 27.0N±0.1×44.3W±0.2, h16km, n34, σ0 854/10, mb3.9/10, MS3.7/27, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SJG** | **San Juan** | **22.02** | **251** | LR | LR | 21 28 07.3 | |
| | comp=Z,139nm,19.8s,baz=71,slow=32 | | | | | | |
| **PCRV** | **Puerto La Cruz** | **25.45** | **233** | LR | LR | 21 29 48.9 | |
| | comp=Z,85nm,21.7s,baz=36,slow=32 | | | | | | |
| **SCHQ** | **Schefferville** | **32.36** | **335** | LR | LR | 21 34 29.7 | |
| | comp=Z,123nm,20.5s,baz=92,slow=34 | | | | | | |
| **ESDC** | **Sonseca Array** | **35.70** | **59** | P | **P** | **21 23 13.7** | **+0.1** |
| | 0.6nm,0.8s,baz=261,slow=8.6,SNR=4.6 | | | | | | |
| ESDC | | | | LR | LR | 21 34 52.1 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,96nm,18.4s,baz=275,slow=31 | | | | | | | |
| **ROSC** | **El Rosal** | **36.13** | **238** | LR | LR | | 21 37 57.2 | |
| | comp=Z,91nm,20.6s,baz=32,slow=36 | | | | | | | |
| **BDFB** | **Brasilia** | **42.50** | **185** | P | | **P** | **21 24 11.3** | **+0.6** |
| | 1.5nm,0.4s,baz=43,slow=13,SNR=2.7 | | | | | | | |
| BDFB | | | | LR | LR | | 21 40 50.8 | |
| | comp=Z,84nm,20.6s,baz=28,slow=35 | | | | | | | |
| **DBIC** | **Dimbokro** | **42.52** | **111** | LR | LR | | 21 39 14.7 | |
| | comp=Z,287nm,18.3s,baz=277,slow=32 | | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **45.05** | **136** | T | T | | 22 12 52.4 | |
| | baz=321,slow=75,SNR=185 | | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **45.05** | **136** | T | T | | 22 12 36.3 | |
| | baz=321,slow=75,SNR=162 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **45.07** | **136** | T | T | | 22 12 53.6 | |
| | baz=321,slow=75,SNR=207 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.07** | **98** | P | | **P** | **21 24 30.4** | **-0.9** |
| | 2.2nm,1.0s,baz=287,slow=5.6,SNR=9.2 | | | | | | | |
| TORD | | | | LR | LR | | 21 42 57.0 | |
| | comp=Z,284nm,18.1s,baz=295,slow=36 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **45.44** | **315** | LR | LR | | 21 42 57.2 | |
| | comp=Z,83nm,18.1s,baz=118,slow=35 | | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **45.82** | **137** | T | T | | 22 13 50.3 | |
| | baz=322,slow=75,SNR=180 | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **45.82** | **137** | T | T | | 22 13 43.4 | |
| | baz=322,slow=75,SNR=230 | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **45.83** | **137** | T | T | | 22 13 51.6 | |
| | baz=322,slow=75,SNR=189 | | | | | | | |
| **KEST** | **Kesra** | **46.14** | **65** | LR | LR | | 21 42 57.6 | |
| | comp=Z,109nm,18.3s,baz=287,slow=35 | | | | | | | |
| **LPAZ** | **La Paz** | **48.84** | **211** | P | | **P** | **21 25 01.1** | **-0.3** |
| | 3.6nm,1.1s,baz=16,slow=10,SNR=7.4 | | | | | | | |
| LPAZ | | | | LR | LR | | 21 44 40.3 | |
| | comp=Z,68nm,19.2s,baz=16,slow=35 | | | | | | | |
| **GERES** | **GERESS Array B** | **49.37** | **48** | P | | **P** | **21 25 05.1** | **+0.5** |
| | 0.8nm,0.8s,baz=256,slow=12,SNR=5.4 | | | | | | | |
| GERES | | | | LR | LR | | 21 41 32.8 | |
| | comp=Z,79nm,21.8s,baz=277,slow=31 | | | | | | | |
| **NOA** | **NORSAR Array B** | **50.20** | **31** | P | | **P** | **21 25 10.7** | **0.0** |
| | 1.0nm,0.8s,baz=249,slow=7.2,SNR=3.6 | | | | | | | |
| NOA | | | | LR | LR | | 21 42 01.9 | |
| | comp=Z,60nm,22.0s,baz=250,slow=31 | | | | | | | |
| **TXAR** | **Lajitas Array** | **51.94** | **287** | P | | **P** | **21 25 24.2** | **-0.1** |
| | 0.2nm,0.2s,baz=58,slow=8.6,SNR=3.4 | | | | | | | |
| TXAR | | | | LR | LR | | 21 46 31.1 | |
| | comp=Z,43nm,21.9s,baz=0.0,slow=35 | | | | | | | |
| **CPUP** | **Villa Florida** | **54.45** | **194** | LR | LR | | 21 47 55.5 | |
| | comp=Z,49nm,20.2s,baz=150,slow=35 | | | | | | | |
| **FINES** | **FINESS Array B** | **57.34** | **33** | LR | LR | | 21 47 33.0 | |
| | comp=Z,40nm,19.1s,baz=256,slow=33 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.95** | **23** | P | | **P** | **21 26 06.8** | **-0.3** |
| | 4.1nm,0.7s,baz=280,slow=5.4,SNR=5.8 | | | | | | | |
| ARCES | | | | LR | LR | | 21 45 20.9 | |
| | comp=Z,12nm,19.6s,baz=284,slow=30 | | | | | | | |
| **AKASG** | **Malin Array Be** | **59.38** | **45** | LR | LR | | 21 49 12.2 | |
| | comp=Z,54nm,18.2s,baz=235,slow=33 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.84** | **301** | LR | LR | | 21 52 05.0 | |
| | comp=Z,199nm,19.5s,baz=66,slow=35 | | | | | | | |
| **BRTR** | **Keskin Array B** | **64.45** | **57** | P | | **P** | **21 26 52.4** | **+0.6** |
| | 1.0nm,0.9s,baz=344,slow=4.0,SNR=5.6 | | | | | | | |
| BRTR | | | | LR | LR | | 21 53 08.3 | |
| | comp=Z,32nm,19.6s,baz=282,slow=34 | | | | | | | |
| **KBZ** | **Khabaz** | **69.97** | **50** | LR | LR | | 21 58 30.6 | |
| | comp=Z,37nm,18.2s,baz=345,slow=36 | | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **70.44** | **153** | T | T | | 22 44 30.4 | |
| | SNR=15 | | | | | | | |
| **ILAR** | **Eielson Array** | **71.10** | **334** | P | | **P** | **21 27 33.0** | **-0.1** |
| | 0.3nm,0.4s,baz=65,slow=4.3,SNR=3.1 | | | | | | | |
| ILAR | | | | LR | LR | | 21 57 21.4 | |
| | comp=Z,69nm,21.1s,baz=101,slow=35 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **76.98** | **40** | LR | LR | | 22 00 05.6 | |
| | comp=Z,69nm,19.6s,baz=304,slow=34 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **82.95** | **95** | LR | LR | | 22 05 56.8 | |
| | comp=Z,108nm,19.1s,baz=83,slow=36 | | | | | | | |
| **BOSA** | **Boshof** | **86.58** | **124** | LR | LR | | 21 59 26.5 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SARI** | **SarD1z-Kayseri** | **0.60** | **5** | *e*PG | **Pg** | **21 51 21.4** | **-1.6** |
| SARI | | | | *e*SG | **Sg** | **21 51 30.8** | **-0.2** |
| **KAMA** | **Osmaniye** | **0.67** | **158** | P | **Pg** | **21 51 23.6** | **-0.6** |
| **PINB** | **Pinarbasi** | **0.86** | **2** | *i* S | **Sg** | **21 51 39.5** | **+0.1** |
| **PINB** | **Pinarbasi** | **0.86** | **2** | P | Pg | 21 51 24.9 | -3.0 |
| PINB | | | | S | **Sg** | **21 51 39.5** | **+0.1** |
| **CEYT** | **Ceyhan** | **0.93** | **211** | *e*PG | **Pn** | **21 51 29.5** | **+0.4** |
| **CEYT** | **Ceyhan** | **0.93** | **211** | *e*Pg | **Pn** | **21 51 29.5** | **+0.4** |
| **GZT** | **Gaziantep** | **1.06** | **115** | P | **Pb** | **21 51 31.2** | **+0.4** |
| GZT | | | | S | **Sn** | **21 51 46.8** | **+1.4** |
| **DARE** | **Darende-Malaty** | **1.17** | **49** | *e*PN | **Pg** | **21 51 33.8** | **+0.2** |
| **DARE** | **Darende-Malaty** | **1.17** | **49** | *e*Pn | **Pg** | **21 51 33.8** | **+0.2** |
| **KARA** | **Karaisali** | **1.17** | **242** | *e*PN | **Pg** | **21 51 33.4** | **-0.2** |
| **KARA** | **Karaisali** | **1.17** | **242** | *e*Pn | **Pg** | **21 51 33.4** | **-0.2** |
| **KUZU** | **Kuzuini** | **1.18** | **151** | *i* P | **Pg** | **21 51 33.8** | **-0.1** |
| KUZU | | | | *i* S | **Sg** | **21 51 41.4** | **+2.0** |
| **KUZU** | **Kuzuini** | **1.18** | **151** | P | **Pg** | **21 51 33.8** | **-0.1** |
| KUZU | | | | S | **Sg** | **21 51 51.4** | **+2.0** |
| **AKCD** | **Akcadag** | **1.33** | **68** | *i* P | **Pn** | **21 51 35.6** | **+0.9** |
| AKCD | | | | *i* S | **Sg** | **21 51 55.0** | **+1.0** |
| **AKCD** | **Akcadag** | **1.33** | **68** | P | **Pn** | **21 51 35.6** | **+0.9** |
| AKCD | | | | S | **Sg** | **21 51 55.0** | **+1.0** |
| **GULE** | **Gulek** | **1.36** | **248** | *i* P | **Pb** | **21 51 36.5** | **+0.6** |
| GULE | | | | *i* S | **Sg** | **21 51 55.1** | **+0.1** |
| **GULE** | **Gulek** | **1.36** | **248** | P | **Pb** | **21 51 36.5** | **+0.6** |
| GULE | | | | S | **Sg** | **21 51 55.1** | **+0.1** |
| **TAHT** | **Tahtakopru-Hat** | **1.44** | **185** | *e*PN | **Pb** | **21 51 37.6** | **+0.4** |
| **TAHT** | **Tahtakopru-Hat** | **1.44** | **185** | *e*Pn | **Pb** | **21 51 37.6** | **+0.4** |
| **CUALT** | **Altinyayla-SIV** | **1.49** | **12** | P | **Pn** | **21 51 37.5** | **+0.6** |
| CUALT | | | | S | **Sb** | **21 51 58.6** | **+1.8** |
| **ATAB** | **Bozova** | **1.58** | **102** | *i* P | **Pn** | **21 51 38.7** | **+0.7** |
| ATAB | | | | *i* S | **Sg** | **21 52 01.0** | **-0.9** |
| **ATAB** | **Bozova** | **1.58** | **102** | P | **Pn** | **21 51 38.7** | **+0.7** |
| ATAB | | | | S | **Sg** | **21 52 00.9** | **-0.9** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.61** | **357** | P | **Pn** | **21 51 39.8** | **+1.3** |
| CUSAR | | | | S | **Sg** | **21 52 02.5** | **-0.4** |
| **CUKAN** | **kangal_SIVAS** | **1.74** | **30** | P | **Pb** | **21 51 42.3** | **-0.1** |
| CUKAN | | | | S | **Sg** | **21 52 07.4** | **+0.4** |
| **BTCH** | **Batrach** | **1.77** | **177** | *e*P | **Pn** | **21 51 42.0** | **+1.3** |
| BTCH | | | | *e*S | **Sn** | **21 52 02.1** | **-0.6** |
| BTCH | comp=E,100nm,0.3s | | | AML | AML | 21 52 15.7 | |
| BTCH | comp=N,78nm,0.5s | | | AML | AML | 21 52 17.7 | |
| **BTCH** | **Batrach** | **1.77** | **177** | *e*P | **Pn** | **21 51 42.0** | **+1.3** |
| BTCH | | | | *e*S | **Sn** | **21 52 02.1** | **-0.6** |
| | comp=N,78nm,0.5s | | | | | | |
| **YAYL** | **Yayladag** | **1.79** | **186** | *i* P | **Pn** | **21 51 41.8** | **+0.9** |
| YAYL | | | | *i* S | **Sb** | **21 52 05.1** | **-0.1** |
| **YAYL** | **Yayladag** | **1.79** | **186** | P | **Pn** | **21 51 41.8** | **+0.9** |
| YAYL | | | | S | **Sb** | **21 52 05.1** | **-0.1** |
| **ARNB** | **Al Arnab** | **1.97** | **189** | *e*P | **Pn** | **21 51 44.9** | **+1.5** |
| ARNB | | | | *e*S | **Sn** | **21 52 09.5** | **+1.8** |
| ARNB | comp=E,25nm,0.5s | | | AML | AML | 21 52 21.1 | |
| ARNB | comp=N,52nm,0.4s | | | AML | AML | 21 52 21.6 | |
| **ARNB** | **Al Arnab** | **1.97** | **189** | *e*P | **Pn** | **21 51 44.9** | **+1.5** |
| ARNB | | | | *e*S | **Sn** | **21 52 09.5** | **+1.8** |
| | comp=N,52nm,0.4s | | | | | | |
| **URFA** | **Urfa** | **1.99** | **100** | *e*PN | **Pb** | **21 51 46.3** | **-0.4** |
| **URFA** | **Urfa** | **1.99** | **100** | *e*Pn | **Pb** | **21 51 46.3** | **-0.4** |
| **SLMH** | **Al Salmeh** | **2.03** | **141** | *e*P | **Pn** | **21 51 45.1** | **+0.9** |
| SLMH | | | | *e*S | **Sn** | **21 52 06.2** | **-2.9** |
| SLMH | comp=E,53nm,0.6s | | | AML | AML | 21 52 26.1 | |
| **SLMH** | **Al Salmeh** | **2.03** | **141** | *e*P | **Pn** | **21 51 45.1** | **+0.9** |
| SLMH | | | | *e*S | **Sn** | **21 52 06.2** | **-2.9** |
| | comp=Z,53nm,0.6s | | | | | | |
| **WRDH** | **Warideh** | **2.30** | **179** | *e*P | **Pn** | **21 51 49.1** | **+1.3** |
| WRDH | | | | *e*S | **Sn** | **21 52 14.7** | **-1.1** |
| WRDH | comp=N,22nm,0.5s | | | AML | AML | 21 52 28.3 | |
| **WRDH** | **Warideh** | **2.30** | **179** | *e*P | **Pn** | **21 51 49.2** | **+1.3** |
| WRDH | | | | *e*S | **Sn** | **21 52 14.7** | **-1.1** |
| | comp=N,22nm,0.5s | | | | | | |
| **BIDA** | **Albida** | **2.79** | **181** | *e*P | **Pn** | **21 51 56.0** | **+1.3** |
| BIDA | | | | *e*S | **Sn** | **21 52 26.9** | **-1.0** |
| BIDA | comp=N,42nm,0.5s | | | AML | AML | 21 52 51.0 | |
| BIDA | comp=E,45nm,0.7s | | | AML | AML | 21 52 55.3 | |
| **BIDA** | **Albida** | **2.79** | **181** | *e*P | **Pn** | **21 51 56.0** | **+1.3** |
| BIDA | | | | *e*S | **Sn** | **21 52 26.9** | **-1.0** |
| | comp=E,45nm,0.7s | | | | | | |
| **MNKR** | **ALMNKUR** | **2.99** | **128** | *e*P | **Pn** | **21 51 57.5** | **+0.1** |
| MNKR | | | | AML | AML | 21 52 54.8 | |
| | comp=Z,95nm,0.4s | | | | | | |
| **MNKR** | **ALMNKUR** | **2.99** | **128** | *e*P | **Pn** | **21 51 57.5** | **+0.1** |
| **HAWK** | **Haweek** | **3.28** | **179** | *e*P | **Pn** | **21 52 03.1** | **+1.6** |
| HAWK | | | | *e*S | **Sn** | **21 52 37.8** | **-2.3** |
| HAWK | comp=N,12nm,0.5s | | | AML | AML | 21 53 01.9 | |
| HAWK | comp=E,5.7nm,0.3s | | | AML | AML | 21 53 02.7 | |
| **HAWK** | **Haweek** | **3.28** | **179** | *e*P | **Pn** | **21 52 03.1** | **+1.6** |
| HAWK | | | | *e*S | **Sn** | **21 52 37.8** | **-2.3** |
| | comp=E,6.0nm,0.3s | | | | | | |
| **RABH** | **Abou Rabah** | **3.44** | **168** | *e*P | **Pn** | **21 52 05.3** | **+1.7** |
| RABH | | | | *e*S | **Sn** | **21 52 40.4** | **-3.4** |
| RABH | comp=E,7.9nm,0.6s | | | AML | AML | 21 53 09.8 | |
| RABH | comp=N,11nm,0.5s | | | AML | AML | 21 53 13.3 | |
| **RABH** | **Abou Rabah** | **3.44** | **168** | *e*P | **Pn** | **21 52 05.3** | **+1.7** |
| RABH | | | | *e*S | **Sn** | **21 52 40.4** | **-3.4** |
| | comp=N,11nm,0.5s | | | | | | |
| **ROOS** | **tl_alroos** | **3.71** | **168** | *e*P | **Pn** | **21 52 07.8** | **+0.4** |
| ROOS | | | | *e*S | **Sn** | **21 52 46.9** | **-3.7** |
| ROOS | comp=E,18nm,0.6s | | | AML | AML | 21 53 13.9 | |
| ROOS | comp=N,13nm,0.6s | | | AML | AML | 21 53 20.4 | |
| **ROOS** | **tl_alroos** | **3.71** | **168** | *e*P | **Pn** | **21 52 07.8** | **+0.4** |
| ROOS | | | | *e*S | **Sn** | **21 52 46.9** | **-3.7** |
| | comp=N,13nm,0.6s | | | | | | |

*ISCJB* ***13*** *21:57:17.9±0.5, 41°.17N±0°.03×23°.33E±0°.03, h14km±4km, Error ellipse: s-maj=4.6km s-min=3.5km az=153.3*
*CSEM* ***13*** *21:57:17.9±0.2, 41°.17N×23°.35E, h12km, ML2.0, Error ellipse: s-maj=4.2km s-min=3.0km az=148.0*
*ATH* ***13*** *21:57:17.8, 41°.18N×23°.35E, h21km±1km, MD2.8/8*
*THE* ***13*** *21:57:18.2, 41°.17N×23°.34E, h6km±3km, ML2.0/5, Error ellipse: s-maj=3.3km s-min=0.6km az=317.0*
*SOF* ***13*** *21:57:22.5, 41°.33N×23°.63E, h10km, MD2.5*

**ISC 13 21:57:18.3±0.9, 41°.18N±0°.02×23°.34E±0°.02, h10km±10km, n43, σ0s37/67, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRS** | **Serrai** | **0.20** | **107** | P | **Pg** | **21 57 22.3** | **-0.2** |
| **SRS** | **Serrai** | **0.20** | **107** | P | **Pg** | **21 57 22.3** | **-0.2** |
| **KNT** | **Kendrikon** | **0.34** | **268** | P | **Pg** | **21 57 24.8** | **-0.2** |
| KNT | | | | S | **Sg** | **21 57 29.2** | **-0.3** |
| **KNT** | **Kendrikon** | **0.34** | **268** | P | **Pg** | **21 57 24.8** | **-0.2** |
| KNT | | | | S | **Sg** | **21 57 29.2** | **-0.3** |
| **SOH** | **Sokhos** | **0.35** | **179** | *e*PB | **Pg** | **21 57 25.5** | **+0.2** |
| SOH | | | | *e*SB | **Sg** | **21 57 30.6** | **+0.5** |
| **SOH** | **Sokhos** | **0.35** | **179** | P | **Pg** | **21 57 25.6** | **+0.2** |
| SOH | | | | S | **Sg** | **21 57 30.5** | **+0.5** |
| **SOH** | **Sokhos** | **0.35** | **179** | P | **Pg** | **21 57 25.6** | **+0.2** |
| SOH | | | | S | **Sg** | **21 57 30.5** | **+0.5** |
| **NVR** | **Nevrokopi** | **0.43** | **66** | *e*PB | **Pg** | **21 57 26.6** | **-0.2** |
| NVR | | | | *e*SB | **Sg** | **21 57 33.0** | **+0.6** |
| **NVR** | **Nevrokopi** | **0.43** | **66** | P | **Pg** | **21 57 26.6** | **-0.2** |
| NVR | | | | S | **Sg** | **21 57 32.7** | **+0.3** |
| **NVR** | **Nevrokopi** | **0.43** | **66** | P | **Pg** | **21 57 26.6** | **-0.2** |
| NVR | | | | S | **Sg** | **21 57 32.7** | **+0.3** |
| NVR | | | | *e*Sb | **Sg** | **21 57 33.0** | **+0.6** |
| **MMB** | **Musomiste** | **0.50** | **35** | *i* Pg | **Pg** | **21 57 27.6** | **-0.6** |
| **MMB** | **Musomiste** | **0.50** | **35** | *i* Pg | **Pg** | **21 57 27.6** | **-0.6** |
| **VAY** | **Valandovo** | **0.60** | **284** | P | **Pg** | **21 57 29.6** | **-0.4** |
| VAY | | | | S | **Sg** | **21 57 38.0** | **+0.1** |
| **VAY** | **Valandovo** | **0.60** | **284** | P | **Pg** | **21 57 29.6** | **-0.4** |
| VAY | | | | S | **Sg** | **21 57 38.0** | **+0.1** |
| **HORT** | **Hortiatis** | **0.61** | **198** | *e*PN | **Pg** | **21 57 30.3** | **+0.1** |
| HORT | | | | *e*SN | **Sg** | **21 57 38.6** | **+0.5** |
| **HORT** | **Hortiatis** | **0.61** | **198** | P | **Pg** | **21 57 30.2** | **+0.1** |
| HORT | | | | S | **Sg** | **21 57 38.3** | **+0.2** |
| HORT | | | | *e*Sn | **Sg** | **21 57 38.6** | **+0.5** |
| **THE** | **Thessaloniki** | **0.61** | **208** | *e*PN | **Pg** | **21 57 30.2** | **0.0** |
| THE | | | | *e*SN | **Sg** | **21 57 38.3** | **0.0** |
| **THE** | **Thessaloniki** | **0.61** | **208** | P | **Pg** | **21 57 30.1** | **-0.1** |
| THE | | | | S | **Sg** | **21 57 38.3** | **0.0** |
| **THE** | **Thessaloniki** | **0.61** | **208** | *e*Pn | **Pg** | **21 57 30.2** | **0.0** |
| THE | | | | S | **Sg** | **21 57 38.3** | **0.0** |
| **KKB** | **Krupnik** | **0.72** | **344** | *i* Pg | **Pn** | **21 57 35.5** | **+0.9** |
| **KKB** | **Krupnik** | **0.72** | **344** | *i* Pg | **Pn** | **21 57 35.5** | **+0.9** |
| **GRG** | **Griva** | **0.74** | **253** | *e*PN | **Pg** | **21 57 32.6** | **-0.1** |
| GRG | | | | *e*SN | **Sg** | **21 57 42.9** | **+0.4** |
| **GRG** | **Griva** | **0.74** | **253** | P | **Pb** | **21 57 33.0** | **-0.4** |
| **GRG** | **Griva** | **0.74** | **253** | *e*Pn | **Pg** | **21 57 32.6** | **-0.1** |
| **GRG** | **Griva** | **0.74** | **253** | P | **Pb** | **21 57 33.0** | **-0.4** |
| GRG | | | | *e*Sn | **Sg** | **21 57 42.9** | **+0.4** |
| **PLG** | **Polygyros** | **0.81** | **174** | *e*PN | **Pg** | **21 57 33.2** | **-0.7** |
| **PLG** | **Polygyros** | **0.81** | **174** | P | **Pg** | **21 57 33.2** | **-0.7** |
| PLG | | | | S | **Sg** | **21 57 44.5** | **+0.1** |
| **PLG** | **Polygyros** | **0.81** | **174** | P | **Pg** | **21 57 33.2** | **-0.7** |
| PLG | | | | S | **Sg** | **21 57 44.5** | **+0.1** |
| **KAVA** | **Kavala** | **0.90** | **101** | P | **Pg** | **21 57 35.0** | **-0.7** |
| KAVA | | | | S | **Sg** | **21 57 47.6** | **+0.1** |
| **KAVA** | **Kavala** | **0.90** | **101** | P | **Pg** | **21 57 35.0** | **-0.7** |
| KAVA | | | | S | **Sg** | **21 57 47.6** | **+0.1** |
| **OUR** | **Ouranopolis** | **0.97** | **150** | *e*PN | **Pg** | **21 57 37.0** | **0.0** |
| **OUR** | **Ouranopolis** | **0.97** | **150** | *e*Pn | **Pg** | **21 57 37.0** | **0.0** |
| **RZN** | **Rozhen** | **1.15** | **63** | Pg | **Pg** | **21 57 40.7** | **+0.2** |
| **RZN** | **Rozhen** | **1.15** | **63** | Pg | **Pg** | **21 57 40.7** | **+0.2** |
| **PAIG** | **Paliouri** | **1.27** | **168** | *e*PN | **Pn** | **21 57 42.2** | **0.0** |
| **PAIG** | **Paliouri** | **1.27** | **168** | *e*Pn | **Pn** | **21 57 42.2** | **0.0** |
| **VTS** | **Vitosha** | **1.42** | **356** | *i* P | **Pg** | **21 57 45.5** | **-0.1** |
| **VTS** | **Vitosha** | **1.42** | **356** | *i* P | **Pg** | **21 57 45.5** | **-0.1** |
| **KDZ** | **Kurdzhali** | **1.63** | **72** | P | **Pn** | **21 57 47.1** | **0.0** |
| **KDZ** | **Kurdzhali** | **1.63** | **72** | P | **Pn** | **21 57 47.1** | **0.0** |
| **ALN** | **Alexandroupoli** | **2.06** | **97** | *e*PB | **Pn** | **21 57 53.2** | **+0.2** |
| **ALN** | **Alexandroupoli** | **2.06** | **97** | *e*Pb | **Pn** | **21 57 53.2** | **+0.2** |

*AUST* ***13*** *21:59:38.7±4.3, 7°.38S×102°.90E, h0km, Error ellipse: s-maj=2.3km s-min=1.0km az=242.0*
*ISCJB* ***13*** *21:59:39.1±1.3, 7°.08S±0°.04×103°.24E±0°.04, h2km±9km, mb4.4/21, MS3.7/8, Error ellipse: s-maj=6.9km s-min=5.0km az=44.2*
*IDC* ***13*** *21:59:41.7±1.2, 7°.00S×103°.30E, h0km, mb4.0/13, mb1 4.2/14, mb1mx3.9/53, mbtmp4.1/14, ML4.5/1, MS3.6/9, Ms1 3.6/9, ms1mx3.2/37, Error ellipse: s-maj=40.4km s-min=16.0km az=45.0*
*DJA* ***13*** *21:59:45.0±0.4, 7°.5±3°×10°.3E±°, h40km±22km, M4.8/23, mb4.9/14, mB5.2/3, MLv4.7/23, Mw(mB)4.6/3*
*NEIC* ***13*** *21:59:47.1±0.6, 6°.97S×103°.41E, h35km, mb4.6/8, Error ellipse: s-maj=16.5km s-min=6.8km az=218.0*
*BJI* ***13*** *21:59:47.5, 7°.10S×103°.30E, h23km, mb4.5/14, mB4.8/7, Ms4.0/5, Ms7 4.0/5*

**ISC 13 21:59:43.6±2.9, 7°.08S±0°.07×103°.32E±0°.07, h14km±18km, n102, σ1s37/83, mb4.3/21, MS3.7/8, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KASI** | **Kota Agung** | **1.94** | **37** | P | **Pn** | **22 00 14.4** | **-1.9** |
| KASI | | | | S | **Sn** | **22 00 38.9** | **-1.6** |
| **LWLI** | **Liwa** | **2.18** | **20** | P | **Pn** | **22 00 18.6** | **-1.0** |
| LWLI | | | | S | **Sn** | **22 00 44.3** | **-2.2** |
| **CGJI** | **Cibinong** | **2.41** | **79** | P | **Pn** | **22 00 21.7** | **-0.9** |
| **KLI** | **Kotabumi** | **2.68** | **35** | P | **Pn** | **22 00 27.3** | **+0.8** |
| **MDSI** | **Maura Dua** | **2.72** | **18** | P | **Pn** | **22 00 25.7** | **-1.2** |
| MDSI | | | | S | **Sn** | **22 00 57.8** | **-1.8** |
| **MNAI** | **Manna** baz=3.0,SNR=3.5 | **2.73** | **352** | P | **Pn** | **22 00 25.3** | **-1.7** |
| **MNAI** | **Manna** | **2.73** | **352** | P | Pn | 22 00 24.1 | -3.0 |
| MNAI | | | | S | **Sn** | **22 00 57.7** | **-2.2** |
| **MNAI** | **Manna** | **2.73** | **352** | *e*Pn | **Pn** | **22 00 25.6** | **-1.5** |
| MNAI | | | | *e*Sn | **Sn** | **22 01 02.1** | **+2.2** |
| **KLSI** | | **2.76** | **31** | P | **Pn** | **22 00 27.0** | **-0.5** |
| KLSI | | | | S | **Sn** | **22 01 00.7** | **0.0** |
| **SBJI** | **Serang** | **2.96** | **71** | P | **Pn** | **22 00 30.8** | **+0.6** |
| **SKJI** | **Sukabumi** | **3.22** | **89** | P | **Pn** | **22 00 34.0** | **+0.2** |
| **KSI** | **Kapahiang** | **3.48** | **348** | P | **Pn** | **22 00 35.6** | **-1.9** |
| KSI | | | | S | **Sn** | **22 01 16.0** | **-2.6** |
| **CBJI** | **Citeko** | **3.57** | **80** | P | **Pn** | **22 00 40.5** | **+1.8** |
| **CNJI** | **Cibinong** | **3.79** | **94** | P | **Pn** | **22 00 40.4** | **-1.3** |
| **XMI** | **Christmas Isla** baz=4.1,SNR=9.3 | **4.09** | **145** | P | Pn | 22 00 42.2 | -3.6 |
| **XMIS** | **Christmas Isla** baz=4.1,SNR=57 | **4.09** | **146** | P | Pn | 22 00 41.8 | -4.0 |
| **XMIS** | **Christmas Isla** | **4.09** | **146** | *e*Pn | Pn | 22 00 42.1 | -3.8 |
| XMIS | | | | *e*Sn | Sn | 22 01 21.2 | -12 |
| **LEM** | **Lembang** 25nm,0.3s,baz=345,slow=6.7,SNR=13 | **4.28** | **87** | Pn | **Pn** | **22 00 49.7** | **+1.1** |
| LEM | | | | LR | LR | 22 02 28.5 | |
| **LEM** | comp=Z,401nm,18.1s,baz=359,slow=39 **Lembang** baz=4.7,SNR=3.6 | **4.28** | **87** | P | Pn | 22 00 51.9 | +3.4 |
| **LEM** | **Lembang** | **4.28** | **87** | P | **Pn** | **22 00 49.2** | **+0.6** |
| **CISI** | **Cisompet, Garu** baz=4.9,SNR=14 | **4.49** | **96** | P | **Pn** | **22 00 50.5** | **-0.9** |
| **CISI** | **Cisompet, Garu** | **4.49** | **96** | P | **Pn** | **22 00 50.1** | **-1.3** |
| **CISI** | **Cisompet, Garu** | **4.49** | **96** | *e*Pn | **Pn** | **22 00 50.2** | **-1.2** |
| CISI | | | | *e*Sn | **Sn** | **22 01 40.1** | **-3.4** |
| **CMJI** | **Cimerak** 184nm,0.5s,3µm1.0nm | **5.14** | **98** | P | **Pn** | **22 00 59.2** | **-1.0** |
| **PPSI** | **Pulau Pagai** 127nm,1.2s,0.7nm | **5.41** | **322** | P | Pn | 22 01 00.9 | -3.0 |
| **JMBI** | **JAMBI** 206nm,0.6s,5µm1.3nm | **5.42** | **3** | P | Pn | 22 01 01.9 | -2.2 |
| **PDSI** | **Padang** 36nm,0.5s,670nm0.3nm | **6.76** | **335** | P | Pn | 22 01 19.3 | -3.2 |
| **SMRI** | **Semarang** 122nm,1.1s,0.6nm | **7.07** | **90** | P | **Pn** | **22 01 28.9** | **+2.1** |
| **SMRI** | **Semarang** | **7.07** | **90** | Pn | **Pn** | **22 01 26.4** | **-0.4** |
| **SISI** | **Saibi** 53nm,1.0s,0.3nm | **7.10** | **323** | P | **Pn** | **22 01 24.9** | **-2.3** |
| **UGM** | **Wanagama** baz=7.6,SNR=16 | **7.20** | **97** | P | **Pn** | **22 01 28.2** | **-0.3** |
| **UGM** | **Wanagama** 176nm,1.8s,0.9nm | **7.20** | **97** | P | **Pn** | **22 01 29.0** | **+0.5** |
| **UGM** | **Wanagama** | **7.20** | **97** | *e*Pn | **Pn** | **22 01 27.9** | **-0.6** |
| UGM | | | | *e*Sn | **Sn** | **22 02 49.6** | **-0.6** |
| **NGJI** | **Ngawi** 58nm,0.6s | **8.09** | **93** | P | **Pn** | **22 01 41.8** | **+1.0** |
| **PWJI** | **Pagerwojo** 89nm,0.8s | **8.47** | **97** | P | **Pn** | **22 01 45.8** | **-0.2** |
| **TBJI** | **Tambak Boyo** 85nm,0.9s | **8.47** | **89** | P | **Pn** | **22 01 45.8** | **-0.3** |
| **MNSI** | **Mandailing Nat** 31nm,0.6s | **8.67** | **334** | P | Pn | 22 01 45.7 | -3.0 |
| **GSI** | **Gunungsitoli** | **10.11** | **325** | *e*Pn | Pn | 22 02 05.0 | -3.5 |
| GSI | | | | *e*Sn | Sn | 22 03 50.3 | -12 |
| **JAGI** | **Jajag, Banyuwa** baz=11,SNR=4.3 | **10.83** | **98** | P | Pn | 22 02 26.9 | +8.5 |
| **JAGI** | **Jajag, Banyuwa** | **10.83** | **98** | *e*Pn | **Pn** | **22 02 17.8** | **-0.6** |
| **MYLDM** | **Lahad Datu** 31nm,0.9s | **19.44** | **52** | *e*P | **P** | **22 04 09.1** | **-0.9** |
| **BATI** | **Baumata** 9.2nm,0.4s,baz=107,slow=6.8,SNR=3.0 | **20.35** | **100** | P | **P** | **22 04 20.1** | **+0.1** |
| **SOEI** | **Soe** baz=21,SNR=3.8 | **20.89** | **99** | P | Pn | 22 04 34.0 | +5.5 |
| **SOEI** | **Soe** 86nm,0.9s | **20.89** | **99** | *e*P | **P** | **22 04 24.1** | **-1.8** |
| SOEI | | | | *e*S | **S** | **22 08 19.9** | **+1.0** |
| **CM01** | **Chiang Mai Arr** | **25.70** | **350** | *e*P | **P** | **22 05 12.6** | **-1.0** |
| **CM31** | **Chiang Mai Arr** baz=26,SNR=3.3 | **25.74** | **350** | P | P | 22 05 20.0 | +6.0 |
| **CM31** | **Chiang Mai Arr** | **25.74** | **350** | *e*P | **P** | **22 05 12.7** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** 2.2nm,0.7s,baz=182,slow=9.3,SNR=20 | **25.74** | **350** | P | **P** | **22 05 12.7** | **-1.3** |
| **CHTO** | **Chiang Mai** 7.1nm,1.0s | **26.09** | **351** | *e*P | **P** | **22 05 16.8** | **-0.4** |
| **KNRA** | **Kununurra** baz=27,SNR=3.7 | **26.34** | **111** | P | **P** | **22 05 17.6** | **-1.9** |
| **MTN** | **Manton Dam** baz=28,SNR=4.6 | **27.98** | **104** | P | **P** | **22 05 35.7** | **+1.5** |
| **MTN** | **Manton Dam** 18nm,1.3s | **27.98** | **104** | *e*P | P | 22 05 29.7 | -4.5 |
| **FAKI** | **Fak Fak** baz=30,SNR=4.0 | **29.11** | **83** | P | P | 22 05 48.0 | +3.6 |
| **H01W3** | **Cape Leeuwin H** baz=339,slow=76,SNR=75 | **29.41** | **162** | T | T | 22 36 37.0 | |
| **H01W2** | **Cape Leeuwin H** baz=339,slow=76,SNR=78 | **29.42** | **162** | T | T | 22 36 45.7 | |
| **H01W1** | **Cape Leeuwin H** | **29.42** | **162** | T | T | 22 36 38.1 | |
| **H08S2** | **Diego Garcia H** baz=90,slow=75,SNR=256 | **30.57** | **267** | T | T | 22 37 59.2 | |
| **H08S3** | **Diego Garcia H** baz=90,slow=75,SNR=140 | **30.58** | **267** | T | T | 22 38 00.5 | |
| **H08S1** | **Diego Garcia H** baz=90,slow=75,SNR=133 | **30.59** | **267** | T | T | 22 38 07.7 | |
| **H08N1** | **Diego Garcia H** baz=126 | **32.09** | **269** | T | T | 22 40 23.6 | |
| **H08N2** | **Diego Garcia H** baz=126 | **32.10** | **269** | T | T | 22 40 26.5 | |
| **H08N3** | **Diego Garcia H** baz=126 | **32.11** | **269** | T | T | 22 40 30.5 | |
| **WRA** | **Warramunga Arr** 1.5nm,0.7s,baz=287,slow=12,SNR=12 | **32.69** | **116** | P | **P** | **22 06 16.0** | **+0.1** |
| WRA | comp=Z,59nm,21.9s,baz=290,slow=34 | | | LR | LR | 22 18 31.4 | |
| **WRAB** | **Tennant Creek** 7.2nm,0.9s | **32.69** | **116** | *e*P | **P** | **22 06 16.4** | **+0.4** |
| **AS12** | **Alice Springs** | **33.67** | **123** | *e*P | **P** | **22 06 24.6** | **+0.1** |
| AS12 | | | | *e*PcP | **PcP** | **22 09 04.8** | **+0.3** |
| **ASAR** | **Alice Springs** 0.8nm,0.6s,baz=300,slow=7.8,SNR=13 | **33.67** | **123** | P | **P** | **22 06 24.6** | **+0.1** |
| ASAR | 0.2nm,0.5s,baz=288,slow=2.2,SNR=2.6 | | | PcP | **PcP** | **22 09 04.8** | **+0.3** |
| **YOJ** | **Yonaguni jima** 401nm,2.4s | **36.77** | **31** | *e*P | **P** | **22 06 52.9** | **+1.9** |
| **LSA** | **Lhasa** | **38.40** | **343** | P | P | 22 07 11.9 | +6.6 |
| LSA | 3.0nm,1.4s | | | PMZ | | | |
| **XAN** | **Xi'an** | **41.24** | **7** | P | P | 22 07 33.9 | +5.5 |
| XAN | | | | pP | pP | 22 07 40.0 | +7.3 |
| XAN | 8.0nm,1.0s | | | PMZ | | | |
| XAN | 130nm,18.5s | | | LE | | | |
| XAN | 210nm,14.4s | | | LZ | | | |
| **CTAO** | **Charters Tower** 32nm,1.4s | **43.55** | **112** | *e*P | P | 22 07 43.6 | -3.9 |
| **GTA** | **Gaotai** | **46.37** | **356** | *e*P | P | 22 08 17.3 | +7.6 |
| GTA | | | | pP | pP | 22 08 20.8 | +6.7 |
| GTA | | | | sP | sP | 22 08 23.4 | +7.6 |
| GTA | 4.0nm,1.0s | | | PMZ | | | |
| **HHC** | **Hu-ho-hao-te** | **48.29** | **8** | *e*P | **P** | **22 08 26.6** | **+2.0** |
| HHC | | | | PP | **PP** | **22 10 21.0** | **+3.7** |
| HHC | | | | S | **S** | **22 15 25.6** | **+1.4** |
| HHC | | | | SS | **SS** | **22 18 50.4** | **-3.7** |
| HHC | 20nm,0.9s | | | PMZ | | | |
| HHC | 52nm,4.2s | | | PMZ | | | |
| HHC | 130nm,12.3s | | | LN | | | |
| HHC | 80nm,13.6s | | | LE | | | |
| HHC | 96nm,13.6s | | | LZ | | | |
| **KS15** | **Wonju Array Si** | **49.89** | **26** | *e*P | **P** | **22 08 37.5** | **+0.7** |
| **KSAR** | **Wonju Array Be** | **49.89** | **26** | P | **P** | **22 08 37.5** | **+0.7** |
| **KSRS** | **Korea Array** 0.9nm,0.6s,baz=222,slow=6.9,SNR=2.7 | **49.91** | **26** | P | **P** | **22 08 37.5** | **+0.5** |
| KSRS | comp=Z,29nm,19.3s,baz=310,slow=37 | | | LR | LR | 22 30 29.7 | |
| **PAF** | **Port-aux-Franc** 527nm,1.5s | **50.48** | **208** | *e*P | P | 22 08 35.3 | -5.8 |
| **KSH** | **Kashi** | **52.82** | **334** | *e*P | **P** | **22 08 58.0** | **-0.9** |
| KSH | comp=Z,5.0nm,0.5s | | | pmax | pmax | | |
| KSH | comp=Z,64nm,3.8s | | | pmax | pmax | | |
| **SONA0** | **Songino Array** | **54.74** | **3** | *e*P | **P** | **22 09 12.1** | **-0.7** |
| **SONM** | **Songino Array** comp=Z,2.5nm,0.8s | **54.74** | **3** | P | **P** | **22 09 12.1** | **-0.7** |
| **TKM2** | **Tokmak 2** comp=Z,5.5nm,0.7s | **55.79** | **336** | *e*P | **P** | **22 09 20.9** | **+0.3** |
| **HNR** | **Honiara** comp=Z,56nm,18.8s,baz=76,slow=39 | **56.05** | **97** | LR | LR | 22 36 18.0 | |
| **EKS2** | **Erkin-Say** comp=Z,5.8nm,0.8s | **56.34** | **334** | *e*P | P | 22 09 20.8 | -3.6 |
| **MK01** | **Makanchi Array** | **56.78** | **343** | *e*P | **P** | **22 09 27.0** | **-0.3** |
| **MK32** | **Makanchi Array** | **56.80** | **343** | *e*P | **P** | **22 09 26.9** | **-0.6** |
| **MKAR** | **Makanchi Array** comp=Z,2.2nm,0.8s,baz=145,slow=8.7,SNR=8.5 | **56.80** | **343** | P | **P** | **22 09 26.9** | **-0.6** |
| MKAR | comp=Z,45nm,20.8s,baz=164,slow=39 | | | LR | LR | 22 36 47.0 | |
| **MKAR** | **Makanchi Array** | **56.80** | **343** | *e*P | **P** | **22 09 28.8** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** comp=Z,1.4nm,0.7s,baz=224,slow=6.9,SNR=4.1 | **57.23** | **24** | P | **P** | **22 09 29.9** | **-0.6** |
| **LHI** | **Lord Howe Isla** baz=58,SNR=3.5 | **57.27** | **123** | P | P | 22 09 38.9 | +7.8 |
| **KURBB** | **Kurchatov Arra** comp=Z,1.1nm,0.8s,baz=159,slow=6.4,SNR=7.0 | **61.34** | **342** | P | **P** | **22 09 58.1** | **-0.8** |
| **KURK** | **Kurchatov** | **61.40** | **342** | *e*P | **P** | **22 09 58.1** | **-1.2** |
| **ZAA0** | **Zalesovo Array** | **62.77** | **348** | *e*P | **P** | **22 10 07.8** | **-0.6** |
| **ZALV** | **Zalesovo Beam** comp=Z,1.8nm,0.5s,baz=154,slow=4.1,SNR=9.5 | **62.77** | **348** | P | **P** | **22 10 07.9** | **-0.5** |
| ZALV | comp=Z,70nm,20.5s,baz=96,slow=39 | | | LR | LR | 22 40 23.2 | |
| **ZAA1** | **Zalesovo Array** | **62.77** | **348** | *e*P | **P** | **22 10 07.9** | **-0.5** |
| **MAW** | **Mawson** comp=Z,65nm,20.9s,baz=59,slow=30 | **66.26** | **196** | LR | LR | 22 33 02.9 | |
| **AKTO** | **Aktyubinsk** comp=Z,0.6nm,0.6s,baz=266,slow=13,SNR=1.9 | **69.37** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2.2nm,0.3s,baz=281,slow=7.5,SNR=8.2 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.82** | **21** | P | | **Pn** | **22 03 58.6** | **+2.9** |
| | SNR=11 | | | | | | | |
| **KBK** | **Karagaybulak** | **6.98** | **24** | P | | Pn | 22 04 02.0 | +4.1 |
| | SNR=6.0 | | | | | | | |
| **SMLA** | **Simla** | **7.21** | **134** | *i* P | | **Pn** | **22 04 03.3** | **+2.4** |
| SMLA | | | | *i* S | | **Sn** | **22 05 19.7** | **-1.7** |
| SMLA | | | | AML | | AML | 22 05 23.0 | |
| | comp=E,637nm,0.2s | | | | | | | |
| SMLA | | | | AML | | AML | 22 05 23.5 | |
| | comp=N,949nm,0.3s | | | | | | | |
| **CHMS** | **Chumysh** | **7.23** | **22** | P | | **Pn** | **22 04 03.7** | **+2.5** |
| | SNR=13 | | | | | | | |
| **USP** | **Ospenovka** | **7.40** | **19** | P | | **Pn** | **22 04 05.4** | **+1.8** |
| | SNR=14 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.43** | **26** | ⇓P | | **Pn** | **22 04 06.6** | **+2.5** |
| | comp=N,4.9nm,0.5s | | | | | | | |
| TKM2 | | | | ⇑S | | **Sn** | **22 05 28.4** | **+1.2** |
| | comp=N,2.8nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.43** | **26** | P | | **Pn** | **22 04 06.7** | **+2.5** |
| | SNR=11 | | | | | | | |
| **KUDL** | **Kundal** | **9.32** | **149** | *e*P | | **Pn** | **22 04 31.6** | **+1.7** |
| KUDL | | | | *e*S | | Sn | 22 06 07.1 | -6.2 |
| **GEYT** | **Alibeck** | **10.53** | **283** | P | | **Pn** | **22 04 48.5** | **+2.1** |
| | comp=N,0.5nm,0.3s,baz=97,slow=10,SNR=8.3 | | | | | | | |
| GEYT | | | | S | | **Sn** | **22 06 40.0** | **-2.8** |
| | comp=N,2.7nm,0.3s,baz=110,slow=23,SNR=10 | | | | | | | |
| **OTUK** | **Ortayu** | **11.95** | **4** | ⇑P | | **Pn** | **22 05 05.3** | **-0.5** |
| | comp=N,4.1nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.37** | **35** | P | | **Pn** | **22 05 25.5** | **+0.4** |
| | comp=N,0.1nm,0.3s,baz=222,slow=14,SNR=3.5 | | | | | | | |
| **KOLN** | **Koldanda** | **13.56** | **125** | *e*P | | **Pn** | **22 05 27.4** | **-0.7** |
| | comp=N,2.4nm,0.3s | | | | | | | |
| **GKN** | **Gorkha** | **14.11** | **122** | *e*P | | **Pn** | **22 05 33.9** | **-1.5** |
| | comp=N,7.7nm,0.3s | | | | | | | |
| **DMN** | **Daman** | **14.68** | **122** | *e*P | | **Pn** | **22 05 41.5** | **-1.6** |
| | comp=N,2.9nm,0.2s | | | | | | | |
| **KKN** | **Kakani** | **14.69** | **121** | *e*P | | **Pn** | **22 05 41.9** | **-1.2** |
| | comp=N,7.2nm,0.5s | | | | | | | |
| **PKIN** | **Phulchoki** | **14.90** | **122** | *e*P | | **Pn** | **22 05 44.9** | **-1.0** |
| | comp=N,1.8nm,0.3s | | | | | | | |
| **PKI** | **Pulchoki** | **14.91** | **122** | *e*P | | **Pn** | **22 05 45.2** | **-0.9** |
| | comp=N,5.4nm,0.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.26** | **18** | ⇓P | | **Pn** | **22 05 51.6** | **+1.5** |
| | comp=N,1.6nm,0.5s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.26** | **18** | P | | **Pn** | **22 05 47.5** | **-2.7** |
| | comp=N,0.0nm,0.3s,baz=208,slow=11,SNR=5.9 | | | | | | | |
| **AB31** | **Akbulak array** | **15.30** | **331** | ⇓P | | **Pn** | **22 05 49.8** | **-0.9** |
| | comp=N,0.4nm,0.5s | | | | | | | |
| AB31 | | | | ⇓S | | **Sn** | **22 08 32.5** | **-6.4** |
| | comp=N,1.0nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **15.37** | **18** | ⇑P | | **Pn** | **22 05 50.9** | **-0.6** |
| | comp=N,6.0nm,1.2s | | | | | | | |
| **RAMN** | **Ramite** | **16.12** | **121** | *e*P | | **Pn** | **22 06 00.7** | **-1.0** |
| | comp=N,3.4nm,0.3s | | | | | | | |
| **VOSK** | **Vostochnaya** | **16.40** | **360** | ⇓P | | **Pn** | **22 06 02.4** | **-2.3** |
| | comp=N,4.2nm,0.9s | | | | | | | |
| **TAPN** | **Taplejung** | **16.66** | **118** | *e*P | | **Pn** | **22 06 07.0** | **-1.5** |
| | comp=N,5.5nm,0.4s | | | | | | | |
| **ZRNK** | **Zerenda** | **16.70** | **355** | ⇑P | | **Pn** | **22 06 08.2** | **-0.3** |
| | comp=N,2.3nm,0.9s | | | | | | | |
| **BVA0** | **Borovoye Array** | **16.71** | **358** | ⇓P | | **Pn** | **22 06 06.7** | **-2.0** |
| | comp=N,2.9nm,0.9s,baz=156,slow=12,SNR=11 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.99** | **330** | ⇑P | | **P** | **22 06 13.3** | **-0.1** |
| | comp=N,3.8nm,0.8s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.99** | **330** | P | | **P** | **22 06 10.4** | **-1.7** |
| | comp=N,0.7nm,0.3s,baz=149,slow=8.4,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.03** | **24** | P | | **P** | **22 06 46.0** | **-0.7** |
| | comp=N,0.9nm,0.3s,baz=223,slow=11,SNR=14 | | | | | | | |
| **FINES** | **FINESS Array B** | **37.70** | **326** | P | | **P** | **22 09 29.8** | **+1.4** |
| | comp=N,1.5nm,0.7s,baz=121,slow=11,SNR=5.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.35** | **338** | P | | **P** | **22 09 59.5** | **+0.8** |
| | comp=N,5.3nm,0.9s,baz=104,slow=8.9,SNR=8.9 | | | | | | | |
| **HFS** | **Hagfors** | **43.28** | **322** | P | | **P** | **22 10 15.1** | **+0.6** |
| | comp=N,5.6nm,1.2s,baz=105,slow=11,SNR=8.2 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.59** | **323** | P | | **P** | **22 10 26.2** | **+1.1** |
| | comp=Z,0.6nm,0.5s,baz=94,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.59** | **323** | P | | **P** | **22 10 26.1** | **+1.1** |
| | comp=Z,1.1nm,0.6s,baz=96,slow=8.0,SNR=4.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.83** | **269** | P | | **P** | **22 12 58.8** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=50,slow=5.1,SNR=5.6 | | | | | | | |

*ISCJB* ***13*** *22:07:40.7±1.2,24°.6S±0°.2×176°.7W±0°.2, h43km, mb3.9/4, MS3.1/2, Error ellipse: s-maj=27.7km s-min=22.5km az=22.8*

*IDC* ***13*** *22:07:45.1±9.5,24°.72S×176°.66W, h75km±82km, mb3.6/4, mb1 3.9/5, mb1mx3.5/36, mbtmp4.0/5, ML3.7/1, MS3.1/2, Ms1 3.2/2, ms1mx2.8/23, Error ellipse: s-maj=48.7km s-min=32.3km az=6.0*

**ISC 13 22:07:41.7±1.0, 24°.6S±0°.2×176°.6W±0°.2, h43km, n12, σ0§92/10, mb3.8/4, 1C, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **URZ** | **Urewera** | **14.61** | **200** | P | | **Pn** | **22 11 05.7** | **+0.1** |
| | 0.3nm,0.3s,baz=35,slow=17,SNR=2.6 | | | | | | | |
| URZ | | | | S | | Sn | 22 13 31.5 | -15 |
| | 0.6nm,0.3s,baz=353,slow=12,SNR=2.7 | | | | | | | |
| **PPT** | **Papeete** | **26.16** | **80** | LR | | LR | 22 21 05.0 | |
| | comp=Z,29nm,20.5s,baz=5.0,slow=30 | | | | | | | |
| **CTA** | **Charters Tower** | **34.56** | **270** | P | | **P** | **22 14 27.3** | **+0.9** |
| | 2.1nm,0.4s,baz=88,slow=10,SNR=4.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.96** | **261** | P | | **P** | **22 15 52.6** | **-0.4** |
| | 0.3nm,0.3s,baz=92,slow=7.1,SNR=7.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.43** | **266** | P | | **P** | **22 15 55.9** | **-0.7** |
| | 0.4nm,0.3s,baz=100,slow=6.8,SNR=10 | | | | | | | |
| **VNDA** | **Vanda** | **53.95** | **186** | LR | | LR | 22 39 16.2 | |
| | comp=Z,29nm,18.6s,baz=345,slow=35 | | | | | | | |
| **SYO** | **Syowa Base** | **83.00** | **192** | *e*P | | **P** | **22 20 02.4** | **+0.4** |
| **NVAR** | **Mina Array Bea** | **83.17** | **42** | P | | **P** | **22 20 04.0** | **+0.5** |
| | 0.9nm,0.8s,baz=222,slow=8.0,SNR=6.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **133.18** | **350** | PKP | | **PKPdf** | **22 26 51.0** | **-0.9** |
| | 9.8nm,1.1s,baz=27,slow=1.0,SNR=3.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **147.20** | **329** | PKPbc | | **PKPdf** | **22 27 18.8** | **+1.1** |
| | 1.1nm,0.4s,baz=41,slow=3.4,SNR=8.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **150.46** | **308** | PKPbc | | **PKPbc** | **22 27 27.8** | **-1.2** |
| | 0.8nm,0.5s,baz=152,slow=4.3,SNR=6.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **168.48** | **172** | PKPab | | **PKPab** | **22 28 52.9** | **-0.7** |
| | 0.3nm,0.7s,baz=187,slow=3.5,SNR=2.9 | | | | | | | |

*IDC* ***13*** *22:09:26.6±1.9,32°.21S×69°.25W, h0km, mb3.6/1, mb1 3.8/2, mb1mx3.5/26, mbtmp3.6/2, ML3.6/1, Error ellipse: s-maj=93.1km s-min=59.1km az=108.0*

*ISCJB* ***13*** *22:09:41.7±0.6, 31°.67S±0°.03×69°.36W±0°.04, h116km±6km, mb3.3/1, Error ellipse: s-maj=6.1km s-min=5.0km az=144.1*

*GUC* ***13*** *22:09:41.6±0.6, 31°.67S×69°.58W, h139km±21km, ML3.7*

*SJA* ***13*** *22:09:42.2±1.0, 31°.71S×69°.31W, h108km±6km, ML3.5*

**ISC 13 22:09:42.0±0.8, 31°.67S±0°.04×69°.37W±0°.04, h113km±7km, n25, σ0§61/35, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RTLS** | **Leoncito** | **0.14** | **154** | *i* P | | **Pn** | **22 09 58.0** | **0.0** |
| **AUSP** | **Uspallata** | **0.55** | **181** | *i* P | | **Pn** | **22 10 00.3** | **+0.3** |
| **SJA** | **San Juan** | **0.71** | **79** | *i* P | | **Pn** | **22 10 01.3** | **+0.5** |
| SJA | | | | *i* S | | **Sn** | **22 10 14.6** | **-0.4** |
| **RTCV** | **Cerro Valdivia** | **0.73** | **105** | *i* P | | **Pn** | **22 10 01.4** | **+0.4** |
| **RTLL** | **Cerro Villicun** | **0.84** | **66** | *i* P | | **Pn** | **22 10 02.2** | **+0.3** |
| **CFAA** | **Coronel Fontan** | **0.97** | **86** | *i* P | | **Pn** | **22 10 03.3** | **+0.1** |
| CFAA | | | | *i* S | | **Sn** | **22 10 18.8** | **-0.4** |
| **ASAL** | **Salagasta** | **1.02** | **154** | *i* P | | **Pn** | **22 10 04.5** | **+0.6** |
| ASAL | | | | *i* S | | **Sn** | **22 10 20.0** | **-0.3** |
| **ARCO** | **CERRO ARCO** | **1.23** | **162** | *i* P | | **Pn** | **22 10 06.9** | **+0.8** |
| ARCO | | | | *i* S | | **Sn** | **22 10 23.3** | **-1.0** |
| ARCO | | | | AML | | AML | 22 10 26.2 | |
| | comp=Z,2μm,0.2s | | | | | | | |
| **PEL** | **Peldehue** | **1.84** | **217** | *e*P | | **Pn** | **22 10 13.5** | **+0.2** |
| PEL | | | | *e*S | | **Sn** | **22 10 37.6** | **+0.6** |
| PEL | | | | AML | | AML | 22 10 40.3 | |
| | comp=E,637nm,1.3s | | | | | | | |
| **ROCH** | **El Roble** | **1.90** | **226** | *e*P | | **Pn** | **22 10 14.1** | **-0.1** |
| ROCH | | | | *e*S | | **Sn** | **22 10 38.7** | **0.0** |
| ROCH | | | | AML | | AML | 22 10 43.2 | |
| | comp=N,420nm,0.1s | | | | | | | |
| **AVFE** | **Valle Fertil** | **1.93** | **59** | *i* P | | **Pn** | **22 10 14.5** | **+0.2** |
| AVFE | | | | *i* S | | **Sn** | **22 10 39.5** | **+0.6** |
| AVFE | | | | AML | | AML | 22 10 40.0 | |
| | comp=Z,151nm,0.2s | | | | | | | |
| **TLL** | **Tololo Astrono** | **1.94** | **320** | *e*P | | **Pn** | **22 10 14.9** | **+0.2** |
| TLL | | | | *e*S | | **Sn** | **22 10 40.6** | **+1.1** |
| TLL | | | | AML | | AML | 22 10 43.5 | |
| | comp=N,502nm,2.7s | | | | | | | |
| **ACAN** | **Cantantal** | **1.95** | **109** | *i* P | | **Pn** | **22 10 15.0** | **+0.4** |
| ACAN | | | | *i* S | | **Sn** | **22 10 38.7** | **-0.8** |
| **CLCH** | **Cerro Calan** | **1.98** | **209** | *e*P | | **Pn** | **22 10 15.8** | **+0.7** |
| CLCH | | | | *e*S | | **Sn** | **22 10 41.3** | **+1.0** |
| CLCH | | | | AML | | AML | 22 10 42.8 | |
| | comp=E,785nm,0.5s | | | | | | | |
| **AGUA** | **GUANDACOL** | **2.30** | **19** | *i* P | | **Pn** | **22 10 20.6** | **+1.4** |
| **LSCH** | **La Serena** | **2.38** | **317** | *e*P | | **Pn** | **22 10 19.8** | **-0.2** |
| LSCH | | | | *e*S | | **Sn** | **22 10 48.2** | **-1.0** |
| **APLL** | **PUNTA DE LOS L** | **2.75** | **63** | *e*P | | **Pn** | **22 10 25.2** | **+0.3** |
| APLL | | | | *i* S | | **Sn** | **22 10 58.3** | **+0.4** |
| **LCO** | **Las Campanas** | **2.89** | **336** | *e*P | | **Pn** | **22 10 27.0** | **0.0** |
| LCO | | | | AML | | AML | 22 11 03.0 | |
| | comp=E,257nm,1.3s | | | | | | | |
| **TCA** | **Tanti** | **4.09** | **87** | AML | | AML | 22 11 49.4 | |
| | comp=Z,51nm,0.7s | | | | | | | |
| **CYA** | **Choya** | **4.46** | **45** | AML | | AML | 22 12 22.0 | |
| | comp=Z,24nm,0.3s | | | | | | | |
| **LPAZ** | **La Paz** | **15.35** | **5** | Pn | | **Pn** | **22 13 13.2** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=191,slow=6.2,SNR=6.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.29** | **69** | P | | **P** | **22 21 46.2** | **+0.1** |
| | comp=Z,0.4nm,0.7s,baz=241,slow=5.2,SNR=3.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **123.87** | **207** | PKP | | **PKPdf** | **22 28 26.6** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=1.8,SNR=3.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.06** | **32** | PKPbc | | **PKPbc** | **22 29 21.5** | **+0.3** |
| | comp=Z,1.1nm,0.5s,baz=319,slow=3.7,SNR=5.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **153.54** | **47** | PKPab | | **PKPab** | **22 29 39.4** | **-0.5** |
| | comp=Z,0.8nm,1.1s,baz=290,slow=4.3,SNR=2.0 | | | | | | | |

*IDC* ***13*** *22:13:38.3±2.0, 10°.93S×167°.69E, h0km, mb4.1/7, mb1 4.3/7, mb1mx3.9/37, mbtmp4.0/7, Error ellipse: s-maj=84.8km s-min=23.3km az=143.0*

*ISCJB* ***13*** *22:13:42.1±1.7, 10°.9S±0°.4×167°.6E±0°.3, h33km, mb4.0/7, Error ellipse: s-maj=75.0km s-min=20.6km az=143.3*

**ISC 13 22:13:43.6±1.8, 11°.0S±0°.5×167°.7E±0°.3, h35km, n7, σ0§95/7, mb4.0/7, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **22.53** | **244** | P | | **P** | **22 18 42.0** | **+1.2** |
| | 3.4nm,0.7s,baz=63,slow=9.0,SNR=2.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.30** | **250** | P | | **P** | **22 20 17.9** | **-0.5** |
| | 0.8nm,0.2s,baz=72,slow=8.9,SNR=15 | | | | | | | |
| **ASAR** | **Alice Springs** | **34.53** | **244** | P | | **P** | **22 20 28.1** | **-1.0** |
| | 1.1nm,0.6s,baz=72,slow=9.4,SNR=17 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.82** | **293** | P | | **P** | **22 25 15.7** | **+0.5** |
| | 1.6nm,0.9s,baz=117,slow=4.4,SNR=6.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.83** | **18** | P | | **P** | **22 26 04.3** | **+0.3** |
| | 1.2nm,0.7s,baz=245,slow=5.1,SNR=9.1 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.52** | **49** | P | | **P** | **22 26 13.7** | **+0.1** |
| | 0.1nm,0.3s,baz=224,slow=6.2,SNR=3.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **94.76** | **317** | P | | **P** | **22 27 00.9** | **-0.7** |
| | 1.3nm,0.6s,baz=91,slow=6.3,SNR=9.9 | | | | | | | |

*ISCJB* ***13*** *22:29:48.5±0.8, 24°.29S±0°.09×180°.0W±0°.1, h505km, mb3.8/7, Error ellipse: s-maj=17.9km s-min=10.9km az=166.3*

*IDC* ***13*** *22:29:48.3±1.6, 24°.19S×179°.92W, h495km±15km, mb3.5/8, mb1 3.6/10, mb1mx3.5/30, mbtmp4.4/10, Error ellipse: s-maj=19.2km s-min=15.2km az=73.0*

**ISC 13 22:29:49.0±0.6, 24°.31S±0°.09×179°.9W±0°.1, h505km, n22, σ1§09/27, mb3.8/7, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **5.24** | **160** | P | | **P** | **22 31 19.0** | **+0.7** |
| | 98nm,0.3s,baz=270,slow=20,SNR=3.6 | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.73** | **277** | P | | **P** | **22 32 36.0** | **+0.5** |
| | 0.4nm,0.3s,baz=180,slow=23,SNR=7.2 | | | | | | | |
| **URZ** | **Urewera** | **14.14** | **190** | P | | **P** | **22 32 49.0** | **-0.9** |
| | 2.6nm,0.3s,baz=312,slow=2.5,SNR=12 | | | | | | | |
| URZ | | | | S | | **S** | **22 35 16.8** | **-2.2** |
| | 1.3nm,0.3s,baz=88,slow=15,SNR=7.1 | | | | | | | |
| **RPZ** | **Rata Peaks** | **20.73** | **199** | P | | **P** | **22 33 53.9** | **+0.1** |
| | 5.5nm,0.4s,baz=18,slow=3.2,SNR=5.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.04** | **261** | P | | **P** | **22 36 56.0** | **0.0** |
| | 2.2nm,0.8s,baz=100,slow=8.6,SNR=14 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **22 41 43.0** | **+1.4** |
| | 0.6nm,0.9s,baz=107,slow=3.2,SNR=4.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.45** | **267** | P | | **P** | **22 36 59.0** | **-0.3** |
| | 3.1nm,0.5s,baz=97,slow=8.4,SNR=127 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **22 41 45.3** | **+2.0** |
| | 1.7nm,1.0s,baz=103,slow=4.5,SNR=7.2 | | | | | | | |
| **SIJI** | **Sorong** | **52.63** | **289** | P | | **P** | **22 38 15.7** | **-0.1** |
| | 15nm,0.7s,baz=91,slow=7.0,SNR=8.3 | | | | | | | |
| **VNDA** | **Vanda** | **53.98** | **185** | P | | **P** | **22 38 25.8** | **+1.3** |
| | 1.7nm,0.8s,baz=0.1,slow=6.1,SNR=8.5 | | | | | | | |
| VNDA | | | | ScP | | **ScP** | **22 42 31.9** | **+0.8** |
| | 0.5nm,0.6s,baz=25,slow=2.2,SNR=4.3 | | | | | | | |
| **MAW** | **Mawson** | **77.39** | **200** | P | | **P** | **22 40 52.0** | **+1.0** |
| | 1.8nm,0.5s,baz=147,slow=5.4,SNR=10.0 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.51** | **347** | P | | **P** | **22 41 02.3** | **-0.2** |
| | 3.0nm,0.7s,baz=168,slow=7.4,SNR=3.5 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **84.47** | **177** | P | | **P** | **22 41 27.7** | **0.0** |
| **VNA2** | **Neumayer--Watz** | **84.89** | **178** | P | | **P** | **22 41 30.0** | **+0.3** |
| | baz=190,slow=3.5 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.00** | **44** | P | | **P** | **22 41 31.8** | **+0.8** |
| | 0.4nm,0.7s,baz=229,slow=8.2,SNR=3.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **112.48** | **313** | PKiKP | | **PKiKP** | **22 47 26.3** | **-1.0** |
| | 0.2nm,0.4s,baz=132,slow=2.1,SNR=3.1 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **115.58** | **316** | PKP | | **PKPdf** | **22 47 31.8** | **-1.3** |
| | 0.3nm,0.6s,baz=78,slow=3.0,SNR=4.7 | | | | | | | |
| **HFS** | **Hagfors** | **142.96** | **349** | PKP | | **PKPdf** | **22 48 21.5** | **-2.8** |
| | 4.9nm,0.4s,baz=64,slow=3.4,SNR=28 | | | | | | | |
| **AKASG** | **Malin Array Be** | **145.35** | **327** | PKPbc | | **PKPdf** | **22 48 28.8** | **+0.1** |
| | 1.5nm,0.5s,baz=45,slow=4.1,SNR=11 | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.88** | **307** | PKPbc | | **PKPbc** | **22 48 36.8** | **-0.5** |
| | 0.7nm,0.5s,baz=151,slow=3.3,SNR=5.8 | | | | | | | |
| BRTR | | | | PKPab | | **PKPab** | **22 48 41.8** | **+0.1** |
| | 1.5nm,0.6s,baz=84,slow=3.8,SNR=9.0 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **147.93** | **294** | PKPbc | | **PKPbc** | **22 48 38.0** | **+0.6** |
| | 2.5nm,0.5s,baz=64,slow=5.7,SNR=5.9 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **148.92** | **4** | PKPbc | | **PKPbc** | **22 48 38.5** | **-0.6** |
| | 0.3nm,0.4s,baz=355,slow=2.7,SNR=4.4 | | | | | | | |
| **ESDC** | **Sonseca Array** | **164.30** | **12** | PKPab | | **PKPab** | **22 49 51.1** | **-0.8** |
| | 0.9nm,1.1s,baz=1.7,slow=4.9,SNR=4.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **168.79** | **188** | PKPab | | **PKPab** | **22 50 12.4** | **+0.3** |
| | 1.3nm,0.7s,baz=177,slow=4.1,SNR=6.2 | | | | | | | |

*IDC* ***13*** *22:38:41.2±1.1, 36°.14S×73°.01W, h0km, mb3.6/5, mb1 3.9/6, mb1mx3.7/22, mbtmp3.6/6, ML2.8/1, MS3.1/5, Ms1 3.1/5, ms1mx2.9/22, Error ellipse: s-maj=39.1km s-min=27.4km az=83.0*

*ISCJB* ***13*** *22:38:44.1±0.8, 36°.11S±0°.05×72°.91W±0°.1, h39km±6km, mb3.7/4, MS2.9/2, Error ellipse: s-maj=13.5km s-min=7.6km az=4.8*

*NEIC* ***13*** *22:38:44.0, 36°.04S×72°.75W, h36km, ML4.4(GUC), After GUC.*

*NEIC Felt [IV] at Cauquenes and Chanco; [III] at Cobquecura, Empedrado and Quirihue; [II] at Linares and Talca.*

*GUC* ***13*** *22:38:44.5±0.6, 36°.04S×72°.75W, h36km±2km, ML4.4*

**ISC 13 22:38:45.4±1.3, 36°.09S±0°.04×72°.91W±0°.09, h31km±8km, n36, σ1§66/37, mb3.7/4, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **0.11** | **115** | *e*P | | **Pn** | **22 38 50.9** | **-0.1** |
| COCH | | | | *e*S | | **Sb** | **22 38 55.2** | **+0.4** |
| COCH | | | | AML | | AML | 22 38 55.6 | |
| | comp=N,37μm,0.3s | | | | | | | |
| **CCHI** | **Chillan** | **0.85** | **128** | *e*P | | **Pn** | **22 38 59.5** | **-1.7** |
| CCHI | | | | *e*S | | **Sn** | **22 39 11.0** | **-1.7** |
| **TALC** | **Talca** | **1.25** | **57** | *e*P | | **Pn** | **22 39 04.9** | **-1.7** |
| **NICH** | **Los Niches** | **1.75** | **52** | *e*P | | **Pn** | **22 39 13.3** | **-0.3** |
| NICH | | | | *e*S | | **Sn** | **22 39 34.6** | **-0.2** |
| NICH | | | | AML | | AML | 22 39 38.7 | |
| | comp=N,10μm,0.1s | | | | | | | |
| **CHPI** | **Pichilemu** | **1.85** | **24** | *e*P | | **Pn** | **22 39 13.6** | **-1.3** |
| CHPI | | | | *e*S | | **Sn** | **22 39 37.8** | **+0.6** |
| **RCDM** | **Rinconada Maip** | **3.12** | **34** | *e*P | | Pn | 22 39 28.4 | -4.1 |
| RCDM | | | | *e*S | | Sn | 22 40 01.7 | -7.0 |
| **ANTU** | **Antumapu** | **3.13** | **37** | *e*P | | **Pn** | **22 39 32.8** | **+0.1** |
| ANTU | | | | AML | | AML | 22 40 25.4 | |
| | comp=N,2μm,0.6s | | | | | | | |
| **ROC1** | **El Roble** | **3.47** | **27** | *i* P | | **Pn** | **22 39 37.2** | **-0.4** |
| ROC1 | | | | *i* S | | **Sb** | **22 40 30.1** | **+1.8** |
| **AAGR** | **Agrelo** | **4.51** | **50** | *e*P | | **Pn** | **22 39 54.0** | **+2.4** |
| **AUSP** | **Uspallata** | **4.83** | **38** | *i* P | | **Pn** | **22 39 57.2** | **+0.9** |
| AUSP | | | | *i* S | | **Sb** | **22 41 06.4** | **-1.0** |
| **ASAL** | **Salagasta** | **4.85** | **45** | *e*P | | **Pn** | **22 39 58.7** | **+2.3** |
| **RTLS** | **Leoncito** | **5.22** | **36** | *i* P | | **Pn** | **22 40 02.3** | **+0.7** |
| **RTCV** | **Cerro Valdivia** | **5.56** | **42** | *i* P | | **Pn** | **22 40 07.6** | **+1.5** |
| **CFAA** | **Coronel Fontan** | **5.92** | **42** | Pn | | **Pn** | **22 40 10.7** | **-0.4** |
| | comp=N,0.3nm,0.3s,baz=214,slow=13,SNR=20 | | | | | | | |
| CFAA | | | | Sn | | **Sn** | **22 41 14.9** | **-3.0** |
| | comp=N,0.3nm,0.3s,baz=229,slow=20,SNR=2.2 | | | | | | | |
| CFAA | | | | Lg | | Lg | 22 41 47.5 | |
| | comp=N,0.3nm,0.3s,baz=303,slow=20,SNR=5.9 | | | | | | | |
| CFAA | | | | LR | | LR | 22 42 34.3 | |
| | comp=N,26nm,18.2s,baz=238,slow=39 | | | | | | | |
| **CFAA** | **Coronel Fontan** | **5.92** | **42** | *e*P | | **Pn** | **22 40 11.0** | **-0.1** |
| **RTLL** | **Cerro Villicun** | **6.01** | **39** | *i* P | | **Pn** | **22 40 11.8** | **-0.5** |
| **ACAN** | **Cantantal** | **6.08** | **53** | *e*P | | **Pn** | **22 40 13.0** | **-0.2** |
| **AMOG** | **MOGNA** | **6.32** | **37** | *i* P | | **Pn** | **22 40 15.5** | **-1.1** |
| **MRA** | **San Martin** | **6.99** | **61** | *e*P | | Pn | 22 40 29.5 | +3.7 |
| MRA | | | | AML | | AML | 22 42 34.4 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **AVFE** | **Valle Fertil** | **7.08** | **42** | *e*P | | **Pn** | **22 40 25.5** | **-1.5** |
| AVFE | | | | AML | | AML | 22 42 02.8 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **LCO** | **Las Campanas** | **7.30** | **15** | *e*Pn | | **Pn** | **22 40 28.1** | **-2.1** |
| | comp=Z,12nm,0.2s | | | | | | | |
| LCO | | | | *e*Sn | | **Sn** | **22 41 46.9** | **-5.1** |
| **AGUA** | **GUANDACOL** | **7.56** | **31** | *e*P | | **Pn** | **22 40 33.3** | **-0.3** |
| **TCA** | **Tanti** | **8.39** | **58** | *e*P | | **Pn** | **22 40 43.8** | **-1.2** |
| TCA | | | | AML | | AML | 22 42 34.7 | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **TRQA** | **Tornquist** | **8.96** | **106** | *e*Pn | | Pn | 22 40 48.4 | -4.2 |
| **CPUP** | **Villa Florida** | **16.48** | **58** | LR | | LR | 22 49 25.6 | |
| | comp=Z,128nm,21.8s,baz=222,slow=39 | | | | | | | |
| **USHA** | **Ushuaia** | **19.00** | **172** | LR | | LR | 22 51 15.3 | |
| | comp=Z,231nm,21.3s,baz=343,slow=40 | | | | | | | |
| **LPAZ** | **La Paz** | **20.17** | **13** | P | | **P** | **22 43 18.2** | **+0.2** |
| | comp=Z,0.7nm,0.6s,baz=198,slow=18,SNR=2.5 | | | | | | | |
| LPAZ | | | | LR | | LR | 22 50 39.2 | |
| | comp=Z,20nm,18.6s,baz=182,slow=36 | | | | | | | |
| **BDFB** | **Brasilia** | **30.12** | **54** | LR | | LR | 22 57 43.5 | |
| | comp=Z,84nm,21.9s,baz=217,slow=38 | | | | | | | |
| **SNAA** | **Sanae** | **49.94** | **157** | P | | **P** | **22 47 36.3** | **+0.4** |
| | comp=Z,0.7nm,0.9s,baz=284,slow=6.7,SNR=6.1 | | | | | | | |
| **SNAA** | **Sanae** | **49.94** | **157** | *e*P | | P | 22 47 32.9 | -3.0 |
| **QSPA** | **South Pole Qui** | **54.16** | **180** | *e*P | | **P** | **22 48 05.7** | **-1.8** |
| **TXAR** | **Lajitas Array** | **71.22** | **332** | P | | **P** | **22 50 02.4** | **+0.9** |
| | comp=Z,0.8nm,0.5s,baz=145,slow=7.6,SNR=5.6 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.19** | **326** | P | | **P** | **22 51 20.4** | **+1.6** |
| | comp=Z,0.1nm,0.3s,baz=146,slow=7.1,SNR=4.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **85.59** | **70** | P | | **P** | **22 51 23.9** | **+2.9** |
| | comp=Z,0.5nm,1.0s,baz=212,slow=5.1,SNR=2.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **118.60** | **209** | PKP | | **PKPdf** | **22 57 29.8** | **-0.9** |
| | comp=Z,0.3nm,0.8s,baz=158,slow=1.8,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **158.64** | **52** | PKPab | | **PKPab** | **22 59 14.3** | **-0.6** |
| | comp=Z,0.1nm,0.3s,baz=254,slow=3.8,SNR=3.9 | | | | | | | |

*PDG* ***13*** *22:43:13.9±0.5, 44°.25N×12°.35E, h22km, ML4.2/12, Error ellipse: s-maj=0.4km s-min=0.6km az=0.0*

*CSEM* ***13*** *22:43:14.6±0.1, 44°.23N×12°.38E, h20km, 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 12µm,0.5s | | | | | | | |
| SEI | Scarperia | 0.71 | 261 | Pg | Pn | 22 | 43 | 28.7 | -0.1 |
| SEI | Scarperia | 0.71 | 261 | Pg | Pn | 22 | 43 | 28.7 | -0.1 |
| CDCA | Citt' di Caste | 0.71 | 186 | Pg | Pn | 22 | 43 | 28.7 | -0.1 |
| | | 15µm,0.7s | | | | | | | |
| CDCA | Citt' di Caste | 0.71 | 186 | P | Pn | 22 | 43 | 28.6 | -0.1 |
| CDCA | Citt' di Caste | 0.71 | 186 | Pg | Pn | 22 | 43 | 28.7 | -0.1 |
| | | 15µm,0.7s | | | | | | | |
| ATPI | Pietralunga - | 0.72 | 176 | ⇓*i*Pg | Pn | 22 | 43 | 28.8 | -0.1 |
| ATPI | | | | Sg | Sb | 22 | 43 | 40.6 | +1.7 |
| | | 8µm,0.5s | | | | | | | |
| ATPI | Pietralunga - | 0.72 | 176 | ⇓*i*Pg | Pn | 22 | 43 | 28.8 | -0.1 |
| ATPI | | | | Sg | Sb | 22 | 43 | 40.6 | +1.7 |
| | | 8µm,0.5s | | | | | | | |
| FIU | Minerbio Fiu | 0.77 | 308 | Pg | Pb | 22 | 43 | 31.2 | +1.2 |
| | | 34µm,0.6s | | | | | | | |
| FIU | Minerbio Fiu | 0.77 | 308 | Pg | Pb | 22 | 43 | 31.2 | +1.2 |
| | | 34µm,0.6s | | | | | | | |
| ATVO | AVT- Monte Val | 0.79 | 176 | ⇓*i*Pg | Pn | 22 | 43 | 30.0 | +0.2 |
| ATVO | | | | Sg | Sb | 22 | 43 | 43.0 | +2.2 |
| | | 16µm,0.5s | | | | | | | |
| ATVO | AVT- Monte Val | 0.79 | 176 | ⇓*i*Pg | Pn | 22 | 43 | 30.0 | +0.2 |
| ATVO | | | | Sg | Sb | 22 | 43 | 43.0 | +2.2 |
| | | 16µm,0.5s | | | | | | | |
| SENI | Senigallia | 0.80 | 125 | Pg | Pb | 22 | 43 | 31.0 | +0.5 |
| | | 6µm,0.9s | | | | | | | |
| SENI | Senigallia | 0.80 | 125 | Pg | Pb | 22 | 43 | 31.0 | +0.5 |
| | | 6µm,0.9s | | | | | | | |
| ARVD | Arcevia | 0.80 | 147 | ⇓*i*Pg | Pn | 22 | 43 | 30.1 | +0.1 |
| ARVD | Arcevia | 0.80 | 147 | ⇓*i*Pg | Pn | 22 | 43 | 30.1 | +0.1 |
| ATFO | Monte Foce - G | 0.82 | 168 | ⇓*i*Pg | Pn | 22 | 43 | 30.4 | +0.1 |
| ATFO | | | | Sg | Sb | 22 | 43 | 43.8 | +2.0 |
| | | 13µm,0.4s | | | | | | | |
| ATFO | Monte Foce - G | 0.82 | 168 | ⇓*i*Pg | Pn | 22 | 43 | 30.4 | +0.1 |
| ATFO | | | | Sg | Sb | 22 | 43 | 43.8 | +2.0 |
| | | 13µm,0.4s | | | | | | | |
| FIR | Firenze | 0.87 | 243 | Pg | Pb | 22 | 43 | 32.1 | +0.3 |
| | | 8µm,0.5s | | | | | | | |
| FIR | Firenze | 0.87 | 243 | Pg | Pb | 22 | 43 | 32.1 | +0.3 |
| | | 8µm,0.5s | | | | | | | |
| ADRI | Adria, Italy | 0.90 | 346 | ⇓*e*Pg | Pb | 22 | 43 | 32.1 | 0.0 |
| ADRI | | | | *e*Sg | Sb | 22 | 43 | 45.9 | +2.0 |
| ADRI | Adria, Italy | 0.90 | 346 | ⇓*e*Pg | Pb | 22 | 43 | 32.2 | 0.0 |
| ADRI | | | | *e*Sg | Sb | 22 | 43 | 45.8 | +2.0 |
| MURB | Monte Urbino | 0.92 | 171 | ⇓*i*Pg | Pn | 22 | 43 | 32.3 | +0.7 |
| | | 21µm,0.4s | | | | | | | |
| MURB | Monte Urbino | 0.92 | 171 | ⇓*i*Pg | Pn | 22 | 43 | 32.3 | +0.7 |
| | | 21µm,0.4s | | | | | | | |
| ZCCA | Zocca | 0.99 | 281 | Pg | Pb | 22 | 43 | 35.3 | +1.5 |
| | | 3µm,0.7s | | | | | | | |
| ZCCA | Zocca | 0.99 | 281 | Pg | Pb | 22 | 43 | 35.3 | +1.5 |
| | | 3µm,0.7s | | | | | | | |
| CING | Cingoli | 1.01 | 141 | Pg | Pb | 22 | 43 | 33.9 | -0.2 |
| | | 3µm,0.4s | | | | | | | |
| CING | Cingoli | 1.01 | 141 | Pg | Pb | 22 | 43 | 33.9 | -0.2 |
| | | 3µm,0.4s | | | | | | | |
| SNTG | Esanatoglia | 1.01 | 154 | Pg | Pb | 22 | 43 | 33.8 | -0.3 |
| | | 6µm,0.6s | | | | | | | |
| SNTG | Esanatoglia | 1.01 | 154 | Pg | Pb | 22 | 43 | 33.8 | -0.3 |
| | | 6µm,0.6s | | | | | | | |
| CRMI | Carmignano | 1.05 | 249 | Pg | Pb | 22 | 43 | 35.1 | +0.3 |
| CRMI | Carmignano | 1.05 | 249 | Pg | Pb | 22 | 43 | 35.1 | +0.3 |
| AOI | Ancona | 1.11 | 124 | Pg | Pb | 22 | 43 | 35.6 | -0.1 |
| | | 5µm,0.7s | | | | | | | |
| AOI | Ancona | 1.11 | 124 | Pg | Pb | 22 | 43 | 35.6 | -0.1 |
| | | 5µm,0.7s | | | | | | | |
| POPM | Popiglio | 1.14 | 264 | P | Pb | 22 | 43 | 36.0 | -0.3 |
| POPM | | | | S | Sn | 22 | 43 | 50.1 | +0.9 |
| CESI | CESI - Serrava | 1.23 | 160 | Pg | Pb | 22 | 43 | 37.5 | -0.4 |
| | | 732nm,0.4s | | | | | | | |
| CESI | CESI - Serrava | 1.23 | 160 | Pg | Pb | 22 | 43 | 37.5 | -0.4 |
| | | 732nm,0.4s | | | | | | | |
| BDI | Bagni Di Lucca | 1.25 | 266 | Pg | Pb | 22 | 43 | 38.1 | -0.1 |
| | | 3µm,0.8s | | | | | | | |
| BDI | Bagni Di Lucca | 1.25 | 266 | Pg | Pb | 22 | 43 | 38.1 | -0.1 |
| | | 3µm,0.8s | | | | | | | |
| FDMO | Fiordimonte | 1.26 | 154 | Pg | Pb | 22 | 43 | 37.8 | -0.4 |
| FDMO | Fiordimonte | 1.26 | 154 | Pg | Pb | 22 | 43 | 37.8 | -0.4 |
| MGAB | Montegabbione | 1.27 | 187 | Pg | Pb | 22 | 43 | 38.1 | -0.3 |
| MGAB | Montegabbione | 1.27 | 187 | Pg | Pb | 22 | 43 | 38.1 | -0.3 |
| TEOL | Teolo | 1.28 | 339 | Pg | Pn | 22 | 43 | 36.6 | 0.0 |
| | | 8µm,0.8s | | | | | | | |
| TEOL | Teolo | 1.28 | 339 | Pg | Pn | 22 | 43 | 36.6 | 0.0 |
| | | 8µm,0.8s | | | | | | | |
| NOVE | Novellara | 1.32 | 299 | Pg | Pb | 22 | 43 | 39.0 | -0.2 |
| | | 7µm,0.6s | | | | | | | |
| NOVE | Novellara | 1.32 | 299 | Pg | Pb | 22 | 43 | 39.0 | -0.2 |
| | | 7µm,0.6s | | | | | | | |
| MAIM | Mastiano | 1.35 | 260 | Pg | Pb | 22 | 43 | 39.0 | -0.8 |
| | | 1µm,0.5s | | | | | | | |
| MAIM | Mastiano | 1.35 | 260 | P | Pn | 22 | 43 | 38.8 | +1.3 |
| MAIM | | | | S | Sn | 22 | 43 | 55.1 | +0.8 |
| SACS | San Casciano d | 1.35 | 193 | Pg | Pb | 22 | 43 | 39.1 | -0.8 |
| | | 3µm,0.6s | | | | | | | |
| IESO | Jesolo | 1.36 | 6 | ⇓*e*Pg | Pn | 22 | 43 | 37.8 | +0.2 |
| IESO | Jesolo | 1.36 | 6 | ⇓*e*Pg | Pn | 22 | 43 | 37.8 | +0.2 |
| SARO | Sassorosso | 1.39 | 271 | P | Pb | 22 | 43 | 40.3 | -0.2 |
| SARO | | | | S | Sb | 22 | 43 | 57.4 | -0.6 |
| VLC | Villacollemand | 1.40 | 270 | Pg | Pb | 22 | 43 | 40.3 | -0.4 |
| | | 2µm,1.1s | | | | | | | |
| VLC | Villacollemand | 1.40 | 270 | *e*Pn | Pb | 22 | 43 | 40.2 | -0.4 |
| VLC | | | | *e*Sn | Sn | 22 | 43 | 55.9 | +0.3 |
| VLC | Villacollemand | 1.40 | 270 | *e*Pn | Pb | 22 | 43 | 40.2 | -0.4 |
| VLC | | | | *e*Sn | Sn | 22 | 43 | 55.9 | +0.3 |
| ERBM | Eremo | 1.40 | 281 | Pg | Pb | 22 | 43 | 41.5 | +0.8 |
| | | 3µm,1.2s | | | | | | | |
| ERBM | Eremo | 1.40 | 281 | Pg | Pb | 22 | 43 | 41.5 | +0.8 |
| | | 3µm,1.2s | | | | | | | |
| ARCI | Arcidosso | 1.46 | 206 | Pg | Pn | 22 | 43 | 40.7 | +1.6 |
| | | 2µm,0.9s | | | | | | | |
| ARCI | Arcidosso | 1.46 | 206 | Pg | Pn | 22 | 43 | 40.7 | +1.6 |
| | | 2µm,0.9s | | | | | | | |
| MCIV | Monte Civitell | 1.47 | 199 | Pg | Pb | 22 | 43 | 40.9 | -0.9 |
| | | 528nm,0.4s | | | | | | | |
| MCIV | Monte Civitell | 1.47 | 199 | Pg | Pb | 22 | 43 | 40.9 | -0.9 |
| | | 528nm,0.4s | | | | | | | |
| SASS | Sassa | 1.50 | 233 | Pg | Pn | 22 | 43 | 40.9 | +1.3 |
| | | 709nm,0.7s | | | | | | | |
| SASS | Sassa | 1.50 | 233 | Pg | Pn | 22 | 43 | 40.9 | +1.3 |
| | | 709nm,0.7s | | | | | | | |
| VALM | Valbona | 1.51 | 278 | P | Pb | 22 | 43 | 43.0 | +0.5 |
| PRMA | PARMA | 1.56 | 293 | Pg | Pb | 22 | 43 | 42.8 | -0.6 |
| | | 2µm,0.6s | | | | | | | |
| PRMA | PARMA | 1.56 | 293 | Pg | Pb | 22 | 43 | 42.8 | -0.6 |
| | | 2µm,0.6s | | | | | | | |
| CESX | Cesi | 1.57 | 173 | Pg | Pb | 22 | 43 | 42.3 | -1.2 |
| | | 4µm,0.5s | | | | | | | |
| CESX | Cesi | 1.57 | 173 | Pg | Pb | 22 | 43 | 42.3 | -1.2 |
| | | 4µm,0.5s | | | | | | | |
| LATE | Laterza | 1.60 | 194 | Pg | Pn | 22 | 43 | 42.7 | +1.7 |
| | | 2µm,0.4s | | | | | | | |
| LATE | Laterza | 1.60 | 194 | Pg | Pn | 22 | 43 | 42.7 | +1.7 |
| | | 2µm,0.4s | | | | | | | |
| GUMA | Gualdo di Mace | 1.60 | 133 | Pg | Pn | 22 | 43 | 39.1 | -2.0 |
| | | 14µm,0.5s | | | | | | | |
| BACM | Baccana | 1.63 | 275 | P | Pb | 22 | 43 | 43.9 | -0.6 |
| LNSS | Leonessa | 1.65 | 162 | Pg | Pb | 22 | 43 | 43.8 | -1.1 |
| | | 3µm,0.6s | | | | | | | |
| LNSS | Leonessa | 1.65 | 162 | Pg | Pb | 22 | 43 | 43.8 | -1.1 |
| | | 3µm,0.6s | | | | | | | |
| MTLO | Montello | 1.65 | 354 | ⇓*e*Pg | Pn | 22 | 43 | 41.7 | 0.0 |
| MTLO | Montello | 1.65 | 354 | ⇓*e*Pg | Pn | 22 | 43 | 41.7 | 0.0 |
| MARN | Marana (Italy) | 1.67 | 332 | ⇓*e*Pg | Pn | 22 | 43 | 42.0 | 0.0 |
| MARN | | | | *e*Sg | Sn | 22 | 44 | 02.0 | -0.3 |
| MARN | Marana (Italy) | 1.67 | 332 | ⇓*e*Pg | Pn | 22 | 43 | 42.0 | 0.0 |
| MARN | | | | *e*Sg | Sn | 22 | 44 | 02.0 | -0.3 |
| CASP | Castiglione de | 1.74 | 218 | Pg | Pn | 22 | 43 | 44.1 | +1.2 |
| | | 1µm,0.3s | | | | | | | |
| CASP | Castiglione de | 1.74 | 218 | Pg | Pn | 22 | 43 | 44.1 | +1.2 |
| | | 1µm,0.3s | | | | | | | |
| CGRP | Cima Grappa | 1.75 | 348 | ⇓*e*Pg | Pn | 22 | 43 | 43.0 | -0.3 |
| CGRP | | | | *e*Sg | Sn | 22 | 44 | 04.4 | -0.1 |
| CGRP | Cima Grappa | 1.75 | 348 | Pg | Pn | 22 | 43 | 43.0 | -0.3 |
| | | 3µm,0.5s | | | | | | | |
| CGRP | Cima Grappa | 1.75 | 348 | Pg | Pn | 22 | 43 | 43.0 | -0.3 |
| | | 3µm,0.5s | | | | | | | |
| CGRP | | | | *e*Sg | Sn | 22 | 44 | 04.4 | -0.1 |
| CODM | Codolo | 1.80 | 278 | P | Pb | 22 | 43 | 46.8 | -0.5 |
| MNS | Montasola | 1.80 | 172 | Pg | Pn | 22 | 43 | 45.5 | +1.7 |
| | | 2µm,0.5s | | | | | | | |
| MNS | Montasola | 1.80 | 172 | Pg | Pn | 22 | 43 | 45.5 | +1.7 |
| | | 2µm,0.5s | | | | | | | |
| TERO | Teramo | 1.80 | 149 | Pg | Pn | 22 | 43 | 45.2 | +1.4 |
| | | 3µm,0.8s | | | | | | | |
| TERO | Teramo | 1.80 | 149 | Pg | Pn | 22 | 43 | 45.2 | +1.4 |
| | | 3µm,0.8s | | | | | | | |
| VARN | Col Varnada, M | 1.83 | 355 | ⇓*e*Pg | Pn | 22 | 43 | 43.9 | -0.4 |
| VARN | Col Varnada, M | 1.83 | 355 | *e*Pg | Pn | 22 | 43 | 43.8 | -0.4 |
| TLI | Talmassons | 1.84 | 17 | ⇓*e*Pg | Pn | 22 | 43 | 43.9 | -0.3 |
| TLI | Talmassons | 1.84 | 17 | ⇓*e*Pg | Pn | 22 | 43 | 43.9 | -0.3 |
| CAE | Caneva | 1.84 | 2 | ⇓*e*Pg | Pn | 22 | 43 | 44.0 | -0.3 |
| CAE | Caneva | 1.84 | 2 | ⇓*e*Pg | Pn | 22 | 43 | 44.0 | -0.3 |
| TRI | Trieste | 1.84 | 33 | ⇓*e*Pg | Pn | 22 | 43 | 43.5 | -0.8 |
| TRI | | | | *e*Sg | Sn | 22 | 44 | 05.8 | -0.7 |
| TRI | Trieste | 1.84 | 33 | *e*Pg | Pn | 22 | 43 | 43.0 | -1.3 |
| | | 3µm,1.0s | | | | | | | |
| TRI | Trieste | 1.84 | 33 | *e*Pn | Pn | 22 | 43 | 43.2 | -1.1 |
| TRI | | | | *e*Sn | Sn | 22 | 44 | 04.5 | -1.9 |
| TRI | Trieste | 1.84 | 33 | *e*Pn | Pn | 22 | 43 | 43.2 | -1.1 |
| TRI | Trieste | 1.84 | 33 | ⇓*e*Pg | Pn | 22 | 43 | 43.5 | -0.8 |
| TRI | | | | *e*Sn | Sn | 22 | 44 | 04.6 | -1.9 |
| TRI | | | | *e*Sg | Sn | 22 | 44 | 05.8 | -0.7 |
| BALD | Monte Baldo | 1.86 | 325 | ⇓*e*Pn | Pn | 22 | 43 | 44.8 | +0.1 |
| BALD | Monte Baldo | 1.86 | 325 | ⇓*e*Pn | Pn | 22 | 43 | 44.8 | +0.1 |
| POLC | Polcenigo | 1.86 | 4 | Pg | Pn | 22 | 43 | 44.6 | 0.0 |
| | | 7µm,0.4s | | | | | | | |
| POLC | Polcenigo | 1.86 | 4 | ⇓*e*Pg | Pn | 22 | 43 | 44.5 | 0.0 |
| DDS | Dosso del Somm | 1.89 | 335 | ⇓*e*Pn | Pn | 22 | 43 | 45.1 | -0.1 |
| DDS | | | | *e*Sn | Sn | 22 | 44 | 08.4 | +0.4 |
| DDS | Dosso del Somm | 1.89 | 335 | ⇓*e*Pn | Pn | 22 | 43 | 45.1 | -0.1 |
| DDS | | | | *e*Sn | Sn | 22 | 44 | 08.4 | +0.4 |
| SALO | Salr | 1.94 | 319 | Pg | Pn | 22 | 43 | 46.4 | +0.8 |
| | | 3µm,0.8s | | | | | | | |
| SALO | Salr | 1.94 | 319 | Pg | Pn | 22 | 43 | 46.4 | +0.8 |
| | | 3µm,0.8s | | | | | | | |
| MAON | Monte Argentar | 1.95 | 207 | Pg | Pn | 22 | 43 | 47.1 | +1.3 |
| | | 410nm,0.5s | | | | | | | |
| MAON | Monte Argentar | 1.95 | 207 | Pg | Pn | 22 | 43 | 47.1 | +1.3 |
| | | 410nm,0.5s | | | | | | | |
| T0104 | Madonna delle | 1.95 | 158 | Pg | Pb | 22 | 43 | 48.9 | -1.1 |
| MAGA | Magasa | 2.01 | 324 | Pg | Pn | 22 | 43 | 46.8 | +0.1 |
| | | 5µm,0.5s | | | | | | | |
| MAGA | Magasa | 2.01 | 324 | Pg | Pn | 22 | 43 | 46.8 | +0.1 |
| | | 5µm,0.5s | | | | | | | |
| PANI | Panarotta | 2.02 | 339 | ⇓*e*Pn | Pn | 22 | 43 | 47.0 | +0.2 |
| PANI | | | | *e*Sn | Sn | 22 | 44 | 10.2 | -0.8 |
| PANI | Panarotta | 2.02 | 339 | ⇓*e*Pn | Pn | 22 | 43 | 47.0 | +0.2 |
| PANI | | | | *e*Sn | Sn | 22 | 44 | 10.2 | -0.8 |
| SABO | M.te Sabotino | 2.02 | 26 | ⇓*e*Pn | Pn | 22 | 43 | 46.5 | -0.3 |
| SABO | | | | *e*Sn | Sn | 22 | 44 | 10.5 | -0.4 |
| SABO | M.te Sabotino | 2.02 | 26 | Pg | Pn | 22 | 43 | 46.5 | -0.3 |
| | | 4µm,0.6s | | | | | | | |
| SABO | M.te Sabotino | 2.02 | 26 | Pg | Pn | 22 | 43 | 46.5 | -0.3 |
| | | 4µm,0.6s | | | | | | | |
| SABO | | | | *e*Sn | Sn | 22 | 44 | 10.5 | -0.4 |
| SC2M | Scurtabo | 2.02 | 278 | Pg | Pb | 22 | 43 | 49.4 | -1.8 |
| | | 3µm,0.4s | | | | | | | |
| SC2M | Scurtabo | 2.02 | 278 | Pg | Pb | 22 | 43 | 49.4 | -1.8 |
| | | 3µm,0.4s | | | | | | | |
| MSSA | Maissana | 2.03 | 275 | Pg | Pn | 22 | 43 | 49.2 | +2.3 |
| MSSA | Maissana | 2.03 | 275 | Pg | Pn | 22 | 43 | 49.2 | +2.3 |
| VCEL | Villa Celiera | 2.09 | 148 | Pg | Pn | 22 | 43 | 49.3 | +1.5 |
| | | 2µm,0.7s | | | | | | | |
| VCEL | Villa Celiera | 2.09 | 148 | Pg | Pn | 22 | 43 | 49.3 | +1.5 |
| | | 2µm,0.7s | | | | | | | |
| COLI | Coloredo | 2.10 | 20 | ⇓*e*Pn | Pn | 22 | 43 | 47.6 | -0.2 |
| COLI | | | | *e*Sn | Sn | 22 | 44 | 12.8 | +0.1 |
| COLI | Coloredo | 2.10 | 20 | ⇓*e*Pn | Pn | 22 | 43 | 47.6 | -0.2 |
| COLI | | | | *e*Sn | Sn | 22 | 44 | 12.8 | +0.1 |
| TOLF | Tolfa | 2.12 | 187 | Pg | Pn | 22 | 43 | 49.4 | +1.3 |
| | | 678nm,1.1s | | | | | | | |
| TOLF | Tolfa | 2.12 | 187 | Pg | Pn | 22 | 43 | 49.4 | +1.3 |
| | | 678nm,1.1s | | | | | | | |
| AGOR | Agordo | 2.12 | 355 | ⇓*e*Pn | Pn | 22 | 43 | 48.1 | -0.2 |
| AGOR | Agordo | 2.12 | 355 | Pg | Pn | 22 | 43 | 48.0 | -0.2 |
| | | 2µm,0.8s | | | | | | | |
| BUA | Buia | 2.12 | 15 | ⇓*e*Pn | Pn | 22 | 43 | 48.3 | +0.1 |
| BUA | | | | *e*Sn | Sn | 22 | 44 | 13.7 | +0.3 |
| BUA | Buia | 2.12 | 15 | ⇓*e*Pn | Pn | 22 | 43 | 48.3 | +0.1 |
| BUA | | | | *e*Sn | Sn | 22 | 44 | 13.7 | +0.3 |
| MPRI | Monte Prat | 2.12 | 12 | ⇓*e*Pn | Pn | 22 | 43 | 48.4 | +0.2 |
| MPRI | Monte Prat | 2.12 | 12 | ⇓*e*Pn | Pn | 22 | 43 | 48.4 | +0.2 |
| CIMO | Cimolais | 2.14 | 2 | ⇓*e*Pn | Pn | 22 | 43 | 48.0 | -0.5 |
| CIMO | Cimolais | 2.14 | 2 | ⇓*e*Pn | Pn | 22 | 43 | 48.0 | -0.5 |
| BOB | Bobbio (Coli) | 2.15 | 287 | Pg | Pn | 22 | 43 | 51.1 | +2.5 |
| | | 1µm,0.4s | | | | | | | |
| BOB | Bobbio (Coli) | 2.15 | 287 | Pg | Pn | 22 | 43 | 51.1 | +2.5 |
| | | 1µm,0.4s | | | | | | | |
| BAD | Bernadia | 2.17 | 17 | ⇓*e*Pn | Pn | 22 | 43 | 48.5 | -0.3 |
| BAD | | | | *e*Sn | Sn | 22 | 44 | 14.0 | -0.5 |
| BAD | Bernadia | 2.17 | 17 | ⇓*e*Pn | Pn | 22 | 43 | 48.5 | -0.3 |
| BAD | | | | *e*Sn | Sn | 22 | 44 | 14.0 | -0.5 |
| RNI | Roncone | 2.17 | 327 | ⇓*e*Pn | Pn | 22 | 43 | 49.2 | +0.3 |
| RNI | Roncone | 2.17 | 327 | ⇓*e*Pn | Pn | 22 | 43 | 49.2 | +0.3 |
| VINO | Villanova | 2.19 | 17 | ⇓*e*Pn | Pn | 22 | 43 | 48.9 | -0.3 |
| VINO | | | | *e*Sn | Sn | 22 | 44 | 14.7 | -0.4 |
| VINO | Villanova | 2.19 | 17 | Pg | Pn | 22 | 43 | 48.9 | -0.3 |
| | | 3µm,0.8s | | | | | | | |
| VINO | Villanova | 2.19 | 17 | Pg | Pn | 22 | 43 | 48.9 | -0.3 |
| | | 3µm,0.8s | | | | | | | |
| VINO | | | | *e*Sn | Sn | 22 | 44 | 14.7 | -0.4 |
| DRE | Drenchia | 2.21 | 24 | ⇓*e*Pn | Pn | 22 | 43 | 49.0 | -0.4 |
| DRE | | | | *e*Sn | Sn | 22 | 44 | 15.2 | -0.4 |
| DRE | Drenchia | 2.21 | 24 | ⇓*e*Pn | Pn | 22 | 43 | 49.0 | -0.4 |
| DRE | | | | *e*Sn | Sn | 22 | 44 | 15.2 | -0.4 |
| GBRS | Gornja Briga | 2.23 | 51 | *i* Pn | Pn | 22 | 43 | 49.6 | +1.0 |
| GBRS | | | | *i* Sn | Sn | 22 | 44 | 17.3 | +1.3 |
| MABI | Malga Bissina | 2.28 | 326 | Pg | Pn | 22 | 43 | 50.9 | +0.3 |
| | | 377nm,0.6s | | | | | | | |
| MABI | Malga Bissina | 2.28 | 326 | Pg | Pn | 22 | 43 | 50.9 | +0.3 |
| | | 377nm,0.6s | | | | | | | |
| FUSE | Fusea | 2.29 | 12 | ⇓*e*Pn | Pn | 22 | 43 | 50.4 | -0.2 |
| FUSE | Fusea | 2.29 | 12 | ⇓*e*Pn | Pn | 22 | 43 | 50.4 | -0.2 |
| PTCC | Patocco-Chiusa | 2.35 | 17 | Pg | Pn | 22 | 43 | 50.7 | -0.6 |
| PTCC | Patocco-Chiusa | 2.35 | 17 | ⇓*e*Pn | Pn | 22 | 43 | 50.9 | -0.4 |
| PTCC | | | | *e*Sn | Sn | 22 | 44 | 18.2 | -0.8 |
| CSMI | Casera Mimoias | 2.35 | 5 | ⇓*e*Pn | Pn | 22 | 43 | 51.7 | +0.2 |
| CSMI | Casera Mimoias | 2.35 | 5 | ⇓*e*Pn | Pn | 22 | 43 | 51.7 | +0.2 |
| AFL | Alpe Faloria | 2.36 | 357 | ⇓*i*Pn | Pn | 22 | 43 | 52.2 | +0.5 |
| AFL | Alpe Faloria | 2.36 | 357 | ⇓*i*Pn | Pn | 22 | 43 | 52.2 | +0.5 |
| AFL | | | | *e*Sn | Sn | 22 | 44 | 20.7 | +1.0 |
| KOSI | Kohlern | 2.39 | 344 | ⇓*e*Pn | Pn | 22 | 43 | 52.6 | +0.6 |
| KOSI | | | | *e*Sn | Sn | 22 | 44 | 20.7 | +0.5 |
| ZOU | Zoufplan | 2.43 | 10 | ⇓*e*Pn | Pn | 22 | 43 | 52.7 | +0.1 |
| ZOU | | | | *e*Sn | Sn | 22 | 44 | 20.7 | -0.5 |
| BOSI | Bolzano | 2.43 | 343 | ⇓*e*Pn | Pn | 22 | 43 | 53.1 | +0.7 |
| LJU | Ljubljana | 2.44 | 39 | ⇓*e*Pn | Pn | 22 | 43 | 52.5 | +0.1 |
| LJU | | | | *e*Pg | Pb | 22 | 43 | 59.5 | +1.4 |
| LJU | | | | *e*Sn | Sn | 22 | 44 | 21.2 | +0.1 |
| LJU | | | | *e*Sg | Sb | 22 | 44 | 32.5 | +4.8 |
| LJU | Ljubljana | 2.44 | 39 | ⇓*e*Pn | Pn | 22 | 43 | 52.5 | +0.1 |
| LJU | | | | *e*Sn | Sn | 22 | 44 | 21.2 | +0.1 |
| APPI | Appiano | 2.44 | 342 | Pg | Pn | 22 | 43 | 53.1 | +0.5 |
| | | 1µm,0.4s | | | | | | | |
| APPI | Appiano | 2.44 | 342 | Pg | Pn | 22 | 43 | 53.1 | +0.5 |
| | | 1µm,0.4s | | | | | | | |
| INTR | Introdacqua | 2.44 | 151 | Pg | Pn | 22 | 43 | 53.7 | +1.1 |
| | | 1µm,0.8s | | | | | | | |
| INTR | Introdacqua | 2.44 | 151 | Pg | Pn | 22 | 43 | 53.7 | +1.1 |
| | | 1µm,0.8s | | | | | | | |
| FVI | Forni Avoltri | 2.45 | 7 | Pg | Pn | 22 | 43 | 52.8 | +0.1 |
| | | 1µm,0.5s | | | | | | | |
| FVI | Forni Avoltri | 2.45 | 7 | Pg | Pn | 22 | 43 | 52.8 | +0.1 |
| | | 1µm,0.5s | | | | | | | |
| LSR | Lussari | 2.46 | 20 | ⇓*e*Pn | Pn | 22 | 43 | 52.7 | -0.2 |
| LSR | Lussari | 2.46 | 20 | ⇓*e*Pn | Pn | 22 | 43 | 52.7 | -0.2 |
| VVLD | Villa Vallelon | 2.48 | 157 | Pg | Pn | 22 | 43 | 55.8 | +2.6 |
| | | 700nm,0.7s | | | | | | | |
| VVLD | Villa Vallelon | 2.48 | 157 | Pg | Pn | 22 | 43 | 55.8 | +2.6 |
| | | 700nm,0.7s | | | | | | | |
| ACOM | Acomizza, Ital | 2.52 | 19 | ⇓*e*Pn | Pn | 22 | 43 | 53.8 | 0.0 |
| ACOM | Acomizza, Ital | 2.52 | 19 | ⇓*e*Pn | Pn | 22 | 43 | 53.8 | 0.0 |
| ABTA | Abfaltersbach | 2.58 | 3 | *e*Pn | Pn | 22 | 43 | 55.1 | +0.6 |
| | SNR=45 | | | | | | | | |
| ABTA | | | | ⇑*i*Sn | Sn | 22 | 44 | 25.3 | +0.5 |
| ABTA | Abfaltersbach | 2.58 | 3 | Pn | Pn | 22 | 43 | 55.1 | +0.6 |
| | SNR=45 | | | | | | | | |
| ABTA | | | | Sn | Sn | 22 | 44 | 25.3 | +0.5 |
| MYKA | Terra Mystica | 2.63 | 20 | ⇓*i*Pn | Pn | 22 | 43 | 55.4 | +0.3 |
| MYKA | | | | ⇓*i*Sn | Sn | 22 | 44 | 26.6 | +0.7 |
| MYKA | | | | ⇑*i*Sg | Sb | 22 | 44 | 39.5 | +6.2 |
| | | 508nm,0.5s | | | | | | | |
| MYKA | Terra Mystica | 2.63 | 20 | Pn | Pn | 22 | 43 | 55.4 | +0.3 |
| MYKA | | | | Sn | Sn | 22 | 44 | 26.6 | +0.7 |
| ABSI | Aberstueckl | 2.66 | 345 | ⇓*e*Pn | Pn | 22 | 43 | 56.1 | +0.4 |
| BRMO | Bormio | 2.69 | 330 | Pg | Pn | 22 | 43 | 57.3 | +1.2 |
| | | 417nm,0.6s | | | | | | | |
| BRMO | Bormio | 2.69 | 330 | Pg | Pn | 22 | 43 | 57.3 | +1.2 |
| | | 417nm,0.6s | | | | | | | |
| MOSI | Grossmontoni | 2.75 | 333 | ⇓*e*Pn | Pn | 22 | 43 | 58.6 | +1.6 |
| RISI | Rein | 2.79 | 356 | Pg | Pn | 22 | 43 | 58.5 | +1.0 |
| | | 2µm,0.6s | | | | | | | |
| RISI | Rein | 2.79 | 356 | ⇓*e*Pn | Pn | 22 | 43 | 58.4 | +1.0 |
| OBKA | Obir | 2.81 | 33 | *e*Pn | Pn | 22 | 43 | 57.7 | 0.0 |
| OBKA | Obir | 2.81 | 33 | *e*Pn | Pn | 22 | 43 | 57.7 | 0.0 |
| OBKA | Obir | 2.81 | 33 | ⇓*e*Pn | Pn | 22 | 43 | 57.5 | -0.2 |
| | SNR=15 | | | | | | | | |
| OBKA | | | | ⇑*i*Sn | Sn | 22 | 44 | 31.4 | +0.9 |
| OBKA | | | | ⇓*i*Sg | Sb | 22 | 44 | 43.6 | +4.9 |
| | | 1µm,0.5s | | | | | | | |
| OBKA | Obir | 2.81 | 33 | Pn | Pn | 22 | 43 | 57.5 | -0.2 |
| | SNR=15 | | | | | | | | |
| OBKA | | | | Sn | Sn | 22 | 44 | 31.4 | +0.9 |
| ROSI | Rosskopf | 2.83 | 347 | ⇓*e*Pn | Pn | 22 | 43 | 58.8 | +0.7 |
| PGF | Pioggiola | 2.92 | 237 | *e*P | Pn | 22 | 44 | 00.9 | +1.7 |
| PGF | | | | *e*Sn | Sn | 22 | 44 | 30.4 | -2.8 |
| PGF | Pioggiola | 2.92 | 237 | *e*P | Pn | 22 | 44 | 00.9 | +1.7 |
| DOBS | Dobrina | 2.97 | 47 | *i* Pn | Pn | 22 | 43 | 59.7 | -0.2 |
| DOBS | | | | *i* Sn | Sn | 22 | 44 | 32.7 | -1.6 |
| DOBS | Dobrina | 2.97 | 47 | *i* Pn | Pn | 22 | 43 | 59.7 | -0.2 |
| DOBS | | | | *i* Sn | Sn | 22 | 44 | 32.7 | -1.6 |
| KBA | Koelnbreinsper | 3.00 | 13 | *e*Pn | Pn | 22 | 44 | 01.3 | +0.9 |
| KBA | Koelnbreinsper | 3.00 | 13 | *e*Pn | Pn | 22 | 44 | 01.3 | +0.9 |
| KBA | Koelnbreinsper | 3.00 | 13 | ⇓*e*Pn | Pn | 22 | 44 | 01.2 | +0.9 |
| | SNR=27 | | | | | | | | |
| KBA | | | | ⇑*i*Sn | Sn | 22 | 44 | 36.1 | +1.0 |
| KBA | Koelnbreinsper | 3.00 | 13 | Pn | Pn | 22 | 44 | 01.2 | +0.9 |
| | SNR=27 | | | | | | | | |
| KBA | | | | Sn | Sn | 22 | 44 | 36.1 | +1.0 |
| FETA | Feichten | 3.07 | 339 | ⇑*i*Pn | Pn | 22 | 44 | 02.3 | +1.0 |
| | SNR=104 | | | | | | | | |
| FETA | | | | ⇓*i*Sn | Sn | 22 | 44 | 39.2 | +2.3 |
| FETA | Feichten | 3.07 | 339 | Pn | Pn | 22 | 44 | 02.3 | +1.0 |
| | SNR=104 | | | | | | | | |
| FETA | | | | Sn | Sn | 22 | 44 | 39.2 | +2.3 |
| TUE | Stuetta | 3.12 | 319 | *e*Pn | Pn | 22 | 44 | 02.9 | +0.8 |
| TUE | | | | *e*Sn | Sn | 22 | 44 | 37.1 | -1.2 |
| TUE | Stuetta | 3.12 | 319 | *e*Pn | Pn | 22 | 44 | 02.9 | +0.8 |
| TUE | | | | *e*Sn | Sn | 22 | 44 | 37.1 | -1.2 |
| DAVOX | Davos/Dischmat | 3.13 | 327 | Pn | Pn | 22 | 44 | 02.8 | +0.6 |
| | 48nm,0.3s,baz=150,slow=18,SNR=565 | | | | | | | | |
| DAVOX | | | | Sn | Sn | 22 | 44 | 40.4 | +1.9 |
| | 39nm,0.3s,baz=321,slow=21,SNR=7.2 | | | | | | | | |
| DAVOX | | | | Lg | Lg | 22 | 44 | 57.1 | |
| | 46nm,0.3s,baz=163,slow=19,SNR=5.0 | | | | | | | | |
| WTTA | Wattenberg | 3.13 | 351 | *e*Pn | Pn | 22 | 44 | 03.5 | +1.3 |
| WTTA | Wattenberg | 3.13 | 351 | *e*Pn | Pn | 22 | 44 | 03.5 | +1.3 |
| WT

SLE eSn Sn 22 45 09.7 -1.9
**SLE Schleitheim 4.48 325** Pn Pn 22 44 21.1 +0.5
SLE Sn Sn 22 45 09.7 -1.9
**CONA Conrad Observa 4.49 32** ⇓*i*Pn Pn 22 44 20.7 -0.1
SNR=9.7
CONA ⇓*i*Sn Sn 22 45 11.7 -0.1
CONA ⇓*i*Sg Sb 22 45 39.5 +12
**CONA Conrad Observa 4.49 32** Pn Pn 22 44 20.7 -0.1
SNR=9.7
CONA Sn Sn 22 45 11.7 -0.1
**BALST Balsthal 4.54 316** *e*Pn Pn 22 44 22.0 +0.6
BALST eSn Sn 22 45 10.3 -2.7
**BALST Balsthal 4.54 316** *e*Pn Pn 22 44 22.0 +0.6
BALST eSn Sn 22 45 10.3 -2.7
**BALST Balsthal 4.54 316** Pn Pn 22 44 22.0 +0.6
BALST Sn Sn 22 45 10.3 -2.7
**BAI Bari 4.54 131** *e*Pn Pn 22 44 21.1 -0.2
BAI Sn Sn 22 45 11.2 -1.7
**SOP Sopron 4.59 38** *e*Pn Pn 22 44 21.8 -0.2
**SOP Sopron 4.59 38** *e*Pn Pn 22 44 21.8 -0.2
**SOP Sopron 4.59 38**⇑*e*Pn Pn 22 44 21.6 -0.4
**SOP Sopron 4.59 38** Pn Pn 22 44 21.8 -0.2
**SG1 Sgolgore (BA) 4.62 135** *e*Pn Pn 22 44 22.6 0.0
SG1 Sn Sn 22 45 14.7 -0.4
**SPAK Spaichingen-Ko 4.64 329** Pn Pn 22 44 23.1 +0.3
SPAK Sn Sn 22 45 14.9 -0.7
**ORIF Oris-en-Rattie 4.67 281** *e*P Pn 22 44 25.0 +1.7
ORIF eSn Sn 22 45 10.8 -5.6
151nm,0.4s
**ORIF Oris-en-Rattie 4.67 281** *e*P Pn 22 44 25.0 +1.7
**BRY Bratogost 4.69 104**⇑*i*Pn Pn 22 44 24.8 +1.3
BRY eSn Sn 22 45 18.3 +1.5
**BRY Bratogost 4.69 104**⇑*i*Pn Pn 22 44 24.8 +1.3
BRY eSn Sn 22 45 18.3 +1.5
**BBS Basel-Blauen 4.71 316** Pn Pn 22 44 24.2 +0.4
BBS Sn Sn 22 45 16.3 -1.0
**GEC2 GERESS Array S 4.77 11** *e*Pn Pn 22 44 24.4 -0.2
**GEC2 GERESS Array S 4.77 11** *e*Pn Pn 22 44 24.4 -0.2
**GEC2 GERESS Array S 4.77 11** Pn Pn 22 44 24.4 -0.2
**GERES GERESS Array B 4.77 11** Pn Pn 22 44 24.3 -0.4
5.3nm,0.3s,baz=193,slow=12,SNR=129
GERES Sn Sn 22 45 16.5 -2.3
18nm,0.3s,baz=190,slow=19,SNR=10.0
GERES Lg Lg 22 45 48.2
13nm,0.3s,baz=188,slow=27,SNR=4.5
**FELD Feldberg im Sc 4.78 322** Pn Pn 22 44 25.0 +0.2
FELD Sn Sn 22 45 17.3 -1.7
**HCY Herceg Novi 4.81 109**⇑*i*Pn Pn 22 44 26.4 +1.3
HCY eSn Sn 22 45 21.4 +1.7
**HCY Herceg Novi 4.81 109**⇑*i*Pn Pn 22 44 26.4 +1.3
HCY eSn Sn 22 45 21.4 +1.7
**GRN Grenoble 4.82 285** Pn Pn 22 44 25.6 +0.3
**GRN Grenoble 4.82 285** Pn Pn 22 44 25.6 +0.3
**LEPF PUYLOUBIER 4.84 265** Pn Pn 22 44 27.1 +1.6
**LEPF PUYLOUBIER 4.84 265** Pn Pn 22 44 27.1 +1.6
**UPM Unac-Piva 4.86 99**⇑*i*Pn Pn 22 44 27.8 +1.8
UPM eSn Sn 22 45 22.2 +1.0
**UPM Unac-Piva 4.86 99**⇑*i*Pn Pn 22 44 27.8 +1.8
UPM eSn Sn 22 45 22.2 +1.0
**SMRF Simiane la Rot 4.87 270** *e*P Pn 22 44 27.8 +1.8
SMRF eSn Sn 22 45 16.0 -5.3
54nm,0.4s
**SMRF Simiane la Rot 4.87 270** *e*P Pn 22 44 27.8 +1.8
**WET Wettzell 4.99 4** *e*Pn Pn 22 44 27.1 -0.5
WET eSn Sn 22 45 20.0 -4.1
**WET Wettzell 4.99 4** *e*Pn Pn 22 44 27.1 -0.5
WET eSn Sn 22 45 20.0 -4.1
**WET Wettzell 4.99 4** Pn Pn 22 44 27.1 -0.5
WET Sn Sn 22 45 20.0 -4.1
**LOMF Lomont 5.00 311** Pn Pn 22 44 28.3 +0.6
**LOMF Lomont 5.00 311** Pn Pn 22 44 28.3 +0.6
**BFO Black Forest 5.00 328** *e*Pn Pn 22 44 28.2 +0.5
BFO eSn Sn 22 45 21.7 -2.7
**BFO Black Forest 5.00 328** *e*Pn Pn 22 44 28.2 +0.5
BFO eSn Sn 22 45 21.7 -2.7
**BFO Black Forest 5.00 328** *e*Pn Pn 22 44 28.2 +0.5
BFO eSn Sn 22 45 22.8 -1.6
**BFO Black Forest 5.00 328** Pn Pn 22 44 28.2 +0.5
BFO eSn Sn 22 45 22.8 -1.6
**NKME Niksic 5.02 104**⇓*i*Pn Pn 22 44 29.4 +1.4
NKME eSn Sn 22 45 26.3 +1.5
**NKME Niksic 5.02 104**⇓*i*Pn Pn 22 44 29.4 +1.4
NKME eSn Sn 22 45 26.3 +1.5
**NKY Niksic 5.03 103**⇑*i*Pn Pn 22 44 30.5 +2.3
NKY eSn Sn 22 45 26.6 +1.4
**NKY Niksic 5.03 103**⇑*i*Pn Pn 22 44 30.5 +2.3
NKY eSn Sn 22 45 26.6 +1.4
**CABF La Chapelle 5.03 301** *e*P Pn 22 44 28.9 +0.7
CABF eSn Sn 22 45 18.9 -6.3
91nm,0.5s
**CABF La Chapelle 5.03 301** *e*P Pn 22 44 28.9 +0.7
**KHC Kasperske Hory 5.04 9** *e*PN Pn 22 44 28.0 -0.2
KHC *ex* x 22 44 35.0
KHC eSN Sn 22 45 22.1 -3.2
KHC *ex* x 22 45 37.0
KHC eSB Sb 22 45 47.9 +5.4
105nm,0.7s
KHC AMS AMS 22 47 00.0
comp=Z,400nm,10.9s
**KHC Kasperske Hory 5.04 9** *e*Pn Pn 22 44 27.9 -0.4
22nm,0.7s
KHC eSn Sn 22 45 23.5 -1.7
**KHC Kasperske Hory 5.04 9** Pn Pn 22 44 28.0 -0.2
KHC eSn Sn 22 45 23.5 -1.7
KHC Sb Sb 22 45 37.0 -5.5
**PE1 Pezze di Greco 5.04 130** *e*Pn Pn 22 44 28.3 0.0
PE1 Sn Sn 22 45 23.1 -2.3
**PKST T"s 5.05 50**⇑*e*Pn Pn 22 44 27.0 -1.4
**PKST T"s 5.05 50**⇑*e*Pn Pn 22 44 27.0 -1.4
**STU Stuttgart 5.09 336** *e*Pn Pn 22 44 29.3 +0.4
**STU Stuttgart 5.09 336** *e*Pn Pn 22 44 29.3 +0.4
**STU Stuttgart 5.09 336** *e*Pn Pn 22 44 28.8 -0.1
**STU Stuttgart 5.09 336** *e*Pn Pn 22 44 28.8 -0.1
**BUM Brajici-Budva 5.14 109**⇑*i*Pn Pn 22 44 30.6 +0.9
BUM eSn Sn 22 45 29.5 +1.6
**BUM Brajici-Budva 5.14 109**⇑*i*Pn Pn 22 44 30.6 +0.9
BUM eSn Sn 22 45 29.5 +1.6
**LIBD Limburg 5.16 322** Pn Pn 22 44 30.3 +0.4
**VSL Villasalto 5.16 206** *e*P Pn 22 44 33.4 +3.4
**VSL Villasalto 5.16 206** *e*P Pn 22 44 33.4 +3.4
**MOF Molkenrain 5.17 317** Pn Pn 22 44 30.5 +0.5
MOF Sn Sn 22 45 27.5 -1.0
**MOF Molkenrain 5.17 317** Pn Pn 22 44 30.5 +0.5
MOF Sn Sn 22 45 27.5 -1.0
**TAR1 Taranto 5.17 133** *e*Pn Pn 22 44 30.4 +0.4
TAR1 Sn Sn 22 45 27.1 -1.3
**PLE Pljevlja 5.18 97**⇓*i*Pn Pn 22 44 32.0 +1.7
PLE eSn Sn 22 45 30.3 +1.4
**PLE Pljevlja 5.18 97**⇓*i*Pn Pn 22 44 32.0 +1.7
PLE eSn Sn 22 45 30.3 +1.4
**ZST Bratislava 5.21 38** *e*PN Pn 22 44 30.2 -0.4
ZST eSN Sn 22 45 24.8 -4.7
**ZST Bratislava 5.21 38** *e*Pn Pn 22 44 30.2 -0.4
ZST eSn Sn 22 45 24.8 -4.7
**HINF Hinteralfeld 5.28 316** *e*P Pn 22 44 31.6 0.0
HINF eSn Sn 22 45 24.6 -6.7
281nm,0.4s
**HINF Hinteralfeld 5.28 316** *e*P Pn 22 44 31.6 0.0
**PKSG 5.32 51** *es*Pn Pb 22 44 42.5 -4.7
**PDG Podgorica 5.34 107**⇑*i*Pn Pn 22 44 34.1 +1.7
PDG eSn Sn 22 45 34.1 +1.4
**TTG Podgorica 5.34 107**⇑*i*Pn Pn 22 44 34.1 +1.7
TTG eSn Sn 22 45 34.1 +1.4
**DRME Dracevica, Mon 5.39 109**⇑*i*Pn Pn 22 44 34.2 +1.2
DRME eSn Sn 22 45 35.4 +1.6
**DRME Dracevica, Mon 5.39 109**⇑*i*Pn Pn 22 44 34.2 +1.2
DRME eSn Sn 22 45 35.4 +1.6
**ECH Echery 5.41 320** Pn Pn 22 44 33.7 +0.3
ECH Sn Sn 22 45 32.9 -1.6
**ECH Echery 5.41 320** Pn Pn 22 44 33.7 +0.3
ECH Sn Sn 22 45 32.9 -1.6
**CDF Champ du Feu 5.50 322** *e*P Pn 22 44 34.8 +0.1
CDF eSn Sn 22 45 29.6 -7.2
129nm,0.5s
**CDF Champ du Feu 5.50 322** *e*P Pn 22 44 34.8 +0.1
**DIVS Divibare 5.51 88**⇓*i*P Pn 22 44 38.5 +3.7
**ULC Ulcinj 5.52 111**⇑*i*Pn Pn 22 44 36.7 +1.8
ULC eSn Sn 22 45 39.7 +2.5
**ULC Ulcinj 5.52 111**⇑*i*Pn Pn 22 44 36.7 +1.8
ULC eSn Sn 22 45 39.7 +2.5
**VIVF Saint-Julien-I 5.52 280** *e*P Pn 22 44 35.5 +0.6
VIVF eSn Sn 22 45 31.0 -6.2
56nm,0.4s
**VIVF Saint-Julien-I 5.52 280** *e*P Pn 22 44 35.5 +0.6
**GRA1 Grafenberg Arr 5.58 353** Pn Pn 22 44 35.3 -0.3
**GRF Grafenberg Arr 5.58 353** *e*Pn Pn 22 44 35.3 -0.3
**GRF Grafenberg Arr 5.58 353** *e*Pn Pn 22 44 35.3 -0.3
**PKS7 Kunszentmiklos 5.59 57** *es*Pb Pb 22 44 55.8 +4.1
**SMOL Smolenice 5.60 37** *e*PN Pn 22 44 35.0 -0.9
SMOL *e* 22 44 45.1
**SMOL Smolenice 5.60 37** *e*SN Sn 22 45 35.9 -3.1
**SMOL Smolenice 5.60 37** *e*Pn Pn 22 44 35.0 -0.9
**ROTZ Rotzenmuhle 5.60 359** *e*Pn Pn 22 44 35.3 -0.7
ROTZ eSn Sn 22 45 34.1 -5.0
**ROTZ Rotzenmuhle 5.60 359** *e*Pn Pn 22 44 35.3 -0.7
ROTZ eSn Sn 22 45 34.1 -5.0
**ROTZ Rotzenmuhle 5.60 359** Pn Pn 22 44 35.3 -0.7
**PKS6 Bocsa 5.64 62** *e*Pb Pb 22 44 53.9 +1.2
**BEY Berane 5.65 101** *e*Pn Pn 22 44 38.4 +1.7
BEY eSn Sn 22 45 41.3 +0.9
**IVA Berane 5.65 101** *e*Pn Pn 22 44 38.4 +1.7
IVA eSn Sn 22 45 41.3 +0.9
**HAU Haudompre 5.66 315** *e*P Pn 22 44 37.0 +0.2
HAU eSn Sn 22 45 33.5 -7.1
438nm,0.5s
**HAU Haudompre 5.66 315** *e*P Pn 22 44 37.0 +0.2
**SSB Saint Sauveur 5.66 284** *e*Pn Pn 22 44 37.2 +0.4
**SSB Saint Sauveur 5.66 284** *e*Pn Pn 22 44 37.2 +0.4
**BUD Budapest 5.73 52** *es*Pb Pb 22 45 02.7 +8.5
**LANF Langenberg 5.74 329** Pn Pn 22 44 38.1 +0.3
**LANF Langenberg 5.74 329** Pn Pn 22 44 38.1 +0.3
**PVY Plav 5.78 103**⇑*i*Pn Pn 22 44 40.6 +2.1
PVY eSn Sn 22 45 44.6 +1.0
**MANZ Manzenberg 5.82 359** *e*Pn Pn 22 44 38.3 -0.7
**MANZ Manzenberg 5.82 359** *e*Pn Pn 22 44 38.3 -0.7
**MANZ Manzenberg 5.82 359** Pn Pn 22 44 38.3 -0.7
**VRAC Vranov 5.92 28** Pn Pn 22 44 39.6 -0.7
1.2nm,0.3s,baz=216,slow=9.0,SNR=11
VRAC Lg Lg 22 46 19.6
2.7nm,0.3s,baz=292,slow=17,SNR=3.2
VRAC LR LR 22 47 25.8
comp=Z,212nm,18.3s,baz=204,slow=43
**VRAC Vranov 5.92 28** Pn Pn 22 44 39.6 -0.7
VRAC eSn Sn 22 45 44.1 -2.7
**KTD Kalmit 5.92 332** Pn Pn 22 44 40.6 +0.2
**TOD Tromm 5.95 337** Pn Pn 22 44 41.5 +0.7
**GOPC GO Pecny, Ondr 5.99 15** *e*PN Pn 22 44 40.6 -0.6
GOPC eSN Sn 22 45 44.5 -4.1
GOPC AMS AMS 22 47 20.0
comp=Z,300nm,16.8s
**GOPC GO Pecny, Ondr 5.99 15** Pn Pn 22 44 40.6 -0.6
**THEF They Montfort 5.99 315** Pn Pn 22 44 41.3 0.0
**THEF They Montfort 5.99 315** Pn Pn 22 44 41.3 0.0
**PRU Pruhonice 6.01 14** *e*PN Pn 22 44 40.9 -0.7
PRU eSN Sn 22 45 45.3 -3.9
PRU *e*SB Sb 22 46 17.2 +6.8
134nm,1.1s
PRU AMS AMS 22 47 20.0
comp=Z,300nm,14.6s
**PRU Pruhonice 6.01 14** Pn Pn 22 44 40.9 -0.7
**NKC Novy Kostel 6.07 1** *e*PN Pn 22 44 42.2 -0.2
NKC eSN Sn 22 45 47.1 -3.5
NKC *e*SB Sb 22 46 20.8 +8.8
104nm,0.9s
NKC AMS AMS 22 47 30.0
comp=Z,600nm,11.4s
**NKC Novy Kostel 6.07 1** Pn Pn 22 44 42.2 -0.2
**PRA Prague 6.08 13** *e*PN Pn 22 44 41.4 -1.0
PRA AMS AMS 22 47 20.0
comp=Z,400nm,12.4s
**PRA Prague 6.08 13** Pn Pn 22 44 41.4 -1.0
**LASF Ste Croix 6.10 272** *e*P Pn 22 44 43.4 +0.5
LASF eSn Sn 22 45 45.1 -6.4
16nm,0.3s
**LASF Ste Croix 6.10 272** *e*P Pn 22 44 43.4 +0.5
**WERN Wernitzgruen 6.12 0** *e*Pn Pn 22 44 42.6 -0.5
**WERN Wernitzgruen 6.12 0** *e*Pn Pn 22 44 42.6 -0.5
**WERN Wernitzgruen 6.12 0** Pn Pn 22 44 42.6 -0.5
**GUNZ Gunzen 6.20 360** *e*Pn Pn 22 44 43.4 -0.7
**GUNZ Gunzen 6.20 360** *e*Pn Pn 22 44 43.4 -0.7
**GUNZ Gunzen 6.20 360** Pn Pn 22 44 43.4 -0.7
**TIR Tirane 6.22 114** *e*Pn Pn 22 44 44.6 +0.2
**TIR Tirane 6.22 114** *e*Pn Pn 22 44 44.7 +0.2
**VYHS Vyhne 6.24 44** *e*PN Pn 22 44 43.4 -1.3
VYHS eSN Sn 22 45 49.8 -5.1
VYHS *e* 22 46 35.6
**VYHS Vyhne 6.24 44** *e*Pn Pn 22 44 43.4 -1.3
**TANN Tannenbergstha 6.25 1** *e*Pn Pn 22 44 44.7 -0.2
TANN eSn Sn 22 45 51.5 -3.6
**TANN Tannenbergstha 6.25 1** *e*Pn Pn 22 44 44.7 -0.2
TANN eSn Sn 22 45 51.5 -3.6
**TANN Tannenbergstha 6.25 1** Pn Pn 22 44 44.7 -0.2
**WERD Werda 6.28 360** *e*Pn Pn 22 44 45.4 +0.1
**WERD Werda 6.28 360** *e*Pn Pn 22 44 45.4 +0.1
**WERD Werda 6.28 360** Pn Pn 22 44 45.4 +0.1
**PLN Plauen 6.32 359** *e*Pn Pn 22 44 45.6 -0.2
**PLN Plauen 6.32 359** *e*Pn Pn 22 44 45.6 -0.2
**PLN Plauen 6.32 359** Pn Pn 22 44 45.6 -0.2
**PAGF Fort de Pagny 6.34 316** *e*P Pn 22 44 46.6 +0.6
baz=132
PAGF eSn Sn 22 45 49.7 -7.5
28nm,0.5s
**PAGF Fort de Pagny 6.34 316** *e*P Pn 22 44 46.6 +0.6
**PLDF La Plantade 6.43 289** Pn Pn 22 44 46.6 -0.8
**PLDF La Plantade 6.43 289** Pn Pn 22 44 46.6 -0.8
**PSZ Piszkesteto 6.46 52** *e*Pn Pn 22 44 47.7 -0.1
**PSZ Piszkesteto 6.46 52** *e*Pn Pn 22 44 47.7 -0.1
**PSZ Piszkesteto 6.46 52**⇓*i*P Pn 22 44 53.7 +5.9
**PSZ Piszkesteto 6.46 52** Pn Pn 22 44 46.7 -1.1
**PSZ Piszkesteto 6.46 52** Pn Pn 22 44 47.7 -0.1
**SMF Signal de Mont 6.47 295** *e*P Pn 22 44 48.1 +0.2
SMF eSn Sn 22 45 53.5 -7.0
114nm,0.4s
**SMF Signal de Mont 6.47 295** *e*P Pn 22 44 48.1 +0.2
**SFTF Sexfontaines 6.47 311** *e*P Pn 22 44 47.7 -0.2
baz=129
SFTF eSn Sn 22 45 52.8 -7.8
78nm,0.4s
**SFTF Sexfontaines 6.47 311** *e*P Pn 22 44 47.7 -0.2
**MOX Moxa 6.50 356** *e*Pn Pn 22 44 47.1 -1.1
MOX eSn Sn 22 45 56.2 -4.9
**MOX Moxa 6.50 356** *e*Pn Pn 22 44 47.1 -1.1
MOX eSn Sn 22 45 56.2 -4.9
**MOX Moxa 6.50 356** Pn Pn 22 44 47.1 -1.1
**PVCC Panska Ves 6.54 13** *e*PN Pn 22 44 48.1 -0.7
PVCC AMS AMS 22 47 40.0
comp=Z,300nm,16.5s
**PVCC Panska Ves 6.54 13** Pn Pn 22 44 48.1 -0.7
**LBL Lubilhac 6.56 282** Pn Pn 22 44 49.7 +0.5
**LBL Lubilhac 6.56 282** Pn Pn 22 44 49.7 +0.5
**ABH Alteburg 6.58 332** Pn Pn 22 44 50.3 +0.9
**RUP Ruppelstein 6.61 329** Pn Pn 22 44 50.5 +0.7
**TNS Taunus Mts 6.61 338** *e*Pn Pn 22 44 50.1 +0.3
**TNS Taunus Mts 6.61 338** *e*Pn Pn 22 44 50.1 +0.3
**TNS Taunus Mts 6.61 338** Pn Pn 22 44 50.1 +0.3
**KRLC Kraliky 6.64 26** *e*PN Pn 22 44 49.6 -0.6
**KRLC Kraliky 6.64 26** Pn Pn 22 44 49.6 -0.6
**MORC Moravsky Berou 6.64 31**⇑*i*P Pn 22 44 48.6 -1.7
**MORC Moravsky Berou 6.64 31** *e*Pn Pn 22 44 49.5 -0.8
**MORC Moravsky Berou 6.64 31** *e*Pn Pn 22 44 49.5 -0.8
**MEZF Maizieres J'vi 6.65 313** *e*P Pn 22 44 50.8 +0.5
baz=129
MEZF eSn Sn 22 45 57.0 -7.8
67nm,0.5s,baz=131
**MEZF Maizieres J'vi 6.65 313** *e*P Pn 22 44 50.8 +0.5
**LOR Lormes 6.69 301** *e*P Pn 22 44 51.2 +0.3
baz=123
LOR eSn Sn 22 45 58.4 -7.6
157nm,0.3s
**LOR Lormes 6.69 301** *e*P Pn 22 44 51.2 +0.3
**BZS Buzias 6.75 74**⇑*i*P Pn 22 44 58.7 +7.0
**DPC Dobruska-Polom 6.75 22** *e*PN Pn 22 44 50.5 -1.3
DPC AMS AMS 22 47 40.0
comp=Z,300nm,8.5s
**DPC Dobruska-Polom 6.75 22** Pn Pn 22 44 50.5 -1.3
**AGO Saint Agoulin 6.78 289** Pn Pn 22 44 51.8 -0.3
**AGO Saint Agoulin 6.78 289** Pn Pn 22 44 51.8 -0.3
**FBE Freiberg 6.79 5** *e*Pn Pn 22 44 51.4 -0.9
**FBE Freiberg 6.79 5** *e*Pn Pn 22 44 51.4 -0.9
**FBE Freiberg 6.79 5** Pn Pn 22 44 51.4 -0.9
**BRG Berggiesshubel 6.80 9** PN Pn 22 44 51.1 -1.2
BRG *i* 22 44 52.6
BRG *i* 22 45 31.5
**BRG Berggiesshubel 6.80 9** SN Sn 22 45 50.2 -18
BRG SG Sb 22 46 52.1 +19
154nm,1.4s
comp=N,310nm,14.0s
comp=E,153nm,14.8s
comp=Z,381nm,12.7s
**BRG Berggiesshubel 6.80 9** *e*Pn Pn 22 44 51.5 -0.8
**BRG Berggiesshubel 6.80 9** *e*Pn Pn 22 44 51.5 -0.8
**BRG Berggiesshubel 6.80 9** Pn Pn 22 44 51.5 -0.8
**PYM Petit Puy Mans 6.80 287** Pn Pn 22 44 53.1 +0.6
**PYM Petit Puy Mans 6.80 287** Pn Pn 22 44 53.1 +0.6
**UPC Upice 6.81 20** *e*PN Pn 22 44 51.7 -0.9
UPC AMS AMS 22 47 50.0
comp=Z,300nm,11.6s
**UPC Upice 6.81 20** Pn Pn 22 44 51.7 -0.9
**SSF Saint Saulge 6.83 298** *e*P Pn 22 44 52.7 -0.1
SSF eSn Sn 22 46 02.0 -7.4
comp=Z,59nm,0.4s
**SSF Saint Saulge 6.83 298** *e*P Pn 22 44 52.7 -0.1
**AVF Avril sur Loir 6.84 296** *e*P Pn 22 44 52.9 0.0
AVF eSn Sn 22 46 01.9 -7.6
comp=Z,55nm,0.7s
**AVF Avril sur Loir 6.84 296** *e*P Pn 22 44 52.9 0.0
**OKC Ostrava-Krasne 6.92 33** *e*PN Pn 22 44 53.7 -0.4
OKC eSN Sn 22 46 07.5 -4.1
OKC AMS AMS 22 47 50.0
comp=Z,300nm,13.5s
**OKC Ostrava-Krasne 6.92 33** Pn Pn 22 44 53.7 -0.4
**BGG Burgeitz 6.93 332** *e*Pn Pn 22 44 55.3 +1.1
BGG eSn Sn 22 46 11.6 -0.2
comp=Z,15nm,0.7s
**BGG Burgeitz 6.93 332** Pn Pn 22 44 55.3 +1.1
BGG Sn Sn 22 46 11.6 -0.2
comp=Z,15nm,0.7s
**WLF Walferdange 6.94 325** *e*Pn Pn 22 44 56.0 +1.7
**WLF Walferdange 6.94 325** *e*Pn Pn 22 44 56.0 +1.7
**WLF Walferdange 6.94 325** *e*Pn Pn 22 44 54.4 +0.2
**WLF Walferdange 6.94 325** *e*Pn Pn 22 44 54.4 +0.2
**OHR Ohrid 6.95 113** *i* Pn Pn 22 44 54.7 +0.2
OHR eSn Sn 22 46 10.6 -1.8
**OHR Ohrid 6.95 113** *i* Pn Pn 22 44 54.7 +0.2
**LANS Liptovska Anna 6.99 42** *e*PN Pn 22 44 54.6 -0.5
LANS *e* 22 45 06.0
**LANS Liptovska Anna 6.99 42** *e*SN Sn 22 46 09.6 -3.8
**LANS Liptovska Anna 6.99 42** *e*Pn Pn 22 44 54.6 -0.5
**KOE Koeppel 7.00 335** *e*Pn Pn 22 44 56.5 +1.4
**KOE Koeppel 7.00 335** Pn Pn 22 44 56.5 +1.4
**NEUB Neuenburg 7.05 357** *e*Pn Pn 22 44 56.0 +0.2
**NEUB Neuenburg 7.05 357** *e*Pn Pn 22 44 56.0 +0.2
**NEUB Neuenburg 7.05 357** Pn Pn 22 44 56.0 +0.2
**BGF Bois d'Agland 7.10 293** *e*P Pn 22 44 56.2 -0.3
BGF eSn Sn 22 46 08.5 -7.4
comp=Z,99nm,0.4s
**BGF Bois d'Agland 7.10 293** *e*P Pn 22 44 56.2 -0.3
**KEK Kerkira 7.12 126** *e*P Pn 22 44 56.6 -0.3
**KEK Kerkira 7.12 126** *e*P Pn 22 44 56.6 -0.3
**CLL Collm 7.16 3** *e*Pn Pn 22 44 57.0 -0.2
**CLL Collm 7.16 3** *e*Pn Pn 22 44 57.0 -0.2
**CLL Collm 7.16 3** *i* Pn Pn 22 44 56.9 -0.4
comp=Z,23nm,0.5s
CLL *i* 22 45 04.2
CLL eSn Sn 22 46 18.0 +0.7
CLL eSb Sb 22 46 35.0 -8.2
CLL *e*Sg 22 47 03.0
comp=Z,105nm,1.0s
**CLL Collm 7.16 3** Pn Pn 22 44 57.0 -0.2
**HILG Hillesheim 7.23 330** *e*Pn Pn 22 44 59.5 +1.2
**HILG Hillesheim 7.23 330** Pn Pn 22 44 59.5 +1.2
**MTLF Montolieu 7.37 267** *e*P Pn 22 45 02.2 +1.9
MTLF eSn Sn 22 46 16.1 -6.6
comp=Z,11nm,0.6s
**MTLF Montolieu 7.37 267** *e*P Pn 22 45 02.2 +1.9
**CAF Calviac 7.38 279** *e*P Pn 22 45 01.4 +1.1
CAF eSn Sn 22 46 15.5 -7.4
comp=Z,33nm,0.6s
**CAF Calviac 7.38 279** *e*P Pn 22 45 01.4 +1.1
**STB Steinbach 7.43 332** *e*Pn Pn 22 45 02.0 +1.0
**STB Steinbach 7.43 332** Pn Pn 22 45 02.0 +1.0
**SGD Sagiada 7.45 125** *e*P Pn 22 45 02.1 +0.8
**SGD Sagiada 7.45 125** *e*P Pn 22 45 02.1 +0.8
**TCF Toulx Ste Croi 7.46 290** *e*P Pn 22 45 01.0 -0.4
TCF eSn Sn 22 46 16.8 -8.0
comp=Z,41nm,0.4s
**TCF Toulx Ste Croi 7.46 290** *e*P Pn 22 45 01.0 -0.4
**HYF Humbligny 7.46 298** *e*P Pn 22 45 02.0 +0.6
HYF eSn Sn 22 46 16.9 -7.9
**HYF Humbligny 7.46 298** *e*P Pn 22 45 02.0 +0.6
**NEST Nestorio 7.47 117** *e*P Pn 22 45 03.1 +1.4
**NEST Nestorio 7.47 117** *e*P Pn 22 45 03.1 +1.4
**FNA Florina 7.49 114** *e*P Pn 22 45 03.3 +1.4
**FNA Florina 7.49 114** *e*P Pn 22 45 03.3 +1.4
**GZR Gura Zlata 7.53 77**⇑*i*P Pn 22 45 06.7 +4.2
**IGT Igoumenitsa 7.55 125** *e*P Pn 22 45 03.6 +0.8
**IGT Igoumenitsa 7.55 125** *e*P Pn 22 45 03.6 +0.8
**HOBG Hohbusch 7.61 335** *e*Pn Pn 22 45 04.4 +0.9
**HOBG Hohbusch 7.61 335** Pn Pn 22 45 04.4 +0.9
**KLL Kalltalsperre 7.66 330** *e*Pn Pn 22 45 05.3 +1.1
**KLL Kalltalsperre 7.66 330** Pn Pn 22 45 05.3 +1.1
**VALF Valcebollere 7.73 260** Pn Pn 22 45 07.5 +2.2
**VALF Valcebollere 7.73 260** Pn Pn 22 45 07.5 +2.2
**MEM Membach 7.74 329** P Pn 22 45 06.6 +1.4
**MEM Membach 7.74 329** P Pn 22 45 06.6 +1.4
**JAN Janina 7.79 122** *e*P Pn 22 45 07.2 +1.2
**JAN Janina 7.79 122** *e*P Pn 22 45 07.2 +1.2
**RJF Les Rejaudoux 7.79 282** *e*P Pn 22 45 06.9 +1.0
RJF eSn Sn 22 46 25.1 -7.8
comp=Z,15nm,0.5s
**RJF Les Rejaudoux 7.79 282** *e*P Pn 22 45 06.9 +1.0
**CLZ Clausthal 7.79 351** *e*Pn Pn 22 45 06.1 +0.1
**CLZ Clausthal 7.79 351** *e*Pn Pn 22 45 06.1 +0.1
**CLZ Clausthal 7.79 351** Pn Pn 22 45 06.1 +0.1
**GIVF Givet 7.84 322** *e*P Pn 22 45 07.7 +1.1
GIVF eSn Sn 22 46 25.5 -8.5
comp=Z,86nm,0.9s
**GIVF Givet 7.84 322** *e*P Pn 22 45 07.7 +1.1
**BCLA Clavier 7.87 325** P Pn 22 45 08.9 +1.9
**BCLA Clavier 7.87 325** P Pn 22 45 08.9 +1.9
**HGN Heimansgroeve 7.89 329** *e*P Pn 22 45 08.9 +1.6
comp=Z,24nm,0.4s
HGN *e*S Sn 22 46 30.9 -4.5
**HGN Heimansgroeve 7.89 329** *e*P Pn 22 45 08.9 +1.6
comp=Z,24nm,0.4s
**DOU Dourbes 7.93 321** P Pn 22 45 08.6 +0.6
**DOU Dourbes 7.93 321** P Pn 22 45 08.5 +0.6
**KZN Kozani 7.99 116** *e*P Pn 22 45 11.6 +2.7
**KZN Kozani 7.99 116** *e*P Pn 22 45 11.6 +2.7
**ASSE Asse, Remlinge 8.04 353** *e*Pn Pn 22 45 09.8 +0.5
**ASSE Asse, Remlinge 8.04 353** *e*Pn Pn 22 45 09.8 +0.5
**ASSE Asse, Remlinge 8.04 353** Pn Pn 22 45 09.8 +0.5
**VAY Valandovo 8.05 107** *i* Pn Pn 22 45 10.3 +0.7
VAY eSn Sn 22 46 19.8 -20
**VAY Valandovo 8.05 107** *i* Pn Pn 22 45 10.3 +0.7
**STHS Stebnicka Huta 8.05 46** *e*PN Pn 22 45 11.5 +1.9
STHS *e* 22 45 21.4
**STHS Stebnicka Huta 8.05 46** *e*Pn Pn 22 45 11.5 +1.9
**VTS Vitosha 8.08 97** P Pn 22 45 12.0 +1.9
**VTS Vitosha 8.08 97** P Pn 22 45 12.0 +1.9
**BAIF Baives 8.09 320** *e*P Pn 22 45 10.7 +0.7
BAIF eSn Sn 22 46 31.3 -8.9
comp=Z,29nm,0.7s
**BAIF Baives 8.09 320** *e*P Pn 22 45 10.7 +0.7
**GRG Griva 8.09 110** *e*P Pn 22 45 10.4 +0.2
**GRG Griva 8.09 110** *e*P Pn 22 45 10.4 +0.2
**TRPA Tarpa 8.12 57**⇑*i*P Pn 22 45 14.8 +4.4
**KKB Krupnik 8.21 103** P Pn 22 45 13.5 +1.8
**KKB Krupnik 8.21 103** P Pn 22 45 13.5 +1.8
**MLS Moulis 8.25 265** Pn Pn 22 45 13.9 +1.6
**MLS Moulis 8.25 265** Pn Pn 22 45 13.9 +1.6
**DSL Palaion Diasel 8.27 124** *e*P Pn 22 45 11.4 -1.1
**DSL Palaion Diasel 8.27 124** *e*P Pn 22 45 11.4 -1.1
**MPEP Malo Peshtene 8.30 92** P Pn 22 45 23.7 +11
**LFF La Frestale 8.32 279** *e*P Pn 22 45 15.0 +1.8
LFF eSn Sn 22 46 37.9 -8.0
comp=Z,34nm,0.7s
**LFF La Frestale 8.32 279** *e*P Pn 22 45 15.0 +1.8
**KOLS Kolonicke sedl 8.34 52** *e*PN Pn 22 45 16.1 +2.6
**SNF Seneffe 8.37 322** P Pn 22 45 16.3 +2.4
**SNF Seneffe 8.37 322** P Pn 22 45 16.3 +2.4
**NRDL Niedersach Rie 8.46 351** *e*Pn Pn 22 45 16.2 +1.1
**NRDL Niedersach Rie 8.46 351** *e*Pn Pn 22 45 16.2 +1.1
**NRDL Niedersach Rie 8.46 351** Pn Pn 22 45 16.2 +1.1
**THL Klokotos Trika 8.56 119** *e*P Pn 22 45 17.2 +0.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **THL** | **Klokotos Trika** | **8.56** | **119** | *e*P | **Pn** | **22 45 17.2** | **+0.6** |
| **LIT** | **Litokhoron** | **8.57** | **115** | *e*P | **Pn** | **22 45 18.7** | **+2.0** |
| **LIT** | **Litokhoron** | **8.57** | **115** | *e*P | **Pn** | **22 45 18.7** | **+2.0** |
| **VLS** | **Valsamata** | **8.63** | **131** | *e*P | **Pn** | **22 45 18.2** | **+0.6** |
| **VLS** | **Valsamata** | **8.63** | **131** | *e*P | **Pn** | **22 45 18.2** | **+0.6** |
| **WTSB** | **Winterswijk** | **8.63** | **337** | *e*P | **Pn** | **22 45 18.4** | **+0.9** |
| **WTSB** | **Winterswijk** | **8.63** | **337** | *e*P | **Pn** | **22 45 18.4** | **+0.9** |
| **PDO** | **Prodromos** | **8.67** | **127** | *e*P | **Pn** | **22 45 18.5** | **+0.4** |
| **PDO** | **Prodromos** | **8.67** | **127** | *e*P | **Pn** | **22 45 18.5** | **+0.4** |
| **HORT** | **Hortiatis** | **8.73** | **110** | *e*P | **Pn** | **22 45 19.5** | **+0.5** |
| **HORT** | **Hortiatis** | **8.73** | **110** | *e*P | **Pn** | **22 45 19.5** | **+0.5** |
| **KEST** | **Kesra** | **8.73** | **196** | Pn | **Pn** | **22 45 19.0** | **0.0** |
| | comp=Z,0.0nm,0.3s,baz=23,slow=7.7,SNR=2.3 | | | | | | |
| KEST | | | | LR | LR | 22 48 02.5 | |
| | comp=Z,27nm,21.2s,baz=59,slow=33 | | | | | | |
| **MMB** | **Musomiste** | **8.76** | **103** | P | Pn | 22 45 22.4 | +3.1 |
| **MMB** | **Musomiste** | **8.76** | **103** | P | Pn | 22 45 22.4 | +3.1 |
| **EPF** | **Esparros** | **8.78** | **267** | *e*Pn | **Pn** | **22 45 16.8** | **-2.8** |
| **SOH** | **Sokhos** | **8.80** | **109** | *e*P | **Pn** | **22 45 21.8** | **+1.9** |
| **SOH** | **Sokhos** | **8.80** | **109** | *e*P | **Pn** | **22 45 21.8** | **+1.9** |
| **EVR** | **Evrytania** | **8.83** | **123** | *e*P | **Pn** | **22 45 21.8** | **+1.5** |
| **EVR** | **Evrytania** | **8.83** | **123** | *e*P | **Pn** | **22 45 21.8** | **+1.5** |
| **SRS** | **Serrai** | **8.84** | **106** | *e*P | **Pn** | **22 45 22.4** | **+2.0** |
| **SRS** | **Serrai** | **8.84** | **106** | *e*P | **Pn** | **22 45 22.4** | **+2.0** |
| **NVR** | **Nevrokopi** | **8.94** | **104** | *e*P | **Pn** | **22 45 23.0** | **+1.3** |
| **NVR** | **Nevrokopi** | **8.94** | **104** | *e*P | **Pn** | **22 45 23.0** | **+1.3** |
| **MAKR** | **Makrakomi, Fth** | **8.96** | **122** | *e*P | **Pn** | **22 45 23.7** | **+1.6** |
| **MAKR** | **Makrakomi, Fth** | **8.96** | **122** | *e*P | **Pn** | **22 45 23.7** | **+1.6** |
| **PLG** | **Polygyros** | **9.07** | **111** | *e*P | **Pn** | **22 45 25.9** | **+2.4** |
| **PLG** | **Polygyros** | **9.07** | **111** | *e*P | **Pn** | **22 45 25.9** | **+2.4** |
| **AGG** | **Agios Georgios** | **9.08** | **121** | *e*P | **Pn** | **22 45 24.2** | **+0.5** |
| **AGG** | **Agios Georgios** | **9.08** | **121** | *e*P | **Pn** | **22 45 24.2** | **+0.5** |
| **MFF** | **Saint Martin d** | **9.11** | **290** | *e*P | **Pn** | **22 45 25.1** | **+1.0** |
| MFF | | | | *e*Sn | Sn | 22 46 56.6 | -8.9 |
| | comp=Z,12nm,0.4s | | | | | | |
| **MFF** | **Saint Martin d** | **9.11** | **290** | *e*P | **Pn** | **22 45 25.1** | **+1.0** |
| **VOIR** | | **9.13** | **78** | *i*P | Pn | 22 45 30.1 | +5.7 |
| **RLS** | **Riolos of Patr** | **9.20** | **128** | *e*P | **Pn** | **22 45 28.3** | **+2.9** |
| **RLS** | **Riolos of Patr** | **9.20** | **128** | *e*P | **Pn** | **22 45 28.3** | **+2.9** |
| **SERG** | **Sergoula** | **9.30** | **125** | *e*P | **Pn** | **22 45 28.8** | **+2.0** |
| **SERG** | **Sergoula** | **9.30** | **125** | *e*P | **Pn** | **22 45 28.8** | **+2.0** |
| **KALE** | **Kalithea** | **9.37** | **125** | *e*P | **Pn** | **22 45 29.3** | **+1.6** |
| **KALE** | **Kalithea** | **9.37** | **125** | *e*P | **Pn** | **22 45 29.3** | **+1.6** |
| **LAKA** | **Lakka** | **9.37** | **126** | *e*P | **Pn** | **22 45 28.9** | **+1.2** |
| **LAKA** | **Lakka** | **9.37** | **126** | *e*P | **Pn** | **22 45 28.9** | **+1.2** |
| **DRO** | **Drossia** | **9.41** | **128** | *e*P | **Pn** | **22 45 29.6** | **+1.3** |
| **DRO** | **Drossia** | **9.41** | **128** | *e*P | **Pn** | **22 45 29.6** | **+1.3** |
| **RZN** | **Rozhen** | **9.42** | **101** | P | Pn | 22 45 31.9 | +3.4 |
| **AXAR** | **Agios Charalam** | **9.44** | **121** | *e*P | **Pn** | **22 45 29.2** | **+0.6** |
| **AXAR** | **Agios Charalam** | **9.44** | **121** | *e*P | **Pn** | **22 45 29.2** | **+0.6** |
| **OUR** | **Ouranopolis** | **9.45** | **110** | *e*P | **Pn** | **22 45 28.7** | **0.0** |
| **OUR** | **Ouranopolis** | **9.45** | **110** | *e*P | **Pn** | **22 45 28.7** | **0.0** |
| **ETSF** | **Etsaut** | **9.45** | **267** | *e*P | **Pn** | **22 45 31.8** | **+3.0** |
| **ETSF** | **Etsaut** | **9.45** | **267** | *e*P | **Pn** | **22 45 31.8** | **+3.0** |
| **DSF** | **Desfina** | **9.59** | **123** | *e*P | **Pn** | **22 45 27.7** | **-3.0** |
| **DSF** | **Desfina** | **9.59** | **123** | *e*P | **Pn** | **22 45 27.7** | **-3.0** |
| **DESF** | **Desfina** | **9.59** | **123** | *e*P | **Pn** | **22 45 30.1** | **-0.6** |
| **DESF** | **Desfina** | **9.59** | **123** | *e*P | **Pn** | **22 45 30.1** | **-0.6** |
| **KLV** | **Kalavryta, Ach** | **9.61** | **126** | *e*P | **Pn** | **22 45 32.8** | **+1.9** |
| **KLV** | **Kalavryta, Ach** | **9.61** | **126** | *e*P | **Pn** | **22 45 32.8** | **+1.9** |
| **BURAR** | **Bucovina Array** | **9.62** | **65** | *i*P | Pn | 22 45 35.5 | +4.3 |
| **LDF** | **La Druitiere** | **9.68** | **302** | *e*P | **Pn** | **22 45 32.1** | **+0.3** |
| LDF | | | | *e*Sn | Sn | 22 47 09.4 | -10 |
| | comp=Z,31nm,0.7s | | | | | | |
| **LDF** | **La Druitiere** | **9.68** | **302** | *e*P | **Pn** | **22 45 32.1** | **+0.3** |
| **LKR** | **Lokris** | **9.72** | **121** | *e*P | **Pn** | **22 45 33.5** | **+1.0** |
| **LKR** | **Lokris** | **9.72** | **121** | *e*P | **Pn** | **22 45 33.5** | **+1.0** |
| **MLR** | **Muntele Rosu** | **9.76** | **77** | *i*P | Pn | 22 45 37.9 | +4.8 |
| **GUR** | **Goura** | **9.79** | **126** | *e*P | **Pn** | **22 45 33.9** | **+0.4** |
| **GUR** | **Goura** | **9.79** | **126** | *e*P | **Pn** | **22 45 33.9** | **+0.4** |
| **BSEG** | **Bad Segeberg** | **9.86** | **353** | *e*Pn | **Pn** | **22 45 34.2** | **-0.1** |
| **BSEG** | **Bad Segeberg** | **9.86** | **353** | *e*Pn | **Pn** | **22 45 34.2** | **-0.1** |
| **BSEG** | **Bad Segeberg** | **9.86** | **353** | Pn | **Pn** | **22 45 34.2** | **-0.1** |
| **SJPF** | **Ste Jean** | **9.89** | **269** | *e*P | **Pn** | **22 45 37.1** | **+2.3** |
| **SJPF** | **Ste Jean** | **9.89** | **269** | *e*P | **Pn** | **22 45 37.1** | **+2.3** |
| **FLN** | **La Foliniere** | **9.96** | **302** | *e*P | **Pn** | **22 45 36.8** | **+1.1** |
| | baz=122 | | | | | | |
| FLN | | | | *e*Sn | Sn | 22 47 16.4 | -10 |
| | comp=Z,14nm,0.4s | | | | | | |
| **FLN** | **La Foliniere** | **9.96** | **302** | *e*P | **Pn** | **22 45 36.8** | **+1.1** |
| **GRR** | **Gorron** | **10.06** | **299** | *e*P | **Pn** | **22 45 36.9** | **-0.1** |
| GRR | | | | *e*Sn | Sn | 22 47 18.6 | -10 |
| | comp=Z,13nm,0.4s | | | | | | |
| **GRR** | **Gorron** | **10.06** | **299** | *e*P | **Pn** | **22 45 36.9** | **-0.1** |
| **VIL2** | **Platees** | **10.16** | **122** | *e*P | **Pn** | **22 45 38.6** | **+0.1** |
| **VIL2** | **Platees** | **10.16** | **122** | *e*P | **Pn** | **22 45 38.6** | **+0.1** |
| **EREA** | **Eretria** | **10.44** | **119** | *e*P | **Pn** | **22 45 41.3** | **-1.1** |
| **EREA** | **Eretria** | **10.44** | **119** | *e*P | **Pn** | **22 45 41.3** | **-1.1** |
| **ALN** | **Alexandroupoli** | **10.63** | **103** | *e*P | **Pn** | **22 45 47.9** | **+3.0** |
| **ALN** | **Alexandroupoli** | **10.63** | **103** | *e*P | **Pn** | **22 45 47.9** | **+3.0** |
| **VLY** | **Voula,Athens** | **10.71** | **122** | *e*P | **Pn** | **22 45 45.7** | **-0.3** |
| **VLY** | **Voula,Athens** | **10.71** | **122** | *e*P | **Pn** | **22 45 45.7** | **-0.3** |
| **SGMF** | **Saint Gilles** | **11.10** | **297** | *e*Pn | **Pn** | **22 45 48.4** | **-2.8** |
| **ESDC** | **Sonseca Array** | **12.94** | **255** | Pn | **Pn** | **22 46 16.0** | **-0.5** |
| | comp=Z,0.3nm,0.3s,baz=63,slow=14,SNR=13 | | | | | | |
| ESDC | | | | LR | LR | 22 51 14.3 | |
| | comp=Z,64nm,20.0s,baz=310,slow=37 | | | | | | |
| **IDI** | **Anoyia** | **13.10** | **128** | Sn | Sn | 22 48 36.9 | -6.5 |
| | comp=Z,0.7nm,0.3s,baz=323,slow=15,SNR=6.2 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **14.96** | **324** | Pn | **Pn** | **22 46 42.3** | **-1.5** |
| | baz=134,slow=13,SNR=17 | | | | | | |
| **HFS** | **Hagfors** | **16.01** | **2** | Pn | **Pn** | **22 46 55.9** | **-1.5** |
| | comp=Z,0.1nm,0.3s,baz=182,slow=14,SNR=2.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **16.45** | **98** | Pn | **P** | **22 47 05.9** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=304,slow=16,SNR=2.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **16.91** | **358** | Pn | **Pn** | **22 47 07.2** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=165,slow=12,SNR=2.6 | | | | | | |
| NOA | | | | LR | LR | 22 54 25.4 | |
| | comp=Z,42nm,20.6s,baz=175,slow=40 | | | | | | |
| **MDT** | **Midelt** | **17.41** | **235** | LR | LR | 22 52 58.8 | |
| | comp=Z,43nm,19.9s,baz=41,slow=33 | | | | | | |
| **FINES** | **FINESS Array B** | **19.12** | **20** | P | **P** | **22 47 33.5** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=211,slow=16,SNR=8.9 | | | | | | |
| **JMIC** | **Jan Mayen** | **28.78** | **346** | LR | LR | 23 00 48.3 | |
| | comp=Z,36nm,19.8s,baz=67,slow=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.23** | **200** | P | **P** | **22 49 40.0** | **-0.3** |
| | comp=Z,4.3nm,0.7s,baz=14,slow=8.4,SNR=49 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.23** | **200** | P | **P** | **22 49 40.0** | **-0.3** |
| **MKAR** | **Makanchi Array** | **47.62** | **61** | pP | pP | 22 51 56.9 | -0.8 |
| | comp=Z,0.9nm,0.7s,baz=283,slow=7.4,SNR=5.6 | | | | | | |
| **KSRS** | **Korea Array** | **80.03** | **47** | LR | LR | 23 34 50.8 | |
| | comp=Z,15nm,19.1s,baz=210,slow=39 | | | | | | |

*CSEM* ***13*** *23:16:50.5, 36.87N×24.39W, h5km, ML2.4, After PDA*
**PDA 13 23:16:50.5±0.6, 36.87N×24.39W, h5km, MD3.8, ML2.4, Error ellipse: s-maj=4.7km s-min=3.8km az=117.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSMN** | **Pico do Norte,** | **0.56** | **284** | *e*P | Pg | 23 17 00.0 | -1.3 |
| PSMN | | | | *e*S | Sg | 23 17 07.2 | -1.3 |
| PSMN | | | | A | A | 23 17 08.2 | |
| | 72nm,0.1s | | | | | | |
| **PSMN** | **Pico do Norte,** | **0.56** | **284** | *e*P | Pg | 23 17 00.0 | -1.3 |
| PSMN | | | | *e*S | Sg | 23 17 07.2 | -1.3 |
| **PSMA** | **Santa Maria** | **0.60** | **282** | *e*P | Pg | 23 17 00.5 | -1.6 |
| PSMA | | | | *e*S | Sg | 23 17 08.5 | -1.5 |
| PSMA | | | | A | A | 23 17 09.2 | |
| | 110nm,0.2s | | | | | | |
| **BART** | **Pico Bartolome** | **1.10** | **326** | *e*P | Pg | 23 17 07.6 | -4.1 |
| BART | | | | *e*S | Sg | 23 17 20.6 | -5.5 |
| BART | | | | A | A | 23 17 22.1 | |
| | 34nm,0.2s | | | | | | |
| **BART** | **Pico Bartolome** | **1.10** | **326** | *e*P | Pg | 23 17 07.6 | -4.1 |
| BART | | | | *e*S | Sg | 23 17 20.6 | -5.5 |
| **PSET** | **Sete Cidades** | **1.43** | **312** | *e*S | Sb | 23 17 28.5 | -7.6 |
| PSET | | | | A | A | 23 17 28.9 | |
| | 26nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **1.43** | **312** | *e*S | Sb | 23 17 28.5 | -7.6 |
| **ROSA** | **Rosais** | **3.57** | **302** | *e*P | Pn | 23 17 42.2 | -4.3 |
| **ROSA** | **Rosais** | **3.57** | **302** | *e*P | Pn | 23 17 42.2 | -4.3 |
| **PICO** | **Pico** | **3.59** | **298** | *e*P | Pn | 23 17 43.3 | -3.6 |
| PICO | | | | *e*S | Sn | 23 18 21.3 | -8.5 |
| **PICO** | **Pico** | **3.59** | **298** | *e*P | Pn | 23 17 43.0 | -4.2 |
| PICO | | | | *e*S | Sn | 23 18 21.3 | -8.5 |
| **PCAN** | **Candelaria** | **3.62** | **297** | *e*P | Pn | 23 17 43.0 | -4.2 |
| **PCAN** | **Candelaria** | **3.62** | **297** | *e*P | Pn | 23 17 43.0 | -4.2 |

*ISK* ***13*** *23:20:53.5, 36.91N×36.38E, h6km, MD2.5*

*CSEM* ***13*** *23:20:54.8±0.6, 36.95N×36.26E, h2km, MD2.6, Error ellipse: s-maj=13.0km s-min=9.2km az=82.0*
*DDA* ***13*** *23:20:54.6, 37.04N×36.27E, h7km, Md2.6*
**ISC 13 23:20:53.4±1.2, 36.99N±0.03×36.20E±0.05, h8km±10km, n14, σ0.67/28, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAMA** | **Osmaniye** | **0.43** | **62** | P | **Pg** | **23 21 01.7** | **-0.1** |
| KAMA | | | | S | **Sg** | **23 21 07.5** | **+0.1** |
| **KOZT** | **Kozan** | **0.58** | **329** | *e*PG | **Pn** | **23 21 08.0** | **+0.1** |
| KOZT | | | | *e*SG | **Sn** | **23 21 18.1** | **+0.6** |
| **KOZT** | **Kozan** | **0.58** | **329** | *e*Pg | **Pn** | **23 21 08.0** | **+0.1** |
| KOZT | | | | *e*Sg | **Sn** | **23 21 18.1** | **+0.6** |
| **ANDN** | **Andirin** | **0.61** | **11** | *i* P | **Pg** | **23 21 05.1** | **-0.1** |
| ANDN | | | | *i* S | **Sg** | **23 21 13.6** | **+0.5** |
| **ANDN** | **Andirin** | **0.61** | **11** | P | **Pg** | **23 21 05.0** | **-0.1** |
| ANDN | | | | S | **Sg** | **23 21 13.6** | **+0.5** |
| **TAHT** | **Tahtakopru-Hat** | **0.61** | **181** | *e*PG | **Pg** | **23 21 04.9** | **-0.3** |
| TAHT | | | | *e*SG | **Sg** | **23 21 12.9** | **-0.2** |
| **TAHT** | **Tahtakopru-Hat** | **0.61** | **181** | *e*Pg | **Pg** | **23 21 04.9** | **-0.3** |
| TAHT | | | | *e*Sg | **Sg** | **23 21 12.9** | **-0.2** |
| **AYKD** | **Aykdinkavak** | **0.65** | **49** | P | **Pb** | **23 21 07.7** | **+0.7** |
| AYKD | | | | S | **Sb** | **23 21 14.6** | **-1.6** |
| **KUZU** | **Kuzuini** | **0.74** | **106** | *i* P | **Pg** | **23 21 08.2** | **+0.6** |
| KUZU | | | | *i* S | **Sb** | **23 21 18.4** | **-0.3** |
| **KUZU** | **Kuzuini** | **0.74** | **106** | P | **Pg** | **23 21 08.2** | **+0.6** |
| KUZU | | | | S | **Sb** | **23 21 18.4** | **-0.3** |
| **KMRS** | **Kahramanmaras** | **0.77** | **47** | *e*PG | **Pg** | **23 21 08.2** | **0.0** |
| KMRS | | | | *e*SG | **Sb** | **23 21 18.2** | **-1.3** |
| **KMRS** | **Kahramanmaras** | **0.77** | **47** | *e*Pg | **Pg** | **23 21 08.2** | **0.0** |
| KMRS | | | | *e*Sg | **Sb** | **23 21 18.2** | **-1.3** |
| **AKCD** | **Akcadag** | **1.90** | **46** | *i* P | **Pg** | **23 21 30.1** | **+0.3** |
| AKCD | | | | *i* S | **Sg** | **23 21 53.5** | **-0.8** |
| **AKCD** | **Akcadag** | **1.90** | **46** | P | **Pg** | **23 21 30.1** | **+0.3** |
| AKCD | | | | S | **Sg** | **23 21 53.5** | **-0.8** |

*ISCJB* ***13*** *23:31:14.9±0.3, 24.07N±0.02×122.66E±0.02, h37km±21km, Error ellipse: s-maj=5.9km s-min=2.7km az=175.0*
*TAP* ***13*** *23:31:15.0, 24.07N×122.61E, h48km±1km, ML3.0, D*
*JMA* ***13*** *23:31:14.6±0.1, 24.09N×122.65E, h43km±4km, M2.4*
**ISC 13 23:31:15.0±1.3, 24.08N±0.04×122.65E±0.02, h33km±8km, n33, σ0.64/65, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.45** | **36** | P | **Pb** | **23 31 24.7** | **-0.2** |
| JYNG | | | | *e*S | **Sn** | **23 31 31.9** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **0.50** | **41** | P | **Pb** | **23 31 25.5** | **-0.1** |
| YOJ | | | | *e*S | **Sn** | **23 31 33.2** | **-0.2** |
| **ENA** | **Nanau** | **0.90** | **293** | *i* P | **Pn** | **23 31 31.3** | **-0.1** |
| | baz=294 | | | | | | |
| ENA | | | | *i* S | **Sb** | **23 31 44.2** | **+0.3** |
| | baz=294 | | | | | | |
| **TWC** | **Suao** | **0.90** | **306** | *i* P | **Pn** | **23 31 31.4** | **0.0** |
| | baz=308 | | | | | | |
| TWC | | | | *i* S | **Sb** | **23 31 43.9** | **-0.1** |
| | baz=308 | | | | | | |
| **TWD** | **Chiawan** | **0.97** | **270** | P | **Pn** | **23 31 31.8** | **-0.5** |
| | baz=270 | | | | | | |
| TWD | | | | S | **Sn** | **23 31 45.2** | **+0.3** |
| | baz=270 | | | | | | |
| **EGS** | | **1.00** | **319** | P | **Pb** | **23 31 33.5** | **-0.4** |
| | baz=321 | | | | | | |
| EGS | | | | S | **Sn** | **23 31 46.2** | **+0.4** |
| | baz=321 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.01** | **76** | P | **Pn** | **23 31 32.6** | **-0.4** |
| **HATJ** | **Hateruma jima** | **1.05** | **91** | P | **Pn** | **23 31 33.7** | **+0.2** |
| HATJ | | | | *e*S | **Sn** | **23 31 47.5** | **+0.4** |
| **TWE** | **Neicheng** | **1.10** | **305** | P | **Pn** | **23 31 34.7** | **+0.5** |
| | baz=307 | | | | | | |
| TWE | | | | S | **Sn** | **23 31 47.7** | **-0.5** |
| | baz=307 | | | | | | |
| **ENTT** | **Nioudou** | **1.14** | **299** | P | **Pn** | **23 31 34.9** | **+0.3** |
| | baz=300 | | | | | | |
| ENTT | | | | S | **Sn** | **23 31 49.4** | **+0.2** |
| | baz=300 | | | | | | |
| **ESL** | **Shilin** | **1.15** | **257** | P | **Pn** | **23 31 34.2** | **-0.6** |
| | baz=256 | | | | | | |
| ESL | | | | S | **Sn** | **23 31 49.0** | **-0.4** |
| | baz=256 | | | | | | |
| **NNS** | **Nan Shan** | **1.22** | **287** | P | **Pn** | **23 31 36.0** | **+0.1** |
| | baz=288 | | | | | | |
| NNS | | | | S | **Sn** | **23 31 51.0** | **-0.4** |
| | baz=288 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.25** | **83** | P | **Pn** | **23 31 36.4** | **+0.2** |
| JKRS | | | | *e*S | **Sn** | **23 31 52.4** | **+0.5** |
| **NWF** | **Wu-fen Shan** | **1.26** | **321** | *e*P | **Pn** | **23 31 37.1** | **+0.6** |
| | baz=322 | | | | | | |
| NWF | | | | *e*S | **Sn** | **23 31 52.2** | **-0.2** |
| | baz=322 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.27** | **273** | *e*P | **Pn** | **23 31 36.6** | **-0.3** |
| | baz=273 | | | | | | |
| WHF | | | | *e*S | **Sn** | **23 31 51.9** | **-1.1** |
| | baz=273 | | | | | | |
| **NSK** | **Sanguang** | **1.32** | **297** | *e*P | **Pn** | **23 31 37.5** | **+0.2** |
| | baz=298 | | | | | | |
| NSK | | | | *e*S | **Sn** | **23 31 53.4** | **-0.4** |
| | baz=298 | | | | | | |
| **EHY** | **Hungye** | **1.35** | **245** | *e*P | **Pn** | **23 31 37.4** | **-0.1** |
| | baz=244 | | | | | | |
| EHY | | | | *e*S | **Sn** | **23 31 53.5** | **-0.8** |
| | baz=244 | | | | | | |
| **TWT** | **Tachien** | **1.36** | **277** | *e*P | **Pn** | **23 31 38.9** | **+1.0** |
| | baz=277 | | | | | | |
| TWT | | | | *e*S | **Sn** | **23 31 54.3** | **-0.6** |
| | baz=277 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.39** | **78** | P | **Pn** | **23 31 37.4** | **-0.7** |
| JIJ | | | | *e*S | **Sn** | **23 31 54.7** | **-0.6** |
| **TWF1** | **Yuli** | **1.44** | **240** | *e*P | **Pn** | **23 31 39.0** | **+0.2** |
| | baz=239 | | | | | | |
| TWF1 | | | | *e*S | **Sn** | **23 31 56.8** | **+0.2** |
| | baz=239 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.59** | **71** | P | **Pn** | **23 31 40.3** | **-0.6** |
| JISG | | | | *e*S | **Sn** | **23 31 59.8** | **-0.6** |
| **SMLT** | **Sun Moon Lake** | **1.62** | **263** | *e*P | **Pn** | **23 31 42.0** | **+0.6** |
| | baz=263 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **23 32 01.2** | **+0.1** |
| | baz=263 | | | | | | |
| **TYC** | **Yuchr** | **1.65** | **264** | *e*P | **Pn** | **23 31 42.2** | **+0.5** |
| | baz=264 | | | | | | |
| TYC | | | | *e*S | **Sn** | **23 32 01.9** | **0.0** |
| | baz=264 | | | | | | |
| **YUS** | **Yu-Shan** | **1.67** | **250** | *e*P | **Pn** | **23 31 42.2** | **-0.2** |
| | baz=249 | | | | | | |
| YUS | | | | *e*S | **Sn** | **23 32 02.1** | **-0.8** |
| | baz=249 | | | | | | |
| **ELDTW** | **Lidau** | **1.75** | **240** | *e*P | **Pn** | **23 31 43.0** | **-0.1** |
| | baz=238 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **23 32 02.6** | **-1.7** |
| | baz=238 | | | | | | |
| **ALS** | **Alishan** | **1.79** | **252** | *e*P | **Pn** | **23 31 44.9** | **+1.1** |
| | baz=251 | | | | | | |
| ALS | | | | *e*S | **Sn** | **23 32 05.1** | **-0.5** |
| | baz=251 | | | | | | |
| **CHN5** | **Tsauling** | **1.87** | **255** | *e*P | **Pn** | **23 31 45.6** | **+0.8** |
| | baz=255 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **23 32 07.2** | **-0.3** |
| | baz=255 | | | | | | |
| **TWG** | **Pinlang** | **1.92** | **229** | *e*P | **Pn** | **23 31 45.6** | **+0.1** |
| | baz=228 | | | | | | |
| TWG | | | | *e*S | **Sn** | **23 32 08.3** | **-0.2** |
| | baz=228 | | | | | | |
| **JTJ** | **Tarama** | **1.95** | **73** | P | **Pn** | **23 31 46.8** | **+1.0** |
| JTJ | | | | *e*S | **Sn** | **23 32 09.6** | **+0.4** |
| **CHN4** | **Tsaushan** | **2.02** | **249** | *e*P | **Pn** | **23 31 47.9** | **+1.0** |
| | baz=248 | | | | | | |
| CHN4 | | | | *e*S | **Sn** | **23 32 11.7** | **+0.6** |
| | baz=248 | | | | | | |
| **WTP** | **Ta-pu** | **2.05** | **246** | *e*P | **Pn** | **23 31 49.0** | **+1.7** |
| | baz=245 | | | | | | |
| WTP | | | | *e*S | **Sn** | **23 32 11.7** | **0.0** |
| | baz=245 | | | | | | |
| **CHN1** | **Nanshi** | **2.14** | **246** | *e*P | **Pn** | **23 31 49.5** | **+0.9** |
| | baz=245 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **23 32 14.4** | **+0.3** |
| | baz=245 | | | | | | |
| **LAY** | **Lan-yu** | **2.27** | **207** | *e*P | **Pn** | **23 31 51.6** | **+1.3** |
| | baz=205 | | | | | | |
| LAY | | | | *e*S | **Sn** | **23 32 15.9** | **-1.3** |
| | baz=205 | | | | | | |

*IDC* ***13*** *23:32:41.2±0.6, 13.73S×167.84E, h0km, mb4.6/15, mb1 4.7/16, mb1mx4.6/24, mbtmp4.6/16, ML5.0/1, MS3.7/12, Ms1 3.7/12, ms1mx3.4/31, Error ellipse: s-maj=20.9km s-min=17.8km az=103.0*
*ISCJB* ***13*** *23:32:45.7±0.2, 13.83S±0.04×167.69E±0.04, h33km, mb4.9/51, MS3.8/9, Error ellipse: s-maj=6.4km s-min=4.8km az=146.4*
*NEIC* ***13*** *23:32:49.3±0.9, 13.81S×167.74E, h55km±8km, mb5.0/39, Error ellipse: s-maj=6.3km s-min=5.4km az=166.0*
*BJI* ***13*** *23:32:49.6, 13.47S×168.27E, h72km, mb4.7/29, mB4.9/21, Ms5.0/7, Ms7 4.6/5*
*AUST* ***13*** *23:32:49.7, 13.99S×167.96E, h60km*
**ISC 13 23:32:47.1±0.4, 13.87S±0.06×167.83E±0.08, h35km, n153, σ1.9/27/157, mb5.0/51, MS3.7/9, 1D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **8.26** | **189** | *e*Pn | **Pn** | **23 34 46.1** | **+1.5** |
| | 25nm,0.3s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **23 36 13.2** | **-3.5** |
| | 5.1nm,0.3s | | | | | | |
| DZM | | | | *e*LR | LR | 23 36 41.8 | |
| | 548nm,27.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **8.26** | **189** | LR | LR | 23 37 24.9 | |
| | comp=Z,320nm,19.9s,baz=37,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **8.26** | **189** | *e*Pn | **Pn** | **23 34 45.6** | **+1.0** |
| **HNR** | **Honiara** | **8.89** | **299** | Pn | **Pn** | **23 34 52.2** | **-1.0** |
| | 17nm,0.3s,baz=216,slow=7.8,SNR=7.8 | | | | | | |
| HNR | | | | LR | LR | 23 37 24.3 | |
| | comp=Z,259nm,21.0s,baz=120,slow=32 | | | | | | |
| **MSVF** | **Nonsavu** | **10.56** | **113** | *e*Pn | Pn | 23 35 21.1 | +5.0 |
| **LHI** | **Lord Howe Isla** | **19.32** | **203** | *e*P | **P** | **23 37 09.3** | **0.0** |
| | 648nm,2.7s | | | | | | |
| **EIDS** | **Eidsvold** | **19.46** | **231** | P | **Pn** | **23 37 13.6** | **+1.4** |
| | baz=20,SNR=22 | | | | | | |
| **EIDS** | **Eidsvold** | **19.46** | **231** | *e*P | **Pn** | **23 37 13.7** | **+1.4** |
| | 57nm,0.8s | | | | | | |
| **AFI** | **Afiamalu** | **19.80** | **93** | LR | LR | 23 42 48.1 | |
| | comp=Z,173nm,22.0s,baz=42,slow=31 | | | | | | |
| **PMG** | **Port Moresby** | **20.72** | **280** | *e*P | Pn | 23 37 26.0 | -1.2 |
| | 32nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **21.53** | **250** | P | **P** | **23 37 34.0** | **+0.5** |
| | 17nm,1.1s,baz=75,slow=13,SNR=6.4 | | | | | | |
| **RMQ** | **Roma** | **21.82** | **232** | P | **P** | **23 37 38.6** | **+2.1** |
| | baz=22,SNR=40 | | | | | | |
| **OUZ** | **Omahuta** | **21.88** | **167** | *e*P | **P** | **23 37 38.1** | **+1.1** |
| | 433nm,2.7s | | | | | | |
| **ARMA** | **Armidale** | **22.23** | **220** | P | **P** | **23 37 43.0** | **+2.1** |
| | baz=22,SNR=4.0 | | | | | | |
| **ARMA** | **Armidale** | **22.23** | **220** | *e*P | **P** | **23 37 43.1** | **+2.1** |
| | 39nm,1.2s | | | | | | |
| **COEN** | **Coen** | **23.93** | **267** | P | **P** | **23 37 59.4** | **+1.2** |
| | baz=24,SNR=5.5 | | | | | | |
| **COEN** | **Coen** | **23.93** | **267** | *e*P | **P** | **23 37 58.7** | **+0.6** |
| | 40nm,1.3s | | | | | | |
| **QLP** | **Quilpie** | **25.44** | **237** | P | **P** | **23 38 12.8** | **+1.0** |
| | baz=26,SNR=8.1 | | | | | | |
| **URZ** | **Urewera** | **25.65** | **163** | P | **P** | **23 38 15.2** | **+1.6** |
| | 3.7nm,0.3s,baz=346,slow=12,SNR=3.5 | | | | | | |
| **BKZ** | **Black Stump Fm** | **26.33** | **165** | *e*P | **P** | **23 38 20.5** | **+0.7** |
| | 122nm,1.8s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.86** | **225** | P | **P** | **23 38 25.6** | **+1.1** |
| | baz=27,SNR=32 | | | | | | |
| **QIS** | **Mount Isa** | **27.74** | **252** | P | **P** | **23 38 32.7** | **0.0** |
| | baz=28,SNR=3.6 | | | | | | |
| **RPZ** | **Rata Peaks** | **29.87** | **175** | LR | LR | 23 49 27.2 | |
| | comp=Z,129nm,18.4s,baz=290,slow=34 | | | | | | |
| **WRAB** | **Tennant Creek** | **32.56** | **255** | *e*P | **P** | **23 39 13.7** | **-1.6** |
| | 10.0nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.57** | **255** | P | **P** | **23 39 14.1** | **-1.3** |
| | 7.7nm,0.8s,baz=85,slow=9.3,SNR=71 | | | | | | |
| WRA | | | | PcP | **PcP** | **23 42 01.2** | **-0.3** |
| | 1.5nm,0.8s,baz=79,slow=3.4,SNR=5.5 | | | | | | |
| WRA | | | | LR | LR | 23 51 55.8 | |
| | comp=Z,272nm,18.1s,baz=95,slow=35 | | | | | | |
| **HTT** | **Hallett** | **32.69** | **228** | P | **P** | **23 39 13.6** | **-2.8** |
| | baz=33,SNR=6.0 | | | | | | |
| **AS01** | **Alice Springs** | **33.45** | **248** | *e*P | **P** | **23 39 21.1** | **-2.0** |
| **AS12** | **Alice Springs** | **33.49** | **248** | *e*P | **P** | **23 39 22.3** | **-1.1** |
| AS12 | | | | *e*PcP | **PcP** | **23 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CM31** | **Chiang Mai Arr** | **75.10** | **294** | *e*P | | **P** | **23 44 26.3** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **75.10** | **294** | P | | **P** | **23 44 26.3** | **+0.2** |
| | 4.3nm,0.7s,baz=129,slow=4.6,SNR=18 | | | | | | | |
| **CHTO** | **Chiang Mai** | **75.23** | **294** | *e*P | | **P** | **23 44 27.0** | **+0.2** |
| | 20nm,1.5s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **75.29** | **319** | *e*P | | **P** | **23 44 28.3** | **+1.5** |
| HHC | | | | PMZ | | | | |
| | 12nm,0.9s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | 94nm,5.1s | | | | | | | |
| **CD2** | **Chengdu** | **75.93** | **307** | *e*P | | **P** | **23 44 31.0** | **+0.4** |
| CD2 | | | | pP | | PcP | 23 44 50.8 | +7.8 |
| CD2 | | | | PP | | **PP** | **23 47 22.1** | **+0.6** |
| CD2 | | | | S | | **S** | **23 54 08.8** | **-2.4** |
| CD2 | | | | SKS | | **SKSac** | **23 54 34.0** | **-4.9** |
| CD2 | | | | SS | | **SS** | **23 59 03.8** | **-0.8** |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | 120nm,5.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **76.15** | **180** | *e*P | | **P** | **23 44 31.7** | **+0.3** |
| | 7.1nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **81.77** | **324** | *e*P | | **P** | **23 45 02.4** | **-0.1** |
| | 8.7nm,1.0s | | | | | | | |
| **SONA0** | **Songino Array** | **82.14** | **323** | *e*P | | **P** | **23 45 04.0** | **-0.4** |
| **SONM** | **Songino Array** | **82.14** | **323** | P | | **P** | **23 45 04.0** | **-0.4** |
| | 1.8nm,0.8s,baz=130,slow=4.5,SNR=13 | | | | | | | |
| **SONA1** | **Songino Array** | **82.14** | **323** | *e*P | | **P** | **23 45 03.9** | **-0.5** |
| **GTA** | **Gaotai** | **82.47** | **314** | *e*P | | **P** | **23 45 06.6** | **+0.3** |
| GTA | | | | pP | | pP | 23 45 27.3 | +10 |
| GTA | | | | sP | | sP | 23 45 35.3 | +14 |
| GTA | | | | PMZ | | | | |
| | 9.0nm,1.0s | | | | | | | |
| **MAW** | **Mawson** | **82.88** | **202** | P | | **P** | **23 45 08.3** | **+0.5** |
| | 5.2nm,1.1s,baz=111,slow=8.6,SNR=10 | | | | | | | |
| **MAW** | **Mawson** | **82.88** | **202** | P | | **P** | **23 45 08.6** | **+0.8** |
| | baz=83,SNR=6.9 | | | | | | | |
| **MAW** | **Mawson** | **82.88** | **202** | *e*P | | **P** | **23 45 08.6** | **+0.8** |
| | 3.0nm,1.4s | | | | | | | |
| **CAST** | **Castle Rocks** | **83.02** | **17** | *e*P | | **P** | **23 45 07.5** | **-1.0** |
| | 7.6nm,0.7s | | | | | | | |
| **PKM** | **Peak Mountain** | **83.89** | **52** | P | | **P** | **23 45 14.6** | **+0.8** |
| | baz=84 | | | | | | | |
| **RND** | **Reindeer** | **83.96** | **18** | *e*P | | **P** | **23 45 13.0** | **-0.4** |
| | 16nm,1.0s | | | | | | | |
| **WDC** | **Whiskeytown Da** | **84.08** | **46** | *e*P | | **P** | **23 45 15.5** | **+1.1** |
| | 9.2nm,1.3s | | | | | | | |
| **N02D** | **Trinity Center** | **84.13** | **45** | P | | **P** | **23 45 15.8** | **+1.1** |
| | baz=84 | | | | | | | |
| **MCK** | **McKinley** | **84.17** | **18** | *e*P | | **P** | **23 45 13.8** | **-0.6** |
| | 15nm,1.2s | | | | | | | |
| **M02C** | **Callahan** | **84.19** | **45** | P | | **P** | **23 45 16.1** | **+1.0** |
| | baz=84 | | | | | | | |
| **BWN** | **Browne** | **84.35** | **17** | *e*P | | **P** | **23 45 14.7** | **-0.5** |
| | 36nm,0.9s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **84.43** | **45** | *e*P | | **P** | **23 45 17.6** | **+1.3** |
| | 91nm,2.8s | | | | | | | |
| **O03D** | **Paynes Creek** | **84.48** | **46** | P | | **P** | **23 45 17.0** | **+0.4** |
| | baz=85 | | | | | | | |
| **CMB** | **Columbia Colle** | **84.63** | **49** | *e*P | | **P** | **23 45 18.0** | **+0.7** |
| | 3.7nm,0.8s | | | | | | | |
| **I03D** | **Drain, OR** | **84.81** | **43** | P | | **P** | **23 45 18.6** | **+0.6** |
| | baz=85 | | | | | | | |
| **WRH** | **Wood River Hil** | **84.97** | **18** | *e*P | | **P** | **23 45 17.6** | **-0.8** |
| | 8.9nm,0.8s | | | | | | | |
| **M04C** | **Macdoel** | **85.05** | **45** | P | | **P** | **23 45 20.3** | **+0.8** |
| | baz=85 | | | | | | | |
| **CCB** | **Clear Creek Bu** | **85.19** | **18** | *e*P | | **P** | **23 45 18.4** | **-1.1** |
| | 5.8nm,0.6s | | | | | | | |
| **ISA** | **Isabella** | **85.20** | **52** | P | | **P** | **23 45 21.1** | **+0.9** |
| | baz=85 | | | | | | | |
| **HDA** | **Harding Lake** | **85.26** | **18** | *e*P | | **P** | **23 45 19.1** | **-0.8** |
| | 11nm,0.7s | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **85.29** | **53** | P | | **P** | **23 45 21.5** | **+0.8** |
| | baz=85 | | | | | | | |
| **MDM** | **Murphy Dome** | **85.29** | **17** | *e*P | | **P** | **23 45 19.1** | **-0.9** |
| | 12nm,1.0s | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **85.33** | **53** | P | | **P** | **23 45 21.6** | **+0.6** |
| | baz=86 | | | | | | | |
| **J04D** | **Umpqua Nationa** | **85.44** | **44** | P | | **P** | **23 45 22.5** | **+1.0** |
| | baz=86 | | | | | | | |
| **I04A** | **Tendick Farm,** | **85.47** | **43** | P | | **P** | **23 45 21.8** | **+0.4** |
| | baz=86 | | | | | | | |
| **WLHM** | **Little Horse** | **85.49** | **51** | *e*P | | **P** | **23 45 23.0** | **+1.0** |
| **IL1** | **Eielson Array** | **85.55** | **18** | *e*P | | **P** | **23 45 19.5** | **-1.7** |
| **ILAR** | **Eielson Array** | **85.55** | **18** | P | | **P** | **23 45 19.9** | **-1.4** |
| | 5.8nm,0.6s,baz=240,slow=5.1,SNR=64 | | | | | | | |
| ILAR | | | | LR | | LR | 00 17 57.1 | |
| | comp=Z,42nm,19.1s,baz=209,slow=32 | | | | | | | |
| **ILB** | **Eielson Array** | **85.55** | **18** | *e*P | | **P** | **23 45 19.9** | **-1.4** |
| **DOT** | **Dot Lake** | **85.63** | **19** | *e*P | | **P** | **23 45 21.3** | **-0.5** |
| | 17nm,0.8s | | | | | | | |
| **MTUM** | **Tungsten Hills** | **85.73** | **50** | *e*P | | **P** | **23 45 24.2** | **+1.2** |
| **LRMC** | **Laurel Mountai** | **85.73** | **52** | P | | **P** | **23 45 24.0** | **+1.0** |
| | baz=86 | | | | | | | |
| **CWC** | **Cottonwood Cre** | **85.77** | **51** | P | | **P** | **23 45 24.2** | **+1.0** |
| | baz=86 | | | | | | | |
| **MONP** | **Monument Peak** | **85.85** | **55** | P | | **P** | **23 45 24.9** | **+1.2** |
| | baz=86 | | | | | | | |
| **RCWM** | **Renegade Canyo** | **85.93** | **52** | *e*P | | **P** | **23 45 23.0** | **-0.9** |
| **J05D** | **Fort Rock, OR** | **86.05** | **44** | P | | **P** | **23 45 25.3** | **+0.9** |
| | baz=86 | | | | | | | |
| **MPMC** | **Manual Prospec** | **86.08** | **52** | P | | **P** | **23 45 25.7** | **+0.9** |
| | baz=86 | | | | | | | |
| **NV01** | **Mina Array Sit** | **86.30** | **49** | *e*P | | **P** | **23 45 26.2** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **86.30** | **49** | P | | **P** | **23 45 26.0** | **+0.1** |
| | 2.7nm,0.9s,baz=234,slow=7.7,SNR=19 | | | | | | | |
| NVAR | | | | LR | | LR | 00 15 58.5 | |
| | comp=Z,112nm,20.5s,baz=242,slow=30 | | | | | | | |
| **COLD** | **Coldfoot** | **86.47** | **15** | *e*P | | **P** | **23 45 26.6** | **+0.8** |
| | 7.2nm,1.0s | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **86.55** | **54** | P | | **P** | **23 45 27.9** | **+0.8** |
| | baz=87 | | | | | | | |
| **HEC** | **Hector,Ludlow** | **86.56** | **53** | P | | **P** | **23 45 27.9** | **+0.8** |
| | baz=87 | | | | | | | |
| **BC3** | **Big Chuckawall** | **86.86** | **54** | P | | **P** | **23 45 29.5** | **+0.9** |
| | baz=87 | | | | | | | |
| **GMRC** | **Granite Mounta** | **87.06** | **53** | P | | **P** | **23 45 30.5** | **+0.9** |
| | baz=87 | | | | | | | |
| **TUQ** | **Turquoise Moun** | **87.07** | **53** | P | | **P** | **23 45 31.0** | **+1.4** |
| | baz=87 | | | | | | | |
| **IRM** | **Iron Mountain** | **87.26** | **54** | P | | **P** | **23 45 31.9** | **+1.5** |
| | baz=87 | | | | | | | |
| **TPNV** | **Topopah Spring** | **87.32** | **51** | P | | **P** | **23 45 31.4** | **+0.5** |
| | baz=88 | | | | | | | |
| **EGAK** | **Eagle** | **87.33** | **19** | *e*P | | **P** | **23 45 30.4** | **+0.4** |
| EGAK | | | | *e*PP | | PP | 23 48 49.0 | -5.7 |
| **I07A** | **Izee** | **87.51** | **44** | *e*P | | **P** | **23 45 32.3** | **+0.8** |
| | 79nm,2.9s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **88.28** | **50** | P | | **P** | **23 45 36.1** | **+0.7** |
| | baz=88 | | | | | | | |
| **G08A** | **Pilot Rock** | **88.32** | **43** | *e*P | | **P** | **23 45 36.0** | **+0.6** |
| | 30nm,2.1s | | | | | | | |
| **SYO** | **Syowa Base** | **89.68** | **196⇓** | *e*P | | **P** | **23 45 39.2** | **-1.9** |
| **F10A** | **Beach Ranch, E** | **89.70** | **42** | *e*P | | **P** | **23 45 41.8** | **0.0** |
| | 107nm,2.9s | | | | | | | |
| **WMQ** | **Urumqi** | **92.52** | **314** | *e*P | | **P** | **23 45 55.0** | **+0.1** |
| **SNAA** | **Sanae** | **94.43** | **183** | P | | **P** | **23 46 02.0** | **-1.2** |
| **SNAA** | **Sanae** | **94.43** | **183** | *e*P | | **P** | **23 46 02.3** | **-0.9** |
| | 5.4nm,1.7s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **95.07** | **181** | P | | **P** | **23 46 05.0** | **-1.1** |
| **VNA2** | **Neumayer--Watz** | **95.35** | **182** | P | | **P** | **23 46 06.4** | **-0.9** |
| | baz=184,slow=3.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **95.39** | **61** | LR | | LR | 00 19 32.0 | |
| | comp=Z,20nm,21.5s,baz=0.0,slow=30 | | | | | | | |
| **CLNB** | **Carlsbad** | **95.86** | **58** | *e*P | | **P** | **23 46 11.6** | **+1.1** |
| **YKA** | **Yellowknife Ar** | **96.54** | **27** | P | | **P** | **23 46 11.6** | **-1.1** |
| | 1.5nm,0.8s,baz=262,slow=4.8,SNR=3.8 | | | | | | | |
| **YKB5** | **Yellowknife Ar** | **96.54** | **27** | *e*P | | **P** | **23 46 11.6** | **-1.1** |
| **MK01** | **Makanchi Array** | **96.95** | **316** | *e*P | | **P** | **23 46 14.2** | **-0.9** |
| **MK32** | **Makanchi Array** | **96.96** | **316** | *e*P | | **P** | **23 46 14.6** | **-0.6** |
| **MKAR** | **Makanchi Array** | **96.96** | **316** | P | | **P** | **23 46 14.6** | **-0.6** |
| | 3.7nm,0.6s,baz=91,slow=5.6,SNR=30 | | | | | | | |
| **MKAR** | **Makanchi Array** | **96.96** | **316** | *e*P | | **P** | **23 46 14.8** | **-0.3** |
| **ZAA0** | **Zalesovo Array** | **97.03** | **324** | *e*P | | **P** | **23 46 13.8** | **-1.4** |
| **ZALV** | **Zalesovo Beam** | **97.03** | **324** | P | | **P** | **23 46 13.9** | **-1.3** |
| | 1.4nm,0.7s,baz=129,slow=4.0,SNR=7.1 | | | | | | | |
| **ZAA1** | **Zalesovo Array** | **97.03** | **324** | *e*P | | **P** | **23 46 13.8** | **-1.3** |
| **KSH** | **Kashi** | **100.10** | **308** | *e*P | | **Pdif** | **23 46 30.6** | **+1.1** |
| KSH | | | | *e*PP | | **PP** | **23 50 39.5** | **+4.1** |
| KSH | | | | SKS | | | 23 57 01.8 | |
| KSH | | | | S | | SKKSac | 23 57 53.9 | +14 |
| KSH | | | | sS | | sS | 23 58 31.3 | +10 |
| KSH | | | | PMZ | | | | |
| | 110nm,4.9s | | | | | | | |
| KSH | | | | LN | | | | |
| | 75nm,4.3s | | | | | | | |
| KSH | | | | LE | | | | |
| | 51nm,3.8s | | | | | | | |
| KSH | | | | LZ | | | | |
| | 90nm,6.1s | | | | | | | |
| **ARA0** | **ARCESS Array S** | **119.56** | **346** | *e*PKPdf | | **PKPdf** | **23 51 31.1** | **-1.5** |
| **ARCES** | **ARCESS Array B** | **119.56** | **346** | PKP | | **PKPdf** | **23 51 31.1** | **-1.5** |
| | 2.8nm,0.7s,baz=45,slow=1.9,SNR=8.9 | | | | | | | |
| **FIA0** | **FINESS Array S** | **125.13** | **339** | *e*PKPdf | | **PKPdf** | **23 51 42.9** | **-0.6** |
| **FINES** | **FINESS Array B** | **125.13** | **339** | PKP | | **PKPdf** | **23 51 42.9** | **-0.6** |
| | 3.4nm,1.0s,baz=132,slow=2.8,SNR=3.5 | | | | | | | |
| **SJG** | **San Juan** | **128.08** | **78** | *e*PKPpre | | PKPpre | 23 51 41.7 | |
| **GEC2** | **GERESS Array S** | **139.12** | **334** | *e*PKPdf | | **PKPdf** | **23 52 10.8** | **+0.4** |
| **GERES** | **GERESS Array B** | **139.12** | **334** | PKP | | **PKPdf** | **23 52 10.8** | **+0.4** |
| | 0.7nm,0.8s,baz=46,slow=5.8,SNR=4.1 | | | | | | | |
| **KEST** | **Kesra** | **150.88** | **322** | PKPbc | | **PKPbc** | **23 52 35.9** | **-0.7** |
| | 6.4nm,0.9s,baz=90,slow=2.0,SNR=5.0 | | | | | | | |
| **ESDC** | **Sonseca Array** | **153.30** | **346** | PKPbc | | **PKPbc** | **23 52 40.3** | **-1.6** |
| | 0.7nm,0.8s,baz=19,slow=1.8,SNR=5.8 | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **166.50** | **269** | *e*PKPdf | | **PKPdf** | **23 52 48.4** | **-1.4** |
| TOA0 | | | | *e*PKPab | | **PKPab** | **23 53 51.4** | **-0.5** |
| TOA0 | | | | *e*PKPab | | PKPab | 23 53 51.6 | -0.2 |
| **TORD** | **Torodi Ar. Bea** | **166.50** | **269** | PKP | | **PKPdf** | **23 52 48.4** | **-1.4** |
| | 0.9nm,0.9s,baz=12,slow=1.0,SNR=10 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **23 53 51.4** | **-0.5** |
| | 2.4nm,1.0s,baz=100,slow=3.0,SNR=9.2 | | | | | | | |

*CSEM* ***13*** *23:43:07.5, 46.°04N×6.°89E, h4km, ML0.6/4, After ZUR*

**ZUR 13 23:43:07.5, 46.°04N×6.°89E, h4km±1km, ML0.6/4, 2C, Switzerland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EMV** | **Vieux Emosson** | **0.02** | **12** | *i* Pg | Pg | 23 43 08.8 | +0.1 |
| | 67nm,0.2s | | | | | | |
| EMV | | | | *i* Sg | Sg | 23 43 09.7 | +0.1 |
| | 67nm,0.2s | | | | | | |
| **EMV** | **Vieux Emosson** | **0.02** | **12** | *i* Pg | Pg | 23 43 08.8 | +0.1 |
| | 67nm,0.2s | | | | | | |
| EMV | | | | *i* Sg | Sg | 23 43 09.7 | +0.1 |
| | 67nm,0.2s | | | | | | |
| **SALAN** | **Lac Salanfe** | **0.12** | **29⇑** | *i* Pg | Pg | 23 43 10.1 | -0.1 |
| | 8.9nm,0.1s | | | | | | |
| SALAN | | | | *i* Sg | Sg | 23 43 12.0 | 0.0 |
| | 8.9nm,0.1s | | | | | | |
| **SALAN** | **Lac Salanfe** | **0.12** | **29⇑** | *i* Pg | Pg | 23 43 10.1 | -0.1 |
| | 8.9nm,0.1s | | | | | | |
| SALAN | | | | *i* Sg | Sg | 23 43 12.0 | 0.0 |
| | 8.9nm,0.1s | | | | | | |
| **GRYON** | **Gryon** | **0.26** | **36** | *e*Pg | Pg | 23 43 12.7 | 0.0 |
| **GRYON** | **Gryon** | **0.26** | **36** | *e*Pg | Pg | 23 43 12.7 | 0.0 |
| **AIGLE** | **Aigle** | **0.30** | **8** | *e*Pg | Pg | 23 43 13.4 | -0.1 |
| | 8.9nm,0.2s | | | | | | |
| **AIGLE** | **Aigle** | **0.30** | **8** | *e*Pg | Pg | 23 43 13.4 | -0.1 |
| | 8.9nm,0.2s | | | | | | |
| **DIX** | **Grande Dixence** | **0.36** | **84** | *e*Pg | Pg | 23 43 14.7 | -0.2 |
| | 13nm,0.2s | | | | | | |
| **DIX** | **Grande Dixence** | **0.36** | **84** | *e*Pg | Pg | 23 43 14.7 | -0.2 |
| | 13nm,0.2s | | | | | | |

*ISK* ***13*** *23:44:19.6, 37.°84N×37.°50E, h5km, MD2.7*
*DDA* ***13*** *23:44:20.8, 37.°84N×37.°48E, h7km, Md2.8*
*CSEM* ***13*** *23:44:20.5±0.4, 37.°82N×37.°54E, h0km±4km, MD2.7, Error ellipse: s-maj=8.5km s-min=4.1km az=139.0*

**ISC 13 23:44:21.0±1.1, 37.°83N±0.°04×37.°51E±0.°04, h11km±13km, n17, σ0°73/29, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKCD** | **Akcadag** | **0.57** | **35** | *i* P | | **Pg** | **23 44 31.8** | **-0.3** |
| AKCD | | | | *i* S | | **Sb** | **23 44 41.1** | **-0.1** |
| **AKCD** | **Akcadag** | **0.57** | **35** | P | | **Pg** | **23 44 31.8** | **-0.3** |
| AKCD | | | | S | | **Sb** | **23 44 41.1** | **-0.1** |
| **KMRS** | **Kahramanmaras** | **0.58** | **236** | *e*PG | | **Pg** | **23 44 31.8** | **-0.6** |
| KMRS | | | | *e*SG | | **Sg** | **23 44 40.3** | **+0.2** |
| **KMRS** | **Kahramanmaras** | **0.58** | **236** | *e*Pg | | **Pg** | **23 44 31.8** | **-0.6** |
| KMRS | | | | *e*Sg | | **Sg** | **23 44 40.3** | **+0.2** |
| **AYKD** | **Aykdinkavak** | **0.70** | **233** | P | | **Pg** | **23 44 33.7** | **-0.8** |
| AYKD | | | | S | | **Sg** | **23 44 43.5** | **-0.2** |
| **DARE** | **Darende-Malaty** | **0.74** | **358** | *e*PG | | **Pg** | **23 44 34.7** | **-0.7** |
| DARE | | | | *e*SG | | **Sb** | **23 44 46.0** | **-0.1** |
| **DARE** | **Darende-Malaty** | **0.74** | **358** | *e*Pg | | **Pg** | **23 44 34.7** | **-0.7** |
| DARE | | | | *e*Sg | | **Sb** | **23 44 46.0** | **-0.1** |
| **KAMA** | **Osmaniye** | **0.93** | **226** | P | | **Pg** | **23 44 38.8** | **-0.2** |
| KAMA | | | | S | | **Sb** | **23 44 51.9** | **+0.3** |
| **ANDN** | **Andirin** | **0.96** | **255** | *i* P | | **Pb** | **23 44 39.6** | **-0.1** |
| ANDN | | | | *i* S | | **Sb** | **23 44 52.3** | **0.0** |
| **ANDN** | **Andirin** | **0.96** | **255** | P | | **Pb** | **23 44 39.6** | **-0.1** |
| ANDN | | | | S | | **Sb** | **23 44 52.3** | **0.0** |
| **SARI** | **SarD1z-Kayseri** | **1.03** | **304** | *e*PG | | **Pb** | **23 44 40.9** | **-0.2** |
| **URFA** | **Urfa** | **1.11** | **110** | *e*PN | | **Pb** | **23 44 42.5** | **+0.2** |
| **URFA** | **Urfa** | **1.11** | **110** | *e*Pn | | **Pb** | **23 44 42.5** | **+0.2** |
| **KOZT** | **Kozan** | **1.38** | **256** | *e*PN | | **Pg** | **23 44 47.0** | **-0.5** |
| KOZT | | | | *e*SN | | **Sg** | **23 45 07.6** | **+2.2** |
| **KOZT** | **Kozan** | **1.38** | **256** | *e*Pn | | **Pg** | **23 44 47.0** | **-0.5** |
| KOZT | | | | *e*Sn | | **Sg** | **23 45 07.6** | **+2.2** |
| **TAHT** | **Tahtakopru-Hat** | **1.80** | **216** | *e*PN | | **Pb** | **23 44 53.4** | **-0.6** |
| **TAHT** | **Tahtakopru-Hat** | **1.80** | **216** | *e*Pn | | **Pb** | **23 44 53.4** | **-0.6** |

*ISCJB* ***13*** *23:44:41.8±0.8, 42.°05S±0.°1×84.°8E±0.°3, h10km, mb3.9/9, MS3.6/13, Error ellipse: s-maj=27.0km s-min=18.6km az=173.9*
*IDC* ***13*** *23:44:41.6±1.0, 41.°94S×84.°71E, h0km, mb3.9/9, mb1 4.0/9, mb1mx3.8/44, mbtmp3.8/9, MS3.6/13, Ms1 3.6/13, ms1mx3.5/19, Error ellipse: s-maj=34.3km s-min=24.4km az=85.0*

**ISC 13 23:44:43.0±0.9, 41.°9S±0.°2×84.°7E±0.°3, h10km, n21, σ0°90/8, mb3.9/9, MS3.6/13, Southeast Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H01W2** | **Cape Leeuwin H** | **24.04** | **83** | T | T | 00 14 36.9 | |
| | baz=245,slow=74,SNR=110 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **24.05** | **83** | T | T | 00 14 37.6 | |
| | baz=245,slow=74,SNR=142 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **24.05** | **83** | T | T | 00 14 38.2 | |
| | baz=245,slow=74,SNR=132 | | | | | | |
| **MAW** | **Mawson** | **28.31** | **197** | LR | LR | 23 59 48.3 | |
| | comp=Z,53nm,19.3s,baz=62,slow=32 | | | | | | |
| **H08S2** | **Diego Garcia H** | **35.82** | **339** | T | T | 00 29 15.0 | |
| | baz=164,slow=76,SNR=97 | | | | | | |
| **H08S1** | **Diego Carcia H** | **35.82** | **339** | T | T | 00 29 16.0 | |
| | baz=164,slow=76,SNR=129 | | | | | | |
| **H08S3** | **Diego Garcia H** | **35.84** | **339** | T | T | 00 29 17.1 | |
| | baz=164,slow=76,SNR=126 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **42.13** | **68** | LR | LR | 00 09 01.0 | |
| | comp=Z,111nm,18.5s,baz=231,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **44.55** | **82** | P | **P** | **23 52 55.2** | **+0.1** |
| | 1.7nm,0.8s,baz=230,slow=8.1,SNR=12 | | | | | | |
| ASAR | | | | LR | LR | 00 09 36.2 | |
| | comp=Z,177nm,19.3s,baz=196,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **46.69** | **163** | P | **P** | **23 53 10.6** | **-0.7** |
| | 0.7nm,1.0s,baz=306,slow=6.2,SNR=3.4 | | | | | | |
| VNDA | | | | LR | LR | 00 10 43.1 | |
| | comp=Z,126nm,20.4s,baz=278,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.14** | **78** | P | **P** | **23 53 15.5** | **-0.1** |
| | 3.2nm,1.0s,baz=230,slow=7.5,SNR=8.6 | | | | | | |
| WRA | | | | LR | LR | 00 12 20.3 | |
| | comp=Z,68nm,19.4s,baz=170,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **48.22** | **180** | P | **P** | **23 53 24.2** | **+0.7** |
| | 0.7nm,0.7s,baz=339,slow=0.1,SNR=5.6 | | | | | | |
| **BOSA** | **Boshof** | **49.40** | **266** | LR | LR | 00 11 01.6 | |
| | comp=Z,97nm,18.1s,baz=174,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.52** | **15** | P | **P** | **23 55 00.1** | **0.0** |
| | 1.2nm,0.8s,baz=216,slow=8.3,SNR=5.4 | | | | | | |
| CMAR | | | | LR | LR | 00 17 39.9 | |
| | comp=Z,20nm,20.5s,baz=180,slow=32 | | | | | | |
| **GEYT** | **Alibeck** | **83.10** | **339** | LR | LR | 00 28 06.7 | |
| | comp=Z,26nm,21.8s,baz=40,slow=31 | | | | | | |
| **MKAR** | **Makanchi Array** | **88.37** | **358** | P | **P** | **23 57 33.3** | **-1.2** |
| | 0.6nm,0.9s,baz=186,slow=2.9,SNR=2.7 | | | | | | |
| MKAR | | | | LR | LR | 00 34 49.4 | |
| | comp=Z,32nm,20.1s,baz=169,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **91.43** | **14** | P | **P** | **23 57 50.2** | **+1.3** |
| | 0.3nm,0.6s,baz=170,slow=4.4,SNR=2.8 | | | | | | |
| SONM | | | | LR | LR | 00 37 41.5 | |
| | comp=Z,17nm,20.0s,baz=204,slow=35 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **92.34** | **356** | P | P | 23 57 54.8 | +1.9 |
| | 0.2nm,0.3s,baz=190,slow=4.9,SNR=2.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **93.56** | **323** | P | **P** | **23 57 59.0** | **0.0** |
| | 0.4nm,0.8s,baz=123,slow=7.6,SNR=3.1 | | | | | | |
| BRTR | | | | LR | LR | 00 35 05.7 | |
| | comp=Z,13nm,19.6s,baz=124,slow=32 | | | | | | |
| **DBIC** | **Dimbokro** | **94.07** | **275** | LR | LR | 00 33 49.1 | |
| | comp=Z,42nm,20.7s,baz=106,slow=31 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **95.51** | **0** | LR | LR | 00 40 32.2 | |
| | comp=Z,19nm,18.1s,baz=250,slow=35 | | | | | | |

*DDA* ***13*** *23:48:11.7, 38.°30N×38.°84E, h7km, Md2.7*
*ISK* ***13*** *23:48:11.5, 38.°34N×38.°81E, h5km, MD2.7*
*ISCJB* ***13*** *23:48:12.6±0.5, 38.°32N±0.°03×38.°83E±0.°03, h5km±5km, Error ellipse: s-maj=5.5km s-min=3.8km az=174.4*
*CSEM* ***13*** *23:48:12.3±0.2, 38.°36N×38.°84E, h12km, MD2.7, Error ellipse: s-maj=5.3km s-min=3.4km az=173.0*

**ISC 13 23:48:12.4±1.0, 38.°32N±0.°04×38.°81E±0.°02, h10km±8km, n19, σ0°57/34, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ELZG** | **Elazig** | **0.23** | **39** | *i* P | **Pg** | **23 48 16.9** | **-0.3** |
| ELZG | | | | *i* S | **Sg** | **23 48 20.6** | **+0.1** |
| **ELZG** | **Elazig** | **0.23** | **39** | P | **Pg** | **23 48 16.9** | **-0.3** |
| ELZG | | | | S | **Sg** | **23 48 20.6** | **+0.1** |
| **SVRC** | **Sivrice-ELAZID** | **0.40** | **82** | *e*PG | **Pg** | **23 48 19.6** | **-0.7** |
| SVRC | | | | *e*SG | **Sg** | **23 48 26.6** | **+1.0** |
| **SVRC** | **Sivrice-ELAZID** | **0.40** | **82** | *e*Pg | **Pg** | **23 48 19.6** | **-0.7** |
| SVRC | | | | *e*Sg | **Sg** | **23 48 26.6** | **+1.0** |
| **AKCD** | **Akcadag** | **0.69** | **268** | *i* P | **Pg** | **23 48 25.7** | **-0.2** |
| AKCD | | | | *i* S | **Sb** | **23 48 36.1** | **-0.2** |
| **AKCD** | **Akcadag** | **0.69** | **268** | P | **Pg** | **23 48 25.7** | **-0.2** |
| AKCD | | | | S | **Sb** | **23 48 36.1** | **-0.2** |
| **PTK** | **Pertek** | **0.73** | **39** | *e*PG | **Pg** | **23 48 26.2** | **-0.3** |
| PTK | | | | *e*SG | **Sb** | **23 48 37.7** | **+0.2** |
| **PTK** | **Pertek** | **0.73** | **39** | *e*Pg | **Pg** | **23 48 26.3** | **-0.3** |
| **URFA** | **Urfa** | **0.88** | **179** | *e*PG | **Pb** | **23 48 29.8** | **0.0** |
| URFA | | | | *e*SG | **Sn** | **23 48 43.4** | **-0.3** |
| **URFA** | **Urfa** | **0.88** | **179** | *e*Pg | **Pb** | **23 48 29.8** | **0.0** |
| URFA | | | | *e*Sg | **Sn** | **23 48 43.4** | **-0.3** |
| **DARE** | **Darende-Malaty** | **1.07** | **284** | *e*PG | **Pn** | **23 48 33.4** | **-0.1** |
| DARE | | | | *e*SG | **Sn** | **23 48 48.4** | **0.0** |
| **DARE** | **Darende-Malaty** | **1.07** | **284** | *e*Pg | **Pn** | **23 48 33.4** | **-0.1** |
| DARE | | | | *e*Sg | **Sn** | **23 48 48.4** | **0.0** |
| **DYBB** | **Diyarbakir** | **1.11** | **109** | *e*PN | **Pn** | **23 48 34.6** | **+0.6** |
| DYBB | | | | *e*SN | **Sn** | **23 48 50.5** | **+1.0** |
| **DIY** | **Diyarbakir** | **1.20** | **110** | *e*Pn | **Pn** | **23 48 34.6** | **-0.6** |
| DIY | | | | *e*Sn | **Sb** | **23 48 50.5** | **-0.3** |
| **CUKAN** | **kangal_SIVAS** | **1.44** | **314** | P | **Pb** | **23 48 39.3** | **-0.1** |
| CUKAN | | | | S | **Sg** | **23 48 59.4** | **+0.5** |
| **KMRS** | **Kahramanmaras** | **1.71** | **242** | *e*PN | **Pb** | **23 48 43.4** | **-0.5** |
| **KMRS** | **Kahramanmaras** | **1.71** | **242** | *e*Pn | **Pb** | **23 48 43.4** | **-0.5** |
| **AYKD** | **Aykdinkavak** | **1.82** | **241** | P | **Pg** | **23 48 46.9** | **-0.5** |
| AYKD | | | | S | **Sg** | **23 49 12.7** | **+1.7** |
| **SARI** | **SarD1z-Kayseri** | **1.88** | **273** | *e*PN | **Pb** | **23 48 46.8** | **-0.1** |

*IDC* ***13*** *23:48:23.7±3.9, 6.°11S×146.°73E, h92km±34km, mb3.6/8, mb1 3.8/11, mb1mx3.6/39, mbtmp4.0/11, MS2.8/1, Ms1 2.8/1, ms1mx2.4/23, Error ellipse: s-maj=36.9km s-min=13.2km az=109.0*

**ISC 13 23:48:20.8±1.0, 6.°19S±0.°09×147.°0E±0.°2, h78km, n16, σ1°21/15, mb3.8/8, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COEN** | **Coen** | **8.59** | **206** | P | **Sn** | **23 52 00.1** | **+2.3** |
| | baz=3.8,SNR=4.0 | | | | | | |
| **CTA** | **Charters Tower** | **13.83** | **183** | P | **P** | **23 51 37.3** | **-2.0** |
| | 0.1nm,0.3s,baz=356,slow=13,SNR=2.5 | | | | | | |
| **QIS** | **Mount Isa** | **15.99** | **206** | P | P | 23 52 08.8 | +5.6 |
| | baz=4.3,SNR=6.0 | | | | | | |
| **SIJI** | **Sorong** | **16.57** | **288** | P | **Pn** | **23 52 08.4** | **-0.1** |
| | 0.9nm,0.3s,baz=100,slow=12,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.40** | **221** | P | **Pn** | **23 52 30.2** | **-0.6** |
| | 0.3nm,0.3s,baz=41,slow=12,SNR=19 | | | | | | |
| **GUMO** | **Guam** | **19.77** | **354** | LR | LR | 23 59 29.3 | |
| | comp=Z,28nm,18.6s,baz=102,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **21.47** | **215** | P | **P** | **23 53 04.1** | **+1.0** |
| | 1.0nm,0.5s,baz=37,slow=8.3,SNR=

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PBX** | **Punta Banda** | **1.03** | **299**⇓ | *e*P | **Pg** | **23 52 19.5** | **-0.5** |
| PBX | | | | *e*S | **Sg** | **23 52 33.5** | **0.0** |
| **CBX** | **Cerro Bola** | **1.35** | **321** | *i* P | **Pn** | **23 52 25.0** | **-0.2** |
| CBX | | | | *i* S | **Sb** | **23 52 41.9** | **-1.2** |
| **RMX** | **La Rumorosa** | **1.39** | **345** | IAML | | 23 52 48.2 | |
| | comp=N,313nm,0.2s | | | | | | |
| RMX | | | | ⇑*e* | | 23 52 48.2 | |
| **IBP** | **Imperial Bould** | **1.45** | **346** | P | **Pb** | **23 52 27.2** | **-0.1** |
| | baz=1.3 | | | | | | |
| IBP | | | | S | **Sb** | **23 52 46.2** | **+0.4** |
| | baz=1.3 | | | | | | |
| **MONP** | **Monument Peak** | **1.75** | **339** | P | **Pb** | **23 52 32.1** | **-0.4** |
| | baz=1.6 | | | | | | |
| MONP | | | | S | **Sb** | **23 52 54.7** | **+0.1** |
| | baz=1.6 | | | | | | |
| **109C** | **Camp Elliot, M** | **2.04** | **324** | S | **Sb** | **23 53 02.4** | **-0.2** |
| | baz=1.9 | | | | | | |
| **MURC** | **Murrieta** | **2.67** | **331** | Sb | **Sb** | **23 53 21.6** | **+0.6** |
| | baz=2.5 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **2.75** | **354** | P | **Pn** | **23 52 45.4** | **+0.9** |
| | baz=2.6 | | | | | | |

*CSEM* ***14*** *00:26:47.2, 38˚.21N×26˚.61W, h0km, ML2.6, After PDA*
**PDA 14 00:26:47.2±0.9, 38˚.21N×26˚.61W, h0km±6km, MD3.7, ML2.6, Error ellipse: s-maj=12.2km s-min=2.0km az=37.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ADH** | **Angra Heroismo** | **0.67** | **313** | *e*P | Pg | 00 26 58.5 | -1.5 |
| ADH | | | | *e*S | Sg | 00 27 07.7 | -0.9 |
| ADH | | | | A | A | 00 27 09.7 | |
| | 107nm,0.3s | | | | | | |
| **ADH** | **Angra Heroismo** | **0.67** | **313** | *e*P | Pg | 00 26 58.5 | -1.5 |
| ADH | | | | *e*S | Sg | 00 27 07.7 | -0.9 |
| **PSET** | **Sete Cidades** | **0.80** | **118** | *e*P | Pg | 00 27 00.6 | -2.0 |
| PSET | | | | *e*S | Sg | 00 27 11.0 | -2.0 |
| PSET | | | | A | A | 00 27 11.9 | |
| | 137nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **0.80** | **118** | *e*P | Pg | 00 27 00.6 | -2.0 |
| PSET | | | | *e*S | Sg | 00 27 11.0 | -2.0 |
| **PDA** | **Ponta Delgada** | **0.88** | **121** | *e*P | Pg | 00 27 01.6 | -2.4 |
| PDA | | | | *e*S | Sg | 00 27 13.1 | -2.3 |
| PDA | | | | A | A | 00 27 14.3 | |
| | 60nm,0.2s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.88** | **121** | *e*P | Pg | 00 27 01.6 | -2.4 |
| PDA | | | | *e*S | Sg | 00 27 13.1 | -2.3 |
| **BART** | **Pico Bartolome** | **1.22** | **110** | *e*P | Pn | 00 27 21.2 | +10 |
| **PMAN** | **Manadas** | **1.24** | **291** | *e*S | Sg | 00 27 21.6 | -5.4 |
| PMAN | | | | A | A | 00 27 24.7 | |
| | 21nm,0.3s | | | | | | |
| **PMAN** | **Manadas** | **1.24** | **291** | *e*S | Sg | 00 27 21.6 | -5.4 |
| **ROSA** | **Rosais** | **1.38** | **292** | *e*P | Pg | 00 27 08.9 | -4.8 |
| ROSA | | | | *e*S | Sg | 00 27 25.1 | -6.5 |
| ROSA | | | | A | A | 00 27 25.5 | |
| | 49nm,0.2s | | | | | | |
| **ROSA** | **Rosais** | **1.38** | **292** | *e*P | Pg | 00 27 08.9 | -4.8 |
| ROSA | | | | *e*S | Sg | 00 27 25.1 | -6.5 |

*IDC* ***14*** *00:29:29.8±1.8, 9˚.26S×125˚.23E, h0km, mb3.7/1, mb1 3.7/4, mb1mx3.5/23, mbtmp3.5/4, ML3.4/3, Error ellipse: s-maj=30.4km s-min=27.1km az=88.0*
*ISCJB* ***14*** *00:29:34.1±0.8, 9˚.50S±0˚.07×125˚.16E±0˚.07, h33km, mb3.7/1, Error ellipse: s-maj=11.0km s-min=8.9km az=149.1*
*AUST* ***14*** *00:29:37.8±0.0, 9˚.50S×125˚.05E, h60km, Error ellipse: s-maj=1.2km s-min=1.0km az=23.0*
**ISC 14 00:29:35.8±1.0, 9˚.49S±0˚.08×125˚.14E±0˚.07, h33km, n12, σ1§93/14, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **0.90** | **253** | P | **Pn** | **00 29 50.6** | **-1.7** |
| | baz=0.8,SNR=111 | | | | | | |
| **BATI** | **Baumata** | **1.62** | **244** | Pn | **Pn** | **00 30 02.6** | **+0.5** |
| | 11nm,0.3s,baz=149,slow=1.2,SNR=16 | | | | | | |
| BATI | | | | Sn | **Sb** | **00 30 26.7** | **+1.4** |
| | 21nm,0.3s,baz=99,slow=18,SNR=9.5 | | | | | | |
| **MTN** | **Manton Dam** | **6.76** | **120** | P | Pn | 00 31 16.6 | +3.8 |
| | baz=6.8,SNR=13 | | | | | | |
| **KNRA** | **Kununurra** | **7.09** | **150** | P | **Pn** | **00 31 20.4** | **+3.1** |
| | baz=7.2,SNR=7.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.57** | **177** | Pn | **Pn** | **00 31 38.6** | **+0.9** |
| | 0.4nm,0.3s,baz=3.8,slow=11,SNR=15 | | | | | | |
| FITZ | | | | Sn | **Sn** | **00 33 13.6** | **+0.2** |
| | 0.9nm,0.3s,baz=117,slow=18,SNR=9.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **8.57** | **177** | P | **Pn** | **00 31 40.1** | **+2.4** |
| | baz=8.6,SNR=12 | | | | | | |
| **SWI** | **Sorong** | **10.51** | **36** | P | **Pn** | **00 32 06.0** | **+1.7** |
| | baz=11,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.67** | **140** | Pn | **Pn** | **00 32 46.7** | **-0.8** |
| | 0.2nm,0.3s,baz=317,slow=15,SNR=15 | | | | | | |
| WRA | | | | Sn | **Sn** | **00 35 14.9** | **-3.4** |
| | 0.1nm,0.3s,baz=317,slow=27,SNR=4.6 | | | | | | |
| **WRKA** | **Warakurna** | **15.75** | **169** | P | **Pn** | **00 33 15.9** | **+0.5** |
| | baz=16,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **16.40** | **150** | Pn | **Pn** | **00 33 23.0** | **-0.6** |
| | 0.1nm,0.3s,baz=319,slow=11,SNR=7.2 | | | | | | |
| **LEM** | **Lembang** | **17.55** | **277** | P | **Pn** | **00 33 37.8** | **-0.4** |
| | baz=18,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.80** | **330** | P | **P** | **00 40 28.6** | **-1.9** |
| | 0.5nm,0.6s,baz=133,slow=8.1,SNR=5.3 | | | | | | |

*ISCJB* ***14*** *00:43:09.3±0.8, 13˚.48N±0˚.09×90˚.38W±0˚.06, h65km±10km, mb3.8/2, Error ellipse: s-maj=16.2km s-min=5.0km az=30.2*
*CASC* ***14*** *00:43:10.0±2.5, 13˚.49N×90˚.38W, h37km±155km, MD3.7, ML3.9*
*IDC* ***14*** *00:43:12.8±2.7, 13˚.92N×90˚.03W, h68km±29km, mb3.6/2, mb1 3.7/5, mb1mx3.3/30, mbtmp3.7/5, ML3.8/3, MS3.3/1, Ms1 3.3/1, ms1mx2.5/26, Error ellipse: s-maj=52.8km s-min=24.7km az=34.0*
*MEX* ***14*** *00:43:20.6±0.5, 13˚.74N×91˚.39W, h96km±21km, MD3.9*
**ISC 14 00:43:09.7±1.4, 13˚.49N±0˚.09×90˚.37W±0˚.06, h55km±13km, n30, σ1§40/44, 4C-4D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SBLS** | **San Blas** | **0.81** | **64**⇓ | *i* P | **Pn** | **00 43 25.3** | **0.0** |
| SBLS | | | | *i* P | **Pn** | **00 43 25.3** | **0.0** |
| SBLS | | | | *e*S | **Sn** | **00 43 36.0** | **-0.8** |
| **RTR** | **El Retiro** | **0.81** | **60**⇓ | *i* P | **Pn** | **00 43 25.6** | **+0.3** |
| **SNJE** | **San Jose** | **0.83** | **63**⇓ | *i* P | **Pn** | **00 43 25.7** | **+0.1** |
| **RBDL** | **Robledal** | **0.91** | **47** | *e*P | **Pn** | **00 43 26.7** | **+0.1** |
| **PCG** | **Pacaya** | **0.93** | **346**⇓ | *e*P | **Pn** | **00 43 27.5** | **+0.5** |
| PCG | | | | *e*S | **Sn** | **00 43 38.8** | **-0.8** |
| **FUG** | **Fuego 3** | **1.06** | **334** | *e*P | **Pn** | **00 43 28.6** | **0.0** |
| **BOQS** | **Boqueron** | **1.09** | **77**⇑ | *e*P | **Pn** | **00 43 29.6** | **+0.6** |
| BOQS | | | | *i* P | **Pn** | **00 43 30.0** | **+1.0** |
| BOQS | | | | *e*S | **Sn** | **00 43 43.5** | **+0.2** |
| BOQS | | | | *e*S | **Sn** | **00 43 44.5** | **+1.3** |
| **NBG** | **Las Nubes** | **1.09** | **1** | *e*P | **Pn** | **00 43 30.4** | **+1.2** |
| NBG | | | | *e*S | **Sn** | **00 43 46.8** | **+3.3** |
| **SNET** | **Serv Nac Est T** | **1.13** | **80** | *e*P | **Pn** | **00 43 29.9** | **+0.5** |
| SNET | | | | *i* P | **Pn** | **00 43 30.7** | **+1.3** |
| SNET | | | | *e*S | **Sn** | **00 43 44.9** | **+0.9** |
| SNET | | | | *e*S | **Sn** | **00 43 45.0** | **+1.1** |
| SNET | | | | AML | AML | 00 43 48.1 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **LFU** | **La Fuente** | **1.25** | **78** | *e*P | **Pn** | **00 43 31.7** | **+0.6** |
| **LFRS** | **El Faro** | **1.28** | **84** | *e*P | **Pn** | **00 43 32.0** | **+0.5** |
| **LBRS** | **Las Brisas** | **1.31** | **79**⇑ | *e*P | **Pn** | **00 43 32.6** | **+0.7** |
| **MTO2** | **Montecristo 2** | **1.34** | **47** | *e*P | **Pn** | **00 43 32.2** | **-0.1** |
| **JAT** | **Jato** | **1.48** | **304**⇑ | *e*P | **Pn** | **00 43 34.6** | **+0.5** |
| **SNVI** | **San Vicente** | **1.50** | **85** | *e*P | **Pn** | **00 43 34.7** | **+0.2** |
| SNVI | | | | *e*P | **Pn** | **00 43 35.4** | **+1.0** |
| **MRL** | **Marmol** | **1.70** | **23**⇑ | *i* P | **Pn** | **00 43 37.8** | **+0.5** |
| **CAHU** | **Cacacuatique** | **2.12** | **82** | *e*P | **Pn** | **00 43 43.1** | **+0.1** |
| **CNCH** | **Conchagua** | **2.48** | **95** | *e*P | **Pn** | **00 43 48.6** | **+0.8** |
| **TGUH** | **Tegucigalpa,Un** | **3.06** | **79** | *e*P | **Pn** | **00 43 54.7** | **-0.9** |
| **CCIG** | **Comitan** | **3.26** | **329** | *e*P | **Pn** | **00 44 00.3** | **+1.7** |
| CCIG | | | | *i* S | **Sn** | **00 44 31.4** | **-4.9** |
| **PCIG** | | **3.53** | **309** | *e*P | **Pn** | **00 44 00.5** | **-1.6** |
| PCIG | | | | *i* S | Sn | 00 44 31.2 | -11 |
| **MOMN** | **Momotombo** | **3.89** | **106** | *e*P | **Pn** | **00 44 08.1** | **+1.1** |
| **COPN** | **Copaltepe** | **3.91** | **109** | *e*P | **Pn** | **00 44 07.6** | **+0.3** |
| COPN | | | | *e*S | **Sn** | **00 44 50.4** | **-1.6** |
| **CMIG** | **Matias Romero** | **5.64** | **310** | P | **Pn** | **00 44 32.4** | **+1.3** |
| | comp=Z,2.2nm,0.3s,baz=135,slow=10.0,SNR=18 | | | | | | |
| CMIG | | | | S | **Sn** | **00 45 35.1** | **+0.6** |
| | comp=Z,2.9nm,0.3s,baz=54,slow=16,SNR=4.7 | | | | | | |
| **JTS** | **JuntasAbangare** | **6.18** | **120** | P | Pn | 00 44 41.7 | +3.2 |
| | comp=Z,1.1nm,0.3s,baz=306,slow=22,SNR=8.6 | | | | | | |
| JTS | | | | S | **Sn** | **00 45 45.7** | **-2.3** |
| | comp=Z,0.5nm,0.3s,baz=277,slow=17,SNR=2.2 | | | | | | |
| **TEIG** | **Tepich** | **7.00** | **16** | P | **Pn** | **00 44 51.0** | **+1.3** |
| | comp=Z,0.4nm,0.3s,baz=0.0,slow=20,SNR=4.0 | | | | | | |
| TEIG | | | | LR | LR | 00 47 05.8 | |
| | comp=Z,276nm,21.8s,baz=322,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **20.02** | **324** | P | Pn | 00 47 40.4 | +0.1 |
| | comp=Z,0.1nm,0.3s,baz=141,slow=12,SNR=5.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.07** | **320** | P | **P** | **00 49 59.1** | **+1.3** |
| | comp=Z,0.7nm,0.7s,baz=122,slow=8.6,SNR=4.9 | | | | | | |
| NVAR | | | | PcP | **PcP** | **00 52 29.3** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=108,slow=5.8,SNR=3.7 | | | | | | |
| **SCHQ** | **Schefferville** | **45.17** | **19** | P | **P** | **00 51 18.0** | **-2.9** |
| | comp=Z,2.6nm,0.8s,baz=204,slow=4.3,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **136.80** | **255** | PKP | **PKPdf** | **01 02 27.7** | **+0.7** |
| | comp=Z,0.2nm,0.9s,baz=90,slow=3.3,SNR=2.9 | | | | | | |

*CSEM* ***14*** *00:44:33.1, 42˚.46N×13˚.40E, h8km, MD1.4/3, After ROM*
**ROM 14 00:44:33.1±0.1, 42˚.46N×13˚.40E, h8km, Md1.4/3, Ml0.7/1, Error ellipse: s-maj=1.5km s-min=1.0km az=80.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T0104** | **Madonna delle** | **0.11** | **206** | Pg | Pg | 00 44 36.0 | +0.3 |
| T0104 | | | | Sg | Sg | 00 44 38.0 | +0.5 |
| **RM32** | **Poggio Cancell** | **0.14** | **325** | Pg | Pg | 00 44 36.6 | +0.3 |
| RM32 | | | | Sg | Sg | 00 44 39.1 | +0.6 |
| **RM32** | **Poggio Cancell** | **0.14** | **325** | Pg | Pg | 00 44 36.6 | +0.3 |
| RM32 | | | | Sg | Sg | 00 44 39.1 | +0.6 |
| **RM33** | **Pellescritta (** | **0.15** | **291** | Pg | Pg | 00 44 36.6 | +0.2 |
| RM33 | | | | Sg | Sg | 00 44 39.2 | +0.5 |
| **RM33** | **Pellescritta (** | **0.15** | **291** | Pg | Pg | 00 44 36.6 | +0.2 |
| RM33 | | | | Sg | Sg | 00 44 39.2 | +0.5 |
| **T0106** | **Roio Piano** | **0.15** | **185** | Pg | Pg | 00 44 36.7 | +0.2 |
| T0106 | | | | Sg | Sg | 00 44 38.9 | +0.1 |
| **SMA1** | **SAN MARTINO** | **0.18** | **344** | Pg | Pg | 00 44 38.1 | +1.1 |
| SMA1 | | | | Sg | Sg | 00 44 41.0 | +1.3 |
| **SMA1** | **SAN MARTINO** | **0.18** | **344** | Pg | Pg | 00 44 38.1 | +1.1 |
| SMA1 | | | | Sg | Sg | 00 44 41.0 | +1.3 |
| **TERO** | **Teramo** | **0.22** | **42** | Pg | Pg | 00 44 37.9 | +0.2 |
| TERO | | | | Sg | Sg | 00 44 41.7 | +0.9 |
| **TERO** | **Teramo** | **0.22** | **42** | Pg | Pg | 00 44 37.9 | +0.2 |
| TERO | | | | Sg | Sg | 00 44 41.7 | +0.9 |
| **FAGN** | **Fagnano** | **0.23** | **145** | Pg | Pg | 00 44 39.0 | +1.1 |
| FAGN | | | | Sg | Sg | 00 44 43.2 | +2.1 |
| | 47nm,1.6s | | | | | | |
| **FAGN** | **Fagnano** | **0.23** | **145** | Pg | Pg | 00 44 39.0 | +1.1 |
| FAGN | | | | Sg | Sg | 00 44 43.2 | +2.1 |
| | 47nm,1.6s | | | | | | |

*CSEM* ***14*** *00:45:27.1, 42˚.45N×13˚.37E, h11km, MD2.7/26, After ROM*
**ROM 14 00:45:27.1±0.1, 42˚.45N×13˚.37E, h11km, Md2.7/26, Ml2.5/21, Error ellipse: s-maj=1.1km s-min=0.9km az=86.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **T0104** | **Madonna delle** | **0.10** | **195** | Pg | Pg | 00 45 30.4 | +0.6 |
| T0104 | | | | Sg | Sg | 00 45 32.4 | +0.6 |
| **RM33** | **Pellescritta (** | **0.13** | **296** | Pg | Pg | 00 45 31.0 | +0.6 |
| RM33 | | | | Sg | Sg | 00 45 33.6 | +0.9 |
| | 3μm,0.4s | | | | | | |
| **RM33** | **Pellescritta (** | **0.13** | **296** | Pg | Pg | 00 45 31.0 | +0.6 |
| RM33 | | | | Sg | Sg | 00 45 33.6 | +0.9 |
| | 3μm,0.4s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.13** | **334** | Pg | Pg | 00 45 31.0 | +0.5 |
| RM32 | | | | Sg | Sg | 00 45 33.5 | +0.7 |
| | 2μm,0.2s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.13** | **334** | Pg | Pg | 00 45 31.0 | +0.5 |
| RM32 | | | | Sg | Sg | 00 45 33.5 | +0.7 |
| | 2μm,0.2s | | | | | | |
| **T0106** | **Roio Piano** | **0.14** | **176** | Pg | Pg | 00 45 31.1 | +0.5 |
| **SMA1** | **SAN MARTINO** | **0.18** | **352** | Pg | Pg | 00 45 31.6 | +0.4 |
| SMA1 | | | | Sg | Sg | 00 45 34.5 | +0.5 |
| | 949nm,0.4s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.18** | **352** | Pg | Pg | 00 45 31.6 | +0.4 |
| SMA1 | | | | Sg | Sg | 00 45 34.5 | +0.5 |
| | 949nm,0.4s | | | | | | |
| **TERO** | **Teramo** | **0.24** | **45** | Pg | Pg | 00 45 32.3 | +0.1 |
| TERO | | | | Sg | Sg | 00 45 36.0 | +0.3 |
| | 968nm,0.4s | | | | | | |
| **TERO** | **Teramo** | **0.24** | **45** | Pg | Pg | 00 45 32.3 | +0.1 |
| TERO | | | | Sg | Sg | 00 45 36.0 | +0.3 |
| | 968nm,0.4s | | | | | | |
| **FAGN** | **Fagnano** | **0.24** | **140** | Pg | Pg | 00 45 32.3 | +0.1 |
| FAGN | | | | Sg | Sg | 00 45 37.8 | +2.1 |
| | 2μm,0.3s | | | | | | |
| **FAGN** | **Fagnano** | **0.24** | **140** | Pg | Pg | 00 45 32.3 | +0.1 |
| FAGN | | | | Sg | Sg | 00 45 37.8 | +2.1 |
| | 2μm,0.3s | | | | | | |
| **FIAM** | **Fiamignano** | **0.26** | **226** | Pg | Pg | 00 45 33.1 | +0.5 |
| FIAM | | | | Sg | Sg | 00 45 37.3 | +0.9 |
| | 518nm,0.5s | | | | | | |
| **FIAM** | **Fiamignano** | **0.26** | **226** | Pg | Pg | 00 45 33.1 | +0.5 |
| FIAM | | | | Sg | Sg | 00 45 37.3 | +0.9 |
| | 518nm,0.5s | | | | | | |
| **LNSS** | **Leonessa** | **0.29** | **302** | Pg | Pg | 00 45 33.7 | +0.6 |
| LNSS | | | | Sg | Sb | 00 45 38.4 | -1.0 |
| | 1μm,0.5s | | | | | | |
| **LNSS** | **Leonessa** | **0.29** | **302** | Pg | Pg | 00 45 33.7 | +0.6 |
| LNSS | | | | Sg | Sb | 00 45 38.4 | -1.0 |
| | 1μm,0.5s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.35** | **99** | Pg | Pg | 00 45 34.4 | +0.1 |
| VCEL | | | | Sg | Sb | 00 45 40.7 | -0.6 |
| | 1μm,0.4s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.35** | **99** | Pg | Pg | 00 45 34.4 | +0.1 |
| VCEL | | | | Sg | Sb | 00 45 40.7 | -0.6 |
| | 1μm,0.4s | | | | | | |
| **PTQR** | **Pietraquaria** | **0.43** | **177** | Pg | Pg | 00 45 35.5 | -0.2 |
| PTQR | | | | Sg | Sg | 00 45 42.1 | +0.6 |
| | 66nm,0.4s | | | | | | |
| **PTQR** | **Pietraquaria** | **0.43** | **177** | Pg | Pg | 00 45 35.5 | -0.2 |
| PTQR | | | | Sg | Sg | 00 45 42.1 | +0.6 |
| | 66nm,0.4s | | | | | | |
| **MNS** | **Montasola** | **0.52** | **263** | Pg | Pg | 00 45 37.2 | 0.0 |
| MNS | | | | Sg | Sg | 00 45 44.8 | +0.7 |
| | 161nm,0.4s | | | | | | |
| **MNS** | **Montasola** | **0.52** | **263** | Pg | Pg | 00 45 37.2 | 0.0 |
| MNS | | | | Sg | Sg | 00 45 44.8 | +0.7 |
| | 161nm,0.4s | | | | | | |
| **OFFI** | **Offida** | **0.54** | **26** | Pg | Pb | 00 45 38.5 | -0.1 |
| | 1μm,0.3s | | | | | | |
| **OFFI** | **Offida** | **0.54** | **26** | Pg | Pb | 00 45 38.5 | -0.1 |
| | 1μm,0.3s | | | | | | |
| **TRTR** | **Tortoreto Alta** | **0.54** | **48** | Pg | Pb | 00 45 38.5 | -0.1 |
| **TRTR** | **Tortoreto Alta** | **0.54** | **48** | Pg | Pb | 00 45 38.5 | -0.1 |
| **INTR** | **Introdacqua** | **0.59** | **138** | Pg | Pg | 00 45 38.4 | -0.4 |
| INTR | | | | Sg | Sb | 00 45 47.8 | -0.3 |
| | 250nm,0.4s | | | | | | |
| **INTR** | **Introdacqua** | **0.59** | **138** | Pg | Pg | 00 45 38.4 | -0.4 |
| INTR | | | | Sg | Sb | 00 45 47.8 | -0.3 |
| | 250nm,0.4s | | | | | | |
| **CESX** | **Cesi** | **0.61** | **285** | Pg | Pg | 00 45 38.9 | 0.0 |
| | 221nm,0.2s | | | | | | |
| **CESX** | **Cesi** | **0.61** | **285** | Pg | Pg | 00 45 38.9 | 0.0 |
| | 221nm,0.2s | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.61** | **162** | Pg | Pg | 00 45 39.0 | -0.1 |
| | 117nm,0.7s | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.61** | **162** | Pg | Pg | 00 45 39.0 | -0.1 |
| | 117nm,0.7s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.62** | **340** | Pg | Pg | 00 45 39.1 | -0.1 |
| **FDMO** | **Fiordimonte** | **0.62** | **340** | Pg | Pg | 00 45 39.1 | -0.1 |
| **MTCE** | **Montecelio** | **0.63** | **228** | Pg | Pg | 00 45 39.6 | +0.2 |
| | 159nm,0.7s | | | | | | |
| **MTCE** | **Montecelio** | **0.63** | **228** | Pg | Pg | 00 45 39.6 | +0.2 |
| | 159nm,0.7s | | | | | | |
| **CESI** | **CESI - Serrava** | **0.65** | **328** | Pg | Pg | 00 45 39.8 | -0.1 |
| | 33nm,0.3s | | | | | | |
| **CESI** | **CESI - Serrava** | **0.65** | **328** | Pg | Pg | 00 45 39.8 | -0.1 |
| | 33nm,0.3s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.74** | **34** | Pg | Pg | 00 45 39.5 | -2.0 |
| | 378nm,0.4s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.74** | **34** | Pg | Pg | 00 45 39.5 | -2.0 |
| | 378nm,0.4s | | | | | | |
| **POFI** | **Posta Fibreno** | **0.78** | **161** | Pg | Pg | 00 45 41.9 | -0.3 |
| | 62nm,0.6s | | | | | | |
| **POFI** | **Posta Fibreno** | **0.78** | **161** | Pg | Pg | 00 45 41.9 | -0.3 |
| | 62nm,0.6s | | | | | | |
| **RMP** | **Rome, Mte Porz** | **0.81** | **218** | Pg | Pg | 00 45 43.0 | +0.2 |
| | 245nm,0.7s | | | | | | |
| **RMP** | **Rome, Mte Porz** | **0.81** | **218** | Pg | Pg | 00 45 43.0 | +0.2 |
| | 245nm,0.7s | | | | | | |
| **SDI** | **San Donato** | **0.81** | **156** | Pg | Pg | 00 45 42.3 | -0.6 |
| | 64nm,0.4s | | | | | | |
| **SDI** | **San Donato** | **0.81** | **156** | Pg | Pg | 00 45 42.3 | -0.6 |
| | 64nm,0.4s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.86** | **339** | Pg | Pg | 00 45 43.3 | -0.5 |
| | 34nm,0.4s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.86** | **339** | Pg | Pg | 00 45 43.3 | -0.5 |
| | 34nm,0.4s | | | | | | |
| **CING** | **Cingoli** | **0.93** | **352** | Pg | Pg | 00 45 44.8 | -0.4 |
| | 83nm,0.3s | | | | | | |
| **CING** | **Cingoli** | **0.93** | **352** | Pg | Pg | 00 45 44.8 | -0.4 |
| | 83nm,0.3s | | | | | | |
| **MIDA** | **Miranda** | **1.04** | **141** | Pg | Pg | 00 45 45.8 | -1.5 |
| | 57nm,0.4s | | | | | | |
| **MIDA** | **Miranda** | **1.04** | **141** | Pg | Pg | 00 45 45.8 | -1.5 |
| | 57nm,0.4s | | | | | | |

*IDC* ***14*** *00:59:01.6±1.3, 22˚.60S×173˚.41E, h0km, mb4.1/6, mb1 4.2/7, mb1mx4.0/31, mbtmp4.1/7, ML3.6/1, MS3.5/10, Ms1 3.5/10, ms1mx3.4/22, Error ellipse: s-maj=35.3km s-min=29.2km az=164.0*
*ISCJB* ***14*** *00:59:06.9±0.8, 22˚.6S±0˚.2×173˚.21E±0˚.09, h44km, mb4.1/6, MS3.6/8, Error ellipse: s-maj=25.0km s-min=10.3km az=14.2*
**ISC 14 00:59:07.3±0.9, 22˚.5S±0˚.2×173˚.3E±0˚.1, h44km, n32, σ0§74/17, mb4.2/6, MS3.5/8, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **6.40** | **272** | Pn | **Pn** | **01 00 40.0** | **+0.8** |
| | 1.4nm,0.3s,baz=179,slow=8.9,SNR=22 | | | | | | |
| DZM | | | | Sn | **Sn** | **01 01 50.4** | **-0.6** |
| | 2.4nm,0.3s,baz=180,slow=20,SNR=2.8 | | | | | | |
| **URZ** | **Urewera** | **16.07** | **169** | LR | LR | 01 07 38.7 | |
| | comp=Z,234nm,21.1s,baz=330,slow=32 | | | | | | |
| **AFI** | **Afiamalu** | **16.49** | **61** | LR | LR | 01 08 16.8 | |
| | comp=Z,165nm,18.6s,baz=72,slow=34 | | | | | | |
| **RPZ** | **Rata Peaks** | **21.28** | **185** | LR | LR | 01 11 05.8 | |
| | comp=Z,167nm,20.1s,baz=23,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **36.23** | **260** | P | **P** | **01 06 06.4** | **0.0** |
| | 2.1nm,1.0s,baz=85,slow=9.1,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.38** | **267** | P | **P** | **01 06 06.6** | **-1.1** |
| | 0.7nm,0.8s,baz=97,slow=8.6,SNR=6.9 | | | | | | |
| WRA | | | | LR | LR | 01 21 26.5 | |
| | comp=Z,125nm,18.8s,baz=145,slow=37 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.22** | **350** | T | T | 01 50 28.4 | |
| | baz=170 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.23** | **350** | T | T | 01 50 41.1 | |
| | baz=170 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.24** | **350** | T | T | 01 50 46.8 | |
| | baz=170 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.40** | **351** | T | T | 01 52 14.6 | |
| | baz=172 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.40** | **351** | T | T | 01 52 12.3 | |
| | baz=172 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.41** | **351** | T | T | 01 52 15.0 | |
| | baz=172 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **44.81** | **267** | P | **P** | **01 07 18.5** | **+1.2** |
| | 4.5nm,0.9s,baz=89,slow=5.5,SNR=7.7 | | | | | | |
| **VNDA** | **Vanda** | **55.38** | **183** | LR | LR | 01 28 57.5 | |
| | comp=Z,41nm,20.5s,baz=355,slow=32 | | | | | | |
| **LEM** | **Lembang** | **65.01** | **273** | LR | LR | 01 38 21.1 | |
| | comp=Z,64nm,19.1s,baz=342,slow=36 | | | | | | |
| **QSPA** | **South Pole Qui** | **67.60** | **180** | P | **P** | **01 09 59.7** | **+0.4** |
| | 2.7nm,1.0s,baz=73,slow=0.9,SNR=5.0 | | | | | | |
| **KSRS** | **Korea Array** | **73.35** | **324** | P | P | 01 10 38.1 | +3.7 |
| | 1.4nm,0.7s,baz=169,slow=7.3,SNR=5.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.48** | **350** | LR | LR | 01 40 07.8 | |
| | comp=Z,28nm,19.2s,baz=122,slow=32 | | | | | | |
| **MAW** | **Mawson** | **76.88** | **202** | LR | LR | 01 41 19.5 | |
| | comp=Z,24nm,19.9s,baz=59,slow=33 | | | | | | |
| **SNAA** | **Sanae** | **86.08** | **181** | P | **P** | **01 11 42.5** | **-0.6** |
| **VNA3** | **Neumayer Olymp** | **86.52** | **179** | P | **P** | **01 11 44.7** | **-0.6** |
| **VNA2** | **Neumayer--Watz** | **86.86** | **180** | P | **P** | **01 11 46.6** | **-0.3** |
| | baz=171,slow=4.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.13** | **179** | P | **P** | **01 11 48.4** | **+0.2** |
| **SONM** | **Songino Array** | **92.11** | **322** | LR | LR | 01 53 26.1 | |
| | comp=Z,12nm,18.8s,baz=96,slow=35 | | | | | | |
| **ILAR** | **Eielson Array** | **92.21** | **16** | P | **P** | **01 12 12.2** | **+0.2** |
| | 0.4nm,0.2s,baz=229,slow=6.7,SNR=5.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **94.97** | **60** | LR | LR | 01 49 37.2 | |
| | comp=Z,16nm,18.1s,baz=0.0,slow=32 | | | | | | |
| **DPC** | **Dobruska-Polom** | **146.86** | **333** | *e*PKP | **PKPab** | **01 18 45.7** | **-0.4** |
| DPC | | | | *ex* | x | 01 18 49.0 | |
| **BRG** | **Berggiesshubel** | **147.41** | **336** | *e*P | **PKPbc** | **01 18 46.2** | **0.0** |
| | 13nm,1.7s | | | | | | |
| **PRU** | **Pruhonice** | **147.87** | **334** | *e*PKP | **PKPab** | **01 18 49.4** | **-0.6** |
| PRU | | | | *ex* | x | 01 18 52.6 | |
| **NKC** | **Novy Kostel** | **148.49** | **336** | *e*PKP | **PKPab** | **01 18 51.4** | **-1.2** |
| NKC | | | | *ex* | x | 01 18 53.6 | |
| **KHC** | **Kasperske Hory** | **148.94** | **334** | *e*PKP | **PKPbc** | **01 18 51.1** | **+0.8** |
| KHC | | | | *ex* | x | 01 18 56.0 | |
| **GERES** | **GERESS Array B** | **149.11** | **333** | PKPbc | **PKPbc** | **01 18 51.2** | **+0.4** |
| | 2.4nm,1.0s,baz=28,slow=4.4,SNR=9.2 | | | | | | |

*AUST* ***14*** *01:53:51.2, 3˚.96S×134˚

*DDA* ***14*** *02:03:19.4, 37°.21N × 28°.69E, h7km, Md2.6*
*ISK* ***14*** *02:03:19.2, 36°.85N × 28°.20E, h30km, MD2.6*
*ISCJB* ***14*** *02:03:20.6±0.6, 37°.24N±0°.03 × 28°.73E±0°.04, h7km±7km, Error ellipse: s-maj=5.8km s-min=5.5km az=13.6*
*CSEM* ***14*** *02:03:20.4±0.4, 37°.25N × 28°.76E, h15km, MD2.6, Error ellipse: s-maj=8.8km s-min=8.6km az=127.0*

**ISC 14 02:03:19.4±1.4, 37°.24N±0°.03 × 28°.71E±0°.03, h9km±12km, n17, σ1°12/28, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.35** | **253** | *e*PG | **Pb** | **02 03 27.3** | **-0.7** |
| YER | | | | *e*SG | **Sb** | **02 03 32.6** | **-1.0** |
| **YER** | **Yerkesik** | **0.35** | **253** | *e*Pg | **Pb** | **02 03 27.3** | **-0.7** |
| YER | | | | *e*Sg | **Sb** | **02 03 32.7** | **-1.0** |
| **TURN** | **Turunc** | **0.37** | **193** | *i* P | **Pn** | **02 03 30.7** | **-0.3** |
| **TURN** | **Turunc** | **0.37** | **193** | P | **Pn** | **02 03 30.7** | **-0.3** |
| TURN | | | | S | **Sb** | **02 03 38.8** | **+4.7** |
| **DALY** | **Dalyan (Mu¨la** | **0.42** | **186** | *e*PG | **Pg** | **02 03 27.9** | **+0.2** |
| DALY | | | | *e*SG | **Sb** | **02 03 35.1** | **-0.4** |
| **DALY** | **Dalyan (Mu¨la** | **0.42** | **186** | *e*Pg | **Pg** | **02 03 27.9** | **+0.2** |
| DALY | | | | *e*Sg | **Sb** | **02 03 35.1** | **-0.4** |
| **DNZL** | **Cakiroluk** | **0.53** | **31** | *i* P | **Pg** | **02 03 30.0** | **+0.3** |
| DNZL | | | | *i* S | **Sb** | **02 03 38.9** | **+0.1** |
| **DNZL** | **Cakiroluk** | **0.53** | **31** | P | **Pg** | **02 03 30.0** | **+0.3** |
| DNZL | | | | S | **Sb** | **02 03 38.9** | **+0.1** |
| **FETY** | **Fethiye** | **0.67** | **153** | *e*PG | **Pb** | **02 03 33.6** | **+0.2** |
| FETY | | | | *e*SG | **Sn** | **02 03 44.3** | **-1.6** |
| **FETY** | **Fethiye** | **0.67** | **153** | *e*Pg | **Pb** | **02 03 33.6** | **+0.2** |
| **GOLH** | **Golhisar** | **0.68** | **90** | *i* P | **Pg** | **02 03 32.0** | **-0.6** |
| GOLH | | | | *i* S | **Sb** | **02 03 43.6** | **+0.4** |
| **GOLH** | **Golhisar** | **0.68** | **90** | P | **Pg** | **02 03 32.0** | **-0.6** |
| GOLH | | | | S | **Sb** | **02 03 43.6** | **+0.4** |
| **AYDN** | **Tasoluk** | **0.78** | **303** | *i* P | **Pn** | **02 03 37.2** | **+0.5** |
| AYDN | | | | *i* S | **Sn** | **02 03 49.2** | **+0.6** |
| **AYDN** | **Tasoluk** | **0.78** | **303** | P | **Pn** | **02 03 37.2** | **+0.5** |
| AYDN | | | | S | **Sn** | **02 03 49.2** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.96** | **318** | *e*PN | **Pn** | **02 03 39.2** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.96** | **318** | *e*Pn | **Pn** | **02 03 39.2** | **0.0** |
| **BODT** | **Bodrum** | **1.13** | **261** | *e*PG | Pb | 02 03 34.1 | -7.0 |

**IDC 14 02:17:22.8±3.8, 18°.17S × 175°.12W, h0km, mb4.4/2, mb1 4.7/2, mb1mx3.7/28, mbtmp4.4/2, Error ellipse: s-maj=215.2km s-min=50.1km az=149.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **47.66** | **259** | P | P | 02 26 01.3 | -0.1 |
| | 2.4nm,0.4s,baz=98,slow=8.7,SNR=85 | | | | | | |
| **ASAR** | **Alice Springs** | **47.73** | **254** | P | P | 02 26 01.8 | -0.2 |
| | 2.7nm,0.5s,baz=86,slow=8.1,SNR=58 | | | | | | |
| ASAR | | | | PcP | PcP | 02 27 31.1 | -0.2 |
| | 0.2nm,0.4s,baz=106,slow=4.6,SNR=2.8 | | | | | | |
| **GERES** | **GERESS Array B** | **148.57** | **349** | PKPbc | PKPbc | 02 37 11.1 | -0.7 |
| | 0.5nm,0.6s,baz=29,slow=3.0,SNR=5.0 | | | | | | |

*NEIC* ***14*** *02:19:27.9±1.9, 37°.73N × 73°.24E, h10km, mb4.5/2, Error ellipse: s-maj=28.4km s-min=18.6km az=163.0*
*IDC* ***14*** *02:19:28.3±1.8, 38°.00N × 73°.68E, h0km, mb4.0/7, mb1 4.2/13, mb1mx3.8/44, mbtmp4.0/13, ML3.8/6, MS3.1/3, Ms1 3.0/3, ms1mx2.5/38, Error ellipse: s-maj=35.7km s-min=21.3km az=136.0*
*ISCJB* ***14*** *02:19:41.6±0.3, 38°.62N±0°.03 × 73°.48E±0°.05, h107km, mb3.9/10, Error ellipse: s-maj=6.0km s-min=3.7km az=2.3*
*NNC* ***14*** *02:19:44.9±0.9, 38°.80N × 73°.28E, h114km±5km, mb3.7, mpv4.4, Error ellipse: s-maj=8.8km s-min=4.6km az=141.0*
*MOS* ***14*** *02:19:44.8±0.9, 38°.89N × 73°.31E, h109km, mb4.0/8, Error ellipse: s-maj=14.9km s-min=5.4km az=93.4*
*BJI* ***14*** *02:19:46.6, 38°.60N × 73°.95E, h144km*

**ISC 14 02:19:43.6±0.6, 38°.63N±0°.05 × 73°.44E±0°.06, h107km, n93, σ1°60/91, mb4.0/10, 9C-15D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **1.38** | **2** | ⇑P | **Pn** | **02 20 08.7** | **-0.4** |
| | 176nm,0.5s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **02 20 27.7** | **-0.7** |
| | 1μm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.38** | **2** | PN | **Pn** | **02 20 08.7** | **-0.4** |
| SFK | | | | | | 02 20 27.6 | |
| SFK | | | | pmax | pmax | | |
| | comp=Z,230nm,0.5s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,1μm,0.4s | | | | | | |
| **KSH** | **Kashi** | **2.16** | **65** | ⇑*i*P | Pn | 02 20 13.1 | -5.5 |
| KSH | | | | S | Sn | 02 20 33.8 | -12 |
| KSH | | | | SMN | | | |
| | comp=N,2μm,0.2s | | | | | | |
| KSH | | | | SME | | | |
| | comp=N,2μm,0.2s | | | | | | |
| **AML** | **Almayashu** | **3.50** | **3** | P | **Pn** | **02 20 36.4** | **-0.2** |
| | SNR=432 | | | | | | |
| **DZET** | **Dzherino** | **3.61** | **274** | ⇑P | **Pn** | **02 20 37.4** | **-0.4** |
| | comp=N,32nm,0.4s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **02 21 18.7** | **-1.0** |
| | comp=N,442nm,0.5s | | | | | | |
| **DZET** | **Dzherino** | **3.61** | **274** | PN | **Pn** | **02 20 37.4** | **-0.4** |
| DZET | | | | | | 02 21 19.4 | |
| DZET | | | | pmax | pmax | | |
| | comp=Z,32nm,0.4s | | | | | | |
| DZET | | | | smax | smax | | |
| | comp=N,392nm,0.6s | | | | | | |
| **UCH** | **Uchtor** | **3.69** | **12** | P | **Pn** | **02 20 39.3** | **+0.2** |
| | SNR=231 | | | | | | |
| **KZA** | **Kyzart** | **3.71** | **21** | P | **Pn** | **02 20 39.1** | **-0.3** |
| | SNR=26 | | | | | | |
| **MNAS** | **Manas** | **3.92** | **350** | ⇓P | **Pn** | **02 20 42.1** | **+0.1** |
| | comp=N,113nm,0.4s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **02 21 24.9** | **-2.2** |
| | comp=N,43nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **3.92** | **350** | PN | **Pn** | **02 20 42.0** | **+0.1** |
| MNAS | | | | | | 02 21 24.8 | |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,113nm,0.4s | | | | | | |
| MNAS | | | | smax | smax | | |
| | comp=N,28nm,0.3s | | | | | | |
| **EKS2** | **Erkin-Say** | **4.04** | **4** | *e*PN | **Pn** | **02 20 43.8** | **+0.3** |
| EKS2 | | | | *e*S | **Sn** | **02 21 28.6** | **-1.3** |
| **EKS2** | **Erkin-Say** | **4.04** | **4** | P | **Pn** | **02 20 43.9** | **+0.3** |
| | SNR=155 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.04** | **4** | *e*Pn | **Pn** | **02 20 43.8** | **+0.3** |
| EKS2 | | | | *e*S | **Sn** | **02 21 28.6** | **-1.3** |
| **AAK** | **Ala-Archa** | **4.08** | **11** | ⇓P | **Pn** | **02 20 44.3** | **+0.2** |
| | comp=N,31nm,0.4s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **02 21 30.2** | **-0.8** |
| | comp=N,85nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **4.08** | **11** | Pn | **Pn** | **02 20 44.7** | **+0.6** |
| | comp=N,28nm,0.3s,baz=163,slow=7.1,SNR=223 | | | | | | |
| AAK | | | | Sn | **Sn** | **02 21 29.7** | **-1.3** |
| | comp=N,6.7nm,0.3s,baz=354,slow=18,SNR=9.6 | | | | | | |
| **AAK** | **Ala-Archa** | **4.08** | **11** | PN | **Pn** | **02 20 44.7** | **+0.6** |
| AAK | | | | | | 02 21 29.7 | |
| AAK | | | | pmax | pmax | | |
| | comp=Z,28nm,0.3s | | | | | | |
| AAK | | | | smax | smax | | |
| | comp=N,7.0nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **4.08** | **11** | P | **Pn** | **02 20 44.7** | **+0.6** |
| | SNR=48 | | | | | | |
| **KBK** | **Karagaybulak** | **4.18** | **15** | P | **Pn** | **02 20 46.0** | **+0.5** |
| | SNR=21 | | | | | | |
| **ULHL** | **Ulahol** | **4.20** | **30** | P | **Pn** | **02 20 45.3** | **-0.5** |
| | SNR=56 | | | | | | |
| **CHMS** | **Chumysh** | **4.48** | **12** | P | **Pn** | **02 20 49.8** | **+0.5** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.59** | **20** | ⇑P | **Pn** | **02 20 50.9** | **-0.1** |
| | comp=N,19nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.59** | **20** | *e*PN | **Pn** | **02 20 50.9** | **-0.1** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,22nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.59** | **20** | P | **Pn** | **02 20 51.2** | **+0.2** |
| | SNR=28 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.59** | **20** | *e*Pn | **Pn** | **02 20 50.9** | **-0.1** |
| | comp=Z,22nm,0.5s | | | | | | |
| **USP** | **Ospenovka** | **4.70** | **9** | P | **Pn** | **02 20 53.0** | **+0.6** |
| | SNR=28 | | | | | | |
| **CEP** | **Cherat** | **4.95** | **195** | ⇓P | **Pn** | **02 20 57.8** | **+1.9** |
| CEP | | | | S | **Sn** | **02 21 52.0** | **-0.1** |
| **CHCP** | **Chirah Chowk** | **4.96** | **182** | P | **Pn** | **02 20 58.2** | **+2.3** |
| **KK31** | **Karatay Array** | **4.99** | **335** | ⇓P | **Pn** | **02 20 56.2** | **-0.1** |
| | comp=Z,18nm,0.3s,baz=135,slow=12,SNR=776 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **02 21 48.9** | **-3.9** |
| | comp=Z,44nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **4.99** | **335** | *e*PN | **Pn** | **02 20 56.1** | **-0.1** |
| KK31 | | | | *e* | | 02 21 49.2 | |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,67nm,0.3s | | | | | | |
| KK31 | | | | smax | smax | | |
| | comp=N,26nm,0.3s | | | | | | |
| **KKAR** | **Karatay Array** | **4.99** | **335** | *e*PN | **Pn** | **02 20 56.1** | **-0.2** |
| KKAR | | | | *e*S | **Sn** | **02 21 49.7** | **-3.1** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,73nm,0.4s | | | | | | |
| **KKAR** | **Karatay Array** | **4.99** | **335** | *e*Pn | **Pn** | **02 20 56.0** | **-0.2** |
| | comp=Z,73nm,0.4s | | | | | | |
| KKAR | | | | *e*S | **Sn** | **02 21 49.7** | **-3.1** |
| **THW** | **Thamme Wali** | **5.98** | **194** | P | **Pn** | **02 21 10.8** | **+1.1** |
| **SARP** | **Sargodha** | **6.72** | **186** | P | **Pn** | **02 21 19.7** | **0.0** |
| **SMLA** | **Simla** | **8.08** | **157** | *i* P | **Pn** | **02 21 35.1** | **-3.1** |
| SMLA | | | | *i* S | Sn | 02 22 58.4 | -9.5 |
| SMLA | | | | AML | AML | 02 23 01.3 | |
| | comp=E,1μm,0.2s | | | | | | |
| SMLA | | | | AML | AML | 02 23 01.8 | |
| | comp=N,522nm,0.2s | | | | | | |
| **OTUK** | **Ortayu** | **9.65** | **356** | ⇓P | **Pn** | **02 21 58.1** | **-1.3** |
| | comp=N,18nm,0.7s | | | | | | |
| **OTUK** | **Ortayu** | **9.65** | **356** | P | **Pn** | **02 21 58.0** | **-1.3** |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,18nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **10.43** | **36** | ⇓P | **Pn** | **02 22 09.8** | **-0.3** |
| | comp=Z,0.6nm,0.3s,baz=217,slow=15,SNR=11 | | | | | | |
| **MK31** | **Makanchi Array** | **10.43** | **36** | *e*P | **Pn** | **02 22 09.7** | **-0.3** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **10.43** | **36** | Pn | **Pn** | **02 22 07.5** | **-2.5** |
| | comp=Z,0.1nm,0.3s,baz=227,slow=14,SNR=6.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.43** | **36** | *i* P | Pn | 02 22 12.6 | +2.6 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **GEYT** | **Alibeck** | **12.07** | **271** | Pn | Pn | 02 22 28.0 | -4.0 |
| | comp=Z,2.9nm,0.3s,baz=96,slow=13,SNR=6.3 | | | | | | |
| GEYT | | | | Sn | Sn | 02 24 36.1 | -8.6 |
| | comp=Z,3.3nm,0.3s,baz=253,slow=30,SNR=5.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.52** | **15** | Pn | **Pn** | **02 22 34.7** | **-3.1** |
| | comp=Z,0.1nm,0.3s,baz=204,slow=12,SNR=9.5 | | | | | | |
| KURBB | | | | Lg | Lg | 02 26 14.7 | |
| | comp=Z,0.0nm,0.3s,baz=178,slow=28,SNR=4.5 | | | | | | |
| **KURK** | **Kurchatov** | **12.63** | **15** | P | Pn | 02 22 34.7 | -4.5 |
| **KURK** | **Kurchatov** | **12.63** | **15** | Pn | Pn | 02 22 34.7 | -4.5 |
| KURK | | | | Lg | Lg | 02 26 14.7 | |
| **KOLN** | **Koldanda** | **13.76** | **139** | *e*P | Pn | 02 22 50.6 | -3.7 |
| | comp=Z,4.1nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **14.12** | **135** | *e*P | Pn | 02 22 54.5 | -4.5 |
| | comp=Z,3.4nm,0.2s | | | | | | |
| **VOSK** | **Vostochnaya** | **14.20** | **354** | ⇑P | **Pn** | **02 22 57.3** | **-2.4** |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **VOSK** | **Vostochnaya** | **14.20** | **354** | P | **Pn** | **02 22 57.2** | **-2.4** |
| VOSK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **14.38** | **322** | P | **Pn** | **02 22 59.3** | **-2.6** |
| | comp=Z,2.3nm,0.5s,baz=128,slow=14,SNR=75 | | | | | | |
| AB31 | | | | ⇓S | Sn | 02 25 26.4 | -14 |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **14.38** | **322** | *e*P | **Pn** | **02 22 59.3** | **-2.6** |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **14.38** | **322** | *e*Pn | **Pn** | **02 22 59.1** | **-2.8** |
| | comp=Z,4.5nm,0.5s | | | | | | |
| ABKAR | | | | *e*S | Sn | 02 25 26.2 | -14 |
| **BVA0** | **Borovoye Array** | **14.55** | **353** | ⇓P | **Pn** | **02 23 01.7** | **-2.4** |
| | comp=Z,18nm,0.6s | | | | | | |
| **BVA0** | **Borovoye Array** | **14.55** | **353** | P | **Pn** | **02 23 01.7** | **-2.4** |
| BVA0 | | | | pmax | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **14.55** | **353** | Pn | **Pn** | **02 23 02.2** | **-1.9** |
| | comp=Z,0.6nm,0.3s,baz=152,slow=13,SNR=20 | | | | | | |
| **BVAR** | **Borovoye Array** | **14.55** | **353** | P | **Pn** | **02 23 02.2** | **-1.9** |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **BRVK** | **Borovoye** | **14.60** | **352** | *e*P | **Pn** | **02 23 03.1** | **-1.6** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,36nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **14.60** | **352** | *e*Pn | **Pn** | **02 23 03.1** | **-1.6** |
| | comp=Z,36nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **14.65** | **134** | *e*S | Sn | 02 25 30.8 | -17 |
| **ZRNK** | **Zerenda** | **14.65** | **349** | ⇑P | **Pn** | **02 23 03.4** | **-2.0** |
| | comp=Z,14nm,0.5s | | | | | | |
| **ZRNK** | **Zerenda** | **14.65** | **349** | *i* P | **Pn** | **02 23 03.3** | **-2.0** |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,14nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **14.88** | **134** | *e*P | Pn | 02 23 04.3 | -4.4 |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **14.89** | **134** | *e*S | Sn | 02 25 37.9 | -16 |
| **CHKZ** | **Chkalovo** | **15.18** | **354** | ⇑P | **Pn** | **02 23 10.1** | **-1.8** |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **CHKZ** | **Chkalovo** | **15.18** | **354** | P | **Pn** | **02 23 08.5** | **-3.5** |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **16.04** | **133** | *e*P | **Pn** | **02 23 20.0** | **-3.3** |
| | comp=Z,3.5nm,0.2s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.09** | **322** | ⇑P | **Pn** | **02 23 22.7** | **-0.8** |
| | comp=Z,13nm,1.1s | | | | | | |
| AKTO | | | | ⇓S | Sn | 02 26 10.7 | -11 |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.09** | **322** | Pn | **Pn** | **02 23 22.1** | **-1.3** |
| | comp=Z,0.5nm,0.3s,baz=128,slow=12,SNR=20 | | | | | | |
| AKTO | | | | Sn | Sn | 02 26 09.1 | -13 |
| | comp=Z,0.2nm,0.3s,baz=0.0,slow=20,SNR=4.4 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.09** | **322** | P | **Pn** | **02 23 22.2** | **-1.3** |
| AKTO | | | | | | 02 26 09.1 | |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **16.40** | **129** | *e*P | Pn | 02 23 21.7 | -6.1 |
| **ZALV** | **Zalesovo Beam** | **17.19** | **23** | Pn | **P** | **02 23 35.5** | **-1.2** |
| | comp=Z,2.7nm,0.3s,baz=212,slow=12,SNR=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.19** | **23** | *i* P | **P** | **02 23 35.9** | **-0.9** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.4s | | | | | | |
| **NVS** | **Novosibirsk** | **17.52** | **19** | *e*P | **P** | **02 23 39.8** | **-0.6** |
| NVS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.7s | | | | | | |
| **ARU** | **Arti** | **20.37** | **336** | *d* iP | **P** | **02 24 11.9** | **+0.5** |
| ARU | | | | | | 02 24 42.9 | |
| ARU | | | | S | **S** | **02 27 55.6** | **+2.1** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **23.47** | **292** | LR | LR | 02 37 31.7 | |
| | comp=Z,28nm,18.9s,baz=44,slow=45 | | | | | | |
| **TLY** | **Talaya** | **24.77** | **48** | LR | LR | 02 34 18.3 | |
| | comp=Z,18nm,18.8s,baz=278,slow=36 | | | | | | |
| **TLY** | **Talaya** | **24.77** | **48** | *e*P | **P** | **02 24 57.4** | **+2.2** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **CD2** | **Chengdu** | **25.98** | **98** | *e*P | P | 02 25 01.0 | -5.4 |
| **HHC** | **Hu-ho-hao-te** | **29.25** | **73** | *e*P | P | 02 25 38.3 | +2.8 |
| **OBN** | **Obninsk** | **29.68** | **316** | *e*P | **P** | **02 25 40.7** | **+1.8** |
| OBN | | | | *e* | | 02 26 37.1 | |
| OBN | | | | *e*S | S | 02 30 19.9 | -6.7 |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **36.86** | **324** | P | **P** | **02 26 42.5** | **+1.4** |
| | comp=Z,1.3nm,0.5s,baz=115,slow=9.8,SNR=14 | | | | | | |
| **FINES** | **FINESS Array B** | **36.86** | **324** | *e*P | **P** | **02 26 42.9** | **+1.8** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.96** | **336** | P | **P** | **02 27 09.0** | **+1.9** |
| | comp=Z,1.8nm,0.5s,baz=110,slow=8.6,SNR=24 | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.96** | **336** | *e*P | **P** | **02 27 08.8** | **+1.8** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **NB2** | **NORSAR Subarra** | **43.88** | **322** | P | **P** | **02 27 40.5** | **+1.4** |
| | comp=Z,0.8nm,0.5s,baz=91,slow=8.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.88** | **322** | P | **P** | **02 27 39.0** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=106,slow=6.4,SNR=4.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.88** | **322** | *e*P | **P** | **02 27 40.5** | **+1.4** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **BILL** | **Bilibino** | **55.84** | **27** | ⇓*e*P | **P** | **02 29 10.4** | **+1.0** |
| BILL | | | | *e**PP | **pP** | **02 29 35.4** | **+0.2** |
| BILL | | | | *e* | | 02 31 19.9 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.70** | **269** | P | **P** | **02 30 30.3** | **+0.7** |
| | comp=Z,0.8nm,1.1s,baz=53,slow=5.2,SNR=7.4 | | | | | | |
| **INK** | **Inuvik** | **71.48** | **10** | P | **P** | **02 30 53.8** | **+1.7** |
| | comp=Z,1.4nm,0.5s,baz=350,slow=7.8,SNR=4.9 | | | | | | |
| INK | | | | LR | LR | 03 07 07.0 | |
| | comp=Z,30nm,18.2s,baz=278,slow=40 | | | | | | |
| **INK** | **Inuvik** | **71.48** | **10** | P | **P** | **02 30 53.8** | **+1.7** |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| INK | | | | MLR | MLR | | |
| | comp=Z,30nm,18.2s | | | | | | |
| **ILAR** | **Eielson Array** | **72.19** | **17** | P | **P** | **02 30 57.1** | **+0.7** |
| | comp=Z,0.5nm,0.6s,baz=324,slow=5.8,SNR=5.2 | | | | | | |
| **ILAR** | **Eielson Array** | **72.19** | **17** | P | **P** | **02 30 57.1** | **+0.7** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.02** | **4** | P | **P** | **02 31 36.7** | **+1.4** |
| | comp=Z,0.7nm,0.4s,baz=347,slow=5.7,SNR=6.7 | | | | | | |

*ISCJB* ***14*** *02:59:11.0±0.4, 39°.89N±0°.03 × 40°.82E±0°.03, h7km±5km, Error ellipse: s-maj=4.8km s-min=3.6km az=16.0*
*CSEM* ***14*** *02:59:10.8±0.2, 39°.87N × 40°.79E, h10km, MD2.7, Error ellipse: s-maj=5.4km s-min=4.6km az=16.0*
*DDA* ***14*** *02:59:10.7, 39°.90N × 40°.83E, h7km, Md2.7*
*ISK* ***14*** *02:59:10.7, 39°.90N × 40°.79E, h10km, MD3.0*

**ISC 14 02:59:10.5±1.1, 39°.90N±0°.02 × 40°.81E±0°.02, h6km±10km, n36, σ0°78/51, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KOPT** | **Kop Dagi** | **0.27** | **296** | *i* P | **Pg** | **02 59 16.7** | **+0.9** |
| KOPT | | | | *i* S | **Sb** | **02 59 21.7** | **-1.1** |
| **KOPT** | **Kop Dagi** | **0.27** | **296** | P | **Pg** | **02 59 16.7** | **+0.9** |
| KOPT | | | | S | **Sb** | **02 59 21.7** | **-1.1** |
| **ECAT** | **Cat-ERZURUM** | **0.32** | **157** | *i* P | **Pg** | **02 59 17.2** | **+0.3** |
| ECAT | | | | *i* S | **Sg** | **02 59 22.1** | **+1.0** |
| **ECAT** | **Cat-ERZURUM** | **0.32** | **157** | P | **Pg** | **02 59 17.2** | **+0.3** |
| ECAT | | | | S | **Sg** | **02 59 22.1** | **+1.0** |
| **EZM** | **Erzurum** | **0.43** | **89** | *e*PG | **Pb** | **02 59 19.8** | **-0.8** |
| **ERZM** | **Erzurum** | **0.43** | **89** | *i* P | **Pg** | **02 59 18.6** | **-0.3** |
| ERZM | | | | *i* S | **Sb** | **02 59 27.1** | **-0.4** |
| **ERZM** | **Erzurum** | **0.43** | **89** | P | **Pg** | **02 59 18.6** | **-0.3** |
| ERZM | | | | S | **Sb** | **02 59 27.1** | **-0.4** |
| **BAYT** | **Ayd¨¬ntepe-Bay** | **0.71** | **314** | *e*PG | **Pg** | **02 59 24.4** | **+0.2** |
| BAYT | | | | *e*SG | **Sb** | **02 59 35.0** | **-0.5** |
| **BAYT** | **Ayd¨¬ntepe-Bay** | **0.71** | **314** | *e*Pg | **Pg** | **02 59 24.4** | **+0.2** |
| BAYT | | | | *e*Sg | **Sb** | **02 59 35.0** | **-0.5** |
| **HOMI** | **Horasan** | **0.85** | **80** | P | **Pg** | **02 59 26.9** | **0.0** |
| **EUZM** | **Uzumlu** | **0.88** | **258** | *i* P | **Pg** | **02 59 27.2** | **-0.2** |
| EUZM | | | | *i* S | **Sb** | **02 59 40.0** | **-0.3** |
| **EUZM** | **Uzumlu** | **0.88** | **258** | P | **Pg** | **02 59 27.2** | **-0.2** |
| EUZM | | | | S | **Sb** | **02 59 40.0** | **-0.3** |
| **VRTB** | **Varto-Mus** | **0.89** | **146** | *e*PG | **Pb** | **02 59 28.5** | **-0.1** |
| **VRTB** | **Varto-Mus** | **0.89** | **146** | *e*Pg | **Pb** | **02 59 28.5** | **-0.1** |
| **ERZN** | **Erzincan** | **0.90** | **250** | *e*PG | **Pb** | **02 59 28.4** | **-0.2** |
| ERZN | | | | *e*SG | **Sb** | **02 59 40.5** | **-0.3** |
| **BNGB** | **Bing¨¶l** | **0.92** | **186** | *e*PG | **Pb** | **02 59 28.8** | **-0.1** |
| BNGB | | | | *e*SG | **Sb** | **02 59 41.7** | **-0.4** |
| **BINT** | **Bingol** | **1.05** | **194** | *e*Pg | **Pg** | **02 59 28.8** | **-1.9** |
| BINT | | | | *e*Sg | **Sg** | **02 59 41.7** | **-2.7** |
| **EZC** | **Erzincan** | **1.13** | **263** | *e*Pg | Pg | 02 59 28.4 | -3.8 |
| **EKAR** | **Karacoban** | **1.17** | **123** | *i* P | **Pn** | **02 59 33.6** | **0.0** |
| **EKAR** | **Karacoban** | **1.17** | **123** | P | **Pn** | **02 59 33.5** | **0.0** |
| EKAR | | | | S | **Sn** | **02 59 52.1** | **+2.2** |
| **KELT** | **Kelkit** | **1.22** | **282** | *i* P | **Pn** | **02 59 34.7** | **+0.4** |
| KELT | | | | *i* S | **Sn** | **02 59 52.0** | **+0.8** |
| **KELT** | **Kelkit** | **1.22** | **282** | P | **Pn** | **02 59 34.7** | **+0.4** |
| KELT | | | | S | **Sn** | **02 59 52.0** | **+0.8** |
| **DDEM** | **Demirkent** | **1.22** | **36** | *i* P | **Pg** | **02 59 33.5** | **-0.5** |
| **DDEM** | **Demirkent** | **1.22** | **36** | P | **Pg** | **02 59 33.5** | **-0.5** |
| **PTK** | **Pertek** | **1.49** | **228** | *e*PN | **Pn** | **02 59 37.9** | **-0.1** |
| **PTK** | **Pertek** | **1.49** | **228** | *e*Pn | **Pn** | **02 59 37.9** | **-0.1** |
| **ARTV** | **Artvin** | **1.54** | **33** | *i* P | **Pb** | **02 59 39.5** | **-0.1** |
| **ARTV** | **Artvin** | **1.54** | **33** | P | **Pb** | **02 59 39.5** | **-0.1** |
| **DBOC** | **Borcka** | **1.58** | **24** | P | **Pn** | **02 59 38.8** | **-0.4** |
| **DBOC** | **Borcka** | **1.58** | **24** | P | **Pn** | **02 59 38.8** | **-0.4** |
| **BCA** | **Borcka** | **1.66** | **22** | *e*PN | **Pn** | **02 59 40.3** | **+0.1** |
| **BCA** | **Borcka** | **1.66** | **22** | *e*Pn | **Pn** | **02 59 40.3** | **+0.1** |
| **AGRB** | **Hanur-Agry** | **1.71** | **100** | *e*PN | **Pn** | **02 59 41.5** | **+0.4** |
| **AGRB** | **Hanur-Agry** | **1.71** | **100** | *e*Pn | **Pn** | **02 59 41.5** | **+0.4** |
| **SVAN** | **Silvan-Diyarba** | **1.77** | **170** | *e*PN | **Pn** | **02 59 42.6** | **+0.8** |
| **SVAN** | **Silvan-Diyarba** | **1.77** | **170** | *e*Pn | **Pn** | **02 59 42.6** | **+0.8** |

**MEX 14 03:00:16.3±0.7, 17°.05N × 100°.13W, h9km±21km, MD4.0, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAIG** | **El Cayaco** | **0.13** | **271** | *e*P | Pg | 03 00 18.5 | -0.7 |
| CAIG | | | | *e*S | Sg | 03 00 20.9 | -0.4 |
| **MEIG** | **Mezcala** | **1.00** | **29**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GULT** | **Gulveren** | **1.76** | **40** | *e*PN | **Pn** | **03 23 23.9** | **+0.8** |
| **GULT** | **Gulveren** | **1.76** | **40** | *e*Pn | **Pn** | **03 23 23.9** | **+0.8** |

**WEL 14 03:49:07.0±0.4, 45°.80S × 165°.99E, h12 km, ML3.7/11, 2C, Error ellipse: s-maj=4.3km s-min=1.4km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **0.61** | **128** | ⇑*P* | Pg | 03 49 18.6 | -0.2 |
| PYZ | | | | *S* | Sg | 03 49 26.8 | -0.1 |
| PYZ | | | | *S* | Sb | 03 49 26.9 | -1.2 |
| **DCZ** | **Deep Cove** | **0.88** | **69** | ⇑*P* | Pg | 03 49 23.1 | -0.8 |
| DCZ | | | | *S* | Sg | 03 49 35.3 | -0.1 |
| DCZ | | | | AML | AML | 03 49 35.8 | |
| DCZ | | | | AML | AML | 03 49 36.5 | |
| DCZ | | | | AML | AML | 03 49 36.6 | |
| **WHZ** | **Wether Hill Ro** | **1.37** | **95** | PN | Pn | 03 49 30.8 | -1.1 |
| WHZ | | | | SN | Sn | 03 49 48.8 | -1.3 |
| WHZ | | | | AML | AML | 03 49 52.5 | |
| **MLZ** | **Mavora Lakes** | **1.60** | **74** | PN | Pn | 03 49 34.2 | -0.9 |
| MLZ | | | | AML | AML | 03 49 57.6 | |
| MLZ | | | | AML | AML | 03 50 03.9 | |
| **APZ** | **The Paps** | **1.73** | **127** | PN | Pn | 03 49 35.1 | -1.9 |
| APZ | | | | AML | AML | 03 49 57.1 | |
| APZ | | | | AML | AML | 03 49 57.4 | |
| **MSZ** | **Milford Sound** | **1.77** | **51** | *e*PN | Pn | 03 49 36.2 | -1.2 |
| MSZ | | | | AML | AML | 03 50 10.2 | |
| MSZ | | | | AML | AML | 03 50 10.3 | |
| MSZ | | | | AML | AML | 03 50 13.6 | |
| MSZ | | | | AML | AML | 03 50 13.6 | |
| **SYZ** | **Scrubby Hill** | **2.31** | **110** | *e*PN | Pn | 03 49 44.0 | -0.8 |
| SYZ | | | | AML | AML | 03 50 21.2 | |
| SYZ | | | | AML | AML | 03 50 21.2 | |
| SYZ | | | | AML | AML | 03 50 21.5 | |
| SYZ | | | | AML | AML | 03 50 21.8 | |
| **WKZ** | **Wanaka** | **2.35** | **67** | *e*PN | Pn | 03 49 46.8 | +1.3 |
| WKZ | | | | AML | AML | 03 50 25.3 | |
| WKZ | | | | AML | AML | 03 50 27.7 | |
| **EAZ** | **Earnscleugh** | **2.40** | **78** | *e*PN | Pn | 03 49 46.4 | +0.3 |
| EAZ | | | | AML | AML | 03 50 23.0 | |
| EAZ | | | | AML | AML | 03 50 24.3 | |
| **TUZ** | **Tuapeka** | **2.55** | **95** | *e*PN | Pn | 03 49 47.6 | -0.5 |
| TUZ | | | | AML | AML | 03 50 20.0 | |
| TUZ | | | | AML | AML | 03 50 20.0 | |
| TUZ | | | | AML | AML | 03 50 24.4 | |
| TUZ | | | | AML | AML | 03 50 34.1 | |
| **JCZ** | **Jackson Bay** | **2.62** | **50** | *e*PN | Pn | 03 49 48.7 | -0.5 |
| JCZ | | | | AML | AML | 03 50 35.7 | |
| JCZ | | | | AML | AML | 03 50 38.5 | |
| **LBZ** | **Lake Benmore** | **3.29** | **66** | *e*PN | Pn | 03 49 57.4 | -0.9 |
| **ODZ** | **Otahua Downs** | **3.37** | **79** | *e*PN | Pn | 03 49 58.1 | -1.2 |
| ODZ | | | | AML | AML | 03 51 00.1 | |
| **FOZ** | **Fox Glacier** | **3.46** | **51** | *e*PN | Pn | 03 50 00.9 | +0.3 |

*NIED **14** 04:10:00, 36°.10N × 139°.90E, h47 km, Mw3.6 Best double couple: M₀2.37000 × 10^14 NP1: φs 287.00000°, δ25.00000°, λ151.00000°. NP2: φs 43.00000°, δ78.00000°, λ68.00000°.*

**JMA 14 04:10:45.9, 36°.01N × 139°.90E, h41 km ± 1 km, M3.5, 1C-4D Broadband fault plane solution: P waves. NP1:** φs 45.00000°, δ70.00000°, λ86.00000°. **NP2:** φs 236.00000°, δ20.00000°, λ100.00000°. **Principal axes:** T Plg65.0000°, Azm309.0000°; N Plg3.0000°, Azm46.0000°; P Plg25.0000°, Azm138.0000°; **Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYT** | **Yasato** | **0.32** | **48** | ⇑*P* | Pn | 04 10 54.4 | -0.1 |
| JYT | | | | *S* | Sn | 04 11 00.5 | 0.0 |
| **JHU** | **Hanno** | **0.53** | **253** | ⇓*P* | Pn | 04 10 56.6 | -0.4 |
| JHU | | | | *S* | Sn | 04 11 04.8 | -0.1 |
| **JAG** | **Ashikaga** | **0.55** | **319** | ⇓*P* | Pn | 04 10 57.3 | -0.1 |
| JAG | | | | *S* | Sn | 04 11 05.4 | -0.1 |
| **JRY** | **Ryogami san** | **0.81** | **271** | ⇓*P* | Pn | 04 11 00.6 | -0.3 |
| JRY | | | | *S* | Sn | 04 11 11.1 | -0.7 |
| **JKT** | **Katashina** | **0.92** | **325** | ⇓*P* | Pn | 04 11 02.2 | -0.3 |
| **JOD2** | **Odawara 2** | **1.00** | **222** | *P* | Pn | 04 11 03.8 | +0.3 |
| JOD2 | | | | *S* | Sn | 04 11 15.9 | -0.4 |
| **MAT** | **Matsushiro** | **1.47** | **292** | *P* | Pn | 04 11 09.8 | -0.1 |
| MAT | | | | *S* | Sn | 04 11 28.8 | +0.8 |

*ISCJB **14** 04:13:08.4±0.5, 18°.24N±0°.06 × 145°.6E±0°.2, h250 km, mb3.9/16 Error ellipse: s-maj=21.2km s-min=7.8km az=2.3*

*IDC **14** 04:13:10.6±1.6, 18°.13N × 145°.60E, h262 km ± 19 km, mb3.7/14, mb1 3.9/16, mb1mx3.7/38, mbtmp4.4/16, Error ellipse: s-maj=19.5km s-min=13.4km az=78.0*

**ISC 14 04:13:10.0±0.7, 18°.21N±0°.07 × 145°.6E±0°.2, h250 km, n19, σ0°.96/20, mb4.1/16, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **4.64** | **188** | *P* | **Pn** | **04 14 23.1** | **+1.5** |
| | 22nm,0.3s,baz=124,slow=3.6,SNR=6.5 | | | | | | |
| GUMO | | | | *S* | **S** | **04 15 17.7** | **-0.8** |
| | 11nm,0.3s,baz=163,slow=19,SNR=3.6 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **15.73** | **342** | *P* | **P** | **04 16 38.8** | **+1.0** |
| | 7.6nm,0.3s,baz=75,slow=20,SNR=2.4 | | | | | | |
| JHJ | | | | *S* | **S** | **04 19 30.0** | **-0.5** |
| | 5.1nm,0.3s,baz=73,slow=19,SNR=1.9 | | | | | | |
| **KSRS** | **Korea Array** | **24.64** | **325** | *P* | **P** | **04 18 07.9** | **0.0** |
| | 0.6nm,0.3s,baz=151,slow=7.9,SNR=5.0 | | | | | | |
| **ASAJ** | **Asahikawa** | **25.95** | **355** | *P* | **P** | **04 18 20.8** | **+1.2** |
| | 6.8nm,0.5s,baz=184,slow=16,SNR=3.5 | | | | | | |
| **USRK** | **Usuriysk Ar.** | **28.31** | **339** | *P* | **P** | **04 18 41.2** | **+0.6** |
| | 1.8nm,0.7s,baz=191,slow=7.0,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.49** | **197** | *P* | **P** | **04 20 15.6** | **-1.0** |
| | 0.7nm,0.3s,baz=8.0,slow=8.6,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **43.15** | **196** | *P* | **P** | **04 20 45.2** | **-1.1** |
| | 0.2nm,0.4s,baz=10,slow=5.8,SNR=3.2 | | | | | | |
| **SONM** | **Songino Array** | **43.45** | **322** | *P* | **P** | **04 20 48.7** | **+0.1** |
| | 1.0nm,0.5s,baz=136,slow=7.7,SNR=8.6 | | | | | | |
| **YAK** | **Yakutsk** | **45.17** | **350** | *P* | **P** | **04 21 00.8** | **-1.0** |
| | 4.6nm,0.4s,baz=234,slow=8.7,SNR=2.6 | | | | | | |
| **ZALV** | **Zelesovo Beam** | **58.33** | **323** | *P* | **P** | **04 22 39.0** | **+0.2** |
| | 2.1nm,0.5s,baz=120,slow=7.8,SNR=6.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.71** | **314** | *P* | **P** | **04 22 42.0** | **+0.4** |
| | 1.4nm,0.5s,baz=89,slow=8.4,SNR=9.8 | | | | | | |
| **KDAK** | **Kodiak Island** | **59.83** | **33** | *P* | **P** | **04 22 49.7** | **+0.7** |
| | 2.9nm,0.5s,baz=326,slow=3.6,SNR=6.8 | | | | | | |
| **ILAR** | **Eielson Array** | **64.13** | **26** | *P* | **P** | **04 23 16.4** | **-1.1** |
| | 2.2nm,0.5s,baz=253,slow=5.9,SNR=39 | | | | | | |
| **INK** | **Inuvik** | **69.87** | **23** | *P* | **P** | **04 23 53.2** | **-0.2** |
| | 5.8nm,0.7s,baz=307,slow=7.7,SNR=12 | | | | | | |
| **YKA** | **Yellowknife Ar** | **78.47** | **28** | *P* | **P** | **04 24 42.5** | **-0.6** |
| | 0.7nm,0.5s,baz=284,slow=5.7,SNR=5.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.92** | **342** | *P* | **P** | **04 25 05.5** | **-1.0** |
| | 6.5nm,1.0s,baz=74,slow=9.1,SNR=4.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.53** | **52** | *P* | **P** | **04 25 10.8** | **+0.2** |
| | 3.2nm,0.6s,baz=269,slow=5.9,SNR=28 | | | | | | |
| **FINES** | **FINESS Array B** | **87.27** | **335** | *P* | P | 04 25 25.1 | -3.0 |
| | 3.1nm,0.8s,baz=99,slow=5.1,SNR=7.8 | | | | | | |
| **LPAZ** | **La Paz** | **147.78** | **92** | PKPbc | **PKPdf** | **04 32 25.6** | **+1.8** |
| | 0.3nm,0.4s,baz=252,slow=3.2,SNR=3.6 | | | | | | |

*MOS **14** 04:15:44.3±0.8, 56°.58N × 164°.15E, h43 km, mb4.2/1, Error ellipse: s-maj=33.9km s-min=12.1km az=53.3*

**KRSC 14 04:15:43.3±1.6, 56°.54N ± 164°.13E, h47 km ± 17 km, ML4.1, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **0.80** | **246** | *i P* | Pn | 04 15 59.5 | +1.2 |
| KBTR | | | | *eS* | Sn | 04 16 08.5 | -0.7 |
| **KBTR** | **Krutoberegovo** | **0.80** | **246** | PN | Pn | 04 15 59.5 | +1.2 |
| KBTR | | | | S | Sn | 04 16 08.5 | -0.7 |
| **KBG** | **Krutoberegovo** | **0.84** | **251** | *eP* | Pn | 04 15 59.9 | +1.1 |
| KBG | | | | *eS* | Sn | 04 16 09.8 | -0.3 |
| **SMKR** | **Semkarok** | **1.48** | **273** | *eP* | Pn | 04 16 09.0 | +1.5 |
| SMKR | | | | *eS* | Sn | 04 16 27.9 | +2.2 |
| **SMKR** | **Semkarok** | **1.48** | **273** | PN | Pn | 04 16 09.0 | +1.5 |
| SMKR | | | | S | Sn | 04 16 27.9 | +2.2 |
| **BDR** | **Baidarnaya** | **1.62** | **272** | *eP* | Pn | 04 16 12.8 | +3.3 |
| BDR | | | | *eS* | Sn | 04 16 31.8 | +2.5 |
| **KMNR** | **Kamenistaya** | **2.32** | **252** | *eP* | Pn | 04 16 22.0 | +2.9 |
| **KMNR** | **Kamenistaya** | **2.32** | **252** | PN | Pn | 04 16 22.0 | +2.9 |
| **MKZ** | **Mys Kozlova** | **2.41** | **215** | *eP* | Pn | 04 16 23.9 | +3.7 |
| MKZ | | | | *eS* | Sn | 04 16 51.7 | +3.3 |
| **MKZ** | **Mys Kozlova** | **2.41** | **215** | PN | Pn | 04 16 23.9 | +3.7 |
| MKZ | | | | S | Sn | 04 16 51.7 | +3.3 |
| **SRDR** | **Sredinnyy** | **2.46** | **267** | *eP* | Pn | 04 16 25.6 | +4.6 |
| SRDR | | | | *eS* | Sn | 04 16 55.0 | +5.1 |
| **SRDR** | **Sredinnyy** | **2.46** | **267** | PN | Pn | 04 16 25.6 | +4.6 |
| SRDR | | | | S | Sn | 04 16 55.0 | +5.1 |
| **TUMR** | **Tumrok** | **2.57** | **242** | *eP* | Pn | 04 16 27.2 | +4.6 |
| **TUMR** | **Tumrok** | **2.57** | **242** | PN | Pn | 04 16 27.2 | +4.6 |
| **OSSR** | **Ossora** | **2.78** | **349** | *eP* | Pn | 04 16 29.0 | +3.8 |
| OSSR | | | | *eS* | Sn | 04 16 58.6 | +1.1 |
| **TILK** | **Tilichiki** | **4.06** | **14** | *eP* | Pn | 04 16 46.9 | +4.1 |
| **SPN** | **Mys Shipunski** | **4.19** | **216** | *eP* | Pn | 04 16 49.0 | +4.4 |
| SPN | | | | *eS* | Sn | 04 17 33.5 | +1.3 |
| **SPN** | **Mys Shipunski** | **4.19** | **216** | PN | Pn | 04 16 49.0 | +4.4 |
| **NLC** | **Nalytchevo** | **4.36** | **221** | *eS* | Sn | 04 17 40.5 | +4.0 |
| **AVH** | **Avacha** | **4.52** | **226** | *eP* | Pn | 04 16 54.1 | +4.8 |
| **AVH** | **Avacha** | **4.52** | **226** | PN | Pn | 04 16 54.1 | +4.8 |
| **GNL** | **Ganaly** | **4.55** | **234** | *eP* | Pn | 04 16 53.7 | +3.9 |
| **GNL** | **Ganaly** | **4.55** | **234** | PN | Pn | 04 16 53.7 | +3.9 |
| **RUS** | **Russkaya** | **5.26** | **221** | *eP* | Pn | 04 17 03.9 | +4.6 |
| **RUS** | **Russkaya** | **5.26** | **221** | PN | Pn | 04 17 03.9 | +4.6 |

*CSEM **14** 04:17:00.9±0.3, 36°.03N × 35°.91E, h19 km ± 1 km, ML2.3, Error ellipse: s-maj=7.3km s-min=4.9km az=73.0*

*DDA **14** 04:17:00.9, 36°.18N × 35°.88E, h7 km, Md3.0*

*ISK **14** 04:17:00.4, 36°.05N × 35°.99E, h20 km, MD2.9*

*ISCJB **14** 04:17:01.0±0.4, 36°.03N±0°.02 × 35°.92E±0°.04, h25 km ± 3 km, Error ellipse: s-maj=6.1km s-min=3.8km az=170.1*

*NSSC **14** 04:17:02.5±2.4, 35°.98N × 35°.96E, h20 km ± 9 km, MD0.7, ML2.3*

**ISC 14 04:17:01.0±0.9, 36°.03N±0°.02 × 35°.94E±0°.03, h24 km ± 5 km, n30, σ0°.84/56, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YAYL** | **Yayladag** | **0.13** | **88** | *i P* | **Pb** | **04 17 05.4** | **-0.6** |
| YAYL | | | | *i S* | **Sb** | **04 17 09.9** | **+0.6** |
| **YAYL** | **Yayladag** | **0.13** | **88** | *P* | **Pb** | **04 17 05.4** | **-0.6** |
| YAYL | | | | *S* | **Sb** | **04 17 09.9** | **+0.6** |
| **ARNB** | **Al Arnab** | **0.17** | **172** | *eP* | **Pb** | **04 17 06.8** | **+0.5** |
| ARNB | | | | *eS* | **Sb** | **04 17 09.8** | **0.0** |
| ARNB | | | | AML | AML | 04 17 12.8 | |
| | comp=N,265nm,0.2s | | | | | | |
| ARNB | | | | AML | AML | 04 17 13.0 | |
| | comp=E,95nm,0.3s | | | | | | |
| **ARNB** | **Al Arnab** | **0.17** | **172** | *eP* | **Pb** | **04 17 06.8** | **+0.5** |
| ARNB | | | | *eS* | **Sb** | **04 17 09.8** | **0.0** |
| | comp=E,95nm,0.3s | | | | | | |
| **TAHT** | **Tahtakopru-Hat** | **0.40** | **30** | *ePG* | **Pb** | **04 17 08.6** | **-0.9** |
| TAHT | | | | *eSG* | **Sb** | **04 17 14.2** | **-1.0** |
| **TAHT** | **Tahtakopru-Hat** | **0.40** | **30** | *ePg* | **Pb** | **04 17 08.6** | **-0.9** |
| TAHT | | | | *eSg* | **Sb** | **04 17 14.2** | **-1.0** |
| **BTCH** | **Batrach** | **0.42** | **89** | *eP* | **Pn** | **04 17 11.0** | **-0.6** |
| BTCH | | | | *eS* | **Sb** | **04 17 17.1** | **+1.2** |
| BTCH | | | | AML | AML | 04 17 19.4 | |
| | comp=E,227nm,0.5s | | | | | | |
| BTCH | | | | AML | AML | 04 17 20.2 | |
| | comp=N,246nm,0.2s | | | | | | |
| **BTCH** | **Batrach** | **0.42** | **89** | *eP* | **Pn** | **04 17 11.0** | **-0.6** |
| BTCH | | | | *eS* | **Sb** | **04 17 17.1** | **+1.2** |
| | comp=N,246nm,0.2s | | | | | | |
| **WRDH** | **Warideh** | **0.65** | **144** | *eP* | **Pn** | **04 17 15.5** | **+0.8** |
| WRDH | | | | *eS* | **Sb** | **04 17 23.1** | **+0.8** |
| WRDH | | | | AML | AML | 04 17 30.8 | |
| | comp=N,121nm,0.2s | | | | | | |
| **WRDH** | **Warideh** | **0.65** | **144** | *eP* | **Pn** | **04 17 15.5** | **+0.8** |
| WRDH | | | | *eS* | **Sb** | **04 17 23.1** | **+0.8** |
| | comp=N,121nm,0.2s | | | | | | |
| **CEYT** | **Ceyhan** | **0.99** | **351** | *e*PG | **Pn** | **04 17 19.2** | **-0.2** |
| CEYT | | | | *e*SG | **Sn** | **04 17 33.8** | **+1.2** |
| **CEYT** | **Ceyhan** | **0.99** | **351** | *e*Pg | **Pn** | **04 17 19.2** | **-0.2** |
| CEYT | | | | *e*Sg | **Sn** | **04 17 33.8** | **+1.2** |
| **BIDA** | **Albida** | **1.06** | **163** | *eP* | **Pn** | **04 17 19.4** | **-1.0** |
| BIDA | | | | *eS* | **Sb** | **04 17 32.8** | **-1.4** |
| BIDA | | | | AML | AML | 04 17 37.8 | |
| | comp=E,246nm,0.4s | | | | | | |
| BIDA | | | | AML | AML | 04 17 39.5 | |
| | comp=N,231nm,0.5s | | | | | | |
| **BIDA** | **Albida** | **1.06** | **163** | *eP* | **Pn** | **04 17 19.4** | **-1.0** |
| BIDA | | | | *eS* | **Sb** | **04 17 32.8** | **-1.4** |
| | comp=N,231nm,0.5s | | | | | | |
| **KFRA** | **Kufra** | **1.07** | **139** | *eP* | **Pn** | **04 17 18.9** | **-1.7** |
| KFRA | | | | *eS* | **Sb** | **04 17 34.1** | **-0.4** |
| KFRA | | | | AML | AML | 04 17 36.2 | |
| | comp=N,150nm,0.6s | | | | | | |
| KFRA | | | | AML | AML | 04 17 36.7 | |
| | comp=E,570nm,0.3s | | | | | | |
| **KFRA** | **Kufra** | **1.07** | **139** | *eP* | **Pn** | **04 17 18.9** | **-1.7** |
| KFRA | | | | *eS* | **Sb** | **04 17 34.1** | **-0.4** |
| | comp=E,571nm,0.3s | | | | | | |
| **KUZU** | **Kuzuini** | **1.18** | **51** | *i P* | **Pb** | **04 17 23.1** | **+0.4** |
| KUZU | | | | *i S* | **Sb** | **04 17 38.8** | **+1.3** |
| **KUZU** | **Kuzuini** | **1.18** | **51** | *P* | **Pb** | **04 17 23.1** | **+0.4** |
| KUZU | | | | *S* | **Sb** | **04 17 38.8** | **+1.3** |
| **KAMA** | **Osmaniye** | **1.29** | **27** | *P* | **Pn** | **04 17 24.1** | **+0.5** |
| KAMA | | | | *S* | **Sn** | **04 17 39.2** | **-1.0** |
| **KARA** | **Karaisali** | **1.42** | **330** | *e*PN | **Pn** | **04 17 25.6** | **+0.4** |
| **KARA** | **Karaisali** | **1.42** | **330** | *e*Pn | **Pn** | **04 17 25.7** | **+0.4** |
| **KOZT** | **Kozan** | **1.45** | **356** | *e*PN | **Pn** | **04 17 26.1** | **+0.4** |
| KOZT | | | | *e*SN | **Sb** | **04 17 44.9** | **-0.5** |
| **KOZT** | **Kozan** | **1.45** | **356** | *e*Pn | **Pn** | **04 17 26.1** | **+0.4** |
| KOZT | | | | *e*Sn | **Sb** | **04 17 44.9** | **-0.5** |
| **KIZK** | **Mersin** | **1.52** | **288** | *i P* | **Pn** | **04 17 27.3** | **+0.7** |
| KIZK | | | | *i S* | **Sn** | **04 17 45.2** | **-0.5** |
| **KIZK** | **Mersin** | **1.52** | **288** | *P* | **Pn** | **04 17 27.3** | **+0.7** |
| KIZK | | | | *S* | **Sn** | **04 17 45.2** | **-0.5** |
| **AYKD** | **Aykdinkavak** | **1.55** | **26** | *P* | **Pn** | **04 17 27.7** | **+0.6** |
| AYKD | | | | *S* | **Sn** | **04 17 46.0** | **-0.4** |
| **HAWK** | **Haweek** | **1.55** | **166** | *eP* | **Pb** | **04 17 29.5** | **+0.4** |
| HAWK | | | | *eS* | **Sn** | **04 17 47.4** | **+0.8** |
| HAWK | | | | AML | AML | 04 17 54.0 | |
| | comp=E,18nm,0.2s | | | | | | |
| HAWK | | | | AML | AML | 04 17 57.1 | |
| | comp=N,28nm,0.5s | | | | | | |
| **HAWK** | **Haweek** | **1.55** | **166** | *eP* | **Pb** | **04 17 29.5** | **+0.4** |
| HAWK | | | | *eS* | **Sn** | **04 17 47.4** | **+0.8** |
| | comp=N,28nm,0.5s | | | | | | |
| **GULE** | **Gulek** | **1.56** | **324** | *i S* | **Sn** | **04 17 46.3** | **-0.7** |
| **GULE** | **Gulek** | **1.56** | **324** | *P* | Pn | 04 17 20.2 | -7.2 |
| GULE | | | | *S* | **Sn** | **04 17 46.3** | **-0.7** |

**KLM 14 04:23:54.3, 5°.34N × 117°.34E, h15 km, mb3.5, ML2.7, 3C-2D, Borneo**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SDKM** | **Sandakan** | **0.33** | **335** | ⇓*P* | Pg | 04 24 01.0 | -0.2 |
| **SDKM** | **Sandakan** | **0.33** | **335** | ⇑*S* | Sb | 04 24 07.6 | +0.4 |
| **MYLDM** | **Lahad Datu** | **1.17** | **98** | ⇓*P* | Pg | 04 24 16.9 | +0.1 |
| **KKM** | **Kota Kinabalu** | **1.32** | **302** | ⇑*P* | Pb | 04 24 18.8 | -0.1 |
| **KDM** | **Kudat** | **1.64** | **342** | ⇑*P* | Pn | 04 24 22.5 | -0.1 |

**WEL 14 05:06:41.9±0.1, 43°.62S × 172°.53E, h5 km, ML3.5/13, 3C-1D, Error ellipse: s-maj=0.8km s-min=0.8km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.08** | **60** | PG | Pg | 05 06 43.3 | -0.3 |
| CRLZ | | | | SG | Sg | 05 06 44.9 | +0.1 |
| CRLZ | | | | AML | AML | 05 06 45.2 | |
| CRLZ | | | | AML | AML | 05 06 45.3 | |
| CRLZ | | | | AML | AML | 05 06 45.3 | |
| **MQZ** | **McQueen's Vall** | **0.13** | **135** | PG | Pg | 05 06 44.8 | +0.3 |
| MQZ | | | | AML | AML | 05 06 44.8 | |
| MQZ | | | | SG | Sg | 05 06 46.9 | +0.3 |
| **OXZ** | **Oxford** | **0.46** | **309** | ⇓PG | Pg | 05 06 51.1 | +0.3 |
| **LTZ** | **Lake Taylor** | **0.85** | **347** | *P** | Pg | 05 06 58.5 | +0.1 |
| LTZ | | | | AML | AML | 05 07 11.1 | |
| LTZ | | | | AML | AML | 05 07 11.5 | |
| **RPZ** | **Rata Peaks** | **1.07** | **264** | ⇑*P** | Pg | 05 07 02.4 | -0.2 |
| RPZ | | | | AML | AML | 05 07 19.7 | |
| RPZ | | | | AML | AML | 05 07 24.0 | |
| **KHZ** | **Kahutara** | **1.41** | **32** | ⇑PN | Pn | 05 07 06.1 | -2.1 |
| **WVZ** | **Waitaha Valley** | **1.41** | **292** | PN | Pn | 05 07 07.5 | -0.7 |
| WVZ | | | | AML | AML | 05 07 37.1 | |
| **LBZ** | **Lake Benmore** | **1.86** | **245** | PN | Pn | 05 07 13.5 | -0.9 |
| LBZ | | | | AML | AML | 05 07 50.8 | |
| LBZ | | | | AML | AML | 05 07 53.1 | |
| **THZ** | **Tophouse** | **1.87** | **9** | PN | Pn | 05 07 13.5 | -1.2 |
| THZ | | | | AML | AML | 05 07 40.0 | |
| THZ | | | | AML | AML | 05 07 49.5 | |
| **DSZ** | **Denniston Nort** | **1.94** | **344** | PN | Pn | 05 07 14.6 | -1.1 |
| DSZ | | | | AML | AML | 05 07 52.5 | |
| **ODZ** | **Otahua Downs** | **1.96** | **223** | ⇑PN | Pn | 05 07 14.5 | -1.4 |
| ODZ | | | | AML | AML | 05 07 48.2 | |
| ODZ | | | | AML | AML | 05 07 57.9 | |
| **FOZ** | **Fox Glacier** | **2.06** | **270** | PN | Pn | 05 07 16.2 | -1.0 |
| FOZ | | | | AML | AML | 05 07 51.4 | |
| FOZ | | | | AML | AML | 05 07 56.1 | |
| **JCZ** | **Jackson Bay** | **2.76** | **259** | PN | Pn | 05 07 26.7 | -0.3 |
| **QRZ** | **Quartz Range** | **2.79** | **0** | AML | AML | 05 08 00.9 | |
| QRZ | | | | AML | AML | 05 08 14.3 | |
| **EAZ** | **Earnscleugh** | **2.81** | **234** | PN | Pn | 05 07 26.3 | -1.3 |
| EAZ | | | | AML | AML | 05 08 17.6 | |
| **TUZ** | **Tuapeka** | **3.12** | **220** | PN | Pn | 05 07 30.3 | -1.3 |
| TUZ | | | | AML | AML | 05 08 33.1 | |
| TUZ | | | | AML | AML | 05 08 33.2 | |

**WEL 14 05:07:30.0±0.1, 43°.62S × 172°.54E, h5 km, ML3.2/4, 1C-1D, Error ellipse: s-maj=1.1km s-min=0.8km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.07** | **56** | ⇑PG | Pg | 05 07 31.6 | 0.0 |
| CRLZ | | | | AML | AML | 05 07 32.1 | |
| CRLZ | | | | SG | Sg | 05 07 32.8 | +0.1 |
| CRLZ | | | | AML | AML | 05 07 33.1 | |
| CRLZ | | | | AML | AML | 05 07 33.1 | |
| **MQZ** | **McQueen's Vall** | **0.12** | **139** | ⇓PG | Pg | 05 07 32.7 | +0.1 |
| MQZ | | | | SG | Sg | 05 07 34.6 | +0.3 |
| MQZ | | | | AML | AML | 05 07 34.8 | |
| **OXZ** | **Oxford** | **0.47** | **308** | PG | Pg | 05 07 39.1 | +0.1 |
| **LTZ** | **Lake Taylor** | **0.86** | **346** | *P** | Pg | 05 07 46.8 | +0.3 |
| LTZ | | | | *S** | Sg | 05 07 58.3 | +0.5 |
| LTZ | | | | AML | AML | 05 07 59.0 | |
| **RPZ** | **Rata Peaks** | **1.08** | **264** | *P** | Pg | 05 07 50.8 | -0.1 |
| RPZ | | | | AML | AML | 05 08 07.5 | |
| RPZ | | | | AML | AML | 05 08 09.0 | |

*ISCJB **14** 05:10:31.7±0.5, 9°.65S±0°.06 × 116°.59E±0°.05, h10 km, Error ellipse: s-maj=8.9km s-min=6.2km az=32.6*

*DJA **14** 05:10:36.1±0.8, 9°.5S±6°.×11°.7E±°, h22 km ± 8 km, M4.3/14, mb4.7/3, mB4.6/2, MLv4.1/14, Mw(mB)3.8/2*

*AUST **14** 05:11:11.4, 11°.99S × 118°.43E, h60 km*

**ISC 14 05:10:32.6±0.8, 9°.59S±0°.07 × 116°.54E±0°.05, h10 km, n20, σ1°.35/21, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **0.91** | **22** | *P* | **Pg** | **05 10 50.5** | **+0.3** |
| **IGBI** | **Denpasar** | **1.57** | **299** | *P* | **Pn** | **05 11 00.8** | **+0.2** |
| IGBI | | | | *S* | **Sn** | **05 11 19.0** | **-2.1** |
| **DNP** | **Denpasar** | **1.59** | **304** | *P* | **Sn** | **05 11 21.1** | **-0.5** |
| **SRBI** | **Singaraja** | **1.99** | **319** | *P* | **Pn** | **05 11 07.0** | **+0.7** |
| **JAGI** | **Jajag, Banyuwa** | **2.61** | **295** | *P* | **Pn** | **05 11 15.7** | **+0.8** |
| **WBSI** | **Waikabubak, Su** | **2.81** | **91** | *P* | **Pn** | **05 11 19.6** | **+1.8** |
| **GMJI** | **Gumukmas** | **3.33** | **293** | *P* | **Pn** | **05 11 26.0** | **+1.2** |
| **BLJI** | **Banyuglugur** | **3.44** | **302** | *P* | **Pb** | **05 11 34.3** | **+0.6** |
| **KMMI** | **Kalianget** | **3.58** | **315** | *P* | **Pn** | **05 11 30.2** | **+1.9** |
| **PWJI** | **Pagerwojo** | **4.93** | **288** | *P* | **Pn** | **05 11 48.7** | **+1.8** |
| **BSSI** | **Bau Bau, Buton** | **5.20** | **49** | *P* | **Pn** | **05 11 50.8** | **+0.2** |
| | 53nm,0.5s,800nm0.3nm | | | | | | |
| **PCJI** | **Pacitan** | **5.48** | **284** | *P* | **Pn** | **05 11 56.8** | **+2.5** |
| **BKSI** | **Bulukumba** | **5.53** | **40** | *P* | **Pn** | **05 11 55.1** | **0.0** |
| | 31nm,0.4s,433nm0.1nm | | | | | | |
| **UGM** | **Wanagama** | **6.17** | **285** | *P* | **Sn** | **05 13 13.0** | **-1.7** |
| | baz=8.8,SNR=3.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.23** | **135** | *P* | **Pn** | **05 13 26.9** | **-0.2** |
| | baz=9.3,SNR=13 | | | | | | |
| **GIRL** | **Giralia** | **13.17** | **189** | *P* | **Pn** | **05 13 39.5** | **-0.4** |
| | baz=11,SNR=9.1 | | | | | | |
| **KNRA** | **Kununurra** | **13.37** | **118** | *P* | **Pn** | **05 13 41.2** | **-1.4** |
| | baz=11,SNR=4.2 | | | | | | |
| **MTN** | **Manton Dam** | **14.68** | **104** | *P* | **P** | **05 14 05.6** | **-1.2** |
| | baz=12,SNR=3.2 | | | | | | |
| **MEEK** | **Meekatharra** | **17.07** | **174** | *P* | **Pn** | **05 14 33.0** | **+1.4** |
| | baz=15,SNR=12 | | | | | | |
| **WRKA** | **Warakurna** | **19.01** | **145** | *P* | **Pn** | **05 14 55.8** | **+0.4** |
| | baz=16,SNR=5.1 | | | | | | |

**MEX 14 05:17:37.5±0.5, 15°.39N × 92°.80W, h76 km ± 6 km, MD3.5, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.52** | **308** | *eP* | Pn | 05 17 49.8 | -1.3 |
| PCIG | | | | *i S* | Sn | 05 17 59.1 | -1.8 |
| **CCIG** | **Comitan** | **1.09** | **35** | *eP* | Pn | 05 17 56.5 | -1.3 |
| CCIG | | | | *i S* | Sn | 05 18 10.8 | -2.1 |

*ISCJB **14** 05:17:40.9±0.6, 51°.44N±0°.03 × 16°.11E±0°.03, h0 km, Error ellipse: s-maj=4.8km s-min=2.8km az=8.6*

*CSEM **14** 05:17:42.4±0.3, 51°.43N × 16°.15E, h2 km, ML3.2/10, Error ellipse: s-maj=5.6km s-min=3.1km az=178.0*

*VIE **14** 05:17:45.9±0.5, 51°.18N × 16°.25E, h0 km, mb2.2/3, ml2.7/3, Error ellipse: s-maj=3.4km s-min=3.3km az=149.0, Suspected Mining induced.*

**ISC 14 05:17:42.3±1.0, 51°.46N±0°.05 ×

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OKC | | | | Sg | **Sg** | **05 18 48.1** | **-0.8** |
| | comp=Z,14nm,0.4s | | | | | | |
| **VRAC** | **Vranov** | **2.18 172** | | *e*Pn | **Pn** | **05 18 19.7** | **-0.1** |
| VRAC | | | | *e*Sg | **Sb** | **05 18 49.1** | **-0.9** |
| **NKC** | **Novy Kostel** | **2.63 244** | | *e*PN | **Pn** | **05 18 26.3** | **+0.2** |
| NKC | | | | *e*PG | **Pg** | **05 18 32.1** | **-0.7** |
| NKC | | | | *e*SG | **Sg** | **05 19 07.5** | **+0.6** |
| | comp=Z,29nm,0.3s | | | | | | |
| **NKC** | **Novy Kostel** | **2.63 244** | | Pn | **Pn** | **05 18 26.3** | **+0.2** |
| **OJC** | **Ojcow** | **2.64 117** | | *e*Pg | **Pg** | **05 18 31.9** | **-1.0** |
| OJC | | | | *e*Sg | **Sg** | **05 19 06.6** | **-0.5** |
| **OJC** | **Ojcow** | **2.64 117** | | *e*Pg | **Pg** | **05 18 31.9** | **-1.0** |
| OJC | | | | *e*Sg | **Sg** | **05 19 06.6** | **-0.5** |
| **KHC** | **Kasperske Hory** | **2.85 216** | | *e*PN | **Pn** | **05 18 29.0** | **0.0** |
| KHC | | | | *e*PG | **Pb** | **05 18 35.1** | **+1.1** |
| KHC | | | | *e*SN | **Sn** | **05 19 02.8** | **-1.2** |
| KHC | | | | *e*SG | **Sg** | **05 19 13.3** | **-0.4** |
| | comp=Z,9.5nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.85 216** | | Pn | **Pn** | **05 18 29.0** | **0.0** |
| **LANS** | **Liptovska Anna** | **3.15 136** | | *e*PN | **Pn** | **05 18 33.0** | **-0.2** |
| LANS | | | | *e*SN | **Sb** | **05 19 19.1** | **+0.9** |
| **VYHS** | **Vyhne** | **3.45 148** | | *e*PN | **Pn** | **05 18 36.1** | **-1.1** |
| **VYHS** | **Vyhne** | **3.45 148** | | *e*Pn | **Pn** | **05 18 36.1** | **-1.1** |
| **MOA** | **Molln** | **3.81 199** | ⇈ | *i*Pn | **Pn** | **05 18 42.6** | **+0.4** |
| MOA | | | ⇈ | *i*Sg | **Sg** | **05 19 44.4** | **-0.3** |
| | comp=Z,14nm,0.5s | | | | | | |
| **MOA** | **Molln** | **3.81 199** | | Pn | **Pn** | **05 18 42.6** | **+0.4** |
| MOA | | | | Sg | **Sg** | **05 19 44.4** | **-0.3** |
| | comp=Z,14nm,0.5s | | | | | | |
| **STHS** | **Stebnicka Huta** | **3.86 120** | | *e*PN | **Pn** | **05 18 43.1** | **+0.2** |
| STHS | | | | *e*SG | **Sg** | **05 19 51.6** | **+5.4** |
| **STHS** | **Stebnicka Huta** | **3.86 120** | | *e*Pn | **Pn** | **05 18 43.1** | **+0.2** |

*NIED* ***14*** *05:29:00.36˚.10N×139˚.90E,h56km,Mw3.9 Best double couple: M₀8.59000×10¹⁴ NP1:ϕs236.00000°,δ22.00000°, λ92.00000°. NP2:ϕs54.00000°,δ68.00000°,λ89.00000°.*

*ISCJB* ***14*** *05:29:51.4±0.5,36˚.05N±0˚.04×139˚.90E±0˚.06,h58km±3km, mb3.9/14,MS2.7/2, Error ellipse: s-maj=7.6km s-min=6.5km az=172.3*

*JMA* ***14*** *05:29:52.4,36˚.06N×139˚.89E,h45km±1km,M3.9 Broadband fault plane solution: P waves. NP1: ϕs40.00000°,δ72.00000°,λ87.00000°. NP2:ϕs231.00000°, δ18.00000°,λ100.00000°. Principal axes: T Plg63.0000°, Azm305.0000°; N Plg3.0000°, Azm41.0000°; P Plg27.0000°, Azm133.0000°;*

*JMA Felt III J1.*

*IDC* ***14*** *05:29:53.7±2.0,35˚.91N×139˚.75E,h67km±21km,mb3.7/14, mb1 3.8/16,mb1mx3.6/50,mbtmp4.0/16,MS2.8/4, Ms1 2.8/4,ms1mx2.5/28 Error ellipse: s-maj=18.8km s-min=13.1km az=69.0*

**ISC 14 05:29:52.4±0.8,36˚.10N±0˚.04×139˚.86E±0˚.05,h51km±7km, n35,σ1s20/33,mb4.0/14,1C-4D,Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JYT** | **Yasato** | **0.30** | **65** | ⇈P | **Pn** | **05 30 01.1** | **-0.6** |
| JYT | | | | S | **Sn** | **05 30 07.3** | **-1.0** |
| **JAG** | **Ashikaga** | **0.46** | **315** | ⇊P | **Pn** | **05 30 03.5** | **+0.2** |
| JAG | | | | S | **Sn** | **05 30 11.4** | **+0.3** |
| **JRY** | **Ryogami san** | **0.78** | **264** | ⇊P | **Pn** | **05 30 07.2** | **-0.1** |
| JRY | | | | S | **Sn** | **05 30 17.8** | **-0.3** |
| **JKT** | **Katashina** | **0.83** | **324** | ⇊P | **Pn** | **05 30 08.1** | **+0.1** |
| JKT | | | | S | **Sn** | **05 30 20.5** | **+1.2** |
| **I30JP** | **ISUMI INFRASON** | **0.87** | **155** | P | **Pn** | **05 30 10.0** | **+1.5** |
| | baz=322,slow=252 | | | | | | |
| I30JP | | | | S | **Sn** | **05 30 23.5** | **+3.2** |
| | baz=114,slow=314 | | | | | | |
| **JOD2** | **Odawara 2** | **1.04** | **217** | P | **Pn** | **05 30 12.4** | **+1.6** |
| JOD2 | | | | S | **Sn** | **05 30 24.4** | **0.0** |
| **JYN** | **Shimob** | **1.23** | **241** | ⇊P | **Pn** | **05 30 14.3** | **+1.0** |
| **MAT** | **Matsushiro** | **1.40** | **289** | P | **Pn** | **05 30 16.5** | **+0.8** |
| MAT | | | | S | **Sn** | **05 30 33.1** | **0.0** |
| **JHJ** | **Hachijo jima 2** | **2.98** | **181** | P | **Pn** | **05 30 36.2** | **-0.9** |
| | 92nm,0.3s,baz=304,slow=19,SNR=30 | | | | | | |
| JHJ | | | | S | **Sn** | **05 31 08.7** | **-2.9** |
| | 43nm,0.3s,baz=36,slow=23,SNR=3.7 | | | | | | |
| **JNU** | **Nakatsue** | **7.97** | **251** | LR | LR | 05 35 21.1 | |
| | comp=Z,42nm,20.1s,baz=119,slow=42 | | | | | | |
| **KSRS** | **Korea Array** | **9.67** | **282** | LR | LR | 05 35 48.2 | |
| | comp=Z,54nm,19.4s,baz=58,slow=37 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **10.08** | **326** | P | Pn | 05 32 19.0 | +4.5 |
| | 0.1nm,0.3s,baz=150,slow=14,SNR=8.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **21.12** | **31** | LR | LR | 05 43 49.2 | |
| | comp=Z,12nm,19.1s,baz=141,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **27.29** | **306** | P | **P** | **05 35 33.0** | **+0.8** |
| | 0.4nm,0.4s,baz=98,slow=10,SNR=2.9 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.79** | **117** | T | T | 06 05 56.1 | |
| | baz=312,slow=74,SNR=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.80** | **117** | T | T | 06 05 55.5 | |
| | baz=312,slow=74,SNR=18 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.81** | **117** | T | T | 06 05 57.2 | |
| | baz=312,slow=74,SNR=12 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.45** | **119** | T | T | 06 06 46.6 | |
| | baz=314,slow=75,SNR=28 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.45** | **119** | T | T | 06 06 47.4 | |
| | baz=314,slow=75,SNR=21 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.47** | **119** | T | T | 06 06 46.0 | |
| | baz=314,slow=75,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.63** | **313** | P | **P** | **05 37 35.4** | **0.0** |
| | 3.9nm,0.5s,baz=93,slow=7.0,SNR=9.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.56** | **303** | P | **P** | **05 37 51.1** | **-0.1** |
| | 1.0nm,0.6s,baz=86,slow=9.9,SNR=8.9 | | | | | | |
| MKAR | | | | LR | LR | 05 56 47.8 | |
| | comp=Z,24nm,18.1s,baz=147,slow=37 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.59** | **309** | P | **P** | **05 38 07.0** | **-0.3** |
| | 3.7nm,0.5s,baz=84,slow=8.0,SNR=18 | | | | | | |
| **KDAK** | **Kodiak Island** | **48.63** | **41** | P | **P** | **05 38 31.4** | **+0.7** |
| | 5.1nm,0.8s,baz=270,slow=10,SNR=3.8 | | | | | | |
| **AAK** | **Ala-Archa** | **49.83** | **299** | P | **P** | **05 38 40.3** | **-0.2** |
| | 1.4nm,0.8s,baz=103,slow=4.5,SNR=5.0 | | | | | | |
| **ILAR** | **Eielson Array** | **50.95** | **32** | P | **P** | **05 38 48.8** | **+0.4** |
| | 0.9nm,0.7s,baz=265,slow=5.6,SNR=13 | | | | | | |
| **INK** | **Inuvik** | **55.78** | **27** | P | **P** | **05 39 24.4** | **+0.7** |
| | 1.2nm,0.8s,baz=309,slow=6.5,SNR=6.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **55.98** | **186** | P | **P** | **05 39 24.2** | **-1.5** |
| | 0.7nm,0.4s,baz=4.1,slow=7.5,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **59.71** | **186** | P | **P** | **05 39 50.0** | **-1.8** |
| | 0.3nm,0.6s,baz=26,slow=6.5,SNR=3.9 | | | | | | |
| **FINES** | **FINESS Array B** | **69.05** | **332** | P | **P** | **05 40 52.3** | **-0.1** |
| | 4.2nm,0.9s,baz=57,slow=5.1,SNR=2.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.26** | **322** | P | **P** | **05 41 23.0** | **-1.0** |
| | 0.1nm,0.3s,baz=41,slow=6.4,SNR=4.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.55** | **52** | P | **P** | **05 41 39.0** | **+1.4** |
| | 0.7nm,0.7s,baz=281,slow=5.9,SNR=6.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.68** | **51** | P | **P** | **05 42 55.4** | **+0.8** |
| | 0.3nm,0.7s,baz=299,slow=3.2,SNR=5.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **117.08** | **313** | PKP | **PKPdf** | **05 48 31.0** | **-1.3** |
| | 0.3nm,0.8s,baz=4.1,slow=3.4,SNR=3.3 | | | | | | |
| **LPAZ** | **La Paz** | **148.25** | **59** | PKPbc | **PKPbc** | **05 49 34.2** | **+0.2** |
| | 0.6nm,0.8s,baz=315,slow=5.7,SNR=3.5 | | | | | | |

*ISCJB* ***14*** *05:34:45.7±0.3,67˚.17N±0˚.02×20˚.65E±0˚.05,h0km, mb3.6/4,Error ellipse: s-maj=3.0km s-min=2.9km az=20.1*

*UPP* ***14*** *05:34:46.7,67˚.18N×20˚.63E,h0km,ML3.4,Mining explosion.*

*HEL* ***14*** *05:34:47.5±0.1,67˚.19N×20˚.63E,h1km,ML2.9, ML3.4(UPP),Suspected explosion*

*NAO* ***14*** *05:34:47.1±0.7,67˚.14N×20˚.92E,ML3.5*

*IDC* ***14*** *05:34:47.2±0.6,67˚.15N×20˚.85E,h0km,mb3.5/4, mb1 3.7/10,mb1mx3.5/36,mbtmp3.6/10,ML3.7/6,MS2.4/1, Ms1 2.5/1,ms1mx2.0/33,Error ellipse: s-maj=12.0km s-min=6.3km az=109.0*

*CSEM* ***14*** *05:34:47.1±0.1,67˚.18N×20˚.73E,h2km,ML3.4,Error ellipse: s-maj=3.7km s-min=3.5km az=111.0,Mining explosion.*

*BER* ***14*** *05:34:49.0±3.6,67˚.17N×20˚.82E,h0km,ML2.9, ML3.5(NAO),Suspected explosion*

**ISC 14 05:34:46.2±0.6,67˚.17N±0˚.02×20˚.67E±0˚.02,h0km,n93, σ1s26/141,mb3.5/4,Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MASU** | **Masugnsbyn** | **0.59** | **60** | *i*P | **Pg** | **05 34 58.2** | **+0.7** |
| MASU | | | | *i*S | **Sg** | **05 35 06.3** | **+1.2** |
| **MASU** | **Masugnsbyn** | **0.59** | **60** | P | **Pg** | **05 34 58.2** | **+0.7** |
| MASU | | | | S | **Sg** | **05 35 06.3** | **+1.2** |
| **KUA** | **Kurravaara** | **0.80** | **351** | *i*P | **Pg** | **05 35 01.4** | **-0.1** |
| **KUA** | **Kurravaara** | **0.80** | **351** | P | **Pg** | **05 35 01.4** | **-0.1** |
| **ERTU** | **Ertsjaerv** | **0.86** | **135** | *e*P | **Pg** | **05 35 03.1** | **+0.6** |
| ERTU | | | | *e*S | **Sg** | **05 35 14.5** | **+0.8** |
| **ERTU** | **Ertsjaerv** | **0.86** | **135** | P | **Pg** | **05 35 03.2** | **+0.6** |
| ERTU | | | | S | **Sg** | **05 35 14.4** | **+0.8** |
| **SALU** | **Saltoluokta** | **0.87** | **285** | *i*P | **Pg** | **05 35 02.6** | **-0.2** |
| **SALU** | **Saltoluokta** | **0.87** | **285** | P | **Pg** | **05 35 02.6** | **-0.2** |
| **NIKU** | **Nikkaluokta** | **0.94** | **319** | *e*P | **Pg** | **05 35 04.4** | **+0.1** |
| **NIKU** | **Nikkaluokta** | **0.94** | **319** | P | **Pg** | **05 35 04.3** | **+0.1** |
| **HARU** | **Harads** | **1.01** | **173** | *e*P | **Pg** | **05 35 06.0** | **+0.5** |
| **HARU** | **Harads** | **1.01** | **173** | P | **Pg** | **05 35 06.1** | **+0.5** |
| **LANU** | **Lannavaara** | **1.02** | **29** | *e*P | **Pg** | **05 35 05.4** | **-0.3** |
| LANU | | | | *e*S | **Sg** | **05 35 18.0** | **-0.9** |
| **LANU** | **Lannavaara** | **1.02** | **29** | P | **Pg** | **05 35 05.4** | **-0.3** |
| LANU | | | | S | **Sg** | **05 35 18.0** | **-0.9** |
| **HEF** | **Hetta** | **1.69** | **41** | *e*P | **Pn** | **05 35 17.1** | **+0.2** |
| HEF | | | | *e*S | **Sn** | **05 35 39.8** | **+0.7** |
| **HEF** | **Hetta** | **1.69** | **41** | *e*P | **Pn** | **05 35 17.1** | **+0.2** |
| HEF | | | | *e*S | **Sn** | **05 35 39.0** | **-0.2** |
| HEF | | | | MSG | | 05 35 42.3 | |
| | comp=Z,59nm,0.2s | | | | | | |
| **HEF** | **Hetta** | **1.69** | **41** | *e*P | **Pn** | **05 35 17.1** | **+0.2** |
| | SNR=50 | | | | | | |
| HEF | | | | *e*S | **Sn** | **05 35 39.8** | **+0.7** |
| | SNR=50 | | | | | | |
| **KALU** | **Kalix** | **1.70** | **139** | *e*P | **Pn** | **05 35 18.0** | **+1.1** |
| KALU | | | | *e*SG | **Sb** | **05 35 40.4** | **+0.4** |
| **KALU** | **Kalix** | **1.70** | **139** | P | **Pn** | **05 35 17.9** | **+0.9** |
| KALU | | | | Sg | **Sb** | **05 35 40.4** | **+0.4** |
| **SJUU** | **Sjulsmark** | **1.71** | **167** | *e*P | **Pn** | **05 35 18.3** | **+1.1** |
| **SJUU** | **Sjulsmark** | **1.71** | **167** | P | **Pn** | **05 35 18.2** | **+1.1** |
| **KIF** | **Kilpisjarvi** | **1.85** | **1** | Pn | **Pn** | **05 35 20.5** | **+1.4** |
| KIF | | | | Lg | Lg | 05 35 46.2 | |
| **KIF** | **Kilpisjarvi** | **1.85** | **1** | *e*P | **Pn** | **05 35 20.4** | **+1.4** |
| KIF | | | | Pn | **Pn** | **05 35 20.5** | **+1.4** |
| KIF | | | | Lg | Lg | 05 35 46.2 | |
| KIF | | | | *e*Sg | **Sg** | **05 35 46.8** | **+1.4** |
| **KIF** | **Kilpisjarvi** | **1.85** | **1** | *e*P | **Pn** | **05 35 20.3** | **+1.3** |
| KIF | | | | MSG | | 05 35 48.4 | |
| | comp=Z,140nm,0.3s | | | | | | |
| **KIF** | **Kilpisjarvi** | **1.85** | **1** | P | **Pn** | **05 35 20.3** | **+1.3** |
| KIF | | | | Lg | Lg | 05 35 46.2 | |
| | SNR=104 | | | | | | |
| KIF | | | | *e*Sg | **Sg** | **05 35 46.8** | **+1.4** |
| | SNR=90 | | | | | | |
| **KTK1** | **Kautokeino** | **2.09** | **26** | *e*P | **Pn** | **05 35 23.9** | **+1.5** |
| KTK1 | | | | *e*Sg | **Sb** | **05 35 51.0** | **-0.3** |
| KTK1 | | | | IAML | | 05 35 53.8 | |
| | comp=Z,316nm,0.6s | | | | | | |
| **KTK1** | **Kautokeino** | **2.09** | **26** | *e*P | **Pn** | **05 35 23.9** | **+1.5** |
| | SNR=50 | | | | | | |
| KTK1 | | | | *e*Sg | **Sb** | **05 35 51.0** | **-0.3** |
| | SNR=90 | | | | | | |
| **RNF** | **Rovaniemi** | **2.18** | **102** | *e*P | **Pn** | **05 35 25.3** | **+1.6** |
| RNF | | | | *e*SG | **Sb** | **05 35 54.7** | **+0.8** |
| **RNF** | **Rovaniemi** | **2.18** | **102** | P | **Pn** | **05 35 25.2** | **+1.6** |
| RNF | | | | Sg | **Sb** | **05 35 54.7** | **+0.8** |
| **STEI** | **Steigen** | **2.22** | **293** | *e*P | **Pb** | **05 35 27.3** | **+0.2** |
| STEI | | | | *e*Sg | **Sg** | **05 35 57.2** | **-0.2** |
| STEI | | | | IAML | | 05 35 59.7 | |
| | comp=Z,124nm,0.5s | | | | | | |
| **STEI** | **Steigen** | **2.22** | **293** | *e*P | **Pb** | **05 35 27.3** | **+0.2** |
| | SNR=50 | | | | | | |
| STEI | | | | *e*Sg | **Sg** | **05 35 57.2** | **-0.2** |
| | SNR=90 | | | | | | |
| **SGF** | **Sodankyl** | **2.29** | **80** | *e*P | **Pn** | **05 35 26.8** | **+1.7** |
| SGF | | | | *e*SB | **Sb** | **05 35 56.7** | **-0.3** |
| **SGF** | **Sodankyl** | **2.29** | **80** | P | **Pn** | **05 35 26.8** | **+1.7** |
| SGF | | | | Sb | **Sb** | **05 35 56.7** | **-0.3** |
| **TRO** | **Tromso** | **2.56** | **346** | *e*P | **Pb** | **05 35 31.6** | **-1.3** |
| **TRO** | **Tromso** | **2.56** | **346** | *e*P | **Pb** | **05 35 31.6** | **-1.3** |
| | SNR=50 | | | | | | |
| **MOR8** | **Moi Rana** | **2.67** | **251** | *e*P | **Pn** | **05 35 31.0** | **+0.6** |
| **MOR8** | **Moi Rana** | **2.67** | **251** | *e*P | **Pn** | **05 35 31.0** | **+0.6** |
| | SNR=50 | | | | | | |
| **LOF** | **Lofoten** | **2.89** | **293** | *e*P | **Pb** | **05 35 37.9** | **-0.6** |
| LOF | | | | IAML | | 05 36 20.9 | |
| | comp=Z,67nm,0.5s | | | | | | |
| **LOF** | **Lofoten** | **2.89** | **293** | *e*P | **Pb** | **05 35 37.9** | **-0.6** |
| | SNR=50 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.98** | **35** | Pn | **Pn** | **05 35 35.5** | **+0.9** |
| | baz=213,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **05 36 11.8** | **+0.9** |
| | baz=214,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.98** | **35** | Pn | **Pn** | **05 35 35.5** | **+0.9** |
| | baz=213,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **05 36 11.8** | **+0.9** |
| | baz=214,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.98** | **35** | Pn | **Pn** | **05 35 35.5** | **+0.9** |
| | SNR=50 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **05 36 11.9** | **+0.9** |
| | SNR=50 | | | | | | |
| **ARCES** | **ARCESS Array B** | **2.98** | **35** | Pn | **Pn** | **05 35 35.4** | **+0.8** |
| | comp=Z,8.2nm,0.3s,baz=214,slow=13,SNR=250 | | | | | | |
| ARCES | | | | Sn | **Sn** | **05 36 12.0** | **+1.1** |
| | comp=Z,23nm,0.3s,baz=215,slow=20,SNR=18 | | | | | | |
| **ARE0** | **ARCESS Array S** | **2.98** | **35** | *e*P | **Pn** | **05 35 35.4** | **+0.8** |
| **ARE0** | **ARCESS Array S** | **2.98** | **35** | *e*P | **Pn** | **05 35 35.5** | **+0.8** |
| **ARE0** | **ARCESS Array S** | **2.98** | **35** | *e*P | **Pn** | **05 35 35.4** | **+0.8** |
| | SNR=50 | | | | | | |
| **FLOS** | **Flostrand** | **3.02** | **257** | *e*P | **Pn** | **05 35 37.0** | **+1.9** |
| **FLOS** | **Flostrand** | **3.02** | **257** | *e*P | **Pn** | **05 35 37.0** | **+1.9** |
| | SNR=50 | | | | | | |
| **KONS** | **Konsvik** | **3.06** | **261** | *e*P | **Pn** | **05 35 37.0** | **+1.3** |
| KONS | | | | IAML | | 05 36 28.9 | |
| | comp=Z,68nm,0.4s | | | | | | |
| **KONS** | **Konsvik** | **3.06** | **261** | *e*P | **Pn** | **05 35 37.0** | **+1.3** |
| | SNR=50 | | | | | | |
| **STOK** | **Stokkvaagen** | **3.15** | **258** | *e*P | **Pn** | **05 35 39.1** | **+2.2** |
| **STOK** | **Stokkvaagen** | **3.15** | **258** | *e*P | **Pn** | **05 35 39.1** | **+2.2** |
| | SNR=50 | | | | | | |
| **UMAU** | **Umeaa** | **3.30** | **180** | *e*P | **Pn** | **05 35 40.7** | **+1.8** |
| UMAU | | | | *e*SG | **Sg** | **05 36 30.2** | **-1.8** |
| **UMAU** | **Umeaa** | **3.30** | **180** | P | **Pn** | **05 35 40.7** | **+1.8** |
| UMAU | | | | Sg | **Sg** | **05 36 30.2** | **-1.8** |
| **VRF** | **Varrio** | **3.49** | **76** | *e*P | **Pn** | **05 35 41.9** | **+0.2** |
| VRF | | | | *e*SB | **Sb** | **05 36 30.2** | **-1.4** |
| **VRF** | **Varrio** | **3.49** | **76** | P | **Pn** | **05 35 41.8** | **+0.2** |
| VRF | | | | Sb | **Sb** | **05 36 30.2** | **-1.4** |
| **MSF** | **Maaselka** | **3.58** | **107** | *e*SB | **Sb** | **05 36 35.1** | **+1.0** |
| **MSF** | **Maaselka** | **3.58** | **107** | Sb | **Sb** | **05 36 35.1** | **+1.0** |
| **HAMF** | **Hammerfest** | **3.66** | **16** | *e*P | **Pn** | **05 35 45.7** | **+1.8** |
| HAMF | | | | IAML | | 05 36 46.3 | |
| | comp=Z,78nm,0.5s | | | | | | |
| **HAMF** | **Hammerfest** | **3.66** | **16** | *e*P | **Pn** | **05 35 45.7** | **+1.8** |
| | SNR=50 | | | | | | |
| **KU6** | **Riekki** | **3.85** | **103** | *e*P | **Pn** | **05 35 47.5** | **+0.9** |
| KU6 | | | | *e*SG | **Sg** | **05 36 47.3** | **-2.5** |
| KU6 | | | | MSG | | 05 36 50.6 | |
| | comp=Z,48nm,0.4s | | | | | | |
| **KU6** | **Riekki** | **3.85** | **103** | P | **Pn** | **05 35 47.4** | **+0.9** |
| KU6 | | | | Sg | **Sg** | **05 36 47.2** | **-2.5** |
| **VAF** | **Ylistaro** | **4.23** | **168** | *e*P | **Pn** | **05 35 53.3** | **+1.6** |
| VAF | | | | *e*SG | **Sb** | **05 36 57.3** | **+4.5** |
| VAF | | | | MSG | | 05 37 02.2 | |
| | comp=Z,21nm,0.4s | | | | | | |
| **VAF** | **Ylistaro** | **4.23** | **168** | P | **Pn** | **05 35 53.3** | **+1.6** |
| **KJN** | **Kajaani** | **4.25** | **133** | *e*P | **Pn** | **05 35 53.5** | **+1.5** |
| KJN | | | | MSG | | 05 37 01.9 | |
| | comp=Z,19nm,0.3s | | | | | | |
| **KJN** | **Kajaani** | **4.25** | **133** | P | **Pn** | **05 35 53.5** | **+1.5** |
| **APA0** | **Apatity Array** | **4.78** | **79** | Pn | **Pn** | **05 35 58.1** | **-1.2** |
| | baz=260,slow=14 | | | | | | |
| APA0 | | | | Pg | **Pb** | **05 36 11.0** | **+0.4** |
| | baz=275,slow=16 | | | | | | |
| APA0 | | | | Sn | **Sn** | **05 36 53.4** | **-1.8** |
| | baz=276,slow=22 | | | | | | |
| APA0 | | | | Lg | Lg | 05 37 12.1 | |
| | baz=281,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **4.78** | **79** | Pn | **Pn** | **05 35 58.1** | **-1.2** |
| | SNR=50 | | | | | | |
| APA0 | | | | Sn | **Sn** | **05 36 53.4** | **-1.8** |
| | SNR=50 | | | | | | |
| APA0 | | | | Lg | Lg | 05 37 12.1 | |
| | SNR=6.2 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.21** | **155** | Pn | **Pn** | **05 36 20.6** | **+1.7** |
| | baz=348,slow=12 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **05 37 29.4** | **-1.0** |
| | baz=344,slow=22 | | | | | | |
| FIA0 | | | | Lg | Lg | 05 37 58.5 | |
| | baz=343,slow=37 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.21** | **155** | Pn | **Pn** | **05 36 20.6** | **+1.7** |
| | SNR=50 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **05 37 29.4** | **-1.0** |
| | SNR=50 | | | | | | |
| FIA0 | | | | Lg | Lg | 05 37 58.5 | |
| | SNR=9.1 | | | | | | |
| **FINES** | **FINESS Array B** | **6.21** | **155** | Pn | **Pn** | **05 36 20.6** | **+1.7** |
| | comp=Z,2.1nm,0.3s,baz=349,slow=13,SNR=66 | | | | | | |
| FINES | | | | Sn | **Sn** | **05 37 28.0** | **-2.4** |
| | comp=Z,1.6nm,0.3s,baz=342,slow=22,SNR=7.2 | | | | | | |
| FINES | | | | Lg | Lg | 05 37 58.8 | |
| | comp=Z,2.0nm,0.3s,baz=345,slow=27,SNR=6.3 | | | | | | |
| **NB2** | **NORSAR Subarra** | **7.41** | **218** | Pn | **Pn** | **05 36 35.9** | **+0.5** |
| | baz=32,slow=14 | | | | | | |
| NB2 | | | | Sn | **Sn** | **05 37 58.9** | **-1.1** |
| | baz=36,slow=22 | | | | | | |
| NB2 | | | | Lg | Lg | 05 38 38.0 | |
| | baz=28,slow=37 | | | | | | |
| **NB2** | **NORSAR Subarra** | **7.41** | **218** | Pn | **Pn** | **05 36 35.9** | **+0.5** |
| | baz=32,slow=14 | | | | | | |
| NB2 | | | | Sn | **Sn** | **05 37 58.9** | **-1.1** |
| | baz=36,slow=22 | | | | | | |
| NB2 | | | | Lg | Lg | 05 38 38.0 | |
| | baz=28,slow=37 | | | | | | |
| **NB2** | **NORSAR Subarra** | **7.41** | **218** | Pn | **Pn** | **05 36 35.9** | **+0.5** |
| | SNR=50 | | | | | | |
| NB2 | | | | Sn | **Sn** | **05 37 58.9** | **-1.1** |
| | SNR=50 | | | | | | |
| NB2 | | | | Lg | Lg | 05 38 38.0 | |
| | SNR=3.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **7.41** | **218** | Pn | **Pn** | **05 36 35.6** | **+0.3** |
| | comp=Z,1.3nm,0.3s,baz=29,slow=11,SNR=22 | | | | | | |
| NOA | | | | Sn | **Sn** | **05 37 56.5** | **-3.6** |
| | comp=Z,1.6nm,0.3s,baz=54,slow=21,SNR=7.4 | | | | | | |
| NOA | | | | Lg | Lg | 05 38 38.4 | |
| | comp=Z,3.0nm,0.3s,baz=61,slow=15,SNR=8.6 | | | | | | |
| NOA | | | | LR | LR | 05 39 30.3 | |
| | comp=Z,30nm,20.2s,baz=10.0,slow=38 | | | | | | |
| **AKN** | **Aaknes** | **7.70** | **236** | Pn | **Pn** | **05 36 40.5** | **+1.2** |
| AKN | | | | Lg | Lg | 05 38 47.3 | |
| **AKN** | **Aaknes** | **7.70** | **236** | Pn | **Pn** | **05 36 40.5** | **+1.2** |
| AKN | | | | Lg | Lg | 05 38 47.3 | |
| **AKN** | **Aaknes** | **7.70** | **236** | Pn | **Pn** | **05 36 40.5** | **+1.2** |
| | SNR=50 | | | | | | |
| **HFS** | **Hagfors** | **7.71** | **207** | Pn | **Pn** | **05 36 39.5** | **+0.1** |
| | baz=19,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **05 38 05.1** | **-2.2** |
| | baz=29,slow=18 | | | | | | |
| HFS | | | | Lg | Lg | 05 38 44.1 | |
| | baz=30,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **7.71** | **207** | Pn | **Pn** | **05 36 39.5** | **+0.1** |
| | baz=19,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **05 38 05.1** | **-2.2** |
| | baz=29,slow=18 | | | | | | |
| HFS | | | | Lg | Lg | 05 38 44.1 | |
| | baz=30,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **7.71** | **207** | Pn | **Pn** | **05 36 39.7** | **+0.2** |
| | comp=Z,1.8nm,0.3s,baz=26,slow=13,SNR=36 | | | | | | |
| HFS | | | | Sn | **Sn** | **05 38 05.3** | **-2.0** |
| | comp=Z,1.6nm,0.3s,baz=7.9,slow=23,SNR=9.8 | | | | | | |
| HFS | | | | Lg | Lg | 05 38 43.2 | |
| | comp=Z,1.7nm,0.3s,baz=36,slow=26,SNR=5.1 | | | | | | |
| **HFS** | **Hagfors** | **7.71** | **207** | Pn | **Pn** | **05 36 39.5** | **+0.1** |
| | SNR=50 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **11.14** | **355** | Pn | **Pn** | **05 37 26.3** | **-0.1** |
| | baz=162,slow=16 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **11.14** | **355** | Pn | **Pn** | **05 37 26.3** | **-0.1** |
| | baz=162,slow=16 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **11.14** | **355** | Pn | **Pn** | **05 37 26.3** | **-0.1** |
| | SNR=50 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **11.14** | **355** | Pn | **Pn** | **05 37 26.3** | **-0.1** |
| | baz=165,slow=12,SNR=14 | | | | | | |
| **AKASG** | **Malin Array Be** | **17.06** | **161** | Pn | Pn | 05 38 40.0 | -5.8 |
| | comp=Z,1.0nm,0.3s,baz=345,slow=13,SNR=4.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **25.01** | **113** | P | **P** | **05 40 11.8** | **+0.5** |
| | comp=Z,2.8nm,0.5s,baz=328,slow=8.2,SNR=9.2 | | | | | | |
| **ILAR** | **Eielson Array** | **48.05** | **353** | P | **P** | **05 43 25.8** | **-0.6** |
| | comp=Z,0.2nm,0.6s,baz=354,slow=6.3,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **55.42** | **203** | P | **P** | **05 44 21.7** | **-0.3** |
| | comp=Z,0.2nm,0.5s,baz=8.8,slow=7.4,SNR=5.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **75.14** | **312** | P | **P** | **05 46 30.6** | **+0.7** |
| | comp=Z,0.1nm,0.5s,baz=46,slow=6.4,SNR=3.2 | | | | | | |

*THE* ***14*** *05:39:16.8,41˚.16N×23˚.36E,h8km±1km,ML2.4/9,Error ellipse: s-maj=1.9km s-min=0.6km az=336.0*

*CSEM* ***14*** *05:39:16.8±0.1,41˚.16N×23˚.37E,h2km,ML2.4,Error ellipse: s-maj=2.4km s-min=2.1km az=117.0*

*SOF* ***14*** *05:39:16.9,41˚.19N×23˚.35E,h5km,MD2.5*

*ISCJB* ***14*** *05:39:16.4±0.4,41˚.15N±0˚.02×23˚.36E±0˚.03,h3km±4km, Error ellipse: s-maj=3.5km s-min=3.2km az=151.7*

*ATH* ***14*** *05:39:16.5,41˚.17N×23˚.34E,h5km±1km,MD3.0/12*

*SKO* ***14*** *05:39:17.6,41˚.17N×23˚.35E,h1km,M1.6,ML2.0*

**IS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PLG** | **Polygyros** | **0.80** | **175** | P | **Pg** | **05 39 31.8** | **-0.6** |
| PLG | | | | S | **Sg** | **05 39 43.0** | **+0.2** |
| **KAVA** | **Kavala** | **0.90** | **100** | P | **Pg** | **05 39 33.9** | **-0.5** |
| KAVA | | | | S | **Sg** | **05 39 45.5** | **-0.6** |
| **KAVA** | **Kavala** | **0.90** | **100** | P | **Pg** | **05 39 33.9** | **-0.5** |
| KAVA | | | | S | **Sg** | **05 39 45.5** | **-0.6** |
| **OUR** | **Ouranopolis** | **0.96** | **150** | *e*PB | **Pg** | **05 39 35.2** | **-0.4** |
| OUR | | | | *e*SB | **Sb** | **05 39 48.9** | **+0.3** |
| **OUR** | **Ouranopolis** | **0.96** | **150** | P | **Pg** | **05 39 35.0** | **-0.6** |
| OUR | | | | S | **Sg** | **05 39 48.0** | **-0.1** |
| **OUR** | **Ouranopolis** | **0.96** | **150** | *e*Pb | **Pg** | **05 39 35.2** | **-0.4** |
| OUR | | | | S | **Sg** | **05 39 48.0** | **-0.1** |
| OUR | | | | *e*Sb | **Sb** | **05 39 48.9** | **+0.3** |
| **RZN** | **Rozhen** | **1.16** | **63** | P | **Pg** | **05 39 38.9** | **-0.4** |
| **RZN** | **Rozhen** | **1.16** | **63** | P | **Pg** | **05 39 38.9** | **-0.4** |
| **LIT** | **Litokhoron** | **1.25** | **212** | *e*PG | **Pn** | **05 39 39.7** | **-0.9** |
| **LIT** | **Litokhoron** | **1.25** | **212** | *e*Pg | **Pn** | **05 39 39.7** | **-0.9** |
| **PAIG** | **Paliouri** | **1.26** | **168** | *e*PG | **Pn** | **05 39 40.2** | **-0.6** |
| PAIG | | | | *e*SB | **Sg** | **05 39 57.8** | **+0.1** |
| **PAIG** | **Paliouri** | **1.26** | **168** | P | **Pn** | **05 39 40.1** | **-0.7** |
| PAIG | | | | S | **Sb** | **05 39 57.1** | **-0.2** |
| **PAIG** | **Paliouri** | **1.26** | **168** | P | **Pn** | **05 39 40.1** | **-0.7** |
| PAIG | | | | S | **Sb** | **05 39 57.1** | **-0.2** |
| PAIG | | | | *e*Sb | **Sg** | **05 39 57.8** | **+0.1** |
| **VTS** | **Vitosha** | **1.43** | **356** | *i* P | **Pg** | **05 39 44.2** | **-0.3** |
| **VTS** | **Vitosha** | **1.43** | **356** | *i* P | **Pg** | **05 39 44.2** | **-0.3** |
| **KDZ** | **Kurdzhali** | **1.63** | **72** | P | **Pn** | **05 39 45.9** | **0.0** |
| **KDZ** | **Kurdzhali** | **1.63** | **72** | P | **Pn** | **05 39 45.9** | **0.0** |
| **NEST** | **Nestorio** | **1.90** | **247** | *e*PN | **Pb** | **05 39 52.1** | **+0.2** |
| **NEST** | **Nestorio** | **1.90** | **247** | *e*Pn | **Pb** | **05 39 52.1** | **+0.2** |
| **BARS** | **Barje** | **2.00** | **326** | *e*Pn | **Pn** | **05 39 51.4** | **+0.4** |
| **ALN** | **Alexandroupoli** | **2.06** | **97** | *e*PG | **Pb** | **05 39 55.4** | **+0.8** |
| **ALN** | **Alexandroupoli** | **2.06** | **97** | *e*Pg | **Pb** | **05 39 55.4** | **+0.8** |
| **MPEP** | **Malo Peshtene** | **2.21** | **7** | P | **Pb** | **05 39 57.4** | **+0.3** |
| **GRUS** | **Gruza** | **3.34** | **325** | *e*Pn | **Pn** | **05 40 11.5** | **+2.1** |

*NEIC* ***14*** *05:59:00.9, 43.62S×172.53E, h5km, ML4.1(WEL), After WEL.*
*NEIC Felt strongly in the Christchurch area.*
**WEL 14 05:59:00.9±0.2, 43.63S×172.53E, h5km±1km, ML4.1/25, 6C-1D, Error ellipse: s-maj=1.3km s-min=1.2km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.08** | **55** | ⇑PG | Pg | 05 59 02.8 | +0.1 |
| CRLZ | | | | SG | Sg | 05 59 04.1 | +0.1 |
| CRLZ | | | | AML | AML | 05 59 04.3 | |
| CRLZ | | | | AML | AML | 05 59 04.3 | |
| CRLZ | | | | AML | AML | 05 59 04.3 | |
| **MQZ** | **McQueen's Vall** | **0.12** | **133** | PG | Pg | 05 59 03.8 | +0.4 |
| MQZ | | | | SG | Sg | 05 59 05.8 | +0.7 |
| MQZ | | | | AML | AML | 05 59 07.4 | |
| **OXZ** | **Oxford** | **0.47** | **310** | ⇑PG | Pg | 05 59 09.9 | 0.0 |
| **LTZ** | **Lake Taylor** | **0.86** | **347** | P* | Pg | 05 59 17.6 | +0.1 |
| LTZ | | | | AML | AML | 05 59 30.3 | |
| LTZ | | | | AML | AML | 05 59 30.6 | |
| **RPZ** | **Rata Peaks** | **1.07** | **265** | ⇓P* | Pg | 05 59 21.4 | -0.2 |
| RPZ | | | | AML | AML | 05 59 39.8 | |
| RPZ | | | | AML | AML | 05 59 41.3 | |
| **RPZ** | **Rata Peaks** | **1.07** | **265** | *e*Pg | Pg | 05 59 21.4 | -0.2 |
| RPZ | | | | *e*Sg | Sb | 05 59 36.4 | +0.1 |
| **KHZ** | **Kahutara** | **1.42** | **32** | ⇑PN | Pn | 05 59 25.2 | -2.1 |
| KHZ | | | | AML | AML | 05 59 53.2 | |
| KHZ | | | | AML | AML | 05 59 59.1 | |
| **KHZ** | **Kahutara** | **1.42** | **32** | *e*Pn | Pn | 05 59 25.3 | -2.0 |
| KHZ | | | | *e*Sn | Sb | 05 59 44.8 | -1.3 |
| **WVZ** | **Waitaha Valley** | **1.42** | **292** | ⇑PN | Pn | 05 59 26.6 | -0.7 |
| WVZ | | | | AML | AML | 05 59 57.6 | |
| **LBZ** | **Lake Benmore** | **1.85** | **245** | PN | Pn | 05 59 32.6 | -0.7 |
| LBZ | | | | AML | AML | 06 00 08.3 | |
| LBZ | | | | AML | AML | 06 00 09.9 | |
| LBZ | | | | AML | AML | 06 00 09.9 | |
| LBZ | | | | AML | AML | 06 00 16.3 | |
| **THZ** | **Tophouse** | **1.88** | **9** | PN | Pn | 05 59 32.2 | -1.6 |
| THZ | | | | AML | AML | 06 00 07.2 | |
| THZ | | | | AML | AML | 06 00 08.6 | |
| **DSZ** | **Denniston Nort** | **1.95** | **344** | PN | Pn | 05 59 33.5 | -1.2 |
| DSZ | | | | AML | AML | 06 00 09.0 | |
| DSZ | | | | AML | AML | 06 00 09.0 | |
| DSZ | | | | AML | AML | 06 00 09.0 | |
| DSZ | | | | AML | AML | 06 00 09.0 | |
| **ODZ** | **Otahua Downs** | **1.96** | **223** | ⇑PN | Pn | 05 59 33.6 | -1.2 |
| ODZ | | | | AML | AML | 06 00 10.9 | |
| ODZ | | | | AML | AML | 06 00 13.9 | |
| ODZ | | | | AML | AML | 06 00 13.9 | |
| ODZ | | | | AML | AML | 06 00 14.0 | |
| **ODZ** | **Otahua Downs** | **1.96** | **223** | *e*Pn | Pn | 05 59 33.8 | -1.0 |
| **FOZ** | **Fox Glacier** | **2.06** | **271** | PN | Pn | 05 59 35.2 | -0.9 |
| FOZ | | | | AML | AML | 06 00 10.1 | |
| FOZ | | | | AML | AML | 06 00 14.6 | |
| **BSWZ** | **Blackbirch Sta** | **2.15** | **28** | PN | Pn | 05 59 35.5 | -1.9 |
| BSWZ | | | | AML | AML | 06 00 19.4 | |
| BSWZ | | | | AML | AML | 06 00 23.2 | |
| **NNZ** | **Nelson** | **2.49** | **15** | PN | Pn | 05 59 40.6 | -1.4 |
| NNZ | | | | AML | AML | 06 00 29.7 | |
| NNZ | | | | AML | AML | 06 00 30.4 | |
| **HHSZ** | **Highcliff Hill** | **2.65** | **211** | PN | Pn | 05 59 43.2 | -1.0 |
| **TCW** | **Tory Channel** | **2.74** | **29** | AML | AML | 06 00 37.6 | |
| TCW | | | | AML | AML | 06 00 40.0 | |
| **JCZ** | **Jackson Bay** | **2.76** | **259** | PN | Pn | 05 59 45.1 | -0.9 |
| JCZ | | | | AML | AML | 06 00 35.3 | |
| JCZ | | | | AML | AML | 06 00 38.1 | |
| **WKZ** | **Wanaka** | **2.79** | **243** | *e*PN | Pn | 05 59 45.6 | -0.8 |
| WKZ | | | | AML | AML | 06 00 40.1 | |
| WKZ | | | | AML | AML | 06 00 44.1 | |
| **QRZ** | **Quartz Range** | **2.80** | **0** | AML | AML | 06 00 32.5 | |
| QRZ | | | | AML | AML | 06 00 32.5 | |
| QRZ | | | | AML | AML | 06 00 33.4 | |
| QRZ | | | | AML | AML | 06 00 33.4 | |
| **EAZ** | **Earnscleugh** | **2.81** | **234** | ⇑PN | Pn | 05 59 45.5 | -1.0 |
| EAZ | | | | AML | AML | 06 00 35.7 | |
| EAZ | | | | AML | AML | 06 00 35.7 | |
| EAZ | | | | AML | AML | 06 00 38.2 | |
| EAZ | | | | AML | AML | 06 00 38.2 | |
| **PLWZ** | **Palliser** | **2.88** | **45** | PN | Pn | 05 59 44.6 | -2.8 |
| **DUWZ** | **D'Urville Isla** | **3.00** | **21** | AML | AML | 06 00 34.8 | |
| **TUZ** | **Tuapeka** | **3.11** | **220** | PN | Pn | 05 59 49.4 | -1.2 |
| TUZ | | | | AML | AML | 06 00 50.3 | |
| TUZ | | | | AML | AML | 06 00 50.7 | |
| TUZ | | | | AML | AML | 06 00 58.6 | |
| TUZ | | | | AML | AML | 06 00 58.6 | |
| **CAW** | **Cannon Point** | **3.14** | **38** | PN | Pn | 05 59 48.4 | -2.6 |
| CAW | | | | AML | AML | 06 00 26.0 | |
| CAW | | | | AML | AML | 06 00 29.0 | |
| **KIW** | **Kapiti Island** | **3.28** | **33** | PN | Pn | 05 59 50.9 | -2.0 |
| **MTW** | **Mount Morrison** | **3.31** | **43** | PN | Pn | 05 59 50.3 | -3.0 |
| MTW | | | | AML | AML | 06 00 34.3 | |
| MTW | | | | AML | AML | 06 00 36.3 | |
| **OGWZ** | **Otaki Gorge** | **3.42** | **36** | PN | Pn | 05 59 51.1 | -3.8 |
| **MLZ** | **Mavora Lakes** | **3.56** | **240** | PN | Pn | 05 59 56.0 | -0.8 |
| MLZ | | | | AML | AML | 06 01 04.2 | |
| MLZ | | | | AML | AML | 06 01 09.1 | |
| **SYZ** | **Scrubby Hill** | **3.77** | **218** | PN | Pn | 05 59 59.1 | -0.6 |
| SYZ | | | | AML | AML | 06 01 10.4 | |
| SYZ | | | | AML | AML | 06 01 22.7 | |
| **WHZ** | **Wether Hill Ro** | **3.97** | **234** | PN | Pn | 06 00 00.5 | -2.0 |
| WHZ | | | | AML | AML | 06 01 25.7 | |
| **WHZ** | **Wether Hill Ro** | **3.97** | **234** | *e*Pn | Pn | 06 00 01.5 | -0.9 |
| **BFZ** | **Birch Farm** | **4.04** | **44** | PN | Pn | 05 59 60.0 | -3.4 |
| **APZ** | **The Paps** | **4.54** | **223** | PN | Pn | 06 00 09.2 | -1.0 |
| **PKE** | **Pukeiti** | **4.56** | **14** | PN | Pn | 06 00 13.5 | +3.0 |

*ISCJB* ***14*** *06:00:32.0±0.4, 24.14N±0.02×121.72E±0.02, h6km±3km, Error ellipse: s-maj=3.7km s-min=2.3km az=34.1*
*JMA* ***14*** *06:00:31.2±0.3, 24.11N×121.69E, h0km±3km, M2.9*
*TAP* ***14*** *06:00:32.0, 24.15N×121.69E, h10km, ML3.5, B*
**ISC 14 06:00:32.1±0.9, 24.13N±0.02×121.71E±0.02, h10km±6km, n47, σ0.63/70, 8C-1D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWD** | **Chiawan** baz=228 | **0.12** | **247** | ⇑*i*P | **Pg** | **06 00 35.0** | **0.0** |
| TWD | | | | *i* S | **Sg** | **06 00 36.8** | **-0.2** |
| **HWA** | **Hwalien** baz=206 | **0.18** | **214** | *e*P | **Pg** | **06 00 36.5** | **+0.5** |
| **EHP** | **Heping Village** baz=18 | **0.18** | **8** | *e*P | **Pg** | **06 00 36.7** | **+0.6** |
| **ENA** | **Nanau** baz=10.0 | **0.30** | **5** | ⇑*i*P | **Pg** | **06 00 38.1** | **-0.1** |
| ENA | baz=10.0 | | | S | **Sg** | **06 00 42.0** | **-0.2** |
| **ESF** | **Shoufeng Towns** baz=212 | **0.32** | **217** | *e*P | **Pg** | **06 00 38.6** | **+0.1** |
| **ESL** | **Shilin** baz=214 | **0.40** | **220** | ⇑P | **Pg** | **06 00 40.0** | **-0.1** |
| ESL | baz=214 | | | *e*S | **Sg** | **06 00 44.9** | **-0.5** |
| **WHF** | **Hehuan Shan** baz=270 | **0.41** | **273** | ⇑*i*P | **Pg** | **06 00 40.2** | **-0.2** |
| WHF | baz=270 | | | *i* S | **Sg** | **06 00 45.5** | **-0.4** |
| **NNS** | **Nan Shan** baz=316 | **0.44** | **315** | ⇑*i*P | **Pg** | **06 00 40.7** | **-0.1** |
| NNS | baz=316 | | | *i* S | **Sg** | **06 00 46.3** | **-0.3** |
| **TWC** | **Suao** baz=12 | **0.49** | **14** | *i* P | **Pg** | **06 00 41.7** | **-0.1** |
| TWC | baz=12 | | | S | **Sg** | **06 00 48.6** | **+0.3** |
| **TWT** | **Tachien** baz=282 | **0.51** | **284** | P | **Pb** | **06 00 42.4** | **-0.8** |
| TWT | baz=282 | | | *i* S | **Sb** | **06 00 49.3** | **-1.4** |
| **ENTT** | **Nioudou** baz=348 | **0.53** | **345** | ⇑*i*P | **Pg** | **06 00 42.5** | **+0.1** |
| ENTT | baz=348 | | | *i* S | **Sg** | **06 00 49.4** | **0.0** |
| **TWE** | **Neicheng** baz=359 | **0.59** | **356** | P | **Pg** | **06 00 43.8** | **+0.1** |
| TWE | baz=359 | | | *i* S | **Sg** | **06 00 51.4** | **-0.1** |
| **NSK** | **Sanguang** baz=331 | **0.64** | **329** | *e*P | **Pg** | **06 00 44.5** | **0.0** |
| NSK | baz=331 | | | S | **Sg** | **06 00 52.7** | **-0.2** |
| **WDT** | **Danda** baz=242 | **0.65** | **235** | ⇑*i*P | **Pg** | **06 00 44.8** | **0.0** |
| **EHY** | **Hungye** baz=209 | **0.71** | **210** | *e*P | **Pg** | **06 00 45.8** | **-0.2** |
| **EGS** | baz=24 | **0.74** | **15** | *e*P | **Pg** | **06 00 46.7** | **+0.2** |
| **SMLT** | **Sun Moon Lake** baz=250 | **0.78** | **252** | ⇑*i*P | **Pb** | **06 00 47.3** | **-0.6** |
| SMLT | baz=250 | | | *i* S | **Sg** | **06 00 57.6** | **+0.1** |
| **TYC** | **Yuchr** baz=242 | **0.81** | **254** | *e*P | **Pg** | **06 00 46.9** | **-1.0** |
| TYC | baz=242 | | | S | **Sg** | **06 00 57.8** | **-0.7** |
| **NSTT** | **Nanjuang** baz=308 | **0.82** | **308** | *e*P | **Pb** | **06 00 48.5** | **0.0** |
| NSTT | baz=308 | | | S | **Sg** | **06 00 58.1** | **-0.6** |
| **TWA** | **Mucha** baz=354 | **0.86** | **352** | *e*P | **Pg** | **06 00 48.5** | **-0.1** |
| TWA | baz=354 | | | *e*S | **Sg** | **06 00 59.3** | **-0.6** |
| **TWF1** | **Yuli** baz=215 | **0.86** | **206** | *e*P | **Pg** | **06 00 48.6** | **-0.2** |
| TWF1 | baz=215 | | | *e*S | **Sb** | **06 01 00.4** | **-0.3** |
| **TWQ1** | **Liyutan** baz=284 | **0.89** | **285** | *e*P | **Pn** | **06 00 50.8** | **+0.1** |
| **TWB1** | **Santiao Chiao** baz=9.0 | **0.91** | **16** | P | **Pg** | **06 00 49.7** | **0.0** |
| TWB1 | baz=9.0 | | | *e*S | **Sg** | **06 01 01.0** | **-0.6** |
| **NSY** | **Sanyi** baz=288 | **0.92** | **288** | *e*P | **Pn** | **06 00 52.1** | **+1.1** |
| **NWF** | **Wu-fen Shan** baz=355 | **0.94** | **4** | *e*P | **Pb** | **06 00 50.5** | **-0.1** |
| NWF | baz=355 | | | *e*S | **Sg** | **06 01 01.2** | **-1.3** |
| **YUS** | **Yu-Shan** baz=215 | **0.94** | **228** | *e*P | **Pb** | **06 00 50.5** | **-0.4** |
| YUS | baz=215 | | | S | **Sb** | **06 01 03.6** | **+0.1** |
| **TCU** | **Taichung** baz=263 | **0.95** | **271** | *e*P | **Pn** | **06 00 52.3** | **+0.9** |
| **TWS1** | **Kuangyinshan** baz=346 | **1.01** | **344** | *e*P | **Pn** | **06 00 52.1** | **-0.2** |
| **ALS** | **Alishan** baz=232 | **1.03** | **234** | *e*P | **Pg** | **06 00 51.5** | **-0.6** |
| **CHKT** | **Chengkung** baz=184 | **1.07** | **197** | *e*P | **Pg** | **06 00 51.9** | **-0.9** |
| **CHN5** | **Tsauling** baz=239 | **1.09** | **241** | *e*P | **Pn** | **06 00 53.9** | **+0.4** |
| CHN5 | baz=239 | | | *e*S | **Sn** | **06 01 09.8** | **+1.2** |
| **ELDTW** | **Lidau** baz=207 | **1.13** | **215** | *e*P | **Pg** | **06 00 53.2** | **-0.7** |
| **JYNG** | **Yonagunijimaku** baz=82 | **1.17** | **74** | P | **Pb** | **06 00 53.8** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **1.23** | **74** | P | **Pn** | **06 00 55.2** | **-0.1** |
| YOJ | | | | *e*S | **Sb** | **06 01 11.4** | **+0.1** |
| **YOJ** | **Yonaguni jima** baz=82 | **1.23** | **74** | ⇓*e*P | **Pn** | **06 00 55.2** | **-0.1** |
| **STYT** | **Tayuyan** baz=220 | **1.30** | **223** | *e*P | **Pn** | **06 00 56.3** | **-0.1** |
| STYT | baz=220 | | | *e*S | **Sn** | **06 01 15.0** | **+1.2** |
| **WTP** | **Ta-pu** baz=216 | **1.34** | **229** | *e*P | **Pb** | **06 00 57.2** | **-0.1** |
| **TWK** | **Hsinying** baz=232 | **1.41** | **233** | *e*P | **Pb** | **06 00 58.4** | **-0.2** |
| **CHN1** | **Nanshi** baz=217 | **1.44** | **229** | *e*P | **Pg** | **06 00 59.5** | **-0.2** |
| CHN1 | baz=217 | | | *e*S | **Sg** | **06 01 20.3** | **+1.9** |
| **SGST** | **Jiashian** baz=224 | **1.47** | **225** | *e*P | **Pg** | **06 01 00.3** | **-0.1** |
| **IRIF** | **Iriomote-Funau** | **1.85** | **83** | P | **Pn** | **06 01 03.9** | **0.0** |
| **EAST** | **Anshuo** baz=196 | **1.91** | **205** | *e*P | **Pb** | **06 01 06.7** | **-0.4** |
| **SCZT** | **Fangliau** baz=211 | **2.02** | **210** | *e*P | **Pg** | **06 01 09.8** | **-1.0** |
| **WDGT** | **Dungji** baz=229 | **2.07** | **246** | *e*P | **Pn** | **06 01 07.7** | **+0.8** |
| **JKRS** | **Kuro-shima** | **2.10** | **87** | P | **Pn** | **06 01 07.8** | **+0.5** |
| **JIJ** | **Ishigaki jima** | **2.23** | **83** | P | **Pn** | **06 01 08.9** | **-0.2** |
| JIJ | | | | S | **Sn** | **06 01 36.5** | **-0.1** |
| **JISG** | **Ishigakijimahi** | **2.41** | **79** | *e*S | **Sn** | **06 01 43.1** | **+2.0** |

*NIED* ***14*** *06:06:00, 21.20N×120.60E, h32km, Mw4.8 Best double couple: M≥2.05000×10^16 NP1:φs173.00000°, δ22.00000°, λ39.00000°. NP2:φs47.00000°, δ76.00000°, λ108.00000°.*
*JMA* ***14*** *06:06:02.1±0.5, 21.22N×120.63E, h0km, M5.1*
*ISCJB* ***14*** *06:06:13.9±0.4, 21.64N±0.02×121.09E±0.02, h29km±2km, mb4.6/68, MS4.3/35, Error ellipse: s-maj=3.3km s-min=2.7km az=21.2*
*TAP* ***14*** *06:06:13.0, 21.64N×121.05E, h34km, ML4.5, C*
*BJI* ***14*** *06:06:13.2, 21.72N×120.81E, h10km, mb4.5/44, mB4.6/38, ML4.2/3, Ms4.3/9, Ms7 4.4/43*
*MOS* ***14*** *06:06:14.5±0.8, 21.66N×121.12E, h34km, mb4.8/31, Error ellipse: s-maj=9.7km s-min=5.9km az=104.3*
*IDC* ***14*** *06:06:16.2±2.2, 21.64N×121.10E, h35km±16km, mb4.2/25, mb1 4.4/27, mb1mx4.3/44, mbtmp4.4/27, ML3.3/3, MS4.1/25, Ms1 4.1/25, ms1mx4.0/37, Error ellipse: s-maj=16.6km s-min=9.8km az=71.0*
*NEIC* ***14*** *06:06:16.1±0.2, 21.64N×121.12E, h35km, mb4.6/16, ML5.0(TAP), Error ellipse: s-maj=4.8km s-min=2.9km az=90.0*
*NEIC Recorded [2 TAP] in P'ing-tung and T'ai-tung.*
*MAN* ***14*** *06:06:17, 19.45N×122.00E, h15km, mb5.0, ML4.0, MS4.1*
**ISC 14 06:06:14.9±0.5, 21.63N±0.03×121.05E±0.03, h24km±2km, h24km:pP-P, n259, σ1.37/309, mb4.6/67, MS4.3/35, 19C-13D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TSEB** | **Hengchuen, Pin** baz=321 | **0.30** | **333** | ⇑*i*P | **Pb** | **06 06 21.3** | **-0.7** |
| **TWK1** | **Hengchun** baz=323 | **0.39** | **324** | ⇑*i*P | **Pb** | **06 06 22.1** | **-1.2** |
| TWK1 | baz=323 | | | S | **Sb** | **06 06 28.3** | **-0.6** |
| **HEN** | **Hengchun** baz=324 | **0.47** | **323** | ⇑*i*P | **Pb** | **06 06 23.9** | **-0.8** |
| HEN | baz=324 | | | *e*S | **Sb** | **06 06 30.9** | **-0.4** |
| **LAY** | **Lan-yu** baz=52 | **0.62** | **49** | *e*P | **Pb** | **06 06 26.4** | **-0.8** |
| **TAW** | **Tawu** baz=359 | **0.74** | **349** | ⇓*i*P | **Pb** | **06 06 27.6** | **-1.6** |
| TAW | baz=359 | | | *i* S | **Sb** | **06 06 38.5** | **-0.4** |
| **EAST** | **Anshuo** baz=2.0 | **0.77** | **346** | ⇓*i*P | **Pb** | **06 06 28.1** | **-1.7** |
| **SCZT** | **Fangliau** baz=321 | **0.84** | **332** | *e*P | **Pb** | **06 06 30.3** | **-0.6** |
| SCZT | baz=321 | | | *e*S | **Sb** | **06 06 42.2** | **+0.4** |
| **TWP** | **Hsiaoliuchiu** baz=319 | **0.96** | **319** | ⇑*e*P | **Pn** | **06 06 32.8** | **-0.1** |
| **ECL** | **Taimali** baz=9.0 | **0.97** | **355** | *e*P | **Pn** | **06 06 30.1** | **-3.0** |
| ECL | baz=9.0 | | | *e*S | **Sb** | **06 06 42.1** | **-3.3** |
| **TTN** | **Taitung** baz=7.0 | **1.12** | **5** | *e*P | **Pn** | **06 06 33.7** | **-1.5** |
| **KAU** | **Kaohsiung** baz=311 | **1.16** | **324** | *e*P | **Pn** | **06 06 35.4** | **-0.3** |
| **TWG** | **Pinlang** baz=3.0 | **1.19** | **1** | *e*P | **Pn** | **06 06 32.9** | **-3.2** |
| **TWG** | **Pinlang** | **1.19** | **1** | *e*Pn | **Pn** | **06 06 35.7** | **-0.3** |
| TWG | | | | *e*Sn | **Sb** | **06 06 55.4** | **+3.6** |
| **SGLT** | **Jiouru** baz=336 | **1.21** | **335** | *e*P | **Pn** | **06 06 36.6** | **+0.2** |
| **TWM1** | **Shoushan** baz=319 | **1.32** | **334** | *e*P | **Pn** | **06 06 38.1** | **+0.1** |
| **CHKT** | **Chengkung** baz=13 | **1.49** | **11** | P | **Pn** | **06 06 38.1** | **-2.2** |
| CHKT | baz=13 | | | *e*S | **Sn** | **06 06 56.4** | **-2.6** |
| **SGST** | **Jiashian** baz=331 | **1.51** | **344** | ⇓P | **Pn** | **06 06 40.1** | **-0.4** |
| **STYT** | **Tauyuan** baz=351 | **1.55** | **350** | *e*P | **Pn** | **06 06 40.6** | **-0.5** |
| **ELDTW** | **Lidau** baz=10.0 | **1.55** | **359** | *e*P | **Pn** | **06 06 38.6** | **-2.6** |
| **CHN3** | **Shinhua** baz=323 | **1.57** | **336** | *e*P | **Pn** | **06 06 40.0** | **-1.4** |
| **TAI1** | **Yung-k'ang** baz=318 | **1.60** | **332** | *e*P | **Pn** | **06 06 41.9** | **+0.2** |
| **CHN1** | **Nanshi** baz=328 | **1.62** | **343** | ⇓*e*P | **Pn** | **06 06 41.6** | **-0.5** |
| **WTP** | **Ta-pu** baz=347 | **1.66** | **346** | *e*P | **Pn** | **06 06 42.5** | **-0.2** |
| **TPUB** | **Ta-pu** | **1.71** | **347** | *e*Pn | **Pn** | **06 06 42.6** | **-0.6** |
| **TWK** | **Hsinying** baz=328 | **1.71** | **343** | *e*P | **Pn** | **06 06 43.6** | **+0.2** |
| **TWF1** | **Yuli** baz=9.0 | **1.73** | **8** | *e*P | **Pn** | **06 06 41.0** | **-2.6** |
| **YULB** | **Yu-li** | **1.77** | **7** | *e*Pn | **Pn** | **06 06 43.9** | **-0.2** |
| **YUS** | **Yu-Shan** baz=6.0 | **1.85** | **357** | *e*P | **Pn** | **06 06 45.0** | **-0.7** |
| **ALS** | **Alishan** baz=354 | **1.89** | **353** | *e*P | **Pn** | **06 06 45.8** | **-0.1** |
| **EHY** | **Hungye** baz=9.0 | **1.89** | **8** | *e*P | **Pn** | **06 06 43.6** | **-2.1** |
| **CHY** | **Chiayi** baz=330 | **1.95** | **343** | *e*P | **Pn** | **06 06 46.5** | **-0.1** |
| **CHN5** | **Tsauling** baz=351 | **1.99** | **350** | *e*P | **Pn** | **06 06 46.9** | **-0.3** |
| **WDGT** | **Dungji** baz=322 | **2.07** | **322** | P | **Pn** | **06 06 45.7** | **-2.5** |
| WDGT | baz=322 | | | S | **Sn** | **06 07 09.8** | **-3.5** |
| **WGK** | **Gukeng** baz=349 | **2.10** | **348** | *e*P | **Pn** | **06 06 48.7** | **+0.1** |
| **WDT** | **Danda** baz=10.0 | **2.12** | **2** | *e*P | **Pn** | **06 06 48.0** | **-1.2** |
| **WSF** | **Szhu** baz=326 | **2.14** | **339** | *e*P | **Pn** | **06 06 47.7** | **-1.4** |
| **SSLB** | **Suanglung** | **2.15** | **358** | *e*Pn | **Pn** | **06 06 49.5** | **+0.1** |
| **ESL** | **Shilin** baz=11 | **2.21** | **9** | *e*P | **Pn** | **06 06 49.0** | **-1.1** |
| **SMLT** | **Sun Moon Lake** baz=345 | **2.25** | **357** | *e*P | **Pn** | **06 06 51.0** | **+0.2** |
| **WNT** | **Mingjian** baz=339 | **2.27** | **352** | *e*P | **Pn** | **06 06 50.6** | **-0.3** |
| **TYC** | **Yuchr** baz=357 | **2.27** | **356** | P | **Pn** | **06 06 51.5** | **+0.5** |
| TYC | baz=357 | | | *e*S | **Sn** | **06 07 18.4** | **+0.2** |
| **HWA** | **Hwalien** baz=7.0 | **2.39** | **12** | *e*P | **Pn** | **06 06 51.8** | **-0.9** |
| **TWD** | **Chiawan** baz=13 | **2.49** | **12** | *e*P | **Pn** | **06 06 52.5** | **-1.5** |
| **WHF** | **Hehuan Shan** baz=15 | **2.51** | **5** | *e*P | **Pn** | **06 06 53.5** | **-1.2** |
| **TCU** | **Taichung** baz=341 | **2.53** | **352** | *e*P | **Pn** | **06 06 53.4** | **-1.2** |
| **NACB** | **Ninganchiao** | **2.58** | **11** | *e*Pn | **Pn** | **06 06 54.5** | **-0.8** |
| **TWT** | **Tachien** baz=4.0 | **2.62** | **3** | *e*P | **Pn** | **06 06 55.8** | **-0.1** |
| **TWQ1** | **Liyutan** baz=344 | **2.72** | **355** | *e*P | **Pn** | **06 06 56.7** | **-0.4** |
| **NSY** | **Sanyi** baz=344 | **2.79** | **355** | *e*P | **Pn** | **06 06 58.0** | **-0.1** |
| **NNS** | **Nan Shan** baz=13 | **2.81** | **6** | *e*P | **Pn** | **06 06 59.7** | **+1.1** |
| **ENA** | **Nanau** baz=4.0 | **2.86** | **13** | *e*P | **Pn** | **06 06 58.3** | **-0.8** |
| **NSTT** | **Nanjuang** baz=1.0 | **2.99** | **359** | *e*P | **Pn** | **06 07 00.9** | **0.0** |
| **ENTT** | **Nioudou** baz=18 | **3.04** | **9** | *e*P | **Pn** | **06 07 00.9** | **-0.7** |
| **YHNB** | **Yeheng** | **3.04** | **6** | *e*Pn | **Pn** | **06 07 01.5** | **-0.2** |
| **NSK** | **Sanguang** baz=353 | **3.05** | **5** | *e*P | **Pn** | **06 07 01.6** | **-0.1** |
| **TWC** | **Suao** baz=6.0 | **3.06** | **14** | *e*P | **Pn** | **06 07 01.2** | **-0.6** |
| **TWE** | **Neicheng** baz=12 | **3.13** | **10** | *e*P | **Pn** | **06 07 03.3** | **+0.5** |
| **EGS** | baz=4.0 | **3.30** | **14** | *e*P | **Pn** | **06 07 05.2** | **+0.1** |
| EGS | baz=4.0 | | | *e*S | **Sn** | **06 07 43.8** | **+0.1** |
| **JYNG** | **Yonagunijimaku** | **3.31** | **32** | P | **Pn** | **06 07 05.0** | **-0.3** |
| JYNG | | | | S | **Sn** | **06 07 44.2** | **+0.3** |
| **PIP** | **Pasuquin** | **3.31** | **187** | ⇓*i*P | **Pn** | **06 07 04.9** | **-0.4** |
| PIP | | | | *e*S | **Sn** | **06 07 43.1** | **-0.8** |
| **YOJ** | **Yonaguni jima** | **3.35** | **32** | P | **Pn** | **06 07 05.6** | **-0.2** |
| YOJ | | | | S | **Sn** | **06 07 44.4** | **-0.5** |
| **YOJ** | **Yonaguni jima** | **3.35** | **32** | *e*P | **Pn** | **06 07 05.7** | **-0.1** |
| **YOJ** | **Yonaguni jima** baz=43 | **3.35** | **32** | ⇑*i*P | **Pn** | **06 07 05.7** | **-0.1** |
| YOJ | baz=43 | | | *e*S | **Sn** | **06 07 43.5** | **-1.4** |
| **YOJ** | **Yonaguni jima** | **3.35** | **32** | *e*Pn | **Pn** | **06 07 05.7** | **-0.1** |
| **TATO** | **Taipei** | **3.36** | **7** | *e*Pn | **Pn** | **06 07 05.8** | **-0.2** |
| **TWA** | **Mucha** baz=10.0 | **3.37** | **8** | *e*P | **Pn** | **06 07 05.2** | **-1.0** |
| **TWB1** | **Santiao Chiao** baz=8.0 | **3.48** | **14** | *e*P | **Pn** | **06 07 07.6** | **0.0** |
| **NWF** | **Wu-fen Shan** baz=13 | **3.49** | **11** | *e*P | **Pn** | **06 07 07.8** | **-0.1** |
| **SGCP** | **Mt. Cagua** | **3.50** | **164** | *e*P | **Pn** | **06 07 09.5** | **+1.7** |
| **HATJ** | **Hateruma jima** | **3.51** | **46** | P | **Pn** | **06 07 07.7** | **-0.3** |
| HATJ | | | | S | **Sn** | **06 07 48.1** | **-0.7** |
| **IRIF** | **Iriomote-Funau** | **3.66** | **42** | P | **Pn** | **06 07 09.8** | **-0.2** |
| IRIF | | | | S | **Sn** | **06 07 51.4** | **-1.0** |
| **KNM** | **Kinmen** baz=317 | **3.67** | **320** | *e*P | **Pn** | **06 07 08.5** | **-1.8** |
| **APYP** | **Conner** | **3.75** | **177** | *e*P | **Pn** | **06 07 12.1** | **+0.7** |
| **JKRS** | **Kuro-shima** | **3.77** | **46** | P | **Pn** | **06 07 11.4** | **-0.2** |
| JKRS | | | | S | **Sn** | **06 07 58.4** | **+3.2** |
| **JIJ** | **Ishigaki jima** | **3.94** | **46** | P | **Pn** | **06 07 13.2** | **-0.8** |
| JIJ | | | | S | **Sn** | **06 07 57.7** | **-1.8** |
| **ABRA** | **Dolores** | **3.97** | **185** | *e*P | **Pn** | **06 07 14.9** | **+0.6** |
| **QZH** | **Quanzhou** | **4.00** | **326** | *e*Pn | **Pn** | **06 07 15.3** | **+0.6** |
| QZH | | | | Sn | **Sn** | **06 07 57.3** | **-3.5** |
| QZH | 400nm,1.0s | | | SMN | | | |
| QZH | 710nm,0.9s | | | SME | | | |
| **SZP** | **Santa** | **4.09** | **188** | *e*Pn | **Pn** | **06 07

**JMJ Miyako jima 2 5.03 50** P **Pn** **06 07 29.9 +1.0**
**JIKM Ikemajima 5.07 49** P **Pn** **06 07 29.5 +0.1**
JIKM S **Sn** **06 08 26.6 -0.6**
**JOGS Gusukube 5.08 51** S **Sn** **06 08 27.7 +0.2**
**BOLP Bolinao 5.33 192** *eP* **Pn** **06 07 34.5 +1.4**
**JKE Kume jima 2 7.03 47** P **Pn** **06 07 54.8 -1.6**
**GZH Guangzhou 7.28 283** P Pn 06 07 55.6 -4.2
**JOW Kunigami 8.39 50** P **Pn** **06 08 13.9 -1.1**
**JOW Kunigami 8.39 50** Pn **Pn** **06 08 14.3 -0.7**
0.2nm,0.3s,baz=98,slow=22,SNR=5.8
JOW Sn Sn 06 09 41.6 -7.4
baz=103,slow=18,SNR=5.9
**JAMN Amaminishikomi 9.88 47** P Pn 06 08 31.9 -3.7
**NJ2 Nanjing 10.56 350** *eP* **Pn** **06 08 46.1 +1.2**
NJ2 S **Sn** **06 10 44.3 +1.9**
NJ2 LZ
3µm,11.6s
**QIZ Qiongzhong 10.82 258** P **Pn** **06 08 47.9 -0.6**
QIZ S **Sn** **06 10 47.8 -1.1**
QIZ LN
2µm,20.1s
QIZ LZ
1µm,13.2s
**GYA Guiyang 13.99 293**⇑ *i*P **Pn** **06 09 30.8 -1.1**
GYA pP **P** **06 09 38.0 -1.6**
GYA PP **PnPn** **06 09 44.4 +4.6**
GYA S **Sn** **06 12 05.1 -1.4**
GYA sS S 06 12 17.8 -10
GYA SS **SnSn** **06 12 24.9 +5.9**
GYA PMZ
20nm,0.8s
GYA PMZ
120nm,4.9s
GYA LZ
1µm,14.6s
**JNU Nakatsue 14.39 35** P **P** **06 09 46.1 +2.2**
**JNU Nakatsue 14.39 35** Pn **Pn** **06 09 35.4 -1.8**
0.2nm,0.3s,baz=234,slow=6.5,SNR=4.2
JNU LR LR 06 15 55.4
comp=Z,702nm,20.9s,baz=191,slow=40
**TIA Tai'an 14.93 348**⇓ P **Pn** **06 09 46.0 +1.5**
TIA S **Sn** **06 12 28.0 -1.1**
TIA PMZ
20nm,1.2s
TIA LZ
2µm,20.1s
**DAV Davao City (W) 15.12 163** LR LR 06 14 47.9
comp=Z,227nm,21.8s,baz=336,slow=34
**XAN Xi'an 16.35 322** P **P** **06 10 07.1 +1.4**
XAN PMZ
17nm,1.2s
XAN LZ
2µm,14.3s
**JMN Monobe 16.55 41** P **P** **06 10 09.8 +1.9**
**KSAR Wonju Array Be 16.84 19** P **Pn** **06 10 09.0 -0.1**
**KSAR Wonju Array Be 16.84 19** Pn **Pn** **06 10 08.9 -0.1**
**KSRS Korea Array 16.86 19** Pn **Pn** **06 10 08.9 -0.4**
0.7nm,0.3s,baz=204,slow=12,SNR=12
KSRS LR LR 06 17 42.1
comp=Z,778nm,18.4s,baz=204,slow=41
**KS01 Wonju Array Si 16.87 19** *e*Pn **Pn** **06 10 10.1 +0.6**
**KMI Kunming 17.16 285** P **P** **06 10 14.5 -0.5**
KMI sP **sP** **06 10 23.6 -1.1**
KMI S **Sn** **06 13 22.0 -1.9**
KMI sS **S** **06 13 32.3 -0.6**
KMI SS **SnSn** **06 13 43.9 +6.7**
KMI PMZ
6.0nm,0.8s
KMI PMZ
77nm,3.5s
KMI LZ
1µm,12.5s
**TIY Taiyuan 17.68 337** *e*P **P** **06 10 21.9 +1.5**
TIY S **Sn** **06 13 34.6 -1.3**
TIY PMZ
150nm,4.7s
TIY LZ
1µm,12.9s
**CD2 Chengdu 18.03 304** P **Pn** **06 10 23.4 -0.6**
CD2 pP **P** **06 10 26.6 +2.2**
CD2 S **Sn** **06 13 44.9 +0.3**
CD2 PMZ
20nm,0.5s
CD2 PMZ
200nm,4.8s
CD2 LZ
2µm,11.4s
**JWT Wachi 18.53 40** P **Pn** **06 10 32.7 +2.7**
**BJT Baijiatuau 18.80 348** *e*P **P** **06 10 32.6 0.0**
BJT pmax pmax
comp=Z,49nm,0.8s
**BJT Baijiatuau 18.80 348** *e*P **P** **06 10 32.6 0.0**
comp=Z,49nm,0.8s
**BJI Beijing 18.82 348** P **Pn** **06 10 33.8 +0.3**
BJI PMZ
comp=Z,52nm,1.0s
BJI PMZ
comp=Z,320nm,4.0s
BJI LZ
comp=Z,780nm,18.0s
**JGF Kuroka 19.93 42** P **Pn** **06 10 47.2 +0.3**
**HHC Hu-ho-hao-te 20.78 339** *e*P Pn 06 10 56.0 -0.9
HHC pP pP 06 11 02.8 +1.7
HHC sP sP 06 11 05.9 +1.7
HHC S **S** **06 14 41.5 -4.3**
HHC sS sS 06 14 54.8 -1.6
HHC PMZ
comp=Z,45nm,1.1s
HHC PMZ
comp=Z,110nm,5.1s
HHC LZ
comp=Z,710nm,15.6s
**LZH Lanzhou 20.80 318** *e*P Pn 06 10 56.6 -0.7
LZH pP pP 06 11 03.9 +2.5
LZH sP sP 06 11 08.1 +3.6
LZH S **S** **06 14 41.5 -4.3**
LZH sS sS 06 14 54.8 -1.6
LZH PMZ
comp=Z,76nm,1.3s
LZH PMZ
comp=Z,190nm,4.4s
LZH LZ
comp=Z,2µm,16.0s
**CHTO Chiang Mai 20.93 266** *e*P Pn 06 10 57.4 -1.3
CHTO pmax pmax
comp=Z,15nm,1.3s
**CHTO Chiang Mai 20.93 266** *e*P Pn 06 10 57.4 -1.3
comp=Z,15nm,1.3s
**GTOI Gorontalo 20.95 175** P **P** **06 10 57.2 +0.9**
comp=Z,103nm,1.0s,comp=Z,160µm
**CMAR Chiang Mai Arr 21.00 265** P **P** **06 10 58.1 +1.2**
comp=Z,1.2nm,0.3s,baz=68,slow=9.0,SNR=10
CMAR LR LR 06 20 19.0
comp=Z,480nm,18.2s,baz=88,slow=40
**CMAR Chiang Mai Arr 21.00 265** *ce*P **P** **06 10 58.4 +1.5**
CMAR pmax pmax
comp=Z,2.0nm,0.4s
**MRSI Marisa 21.04 178** P **P** **06 11 00.9 +3.7**
comp=Z,38nm,1.1s
**MAJO Matsushiro 21.06 41** *c i*P **P** **06 10 58.5 +1.1**
MAJO pmax pmax
comp=Z,74nm,0.9s
**MAJO Matsushiro 21.06 41** *e*P **P** **06 10 58.2 +0.8**
comp=Z,11nm,0.7s
**MAT Matsushiro 21.06 41** P **P** **06 10 58.3 +0.9**
MAT S **S** **06 14 52.0 +1.2**
**JRY Ryogami san 21.17 43** P **P** **06 11 01.0 +2.5**
**MPSI Mapaga 21.19 183** P **P** **06 11 01.5 +2.7**
comp=Z,16nm,0.9s,comp=Z,1µm
**TNTI Ternate 21.63 163** *e*P **P** **06 11 03.5 0.0**
comp=Z,68nm,1.1s
**APSI Ampana 22.41 178** P **P** **06 11 14.1 +2.2**
**CN2 Changchun 22.41 8** *e*P **P** **06 11 11.6 -0.2**
CN2 *es*P **sP** **06 11 22.1 +0.5**
CN2 PMZ
comp=Z,10.0nm,0.6s
CN2 PMZ
comp=Z,100nm,4.0s
CN2 LZ
comp=Z,1µm,16.0s
**LUWI Luwuk 22.59 176** P **P** **06 11 14.2 +0.3**
**LUWI Luwuk 22.59 176** *e*P **P** **06 11 14.3 +0.4**
comp=Z,302nm,1.4s
**VLA Vladivostok 23.26 20** *c i*P **P** **06 11 20.5 -0.1**
VLA pmax pmax
comp=Z,68nm,0.8s

**MDJ Mudanjiang 23.99 15** P **P** **06 11 27.8 +0.2**
MDJ pP **pP** **06 11 33.6 -1.2**
MDJ sP **sP** **06 11 36.1 -1.6**
MDJ S **S** **06 15 45.8 +2.7**
MDJ ScS **ScS** **06 22 31.1 -2.2**
MDJ PMZ
comp=Z,19nm,0.9s
MDJ PMZ
comp=Z,50nm,4.6s
MDJ LZ
comp=Z,740nm,15.4s
**MDJ Mudanjiang 23.99 15** *e*P **P** **06 11 27.4 -0.3**
comp=Z,16nm,0.8s
**GUMO Guam 24.05 105** LR LR 06 20 36.8
comp=Z,318nm,18.0s,baz=270,slow=36
**USRK Ussuriysk Ar. 24.27 19** P **P** **06 11 30.3 +0.1**
comp=Z,20nm,0.9s,baz=204,slow=10,SNR=28
USRK LR LR 06 22 20.3
comp=Z,411nm,18.4s,baz=192,slow=40
**GTA Gaotai 25.37 319** *e*P **P** **06 11 41.6 +1.2**
GTA pP **pP** **06 11 48.8 +1.3**
GTA sP **sP** **06 11 51.6 +1.1**
GTA PcP **PcP** **06 15 13.8 +1.2**
GTA S **S** **06 16 07.5 +1.9**
GTA PMZ
comp=Z,8.0nm,1.2s
GTA PMZ
comp=Z,100nm,6.2s
GTA LZ
comp=Z,1µm,16.2s
**NLAI Namlea 25.41 166** P **P** **06 11 42.8 +2.0**
**KAPI Kappang 26.51 183** P **P** **06 11 51.2 +0.5**
comp=Z,4.4nm,0.5s,baz=59,slow=19,SNR=4.2
**KAPI Kappang 26.51 183** *e*P **P** **06 11 54.0 +3.3**
comp=Z,18nm,1.0s
**FAKI Fak Fak 26.75 154** *e*P **P** **06 11 52.1 -0.8**
comp=Z,8.5nm,0.7s
FAKI *e* 06 15 16.4
**JEW Eniwo 27.17 34** P **P** **06 11 58.3 +1.8**
**ERM Erimo 27.54 37**⇓ *e*P **P** **06 11 59.8 0.0**
ERM pmax pmax
comp=Z,42nm,1.1s
**ULN Ulaanbaatar 28.50 340** *c i*P **P** **06 12 08.3 -0.2**
ULN pmax pmax
comp=Z,25nm,1.7s
**ULN Ulaanbaatar 28.50 340** *e*P **P** **06 12 08.9 +0.4**
comp=Z,10.0nm,0.8s
**ASAJ Asahikawa 28.66 33** P **P** **06 12 12.7 +2.9**
**ASAJ Asahikawa 28.66 33** P **P** **06 12 10.1 +0.3**
comp=Z,33nm,0.7s,baz=225,slow=11,SNR=26
**ASAJ Asahikawa 28.66 33** *e*P **P** **06 12 09.0 -0.7**
**SONM Songino Array 28.68 339** P **P** **06 12 10.5 +0.3**
comp=Z,7.5nm,1.0s,baz=158,slow=9.5,SNR=30
SONM PcP **PcP** **06 15 20.6 +0.2**
comp=Z,1.3nm,0.8s,baz=175,slow=3.0,SNR=4.6
SONM ScP **ScP** **06 18 59.5 -0.7**
comp=Z,0.3nm,0.5s,baz=151,slow=3.3,SNR=3.6
SONM LR LR 06 25 02.5
comp=Z,500nm,19.4s,baz=159,slow=39
**SONA1 Songino Array 28.69 339** *e*P **P** **06 12 09.9 -0.3**
SONA1 *e*PcP **PcP** **06 15 20.9 +0.5**
**KLR Kul'dur 28.83 15** *e*P P 06 12 06.2 -5.0
KLR MLR MLR
comp=E,500nm,14.0s
KLR MLR MLR
comp=Z,1µm,14.0s
**YUK Yuzh-Kuril'sk 30.35 37** *d i*P **P** **06 12 23.0 -1.8**
YUK MLR MLR
comp=Z,351nm,22.0s
**YSS Yuzh-Sakhalins 30.78 30** *e*P **P** **06 12 28.0 -0.5**
YSS *e* 06 12 34.5
YSS pmax pmax
comp=Z,30nm,1.0s
YSS MLR MLR
comp=N,500nm,16.0s
YSS MLR MLR
comp=Z,500nm,16.0s
**YSS Yuzh-Sakhalins 30.78 30** *e*P **P** **06 12 29.1 +0.6**
**ZAK Zakamensk 31.92 338** *e*P **P** **06 12 35.8 -2.9**
ZAK *e* 06 15 27.0
ZAK pmax pmax
comp=Z,4.0nm,1.1s
**KUR Kuril'sk 32.22 37** *d*P **P** **06 12 40.4 -0.8**
KUR MLR MLR
comp=Z,428nm,21.0s
**TLY Talaya 32.91 340** P **P** **06 12 47.1 -0.2**
comp=Z,3.4nm,0.5s,baz=143,slow=5.1,SNR=3.0
**TLY Talaya 32.91 340** *e*P **P** **06 12 47.5 +0.3**
TLY *e*SS SS 06 20 31.3 +5.6
TLY pmax pmax
comp=Z,9.0nm,1.0s
TLY MLR MLR
comp=Z,384nm,15.0s
**IRK Irkutsk 33.20 341** *e*P **P** **06 12 49.3 -0.5**
IRK pmax pmax
comp=Z,25nm,1.5s
**WMQ Urumqi 35.37 317** P **P** **06 13 10.0 +1.2**
WMQ sP **sP** **06 13 21.0 +2.0**
WMQ S **S** **06 18 40.6 -1.4**
WMQ SS **SnSn** **06 21 01.0 -0.5**
WMQ PMZ
comp=Z,10.0nm,0.8s
WMQ PMZ
comp=Z,12nm,3.5s
WMQ LZ
comp=Z,350nm,10.0s
**FITZ Fitzroy Crossi 39.74 173** P **P** **06 13 44.9 -0.9**
comp=Z,1.7nm,0.5s,baz=0.9,slow=9.6,SNR=10
FITZ PcP **PcP** **06 15 51.8 -0.3**
comp=Z,2.4nm,0.7s,baz=0.0,slow=5.1,SNR=3.8
**FITZ Fitzroy Crossi 39.74 173** *e*P **P** **06 13 45.3 -0.5**
comp=Z,11nm,1.0s
FITZ PcP **PcP** **06 15 51.8 -0.3**
**MK01 Makanchi Array 40.10 318** *e*P **P** **06 13 48.8 +0.1**
**MK31 Makanchi Array 40.11 318** *e*P **P** **06 13 49.2 +0.4**
MK31 pmax pmax
comp=Z,5.0nm,0.7s
**MKAR Makanchi Array 40.11 318** P **P** **06 13 48.3 -0.5**
comp=Z,3.4nm,0.8s,baz=117,slow=9.5,SNR=18
MKAR PcP **PcP** **06 15 52.8 -0.2**
comp=Z,0.8nm,0.5s,baz=114,slow=3.5,SNR=4.1
MKAR LR LR 06 32 31.2
comp=Z,640nm,18.4s,baz=98,slow=39
**MKAR Makanchi Array 40.11 318** *ce*P **P** **06 13 50.2 +1.4**
MKAR pmax pmax
comp=Z,4.0nm,0.8s
**MKAR Makanchi Array 40.11 318** *e*P **P** **06 13 49.5 +0.7**
MKAR PcP **PcP** **06 15 52.8 -0.2**
**MAKZ Makanchi 40.31 318** *e*P **P** **06 13 50.8 +0.4**
**YAK Yakutsk 40.81 6** *e*P **P** **06 13 53.0 -1.2**
YAK *e* 06 15 48.8
YAK pmax pmax
comp=Z,36nm,0.9s
YAK pmax pmax
comp=N,22nm,1.3s
YAK pmax pmax
comp=E,6.0nm,1.3s
YAK MLR MLR
comp=Z,729nm,17.0s
YAK MLR MLR
comp=N,598nm,18.0s
YAK MLR MLR
comp=E,291nm,15.0s
**YAK Yakutsk 40.81 6** *e*P **P** **06 13 53.1 -1.1**
comp=E,36nm,0.6s
**COEN Coen 41.50 147** *e*P **P** **06 14 00.1 -0.3**
comp=E,10nm,0.9s
**PETK Petropavlovsk- 42.06 32** LR LR 06 32 59.8
comp=E,115nm,19.8s,baz=231,slow=38
**KSH Kashi 42.23 305** *e*P P 06 14 10.1 +3.7
KSH *es*P sP 06 14 20.6 +4.0
KSH PcS **PcS** **06 19 52.8 +0.7**
KSH S **S** **06 20 30.5 +5.0**
KSH ScS **ScS** **06 24 07.8 +0.5**
KSH PMZ
comp=E,130nm,5.4s
KSH LZ
comp=E,480nm,17.7s
**ZALV Zalesovo Beam 42.34 329** P **P** **06 14 07.1 +0.2**
comp=E,12nm,0.9s,baz=124,slow=7.7,SNR=25
ZALV PcP **PcP** **06 15 59.8 -0.2**
comp=E,1.3nm,0.5s,baz=94,slow=4.2,SNR=2.7
ZALV LR LR 06 33 31.6
comp=E,413nm,18.4s,baz=146,slow=39
**PET Petropavlovsk 42.50 33**⇓ *e*P **P** **06 14 07.1 -1.1**
PET pmax pmax
comp=Z,15nm,1.0s
**WRAB Tennant Creek 43.31 162**⇑ *e*P **P** **06 14 14.7 -0.4**
WRAB pmax pmax
comp=Z,63nm,2.5s
**WRAB Tennant Creek 43.31 162** *e*P **P** **06 14 14.4 -0.7**
comp=Z,26nm,1.4s
WRAB *e*PcP **PcP** **06 16 03.8 0.0**
**WRA Warramunga Arr 43.31 162** P **P** **06 14 14.1 -1.0**
comp=Z,6.8nm,0.6s,baz=343,slow=9.0,SNR=30
WRA PcP **PcP** **06 16 03.8 0.0**
comp=Z,4.7nm,0.8s,baz=344,slow=3.7,SNR=13
**MA2 Magadan 43.39 22** *e*P **P** **06 14 16.2 +0.9**
**NVS Novosibirsk 43.60 329** *e*P **P** **06 14 17.0 -0.1**
NVS *e* 06 14 27.5
NVS pmax pmax
comp=Z,24nm,1.8s
NVS pmax pmax
comp=N,14nm,1.7s
NVS pmax pmax
comp=E,9.0nm,0.9s
**AAK Ala-Archa 43.99 310**⇑ *e*P **P** **06 14 20.4 -0.2**
AAK pmax pmax
comp=Z,2.0nm,0.8s
**KURK Kurchatov 43.99 322** *e*P **P** **06 14 19.2 -1.1**
KURK pmax pmax
comp=Z,9.0nm,0.6s
**KURK Kurchatov 43.99 322** *e*P **P** **06 14 19.2 -1.1**
comp=Z,8.8nm,0.6s
**KURBB Kurchatov Arra 44.00 322** P **P** **06 14 20.7 +0.4**
comp=Z,9.3nm,0.9s,baz=121,slow=7.5,SNR=40
**ASAR Alice Springs 46.73 164** P **P** **06 14 42.4 +0.1**
comp=Z,1.4nm,0.4s,baz=351,slow=8.1,SNR=23
ASAR PcP **PcP** **06 16 15.6 0.0**
comp=Z,4.4nm,0.8s,baz=340,slow=2.9,SNR=12
ASAR ScP **ScP** **06 20 06.8 -1.0**
comp=Z,2.3nm,1.1s,baz=360,slow=4.3,SNR=8.2
ASAR S **S** **06 21 28.8 -2.0**
comp=Z,2.4nm,1.1s,baz=357,slow=23,SNR=7.7
**AS01 Alice Springs 46.74 164** *e*P **P** **06 14 42.2 -0.1**
AS01 *e* 06 16 15.2
**KKAR Karatay Array 46.95 309** *e*P **P** **06 14 44.1 +0.2**
KKAR pmax pmax
comp=Z,2.0nm,0.7s
**KKAR Karatay Array 46.95 309** *e*P **P** **06 14 44.1 +0.2**
comp=Z,2.2nm,0.7s
**CTA Charters Tower 48.23 148** P **P** **06 14 54.2 +0.2**
comp=Z,3.4nm,0.7s,baz=312,slow=8.5,SNR=3.7
**VOSK Vostochnaya 49.15 322** *i* P **P** **06 14 58.3 -2.4**
VOSK pmax pmax
comp=Z,7.0nm,1.3s
**BVA0 Borovoye Array 49.59 322** *i* P **P** **06 15 04.8 +0.8**
BVA0 pmax pmax
comp=Z,9.0nm,1.5s
**BRVK Borovoye 49.66 322** *e*P **P** **06 15 05.6 +1.0**
BRVK pmax pmax
comp=Z,12nm,1.1s
**BRVK Borovoye 49.66 322** *e*P **P** **06 15 05.6 +1.0**
comp=Z,12nm,1.1s
**ZRNK Zerenda 50.35 322** *i* P **P** **06 15 09.2 -0.7**
ZRNK pmax pmax
comp=Z,15nm,1.2s
**AB31 Akbulak array 55.15 316** *i* P **P** **06 15 45.8 +0.4**
AB31 pmax pmax
comp=Z,3.0nm,0.6s
**ABKAR Akbulak array 55.15 316** *e*P **P** **06 15 46.2 +0.8**
**GEYT Alibeck 56.00 302** P **P** **06 15 51.0 -0.8**
comp=Z,2.7nm,0.4s,baz=75,slow=1.6,SNR=5.3
GEYT LR LR 06 43 42.9
comp=Z,247nm,19.4s,baz=5.0,slow=40
**AKTO Aktyubinsk 56.53 317** P **P** **06 15 55.0 -0.3**
AKTO pmax pmax
comp=Z,7.0nm,1.1s
**ARU Arti 57.08 324** *d i*P **P** **06 15 59.3 +0.2**
ARU S **S** **06 23 54.4 +2.0**
ARU SS **SS** **06 27 43.3 +2.3**
ARU pmax pmax
comp=Z,18nm,1.0s
**ARU Arti 57.08 324** *e*P **P** **06 15 59.0 0.0**
comp=Z,9.1nm,0.8s
**VRH Novokhopyorsk 66.84 318** *e*P **P** **06 17 04.7 -0.1**
VRH pmax pmax
comp=E,10.0nm,0.7s
VRH pmax pmax
comp=Z,10.0nm,0.7s
VRH pmax pmax
comp=N,10.0nm,0.5s
**KBZ Khabaz 66.99 310** P **P** **06 17 05.8 0.0**
comp=N,1.4nm,0.3s,baz=246,slow=3.1,SNR=5.0
KBZ LR LR 06 50 45.6
comp=N,181nm,18.2s,baz=88,slow=40
**KIV Kislovodsk 67.11 310** *de*P **P** **06 17 07.9 +1.2**
KIV *e* 06 19 31.7
KIV *e*PPP PPP 06 21 11.6
KIV pmax pmax
comp=Z,8.0nm,0.8s
KIV MLR MLR
comp=Z,193nm,18.0s
**KLMR Klimovskoe 67.25 328** *e*P **P** **06 17 05.7 -1.5**
KLMR pmax pmax
comp=Z,42nm,1.6s
**VORD Divnogorie 68.39 318** *e*P **P** **06 17 14.3 -0.2**
VORD pmax pmax
comp=Z,10.0nm,1.5s
VORD pmax pmax
comp=N,10.0nm,1.1s
VORD pmax pmax
comp=E,10.0nm,0.9s
**LPSR Galich'ya Gora 68.39 319** *e*P **P** **06 17 14.3 -0.2**
LPSR pmax pmax
comp=Z,20nm,1.4s
LPSR pmax pmax
comp=N,6.0nm,1.0s
LPSR pmax pmax
comp=E,10.0nm,1.5s
**VSR Storozhevoye 68.44 318** *e*P **P** **06 17 14.9 +0.1**
VSR pmax pmax
comp=Z,20nm,1.3s
VSR pmax pmax
comp=N,10.0nm,1.1s
VSR pmax pmax
comp=E,10.0nm,1.2s
**OBN Obninsk 69.43 322**⇑ *e*P **P** **06 17 21.3 +0.4**
OBN *e* 06 19 58.8
OBN *e*PPP PPP 06 21 40.2
OBN pmax pmax
comp=Z,13nm,0.4s
OBN MLR MLR
comp=Z,168nm,17.0s
**BPAW Bear Paw Mtn. 69.90 28** *e*P **P** **06 17 23.7 0.0**
comp=Z,3.1nm,1.2s
**KDAK Kodiak Island 70.06 35** *i* P **P** **06 17 24.2 -0.6**
**MCK McKinley 70.85 28** *e*P **P** **06 17 28.7 -0.9**
MCK pmax pmax
comp=Z,3.0nm,0.3s
**MCK McKinley 70.85 28** *e*P **P** **06 17 28.7 -0.9**
comp=Z,3.0nm,0.3s
**COLA College 71.11 27**⇑ *e*P **P** **06 17 31.5 +0.5**
COLA pmax pmax
comp=Z,3.0nm,0.9s
**ILAR Eielson Array 71.54 27** P **P** **06 17 31.8 -1.8**
comp=Z,0.8nm,0.8s,baz=269,slow=5.0,SNR=15
**ARCES ARCESS Array B 71.86 338** P **P** **06 17 35.0 -0.5**
comp=Z,6.2nm,0.8s,baz=74,slow=9.0,SNR=11
ARCES LR LR 06 55 03.7
comp=Z,104nm,19.8s,baz=67,slow=41
**ARCES ARCESS Array B 71.86 338** P **P** **06 17 35.0 -0.5**
**FINES FINESS Array B 73.58 330** P **P** **06 17 45.3 -0.6**
comp=Z,4.0nm,0.8s,baz=72,slow=6.2,SNR=10
FINES LR LR 06 54 05.3
comp=Z,283nm,18.8s,baz=58,slow=39
**FINES FINESS Array B 73.58 330** *i* P **P** **06 17 46.0 +0.2**
FINES pmax pmax
comp=Z,4.0nm,0.8s
**VSU Vasula 74.04 327**⇑ *e*P **P** **06 17 49.7 +1.1**
VSU pmax pmax
comp=Z,36nm,1.0s
**BRTR Keskin Array B 74.59 307** P **P** **06 17 51.4 -1.0**
comp=Z,1.0nm,0.7s,baz=113,slow=8.3,SNR=5.1
BRTR LR LR 06 57 02.5
comp=Z,38nm,18.1s,baz=86,slow=41
**BRTR Keskin Array B 74.59 307** *ce*P **P** **06 17 52.7 +0.3**
BRTR pmax pmax
comp=Z,1.0nm,0.6s
**AKASG Malin Array Be 74.69 319** P **P** **06 17 51.5 -1.0**
comp=Z,1.9nm,0.6s,baz=61,slow=5.3,SNR=11
AKASG LR LR 06 53 08.5

comp=Z,145nm,18.1s,baz=60,slow=38
**AKASG Malin Array Be 74.69 319** *ce*P **P 06 17 52.2 -0.3**
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**KIEV Kiev 74.70 319** *de*P **P 06 17 52.1 -0.5**
KIEV pmax pmax
comp=Z,4.0nm,1.2s
**KWP Kalwaria Pacla 79.01 319** *e*P **P 06 18 17.8 +0.8**
**KWP Kalwaria Pacla 79.01 319** *e*P **P 06 18 17.9 +0.9**
**HFS Hagfors 79.73 331** LR LR 06 57 12.6
comp=Z,196nm,18.0s,baz=63,slow=38
**NB2 NORSAR Subarra 80.42 332** P **P 06 18 23.9 -0.5**
comp=Z,15nm,1.2s,baz=61,slow=5.6
**NOA NORSAR Array B 80.42 332** P **P 06 18 23.9 -0.5**
comp=Z,3.6nm,0.7s,baz=61,slow=5.4,SNR=7.2
NOA LR LR 06 58 03.1
comp=Z,476nm,18.3s,baz=60,slow=39
**OJC Ojcow 80.55 320** *e*P **P 06 18 25.9 +0.6**
**OJC Ojcow 80.55 320** *e*P **P 06 18 25.9 +0.6**
**NIE Niedzica 80.55 319** *e*P **P 06 18 26.5 +1.2**
**NIE Niedzica 80.55 319** *e*P **P 06 18 26.5 +1.2**
**OKC Ostrava-Krasne 81.68 320** AMS AMS 06 58 40.0
comp=Z,200nm,13.7s
**VYHS Vyhne 81.80 319** *e*P **P 06 18 32.2 +0.2**
VYHS pmax pmax
comp=Z,5.0nm,1.4s
**VYHS Vyhne 81.80 319** *e*P **P 06 18 32.2 +0.2**
**KSP Ksiaz 82.35 322** *e*P **P 06 18 35.7 +1.0**
**KSP Ksiaz 82.35 322** *e*P **P 06 18 35.8 +1.0**
**UPC Upice 82.65 322** AMS AMS 06 58 10.0
comp=Z,200nm,13.0s
**VRAC Vranov 82.82 320** LR LR 06 59 41.5
comp=Z,117nm,18.1s,baz=78,slow=39
**TREC Trest 83.48 321** AMS AMS 07 00 30.0
comp=Z,200nm,17.4s
**PRU Pruhonice 83.73 321** AMS AMS 06 58 30.0
comp=Z,200nm,16.8s
**CLL Collm 84.01 323** *e*P **P 06 18 44.0 +0.7**
CLL pmax pmax
comp=Z,5.0nm,0.9s
CLL MLR MLR
comp=Z,200nm,19.8s
**CLL Collm 84.01 323** *e*P **P 06 18 44.0 +0.7**
comp=Z,5.0nm,0.9s
CLL *e*(pP) **pP 06 18 51.0 -0.2**
CLL LV 06 59 00.0
comp=Z,200nm,19.8s
**KMBO Kilima Mbogo 84.64 267** P **P 06 18 47.1 -0.4**
comp=Z,0.9nm,0.4s,baz=35,slow=8.8,SNR=3.3
KMBO LR LR 06 58 54.5
comp=Z,78nm,18.0s,baz=83,slow=37
**KMBO Kilima Mbogo 84.64 267** *ce*P **P 06 18 50.0 +2.5**
KMBO pmax pmax
comp=Z,1.0nm,0.4s
**GERES GERESS Array B 84.73 321** P **P 06 18 46.9 -0.3**
comp=Z,2.5nm,0.8s,baz=68,slow=5.0,SNR=13
GERES LR LR 07 01 29.5
comp=Z,46nm,18.9s,baz=51,slow=39
**YKA Yellowknife Ar 85.36 23** P **P 06 18 49.0 -0.9**
comp=Z,4.6nm,0.7s,baz=317,slow=4.8,SNR=21
**YKA Yellowknife Ar 85.36 23** P **P 06 18 49.0 -0.9**
**YKA Yellowknife Ar 85.36 23** P **P 06 18 49.0 -0.9**
**BORG Borgarnes 89.15 345** LR LR 07 03 51.0
comp=Z,115nm,21.7s,baz=34,slow=39
**FRB Frobisher Bay 94.58 4** LR LR 07 01 27.0
comp=Z,97nm,20.5s,baz=360,slow=35
**PPT Papeete 95.75 107** LR LR 07 06 29.9
comp=Z,36nm,18.1s,baz=87,slow=38
**NVAR Mina Array Bea 98.38 43** P Pdif 06 19 51.5 0.0
comp=Z,0.5nm,0.7s,baz=294,slow=5.3,SNR=5.2
**MAW Mawson 98.65 199** LR LR 07 03 31.0
comp=Z,58nm,18.0s,baz=56,slow=35
**TXAR Lajitas Array 113.50 42** PKiKP **PKiKP 06 24 51.0 -0.8**
comp=Z,0.3nm,0.6s,baz=95,slow=0.5,SNR=6.2
**VNA2 Neumayer--Watz 122.43 198** P **PKPdf 06 25 07.4 0.0**
baz=67,slow=1.8
**ROSC El Rosal 149.67 32** PKPbc **PKPbc 06 26 02.5 -1.5**
comp=Z,3.0nm,0.5s,baz=85,slow=20,SNR=6.9
**OTAV Otavalo 151.11 44** *e*PKPbc **PKPbc 06 26 07.1 -0.5**
**PTGA Pitinga 159.21 3** PKP **PKPdf 06 26 11.1 -1.0**
comp=Z,1.9nm,0.6s,baz=116,slow=2.5,SNR=5.1
**LPAZ La Paz 169.82 60** PKP **PKPdf 06 26 20.9 -1.2**
comp=Z,2.7nm,1.1s,baz=320,slow=1.6,SNR=6.5

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*CSEM* ***14*** *06:23:32.2, 38°.13N×26°.37W, h1km, ML2.4, After PDA*
**PDA 14 06:23:32.2**±1.0**, 38°.13N×26°.37W, h1**km±6km**, MD3.5, ML2.4, Error ellipse: s-maj=12.9km s-min=2.1km az=34.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PSET** | **Sete Cidades** | **0.60** | **121** | *e*P | | Pg | | 06 23 43.0 | -0.8 |
| PSET | | | | *e*S | | Sg | | 06 23 50.3 | -1.3 |
| PSET | | | | A | | A | | 06 23 52.8 | |
| | 70nm,0.3s | | | | | | | | |
| **PSET** | **Sete Cidades** | **0.60** | **121** | *e*P | | Pg | | 06 23 43.0 | -0.8 |
| PSET | | | | *e*S | | Sg | | 06 23 50.3 | -1.3 |
| **PDA** | **Ponta Delgada** | **0.68** | **124** | *e*S | | Sg | | 06 23 52.8 | -1.2 |
| PDA | | | | A | | A | | 06 23 54.5 | |
| | 29nm,0.1s | | | | | | | | |
| **PDA** | **Ponta Delgada** | **0.68** | **124** | *e*S | | Sg | | 06 23 52.8 | -1.2 |
| **ADH** | **Angra Heroismo** | **0.86** | **308** | *e*P | | Pg | | 06 23 46.0 | -2.6 |
| ADH | | | | *e*S | | Sg | | 06 23 57.1 | -2.6 |
| ADH | | | | A | | A | | 06 23 59.5 | |
| | 115nm,0.3s | | | | | | | | |
| **ADH** | **Angra Heroismo** | **0.86** | **308** | *e*P | | Pg | | 06 23 46.0 | -2.6 |
| ADH | | | | *e*S | | Sg | | 06 23 57.1 | -2.6 |
| **PMAN** | **Manadas** | **1.44** | **291** | *e*S | | Sg | | 06 24 11.3 | -7.2 |
| PMAN | | | | A | | A | | 06 24 12.1 | |
| | 15nm,0.2s | | | | | | | | |
| **PMAN** | **Manadas** | **1.44** | **291** | *e*S | | Sg | | 06 24 11.3 | -7.2 |
| **ROSA** | **Rosais** | **1.58** | **292** | *e*P | | Pn | | 06 23 56.4 | -5.0 |
| ROSA | | | | *e*S | | Sn | | 06 24 14.5 | -8.0 |
| ROSA | | | | A | | A | | 06 24 15.2 | |
| | 18nm,0.2s | | | | | | | | |
| **ROSA** | **Rosais** | **1.58** | **292** | *e*P | | Pn | | 06 23 56.4 | -5.0 |
| ROSA | | | | *e*S | | Sn | | 06 24 14.5 | -8.1 |
| **PICO** | **Pico** | **1.66** | **283** | *e*P | | Pn | | 06 23 57.8 | -4.7 |
| PICO | | | | *e*S | | Sn | | 06 24 16.4 | -8.1 |
| **PICO** | **Pico** | **1.66** | **283** | *e*P | | Pn | | 06 23 57.8 | -4.7 |
| PICO | | | | *e*S | | Sn | | 06 24 16.4 | -8.1 |
| **PCAN** | **Candelaria** | **1.69** | **282** | *e*P | | Pg | | 06 24 16.7 | +12 |
| **CALA** | **Caldeira** | **1.89** | **284** | *e*S | | Sn | | 06 24 22.3 | -7.8 |
| **CALA** | **Caldeira** | **1.89** | **284** | *e*S | | Sn | | 06 24 22.3 | -7.8 |

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*BJI* ***14*** *06:26:51.0, 6°.80N×73°.10W, h145km*
*ISCJB* ***14*** *06:26:52.9±0.2, 6°.79N±0°.03×72°.95W±0°.02, h166km, mb4.2/36, Error ellipse: s-maj=4.7km s-min=3.0km az=172.1*
*NEIC* ***14*** *06:26:53.4±0.4, 6°.82N×73°.04W, mb4.5/27, Error ellipse: s-maj=7.5km s-min=5.7km az=116.0*
*FUNV* ***14*** *06:26:53.9, 6°.82N×73°.10W, h170km, MW4.1*
*IDC* ***14*** *06:26:53.3±1.0, 6°.73N×72°.89W, h156km±10km, mb3.6/10, mb1 3.8/14, mb1mx3.6/30, mbtmp4.1/14, MS2.5/1, Ms1 2.5/1, ms1mx2.2/36, Error ellipse: s-maj=13.9km s-min=11.9km az=146.0*
**ISC 14 06:26:54.0**±0.4**, 6°.77N**±0°.04**×72°.93W**±0°.05**, h166**km**, n323, σ0s91/338, mb4.3/38, 18D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CAPV** | **Capacho** | **1.25** | **29** | ⇓*i*P | | Pn | | **06 27 22.4** | **-0.3** |
| CAPV | | | | *e*S | | Sn | | **06 27 43.5** | **-1.4** |
| **ROSC** | **El Rosal** | **2.36** | **216** | P | | Pn | | **06 27 34.0** | **-0.6** |
| | 175nm,0.3s,baz=97,slow=11,SNR=449 | | | | | | | | |
| ROSC | | | | S | | Sn | | **06 28 04.7** | **-1.5** |
| | 242nm,0.3s,baz=62,slow=22,SNR=22 | | | | | | | | |
| ROSC | | | | LR | | LR | | 06 28 46.2 | |
| | comp=Z,106nm,21.0s,baz=230,slow=48 | | | | | | | | |
| **ROSC** | **El Rosal** | **2.36** | **216** | *e*Pn | | Pn | | **06 27 34.1** | **-0.6** |
| ROSC | | | | *e*Sn | | Sn | | **06 28 03.6** | **-2.6** |
| **SOCV** | **Socops** | **2.55** | **54** | ⇓*i*P | | Pn | | **06 27 37.3** | **+0.7** |
| SOCV | | | | *e*S | | Sn | | **06 28 08.8** | **-0.8** |
| **VIGV** | **El Vigia** | **2.58** | **37** | ⇓*i*P | | Pn | | **06 27 37.0** | **+0.1** |
| VIGV | | | | *e*S | | Sn | | **06 28 08.8** | **-1.5** |
| **SDV** | **Santo Domingo** | **3.10** | **47** | *e*Pn | | Pn | | **06 27 44.1** | **+0.6** |
| SDV | | | | *e*Sn | | Sn | | **06 28 21.5** | **-0.4** |
| **ELOV** | **Elorza** | **3.43** | **86** | ⇓*i*P | | Pn | | **06 27 48.7** | **+1.2** |
| **VIRV** | **Villa del Rosa** | **3.74** | **8** | ⇓*i*P | | Pn | | **06 27 49.4** | **-2.0** |
| VIRV | | | | *e*S | | Sn | | **06 28 30.6** | **-5.6** |
| **QARV** | **Quebrada Arrib** | **4.16** | **35** | ⇓*i*P | | Pn | | **06 27 57.0** | **+0.1** |
| **SANV** | **Sanarito** | **4.32** | **51** | ⇓*i*P | | Pn | | **06 27 58.9** | **-0.1** |
| **CURV** | **Curarigua** | **4.36** | **42** | ⇓*i*P | | Pn | | **06 27 59.2** | **-0.2** |
| **DABV** | **Dabajuro** | **4.71** | **29** | ⇓*i*P | | Pn | | **06 28 03.4** | **-0.5** |
| **TEPV** | **Terepaima** | **4.87** | **49** | ⇓*i*P | | Pn | | **06 28 06.1** | **0.0** |
| **SIQV** | **Siquisique** | **4.94** | **39** | ⇓*i*P | | Pn | | **06 28 06.3** | **-0.7** |
| **BAUV** | **El Baul** | **5.30** | **66** | ⇓*e*P | | Pn | | **06 28 10.8** | **-1.0** |
| **MAPV** | **Macapo** | **5.37** | **55** | ⇓*i*P | | Pn | | **06 28 12.6** | **-0.1** |
| **JACV** | **Jacura** | **5.90** | **43** | *e*P | | Pn | | **06 28 18.9** | **-0.7** |
| **MONV** | **Montecano** | **5.92** | **29** | ⇓*e*P | | Pn | | **06 28 18.3** | **-1.6** |
| **TURV** | **Turiamo** | **6.22** | **54** | *e*P | | Pn | | **06 28 23.0** | **-0.9** |
| **MERV** | **Las Mercedes** | **7.02** | **69** | ⇓*i*P | | Pn | | **06 28 33.3** | **-1.1** |
| **FUNV** | **FUNVISIS** | **7.08** | **58** | ⇓*e*P | | Pn | | **06 28 34.3** | **-1.1** |
| **BCIP** | **Isla Barro Col** | **7.24** | **290** | *e*Pn | | Pn | | 06 28 33.4 | -4.0 |
| **BIRV** | **Birongo** | **7.55** | **60** | ⇓*e*P | | Pn | | **06 28 40.4** | **-1.0** |
| **CUPV** | **Cicapira** | **7.79** | **65** | ⇓*i*P | | Pn | | **06 28 43.5** | **-1.1** |
| **OTAV** | **Otavalo** | **8.51** | **221** | *e*Pn | | Pn | | **06 28 52.5** | **-2.1** |
| **PCRV** | **Puerto La Cruz** | **8.88** | **67** | P | | Pn | | **06 28 58.6** | **-0.5** |
| | 4.2nm,0.3s,baz=284,slow=2.8,SNR=31 | | | | | | | | |
| PCRV | | | | S | | Sn | | **06 30 37.6** | **-0.4** |
| | 0.9nm,0.3s,baz=291,slow=8.6,SNR=2.2 | | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **8.88** | **67** | *e*P | | Pn | | **06 28 57.6** | **-1.5** |
| **MTDJ** | **Mount Denham** | **12.24** | **339** | *e*Pn | | Pn | | **06 29 43.5** | **+0.5** |
| **JTS** | **JuntasAbangare** | **12.39** | **287** | P | | P | | **06 29 51.4** | **+1.2** |
| | 2.1nm,0.3s,baz=202,slow=1.5,SNR=15 | | | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **12.53** | **26** | Pn | | Pn | | **06 29 45.2** | **-1.5** |
| **SJG** | **San Juan** | **13.07** | **30** | P | | Pn | | **06 29 52.8** | **-0.8** |
| | 3.5nm,0.3s,baz=182,slow=10,SNR=11 | | | | | | | | |
| **SJG** | **San Juan** | **13.07** | **30** | *e*Pn | | Pn | | **06 29 52.5** | **-1.1** |
| **CPD** | **Cerro la Pandu** | **13.12** | **31** | *e*Pn | | Pn | | **06 29 53.3** | **-1.0** |
| **STVI** | **Saint Thomas** | **13.89** | **33** | *e*Pn | | Pn | | **06 30 04.6** | **+0.7** |
| **PTGA** | **Pitinga** | **14.93** | **119** | P | | Pn | | **06 30 16.8** | **-0.3** |
| | 0.2nm,0.3s,baz=315,slow=19,SNR=2.3 | | | | | | | | |
| PTGA | | | | S | | Sn | | **06 33 00.2** | **-3.3** |
| | 0.4nm,0.3s,baz=336,slow=20,SNR=3.0 | | | | | | | | |
| **SAML** | **Samuel** | **18.39** | **148** | *e*P | | Pn | | **06 30 58.9** | **+0.2** |
| | 9.9nm,1.1s | | | | | | | | |
| **NNA** | **Nana** | **19.04** | **192** | *e*P | | P | | **06 31 04.2** | **+0.5** |
| **TEIG** | **Teich** | **20.01** | **313** | P | | P | | **06 31 15.8** | **+1.8** |
| | 2.9nm,0.3s,baz=285,slow=20,SNR=3.6 | | | | | | | | |
| **LPAZ** | **La Paz** | **23.40** | **168** | P | | P | | **06 31 48.3** | **-0.5** |
| | 0.2nm,0.3s,baz=45,slow=2.9,SNR=3.8 | | | | | | | | |
| **035Z** | **Hargill** | **30.92** | **312** | P | | P | | **06 32 56.4** | **+1.1** |
| | baz=31 | | | | | | | | |
| **737A** | **Port Lavaca** | **31.17** | **317** | P | | P | | **06 32 58.6** | **+1.2** |
| | baz=31 | | | | | | | | |
| **034A** | **Hebbronville** | **31.72** | **313** | P | | P | | **06 33 02.5** | **+0.2** |
| | baz=32 | | | | | | | | |
| **934A** | **Benavides** | **31.91** | **314** | P | | P | | **06 33 04.1** | **+0.1** |
| | baz=32 | | | | | | | | |
| **834A** | **Tilden** | **32.24** | **314** | P | | P | | **06 33 07.2** | **+0.4** |
| | baz=32 | | | | | | | | |
| **WVT** | **Waverly** | **32.25** | **337** | *e*P | | P | | **06 33 07.6** | **+0.8** |
| | 4.5nm,0.7s | | | | | | | | |
| **933A** | **Laredo** | **32.46** | **313** | P | | P | | **06 33 08.9** | **+0.1** |
| | baz=32 | | | | | | | | |
| **238A** | **Jacksonville** | **32.53** | **323** | P | | P | | **06 33 10.3** | **+1.0** |
| | baz=32 | | | | | | | | |
| **436A** | **Wall Ranch, Ga** | **32.72** | **320** | P | | P | | **06 33 11.7** | **+0.7** |
| | baz=33 | | | | | | | | |
| **833A** | **Chaparral WMA,** | **32.95** | **314** | P | | P | | **06 33 13.1** | **0.0** |
| | baz=33 | | | | | | | | |
| **832A** | **Faith Ranch, C** | **33.35** | **313** | P | | P | | **06 33 16.4** | **-0.2** |
| | baz=33 | | | | | | | | |
| **MIAR** | **Mount Ida** | **33.56** | **328** | P | | P | | **06 33 18.3** | **0.0** |
| | baz=34 | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **33.87** | **334** | *e*P | | P | | **06 33 21.7** | **+0.8** |
| | 7.2nm,0.8s | | | | | | | | |
| **632A** | **Uvalde** | **33.93** | **315** | P | | P | | **06 33 22.0** | **+0.5** |
| | baz=34 | | | | | | | | |
| **WHTX** | **Lake Whitney** | **33.95** | **321** | P | | P | | **06 33 22.7** | **+1.0** |
| | baz=34 | | | | | | | | |
| **334A** | **Lometa** | **34.01** | **319** | P | | P | | **06 33 22.2** | **-0.1** |
| | baz=34 | | | | | | | | |
| **433A** | **Art** | **34.21** | **318** | P | | P | | **06 33 23.6** | **-0.4** |
| | baz=34,SNR=10 | | | | | | | | |
| **X38A** | **Whitesboro** | **34.33** | **327** | P | | P | | **06 33 25.5** | **+0.6** |
| | baz=34 | | | | | | | | |
| **532A** | **Rocksprings** | **34.38** | **316** | P | | P | | **06 33 25.5** | **+0.1** |
| | baz=34,SNR=5.3 | | | | | | | | |
| **631A** | **Perdido Creek** | **34.43** | **314** | P | | P | | **06 33 26.2** | **+0.4** |
| | baz=34 | | | | | | | | |
| **333A** | **Richland Sprin** | **34.50** | **318** | P | | P | | **06 33 26.4** | **0.0** |
| | baz=34 | | | | | | | | |
| **X37A** | **Clayton** | **34.56** | **326** | P | | P | | **06 33 27.5** | **+0.6** |
| | baz=35 | | | | | | | | |
| **432A** | **Menard** | **34.76** | **317** | P | | P | | **06 33 28.9** | **+0.2** |
| | baz=35 | | | | | | | | |
| **531A** | **Rocksprings** | **34.85** | **315** | P | | P | | **06 33 29.6** | **+0.1** |
| | baz=35 | | | | | | | | |
| **233A** | **Rising Star** | **34.89** | **319** | P | | P | | **06 33 29.8** | **0.0** |
| | baz=35 | | | | | | | | |
| **W37A** | **Quinton** | **35.00** | **327** | P | | P | | **06 33 31.2** | **+0.6** |
| | baz=35 | | | | | | | | |
| **V38A** | **Canehill** | **35.01** | **329** | P | | P | | **06 33 30.8** | **+0.1** |
| | baz=35,SNR=6.1 | | | | | | | | |
| **332A** | **Millersview** | **35.04** | **318** | P | | P | | **06 33 31.1** | **+0.1** |
| | baz=35 | | | | | | | | |
| **X36A** | **Centrahoma** | **35.10** | **325** | P | | P | | **06 33 31.8** | **+0.3** |
| | baz=35 | | | | | | | | |
| **431A** | **Sonora** | **35.20** | **316** | P | | P | | **06 33 32.3** | **-0.1** |
| | baz=35 | | | | | | | | |
| **133A** | **Hamilton Ranch** | **35.28** | **320** | P | | P | | **06 33 33.6** | **+0.4** |
| | baz=35 | | | | | | | | |
| **232A** | **Coleman** | **35.29** | **319** | P | | P | | **06 33 33.6** | **+0.3** |
| | baz=35 | | | | | | | | |
| **CCM** | **Cathedral Cave** | **35.29** | **335** | *e*P | | P | | **06 33 33.8** | **+0.7** |
| | 11nm,0.7s | | | | | | | | |
| **X35A** | **Drake** | **35.33** | **324** | P | | P | | **06 33 34.6** | **+1.1** |
| | baz=35 | | | | | | | | |
| **530A** | **J-C Ranch, Com** | **35.39** | **315** | P | | P | | **06 33 34.3** | **+0.1** |
| | baz=35,SNR=7.2 | | | | | | | | |
| **W36A** | **Wetumka** | **35.44** | **326** | P | | P | | **06 33 34.2** | **-0.2** |
| | baz=35 | | | | | | | | |
| **U38A** | **Gravette** | **35.45** | **329** | P | | P | | **06 33 34.3** | **-0.2** |
| | baz=36 | | | | | | | | |
| **331A** | **San Angelo** | **35.45** | **317** | P | | P | | **06 33 34.3** | **-0.3** |
| | baz=35 | | | | | | | | |
| **Y34A** | **Reagan Ranch,** | **35.48** | **323** | P | | P | | **06 33 35.1** | **+0.3** |
| | baz=36 | | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **35.64** | **321** | P | | P | | **06 33 36.9** | **+0.7** |
| | baz=36 | | | | | | | | |
| **430A** | **Baggett Ranch,** | **35.69** | **316** | P | | P | | **06 33 37.4** | **+0.7** |
| | baz=36 | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **35.76** | **320** | P | | P | | **06 33 37.7** | **+0.5** |
| | baz=36 | | | | | | | | |
| **231A** | **Bronte** | **35.76** | **318** | P | | P | | **06 33 37.6** | **+0.3** |
| | baz=36 | | | | | | | | |
| **V36A** | **Jenks** | **35.77** | **327** | P | | P | | **06 33 38.0** | **+0.9** |
| | baz=36 | | | | | | | | |
| **TUL1** | **Tulsa** | **35.78** | **327** | P | | P | | **06 33 37.0** | **-0.3** |
| | baz=36 | | | | | | | | |
| **SFIN** | **Scholer Farm** | **35.79** | **341** | P | | P | | **06 33 38.4** | **+1.1** |
| | baz=36 | | | | | | | | |
| **U37A** | **Salina** | **35.80** | **329** | P | | P | | **06 33 37.2** | **-0.2** |
| | baz=36 | | | | | | | | |
| **W35A** | **Tecumseh** | **35.81** | **325** | P | | P | | **06 33 38.0** | **+0.4** |
| | baz=36 | | | | | | | | |
| **X34A** | **Smith Ranch, M** | **35.97** | **324** | P | | P | | **06 33 39.7** | **+0.7** |
| | baz=36 | | | | | | | | |
| **529A** | **Stev Forest Ra** | **36.01** | **314** | P | | P | | **06 33 39.3** | **-0.1** |
| | baz=36 | | | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **36.04** | **322** | P | | P | | **06 33 39.9** | **+0.4** |
| | baz=36 | | | | | | | | |
| **429A** | **Davenport Ranc** | **36.06** | **315** | P | | P | | **06 33 39.9** | **+0.1** |
| | baz=36 | | | | | | | | |
| **Z32A** | **Haskell** | **36.10** | **321** | P | | P | | **06 33 40.5** | **+0.5** |
| | baz=36,SNR=6.0 | | | | | | | | |
| **T37A** | **Cheyenville 18** | **36.25** | **330** | P | | P | | **06 33 41.4** | **+0.2** |
| | baz=36,SNR=6.2 | | | | | | | | |
| **230A** | **Sterling City** | **36.27** | **317** | P | | P | | **06 33 42.1** | **+0.5** |
| | baz=36 | | | | | | | | |
| **X33A** | **Lawton** | **36.33** | **323** | P | | P | | **06 33 41.9** | **-0.1** |
| | baz=36,SNR=5.6 | | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **36.53** | **320** | P | | P | | **06 33 44.5** | **+0.8** |
| | baz=36 | | | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **36.53** | **321** | P | | P | | **06 33 44.4** | **+0.6** |
| | baz=36 | | | | | | | | |
| **130A** | **Snyder** | **36.60** | **318** | P | | P | | **06 33 44.6** | **+0.2** |
| | baz=37 | | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **36.62** | **316** | P | | P | | **06 33 44.7** | **+0.1** |
| | baz=37 | | | | | | | | |
| **U35A** | **Pawnee** | **36.63** | **327** | P | | P | | **06 33 45.0** | **+0.5** |
| | baz=37 | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **36.63** | **323** | *e*P | | P | | **06 33 44.1** | **-0.4** |
| | 2.9nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.63** | **312** | P | | P | | **06 33 45.0** | **+0.3** |
| | 1.3nm,0.4s,baz=128,slow=9.1,SNR=32 | | | | | | | | |
| TXAR | | | | PcP | | PcP | | **06 36 06.3** | **+2.0** |
| | 0.4nm,0.6s,baz=141,slow=5.6,SNR=5.8 | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **36.63** | **312** | *e*P | | P | | **06 33 45.0** | **+0.3** |
| **V34A** | **Guthrie** | **36.67** | **326** | P | | P | | **06 33 44.9** | **0.0** |
| | baz=37 | | | | | | | | |
| **HDIL** | **Hopedale** | **36.69** | **339** | P | | P | | **06 33 45.0** | **+0.1** |
| | baz=37 | | | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **36.69** | **329** | P | | P | | **06 33 44.9** | **-0.1** |
| | baz=37 | | | | | | | | |
| **S37A** | **Fort Scott** | **36.70** | **330** | P | | P | | **06 33 45.1** | **0.0** |
| | baz=37 | | | | | | | | |
| **X32A** | **Elmer** | **36.72** | **322** | P | | P | | **06 33 45.5** | **+0.1** |
| | baz=37 | | | | | | | | |
| **W33A** | **Caddo, Fort Co** | **36.73** | **324** | P | | P | | **06 33 45.9** | **+0.5** |
| | baz=37 | | | | | | | | |
| **229A** | **Bryant Ranch,** | **36.79** | **317** | P | | P | | **06 33 46.4** | **+0.4** |
| | baz=37 | | | | | | | | |
| **T35A** | **Sooner Cattle** | **36.91** | **328** | P | | P | | **06 33 47.0** | **+0.1** |
| | baz=37 | | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **37.02** | **321** | P | | P | | **06 33 48.6** | **+0.7** |
| | baz=37,SNR=8.2 | | | | | | | | |
| **V33A** | **Lossen Ranch,** | **37.09** | **325** | P | | P | | **06 33 47.7** | **-0.8** |
| | baz=37 | | | | | | | | |
| **U34A** | **Anderson Ranch** | **37.11** | **326** | P | | P | | **06 33 48.4** | **-0.2** |
| | baz=37 | | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **37.14** | **319** | P | | P | | **06 33 49.3** | **+0.4** |
| | baz=37 | | | | | | | | |
| **W32A** | **Sentinel** | **37.17** | **323** | P | | P | | **06 33 49.3** | **+0.2** |
| | baz=37 | | | | | | | | |
| **129A** | **Stewart Farms,** | **37.23** | **318** | P | | P | | **06 33 50.0** | **+0.3** |
| | baz=37 | | | | | | | | |
| **X31A** | **McDonald Ranch** | **37.28** | **322** | P | | P | | **06 33 50.3** | **+0.2** |
| | baz=37 | | | | | | | | |
| **T34A** | **McClaskey Farm** | **37.35** | **327** | P | | P | | **06 33 51.2** | **+0.6** |
| | baz=37 | | | | | | | | |
| **Y30A** | **Stafford Cattl** | **37.37** | **320** | P | | P | | **06 33 51.2** | **+0.4** |
| | baz=37 | | | | | | | | |
| **S35A** | **Otter Creek Ra** | **37.39** | **329** | P | | P | | **06 33 50.8** | **-0.1** |
| | baz=37 | | | | | | | | |
| **Q37A** | **Longview Farm,** | **37.40** | **332** | P | | P | | **06 33 51.3** | **+0.3** |
| | baz=37 | | | | | | | | |
| **228A** | **UT Block 9, Go** | **37.41** | **316** | P | | P | | **06 33 51.1** | **-0.2** |
| | baz=37 | | | | | | | | |
| **R36A** | **Gordon, Harris** | **37.47** | **330** | P | | P | | **06 33 52.3** | **+0.7** |
| | baz=38 | | | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **37.50** | **319** | P | | P | | **06 33 52.1** | **+0.1** |
| | baz=38,SNR=9.0 | | | | | | | | |
| **W31A** | **Holland Ranch,** | **37.63** | **322** | P | | P | | **06 33 52.8** | **-0.2** |
| | baz=38 | | | | | | | | |
| **128A** | **Castleberry Fa** | **37.64** | **317** | P | | P | | **06 33 53.6** | **+0.5** |
| | baz=38,SNR=8.7 | | | | | | | | |
| **X30A** | **Coker Ranch, T** | **37.72** | **321** | P | | P | | **06 33 54.5** | **+0.7** |
| | baz=38 | | | | | | | | |
| **S34A** | **Willow Spring** | **37.82** | **328** | P | | P | | **06 33 55.9** | **+1.4** |
| | baz=38 | | | | | | | | |
| **Y29A** | **Porterfield Fa** | **37.85** | **319** | P | | P | | **06 33 55.5** | **+0.5** |
| | baz=38,SNR=7.2 | | | | | | | | |
| **U32A** | **Winter Ranch,** | **37.90** | **325** | P | | P | | **06 33 55.4** | **+0.1** |
| | baz=38 | | | | | | | | |
| **Z28A** | **Tucker Farm, M** | **37.97** | **318** | P | | P | | **06 33 56.3** | **+0.3** |
| | baz=38 | | | | | | | | |
| **Q35A** | **Mercer Eighty,** | **38.15** | **330** | P | | P | | **06 33 56.8** | **-0.5** |
| | baz=38 | | | | | | | | |
| **X29A** | **Tulia** | **38.24** | **320** | P | | P | | **06 33 58.5** | **+0.2** |
| | baz=38 | | | | | | | | |
| **Y28A** | **McKinney Farm,** | **38.26** | **319** | P | | P | | **06 33 58.4** | **+0.1** |
| | baz=38 | | | | | | | | |
| **R34A** | **Isabella, Hill** | **38.34** | **329** | P | | P | | **06 33 59.3** | **+0.4** |
| | baz=38 | | | | | | | | |
| **P36A** | **Good Intent, A** | **38.35** | **332** | P | | P | | **06 33 59.1** | **+0.2** |
| | baz=38 | | | | | | | | |
| **AMTX** | **Amarillo** | **38.51** | **321** | P | | P | | **06 34 01.1** | **+0.7** |
| | baz=38 | | | | | | | | |
| **AMTX** | **Amarillo** | **38.51** | **321** | *e*P | | P | | **06 34 01.1** | **+0.7** |
| | 7.3nm,0.8s | | | | | | | | |
| **X28A** | **Dimmitt** | **38.61** | **320** | P | | P | | **06 34 01.4** | **+0.1** |
| | baz=39 | | | | | | | | |
| **MSTX** | **Muleshoe** | **38.64** | **319** | P | | P | | **06 34 01.7** | **+0.2** |
| | baz=39 | | | | | | | | |
| **R33A** | **Olander Ranch,** | **38.73** | **328** | P | | P | | **06 34 02.1** | **0.0** |
| | baz=39 | | | | | | | | |
| **T31A** | **Randall Ranch,** | **38.79** | **325** | P | | P | | **06 34 03.0** | **+0.4** |
| | baz=39 | | | | | | | | |
| **V29A** | **Stinnett** | **39.05** | **322** | P | | P | | **06 34 05.9** | **+1.0** |
| | baz=39 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **39.14** | **314** | P | | P | | **06 34 06.1** | **+0.4** |
| | baz=39,SNR=12 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **39.14** | **314** | *e*P | | P | | **06 34 06.0** | **+0.4** |
| | 4.4nm,0.7s | | | | | | | | |
| **Q33A** | **Connelly Farm,** | **39.16** | **329** | P | | P | | **06 34 06.4** | **+0.7** |
| | baz=39 | | | | | | | | |
| **R32A** | **Long Quarter,** | **39.20** | **327** | P | | P | | **06 34 05.8** | **-0.3** |
| | baz=39 | | | | | | | | |
| **P33A** | **Williams Farm,** | **39.42** | **329** | P | | P | | **06 34 07.9** | **+0.1** |
| | baz=39 | | | | | | | | |
| **Q32A** | **Meitler Ranch,** | **39.54** | **328** | P | | P | | **06 34 08.7** | **-0.1** |
| | baz=40 | | | | | | | | |
| **T29A** | **Hugoton** | **39.77** | **324** | P | | P | | **06 34 10.7** | **-0.1** |
| | baz=40 | | | | | | | | |
| **O33A** | **Hebron** | **39.85** | **330** | P | | P | | **06 34 11.0** | **-0.4** |
| | baz=40 | | | | | | | | |
| **R30A** | **Dighton** | **39.96** | **326** | P | | P | | **06 34 12.6** | **+0.3** |
| | baz=40 | | | | | | | | |
| **P32A** | **Huiting Farm,** | **40.02** | **329** | P | | P | | **06 34 12.9** | **0.0** |
| | baz=40 | | | | | | | | |
| **M35A** | **Neola** | **40.05** | **333** | P | | P | | **06 34 13.0** | **+0.1** |
| | baz=40,SNR=5.5 | | | | | | | | |
| **U27A** | **Thompson Grove** | **40.21** | **321** | P | | P | | **06 34 14.8** | **+0.3** |
| | baz=40 | | | | | | | | |
| **T28A** | **Walsh** | **40.23** | **323** | P | | P | | **06 34 15.3** | **+0.6** |
| | baz=40 | | | | | | | | |
| **S28A** | **Manter** | **40.41** | **324** | P | | P | | **06 34 16.8** | **+0.6** |
| | baz=40,SNR=7.7 | | | | | | | | |
| **L35A** | **Bielow Farm, R** | **40.50** | **334** | P | | P | | **06 34 17.2** | **+0.5** |
| | baz=40 | | | | | | | | |
| **J37A** | **Redenius Farm,** | **40.66** | **337** | P | | P | | **06 34 18.8

| | | | | | | |
|---|---|---|---|---|---|---|
| ECSD | EROS Data Cent<br>60nm,2.6s | 42.27 334 | *e*P | P | 06 34 31.3 | +0.2 |
| L30A | Spencer Herefo<br>baz=42 | 42.32 330 | P | P | 06 34 32.9 | +1.3 |
| K31A | O'Neill<br>baz=42 | 42.37 332 | P | P | 06 34 32.7 | +0.8 |
| J32A | Parkston<br>baz=42 | 42.53 333 | P | P | 06 34 33.0 | -0.1 |
| P26A | Davis Ranch, A<br>baz=43 | 42.57 325 | P | P | 06 34 33.7 | -0.1 |
| G35A | Watkins<br>baz=43 | 42.63 337 | P | P | 06 34 34.4 | +0.4 |
| SDCO | Great Sand Dun<br>baz=43,SNR=7.1 | 42.70 321 | P | P | 06 34 36.2 | +1.2 |
| SDCO | Great Sand Dun<br>2.6nm,0.8s | 42.70 321 | *e*P | P | 06 34 36.2 | +1.2 |
| L29A | Maesberg Ranch<br>baz=43 | 42.79 330 | P | P | 06 34 35.7 | +0.3 |
| OGNE | Ogallala<br>baz=43 | 42.79 327 | P | P | 06 34 36.0 | +0.6 |
| K30A | Basset<br>baz=43,SNR=6.3 | 42.81 331 | P | P | 06 34 35.6 | 0.0 |
| F36A | Milaca<br>baz=43 | 42.82 339 | P | P | 06 34 35.7 | +0.2 |
| J31A | Geddes<br>baz=43 | 42.87 332 | P | P | 06 34 36.2 | +0.2 |
| I32A | Karley and Nic<br>baz=43 | 42.87 334 | P | P | 06 34 36.0 | 0.0 |
| H33A | Prehn Over Nor<br>baz=43 | 43.09 335 | P | P | 06 34 37.9 | +0.2 |
| F35A | Swanville<br>baz=43 | 43.20 338 | P | P | 06 34 38.9 | +0.3 |
| H32A | Carlson Farm,<br>baz=43 | 43.24 334 | P | P | 06 34 38.8 | -0.1 |
| J30A | Dallas<br>baz=43 | 43.25 332 | P | P | 06 34 39.1 | 0.0 |
| I31A | Royce, Wessing<br>baz=43,SNR=6.8 | 43.35 333 | P | P | 06 34 39.6 | -0.2 |
| S22A | 4UR Ranch, Cre<br>baz=44 | 43.54 320 | P | P | 06 34 42.9 | +1.2 |
| D37A | Cotton<br>baz=44 | 43.57 341 | P | P | 06 34 42.3 | +0.8 |
| H31A | Wolsey<br>baz=44 | 43.68 333 | P | P | 06 34 42.7 | +0.3 |
| C38A | Sawbill Land.<br>baz=44 | 43.70 342 | P | P | 06 34 42.7 | +0.2 |
| J29A | Okreek<br>baz=44,SNR=5.0 | 43.71 331 | P | P | 06 34 42.3 | -0.4 |
| D36A | Goodland<br>baz=44 | 43.83 340 | P | P | 06 34 43.7 | +0.1 |
| SUSD | South Dakota S<br>baz=44 | 43.86 333 | P | P | 06 34 43.6 | -0.3 |
| EYMN | Ely<br>baz=44 | 43.97 342 | P | P | 06 34 45.0 | +0.3 |
| E34A | Wadena<br>baz=44 | 43.98 338 | P | P | 06 34 45.1 | +0.3 |
| C37A | Embarrass<br>baz=44 | 43.99 341 | P | P | 06 34 45.3 | +0.4 |
| ISCO | Idaho Springs<br>baz=44 | 44.05 323 | P | P | 06 34 47.0 | +1.2 |
| ISCO | Idaho Springs<br>2.9nm,0.9s | 44.05 323 | *e*P | P | 06 34 47.0 | +1.2 |
| D35A | Remer<br>baz=44 | 44.06 339 | P | P | 06 34 45.9 | +0.5 |
| G31A | Conde<br>baz=44 | 44.15 334 | P | P | 06 34 46.2 | +0.1 |
| I29A | Vivian Onida<br>baz=44 | 44.16 332 | P | P | 06 34 46.2 | -0.1 |
| J28A | Allard Ranch,<br>baz=44 | 44.17 330 | P | P | 06 34 46.1 | -0.3 |
| C36A | Pine Crest Far<br>baz=44 | 44.23 341 | P | P | 06 34 47.4 | +0.7 |
| E33A | Westby DABS, E<br>baz=44 | 44.29 337 | P | P | 06 34 47.1 | -0.1 |
| MVCO | Mesa Verde<br>baz=44 | 44.31 318 | P | P | 06 34 48.5 | +0.7 |
| J27A | Elkhorn Farm,<br>baz=44 | 44.43 330 | P | P | 06 34 48.5 | 0.0 |
| D34A | Park Rapids<br>baz=44 | 44.47 338 | P | P | 06 34 49.1 | +0.5 |
| I28A | Midland<br>baz=45 | 44.56 331 | P | P | 06 34 49.4 | -0.1 |
| C35A | Jirik Farms, M<br>baz=45 | 44.56 340 | P | P | 06 34 49.8 | +0.4 |
| H29A | Onida<br>baz=45 | 44.58 332 | P | P | 06 34 49.2 | -0.4 |
| F31A | Hecla<br>baz=45 | 44.67 335 | P | P | 06 34 50.1 | -0.2 |
| D33A | AnnSam, Waubun<br>baz=45,SNR=11 | 44.76 338 | P | P | 06 34 51.3 | +0.4 |
| G29A | Hoven<br>baz=45 | 44.88 333 | P | P | 06 34 51.8 | -0.1 |
| PV01 | Paradox Valley | 44.88 319 | *e*P | P | 06 34 53.6 | +1.2 |
| I27A | Quinn<br>baz=45 | 45.04 330 | P | P | 06 34 52.8 | -0.5 |
| G28A | Parade<br>baz=45 | 45.24 332 | P | P | 06 34 54.9 | +0.1 |
| C33A | Trail<br>baz=45 | 45.25 338 | P | P | 06 34 55.1 | +0.4 |
| WUAZ | Wupatki<br>7.6nm,1.0s | 45.39 315 | *e*P | P | 06 34 58.2 | +1.9 |
| I26A | New Underwood<br>baz=45 | 45.42 330 | P | P | 06 34 56.3 | +0.1 |
| J25A | Sunshine Ranch<br>baz=45 | 45.44 328 | P | P | 06 34 56.5 | 0.0 |
| H27A | Howes<br>baz=46 | 45.47 331 | P | P | 06 34 56.5 | -0.1 |
| B34A | Aery, Baudette<br>baz=46,SNR=6.1 | 45.47 340 | P | P | 06 34 56.7 | +0.2 |
| AGMN | Agassiz Nation<br>baz=46 | 45.74 339 | P | P | 06 34 59.2 | +0.6 |
| F28A | McLaughlin<br>baz=46 | 45.78 333 | P | P | 06 34 59.0 | 0.0 |
| H26A | Fairpoint<br>baz=46 | 45.80 330 | P | P | 06 34 59.2 | 0.0 |
| E29A | Napoleon<br>baz=46 | 45.82 334 | P | P | 06 34 59.9 | +0.6 |
| I25A | Rochford<br>baz=46 | 45.85 329 | P | P | 06 34 60.0 | +0.2 |
| O20A | White River Ci<br>baz=46 | 45.85 322 | P | P | 06 35 00.8 | +0.9 |
| D30A | Buchanan<br>baz=46 | 45.88 336 | P | P | 06 34 59.9 | +0.1 |
| G27A | Dupree<br>baz=46 | 45.95 332 | P | P | 06 35 00.3 | -0.1 |
| C31A | Landman Farms,<br>baz=46 | 46.02 337 | P | P | 06 35 01.3 | +0.4 |
| B32A | Ashes, Strandq<br>baz=46 | 46.06 338 | P | P | 06 35 01.6 | +0.5 |
| A33A | Warroad<br>baz=46 | 46.11 340 | P | P | 06 35 01.9 | +0.4 |
| G26A | Maurine<br>baz=46 | 46.20 331 | P | P | 06 35 01.9 | -0.5 |
| C30A | Mose, Pekin<br>baz=46 | 46.24 336 | P | P | 06 35 03.1 | +0.5 |
| E28A | Huff<br>baz=46 | 46.29 334 | P | P | 06 35 03.5 | +0.5 |
| K22A | Casper<br>baz=46 | 46.42 326 | P | P | 06 35 04.8 | +0.6 |
| E27A | Carson<br>baz=47 | 46.56 333 | P | P | 06 35 05.5 | +0.4 |
| F26A | Lodgepole<br>baz=47 | 46.65 332 | P | P | 06 35 06.1 | +0.3 |
| SRU | San Rafael<br>2.8nm,0.7s | 46.70 319 | *e*P | P | 06 35 08.1 | +1.6 |
| E26A | Carlson Angus<br>baz=47 | 47.01 332 | P | P | 06 35 09.3 | +0.7 |
| B29A | Wagenman Farm,<br>baz=47 | 47.20 336 | P | P | 06 35 10.8 | +0.8 |
| ULM | Lac du Bonnet<br>4.1nm,0.4s,baz=149,slow=6.8,SNR=9.6 | 47.39 340 | P | P | 06 35 11.2 | -0.2 |
| D26A | Manning<br>baz=47 | 47.41 333 | P | P | 06 35 12.3 | +0.6 |
| E25A | Miller Ranch,<br>baz=48 | 47.47 332 | P | P | 06 35 12.5 | +0.3 |
| A29A | Manning Farm,<br>baz=48 | 47.52 337 | P | P | 06 35 13.0 | +0.5 |
| B28A | Dugan Ranch, T<br>baz=48 | 47.60 335 | P | P | 06 35 14.6 | +1.5 |
| B27A | Peters Farms,<br>baz=48 | 47.94 335 | P | P | 06 35 16.8 | +1.1 |
| SCHQ | Schefferville<br>3.4nm,0.5s,baz=206,slow=5.9,SNR=11 | 48.17 5 | P | P | 06 35 18.9 | +1.5 |
| BW06 | Boulder Array | 48.23 324 | *e*P | P | 06 35 18.7 | +0.4 |
| A27A | Ledoux Ranch,<br>baz=48 | 48.36 335 | P | P | 06 35 20.4 | +1.5 |
| TCUT | Toone Canyon<br>9.5nm,0.7s | 48.38 321 | *e*P | P | 06 35 19.8 | +0.3 |
| TUQ | Turquoise Moun<br>baz=49 | 48.64 312 | P | P | 06 35 21.9 | +0.5 |
| A26A | Wade Farm, Ken<br>baz=49 | 48.65 335 | P | P | 06 35 21.9 | +0.7 |
| B25A | Knox Farm, Ray<br>baz=49 | 48.67 333 | P | P | 06 35 22.6 | +1.3 |
| HWUT | Hardware Ranch<br>40nm,2.5s | 48.75 321 | *e*P | P | 06 35 22.6 | +0.3 |
| HWUT | | | *e*PP | PP | 06 37 16.7 | -0.3 |
| DUG | Dugway<br>baz=49 | 48.77 319 | P | P | 06 35 23.1 | +0.7 |
| LAO | LASA Array<br>baz=49 | 48.97 330 | P | P | 06 35 23.9 | +0.2 |
| DGMT | Dagmar<br>baz=49 | 49.28 333 | P | P | 06 35 27.0 | +1.1 |
| DGMT | Dagmar<br>17nm,0.6s | 49.28 333 | *e*P | P | 06 35 27.1 | +1.1 |
| BGU | Big Grassy Mou<br>4.9nm,0.6s | 49.30 320 | *e*P | P | 06 35 26.9 | +0.5 |
| REDW | Red Top Meadow<br>11nm,1.4s | 49.34 324 | *e*P | P | 06 35 27.4 | +0.7 |
| REDW | | | *e*pP | pP | 06 36 00.3 | -3.8 |
| SNOW | Snow King Moun<br>91nm,3.0s | 49.34 324 | *e*P | P | 06 35 27.7 | +0.8 |
| LOHW | Long Hollow<br>2.6nm,0.6s | 49.35 324 | *e*P | P | 06 35 27.8 | +0.9 |
| TPAW | Teton Pass<br>2.8nm,0.6s | 49.48 324 | *e*P | P | 06 35 28.5 | +0.7 |
| TPAW | | | *e*pP | pP | 06 36 00.4 | -4.8 |
| MOOW | Moose Ponds<br>2.2nm,0.9s | 49.51 324 | *e*P | P | 06 35 28.4 | +0.4 |
| MOOW | | | *e*pP | pP | 06 36 02.6 | -2.8 |
| IMW | Indian Meadow<br>5.8nm,1.3s | 49.71 324 | *e*P | P | 06 35 30.2 | +0.5 |
| IMW | | | *e*pP | pP | 06 36 02.8 | -4.2 |
| EDW2 | Edwards Air Fo<br>baz=50 | 49.95 311 | P | P | 06 35 31.5 | +0.2 |
| LRMC | Laurel Mountai<br>baz=50 | 49.96 311 | P | P | 06 35 31.9 | +0.4 |
| BOZ | Bozeman (W) | 51.16 326 | *e*P | P | 06 35 40.8 | +0.5 |
| BOZ | | | *e*pP | pP | 06 36 11.6 | -6.3 |
| BOZ | | | *e*PP | PP | 06 37 40.1 | +1.4 |
| MCMT | McKenzie Canyo | 51.37 324 | *e*P | P | 06 35 43.2 | +1.2 |
| HLID | Hailey<br>baz=52 | 51.59 322 | P | P | 06 35 44.8 | +1.2 |
| HLID | Hailey<br>46nm,3.0s | 51.59 322 | *e*P | P | 06 35 44.8 | +1.2 |
| SMMC | Simmler<br>baz=52 | 51.64 310 | P | P | 06 35 44.3 | +0.4 |
| EGMT | Eagleton<br>baz=52 | 51.65 329 | P | P | 06 35 44.6 | +0.8 |
| NVAR | Mina Array Bea<br>1.2nm,0.6s,baz=99,slow=5.7,SNR=1.8 | 51.65 315 | P | P | 06 35 44.9 | +0.8 |
| NVAR | | | PcP | PcP | 06 36 56.7 | +1.2 |
| MFID | 0.3nm,0.5s,baz=131,slow=4.3,SNR=2.3<br>Camas Ranch<br>3.3nm,0.6s | 52.38 321 | *e*P | P | 06 35 49.6 | +0.3 |
| MFID | | | *e*pP | pP | 06 36 24.4 | -2.7 |
| MSO | Missoula<br>baz=53 | 53.15 326 | P | P | 06 35 55.8 | +0.9 |
| F10A | Beach Ranch, E<br>63nm,2.6s | 54.57 323 | *e*P | P | 06 36 05.3 | 0.0 |
| I07A | Izee<br>43nm,2.4s | 55.02 320 | *e*P | P | 06 36 09.3 | +0.8 |
| G08A | Pilot Rock<br>3.7nm,0.6s | 55.27 322 | *e*P | P | 06 36 10.9 | +0.6 |
| HOPS | Hopland<br>156nm,2.0s | 55.29 313 | *e*P | P | 06 36 14.1 | +3.7 |
| M04C | Macdoel<br>baz=56 | 55.53 317 | P | P | 06 36 12.8 | +0.6 |
| NEW | Newport<br>baz=56 | 55.74 326 | P | P | 06 36 14.1 | +0.6 |
| J05D | Fort Rock, OR<br>baz=56 | 55.77 319 | P | P | 06 36 15.1 | +1.1 |
| M02C | Callahan<br>baz=56 | 56.06 316 | P | P | 06 36 15.3 | -0.6 |
| J04D | Umpqua Nationa<br>baz=56 | 56.33 318 | P | P | 06 36 18.4 | +0.4 |
| G05D | Wamic, OR<br>baz=57 | 56.71 321 | P | P | 06 36 22.2 | +1.8 |
| EDM | Edmonton<br>16nm,0.6s | 56.75 332 | *e*P | P | 06 36 20.5 | 0.0 |
| EDM | | | *e*ScS | ScS | 06 45 54.0 | +0.8 |
| I03D | Drain, OR<br>baz=57 | 57.34 318 | P | P | 06 36 25.3 | +0.5 |
| B05A | Bryant<br>baz=58 | 58.59 324 | P | P | 06 36 33.2 | -0.2 |
| YKA | Yellowknife Ar<br>3.2nm,0.6s,baz=132,slow=6.5,SNR=30 | 63.37 340 | P | P | 06 37 05.6 | +0.3 |
| DBIC | Dimbokro<br>2.6nm,0.9s,baz=240,slow=8.1,SNR=2.2 | 67.55 86 | P | P | 06 37 33.9 | +0.8 |
| TORD | Torodi Ar. Bea<br>0.1nm,0.3s,baz=282,slow=6.4,SNR=5.7 | 73.56 78 | P | P | 06 38 09.4 | -0.2 |
| ILAR | Eielson Array<br>0.4nm,0.7s,baz=108,slow=4.6,SNR=7.1 | 77.08 335 | P | P | 06 38 29.2 | +0.5 |
| MKAR | Makanchi Array<br>0.2nm,0.5s,baz=357,slow=4.2,SNR=2.8 | 122.30 20 | PKP | PKPdf | 06 45 30.1 | +0.5 |
| WMQ | Urumqi | 126.68 17 | *e*PKP | PKPdf | 06 45 38.0 | -0.1 |
| HHC | Hu-ho-hao-te | 132.43 355 | *e*PKP | PKPdf | 06 45 49.1 | -0.1 |
| BJI | Beijing | 132.67 350 | PKP | PKPdf | 06 45 43.5 | -6.0 |
| BJI | | | PP | PP | 06 48 13.3 | -0.9 |
| LZH | Lanzhou<br>130nm,19.0s | 137.26 4 | *e*PKP<br>LN | PKPdf | 06 45 58.3 | -0.1 |
| LZH | | | LE | | | |
| LZH | 130nm,19.9s | | LZ | | | |
| | 160nm,20.1s | | | | | |
| NJ2 | Nanjing | 139.79 344 | *e*PKP | PKPdf | 06 46 05.1 | +2.2 |
| KMI | Kunming | 148.02 7 | PKPbc | PKPdf | 06 46 17.5 | -0.2 |
| ASAR | Alice Springs<br>1.5nm,0.5s,baz=116,slow=3.6,SNR=34 | 149.23 234 | PKPbc | PKPbc | 06 46 23.9 | -0.1 |
| WRA | Warramunga Arr<br>1.5nm,0.4s,baz=108,slow=2.6,SNR=36 | 150.48 241 | PKPbc | PKPbc | 06 46 26.8 | -0.2 |

**WEL 14 06:44:01.6±0.3, 37.28S×176.48E, h203km±3km, ML3.5/9, 1C, Error ellipse: s-maj=4.1km s-min=3.9km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| URZ | Urewera | 1.10 | 153 | ⇑PN | Pn | | 06 44 32.5 | +0.3 |
| URZ | | | | SN | S | | 06 44 56.4 | +0.4 |
| HAZ | Te Kaha | 1.14 | 115 | PN | Pn | | 06 44 32.5 | 0.0 |
| HAZ | | | | SN | S | | 06 44 55.9 | -0.5 |
| MWZ | Matawai | 1.34 | 142 | PN | Pn | | 06 44 34.2 | 0.0 |
| MWZ | | | | SN | S | | 06 44 59.2 | -0.1 |
| WMGZ | Waiomatatini S | 1.63 | 110 | PN | Pn | | 06 44 36.8 | +0.1 |
| WMGZ | | | | SN | S | | 06 45 03.8 | +0.2 |
| RIGZ | Rimuhau | 1.75 | 145 | PN | Pn | | 06 44 38.0 | +0.2 |
| BKZ | Black Stump Fm | 1.88 | 180 | PN | Pn | | 06 44 38.9 | -0.3 |
| KNZ | Kokohu | 1.97 | 152 | PN | Pn | | 06 44 39.4 | -0.6 |
| WNVZ | Wahianoa | 2.16 | 198 | PN | Pn | | 06 44 42.3 | +0.1 |
| BHHZ | Black Hill Sta | 2.23 | 188 | PN | Pn | | 06 44 42.3 | -0.5 |
| KRHZ | Kereru | 2.36 | 182 | PN | Pn | | 06 44 43.3 | -0.8 |
| KAHZ | Kahuranaki | 2.53 | 173 | PN | Pn | | 06 44 45.1 | -0.9 |
| PNHZ | Pukenui | 2.64 | 185 | PN | Pn | | 06 44 45.9 | -1.3 |
| MRZ | Mangatainoka R | 3.45 | 191 | PN | Pn | | 06 44 54.0 | -2.7 |
| OGWZ | Otaki Gorge | 3.67 | 196 | PN | Pn | | 06 44 56.9 | -2.5 |
| HOWZ | Holdsworth Sta | 3.69 | 191 | PN | Pn | | 06 44 56.7 | -2.9 |
| KIW | Kapiti Island | 3.78 | 198 | PN | Pn | | 06 44 57.8 | -2.9 |
| MTW | Mount Morrison | 3.94 | 191 | PN | Pn | | 06 44 59.3 | -3.5 |
| CAW | Cannon Point | 3.97 | 196 | PN | Pn | | 06 44 59.9 | -3.2 |
| TCW | Tory Channel | 4.28 | 203 | PN | Pn | | 06 45 03.8 | -3.0 |
| TUWZ | Tuamarina | 4.58 | 205 | PN | Pn | | 06 45 07.1 | -3.6 |
| NNZ | Nelson | 4.61 | 211 | PN | Pn | | 06 45 07.6 | -3.4 |
| THZ | Tophouse | 5.26 | 211 | PN | Pn | | 06 45 16.5 | -2.9 |
| KHZ | Kahutara | 5.60 | 203 | PN | Pn | | 06 45 19.9 | -3.8 |

**IDC 14 06:49:55.4±11.0, 12.40S×166.97E, h258km±124km, mb3.4/3, mb1 3.5/4, mb1mx3.1/29, mbtmp3.9/4, Error ellipse: s-maj=121.6km s-min=35.0km az=154.0, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| DZM | Mont Dzumac<br>0.3nm,0.3s,baz=180,slow=19,SNR=4.1 | 9.63 | 183 | P | Pn | | 06 52 09.6 | +0.1 |
| ASAR | Alice Springs<br>0.3nm,0.4s,baz=72,slow=9.1,SNR=5.4 | 33.30 | 246 | P | P | | 06 56 08.9 | -0.4 |
| ILAR | Eielson Array<br>0.7nm,0.6s,baz=240,slow=5.7,SNR=17 | 84.41 | 18 | P | P | | 07 01 58.2 | -0.3 |
| MKAR | Makanchi Array<br>0.6nm,0.6s,baz=87,slow=6.1,SNR=5.3 | 95.32 | 317 | P | P | | 07 02 50.9 | +0.6 |

| | | | | | | |
|---|---|---|---|---|---|---|
| ARCES | ARCESS Array B<br>3.8nm,1.0s,baz=82,slow=1.8,SNR=5.4 | 117.93 346 | PKP | PKPdf | 07 08 10.5 | -0.2 |

*ATH* ***14*** *06:51:36.5, 41.67N×20.17E, h13km±1km, MD3.3/13*
*CSEM* ***14*** *06:51:37.9±0.1, 41.64N×20.26E, h2km, ML2.6, Error ellipse: s-maj=4.1km s-min=2.1km az=53.0*
*BEO* ***14*** *06:51:38.0±0.3, 41.62N×20.30E, h0km, ML2.6/8*
*PDG* ***14*** *06:51:38.4±0.3, 41.60N×20.16E, h12km, ML2.9/11, Error ellipse: s-maj=0.3km s-min=0.6km az=0.0*
*SKO* ***14*** *06:51:38.6, 41.57N×20.16E, h17km*
*THE* ***14*** *06:51:39.0, 41.62N×20.24E, h12km±6km, ML2.3/4, Error ellipse: s-maj=6.4km s-min=1.5km az=344.0*

**ISC 14 06:51:38.0±1.1, 41.62N±0.02×20.23E±0.02, h3km±9km, n96, σ0.981/172, 13C-8D, Albania**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| TIR | Tirane | 0.38 | 225 | *e*Pg | Pg | | 06 51 44.7 | -0.6 |
| TIR | | | | *i* Sg | Sg | | 06 51 50.9 | +0.6 |
| OHR | Ohrid | 0.67 | 139 | *i* Pg | Pg | | 06 51 50.8 | 0.0 |
| OHR | | | | *i* Sg | Sb | | 06 52 01.8 | -0.1 |
| OHR | Ohrid | 0.67 | 139 | *i* Pg | Pg | | 06 51 50.7 | 0.0 |
| OHR | | | | *i* Sg | Sb | | 06 52 01.8 | -0.1 |
| ULC | Ulcinj | 0.81 | 295 | ⇑*i* Pg | Pg | | 06 51 52.8 | -0.7 |
| ULC | | | | *e*Sg | Sg | | 06 52 05.0 | +1.0 |
| ULC | Ulcinj | 0.81 | 295 | ⇑*i* Pg | Pg | | 06 51 52.8 | -0.7 |
| ULC | | | | *e*Sg | Sg | | 06 52 05.0 | +1.0 |
| DRME | Dracevica, Mon | 0.96 | 306 | ⇑*i* Pg | Pg | | 06 51 55.5 | -0.9 |
| DRME | | | | *e*Sg | Sb | | 06 52 10.9 | +0.5 |
| DRME | Dracevica, Mon | 0.96 | 306 | ⇑*i* Pg | Pg | | 06 51 55.5 | -0.9 |
| DRME | | | | *e*Sg | Sb | | 06 52 10.9 | +0.5 |
| PVY | Plav | 0.99 | 349 | ⇑*i* Pg | Pg | | 06 51 56.9 | -0.2 |
| PVY | | | | *e*Sg | Sn | | 06 52 12.9 | -0.7 |
| PVY | Plav | 0.99 | 349 | ⇑*i* Pg | Pg | | 06 51 56.9 | -0.2 |
| PVY | | | | *e*Sg | Sn | | 06 52 12.9 | -0.7 |
| PDG | Podgorica | 1.09 | 319 | ⇓*i* Pg | Pg | | 06 51 58.2 | -0.6 |
| PDG | | | | *i* Sg | Sb | | 06 52 13.3 | -0.1 |
| PDG | Podgorica | 1.09 | 319 | P | Pg | | 06 51 58.0 | -0.8 |
| PDG | | | | S | Sn | | 06 52 15.5 | -0.1 |
| PDG | Podgorica | 1.09 | 319 | ⇓*i* Pg | Pg | | 06 51 58.2 | -0.6 |
| PDG | | | | *i* Sg | Sb | | 06 52 13.8 | -0.1 |
| PDG | | | | S | Sn | | 06 52 15.5 | -0.1 |
| TTG | Podgorica | 1.09 | 319 | ⇑*i* Pg | Pg | | 06 51 58.0 | -0.8 |
| TTG | | | | *e*Sg | Sn | | 06 52 15.2 | -0.4 |
| BUM | Brajici-Budva | 1.20 | 305 | ⇑*i* Pg | Pb | | 06 52 00.0 | -1.5 |
| BUM | | | | *e*Sg | Sn | | 06 52 18.7 | +0.1 |
| BUM | Brajici-Budva | 1.20 | 305 | ⇑*i* Pg | Pb | | 06 52 00.0 | -1.5 |
| BUM | | | | *e*Sg | Sn | | 06 52 18.7 | +0.1 |
| FNA | Florina | 1.20 | 133 | *e*PB | Pb | | 06 52 00.8 | -0.6 |
| FNA | | | | *e*SB | Sn | | 06 52 17.8 | -0.8 |
| FNA | Florina | 1.20 | 133 | P | Pb | | 06 52 00.8 | -0.6 |
| FNA | | | | S | Sg | | 06 52 16.4 | -0.3 |
| FNA | Florina | 1.20 | 133 | P | Pb | | 06 52 00.8 | -0.6 |
| FNA | | | | S | Sg | | 06 52 16.4 | -0.3 |
| FNA | | | | *e*Sb | Sg | | 06 52 17.8 | -0.8 |
| BEY | Berane | 1.28 | 349 | ⇓*i* Pg | Pn | | 06 52 02.1 | -0.7 |
| BEY | | | | *e*Sg | Sn | | 06 52 22.2 | +1.8 |
| IVA | Berane | 1.28 | 349 | ⇓*i* Pg | Pn | | 06 52 02.1 | -0.7 |
| IVA | | | | *e*Sg | Sn | | 06 52 22.2 | +1.8 |
| NEST | Nestorio | 1.35 | 152 | *e*PB | Pn | | 06 52 03.6 | -0.3 |
| NEST | | | | *e*SB | Sg | | 06 52 22.4 | +0.9 |
| NEST | Nestorio | 1.35 | 152 | P | Pn | | 06 52 03.5 | -0.3 |
| NEST | | | | S | Sg | | 06 52 23.0 | +1.5 |
| NEST | Nestorio | 1.35 | 152 | *e*Pb | Pn | | 06 52 03.6 | -0.3 |
| NEST | | | | *e*Sb | Sg | | 06 52 22.4 | +0.9 |
| NEST | | | | S | Sg | | 06 52 23.0 | +1.5 |
| NKME | Niksic | 1.49 | 321 | ⇓*i* Pg | Pn | | 06 52 05.2 | -0.4 |
| NKME | | | | *e*Sg | Sg | | 06 52 27.5 | +1.7 |
| NKME | Niksic | 1.49 | 321 | ⇓*i* Pg | Pn | | 06 52 05.2 | -0.4 |
| NKME | | | | *e*Sg | Sg | | 06 52 27.5 | +1.7 |
| NKY | Niksic | 1.50 | 323 | ⇑*i* Pg | Pn | | 06 52 06.1 | +0.2 |
| NKY | | | | *e*Sg | Sg | | 06 52 27.9 | +1.6 |
| NKY | Niksic | 1.50 | 323 | ⇑*i* Pg | Pn | | 06 52 06.1 | +0.2 |
| NKY | | | | *e*Sg | Sg | | 06 52 27.9 | +1.6 |
| HCY | Herceg Novi | 1.53 | 303 | ⇑*i* Pg | Pn | | 06 52 05.7 | -0.5 |
| HCY | | | | *e*Sg | Sg | | 06 52 27.9 | +0.7 |
| HCY | Herceg Novi | 1.53 | 303 | ⇑*i* Pg | Pn | | 06 52 05.7 | -0.5 |
| HCY | | | | *e*Sg | Sg | | 06 52 27.9 | +0.7 |
| SJES | Sjenica | 1.65 | 354 | *e*Pg | Pb | | 06 52 08.6 | -0.5 |
| SJES | | | | *e*Sg | Sb | | 06 52 30.2 | -0.2 |
| SJES | Sjenica | 1.65 | 354 | *e*Pg | Pb | | 06 52 08.6 | -0.5 |
| SJES | | | | *e*Sg | Sb | | 06 52 30.2 | -0.2 |
| BARS | Barje | 1.68 | 44 | *e*Pg | Pn | | 06 52 08.3 | 0.0 |
| BARS | | | | *e*Sg | Sn | | 06 52 28.9 | -1.4 |
| BARS | Barje | 1.68 | 44 | *e*Pg | Pn | | 06 52 08.3 | 0.0 |
| BARS | | | | *e*Sg | Sn | | 06 52 28.9 | -1.4 |
| SELS | Selova | 1.73 | 22 | *e*Pg | Pn | | 06 52 08.5 | -0.5 |
| KZN | Kozani | 1.76 | 138 | *e*PN | Pb | | 06 52 10.2 | -0.7 |
| KZN | | | | *e*SN | Sg | | 06 52 34.2 | +0.3 |
| KZN | Kozani | 1.76 | 138 | P | Pb | | 06 52 11.0 | +0.1 |
| KZN | | | | S | Sb | | 06 52 33.6 | +0.3 |
| KZN | Kozani | 1.76 | 138 | *e*Pg | Pb | | 06 52 10.2 | -0.7 |
| KZN | Kozani | 1.76 | 138 | P | Pb | | 06 52 11.0 | +0.1 |
| KZN | | | | S | Sb | | 06 52 33.6 | +0.3 |
| KZN | | | | *e*Sn | Sg | | 06 52 34.7 | +0.3 |
| GRG | Griva | 1.77 | 111 | *e*PN | Pn | | 06 52 09.4 | -0.1 |
| GRG | | | | *e*SN | Sb | | 06 52 33.8 | +0.2 |
| GRG | Griva | 1.77 | 111 | P | Pn | | 06 52 09.2 | -0.3 |
| GRG | | | | S | Sn | | 06 52 31.6 | -0.9 |
| GRG | Griva | 1.77 | 111 | P | Pn | | 06 52 09.2 | -0.3 |
| GRG | | | | S | Sn | | 06 52 31.6 | -0.9 |
| GRG | | | | *e*Sn | Sb | | 06 52 33.8 | +0.2 |
| VAY | Valandovo | 1.79 | 99 | *e*Pn | Pn | | 06 52 08.5 | -1.2 |
| VAY | | | | *e*Sn | Sb | | 06 52 33.5 | -0.7 |
| VAY | Valandovo | 1.79 | 99 | *e*Pg | Pn | | 06 52 10.3 | +0.6 |
| VAY | | | | *e*Sg | Sn | | 06 52 32.5 | -0.4 |
| VAY | Valandovo | 1.79 | 99 | *e*Pn | Pn | | 06 52 08.5 | -1.2 |
| VAY | Valandovo | 1.79 | 99 | *e*Pg | Pn | | 06 52 10.3 | +0.6 |
| VAY | | | | *e*Sg | Sn | | 06 52 32.5 | -0.4 |
| VAY | | | | *e*Sn | Sb | | 06 52 33.4 | -0.7 |
| BRY | Bratogost | 1.79 | 316 | *e*Pn | Pn | | 06 52 10.1 | +0.2 |
| BRY | | | | *e*Sn | Sb | | 06 52 34.5 | +0.1 |
| BRY | Bratogost | 1.79 | 316 | *e*Pn | Pn | | 06 52 10.1 | +0.2 |
| BRY | | | | *e*Sn | Sb | | 06 52 34.5 | +0.1 |
| PLE | Pljevlja | 1.82 | 340 | ⇓*i* Pn | Pn | | 06 52 10.7 | +0.4 |
| PLE | | | | *e*Sn | Sb | | 06 52 35.8 | +0.6 |
| PLE | Pljevlja | 1.82 | 340 | ⇓*i* Pn | Pn | | 06 52 10.7 | +0.4 |
| PLE | | | | *e*Sn | Sb | | 06 52 35.8 | +0.6 |
| UPM | Unac-Piva | 1.86 | 329 | *e*Pn | Pn | | 06 52 11.5 | +0.6 |
| UPM | | | | *e*Sn | Sb | | 06 52 36.3 | -0.2 |
| UPM | Unac-Piva | 1.86 | 329 | *e*Pn | Pn | | 06 52 11.5 | +0.6 |
| UPM | | | | *e*Sn | Sb | | 06 52 36.3 | -0.2 |
| KEK | Kerkira | 1.93 | 190 | *e*PN | Pn | | 06 52 11.0 | -0.6 |
| KEK | | | | *e*SN | Sb | | 06 52 37.8 | -0.5 |
| KEK | Kerkira | 1.93 | 190 | P | Pn | | 06 52 11.1 | -0.6 |
| KEK | | | | S | Sn | | 06 52 35.6 | -0.8 |
| KEK | Kerkira | 1.93 | 190 | P | Pn | | 06 52 11.1 | -0.6 |
| KEK | | | | S | Sn | | 06 52 35.6 | -0.8 |
| KEK | | | | *e*Sn | Sb | | 06 52 37.8 | -0.5 |
| IVAS | Ivanjica | 1.96 | 358 | *e*Pn | Pb | | 06 52 13.3 | -1.0 |
| IVAS | Ivanjica | 1.96 | 358 | *e*PN | Pb | | 06 52 13.3 | -1.0 |
| SGD | Sagiada | 2.00 | 180 | *e*PN | Pn | | 06 52 12.6 | -0.1 |
| SGD | | | | *e*SN | Sb | | 06 52 39.3 | -1.1 |
| SGD | Sagiada | 2.00 | 180 | P | Pn | | 06 52 12.0 | -0.7 |
| SGD | | | | S | Sn | | 06 52 38.1 | -0.1 |
| SGD | Sagiada | 2.00 | 180 | P | Pn | | 06 52 12.0 | -0.7 |
| SGD | Sagiada | 2.00 | 180 | *e*Pn | Pn | | 06 52 12.6 | -0.1 |
| SGD | | | | S | Sn | | 06 52 38.1 | -0.1 |
| SGD | | | | *e*Sn | Sb | | 06 52 39.3 | -1.1 |
| JAN | Janina | 2.02 | 166 | *e*PN | Pn | | 06 52 13.2 | +0.3 |
| JAN | | | | *e*SN | Sb | | 06 52 40.0 | -0.8 |
| JAN | Janina | 2.02 | 166 | *e*Pn | Pn | | 06 52 13.2 | +0.3 |
| JAN | | | | *e*Sn | Sb | | 06 52 40.0 | -0.8 |
| IGT | Igoumenitsa | 2.09 | 178 | *e*PN | Pn | | 06 52 13.7 | -0.1 |
| IGT | | | | *e*SN | Sn | | 06 52 41.0 | +0.7 |
| IGT | Igoumenitsa | 2.09 | 178 | *e*Pn | Pn | | 06 52 13.7 | -0.1 |
| IGT | | | | *e*Sn | Sn | | 06 52 41.0 | +0.7 |
| STON | Ston | 2.25 | 305 | *e*Pn | Pn | | 06 52 17.6 | +1.5 |
| STON | Ston | 2.25 | 305 | *e*Pn | Pn | | 06 52 17.6 | +1.5 |
| LIT | Litokhoron | 2.29 | 131 | *e*PN | Pn | | 06 52 17.2 | +0.5 |
| LIT | Litokhoron | 2.29 | 131 | *e*Pn |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HORT | Hortiatis | 2.40 | 114 | *e*Pb | Pn | 06 52 18.0 | -0.2 |
| ZAPS | Zavoj | 2.43 | 46 | *e*Pn | Pn | 06 52 19.1 | +0.5 |
| ZAPS | Zavoj | 2.43 | 46 | *e*Pn | Pn | 06 52 19.1 | +0.5 |
| THL | Klokotos Trika | 2.46 | 146 | *e*PN | Pn | 06 52 20.1 | +1.1 |
| THL | | | | *e*SN | Sn | 06 52 50.8 | +1.3 |
| THL | Klokotos Trika | 2.46 | 146 | *e*Pn | Pn | 06 52 20.1 | +1.1 |
| THL | | | | *e*Sn | Sn | 06 52 50.8 | +1.3 |
| DIVS | Divibare | 2.48 | 356 | *e*Sn | Sn | 06 52 49.6 | -0.6 |
| DIVS | Divibare | 2.48 | 356 | *e*Sn | Sn | 06 52 49.6 | -0.6 |
| TRUS | Trudelj | 2.61 | 3 | *e*Pn | Pn | 06 52 21.8 | +0.8 |
| TRUS | Trudelj | 2.61 | 3 | *e*Pn | Pn | 06 52 21.8 | +0.8 |
| PLG | Polygyros | 2.74 | 116 | *e*PN | Pn | 06 52 23.2 | +0.4 |
| PLG | | | | *e*SN | Sn | 06 52 56.4 | 0.0 |
| PLG | Polygyros | 2.74 | 116 | *e*Pn | Pn | 06 52 23.2 | +0.4 |
| PLG | | | | *e*Sn | Sn | 06 52 56.4 | 0.0 |
| NVR | Nevrokopi | 2.75 | 94 | *e*PN | Pn | 06 52 23.1 | +0.2 |
| NVR | Nevrokopi | 2.75 | 94 | *e*Pn | Pn | 06 52 23.1 | +0.2 |
| EVR | Evrytania | 2.96 | 155 | *e*PB | Pn | 06 52 27.1 | +1.2 |
| EVR | Evrytania | 2.96 | 155 | *e*Pb | Pn | 06 52 27.1 | +1.2 |
| MAKR | Makrakomi, Fth | 2.98 | 150 | *e*PB | Pn | 06 52 27.5 | +1.3 |
| MAKR | | | | *e*SN | Sn | 06 53 04.2 | +1.7 |
| MAKR | Makrakomi, Fth | 2.98 | 150 | *e*Pb | Pn | 06 52 27.5 | +1.3 |
| MAKR | | | | *e*Sn | Sn | 06 53 04.2 | +1.7 |
| KUBS | Kucevo | 2.99 | 20 | *e*Pn | Pn | 06 52 26.6 | +0.4 |
| KUBS | Kucevo | 2.99 | 20 | *e*Pn | Pn | 06 52 26.6 | +0.4 |
| AGG | Agios Georgios | 3.05 | 147 | *e*PB | Pn | 06 52 28.5 | +1.4 |
| AGG | | | | *e*SN | Sn | 06 53 06.0 | +1.8 |
| AGG | Agios Georgios | 3.05 | 147 | *e*Pb | Pn | 06 52 28.5 | +1.4 |
| AGG | | | | *e*Sn | Sn | 06 53 06.0 | +1.8 |
| PAIG | Paliouri | 3.12 | 122 | *e*PB | Pn | 06 52 29.3 | +1.3 |
| PAIG | Paliouri | 3.12 | 122 | *e*Pn | Pn | 06 52 29.3 | +1.3 |

*IDC* ***14*** *07:09:14.0±1.4, 17°.83S×178°.75W, h525km±17km, mb3.6/12, mb1 3.7/14, mb1mx3.5/35, mbtmp4.5/14, Error ellipse: s-maj=23.0km s-min=11.6km az=145.0*
*ISCJB* ***14*** *07:09:15.1±0.6, 17°.9S±0°.1×178°.40W±0°.10, h579km, mb4.1/11, Error ellipse: s-maj=17.9km s-min=8.5km az=147.1*
*AUST* ***14*** *07:09:17.8, 17°.55S×178°.50W, h600km*
**ISC 14 07:09:16.1±0.8,17°.9S±0°.1×178°.3W±0°.1,h579km,n30, σ1°54/26,mb4.1/11,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **7.42** | **59** | P | **P** | **07 11 08.0** | **-1.4** |
| | 5.9nm,0.3s,baz=184,slow=8.7,SNR=10 | | | | | | |
| AFI | | | | S | **S** | **07 12 39.4** | **-2.6** |
| | 3.5nm,0.3s,baz=88,slow=17,SNR=3.7 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.92** | **251** | P | P | 07 12 20.1 | -4.2 |
| | 0.6nm,0.3s,baz=358,slow=8.9,SNR=7.7 | | | | | | |
| **URZ** | **Urewera** | **20.69** | **190** | P | **P** | **07 13 17.4** | **+0.6** |
| | 5.0nm,0.5s,baz=1.0,slow=6.3,SNR=6.5 | | | | | | |
| **ARMA** | **Armidale** | **30.03** | **240** | P | **P** | **07 14 39.9** | **+0.6** |
| | baz=30,SNR=6.1 | | | | | | |
| **CNB** | **Canberra Magne** | **33.52** | **232** | P | **P** | **07 15 09.8** | **+1.0** |
| | baz=34,SNR=5.1 | | | | | | |
| **CTA** | **Charters Tower** | **33.54** | **260** | P | **P** | **07 15 07.8** | **-1.4** |
| | 3.8nm,0.6s,baz=82,slow=12,SNR=3.8 | | | | | | |
| **COEN** | **Coen** | **37.20** | **270** | P | **P** | **07 15 38.7** | **-0.8** |
| | baz=37,SNR=5.9 | | | | | | |
| **TOO** | **Toolangi** | **37.26** | **231** | P | **P** | **07 15 40.6** | **+0.9** |
| | baz=37,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.73** | **259** | P | **P** | **07 16 36.8** | **-2.2** |
| | 2.2nm,0.5s,baz=94,slow=7.3,SNR=22 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 18 10.2** | **+1.5** |
| | 0.8nm,0.7s,baz=96,slow=3.5,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **44.89** | **254** | P | **P** | **07 16 39.6** | **-0.7** |
| | 19nm,0.6s,baz=88,slow=8.1,SNR=267 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 18 11.0** | **+1.7** |
| | 0.9nm,0.5s,baz=102,slow=4.1,SNR=4.5 | | | | | | |
| ASAR | | | | S | **S** | **07 22 33.5** | **-3.3** |
| | 1.4nm,0.9s,baz=90,slow=17,SNR=8.6 | | | | | | |
| **KDU** | **Kakadu** | **47.65** | **269** | P | **P** | **07 17 00.5** | **-0.7** |
| | baz=48,SNR=4.2 | | | | | | |
| **GUMO** | **Guam** | **47.94** | **308** | P | **P** | **07 17 02.9** | **-0.4** |
| | 65nm,0.8s,baz=99,slow=22,SNR=3.7 | | | | | | |
| **MTN** | **Manton Dam** | **48.90** | **268** | P | P | 07 17 02.8 | -7.6 |
| | baz=49,SNR=3.9 | | | | | | |
| **WRKA** | **Warakurna** | **49.94** | **252** | P | **P** | **07 17 17.7** | **-0.3** |
| | baz=50,SNR=29 | | | | | | |
| **KNRA** | **Kununurra** | **50.59** | **264** | P | **P** | **07 17 21.8** | **-0.9** |
| | baz=50,SNR=4.4 | | | | | | |
| **PALU** | **Palau** | **52.93** | **294** | P | **P** | **07 17 40.0** | **+0.4** |
| | baz=53,SNR=3.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **53.13** | **261** | P | **P** | **07 17 40.9** | **0.0** |
| | baz=53,SNR=3.8 | | | | | | |
| **LUWI** | **Luwuk** | **60.20** | **279** | P | P | 07 18 38.2 | +8.7 |
| | baz=60,SNR=3.4 | | | | | | |
| **ASAJ** | **Asahikawa** | **71.31** | **331** | P | P | 07 19 39.5 | +1.7 |
| | 2.8nm,0.4s,baz=126,slow=19,SNR=2.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.69** | **345** | P | **P** | **07 19 52.7** | **+1.4** |
| | 2.8nm,0.7s,baz=139,slow=14,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.34** | **44** | P | P | 07 20 27.4 | +4.5 |
| | 0.5nm,0.7s,baz=233,slow=8.5,SNR=5.8 | | | | | | |
| **SEY** | **Seymchan** | **83.78** | **347** | P | **P** | **07 20 45.9** | **+1.3** |
| | 4.3nm,0.6s,baz=150,slow=4.8,SNR=6.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.90** | **58** | P | P | 07 21 00.2 | +4.3 |
| | 0.3nm,0.7s,baz=217,slow=8.2,SNR=5.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.97** | **290** | P | P | 07 21 11.9 | +1.6 |
| | 0.8nm,0.3s,baz=110,slow=2.8,SNR=5.5 | | | | | | |
| **YAK** | **Yakutsk** | **89.59** | **338** | P | **P** | **07 21 13.6** | **+1.4** |
| | 3.2nm,0.3s,baz=187,slow=8.1,SNR=1.9 | | | | | | |
| **PLCA** | **Paso Flores** | **91.28** | **134** | P | P | 07 21 26.5 | +5.8 |
| | baz=92,SNR=6.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.84** | **315** | PKP | **PKPab** | **07 27 50.6** | **+0.9** |
| | 2.5nm,0.8s,baz=105,slow=3.3,SNR=12 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.21** | **303** | PKPbc | **PKPab** | **07 27 55.1** | **-0.1** |
| | 3.1nm,0.5s,baz=82,slow=6.0,SNR=5.3 | | | | | | |
| **GERES** | **GERESS Array B** | **147.62** | **345** | PKPbc | **PKPab** | **07 27 58.4** | **-2.0** |
| | 1.4nm,0.5s,baz=29,slow=3.0,SNR=9.0 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **150.40** | **349** | PKPbc | **PKPbc** | **07 28 05.7** | **+2.7** |
| | 1.0nm,0.3s,baz=235,slow=12,SNR=5.7 | | | | | | |

**IDC 14 07:12:46.8±4.4,36°.41N×82°.08E,h0km,mb3.3/1, mb1 3.6/5,mb1mx3.3/56,mbtmp3.6/5,ML3.6/2,Error ellipse: s-maj=52.2km s-min=31.1km az=31.0,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **8.54** | **319** | Pn | Pn | 07 14 53.7 | +1.7 |
| | 0.6nm,0.3s,baz=309,slow=22,SNR=14 | | | | | | |
| AAK | | | | Lg | Lg | 07 17 20.5 | |
| | 0.4nm,0.3s,baz=342,slow=20,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.38** | **1** | Pn | Pn | 07 15 18.1 | +1.2 |
| | 0.6nm,0.3s,baz=184,slow=13,SNR=22 | | | | | | |
| MKAR | | | | Sn | Sn | 07 17 12.1 | -1.9 |
| | 0.2nm,0.3s,baz=182,slow=24,SNR=2.5 | | | | | | |
| MKAR | | | | Lg | Lg | 07 18 15.9 | |
| | 0.1nm,0.3s,baz=182,slow=27,SNR=2.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.44** | **351** | Pn | Pn | 07 16 10.9 | -1.4 |
| | baz=170,slow=12,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.65** | **5** | P | Pn | 07 16 52.4 | -1.5 |
| | baz=198,slow=14,SNR=5.2 | | | | | | |
| **SONM** | **Songino Array** | **21.26** | **50** | P | P | 07 17 35.1 | +0.4 |
| | 1.1nm,0.7s,baz=237,slow=10,SNR=4.0 | | | | | | |

*JMA* ***14*** *07:14:01.2±0.2,21°.32N×121°.14E, h54km,M3.7*
*TAP* ***14*** *07:14:03.0,21°.54N×121°.04E, h11km,ML3.7,D*
**ISC 14 07:14:02.5±2.3,21°.5N±0°.1×121°.07E±0°.05,h15km±9km, n33,σ1°20/48,1C,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TSEB** | **Hengchuen, Pin** | **0.40** | **337** | *i* P | **Pg** | **07 14 10.9** | **+0.4** |
| | baz=334 | | | | | | |
| TSEB | | | | S | **Sg** | **07 14 16.8** | **+0.7** |
| | baz=334 | | | | | | |
| **TWK1** | **Hengchun** | **0.48** | **330** | *i* P | **Pg** | **07 14 11.6** | **-0.4** |
| | baz=332 | | | | | | |
| TWK1 | | | | S | **Sg** | **07 14 18.0** | **-0.5** |
| | baz=332 | | | | | | |
| **HEN** | **Hengchun** | **0.56** | **327** | P | **Pg** | **07 14 13.5** | **-0.2** |
| | baz=329 | | | | | | |
| HEN | | | | S | **Sg** | **07 14 20.9** | **-0.3** |
| | baz=329 | | | | | | |
| **LAY** | **Lan-yu** | **0.68** | **42** | *e*P | **Pb** | **07 14 16.5** | **+0.4** |
| | baz=44 | | | | | | |
| LAY | | | | *e*S | **Sg** | **07 14 25.7** | **+0.9** |
| | baz=44 | | | | | | |
| **TAW** | **Tawu** | **0.84** | **349** | *e*P | **Pg** | **07 14 17.1** | **-1.7** |
| | baz=351 | | | | | | |
| **EAST** | **Anshuo** | **0.87** | **347** | *e*P | **Pg** | **07 14 17.7** | **-1.8** |
| | baz=348 | | | | | | |
| EAST | | | | *e*S | **Sg** | **07 14 30.8** | **-0.2** |
| | baz=348 | | | | | | |
| **SCZT** | **Fangliau** | **0.94** | **334** | *i* P | **Pb** | **07 14 19.9** | **-0.6** |
| | baz=335 | | | | | | |
| SCZT | | | | S | **Sb** | **07 14 32.3** | **-0.4** |
| | baz=335 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.04** | **321** | *e*P | **Pn** | **07 14 24.2** | **+1.6** |
| | baz=322 | | | | | | |
| **ECL** | **Taimali** | **1.07** | **354** | *e*P | **Pb** | **07 14 22.9** | **+0.2** |
| | baz=356 | | | | | | |
| **TTN** | **Taitung** | **1.22** | **4** | *e*S | **Sg** | **07 14 42.5** | **+0.5** |
| | baz=4.0 | | | | | | |
| **TWG** | **Pinlang** | **1.29** | **0** | *e*P | **Pn** | **07 14 25.1** | **-0.9** |
| | baz=1.0 | | | | | | |
| TWG | | | | *e*S | **Sb** | **07 14 42.1** | **-0.8** |
| | baz=1.0 | | | | | | |
| **TWM1** | **Shoushan** | **1.42** | **335** | *e*P | **Pg** | **07 14 30.4** | **+0.5** |
| | baz=336 | | | | | | |
| **CHKT** | **Chengkung** | **1.59** | **10** | *e*P | **Pn** | **07 14 29.9** | **-0.3** |
| | baz=11 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **07 14 46.2** | **-4.2** |
| | baz=11 | | | | | | |
| **SGST** | **Jiashian** | **1.61** | **344** | *e*P | **Pg** | **07 14 33.8** | **+0.4** |
| | baz=344 | | | | | | |
| **STYT** | **Tauyuan** | **1.65** | **350** | *e*P | **Pg** | **07 14 34.4** | **+0.1** |
| | baz=351 | | | | | | |
| STYT | | | | *e*S | **Sb** | **07 14 54.6** | **+1.2** |
| | baz=351 | | | | | | |
| **ELDTW** | **Lidau** | **1.65** | **358** | *e*P | **Pn** | **07 14 31.4** | **+0.2** |
| | baz=359 | | | | | | |
| **CHN1** | **Nanshi** | **1.72** | **343** | *e*P | **Pg** | **07 14 35.7** | **+0.1** |
| | baz=343 | | | | | | |
| **WTP** | **Ta-pu** | **1.76** | **346** | *e*P | **Pg** | **07 14 35.9** | **-0.5** |
| | baz=347 | | | | | | |
| **TWF1** | **Yuli** | **1.83** | **7** | *e*P | **Pn** | **07 14 32.1** | **-1.4** |
| | baz=7.0 | | | | | | |
| **YUS** | **Yu-Shan** | **1.95** | **357** | *e*P | **Pn** | **07 14 35.8** | **+0.1** |
| | baz=357 | | | | | | |
| **ALS** | **Alishan** | **1.99** | **353** | *e*P | **Pn** | **07 14 36.6** | **+0.7** |
| | baz=353 | | | | | | |
| **CHN5** | **Tsauling** | **2.09** | **350** | *e*P | **Pn** | **07 14 36.8** | **-0.4** |
| | baz=350 | | | | | | |
| **WDGT** | **Dungji** | **2.16** | **323** | *e*P | **Pn** | **07 14 36.4** | **-1.6** |
| | baz=323 | | | | | | |
| **WDT** | **Danda** | **2.22** | **2** | *e*P | **Pn** | **07 14 41.1** | **+2.0** |
| | baz=2.0 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **2.35** | **356** | *e*P | **Pn** | **07 14 41.5** | **+0.8** |
| | baz=356 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **07 15 09.9** | **+0.6** |
| | baz=356 | | | | | | |
| **TYC** | **Yuchr** | **2.37** | **355** | *e*P | **Pn** | **07 14 42.3** | **+1.3** |
| | baz=356 | | | | | | |
| TYC | | | | *e*S | **Sn** | **07 15 10.9** | **+1.2** |
| | baz=356 | | | | | | |
| **WHF** | **Hehuan Shan** | **2.61** | **4** | *e*P | **Pn** | **07 14 45.8** | **+1.2** |
| | baz=4.0 | | | | | | |
| **TWT** | **Tachien** | **2.71** | **2** | *e*S | **Sn** | **07 15 21.2** | **+2.8** |
| | baz=2.0 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **3.38** | **30** | *e*S | **Sn** | **07 15 35.5** | **+0.7** |
| **IRIF** | **Iriomote-Funau** | **3.72** | **41** | P | **Pn** | **07 14 59.3** | **-0.1** |
| IRIF | | | | *e*S | **Sn** | **07 15 43.0** | **0.0** |
| **JKRS** | **Kuro-shima** | **3.83** | **45** | P | **Pn** | **07 15 00.9** | **0.0** |
| JKRS | | | | *e*S | **Sn** | **07 15 47.1** | **+1.4** |
| **JIJ** | **Ishigaki jima** | **4.00** | **45** | P | **Pn** | **07 15 04.1** | **+0.8** |
| JIJ | | | | S | **Sn** | **07 15 47.9** | **-2.1** |
| **JISG** | **Ishigakijimahi** | **4.27** | **44** | P | **Pn** | **07 15 06.8** | **-0.2** |
| JISG | | | | *e*S | **Sn** | **07 15 55.9** | **-0.6** |

*IDC* ***14*** *07:17:31.4±1.4, 1°.00N×97°.22E, h0km, mb4.1/8, mb1 4.2/10,mb1mx3.9/49,mbtmp4.1/10,ML4.0/2,MS2.9/2, Ms1 3.0/2,ms1mx2.6/37,Error ellipse: s-maj=39.7km s-min=20.7km az=61.0*
*ISCJB* ***14*** *07:17:32.8±0.7, 1°.04N±0°.05×97°.05E±0°.05, h25km, mb4.1/10, Error ellipse: s-maj=8.3km s-min=6.0km az=142.5*
*DJA* ***14*** *07:17:33.9±1.0, 1°N±5°×97°7E±°, h25km±7km, M4.3/9, mb4.7/2, mB4.7/1, MLv4.1/9, Mw(mB)4.0/1*
*NEIC* ***14*** *07:17:36.4±0.6, 1°.04N×97°.26E, h35km, mb4.1/2, Error ellipse: s-maj=11.4km s-min=9.7km az=78.0*
**ISC 14 07:17:35.3±0.9,1°.09N±0°.07×97°.15E±0°.07,h25km,n32, σ1°07/29,mb4.3/10,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSI** | **Gunungsitoli** | **0.48** | **63** | P | **Pn** | **07 17 46.0** | **-0.6** |
| **GSI** | **Gunungsitoli** | **0.48** | **63** | *e*Pg | **Pn** | **07 17 45.9** | **-0.7** |
| GSI | | | | *e*Sg | **Sn** | **07 17 55.6** | **+1.4** |
| **SNSI** | **Sinabang, Aceh** | **1.55** | **328** | P | Pb | 07 18 13.0 | +10 |
| **MNSI** | **Mandailing Nat** | **2.45** | **97** | P | **Pn** | **07 18 13.9** | **+0.2** |
| MNSI | | | | S | **Sb** | **07 18 45.9** | **-2.5** |
| **PSI** | **Prapat** | **2.46** | **46** | Pn | **Pn** | **07 18 12.1** | **-1.9** |
| | 4.9nm,0.3s,baz=321,slow=10,SNR=9.6 | | | | | | |
| PSI | | | | LR | LR | 07 18 51.8 | |
| | comp=Z,194nm,18.5s,baz=186,slow=34 | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **2.50** | **14** | P | **Pn** | **07 18 14.6** | **+0.2** |
| **TSI** | **Tuntungan** | **2.78** | **31** | P | Sn | 07 18 45.0 | -6.1 |
| **MLSI** | **Meulaboh, Aceh** | **3.25** | **347** | P | **Pn** | **07 18 24.2** | **-0.5** |
| MLSI | | | | S | **Sn** | **07 19 02.0** | **-0.5** |
| **PPI** | **Padang Panjang** | **3.59** | **115** | P | **Pn** | **07 18 29.6** | **+0.2** |
| **SDSI** | **Sungai Dareh** | **4.73** | **115** | P | **Pn** | **07 18 45.2** | **+0.2** |
| **IPM** | **Ipoh** | **5.13** | **49** | *e*Pn | **Pn** | **07 18 51.7** | **+1.0** |
| | 34nm,0.6s | | | | | | |
| IPM | | | | *e*Sn | **Sn** | **07 19 51.8** | **+2.6** |
| **KULM** | **Kulim** | **5.44** | **40** | *e*Pn | **Pn** | **07 18 54.5** | **-0.4** |
| | 59nm,0.8s | | | | | | |
| KULM | | | | *e*Sn | **Sn** | **07 19 57.3** | **+0.5** |
| **MDSI** | **Maura Dua** | **8.94** | **128** | P | **Pn** | **07 19 41.9** | **-1.1** |
| **CMAR** | **Chiang Mai Arr** | **17.35** | **6** | P | **Pn** | **07 21 35.5** | **-0.4** |
| | 0.7nm,0.3s,baz=197,slow=12,SNR=7.9 | | | | | | |
| CMAR | | | | LR | LR | 07 28 47.9 | |
| | comp=Z,40nm,18.3s,baz=195,slow=39 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.08** | **250** | T | T | 07 50 07.4 | |
| | baz=71,slow=75,SNR=2477 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.08** | **250** | T | T | 07 50 07.6 | |
| | baz=71,slow=75,SNR=1422 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.09** | **250** | T | T | 07 50 08.6 | |
| | baz=71,slow=75,SNR=1834 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **39.16** | **158** | T | T | 08 06 19.0 | |
| | baz=333,slow=76,SNR=36 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **39.17** | **158** | T | T | 08 06 21.9 | |
| | baz=333,slow=76,SNR=38 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **39.18** | **158** | T | T | 08 06 20.7 | |
| | baz=333,slow=76,SNR=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.02** | **122** | P | **P** | **07 25 23.6** | **-1.4** |
| | 0.4nm,0.5s,baz=300,slow=9.0,SNR=6.2 | | | | | | |
| **WRAB** | **Tennant Creek** | **42.02** | **122** | *e*P | **P** | **07 25 24.0** | **-1.1** |
| | 2.5nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **43.37** | **127** | P | **P** | **07 25 35.4** | **-0.7** |
| | 1.0nm,0.8s,baz=302,slow=7.4,SNR=6.4 | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.94** | **34** | P | **P** | **07 25 56.1** | **-0.1** |
| **KSRS** | **Korea Array** | **45.97** | **34** | P | **P** | **07 25 56.1** | **-0.4** |
| | 3.1nm,0.9s,baz=220,slow=9.9,SNR=8.4 | | | | | | |
| **SONM** | **Songino Array** | **47.25** | **8** | P | **P** | **07 26 06.7** | **+0.2** |
| | 2.2nm,0.5s,baz=191,slow=11,SNR=10 | | | | | | |
| SONM | | | | PcP | **PcP** | **07 27 38.4** | **+0.9** |
| | 0.7nm,0.7s,baz=204,slow=3.2,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.34** | **346** | P | **P** | **07 26 08.2** | **+1.1** |
| | 2.5nm,0.7s,baz=162,slow=8.6,SNR=11 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.89** | **31** | P | **P** | **07 26 49.8** | **+0.6** |
| | 3.3nm,0.8s,baz=221,slow=6.1,SNR=6.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.66** | **351** | P | **P** | **07 26 55.4** | **+0.7** |
| | 2.1nm,0.3s,baz=175,slow=7.4,SNR=8.2 | | | | | | |
| **ABKAR** | **Akbulak array** | **57.59** | **332** | *e*P | **P** | **07 27 23.3** | **+0.3** |
| | 2.0nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.62** | **340** | P | **P** | **07 29 56.4** | **+0.3** |
| | 4.9nm,1.0s,baz=97,slow=7.4,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.79** | **32** | PKP | PKPbc | 07 37 07.2 | +0.5 |
| | 0.2nm,0.6s,baz=5.7,slow=0.9,SNR=3.4 | | | | | | |

**WEL 14 07:27:43.7±0.6,35°.13S×178°.44E,h218km±19km,ML3.9/8, Error ellipse: s-maj=13.7km s-min=10.0km az=0.0,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HAZ** | **Te Kaha** | **2.67** | **191** | PN | Pn | 07 28 30.8 | +0.3 |
| HAZ | | | | SN | S | 07 29 07.2 | +0.1 |
| **WMGZ** | **Waiomatatini S** | **2.68** | **180** | PN | Pn | 07 28 30.6 | 0.0 |
| WMGZ | | | | SN | S | 07 29 06.9 | -0.5 |
| **PUZ** | **Puketiti** | **2.94** | **183** | PN | Pn | 07 28 33.5 | -0.1 |
| PUZ | | | | SN | S | 07 29 11.0 | -1.6 |
| **TWGZ** | **Tauwhareparae** | **3.06** | **187** | PN | Pn | 07 28 35.8 | +0.8 |
| TWGZ | | | | SN | S | 07 29 15.7 | +0.5 |
| **MWZ** | **Matawai** | **3.28** | **193** | PN | Pn | 07 28 37.8 | +0.2 |
| MWZ | | | | SN | S | 07 29 19.8 | +0.1 |
| **URZ** | **Urewera** | **3.30** | **199** | PN | Pn | 07 28 37.9 | +0.3 |
| **CNGZ** | **Carnagh Statio** | **3.35** | **183** | *e*PN | Pn | 07 28 38.5 | +0.3 |
| **RAGZ** | **Rawiri** | **3.46** | **194** | PN | Pn | 07 28 40.1 | +0.4 |
| **RIGZ** | **Rimuhau** | **3.61** | **189** | PN | Pn | 07 28 41.0 | -0.4 |
| **MRHZ** | **Matea Rd** | **4.04** | **203** | PN | Pn | 07 28 47.0 | +0.4 |
| **BKZ** | **Black Stump Fm** | **4.32** | **201** | PN | Pn | 07 28 50.0 | -0.1 |
| **BHHZ** | **Black Hill Sta** | **4.75** | **203** | PN | Pn | 07 28 54.8 | -0.5 |
| **WNVZ** | **Wahianoa** | **4.76** | **208** | PN | Pn | 07 28 56.0 | +0.3 |
| **KRHZ** | **Kereru** | **4.80** | **200** | PN | Pn | 07 28 54.9 | -1.1 |
| **PNHZ** | **Pukenui** | **5.10** | **200** | PN | Pn | 07 28 58.1 | -1.6 |
| **BFZ** | **Birch Farm** | **5.81** | **197** | PN | Pn | 07 29 06.8 | -1.9 |
| **MRZ** | **Mangatainoka R** | **5.97** | **201** | PN | Pn | 07 29 08.5 | -2.2 |
| **HOWZ** | **Holdsworth Sta** | **6.20** | **201** | PN | Pn | 07 29 11.1 | -2.7 |
| **OGWZ** | **Otaki Gorge** | **6.24** | **204** | PN | Pn | 07 29 11.5 | -2.6 |
| **KIW** | **Kapiti Island** | **6.37** | **205** | PN | Pn | 07 29 13.6 | -2.2 |
| **MTW** | **Mount Morrison** | **6.45** | **200** | PN | Pn | 07 29 14.2 | -2.6 |
| **CAW** | **Cannon Point** | **6.53** | **203** | PN | Pn | 07 29 14.9 | -3.0 |
| **NNZ** | **Nelson** | **7.27** | **212** | PN | Pn | 07 29 25.5 | -1.9 |
| NNZ | | | | SN | S | 07 30 48.7 | -1.3 |
| **THZ** | **Tophouse** | **7.92** | **212** | PN | Pn | 07 29 34.3 | -1.5 |
| **KHZ** | **Kahutara** | **8.22** | **206** | PN | Pn | 07 29 36.8 | -2.7 |
| **MQZ** | **McQueen's Vall** | **9.66** | **206** | SN | S | 07 31 40.3 | -6.2 |

*ISCJB* ***14*** *07:29:12.5±0.7, 76°.89N±0°.06×18°.3E±0°.2, h10km, Error ellipse: s-maj=8.8km s-min=4.4km az=24.4*
*NAO* ***14*** *07:29:13.7±1.1, 76°.88N×18°.24E, h10km±10km, ML3.5*
*CSEM* ***14*** *07:29:13.1±0.1, 76°.90N×18°.36E, h8km, ML2.5, Error ellipse: s-maj=3.9km s-min=2.2km az=30.0*
*BER* ***14*** *07:29:15.9±2.8, 76°.87N×18°.12E, h15km, MD1.8, ML2.5, ML3.5(NAO)*
**ISC 14 07:29:13.3±0.9,76°.89N±0°.05×18°.39E±0°.05,h10km,n18, σ0°42/26,Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HSP** | **Hornsund** | **0.66** | **282** | Pg | **Pg** | **07 29 25.7** | **-0.3** |
| HSP | | | | Lg | Lg | 07 29 34.2 | |
| **HSP** | **Hornsund** | **0.66** | **282** | Pg | **Pg** | **07 29 25.7** | **-0.3** |
| HSP | | | | Lg | Lg | 07 29 34.2 | |
| **HSPB** | **Hornsund (broa** | **0.66** | **281** | *e*P | **Pg** | **07 29 25.8** | **-0.2** |
| HSPB | | | | *e*S | **Sg** | **07 29 34.3** | **-0.3** |
| **HSPB** | **Hornsund (broa** | **0.66** | **281** | *e*P | **Pg** | **07 29 25.8** | **-0.2** |
| | SNR=95 | | | | | | |
| HSPB | | | | *e*S | **Sg** | **07 29 34.3** | **-0.3** |
| | SNR=95 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.37** | **342** | Pn | **Pb** | **07 29 38.8** | **-0.2** |
| | baz=152,slow=18 | | | | | | |
| SPA0 | | | | Lg | Lg | 07 29 56.3 | |
| | baz=162,slow=18 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.37** | **342** | Pn | **Pb** | **07 29 38.8** | **-0.2** |
| | baz=152,slow=18 | | | | | | |
| SPA0 | | | | *e*Sg | **Sg** | **07 29 57.5** | **+0.3** |
| **SPA0** | **Spitsbergen Ar** | **1.37** | **342** | Pn | **Pb** | **07 29 38.8** | **-0.2** |
| | SNR=55 | | | | | | |
| SPA0 | | | | Lg | Lg | 07 29 56.3 | |
| | SNR=9.4 | | | | | | |
| SPA0 | | | | *e*Sg | **Sg** | **07 29 57.5** | **+0.3** |
| | SNR=91 | | | | | | |
| **HOPEN** | **Hopen** | **1.58** | **101** | Pn | **Pn** | **07 29 41.6** | **+0.4** |
| HOPEN | | | | Sn | **Sn** | **07 30 01.9** | **+0.2** |
| HOPEN | | | | Lg | Lg | 07 30 05.0 | |
| **HOPEN** | **Hopen** | **1.58** | **101** | *e*P | **Pn** | **07 29 41.7** | **+0.4** |
| HOPEN | | | | *e*S | **Sb** | **07 30 02.5** | **0.0** |
| HOPEN | | | | IAML | | 07 30 09.7 | |
| | comp=Z,57nm,0.4s | | | | | | |
| **HOPEN** | **Hopen** | **1.58** | **101** | *e*P | **Pn** | **07 29 41.7** | **+0.4** |
| | SNR=55 | | | | | | |
| HOPEN | | | | Sn | **Sn** | **07 30 01.9** | **+0.2** |
| HOPEN | | | | *e*S | **Sb** | **07 30 02.5** | **0.0** |
| | SNR=55 | | | | | | |
| HOPEN | | | | Lg | Lg | 07 30 05.0 | |
| **BJO** | **Bjornoya** | **2.41** | **175** | Lg | Lg | 07 30 31.1 | |
| **BJO** | **Bjornoya** | **2.41** | **175** | Lg | Lg | 07 30 31.1 | |
| **KBS** | **Kingsbay** | **2.46** | **330** | Pn | **Pn** | **07 29 53.3** | **0.0** |
| KBS | | | | Pg | **Pg** | **07 29 59.2** | **-1.1** |
| KBS | | | | Lg | Lg | 07 30 28.7 | |
| **KBS** | **Kingsbay** | **2.46** | **330** | *e*P | **Pn** | **07 29 53.3** | **0.0** |
| KBS | | | | *e*Sg | **Sb** | **07 30 28.9** | **+1.2** |
| KBS | | | | IAML | | 07 30 38.3 | |
| | comp=Z,80nm,0.5s | | | | | | |
| **KBS** | **Kingsbay** | **2.46** | **330** | *e*P | **Pn** | **07 29 53.3** | **0.0** |
| | SNR=55 | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.67** | **161** | Pn | **Pn** | **07 31 05.0** | **+0.2** |
| ARA0 | | | | Sn | Sn | 07 32 24.6 | -7.0 |
| | baz=2.6,slow=22 | | | | | | |
| **AR

5.5nm,0.3s,baz=54,slow=8.3,SNR=62
**KSRS Korea Array 47.91 336** P **P 07 48 49.9 +0.4**
1.8nm,0.8s,baz=159,slow=9.1,SNR=4.9
**KSAR Wonju Array Be 47.91 336** P **P 07 48 49.9 +0.3**
**PETK Petropavlovsk- 59.26 5** LR LR 08 12 53.4
comp=Z,13nm,21.1s,baz=192,slow=33
**SONM Songino Array 65.91 329** P **P 07 50 57.6 +0.6**
0.7nm,0.5s,baz=146,slow=5.1,SNR=4.5
SONM LR LR 08 19 02.5
comp=Z,19nm,20.8s,baz=96,slow=35
**VNDA Vanda 71.73 177** P **P 07 51 33.7 +1.1**
1.1nm,0.8s,baz=329,slow=6.2,SNR=5.9
**POO Poona 78.88 290** *ex* x 07 51 50.0
**MKAR Makanchi Array 79.43 320** P **P 07 52 17.8 +0.6**
0.2nm,0.5s,baz=100,slow=7.3,SNR=4.5
MKAR LR LR 08 28 39.9
comp=Z,17nm,18.7s,baz=97,slow=37
**ZALV Zalesovo Beam 80.64 327** LR LR 08 28 45.6
comp=Z,18nm,19.2s,baz=66,slow=36
**AAK Ala-Archa 83.49 314** LR LR 08 29 16.6
comp=Z,40nm,18.6s,baz=62,slow=35
**QSPA South Pole Qui 83.95 180** *eP* **P 07 52 41.7 +0.9**
1.3nm,0.6s
**ILAR Eielson Array 84.34 23** P **P 07 52 40.8 -1.7**
0.4nm,0.6s,baz=246,slow=5.0,SNR=6.8
**NVAR Mina Array Bea 95.02 52** LR LR 08 29 35.8
comp=Z,40nm,18.5s,baz=212,slow=31
**TORD Torodi Ar. Bea 147.99 285** PKPbc **PKPbc 07 59 57.1 +0.1**
2.0nm,0.5s,baz=68,slow=2.4,SNR=33
**BDFB Brasilia 152.04 141** PKPbc **PKPbc 08 00 05.4 -1.7**
2.1nm,0.5s,baz=204,slow=10.0,SNR=3.6

*ISK **14** 07:49:19.5, 38°.14N × 38°.92E, h15km, MD2.8*
*ISCJB **14** 07:49:20.7±0.7, 38°.11N±0°.03 × 39°.01E±0°.05, h7km±7km, Error ellipse: s-maj=6.8km s-min=5.4km az=23.5*
*CSEM **14** 07:49:20.6±0.2, 38°.12N × 39°.01E, h12km, MD2.8, Error ellipse: s-maj=6.1km s-min=4.5km az=118.0*
*DDA **14** 07:49:20.3, 38°.11N × 38°.99E, h3km, Md2.7*
**ISC 14 07:49:20.6±0.9, 38°.12N±0°.03 × 39°.00E±0°.03, h17**km±10km, **n12,** σ1§**41/24, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVRC** | **Sivrice-ELAZID** | **0.35** | **43** | *e*PG | **Pg** | **07 49 28.1** | **+0.1** |
| SVRC | | | | *e*SG | **Sg** | **07 49 33.3** | **+0.2** |
| **SVRC** | **Sivrice-ELAZID** | **0.35** | **43** | *e*Pg | **Pg** | **07 49 28.1** | **+0.1** |
| SVRC | | | | *e*Sg | **Sg** | **07 49 33.3** | **+0.2** |
| **ELZG** | **Elazig** | **0.38** | **358** | *i* P | **Pg** | **07 49 28.1** | **-0.4** |
| ELZG | | | | *i* S | **Sb** | **07 49 34.2** | **-0.3** |
| **ELZG** | **Elazig** | **0.38** | **358** | P | **Pg** | **07 49 28.1** | **-0.4** |
| ELZG | | | | S | **Sb** | **07 49 34.2** | **-0.3** |
| **URFA** | **Urfa** | **0.70** | **192** | *e*PG | **Pg** | **07 49 33.6** | **-0.7** |
| URFA | | | | *e*SG | **Sb** | **07 49 43.9** | **+0.3** |
| **URFA** | **Urfa** | **0.70** | **192** | *e*Pg | **Pg** | **07 49 33.6** | **-0.7** |
| URFA | | | | *e*Sg | **Sb** | **07 49 43.9** | **+0.3** |
| **ATAB** | **Bozova** | **0.86** | **221** | *i* P | **Pn** | **07 49 38.6** | **+0.7** |
| ATAB | | | | *i* S | **Sg** | **07 49 48.9** | **+0.1** |
| **ATAB** | **Bozova** | **0.86** | **221** | P | **Pn** | **07 49 38.6** | **+0.7** |
| ATAB | | | | S | **Sg** | **07 49 48.9** | **+0.1** |
| **AKCD** | **Akcadag** | **0.87** | **282** | *i* P | **Pb** | **07 49 37.1** | **-0.2** |
| AKCD | | | | *i* S | **Sg** | **07 49 45.9** | **+0.4** |
| **AKCD** | **Akcadag** | **0.87** | **282** | P | **Pb** | **07 49 37.1** | **-0.2** |
| AKCD | | | | S | **Sg** | **07 49 45.9** | **+0.4** |
| **MAZI** | **Mazidag** | **1.32** | **120** | *e*PN | **Pn** | **07 49 44.2** | **-0.1** |
| MAZI | | | | *e*SN | **Sg** | **07 50 03.7** | **+0.3** |
| **MAZI** | **Mazidag** | **1.32** | **120** | *e*Pn | **Pn** | **07 49 44.3** | **-0.1** |
| MAZI | | | | *e*Sn | **Sg** | **07 50 03.7** | **+0.3** |

**WEL 14 08:08:09.1±0.5, 34°.68S × 178°.12E, h33**km, **ML3.9**/2**, Error ellipse: s-maj=7.0km s-min=3.1km az=90.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **3.08** | **185** | PN | Pn | 08 08 55.4 | -0.1 |
| HAZ | | | | *e*SN | Sn | 08 09 29.3 | -1.9 |
| **WMGZ** | **Waiomatatini S** | **3.14** | **176** | PN | Pn | 08 08 55.5 | -0.8 |
| WMGZ | | | | SN | Sn | 08 09 30.9 | -1.8 |
| **PUZ** | **Puketiti** | **3.39** | **178** | PN | Pn | 08 08 57.7 | -2.0 |
| **URZ** | **Urewera** | **3.67** | **193** | *e*PN | Pn | 08 09 02.8 | -0.7 |
| URZ | | | | SN | Sn | 08 09 43.1 | -2.5 |

*SJA **14** 08:08:08.9±0.5, 28°.28S × 68°.62W, h2km±3km, MD3.4*
*GUC **14** 08:08:14.0±0.6, 28°.61S × 68°.31W, h100km, ML3.1*
*ISCJB **14** 08:08:16.3±0.5, 28°.44S±0°.04 × 68°.45W±0°.04, h100km, Error ellipse: s-maj=5.7km s-min=4.8km az=8.3*
**ISC 14 08:08:17.8±1.2, 28°.37S±0°.04 × 68°.51W±0°.04, h100**km, **n18,** σ1§**91/28, 4C-1D, La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPCH** | **Copiapo** | **1.92** | **301** | ⇑*i* P | **Pn** | **08 08 46.9** | **-2.4** |
| CPCH | | | | *i* S | **Sn** | **08 09 13.0** | **-0.4** |
| **VACH** | **Vallenar** | **1.99** | **264** | ⇑*i* P | **Pn** | **08 08 49.0** | **-1.3** |
| VACH | | | | *i* S | **Sn** | **08 09 15.7** | **+0.6** |
| **LCO** | **Las Campanas** | **2.03** | **251** | ⇓*i* P | **Pn** | **08 08 49.2** | **-1.8** |
| LCO | | | | *i* S | **Sn** | **08 09 16.4** | **+0.1** |
| LCO | | | | AML | AML | 08 09 24.0 | |
| | comp=N,66nm,0.9s | | | | | | |
| **CYA** | **Choya** | **2.39** | **92** | *i* P | **Pn** | **08 08 53.4** | **-2.0** |
| CYA | | | | *i* P | **Pn** | **08 08 53.5** | **-1.9** |
| **CDCH** | **Caldera** | **2.42** | **302** | *e*P | **Pn** | **08 08 56.0** | **+0.2** |
| CDCH | | | | *i* S | **Sn** | **08 09 28.3** | **+3.2** |
| **AVFE** | **Valle Fertil** | **2.46** | **158** | *i* P | **Pn** | **08 08 54.6** | **-1.8** |
| **AMOG** | **MOGNA** | **2.56** | **180** | *i* P | **Pn** | **08 08 55.6** | **-2.2** |
| **APLL** | **PUNTA DE LOS L** | **2.66** | **140** | *i* P | **Pn** | **08 08 57.3** | **-1.8** |
| **TLL** | **Tololo Astrono** | **2.69** | **228** | AML | AML | 08 10 01.2 | |
| | comp=N,158nm,0.6s | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.95** | **179** | *i* P | **Pn** | **08 09 00.8** | **-2.1** |
| RTLL | | | | ⇑*i* S | **Sn** | **08 09 39.8** | **+2.1** |
| **SJA** | **San Juan** | **3.15** | **181** | *i* P | **Pn** | **08 09 03.7** | **-1.8** |
| **FSA** | **Cafayete** | **3.17** | **45** | *e*P | **Pn** | **08 09 06.1** | **+0.1** |
| FSA | | | | *i* S | **Sn** | **08 09 45.8** | **+2.5** |
| **AHML** | **Horco Molle** | **3.23** | **61** | *i* P | **Pn** | **08 09 04.3** | **-2.4** |
| AHML | | | | *e*S | **Sn** | **08 09 45.5** | **+1.1** |
| **CFAA** | **Coronel Fontan** | **3.23** | **176** | *i* P | **Pn** | **08 09 05.1** | **-1.6** |
| CFAA | | | | *i* S | **Sn** | **08 09 46.6** | **+2.2** |
| **RTCV** | **Cerro Valdivia** | **3.48** | **180** | *i* P | **Pn** | **08 09 08.4** | **-1.6** |
| RTCV | | | | *i* S | **Sn** | **08 09 52.7** | **+2.3** |
| **RTLS** | **Leoncito** | **3.49** | **191** | *i* P | **Pn** | **08 09 09.0** | **-1.3** |
| **AUSP** | **Uspallata** | **3.92** | **191** | *i* P | **Pn** | **08 09 15.6** | **-0.5** |
| AUSP | | | | ⇑*i* S | **Sn** | **08 10 04.1** | **+2.9** |
| **AAGR** | **Agrelo** | **4.71** | **183** | *i* P | **Pn** | **08 09 26.1** | **-0.5** |

**RSPR 14 08:08:50.5, 18°.54N × 68°.85W, h126**km±1km**, MD3.5**/11**, 6C-6D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DR12** | **Loma Pena Alta** | **0.56** | **296** | ⇑*e*P | Pn | 08 09 09.0 | -0.5 |
| DR12 | | | | *e*S | Sn | 08 09 23.4 | -0.5 |
| **IDE** | **Isla Desecheo** | **1.32** | **97** | ⇓*e*P | Pn | 08 09 16.1 | -0.2 |
| **IDE** | **Isla Desecheo** | **1.32** | **97** | *e*S | Sn | 08 09 35.7 | -0.2 |
| **AGPR** | **Aguadilla, PR** | **1.65** | **92** | ⇑*e*P | Pn | 08 09 20.3 | +0.2 |
| **AGPR** | **Aguadilla, PR** | **1.65** | **92** | *e*S | Sn | 08 09 42.8 | +0.1 |
| **LSP** | **Las Mesas** | **1.72** | **102** | ⇑*e*P | Pn | 08 09 21.0 | +0.1 |
| **CRPR** | **Cabo Rojo, PR** | **1.74** | **108** | ⇑*e*P | Pn | 08 09 20.7 | -0.4 |
| **CRPR** | **Cabo Rojo, PR** | **1.74** | **108** | *e*S | Sn | 08 09 44.2 | -0.2 |
| **LRS** | **Lares** | **1.92** | **97** | ⇑*e*P | Pn | 08 09 22.9 | -0.5 |
| LRS | | | | *e*S | Sn | 08 09 48.1 | -0.4 |
| **GBPR** | **Guanica, Bosqu** | **1.96** | **106** | ⇓*e*P | Pn | 08 09 23.9 | +0.2 |
| GBPR | | | | *e*S | Sn | 08 09 49.8 | +0.6 |
| **AOPR** | **Arecibo Observ** | **2.00** | **95** | ⇓*e*P | Pn | 08 09 23.7 | -0.6 |
| **AOPR** | **Arecibo Observ** | **2.00** | **95** | *e*S | Sn | 08 09 50.5 | +0.3 |
| **OBIP** | **Obispado Ponce** | **2.19** | **103** | ⇓*e*P | Pn | 08 09 26.6 | 0.0 |
| **OBIP** | **Obispado Ponce** | **2.19** | **103** | *e*S | Sn | 08 09 55.0 | +0.7 |
| **CELP** | **Cerrillos** | **2.21** | **102** | ⇑*e*P | Pn | 08 09 26.8 | 0.0 |
| CELP | | | | *e*S | Sn | 08 09 55.1 | +0.3 |
| **HUMP** | **Col San Antoni** | **2.88** | **97** | ⇓*e*P | Pn | 08 09 35.0 | -0.4 |
| **STVI** | **Saint Thomas** | **3.71** | **92** | ⇓*e*P | Pn | 08 09 46.6 | +0.3 |

**MEX 14 08:19:05.6±0.9, 16°.37N × 99°.08W, h16**km±13km**, MD3.9, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.91** | **89** | *e*P | Pb | 08 19 20.5 | -2.5 |
| PNIG | | | | *e*S | Sb | 08 19 29.9 | -5.1 |
| **TLIG** | **Tlapa** | **1.28** | **22** | *i* P | Pn | 08 19 25.1 | -4.0 |
| TLIG | | | | *e*S | Sb | 08 19 40.5 | -5.4 |
| **CAIG** | **El Cayaco** | **1.33** | **301** | *e*P | Pn | 08 19 25.1 | -4.4 |
| CAIG | | | | *e*S | Sn | 08 19 41.5 | -5.3 |
| **MEIG** | **Mezcala** | **1.63** | **341** | *e*P | Pn | 08 19 30.1 | -3.7 |
| MEIG | | | | *i* S | Sn | 08 19 49.5 | -5.1 |
| **PLIG** | **Platanillo** | **2.05** | **349** | *e*P | Pn | 08 19 36.2 | -3.4 |
| PLIG | | | | *e*S | Sn | 08 20 00.3 | -4.7 |
| **ARIG** | **Puente Sto Nin** | **2.25** | **328** | *e*P | Pn | 08 19 39.5 | -2.8 |
| ARIG | | | | *i* S | Sn | 08 20 05.2 | -4.6 |

*ISK **14** 08:27:33.8, 38°.38N × 37°.71E, h9km, MD3.1*
*DDA **14** 08:27:35.8, 38°.39N × 37°.72E, h7km, Md2.6*
*CSEM **14** 08:27:35.0±0.3, 38°.40N × 37°.73E, h10km, MD2.6, Error ellipse: s-maj=11.1km s-min=8.6km az=25.0*
**ISC 14 08:27:35.5±1.0, 38°.39N±0°.03 × 37°.69E±0°.02, h9**km±8km, **n29,** σ1§**17/37, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKCD** | **Akcadag** | **0.20** | **116** | *i* P | **Pg** | **08 27 39.0** | **-0.7** |
| AKCD | | | | *i* S | **Sg** | **08 27 43.9** | **+1.2** |
| **AKCD** | **Akcadag** | **0.20** | **116** | P | **Pg** | **08 27 39.0** | **-0.7** |
| AKCD | | | | S | **Sg** | **08 27 43.9** | **+1.2** |
| **DARE** | **Darende-Malaty** | **0.24** | **319** | *e*Pg | **Pg** | **08 27 39.4** | **-1.1** |
| **DARE** | **Darende-Malaty** | **0.24** | **319** | *e*Pg | **Pg** | **08 27 39.4** | **-1.1** |
| **CUKAN** | **kangal_SIVAS** | **0.94** | **349** | P | **Pg** | **08 27 53.4** | **-0.2** |
| CUKAN | | | | S | **Sn** | **08 28 08.8** | **+0.1** |
| **SARI** | **SarD1z-Kayseri** | **1.00** | **272** | *e*PG | **Pg** | **08 27 54.0** | **-0.7** |
| SARI | | | | *e*SG | **Sg** | **08 28 08.3** | **+0.6** |
| **ELZG** | **Elazig** | **1.02** | **83** | *i* P | **Pg** | **08 27 54.3** | **-0.9** |
| **ELZG** | **Elazig** | **1.02** | **83** | P | **Pg** | **08 27 54.3** | **-0.9** |
| ELZG | | | | S | **Sn** | **08 28 12.4** | **+1.6** |
| **ATAB** | **Bozova** | **1.03** | **152** | *i* P | **Pn** | **08 27 56.7** | **+0.6** |
| **ATAB** | **Bozova** | **1.03** | **152** | P | **Pn** | **08 27 56.7** | **+0.6** |
| ATAB | | | | S | **Sn** | **08 28 12.4** | **+1.7** |
| **GZT** | **Gaziantep** | **1.03** | **186** | P | **Pn** | **08 27 56.0** | **-0.2** |
| **KMRS** | **Kahramanmaras** | **1.08** | **216** | *e*PN | **Pg** | **08 27 54.9** | **-1.3** |
| **KMRS** | **Kahramanmaras** | **1.08** | **216** | *e*Pn | **Pg** | **08 27 54.9** | **-1.3** |
| **URFA** | **Urfa** | **1.30** | **136** | *e*PN | **Pn** | **08 27 58.5** | **-1.4** |
| **URFA** | **Urfa** | **1.30** | **136** | *e*Pn | **Pn** | **08 27 58.5** | **-1.4** |
| **ANDN** | **Andirin** | **1.33** | **233** | *i* P | **Pn** | **08 28 00.2** | **-0.1** |
| **ANDN** | **Andirin** | **1.33** | **233** | P | **Pn** | **08 28 00.2** | **-0.1** |
| **PTK** | **Pertek** | **1.43** | **69** | *e*PN | **Pn** | **08 28 00.5** | **-1.2** |
| **PTK** | **Pertek** | **1.43** | **69** | *e*Pn | **Pn** | **08 28 00.5** | **-1.2** |
| **KAMA** | **Osmaniye** | **1.45** | **214** | P | **Pn** | **08 28 00.6** | **-1.3** |
| KAMA | | | | S | **Sn** | **08 28 20.4** | **-0.6** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.53** | **313** | P | **Pg** | **08 28 04.4** | **-0.4** |
| CUSAR | | | | S | **Sg** | **08 28 28.1** | **+3.5** |
| **SVSK** | **Karacayir** | **1.62** | **341** | *e*PN | **Pn** | **08 28 03.3** | **-0.9** |
| **SVSK** | **Karacayir** | **1.62** | **341** | *e*Pn | **Pn** | **08 28 03.3** | **-0.9** |
| **KUZU** | **Kuzuini** | **1.68** | **197** | *i* P | **Pn** | **08 28 05.0** | **-0.1** |
| **KUZU** | **Kuzuini** | **1.68** | **197** | P | **Pn** | **08 28 05.0** | **-0.1** |
| **KOZT** | **Kozan** | **1.73** | **239** | *e*PN | **Pn** | **08 28 04.9** | **-0.8** |
| **KOZT** | **Kozan** | **1.73** | **239** | *e*Pn | **Pn** | **08 28 04.9** | **-0.8** |
| **SUSE** | **Susehri** | **1.86** | **12** | P | **Pg** | **08 28 10.8** | **-0.5** |
| **KELT** | **Kelkit** | **2.14** | **34** | P | **Pg** | **08 28 15.1** | **-1.4** |

*ISCJB **14** 08:34:22.6±0.7, 49°.87N±0°.05 × 18°.47E±0°.04, h0km, Error ellipse: s-maj=7.9km s-min=3.8km az=167.9*
*CSEM **14** 08:34:23.6±0.3, 49°.88N × 18°.50E, h1km, ML2.7/8, Error ellipse: s-maj=7.8km s-min=4.1km az=168.0*
*IPEC **14** 08:34:24.1±0.2, 49°.82N × 18°.57E, h0km, ML1.6/3, Error ellipse: s-maj=2.1km s-min=1.1km az=161.0*
*PRU **14** 08:34:24.4, 49°.87N × 18°.49E, h0km*
**ISC 14 08:34:23.8±1.0, 49°.83N±0°.07 × 18°.53E±0°.03, h0**km, **n22,** σ0§**80/34, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKC** | **Ostrava-Krasne** | **0.25** | **271** | *e*PG | **Pg** | **08 34 29.3** | **+0.8** |
| OKC | | | | *e*SG | **Sg** | **08 34 32.3** | **+0.6** |
| | comp=Z,37nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.25** | **271** | Pg | **Pg** | **08 34 29.3** | **+0.8** |
| OKC | | | | Sg | **Sg** | **08 34 32.3** | **+0.6** |
| | 37nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.64** | **265** | *e*Pg | **Pg** | **08 34 36.8** | **+0.8** |
| | baz=86 | | | | | | |
| MORC | | | | *e*Sg | **Sg** | **08 34 44.8** | **+0.4** |
| | 10nm,0.2s,baz=86 | | | | | | |
| **OJC** | **Ojcow** | **0.91** | **64** | *e*Pg | **Pg** | **08 34 41.1** | **0.0** |
| OJC | | | | *e*Sg | **Sg** | **08 34 53.3** | **+0.5** |
| **OJC** | **Ojcow** | **0.91** | **64** | *e*Pg | **Pg** | **08 34 41.1** | **0.0** |
| **OJC** | **Ojcow** | **0.91** | **64** | *e*Sg | **Sg** | **08 34 53.3** | **+0.5** |
| **KRLC** | **Kraliky** | **1.16** | **283** | *e*SG | **Sg** | **08 35 01.0** | **+0.2** |
| **KRLC** | **Kraliky** | **1.16** | **283** | Sg | **Sg** | **08 35 01.0** | **+0.2** |
| **VRAC** | **Vranov** | **1.36** | **248** | *e*Pg | **Pg** | **08 34 49.9** | **0.0** |
| VRAC | | | | *e*Sg | **Sg** | **08 35 07.5** | **-0.1** |
| | 9.0nm,0.3s,baz=68 | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.51** | **291** | *e*PG | **Pn** | **08 34 51.7** | **-0.5** |
| DPC | | | | *e*SG | **Sg** | **08 35 12.3** | **-0.1** |
| | comp=Z,7.7nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.51** | **291** | Pg | **Pn** | **08 34 51.7** | **-0.5** |
| DPC | | | | Sg | **Sg** | **08 35 12.3** | **-0.1** |
| | 7.7nm,0.3s | | | | | | |
| **KRUC** | **Moravsky** | **1.59** | **242** | *e*Pg | **Pn** | **08 34 53.4** | **+0.2** |
| | baz=61 | | | | | | |
| KRUC | | | | *e*Sg | **Sn** | **08 35 14.5** | **+0.1** |
| | 6.4nm,0.2s,baz=61 | | | | | | |
| **UPC** | **Upice** | **1.75** | **294** | *e*PG | **Pn** | **08 34 55.8** | **+0.4** |
| UPC | | | | *e*SG | **Sg** | **08 35 19.7** | **-0.4** |
| | comp=Z,4.0nm,0.2s | | | | | | |
| **UPC** | **Upice** | **1.75** | **294** | Pg | **Pn** | **08 34 55.8** | **+0.4** |
| UPC | | | | Sg | **Sg** | **08 35 19.7** | **-0.4** |
| | 4.0nm,0.2s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.42** | **273** | *e*SG | **Sb** | **08 35 39.4** | **+0.8** |
| **GOPC** | **GO Pecny, Ondr** | **2.42** | **273** | Sg | **Sb** | **08 35 39.4** | **+0.8** |
| **PRU** | **Pruhonice** | **2.58** | **275** | *e*SG | **Sb** | **08 35 44.1** | **+0.9** |
| | comp=Z,3.2nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **2.58** | **275** | Sg | **Sb** | **08 35 44.1** | **+0.9** |
| | 3.2nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **2.64** | **287** | *e*SG | **Sg** | **08 35 47.5** | **-1.0** |
| | comp=Z,6.2nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **2.64** | **287** | Sg | **Sg** | **08 35 47.5** | **-1.0** |
| | 6.2nm,0.2s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.30** | **260** | *e*SN | **Sn** | **08 35 54.7** | **-2.0** |
| KHC | | | | *e*SG | **Sg** | **08 36 08.8** | **-1.1** |
| | comp=Z,2.5nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.30** | **260** | Sn | **Sn** | **08 35 54.7** | **-2.0** |
| KHC | | | | Sg | **Sg** | **08 36 08.8** | **-1.1** |
| | 2.5nm,0.4s | | | | | | |

**IDC 14 08:50:56.0±3.5, 6°.99S × 150°.52E, h0**km, **mb3.3**/2**, mb1 3.7**/2**, mb1mx3.3**/30**, mbtmp3.5**/2**, MS3.2**/1**, Ms1 3.2**/1**, ms1mx2.5**/14**, Error ellipse: s-maj=131.1km s-min=47.0km az=119.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.31** | **229** | P | P | 08 55 32.9 | -0.9 |
| | 2.1nm,0.6s,baz=54,slow=11,SNR=27 | | | | | | |
| **ASAR** | **Alice Springs** | **23.02** | **222** | P | P | 08 56 02.8 | -0.1 |
| | 0.4nm,0.7s,baz=55,slow=8.6,SNR=6.7 | | | | | | |
| **KAPI** | **Kappang** | **30.66** | **272** | LR | LR | 09 12 40.0 | |
| | comp=Z,42nm,18.6s,baz=355,slow=42 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.72** | **284** | PKPbc | PKPbc | 09 10 46.3 | -0.1 |
| | 0.3nm,0.5s,baz=99,slow=1.9,SNR=3.6 | | | | | | |

*ISCJB **14** 08:56:53.5±0.6, 13°.28N±0°.09 × 144°.2E±0°.1, h129km, mb3.8/14, Error ellipse: s-maj=14.7km s-min=12.4km az=176.4*
*IDC **14** 08:56:54.8±0.5, 13°.33N × 144°.45E, h130km±4km, mb3.6/14, mb1 3.8/14, mb1mx3.6/48, mbtmp4.0/14, Error ellipse: s-maj=20.9km s-min=12.9km az=86.0*
**ISC 14 08:56:54.8±0.7, 13°.3N±0°.1 × 144°.4E±0°.1, h129**km, **n20,** σ1§**03/18, mb3.9/14, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.56** | **59** | P | **Pn** | **08 57 15.3** | **+1.3** |
| | 456nm,0.3s,baz=319,slow=17,SNR=594 | | | | | | |
| GUMO | | | | LR | LR | 08 57 20.7 | |
| | comp=Z,22nm,19.3s,baz=48,slow=54 | | | | | | |
| GUMO | | | | S | **Sn** | **08 57 29.6** | **+0.9** |
| | 1μm,0.3s,baz=346,slow=23,SNR=140 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 22.50** | **71** | | T | T | 09 25 32.7 | |
| | baz=256,slow=75,SNR=4.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 22.50** | **71** | | T | T | 09 25 32.7 | |
| | baz=256,slow=75,SNR=5.0 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 22.51** | **71** | | T | T | 09 25 32.7 | |
| | baz=256,slow=75,SNR=5.6 | | | | | | |
| **JNU** | **Nakatsue 23.26 330** | | | P | **P** | **09 01 51.3** | **+0.4** |
| | 3.7nm,0.6s,baz=114,slow=4.0,SNR=4.9 | | | | | | |
| **MJAR** | **Matsushiro Arr 23.79 348** | | | P | **P** | **09 01 54.9** | **-0.8** |
| | 4.5nm,0.6s,baz=167,slow=8.3,SNR=16 | | | | | | |
| **MAT** | **Matsushiro 23.80 348** | | | P | **P** | **09 01 54.7** | **-1.0** |
| **KSRS** | **Korea Array 28.18 331** | | | P | **P** | **09 02 34.8** | **-0.3** |
| | 1.4nm,0.5s,baz=141,slow=9.9,SNR=5.5 | | | | | | |
| **USRK** | **Ussuriysk Ar. 32.57 343** | | | P | **P** | **09 03 14.3** | **+0.6** |
| | 1.3nm,0.6s,baz=171,slow=8.6,SNR=5.0 | | | | | | |
| **WRA** | **Warramunga Arr 34.48 197** | | | P | **P** | **09 03 30.8** | **+0.2** |
| | 1.8nm,0.8s,baz=19,slow=9.7,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs 38.14 196** | | | P | **P** | **09 04 01.3** | **-0.4** |
| | 0.3nm,0.5s,baz=20,slow=13,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr 43.91 283** | | | P | **P** | **09 04 50.4** | **+1.3** |
| | 1.6nm,0.5s,baz=82,slow=6.7,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array 46.69 325** | | | P | **P** | **09 05 10.6** | **-0.1** |
| | 0.7nm,0.4s,baz=136,slow=5.9,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array 61.36 316** | | | P | **P** | **09 06 57.1** | **-0.1** |
| | 0.5nm,0.3s,baz=93,slow=8.9,SNR=6.2 | | | | | | |
| **ILAR** | **Eielson Array 69.03 25** | | | P | **P** | **09 07 44.2** | **-2.0** |
| | 0.8nm,0.6s,baz=254,slow=5.7,SNR=15 | | | | | | |
| **BVAR** | **Borovoye Array 69.85 322** | | | P | **P** | **09 07 51.2** | **-0.3** |
| | 0.9nm,0.3s,baz=107,slow=8.1,SNR=8.5 | | | | | | |
| **YKA** | **Yellowknife Ar 83.33 27** | | | P | **P** | **09 09 06.4** | **-0.7** |
| | 0.5nm,0.6s,baz=288,slow=5.4,SNR=3.6 | | | | | | |
| **NVAR** | **Mina Array Bea 87.47 51** | | | P | **P** | **09 09 29.4** | **+1.0** |
| | 1.1nm,0.6s,baz=259,slow=6.3,SNR=15 | | | | | | |
| **VNDA** | **Vanda 91.21 176** | | | P | **P** | **09 09 43.2** | **-1.5** |
| | 0.5nm,0.5s,baz=358,slow=12,SNR=11 | | | | | | |
| **LPAZ** | **La Paz 148.45 99** | | | PKPbc | **PKPbc** | **09 16 29.3** | **+1.3** |
| | 1.0nm,0.5s,baz=276,slow=1.8,SNR=9.1 | | | | | | |

*IDC **14** 09:08:18.0±0.5, 36°.35N × 29°.56E, h0km, mb4.2/28, mb1 4.3/34, mb1mx4.3/56, mbtmp4.3/34, ML4.1/6, MS3.7/24, Ms1 3.7/24, ms1mx3.6/49, Error ellipse: s-maj=11.9km s-min=9.7km az=144.0*
*MOS **14** 09:08:18.9±1.5, 36°.10N × 29°.67E, h14km, mb4.4/22, Error ellipse: s-maj=6.4km s-min=4.1km az=84.6*
*NEIC **14** 09:08:21.0, 36°.07N × 29°.53E, h21km, ML4.3(THE), ML4.5(ISK), ML4.5(ATH), After ISK.*
*ISK **14** 09:08:22.5, 36°.11N × 29°.54E, h32km, ML4.5*
*ISCJB **14** 09:08:22.8±0.2, 36°.13N±0°.01 × 29°.57E±0°.01, h51km±2km, mb4.3/40, MS3.8/18, Error ellipse: s-maj=2.4km s-min=1.6km az=10.1*
*ATH **14** 09:08:22.0, 36°.27N × 29°.65E, h49km±1km, MD4.5/49, ML4.3*
*DDA **14** 09:08:23.4, 36°.23N × 29°.52E, h41km, Ml4.8*
*NIC **14** 09:08:24.9, 36°.35N × 29°.90E, h16km, mb4.4, ML4.1*
*CSEM **14** 09:08:24.1±0.1, 36°.13N × 29°.60E, h40km, mb4.3/20, Error ellipse: s-maj=3.0km s-min=2.0km az=14.0*
*THE **14** 09:08:25.3, 36°.24N × 29°.53E, h47km±4km, ML4.4/7, Error ellipse: s-maj=4.5km s-min=1.2km az=118.0*
*NSSC **14** 09:08:27.8±1.3, 36°.04N × 30°.38E, h0km±173km, ML4.2*
*BJI **14** 09:08:27.3, 36°.10N × 29°.60E, h30km, mb4.5/7, mB4.8/3, Ms4.1/1, Ms7 3.8/1*
*HLW **14** 09:08:28.4, 35°.70N × 29°.66E, h33km±15km, Md4.2, Ml4.4*
**ISC 14 09:08:24.3±0.4, 36°.16N±0°.03 × 29°.59E±0°.02, h43**km±3km, **n646,** σ1§**30/719, mb4.3**/40**, MS3.8**/18**, 15C-11D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.01** | **214** | *e*P | **Pn** | **09 08 30.4** | **-0.6** |
| KSL | | | | *e*S | **Sn** | **09 08 36.2** | **+0.5** |
| **KSL** | **Kastellorizon** | **0.01** | **214** | *e*P | **Pn** | **09 08 30.4** | **-0.6** |
| KSL | | | | *e*S | **Sn** | **09 08 36.2** | **+0.5** |
| **AKAS** | **Kas** | **0.07** | **9** | P | **Pn** | **09 08 30.2** | **-1.2** |
| AKAS | | | | S | **Sn** | **09 08 35.7** | **-0.6** |
| **FETY** | **Fethiye** | **0.63** | **319** | PG | **Pn** | **09 08 35.3** | **-1.5** |
| FETY | | | | *e*SG | **Sn** | **09 08 44.4** | **-1.4** |
| **FETY** | **Fethiye** | **0.63** | **319** | *i* Pg | **Pn** | **09 08 35.3** | **-1.5** |
| FETY | | | | *e*Sg | **Sn** | **09 08 44.4** | **-1.4** |
| **ELL** | **Elmali** | **0.64** | **23** | PG | **Pn** | **09 08 36.1** | **-1.0** |
| ELL | | | | *e*SG | **Sn** | **09 08 46.7** | **+0.4** |
| **ELL** | **Elmali** | **0.64** | **23** | P | **Pn** | **09 08 36.1** | **-1.0** |
| **ELL** | **Elmali** | **0.64** | **23** | *i* Pg | **Pn** | **09 08 36.1** | **-1.0** |
| ELL | | | | *e*Sg | **Sn** | **09 08 46.7** | **+0.4** |
| **DALY** | **Dalyan (Mu¨la** | **1.00** | **311** | PG | **Pn** | **09 08 41.0** | **-0.8** |
| DALY | | | | *e*SG | **Sn** | **09 08 54.1** | **-0.6** |
| **DALY** | **Dalyan (Mu¨la** | **1.00** | **311** | *i* Pg | **Pn** | **09

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| KHL | Karahalli | 2.16 | 359 | ePN | Pn | 09 08 58.4 | +0.5 | MHLO | | S | Sn | 09 10 11.3 | -2.7 |
| KHL | Karahalli | 2.16 | 359 | ePn | Pn | 09 08 58.4 | +0.5 | MHLO | Agia Marina, M | 4.22 | 279 eP | Pn | 09 09 27.0 | +1.0 |
| GAZI | Gazipasa | 2.20 | 87 | iP | Pn | 09 08 58.3 | -0.1 | MHLO | | S | Sn | 09 10 11.3 | -2.7 |
| GAZI | | | | iS | Sn | 09 09 23.2 | -1.2 | SERI | Serifos | 4.22 | 285 eP | Pn | 09 09 27.1 | +0.9 |
| GAZI | Gazipasa | 2.20 | 87 | P | Pn | 09 08 58.3 | -0.1 | SERI | Serifos | 4.22 | 285 eP | Pn | 09 09 27.1 | +0.9 |
| GAZI | | | | S | Sn | 09 09 23.2 | -1.2 | MDNY | Mudanya-Bursa | 4.24 | 353 ePN | Pn | 09 09 27.3 | +1.0 |
| KHAL | Karahalli | 2.21 | 358 | iP | Pn | 09 08 57.3 | -1.2 | MDNY | Mudanya-Bursa | 4.24 | 353 ePn | Pn | 09 09 27.3 | +1.0 |
| KHAL | | | | iS | Sn | 09 09 25.5 | +0.9 | SIGR | SIGRI | 4.25 | 317 eP | Pn | 09 09 25.4 | -1.0 |
| KHAL | Karahalli | 2.21 | 358 | P | Pn | 09 08 57.3 | -1.2 | SIGR | | | eS | Sn | 09 10 12.5 | -2.3 |
| KHAL | | | | S | Sn | 09 09 25.5 | +0.9 | SIGR | SIGRI | 4.25 | 317 P | Pn | 09 09 25.9 | -0.5 |
| AYDB | Zeytinkoy-Aydi | 2.24 | 323 | ePN | Pn | 09 08 59.0 | 0.0 | SIGR | | | S | Sn | 09 10 11.5 | -3.3 |
| AYDB | Zeytinkoy-Aydi | 2.24 | 323 | ePn | Pn | 09 08 59.0 | 0.0 | SIGR | SIGRI | 4.25 | 317 P | Pn | 09 09 25.9 | -0.5 |
| GCAM | G?zelcami? | 2.44 | 310 | iP | Pn | 09 09 00.8 | -0.7 | SIGR | | | S | Sn | 09 10 11.5 | -3.3 |
| GCAM | G?zelcami? | 2.44 | 310 | P | Pn | 09 09 00.8 | -0.7 | SIGR | SIGRI | 4.25 | 317 P | Pn | 09 09 25.9 | -0.5 |
| GCAM | | | | S | Sn | 09 09 26.9 | -3.2 | SIGR | | | S | Sn | 09 10 11.5 | -3.3 |
| KULA | Kula-Manisa | 2.46 | 343 | ePN | Pn | 09 09 02.0 | 0.0 | ADVT | Abdulvahap | 4.27 | 2 ePN | Pn | 09 09 28.9 | +2.2 |
| KULA | Kula-Manisa | 2.46 | 343 | ePn | Pn | 09 09 02.1 | 0.0 | ADVT | Abdulvahap | 4.27 | 2 ePn | Pn | 09 09 28.9 | +2.2 |
| MANT | Manisa | 2.47 | 341 | iP | Pn | 09 09 01.0 | -1.2 | AFSR | Af`ar-Bala (A | 4.28 | 39 ePN | Pn | 09 09 28.7 | +1.7 |
| MANT | Manisa | 2.47 | 341 | P | Pn | 09 09 01.0 | -1.2 | AFSR | Af`ar-Bala (A | 4.28 | 39 ePn | Pn | 09 09 28.7 | +1.7 |
| MANT | | | | S | Sn | 09 09 28.8 | -2.4 | GULT | Gulveren | 4.33 | 9 ePN | Pn | 09 09 29.2 | +1.6 |
| AKMC | Akamas | 2.50 | 116 | P | Pn | 09 09 02.6 | +0.1 | GULT | Gulveren | 4.33 | 9 ePn | Pn | 09 09 29.2 | +1.6 |
| | baz=304 | | | | | | | ARMT | Armutlu | 4.44 | 353 ePN | Pn | 09 09 30.6 | +1.6 |
| AKMC | Akamas | 2.50 | 116 | P | Pn | 09 09 02.6 | +0.1 | ARMT | Armutlu | 4.44 | 353 ePn | Pn | 09 09 30.6 | +1.6 |
| SHUT | Suhut-Afyon | 2.51 | 17 | ePN | Pn | 09 09 03.4 | +0.8 | VAM | Vamos | 4.45 | 262 P | Pn | 09 09 28.6 | -0.6 |
| SHUT | Suhut-Afyon | 2.51 | 17 | ePn | Pn | 09 09 03.4 | +0.8 | VAM | Vamos | 4.45 | 262 eP | Pn | 09 09 30.1 | +0.9 |
| PPCY | Paphos | 2.58 | 119 | P | Pn | 09 09 04.1 | +0.6 | VAM | Vamos | 4.45 | 262 P | Pn | 09 09 28.6 | -0.6 |
| | baz=306 | | | | | | | VAM | Vamos | 4.45 | 262 P | Pn | 09 09 28.6 | -0.6 |
| PPCY | Paphos | 2.58 | 119 | P | Pn | 09 09 04.1 | +0.6 | VAM | Vamos | 4.45 | 262 P | Pn | 09 09 28.6 | -0.6 |
| ALFC | Alevga | 2.65 | 111 | P | Pn | 09 09 04.6 | +0.1 | NIG | Nigde | 4.46 | 63 ePN | Pn | 09 09 31.1 | +1.5 |
| | baz=299 | | | | | | | NIG | Nigde | 4.46 | 63 ePn | Pn | 09 09 31.1 | +1.5 |
| ALFC | | | | S | Sn | 09 09 35.0 | -0.3 | EZN | Ezine | 4.48 | 326 ePN | Pn | 09 09 30.9 | +1.3 |
| ALFC | Alevga | 2.65 | 111 | P | Pn | 09 09 04.6 | +0.1 | EZN | Ezine | 4.48 | 326 ePn | Pn | 09 09 30.9 | +1.3 |
| ALFC | | | | S | Sn | 09 09 35.0 | -0.3 | MDUB | Mudurnu | 4.49 | 16 ePN | Pn | 09 09 31.4 | +1.6 |
| SMG | Samos | 2.69 | 306 | eP | Pn | 09 09 04.5 | -0.5 | MDUB | Mudurnu | 4.49 | 16 ePn | Pn | 09 09 31.4 | +1.6 |
| SMG | | | | eS | Sn | 09 09 34.9 | -1.6 | KARA | Karaisali | 4.52 | 74 ePN | Pn | 09 09 31.5 | +1.3 |
| SMG | Samos | 2.69 | 306 | P | Pn | 09 09 04.6 | -0.5 | KARA | Karaisali | 4.52 | 74 ePn | Pn | 09 09 31.5 | +1.3 |
| SMG | | | | S | Sn | 09 09 33.8 | -2.7 | SPNC | Sapanca-Adapaz | 4.55 | 7 ePN | Pn | 09 09 32.4 | +1.8 |
| SMG | Samos | 2.69 | 306 | P | Pn | 09 09 04.6 | -0.5 | SPNC | Sapanca-Adapaz | 4.55 | 7 ePn | Pn | 09 09 32.4 | +1.8 |
| SMG | | | | S | Sn | 09 09 33.8 | -2.7 | KAMT | Kaman | 4.57 | 44 ePN | Pn | 09 09 32.4 | +1.4 |
| SMG | Samos | 2.69 | 306 | P | Pn | 09 09 04.6 | -0.5 | KAMT | Kaman | 4.57 | 44 ePn | Pn | 09 09 32.4 | +1.4 |
| SMG | | | | eS | Sn | 09 09 34.9 | -1.6 | KRBG | Karabiga-Canak | 4.59 | 338 ePN | Pn | 09 09 32.0 | +0.8 |
| BOLV | Bolvadin | 2.77 | 23 | iP | Pn | 09 09 05.9 | -0.4 | KRBG | Karabiga-Canak | 4.59 | 338 ePn | Pn | 09 09 32.0 | +0.8 |
| BOLV | Bolvadin | 2.77 | 23 | P | Pn | 09 09 05.9 | -0.4 | IMMV | Iera Moni Meta | 4.61 | 263 eP | Pn | 09 09 31.8 | +0.3 |
| KONT | Konya--Tatoy | 2.84 | 50 | ePN | Pn | 09 09 08.0 | +0.8 | IMMV | Iera Moni Meta | 4.61 | 263 eP | Pn | 09 09 31.8 | +0.3 |
| KONT | Konya--Tatoy | 2.84 | 50 | ePn | Pn | 09 09 08.0 | +0.8 | HRT | Hereke | 4.66 | 1 ePN | Pn | 09 09 33.8 | +1.7 |
| AKDN | Akdeniz- K¯br | 2.88 | 106 | ePN | Pn | 09 09 08.2 | +0.6 | HRT | Hereke | 4.66 | 1 ePn | Pn | 09 09 33.8 | +1.7 |
| AKDN | Akdeniz- K¯br | 2.88 | 106 | ePn | Pn | 09 09 08.2 | +0.6 | KRTS | Karatas | 4.69 | 83 ePN | Pn | 09 09 33.8 | +1.4 |
| LEF | Lefka | 2.88 | 110 | ePN | Pn | 09 09 07.3 | -0.4 | KRTS | Karatas | 4.69 | 83 ePn | Pn | 09 09 33.8 | +1.4 |
| LEF | Lefka | 2.88 | 110 | ePn | Pn | 09 09 07.3 | -0.4 | MRMT | Marmara Adasi | 4.71 | 341 ePN | Pn | 09 09 33.7 | +0.9 |
| IZM | Izmir | 2.91 | 321 | ePN | Pn | 09 09 07.4 | -0.7 | MRMT | Marmara Adasi | 4.71 | 341 ePn | Pn | 09 09 33.7 | +0.9 |
| IZM | Izmir | 2.91 | 321 | ePn | Pn | 09 09 07.4 | -0.7 | LPK | Lapseki | 4.76 | 333 ePN | Pn | 09 09 34.7 | +1.3 |
| ZKR | Zakros | 2.94 | 250 | eP | Pn | 09 09 09.4 | +0.9 | LPK | Lapseki | 4.76 | 333 ePn | Pn | 09 09 34.7 | +1.3 |
| ZKR | Zakros | 2.94 | 250 | eP | Pn | 09 09 09.4 | +0.9 | BRTR | Keskin Array B | 4.79 | 41 Pn | Pn | 09 09 32.9 | -1.0 |
| DEMI | Demirci | 2.96 | 347 | iP | Pn | 09 09 07.3 | -1.5 | | 4.5nm,0.3s,baz=216,slow=16,SNR=90 | | | | | |
| DEMI | | | | iS | Sn | 09 09 43.1 | -0.1 | BRTR | | | Sn | Sn | 09 10 27.8 | -0.4 |
| DEMI | Demirci | 2.96 | 347 | P | Pn | 09 09 07.3 | -1.5 | | 51nm,0.3s,baz=212,slow=26,SNR=32 | | | | | |
| DEMI | | | | S | Sn | 09 09 43.1 | -0.1 | BRTR | Keskin Array B | 4.79 | 41 P | Pn | 09 09 32.9 | -1.0 |
| BLCB | Balcova | 3.01 | 318 | ePN | Pn | 09 09 09.3 | -0.2 | BRTR | | | | | 09 10 27.8 | |
| BLCB | Balcova | 3.01 | 318 | ePn | Pn | 09 09 09.3 | -0.2 | BRTR | | | pmax | pmax | | |
| SZAC | Souni-Zanaja | 3.03 | 117 | P | Pn | 09 09 10.1 | +0.3 | | comp=Z,5.0nm,0.3s | | | | | |
| | baz=304 | | | | | | | BRTR | | | smax | smax | | |
| SZAC | | | | S | Sn | 09 09 45.0 | +0.2 | | comp=N,51nm,0.3s | | | | | |
| SZAC | Souni-Zanaja | 3.03 | 117 | P | Pn | 09 09 10.1 | +0.3 | GELI | Tayfur-Gelibol | 4.89 | 331 ePN | Pn | 09 09 35.7 | +0.4 |
| SZAC | | | | S | Sn | 09 09 45.0 | +0.2 | GELI | Tayfur-Gelibol | 4.89 | 331 ePn | Pn | 09 09 35.7 | +0.4 |
| AKS | Akhisar | 3.06 | 333 | ePN | Pn | 09 09 09.5 | -0.6 | ISK | Istanbul-Kandi | 4.92 | 355 ePN | Pn | 09 09 37.5 | +1.9 |
| AKS | Akhisar | 3.06 | 333 | ePn | Pn | 09 09 09.5 | -0.6 | ISK | Istanbul-Kandi | 4.92 | 355 ePn | Pn | 09 09 37.5 | +1.9 |
| KDHN | Kadinhani | 3.10 | 40 | iP | Pn | 09 09 10.8 | 0.0 | VLY | Voula,Athens | 4.94 | 292 eP | Pn | 09 09 36.5 | +0.6 |
| KDHN | | | | iS | Sn | 09 09 47.2 | +0.6 | VLY | Voula,Athens | 4.94 | 292 eP | Pn | 09 09 36.5 | +0.6 |
| KDHN | Kadinhani | 3.10 | 40 | P | Pn | 09 09 10.8 | 0.0 | GADA | Gvkgeada | 4.96 | 325 ePN | Pn | 09 09 37.5 | +1.2 |
| KDHN | | | | S | Sn | 09 09 47.2 | +0.6 | GADA | Gvkgeada | 4.96 | 325 ePn | Pn | 09 09 37.5 | +1.2 |
| MAMC | Mammari | 3.11 | 107 | P | Pn | 09 09 12.0 | +1.1 | SILT | Sile | 4.99 | 0 ePN | Pn | 09 09 38.4 | +1.9 |
| | baz=294 | | | | | | | SILT | Sile | 4.99 | 0 ePn | Pn | 09 09 38.4 | +1.9 |
| MAMC | Mammari | 3.11 | 107 | P | Pn | 09 09 12.0 | +1.1 | CEYT | Ceyhan | 5.03 | 78 ePN | Pn | 09 09 38.8 | +1.7 |
| ZEY | ¨zmir | 3.22 | 311 | P | Pn | 09 09 11.4 | -0.9 | CEYT | Ceyhan | 5.03 | 78 ePn | Pn | 09 09 38.8 | +1.7 |
| KIZT | Kizilcal | 3.27 | 33 | ePN | Pn | 09 09 13.5 | +0.4 | ATH | Athens Observa | 5.03 | 293 eP | Pn | 09 09 37.3 | +0.1 |
| KIZT | Kizilcal | 3.27 | 33 | ePn | Pn | 09 09 13.5 | +0.4 | ATH | Athens Observa | 5.03 | 293 eP | Pn | 09 09 37.3 | +0.1 |
| CSS | Prodhromos | 3.27 | 110 | P | Pn | 09 09 12.7 | -0.4 | EREA | Eretria | 5.04 | 298 eP | Pn | 09 09 37.7 | +0.3 |
| | baz=297 | | | | | | | EREA | Eretria | 5.04 | 298 eP | Pn | 09 09 37.7 | +0.3 |
| CSS | | | | S | Sn | 09 09 50.6 | -0.2 | BGKT | Bogazkoy | 5.05 | 353 ePN | Pn | 09 09 39.8 | +2.3 |
| CSS | Prodhromos | 3.27 | 110 | P | Pn | 09 09 13.1 | 0.0 | BGKT | Bogazkoy | 5.05 | 353 ePn | Pn | 09 09 39.8 | +2.3 |
| CSS | Prodhromos | 3.27 | 110 | P | Pn | 09 09 13.1 | 0.0 | LIA | Limnos Island | 5.10 | 318 eP | Pn | 09 09 37.7 | -0.4 |
| CSS | | | | S | Sn | 09 09 50.6 | -0.2 | LIA | Limnos Island | 5.10 | 318 eP | Pn | 09 09 37.7 | -0.4 |
| LFK | Lefkose | 3.33 | 104 | ePN | Pn | 09 09 13.6 | -0.2 | ANKY | Antikythira Is | 5.11 | 269 P | Pn | 09 09 37.8 | -0.4 |
| LFK | Lefkose | 3.33 | 104 | ePn | Pn | 09 09 13.6 | -0.2 | ANKY | | | S | Sn | 09 10 35.0 | -0.9 |
| SANT | Santorini | 3.35 | 275 | eP | Pn | 09 09 13.6 | -0.5 | ANKY | Antikythira Is | 5.11 | 269 P | Pn | 09 09 37.8 | -0.4 |
| SANT | | | | eS | Sn | 09 09 52.7 | +0.1 | ANKY | | | S | Sn | 09 10 35.0 | -0.9 |
| SANT | Santorini | 3.35 | 275 | P | Pn | 09 09 12.9 | -1.2 | ANKY | Antikythira Is | 5.11 | 269 P | Pn | 09 09 37.8 | -0.4 |
| SANT | | | | S | Sn | 09 09 50.8 | -1.8 | ANKY | | | S | Sn | 09 10 35.0 | -0.9 |
| SANT | Santorini | 3.35 | 275 | P | Pn | 09 09 12.9 | -1.2 | ERIK | Erikli-Kesan | 5.11 | 333 ePN | Pn | 09 09 39.4 | +1.1 |
| SANT | | | | S | Sn | 09 09 50.1 | -2.5 | ERIK | Erikli-Kesan | 5.11 | 333 ePn | Pn | 09 09 39.4 | +1.1 |
| SANT | Santorini | 3.35 | 275 | eP | Pn | 09 09 13.6 | -0.5 | CTKS | Kestanelik-??a | 5.14 | 351 ePN | Pn | 09 09 40.7 | +2.1 |
| SANT | | | | eS | Sn | 09 09 52.7 | +0.1 | CTKS | Kestanelik-??a | 5.14 | 351 ePn | Pn | 09 09 40.7 | +2.1 |
| NPS | Neapolis | 3.36 | 256 | eP | Pn | 09 09 14.4 | +0.1 | CRLT | Corlu | 5.17 | 344 ePN | Pn | 09 09 39.8 | +0.7 |
| NPS | Neapolis | 3.36 | 256 | eP | Pn | 09 09 14.4 | +0.1 | CRLT | Corlu | 5.17 | 344 ePn | Pn | 09 09 39.8 | +0.7 |
| APE | Apeiranthos | 3.39 | 287 | eP | Pn | 09 09 13.9 | -0.8 | KOZT | Kozan | 5.17 | 73 ePN | Pn | 09 09 40.6 | +1.5 |
| APE | Apeiranthos | 3.39 | 287 | eP | Pn | 09 09 14.3 | -0.4 | KOZT | Kozan | 5.17 | 73 ePn | Pn | 09 09 40.6 | +1.5 |
| APE | | | | eS | Sn | 09 09 52.6 | -1.1 | ARNB | Al Arnab | 5.18 | 91 eP | Pn | 09 09 38.8 | -0.6 |
| APE | Apeiranthos | 3.39 | 287 | P | Pn | 09 09 13.9 | -0.8 | ARNB | | | eS | Sn | 09 10 29.1 | -8.8 |
| APE | | | | S | Sn | 09 09 52.3 | -1.4 | ARNB | | | AML | AML | 09 10 42.5 | |
| APE | Apeiranthos | 3.39 | 287 | P | Pn | 09 09 13.9 | -0.8 | | comp=N,591nm,0.7s | | | | | |
| APE | | | | S | Sn | 09 09 52.3 | -1.4 | ARNB | | | AML | AML | 09 10 47.0 | |
| APE | Apeiranthos | 3.39 | 287 | eP | Pn | 09 09 14.3 | -0.4 | | comp=E,488nm,0.7s | | | | | |
| APE | | | | eS | Sn | 09 09 52.6 | -1.1 | ARNB | Al Arnab | 5.18 | 91 eP | Pn | 09 09 38.8 | -0.6 |
| THR3 | Thira Island, | 3.40 | 275 | P | Pn | 09 09 14.6 | -0.1 | ARNB | | | eS | Sn | 09 10 29.1 | -8.8 |
| THR3 | Thira Island, | 3.40 | 275 | P | Pn | 09 09 14.6 | -0.1 | | comp=E,488nm,0.7s | | | | | |
| THR3 | Thira Island, | 3.40 | 275 | P | Pn | 09 09 14.6 | -0.1 | MATC | Matruh | 5.19 | 203 P | Pn | 09 09 39.0 | -0.3 |
| THR6 | Thira Island, | 3.40 | 275 | P | Pn | 09 09 14.5 | -0.2 | | baz=206 | | | | | |
| THR6 | Thira Island, | 3.40 | 275 | P | Pn | 09 09 14.5 | -0.2 | DID | Didima | 5.27 | 287 eP | Pn | 09 09 40.5 | 0.0 |
| THR6 | Thira Island, | 3.40 | 275 | P | Pn | 09 09 14.5 | -0.2 | DID | Didima | 5.27 | 287 eP | Pn | 09 09 40.5 | 0.0 |
| ESKT | Eskisehir | 3.50 | 16 | ePN | Pn | 09 09 17.2 | +0.9 | DIDY | Didyma | 5.28 | 286 eP | Pn | 09 09 41.0 | +0.2 |
| ESKT | Eskisehir | 3.50 | 16 | ePn | Pn | 09 09 17.2 | +0.9 | DIDY | Didyma | 5.28 | 286 eP | Pn | 09 09 41.0 | +0.2 |
| DST | Dursunbey | 3.52 | 348 | ePN | Pn | 09 09 17.5 | +0.9 | KYTH | Kithira | 5.30 | 273 eP | Pn | 09 09 41.2 | +0.3 |
| DST | Dursunbey | 3.52 | 348 | ePn | Pn | 09 09 17.5 | +0.9 | KYTH | Kithira | 5.30 | 273 eP | Pn | 09 09 41.2 | +0.3 |
| CHOS | Chios island | 3.59 | 309 | P | Pn | 09 09 16.8 | -0.7 | KRND | KRANIDI | 5.31 | 285 eP | Pn | 09 09 42.9 | +1.8 |
| CHOS | Chios island | 3.59 | 309 | P | Pn | 09 09 16.8 | -0.7 | KRND | KRANIDI | 5.31 | 285 eP | Pn | 09 09 42.9 | +1.8 |
| CHOS | Chios island | 3.59 | 309 | P | Pn | 09 09 16.8 | -0.7 | TAHT | Tahtakopru-Hat | 5.33 | 86 ePN | Pn | 09 09 42.8 | +1.5 |
| DKL | Dikili | 3.60 | 325 | ePN | Pn | 09 09 17.7 | +0.1 | TAHT | Tahtakopru-Hat | 5.33 | 86 ePn | Pn | 09 09 42.8 | +1.5 |
| DKL | Dikili | 3.60 | 325 | ePn | Pn | 09 09 17.7 | +0.1 | KDZE | Karadeniz Ereo | 5.34 | 15 ePN | Pn | 09 09 43.5 | +2.0 |
| SVRH | Sivrihisar-ESK | 3.62 | 24 | ePN | Pn | 09 09 19.4 | +1.6 | KDZE | Karadeniz Ereo | 5.34 | 15 ePn | Pn | 09 09 43.5 | +2.0 |
| SVRH | Sivrihisar-ESK | 3.62 | 24 | ePn | Pn | 09 09 19.5 | +1.6 | SMTH | Samothraki Isl | 5.36 | 325 eP | Pn | 09 09 41.7 | 0.0 |
| KIZK | Mersin | 3.69 | 84 | iS | Sn | 09 10 00.3 | -0.7 | SMTH | Samothraki Isl | 5.36 | 325 eP | Pn | 09 09 41.7 | 0.0 |
| KIZK | Mersin | 3.69 | 84 | P | Pn | 09 09 21.4 | +2.7 | VLI | Veliai | 5.39 | 278 eP | Pn | 09 09 42.9 | +0.7 |
| KIZK | | | | S | Sn | 09 10 00.3 | -0.7 | VLI | Veliai | 5.39 | 278 P | Pn | 09 09 42.5 | +0.3 |
| BALB | Balikesir | 3.73 | 339 | ePN | Pn | 09 09 19.8 | +0.5 | VLI | | | S | Sn | 09 10 40.7 | -2.3 |
| BALB | Balikesir | 3.73 | 339 | ePn | Pn | 09 09 19.8 | +0.5 | VLI | Veliai | 5.39 | 278 P | Pn | 09 09 42.5 | +0.3 |
| SULT | Sultanhani-AKS | 3.74 | 56 | ePN | Pn | 09 09 20.9 | +1.4 | VLI | | | S | Sn | 09 10 40.7 | -2.3 |
| SULT | Sultanhani-AKS | 3.74 | 56 | ePn | Pn | 09 09 20.9 | +1.4 | VLI | Veliai | 5.39 | 278 P | Pn | 09 09 42.5 | +0.3 |
| EREN | Erenkoy | 3.77 | 98 | ePN | Pn | 09 09 20.5 | +0.6 | VLI | | | S | Sn | 09 10 40.7 | -2.3 |
| EREN | Erenkoy | 3.77 | 98 | ePn | Pn | 09 09 20.5 | +0.6 | VILL | Villia | 5.40 | 294 eP | Pn | 09 09 42.3 | 0.0 |
| IACM | Heraklion | 3.77 | 258 | eP | Pn | 09 09 20.0 | +0.1 | CTYL | Yal??k??y-??at | 5.40 | 350 ePN | Pn | 09 09 44.8 | +2.5 |
| IACM | | | | eS | Sn | 09 10 04.0 | +0.9 | CTYL | Yal??k??y-??at | 5.40 | 350 ePn | Pn | 09 09 44.8 | +2.5 |
| IACM | Heraklion | 3.77 | 258 | eP | Pn | 09 09 20.0 | +0.1 | MRKA | Markates | 5.41 | 300 eP | Pn | 09 09 42.2 | -0.2 |
| BORA | Eskisehir | 3.78 | 10 | iP | Pn | 09 09 19.1 | -0.9 | MRKA | Markates | 5.41 | 300 eP | Pn | 09 09 42.2 | -0.2 |
| BORA | Eskisehir | 3.78 | 10 | P | Pn | 09 09 19.1 | -0.9 | AOS | Alonnisos | 5.44 | 305 eP | Pn | 09 09 43.3 | +0.6 |
| IDI | Anoyia | 3.92 | 259 | Pn | Pn | 09 09 21.8 | -0.3 | AOS | Alonnisos | 5.44 | 305 eP | Pn | 09 09 43.3 | +0.6 |
| | 18nm,0.3s,baz=340,slow=5.6,SNR=66 | | | | | | | VIL2 | Platees | 5.45 | 294 eP | Pn | 09 09 42.3 | -0.6 |
| IDI | | | | Sn | Sn | 09 10 05.9 | -1.0 | CANT | Cankiri | 5.45 | 34 ePN | Pn | 09 09 45.0 | +2.0 |
| | 78nm,0.3s,baz=336,slow=22,SNR=12 | | | | | | | HMAT | Matruh | 5.46 | 203 S | Sn | 09 10 39.1 | -5.6 |
| IDI | Anoyia | 3.92 | 259 | Pn | Pn | 09 09 21.8 | -0.3 | | baz=206 | | | | | |
| IDI | | | | P | Pn | 09 09 22.0 | 0.0 | ALN | Alexandroupoli | 5.49 | 331 eP | Pn | 09 09 42.4 | -1.0 |
| IDI | | | | Sn | Sn | 09 10 05.9 | -1.0 | ALN | Alexandroupoli | 5.49 | 331 ePn | Pn | 09 09 42.4 | -1.0 |
| AUMIH | MIHALICIK | 3.99 | 21 | P | Pn | 09 09 22.7 | -0.3 | DQRL | Deir Qamar | 5.49 | 115 eP | Pn | 09 09 43.2 | -0.3 |
| AUMIH | | | | S | Sn | 09 10 08.0 | -0.6 | DQRL | Deir Qamar | 5.49 | 115 ePn | Pn | 09 09 43.2 | -0.3 |
| CAVI | Cavuskoy | 4.04 | 3 | ePN | Pn | 09 09 25.1 | +1.5 | NAQL | Naqoura | 5.49 | 122 eP | Pn | 09 09 42.7 | -0.8 |
| CAVI | Cavuskoy | 4.04 | 3 | ePn | Pn | 09 09 25.1 | +1.5 | NAQL | Naqoura | 5.49 | 122 ePn | Pn | 09 09 42.7 | -0.8 |
| PRK | Paraskevi | 4.05 | 320 | P | Pn | 09 09 23.5 | -0.2 | HWQ | Hawqa | 5.53 | 108 eP | Pn | 09 09 44.0 | -0.2 |
| PRK | Paraskevi | 4.05 | 320 | eP | Pn | 09 09 23.4 | -0.2 | HWQ | Hawqa | 5.53 | 108 ePn | Pn | 09 09 44.0 | -0.2 |
| PRK | Paraskevi | 4.05 | 320 | P | Pn | 09 09 23.5 | -0.2 | BTCH | Batrach | 5.56 | 89 eP | Pn | 09 09 43.6 | -1.0 |
| PRK | Paraskevi | 4.05 | 320 | P | Pn | 09 09 23.5 | -0.2 | BTCH | | | eS | Sn | 09 10 38.9 | -8.3 |
| PRK | Paraskevi | 4.05 | 320 | P | Pn | 09 09 23.5 | -0.2 | BTCH | | | AML | AML | 09 10 52.1 | |
| GONE | Gonen-Balikesi | 4.16 | 339 | ePN | Pn | 09 09 26.5 | +1.3 | | comp=E,757nm,0.7s | | | | | |
| GONE | Gonen-Balikesi | 4.16 | 339 | ePn | Pn | 09 09 26.5 | +1.3 | BTCH | | | AML | AML | 09 10 55.2 | |
| GPA | Golpazari | 4.16 | 8 | ePN | Pn | 09 09 25.9 | +0.6 | | comp=N,674nm,0.7s | | | | | |
| GPA | Golpazari | 4.16 | 8 | ePn | Pn | 09 09 25.9 | +0.6 | BTCH | Batrach | 5.56 | 89 eP | Pn | 09 09 43.6 | -1.0 |
| IZI | Iznik | 4.17 | 359 | ePN | Pn | 09 09 26.5 | +1.0 | BTCH | | | eS | Sn | 09 10 38.9 | -8.3 |
| IZI | Iznik | 4.17 | 359 | ePn | Pn | 09 09 26.5 | +1.0 | | comp=N,674nm,0.7s | | | | | |
| KCTX | Karacabey (Bur | 4.21 | 347 | ePN | Pn | 09 09 26.9 | +0.9 | WRDH | Warideh | 5.58 | 95 eP | Pn | 09 09 43.3 | -1.5 |
| KCTX | Karacabey (Bur | 4.21 | 347 | ePn | Pn | 09 09 26.9 | +0.9 | WRDH | Warideh | 5.58 | 95 ePn | Pn | 09 09 43.3 | -1.5 |
| MHLO | Agia Marina, M | 4.22 | 279 | eP | Pn | 09 09 27.0 | +1.0 | LOUT | Loutraki | 5.60 | 291 eP | Pn | 09 09 44.7 | -0.3 |
| MHLO | Agia Marina, M | 4.22 | 279 | P | Pn | 09 09 24.9 | -1.1 | LOUT | Loutraki | 5.60 | 291 ePn | Pn | 09 09 44.7 | -0.3 |
| BIDA | Albida | 5.60 | 100 | eP | Pn | 09 09 43.1 | -2.0 | | | | | | | |
| BIDA | Albida | 5.60 | 100 | eP | Pn | 09 09 43.1 | -2.0 | | | | | | | |
| LTK | Loutraki | 5.61 | 291 | eP | Pn | 09 09 45.4 | +0.2 | | | | | | | |
| LTK | Loutraki | 5.61 | 291 | eP | Pn | 09 09 45.4 | +0.2 | | | | | | | |
| PHSR | Pinarhisar | 5.70 | 344 | ePN | Pn | 09 09 48.1 | +1.8 | | | | | | | |
| PHSR | Pinarhisar | 5.70 | 344 | ePn | Pn | 09 09 48.1 | +1.8 | | | | | | | |
| SKIA | Skiathos | 5.71 | 304 | eP | Pn | 09 09 46.7 | +0.2 | | | | | | | |
| SKIA | Skiathos | 5.71 | 304 | eP | Pn | 09 09 46.7 | +0.2 | | | | | | | |
| MMAI | Mount Meron Ar | 5.73 | 122 | Pn | Pn | 09 09 46.2 | -0.6 | | | | | | | |
| | comp=N,221nm,0.3s,baz=306,slow=11,SNR=383 | | | | | | | | | | | | | |
| MMAI | | | | Sn | Sn | 09 10 48.1 | -3.2 | | | | | | | |
| | comp=N,363nm,0.3s,baz=303,slow=23,SNR=18 | | | | | | | | | | | | | |
| MMAI | | | | LR | LR | 09 12 43.7 | | | | | | | | |
| | comp=N,799nm,19.2s,baz=340,slow=45 | | | | | | | | | | | | | |
| RCY | Rachaya | 5.78 | 116 | eP | Pn | 09 09 47.1 | -0.5 | | | | | | | |
| HAWK | Haweek | 5.80 | 104 | eP | Pn | 09 09 47.6 | -0.3 | | | | | | | |
| HAWK | Haweek | 5.80 | 104 | eP | Pn | 09 09 47.6 | -0.3 | | | | | | | |
| LKR | Lokris | 5.81 | 297 | eP | Pn | 09 09 48.3 | +0.5 | | | | | | | |
| LKR | Lokris | 5.81 | 297 | eP | Pn | 09 09 48.3 | +0.5 | | | | | | | |
| SARI | SarD1z-Kayseri | 5.89 | 66 | ePN | Pn | 09 09 51.7 | +2.6 | | | | | | | |
| BRBR | Barbar | 5.91 | 116 | eP | Pn | 09 09 49.3 | -0.1 | | | | | | | |
| BRBR | | | | eS | Sn | 09 10 47.5 | -8.5 | | | | | | | |
| BRBR | | | | AML | AML | 09 10 56.4 | | | | | | | | |
| | comp=E,444nm,0.6s | | | | | | | | | | | | | |
| BRBR | | | | AML | AML | 09 10 56.9 | | | | | | | | |
| | comp=N,1µm,0.6s | | | | | | | | | | | | | |
| BRBR | Barbar | 5.91 | 116 | eP | Pn | 09 09 49.3 | -0.1 | | | | | | | |
| BRBR | | | | eS | Sn | 09 10 47.5 | -8.5 | | | | | | | |
| | comp=N,1µm,0.6s | | | | | | | | | | | | | |
| SLUM | | 5.91 | 219 | P | Pn | 09 09 50.1 | +0.8 | | | | | | | |
| | baz=223 | | | | | | | | | | | | | |
| SLUM | | 5.91 | 219 | P | Pn | 09 09 50.1 | +0.8 | | | | | | | |
| VLX | Vlachokerasia | 5.92 | 284 | eP | Pn | 09 09 50.9 | +1.5 | | | | | | | |
| VLX | Vlachokerasia | 5.92 | 284 | eP | Pn | 09 09 50.9 | +1.5 | | | | | | | |
| NEO | Neokhori | 5.94 | 304 | eP | Pn | 09 09 50.7 | +1.0 | | | | | | | |
| NEO | Neokhori | 5.94 | 304 | eP | Pn | 09 09 50.7 | +1.0 | | | | | | | |
| PAIG | Palicuri | 5.99 | 311 | eP | Pn | 09 09 50.7 | +0.3 | | | | | | | |
| PAIG | Palicuri | 5.99 | 311 | eP | Pn | 09 09 50.7 | +0.3 | | | | | | | |
| KMRS | Kahramanmaras | 6.01 | 75 | ePN | Pn | 09 09 51.2 | +0.5 | | | | | | | |
| KMRS | Kahramanmaras | 6.01 | 75 | ePn | Pn | 09 09 51.2 | +0.5 | | | | | | | |
| DESF | Desfina | 6.06 | 294 | eP | Pn | 09 09 52.4 | +1.0 | | | | | | | |
| DESF | Desfina | 6.06 | 294 | eP | Pn | 09 09 52.4 | +1.0 | | | | | | | |
| GUR | Goura | 6.06 | 289 | eP | Pn | 09 09 51.2 | -0.3 | | | | | | | |
| GUR | Goura | 6.06 | 289 | eP | Pn | 09 09 51.2 | -0.3 | | | | | | | |
| DSF | Desfina | 6.06 | 294 | eP | Pn | 09 09 52.6 | +1.2 | | | | | | | |
| DSF | Desfina | 6.06 | 294 | eP | Pn | 09 09 52.6 | +1.2 | | | | | | | |
| QASN | Qassioun | 6.09 | 114 | eP | Pn | 09 09 50.8 | -1.0 | | | | | | | |
| QASN | | | | eS | Sn | 09 10 51.5 | -8.8 | | | | | | | |
| QASN | | | | AML | AML | 09 11 02.7 | | | | | | | | |
| | comp=E,530nm,0.8s | | | | | | | | | | | | | |
| QASN | | | | AML | AML | 09 11 05.2 | | | | | | | | |
| | comp=N,1µm,0.5s | | | | | | | | | | | | | |
| QASN | Qassioun | 6.09 | 114 | eP | Pn | 09 09 50.8 | -1.0 | | | | | | | |
| QASN | | | | eS | Sn | 09 10 51.5 | -8.8 | | | | | | | |
| | comp=N,1µm,0.5s | | | | | | | | | | | | | |
| EDRB | Edirne | 6.10 | 340 | ePN | Pn | 09 09 53.2 | +1.4 | | | | | | | |
| EDRB | Edirne | 6.10 | 340 | ePn | Pn | 09 09 53.2 | +1.4 | | | | | | | |
| AXAR | Agios Charalam | 6.10 | 297 | eP | Pn | 09 09 52.7 | +0.9 | | | | | | | |
| AXAR | Agios Charalam | 6.10 | 297 | eP | Pn | 09 09 52.7 | +0.9 | | | | | | | |
| RSH | | 6.23 | 145 | P | Pn | 09 09 53.1 | -0.5 | | | | | | | |
| | baz=143 | | | | | | | | | | | |

**MPEP Malo Peshtene 8.48 330** P Pn 09 10 32.5 +8.0
**TLB Topalu 8.50 352** ⇑*i*P **Pn** **09 10 24.5 -0.2**
**SKO Skopje 8.59 315** *e*P **Pn** **09 10 25.7 -0.4**
**SKO Skopje 8.59 315** *e*P **Pn** **09 10 25.6 -0.4**
**SEV Sevastopol' 8.93 19** *e*P **Pn** **09 10 32.2 +1.6**
SEV *e*S **Sn** **09 12 04.2 -5.7**
**SEV Sevastopol' 8.93 19** *e*P **Pn** **09 10 32.2 +1.6**
**BARS Barje 8.96 320** *e*Pn **Pn** **09 10 30.1 -0.9**
**YAL Yalta 9.02 21** *e*P **Pn** **09 10 34.6 +2.8**
**TLCR 9.04 356** ⇓*i*P **Pn** **09 10 30.5 -1.6**
**CFR Carcaliu 9.08 353** ⇓*i*P **Pn** **09 10 32.0 -0.6**
**ISR Istrita 9.24 346** ⇓*i*P Pn 09 10 47.5 +12
**ALU Alushta 9.27 22** *e*P **Pn** **09 10 37.6 +2.4**
**ALU Alushta 9.27 22** *e*P **Pn** **09 10 37.6 +2.4**
**LJBD Adjabya 9.42 239** *i* P **Pn** **09 10 36.0 -1.4**
SNR=76
**SIM Simferopol' 9.43 20** *e*P Pn 09 10 43.7 +6.3
SIM *e*S **Sn** **09 12 20.0 -2.1**
SIM pmax pmax
comp=Z,104nm,0.4s
**SUDU Sudak 9.64 24** *e*P Pn 09 10 43.4 +3.1
SUDU *e*S **Sn** **09 12 22.8 -4.4**
**MLR Muntele Rosu 9.72 345** ⇓*i*P **Pn** **09 10 42.7 +1.1**
**VOIR 9.88 341** ⇓*i*P **Pn** **09 10 46.2 +2.4**
**PLOR Plostina 9.93 348** ⇓*i*P **Pn** **09 10 44.3 -0.1**
**VRI Vrincioaia 9.93 348** ⇑*i*P **Pn** **09 10 45.5 +1.1**
**DOPR Dopca 10.30 343** ⇑*i*P **Pn** **09 10 50.3 +0.9**
**GZR Gura Zlata 10.57 333** ⇑*i*P Pn 09 10 59.1 +6.0
**SOC Sochi 10.74 43** *e*P Pn 09 10 47.2 -8.2
SOC *e* 09 12 49.0
SOC MLR MLR
comp=Z,308nm,13.0s
**DIVS Divibare 10.80 320** ⇑*i*P Pn 09 11 05.2 +8.8
**CHVG Ch'k'valeri 11.66 52** P Pn 09 11 25.3 +17
**CHVG Ch'k'valeri 11.66 52** ⇓*i*P Pn 09 11 12.7 +4.7
**BURAR Bucovina Array 11.90 346** ⇑*i*P **Pn** **09 11 12.2 +0.9**
**ONI Oni 12.49 55** P **P** **09 11 31.6 +1.3**
**ONI Oni 12.49 55** *e*P **P** **09 11 31.6 +1.3**
**GNI Garni 12.57 67**⇑ *e*P **Pn** **09 11 18.2 -2.4**
**GNI Garni 12.57 67** *e*P **Pn** **09 11 18.2 -2.4**
**KIV Kislovodsk 12.69 48** *de*P **Pn** **09 11 21.4 -0.7**
KIV MLR MLR
comp=Z,231nm,19.0s
**KIV Kislovodsk 12.69 48** *e*P **Pn** **09 11 21.4 -0.7**
comp=Z,231nm,19.0s
**KBZ Khabaz 12.69 49** Pn **Pn** **09 11 22.0 -0.1**
comp=Z,0.1nm,0.3s,baz=222,slow=13,SNR=2.1
**KBZ Khabaz 12.69 49** P **Pn** **09 11 22.0 -0.1**
**KBZ Khabaz 12.69 49** P **Pn** **09 11 22.0 -0.1**
**NCK Nalchik 13.01 51**⇑ *e*P **Pn** **09 11 26.2 -0.2**
**NCK Nalchik 13.01 51** *e*P **Pn** **09 11 26.2 -0.2**
**LKFR Kufra 13.16 206** *i* P **Pn** **09 11 28.2 -0.5**
SNR=76
**DGRG David-gareji 13.39 62** P **P** **09 11 39.5 -0.7**
**DGRG David-gareji 13.39 62** *e*P **P** **09 11 39.5 -0.7**
**UZH Uzhgorod 13.57 339** *e*P P 09 11 38.5 -3.6
UZH *e*S Sn 09 14 09.5 +6.2
UZH MLR MLR
comp=N,570nm,15.0s
UZH MLR MLR
comp=E,460nm,15.0s
UZH MLR MLR
comp=Z,400nm,15.0s
**UZH Uzhgorod 13.57 339** *e*P P 09 11 38.5 -3.6
**IHRS Heris 14.07 76** *e*P Pn 09 11 44.7 +3.6
**IHRS Heris 14.07 76** *e*P Pn 09 11 44.7 +3.6
**IVIS Veis 14.18 92** *e*P **Pn** **09 11 43.5 +1.0**
**LVV L'vov 14.24 345** *e*P **P** **09 11 48.8 -0.7**
**LVV L'vov 14.24 345** *e*P **P** **09 11 48.8 -0.7**
**KIEV Kiev 14.53 359**⇑ *e*P **Pn** **09 11 47.7 +0.7**
KIEV pmax pmax
comp=Z,3.0nm,1.0s
**AKASG Malin Array Be 14.54 359** Pn **Pn** **09 11 45.6 -1.5**
baz=175,slow=12,SNR=2.2
AKASG LR LR 09 18 19.3
comp=Z,259nm,19.3s,baz=190,slow=42
**VYHS Vyhne 14.65 331** *e*P **Pn** **09 11 51.0 +2.4**
**VYHS Vyhne 14.65 331** *e*PN **Pn** **09 11 51.0 +2.4**
**VYHS Vyhne 14.65 331** *e*P **Pn** **09 11 51.0 +2.4**
**MAK Makhachkala 15.38 58** *e*P **Pn** **09 11 58.1 -0.1**
MAK *e*S **Sn** **09 14 47.5 +0.1**
MAK pmax pmax
comp=Z,272nm,1.7s
MAK MLR MLR
comp=Z,255nm,12.0s
**OKC Ostrava-Krasne 16.00 332** *e*P **P** **09 12 10.1 +1.0**
OKC MLR MLR
comp=Z,200nm,13.8s
**OKC Ostrava-Krasne 16.00 332** *e*P **P** **09 12 10.1 +1.0**
OKC *e*pP **pP** **09 12 21.5 +2.1**
OKC *ex* x 09 12 26.1
OKC AMS AMS 09 18 40.0
comp=Z,200nm,13.8s
**OKC Ostrava-Krasne 16.00 332** *e*P **P** **09 12 10.1 +1.0**
comp=Z,200nm,13.8s
**VRAC Vranov 16.21 328** Pn **P** **09 12 10.3 -1.1**
comp=Z,0.3nm,0.3s,baz=147,slow=9.5,SNR=6.8
VRAC LR LR 09 19 26.5
comp=Z,191nm,20.5s,baz=142,slow=42
**VORD Divnogorie 16.36 22** *e*P **Pn** **09 12 10.7 0.0**
VORD pmax pmax
comp=Z,6.0nm,1.0s
VORD pmax pmax
comp=N,10.0nm,0.8s
VORD pmax pmax
comp=E,20nm,0.8s
**VORD Divnogorie 16.36 22** *e*P **Pn** **09 12 10.7 0.0**
comp=E,6.0nm,1.0s
**KEST Kesra 16.40 274** Pn **Pn** **09 12 11.2 -0.3**
comp=E,0.4nm,0.3s,baz=332,slow=2.7,SNR=4.0
**VSR Storozhevoye 16.54 22** *e*P **Pn** **09 12 13.0 0.0**
VSR pmax pmax
comp=Z,6.0nm,0.8s
VSR pmax pmax
comp=N,10.0nm,1.0s
VSR pmax pmax
comp=E,6.0nm,0.5s
**VSR Storozhevoye 16.54 22** *e*P **Pn** **09 12 13.0 0.0**
comp=E,10.0nm,1.0s
**TREC Trest 16.69 326** AMS AMS 09 19 20.0
comp=E,300nm,12.2s
**KRLC Kraliky 16.72 330** *es*P sP 09 12 31.8 -1.1
**DPC Dobruska-Polom 17.12 330** *e*P **Pn** **09 12 20.9 +0.6**
**DPC Dobruska-Polom 17.12 330** *e*P **Pn** **09 12 20.9 +0.6**
DPC *es*P **sP** **09 12 36.5 -0.8**
**DPC Dobruska-Polom 17.12 330** *e*P **Pn** **09 12 20.9 +0.6**
**GERES GERESS Array B 17.22 322** P **Pn** **09 12 21.0 -0.6**
comp=E,0.3nm,0.3s,baz=135,slow=13,SNR=9.2
GERES LR LR 09 20 07.2
comp=E,310nm,19.4s,baz=130,slow=42
**GERES GERESS Array B 17.22 322** P **Pn** **09 12 21.0 -0.6**
GERES MLR MLR
comp=Z,310nm,19.4s
**GERES GERESS Array B 17.22 322** P **Pn** **09 12 21.0 -0.6**
comp=Z,310nm,19.4s
**UPC Upice 17.37 330** *e*P **Pn** **09 12 21.9 -1.5**
UPC MLR MLR
comp=Z,300nm,11.1s
**UPC Upice 17.37 330** *e*P **Pn** **09 12 21.9 -1.5**
UPC *e*pP **pP** **09 12 34.2 -0.3**
UPC *es*P **sP** **09 12 39.3 -0.7**
UPC AMS AMS 09 19 30.0
comp=Z,300nm,11.1s
**UPC Upice 17.37 330** *e*P **Pn** **09 12 21.9 -1.5**
comp=Z,300nm,11.1s
**VRH Novokhopyorsk 17.37 26** *e*P **Pn** **09 12 22.5 -0.8**
VRH pmax pmax
comp=E,20nm,0.9s
VRH pmax pmax
comp=Z,10.0nm,0.9s
VRH pmax pmax
comp=N,10.0nm,1.1s
**VRH Novokhopyorsk 17.37 26** *e*P **Pn** **09 12 22.5 -0.8**
comp=N,10.0nm,1.1s
**GOPC GO Pecny, Ondr 17.45 327** *e*P P 09 12 36.9 +12
**KHC Kasperske Hory 17.47 323** *e*P **P** **09 12 25.8 +0.4**
KHC MLR MLR
comp=Z,300nm,12.2s
**KHC Kasperske Hory 17.47 323** *e*P **P** **09 12 25.8 +0.4**
KHC *e*pP **pP** **09 12 35.2 -0.5**
KHC AMS AMS 09 19 30.0
comp=Z,300nm,12.2s
**KHC Kasperske Hory 17.47 323** *e*P **P** **09 12 25.8 +0.4**
comp=Z,300nm,12.2s

**PRU Pruhonice 17.61 326** *e*P **Pn** **09 12 23.6 -2.7**
PRU MLR MLR
comp=Z,300nm,12.9s
**PRU Pruhonice 17.61 326** *e*P **Pn** **09 12 23.6 -2.7**
PRU *e*pP **pP** **09 12 34.7 -2.5**
PRU *es*P **sP** **09 12 41.8 -0.9**
PRU AMS AMS 09 20 10.0
comp=Z,300nm,12.9s
**LPSR Galich'ya Gora 17.71 19** *e*P **Pn** **09 12 27.8 +0.3**
LPSR pmax pmax
comp=Z,6.0nm,0.9s
LPSR pmax pmax
comp=N,10.0nm,1.1s
LPSR pmax pmax
comp=E,10.0nm,1.0s
**LPSR Galich'ya Gora 17.71 19** *e*P **Pn** **09 12 27.8 +0.3**
comp=E,10.0nm,1.1s
**PRA Prague 17.72 326** *e*P P 09 12 40.1 +12
**PRA Prague 17.72 326** *e*P P 09 12 40.1 +12
**FETA Feichten 17.75 313** ⇓*i*Pn **P** **09 12 29.5 +0.8**
comp=E,11nm,1.0s
**FETA Feichten 17.75 313** Pn **P** **09 12 29.5 +0.8**
comp=E,11nm,1.0s
**IPIR Pirpir 17.91 95** *e*P **Pn** **09 12 28.4 -2.0**
**IPIR Pirpir 17.91 95** *e*P **Pn** **09 12 28.4 -2.0**
**PVCC Panska Ves 17.99 328** *e*P **Pn** **09 12 30.7 -0.3**
PVCC MLR MLR
comp=Z,300nm,12.7s
**PVCC Panska Ves 17.99 328** *e*P **Pn** **09 12 30.7 -0.3**
PVCC *e*pP **pP** **09 12 42.6 +1.2**
PVCC *es*P **sP** **09 12 46.9 0.0**
PVCC AMS AMS 09 20 20.0
comp=Z,300nm,12.7s
**PVCC Panska Ves 17.99 328** *e*P **Pn** **09 12 30.7 -0.3**
comp=Z,300nm,12.7s
**DAVOX Davos/Dischmat 18.14 312** LR LR 09 20 43.1
comp=Z,693nm,20.0s,baz=114,slow=41
**BRG Berggiesshubel 18.52 327** *e*P **Pn** **09 12 38.2 +0.8**
comp=Z,6.6nm,1.3s
BRG *e* 09 12 47.1
comp=Z,14nm,1.2s
**BRG Berggiesshubel 18.52 327** *e*P **Pn** **09 12 38.2 +0.8**
BRG pmax pmax
comp=Z,7.0nm,1.3s
**BRG Berggiesshubel 18.52 327** *e*P **Pn** **09 12 38.2 +0.8**
comp=Z,7.0nm,1.3s
**NKC Novy Kostel 18.75 324** *e*P **P** **09 12 39.4 -0.1**
**NKC Novy Kostel 18.75 324** *e*P **P** **09 12 39.4 -0.1**
NKC *es*P **sP** **09 12 54.7 -0.6**
**NKC Novy Kostel 18.75 324** *e*P **P** **09 12 39.4 -0.1**
**IGAR Gharneh 18.92 95** *e*P **Pn** **09 12 42.4 -0.2**
**IZEF Zefreh 19.01 93** *e*P **Pn** **09 12 43.5 -0.2**
**IZEF Zefreh 19.01 93** *e*P **Pn** **09 12 43.5 -0.2**
**CLL Collm 19.24 327** *e*P **Pn** **09 12 46.0 -0.1**
CLL *e*S **Sn** **09 16 25.0 +4.3**
**CLL Collm 19.24 327** *e*P **Pn** **09 12 46.0 -0.1**
CLL *es*P sP 09 12 53.0 -7.6
CLL *e* 09 12 57.0
CLL *e*PP **PnPn** **09 13 00.0 +0.3**
CLL *i* pPP 09 13 02.7
CLL *e*PPP PPP 09 13 07.0
CLL *e*S **Sn** **09 16 25.0 +4.3**
CLL Lm MLR 09 21 00.0
comp=N,100nm,21.9s
CLL Lm MLR 09 21 00.0
comp=E,200nm,18.6s
**CLL Collm 19.24 327** *e*P **Pn** **09 12 46.0 -0.1**
**IDID Didziasalis 19.26 355** *e*P **P** **09 12 45.1 +0.2**
IDID IAmb IAmb 09 12 55.2
comp=Z,6.2nm,0.4s
**IDID Didziasalis 19.26 355** *e*P **P** **09 12 45.1 +0.2**
SNR=34
**IIGN Ignalina 19.33 354** *e*P **P** **09 12 46.1 +0.4**
IIGN IAmb IAmb 09 12 56.0
comp=Z,6.8nm,1.0s
**IIGN Ignalina 19.33 354** *e*P **P** **09 12 46.1 +0.4**
SNR=34
**IKIA Kiasar 19.44 83** *e*P **P** **09 12 46.2 -1.2**
**IKIA Kiasar 19.44 83** *e*P **P** **09 12 46.2 -1.2**
**KLNR Kaliningrad 19.55 344**⇑ *e*P **Pn** **09 12 49.3 -0.4**
**KLNR Kaliningrad 19.55 344** *e*P **Pn** **09 12 49.3 -0.4**
**OBN Obninsk 19.55 12** LR LR 09 21 48.5
comp=Z,119nm,19.2s,baz=246,slow=42
**OBN Obninsk 19.55 12**⇑ *e*P **P** **09 12 46.7 -1.4**
OBN *e*S **Sn** **09 16 31.1 +3.0**
OBN pmax pmax
comp=Z,5.0nm,1.1s
OBN MLR MLR
comp=Z,165nm,24.0s
**OBN Obninsk 19.55 12** *e*P **P** **09 12 46.7 -1.4**
comp=Z,165nm,24.0s
**ISAL Salakas 19.56 354** *e*P **P** **09 12 48.1 -0.1**
ISAL IAmb IAmb 09 12 49.5
comp=Z,27nm,0.4s
**ISAL Salakas 19.56 354** *e*P **P** **09 12 48.1 -0.1**
SNR=33
**LPG La Plagne 19.59 305** P **Pn** **09 12 54.1 +3.6**
LPG pmax pmax
comp=Z,15nm,1.2s
**LPL La Plagne 19.60 306** P **Pn** **09 12 52.2 +1.5**
LPL pmax pmax
comp=Z,11nm,0.9s
**IKAZ Kazeroun 19.70 102** *e*P **P** **09 12 51.2 +0.8**
**IKAZ Kazeroun 19.70 102** *e*P **P** **09 12 51.2 +0.8**
**IZAR Zarasai 19.73 354** *e*P **P** **09 12 50.2 +0.2**
IZAR IAmb IAmb 09 12 53.2
comp=Z,7.3nm,0.6s
**IZAR Zarasai 19.73 354** *e*P **P** **09 12 50.2 +0.2**
SNR=33
**MOS Moscow 20.34 13** *e*P Pn 09 13 04.1 +5.2
MOS *e* 09 13 23.3
**ISAD Sadrabad 20.39 95** *e*P **P** **09 12 57.6 -0.3**
**ISAD Sadrabad 20.39 95** *e*P **P** **09 12 57.6 -0.3**
**IPAR Pars 20.63 101** *e*P **P** **09 13 01.4 +1.0**
**IPAR Pars 20.63 101** *e*P **P** **09 13 01.4 +1.0**
**ISRV Sarvestan 20.88 102** *e*P **P** **09 13 03.8 +0.7**
**ISRV Sarvestan 20.88 102** *e*P **P** **09 13 03.8 +0.7**
**IBAF Bafgh 22.02 94** *e*P **P** **09 13 16.1 +1.0**
**IBAF Bafgh 22.02 94** *e*P **P** **09 13 16.1 +1.0**
**VSU Vasula 22.39 356**⇑ *e*P **P** **09 13 18.3 -0.4**
**VSU Vasula 22.39 356** *e*P **P** **09 13 18.3 -0.4**
**ISFR Sfrayin 22.79 79** *e*P **P** **09 13 22.6 -0.9**
**ISFR Sfrayin 22.79 79** *e*P **P** **09 13 22.6 -0.9**
**GEYT Alibeck 22.80 77** P **P** **09 13 22.2 -1.1**
comp=Z,4.7nm,0.3s,baz=297,slow=6.5,SNR=7.9
**IMOG Moghan 23.99 81** *e*P **P** **09 13 35.5 +0.3**
**IMOG Moghan 23.99 81** *e*P **P** **09 13 35.5 +0.3**
**IMYA Miami 24.56 80** *e*P **P** **09 13 40.8 +0.6**
**IMYA Miami 24.56 80** *e*P **P** **09 13 40.8 +0.6**
**TAM Tamanrasset 24.75 244** P **P** **09 13 44.0 +2.0**
TAM pmax pmax
comp=Z,13nm,1.0s
**AKTK Aktyubinsk 24.94 46** P **P** **09 13 41.5 -1.8**
comp=Z,72nm,18.2s
**AKTO Aktyubinsk 24.94 46** P **P** **09 13 41.5 -1.8**
comp=Z,2.4nm,0.3s,baz=242,slow=11,SNR=9.3
AKTO LR LR 09 26 32.7
comp=Z,72nm,18.2s,baz=247,slow=44
**AKTO Aktyubinsk 24.94 46** P **P** **09 13 41.5 -1.8**
AKTO pmax pmax
comp=Z,2.0nm,0.3s
AKTO MLR MLR
comp=Z,72nm,18.2s
**FINES FINESS Array B 25.40 356** P **P** **09 13 45.8 -1.6**
comp=Z,2.5nm,0.7s,baz=165,slow=11,SNR=9.0
FINES LR LR 09 24 28.9
comp=Z,171nm,19.9s,baz=188,slow=38
**FINES FINESS Array B 25.40 356** P **P** **09 13 45.8 -1.6**
FINES pmax pmax
comp=Z,3.0nm,0.7s
FINES MLR MLR
comp=Z,171nm,19.9s
**KLMR Klimovskoe 25.51 11** *e*P **P** **09 13 52.2 +3.8**
KLMR pmax pmax
comp=Z,42nm,1.0s
**AB31 Akbulak array 25.66 50** P **P** **09 13 49.2 -0.7**
AB31 pmax pmax
comp=Z,1.0nm,0.3s
**AB31 Akbulak array 25.66 50** P **P** **09 13 49.2 -0.7**
comp=Z,1.0nm,0.3s
**HFS Hagfors 26.09 342** P **P** **09 13 51.7 -1.9**
comp=Z,3.4nm,0.6s,baz=138,slow=14,SNR=9.5
HFS LR LR 09 25 33.4
comp=Z,250nm,18.6s,baz=146,slow=40

**HFS Hagfors 26.09 342** P **P** **09 13 51.7 -1.9**
HFS pmax pmax
comp=Z,3.0nm,0.6s
HFS MLR MLR
comp=Z,250nm,18.6s
**ESDC Sonseca Array 26.61 288** P **P** **09 13 57.5 -1.2**
comp=Z,0.9nm,0.4s,baz=80,slow=9.4,SNR=5.4
ESDC LR LR 09 25 12.7
comp=Z,100nm,20.4s,baz=120,slow=38
**NOA NORSAR Array B 27.51 341** P **P** **09 14 04.4 -2.0**
comp=Z,0.8nm,0.6s,baz=144,slow=9.1,SNR=2.7
NOA LR LR 09 27 05.8
comp=Z,177nm,18.5s,baz=155,slow=41
**NOA NORSAR Array B 27.51 341** P **P** **09 14 04.4 -2.0**
NOA pmax pmax
comp=Z,1.0nm,0.6s
NOA MLR MLR
comp=Z,177nm,18.5s
**MDT Midelt 28.30 273** P **P** **09 14 15.0 +1.0**
comp=Z,4.1nm,0.9s,baz=78,slow=10,SNR=8.2
**EKA Eskdalemuir Ar 29.42 321** P **P** **09 14 20.7 -2.8**
comp=Z,0.5nm,0.4s,baz=116,slow=9.5,SNR=4.7
**EKA Eskdalemuir Ar 29.42 321** P **P** **09 14 20.7 -2.8**
EKA pmax pmax
comp=Z,1.0nm,0.4s
**BVA0 Borovoye Array 33.05 46** *i* P **P** **09 14 56.5 +1.1**
BVA0 pmax pmax
comp=Z,6.0nm,1.0s
**BVAR Borovoye Array 33.05 46** P **P** **09 14 55.6 +0.2**
comp=Z,0.3nm,0.3s,baz=324,slow=7.1,SNR=3.7
BVAR LR LR 09 31 29.9
comp=Z,161nm,21.2s,baz=264,slow=42
**OTUK Ortayu 33.47 55** P **P** **09 14 57.6 -1.6**
OTUK pmax pmax
comp=Z,16nm,0.9s
**OTUK Ortayu 33.47 55** P **P** **09 14 57.6 -1.6**
comp=Z,16nm,0.9s
**ARCES ARCESS Array B 33.51 357** P **P** **09 14 58.1 -1.1**
comp=Z,5.8nm,1.1s,baz=170,slow=5.5,SNR=3.4
ARCES PcP **PcP** **09 17 38.1 -1.0**
comp=Z,2.8nm,0.8s,baz=186,slow=4.2,SNR=3.4
ARCES LR LR 09 29 20.6
comp=Z,126nm,21.1s,baz=200,slow=38
**ARCES ARCESS Array B 33.51 357** P **P** **09 14 58.1 -1.1**
ARCES 09 17 38.1
ARCES pmax pmax
comp=Z,6.0nm,1.1s
ARCES MLR MLR
comp=Z,126nm,21.1s
**TOA0 Torodi Ar. Sit 33.95 235** *e*P **P** **09 15 03.5 -0.2**
**TORD Torodi Ar. Bea 33.95 235** P **P** **09 15 03.9 +0.2**
comp=Z,7.6nm,0.7s,baz=34,slow=9.7,SNR=69
TORD PcP **PcP** **09 17 41.4 +0.1**
comp=Z,1.0nm,1.0s,baz=44,slow=3.3,SNR=3.1
TORD LR LR 09 31 22.9
comp=Z,168nm,19.5s,baz=50,slow=41
**AAK Ala-Archa 34.97 65** P **P** **09 15 13.4 +1.0**
comp=Z,1.0nm,0.4s,baz=273,slow=8.6,SNR=3.5
**AAK Ala-Archa 34.97 65**⇓ *e*P **P** **09 15 14.6 +2.1**
AAK pmax pmax
comp=Z,3.0nm,1.0s
**MBAR Mbarara 36.59 178** P **P** **09 15 27.0 +0.5**
comp=Z,3.5nm,0.2s,baz=297,slow=0.8,SNR=4.4
**MBAR Mbarara 36.59 178** P **P** **09 15 27.0 +0.5**
MBAR pmax pmax
comp=Z,4.0nm,0.2s
**KURBB Kurchatov Arra 37.68 52** P **P** **09 15 33.9 -1.3**
comp=Z,4.2nm,1.0s,baz=274,slow=8.8,SNR=25
**KURK Kurchatov 37.74 52** P **P** **09 15 33.9 -1.8**
KURK pmax pmax
comp=Z,4.0nm,1.0s
**KURK Kurchatov 37.74 52** P **P** **09 15 33.9 -1.8**
**KURK Kurchatov 37.74 52** P **P** **09 15 33.9 -1.8**
comp=Z,4.0nm,1.0s
**MK31 Makanchi Array 40.20 58** *i* P **P** **09 15 56.0 -0.4**
MK31 pmax pmax
comp=Z,2.0nm,0.4s
**MK31 Makanchi Array 40.20 58** *i* P **P** **09 15 56.0 -0.4**
comp=Z,2.0nm,0.4s
**MKAR Makanchi Array 40.20 58** P **P** **09 15 55.1 -1.3**
comp=Z,1.9nm,0.8s,baz=286,slow=4.9,SNR=8.6
**MKAR Makanchi Array 40.20 58** P **P** **09 15 55.1 -1.3**
MKAR pmax pmax
comp=Z,2.0nm,0.8s
**NVS Novosibirsk 40.83 45** *e*P P 09 16 06.8 +5.4
NVS pmax pmax
comp=Z,26nm,1.6s
**ZALV Zalesovo Beam 41.70 47** P **P** **09 16 07.4 -1.2**
comp=Z,0.9nm,0.3s,baz=271,slow=9.0,SNR=3.1
ZALV LR LR 09 36 55.1
comp=Z,101nm,21.8s,baz=248,slow=41
**ZALV Zalesovo Beam 41.70 47** P **P** **09 16 07.4 -1.2**
ZALV pmax pmax
comp=Z,1.0nm,0.3s
ZALV MLR MLR
comp=Z,101nm,21.8s
**DBIC Dimbokro 43.06 235** P **P** **09 16 19.9 -0.2**
comp=Z,4.3nm,0.3s,baz=23,slow=8.2,SNR=16
DBIC LR LR 09 37 18.7
comp=Z,92nm,18.1s,baz=26,slow=40
**DBIC Dimbokro 43.06 235** P **P** **09 16 19.9 -0.2**
DBIC pmax pmax
comp=Z,4.0nm,0.4s
DBIC MLR MLR
comp=Z,92nm,18.1s
**TIC Toumodi 43.19 236** *e*P **P** **09 16 20.8 -0.3**
**KIC Kosan Boka 43.21 235** *e*P **P** **09 16 21.2 -0.1**
comp=Z,39nm,0.8s
**KOLN Koldamda 46.08 84** *e*P **P** **09 16 44.7 +0.3**
**GKN Gorkha 46.82 84** *e*P P 09 16 54.5 +4.4
comp=Z,44nm,0.9s
**HVS Khovu-Aksy 47.25 51**⇓ *e*P **P** **09 16 55.0 +1.9**
**DMN Daman 47.36 84** *e*P **P** **09 16 55.2 +0.8**
**KKN Kakani 47.42 84** *e*P **P** **09 16 58.0 +3.1**
**PKIN Phulchoki 47.60 84** *e*P **P** **09 16 58.2 +1.8**
**PKI Pulchoki 47.62 84** *e*P **P** **09 16 58.6 +2.1**
**GUN Gumba 47.85 83** *e*P P 09 17 05.6 +7.2
comp=Z,49nm,0.9s
**TAPN Taplejung 49.56 83** *e*P P 09 17 16.3 +4.8
**LSZ Lusaka 51.17 182** P **P** **09 17 24.8 +1.5**
comp=Z,5.1nm,0.8s,baz=12,slow=9.8,SNR=9.0
**LSZ Lusaka 51.17 182** P **P** **09 17 24.8 +1.5**
LSZ pmax pmax
comp=Z,5.0nm,0.8s
**TLY Talaya 53.26 48**⇑ *e*P **P** **09 17 40.3 +1.8**
TLY pmax pmax
comp=Z,1.0nm,0.9s
**ZAK Zakamensk 53.36 50** *e*P P 09 17 44.6 +5.3
ZAK pmax pmax
comp=Z,5.0nm,1.3s
**GTA Gaotai 54.30 64** *e*P P 09 17 55.3 +8.9
GTA pP pP 09 18 04.1 +5.5
GTA sP sP 09 18 08.1 +4.6
GTA PMZ
comp=Z,4.0nm,0.9s
GTA PMZ
comp=Z,84nm,6.7s
GTA LN
comp=Z,97nm,23.7s
GTA LE
comp=Z,85nm,23.3s
GTA LZ
comp=Z,86nm,20.4s
**SONM Songino Array 56.04 52** P **P** **09 17 57.4 -1.4**
comp=Z,0.6nm,0.7s,baz=294,slow=11,SNR=5.2
SONM LR LR 09 45 15.2
comp=Z,109nm,21.7s,baz=296,slow=40
**SONM Songino Array 56.04 52** P **P** **09 17 57.4 -1.4**
SONM pmax pmax
comp=Z,1.0nm,0.7s
SONM MLR MLR
comp=Z,109nm,21.7s
**OPO Ambohidratompo 56.92 160** P **P** **09 18 06.8 +1.4**
comp=Z,8.7nm,0.9s,baz=287,slow=6.8
**HHC Hu-ho-hao-te 62.06 58** *e*P **P** **09 18 42.5 +1.9**
HHC S **S** **09 27 04.3 +1.9**
HHC pmax pmax
comp=Z,430nm,0.7s
HHC pmax pmax
comp=Z,110nm,4.2s
HHC LR LR
comp=N,100nm,16.0s
HHC LR LR
comp=E,66nm,13.6s
HHC LR LR
comp=Z,59nm,14.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **62.89** | **86** | P | | **P** | **09 18 45.8** | **-0.5** |
| | comp=Z,1.8nm,0.6s,baz=296,slow=6.9,SNR=4.3 | | | | | | | |
| CMAR | | | | LR | | LR | 09 52 33.8 | |
| | comp=Z,33nm,18.6s,baz=295,slow=42 | | | | | | | |
| **BOSA** | **Boshof** | **64.56** | **184** | P | | **P** | **09 18 58.8** | **+1.7** |
| | comp=Z,7.0nm,1.0s,baz=11,slow=5.0,SNR=5.2 | | | | | | | |
| **BOSA** | **Boshof** | **64.56** | **184** | P | | **P** | **09 18 58.8** | **+1.7** |
| BOSA | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| **SCHQ** | **Schefferville** | **64.74** | **321** | P | | **P** | **09 18 56.2** | **-1.8** |
| | comp=Z,3.6nm,0.6s,baz=68,slow=5.0,SNR=8.1 | | | | | | | |
| SCHQ | | | | LR | | LR | 09 45 37.8 | |
| | comp=Z,81nm,21.7s,baz=73,slow=35 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **73.55** | **47** | P | | **P** | **09 19 50.3** | **-2.4** |
| | comp=Z,3.2nm,0.9s,baz=277,slow=4.8,SNR=7.9 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **74.77** | **55** | P | | **P** | **09 19 58.4** | **-1.5** |
| **KSAR** | **Wonju Array Be** | **74.77** | **55** | P | | **P** | **09 19 58.4** | **-1.5** |
| **KSAR** | **Wonju Array Be** | **74.77** | **55** | P | | **P** | **09 19 58.4** | **-1.5** |
| **KSRS** | **Korea Array** | **74.79** | **55** | P | | **P** | **09 19 58.4** | **-1.6** |
| | comp=Z,1.8nm,0.8s,baz=304,slow=5.5,SNR=6.4 | | | | | | | |
| **KSRS** | **Korea Array** | **74.79** | **55** | P | | **P** | **09 19 58.4** | **-1.6** |
| KSRS | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.55** | **344** | P | | **P** | **09 20 13.8** | **-1.4** |
| | comp=Z,2.2nm,1.0s,baz=41,slow=5.4,SNR=6.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.55** | **344** | P | | **P** | **09 20 13.8** | **-1.4** |
| YKA | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **79.36** | **358** | P | | **P** | **09 20 23.8** | **-1.4** |
| | comp=Z,0.8nm,1.1s,baz=333,slow=3.8,SNR=4.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **79.36** | **358** | P | | **P** | **09 20 23.8** | **-1.4** |
| ILAR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,1.1s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **80.35** | **29** | LR | | LR | 10 01 07.1 | |
| | comp=Z,50nm,20.0s,baz=285,slow=40 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **81.43** | **328** | P | | **P** | **09 20 34.5** | **-2.1** |
| | comp=Z,1.3nm,0.5s,baz=11,slow=5.2,SNR=2.0 | | | | | | | |
| ULM | | | | LR | | LR | 09 57 23.6 | |
| | comp=Z,85nm,20.5s,baz=352,slow=36 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **81.43** | **328** | P | | **P** | **09 20 34.5** | **-2.1** |
| ULM | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| ULM | | | | MLR | | MLR | | |
| | comp=Z,85nm,20.5s | | | | | | | |
| **BDFB** | **Brasilia** | **89.43** | **250** | LR | | LR | 10 02 48.4 | |
| | comp=Z,55nm,18.7s,baz=76,slow=37 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **100.06** | **335** | LR | | LR | 10 09 52.1 | |
| | comp=Z,61nm,20.0s,baz=42,slow=37 | | | | | | | |

**IDC 14 09:10:51.1±3.6, 5.74S×149.77E, h0km, mb3.2/2, mb1 3.6/2, mb1mx3.3/34, mbtmp3.4/2, Error ellipse: s-maj=129.5km s-min=46.7km az=115.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.61** | **225** | P | | P | 09 15 31.6 | -0.5 |
| | 1.1nm,0.5s,baz=52,slow=11,SNR=24 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.48** | **219** | P | | P | 09 16 03.3 | +0.6 |
| | 0.2nm,0.5s,baz=51,slow=9.2,SNR=5.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.69** | **285** | PKPbc | | PKPbc | 09 30 38.0 | -0.9 |
| | 0.3nm,0.3s,baz=86,slow=2.5,SNR=8.9 | | | | | | | |

*KLM **14** 09:14:25.8, 1.2±4.0N×99.7±9.6E, h217km±7km, mb4.7, ML4.0*
*ISCJB **14** 09:14:27.1±0.3, 1.31±1.0N×99.84±1.0E, h201km±3km, mb4.1/23, Error ellipse: s-maj=7.7km s-min=4.6km az=138.2*
*DJA **14** 09:14:28.7±0.4, 1.7±3.3N×150.0±2.0E, h195km±7km, M4.7/18, mb4.8/5, mB5.1/4, MLv4.8/18, Mw(mB)4.5/4*
*IDC **14** 09:14:28.2±0.8, 1.37N×100.02E, h192km±5km, mb3.9/18, mb1 3.9/19, mb1mx3.7/49, mbtmp4.4/19, Error ellipse: s-maj=17.4km s-min=9.9km az=54.0*
*NEIC **14** 09:14:28.9±0.5, 1.35N×99.92E, h199km±4km, mb4.7/4, Error ellipse: s-maj=10.3km s-min=7.1km az=47.0*

**ISC 14 09:14:28.0±0.7, 1.31N±0.05×99.82E±0.05, h197km±6km, n63, σ1§17/75, mb4.1/23, 10C, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BKNI** | **Bangkinang** | **1.56** | **129** | *e*Pn | | **Pn** | **09 15 02.3** | **+0.3** |
| **PSI** | **Prapat** | **1.74** | **329** | P | | **Pn** | **09 15 04.1** | **+0.3** |
| | 19nm,0.3s,baz=148,slow=9.2,SNR=61 | | | | | | | |
| PSI | | | | S | | **Sn** | **09 15 30.3** | **-1.4** |
| | 12nm,0.3s,baz=2.8,slow=21,SNR=35 | | | | | | | |
| **PPI** | **Padang Panjang** | **1.84** | **162** | P | | **Pn** | **09 15 05.3** | **+0.6** |
| PPI | | | | S | | **Sn** | **09 15 33.8** | **+0.4** |
| **GSI** | **Gunungsitoli** | **2.25** | **270** | P | | **Pn** | **09 15 09.7** | **+0.8** |
| GSI | | | | S | | **Sn** | **09 15 40.3** | **-0.4** |
| **GSI** | **Gunungsitoli** | **2.25** | **270** | *e*Pn | | **Pn** | **09 15 10.5** | **+1.5** |
| **PDSI** | **Padang** | **2.29** | **164** | P | | **Pn** | **09 15 09.3** | **-0.2** |
| **SISI** | **Saibi** | **2.71** | **196** | P | | **Pn** | **09 15 13.4** | **-0.8** |
| SISI | | | | S | | **Sn** | **09 15 49.1** | **-1.2** |
| **SDSI** | **Sungai Dareh** | **2.74** | **144** | P | | **Pn** | **09 15 15.0** | **+0.5** |
| SDSI | | | | S | | **Sn** | **09 15 50.5** | **-0.3** |
| **RGRI** | **Rengat** | **3.00** | **123** | P | | **Pn** | **09 15 18.9** | **+1.4** |
| **IPM** | **Ipoh** | **3.38** | **21** | ⇑P | | **Pn** | **09 15 22.9** | **+0.8** |
| **IPM** | **Ipoh** | **3.38** | **21** | *e*Pn | | **Pn** | **09 15 23.3** | **+1.3** |
| **KGM** | **Kluang** | **3.57** | **79** | ⇑P | | **Pn** | **09 15 24.6** | **+0.3** |
| **KULM** | **Kulim** | **4.04** | **12** | ⇑P | | **Pn** | **09 15 30.4** | **+0.2** |
| **KULM** | **Kulim** | **4.04** | **12** | *e*Pn | | **Pn** | **09 15 30.6** | **+0.3** |
| **PPSI** | **Pulau Pagai** | **4.04** | **177** | P | | **Pn** | **09 15 29.1** | **-1.2** |
| MYKOM | **Kota Tinggi** | **4.05** | **83** | ⇑P | | **Pn** | **09 15 30.0** | **-0.3** |
| **MLSI** | **Meulaboh, Aceh** | **4.51** | **311** | P | | **Pn** | **09 15 35.8** | **-0.3** |
| MLSI | | | | S | | **Sn** | **09 16 27.4** | **-2.3** |
| **JMBI** | **JAMBI** | **4.81** | **127** | P | | **Pn** | **09 15 41.3** | **+1.4** |
| **KSI** | **Kapahiang** | **5.65** | **151** | P | | **Pn** | **09 15 49.9** | **-0.9** |
| | 261nm,0.7s,6μm2.1nm | | | | | | | |
| **MNAI** | **Manna** | **6.44** | **151** | P | | **Pn** | **09 15 58.9** | **-2.1** |
| **PMBI** | **Palembang** | **6.49** | **130** | P | | **Pn** | **09 16 01.4** | **-0.3** |
| | 276nm,0.4s,1.9nm | | | | | | | |
| **PPBI** | **Pangkal Pinang** | **7.19** | **119** | P | | **Pn** | **09 16 12.7** | **+1.9** |
| | 31nm,1.0s,14μm1.3nm | | | | | | | |
| **MDSI** | **Maura Dua** | **7.21** | **143** | P | | **Pn** | **09 16 09.8** | **-1.2** |
| | 96nm,0.7s,1μm0.4nm | | | | | | | |
| **LWLI** | **Liwa** | **7.57** | **146** | P | | **Pn** | **09 16 17.3** | **+1.5** |
| **KLSI** | | **7.71** | **141** | P | | **Pn** | **09 16 16.7** | **-0.9** |
| **KSM** | **Kuching** | **10.48** | **89** | ⇑P | | **Pn** | **09 16 52.4** | **-1.2** |
| **LEM** | **Lembang** | **11.21** | **136** | ⇑P | | **Pn** | **09 17 01.5** | **-1.7** |
| **BTM** | **Bintulu** | **13.38** | **82** | ⇑P | | **Pn** | **09 17 28.9** | **-1.6** |
| **KKM** | **Kota Kinabalu** | **17.02** | **74** | ⇑P | | **P** | **09 18 11.7** | **-1.8** |
| **CMAR** | **Chiang Mai Arr** | **17.07** | **357** | P | | **Pn** | **09 18 14.7** | **-0.6** |
| | 0.5nm,0.3s,baz=187,slow=11,SNR=8.8 | | | | | | | |
| CMAR | | | | | | ScP | **09 26 03.9** | **-0.8** |
| | baz=208,slow=1.7,SNR=4.9 | | | | | | | |
| **KDM** | **Kudat** | **17.85** | **71** | ⇑P | | **P** | **09 18 20.8** | **-1.7** |
| **SDKM** | **Sandakan** | **17.86** | **76** | ⇑P | | **P** | **09 18 20.6** | **-2.2** |
| **PALK** | **Pallekele** | **19.96** | **288** | P | | **Pn** | **09 18 49.1** | **-0.5** |
| | 8.4nm,0.5s,baz=119,slow=8.2,SNR=5.7 | | | | | | | |
| **KAPI** | **Kappang** | **20.88** | **108** | P | | **P** | **09 18 57.1** | **+2.1** |
| | 2.9nm,0.3s,baz=265,slow=7.6,SNR=4.1 | | | | | | | |
| **LUWI** | **Luwuk** | **23.07** | **96** | *e*P | | **P** | **09 19 16.5** | **+0.1** |
| | 50nm,0.6s | | | | | | | |
| **SIJI** | **Sorong** | **31.52** | **94** | P | | **P** | **09 20 29.9** | **-2.0** |
| | 4.6nm,0.4s,baz=241,slow=19,SNR=2.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **39.89** | **124** | P | | **P** | **09 21 42.5** | **-0.5** |
| | 13nm,0.4s,baz=304,slow=9.0,SNR=223 | | | | | | | |
| WRA | | | | | | PcP | **09 23 45.0** | **+0.2** |
| | 2.1nm,0.5s,baz=315,slow=2.5,SNR=19 | | | | | | | |
| WRA | | | | | | ScP | **09 27 12.4** | **-2.7** |
| | 1.1nm,0.6s,baz=313,slow=3.0,SNR=8.0 | | | | | | | |
| **WRAB** | **Tennant Creek** | **39.89** | **124** | *e*P | | **P** | **09 21 42.5** | **-0.5** |
| | 20nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **41.39** | **129** | P | | **P** | **09 21 54.5** | **-0.8** |
| | 1.2nm,0.3s,baz=299,slow=7.5,SNR=29 | | | | | | | |
| ASAR | | | | | | PcP | **09 23 50.0** | **+0.4** |
| | 1.9nm,0.7s,baz=308,slow=3.1,SNR=16 | | | | | | | |
| ASAR | | | | | | ScP | **09 27 19.4** | **-1.6** |
| | 1.5nm,0.7s,baz=302,slow=4.1,SNR=18 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **44.28** | **32** | P | | **P** | **09 22 17.9** | **-0.3** |
| **KSRS** | **Korea Array** | **44.31** | **32** | P | | **P** | **09 22 17.9** | **-0.6** |
| | 2.0nm,0.7s,baz=223,slow=8.8,SNR=8.6 | | | | | | | |
| **SONM** | **Songino Array** | **46.70** | **6** | P | | **P** | **09 22 38.2** | **+1.1** |
| | 1.5nm,0.4s,baz=190,slow=10,SNR=11 | | | | | | | |
| SONM | | | | | | PcP | **09 24 07.5** | **+0.2** |
| | 1.5nm,0.5s,baz=172,slow=4.8,SNR=7.3 | | | | | | | |
| SONM | | | | | | ScP | **09 27 41.1** | **-1.2** |
| | 0.2nm,0.3s,baz=215,slow=1.8,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.82** | **344** | P | | **P** | **09 22 46.7** | **+1.0** |
| | 2.9nm,0.4s,baz=153,slow=9.0,SNR=34 | | | | | | | |
| **KKAR** | **Karatay Array** | **49.16** | **332** | *e*P | | **P** | **09 22 57.5** | **+1.5** |
| | 5.2nm,0.3s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.36** | **29** | P | | **P** | **09 23 12.3** | **-0.1** |
| | 1.1nm,0.6s,baz=240,slow=12,SNR=4.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **52.35** | **343** | P | | **P** | **09 23 20.6** | **+1.0** |
| | 1.3nm,0.5s,baz=163,slow=6.8,SNR=9.8 | | | | | | | |
| **KURK** | **Kurchatov** | **52.41** | **343** | P | | **P** | **09 23 20.6** | **+0.6** |
| **ZALV** | **Zalesovo Beam** | **53.91** | **349** | P | | **P** | **09 23 31.7** | **+0.8** |
| | 9.6nm,0.6s,baz=179,slow=6.6,SNR=14 | | | | | | | |
| **BVAR** | **Borovoye Array** | **57.05** | **339** | P | | **P** | **09 23 53.6** | **+0.3** |
| | 2.1nm,0.4s,baz=139,slow=9.3,SNR=11 | | | | | | | |
| **ABKAR** | **Akbulak array** | **58.68** | **331** | *e*P | | **P** | **09 24 05.1** | **+0.4** |
| | 2.0nm,0.6s | | | | | | | |
| **BRTR** | **Keskin Array B** | **70.99** | **312** | P | | **P** | **09 25 23.7** | **-0.9** |
| | 0.8nm,0.6s,baz=139,slow=5.7,SNR=4.2 | | | | | | | |
| **MAW** | **Mawson** | **73.43** | **194** | P | | **P** | **09 25 40.8** | **+2.6** |
| | 0.6nm,0.2s,baz=79,slow=15,SNR=4.1 | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.78** | **322** | P | | **P** | **09 25 57.8** | **0.0** |
| | 0.3nm,0.3s,baz=87,slow=5.3,SNR=4.8 | | | | | | | |
| **FINES** | **FINESS Array B** | **81.12** | **332** | P | | **P** | **09 26 21.6** | **+0.5** |
| | 1.5nm,0.4s,baz=119,slow=6.3,SNR=18 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.33** | **340** | P | | **P** | **09 26 32.8** | **+0.4** |
| | 3.4nm,0.5s,baz=97,slow=4.7,SNR=30 | | | | | | | |
| **GERES** | **GERESS Array B** | **86.47** | **319** | P | | **P** | **09 26 49.8** | **+1.2** |
| | 0.3nm,0.3s,baz=109,slow=5.3,SNR=3.9 | | | | | | | |
| **HFS** | **Hagfors** | **86.94** | **330** | P | | **P** | **09 26 51.5** | **+1.0** |
| | 0.9nm,0.4s,baz=67,slow=8.2,SNR=6.4 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **87.38** | **348** | P | | **P** | **09 26 51.4** | **-1.0** |
| | 10nm,0.8s,baz=84,slow=7.6,SNR=9.4 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **89.02** | **317** | P | | **P** | **09 27 02.5** | **+1.6** |
| | 2.9nm,0.5s,baz=116,slow=13,SNR=3.0 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **127.13** | **37** | PKP | | **PKPdf** | **09 33 10.5** | **+1.0** |
| | 0.4nm,0.7s,baz=284,slow=2.9,SNR=4.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **142.15** | **35** | PKhKP | | PKPpre | 09 33 33.3 | |
| | 0.2nm,0.4s,baz=193,slow=1.0,SNR=5.5 | | | | | | | |
| TXAR | | | | SKP | | | 09 36 53.7 | |
| | 0.4nm,0.7s,baz=204,slow=2.0,SNR=5.9 | | | | | | | |
| **BDFB** | **Brasilia** | **145.23** | **244** | PKPbc | | **PKPab** | **09 33 44.4** | **+0.7** |
| | 3.4nm,0.5s,baz=57,slow=5.1,SNR=5.2 | | | | | | | |
| **CPUP** | **Villa Florida** | **146.80** | **220** | PKPbc | | **PKPbc** | **09 33 48.2** | **+0.6** |
| | 4.1nm,0.7s,baz=117,slow=4.8,SNR=9.1 | | | | | | | |

*ATH **14** 09:19:24.5, 37.41N×27.25E, h33km±2km, MD3.1/4*
*DDA **14** 09:19:25.7, 37.79N×27.34E, h23km, Md3.2*
*ISK **14** 09:19:25.8, 37.80N×27.43E, h12km, MD2.9*
*ISCJB **14** 09:19:26.0±0.5, 37.77N±0.02×27.40E±0.02, h7km±9km, n42, σ1§17/63, Turkey*

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GCAM** | **G?zelcaml?** | **0.16** | **237** | *i*P | | Pg | 09 19 28.4 | -1.3 |
| GCAM | | | | *i*S | | **Sg** | **09 19 31.1** | **-0.8** |
| **GCAM** | **G?zelcaml?** | **0.16** | **237** | P | | Pg | 09 19 28.4 | -1.3 |
| GCAM | | | | S | | **Sg** | **09 19 31.1** | **-0.8** |
| **AYDN** | **Tasoluk** | **0.40** | **109** | *i*P | | **Pg** | **09 19 35.9** | **+1.8** |
| **AYDN** | **Tasoluk** | **0.40** | **109** | P | | **Pg** | **09 19 35.9** | **+1.8** |
| AYDN | | | | S | | **Sb** | **09 19 42.2** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.42** | **68** | *e*PG | | **Pg** | **09 19 34.4** | **-0.1** |
| AYDB | | | | *e*SG | | **Sg** | **09 19 40.2** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.42** | **68** | *e*Pg | | **Pg** | **09 19 34.4** | **-0.1** |
| AYDB | | | | *e*Sg | | **Sg** | **09 19 40.3** | **+0.3** |
| **SMG** | **Samos** | **0.46** | **260** | *e*PB | | **Pg** | **09 19 34.3** | **-0.9** |
| SMG | | | | *e*SB | | **Sg** | **09 19 41.8** | **+0.6** |
| **SMG** | **Samos** | **0.46** | **260** | *e*Pb | | **Pg** | **09 19 34.3** | **-0.9** |
| SMG | | | | *e*Sb | | **Sg** | **09 19 41.8** | **+0.6** |
| **BLCB** | **Balcova** | **0.66** | **334** | *e*PG | | **Pg** | **09 19 39.1** | **0.0** |
| BLCB | | | | *e*SG | | **Sg** | **09 19 48.8** | **+1.1** |
| **BLCB** | **Balcova** | **0.66** | **334** | *e*Pg | | **Pg** | **09 19 39.1** | **0.0** |
| BLCB | | | | *e*Sg | | **Sg** | **09 19 48.8** | **+1.1** |
| **BDRM** | **Kayabasi** | **0.72** | **177** | *i*P | | **Pg** | **09 19 40.7** | **+0.4** |
| **BDRM** | **Kayabasi** | **0.72** | **177** | P | | **Pg** | **09 19 40.7** | **+0.4** |
| BDRM | | | | S | | **Sn** | **09 19 54.5** | **+0.1** |
| **BODT** | **Bodrum** | **0.73** | **186** | *e*PG | | **Pg** | **09 19 40.7** | **+0.3** |
| **BODT** | **Bodrum** | **0.73** | **186** | *e*Pg | | **Pg** | **09 19 40.7** | **+0.3** |
| **YER** | **Yerkesik** | **0.96** | **133** | *e*PG | | **Pb** | **09 19 44.2** | **-1.1** |
| **YER** | **Yerkesik** | **0.96** | **133** | *e*Pg | | **Pb** | **09 19 44.2** | **-1.1** |
| **AKHS** | **Akhisar** | **1.13** | **16** | *i*P | | **Pn** | **09 19 47.7** | **-1.0** |
| AKHS | | | | *i*S | | **Sb** | **09 20 03.3** | **0.0** |
| **AKHS** | **Akhisar** | **1.13** | **16** | P | | **Pn** | **09 19 47.7** | **-1.0** |
| AKHS | | | | S | | **Sb** | **09 20 03.2** | **0.0** |
| **AKS** | **Akhisar** | **1.13** | **16** | *e*PN | | **Pn** | **09 19 47.4** | **-1.3** |
| **AKS** | **Akhisar** | **1.13** | **16** | *e*Pn | | **Pn** | **09 19 47.4** | **-1.3** |
| **MANT** | **Manisa** | **1.15** | **52** | *i*P | | **Pn** | **09 19 48.1** | **-1.0** |
| MANT | | | | *i*S | | **Sb** | **09 20 02.4** | **-1.5** |
| **MANT** | **Manisa** | **1.15** | **52** | P | | **Pn** | **09 19 48.1** | **-1.0** |
| MANT | | | | S | | **Sb** | **09 20 02.4** | **-1.5** |
| **CHOS** | **Chios island** | **1.22** | **300** | *e*PN | | **Pn** | **09 19 48.8** | **-1.1** |
| CHOS | | | | *e*SN | | **Sb** | **09 20 07.0** | **+1.2** |
| **CHOS** | **Chios island** | **1.22** | **300** | *e*Pn | | **Pn** | **09 19 48.8** | **-1.1** |
| CHOS | | | | *e*Sn | | **Sb** | **09 20 07.0** | **+1.2** |
| **KULA** | **Kula-Manisa** | **1.23** | **53** | *e*PN | | **Pn** | **09 19 48.9** | **-1.1** |
| **KULA** | **Kula-Manisa** | **1.23** | **53** | *e*Pn | | **Pn** | **09 19 48.9** | **-1.1** |
| **DENT** | **Denizli** | **1.29** | **91** | *e*PN | | **Pn** | **09 19 49.3** | **-1.6** |
| **DENT** | **Denizli** | **1.29** | **91** | *e*Pn | | **Pn** | **09 19 49.3** | **-1.6** |
| **DNZL** | **Cakiroluk** | **1.31** | **94** | *i*P | | **Pn** | **09 19 51.0** | **-0.2** |
| **DNZL** | **Cakiroluk** | **1.31** | **94** | P | | **Pn** | **09 19 51.0** | **-0.2** |
| DNZL | | | | S | | **Sg** | **09 20 12.5** | **+4.2** |
| **DALY** | **Dalyan (Mu˘la** | **1.39** | **134** | *e*PN | | **Pn** | **09 19 52.5** | **+0.3** |
| **DALY** | **Dalyan (Mu˘la** | **1.39** | **134** | *e*Pn | | **Pn** | **09 19 52.5** | **+0.3** |
| **PRK** | **Paraskevi** | **1.70** | **329** | *e*PB | | **Pn** | **09 19 58.3** | **+1.8** |
| PRK | | | | *e*SN | | **Sb** | **09 20 21.7** | **+2.1** |
| **PRK** | **Paraskevi** | **1.70** | **329** | *e*Pb | | **Pn** | **09 19 58.3** | **+1.8** |
| PRK | | | | *e*Sn | | **Sb** | **09 20 21.7** | **+2.1** |
| **FETY** | **Fethiye** | **1.77** | **130** | *e*PN | | **Pn** | **09 19 56.8** | **-0.6** |
| **FETY** | **Fethiye** | **1.77** | **130** | *e*Pn | | **Pn** | **09 19 56.8** | **-0.6** |
| **SIGR** | **SIGRI** | **1.87** | **320** | *e*PN | | **Pn** | **09 20 00.0** | **+1.3** |
| SIGR | | | | *e*SN | | **Sb** | **09 20 25.2** | **+0.8** |
| **SIGR** | **SIGRI** | **1.87** | **320** | *e*Pn | | **Pn** | **09 20 00.0** | **+1.3** |
| SIGR | | | | *e*Sn | | **Sb** | **09 20 25.2** | **+0.8** |
| **BALY** | **Balya** | **1.96** | **5** | *i*P | | **Pn** | **09 19 59.6** | **-0.4** |
| BALY | | | | *i*S | | **Sn** | **09 20 23.9** | **-0.9** |
| **BALY** | **Balya** | **1.96** | **5** | P | | **Pn** | **09 19 59.6** | **-0.4** |
| BALY | | | | S | | **Sn** | **09 20 23.9** | **-0.9** |
| **LIA** | **Limnos Island** | **2.73** | **321** | *e*PN | | **Pn** | **09 20 11.3** | **+0.8** |
| **LIA** | **Limnos Island** | **2.73** | **321** | *e*Pn | | **Pn** | **09 20 11.3** | **+0.8** |

*ATH **14** 09:25:45.9, 35.89N×29.38E, h12km±3km, MD3.4/6*
*ISK **14** 09:25:45.1, 36.18N×29.54E, h26km, MD3.2, ML3.1*
*ISCJB **14** 09:25:45.6±0.3, 36.15N±0.03×29.60E±0.03, h43km±5km, Error ellipse: s-maj=4.9km s-min=3.2km az=20.4*
*DDA **14** 09:25:46.5, 36.28N×29.47E, h32km, Md3.3*
*CSEM **14** 09:25:46.3±0.1, 36.19N×29.59E, h30km, MD3.3, Error ellipse: s-maj=4.2km s-min=2.8km az=19.0*
*NIC **14** 09:25:47.6, 36.46N×30.02E, h16km, ML3.4*

**ISC 14 09:25:46.4±1.6, 36.18N±0.03×29.58E±0.02, h37km±1km, n75, σ0§99/104, 2C, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.03** | **176** | *e*PB | | **Pn** | **09 25 52.5** | **+0.1** |
| KSL | | | | *e*SB | | **Sn** | **09 25 56.6** | **+0.1** |
| **AKAS** | **Kas** | **0.06** | **19** | *i*P | | **Pn** | **09 25 52.3** | **-0.4** |
| AKAS | | | | *i*S | | **Sn** | **09 25 57.4** | **+0.4** |
| **AKAS** | **Kas** | **0.06** | **19** | P | | **Pn** | **09 25 52.3** | **-0.4** |
| AKAS | | | | S | | **Sn** | **09 25 57.5** | **+0.4** |
| **FETY** | **Fethiye** | **0.61** | **319** | PG | | **Pn** | **09 25 57.6** | **-1.1** |
| FETY | | | | *e*SG | | **Sn** | **09 26 06.5** | **-0.7** |
| **FETY** | **Fethiye** | **0.61** | **319** | *i*Pg | | **Pn** | **09 25 57.6** | **-1.1** |
| FETY | | | | *e*Sg | | **Sn** | **09 26 06.5** | **-0.7** |
| **ELL** | **Elmali** | **0.63** | **25** | *e*PG | | **Pn** | **09 25 58.2** | **-0.8** |
| **ELL** | **Elmali** | **0.63** | **25** | *e*Pg | | **Pn** | **09 25 58.3** | **-0.8** |
| **DALY** | **Dalyan (Mu˘la** | **0.98** | **311** | *e*PG | | **Pn** | **09 26 03.1** | **-0.5** |
| DALY | | | | *e*SG | | **Sn** | **09 26 16.6** | **+0.3** |
| **DALY** | **Dalyan (Mu˘la** | **0.98** | **311** | *e*Pg | | **Pn** | **09 26 03.1** | **-0.5** |
| DALY | | | | *e*Sg | | **Sn** | **09 26 16.6** | **+0.3** |
| **KORT** | **Korkueli** | **1.03** | **37** | *i*P | | **Pn** | **09 26 04.7** | **+0.3** |
| KORT | | | | *i*S | | **Sn** | **09 26 19.2** | **+1.6** |
| **KORT** | **Korkueli** | **1.03** | **37** | P | | **Pn** | **09 26 04.7** | **+0.3** |
| KORT | | | | S | | **Sn** | **09 26 19.2** | **+1.6** |
| **TURN** | **Turunc** | **1.05** | **312** | *i*P | | **Pn** | **09 26 06.7** | **+2.2** |
| **TURN** | **Turunc** | **1.05** | **312** | P | | **Pn** | **09 26 06.7** | **+2.2** |
| TURN | | | | S | | **Sn** | **09 26 22.2** | **+4.3** |
| **GOLH** | **Golhisar** | **1.06** | **359** | *i*P | | **Pn** | **09 26 04.8** | **0.0** |
| GOLH | | | | *i*S | | **Sn** | **09 26 19.3** | **+1.0** |
| **GOLH** | **Golhisar** | **1.06** | **359** | P | | **Pn** | **09 26 04.8** | **0.0** |
| GOLH | | | | S | | **Sn** | **09 26 19.3** | **+1.0** |
| **ANTB** | **Antalya** | **1.13** | **50** | *e*PN | | **Pn** | **09 26 05.9** | **+0.3** |
| **ANTB** | **Antalya** | **1.13** | **50** | *e*Pn | | **Pn** | **09 26 05.9** | **+0.3** |
| **ARG** | **Arkhangelos** | **1.18** | **272** | *e*PB | | **Pn** | **09 26 06.0** | **-0.2** |
| ARG | | | | *e*SB | | **Sn** | **09 26 21.0** | **0.0** |
| **ARG** | **Arkhangelos** | **1.18** | **272** | *e*Pg | | **Pn** | **09 26 06.0** | **-0.2** |
| ARG | | | | *e*Sb | | **Sn** | **09 26 21.0** | **0.0** |
| **YER** | **Yerkesik** | **1.42** | **313** | *e*PN | | **Pn** | **09 26 09.4** | **-0.1** |
| **YER** | **Yerkesik** | **1.42** | **313** | *e*Pn | | **Pn** | **09 26 09.5** | **-0.1** |
| **BCK** | **Bucak** | **1.52** | **32** | *e*PN | | **Pn** | **09 26 11.8** | **+0.8** |
| **BCK** | **Bucak** | **1.52** | **32** | *e*Pn | | **Pn** | **09 26 11.8** | **+0.8** |
| **DNZL** | **Cakiroluk** | **1.57** | **344** | *i*P | | **Pn** | **09 26 13.8** | **+1.9** |
| DNZL | | | | *i*S | | **Sn** | **09 26 30.3** | **-0.7** |
| **DNZL** | **Cakiroluk** | **1.57** | **344** | P | | **Pn** | **09 26 13.8** | **+1.9** |
| DNZL | | | | S | | **Sn** | **09 26 30.3** | **-0.7** |
| **DENT** | **Denizli** | **1.64** | **345** | *e*PN | | **Pn** | **09 26 12.9** | **+0.3** |
| **DENT** | **Denizli** | **1.64** | **345** | *e*Pn | | **Pn** | **09 26 12.9** | **+0.3** |
| **BDRM** | **Kayabasi** | **1.94** | **298** | *i*P | | **Pn** | **09 26 18.8** | **+2.1** |
| BDRM | | | | *i*S | | **Sn** | **09 26 38.9** | **-0.8** |
| **BDRM** | **Kayabasi** | **1.94** | **298** | P | | **Pn** | **09 26 18.8** | **+2.1** |
| BDRM | | | | S | | **Sn** | **09 26 38.9** | **-0.8** |
| **NISR** | **Nisiros** | **2.03** | **283** | *e*PG | | Pn | 09 26 21.9 | +4.0 |
| **BODT** | **Bodrum** | **2.03** | **297** | *e*PN | | **Pn** | **09 26 18.0** | **0.0** |
| **BODT** | **Bodrum** | **2.03** | **297** | *e*Pn | | **Pn** | **09 26 18.0** | **0.0** |
| **KARP** | **Karpathos** | **2.06** | **253** | *e*PN | | **Pn** | **09 26 18.7** | **+0.2** |
| KARP | | | | *e*SN | | **Sn** | **09 26 43.4** | **+0.4** |
| **KARP** | **Karpathos** | **2.06** | **253** | *e*Pn | | **Pn** | **09 26 18.7** | **+0.2** |
| KARP | | | | *e*Sn | | **Sn** | **09 26 43.4** | **+0.4** |
| **KHL** | **Karahalli** | **2.14** | **359** | *e*PN | | **Pn** | **09 26 20.0** | **+0.4** |
| **KHL** | **Karahalli** | **2.14** | **359** | *e*Pn | | **Pn** | **09 26 20.0** | **+0.4** |
| **KHAL** | **Karahalli** | **2.19** | **358** | *i*P | | **Pn** | **09 26 19.5** | **-0.8** |
| KHAL | | | | *i*S | | **Sn** | **09 26 47.2** | **+0.9** |
| **KHAL** | **Karahalli** | **2.19** | **358** | P | | **Pn** | **09 26 19.5** | **-0.8** |
| KHAL | | | | S | | **Sn** | **09 26 47.2** | **+0.9** |
| **GAZI** | **Gazipasa** | **2.21** | **88** | *i*P | | **Pn** | **09 26 19.9** | **-0.6** |
| GAZI | | | | *i*S | | **Sn** | **09 26 45.7** | **-0.9** |
| **GAZI** | **Gazipasa** | **2.21** | **88** | P | | **Pn** | **09 26 19.9** | **-0.6** |
| GAZI | | | | S | | **Sn** | **09 26 45.7** | **-0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.23** | **323** | *e*PN | | **Pn** | **09 26 21.1** | **+0.3** |
| **KULA** | **Kula-Manisa** | **2.45** | **343** | *e*PN | | **Pn** | **09 26 24.6** | **+0.8** |
| **HDMB** | **Hadim** | **2.47** | **71** | *e*PN | | **Pn** | **09 26 25.3** | **+1.1** |
| **HDMB** | **Hadim** | **2.47** | **71** | *e*Pn | | **Pn** | **09 26 25.3** | **+1.1** |
| **AKMC** | **Akamas** | **2.52** | **116** | P | | **Pn** | **09 26 25.0** | **+0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ULHL** | **Ulahol** | **0.35** | **164** | P | | **Pg** | **09 32 47.5** | **-0.1** |
| | 69nm,0.3s,SNR=185 | | | | | | | |
| ULHL | | | | ⇓S | | **Sg** | **09 32 52.5** | **+0.4** |
| | 32nm,0.2s | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.51** | **312** | ⇓P | | **Pg** | **09 32 50.1** | **-0.4** |
| | 3.8nm,0.3s | | | | | | | |
| TKM2 | | | | ⇓S | | **Sg** | **09 32 57.7** | **+0.4** |
| | 87nm,0.3s | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.51** | **312** | ⇑*i*P | | **Pg** | **09 32 50.4** | **-0.2** |
| | baz=313 | | | | | | | |
| TKM2 | | | | ⇑*i*S | | **Sg** | **09 32 57.6** | **+0.4** |
| | baz=313 | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.51** | **312** | ⇑P | | **Pg** | **09 32 50.6** | **0.0** |
| | 18nm,0.2s,SNR=9.8 | | | | | | | |
| TKM2 | | | | ⇑S | | **Sg** | **09 32 57.8** | **+0.4** |
| | 205nm,0.2s | | | | | | | |
| **KZA** | **Kyzart** | **0.82** | **232** | ⇑*i*P | | **Pg** | **09 32 56.1** | **-0.3** |
| | baz=233 | | | | | | | |
| KZA | | | | ⇑*i*S | | **Sg** | **09 33 07.2** | **+0.2** |
| | baz=233 | | | | | | | |
| **KZA** | **Kyzart** | **0.82** | **232** | ⇑P | | **Pg** | **09 32 56.5** | **+0.2** |
| | 2.0nm,0.1s,SNR=9.6 | | | | | | | |
| KZA | | | | ⇑S | | **Sb** | **09 33 08.3** | **-0.4** |
| | 15nm,0.2s | | | | | | | |
| **KBK** | **Karagaybulak** | **0.87** | **275** | ⇑*i*P | | **Pg** | **09 32 57.0** | **-0.3** |
| | baz=276 | | | | | | | |
| KBK | | | | ⇑*i*S | | **Sg** | **09 33 08.9** | **+0.3** |
| | baz=276 | | | | | | | |
| **KBK** | **Karagaybulak** | **0.87** | **275** | P | | **Pg** | **09 32 57.3** | **0.0** |
| | 7.2nm,0.2s,SNR=8.5 | | | | | | | |
| KBK | | | | ⇓S | | **Sb** | **09 33 09.7** | **-0.3** |
| | 28nm,0.2s | | | | | | | |
| **CHMS** | **Chumysh** | **1.09** | **293** | ⇑*i*P | | **Pg** | **09 33 00.4** | **-1.1** |
| | baz=294 | | | | | | | |
| CHMS | | | | ⇑*i*S | | **Sg** | **09 33 14.6** | **-1.1** |
| | baz=294 | | | | | | | |
| **NRN** | **Naryn** | **1.15** | **184** | ⇑*e*P | | **Pg** | **09 33 02.2** | **-0.5** |
| | baz=185 | | | | | | | |
| NRN | | | | ⇑*i*S | | **Sg** | **09 33 17.3** | **-0.3** |
| | baz=185 | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.16** | **79** | ⇓*i*P | | **Pg** | **09 33 02.2** | **-0.7** |
| | baz=79 | | | | | | | |
| ANVS | | | | ⇓*i*S | | **Sg** | **09 33 17.9** | **-0.1** |
| | baz=79 | | | | | | | |
| **AAK** | **Ala-Archa** | **1.20** | **273** | ⇑P | | **Pg** | **09 33 02.6** | **-1.0** |
| | 0.8nm,0.3s | | | | | | | |
| AAK | | | | ⇑S | | **Sg** | **09 33 18.5** | **-0.7** |
| | 5.7nm,0.3s | | | | | | | |
| **AAK** | **Ala-Archa** | **1.20** | **273** | ⇑*i*P | | **Pg** | **09 33 02.5** | **-1.2** |
| | baz=273 | | | | | | | |
| AAK | | | | ⇑*i*S | | **Sg** | **09 33 18.7** | **-0.5** |
| | baz=273 | | | | | | | |
| **AAK** | **Ala-Archa** | **1.20** | **273** | P | | **Pg** | **09 33 02.9** | **-0.8** |
| | SNR=6.8 | | | | | | | |
| **UCH** | **Uchtor** | **1.24** | **254** | ⇓*i*P | | **Pg** | **09 33 03.5** | **-0.9** |
| | baz=254 | | | | | | | |
| UCH | | | | ⇓*i*S | | **Sg** | **09 33 19.5** | **-1.0** |
| | baz=254 | | | | | | | |
| **UCH** | **Uchtor** | **1.24** | **254** | ⇓P | | **Pg** | **09 33 03.6** | **-0.9** |
| | 2.1nm,0.2s,SNR=5.4 | | | | | | | |
| **EKS** | **Erkin-Say** | **1.72** | **274** | ⇓*i*P | | **Pb** | **09 33 12.9** | **+0.2** |
| | baz=274 | | | | | | | |
| EKS | | | | ⇓*i*S | | **Sg** | **09 33 36.4** | **+0.4** |
| | baz=274 | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.73** | **273** | ⇑*i*P | | **Pb** | **09 33 12.7** | **-0.1** |
| | baz=274 | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sb** | **09 33 35.4** | **+0.6** |
| | baz=274 | | | | | | | |
| **AML** | **Almayashu** | **1.85** | **257** | ⇑*i*P | | **Pb** | **09 33 14.6** | **-0.4** |
| | baz=257 | | | | | | | |
| AML | | | | ⇑*i*S | | **Sb** | **09 33 39.1** | **+0.6** |
| | baz=257 | | | | | | | |
| **PDGK** | **Podgornoye** | **2.58** | **72** | ⇓Pn | | **Pb** | **09 33 26.3** | **-0.9** |
| | 2.3nm,0.6s | | | | | | | |
| PDGK | | | | ⇓Sn | | **Sb** | **09 34 00.8** | **+1.6** |
| | 7.4nm,0.5s | | | | | | | |
| **KK31** | **Karatay Array** | **4.16** | **279** | ⇑Pg | | **Pb** | **09 33 56.5** | **+2.4** |
| | 0.8nm,0.7s,baz=95,slow=13,SNR=6.4 | | | | | | | |
| KK31 | | | | ⇓Lg | | Lg | 09 34 49.0 | |
| | 2.9nm,0.7s,baz=98,slow=28 | | | | | | | |

*DDA* **14** *09:38:05.7,36˚.79N×28˚.75E,h7km,Md2.7*
*ISCJB* **14** *09:38:07.1±0.6,36˚.84N±0˚.07×28˚.72E±0˚.07,h13km±6km, Error ellipse: s-maj=13.5km s-min=5.6km az=35.7*
*CSEM* **14** *09:38:07.5±0.3,36˚.94N×28˚.71E,h2km,MD2.8, Error ellipse: s-maj=8.2km s-min=6.2km az=31.0*
*ISK* **14** *09:38:07.2,36˚.85N×28˚.66E,h11km,MD2.8*

**ISC 14 09:38:07.6±1.1, 36˚.82N±0˚.06×28˚.64E±0˚.05, h11km±5km, n17, σ2s04/23, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DALY** | **Dalyan (Mu˘la** | **0.01** | **88** | *e*PG | | **Pg** | **09 38 09.2** | **-0.4** |
| DALY | | | | *e*SG | | **Sg** | **09 38 11.2** | **+0.3** |
| **DALY** | **Dalyan (Mu˘la** | **0.01** | **88** | *e*Pg | | **Pg** | **09 38 09.2** | **-0.4** |
| DALY | | | | *e*Sg | | **Sg** | **09 38 11.2** | **+0.3** |
| **TURN** | **Turunc** | **0.06** | **335** | *i* P | | Pg | 09 38 13.4 | +3.5 |
| **TURN** | **Turunc** | **0.06** | **335** | P | | Pg | 09 38 13.4 | +3.5 |
| TURN | | | | S | | Sg | 09 38 20.5 | +8.9 |
| **FETY** | **Fethiye** | **0.40** | **117** | ePG | | **Pg** | **09 38 15.9** | **+0.3** |
| **FETY** | **Fethiye** | **0.40** | **117** | *e*Pg | | **Pg** | **09 38 15.9** | **+0.3** |
| **YER** | **Yerkesik** | **0.42** | **318** | ePG | | **Pg** | **09 38 15.1** | **-0.9** |
| YER | | | | *e*SG | | **Sg** | **09 38 22.6** | **+0.9** |
| **YER** | **Yerkesik** | **0.42** | **318** | *e*Pg | | **Pg** | **09 38 15.1** | **-0.9** |
| YER | | | | *e*Sg | | **Sg** | **09 38 22.6** | **+0.9** |
| **GOLH** | **Golhisar** | **0.85** | **60** | *i* P | | Pg | 09 38 20.8 | -3.3 |
| GOLH | | | | *i* S | | **Sg** | **09 38 32.5** | **-2.7** |
| **GOLH** | **Golhisar** | **0.85** | **60** | P | | Pg | 09 38 20.8 | -3.3 |
| GOLH | | | | S | | **Sg** | **09 38 32.5** | **-2.7** |
| **AKAS** | **Kas** | **0.97** | **126** | *i* P | | **Pn** | **09 38 28.5** | **+1.2** |
| AKAS | | | | *i* S | | **Sg** | **09 38 35.8** | **-3.3** |
| **AKAS** | **Kas** | **0.97** | **126** | P | | **Pn** | **09 38 28.5** | **+1.2** |
| AKAS | | | | S | | **Sg** | **09 38 35.8** | **-3.3** |
| **ELL** | **Elmali** | **1.02** | **93** | *e*PG | | **Pg** | **09 38 26.7** | **-0.6** |
| **ELL** | **Elmali** | **1.02** | **93** | *e*Pg | | **Pg** | **09 38 26.7** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.27** | **332** | *e*PN | | **Pn** | **09 38 30.9** | **-0.6** |
| AYDB | | | | *e*SN | | **Sb** | **09 38 49.1** | **+1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.27** | **332** | *e*Pn | | **Pn** | **09 38 30.9** | **-0.6** |
| AYDB | | | | *e*Sn | | **Sb** | **09 38 49.1** | **+1.0** |
| **KORT** | **Korkueli** | **1.39** | **82** | P | | Pg | 09 38 42.5 | +8.2 |
| KORT | | | | S | | **Sg** | **09 38 58.0** | **+5.7** |

*NIED* **14** *09:41:00,44˚.10N×147˚.90E,h47km,Mw4.1 Best double couple: M0 1.65000×10^15 NP1:φs247.00000°,δ21.00000°, λ135.00000°. NP2:φs20.00000°,δ75.00000°,λ75.00000°.*
*BJI* **14** *09:41:30.8,44˚.36N×148˚.74E,h56km,mb4.7/14,mB4.7/7, Ms4.3/5, Ms7 4.0/5*
*ISCJB* **14** *09:41:33.8±0.6,44˚.35N±0˚.04×148˚.13E±0˚.06,h60km±4km, mb4.2/33, Error ellipse: s-maj=8.5km s-min=4.5km az=41.4*
*JMA* **14** *09:41:34.2±0.3,44˚.07N×147˚.89E,h0km,M5.0*
*MOS* **14** *09:41:34.0±1.2,44˚.44N×148˚.03E,h60km,mb4.4/25, Error ellipse: s-maj=8.5km s-min=7.5km az=82.9*
*MOS Felt (II-III) at Goryachye Klyuchi, Gornoye.*
*SKHL* **14** *09:41:35.4±0.4,44˚.33N×148˚.12E,h71km±2km,mb4.6/10*
*SKHL Felt (II-III) at Goryachie Klyuchi, Gorny.*
*IDC* **14** *09:41:36.8±2.4,44˚.45N×148˚.12E,h67km±20km,mb3.9/27, mb1 4.0/32,mb1mx3.9/56,mbtmp4.2/32,MS3.3/6, Ms1 3.3/6,ms1mx3.0/37, Error ellipse: s-maj=16.0km s-min=11.0km az=151.0*
*NEIC* **14** *09:41:36.8±0.9,44˚.49N×148˚.09E,h68km±8km,mb4.5/3, Error ellipse: s-maj=11.3km s-min=6.7km az=142.0*
*NEIC Felt [III] at Kuril'sk.*

**ISC 14 09:41:34.7±1.0, 44˚.37N±0˚.05×148˚.13E±0˚.06, h51km±8km, n155, σ1s22/165, mb4.2/33, MS3.3/5, 6C-5D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **0.88** | **348** | *d* iPN | | **Pn** | **09 41 51.1** | **+0.3** |
| KUR | | | | *i* S | | **Sn** | **09 42 03.1** | **+0.5** |
| KUR | | | | | pmax | pmax | | |
| | comp=N,411nm,0.5s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,2μm,0.5s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,375nm,0.3s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,3μm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **0.88** | **348** | *e*P | | **Pn** | **09 41 51.1** | **+0.3** |
| KUR | | | | | AMB | AMB | 09 41 51.6 | |
| | comp=N,411nm,0.4s | | | | | | | |
| KUR | | | | | AMB | AMB | 09 41 51.6 | |
| | comp=N,375nm,0.4s | | | | | | | |
| KUR | | | | | AMB | AMB | 09 41 51.6 | |
| | comp=N,2μm,0.4s | | | | | | | |
| KUR | | | | *e*S | | **Sn** | **09 42 03.0** | **+0.5** |
| KUR | | | | A | | A | 09 42 05.1 | |
| | comp=N,3μm,0.5s | | | | | | | |
| KUR | | | | A | | A | 09 42 05.1 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **1.06** | **242** | *d* iPN | | **Pn** | **09 41 52.8** | **-0.4** |
| SHO | | | | *i* S | | **Sn** | **09 42 05.5** | **-1.5** |
| SHO | | | | | pmax | pmax | | |
| | comp=N,311nm,0.3s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=E,400nm,0.3s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,901nm,0.3s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=N,3μm,0.5s | | | | | | | |
| SHO | | | | | smax | smax | | |
| | comp=E,8μm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **1.06** | **242** | *e*P | | **Pn** | **09 41 52.8** | **-0.4** |
| SHO | | | | | AMB | AMB | 09 41 53.1 | |
| | comp=E,900nm,0.3s | | | | | | | |
| SHO | | | | *e*S | | **Sn** | **09 42 05.5** | **-1.5** |
| SHO | | | | A | | A | 09 42 06.0 | |
| | comp=E,8μm,0.5s | | | | | | | |
| SHO | | | | A | | A | 09 42 06.0 | |
| | comp=E,3μm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.67** | **259** | *d* iPN | | **Pn** | **09 42 01.9** | **+0.5** |
| YUK | | | | *i* S | | **Sn** | **09 42 21.9** | **+0.3** |
| YUK | | | | | pmax | pmax | | |
| | comp=N,721nm,0.2s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=E,437nm,0.2s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,2μm,0.2s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=N,2μm,0.7s | | | | | | | |
| YUK | | | | | smax | smax | | |
| | comp=E,4μm,0.7s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.67** | **259** | *e*P | | **Pn** | **09 42 01.9** | **+0.5** |
| YUK | | | | | AMB | AMB | 09 42 03.6 | |
| | comp=E,72nm,0.4s | | | | | | | |
| YUK | | | | | AMB | AMB | 09 42 03.6 | |
| | comp=E,44nm,0.4s | | | | | | | |
| YUK | | | | | AMB | AMB | 09 42 03.6 | |
| | comp=E,189nm,0.4s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **09 42 21.9** | **+0.3** |
| YUK | | | | A | | A | 09 42 26.1 | |
| | comp=E,2μm,0.7s | | | | | | | |
| YUK | | | | A | | A | 09 42 26.1 | |
| | comp=E,4μm,0.7s | | | | | | | |
| **NEM2** | **Nemuro 2** | **2.00** | **241** | P | | **Pn** | **09 42 05.5** | **-0.5** |
| NEM2 | | | | *e*S | | **Sn** | **09 42 27.9** | **-1.9** |
| **JRA** | **Rausu** | **2.21** | **260** | P | | **Pn** | **09 42 10.3** | **+1.5** |
| **JNK** | **Nakash** | **2.59** | **253** | *e*S | | **Sn** | **09 42 44.5** | **+0.3** |
| **JAK** | **Akkeshi** | **2.85** | **242** | P | | **Pn** | **09 42 17.7** | **+0.1** |
| JAK | | | | *e*S | | **Sn** | **09 42 49.8** | **-0.8** |
| **JTKR** | **Abashiri--Toko** | **3.06** | **264** | P | | **Pn** | **09 42 21.9** | **+1.3** |
| **JAR** | **Ashorobuto** | **3.33** | **253** | P | | **Pn** | **09 42 25.9** | **+1.6** |
| JAR | | | | *e*S | | **Sn** | **09 43 04.2** | **+1.6** |
| **JOB** | **Onbets** | **3.45** | **246** | P | | **Pn** | **09 42 26.7** | **+0.9** |
| JOB | | | | *e*S | | **Sn** | **09 43 05.6** | **+0.2** |
| **JMP** | **Maruseppu** | **3.45** | **266** | P | | **Pn** | **09 42 27.6** | **+1.7** |
| **JCH** | **Churui** | **3.89** | **245** | P | | **Pn** | **09 42 32.0** | **+0.1** |
| JCH | | | | *e*S | | **Sn** | **09 43 15.1** | **-1.2** |
| **JKK2** | **Kamakawa 2** | **3.91** | **265** | P | | **Pn** | **09 42 34.3** | **+2.1** |
| **JKA** | **Kamikawa-asahi** | **3.98** | **268** | *e*P | | **Pn** | **09 42 35.5** | **+2.3** |
| **ASAJ** | **Asahikawa** | **3.98** | **268** | P | | **Pn** | **09 42 35.5** | **+2.3** |
| | comp=E,4.9nm,0.3s,baz=59,slow=19,SNR=36 | | | | | | | |
| ASAJ | | | | | S | Sn | 09 43 31.1 | +12 |
| | comp=E,4.4nm,0.3s,baz=151,slow=19,SNR=3.2 | | | | | | | |
| ASAJ | | | | | LR | LR | 09 44 15.8 | |
| | comp=E,378nm,20.9s,baz=134,slow=40 | | | | | | | |
| **JSE** | **Soyaes** | **4.00** | **280** | P | | **Pn** | **09 42 35.1** | **+1.7** |
| **ERM** | **Erimo** | **4.33** | **239** | *c* iPN | | **Pn** | **09 42 40.7** | **+2.7** |
| **ERM** | **Erimo** | **4.33** | **239** | *e*P | | **Pn** | **09 42 40.7** | **+2.7** |
| **ERM** | **Erimo** | **4.33** | **239** | *e*Pn | | **Pn** | **09 42 40.7** | **+2.7** |
| ERM | | | | *e*Sn | | **Sn** | **09 43 33.0** | **+5.8** |
| **JNBK** | **Urakawa-nobuka** | **4.45** | **244** | P | | **Pn** | **09 42 39.5** | **0.0** |
| **JWK2** | **Keihoku** | **4.53** | **284** | P | | Pn | 09 42 43.9 | +3.2 |
| **YSS** | **Yuzh-Sakhalins** | **4.57** | **306** | ‖ePN | | **Pn** | **09 42 42.5** | **+1.4** |
| YSS | | | | *e*S | | **Sn** | **09 43 35.0** | **+2.1** |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,70nm,0.5s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.57** | **306** | *e*P | | **Pn** | **09 42 42.5** | **+1.4** |
| YSS | | | | | AMB | AMB | 09 42 43.0 | |
| | comp=Z,70nm,0.5s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.57** | **306** | *e*Pn | | **Pn** | **09 42 42.2** | **+1.1** |
| **UGL** | **Uglegorsk** | **6.29** | **321** | *e*PN | | **Pn** | **09 43 02.9** | **-1.8** |
| UGL | | | | *e* | | | 09 44 15.6 | |
| **UGL** | **Uglegorsk** | **6.29** | **321** | *e*rx | | rx | 09 43 02.9 | |
| **TYV** | **Tymovskoe** | **7.47** | **332** | *e*P | | **Pn** | **09 43 24.0** | **+3.1** |
| TYV | | | | | AMB | AMB | 09 43 27.5 | |
| | comp=Z,22nm,0.5s | | | | | | | |
| TYV | | | | | AMB | AMB | 09 43 27.5 | |
| | comp=Z,13nm,0.5s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **8.30** | **38** | *e*PN | | **Pn** | **09 43 30.0** | **-2.3** |
| **SKR** | **Severo-Kuril's** | **8.30** | **38** | *e*P | | **Pn** | **09 43 34.9** | **+2.6** |
| **HABR** | **Khabarovsk** | **9.92** | **299** | *e*PN | | **Pn** | **09 43 53.0** | **-1.4** |
| HABR | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| HABR | | | | | MLR | MLR | | |
| | comp=Z,90nm,16.0s | | | | | | | |
| **HABR** | **Khabarovsk** | **9.92** | **299** | *e*P | | **Pn** | **09 43 53.0** | **-1.4** |
| **PETK** | **Petropavlovsk-** | **10.77** | **32** | P | | **Pn** | **09 44 06.5** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=197,slow=17,SNR=4.5 | | | | | | | |
| **MAJO** | **Matsushiro** | **10.87** | **227** | *i* PN | | **Pn** | **09 44 06.7** | **-0.9** |
| **MAJO** | **Matsushiro** | **10.87** | **227** | *e*P | | **Pn** | **09 44 06.7** | **-0.9** |
| **MAT** | **Matsushiro** | **10.87** | **227** | P | | **Pn** | **09 44 07.2** | **-0.4** |
| **USRK** | **Ussuriysk Ar.** | **11.58** | **275** | P | | **Pn** | **09 44 19.2** | **+2.1** |
| | comp=Z,0.3nm,0.3s,baz=89,slow=12,SNR=13 | | | | | | | |
| USRK | | | | | LR | LR | 09 48 40.8 | |
| | comp=Z,104nm,21.6s,baz=54,slow=37 | | | | | | | |
| **VLA** | **Vladivostok** | **11.82** | **270** | ‖ePN | | **Pn** | **09 44 20.0** | **-0.4** |
| **VLA** | **Vladivostok** | **11.82** | **270** | *e*P | | **Pn** | **09 44 20.0** | **-0.4** |
| **KLR** | **Kul'dur** | **12.22** | **299** | *e*PN | | **Pn** | **09 44 27.3** | **+1.4** |
| **KLR** | **Kul'dur** | **12.22** | **299** | *e*rx | | rx | 09 44 27.3 | |
| **EKMR** | **Ekimchan** | **13.25** | **316** | *e*P | | **Pn** | **09 44 40.5** | **+0.6** |
| EKMR | | | | | AMB | AMB | 09 44 45.0 | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **BMKR** | **Bomnak** | **16.18** | **317** | *e*P | | **Pn** | **09 45 18.5** | **+0.1** |
| BMKR | | | | | AMB | AMB | 09 45 22.5 | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **ZEA** | **Zeya** | **16.53** | **312** | *e*P | | **Pn** | **09 45 21.5** | **-1.3** |
| ZEA | | | | | AMB | AMB | 09 45 28.5 | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **KSRS** | **Korea Array** | **16.75** | **253** | P | | **Pn** | **09 45 24.3** | **-1.2** |
| | comp=Z,0.2nm,0.3s,baz=63,slow=12,SNR=4.4 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **16.78** | **253** | P | | **Pn** | **09 45 24.3** | **-1.7** |
| **KSAR** | **Wonju Array Be** | **16.78** | **253** | P | | **Pn** | **09 45 24.3** | **-1.7** |
| **KROS** | **Kirovskiy** | **16.99** | **314** | *e*P | | **Pn** | **09 45 27.0** | **-1.6** |
| KROS | | | | | AMB | AMB | 09 45 31.4 | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **JNU** | **Nakatsue** | **17.49** | **236** | P | | **P** | **09 45 38.1** | **+2.6** |
| | comp=Z,0.4nm,0.3s,baz=37,slow=5.1,SNR=6.2 | | | | | | | |
| **SEY** | **Seymchan** | **18.76** | **6** | P | | **P** | **09 45 48.5** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=159,slow=17,SNR=6.3 | | | | | | | |
| **YAK** | **Yakutsk** | **20.72** | **335** | LR | | LR | 09 54 01.0 | |
| | comp=Z,99nm,21.3s,baz=176,slow=36 | | | | | | | |
| **YAK** | **Yakutsk** | **20.72** | **335** | *e*P | | **P** | **09 46 07.3** | **-3.2** |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **TIA** | **Tai'an** | **24.90** | **262** | ⇑P | | **P** | **09 46 54.3** | **+1.5** |
| TIA | | | | | PMZ | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **27.00** | **275** | *e*P | | **P** | **09 47 10.8** | **-1.0** |
| HHC | | | | S | | **S** | **09 51 45.3** | **-0.4** |
| HHC | | | | | PMZ | | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| HHC | | | | | PMZ | | | |
| | comp=Z,97nm,3.6s | | | | | | | |
| HHC | | | | | LN | | | |
| | comp=Z,150nm,13.4s | | | | | | | |
| HHC | | | | | LE | | | |
| | comp=Z,150nm,10.3s | | | | | | | |
| HHC | | | | | LZ | | | |
| | comp=Z,70nm,11.3s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.45** | **292** | *de*P | | **P** | **09 47 25.6** | **+0.9** |
| ULN | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.45** | **292** | *e*P | | **P** | **09 47 25.6** | **+0.9** |
| **SONM** | **Songino Array** | **28.89** | **292** | P | | **P** | **09 47 29.6** | **+1.0** |
| | comp=Z,1.4nm,0.8s,baz=76,slow=8.7,SNR=7.6 | | | | | | | |
| SONM | | | | | LR | LR | 10 00 05.1 | |
| | comp=Z,77nm,19.2s,baz=112,slow=38 | | | | | | | |
| **SONM** | **Songino Array** | **28.89** | **292** | P | | **P** | **09 47 29.6** | **+1.0** |
| SONM | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| SONM | | | | | MLR | MLR | | |
| | comp=Z,77nm,19.2s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.13** | **141** | T | | T | 10 18 28.2 | |
| | baz=332,slow=76,SNR=534 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.14** | **142** | T | | T | 10 18 25.3 | |
| | baz=332,slow=76,SNR=394 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.15** | **141** | T | | T | 10 18 29.6 | |
| | baz=332,slow=76,SNR=386 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.12** | **143** | T | | T | 10 19 43.1 | |
| | baz=333,slow=76,SNR=931 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.13** | **143** | T | | T | 10 19 44.5 | |
| | baz=333,slow=76,SNR=737 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.14** | **143** | T | | T | 10 19 37.8 | |
| | baz=333,slow=76,SNR=578 | | | | | | | |
| **KDAK** | **Kodiak Island** | **38.30** | **48** | P | | **P** | **09 48 50.4** | **+0.4** |
| | comp=Z,3.2nm,0.6s,baz=258,slow=3.4,SNR=7.7 | | | | | | | |
| **COLA** | **College** | **40.15** | **37** | *c* iP | | **P** | **09 49 06.7** | **+1.5** |
| COLA | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **COLA** | **College** | **40.15** | **37** | *e*P | | **P** | **09 49 06.7** | **+1.5** |
| **ILAR** | **Eielson Array** | **40.56** | **37** | P | | **P** | **09 49 08.0** | **-0.7** |
| | comp=Z,1.6nm,0.9s,baz=271,slow=8.7,SNR=18 | | | | | | | |
| **ILAR** | **Eielson Array** | **40.56** | **37** | P | | **P** | **09 49 08.0** | **-0.7** |
| ILAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **ILAR** | **Eielson Array** | **40.56** | **37** | *e*P | | **P** | **09 49 08.0** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **41.19** | **307** | PcP | | **PcP** | **09 51 12.1** | **-0.1** |
| | comp=Z,3.3nm,0.4s,baz=79,slow=3.3,SNR=5.9 | | | | | | | |
| ZALV | | | | | LR | LR | 10 07 14.7 | |
| | comp=Z,27nm,18.6s,baz=68,slow=37 | | | | | | | |
| **KMI** | **Kunming** | **41.34** | **258** | P | | **P** | **09 49 16.1** | **+0.3** |
| KMI | | | | | PMZ | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **EGAK** | **Eagle** | **43.01** | **36** | *e*P | | **P** | **09 49 28.3** | **-0.4** |
| **MKAR** | **Makanchi Array** | **44.92** | **297** | P | | **P** | **09 49 44.0** | **-0.3** |
| | comp=Z,2.6nm,0.6s,baz=78,slow=8.7,SNR=11 | | | | | | | |
| MKAR | | | | | PcP | **PcP** | **09 51 24.9** | **0.0** |
| | comp=Z,1.1nm,0.5s,baz=69,slow=5.0,SNR=8.0 | | | | | | | |
| MKAR | | | | | LR | LR | 10 09 41.4 | |
| | comp=Z,79nm,19.4s,baz=109,slow=38 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.92** | **297** | *c* eP | | **P** | **09 49 44.7** | **+0.4** |
| MKAR | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.92** | **297** | *e*P | | **P** | **09 49 44.7** | **+0.4** |
| **INK** | **Inuvik** | **45.51** | **31** | P | | **P** | **09 49 49.0** | **+0.5** |
| | comp=Z,2.6nm,0.7s,baz=299,slow=9.0,SNR=21 | | | | | | | |
| **INK** | **Inuvik** | **45.51** | **31** | P | | **P** | **09 49 49.0** | **+0.5** |
| INK | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **INK** | **Inuvik** | **45.51** | **31** | *e*P | | **P** | **09 49 49.0** | **+0.5** |
| **KURK** | **Kurchatov** | **45.77** | **304** | P | | **P** | **09 49 50.8** | **0.0** |
| KURK | | | | | | | 09 51 28.0 | |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **45.77** | **304** | *e*P | | **P** | **09 49 50.8** | **0.0** |
| **KURK** | **Kurchatov** | **45.77** | **304** | *e*P | | **P** | **09 49 49.8** | **-1.1** |
| | comp=Z,3.7nm,0.6s | | | | | | | |
| KURK | | | | | P | **P** | **09 49 50.8** | **0.0** |
| KURK | | | | | PcP | **PcP** | **09 51 28.0** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **45.85** | **304** | P | | **P** | **09 49 50.8** | **-0.7** |
| | comp=Z,1.2nm,0.4s,baz=70,slow=8.6,SNR=6.0 | | | | | | | |
| KURBB | | | | | PcP | **PcP** | **09 51 28.0** | **0.0** |
| | comp=Z,1.3nm,0.7s,baz=75,slow=3.5,SNR=14 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **48.38** | **254** | P | | **P** | **09 50 12.8** | **+1.2** |
| | comp=Z,1.4nm,0.4s,baz=41,slow=7.1,SNR=6.5 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **48.38** | **254** | *i* P | | **P** | **09 50 12.0** | **+0.4** |
| CMAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **48.38** | **254** | *e*P | | **P** | **09 50 12.0** | **+0.4** |
| **BVAR** | **Borovoye Array** | **49.66** | **309** | P | | **P** | **09 50 22.4** | **+1.4** |
| | comp=Z,0.8nm,0.4s,baz=84,slow=9.8,SNR=4.3 | | | | | | | |
| BVAR | | | | | PcP | **PcP** | **09 51 41.5** | **-0.1** |
| | comp=Z,1.0nm,0.4s,baz=33,slow=3.5,SNR=5.5 | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.66** | **309** | P | | **P** | **09 50 22.4** | **+1.4** |
| BVAR | | | | | | | 09 51 41.5 | |
| BVAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **TAPN** | **Taplejung** | **50.70** | **272** | *e*P | | **P** | **09 50 30.0** | **+0.4** |
| | comp=Z,16nm,0.8s | | | | | | | |
| **GUN** | **Gumba** | **51.68** | **273** | *e*P | | **P** | **09 50 37.0** | **0.0** |
| | comp=Z,15nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **51.73** | **296** | P | | **P** | **09 50 36.5** | **-0.3** |
| | comp=Z,1.0nm,0.3s,baz=281,slow=2.2,SNR=3.7 | | | | | | | |
| **AAK** | **Ala-Archa** | **51.73** | **296** | ‖*e*P | | **P** | **09 50 36.6** | **-0.3** |
| AAK | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **RAMN** | **Ramite** | **51.73** | **272** | *e*P | | **P** | **09 50 37.3** | **+0.1** |
| | comp=Z,44nm,0.4s | | | | | | | |
| **KKN** | **Kakani** | **52.18** | **274** | *e*P | | **P** | **09 50 41.3** | **+0.8** |
| **PKI** | **Pulchoki** | **52.22** | **273** | *e*P | | **P** | **09 50 40.9** | **0.0** |
| **PKIN** | **Phulchoki** | **52.23** | **273** | *e*

comp=Z,2.0nm,0.8s
**ULM Lac du Bonnet 70.57 38** P **P** 09 52 43.8 -0.4
comp=Z,2.3nm,0.5s,baz=332,slow=8.2,SNR=3.9
**ULM Lac du Bonnet 70.57 38** P **P** 09 52 43.8 -0.4
ULM pmax pmax
comp=Z,2.0nm,0.5s
**AKASG Malin Array Be 71.49 324** P **P** 09 52 48.9 -0.8
comp=Z,0.3nm,0.3s,baz=40,slow=5.8,SNR=5.0
**SCHQ Scheffer ville 76.80 20** P **P** 09 53 20.1 -0.4
comp=Z,1.5nm,0.4s,baz=312,slow=5.0,SNR=7.4
**CLL Collm 77.08 333** *e*P **P** 09 53 22.0 -0.2
**CLL Collm 77.08 333** *e*P **P** 09 53 22.0 -0.2
**CLL Collm 77.08 333** *e*P **P** 09 53 22.0 -0.2
**BRTR Keskin Array B 77.62 314** P **P** 09 53 25.8 +0.1
comp=Z,0.8nm,0.4s,baz=83,slow=2.1,SNR=7.1
**BRTR Keskin Array B 77.62 314** *i* P **P** 09 53 25.7 +0.1
BRTR pmax pmax
comp=Z,1.0nm,0.4s
**EKA Eskdalemuir Ar 77.73 344** P **P** 09 53 25.2 -0.5
comp=Z,0.7nm,0.3s,baz=21,slow=5.1,SNR=5.9
**EKA Eskdalemuir Ar 77.73 344** P **P** 09 53 25.2 -0.5
EKA pmax pmax
comp=Z,1.0nm,0.4s
**GERES GERESS Array B 78.95 331** P **P** 09 53 32.2 -0.6
comp=Z,0.5nm,0.4s,baz=2.9,slow=2.7,SNR=3.6
**GERES GERESS Array B 78.95 331** P **P** 09 53 32.2 -0.6
GERES pmax pmax
comp=Z,1.0nm,0.4s
**MMAI Mount Meron Ar 81.65 308** P **P** 09 53 48.3 +0.8
comp=Z,1.8nm,0.4s,baz=36,slow=8.9,SNR=6.3
**TXAR Lajitas Array 81.72 57** P **P** 09 53 48.5 +0.5
comp=Z,1.0nm,0.6s,baz=300,slow=3.8,SNR=17
**TXAR Lajitas Array 81.72 57** P **P** 09 53 48.5 +0.5
TXAR pmax pmax
comp=Z,1.0nm,0.6s
**IDI Anoyia 85.46 317** P **P** 09 54 05.6 -1.4
comp=Z,6.1nm,0.4s,baz=67,slow=15,SNR=7.4
**ESDC Sonseca Array 92.63 339** LR LR 10 45 38.0
comp=Z,175nm,18.6s,baz=140,slow=42
**TORD Torodi Ar. Bea 115.12 324** PKP **PKPdf** 10 00 09.3 -1.2
comp=Z,0.2nm,0.3s,baz=27,slow=1.9,SNR=7.7
**VNDA Vanda 121.92 177** PKP **PKPdf** 10 00 22.1 +0.4
comp=Z,0.5nm,1.0s,baz=333,slow=2.9,SNR=3.3
**VNDA Vanda 121.92 177** PKIKP **PKPdf** 10 00 22.1 +0.4
VNDA pmax pmax
comp=Z,1.0nm,1.0s
**BDFB Brasilia 148.25 31** PKPbc **PKPbc** 10 01 15.8 +0.3
comp=Z,1.6nm,0.4s,baz=63,slow=2.5,SNR=4.3
**BDFB Brasilia 148.25 31** PKP2 **PKPbc** 10 01 15.8 +0.3
BDFB pmax pmax
comp=Z,2.0nm,0.4s
**SNAA Sanae 149.26 197** P **PKPbc** 10 01 16.3 -0.1
**VNA2 Neumayer--Watz 150.78 196** P **PKPbc** 10 01 20.5 +0.5
baz=82,slow=0.9
**VNA3 Neumayer Olymp 150.96 195** P **PKPbc** 10 01 21.1 +0.7
**CPUP Villa Florida 152.69 57** PKPbc **PKPbc** 10 01 25.4 -0.3
comp=Z,1.0nm,0.6s,baz=99,slow=1.1,SNR=3.3
**CPUP Villa Florida 152.69 57** PKIKP **PKPbc** 10 01 25.4 -0.3
CPUP pmax pmax
comp=Z,1.0nm,0.6s

*IDC* **14** *09:47:57.5±0.8, 21°.46N × 120°.83E, h0km, mb4.0/9, mb1 4.1/9, mb1mx3.8/56, mbtmp4.0/9, MS3.0/2, Ms1 3.1/2, ms1mx2.6/38, Error ellipse: s-maj=42.9km s-min=17.0km az=67.0*
*ISCJB* **14** *09:47:58.9±0.7, 21°.56N±0°.03 × 121°.17E±0°.03, h20km±4km, mb3.8/9, MS2.8/2, Error ellipse: s-maj=5.7km s-min=5.1km az=23.2*
*TAP* **14** *09:47:59.4, 21°.55N × 121°.02E, h20km±1km, ML4.0, D*
*JMA* **14** *09:47:59.0±0.3, 21°.61N × 121°.17E, h24km, M3.9*
**ISC 14 09:47:59.5±1.5, 21°.59N±0°.06 × 121°.07E±0°.04, h16km±8km, n56, σ1°36/84, mb3.9/8, 5C-2D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TSEB** | **Hengchuen, Pin** | **0.35** | **333** | ⇑*i* P | **Pb** | **09 48 07.3** | **0.0** |
| | baz=336 | | | | | | |
| TSEB | | | | S | **Sb** | **09 48 13.3** | **+0.8** |
| | baz=336 | | | | | | |
| **TWK1** | **Hengchun** | **0.43** | **325** | ⇑*i* P | **Pg** | **09 48 08.0** | **-0.2** |
| | baz=334 | | | | | | |
| TWK1 | | | | *i* S | **Sg** | **09 48 14.2** | **+0.1** |
| | baz=334 | | | | | | |
| **HEN** | **Hengchun** | **0.52** | **323** | ⇑*i* P | **Pg** | **09 48 09.7** | **0.0** |
| | baz=330 | | | | | | |
| HEN | | | | S | **Sg** | **09 48 17.0** | **+0.2** |
| | baz=330 | | | | | | |
| **LAY** | **Lan-yu** | **0.63** | **45** | ⇑*i* P | **Pb** | **09 48 12.5** | **+0.4** |
| | baz=45 | | | | | | |
| LAY | | | | S | **Sn** | **09 48 22.2** | **-1.4** |
| | baz=45 | | | | | | |
| **TAW** | **Tawu** | **0.78** | **348** | ⇓P | **Pb** | **09 48 13.5** | **-1.2** |
| | baz=352 | | | | | | |
| TAW | | | | *e*S | **Sg** | **09 48 25.4** | **+0.3** |
| | baz=352 | | | | | | |
| **EAST** | **Anshuo** | **0.82** | **345** | ⇓*i* P | **Pb** | **09 48 14.1** | **-1.2** |
| | baz=349 | | | | | | |
| EAST | | | | *e*S | **Sg** | **09 48 26.2** | **0.0** |
| | baz=349 | | | | | | |
| **SCZT** | **Fangliau** | **0.88** | **332** | ⇑*i* P | **Pb** | **09 48 16.2** | **-0.2** |
| | baz=336 | | | | | | |
| SCZT | | | | S | **Sg** | **09 48 28.4** | **+0.1** |
| | baz=336 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.00** | **319** | *e*P | **Pn** | **09 48 18.6** | **-0.3** |
| | baz=322 | | | | | | |
| TWP | | | | *e*S | **Sn** | **09 48 32.7** | **+0.1** |
| | baz=322 | | | | | | |
| **ECL** | **Taimali** | **1.01** | **354** | P | **Pg** | **09 48 19.6** | **+0.6** |
| | baz=357 | | | | | | |
| ECL | | | | *e*S | **Sn** | **09 48 33.0** | **+0.1** |
| | baz=357 | | | | | | |
| **TTN** | **Taitung** | **1.16** | **3** | *e*P | **Pg** | **09 48 22.3** | **+0.4** |
| | baz=5.0 | | | | | | |
| **TWG** | **Pinlang** | **1.23** | **0** | *e*P | **Pn** | **09 48 21.5** | **-0.4** |
| | baz=2.0 | | | | | | |
| TWG | | | | *e*S | **Sn** | **09 48 38.2** | **0.0** |
| | baz=2.0 | | | | | | |
| **SGLT** | **Jiouru** | **1.25** | **335** | *e*P | **Pn** | **09 48 21.0** | **-1.3** |
| | baz=337 | | | | | | |
| **TWM1** | **Shoushan** | **1.37** | **334** | *e*P | **Pg** | **09 48 27.6** | **+1.7** |
| | baz=336 | | | | | | |
| **CHKT** | **Chengkung** | **1.53** | **10** | *e*P | **Pn** | **09 48 26.2** | **+0.1** |
| | baz=11 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **09 48 42.5** | **-3.1** |
| | baz=11 | | | | | | |
| **SGST** | **Jiashian** | **1.55** | **343** | *e*P | **Pg** | **09 48 28.9** | **-0.4** |
| | baz=345 | | | | | | |
| SGST | | | | *e*S | **Sg** | **09 48 49.9** | **+0.3** |
| | baz=345 | | | | | | |
| **ELDTW** | **Lidau** | **1.59** | **358** | *e*P | **Pn** | **09 48 27.4** | **+0.3** |
| **STYT** | **Tauyuan** | **1.59** | **350** | P | **Pn** | **09 48 27.0** | **-0.1** |
| | baz=351 | | | | | | |
| STYT | | | | *e*S | **Sn** | **09 48 47.6** | **+0.2** |
| | baz=351 | | | | | | |
| **CHN1** | **Nanshi** | **1.67** | **343** | P | **Pn** | **09 48 27.5** | **-0.5** |
| | baz=344 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **09 48 49.4** | **+0.3** |
| | baz=344 | | | | | | |
| **WTP** | **Ta-pu** | **1.70** | **346** | P | **Pn** | **09 48 28.2** | **-0.3** |
| | baz=347 | | | | | | |
| WTP | | | | *e*S | **Sn** | **09 48 50.0** | **-0.1** |
| | baz=347 | | | | | | |
| **TWK** | **Hsinying** | **1.75** | **342** | *e*P | **Pg** | **09 48 33.0** | **-0.2** |
| | baz=344 | | | | | | |
| **TWF1** | **Yuli** | **1.77** | **7** | *e*P | **Pb** | **09 48 30.9** | **-0.6** |
| | baz=8.0 | | | | | | |
| **YUS** | **Yu-Shan** | **1.89** | **357** | *e*P | **Pn** | **09 48 32.4** | **+0.8** |
| | baz=358 | | | | | | |
| **EHY** | **Hungye** | **1.92** | **7** | P | **Pb** | **09 48 33.1** | **-1.1** |
| | baz=8.0 | | | | | | |
| EHY | | | | *e*S | **Sn** | **09 48 55.9** | **+0.5** |
| | baz=8.0 | | | | | | |
| **ALS** | **Alishan** | **1.93** | **353** | *e*P | **Pn** | **09 48 32.3** | **+0.4** |
| | baz=354 | | | | | | |
| **CHN5** | **Tsauling** | **2.03** | **350** | P | **Pn** | **09 48 32.9** | **-0.2** |
| | baz=351 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **09 48 58.0** | **-0.2** |
| | baz=351 | | | | | | |
| **WDGT** | **Dungji** | **2.11** | **322** | *e*P | **Pn** | **09 48 31.3** | **-2.9** |
| | baz=323 | | | | | | |
| WDGT | | | | *e*S | **Sn** | **09 48 55.1** | **-5.1** |
| | baz=323 | | | | | | |
| **WDT** | **Danda** | **2.16** | **2** | *e*P | **Pn** | **09 48 36.4** | **+1.3** |
| | baz=2.0 | | | | | | |
| WDT | | | | *e*S | **Sb** | **09 49 03.6** | **-1.4** |
| | baz=2.0 | | | | | | |
| **ESL** | **Shilin** | **2.24** | **9** | *e*P | **Pn** | **09 48 36.7** | **+0.8** |
| | baz=9.0 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **2.29** | **356** | *e*P | **Pn** | **09 48 37.1** | **+0.4** |
| | baz=357 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **09 49 05.8** | **+1.2** |
| | baz=357 | | | | | | |
| **TYC** | **Yuchr** | **2.31** | **355** | *e*P | **Pn** | **09 48 37.1** | **+0.2** |
| | baz=356 | | | | | | |
| TYC | | | | *e*S | **Sb** | **09 49 07.4** | **-1.7** |
| | baz=356 | | | | | | |
| **WHF** | **Hehuan Shan** | **2.55** | **4** | *e*P | **Pb** | **09 48 43.2** | **-2.0** |
| | baz=5.0 | | | | | | |
| **TWQ1** | **Liyutan** | **2.76** | **354** | *e*P | **Pn** | **09 48 43.6** | **+0.6** |
| | baz=355 | | | | | | |
| **NNS** | **Nan Shan** | **2.85** | **6** | *e*P | **Pn** | **09 48 46.8** | **+2.4** |
| | baz=6.0 | | | | | | |
| **NSTT** | **Nanjuang** | **3.03** | **359** | *e*P | **Pb** | **09 48 51.1** | **-1.9** |
| | baz=359 | | | | | | |
| **ENTT** | **Nioudou** | **3.07** | **8** | *e*P | **Pn** | **09 48 49.1** | **+1.7** |
| | baz=9.0 | | | | | | |
| **NSK** | **Sanguang** | **3.08** | **5** | *e*P | **Pn** | **09 48 48.6** | **+1.0** |
| | baz=5.0 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **3.33** | **31** | P | **Pn** | **09 48 49.8** | **-1.1** |
| JYNG | | | | *e*S | **Sn** | **09 49 28.9** | **-1.3** |
| **YOJ** | **Yonaguni jima** | **3.37** | **32** | P | **Pn** | **09 48 53.5** | **+2.0** |
| YOJ | | | | *e*S | **Sn** | **09 49 30.8** | **-0.4** |
| **HATJ** | **Hateruma jima** | **3.52** | **45** | P | **Pn** | **09 48 53.6** | **+0.1** |
| HATJ | | | | S | **Sn** | **09 49 32.5** | **-2.3** |
| **IRIF** | **Iriomote-Funau** | **3.67** | **41** | P | **Pn** | **09 48 55.4** | **-0.2** |
| IRIF | | | | *e*S | **Sn** | **09 49 36.8** | **-1.7** |
| **JKRS** | **Kuro-shima** | **3.78** | **45** | P | **Pn** | **09 48 57.2** | **+0.1** |
| JKRS | | | | *e*S | **Sn** | **09 49 37.6** | **-3.6** |
| **JIJ** | **Ishigaki jima** | **3.95** | **45** | P | **Pn** | **09 48 59.3** | **-0.2** |
| JIJ | | | | *e*S | **Sn** | **09 49 42.2** | **-3.3** |
| **JISG** | **Ishigakijimahi** | **4.22** | **44** | P | **Pn** | **09 49 01.5** | **-1.6** |
| JISG | | | | S | **Sn** | **09 49 51.3** | **-0.8** |
| **JTJ** | **Tarama** | **4.52** | **47** | P | **Pn** | **09 49 07.5** | **+0.3** |
| JTJ | | | | S | **Sn** | **09 49 57.7** | **-1.7** |
| **JIRB** | **Irabujima** | **4.96** | **49** | P | **Pn** | **09 49 13.5** | **+0.2** |
| JIRB | | | | *e*S | **Sn** | **09 50 08.4** | **-2.0** |
| **CMAR** | **Chiang Mai Arr** | **21.02** | **265** | LR | LR | 10 01 12.3 | |
| | comp=Z,26nm,18.6s,baz=120,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **21.08** | **41** | LR | LR | 10 01 40.6 | |
| | comp=Z,54nm,21.4s,baz=155,slow=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **28.68** | **33** | P | **P** | **09 53 58.2** | **+2.7** |
| | 3.7nm,0.6s,baz=195,slow=5.6,SNR=4.0 | | | | | | |
| **SONM** | **Songino Array** | **28.73** | **339** | P | **P** | **09 53 56.0** | **-0.2** |
| | 0.7nm,0.7s,baz=156,slow=11,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.16** | **318** | P | **P** | **09 55 34.9** | **+0.1** |
| | 0.7nm,0.6s,baz=118,slow=8.4,SNR=5.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.38** | **329** | P | **P** | **09 55 52.0** | **-0.9** |
| | 0.9nm,0.3s,baz=114,slow=6.6,SNR=4.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.27** | **162** | P | **P** | **09 55 59.9** | **-0.5** |
| | 0.7nm,0.6s,baz=343,slow=8.9,SNR=8.1 | | | | | | |
| **KURBB** | **Kurchatov Array** | **44.05** | **322** | P | **P** | **09 56 06.6** | **+0.2** |
| | 1.2nm,0.6s,baz=119,slow=7.5,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **46.69** | **164** | P | **P** | **09 56 28.0** | **+0.4** |
| | 0.5nm,0.4s,baz=346,slow=8.1,SNR=19 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 58 01.0** | **-0.3** |
| | 0.3nm,0.5s,baz=344,slow=3.7,SNR=4.3 | | | | | | |
| **FINES** | **FINESS Array B** | **73.63** | **330** | P | **P** | **09 59 33.8** | **+2.0** |
| | 3.6nm,1.0s,baz=56,slow=5.5,SNR=3.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **98.39** | **43** | P | Pdif | 10 01 39.0 | +1.7 |
| | 0.3nm,0.8s,baz=271,slow=4.1,SNR=3.0 | | | | | | |

*JMA* **14** *09:49:09.7±0.4, 44°.01N × 147°.97E, h0km, M4.1*
*SKHL* **14** *09:49:12.2±0.3, 44°.37N × 148°.08E, h36km±2km, mb4.6/3*
**ISC 14 09:49:08.8±3.5, 44°.30N±0°.08 × 148°.1E±0°.1, h10km±27km, n14, σ1°13/25, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **0.94** | **352** | *i* P | **Pb** | **09 49 27.1** | **-0.2** |
| KUR | | | | AMB | AMB | 09 49 27.9 | |
| | 48nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 09 49 27.9 | |
| | 136nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 09 49 27.9 | |
| | 512nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sb** | **09 49 38.5** | **-1.3** |
| KUR | | | | A | A | 09 49 41.0 | |
| | 640nm,0.3s | | | | | | |
| KUR | | | | A | A | 09 49 41.0 | |
| | 272nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **0.98** | **244** | *e*P | **Pn** | **09 49 28.8** | **+0.1** |
| SHO | | | | AMB | AMB | 09 49 29.0 | |
| | 99nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sb** | **09 49 41.1** | **+0.2** |
| SHO | | | | A | A | 09 49 42.0 | |
| | 820nm,0.4s | | | | | | |
| SHO | | | | A | A | 09 49 42.0 | |
| | 300nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.60** | **261** | *i* P | **Pn** | **09 49 38.1** | **+0.9** |
| YUK | | | | AMB | AMB | 09 49 39.8 | |
| | 132nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 09 49 39.8 | |
| | 101nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 09 49 39.8 | |
| | 302nm,0.2s | | | | | | |
| YUK | | | | *i* S | **Sn** | **09 49 57.5** | **-0.4** |
| YUK | | | | A | A | 09 50 02.0 | |
| | 231nm,0.5s | | | | | | |
| YUK | | | | A | A | 09 50 02.0 | |
| | 421nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.92** | **242** | P | **Pn** | **09 49 41.5** | **0.0** |
| NEM2 | | | | *e*S | **Sn** | **09 50 05.5** | **-0.2** |
| **JRA** | **Rausu** | **2.15** | **261** | P | **Pb** | **09 49 46.7** | **-1.0** |
| JRA | | | | *e*S | **Sb** | **09 50 13.6** | **-0.8** |
| **JNK** | **Nakash** | **2.52** | **255** | P | **Pn** | **09 49 51.0** | **+1.3** |
| JNK | | | | *e*S | **Sn** | **09 50 20.9** | **+0.5** |
| **JAK** | **Akkeshi** | **2.77** | **243** | P | **Pn** | **09 49 53.6** | **+0.4** |
| JAK | | | | *e*S | **Sn** | **09 50 25.7** | **-0.9** |
| **JTKR** | **Abashiri--Toko** | **3.01** | **265** | P | **Pn** | **09 49 58.0** | **+1.5** |
| **JAR** | **Ashorobuto** | **3.26** | **254** | P | **Pn** | **09 50 02.0** | **+2.0** |
| JAR | | | | *e*S | **Sn** | **09 50 40.2** | **+1.3** |
| **JOB** | **Onbets** | **3.37** | **247** | P | **Pn** | **09 50 02.8** | **+1.3** |
| JOB | | | | *e*S | **Sn** | **09 50 41.6** | **+0.1** |
| **JMP** | **Maruseppu** | **3.39** | **267** | P | **Pn** | **09 50 03.6** | **+1.8** |
| **JCH** | **Churui** | **3.81** | **245** | P | **Pn** | **09 50 08.3** | **+0.8** |
| JCH | | | | *e*S | **Sn** | **09 50 51.0** | **-1.4** |
| **YSS** | **Yuzh-Sakhalins** | **4.57** | **307** | *e*S | **Sn** | **09 51 10.4** | **-0.6** |
| YSS | | | | A | A | 09 51 12.8 | |
| | 27nm,0.2s | | | | | | |
| **JKB** | **Kayabe** | **5.68** | **247** | P | **Pn** | **09 50 34.9** | **+1.7** |
| JKB | | | | *e*S | **Sn** | **09 51 37.6** | **-0.8** |

*CSEM* **14** *09:50:53.8±0.1, 44°.60N × 7°.19E, h8km, ML1.5/8, Error ellipse: s-maj=3.1km s-min=2.2km az=48.0*
*GEN* **14** *09:50:53.9, 44°.61N × 7°.21E, h11km, ML0.8*
**LDG 14 09:50:53.6±0.1, 44°.63N × 7°.25E, h2km, Md1.7/3, Ml1.7/7, Error ellipse: s-maj=1.7km s-min=0.9km az=76.0, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PZZ** | **Stroppo** | **0.16** | **219** | P | Pg | 09 50 57.2 | +0.3 |
| PZZ | | | | S | Sg | 09 50 59.3 | +0.2 |
| **BHB** | **Bricherasio** | **0.21** | **2** | P | Pg | 09 50 58.8 | +1.0 |
| **MBDF** | **Montbardon** | **0.36** | **286** | *e*Pg | Pg | 09 51 00.8 | +0.1 |
| MBDF | | | | *e*Sg | Sg | 09 51 05.0 | -0.6 |
| | 8.5nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** | **0.36** | **286** | *e*Pg | Pg | 09 51 00.8 | +0.1 |
| MBDF | | | | *e*Sg | Sg | 09 51 05.0 | -0.6 |
| | 4.2nm,0.2s | | | | | | |
| **STV** | **Sant Anna di V** | **0.39** | **172** | P | Pg | 09 51 01.1 | -0.1 |
| STV | | | | S | Sg | 09 51 06.2 | -0.1 |
| **ENR** | **Entracque** | **0.42** | **163** | P | Pg | 09 51 01.5 | -0.3 |
| ENR | | | | S | Sg | 09 51 07.2 | -0.1 |
| **RRL** | **Rocca Remolon** | **0.44** | **312** | P | Pg | 09 51 02.5 | +0.1 |
| RRL | | | | S | Sg | 09 51 08.5 | +0.1 |
| **SBF** | **Sospel** | **0.78** | **170** | *e*Pg | Pg | 09 51 08.3 | -0.3 |
| SBF | | | | *e*Sg | Sg | 09 51 18.2 | -0.6 |
| | 2.8nm,0.3s | | | | | | |
| **SBF** | **Sospel** | **0.78** | **170** | *e*Pg | Pg | 09 51 08.3 | -0.3 |
| SBF | | | | *e*Sg | Sg | 09 51 18.2 | -0.6 |
| | 1.4nm,0.3s | | | | | | |
| **LPG** | **La Plagne** | **0.94** | **338** | *e*Pg | Pg | 09 51 11.5 | -0.5 |
| LPG | | | | *e*Sg | Sg | 09 51 23.9 | -0.6 |
| | 2.0nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.96** | **338** | *e*Pg | Pg | 09 51 12.0 | -0.4 |
| LPL | | | | *e*Sg | Sg | 09 51 24.2 | -0.9 |
| | 1.3nm,0.2s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **287** | *e*Pg | Pg | 09 51 13.2 | -0.1 |
| ORIF | | | | *e*Sg | Sg | 09 51 25.7 | -1.0 |
| | 1.4nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **287** | *e*Pg | Pg | 09 51 13.2 | -0.1 |
| ORIF | | | | *e*Sg | Sg | 09 51 25.7 | -1.0 |
| | 0.7nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.15** | **202** | *e*Pg | Pg | 09 51 15.2 | -0.5 |
| FRF | | | | *e*Sg | Sg | 09 51 30.2 | -0.5 |
| | 2.2nm,0.2s | | | | | | |
| **FRF** | **La Foret Royal** | **1.15** | **202** | *e*Pg | Pg | 09 51 15.2 | -0.5 |
| FRF | | | | *e*Sg | Sg | 09 51 30.2 | -0.5 |
| | 1.1nm,0.2s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.37** | **242** | *e*Pg | Pn | 09 51 19.4 | -0.4 |
| SMRF | | | | *e*Sg | Sg | 09 51 37.1 | -0.7 |
| | 0.8nm,0.2s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.37** | **242** | *e*Pg | Pn | 09 51 19.4 | -0.4 |
| SMRF | | | | *e*Sg | Sg | 09 51 37.1 | -0.7 |
| | 0.4nm,0.2s | | | | | | |
| **LMR** | **La Mourre** | **1.40** | **203** | *e*Pg | Pn | 09 51 19.1 | -1.1 |
| LMR | | | | *e*Sg | Sg | 09 51 37.5 | -1.2 |
| | 2.5nm,0.2s | | | | | | |
| **LMR** | **La Mourre** | **1.40** | **203** | *e*Pg | Pn | 09 51 19.1 | -1.1 |
| LMR | | | | *e*Sg | Sg | 09 51 37.5 | -1.2 |
| | 1.2nm,0.2s | | | | | | |

**ROM 14 09:52:08.1±0.5, 43°.39N × 12°.55E, h8km, Md1.6/2, Ml0.7/3, Error ellipse: s-maj=7.1km s-min=4.2km az=87.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATVO** | **AVT- Monte Val** | **0.11** | **266** | Pg | Pg | 09 52 10.2 | -0.5 |
| ATVO | | | | Sg | Sg | 09 52 13.7 | +1.3 |
| | 141nm,2.2s | | | | | | |
| **ATVO** | **AVT- Monte Val** | **0.11** | **266** | Pg | Pg | 09 52 10.2 | -0.5 |
| **MURB** | **Monte Urbino** | **0.13** | **189** | Pg | Pg | 09 52 11.2 | +0.2 |
| MURB | | | | Sg | Sg | 09 52 14.2 | +1.2 |
| | 130nm,0.2s | | | | | | |
| **MURB** | **Monte Urbino** | **0.13** | **189** | Pg | Pg | 09 52 11.2 | +0.2 |
| **PIEI** | **Pieia** | **0.15** | **355** | Pg | Pg | 09 52 12.1 | +0.7 |
| | 82nm,2.0s | | | | | | |
| **PIEI** | **Pieia** | **0.15** | **355** | Pg | Pg | 09 52 12.1 | +0.7 |
| | 82nm,2.0s | | | | | | |

*ISK* **14** *09:55:48.4, 36°.11N × 29°.54E, h29km, MD3.2, ML3.2*
*ISCJB* **14** *09:55:49.2±0.3, 36°.11N±0°.03 × 29°.57E±0°.02, h47km±5km, Error ellipse: s-maj=4.8km s-min=3.3km az=178.6*
*DDA* **14** *09:55:49.8, 36°.25N × 29°.47E, h39km, Md3.1*
*ATH* **14** *09:55:49.2, 36°.10N × 29°.55E, h45km±1km, MD3.5/9*
*CSEM* **14** *09:55:50.3±0.2, 36°.16N × 29°.58E, h35km±2km, MD3.5, Error ellipse: s-maj=4.4km s-min=3.1km az=179.0*
**ISC 14 09:55:49.9±0.9, 36°.14N±0°.03 × 29°.58E±0°.02, h40km±5km, n87, σ1°23/135, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.01** | **3** | *e*P | **Pn** | **09 55 56.5** | **+0.3** |
| KSL | | | | *e*S | **Sn** | **09 56 02.1** | **+1.5** |
| **AKAS** | **Kas** | **0.10** | **11** | *i* P | **Pn** | **09 55 56.3** | **-0.3** |
| AKAS | | | | *i* S | **Sn** | **09 56 01.6** | **+0.3** |
| **AKAS** | **Kas** | **0.10** | **11** | P | **Pn** | **09 55 56.3** | **-0.3** |
| AKAS | | | | S | **Sn** | **09 56 01.6** | **+0.3** |
| **FETY** | **Fethiye** | **0.64** | **321** | *e*PG | **Pn** | **09 56 01.5** | **-1.1** |
| FETY | | | | *e*SG | **Sn** | **09 56 10.7** | **-0.9** |
| **FETY** | **Fethiye** | **0.64** | **321** | *e*Pg | **Pn** | **09 56 01.5** | **-1.1** |
| FETY | | | | *e*Sg | **Sn** | **09 56 10.7** | **-0.9** |
| **ELL** | **Elmali** | **0.67** | **23** | *e*PG | **Pn** | **09 56 02.0** | **-1.0** |
| ELL | | | | *e*SG | **Sn** | **09 56 13.0** | **+0.7** |
| **ELL** | **Elmali** | **0.67** | **23** | *e*Pg | **Pn** | **09 56 02.0** | **-1.0** |
| ELL | | | | *e*Sg | **Sn** | **09 56 13.0** | **+0.7** |
| **DALY** | **Dalyan (Mu¨la** | **1.01** | **313** | *e*PG | **Pn** | **09 56 06.8** | **-0.7** |
| DALY | | | | *e*SG | **Sn** | **09 56 21.0** | **+0.4** |
| **DALY** | **Dalyan (Mu¨la** | **1.01** | **313** | *e*Pg | **Pn** | **09 56 06.8** | **-0.7** |
| **KORT** | **Korkueli** | **1.06** | **35** | *i* P | **Pn** | **09 56 09.1** | **+0.7** |
| KORT | | | | *i* S | **Sn** | **09 56 24.0** | **+2.0** |
| **KORT** | **Korkueli** | **1.06** | **35** | P | **Pn** | **09 56 09.1** | **+0.7** |
| KORT | | | | S | **Sn** | **09 56 24.0** | **+2.0** |
| **TURN** | **Turunc** | **1.08** | **313** | *i* P | **Pn** | **09 56 11.0** | **+2.6** |
| TURN | | | | *i* S | **Sn** | **09 56 26.6** | **+4.4** |
| **TURN** | **Turunc** | **1.08** | **313** | P | **Pn** | **09 56 11.0** | **+2.6** |
| TURN | | | | S | **Sn** | **09 56 26.6** | **+4.4** |
| **GOLH** | **Golhisar** | **1.10** | **359** | *i* P | **Pn** | **09 56 09.1** | **+0.2** |
| GOLH | | | | *i* S | **Sn** | **09 56 23.3** | **+0.4** |
| **GOLH** | **Golhisar** | **1.10** | **359** | P | **Pn** | **09 56 09.1** | **+0.2** |
| GOLH | | | | S | **Sn** | **09 56 23.3** | **+0.4** |
| **ANTB** | **Antalya** | **1.15** | **48** | *e*PN | **Pn** | **09 56 09.1** | **-0.3** |
| **ANTB** | **Antalya** | **1.15** | **48** | *e*Pn | **Pn** | **09 56 09.1** | **-0.3** |
| **ARG** | **Arkhangelos** | **1.18** | **274** | *e*P | **Pn** | **09 56 10.1** | **+0.2** |
| ARG | | | | *e*S | **Sn** | **09 56 25.3** | **+0.6** |
| **ARG** | **Arkhangelos** | **1.18** | **274** | *e*P | **Pn** | **09 56 10.1** | **+0.2** |
| ARG | | | | *e*S | **Sn** | **09 56 25.3** | **+0.6** |
| **YER** | **Yerkesik** | **1.45** | **314** | *e*PN | **Pn** | **09 56 13.4** | **-0.2** |
| YER | | | | *e*SN | **Sn** | **09 56 30.9** | **-0.5** |
| **YER** | **Yerkesik** | **1.45** | **314** | *e*Pn | **Pn** | **09 56 13.4** | **-0.2** |
| YER | | | | *e*Sn | **Sn** | **09 56 30.9** | **-0.5** |
| **BCK** | **Bucak** | **1.55** | **31** | *e*PN | **Pn** | **09 56 15.8** | **+0.8** |
| **BCK** | **Bucak** | **1.55** | **31** | *e*Pn | **Pn** | **09 56 15.8** | **+0.8** |
| **DNZL** | **Cakiroluk** | **1.61** | **345** | *i* P | **Pn** | **09 56 17.5** | **+1.5** |
| DNZL | | | | *i* S | **Sn** | **09 56 35.6** | **0.0** |
| **DNZL** | **Cakiroluk** | **1.61** | **345** | P | **Pn** | **09 56 17.5** | **+1.5** |
| DNZL | | | | S | **Sn** | **09 56 35.6** | **0.0** |
| **DENT** | **Denizli** | **1.68** | **345** | *e*PN | **Pn** | **09 56 17.1** | **+0.4** |
| **DENT** | **Denizli** | **1.68** | **345** | *e*Pn | **Pn** | **09 56 17.1** | **+0.4** |
| **ISP** | **Isparta** | **1.84** | **24** | *e*P | **Pn** | **09 56 20.5** | **+1.4** |
| **ISP** | **Isparta** | **1.84** | **24** | *e*P | **Pn** | **09 56 20.5** | **+1.4** |
| **BDRM** | **Kayabasi** | **1.96** | **299** | *i* P | **Pn** | **09 56 21.6** | **+1.0** |
| BDRM | | | | *i* S | **Sn** | **09 56 44.0** | **+0.1** |
| **BDRM** | **Kayabasi** | **1.96** | **299** | P | **Pn** | **09 56 21.6** | **+1.0** |
| BDRM | | | | S | **Sn** | **09 56 44.0** | **+0.1** |
| **AYDN** | **Tasoluk** | **2.04** | **319** | *i* P | **Pn** | **09 56 24.3** | **+2.5** |
| AYDN | | | | *i* S | **Sn** | **09 56 46.5** | **+0.4** |
| **AYDN** | **Tasoluk** | **2.04** | **319** | P | **Pn** | **09 56 24.3** | **+2.5** |
| AYDN | | | | S | **Sn** | **09 56 46.5** | **+0.4** |
| **BODT** | **Bodrum** | **2.05** | **298** | *e*PN | **Pn** | **09 56 21.6** | **-0.2** |
| **BODT** | **Bodrum** | **2.05** | **298** | *e*Pn | **Pn** | **09 56 21.6** | **-0.2** |
| **KARP** | **Karpathos** | **2.05**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NPS** | **Neapolis** | **3.35** | **256** | *e*P | **Pn** | **09 56 40.8** | **+1.2** |
| NPS | | | | *e*S | **Sn** | **09 57 17.8** | **-0.4** |
| **LAST** | **Lasithi** | **3.48** | **255** | *e*P | **Pn** | **09 56 42.9** | **+1.3** |
| LAST | | | | *e*S | **Sn** | **09 57 21.3** | **-0.3** |
| **LAST** | **Lasithi** | **3.48** | **255** | *e*P | **Pn** | **09 56 42.9** | **+1.3** |
| LAST | | | | *e*S | **Sn** | **09 57 21.3** | **-0.3** |
| **IDI** | **Anoyia** | **3.91** | **259** | *e*P | **Pn** | **09 56 47.6** | **+0.1** |
| IDI | | | | *e*S | **Sn** | **09 57 31.5** | **-0.6** |
| **IDI** | **Anoyia** | **3.91** | **259** | *e*P | **Pn** | **09 56 47.6** | **+0.1** |
| IDI | | | | *e*S | **Sn** | **09 57 31.5** | **-0.6** |
| **SIVA** | **Sivas** | **4.05** | **255** | *e*P | **Pn** | **09 56 50.2** | **+1.0** |
| **SIVA** | **Sivas** | **4.05** | **255** | *e*P | **Pn** | **09 56 50.2** | **+1.0** |
| **SIGR** | **SIGRI** | **4.26** | **317** | *e*P | **Pn** | **09 56 54.6** | **+2.4** |
| **SIGR** | **SIGRI** | **4.26** | **317** | *e*P | **Pn** | **09 56 54.6** | **+2.4** |
| **VAM** | **Vamos** | **4.44** | **262** | *e*P | **Pn** | **09 56 56.0** | **+1.4** |
| **VAM** | **Vamos** | **4.44** | **262** | *e*P | **Pn** | **09 56 56.0** | **+1.4** |
| **KYTH** | **Kithira** | **5.29** | **273** | *e*P | **Pn** | **09 57 07.3** | **+0.9** |
| **KYTH** | **Kithira** | **5.29** | **273** | *e*P | **Pn** | **09 57 07.3** | **+0.9** |
| **VLI** | **Veliai** | **5.39** | **278** | *e*P | **Pn** | **09 57 09.1** | **+1.4** |
| **VLI** | **Veliai** | **5.39** | **278** | *e*P | **Pn** | **09 57 09.1** | **+1.4** |
| **BIDA** | **Albida** | **5.61** | **100** | *e*P | **Pn** | **09 57 11.2** | **+0.5** |
| BIDA | | | | *e*S | **Sn** | **09 58 10.5** | **-3.4** |
| | 73nm,0.4s | | | | | | |
| **HAWK** | **Haweek** | **5.80** | **104** | *e*P | **Pn** | **09 57 14.7** | **+1.2** |
| **BRBR** | **Barbar** | **5.90** | **116** | *e*P | **Pn** | **09 57 16.6** | **+1.6** |
| BRBR | | | | *e*S | **Sn** | **09 58 18.5** | **-2.9** |
| | 24nm,0.8s | | | | | | |

*ISCJB* ***14*** *10:03:27.4±2.4, 10°.31S±0°.03×42°.85E±0°.04, h0km±14km, mb5.0/106,MS4.3/31, Error ellipse: s-maj=6.1km s-min=5.6km az=138.0*

*IDC* ***14*** *10:03:28.7±0.4, 10°.36S×42°.83E, h0km, mb4.7/29, mb1 4.8/33, mb1mx4.8/39, mbtmp4.8/33, ML5.0/3, MS4.2/29, Ms1 4.2/29, ms1mx4.2/33, Error ellipse: s-maj=14.6km s-min=10.9km az=103.0*

*BJI* ***14*** *10:03:29.2, 9°.96S×42°.61E, h10km, mb5.0/33, mB5.0/30, Ms4.8/27, Ms7 4.5/27*

*NEIC* ***14*** *10:03:30.5±0.2, 10°.32S×42°.78E, h10km, mb5.2/23, Error ellipse: s-maj=6.7km s-min=5.7km az=63.0*

*GCMT* ***14*** *10:03:30.5±0.2, 10°.35S×42°.84E, h53km, MW5.2/77, Moment Tensor Solution. s77,c119; s65,c99; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr-6.40±.17; Mθθ6.35±.12; Mφφ0.04±.14; Mrθ0.19±.14; Mrφ-1.60±.13; Mθφ-0.73±.12; Best double couple: Mo6.61200×10^16 NP1:ϕ=290.00000°, δ47.00000°, λ=82.00000°; NP2: ϕ=97.00000°, δ44.00000°, λ=99.00000°. Principal axes: T 6.7430, Plg2.0000°, Azm14.0000°; N -0.2660, Plg6.0000°, Azm104.0000°; P -6.4820, Plg84.0000°, Azm269.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*MOS* ***14*** *10:03:31.0±1.0, 10°.26S×42°.87E, h22km, mb5.0/58, MS4.2/18 Error ellipse: s-maj=9.5km s-min=5.0km az=95.1*

**ISC 14 10:03:31.3**±0.4,**10°.39S**±0°.04×**42°.75E**±0°.04,**h18**km±1km, **h17**km:**pP-P,n669,**σ1§**09**/695,**mb5.0**/106,**MS4.2**/31, **31C-14D,Northwest of Madagascar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DODT** | **Dodoma, Tanzan** | **8.08** | **301** | *i* P | | **Pn** | **10 05 30.3** | **+2.2** |
| DODT | | | | *i* S | | **Sn** | **10 06 54.4** | **-4.8** |
| **OPO** | **Ambohidratompo** | **9.20** | **153** | Pn | | **Pn** | **10 05 45.7** | **+2.3** |
| | 133nm,0.3s,baz=322,slow=10,SNR=624 | | | | | | | |
| OPO | | | | Sn | | **Sn** | **10 07 23.0** | **-3.6** |
| | 138nm,0.3s,baz=258,slow=18,SNR=9.1 | | | | | | | |
| OPO | | | | LR | | LR | 10 09 24.0 | |
| | comp=Z,4μm,18.2s,baz=314,slow=39 | | | | | | | |
| **ABPO** | **Ambohimpanom** | **9.61** | **154** | *e*P | | **Pn** | **10 05 51.0** | **+2.0** |
| **ABPO** | **Ambohimpanom** | **9.61** | **154** | Pn | | **Pn** | **10 05 51.0** | **+2.0** |
| | 12μm,0.6s | | | | | | | |
| **ABPO** | **Ambohimpanom** | **9.61** | **154** | *e*Pn | | **Pn** | **10 05 51.0** | **+2.0** |
| **KMBO** | **Kilima Mbogo** | **10.70** | **329** | Pn | | **Pn** | **10 06 03.7** | **-0.4** |
| | 8.3nm,0.3s,baz=149,slow=14,SNR=48 | | | | | | | |
| KMBO | | | | Sn | | Sn | 10 07 56.4 | -7.3 |
| | 12nm,0.3s,baz=204,slow=20,SNR=7.5 | | | | | | | |
| KMBO | | | | LR | | LR | 10 09 47.5 | |
| | comp=Z,1μm,21.3s,baz=104,slow=35 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **10.70** | **329** | *i* P | | **Pn** | **10 06 04.4** | **+0.3** |
| KMBO | | | | pmax | | pmax | | |
| | comp=Z,16nm,0.3s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **10.70** | **329** | *e*Pn | | **Pn** | **10 06 04.8** | **+0.6** |
| KMBO | | | | Sn | | Sn | 10 07 56.4 | -7.3 |
| **LSZ** | **Lusaka** | **15.00** | **250** | Pn | | **Pn** | **10 07 01.9** | **-0.9** |
| | comp=Z,25nm,0.3s,baz=76,slow=13,SNR=144 | | | | | | | |
| LSZ | | | | Sn | | Sn | 10 09 38.4 | -10 |
| | comp=Z,15nm,0.3s,baz=356,slow=16,SNR=5.7 | | | | | | | |
| LSZ | | | | LR | | LR | 10 13 03.9 | |
| | comp=Z,2μm,18.1s,baz=100,slow=38 | | | | | | | |
| **MBAR** | **Mbarara** | **15.40** | **308** | Pn | | **Pn** | **10 07 06.6** | **-1.5** |
| | comp=Z,9.0nm,0.3s,baz=104,slow=14,SNR=6.8 | | | | | | | |
| MBAR | | | | Sn | | Sn | 10 09 44.3 | -14 |
| | comp=Z,6.9nm,0.3s,baz=229,slow=22,SNR=7.0 | | | | | | | |
| MBAR | | | | LR | | LR | 10 13 13.2 | |
| | comp=Z,1μm,18.4s,baz=134,slow=38 | | | | | | | |
| **MBAR** | **Mbarara** | **15.40** | **308** | Pn | | **Pn** | **10 07 07.7** | **-0.4** |
| | comp=Z,82nm,0.4s,SNR=11 | | | | | | | |
| **RER** | **Riviere de l'E** | **16.45** | **132** | *e*Pn | | **P** | **10 07 24.6** | **+0.5** |
| | comp=Z,222nm,0.7s | | | | | | | |
| **MATP** | **Matopo** | **16.96** | **232** | P | | **Pn** | **10 07 28.0** | **0.0** |
| | comp=Z,3.5nm,0.3s,baz=50,slow=14,SNR=77 | | | | | | | |
| MATP | | | | S | | **Sn** | **10 10 30.7** | **-5.7** |
| | comp=Z,1.1nm,0.3s,baz=13,slow=19,SNR=2.1 | | | | | | | |
| MATP | | | | LR | | LR | 10 13 54.4 | |
| | comp=Z,2μm,19.1s,baz=59,slow=37 | | | | | | | |
| **AAE** | **Adis Abeba** | **19.70** | **348** | *i* P | | **Pn** | **10 08 05.0** | **+3.4** |
| **ATD** | **Arta Tunnel** | **21.78** | **0** | P | | **P** | **10 08 23.6** | **+1.1** |
| | comp=Z,20nm,0.7s,baz=152,slow=4.1,SNR=15 | | | | | | | |
| ATD | | | | S | | **S** | **10 12 24.9** | **+2.0** |
| | comp=Z,3.7nm,0.5s,baz=127,slow=20,SNR=1.8 | | | | | | | |
| ATD | | | | LR | | LR | 10 16 13.9 | |
| | comp=Z,408nm,21.8s,baz=200,slow=35 | | | | | | | |
| **LBTB** | **Lobatse** | **21.83** | **226** | P | | **P** | **10 08 25.0** | **+1.9** |
| | comp=Z,34nm,0.7s,baz=53,slow=11,SNR=31 | | | | | | | |
| LBTB | | | | S | | **S** | **10 12 23.1** | **-0.8** |
| | comp=Z,3.2nm,0.6s,baz=0.0,slow=20,SNR=2.0 | | | | | | | |
| LBTB | | | | LR | | LR | 10 16 51.5 | |
| | comp=Z,1μm,18.3s,baz=50,slow=37 | | | | | | | |
| **LBTB** | **Lobatse** | **21.83** | **226** | P | | **P** | **10 08 25.0** | **+1.9** |
| LBTB | | | | S | | **S** | **10 12 23.2** | **-0.8** |
| LBTB | | | | pmax | | pmax | | |
| | comp=Z,34nm,0.7s | | | | | | | |
| LBTB | | | | smax | | smax | | |
| | comp=N,3.0nm,0.6s | | | | | | | |
| LBTB | | | | MLR | | MLR | | |
| | comp=Z,1μm,18.3s | | | | | | | |
| **BOSA** | **Boshof** | **24.44** | **220** | P | | **P** | **10 08 50.2** | **+0.8** |
| | comp=Z,15nm,0.7s,baz=50,slow=9.8,SNR=19 | | | | | | | |
| BOSA | | | | LR | | LR | 10 18 28.7 | |
| | comp=Z,2μm,21.3s,baz=48,slow=37 | | | | | | | |
| **BOSA** | **Boshof** | **24.44** | **220** | P | | **P** | **10 08 50.3** | **+0.8** |
| BOSA | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.7s | | | | | | | |
| BOSA | | | | MLR | | MLR | | |
| | comp=Z,2μm,21.3s | | | | | | | |
| **BOSA** | **Boshof** | **24.44** | **220** | *e*P | | **P** | **10 08 51.6** | **+2.2** |
| | comp=Z,194nm,1.8s | | | | | | | |
| **DAMY** | **Dhamar** | **24.86** | **4** | *e*P | | P | 10 08 58.5 | +5.0 |
| | comp=Z,75nm,1.4s | | | | | | | |
| **DGAR** | **Diego Garcia** | **29.49** | **87** | ⇓*e*P | | **P** | **10 09 32.8** | **-2.0** |
| **ISRV** | **Sarvestan** | **40.79** | **14** | *e*P | | P | 10 11 08.3 | -3.8 |
| **IKAZ** | **Kazeroun** | **40.89** | **12** | *e*P | | **P** | **10 11 13.5** | **+0.5** |
| **IPAR** | **Pars** | **41.21** | **14** | *e*P | | **P** | **10 11 17.3** | **+1.6** |
| **IGAR** | **Gharneh** | **43.47** | **11** | *e*P | | **P** | **10 11 35.6** | **+1.7** |
| **IPIR** | **Pirpir** | **43.53** | **10** | *e*P | | **P** | **10 11 36.0** | **+0.5** |
| **TOA0** | **Torodi Ar. Sit** | **46.98** | **299** | *e*P | | **P** | **10 12 02.7** | **+0.9** |
| **TOA0** | **Torodi Ar. Sit** | **46.98** | **299** | *e*P | | **P** | **10 12 02.8** | **+0.9** |
| **TORD** | **Torodi Ar. Bea** | **46.98** | **299** | P | | **P** | **10 12 03.0** | **+1.2** |
| | comp=Z,4.0nm,0.7s,baz=127,slow=9.0,SNR=29 | | | | | | | |
| TORD | | | | PcP | | **PcP** | **10 13 34.0** | **-0.2** |
| | comp=Z,4.5nm,0.6s,baz=114,slow=4.5,SNR=14 | | | | | | | |
| TORD | | | | LR | | LR | 10 31 31.7 | |
| | comp=Z,434nm,21.7s,baz=115,slow=36 | | | | | | | |
| **IGZV** | **Ghazvin** | **47.05** | **8** | *e*P | | **P** | **10 12 04.0** | **+1.7** |
| **KIC** | **Kosan Boka** | **50.13** | **287** | *e*P | | **P** | **10 12 26.6** | **+0.5** |
| | comp=Z,62nm,1.3s | | | | | | | |
| **GEYT** | **Ailbeck** | **50.17** | **16** | P | | **P** | **10 12 26.6** | **+0.5** |
| | comp=Z,8.2nm,0.8s,baz=195,slow=10,SNR=9.1 | | | | | | | |
| GEYT | | | | PcP | | **PcP** | **10 13 45.9** | **+0.6** |
| | comp=Z,2.9nm,0.3s,baz=220,slow=5.6,SNR=3.5 | | | | | | | |
| GEYT | | | | LR | | LR | 10 34 48.5 | |
| | comp=Z,210nm,20.9s,baz=200,slow=38 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GNI** | **Garni** | **50.32** | **2** | ⇑*e*P | | **P** | **10 12 26.6** | **-0.7** |
| GNI | | | | pmax | | pmax | | |
| | comp=Z,44nm,0.6s | | | | | | | |
| **DBIC** | **Dimbokro** | **50.34** | **288** | P | | **P** | **10 12 28.4** | **+0.7** |
| | comp=Z,9.6nm,0.6s,baz=94,slow=8.6,SNR=20 | | | | | | | |
| DBIC | | | | LR | | LR | 10 34 18.1 | |
| | comp=Z,241nm,18.6s,baz=88,slow=37 | | | | | | | |
| **DBIC** | **Dimbokro** | **50.34** | **288** | P | | **P** | **10 12 28.4** | **+0.7** |
| DBIC | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| DBIC | | | | MLR | | MLR | | |
| | comp=Z,241nm,18.6s | | | | | | | |
| **DBIC** | **Dimbokro** | **50.34** | **288** | *e*P | | **P** | **10 12 28.6** | **+1.0** |
| **TIC** | **Toumodi** | **50.48** | **288** | *e*P | | **P** | **10 12 29.8** | **+1.0** |
| **BRTR** | **Keskin Array B** | **50.57** | **351** | P | | **P** | **10 12 30.5** | **+1.3** |
| | comp=Z,2.7nm,0.7s,baz=170,slow=7.0,SNR=15 | | | | | | | |
| BRTR | | | | PcP | | **PcP** | **10 13 46.6** | **-0.2** |
| | comp=Z,3.2nm,0.8s,baz=155,slow=6.0,SNR=6.7 | | | | | | | |
| **BR231** | **Keskin MP Arra** | **50.83** | **350** | *e*P | | **P** | **10 12 30.7** | **-0.3** |
| **DGRG** | **David-gareji** | **51.64** | **3** | P | | **P** | **10 12 39.0** | **+1.9** |
| **DGRG** | **David-gareji** | **51.64** | **3** | *e*P | | **P** | **10 12 38.9** | **+1.9** |
| **ONI** | **Oni** | **52.73** | **1** | P | | **P** | **10 12 47.8** | **+2.6** |
| **ONI** | **Oni** | **52.73** | **1** | *e*P | | **P** | **10 12 47.7** | **+2.6** |
| **MAK** | **Makhachkala** | **53.27** | **4** | *e*P | | P | 10 13 00.6 | +12 |
| MAK | | | | MLR | | MLR | | |
| | comp=Z,518nm,21.0s | | | | | | | |
| **KBZ** | **Khabaz** | **53.86** | **0** | P | | **P** | **10 12 54.3** | **+1.0** |
| | comp=Z,6.1nm,0.7s,baz=171,slow=6.6,SNR=14 | | | | | | | |
| KBZ | | | | PcP | | **PcP** | **10 13 59.0** | **+0.2** |
| | comp=Z,3.3nm,0.7s,baz=155,slow=1.9,SNR=4.0 | | | | | | | |
| KBZ | | | | LR | | LR | 10 37 39.3 | |
| | comp=Z,268nm,19.9s,baz=143,slow=38 | | | | | | | |
| **KBZ** | **Khabaz** | **53.86** | **0** | P | | **P** | **10 12 54.3** | **+1.0** |
| KBZ | | | | | | | 10 13 59.0 | |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| KBZ | | | | MLR | | MLR | | |
| | comp=Z,268nm,19.9s | | | | | | | |
| **KIV** | **Kislovodsk** | **54.09** | **360** | *de*P | | **P** | **10 12 55.8** | **+0.7** |
| KIV | | | | *e* | | | 10 14 56.1 | |
| KIV | | | | *e*PPP | | PPP | 10 16 05.1 | |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.2s | | | | | | | |
| KIV | | | | MLR | | MLR | | |
| | comp=Z,176nm,19.0s | | | | | | | |
| **DZET** | **Dzherino** | **54.65** | **25** | P | | **P** | **10 12 59.5** | **+0.1** |
| DZET | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **KEST** | **Kesra** | **55.66** | **327** | P | | **P** | **10 13 06.9** | **+0.2** |
| | comp=Z,4.0nm,0.8s,baz=107,slow=9.9,SNR=2.3 | | | | | | | |
| KEST | | | | PcP | | **PcP** | **10 14 07.4** | **+1.3** |
| | comp=Z,11nm,1.1s,baz=118,slow=1.0,SNR=5.5 | | | | | | | |
| **GKN** | **Gorkha** | **55.67** | **46** | *e*P | | **P** | **10 13 05.9** | **-1.1** |
| | comp=Z,25nm,0.8s | | | | | | | |
| **DMN** | **Daman** | **55.77** | **46** | *e*P | | **P** | **10 13 06.3** | **-1.6** |
| | comp=Z,25nm,0.8s | | | | | | | |
| **PKIN** | **Phulchoki** | **55.96** | **47** | *e*P | | **P** | **10 13 08.0** | **-1.2** |
| | comp=Z,10nm,0.8s | | | | | | | |
| **PKI** | **Pulchoki** | **55.96** | **47** | *e*P | | **P** | **10 13 08.9** | **-0.4** |
| **KKN** | **Kakani** | **56.00** | **46** | *e*P | | **P** | **10 13 08.6** | **-0.9** |
| | comp=Z,20nm,0.8s | | | | | | | |
| **RAMN** | **Ramite** | **56.46** | **48** | *e*P | | **P** | **10 13 12.2** | **-0.6** |
| **GUN** | **Gumba** | **56.50** | **47** | *e*P | | **P** | **10 13 12.4** | **-0.8** |
| **CFR** | **Carcaliu** | **56.86** | **348** | ⇑P | | **P** | **10 13 15.9** | **+1.0** |
| **CFR** | **Carcaliu** | **56.86** | **348** | ⇑*i*P | | **P** | **10 13 15.9** | **+1.0** |
| **ODAN** | **Odare** | **56.99** | **48** | *e*P | | **P** | **10 13 15.8** | **-0.7** |
| | comp=Z,30nm,0.8s | | | | | | | |
| **TAPN** | **Taplejung** | **57.50** | **48** | *e*P | | **P** | **10 13 19.3** | **-0.9** |
| | comp=Z,17nm,0.8s | | | | | | | |
| **MLR** | **Muntele Rosu** | **57.65** | **346** | ⇓P | | **P** | **10 13 22.3** | **+1.6** |
| **MLR** | **Muntele Rosu** | **57.65** | **346** | ⇓*i*P | | **P** | **10 13 22.3** | **+1.6** |
| **SFK** | **Sufi-Kurgan** | **57.69** | **28** | P | | **P** | **10 13 22.0** | **+0.8** |
| SFK | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.3s | | | | | | | |
| **VRI** | **Vrincioaia** | **57.82** | **347** | ⇑P | | **P** | **10 13 24.5** | **+2.7** |
| **VRI** | **Vrincioaia** | **57.82** | **347** | ⇑*i*P | | **P** | **10 13 24.5** | **+2.7** |
| **PLOR** | **Plostina** | **57.83** | **347** | ⇓P | | **P** | **10 13 22.7** | **+0.9** |
| **PLOR** | **Plostina** | **57.83** | **347** | ⇓*i*P | | **P** | **10 13 22.7** | **+0.9** |
| **DIVS** | **Divibare** | **58.04** | **341** | ⇑*i*P | | **P** | **10 13 25.2** | **+1.8** |
| **LOT** | **Lotru** | **58.16** | **344** | ⇓*i*P | | **P** | **10 13 25.4** | **+1.2** |
| **GZR** | **Gura Zlata** | **58.37** | **344** | ⇑P | | **P** | **10 13 26.9** | **+1.2** |
| **GZR** | **Gura Zlata** | **58.37** | **344** | ⇑*i*P | | **P** | **10 13 26.9** | **+1.2** |
| **KSH** | **Kashi** | **58.46** | **30** | *e*P | | P | 10 13 22.9 | -3.6 |
| KSH | | | | *es*P | | sP | 10 13 30.1 | -4.3 |
| KSH | | | | PcS | | PcS | 10 18 13.1 | -5.6 |
| KSH | | | | S | | S | 10 21 15.8 | -13 |
| KSH | | | | ScS | | ScS | 10 23 07.1 | -8.7 |
| KSH | | | | PMZ | | | | |
| | comp=Z,110nm,5.3s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,95nm,4.6s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,93nm,6.1s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,410nm,24.1s | | | | | | | |
| **SYO** | **Syowa Base** | **58.59** | **181** | ⇑*e*P | | **P** | **10 13 27.4** | **+0.6** |
| **SYO** | **Syowa Base** | **58.59** | **181** | ⇑*e*PcP | | **PcP** | **10 14 16.0** | **-0.9** |
| **MAW** | **Mawson** | **58.70** | **171** | P | | **P** | **10 13 29.4** | **+1.8** |
| | comp=Z,4.3nm,0.7s,baz=323,slow=10,SNR=14 | | | | | | | |
| MAW | | | | LR | | LR | 10 34 17.6 | |
| | comp=Z,886nm,20.8s,baz=24,slow=32 | | | | | | | |
| **BZS** | **Buzias** | **58.91** | **343** | ⇓P | | **P** | **10 13 30.9** | **+1.6** |
| **BZS** | **Buzias** | **58.91** | **343** | ⇓*i*P | | **P** | **10 13 30.9** | **+1.6** |
| **KK31** | **Karatay Array** | **58.96** | **23** | *i* P | | **P** | **10 13 29.9** | **+0.1** |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **MNAS** | **Manas** | **59.26** | **25** | P | | **P** | **10 13 31.8** | **-0.2** |
| MNAS | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **AML** | **Almayashu** | **59.48** | **26** | P | | **P** | **10 13 34.1** | **+0.2** |
| | SNR=5.6 | | | | | | | |
| **BURAR** | **Bucovina Array** | **59.82** | **346** | ⇑P | | **P** | **10 13 37.4** | **+1.7** |
| **BURAR** | **Bucovina Array** | **59.82** | **346** | ⇑*i*P | | **P** | **10 13 37.4** | **+1.7** |
| **BUR04** | **Bucovina Ar. S** | **59.82** | **346** | *e*P | | **P** | **10 13 36.5** | **+0.8** |
| **IPM** | **Ipoh** | **59.88** | **79** | *e*P | | **P** | **10 13 37.2** | **+0.5** |
| | comp=Z,17nm,1.0s | | | | | | | |
| **UCH** | **Uchtor** | **59.92** | **27** | P | | **P** | **10 13 37.3** | **+0.4** |
| | SNR=9.8 | | | | | | | |
| **EKS2** | **Erkin-Say** | **59.94** | **26** | *e*P | | **P** | **10 13 37.6** | **+0.9** |
| EKS2 | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **EKS2** | **Erkin-Say** | **59.94** | **26** | *e*P | | **P** | **10 13 37.6** | **+0.9** |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **60.23** | **27** | P | | **P** | **10 13 39.2** | **+0.5** |
| | comp=Z,5.4nm,0.8s,baz=212,slow=7.4,SNR=12 | | | | | | | |
| **AAK** | **Ala-Archa** | **60.23** | **27** | *ce*P | | **P** | **10 13 38.9** | **+0.1** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,31nm,1.2s | | | | | | | |
| **AAK** | **Ala-Archa** | **60.23** | **27** | P | | **P** | **10 13 39.9** | **+1.2** |
| | SNR=5.7 | | | | | | | |
| **AAK** | **Ala-Archa** | **60.23** | **27** | *e*P | | **P** | **10 13 39.4** | **+0.7** |
| **KBK** | **Karagaybulak** | **60.45** | **27** | P | | **P** | **10 13 41.3** | **+1.0** |
| | SNR=14 | | | | | | | |
| **ULHL** | **Ulahol** | **60.72** | **28** | P | | **P** | **10 13 42.5** | **+0.4** |
| | SNR=5.9 | | | | | | | |
| **USP** | **Ospenovka** | **60.74** | **26** | P | | **P** | **10 13 42.5** | **+0.4** |
| | SNR=7.3 | | | | | | | |
| **BOJS** | **Bojanci** | **60.90** | **338** | *i* P | | **P** | **10 13 44.8** | **+1.8** |
| **TKM2** | **Tokmak 2** | **60.95** | **27** | *e*P | | **P** | **10 13 44.1** | **+0.4** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **60.95** | **27** | P | | **P** | **10 13 44.1** | **+0.4** |
| | SNR=9.6 | | | | | | | |
| **TKM2** | **Tokmak 2** | **60.95** | **27** | *e*P | | **P** | **10 13 44.1** | **+0.4** |
| | comp=Z,18nm,0.8s | | | | | | | |
| **VORD** | **Divnogorie** | **61.17** | **358** | *e*P | | **P** | **10 13 44.9** | **+0.2** |
| VORD | | | | pmax | | pmax | | |
| | comp=N,40nm,0.9s | | | | | | | |
| VORD | | | | pmax | | pmax | | |
| | comp=E,10.0nm,0.9s | | | | | | | |
| VORD | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | |
| **AB31** | **Akbulak array** | **61.29** | **13** | P | | **P** | **10 13 45.0** | **-0.6** |
| AB31 | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **ABKAR** | **Akbulak array** | **61.29** | **13** | *e*P | | **P** | **10 13 45.5** | **-0.1** |
| **VRH** | **Novokhopyorsk** | **61.34** | **359** | *e*P | | **P** | **10 13 46.3** | **+0.4** |
| VRH | | | | pmax | | pmax | | |
| | comp=N,50nm,0.9s | | | | | | | |
| VRH | | | | pmax | | pmax | | |
| | comp=E,50nm,0.9s | | | | | | | |
| VRH | | | | pmax | | pmax | | |
| | comp=Z,100nm,0.9s | | | | | | | |
| **VSR** | **Storozhevoye** | **61.43** | **357** | *e*P | | **P** | **10 13 46.8** | **+0.3** |
| VSR | | | | pmax | | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | | |
| VSR | | | | pmax | | pmax | | |
| | comp=E,4.0nm,0.6s | | | | | | | |
| VSR | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **JAVS** | **Javornik** | **61.67** | **338** | *i* P | | **P** | **10 13 49.2** | **+0.8** |
| **PERS** | **Pernice** | **61.92** | **339** | *i* P | | **P** | **10 13 51.9** | **+2.0** |
| **KIEV** | **Kiev** | **61.96** | **350** | *c* P | | **P** | **10 13 49.7** | **-0.4** |
| KIEV | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **AKASG** | **Malin Array Be** | **61.97** | **350** | P | | **P** | **10 13 49.4** | **-0.7** |
| | comp=Z,4.7nm,0.7s,baz=168,slow=5.7,SNR=16 | | | | | | | |
| AKASG | | | | LR | | LR | 10 41 25.9 | |
| | comp=Z,77nm,21.9s,baz=90,slow=37 | | | | | | | |
| **AKASG** | **Malin Array Be** | **61.97** | **350** | *ce*P | | **P** | **10 13 49.5** | **-0.6** |
| AKASG | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **SOKA** | **Soboth** | **61.98** | **339** | ⇑*i*P | | **P** | **10 13 51.6** | **+1.2** |
| | comp=Z,12nm,0.8s | | | | | | | |
| **OBKA** | **Obir** | **62.01** | **338** | ⇑*i*P | | **P** | **10 13 52.2** | **+1.6** |
| | comp=Z,22nm,0.8s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **62.02** | **11** | P | | **P** | **10 13 50.3** | **-0.2** |
| | comp=Z,10nm,0.8s,baz=199,slow=6.1,SNR=38 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **62.02** | **11** | P | | **P** | **10 13 50.3** | **-0.2** |
| AKTO | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **62.30** | **345** | *e*P | | **P** | **10 13 52.9** | **+0.5** |
| **KWP** | **Kalwaria Pacla** | **62.30** | **345** | *e*P | | **P** | **10 13 53.0** | **+0.5** |
| **ARSA** | **Arzberg** | **62.30** | **339** | ⇑*i*P | | **P** | **10 13 53.1** | **+0.6** |
| | comp=Z,11nm,1.0s | | | | | | | |
| **VYHS** | **Vyhne** | **62.33** | **342** | *e*P | | **P** | **10 13 52.9** | **+0.3** |
| VYHS | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **VYHS** | **Vyhne** | **62.33** | **342** | *e*P | | **P** | **10 13 52.9** | **+0.3** |
| **CM01** | **Chiang Mai Arr** | **62.41** | **63** | *e*P | | **P** | **10 13 53.8** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **62.41** | **63** | P | | **P** | **10 13 54.0** | **+0.2** |
| | comp=Z,14nm,0.8s,baz=252,slow=7.9,SNR=46 | | | | | | | |
| CMAR | | | | LR | | LR | 10 37 46.7 | |
| | comp=Z,305nm,19.9s,baz=226,slow=33 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **62.41** | **63** | *ce*P | | **P** | **10 13 54.0** | **+0.2** |
| CMAR | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **STHS** | **Stebnicka Huta** | **62.48** | **344** | *e*P | | **P** | **10 13 54.0** | **+0.4** |
| STHS | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **STHS** | **Stebnicka Huta** | **62.48** | **344** | *e*P | | **P** | **10 13 54.0** | **+0.4** |
| **CHTO** | **Chiang Mai** | **62.55** | **62** | *e*P | | **P** | **10 13 55.1** | **+0.4** |
| CHTO | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **CHTO** | **Chiang Mai** | **62.55** | **62** | *e*P | | **P** | **10 13 55.1** | **+0.4** |
| | comp=Z,14nm,0.9s | | | | | | | |
| **NIE** | **Niedzica** | **62.74** | **344** | *e*P | | **P** | **10 13 57.5** | **+2.1** |
| **NIE** | **Niedzica** | **62.74** | **344** | *e*P | | **P** | **10 13 57.5** | **+2.1** |
| **LPSR** | **Galich'ya Gora** | **62.82** | **357** | *e*P | | **P** | **10 13 56.0** | **+0.2** |
| LPSR | | | | pmax | | pmax | | |
| | comp=N,7.0nm,0.8s | | | | | | | |
| LPSR | | | | pmax | | pmax | | |
| | comp=E,6.0nm,0.8s | | | | | | | |
| LPSR | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **62.97** | **337** | ⇑*i*P | | **P** | **10 13 57.4** | **+0.3** |
| | comp=Z,11nm,0.9s | | | | | | | |
| **PDGK** | **Podgornoye** | **63.08** | **29** | P | | **P** | **10 13 56.9** | **-0.8** |
| PDGK | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.4s | | | | | | | |
| **MOA** | **Molln** | **63.26** | **339** | ⇑*i*P | | **P** | **10 13 58.3** | **-0.5** |
| | comp=Z,16nm,0.8s | | | | | | | |
| **NVL** | **N'lazarevskaya** | **63.33** | **191** | *e*P | | P | 10 14 02.3 | +3.3 |
| NVL | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **63.73** | **343** | *e*P | | **P** | **10 14 02.5** | **+0.6** |
| **OKC** | **Ostrava-Krasne** | **63.73** | **343** | *e*P | | **P** | **10 14 02.5** | **+0.6** |
| **WTTA** | **Wattenberg** | **63.74** | **337** | ⇑*i*P | | **P** | **10 14 02.8** | **+0.6** |
| | comp=Z,7.7nm,0.7s | | | | | | | |
| **MORC** | **Moravsky Berou** | **63.86** | **342** | ⇑P | | **P** | **10 14 03.5** | **+0.7** |
| **MORC** | **Moravsky Berou** | **63.86** | **342** | ⇑*i*P | | **P** | **10 14 03.5** | **+0.7** |
| **MORC** | **Moravsky Berou** | **63.86** | **342** | *e*P | | **P** | **10 14 03.5** | **+0.7** |
| | comp=Z,62nm,1.0s | | | | | | | |
| **FETA** | **Feichten** | **63.90** | **336** | ⇑*i*P | | **P** | **10 14

**CLL Collm 66.63 340** *e*P **P** **10 14 21.0 +0.3**
comp=Z,13nm,1.0s
CLL *e* 10 14 36.0
CLL *e*PPPP 10 19 12.0
CLL *e*S **S** **10 23 07.0 -4.2**
CLL *e*(SS) 10 27 45.0
CLL *e*SSS SSS 10 30 42.0
CLL LmV 10 44 00.0
comp=Z,100nm,21.9s
**MAKZ Makanchi 66.84 28** *e*P **P** **10 14 22.1 -0.1**
**MK01 Makanchi Array 66.97 28** *e*P **P** **10 14 22.5 -0.5**
**ZRNK Zerenda 66.97 17** P P 10 14 12.9 -10
ZRNK pmax pmax
comp=Z,7.0nm,0.7s
**MK31 Makanchi Array 66.98 28** P **P** **10 14 22.5 -0.6**
MK31 pmax pmax
comp=Z,1.0nm,0.4s
**MKAR Makanchi Array 66.98 28** P **P** **10 14 22.6 -0.5**
comp=Z,5.0nm,0.8s,baz=216,slow=6.0,SNR=22
MKAR LR LR 10 43 30.7
comp=Z,115nm,20.0s,baz=211,slow=36
**MKAR Makanchi Array 66.98 28** *e*P **P** **10 14 22.8 -0.3**
**PBAR Barrancos 67.03 319** *e*P **P** **10 14 25.1 +1.6**
comp=Z,27nm,2.0s
**PVAQ Vaqueiros 67.03 318** *e*P **P** **10 14 24.5 +1.0**
comp=Z,15nm,1.8s
**PBDV Barranco-do-Ve 67.08 318** *e*P **P** **10 14 25.3 +1.4**
comp=Z,19nm,1.6s
**SNAA Sanae 67.18 194** P **P** **10 14 25.8 +1.7**
**SNAA Sanae 67.18 194** *e*P **P** **10 14 25.7 +1.7**
SNAA pmax pmax
comp=Z,1.0nm,0.8s
**SNAA Sanae 67.18 194** *e*P **P** **10 14 25.7 +1.7**
comp=Z,1.5nm,0.8s
**PCVE Castro Verde 67.36 318** *e*P **P** **10 14 27.5 +1.8**
comp=Z,15nm,1.8s
**BRVK Borovoye 67.44 18***d i*P **P** **10 14 25.4 -0.4**
BRVK pmax pmax
comp=Z,20nm,1.7s
**BVAR Borovoye Array 67.44 18** P **P** **10 14 25.9 +0.1**
comp=Z,7.6nm,0.6s,baz=204,slow=3.3,SNR=27
**BVAR Borovoye Array 67.44 18** P **P** **10 14 25.9 +0.1**
BVAR pmax pmax
comp=Z,8.0nm,0.6s
**MORF Marmelete 67.59 318** *e*P **P** **10 14 28.1 +0.9**
MORF AMb AMB 10 14 32.2
comp=Z,27nm,1.7s
**MORF Marmelete 67.59 318** *e*P **P** **10 14 30.1 +2.9**
comp=Z,28nm,2.1s
**MORF Marmelete 67.59 318** *e*P **P** **10 14 28.0 +0.9**
MORF pmax pmax
comp=Z,27nm,1.7s
**MESJ Messejana 67.60 318** *e*P **P** **10 14 28.4 +1.3**
MESJ AMb AMB 10 14 30.6
comp=Z,24nm,1.6s
**MESJ Messejana 67.60 318** *e*P **P** **10 14 28.6 +1.4**
comp=Z,25nm,1.4s
**MESJ Messejana 67.60 318** *e*P **P** **10 14 28.4 +1.3**
MESJ pmax pmax
comp=Z,25nm,1.6s
**WMQ Urumqi 67.64 34** P **P** **10 14 28.0 +0.6**
WMQ sP **sP** **10 14 35.0 -0.3**
WMQ PP **PP** **10 16 57.0 +0.2**
WMQ ScP 10 18 59.0
WMQ S **S** **10 23 23.0 -0.9**
WMQ PMZ
comp=Z,15nm,1.2s
WMQ PMZ
comp=Z,110nm,5.0s
WMQ LN
comp=Z,140nm,22.0s
WMQ LE
comp=Z,140nm,20.0s
WMQ LZ
comp=Z,140nm,21.0s
**WLF Walferdange 67.85 335** P **P** **10 14 29.3 +0.8**
**VNA2 Neumayer--Watz 67.88 196** P **P** **10 14 30.1 +1.7**
baz=32,slow=5.2
**PNCL Nicolau / Gran 67.95 318** *e*P **P** **10 14 31.8 +2.4**
comp=Z,26nm,1.7s
**VNA1 Neumayer--Stat 67.96 196** P **P** **10 14 32.0 +3.2**
**PMRV Marv??o 67.97 320** *e*P **P** **10 14 30.5 +1.0**
comp=Z,23nm,1.7s
**KSM Kuching 68.23 84** *e*P **P** **10 14 30.8 -0.9**
comp=Z,18nm,0.7s
**KMI Kunming 68.26 58** P **P** **10 14 32.1 +0.2**
KMI pP **pP** **10 14 38.6 +0.9**
KMI sP **sP** **10 14 40.3 +0.5**
KMI S **S** **10 23 29.4 -2.9**
KMI PMZ
comp=Z,12nm,0.8s
KMI PMZ
comp=Z,50nm,5.3s
KMI LN
comp=Z,210nm,19.8s
KMI LE
comp=Z,76nm,19.8s
KMI LZ
comp=Z,190nm,17.4s
**KURBB Kurchatov Arra 68.27 24** P **P** **10 14 30.8 -0.3**
comp=Z,9.1nm,0.7s,baz=222,slow=7.1,SNR=35
**KURK Kurchatov 68.38 24** P **P** **10 14 30.8 -0.9**
KURK pmax pmax
comp=Z,9.0nm,0.7s
**KURK Kurchatov 68.38 24** P **P** **10 14 30.8 -0.9**
**MTE Manteigas 68.63 321** *e*P **P** **10 14 34.7 +1.0**
comp=Z,18nm,1.6s
**MTE Manteigas 68.63 321** *e*P **P** **10 14 34.8 +1.1**
comp=Z,10nm,0.8s
**MEM Membach 68.64 336** P **P** **10 14 34.5 +1.1**
**VNA3 Neumayer Olymp 68.67 196** P **P** **10 14 35.5 +2.1**
**MVO Moncorvo 68.77 322** *e*P **P** **10 14 36.5 +2.0**
comp=Z,23nm,1.0s
**BCLA Clavier 68.78 335** P **P** **10 14 35.0 +0.8**
**DOU Dourbes 68.83 335** P **P** **10 14 35.2 +0.6**
**SNF Seneffe 69.27 335** P **P** **10 14 38.2 +0.9**
**POLO Lamas de Olo 69.36 322** *e*P **P** **10 14 39.9 +1.7**
comp=Z,15nm,1.4s
**VSU Vasula 69.84 351⇑** *e*P **P** **10 14 42.1 +1.5**
VSU pmax pmax
comp=Z,115nm,1.2s
**PGAV Gavieira, Arco 69.99 322** *e*P **P** **10 14 44.8 +2.7**
comp=Z,29nm,2.0s
**SBUM Sibu 70.30 84** *e*P **P** **10 14 44.3 -0.2**
comp=Z,14nm,1.2s
**JAGI Jajag, Banyuwa 70.33 95** *e*P **P** **10 14 43.8 -0.9**
comp=Z,46nm,0.9s
**KLMR Klimovskoe 71.06 358** *e*P **P** **10 14 46.9 -1.1**
KLMR pmax pmax
comp=Z,38nm,1.3s
**CD2 Chengdu 71.45 52** *e*P **P** **10 14 51.3 +0.2**
CD2 pP **pP** **10 14 56.3 -0.7**
CD2 PP **PP** **10 17 29.5 -0.4**
CD2 S **S** **10 24 09.8 +0.6**
CD2 sS **sS** **10 24 18.3 -0.4**
CD2 SKS **SKSac** **10 24 53.6 -0.4**
CD2 SS **SS** **10 28 45.5 +1.1**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,120nm,5.0s
CD2 LE
comp=Z,220nm,19.6s
CD2 LZ
comp=Z,200nm,15.2s
**GYA Guiyang 72.04 58** P **P** **10 14 57.0 +2.1**
GYA PP **PP** **10 17 39.3 +4.1**
GYA S **S** **10 24 17.6 +1.3**
GYA SKS **SKSac** **10 24 55.5 -3.3**
GYA SS **SS** **10 28 54.0 +0.2**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,130nm,5.3s
GYA LN
comp=Z,530nm,20.2s
GYA LE
comp=Z,490nm,19.8s
GYA LZ
comp=Z,2µm,19.6s
**QIZ Qiongzhong 72.29 66** P **P** **10 14 57.0 +0.6**
QIZ sP **sP** **10 15 01.9 -2.4**
QIZ PP **PP** **10 17 37.9 +0.6**
QIZ S **S** **10 24 20.5 +1.3**
QIZ sS **sS** **10 24 26.8 -2.0**
QIZ SS **SS** **10 28 57.0 -0.6**
QIZ PMZ
comp=Z,21nm,1.6s
QIZ LN
comp=Z,150nm,20.9s
QIZ LZ
comp=Z,240nm,23.9s
**GTA Gaotai 72.48 43** *e*P **P** **10 14 57.9 +0.6**
GTA pP **pP** **10 15 02.5 -0.6**
GTA sP **sP** **10 15 04.9 -0.3**
GTA PcP **PcP** **10 15 15.3 +0.3**
GTA PP **PP** **10 17 40.9 +2.2**
GTA S **S** **10 24 20.8 -0.1**
GTA sS **sS** **10 24 27.8 -2.7**
GTA SKS **SKSac** **10 24 57.5 -4.1**
GTA SS **SS** **10 29 00.0 -0.1**
GTA PMZ
comp=Z,9.0nm,0.9s
GTA PMZ
comp=Z,69nm,5.2s
GTA LN
comp=Z,120nm,19.0s
GTA LE
comp=Z,150nm,19.9s
GTA LZ
comp=Z,150nm,19.0s
**FINES FINESS Array B 72.80 352** LR LR 10 47 44.0
comp=Z,72nm,21.2s,baz=174,slow=36
**HEX Exmoor 73.27 331** *e*P **P** **10 15 02.5 +1.0**
**ZAA0 Zalesovo Array 73.31 24** *e*P **P** **10 15 00.5 -1.2**
**ZALV Zalesovo Beam 73.31 24** P **P** **10 15 00.9 -0.8**
comp=Z,13nm,0.7s,baz=227,slow=6.7,SNR=10
ZALV LR LR 10 46 45.4
comp=Z,130nm,21.9s,baz=250,slow=35
**ZALV Zalesovo Beam 73.31 24** P **P** **10 15 00.9 -0.8**
ZALV pmax pmax
comp=Z,13nm,0.7s
ZALV MLR MLR
comp=Z,130nm,21.9s
**NVS Novosibirsk 73.34 23** *e*P **P** **10 15 01.5 -0.3**
NVS *i* 10 15 19.0
NVS pmax pmax
comp=Z,34nm,1.2s
NVS pmax pmax
comp=N,16nm,0.9s
NVS pmax pmax
comp=E,7.0nm,0.5s
**CCA1 Carnmenellis 73.38 330** *e*P **P** **10 15 02.3 +0.2**
CCA1 AMB AMB 10 15 04.3
comp=Z,21nm,0.9s
**MCH1 Michaelchurch 73.52 332** *e*P **P** **10 15 03.4 +0.4**
MCH1 AMB AMB 10 15 04.9
comp=Z,64nm,0.8s
**LZH Lanzhou 73.73 48** *e*P **P** **10 15 06.6 +1.8**
LZH pP **pP** **10 15 11.3 +0.6**
LZH sP **sP** **10 15 13.8 +1.0**
LZH S **SKiKP** **10 24 32.3 -1.7**
LZH sS **sS** **10 24 48.0 +3.0**
LZH PMZ
comp=Z,23nm,1.0s
LZH PMZ
comp=Z,130nm,4.4s
LZH LN
comp=Z,250nm,14.4s
LZH LE
comp=Z,330nm,14.5s
LZH LZ
comp=Z,450nm,15.0s
**FOEL Foel Wylfa 74.22 333** *e*P **P** **10 15 06.8 -0.3**
FOEL AMB AMB 10 15 09.6
comp=Z,23nm,1.0s
**MBWA Marble Bar 74.27 109** *e*P **P** **10 15 08.2 +0.1**
comp=Z,9.9nm,0.7s
**WPM1 Penmaenmawr 74.78 333** *e*P **P** **10 15 11.2 +0.9**
**YRE Yr Eifl 74.83 333** *e*P **P** **10 15 10.7 +0.1**
**WME Myndd Eilian 75.05 333** *e*P **P** **10 15 12.1 +0.2**
**KESW Keswick, Cumbr 75.34 334** *e*P **P** **10 15 14.5 +1.0**
KESW AMB AMB 10 15 16.5
comp=Z,26nm,1.0s
**NB2 NORSAR Subarra 75.43 345** P **P** **10 15 13.6 -0.3**
comp=Z,12nm,1.0s,baz=151,slow=5.6
**NOA NORSAR Array B 75.43 345** P **P** **10 15 13.7 -0.2**
comp=Z,4.4nm,0.8s,baz=148,slow=5.9,SNR=5.1
NOA LR LR 10 51 38.1
comp=Z,62nm,20.5s,baz=130,slow=38
**NOA NORSAR Array B 75.43 345** P **P** **10 15 13.7 -0.2**
NOA pmax pmax
comp=Z,4.0nm,0.8s
NOA MLR MLR
comp=Z,62nm,20.5s
**BBO1 Bothel 75.50 334** *e*P **P** **10 15 14.8 +0.4**
**BHH Howats Hill 75.73 335** *e*P **P** **10 15 16.3 +0.6**
**ECK Cauldkaine Hil 75.75 335** *e*P **P** **10 15 16.5 +0.6**
**EKA Eskdalemuir Ar 75.87 335** P **P** **10 15 17.0 +0.5**
comp=Z,13nm,0.7s,baz=124,slow=6.0,SNR=41
**EKA Eskdalemuir Ar 75.87 335** P **P** **10 15 17.0 +0.5**
EKA pmax pmax
comp=Z,13nm,0.7s
**ESK Eskdalemuir 75.88 335** *e*P **P** **10 15 16.8 +0.2**
**ESK Eskdalemuir 75.88 335** *i* P **P** **10 15 18.4 +1.8**
**BWH Wardlaw 75.97 335** *e*P **P** **10 15 18.3 +1.2**
**ESY Stoneypath 76.05 336** *e*P **P** **10 15 17.7 +0.1**
**GAL1 Galloway 76.21 334** *e*P **P** **10 15 18.6 +0.2**
GAL1 AMB AMB 10 15 21.0
comp=Z,16nm,0.9s
**KAPI Kappang 76.35 93** LR LR 10 45 57.7
comp=Z,94nm,18.7s,baz=286,slow=33
**EDU Dundee 76.65 336** *e*P **P** **10 15 21.3 +0.4**
**XAN Xi'an 76.69 51** P **P** **10 15 21.3 -0.5**
XAN pP **pP** **10 15 28.4 +0.8**
XAN S S 10 24 59.4 -8.7
XAN PMZ
comp=Z,16nm,0.9s
XAN PMZ
comp=Z,76nm,5.1s
XAN LN
comp=Z,64nm,18.3s
XAN LE
comp=Z,100nm,18.3s
XAN LZ
comp=Z,130nm,20.4s
**EAB Aberfoyle 76.94 335** *e*P **P** **10 15 22.9 +0.4**
**APA Apatity 78.05 356⇓** *i*P **P** **10 15 30.0 +1.5**
APA MLR MLR
comp=Z,400nm,10.0s
**KPL Plockton 78.25 336** *e*P **P** **10 15 29.9 +0.1**
**RSC Scourie 78.73 336** *e*P **P** **10 15 31.6 -0.9**
**BATI Baumata 79.37 99** LR LR 10 42 25.7
comp=Z,71nm,20.6s,slow=30
**MOY Mondy 79.50 33** *e*P **P** **10 15 38.8 +1.8**
**LUWI Luwuk 80.00 89** *e*P **P** **10 15 39.7 -0.7**
comp=Z,28nm,0.8s
**ZAK Zakamensk 80.09 34** *e*P **P** **10 15 40.3 +0.1**
ZAK pmax pmax
comp=Z,6.0nm,1.5s
**ARCES ARCESS Array B 80.64 354** P **P** **10 15 42.8 +0.1**
comp=Z,8.5nm,0.6s,baz=169,slow=5.2,SNR=28
ARCES LR LR 10 53 42.3
comp=Z,56nm,19.5s,baz=138,slow=37
**ARCES ARCESS Array B 80.64 354** P **P** **10 15 42.8 +0.1**
ARCES pmax pmax
comp=Z,9.0nm,0.6s
ARCES MLR MLR
comp=Z,56nm,19.5s
**SONM Songino Array 80.69 38** P **P** **10 15 43.9 +0.3**
comp=Z,2.9nm,0.8s,baz=235,slow=6.4,SNR=19
SONM LR LR 10 52 10.7
comp=Z,84nm,18.8s,baz=240,slow=36
**SONM Songino Array 80.69 38** P **P** **10 15 43.9 +0.3**
SONM pmax pmax
comp=Z,3.0nm,0.8s
SONM MLR MLR
comp=Z,84nm,18.8s
**SONA1 Songino Array 80.70 38** *e*P **P** **10 15 44.1 +0.4**
**ULN Ulaanbaatar 81.10 38***de*P **P** **10 15 46.0 +0.2**
ULN pmax pmax
comp=Z,10.0nm,1.7s
**ULN Ulaanbaatar 81.10 38** *e*P **P** **10 15 46.3 +0.5**
comp=Z,45nm,2.3s
**HHC Hu-ho-hao-te 81.20 46** *e*P **P** **10 15 47.8 +1.4**
HHC S **S** **10 25 56.0 -0.1**
HHC SS **SS** **10 31 13.0 +1.1**
HHC PMZ
comp=Z,25nm,1.0s
HHC PMZ
comp=Z,98nm,5.7s
HHC LN
comp=Z,120nm,16.1s
HHC LE
comp=Z,180nm,16.3s
HHC LZ
comp=Z,190nm,18.8s
**IRK Irkutsk 81.54 33** *e*P **P** **10 15 48.5 +0.7**
IRK pmax pmax
comp=Z,32nm,1.6s
**NJ2 Nanjing 83.92 56** *e*P **P** **10 16 01.9 +1.3**
NJ2 PMZ
comp=Z,30nm,0.9s
**BJI Beijing 84.23 48** P **P** **10 16 02.8 +0.8**
BJI SKS **S** **10 26 21.8 -4.9**
BJI S **SKKSac** **10 26 29.5 -0.7**
BJI SS **SS** **10 31 58.6 +2.1**
BJI PMZ
comp=Z,15nm,0.6s
BJI PMZ
comp=Z,210nm,5.0s
BJI LN
comp=Z,160nm,19.0s
BJI LE
comp=Z,180nm,23.6s
BJI LZ
comp=Z,240nm,26.0s
**VNDA Vanda 85.94 169** P **P** **10 16 10.7 +0.7**
comp=Z,0.8nm,0.7s,baz=274,slow=4.8,SNR=5.9
VNDA LR LR 10 50 47.1
comp=Z,481nm,20.5s,baz=236,slow=33
**ASAR Alice Springs 86.94 113** P **P** **10 16 15.8 -0.2**
comp=Z,5.5nm,0.8s,baz=263,slow=4.5,SNR=25
ASAR PKKPbc **PKKPbc** **10 34 08.3 -1.0**
comp=Z,0.5nm,0.7s,baz=93,slow=3.0,SNR=7.4
**AS01 Alice Springs 86.99 113** *e*P **P** **10 16 15.7 -0.6**
**BDFB Brasilia 87.97 255** P **P** **10 16 21.8 +0.6**
comp=Z,4.5nm,0.9s,baz=134,slow=6.8,SNR=6.4
**BDFB Brasilia 87.97 255** P **P** **10 16 21.8 +0.6**
BDFB pmax pmax
comp=Z,5.0nm,0.9s
**BDFB Brasilia 87.97 255** *e*P P 10 16 24.7 +3.5
comp=Z,193nm,2.5s
**WRA Warramunga Arr 87.99 110** P **P** **10 16 20.7 -0.4**
comp=Z,4.4nm,0.7s,baz=265,slow=3.4,SNR=33
WRA PKKPbc **PKKPbc** **10 34 06.9 +0.3**
comp=Z,0.9nm,0.7s,baz=86,slow=2.9,SNR=11
WRA LR LR 10 49 57.1
comp=Z,74nm,20.9s,baz=245,slow=32
**WRAB Tennant Creek 88.00 110***c i*P **P** **10 16 20.7 -0.5**
WRAB pmax pmax
comp=Z,13nm,0.8s
**WRAB Tennant Creek 88.00 110** P **P** **10 16 20.0 -1.2**
comp=Z,67nm,0.7s,SNR=5.5
**KSAR Wonju Array Be 92.41 53** P **P** **10 16 40.2 -1.1**
**KSAR Wonju Array Be 92.41 53** P **P** **10 16 40.2 -1.1**
**KS01 Wonju Array Si 92.43 53** *e*P **P** **10 16 40.4 -1.0**
**KSRS Korea Array 92.45 53** P **P** **10 16 40.2 -1.3**
comp=Z,2.9nm,0.9s,baz=256,slow=5.6,SNR=8.7
KSRS LR LR 10 59 08.3
comp=Z,105nm,19.4s,baz=265,slow=36
**KSRS Korea Array 92.45 53** P **P** **10 16 40.2 -1.3**
KSRS pmax pmax
comp=Z,3.0nm,0.9s
KSRS MLR MLR
comp=Z,105nm,19.4s
**USRK Ussuriysk Ar. 96.61 46** LR LR 10 59 48.1
comp=Z,83nm,21.6s,baz=291,slow=35
**KLR Kul'dur 97.13 41⇓** *e*P **P** **10 17 00.5 -2.2**
**YAK Yakutsk 97.66 28** *e*P P 10 16 58.9 -5.8
YAK pmax pmax
comp=Z,9.0nm,0.6s
YAK pmax pmax
comp=N,2.0nm,0.3s
**HABR Khabarovsk 99.21 42** *e*P **Pdif** **10 17 09.5 -2.5**
HABR *e**SP sP 10 17 14.3 -5.8
HABR *e* 10 21 11.4
HABR *e*PPP PPP 10 23 17.4
HABR *e*S **SKSac** **10 27 47.8 -1.8**
HABR *e*SS **SS** **10 35 28.6 -3.2**
HABR *e*SSS SSS 10 39 18.2
HABR pmax pmax
comp=Z,8.0nm,0.9s
HABR MLR MLR
comp=Z,178nm,19.0s
**BILL Bilibino 111.74 20***c i*PKIKP **PKiKP** **10 22 02.6 -2.0**
BILL *e* 10 22 46.2
BILL *e*PPP PPP 10 25 09.3
BILL MLR MLR
comp=Z,151nm,22.0s
**DZM Mont Dzumac 116.06 121** *e*LR LR 10 21 18.2
comp=Z,386nm,24.9s
**DZM Mont Dzumac 116.06 121** *e*LR LR 10 57 21.3
comp=Z,192nm,22.3s
**OTAV Otavalo 120.69 264** *e*PKPdf **PKPdf** **10 22 23.9 -0.1**
**INK Inuvik 122.10 358** *e*PKIKP **PKPdf** **10 22 23.8 -0.6**
**INK Inuvik 122.10 358** *e*PKPdf **PKPdf** **10 22 23.8 -0.6**
**KMSC Kings Mountain 123.67 305** PKPdf **PKPdf** **10 22 27.7 -0.8**
baz=124
**MLY Manley 124.63 7** *e*PKPdf **PKPdf** **10 22 29.3 -0.3**
**COLA College 125.09 6** *i* PKIKP **PKPdf** **10 22 29.2 -1.1**
**IL1 Eielson Array 125.28 5** *e*PKPdf **PKPdf** **10 22 29.2 -1.5**
**ILAR Eielson Array 125.28 5** PKP **PKPdf** **10 22 29.2 -1.5**
comp=Z,2.0nm,0.7s,baz=324,slow=3.1,SNR=29
**ILAR Eielson Array 125.28 5** PKIKP **PKPdf** **10 22 29.2 -1.5**
ILAR pmax pmax
comp=Z,2.0nm,0.7s
**CCB Clear Creek Bu 125.32 6** *e*PKPdf **PKPdf** **10 22 29.2 -1.6**
**WRH Wood River Hil 125.47 6** *e*PKPdf **PKPdf** **10 22 30.2 -0.8**
**YKA Yellowknife Ar 125.47 347** PKP **PKPdf** **10 22 30.0 -1.1**
comp=Z,4.0nm,0.7s,baz=21,slow=1.7,SNR=18
**YKA Yellowknife Ar 125.47 347** PKIKP **PKPdf** **10 22 30.0 -1.1**
YKA pmax pmax
comp=Z,4.0nm,0.7s
**C39A Grand Marais 125.70 323** PKPdf **PKPdf** **10 22 31.2 -0.8**
baz=126
**TRF Thorofare Moun 126.21 7** *e*PKPdf **PKPdf** **10 22 32.2 -0.6**
**TIGA Tifton 126.25 301** PKPdf **PKPdf** **10 22 32.1 -1.4**
baz=126
**C38A Sawbill Land. 126.43 323** PKPdf **PKPdf** **10 22 32.9 -0.5**
baz=126
**EYMN Ely 126.45 323** PKPdf **PKPdf** **10 22 33.0 -0.4**
baz=126
**EYMN Ely 126.45 323** *e*PKPdf **PKPdf** **10 22 33.1 -0.3**
**SFIN Scholer Farm 126.67 313** PKPdf **PKPdf** **10 22 33.4 -0.7**
baz=127
**C37A Embarrass 126.96 323** PKPdf **PKPdf** **10 22 33.9 -0.5**
baz=127
**SWET Sewanee 127.32 307** *e*PKPdf **PKPdf** **10 22 34.8 -0.7**
**C36A Pine Crest Far 127.33 324** PKPdf **PKPdf** **10 22 34.8 -0.3**
baz=127
**D37A Cotton 127.38 323** PKPdf **PKPdf** **10 22 34.8 -0.4**
baz=127
**ULM Lac du Bonnet 127.69 328** PKP **PKPdf** **10 22 35.0 -0.7**
comp=Z,8.3nm,0.9s,baz=58,slow=3.7,SNR=6.6
**ULM Lac du Bonnet 127.69 328** PKIKP **PKPdf** **10 22 35.0 -0.7**
ULM pmax pmax
comp=Z,8.0nm,0.9s
**D36A Goodland 127.81 323** PKPdf **PKPdf** **10 22 35.6 -0.5**
baz=128
**JFWS Jewell Farm 127.91 317** *e*PKIKP **PKPdf** **10 22 36.0 -0.4**
**JFWS Jewell Farm 127.91 317** *e*PKPdf **PKPdf** **10 22 36.0 -0.4**
**OLIL Olney 127.94 311** *e*PKPdf **PKPdf** **10 22 36.4 -0.2**
**B34A Aery, Baudette 127.99 325** PKPdf **PKPdf** **10 22 35.8 -0.5**
baz=128
**C35A Jirik Farms, M 128.02 324** PKPdf **PKPdf** **10 22 35.9 -0.6**
baz=128
**A33A Warroad 128.16 326** PKPdf **PKPdf** **10 22 36.3 -0.4**
baz=128
**HDIL Hopedale 128.17 314** PKPdf **PKPdf** **10 22 36.4 -0.6**
baz=128
**D35A Remer 128.38 323** PKPdf **PKPdf** **10 22 36.8 -0.4**
baz=128
**SPMN St. Paul 128.54 321** PKPdf **PKPdf** **10 22 36.8 -0.7**
baz=128
**SPMN St. Paul 128.54 321** *e*PKPdf **PKPdf** **10 22 36.9 -0.6**
**F36A Milaca 128.68 322** PKPdf **PKPdf** **10 22 36.9 -0.8**
baz=129
**AGMN Agassiz Nation 128.77 326** PKPdf **PKPdf** **10 22 37.1 -0.7**
baz=129
**AGMN Agassiz Nation 128.77 326** *e*PKPdf **PKPdf** **10 22 37.4 -0.4**
**I38A Scanlan Farm, 128.79 319** PKPdf **PKPdf** **10 22 37.2 -0.8**
baz=129
**D34A Park Rapids 129.05 324** PKPdf **PKPdf** **10 22 37.7 -0.7**
baz=129
**B32A Ashes, Strandq 129.09 326** PKPdf **PKPdf** **10 22 37.7 -0.8**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=129 | | | | | | | |
| I37A | Lemond, Waseca | 129.49 320 | | PKPdf | PKPdf | 10 22 39.3 | -0.1 | |
| | baz=129 | | | | | | | |
| G35A | Watkins | 129.59 321 | | PKPdf | PKPdf | 10 22 39.6 | +0.1 | |
| | baz=130 | | | | | | | |
| H35A | Sunnyside Ranc | 130.06 321 | | PKPdf | PKPdf | 10 22 40.0 | -0.4 | |
| | baz=130 | | | | | | | |
| C31A | Landman Farms, | 130.10 326 | | PKPdf | PKPdf | 10 22 39.9 | -0.5 | |
| | baz=130 | | | | | | | |
| A29A | Manning Farm, | 130.23 328 | | PKPdf | PKPdf | 10 22 40.5 | -0.2 | |
| | baz=130 | | | | | | | |
| F33A | 5 Mile Ranch, | 130.35 323 | | PKPdf | PKPdf | 10 22 40.3 | -0.6 | |
| | baz=130 | | | | | | | |
| J36A | Seneca 1, Swea | 130.41 319 | | PKPdf | PKPdf | 10 22 40.3 | -0.9 | |
| | baz=130 | | | | | | | |
| C30A | Mose, Pekin | 130.56 326 | | PKPdf | PKPdf | 10 22 40.4 | -0.9 | |
| | baz=130 | | | | | | | |
| A28A | Rude Farm, Bot | 130.78 328 | | PKPdf | PKPdf | 10 22 41.2 | -0.6 | |
| | baz=131 | | | | | | | |
| D30A | Buchanan | 131.06 326 | | PKPdf | PKPdf | 10 22 42.0 | -0.3 | |
| | baz=131 | | | | | | | |
| H33A | Prehn Over Nor | 131.24 322 | | PKPdf | PKPdf | 10 22 41.3 | -1.4 | |
| | baz=131 | | | | | | | |
| KDAK | Kodiak Island | 131.27 11 | | *i* PKIKP | PKPdf | 10 22 43.5 | +1.2 | |
| F31A | Hecla | 131.49 324 | | PKPdf | PKPdf | 10 22 42.0 | -1.2 | |
| | baz=131 | | | | | | | |
| ECSD | EROS Data Cent | 131.65 321 | | PKPdf | PKPdf | 10 22 42.7 | -0.7 | |
| | baz=132 | | | | | | | |
| ECSD | EROS Data Cent | 131.65 321 | | *e*PKPdf | PKPdf | 10 22 42.8 | -0.7 | |
| I32A | Karley and Nic | 132.02 322 | | PKPdf | PKPdf | 10 22 43.1 | -1.0 | |
| | baz=132 | | | | | | | |
| UALR | University of | 132.48 308 | | *e*PKPdf | PKPdf | 10 22 45.7 | +0.4 | |
| I31A | Royce, Wessing | 132.67 322 | | PKPdf | PKPdf | 10 22 43.7 | -1.8 | |
| | baz=133 | | | | | | | |
| F28A | McLaughlin | 132.94 325 | | PKPdf | PKPdf | 10 22 44.8 | -1.1 | |
| | baz=133 | | | | | | | |
| K32A | Verdigre | 133.06 320 | | PKPdf | PKPdf | 10 22 44.6 | -1.6 | |
| | baz=133 | | | | | | | |
| C25A | Freed Ranch, W | 133.08 329 | | PKPdf | PKPdf | 10 22 44.6 | -1.5 | |
| | baz=133 | | | | | | | |
| J31A | Geddes | 133.20 321 | | PKPdf | PKPdf | 10 22 45.0 | -1.4 | |
| | baz=133 | | | | | | | |
| S37A | Fort Scott | 133.22 313 | | PKPdf | PKPdf | 10 22 45.9 | -0.7 | |
| | baz=133 | | | | | | | |
| I30A | Oacoma | 133.27 323 | | PKPdf | PKPdf | 10 22 45.1 | -1.5 | |
| | baz=133 | | | | | | | |
| P35A | Duane Minner, | 133.30 316 | | PKPdf | PKPdf | 10 22 47.1 | +0.3 | |
| | baz=133 | | | | | | | |
| U38A | Gravette | 133.43 311 | | PKPdf | PKPdf | 10 22 47.2 | +0.1 | |
| | baz=133 | | | | | | | |
| O34A | Beatrice | 133.46 317 | | PKPdf | PKPdf | 10 22 47.3 | +0.2 | |
| | baz=133 | | | | | | | |
| E26A | Carlson Angus | 133.47 327 | | PKPdf | PKPdf | 10 22 47.2 | +0.3 | |
| | baz=133 | | | | | | | |
| R36A | Gordon, Harris | 133.47 314 | | PKPdf | PKPdf | 10 22 46.8 | -0.2 | |
| | baz=133 | | | | | | | |
| G28A | Parade | 133.47 325 | | PKPdf | PKPdf | 10 22 47.2 | +0.3 | |
| | baz=133 | | | | | | | |
| D25A | Fairfield | 133.48 328 | | PKPdf | PKPdf | 10 22 46.8 | -0.1 | |
| | baz=133 | | | | | | | |
| T37A | Cheneyville 18 | 133.55 312 | | PKPdf | PKPdf | 10 22 47.2 | -0.1 | |
| | baz=134 | | | | | | | |
| K31A | O'Neill | 133.57 321 | | PKPdf | PKPdf | 10 22 47.2 | +0.1 | |
| | baz=134 | | | | | | | |
| F27A | Lemmon | 133.60 326 | | PKPdf | PKPdf | 10 22 47.5 | +0.4 | |
| | baz=134 | | | | | | | |
| Q35A | Mercer Eighty, | 133.61 315 | | PKPdf | PKPdf | 10 22 47.7 | +0.3 | |
| | baz=134 | | | | | | | |
| J30A | Dallas | 133.64 322 | | PKPdf | PKPdf | 10 22 47.3 | 0.0 | |
| | baz=134 | | | | | | | |
| V38A | Canehill | 133.66 310 | | PKPdf | PKPdf | 10 22 47.4 | -0.1 | |
| | baz=134 | | | | | | | |
| N33A | J Bar K, Exete | 133.69 318 | | PKPdf | PKPdf | 10 22 47.4 | 0.0 | |
| | baz=134 | | | | | | | |
| I29A | Vivian Onida | 133.73 323 | | PKPdf | PKPdf | 10 22 47.6 | +0.2 | |
| | baz=134 | | | | | | | |
| H28A | Mission Ridge | 133.77 324 | | PKPdf | PKPdf | 10 22 47.9 | +0.4 | |
| | baz=134 | | | | | | | |
| P34A | Walnut Farm, R | 133.84 316 | | PKPdf | PKPdf | 10 22 48.3 | +0.5 | |
| | baz=134 | | | | | | | |
| G27A | Dupree | 133.86 326 | | PKPdf | PKPdf | 10 22 48.0 | +0.4 | |
| | baz=134 | | | | | | | |
| L31A | Butterfield Fa | 133.86 320 | | PKPdf | PKPdf | 10 22 47.8 | 0.0 | |
| | baz=134 | | | | | | | |
| KSU1 | Kansas State U | 133.90 315 | | PKPdf | PKPdf | 10 22 48.5 | +0.6 | |
| | baz=134 | | | | | | | |
| KSU1 | Kansas State U | 133.90 315 | | *e*PKPdf | PKPdf | 10 22 49.0 | +1.2 | |
| R35A | Emporia Munici | 133.96 314 | | PKPdf | PKPdf | 10 22 48.0 | 0.0 | |
| | baz=134 | | | | | | | |
| F26A | Lodgepole | 133.97 327 | | PKPdf | PKPdf | 10 22 48.0 | +0.2 | |
| | baz=134 | | | | | | | |
| U37A | Salina | 133.98 311 | | PKPdf | PKPdf | 10 22 48.3 | +0.2 | |
| | baz=134 | | | | | | | |
| W38A | Poteau | 134.05 309 | | PKPdf | PKPdf | 10 22 48.5 | +0.3 | |
| | baz=134 | | | | | | | |
| K30A | Basset | 134.07 321 | | PKPdf | PKPdf | 10 22 48.3 | +0.1 | |
| | baz=134 | | | | | | | |
| J29A | Okreek | 134.10 322 | | PKPdf | PKPdf | 10 22 48.4 | +0.3 | |
| | baz=134 | | | | | | | |
| O33A | Hebron | 134.11 317 | | PKPdf | PKPdf | 10 22 48.4 | +0.1 | |
| | baz=134 | | | | | | | |
| Y39A | Lockesburg | 134.12 308 | | PKPdf | PKPdf | 10 22 48.7 | +0.3 | |
| | baz=134 | | | | | | | |
| V37A | Hulbert | 134.21 311 | | PKPdf | PKPdf | 10 22 48.8 | +0.3 | |
| | baz=134 | | | | | | | |
| Q34A | Chapman | 134.21 315 | | PKPdf | PKPdf | 10 22 48.6 | +0.1 | |
| | baz=134 | | | | | | | |
| I28A | Midland | 134.25 324 | | PKPdf | PKPdf | 10 22 48.7 | +0.3 | |
| | baz=134 | | | | | | | |
| G26A | Maurine | 134.28 326 | | PKPdf | PKPdf | 10 22 48.9 | +0.4 | |
| | baz=134 | | | | | | | |
| S35A | Otter Creek Ra | 134.33 313 | | PKPdf | PKPdf | 10 22 49.3 | +0.6 | |
| | baz=134 | | | | | | | |
| H27A | Howes | 134.40 325 | | PKPdf | PKPdf | 10 22 49.3 | +0.6 | |
| | baz=134 | | | | | | | |
| X38A | Whitesboro | 134.43 309 | | PKPdf | PKPdf | 10 22 49.4 | +0.4 | |
| | baz=134 | | | | | | | |
| U36A | Oologah | 134.44 311 | | PKPdf | PKPdf | 10 22 49.5 | +0.6 | |
| | baz=134 | | | | | | | |
| K29A | Lazy Trails An | 134.46 322 | | PKPdf | PKPdf | 10 22 49.3 | +0.4 | |
| | baz=134 | | | | | | | |
| J28A | Allard Ranch, | 134.63 323 | | PKPdf | PKPdf | 10 22 49.3 | +0.1 | |
| | baz=134 | | | | | | | |
| TUL1 | Tulsa | 134.68 311 | | PKPdf | PKPdf | 10 22 50.0 | +0.5 | |
| | baz=135 | | | | | | | |
| TUL1 | Tulsa | 134.68 311 | | *e*PKPdf | PKPdf | 10 22 50.6 | +1.2 | |
| R34A | Isabella, Hill | 134.71 315 | | PKPdf | PKPdf | 10 22 49.8 | +0.4 | |
| | baz=135 | | | | | | | |
| I27A | Quinn | 134.72 324 | | PKPdf | PKPdf | 10 22 49.5 | +0.1 | |
| | baz=135 | | | | | | | |
| Q33A | Connelly Farm, | 134.79 316 | | PKPdf | PKPdf | 10 22 50.1 | +0.6 | |
| | baz=135 | | | | | | | |
| G25A | Newell | 134.79 326 | | PKPdf | PKPdf | 10 22 49.8 | +0.3 | |
| | baz=135 | | | | | | | |
| T35A | Sooner Cattle | 134.79 313 | | PKPdf | PKPdf | 10 22 50.1 | +0.4 | |
| | baz=135 | | | | | | | |
| H26A | Fairpoint | 134.80 325 | | PKPdf | PKPdf | 10 22 50.0 | +0.5 | |
| | baz=135 | | | | | | | |
| X37A | Clayton | 134.88 309 | | PKPdf | PKPdf | 10 22 50.2 | +0.4 | |
| | baz=135 | | | | | | | |
| P32A | Huiting Farm, | 135.01 317 | | PKPdf | PKPdf | 10 22 50.1 | +0.2 | |
| | baz=135 | | | | | | | |
| K28A | Ten Mile Ranch | 135.12 322 | | PKPdf | PKPdf | 10 22 50.5 | +0.3 | |
| | baz=135 | | | | | | | |
| J27A | Elkhorn Farm, | 135.19 323 | | PKPdf | PKPdf | 10 22 50.8 | +0.5 | |
| | baz=135 | | | | | | | |
| I26A | New Underwood | 135.21 325 | | PKPdf | PKPdf | 10 22 50.8 | +0.5 | |
| | baz=135 | | | | | | | |
| R33A | Olander Ranch, | 135.22 315 | | PKPdf | PKPdf | 10 22 51.1 | +0.7 | |
| | baz=135 | | | | | | | |
| O31A | Woolen Ranch, | 135.23 318 | | PKPdf | PKPdf | 10 22 50.8 | +0.4 | |
| | baz=135 | | | | | | | |
| T34A | McClaskey Farm | 135.24 313 | | PKPdf | PKPdf | 10 22 51.1 | +0.6 | |
| | baz=135 | | | | | | | |
| H25A | Fruitdale | 135.25 326 | | PKPdf | PKPdf | 10 22 51.1 | +0.7 | |
| | baz=135 | | | | | | | |
| LAO | LASA Array | 135.26 330 | | PKPdf | PKPdf | 10 22 50.9 | +0.6 | |
| | baz=135 | | | | | | | |
| LAO | LASA Array | 135.26 330 | | *e*PKPdf | PKPdf | 10 22 51.2 | +1.0 | |
| Y37A | Hugo | 135.29 308 | | PKPdf | PKPdf | 10 22 51.3 | +0.7 | |
| | baz=135 | | | | | | | |
| W36A | Wetumka | 135.31 310 | | PKPdf | PKPdf | 10 22 51.0 | +0.4 | |
| | baz=135 | | | | | | | |
| V35A | Meyer Ranch, C | 135.52 311 | | PKPdf | PKPdf | 10 22 51.6 | +0.6 | |
| | baz=136 | | | | | | | |
| P31A | Stockton | 135.58 317 | | PKPdf | PKPdf | 10 22 51.7 | +0.6 | |
| | baz=136 | | | | | | | |
| X36A | Centrahoma | 135.63 309 | | PKPdf | PKPdf | 10 22 51.4 | +0.2 | |
| | baz=136 | | | | | | | |
| R32A | Long Quarter, | 135.67 316 | | PKPdf | PKPdf | 10 22 51.8 | +0.6 | |
| | baz=136 | | | | | | | |
| O30A | MW Ranch, Wils | 135.69 318 | | PKPdf | PKPdf | 10 22 51.8 | +0.6 | |
| | baz=136 | | | | | | | |
| I25A | Rochford | 135.71 325 | | PKPdf | PKPdf | 10 22 51.9 | +0.6 | |
| | baz=136 | | | | | | | |
| U34A | Anderson Ranch | 135.74 312 | | PKPdf | PKPdf | 10 22 51.9 | +0.5 | |
| | baz=136 | | | | | | | |
| J26A | Sides Ranch, S | 135.77 324 | | PKPdf | PKPdf | 10 22 52.0 | +0.7 | |
| | baz=136 | | | | | | | |
| W35A | Tecumseh | 135.79 310 | | PKPdf | PKPdf | 10 22 52.0 | +0.5 | |
| | baz=136 | | | | | | | |
| RSSD | Black Hills | 135.81 326 | | *e*PKIKP | PKPdf | 10 22 52.4 | +0.8 | |
| RSSD | Black Hills | 135.81 326 | | *e*PKPdf | PKPdf | 10 22 52.4 | +0.8 | |
| Y36A | Durant | 135.84 308 | | PKPdf | PKPdf | 10 22 51.9 | +0.3 | |
| | baz=136 | | | | | | | |
| EGMT | Eagleton | 135.94 334 | | PKPdf | PKPdf | 10 22 51.9 | +0.4 | |
| | baz=136 | | | | | | | |
| EGMT | Eagleton | 135.94 334 | | *e*PKPdf | PKPdf | 10 22 52.6 | +1.1 | |
| V34A | Guthrie | 135.99 312 | | PKPdf | PKPdf | 10 22 52.7 | +0.9 | |
| | baz=136 | | | | | | | |
| J25A | Sunshine Ranch | 136.14 325 | | PKPdf | PKPdf | 10 22 52.9 | +0.8 | |
| | baz=136 | | | | | | | |
| P30A | Selden | 136.15 318 | | PKPdf | PKPdf | 10 22 52.3 | +0.2 | |
| | baz=136 | | | | | | | |
| U33A | Lingo Farm, Me | 136.16 313 | | PKPdf | PKPdf | 10 22 52.7 | +0.5 | |
| | baz=136 | | | | | | | |
| CBKS | Cedar Bluff | 136.18 317 | | PKPdf | PKPdf | 10 22 52.4 | +0.2 | |
| | baz=136 | | | | | | | |
| Y34A | Reagan Ranch, | 136.94 309 | | PKPdf | PKPdf | 10 22 54.3 | +0.6 | |
| | baz=137 | | | | | | | |
| Q29A | Oakley | 136.97 317 | | PKPdf | PKPdf | 10 22 54.4 | +0.7 | |
| | baz=137 | | | | | | | |
| T31A | Randall Ranch, | 136.97 314 | | PKPdf | PKPdf | 10 22 54.4 | +0.7 | |
| | baz=137 | | | | | | | |
| P28A | Saint Francis | 137.12 319 | | PKPdf | PKPdf | 10 22 54.2 | +0.2 | |
| | baz=137 | | | | | | | |
| 336A | Riesel | 137.18 305 | | PKPdf | PKPdf | 10 22 54.7 | +0.5 | |
| | baz=137 | | | | | | | |
| Z34A | Collier Ranch, | 137.29 309 | | PKiKP | PKPdf | 10 22 54.9 | +0.5 | |
| | baz=137 | | | | | | | |
| 637A | Eagle Lake | 137.40 302 | | PKiKP | PKiKP | 10 22 57.0 | +0.4 | |
| | baz=137 | | | | | | | |
| Q28A | Sharon Springs | 137.44 318 | | PKiKP | PKiKP | 10 22 56.8 | +0.3 | |
| | baz=137 | | | | | | | |
| WHTX | Lake Whitney | 137.46 306 | | PKiKP | PKiKP | 10 22 56.6 | 0.0 | |
| | baz=137 | | | | | | | |
| Y33A | Hilltop Ranch, | 137.58 310 | | PKiKP | PKiKP | 10 22 57.2 | +0.3 | |
| | baz=138 | | | | | | | |
| 335A | Moody | 137.69 305 | | PKiKP | PKiKP | 10 22 57.1 | 0.0 | |
| | baz=138 | | | | | | | |
| V31A | Spring Creek L | 137.71 313 | | PKiKP | PKiKP | 10 22 57.2 | +0.1 | |
| | baz=138 | | | | | | | |
| S29A | Ulysses | 137.72 316 | | PKiKP | PKiKP | 10 22 57.1 | 0.0 | |
| | baz=138 | | | | | | | |
| 134A | White-Moore Ra | 137.73 308 | | PKPdf | PKPdf | 10 22 54.5 | -0.7 | |
| | baz=138 | | | | | | | |
| R28A | Tribune | 137.81 317 | | PKiKP | PKiKP | 10 22 57.3 | 0.0 | |
| | baz=138 | | | | | | | |
| YBMT | Yellow Bay | 137.83 337 | | *e*PKPdf | PKPdf | 10 22 55.6 | +0.5 | |
| RLMT | Red Lodge | 137.87 330 | | PKPdf | PKPdf | 10 22 54.6 | -0.8 | |
| | baz=138 | | | | | | | |
| X32A | Elmer | 137.90 311 | | PKPdf | PKPdf | 10 22 55.8 | +0.3 | |
| | baz=138 | | | | | | | |
| U30A | WK&E Inc. Balk | 137.93 314 | | PKPdf | PKPdf | 10 22 56.0 | +0.4 | |
| | baz=138 | | | | | | | |
| Z33A | Whitaker Ranch | 137.98 309 | | PKPdf | PKPdf | 10 22 56.2 | +0.6 | |
| | baz=138 | | | | | | | |
| 636A | Smothers Creek | 137.99 303 | | PKPdf | PKPdf | 10 22 56.1 | +0.4 | |
| | baz=138 | | | | | | | |
| 234A | Clairette | 137.99 307 | | PKPdf | PKPdf | 10 22 55.2 | -0.5 | |
| | baz=138 | | | | | | | |
| KSCO | Skye Shedlock' | 137.99 319 | | PKiKP | PKiKP | 10 22 58.1 | +0.4 | |
| | baz=138 | | | | | | | |
| JTMT | Jette | 138.03 337 | | *e*PKPdf | PKPdf | 10 22 55.5 | 0.0 | |
| W31A | Holland Ranch, | 138.05 312 | | PKPdf | PKPdf | 10 22 56.2 | +0.5 | |
| | baz=138 | | | | | | | |
| SWMT | Swartz Lake | 138.12 336 | | *e*PKPdf | PKPdf | 10 22 55.9 | +0.3 | |
| SLMT | Seeley Lake | 138.13 336 | | *e*PKPdf | PKPdf | 10 22 55.8 | +0.1 | |
| BSMT | Bassoo Peak | 138.14 337 | | *e*PKPdf | PKPdf | 10 22 55.2 | -0.5 | |
| K22A | Casper | 138.15 326 | | PKPdf | PKPdf | 10 22 55.7 | -0.2 | |
| | baz=138 | | | | | | | |
| P26A | Davis Ranch, A | 138.15 320 | | PKPdf | PKPdf | 10 22 56.0 | 0.0 | |
| | baz=138 | | | | | | | |
| 736A | Circle Diamond | 138.16 302 | | PKiKP | PKiKP | 10 22 58.3 | +0.2 | |
| | baz=138 | | | | | | | |
| Y32A | R-V Farms, Ver | 138.20 310 | | PKiKP | PKiKP | 10 22 58.5 | +0.4 | |
| | baz=138 | | | | | | | |
| 535A | Dale | 138.23 304 | | PKiKP | PKiKP | 10 22 58.5 | +0.2 | |
| | baz=138 | | | | | | | |
| S28A | Manter | 138.27 316 | | PKPdf | PKPdf | 10 22 56.5 | +0.3 | |
| | baz=138 | | | | | | | |
| 334A | Lometa | 138.32 306 | | PKPdf | PKPdf | 10 22 56.4 | +0.1 | |
| | baz=138 | | | | | | | |
| V30A | Spur Ranch, Mi | 138.32 313 | | PKPdf | PKPdf | 10 22 56.2 | -0.1 | |
| | baz=138 | | | | | | | |
| X31A | McDonald Ranch | 138.33 311 | | PKPdf | PKPdf | 10 22 56.6 | +0.4 | |
| | baz=138 | | | | | | | |
| 133A | Hamilton Ranch | 138.37 308 | | PKPdf | PKPdf | 10 22 56.5 | +0.1 | |
| | baz=138 | | | | | | | |
| R27A | Eads | 138.50 318 | | PKiKP | PKiKP | 10 22 58.6 | -0.1 | |
| | baz=138 | | | | | | | |
| Z32A | Haskell | 138.52 309 | | PKPdf | PKPdf | 10 22 56.9 | +0.3 | |
| | baz=138 | | | | | | | |
| 434A | Burnet | 138.53 305 | | PKPdf | PKPdf | 10 22 56.5 | -0.3 | |
| | baz=138 | | | | | | | |
| 233A | Rising Star | 138.58 307 | | PKPdf | PKPdf | 10 22 56.9 | 0.0 | |
| | baz=138 | | | | | | | |
| BOZ | Bozeman (W) | 138.59 333 | | *e*PKiKP | PKPdf | 10 22 57.9 | +1.3 | |
| BOZ | Bozeman (W) | 138.59 333 | | PKiKP | PKiKP | 10 22 58.5 | -0.2 | |
| | baz=138 | | | | | | | |
| BOZ | Bozeman (W) | 138.59 333 | | *e*PKPdf | PKPdf | 10 22 57.9 | +1.3 | |
| 635A | Leesville | 138.61 303 | | PKPdf | PKPdf | 10 22 57.0 | +0.2 | |
| | baz=139 | | | | | | | |
| Q26A | Hugo | 138.62 319 | | PKPdf | PKPdf | 10 22 56.9 | +0.1 | |
| | baz=138 | | | | | | | |
| NEW | Newport | 138.64 340 | | *e*PKiKP | PKPdf | 10 22 56.7 | +0.2 | |
| NEW | Newport | 138.64 340 | | PKPdf | PKPdf | 10 22 56.6 | +0.2 | |
| | baz=138 | | | | | | | |
| NEW | Newport | 138.64 340 | | *e*PKPdf | PKPdf | 10 22 56.7 | +0.2 | |
| MSO | Missoula | 138.65 336 | | PKPdf | PKPdf | 10 22 56.7 | +0.1 | |
| | baz=138 | | | | | | | |
| MSO | Missoula | 138.65 336 | | *e*PKPdf | PKPdf | 10 22 56.7 | +0.1 | |
| T28A | Walsh | 138.66 316 | | PKPdf | PKPdf | 10 22 57.0 | +0.1 | |
| | baz=139 | | | | | | | |
| 735A | Kenedy | 138.81 302 | | PKiKP | PKiKP | 10 23 00.2 | +0.8 | |
| | baz=139 | | | | | | | |
| 333A | Richland Sprin | 138.91 306 | | PKPdf | PKPdf | 10 22 57.4 | -0.1 | |
| | baz=139 | | | | | | | |
| R26A | Arlington | 138.92 318 | | PKiKP | PKiKP | 10 22 59.9 | +0.3 | |
| | baz=139 | | | | | | | |
| ABTX | Abilene, Hawle | 138.92 308 | | PKPdf | PKPdf | 10 22 57.7 | +0.3 | |
| | baz=139 | | | | | | | |
| ABTX | Abilene, Hawle | 138.92 308 | | *e*PKPdf | PKPdf | 10 22 58.5 | +1.0 | |
| N23A | Red Feather La | 138.94 323 | | PKPdf | PKPdf | 10 22 57.2 | -0.3 | |
| | baz=139 | | | | | | | |
| 534A | Blanco | 138.97 304 | | PKiKP | PKiKP | 10 23 00.2 | +0.4 | |
| | baz=139 | | | | | | | |
| Z31A | Sharp Cattle R | 139.02 310 | | PKPdf | PKPdf | 10 22 57.9 | +0.3 | |
| | baz=139 | | | | | | | |
| H17A | Grant Village | 139.04 331 | | PKiKP | PKiKP | 10 23 00.1 | +0.3 | |
| | baz=139 | | | | | | | |
| H17A | Grant Village | 139.04 331 | | *e*PKPdf | PKiKP | 10 23 00.1 | +0.3 | |
| X30A | Coker Ranch, T | 139.07 312 | | PKiKP | PKiKP | 10 23 00.3 | +0.4 | |
| | baz=139 | | | | | | | |
| T27A | Campo | 139.10 316 | | PKiKP | PKiKP | 10 23 00.3 | +0.3 | |
| | baz=139 | | | | | | | |
| 433A | Art | 139.21 305 | | PKiKP | PKiKP | 10 23 00.4 | +0.2 | |
| | baz=139 | | | | | | | |
| DLMT | Dillon | 139.24 333 | | *e*PKPdf | PKPdf | 10 22 59.0 | +1.3 | |
| S26A | Kim | 139.31 317 | | PKiKP | PKiKP | 10 23 00.5 | +0.1 | |
| | baz=139 | | | | | | | |
| C09A | Chrisman Ranch | 139.43 340 | | *e*PKPdf | PKPdf | 10 22 58.5 | +0.6 | |
| 332A | Millersview | 139.49 307 | | PKPdf | PKPdf | 10 22 59.0 | +0.5 | |
| | baz=140 | | | | | | | |
| MOOW | Moose Ponds | 139.60 330 | | *e*PKPdf | PKPdf | 10 22 59.0 | +0.5 | |
| LOHW | Long Hollow | 139.63 330 | | *e*PKPdf | PKPdf | 10 22 58.0 | -0.6 | |
| T26A | Comanche Natio | 139.63 317 | | PKPdf | PKPdf | 10 22 58.7 | -0.1 | |
| | baz=140 | | | | | | | |
| Q24A | Divide | 139.63 320 | | PKPdf | PKPdf | 10 22 58.8 | -0.1 | |
| | baz=140 | | | | | | | |
| BW06 | Boulder Array | 139.70 328 | | *e*PKPdf | PKPdf | 10 22 58.0 | -0.8 | |
| 432A | Menard | 139.72 306 | | PKPdf | PKPdf | 10 22 59.1 | +0.1 | |
| | baz=140 | | | | | | | |
| MCMT | McKenzie Canyo | 139.77 333 | | *e*PKPdf | PKPdf | 10 23 00.8 | +2.0 | |
| SNOW | Snow King Moun | 139.81 330 | | *e*PKPdf | PKPdf | 10 22 57.8 | -1.3 | |
| | baz=140 | | | | | | | |
| FXWY | Fox Creek | 139.82 330 | | *e*PKPdf | PKPdf | 10 22 58.0 | -1.0 | |
| V27A | Dan Oppiter Fa | 139.85 315 | | PKPdf | PKPdf | 10 22 58.8 | -0.3 | |
| | baz=140 | | | | | | | |
| JCT | Junction City | 139.88 305 | | *e*PKIKP | PKPdf | 10 22 59.5 | +0.2 | |
| JCT | Junction City | 139.88 305 | | PKPdf | PKPdf | 10 22 58.9 | -0.3 | |
| | baz=140 | | | | | | | |
| JCT | Junction City | 139.88 305 | | *e*PKPdf | PKPdf | 10 22 59.5 | +0.2 | |
| TPAW | Teton Pass | 139.89 330 | | *e*PKPdf | PKPdf | 10 22 59.6 | +0.4 | |
| A04D | Lummi Island | 139.90 345 | | PKPdf | PKPdf | 10 22 59.2 | +0.6 | |
| | baz=140 | | | | | | | |
| REDW | Red Top Meadow | 139.93 330 | | *e*PKPdf | PKPdf | 10 22 59.5 | +0.3 | |
| 130A | Snyder | 139.95 309 | | PKPdf | PKPdf | 10 22 59.0 | -0.3 | |
| | baz=140 | | | | | | | |
| X28A | Dimmitt | 140.00 312 | | PKPdf | PKPdf | 10 22 59.4 | -0.1 | |
| | baz=140 | | | | | | | |
| B05A | Bryant | 140.16 344 | | PKPdf | PKPdf | 10 22 57.7 | -1.4 | |
| | baz=140 | | | | | | | |
| Y28A | McKinney Farm, | 140.33 312 | | PKPdf | PKPdf | 10 22 59.6 | -0.5 | |
| | baz=140 | | | | | | | |
| SDCO | Great Sand Dun | 140.57 319 | | PKPdf | PKPdf | 10 22 59.9 | -0.7 | |
| | baz=140 | | | | | | | |
| 531A | Rocksprings | 140.59 305 | | PKPdf | PKPdf | 10 23 00.2 | -0.4 | |
| | baz=141 | | | | | | | |
| F10A | Beach Ranch, E | 140.63 338 | | *e*PKPdf | PKPdf | 10 22 59.1 | -1.1 | |
| LTY | Liberty | 140.66 342 | | *e*PKPdf | PKPdf | 10 22 60.0 | -0.2 | |
| MSTX | Muleshoe | 140.68 312 | | PKPdf | PKPdf | 10 23 00.7 | 0.0 | |
| | baz=141 | | | | | | | |
| MSTX | Muleshoe | 140.68 312 | | *e*PKPdf | PKPdf | 10 23 01.3 | +0.6 | |
| Z28A | Tucker Farm, M | 140.72 311 | | PKPdf | PKPdf | 10 23 00.5 | -0.3 | |
| | baz=141 | | | | | | | |
| O20A | White River Ci | 140.78 324 | | PKPdf | PKPdf | 10 23 00.5 | -0.3 | |
| | baz=141 | | | | | | | |
| O20A | White River Ci | 140.78 324 | | *e*PKPdf | PKPdf | 10 23 00.0 | -0.8 | |
| 832A | Faith Ranch, C | 140.79 302 | | PKPdf | PKPdf | 10 23 00.8 | -0.1 | |
| | baz=141 | | | | | | | |
| 229A | Bryant Ranch, | 140.87 309 | | PKPdf | PKPdf | 10 23 00.5 | -0.5 | |
| | baz=141 | | | | | | | |
| 530A | J-C Ranch, Com | 141.23 306 | | PKPdf | PKPdf | 10 23 01.3 | -0.4 | |
| | baz=141 | | | | | | | |
| 228A | UT Block 9, Go | 141.40 309 | | PKPdf | PKPdf | 10 23 02.1 | +0.1 | |
| | baz=141 | | | | | | | |
| S22A | 4UR Ranch, Cre | 141.42 320 | | PKPdf | PKPdf | 10 23 02.0 | -0.1 | |
| | baz=141 | | | | | | | |
| HLID | Hailey | 141.46 333 | | PKPdf | PKPdf | 10 23 01.6 | -0.2 | |
| | baz=141 | | | | | | | |
| HLID | Hailey | 141.46 333 | | *e*PKPdf | PKPdf | 10 23 01.7 | -0.2 | |
| G08A | Pilot Rock | 141.84 339 | | *e*PKPdf | PKPdf | 10 22 59.9 | -2.6 | |
| CTU | Camp Tracy | 142.33 328 | | *e*PKPdf | PKPdf | 10 23 01.9 | -1.7 | |
| O16A | Springville | 142.55 327 | | *e*PKPdf | PKPdf | 10 23 03.6 | -0.3 | |
| ANMO | Albuquerque | 142.79 316 | | *i* PKIKP | PKPdf | 10 23 01.7 | -2.9 | |
| MVCO | Mesa Verde | 142.80 321 | | *e*PKPdf | PKPdf | 10 23 03.0 | -1.6 | |
| BGU | Big Grassy Mou | 142.82 329 | | *e*PKPdf | PKPdf | 10 23 03.7 | -0.7 | |
| I07A | Izee | 143.08 339 | | *e*PKPdf | PKPdf | 10 23 03.4 | -1.3 | |
| DUG | Dugway | 143.25 328 | | *e*PKIKP | PKPdf | 10 23 04.3 | -0.9 | |
| DUG | Dugway | 143.25 328 | | PKPdf | PKPdf | 10 23 04.0 | -1.2 | |
| | baz=143 | | | | | | | |
| DUG | Dugway | 143.25 328 | | *e*PKPdf | PKPdf | 10 23 04.3 | -0.9 | |
| G03D | McMinnville, O | 143.28 343 | | PKPdf | PKPdf | 10 23 04.7 | -0.2 | |
| | baz=143 | | | | | | | |
| TXAR | Lajitas Array | 143.41 306 | | PKP | PKPbc | 10 23 03.5 | +0.7 | |
| | comp=Z,6.3nm,0.7s,baz=89,slow=4.4,SNR=62 | | | | | | | |
| TXAR | Lajitas Array | 143.41 306 | | PKIKP | PKPbc | 10 23 03.5 | +0.7 | |
| TXAR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| I05D | Terrebonne, OR | 143.49 341 | | PKPdf | PKPbc | 10 23 03.6 | +1.1 | |
| | baz=143 | | | | | | | |
| Y22D | IRIS PASSCAL I | 143.59 315 | | PKPdf | PKPbc | 10 23 04.2 | +0.9 | |
| | baz=144 | | | | | | | |
| MNTX | Cornudas Mount | 143.69 311 | | PKPdf | PKPbc | 10 23 03.7 | +0.2 | |
| | baz=144 | | | | | | | |
| ELK | Elko | 144.05 331 | | *e*PKIKP | PKPbc | 10 23 05.6 | +1.1 | |
| ELK | Elko | 144.05 331 | | *e*PKPdf | PKPbc | 10 23 05.6 | +1.0 | |
| WVOR | Wild Horse Val | 144.16 336 | | *e*PKIKP | PKPbc | 10 23 05.5 | +0.8 | |
| WVOR | Wild Horse Val | 144.16 336 | | *e*PKPdf | PKPbc | 10 23 05.5 | +0.8 | |
| I04A | Tendico Farm, | 144.32 341 | | PKPdf | PKPbc | 10 23 05.3 | +0.2 | |
| | baz=144 | | | | | | | |
| J05D | Fort Rock, OR | 144.39 340 | | PKPdf | PKPdf | 10 23 06.9 | -0.2 | |
| | baz=144 | | | | | | | |
| TBI | Tubuai | 144.40 160 | | *e*LR | LR | 11 10 34.4 | | |
| | comp=Z,256nm,26.5s | | | | | | | |
| BTU | Barney Top | 144.47 324 | | *e*PKPdf | PKPbc | 10 23 06.7 | +0.5 | |
| I03D | Drain, OR | 144.69 342 | | PKPdf | PKPdf | 10 23 07.4 | +0.1 | |
| | baz=144 | | | | | | | |
| J04D | Umpqua Nationa | 144.72 341 | | PKPdf | PKPdf | 10 23 07.3 | -0.3 | |
| | baz=145 | | | | | | | |
| K05A | Summer Lake | 144.76 339 | | *e*PKPdf | PKPdf | 10 23 07.6 | -0.1 | |
| W18A | Petrified Fore | 144.88 319 | | PKPdf | PKPbc | 10 23 07.7 | +0.5 | |
| | baz=145 | | | | | | | |
| W18A | Petrified Fore | 144.88 319 | | *e*PKPdf | PKPbc | 10 23 07.8 | +0.5 | |
| 121A | Cookes Peak, D | 145.03 314 | | PKPdf | PKPdf | 10 23 08.4 | -0.1 | |
| | baz=145 | | | | | | | |
| BMN | Battle Mountai | 145.22 333 | | *e*PKIKP | PKPdf | 10 23 09.0 | +0.4 | |
| BMN | Battle Mountai | 145.22 333 | | *e*PKPbc | PKPdf | 10 23 09.0 | +0.4 | |
| MOD | Modoc | 145.26 338 | | *e*PKPbc | PKPdf | 10 23 08.7 | +0.1 | |
| CCUT | Cedar City | 145.46 325 | | *e*PKPbc | PKPab | 10 23 10.0 | +0.6 | |
| WUAZ | Wupatki | 145.66 321 | | PKPdf | PKPdf | 10 23 09.6 | +0.1 | |
| | baz=146 | | | | | | | |
| WUAZ | Wupatki | 145.66 321 | | *e*PKPdf | PKPab | 10 23 10.4 | +0.3 | |
| KEBM | Edson Butte | 145.73 343 | | *e*PKPdf | PKPab | 10 23 10.4 | +0

| | | | | | | |
|---|---|---|---|---|---|---|
| LRMC | Laurel Mountai | 149.33 | 328 | PKiKP | PKiKP | 10 23 20.8 -0.2 |
| | baz=149 | | | | | |
| BC3 | Big Chuckawall | 149.40 | 323 | PKiKP | PKiKP | 10 23 20.9 -0.3 |
| | baz=149 | | | | | |
| RRX | Edison Barstow | 149.41 | 326 | PKiKP | PKiKP | 10 23 21.0 -0.1 |
| | baz=149 | | | | | |
| GLA | Glamis | 149.43 | 321 | *e*PKP2 | PKPbc | 10 23 21.3 +1.2 |
| GLA | Glamis | 149.43 | 321 | PKiKP | PKiKP | 10 23 21.0 -0.2 |
| | baz=149 | | | | | |
| GLA | Glamis | 149.43 | 321 | *e*PKPbc | PKPbc | 10 23 21.3 +1.2 |
| RCTC | Rector, Farmer | 149.47 | 331 | PKiKP | PKPbc | 10 23 20.4 +0.4 |
| | baz=149 | | | | | |
| BELC | Belle Mtn. Jos | 149.48 | 324 | PKiKP | PKiKP | 10 23 21.4 -0.1 |
| | baz=149 | | | | | |
| ISA | Isabella | 149.60 | 329 | *e*PKHKP | PKPpre | 10 23 17.8 |
| ISA | Isabella | 149.60 | 329 | PKiKP | PKiKP | 10 23 21.1 -0.4 |
| | baz=150 | | | | | |
| ISA | Isabella | 149.60 | 329 | *e*PKPdf | PKPdf | 10 23 17.8 +1.9 |
| PPT2 | Papeete2 | 149.65 | 156 | *e*LR | LR | 11 13 01.7 |
| | comp=Z,281nm,22.5s | | | | | |
| VES | Vestal, Richgr | 149.76 | 330 | PKiKP | PKiKP | 10 23 21.8 0.0 |
| | baz=150 | | | | | |
| BBRC | Big Bear Solar | 149.82 | 325 | PKiKP | PKiKP | 10 23 22.4 +0.1 |
| | baz=150 | | | | | |
| EDW2 | Edwards Air Fo | 149.95 | 327 | PKiKP | PKiKP | 10 23 22.2 0.0 |
| | baz=150 | | | | | |
| PFO | Pinyon Flat Ob | 150.03 | 324 | *e*PKP2 | PKPbc | 10 23 22.9 +1.3 |
| PFO | Pinyon Flat Ob | 150.03 | 324 | *e*PKPbc | PKPbc | 10 23 22.9 +1.3 |
| SWSC | Sam W. Stewart | 150.10 | 322 | PKiKP | PKiKP | 10 23 22.4 -0.1 |
| | baz=150 | | | | | |
| SAO | San Andreas Ge | 150.11 | 334 | *e*PKIKP | PKPbc | 10 23 22.3 +0.7 |
| SAO | San Andreas Ge | 150.11 | 334 | *e*PKPbc | PKPbc | 10 23 22.3 +0.7 |
| ARVC | Arvin | 150.20 | 329 | PKiKP | PKiKP | 10 23 22.6 -0.1 |
| | baz=150 | | | | | |
| BFSC | Mount Baldy Ra | 150.25 | 326 | PKiKP | PKiKP | 10 23 22.7 -0.3 |
| | baz=150 | | | | | |
| MURC | Murrieta | 150.46 | 325 | PKiKP | PKiKP | 10 23 23.4 0.0 |
| | baz=150 | | | | | |
| IBP | Imperial Bould | 150.48 | 322 | PKiKP | PKiKP | 10 23 23.5 0.0 |
| | baz=150 | | | | | |
| MONP | Monument Peak | 150.51 | 323 | PKiKP | PKiKP | 10 23 23.8 +0.2 |
| | baz=150 | | | | | |
| OSI | Osito Adit | 150.54 | 328 | PKiKP | PKiKP | 10 23 23.7 +0.3 |
| | baz=150 | | | | | |
| OSI | Osito Adit | 150.54 | 328 | *e*PKPbc | PKPbc | 10 23 24.2 +1.4 |
| PASC | Pasadena Art C | 150.59 | 327 | *e*PKPbc | PKPbc | 10 23 23.6 +0.8 |
| DECC | Green Verdugo | 150.61 | 327 | PKiKP | PKiKP | 10 23 23.7 +0.1 |
| | baz=150 | | | | | |
| SMMC | Simmler | 150.64 | 330 | PKiKP | PKiKP | 10 23 23.7 +0.1 |
| | baz=150 | | | | | |
| BAR | Barrett | 150.81 | 323 | *e*PKPdf | PKPbc | 10 23 21.2 -2.2 |
| PKM | Peak Mountain | 150.88 | 330 | PKiKP | PKiKP | 10 23 24.1 -0.2 |
| | baz=151 | | | | | |
| 109C | Camp Elliot, M | 150.92 | 323 | PKiKP | PKiKP | 10 23 24.3 +0.1 |
| | baz=151 | | | | | |
| FMP | Fort Macarthur | 150.99 | 326 | PKiKP | PKiKP | 10 23 24.6 +0.2 |
| | baz=151 | | | | | |
| BLG | Laguna Peak | 151.11 | 328 | PKiKP | PKiKP | 10 23 24.5 -0.1 |
| | baz=151 | | | | | |
| SBC | Santa Barbara | 151.19 | 329 | PKiKP | PKiKP | 10 23 24.9 +0.2 |
| | baz=151 | | | | | |
| BSC | Santa Cruz Isl | 151.49 | 328 | PKiKP | PKiKP | 10 23 25.5 +0.1 |
| | baz=151 | | | | | |

*ISCJB* ***14*** *10:07:15.3±0.6,8.58S±0.08×122.96E±0.09,h150km, Error ellipse: s-maj=14.3km s-min=7.8km az=141.8*
*DJA* ***14*** *10:07:15.4±2.4,9.3S±16.1°×12.3E±1.3,h186km±69km, M4.1/3,mb4.3/2,mB5.3/1,MLv4.0/3,Mw(mB)4.7/1*
*AUST* ***14*** *10:07:24.1,9.00S×123.51E,h200km*

**ISC 14 10:07:15.2±1.0,8.59S±0.09×123.0E±0.1,h150km,n18, σ1s58/14,Flores region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MMRI | Maumere | 0.75 | 267 | P | | Pn | 10 07 38.8 | +0.8 |
| SOEI | Soe | 1.71 | 133 | P | | Pn | 10 07 50.6 | +3.5 |
| | baz=1.1,SNR=8.3 | | | | | | | |
| SOEI | Soe | 1.71 | 133 | P | | Pn | 10 07 50.4 | +3.3 |
| BATI | Baumata | 1.73 | 158 | P | | Pn | 10 07 48.6 | +1.3 |
| WSI | Waingapu | 2.87 | 248 | P | | Sn | 10 08 29.7 | -6.5 |
| BASI | Baing, Sumba | 2.88 | 236 | P | | Pn | 10 08 03.9 | +2.9 |
| BKSI | Bulukumba | 4.32 | 319 | P | | Pn | 10 08 21.3 | +1.6 |
| TTSI | Tana Toraja | 6.35 | 330 | P | | Pn | 10 08 46.1 | -0.5 |
| | 24nm,0.5s,5μm | | | | | | | |
| APSI | Ampana | 7.75 | 350 | P | | Pn | 10 09 05.0 | -0.3 |
| KNRA | Kununurra | 9.02 | 142 | P | | Pn | 10 09 21.1 | -1.0 |
| | baz=8.4,SNR=66 | | | | | | | |
| MTN | Manton Dam | 9.04 | 119 | P | | Pn | 10 09 24.8 | +2.3 |
| | baz=8.4,SNR=5.7 | | | | | | | |
| KDU | Kakadu | 10.16 | 114 | P | | Pn | 10 09 39.1 | +1.8 |
| | baz=9.5,SNR=15 | | | | | | | |
| WRKA | Warakurna | 17.12 | 163 | P | | Pn | 10 11 06.1 | +0.6 |
| | baz=17,SNR=8.6 | | | | | | | |
| MEEK | Meekatharra | 18.42 | 192 | P | | P | 10 11 19.0 | -0.1 |
| | baz=18,SNR=6.9 | | | | | | | |
| QIS | Mount Isa | 19.97 | 128 | P | | Pn | 10 11 38.9 | -0.3 |
| | baz=19,SNR=16 | | | | | | | |
| MORW | Morawa | 21.39 | 197 | P | | P | 10 11 49.9 | -1.2 |
| | baz=21,SNR=3.9 | | | | | | | |
| HTT | Hallett | 28.76 | 152 | P | | P | 10 12 57.2 | -1.7 |
| | baz=28,SNR=3.4 | | | | | | | |
| CMSA | Cobar Meteorol | 31.10 | 140 | P | | P | 10 13 22.8 | +3.4 |
| | baz=30,SNR=7.4 | | | | | | | |

*ISCJB* ***14*** *10:07:33.1±0.2,35.30N±0.02×92.35W±0.02,h10km,Error ellipse: s-maj=2.4km s-min=1.7km az=159.2*
*NEIC* ***14*** *10:07:33.9,35.30N×92.35W,h4km,MW3.4,Moment Tensor Solution. s19 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.00; $M_{\theta\theta}$1.17; $M_{\phi\phi}$-1.17; $M_{r\theta}$-0.12; $M_{\theta\phi}$0.98; $M_{\phi r}$0.06; Best double couple: $M_0$1.50000×$10^{14}$ NP1:$\phi_{s2}$205.00000°, δ85.00000°,λ-180.00000°. NP2:$\phi_{s1}$115.00000°, δ90.00000°,λ-5.00000°. Principal axes: T 1.5300, Plg4.0000°, Azm160.0000°; N 0.0000, Plg85.0000°, Azm295.0000°; P -1.5300, Plg4.0000°, Azm70.0000°; After CERI.*
*NEIC Felt [III] at Greenbrier and Quitman and [II] at Damascus and Mountain View. Also felt at Batesville, Conway, Edgemont, Norfork and Rose Bud.*

**ISC 14 10:07:33.8±0.7,35.30N±0.03×92.35W±0.02,h10km,n180, σ1s09/209,Arkansas**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| UALR | University of | 0.52 | 179 | *e*Pg | | Pg | 10 07 43.8 | -0.1 |
| UALR | | | | *e*Sg | | Sg | 10 07 50.0 | -0.7 |
| MIAR | Mount Ida | 1.25 | 234 | P | | Pn | 10 07 57.0 | -0.4 |
| | baz=1.3,SNR=186 | | | | | | | |
| MIAR | | | | S | | Sb | 10 08 13.8 | +0.2 |
| | baz=1.3 | | | | | | | |
| MIAR | Mount Ida | 1.25 | 234 | *e*Pn | | Pn | 10 07 56.9 | -0.4 |
| MIAR | | | | *e*Sn | | Sb | 10 08 13.8 | +0.2 |
| HBAR | Harrisburg | 1.41 | 79 | *e*Pn | | Pn | 10 07 59.3 | -0.2 |
| QUAR | Qualls | 1.44 | 75 | *e*Pn | | Pn | 10 07 59.9 | 0.0 |
| QUAR | | | | *e*Sn | | Sb | 10 08 19.4 | +0.4 |
| V38A | Canehill | 1.77 | 289 | P | | Pb | 10 08 05.6 | -0.8 |
| | baz=1.8,SNR=164 | | | | | | | |
| V38A | | | | S | | Sb | 10 08 29.2 | +0.7 |
| | baz=1.8 | | | | | | | |
| W38A | Poteau | 1.79 | 263 | P | | Pb | 10 08 06.1 | -0.5 |
| | baz=1.8,SNR=116 | | | | | | | |
| W38A | | | | Sb | | Sg | 10 08 31.1 | -0.2 |
| | baz=1.8 | | | | | | | |
| SFTN | Shelby Forest | 1.91 | 87 | *e*Pn | | Pg | 10 08 10.0 | -0.5 |
| SFTN | | | | *e*Sn | | Sb | 10 08 33.5 | +0.8 |
| Y39A | Lockesburg | 1.97 | 227 | P | | Pn | 10 08 08.1 | +0.9 |
| | baz=2.0,SNR=21 | | | | | | | |
| Y39A | | | | S | | Sb | 10 08 34.0 | -0.4 |
| | baz=2.0 | | | | | | | |
| DLAR | Dell | 1.98 | 74 | *e*Pn | | Pn | 10 08 08.6 | +1.2 |
| DLAR | | | | *e*Sn | | Sb | 10 08 34.6 | 0.0 |
| U38A | Gravette | 2.01 | 305 | P | | Pn | 10 08 09.1 | +1.3 |
| | baz=2.0,SNR=84 | | | | | | | |
| U38A | | | | Sb | | Sg | 10 08 37.1 | -1.3 |
| | baz=2.0 | | | | | | | |
| GNAR | Gosnell | 2.02 | 70 | *e*Pn | | Pn | 10 08 08.9 | +1.0 |
| GNAR | | | | *e*Sn | | Sb | 10 08 35.6 | -0.1 |
| X38A | Whitesboro | 2.12 | 254 | P | | Pn | 10 08 10.5 | +1.1 |
| | baz=2.1,SNR=98 | | | | | | | |
| X38A | | | | Sb | | Sg | 10 08 40.7 | -1.4 |
| | baz=2.1 | | | | | | | |
| PBMO | Poplar Bluff | 2.15 | 46 | *e*Pn | | Pn | 10 08 10.8 | +1.0 |
| CWPT | Cottonwood Poi | 2.33 | 71 | *e*Pn | | Pn | 10 08 13.0 | +0.7 |
| WADM | Wardell | 2.34 | 62 | *e*Pn | | Pb | 10 08 14.7 | -1.4 |
| WADM | | | | *e*Sn | | Sb | 10 08 45.8 | +0.9 |
| V37A | Hulbert | 2.35 | 285 | P | | Pn | 10 08 13.6 | +1.1 |
| | baz=2.3,SNR=65 | | | | | | | |
| Y38A | Idabel | 2.39 | 236 | P | | Pn | 10 08 14.0 | +1.0 |
| | baz=2.4,SNR=38 | | | | | | | |
| EBZ | Ebenezer Churc | 2.46 | 93 | *e*Pn | | Pn | 10 08 14.3 | +0.2 |
| EBZ | | | | *e*Sn | | Sn | 10 08 44.7 | +0.5 |
| U37A | Salina | 2.50 | 297 | P | | Pn | 10 08 15.7 | +1.1 |
| | baz=2.5,SNR=41 | | | | | | | |
| PARMO | Parma | 2.51 | 56 | *e*Pn | | Pn | 10 08 16.0 | +1.3 |
| PARMO | | | | *e*Sn | | Sn | 10 08 47.5 | +2.0 |
| W37A | Quinton | 2.52 | 267 | P | | Pn | 10 08 15.7 | +0.9 |
| | baz=2.5 | | | | | | | |
| W37A | | | | Sb | | Sb | 10 08 52.6 | +2.3 |
| | baz=2.5 | | | | | | | |
| HALT | Halls | 2.53 | 75 | *e*Pn | | Pn | 10 08 15.4 | +0.4 |
| OXF | Oxford | 2.54 | 107 | *e*Pn | | Pn | 10 08 15.6 | +0.4 |
| OXF | | | | *e*Sn | | Sn | 10 08 45.9 | -0.3 |
| Z39A | Irene McRaven, | 2.55 | 217 | Sb | | Sg | 10 08 53.9 | -1.8 |
| | baz=2.6 | | | | | | | |
| X37A | Clayton | 2.58 | 255 | P | | Pn | 10 08 16.6 | +1.0 |
| | baz=2.6,SNR=111 | | | | | | | |
| X37A | | | | Sb | | Sg | 10 08 54.8 | -1.8 |
| | baz=2.6 | | | | | | | |
| RELT | Roellen | 2.59 | 73 | *e*Pn | | Pn | 10 08 16.7 | +0.9 |
| GLAT | Glass | 2.68 | 68 | *e*Pn | | Pn | 10 08 18.0 | +1.0 |
| GLST | Glass | 2.68 | 68 | *e*Pn | | Pb | 10 08 20.2 | -1.6 |
| T37A | Cheneyville 18 | 2.76 | 312 | P | | Pn | 10 08 18.9 | +0.8 |
| | baz=2.8,SNR=49 | | | | | | | |
| TUL1 | Tulsa | 2.87 | 283 | P | | Pn | 10 08 20.5 | +0.8 |
| | baz=2.9,SNR=15 | | | | | | | |
| TUL1 | Tulsa | 2.87 | 283 | *e*Pn | | Pn | 10 08 20.9 | +1.3 |
| TUL1 | | | | *e*Sn | | Sn | 10 08 55.8 | +1.6 |
| U36A | Oologah | 2.96 | 293 | P | | Pn | 10 08 21.6 | +0.8 |
| | baz=3.0 | | | | | | | |
| U36A | | | | S | | Sn | 10 08 58.4 | +2.1 |
| | baz=3.0 | | | | | | | |
| V36A | Jenks | 2.97 | 281 | P | | Pn | 10 08 22.2 | +1.3 |
| | baz=3.0,SNR=29 | | | | | | | |
| Z38A | Mt. Pleasant | 2.98 | 228 | P | | Pn | 10 08 22.6 | +1.4 |
| | baz=3.0,SNR=11 | | | | | | | |
| Y37A | Hugo | 3.00 | 245 | P | | Pn | 10 08 22.7 | +1.4 |
| | baz=3.0,SNR=92 | | | | | | | |
| UTMT | University of | 3.02 | 69 | Pn | | Pn | 10 08 22.8 | +1.1 |
| 139A | Bunkhouse Ranc | 3.11 | 214 | P | | Pn | 10 08 23.9 | +1.0 |
| | baz=3.1 | | | | | | | |
| 139A | | | | S | | Sn | 10 09 01.6 | +1.4 |
| | baz=3.1 | | | | | | | |
| S37A | Fort Scott | 3.17 | 322 | P | | Pn | 10 08 24.7 | +1.0 |
| | baz=3.2,SNR=14 | | | | | | | |
| S37A | | | | Sb | | Sg | 10 09 12.3 | -3.2 |
| | baz=3.2 | | | | | | | |
| W36A | Wetumka | 3.17 | 268 | P | | Pn | 10 08 24.8 | +1.0 |
| | baz=3.2,SNR=19 | | | | | | | |
| T36A | Boggs Farm, Ca | 3.35 | 303 | P | | Pn | 10 08 26.7 | +0.5 |
| | baz=3.3,SNR=5.8 | | | | | | | |
| T36A | | | | Sb | | Sg | 10 09 18.1 | -3.4 |
| | baz=3.3 | | | | | | | |
| X36A | Centrahoma | 3.36 | 259 | P | | Pn | 10 08 28.0 | +1.6 |
| | baz=3.4,SNR=24 | | | | | | | |
| Z37A | Pogue Cattle C | 3.42 | 233 | P | | Pn | 10 08 28.1 | +0.9 |
| | baz=3.4,SNR=7.4 | | | | | | | |
| Z37A | | | | S | | Sn | 10 09 10.1 | +2.3 |
| | baz=3.4 | | | | | | | |
| VBMS | Vicksburg | 3.43 | 153 | P | | Pn | 10 08 28.5 | +1.2 |
| | baz=3.4 | | | | | | | |
| 138A | Matatall Enter | 3.47 | 222 | P | | Pn | 10 08 29.0 | +1.1 |
| | baz=3.5 | | | | | | | |
| 138A | | | | S | | Sn | 10 09 10.0 | +0.9 |
| | baz=3.5 | | | | | | | |
| SIUC | Southern Illin | 3.50 | 45 | *e*Pn | | Pn | 10 08 28.7 | +0.5 |
| SIUC | | | | *e*Sn | | Sn | 10 09 12.1 | +2.4 |
| Y36A | Durant | 3.53 | 248 | P | | Pn | 10 08 29.8 | +1.2 |
| | baz=3.5,SNR=57 | | | | | | | |
| S36A | Lake Cedric, C | 3.56 | 314 | P | | Pn | 10 08 30.3 | +1.1 |
| | baz=3.6,SNR=9.8 | | | | | | | |
| V35A | Meyer Ranch, C | 3.69 | 279 | P | | Pn | 10 08 31.6 | +0.7 |
| | baz=3.7 | | | | | | | |
| V35A | | | | S | | Sn | 10 09 15.9 | +1.5 |
| | baz=3.7 | | | | | | | |
| W35A | Tecumseh | 3.70 | 269 | P | | Pn | 10 08 32.0 | +0.9 |
| | baz=3.7,SNR=10 | | | | | | | |
| W35A | | | | S | | Sn | 10 09 16.3 | +1.5 |
| | baz=3.7 | | | | | | | |
| 239A | Gary | 3.71 | 209 | P | | Pn | 10 08 32.5 | +1.3 |
| | baz=3.7 | | | | | | | |
| U35A | Pawnee | 3.71 | 288 | P | | Pn | 10 08 32.2 | +0.9 |
| | baz=3.7,SNR=5.3 | | | | | | | |
| T35A | Sooner Cattle | 3.73 | 297 | P | | Pn | 10 08 32.5 | +1.0 |
| | baz=3.7 | | | | | | | |
| WVT | Waverly | 3.77 | 76 | *e*Pn | | Pn | 10 08 32.0 | -0.1 |
| WVT | | | | *e*Sn | | Sn | 10 09 15.2 | -1.3 |
| X35A | Drake | 3.90 | 258 | P | | Pn | 10 08 34.7 | +0.8 |
| | baz=3.9,SNR=32 | | | | | | | |
| Z36A | Blue Ridge | 3.94 | 240 | P | | Pn | 10 08 35.8 | +1.5 |
| | baz=3.9 | | | | | | | |
| R36A | Gordon, Harris | 3.94 | 321 | P | | Pn | 10 08 35.1 | +0.8 |
| | baz=3.9 | | | | | | | |
| Q37A | Longview Farm, | 3.95 | 335 | P | | Pn | 10 08 36.2 | +1.7 |
| | baz=4.0 | | | | | | | |
| S35A | Otter Creek Ra | 3.98 | 308 | P | | Pn | 10 08 36.3 | +1.4 |
| | baz=4.0 | | | | | | | |
| 238A | Jacksonville | 4.01 | 216 | P | | Pn | 10 08 36.7 | +1.4 |
| | baz=4.0 | | | | | | | |
| 340A | Bronson | 4.08 | 199 | P | | Pn | 10 08 37.7 | +1.5 |
| | baz=4.1 | | | | | | | |
| Y35A | Marietta | 4.10 | 252 | P | | Pn | 10 08 37.8 | +1.2 |
| | baz=4.1,SNR=12 | | | | | | | |
| V34A | Guthrie | 4.24 | 279 | P | | Pn | 10 08 39.3 | +0.7 |
| | baz=4.2,SNR=8.5 | | | | | | | |
| V34A | Guthrie | 4.24 | 279 | *e*Pn | | Pn | 10 08 39.4 | +0.9 |
| T34A | McClaskey Farm | 4.27 | 295 | P | | Pn | 10 08 40.0 | +1.1 |
| | baz=4.3 | | | | | | | |
| R35A | Emporia Munici | 4.32 | 316 | P | | Pn | 10 08 40.9 | +1.3 |
| | baz=4.3 | | | | | | | |
| U34A | Anderson Ranch | 4.36 | 287 | *e*Pn | | Pn | 10 08 42.5 | +2.4 |
| Z37A | Washetta, Mont | 4.37 | 222 | P | | Pn | 10 08 41.4 | +1.2 |
| | baz=4.4 | | | | | | | |
| Q36A | Arnold C. Orve | 4.42 | 327 | P | | Pn | 10 08 42.8 | +1.8 |
| | baz=4.4 | | | | | | | |
| W34A | Bridge Creek, | 4.43 | 271 | *e*Pn | | Pn | 10 08 42.3 | +1.1 |
| 136A | Ennis | 4.47 | 232 | P | | Pn | 10 08 42.7 | +1.1 |
| | baz=4.5 | | | | | | | |
| Z35A | Perchaven, San | 4.50 | 246 | P | | Pn | 10 08 43.4 | +1.3 |
| | baz=4.5 | | | | | | | |
| S34A | Willow Spring | 4.52 | 303 | P | | Pn | 10 08 43.2 | +0.9 |
| | baz=4.5 | | | | | | | |
| Q35A | Mercer Eighty, | 4.62 | 321 | P | | Pn | 10 08 44.7 | +1.1 |
| | baz=4.6,SNR=9.3 | | | | | | | |
| USIN | University of | 4.62 | 53 | *e*Pn | | Pn | 10 08 44.5 | +0.8 |
| 338A | Crockett | 4.64 | 213 | P | | Pn | 10 08 44.9 | +0.9 |
| | baz=4.7 | | | | | | | |
| Y34A | Reagan Ranch, | 4.65 | 255 | P | | Pn | 10 08 44.9 | +0.8 |
| | baz=4.6 | | | | | | | |
| OLIL | Olney | 4.83 | 44 | *e*Pn | | Pn | 10 08 49.5 | +2.8 |
| V33A | Lossen Ranch, | 4.86 | 278 | P | | Pn | 10 08 47.9 | +0.8 |
| | baz=4.9 | | | | | | | |
| P36A | Good Intent, A | 4.88 | 333 | P | | Pn | 10 08 48.8 | +1.6 |
| | baz=4.9 | | | | | | | |
| R34A | Isabella, Hill | 4.94 | 309 | P | | Pn | 10 08 48.6 | +0.5 |
| | baz=4.9,SNR=14 | | | | | | | |
| Z34A | Collier Ranch, | 4.99 | 249 | P | | Pn | 10 08 50.0 | +1.2 |
| | baz=5.0 | | | | | | | |
| W33A | Caddo, Fort Co | 5.01 | 270 | P | | Pn | 10 08 50.3 | +1.3 |
| | baz=5.0 | | | | | | | |
| KSU1 | Kansas State U | 5.09 | 319 | P | | Pn | 10 08 51.1 | +0.9 |
| | baz=5.1 | | | | | | | |
| KSU1 | Kansas State U | 5.09 | 319 | *e*Pn | | Pn | 10 08 52.2 | +2.0 |
| P35A | Duane Minner, | 5.13 | 326 | P | | Pn | 10 08 51.4 | +0.7 |
| | baz=5.1 | | | | | | | |
| Q34A | Chapman | 5.15 | 316 | P | | Pn | 10 08 51.4 | +0.4 |
| | baz=5.1 | | | | | | | |
| O36A | Bolckow | 5.25 | 338 | P | | Pn | 10 08 53.6 | +1.2 |
| | baz=5.3 | | | | | | | |
| WMOK | Wichita Mounta | 5.30 | 266 | *e*Pn | | Pn | 10 08 54.1 | +0.9 |
| Y33A | Hilltop Ranch, | 5.33 | 258 | P | | Pn | 10 08 54.5 | +1.0 |
| | baz=5.3 | | | | | | | |
| WHTX | Lake Whitney | 5.38 | 234 | P | | Pn | 10 08 55.1 | +1.0 |
| | baz=5.4 | | | | | | | |
| 437A | Phantom Ranch, | 5.47 | 217 | P | | Pn | 10 08 56.2 | +0.8 |
| | baz=5.5 | | | | | | | |
| P34A | Walnut Farm, R | 5.54 | 321 | P | | Pn | 10 08 57.1 | +0.8 |
| | baz=5.5 | | | | | | | |
| W32A | Sentinel | 5.64 | 270 | P | | Pn | 10 08 58.5 | +0.7 |
| | baz=5.6,SNR=8.2 | | | | | | | |
| Z33A | Whitaker Ranch | 5.67 | 251 | P | | Pn | 10 08 59.0 | +0.8 |
| | baz=5.7,SNR=9.3 | | | | | | | |
| WCI | Wyandotte Cave | 5.68 | 57 | *e*Pn | | Pn | 10 08 58.5 | +0.3 |
| 538A | Harpers Horsep | 5.71 | 208 | P | | Pn | 10 08 59.4 | +0.7 |
| | baz=5.7 | | | | | | | |
| O35A | Humboldt | 5.71 | 331 | P | | Pn | 10 08 59.3 | +0.7 |
| | baz=5.7 | | | | | | | |
| Q33A | Connelly Farm, | 5.73 | 312 | P | | Pn | 10 08 60.0 | +1.0 |
| | baz=5.7 | | | | | | | |
| X32A | Elmer | 5.76 | 263 | P | | Pn | 10 09 00.3 | +0.8 |
| | baz=5.8 | | | | | | | |
| HDIL | Hopedale | 5.78 | 24 | P | | Pn | 10 09 00.5 | +0.9 |
| | baz=5.8 | | | | | | | |
| HDIL | Hopedale | 5.78 | 24 | *e*Pn | | Pn | 10 09 00.8 | +1.2 |
| S32A | Newby Ranch, P | 5.82 | 296 | P | | Pn | 10 09 01.1 | +0.9 |
| | baz=5.8 | | | | | | | |
| 234A | Clairette | 5.83 | 237 | P | | Pn | 10 09 01.0 | +0.6 |
| | baz=5.8 | | | | | | | |
| 335A | Moody | 5.83 | 228 | P | | Pn | 10 09 00.8 | +0.4 |
| | baz=5.8 | | | | | | | |
| Y32A | R-V Farms, Ver | 5.98 | 260 | P | | Pn | 10 09 03.1 | +0.6 |
| | baz=6.0 | | | | | | | |
| BLO | Bloomington | 6.05 | 49 | *e*Pn | | Pn | 10 09 03.7 | +0.4 |
| N35A | Tabor | 6.13 | 336 | P | | Pn | 10 09 05.7 | +1.2 |
| | baz=6.1 | | | | | | | |
| Q32A | Meitler Ranch, | 6.18 | 308 | P | | Pn | 10 09 05.8 | +0.7 |
| | baz=6.2 | | | | | | | |
| U31A | Nine Bar Ranch | 6.18 | 282 | P | | Pn | 10 09 06.3 | +1.1 |
| | baz=6.2 | | | | | | | |
| W31A | Holland Ranch, | 6.21 | 271 | P | | Pn | 10 09 06.4 | +0.8 |
| | baz=6.2 | | | | | | | |
| Z32A | Haskell | 6.22 | 253 | P | | Pn | 10 09 06.7 | +1.0 |
| | baz=6.2 | | | | | | | |
| X31A | McDonald Ranch | 6.30 | 266 | P | | Pn | 10 09 07.8 | +1.1 |
| | baz=6.3 | | | | | | | |
| 334A | Lometa | 6.31 | 233 | P | | Pn | 10 09 07.2 | +0.2 |
| | baz=6.3 | | | | | | | |
| 233A | Rising Star | 6.36 | 241 | P | | Pn | 10 09 08.0 | +0.3 |
| | baz=6.4 | | | | | | | |
| CPCT | Cooper Cave | 6.40 | 86 | *e*Pn | | Pn | 10 09 09.1 | +1.0 |
| R31A | Burdett | 6.48 | 300 | P | | Pn | 10 09 10.4 | +1.1 |
| | baz=6.5 | | | | | | | |
| P32A | Huiting Farm, | 6.58 | 313 | P | | Pn | 10 09 11.4 | +0.7 |
| | baz=6.6 | | | | | | | |
| ABTX | Abilene, Hawle | 6.62 | 248 | P | | Pn | 10 09 11.5 | +0.3 |
| | baz=6.6 | | | | | | | |
| ABTX | Abilene, Hawle | 6.62 | 248 | *e*Pn | | Pn | 10 09 11.6 | +0.4 |
| Y31A | Rekieta Farm, | 6.65 | 261 | P | | Pn | 10 09 12.3 | +0.7 |
| | baz=6.6 | | | | | | | |
| 434A | Burnet | 6.68 | 230 | P | | Pn | 10 09 12.1 | +0.1 |
| | baz=6.7 | | | | | | | |
| W30A | Crocket Farms | 6.73 | 271 | P | | Pn | 10 09 13.4 | +0.6 |
| | baz=6.7 | | | | | | | |
| Q31A | Ellis | 6.73 | 305 | P | | Pn | 10 09 13.5 | +0.8 |
| | baz=6.7 | | | | | | | |
| Z31A | Sharp Cattle R | 6.74 | 255 | P | | Pn | 10 09 13.7 | +0.8 |
| | baz=6.7 | | | | | | | |
| N33A | J Bar K, Exete | 6.76 | 325 | P | | Pn | 10 09 14.6 | +1.4 |
| | baz=6.8 | | | | | | | |
| V30A | Spur Ranch, Mi | 6.81 | 276 | P | | Pn | 10 09 15.2 | +1.3 |
| | baz=6.8 | | | | | | | |
| 333A | Richland Sprin | 6.82 | 236 | P | | Pn | 10 09 13.7 | -0.2 |
| | baz=6.8 | | | | | | | |
| CBKS | Cedar Bluff | 6.87 | 303 | P | | Pn | 10 09 15.3 | +0.7 |
| | baz=6.9 | | | | | | | |
| CBKS | Cedar Bluff | 6.87 | 303 | *e*Pn | | Pn | 10 09 15.6 | +0.9 |
| 232A | Coleman | 6.97 | 243 | P | | Pn | 10 09 16.8 | +0.8 |
| | baz=7.0 | | | | | | | |
| P31A | Stockton | 7.00 | 309 | P | | Pn | 10 09 17.7 | +1.3 |
| | baz=7.0 | | | | | | | |
| TKL | Tuckaleechee C | 7.01 | 85 | *e*Pn | | Pn | 10 09 17.9 | +1.4 |
| R30A | Dighton | 7.02 | 297 | P | | Pn | 10 09 17.9 | +1.2 |
| | baz=7.0 | | | | | | | |
| 131A | Roby | 7.17 | 251 | P | | Pn | 10 09 19.3 | +0.6 |
| | baz=7.2 | | | | | | | |
| Y30A | Stafford Cattl | 7.19 | 261 | P | | Pn | 10 09 19.8 | +0.7 |
| | baz=7.2 | | | | | | | |
| 433A | Art | 7.24 | 233 | P | | Pn | 10 09 20.6 | +0.8 |
| | baz=7.2 | | | | | | | |
| TZTN | Tazewell | 7.25 | 78 | *e*Pn | | Pn | 10 09 20.2 | +0.3 |
| TZTN | | | | *e*Sn | | Sn | 10 10 46.4 | +4.1 |
| 534A | Blanco | 7.36 | 226 | P | | Pn | 10 09 21.3 | -0.1 |
| | baz=7.4 | | | | | | | |
| Z30A | Sanderson Ranc | 7.53 | 257 | P | | Pn | 10 09 24.3 | +0.5 |
| | baz=7.5 | | | | | | | |
| P30A | Selden | 7.58 | 306 | P | | Pn | 10 09 25.1 | +0.7 |
| | baz=7.6 | | | | | | | |
| 130A | Snyder | 7.64 | 252 | P | | Pn | 10 09 26.2 | +0.9 |
| | baz=7.6 | | | | | | | |
| AMTX | Amarillo | 7.66 | 270 | *e*Pn | | Pn | 10 09 25.3 | -0.2 |
| X29A | Tulia | 7.73 | 266 | P | | Pn | 10 09 27.1 | +0.6 |
| | baz=7.7 | | | | | | | |
| JFWS | Jewell Farm | 7.78 | 12 | Pn | | Pn | 10 09 26.7 | -0.5 |
| O30A | MW Ranch, Wils | 7.81 | 311 | P | | Pn | 10 09 28.1 | +0.6 |
| | baz=7.8 | | | | | | | |
| 331A | San Angelo | 7.84 | 242 | P | | Pn | 10 09 28.4 | +0.5 |
| | baz=7.8 | | | | | | | |
| JCT | Junction City | 7.89 | 235 | *e*Pn | | Pn | 10 09 28.7 | 0.0 |
| Z29A | Hungry Hill Ra | 8.00 | 258 | P | | Pn | 10 09 30.9 | +0.7 |
| | baz=8.0 | | | | | | | |
| 230A | Sterling City | 8.06 | 248 | P | | Pn | 10 09 31.5 | +0.5 |
| | baz=8.1 | | | | | | | |
| R28A | Tribune | 8.17 | 295 | P | | Pn | 10 09 33.1 | +0.6 |
| | baz=8.2 | | | | | | | |
| 532A | Rocksprings | 8.19 | 233 | P | | Pn | 10 09 31.8 | -0.9 |
| | baz=8.2 | | | | | | | |
| 330A | Mertzon | 8.34 | 245 | P | | Pn | 10 09 34.4 | -0.3 |
| | baz=8.3 | | | | | | | |
| L31A | Butterfield Fa | 8.53 | 326 | P | | Pn | 10 09 38.2 | +0.7 |
| | baz=8.5 | | | | | | | |
| N29A | Votaw Ranch, W | 8.54 | 313 | P | | Pn | 10 09 38.6 | +1.0 |
| | baz=8.5 | | | | | | | |
| 531A | Rocksprings | 8.59 | 236 | P | | Pn | 10 09 37.8 | -0.4 |
| | baz=8.6 | | | | | | | |
| MSTX | Muleshoe | 8.69 | 264 | *e*Pn | | Pn | 10 09 39.7 | 0.0 |
| 430A | Baggett Ranch, | 8.71 | 241 | P | | Pn | 10 09 39.4 | -0.5 |
| | baz=8.7 | | | | | | | |
| 128A | Castleberry Fa | 8.83 | 255 | P | | Pn | 10 09 41.7 | +0.2 |
| | baz=8.8 | | | | | | | |
| K31A | O'Neill | 8.85 | 328 | P | | Pn | 10 09 43.0 | +1.2 |
| | baz=8.8 | | | | | | | |
| 329A | Wagon Wheel Ra | 8.90 | 247 | P | | Pn | 10 09 42.7 | +0.2 |
| | baz=8.9 | | | | | | | |
| M29A | Burnside Ranch | 8.97 | 316 | P | | Pn | 10 09 43.9 | +0.4 |
| | baz=9.0 | | | | | | | |
| N28A | Pribbeno Ranch | 9.03 | 309 | P | | Pn | 10 09 44.7 | +0.5 |
| | baz=9.0 | | | | | | | |
| ECSD | EROS Data Cent | 9.05 | 340 | P | | Pn | 10 09

σ1⚲55/21, **mb4.2/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **8.27** | **42** | P | **P** | **10 17 28.6** | **-0.5** |
| | 3.0nm,0.3s,baz=160,slow=1.6,SNR=5.8 | | | | | | |
| AFI | | | | S | **S** | **10 18 58.6** | **-3.6** |
| | 7.2nm,0.3s,baz=217,slow=20,SNR=5.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.11** | **260** | P | **Pn** | **10 18 44.7** | **-2.3** |
| | 0.1nm,0.3s,baz=1.4,slow=11,SNR=2.3 | | | | | | |
| **URZ** | **Urewera** | **18.64** | **193** | P | **P** | **10 19 22.8** | **+0.4** |
| | 1.4nm,0.3s,baz=41,slow=5.0,SNR=8.5 | | | | | | |
| URZ | | | | S | **S** | **10 22 35.2** | **-1.0** |
| | 0.6nm,0.3s,baz=14,slow=17,SNR=6.6 | | | | | | |
| **EIDS** | **Eidsvold** | **29.40** | **254** | P | P | 10 21 02.3 | +1.2 |
| | baz=29,SNR=4.7 | | | | | | |
| **RMQ** | **Roma** | **31.56** | **252** | P | P | 10 21 21.8 | +1.9 |
| | baz=31,SNR=5.0 | | | | | | |
| **RABL** | **Rabaul** | **33.53** | **294** | P | **P** | **10 21 35.6** | **-1.5** |
| | baz=33,SNR=4.2 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **34.86** | **244** | P | **P** | **10 21 49.0** | **+0.8** |
| | baz=35,SNR=5.3 | | | | | | |
| **QLP** | **Quilpie** | **35.61** | **252** | P | **P** | **10 21 53.6** | **-1.0** |
| | baz=35,SNR=14 | | | | | | |
| **COEN** | **Coen** | **38.03** | **273** | P | P | 10 22 16.5 | +1.5 |
| | baz=38,SNR=12 | | | | | | |
| **JAY** | **Jayapura** | **44.38** | **288** | P | P | 10 23 08.4 | +2.2 |
| | baz=44,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **45.06** | **256** | P | **P** | **10 23 10.1** | **-1.3** |
| | 29nm,0.8s,baz=88,slow=8.1,SNR=123 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.12** | **262** | P | **P** | **10 23 10.3** | **-1.6** |
| | 5.1nm,0.3s,baz=94,slow=7.2,SNR=66 | | | | | | |
| **KDU** | **Kakadu** | **48.42** | **271** | P | **P** | **10 23 36.5** | **-0.7** |
| | baz=48,SNR=6.7 | | | | | | |
| **GUMO** | **Guam** | **49.95** | **309** | P | **P** | **10 23 49.2** | **+0.6** |
| | 93nm,1.1s,baz=166,slow=12,SNR=3.7 | | | | | | |
| **WRKA** | **Warakurna** | **50.02** | **254** | P | **P** | **10 23 48.6** | **-0.5** |
| | baz=50,SNR=8.8 | | | | | | |
| **KNRA** | **Kununurra** | **51.16** | **266** | P | **P** | **10 23 56.7** | **-0.9** |
| | baz=51,SNR=24 | | | | | | |
| **FAKI** | **Fak Fak** | **51.88** | **283** | P | **P** | **10 24 04.1** | **+1.1** |
| | baz=52,SNR=5.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.21** | **323** | P | **P** | **10 26 06.3** | **+1.7** |
| | 1.2nm,0.8s,baz=166,slow=5.5,SNR=3.5 | | | | | | |
| **KSM** | **Kuching** | **73.83** | **278** | P | **P** | **10 26 27.6** | **+1.2** |
| | baz=74,SNR=3.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.06** | **345** | P | **P** | **10 26 39.8** | **+1.7** |
| | 5.7nm,0.9s,baz=116,slow=6.8,SNR=5.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.45** | **43** | P | **P** | **10 27 04.5** | **+1.9** |
| | 2.1nm,1.1s,baz=226,slow=8.6,SNR=5.2 | | | | | | |
| **ILAR** | **Eielson Array** | **87.87** | **13** | P | **P** | **10 27 39.4** | **+0.6** |
| | 0.6nm,0.8s,baz=225,slow=5.8,SNR=6.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.45** | **289** | P | P | 10 27 53.8 | +2.0 |
| | 4.0nm,1.0s,baz=120,slow=2.7,SNR=14 | | | | | | |
| **AKASG** | **Malin Array Be** | **142.94** | **332** | PKhKP | PKPpre | 10 34 16.4 | |
| | 0.5nm,0.3s,baz=42,slow=5.1,SNR=6.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.95** | **313** | PKPbc | **PKPbc** | **10 34 29.6** | **-1.3** |
| | 1.3nm,1.0s,baz=164,slow=4.9,SNR=3.6 | | | | | | |

*NIED* ***14*** *10:26:00.36˚.90N×141˚.40E,h62km,Mw3.6 Best double couple: M₀3.01000×10¹⁴ NP1:φs45.00000°,δ29.00000°, λ-123.00000°. NP2:φs262.00000°,δ66.00000°, λ-73.00000°.*

**JMA 14 10:26:12.9±0.1, 36˚.90N×141˚.39E, h76km±1km, M3.5, 2C-5D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ONAJ** | **Iwakimizuishiy** | **0.52** | **293** | ⇓P | Pn | 10 26 26.4 | -0.1 |
| ONAJ | | | | S | Sn | 10 26 36.1 | -0.4 |
| **JFK** | **Kawauchi** | **0.62** | **319** | ⇓P | Pn | 10 26 27.3 | -0.2 |
| JFK | | | | S | Sn | 10 26 37.5 | -0.8 |
| **JHO** | **Hitachi** | **0.72** | **247** | ⇓P | Pn | 10 26 28.4 | -0.1 |
| JHO | | | | S | Sn | 10 26 39.6 | -0.4 |
| **JFT** | **Otama** | **1.04** | **307** | ⇓P | Pn | 10 26 33.1 | +0.8 |
| JFT | | | | S | Sn | 10 26 47.5 | +0.8 |
| **JMM** | **Marumori** | **1.07** | **334** | ⇑P | Pn | 10 26 32.7 | +0.1 |
| JMM | | | | S | Sn | 10 26 47.2 | -0.2 |
| **JFY** | **Yanaizu** | **1.44** | **291** | P | Pn | 10 26 37.8 | +0.5 |
| JFY | | | | S | Sn | 10 26 55.5 | -0.2 |
| **JIO** | **Ouri** | **1.55** | **359** | ⇑P | Pn | 10 26 38.3 | -0.4 |
| JIO | | | | S | Sn | 10 26 56.6 | -1.6 |
| **JOU** | **Okura** | **1.57** | **339** | P | Pn | 10 26 39.0 | -0.1 |
| JOU | | | | S | Sn | 10 26 59.0 | +0.2 |
| **JAG** | **Ashikaga** | **1.63** | **254** | ⇓P | Pn | 10 26 40.3 | +0.6 |
| JAG | | | | S | Sn | 10 27 00.6 | +0.5 |
| **JYS** | **Shirataka** | **1.69** | **322** | P | Pn | 10 26 40.8 | +0.3 |
| JYS | | | | S | Sn | 10 27 03.3 | +1.8 |
| **JKT** | **Katashina** | **1.72** | **266** | P | Pn | 10 26 42.1 | +1.0 |
| JKT | | | | S | Sn | 10 27 04.1 | +1.6 |
| **MAT** | **Matsushiro** | **2.58** | **263** | P | Pn | 10 26 53.9 | +1.4 |
| MAT | | | | S | Sn | 10 27 24.3 | +1.3 |

*ISCJB* ***14*** *10:41:19.4±0.3,16˚.0S±0.˚1×173˚.4W±0.˚1,h10km,mb4.5/32, MS3.7/4,Error ellipse: s-maj=20.1km s-min=8.3km az=136.1*

*IDC* ***14*** *10:41:19.2±0.7,16˚.06S×173˚.36W,h0km,mb4.3/6, mb1 4.5/8,mb1mx4.2/36,mbtmp4.3/8,ML4.1/2,MS3.7/6, Ms1 3.7/6,ms1mx3.4/23,Error ellipse: s-maj=32.5km s-min=17.0km az=133.0*

*NEIC* ***14*** *10:41:20.8±0.3,16˚.07S×173˚.25W,h10km,mb4.6/26, Error ellipse: s-maj=16.4km s-min=6.4km az=141.0*

**ISC 14 10:41:20.6±0.5, 16˚.0S±0.˚1×173˚.2W±0.˚1, h10km, n68,** σ1⚲10/62, **mb4.6/32, MS3.9/4, 7C, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.48** | **34** | Pn | **Pn** | **10 42 01.2** | **+0.1** |
| | 118nm,0.3s,baz=209,slow=3.2,SNR=284 | | | | | | |
| AFI | | | | Sn | **Sn** | **10 42 28.4** | **-3.0** |
| | 344nm,0.3s,baz=86,slow=21,SNR=15 | | | | | | |
| AFI | | | | LR | LR | 10 43 03.2 | |
| | comp=Z,709nm,20.9s,baz=230,slow=40 | | | | | | |
| **MSVF** | **Nonsavu** | **8.54** | **257** | Pn | **Pn** | **10 43 25.8** | **+1.3** |
| | 91nm,1.0s | | | | | | |
| **RAR** | **Rarotonga** | **13.77** | **114** | LR | LR | 10 48 25.7 | |
| | comp=Z,329nm,20.8s,baz=282,slow=31 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.16** | **249** | eP | Pn | 10 46 00.2 | +3.0 |
| | 43nm,1.1s | | | | | | |
| DZM | | | | eLR | LR | 10 51 08.0 | |
| | 615nm,26.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.16** | **249** | P | **P** | **10 45 55.3** | **0.0** |
| | 0.2nm,0.3s,baz=0.0,slow=15,SNR=2.7 | | | | | | |
| DZM | | | | LR | LR | 10 52 25.3 | |
| | comp=Z,432nm,19.5s,baz=246,slow=33 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.16** | **249** | P | **P** | **10 45 55.3** | **0.0** |
| DZM | | | | eP | Pn | 10 45 56.5 | -0.7 |
| **PPT** | **Papeete** | **22.69** | **97** | LR | LR | 10 52 42.0 | |
| | comp=Z,99nm,21.4s,baz=300,slow=30 | | | | | | |
| **PPT2** | **Papeete2** | **22.69** | **97** | eLR | LR | 10 51 34.8 | |
| | 429nm,27.2s | | | | | | |
| **TBI** | **Tubuai** | **23.52** | **112** | eLR | LR | 10 52 05.3 | |
| | 380nm,26.8s | | | | | | |
| **URZ** | **Urewera** | **23.78** | **199** | P | **P** | **10 46 31.8** | **-1.6** |
| | 5.5nm,0.3s,baz=260,slow=4.1,SNR=10 | | | | | | |
| **URZ** | **Urewera** | **23.78** | **199** | P | **P** | **10 46 31.8** | **-1.6** |
| URZ | | | | eP | **P** | **10 46 31.8** | **-1.6** |
| **HNR** | **Honiara** | **26.96** | **281** | LR | LR | 10 56 13.0 | |
| | comp=Z,365nm,20.9s,baz=124,slow=33 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.49** | **330** | T | T | 11 32 12.4 | |
| | baz=150,slow=76,SNR=21 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.50** | **330** | T | T | 11 32 11.8 | |
| | baz=150,slow=76,SNR=46 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.51** | **330** | T | T | 11 32 12.9 | |
| | baz=150,slow=76,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.89** | **257** | P | **P** | **10 50 12.2** | **-2.5** |
| | 1.5nm,0.7s,baz=94,slow=6.9,SNR=23 | | | | | | |
| **ASAR** | **Alice Springs** | **50.11** | **252** | P | **P** | **10 50 14.1** | **-2.2** |
| | 7.6nm,0.7s,baz=87,slow=7.6,SNR=50 | | | | | | |
| ASAR | | | | LR | LR | 11 10 22.5 | |
| | comp=Z,138nm,18.3s,baz=92,slow=35 | | | | | | |
| **VNDA** | **Vanda** | **62.83** | **186** | P | **P** | **10 51 46.3** | **+0.2** |
| | 0.5nm,0.8s,baz=54,slow=1.7,SNR=3.8 | | | | | | |
| **CMB** | **Columbia Colle** | **73.07** | **41** | eP | **P** | **10 52 52.1** | **+0.9** |
| | 5.1nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **73.94** | **37** | eP | **P** | **10 52 58.0** | **+1.7** |
| | 10nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **74.08** | **180** | eP | **P** | **10 52 56.8** | **0.0** |
| | 4.3nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.63** | **42** | P | **P** | **10 53 02.2** | **+1.7** |
| | 4.4nm,0.7s,baz=226,slow=10,SNR=52 | | | | | | |
| **MOD** | **Modoc** | **75.46** | **38** | eP | **P** | **10 53 06.4** | **+1.2** |
| | 7.2nm,0.9s | | | | | | |
| **SHPR** | **Sheep Range** | **75.64** | **45** | eP | **P** | **10 53 07.6** | **+1.3** |
| | 9.9nm,1.4s | | | | | | |
| **TUC** | **Tucson** | **76.61** | **50** | eP | **P** | **10 53 13.2** | **+1.4** |
| | 1.9nm,0.8s | | | | | | |
| **WVOR** | **Wild Horse Val** | **76.77** | **38** | eP | **P** | **10 53 13.7** | **+1.1** |
| | 6.6nm,1.3s | | | | | | |
| **WUAZ** | **Wupatki** | **77.75** | **47** | eP | **P** | **10 53 18.7** | **+0.4** |
| | 1.9nm,0.9s | | | | | | |
| **121A** | **Cookes Peak, D** | **78.96** | **52** | eP | **P** | **10 53 26.1** | **+1.1** |
| | 2.2nm,0.8s | | | | | | |
| **DUG** | **Dugway** | **79.16** | **43** | eP | **P** | **10 53 26.7** | **+0.8** |
| | 5.1nm,1.4s | | | | | | |
| **TMUT** | **Trail Mountain** | **79.76** | **44** | eP | **P** | **10 53 31.0** | **+1.6** |
| | 22nm,1.0s | | | | | | |
| **MNTX** | **Cornudas Mount** | **80.42** | **53** | eP | **P** | **10 53 34.0** | **+1.1** |
| | 6.1nm,1.3s | | | | | | |
| **PV01** | **Paradox Valley** | **80.99** | **46** | eP | **P** | **10 53 36.4** | **+0.4** |
| | 617nm,1.2s | | | | | | |
| **ANMO** | **Albuquerque** | **81.03** | **50** | eP | **P** | **10 53 37.0** | **+0.8** |
| | 5.7nm,1.3s | | | | | | |
| **MOOW** | **Moose Ponds** | **82.31** | **40** | eP | **P** | **10 53 43.6** | **+0.8** |
| | 15nm,2.1s | | | | | | |
| **LOHW** | **Long Hollow** | **82.33** | **41** | eP | **P** | **10 53 43.6** | **+0.7** |
| | 18nm,2.1s | | | | | | |
| **SMCO** | **Snowmass** | **82.58** | **46** | eP | **P** | **10 53 45.4** | **+0.9** |
| | 5.3nm,1.0s | | | | | | |
| **YMR** | **Madison River** | **82.65** | **40** | eP | **P** | **10 53 45.1** | **+0.6** |
| | 30nm,1.8s | | | | | | |
| **BOZ** | **Bozeman (W)** | **82.75** | **38** | P | P | **10 53 46.3** | **+1.3** |
| | 6.4nm,1.3s | | | | | | |
| **SDCO** | **Great Sand Dun** | **82.96** | **48** | eP | **P** | **10 53 46.6** | **+0.1** |
| | 3.4nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **82.97** | **11** | P | **P** | **10 53 45.8** | **+0.3** |
| | 1.5nm,0.5s,baz=231,slow=6.3,SNR=50 | | | | | | |
| **HRY** | **Holter Researc** | **83.19** | **37** | eP | **P** | **10 53 47.8** | **+0.6** |
| | 2.1nm,0.7s | | | | | | |
| **MSTX** | **Muleshoe** | **83.37** | **52** | eP | **P** | **10 53 48.2** | **-0.2** |
| | 5.7nm,1.0s | | | | | | |
| **RLMT** | **Red Lodge** | **83.92** | **40** | eP | **P** | **10 53 51.6** | **+0.6** |
| | 1.1nm,0.8s | | | | | | |
| **GCMT** | **Greycliff** | **84.00** | **39** | P | **P** | **10 53 52.2** | **+0.8** |
| | 4.4nm,1.2s | | | | | | |
| **AMTX** | **Amarillo** | **84.56** | **52** | eP | **P** | **10 53 54.6** | **+0.2** |
| | 8.3nm,0.8s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **85.25** | **54** | P | **P** | **10 53 58.1** | **+0.2** |
| | 13nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **92.33** | **177** | P | **P** | **10 54 30.7** | **-0.3** |
| **VNA1** | **Neumayer--Stat** | **92.97** | **175** | P | **P** | **10 54 35.5** | **+1.7** |
| **ARCES** | **ARCESS Array B** | **125.19** | **352** | PKP | **PKPdf** | **11 00 20.6** | **-0.3** |
| | 4.1nm,0.8s,baz=11,slow=1.2,SNR=7.7 | | | | | | |
| **FINES** | **FINESS Array B** | **132.53** | **348** | PKP | **PKPdf** | **11 00 35.9** | **+0.8** |
| | 4.1nm,0.9s,baz=22,slow=2.1,SNR=4.5 | | | | | | |
| **CLL** | **Collm** | **144.40** | **353** | ePKPdf | PKPbc | 11 00 56.0 | +0.6 |
| **DPC** | **Dobruska-Polom** | **144.85** | **349** | ePKP | **PKPdf** | **11 00 58.2** | **+0.2** |
| DPC | | | | epPKP | **PKiKP** | **11 01 02.8** | **+1.1** |
| DPC | | | | ex | x | 11 01 11.1 | |
| **OKC** | **Ostrava-Krasne** | **144.98** | **347** | ePKP | **PKPdf** | **11 00 58.3** | **+0.2** |
| **KMBO** | **Kilima Mbogo** | **145.44** | **243** | PKPbc | **PKPdf** | **11 01 01.2** | **+0.9** |
| | 0.9nm,0.2s,baz=58,slow=3.6,SNR=4.3 | | | | | | |
| **PRU** | **Pruhonice** | **145.49** | **351** | ePKP | **PKPab** | **11 01 00.0** | **+0.8** |
| **NKC** | **Novy Kostel** | **145.52** | **354** | ePKP | **PKPab** | **11 00 59.9** | **+0.6** |
| **GOPC** | **GO Pecny, Ondr** | **145.53** | **351** | ePKP | **PKPbc** | **11 00 59.6** | **+0.5** |
| **KHC** | **Kasperske Hory** | **146.47** | **352** | ePKP | **PKPbc** | **11 01 02.0** | **-0.1** |
| KHC | | | | ex | x | 11 01 15.7 | |
| **BRTR** | **Keskin Array B** | **146.71** | **321** | PKPbc | **PKPab** | **11 01 04.3** | **0.0** |
| | 2.6nm,0.8s,baz=136,slow=2.3,SNR=11 | | | | | | |
| **GERES** | **GERESS Array B** | **146.73** | **352** | PKPbc | **PKPbc** | **11 01 03.7** | **+0.8** |
| | 2.5nm,0.7s,baz=27,slow=3.3,SNR=13 | | | | | | |
| **CONA** | **Conrad Observa** | **147.26** | **349** | ⇑iPKPab | **PKPbc** | **11 01 05.4** | **+0.9** |
| | 8.0nm,0.7s | | | | | | |
| **ARSA** | **Arzberg** | **147.98** | **349** | ⇑isPKPdf | **PKiKP** | **11 01 07.6** | **-0.6** |
| | 3.3nm,0.6s | | | | | | |
| **MOTA** | **Moosalm** | **148.51** | **354** | ⇑isPKPdf | **PKiKP** | **11 01 08.4** | **-1.0** |
| | 7.2nm,0.9s | | | | | | |
| **WTTA** | **Wattenberg** | **148.54** | **354** | ⇑iPKiKP | **PKiKP** | **11 01 08.5** | **-1.1** |
| | 12nm,0.6s | | | | | | |
| **DAVA** | **Damuels** | **148.67** | **356** | ⇑iPKiKP | **PKPbc** | **11 01 09.1** | **+0.8** |
| | 13nm,0.9s | | | | | | |
| **FETA** | **Feichten** | **148.87** | **355** | ⇑iPKiKP | **PKPbc** | **11 01 09.6** | **+0.8** |
| | 11nm,1.4s | | | | | | |
| **ABTA** | **Abfaltersbach** | **148.94** | **352** | ⇑isPKPdf | **PKiKP** | **11 01 09.2** | **-1.2** |
| | 10nm,0.7s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **174.33** | **119** | PKP | **PKPdf** | **11 01 30.3** | **-1.3** |
| | 1.2nm,1.1s,baz=185,slow=3.7,SNR=3.4 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **11 03 03.1** | **-0.7** |
| | 1.9nm,1.0s,baz=254,slow=4.2,SNR=6.2 | | | | | | |

*DDA* ***14*** *10:46:55.9,36˚.38N×40˚.16E,h7km,Md3.2*

*ISCJB* ***14*** *10:46:57.7±1.3,36˚.34N±0.˚09×40˚.29E±0.˚06,h10km,Error ellipse: s-maj=13.2km s-min=6.7km az=3.0*

*ISK* ***14*** *10:46:57.0,36˚.34N×40˚.27E,h10km,MD3.4,ML3.4*

*CSEM* ***14*** *10:46:58.9±0.6,36˚.49N×40˚.32E,h2km,MD3.4,Error ellipse: s-maj=14.9km s-min=7.3km az=2.0*

**ISC 14 10:46:58.4±1.7, 36˚.40N±0.˚09×40˚.27E±0.˚04, h10km, n26,** σ0⚲79/34, **Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAZI** | **Mazidag** | **1.07** | **8** | ePN | **Pb** | **10 47 18.3** | **-0.8** |
| MAZI | | | | eSN | **Sn** | **10 47 35.5** | **+0.9** |
| **MAZI** | **Mazidag** | **1.07** | **8** | ePn | **Pb** | **10 47 18.3** | **-0.8** |
| MAZI | | | | eSn | **Sn** | **10 47 35.5** | **+0.9** |
| **DIY** | **Diyarbakir** | **1.49** | **359** | ePn | **Pg** | **10 47 26.6** | **-0.5** |
| **DYBB** | **Diyarbakir** | **1.56** | **356** | ePN | **Pb** | **10 47 26.6** | **-0.7** |
| **URFA** | **Urfa** | **1.56** | **312** | ePN | **Pb** | **10 47 26.2** | **-1.2** |
| URFA | | | | eSN | **Sb** | **10 47 47.2** | **+0.1** |
| **URFA** | **Urfa** | **1.56** | **312** | ePn | **Pb** | **10 47 26.2** | **-1.2** |
| URFA | | | | eSn | **Sb** | **10 47 47.2** | **+0.1** |
| **BEST** | **Besiri** | **1.69** | **28** | P | **Pb** | **10 47 28.7** | **-0.9** |
| **SVAN** | **Silvan-Diyarba** | **1.90** | **23** | ePN | **Pn** | **10 47 30.9** | **-0.1** |
| SVAN | | | | eSN | **Sn** | **10 47 55.8** | **+0.8** |
| **SVAN** | **Silvan-Diyarba** | **1.90** | **23** | ePn | **Pn** | **10 47 30.9** | **-0.1** |
| SVAN | | | | eSn | **Sn** | **10 47 55.8** | **+0.8** |
| **ATAB** | **Bozova** | **1.91** | **305** | *i* S | **Sb** | **10 47 56.6** | **-0.6** |
| **ATAB** | **Bozova** | **1.91** | **305** | P | **Pn** | **10 47 30.9** | **-0.1** |
| ATAB | | | | S | **Sb** | **10 47 56.6** | **-0.6** |
| **BTMT** | **Batman** | **2.04** | **28** | ePN | **Pn** | **10 47 32.5** | **-0.4** |
| **BTMT** | **Batman** | **2.04** | **28** | ePn | **Pn** | **10 47 32.5** | **-0.4** |
| **SVRC** | **Sivrice-ELAZID** | **2.12** | **339** | ePN | **Pn** | **10 47 34.4** | **+0.3** |
| **SVRC** | **Sivrice-ELAZID** | **2.12** | **339** | ePn | **Pn** | **10 47 34.4** | **+0.3** |
| **ELZG** | **Elazig** | **2.33** | **334** | *i* P | **Pn** | **10 47 37.1** | **+0.1** |
| **ELZG** | **Elazig** | **2.33** | **334** | P | **Pn** | **10 47 37.1** | **+0.1** |
| **GZT** | **Gaziantep** | **2.37** | **295** | P | **Pg** | **10 47 43.8** | **0.0** |
| **PTK** | **Pertek** | **2.58** | **345** | ePN | **Pn** | **10 47 41.4** | **+0.9** |
| **PTK** | **Pertek** | **2.58** | **345** | ePn | **Pn** | **10 47 41.4** | **+0.9** |
| **AKCD** | **Akcadag** | **2.66** | **316** | *i* P | **Pn** | **10 47 42.6** | **+1.1** |
| **AKCD** | **Akcadag** | **2.66** | **316** | P | **Pn** | **10 47 42.6** | **+1.1** |
| AKCD | | | | S | **Sb** | **10 48 20.5** | **+1.5** |
| **CUKT** | **Cukurca** | **2.81** | **71** | ePN | **Pn** | **10 47 44.7** | **+1.2** |
| **CUKT** | **Cukurca** | **2.81** | **71** | ePn | **Pn** | **10 47 44.7** | **+1.2** |
| **HAKT** | **HAKKARI** | **2.99** | **66** | *i* P | **Pn** | **10 47 45.9** | **-0.2** |
| **HAKT** | **HAKKARI** | **2.99** | **66** | P | **Pn** | **10 47 45.9** | **-0.2** |

*IDC* ***14*** *10:47:13.1±0.6,5˚.69N×82˚.40W,h0km,mb4.3/13, mb1 4.5/17,mb1mx4.4/28,mbtmp4.3/17,ML4.0/4,MS4.0/19, Ms1 4.0/19,ms1mx3.9/25,Error ellipse: s-maj=30.3km s-min=12.1km az=63.0*

*ISCJB* ***14*** *10:47:14.1±0.2,5˚.68N±0.˚03×82˚.56W±0.˚03,h15km, mb4.7/117,MS4.0/17,Error ellipse: s-maj=4.2km s-min=3.1km az=42.6*

*NEIC* ***14*** *10:47:15.2±0.3,5˚.55N×82˚.66W,h10km,mb4.8/115,Error ellipse: s-maj=6.8km s-min=4.4km az=214.0*

*CASC* ***14*** *10:47:16.8±5.8,5˚.70N×82˚.45W,h35km±119km,MD4.4*

*BJI* ***14*** *10:47:17.0,5˚.50N×82˚.70W,h31km,mB5.2/5,Ms5.3/5, Ms7 4.7/5*

*GCMT* ***14*** *10:47:19.6±0.2,5˚.50N×82˚.59W,h19km±1km,MW5.0/93, Moment Tensor Solution. s46,c62; s93,c158; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-0.29±.11; Mθθ0.18±.09; Mφφ0.10±.12; Mrθ0.39±.19; Mφφ3.91±.09; Mφr0.07±.21; Best double couple: M₀3.93000×10¹⁶ NP1:φs90.00000°,δ90.00000°,λ6.00000°. NP2: φs0.00000°,δ84.00000°,λ180.00000°. Principal axes: T 4.0780, Plg4.0000°, Azm315.0000°; N -0.2980, Plg84.0000°, Azm94.0000°; P -3.7810, Plg4.0000°, Azm225.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 14 10:47:15.3±0.4, 5˚.57N±0.˚05×82˚.64W±0.˚05, h15km, n555,** σ1⚲11/548, **mb4.8/117, MS4.0/17, 1D, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TBS2** | | **3.20** | **360** | eP | **Pn** | **10 48 05.0** | **-0.3** |
| TBS2 | | | | eS | **Sn** | **10 48 41.6** | **-1.6** |
| **AZU** | **Azuero** | **3.22** | **47** | ⇓iP | **Pn** | **10 48 03.6** | **-1.8** |
| AZU | | | | eS | Sn | 10 48 34.5 | -9.1 |
| **PNME** | **Penonome** | **3.70** | **38** | eP | **Pn** | **10 48 11.1** | **-0.8** |
| PNME | | | | eS | **Sn** | **10 48 53.4** | **-1.8** |
| **BUS** | **Buena Vista** | **4.11** | **344** | eP | **Pn** | **10 48 16.4** | **-1.6** |
| BUS | | | | eS | **Sn** | **10 49 05.6** | **-0.5** |
| **ZANG** | **Zanguenga, Cho** | **4.35** | **39** | eP | **Pn** | **10 48 21.8** | **+1.0** |
| ZANG | | | | eS | **Sn** | **10 49 09.6** | **-1.7** |
| **BCIP** | **Isla Barro Col** | **4.53** | **38** | eP | **Pn** | **10 48 23.4** | **+0.1** |
| **BCIP** | **Isla Barro Col** | **4.53** | **38** | ePn | **Pn** | **10 48 24.0** | **+0.7** |
| **UPIG** | | **4.59** | **42** | eP | **Pn** | **10 48 23.4** | **-0.7** |
| **CGA2** | **Cerro Gallo 2** | **4.77** | **338** | eP | **Pn** | **10 48 25.4** | **-1.5** |
| CGA2 | | | | eS | **Sn** | **10 49 22.0** | **-0.1** |
| **JCR** | **Jicaral** | **4.91** | **330** | eP | **Pn** | **10 48 26.5** | **-2.1** |
| JCR | | | | eS | **Sn** | **10 49 22.5** | **-2.7** |
| **JTS** | **JuntasAbangare** | **5.22** | **334** | Pn | **Pn** | **10 48 31.4** | **-1.5** |
| | 153nm,0.3s,baz=113,slow=13,SNR=364 | | | | | | |
| JTS | | | | Sn | **Sn** | **10 49 31.4** | **-1.5** |
| | 193nm,0.3s,baz=298,slow=23,SNR=14 | | | | | | |
| **JTS** | **JuntasAbangare** | **5.22** | **334** | eP | **Pn** | **10 48 31.2** | **-1.6** |
| JTS | | | | eS | **Sn** | **10 49 31.1** | **-1.8** |
| **AMAS** | **Alto Masis** | **5.53** | **335** | *i* P | **Pn** | **10 48 36.1** | **-1.0** |
| AMAS | | | | *i* S | **Sn** | **10 49 39.7** | **-0.8** |
| **PTEN** | **Parque Tenorio** | **5.62** | **336** | *i* P | **Pn** | **10 48 37.8** | **-0.6** |
| **CUI** | **Cuipilapa** | **5.64** | **334** | *i* P | **Pn** | **10 48 37.5** | **-1.2** |
| CUI | | | | *i* S | **Sn** | **10 49 42.1** | **-1.2** |
| **COLC** | **Colonia** | **5.66** | **334** | *i* P | **Pn** | **10 48 38.2** | **-0.8** |
| **HORNC** | **Hornillas** | **5.69** | **334** | *i* P | **Pn** | **10 48 38.4** | **-1.1** |
| **GUAB** | **Guayabo de Bag** | **5.71** | **334** | *i* P | **Pn** | **10 48 38.9** | **-0.7** |
| GUAB | | | | *i* S | **Sn** | **10 49 45.6** | **+0.6** |
| **LIM1** | **Limonal** | **5.71** | **333** | *i* P | **Pn** | **10 48 39.0** | **-0.7** |
| **MESS** | **Mesas** | **5.73** | **334** | *i* P | **Pn** | **10 48 38.9** | **-1.0** |
| **NY14** | **Universidad de** | **5.80** | **331** | *i* P | **Pn** | **10 48 39.4** | **-1.5** |
| **GPS3** | **Bodega del ICE** | **5.81** | **333** | *i* P | **Pn** | **10 48 41.9** | **+0.8** |
| **GPS1** | **Guardaparques** | **5.83** | **333** | *i* P | **Pn** | **10 48 40.8** | **-0.5** |
| **LAPC** | **Finca la Perla** | **5.86** | **332** | *i* P | **Pn** | **10 48 40.8** | **-0.9** |
| **BUEV** | **Buena Vista** | **5.87** | **332** | *i* P | **Pn** | **10 48 41.3** | **-0.6** |
| BUEV | | | | *i* S | **Sn** | **10 49 48.3** | **-0.8** |
| **GBS3** | **Finca Las Im˜¡** | **5.88** | **332** | *i* P | **Pn** | **10 48 41.4** | **-0.6** |
| **GBS2** | **Las Lilas** | **5.93** | **332** | *i* P | **Pn** | **10 48 42.2** | **-0.4** |
| **OTAV** | **Otavalo** | **6.75** | **142** | ePn | **Pn** | **10 48 52.7** | **-1.6** |
| **COPN** | **Copaltepe** | **7.64** | **330** | eP | **Pn** | **10 49 07.5** | **+1.3** |
| COPN | | | | eS | **Sn** | **10 50 30.1** | **-2.5** |
| **ROSC** | **El Rosal** | **8.31** | **95** | Pn | **Pn** | **10 49 16.5** | **+0.8** |
| | 2.8nm,0.3s,baz=306,slow=3.3,SNR=6.5 | | | | | | |
| ROSC | | | | LR | LR | 10 51 26.9 | |
| | comp=Z,348nm,18.4s,baz=94,slow=31 | | | | | | |
| **ROSC** | **El Rosal** | **8.31** | **95** | ePn | Pn | 10 49 19.9 | +4.2 |
| **CNCH** | **Conchagua** | **9.21** | **327** | eP | **Pn** | **10 49 30.6** | **+2.8** |
| **VSM** | **San Miguel** | **9.58** | **325** | eP | Pn | 10 49 36.3 | +3.3 |
| **TGUH** | **Tegucigalpa,Un** | **9.59** | **332** | eP | **Pn** | **10 49 35.0** | **+2.2** |
| **TGUH** | **Tegucigalpa,Un** | **9.59** | **332** | ePn | **Pn** | **10 49 35.4** | **+2.5** |
| **CAHU** | **Cacacuatique** | **9.82** | **326** | eP | **Pn** | **10 49 39.1** | **+2.8** |
| **LFRS** | **El Faro** | **10.20** | **322** | eP | **Pn** | **10 49 44.1** | **+2.8** |
| **LBRS** | **Las Brisas** | **10.28** | **323** | eP | Pn | 10 49 46.3 | +3.9 |
| **LFU** | **La Fuente** | **10.33** | **322** | eP | Pn | 10 49 46.6 | +3.5 |
| **SNET** | **Serv Nac Est T** | **10.36** | **322** | eP | Pn | 10 49 47.7 | +4.3 |
| **BOQS** | **Boqueron** | **10.42** | **322** | eP | Pn | 10 49 48.0 | +3.5 |
| **SBLS** | **San Blas** | **10.72** | **321** | eP | Pn | 10 49 52.4 | +3.8 |
| **RTR** | **El Retiro** | **10.77** | **321** | eP | Pn | 10 49 52.6 | +3.3 |
| **SDV** | **Santo Domingo** | **12.36** | **74** | ePn | **Pn** | **10 50 12.1** | **+1.1** |
| | 55nm,1.0s | | | | | | |
| **ATAH** | **Atahualpa** | **13.31** | **161** | Pn | **Pn** | **10 50 24.8** | **+0.5** |
| | 0.8nm,0.3s,baz=338,slow=14,SNR=4.0 | | | | | | |
| ATAH | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 336A | Riesel<br>baz=29 | 28.93 | 334 | P | P | 10 53 14.3 | +0.2 |
| 434A | Burnet<br>baz=29 | 29.09 | 332 | P | P | 10 53 15.5 | 0.0 |
| 631A | Perdido Creek<br>baz=29 | 29.15 | 327 | P | P | 10 53 16.7 | +0.7 |
| 138A | Matatall Enter<br>baz=30 | 29.35 | 338 | P | P | 10 53 17.7 | 0.0 |
| 532A | Rocksprings<br>baz=30 | 29.35 | 328 | P | P | 10 53 18.5 | +0.7 |
| 433A | Art<br>baz=30 | 29.44 | 330 | P | P | 10 53 18.9 | +0.3 |
| KMSC | Kings Mountain<br>baz=30 | 29.45 | 2 | P | P | 10 53 18.2 | -0.4 |
| OXF | Oxford<br>43nm,1.1s | 29.47 | 349 | eP | P | 10 53 18.7 | -0.1 |
| 334A | Lometa<br>baz=30 | 29.51 | 332 | P | P | 10 53 19.6 | +0.4 |
| 137A | Heron Place, G<br>baz=30 | 29.55 | 337 | P | P | 10 53 19.3 | -0.1 |
| JCT | Junction City<br>baz=30 | 29.58 | 329 | P | P | 10 53 20.4 | +0.6 |
| SWET | Sewanee<br>17nm,0.9s | 29.66 | 355 | eP | P | 10 53 20.1 | -0.3 |
| WHTX | Lake Whitney<br>baz=30 | 29.72 | 334 | P | P | 10 53 20.8 | -0.1 |
| 531A | Rocksprings<br>baz=30 | 29.72 | 328 | P | P | 10 53 21.2 | +0.1 |
| CPCT | Cooper Cave | 29.79 | 357 | eP | P | 10 53 22.0 | +0.5 |
| Z38A | Mt. Pleasant<br>baz=30 | 29.84 | 339 | P | P | 10 53 22.5 | +0.4 |
| 333A | Richland Sprin<br>baz=30 | 29.86 | 331 | P | P | 10 53 22.6 | +0.3 |
| 432A | Menard<br>baz=30 | 29.89 | 329 | P | P | 10 53 22.7 | +0.1 |
| TKL | Tuckaleechee C<br>8.2nm,0.9s,baz=189,slow=10,SNR=8.4 | 29.96 | 358 | P | P | 10 53 22.5 | -0.6 |
| TKL | Tuckaleechee C | 29.96 | 358 | eP | P | 10 53 23.2 | +0.1 |
| 234A | Clairette<br>baz=30 | 30.03 | 333 | P | P | 10 53 24.1 | +0.3 |
| 530A | J-C Ranch, Com<br>baz=30,SNR=6.8 | 30.14 | 326 | P | P | 10 53 25.5 | +0.7 |
| 431A | Sonora<br>baz=30,SNR=8.5 | 30.16 | 328 | P | P | 10 53 25.6 | +0.6 |
| 332A | Millersview<br>baz=30 | 30.28 | 330 | P | P | 10 53 26.3 | +0.3 |
| 233A | Rising Star<br>baz=30 | 30.39 | 332 | P | P | 10 53 27.6 | +0.6 |
| 134A | White-Moore Ra<br>baz=31 | 30.49 | 334 | P | P | 10 53 28.1 | +0.3 |
| H06E1 | SOCORRO T-PHAS<br>SNR=157 | 30.54 | 298 | T | T | 11 25 28.5 | |
| H06S1 | SOCORRO T<br>SNR=22 | 30.55 | 298 | T | T | 11 25 29.3 | |
| MIAR | Mount Ida<br>baz=31 | 30.56 | 342 | P | P | 10 53 28.4 | 0.0 |
| 331A | San Angelo<br>baz=31 | 30.56 | 329 | P | P | 10 53 29.2 | +0.7 |
| 430A | Baggett Ranch,<br>baz=31 | 30.58 | 327 | P | P | 10 53 29.1 | +0.5 |
| 529A | Stev Forest Ra<br>baz=31 | 30.61 | 325 | P | P | 10 53 28.6 | -0.4 |
| 232A | Coleman<br>baz=31 | 30.64 | 331 | P | P | 10 53 29.0 | -0.2 |
| Y37A | Hugo<br>baz=31 | 30.73 | 339 | P | P | 10 53 29.9 | 0.0 |
| WVT | Waverly<br>8.8nm,0.6s | 30.79 | 352 | P | P | 10 53 29.3 | -1.1 |
| Z35A | Perchaven, San<br>baz=31 | 30.79 | 336 | P | P | 10 53 30.8 | +0.4 |
| 429A | Davenport Ranc<br>baz=31,SNR=13 | 30.81 | 326 | P | P | 10 53 31.2 | +0.4 |
| TZTN | Tazewell<br>26nm,1.3s | 30.84 | 359 | eP | P | 10 53 31.2 | +0.4 |
| TX31 | Lajitas Ar. Si | 30.88 | 322 | eP | P | 10 53 32.1 | +0.7 |
| TXAR | Lajitas Array<br>3.2nm,1.1s,baz=165,slow=5.2,SNR=11 | 30.88 | 322 | P | P | 10 53 32.2 | +0.8 |
| 133A | Hamilton Ranch<br>baz=31 | 30.89 | 333 | P | P | 10 53 30.9 | -0.5 |
| 330A | Mertzon<br>baz=31 | 31.03 | 328 | P | P | 10 53 32.7 | 0.0 |
| LVC | Limon Verde<br>15nm,0.9s,baz=312,slow=14,SNR=2.7 | 31.06 | 155 | P | P | 10 53 34.1 | +0.9 |
| Z34A | Collier Ranch,<br>baz=31 | 31.10 | 335 | P | P | 10 53 33.3 | +0.1 |
| UTMT | University of<br>50nm,0.8s | 31.16 | 350 | eP | P | 10 53 33.1 | -0.5 |
| Y35A | Marietta<br>baz=31,SNR=7.1 | 31.20 | 336 | P | P | 10 53 34.8 | +0.7 |
| ABTX | Abilene, Hawle<br>baz=31 | 31.25 | 332 | P | P | 10 53 34.6 | +0.1 |
| ABTX | Abilene, Hawle<br>10nm,0.9s | 31.25 | 332 | eP | P | 10 53 34.7 | +0.1 |
| 230A | Sterling City<br>baz=32 | 31.38 | 329 | P | P | 10 53 36.1 | +0.4 |
| Z33A | Whitaker Ranch<br>baz=32 | 31.40 | 333 | P | P | 10 53 36.4 | +0.6 |
| 329A | Wagon Wheel Ra<br>baz=32 | 31.52 | 327 | P | P | 10 53 37.3 | +0.3 |
| Y34A | Reagan Ranch,<br>baz=32 | 31.54 | 336 | P | P | 10 53 37.0 | -0.1 |
| X35A | Drake<br>baz=32 | 31.61 | 337 | P | P | 10 53 37.7 | 0.0 |
| Z32A | Haskell<br>baz=32,SNR=6.5 | 31.73 | 333 | P | P | 10 53 38.8 | 0.0 |
| 229A | Bryant Ranch,<br>baz=32 | 31.80 | 328 | P | P | 10 53 39.0 | -0.5 |
| Y33A | Hilltop Ranch,<br>baz=32 | 31.95 | 334 | P | P | 10 53 40.0 | -0.6 |
| V38A | Canehill<br>baz=32 | 32.03 | 342 | P | P | 10 53 40.9 | -0.5 |
| Z31A | Sharp Cattle R<br>baz=32 | 32.05 | 332 | P | P | 10 53 40.5 | -1.2 |
| X34A | Smith Ranch, M<br>baz=32 | 32.13 | 336 | P | P | 10 53 41.5 | -0.7 |
| W35A | Tecumseh<br>baz=32 | 32.24 | 338 | P | P | 10 53 42.5 | -0.7 |
| X33A | Lawton<br>baz=32,SNR=9.5 | 32.35 | 335 | P | P | 10 53 43.9 | -0.3 |
| 129A | Stewart Farms,<br>baz=32 | 32.35 | 329 | P | P | 10 53 43.7 | -0.6 |
| Z30A | Sanderson Ranc<br>baz=33 | 32.50 | 330 | P | P | 10 53 45.6 | 0.0 |
| U38A | Gravette<br>baz=33 | 32.56 | 342 | P | P | 10 53 45.2 | -0.8 |
| USIN | University of<br>28nm,0.8s | 32.57 | 353 | eP | P | 10 53 45.4 | -0.6 |
| X32A | Elmer<br>baz=33 | 32.59 | 334 | P | P | 10 53 46.0 | -0.2 |
| WMOK | Wichita Mounta<br>6.9nm,1.0s | 32.64 | 335 | eP | P | 10 53 46.3 | -0.4 |
| Y31A | Rekieta Farm,<br>baz=33,SNR=5.2 | 32.64 | 332 | P | P | 10 53 46.4 | -0.4 |
| W34A | Bridge Creek,<br>baz=33 | 32.66 | 337 | P | P | 10 53 46.6 | -0.3 |
| 128A | Castleberry Fa<br>baz=33 | 32.67 | 328 | P | P | 10 53 47.2 | +0.1 |
| WCI | Wyandotte Cave<br>64nm,0.8s | 32.68 | 355 | eP | P | 10 53 46.7 | -0.3 |
| V35A | Meyer Ranch, C<br>baz=33 | 32.77 | 338 | P | P | 10 53 46.7 | -1.1 |
| Z29A | Hungry Hill Ra<br>baz=33 | 32.77 | 330 | P | P | 10 53 47.9 | -0.1 |
| W33A | Caddo, Fort Co<br>baz=33 | 32.86 | 336 | P | P | 10 53 48.2 | -0.5 |
| Y30A | Stafford Cattl<br>baz=33,SNR=14 | 32.87 | 331 | P | P | 10 53 48.4 | -0.4 |
| U36A | Oologah<br>baz=33 | 32.95 | 340 | P | P | 10 53 48.3 | -1.0 |
| X31A | McDonald Ranch<br>baz=33 | 33.07 | 333 | P | P | 10 53 49.0 | -1.5 |
| V34A | Guthrie<br>baz=33 | 33.08 | 338 | P | P | 10 53 49.4 | -1.2 |
| Z28A | Tucker Farm, M<br>baz=33 | 33.14 | 329 | P | P | 10 53 49.6 | -1.7 |
| W32A | Sentinel<br>baz=33 | 33.16 | 335 | P | P | 10 53 50.3 | -1.1 |
| Y29A | Porterfield Fa<br>baz=33 | 33.23 | 330 | P | P | 10 53 51.6 | -0.4 |
| CCM | Cathedral Cave<br>25nm,0.9s | 33.27 | 348 | eP | P | 10 53 50.5 | -1.7 |
| X30A | Coker Ranch, T<br>baz=34,SNR=7.3 | 33.33 | 332 | P | P | 10 53 52.6 | -0.2 |
| T37A | Cheneyville 18<br>baz=34 | 33.35 | 342 | P | P | 10 53 52.5 | -0.4 |
| OLIL | Olney<br>40nm,0.8s | 33.38 | 352 | eP | P | 10 53 52.9 | -0.3 |
| V32A | Arapaho<br>baz=34 | 33.59 | 335 | P | P | 10 53 54.3 | -0.8 |
| MNTX | Cornudas Mount<br>baz=34 | 33.60 | 323 | P | P | 10 53 55.0 | -0.2 |
| MNTX | Cornudas Mount<br>6.7nm,0.9s | 33.60 | 323 | eP | P | 10 53 56.0 | +0.8 |
| SLM | Saint Louis<br>47nm,0.9s | 33.63 | 349 | P | P | 10 53 54.6 | -0.7 |
| BLO | Bloomington<br>23nm,0.8s | 33.63 | 355 | eP | P | 10 53 54.3 | -1.1 |
| T35A | Sooner Cattle<br>baz=34 | 33.68 | 340 | P | P | 10 53 54.0 | -1.8 |
| X29A | Tulia<br>baz=34 | 33.72 | 331 | P | P | 10 53 54.8 | -1.4 |
| S37A | Fort Scott<br>baz=34,SNR=8.5 | 33.91 | 343 | P | P | 10 53 56.7 | -1.1 |
| S36A | Lake Cedric, C<br>baz=34 | 34.12 | 342 | P | P | 10 53 58.8 | -0.8 |
| U32A | Winter Ranch,<br>baz=34 | 34.14 | 336 | P | P | 10 53 59.3 | -0.5 |
| S35A | Otter Creek Ra<br>baz=34 | 34.31 | 341 | P | P | 10 54 00.9 | -0.3 |
| V30A | Spur Ranch, Mi<br>baz=34 | 34.33 | 333 | P | P | 10 54 01.2 | -0.4 |
| ACSO | Alum Creek Sta<br>28nm,1.0s | 34.51 | 360 | eP | P | 10 54 03.0 | 0.0 |
| R36A | Gordon, Harris<br>baz=35 | 34.64 | 342 | P | P | 10 54 02.8 | -1.3 |
| SFIN | Scholer Farm<br>baz=35 | 34.89 | 354 | P | P | 10 54 04.8 | -1.4 |
| SFIN | Scholer Farm<br>34nm,1.3s | 34.89 | 354 | eP | P | 10 54 05.1 | -1.1 |
| U30A | WK&E Inc. Balk<br>baz=35 | 34.96 | 334 | P | P | 10 54 05.6 | -1.4 |
| T31A | Randall Ranch,<br>baz=35 | 35.03 | 336 | P | P | 10 54 06.5 | -1.1 |
| R34A | Isabella, Hill<br>baz=35 | 35.18 | 340 | P | P | 10 54 07.9 | -0.9 |
| Q36A | Arnold C. Orve<br>baz=35 | 35.21 | 343 | P | P | 10 54 08.4 | -0.6 |
| Q35A | Mercer Eighty,<br>baz=35 | 35.29 | 342 | P | P | 10 54 08.8 | -0.9 |
| HDIL | Hopedale<br>baz=36,SNR=15 | 35.34 | 351 | P | P | 10 54 08.7 | -1.4 |
| HDIL | Hopedale<br>56nm,0.6s | 35.34 | 351 | eP | P | 10 54 08.9 | -1.2 |
| T30A | Plains<br>baz=36 | 35.35 | 335 | P | P | 10 54 09.7 | -0.6 |
| R33A | Olander Ranch,<br>baz=36,SNR=6.2 | 35.45 | 339 | P | P | 10 54 10.5 | -0.6 |
| 121A | Cookes Peak, D<br>baz=36,SNR=10 | 35.64 | 322 | P | P | 10 54 13.9 | +0.9 |
| 121A | Cookes Peak, D<br>23nm,1.1s | 35.64 | 322 | eP | P | 10 54 14.9 | +1.9 |
| Q34A | Chapman<br>baz=36 | 35.64 | 341 | P | P | 10 54 11.9 | -0.8 |
| KSU1 | Kansas State U<br>baz=36 | 35.70 | 341 | P | P | 10 54 12.4 | -0.8 |
| KSU1 | Kansas State U<br>14nm,1.0s | 35.70 | 341 | eP | P | 10 54 12.7 | -0.4 |
| P36A | Good Intent, A<br>baz=36 | 35.75 | 343 | P | P | 10 54 12.9 | -0.7 |
| T29A | Hugoton<br>baz=36 | 35.77 | 334 | P | P | 10 54 13.7 | -0.2 |
| R32A | Long Quarter,<br>baz=36 | 35.81 | 338 | P | P | 10 54 13.2 | -1.1 |
| S30A | Montezuma<br>baz=36 | 35.82 | 335 | P | P | 10 54 13.2 | -1.1 |
| U27A | Thompson Grove<br>baz=36 | 35.85 | 332 | P | P | 10 54 13.1 | -1.6 |
| P35A | Duane Minner,<br>baz=36 | 35.90 | 342 | P | P | 10 54 14.3 | -0.7 |
| R31A | Burdett<br>baz=36 | 36.01 | 337 | P | P | 10 54 15.2 | -0.7 |
| Q33A | Connelly Farm,<br>baz=36 | 36.01 | 340 | P | P | 10 54 16.1 | +0.2 |
| S29A | Ulysses<br>baz=36 | 36.08 | 335 | P | P | 10 54 16.0 | -0.6 |
| BNM | Barren Site | 36.10 | 325 | eP | P | 10 54 18.2 | +1.3 |
| T28A | Walsh<br>baz=36 | 36.10 | 333 | P | P | 10 54 16.9 | +0.1 |
| O36A | Bolckow<br>baz=36 | 36.15 | 344 | P | P | 10 54 16.0 | -1.1 |
| P34A | Walnut Farm, R<br>baz=36 | 36.17 | 341 | P | P | 10 54 17.0 | -0.2 |
| Q32A | Meitler Ranch,<br>baz=36 | 36.26 | 339 | P | P | 10 54 17.2 | -0.8 |
| R30A | Dighton<br>baz=36 | 36.30 | 336 | P | P | 10 54 19.2 | +0.8 |
| S28A | Manter<br>baz=36 | 36.39 | 334 | P | P | 10 54 19.4 | +0.2 |
| CBKS | Cedar Bluff<br>baz=37 | 36.54 | 337 | P | P | 10 54 20.7 | +0.2 |
| O35A | Humboldt<br>baz=37 | 36.55 | 343 | P | P | 10 54 20.3 | -0.1 |
| LAZ | Ladron | 36.57 | 325 | eP | P | 10 54 22.4 | +1.4 |
| Q31A | Ellis<br>baz=37 | 36.58 | 338 | P | P | 10 54 20.3 | -0.5 |
| ANMO | Albuquerque<br>12nm,1.1s | 36.58 | 326 | eP | P | 10 54 22.8 | +1.7 |
| O34A | Beatrice<br>baz=37 | 36.71 | 342 | P | P | 10 54 21.8 | -0.1 |
| T26A | Comanche Natio<br>baz=37 | 36.83 | 332 | P | P | 10 54 22.9 | -0.2 |
| P32A | Huiting Farm,<br>baz=37 | 36.84 | 339 | P | P | 10 54 22.8 | -0.2 |
| Q30A | Quinter<br>baz=37,SNR=5.7 | 36.87 | 337 | P | P | 10 54 23.1 | -0.2 |
| O33A | Hebron<br>baz=37 | 36.90 | 341 | P | P | 10 54 23.1 | -0.4 |
| R28A | Tribune<br>baz=37,SNR=7.3 | 36.98 | 335 | P | P | 10 54 24.3 | 0.0 |
| N35A | Tabor<br>baz=37 | 37.02 | 344 | P | P | 10 54 24.1 | -0.4 |
| P31A | Stockton<br>baz=37 | 37.03 | 338 | P | P | 10 54 24.5 | -0.1 |
| Q29A | Oakley<br>baz=37,SNR=8.0 | 37.10 | 336 | P | P | 10 54 25.9 | +0.6 |
| S26A | Kim<br>baz=37 | 37.13 | 332 | P | P | 10 54 25.9 | +0.3 |
| T25A | Trinidad<br>baz=37 | 37.19 | 331 | P | P | 10 54 26.7 | +0.4 |
| T25A | Trinidad<br>12nm,1.1s | 37.19 | 331 | eP | P | 10 54 28.0 | +1.8 |
| O32A | Brockman Farm,<br>baz=37 | 37.29 | 340 | P | P | 10 54 26.5 | -0.3 |
| R27A | Eads<br>baz=38 | 37.37 | 333 | P | P | 10 54 27.9 | +0.3 |
| P30A | Selden<br>baz=38,SNR=6.6 | 37.37 | 337 | P | P | 10 54 28.0 | +0.4 |
| SCIA | State Center<br>30nm,0.9s | 37.39 | 347 | eP | P | 10 54 27.0 | -0.6 |
| TUC | Tucson<br>4.6nm,1.0s | 37.40 | 319 | eP | P | 10 54 29.7 | +1.8 |
| N33A | J Bar K, Exete<br>baz=38 | 37.45 | 341 | P | P | 10 54 28.0 | -0.1 |
| O31A | Woolen Ranch,<br>baz=38 | 37.56 | 339 | P | P | 10 54 29.2 | 0.0 |
| Q28A | Sharon Springs<br>baz=38,SNR=10 | 37.59 | 335 | P | P | 10 54 29.9 | +0.4 |
| R26A | Arlington<br>baz=38 | 37.67 | 333 | P | P | 10 54 29.4 | -0.7 |
| P29A | Atwood<br>baz=38,SNR=8.5 | 37.69 | 337 | P | P | 10 54 30.1 | -0.1 |
| JFWS | Jewell Farm | 37.80 | 351 | eP | P | 10 54 29.9 | -1.1 |
| JFWS | Jewell Farm<br>67nm,1.6s | 37.80 | 351 | eP | P | 10 54 29.9 | -1.1 |
| O30A | MW Ranch, Wils<br>baz=38 | 37.85 | 338 | P | P | 10 54 32.0 | +0.3 |
| KSCO | Kaye Shedlock'<br>baz=38 | 37.89 | 334 | P | P | 10 54 32.4 | +0.3 |
| KSCO | Kaye Shedlock'<br>13nm,0.9s | 37.89 | 334 | eP | P | 10 54 33.0 | +0.9 |
| P28A | Saint Francis<br>baz=38 | 37.99 | 336 | P | P | 10 54 32.6 | -0.3 |
| O29A | 4D Ranch, Culb<br>baz=38 | 38.09 | 337 | P | P | 10 54 33.7 | +0.1 |
| M33A | Taylor Creek F<br>baz=38 | 38.13 | 342 | P | P | 10 54 33.6 | -0.3 |
| L35A | Bielow Farm, R<br>baz=38 | 38.16 | 344 | P | P | 10 54 35.3 | +1.2 |
| SDCO | Great Sand Dun<br>baz=38,SNR=23 | 38.20 | 330 | P | P | 10 54 36.2 | +1.3 |
| SDCO | Great Sand Dun<br>21nm,1.2s | 38.20 | 330 | eP | P | 10 54 37.0 | +2.1 |
| Q26A | Hugo<br>baz=38 | 38.21 | 333 | P | P | 10 54 35.3 | +0.5 |
| P27A | Ficken Ranch,<br>baz=38 | 38.32 | 335 | P | P | 10 54 36.9 | +1.3 |
| O28A | Krutsinger Ran<br>baz=39 | 38.47 | 336 | P | P | 10 54 37.2 | +0.3 |
| M31A | Lambtecht Ranc<br>baz=39 | 38.50 | 340 | P | P | 10 54 37.2 | +0.1 |
| 214A | Organ Pipe Nat<br>baz=39 | 38.53 | 317 | P | P | 10 54 38.8 | +1.3 |
| W18A | Petrified Fore<br>baz=39,SNR=10 | 38.59 | 323 | P | P | 10 54 38.8 | +0.7 |
| W18A | Petrified Fore<br>27nm,1.0s | 38.59 | 323 | eP | P | 10 54 40.2 | +2.1 |
| N29A | Votaw Ranch, W<br>baz=39 | 38.62 | 338 | P | P | 10 54 37.6 | -0.5 |
| P26A | Davis Ranch, A<br>baz=39 | 38.66 | 334 | P | P | 10 54 38.4 | -0.1 |
| J37A | Redenius Farm,<br>baz=39 | 38.80 | 347 | P | P | 10 54 38.0 | -1.5 |
| N28A | Pribbeno Ranch<br>baz=39,SNR=5.6 | 38.86 | 337 | P | P | 10 54 40.1 | 0.0 |
| S22A | 4UR Ranch, Cre<br>baz=39,SNR=7.3 | 38.88 | 329 | P | P | 10 54 41.9 | +1.4 |
| S22A | 4UR Ranch, Cre<br>15nm,1.4s | 38.88 | 329 | eP | P | 10 54 42.3 | +1.8 |
| Q24A | Divide<br>baz=39 | 38.99 | 332 | P | P | 10 54 41.6 | +0.1 |
| J36A | Seneca 1, Swea<br>baz=39,SNR=8.9 | 39.00 | 346 | P | P | 10 54 40.1 | -1.1 |
| M29A | Burnside Ranch<br>baz=39 | 39.19 | 338 | P | P | 10 54 43.0 | +0.2 |
| L31A | Butterfield Fa<br>baz=39 | 39.20 | 341 | P | P | 10 54 42.3 | -0.5 |
| I38A | Scanlan Farm,<br>baz=39 | 39.25 | 349 | P | P | 10 54 42.0 | -1.3 |
| OGNE | Ogallala<br>baz=39 | 39.27 | 337 | P | P | 10 54 43.7 | +0.1 |
| K32A | Verdigre<br>baz=40 | 39.36 | 342 | P | P | 10 54 43.0 | -1.2 |
| MVCO | Mesa Verde<br>baz=40,SNR=15 | 39.36 | 327 | P | P | 10 54 45.8 | +1.2 |
| MVCO | Mesa Verde<br>19nm,0.8s | 39.36 | 327 | eP | P | 10 54 46.2 | +1.7 |
| CFAA | Coronel Fontan<br>0.9nm,1.0s,baz=335,slow=7.5,SNR=7.9 | 39.44 | 160 | P | P | 10 54 45.1 | +0.2 |
| I37A | Lemond, Waseca<br>baz=40 | 39.44 | 348 | P | P | 10 54 43.6 | -1.3 |
| K31A | O'Neill<br>baz=40 | 39.57 | 341 | P | P | 10 54 45.6 | -0.4 |
| I36A | Fitzsimmons Fa<br>baz=40 | 39.58 | 347 | P | P | 10 54 44.7 | -1.3 |
| I35A | Creekview Farm<br>baz=40 | 39.65 | 346 | P | P | 10 54 46.1 | -0.5 |
| L29A | Maesberg Ranch<br>baz=40 | 39.66 | 339 | P | P | 10 54 46.0 | -0.7 |
| J33A | Davis<br>baz=40 | 39.67 | 344 | P | P | 10 54 45.6 | -1.2 |
| WUAZ | Wupatki<br>baz=40,SNR=8.1 | 39.85 | 322 | P | P | 10 54 49.6 | +1.1 |
| WUAZ | Wupatki<br>8.0nm,0.9s | 39.85 | 322 | eP | P | 10 54 50.9 | +2.3 |
| ISCO | Idaho Springs<br>baz=40 | 39.87 | 332 | P | P | 10 54 49.4 | +0.5 |
| ISCO | Idaho Springs<br>9.1nm,1.3s | 39.87 | 332 | eP | P | 10 54 49.1 | +0.2 |
| H37A | Dierke Farm, C<br>baz=40 | 39.89 | 349 | P | P | 10 54 47.3 | -1.2 |
| K30A | Basset<br>baz=40 | 39.90 | 340 | P | P | 10 54 48.1 | -0.6 |
| ECSD | EROS Data Cent<br>baz=40 | 39.95 | 344 | P | P | 10 54 47.7 | -1.4 |
| ECSD | EROS Data Cent<br>11nm,1.1s | 39.95 | 344 | eP | P | 10 54 48.0 | -1.1 |
| J32A | Parkston<br>baz=40 | 39.97 | 343 | P | P | 10 54 48.1 | -1.2 |
| I34A | Hadley<br>baz=40 | 40.04 | 345 | P | P | 10 54 48.7 | -1.1 |
| SMCO | Snowmass<br>8.6nm,0.8s | 40.04 | 330 | eP | P | 10 54 52.5 | +2.1 |
| PV01 | Paradox Valley | 40.08 | 328 | eP | P | 10 54 52.5 | +2.0 |
| H36A | Jessenland, He<br>baz=40 | 40.09 | 347 | P | P | 10 54 49.1 | -1.2 |
| CPUP | Villa Florida<br>3.3nm,1.0s,baz=355,slow=9.8,SNR=4.4 | 40.10 | 143 | P | P | 10 54 49.5 | -0.9 |
| CPUP | | | | LR | LR | 11 14 11.7 | |
| | comp=Z,245nm,18.4s,baz=323,slow=40 | | | | | | |
| J31A | Geddes<br>baz=40 | 40.17 | 342 | P | P | 10 54 49.4 | -1.5 |
| BDFB | Brasilia<br>comp=Z,396nm,20.2s,baz=274,slow=36 | 40.25 | 122 | LR | LR | 11 11 24.1 | |
| PV05 | Paradox Valley | 40.32 | 327 | eP | P | 10 54 54.1 | +1.6 |
| H35A | Sunnyside Ranc<br>baz=41,SNR=7.4 | 40.41 | 347 | P | P | 10 54 51.4 | -1.4 |
| J30A | Dallas<br>baz=41,SNR=13 | 40.44 | 341 | P | P | 10 54 53.1 | -0.1 |
| SPMN | St. Paul<br>baz=41 | 40.48 | 349 | P | P | 10 54 52.3 | -1.1 |
| SPMN | St. Paul<br>22nm,0.8s | 40.48 | 349 | eP | P | 10 54 52.0 | -1.5 |
| SPMN | St. Paul<br>22nm,0.8s | 40.48 | 349 | eP | P | 10 54 52.0 | -1.5 |
| PV10 | Paradox Valley | 40.51 | 327 | eP | P | 10 54 55.1 | +1.1 |
| K28A | Ten Mile Ranch<br>baz=41,SNR=6.0 | 40.54 | 339 | P | P | 10 54 54.3 | +0.2 |
| GLA | Glamis<br>baz=41 | 40.55 | 317 | P | P | 10 54 56.5 | +2.2 |
| H34A | Spellman Lake,<br>baz=41 | 40.61 | 346 | P | P | 10 54 53.6 | -0.9 |
| G36A | St. Michael<br>baz=41 | 40.68 | 348 | P | P | 10 54 53.8 | -1.3 |
| I31A | Royce, Wessing<br>baz=41 | 40.78 | 342 | P | P | 10 54 55.5 | -0.4 |
| J29A | Okreek<br>baz=41,SNR=9.1 | 40.79 | 340 | P | P | 10 54 55.3 | -0.7 |
| PDMCI | Parker Dam,Lak<br>baz=41 | 40.83 | 319 | P | P | 10 54 57.7 | +1.2 |
| H33A | Prehn Over Nor<br>baz=41,SNR=10 | 40.87 | 345 | P | P | 10 54 55.1 | -1.5 |
| H32A | Carlson Farm,<br>baz=41 | 40.89 | 344 | P | P | 10 54 55.8 | -1.1 |
| N23A | Red Feather La<br>baz=41 | 40.90 | 333 | P | P | 10 54 58.5 | +1.2 |
| YUH | Yuha Desert | 41.09 | 315 | eP | P | 10 54 59.6 | +1.0 |
| J28A | Allard Ranch,<br>baz=41,SNR=6.2 | 41.12 | 339 | P | P | 10 54 58.4 | -0.4 |
| SWSC | Sam W. Stewart<br>baz=41 | 41.16 | 316 | P | P | 10 55 00.1 | +0.9 |
| IBP | Imperial Bould<br>baz=41 | 41.21 | 315 | P | P | 10 54 59.9 | +0.1 |
| PKME | Peaks-Kenny Pk<br>30nm,1.4s | 41.22 | 14 | eP | P | 10 55 03.3 | +3.8 |
| F36A | Milaca<br>baz=41,SNR=8.5 | 41.24 | 348 | P | P | 10 54 58.0 | -1.6 |
| J27A | Elkhorn Farm,<br>baz=41,SNR=7.6 | 41.24 | 338 | P | P | 10 54 59.9 | 0.0 |
| I29A | Vivian Onida<br>baz=42 | 41.33 | 341 | P | P | 10 54 59.4 | -1.1 |
| BC3 | Big Chuckawall<br>baz=41 | 41.33 | 317 | P | P | 10 55 02.1 | +1.3 |
| O20A | White River Ci<br>baz=42,SNR=7.9 | 41.40 | 330 | P | P | 10 55 02.2 | +0.8 |
| O20A | White River Ci | 41.40 | 330 | eP | P | 10 55 03.3 | +1.9 |
| IRM | Iron Mountain<br>baz=42 | 41.42 | 318 | P | P | 10 55 01.7 | +0.3 |
| F35A | Swanville<br>baz=42 | 41.45 | 347 | P | P | 10 55 00.1 | -1.3 |
| F34A | Alexandria<br>baz=42 | 41.55 | 347 | P | P | 10 55 00.9 | -1.3 |
| MONP | Monument Peak<br>baz=42 | 41.57 | 315 | P | P | 10 55 03.8 | +1.0 |
| I28A | Midland<br>baz=42 | 41.60 | 340 | P | P | 10 55 01.9 | -0.9 |
| G32A | Webster<br>baz=42 | 41.60 | 344 | P | P | 10 55 00.9 | -1.8 |
| J26A | Sides Ranch, S<br>baz=42,SNR=7.2 | 41.70 | 337 | P | P | 10 55 04.2 | +0.6 |
| G31A | Conde<br>baz=42 | 41.77 | 343 | P | P | 10 55 03.5 | -0.6 |
| F33A | 5 Mile Ranch,<br>baz=42 | 41.83 | 346 | P | P | 10 55 02.7 | -1.9 |
| H29A | Onida<br>baz=42 | 41.84 | 341 | P | P | 10 55 03.7 | -0.9 |
| SRU | San Rafael<br>21nm,1.0s | 41.84 | 327 | eP | P | 10 55 06.6 | +1.6 |
| BELC | Belle Mtn. Jos<br>baz=42,SNR=8.7 | 41.90 | 317 | P | P | 10 55 06.4 | +0.9 |
| I27A | Quinn<br>baz=42 | 41.97 | 339 | P | P | 10 55 05.8 | 0.0 |
| PFO | Pinyon Flat Ob<br>7.2nm,1.1s | 41.99 | 316 | eP | P | 10 55 08.1 | +1.9 |
| J25A | Sunshine Ranch | 42.04 | 337 | P | P | 10 55 07.5 | +1.0 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | baz=42 | | | | | |
| 109C | **Camp Elliot, M** | 42.05 315 | P | P | 10 55 07.9 | +1.4 |
| | baz=42 | | | | | |
| P18A | **Preston Nutter** | 42.06 328 | *e*P | P | 10 55 08.1 | +1.2 |
| | 9.8nm,1.0s | | | | | |
| GMRC | **Granite Mounta** | 42.12 318 | P | P | 10 55 08.1 | +0.8 |
| | baz=42 | | | | | |
| H28A | **Mission Ridge** | 42.14 340 | P | P | 10 55 06.9 | -0.3 |
| | baz=42 | | | | | |
| P17A | **Butcher Ranch,** | 42.21 327 | *e*P | P | 10 55 09.8 | +1.8 |
| | 10nm,0.9s | | | | | |
| I26A | **New Underwood** | 42.23 338 | P | P | 10 55 08.2 | +0.3 |
| | baz=42,SNR=5.2 | | | | | |
| D37A | **Cotton** | 42.28 350 | P | P | 10 55 07.0 | -1.3 |
| | baz=42,SNR=14 | | | | | |
| TMUT | **Trail Mountain** | 42.34 327 | *e*P | P | 10 55 10.3 | +1.1 |
| | 17nm,0.9s | | | | | |
| E33A | **Westby DABS, E** | 42.39 346 | P | P | 10 55 07.9 | -1.2 |
| | baz=43 | | | | | |
| CCUT | **Cedar City** | 42.39 323 | *e*P | P | 10 55 11.5 | +2.0 |
| | 4.2nm,1.0s | | | | | |
| D36A | **Goodland** | 42.43 349 | P | P | 10 55 07.7 | -1.8 |
| | baz=43,SNR=5.6 | | | | | |
| G28A | **Parade** | 42.46 341 | P | P | 10 55 09.3 | -0.5 |
| | baz=43 | | | | | |
| H27A | **Howes** | 42.47 339 | P | P | 10 55 09.7 | -0.2 |
| | baz=43,SNR=9.2 | | | | | |
| MURC | **Murrieta** | 42.50 316 | P | P | 10 55 11.2 | +0.9 |
| | baz=43 | | | | | |
| D35A | **Remer** | 42.51 348 | P | P | 10 55 08.5 | -1.6 |
| | baz=43 | | | | | |
| I25A | **Rochford** | 42.55 337 | P | P | 10 55 12.1 | +1.4 |
| | baz=43,SNR=12 | | | | | |
| K22A | **Casper** | 42.56 334 | P | P | 10 55 11.1 | +0.3 |
| | baz=43 | | | | | |
| C39A | **Grand Marais** | 42.58 353 | P | P | 10 55 08.5 | -2.1 |
| | baz=43 | | | | | |
| HEC | **Hector,Ludlow** | 42.60 318 | P | P | 10 55 11.7 | +0.6 |
| | baz=43 | | | | | |
| C38A | **Sawbill Land.** | 42.64 351 | P | P | 10 55 09.0 | -2.1 |
| | baz=43 | | | | | |
| BBRC | **Big Bear Solar** | 42.68 317 | P | P | 10 55 11.7 | -0.2 |
| | baz=43 | | | | | |
| TUQ | **Turquoise Moun** | 42.68 319 | P | P | 10 55 12.7 | +0.8 |
| | baz=43 | | | | | |
| H26A | **Fairpoint** | 42.70 339 | P | P | 10 55 11.5 | -0.3 |
| | baz=43 | | | | | |
| RSSD | **Black Hills** | 42.75 337 | *e*P | P | 10 55 13.5 | +1.2 |
| | 13nm,1.0s | | | | | |
| D34A | **Park Rapids** | 42.75 347 | P | P | 10 55 10.5 | -1.6 |
| | baz=43 | | | | | |
| C37A | **Embarrass** | 42.80 351 | P | P | 10 55 11.1 | -1.3 |
| | baz=43,SNR=5.8 | | | | | |
| F29A | **Eureka** | 42.80 342 | P | P | 10 55 11.1 | -1.3 |
| | baz=43 | | | | | |
| SHPR | **Sheep Range** | 42.84 320 | *e*P | P | 10 55 15.1 | +2.0 |
| EYMN | **Ely** | 42.90 351 | P | P | 10 55 11.1 | -2.1 |
| | baz=43 | | | | | |
| EYMN | **Ely** | 42.90 351 | *e*P | P | 10 55 11.4 | -1.8 |
| | 7.5nm,0.8s | | | | | |
| E31A | **Nome** | 42.91 345 | P | P | 10 55 12.1 | -1.2 |
| | baz=43 | | | | | |
| C36A | **Pine Crest Far** | 42.93 350 | P | P | 10 55 12.4 | -1.1 |
| | baz=43,SNR=11 | | | | | |
| H25A | **Fruitdale** | 43.01 338 | P | P | 10 55 14.6 | +0.4 |
| | baz=43,SNR=11 | | | | | |
| G27A | **Dupree** | 43.07 340 | P | P | 10 55 14.4 | -0.3 |
| | baz=43 | | | | | |
| MPU | **Maple Canyon** | 43.08 327 | *e*P | P | 10 55 15.7 | +0.6 |
| | 21nm,0.8s | | | | | |
| C35A | **Jirik Farms, M** | 43.09 349 | P | P | 10 55 13.0 | -1.8 |
| | baz=43,SNR=5.9 | | | | | |
| F28A | **McLaughlin** | 43.11 341 | P | P | 10 55 14.6 | -0.5 |
| | baz=43 | | | | | |
| E30A | **Jud** | 43.14 344 | P | P | 10 55 14.3 | -0.9 |
| | baz=43 | | | | | |
| O16A | **Springville** | 43.15 327 | *e*P | P | 10 55 09.6 | -6.0 |
| | 6.6nm,1.0s | | | | | |
| BFSC | **Mount Baldy Ra** | 43.17 316 | P | P | 10 55 15.8 | 0.0 |
| | baz=43 | | | | | |
| GSC | **Goldstone** | 43.19 318 | P | P | 10 55 15.7 | -0.2 |
| | baz=43 | | | | | |
| GSC | **Goldstone** | 43.19 318 | *e*P | P | 10 55 17.8 | +1.9 |
| | 7.3nm,1.1s | | | | | |
| G26A | **Maurine** | 43.23 339 | P | P | 10 55 14.9 | -1.1 |
| | baz=43 | | | | | |
| NLU | **North Lily Min** | 43.28 327 | *e*P | P | 10 55 18.3 | +1.6 |
| | 6.0nm,1.2s | | | | | |
| E29A | **Napoleon** | 43.41 343 | P | P | 10 55 15.6 | -1.8 |
| | baz=44 | | | | | |
| G25A | **Newell** | 43.43 339 | P | P | 10 55 16.6 | -1.0 |
| | baz=44 | | | | | |
| F27A | **Lemmon** | 43.53 340 | P | P | 10 55 17.4 | -1.0 |
| | baz=44 | | | | | |
| CTU | **Camp Tracy** | 43.63 328 | *e*P | P | 10 55 21.1 | +1.7 |
| | 16nm,1.3s | | | | | |
| D30A | **Buchanan** | 43.65 344 | P | P | 10 55 18.6 | -0.7 |
| | baz=44,SNR=6.6 | | | | | |
| E28A | **Huff** | 43.73 342 | P | P | 10 55 19.5 | -0.4 |
| | baz=44 | | | | | |
| F26A | **Lodgepole** | 43.73 340 | P | P | 10 55 19.6 | -0.5 |
| | baz=44,SNR=5.1 | | | | | |
| TCUT | **Toone Canyon** | 43.75 328 | *e*P | P | 10 55 22.3 | +1.7 |
| | 21nm,1.0s | | | | | |
| EDW2 | **Edwards Air Fo** | 43.75 317 | P | P | 10 55 20.9 | +0.4 |
| | baz=44 | | | | | |
| TPNV | **Topopah Spring** | 43.80 320 | P | P | 10 55 20.6 | -0.3 |
| | baz=44 | | | | | |
| TPNV | **Topopah Spring** | 43.80 320 | *e*P | P | 10 55 23.0 | +2.1 |
| | 9.9nm,1.3s | | | | | |
| DUG | **Dugway** | 43.85 326 | P | P | 10 55 20.7 | -0.5 |
| | baz=44 | | | | | |
| DUG | **Dugway** | 43.85 326 | *e*P | P | 10 55 22.8 | +1.6 |
| | 5.3nm,1.1s | | | | | |
| E27A | **Carson** | 43.87 341 | P | P | 10 55 20.7 | -0.5 |
| | baz=44,SNR=6.9 | | | | | |
| LRMC | **Laurel Mountai** | 43.88 317 | P | P | 10 55 21.7 | +0.2 |
| | baz=44 | | | | | |
| FURC | **Furnace Creek,** | 43.91 319 | P | P | 10 55 22.7 | +1.2 |
| | baz=44,SNR=11 | | | | | |
| B34A | **Aery, Baudette** | 43.97 348 | P | P | 10 55 20.3 | -1.6 |
| | baz=44,SNR=9.2 | | | | | |
| C31A | **Landman Farms,** | 44.01 345 | P | P | 10 55 21.2 | -1.0 |
| | baz=44 | | | | | |
| AGMN | **Agassiz Nation** | 44.05 347 | P | P | 10 55 21.5 | -1.0 |
| | baz=44 | | | | | |
| AGMN | **Agassiz Nation** | 44.05 347 | *e*P | P | 10 55 21.4 | -1.0 |
| | 10nm,0.8s | | | | | |
| BW06 | **Boulder Array** | 44.05 331 | *e*P | P | 10 55 23.1 | +0.3 |
| F25A | **Bowman** | 44.08 339 | P | P | 10 55 22.1 | -0.7 |
| | baz=44 | | | | | |
| MPMC | **Manual Prospec** | 44.08 318 | P | P | 10 55 22.7 | -0.5 |
| | baz=44 | | | | | |
| C30A | **Mose, Pekin** | 44.12 345 | P | P | 10 55 22.6 | -0.5 |
| | baz=44 | | | | | |
| HWUT | **Hardware Ranch** | 44.19 329 | *e*P | P | 10 55 24.8 | +0.9 |
| | 14nm,0.8s | | | | | |
| E26A | **Carlson Angus** | 44.20 340 | P | P | 10 55 23.7 | -0.2 |
| | baz=44 | | | | | |
| R11A | **Troy Canyon, C** | 44.25 322 | P | P | 10 55 25.0 | +0.5 |
| | baz=44,SNR=9.9 | | | | | |
| R11A | **Troy Canyon, C** | 44.25 322 | *e*P | P | 10 55 25.5 | +1.0 |
| | 4.4nm,1.0s | | | | | |
| DAC | **Darwin (Calif)** | 44.27 318 | *e*P | P | 10 55 26.1 | +1.4 |
| | 3.6nm,1.0s | | | | | |
| B32A | **Ashes, Strandq** | 44.29 347 | P | P | 10 55 23.3 | -1.1 |
| | baz=44,SNR=14 | | | | | |
| SPUT | **South Promonto** | 44.44 328 | *e*P | P | 10 55 27.4 | +1.4 |
| | 8.5nm,0.9s | | | | | |
| ARVC | **Arvin** | 44.46 316 | P | P | 10 55 26.5 | +0.5 |
| | baz=44 | | | | | |
| BGU | **Big Grassy Mou** | 44.48 327 | *e*P | P | 10 55 27.4 | +1.1 |
| | 8.7nm,0.9s | | | | | |
| ISA | **Isabella** | 44.52 317 | P | P | 10 55 27.4 | +0.8 |
| | baz=45 | | | | | |
| E25A | **Miller Ranch,** | 44.55 340 | P | P | 10 55 25.7 | -1.0 |
| | baz=45 | | | | | |
| A33A | **Warroad** | 44.55 348 | P | P | 10 55 25.4 | -1.1 |
| | baz=45 | | | | | |
| B31A | **Greenbush Farm** | 44.58 346 | P | P | 10 55 25.4 | -1.3 |
| | baz=45 | | | | | |
| C28A | **Hausauer Farms** | 44.66 343 | P | P | 10 55 26.5 | -0.9 |
| | baz=45 | | | | | |
| D26A | **Manning** | 44.69 341 | P | P | 10 55 26.6 | -1.1 |
| | baz=45 | | | | | |
| B30A | **Myrvik Farm, E** | 44.77 345 | P | P | 10 55 27.1 | -1.2 |
| | baz=45 | | | | | |
| HVU | **Hansel Valley** | 44.94 328 | *e*P | P | 10 55 30.1 | +0.2 |
| | 6.2nm,0.9s | | | | | |
| PKM | **Peak Mountain** | 45.03 315 | P | P | 10 55 31.4 | +0.6 |
| | baz=45 | | | | | |
| VES | **Vestal, Richgr** | 45.03 317 | P | P | 10 55 31.3 | +0.8 |
| | baz=45,SNR=6.6 | | | | | |
| B29A | **Wagenman Farm,** | 45.05 344 | P | P | 10 55 29.9 | -0.7 |
| | baz=45 | | | | | |
| D25A | **Fairfield** | 45.09 340 | P | P | 10 55 30.3 | -0.6 |
| | baz=45 | | | | | |
| REDW | **Red Top Meadow** | 45.12 331 | *e*P | P | 10 55 32.5 | +1.1 |
| | 16nm,1.0s | | | | | |
| SNOW | **Snow King Moun** | 45.15 331 | *e*P | P | 10 55 32.9 | +1.2 |
| | 20nm,1.3s | | | | | |
| LOHW | **Long Hollow** | 45.19 331 | *e*P | P | 10 55 33.0 | +1.1 |
| | 7.2nm,1.1s | | | | | |
| A30A | **Hoffart Farm,** | 45.22 345 | P | P | 10 55 30.9 | -1.0 |
| | baz=45 | | | | | |
| TPAW | **Teton Pass** | 45.26 331 | *e*P | P | 10 55 33.5 | +1.0 |
| | 10nm,1.0s | | | | | |
| C26A | **Wahner Farm, P** | 45.28 342 | P | P | 10 55 31.8 | -0.5 |
| | baz=45 | | | | | |
| MOOW | **Moose Ponds** | 45.36 331 | *e*P | P | 10 55 34.1 | +0.9 |
| | 7.6nm,1.0s | | | | | |
| SMMC | **Simmler** | 45.37 316 | P | P | 10 55 34.4 | +1.1 |
| | baz=45 | | | | | |
| RCTC | **Rector, Farmer** | 45.39 317 | P | P | 10 55 34.8 | +1.4 |
| | baz=46 | | | | | |
| FXWY | **Fox Creek** | 45.41 331 | *e*P | P | 10 55 33.1 | -0.6 |
| | 5.1nm,0.9s | | | | | |
| A29A | **Manning Farm,** | 45.44 345 | P | P | 10 55 32.6 | -1.0 |
| | baz=46 | | | | | |
| IMW | **Indian Meadow** | 45.56 331 | *e*P | P | 10 55 35.6 | +0.6 |
| | 4.4nm,0.9s | | | | | |
| FLWY | **Flagg Ranch** | 45.59 332 | *e*P | P | 10 55 36.5 | +1.4 |
| | 10nm,0.9s | | | | | |
| ELK | **Elko** | 45.59 325 | *e*P | P | 10 55 36.7 | +1.5 |
| | 5.2nm,0.9s | | | | | |
| A28A | **Rude Farm, Bot** | 45.71 344 | P | P | 10 55 36.1 | +0.3 |
| | baz=46 | | | | | |
| RLMT | **Red Lodge** | 45.73 334 | P | P | 10 55 36.7 | +0.5 |
| | baz=46,SNR=6.7 | | | | | |
| RLMT | **Red Lodge** | 45.73 334 | *e*P | P | 10 55 36.8 | +0.6 |
| | 5.5nm,0.9s | | | | | |
| LAO | **LASA Array** | 45.74 337 | P | P | 10 55 36.8 | +0.7 |
| | baz=46,SNR=13 | | | | | |
| LAO | **LASA Array** | 45.74 337 | *e*P | P | 10 55 36.3 | +0.3 |
| | 19nm,1.0s | | | | | |
| H17A | **Grant Village** | 45.77 332 | P | P | 10 55 37.0 | +0.4 |
| | baz=46 | | | | | |
| H17A | **Grant Village** | 45.77 332 | *e*P | P | 10 55 38.0 | +1.4 |
| | 66nm,2.8s | | | | | |
| ULM | **Lac du Bonnet** | 45.90 348 | P | P | 10 55 35.3 | -1.8 |
| | 6.6nm,0.7s,baz=155,slow=8.5,SNR=6.7 | | | | | |
| ULM | **Lac du Bonnet** | 45.90 348 | *e*P | P | 10 55 35.8 | -1.4 |
| | 11nm,0.9s | | | | | |
| YFT | **Old Faithful** | 45.93 332 | *e*P | P | 10 55 39.8 | +2.0 |
| | 24nm,1.2s | | | | | |
| NV01 | **Mina Array Sit** | 45.99 320 | *e*P | P | 10 55 39.2 | +0.8 |
| NVAR | **Mina Array Bea** | 45.99 320 | P | P | 10 55 39.7 | +1.4 |
| | 7.7nm,0.9s,baz=136,slow=7.5,SNR=28 | | | | | |
| NVAR | | | PcP | PcP | 10 57 15.7 | +0.7 |
| | 1.2nm,1.0s,baz=99,slow=5.6,SNR=3.1 | | | | | |
| NVAR | | | LR | LR | 11 15 13.5 | |
| | comp=Z,478nm,18.2s,baz=108,slow=37 | | | | | |
| B25A | **Knox Farm, Ray** | 46.01 341 | P | P | 10 55 38.7 | +0.6 |
| | baz=46 | | | | | |
| YMR | **Madison River** | 46.15 332 | *e*P | P | 10 55 40.6 | +1.0 |
| | 15nm,0.9s | | | | | |
| GCMT | **Greycliff** | 46.43 334 | *e*P | P | 10 55 42.3 | +0.6 |
| QLMT | **Earthquake Lak** | 46.49 332 | *e*P | P | 10 55 44.4 | +2.2 |
| DGMT | **Dagmar** | 46.52 340 | P | P | 10 55 43.2 | +1.0 |
| | baz=47 | | | | | |
| DGMT | **Dagmar** | 46.52 340 | *e*P | P | 10 55 43.2 | +1.0 |
| | 26nm,1.3s | | | | | |
| BMN | **Battle Mountai** | 46.54 323 | *e*P | P | 10 55 44.0 | +1.4 |
| | 14nm,1.1s | | | | | |
| A25A | **Svangstu Ranch** | 46.58 341 | P | P | 10 55 42.7 | +0.1 |
| | baz=47 | | | | | |
| HLID | **Hailey** | 47.05 328 | P | P | 10 55 47.1 | +0.5 |
| | baz=47,SNR=9.9 | | | | | |
| HLID | **Hailey** | 47.05 328 | *e*P | P | 10 55 47.8 | +1.2 |
| | 4.2nm,0.8s | | | | | |
| MCMT | **McKenzie Canyo** | 47.17 331 | *e*P | P | 10 55 49.2 | +1.7 |
| BOZ | **Bozeman (W)** | 47.20 332 | P | P | 10 55 48.2 | +0.6 |
| | baz=47,SNR=20 | | | | | |
| BOZ | **Bozeman (W)** | 47.20 332 | *e*P | P | 10 55 48.4 | +0.7 |
| | 12nm,1.0s | | | | | |
| DLMT | **Dillon** | 47.44 331 | *e*P | P | 10 55 53.6 | +4.0 |
| | 46nm,2.5s | | | | | |
| MFID | **Camas Ranch** | 47.70 327 | *e*P | P | 10 55 52.6 | +1.1 |
| | 9.0nm,1.3s | | | | | |
| LRM | **Limekiln Ridge** | 47.71 332 | *e*P | P | 10 55 52.9 | +1.1 |
| HRY | **Holter Researc** | 48.10 333 | *e*P | P | 10 55 55.7 | +1.1 |
| EGMT | **Eagleton** | 48.23 336 | P | P | 10 55 56.3 | +0.8 |
| | baz=48 | | | | | |
| EGMT | **Eagleton** | 48.23 336 | *e*P | P | 10 55 56.5 | +1.0 |
| | 14nm,1.0s | | | | | |
| OHCM | **Honcut** | 48.54 320 | *e*P | P | 10 55 59.2 | +1.2 |
| WVOR | **Wild Horse Val** | 48.63 325 | *e*P | P | 10 55 59.1 | +0.4 |
| | 20nm,1.3s | | | | | |
| J08A | **Circle Bar Ran** | 49.12 326 | *e*P | P | 10 56 03.1 | +0.6 |
| | 5.2nm,1.0s | | | | | |
| MSO | **Missoula** | 49.15 332 | P | P | 10 56 03.0 | +0.3 |
| | baz=49,SNR=8.0 | | | | | |
| MSO | **Missoula** | 49.15 332 | *e*P | P | 10 56 03.5 | +0.8 |
| | 9.3nm,1.1s | | | | | |
| O03D | **Paynes Creek** | 49.28 320 | P | P | 10 56 04.1 | +0.4 |
| | baz=49 | | | | | |
| MOD | **Modoc** | 49.28 323 | *e*P | P | 10 56 06.0 | +2.2 |
| | 5.6nm,1.2s | | | | | |
| JTMT | **Jette** | 49.98 332 | *e*P | P | 10 56 09.9 | +0.9 |
| M04C | **Macdoel** | 50.14 322 | P | P | 10 56 10.4 | +0.1 |
| | baz=50 | | | | | |
| I07A | **Izee** | 50.15 326 | *e*P | P | 10 56 10.7 | +0.3 |
| | 4.4nm,0.9s | | | | | |
| F10A | **Beach Ranch, E** | 50.17 329 | *e*P | P | 10 56 10.8 | +0.4 |
| | 67nm,2.5s | | | | | |
| N02D | **Trinity Center** | 50.23 321 | P | P | 10 56 10.8 | -0.1 |
| | baz=50 | | | | | |
| BSMT | **Bassoo Peak** | 50.29 332 | *e*P | P | 10 56 12.5 | +1.0 |
| M02C | **Callahan** | 50.55 321 | P | P | 10 56 13.7 | +0.3 |
| | baz=51 | | | | | |
| G08A | **Pilot Rock** | 50.62 327 | *e*P | P | 10 56 15.3 | +1.4 |
| | 28nm,2.1s | | | | | |
| J05D | **Fort Rock, OR** | 50.66 324 | P | P | 10 56 14.6 | +0.4 |
| | baz=51 | | | | | |
| SCHQ | **Schefferville** | 50.75 12 | P | P | 10 56 12.8 | -1.7 |
| | 5.6nm,1.0s,baz=186,slow=9.2,SNR=3.1 | | | | | |
| KHMM | **Horse Mountain** | 50.82 320 | *e*P | P | 10 56 16.2 | +0.7 |
| | 28nm,1.3s | | | | | |
| J04D | **Umpqua Nationa** | 51.15 323 | P | P | 10 56 18.5 | +0.5 |
| | baz=51 | | | | | |
| I05D | **Terrebonne, OR** | 51.35 325 | P | P | 10 56 20.1 | +0.8 |
| | baz=51 | | | | | |
| L02D | **Cave Junction,** | 51.44 321 | P | P | 10 56 20.1 | +0.1 |
| | baz=52 | | | | | |
| G06A | **Carlson Farm,** | 51.50 326 | *e*P | P | 10 56 22.1 | +1.6 |
| | 53nm,1.9s | | | | | |
| I04A | **Tendick Farm,** | 51.65 324 | P | P | 10 56 20.7 | -0.8 |
| | baz=52 | | | | | |
| NEW | **Newport** | 51.69 331 | P | P | 10 56 21.2 | -0.6 |
| | baz=52 | | | | | |
| NEW | **Newport** | 51.69 331 | *e*P | P | 10 56 22.5 | +0.8 |
| | 84nm,2.8s | | | | | |
| D08A | **Wollman Farm,** | 51.76 329 | *e*P | P | 10 56 24.6 | +2.3 |
| | 76nm,2.6s | | | | | |
| KBO | **Bosley Butte** | 51.86 321 | *e*P | P | 10 56 25.4 | +2.2 |
| | 48nm,1.2s | | | | | |
| G05D | **Wamic, OR** | 51.89 326 | P | P | 10 56 24.5 | +1.2 |
| | baz=52 | | | | | |
| C09A | **Chrisman Ranch** | 51.93 330 | *e*P | P | 10 56 25.8 | +2.2 |
| | 32nm,2.1s | | | | | |
| I03D | **Drain, OR** | 52.15 323 | P | P | 10 56 25.4 | +0.2 |
| | baz=52 | | | | | |
| LTY | **Liberty** | 52.80 328 | *e*P | P | 10 56 31.0 | +0.9 |
| | 6.3nm,1.1s | | | | | |
| G03D | **McMinnville, O** | 52.97 325 | P | P | 10 56 31.8 | +0.5 |
| | baz=53 | | | | | |
| LON | **Longmire** | 53.09 327 | *e*P | P | 10 56 33.0 | +0.8 |
| | 4.0nm,0.9s | | | | | |
| D05A | **Enumclaw** | 53.45 327 | *e*P | P | 10 56 35.7 | +0.9 |
| | 13nm,0.8s | | | | | |
| EDM | **Edmonton** | 53.73 338 | *e*P | P | 10 56 36.8 | 0.0 |
| | 45nm,1.0s | | | | | |
| E03A | **Lebam** | 53.92 326 | *e*P | P | 10 56 39.9 | +1.7 |
| | 48nm,1.6s | | | | | |
| B05A | **Bryant** | 54.18 328 | P | P | 10 56 39.5 | -0.5 |
| | baz=54 | | | | | |
| A04D | **Lummi Island** | 54.78 329 | P | P | 10 56 45.0 | +0.6 |
| | baz=55 | | | | | |
| RKT | **Rikitea** | 58.51 239 | *e*LR | LR | 10 58 07.5 | |
| | 227nm,26.8s | | | | | |
| RKT | **Rikitea** | 58.51 239 | *e*S | S | 11 05 12.9 | -2.0 |
| | 216nm,29.2s | | | | | |
| RKT | | | *e*LR | LR | 11 14 27.1 | |
| | 399nm,26.5s | | | | | |
| YKA | **Yellowknife Ar** | 61.48 344 | P | P | 10 57 31.0 | -0.1 |
| | 13nm,0.9s,baz=138,slow=6.6,SNR=34 | | | | | |
| PPT | **Papeete** | 69.94 249 | LR | LR | 11 23 23.2 | |
| | comp=Z,242nm,18.1s,baz=136,slow=31 | | | | | |
| PPT2 | **Papeete2** | 69.94 249 | *e*LR | LR | 11 19 42.7 | |
| | 281nm,22.5s | | | | | |
| INK | **Inuvik** | 71.16 342 | *e*P | P | 10 58 34.2 | +1.2 |
| TBI | **Tubuai** | 71.21 243 | *e*LR | LR | 11 20 15.3 | |
| | 486nm,26.0s | | | | | |
| SUMG | **Summit** | 72.12 13 | *e*P | P | 10 58 40.4 | +1.1 |
| DOT | **Dot Lake** | 72.62 336 | *e*P | P | 10 58 42.9 | +0.9 |
| ILAR | **Eielson Array** | 74.19 336 | P | P | 10 58 51.0 | -0.1 |
| | 2.9nm,1.0s,baz=120,slow=3.4,SNR=17 | | | | | |
| ILAR | | | LR | LR | 11 34 33.5 | |
| | comp=Z,102nm,19.0s,baz=104,slow=38 | | | | | |
| PPLA | **Purkeypile** | 75.82 334 | *e*P | P | 10 59 01.4 | +0.6 |
| DBIC | **Dimbokro** | 77.27 84 | LR | LR | 11 32 51.5 | |
| | comp=Z,44nm,18.7s,baz=254,slow=36 | | | | | |
| ESDC | **Sonseca Array** | 77.75 51 | P | P | 10 59 11.8 | -0.3 |
| | 0.4nm,0.4s,baz=269,slow=6.0,SNR=7.5 | | | | | |
| ESDC | | | LR | LR | 11 27 35.0 | |
| | comp=Z,44nm,22.0s,baz=205,slow=31 | | | | | |
| ES19 | **SONSECA Array** | 77.80 51 | *e*P | P | 10 59 13.8 | +1.4 |
| TORD | **Torodi Ar. Bea** | 83.25 77 | P | P | 10 59 41.0 | -1.0 |
| | 0.6nm,0.9s,baz=294,slow=6.9,SNR=3.6 | | | | | |
| TORD | | | LR | LR | 11 38 20.3 | |
| | comp=Z,32nm,19.1s,baz=135,slow=37 | | | | | |
| NOA | **NORSAR Array B** | 87.04 29 | LR | LR | 11 35 14.0 | |
| | comp=Z,29nm,20.5s,baz=275,slow=33 | | | | | |
| HFS | **Hagfors** | 88.37 30 | LR | LR | 11 35 11.2 | |
| | comp=Z,32nm,21.5s,baz=274,slow=33 | | | | | |
| KEST | **Kesra** | 88.40 54 | LR | LR | 11 36 43.6 | |
| | comp=Z,36nm,18.7s,baz=230,slow=34 | | | | | |
| GERES | **GERESS Array B** | 90.01 41 | LR | LR | 11 33 37.9 | |
| | comp=Z,83nm,21.0s,baz=265,slow=31 | | | | | |
| ARCES | **ARCESS Array B** | 91.08 20 | LR | LR | 11 35 31.5 | |
| | comp=Z,51nm,21.2s,baz=272,slow=32 | | | | | |
| VRAC | **Vranov** | 91.81 40 | LR | LR | 11 35 32.2 | |
| | comp=Z,115nm,21.2s,baz=344,slow=32 | | | | | |
| FINES | **FINESS Array B** | 93.95 27 | LR | LR | 11 41 38.6 | |
| | comp=Z,40nm,18.4s,baz=290,slow=35 | | | | | |
| AKASG | **Malin Array Be** | 99.28 37 | LR | LR | 11 41 16.5 | |
| | comp=Z,54nm,21.8s,baz=310,slow=33 | | | | | |
| MKAR | **Makanchi Array** | 126.18 13 | PKP | PKPdf | 11 06 16.8 | -0.7 |
| | 0.3nm,0.4s,baz=180,slow=1.0,SNR=2.9 | | | | | |
| SONM | **Songino Array** | 126.23 352 | PKP | PKPdf | 11 06 17.3 | -0.4 |
| | 0.3nm,0.4s,baz=318,slow=1.9,SNR=3.4 | | | | | |
| WMQ | **Urumqi** | 130.07 9 | *e*PKP | PKPdf | 11 06 25.0 | -0.1 |
| WMQ | | | PP | PP | 11 08 44.0 | +7.9 |
| WMQ | | | SKS | SKSdf | 11 13 28.0 | -8.5 |
| WMQ | | | SS | SS | 11 26 03.0 | +2.7 |
| WMQ | | | PPMZ | | | |
| | 24nm,10.0s | | | | | |
| WMQ | | | LN | | | |
| | 59nm,28.0s | | | | | |
| WMQ | | | LE | | | |
| | 79nm,27.0s | | | | | |
| WMQ | | | LZ | | | |
| | 92nm,27.0s | | | | | |
| KSH | **Kashi** | 130.98 22 | *e*PKP | PKPdf | 11 06 26.6 | -0.4 |
| KSH | | | *es*PKP | | 11 06 41.1 | |
| KSH | | | *e*PP | PP | 11 08 48.0 | +5.6 |
| KSH | | | PPMZ | | | |
| | 51nm,4.9s | | | | | |
| KSH | | | LN | | | |
| | 90nm,4.0s | | | | | |
| KSH | | | LE | | | |
| | 69nm,4.1s | | | | | |
| KSH | | | LZ | | | |
| | 94nm,6.9s | | | | | |
| HHC | **Hu-ho-hao-te** | 132.00 345 | *e*PKP | PKPdf | 11 06 28.3 | -0.6 |
| HHC | | | PP | PP | 11 08 49.9 | +1.2 |
| HHC | | | SKS | SKSdf | 11 13 38.1 | -2.1 |
| HHC | | | SKKS | SKKSac | 11 15 38.8 | -7.3 |
| HHC | | | SS | SS | 11 26 23.3 | -0.9 |
| HHC | | | PPMZ | | | |
| | 49nm,10.8s | | | | | |
| HHC | | | LN | | | |
| | 230nm,19.1s | | | | | |
| HHC | | | LE | | | |
| | 210nm,16.7s | | | | | |
| HHC | | | LZ | | | |
| | 110nm,19.1s | | | | | |
| NJ2 | **Nanjing** | 137.35 333 | *e*PKP | PKPdf | 11 06 38.1 | -0.9 |
| LZH | **Lanzhou** | 138.12 352 | *e*PKP | PKPdf | 11 06 39.5 | -1.0 |
| LZH | | | sPKP | | 11 06 54.4 | |
| LZH | | | LN | | | |
| | 110nm,18.9s | | | | | |
| LZH | | | LE | | | |
| | 120nm,17.0s | | | | | |
| LZH | | | LZ | | | |
| | 160nm,19.2s | | | | | |
| CD2 | **Chengdu** | 143.21 351 | PKP | PKPdf | 11 06 48.3 | -1.4 |
| CD2 | | | pPKP | pPKPdf | 11 06 58.3 | +3.4 |
| CD2 | | | sPKP | | 11 07 02.1 | |
| CD2 | | | PP | PP | 11 09 58.8 | +0.4 |
| CD2 | | | SKS | SKSdf | 11 13 55.4 | -3.9 |
| CD2 | | | SKKS | SKKSac | 11 16 48.4 | -4.3 |
| CD2 | | | SS | SS | 11 28 37.1 | +0.1 |
| CD2 | | | PPMZ | | | |
| | 120nm,5.2s | | | | | |
| KMI | **Kunming** | 149.05 350 | PKPbc | PKPdf | 11 06 54.0 | -6.0 |
| KMI | | | pPKP | PKPbc | 11 07 03.4 | -0.6 |
| KMI | | | sPKP | | 11 07 06.5 | |
| CMAR | **Chiang Mai Arr** | 156.07 356 | PKPab | PKPab | 11 07 38.0 | +0.8 |
| | 0.6nm,0.3s,baz=340,slow=4.7,SNR=5.7 | | | | | |

*CSEM* ***14*** *10:51:04.9±0.1, 42°.54N×43°.46E, h2km, mb3.9, Error ellipse: s-maj=3.4km s-min=2.7km az=121.0*
*TIF* ***14*** *10:51:04.1, 42°.54N×43°.54E, h15km±1km*
*MOS* ***14*** *10:51:04.6±1.4, 42°.57N×43°.51E, h3km, mb3.9/2, Error ellipse: s-maj=8.3km s-min=5.0km az=84.9*
*AZER* ***14*** *10:51:05.8±2.5, 42°.18N×43°.09E, h2km, Error ellipse: s-maj=43.1km s-min=17.4km az=42.0*
*DDA* ***14*** *10:51:08.9, 42°.00N×43°.53E, h7km, Md3.2*

**ISC 14 10:51:05.2±0.9, 42°.52N±0°.01×43°.52E±0°.02, h7km±6km, n83,σ0s95/137, 8C-11D, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ONI** | **Oni** | **0.08** | **322** | P | **Pg** | **10 51 07.4** | **+0.1** |
| ONI | | | | S | **Sg** | **10 51 09.7** | **+0.9** |
| **ONI** | **Oni** | **0.08** | **322** | *e*PG | **Pg** | **10 51 07.4** | **+0.1** |
| **DIGR** | **Digorskoe uzhe** | **0.38** | **7** | *i*PG | **Pg** | **10 51 11.7** | **-1.0** |
| DIGR | | | | *i* S | **Sg** | **10 51 17.5** | **-0.2** |
| **DIGR** | **Digorskoe uzhe** | **0.38** | **7** | *i* Pg | **Pg** | **10 51 11.7** | **-1.0** |
| DIGR | | | | *i* Sg | **Sg** | **10 51 17.5** | **-0.2** |
| **LACR** | **Lac** | **0.65** | **62** | *i* PG | **Pg** | **10 51 16.6** | **-1.1** |
| LACR | | | | *i* S | **Sg** | **10 51 25.5** | **-0.6** |
| LACR | | | | pmax | pmax | | |
| | comp=Z,162nm,0.2s | | | | | | |
| LACR | | | | smax | smax | | |
| | comp=N,710nm,0.4s | | | | | | |
| **LACR** | **Lac** | **0.65** | **62** | *i* Pg | **Pg** | **10 51 16.6** | **-1.1** |
| | comp=N,162nm,0.2s | | | | | | |
| LACR | | | | *i* Sg | **Sg** | **10 51 25.5** | **-0.6** |
| | comp=N,710nm,0.4s | | | | | | |
| **KORR** | **Kora** | **0.69** | **35** | *i* PG | **Pg** | **10 51 18.0** | **-0.5** |
| KORR | | | | *i* S | **Sg** | **10 51 28.0** | **+0.5** |
| KORR | | | | pmax | pmax | | |
| | comp=Z,372nm,0.2s | | | | | | |
| KORR | | | | smax | smax | | |
| | comp=E,2μm,0.3s | | | | | | |
| **KORR** | **Kora** | **0.69** | **35** | *i* Pg | **Pg** | **10 51 18.0** | **-0.5** |
| | comp=E,372nm,0.2s | | | | | | |
| KORR | | | | *i* Sg | **Sg** | **10 51 28.0** | **+0.5** |
| **LSNR** | **Lesken** | **0.79** | **16** | *i* PG | **Pg** | **10 51 19.7** | **-0.6** |
| LSNR | | | | *i* S | **Sg** | **10 51 30.8** | **+0.2** |
| LSNR | | | | pmax | pmax | | |
| | comp=Z,124nm,0.1s | | | | | | |
| LSNR | | | | smax | smax | | |
| | comp=N,413nm,0.2s | | | | | | |
| **LSNR** | **Lesken** | **0.79** | **16** | *i* Pg | **Pg** | **10 51 19.7** | **-0.6** |
| | comp=N,124nm,0.1s | | | | | | |
| LSNR | | | | *i* Sg | **Sg** | **10 51 30.8** | **+0.2** |
| | comp=N,413nm,0.2s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **STDR** | **Stavd-Durt** | **0.93** | **25** | ⇑*i*PG | **Pg** | **10 51 23.2** | **+0.1** |
| STDR | | | | *i* S | **Sb** | **10 51 36.4** | **0.0** |
| **STDR** | **Stavd-Durt** | **0.93** | **25** | *i* Pg | **Pg** | **10 51 23.2** | **+0.1** |
| STDR | | | | *i* Sg | **Sb** | **10 51 36.4** | **0.0** |
| **NCK** | **Nalchik** | **0.97** | **3** | ⇓*i*PG | **Pg** | **10 51 23.5** | **-0.4** |
| NCK | | | | *i* S | **Sg** | **10 51 36.9** | **+0.4** |
| **NCK** | **Nalchik** | **0.97** | **3** | *i* Pg | **Pg** | **10 51 23.5** | **-0.4** |
| NCK | | | | *i* Sg | **Sg** | **10 51 36.9** | **+0.4** |
| **DUS** | **Dusheti** | **0.98** | **116** | P | **Pg** | **10 51 23.8** | **-0.2** |
| DUS | | | | S | **Sg** | **10 51 37.1** | **+0.5** |
| **DUS** | **Dusheti** | **0.98** | **116** | *e*PG | **Pg** | **10 51 23.7** | **-0.2** |
| DUS | | | | *e*S | **Sg** | **10 51 37.1** | **+0.5** |
| **DUS** | **Dusheti** | **0.98** | **116** | P | **Pg** | **10 51 23.8** | **-0.2** |
| DUS | | | | S | **Sg** | **10 51 37.1** | **+0.5** |
| **VLKR** | **Vladikavkaz** | **1.00** | **58** | *i* PG | **Pg** | **10 51 24.6** | **+0.2** |
| VLKR | | | | *e*S | **Sb** | **10 51 38.6** | **+0.3** |
| VLKR | comp=Z,41nm,0.3s | | | pmax | pmax | | |
| VLKR | comp=E,30nm,0.5s | | | smax | smax | | |
| **VLKR** | **Vladikavkaz** comp=E,41nm,0.3s | **1.00** | **58** | *i* Pg | **Pg** | **10 51 24.6** | **+0.2** |
| VLKR | | | | *e*Sg | **Sb** | **10 51 38.6** | **+0.3** |
| **CHVG** | **Ch'k'valeri** | **1.08** | **281** | P | **Pg** | **10 51 25.1** | **-0.8** |
| CHVG | | | | S | **Sb** | **10 51 40.2** | **-0.3** |
| **CHVG** | **Ch'k'valeri** | **1.08** | **281** | P | **Pg** | **10 51 25.1** | **-0.8** |
| CHVG | | | | S | **Sb** | **10 51 40.2** | **-0.3** |
| **AKH** | **Akhalkalaki** | **1.11** | **181** | P | **Pg** | **10 51 25.7** | **-0.9** |
| AKH | | | | S | **Sg** | **10 51 41.4** | **+0.3** |
| **AKH** | **Akhalkalaki** | **1.11** | **181** | *e*PG | **Pg** | **10 51 25.6** | **-0.9** |
| AKH | | | | *e*S | **Sg** | **10 51 41.3** | **+0.3** |
| **AKH** | **Akhalkalaki** | **1.11** | **181** | P | **Pg** | **10 51 25.7** | **-0.9** |
| AKH | | | | *e*Sg | **Sg** | **10 51 41.3** | **+0.3** |
| **KMGR** | **Komgaron** | **1.12** | **61** | *e*PG | **Pg** | **10 51 26.8** | **0.0** |
| KMGR | | | | *e*S | **Sb** | **10 51 42.1** | **+0.2** |
| **KMGR** | **Komgaron** | **1.12** | **61** | *e*Pg | **Pg** | **10 51 26.8** | **0.0** |
| KMGR | | | | *e*Sg | **Sb** | **10 51 42.1** | **+0.2** |
| **BTKR** | **Batakoyurt** | **1.13** | **41** | ⇓*i*PG | **Pn** | **10 51 27.6** | **+0.1** |
| BTKR | | | | *e*S | **Sb** | **10 51 43.0** | **+0.9** |
| **BTKR** | **Batakoyurt** | **1.13** | **41** | *i* Pg | **Pn** | **10 51 27.6** | **+0.1** |
| BTKR | | | | *e*Sg | **Sb** | **10 51 43.0** | **+0.9** |
| **TBLG** | **Delisi** | **1.20** | **131** | P | **Pg** | **10 51 27.1** | **-1.1** |
| TBLG | | | | S | **Sg** | **10 51 43.9** | **0.0** |
| **TBLG** | **Delisi** | **1.20** | **131** | *e*PG | **Pg** | **10 51 27.1** | **-1.1** |
| **TBLG** | **Delisi** | **1.20** | **131** | *i* P | **Pg** | **10 51 27.2** | **-1.1** |
| TBLG | | | | S | **Sg** | **10 51 43.9** | **0.0** |
| **SEAG** | **Tbilisi Sea** | **1.22** | **128** | P | **Sn** | **10 51 44.9** | **-0.6** |
| **KBTC** | **Kuba-Taba** | **1.29** | **356** | ⇓*e*PG | **Pn** | **10 51 29.2** | **-0.6** |
| KBTC | | | | *e*S | **Sg** | **10 51 46.6** | **-0.2** |
| **KBTC** | **Kuba-Taba** | **1.29** | **356** | *e*Pg | **Pn** | **10 51 29.2** | **-0.6** |
| KBTC | | | | *e*Sg | **Sg** | **10 51 46.6** | **-0.2** |
| **KZR** | **Kazreti** | **1.32** | **149** | P | **Sg** | **10 51 47.4** | **-0.3** |
| **PRTR** | **Priterechnaya** | **1.35** | **24** | *e*PG | **Pn** | **10 51 29.4** | **-1.1** |
| PRTR | | | | *e*S | **Sb** | **10 51 47.9** | **-0.3** |
| PRTR | comp=Z,39nm,0.2s | | | pmax | pmax | | |
| PRTR | comp=N,160nm,0.5s | | | smax | smax | | |
| **PRTR** | **Priterechnaya** comp=N,39nm,0.2s | **1.35** | **24** | *e*Pg | **Pn** | **10 51 29.4** | **-1.1** |
| PRTR | comp=N,160nm,0.5s | | | *e*Sg | **Sb** | **10 51 47.9** | **-0.3** |
| **KIV** | **Kislovodsk** | **1.56** | **337** | *ce*PG | **Pn** | **10 51 33.5** | **+0.1** |
| KIV | | | | *i* S | **Sn** | **10 51 52.9** | **-1.0** |
| KIV | comp=Z,58nm,1.1s | | | pmax | pmax | | |
| **KIV** | **Kislovodsk** comp=Z,58nm,1.1s | **1.56** | **337** | *e*Pg | **Pn** | **10 51 33.5** | **+0.1** |
| KIV | | | | *i* Sg | **Sn** | **10 51 52.9** | **-1.0** |
| **DGRG** | **David-gareji** | **1.75** | **127** | P | **Pb** | **10 51 37.3** | **-0.4** |
| DGRG | | | | S | **Sg** | **10 52 00.9** | **-0.5** |
| **DGRG** | **David-gareji** | **1.75** | **127** | *e*PN | **Pb** | **10 51 37.2** | **-0.4** |
| **DGRG** | **David-gareji** | **1.75** | **127** | *e*Pn | **Pb** | **10 51 37.2** | **-0.4** |
| DGRG | | | | *i* S | **Sb** | **10 52 00.3** | **+0.5** |
| **BCA** | **Borcka** | **1.78** | **233** | *e*PN | **Pn** | **10 51 36.1** | **-0.3** |
| **BCA** | **Borcka** | **1.78** | **233** | *e*Pn | **Pn** | **10 51 36.2** | **-0.3** |
| **ARTV** | **Artvin** | **1.79** | **222** | *i* P | **Pn** | **10 51 37.2** | **+0.4** |
| ARTV | | | | *i* S | **Sb** | **10 52 01.5** | **+0.3** |
| **ARTV** | **Artvin** | **1.79** | **222** | P | **Pn** | **10 51 37.2** | **+0.4** |
| ARTV | | | | S | **Sb** | **10 52 01.5** | **+0.3** |
| **DBOC** | **Borcka** | **1.82** | **230** | *i* P | **Pn** | **10 51 37.1** | **+0.1** |
| DBOC | | | | *i* S | **Sn** | **10 52 00.0** | **-0.3** |
| **DBOC** | **Borcka** | **1.82** | **230** | P | **Pn** | **10 51 37.1** | **+0.1** |
| DBOC | | | | S | **Sn** | **10 52 00.0** | **-0.3** |
| **QZX** | **Qazax, Azerbai** SNR=8.8 | **2.02** | **136** | ⇓Pn | **Pn** | **10 51 40.1** | **+0.4** |
| QZX | | | | ⇓Sn | **Sb** | **10 52 06.8** | **-0.7** |
| **QZX** | **Qazax, Azerbai** SNR=8.8 | **2.02** | **136** | Pn | **Pn** | **10 51 40.1** | **+0.4** |
| QZX | | | | Sn | **Sb** | **10 52 06.8** | **-0.7** |
| **DDEM** | **Demirkent** | **2.10** | **220** | *i* P | **Pn** | **10 51 41.4** | **+0.5** |
| DDEM | | | | *i* S | **Sb** | **10 52 10.3** | **+0.2** |
| **DDEM** | **Demirkent** | **2.10** | **220** | P | **Pn** | **10 51 41.4** | **+0.5** |
| DDEM | | | | S | **Sb** | **10 52 10.3** | **+0.2** |
| **DIGO** | **Kars** | **2.11** | **183** | *i* P | **Pn** | **10 51 41.5** | **+0.3** |
| **DIGO** | **Kars** | **2.11** | **183** | P | **Pn** | **10 51 41.5** | **+0.3** |
| **ZKTA** | **Zakatala** | **2.47** | **110** | ⇓Pn | **Pb** | **10 51 49.4** | **-0.6** |
| ZKTA | | | | ⇑Sn | **Sb** | **10 52 22.4** | **+1.8** |
| **DBC** | **Dubki** | **2.49** | **77** | ⇑*i*PN | **Pb** | **10 51 48.6** | **-1.6** |
| DBC | | | | *i* S | **Sg** | **10 52 24.6** | **-0.7** |
| **DBC** | **Dubki** | **2.49** | **77** | *i* Pn | **Sg** | **10 51 48.6** | **-1.6** |
| DBC | | | | *i* Sb | **Sg** | **10 52 24.4** | **-0.7** |
| **GNI** | **Garni** | **2.54** | **158** | *e*PN | **Pg** | **10 51 53.9** | **-0.1** |
| **GANJ** | **Ganja** SNR=3.0 | **2.82** | **131** | ⇑Pn | **Pn** | **10 51 53.1** | **+2.4** |
| GANJ | | | | ⇑Sn | **Sb** | **10 52 29.2** | **-1.4** |
| **GANJ** | **Ganja** SNR=3.0 | **2.82** | **131** | Pn | **Pn** | **10 51 53.1** | **+2.4** |
| GANJ | | | | Sn | **Sb** | **10 52 29.2** | **-1.4** |
| **SEKA** | **Sheki** SNR=2.8 | **3.04** | **114** | ⇓Pn | **Pb** | **10 51 57.9** | **-1.9** |
| SEKA | | | | ⇑Sn | **Sb** | **10 52 35.3** | **-1.9** |
| **SEKA** | **Sheki** SNR=2.8 | **3.04** | **114** | Pn | **Pb** | **10 51 57.9** | **-1.9** |
| SEKA | | | | Sn | **Sb** | **10 52 35.3** | **-1.9** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **3.31** | **231** | *e*PN | **Pn** | **10 51 58.0** | **+0.3** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **3.31** | **231** | *e*Pn | **Pn** | **10 51 58.0** | **+0.3** |
| **GUMT** | **Gumushane** | **3.67** | **237** | *e*PN | **Pn** | **10 52 00.7** | **-1.8** |
| **GUMT** | **Gumushane** | **3.67** | **237** | *e*Pn | **Pn** | **10 52 00.7** | **-1.8** |
| **ESPY** | **Espiye-Giresun** | **3.93** | **247** | *e*PN | **Pn** | **10 52 03.0** | **-3.0** |
| **ESPY** | **Espiye-Giresun** | **3.93** | **247** | *e*Pn | **Pn** | **10 52 03.0** | **-3.0** |
| **KELT** | **Kelkit** | **3.99** | **235** | *i* P | **Pn** | **10 52 07.6** | **+0.6** |
| **KELT** | **Kelkit** | **3.99** | **235** | P | **Pn** | **10 52 07.6** | **+0.6** |
| **SUSE** | **Susehri** | **4.62** | **242** | *i* P | **Pn** | **10 52 16.5** | **+0.9** |
| **SUSE** | **Susehri** | **4.62** | **242** | P | **Pn** | **10 52 16.5** | **+0.9** |
| **TIRR** | **Tirgusor** | **11.15** | **285** | ⇑*i*P | **Pn** | **10 53 47.8** | **+2.9** |
| **TLB** | **Topalu** | **11.42** | **286** | ⇓*i*P | **Pn** | **10 53 47.5** | **-1.2** |
| **HARR** | **Harsova** | **11.51** | **286** | ⇓*i*P | **Pn** | **10 53 48.5** | **-1.4** |
| **KIEV** | **Kiev** | **12.77** | **315** | *i* P | **Pn** | **10 54 07.1** | **0.0** |
| **KIEV** | **Kiev** | **12.77** | **315** | *i* P | **Pn** | **10 54 07.1** | **0.0** |
| **OBN** | **Obninsk** | **13.40** | **343** | *de*P | **Pn** | **10 54 15.7** | **+0.1** |
| OBN | | | | *e*S | **Sn** | **10 56 46.7** | **+2.1** |
| OBN | comp=Z,18nm,0.3s | | | pmax | pmax | | |
| OBN | comp=Z,31nm,14.0s | | | MLR | MLR | | |
| **OBN** | **Obninsk** comp=Z,18nm,0.3s | **13.40** | **343** | *e*P | **Pn** | **10 54 15.7** | **+0.1** |
| OBN | comp=Z,31nm,14.0s | | | *e*S | **Sn** | **10 56 46.7** | **+2.1** |
| **BRVK** | **Borovoye** | **20.72** | **50** | *i* P | **P** | **10 55 46.8** | **+0.8** |
| BRVK | comp=Z,1.0nm,0.9s | | | pmax | pmax | | |
| **BRVK** | **Borovoye** comp=Z,1.0nm,0.9s | **20.72** | **50** | *i* P | **P** | **10 55 46.8** | **+0.8** |
| **AAK** | **Ala-Archa** | **22.75** | **79** | *i* P | **P** | **10 56 09.3** | **+1.2** |
| AAK | comp=Z,1.0nm,0.9s | | | pmax | pmax | | |
| **AAK** | **Ala-Archa** comp=Z,1.0nm,0.9s | **22.75** | **79** | *i* P | **P** | **10 56 09.3** | **+1.2** |

*PRE **14** 11:20:09.6±1.6, 26°.09S×29°.57E, h0km, ML2.6, Explosion*
*BUL **14** 11:20:21.9±4.1, 24°.13S×23°.04E, h0km±281km, MD3.7*
**ISC 14 11:20:09.6**±1.0, **26°.08S**±0°.04×**29°.59E**±0°.04, **h0km**, **n13,**
σ1§**63**/24, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ERPM** | **east rand prop** | **1.24** | **258** | *e*P | **Pb** | **11 20 33.5** | **-0.4** |
| ERPM | | | | *e*S | **Sg** | **11 20 48.4** | **-1.0** |
| ERPM | | | | AML | AML | 11 20 58.0 | |
| | comp=Z,56nm,0.2s | | | | | | |
| **OBSV** | **Observatory** | **1.37** | **265** | *e*P | **Pb** | **11 20 36.1** | **-0.1** |
| OBSV | | | | *e*S | **Sb** | **11 20 54.1** | **-0.1** |
| OBSV | | | | AML | AML | 11 20 55.9 | |
| | comp=Z,65nm,0.2s | | | | | | |
| **WDLM** | **Western Deep L** | **1.98** | **260** | *e*P | **Pn** | **11 20 45.3** | **+0.8** |
| WDLM | | | | *e*S | **Sb** | **11 21 10.7** | **-1.1** |
| WDLM | | | | AML | AML | 11 21 19.7 | |
| | comp=Z,61nm,0.2s | | | | | | |
| **PRYS** | **Parys** | **2.17** | **247** | *e*P | **Pn** | **11 20 47.3** | **+0.2** |
| PRYS | | | | *e*S | **Sn** | **11 21 13.8** | **-1.0** |
| PRYS | | | | AML | AML | 11 21 20.6 | |
| | comp=Z,47nm,0.5s | | | | | | |
| **POGA** | **Pongola** | **2.22** | **126** | *e*P | **Pb** | **11 20 50.4** | **-0.1** |
| POGA | | | | *e*S | **Sn** | **11 21 17.4** | **+1.7** |
| POGA | | | | AML | AML | 11 21 25.4 | |
| | comp=Z,42nm,0.6s | | | | | | |
| **KSR** | **Koster** | **2.43** | **275** | *e*P | **Pn** | **11 20 52.3** | **+1.5** |
| KSR | | | | *e*S | **Sn** | **11 21 21.9** | **+0.6** |
| KSR | | | | AML | AML | 11 21 37.8 | |
| | comp=Z,15nm,0.2s | | | | | | |
| **MSNA** | **Messina** | **3.74** | **6** | *e*P | **Pn** | **11 21 07.6** | **-1.1** |
| MSNA | | | | *e*S | **Sn** | **11 21 50.4** | **-3.1** |
| MSNA | | | | AML | AML | 11 22 08.4 | |
| | comp=Z,33nm,0.2s | | | | | | |
| **LBTB** | **Lobatse** | **3.76** | **286** | *i* P | Pb | 11 21 13.2 | -3.7 |
| LBTB | | | | *i* S | **Sn** | **11 21 54.6** | **+0.6** |
| **SWZ** | **Schweizer** | **3.96** | **253** | *e*P | **Pn** | **11 21 11.6** | **-0.2** |
| SWZ | | | | *e*S | **Sn** | **11 21 58.8** | **-0.3** |
| SWZ | | | | AML | AML | 11 22 22.0 | |
| | comp=Z,20nm,0.2s | | | | | | |
| **BOSA** | **Boshof** | **4.61** | **236** | *i* P | **Pb** | **11 21 32.4** | **+1.1** |
| BOSA | | | | *i* S | **Sb** | **11 22 30.0** | **+2.6** |
| **MATP** | **Matopo** | **5.72** | **350** | *i* P | **Pb** | **11 21 53.4** | **+3.0** |
| MATP | | | | *i* S | **Sb** | **11 22 58.6** | **-0.9** |
| **BLWY** | **Bulawayo** | **5.98** | **351** | *i* P | Pb | 11 21 58.4 | +3.6 |
| BLWY | | | | *i* S | **Sb** | **11 23 07.7** | **+0.5** |
| **UPI** | **Upington** | **7.76** | **251** | *e*P | **Pn** | **11 22 05.0** | **+1.0** |
| UPI | | | | *e*S | **Sn** | **11 23 28.6** | **-3.9** |
| UPI | | | | AML | AML | 11 23 38.7 | |
| | comp=Z,2.0nm,0.2s | | | | | | |

*ISCJB **14** 11:30:34.8±0.8, 5°.00S±0°.06×133°.88E±0°.07, h28km, mb4.1/1, MS3.3/1, Error ellipse: s-maj=11.8km s-min=6.1km az=146.4*
*IDC **14** 11:30:34.2±2.4, 5°.09S×133°.84E, h0km, mb4.1/1, mb1 4.4/5, mb1mx3.9/22, mbtmp4.3/5, ML4.2/4, MS3.4/3, Ms1 3.4/3, ms1mx3.0/27, Error ellipse: s-maj=67.7km s-min=26.3km az=80.0*
*AUST **14** 11:30:36.2, 4.96S×134°.03E, h35km*
*DJA **14** 11:30:38.8±0.8, 5°.S±4°×13°.4E±°, h95km±39km, M4.4/10, mb4.6/9, mB4.9/5, MLv4.4/9, MLv4.4/10, Mw(mB)4.2/5*
**ISC 14 11:30:38.1**±1.1, **4.96S**±0°.10×**133°.88E**±0°.10, **h28km**, **n28,**
σ1§**59**/26, **Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** baz=2.7,SNR=66 | **2.60** | **321** | P | **Pn** | **11 31 16.2** | **-2.1** |
| **FAKI** | **Fak Fak** | **2.60** | **321** | P | **Pn** | **11 31 16.1** | **-2.1** |
| **SAUI** | **Saumlaki** | **3.95** | **220** | P | **Pn** | **11 31 39.0** | **+2.2** |
| **BNDI** | **Bandanaira** | **3.98** | **276** | P | **Pn** | **11 31 37.2** | **-0.1** |
| BNDI | | | | S | **Sn** | **11 32 24.6** | **+1.5** |
| **SIJI** | **Sorong** 4.6nm,0.3s,baz=164,slow=13,SNR=19 | **4.83** | **327** | Pn | **Pn** | **11 31 47.7** | **-1.3** |
| SIJI | baz=135,slow=20 | | | Sn | Sn | 11 32 37.3 | -6.7 |
| **SWI** | **Sorong** baz=4.9,SNR=6.7 | **4.84** | **327** | P | **Pn** | **11 31 48.1** | **-1.0** |
| **SWI** | **Sorong** | **4.84** | **327** | P | **Pn** | **11 31 47.8** | **-1.3** |
| **MSAI** | **Masohi** 17nm,0.5s,454nm0.1nm | **5.19** | **288** | P | **Pn** | **11 31 53.0** | **-0.9** |
| **AAI** | **Ambon** baz=6.0,SNR=8.2 | **5.81** | **282** | P | **Pn** | **11 32 02.0** | **-0.4** |
| **AAI** | **Ambon** 109nm,0.4s,2µm0.6nm0.6nm | **5.81** | **282** | P | **Pn** | **11 32 01.6** | **-0.8** |
| **NLAI** | **Namlea** 46nm,0.5s,1µm0.2nm0.2nm | **6.97** | **284** | P | **Pn** | **11 32 19.1** | **+0.7** |
| **LBMI** | **Labuha** 42nm,0.9s,0.1nm0.1nm | **7.68** | **304** | P | **Pn** | **11 32 26.8** | **-1.4** |
| **KDU** | **Kakadu** baz=7.9,SNR=54 | **7.80** | **190** | P | **Pn** | **11 32 30.1** | **+0.2** |
| **MTN** | **Manton Dam** baz=8.4,SNR=27 | **8.29** | **199** | P | **Pn** | **11 32 36.4** | **-0.1** |
| **SANI** | **Sanana** 20nm,0.7s | **8.39** | **290** | P | **Pn** | **11 32 35.5** | **-2.4** |
| **SOEI** | **Soe** baz=11,SNR=7.3 | **10.65** | **243** | P | **Pn** | **11 33 07.7** | **-1.4** |
| **SOEI** | **Soe** 52nm,0.7s | **10.65** | **243** | P | **Pn** | **11 33 07.5** | **-1.6** |
| **BATI** | **Baumata** 5.1nm,0.3s,baz=79,slow=5.2,SNR=6.5 | **11.38** | **242** | Pn | **Pn** | **11 33 17.3** | **-1.8** |
| **BATI** | **Baumata** | **11.38** | **242** | P | **Pn** | **11 33 17.1** | **-1.9** |
| **KNRA** | **Kununurra** baz=12,SNR=116 | **11.78** | **205** | P | **Pn** | **11 33 22.1** | **-2.2** |
| **COEN** | **Coen** baz=13,SNR=8.1 | **12.80** | **135** | P | **Pn** | **11 33 37.6** | **-0.8** |
| **WRA** | **Warramunga Arr** 1.1nm,0.3s,baz=359,slow=13,SNR=43 | **14.90** | **178** | Pn | Pn | 11 34 03.0 | -4.0 |
| WRA | 1.1nm,0.3s,baz=358,slow=24,SNR=8.3 | | | Sn | Sn | 11 36 41.8 | -9.4 |
| WRA | comp=Z,149nm,20.3s,baz=310,slow=40 | | | LR | LR | 11 40 32.6 | |
| **QIS** | **Mount Isa** baz=16,SNR=5.5 | **16.47** | **161** | P | **Pn** | **11 34 27.6** | **+0.2** |
| **ASAR** | **Alice Springs** 0.8nm,0.3s,baz=0.4,slow=12,SNR=40 | **18.60** | **180** | P | **P** | **11 34 51.7** | **-1.6** |
| ASAR | 0.3nm,0.3s,baz=359,slow=29,SNR=6.0 | | | S | Sn | 11 38 09.6 | -11 |
| ASAR | comp=Z,161nm,21.9s,baz=350,slow=40 | | | LR | LR | 11 42 56.8 | |
| **WRKA** | **Warakurna** baz=21,SNR=3.6 | **20.67** | **194** | P | Pn | 11 35 18.6 | +0.2 |
| **QLP** | **Quilpie** baz=24,SNR=8.0 | **23.67** | **156** | P | **P** | **11 35 50.0** | **+2.5** |
| **JNU** | **Nakatsue** comp=Z,50nm,20.3s,slow=36 | **37.98** | **356** | LR | LR | 11 53 23.8 | |
| **MKAR** | **Makanchi Array** 1.9nm,0.8s,baz=108,slow=8.0,SNR=6.4 | **68.72** | **325** | P | **P** | **11 41 40.9** | **+1.6** |

*ISCJB **14** 11:43:30.5±1.0, 34°.07N±0°.05×35°.7E±0°.1, h29km±6km, Error ellipse: s-maj=17.0km s-min=5.9km az=20.4*
*CSEM **14** 11:43:30.5±0.2, 34°.06N×35°.73E, h23km±2km, ML2.7, Error ellipse: s-maj=8.6km s-min=2.8km az=108.0*
*NSSC **14** 11:43:30.8±1.3, 34°.09N×35°.77E, h19km±450km, ML2.0*
*GRAL **14** 11:43:31.7±0.3, 34°.03N×35°.74E, h25km±2km, MD2.7*
**ISC 14 11:43:30.2**±1.2, **34°.08N**±0°.04×**35°.72E**±0°.09, **h28**km±9km,
**n15,** σ0§**59**/25, **Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BHL** | **Bhannes** | **0.19** | **197** | *e*P | **Pb** | **11 43 36.4** | **+0.2** |
| BHL | | | | *e*S | **Sb** | **11 43 39.9** | **-0.3** |
| **BHL** | **Bhannes** | **0.19** | **197** | *e*P | **Pb** | **11 43 36.4** | **+0.2** |
| BHL | | | | *e*S | **Sb** | **11 43 39.9** | **-0.3** |
| **HWQ** | **Hawqa** | **0.27** | **44** | *e*P | **Pn** | **11 43 38.3** | **-0.2** |
| HWQ | | | | *e*S | **Sn** | **11 43 43.2** | **-0.5** |
| **HWQ** | **Hawqa** | **0.27** | **44** | *e*P | **Pn** | **11 43 38.3** | **-0.2** |
| HWQ | | | | *e*S | **Sn** | **11 43 43.2** | **-0.5** |
| **DQRL** | **Deir Qamar** | **0.40** | **198** | *e*P | **Pb** | **11 43 39.0** | **0.0** |
| **DQRL** | **Deir Qamar** | **0.40** | **198** | *e*P | **Pb** | **11 43 39.0** | **0.0** |
| **RCY** | **Rachaya** | **0.59** | **171** | *e*P | **Pb** | **11 43 41.9** | **-0.3** |
| **BRBR** | **Barbar** | **0.70** | **164** | *e*P | **Pb** | **11 43 44.0** | **+0.1** |
| BRBR | | | | *e*S | **Sb** | **11 43 52.9** | **-0.4** |
| BRBR | comp=E,41nm,0.2s | | | AML | AML | 11 43 54.4 | |
| BRBR | comp=N,52nm,0.3s | | | AML | AML | 11 43 54.6 | |
| **BRBR** | **Barbar** | **0.70** | **164** | *e*P | **Pb** | **11 43 44.0** | **+0.1** |
| BRBR | | | | *e*S | **Sb** | **11 43 52.9** | **-0.4** |
| BRBR | comp=N,52nm,0.3s | | | | | | |
| **HAWK** | **Haweek** | **0.72** | **52** | *e*P | **Pb** | **11 43 44.7** | **+0.5** |
| HAWK | | | | *e*S | **Sb** | **11 43 53.0** | **-0.8** |
| HAWK | comp=E,54nm,0.4s | | | AML | AML | 11 43 55.7 | |
| HAWK | comp=N,69nm,0.3s | | | AML | AML | 11 43 57.4 | |
| **HAWK** | **Haweek** | **0.72** | **52** | *e*P | **Pb** | **11 43 44.7** | **+0.5** |
| HAWK | | | | *e*S | **Sb** | **11 43 53.0** | **-0.8** |
| HAWK | comp=N,69nm,0.3s | | | | | | |
| **BIDA** | **Albida** | **1.05** | **28** | *e*P | **Pn** | **11 43 50.1** | **+0.9** |
| BIDA | | | | *e*S | **Sb** | **11 44 02.8** | **-0.6** |
| BIDA | | | | AML | AML | 11 44 05.2 | |
| BIDA | comp=N,81nm,0.6s | | | AML | AML | 11 44 07.4 | |
| BIDA | comp=E,139nm,0.3s | | | | | | |
| **BIDA** | **Albida** | **1.05** | **28** | *e*P | **Pn** | **11 43 50.1** | **+0.9** |
| BIDA | | | | *e*S | **Sb** | **11 44 02.8** | **-0.6** |
| BIDA | comp=E,139nm,0.3s | | | | | | |
| **ROOS** | **tl_alroos** | **1.30** | **86** | *e*P | **Pn** | **11 43 53.6** | **+1.0** |
| **ROOS** | **tl_alroos** | **1.30** | **86** | *e*P | **Pn** | **11 43 53.6** | **+1.0** |

*JMA **14** 11:52:11.6±0.4, 43°.98N×147°.91E, h0km, M3.9*
*SKHL **14** 11:52:12.9±0.4, 44°.35N×148°.05E, h35km±1km, mb4.5/3*
**ISC 14 11:52:09.9**±3.7, **44°.31N**±0°.08×**148°.3E**±0°.2, **h33**km±10km,
**n12,** σ1§**52**/21, **Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **0.98** | **342** | *e*P | **Pn** | **11 52 28.1** | **+0.8** |
| KUR | | | | AMB | AMB | 11 52 28.5 | |
| KUR | 21nm,0.3s | | | AMB | AMB | 11 52 28.5 | |
| KUR | 63nm,0.3s | | | AMB | AMB | 11 52 28.5 | |
| KUR | 241nm,0.3s | | | *i* S | **Sb** | **11 52 39.8** | **-1.2** |
| KUR | | | | A | A | 11 52 40.4 | |
| KUR | 221nm,0.3s | | | A | A | 11 52 40.4 | |
| KUR | 160nm,0.3s | | | A | A | 11 52 40.4 | |
| **SHO** | **Shikotan** | **1.14** | **248** | *e*P | **Pn** | **11 52 29.8** | **+0.3** |
| SHO | | | | AMB | AMB | 11 52 30.0 | |
| SHO | 70nm,0.2s | | | *e*S | **Sn** | **11 52 42.5** | **-1.5** |
| SHO | | | | A | A | 11 52 43.1 | |
| **YUK** | **Yuzn-Kuril'sk** | **1.77** | **262** | *i* P | **Pn** | **11 52 39.2** | **+1.0** |
| YUK | | | | AMB | AMB | 11 52 41.7 | |
| YUK | 51nm,0.2s | | | AMB | AMB | 11 52 41.7 | |
| YUK | 68nm,0.2s | | | AMB | AMB | 11 52 41.7 | |
| YUK | 181nm,0.2s | | | *i* S | **Sn** | **11 52 58.5** | **-1.1** |
| YUK | | | | A | A | 11 53 03.7 | |
| YUK | 154nm,0.6s | | | A | A | 11 53 03.7 | |
| YUK | 255nm,0.6s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.07** | **244** | P | **Pn** | **11 52 42.5** | **+0.2** |
| NEM2 | | | | *e*S | **Sn** | **11 53 04.8** | **-2.2** |
| **JRA** | **Rausu** | **2.31** | **262** | P | **Pn** | **11 52 47.4** | **+1.8** |
| JRA | | | | *e*S | **Sn** | **11 53 14.0** | **+1.1** |
| **JNK** | **Nakash** | **2.68** | **256** | P | **Pn** | **11 52 52.1** | **+1.4** |
| JNK | | | | *e*S | **Sn** | **11 53 21.6** | **-0.4** |
| **JAK** | **Akkeshi** | **2.92** | **245** | P | **Pn** | **11 52 54.7** | **+0.7** |
| **JAR** | **Ashorobuto** | **3.43** | **254** | P | **Pn** | **11 53 03.3** | **+2.3** |
| **JOB** | **Onbets** | **3.53** | **248** | P | **Pn** | **11 53 03.9** | **+1.5** |
| JOB | | | | *e*S | **Sn** | **11 53 42.3** | **-0.6** |
| **JMP** | **Maruseppu** | **3.56** | **267** | P | **Pn** | **11 53 05.1** | **+2.2** |
| **JCH** | **Churui** | **3.97** | **247** | P | **Pn** | **11 53 09.4** | **+1.0** |
| JCH | | | | *e*S | **Sn** | **11 53 52.0** | **-1.8** |
| **YSS** | **Yuzh-Sakhalins** | **4.70** | **306** | *e*P | **Pn** | **11 53 19.7** | **+1.2** |
| YSS | | | | *e*S | **Sn** | **11 54 10.2** | **-1.6** |
| YSS | 103nm,0.3s | | | A | A | 11 54 13.1 | |

*NEIC **14** 11:53:15.1±1.3, 19°.39N×122°.15E, h10km, mb4.4/5, Error ellipse: s-maj=25.4km s-min=9.1km az=113.0*
*ISCJB **14** 11:53:16.6±0.4, 19°.36N±0°.03×122°.16E±0°.07, h44km, mb4.0/16, MS3.5/5, Error ellipse: s-maj=9.7km s-min=3.9km az=10.2*
*IDC **14** 11:53:19.6±4.7, 19°.24N×122°.17E, h60km±44km, mb3.7/11, mb1 3.9/13, mb1mx3.8/44, mbtmp4.1/13, ML3.7/2, MS3.4/6, Ms1 3.5/6, ms1mx3.1/37, Error ellipse: s-maj=23.5km s-min=16.6km az=78.0*
**ISC 14 11:53:18.1**±0.6, **19°.34N**±0°.04×**122°.19E**±0°.08, **h44**km, **n45,**
σ1§**51**/41, **mb4.1**/16, **MS3.4**/5, **1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGCP** | **Mt. Cagua** | **1.10** | **187** | *e*P | **Pn** | **11 53 34.9** | **-2.2** |
| SGCP | | | | *e*S | **Sn** | **11 53 47.6** | **-3.6** |
| **CVP** | **Callao Caves** | **1.67** | **192** | *e*P | **Pn** | **11 53 43.5** | **-1.4** |
| CVP | | | | *e*S | **Sn** | **11 54 05.7** | **+0.6** |
| **APYP** | **Conner** | **1.73** | **212** | *e*P | **Pn** | **11 53 43.0** | **-2.7** |
| **PIP** | **Pasuquin** | **1.80** | **236** | ⇑*i*P | Pn | 11 53 42.4 | -4.4 |
| PIP | | | | *e*S | **Sn** | **11 54 07.1** | **-1.3** |
| **ABRA** | **Dolores** | **2.19** | **220** | *e*P | **Pn** | **11 53 50.1** | **-2.0** |
| **PALP** | **Palanan** | **2.28** | **174** | *e*P | **Pn** | **11 53 53.6** | **+0.4** |
| **CAUP** | **Cauayan** | **2.41** | **188** | *e*P | **Pn** | **11 53 56.6** | **+1.5** |
| **SZP** | **Santa** | **2.43** | **223** | *e*Pn | **Pn** | **11 53 54.9** | **-0.5** |
| **TWG** | **Pinlang** | **3.61** | **343** | *e*Pn | **Pn** | **11 54 10.5** | **-1.1** |
| **BOLP** | **Bolinao** | **3.66** | **217** | *e*P | **Pn** | **11 54 13.2** | **+0.9** |
| **YULB** | **Yu-li** | **4.11** | **348** | *e*Pn | **Pn** | **11 54 16.1** | **-2.4** |
| **SCZP** | **Santa Cruz** | **4.16** | **212** | *e*P | **Pn** | **11 54 21.6** | **+2.5** |
| **TPUB** | **Ta-pu** | **4.20** | **340** | *e*Pn | **Pn** | **11 54 19.9** | **+0.2** |
| **SSLB** | **Suanglung** | **4.57** | **346** | *e*Pn | **Pn** | **11 54 24.2** | **-0.6** |
| **NACB** | **Ninganchiao** | **4.84** | **354** | *e*Pn | **Pn** | **11 54 25.4** | **-3.0** |
| **YOJ** | **Yonaguni jima** | **5.15** | **8** | *e*Pn | **Pn** | **11 54 31.4** | **-1.2** |
| **YHNB** | **Yeheng** | **5.35** | **352**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0.2nm,0.3s,baz=65,slow=5.3,SNR=3.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **82.93** | **333** | LR | LR | 12 45 54.3 | |
| | comp=Z,79nm,18.3s,baz=345,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.05** | **23** | P | **P** | **12 05 59.4** | **+0.7** |
| | 3.5nm,0.9s,baz=314,slow=5.1,SNR=8.5 | | | | | | |

*ISCJB* ***14*** *12:07:06.2±0.3,66°.33N±0°.02×15°.09E±0°.04,h0km, mb3.8/1,MS3.7/4, Error ellipse: s-maj=3.3km s-min=2.4km az=160.0*

*CSEM* ***14*** *12:07:09.8±0.2,66°.47N×14°.72E,h2km,ML2.7, Error ellipse: s-maj=5.8km s-min=3.2km az=150.0, Mining explosion.*

*HEL* ***14*** *12:07:09.1±0.4,66°.40N×14°.48E,h0km,ML2.9, Suspected explosion*

*BER* ***14*** *12:07:11.8±4.1,66°.42N×14°.70E,h0km,ML2.7, ML3.1(NAO), Explosion*

*NAO* ***14*** *12:07:11.0±1.1,66°.40N×14°.92E,ML3.1*

*IDC* ***14*** *12:07:12.4±1.2,66°.39N×15°.16E,h0km,mb3.8/1, mb1 3.5/6,mb1mx3.2/45,mbtmp3.5/6,ML3.1/5,MS3.3/7, Ms1 3.3/7,ms1mx2.8/39, Error ellipse: s-maj=19.8km s-min=6.9km az=119.0*

**ISC 14 12:07:10.4±0.7, 66°.37N±0°.03×14°.67E±0°.03, h0km, n57, σ2°.37/88, MS3.7/4, Northern Norway**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MOR8** | **Moi Rana** | **0.22** | **206** | *e*P | **Pg** | **12 07 12.4** | **-2.1** |
| MOR8 | | | | *e*S | **Sg** | **12 07 14.5** | **-2.7** |
| MOR8 | | | | IAML | | 12 07 17.4 | |
| | comp=Z,10μm,0.4s | | | | | | |
| **FLOS** | **Flostrand** | **0.53** | **268** | *e*P | **Pg** | **12 07 19.9** | **-0.6** |
| FLOS | | | | *e*S | **Sg** | **12 07 28.4** | **+1.1** |
| FLOS | | | | IAML | | 12 07 30.2 | |
| | comp=Z,271nm,0.4s | | | | | | |
| **FLOS** | **Flostrand** | **0.53** | **268** | *e*P | **Pg** | **12 07 19.9** | **-0.6** |
| | SNR=90 | | | | | | |
| FLOS | | | | *e*S | **Sg** | **12 07 28.4** | **+1.1** |
| | SNR=90 | | | | | | |
| **KONS** | **Konsvik** | **0.64** | **283** | *e*P | **Pg** | **12 07 21.5** | **-1.1** |
| KONS | | | | *e*S | **Sg** | **12 07 30.9** | **+0.1** |
| KONS | | | | IAML | | 12 07 32.8 | |
| | comp=Z,259nm,0.4s | | | | | | |
| **KONS** | **Konsvik** | **0.64** | **283** | *e*P | **Pg** | **12 07 21.5** | **-1.1** |
| | SNR=90 | | | | | | |
| KONS | | | | *e*S | **Sg** | **12 07 31.0** | **+0.1** |
| | SNR=90 | | | | | | |
| **STOK** | **Stokkvaagen** | **0.67** | **268** | *e*P | **Pg** | **12 07 22.3** | **-0.9** |
| STOK | | | | *e*S | **Sb** | **12 07 33.6** | **-1.0** |
| **STOK** | **Stokkvaagen** | **0.67** | **268** | *e*P | **Pg** | **12 07 22.3** | **-0.9** |
| | SNR=90 | | | | | | |
| STOK | | | | *e*S | **Sb** | **12 07 33.6** | **-1.0** |
| | SNR=90 | | | | | | |
| **STEI** | **Steigen** | **1.59** | **8** | *e*P | **Pn** | **12 07 37.6** | **-2.1** |
| STEI | | | | *e*S | **Sn** | **12 08 00.3** | **-0.5** |
| STEI | | | | IAML | | 12 08 02.6 | |
| | comp=Z,92nm,0.4s | | | | | | |
| **STEI** | **Steigen** | **1.59** | **8** | *e*P | **Pn** | **12 07 37.6** | **-2.1** |
| | SNR=50 | | | | | | |
| **ERTU** | **Ertsjaerv** | **3.02** | **83** | *e*P | **Pn** | **12 07 58.7** | **-0.7** |
| **ERTU** | **Ertsjaerv** | **3.02** | **83** | P | **Pn** | **12 07 58.7** | **-0.7** |
| **LANU** | **Lannavaara** | **3.31** | **56** | *e*SG | **Sb** | **12 08 52.2** | **+1.4** |
| **LANU** | **Lannavaara** | **3.31** | **56** | Sg | **Sb** | **12 08 52.1** | **+1.4** |
| **KIF** | **Kilpisjarvi** | **3.53** | **39** | Pn | **Pn** | **12 08 06.1** | **-0.3** |
| KIF | | | | Pg | **Pb** | **12 08 15.3** | **+1.6** |
| KIF | | | | Sn | **Sn** | **12 08 47.6** | **-1.1** |
| KIF | | | | Lg | Lg | 12 08 59.8 | |
| **KIF** | **Kilpisjarvi** | **3.53** | **39** | Pn | **Pn** | **12 08 06.1** | **-0.3** |
| KIF | | | | Pg | **Pb** | **12 08 15.3** | **+1.6** |
| KIF | | | | Sn | **Sn** | **12 08 47.6** | **-1.1** |
| KIF | | | | Lg | Lg | 12 08 59.8 | |
| **KIF** | **Kilpisjarvi** | **3.53** | **39** | *e*SG | **Sb** | **12 08 59.6** | **+2.5** |
| KIF | | | | MSG | | 12 09 08.0 | |
| | comp=Z,31nm,0.3s | | | | | | |
| **KIF** | **Kilpisjarvi** | **3.53** | **39** | Pn | **Pn** | **12 08 06.1** | **-0.3** |
| | SNR=50 | | | | | | |
| **KIF** | **Kilpisjarvi** | **3.53** | **39** | Pg | **Pb** | **12 08 15.3** | **+1.6** |
| | SNR=90 | | | | | | |
| KIF | | | | Sn | **Sn** | **12 08 47.7** | **-1.1** |
| | SNR=50 | | | | | | |
| KIF | | | | Sg | **Sb** | **12 08 59.5** | **+2.5** |
| KIF | | | | Lg | Lg | 12 08 59.8 | |
| **UMAU** | **Umeaa** | **3.56** | **132** | *e*P | **Pn** | **12 08 06.7** | **0.0** |
| UMAU | | | | *e*SG | **Sb** | **12 09 00.6** | **+2.9** |
| **UMAU** | **Umeaa** | **3.56** | **132** | P | **Pn** | **12 08 06.7** | **0.0** |
| UMAU | | | | Sg | **Sb** | **12 09 00.5** | **+2.9** |
| **HEF** | **Hetta** | **4.03** | **55** | *e*SG | **Sb** | **12 09 15.0** | **+3.6** |
| HEF | | | | MSG | | 12 09 20.1 | |
| | comp=Z,24nm,0.4s | | | | | | |
| **HEF** | **Hetta** | **4.03** | **55** | Sg | **Sb** | **12 09 15.0** | **+3.6** |
| **RNF** | **Rovaniemi** | **4.55** | **82** | *e*SG | **Sb** | **12 09 31.1** | **+4.8** |
| **RNF** | **Rovaniemi** | **4.55** | **82** | Sg | **Sb** | **12 09 31.1** | **+4.8** |
| **VAF** | **Ylistaro** | **4.78** | **130** | *e*SG | **Sg** | **12 09 38.8** | **-5.0** |
| VAF | | | | MSG | | 12 09 44.2 | |
| | comp=Z,26nm,0.4s | | | | | | |
| **OUL** | **Oulu** | **4.81** | **100** | *e*SG | **Sb** | **12 09 38.8** | **+5.2** |
| **ARA0** | **ARCESS Array S** | **5.17** | **47** | Pn | **Pn** | **12 08 27.4** | **-1.5** |
| | baz=236,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **12 09 24.9** | **-4.3** |
| | baz=243,slow=18 | | | | | | |
| ARA0 | | | | Lg | Lg | 12 09 47.3 | |
| | baz=234,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **5.17** | **47** | Pn | **Pn** | **12 08 27.4** | **-1.5** |
| | baz=236,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **12 09 24.9** | **-4.3** |
| | baz=243,slow=18 | | | | | | |
| ARA0 | | | | Lg | Lg | 12 09 47.3 | |
| | baz=234,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **5.17** | **47** | Pn | **Pn** | **12 08 27.4** | **-1.5** |
| | SNR=50 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **12 09 24.9** | **-4.3** |
| | SNR=50 | | | | | | |
| ARA0 | | | | Lg | Lg | 12 09 47.3 | |
| | SNR=1.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **5.17** | **47** | Pn | **Pn** | **12 08 27.4** | **-1.5** |
| | comp=Z,0.8nm,0.3s,baz=236,slow=13,SNR=19 | | | | | | |
| ARCES | | | | Sn | **Sn** | **12 09 24.4** | **-4.8** |
| | comp=Z,3.4nm,0.3s,baz=234,slow=21,SNR=10 | | | | | | |
| ARCES | | | | Lg | Lg | 12 09 48.1 | |
| | comp=Z,5.6nm,0.3s,baz=231,slow=24,SNR=11 | | | | | | |
| ARCES | | | | LR | LR | 12 10 35.0 | |
| | comp=Z,73nm,18.4s,baz=230,slow=40 | | | | | | |
| **AKN** | **Aaknes** | **5.37** | **222** | Pn | **Pn** | **12 08 32.6** | **+1.0** |
| AKN | | | | Sn | **Sn** | **12 09 36.0** | **+1.9** |
| AKN | | | | Lg | Lg | 12 09 58.3 | |
| **AKN** | **Aaknes** | **5.37** | **222** | Pn | **Pn** | **12 08 32.6** | **+1.0** |
| AKN | | | | Sn | **Sn** | **12 09 36.0** | **+1.9** |
| AKN | | | | Lg | Lg | 12 09 58.3 | |
| **AKN** | **Aaknes** | **5.37** | **222** | Pn | **Pn** | **12 08 32.6** | **+1.0** |
| | SNR=50 | | | | | | |
| AKN | | | | Sn | **Sn** | **12 09 36.0** | **+1.9** |
| | SNR=50 | | | | | | |
| AKN | | | | Lg | Lg | 12 09 58.3 | |
| **NB2** | **NORSAR Subarra** | **5.56** | **198** | Pn | **Pn** | **12 08 34.8** | **+0.5** |
| | baz=16,slow=16 | | | | | | |
| NB2 | | | | Pg | **Pb** | **12 08 51.0** | **+2.7** |
| | baz=17,slow=22 | | | | | | |
| NB2 | | | | Sn | **Sn** | **12 09 40.4** | **+1.5** |
| NB2 | | | | Lg | Lg | 12 10 04.0 | |
| | baz=15,slow=28 | | | | | | |
| **NB2** | **NORSAR Subarra** | **5.56** | **198** | Pn | **Pn** | **12 08 34.8** | **+0.5** |
| | baz=16,slow=16 | | | | | | |
| NB2 | | | | Pg | **Pb** | **12 08 51.0** | **+2.7** |
| | baz=17,slow=22 | | | | | | |
| NB2 | | | | Sn | **Sn** | **12 09 40.4** | **+1.5** |
| NB2 | | | | Lg | Lg | 12 10 04.0 | |
| | baz=15,slow=28 | | | | | | |
| **NB2** | **NORSAR Subarra** | **5.56** | **198** | Pn | **Pn** | **12 08 34.8** | **+0.5** |
| | SNR=50 | | | | | | |
| NB2 | | | | Sn | **Sn** | **12 09 40.4** | **+1.5** |
| | SNR=50 | | | | | | |
| NB2 | | | | Lg | Lg | 12 10 04.0 | |
| | SNR=3.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **5.56** | **198** | Pn | **Pn** | **12 08 36.0** | **+1.7** |
| | comp=Z,0.7nm,0.3s,baz=13,slow=12,SNR=11 | | | | | | |
| NOA | | | | Sn | **Sn** | **12 09 39.0** | **+0.1** |
| | comp=Z,1.7nm,0.3s,baz=335,slow=21,SNR=5.3 | | | | | | |
| NOA | | | | Lg | Lg | 12 10 06.4 | |
| | comp=Z,6.3nm,0.3s,baz=22,slow=21,SNR=8.0 | | | | | | |
| NOA | | | | LR | LR | 12 11 00.7 | |
| | comp=Z,70nm,21.4s,baz=20,slow=40 | | | | | | |
| **KJN** | **Kajaani** | **5.94** | **107** | *e*SG | Sg | 12 10 14.1 | -6.8 |
| **KU6** | **Riekki** | **6.17** | **86** | *e*SG | Sb | 12 10 19.8 | +6.9 |
| **RAF** | **Rauma** | **6.22** | **146** | *e*S | **Sn** | **12 09 52.9** | **-2.0** |
| **HFS** | **Hagfors** | **6.27** | **184** | Pn | **Pn** | **12 08 45.0** | **+1.0** |
| | baz=23,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **12 09 53.8** | **-2.4** |
| | baz=19,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 12 10 28.8 | |
| | baz=3.8,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **6.27** | **184** | Pn | **Pn** | **12 08 45.0** | **+1.0** |
| | baz=23,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **12 09 53.8** | **-2.4** |
| | baz=19,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 12 10 28.8 | |
| | baz=3.8,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **6.27** | **184** | Pn | **Pn** | **12 08 45.2** | **+1.1** |
| | comp=Z,0.5nm,0.3s,baz=2.1,slow=12,SNR=7.9 | | | | | | |
| HFS | | | | Pg | **Pb** | **12 09 02.5** | **+2.2** |
| | comp=Z,0.7nm,0.3s,baz=2.2,slow=15,SNR=6.5 | | | | | | |
| HFS | | | | Sn | **Sn** | **12 09 54.7** | **-1.5** |
| | comp=Z,1.6nm,0.3s,baz=9.2,slow=19,SNR=8.4 | | | | | | |
| HFS | | | | Lg | Lg | 12 10 27.2 | |
| | comp=Z,3.3nm,0.3s,baz=4.4,slow=27,SNR=10 | | | | | | |
| HFS | | | | LR | LR | 12 11 22.4 | |
| | comp=Z,96nm,18.8s,baz=49,slow=40 | | | | | | |
| **HFS** | **Hagfors** | **6.27** | **184** | Pn | **Pn** | **12 08 45.0** | **+1.0** |
| | SNR=50 | | | | | | |
| HFS | | | | Lg | Lg | 12 10 28.8 | |
| | SNR=8.5 | | | | | | |
| **FIA0** | **FINESS Array S** | **7.04** | **129** | Pn | **Pn** | **12 08 54.5** | **0.0** |
| | baz=312,slow=11 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **12 10 10.0** | **-5.2** |
| FIA0 | | | | Lg | Lg | 12 10 48.9 | |
| | baz=322,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **7.04** | **129** | Pn | **Pn** | **12 08 54.5** | **0.0** |
| | baz=312,slow=11 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **12 10 10.0** | **-5.2** |
| FIA0 | | | | Lg | Lg | 12 10 48.9 | |
| | baz=322,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **7.04** | **129** | Pn | **Pn** | **12 08 54.5** | **0.0** |
| | SNR=50 | | | | | | |
| **FINES** | **FINESS Array B** | **7.04** | **129** | Pn | **Pn** | **12 08 54.6** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=316,slow=10,SNR=7.7 | | | | | | |
| FINES | | | | Lg | Lg | 12 10 47.5 | |
| | comp=Z,5.2nm,0.3s,baz=321,slow=24,SNR=13 | | | | | | |
| **APA0** | **Apatity Array** | **7.28** | **72** | Pn | **Pn** | **12 08 57.8** | **0.0** |
| APA0 | | | | Sn | **Sn** | **12 10 16.3** | **-4.8** |
| | baz=254,slow=18 | | | | | | |
| APA0 | | | | Lg | Lg | 12 10 55.8 | |
| | baz=282,slow=22 | | | | | | |
| **APA0** | **Apatity Array** | **7.28** | **72** | Pn | **Pn** | **12 08 57.8** | **0.0** |
| APA0 | | | | Sn | **Sn** | **12 10 16.3** | **-4.8** |
| | baz=254,slow=18 | | | | | | |
| APA0 | | | | Lg | Lg | 12 10 55.8 | |
| | baz=282,slow=22 | | | | | | |
| **APA0** | **Apatity Array** | **7.28** | **72** | Pn | **Pn** | **12 08 57.8** | **0.0** |
| | SNR=50 | | | | | | |
| APA0 | | | | Sn | **Sn** | **12 10 16.3** | **-4.8** |
| | baz=254,slow=16,SNR=50 | | | | | | |
| **AKASG** | **Malin Array Be** | **17.37** | **148** | Pn | Pn | 12 11 08.0 | -5.8 |
| | comp=Z,0.5nm,0.3s,baz=339,slow=12,SNR=3.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.01** | **76** | P | **P** | **12 14 04.1** | **+0.1** |
| | comp=Z,0.5nm,0.4s,baz=311,slow=6.6,SNR=2.2 | | | | | | |
| **GEYT** | **Alibeck** | **37.66** | **117** | LR | LR | 12 31 13.7 | |
| | comp=Z,41nm,18.3s,baz=230,slow=38 | | | | | | |
| **ULM** | **Lac du Bonnet** | **52.35** | **311** | LR | LR | 12 35 51.9 | |
| | comp=Z,86nm,20.8s,baz=25,slow=33 | | | | | | |
| **NVAR** | **Mina Array Bea** | **69.48** | **322** | LR | LR | 12 47 32.1 | |
| | comp=Z,95nm,18.3s,baz=21,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **73.81** | **307** | LR | LR | 12 48 48.5 | |
| | comp=Z,35nm,20.1s,baz=0.0,slow=34 | | | | | | |

**GUC 14 12:07:33.5±0.8, 24°.34S×69°.91W, h112km±11km, ML3.5, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANCH** | **Antofagasta** | **0.80** | **325** | *e*P | Pn | 12 07 43.7 | -9.2 |
| ANCH | | | | *e*S | Sn | 12 07 58.0 | -10 |
| **PB10** | **IPOC Station P** | **1.01** | **324** | *e*P | Pn | 12 07 55.3 | +0.2 |
| PB10 | | | | *e*S | Sn | 12 08 12.0 | +0.7 |
| PB10 | | | | AML | AML | 12 08 17.1 | |
| | comp=N,1μm,1.2s | | | | | | |
| **PB06** | **IPOC Station P** | **1.65** | **11** | *e*P | Pn | 12 08 02.8 | +0.2 |
| PB06 | | | | *e*S | Sn | 12 08 25.4 | +0.7 |
| PB06 | | | | AML | AML | 12 08 29.5 | |
| | comp=N,403nm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **2.01** | **354** | *e*P | Pn | 12 08 07.6 | +0.6 |
| PB04 | | | | *e*S | Sn | 12 08 33.3 | +0.7 |
| PB04 | | | | AML | AML | 12 08 43.1 | |
| | comp=E,285nm,0.7s | | | | | | |
| **PB07** | **IPOC Station P** | **2.60** | **0** | *e*P | Pn | 12 08 15.0 | +0.4 |
| PB07 | | | | *e*S | Sn | 12 08 46.6 | +0.4 |
| PB07 | | | | AML | AML | 12 09 02.7 | |
| | comp=N,142nm,2.2s | | | | | | |
| **PB09** | **IPOC Station P** | **2.60** | **14** | *e*P | Pn | 12 08 15.6 | +0.9 |
| PB09 | | | | AML | AML | 12 08 58.8 | |
| | comp=E,471nm,0.3s | | | | | | |
| **CDCH** | **Caldera** | **2.84** | **197** | *e*P | Pn | 12 08 14.6 | -2.8 |
| CDCH | | | | *e*S | Sn | 12 08 47.6 | -3.6 |
| **PB01** | **IPOC Station P** | **3.30** | **7** | *e*P | Pn | 12 08 24.4 | +0.6 |
| PB01 | | | | *e*S | Sn | 12 09 02.8 | +0.3 |
| PB01 | | | | AML | AML | 12 09 14.4 | |
| | comp=E,110nm,0.1s | | | | | | |

**CASC 14 12:09:40.6±1.4, 9°.63N×84°.07W, h20km±3km, MD3.6, 1D, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LCR2** | **La Lucha 2** | **0.12** | **30** | *i* P | Pg | 12 09 45.6 | +0.5 |
| LCR2 | | | | *e*S | Sg | 12 09 49.3 | +1.1 |
| **BUS** | **Buena Vista** | **0.31** | **104** | *e*P | Pg | 12 09 48.1 | 0.0 |
| BUS | | | | *e*S | Sg | 12 09 53.5 | +0.3 |
| **CGA2** | **Cerro Gallo 2** | **0.55** | **314** | *e*P | Pb | 12 09 51.5 | -0.2 |
| CGA2 | | | | *e*S | Sg | 12 10 00.3 | +0.8 |
| **JCR** | **Jicaral** | **1.05** | **282** | *e*P | Pb | 12 09 59.5 | -0.8 |
| JCR | | | | *e*S | Sn | 12 10 14.8 | +0.2 |
| **JTS** | **JuntasAbangare** | **1.09** | **307** | *e*P | Pn | 12 09 59.9 | -1.0 |
| JTS | | | | *e*S | Sb | 12 10 13.6 | -1.2 |
| **PTEN** | **Parque Tenorio** | **1.41** | **320** | *i* P | Pn | 12 10 04.7 | -0.5 |
| PTEN | | | | *i* S | Sb | 12 10 24.1 | +0.2 |
| **CUI** | **Cuipilapa** | **1.48** | **313** | *i* P | Pn | 12 10 06.4 | +0.1 |
| CUI | | | | *i* S | Sb | 12 10 26.2 | +0.1 |
| **TBS2** | | **1.62** | **121** | *e*P | Pn | 12 10 08.7 | +0.4 |
| TBS2 | | | | *e*S | Sn | 12 10 29.3 | +0.5 |
| **BRU** | **Baru** | **1.70** | **119** | *e*P | Pn | 12 10 10.1 | +0.3 |
| BRU | | | | *e*S | Sb | 12 10 33.1 | 0.0 |
| **LAPC** | **Finca la Perla** | **1.75** | **310** | *i* P | Pn | 12 10 09.8 | -0.2 |

**MAN 14 12:16:22, 18°.61N×120°.91E, h7km, mb4.7, ML3.6, MS3.5, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SGCP** | **Mt. Cagua** | **1.14** | **109** | *e*P | Pg | 12 16 43.5 | -0.3 |
| **CVP** | **Callao Caves** | **1.25** | **136** | *e*P | Pg | 12 16 52.5 | +6.5 |
| **CAUP** | **Cauayan** | **1.87** | **152** | *e*P | Pg | 12 17 00.4 | +2.5 |
| **PALP** | **Palanan** | **2.11** | **137** | *e*P | Pg | 12 17 04.6 | +2.1 |

*ISCJB* ***14*** *12:59:26.2±0.4,60°.39N±0°.02×140°.66W±0°.03,h5km±2km, mb4.2/36,MS3.3/8, Error ellipse: s-maj=2.7km s-min=2.0km az=27.2*

*IDC* ***14*** *12:59:26.8±0.6,60°.36N×140°.59W,h0km,mb4.1/15, mb1 4.3/21,mb1mx4.1/33,mbtmp4.1/21,ML3.5/6,MS3.3/9, Ms1 3.3/9,ms1mx3.0/38, Error ellipse: s-maj=14.6km s-min=8.2km az=29.0*

*NEIC* ***14*** *12:59:27.7,60°.35N×140°.63W,h1km,mb4.2/27,MW4.1, ML4.1(AEIC),MW4.3(OTT),Moment Tensor Solution. s24 Moment tensor: Scale 10^15Nm; Mrr=0.68; Mθθ 0.86; Mφφ-0.18; Mrθ-1.04; Mrφ-1.58; Mθφ-0.53; Best double couple: M=2.10000×10^15 NP1:φs345.00000°,δ55.00000°, λ-20.00000°. NP2:φs87.00000°,δ74.00000°, λ-143.00000°. Principal axes: T 2.1200, Plg12.0000°, Azm212.0000°; N 0.0000, Plg50.0000°, Azm107.0000°; P -2.1200, Plg37.0000°, Azm311.0000°; After OTT.*

*PGC* ***14*** *12:59:27.7±2.9,60°.35N×140°.63W,h1km,ML4.3/3,Mw4.3, 133km northwest of Yakutat, Ak Southeastern Alaska*

*BJI* ***14*** *12:59:27.3,60°.40N×140°.90W,h10km,mb4.6/7,mB4.8/4, Ms4.4/1,Ms7 3.7/1*

**ISC 14 12:59:26.9±0.8, 60°.36N±0°.02×140°.60W±0°.02, h2km±5km, n224, σ1°.36/264, mb4.2/36, MS3.4/8, Southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAMH** | **Samovar Hills** | **0.25** | **201** | P | **Pg** | **12 59 31.5** | **-0.2** |
| SAMH | | | | S | **Sg** | **12 59 35.5** | **+0.5** |
| **TABL** | **Table Mountain** | **0.28** | **286** | P | **Pg** | **12 59 31.8** | **-0.5** |
| TABL | | | | S | **Sg** | **12 59 35.5** | **-0.4** |
| **PCA** | **Pinnacle** | **0.32** | **147** | P | **Pg** | **12 59 32.8** | **-0.2** |
| PCA | | | | S | **Sg** | **12 59 38.3** | **+1.2** |
| **RKAV** | **Rock Avalanche** | **0.38** | **261** | P | **Pg** | **12 59 33.6** | **-0.5** |
| RKAV | | | | S | **Sg** | **12 59 38.9** | **-0.1** |
| **LOGN** | **Logan Glacier** | **0.51** | **337** | P | **Pg** | **12 59 36.4** | **-0.2** |
| LOGN | | | | S | **Sg** | **12 59 42.6** | **-0.5** |
| **MESA** | **MESA** | **0.70** | **255** | P | **Pb** | **12 59 40.8** | **-1.1** |
| **CTGM** | **Chitina Glacie** | **0.70** | **329** | P | **Pg** | **12 59 39.8** | **-0.6** |
| CTGM | | | | S | **Sg** | **12 59 49.4** | **-0.2** |
| **BAGL** | **Bagley Icefiel** | **0.75** | **280** | P | **Pg** | **12 59 39.6** | **-1.6** |
| **ISLE** | **Juniper Island** | **0.90** | **286** | P | **Pg** | **12 59 41.9** | **-2.2** |
| **PNL** | **Peninsula** | **0.92** | **139** | P | **Pg** | **12 59 44.5** | **-0.1** |
| PNL | | | | S | **Sg** | **12 59 57.9** | **+1.4** |
| **BARK** | **Barkley Ridge** | **0.94** | **273** | P | **Pg** | **12 59 44.0** | **-0.9** |
| **YKU2** | **Yakutat** | **0.97** | **151** | P | **Pg** | **12 59 45.2** | **-0.2** |
| **KIAG** | **Kiagna River** | **1.03** | **304** | P | **Pg** | **12 59 45.0** | **-1.7** |
| **KULT** | **Kultieth River** | **1.06** | **265** | P | **Pb** | **12 59 47.1** | **-0.9** |
| **BALM** | **Baldy** | **1.09** | **309** | P | **Pg** | **12 59 45.9** | **-1.9** |
| **YUK7** | **Dusty Glacier** | **1.23** | **81** | P | **Pg** | **12 59 49.5** | **-0.9** |
| YUK7 | | | | S | **Sg** | **13 00 07.2** | **+0.8** |
| YUK7 | | | | Sg | Sn | **13 00 10.5** | **+1.9** |
| **YUK7** | **Dusty Glacier** | **1.23** | **81** | P | **Pg** | **12 59 49.5** | **-0.9** |
| YUK7 | | | | S | **Sg** | **13 00 07.2** | **+0.8** |
| **PTPK** | **Patty Peak** | **1.23** | **313** | P | **Pg** | **12 59 48.5** | **-2.0** |
| **YUK6** | **Outpost Mounta** | **1.25** | **61** | P | **Pg** | **12 59 49.7** | **-1.1** |
| YUK6 | | | | S | **Sg** | **13 00 06.8** | **-0.1** |
| YUK6 | | | | Sg | Sn | **13 00 12.2** | **+3.2** |
| **YUK6** | **Outpost Mounta** | **1.25** | **61** | P | **Pg** | **12 59 49.7** | **-1.1** |
| YUK6 | | | | S | **Sg** | **13 00 06.8** | **-0.1** |
| **KHIT** | **Khitrov Hills** | **1.32** | **275** | P | **Pg** | **12 59 51.2** | **-0.9** |
| **GRIN** | **Grindle Hills** | **1.36** | **268** | P | **Pg** | **12 59 52.0** | **-0.9** |
| GRIN | | | | S | **Sn** | **13 00 12.4** | **+1.0** |
| **BGLC** | **Bering Glacier** | **1.36** | **261** | P | **Pn** | **12 59 52.5** | **-0.4** |
| **YUK4** | **Talbot Arm** | **1.37** | **43** | Pn | **Pn** | **12 59 54.2** | **+1.0** |
| YUK4 | | | | Sg | Sn | 13 00 19.0 | +6.9 |
| **YUK4** | **Talbot Arm** | **1.37** | **43** | Pn | **Pn** | **12 59 54.2** | **+1.0** |
| YUK4 | | | | Sg | Sn | 13 00 19.0 | +6.9 |
| **YUK3** | **Moose Creek** | **1.42** | **3** | Pn | **Pn** | **12 59 53.0** | **-0.9** |
| YUK3 | | | | Sn | **Sb** | **13 00 12.3** | **-0.5** |
| YUK3 | | | | Sg | **Sn** | **13 00 17.7** | **+4.5** |
| **YUK3** | **Moose Creek** | **1.42** | **3** | Pn | **Pn** | **12 59 53.0** | **-0.9** |
| YUK3 | | | | Sn | **Sb** | **13 00 12.3** | **-0.5** |
| YUK3 | | | | Sg | **Sn** | **13 00 17.7** | **+4.5** |
| **YUK2** | **White River** | **1.43** | **355** | Pn | **Pn** | **12 59 53.1** | **-0.9** |
| YUK2 | | | | Sn | **Sb** | **13 00 12.6** | **-0.5** |
| YUK2 | | | | Sg | **Sn** | **13 00 17.1** | **+3.7** |
| **YUK2** | **White River** | **1.43** | **355** | Pn | **Pn** | **12 59 53.1** | **-0.9** |
| YUK2 | | | | Sn | **Sb** | **13 00 12.6** | **-0.5** |
| YUK2 | | | | Sg | **Sn** | **13 00 17.1** | **+3.7** |
| **BERG** | **Berg Lake** | **1.54** | **272** | P | **Pn** | **12 59 54.8** | **-0.6** |
| **YUK5** | **Granite Creek** | **1.55** | **59** | Pn | **Pn** | **12 59 55.5** | **-0.2** |
| YUK5 | | | | Sn | **Sn** | **13 00 16.5** | **+0.1** |
| **YUK5** | **Granite Creek** | **1.55** | **59** | Pn | **Pn** | **12 59 55.5** | **-0.2** |
| YUK5 | | | | Sn | **Sn** | **13 00 16.5** | **+0.1** |
| **MCARA** | **McCarthy VSAT** | **1.57** | **312** | P | **Pn** | **12 59 54.5** | **-1.2** |
| **HYT** | **Haines Junctio** | **1.60** | **72** | Pn | **Pn** | **12 59 55.9** | **-0.4** |
| HYT | | | | Sn | **Sn** | **13 00 16.9** | **-0.6** |
| **HYT** | **Haines Junctio** | **1.60** | **72** | Pn | **Pn** | **12 59 55.9** | **-0.4** |
| HYT | | | | Sg | **Sn** | **13 00 16.9** | **-0.6** |
| **SUCK** | **Suckling Hills** | **1.61** | **261** | P | **Pn** | **12 59 56.2** | **-0.1** |
| **NICHA** | **Nichawak Mount** | **1.68** | **267** | P | **Pn** | **12 59 57.1** | **-0.2** |
| NICHA | | | | S | **Sg** | **13 00 21.2** | **+0.4** |
| **DHAK** | **Deception Hill** | **1.76** | **136** | P | **Pn** | **12 59 57.1** | **-1.2** |
| **YUK1** | **Sand Pete Hill** | **1.80** | **1** | Pn | **Pn** | **12 59 59.4** | **+0.4** |
| YUK1 | | | | Sg | **Sg** | **13 00 25.6** | **+1.0** |
| **YUK1** | **Sand Pete Hill** | **1.80** | **1** | Pn | **Pn** | **12 59 59.4** | **+0.4** |
| YUK1 | | | | Sg | **Sg** | **13 00 25.6** | **+1.0** |
| **BMRM** | **Bremner River** | **2.06** | **289** | *e*Pn | **Pn** | **13 00 01.6** | **-0.9** |
| **BVCY** | **Beaver Creek** | **2.06** | **357** | Pn | **Pb** | **13 00 04.5** | **-0.5** |
| BVCY | | | | Sg | **Sg** | **13 00 33.7** | **+0.6** |
| **BVCY** | **Beaver Creek** | **2.06** | **357** | Pn | **Pb** | **13 00 04.5** | **-0.5** |
| BVCY | | | | Sg | **Sg** | **13 00 37.8** | **+4.7** |
| **SGAM** | **Sherman Glacie** | **2.29** | **275** | P | **Pn** | **13 00 05.5** | **-0.1** |
| **PLBC** | **Pleasant Camp** | **2.32** | **111** | Pn | **Pn** | **13 00 05.3** | **-0.7** |
| PLBC | | | | Sg | **Sb** | **13 00 37.8** | **-0.6** |
| **PLBC** | **Pleasant Camp** | **2.32** | **111** | Pn | **Pn** | **13 00 05.3** | **-0.7** |
| PLBC | | | | Sg | **Sb** | **13 00 37.8** | **-0.6** |
| **EYAK** | **Cordova Ski Ar** | **2.56** | **276** | P | **Pn** | **13 00 08.9** | **-0.4** |
| **DIV** | **Divide** | **2.65** | **289** | *e*Pn | **Pn** | **13 00 10.0** | **-0.7** |
| **BCA3** | **Beaver Creek A** | **2.77** | **349** | P | **Pn** | **13 00 12.8** | **+0.5** |
| **SKAG** | **Skagway** | **2.81** | **107** | *e*Pn | **Pn** | **13 00 11.7** | **-1.0** |
| **KLU** | **Klutina** | **2.83** | **296** | P | **Pn** | **13 00 13.5** | **+0.3** |
| **WHY** | **Whitehorse** | **2.84** | **82** | Pn | **Pn** | **13 00 13.7** | **+0.4** |
| WHY | | | | Sn | **Sn** | **13 00 49.9** | **+1.7** |
| WHY | | | | Sg | **Sb** | **13 00 56.4** | **+2.8** |
| **WHY** | **Whitehorse** | **2.84** | **82** | Pn | **Pn** | **13 00 13.7** | **+0.4** |
| WHY | | | | Sn | **Sn** | **13 00 49.9** | **+1.7** |
| **VLZ** | **Valdez** | **2.92** | **288** | P | **Pn** | **13 00 14.1** | **-0.1** |
| **FID** | **Port Fidalgo** | **2.93** | **280** | P | **Pn** | **13 00 14.2** | **-0.3** |
| **HIN** | **Hinchinbrook I** | **2.93** | **273** | P | **Pn** | **13 00 13.5** | **-0.9** |
| **MENT** | **Mentasta** | **2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KDAK | **Kodiak Island** | **6.70** | **253** | Pn | **Pn** | **13 01 04.8** | **-1.3** |
| | 4.5nm,0.3s,baz=76,slow=13,SNR=64 | | | | | | |
| KDAK | | | | Sn | **Sn** | **13 02 18.0** | **-4.9** |
| | 1.2nm,0.3s,baz=260,slow=19,SNR=4.7 | | | | | | |
| **KDAK** | **Kodiak Island** | **6.70** | **253** | *e*Pn | **Pn** | **13 01 05.4** | **-0.7** |
| | 65nm,0.8s | | | | | | |
| KDAK | | | | Sn | **Sn** | **13 02 18.0** | **-4.9** |
| **FOPK** | **Fourpeaked Vol** | **6.74** | **262** | P | **Pn** | **13 01 07.0** | **+0.3** |
| **BM3** | **Burnt Mountain** | **7.30** | **348** | P | **Pn** | **13 01 15.3** | **+0.9** |
| **OHAK** | **Old Harbor** | **7.30** | **250** | P | **Pn** | **13 01 12.2** | **-2.2** |
| **KAHC** | **Katmai Hardscr** | **7.53** | **263** | P | **Pn** | **13 01 17.1** | **-0.6** |
| **TT01** | **Tatalina** | **7.77** | **296** | P | **Pn** | **13 01 20.5** | **-0.4** |
| **COLD** | **Coldfoot** | **8.09** | **333** | P | **Pn** | **13 01 24.9** | **-0.3** |
| **IM3** | **Indian Mountai** | **8.18** | **319** | P | **Pn** | **13 01 25.4** | **-1.1** |
| **INK** | **Inuvik** | **8.54** | **18** | Pn | **Pn** | **13 01 31.5** | **+0.2** |
| | 0.1nm,0.3s,baz=198,slow=12,SNR=4.5 | | | | | | |
| INK | | | | Sn | **Sn** | **13 03 05.0** | **-3.1** |
| | 0.9nm,0.3s,baz=200,slow=18,SNR=3.3 | | | | | | |
| INK | | | | Lg | Lg | 13 04 01.8 | |
| | 0.3nm,0.3s,baz=259,slow=19,SNR=3.3 | | | | | | |
| **INK** | **Inuvik** | **8.54** | **18** | Pn | **Pn** | **13 01 32.0** | **+0.7** |
| **FNBB** | **Fort Nelson** | **9.03** | **92** | Pn | **Pn** | **13 01 38.9** | **+0.7** |
| FNBB | | | | Sg | Sn | 13 04 06.4 | +46 |
| **FNBB** | **Fort Nelson** | **9.03** | **92** | Pn | **Pn** | **13 01 38.9** | **+0.7** |
| FNBB | | | | Sg | Sn | 13 04 06.4 | +46 |
| **CLVN** | **Colville Lake** | **9.27** | **38** | Pn | **Pn** | **13 01 43.5** | **+2.2** |
| **SDPT** | **Sand Point** | **11.70** | **253** | *e*Pn | **Pn** | **13 02 14.4** | **-0.1** |
| | 62nm,0.9s | | | | | | |
| **YKR1** | **Yellowknife Ar** | **12.43** | **69** | Pn | **Pn** | **13 02 22.5** | **-2.1** |
| **YKR2** | **Yellowknife Ar** | **12.45** | **69** | Pn | **Pn** | **13 02 23.5** | **-1.3** |
| **YKR3** | **Yellowknife Ar** | **12.48** | **69** | Pn | **Pn** | **13 02 25.3** | **+0.1** |
| **YKR4** | **Yellowknife Ar** | **12.50** | **69** | Pn | **Pn** | **13 02 25.4** | **-0.1** |
| **YKR6** | **Yellowknife Ar** | **12.54** | **69** | Pn | **Pn** | **13 02 26.3** | **+0.2** |
| **YKR7** | **Yellowknife Ar** | **12.57** | **69** | Pn | **Pn** | **13 02 27.3** | **+0.9** |
| **YKW3** | **Yellowknife Ar** | **12.58** | **69** | Pn | **Pn** | **13 02 25.3** | **-1.3** |
| YKW3 | | | | Sg | | 13 06 02.8 | |
| **YKB0** | **Yellowknife Ar** | **12.59** | **68** | Pn | **Pn** | **13 02 26.2** | **-0.4** |
| **YKB7** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 26.9** | **+0.2** |
| **YKB8** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 26.3** | **-0.4** |
| **YKB9** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 25.3** | **-1.4** |
| **YKB6** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 26.5** | **-0.2** |
| **YKA** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 25.7** | **-1.0** |
| | 0.3nm,0.3s,baz=271,slow=13,SNR=13 | | | | | | |
| YKA | | | | Lg | Lg | 13 06 02.2 | |
| | 0.1nm,0.3s,baz=260,slow=28,SNR=3.8 | | | | | | |
| **YKR8** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 26.7** | **0.0** |
| **YKB3** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 26.6** | **-0.2** |
| **YKB4** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 27.2** | **+0.5** |
| **YKB2** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 26.6** | **-0.2** |
| **YKB1** | **Yellowknife Ar** | **12.59** | **69** | Pn | **Pn** | **13 02 26.6** | **-0.1** |
| **YKR9** | **Yellowknife Ar** | **12.61** | **69** | Pn | **Pn** | **13 02 26.5** | **-0.5** |
| **LLLB** | **Lillooet** | **14.37** | **125** | Pn | **P** | **13 02 56.8** | **-1.6** |
| **NEW** | **Newport** | **18.16** | **121** | P | **P** | **13 03 41.5** | **+1.2** |
| | 0.1nm,0.3s,baz=336,slow=11,SNR=6.6 | | | | | | |
| NEW | | | | Lg | Lg | 13 09 01.7 | |
| | 0.1nm,0.3s,baz=66,slow=19,SNR=1.7 | | | | | | |
| NEW | | | | LR | LR | 13 10 19.4 | |
| | comp=Z,62nm,21.9s,baz=306,slow=36 | | | | | | |
| **NEW** | **Newport** | **18.16** | **121** | P | **P** | **13 03 40.8** | **+0.5** |
| | baz=18 | | | | | | |
| **NEW** | **Newport** | **18.16** | **121** | *e*P | **P** | **13 03 42.1** | **+1.8** |
| | 12nm,1.1s | | | | | | |
| NEW | | | | Lg | Lg | 13 09 01.7 | |
| **G05D** | **Wamic, OR** | **18.99** | **134** | P | **Pn** | **13 03 50.7** | **+0.6** |
| | baz=19 | | | | | | |
| **JTMT** | **Jette** | **19.78** | **118** | *e*P | **Pn** | **13 04 00.7** | **+1.0** |
| | 3.9nm,1.0s | | | | | | |
| **I04A** | **Tendick Farm,** | **19.89** | **138** | P | **Pn** | **13 04 01.9** | **+1.0** |
| | baz=20 | | | | | | |
| **SWMT** | **Swartz Lake** | **20.09** | **118** | *e*P | Pn | 13 04 04.2 | +0.9 |
| | 9.7nm,1.2s | | | | | | |
| **SLMT** | **Seeley Lake** | **20.51** | **118** | *e*P | Pn | 13 04 08.6 | +0.2 |
| | 10nm,1.2s | | | | | | |
| **MSO** | **Missoula** | **20.63** | **119** | P | Pn | 13 04 10.7 | +0.9 |
| | baz=21 | | | | | | |
| **CHMT** | **Chamberlain Mo** | **20.87** | **118** | *e*P | **P** | **13 04 10.7** | **+0.5** |
| | 5.1nm,1.0s | | | | | | |
| **FFC** | **Flin Flon** | **21.24** | **88** | *e*P | **P** | **13 04 15.9** | **+2.1** |
| | 11nm,0.9s | | | | | | |
| **EGMT** | **Eagleton** | **21.62** | **111** | P | **P** | **13 04 17.7** | **-0.4** |
| | baz=22 | | | | | | |
| **EGMT** | **Eagleton** | **21.62** | **111** | *e*P | **P** | **13 04 18.4** | **+0.3** |
| | 10nm,0.9s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **21.65** | **141** | P | **P** | **13 04 18.5** | **+0.1** |
| | 4.3nm,0.8s,baz=0.0,slow=7.1,SNR=10 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **21.65** | **141** | *e*P | **P** | **13 04 19.6** | **+1.3** |
| | 4.8nm,0.9s | | | | | | |
| **HRY** | **Holter Researc** | **21.65** | **116** | *e*P | **P** | **13 04 19.2** | **+0.8** |
| | 6.8nm,0.8s | | | | | | |
| **RES** | **Resolute Bay** | **21.75** | **31** | P | **P** | **13 04 19.5** | **+0.3** |
| | 4.2nm,0.9s,baz=260,slow=14,SNR=2.4 | | | | | | |
| RES | | | | LR | LR | 13 13 19.2 | |
| | comp=Z,130nm,18.7s,baz=335,slow=38 | | | | | | |
| **M04C** | **Macdoel** | **21.88** | **140** | P | **P** | **13 04 21.3** | **+0.4** |
| | baz=22 | | | | | | |
| **M02C** | **Callahan** | **21.91** | **142** | P | **P** | **13 04 22.7** | **+1.5** |
| | baz=22 | | | | | | |
| **LRM** | **Limekiln Ridge** | **22.07** | **119** | *e*P | **P** | **13 04 25.7** | **+2.6** |
| | 63nm,1.1s | | | | | | |
| **N02D** | **Trinity Center** | **22.34** | **142** | P | **P** | **13 04 28.1** | **+2.2** |
| | baz=22 | | | | | | |
| **DLMT** | **Dillon** | **22.36** | **120** | *e*P | **P** | **13 04 27.4** | **+1.2** |
| | 8.0nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **22.39** | **133** | P | **P** | **13 04 26.9** | **+0.5** |
| | 5.5nm,1.1s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **22.68** | **121** | *e*P | **P** | **13 04 30.4** | **+0.8** |
| | 3.2nm,1.1s | | | | | | |
| **WDC** | **Whiskeytown Da** | **22.75** | **142** | *e*P | **P** | **13 04 31.3** | **+1.2** |
| | 8.7nm,1.1s | | | | | | |
| **HLID** | **Hailey** | **23.06** | **125** | P | **P** | **13 04 33.8** | **+0.3** |
| | baz=23 | | | | | | |
| **O03D** | **Paynes Creek** | **23.24** | **141** | P | **P** | **13 04 36.5** | **+1.2** |
| | baz=23 | | | | | | |
| **RLMT** | **Red Lodge** | **24.02** | **115** | P | **P** | **13 04 44.3** | **+1.2** |
| | baz=24 | | | | | | |
| **IMW** | **Indian Meadow** | **24.25** | **119** | *e*P | **P** | **13 04 47.0** | **+1.8** |
| | 12nm,1.2s | | | | | | |
| **TPAW** | **Teton Pass** | **24.57** | **120** | *e*P | **P** | **13 04 50.2** | **+2.0** |
| | 11nm,1.1s | | | | | | |
| **LOHW** | **Long Hollow** | **24.62** | **119** | *e*P | **P** | **13 04 50.0** | **+1.4** |
| | 8.8nm,1.5s | | | | | | |
| **BMN** | **Battle Mountai** | **24.66** | **133** | *e*P | **P** | **13 04 50.8** | **+1.9** |
| | 4.0nm,1.0s | | | | | | |
| **REDW** | **Red Top Meadow** | **24.71** | **120** | *e*P | **P** | **13 04 50.9** | **+1.4** |
| | 7.7nm,1.1s | | | | | | |
| **BW06** | **Boulder Array** | **25.75** | **119** | *e*P | **P** | **13 05 01.5** | **+2.6** |
| | 4.2nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **26.07** | **137** | P | **P** | **13 05 02.7** | **+1.0** |
| | 3.8nm,0.9s,baz=314,slow=8.0,SNR=22 | | | | | | |
| NVAR | | | | PcP | **PcP** | **13 08 29.7** | **+0.3** |
| | 0.5nm,0.7s,baz=320,slow=4.4,SNR=4.0 | | | | | | |
| **DUG** | **Dugway** | **26.54** | **127** | P | **P** | **13 05 09.3** | **+3.4** |
| | baz=26 | | | | | | |
| **F26A** | **Lodgepole** | **26.54** | **106** | P | **P** | **13 05 08.9** | **+3.1** |
| | baz=26 | | | | | | |
| **ULM** | **Lac du Bonnet** | **26.87** | **92** | LR | LR | 13 17 01.2 | |
| | comp=Z,220nm,19.9s,baz=324,slow=39 | | | | | | |
| **R11A** | **Troy Canyon, C** | **27.09** | **133** | P | **P** | **13 05 10.5** | **-0.4** |
| | baz=27 | | | | | | |
| **R11A** | **Troy Canyon, C** | **27.09** | **133** | *e*P | **P** | **13 05 11.4** | **+0.5** |
| | 3.2nm,1.0s | | | | | | |
| **K22A** | **Casper** | **27.19** | **115** | P | **P** | **13 05 11.8** | **+0.1** |
| | baz=27 | | | | | | |
| **K22A** | **Casper** | **27.19** | **115** | *e*P | **P** | **13 05 12.3** | **+0.6** |
| | 7.7nm,1.0s | | | | | | |
| **GSC** | **Goldstone** | **29.40** | **138** | *e*P | **P** | **13 05 32.1** | **+0.7** |
| | 3.5nm,0.5s | | | | | | |
| **PV01** | **Paradox Valley** | **30.02** | **123** | *e*P | **P** | **13 05 38.2** | **+1.2** |
| **T26A** | **Comanche Natio** | **32.95** | **118** | P | **P** | **13 06 04.0** | **+1.1** |
| | baz=33 | | | | | | |
| **PETK** | **Petropavlovsk-** | **33.45** | **286** | P | **P** | **13 06 05.9** | **-0.9** |
| | 3.7nm,0.8s,baz=83,slow=12,SNR=4.2 | | | | | | |
| PETK | | | | LR | LR | 13 21 04.7 | |
| | comp=Z,22nm,18.9s,baz=60,slow=39 | | | | | | |
| **V31A** | **Spring Creek L** | **35.79** | **115** | P | **P** | **13 06 29.1** | **+1.8** |
| | baz=36 | | | | | | |
| **T34A** | **McClaskey Farm** | **35.98** | **111** | P | **P** | **13 06 29.8** | **+1.0** |
| | baz=36 | | | | | | |
| **MSTX** | **Muleshoe** | **36.01** | **120** | P | **P** | **13 06 30.6** | **+1.4** |
| | baz=36 | | | | | | |
| **MSTX** | **Muleshoe** | **36.01** | **120** | *e*P | **P** | **13 06 30.8** | **+1.6** |
| | 15nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **37.13** | **115** | *e*P | **P** | **13 06 39.3** | **+0.6** |
| | 9.9nm,0.9s | | | | | | |
| **128A** | **Castleberry Fa** | **37.29** | **121** | P | **P** | **13 06 41.1** | **+1.0** |
| | baz=37 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SCHQ** | **Schefferville** | **37.99** | **64** | LR | LR | 13 22 52.7 | |
| | comp=Z,130nm,18.6s,baz=266,slow=37 | | | | | | |
| **Z32A** | **Haskell** | **38.02** | **117** | P | **P** | **13 06 46.5** | **+0.3** |
| | baz=38 | | | | | | |
| **330A** | **Mertzon** | **38.90** | **120** | P | **P** | **13 06 55.0** | **+1.3** |
| | baz=39 | | | | | | |
| **X38A** | **Whitesboro** | **39.00** | **110** | P | **P** | **13 06 54.9** | **+0.4** |
| | baz=39 | | | | | | |
| **232A** | **Coleman** | **39.15** | **118** | P | **P** | **13 06 56.4** | **+0.6** |
| | baz=39 | | | | | | |
| **429A** | **Davenport Ranc** | **39.27** | **122** | P | **P** | **13 06 56.3** | **-0.5** |
| | baz=39 | | | | | | |
| **430A** | **Baggett Ranch,** | **39.41** | **121** | P | **P** | **13 06 58.8** | **+0.8** |
| | baz=39 | | | | | | |
| **332A** | **Millersview** | **39.54** | **118** | P | **P** | **13 07 00.3** | **+1.3** |
| | baz=40 | | | | | | |
| **529A** | **Stev Forest Ra** | **39.57** | **122** | P | **P** | **13 07 01.0** | **+1.7** |
| | baz=40 | | | | | | |
| **TXAR** | **Lajitas Array** | **39.66** | **125** | P | **P** | **13 07 00.6** | **+0.5** |
| | 0.2nm,0.3s,baz=302,slow=8.4,SNR=4.2 | | | | | | |
| TXAR | | | | LR | LR | 13 24 38.2 | |
| | comp=Z,56nm,20.9s,baz=0.0,slow=38 | | | | | | |
| **MIAR** | **Mount Ida** | **39.69** | **109** | P | **P** | **13 07 00.8** | **+0.7** |
| | baz=40 | | | | | | |
| **MIAR** | **Mount Ida** | **39.69** | **109** | *e*P | **P** | **13 07 00.7** | **+0.5** |
| | 8.3nm,1.1s | | | | | | |
| **234A** | **Clairette** | **39.72** | **116** | P | **P** | **13 07 01.5** | **+1.0** |
| | baz=40 | | | | | | |
| **431A** | **Sonora** | **39.77** | **120** | P | **P** | **13 07 01.5** | **+0.6** |
| | baz=40 | | | | | | |
| **530A** | **J-C Ranch, Com** | **39.92** | **121** | P | **P** | **13 07 03.5** | **+1.4** |
| | baz=40 | | | | | | |
| **333A** | **Richland Sprin** | **39.92** | **118** | P | **P** | **13 07 03.4** | **+1.3** |
| | baz=40 | | | | | | |
| **531A** | **Rocksprings** | **40.24** | **120** | P | **P** | **13 07 05.0** | **+0.1** |
| | baz=40 | | | | | | |
| **532A** | **Rocksprings** | **40.55** | **120** | P | **P** | **13 07 08.4** | **+1.0** |
| | baz=40 | | | | | | |
| **434A** | **Burnet** | **40.67** | **117** | P | **P** | **13 07 10.3** | **+1.9** |
| | baz=41 | | | | | | |
| **631A** | **Perdido Creek** | **40.88** | **121** | P | **P** | **13 07 10.4** | **+0.3** |
| | baz=41 | | | | | | |
| **ARCES** | **ARCESS Array B** | **50.01** | **6** | P | **P** | **13 08 23.6** | **+1.6** |
| | 3.1nm,0.8s,baz=350,slow=4.6,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **58.09** | **7** | P | **P** | **13 09 21.6** | **+0.7** |
| | 4.6nm,0.9s,baz=12,slow=7.1,SNR=4.9 | | | | | | |
| **KSRS** | **Korea Array** | **58.98** | **292** | LR | LR | 13 35 50.4 | |
| | comp=Z,15nm,19.1s,baz=218,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **59.31** | **314** | P | **P** | **13 09 30.7** | **+0.9** |
| | 1.7nm,0.8s,baz=27,slow=8.2,SNR=9.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.42** | **331** | P | **P** | **13 09 36.1** | **-1.0** |
| | 0.6nm,0.3s,baz=23,slow=7.8,SNR=3.2 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **63.26** | **306** | *e*P | **P** | **13 09 57.0** | **+0.3** |
| HHC | | | | sP | sP | 13 10 05.6 | +8.0 |
| HHC | | | | PP | **PP** | **13 12 14.6** | **-0.6** |
| HHC | | | | S | **S** | **13 18 24.6** | **-4.5** |
| HHC | | | | PMZ | | | |
| | 74nm,6.2s | | | | | | |
| HHC | | | | LN | | | |
| | 98nm,17.7s | | | | | | |
| HHC | | | | LE | | | |
| | 100nm,17.5s | | | | | | |
| HHC | | | | LZ | | | |
| | 44nm,17.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.65** | **330** | P | **P** | **13 10 23.6** | **-1.3** |
| | 0.4nm,0.6s,baz=39,slow=7.9,SNR=4.4 | | | | | | |
| MKAR | | | | LR | LR | 13 42 01.9 | |
| | comp=Z,39nm,21.0s,baz=358,slow=38 | | | | | | |
| **DPC** | **Dobruska-Polom** | **68.08** | **16** | *e*P | **P** | **13 10 29.2** | **+1.7** |
| **KHC** | **Kasperske Hory** | **68.87** | **18** | *e*P | **P** | **13 10 34.8** | **+2.3** |
| KHC | | | | *ex* | x | 13 10 50.7 | |
| **WMQ** | **Urumqi** | **68.94** | **325** | *e*P | **P** | **13 10 35.0** | **+2.0** |
| **AKASG** | **Malin Array Be** | **68.99** | **7** | P | **P** | **13 10 32.5** | **-0.6** |
| | 2.2nm,0.5s,baz=355,slow=6.4,SNR=7.7 | | | | | | |
| **GTA** | **Gaotai** | **68.99** | **314** | *e*P | **P** | **13 10 33.9** | **+0.4** |
| GTA | | | | pP | **pP** | **13 10 38.3** | **+4.1** |
| GTA | | | | sP | sP | 13 10 41.0 | +6.5 |
| GTA | | | | PMZ | | | |
| | 6.0nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **69.17** | **18** | LR | LR | 13 41 32.8 | |
| | comp=Z,32nm,18.5s,baz=346,slow=36 | | | | | | |
| **ABKAR** | **Akbulak array** | **69.48** | **346** | *e*P | **P** | **13 10 35.6** | **-0.5** |
| | 2.6nm,0.7s | | | | | | |
| **ESDC** | **Sonseca Array** | **74.16** | **33** | P | **P** | **13 11 05.4** | **+0.8** |
| | 1.9nm,0.8s,baz=342,slow=5.9,SNR=9.7 | | | | | | |
| **CD2** | **Chengdu** | **75.01** | **307** | *e*P | **P** | **13 11 09.0** | **-0.6** |
| **BRTR** | **Keskin Array B** | **80.16** | **5** | P | **P** | **13 11 38.0** | **-0.4** |
| | 1.3nm,1.0s,baz=336,slow=5.4,SNR=3.9 | | | | | | |
| **GEYT** | **Alibeck** | **80.86** | **345** | P | **P** | **13 11 43.2** | **+1.2** |
| | 1.7nm,0.3s,baz=282,slow=7.2,SNR=3.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.06** | **305** | P | **P** | **13 12 18.8** | **+0.1** |
| | 1.9nm,0.8s,baz=3.7,slow=5.0,SNR=12 | | | | | | |

*NEIC* ***14*** *13:15:34.0, 38.57S×177.87E, h25km, ML4.1(WEL), After WEL.*

*NEIC Felt in the Gisborne area.*

**WEL 14 13:15:34.0±0.1, 38.58S×177.89E, h25km, ML4.1/39, 18C-9D, Error ellipse: s-maj=1.2km s-min=0.6km az=90.0, intensity MM 4., North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | ISC |
| **TKGZ** | **Te Karaka** | **0.14** | **348** | ⇑P* | Pb | 13 15 38.4 | -0.6 |
| TKGZ | | | | S* | Sb | 13 15 42.7 | +0.3 |
| **TKGZ** | **Te Karaka** | **0.14** | **348** | P* | Pb | 13 15 38.4 | -0.6 |
| TKGZ | | | | S* | Sb | 13 15 42.7 | +0.3 |
| **RIGZ** | **Rimuhau** | **0.16** | **217** | ⇓P* | Pb | 13 15 38.8 | -0.5 |
| RIGZ | | | | S* | Sb | 13 15 43.4 | +0.5 |
| **CNGZ** | **Carnagh Statio** | **0.27** | **70** | ⇑P* | Pn | 13 15 41.7 | -0.7 |
| CNGZ | | | | S* | Sn | 13 15 50.8 | +3.2 |
| **CNGZ** | **Carnagh Statio** | **0.27** | **70** | P* | Pn | 13 15 41.7 | -0.7 |
| CNGZ | | | | S* | Sn | 13 15 50.8 | +3.2 |
| **PRGZ** | **Paritu Road** | **0.35** | **180** | ⇑P* | Pb | 13 15 42.1 | +0.3 |
| PRGZ | | | | S* | Sn | 13 15 50.1 | +0.4 |
| **PRGZ** | **Paritu Road** | **0.35** | **180** | P* | Pb | 13 15 42.1 | +0.3 |
| **MWZ** | **Matawai** | **0.37** | **311** | ⇓P* | Pb | 13 15 41.7 | -0.5 |
| MWZ | | | | | AML | 13 15 48.3 | |
| MWZ | | | | | AML | 13 15 48.3 | |
| MWZ | | | | | AML | 13 15 49.9 | |
| MWZ | | | | | AML | 13 15 49.9 | |
| **MWZ** | **Matawai** | **0.37** | **311** | P* | Pb | 13 15 41.1 | -1.0 |
| **RAGZ** | **Rawiri** | **0.38** | **282** | ⇓P* | Pb | 13 15 41.8 | -0.5 |
| RAGZ | | | | S* | Sb | 13 15 48.5 | +0.5 |
| **RAGZ** | **Rawiri** | **0.38** | **282** | P* | Pb | 13 15 41.8 | -0.5 |
| RAGZ | | | | S* | Sb | 13 15 48.5 | +0.5 |
| **TWGZ** | **Tauwhareparae** | **0.41** | **11** | ⇑P* | Pb | 13 15 43.3 | +0.5 |
| TWGZ | | | | S* | Sn | 13 15 51.8 | +0.6 |
| **TWGZ** | **Tauwhareparae** | **0.41** | **11** | P* | Pb | 13 15 43.3 | +0.6 |
| **KNZ** | **Kokohu** | **0.47** | **200** | ⇑P* | Pb | 13 15 43.8 | +0.1 |
| KNZ | | | | | AML | 13 15 57.9 | |
| KNZ | | | | | AML | 13 15 58.2 | |
| **KNZ** | **Kokohu** | **0.47** | **200** | P* | Pb | 13 15 43.8 | +0.1 |
| **SNGZ** | **Shannon Statio** | **0.47** | **244** | ⇓P* | Pb | 13 15 43.8 | 0.0 |
| **SNGZ** | **Shannon Statio** | **0.47** | **244** | P* | Pb | 13 15 43.8 | 0.0 |
| **MHGZ** | **Mahia Peninsul** | **0.58** | **178** | P* | Pb | 13 15 45.6 | +0.1 |
| **MHGZ** | **Mahia Peninsul** | **0.58** | **178** | P* | Pb | 13 15 45.6 | +0.1 |
| **PUZ** | **Puketiti** | **0.58** | **30** | P* | Pb | 13 15 45.4 | -0.3 |
| PUZ | | | | | AML | 13 15 58.4 | |
| PUZ | | | | | AML | 13 15 59.8 | |
| **PUZ** | **Puketiti** | **0.58** | **30** | P* | Pb | 13 15 45.4 | -0.3 |
| **URZ** | **Urewera** | **0.69** | **297** | ⇓P* | Pb | 13 15 46.9 | -0.4 |
| URZ | | | | | AML | 13 15 57.7 | |
| URZ | | | | | AML | 13 15 59.0 | |
| **URZ** | **Urewera** | **0.69** | **297** | P* | Pb | 13 15 46.4 | -0.9 |
| URZ | | | | *e*Pg | Pn | 13 15 47.0 | -1.0 |
| URZ | | | | *e*Sg | Sb | 13 15 55.8 | -0.6 |
| **RAHZ** | **Arahi** | **0.71** | **241** | ⇑P* | Pb | 13 15 47.7 | -0.1 |
| **RAHZ** | **Arahi** | **0.71** | **241** | P* | Pb | 13 15 47.7 | -0.1 |
| **WHHZ** | **Waihua** | **0.71** | **225** | ⇑P* | Pb | 13 15 47.7 | -0.1 |
| **HAZ** | **Te Kaha** | **0.82** | **354** | P* | Pb | 13 15 49.1 | -0.5 |
| **WMGZ** | **Waiomatatini S** | **0.86** | **29** | ⇓PN | Pb | 13 15 50.2 | -0.2 |
| **WMGZ** | **Waiomatatini S** | **0.86** | **29** | Pn | Pb | 13 15 50.2 | -0.2 |
| **ARHZ** | **Aropaoanui** | **0.97** | **225** | PN | Pn | 13 15 51.4 | -0.7 |
| **ARHZ** | **Aropaoanui** | **0.97** | **225** | Pn | Pn | 13 15 51.4 | -0.7 |
| **NMHZ** | **Naumai** | **0.99** | **238** | ⇑PN | Pn | 13 15 51.7 | -0.6 |
| **NMHZ** | **Naumai** | **0.99** | **238** | Pn | Pn | 13 15 51.7 | -0.6 |
| **EDRZ** | **Edgecumbe** | **1.02** | **297** | PN | Pn | 13 15 52.7 | 0.0 |
| EDRZ | | | | | AML | 13 16 17.0 | |
| EDRZ | | | | | AML | 13 16 20.7 | |
| **EDRZ** | **Edgecumbe** | **1.02** | **297** | Pn | Pn | 13 15 52.7 | 0.0 |
| **MXZ** | **Matakaoa Point** | **1.06** | **18** | PN | Pn | 13 15 53.1 | -0.2 |
| MXZ | | | | | AML | 13 16 10.5 | |
| MXZ | | | | | AML | 13 16 10.5 | |
| MXZ | | | | | AML | 13 16 10.7 | |
| MXZ | | | | | AML | 13 16 10.7 | |
| **MXZ** | **Matakaoa Point** | **1.06** | **18** | Pn | Pn | 13 15 53.1 | -0.2 |
| **RRRZ** | **Republican Roa** | **1.10** | **282** | PN | Pn | 13 15 53.7 | -0.1 |
| **RRRZ** | **Republican Roa** | **1.10** | **282** | Pn | Pn | 13 15 53.7 | -0.1 |
| **MARZ** | **Manawahe** | **1.12** | **301** | ⇓PN | Pn | 13 15 54.0 | -0.1 |
| **MARZ** | **Manawahe** | **1.12** | **301** | Pn | Pn | 13 15 54.0 | -0.1 |
| **TARZ** | **Mount Tarawera** | **1.14** | **287** | ⇑PN | Pn | 13 15 54.4 | 0.0 |
| **TARZ** | **Mount Tarawera** | **1.14** | **287** | Pn | Pn | 13 15 54.4 | 0.0 |
| **PRRZ** | **Plateau Road** | **1.17** | **273** | ⇑PN | Pn | 13 15 54.4 | -0.4 |
| **PRRZ** | **Plateau Road** | **1.17** | **273** | Pn | Pn | 13 15 54.4 | -0.4 |
| **MRHZ** | **Matea Rd** | **1.18** | **257** | ⇑PN | Pn | 13 15 54.4 | -0.5 |
| **WIZ** | **White Island** | **1.18** | **332** | PN | Pn | 13 15 54.6 | -0.3 |
| **WIZ** | **White Island** | **1.18** | **332** | Pn | Pn | 13 15 54.6 | -0.3 |
| **MKRZ** | **Makatiti** | **1.20** | **291** | PN | Pb | 13 15 55.8 | -0.2 |
| MKRZ | | | | | AML | 13 16 01.0 | |
| MKRZ | | | | | AML | 13 16 02.5 | |
| **MKRZ** | **Makatiti** | **1.20** | **291** | Pn | Pb | 13 15 55.8 | -0.2 |
| **ALRZ** | **Allen Road** | **1.21** | **270** | ⇑PN | Pn | 13 15 54.9 | -0.4 |
| **ALRZ** | **Allen Road** | **1.21** | **270** | Pn | Pn | 13 15 54.9 | -0.4 |
| **BKZ** | **Black Stump Fm** | **1.24** | **241** | ⇑PN | Pn | 13 15 55.0 | -0.7 |
| BKZ | | | | | AML | 13 16 20.3 | |
| BKZ | | | | | AML | 13 16 28.9 | |
| **BKZ** | **Black Stump Fm** | **1.24** | **241** | Pn | Pn | 13 15 55.0 | -0.7 |
| **HLRZ** | **Highlands Stat** | **1.25** | **285** | PN | Pn | 13 15 56.0 | +0.2 |
| **CKHZ** | **Cape Kidnapper** | **1.25** | **210** | PN | Pn | 13 15 54.3 | -1.5 |
| **CKHZ** | **Cape Kidnapper** | **1.25** | **210** | Pn | Pn | 13 15 54.3 | -1.5 |
| **MCHZ** | **McNeill Hill** | **1.27** | **227** | PN | Pn | 13 15 55.3 | -0.8 |
| **MCHZ** | **McNeill Hill** | **1.27** | **227** | Pn | Pn | 13 15 55.3 | -0.8 |
| **HRRZ** | **Handcock Road** | **1.27** | **278** | PN | Pn | 13 15 55.7 | -0.5 |
| **HRRZ** | **Handcock Road** | **1.27** | **278** | Pn | Pn | 13 15 55.7 | -0.5 |
| **OPRZ** | **Ohinepanea** | **1.28** | **304** | PN | Pn | 13 15 55.6 | -0.6 |
| **OPRZ** | **Ohinepanea** | **1.28** | **304** | Pn | Pn | 13 15 55.6 | -0.6 |
| **OMRZ** | **Omania** | **1.28** | **291** | PN | Pn | 13 15 56.0 | -0.3 |
| **OMRZ** | **Omania** | **1.28** | **291** | Pn | Pn | 13 15 56.0 | -0.3 |
| **HSRZ** | **Hossack Road** | **1.31** | **281** | PN | Pn | 13 15 56.9 | +0.2 |
| **WPRZ** | **Whakapapatarin** | **1.35** | **272** | PN | Pn | 13 15 57.0 | -0.3 |
| **WPRZ** | **Whakapapatarin** | **1.35** | **272** | Pn | Pn | 13 15 57.0 | -0.3 |
| **UTU** | **Utuhina** | **1.39** | **286** | PN | Pn | 13 15 58.4 | +0.7 |
| UTU | | | | | AML | 13 16 22.5 | |
| UTU | | | | | AML | 13 16 24.2 | |
| **UTU** | **Utuhina** | **1.39** | **286** | Pn | Pn | 13 15 58.4 | +0.7 |
| **KARZ** | **Kaharoa** | **1.41** | **293** | ⇑PN | Pn | 13 15 57.6 | -0.4 |
| **KARZ** | **Kaharoa** | **1.41** | **293** | Pn | Pn | 13 15 57.6 | -0.4 |
| **KAHZ** | **Kahuranaki** | **1.45** | **212** | PN | Pn | 13 15 57.0 | -1.7 |
| **KAHZ** | **Kahuranaki** | **1.45** | **212** | Pn | Pn | 13 15 57.0 | -1.7 |
| **WHTZ** | **Whakaora** | **1.51** | **266** | PN | Pn | 13 15 59.4 | -0.1 |
| **WHTZ** | **Whakaora** | **1.51** | **266** | Pn | Pn | 13 15 59.4 | -0.1 |
| **TGRZ** | **Tauranga** | **1.53** | **303** | PN | Pn | 13 15 59.0 | -0.7 |
| TGRZ | | | | | AML | 13 16 10.1 | |
| TGRZ | | | | | AML | 13 16 28.7 | |
| **TGRZ** | **Tauranga** | **1.53** | **303** | Pn | Pn | 13 15 59.0 | -0.7 |
| **KRHZ** | **Kereru** | **1.59** | **227** | ⇓PN | Pn | 13 15 59.2 | -1.3 |
| **KUTZ** | **Kaahu Road** | **1.62** | **272** | PN | Pn | 13 16 00.4 | -0.5 |
| **KUTZ** | **Kaahu Road** | **1.62** | **272** | Pn | Pn | 13 16 00.5 | -0.5 |
| **RITZ** | **Rihia Road** | **1.63** | **255** | AML | AML | 13 16 34.3 | |
| RITZ | | | | | AML | 13 16 42.1 | |
| **PXZ** | **Pawanui** | **1.66** | **208** | PN | Pn | 13 15 59.2 | -2.2 |
| PXZ | | | | | AML | 13 16 49.1 | |
| PXZ | | | | | AML | 13 16 49.1 | |
| PXZ | | | | | AML | 13 16 55.4 | |
| PXZ | | | | | AML | 13 16 55.5 | |
| **PXZ** | **Pawanui** | **1.66** | **208** | Pn | Pn | 13 15 59.2 | -2.2 |
| **RATZ** | **Rangitukua** | **1.68** | **259** | AML | AML | 13 16 48.4 | |
| RATZ | | | | | AML | 13 16 48.9 | |
| **BHHZ** | **Black Hill Sta** | **1.69** | **237** | ⇑PN | Pn | 13 16 00.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MRZ | | | | AML | AML | 13 16 48.3 | |
| MRZ | | | | AML | AML | 13 17 22.0 | |
| **MRZ** | **Mangatainoka R** | **2.74** | **220** | Pn | Pn | 13 16 13.1 | -3.2 |
| **KBAZ** | **Karaka Road Bo** | **2.79** | **301** | PN | Pn | 13 16 17.6 | +0.6 |
| **KBAZ** | **Karaka Road Bo** | **2.79** | **301** | Pn | Pn | 13 16 17.6 | +0.6 |
| **ETAZ** | **East Tamaki Re** | **2.85** | **304** | PN | Pn | 13 16 18.1 | +0.3 |
| **ETAZ** | **East Tamaki Re** | **2.85** | **304** | Pn | Pn | 13 16 18.1 | +0.3 |
| **LREZ** | **Lake Rotokare** | **2.85** | **251** | PN | Pn | 13 16 18.3 | +0.4 |
| **HOWZ** | **Holdsworth Sta** | **2.95** | **217** | PN | Pn | 13 16 15.8 | -3.5 |
| **HOWZ** | **Holdsworth Sta** | **2.95** | **217** | Pn | Pn | 13 16 15.8 | -3.5 |
| **TMWZ** | **Te Maipa** | **2.96** | **211** | PN | Pn | 13 16 16.0 | -3.3 |
| **TMWZ** | **Te Maipa** | **2.96** | **211** | Pn | Pn | 13 16 16.0 | -3.3 |
| **NEZ** | **North Egmont** | **3.04** | **256** | PN | Pn | 13 16 21.6 | +1.1 |
| **NEZ** | **North Egmont** | **3.04** | **256** | Pn | Pn | 13 16 21.6 | +1.1 |
| **OGWZ** | **Otaki Gorge** | **3.06** | **222** | PN | Pn | 13 16 17.4 | -3.3 |
| **OGWZ** | **Otaki Gorge** | **3.06** | **222** | Pn | Pn | 13 16 17.4 | -3.3 |
| **PKE** | **Pukeiti** | **3.10** | **257** | PN | Pn | 13 16 22.1 | +0.8 |
| **PKE** | **Pukeiti** | **3.10** | **257** | Pn | Pn | 13 16 22.1 | +0.8 |
| **MTW** | **Mount Morrison** | **3.16** | **215** | PN | Pn | 13 16 18.3 | -3.9 |
| **MTW** | **Mount Morrison** | **3.16** | **215** | Pn | Pn | 13 16 18.3 | -3.9 |
| **RVAZ** | **Riverhead Bore** | **3.18** | **303** | Pn | Pn | 13 16 22.6 | +0.2 |
| **KIW** | **Kapiti Island** | **3.24** | **224** | PN | Pn | 13 16 19.8 | -3.4 |
| KIW | | | | AML | AML | 13 17 26.7 | |
| KIW | | | | AML | AML | 13 17 40.6 | |
| **KIW** | **Kapiti Island** | **3.24** | **224** | Pn | Pn | 13 16 19.8 | -3.4 |
| **CAW** | **Cannon Point** | **3.33** | **220** | PN | Pn | 13 16 20.5 | -4.0 |
| CAW | | | | AML | AML | 13 17 40.9 | |
| CAW | | | | AML | AML | 13 17 47.3 | |
| **CAW** | **Cannon Point** | **3.33** | **220** | Pn | Pn | 13 16 20.5 | -4.0 |
| **PAWZ** | **Paruwai Farm** | **3.38** | **213** | PN | Pn | 13 16 21.2 | -3.9 |
| **PAWZ** | **Paruwai Farm** | **3.38** | **213** | Pn | Pn | 13 16 21.2 | -3.9 |
| **MSWZ** | **Moikau Station** | **3.48** | **215** | PN | Pn | 13 16 22.3 | -4.3 |
| **MSWZ** | **Moikau Station** | **3.48** | **215** | Pn | Pn | 13 16 22.3 | -4.3 |
| **PLWZ** | **Palliser** | **3.61** | **213** | PN | Pn | 13 16 24.0 | -4.3 |
| **PLWZ** | **Palliser** | **3.61** | **213** | Pn | Pn | 13 16 24.0 | -4.3 |
| **SNZO** | **South Karori** | **3.66** | **221** | Pn | Pn | 13 16 27.4 | -1.5 |
| SNZO | | | | *e*Sn | Sn | 13 17 10.2 | -1.1 |
| **DUWZ** | **D'Urville Isla** | **3.78** | **233** | PN | Pn | 13 16 27.7 | -2.9 |
| DUWZ | | | | AML | AML | 13 17 46.3 | |
| **DUWZ** | **D'Urville Isla** | **3.78** | **233** | Pn | Pn | 13 16 27.7 | -2.9 |
| **TCW** | **Tory Channel** | **3.83** | **225** | PN | Pn | 13 16 27.1 | -4.1 |
| TCW | | | | AML | AML | 13 17 18.0 | |
| TCW | | | | AML | AML | 13 17 18.9 | |
| **TCW** | **Tory Channel** | **3.83** | **225** | Pn | Pn | 13 16 27.1 | -4.1 |
| **TUWZ** | **Tuamarina** | **4.16** | **225** | PN | Pn | 13 16 31.5 | -4.3 |
| TUWZ | | | | AML | AML | 13 17 28.5 | |
| **TUWZ** | **Tuamarina** | **4.16** | **225** | Pn | Pn | 13 16 31.5 | -4.3 |
| **NNZ** | **Nelson** | **4.36** | **231** | PN | Pn | 13 16 34.7 | -3.8 |
| **NNZ** | **Nelson** | **4.36** | **231** | Pn | Pn | 13 16 34.7 | -3.8 |
| **BSWZ** | **Blackbirch Sta** | **4.39** | **223** | PN | Pn | 13 16 34.6 | -4.4 |
| **BSWZ** | **Blackbirch Sta** | **4.39** | **223** | Pn | Pn | 13 16 34.6 | -4.4 |
| **QRZ** | **Quartz Range** | **4.70** | **240** | PN | Pn | 13 16 39.6 | -3.7 |
| QRZ | | | | AML | AML | 13 18 32.8 | |
| **QRZ** | **Quartz Range** | **4.70** | **240** | Pn | Pn | 13 16 39.6 | -3.7 |
| **OUZ** | **Omahuta** | **4.80** | **313** | *e*Pn | Pn | 13 16 44.1 | -0.5 |
| OUZ | | | | *e*Sn | Sn | 13 17 39.3 | -0.1 |
| **THZ** | **Tophouse** | **4.97** | **229** | PN | Pn | 13 16 42.9 | -4.1 |
| THZ | | | | AML | AML | 13 18 05.6 | |
| THZ | | | | AML | AML | 13 18 06.2 | |
| **THZ** | **Tophouse** | **4.97** | **229** | Pn | Pn | 13 16 42.9 | -4.1 |
| **KHZ** | **Kahutara** | **5.07** | **219** | PN | Pn | 13 16 43.3 | -5.0 |
| **KHZ** | **Kahutara** | **5.07** | **219** | Pn | Pn | 13 16 43.3 | -5.0 |
| **DSZ** | **Denniston Nort** | **5.63** | **234** | PN | Pn | 13 16 51.6 | -4.5 |
| **DSZ** | **Denniston Nort** | **5.63** | **234** | Pn | Pn | 13 16 51.6 | -4.5 |
| **LTZ** | **Lake Taylor** | **5.99** | **224** | PN | Pn | 13 16 55.5 | -5.5 |
| **LTZ** | **Lake Taylor** | **5.99** | **224** | Pn | Pn | 13 16 55.5 | -5.5 |
| **CRLZ** | **Canterbury Las** | **6.38** | **217** | PN | Pn | 13 17 00.7 | -5.6 |
| **CRLZ** | **Canterbury Las** | **6.38** | **217** | Pn | Pn | 13 17 00.8 | -5.6 |
| **MQZ** | **McQueen's Vall** | **6.47** | **216** | PN | Pn | 13 17 02.1 | -5.4 |
| **MQZ** | **McQueen's Vall** | **6.47** | **216** | Pn | Pn | 13 17 02.1 | -5.4 |
| **OXZ** | **Oxford** | **6.49** | **221** | PN | Pn | 13 17 01.8 | -6.0 |
| **OXZ** | **Oxford** | **6.49** | **221** | Pn | Pn | 13 17 01.8 | -6.0 |
| **CTZ** | **Chatham Island** | **6.62** | **143** | PN | Pn | 13 17 09.1 | -0.4 |
| **CTZ** | **Chatham Island** | **6.62** | **143** | Pn | Pn | 13 17 09.1 | -0.4 |
| **ODZ** | **Otahua Downs** | **8.42** | **218** | PN | Pn | 13 17 28.1 | -6.2 |
| **ODZ** | **Otahua Downs** | **8.42** | **218** | Pn | Pn | 13 17 28.1 | -6.2 |

**IDC 14 13:53:18.8±999.0, 43°.04N×39°.75E, h0km, Error ellipse: s-maj=442.8km s-min=214.8km az=24.0, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I43RU** | **DUBNA INFRASON** | **13.79** | **354** | *i* | | 15 17 20.0 | |
| | baz=172,slow=321,SNR=0.3 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **14.52** | **53** | *i* | | 15 25 50.0 | |
| | baz=245,slow=314,SNR=1.0 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **31.29** | **54** | *i* | | 17 05 10.2 | |
| | baz=269,slow=320,SNR=0.8 | | | | | | |

*NIED* ***14*** *13:58:00, 42°.30N×143°.10E, h53km, Mw5.6 Best double couple: M0 2.77000×10^17 NP1:φ=231.00000°, δ=27.00000°, λ=117.00000°. NP2:φ=22.00000°, δ=66.00000°, λ=77.00000°.*

*BJI* ***14*** *13:58:50.0, 42°.18N×143°.10E, h33km, mb5.5/85, mB5.4/62, Ms5.3/93, Ms7 5.1/85*

*ISCJB* ***14*** *13:58:54.8±0.2, 42°.32N±0°.02×142°.95E±0°.02, h62km±1km, mb5.4/372, Error ellipse: s-maj=2.9km s-min=1.7km az=153.3*

*MOS* ***14*** *13:58:54.1±0.9, 42°.33N×142°.97E, h59km, mb5.7/104, MS5.0/70, Error ellipse: s-maj=5.7km s-min=3.6km az=107.1*

*IDC* ***14*** *13:58:54.8±1.5, 42°.38N×143°.09E, h51km±12km, mb5.2/40, mb1 5.2/45, mb1mx5.2/47, mbtmp5.4/45, ML4.4/5, MS4.9/33, Ms1 4.9/33, ms1mx4.9/33, Error ellipse: s-maj=11.5km s-min=10.7km az=131.0*

*JMA* ***14*** *13:58:55.5±0.1, 42°.31N×143°.07E, h53km±1km, M5.5 Broadband fault plane solution: P waves. NP1: φ=23.00000°, δ=60.00000°, λ=51.00000°. NP2:φ=262.00000°, δ=48.00000°, λ=138.00000°. Principal axes: T Plg56.0000°, Azm241.0000°; N Plg33.0000°, Azm45.0000°; P Plg7.0000°, Azm140.0000°;*

*JMA Felt IV J1.*

*NEIC* ***14*** *13:58:55.6±0.5, 42°.31N×142°.87E, h59km±4km, mb5.2/193, MW5.6(NIED) Error ellipse: s-maj=4.1km s-min=2.6km az=153.0*

*NEIC Felt [IV] at Obihiro and [III] at Sapporo. Also felt at Date, Furano, Iwanai, Nanae and Otaru. Felt [II] at Misawa, Honshu. Recorded [4 JMA] in southern and southwestern Hokkaido and [2 JMA] in central, eastern and western Hokkaido. Also recorded [3 JMA] in Aomori, [2 JMA] in Iwate and [1 JMA] in Miyagi, Honshu.*

*GCMT* ***14*** *13:58:55.6±0.1, 42°.14N×143°.15E, h62km, MW5.6/112, Moment Tensor Solution. s99,c193; s112,c247; Duration: 1s5 Moment tensor: Scale 10^17Nm; Mrr 2.06±.04; Mθθ -0.72±.03; Mφφ -1.34±.03; Mrθ 0.30±.02; Mrφ -1.44±.02; Mθφ 1.35±.02; Best double couple: M0 2.68400×10^17 NP1:φ=24.00000°, δ=61.00000°, λ=73.00000°. NP2:φ=236.00000°, δ=33.00000°, λ=118.00000°. Principal axes: T 2.5430, Plg69.0000°, Azm259.0000°; N 0.2850, Plg15.0000°, Azm32.0000°; P -2.8250, Plg15.0000°, Azm126.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*SZGRF* ***14*** *13:58:59.9, 43°.36N×143°.59E, h45km, mb5.5/30(BGR), Ms5.1/7(BGR)*

**ISC 14 13:58:54.5±0.3, 42°.37N±0°.03×142°.97E±0°.02, h47km±1km, h47km: pP-P, n1762, σ1s21/1771, mb5.4/389, MS4.9/198, 126C-39D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNBK** | **Urakawa-nobuka** | **0.18** | **241** | ⇑P | **Pn** | **13 59 04.1** | **+1.7** |
| JNBK | | | | *e*S | **Sn** | **13 59 11.8** | **+3.8** |
| **JCH** | **Churui** | **0.38** | **50** | ⇑P | **Pn** | **13 59 05.5** | **+1.4** |
| JCH | | | | *e*S | **Sn** | **13 59 13.5** | **+2.5** |
| **ERM** | **Erimo** | **0.38** | **159** | *d* iPN | **Pn** | **13 59 05.6** | **+1.4** |
| **ERM** | **Erimo** | **0.38** | **159** | Pn | **Pn** | **13 59 05.1** | **+0.9** |
| | 2107μm,1.0s | | | | | | |
| **JEM** | **Erimo** | **0.38** | **158** | ⇑P | **Pn** | **13 59 05.1** | **+0.9** |
| **JBT2** | **Biratori 2** | **0.60** | **313** | ⇓P | **Pn** | **13 59 09.5** | **+2.6** |
| **JOB** | **Onbets** | **0.83** | **50** | ⇑P | **Pn** | **13 59 11.6** | **+1.8** |
| JOB | | | | *e*S | **Sn** | **13 59 24.4** | **+3.4** |
| **JFR** | **Furan** | **0.84** | **341** | ⇓P | **Pn** | **13 59 11.3** | **+1.3** |
| JFR | | | | *e*S | **Sn** | **13 59 24.4** | **+3.1** |
| **JAR** | **Ashorobuto** | **1.10** | **32** | ⇑P | **Pn** | **13 59 14.7** | **+1.3** |
| JAR | | | | *e*S | **Sn** | **13 59 29.4** | **+1.9** |
| **JEW** | **Eniwo** | **1.22** | **293** | ⇓P | **Pn** | **13 59 17.9** | **+2.9** |
| **JAB** | **Ashibetsu** | **1.26** | **334** | ⇓P | Pn | 13 59 18.7 | +3.1 |
| **JAK** | **Akkeshi** | **1.42** | **63** | ⇑P | **Pn** | **13 59 18.2** | **+0.4** |
| JAK | | | | *e*S | **Sn** | **13 59 36.3** | **+1.0** |
| **JKK2** | **Kamakawa 2** | **1.51** | **354** | P | **Pn** | **13 59 21.6** | **+2.5** |
| **JTKR** | **Abashiri--Toko** | **1.74** | **23** | ⇓P | **Pn** | **13 59 24.3** | **+2.1** |
| **JOT** | **Ohata** | **1.74** | **236** | ⇑P | **Pn** | **13 59 23.5** | **+1.3** |
| **ASAJ** | **Asahikawa** | **1.77** | **351** | P | **Pn** | **13 59 24.9** | **+2.4** |
| | 3μm,0.3s,baz=190,slow=12,SNR=4192 | | | | | | |
| ASAJ | | | | S | **Sn** | **13 59 49.6** | **+5.8** |
| | 703nm,0.3s,baz=213,slow=29,SNR=8.9 | | | | | | |
| ASAJ | | | | LR | LR | 14 00 10.2 | |
| | comp=Z,26μm,22.0s,baz=203,slow=42 | | | | | | |
| **JNK** | **Nakash** | **1.77** | **46** | ⇑P | **Pn** | **13 59 23.3** | **+0.7** |
| **JANG** | **Nango** | **2.28** | **209** | ⇑P | **Pn** | **13 59 29.4** | **-0.2** |
| **JKZ** | **Kuzumaki** | **2.69** | **208** | ⇑P | **Pn** | **13 59 35.2** | **0.0** |
| **YUK** | **Yuzh-Kuril'sk** | **2.69** | **51** | *c i* PN | **Pn** | **13 59 37.1** | **+1.9** |
| YUK | | | | *i* S | **Sn** | **14 00 08.4** | **+1.9** |
| YUK | | | | pmax | pmax | | |
| | comp=N,1μm,0.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,1μm,0.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,2μm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,2μm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,13μm,0.6s | | | | | | |
| **JIW** | **Iwasaki** | **2.85** | **232** | ⇑P | **Pn** | **13 59 38.5** | **+1.1** |
| **SHO** | **Shikotan** | **3.20** | **61** | *d* iPN | **Pn** | **13 59 42.3** | **+0.1** |
| SHO | | | | *i* S | **Sn** | **14 00 18.1** | **-0.9** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,868nm,0.8s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,503nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,441nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,4μm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,7μm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **4.55** | **49** | *d* iPN | **Pn** | **14 00 03.6** | **+2.8** |
| KUR | | | | *i* S | **Sn** | **14 00 57.9** | **+5.5** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,3μm,3.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,366nm,0.8s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,696nm,0.8s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,12μm,2.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,4μm,2.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,954nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,324nm,0.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.58** | **358** | ⇓*e* PN | Pn | 14 00 04.5 | +3.3 |
| YSS | | | | *i* S | **Sn** | **14 00 56.0** | **+2.9** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,530nm,1.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,8μm,19.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,8μm,16.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.58** | **358** | *e* Pn | Pn | 14 00 04.5 | +3.3 |
| **JAW** | **Awa shima** | **4.83** | **217** | P | **Pn** | **14 00 06.1** | **+1.5** |
| **JSD** | **Sado** | **5.63** | **221** | P | **Pn** | **14 00 17.3** | **+1.7** |
| **JIZZ** | **Izumozaki** | **5.84** | **215** | P | **Pn** | **14 00 20.6** | **+2.2** |
| **JHK** | **Hiroka** | **5.95** | **212** | P | **Pn** | **14 00 20.9** | **+0.9** |
| **JHG** | **Hegura jima** | **6.47** | **228** | ⇑P | **Pn** | **14 00 29.5** | **+2.4** |
| **UGL** | **Uglegorsk** | **6.74** | **355** | *d* iPN | Pn | 14 00 34.4 | +3.7 |
| UGL | | | | *e* | | 14 01 49.4 | |
| **MAJO** | **Matsushiro** | **6.89** | **214** | *c i* PN | **Pn** | **14 00 33.5** | **+0.6** |
| **MAT** | **Matsushiro** | **6.89** | **214** | P | **Pn** | **14 00 33.7** | **+0.8** |
| MAT | | | | S | **Sn** | **14 01 51.8** | **+1.9** |
| **MAT** | **Matsushiro** | **6.89** | **214** | P | **Pn** | **14 00 33.9** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **6.89** | **214** | P | **Pn** | **14 00 33.9** | **+1.0** |
| | comp=N,18nm,0.3s,baz=27,slow=14,SNR=115 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.89** | **214** | PN | **Pn** | **14 00 33.9** | **+1.0** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,18nm,0.3s | | | | | | |
| **JNG** | **Nsakai** | **7.05** | **214** | P | **Pn** | **14 00 36.1** | **+1.0** |
| **VLA** | **Vladivostok** | **8.19** | **279** | *c i* PN | Pn | 14 00 53.9 | +3.2 |
| **USRK** | **Ussuriysk Ar.** | **8.22** | **287** | P | Pn | 14 00 54.3 | +3.3 |
| | comp=Z,11nm,0.3s,baz=93,slow=15,SNR=122 | | | | | | |
| USRK | | | | LR | LR | 14 04 10.9 | |
| | comp=Z,15μm,21.9s,baz=83,slow=38 | | | | | | |
| **HABR** | **Khabarovsk** | **8.26** | **320** | *c i* PN | Pn | 14 00 55.3 | +3.8 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,360nm,1.4s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,146nm,1.4s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,208nm,1.4s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,7μm,16.0s | | | | | | |
| **JKY** | **Yasaka** | **9.10** | **225** | ⇑P | **Pn** | **14 01 05.3** | **+2.2** |
| **JWT** | **Wachi** | **9.21** | **222** | P | **Pn** | **14 01 06.7** | **+2.0** |
| **JKSM** | **Kasumi** | **9.36** | **226** | P | **Pn** | **14 01 08.9** | **+2.2** |
| **JHJ** | **Hachijo jima 2** | **9.57** | **196** | P | **Pn** | **14 01 06.8** | **-2.8** |
| | comp=Z,70nm,0.3s,baz=326,slow=23,SNR=37 | | | | | | |
| JHJ | | | | S | Sn | 14 02 45.6 | -10 |
| | comp=Z,134nm,0.3s,baz=275,slow=23,SNR=7.6 | | | | | | |
| **MDJ** | **Mudanjiang** | **9.98** | **288** | P | **Pn** | **14 01 16.3** | **+1.2** |
| MDJ | | | | S | **Sn** | **14 03 09.1** | **+3.5** |
| MDJ | | | | PcP | **PcP** | **14 07 25.1** | **+1.7** |
| MDJ | | | | ScP | **ScP** | **14 10 54.9** | **+3.3** |
| MDJ | | | | PcS | **PcS** | **14 10 58.8** | **+2.1** |
| MDJ | | | | ScS | **ScS** | **14 14 29.8** | **+3.6** |
| MDJ | | | | PMZ | | | |
| | comp=Z,23nm,1.3s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,3μm,19.3s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,10μm,23.8s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,14μm,23.2s | | | | | | |
| **MDJ** | **Mudanjiang** | **9.98** | **288** | *e* Pn | Pn | 14 01 18.9 | +3.8 |
| MDJ | | | | *e* Sn | **Sn** | **14 03 02.3** | **-3.3** |
| **KLR** | **Kul'dur** | **10.40** | **315** | ⇓*i* PN | **Pn** | **14 01 21.7** | **+0.8** |
| KLR | | | | pmax | pmax | | |
| | comp=E,120nm,1.6s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,130nm,1.6s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=E,1μm,7.0s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,2μm,7.0s | | | | | | |
| KLR | | | | MLR | MLR | | |
| | comp=Z,26μm,12.0s | | | | | | |
| **KSULL** | **Ulleungdo** | **10.48** | **246** | P | **Pn** | **14 01 24.8** | **+2.8** |
| | SNR=11 | | | | | | |
| **KSULL** | **Ulleungdo** | **10.48** | **246** | P | **Pn** | **14 01 24.8** | **+2.8** |
| | SNR=11 | | | | | | |
| **OKH** | **Okha** | **11.19** | **360** | *e* PN | Pn | 14 01 36.4 | +4.9 |
| OKH | | | | *e*S | Sn | 14 03 44.2 | +9.2 |
| OKH | | | | pmax | pmax | | |
| | comp=Z,2μm,12.0s | | | | | | |
| OKH | | | | smax | smax | | |
| | comp=N,2μm,10.0s | | | | | | |
| OKH | | | | smax | smax | | |
| | comp=Z,4μm,17.0s | | | | | | |
| **KSSKC** | **Sokcho** | **11.75** | **255** | P | **Pn** | **14 01 42.3** | **+2.9** |
| | SNR=22 | | | | | | |
| **KSSKC** | **Sokcho** | **11.75** | **255** | P | **Pn** | **14 01 42.3** | **+2.9** |
| | SNR=22 | | | | | | |
| **KSJMJ** | **Jumunjin** | **11.77** | **252** | P | **Pn** | **14 01 42.3** | **+2.7** |
| | SNR=12 | | | | | | |
| **KSJMJ** | **Jumunjin** | **11.77** | **252** | P | **Pn** | **14 01 42.1** | **+2.6** |
| | SNR=40 | | | | | | |
| **KSULJ** | **Uljin** | **11.90** | **246** | P | Pn | 14 01 45.2 | +3.8 |
| | SNR=22 | | | | | | |
| **KSULJ** | **Uljin** | **11.90** | **246** | P | Pn | 14 01 45.2 | +3.8 |
| | SNR=22 | | | | | | |
| **KSDGY** | **Daegwallycong** | **11.91** | **252** | P | **Pn** | **14 01 44.5** | **+2.9** |
| | SNR=11 | | | | | | |
| **KSDGY** | **Daegwallycong** | **11.91** | **252** | P | **Pn** | **14 01 44.4** | **+2.7** |
| | SNR=12 | | | | | | |
| **SEHB** | **SEOHWA** | **11.96** | **255** | P | **Pn** | **14 01 45.2** | **+2.9** |
| | SNR=21 | | | | | | |
| **SEHB** | **SEOHWA** | **11.96** | **255** | P | **Pn** | **14 01 45.1** | **+2.9** |
| | SNR=44 | | | | | | |
| **KSTBA** | **Taebaek** | **11.99** | **249** | P | Pn | 14 01 45.7 | +3.0 |
| | SNR=91 | | | | | | |
| **KSTBA** | **Taebaek** | **11.99** | **249** | P | Pn | 14 01 45.7 | +3.0 |
| | SNR=91 | | | | | | |
| **KSJES** | **JEONGSEON** | **12.04** | **251** | P | Pn | 14 01 46.3 | +3.0 |
| | SNR=31 | | | | | | |
| **KSJES** | **JEONGSEON** | **12.04** | **251** | P | Pn | 14 01 46.3 | +3.0 |
| | SNR=31 | | | | | | |
| **KSIJA** | **INJE** | **12.18** | **254** | P | **Pn** | **14 01 48.1** | **+2.9** |
| | SNR=62 | | | | | | |
| **KSIJA** | **INJE** | **12.18** | **254** | P | **Pn** | **14 01 48.1** | **+2.9** |
| | SNR=62 | | | | | | |
| **KSPHA** | **Pohang** | **12.20** | **244** | P | Pn | 14 01 48.9 | +3.4 |
| | SNR=13 | | | | | | |
| **KSPHA** | **Pohang** | **12.20** | **244** | P | Pn | 14 01 48.9 | +3.4 |
| | SNR=13 | | | | | | |
| **SKR** | **Severo-Kuril's** | **12.28** | **43** | *e* PN | Pn | 14 01 40.5 | -5.9 |
| SKR | | | | pmax | pmax | | |
| | comp=N,120nm,0.8s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=E,140nm,0.8s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,170nm,0.8s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=E,4μm,14.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,5μm,14.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=N,2μm,18.0s | | | | | | |
| **KSCHC** | **Chuncheon** | **12.48** | **253** | P | **Pn** | **14 01 52.0** | **+2.6** |
| | SNR=37 | | | | | | |
| **KSCHC** | **Chuncheon** | **12.48** | **253** | P | **Pn** | **14 01 51.9** | **+2.6** |
| | SNR=17 | | | | | | |
| **KSRS** | **Korea Array** | **12.55** | **252** | P | **Pn** | **14 01 53.0** | **+2.8** |
| | comp=N,2.3nm,0.3s,baz=65,slow=13,SNR=172 | | | | | | |
| KSRS | | | | S | Sn | 14 04 19.6 | +11 |
| | comp=N,4.2nm,0.3s,baz=65,slow=24,SNR=6.9 | | | | | | |
| KSRS | | | | LR | LR | 14 06 26.9 | |
| | comp=N,4μm,21.8s,baz=68,slow=36 | | | | | | |
| KSRS | | | | PcP | **PcP** | **14 07 26.7** | **+0.5** |
| | baz=73,slow=0.7,SNR=7.3 | | | | | | |
| **KSRS** | **Korea Array** | **12.55** | **252** | PN | **Pn** | **14 01 53.0** | **+2.8** |
| KSRS | | | | S | Sn | 14 04 19.6 | +11 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| KSRS | | | | smax | smax | | |
| | comp=N,4.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,4μm,21.8s | | | | | | |
| **KSCWO** | **Cheorwon** | **12.56** | **255** | P | **Pn** | **14 01 53.1** | **+2.7** |
| | SNR=38 | | | | | | |
| **KSEUS** | **ULSEONG** | **12.57** | **246** | P | Pn | 14 01 54.0 | +3.3 |
| | SNR=46 | | | | | | |
| **KSEUS** | **ULSEONG** | **12.57** | **246** | P | Pn | 14 01 53.9 | +3.3 |
| | SNR=16 | | | | | | |
| **KSAR** | **Wonju Array Be** | **12.58** | **252** | PN | **Pn** | **14 01 53.0** | **+2.3** |
| KSAR | | | | S | Sn | 14 04 19.6 | +10 |
| **KSAR** | **Wonju Array Be** | **12.58** | **252** | P | **Pn** | **14 01 53.0** | **+2.3** |
| KSAR | | | | S | Sn | 14 04 19.6 | +10 |
| KSAR | | | | PcP | **PcP** | **14 07 26.7** | **+0.4** |
| **KSYOC** | **YEONGCHEON** | **12.61** | **244** | P | **Pn** | **14 01 53.8** | **+2.7** |
| | SNR=18 | | | | | | |
| **KSDAG** | **Daegu** | **12.76** | **244** | P | **Pn** | **14 01 55.5** | **+2.3** |
| | SNR=17 | | | | | | |
| **KSCHJ** | **Chungju** | **12.79** | **250** | P | **Pn** | **14 01 56.3** | **+2.7** |
| | SNR=37 | | | | | | |
| **CN2** | **Changchun** | **12.89** | **282** | ⇓P | **Pn** | **14 01 57.4** | **+2.5** |
| CN2 | | | | *e*SP | | 14 02 09.8 | |
| CN2 | | | | *e*S | **Sn** | **14 04 19.8** | **+3.0** |
| CN2 | | | | PMZ | | | |
| | comp=Z,130nm,0.9s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,1μm,7.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,4μm,15.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,10μm,15.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,12μm,16.0s | | | | | | |
| **KSSAJ** | **Sangju** | **12.91** | **247** | P | **Pn** | **14 01 58.0** | **+2.9** |
| | SNR=16 | | | | | | |
| **KSDDC** | **Dongducheon** | **12.97** | **255** | P | **Pn** | **14 01 58.6** | **+2.7** |
| | SNR=8.5 | | | | | | |
| **KSICN** | **Icheon** | **12.98** | **252** | P | **Pn** | **14 01 58.2** | **+2.0** |
| | SNR=20 | | | | | | |
| **YNCB** | **YEONCHEON** | **13.00** | **256** | P | **Pn** | **14 01 58.9** | **+2.5** |
| | SNR=30 | | | | | | |
| **KSBON** | **Boeun** | **13.10** | **248** | P | Pn | 14 02 01.2 | +3.4 |
| | SNR=47 | | | | | | |
| **KSCPR** | **CHUPUNGNYEONG** | **13.13** | **247** | P | Pn | 14 02 01.4 | +3.1 |
| | SNR=32 | | | | | | |
| **KSMUS** | **Musan** | **13.19** | **256** | P | **Pn** | **14 02 01.2** | **+2.3** |
| | SNR=20 | | | | | | |
| **KSSEO** | **Seoul** | **13.24** | **254** | P | **Pn** | **14 02 01.6** | **+1.8** |
| | SNR=8.1 | | | | | | |
| **JNU** | **Nakatsue** | **13.28** | **230** | P | **Pn** | **14 02 00.3** | **-0.1** |
| **JNU** | **Nakatsue** | **13.28** | **230** | P | **Pn** | **14 02 00.2** | **-0.1** |
| | comp=Z,3.0nm,0.3s,baz=51,slow=13,SNR=58 | | | | | | |
| **KSSWO** | **Suwon** | **13.31** | **253** | P | **Pn** | **14 02 02.4** | **+1.7** |
| | SNR=25 | | | | | | |
| **KSCEA** | **Cheonan** | **13.32** | **251** | P | **Pn** | **14 02 03.2** | **+2.4** |
| | SNR=5.9 | | | | | | |
| **KSTEJ** | **Daejeon** | **13.47** | **249** | P | **Pn** | **14 02 05.8** | **+3.0** |
| | SNR=26 | | | | | | |
| **TJN** | **Taejon** | **13.47** | **249** | ⇓*e* PN | **Pn** | **14 02 04.0** | **+1.2** |
| **KSGAH** | **Ganghwa** | **13.49** | **255** | P | **Pn** | **14 02 05.0** | **+1.9** |
| | SNR=5.4 | | | | | | |
| **KSJIN** | **Jinju** | **13.69** | **243** | P | **Pn** | **14 02 08.6** | **+2.7** |
| | SNR=8.6 | | | | | | |
| **KSSES** | **Seosan** | **13.90** | **252** | P | **Pn** | **14 02 10.4** | **+1.7** |
| | SNR=12 | | | | | | |
| **KSNAH** | **Namhae** | **13.96** | **242** | P | **Pn** | **14 02 11.5** | **+1.9** |
| | SNR=5.7 | | | | | | |
| **KSGUS** | **GUNSAN** | **14.05** | **249** | P | **Pn** | **14 02 12.9** | **+2.2** |
| | SNR=18 | | | | | | |
| **JTZ** | **Takazaki** | **14.09** | **226** | P | **Pn** | **14 02 11.2** | **-0.1** |
| **JZO** | **Okuchi** | **14.17** | **228** | P | **Pn** | **14 02 11.7** | **-0.7** |
| **KSJEU** | **Jeongeup** | **14.24** | **246** | P | **Pn** | **14 02 14.8** | **+1.5** |
| | SNR=57 | | | | | | |
| **SNY** | **Shenyang** | **14.41** | **274** | ⇑P | **Pn** | **14 02 16.9** | **+1.4** |
| SNY | | | | S | Sn | 14 05 02.1 | +8.3 |
| SNY | | | | PMZ | | | |
| | comp=Z,100nm,0.8s | | | | | | |
| SNY | | | | PMZ | | | |
| | comp=Z,1μm,9.4s | | | | | | |
| SNY | | | | LN | | | |
| | comp=Z,2μm,21.8s | | | | | | |
| SNY | | | | LE | | | |
| | comp=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **HIA** | **Hailar** | **17.56** | **301** | *e*P | **Pn** | **14 02 54.4** | **-1.2** |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,127nm,1.0s | | | | | | | |
| **HIA** | **Hailar** | **17.56** | **301** | *e*Pn | **Pn** | **14 02 54.4** | **-1.2** |
| | comp=Z,127nm,1.0s | | | | | | | |
| **MA2** | **Magadan** | **17.89** | **13** | *e*P | **Pn** | **14 02 59.3** | **-0.3** |
| **CLNS** | **Chul'man** | **18.54** | **328** | *e*P | **Pn** | **14 03 07.4** | **-0.1** |
| CLNS | | | | *e*S | **Sn** | **14 06 32.3** | **-1.3** |
| CLNS | | | | pmax | pmax | | | |
| | comp=Z,129nm,0.9s | | | | | | | |
| CLNS | | | | pmax | pmax | | | |
| | comp=N,65nm,0.9s | | | | | | | |
| CLNS | | | | smax | smax | | | |
| | comp=N,1μm,12.6s | | | | | | | |
| CLNS | | | | smax | smax | | | |
| | comp=E,2μm,13.8s | | | | | | | |
| CLNS | | | | MLR | MLR | | | |
| | comp=E,2μm,12.0s | | | | | | | |
| CLNS | | | | MLR | MLR | | | |
| | comp=N,2μm,12.0s | | | | | | | |
| CLNS | | | | MLR | MLR | | | |
| | comp=E,2μm,13.0s | | | | | | | |
| **JOW** | **Kunigami** | **19.62** | **222** | P | **P** | **14 03 17.2** | **-1.6** |
| | comp=E,1.4nm,0.3s,baz=40,slow=14,SNR=41 | | | | | | | |
| **BJI** | **Beijing** | **20.27** | **272** | P | **P** | **14 03 24.9** | **-1.0** |
| BJI | | | | S | **S** | **14 07 11.6** | **+1.1** |
| BJI | | | | PMZ | | | | |
| | comp=E,150nm,0.9s | | | | | | | |
| BJI | | | | PMZ | | | | |
| | comp=E,590nm,4.1s | | | | | | | |
| BJI | | | | LN | | | | |
| | comp=E,6μm,16.6s | | | | | | | |
| BJI | | | | LE | | | | |
| | comp=E,4μm,30.7s | | | | | | | |
| BJI | | | | LZ | | | | |
| | comp=E,9μm,29.1s | | | | | | | |
| **BJT** | **Baijiatuau** | **20.28** | **272** | *e*P | **P** | **14 03 22.8** | **-3.2** |
| BJT | | | | pmax | pmax | | | |
| | comp=Z,162nm,0.9s | | | | | | | |
| BJT | | | | MLR | MLR | | | |
| | comp=Z,8μm,22.0s | | | | | | | |
| **BJT** | **Baijiatuau** | **20.28** | **272** | *e*P | **P** | **14 03 22.8** | **-3.2** |
| | comp=Z,162nm,0.9s | | | | | | | |
| BJT | | | | LR | LR | | | |
| | comp=Z,8μm,22.0s | | | | | | | |
| **SSE** | **Sheshan** | **20.71** | **244** | ⇓P | **P** | **14 03 27.3** | **-3.4** |
| SSE | | | | pP | Pn | 14 03 35.6 | +2.1 |
| SSE | | | | PMZ | | | | |
| | comp=Z,25nm,0.6s | | | | | | | |
| SSE | | | | PMZ | | | | |
| | comp=Z,250nm,3.7s | | | | | | | |
| SSE | | | | LN | | | | |
| | comp=Z,3μm,17.0s | | | | | | | |
| SSE | | | | LZ | | | | |
| | comp=Z,2μm,23.1s | | | | | | | |
| **TIA** | **Tai'an** | **20.89** | **261** | ⇑P | **P** | **14 03 30.9** | **-1.7** |
| TIA | | | | S | **S** | **14 07 16.4** | **-6.4** |
| TIA | | | | PcP | **PcP** | **14 07 43.6** | **+4.4** |
| TIA | | | | PMZ | | | | |
| | comp=Z,330nm,0.7s | | | | | | | |
| TIA | | | | PMZ | | | | |
| | comp=Z,700nm,4.0s | | | | | | | |
| TIA | | | | LN | | | | |
| | comp=Z,2μm,9.5s | | | | | | | |
| TIA | | | | LE | | | | |
| | comp=Z,4μm,15.5s | | | | | | | |
| TIA | | | | LZ | | | | |
| | comp=Z,4μm,15.2s | | | | | | | |
| **YAK** | **Yakutsk** | **21.23** | **343** | P | **P** | **14 03 33.5** | **-2.5** |
| | comp=Z,20nm,0.5s,baz=330,slow=20,SNR=40 | | | | | | | |
| YAK | | | | S | **S** | **14 07 23.5** | **-5.5** |
| | comp=Z,5.8nm,0.5s,baz=225,slow=23,SNR=7.4 | | | | | | | |
| **YAK** | **Yakutsk** | **21.23** | **343** | *c* i P | **P** | **14 03 32.9** | **-3.1** |
| YAK | | | | *e* | | 14 03 53.0 | | |
| YAK | | | | *i* S | S | 14 07 21.5 | -7.6 | |
| YAK | | | | *e*SS | Sn | 14 07 41.4 | +3.3 | |
| YAK | | | | *e* | | 14 14 50.6 | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,369nm,0.9s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,545nm,2.3s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,257nm,1.4s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=E,555nm,2.4s | | | | | | | |
| YAK | | | | smax | smax | | | |
| | comp=N,241nm,1.2s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=Z,1μm,11.0s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=N,962nm,11.0s | | | | | | | |
| YAK | | | | MLR | MLR | | | |
| | comp=E,713nm,11.0s | | | | | | | |
| **YAK** | **Yakutsk** | **21.23** | **343** | P | **P** | **14 03 33.5** | **-2.5** |
| | comp=E,30nm,0.8s | | | | | | | |
| YAK | | | | S | **S** | **14 07 23.6** | **-5.5** |
| YAK | | | | LR | LR | | | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **SEY** | **Seymchan** | **21.33** | **12** | P | **P** | **14 03 35.4** | **-1.7** |
| | comp=Z,93nm,0.9s,baz=183,slow=8.9,SNR=210 | | | | | | | |
| **SEY** | **Seymchan** | **21.33** | **12** | *e*P | **P** | **14 03 35.8** | **-1.3** |
| **NJ2** | **Nanjing** | **21.73** | **250** | *e*P | **P** | **14 03 38.4** | **-3.2** |
| NJ2 | | | | pP | **pP** | **14 03 50.9** | **-1.9** |
| NJ2 | | | | sP | **sP** | **14 03 54.6** | **-4.1** |
| NJ2 | | | | S | **S** | **14 07 41.5** | **+2.1** |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,110nm,1.1s | | | | | | | |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,600nm,11.0s | | | | | | | |
| NJ2 | | | | LN | | | | |
| | comp=Z,11μm,20.5s | | | | | | | |
| NJ2 | | | | LE | | | | |
| | comp=Z,8μm,18.6s | | | | | | | |
| NJ2 | | | | LZ | | | | |
| | comp=Z,8μm,18.6s | | | | | | | |
| **CIT** | **Chita** | **22.06** | **306** | *e*P | **P** | **14 03 47.6** | **+2.5** |
| CIT | | | | *e* | | 14 04 06.2 | | |
| **HHC** | **Hu-ho-hao-te** | **23.47** | **277** | *e*P | **P** | **14 03 57.3** | **-2.5** |
| HHC | | | | sP | **sP** | **14 04 15.9** | **-1.4** |
| HHC | | | | S | **S** | **14 08 07.8** | **-2.1** |
| HHC | | | | sS | sS | 14 08 17.9 | -13 |
| HHC | | | | PMZ | | | | |
| | comp=Z,41nm,1.0s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,640nm,5.9s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,3μm,16.9s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,4μm,21.8s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,5μm,20.6s | | | | | | | |
| **TIY** | **Taiyuan** | **23.77** | **269** | *e*P | **P** | **14 04 00.5** | **-2.1** |
| TIY | | | | S | **S** | **14 08 12.6** | **-2.1** |
| TIY | | | | SS | **SnSn** | **14 09 00.9** | **+4.8** |
| TIY | | | | PMZ | | | | |
| | comp=Z,470nm,9.9s | | | | | | | |
| TIY | | | | LN | | | | |
| | comp=Z,1μm,14.0s | | | | | | | |
| TIY | | | | LE | | | | |
| | comp=Z,2μm,14.2s | | | | | | | |
| TIY | | | | LZ | | | | |
| | comp=Z,3μm,20.2s | | | | | | | |
| **BOD** | **Bodaibo** | **23.91** | **320** | *e*P | **P** | **14 04 00.8** | **-2.8** |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,47nm,0.5s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **24.32** | **229** | *e*P | **P** | **14 04 04.4** | **-3.2** |
| YOJ | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.6s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **24.32** | **229** | *e*P | **P** | **14 04 04.4** | **-3.2** |
| | comp=Z,21nm,0.6s | | | | | | | |
| **BTO** | **Baotou** | **24.66** | **277** | *e*P | **P** | **14 04 09.9** | **-0.9** |
| **TATO** | **Taipei** | **24.80** | **232** | PFAKE | | 14 04 20.0 | +8.0 |
| TATO | | | | LR | LR | | | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **YHNB** | **Yeheng** | **25.10** | **232** | *e*P | **P** | **14 04 13.5** | **-1.4** |
| | comp=Z,101nm,0.8s | | | | | | | |
| YHNB | | | | LR | LR | | | |
| | comp=Z,2μm,19.0s | | | | | | | |
| **WHN** | **Wuhan** | **25.74** | **252** | ⇓P | **P** | **14 04 18.3** | **-2.2** |
| WHN | | | | S | **S** | **14 08 41.4** | **-4.8** |
| WHN | | | | LN | | | | |
| | comp=Z,2μm,9.7s | | | | | | | |
| WHN | | | | LE | | | | |
| | comp=Z,4μm,14.6s | | | | | | | |
| WHN | | | | LZ | | | | |
| | comp=Z,8μm,21.2s | | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ULN** | **Ulaanbaatar** | **25.77** | **295** | *c i*P | **P** | **14 04 21.0** | **+0.2** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,121nm,0.8s | | | | | | | |
| ULN | | | | MLR | MLR | | | |
| | comp=Z,5μm,16.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.77** | **295** | P | **P** | **14 04 21.2** | **+0.4** |
| | SNR=63 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.77** | **295** | *e*P | **P** | **14 04 21.1** | **+0.3** |
| | comp=Z,139nm,1.0s | | | | | | | |
| ULN | | | | LR | LR | | | |
| | comp=Z,6μm,20.0s | | | | | | | |
| **YULB** | **Yu-li** | **26.13** | **230** | *e*P | **P** | **14 04 20.9** | **-3.2** |
| | comp=Z,29nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **26.21** | **295** | P | **P** | **14 04 25.4** | **+0.6** |
| | comp=Z,114nm,0.7s,baz=78,slow=8.6,SNR=611 | | | | | | | |
| SONM | | | | PcP | **PcP** | **14 07 50.8** | **+0.3** |
| | comp=Z,4.7nm,0.7s,baz=147,slow=2.7,SNR=4.0 | | | | | | | |
| SONM | | | | LR | LR | 14 15 44.8 | | |
| | comp=Z,6μm,18.8s,baz=88,slow=38 | | | | | | | |
| **SONM** | **Songino Array** | **26.21** | **295** | P | **P** | **14 04 25.4** | **+0.6** |
| SONM | | | | | | 14 07 50.8 | | |
| SONM | | | | pmax | pmax | | | |
| | comp=Z,114nm,0.7s | | | | | | | |
| SONM | | | | MLR | MLR | | | |
| | comp=Z,6μm,18.8s | | | | | | | |
| **QZH** | **Quanzhou** | **26.57** | **237** | ⇑*i*P | **P** | **14 04 30.1** | **+2.0** |
| QZH | | | | S | **S** | **14 09 03.3** | **+3.9** |
| QZH | | | | PMZ | | | | |
| | comp=Z,210nm,0.9s | | | | | | | |
| QZH | | | | PMZ | | | | |
| | comp=Z,2μm,8.0s | | | | | | | |
| QZH | | | | LN | | | | |
| | comp=Z,1μm,14.1s | | | | | | | |
| QZH | | | | LE | | | | |
| | comp=Z,2μm,11.6s | | | | | | | |
| QZH | | | | LZ | | | | |
| | comp=Z,4μm,30.6s | | | | | | | |
| **TPUB** | **Ta-pu** | **26.58** | **231** | *e*P | **P** | **14 04 25.6** | **-2.6** |
| | comp=Z,91nm,0.8s | | | | | | | |
| **TWG** | **Pinlang** | **26.70** | **230** | *e*P | **P** | **14 04 28.2** | **-1.0** |
| | comp=Z,264nm,0.6s | | | | | | | |
| **IRK** | **Irkutsk** | **27.73** | **304** | *e*P | **P** | **14 04 38.4** | **+0.1** |
| IRK | | | | *e* | | 14 04 59.7 | | |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,181nm,1.4s | | | | | | | |
| **XAN** | **Xi'an** | **27.87** | **264** | P | **P** | **14 04 39.3** | **-0.4** |
| XAN | | | | pP | **pP** | **14 04 47.9** | **-4.2** |
| XAN | | | | S | **S** | **14 09 24.3** | **+4.4** |
| XAN | | | | SS | **SnSn** | **14 10 36.5** | **0.0** |
| XAN | | | | PMZ | | | | |
| | comp=Z,64nm,0.7s | | | | | | | |
| XAN | | | | PMZ | | | | |
| | comp=Z,540nm,8.2s | | | | | | | |
| XAN | | | | LN | | | | |
| | comp=Z,1μm,21.4s | | | | | | | |
| XAN | | | | LE | | | | |
| | comp=Z,2μm,20.4s | | | | | | | |
| XAN | | | | LZ | | | | |
| | comp=Z,2μm,21.4s | | | | | | | |
| **TLY** | **Talaya** | **28.07** | **303** | P | **P** | **14 04 42.3** | **+1.0** |
| | comp=Z,69nm,0.8s,baz=107,slow=5.7,SNR=102 | | | | | | | |
| TLY | | | | PcP | **PcP** | **14 07 55.4** | **+0.7** |
| | comp=Z,14nm,0.8s,baz=154,slow=3.4,SNR=4.9 | | | | | | | |
| TLY | | | | LR | LR | 14 16 44.4 | | |
| | comp=Z,5μm,20.5s,baz=94,slow=38 | | | | | | | |
| **TLY** | **Talaya** | **28.07** | **303** | *i* P | **P** | **14 04 41.7** | **+0.4** |
| TLY | | | | *e* | | 14 04 59.0 | | |
| TLY | | | | *e*PPP | PPP | 14 05 34.9 | | |
| TLY | | | | *e*S | **S** | **14 09 21.7** | **-1.0** |
| TLY | | | | pmax | pmax | | | |
| | comp=Z,122nm,0.9s | | | | | | | |
| TLY | | | | MLR | MLR | | | |
| | comp=Z,5μm,22.0s | | | | | | | |
| **TLY** | **Talaya** | **28.07** | **303** | P | **P** | **14 04 42.9** | **+1.6** |
| | comp=Z,734nm,0.9s,SNR=40 | | | | | | | |
| **TLY** | **Talaya** | **28.07** | **303** | P | **P** | **14 04 42.7** | **+1.3** |
| | SNR=44 | | | | | | | |
| **TLY** | **Talaya** | **28.07** | **303** | *e*P | **P** | **14 04 42.3** | **+1.0** |
| | comp=Z,114nm,0.9s | | | | | | | |
| TLY | | | | PcP | **PcP** | **14 07 55.4** | **+0.7** |
| **ZAK** | **Zakamensk** | **28.25** | **300** | *e*P | **P** | **14 04 42.3** | **-0.7** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,66nm,1.1s | | | | | | | |
| **BILL** | **Bilibino** | **28.58** | **18** | *ce*P | **P** | **14 04 43.8** | **-1.8** |
| BILL | | | | *e* | | 14 05 36.2 | | |
| BILL | | | | *e*PPP | PPP | 14 05 47.2 | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,2μm,16.0s | | | | | | | |
| **BILL** | **Bilibino** | **28.58** | **18** | *e*PcP | **PcP** | **14 07 56.5** | **+0.9** |
| BILL | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **ENH** | **Enshi** | **29.37** | **257** | *e*P | **P** | **14 04 51.1** | **-1.9** |
| | comp=Z,52nm,0.8s | | | | | | | |
| ENH | | | | *e*PcP | **PcP** | **14 07 58.9** | **+0.6** |
| ENH | | | | LR | LR | | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| **MOY** | **Mondy** | **29.72** | **303** | *e*P | **P** | **14 04 57.2** | **+1.1** |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,296nm,2.7s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.30** | **131** | T | T | 14 36 35.4 | | |
| | baz=324,slow=75,SNR=2479 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.31** | **131** | T | T | 14 36 32.5 | | |
| | baz=324,slow=75,SNR=3517 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.32** | **131** | T | T | 14 36 36.7 | | |
| | baz=324,slow=75,SNR=5280 | | | | | | | |
| **WAKE** | **Wake Island** | **30.52** | **132** | PFAKE | | 14 05 20.0 | +17 | |
| WAKE | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | |
| **LZH** | **Lanzhou** | **30.75** | **271** | ⇑P | **P** | **14 05 06.6** | **+1.2** |
| LZH | | | | pP | **pP** | **14 05 15.5** | **-2.3** |
| LZH | | | | sP | **sP** | **14 05 19.1** | **-4.3** |
| LZH | | | | S | **S** | **14 10 03.3** | **-2.0** |
| LZH | | | | sS | sS | 14 10 18.6 | -7.5 |
| LZH | | | | PMZ | | | | |
| | comp=Z,130nm,1.0s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,680nm,4.6s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,2μm,14.5s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,3μm,14.9s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,4μm,15.5s | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.18** | **132** | T | T | 14 37 41.9 | | |
| | baz=326,slow=76,SNR=2642 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.18** | **132** | T | T | 14 37 39.2 | | |
| | baz=326,slow=76,SNR=2773 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.19** | **132** | T | T | 14 37 44.6 | | |
| | baz=326,slow=76,SNR=2372 | | | | | | | |
| **GZH** | **Guangzhou** | **31.24** | **241** | P | P | 14 05 05.3 | -4.3 | |
| GZH | | | | S | S | 14 10 04.8 | -7.9 | |
| GZH | | | | PMZ | | | | |
| | comp=Z,1μm,5.9s | | | | | | | |
| GZH | | | | LN | | | | |
| | comp=Z,4μm,15.1s | | | | | | | |
| GZH | | | | LE | | | | |
| | comp=Z,3μm,14.7s | | | | | | | |
| **SZP** | **Santa** | **31.31** | **225** | P | **P** | **14 05 09.4** | **-0.8** |
| | comp=Z,205nm,0.8s | | | | | | | |
| **GTA** | **Gaotai** | **32.50** | **280** | ⇑P | **P** | **14 05 22.0** | **+1.3** |
| GTA | | | | PcP | **PcP** | **14 08 07.3** | **+0.7** |
| GTA | | | | S | **S** | **14 10 34.4** | **+1.9** |
| GTA | | | | ScP | **ScP** | **14 11 46.9** | **+0.5** |
| GTA | | | | PcS | **PcS** | **14 11 52.6** | **+0.8** |
| GTA | | | | ScS | **ScS** | **14 15 44.8** | **-1.2** |
| GTA | | | | PMZ | | | | |
| | comp=Z,210nm,0.9s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,730nm,6.9s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,1μm,16.6s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,4μm,18.0s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,4μm,17.6s | | | | | | | |
| **PVCP** | **Virac** | **32.98** | **215** | ⇑*e*P | **P** | **14 05 25.0** | **+0.2** |
| **CD2** | **Chengdu** | **33.20** | **263** | ⇑*i*P | **P** | **14 05 26.8** | **0.0** |
| CD2 | | | | pP | **pP** | **14 05 39.0** | **-0.3** |
| CD2 | | | | PP | **PP** | **14 06 42.3** | **-0.1** |
| CD2 | | | | S | **S** | **14 10 43.5** | **+0.1** |
| CD2 | | | | sS | **sS** | **14 11 04.9** | **+0.6** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,90nm,0.7s | | | | | | | |
| CD2 | | | | PMZ | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,500nm,4.7s | | | | | | | |
| CD2 | | | | LN | | | | |
| | comp=Z,4μm,13.2s | | | | | | | |
| CD2 | | | | LE | | | | |
| | comp=Z,1μm,14.2s | | | | | | | |
| CD2 | | | | LZ | | | | |
| | comp=Z,2μm,22.5s | | | | | | | |
| **GYA** | **Guiyang** | **33.60** | **254** | ⇑*i*P | **P** | **14 05 30.3** | **-0.1** |
| GYA | | | | pP | **pP** | **14 05 42.0** | **-0.8** |
| GYA | | | | sP | **sP** | **14 05 45.8** | **-2.6** |
| GYA | | | | PP | **PnPn** | **14 06 44.9** | **+1.8** |
| GYA | | | | PcP | **PcP** | **14 08 12.0** | **+2.1** |
| GYA | | | | S | **S** | **14 10 48.1** | **-1.6** |
| GYA | | | | sS | **sS** | **14 11 07.3** | **-3.4** |
| GYA | | | | ScP | **ScP** | **14 11 53.0** | **+2.6** |
| GYA | | | | ScS | **ScS** | **14 15 50.8** | **-1.2** |
| GYA | | | | PMZ | | | | |
| | comp=Z,60nm,0.7s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=Z,350nm,9.4s | | | | | | | |
| GYA | | | | LN | | | | |
| | comp=Z,2μm,20.9s | | | | | | | |
| GYA | | | | LE | | | | |
| | comp=Z,2μm,21.2s | | | | | | | |
| GYA | | | | LZ | | | | |
| | comp=Z,2μm,20.9s | | | | | | | |
| **HVS** | **Khovu-Aksy** | **34.30** | **302** | *d i*P | **P** | **14 05 37.4** | **+1.2** |
| HVS | | | | pmax | pmax | | | |
| | comp=Z,105nm,0.9s | | | | | | | |
| **KRAR** | **Krasnoyarsk** | **34.66** | **311** | *c i*P | **P** | **14 05 39.3** | **+0.2** |
| KRAR | | | | pmax | pmax | | | |
| | comp=Z,140nm,1.0s | | | | | | | |
| KRAR | | | | MLR | MLR | | | |
| | comp=Z,2μm,18.0s | | | | | | | |
| **MIDW** | **Midway** | **34.99** | **101** | PFAKE | | 14 05 50.0 | +7.8 | |
| MIDW | | | | LR | LR | | | |
| | comp=Z,1μm,19.0s | | | | | | | |
| **QIZ** | **Qiongzhong** | **36.42** | **241** | P | **P** | **14 05 55.3** | **+0.8** |
| QIZ | | | | pP | **pP** | **14 06 04.1** | **-3.0** |
| QIZ | | | | sP | sP | 14 06 07.8 | -4.9 |
| QIZ | | | | PP | **PP** | **14 07 18.4** | **+0.4** |
| QIZ | | | | S | **S** | **14 11 34.8** | **+1.9** |
| QIZ | | | | sS | **sS** | **14 11 49.8** | **-4.1** |
| QIZ | | | | PMZ | | | | |
| | comp=Z,39nm,1.5s | | | | | | | |
| QIZ | | | | LN | | | | |
| | comp=Z,2μm,19.3s | | | | | | | |
| QIZ | | | | LZ | | | | |
| | comp=Z,2μm,14.9s | | | | | | | |
| **QIZ** | **Qiongzhong** | **36.42** | **241** | *e*P | **P** | **14 05 52.1** | **-2.5** |
| | comp=Z,133nm,1.7s | | | | | | | |
| QIZ | | | | LR | LR | | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| **KMI** | **Kunming** | **37.22** | **255** | P | **P** | **14 06 01.8** | **+0.2** |
| KMI | | | | PP | **PnPn** | **14 07 29.6** | **+1.8** |
| KMI | | | | S | S | 14 11 35.3 | -10 |
| KMI | | | | PMZ | | | | |
| | comp=Z,160nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,850nm,6.3s | | | | | | | |
| KMI | | | | LN | | | | |
| | comp=Z,2μm,20.3s | | | | | | | |
| KMI | | | | LE | | | | |
| | comp=Z,570nm,19.7s | | | | | | | |
| KMI | | | | LZ | | | | |
| | comp=Z,2μm,19.3s | | | | | | | |
| **DAV** | **Davao City (W)** | **38.38** | **209** | ⇓*e*P | **P** | **14 06 09.6** | **-1.6** |
| **DAV** | **Davao City (W)** | **38.38** | **209** | PFAKE | | 14 06 20.0 | +8.9 | |
| DAV | | | | LR | LR | | | |
| | comp=Z,1μm,19.0s | | | | | | | |
| **SLVN** | **Son La** | **38.80** | **250** | *e*P | **P** | **14 06 13.8** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **39.40** | **308** | P | **P** | **14 06 19.9** | **+0.6** |
| | comp=Z,222nm,0.8s,baz=88,slow=7.6,SNR=600 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **14 08 27.0** | **+0.4** |
| | comp=Z,60nm,0.8s,baz=96,slow=3.0,SNR=9.7 | | | | | | | |
| ZALV | | | | ScP | **ScP** | **14 12 09.9** | **-1.3** |
| | comp=Z,3.5nm,0.7s,baz=63,slow=3.9,SNR=4.8 | | | | | | | |
| ZALV | | | | LR | LR | 14 23 51.8 | | |
| | comp=Z,3μm,18.9s,baz=70,slow=38 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.40** | **308** | P | **P** | **14 06 19.9** | **+0.6** |
| ZALV | | | | | | 14 08 27.0 | | |
| ZALV | | | | | | 14 12 09.9 | | |
| ZALV | | | | pmax | pmax | | | |
| | comp=Z,222nm,0.8s | | | | | | | |
| ZALV | | | | MLR | MLR | | | |
| | comp=Z,3μm,18.9s | | | | | | | |
| **WMQ** | **Urumqi** | **39.75** | **292** | ⇑*i*P | **P** | **14 06 23.0** | **+0.5** |
| WMQ | | | | pP | **pP** | **14 06 33.0** | **-2.1** |
| WMQ | | | | sP | **sP** | **14 06 37.0** | **-3.7** |
| WMQ | | | | PP | **PnPn** | **14 08 00.0** | **+2.3** |
| WMQ | | | | PcP | **PcP** | **14 08 30.0** | **+1.9** |
| WMQ | | | | ScP | **ScP** | **14 12 15.0** | **+2.1** |
| WMQ | | | | S | **S** | **14 12 22.0** | **-1.0** |
| WMQ | | | | sS | **sS** | **14 12 40.0** | **-4.2** |
| WMQ | | | | SS | **SS** | **14 15 14.0** | **-5.8** |
| WMQ | | | | ScS | **ScS** | **14 16 26.0** | **+0.3** |
| WMQ | | | | PMZ | | | | |
| | comp=Z,220nm,1.0s | | | | | | | |
| WMQ | | | | PMZ | | | | |
| | comp=Z,870nm,5.6s | | | | | | | |
| WMQ | | | | LN | | | | |
| | comp=Z,3μm,16.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | comp=Z,5μm,16.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | comp=Z,5μm,16.0s | | | | | | | |
| **NVS** | **Novosibirsk** | **40.20** | **309** | ⇑*i*P | **P** | **14 06 26.6** | **+0.6** |
| NVS | | | | pmax | pmax | | | |
| | comp=N,20nm,0.9s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=E,86nm,0.9s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=Z,105nm,0.9s | | | | | | | |
| **SGSI** | **Sangihe** | **41.55** | **207** | P | P | 14 06 41.5 | +4.1 | |
| **RSO** | **Redoubt South** | **42.05** | **42** | *e*P | **P** | **14 06 41.8** | **+0.5** |
| | comp=Z,68nm,0.8s | | | | | | | |
| **OHAK** | **Old Harbor** | **42.12** | **47** | *e*P | **P** | **14 06 43.2** | **+1.6** |
| | comp=Z,97nm,1.2s | | | | | | | |
| **PPLA** | **Purkeypile** | **42.17** | **38** | *e*P | **P** | **14 06 43.0** | **+0.8** |
| | comp=Z,105nm,1.3s | | | | | | | |
| **SPU** | **Mount Spurr** | **42.33** | **41** | *e*P | **P** | **14 06 44.8** | **+1.4** |
| **KDAK** | **Kodiak Island** | **42.42** | **46** | *i*P | **P** | **14 06 43.7** | **-0.4** |
| **KDAK** | **Kodiak Island** | **42.42** | **46** | P | **P** | **14 06 44.3** | **+0.2** |
| | comp=Z,183nm,0.9s,SNR=13 | | | | | | | |
| **KDAK** | **Kodiak Island** | **42.42** | **46** | PFAKE | | 14 07 00.0 | +16 | |
| KDAK | | | | LR | LR | | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| **MK31** | **Makanchi Array** | **42.51** | **298** | *i*P | **P** | **14 06 45.2** | **+0.2** |
| MK31 | | | | pmax | pmax | | | |
| | comp=Z,121nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.51** | **298** | P | **P** | **14 06 45.5** | **+0.4** |
| | comp=Z,103nm,0.6s,baz=82,slow=9.5,SNR=712 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **14 08 36.8** | **-0.1** |
| | comp=Z,18nm,0.7s,baz=67,slow=3.2,SNR=3.9 | | | | | | | |
| MKAR | | | | LR | LR | 14 25 08.2 | | |
| | comp=Z,2μm,20.4s,baz=88,slow=37 | | | | | | | |
| **DLV** | **T Lat** | **42.62** | **235** | *e*P | **P** | **14 06 46.6** | **+0.2** |
| | comp=Z,83nm,0.9s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **42.66** | **36** | *e*P | **P** | **14 06 45.9** | **-0.1** |
| | comp=Z,23nm,0.9s | | | | | | | |
| **MAKZ** | **Makanchi** | **42.71** | **298** | *e*P | **P** | **14 06 47.1** | **+0.4** |
| **MLY** | **Manley** | **42.74** | **35** | *e*P | **P** | **14 06 47.8** | **+1.1** |
| | comp=Z,55nm,1.6s | | | | | | | |
| **SUA** | **Susitna One** | **42.94** | **40** | *e*P | **P** | **14 06 51.1** | **+2.6** |
| | comp=Z,34nm,0.9s | | | | | | | |
| **TRF** | **Thorofare Moun** | **43.00** | **37** | *e*P | **P** | **14 06 49.8** | **+0.8** |
| | comp=Z,32nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **43.15** | **270** | P | **P** | **14 06 52.6** | **+1.6** |
| LSA | | | | PMZ | | | | |
| | comp=Z,42nm,1.2s | | | | | | | |
| **LSA** | **Lhasa** | **43.15** | **270** | P | **P** | **14 06 52.1** | **+1.1** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,50nm,0.7s | | | | | | | |
| LSA | | | | MLR | MLR | | | |
| | comp=Z,3μm,22.0s | | | | | | | |
| **LSA** | **Lhasa** | **43.15** | **270** | P | **P** | **14 06 52.1** | **+1.1** |
| | comp=Z,50nm,0.7s | | | | | | | |
| LSA | | | | LR | LR | | | |
| | comp=Z,3μm,22.0s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **43.26** | **221** | *e*P | **P** | **14 06 50.8** | **-0.6** |
| | comp=Z,96nm,1.4s | | | | | | | |
| KKM | | | | LR | LR | | | |
| | comp=Z,639nm,19.0s | | | | | | | |
| **RC01** | **Rabbit Creek A** | **43.46** | **41** | *e*P | **P** | **14 06 50.5** | **-2.0** |
| | comp=Z,21nm,0.8s | | | | | | | |
| **MCK** | **McKinley** | **43.59** | **37** | *e*P | **P** | **14 06 53.2** | **-0.3** |

MCK *e* 14 08 40.7
MCK pmax pmax
comp=Z,49nm,1.0s
**MCK McKinley 43.59 37** *e*P **P 14 06 53.2 -0.3**
comp=Z,49nm,1.0s
MCK *e*PcP **PcP 14 08 40.7 +0.5**
**RND Reindeer 43.65 37** *e*P **P 14 06 54.3 +0.2**
RND pmax pmax
comp=Z,47nm,1.0s
**RND Reindeer 43.65 37** *e*P **P 14 06 54.3 +0.2**
comp=Z,46nm,1.0s
**PMR Palmer 43.70 40** P **P 14 06 53.8 -0.5**
PMR pmax pmax
comp=Z,19nm,0.8s
**PMR Palmer 43.70 40** P **P 14 06 53.8 -0.5**
comp=Z,19nm,0.8s
**SEW Seward 43.72 42** *e*P **P 14 06 54.5 -0.1**
comp=Z,33nm,0.9s
**TNTI Ternate 43.73 203** *e*P **P 14 06 54.6 -0.5**
comp=Z,60nm,0.7s
**KURK Kurchatov 43.76 304** P **P 14 06 56.3 +1.3**
KURK 14 08 41.4
KURK pmax pmax
comp=Z,248nm,0.7s
**KURK Kurchatov 43.76 304** P **P 14 06 55.8 +0.8**
comp=Z,2µm,0.9s
**KURK Kurchatov 43.76 304** *e*P **P 14 06 55.4 +0.3**
comp=Z,663nm,0.8s
KURK PcP **PcP 14 08 41.4 +0.4**
KURK LR LR
comp=Z,3µm,20.0s
**MDM Murphy Dome 43.81 35** *e*P **P 14 06 56.1 +0.8**
comp=Z,33nm,0.9s
**KURBB Kurchatov Arra 43.84 304** P **P 14 06 56.2 +0.6**
comp=Z,248nm,0.7s,baz=77,slow=8.8,SNR=1317
KURBB PcP **PcP 14 08 41.4 +0.1**
comp=Z,19nm,0.8s,baz=79,slow=4.2,SNR=3.6
**WRH Wood River Hil 43.90 36** *e*P **P 14 06 56.7 +0.7**
comp=Z,26nm,0.8s
**CHTO Chiang Mai 43.95 252** P **P 14 06 58.2 +1.3**
SNR=26
**CHTO Chiang Mai 43.95 252** PFAKE 14 07 10.0 +13
CHTO LR LR
comp=Z,2µm,20.0s
**COLA College 43.98 35***c i*P **P 14 06 56.8 +0.3**
COLA pmax pmax
comp=Z,49nm,0.9s
COLA MLR MLR
comp=Z,898nm,19.0s
**COLA College 43.98 35** PFAKE 14 07 10.0 +13
COLA LR LR
comp=Z,925nm,20.0s
**SML Sawmill 44.05 40** P **P 14 06 57.2 -0.1**
SML pmax pmax
comp=Z,9.0nm,0.8s
**SML Sawmill 44.05 40** P **P 14 06 57.2 -0.1**
comp=Z,9.3nm,0.8s
**CMAR Chiang Mai Arr 44.19 251** P **P 14 06 59.7 +0.8**
comp=Z,32nm,0.8s,baz=45,slow=7.0,SNR=212
CMAR PcP **PcP 14 08 43.0 0.0**
comp=Z,6.2nm,0.9s,baz=22,slow=4.2,SNR=4.0
CMAR ScP **ScP 14 12 31.4 +0.6**
comp=Z,0.6nm,0.5s,baz=1.9,slow=2.7,SNR=4.6
CMAR LR LR 14 26 23.5
comp=Z,2µm,20.0s,baz=54,slow=37
**CMAR Chiang Mai Arr 44.19 251***ce*P **P 14 06 59.9 +1.1**
CMAR pmax pmax
comp=Z,32nm,0.8s
**SWI Sorong 44.32 197** P **P 14 06 59.9 +0.1**
comp=Z,63nm,1.0s,comp=Z,870nm
**SMPI Sarmi 44.32 186** P **P 14 07 00.6 +0.7**
comp=Z,34nm,1.3s,comp=Z,21µm
**ILAR Eielson Array 44.40 35** P **P 14 06 59.7 -0.2**
comp=Z,26nm,0.9s,baz=266,slow=5.9,SNR=167
ILAR ScP **ScP 14 12 30.1 -0.9**
comp=Z,0.5nm,0.7s,baz=287,slow=4.7,SNR=3.5
ILAR LR LR 14 27 51.7
comp=Z,387nm,18.8s,baz=280,slow=39
**GENI Genyem 44.83 184** P **P 14 07 05.5 +1.6**
**FYU Fort Yukon 44.93 33** *e*P **P 14 07 05.6 +1.4**
comp=Z,32nm,0.7s
**KMSI Cibinong 44.98 207** P **P 14 07 05.3 +0.2**
comp=Z,260nm,0.9s,comp=Z,3µm
**LBMI Labuha 45.03 202** P **P 14 07 05.5 0.0**
comp=Z,79nm,1.4s,comp=Z,1µm
**DIV Divide 45.36 40** P **P 14 07 07.4 -0.4**
comp=Z,101nm,1.4s
**PDGK Podgornoye 45.53 294** P **P 14 07 08.7 -0.5**
PDGK pmax pmax
comp=Z,84nm,0.8s
**MRSI Marisa 45.80 210** P **P 14 07 11.8 +0.2**
comp=Z,238nm,1.4s,comp=Z,2µm
**BMRM Bremner River 45.95 40** *e*P **P 14 07 13.5 +1.1**
comp=Z,31nm,0.8s
**MENT Mentasta 46.02 38** *e*P **P 14 07 13.9 +1.0**
**FAKI Fak Fak 46.12 195** P **P 14 07 14.0 -0.1**
comp=Z,123nm,0.8s,comp=Z,1µm
**FAKI Fak Fak 46.12 195** *e*P **P 14 07 12.8 -1.3**
comp=Z,106nm,0.9s
**MPSI Mapaga 46.71 213** P **P 14 07 18.8 +0.1**
comp=Z,40nm,1.5s,comp=Z,715nm
**SANI Sanana 46.81 204** P **P 14 07 19.5 0.0**
comp=Z,95nm,1.2s,comp=Z,1µm
**EGAK Eagle 46.83 35** *e*P **P 14 07 18.7 -0.4**
comp=Z,41nm,0.9s
EGAK LR LR
comp=Z,946nm,22.0s
**LUWI Luwuk 46.90 208** *e*P **P 14 07 17.9 -2.3**
comp=Z,48nm,0.8s
**TAPN Taplejung 46.96 270** *e*P **P 14 07 22.1 +1.0**
comp=Z,196nm,0.6s
**APSI Ampana 47.18 210** P **P 14 07 22.1 -0.3**
comp=Z,153nm,1.4s,comp=Z,2µm
**AAA Alma-Ata 47.27 295** *i* P **P 14 07 24.4 +1.4**
AAA pmax pmax
comp=Z,400nm,1.1s
AAA MLR MLR
comp=Z,3µm,14.0s
**ODAN Odare 47.47 270** *e*P **P 14 07 25.8 +0.8**
comp=Z,148nm,0.5s
**NLAI Namlea 47.62 202** P **P 14 07 26.3 +0.5**
comp=Z,48nm,0.9s,comp=Z,664nm
**AAI Ambon 47.76 200** P **P 14 07 27.5 +0.6**
comp=Z,134nm,0.8s
**JOHN Johnston Islan 47.79 107** PFAKE 14 07 40.0 +13
JOHN LR LR
comp=Z,233nm,22.0s
**PCI Palu 47.87 212** P **P 14 07 26.7 -1.1**
comp=Z,112nm,1.3s,comp=Z,1µm
**BVA0 Borovoye Array 48.00 309** *i* P **P 14 07 28.6 +0.2**
BVA0 pmax pmax
comp=Z,71nm,0.6s
**BVAR Borovoye Array 48.00 309** P **P 14 07 29.3 +0.8**
comp=Z,66nm,0.4s,baz=80,slow=8.8,SNR=342
BVAR PcP **PcP 14 08 56.6 +0.7**
comp=Z,39nm,0.7s,baz=93,slow=3.0,SNR=6.9
BVAR LR LR 14 29 19.2
comp=Z,2µm,19.4s,baz=76,slow=38
**BVAR Borovoye Array 48.00 309** P **P 14 07 29.3 +0.8**
BVAR 14 08 56.6
BVAR pmax pmax
comp=Z,66nm,0.4s
BVAR MLR MLR
comp=Z,2µm,19.4s
**RAMN Ramite 48.01 270** *e*P **P 14 07 29.7 +0.6**
comp=Z,460nm,0.7s
**GUN Gumba 48.01 272** *e*P **P 14 07 30.1 +0.8**
comp=Z,684nm,0.4s
**BRVK Borovoye 48.05 309***c i*P **P 14 07 29.6 +0.8**
BRVK pmax pmax
comp=Z,287nm,1.7s
BRVK MLR MLR
comp=Z,3µm,19.0s
**BRVK Borovoye 48.05 309** P **P 14 07 29.2 +0.4**
comp=Z,1µm,1.2s,SNR=47
**BRVK Borovoye 48.05 309** P **P 14 07 29.8 +1.0**
SNR=65
**BRVK Borovoye 48.05 309** *e*P **P 14 07 29.8 +1.0**
comp=Z,245nm,1.2s
BRVK LR LR
comp=Z,3µm,20.0s
**ULHL Ulahol 48.15 294** P **P 14 07 32.0 +2.0**
SNR=18
**TKM2 Tokmak 2 48.31 295** *e*P **P 14 07 32.4 +1.1**
TKM2 pmax pmax
comp=Z,206nm,0.9s
TKM2 MLR MLR
comp=Z,3µm,19.0s
**TKM2 Tokmak 2 48.31 295** P **P 14 07 32.4 +1.1**
SNR=191
**TKM2 Tokmak 2 48.31 295** *e*P **P 14 07 32.4 +1.1**
comp=Z,206nm,0.9s
TKM2 LR LR
comp=Z,3µm,19.0s
**SBUM Sibu 48.33 223** ⇑P **P 14 07 32.8 +1.4**
**OTUK Ortayu 48.42 303** P **P 14 07 31.6 -0.2**
OTUK pmax pmax
comp=Z,99nm,1.1s
**KKN Kakani 48.52 272** *e*P **P 14 07 33.7 +0.7**
comp=Z,291nm,0.9s
**PKI Pulchoki 48.55 272** *e*P **P 14 07 33.8 +0.4**
comp=Z,134nm,0.5s
**PKIN Phulchoki 48.55 272** *e*P **P 14 07 33.7 +0.4**
comp=Z,98nm,0.5s
**DMN Daman 48.75 272** *e*P **P 14 07 35.6 +0.8**
comp=Z,154nm,0.4s
**CHMS Chumysh 48.85 295** P **P 14 07 35.8 +0.6**
SNR=20
**KBK Karagaybulak 48.86 295** P **P 14 07 36.2 +0.7**
SNR=52
**GKN Gorkha 48.88 273** *e*P **P 14 07 36.2 +0.5**
comp=Z,243nm,0.5s
**KZA Kyzart 48.89 294** P **P 14 07 37.6 +1.7**
SNR=22
**USP Ospenovka 48.91 296** P **P 14 07 36.4 +0.7**
SNR=47
**FRU Bishkek 49.01 295**⇑*i*P **P 14 07 36.0 -0.4**
FRU *i* 14 07 48.0
FRU pmax pmax
comp=Z,200nm,2.0s
**INK Inuvik 49.12 29** *e*P **P 14 07 35.4 -1.4**
INK pmax pmax
comp=Z,32nm,1.1s
**INK Inuvik 49.12 29** *e*P **P 14 07 35.4 -1.4**
comp=Z,32nm,1.1s
**AAK Ala-Archa 49.17 295** P **P 14 07 38.2 +0.4**
comp=Z,30nm,0.3s,baz=83,slow=8.7,SNR=157
AAK LR LR 14 30 32.4
comp=Z,4µm,18.8s,baz=64,slow=38
**AAK Ala-Archa 49.17 295***c i*P **P 14 07 37.8 0.0**
AAK pmax pmax
comp=Z,84nm,1.0s
AAK MLR MLR
comp=Z,9µm,19.0s
**AAK Ala-Archa 49.17 295** P **P 14 07 38.6 +0.8**
comp=Z,391nm,0.5s,SNR=50
**AAK Ala-Archa 49.17 295** P **P 14 07 38.6 +0.8**
SNR=27
**AAK Ala-Archa 49.17 295** P **P 14 07 38.3 +0.5**
SNR=65
**UCH Uchtor 49.33 294** P **P 14 07 40.0 +0.7**
SNR=30
**DANN Dangsing 49.34 274** *e*P **P 14 07 40.6 +1.2**
**BKB Balikpapan 49.40 215** P **P 14 07 40.4 +0.9**
comp=Z,386nm,1.1s,comp=Z,3µm
**KSH Kashi 49.49 291** P P 14 07 44.6 +4.4
KSH pP pP 14 07 54.4 +1.2
KSH *e*PP PP 14 09 39.8 +5.3
KSH S **S 14 14 49.9 +5.5**
KSH sS sS 14 15 06.1 0.0
KSH ScS **ScS 14 17 31.1 +3.2**
KSH PMZ
comp=Z,67nm,1.0s
KSH LN
comp=Z,2µm,13.4s
KSH LE
comp=Z,3µm,16.4s
KSH LZ
comp=Z,4µm,16.1s
**EKS2 Erkin-Say 49.64 295** *e*P **P 14 07 40.5 -0.8**
EKS2 pmax pmax
comp=Z,57nm,0.6s
EKS2 MLR MLR
comp=Z,3µm,20.0s
**EKS2 Erkin-Say 49.64 295** P **P 14 07 42.0 +0.6**
SNR=46
**EKS2 Erkin-Say 49.64 295** *e*P **P 14 07 40.5 -0.8**
comp=Z,57nm,0.6s
EKS2 LR LR
comp=Z,3µm,20.0s
**KDI Kendari 49.67 207** P **P 14 07 42.2 +0.6**
comp=Z,66nm,1.2s,comp=Z,935nm
**KOLN Koldanda 49.78 273** *e*P **P 14 07 43.4 +0.8**
comp=Z,182nm,0.6s
**TTSI Tana Toraja 49.84 211** P P 14 07 47.0 +4.2
**AML Almayashu 49.92 295** P **P 14 07 44.8 +1.0**
SNR=58
**KSM Kuching 50.15 225**⇓P **P 14 07 47.3 +2.0**
**KSM Kuching 50.15 225** *e*P **P 14 07 44.4 -0.9**
comp=Z,93nm,0.9s
KSM LR LR
comp=Z,385nm,20.0s
**MNAS Manas 50.57 296** P **P 14 07 48.4 0.0**
MNAS pmax pmax
comp=Z,110nm,0.7s
**SKAG Skagway 50.81 41** *e*P **P 14 07 50.7 +1.0**
comp=Z,20nm,0.9s
**SFK Sufi-Kurgan 50.98 292** P **P 14 07 51.7 +0.1**
SFK pmax pmax
comp=Z,64nm,0.5s
**KTGM Kuala Trenggan 51.06 235**⇓P **P 14 07 54.3 +2.2**
**KBKI Kotabaru 51.54 215** P **P 14 07 55.2 -0.5**
comp=Z,90nm,1.0s,comp=Z,1µm
**KK31 Karatay Array 51.63 297** *e*P **P 14 07 56.0 -0.2**
KK31 pmax pmax
comp=Z,66nm,0.7s
**KKAR Karatay Array 51.63 297** *e*P **P 14 07 56.4 +0.3**
**KKAR Karatay Array 51.63 297** *e*P **P 14 07 56.4 +0.3**
**PMG Port Moresby 51.67 175** PFAKE 14 08 10.0 +13
PMG LR LR
comp=Z,734nm,21.0s
**KAPI Kappang 51.67 210** P **P 14 07 56.9 +0.3**
comp=Z,292nm,1.2s,SNR=12
**KAPI Kappang 51.67 210** *e*P **P 14 07 56.6 -0.1**
comp=Z,130nm,1.4s
KAPI LR LR
comp=Z,239nm,22.0s
**BKSI Bulukumba 51.82 209** P **P 14 07 56.3 -1.4**
comp=Z,29nm,1.1s
**SVE Sverdlovsk 52.03 316***d i*P **P 14 07 59.7 +0.8**
SVE *e* 14 10 01.1
SVE *e*S **S 14 15 17.5 -1.3**
SVE pmax pmax
comp=Z,447nm,0.9s
SVE MLR MLR
comp=Z,2µm,20.0s
**BBKI Banjar Baru 52.26 217** P **P 14 08 00.8 -0.3**
comp=Z,235nm,1.0s,comp=Z,3µm
**KULM Kulim 52.62 238** ⇑P **P 14 08 05.9 +2.2**
**KULM Kulim 52.62 238** *e*P **P 14 08 02.9 -0.9**
comp=Z,78nm,0.9s
KULM LR LR
comp=Z,781nm,21.0s
**SMLA Simla 52.71 281** *i* P **P 14 08 04.6 +0.4**
SMLA AMB AMB 14 08 05.3
comp=Z,2µm,0.4s
SMLA *i* S **S 14 15 29.0 +0.2**
SMLA *i* S S 14 15 32.2 +3.5
**IPM Ipoh 53.01 237** *e*P **P 14 08 05.3 -1.4**
comp=Z,278nm,2.1s
**PBKI Pangkalan Bun 53.06 220** P **P 14 08 07.0 +0.1**
comp=Z,293nm,0.8s,comp=Z,2µm
**KIP Kipapa 53.18 94** PFAKE 14 08 20.0 +12
KIP LR LR
comp=Z,4µm,19.0s
**ARU Arti 53.24 316** P **P 14 08 08.0 +0.2**
comp=Z,5.8nm,0.3s,baz=246,slow=23,SNR=49
ARU LR LR 14 33 17.5
comp=Z,2µm,21.0s,baz=62,slow=39
**ARU Arti 53.24 316***c i*P **P 14 08 08.1 +0.2**
ARU 14 09 14.1
ARU 14 10 06.6
ARU S **S 14 15 38.2 +2.8**
ARU 14 17 47.7
ARU pmax pmax
comp=Z,357nm,1.0s
ARU MLR MLR
comp=Z,2µm,23.0s
**ARU Arti 53.24 316** P **P 14 08 08.9 +1.0**
comp=Z,2µm,0.8s
**ARU Arti 53.24 316** *e*P **P 14 08 08.1 +0.2**
comp=Z,257nm,0.8s
ARU *e*PcP **PcP 14 09 15.5 +0.4**
**MYKOM Kota Tinggi 53.45 232**⇑P **P 14 08 12.0 +2.1**
**KGM Kluang 53.58 232**⇓P **P 14 08 12.9 +2.1**
**DLBC Dease Lake 53.74 41** P **P 14 08 12.6 +1.0**
comp=Z,94nm,1.7s
**HNR Honiara 53.84 159** PFAKE 14 08 20.0 +7.3
HNR LR LR
comp=Z,2µm,20.0s
**NDI New Delhi 53.98 278** *e*P **P 14 08 13.5 -0.2**
**MMRI Maumere 54.19 206** P **P 14 08 14.5 -0.7**
comp=Z,128nm,1.6s,comp=Z,2µm
**MMRI Maumere 54.19 206** *e*P **P 14 08 14.0 -1.2**
comp=Z,214nm,1.4s
**SOEI Soe 54.63 203** P **P 14 08 17.1 -1.4**
comp=Z,117nm,1.1s,comp=Z,1µm
**SOEI Soe 54.63 203** *e*P **P 14 08 16.4 -2.1**
comp=Z,181nm,1.0s
**ALE Alert 54.71 4** P **P 14 08 18.9 +0.6**
comp=Z,332nm,1.2s,SNR=20
**DZET Dzherino 54.74 293** P **P 14 08 18.8 -0.4**
DZET pmax pmax
comp=Z,93nm,0.5s
**CHLP Challavanipeta 54.91 263** *e*P **P 14 08 20.4 0.0**
CHLP IAmb IAmb 14 08 21.9
comp=Z,30nm,0.8s
**BATI Baumata 55.23 203** P **P 14 08 23.7 +0.9**
comp=Z,46nm,0.8s
**PPBI Pangkal Pinang 55.42 227** P **P 14 08 25.2 +1.0**
**AB31 Akbulak array 55.51 308** P **P 14 08 24.7 +0.2**
AB31 pmax pmax
comp=Z,55nm,0.4s
**ABKAR Akbulak array 55.51 308** *e*P **P 14 08 24.9 +0.4**
**SPA0 Spitsbergen Ar 55.53 348** *e*P **P 14 08 24.0 -0.2**
**SPITS Spitsbergen Ar 55.53 348** P **P 14 08 23.5 -0.8**
comp=Z,15nm,0.5s,baz=56,slow=8.1,SNR=49
**SPITS Spitsbergen Ar 55.53 348** P **P 14 08 23.5 -0.8**
SPITS pmax pmax
comp=Z,15nm,0.5s
**KBS Kingsbay 55.62 350** *e*P **P 14 08 25.4 +0.6**
KBS IAmb IAmb 14 08 25.9
comp=Z,90nm,0.8s
KBS *e*S **S 14 16 07.7 +0.9**
**KBS Kingsbay 55.62 350** *e*P **P 14 08 24.8 0.0**
KBS pmax pmax
comp=Z,101nm,0.9s
KBS MLR MLR
comp=Z,652nm,19.0s
**KBS Kingsbay 55.62 350** *e*P **P 14 08 24.8 0.0**
comp=Z,101nm,0.9s
KBS LR LR
comp=Z,652nm,19.0s
**PSI Prapat 55.62 237** LR LR 14 33 41.2
comp=Z,367nm,18.2s,baz=41,slow=37
**KMMI Kalianget 55.85 216** P **P 14 08 27.2 0.0**
comp=Z,76nm,1.0s
**POHA Pohakuloa 56.03 94** PFAKE 14 08 40.0 +11
POHA LR LR
comp=Z,3µm,22.0s
**COEN Coen 56.05 180** *e*P **P 14 08 27.5 -1.0**
comp=Z,100nm,1.4s
**AKTO Aktyubinsk 56.09 310** P **P 14 08 28.4 -0.2**
comp=Z,47nm,0.7s,baz=69,slow=7.9,SNR=83
AKTO LR LR 14 34 25.9
comp=Z,2µm,18.9s,baz=66,slow=38
**AKTO Aktyubinsk 56.09 310** P **P 14 08 28.4 -0.2**
AKTO pmax pmax
comp=Z,47nm,0.7s
AKTO MLR MLR
comp=Z,2µm,18.9s
**SRBI Singaraja 56.25 214** P **P 14 08 30.0 -0.1**
**HSPB Hornsund (broa 56.49 348** *e*P **P 14 08 29.7 -1.3**
HSPB IAmb IAmb 14 08 32.0
comp=Z,217nm,1.1s
HSPB *e*S **S 14 16 19.2 +0.9**
**KBL Kabul 56.75 288** *e*P **P 14 08 33.1 -0.7**
KBL pmax pmax
comp=Z,60nm,0.6s
**KBL Kabul 56.75 288** *e*P **P 14 08 33.1 -0.7**
comp=Z,60nm,0.6s
**RES Resolute Bay 57.14 16** *e*P **P 14 08 35.0 -0.6**
RES pmax pmax
comp=Z,43nm,0.5s
**RES Resolute Bay 57.14 16** *e*P **P 14 08 35.0 -0.6**
comp=Z,43nm,0.5s
**SMRI Semarang 57.43 219** *e*P **P 14 08 37.8 -0.6**
comp=Z,215nm,0.9s
**PVM Polavaram 57.49 264** *e*P **P 14 08 38.4 -0.5**
PVM IAmb IAmb 14 08 40.4
comp=Z,69nm,0.7s
**LVZ Lovozero 57.77 335**⇓*e*P **P 14 08 39.7 -0.5**
LVZ pmax pmax
comp=Z,20nm,0.7s
LVZ MLR MLR
comp=Z,1µm,24.0s
**LVZ Lovozero 57.77 335** P **P 14 08 39.6 -0.6**
comp=Z,208nm,1.0s,SNR=8.6
**LVZ Lovozero 57.77 335** PFAKE 14 08 50.0 +10
LVZ LR LR
comp=Z,1µm,19.0s
**RPR Rampur 58.20 267** *e*P **P 14 08 43.4 -0.5**
RPR IAmb IAmb 14 08 45.1
comp=Z,76nm,0.9s
**APA Apatity 58.34 335** *i* P **P 14 08 43.4 -0.8**
APA *i* 14 09 30.0
APA *i* S **S 14 16 40.0 -2.9**
APA *i* SS SS 14 20 44.0 +9.4
**LEM Lembang 58.61 222** LR LR 14 35 31.8
comp=Z,192nm,20.4s,baz=21,slow=37
**YKA Yellowknife Ar 58.62 32** P **P 14 08 45.1 -1.1**
comp=Z,19nm,1.1s,baz=309,slow=6.7,SNR=23
**YKA Yellowknife Ar 58.62 32** P **P 14 08 45.1 -1.1**
YKA pmax pmax
comp=Z,19nm,1.1s
**TMCR Tamitsa 58.67 330** *e*P **P 14 08 45.3 -1.2**
TMCR pmax pmax
comp=Z,83nm,0.9s
**HAMF Hammerfest 59.19 340** *e*P **P 14 08 50.2 +0.2**
**ARCES ARCESS Array B 59.45 339** P **P 14 08 51.8 0.0**
comp=Z,12nm,0.5s,baz=48,slow=8.1,SNR=95
ARCES LR LR 14 39 05.7
comp=Z,798nm,19.9s,baz=42,slow=40
**ARCES ARCESS Array B 59.45 339** P **P 14 08 51.8 0.0**
ARCES pmax pmax
comp=Z,13nm,0.5s
ARCES MLR MLR
comp=Z,798nm,19.9s
**ARE0 ARCESS Array S 59.45 339** *e*P **P 14 08 52.1 +0.2**
ARE0 *e*S **S 14 16 59.3 +2.1**
**ADKI Addanki 59.60 264** *e*P **P 14 08 53.8 +0.2**
ADKI IAmb IAmb 14 08 54.9
comp=Z,54nm,0.9s
**NJS Nagarjunasagar 59.64 265** *e*P **P 14 08 52.9 -1.0**
NJS IAmb IAmb 14 08 54.8
comp=Z,51nm,0.8s
**HYBB Hyderabad (bro 59.65 266** *e*P **P 14 08 52.8 -1.2**
HYBB IAmb IAmb 14 08 54.8
comp=Z,82nm,0.9s
**HYB Hyderabad 59.65 266**⇑*i*P **P 14 08 53.0 -1.0**
HYB *e*sP sP 14 09 18.0 +5.3
HYB *e*PcP **PcP 14 09 39.5 -1.3**
HYB *e*S **S 14 16 56.0 -5.2**
**KLMR Klimovskoe 59.93 327***c i*P **P 14 08 54.9 -0.3**
KLMR SS SS 14 21 06.8 +7.2
KLMR pmax pmax
comp=Z,267nm,1.3s
KLMR pmax pmax
comp=Z,193nm,1.2s
KLMR MLR MLR
comp=Z,1µm,16.0s
**KTK1 Kautokeino 60.40 339** *e*P **P 14 08 58.1 -0.2**
KTK1 IAmb IAmb 14 08 59.2
comp=Z,42nm,0.8s
**DAG Danmarks Havn 60.56 355**⇑*i*P **P 14 08 58.9 -0.5**
DAG pmax pmax
comp=Z,23nm,0.8s
**DAG Danmarks Havn 60.56 355**⇑*i*P **P 14 08 58.9 -0.5**
comp=Z,31nm,0.8s
**TRO Tromso 61.07 341** *e*P **P 14 09 02.1 -0.8**
TRO IAmb IAmb 14 09 04.3
comp=Z,82nm,0.6s
TRO *e*S **S 14 17 19.2 +1.3**
**SKHT Srikalahasti 61.15 262** *e*P **P 14 09 04.4 +0.2**
SKHT IAmb IAmb 14 09 05.6
comp=Z,58nm,1.1s
**IMYA Miami 61.94 295** *e*P **P 14 09 10.3 +0.8**
**URV Uravakonda 62.18 265** *e*P **P 14 09 10.5 -0.7**

URV IAmb IAmb 14 09 11.6
comp=Z,30nm,0.8s
**CTAO Charters Tower 62.22 177** PFAKE 14 09 20.0 +8.8
CTAO LR LR
comp=Z,8μm,20.0s
**NLWA Neilton Lookou 62.30 50** *e*P **P 14 09 14.0 +2.4**
comp=Z,28nm,1.2s
NLWA LR LR
comp=Z,857nm,22.0s
**IEMG Emamgholi 62.31 297** *e*P **P 14 09 12.7 +0.6**
**ISRO Mashad 62.38 295** *e*P **P 14 09 13.8 +1.4**
**ABKT Ailbek 62.38 297** P **P 14 09 12.2 -0.1**
comp=Z,1μm,0.5s,SNR=33
**GEYT Alibeck 62.38 297** P **P 14 09 12.7 +0.4**
comp=Z,109nm,0.7s,baz=58,slow=3.1,SNR=195
GEYT LR LR 14 38 33.0
comp=Z,4μm,18.7s,baz=40,slow=38
**WRAB Tennant Creek 62.50 189** *d i*P **P 14 09 12.1 -1.0**
WRAB pmax pmax
comp=Z,45nm,1.0s
**WRAB Tennant Creek 62.50 189** P **P 14 09 12.3 -0.8**
comp=Z,122nm,1.0s,SNR=12
**WRAB Tennant Creek 62.50 189** PFAKE 14 09 20.0 +6.9
WRAB LR LR
comp=Z,498nm,22.0s
**WRA Warramunga Arr 62.51 189** P **P 14 09 11.9 -1.2**
comp=Z,14nm,0.8s,baz=7.3,slow=6.9,SNR=89
WRA LR LR 14 34 04.7
comp=Z,275nm,21.9s,baz=15,slow=34
**KULLO Kullorsuaq 62.55 6** *i*P **P 14 09 12.2 -0.6**
comp=Z,48nm,0.8s
comp=Z,790nm,23.0s
**IMOG Moghan 62.58 295** *e*P **P 14 09 15.5 +1.5**
**IPAY Payeh 62.62 295** *e*P **P 14 09 15.4 +1.2**
**IAKL Akhelmad 62.69 296** *e*P **P 14 09 15.6 +0.9**
**IKRD Kardeh 62.76 296** *e*P P 14 09 11.8 -3.3
**B05A Bryant 62.81 48** P **P 14 09 15.7 +0.8**
baz=63
**ISHV Shirvan 62.87 297** *e*P **P 14 09 16.8 +1.0**
**ISFR Sfrayin 62.95 297** *e*P **P 14 09 17.4 +1.0**
**STEI Steigen 63.24 340** *e*P **P 14 09 17.7 +0.3**
**LOF Lofoten 63.50 341** *e*P **P 14 09 19.1 -0.1**
**C06D Leavenworth 63.67 48** P **P 14 09 21.5 +0.8**
baz=64
**MOS Moscow 63.71 323** *e*P **P 14 09 20.2 -0.6**
MOS *e* 14 09 35.1
MOS *e* 14 09 42.3
MOS *e*S **S 14 17 48.9 -2.6**
MOS pmax pmax
comp=Z,300nm,1.5s
MOS pmax pmax
comp=Z,201nm,1.4s
MOS pmax pmax
comp=E,98nm,0.9s
MOS pmax pmax
comp=N,120nm,0.9s
MOS MLR MLR
comp=Z,2μm,19.0s
**LON Longmire 63.82 50** *e*P **P 14 09 22.6 +0.8**
LON pmax pmax
comp=Z,12nm,1.0s
**LON Longmire 63.82 50** *e*P **P 14 09 22.6 +0.8**
comp=Z,12nm,1.0s
**F04A Amboy 63.94 51** *e*P **P 14 09 23.9 +1.5**
comp=Z,182nm,2.0s
**IMON Monand 64.00 292** *e*P **P 14 09 24.2 +0.9**
**IDAH Dahanechah 64.12 292** *e*P **P 14 09 24.9 +0.7**
**LTY Liberty 64.17 49** *e*P **P 14 09 24.4 +0.4**
comp=Z,14nm,1.0s
**EDM Edmonton 64.46 40** *e*PcP **PcP 14 10 00.1 +0.3**
**VRH Novokhopyorsk 64.47 317** *e*P **P 14 09 25.5 -0.3**
VRH pmax pmax
comp=Z,110nm,0.8s
VRH pmax pmax
comp=N,20nm,0.6s
VRH pmax pmax
comp=E,20nm,0.7s
VRH MLR MLR
comp=N,900nm,19.0s
VRH MLR MLR
comp=E,970nm,19.0s
VRH MLR MLR
comp=Z,2μm,19.0s
**OBN Obninsk 64.57 322** P **P 14 09 26.3 0.0**
comp=Z,47nm,0.4s,baz=36,slow=5.9,SNR=5.5
**OBN Obninsk 64.57 322** *c i*P **P 14 09 26.0 -0.4**
OBN *e* 14 09 57.9
OBN *e* 14 11 49.4
OBN *e*PPP PPP 14 13 20.2
OBN *i*S **S 14 18 03.4 +1.3**
OBN *i*SS **SS 14 22 11.8 -0.6**
OBN pmax pmax
comp=Z,125nm,1.0s
OBN MLR MLR
comp=Z,2μm,19.0s
**OBN Obninsk 64.57 322** P **P 14 09 26.3 0.0**
OBN LR LR
comp=Z,2μm,20.0s
**FINES FINESS Array B 64.67 332** P **P 14 09 26.3 -0.6**
comp=Z,62nm,0.4s,baz=60,slow=6.5,SNR=384
FINES LR LR 14 40 13.7
comp=Z,2μm,20.3s,baz=52,slow=38
**FINES FINESS Array B 64.67 332** *i*P **P 14 09 26.5 -0.4**
FINES pmax pmax
comp=Z,62nm,0.4s
**I03D Drain, OR 64.68 53** P **P 14 09 28.4 +1.2**
baz=64
**PALK Pallekele 64.75 256** LR LR 14 39 05.3
comp=Z,579nm,20.6s,baz=114,slow=37
**PALK Pallekele 64.75 256** *i*P **P 14 09 29.1 +0.9**
**PALK Pallekele 64.75 256** P **P 14 09 28.5 +0.3**
comp=Z,478nm,1.1s,SNR=7.6
**PALK Pallekele 64.75 256** ǁ *i*P **P 14 09 27.6 -0.6**
SNR=6.7
**MOR8 Moi Rana 64.79 339** *e*P **P 14 09 26.3 -1.3**
MOR8 IAmb IAmb 14 09 28.0
comp=Z,197nm,1.1s
**H04A Detroit Lake 64.79 52** *e*P **P 14 09 29.9 +1.8**
comp=Z,20nm,0.8s
**ITEG Tejag 64.80 292** *e*P **P 14 09 29.4 +0.8**
**KONS Konsvik 64.87 340** *e*P **P 14 09 28.6 +0.5**
**IKOO Kooshah 64.90 292** *e*P **P 14 09 29.9 +0.7**
**FLOS Flostrand 64.94 340** *e*P **P 14 09 28.7 +0.2**
**LPSR Galich'ya Gora 65.01 319** *e*P **P 14 09 29.0 -0.3**
LPSR pmax pmax
comp=N,10.0nm,0.9s
LPSR pmax pmax
comp=E,20nm,0.9s
LPSR pmax pmax
comp=Z,130nm,0.9s
**E07A Sunnyside 65.03 49** *e*P **P 14 09 31.1 +1.4**
comp=Z,20nm,0.9s
**C09A Chrisman Ranch 65.17 47** *e*P **P 14 09 31.4 +0.9**
comp=Z,28nm,1.0s
**I04A Tendick Farm, 65.17 53** P **P 14 09 31.6 +0.9**
baz=65,SNR=7.8
**HAWA Hanford 65.31 49** *e*P **P 14 09 32.8 +1.4**
comp=Z,18nm,0.9s
HAWA LR LR
comp=Z,567nm,19.0s
**SUMG Summit 65.35 0** *e*P **P 14 09 32.2 +0.5**
SUMG pmax pmax
comp=Z,122nm,0.9s
**SUMG Summit 65.35 0** *i*P **P 14 09 32.5 +0.8**
comp=Z,104nm,0.8s
**SUMG Summit 65.35 0** *e*P **P 14 09 32.2 +0.5**
comp=Z,122nm,0.9s
**G06A Carlson Farm, 65.37 51** *e*P **P 14 09 33.2 +1.3**
comp=Z,15nm,1.0s
**L02D Cave Junction, 65.41 55** P **P 14 09 32.9 +0.7**
baz=65
**I05D Terrebonne, OR 65.48 52** P **P 14 09 33.4 +0.8**
baz=65
**NEW Newport 65.52 46** *e*P **P 14 09 32.2 -0.6**
NEW pmax pmax
comp=Z,18nm,1.0s
NEW MLR MLR
comp=Z,505nm,19.0s
**NEW Newport 65.52 46** P **P 14 09 33.3 +0.5**
baz=65,SNR=9.9
**NEW Newport 65.52 46** *e*P **P 14 09 32.2 -0.6**
comp=Z,18nm,1.0s
NEW LR LR
comp=Z,505nm,19.0s
**J04D Umpqua Nationa 65.68 53** P **P 14 09 34.7 +0.6**
baz=66

**VSR Storozhevoye 65.74 318** *e*P **P 14 09 34.1 0.0**
VSR pmax pmax
comp=N,30nm,0.6s
VSR pmax pmax
comp=E,30nm,0.6s
VSR pmax pmax
comp=Z,80nm,0.6s
VSR MLR MLR
comp=N,640nm,21.0s
VSR MLR MLR
comp=E,1μm,21.0s
VSR MLR MLR
comp=Z,1μm,21.0s
**VORD Divnogorie 65.83 318** *e*P **P 14 09 34.6 0.0**
VORD pmax pmax
comp=N,30nm,0.9s
VORD pmax pmax
comp=E,60nm,0.9s
VORD pmax pmax
comp=Z,90nm,0.9s
VORD MLR MLR
comp=N,580nm,17.0s
VORD MLR MLR
comp=E,1μm,17.0s
VORD MLR MLR
comp=Z,1μm,17.0s
**IGLO Ghaloghah 66.00 298** *e*P **P 14 09 36.6 +0.4**
**KHMM Horse Mountain 66.09 56** *e*P **P 14 09 37.3 +0.7**
comp=Z,34nm,1.2s
**MAK Makhachkala 66.16 307** *e*P **P 14 09 33.9 -3.0**
MAK *e* 14 10 05.5
MAK *e* 14 12 07.4
MAK *e*PPP PPP 14 13 35.4
MAK *e*S **S 14 18 18.0 -4.0**
MAK *e* 14 19 27.9
MAK pmax pmax
comp=Z,76nm,0.9s
**J05D Fort Rock, OR 66.17 53** P **P 14 09 38.1 +0.9**
baz=66,SNR=7.9
**YBH Yreka Blue Hor 66.20 55** *e*P **P 14 09 38.3 +1.0**
YBH pmax pmax
comp=Z,11nm,1.0s
**YBH Yreka Blue Hor 66.20 55** *e*P **P 14 09 38.3 +1.0**
comp=Z,11nm,1.0s
**ASAR Alice Springs 66.24 189** P **P 14 09 36.8 -0.7**
comp=Z,8.8nm,0.7s,baz=9.3,slow=6.1,SNR=34
ASAR PKP2bc 14 38 11.8
comp=Z,4.5nm,1.1s,baz=180,slow=2.8,SNR=11
ASAR LR LR 14 39 25.5
comp=Z,298nm,20.0s,baz=352,slow=37
**M02C Callahan 66.32 55** P **P 14 09 39.0 +0.9**
baz=66
**VSU Vasula 66.48 329** *c i*P **P 14 09 38.7 0.0**
VSU pmax pmax
comp=Z,397nm,1.0s
VSU MLR MLR
comp=Z,3μm,22.0s
**IANJ Anjilo 66.56 297** *e*P **P 14 09 41.0 +1.2**
**N02D Trinity Center 66.65 55** P **P 14 09 41.3 +1.0**
baz=66,SNR=7.8
**M04C Macdoel 66.70 54** P **P 14 09 41.5 +1.0**
baz=67,SNR=7.4
**WALA Waterton Lakes 66.73 44** *e*P **P 14 09 39.8 -0.8**
comp=Z,29nm,1.2s
**MBWA Marble Bar 66.76 204** PFAKE 14 09 50.0 +9.2
MBWA LR LR
comp=Z,530nm,20.0s
**ISHM Shahmirzad 66.77 298** *e*P **P 14 09 42.4 +1.1**
**F10A Beach Ranch, E 66.84 48** *e*P **P 14 09 41.9 +0.5**
comp=Z,24nm,1.3s
**KCPM Cahto Peak 66.88 57** *e*P **P 14 09 42.8 +1.1**
**SCO Scoresbysund 66.93 355** *e*P **P 14 09 41.6 +0.3**
SCO pmax pmax
comp=Z,43nm,1.0s
**SCO Scoresbysund 66.93 355** *i*P **P 14 09 41.6 +0.3**
comp=Z,43nm,1.0s
**WDC Whiskeytown Da 66.99 56** *e*P **P 14 09 42.7 +0.4**
WDC pmax pmax
comp=Z,17nm,1.1s
**WDC Whiskeytown Da 66.99 56** *e*P **P 14 09 42.7 +0.4**
comp=Z,17nm,1.1s
**BSMT Bassoo Peak 67.02 46** *e*P **P 14 09 43.6 +1.0**
**IFIR Firoozkooh 67.22 298** *e*P **P 14 09 45.2 +1.1**
**ILAS Lasjerd 67.23 298** *e*P **P 14 09 45.2 +1.0**
**JTMT Jette 67.35 46** *e*P **P 14 09 45.9 +1.3**
**YBMT Yellow Bay 67.42 45** *e*P **P 14 09 46.4 +1.4**
comp=Z,15nm,1.0s
**MOD Modoc 67.55 53** *e*P **P 14 09 46.5 +0.5**
comp=Z,8.3nm,0.8s
**O03D Paynes Creek 67.61 55** P **P 14 09 46.7 +0.4**
baz=68,SNR=7.8
**SWMT Swartz Lake 67.65 46** *e*P **P 14 09 47.5 +1.0**
comp=Z,582nm,2.5s
**DZM Mont Dzumac 67.69 156** *e*LR LR 14 30 10.1
comp=Z,1μm,23.1s
**IDMV Damavand 67.73 298** *e*P **P 14 09 48.0 +0.7**
**IBAF Bafgh 67.75 293** *e*P **P 14 09 47.7 +0.3**
**MSVF Nonsavu 67.99 144** PFAKE 14 10 00.0 +11
MSVF LR LR
comp=Z,2μm,20.0s
**SLMT Seeley Lake 68.08 46** *e*P **P 14 09 49.5 +0.3**
comp=Z,28nm,0.9s
**MSO Missoula 68.10 46** P **P 14 09 49.5 +0.2**
baz=68
**NCK Nalchik 68.12 309** ǁ *i*P **P 14 09 50.2 +0.9**
**ICHK Chekchek 68.14 294** *e*P **P 14 09 50.3 +0.3**
**WVOR Wild Horse Val 68.20 52** *e*P **P 14 09 50.3 +0.3**
WVOR pmax pmax
comp=Z,15nm,1.1s
WVOR MLR MLR
comp=Z,471nm,20.0s
**WVOR Wild Horse Val 68.20 52** *e*P **P 14 09 50.3 +0.3**
comp=Z,15nm,1.1s
WVOR LR LR
comp=Z,471nm,20.0s
**ILULI Ilulissat 68.25 5** *i*P **P 14 09 49.4 -0.2**
comp=Z,54nm,0.9s
**DGRG David-gareji 68.33 307** P **P 14 09 49.7 -1.1**
**DGRG David-gareji 68.33 307** *e*P **P 14 09 49.6 -1.1**
**DUS Dusheti 68.34 308** P **P 14 09 52.5 +1.6**
**DUS Dusheti 68.34 308** *e*P **P 14 09 52.4 +1.6**
**KIV Kislovodsk 68.35 310** *c i*P **P 14 09 51.5 +0.6**
KIV *e* 14 10 15.3
KIV *e* 14 12 21.7
KIV *i*S **S 14 18 50.1 +1.6**
KIV *i*SS **SS 14 23 09.2 -2.5**
KIV pmax pmax
comp=Z,197nm,1.0s
**KIV Kislovodsk 68.35 310** P **P 14 09 52.6 +1.7**
comp=Z,1μm,0.9s,SNR=20
**KIV Kislovodsk 68.35 310** P **P 14 09 52.2 +1.3**
SNR=30
**KIV Kislovodsk 68.35 310** ǁ *i*P **P 14 09 51.9 +1.0**
SNR=18
**KIV Kislovodsk 68.35 310** *e*P **P 14 09 51.3 +0.4**
comp=Z,189nm,0.9s
KIV LR LR
comp=Z,2μm,19.0s
**KBZ Khabaz 68.37 310** P **P 14 09 51.7 +0.9**
comp=Z,64nm,0.9s,baz=49,slow=5.1,SNR=105
KBZ LR LR 14 45 06.6
comp=Z,1μm,18.7s,baz=42,slow=40
**KBZ Khabaz 68.37 310** P **P 14 09 51.7 +0.9**
KBZ pmax pmax
comp=Z,64nm,0.9s
KBZ MLR MLR
comp=Z,1μm,18.7s
**OHCM Honcut 68.39 56** *e*P **P 14 09 51.9 +0.8**
**IGZV Ghazvin 68.42 300** *e*P **P 14 09 52.4 +0.8**
**CHMT Chamberlain Mo 68.42 46** *e*P **P 14 09 51.9 +0.5**
comp=Z,4.1nm,0.8s
**IMEH Mehriz 68.52 293** *e*P **P 14 09 51.9 -0.4**
**TBLG Delisi 68.54 307** P **P 14 09 52.7 +0.6**
**TBLG Delisi 68.54 307** *e*P **P 14 09 52.6 +0.6**
**IZAR Zarasai 68.57 327** *e*P **P 14 09 52.3 +0.5**
IZAR IAmb IAmb 14 09 53.3
comp=Z,33nm,0.5s
**FFC Flin Flon 68.60 34** P **P 14 09 52.2 +0.1**
comp=Z,140nm,0.7s,SNR=5.5
**FFC Flin Flon 68.60 34** PFAKE 14 10 00.0 +7.9
FFC LR LR
comp=Z,491nm,20.0s
**IDID Didziasalis 68.67 327** *e*P **P 14 09 53.0 +0.5**
IDID IAmb IAmb 14 09 54.1
comp=Z,33nm,0.9s
**ISAL Salakas 68.74 327** *e*P **P 14 09 53.4 +0.5**

ISAL IAmb IAmb 14 09 54.7
comp=Z,46nm,0.7s
**ONI Oni 68.76 309** P **P 14 09 53.5 0.0**
**ONI Oni 68.76 309** *e*P **P 14 09 53.4 0.0**
**MICGM Minsk 68.77 325** ǁ *i*P **P 14 09 52.0 -1.1**
**MNK Minsk 68.79 325** ǁ *i*P **P 14 09 52.0 -1.3**
MNK *e*PPP PPP 14 14 00.0
MNK *e*S **S 14 18 48.0 -5.1**
MNK *e*PS PnS 14 19 12.0 -11
MNK *e*SS **SS 14 23 20.0 +2.3**
MNK *e*SSS SSS 14 26 22.0
MNK MLR MLR
comp=Z,2μm,20.0s
**COCO West Island 68.83 229** PFAKE 14 10 10.0 +16
COCO LR LR
comp=Z,354nm,20.0s
**ISAD Sadrabad 68.83 294** *e*P **P 14 09 54.4 +0.1**
**IIGN Ignalina 68.86 327** *e*P **P 14 09 54.2 +0.5**
IIGN IAmb IAmb 14 09 55.4
comp=Z,46nm,0.6s
**IR5 Iran Long-Peri 68.89 299** *e*P **P 14 09 54.9 +0.4**
**NACGM Naroch 68.94 326** *e*P **P 14 09 54.0 -0.2**
**IZEF Zefreh 69.15 296** *e*P **P 14 09 56.6 +0.4**
**ISRB Sarab 69.16 302** *e*P **P 14 09 56.7 +0.6**
**IRAZ Razeghan 69.20 299** *e*P **P 14 09 56.9 +0.5**
**MFID Camas Ranch 69.21 50** *e*P **P 14 09 57.5 +1.2**
comp=Z,23nm,1.4s
**IHRS Heris 69.24 303** *e*P **P 14 09 57.4 +0.7**
**HRY Holter Researc 69.30 45** *e*P **P 14 09 57.8 +1.1**
**IKLH Kolahrood 69.39 297** *e*P **P 14 09 58.3 +0.6**
**CHVG Ch'k'valeri 69.47 309** P **P 14 09 58.6 +0.9**
**CHVG Ch'k'valeri 69.47 309** ǁ *i*P **P 14 09 59.1 +1.4**
**AKH Akhalkalaki 69.47 308** P **P 14 09 59.1 +1.1**
**AKH Akhalkalaki 69.47 308** *e*P **P 14 09 59.1 +1.1**
**MOL Molde 69.47 340** *e*P **P 14 09 58.3 +0.9**
**GNI Garni 69.52 306** *c i*P **P 14 09 59.4 +1.1**
GNI pmax pmax
comp=Z,251nm,1.2s
GNI MLR MLR
comp=Z,4μm,19.0s
**GNI Garni 69.52 306** PFAKE 14 10 10.0 +12
GNI LR LR
comp=Z,1μm,21.0s
**EGMT Eagleton 69.52 43** P **P 14 09 58.4 +0.3**
baz=69,SNR=13
**EGMT Eagleton 69.52 43** *e*P **P 14 09 57.2 -0.9**
comp=Z,26nm,0.8s
EGMT LR LR
comp=Z,635nm,22.0s
**LRM Limekiln Ridge 69.54 46** *e*P **P 14 09 58.7 +0.3**
comp=Z,173nm,0.9s
**IGAR Gharneh 69.64 296** *e*P **P 14 09 59.5 +0.3**
**IBST Bostanabad 69.72 303** *e*P **P 14 09 59.5 -0.1**
**HFS Hagfors 69.73 336** P **P 14 09 58.7 -0.3**
comp=Z,54nm,0.4s,baz=48,slow=6.6,SNR=295
**HFS Hagfors 69.73 336** P **P 14 09 58.7 -0.3**
HFS pmax pmax
comp=Z,54nm,0.4s
**NB2 NORSAR Subarra 69.73 337** P **P 14 09 58.7 -0.4**
comp=Z,118nm,1.1s,baz=36,slow=6.2
**NB2 NORSAR Subarra 69.73 337** P **P 14 09 58.7 -0.4**
baz=36,slow=6.2
**NOA NORSAR Array B 69.73 337** P **P 14 09 58.7 -0.4**
comp=Z,49nm,0.8s,baz=35,slow=6.2,SNR=102
NOA LR LR 14 44 13.2
comp=Z,938nm,19.9s,baz=40,slow=39
**NOA NORSAR Array B 69.73 337** P **P 14 09 58.7 -0.4**
NOA pmax pmax
comp=Z,49nm,0.8s
NOA MLR MLR
comp=Z,938nm,19.9s
**AFI Afiamalu 69.75 133** PFAKE 14 10 10.0 +10
AFI LR LR
comp=Z,414nm,19.0s
**DLMT Dillon 69.76 47** *e*P **P 14 10 00.1 +0.5**
comp=Z,21nm,0.8s
**IRAM Ramesheh 69.77 295** *e*P **P 14 09 59.7 -0.4**
**IMRD Marand 69.82 304** *e*P **P 14 10 00.6 +0.4**
**CMB Columbia Colle 69.86 57** *e*P **P 14 10 00.7 +0.4**
CMB pmax pmax
comp=Z,21nm,1.1s
**CMB Columbia Colle 69.86 57** *e*P **P 14 10 00.7 +0.4**
comp=Z,21nm,1.1s
**NC602 NORSAR Array S 69.89 337** *e*P **P 14 09 59.4 -0.6**
**HLID Hailey 69.91 49** P **P 14 10 00.8 +0.1**
baz=70,SNR=8.2
**HLID Hailey 69.91 49** PFAKE 14 10 10.0 +9.3
HLID LR LR
comp=Z,476nm,20.0s
**AKN Aaknes 69.94 340** *e*P **P 14 10 00.4 +0.1**
**MCMT McKenzie Canyo 69.97 47** *e*P **P 14 10 00.7 -0.4**
**BOZ Bozeman (W) 70.09 46** P **P 14 10 02.5 +0.7**
baz=70,SNR=16
**BOZ Bozeman (W) 70.09 46** PFAKE 14 10 10.0 +8.3
BOZ LR LR
comp=Z,410nm,20.0s
**ISHB Shabestar 70.14 304** *e*P **P 14 10 03.0 +0.8**
**IPIR Pirpir 70.23 296** *e*P **P 14 10 02.9 -0.1**
**SOC Sochi 70.26 311** *e*P **P 14 10 01.8 -0.7**
SOC *e* 14 10 21.4
SOC *e* 14 12 38.3
SOC *e*S **S 14 19 08.8 -1.9**
SOC *e* 14 19 55.6
SOC pmax pmax
comp=Z,85nm,0.9s
SOC MLR MLR
comp=Z,2μm,19.0s
**BMN Battle Mountai 70.28 53** *e*P **P 14 10 03.4 +0.4**
BMN pmax pmax
comp=Z,45nm,1.8s
**BMN Battle Mountai 70.28 53** *e*P **P 14 10 03.4 +0.4**
comp=Z,45nm,1.8s
**IAZR Azarshahr 70.30 303** *e*P **P 14 10 04.2 +1.0**
**SFJD Kangerlussuaq 70.47 6** *i*P **P 14 10 03.7 +0.3**
SFJD pmax pmax
comp=Z,49nm,1.1s
**SFJD Kangerlussuaq 70.47 6** *i*P **P 14 10 03.7 +0.3**
comp=Z,49nm,1.1s
**SFJD Kangerlussuaq 70.47 6** PFAKE 14 10 20.0 +17
SFJD LR LR
comp=Z,563nm,20.0s
**IPAR Pars 70.53 293** *e*P **P 14 10 05.0 +0.2**
**BANOM Banah 70.69 288** ǁ *i*P **P 14 10 05.8 +0.3**
SNR=11
**ANN Anapa 70.72 313** *e*P **P 14 10 05.2 -0.1**
ANN *e*S **S 14 19 16.9 +0.9**
ANN pmax pmax
comp=Z,81nm,0.9s
ANN MLR MLR
comp=N,1μm,21.0s
ANN MLR MLR
comp=Z,825nm,21.0s
ANN MLR MLR
comp=E,665nm,21.0s
**ISRV Sarvestan 70.77 292** *e*P **P 14 10 06.4 +0.1**
**OSL Oslo 70.77 337** *e*P **P 14 10 05.7 +0.3**
**AKASG Malin Array Be 70.83 322** P **P 14 10 05.6 -0.3**
comp=E,42nm,0.6s,baz=42,slow=6.3,SNR=116
AKASG LR LR 14 43 54.9
comp=E,1μm,18.4s,baz=80,slow=38
**KIEV Kiev 70.84 322** *c i*P **P 14 10 05.0 -0.9**
KIEV pmax pmax
comp=Z,77nm,0.9s
KIEV MLR MLR
comp=Z,1μm,17.0s
**KIEV Kiev 70.84 322** *e*P **P 14 10 05.7 -0.3**
comp=Z,83nm,0.9s
KIEV LR LR
comp=Z,1μm,20.0s
**WBK Wadi Bani Khal 70.84 283** P **P 14 10 08.2 +1.8**
SNR=20
**NVAR Mina Array Bea 70.89 55** P **P 14 10 06.9 +0.1**
comp=Z,7.2nm,0.8s,baz=292,slow=6.1,SNR=50
NVAR LR LR 14 38 32.7
comp=Z,231nm,21.2s,baz=300,slow=34
**AGRB Hanur-Agry 70.92 306** *e*P **P 14 10 07.3 +0.4**
**HYA Hoyanger 71.00 339** *e*P **P 14 10 07.1 +0.4**
HYA IAmb IAmb 14 10 07.7
comp=Z,111nm,1.3s
**GCMT Greycliff 71.03 45** *e*P **P 14 10 08.6 +1.2**
comp=Z,13nm,1.0s
**SUW Suwalki 71.05 327** *e*P **P 14 10 06.9 -0.3**
**SUW Suwalki 71.05 327** *e*P **P 14 10 06.9 -0.3**
**SMDO Samad 71.22 284** P **P 14 10 09.9 +1.1**
SNR=16

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ELK** | **Elko** | **71.25** | **52** | *eP* | | **P** | | **14 10 09.2** | **+0.3** |
| ELK | | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | | |
| **ELK** | **Elko** | **71.25** | **52** | *eP* | | **P** | | **14 10 09.2** | **+0.3** |
| | comp=Z,6.3nm,1.0s | | | | | | | | | |
| **YFT** | **Old Faithful** | **71.30** | **47** | *eP* | | **P** | | **14 10 10.8** | **+1.6** |
| | comp=Z,18nm,0.8s | | | | | | | | | |
| **KONO** | **Kongsberg** | **71.34** | **337** | *eP* | | **P** | | **14 10 09.4** | **+0.6** |
| KONO | | | | *eS* | | **S** | | **14 19 25.1** | **+2.3** |
| **KONO** | **Kongsberg** | **71.34** | **337** | | PFAKE | | | 14 10 20.0 | +11 |
| KONO | | | | | LR | LR | | | | |
| | comp=Z,1µm,20.0s | | | | | | | | | |
| **UOSS** | **Wadi Hilu** | **71.36** | **287** | | P | **P** | | **14 10 09.9** | **+0.3** |
| | comp=Z,762nm,0.7s,SNR=11 | | | | | | | | | |
| **IKAZ** | **Kazeroun** | **71.39** | **293** | *eP* | | **P** | | **14 10 10.0** | **-0.1** |
| **MTUM** | **Tungsten Hills** | **71.42** | **56** | *eP* | | **P** | | **14 10 11.4** | **+1.5** |
| **HOQ** | **Hoqain** | **71.42** | **285** | | P | **P** | | **14 10 11.0** | **+1.0** |
| | SNR=15 | | | | | | | | | |
| **LKWY** | **Lake** | **71.46** | **46** | | PFAKE | | | 14 10 20.0 | +10 |
| LKWY | | | | | LR | LR | | | | |
| | comp=Z,620nm,21.0s | | | | | | | | | |
| **H17A** | **Grant Village** | **71.48** | **46** | | P | **P** | | **14 10 12.0** | **+1.7** |
| | baz=71,SNR=9.6 | | | | | | | | | |
| **H17A** | **Grant Village** | **71.48** | **46** | *eP* | | **P** | | **14 10 11.7** | **+1.4** |
| | comp=Z,51nm,1.4s | | | | | | | | | |
| **HATD** | **Hatta, Dubai** | **71.49** | **287** | ⇑ *iP* | | **P** | | **14 10 10.9** | **+0.5** |
| | SNR=24 | | | | | | | | | |
| **JMDO** | **Jabal Madar** | **71.61** | **284** | | P | **P** | | **14 10 11.8** | **+0.7** |
| | SNR=19 | | | | | | | | | |
| **IMW** | **Indian Meadow** | **71.61** | **47** | | P | **P** | | **14 10 10.5** | **-0.7** |
| | comp=Z,39nm,1.4s | | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **71.62** | **47** | *eP* | | **P** | | **14 10 12.5** | **+1.4** |
| | comp=Z,49nm,1.5s | | | | | | | | | |
| **ASHO** | **Ashiyiah** | **71.63** | **287** | | P | **P** | | **14 10 11.8** | **+0.6** |
| | SNR=7.0 | | | | | | | | | |
| **ASHO** | **Ashiyiah** | **71.63** | **287** | *i* | P | **P** | | **14 10 11.7** | **+0.4** |
| | SNR=14 | | | | | | | | | |
| **RLMT** | **Red Lodge** | **71.69** | **45** | | P | **P** | | **14 10 12.0** | **+0.5** |
| | baz=72,SNR=5.5 | | | | | | | | | |
| **RLMT** | **Red Lodge** | **71.69** | **45** | *eP* | | **P** | | **14 10 09.9** | **-1.6** |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| RLMT | | | | | LR | LR | | | | |
| | comp=Z,510nm,19.0s | | | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **71.72** | **287** | ⇑ *iP* | | **P** | | **14 10 12.0** | **+0.3** |
| | SNR=6.4 | | | | | | | | | |
| **IVIS** | **Veis** | **71.72** | **300** | *eP* | | **P** | | **14 10 11.8** | **0.0** |
| **FXWY** | **Fox Creek** | **71.73** | **47** | *eP* | | **P** | | **14 10 13.4** | **+1.6** |
| | comp=Z,47nm,1.5s | | | | | | | | | |
| **SMMC** | **Simmler** | **71.81** | **59** | | P | **P** | | **14 10 13.2** | **+1.0** |
| | baz=72 | | | | | | | | | |
| **MOOW** | **Moose Ponds** | **71.81** | **47** | *eP* | | **P** | | **14 10 12.8** | **+0.5** |
| | comp=Z,26nm,1.3s | | | | | | | | | |
| **ASK** | **Askoy** | **71.84** | **339** | *eP* | | **P** | | **14 10 12.3** | **+0.5** |
| **RUND** | **Rundenannen** | **71.86** | **339** | *eP* | | **P** | | **14 10 12.8** | **+0.8** |
| **TPAW** | **Teton Pass** | **71.88** | **47** | *eP* | | **P** | | **14 10 13.9** | **+1.2** |
| | comp=Z,45nm,1.4s | | | | | | | | | |
| **IDHR** | **Dehrash** | **71.91** | **301** | *eP* | | **P** | | **14 10 12.8** | **-0.2** |
| **FAQ** | **Al Faqa, Dubai** | **71.92** | **287** | *i* | P | **P** | | **14 10 13.0** | **+0.1** |
| | SNR=13 | | | | | | | | | |
| **ODD1** | **Odda** | **71.95** | **339** | *eP* | | **P** | | **14 10 13.2** | **+0.7** |
| **DGMT** | **Dagmar** | **71.95** | **40** | | P | **P** | | **14 10 12.9** | **+0.1** |
| | baz=72 | | | | | | | | | |
| **DGMT** | **Dagmar** | **71.95** | **40** | | PFAKE | | | 14 10 30.0 | +17 |
| DGMT | | | | | LR | LR | | | | |
| | comp=Z,723nm,20.0s | | | | | | | | | |
| **LOHW** | **Long Hollow** | **71.98** | **47** | *eP* | | **P** | | **14 10 14.0** | **+0.7** |
| | comp=Z,20nm,1.2s | | | | | | | | | |
| **HVU** | **Hansel Valley** | **71.99** | **50** | *eP* | | **P** | | **14 10 14.1** | **+0.8** |
| HVU | | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.0s | | | | | | | | | |
| **HVU** | **Hansel Valley** | **71.99** | **50** | *eP* | | **P** | | **14 10 14.1** | **+0.8** |
| | comp=Z,11nm,1.0s | | | | | | | | | |
| **REDW** | **Red Top Meadow** | **72.01** | **47** | *eP* | | **P** | | **14 10 14.1** | **+0.6** |
| | comp=Z,33nm,1.3s | | | | | | | | | |
| **CUKT** | **Cukurca** | **72.03** | **304** | *eP* | | **P** | | **14 10 14.2** | **+0.7** |
| **VES** | **Vestal, Richgr** | **72.05** | **58** | | P | **P** | | **14 10 14.4** | **+0.8** |
| | baz=72 | | | | | | | | | |
| **BAYT** | **Ayd¨–ntepe-Bay** | **72.08** | **308** | *eP* | | **P** | | **14 10 15.2** | **+1.4** |
| **A25A** | **Svangstu Ranch** | **72.14** | **39** | | P | **P** | | **14 10 14.5** | **+0.6** |
| | baz=72 | | | | | | | | | |
| **ARQ** | **Araqi** | **72.14** | **285** | | P | **P** | | **14 10 15.5** | **+1.2** |
| | SNR=16 | | | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **72.18** | **287** | *i* | P | **P** | | **14 10 15.2** | **+0.7** |
| | SNR=23 | | | | | | | | | |
| **PKM** | **Peak Mountain** | **72.19** | **59** | | P | **P** | | **14 10 15.5** | **+0.9** |
| | baz=72 | | | | | | | | | |
| **LAO** | **LASA Array** | **72.19** | **43** | | P | **P** | | **14 10 14.9** | **+0.6** |
| | baz=72,SNR=12 | | | | | | | | | |
| **LAO** | **LASA Array** | **72.19** | **43** | *eP* | | **P** | | **14 10 14.3** | **0.0** |
| | comp=Z,29nm,1.0s | | | | | | | | | |
| LAO | | | | | LR | LR | | | | |
| | comp=Z,603nm,20.0s | | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **72.27** | **48** | | PFAKE | | | 14 10 30.0 | +15 |
| AHID | | | | | LR | LR | | | | |
| | comp=Z,457nm,22.0s | | | | | | | | | |
| **CWC** | **Cottonwood Cre** | **72.29** | **57** | | P | **P** | | **14 10 16.2** | **+1.0** |
| | baz=72 | | | | | | | | | |
| **GRAC** | **Grapevine Rang** | **72.37** | **56** | | P | **P** | | **14 10 16.3** | **+0.8** |
| | baz=72,SNR=8.0 | | | | | | | | | |
| **SIM** | **Simferopol'** | **72.38** | **315** | *eP* | | **P** | | **14 10 15.5** | **+0.2** |
| SIM | | | | *e* | | | | 14 10 34.0 | | |
| SIM | | | | *eS* | | **S** | | **14 19 36.0** | **+0.8** |
| SIM | | | | *eP* | S | PnS | | 14 20 32.0 | +22 |
| SIM | | | | | pmax | pmax | | | | |
| | comp=Z,73nm,0.9s | | | | | | | | | |
| SIM | | | | | MLR | MLR | | | | |
| | comp=N,1µm,19.9s | | | | | | | | | |
| **BGU** | **Big Grassy Mou** | **72.40** | **50** | *eP* | | **P** | | **14 10 15.7** | **0.0** |
| | comp=N,32nm,1.6s | | | | | | | | | |
| **BLS5** | **Blasjo** | **72.41** | **338** | *eP* | | **P** | | **14 10 16.0** | **+0.7** |
| **GUMT** | **Gumushane** | **72.41** | **309** | *eP* | | **P** | | **14 10 15.6** | **-0.2** |
| **ISA** | **Isabella** | **72.55** | **58** | *eP* | | **P** | | **14 10 16.1** | **-0.5** |
| ISA | | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| **ISA** | **Isabella** | **72.55** | **58** | | P | **P** | | **14 10 16.9** | **+0.4** |
| | baz=72,SNR=6.8 | | | | | | | | | |
| **ISA** | **Isabella** | **72.55** | **58** | *eP* | | **P** | | **14 10 16.1** | **-0.5** |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| **ESPY** | **Espiye-Giresun** | **72.55** | **310** | *eP* | | **P** | | **14 10 16.3** | **-0.1** |
| **B25A** | **Knox Farm, Ray** | **72.59** | **40** | | P | **P** | | **14 10 17.3** | **+0.7** |
| | baz=72 | | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **72.59** | **54** | | P | **P** | | **14 10 18.0** | **+1.0** |
| | baz=72,SNR=14 | | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **72.59** | **54** | | P | **P** | | **14 10 15.2** | **-1.7** |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| **A26A** | **Wade Farm, Ken** | **72.67** | **39** | | P | **P** | | **14 10 18.0** | **+1.0** |
| | baz=72,SNR=6.7 | | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **72.70** | **57** | *eP* | | **P** | | **14 10 17.4** | **-0.3** |
| DAC | | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.2s | | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **72.70** | **57** | *eP* | | **P** | | **14 10 17.4** | **-0.3** |
| | comp=Z,20nm,1.2s | | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **72.78** | **49** | *eP* | | **P** | | **14 10 19.5** | **+1.4** |
| | comp=Z,94nm,1.9s | | | | | | | | | |
| **RSUT** | **Red Spur Mount** | **72.85** | **49** | *eP* | | **P** | | **14 10 19.5** | **+0.9** |
| **BSC** | **Santa Cruz Isl** | **72.88** | **60** | | P | **P** | | **14 10 19.5** | **+0.9** |
| | baz=73 | | | | | | | | | |
| **MPMC** | **Manual Prospec** | **72.90** | **57** | | P | **P** | | **14 10 19.8** | **+0.9** |
| | baz=73,SNR=20 | | | | | | | | | |
| **A27A** | **Ledoux Ranch,** | **73.00** | **38** | | P | **P** | | **14 10 19.5** | **+0.5** |
| | baz=73,SNR=5.3 | | | | | | | | | |
| **DUG** | **Dugway** | **73.01** | **51** | | P | **P** | | **14 10 18.8** | **-0.5** |
| DUG | | | | | pmax | pmax | | | | |
| | comp=Z,14nm,0.9s | | | | | | | | | |
| DUG | | | | | MLR | MLR | | | | |
| | comp=Z,361nm,21.0s | | | | | | | | | |
| **DUG** | **Dugway** | **73.01** | **51** | | P | **P** | | **14 10 20.3** | **+0.9** |
| | baz=73,SNR=8.6 | | | | | | | | | |
| **DUG** | **Dugway** | **73.01** | **51** | | P | **P** | | **14 10 18.8** | **-0.5** |
| | comp=Z,14nm,0.9s | | | | | | | | | |
| DUG | | | | | LR | LR | | | | |
| | comp=Z,361nm,21.0s | | | | | | | | | |
| **FURC** | **Furnace Creek,** | **73.03** | **56** | | P | **P** | | **14 10 20.5** | **+1.2** |
| | baz=73 | | | | | | | | | |
| **OSI** | **Osito Adit** | **73.06** | **59** | | P | **P** | | **14 10 20.8** | **+1.1** |
| | baz=73 | | | | | | | | | |
| **TPNV** | **Topopah Spring** | **73.09** | **55** | *eP* | | **P** | | **14 10 20.7** | **+0.7** |
| TPNV | | | | | pmax | pmax | | | | |
| | comp=Z,30nm,0.9s | | | | | | | | | |
| **TPNV** | **Topopah Spring** | **73.09** | **55** | | P | **P** | | **14 10 21.1** | **+1.2** |
| | baz=73,SNR=26 | | | | | | | | | |
| **TPNV** | **Topopah Spring** | **73.09** | **55** | *eP* | | **P** | | **14 10 20.7** | **+0.7** |
| | comp=Z,30nm,0.9s | | | | | | | | | |
| **BW06** | **Boulder Array** | **73.12** | **47** | *eP* | | **P** | | **14 10 19.6** | **-0.5** |
| | comp=Z,36nm,1.5s | | | | | | | | | |
| BW06 | | | | | LR | LR | | | | |
| | comp=Z,462nm,19.0s | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SNART** | **Snartemo** | **73.12** | **337** | *eP* | | **P** | | **14 10 20.4** | **+0.9** |
| **LRMC** | **Laurel Mountai** | **73.16** | **57** | | P | **P** | | **14 10 21.0** | **+0.7** |
| | baz=73,SNR=5.4 | | | | | | | | | |
| **BLG** | **Laguna Peak** | **73.17** | **59** | | P | **P** | | **14 10 20.9** | **+0.7** |
| | baz=73 | | | | | | | | | |
| **TCUT** | **Toone Canyon** | **73.20** | **49** | *eP* | | **P** | | **14 10 21.0** | **+0.4** |
| | comp=Z,26nm,1.0s | | | | | | | | | |
| **D25A** | **Fairfield** | **73.30** | **41** | | P | **P** | | **14 10 21.3** | **+0.5** |
| | baz=73 | | | | | | | | | |
| **BSD** | **Bornholm Skovb** | **73.31** | **332** | *i* | P | **P** | | **14 10 20.4** | **-0.2** |
| BSD | | | | | pmax | pmax | | | | |
| | comp=Z,68nm,0.8s | | | | | | | | | |
| BSD | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,24.0s | | | | | | | | | |
| **BSD** | **Bornholm Skovb** | **73.31** | **332** | *i* | P | **P** | | **14 10 20.4** | **-0.2** |
| | comp=Z,68nm,0.8s | | | | | | | | | |
| | comp=Z,2µm,24.0s | | | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **73.35** | **58** | | P | **P** | | **14 10 21.8** | **+0.5** |
| | baz=73,SNR=10 | | | | | | | | | |
| **B27A** | **Peters Farms,** | **73.38** | **39** | | P | **P** | | **14 10 21.9** | **+0.6** |
| | baz=73 | | | | | | | | | |
| **C26A** | **Wahner Farm, P** | **73.41** | **40** | | P | **P** | | **14 10 22.0** | **+0.6** |
| | baz=73 | | | | | | | | | |
| **A28A** | **Rude Farm, Bot** | **73.48** | **38** | | P | **P** | | **14 10 22.4** | **+0.6** |
| | baz=73 | | | | | | | | | |
| **PTK** | **Pertek** | **73.50** | **308** | *eP* | | **P** | | **14 10 21.8** | **-0.5** |
| **NLU** | **North Lily Min** | **73.59** | **51** | *eP* | | **P** | | **14 10 23.4** | **+0.5** |
| | comp=Z,20nm,1.1s | | | | | | | | | |
| **ILIC** | **ilic-Erzincan** | **73.61** | **309** | *eP* | | **P** | | **14 10 24.4** | **+1.5** |
| **KIS** | **Kishinev** | **73.62** | **319** | ⇑ *iP* | | **P** | | **14 10 23.0** | **+0.4** |
| | comp=Z,300nm,2.0s | | | | | | | | | |
| **KIS** | **Kishinev** | **73.62** | **319** | *i* | PcP | **PcP** | | **14 10 40.0** | **+1.7** |
| KIS | | | | *eS* | | **SKiKP** | | **14 19 48.0** | **-0.2** |
| KIS | | | | *eLR* | | LR | | 14 39 25.0 | | |
| | comp=Z,1µm,16.0s | | | | | | | | | |
| **KIS** | **Kishinev** | **73.62** | **319** | α *iP* | | **P** | | **14 10 23.0** | **+0.4** |
| KIS | | | | *i* | | | | 14 10 40.0 | | |
| KIS | | | | *e* | | | | 14 13 09.0 | | |
| KIS | | | | *eS* | | **SKiKP** | | **14 19 48.0** | **-0.2** |
| KIS | | | | *e* | | | | 14 20 20.0 | | |
| KIS | | | | *e* | | | | 14 20 48.0 | | |
| KIS | | | | | pmax | pmax | | | | |
| | comp=Z,300nm,2.0s | | | | | | | | | |
| KIS | | | | | pmax | pmax | | | | |
| | comp=Z,400nm,6.0s | | | | | | | | | |
| KIS | | | | | MLR | MLR | | | | |
| | comp=Z,2µm,15.0s | | | | | | | | | |
| KIS | | | | | MLR | MLR | | | | |
| | comp=N,600nm,14.0s | | | | | | | | | |
| KIS | | | | | MLR | MLR | | | | |
| | comp=Z,1µm,16.0s | | | | | | | | | |
| **BEL** | **Belsk** | **73.64** | **327** | *eP* | | **P** | | **14 10 23.4** | **+0.8** |
| **BEL** | **Belsk** | **73.64** | **327** | ⇑ *eP* | | **P** | | **14 10 23.5** | **+0.8** |
| **DYBB** | **Diyarbakir** | **73.67** | **307** | *eP* | | **P** | | **14 10 21.8** | **-1.4** |
| **COP** | **Copenhagen** | **73.70** | **333** | *i* | P | **P** | | **14 10 23.4** | **+0.5** |
| COP | | | | | pmax | pmax | | | | |
| | comp=Z,49nm,0.9s | | | | | | | | | |
| COP | | | | | MLR | MLR | | | | |
| | comp=Z,670nm,15.0s | | | | | | | | | |
| **COP** | **Copenhagen** | **73.70** | **333** | *i* | P | **P** | | **14 10 23.4** | **+0.5** |
| | comp=Z,49nm,0.9s | | | | | | | | | |
| | comp=Z,660nm,15.0s | | | | | | | | | |
| **E25A** | **Miller Ranch,** | **73.72** | **41** | | P | **P** | | **14 10 23.8** | **+0.5** |
| | baz=74,SNR=5.4 | | | | | | | | | |
| **O16A** | **Springville** | **73.75** | **50** | *eP* | | P | | 14 10 31.8 | +8.0 |
| **B28A** | **Dugan Ranch, T** | **73.77** | **38** | | P | **P** | | **14 10 24.0** | **+0.5** |
| | baz=74 | | | | | | | | | |
| **C27A** | **Sayler Ranch,** | **73.77** | **39** | | P | **P** | | **14 10 24.0** | **+0.5** |
| | baz=74 | | | | | | | | | |
| **LVV** | **L'vov** | **73.78** | **324** | *c iP* | | **P** | | **14 10 23.0** | **-0.5** |
| LVV | | | | *e* | | | | 14 10 43.0 | | |
| LVV | | | | *e* | | | | 14 13 13.8 | | |
| LVV | | | | *eS* | | **SKiKP** | | **14 19 49.0** | **+0.6** |
| LVV | | | | *ePS* | | **PnS** | | **14 20 30.0** | **+1.4** |
| LVV | | | | | MLR | MLR | | | | |
| | comp=Z,1µm,17.5s | | | | | | | | | |
| LVV | | | | | MLR | MLR | | | | |
| | comp=N,600nm,17.0s | | | | | | | | | |
| LVV | | | | | MLR | MLR | | | | |
| | comp=E,800nm,17.0s | | | | | | | | | |
| **MPU** | **Maple Canyon** | **73.80** | **50** | | P | P | | 14 10 20.9 | -3.3 |
| | comp=E,61nm,1.0s | | | | | | | | | |
| **D26A** | **Manning** | **73.81** | **40** | | P | **P** | | **14 10 24.4** | **+0.6** |
| | baz=74 | | | | | | | | | |
| **MAZI** | **Mazidag** | **73.81** | **306** | *eP* | | **P** | | **14 10 23.9** | **-0.2** |
| **GSC** | **Goldstone** | **73.82** | **57** | *eP* | | **P** | | **14 10 24.9** | **+0.7** |
| GSC | | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| **GSC** | **Goldstone** | **73.82** | **57** | | P | **P** | | **14 10 24.8** | **+0.7** |
| | baz=74,SNR=6.5 | | | | | | | | | |
| **GSC** | **Goldstone** | **73.82** | **57** | *eP* | | **P** | | **14 10 24.9** | **+0.7** |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| **SVRC** | **Sivrice-ELAZID** | **73.88** | **307** | *eP* | | **P** | | **14 10 25.2** | **+0.7** |
| **GKP** | **Gorka Klasztor** | **73.92** | **330** | *eP* | | **P** | | **14 10 24.7** | **+0.4** |
| **GKP** | **Gorka Klasztor** | **73.92** | **330** | *eP* | | **P** | | **14 10 24.7** | **+0.4** |
| **A29A** | **Manning Farm,** | **73.93** | **37** | | P | **P** | | **14 10 25.0** | **+0.5** |
| | baz=74,SNR=8.6 | | | | | | | | | |
| **KVT** | **Kavak** | **73.95** | **311** | *eP* | | **P** | | **14 10 26.6** | **+1.9** |
| **BFSC** | **Mount Baldy Ra** | **73.97** | **58** | | P | **P** | | **14 10 25.8** | **+0.7** |
| | baz=74,SNR=5.7 | | | | | | | | | |
| **DIKM** | **Dikmen** | **74.00** | **312** | *eP* | | **P** | | **14 10 23.9** | **-1.1** |
| **SHPR** | **Sheep Range** | **74.04** | **55** | *eP* | | **P** | | **14 10 26.4** | **+0.9** |
| **F25A** | **Bowman** | **74.10** | **42** | | P | **P** | | **14 10 25.9** | **+0.3** |
| | baz=74 | | | | | | | | | |
| **MUD** | **Monsted U'grnd** | **74.11** | **335** | ⇑ *iP* | | **P** | | **14 10 25.6** | **+0.3** |
| MUD | | | | | pmax | pmax | | | | |
| | comp=Z,32nm,0.9s | | | | | | | | | |
| **MUD** | **Monsted U'grnd** | **74.11** | **335** | ⇑ *iP* | | **P** | | **14 10 25.6** | **+0.3** |
| | comp=Z,32nm,0.9s | | | | | | | | | |
| **TOKT** | **Tokat** | **74.18** | **310** | *eP* | | P | | 14 10 22.5 | -3.6 |
| **D27A** | **Center** | **74.19** | **40** | | P | **P** | | **14 10 26.3** | **+0.2** |
| | baz=74 | | | | | | | | | |
| **SVSK** | **Karacayir** | **74.20** | **310** | *eP* | | **P** | | **14 10 26.6** | **+0.5** |
| **E26A** | **Carlson Angus** | **74.20** | **41** | | P | **P** | | **14 10 26.6** | **+0.5** |
| | baz=74 | | | | | | | | | |
| **B29A** | **Wagenman Farm,** | **74.22** | **38** | | P | **P** | | **14 10 26.4** | **+0.3** |
| | baz=74 | | | | | | | | | |
| **TUQ** | **Turquoise Moun** | **74.28** | **56** | | P | **P** | | **14 10 27.6** | **+0.8** |
| | baz=74,SNR=11 | | | | | | | | | |
| **C28A** | **Hausauer Farms** | **74.29** | **39** | | P | **P** | | **14 10 27.2** | **+0.6** |
| | baz=74,SNR=7.0 | | | | | | | | | |
| **A30A** | **Hoffart Farm,** | **74.34** | **37** | | P | **P** | | **14 10 26.9** | **+0.1** |
| | baz=74,SNR=5.7 | | | | | | | | | |
| **ULM** | **du Bonnet** | **74.41** | **35** | | P | **P** | | **14 10 26.6** | **-0.6** |
| | comp=Z,9.4nm,0.7s,baz=316,slow=6.6,SNR=7.5 | | | | | | | | | |
| ULM | | | | | LR | LR | | 14 44 54.5 | | |
| | comp=Z,408nm,20.0s,baz=299,slow=37 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **74.41** | **35** | | P | **P** | | **14 10 26.6** | **-0.6** |
| ULM | | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | | |
| ULM | | | | | MLR | MLR | | | | |
| | comp=Z,408nm,20.0s | | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **74.42** | **57** | | P | **P** | | **14 10 29.0** | **+1.3** |
| | baz=74,SNR=9.1 | | | | | | | | | |
| **BBRC** | **Big Bear Solar** | **74.42** | **58** | | P | **P** | | **14 10 28.6** | **+0.8** |
| | baz=74 | | | | | | | | | |
| **CCUT** | **Cedar City** | **74.44** | **53** | *eP* | | **P** | | **14 10 27.2** | **-0.7** |
| | comp=Z,21nm,1.3s | | | | | | | | | |
| **BZK** | **Bozkurt** | **74.48** | **313** | *eP* | | **P** | | **14 10 25.9** | **-1.8** |
| **KWP** | **Kalwaria Pacla** | **74.50** | **324** | *eP* | | **P** | | **14 10 28.4** | **+0.7** |
| **KWP** | **Kalwaria Pacla** | **74.50** | **324** | ⇑ *eP* | | **P** | | **14 10 28.5** | **+0.7** |
| **TMUT** | **Trail Mountain** | **74.53** | **51** | *eP* | | **P** | | **14 10 28.4** | **-0.1** |
| | comp=Z,72nm,1.2s | | | | | | | | | |
| **F26A** | **Lodgepole** | **74.54** | **41** | | P | **P** | | **14 10 28.5** | **+0.3** |
| | baz=74 | | | | | | | | | |
| **MDND** | **Maddock** | **74.55** | **38** | | P | **P** | | **14 10 28.1** | **0.0** |
| | baz=74 | | | | | | | | | |
| **D28A** | **Regan** | **74.58** | **39** | | P | **P** | | **14 10 28.5** | **+0.2** |
| | baz=74 | | | | | | | | | |
| **G25A** | **Newell** | **74.64** | **42** | | P | **P** | | **14 10 29.0** | **+0.3** |
| | baz=74 | | | | | | | | | |
| **E27A** | **Carson** | **74.66** | **40** | | P | **P** | | **14 10 29.9** | **+1.1** |
| | baz=74 | | | | | | | | | |
| **MURC** | **Murrieta** | **74.68** | **59** | | P | **P** | | **14 10 29.8** | **+0.7** |
| | baz=75 | | | | | | | | | |
| **B30A** | **Myrvik Farm, E** | **74.69** | **37** | | P | **P** | | **14 10 29.6** | **+0.7** |
| | baz=74,SNR=5.5 | | | | | | | | | |
| **DARE** | **Darende-Malaty** | **74.82** | **308** | *eP* | | **P** | | **14 10 29.4** | **-0.6** |
| **K22A** | **Casper** | **74.83** | **46** | | P | **P** | | **14 10 30.2** | **+0.2** |
| | baz=75 | | | | | | | | | |
| **K22A** | **Casper** | **74.83** | **46** | *eP* | | **P** | | **14 10 29.6** | **-0.4** |
| | comp=Z,61nm,1.6s | | | | | | | | | |
| **F27A** | **Lemmon** | **74.84** | **41** | | P | **P** | | **14 10 29.9** | **+0.1** |
| | baz=75 | | | | | | | | | |
| **GMRC** | **Granite Mounta** | **74.87** | **57** | | P | **P** | | **14 10 31.2** | **+0.9** |
| | baz=75,SNR=8.9 | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **BURAR** | **Bucovina Array** | **74.87** | **322** | ⇑ *iP* | | **P** | | **14 10 30.5** | **+0.4** |
| **H25A** | **Fruitdale** | **74.95** | **43** | | P | **P** | | **14 10 30.5** | **0.0** |
| | baz=75 | | | | | | | | | |
| **G26A** | **Maurine** | **74.97** | **42** | | P | **P** | | **14 10 30.7** | **+0.1** |
| | baz=75,SNR=13 | | | | | | | | | |
| **SRU** | **San Rafael** | **75.05** | **51** | *eP* | | **P** | | **14 10 31.9** | **+0.6** |
| SRU | | | | | pmax | pmax | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| **SRU** | **San Rafael** | **75.05** | **51** | *eP* | | **P** | | **14 10 31.9** | **+0.6** |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| **TOS** | **Tosya** | **75.10** | **312** | *eP* | | **P** | | **14 10 32.8** | **+1.3** |
| **PFO** | **Pinyon Flat Ob** | **75.14** | **58** | | PFAKE | | | 14 10 40.0 | +8.1 |
| PFO | | | | | LR | LR | | | | |
| | comp=Z,1µm,22.0s | | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **75.17** | **58** | | P | **P** | | **14 10 32.6** | **+0.5** |
| | baz=75,SNR=6.5 | | | | | | | | | |
| **C30A** | **Mose, Pekin** | **75.17** | **38** | | P | **P** | | **14 10 31.9** | **+0.3** |
| | baz=75 | | | | | | | | | |
| **MMU** | **Miners Mountai** | **75.22** | **52** | *eP* | | **P** | | **14 10 33.5** | **+1.1** |
| **G27A** | **Dupree** | **75.24** | **41** | | P | **P** | | **14 10 32.0** | **-0.1** |
| | baz=75,SNR=6.2 | | | | | | | | | |
| **CFR** | **Carcaliu** | **75.25** | **318** | ⇓ *iP* | | **P** | | **14 10 32.7** | **+0.6** |
| **OJC** | **Ojcow** | **75.28** | **326** | *i* | P | **P** | | **14 10 32.8** | **+0.6** |
| **OJC** | **Ojcow** | **75.28** | **326** | ⇑ *iP* | | **P** | | **14 10 32.8** | **+0.6** |
| **STHS** | **Stebnicka Huta** | **75.28** | **325** | *eP* | | **P** | | **14 10 33.1** | **+0.8** |
| STHS | | | | | pmax | pmax | | | | |
| | comp=Z,23nm,0.7s | | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **75.28** | **325** | *eP* | | **P** | | **14 10 33.1** | **+0.8** |
| **PETR** | **Petresti** | **75.30** | **319** | ⇑ *iP* | | **P** | | **14 10 34.3** | **+1.9** |
| **I25A** | **Rochford** | **75.31** | **43** | | P | **P** | | **14 10 32.6** | **-0.2** |
| | baz=75,SNR=5.7 | | | | | | | | | |
| **H26A** | **Fairpoint** | **75.37** | **42** | | P | **P** | | **14 10 33.2** | **+0.2** |
| | baz=75 | | | | | | | | | |
| **UZH** | **Uzhgorod** | **75.43** | **324** | ⇑ *iP* | | **P** | | **14 10 33.3** | **+0.2** |
| UZH | | | | *i* | | | | 14 10 47.1 | | |
| UZH | | | | *e* | | | | 14 10 55.3 | | |
| UZH | | | | *e* | | | | 14 13 21.9 | | |
| UZH | | | | *e* | | | | 14 15 17.1 | | |
| UZH | | | | *eS* | | **S** | | **14 20 06.3** | **-3.1** |
| UZH | | | | *e* | | | | 14 20 35.5 | | |
| UZH | | | | *e* | | | | 14 20 45.7 | | |
| UZH | | | | *e* | | | | 14 28 13.7 | | |
| UZH | | | | | MLR | MLR | | | | |
| | comp=N,780nm,15.0s | | | | | | | | | |
| UZH | | | | | MLR | MLR | | | | |
| | comp=E,1µm,15.0s | | | | | | | | | |
| UZH | | | | | MLR | MLR | | | | |
| | comp=Z,900nm,15.0s | | | | | | | | | |
| **VRI** | **Vrincioaia** | **75.44** | **320** | ⇓ *iP* | | **P** | | **14 10 34.2** | **+1.0** |
| **C31A** | **Landman Farms,** | **75.44** | **37** | | P | **P** | | **14 10 33.6** | **+0.4** |
| | baz=75 | | | | | | | | | |
| **E29A** | **Napoleon** | **75.47** | **39** | | P | **P** | | **14 10 33.7** | **+0.2** |
| | baz=75 | | | | | | | | | |
| **D30A** | **Buchanan** | **75.48** | **38** | | P | **P** | | **14 10 33.6** | **+0.1** |
| | baz=75,SNR=6.7 | | | | | | | | | |
| **PLOR** | **Plostina** | **75.49** | **320** | ⇑ *iP* | | **P** | | **14 10 34.5** | **+0.9** |
| **B32A** | **Ashes, Strandq** | **75.53** | **36** | | P | **P** | | **14 10 33.4** | **-0.2** |
| | baz=75 | | | | | | | | | |
| **SARI** | **SarD1z-Kayseri** | **75.55** | **309** | *eP* | | **P** | | **14 10 35.6** | **+1.4** |
| **BNN** | **Bunyan** | **75.57** | **310** | *eP* | | **P** | | **14 10 34.5** | **+0.2** |
| **IRM** | **Iron Mountain** | **75.59** | **57** | | P | **P** | | **14 10 34.9** | **+0.6** |
| | baz=76,SNR=7.1 | | | | | | | | | |
| **A33A** | **Warroad** | **75.61** | **35** | | P | **P** | | **14 10 34.2** | **0.0** |
| | baz=75 | | | | | | | | | |
| **BAR** | **Barrett** | **75.61** | **59** | *eP* | | **P** | | **14 10 35.5** | **+1.0** |
| | comp=Z,39nm,1.9s | | | | | | | | | |
| **O20A** | **White River Ci** | **75.63** | **49** | | P | **P** | | **14 10 35.2** | **+0.5** |
| | baz=76 | | | | | | | | | |
| **O20A** | **White River Ci** | **75.63** | **49** | *eP* | | **P** | | **14 10 34.6** | **-0.1** |
| | comp=Z,16nm,1.0s | | | | | | | | | |
| **TIRR** | **Tirgusor** | **75.63** | **318** | *eP* | | **P** | | **14 10 34.3** | **0.0** |
| TIRR | | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.0s | | | | | | | | | |
| **TIRR** | **Tirgusor** | **75.63** | **318** | ⇑ *iP* | | **P** | | **14 10 34.1** | **-0.2** |
| **TIRR** | **Tirgusor** | **75.63** | **318** | *eP* | | **P** | | **14 10 34.3** | **0.0** |
| | comp=Z,40nm,1.0s | | | | | | | | | |
| **MONP** | **Monument Peak** | **75.64** | **59** | | P | **P** | | **14 10 34.9** | **+0.1** |
| | baz=76 | | | | | | | | | |
| **NIE** | **Niedzica** | **75.68** | **325** | *eP* | | **P** | | **14 10 35.6** | **+1.0** |
| **NIE** | **Niedzica** | **75.68** | **325** | ⇑

baz=76
**MORC Moravsky Berou 76.54 327 eP P 14 10 39.9 +0.4**
MORC pmax pmax
comp=Z,231nm,0.9s
**MORC Moravsky Berou 76.54 327⇑ iP P 14 10 40.5 +1.0**
**MORC Moravsky Berou 76.54 327 eP P 14 10 39.9 +0.4**
comp=Z,231nm,0.9s
**VOIR 76.56 320⇓ iP P 14 10 40.7 +1.0**
**PV05 Paradox Valley 76.57 51 eP P 14 10 40.9 +0.8**
**UPC Upice 76.57 328 eP P 14 10 40.1 +0.5**
UPC e 14 11 00.3
UPC eS S 14 20 19.7 -2.2
UPC MLR MLR
comp=Z,1μm,21.3s
**UPC Upice 76.57 328⇑ eP P 14 10 40.1 +0.5**
UPC ex x 14 11 00.3
UPC eS S 14 20 19.7 -2.2
UPC AMS AMS 14 44 40.0
comp=Z,1μm,21.3s
**DPC Dobruska-Polom 76.57 328 eP P 14 10 40.2 +0.6**
DPC e 14 10 46.6
DPC e 14 10 59.4
DPC eS S 14 20 20.4 -1.7
DPC MLR MLR
comp=Z,1μm,19.3s
**DPC Dobruska-Polom 76.57 328 eP P 14 10 40.2 +0.6**
DPC ex x 14 10 46.6
DPC ex x 14 10 59.4
DPC eS S 14 20 20.4 -1.7
DPC AMS AMS 14 43 20.0
comp=Z,1μm,19.3s
**ANTO Ankara 76.58 312 eP P 14 10 40.5 +0.6**
ANTO pmax pmax
comp=Z,93nm,0.8s
ANTO MLR MLR
comp=Z,524nm,19.0s
**ANTO Ankara 76.58 312⇓ iP P 14 10 41.0 +1.1**
**ANTO Ankara 76.58 312 P P 14 10 41.3 +1.4**
SNR=9.2
**ANTO Ankara 76.58 312 eP P 14 10 40.5 +0.6**
comp=Z,93nm,0.8s
ANTO LR LR
comp=Z,524nm,19.0s
**KRLC Kraliky 76.61 328 eP P 14 10 40.2 +0.3**
KRLC e 14 11 00.6
**KRLC Kraliky 76.61 328⇑ eP P 14 10 40.2 +0.3**
KRLC ex x 14 11 00.6
**I28A Midland 76.61 42 P P 14 10 40.5 +0.5**
baz=76,SNR=8.7
**H29A Onida 76.62 41 P P 14 10 40.5 +0.5**
baz=76
**DRGR 76.63 322⇓ iP P 14 10 40.8 +0.7**
**E32A Braaten, Kindr 76.64 38 P P 14 10 40.4 +0.4**
baz=76
**F31A Hecla 76.64 39 P P 14 10 40.6 +0.5**
baz=76
**YAYX Yaylak 76.67 311 eP P 14 10 38.5 -2.0**
**AFSR Af ar-Bala (A 76.73 312 eP P 14 10 39.7 -1.1**
**J27A Elkhorn Farm, 76.74 43 P P 14 10 41.7 +0.9**
baz=76
**D33A AnnSam, Waubun 76.78 37 P P 14 10 41.7 +0.9**
baz=77
**NIG Nigde 76.79 310 eP P 14 10 41.8 +0.4**
**ARR Arges 76.80 320⇑ iP P 14 10 43.8 +2.7**
**PV01 Paradox Valley 76.83 50 eP P 14 10 42.1 +0.6**
comp=Z,3μm,1.3s
**MDO Dochfour 76.85 343 eP P 14 10 41.1 +0.1**
**RRH Rhemigidale 76.91 344⇑ eP P 14 10 41.3 0.0**
**WUAZ Wupatki 76.99 54 P P 14 10 43.1 +0.7**
baz=77,SNR=8.2
**WUAZ Wupatki 76.99 54 eP P 14 10 43.2 +0.8**
comp=Z,17nm,1.0s
WUAZ LR LR
comp=Z,540nm,22.0s
**J28A Allard Ranch, 77.00 42 P P 14 10 43.0 +0.8**
baz=77,SNR=7.5
**KAC Achnashellach 77.00 343 eP P 14 10 42.4 +0.5**
**SMCO Snowmass 77.00 49 eP P 14 10 43.2 +0.4**
comp=Z,15nm,1.0s
**PSZ Piszkesteto 77.01 325 eP P 14 10 42.2 0.0**
PSZ pmax pmax
comp=Z,76nm,1.4s
PSZ MLR MLR
comp=Z,2μm,19.0s
**PSZ Piszkesteto 77.01 325⇓ iP P 14 10 43.5 +1.3**
**PSZ Piszkesteto 77.01 325⇑ eP P 14 10 42.9 +0.7**
**PSZ Piszkesteto 77.01 325 eP P 14 10 42.2 0.0**
comp=Z,76nm,1.4s
PSZ LR LR
comp=Z,2μm,19.0s
**VYHS Vyhne 77.01 326 eP P 14 10 42.8 +0.7**
VYHS pmax pmax
comp=Z,16nm,1.1s
**VYHS Vyhne 77.01 326 eP P 14 10 42.8 +0.7**
**I29A Vivian Onida 77.02 41 P P 14 10 42.4 +0.1**
baz=77
**MDUB Mudurnu 77.03 313 eP P 14 10 41.8 -0.7**
**CLL Collm 77.06 330⇑ iP P 14 10 42.3 0.0**
CLL i *SP sP 14 11 04.7 +3.4
CLL eS S 14 20 25.0 -2.2
CLL pmax pmax
comp=Z,83nm,0.8s
**CLL Collm 77.06 330 eP P 14 10 42.3 0.0**
comp=Z,83nm,0.8s,baz=33,slow=5.5
CLL eL L 14 47 26.3
comp=Z,1μm,21.9s
**CLL Collm 77.06 330⇑ iP P 14 10 42.3 0.0**
comp=Z,83nm,0.8s
CLL ePcP PcP 14 10 52.0 -1.1
CLL i sP sP 14 11 04.7 +3.4
CLL ePP PP 14 13 32.0 -3.5
CLL i 14 13 37.3
CLL esPP 14 13 58.0
CLL eS S 14 20 25.0 -2.2
CLL eScS ScS 14 20 54.0 -1.4
CLL ePS PnS 14 21 12.0 +1.4
CLL e 14 26 42.0
CLL e 14 29 54.0
**CLL Collm 77.06 330 eP P 14 10 42.4 0.0**
comp=Z,90nm,0.8s
**BRG Berggiesshubel 77.06 330 iP P 14 10 42.4 +0.1**
comp=Z,26nm,0.9s
BRG i PP PP 14 13 27.0 -8.5
comp=Z,11nm,0.9s
BRG S S 14 20 28.0 +0.7
BRG ePKPPKP P'P'df 14 37 57.7 +0.7
comp=Z,17nm,1.9s
comp=N,1μm,23.2s
comp=E,1μm,21.8s
comp=Z,1μm,21.2s
**BRG Berggiesshubel 77.06 330 iP P 14 10 42.4 +0.1**
BRG S S 14 20 28.0 +0.7
BRG pmax pmax
comp=Z,26nm,0.9s
BRG MLR MLR
comp=N,1μm,23.2s
BRG MLR MLR
comp=E,1μm,21.8s
BRG MLR MLR
comp=Z,1μm,21.2s
**BRG Berggiesshubel 77.06 330 eP P 14 10 42.6 +0.3**
comp=Z,26nm,0.9s,baz=33,slow=5.5
**TAHT Tahtakopru-Hat 77.07 308 eP P** 14 10 37.0 -5.7
**NRDL Niedersach Rie 77.11 333 eP P 14 10 42.9 +0.4**
comp=Z,31nm,0.9s,baz=33,slow=5.5
**PVCC Panska Ves 77.11 329 eP P 14 10 43.1 +0.5**
PVCC e 14 10 49.6
PVCC e 14 11 03.5
PVCC MLR MLR
comp=Z,1μm,23.1s
**PVCC Panska Ves 77.11 329⇑ eP P 14 10 43.1 +0.5**
PVCC esP sP 14 11 03.5 +1.9
PVCC AMS AMS 14 45 20.0
comp=Z,1μm,23.1s
**D34A Park Rapids 77.11 37 P P 14 10 42.6 -0.1**
baz=77
**KARA Karaisali 77.12 309 eP P 14 10 41.1 -1.8**
**BTCH Batrach 77.14 307 eP P 14 10 43.8 +0.7**
**G31A Conde 77.14 39 P P 14 10 43.2 +0.3**
baz=77
**C35A Jirik Farms, M 77.17 35 P P 14 10 42.7 -0.3**
baz=77,SNR=8.9
**E33A Westby DABS, E 77.19 37 P P 14 10 43.5 +0.4**
baz=77
**ASSE Asse, Remlinge 77.22 332 eP P 14 10 43.6 +0.5**
comp=Z,36nm,0.9s,baz=33,slow=5.5
**KPL Plockton 77.22 343 eP P 14 10 43.3 +0.2**
KPL AMB AMB 14 10 44.6
comp=Z,62nm,0.9s
**FBE Freiberg 77.25 330 eP P 14 10 43.9 +0.5**
comp=Z,54nm,1.0s,baz=33,slow=5.5
**VRAC Vranov 77.29 327 P P 14 10 43.9 +0.3**
comp=Z,33nm,0.8s,baz=41,slow=5.3,SNR=36
**VRAC Vranov 77.29 327 P P 14 10 43.9 +0.3**
VRAC pmax pmax
comp=Z,33nm,0.9s
**VRAC Vranov 77.29 327⇓ iP P 14 10 44.9 +1.2**
**KSB Sheil Bridge 77.30 343 eP P 14 10 43.9 +0.4**
**ISCO Idaho Springs 77.31 47 eP P 14 10 44.3 0.0**
ISCO pmax pmax
comp=Z,12nm,1.0s
ISCO MLR MLR
comp=Z,409nm,21.0s
**ISCO Idaho Springs 77.31 47 P P 14 10 45.0 +0.7**
baz=77,SNR=7.2
**ISCO Idaho Springs 77.31 47 eP P 14 10 44.3 0.0**
comp=Z,12nm,1.0s
ISCO LR LR
comp=Z,409nm,21.0s
**SULT Sultanhani-AKS 77.35 310 eP P 14 10 45.9 +1.6**
**SUSD South Dakota S 77.37 40 P P 14 10 43.7 -0.5**
baz=77
**CHBY Cihanbeyli 77.43 311 eP P 14 10 45.9 +1.2**
**G32A Webster 77.45 39 P P 14 10 45.0 +0.4**
baz=77
**K28A Ten Mile Ranch 77.45 43 P P 14 10 44.9 +0.1**
baz=77
**J29A Okreek 77.46 42 P P 14 10 44.4 -0.4**
baz=77
**SIRR Siria 77.50 323⇓ iP P 14 10 45.8 +0.9**
**YESY Yesilyurt 77.51 310 eP P 14 10 46.5 +1.2**
**MVCO Mesa Verde 77.51 51 P P 14 10 45.6 +0.2**
baz=77
**MVCO Mesa Verde 77.51 51 eP P 14 10 46.0 +0.6**
comp=Z,44nm,1.4s
MVCO LR LR
comp=Z,374nm,20.0s
**CAN Canberra 77.52 175** PFAKE 14 11 00.0 +15
CAN LR LR
comp=Z,496nm,19.0s
**GOPC GO Pecny, Ondr 77.52 329 eP P 14 10 45.5 +0.6**
GOPC e 14 11 05.5
GOPC eS S 14 20 30.5 -1.8
GOPC MLR MLR
comp=Z,1μm,18.6s
**GOPC GO Pecny, Ondr 77.52 329 eP P 14 10 45.5 +0.6**
GOPC ex x 14 11 05.5
GOPC eS S 14 20 30.5 -1.8
GOPC AMS AMS 14 46 10.0
comp=Z,1μm,18.6s
**PRA Prague 77.53 329 eP P 14 10 45.2 +0.3**
**PRA Prague 77.53 329⇑ eP P 14 10 45.2 +0.3**
**I30A Oacoma 77.53 41 P P 14 10 45.3 +0.1**
baz=77,SNR=8.5
**PRU Pruhonice 77.55 329 eP P 14 10 45.6 +0.5**
PRU e 14 11 05.7
PRU eS S 14 20 28.4 -4.2
PRU MLR MLR
comp=Z,1μm,23.4s
**PRU Pruhonice 77.55 329⇑ eP P 14 10 45.6 +0.5**
PRU esP sP 14 11 05.7 +1.6
PRU eS S 14 20 28.4 -4.2
PRU AMS AMS 14 46 00.0
comp=Z,1μm,23.4s
**CLZ Clausthal 77.56 332** eL L 14 47 41.7
comp=Z,791nm,21.6s
**F33A 5 Mile Ranch, 77.56 38 P P 14 10 45.0 -0.2**
baz=77
**H31A Wolsey 77.57 40 P P 14 10 44.9 -0.3**
baz=77
**SVRH Sivrihisar-ESK 77.58 312 eP P 14 10 46.6 +1.0**
**NEUB Neuenburg 77.59 331 eP P 14 10 45.5 +0.3**
comp=Z,104nm,0.8s,baz=33,slow=5.5
**C36A Pine Crest Far 77.61 35 P P 14 10 45.7 +0.2**
baz=77,SNR=15
**D35A Remer 77.61 36 P P 14 10 45.4 -0.1**
baz=77
**GZR Gura Zlata 77.65 321⇑ iP P 14 10 46.4 +0.6**
**SZH Strazhica 77.73 318 iP P 14 10 46.2 0.0**
**TREC Trest 77.74 328⇑ AMS AMS** 14 46 40.0
comp=Z,1μm,20.3s
**KIZT Kizilcal 77.78 312 eP P** 14 10 38.3 -8.4
**RABH Abou Rabah 77.79 306 eP P 14 10 48.3 +1.5**
**ESY Stoneypath 77.83 341 eP P 14 10 46.2 -0.4**
**ADVT Abdulvahap 77.84 314 eP P 14 10 46.6 -0.3**
**ESKT Eskisehir 77.89 313 eP P 14 10 48.6 +1.3**
**C37A Embarrass 77.91 35 P P 14 10 47.2 +0.1**
baz=78,SNR=14
**ROOS tl_alroos 77.92 305 eP P 14 10 49.5 +2.0**
**BIDA Albida 77.92 306 eP P 14 10 48.4 +0.9**
**D36A Goodland 77.92 35 P P 14 10 47.1 -0.1**
baz=78
**J30A Dallas 77.93 41 P P 14 10 47.9 +0.5**
baz=78
**K29A Lazy Trails An 77.94 42 P P 14 10 48.2 +0.7**
baz=78
**GTTG Gvttingen 77.95 332 eP P 14 10 47.7 +0.4**
comp=Z,64nm,0.9s,baz=33,slow=5.5
**CAVI Cavuskoy 77.95 314 eP P 14 10 48.0 +0.5**
**TANN Tannenbergstha 77.99 330 eP P 14 10 47.8 +0.3**
comp=Z,15nm,0.9s,baz=33,slow=5.5
**EAB Aberfoyle 77.99 342⇑ eP P 14 10 46.9 -0.5**
**BZS Buzias 78.01 322 eP P 14 10 47.8 0.0**
**BZS Buzias 78.01 322⇑ iP P 14 10 48.2 +0.5**
**WERD Werda 78.02 330 eP P 14 10 48.0 +0.3**
comp=Z,23nm,0.9s,baz=33,slow=5.5
**EYMN Ely 78.02 34 P P 14 10 48.0 +0.2**
baz=78,SNR=14
**EYMN Ely 78.02 34 eP P 14 10 47.3 -0.5**
comp=Z,30nm,0.8s
EYMN LR LR
comp=Z,547nm,21.0s
**PLN Plauen 78.04 330 eP P 14 10 48.2 +0.3**
comp=Z,27nm,1.0s,baz=33,slow=5.5
**H32A Carlson Farm, 78.04 39 P P 14 10 48.0 0.0**
baz=78
**IZI Iznik 78.05 314 eP P 14 10 48.0 -0.2**
**IBBN Ibbenburen 78.05 334 eP P 14 10 48.0 +0.3**
comp=Z,88nm,1.0s,baz=33,slow=5.5
**PKSG 78.06 325⇑ eP P 14 10 48.6 +0.7**
**F34A Alexandria 78.07 37 P P 14 10 48.3 +0.3**
baz=78
**GUNZ Gunzen 78.08 330 eP P 14 10 48.5 +0.4**
comp=Z,29nm,0.9s,baz=33,slow=5.5
**S22A 4UR Ranch, Cre 78.08 49 P P 14 10 49.7 +1.0**
baz=78,SNR=7.8
**S22A 4UR Ranch, Cre 78.08 49 eP P 14 10 50.1 +1.4**
comp=Z,14nm,1.2s
**MOX Moxa 78.11 331 eP P 14 10 48.5 +0.3**
comp=Z,29nm,0.8s,baz=33,slow=5.5
**WERN Wernitzgruen 78.12 330 eP P 14 10 48.8 +0.5**
comp=Z,30nm,0.8s,baz=33,slow=5.5
**PHSR Pinarhisar 78.13 316 eP P 14 10 48.6 +0.2**
**NKC Novy Kostel 78.14 330 eP P 14 10 48.7 +0.3**
NKC e 14 11 08.4
NKC e 14 11 14.7
NKC MLR MLR
comp=Z,1μm,19.2s
**NKC Novy Kostel 78.14 330⇑ eP P 14 10 48.7 +0.3**
NKC epP pP 14 11 08.4 +6.3
NKC esP sP 14 11 14.7 +7.2
NKC AMS AMS 14 48 00.0
comp=Z,1μm,19.2s
**Q24A Divide 78.16 48 P P 14 10 49.5 +0.4**
baz=78,SNR=7.5
**Q24A Divide 78.16 48 eP P 14 10 49.8 +0.7**
comp=Z,13nm,1.0s
**KONT Konya--Tatoy 78.17 311 eP P 14 10 48.6 -0.2**
**ARMT Armutlu 78.21 315 eP P** 14 10 45.2 -3.7
**HAWK Haweek 78.21 306 eP P 14 10 50.0 +0.9**
**W18A Petrified Fore 78.23 53 P P 14 10 49.3 -0.1**
baz=78
**H33A Prehn Over Nor 78.23 39 P P 14 10 49.6 +0.6**
baz=78,SNR=6.1
**D37A Cotton 78.25 35 P P 14 10 49.2 +0.1**
baz=78
**ABTO Aybut 78.28 283 P P 14 10 49.9 +0.2**
SNR=8.2
**C38A Sawbill Land. 78.30 34 P P 14 10 49.3 0.0**
baz=78,SNR=16
**G34A Benson 78.32 38 P P 14 10 49.9 +0.5**
baz=78
**F35A Swanville 78.33 37 P P 14 10 49.6 +0.1**
baz=78
**J31A Geddes 78.33 41 P P 14 10 49.7 +0.1**
baz=78
**K30A Basset 78.36 42 P P 14 10 50.0 +0.2**
baz=78
**EDRB Edirne 78.37 317 eP P 14 10 51.0 +1.2**
**PGBU Glenifferbraes 78.37 342⇑ eP P 14 10 50.1 +0.7**
PGBU AMB AMB 14 10 50.6
comp=Z,93nm,1.1s
**I32A Karley and Nic 78.39 40 P P 14 10 49.8 -0.1**
baz=78
**OGNE Ogallala 78.40 44 P P 14 10 49.8 -0.3**
baz=78
**OGNE Ogallala 78.40 44** PFAKE 14 11 00.0 +10
OGNE LR LR
comp=Z,379nm,22.0s
**M28A Bar X Bar Ranc 78.41 44 P P 14 10 49.5 -0.7**
baz=78
**MANZ Manzenberg 78.47 330 eP P 14 10 50.6 +0.3**
comp=Z,31nm,1.0s,baz=33,slow=5.5
**EKA Eskdalemuir Ar 78.49 341 P P 14 10 49.8 -0.4**
comp=Z,23nm,0.7s,baz=24,slow=5.1,SNR=53
**EKA Eskdalemuir Ar 78.49 341 P P 14 10 49.8 -0.4**
EKA pmax pmax
comp=Z,23nm,0.7s
**ESK Eskdalemuir 78.52 341 eP P 14 10 50.3 0.0**
**ESK Eskdalemuir 78.52 341 eP P 14 10 49.2 -1.1**
ESK pmax pmax
comp=Z,20nm,0.8s
ESK MLR MLR
comp=Z,513nm,21.0s
**ESK Eskdalemuir 78.52 341 P P 14 10 50.5 +0.2**
comp=Z,219nm,0.7s,SNR=5.7
**ESK Eskdalemuir 78.52 341 eP P 14 10 49.2 -1.1**
comp=Z,20nm,0.8s
ESK LR LR
comp=Z,513nm,21.0s
**214A Organ Pipe Nat 78.53 57 P P 14 10 50.9 +0.1**
baz=78
**NWAO Narrogin (SRO) 78.57 202 eP P 14 10 51.4 +0.7**
NWAO pmax pmax
comp=Z,43nm,1.2s
**NWAO Narrogin (SRO) 78.57 202 eP P 14 10 51.4 +0.7**
comp=Z,43nm,1.2s
**SOP Sopron 78.59 326⇑ eP P 14 10 51.9 +1.0**
**ROTZ Rotzenmuhle 78.61 330 eP P 14 10 51.8 +0.8**
comp=Z,37nm,1.0s,baz=33,slow=5.5
**KHC Kasperske Hory 78.61 329 eP P 14 10 51.2 +0.2**
KHC pmax pmax
comp=Z,21nm,0.8s
**KHC Kasperske Hory 78.61 329⇑ iP P 14 10 51.7 +0.6**
KHC esP sP 14 11 12.6 +2.5
KHC eS S 14 20 38.8 -5.4
KHC AMS AMS 14 47 00.0
comp=Z,2μm,22.0s
**KHC Kasperske Hory 78.61 329 eP P 14 10 51.2 +0.2**
comp=Z,21nm,0.8s
**ECK Cauldkaine Hil 78.62 341 eP P 14 10 50.7 -0.2**
**WTSB Winterswijk 78.65 334 eP P 14 10 50.9 -0.2**
comp=Z,62nm,0.8s
**CONA Conrad Observa 78.68 327⇑ iP P 14 10 52.3 +0.8**
comp=Z,561nm,4.8s,SNR=8.3
**C39A Grand Marais 78.69 33 P P 14 10 50.9 -0.5**
baz=78
**I33A Coleman 78.69 39 P P 14 10 52.4 +0.9**
baz=78
**H34A Spellman Lake, 78.69 38 P P 14 10 51.2 -0.3**
baz=78
**J32A Parkston 78.70 40 P P 14 10 51.5 -0.1**
baz=78
**P26A Davis Ranch, A 78.71 46 P P 14 10 52.1 +0.3**
baz=78
**BHH Howats Hill 78.73 341⇑ eP P 14 10 51.5 0.0**
**MPEP Malo Peshtene 78.73 320 iP P 14 10 51.9 +0.1**
**ZALF Zalf 78.74 304 eP P 14 10 53.1 +1.1**
**SHUT Suhut-Afyon 78.75 312 eP P 14 10 50.7 -1.4**
**F36A Milaca 78.79 36 P P 14 10 51.9 -0.1**
baz=79
**HDMB Hadim 78.80 310 eP P 14 10 52.1 -0.4**
**GEC2 GERESS Array S 78.80 329 eP P 14 10 52.4 +0.2**
**GEC2 GERESS Array S 78.80 329 eP P 14 10 52.4 +0.2**
comp=Z,19nm,0.8s,baz=33,slow=5.5
GEC2 eL L 14 49 56.5
comp=Z,702nm,19.0s
**GEC2 GERESS Array S 78.80 329 eP P 14 10 52.4 +0.2**
**GERES GERESS Array B 78.80 329 P P 14 10 52.1 0.0**
comp=Z,8.1nm,0.5s,baz=28,slow=6.0,SNR=80
GERES pP pP 14 13 38.0 -12
comp=Z,1.3nm,0.5s,baz=58,slow=8.0,SNR=3.5
GERES LR LR 14 49 37.5
comp=Z,523nm,18.2s,baz=29,slow=39
**K31A O'Neill 78.82 41 P P 14 10 52.9 +0.6**
baz=79
**SDCO Great Sand Dun 78.83 49 P P 14 10 53.3 +0.5**
baz=79,SNR=14
**SDCO Great Sand Dun 78.83 49 eP P 14 10 53.0 +0.2**
comp=Z,12nm,1.1s
SDCO LR LR
comp=Z,407nm,20.0s
**L30A Spencer Herefo 78.84 42 P P 14 10 52.9 +0.5**
baz=79
**N28A Pribbeno Ranch 78.84 44 P P 14 10 53.2 +0.7**
baz=79
**BNT Bandirma 78.85 315 eP P 14 10 52.1 -0.4**
**WET Wettzell 78.87 329 eP P 14 10 53.2 +0.7**
comp=Z,44nm,0.9s,baz=33,slow=5.5
WET eL L 14 48 35.3
comp=Z,949nm,21.5s
**EDC Edincik 78.89 315 eP P 14 10 53.5 +0.8**
**BUG Bochum--Univer 78.95 334 eP P 14 10 52.8 0.0**
comp=Z,59nm,0.8s,baz=33,slow=5.5
**TOTH TOTAH 78.99 305 eP P 14 10 54.8 +1.3**
**RKY Sarkoy-Tekirda 79.00 316 eP P 14 10 53.5 +0.2**
**ECSD EROS Data Cent 79.01 40 P P 14 10 53.3 0.0**
baz=79,SNR=16
**ECSD EROS Data Cent 79.01 40 eP P 14 10 52.8 -0.5**
comp=Z,25nm,0.9s
ECSD LR LR
comp=Z,595nm,20.0s
**GRF Grafenberg Arr 79.04 330 eP P 14 10 54.1 +0.8**
comp=Z,100nm,1.0s,baz=33,slow=5.5
GRF eL L 14 49 06.2
comp=Z,823nm,20.7s
**GRFO Grafenberg 79.04 330 P P 14 10 50.4 -2.9**
GRFO pmax pmax
comp=Z,49nm,0.8s
**GRFO Grafenberg 79.04 330 P P 14 10 50.4 -2.9**
comp=Z,49nm,0.8s
**BBO1 Bothel 79.06 341⇑ eP P 14 10 53.5 +0.2**
**Q26A Hugo 79.07 47 P P 14 10 54.8 +0.9**
baz=79
**H35A Sunnyside Ranc 79.10 38 P P 14 10 54.4 +0.6**
baz=79
**L31A Butterfield Fa 79.11 42 P P 14 10 54.4 +0.5**
baz=79
**PGB Panagyurishte 79.13 319 iP P 14 10 54.8 +0.8**
**KRBG Karabiga-Canak 79.15 316 eP P 14 10 54.2 +0.1**
**KESW Keswick, Cumbr 79.16 341 eP P 14 10 54.3 +0.5**
KESW AMB AMB 14 10 55.5
comp=Z,80nm,1.0s
**K32A Verdigre 79.17 41 P P 14 10 54.2 0.0**
baz=79
**KDZ Kurdzhali 79.18 317 iP P 14 10 55.2 +0.9**
**ISP Isparta 79.28 312 eP P** 14 10 50.4 -4.6
**ISP Isparta 79.28 312 eP P 14 10 55.7 +0.7**
ISP pmax pmax
comp=Z,22nm,0.7s
ISP MLR MLR
comp=Z,565nm,21.0s
**ISP Isparta 79.28 312 eP P 14 10 55.7 +0.7**
comp=Z,22nm,0.7s
ISP LR LR
comp=Z,565nm,21.0s
**GAL1 Galloway 79.29 342 eP P 14 10 54.6 +0.1**
GAL1 AMB AMB 14 10 55.3
comp=Z,60nm,1.0s
**ERIK Erikli-Kesan 79.35 316 eP P 14 10 56.1 +1.0**
**ARSA Arzberg 79.36 327⇑ iP P 14 10 55.6 +0.5**
comp=Z,288nm,4.5s
**LFK Lefkose 79.38 308 eP P 14 10 55.5 0.0**
**MOA Molln 79.39 328⇑ iP P 14 10 55.9 +0.6**
comp=Z,132nm,2.7s,SNR=7.9
**ALN Alexandroupoli 79.42 317 eP P 14 10 55.8 +0.2**
**ALN Alexandroupoli 79.42 317 P P 14 10 55.0 -0.5**

ALN Alexandroupoli 79.42 317 eP P 14 10 56.5 +1.0
ALN Alexandroupoli 79.42 317 eP P 14 10 56.5 +1.0
ALN Alexandroupoli 79.42 317 P P 14 10 55.0 -0.5
ALN Alexandroupoli 79.42 317 P P 14 10 55.0 -0.5
LPK Lapseki 79.44 316 eP P 14 10 56.2 +0.5
KHL Karahalli 79.47 313 eP P 14 10 56.2 +0.2
KSCO Kaye Shedlock' 79.49 46 P P 14 10 56.1 -0.1
baz=79
RDO Rodhopi 79.50 317 eP P 14 10 59.5 +3.6
RDO Rodhopi 79.50 317 eP P 14 10 59.5 +3.6
N30A Hueftle Ranch, 79.50 44 P P 14 10 55.7 -0.4
baz=79
RZN Rozhen 79.50 318 i P P 14 10 56.9 +0.7
ASF Jabal al Asfar 79.52 304 P P 14 10 57.0 +0.6
comp=Z,17nm,0.8s,baz=24,slow=3.8,SNR=29
ASF Jabal al Asfar 79.52 304 P P 14 10 57.0 +0.6
ASF pmax pmax
comp=Z,17nm,0.8s
TUC Tucson 79.54 56 eP P 14 10 57.2 +0.8
TUC pmax pmax
comp=Z,15nm,1.2s
TUC MLR MLR
comp=Z,458nm,21.0s
TUC Tucson 79.54 56 eP P 14 10 57.2 +0.8
comp=Z,15nm,1.2s
TUC LR LR
comp=Z,458nm,21.0s
R26A Arlington 79.56 47 P P 14 10 56.6 +0.1
baz=79,SNR=29
VTS Vitosha 79.56 319 i P P 14 10 57.2 +0.7
GELI Tayfur-Gelibol 79.57 316 eP P 14 10 57.3 +0.9
TNS Taunus Mts 79.58 332 eP P 14 10 56.6 +0.2
comp=Z,32nm,1.0s,baz=33,slow=5.5
SPMN St. Paul 79.60 36 P P 14 10 56.3 -0.1
baz=79
SPMN St. Paul 79.60 36 eP P 14 10 56.4 -0.1
comp=Z,15nm,0.9s
O29A 4D Ranch, Culb 79.64 44 P P 14 10 56.7 -0.1
baz=80
L32A Elgin 79.65 41 P P 14 10 56.7 -0.1
baz=80
CSS Prodhromos 79.72 308 P P 14 10 57.6 +0.3
CSS Prodhromos 79.72 308 P P 14 10 56.5 -0.8
comp=Z,12nm,0.9s
CSS LR LR
comp=Z,208nm,19.0s
LHO Holmfirth 79.79 340 eP P 14 10 57.3 -0.1
MMAI Mount Meron Ar 79.85 306 P P 14 10 58.2 0.0
comp=Z,81nm,0.8s,baz=40,slow=6.6,SNR=42
T25A Trinidad 79.87 49 P P 14 10 58.8 +0.5
baz=80,SNR=12
T25A Trinidad 79.87 49 eP P 14 10 59.1 +0.8
comp=Z,14nm,0.8s
Q28A Sharon Springs 79.88 46 P P 14 10 57.5 -0.7
baz=80
SCHQ Schefferville 79.89 17 P P 14 10 57.9 +0.1
comp=Z,9.4nm,0.9s,baz=344,slow=5.9,SNR=5.6
SCHQ LR LR 14 49 47.9
comp=Z,296nm,21.0s,baz=330,slow=38
DIVS Divibare 79.92 322⇑iP P 14 10 58.5 +0.2
DIVS Divibare 79.92 322 P P 14 10 58.3 0.0
R27A Eads 79.92 47 P P 14 10 58.7 +0.2
baz=80,SNR=7.2
HGN Heimansgroeve 79.96 334 eP P 14 10 57.9 -0.3
comp=Z,42nm,0.8s
HGN ePP PP 14 14 01.5 +1.9
HGN eS S 14 20 57.6 -0.6
AKS Akhisar 79.99 314 eP P 14 10 56.2 -2.5
I36A Fitzsimmons Fa 80.00 38 P P 14 10 58.9 +0.3
baz=80
SMTH Samothraki Isl 80.00 317 eP P 14 10 58.5 -0.3
SMTH Samothraki Isl 80.00 317 eP P 14 10 58.5 -0.3
SMTH Samothraki Isl 80.00 317 P P 14 10 58.4 -0.3
SMTH Samothraki Isl 80.00 317 P P 14 10 58.4 -0.3
GROS Grobnik 80.00 326 iP P 14 10 58.8 0.0
BEBN Eben Emael 80.02 334 P P 14 10 58.6 +0.1
comp=Z,19nm,0.8s
PERS Pernice 80.02 326 iP P 14 10 58.9 +0.1
SOKA Soboth 80.02 327⇑iP P 14 10 59.2 +0.4
comp=Z,78nm,1.1s,SNR=24
BGNE Belgrade 80.03 42 P P 14 10 59.3 +0.4
baz=80
S26A Kim 80.04 48 P P 14 10 59.2 0.0
baz=80,SNR=13
H37A Dierke Farm, C 80.05 37 P P 14 10 59.4 +0.5
baz=80
RJOB Jochberg 80.05 328 eP P 14 10 59.8 +0.8
comp=Z,48nm,0.9s,baz=33,slow=5.5
K34A Le Mars 80.06 40 P P 14 10 59.6 +0.6
baz=80
N31A Bailey Ranch, 80.06 43 P P 14 10 59.6 +0.5
baz=80
MMB Musomiste 80.07 318 iP P 14 10 59.8 +0.7
MEM Membach 80.07 334 P P 14 10 59.2 +0.3
comp=Z,26nm,1.0s
KAVA Kavala 80.12 318 P P 14 10 59.9 +0.6
KAVA Kavala 80.12 318 P P 14 10 59.9 +0.6
KKB Krupnik 80.17 319 iP P 14 11 00.3 +0.7
NVR Nevrokopi 80.18 318 eP P 14 11 02.5 +2.8
NVR Nevrokopi 80.18 318 eP P 14 11 02.5 +2.8
NVR Nevrokopi 80.18 318 P P 14 11 00.1 +0.4
NVR Nevrokopi 80.18 318 P P 14 11 00.1 +0.4
MMLI Mount Malkishu 80.24 305 eP P 14 11 01.4 +1.3
LAZ Ladron 80.26 52 eP P 14 11 00.8 +0.3
comp=Z,7.7nm,1.1s
ANMO Albuquerque 80.27 51⇑eP P 14 11 00.3 -0.2
ANMO pmax pmax
comp=Z,9.0nm,1.1s
ANMO MLR MLR
comp=Z,264nm,22.0s
ANMO Albuquerque 80.27 51 eP P 14 10 59.9 -0.6
comp=Z,11nm,1.1s
ANMO LR LR
comp=Z,364nm,20.0s
FUR Furstenfeldbru 80.28 330 eP P 14 11 00.7 +0.6
comp=Z,88nm,1.0s,baz=33,slow=5.5
FUR eL L 14 49 14.6
comp=Z,1µm,21.7s
I37A Lemond, Waseca 80.28 38 P P 14 11 00.8 +0.6
baz=80
T26A Comanche Natio 80.30 48 P P 14 11 00.6 0.0
baz=80,SNR=17
P30A Selden 80.35 44 P P 14 11 01.2 +0.5
baz=80
OBKA Obir 80.36 327⇑iP P 14 11 00.5 -0.1
comp=Z,72nm,1.4s,SNR=6.7
CWF Charnwood Fore 80.37 339 eP P 14 11 00.1 -0.3
CWF Charnwood Fore 80.37 339 eP P 14 11 00.9 +0.5
comp=Z,30nm,1.0s
M33A Taylor Creek F 80.37 41 P P 14 11 00.9 +0.1
baz=80
KBA Koelnbreinsper 80.38 328⇑iP P 14 11 01.2 +0.4
comp=Z,68nm,1.3s
ELL Elmali 80.39 311 eP P 14 11 01.7 +0.7
R28A Tribune 80.41 46 P P 14 11 01.1 0.0
baz=80
Q29A Oakley 80.45 45 P P 14 11 01.1 -0.1
baz=80
BCLA Clavier 80.46 334 P P 14 11 01.3 +0.3
comp=Z,21nm,1.3s
COWI Conover 80.47 34 eP P 14 10 59.6 -1.6
comp=Z,16nm,0.9s
COWI LR LR
comp=Z,615nm,19.0s
L34A Svendsen Farm, 80.47 41 P P 14 11 01.6 +0.4
baz=80
SRS Serrai 80.49 318 P P 14 11 01.4 0.0
SRS Serrai 80.49 318 eP P 14 11 04.5 +3.1
SRS Serrai 80.49 318 eP P 14 11 04.5 +3.1
SRS Serrai 80.49 318 P P 14 11 01.4 0.0
SRS Serrai 80.49 318 P P 14 11 01.4 0.0
PRK Paraskevi 80.53 315 P P 14 11 01.7 +0.2
PRK Paraskevi 80.53 315 eP P 14 11 02.0 +0.5
PRK Paraskevi 80.53 315 eP P 14 11 02.0 +0.5
PRK Paraskevi 80.53 315 P P 14 11 01.7 +0.2
PRK Paraskevi 80.53 315 P P 14 11 01.7 +0.2
WME Myndd Elian 80.54 341⇑eP P 14 11 01.2 -0.1
STU Stuttgart 80.54 331 eP P 14 11 01.8 +0.4
comp=Z,67nm,0.9s,baz=33,slow=5.5
WPM1 Penmaenmawr 80.57 341⇑eP P 14 11 01.6 +0.1
LIA Limnos Island 80.61 316 eP P 14 11 02.0 +0.1
LIA Limnos Island 80.61 316 eP P 14 11 02.0 +0.1
LPM Los Pinos Moun 80.62 52 eP P 14 11 03.3 +0.9
comp=Z,3.3nm,0.8s
MYKA Terra Mystica 80.62 327⇑iP P 14 11 01.8 -0.2
comp=Z,90nm,2.0s,SNR=6.7
WLF1 Llynfaes 80.66 341 eP P 14 11 01.9 -0.1
WLF1 AMB AMB 14 11 02.7
comp=Z,53nm,1.5s
R29A Marienthal 80.71 46 P P 14 11 02.9 +0.2
baz=80
SNF Seneffe 80.71 335 P P 14 11 02.0 -0.3
M34A Aspy Farms, Fr 80.72 41 P P 14 11 02.7 +0.1
baz=80
BNM Barren Site 80.74 52 eP P 14 11 04.0 +0.9
YLL Llanberis 80.74 341⇑eP P 14 11 02.6 +0.2
I38A Scanlan Farm, 80.74 37 P P 14 11 02.5 -0.1
baz=80
J37A Redenius Farm, 80.76 38 P P 14 11 03.1 +0.4
baz=81
SIGR SIGRI 80.77 316 eP P 14 11 02.0 -0.8
SIGR SIGRI 80.77 316 eP P 14 11 02.0 -0.8
SIGR SIGRI 80.77 316 P P 14 10 56.1 -6.7
SIGR SIGRI 80.77 316 P P 14 10 56.1 -6.7
Q30A Quinter 80.79 45 P P 14 11 03.7 +0.6
baz=81
PLE Pljevlja 80.79 322⇑iP P 14 11 02.8 -0.3
KNT Kendrikon 80.80 319 P P 14 11 03.7 +0.7
KNT Kendrikon 80.80 319 P P 14 11 03.7 +0.7
KNT Kendrikon 80.80 319 P P 14 11 03.7 +0.7
VISS Visnje 80.81 326 i P P 14 11 02.4 -0.6
P31A Stockton 80.82 44 P P 14 11 02.8 -0.4
baz=81,SNR=8.1
WLF Walferdange 80.83 333 P P 14 11 03.2 +0.2
comp=Z,24nm,1.5s
WLF Walferdange 80.83 333 eP P 14 11 03.0 0.0
WLF pmax pmax
comp=Z,24nm,0.9s
WLF MLR MLR
comp=Z,1µm,20.0s
WLF Walferdange 80.83 333 eP P 14 11 03.2 +0.2
comp=Z,41nm,1.1s,baz=33,slow=5.5
WLF Walferdange 80.83 333 eP P 14 11 03.0 0.0
comp=Z,24nm,0.9s
WLF LR LR
comp=Z,1µm,20.0s
VAY Valandovo 80.84 319 eP P 14 11 04.4 +1.2
DGAR Diego Garcia 80.85 251 PFAKE 14 11 10.0 +6.5
DGAR LR LR
comp=Z,588nm,20.0s
WATA Walderalm 80.85 329⇑iP P 14 11 03.7 +0.3
comp=Z,47nm,1.1s,SNR=11
BOJS Bojanci 80.88 326 i P P 14 11 03.2 -0.1
SKO Skopje 80.89 320 eP P 14 11 05.0 +1.6
OUR Ouranopolis 80.89 317 P P 14 11 04.0 +0.6
OUR Ouranopolis 80.89 317 eP P 14 11 04.0 +0.6
OUR Ouranopolis 80.89 317 eP P 14 11 04.0 +0.6
OUR Ouranopolis 80.89 317 P P 14 11 04.0 +0.6
OUR Ouranopolis 80.89 317 P P 14 11 04.0 +0.6
WTTA Wattenberg 80.89 329 iP P 14 11 04.0 +0.4
comp=Z,207nm,2.8s,SNR=10
IVA Berane 80.92 321⇑iP P 14 11 04.3 +0.6
S28A Manter 80.92 47 P P 14 11 04.2 +0.3
baz=81
YRE Yr Eifl 80.95 341⇑eP P 14 11 03.5 0.0
DOU Dourbes 80.97 334 P P 14 11 04.0 +0.2
comp=Z,11nm,1.1s
ABTA Abfaltersbach 80.98 328⇑iP P 14 11 03.1 -0.9
comp=Z,108nm,2.5s,SNR=5.8
HLM1 Long Mynd 80.98 340 eP P 14 11 03.6 -0.1
HLM1 AMB AMB 14 11 06.2
comp=Z,24nm,0.9s
KSL Kastellorizon 81.01 311 eP P 14 11 04.5 +0.3
KSL Kastellorizon 81.01 311 eP P 14 11 04.5 +0.3
MOTA Moosalm 81.03 329⇑iP P 14 11 04.5 +0.2
comp=Z,66nm,1.0s,SNR=40
DALY Dalyan (Mu˙la 81.04 312 eP P 14 11 04.5 +0.2
RETA Reutte 81.04 329 iP P 14 11 04.6 +0.3
comp=Z,108nm,1.7s,SNR=17
JAVS Javornik 81.05 327 iP P 14 11 04.0 -0.3
PVY Plav 81.10 321 eP P 14 11 04.8 +0.1
UPM Unac-Piva 81.11 322⇑iP P 14 11 04.7 -0.2
PLG Polygyros 81.13 318 P P 14 11 05.8 +1.0
PLG Polygyros 81.13 318 eP P 14 11 06.0 +1.2
PLG Polygyros 81.13 318 eP P 14 11 06.0 +1.2
PLG Polygyros 81.13 318 P P 14 11 05.8 +1.0
PLG Polygyros 81.13 318 P P 14 11 05.8 +1.0
HORT Hortiatis 81.13 318 eP P 14 11 06.5 +1.6
HORT Hortiatis 81.13 318 eP P 14 11 06.5 +1.6
HORT Hortiatis 81.13 318 P P 14 11 04.7 -0.2
HORT Hortiatis 81.13 318 P P 14 11 04.7 -0.2
P32A Huiting Farm, 81.14 43 P P 14 11 04.8 -0.1
baz=81
T28A Walsh 81.14 47 P P 14 11 05.1 +0.1
baz=81
CBKS Cedar Bluff 81.16 45 eP P 14 11 04.8 -0.2
CBKS pmax pmax
comp=Z,32nm,1.1s
CBKS Cedar Bluff 81.16 45 P P 14 11 05.0 0.0
baz=81
CBKS Cedar Bluff 81.16 45 eP P 14 11 04.8 -0.2
comp=Z,32nm,1.1s
DSB Dublin 81.17 342 eP P 14 11 05.1 +0.4
comp=Z,29nm,0.8s
THE Thessaloniki 81.17 318 eP P 14 11 08.0 +3.1
THE Thessaloniki 81.17 318 eP P 14 11 08.0 +3.1
M35A Neola 81.18 41 P P 14 11 05.3 +0.3
baz=81
Q31A Ellis 81.19 44 P P 14 11 05.3 +0.1
baz=81
121A Cookes Peak, D 81.20 54 P P 14 11 06.2 +0.7
baz=81,SNR=5.1
121A Cookes Peak, D 81.20 54 eP P 14 11 04.5 -0.9
comp=Z,24nm,1.0s
GRG Griva 81.20 319 eP P 14 11 05.8 +0.6
GRG Griva 81.20 319 P P 14 11 05.2 0.0
GRG Griva 81.20 319 eP P 14 11 05.5 +0.3
GRG Griva 81.20 319 eP P 14 11 05.5 +0.3
GRG Griva 81.20 319 P P 14 11 05.2 0.0
GRG Griva 81.20 319 P P 14 11 05.2 0.0
BFO Black Forest 81.22 331 eP P 14 11 04.9 -0.2
BFO pmax pmax
comp=Z,115nm,1.6s
BFO MLR MLR
comp=Z,602nm,21.0s
BFO Black Forest 81.22 331 P P 14 11 05.8 +0.7
comp=Z,179nm,0.9s,SNR=7.5
BFO Black Forest 81.22 331 eP P 14 11 05.3 +0.2
comp=Z,33nm,1.0s,baz=33,slow=5.5
BFO eL L 14 49 06.0
comp=Z,644nm,21.9s
BFO Black Forest 81.22 331 eP P 14 11 04.9 -0.2
comp=Z,115nm,1.6s
BFO LR LR
comp=Z,602nm,21.0s
U27A Thompson Grove 81.27 48 P P 14 11 05.9 +0.2
baz=81,SNR=5.6
N34A Lincoln 81.27 41 P P 14 11 05.3 -0.2
baz=81
PAIG Paliouri 81.35 317 P P 14 11 06.3 +0.4
PAIG Paliouri 81.35 317 eP P 14 11 06.5 +0.6
PAIG Paliouri 81.35 317 eP P 14 11 06.5 +0.6
PAIG Paliouri 81.35 317 P P 14 11 06.3 +0.4
PAIG Paliouri 81.35 317 P P 14 11 06.3 +0.4
SMG Samos 81.37 314 eP P 14 11 06.5 +0.4
SMG Samos 81.37 314 eP P 14 11 06.5 +0.4
NKY Niksic 81.38 322⇑iP P 14 11 05.6 -0.6
NKME Niksic 81.43 322 eP P 14 11 05.8 -0.6
FETA Feichten 81.44 329⇑iP P 14 11 06.5 0.0
comp=Z,45nm,1.1s,SNR=22
STRD Stroud 81.47 339 eP P 14 11 06.4 +0.1
STRD AMB AMB 14 11 08.7
comp=Z,121nm,0.9s
MCH1 Michaelchurch 81.49 340⇑eP P 14 11 07.1 +0.7
MCH1 AMB AMB 14 11 08.6
comp=Z,53nm,1.0s
BRY Bratogost 81.51 322⇑iP P 14 11 06.3 -0.6
DAVA Damuels 81.54 330⇓iP P 14 11 07.2 +0.2
comp=Z,53nm,1.0s,SNR=22
TTG Podgorica 81.56 321⇑iP P 14 11 07.0 +0.1
MONM Monmouth 81.58 339⇑eP P 14 11 07.6 +0.7
MONM AMB AMB 14 11 09.1
comp=Z,49nm,1.1s
PHP Peshkopia 81.58 320 P P 14 11 07.3 +0.1
PHP Peshkopia 81.58 320 P P 14 11 07.3 +0.1
PHP Peshkopia 81.58 320 P P 14 11 07.3 +0.1
Q32A Meitler Ranch, 81.64 44 P P 14 11 07.3 -0.2
baz=82,SNR=7.3
S30A Montezuma 81.65 46 P P 14 11 07.8 +0.1
baz=82
R31A Burdett 81.66 45 P P 14 11 07.4 -0.2
baz=82
O34A Beatrice 81.67 42 P P 14 11 07.2 -0.5
baz=82
V27A Dan Oppiter Fa 81.74 49 P P 14 11 08.8 +0.6
baz=82
ARG Arkhangelos 81.77 312 P P 14 11 05.2 -3.0
ARG Arkhangelos 81.77 312 eP P 14 11 09.5 +1.3
ARG Arkhangelos 81.77 312 eP P 14 11 09.5 +1.3
ARG Arkhangelos 81.77 312 P P 14 11 05.2 -3.0
ARG Arkhangelos 81.77 312 P P 14 11 05.2 -3.0
LIT Litokhoron 81.81 318 P P 14 11 07.5 -0.9
LIT Litokhoron 81.81 318 eP P 14 11 08.5 +0.1
LIT Litokhoron 81.81 318 eP P 14 11 08.5 +0.1
LIT Litokhoron 81.81 318 P P 14 11 07.5 -0.9
LIT Litokhoron 81.81 318 P P 14 11 07.5 -0.9
AOS Alonnisos 81.82 317 eP P 14 11 08.0 -0.4
AOS Alonnisos 81.82 317 eP P 14 11 08.0 -0.4
AOS Alonnisos 81.82 317 P P 14 11 05.9 -2.5
AOS Alonnisos 81.82 317 P P 14 11 05.9 -2.5
BUM Brajici-Budva 81.82 322⇑iP P 14 11 08.4 -0.1
FNA Florina 81.83 319 P P 14 11 08.3 -0.2
FNA Florina 81.83 319 eP P 14 11 08.5 0.0
FNA Florina 81.83 319 eP P 14 11 08.5 0.0
FNA Florina 81.83 319 P P 14 11 08.3 -0.2
FNA Florina 81.83 319 P P 14 11 08.3 -0.2
OHR Ohrid 81.86 320 eP P 14 11 08.8 +0.1
HCY Herceg Novi 81.89 322⇑iP P 14 11 08.2 -0.6
ULC Ulcinj 81.92 321⇑iP P 14 11 08.7 -0.3
FUORN Ofenpass-Fuorn 81.95 329 eP P 14 11 09.9 +0.6
comp=Z,93nm,0.9s
DAVOX Davos/Dischmat 81.96 330 P P 14 11 09.2 -0.1
comp=Z,31nm,0.8s,baz=59,slow=5.9,SNR=26
DAVOX Davos/Dischmat 81.96 330 P P 14 11 09.2 -0.1
DAVOX pmax pmax
comp=Z,31nm,0.8s
Q33A Connelly Farm, 82.00 43 P P 14 11 09.1 -0.3
baz=82,SNR=8.2
KZN Kozani 82.00 319 P P 14 11 09.3 -0.2
KZN Kozani 82.00 319 eP P 14 11 09.5 0.0
KZN Kozani 82.00 319 eP P 14 11 09.5 0.0
KZN Kozani 82.00 319 P P 14 11 09.3 -0.2
KZN Kozani 82.00 319 P P 14 11 09.3 -0.2
SCIA State Center 82.01 39 eP P 14 11 09.9 +0.5
comp=Z,42nm,0.8s
SCIA LR LR
comp=Z,974nm,22.0s
XOR Xorichti 82.02 317 eP P 14 11 09.5 0.0
XOR Xorichti 82.02 317 eP P 14 11 09.5 0.0
XOR Xorichti 82.02 317 P P 14 11 09.2 -0.3
XOR Xorichti 82.02 317 P P 14 11 09.2 -0.3
SKIA Skiathos 82.03 317 P P 14 11 15.9 +6.4
NEO Neokhori 82.05 317 eP P 14 11 09.5 -0.2
NEO Neokhori 82.05 317 eP P 14 11 09.5 -0.2
NEO Neokhori 82.05 317 P P 14 11 08.0 -1.7
NEO Neokhori 82.05 317 P P 14 11 08.0 -1.7
P34A Walnut Farm, R 82.09 42 P P 14 11 09.9 0.0
baz=82,SNR=9.1
FYTO Fytoko, Volos 82.11 317 P P 14 11 09.3 -0.6
FYTO Fytoko, Volos 82.11 317 P P 14 11 09.3 -0.6
TIR Tirane 82.12 320 eP P 14 11 10.3 +0.4
TIR pmax pmax
comp=Z,101nm,0.8s
TIR MLR MLR
comp=Z,650nm,19.0s
TIR Tirane 82.12 320 eP P 14 11 10.3 +0.4
comp=Z,101nm,0.8s
TIR LR LR
comp=Z,650nm,19.0s
KBN Korca 82.24 319 P P 14 11 11.2 +0.5
KBN Korca 82.24 319 P P 14 11 11.2 +0.5
KBN Korca 82.24 319 P P 14 11 11.2 +0.5
NEST Nestorio 82.27 319 eP P 14 11 11.0 +0.1
NEST Nestorio 82.27 319 eP P 14 11 11.0 +0.1
NEST Nestorio 82.27 319 P P 14 11 10.5 -0.4
MRKA Markates 82.32 317 eP P 14 11 06.5 -4.6
MRKA Markates 82.32 317 eP P 14 11 06.5 -4.6
EREA Eretria 82.36 316 eP P 14 11 08.0 -3.3
EREA Eretria 82.36 316 eP P 14 11 08.0 -3.3
EREA Eretria 82.36 316 P P 14 11 10.9 -0.4
SMIA Simia 82.38 317 eP P 14 11 11.5 +0.1
SMIA Simia 82.38 317 eP P 14 11 11.5 +0.1
SMIA Simia 82.38 317 P P 14 11 11.0 -0.4
S32A Newby Ranch, P 82.41 45 P P 14 11 11.4 -0.2
baz=82
TUE Stuetta 82.42 330 eP P 14 11 11.6 -0.1
comp=Z,27nm,0.7s
TUE LR LR
comp=Z,1µm,21.0s
R33A Olander Ranch, 82.45 44 P P 14 11 11.9 +0.1
baz=82
THL Klokotos Trika 82.45 318 eP P 14 11 10.5 -1.2
THL Klokotos Trika 82.45 318 eP P 14 11 10.5 -1.2
THL Klokotos Trika 82.45 318 P P 14 11 10.7 -1.0
EIL Elat 82.46 303 eP P 14 11 12.6 +0.7
EIL Elat 82.46 303 P P 14 11 12.3 +0.4
comp=Z,26nm,0.9s,baz=17,slow=4.8,SNR=34
EIL PP PP 14 14 22.2 +1.2
comp=Z,10nm,1.0s,baz=60,slow=1.9,SNR=6.0
T31A Randall Ranch, 82.47 46 P P 14 11 12.3 +0.4
baz=82
P35A Duane Minner, 82.51 42 P P 14 11 12.1 0.0
baz=82
Q34A Chapman 82.51 43 P P 14 11 12.0 -0.1
baz=82
KSU1 Kansas State U 82.54 43 P P 14 11 12.1 -0.1
baz=82
KSU1 Kansas State U 82.54 43 PFAKE 14 11 20.0 +7.8
KSU1 LR LR
comp=Z,440nm,20.0s
JFWS Jewell Farm 82.56 36 PFAKE 14 11 20.0 +7.8
JFWS LR LR
comp=Z,724nm,22.0s
ATAL Atalanti 82.61 317 P P 14 11 11.0 -1.6
ATAL Atalanti 82.61 317 P P 14 11 11.0 -1.6
LKR Lokris 82.66 317 eP P 14 11 12.0 -0.8
LKR Lokris 82.66 317 eP P 14 11 12.0 -0.8
LKR Lokris 82.66 317 P P 14 11 12.0 -0.8
LKR Lokris 82.66 317 P P 14 11 12.0 -0.8
AGG Agios Georgios 82.71 317 P P 14 11 12.0 -1.1
AGG Agios Georgios 82.71 317 eP P 14 11 12.0 -1.1
AGG Agios Georgios 82.71 317 eP P 14 11 12.0 -1.1
AGG Agios Georgios 82.71 317 P P 14 11 12.0 -1.1
AGG Agios Georgios 82.71 317 P P 14 11 12.0 -1.1
AXAR Agios Charalam 82.74 317 eP P 14 11 12.5 -0.8
AXAR Agios Charalam 82.74 317 eP P 14 11 12.5 -0.8
AXAR Agios Charalam 82.74 317 P P 14 11 12.4 -0.8
AXAR Agios Charalam 82.74 317 P P 14 11 12.4 -0.8
KARP Karpathos 82.79 312 eP P 14 11 14.0 +0.4
KARP Karpathos 82.79 312 eP P 14 11 14.0 +0.4
KARP Karpathos 82.79 312 P P 14 11 13.8 +0.2
KARP Karpathos 82.79 312 P P 14 11 13.8 +0.2
ATH Athens Observa 82.81 316 eP P 14 11 20.0 +6.4
ATH Athens Observa 82.81 316 eP P 14 11 20.0 +6.4
T32A Huddler Ranch, 82.81 45 P P 14 11 13.7 0.0
baz=83
MAKR Makrakomi, Fth 82.82 318 eP P 14 11 13.0 -0.7
MAKR Makrakomi, Fth 82.82 318 eP P 14 11 13.0 -0.7
MAKR Makrakomi, Fth 82.82 318 P P 14 11 12.9 -0.7
MAKR Makrakomi, Fth 82.82 318 P P 14 11 12.9 -0.7
R34A Isabella, Hill 82.83 43 P P 14 11 13.4 -0.3
baz=83
P36A Good Intent, A 82.84 41 P P 14 11 14.3 +0.5
baz=83
VIL2 Platees 82.86 316 eP P 14 11 13.0 -0.9
VIL2 Platees 82.86 316 eP P 14 11 13.0 -0.9
VLY Voula,Athens 82.86 316 eP P 14 11 13.0 -0.9
VLY Voula,Athens 82.86 316 eP P 14 11 13.0 -0.9
VILL Villia 82.87 316 P P 14 11 13.2 -0.8
JAN Janina 82.95 319 P P 14 11 14.8 +0.4
JAN Janina 82.95 319 eP P 14 11 15.0 +0.6
JAN Janina 82.95 319 eP P 14 11 15.0 +0.6
JAN Janina 82.95 319 P P 14 11 14.8 +0.4
JAN Janina 82.95 319 P P 14 11 14.8 +0.4
S33A Kaszmaul Farm, 82.98 44 P P 14 11 14.7 +0.2
baz=83
Q35A Mercer Eighty, 83.01 42 P P 14 11 14.7 0.0
baz=83,SNR=5.4
SERI Serifos 83.02 315 eP P 14 11 13.0 -1.8
SERI Serifos 83.02 315 eP P 14 11 13.0 -1.8
AMTX Amarillo 83.03 48 P P 14 11 15.4 +0.5
baz=83
EVR Evrytania 83.05 318 eP P 14 11 14.5 -0.5

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EVR | Evrytania | 83.05 | 318 | eP | P | 14 11 14.5 | -0.5 | | baz=84,SNR=6.9 | | | |
| EVR | Evrytania | 83.05 | 318 | P | P | 14 11 14.7 | -0.3 | ITM | Ithomi | 84.33 | 317 | eP |
| EVR | Evrytania | 83.05 | 318 | P | P | 14 11 14.7 | -0.3 | ITM | Ithomi | 84.33 | 317 | eP |
| DESF | Desfina | 83.08 | 317 | eP | P | 14 11 14.0 | -1.1 | ITM | Ithomi | 84.33 | 317 | P |
| DESF | Desfina | 83.08 | 317 | eP | P | 14 11 14.0 | -1.1 | ITM | Ithomi | 84.33 | 317 | P |
| DSF | Desfina | 83.08 | 317 | eP | P | 14 11 14.0 | -1.1 | KYTH | Kithira | 84.44 | 315 | eP |
| DSF | Desfina | 83.08 | 317 | eP | P | 14 11 14.0 | -1.1 | KYTH | Kithira | 84.44 | 315 | eP |
| DSF | Desfina | 83.08 | 317 | P | P | 14 11 13.7 | -1.4 | SIVA | Sivas | 84.46 | 313 | eP |
| DSF | Desfina | 83.08 | 317 | P | P | 14 11 13.7 | -1.4 | SIVA | Sivas | 84.46 | 313 | eP |
| NAIG | Nisos Aigina | 83.09 | 316 | eP | P | 14 11 14.0 | -1.1 | SIVA | Sivas | 84.46 | 313 | P |
| NAIG | Nisos Aigina | 83.09 | 316 | eP | P | 14 11 14.0 | -1.1 | SIVA | Sivas | 84.46 | 313 | P |
| LTK | Loutraki | 83.15 | 316 | eP | P | 14 11 14.0 | -1.4 | S37A | Fort Scott | 84.47 | 42 | P |
| LTK | Loutraki | 83.15 | 316 | eP | P | 14 11 14.0 | -1.4 | | baz=84,SNR=7.7 | | | |
| LTK | Loutraki | 83.15 | 316 | P | P | 14 11 13.3 | -2.1 | T36A | Boggs Farm, Ca | 84.48 | 43 | P |
| LTK | Loutraki | 83.15 | 316 | P | P | 14 11 13.3 | -2.1 | | baz=84,SNR=5.5 | | | |
| SRN | Sarande | 83.19 | 319 | P | P | 14 11 15.8 | +0.3 | Y31A | Rekieta Farm, | 84.49 | 48 | P |
| SRN | Sarande | 83.19 | 319 | P | P | 14 11 15.8 | +0.3 | | baz=84 | | | |
| MNTX | Cornudas Mount | 83.22 | 53 | P | P | 14 11 16.9 | +1.0 | VAM | Vamos | 84.49 | 314 | P |
| | baz=83,SNR=9.8 | | | | | | | VAM | Vamos | 84.49 | 314 | eP |
| MNTX | Cornudas Mount | 83.22 | 53 | P | P | 14 11 14.8 | -1.1 | VAM | Vamos | 84.49 | 314 | eP |
| | comp=Z,10nm,1.1s | | | | | | | VAM | Vamos | 84.49 | 314 | P |
| MNTX | | | | LR | LR | | | VAM | Vamos | 84.49 | 314 | P |
| | comp=Z,462nm,22.0s | | | | | | | Z30A | Sanderson Ranc | 84.51 | 49 | P |
| VAL | Valentia | 83.23 | 344 | eP | P | 14 11 16.2 | +0.7 | | baz=84,SNR=9.0 | | | |
| DSL | Palaion Diasel | 83.24 | 318 | eP | P | 14 11 16.0 | +0.2 | 228A | UT Block 9, Go | 84.54 | 51 | P |
| DSL | Palaion Diasel | 83.24 | 318 | eP | P | 14 11 16.0 | +0.2 | | baz=84,SNR=6.0 | | | |
| DSL | Palaion Diasel | 83.24 | 318 | P | P | 14 11 16.1 | +0.2 | V34A | Guthrie | 84.56 | 45 | P |
| DSL | Palaion Diasel | 83.24 | 318 | P | P | 14 11 16.1 | +0.2 | | baz=84 | | | |
| SENIN | Lac Senin/Sane | 83.26 | 331 | eP | P | 14 11 16.2 | +0.1 | V34A | Guthrie | 84.56 | 45 | eP |
| | comp=Z,27nm,0.8s | | | | | | | | comp=Z,28nm,0.9s | | | |
| SGD | Sagiada | 83.29 | 319 | eP | P | 14 11 16.5 | +0.5 | U35A | Pawnee | 84.57 | 44 | P |
| SGD | Sagiada | 83.29 | 319 | eP | P | 14 11 16.5 | +0.5 | | baz=84 | | | |
| SGD | Sagiada | 83.29 | 319 | P | P | 14 11 16.0 | -0.1 | IMMV | Iera Moni Meta | 84.57 | 314 | eP |
| KALE | Kalithea | 83.29 | 317 | eP | P | 14 11 15.5 | -0.7 | IMMV | Iera Moni Meta | 84.57 | 314 | eP |
| KALE | Kalithea | 83.29 | 317 | eP | P | 14 11 15.5 | -0.7 | W33A | Caddo, Fort Co | 84.58 | 46 | P |
| KALE | Kalithea | 83.29 | 317 | P | P | 14 11 15.4 | -0.7 | | baz=84 | | | |
| KALE | Kalithea | 83.29 | 317 | P | P | 14 11 15.4 | -0.7 | BNI | Bardonecchia | 84.61 | 331 | eP |
| THAL | Thalero | 83.30 | 317 | eP | P | 14 11 15.0 | -1.1 | BNI | | | | pmax |
| THAL | Thalero | 83.30 | 317 | eP | P | 14 11 15.0 | -1.1 | BNI | | | | MLR |
| THAL | Thalero | 83.30 | 317 | P | P | 14 11 14.3 | -1.8 | | comp=Z,664nm,22.0s | | | |
| IGT | Igoumenitsa | 83.30 | 319 | eP | P | 14 11 16.5 | +0.4 | BNI | Bardonecchia | 84.61 | 331 | eP |
| IGT | Igoumenitsa | 83.30 | 319 | P | P | 14 11 15.9 | -0.2 | | comp=Z,40nm,1.1s | | | |
| IGT | Igoumenitsa | 83.30 | 319 | eP | P | 14 11 16.0 | -0.2 | BNI | | | | LR |
| IGT | Igoumenitsa | 83.30 | 319 | eP | P | 14 11 16.0 | -0.2 | | comp=Z,664nm,22.0s | | | |
| IGT | Igoumenitsa | 83.30 | 319 | P | P | 14 11 15.9 | -0.2 | ANKY | Antikythira Is | 84.62 | 315 | eP |
| IGT | Igoumenitsa | 83.30 | 319 | P | P | 14 11 15.9 | -0.2 | ANKY | Antikythira Is | 84.62 | 315 | eP |
| SERG | Sergoula | 83.31 | 317 | eP | P | 14 11 16.0 | -0.3 | ANKY | Antikythira Is | 84.62 | 315 | P |
| SERG | Sergoula | 83.31 | 317 | eP | P | 14 11 16.0 | -0.3 | ANKY | Antikythira Is | 84.62 | 315 | P |
| SERG | Sergoula | 83.31 | 317 | P | P | 14 11 15.8 | -0.5 | PYL | PYLOS | 84.64 | 316 | eP |
| X29A | Tulia | 83.34 | 49 | P | P | 14 11 17.0 | +0.5 | PYL | PYLOS | 84.64 | 316 | eP |
| | baz=83 | | | | | | | PYL | PYLOS | 84.64 | 316 | P |
| R35A | Emporia Munici | 83.34 | 43 | P | P | 14 11 17.0 | +0.7 | PYL | PYLOS | 84.64 | 316 | P |
| | baz=83 | | | | | | | X32A | Elmer | 84.69 | 47 | P |
| EFP | Efpalio | 83.38 | 317 | eP | P | 14 11 16.5 | 0.0 | | baz=84 | | | |
| EFP | Efpalio | 83.38 | 317 | eP | P | 14 11 16.5 | 0.0 | WMOK | Wichita Mounta | 84.72 | 47 | eP |
| EFP | Efpalio | 83.38 | 317 | P | P | 14 11 16.2 | -0.3 | WMOK | | | | pmax |
| DID | Didima | 83.41 | 316 | eP | P | 14 11 15.0 | -1.8 | | comp=Z,17nm,1.2s | | | |
| DID | Didima | 83.41 | 316 | eP | P | 14 11 15.0 | -1.8 | WMOK | | | | MLR |
| DID | Didima | 83.41 | 316 | P | P | 14 11 14.8 | -2.0 | | comp=Z,327nm,19.0s | | | |
| DID | Didima | 83.41 | 316 | P | P | 14 11 14.8 | -2.0 | WMOK | Wichita Mounta | 84.72 | 47 | eP |
| KEK | Kerkira | 83.42 | 319 | eP | P | 14 11 17.0 | +0.2 | | comp=Z,17nm,1.2s | | | |
| KEK | Kerkira | 83.42 | 319 | eP | P | 14 11 17.0 | +0.2 | WMOK | | | | LR |
| KEK | Kerkira | 83.42 | 319 | P | P | 14 11 16.5 | -0.2 | | comp=Z,327nm,19.0s | | | |
| KEK | Kerkira | 83.42 | 319 | P | P | 14 11 16.5 | -0.2 | HDIL | Hopedale | 84.88 | 37 | P |
| PVO | Paravola | 83.42 | 318 | P | P | 14 11 17.9 | +1.1 | | baz=85 | | | |
| LAKA | Lakka | 83.49 | 317 | eP | P | 14 11 17.0 | -0.2 | HDIL | Hopedale | 84.88 | 37 | PFAKE |
| LAKA | Lakka | 83.49 | 317 | eP | P | 14 11 17.0 | -0.2 | HDIL | | | | LR |
| LAKA | Lakka | 83.49 | 317 | P | P | 14 11 16.7 | -0.5 | | comp=Z,557nm,22.0s | | | |
| LAKA | Lakka | 83.49 | 317 | P | P | 14 11 16.7 | -0.5 | W34A | Bridge Creek, | 84.88 | 46 | P |
| GUR | Goura | 83.54 | 317 | eP | P | 14 11 16.5 | -1.0 | | baz=85 | | | |
| GUR | Goura | 83.54 | 317 | eP | P | 14 11 16.5 | -1.0 | Y32A | R-V Farms, Ver | 84.91 | 48 | P |
| GUR | Goura | 83.54 | 317 | P | P | 14 11 16.7 | -0.8 | | baz=85 | | | |
| GUR | Goura | 83.54 | 317 | P | P | 14 11 16.7 | -0.8 | V35A | Meyer Ranch, C | 84.98 | 45 | P |
| KLV | Kalavryta, Ach | 83.55 | 317 | eP | P | 14 11 16.5 | -1.0 | | baz=85 | | | |
| KLV | Kalavryta, Ach | 83.55 | 317 | eP | P | 14 11 16.5 | -1.0 | Z31A | Sharp Cattle R | 85.04 | 49 | P |
| KLV | Kalavryta, Ach | 83.55 | 317 | P | P | 14 11 16.5 | -1.0 | | baz=85 | | | |
| KLV | Kalavryta, Ach | 83.55 | 317 | P | P | 14 11 16.5 | -1.0 | U36A | Oologah | 85.06 | 44 | P |
| PDO | Prodromos | 83.61 | 318 | eP | P | 14 11 18.0 | +0.3 | | baz=85 | | | |
| PDO | Prodromos | 83.61 | 318 | eP | P | 14 11 18.0 | +0.3 | CUC | Castrocucco | 85.07 | 322 | eP |
| PDO | Prodromos | 83.61 | 318 | P | P | 14 11 17.1 | -0.6 | | comp=Z,11nm,0.8s | | | |
| ZKR | Zakros | 83.62 | 313 | eP | P | 14 11 18.5 | +0.6 | CUC | | | | LR |
| ZKR | Zakros | 83.62 | 313 | eP | P | 14 11 18.5 | +0.6 | | comp=Z,659nm,20.0s | | | |
| R36A | Gordon, Harris | 83.69 | 42 | P | P | 14 11 18.6 | +0.4 | 229A | Bryant Ranch, | 85.10 | 51 | P |
| | baz=84,SNR=12 | | | | | | | | baz=86,SNR=5.4 | | | |
| LKD2 | Lefkada island | 83.72 | 318 | eP | P | 14 11 18.5 | +0.2 | 130A | Snyder | 85.12 | 50 | P |
| LKD2 | Lefkada island | 83.72 | 318 | eP | P | 14 11 18.5 | +0.2 | | baz=85 | | | |
| LKD2 | Lefkada island | 83.72 | 318 | P | P | 14 11 18.0 | -0.3 | SSB | Saint Sauveur | 85.18 | 332 | eP |
| LKD2 | Lefkada island | 83.72 | 318 | P | P | 14 11 18.0 | -0.3 | SSB | | | | pmax |
| W31A | Holland Ranch, | 83.75 | 47 | P | P | 14 11 19.4 | +0.8 | | comp=Z,29nm,1.2s | | | |
| | baz=84,SNR=6.3 | | | | | | | SSB | | | | MLR |
| S35A | Otter Creek Ra | 83.77 | 43 | P | P | 14 11 18.8 | +0.2 | | comp=Z,521nm,20.0s | | | |
| | baz=84,SNR=13 | | | | | | | SSB | Saint Sauveur | 85.18 | 332 | eP |
| X30A | Coker Ranch, T | 83.80 | 48 | P | P | 14 11 19.1 | +0.3 | | comp=Z,29nm,1.2s | | | |
| | baz=84 | | | | | | | SSB | | | | LR |
| U33A | Lingo Farm, Me | 83.80 | 45 | P | P | 14 11 19.2 | +0.4 | | comp=Z,521nm,20.0s | | | |
| | baz=84 | | | | | | | PMOR | Pomariorio Ree | 85.28 | 115 | eT |
| AXS | Araxos | 83.82 | 318 | P | P | 14 11 19.0 | +0.2 | | comp=Z,100nm,0.2s | | | |
| T34A | McClaskey Farm | 83.83 | 44 | P | P | 14 11 19.2 | +0.3 | TIP | Timpagrande | 85.28 | 321 | P |
| | baz=84 | | | | | | | | comp=Z,49nm,1.2s | | | |
| DRO | Drossia | 83.84 | 317 | eP | P | 14 11 19.0 | 0.0 | TIP | | | | LR |
| DRO | Drossia | 83.84 | 317 | eP | P | 14 11 19.0 | 0.0 | | comp=Z,417nm,19.0s | | | |
| DRO | Drossia | 83.84 | 317 | P | P | 14 11 18.8 | -0.2 | X34A | Smith Ranch, M | 85.33 | 46 | P |
| NPS | Neapolis | 83.84 | 313 | eP | P | 14 11 18.5 | -0.5 | | baz=85 | | | |
| NPS | Neapolis | 83.84 | 313 | eP | P | 14 11 18.5 | -0.5 | Y33A | Hilltop Ranch, | 85.36 | 47 | P |
| RLS | Riolos of Patr | 83.89 | 317 | eP | P | 14 11 19.5 | +0.4 | | baz=85 | | | |
| RLS | Riolos of Patr | 83.89 | 317 | eP | P | 14 11 19.5 | +0.4 | U37A | Salina | 85.37 | 43 | P |
| RLS | Riolos of Patr | 83.89 | 317 | P | P | 14 11 19.2 | +0.1 | | baz=85,SNR=6.5 | | | |
| RLS | Riolos of Patr | 83.89 | 317 | P | P | 14 11 19.2 | +0.1 | 131A | Roby | 85.38 | 49 | P |
| VLX | Vlachokerasia | 83.95 | 316 | eP | P | 14 11 19.0 | -0.6 | | baz=85 | | | |
| VLX | Vlachokerasia | 83.95 | 316 | eP | P | 14 11 19.0 | -0.6 | TUL1 | Tulsa | 85.41 | 44 | P |
| VLX | Vlachokerasia | 83.95 | 316 | P | P | 14 11 18.7 | -0.9 | | baz=85 | | | |
| VLX | Vlachokerasia | 83.95 | 316 | P | P | 14 11 18.7 | -0.9 | Z32A | Haskell | 85.42 | 48 | P |
| VLC | Villacollemand | 83.96 | 328 | eP | P | 14 11 19.0 | -0.5 | | baz=85,SNR=7.4 | | | |
| | comp=Z,38nm,1.0s | | | | | | | W35A | Tecumseh | 85.42 | 45 | P |
| VLC | | | | LR | LR | | | | baz=85 | | | |
| | comp=Z,2µm,22.0s | | | | | | | V36A | Jenks | 85.42 | 44 | P |
| LAST | Lasithi | 83.99 | 313 | eP | P | 14 11 20.0 | +0.1 | | baz=85 | | | |
| LAST | Lasithi | 83.99 | 313 | eP | P | 14 11 20.0 | +0.1 | 230A | Sterling City | 85.56 | 50 | P |
| LAST | Lasithi | 83.99 | 313 | P | P | 14 11 20.2 | +0.3 | | baz=85,SNR=24 | | | |
| LAST | Lasithi | 83.99 | 313 | P | P | 14 11 20.2 | +0.3 | U38A | Gravette | 85.71 | 43 | P |
| U34A | Anderson Ranch | 84.10 | 45 | P | P | 14 11 20.8 | +0.5 | | baz=86,SNR=5.6 | | | |
| | baz=84 | | | | | | | V37A | Hulbert | 85.76 | 44 | P |
| U34A | Anderson Ranch | 84.10 | 45 | eP | P | 14 11 20.3 | 0.0 | | baz=86,SNR=7.4 | | | |
| | comp=Z,33nm,0.9s | | | | | | | W36A | Wetumka | 85.77 | 45 | P |
| IACM | Heraklion | 84.10 | 313 | eP | P | 14 11 20.5 | +0.2 | | baz=86 | | | |
| IACM | Heraklion | 84.10 | 313 | eP | P | 14 11 20.5 | +0.2 | Z33A | Whitaker Ranch | 85.82 | 48 | P |
| S36A | Lake Cedric, C | 84.11 | 43 | P | P | 14 11 20.5 | +0.2 | | baz=86 | | | |
| | baz=84,SNR=5.9 | | | | | | | AAM | Ann Arbor | 85.83 | 33 | PFAKE |
| VTN | Vitineika | 84.14 | 317 | eP | P | 14 11 21.5 | +1.1 | AAM | | | | LR |
| VTN | Vitineika | 84.14 | 317 | eP | P | 14 11 21.5 | +1.1 | | comp=Z,499nm,21.0s | | | |
| X31A | McDonald Ranch | 84.15 | 48 | P | P | 14 11 21.2 | +0.6 | ABTX | Abilene, Hawle | 85.84 | 49 | P |
| | baz=84 | | | | | | | | baz=86 | | | |
| VLI | Veliai | 84.16 | 316 | eP | P | 14 11 19.5 | -1.1 | ABTX | Abilene, Hawle | 85.84 | 49 | eP |
| VLI | Veliai | 84.16 | 316 | eP | P | 14 11 19.5 | -1.1 | | comp=Z,18nm,1.2s | | | |
| VLI | Veliai | 84.16 | 316 | P | P | 14 11 19.4 | -1.1 | Y34A | Reagan Ranch, | 85.86 | 47 | P |
| VLI | Veliai | 84.16 | 316 | P | P | 14 11 19.4 | -1.1 | | baz=86 | | | |
| AMT | Artemida-Makis | 84.17 | 317 | eP | P | 14 11 21.0 | +0.4 | 330A | Mertzon | 85.88 | 50 | P |
| AMT | Artemida-Makis | 84.17 | 317 | eP | P | 14 11 21.0 | +0.4 | | baz=86 | | | |
| AMT | Artemida-Makis | 84.17 | 317 | P | P | 14 11 20.6 | 0.0 | X35A | Drake | 85.95 | 46 | P |
| V33A | Lossen Ranch, | 84.17 | 46 | P | P | 14 11 21.3 | +0.7 | | baz=86,SNR=5.6 | | | |
| | baz=84 | | | | | | | TXAR | Lajitas Array | 85.95 | 53 | P |
| W32A | Sentinel | 84.18 | 47 | P | P | 14 11 21.5 | +0.8 | | comp=Z,10.0nm,0.7s,baz=294,slow=3.5,SNR=72 | | | |
| | baz=84 | | | | | | | TXAR | | | | PKKPbc |
| KFL | Anninata | 84.18 | 318 | eP | P | 14 11 21.0 | +0.3 | | comp=Z,1.0nm,0.8s,baz=134,slow=5.4,SNR=8.0 | | | |
| KFL | Anninata | 84.18 | 318 | eP | P | 14 11 21.0 | +0.3 | TXAR | | | | LR |
| KFL | Anninata | 84.18 | 318 | P | P | 14 11 20.8 | +0.1 | | comp=Z,300nm,21.3s,baz=0.0,slow=33 | | | |
| Y30A | Stafford Cattl | 84.20 | 49 | P | P | 14 11 21.7 | +0.8 | 231A | Bronte | 85.97 | 50 | P |
| | baz=84 | | | | | | | | baz=86,SNR=6.9 | | | |
| Z29A | Hungry Hill Ra | 84.21 | 50 | P | P | 14 11 21.4 | +0.4 | CCM | Cathedral Cave | 85.98 | 40 | eP |
| | baz=84,SNR=9.0 | | | | | | | CCM | | | | pmax |
| IDI | Anoyia | 84.21 | 313 | P | P | 14 11 20.2 | -0.7 | | comp=Z,22nm,0.9s | | | |
| | comp=Z,90nm,0.8s,baz=59,slow=4.6,SNR=35 | | | | | | | CCM | Cathedral Cave | 85.98 | 40 | eP |
| IDI | Anoyia | 84.21 | 313 | eP | P | 14 11 20.0 | -1.0 | | comp=Z,22nm,0.9s | | | |
| IDI | Anoyia | 84.21 | 313 | eP | P | 14 11 20.0 | -1.0 | SFIN | Scholer Farm | 85.99 | 36 | P |
| VLS | Valsamata | 84.23 | 318 | P | P | 14 11 20.6 | -0.3 | | baz=86 | | | |
| VLS | Valsamata | 84.23 | 318 | eP | P | 14 11 21.0 | +0.1 | PPT | Papeete | 86.01 | 118 | LR |
| VLS | Valsamata | 84.23 | 318 | eP | P | 14 11 21.0 | +0.1 | | comp=Z,605nm,21.8s,baz=301,slow=30 | | | |
| VLS | Valsamata | 84.23 | 318 | P | P | 14 11 20.6 | -0.3 | PPT2 | Papeete2 | 86.02 | 118 | eS |
| VLS | Valsamata | 84.23 | 318 | P | P | 14 11 20.6 | -0.3 | | comp=Z,351nm,26.2s | | | |
| 128A | Castleberry Fa | 84.23 | 50 | P | P | 14 11 21.4 | +0.3 | PPT2 | Papeete2 | 86.02 | 118 | eLR |
| | baz=84,SNR=13 | | | | | | | | comp=Z,3µm,26.2s,baz=317 | | | |
| T35A | Sooner Cattle | 84.26 | 44 | P | P | 14 11 21.4 | +0.3 | PPT2 | Papeete2 | 86.02 | 118 | eT |
| | | | | | | | | | comp=Z,18nm,0.2s | | | |
| | | | | | | | | 429A | Davenport Ranc | 86.04 | 51 | P |
| | | | | | | | | | baz=86,SNR=7.6 | | | |
| | | | | | | | | URZ | Urewera | 86.06 | 154 | epP |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| ITM | Ithomi | 84.33 | 317 | eP | P | 14 11 21.0 | -0.4 |
| ITM | Ithomi | 84.33 | 317 | eP | P | 14 11 21.0 | -0.4 |
| ITM | Ithomi | 84.33 | 317 | P | P | 14 11 20.8 | -0.6 |
| ITM | Ithomi | 84.33 | 317 | P | P | 14 11 20.8 | -0.6 |
| KYTH | Kithira | 84.44 | 315 | eP | P | 14 11 21.5 | -0.6 |
| KYTH | Kithira | 84.44 | 315 | eP | P | 14 11 21.5 | -0.6 |
| SIVA | Sivas | 84.46 | 313 | eP | P | 14 11 22.5 | +0.4 |
| SIVA | Sivas | 84.46 | 313 | eP | P | 14 11 22.5 | +0.4 |
| SIVA | Sivas | 84.46 | 313 | P | P | 14 11 22.3 | +0.2 |
| SIVA | Sivas | 84.46 | 313 | P | P | 14 11 22.3 | +0.2 |
| S37A | Fort Scott | 84.47 | 42 | P | P | 14 11 22.3 | +0.2 |
| | | | | | | | |
| T36A | Boggs Farm, Ca | 84.48 | 43 | P | P | 14 11 22.8 | +0.7 |
| | | | | | | | |
| Y31A | Rekieta Farm, | 84.49 | 48 | P | P | 14 11 22.8 | +0.4 |
| | | | | | | | |
| VAM | Vamos | 84.49 | 314 | P | P | 14 11 22.7 | +0.4 |
| VAM | Vamos | 84.49 | 314 | eP | P | 14 11 23.0 | +0.7 |
| VAM | Vamos | 84.49 | 314 | eP | P | 14 11 23.0 | +0.7 |
| VAM | Vamos | 84.49 | 314 | P | P | 14 11 22.7 | +0.4 |
| VAM | Vamos | 84.49 | 314 | P | P | 14 11 22.7 | +0.4 |
| Z30A | Sanderson Ranc | 84.51 | 49 | P | P | 14 11 22.8 | +0.3 |
| | | | | | | | |
| 228A | UT Block 9, Go | 84.54 | 51 | P | P | 14 11 23.2 | +0.5 |
| | | | | | | | |
| V34A | Guthrie | 84.56 | 45 | P | P | 14 11 23.7 | +1.1 |
| | | | | | | | |
| V34A | Guthrie | 84.56 | 45 | eP | P | 14 11 22.9 | +0.3 |
| | | | | | | | |
| U35A | Pawnee | 84.57 | 44 | P | P | 14 11 23.4 | +0.8 |
| | | | | | | | |
| IMMV | Iera Moni Meta | 84.57 | 314 | eP | P | 14 11 23.5 | +0.8 |
| IMMV | Iera Moni Meta | 84.57 | 314 | eP | P | 14 11 23.5 | +0.8 |
| W33A | Caddo, Fort Co | 84.58 | 46 | P | P | 14 11 23.7 | +0.9 |
| | | | | | | | |
| BNI | Bardonecchia | 84.61 | 331 | eP | P | 14 11 22.2 | -0.7 |
| BNI | | | | pmax | pmax | | |
| | comp=Z,40nm,1.1s | | | | | | |
| BNI | | | | MLR | MLR | | |
| | comp=Z,664nm,22.0s | | | | | | |
| BNI | Bardonecchia | 84.61 | 331 | eP | P | 14 11 22.1 | -0.7 |
| | comp=Z,40nm,1.1s | | | | | | |
| BNI | | | | LR | LR | | |
| | comp=Z,664nm,22.0s | | | | | | |
| ANKY | Antikythira Is | 84.62 | 315 | eP | P | 14 11 23.0 | +0.1 |
| ANKY | Antikythira Is | 84.62 | 315 | eP | P | 14 11 23.0 | +0.1 |
| ANKY | Antikythira Is | 84.62 | 315 | P | P | 14 11 22.2 | -0.7 |
| ANKY | Antikythira Is | 84.62 | 315 | P | P | 14 11 22.2 | -0.7 |
| PYL | PYLOS | 84.64 | 316 | eP | P | 14 11 22.0 | -1.0 |
| PYL | PYLOS | 84.64 | 316 | eP | P | 14 11 22.0 | -1.0 |
| PYL | PYLOS | 84.64 | 316 | P | P | 14 11 21.8 | -1.2 |
| PYL | PYLOS | 84.64 | 316 | P | P | 14 11 21.8 | -1.2 |
| X32A | Elmer | 84.69 | 47 | P | P | 14 11 23.6 | +0.3 |
| | | | | | | | |
| WMOK | Wichita Mounta | 84.72 | 47 | eP | P | 14 11 22.4 | -1.1 |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | |
| WMOK | | | | MLR | MLR | | |
| | comp=Z,327nm,19.0s | | | | | | |
| WMOK | Wichita Mounta | 84.72 | 47 | eP | P | 14 11 22.4 | -1.1 |
| | comp=Z,17nm,1.2s | | | | | | |
| WMOK | | | | LR | LR | | |
| | comp=Z,327nm,19.0s | | | | | | |
| HDIL | Hopedale | 84.88 | 37 | P | P | 14 11 24.2 | +0.1 |
| | baz=85 | | | | | | |
| HDIL | Hopedale | 84.88 | 37 | PFAKE | | 14 11 40.0 | +16 |
| HDIL | | | | LR | LR | | |
| | comp=Z,557nm,22.0s | | | | | | |
| W34A | Bridge Creek, | 84.88 | 46 | P | P | 14 11 24.8 | +0.5 |
| | baz=85 | | | | | | |
| Y32A | R-V Farms, Ver | 84.91 | 48 | P | P | 14 11 24.9 | +0.4 |
| | baz=85 | | | | | | |
| V35A | Meyer Ranch, C | 84.98 | 45 | P | P | 14 11 25.8 | +1.1 |
| | baz=85 | | | | | | |
| Z31A | Sharp Cattle R | 85.04 | 49 | P | P | 14 11 25.6 | +0.4 |
| | baz=85 | | | | | | |
| U36A | Oologah | 85.06 | 44 | P | P | 14 11 25.4 | +0.3 |
| | baz=85 | | | | | | |
| CUC | Castrocucco | 85.07 | 322 | eP | P | 14 11 24.0 | -1.1 |
| | comp=Z,11nm,0.8s | | | | | | |
| CUC | | | | LR | LR | | |
| | comp=Z,659nm,20.0s | | | | | | |
| 229A | Bryant Ranch, | 85.10 | 51 | P | P | 14 11 26.2 | +0.7 |
| | baz=86,SNR=5.4 | | | | | | |
| 130A | Snyder | 85.12 | 50 | P | P | 14 11 26.2 | +0.7 |
| | baz=85 | | | | | | |
| SSB | Saint Sauveur | 85.18 | 332 | eP | P | 14 11 24.2 | -1.4 |
| SSB | | | | pmax | pmax | | |
| | comp=Z,29nm,1.2s | | | | | | |
| SSB | | | | MLR | MLR | | |
| | comp=Z,521nm,20.0s | | | | | | |
| SSB | Saint Sauveur | 85.18 | 332 | eP | P | 14 11 24.2 | -1.4 |
| | comp=Z,29nm,1.2s | | | | | | |
| SSB | | | | LR | LR | | |
| | comp=Z,521nm,20.0s | | | | | | |
| PMOR | Pomariorio Ree | 85.28 | 115 | eT | T | 15 45 06.2 | |
| | comp=Z,100nm,0.2s | | | | | | |
| TIP | Timpagrande | 85.28 | 321 | P | P | 14 11 24.3 | -2.0 |
| | comp=Z,49nm,1.2s | | | | | | |
| TIP | | | | LR | LR | | |
| | comp=Z,417nm,19.0s | | | | | | |
| X34A | Smith Ranch, M | 85.33 | 46 | P | P | 14 11 27.4 | +0.8 |
| | baz=85 | | | | | | |
| Y33A | Hilltop Ranch, | 85.36 | 47 | P | P | 14 11 27.2 | +0.6 |
| | baz=85 | | | | | | |
| U37A | Salina | 85.37 | 43 | P | P | 14 11 27.1 | +0.4 |
| | baz=85,SNR=6.5 | | | | | | |
| 131A | Roby | 85.38 | 49 | P | P | 14 11 27.4 | +0.5 |
| | baz=85 | | | | | | |
| TUL1 | Tulsa | 85.41 | 44 | P | P | 14 11 27.4 | +0.6 |
| | baz=85 | | | | | | |
| Z32A | Haskell | 85.42 | 48 | P | P | 14 11 27.1 | +0.1 |
| | baz=85,SNR=7.4 | | | | | | |
| W35A | Tecumseh | 85.42 | 45 | P | P | 14 11 27.4 | +0.4 |
| | baz=85 | | | | | | |
| V36A | Jenks | 85.42 | 44 | P | P | 14 11 27.4 | +0.4 |
| | baz=85 | | | | | | |
| 230A | Sterling City | 85.56 | 50 | P | P | 14 11 28.4 | +0.7 |
| | baz=85,SNR=24 | | | | | | |
| U38A | Gravette | 85.71 | 43 | P | P | 14 11 28.3 | -0.1 |
| | baz=86,SNR=5.6 | | | | | | |
| V37A | Hulbert | 85.76 | 44 | P | P | 14 11 28.6 | -0.1 |
| | baz=86,SNR=7.4 | | | | | | |
| W36A | Wetumka | 85.77 | 45 | P | P | 14 11 29.0 | +0.3 |
| | baz=86 | | | | | | |
| Z33A | Whitaker Ranch | 85.82 | 48 | P | P | 14 11 29.4 | +0.4 |
| | baz=86 | | | | | | |
| AAM | Ann Arbor | 85.83 | 33 | PFAKE | | 14 11 40.0 | +11 |
| AAM | | | | LR | LR | | |
| | comp=Z,499nm,21.0s | | | | | | |
| ABTX | Abilene, Hawle | 85.84 | 49 | P | P | 14 11 29.8 | +0.7 |
| | baz=86 | | | | | | |
| ABTX | Abilene, Hawle | 85.84 | 49 | eP | P | 14 11 29.4 | +0.3 |
| | comp=Z,18nm,1.2s | | | | | | |
| Y34A | Reagan Ranch, | 85.86 | 47 | P | P | 14 11 29.6 | +0.5 |
| | baz=86 | | | | | | |
| 330A | Mertzon | 85.88 | 50 | P | P | 14 11 29.8 | +0.4 |
| | baz=86 | | | | | | |
| X35A | Drake | 85.95 | 46 | P | P | 14 11 29.5 | -0.1 |
| | baz=86,SNR=5.6 | | | | | | |
| TXAR | Lajitas Array | 85.95 | 53 | P | P | 14 11 29.8 | 0.0 |
| | comp=Z,10.0nm,0.7s,baz=294,slow=3.5,SNR=72 | | | | | | |
| TXAR | | | | PKKPbc | PKKPbc | 14 29 29.6 | +1.5 |
| | comp=Z,1.0nm,0.8s,baz=134,slow=5.4,SNR=8.0 | | | | | | |
| TXAR | | | | LR | LR | 14 46 34.3 | |
| | comp=Z,300nm,21.3s,baz=0.0,slow=33 | | | | | | |
| 231A | Bronte | 85.97 | 50 | P | P | 14 11 29.5 | -0.3 |
| | baz=86,SNR=6.9 | | | | | | |
| CCM | Cathedral Cave | 85.98 | 40 | eP | P | 14 11 28.8 | -0.9 |
| CCM | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| CCM | Cathedral Cave | 85.98 | 40 | eP | P | 14 11 28.8 | -0.9 |
| | comp=Z,22nm,0.9s | | | | | | |
| SFIN | Scholer Farm | 85.99 | 36 | P | P | 14 11 30.0 | +0.4 |
| | baz=86 | | | | | | |
| PPT | Papeete | 86.01 | 118 | LR | LR | 14 42 35.3 | |
| | comp=Z,605nm,21.8s,baz=301,slow=30 | | | | | | |
| PPT2 | Papeete2 | 86.02 | 118 | eS | S | 14 21 56.3 | -4.4 |
| | comp=Z,351nm,26.2s | | | | | | |
| PPT2 | Papeete2 | 86.02 | 118 | eLR | LR | 14 38 34.5 | |
| | comp=Z,3µm,26.2s,baz=317 | | | | | | |
| PPT2 | Papeete2 | 86.02 | 118 | eT | T | 15 46 01.0 | |
| | comp=Z,18nm,0.2s | | | | | | |
| 429A | Davenport Ranc | 86.04 | 51 | P | P | 14 11 30.4 | +0.2 |
| | baz=86,SNR=7.6 | | | | | | |
| URZ | Urewera | 86.06 | 154 | epP | pP | 14 11 45.2 | +1.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| PAE | Paea | 86.07 | 118 | eT | T | 15 46 03.9 | |
| | comp=Z,2.6nm,0.3s | | | | | | |
| X36A | Centrahoma | 86.14 | 45 | P | P | 14 11 31.1 | +0.6 |
| | baz=86 | | | | | | |
| V38A | Canehill | 86.15 | 43 | P | P | 14 11 30.4 | -0.2 |
| | baz=86,SNR=9.5 | | | | | | |
| TIAR | Tiarei | 86.15 | 118 | eT | T | 15 46 10.0 | |
| | comp=Z,7.7nm,0.3s | | | | | | |
| W37A | Quinton | 86.19 | 44 | P | P | 14 11 30.8 | 0.0 |
| | baz=86,SNR=6.1 | | | | | | |
| 529A | Stev Forest Ra | 86.22 | 52 | P | P | 14 11 31.7 | +0.6 |
| | baz=86 | | | | | | |
| Z34A | Collier Ranch, | 86.22 | 47 | P | P | 14 11 31.7 | +0.7 |
| | baz=86 | | | | | | |
| 133A | Hamilton Ranch | 86.25 | 48 | P | P | 14 11 31.8 | +0.7 |
| | baz=86 | | | | | | |
| Y35A | Marietta | 86.29 | 46 | P | P | 14 11 31.7 | +0.5 |
| | baz=86 | | | | | | |
| 430A | Baggett Ranch, | 86.30 | 51 | P | P | 14 11 31.3 | -0.2 |
| | baz=86,SNR=6.6 | | | | | | |
| TAOE | Nuku Hiva Isla | 86.36 | 105 | eT | T | 15 46 33.8 | |
| | comp=Z,427nm,0.3s | | | | | | |
| 331A | San Angelo | 86.38 | 50 | P | P | 14 11 32.0 | +0.2 |
|

**TBI Tubuai 90.27 122** *e*S **S** **14 22 38.8 -1.8**
comp=Z,359nm,28.0s
**TBI Tubuai 90.27 122** *e*LR LR 14 40 15.3
comp=Z,2μm,22.8s,baz=317
**TBI Tubuai 90.27 122** *e*T T 15 51 16.1
comp=Z,63nm,0.3s
**LUPA Lehigh Univers 90.42 28** *e*P **P** **14 11 51.3 +0.6**
comp=Z,21nm,1.0s
**ODZ Otahua Downs 90.48 161** *e*P **P** **14 11 53.4 +2.8**
ODZ *e*pP **pP** **14 12 08.2 +3.7**
**034A Hebbronville 90.57 52** P **P** **14 11 52.8 +1.1**
baz=90
**MVL Millersville 90.60 29** *e*P **P** **14 11 52.3 +0.7**
comp=Z,13nm,1.4s
**BRNJ Basking Ridge 90.62 28** *e*P **P** **14 11 52.5 +0.8**
comp=Z,23nm,0.9s
**KVTX Kingsville 90.66 51** PFAKE 14 12 00.0 +7.9
KVTX LR LR
comp=Z,638nm,21.0s
**TZTN Tazewell 90.72 36** *e*P **P** **14 11 51.6 -0.7**
comp=Z,14nm,1.0s
**SWET Sewanee 90.77 38** *e*P **P** **14 11 53.0 +0.5**
comp=Z,14nm,0.9s
**CPCT Cooper Cave 91.21 37** *e*P **P** **14 11 55.4 +0.8**
**TKL Tuckaleechee C 91.37 36** *e*P **P** **14 11 55.6 +0.3**
**TKL Tuckaleechee C 91.37 36** *e*P **P** **14 11 55.6 +0.3**
**KEST Kesra 91.47 324** P **P** **14 11 55.7 -0.1**
comp=Z,17nm,0.9s,baz=64,slow=5.0,SNR=12
KEST LR LR 14 57 28.8
comp=Z,1μm,21.2s,baz=340,slow=38
**BLA Blacksburg 91.47 33** PFAKE 14 12 10.0 +14
BLA LR LR
comp=Z,182nm,20.0s
**CBN Corbin 91.80 31** PFAKE 14 12 10.0 +13
CBN LR LR
comp=Z,586nm,20.0s
**PBRG Braganca 91.86 338** *e*P **P** **14 11 57.7 +0.2**
comp=Z,33nm,1.2s
**PGAV Gavieira, Arco 92.13 339** *e*P **P** **14 11 58.8 0.0**
comp=Z,36nm,1.0s
**PGAV Gavieira, Arco 92.13 339** *e*SKS **S** **14 23 01.7 +4.1**
**PGAV Gavieira, Arco 92.13 339** *e*LR LR 14 43 08.1
comp=Z,399nm,20.0s
**PCAB Cabril 92.30 339** *e*P **P** **14 11 59.2 -0.3**
comp=Z,40nm,1.3s
**MVO Moncorvo 92.54 338** *e*P **P** **14 12 00.6 -0.1**
comp=Z,29nm,1.3s
**MVO Moncorvo 92.54 338** *e*LR LR 14 43 12.8
comp=Z,594nm,22.0s
**POLO Lamas de Olo 92.55 338** *e*P **P** **14 12 00.2 -0.6**
comp=Z,24nm,1.0s
**PVRL Vila Real 92.62 338** *e*P **P** **14 12 01.2 +0.2**
comp=Z,38nm,1.3s
**KMSC Kings Mountain 92.86 35** P **P** **14 12 02.1 -0.1**
baz=93
**ESDC Sonseca Array 93.00 335** P **P** **14 12 02.7 -0.1**
comp=Z,8.1nm,0.8s,baz=18,slow=3.9,SNR=43
ESDC LR LR 14 58 23.8
comp=Z,298nm,19.1s,baz=35,slow=38
**PVIS Viseu 93.19 338** *e*P **P** **14 12 03.0 -0.7**
comp=Z,33nm,1.4s
**PAB San Pablo 93.24 335** *e*P **P** **14 12 03.7 -0.3**
PAB pmax pmax
comp=Z,10.0nm,0.9s
PAB MLR MLR
comp=Z,1μm,22.0s
**PAB San Pablo 93.24 335** *e*P **P** **14 12 03.7 -0.3**
comp=Z,9.6nm,0.9s
PAB LR LR
comp=Z,1μm,22.0s
**MTE Manteigas 93.39 338** *e*P **P** **14 12 04.7 +0.1**
comp=Z,39nm,1.0s
**MTE Manteigas 93.39 338** *e*SKS **S** **14 23 03.8 -5.0**
**MTE Manteigas 93.39 338** *e*LR LR 14 44 25.5
comp=Z,585nm,22.0s
**MTE Manteigas 93.39 338** *e*P **P** **14 12 04.4 -0.2**
comp=Z,14nm,0.8s
MTE LR LR
comp=Z,842nm,22.0s
**GOGA Godfrey 93.39 37** PFAKE 14 12 20.0 +15
GOGA LR LR
comp=Z,514nm,20.0s
**BRAL Brewton 93.70 41** PFAKE 14 12 20.0 +14
BRAL LR LR
comp=Z,404nm,21.0s
**PCBR Castelo Branco 93.89 338** *e*P **P** **14 12 06.6 -0.2**
comp=Z,19nm,1.8s
**CNNC Cliffs of the 94.19 32** PFAKE 14 12 20.0 +12
CNNC LR LR
comp=Z,484nm,22.0s
**PMRV Marv??o 94.25 337** *e*P **P** **14 12 08.3 -0.2**
comp=Z,15nm,1.7s
**PMRV Marv??o 94.25 337** *e*SKS S 14 23 06.4 -10
**PMRV Marv??o 94.25 337** *e*LR LR 14 44 56.1
comp=Z,492nm,22.0s
**PMTG Montargil 94.82 338** *e*P **P** **14 12 10.6 -0.5**
comp=Z,21nm,1.3s
**NHSC New Hope 95.09 35** PFAKE 14 12 20.0 +7.6
NHSC LR LR
comp=Z,495nm,19.0s
**PBAR Barrancos 95.31 337** *e*P **P** **14 12 13.2 -0.2**
comp=Z,35nm,1.4s
**PBEJ Beja 95.69 337** *e*P **P** **14 12 15.1 0.0**
comp=Z,12nm,1.1s
**PNCL Nicolau / Gran 95.80 338** *e*P **P** **14 12 15.5 -0.1**
comp=Z,21nm,2.1s
**MESJ Messejana 95.96 337** *e*P **P** **14 12 16.5 +0.2**
MESJ AMS AMS 14 58 46.7
comp=Z,532nm,19.6s
**MESJ Messejana 95.96 337** *e*P **P** **14 12 16.3 0.0**
comp=Z,16nm,2.2s
**MESJ Messejana 95.96 337** *e*P **P** **14 12 16.5 +0.2**
**PCVE Castro Verde 96.11 337** *e*P **P** **14 12 17.0 0.0**
comp=Z,14nm,2.3s
**PVAQ Vaqueiros 96.22 337** *e*P **P** **14 12 17.6 +0.1**
comp=Z,16nm,1.2s
**PVAQ Vaqueiros 96.22 337** *e*LR LR 14 44 48.1
comp=Z,646nm,22.0s
**RTC Rabat Centre 99.13 335** PFAKE 14 12 40.0 +9.3
RTC LR LR
comp=Z,8μm,21.0s
**RKT Rikitea 99.67 112** *e*SKSac **SKSac** **14 23 06.7 -1.0**
comp=Z,223nm,29.0s
RKT *e*SP **SP** **14 25 30.7 +0.1**
comp=Z,246nm,41.5s
RKT *e*SS **SS** **14 30 54.2 -1.2**
comp=Z,273nm,29.8s
**RKT Rikitea 99.67 112** *e*LR LR 14 44 58.2
comp=Z,2μm,33.0s,baz=309
**BBSR BB Station 101.40 24** PFAKE 14 12 50.0 +9.2
BBSR LR LR
comp=Z,369nm,22.0s
**TEIG Tepich 101.82 48** PFAKE 14 12 50.0 +7.1
TEIG LR LR
comp=Z,237nm,22.0s
**KMBO Kilima Mbogo 102.35 280** P **Pdif** **14 12 45.9 +0.3**
comp=Z,0.9nm,0.3s,baz=30,slow=8.1,SNR=7.2
KMBO PP **PP** **14 16 59.2 +0.8**
comp=Z,0.8nm,0.3s,baz=41,slow=11,SNR=3.7
**KMBO Kilima Mbogo 102.35 280** P **Pdif** **14 12 45.9 +0.3**
KMBO 14 16 59.2
KMBO pmax pmax
comp=Z,1.0nm,0.3s
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**KMBO Kilima Mbogo 102.35 280** P **Pdif** **14 12 45.9 +0.3**
KMBO PP **PP** **14 16 59.2 +0.8**
KMBO LR LR
comp=Z,342nm,20.0s
**TAM Tamanrasset 104.19 320** PFAKE 14 13 00.0 +6.4
TAM LR LR
comp=Z,329nm,21.0s
**MBAR Mbarara 106.70 285** PFAKE 14 17 30.0
MBAR LR LR
comp=Z,1μm,20.0s
**ABPO Ambohimpanom 106.72 259** PFAKE 14 17 30.0
ABPO LR LR
comp=Z,213nm,21.0s
**GTBY Guantanamo Bay 108.74 38** PFAKE 14 17 30.0
GTBY LR LR
comp=Z,306nm,22.0s
**GRTK Grand Turk 109.06 34** PFAKE 14 17 30.0
GRTK LR LR
comp=Z,465nm,20.0s
**CASY Casey 111.16 193** PFAKE 14 17 30.0
CASY LR LR
comp=Z,441nm,20.0s

**SDDR Presa de Saban 111.25 35** PFAKE 14 17 30.0
SDDR LR LR
comp=Z,285nm,19.0s
**JTS JuntasAbangare 111.69 52** PFAKE 14 17 40.0
JTS LR LR
comp=Z,433nm,21.0s
**SJG San Juan 114.09 30** PFAKE 14 17 40.0 +11
SJG LR LR
comp=Z,297nm,22.0s
**TOA0 Torodi Ar. Sit 114.29 318** *e*PKIKP PKPdf 14 17 28.3 -0.9
**TORD Torodi Ar. Bea 114.29 318** PKP PKPdf 14 17 28.3 -0.9
comp=Z,3.5nm,0.9s,baz=25,slow=2.3,SNR=17
TORD PP PP 14 18 16.1 -8.3
comp=Z,6.0nm,0.9s,baz=29,slow=7.5,SNR=9.9
TORD PKKPbc **PKKPbc** **14 28 08.4 +0.9**
comp=Z,0.7nm,0.8s,baz=222,slow=1.8,SNR=3.2
**BCIP Isla Barro Col 115.50 48** PFAKE 14 17 40.0 +8.4
BCIP LR LR
comp=Z,252nm,21.0s
**ANWB Willy Bob 116.04 26** PFAKE 14 17 40.0 +7.5
ANWB LR LR
comp=Z,301nm,20.0s
**LSZ Lusaka 118.40 275** PFAKE 14 17 50.0 +13
LSZ LR LR
comp=Z,999nm,20.0s
**FDF Fort de France 118.99 27** PFAKE 14 17 50.0 +12
FDF LR LR
comp=Z,252nm,22.0s
**VNDA Vanda 120.19 175** PKP **PKPdf** **14 17 38.1 -0.6**
comp=Z,2.8nm,0.8s,baz=316,slow=3.5,SNR=21
VNDA PKKPbc **PKKPbc** **14 27 46.9 -0.8**
comp=Z,1.2nm,0.9s,baz=150,slow=3.1,SNR=5.8
**SDV Santo Domingo 120.45 39** PFAKE 14 17 50.0 +8.6
SDV LR LR
comp=Z,427nm,21.0s
**SBA Scott Base 120.84 174** *e*PKIKP **PKPdf** **14 17 41.1 +1.2**
**SBA Scott Base 120.84 174** *e*PKPdf **PKPdf** **14 17 41.1 +1.2**
**BBGH Gun Hill 121.00 26** PFAKE 14 17 50.0 +7.9
BBGH LR LR
comp=Z,673nm,21.0s
**GRGR Grenville 121.24 28** PFAKE 14 17 50.0 +7.4
GRGR LR LR
comp=Z,294nm,22.0s
**DBIC Dimbokro 123.06 321** PKP **PKPdf** **14 17 45.5 -0.6**
comp=Z,11nm,0.9s,baz=16,slow=2.2,SNR=8.1
**DBIC Dimbokro 123.06 321** PKIKP **PKPdf** **14 17 45.5 -0.6**
DBIC pmax pmax
comp=Z,11nm,0.9s
**TIC Toumodi 123.16 321** *e*PKIKP **PKPdf** **14 17 45.8 -0.6**
**KIC Kosan Boka 123.28 321** *e*PKIKP **PKPdf** **14 17 45.7 -0.9**
comp=Z,31nm,0.9s
**OTAV Otavalo 123.57 53** PFAKE 14 18 00.0 +12
OTAV LR LR
comp=Z,283nm,20.0s
**MAW Mawson 124.85 207** PKP **PKPdf** **14 17 47.8 0.0**
comp=Z,12nm,0.8s,baz=323,slow=2.1,SNR=34
**MAW Mawson 124.85 207** PKIKP **PKPdf** **14 17 47.8 0.0**
MAW pmax pmax
comp=Z,12nm,0.8s
**LBTB Lobatse 126.26 268** *e*PKIKP **PKPdf** **14 17 52.8 +0.8**
**LBTB Lobatse 126.26 268** *e*PKPdf **PKPdf** **14 17 52.8 +0.8**
**BOSA Boshof 128.53 264** PKP **PKPdf** **14 17 57.5 +1.3**
comp=Z,4.0nm,0.9s,baz=84,slow=1.9,SNR=4.1
BOSA PP **PP** **14 19 57.7 -4.8**
comp=Z,2.9nm,0.7s,baz=45,slow=2.9,SNR=3.1
**BOSA Boshof 128.53 264** PKIKP **PKPdf** **14 17 57.6 +1.3**
BOSA 14 19 57.7
BOSA pmax pmax
comp=Z,4.0nm,0.9s
BOSA pmax pmax
comp=Z,3.0nm,0.7s
**TSUM Tsumeb 128.69 279** PFAKE 14 18 10.0 +13
TSUM LR LR
comp=Z,338nm,20.0s
**ATAH Atahualpa 129.40 58** PKP **PKPdf** **14 17 59.4 +0.6**
comp=Z,7.2nm,0.7s,baz=27,slow=2.3,SNR=4.3
**QSPA South Pole Qui 132.11 180** *e*PKPdf **PKPdf** **14 18 02.1 +0.3**
**SYO Syowa Base 133.48 209** *e*X **PKPdf** **14 18 03.2 -1.0**
**PTGA Pitinga 133.70 33** PKP **PKPdf** **14 18 06.2 -0.2**
comp=Z,4.2nm,0.7s,baz=39,slow=1.0,SNR=14
PTGA SKPbc **SKPbc** **14 21 30.2 -0.9**
comp=Z,6.3nm,1.0s,baz=3.2,slow=4.2,SNR=7.3
**PTGA Pitinga 133.70 33** PKP **PKPdf** **14 18 06.2 -0.2**
PTGA SKPbc **SKPbc** **14 21 30.2 -0.9**
PTGA LR LR
comp=Z,41μm,20.0s
**SAML Samuel 139.55 42** *e*PKPdf **PKPdf** **14 18 17.0 -0.1**
SAML LR LR
comp=Z,700nm,19.0s
**LPAZ La Paz 142.80 55** PKhKP PKPpre 14 18 19.6
comp=Z,3.2nm,0.8s,baz=2.9,slow=2.0,SNR=13
**LPAZ La Paz 142.80 55** PKIKP PKPpre 14 18 19.6
LPAZ pmax pmax
comp=Z,3.0nm,0.8s
**RCBR Riachuelo 143.59 358** PFAKE 14 18 40.0 +16
RCBR LR LR
comp=Z,250nm,19.0s
**SNAA Sanae 146.19 199** P **PKPdf** **14 18 27.3 0.0**
**SNAA Sanae 146.19 199** *e*PKP2 **PKPdf** **14 18 27.0 -0.2**
**SNAA Sanae 146.19 199** *e*PKPdf **PKPdf** **14 18 27.0 -0.2**
**SIV San Ignacio 146.59 45** PKPbc **PKPbc** **14 18 30.6 -0.4**
comp=Z,35nm,0.6s,baz=322,slow=2.4,SNR=74
**LVC Limon Verde 146.95 63** PKPbc **PKPbc** **14 18 31.8 -0.5**
comp=Z,94nm,0.9s,baz=296,slow=4.2,SNR=16
**LVC Limon Verde 146.95 63** *e*PKPdf **PKPbc** **14 18 31.5 -0.8**
LVC PKPbc **PKPbc** **14 18 31.8 -0.5**
LVC *e*PKPbc **PKPab** **14 18 33.5 -0.2**
LVC LR LR
comp=Z,515nm,20.0s
**VNA2 Neumayer--Watz 147.77 198** P **PKPbc** **14 18 31.3 -1.5**
baz=109,slow=2.1
**VNA3 Neumayer Olymp 148.02 196** P **PKPdf** **14 18 31.6 +1.4**
**VNA1 Neumayer--Stat 148.16 198** P **PKPbc** **14 18 32.1 -1.7**
**LCO Las Campanas 149.79 75** *e*PKPbc **PKPbc** **14 18 40.0 +0.5**
LCO LR LR
comp=Z,711nm,21.0s
**BDFB Brasilia 151.74 23** PKPbc **PKPbc** **14 18 44.4 +0.2**
comp=Z,27nm,0.8s,baz=336,slow=1.6,SNR=30
**BDFB Brasilia 151.74 23** PKIKP **PKPbc** **14 18 44.4 +0.2**
BDFB pmax pmax
comp=Z,27nm,0.8s
**CFAA Coronel Fontan 153.00 77** PKPbc **PKPbc** **14 18 46.2 -0.3**
comp=Z,1.2nm,0.7s,baz=311,slow=3.1,SNR=18
**CPUP Villa Florida 156.92 53** PKP **PKPdf** **14 18 43.7 -1.0**
comp=Z,2.2nm,0.7s,baz=29,slow=2.6,SNR=4.4
**CPUP Villa Florida 156.92 53** PKIKP **PKPdf** **14 18 43.7 -1.0**
CPUP pmax pmax
comp=Z,2.0nm,0.7s

*IDC* ***14*** *14:28:39.2±0.5, 4˚.36N×93˚.20E, h0km, mb4.1/15, mb1 4.3/18, mb1mx4.0/45, mbtmp4.2/18, ML3.9/3, MS3.5/2, Ms1 3.5/2, ms1mx3.0/39, Error ellipse: s-maj=21.2km s-min=13.4km az=56.0*
*ISCJB* ***14*** *14:28:41.5±0.4, 4˚.33N±0˚.05×93˚.25E±0˚.04, h28km, mb4.3/20, MS3.5/2, Error ellipse: s-maj=8.5km s-min=4.3km az=27.9*
*AUST* ***14*** *14:28:44.3, 3˚.91N×93˚.47E, h0km*
*NEIC* ***14*** *14:28:44.2±0.3, 4˚.39N×93˚.26E, h35km, mb4.5/4, Error ellipse: s-maj=7.8km s-min=5.5km az=201.0*
*DJA* ***14*** *14:28:49.2±0.8, 4˚.N±6˚×9˚.4E±˚, h10km, M4.7/9, mb4.8/8, mb4.9/4, MLv4.8/9, Mw(mB)4.2/4*
**ISC 14 14:28:43.6±0.5, 4˚.37N±0˚.06×93˚.28E±0˚.05, h28km, n64, σ1°76/67, mb4.3/20, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MLSI** | **Meulaboh, Aceh** | **3.11** | **92** | P | **Pn** | **14 29 31.8** | **+1.0** |
| MLSI | | | | S | **Sn** | **14 30 07.9** | **+0.8** |
| **LHMI** | **Lhok Sumawe** | **3.75** | **77** | P | **Pn** | **14 29 41.8** | **+2.2** |
| | baz=3.7,SNR=6.8 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **3.75** | **77** | P | **Pn** | **14 29 41.7** | **+2.1** |
| LHMI | | | | S | **Sb** | **14 30 30.1** | **-4.1** |
| **LHMI** | **Lhok Sumawe** | **3.75** | **77** | *e*Pn | **Pn** | **14 29 40.1** | **+0.5** |
| LHMI | | | | *e*Sn | **Sn** | **14 30 25.0** | **+2.1** |
| **KCSI** | **Kotacane, Aceh** | **4.55** | **100** | P | **Pn** | **14 29 53.5** | **+2.8** |
| KCSI | | | | S | **Sn** | **14 30 42.7** | **-0.1** |
| **GSI** | **Gunungsitoli** | **5.25** | **125** | P | **Pn** | **14 30 00.3** | **0.0** |
| GSI | | | | S | **Sn** | **14 30 55.8** | **-4.2** |
| **GSI** | **Gunungsitoli** | **5.25** | **125** | *e*Pn | **Pn** | **14 29 60.0** | **-0.3** |
| | 160nm,0.6s | | | | | | |
| GSI | | | | *e*Sn | **Sn** | **14 30 58.4** | **-1.6** |

**TSI Tuntungan 5.34 99** P **Pn** **14 30 04.0 +2.6**
**PSI Prapat 5.84 105** Pn **Pn** **14 30 09.5 +1.0**
8.3nm,0.3s,baz=308,slow=9.3,SNR=12
PSI Sn **Sn** **14 31 13.2 -1.4**
17nm,0.3s,baz=358,slow=23,SNR=12
**PSI Prapat 5.84 105** P **Pn** **14 30 10.9 +2.5**
baz=5.6,SNR=9.1
**MNSI Mandailing Nat 7.22 119** P Pn 14 30 36.5 +9.2
**KULM Kulim 7.40 83** *e*Pn **Pn** **14 30 30.7 +0.9**
61nm,0.6s
KULM *e*Sn **Sn** **14 31 48.2 -4.6**
**IPM Ipoh 7.72 89** *e*Pn **Pn** **14 30 33.9 -0.4**
30nm,0.5s
IPM *e*Sn **Sn** **14 31 57.1 -3.7**
**SISI Saibi 8.10 134** P **Pn** **14 30 38.6 -0.8**
78nm,0.7s,0.3nm
**PPI Padang Panjang 8.57 124** P **Pn** **14 30 46.9 +1.0**
25nm,0.8s
**PALK Pallekele 12.85 284** Pn **Pn** **14 31 41.9 -2.5**
0.8nm,0.3s,baz=117,slow=14,SNR=4.5
PALK Sn Sn 14 33 49.8 -17
3.4nm,0.3s,baz=116,slow=6.2,SNR=13
**MNAI Manna 12.98 132** P **Pn** **14 31 46.3 0.0**
baz=13,SNR=3.5
**MDSI Maura Dua 13.99 129** P **P** **14 32 10.4 +2.7**
**KLSI 14.55 128** P **P** **14 32 16.2 +2.3**
**CM31 Chiang Mai Arr 15.06 21** P **P** **14 32 20.3 +0.7**
baz=16,SNR=4.4
**CMAR Chiang Mai Arr 15.06 21** Pn **Pn** **14 32 14.7 +0.1**
0.1nm,0.3s,baz=216,slow=14,SNR=32
**CHTO Chiang Mai 15.39 21** *e*Pn **Pn** **14 32 18.2 -0.7**
2.2nm,0.8s
**DLV T Lat 16.82 62** Pn **Pn** **14 32 36.1 -1.4**
57nm,1.1s
**BBKI Banjar Baru 22.90 110** P **P** **14 33 48.1 +2.7**
51nm,0.8s,3μm
**ODAN Odare 23.07 346** *e*P P 14 33 57.1 +10
30nm,0.7s
ODAN *e*S **S** **14 37 56.8 0.0**
**RAMN Ramite 23.35 345** *e*S **S** **14 38 03.2 +1.8**
**TAPN Taplejung 23.47 347** *e*P **P** **14 33 51.3 0.0**
41nm,0.8s
**H08S2 Diego Garcia H 23.93 240** T T 14 58 44.5
baz=60,slow=75,SNR=445
**H08S3 Diego Garcia H 23.93 240** T T 14 58 45.6
baz=60,slow=75,SNR=810
**H08S1 Diego Garcia H 23.95 240** T T 14 58 47.5
baz=60,slow=75,SNR=973
**PKI Pulchoki 24.27 343** *e*P **P** **14 34 03.2 +4.3**
**PKIN Phulchoki 24.28 343** *e*P **P** **14 34 03.2 +4.3**
20nm,0.4s
**DMN Daman 24.39 342** *e*P P 14 34 05.3 +5.3
**GUN Gumba 24.45 344** *e*P **P** **14 33 58.9 -1.7**
35nm,0.8s
**KKN Kakani 24.51 343** *e*P **P** **14 34 03.2 +2.2**
26nm,0.8s
**GKN Gorkha 24.91 342** *e*P **P** **14 34 05.0 +0.5**
74nm,1.0s
**LSA Lhasa 25.28 356** P **P** **14 34 06.8 -1.4**
8.9nm,0.7s
**AAK Ala-Archa 41.61 339** P **P** **14 36 29.5 +0.1**
0.4nm,0.3s,baz=169,slow=5.2,SNR=2.5
**MKAR Makanchi Array 43.33 349** P **P** **14 36 43.2 +0.1**
1.4nm,0.9s,baz=160,slow=7.9,SNR=7.1
**H01W3 Cape Leeuwin H 43.70 155** T T 15 23 15.7
baz=330,slow=76,SNR=20
**H01W2 Cape Leeuwin H 43.71 155** T T 15 23 15.1
baz=330,slow=76,SNR=15
**H01W1 Cape Leeuwin H 43.71 155** T T 15 23 15.1
baz=330,slow=76,SNR=20
**SONM Songino Array 44.75 13** P **P** **14 36 55.4 +0.7**
0.9nm,0.7s,baz=189,slow=8.9,SNR=5.8
SONM PcP **PcP** **14 38 36.5 -0.1**
0.6nm,0.5s,baz=198,slow=3.4,SNR=3.0
**GEYT Alibeck 46.30 321** P **P** **14 37 05.8 -1.3**
1.8nm,0.6s,baz=142,slow=7.3,SNR=4.3
**WRA Warramunga Arr 47.02 122** P **P** **14 37 12.9 0.0**
3.6nm,0.8s,baz=299,slow=8.9,SNR=21
**KURBB Kurchatov Arra 47.74 347** P **P** **14 37 17.8 -0.2**
1.7nm,0.7s,baz=170,slow=6.7,SNR=20
KURBB PcP **PcP** **14 38 46.9 0.0**
0.9nm,0.9s,baz=157,slow=2.6,SNR=2.7
**KURK Kurchatov 47.81 347** *e*P **P** **14 37 17.5 -0.9**
5.3nm,0.6s
KURK PcP **PcP** **14 38 46.9 -0.2**
**ASAR Alice Springs 48.41 127** P **P** **14 37 23.6 -0.1**
1.9nm,0.9s,baz=295,slow=7.9,SNR=24
ASAR PcP **PcP** **14 38 49.5 -0.4**
0.9nm,0.6s,baz=302,slow=3.0,SNR=6.1
**ZALV Zalesovo Beam 49.91 353** P **P** **14 37 34.7 +0.2**
1.8nm,0.5s,baz=174,slow=7.0,SNR=10
**GUMO Guam 51.68 76** LR LR 14 58 52.3
comp=Z,42nm,22.0s,baz=344,slow=35
**BVAR Borovoye Array 52.04 343** P **P** **14 37 50.2 -0.4**
1.7nm,0.7s,baz=146,slow=8.2,SNR=9.6
**ABKAR Akbulak array 52.92 333** *e*P **P** **14 37 56.7 -0.5**
2.0nm,0.6s
**KMBO Kilima Mbogo 56.25 266** P **P** **14 38 22.7 +0.4**
0.8nm,0.2s,baz=109,slow=13,SNR=2.6
**CMSA Cobar Meteorol 61.31 130** P **P** **14 38 57.8 +0.9**
baz=61,SNR=20
**BRTR Keskin Array B 64.10 312** P **P** **14 39 14.6 -1.0**
1.9nm,0.7s,baz=122,slow=8.2,SNR=11
**IDI Anoyia 69.89 306** P **P** **14 39 51.9 -0.5**
28nm,1.1s,baz=95,slow=12,SNR=3.5
**MAW Mawson 74.95 192** P **P** **14 40 22.5 +0.8**
2.2nm,0.5s,baz=14,slow=4.9,SNR=12
**GERES GERESS Array B 79.87 319** P **P** **14 40 49.6 -0.2**
2.6nm,0.9s,baz=89,slow=5.9,SNR=13
**DAVOX Davos/Dischmat 82.32 316** P **P** **14 41 03.0 -0.1**
1.8nm,0.5s,baz=30,slow=10.0,SNR=4.2
**VNDA Vanda 89.69 168** P **P** **14 41 38.6 +0.1**
0.9nm,1.0s,baz=287,slow=5.4,SNR=5.4
**SNAA Sanae 96.05 198** LR LR 15 16 32.9
comp=Z,22nm,21.2s,baz=184,slow=30
**NVAR Mina Array Bea 128.34 32** PKP **PKPdf** **14 47 48.9 +0.5**
0.3nm,0.4s,baz=261,slow=4.5,SNR=6.3
**CPUP Villa Florida 144.40 229** PKP **PKPab** **14 48 16.2 +0.1**
5.7nm,0.8s,baz=92,slow=4.9,SNR=9.6
**LPAZ La Paz 158.24 236** PKPab **PKPab** **14 49 13.4 -0.5**
0.9nm,0.7s,baz=72,slow=5.8,SNR=4.1

*GRAL* ***14*** *14:31:20.7±0.3, 33˚.58N×36˚.02E, h16km±6km, MD2.9*
*CSEM* ***14*** *14:31:21.1±0.2, 33˚.61N×35˚.91E, h12km, ML2.2, Error ellipse: s-maj=6.8km s-min=3.8km az=45.0*
*NSSC* ***14*** *14:31:22.4±1.4, 33˚.59N×35˚.97E, h15km±4km, ML2.2*
**ISC 14 14:31:21.2±1.0, 33˚.63N±0˚.03×35˚.96E±0˚.04, h14km±9km, n19, σ0°51/30, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCY** | **Rachaya** | **0.17** | **220** | *e*P | **Pg** | **14 31 24.9** | **-0.5** |
| RCY | | | | *e*S | **Sg** | **14 31 28.1** | **-0.1** |
| **BRBR** | **Barbar** | **0.21** | **183** | *e*P | **Pg** | **14 31 25.9** | **-0.3** |
| BRBR | | | | *e*S | **Sb** | **14 31 30.8** | **-0.1** |
| BRBR | | | | AML | AML | 14 31 31.2 | |
| | comp=E,493nm,0.6s | | | | | | |
| BRBR | | | | AML | AML | 14 31 36.5 | |
| | comp=N,930nm,0.5s | | | | | | |
| **BRBR** | **Barbar** | **0.21** | **183** | *e*P | **Pg** | **14 31 25.9** | **-0.3** |
| BRBR | | | | *e*S | **Sb** | **14 31 30.8** | **-0.1** |
| | comp=N,930nm,0.5s | | | | | | |
| **QASN** | **Qassioun** | **0.28** | **109** | *e*P | **Pb** | **14 31 27.9** | **-0.2** |
| QASN | | | | *e*S | **Sb** | **14 31 32.8** | **+0.1** |
| QASN | | | | AML | AML | 14 31 39.8 | |
| | comp=N,898nm,0.4s | | | | | | |
| QASN | | | | AML | AML | 14 31 39.9 | |
| | comp=E,446nm,0.3s | | | | | | |
| **QASN** | **Qassioun** | **0.28** | **109** | *e*P | **Pb** | **14 31 27.9** | **-0.2** |
| QASN | | | | *e*S | **Sb** | **14 31 32.8** | **+0.1** |
| | comp=E,446nm,0.3s | | | | | | |
| **DQRL** | **Deir Qamar** | **0.34** | **284** | *e*P | **Pg** | **14 31 28.2** | **0.0** |
| **DQRL** | **Deir Qamar** | **0.34** | **284** | *e*P | **Pg** | **14 31 28.2** | **0.0** |
| **BHL** | **Bhannes** | **0.38** | **317** | *e*P | **Pg** | **14 31 28.9** | **-0.1** |
| BHL | | | | *e*S | **Sg** | **14 31 35.0** | **+0.8** |
| **BHL** | **Bhannes** | **0.38** | **317** | *e*P | **Pg** | **14 31 28.9** | **-0.1** |
| BHL | | | | *e*S | **Sg** | **14 31 35.0** | **+0.8** |
| **TOTH** | **TOTAH** | **0.47** | **124** | *e*P | **Pb** | **14 31 31.7** | **+0.4** |
| TOTH | | | | *e*S | **Sg** | **14 31 37.5** | **+0.6** |
| TOTH | | | | AML | AML | 14 31 39.9 | |
| | comp=N,133nm,0.2s | | | | | | |
| TOTH | | | | AML | AML | 14 31 44.0 | |
| | comp=E,111nm,0.3s | | | | | | |
| **TOTH** | **TOTAH** | **0.47** | **124** | *e*P | **Pb** | **14 31 31.7** | **+0.4** |
| TOTH | | | | *e*S | **Sg** | **14 31 37.5** | **+0.6** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=E,111nm,0.3s | | | | | | | |
| **HWQ** | **Hawqa** | **0.65** | **359** | *eP* | | **Pg** | **14 31 33.2** | **-0.9** |
| **HWQ** | **Hawqa** | **0.65** | **359** | *eP* | | **Pg** | **14 31 33.2** | **-0.9** |
| **SALA** | **Sala** | **1.12** | **144** | *eP* | | **Pg** | **14 31 43.0** | **+0.2** |
| SALA | | | | *eS* | | **Sb** | **14 31 55.9** | **-1.0** |
| SALA | | | | AML | | AML | 14 32 02.6 | |
| | comp=N,60nm,0.3s | | | | | | | |
| SALA | | | | AML | | AML | 14 32 03.2 | |
| | comp=E,9.6nm,0.5s | | | | | | | |
| **SALA** | **Sala** | **1.12** | **144** | *eP* | | **Pg** | **14 31 43.0** | **+0.2** |
| SALA | | | | *eS* | | **Sb** | **14 31 55.9** | **-1.0** |
| | comp=E,10.0nm,0.5s | | | | | | | |
| **ROOS** | **tl_alroos** | **1.23** | **63** | *eP* | | **Pg** | **14 31 45.0** | **+0.1** |
| **ROOS** | **tl_alroos** | **1.23** | **63** | *eP* | | **Pg** | **14 31 45.0** | **+0.1** |
| **ZALF** | **Zalf** | **1.35** | **121** | *eP* | | **Pg** | **14 31 46.8** | **-0.3** |
| **ZALF** | **Zalf** | **1.35** | **121** | *eP* | | **Pg** | **14 31 46.8** | **-0.3** |

*JMA **14** 14:39:32.7±0.1,24.2′10N×121.7′65E,h5km±2km,M2.3*
*ISCJB **14** 14:39:33.1±0.4,24.2′12N±0.0′02×121.7′73E±0.0′02,h10km±3km, Error ellipse: s-maj=3.7km s-min=2.4km az=38.7*
*TAP **14** 14:39:33.2,24.2′13N×121.7′68E,h12km,ML3.0,C*

**ISC 14 14:39:33.1±0.9,24.2′11N±0.0′02×121.7′70E±0.0′03,h13km±6km, n42,σ0.950/65,6C-1D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWD** | **Chiawan** | **0.10** | **251** | *i* P | **Pg** | **14 39 36.0** | **-0.1** |
| | baz=235 | | | | | | |
| TWD | | | | *i* S | **Sg** | **14 39 38.1** | **-0.2** |
| | baz=235 | | | | | | |
| **HWA** | **Hwalien** | **0.16** | **213** | P | **Pg** | **14 39 37.5** | **+0.6** |
| | baz=205 | | | | | | |
| **EHP** | **Heping Village** | **0.20** | **10** | *eP* | **Pb** | **14 39 38.8** | **+0.1** |
| | baz=16 | | | | | | |
| EHP | | | | *eS* | **Sb** | **14 39 41.8** | **-0.6** |
| | baz=16 | | | | | | |
| **ENA** | **Nanau** | **0.32** | **7⇑** | *iP* | **Pg** | **14 39 39.6** | **0.0** |
| | baz=10.0 | | | | | | |
| ENA | | | | *i* S | **Sg** | **14 39 44.0** | **0.0** |
| | baz=10.0 | | | | | | |
| **ESL** | **Shilin** | **0.39** | **220** | *i* P | **Pg** | **14 39 40.9** | **0.0** |
| | baz=223 | | | | | | |
| ESL | | | | S | **Sb** | **14 39 47.1** | **-0.6** |
| | baz=223 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.40** | **275⇑** | *iP* | **Pg** | **14 39 41.0** | **-0.3** |
| | baz=272 | | | | | | |
| WHF | | | | *i* S | **Sg** | **14 39 46.3** | **-0.5** |
| | baz=272 | | | | | | |
| **NNS** | **Nan Shan** | **0.44** | **318⇑** | *iP* | **Pg** | **14 39 41.9** | **-0.1** |
| | baz=318 | | | | | | |
| NNS | | | | *i* S | **Sg** | **14 39 47.8** | **-0.1** |
| | baz=318 | | | | | | |
| **TWT** | **Tachien** | **0.50** | **286** | P | **Pb** | **14 39 43.4** | **-0.5** |
| | baz=284 | | | | | | |
| TWT | | | | *i* S | **Sb** | **14 39 50.0** | **-1.1** |
| | baz=284 | | | | | | |
| **TWC** | **Suao** | **0.51** | **15⇑** | *iP* | **Pg** | **14 39 43.3** | **+0.1** |
| | baz=11 | | | | | | |
| TWC | | | | S | **Sg** | **14 39 50.1** | **0.0** |
| | baz=11 | | | | | | |
| **ENTT** | **Nioudou** | **0.54** | **347⇑** | *iP* | **Pg** | **14 39 43.9** | **+0.1** |
| | baz=348 | | | | | | |
| ENTT | | | | *i* S | **Sg** | **14 39 51.1** | **+0.1** |
| | baz=348 | | | | | | |
| **TWE** | **Neicheng** | **0.61** | **357⇑** | *iP* | **Pg** | **14 39 45.2** | **+0.2** |
| | baz=359 | | | | | | |
| TWE | | | | *i* S | **Sg** | **14 39 52.9** | **-0.2** |
| | baz=359 | | | | | | |
| **WDT** | **Danda** | **0.63** | **236⇓** | *iP* | **Pg** | **14 39 45.8** | **+0.3** |
| | baz=234 | | | | | | |
| WDT | | | | S | **Sg** | **14 39 54.3** | **+0.4** |
| | baz=234 | | | | | | |
| **NSK** | **Sanguang** | **0.64** | **331** | *i* P | **Pg** | **14 39 45.7** | **0.0** |
| | baz=331 | | | | | | |
| NSK | | | | *i* S | **Sg** | **14 39 54.0** | **-0.2** |
| | baz=331 | | | | | | |
| **ILA** | **Ilan** | **0.65** | **4** | *eP* | **Pg** | **14 39 45.4** | **-0.5** |
| | baz=358 | | | | | | |
| ILA | | | | *eS* | **Sg** | **14 39 54.8** | **+0.3** |
| | baz=358 | | | | | | |
| **EHY** | **Hungye** | **0.70** | **210** | *eP* | **Pg** | **14 39 46.7** | **0.0** |
| | baz=217 | | | | | | |
| EHY | | | | *eS* | **Sb** | **14 39 57.5** | **+0.8** |
| | baz=217 | | | | | | |
| **EGS** | | **0.76** | **16** | *eP* | **Pg** | **14 39 47.8** | **-0.1** |
| | baz=24 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.77** | **253** | *eP* | **Pb** | **14 39 48.2** | **-0.2** |
| | baz=251 | | | | | | |
| SMLT | | | | *eS* | **Sg** | **14 39 57.9** | **-0.3** |
| | baz=251 | | | | | | |
| **TYC** | **Yuchr** | **0.80** | **255** | *eP* | **Pb** | **14 39 48.7** | **-0.2** |
| | baz=254 | | | | | | |
| **NSTT** | **Nanjuang** | **0.82** | **309** | P | **Pb** | **14 39 49.4** | **+0.1** |
| | baz=309 | | | | | | |
| NSTT | | | | *i* S | **Sg** | **14 39 59.5** | **-0.4** |
| | baz=309 | | | | | | |
| **TWF1** | **Yuli** | **0.84** | **206** | *eP* | **Pg** | **14 39 49.1** | **-0.4** |
| | baz=216 | | | | | | |
| **TWA** | **Mucha** | **0.87** | **353** | *eP* | **Pg** | **14 39 50.0** | **0.0** |
| | baz=354 | | | | | | |
| **TWQ1** | **Liyutan** | **0.88** | **286** | P | **Pn** | **14 39 51.1** | **-0.2** |
| | baz=285 | | | | | | |
| **NSY** | **Sanyi** | **0.91** | **290** | *eP* | **Pn** | **14 39 52.5** | **+0.8** |
| | baz=289 | | | | | | |
| **YUS** | **Yu-Shan** | **0.93** | **228** | *eP* | **Pg** | **14 39 51.1** | **0.0** |
| | baz=217 | | | | | | |
| YUS | | | | *eS* | **Sn** | **14 40 04.9** | **-0.8** |
| | baz=217 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.93** | **16** | *eP* | **Pb** | **14 39 50.9** | **-0.2** |
| | baz=10.0 | | | | | | |
| **TCU** | **Taichung** | **0.94** | **272** | *eP* | **Pn** | **14 39 53.4** | **+1.4** |
| | baz=271 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.96** | **4** | *eP* | **Pb** | **14 39 51.6** | **-0.1** |
| | baz=4.0 | | | | | | |
| **ALS** | **Alishan** | **1.02** | **234** | *eP* | **Pg** | **14 39 52.9** | **0.0** |
| | baz=233 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.02** | **345** | *eP* | **Pn** | **14 39 53.6** | **+0.5** |
| | baz=345 | | | | | | |
| TWS1 | | | | *eS* | **Sn** | **14 40 07.9** | **+0.6** |
| | baz=345 | | | | | | |
| **CHN5** | **Tsauling** | **1.07** | **241** | *eP* | **Pb** | **14 39 53.5** | **0.0** |
| | baz=241 | | | | | | |
| CHN5 | | | | *eS* | **Sn** | **14 40 09.8** | **+1.1** |
| | baz=241 | | | | | | |
| **ELDTW** | **Lidau** | **1.11** | **214** | *eP* | **Pb** | **14 39 53.1** | **-1.2** |
| | baz=214 | | | | | | |
| **JYNG** | **Yonaguni jima** | **1.18** | **73** | P | **Pn** | **14 39 55.4** | **0.0** |
| **YOJ** | **Yonaguni jima** | **1.25** | **74** | P | **Pn** | **14 39 56.5** | **+0.3** |
| **STYT** | **Tauyuan** | **1.28** | **223** | *eP* | **Pn** | **14 39 56.4** | **-0.4** |
| | baz=222 | | | | | | |
| **WTP** | **Ta-pu** | **1.32** | **229** | *eP* | **Pb** | **14 39 58.0** | **+0.2** |
| | baz=229 | | | | | | |
| **TWG** | **Pinlang** | **1.41** | **204** | *eP* | **Pb** | **14 39 59.8** | **+0.5** |
| | baz=188 | | | | | | |
| **CHN1** | **Nanshi** | **1.42** | **230** | *eP* | **Pn** | **14 39 58.8** | **+0.1** |
| | baz=230 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.86** | **83** | P | **Pn** | **14 40 04.7** | **-0.1** |
| IRIF | | | | *eS* | **Sn** | **14 40 28.5** | **+0.3** |
| **EAST** | **Anshuo** | **1.89** | **205** | *eP* | **Pb** | **14 40 07.7** | **+0.1** |
| | baz=191 | | | | | | |
| **JKRS** | **Kuro-shima** | **2.11** | **86** | P | **Pn** | **14 40 08.5** | **+0.3** |
| JKRS | | | | *eS* | **Sn** | **14 40 35.9** | **+1.6** |
| **JIJ** | **Ishigaki jima** | **2.24** | **83** | P | **Pn** | **14 40 09.7** | **-0.3** |
| JIJ | | | | *eS* | **Sn** | **14 40 37.7** | **+0.2** |
| **JISG** | **Ishigakijimahi** | **2.43** | **78** | P | **Pn** | **14 40 12.1** | **-0.4** |
| JISG | | | | *eS* | **Sn** | **14 40 41.5** | **-0.6** |

**MEX 14 14:45:25.7±0.3,15.71N×94.01W,h74km±8km,MD3.7, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.77** | **90** | *eP* | Pn | 14 45 40.3 | -1.3 |
| PCIG | | | | *eS* | Sn | 14 45 51.7 | -1.7 |
| **CCIG** | **Comitan** | **1.89** | **72** | *eP* | Pn | 14 45 54.9 | -1.4 |
| CCIG | | | | *eS* | Sn | 14 46 17.6 | -1.8 |

*AUST **14** 14:44:51.1±32.0,6.59S×121.90E,h7km±4km, Error ellipse: s-maj=5.5km s-min=1.1km az=16.0*
*IDC **14** 14:45:42.5±1.9,11.02S×123.29E,h0km,mb3.8/1, mb1 4.2/3,mb1mx3.6/29,mbtmp4.0/3,ML3.9/2,Error ellipse: s-maj=34.2km s-min=14.2km az=108.0*

**ISC 14 14:45:45.2±1.3,10.9S±0.1×123.8E±0.3,h10km,n8, σ2.986/7,Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **0.66** | **350** | Pg | **Pg** | **14 45 59.5** | **+1.4** |
| | 128nm,0.3s,baz=26,slow=3.3,SNR=166 | | | | | | |
| BATI | | | | Lg | Lg | 14 46 12.1 | |
| | 178nm,0.3s,baz=288,slow=20,SNR=13 | | | | | | |
| BATI | | | | LR | LR | 14 46 26.5 | |
| | comp=Z,104nm,19.3s,baz=107,slow=50 | | | | | | |
| **KNRA** | **Kununurra** | **6.81** | **135** | P | Pn | 14 47 29.9 | +4.6 |
| | baz=11,SNR=38 | | | | | | |
| **MTN** | **Manton Dam** | **7.46** | **106** | P | Pn | 14 47 29.6 | -4.7 |
| | baz=11,SNR=37 | | | | | | |
| **KDU** | **Kakadu** | **8.71** | **103** | P | Pn | 14 47 44.4 | -6.9 |
| | baz=12,SNR=9.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.60** | **133** | Pn | **Pn** | **14 48 58.6** | **+0.2** |
| | 0.6nm,0.3s,baz=310,slow=15,SNR=38 | | | | | | |
| WRA | | | | Sn | **Sn** | **14 51 27.4** | **-2.2** |
| | 1.0nm,0.3s,baz=319,slow=23,SNR=13 | | | | | | |
| **WRKA** | **Warakurna** | **14.73** | **164** | P | **P** | **14 49 20.2** | **+0.2** |
| | baz=19,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **15.97** | **144** | Pn | **P** | **14 49 32.8** | **-1.0** |
| | 0.5nm,0.3s,baz=318,slow=12,SNR=45 | | | | | | |
| ASAR | | | | Sn | **Sn** | **14 52 32.2** | **+4.6** |
| | 0.3nm,0.3s,baz=318,slow=18,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.31** | **331** | P | **P** | **14 56 44.9** | **-1.8** |
| | 0.6nm,0.6s,baz=126,slow=6.3,SNR=4.6 | | | | | | |

*DDA **14** 14:54:28.7,37.5′51N×35.7′72E,h21km,Md2.9*
*ISK **14** 14:54:28.1,37.5′52N×35.7′73E,h5km,MD2.6*
*ISCJB **14** 14:54:29.3±0.5,37.4′49N±0.0′03×35.7′75E±0.0′03,h3km±5km, Error ellipse: s-maj=4.5km s-min=3.5km az=161.0*
*CSEM **14** 14:54:29.5±0.2,37.4′48N×35.7′77E,h8km,MD2.9,Error ellipse: s-maj=4.6km s-min=4.0km az=165.0*

**ISC 14 14:54:29.2±1.1,37.5′0N±0.0′02×35.7′4E±0.0′02,h12km±9km, n34,σ0.959/51,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANDN** | **Andirin** | **0.49** | **81** | *i* P | **Pg** | **14 54 38.9** | **+0.1** |
| ANDN | | | | *i* S | **Sb** | **14 54 46.8** | **-0.2** |
| **ANDN** | **Andirin** | **0.49** | **81** | P | **Pg** | **14 54 38.9** | **+0.1** |
| ANDN | | | | S | **Sb** | **14 54 46.8** | **-0.2** |
| **CEYT** | **Ceyhan** | **0.49** | **179** | *e*PG | **Pg** | **14 54 39.0** | **+0.2** |
| CEYT | | | | *e*SG | **Sb** | **14 54 47.9** | **+1.0** |
| **CEYT** | **Ceyhan** | **0.49** | **179** | *e*Pg | **Pg** | **14 54 39.0** | **+0.2** |
| CEYT | | | | *e*Sg | **Sb** | **14 54 47.9** | **+1.0** |
| **KARA** | **Karaisali** | **0.59** | **246** | *e*PG | **Pg** | **14 54 40.6** | **-0.1** |
| KARA | | | | *e*SG | **Sb** | **14 54 49.7** | **-0.2** |
| **KARA** | **Karaisali** | **0.59** | **246** | *e*Pg | **Pg** | **14 54 40.6** | **-0.1** |
| KARA | | | | *e*Sg | **Sb** | **14 54 49.7** | **-0.2** |
| **GULE** | **Gulek** | **0.80** | **254** | *i* S | **Sb** | **14 54 56.1** | **+0.3** |
| **GULE** | **Gulek** | **0.80** | **254** | S | **Sb** | **14 54 56.1** | **+0.3** |
| **KAMA** | **Osmaniye** | **0.81** | **113** | P | **Pg** | **14 54 44.4** | **-0.3** |
| KAMA | | | | S | **Sb** | **14 54 57.3** | **+1.2** |
| **AYKD** | **Aykdinkavak** | **0.86** | **96** | P | **Pg** | **14 54 45.2** | **-0.5** |
| AYKD | | | | S | **Sg** | **14 54 57.4** | **+0.5** |
| **KMRS** | **Kahramanmaras** | **0.93** | **89** | *e*PG | **Pg** | **14 54 46.9** | **-0.1** |
| **KMRS** | **Kahramanmaras** | **0.93** | **89** | *e*Pg | **Pg** | **14 54 46.9** | **-0.1** |
| **KRTS** | **Karatas** | **0.97** | **197** | *e*PG | **Pn** | **14 54 48.5** | **-0.1** |
| **KRTS** | **Karatas** | **0.97** | **197** | *e*Pg | **Pn** | **14 54 48.5** | **-0.1** |
| **SARI** | **SarD1z-Kayseri** | **1.05** | **31** | *e*PG | **Pb** | **14 54 49.2** | **-0.2** |
| **NIG** | **Nigde** | **1.08** | **305** | *e*PG | **Pn** | **14 54 50.2** | **-0.1** |
| **NIG** | **Nigde** | **1.08** | **305** | *e*Pg | **Pn** | **14 54 50.2** | **-0.1** |
| **TAHT** | **Tahtakopru-Hat** | **1.18** | **162** | *e*PN | **Pb** | **14 54 51.7** | **+0.2** |
| **TAHT** | **Tahtakopru-Hat** | **1.18** | **162** | *e*Pn | **Pb** | **14 54 51.7** | **+0.2** |
| **PINB** | **Pinarbasi** | **1.28** | **24** | *i* P | **Pg** | **14 54 55.4** | **+1.5** |
| PINB | | | | *i* S | **Sn** | **14 55 10.3** | **-0.2** |
| **PINB** | **Pinarbasi** | **1.28** | **24** | P | **Pg** | **14 54 55.4** | **+1.5** |
| PINB | | | | S | **Sn** | **14 55 10.3** | **-0.2** |
| **KUZU** | **Kuzuini** | **1.29** | **124** | *i* P | **Pn** | **14 54 51.4** | **-1.7** |
| KUZU | | | | *i* S | **Sn** | **14 55 10.6** | **+0.2** |
| **KUZU** | **Kuzuini** | **1.29** | **124** | P | **Pn** | **14 54 51.4** | **-1.7** |
| KUZU | | | | S | **Sn** | **14 55 10.6** | **+0.2** |
| **BNN** | **Bunyan** | **1.35** | **4** | *e*PN | **Pg** | **14 54 54.9** | **-0.2** |
| **BNN** | **Bunyan** | **1.35** | **4** | *e*Pn | **Pg** | **14 54 54.9** | **-0.2** |
| **GULA** | **Gulagac** | **1.45** | **306** | *e*PN | **Pg** | **14 54 56.9** | **-0.2** |
| **GULA** | **Gulagac** | **1.45** | **306** | *e*Pn | **Pg** | **14 54 56.9** | **-0.2** |
| **YAYL** | **Yayladag** | **1.50** | **168** | *i* P | **Pn** | **14 54 56.0** | **+0.1** |
| YAYL | | | | *i* S | **Sn** | **14 55 15.6** | **+0.2** |
| **YAYL** | **Yayladag** | **1.50** | **168** | P | **Pn** | **14 54 56.0** | **+0.1** |
| YAYL | | | | S | **Sn** | **14 55 15.6** | **+0.2** |
| **YESY** | **Yesilyurt** | **1.61** | **281** | *e*PN | **Pb** | **14 54 59.2** | **+0.4** |
| **YESY** | **Yesilyurt** | **1.61** | **281** | *e*Pn | **Pb** | **14 54 59.2** | **+0.4** |
| **KIZK** | **Mersin** | **1.63** | **232** | *i* P | **Pb** | **14 54 59.1** | **-0.1** |
| KIZK | | | | *i* S | **Sg** | **14 55 21.3** | **-0.4** |
| **KIZK** | **Mersin** | **1.63** | **232** | P | **Pb** | **14 54 59.1** | **-0.1** |
| KIZK | | | | S | **Sg** | **14 55 21.3** | **-0.4** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.95** | **12** | P | **Pb** | **14 55 04.5** | **-0.3** |
| CUSAR | | | | S | **Sb** | **14 55 29.8** | **+0.6** |

*ISCJB **14** 15:07:57.9±1.1,55.5′51N±0.0′03×163.7′25E±0.0′06,h9km±7km, mb3.7/15,Error ellipse: s-maj=5.9km s-min=4.2km az=13.4*
*KRSC **14** 15:07:57.0±1.3,55.4′46N×163.7′17E,h4km±30km,ML4.5*
*MOS **14** 15:07:57.4±0.9,55.5′4N×163.7′15E,h7km,mb4.1/7, Error ellipse: s-maj=9.3km s-min=6.3km az=63.7*
*IDC **14** 15:07:58.0±0.7,55.7′4N×162.8′5E,h0km,mb3.8/13, mb1 4.0/16,mb1mx3.9/32,mbtmp3.8/16,ML3.4/3,Error ellipse: s-maj=22.4km s-min=15.8km az=149.0*

**ISC 14 15:07:58.0±2.0,55.4′8N±0.0′03×163.0′7E±0.0′04,h5km±12km, n82,σ1.958/93,mb3.9/15,2C,Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBTR** | **Krutoberegovo** | **0.75** | **349** | *i* P | **Pb** | **15 08 12.9** | **-0.6** |
| KBTR | | | | *i* S | **Sb** | **15 08 24.9** | **+0.8** |
| **KBTR** | **Krutoberegovo** | **0.75** | **349** | PN | **Pb** | **15 08 12.9** | **-0.6** |
| KBTR | | | | S | **Sb** | **15 08 24.9** | **+0.8** |
| **KBG** | **Krutoberegovo** | **0.81** | **345** | *e*P | **Pb** | **15 08 14.1** | **-0.5** |
| KBG | | | | *e*S | **Sn** | **15 08 27.2** | **-1.3** |
| **MKZ** | **Mys Kozlova** | **1.20** | **220** | *e*P | **Pn** | **15 08 21.2** | **-0.3** |
| **MKZ** | **Mys Kozlova** | **1.20** | **220** | PN | **Pn** | **15 08 21.2** | **-0.3** |
| **SMKR** | **Semkarok** | **1.43** | **322** | *e*P | **Pn** | **15 08 24.1** | **-0.6** |
| SMKR | | | | *e*S | **Sg** | **15 08 45.9** | **+2.0** |
| **SMKR** | **Semkarok** | **1.43** | **322** | PN | **Pn** | **15 08 24.1** | **-0.6** |
| SMKR | | | | S | **Sg** | **15 08 45.9** | **+2.0** |
| **BDR** | **Baidarnaya** | **1.51** | **317** | *i* P | **Pn** | **15 08 26.1** | **+0.2** |
| **SRKR** | **Sorokina** | **1.59** | **319** | *e*P | **Pn** | **15 08 26.8** | **-0.2** |
| SRKR | | | | *e*S | **Sg** | **15 08 49.9** | **+0.8** |
| **SRKR** | **Sorokina** | **1.59** | **319** | PN | **Pn** | **15 08 26.8** | **-0.2** |
| SRKR | | | | S | **Sg** | **15 08 49.9** | **+0.8** |
| **KLY** | **Klyuchi** | **1.60** | **303** | *e*P | **Pn** | **15 08 24.9** | **-2.1** |
| KLY | | | | *e*S | **Sn** | **15 08 46.3** | **-1.7** |
| **KIRR** | **Kirishev** | **1.62** | **288** | *e*P | **Pb** | **15 08 28.3** | **-0.1** |
| **KZV** | **Kizimen** | **1.63** | **258** | *i* P | **Pn** | **15 08 27.5** | **-0.1** |
| **KMNR** | **Kamenistaya** | **1.63** | **281** | *e*P | **Pb** | **15 08 28.1** | **-0.6** |
| KMNR | | | | *e*S | **Sn** | **15 08 49.8** | **+0.8** |
| **KMNR** | **Kamenistaya** | **1.63** | **281** | PN | **Pb** | **15 08 28.1** | **-0.6** |
| KMNR | | | | S | **Sn** | **15 08 49.8** | **+0.8** |
| **TUMR** | **Tumrok** | **1.68** | **265** | *i* P | **Pb** | **15 08 28.9** | **-0.6** |
| **TUMR** | **Tumrok** | **1.68** | **265** | PN | **Pb** | **15 08 28.9** | **-0.6** |
| **KPT** | **Kopyto** | **1.69** | **288** | *e*P | **Pn** | **15 08 28.5** | **+0.2** |
| **KPT** | **Kopyto** | **1.69** | **288** | PN | **Pn** | **15 08 28.5** | **+0.2** |
| **KOZ** | **Kozyrevsk** | **1.90** | **289** | *i* P | **Pb** | **15 08 32.3** | **-0.9** |
| KOZ | | | | *e*S | **Sb** | **15 08 57.5** | **+0.3** |
| **KOZ** | **Kozyrevsk** | **1.90** | **289** | PN | **Pb** | **15 08 32.3** | **-0.9** |
| KOZ | | | | S | **Sb** | **15 08 57.5** | **+0.3** |
| **SRDR** | **Sredinnyy** | **2.07** | **295** | *i* P | **Pn** | **15 08 34.7** | **+1.2** |
| SRDR | | | | *e*S | **Sn** | **15 09 00.9** | **+1.2** |
| **SRDR** | **Sredinnyy** | **2.07** | **295** | PN | **Pn** | **15 08 34.7** | **+1.2** |
| SRDR | | | | S | **Sn** | **15 09 00.9** | **+1.2** |
| **ESO** | **Esso** | **2.52** | **282** | *e*P | **Pn** | **15 08 41.2** | **+1.6** |
| ESO | | | | *e*S | **Sb** | **15 09 13.4** | **-1.5** |
| **ESO** | **Esso** | **2.52** | **282** | PN | **Pn** | **15 08 41.2** | **+1.6** |
| ESO | | | | S | **Sb** | **15 09 13.4** | **-1.5** |
| **KII** | **Karymskiy** | **2.55** | **237** | P | **Pn** | **15 08 41.0** | **+0.9** |
| **KII** | **Karymskiy** | **2.55** | **237** | PN | **Pn** | **15 08 41.0** | **+0.9** |
| **SPN** | **Mys Shipunski** | **2.98** | **218** | *e*P | **Pn** | **15 08 47.4** | **+1.5** |
| SPN | | | | S | **Sb** | **15 09 25.2** | **-3.0** |
| **SPN** | **Mys Shipunski** | **2.98** | **218** | PN | **Pn** | **15 08 47.4** | **+1.5** |
| SPN | | | | S | **Sb** | **15 09 25.2** | **-3.0** |
| **NLC** | **Nalytchevo** | **3.18** | **225** | *e*S | **Sb** | **15 09 31.1** | **-2.8** |
| **SDLR** | **Sedlovina** | **3.29** | **230** | *e*P | **Pn** | **15 08 52.0** | **+1.6** |
| **SDLR** | **Sedlovina** | **3.29** | **230** | PN | **Pn** | **15 08 52.0** | **+1.6** |
| **SMAR** | **Somma** | **3.34** | **230** | *e*P | **Pn** | **15 08 52.5** | **+1.4** |
| **SMAR** | **Somma** | **3.34** | **230** | PN | **Pn** | **15 08 52.5** | **+1.4** |
| **AVH** | **Avacha** | **3.37** | **231** | *e*P | **Pn** | **15 08 53.6** | **+2.3** |
| **AVH** | **Avacha** | **3.37** | **231** | PN | **Pn** | **15 08 53.6** | **+2.3** |
| **UGLR** | **Uglovaya** | **3.37** | **229** | *e*P | **Pn** | **15 08 53.6** | **+2.2** |
| **KOK** | **Koryaka** | **3.39** | **232** | *e*P | Pn | 15 08 54.5 | +2.8 |
| **KOK** | **Koryaka** | **3.39** | **232** | PN | Pn | 15 08 54.5 | +2.8 |
| **GNL** | **Ganaly** | **3.48** | **241** | *e*P | **Pn** | **15 08 54.8** | **+1.9** |
| **GNL** | **Ganaly** | **3.48** | **241** | PN | **Pn** | **15 08 54.8** | **+1.9** |
| **PET** | **Petropavlovsk** | **3.57** | **228** | *e*P | Pn | 15 08 57.3 | +3.2 |
| PET | | | | *e*S | **Sb** | **15 09 40.9** | **-4.4** |
| **PET** | **Petropavlovsk** | **3.57** | **228** | *e*PN | Pb | 15 08 57.4 | -4.2 |
| PET | | | | *e*S | **Sb** | **15 09 42.4** | **-2.9** |
| PET | | | | pmax | pmax | | |
| | comp=Z,93nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,219nm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,175nm,0.6s | | | | | | |
| **OSSR** | **Ossora** | **3.78** | **360** | *e*P | **Pn** | **15 08 58.5** | **+1.5** |
| **PETK** | **Petropavlovsk-** | **3.94** | **235** | Pn | **Pn** | **15 09 01.6** | **+2.4** |
| | comp=E,1.8nm,0.3s,baz=83,slow=20,SNR=19 | | | | | | |
| PETK | | | | Sn | **Sn** | **15 09 50.3** | **+4.5** |
| | comp=E,1.6nm,0.3s,baz=58,slow=19,SNR=2.5 | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.94** | **235** | PN | **Pn** | **15 09 01.6** | **+2.4** |
| PETK | | | | | | 15 09 50.3 | |
| PETK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| PETK | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| **RUS** | **Russkaya** | **4.07** | **223** | *e*P | Pn | 15 09 04.0 | +3.1 |
| RUS | | | | *e*S | **Sn** | **15 09 51.5** | **+2.7** |
| **RUS** | **Russkaya** | **4.07** | **223** | PN | Pn | 15 09 04.0 | +3.1 |
| **APC** | **Apacha** | **4.31** | **236** | *e*P | Pb | 15 09 08.8 | -5.4 |
| **APC** | **Apacha** | **4.31** | **236** | PN | Pb | 15 09 08.8 | -5.4 |
| **ASAK** | **Asacha** | **4.35** | **227** | *e*P | Pb | 15 09 09.8 | -5.2 |
| **UGL** | **Uglegorsk** | **14.33** | **252** | *e*P | **Pn** | **15 11 21.6** | **+0.2** |
| UGL | | | | *e*S | **Sn** | **15 14 02.5** | **+1.8** |
| **ASAJ** | **Asahikawa** | **17.36** | **238** | Pn | **P** | **15 12 01.3** | **-1.0** |
| | comp=N,0.2nm,0.3s,baz=62,slow=14,SNR=3.8 | | | | | | |
| **YAK** | **Yakutsk** | **18.36** | **305** | P | **Pn** | **15 12 09.7** | **-3.3** |
| | comp=N,0.0nm,0.3s,baz=57,slow=2.2,SNR=2.5 | | | | | | |
| **HABR** | **Khabarovsk** | **18.54** | **259** | *e*P | **Pn** | **15 12 15.5** | **+0.1** |
| HABR | | | | *e*S | **Sn** | **15 15 44.8** | **+2.1** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,42nm,15.0s | | | | | | |
| **MAJO** | **Matsushiro** | **25.39** | **232** | *e*P | **P** | **15 13 26.5** | **+0.3** |
| **COLA** | **College** | **25.49** | **49⇑** | *iP* | **P** | **15 13 27.7** | **+0.9** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.6s | | | | | | |
| **ILAR** | **Eielson Array** | **25.91** | **49** | P | **P** | **15 13 29.5** | **-1.2** |
| | comp=Z,0.2nm,0.7s,baz=270,slow=9.4,SNR=6.7 | | | | | | |
| **ILAR** | **Eielson Array** | **25.91** | **49** | *e*P | **P** | **15 13 31.6** | **+1.0** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **34.71** | **281⇑** | *e*P | **P** | **15 14 49.7** | **+0.9** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **35.09** | **282** | P | **P** | **15 14 52.6** | **+0.6** |
| | comp=Z,0.2nm,0.4s,baz=51,slow=9.8,SNR=3.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.80** | **174** | T | T | 15 53 18.1 | |
| | baz=356,slow=76,SNR=47 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.82** | **174** | T | T | 15 53 36.1 | |
| | baz=356,slow=76,SNR=33 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.82** | **174** | T | T | 15 53 45.2 | |
| | baz=356,slow=76,SNR=33 | | | | | | |
| **YKA** | **Yellowknife Ar** | **40.23** | **45** | P | **P** | **15 15 34.4** | **-0.7** |
| | comp=Z,1.2nm,0.7s,baz=298,slow=9.1,SNR=2.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **40.23** | **45** | P | **P** | **15 15 34.4** | **-0.7** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **48.70** | **295** | P | **P** | **15 16 40.2** | **-2.9** |
| | comp=Z,0.3nm,0.3s,baz=63,slow=6.6,SNR=5.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **53.34** | **74** | P | P | 15 17 20.4 | +2.1 |
| | comp=Z,0.4nm,0.6s,baz=305,slow=8.8,SNR=3.8 | | | | | | |
| **FINES** | **FINESS Array B** | **58.60** | **337** | P | **P** | **15 17 54.4** | **-0.9** |
| | comp=Z,5.8nm,1.0s,baz=18,slow=9.4,SNR=4.3 | | | | | | |
| **FINES** | **FINESS Array B** | **58.60** | **337** | P | **P** | **15 17 54.4** | **-0.9** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **60.36** | **259** | P | **P** | **15 18 08.6** | **+0.5** |
| | comp=Z,0.4nm,0.4s,baz=25,slow=9.0,SNR=3.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **67.44** | **330** | P | **P** | **15 18 53.6** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=28,slow=7.0,SNR=2.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **68.14** | **70** | P | **P** | **15 19 00.9** | **+1.8** |
| | comp=Z,0.4nm,0.6s,baz=291,slow=2.8,SNR=3.4 | | | | | | |
| **KBZ** | **Khabaz** | **68.97** | **318** |

| | | | | | | |
|---|---|---|---|---|---|---|
| YSS | | | | AMB | AMB | 15 31 16.5 |
| | 43nm,0.3s | | | | | |
| YSS | | | | *e*S | **Sn** | **15 32 05.0 -0.6** |
| YSS | | | | A | A | 15 32 12.2 |
| | 37nm,0.3s | | | | | |

*CSEM **14** 16:02:32.9±0.2, 39°.25N×41°.02E, h2km, MD2.9, Error ellipse: s-maj=5.7km s-min=4.5km az=129.0*
*ISK **14** 16:02:32.9, 39°.31N×41°.07E, h8km, MD3.0*
*ISCJB **14** 16:02:33.6±0.5, 39°.30N±0°.02×41°.08E±0°.04, h4km±6km, Error ellipse: s-maj=5.3km s-min=3.7km az=15.0*
*DDA **14** 16:02:33.4, 39°.31N×41°.06E, h9km, Md2.9*
**ISC 14 16:02:33.0**±1.0, **39°.30N**±0°.02×**41°.03E**±0°.02, **h10**km±10km, **n32**, σ0**94**/**47**, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ECAT** | **Cat-ERZURUM** | **0.31** | **351** | *i* P | **Pg** | **16 02 39.6** | **+0.3** |
| ECAT | | | | *i* S | **Sb** | **16 02 44.9** | **-1.2** |
| **ECAT** | **Cat-ERZURUM** | **0.31** | **351** | P | **Pg** | **16 02 39.6** | **+0.3** |
| ECAT | | | | S | **Sb** | **16 02 45.0** | **-1.2** |
| **VRTB** | **Varto-Mus** | **0.35** | **113** | *e*PG | **Pg** | **16 02 40.0** | **-0.1** |
| **VRTB** | **Varto-Mus** | **0.35** | **113** | *e*Pg | **Pg** | **16 02 40.0** | **-0.1** |
| **BNGL** | **BINGOL** | **0.36** | **165** | P | **Pg** | **16 02 40.8** | **+0.7** |
| BNGL | | | | S | **Sg** | **16 02 46.0** | **+1.1** |
| **BNGB** | **Bingˆ¶l** | **0.41** | **222** | *e*PG | **Pg** | **16 02 41.9** | **+0.8** |
| BNGB | | | | *e*SG | **Sb** | **16 02 49.3** | **+0.5** |
| **BINT** | **Bingol** | **0.60** | **225** | *e*Pg | **Pg** | **16 02 41.9** | **-2.7** |
| BINT | | | | *e*Sg | **Sg** | **16 02 49.3** | **-3.2** |
| **EZM** | **Erzurum** | **0.66** | **23** | *e*PG | **Pg** | **16 02 45.8** | **0.0** |
| EZM | | | | *e*SG | **Sb** | **16 02 55.1** | **-1.0** |
| **ERZM** | **Erzurum** | **0.66** | **23** | *i* P | **Pg** | **16 02 45.6** | **-0.2** |
| ERZM | | | | *i* S | **Sg** | **16 02 54.7** | **+0.2** |
| **ERZM** | **Erzurum** | **0.66** | **23** | P | **Pg** | **16 02 45.6** | **-0.2** |
| ERZM | | | | S | **Sg** | **16 02 54.7** | **+0.2** |
| **EKAR** | **Karacoban** | **0.80** | **93** | *i* P | **Pb** | **16 02 49.2** | **0.0** |
| EKAR | | | | *i* S | **Sb** | **16 03 00.5** | **+0.4** |
| **EKAR** | **Karacoban** | **0.80** | **93** | P | **Pb** | **16 02 49.2** | **0.0** |
| EKAR | | | | S | **Sb** | **16 03 00.5** | **+0.4** |
| **ERZN** | **Erzincan** | **1.06** | **286** | *e*PN | **Pg** | **16 02 53.2** | **-0.1** |
| **SVAN** | **Silvan-Diyarba** | **1.15** | **174** | *e*PN | **Pn** | **16 02 55.3** | **+0.1** |
| **SVAN** | **Silvan-Diyarba** | **1.15** | **174** | *e*Pn | **Pn** | **16 02 55.3** | **+0.1** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.29** | **328** | *e*PN | **Pg** | **16 02 58.5** | **+0.7** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.29** | **328** | *e*Pn | **Pg** | **16 02 58.5** | **+0.7** |
| **PTK** | **Pertek** | **1.34** | **253** | *e*PN | **Pn** | **16 02 58.4** | **+0.4** |
| **PTK** | **Pertek** | **1.34** | **253** | *e*Pn | **Pn** | **16 02 58.4** | **+0.4** |
| **AGRB** | **Hanur-Agry** | **1.54** | **79** | *e*PN | **Pb** | **16 03 01.5** | **-0.3** |
| **AGRB** | **Hanur-Agry** | **1.54** | **79** | *e*Pn | **Pb** | **16 03 01.5** | **-0.3** |
| **KELT** | **Kelkit** | **1.61** | **302** | *i* P | **Pg** | **16 03 04.9** | **+0.9** |
| KELT | | | | *i* S | **Sg** | **16 03 26.2** | **+1.3** |
| **KELT** | **Kelkit** | **1.61** | **302** | P | **Pg** | **16 03 04.9** | **+0.9** |
| KELT | | | | S | **Sg** | **16 03 26.2** | **+1.3** |
| **SVRC** | **Sivrice-ELAZID** | **1.63** | **236** | *e*PN | **Pn** | **16 03 02.4** | **+0.4** |
| **SVRC** | **Sivrice-ELAZID** | **1.63** | **236** | *e*Pn | **Pn** | **16 03 02.4** | **+0.4** |
| **DDEM** | **Demirkent** | **1.69** | **19** | *i* P | **Pg** | **16 03 04.7** | **-0.6** |
| DDEM | | | | *i* S | **Sg** | **16 03 26.3** | **-0.9** |
| **DDEM** | **Demirkent** | **1.69** | **19** | P | **Pg** | **16 03 04.7** | **-0.6** |
| DDEM | | | | S | **Sg** | **16 03 26.3** | **-0.9** |
| **MAZI** | **Mazidag** | **1.89** | **194** | *e*PN | **Pn** | **16 03 06.7** | **+1.2** |
| **MAZI** | **Mazidag** | **1.89** | **194** | *e*Pn | **Pn** | **16 03 06.7** | **+1.2** |
| **ILIC** | **ilic-Erzincan** | **1.92** | **275** | *e*PN | **Pb** | **16 03 07.5** | **-0.6** |
| **ILIC** | **ilic-Erzincan** | **1.92** | **275** | *e*Pn | **Pb** | **16 03 07.6** | **-0.6** |
| **KEMA** | **Kemaliye** | **1.97** | **270** | P | **Pg** | **16 03 10.5** | **-0.3** |
| KEMA | | | | S | **Sg** | **16 03 37.6** | **+1.2** |

*DDA **14** 16:05:08.0, 38°.06N×30°.08E, h7km, Md2.8*
*ISK **14** 16:05:07.2, 38°.03N×30°.05E, h5km, MD2.4*
*CSEM **14** 16:05:08.7±0.3, 38°.02N×30°.11E, h15km, MD2.4, Error ellipse: s-maj=6.6km s-min=5.7km az=3.0*
*ISCJB **14** 16:05:09.2±0.8, 38°.04N±0°.04×30°.12E±0°.05, h13km±8km, Error ellipse: s-maj=6.5km s-min=5.6km az=39.9*
**ISC 14 16:05:08.1**±1.2, **38°.03N**±0°.03×**30°.10E**±0°.02, **h7**km±11km, **n15**, σ0**52**/30, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ISP** | **Isparta** | **0.39** | **121** | *e*PG | **Pg** | **16 05 16.2** | **+0.5** |
| ISP | | | | *e*SG | **Sb** | **16 05 24.1** | **+0.3** |
| **ISP** | **Isparta** | **0.39** | **121** | *e*Pg | **Pg** | **16 05 16.2** | **+0.5** |
| ISP | | | | *e*Sg | **Sb** | **16 05 24.1** | **+0.3** |
| **BAGO** | **Egridir - ISPA** | **0.55** | **94** | P | **Pg** | **16 05 18.8** | **+0.1** |
| BAGO | | | | S | **Sb** | **16 05 27.7** | **-0.5** |
| **KHAL** | **Karahalli** | **0.59** | **306** | *i* P | **Pg** | **16 05 19.4** | **-0.1** |
| KHAL | | | | *i* S | **Sb** | **16 05 30.5** | **+1.1** |
| **KHAL** | **Karahalli** | **0.59** | **306** | P | **Pg** | **16 05 19.4** | **-0.1** |
| KHAL | | | | S | **Sb** | **16 05 30.5** | **+1.1** |
| **SHUT** | **Suhut-Afyon** | **0.63** | **34** | *e*PG | **Pb** | **16 05 21.3** | **-0.3** |
| SHUT | | | | *e*SG | **Sb** | **16 05 31.1** | **+0.4** |
| **SHUT** | **Suhut-Afyon** | **0.63** | **34** | *e*Pg | **Pb** | **16 05 21.3** | **-0.3** |
| SHUT | | | | *e*Sg | **Sb** | **16 05 31.1** | **+0.4** |
| **GOLH** | **Golhisar** | **0.90** | **209** | *i* P | **Pg** | **16 05 25.1** | **-0.2** |
| GOLH | | | | *i* S | **Sb** | **16 05 39.1** | **+0.8** |
| **GOLH** | **Golhisar** | **0.90** | **209** | P | **Pg** | **16 05 25.1** | **-0.2** |
| GOLH | | | | S | **Sb** | **16 05 39.1** | **+0.8** |
| **DNZL** | **Cakiroluk** | **0.90** | **248** | *i* P | **Pn** | **16 05 27.0** | **-0.3** |
| DNZL | | | | *i* S | **Sb** | **16 05 39.1** | **+0.7** |
| **DNZL** | **Cakiroluk** | **0.90** | **248** | P | **Pn** | **16 05 27.0** | **-0.3** |
| DNZL | | | | S | **Sb** | **16 05 39.1** | **+0.7** |
| **KULA** | **Kula-Manisa** | **1.23** | **294** | *e*PN | **Pb** | **16 05 31.1** | **-0.7** |
| KULA | | | | *e*SN | **Sn** | **16 05 48.9** | **+0.1** |
| **KULA** | **Kula-Manisa** | **1.23** | **294** | *e*Pn | **Pb** | **16 05 31.1** | **-0.7** |
| KULA | | | | *e*Sn | **Sn** | **16 05 48.9** | **+0.1** |
| **MANT** | **Manisa** | **1.30** | **291** | *i* P | **Pn** | **16 05 32.8** | **-0.1** |
| MANT | | | | *i* S | **Sg** | **16 05 49.9** | **0.0** |
| **MANT** | **Manisa** | **1.30** | **291** | P | **Pn** | **16 05 32.8** | **-0.1** |
| MANT | | | | S | **Sg** | **16 05 49.9** | **0.0** |

*BJI **14** 16:23:10.7, 37°.98N×71°.34E, h2km, mb4.3/3, mB4.8/1, ML3.7/4, Ms3.9/2, Ms7 3.5/2*
*IDC **14** 16:23:11.2±2.2, 38°.14N×71°.58E, h0km, mb4.0/5, mb1 4.0/12, mb1mx3.7/47, mbtmp3.9/12, ML3.6/7, MS2.8/2, Ms1 2.8/2, ms1mx2.4/41, Error ellipse: s-maj=38.8km s-min=14.1km az=144.0*
*NNC **14** 16:23:15.6±1.2, 38°.07N×71°.14E, h107km±17km, mb3.5, mpv4.1, Error ellipse: s-maj=12.1km s-min=5.8km az=154.0*
**ISC 14 16:23:12.1**±0.6, **38°.02N**±0°.04×**71°.35E**±0°.04, **h10**km, **n42**, σ1§**77**/53, **mb4.0**/6, **16C-13D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.13** | **292** | ⇑Pn | **Pn** | **16 23 48.2** | **+0.3** |
| | 14nm,0.2s | | | | | | |
| DZET | | | | ⇑Pg | **Pg** | **16 23 51.9** | **-1.2** |
| | 236nm,0.4s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 16 24 20.0 | |
| | 924nm,0.8s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.60** | **39** | ⇑P | **Pb** | **16 23 57.2** | **-1.8** |
| | 194nm,0.6s | | | | | | |
| SFK | | | | ⇓S | **Sb** | **16 24 30.5** | **-0.6** |
| | 283nm,0.4s | | | | | | |
| **KSH** | **Kashi** | **3.91** | **66** | Pg | **Pn** | **16 24 13.9** | **+1.6** |
| KSH | | | | Sn | **Sn** | **16 24 56.9** | **-1.4** |
| KSH | | | | SMN | | | |
| | 340nm,1.2s | | | | | | |
| KSH | | | | SME | | | |
| | 240nm,0.8s | | | | | | |
| **CEP** | **Cherat** | **4.21** | **174** | P | **Pg** | **16 24 33.2** | **+0.5** |
| **AML** | **Almayashu** | **4.49** | **23** | P | **Pn** | **16 24 21.6** | **+1.1** |
| | SNR=21 | | | | | | |
| **MNAS** | **Manas** | **4.55** | **11** | ⇑Pn | **Pn** | **16 24 21.7** | **+0.5** |
| | 6.0nm,0.4s | | | | | | |
| MNAS | | | | ⇓Pg | **Pb** | **16 24 34.4** | **+2.3** |
| | 38nm,0.6s | | | | | | |
| MNAS | | | | ⇑Sn | **Sn** | **16 25 16.0** | **+1.9** |
| | 34nm,0.5s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 16 25 34.3 | |
| | 159nm,1.5s | | | | | | |
| **CHCP** | **Chirah Chowk** | **4.62** | **160** | P | **Sg** | **16 25 36.6** | **-3.7** |
| **UCH** | **Uchtor** | **4.85** | **29** | P | **Pn** | **16 24 26.9** | **+1.4** |
| | SNR=17 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.00** | **21** | P | **Pn** | **16 24 28.6** | **+1.4** |
| | SNR=20 | | | | | | |
| **KK31** | **Karatay Array** | **5.12** | **353** | Pn | **Pn** | **16 24 29.3** | **+0.4** |
| | 2.9nm,0.2s,baz=179,slow=12,SNR=21 | | | | | | |
| KK31 | | | | ⇑Pg | **Pb** | **16 24 42.4** | **+0.6** |
| | 16nm,0.6s,baz=170,slow=14,SNR=7.5 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **16 25 25.1** | **-2.9** |
| | 7.0nm,0.3s | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 16 25 43.9 | |
| | 30nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **5.20** | **27** | ⇑Pn | **Pn** | **16 24 31.4** | **+1.3** |
| | 7.1nm,0.3s | | | | | | |
| AAK | | | | ⇓Pg | **Pb** | **16 24 43.1** | **-0.1** |
| | 47nm,0.7s | | | | | | |
| AAK | | | | ⇑Sn | **Sn** | **16 25 31.2** | **+1.0** |
| | 60nm,0.9s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 16 25 52.6 | |
| | 79nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **5.20** | **27** | Pn | **Pn** | **16 24 31.6** | **+1.6** |
| | 8.2nm,0.3s,baz=180,slow=4.7,SNR=32 | | | | | | |
| AAK | | | | Pg | **Pb** | **16 24 42.7** | **-0.4** |
| | 10nm,0.3s,baz=193,slow=10,SNR=16 | | | | | | |
| AAK | | | | LR | LR | 16 25 47.6 | |
| | comp=Z,17nm,20.2s,baz=213,slow=31 | | | | | | |
| **AAK** | **Ala-Archa** | **5.20** | **27** | P | **Pn** | **16 24 31.7** | **+1.6** |
| | SNR=18 | | | | | | |
| **KBK** | **Karagaybulak** | **5.39** | **30** | P | **Pn** | **16 24 34.6** | **+1.9** |
| | SNR=18 | | | | | | |
| **CHMS** | **Chumysh** | **5.61** | **26** | P | **Pn** | **16 24 37.3** | **+1.7** |
| | SNR=7.3 | | | | | | |
| **ULHL** | **Ulahol** | **5.65** | **40** | P | **Pn** | **16 24 37.8** | **+1.6** |
| | SNR=12 | | | | | | |
| **USP** | **Ospenovka** | **5.76** | **24** | P | **Pn** | **16 24 39.2** | **+1.5** |
| | SNR=23 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.87** | **32** | ⇑Pn | **Pn** | **16 24 40.4** | **+1.1** |
| | 6.6nm,0.3s | | | | | | |
| TKM2 | | | | ⇓Pg | **Pb** | **16 24 55.8** | **+1.1** |
| | 19nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 16 26 13.4 | |
| | 23nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **5.87** | **32** | P | **Pn** | **16 24 41.7** | **+2.3** |
| | SNR=20 | | | | | | |
| **PDGK** | **Podgornoye** | **8.14** | **47** | ⇓Pn | **Pn** | **16 25 11.7** | **+1.5** |
| | 4.0nm,0.7s | | | | | | |
| PDGK | | | | ⇑Pg | Pb | 16 25 39.6 | +6.5 |
| | 9.1nm,1.0s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 16 27 21.8 | |
| | 30nm,1.2s | | | | | | |
| **GEYT** | **Alibeck** | **10.45** | **274** | Pn | **Pn** | **16 25 44.0** | **+2.0** |
| | 0.8nm,0.3s,baz=88,slow=7.8,SNR=8.4 | | | | | | |
| GEYT | | | | Sn | **Sn** | **16 27 37.6** | **-1.6** |
| | 0.5nm,0.3s,baz=102,slow=12,SNR=3.4 | | | | | | |
| **MK31** | **Makanchi Array** | **11.92** | **39** | Pn | **Pn** | **16 26 02.8** | **+0.8** |
| | 4.9nm,0.7s,baz=210,slow=9.5,SNR=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **11.92** | **39** | Pn | **Pn** | **16 26 01.9** | **-0.1** |
| | 0.6nm,0.3s,baz=228,slow=13,SNR=25 | | | | | | |
| MKAR | | | | Lg | Lg | 16 29 26.5 | |
| | 0.1nm,0.3s,baz=234,slow=27,SNR=2.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.60** | **20** | ⇑Pn | Pn | 16 26 20.3 | -4.7 |
| | 1.7nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.60** | **20** | Pn | Pn | 16 26 20.7 | -4.2 |
| | 0.1nm,0.3s,baz=212,slow=12,SNR=5.3 | | | | | | |
| KURBB | | | | Lg | Lg | 16 30 17.5 | |
| | 0.0nm,0.3s,baz=208,slow=30,SNR=3.3 | | | | | | |
| **AB31** | **Akbulak array** | **13.93** | **327** | ⇑Pn | **Pn** | **16 26 26.5** | **-2.8** |
| | 1.0nm,0.5s,baz=164,slow=11,SNR=13 | | | | | | |
| AB31 | | | | ⇓Sn | Sn | 16 28 54.1 | -10 |
| | 3.4nm,0.7s,baz=143,slow=24,SNR=6.3 | | | | | | |
| **BVA0** | **Borovoye Array** | **15.03** | **358** | Pn | **Pn** | **16 26 42.9** | **-1.4** |
| | 2.2nm,0.7s,baz=158,slow=11,SNR=12 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.03** | **358** | Pn | **Pn** | **16 26 40.5** | **-3.8** |
| | 0.3nm,0.3s,baz=159,slow=12,SNR=5.5 | | | | | | |
| **ZRNK** | **Zerenda** | **15.03** | **355** | ⇑Pn | **Pn** | **16 26 41.2** | **-3.2** |
| | 1.5nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **15.06** | **358** | ⇑Pn | **Pn** | **16 26 44.0** | **-0.8** |
| | 7.9nm,1.0s | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.64** | **327** | ⇓Pn | **P** | **16 26 56.3** | **-0.3** |
| | 8.6nm,0.9s | | | | | | |
| AKTO | | | | ⇓Sn | Sn | 16 29 32.9 | -13 |
| | 5.9nm,1.3s | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.64** | **327** | Pn | **Pn** | **16 26 50.7** | **-1.7** |
| | 0.1nm,0.3s,baz=128,slow=18,SNR=3.5 | | | | | | |
| AKTO | | | | Sn | Sn | 16 29 31.4 | -14 |
| | 0.1nm,0.3s,baz=250,slow=18,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.43** | **26** | P | **P** | **16 27 24.5** | **-2.9** |
| | 0.8nm,0.3s,baz=220,slow=11,SNR=19 | | | | | | |
| **KBZ** | **Khabaz** | **22.20** | **294** | P | **P** | **16 28 10.2** | **+1.7** |
| | 1.7nm,0.7s,baz=90,slow=10,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **27.26** | **58** | P | **P** | **16 29 00.1** | **+3.6** |
| | 0.4nm,0.7s,baz=269,slow=8.1,SNR=2.0 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.00** | **72** | *e*P | **P** | **16 29 30.8** | **+1.0** |
| HHC | | | | PP | **PnPn** | **16 30 31.8** | **+1.2** |
| HHC | | | | S | **S** | **16 34 33.4** | **-1.2** |
| HHC | | | | PMZ | | | |
| | 30nm,1.0s | | | | | | |
| HHC | | | | PMZ | | | |
| | 66nm,3.8s | | | | | | |
| HHC | | | | LN | | | |
| | 140nm,14.8s | | | | | | |
| HHC | | | | LE | | | |
| | 82nm,12.3s | | | | | | |
| HHC | | | | LZ | | | |
| | 46nm,9.9s | | | | | | |
| **FINES** | **FINESS Array B** | **36.40** | **325** | P | **P** | **16 30 16.9** | **+0.6** |
| | 5.0nm,0.9s,baz=109,slow=12,SNR=8.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.86** | **337** | P | **P** | **16 30 45.0** | **-0.4** |
| | 4.0nm,0.8s,baz=95,slow=6.1,SNR=8.8 | | | | | | |
| **NB2** | **NORSAR Subarra** | **43.35** | **322** | P | **P** | **16 31 14.9** | **+0.7** |
| | comp=Z,1.7nm,0.6s,baz=94,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.35** | **322** | P | **P** | **16 31 14.2** | **+0.1** |
| | comp=Z,1.6nm,0.6s,baz=94,slow=8.1,SNR=5.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.04** | **268** | P | **P** | **16 34 01.6** | **+2.2** |
| | comp=Z,0.6nm,0.5s,baz=48,slow=5.9,SNR=9.0 | | | | | | |
| **LBTB** | **Lobatse** | **75.99** | **222** | LR | LR | 17 10 08.7 | |
| | comp=Z,34nm,18.8s,baz=116,slow=37 | | | | | | |

*IDC **14** 16:26:45.9±1.3, 22°.84S×171°.65E, h0km, mb4.2/6, mb1 4.5/7, mb1mx4.0/27, mbtmp4.2/7, ML4.6/1, MS3.4/1, Ms1 3.4/1, ms1mx2.7/25, Error ellipse: s-maj=64.1km s-min=25.2km az=163.0*
*ISCJB **14** 16:26:46.0±0.6, 22°.6S±0°.1×171°.56E±0°.07, h10km, mb4.2/11, Error ellipse: s-maj=19.3km s-min=8.9km az=179.6*
*NEIC **14** 16:26:48.2±6.3, 22°.62S×171°.62E, h15km±38km, mb4.3/5, Error ellipse: s-maj=22.2km s-min=13.5km az=167.0*
**ISC 14 16:26:47.6**±0.6, **22°.6S**±0°.2×**171°.60E**±0°.09, **h10**km, **n27**, σ1§**19**/21, **mb4.2**/11, **Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **4.80** | **275** | Pn | **Pn** | **16 28 01.1** | **+1.0** |
| | 23nm,0.3s,baz=182,slow=5.8,SNR=156 | | | | | | |
| DZM | | | | Sn | **Sn** | **16 28 55.1** | **-0.8** |
| | 5.0nm,0.3s,baz=0.0,slow=20,SNR=4.8 | | | | | | |
| **MSVF** | **Nonsavu** | **7.76** | **52** | *e*Pn | Pn | 16 28 49.0 | +8.3 |
| | 67nm,1.4s | | | | | | |
| **RAO** | **Raoul Island** | **11.51** | **127** | LR | LR | 16 32 58.4 | |
| | comp=Z,204nm,20.1s,baz=224,slow=33 | | | | | | |
| **AFI** | **Afiamalu** | **17.99** | **64** | P | **Pn** | **16 30 57.4** | **-0.7** |
| **ASAR** | **Alice Springs** | **34.62** | **261** | P | **P** | **16 33 37.0** | **-0.2** |
| | 3.0nm,1.0s,baz=86,slow=9.1,SNR=23 | | | | | | |
| **WRAB** | **Tennant Creek** | **34.76** | **267** | *e*P | **P** | **16 33 37.2** | **-1.2** |
| | 5.4nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **34.77** | **267** | P | **P** | **16 33 37.6** | **-0.8** |
| | 0.6nm,0.3s,baz=101,slow=8.7,SNR=30 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **41.13** | **353** | T | T | 17 18 14.3 | |
| | baz=173,slow=76,SNR=5.8 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **41.14** | **353** | T | T | 17 18 26.5 | |
| | baz=173,slow=76,SNR=3.9 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **41.15** | **353** | T | T | 17 18 13.5 | |
| | baz=173,slow=76,SNR=4.5 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.32** | **353** | T | T | 17 19 43.1 | |
| | baz=170,slow=74 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.32** | **353** | T | T | 17 19 54.0 | |
| | baz=170 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.34** | **353** | T | T | 17 19 53.1 | |
| | baz=170,slow=74 | | | | | | |
| **MBWA** | **Marble Bar** | **47.95** | **261** | *e*P | **P** | **16 35 26.7** | **0.0** |
| | 9.3nm,0.7s | | | | | | |
| **SBA** | **Scott Base** | **55.34** | **181** | P | **P** | **16 36 22.9** | **+1.8** |
| | 1.6nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.46** | **180** | P | **P** | **16 37 43.5** | **+0.1** |
| | 2.5nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.89** | **294** | P | **P** | **16 39 09.8** | **+2.1** |
| | 1.0nm,0.3s,baz=133,slow=4.2,SNR=11 | | | | | | |
| **CHTO** | **Chiang Mai** | **82.05** | **294** | P | **P** | **16 39 07.8** | **-0.8** |
| **SNAA** | **Sanae** | **85.89** | **182** | *e*P | **P** | **16 39 25.4** | **-2.0** |
| | 0.5nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.40** | **48** | P | **P** | **16 39 46.4** | **+1.4** |
| | 1.2nm,0.8s,baz=224,slow=8.1,SNR=8.9 | | | | | | |
| **SONM** | **Songino Array** | **91.23** | **322** | P | **P** | **16 39 53.4** | **+0.3** |
| | 0.9nm,0.8s,baz=128,slow=5.6,SNR=5.2 | | | | | | |
| **ILAR** | **Eielson Array** | **92.80** | **17** | P | **P** | **16 39 58.8** | **-1.1** |
| | 0.2nm,0.3s,baz=225,slow=6.2,SNR=2.4 | | | | | | |
| **GEYT** | **Alibeck** | **121.68** | **302** | PKP | **PKPdf** | **16 45 42.5** | **+0.5** |
| | 0.9nm,0.6s,baz=341,slow=8.3,SNR=2.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **140.59** | **306** | PKP | **PKPdf** | **16 46 19.0** | **+1.2** |
| | 0.6nm,0.8s,baz=88,slow=3.5,SNR=3.1 | | | | | | |
| **CLL** | **Collm** | **146.89** | **335** | *i* PKPbc | **PKPbc** | **16 46 30.7** | **+0.7** |
| | comp=Z,5.0nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **148.50** | **332** | PKPbc | **PKPbc** | **16 46 34.1** | **-0.5** |
| | comp=Z,0.8nm,0.5s,baz=31,slow=3.1,SNR=7.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **166.56** | **227** | PKP | **PKPdf** | **16 46 52.6** | **-1.6** |
| | comp=Z,0.8nm,1.0s,baz=28,slow=2.7,SNR=4.8 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **16 47 55.4** | **-0.8** |
| | comp=Z,0.2nm,0.6s,baz=124,slow=4.3,SNR=2.6 | | | | | | |

*DDA **14** 16:53:49.3, 38°.81N×27°.82E, h8km, Md2.8*
*ISK **14** 16:53:49.1, 38°.82N×27°.87E, h7km, MD2.7*
*CSEM **14** 16:53:50.0±0.1, 38°.84N×27°.84E, h5km, MD2.8, Error ellipse: s-maj=3.2km s-min=2.9km az=93.0*
**ISC 14 16:53:49.7**±0.8, **38°.83N**±0°.02×**27°.84E**±0°.02, **h7**km±5km, **n45**, σ0**59**/70, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKHS** | **Akhisar** | **0.05** | **338** | *i* P | **Pg** | **16 53 51.4** | **0.0** |
| AKHS | | | | *i* S | **Sg** | **16 53 52.7** | **+0.1** |
| **AKHS** | **Akhisar** | **0.05** | **338** | P | **Pg** | **16 53 51.4** | **0.0** |
| AKHS | | | | S | **Sg** | **16 53 52.7** | **+0.1** |
| **AKS** | **Akhisar** | **0.05** | **337** | *e*PG | **Pg** | **16 53 51.3** | **-0.1** |
| **AKS** | **Akhisar** | **0.05** | **337** | *e*Pg | **Pg** | **16 53 51.3** | **-0.1** |
| **IZM** | **Izmir** | **0.62** | **226** | *e*PG | **Pg** | **16 54 01.8** | **+0.1** |
| IZM | | | | *e*SG | **Sb** | **16 54 10.8** | **-1.1** |
| **IZM** | **Izmir** | **0.62** | **226** | *e*Pg | **Pg** | **16 54 01.8** | **+0.1** |
| IZM | | | | *e*Sg | **Sb** | **16 54 10.8** | **-1.1** |
| **DEMI** | **Demirci** | **0.72** | **72** | *i* P | **Pg** | **16 54 03.4** | **-0.1** |
| DEMI | | | | *i* S | **Sb** | **16 54 14.2** | **-0.3** |
| **DEMI** | **Demirci** | **0.72** | **72** | P | **Pg** | **16 54 03.4** | **-0.1** |
| DEMI | | | | S | **Sb** | **16 54 14.2** | **-0.3** |
| **KULA** | **Kula-Manisa** | **0.72** | **116** | *e*PG | **Pg** | **16 54 03.3** | **-0.1** |
| KULA | | | | *e*SG | **Sg** | **16 54 12.5** | **-0.3** |
| **KULA** | **Kula-Manisa** | **0.72** | **116** | *e*Pg | **Pg** | **16 54 03.3** | **-0.1** |
| **BLCB** | **Balcova** | **0.77** | **235** | *e*PG | **Pb** | **16 54 04.9** | **-0.4** |
| BLCB | | | | *e*SG | **Sb** | **16 54 15.3** | **-0.6** |
| **BLCB** | **Balcova** | **0.77** | **235** | *e*Pg | **Pb** | **16 54 04.9** | **-0.4** |
| BLCB | | | | *e*Sg | **Sb** | **16 54 15.3** | **-0.6** |
| **DKL** | **Dikili** | **0.77** | **289** | *e*PG | **Pb** | **16 54 04.8** | **-0.5** |
| **DKL** | **Dikili** | **0.77** | **289** | *e*Pg | **Pb** | **16 54 04.8** | **-0.5** |
| **BALB** | **Balikesir** | **0.81** | **2** | *e*PG | **Pg** | **16 54 05.6** | **+0.4** |
| **BALB** | **Balikesir** | **0.81** | **2** | *e*Pg | **Pg** | **16 54 05.6** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.88** | **177** | *e*PG | **Pb** | **16 54 06.8** | **-0.5** |
| AYDB | | | | *e*SG | **Sb** | **16 54 19.1** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.88** | **177** | *e*Pg | **Pb** | **16 54 06.8** | **-0.5** |
| **BALY** | **Balya** | **0.93** | **349** | *i* P | **Pg** | **16 54 07.5** | **+0.1** |
| BALY | | | | *i* S | **Sb** | **16 54 21.2** | **+0.7** |
| **BALY** | **Balya** | **0.93** | **349** | P | **Pg** | **16 54 07.5** | **+0.1** |
| BALY | | | | S | **Sb** | **16 54 21.2** | **+0.7** |
| **DST** | **Dursunbey** | **0.98** | **38** | *e*PG | **Pg** | **16 54 07.5** | **-1.0** |
| **DST** | **Dursunbey** | **0.98** | **38** | *e*Pg | **Pg** | **16 54 07.5** | **-1.0** |
| **AYVA** | **Ayvalik** | **1.01** | **298** | *i* P | **Pb** | **16 54 09.5** | **0.0** |
| AYVA | | | | *i* S | **Sb** | **16 54 23.0** | **0.0** |
| **AYVA** | **Ayvalik** | **1.01** | **298** | P | **Pb** | **16 54 09.5** | **0.0** |
| AYVA | | | | S | **Sb** | **16 54 23.0** | **0.0** |
| **AYDN** | **Tasoluk** | **1.17** | **178** | *i* P | **Pn** | **16 54 14.3** | **+1.9** |
| AYDN | | | | *i* S | **Sn** | **16 54 28.0** | **-0.6** |
| **AYDN** | **Tasoluk** | **1.17** | **178** | P | **Pn** | **16 54 14.3** | **+1.9** |
| AYDN | | | | S | **Sn** | **16 54 28.0** | **-0.6** |
| **GONE** | **Gonen-Balikesi** | **1.22** | **354** | *e*PN | **Pg** | **16 54 13.3** | **+0.2** |
| **GONE** | **Gonen-Balikesi** | **1.22** | **354** | *e*Pn | **Pg** | **16 54 13.3** | **+0.2** |
| **KHAL** | **Karahalli** | **1.37** | **109** | *i* P | **Pg** | **16 54 16.3** | **+0.3** |
| KHAL | | | | *i* S | **Sg** | **16 54 34.5** | **+0.7** |
| **KHAL** | **Karahalli** | **1.37** | **109** | P | **Pg** | **16 54 16.3** | **+0.3** |
| KHAL | | | | S | **Sg** | **16 54 34.5** | **+0.7** |
| **DNZL** | **Cakiroluk** | **1.48** | **140** | *i* P | **Pn** | **16 54 16.6** | **-0.3** |
| DNZL | | | | *i* S | **Sg** | **16 54 38.3** | **+1.0** |
| **DNZL** | **Cakiroluk** | **1.48** | **140** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KIF** | **Kilpisjarvi** | **1.97** | **359** | Pn | **Pb** | **17 04 16.0** | **-0.4** |
| KIF | | | | Lg | Lg | 17 04 42.8 | |
| **KIF** | **Kilpisjarvi** | **1.97** | **359** | Pn | **Pb** | **17 04 16.0** | **-0.4** |
| KIF | | | | Lg | Lg | 17 04 42.8 | |
| **KIF** | **Kilpisjarvi** | **1.97** | **359** | PG | **Pb** | **17 04 15.9** | **-0.6** |
| KIF | comp=Z,29nm,0.2s | | | MSG | | 17 04 39.5 | |
| KIF | | | | SG | **Sg** | **17 04 42.7** | **-0.4** |
| **KIF** | **Kilpisjarvi** | **1.97** | **359** | Pg | **Pb** | **17 04 15.8** | **-0.6** |
| KIF | SNR=22 | | | Lg | Lg | 17 04 42.8 | |
| **RNF** | **Rovaniemi** | **2.06** | **100** | PG | **Pn** | **17 04 16.9** | **+1.4** |
| RNF | | | | SG | **Sb** | **17 04 44.7** | **+0.8** |
| **RNF** | **Rovaniemi** | **2.06** | **100** | Pg | **Pn** | **17 04 16.9** | **+1.4** |
| RNF | | | | Sg | **Sb** | **17 04 44.7** | **+0.8** |
| **SGF** | **Sodankyl** | **2.21** | **77** | PG | **Pb** | **17 04 19.6** | **-0.9** |
| SGF | | | | SG | **Sb** | **17 04 49.5** | **+1.1** |
| **SGF** | **Sodankyl** | **2.21** | **77** | Pg | **Pb** | **17 04 19.6** | **-0.9** |
| **OUL** | **Oulu** | **2.82** | **132** | PB | **Pn** | **17 04 28.2** | **+2.3** |
| **OUL** | **Oulu** | **2.82** | **132** | Pb | **Pn** | **17 04 28.2** | **+2.3** |
| **ARA0** | **ARCESS Array S** baz=216,slow=14 | **3.03** | **32** | Pn | **Pn** | **17 04 29.5** | **+0.6** |
| ARA0 | | | | Sn | **Sn** | **17 05 06.3** | **+0.5** |
| **ARA0** | **ARCESS Array S** baz=216,slow=14 | **3.03** | **32** | Pn | **Pn** | **17 04 29.5** | **+0.6** |
| ARA0 | baz=215,slow=22 | | | Sn | **Sn** | **17 05 06.3** | **+0.5** |
| **ARA0** | **ARCESS Array S** SNR=50 | **3.03** | **32** | Pn | **Pn** | **17 04 29.5** | **+0.6** |
| ARA0 | SNR=50 | | | Sn | **Sn** | **17 05 06.3** | **+0.5** |
| **ARCES** | **ARCESS Array B** comp=Z,0.4nm,0.3s,baz=218,slow=14,SNR=31 | **3.03** | **32** | Pn | **Pn** | **17 04 28.9** | **+0.1** |
| ARCES | comp=Z,1.1nm,0.3s,baz=214,slow=21,SNR=11 | | | Sn | **Sn** | **17 05 06.2** | **+0.5** |
| **UMAU** | **Umeaa** | **3.17** | **182** | PB | **Pn** | **17 04 32.5** | **+1.7** |
| **UMAU** | **Umeaa** | **3.17** | **182** | Pb | **Pn** | **17 04 32.5** | **+1.7** |
| **VRF** | **Varrio** | **3.42** | **74** | PN | **Pn** | **17 04 34.9** | **+0.5** |
| VRF | | | | SG | **Sb** | **17 05 24.2** | **+0.9** |
| **VRF** | **Varrio** | **3.42** | **74** | Pn | **Pn** | **17 04 34.8** | **+0.5** |
| **MSF** | **Maaselka** | **3.44** | **105** | PN | **Pn** | **17 04 35.6** | **+1.1** |
| **MSF** | **Maaselka** | **3.44** | **105** | Pn | **Pn** | **17 04 35.6** | **+1.1** |
| **KU6** | **Riekki** baz=288 | **3.73** | **102** | PN | **Pn** | **17 04 39.4** | **+0.9** |
| **KU6** | **Riekki** | **3.73** | **102** | Pn | **Pn** | **17 04 39.3** | **+0.9** |
| **VAF** | **Ylistaro** baz=349 | **4.08** | **169** | PN | **Pn** | **17 04 45.3** | **+2.0** |
| **VAF** | **Ylistaro** | **4.08** | **169** | Pn | **Pn** | **17 04 45.3** | **+2.0** |
| **APA0** | **Apatity Array** baz=266,slow=11 | **4.70** | **78** | Pn | **Pn** | **17 04 51.0** | **-0.8** |
| APA0 | baz=281,slow=28 | | | Sn | **Sn** | **17 05 45.6** | **-1.3** |
| **APA0** | **Apatity Array** baz=266,slow=11 | **4.70** | **78** | Pn | **Pn** | **17 04 51.0** | **-0.8** |
| APA0 | baz=281,slow=28 | | | Sn | **Sn** | **17 05 45.6** | **-1.3** |
| **APA0** | **Apatity Array** SNR=50 | **4.70** | **78** | Pn | **Pn** | **17 04 51.0** | **-0.8** |
| APA0 | SNR=50 | | | Sn | **Sn** | **17 05 45.7** | **-1.3** |
| **FIA0** | **FINESS Array S** baz=347,slow=14 | **6.05** | **156** | Pn | **Pn** | **17 05 11.2** | **+0.9** |
| FIA0 | baz=344,slow=22 | | | Sn | **Sn** | **17 06 20.9** | **+0.9** |
| **FIA0** | **FINESS Array S** baz=347,slow=14 | **6.05** | **156** | Pn | **Pn** | **17 05 11.2** | **+0.9** |
| FIA0 | baz=344,slow=22 | | | Sn | **Sn** | **17 06 20.9** | **+0.9** |
| **FIA0** | **FINESS Array S** SNR=50 | **6.05** | **156** | Pn | **Pn** | **17 05 11.2** | **+0.9** |
| FIA0 | SNR=50 | | | Sn | **Sn** | **17 06 21.0** | **+0.9** |
| **FINES** | **FINESS Array B** comp=Z,0.1nm,0.3s,baz=348,slow=12,SNR=8.6 | **6.05** | **156** | Pn | **Pn** | **17 05 11.8** | **+1.6** |
| FINES | comp=Z,0.3nm,0.3s,baz=346,slow=20,SNR=6.6 | | | Sn | **Sn** | **17 06 20.2** | **+0.1** |
| **NB2** | **NORSAR Subarra** baz=24,slow=14 | **7.37** | **220** | Pn | **Pn** | **17 05 28.7** | **+0.2** |
| **NB2** | **NORSAR Subarra** baz=24,slow=14 | **7.37** | **220** | Pn | **Pn** | **17 05 28.7** | **+0.2** |
| **NB2** | **NORSAR Subarra** SNR=50 | **7.37** | **220** | Pn | **Pn** | **17 05 28.7** | **+0.2** |
| **NOA** | **NORSAR Array B** comp=Z,0.1nm,0.3s,baz=31,slow=12,SNR=2.2 | **7.37** | **220** | Pn | **Pn** | **17 05 28.2** | **-0.4** |
| NOA | comp=Z,0.1nm,0.3s,baz=48,slow=22,SNR=2.7 | | | Sn | **Sn** | **17 06 50.5** | **-2.3** |
| **HFS** | **Hagfors** baz=38,slow=14 | **7.64** | **208** | Pn | **Pn** | **17 05 31.2** | **-1.0** |
| **HFS** | **Hagfors** baz=38,slow=14 | **7.64** | **208** | Pn | **Pn** | **17 05 31.2** | **-1.0** |
| **HFS** | **Hagfors** comp=Z,0.1nm,0.3s,baz=24,slow=14,SNR=4.3 | **7.64** | **208** | Pn | **Pn** | **17 05 32.6** | **+0.4** |
| HFS | comp=Z,0.1nm,0.3s,baz=26,slow=27,SNR=2.7 | | | Sn | **Sn** | **17 06 55.5** | **-3.9** |
| **HFS** | **Hagfors** SNR=50 | **7.64** | **208** | Pn | **Pn** | **17 05 31.2** | **-1.0** |

*ISK **14** 17:10:35.6, 36°.73N×28°.26E, h9km, MD2.6*
*ISCJB **14** 17:10:36.6±0.8, 36°.74N±0°.05×28°.29E±0°.03, h8km±5km, Error ellipse: s-maj=8.2km s-min=4.1km az=18.6*
*DDA **14** 17:10:36.7, 36°.76N×28°.29E, h7km, Md2.8*
*CSEM **14** 17:10:36.9±0.4, 36°.74N×28°.27E, h12km, MD2.8, Error ellipse: s-maj=9.0km s-min=5.0km az=18.0*

**ISC 14 17:10:37.1±1.1, 36°.78N±0°.04×28°.28E±0°.03, h10km±9km, n25, σ0s96/40, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TURN** | **Turunc** | **0.27** | **71** | P | Pg | 17 10 38.5 | -4.1 |
| TURN | | | | S | Sg | 17 10 39.6 | -6.8 |
| **DALY** | **Dalyan (Mu˘la** | **0.30** | **84** | *e*PG | **Pg** | **17 10 42.5** | **-0.7** |
| DALY | | | | *e*SG | **Sg** | **17 10 47.7** | **+0.5** |
| **YER** | **Yerkesik** | **0.35** | **0** | *e*PG | **Pg** | **17 10 43.7** | **-0.4** |
| YER | | | | *e*SG | **Sg** | **17 10 50.4** | **+1.6** |
| **YER** | **Yerkesik** | **0.35** | **0** | *e*Pg | **Pg** | **17 10 43.7** | **-0.4** |
| YER | | | | *e*Sg | **Sg** | **17 10 50.4** | **+1.6** |
| **FETY** | **Fethiye** | **0.66** | **103** | *e*PG | **Pg** | **17 10 49.0** | **-0.9** |
| FETY | | | | *e*SG | **Sg** | **17 10 58.8** | **+0.1** |
| **BDRM** | **Kayabasi** | **0.73** | **293** | *i* P | **Pb** | **17 10 51.5** | **-0.4** |
| BDRM | | | | *i* S | **Sb** | **17 11 02.6** | **+0.7** |
| **BDRM** | **Kayabasi** | **0.73** | **293** | P | **Pb** | **17 10 51.5** | **-0.4** |
| BDRM | | | | S | **Sb** | **17 11 02.6** | **+0.7** |
| **BODT** | **Bodrum** | **0.82** | **290** | *e*PG | **Pg** | **17 10 52.2** | **-0.9** |
| **BODT** | **Bodrum** | **0.82** | **290** | *e*Pg | **Pg** | **17 10 52.2** | **-0.9** |
| **AYDN** | **Tasoluk** | **0.93** | **340** | *i* P | **Pn** | **17 10 56.4** | **+0.1** |
| AYDN | | | | *i* S | **Sn** | **17 11 10.3** | **+0.5** |
| **AYDN** | **Tasoluk** | **0.93** | **340** | P | **Pn** | **17 10 56.4** | **+0.1** |
| AYDN | | | | S | **Sn** | **17 11 10.3** | **+0.5** |
| **DNZL** | **Cakiroluk** | **1.09** | **34** | *i* P | **Pb** | **17 10 56.5** | **-1.7** |
| DNZL | | | | *i* S | **Sg** | **17 11 13.7** | **+1.3** |
| **DNZL** | **Cakiroluk** | **1.09** | **34** | P | **Pb** | **17 10 56.5** | **-1.7** |
| DNZL | | | | S | **Sg** | **17 11 13.7** | **+1.3** |
| **GOLH** | **Golhisar** | **1.12** | **66** | *i* P | **Pg** | **17 10 59.2** | **+0.5** |
| **GOLH** | **Golhisar** | **1.12** | **66** | P | **Pg** | **17 10 59.2** | **+0.5** |
| GOLH | | | | S | **Sb** | **17 11 10.9** | **-2.4** |
| **AKAS** | **Kas** | **1.20** | **117** | *i* P | **Pb** | **17 10 59.7** | **-0.4** |
| **AKAS** | **Kas** | **1.20** | **117** | P | **Pb** | **17 10 59.7** | **-0.4** |
| AKAS | | | | S | **Sn** | **17 11 18.3** | **+1.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.20** | **345** | *e*PN | **Pn** | **17 10 59.7** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.20** | **345** | *e*Pn | **Pn** | **17 10 59.7** | **-0.4** |
| **GCAM** | **G?zelcaml?** | **1.24** | **318** | *i* P | **Pn** | **17 10 59.9** | **-0.6** |
| GCAM | | | | *i* S | **Sb** | **17 11 16.6** | **0.0** |
| **GCAM** | **G?zelcaml?** | **1.24** | **318** | P | **Pn** | **17 10 59.9** | **-0.6** |
| GCAM | | | | S | **Sb** | **17 11 16.6** | **0.0** |
| **ELL** | **Elmali** | **1.31** | **91** | *e*PN | **Pb** | **17 11 01.6** | **-0.3** |
| **ELL** | **Elmali** | **1.31** | **91** | *e*Pn | **Pb** | **17 11 01.6** | **-0.3** |
| **KHAL** | **Karahalli** | **1.85** | **31** | *i* P | **Pn** | **17 11 10.1** | **+1.0** |
| KHAL | | | | *i* S | **Sn** | **17 11 32.4** | **-0.2** |
| **KHAL** | **Karahalli** | **1.85** | **31** | P | **Pn** | **17 11 10.1** | **+1.0** |
| KHAL | | | | S | **Sn** | **17 11 32.4** | **-0.2** |

*IGQ **14** 17:25:54±0.6, 1°.48S×77°.47W, h4km±32km, Mb4.1, Error ellipse: s-maj=4.9km s-min=2.4km az=232.6*
*ISCJB **14** 17:25:55.3±0.6, 1°.56S±0°.08×77°.11W±0°.07, h200km, mb3.6/5, Error ellipse: s-maj=11.4km s-min=9.9km az=18.6*
*IDC **14** 17:26:09.1±7.8, 2°.01S×77°.64W, h364km±94km, mb3.3/5, mb1 3.4/6, mb1mx3.1/35, mbtmp4.0/6, Error ellipse: s-maj=78.6km s-min=17.9km az=34.0*

**ISC 14 17:25:55.5±0.9, 1°.52S±0°.10×77°.22W±0°.10, h200km, n47, σ0s99/43, mb3.7/5, 8C-7D, Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BULB** | **Ulba Tungurahu** | **1.19** | **274** | ⇑P | **Pn** | **17 26 27.4** | **+0.3** |
| **BULB** | **Ulba Tungurahu** | **1.19** | **274** | ⇑S | **Sn** | **17 26 51.8** | **+0.4** |
| **BRUN** | **Tungurahua Vol** | **1.20** | **275** | ⇑P | **Pn** | **17 26 27.5** | **+0.4** |
| **RUN5** | **Runtun** | **1.21** | **275** | P | **Pn** | **17 26 27.4** | **+0.3** |
| **BPAT** | **Tungurahua Vol** | **1.21** | **271** | ⇑S | **Sn** | **17 26 52.3** | **+0.4** |
| **BPAT** | **Tungurahua Vol** | **1.21** | **271** | ⇑P | **Pn** | **17 26 28.7** | **+1.4** |
| **PAT1** | **Patacocha** | **1.22** | **271** | P | **Pn** | **17 26 28.6** | **+1.2** |
| **RETU** | **Refugio** | **1.23** | **273** | P | **Pn** | **17 26 28.8** | **+1.3** |
| **ARRY** | **Arrayan** | **1.23** | **271** | ⇑P | **Pn** | **17 26 28.5** | **+1.1** |
| **JUI6** | **Juive** | **1.25** | **275** | P | **Pn** | **17 26 27.5** | **0.0** |
| **PISA** | **Pisayambo** | **1.25** | **292** | P | **Pn** | **17 26 28.2** | **+0.5** |
| **BMAS** | **Trigal station** | **1.26** | **271** | ⇑P | **Pn** | **17 26 28.8** | **+1.2** |
| **BBIL** | **Ulba Tungurahu** | **1.27** | **273** | P | **Pn** | **17 26 27.5** | **-0.1** |
| **COV1** | **Cotopaxi Volc** | **1.41** | **307** | P | **Pn** | **17 26 30.3** | **+1.1** |
| **TAMB** | **Tambo** | **1.41** | **306** | P | **Pn** | **17 26 30.7** | **+1.7** |
| **IGUA** | **Igualata** | **1.42** | **271** | P | **Pn** | **17 26 29.3** | **+0.2** |
| **ANTI** | **Antisana** | **1.42** | **319** | ⇓P | **Pn** | **17 26 30.1** | **+0.9** |
| **RIOE** | **Riobamba** | **1.43** | **261** | ⇑P | **Pn** | **17 26 29.1** | **+0.2** |
| **BTAM** | **Cotopaxi Volca** | **1.45** | **306** | ⇓P | **Pn** | **17 26 30.2** | **+0.9** |
| **BMOR** | **Cotopaxi Volca** | **1.47** | **302** | ⇓P | **Pn** | **17 26 30.1** | **+0.5** |
| **BVC2** | **Cotopaxi Volca** | **1.47** | **306** | P | **Pn** | **17 26 30.6** | **+1.0** |
| **VC1** | **Cotopaxi 1** | **1.47** | **307** | P | **Pn** | **17 26 30.6** | **+1.1** |
| **LAV4** | **Lava4-Reventad** | **1.48** | **344** | ⇓P | **Pn** | **17 26 30.2** | **+0.9** |
| **BREF** | **Cotopaxi Volca** | **1.48** | **305** | P | **Pn** | **17 26 30.4** | **+0.6** |
| **CHAR** | **Charly** | **1.50** | **343** | P | **Pn** | **17 26 31.6** | **+1.9** |
| **CONE** | **Cono NE Rev Vo** | **1.50** | **344** | P | **Pn** | **17 26 30.3** | **+0.6** |
| **BNAS** | **Cotopaxi Volca** | **1.52** | **304** | P | **Pn** | **17 26 30.7** | **+0.8** |
| **NAS2** | **Nasa** | **1.52** | **305** | P | **Pn** | **17 26 31.8** | **+1.8** |
| **PITA** | **Cotopaxi Volc** | **1.54** | **308** | P | **Pn** | **17 26 31.6** | **+1.4** |
| **PAST** | **Pastocalle** | **1.64** | **300** | P | **Pn** | **17 26 29.9** | **-1.1** |
| **CAYA** | **Cayambe** | **1.76** | **334** | ⇓P | **Pn** | **17 26 33.4** | **+1.2** |
| **GGP** | **Refugio Guagua** | **1.92** | **314** | P | **Pn** | **17 26 33.4** | **-0.4** |
| **PINO** | **Pino** | **1.94** | **314** | P | **Pn** | **17 26 34.7** | **+0.7** |
| **YANA** | **Yana** | **1.94** | **316** | ⇓P | **Pn** | **17 26 34.0** | **+0.1** |
| **OTAV** | **Otavalo** | **2.14** | **325** | ⇓P | **Pn** | **17 26 36.6** | **+0.7** |
| **COTA** | **Cotacachi** | **2.16** | **329** | P | **Pn** | **17 26 36.4** | **+0.2** |
| **PECV** | **Mancha de Ca P** | **2.92** | **285** | P | **Pn** | **17 26 46.2** | **+1.9** |
| **MAG1** | **Magdalena** | **2.93** | **299** | P | **Pn** | **17 26 43.2** | **-1.1** |
| **CHIS** | **Cerro-Chispas-** | **3.54** | **278** | P | Pn | 17 26 49.7 | -1.9 |
| **LPAZ** | **La Paz** baz=340,slow=13,SNR=6.8 | **17.19** | **149** | P | **Pn** | **17 29 45.1** | **+0.5** |
| **ANMO** | **Albuquerque** 1.2nm,0.6s,baz=158,slow=5.4,SNR=4.0 | **45.45** | **326** | P | **P** | **17 33 55.4** | **+0.4** |
| **PFO** | **Pinyon Flat Ob** 1.7nm,0.3s,baz=57,slow=18,SNR=6.4 | **50.83** | **317** | P | **P** | **17 34 35.2** | **-0.8** |
| **NVAR** | **Mina Array Bea** baz=138,slow=8.3,SNR=4.1 | **54.87** | **321** | P | P | 17 35 02.9 | -2.8 |
| **DBIC** | **Dimbokro** 2.7nm,0.8s,baz=209,slow=4.9,SNR=3.6 | **72.68** | **83** | P | **P** | **17 37 01.7** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** 0.6nm,0.4s,baz=279,slow=5.9,SNR=19 | **79.56** | **76** | P | **P** | **17 37 39.9** | **-1.1** |
| **ASAR** | **Alice Springs** 0.5nm,0.6s,baz=123,slow=3.4,SNR=13 | **140.72** | **228** | PKP | PKPdf | 17 44 54.5 | -7.8 |
| **WRA** | **Warramunga Arr** 0.7nm,0.7s,baz=116,slow=2.9,SNR=21 | **142.41** | **234** | PKP | PKPdf | 17 45 00.1 | -5.2 |

*TAP **14** 17:58:08.9, 24°.56N×122°.88E, h81km±1km, ML3.1, D*
*ISCJB **14** 17:58:09.4±0.4, 24°.46N±0°.04×122°.89E±0°.02, h74km±5km, Error ellipse: s-maj=6.5km s-min=2.4km az=170.6*
*JMA **14** 17:58:09.1±0.1, 24°.51N×122°.86E, h77km±1km, M1.9*

**ISC 14 17:58:10.0±1.3, 24°.45N±0°.05×122°.89E±0°.02, h71km±8km, n40, σ0s83/76, 1C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.06** | **93** | P | **Pn** | **17 58 19.9** | **-0.3** |
| JYNG | | | | *e*S | **Sn** | **17 58 37.1** | **+0.4** |
| **YOJ** | **Yonaguni jima** | **0.12** | **86** | P | **Pn** | **17 58 20.5** | **+0.1** |
| YOJ | | | | *e*S | **Sn** | **17 58 28.6** | **+0.6** |
| **IRIF** | **Iriomote-Funau** | **0.78** | **99** | P | **Pn** | **17 58 25.7** | **-0.1** |
| IRIF | | | | *e*S | **Sn** | **17 58 38.1** | **+0.5** |
| **HATJ** | **Hateruma jima** | **0.93** | **115** | P | **Pn** | **17 58 28.1** | **+0.5** |
| HATJ | | | | S | **Sn** | **17 58 41.7** | **+1.0** |
| **TWC** | **Suao** baz=278 | **0.96** | **280** | P | **Pn** | **17 58 27.2** | **-0.8** |
| TWC | baz=278 | | | S | **Sn** | **17 58 40.3** | **-1.1** |
| **ENA** | **Nanau** baz=262 | **1.04** | **269** | *e*P | **Pn** | **17 58 29.2** | **+0.2** |
| ENA | baz=262 | | | *e*S | **Sn** | **17 58 43.8** | **+0.5** |
| **JKRS** | **Kuro-shima** | **1.05** | **102** | P | **Pn** | **17 58 29.3** | **+0.2** |
| JKRS | | | | *e*S | **Sn** | **17 58 43.9** | **+0.5** |
| **TWE** | **Neicheng** baz=278 | **1.14** | **284** | *e*P | **Pn** | **17 58 29.9** | **-0.4** |
| TWE | baz=278 | | | *e*S | **Sn** | **17 58 44.5** | **-1.0** |
| **JIJ** | **Ishigaki jima** | **1.15** | **94** | P | **Pn** | **17 58 29.9** | **-0.5** |
| JIJ | | | | *e*S | **Sn** | **17 58 45.0** | **-0.7** |
| **NWF** | **Wu-fen Shan** baz=289 | **1.18** | **302** | *e*P | **Pn** | **17 58 30.3** | **-0.5** |
| **ENTT** | **Nioudou** baz=273 | **1.22** | **279** | *e*P | **Pn** | **17 58 31.9** | **+0.6** |
| ENTT | baz=273 | | | *e*S | **Sn** | **17 58 47.1** | **-0.1** |
| **TWD** | **Chiawan** baz=247 | **1.23** | **253** | *e*P | **Pn** | **17 58 31.0** | **-0.5** |
| TWD | baz=247 | | | *e*S | **Sn** | **17 58 47.4** | **-0.2** |
| **TWA** | **Mucha** baz=281 | **1.29** | **294** | *e*P | **Pn** | **17 58 31.7** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **1.30** | **84** | P | **Pn** | **17 58 31.8** | **-0.6** |
| JISG | | | | *e*S | **Sn** | **17 58 48.8** | **-0.4** |
| **NNS** | **Nan Shan** baz=256 | **1.38** | **270** | *e*P | **Pn** | **17 58 33.1** | **-0.4** |
| NNS | baz=256 | | | *e*S | **Sn** | **17 58 51.1** | **0.0** |
| **NSK** | **Sanguang** baz=274 | **1.41** | **279** | *e*P | **Pn** | **17 58 34.1** | **+0.2** |
| NSK | baz=274 | | | *e*S | **Sn** | **17 58 51.7** | **-0.1** |
| **ESL** | **Shilin** baz=240 | **1.47** | **245** | *e*P | **Pn** | **17 58 33.4** | **-1.2** |
| ESL | baz=240 | | | *e*S | **Sn** | **17 58 53.1** | **-0.1** |
| **WHF** | **Hehuan Shan** baz=254 | **1.51** | **259** | *e*P | **Pn** | **17 58 34.9** | **-0.7** |
| WHF | baz=254 | | | *e*S | **Sn** | **17 58 54.4** | **-0.3** |
| **TWT** | **Tachien** baz=259 | **1.57** | **263** | *e*P | **Pn** | **17 58 36.9** | **+0.8** |
| JTJ | **Tarama** | **1.67** | **83** | P | **Pn** | **17 58 37.0** | **-0.1** |
| JTJ | | | | *e*S | **Sn** | **17 58 57.3** | **-0.4** |
| **EHY** | **Hungye** baz=233 | **1.71** | **237** | *e*P | **Pn** | **17 58 37.3** | **-0.6** |
| EHY | baz=233 | | | *e*S | **Sn** | **17 58 58.3** | **-0.6** |
| **NSTT** | **Nanjuang** baz=272 | **1.73** | **276** | *e*P | **Pn** | **17 58 38.1** | **+0.1** |
| NSTT | baz=272 | | | *e*S | **Sn** | **17 58 59.4** | **+0.2** |
| **TWF1** | **Yuli** baz=240 | **1.82** | **233** | *e*P | **Pn** | **17 58 39.1** | **-0.1** |
| TWF1 | baz=240 | | | *e*S | **Sn** | **17 59 01.2** | **-0.3** |
| **SMLT** | **Sun Moon Lake** baz=244 | **1.90** | **253** | *e*P | **Pn** | **17 58 41.1** | **+0.6** |
| SMLT | baz=244 | | | *e*S | **Sn** | **17 59 04.4** | **+0.8** |
| **TYC** | **Yuchr** baz=245 | **1.93** | **254** | *e*P | **Pn** | **17 58 41.4** | **+0.7** |
| TYC | baz=245 | | | *e*S | **Sn** | **17 59 04.6** | **+0.5** |
| **CHKT** | **Chengkung** baz=223 | **1.94** | **226** | *e*P | **Pn** | **17 58 40.5** | **-0.4** |
| CHKT | baz=223 | | | *e*S | **Sn** | **17 59 03.0** | **-1.3** |
| **YUS** | **Yu-Shan** baz=231 | **2.01** | **242** | *e*P | **Pn** | **17 58 42.9** | **+0.6** |
| YUS | baz=231 | | | *e*S | **Sn** | **17 59 05.9** | **-0.9** |
| **JIRB** | **Irabujima** | **2.12** | **79** | P | **Pn** | **17 58 42.7** | **-0.5** |
| JIRB | | | | S | **Sn** | **17 59 07.4** | **-1.1** |
| **ALS** | **Alishan** baz=236 | **2.12** | **244** | *e*P | **Pn** | **17 58 44.5** | **+0.9** |
| ALS | baz=236 | | | *e*S | **Sn** | **17 59 10.5** | **+1.4** |
| **ELDTW** | **Lidau** baz=225 | **2.12** | **234** | *e*P | **Pn** | **17 58 43.2** | **-0.3** |
| ELDTW | baz=225 | | | *e*S | **Sn** | **17 59 08.6** | **-0.4** |
| **CHN5** | **Tsauling** baz=236 | **2.19** | **248** | *e*P | **Pn** | **17 58 45.1** | **+0.8** |
| CHN5 | baz=236 | | | *e*S | **Sn** | **17 59 11.9** | **+1.4** |
| **JIKM** | **Ikemajima** | **2.20** | **77** | P | **Pn** | **17 58 44.3** | **0.0** |
| JIKM | | | | *e*S | **Sn** | **17 59 10.1** | **-0.5** |
| **JOGS** | **Gusukube** | **2.31** | **82** | P | **Pn** | **17 58 46.7** | **+0.8** |
| JOGS | | | | *e*S | **Sn** | **17 59 14.8** | **+1.4** |
| **TWG** | **Pinlang** baz=231 | **2.33** | **226** | *e*P | **Pn** | **17 58 45.1** | **-0.9** |
| TWG | baz=231 | | | *e*S | **Sn** | **17 59 12.4** | **-1.2** |
| **STYT** | **Tauyuan** baz=229 | **2.33** | **237** | *e*P | **Pn** | **17 58 47.3** | **+1.0** |
| STYT | baz=229 | | | *e*S | **Sn** | **17 59 14.8** | **+0.8** |
| **WTP** | **Ta-pu** baz=237 | **2.40** | **240** | *e*P | **Pn** | **17 58 48.5** | **+1.3** |
| WTP | baz=237 | | | *e*S | **Sn** | **17 59 16.6** | **+1.0** |
| **CHN1** | **Nanshi** baz=237 | **2.50** | **240** | *e*P | **Pn** | **17 58 50.0** | **+1.6** |
| CHN1 | baz=237 | | | *e*S | **Sn** | **17 59 19.5** | **+1.5** |
| **SGST** | **Jiashian** baz=234 | **2.51** | **238** | *e*P | **Pn** | **17 58 49.4** | **+0.8** |
| SGST | baz=234 | | | *e*S | **Sn** | **17 59 19.6** | **+1.4** |
| **LAY** | **Lan-yu** baz=200 | **2.70** | **207** | *e*P | **Pn** | **17 58 51.6** | **+0.5** |
| LAY | baz=200 | | | *e*S | **Sn** | **17 59 21.2** | **-1.5** |
| **EAST** | **Anshuo** baz=226 | **2.78** | **223** | *e*P | **Pn** | **17 58 49.8** | **-2.5** |

*ISCJB **14** 17:59:40.8±0.5, 37°.53N±0°.03×35°.73E±0°.03, h6km±7km, Error ellipse: s-maj=5.6km s-min=3.8km az=179.0*
*DDA **14** 17:59:40.5, 37°.54N×35°.72E, h7km, Md2.6*
*ISK **14** 17:59:40.5, 37°.53N×35°.72E, h12km, MD2.7*
*CSEM **14** 17:59:41.0±0.2, 37°.52N×35°.72E, h10km, MD2.6, Error ellipse: s-maj=4.5km s-min=3.8km az=173.0*

**ISC 14 17:59:40.5±1.1, 37°.50N±0°.03×35°.73E±0°.03, h9km±10km, n26, σ0s69/39, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CEYT** | **Ceyhan** | **0.49** | **178** | *e*PG | **Pb** | **17 59 51.3** | **0.0** |
| CEYT | | | | *e*SG | **Sb** | **17 59 58.7** | **+0.2** |
| **CEYT** | **Ceyhan** | **0.49** | **178** | *e*Pg | **Pb** | **17 59 51.3** | **0.0** |
| CEYT | | | | *e*Sg | **Sb** | **17 59 58.7** | **+0.2** |
| **ANDN** | **Andirin** | **0.49** | **81** | *i* P | **Pb** | **17 59 51.1** | **-0.4** |
| **ANDN** | **Andirin** | **0.49** | **81** | P | **Pb** | **17 59 51.1** | **-0.4** |
| ANDN | | | | S | **Sg** | **17 59 54.4** | **-2.3** |
| **KARA** | **Karaisali** | **0.59** | **246** | *e*PG | **Pg** | **17 59 52.1** | **+0.2** |
| KARA | | | | *e*SG | **Sb** | **18 00 01.5** | **+0.1** |
| **KARA** | **Karaisali** | **0.59** | **246** | *e*Pg | **Pg** | **17 59 52.1** | **+0.2** |
| KARA | | | | *e*Sg | **Sb** | **18 00 01.5** | **+0.1** |
| **GULE** | **Gulek** | **0.79** | **254** | *i* P | **Pg** | **17 59 55.8** | **0.0** |
| GULE | | | | *i* S | **Sb** | **18 00 08.5** | **+1.1** |
| **GULE** | **Gulek** | **0.79** | **254** | P | **Pg** | **17 59 55.8** | **0.0** |
| GULE | | | | S | **Sb** | **18 00 08.4** | **+1.1** |
| **KAMA** | **Osmaniye** | **0.81** | **113** | P | **Pb** | **17 59 57.5** | **+0.7** |
| KAMA | | | | S | **Sn** | **18 00 09.4** | **-1.0** |
| **AYKD** | **Aykdinkavak** | **0.86** | **95** | P | **Pb** | **17 59 57.3** | **-0.4** |
| AYKD | | | | S | **Sn** | **18 00 10.5** | **-1.1** |
| **KMRS** | **Kahramanmaras** | **0.93** | **89** | *e*PG | **Pb** | **17 59 59.1** | **+0.3** |
| **KMRS** | **Kahramanmaras** | **0.93** | **89** | *e*Pg | **Pb** | **17 59 59.1** | **+0.3** |
| **SARI** | **SarD1z-Kayseri** | **1.05** | **31** | *e*PG | **Pb** | **18 00 00.7** | **-0.4** |
| **NIG** | **Nigde** | **1.08** | **305** | *e*PG | **Pb** | **18 00 01.5** | **0.0** |
| **NIG** | **Nigde** | **1.08** | **305** | *e*Pg | **Pb** | **18 00 01.5** | **0.0** |
| **TAHT** | **Tahtakopru-Hat** | **1.18** | **162** | *e*PN | **Pn** | **18 00 03.7** | **+0.5** |
| **TAHT** | **Tahtakopru-Hat** | **1.18** | **162** | *e*Pn | **Pn** | **18 00 03.7** | **+0.5** |
| **PINB** | **Pinarbasi** | **1.29** | **24** | *i* P | **Pg** | **18 00 06.8** | **+1.5** |
| PINB | | | | *i* S | **Sn** | **18 00 22.0** | **-0.4** |
| **PINB** | **Pinarbasi** | **1.29** | **24** | P | **Pg** | **18 00 06.8** | **+1.5** |
| PINB | | | | S | **Sn** | **18 00 22.0** | **-0.4** |
| **KUZU** | **Kuzuini** | **1.30** | **124** | *i* P | **Pn** | **18 00 05.0** | **+0.1** |
| KUZU | | | | *i* S | **Sg** | **18 00 22.3** | **0.0** |
| **KUZU** | **Kuzuini** | **1.30** | **124** | P | **Pn** | **18 00 05.0** | **+0.1** |
| KUZU | | | | S | **Sg** | **18 00 22.3** | **0.0** |
| **BNN** | **Bunyan** | **1.35** | **4** | *e*PN | **Pn** | **18 00 05.3** | **-0.4** |
| **BNN** | **Bunyan** | **1.35** | **4** | *e*Pn | **Pn** | **18 00 05.3** | **-0.4** |
| **GULA** | **Gulagac** | **1.45** | **306** | *e*PN | **Pn** | **18 00 07.2** | **+0.1** |
| **GULA** | **Gulagac** | **1.45** | **306** | *e*Pn | **Pn** | **18 00 07.2** | **+0.1** |
| **YESY** | **Yesilyurt** | **1.60** | **281** | *e*PN | **Pn** | **18 00 09.0** | **-0.1** |

*ISCJB **14** 18:49:17.4±1.2, 5°.04S±0°.07×133°.8E±0°.1, h25km, mb3.9/3, MS3.1/2, Error ellipse: s-maj=19.8km s-min=7.6km az=160.6*
*DJA **14** 18:49:19.8±2.4, 5°.4′S±4′×13°.4′E±′, h18km±30km, M4.2/7, mb4.5/6, mB4.8/3, MLv4.1/7, Mw(mB)4.0/3*
*AUST **14** 18:49:19.6, 4°.96S×133°.53E, h0km*
*IDC **14** 18:49:19.4±1.7, 5°.32S×132°.83E, h0km, mb4.0/3, mb1 4.1/5, mb1mx3.7/28, mbtmp4.0/5, ML3.8/2, MS3.3/4, Ms1 3.3/4, ms1mx3.0/24, Error ellipse: s-maj=114.4km s-min=27.3km az=83.0*

**ISC 14 18:49:19.5±1.6, 4°.9S±0°.1×133°.9E±0°.2, h25km, n25, σ1s23/17, mb3.9/3, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** baz=2.4,SNR=31 | **2.59** | **320** | P | **Pn** | **18 49 58.4** | **-1

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **5.58** | **319** | *i* | | 19 29 40.0 | |
| | baz=135,slow=337,SNR=0.5 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **15.41** | **53** | *i* | | 20 24 55.0 | |
| | baz=250,slow=325,SNR=6.6 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **28.78** | **71** | *i* | | 21 50 40.0 | |
| | baz=284,slow=322,SNR=1.0 | | | | | | |
| **I45RU** | **USSURIYSK INFR** | **46.65** | **67** | *i* | | 23 39 00.0 | |
| | baz=296,slow=330,SNR=1.3 | | | | | | |

**IDC 14 19:02:31.6±558.0, 50°26N×87°31E, h0km, Error ellipse: s-maj=210.6km s-min=90.6km az=161.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **4.00** | **338** | *i* | | 19 25 10.0 | |
| | baz=158,slow=324,SNR=13 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **12.77** | **94** | *i* | | 20 20 30.0 | |
| | baz=290,slow=321,SNR=0.9 | | | | | | |

*ISCJB **14** 19:10:03.0±0.9, 23°.95N±0°.02×122°.35E±0°.02, h11km±6km, Error ellipse: s-maj=3.5km s-min=2.3km az=159.8*
*TAP **14** 19:10:03.3, 23°.97N×122°.32E, h15km±1km, ML3.2, D*
*JMA **14** 19:10:03.7±0.2, 23°.99N×122°.31E, h22km±4km, M3.3*
**ISC 14 19:10:03.5±1.2, 23°.98N±0°.03×122°.32E±0°.02, h19km±3km, n48, σ0s56/76, 9C-3D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWD** | **Chiawan** | **0.67** | **279** | *eP* | **Pg** | **19 10 17.3** | **+0.6** |
| | baz=279 | | | | | | |
| TWD | | | | S | **Sn** | **19 10 26.8** | **-1.0** |
| | baz=279 | | | | | | |
| **ENA** | **Nanau** | **0.69** | **311** | ⇑*iP* | **Pb** | **19 10 17.0** | **+0.1** |
| | baz=311 | | | | | | |
| ENA | | | | *e*S | **Sg** | **19 10 26.3** | **-0.1** |
| | baz=311 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.74** | **51** | P | **Pb** | **19 10 17.7** | **-0.1** |
| JYNG | | | | *e*S | **Sb** | **19 10 26.6** | **-1.0** |
| **TWC** | **Suao** | **0.76** | **326** | ⇑*iP* | **Pb** | **19 10 17.8** | **-0.3** |
| | baz=326 | | | | | | |
| TWC | | | | *e*S | **Sb** | **19 10 27.1** | **-1.0** |
| | baz=326 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.80** | **53** | P | **Pb** | **19 10 18.5** | **-0.2** |
| YOJ | | | | *e*S | **Sb** | **19 10 28.1** | **-1.0** |
| **ESL** | **Shilin** | **0.82** | **259** | *eP* | **Pb** | **19 10 19.1** | **-0.1** |
| | baz=258 | | | | | | |
| **EGS** | | **0.93** | **338** | *eP* | **Pg** | **19 10 22.3** | **+0.6** |
| | baz=338 | | | | | | |
| EGS | | | | *e*S | **Sg** | **19 10 34.1** | **+0.1** |
| | baz=338 | | | | | | |
| **ILA** | **Ilan** | **0.94** | **327** | *eP* | **Pb** | **19 10 21.4** | **+0.2** |
| | baz=327 | | | | | | |
| **TWE** | **Neicheng** | **0.95** | **321** | ⇑*iP* | **Pb** | **19 10 21.5** | **+0.2** |
| | baz=322 | | | | | | |
| TWE | | | | S | **Sn** | **19 10 34.7** | **-0.1** |
| | baz=322 | | | | | | |
| **ENTT** | **Nioudou** | **0.95** | **314** | P | **Pn** | **19 10 21.9** | **+0.1** |
| | baz=314 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.97** | **280** | *i* P | **Pb** | **19 10 22.3** | **+0.2** |
| | baz=280 | | | | | | |
| WHF | | | | *e*S | **Sb** | **19 10 34.6** | **-0.1** |
| | baz=280 | | | | | | |
| **NNS** | **Nan Shan** | **0.98** | **298** | ⇑*iP* | **Pn** | **19 10 22.4** | **+0.1** |
| | baz=298 | | | | | | |
| **EHY** | **Hungye** | **1.02** | **243** | ⇓*iP* | **Pn** | **19 10 22.9** | **0.0** |
| | baz=242 | | | | | | |
| EHY | | | | S | **Sn** | **19 10 36.5** | **-0.2** |
| | baz=242 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.07** | **344** | P | **Pn** | **19 10 23.8** | **+0.3** |
| | baz=344 | | | | | | |
| **NSK** | **Sanguang** | **1.12** | **309** | ⇑*iP* | **Pg** | **19 10 25.2** | **0.0** |
| | baz=309 | | | | | | |
| **TWF1** | **Yuli** | **1.12** | **236** | ⇑*iP* | **Pn** | **19 10 24.2** | **0.0** |
| | baz=236 | | | | | | |
| TWF1 | | | | *i* S | **Sn** | **19 10 39.5** | **+0.3** |
| | baz=236 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.19** | **336** | P | **Pb** | **19 10 25.6** | **0.0** |
| | baz=336 | | | | | | |
| NWF | | | | S | **Sg** | **19 10 41.8** | **-0.5** |
| | baz=336 | | | | | | |
| **TWA** | **Mucha** | **1.20** | **326** | *eP* | **Pg** | **19 10 26.7** | **0.0** |
| | baz=326 | | | | | | |
| TWA | | | | S | **Sg** | **19 10 42.6** | **+0.1** |
| | baz=326 | | | | | | |
| **CHKT** | **Chengkung** | **1.23** | **225** | ⇑*eP* | **Pn** | **19 10 25.0** | **-0.8** |
| | baz=224 | | | | | | |
| CHKT | | | | *e*S | **Sb** | **19 10 40.6** | **-1.1** |
| | baz=224 | | | | | | |
| **TAP** | **Taipei** | **1.29** | **325** | *eS* | **Sg** | **19 10 44.7** | **-0.6** |
| | baz=325 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.30** | **266** | *eP* | **Pb** | **19 10 27.3** | **-0.1** |
| | baz=266 | | | | | | |
| SMLT | | | | *e*S | **Sb** | **19 10 43.8** | **+0.1** |
| | baz=266 | | | | | | |
| **TYC** | **Yuchr** | **1.34** | **267** | ⇓*iP* | **Pb** | **19 10 27.9** | **0.0** |
| | baz=267 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.34** | **74** | P | **Pb** | **19 10 28.1** | **+0.1** |
| IRIF | | | | *e*S | **Sb** | **19 10 45.1** | **+0.3** |
| **YUS** | **Yu-Shan** | **1.34** | **249** | P | **Pb** | **19 10 28.6** | **+0.2** |
| | baz=248 | | | | | | |
| YUS | | | | S | **Sn** | **19 10 45.0** | **-0.2** |
| | baz=248 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.36** | **86** | P | **Pn** | **19 10 28.0** | **+0.5** |
| HATJ | | | | *e*S | **Sb** | **19 10 45.5** | **0.0** |
| **NSTT** | **Nanjuang** | **1.36** | **299** | ⇓*eP* | **Pg** | **19 10 29.4** | **-0.5** |
| | baz=298 | | | | | | |
| NSTT | | | | S | **Sb** | **19 10 46.3** | **+0.8** |
| | baz=298 | | | | | | |
| **ELDTW** | **Lidau** | **1.43** | **237** | ⇑P | **Pn** | **19 10 28.2** | **-0.3** |
| | baz=236 | | | | | | |
| ELDTW | | | | S | **Sn** | **19 10 45.7** | **-1.1** |
| | baz=236 | | | | | | |
| **TWQ1** | **Liyutan** | **1.46** | **285** | *eP* | **Pg** | **19 10 31.1** | **-0.5** |
| | baz=285 | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **19 10 49.0** | **+0.8** |
| | baz=285 | | | | | | |
| **ALS** | **Alishan** | **1.46** | **252** | *eP* | **Pb** | **19 10 30.1** | **-0.1** |
| | baz=251 | | | | | | |
| ALS | | | | *e*S | **Sb** | **19 10 49.0** | **+0.5** |
| | baz=251 | | | | | | |
| **WNT** | **Mingjian** | **1.50** | **267** | *e*S | **Sg** | **19 10 51.5** | **-0.4** |
| | baz=266 | | | | | | |
| **CHN5** | **Tsauling** | **1.55** | **256** | *eP* | **Pb** | **19 10 31.8** | **+0.2** |
| | baz=256 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.57** | **80** | P | **Pb** | **19 10 32.4** | **+0.5** |
| **TWG** | **Pinlang** | **1.62** | **225** | P | **Pn** | **19 10 31.3** | **+0.2** |
| | baz=224 | | | | | | |
| TWG | | | | *e*S | **Sn** | **19 10 51.4** | **-0.1** |
| | baz=224 | | | | | | |
| **WGK** | **Gukeng** | **1.63** | **260** | *e*S | **Sb** | **19 10 54.5** | **+1.3** |
| | baz=259 | | | | | | |
| **STYT** | **Tauyuan** | **1.64** | **241** | ⇑*iP* | **Pn** | **19 10 32.4** | **+1.0** |
| | baz=240 | | | | | | |
| STYT | | | | S | **Sb** | **19 10 53.1** | **-0.6** |
| | baz=240 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.71** | **77** | P | **Pn** | **19 10 32.4** | **+0.1** |
| JIJ | | | | *e*S | **Sn** | **19 10 54.1** | **+0.4** |
| **WTP** | **Ta-pu** | **1.72** | **245** | P | **Pb** | **19 10 34.3** | **-0.2** |
| | baz=245 | | | | | | |
| WTP | | | | *e*S | **Sb** | **19 10 57.3** | **+1.4** |
| | baz=245 | | | | | | |
| **CHN1** | **Nanshi** | **1.82** | **245** | *eP* | **Pb** | **19 10 36.5** | **+0.2** |
| | baz=244 | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **19 10 59.5** | **+0.9** |
| | baz=244 | | | | | | |
| **SGST** | **Jiashian** | **1.82** | **241** | *e*S | **Sb** | **19 10 59.4** | **+0.7** |
| | baz=240 | | | | | | |
| **ECL** | **Taimali** | **1.86** | **223** | *eP* | **Pn** | **19 10 34.1** | **-0.2** |
| | baz=222 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.92** | **71** | P | **Pn** | **19 10 35.0** | **-0.2** |
| JISG | | | | S | **Sn** | **19 10 58.5** | **-0.3** |
| **WSF** | **Szhu** | **1.95** | **260** | *e*S | **Sb** | **19 11 02.3** | **+0.1** |
| | baz=260 | | | | | | |
| **LAY** | **Lan-yu** | **2.06** | **200** | *eP* | **Pn** | **19 10 36.4** | **-0.7** |
| | baz=199 | | | | | | |
| **EAST** | **Anshuo** | **2.08** | **221** | P | **Pn** | **19 10 38.5** | **+1.1** |
| | baz=220 | | | | | | |
| EAST | | | | *e*S | **Sb** | **19 11 05.8** | **-0.5** |
| | baz=220 | | | | | | |
| **JTJ** | **Tarama** | **2.27** | **73** | P | **Pn** | **19 10 40.3** | **+0.2** |
| **JIRB** | **Irabujima** | **2.74** | **71** | P | **Pn** | **19 10 46.9** | **+0.5** |
| **JIKM** | **Ikemajima** | **2.83** | **70** | P | **Pn** | **19 10 48.0** | **+0.3** |
| **JOGS** | **Gusukube** | **2.92** | **74** | P | **Pn** | **19 10 50.3** | **+1.3** |

*ISCJB **14** 19:25:57.8±0.5, 38°.25N±0°.02×26°.50E±0°.03, h7km±2km, Error ellipse: s-maj=4.6km s-min=3.5km az=44.1*
*DDA **14** 19:25:57.8, 38°.26N×26°.54E, h7km, Md2.7*
*CSEM **14** 19:25:58.3±0.2, 38°.27N×26°.53E, h8km, MD2.7, Error ellipse: s-maj=5.9km s-min=4.1km az=42.0*
*ATH **14** 19:25:58.0, 38°.26N×26°.46E, h26km±1km, MD2.8/4*
*ISK **14** 19:25:58.1, 38°.21N×26°.59E, h6km, MD2.9*
**ISC 14 19:25:57.9±0.8, 38°.27N±0°.02×26°.54E±0°.02, h8km±5km, n45, σ0s65/72, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZEY** | **˜zmir** | **0.04** | **232** | P | **Pg** | **19 25 59.4** | **-0.1** |
| ZEY | | | | S | **Sg** | **19 26 00.6** | **-0.1** |
| **URLA** | **Izmir** | **0.10** | **23** | *i* P | **Pg** | **19 26 00.3** | **-0.1** |
| URLA | | | | *i* S | **Sg** | **19 26 02.7** | **+0.6** |
| **URLA** | **Izmir** | **0.10** | **23** | P | **Pg** | **19 26 00.3** | **-0.1** |
| URLA | | | | S | **Sg** | **19 26 02.7** | **+0.6** |
| **CHOS** | **Chios island** | **0.40** | **288** | *e*PG | **Pb** | **19 26 07.2** | **-0.1** |
| **CHOS** | **Chios island** | **0.40** | **288** | *e*PB | **Pg** | **19 26 06.0** | **+0.2** |
| CHOS | | | | *e*SB | **Sg** | **19 26 11.6** | **+0.5** |
| **CHOS** | **Chios island** | **0.40** | **288** | *e*Pb | **Pg** | **19 26 06.0** | **+0.2** |
| **CHOS** | **Chios island** | **0.40** | **288** | *e*Pg | **Pb** | **19 26 07.2** | **-0.1** |
| CHOS | | | | *e*Sb | **Sg** | **19 26 11.6** | **+0.5** |
| **BLCB** | **Balcova** | **0.41** | **73** | *e*PG | **Pg** | **19 26 05.9** | **0.0** |
| BLCB | | | | *e*SG | **Sg** | **19 26 11.8** | **+0.5** |
| **BLCB** | **Balcova** | **0.41** | **73** | *e*Pg | **Pg** | **19 26 05.9** | **0.0** |
| BLCB | | | | *e*Sg | **Sg** | **19 26 11.8** | **+0.5** |
| **IZM** | **Izmir** | **0.58** | **77** | *e*PG | **Pg** | **19 26 09.3** | **+0.2** |
| IZM | | | | *e*SG | **Sb** | **19 26 18.3** | **-0.4** |
| **IZM** | **Izmir** | **0.58** | **77** | *e*Pg | **Pg** | **19 26 09.3** | **+0.2** |
| IZM | | | | *e*Sg | **Sb** | **19 26 18.3** | **-0.4** |
| **SMG** | **Samos** | **0.60** | **157** | *e*PN | **Pg** | **19 26 10.6** | **0.0** |
| **SMG** | **Samos** | **0.60** | **157** | *e*Pn | **Pb** | **19 26 10.6** | **0.0** |
| **GCAM** | **G?zelcaml?** | **0.78** | **136** | *i* P | **Pg** | **19 26 13.0** | **0.0** |
| GCAM | | | | *i* S | **Sg** | **19 26 23.2** | **0.0** |
| **GCAM** | **G?zelcaml?** | **0.78** | **136** | P | **Pg** | **19 26 13.0** | **0.0** |
| GCAM | | | | S | **Sg** | **19 26 23.2** | **0.0** |
| **DKL** | **Dikili** | **0.85** | **19** | *e*PG | **Pn** | **19 26 16.4** | **+0.2** |
| DKL | | | | *e*SG | **Sn** | **19 26 28.5** | **-0.3** |
| **DKL** | **Dikili** | **0.85** | **19** | *e*Pg | **Pn** | **19 26 16.4** | **+0.2** |
| DKL | | | | *e*Sg | **Sn** | **19 26 28.5** | **-0.3** |
| **PRK** | **Paraskevi** | **1.00** | **348** | *e*PN | **Pg** | **19 26 17.3** | **+0.1** |
| PRK | | | | *e*SN | **Sb** | **19 26 31.3** | **+0.5** |
| **PRK** | **Paraskevi** | **1.00** | **348** | *e*Pn | **Pg** | **19 26 17.3** | **+0.1** |
| PRK | | | | *e*Sn | **Sb** | **19 26 31.3** | **+0.5** |
| **AYVA** | **Ayvalik** | **1.05** | **6** | *i* P | **Pg** | **19 26 17.7** | **-0.3** |
| AYVA | | | | *i* S | **Sg** | **19 26 32.0** | **+0.4** |
| **AYVA** | **Ayvalik** | **1.05** | **6** | P | **Pg** | **19 26 17.7** | **-0.3** |
| AYVA | | | | S | **Sg** | **19 26 32.0** | **+0.4** |
| **SIGR** | **SIGRI** | **1.09** | **331** | *e*PN | **Pn** | **19 26 21.0** | **+1.6** |
| **SIGR** | **SIGRI** | **1.09** | **331** | *e*PN | **Pg** | **19 26 18.3** | **-0.5** |
| SIGR | | | | *e*SN | **Sg** | **19 26 33.3** | **+0.4** |
| **SIGR** | **SIGRI** | **1.09** | **331** | *e*Pn | **Pn** | **19 26 21.0** | **+1.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.11** | **106** | *e*PG | **Pg** | **19 26 18.8** | **-0.4** |
| AYDB | | | | *e*SG | **Sb** | **19 26 34.2** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.11** | **106** | *e*Pg | **Pg** | **19 26 18.8** | **-0.4** |
| AYDB | | | | *e*Sg | **Sb** | **19 26 34.3** | **+0.3** |
| **AKS** | **Akhisar** | **1.17** | **58** | *e*PN | **Pn** | **19 26 21.1** | **+0.6** |
| **AKS** | **Akhisar** | **1.17** | **58** | *e*Pn | **Pn** | **19 26 21.1** | **+0.6** |
| **AKHS** | **Akhisar** | **1.17** | **58** | *i* S | **Sg** | **19 26 34.4** | **-1.1** |
| **AKHS** | **Akhisar** | **1.17** | **58** | P | Pn | 19 26 23.9 | +3.3 |
| AKHS | | | | S | **Sg** | **19 26 34.4** | **-1.1** |
| **AYDN** | **Tasoluk** | **1.22** | **119** | *i* P | **Pg** | **19 26 22.5** | **+1.3** |
| AYDN | | | | *i* S | **Sn** | **19 26 39.0** | **+1.2** |
| **AYDN** | **Tasoluk** | **1.22** | **119** | P | **Pg** | **19 26 22.5** | **+1.3** |
| AYDN | | | | S | **Sn** | **19 26 39.0** | **+1.2** |
| **BODT** | **Bodrum** | **1.34** | **153** | *e*PN | **Pn** | **19 26 28.3** | **+0.2** |
| **BODT** | **Bodrum** | **1.34** | **153** | *e*Pn | **Pn** | **19 26 28.3** | **+0.2** |
| **BDRM** | **Kayabasi** | **1.39** | **149** | *i* P | **Pg** | **19 26 24.8** | **+0.2** |
| BDRM | | | | *i* S | **Sb** | **19 26 41.1** | **-1.0** |
| **BDRM** | **Kayabasi** | **1.39** | **149** | P | **Pg** | **19 26 24.8** | **+0.2** |
| BDRM | | | | S | **Sb** | **19 26 41.1** | **-1.0** |
| **MANT** | **Manisa** | **1.60** | **81** | *i* P | **Pg** | **19 26 29.1** | **+0.6** |
| MANT | | | | *i* S | **Sb** | **19 26 48.6** | **+0.4** |
| **MANT** | **Manisa** | **1.60** | **81** | P | **Pg** | **19 26 29.1** | **+0.6** |
| MANT | | | | S | **Sb** | **19 26 48.6** | **+0.4** |
| **KULA** | **Kula-Manisa** | **1.68** | **81** | *e*PN | **Pn** | **19 26 28.6** | **+1.0** |
| **KULA** | **Kula-Manisa** | **1.68** | **81** | *e*Pn | **Pn** | **19 26 28.6** | **+1.0** |
| **BALY** | **Balya** | **1.69** | **29** | P | Pg | 19 26 36.0 | +5.6 |
| BALY | | | | S | **Sg** | **19 26 53.3** | **+0.9** |
| **BALB** | **Balikesir** | **1.72** | **37** | *e*PN | **Pb** | **19 26 29.8** | **0.0** |
| **BALB** | **Balikesir** | **1.72** | **37** | *e*Pn | **Pb** | **19 26 29.8** | **0.0** |
| **KHAL** | **Karahalli** | **2.32** | **86** | P | **Pg** | **19 26 42.1** | **-0.3** |
| KHAL | | | | S | **Sb** | **19 27 08.7** | **-0.2** |
| **OJC** | **Ojcow** | **12.88** | **340** | *e*Pg | **Pn** | **19 28 59.2** | **-2.0** |

*CRAAG **14** 19:41:11.3, 35°.50N×1°.69E, Ml3.5*
*MDD **14** 19:41:12.5±0.7, 35°.24N×1°.95E, h0km, mb3.5/13, Error ellipse: s-maj=7.1km s-min=4.6km az=147.0, PRXIMO*
*CSEM **14** 19:41:13.0±0.5, 35°.45N×1°.76E, h2km, mb3.5, Error ellipse: s-maj=11.3km s-min=6.2km az=144.0*
**ISC 14 19:41:12.2±2.4, 35°.4N±0°.1×1°.83E±0°.10, h10km, n32, σ0s97/41, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ETRT** | **Tiaret** | **0.44** | **269** | P | **Pg** | **19 41 20.1** | **-0.7** |
| **ETRT** | **Tiaret** | **0.44** | **269** | P | **Pg** | **19 41 20.1** | **-0.7** |
| **ETRT** | **Tiaret** | **0.44** | **269** | P | **Pg** | **19 41 20.1** | **-0.7** |
| **EANR** | **'Ain N'Sour** | **0.81** | **313** | P | **Pg** | **19 41 27.0** | **-0.9** |
| **EANR** | **'Ain N'Sour** | **0.81** | **313** | P | **Pg** | **19 41 27.0** | **-0.9** |
| **EANR** | **'Ain N'Sour** | **0.81** | **313** | P | **Pg** | **19 41 27.0** | **-0.9** |
| **OKGL** | **Djebel Kef Gue** | **1.16** | **304** | P | **Pb** | **19 41 34.0** | **-0.4** |
| | 23nm,0.1s,SNR=18 | | | | | | |
| OKGL | | | | S | **Sn** | **19 41 51.6** | **+1.1** |
| | 79nm,0.4s,SNR=4.0 | | | | | | |
| **OKGL** | **Djebel Kef Gue** | **1.16** | **304** | P | **Pb** | **19 41 34.0** | **-0.4** |
| | 23nm,0.1s,SNR=18 | | | | | | |
| **EMUR** | **La Murta** | **3.47** | **316** | P | **Pn** | **19 42 07.1** | **+0.7** |
| | 1.3nm,0.7s,SNR=7.9 | | | | | | |
| **EMUR** | **La Murta** | **3.47** | **316** | P | **Pn** | **19 42 07.1** | **+0.7** |
| | 1.3nm,0.7s,SNR=7.9 | | | | | | |
| **EIBI** | **Ibiza** | **3.64** | **354** | P | **Pn** | **19 42 09.4** | **+0.8** |
| | 6.3nm,0.3s,SNR=11 | | | | | | |
| EIBI | | | | S | **Sn** | **19 42 50.6** | **-1.1** |
| | 0.9nm,0.4s | | | | | | |
| **EIBI** | **Ibiza** | **3.64** | **354** | P | **Pn** | **19 42 09.4** | **+0.8** |
| | 6.3nm,0.3s,SNR=11 | | | | | | |
| EIBI | | | | S | **Sn** | **19 42 50.6** | **-1.1** |
| | 0.9nm,0.4s | | | | | | |
| **EBEN** | **Beniarda** | **3.69** | **334** | P | **Pn** | **19 42 10.3** | **+1.0** |
| | 2.1nm,3.0s,SNR=7.9 | | | | | | |
| **EBEN** | **Beniarda** | **3.69** | **334** | P | **Pn** | **19 42 10.3** | **+1.0** |
| | 2.1nm,3.0s,SNR=7.9 | | | | | | |
| **EBER** | **Berja** | **4.11** | **293** | P | **Pn** | **19 42 14.8** | **-0.4** |
| | 1.7nm,0.2s,SNR=6.9 | | | | | | |
| **EBER** | **Berja** | **4.11** | **293** | P | **Pn** | **19 42 14.8** | **-0.4** |
| | 1.7nm,0.2s,SNR=6.9 | | | | | | |
| **ETOB** | **Tobarra** | **4.22** | **321** | P | **Pn** | **19 42 17.9** | **+1.3** |
| | 3.3nm,0.2s,SNR=7.2 | | | | | | |
| **ETOB** | **Tobarra** | **4.22** | **321** | P | **Pn** | **19 42 17.9** | **+1.3** |
| | 3.3nm,0.2s,SNR=7.2 | | | | | | |
| **EHUE** | **Huescar** | **4.30** | **305** | P | **Pn** | **19 42 19.2** | **+1.4** |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **4.30** | **305** | P | **Pn** | **19 42 19.2** | **+1.4** |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| **ETOS** | **Mallorca** | **4.43** | **10** | P | **Pn** | **19 42 20.5** | **+1.0** |
| | 0.6nm,1.9s,SNR=7.9 | | | | | | |
| **ETOS** | **Mallorca** | **4.43** | **10** | P | **Pn** | **19 42 20.5** | **+1.0** |
| | 0.6nm,1.9s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **4.44** | **309** | P | **Pn** | **19 42 21.3** | **+1.5** |
| | 5.2nm,0.2s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **19 43 12.2** | **+0.6** |
| | 2.1nm,0.2s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **4.44** | **309** | P | **Pn** | **19 42 21.3** | **+1.5** |
| | 5.2nm,0.2s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **19 43 12.2** | **+0.6** |
| | 2.1nm,0.2s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **4.62** | **303** | P | **Pn** | **19 42 23.2** | **+1.1** |
| | 1.8nm,0.2s,SNR=20 | | | | | | |
| EQES | | | | S | **Sn** | **19 43 15.4** | **-0.5** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **4.62** | **303** | P | **Pn** | **19 42 23.2** | **+1.1** |
| | 1.8nm,0.2s,SNR=20 | | | | | | |
| EQES | | | | S | **Sn** | **19 43 15.4** | **-0.5** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **4.62** | **294** | P | **Pn** | **19 42 23.2** | **+1.0** |
| | 0.8nm,5.4s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **4.62** | **294** | P | **Pn** | **19 42 23.2** | **+1.0** |
| | 0.8nm,5.4s,SNR=7.9 | | | | | | |
| **EVIA** | **Vianos** | **4.74** | **314** | P | **Pn** | **19 42 24.4** | **+0.5** |
| | 0.6nm,0.1s,SNR=7.9 | | | | | | |
| EVIA | | | | S | **Sn** | **19 43 19.5** | **+0.5** |
| | 0.9nm,0.2s,SNR=4.0 | | | | | | |
| **EVIA** | **Vianos** | **4.74** | **314** | P | **Pn** | **19 42 24.4** | **+0.5** |
| | 0.6nm,0.1s,SNR=7.9 | | | | | | |
| EVIA | | | | S | **Sn** | **19 43 19.5** | **+0.5** |
| | 0.9nm,0.2s,SNR=4.0 | | | | | | |
| **EMOS** | **Mosqueruela** | **5.28** | **340** | P | **Pn** | **19 42 32.6** | **+1.3** |
| | 0.5nm,0.1s,SNR=7.8 | | | | | | |
| **EMOS** | **Mosqueruela** | **5.28** | **340** | P | **Pn** | **19 42 32.6** | **+1.3** |
| | 0.5nm,0.1s,SNR=7.8 | | | | | | |

*IDC **14** 19:46:40.0±1.1, 5°.27N×82°.62W, h0km, mb4.0/9, mb1 4.3/12, mb1mx4.0/45, mbtmp4.1/12, ML3.6/3, MS3.4/11, Ms1 3.5/11, ms1mx3.3/23, Error ellipse: s-maj=31.4km s-min=17.1km az=42.0*
*ISCJB **14** 19:46:40.3±0.5, 5°.30N±0°.04×82°.64W±0°.05, h15km, mb3.9/10, MS3.4/10, Error ellipse: s-maj=8.2km s-min=4.6km az=147.0*
*CASC **14** 19:46:41.0±3.3, 5°.16N×82°.59W, h35km±999km, MD4.4*
*NEIC **14** 19:46:43.3±3.2, 5°.27N×82°.61W, h23km±23km, mb4.3/2, Error ellipse: s-maj=14.9km s-min=9.3km az=65.0*
**ISC 14 19:46:42.3±0.7, 5°.29N±0°.07×82°.62W±0°.06, h15km, n43, σ1s51/33, mb4.0/10, MS3.4/10, 2D, South of Panama**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AZU** | **Azuero** | **3.40** | **43** | *eP* | **Pn** | **19 47 32.8** | **-2.1** |
| AZU | | | | *e*S | **Sn** | **19 48 10.0** | **-5.1** |
| **TBS2** | | **3.48** | **359** | *eP* | **Pn** | **19 47 36.2** | **+0.1** |
| TBS2 | | | | *e*S | **Sn** | **19 48 18.1** | **+0.9** |
| **BUS** | **Buena Vista** | **4.38** | **345** | ⇓*eP* | **Pn** | **19 47 47.9** | **-0.9** |
| BUS | | | | *e*S | **Sn** | **19 48 38.3** | **-1.5** |
| **BCIP** | **Isla Barro Col** | **4.73** | **35** | *eP* | **Pn** | **19 47 53.9** | **+0.7** |
| BCIP | | | | *e*S | **Sn** | **19 48 48.4** | **+0.5** |
| **BCIP** | **Isla Barro Col** | **4.73** | **35** | *e*Pn | **Pn** | **19 47 53.6** | **+0.4** |
| **CGA2** | **Cerro Gallo 2** | **5.04** | **339** | *eP* | **Pn** | **19 47 56.5** | **-1.1** |
| CGA2 | | | | *e*S | **Sn** | **19 48 54.8** | **-0.8** |
| **JCR** | **Jicaral** | **5.16** | **332** | ⇓*iP* | **Pn** | **19 47 57.8** | **-1.3** |
| JCR | | | | *e*S | Sn | 19 48 51.9 | -6.5 |
| **JTS** | **JuntasAbangare** | **5.48** | **335** | Pn | **Pn** | **19 48 02.2** | **-1.2** |
| | 17nm,0.3s,baz=147,slow=6.3,SNR=21 | | | | | | |
| JTS | | | | Sn | **Sn** | **19 49 06.4** | **+0.1** |
| | 23nm,0.3s,baz=298,slow=22,SNR=21 | | | | | | |
| **JTS** | **JuntasAbangare** | **5.48** | **335** | *eP* | **Pn** | **19 48 02.1** | **-1.4** |
| JTS | | | | *e*S | **Sn** | **19 49 05.4** | **-0.9** |
| **OTAV** | **Otavalo** | **6.52** | **140** | *e*Pn | Pn | 19 48 14.5 | -3.8 |
| | 14nm,0.3s | | | | | | |
| **ROSC** | **El Rosal** | **8.27** | **93** | Pn | **Pn** | **19 48 41.9** | **-0.3** |
| | 1.8nm,0.3s,baz=74,slow=18,SNR=2.3 | | | | | | |
| ROSC | | | | Sn | **Sn** | **19 50 17.6** | **+2.0** |
| | 1.6nm,0.3s,baz=292,slow=19,SNR=2.6 | | | | | | |
| **ATAH** | **Atahualpa** | **13.05** | **161** | Pn | **Pn** | **19 49 46.8** | **-0.8** |
| | 0.6nm,0.3s,baz=9.5,slow=7.3,SNR=3.8 | | | | | | |
| ATAH | | | | LR | LR | 19 54 18.6 | |
| | comp=Z,489nm,19.8s,baz=335,slow=35 | | | | | | |
| **LRS** | **Lares** | **20.11** | **49** | P | Pn | 19 51 16.2 | -1.4 |
| **SJG** | **San Juan** | **20.52** | **50** | P | Pn | 19 51 21.0 | -1.5 |
| | 13nm,0.3s,baz=238,slow=12,SNR=5.8 | | | | | | |
| **PTGA** | **Pitinga** | **23.40** | **104** | P | **P** | **19 51 50.8** | **-0.1** |
| | 1.5nm,0.5s,baz=282,slow=11,SNR=4.6 | | | | | | |
| **SAML** | **Samuel** | **23.99** | **126** | *eP* | **P** | **19 51 53.8** | **-2.9** |
| | 17nm,1.2s | | | | | | |
| **LPAZ** | **La Paz** | **25.79** | **146** | P | **P** | **19 52 13.5** | **-0.2** |
| | 0.8nm,0.5s,baz=295,slow=6.8,SNR=3.9 | | | | | | |
| LPAZ | | | | LR | LR | 20 03 26.4 | |
| | comp=Z,177nm,19.4s,baz=321,slow=39 | | | | | | |
| **TKL** | **Tuckaleechee C** | **30.24** | **358** | LR | LR | 20 04 56.2 | |
| | comp=Z,48nm,18.9s,baz=222,slow=36 | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **30.69** | **298** | T | T | 20 25 20.0 | |
| | SNR=6.1 | | | | | | |
| **LVC** | **Limon Verde** | **30.81** | **155** | P | **P** | **19 52 58.8** | **+0.8** |
| **LPIG** | **La Paz** | **32.54** | **308** | LR | LR | 20 04 06.5 | |
| | comp=Z,65nm,18.3s,baz=40,slow=32 | | | | | | |
| **ANMO** | **Albuquerque** | **36.82** | **326** | LR | LR | 20 10 19.0 | |
| | comp=Z,46nm,18.6s,baz=134,slow=38 | | | | | | |
| **SDCO** | **Great Sand Dun** | **38.45** | **330** | *eP* | **P** | **19 54 05.4** | **+1.4** |
| | 4.6nm,1.1s | | | | | | |
| **SADO** | **Sadowa** | **39.44** | **4** | LR | LR | 20 10 15.5 | |
| | comp=Z,33nm,18.0s,baz=272,slow=36 | | | | | | |
| **CPUP** | **Villa Florida** | **39.86** | **143** | LR | LR | 20 10 36.5 | |
| | comp=Z,56nm,18.6s,baz=356,slow=36 | | | | | | |
| **BDFB** | **Brasilia** | **40.08** | **122** | LR | LR | 20 10 52.5 | |
| | comp=Z,86nm,18.1s,baz=257,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **46.21** | **321** | P | **P** | **19 55 08.4** | **+1.2** |
| | 2.3nm,0.9s,baz=139,slow=7.6,SNR=18 | | | | | | |
| NVAR | | | | LR | LR | 20 14 47.5 | |
| | comp=Z,64nm,19.5s,baz=174,slow=37 | | | | | | |
| **INK** | **Inuvik** | **71.42** | **342** | P | **P** | **19 58 02.4** | **+0.7** |
| | 3.3nm,1.1s,baz=153,slow=4.5,SNR=2.4 | | | | | | |
| **ILAR** | **E

**LEM Lembang** 1.34 51 P Pn 19 48 48.0 +1.8
baz=1.6,SNR=1000
**LEM Lembang** 1.34 51 P Pn 19 48 48.2 +1.9
**CGJI Cibinong** 1.37 320 P Pn 19 48 47.5 +0.9
**TNG Tangerang** 1.50 3 P Pn 19 48 50.9 +2.6
**SBJI Serang** 1.61 344 P Pn 19 48 52.2 +2.4
SBJI S Sn 19 49 12.0 +2.6
**CMJI Cimerak** 1.86 93 P Pn 19 48 53.1 -0.2
CMJI S Sn 19 49 13.6 -2.1
**XMI Christmas Isla** 2.89 197 P Pn 19 49 05.1 -2.3
baz=2.7,SNR=65
**XMIS Christmas Isla** 2.93 198 P Pn 19 49 05.2 -2.7
baz=2.7,SNR=283
**XMIS Christmas Isla** 2.93 198 *e*Pn Pn 19 49 05.0 -2.9
**KASI Kota Agung** 2.97 316 P Pn 19 49 10.5 +2.0
KASI S Sn 19 49 45.4 +2.5
**KLI Kotabumi** 3.27 329 P Pn 19 49 15.9 +3.2
**KLSI** 3.49 328 P Pn 19 49 18.9 +3.3
**LWLI Liwa** 3.64 316 P Pn 19 49 20.3 +2.6
**SMRI Semarang** 3.89 81 P Pn 19 49 23.9 +2.8
baz=4.1,SNR=10
**SMRI Semarang** 3.89 81 P Pn 19 49 23.9 +2.8
**SMRI Semarang** 3.89 81 *e*Pn Pn 19 49 23.9 +2.8
**UGM Wanagama** 3.92 94 P Pn 19 49 21.9 +0.3
baz=4.1,SNR=56
**UGM Wanagama** 3.92 94 P Pn 19 49 22.8 +1.2
**MDSI Maura Dua** 3.96 323 P Pn 19 49 24.9 +2.8
**WOJI Wonogiri, Jawa** 4.32 92 P Pn 19 49 28.2 +1.3
**UWJI Ujung Watu** 4.52 74 P Pn 19 49 31.5 +1.7
**PCJI Pacitan** 4.59 97 P Pn 19 49 31.3 +0.6
**NGJI Ngawi** 4.86 87 P Pn 19 49 42.7 +8.3
**MNAI Manna** 4.88 312 P Pn 19 49 36.4 +1.7
baz=4.9,SNR=18
**MNAI Manna** 4.88 312 P Pn 19 49 37.0 +2.3
**TPI Tanjungpandan** 5.01 12 P Pn 19 49 38.8 +2.4
123nm,1.0s,1µm0.9nm
**PMBI Palembang** 5.05 339 P Pn 19 49 41.5 +4.5
603nm,0.9s,1.7nm
**PWJI Pagerwojo** 5.20 94 P Pn 19 49 40.1 +1.1
336nm,0.8s,4µm2.5nm
**PPBI Pangkal Pinang** 5.50 355 P Pn 19 49 46.6 +3.4
80nm,0.6s,1µm0.4nm
**KSI Kapahiang** 5.63 315 P Pn 19 49 47.0 +2.0
217nm,0.5s,4µm0.9nm
**BLJI Banyuglugur** 6.96 91 P Pn 19 50 09.7 +6.4
**JAGI Jajag, Banyuwa** 7.55 97 P Pn 19 50 13.3 +2.0
baz=7.7,SNR=168
**JAGI Jajag, Banyuwa** 7.55 97 P Pn 19 50 14.2 +2.9
192nm,0.6s,7µm1.3nm
**JAGI Jajag, Banyuwa** 7.55 97 *e*Pn Pn 19 50 13.3 +2.0
182nm,0.3s
**PPSI Pulau Pagai** 8.15 306 P Pn 19 50 19.3 -0.3
357nm,0.7s
**IGBI Denpasar** 8.56 98 P Pn 19 50 27.9 +2.7
151nm,1.0s,5µm
**SRBI Singaraja** 8.57 93 P Pn 19 50 27.8 +2.5
231nm,0.7s,3µm
**PDSI Padang** 9.07 318 P Pn 19 50 30.7 -1.5
**BBKI Banjar Baru** 9.23 63 P Pn 19 50 43.6 +9.2
**BTDF Bukit Timah Da** 9.40 343 P Pn 19 50 43.6 +6.9
baz=9.6,SNR=3.8
**PPI Padang Panjang** 9.45 319 P Pn 19 50 38.5 +1.1
**SISI Saibi** 9.77 310 P Pn 19 50 39.9 -1.8
102nm,0.9s
MYKOM **Kota Tinggi** 9.79 344 ⇓P Pn 19 50 46.2 +4.2
MYKOM **Kota Tinggi** 9.79 344 ⇑P Pn 19 50 49.2 +7.1
**KSM Kuching** 9.83 22 ⇑P Pn 19 50 48.2 +5.6
**KGM Kluang** 10.16 341 ⇑P Pn 19 50 54.0 +6.9
**TWSI Taliwang, Sumb** 10.26 97 P Pn 19 50 49.2 +0.7
78nm,0.9s,1µm
**KBKI Kotabaru** 10.49 66 P Pn 19 50 58.0 +6.3
**COCO West Island** 10.59 244 *i*P Pn 19 50 51.3 -1.6
**MNSI Mandailing Nat** 10.93 320 P Pn 19 51 00.6 +3.0
29nm,0.4s
**GSI Gunungsitoli** 12.65 314 P Pn 19 51 17.0 -4.2
86nm,0.5s
**GSI Gunungsitoli** 12.65 314 *e*Pn Pn 19 51 16.9 -4.2
65nm,0.4s
**KAPI Kappang** 13.37 79 P Pn 19 51 32.8 +1.9
0.7nm,0.3s,baz=350,slow=20,SNR=6.1
KAPI LR LR 19 56 54.0
comp=Z,198nm,21.5s,baz=275,slow=38
**BKSI Bulukumba** 13.67 81 P Pn 19 51 37.0 +2.0
35nm,1.1s
**WSI Waingapu** 13.71 99 P P 19 51 48.5 +5.6
**BSSI Bau Bau, Buton** 13.90 85 P Pn 19 51 40.2 +1.9
68nm,1.0s
**TTSI Tana Toraja** 13.97 71 P P 19 51 51.1 +5.3
**PCI Palu** 14.84 64 P Pn 19 51 52.2 +1.6
34nm,1.1s
**MPSI Mapaga** 15.49 60 P P 19 52 03.3 +0.6
MYLDM **Lahad Datu** 17.46 43 ⇑P P 19 52 29.1 +4.6
**SOEI Soe** 17.61 98 P Pn 19 52 24.3 -1.7
baz=18,SNR=33
**SOEI Soe** 17.61 98 P Pn 19 52 23.9 -2.0
96nm,1.0s,927nm
**SOEI Soe** 17.61 98 *e*P Pn 19 52 22.2 -3.7
99nm,0.9s
**MBWA Marble Bar** 18.47 138 *e*P P 19 52 36.1 +0.4
9.1nm,0.5s
**SANI Sanana** 20.13 75 P P 19 52 54.6 +0.7
24nm,0.6s
**NLAI Namlea** 20.90 79 P P 19 53 04.2 +2.0
46nm,1.0s,604nm
**AAI Ambon** 21.88 81 P P 19 53 13.2 +0.5
baz=22,SNR=6.6
**AAI Ambon** 21.88 81 P P 19 53 12.0 -0.6
76nm,0.9s,811nm
**LBMI Labuha** 22.00 72 P P 19 53 15.3 +1.3
32nm,0.8s
**MEEK Meekatharra** 22.06 150 P P 19 53 18.2 +3.7
baz=22,SNR=16
**TNTI Ternate** 22.37 69 P P 19 53 19.1 +1.1
**TNTI Ternate** 22.37 69 *e*P P 19 53 15.5 -2.5
30nm,0.3s
**KNRA Kununurra** 23.12 112 P P 19 53 25.7 0.0
baz=23,SNR=36
**DAV Davao City (W)** 23.96 53 LR LR 20 03 29.5
comp=Z,116nm,20.6s,baz=241,slow=38
**MTN Manton Dam** 24.70 104 P P 19 53 40.4 -0.1
baz=25,SNR=25
**SWI Sorong** 25.52 76 P P 19 53 49.1 +1.2
14nm,0.7s
**SIJI Sorong** 25.52 76 P P 19 53 47.0 -0.9
7.1nm,0.5s,baz=299,slow=11,SNR=6.6
**KDU Kakadu** 25.96 103 P P 19 53 51.4 -0.6
baz=26,SNR=5.2
**FAKI Fak Fak** 25.99 81 P P 19 53 51.2 -1.0
baz=26,SNR=6.6
**WRKA Warakurna** 26.99 132 P P 19 54 02.2 +1.1
baz=27,SNR=5.8
**CM31 Chiang Mai Arr** 27.04 344 P P 19 54 00.0 -1.5
baz=27,SNR=4.0
**CMAR Chiang Mai Arr** 27.04 344 P P 19 53 59.5 -2.0
4.0nm,0.6s,baz=180,slow=8.5,SNR=46
CMAR PcP PcP 19 57 23.2 +1.2
2.5nm,0.7s,baz=198,slow=3.6,SNR=12
CMAR LR LR 20 06 16.8
comp=Z,83nm,18.0s,baz=168,slow=40
**H01W3 Cape Leeuwin H** 27.95 167 T T 20 24 00.8
baz=346,slow=76
**H01W1 Cape Leeuwin H** 27.97 167 T T 20 23 56.3
baz=346,slow=76
**H01W2 Cape Leeuwin H** 27.97 167 T T 20 24 01.9
baz=346,slow=76
**WRA Warramunga Arr** 29.53 117 P P 19 54 24.3 +0.5
1.9nm,0.4s,baz=291,slow=10,SNR=54
WRA PcP PcP 19 57 29.1 +0.9
0.6nm,0.3s,baz=310,slow=2.1,SNR=6.0
WRA LR LR 20 07 24.8
comp=Z,102nm,21.2s,baz=345,slow=38

**WRAB Tennant Creek** 29.54 117 *de*P P 19 54 24.2 +0.3
WRAB pmax pmax
comp=Z,24nm,1.7s
**WRAB Tennant Creek** 29.54 117 *e*P P 19 54 24.4 +0.5
comp=Z,4.0nm,0.4s
**PALK Pallekele** 29.77 299 LR LR 20 04 55.8
comp=Z,62nm,21.6s,baz=116,slow=33
**ASAR Alice Springs** 30.65 124 P P 19 54 34.6 +0.9
comp=Z,1.8nm,0.6s,baz=294,slow=8.3,SNR=29
ASAR PcP PcP 19 57 32.5 +1.3
comp=Z,0.7nm,0.4s,baz=301,slow=2.1,SNR=5.6
ASAR LR LR 20 07 14.7
comp=Z,100nm,20.4s,baz=300,slow=37
**H08S2 Diego Garcia H** 33.77 268 T T 20 30 30.9
baz=91,slow=75,SNR=320
**H08S3 Diego Garcia H** 33.78 268 T T 20 30 31.6
baz=91,slow=75,SNR=260
**H08S1 Diego Garcia H** 33.79 268 T T 20 30 28.6
baz=91,slow=75,SNR=296
**QIS Mount Isa** 34.41 115 P P 19 55 08.0 +1.3
baz=34,SNR=5.1
**H08N1 Diego Carcia H** 35.31 270 T T 20 32 46.7
baz=128,slow=72,SNR=28
**H08N2 Diego Carcia H** 35.33 270 T T 20 32 56.8
baz=128,slow=72,SNR=32
**H08N3 Diego Carcia H** 35.33 270 T T 20 32 50.2
baz=128,slow=72,SNR=37
**COEN Coen** 36.46 103 P P 19 55 24.6 +0.3
baz=37,SNR=5.2
**ODAN Odare** 39.05 332 *e*P P 19 55 44.3 -1.9
comp=Z,12nm,0.5s
**TAPN Taplejung** 39.32 333 *e*P P 19 55 46.9 -1.7
comp=Z,12nm,0.6s
**HTT Hallett** 39.38 135 P P 19 55 47.6 -1.2
baz=39,SNR=3.5
**LSA Lhasa** 40.01 339 *e*P P 19 55 52.9 -1.6
LSA pmax pmax
comp=Z,5.0nm,0.6s
**LSA Lhasa** 40.01 339 *e*P P 19 55 52.9 -1.6
comp=Z,4.6nm,0.6s
**QLP Quilpie** 40.39 122 P P 19 55 59.6 +2.4
baz=40,SNR=4.5
**PKI Pulchoki** 40.59 330 *e*P P 19 55 57.1 -2.0
**PKIN Phulchoki** 40.60 330 *e*P P 19 55 57.1 -2.0
**GUN Gumba** 40.65 331 *e*P P 19 55 57.8 -1.8
comp=Z,25nm,0.6s
**DMN Daman** 40.77 330 *e*P P 19 55 58.6 -1.9
**KKN Kakani** 40.83 331 *e*P P 19 55 59.1 -1.9
**GKN Gorkha** 41.33 330 *e*P P 19 56 03.2 -1.8
comp=Z,9.1nm,0.3s
**XAN Xi'an** 41.55 3 P P 19 56 05.4 -1.2
XAN PMZ
comp=Z,4.0nm,0.7s
XAN PMZ
comp=Z,38nm,7.5s
XAN LN
comp=Z,87nm,19.4s
XAN LZ
comp=Z,160nm,19.4s
**KOLN Koldanda** 41.66 329 *e*P P 19 56 06.1 -1.7
comp=Z,27nm,0.7s
**CMSA Cobar Meteorol** 43.48 128 P P 19 56 24.3 +2.0
baz=44,SNR=15
**JNU Nakatsue** 46.70 28 LR LR 20 18 09.1
comp=Z,12nm,18.2s,baz=38
**GTA Gaotai** 47.27 353 *e*P P 19 56 51.8 -0.5
GTA pP pP 19 57 04.4 -1.5
GTA PcP PcP 19 58 24.6 +1.8
GTA S S 20 03 40.6 -1.5
GTA SS SS 20 07 00.6 -10
GTA PMZ
comp=Z,5.0nm,1.0s
GTA PMZ
comp=Z,42nm,5.2s
GTA LN
comp=Z,97nm,20.4s
GTA LE
comp=Z,81nm,20.9s
GTA LZ
comp=Z,110nm,20.4s
**KSAR Wonju Array Be** 49.11 22 P P 19 57 05.8 -0.6
**KSAR Wonju Array Be** 49.11 22 P P 19 57 05.8 -0.6
**KSRS Korea Array** 49.14 23 P P 19 57 05.8 -0.8
comp=Z,3.6nm,0.8s,baz=214,slow=9.0,SNR=11
KSRS LR LR 20 20 01.3
comp=Z,13nm,20.4s,baz=200,slow=39
**MAJO Matsushiro** 53.07 32 *de*P P 19 57 32.7 -3.4
MAJO pmax pmax
comp=Z,54nm,1.3s
**MJAR Matsushiro Arr** 53.07 32 P P 19 57 33.2 -2.9
comp=Z,0.9nm,0.5s,baz=209,slow=9.6,SNR=5.6
**CN2 Changchun** 54.02 17 *e*P P 19 57 41.3 -1.6
**SONM Songino Array** 55.27 360 P P 19 57 51.2 -0.9
comp=Z,1.7nm,0.9s,baz=184,slow=8.8,SNR=12
SONM PcP PcP 19 58 52.7 +0.4
comp=Z,5.6nm,0.7s,baz=174,slow=3.6,SNR=14
SONM LR LR 20 24 05.4
comp=Z,81nm,18.1s,baz=200,slow=39
**ULN Ulaanbaatar** 55.30 0⇑ *e*P P 19 57 51.5 -0.8
ULN pmax pmax
comp=Z,5.0nm,1.2s
**ULN Ulaanbaatar** 55.30 0 *e*P P 19 57 51.9 -0.5
comp=Z,2.2nm,0.6s
**MDJ Mudanjiang** 56.04 20 *e*P P 19 57 55.9 -1.6
**USRK Ussuriysk Ar.** 56.52 22 P P 19 57 59.8 -1.1
comp=Z,3.9nm,0.6s,baz=201,slow=7.7,SNR=11
**TKM2 Tokmak 2** 57.71 333 *e*P P 19 58 07.7 -2.0
TKM2 pmax pmax
comp=Z,6.0nm,0.4s
**TKM2 Tokmak 2** 57.71 333 *e*P P 19 58 07.7 -2.0
comp=Z,5.6nm,0.4s
**AAK Ala-Archa** 57.98 332⇓ *e*P P 19 58 11.6 +0.1
AAK pmax pmax
comp=Z,4.0nm,1.1s
**EKS2 Erkin-Say** 58.33 332 *e*P P 19 58 13.5 -0.4
EKS2 pmax pmax
comp=Z,4.0nm,0.8s
**EKS2 Erkin-Say** 58.33 332 *e*P P 19 58 13.5 -0.4
comp=Z,3.7nm,0.8s
**MKAR Makanchi Array** 58.38 341 P P 19 58 12.3 -1.7
comp=Z,4.1nm,0.5s,baz=150,slow=8.5,SNR=66
MKAR LR LR 20 26 05.3
comp=Z,47nm,19.6s,baz=174,slow=39
**TLY Talaya** 59.17 358 LR LR 20 25 59.1
comp=Z,47nm,19.7s,baz=162,slow=38
**KKAR Karatay Array** 60.23 330 *e*P P 19 58 25.8 -1.1
KKAR pmax pmax
comp=Z,1.0nm,0.5s
**KKAR Karatay Array** 60.23 330 *e*P P 19 58 25.8 -1.1
comp=Z,1.3nm,0.5s
**IMON Monand** 60.30 315 *e*P P 19 58 27.8 0.0
**IKOO Kooshah** 60.35 314 *e*P P 19 58 28.1 -0.1
**KLR Kul'dur** 60.81 19 *e*P P 19 58 24.7 -5.9
**IMOG Moghan** 62.15 318 *e*P P 19 58 40.2 -0.2
**IPAY Payeh** 62.57 318 *e*P P 19 58 43.0 -0.1
**KURK Kurchatov** 62.99 340 *e*P P 19 58 43.4 -1.9
KURK pmax pmax
comp=Z,41nm,1.2s
**KURK Kurchatov** 62.99 340 *e*P P 19 58 43.4 -1.9
comp=Z,41nm,1.2s
**YSS Yuzh-Sakhalins** 63.17 27⇑ *e*P P 19 58 44.5 -2.0
YSS pmax pmax
comp=Z,15nm,1.3s
**ISRV Sarvestan** 63.24 308 *e*P P 19 58 48.6 +0.8
**IPAR Pars** 63.50 309 *e*P P 19 58 50.6 +1.1
**ISAD Sadrabad** 63.97 311 *e*P P 19 58 52.2 -0.4
**GEYT Alibeck** 63.99 319 P P 19 58 52.7 +0.5
comp=Z,5.6nm,0.4s,baz=166,slow=4.8,SNR=33
**ISHV Shirvan** 64.04 318 *e*P P 19 58 53.4 +0.6
**ZALV Zalesovo Beam** 64.08 346 P P 19 58 50.2 -2.2
comp=Z,2.8nm,0.5s,baz=132,slow=2.2,SNR=12
ZALV LR LR 20 29 24.6
comp=Z,35nm,20.8s,baz=250,slow=38
**KRAR Krasnoyarsk** 64.47 352 *ce*P P 19 58 54.2 -0.7
KRAR pmax pmax
comp=Z,12nm,0.4s
**IRAM Ramesheh** 64.90 310 *e*P P 19 58 58.2 -0.4
**NVS Novosibirsk** 65.28 345 *e*P P 19 58 58.2 -2.0
**BOD Bodaibo** 65.55 4 *e*P P 19 59 00.6 -1.3
BOD pmax pmax
comp=Z,4.0nm,1.3s
**IKLH Kolahrood** 66.20 311 *e*P P 19 59 06.4 -0.6
**IPIR Pirpir** 66.43 311 *e*P P 19 59 08.9 +0.5
**MAW Mawson** 66.60 197 P P 19 59 10.7 +2.2
comp=Z,2.0nm,0.6s,baz=89,slow=3.4,SNR=8.6
**IALA Alasht** 66.62 315 *e*P P 19 59 10.3 +0.7

**BRVK Borovoye** 67.89 337 *ce*P P 19 59 15.8 -1.1
BRVK pmax pmax
comp=Z,13nm,1.2s
**BRVK Borovoye** 67.89 337 *e*P P 19 59 15.4 -1.5
comp=Z,5.4nm,0.4s
ABKAR **Akbulak array** 69.78 329 *e*P P 19 59 27.9 -0.8
comp=Z,14nm,0.5s
**IVIS Veis** 70.26 311 *e*P P 19 59 31.6 -0.5
**ISRB Sarab** 71.08 314 *e*P P 19 59 37.1 -0.1
**YAK Yakutsk** 71.78 11 *e*P P 19 59 38.7 -1.9
YAK *e* 19 59 58.9
YAK *e*S S 20 08 57.9 +1.1
YAK *e* 20 09 39.6
YAK *e*SSS SSS 20 16 36.4
YAK pmax pmax
comp=Z,24nm,0.9s
YAK pmax pmax
comp=N,4.0nm,1.0s
YAK pmax pmax
comp=E,5.0nm,1.5s
YAK smax smax
comp=E,22nm,2.1s
YAK smax smax
comp=N,27nm,3.3s
**YAK Yakutsk** 71.78 11 *e*P P 19 59 38.5 -2.1
comp=N,20nm,0.8s
**ISHB Shabestar** 72.73 314 *e*P P 19 59 46.9 -0.3
**PETK Petropavlovsk-** 74.39 29 P P 19 59 54.3 -1.9
comp=N,1.2nm,0.5s,baz=201,slow=2.7,SNR=5.9
PETK LR LR 20 36 06.9
comp=N,19nm,18.5s,baz=169,slow=39
**SVE Sverdlovsk** 74.45 336⇓ *e*P P 19 59 57.3 +0.8
SVE pmax pmax
comp=Z,51nm,1.2s
**ARU Arti** 75.05 335 *ci*P P 20 00 00.2 +0.2
ARU S S 20 09 41.1 +7.0
ARU SS SS 20 14 20.8 -3.3
ARU pmax pmax
comp=Z,52nm,1.7s
**ARU Arti** 75.05 335 *e*P P 20 00 00.1 +0.1
comp=Z,34nm,1.0s
**VNDA Vanda** 75.38 169 P P 20 00 03.0 +1.4
comp=Z,1.0nm,0.7s,baz=300,slow=4.7,SNR=8.3
VNDA LR LR 20 31 14.7
comp=Z,29nm,19.6s,baz=324,slow=34
**VNDA Vanda** 75.38 169 P P 20 00 03.0 +1.4
**VNDA Vanda** 75.38 169 P P 20 00 03.0 +1.4
**NCK Nalchik** 76.31 318⇑ *i*P P 20 00 08.0 +0.5
**KBZ Khabaz** 76.87 318 P P 20 00 09.8 -0.8
comp=Z,6.5nm,0.9s,baz=121,slow=2.3,SNR=6.9
**KIV Kislovodsk** 77.10 318⇓ *e*P P 20 00 12.8 +0.7
KIV *e* 20 03 08.6
KIV *e*S S 20 09 59.1 +1.7
KIV pmax pmax
comp=Z,5.0nm,0.8s
KIV MLR MLR
comp=Z,22nm,15.0s
**EIL Elat** 78.08 302 P P 20 00 19.4 +1.7
baz=78,SNR=4.4
**BOSA Boshof** 78.77 242 P P 20 00 23.3 +1.6
comp=Z,2.4nm,0.9s,baz=119,slow=7.7,SNR=4.3
**VRH Novokhopyorsk** 80.69 325 *e*P P 20 00 31.7 +0.3
VRH pmax pmax
comp=E,9.0nm,0.8s
VRH pmax pmax
comp=Z,10.0nm,0.8s
VRH pmax pmax
comp=N,9.0nm,0.6s
**CSS Prodhromos** 80.85 307 *e*P P 20 00 33.9 +1.2
comp=N,3.3nm,0.8s
**BR131 Keskin Array S** 81.96 312 P P 20 00 40.0 +1.4
baz=82,SNR=3.7
**BRTR Keskin Array B** 81.96 312 P P 20 00 38.9 +0.2
comp=N,3.2nm,0.8s,baz=142,slow=6.7,SNR=15
**VSR Storozhevoye** 82.17 324 *e*P P 20 00 39.3 +0.1
VSR pmax pmax
comp=N,3.0nm,0.5s
VSR pmax pmax
comp=Z,20nm,0.5s
VSR pmax pmax
comp=E,2.0nm,0.4s
**LPSR Galich'ya Gora** 82.83 325 *e*P P 20 00 43.3 +0.6
LPSR pmax pmax
comp=N,4.0nm,0.8s
LPSR pmax pmax
comp=Z,10.0nm,0.8s
LPSR pmax pmax
comp=E,4.0nm,0.6s
**OBN Obninsk** 85.06 327⇑ *e*P P 20 00 54.3 +0.4
OBN *e* 20 04 06.9
OBN *e*PPP PPP 20 06 05.8
OBN *e*S PnS 20 12 24.8 +4.4
OBN pmax pmax
comp=Z,18nm,0.7s
OBN MLR MLR
comp=Z,31nm,16.0s
**OBN Obninsk** 85.06 327 *e*P P 20 00 54.4 +0.4
comp=Z,10nm,0.5s
**KLMR Klimovskoe** 85.79 333 *e*P P 20 00 56.0 -1.5
KLMR pmax pmax
comp=Z,32nm,1.3s
**TLB Topalu** 87.25 315 ⇓P P 20 01 01.9 -3.1
**TLB Topalu** 87.25 315 ⇓ *i*P P 20 01 01.9 -3.1
**CFR Carcaliu** 87.32 316 ⇓P P 20 01 06.4 +1.1
**CFR Carcaliu** 87.32 316 ⇓ *i*P P 20 01 06.4 +1.1
AKASG **Malin Array Be** 87.96 322 P P 20 01 08.5 +0.2
comp=Z,3.4nm,0.6s,baz=82,slow=4.6,SNR=13
**KIEV Kiev** 87.97 322⇑ *e*P P 20 01 08.6 +0.3
KIEV pmax pmax
comp=Z,5.0nm,0.8s
**VRI Vrincioaia** 88.44 317 ⇓P P 20 01 12.6 +1.9
**VRI Vrincioaia** 88.44 317 ⇓ *i*P P 20 01 12.6 +1.9
**PLOR Plostina** 88.49 316 ⇑P P 20 01 12.4 +1.4
**PLOR Plostina** 88.49 316 ⇑ *i*P P 20 01 12.4 +1.4
**TESR Tescani** 88.64 317 ⇑ *i*P P 20 01 12.7 +1.1
**SNAA Sanae** 88.76 197 P P 20 01 13.6 +1.8
**MLR Muntele Rosu** 88.90 316 ⇓P P 20 01 13.4 +0.4
**MLR Muntele Rosu** 88.90 316 ⇓ *i*P P 20 01 13.4 +0.4
**PRAR RASCA** 89.10 318 ⇓ *i*P P 20 01 15.2 +1.4
**VOIR** 89.50 316 ⇓P P 20 01 18.1 +2.3
**VOIR** 89.50 316 ⇓ *i*P P 20 01 18.1 +2.3
BURAR **Bucovina Array** 89.82 318 ⇑P P 20 01 20.4 +3.1
BURAR **Bucovina Array** 89.82 318 ⇑ *i*P P 20 01 20.4 +3.1
**LOT Lotru** 90.39 316 ⇓ *i*P P 20 01 18.9 -1.1
**GZR Gura Zlata** 91.07 316 ⇑P P 20 01 25.7 +2.6
**GZR Gura Zlata** 91.07 316 ⇑ *i*P P 20 01 25.7 +2.6
**BZS Buzias** 91.91 316 ⇑P P 20 01 31.7 +4.8
**BZS Buzias** 91.91 316 ⇑ *i*P P 20 01 31.7 +4.8
**UZH Uzhgorod** 91.93 319 *e*P P 20 01 34.3 +7.4
**KOLS Kolonicke sedl** 92.00 319 *e*PKP PKiKP 20 06 16.3 -1.1
**FINES FINESS Array B** 92.16 332 P P 20 01 26.4 -1.3
comp=Z,1.8nm,0.7s,baz=128,slow=3.1,SNR=6.9
**LANS Liptovska Anna** 93.85 319 *e*PKP PKiKP 20 06 18.1 -2.5
**ARCES ARCESS Array B** 94.02 340 P P 20 01 35.5 -0.6
comp=Z,5.7nm,1.0s,baz=96,slow=3.7,SNR=8.2
ARCES LR LR 20 47 32.4
comp=Z,26nm,18.2s,baz=81,slow=38
**NOA NORSAR Array B** 99.26 331 LR LR 20 52 04.4
comp=Z,17nm,19.0s,baz=80,slow=38
**TORD Torodi Ar. Bea** 106.13 281 PKiKP PKiKP 20 06 43.3 -0.2
comp=Z,0.4nm,0.8s,baz=96,slow=1.2,SNR=3.4
**NVAR Mina Array Bea** 129.33 46 PKP PKPdf 20 07 29.4 +1.9
comp=Z,1.2nm,0.6s,baz=299,slow=1.9,SNR=12
**HVU Hansel Valley** 131.41 39 *e*PKiKP PKPdf 20 07 32.8 +1.6
**HVU Hansel Valley** 131.41 39 *e*PKPdf PKPdf 20 07 32.8 +1.6
**SCHQ Schefferville** 132.68 355 PKP PKPdf 20 07 34.4 +1.4
comp=Z,2.7nm,0.5s,baz=323,slow=5.1,SNR=3.8
**MSU Marysvale** 133.53 43 *e*PKiKP PKPdf 20 07 37.2 +1.8
**MSU Marysvale** 133.53 43 *e*PKPdf PKPdf 20 07 37.1 +1.8
**O20A White River Ci** 135.16 38 *e*PKPdf PKPdf 20 07 39.4 +1.0
**ANMO Albuquerque** 139.32 43 PKP PKPdf 20 07 45.0 -1.2
comp=Z,0.4nm,0.3s,baz=297,slow=0.9,SNR=2.3
**ANMO Albuquerque** 139.32 43 PKiKP PKPdf 20 07 45.0 -1.2
**CPUP Villa Florida** 142.75 204 PKP PKPdf 20 07 50.4 -2.0
comp=Z,1.0nm,0.6s,baz=117,slow=6.8,SNR=2.3
**NCB Newcomb** 143.84 1 *e*PKPdf PKPab 20 07 50.1 -0.7
**TXAR Lajitas Array** 144.33 49 PKP PKPdf 20 07 55.2 0.0
comp=Z,1.8nm,0.6s,baz=272,slow=1.4,SNR=8.9
**WMOK Wichita Mounta** 144.38 37 *e*PKiKP PKPbc 20 07 54.0 +0.5
WMOK **Wichita Mounta** 144.38 37 *e*PKPdf PKPbc 20 07 54.0 +0.5
**SFIN Scholer Farm** 145.22 18 *e*PKPdf PKPdf 20 07 56.1 -0.1
**ABTX Abilene, Hawle** 145.25 41 *e*PKPdf PKPdf 20 07 57.5 +0.9
**CCM Cathedral Cave** 145.73 25 *e*PKiKP PKPbc 20 07 57.5 -0.1
**CCM Cathedral Cave** 145.73 25 *e*PKPdf PKPbc 20 07 57.5 -0.1
**BDFB Brasilia** 145.78 227 PKPbc PKPab 20 08 00.5 +1.6

comp=Z,3.4nm,0.5s,baz=73,slow=9.3,SNR=3.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OLIL** | **Olney** | **146.37** | **21** | *e*PKPdf | **PKPbc** | **20 07 59.8** | **+0.3** |
| **JCT** | **Junction City** | **146.47** | **44** | *e*PKP2 | **PKPbc** | **20 07 59.8** | **-0.4** |
| **JCT** | **Junction City** | **146.47** | **44** | *e*PKPbc | **PKPbc** | **20 07 59.8** | **-0.4** |
| **ACSO** | **Alum Creek Sta** | **146.48** | **13** | *e*PKPdf | **PKPbc** | **20 07 59.6** | **-0.2** |
| **SIUC** | **Southern Illin** | **146.85** | **23** | *e*PKPbc | **PKPbc** | **20 08 00.6** | **-0.3** |
| **SSPA** | **Standing Stone** | **146.94** | **6** | *e*PKPbc | **PKPbc** | **20 08 00.6** | **-0.5** |
| **WHTX** | **Lake Whitney** | **147.06** | **40** | *e*PKPbc | **PKPab** | **20 08 02.9** | **-0.4** |
| **WCI** | **Wyandotte Cave** | **147.44** | **19** | *e*PKP2 | **PKPbc** | **20 08 02.9** | **+0.3** |
| **WCI** | **Wyandotte Cave** | **147.44** | **19** | *e*PKPbc | **PKPbc** | **20 08 02.9** | **+0.3** |
| **MIAR** | **Mount Ida** | **147.46** | **32** | *e*PKP2 | **PKPbc** | **20 08 03.3** | **+0.5** |
| **MIAR** | **Mount Ida** | **147.46** | **32** | *e*PKPbc | **PKPbc** | **20 08 03.3** | **+0.5** |
| **WVT** | **Waverly** | **148.77** | **23** | *e*PKP2 | **PKPbc** | **20 08 06.7** | **+0.5** |
| **WVT** | **Waverly** | **148.77** | **23** | *e*PKPbc | **PKPbc** | **20 08 06.7** | **+0.5** |
| **CPCT** | **Cooper Cave** | **150.55** | **19** | *e*PKPbc | **PKPbc** | **20 08 11.1** | **+0.5** |
| CPCT | | | | *e*PKPab | **PKPab** | **20 08 17.1** | **-0.1** |
| **TKL** | **Tuckaleechee C** | **150.58** | **17** | PKPbc | **PKPbc** | **20 08 10.9** | **+0.3** |

comp=Z,15nm,0.6s,baz=138,slow=2.3,SNR=11

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GOGA** | **Godfrey** | **152.76** | **19** | *e*PKIKP | **PKPbc** | **20 08 16.7** | **+1.0** |
| **GOGA** | **Godfrey** | **152.76** | **19** | *e*PKPbc | **PKPbc** | **20 08 16.7** | **+1.0** |

**MEX 14 20:05:47.4±0.3, 18°.25N×103°.15W, h20km±28km, MD3.5, Near coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MMIG** | **Aquila** | **0.19** | **283** | *i* P | Pb | 20 05 51.4 | -1.0 |
| MMIG | | | | *e*S | Sb | 20 05 54.7 | -1.2 |
| **R15V** | | **1.21** | **320** | *i* P | Pn | 20 06 06.2 | -3.2 |
| R15V | | | | *i* S | Sb | 20 06 20.6 | -4.5 |
| **EZ5V** | | **1.30** | **341** | *i* P | Pn | 20 06 07.4 | -3.4 |
| EZ5V | | | | *i* S | Sn | 20 06 23.3 | -4.6 |

*IDC **14** 20:06:45.5±1.1, 8°.32N×91°.71E, h0km, mb3.7/8, mb1 3.8/10, mb1mx3.6/41, mbtmp3.7/10, ML3.8/2, Error ellipse: s-maj=30.7km s-min=19.0km az=49.0*
*ISCJB **14** 20:06:46.6±0.8, 8°.3N±0°.1×91°.7E±0°.1, h23km, mb3.6/8, Error ellipse: s-maj=17.4km s-min=14.6km az=9.2*

**ISC 14 20:06:48.8±1.1, 8°.3N±0°.2×91°.7E±0°.1, h23km, n13, σ0§89/10, mb3.5/8, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALK** | **Pallekele** | **10.94** | **265** | Pn | **Pn** | **20 09 23.5** | **-0.6** |

0.5nm,0.3s,baz=116,slow=10,SNR=4.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PALK | | | | Sn | Sn | 20 11 13.0 | -13 |

1.1nm,0.3s,baz=115,slow=11,SNR=5.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **12.28** | **34** | Pn | **Pn** | **20 09 41.8** | **-0.6** |

0.2nm,0.3s,baz=230,slow=16,SNR=5.2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H08S3** | **Diego Garcia H** | **24.86** | **231** | T | T | 20 38 19.3 | |

baz=52,slow=75,SNR=4.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **24.86** | **231** | T | T | 20 38 18.2 | |

baz=52,slow=75,SNR=5.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Garcia H** | **24.88** | **231** | T | T | 20 38 26.6 | |

baz=52,slow=75,SNR=4.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **37.36** | **339** | P | **P** | **20 14 00.6** | **+0.8** |

0.4nm,0.3s,baz=216,slow=17,SNR=2.9

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **39.16** | **350** | P | **P** | **20 14 14.7** | **-0.1** |

0.3nm,0.5s,baz=168,slow=8.2,SNR=4.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **41.30** | **15** | P | **P** | **20 14 31.7** | **-1.0** |

0.5nm,0.6s,baz=196,slow=9.8,SNR=6.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **GEYT** | **Alibeck** | **42.26** | **319** | P | **P** | **20 14 41.3** | **+0.8** |

1.9nm,0.7s,baz=141,slow=9.6,SNR=5.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Array** | **43.55** | **348** | P | **P** | **20 14 50.7** | **0.0** |

0.2nm,0.3s,baz=174,slow=7.8,SNR=5.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JNU** | **Nakatsue** | **43.78** | **50** | P | **P** | **20 14 54.1** | **+1.2** |

6.8nm,0.9s,baz=173,slow=19,SNR=2.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **50.52** | **124** | P | **P** | **20 15 44.7** | **-0.9** |

0.5nm,0.8s,baz=303,slow=8.8,SNR=3.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **52.09** | **129** | P | **P** | **20 15 58.0** | **+0.7** |

0.5nm,0.8s,baz=305,slow=6.4,SNR=3.6

**WEL 14 20:09:23.5±0.4, 38°.62S×175°.50E, h180km±3km, ML4.0/21, 13C-5D, Error ellipse: s-maj=2.0km s-min=1.7km az=0.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWVZ** | **Taurewa** | **0.45** | **186** | ⇑P | Pn | 20 09 48.0 | -0.2 |
| TWVZ | | | | SN | Sn | 20 10 05.9 | -1.4 |
| **KRVZ** | **Karewarewa** | **0.48** | **167** | PN | Pn | 20 09 48.4 | +0.1 |
| KRVZ | | | | SN | Sn | 20 10 06.1 | -1.5 |
| **WTVZ** | **West Tongariro** | **0.50** | **172** | PN | Pn | 20 09 48.4 | 0.0 |
| WTVZ | | | | SN | Sn | 20 10 06.3 | -1.4 |
| **HIZ** | **Hauiti** | **0.52** | **282** | ⇑PN | Pn | 20 09 48.2 | 0.0 |
| HIZ | | | | SN | Sn | 20 10 07.0 | -0.3 |
| **OTVZ** | **Oturere** | **0.56** | **167** | PN | Pn | 20 09 48.8 | +0.1 |
| **WPVZ** | **Whakapapa** | **0.58** | **177** | ⇑PN | Pn | 20 09 48.8 | 0.0 |
| **TUVZ** | **Tukino** | **0.66** | **170** | PN | Pn | 20 09 49.2 | +0.1 |
| **WHVZ** | **Whangaehu Hut** | **0.66** | **174** | PN | Pn | 20 09 49.6 | +0.4 |
| **PKVZ** | **Pokaka** | **0.68** | **190** | PN | Pn | 20 09 49.0 | -0.2 |
| **WNVZ** | **Wahianoa** | **0.71** | **174** | ⇑PN | Pn | 20 09 49.5 | 0.0 |
| **MRHZ** | **Matea Rd** | **0.75** | **107** | PN | Pn | 20 09 49.3 | -0.2 |
| **MTVZ** | **Mangateitei** | **0.76** | **182** | ⇑PN | Pn | 20 09 49.6 | 0.0 |
| **BKZ** | **Black Stump Fm** | **0.94** | **125** | ⇑PN | Pn | 20 09 50.8 | 0.0 |
| BKZ | | | | | AML | 20 10 12.9 | |
| BKZ | | | | | AML | 20 10 13.9 | |
| **BHHZ** | **Black Hill Sta** | **0.97** | **153** | PN | Pn | 20 09 50.7 | -0.2 |
| **NMHZ** | **Naumai** | **1.12** | **115** | PN | Pn | 20 09 53.3 | +1.1 |
| **LREZ** | **Lake Rotokare** | **1.20** | **225** | PN | Pn | 20 09 52.6 | 0.0 |
| **WAZ** | **Wanganui** | **1.20** | **199** | ⇑PN | Pn | 20 09 52.6 | -0.1 |
| **KRHZ** | **Kereru** | **1.22** | **147** | PN | Pn | 20 09 53.0 | +0.1 |
| **MCHZ** | **McNeill Hill** | **1.24** | **132** | PN | Pn | 20 09 53.6 | +0.6 |
| **NEZ** | **North Egmont** | **1.27** | **239** | PN | Pn | 20 09 53.4 | 0.0 |
| **PKE** | **Pukeiti** | **1.31** | **244** | PN | Pn | 20 09 53.5 | -0.2 |
| **URZ** | **Urewera** | **1.31** | **74** | ⇑PN | Pn | 20 09 53.1 | -0.5 |
| URZ | | | | | AML | 20 10 15.1 | |
| URZ | | | | | AML | 20 10 15.9 | |
| **ARHZ** | **Aropaoanui** | **1.33** | **119** | PN | Pn | 20 09 54.5 | +0.7 |
| **PNHZ** | **Pukenui** | **1.40** | **157** | PN | Pn | 20 09 54.3 | -0.2 |
| **SNGZ** | **Shannon Statio** | **1.45** | **97** | PN | Pn | 20 09 54.5 | -0.4 |
| **TSZ** | **Takapari Road** | **1.48** | **166** | ⇓PN | Pn | 20 09 54.9 | -0.3 |
| TSZ | | | | | AML | 20 10 19.7 | |
| TSZ | | | | | AML | 20 10 20.0 | |
| **KAHZ** | **Kahuranaki** | **1.58** | **138** | ⇓PN | Pn | 20 09 56.6 | +0.3 |
| **CKHZ** | **Cape Kidnapper** | **1.60** | **131** | PN | Pn | 20 09 56.9 | +0.5 |
| **WPHZ** | **Waipukurau** | **1.61** | **153** | ⇓PN | Pn | 20 09 56.3 | -0.2 |
| **MWZ** | **Matawai** | **1.61** | **80** | ⇑PN | Pn | 20 09 56.3 | -0.3 |
| MWZ | | | | | AML | 20 10 21.0 | |
| MWZ | | | | | AML | 20 10 21.1 | |
| MWZ | | | | | AML | 20 10 21.3 | |
| **KNZ** | **Kokohu** | **1.74** | **104** | PN | Pn | 20 09 57.8 | +0.1 |
| KNZ | | | | | AML | 20 10 21.2 | |
| KNZ | | | | | AML | 20 10 24.6 | |
| **DVHZ** | **Dannevirke** | **1.75** | **163** | PN | Pn | 20 09 57.1 | -0.7 |
| **PXZ** | **Pawanui** | **1.76** | **144** | ⇓PN | Pn | 20 09 57.7 | -0.1 |
| PXZ | | | | | AML | 20 10 25.9 | |
| PXZ | | | | | AML | 20 10 25.9 | |
| PXZ | | | | | AML | 20 10 26.4 | |
| PXZ | | | | | AML | 20 10 27.5 | |
| **RIGZ** | **Rimuhau** | **1.77** | **93** | PN | Pn | 20 09 58.2 | +0.1 |
| **POWZ** | **Post Office Ro** | **1.78** | **173** | PN | Pn | 20 09 57.3 | -0.8 |
| **TKGZ** | **Te Karaka** | **1.85** | **85** | ⇑PN | Pn | 20 09 59.1 | +0.2 |
| **PRHZ** | **Porangahau** | **1.86** | **152** | PN | Pn | 20 09 58.5 | -0.5 |
| **PRGZ** | **Paritu Road** | **1.89** | **100** | PN | Pn | 20 09 59.3 | 0.0 |
| **MHGZ** | **Mahia Peninsul** | **1.95** | **107** | PN | Pn | 20 10 00.3 | +0.3 |
| **PRWZ** | **Pori Road** | **1.96** | **170** | PN | Pn | 20 09 59.5 | -0.6 |
| **ANWZ** | **Angora Road** | **1.98** | **158** | PN | Pn | 20 09 59.9 | -0.4 |
| **HAZ** | **Te Kaha** | **2.00** | **65** | PN | Pn | 20 09 59.4 | -1.0 |
| **TWGZ** | **Tauwhareparae** | **2.00** | **78** | PN | Pn | 20 10 00.6 | +0.1 |
| **MRZ** | **Mangatainoka R** | **2.04** | **178** | PN | Pn | 20 09 59.7 | -1.2 |
| MRZ | | | | | AML | 20 10 28.7 | |
| MRZ | | | | | AML | 20 10 30.1 | |
| **BFZ** | **Birch Farm** | **2.13** | **165** | ⇓PN | Pn | 20 10 00.9 | -1.0 |
| BFZ | | | | | AML | 20 10 30.5 | |
| BFZ | | | | | AML | 20 10 30.5 | |
| BFZ | | | | | AML | 20 10 30.8 | |
| BFZ | | | | | AML | 20 10 30.8 | |
| **TIWZ** | **Tintock** | **2.17** | **172** | PN | Pn | 20 10 01.2 | -1.1 |
| TIWZ | | | | | AML | 20 10 32.1 | |
| TIWZ | | | | | AML | 20 10 32.1 | |
| **OGWZ** | **Otaki Gorge** | **2.21** | **187** | PN | Pn | 20 10 01.7 | -1.1 |
| **PUZ** | **Puketiti** | **2.23** | **77** | ⇑PN | Pn | 20 10 02.5 | -0.7 |
| PUZ | | | | | AML | 20 10 32.3 | |
| PUZ | | | | | AML | 20 10 33.0 | |
| **HOWZ** | **Holdsworth Sta** | **2.27** | **180** | PN | Pn | 20 10 02.1 | -1.5 |
| **KIW** | **Kapiti Island** | **2.28** | **191** | PN | Pn | 20 10 02.1 | -1.5 |
| KIW | | | | | AML | 20 10 31.2 | |
| KIW | | | | | AML | 20 10 32.4 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CPWZ** | **Castlepoint** | **2.35** | **167** | PN | Pn | 20 10 03.6 | -0.7 |
| **WMGZ** | **Waiomatatini S** | **2.43** | **72** | PN | Pn | 20 10 04.7 | -0.6 |
| **MXZ** | **Matakaoa Point** | **2.45** | **65** | PN | Pn | 20 10 05.3 | -0.2 |
| **DUWZ** | **D'Urville Isla** | **2.50** | **209** | PN | Pn | 20 10 04.1 | -2.0 |
| **TMWZ** | **Te Maipa** | **2.50** | **173** | PN | Pn | 20 10 04.5 | -1.6 |
| **CAW** | **Cannon Point** | **2.50** | **188** | PN | Pn | 20 10 04.6 | -1.6 |
| CAW | | | | | AML | 20 10 37.0 | |
| CAW | | | | | AML | 20 10 37.0 | |
| **MTW** | **Mount Morrison** | **2.53** | **180** | PN | Pn | 20 10 04.6 | -1.8 |
| MTW | | | | | AML | 20 10 37.4 | |
| MTW | | | | | AML | 20 10 37.7 | |
| **WEL** | **Wellington** | **2.72** | **192** | PN | Pn | 20 10 06.8 | -1.8 |
| WEL | | | | | AML | 20 10 41.8 | |
| WEL | | | | | AML | 20 10 41.9 | |
| **TCW** | **Tory Channel** | **2.75** | **200** | PN | Pn | 20 10 07.1 | -1.9 |
| TCW | | | | | AML | 20 10 41.9 | |
| TCW | | | | | AML | 20 10 42.0 | |
| **PAWZ** | **Paruwai Farm** | **2.76** | **181** | PN | Pn | 20 10 07.1 | -2.0 |
| PAWZ | | | | | AML | 20 10 41.8 | |
| PAWZ | | | | | AML | 20 10 42.7 | |
| **TRWZ** | **Traveller** | **2.78** | **177** | PN | Pn | 20 10 07.5 | -1.9 |
| TRWZ | | | | | AML | 20 10 43.0 | |
| TRWZ | | | | | AML | 20 10 43.1 | |
| **MSWZ** | **Moikau Station** | **2.79** | **184** | PN | Pn | 20 10 07.5 | -2.1 |
| MSWZ | | | | | AML | 20 10 42.1 | |
| MSWZ | | | | | AML | 20 10 42.6 | |
| **BHW** | **Baring Head** | **2.82** | **190** | PN | Pn | 20 10 07.8 | -2.1 |
| BHW | | | | | AML | 20 10 43.1 | |
| BHW | | | | | AML | 20 10 43.2 | |
| **PLWZ** | **Palliser** | **2.95** | **184** | PN | Pn | 20 10 09.1 | -2.3 |
| **TUWZ** | **Tuamarina** | **3.05** | **203** | PN | Pn | 20 10 10.2 | -2.4 |
| TUWZ | | | | | AML | 20 10 47.8 | |
| TUWZ | | | | | AML | 20 10 48.1 | |
| **QRZ** | **Quartz Range** | **3.18** | **225** | ⇑PN | Pn | 20 10 11.0 | -3.3 |
| **BSWZ** | **Blackbirch Sta** | **3.33** | **201** | PN | Pn | 20 10 14.0 | -2.1 |
| **THZ** | **Tophouse** | **3.71** | **212** | ⇑PN | Pn | 20 10 17.8 | -3.2 |
| **KHZ** | **Kahutara** | **4.07** | **201** | PN | Pn | 20 10 22.9 | -2.5 |
| KHZ | | | | | AML | 20 11 10.1 | |
| KHZ | | | | | AML | 20 11 10.3 | |
| **DSZ** | **Denniston Nort** | **4.21** | **221** | PN | Pn | 20 10 23.2 | -4.1 |
| **LTZ** | **Lake Taylor** | **4.83** | **210** | PN | Pn | 20 10 31.8 | -3.4 |
| **OXZ** | **Oxford** | **5.38** | **208** | PN | Pn | 20 10 37.4 | -4.9 |
| **MQZ** | **McQueen's Vall** | **5.51** | **202** | PN | Pn | 20 10 39.0 | -5.0 |
| **WVZ** | **Waitaha Valley** | **5.73** | **218** | PN | Pn | 20 10 43.7 | -3.1 |
| **LBZ** | **Lake Benmore** | **7.00** | **213** | PN | Pn | 20 10 59.3 | -4.2 |

*ISCJB **14** 20:20:33.7±0.4, 24°.45N±0°.02×121°.99E±0°.02, h11km±2km, Error ellipse: s-maj=2.9km s-min=2.3km az=149.1*
*TAP **14** 20:20:33.8, 24°.45N×121°.90E, h23km, ML3.7, B*
*JMA **14** 20:20:33.5, 24°.39N×121°.86E, h30km±2km, M2.9*

**ISC 14 20:20:33.9±1.0, 24°.45N±0°.02×121°.94E±0°.02, h18km±3km, n57, σ0§68/96, 4C-9D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ENA** | **Nanau** | **0.18** | **265** | ⇑*i* P | **Pg** | **20 20 38.7** | **0.0** |

baz=260

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ENA | | | | *e*S | **Sg** | **20 20 41.5** | **-0.4** |

baz=260

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWC** | **Suao** | **0.18** | **333** | ⇓*i* P | **Pg** | **20 20 39.1** | **+0.4** |

baz=347

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWC | | | | *i* S | **Sg** | **20 20 42.2** | **+0.2** |

baz=347

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.23** | **234** | *e*P | **Pg** | **20 20 40.0** | **+0.6** |

baz=224

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EHP | | | | *e*S | **Sg** | **20 20 44.0** | **+0.9** |

baz=224

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ILA** | **Ilan** | **0.36** | **331** | ⇓*i* P | **Pb** | **20 20 42.0** | **+0.1** |

baz=330

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ILA | | | | *i* S | **Sb** | **20 20 47.5** | **+0.2** |

baz=330

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWE** | **Neicheng** | **0.37** | **318** | ⇓*i* P | **Pg** | **20 20 41.6** | **-0.2** |

baz=323

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWE | | | | *i* S | **Sg** | **20 20 46.8** | **-0.2** |

baz=323

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ENTT** | **Nioudou** | **0.39** | **300** | ⇓*i* P | **Pg** | **20 20 42.0** | **-0.2** |

baz=303

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ENTT | | | | S | **Sg** | **20 20 47.2** | **-0.4** |

baz=303

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **EGS** | | **0.40** | **359** | *i* P | **Pb** | **20 20 42.4** | **-0.1** |

baz=6.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EGS | | | | S | **Sb** | **20 20 47.9** | **-0.4** |

baz=6.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWD** | **Chiawan** | **0.48** | **221** | ⇑P | **Pg** | **20 20 43.1** | **-0.6** |

baz=217

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWD | | | | *e*S | **Sb** | **20 20 52.2** | **+1.6** |

baz=217

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NNS** | **Nan Shan** | **0.52** | **270** | P | **Pg** | **20 20 44.1** | **-0.3** |

baz=269

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NNS | | | | S | **Sg** | **20 20 50.6** | **-0.9** |

baz=269

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **HWA** | **Hwalien** | **0.56** | **213** | *e*P | **Pg** | **20 20 45.2** | **0.0** |

baz=219

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.56** | **4** | *i* P | **Pb** | **20 20 45.1** | **0.0** |

baz=4.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWB1 | | | | *i* S | **Sb** | **20 20 52.8** | **-0.1** |

baz=4.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NSK** | **Sanguang** | **0.58** | **294** | ⇓*i* P | **Pb** | **20 20 44.9** | **-0.6** |

baz=295

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NSK | | | | *i* S | **Sg** | **20 20 52.1** | **-1.2** |

baz=295

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWA** | **Mucha** | **0.62** | **329** | ⇓*i* P | **Pg** | **20 20 46.3** | **-0.1** |

baz=323

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWA | | | | S | **Sg** | **20 20 54.6** | **-0.1** |

baz=323

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NWF** | **Wu-fen Shan** | **0.64** | **347** | ⇓*i* P | **Pg** | **20 20 46.8** | **+0.1** |

baz=343

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NWF | | | | S | **Sg** | **20 20 55.2** | **-0.1** |

baz=343

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WHF** | **Hehuan Shan** | **0.69** | **244** | ⇑*i* P | **Pb** | **20 20 46.8** | **-0.8** |

baz=249

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WHF | | | | *e*S | **Sb** | **20 20 56.6** | **-0.2** |

baz=249

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TAP1** | **Taipei** | **0.70** | **327** | ⇓*i* P | **Pg** | **20 20 47.9** | **+0.1** |

baz=323

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TAP1 | | | | *e*S | **Sg** | **20 20 57.1** | **-0.1** |

baz=323

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWT** | **Tachien** | **0.72** | **255** | *e*P | **Pb** | **20 20 48.1** | **0.0** |

baz=254

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWT | | | | *e*S | **Sb** | **20 20 57.7** | **0.0** |

baz=254

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ESL** | **Shilin** | **0.78** | **217** | *e*P | **Pb** | **20 20 48.5** | **-0.5** |

baz=220

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ESL | | | | *e*S | **Sn** | **20 21 00.9** | **-0.3** |

baz=220

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWS1** | **Kuangyinshan** | **0.81** | **324** | ⇓*i* P | **Pg** | **20 20 49.9** | **+0.1** |

baz=322

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWS1 | | | | S | **Sn** | **20 21 01.4** | **-0.5** |

baz=322

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NCU** | **National Centr** | **0.86** | **307** | P | **Pn** | **20 20 51.0** | **-0.2** |

baz=313

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NCU | | | | S | **Sn** | **20 21 02.8** | **-0.5** |

baz=313

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NSTT** | **Nanjuang** | **0.88** | **282** | *e*P | **Pb** | **20 20 50.7** | **+0.1** |

baz=279

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NSTT | | | | S | **Sg** | **20 21 02.3** | **-0.4** |

baz=279

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWY** | **Chenhua** | **0.88** | **339** | *e*P | **Pn** | **20 20 51.3** | **-0.1** |

baz=342

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonaguni jima** | **0.92** | **89** | P | **Pb** | **20 20 51.4** | **+0.2** |
| JYNG | | | | *e*S | **Sn** | **20 21 04.4** | **-0.1** |
| **HSN** | **Hsinchu** | **0.95** | **292** | *e*P | **Pb** | **20 20 52.0** | **+0.1** |

baz=296

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YOJ** | **Yonaguni jima** | **0.97** | **89** | P | **Pb** | **20 20 52.1** | **-0.2** |
| YOJ | | | | *e*S | **Sg** | **20 21 05.5** | **-0.3** |
| **YOJ** | **Yonaguni jima** | **0.97** | **89** | *e*P | **Pb** | **20 20 51.9** | **-0.4** |

baz=81

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| YOJ | | | | *e*S | **Sg** | **20 21 05.6** | **-0.1** |

baz=81

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWQ1** | **Liyutan** | **1.07** | **265** | *e*P | **Pg** | **20 20 55.3** | **+0.6** |

baz=265

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TWQ1 | | | | *e*S | **Sg** | **20 21 08.9** | **+0.2** |

baz=265

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NSY** | **Sanyi** | **1.08** | **269** | *e*P | **Pg** | **20 20 54.9** | **0.0** |

baz=269

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NSY | | | | *e*S | **Sg** | **20 21 10.4** | **+1.4** |

baz=269

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **EHY** | **Hungye** | **1.09** | **211** | *e*P | **Pb** | **20 20 52.7** | **-1.6** |

baz=208

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SMLT** | **Sun Moon Lake** | **1.10** | **240** | *e*P | **Pn** | **20 20 54.6** | **+0.1** |

baz=247

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SMLT | | | | *e*S | **Sg** | **20 21 09.9** | **0.0** |

baz=247

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TYC** | **Yuchr** | **1.13** | **242** | P | **Pb** | **20 20 55.0** | **+0.1** |

baz=249

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TYC | | | | *e*S | **Sg** | **20 21 11.9** | **+1.3** |

baz=249

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TCU** | **Taichung** | **1.19** | **256** | *e*P | **Pg** | **20 20 56.7** | **-0.3** |

baz=261

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| TCU | | | | *e*S | **Sg** | **20 21 15.0** | **+2.3** |

baz=261

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWF1** | **Yuli** | **1.24** | **209** | *e*P | **Pn** | **20 20 55.4** | **-1.0** |

baz=219

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WNT** | **Mingjian** | **1.28** | **244** | *e*P | **Pg** | **20 20 58.2** | **-0.5** |

baz=242

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WNT | | | | *e*S | **Sg** | **20 21 16.4** | **+1.0** |

baz=242

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YUS** | **Yu-Shan** | **1.31** | **224** | *e*P | **Pn** | **20 20 57.8** | **0.0** |

baz=223

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ALS** | **Alishan** | **1.40** | **228** | *e*P | **Pb** | **20 20 59.8** | **+0.2** |

baz=215

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CHN5** | **Tsauling** | **1.43** | **234** | ⇑P | **Pb** | **20 21 00.3** | **+0.2** |

baz=233

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CHN5 | | | | *e*S | **Sg** | **20 21 21.1** | **+0.8** |

baz=233

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CHKT** | **Chengkung** | **1.44** | **202** | *e*P | **Pn** | **20 20 59.7** | **+0.7** |

baz=184

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WGK** | **Gukeng** | **1.47** | **239** | *e*P | **Pb** | **20 21 01.2** | **+0.5** |

baz=238

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WGK | | | | *e*S | **Sg** | **20 21 21.4** | **-0.1** |

baz=238

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ELDTW** | **Lidau** | **1.51** | **214** | *e*P | **Pn** | **20 20 59.8** | **-0.3** |

baz=199

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **IRIF** | **Iriomote-Funau** | **1.63** | **93** | P | **Pn** | **20 21 01.5** | **-0.2** |
| IRIF | | | | *e*S | **Sn** | **20 21 22.0** | **-0.3** |
| **STYT** | **Tauyuan** | **1.68** | **221** | *e*P | **Pb** | **20 21 03.8** | **-0.5** |

baz=219

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| STYT | | | | *e*S | **Sb** | **20 21 25.2** | **+0.2** |

baz=219

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CHY** | **Chiayi** | **1.68** | **236** | *e*P | **Pb** | **20 21 04.6** | **+0.4** |

baz=235

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CHY | | | | *e*S | **Sg** | **20 21 27.8** | **-0.3** |

baz=235

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WTP** | **Ta-pu** | **1.70** | **226** | *e*P | **Pb** | **20 21 04.5** | **-0.2** |

baz=224

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WTP | | | | *e*S | **Sg** | **20 21 28.3** | **-0.7** |

baz=224

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WSF** | **Szhu** | **1.77** | **243** | *e*P | **Pb** | **20 21 05.4** | **-0.4** |

baz=242

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WSF | | | | *e*S | **Sb** | **20 21 28.6** | **+1.0** |

baz=242

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CHN1** | **Nanshi** | **1.80** | **226** | *e*P | **Pb** | **20 21 05.5** | **-0.9** |

baz=224

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CHN1 | | | | *e*S | **Sg** | **20 21 31.1** | **-1.0** |

baz=224

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TWG** | **Pinlang** | **1.80** | **206** | *e*P | **Pn** | **20 21 03.3** | **-0.8** |

baz=191

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SGST** | **Jiashian** | **1.84** | **223** | *e*P | **Pb** | **20 21 06.1** | **-0.9** |

baz=221

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JKRS** | **Kuro-shima** | **1.90** | **96** | P | **Pn** | **20 21 06.2** | **+0.8** |
| JKRS | | | | *e*S | **Sn** | **20 21 29.3** | **+0.5** |
| **JIJ** | **Ishigaki jima** | **2.01** | **92** | P | **Pn** | **20 21 07.6** | **+0.7** |
| JIJ | | | | *e*S | **Sn** | **20 21 30.4** | **-1.1** |
| **ECL** | **Taimali** |

comp=N,0.9nm,0.3s,baz=226,slow=13,SNR=13
**BDFB Brasilia 19.86 68** P **P 20 38 48.4 +0.2**
comp=N,1.1nm,0.3s,baz=244,slow=11,SNR=14
**SJG San Juan 42.14 1** LR LR 21 03 20.4
comp=N,25nm,18.5s,baz=114,slow=41
**SNAA Sanae 59.11 161** P **P 20 44 12.5 +0.7**
comp=N,0.3nm,1.0s,baz=326,slow=11,SNR=3.8
**TORD Torodi Ar. Bea 76.74 69** P **P 20 46 03.0 +0.5**
comp=N,0.5nm,0.4s,baz=257,slow=5.4,SNR=17
**MKAR Makanchi Array 146.79 40** PKPbc **PKPbc 20 53 51.8 +0.4**
comp=N,0.3nm,0.4s,baz=278,slow=3.7,SNR=3.2

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*ISCJB* **14** *20:39:54.9±1.0,38.09°N±0.08°×29.56°E±0.05,h11km, Error ellipse: s-maj=11.3km s-min=5.4km az=173.4*
*ISK* **14** *20:39:54.5,38.07°N×29.56°E,h7km, MD2.6*
*CSEM* **14** *20:39:55.0±0.6,38.02°N×29.60°E,h8km, MD2.6, Error ellipse: s-maj=16.9km s-min=8.6km az=161.0*
*DDA* **14** *20:39:59.1,37.99°N×29.11°E,h7km, Md2.6*
**ISC 14 20:39:55.6±1.1,38.07°N±0.06°×29.53°E±0.03,h11km,n11, σ1s24/17,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHAL** | **Karahalli** | **0.30** | **355** | P | **Pn** | **20 40 08.9** | **+2.8** |
| KHAL | | | | S | Sb | 20 40 15.6 | +7.4 |
| **DENT** | **Denizli** | **0.50** | **231** | *e*PG | **Pg** | **20 40 05.2** | **-0.2** |
| **DENT** | **Denizli** | **0.50** | **231** | *e*Pg | **Pg** | **20 40 05.2** | **-0.2** |
| **KULA** | **Kula-Manisa** | **0.81** | **303** | *e*PG | **Pg** | **20 40 11.4** | **0.0** |
| KULA | | | | *e*SG | **Sb** | **20 40 22.9** | **0.0** |
| **KULA** | **Kula-Manisa** | **0.81** | **303** | *e*Pg | **Pg** | **20 40 11.4** | **0.0** |
| KULA | | | | *e*Sg | **Sb** | **20 40 22.9** | **0.0** |
| **MANT** | **Manisa** | **0.87** | **299** | *i* P | **Pn** | **20 40 14.9** | **+0.9** |
| MANT | | | | *i* S | **Sg** | **20 40 21.8** | **-2.1** |
| **MANT** | **Manisa** | **0.87** | **299** | P | **Pn** | **20 40 14.9** | **+0.9** |
| MANT | | | | S | **Sg** | **20 40 21.8** | **-2.1** |
| **SHUT** | **Suhut-Afyon** | **0.94** | **59** | *e*PG | **Pg** | **20 40 12.6** | **-1.2** |
| SHUT | | | | *e*SG | **Sg** | **20 40 25.5** | **-0.5** |
| **SHUT** | **Suhut-Afyon** | **0.94** | **59** | *e*Pg | **Pg** | **20 40 12.6** | **-1.2** |
| SHUT | | | | *e*Sg | **Sg** | **20 40 25.5** | **-0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.30** | **265** | *e*PN | **Pb** | **20 40 20.1** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.30** | **265** | *e*Pn | **Pb** | **20 40 20.1** | **0.0** |

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**BUC 14 20:44:15.5±0.4,45.82°N×27.36°E,h5km±27km,MD1.8/2, 6C-4D,Error ellipse: s-maj=8.4km s-min=2.0km az=47.0, Romania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VRI** | **Vrincioaia** | **0.44** | **276** | ↑*i*P | Pg | 20 44 24.9 | +0.8 |
| VRI | | | | *i* S | Sg | 20 44 30.5 | +0.6 |
| **VRI** | **Vrincioaia** | **0.44** | **276** | ↑*i*P | Pg | 20 44 24.9 | +0.8 |
| **VRI** | **Vrincioaia** | **0.44** | **276** | S | Sg | 20 44 30.5 | +0.6 |
| **PLOR** | **Plostina** | **0.49** | **274** | ↓*i*P | Pg | 20 44 25.7 | +0.6 |
| PLOR | | | | *i* S | Sg | 20 44 32.7 | +1.1 |
| **PLOR** | **Plostina** | **0.49** | **274** | ↓*i*P | Pg | 20 44 25.7 | +0.6 |
| **PLOR** | **Plostina** | **0.49** | **274** | S | Sg | 20 44 32.7 | +1.1 |
| **CFR** | **Carcaliu** | **0.85** | **139** | ↑*i*P | Pb | 20 44 32.6 | 0.0 |
| **CFR** | **Carcaliu** | **0.85** | **139** | ↑*i*P | Pb | 20 44 32.6 | 0.0 |
| **TESR** | **Tescani** | **0.85** | **325** | ↑*i*P | Pb | 20 44 32.7 | 0.0 |
| TESR | | | | *i* S | Sn | 20 44 47.0 | +0.1 |
| **TESR** | **Tescani** | **0.85** | **325** | ↑*i*P | Pb | 20 44 32.7 | 0.0 |
| **MLR** | **Muntele Rosu** | **1.04** | **252** | ↓*i*P | Pb | 20 44 36.4 | +0.2 |
| MLR | | | | *i* S | Sb | 20 44 50.1 | -0.2 |
| **MLR** | **Muntele Rosu** | **1.04** | **252** | ↓*i*P | Pb | 20 44 36.4 | +0.2 |
| MLR | | | | S | Sb | 20 44 50.1 | -0.2 |

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**IDC 14 20:51:34.5±3.6,3.70S×144.28E,h0km,mb3.7/2, mb1 4.1/3,mb1mx3.6/21,mbtmp3.8/3,ML4.0/1,MS3.1/4, Ms1 3.1/4,ms1mx2.8/19,Error ellipse: s-maj=110.3km s-min=32.6km az=96.0,Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **18.84** | **210** | P | P | 20 55 55.9 | -0.3 |
| | 0.5nm,0.3s,baz=32,slow=11,SNR=45 | | | | | | |
| **ASAR** | **Alice Springs** | **22.24** | **206** | P | P | 20 56 32.9 | -0.3 |
| | 3.7nm,0.6s,baz=33,slow=9.6,SNR=47 | | | | | | |
| ASAR | | | | LR | LR | 21 05 28.8 | |
| | comp=Z,45nm,20.7s,baz=302,slow=38 | | | | | | |
| **JNU** | **Nakatsue** | **38.75** | **342** | LR | LR | 21 11 08.0 | |
| | comp=Z,26nm,20.0s,baz=132,slow=30 | | | | | | |
| **KSRS** | **Korea Array** | **43.68** | **341** | LR | LR | 21 15 44.7 | |
| | comp=Z,21nm,18.4s,baz=204,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **61.10** | **332** | LR | LR | 21 26 28.8 | |
| | comp=Z,20nm,21.0s,baz=191,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **74.01** | **321** | P | P | 21 03 12.5 | +0.3 |
| | 0.2nm,0.4s,baz=103,slow=6.2,SNR=2.8 | | | | | | |

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*CSEM* **14** *20:54:05.1,39.53°N×29.78°W,h10km, ML2.5, After PDA*
**PDA 14 20:54:05.1±0.6,39.53°N×29.78°W,h10km,MD3.5,ML2.5, Error ellipse: s-maj=14.2km s-min=4.5km az=50.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCED** | **Cedros** | **1.23** | **137** | *e*S | Sb | 20 54 37.6 | -6.8 |
| PCED | | | | A | A | 20 54 38.8 | |
| | 27nm,0.3s | | | | | | |
| **PCED** | **Cedros** | **1.23** | **137** | *e*S | Sb | 20 54 37.6 | -6.8 |
| **CALA** | **Caldeira** | **1.27** | **138** | *e*P | Pn | 20 54 24.6 | -4.4 |
| CALA | | | | *e*S | Sb | 20 54 38.5 | -7.1 |
| **CALA** | **Caldeira** | **1.27** | **138** | *e*P | Pn | 20 54 24.6 | -4.4 |
| CALA | | | | *e*S | Sb | 20 54 38.5 | -7.1 |
| **ROSA** | **Rosais** | **1.44** | **124** | *e*S | Sn | 20 54 42.7 | -7.6 |
| ROSA | | | | A | A | 20 54 43.1 | |
| | 33nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **1.44** | **124** | *e*S | Sn | 20 54 42.7 | -7.6 |
| **PCAN** | **Candelaria** | **1.47** | **136** | *e*P | Pn | 20 54 26.9 | -4.7 |
| PCAN | | | | A | A | 20 54 40.9 | |
| | 9.5nm,0.2s | | | | | | |
| PCAN | | | | *e*S | Sn | 20 54 43.4 | -7.5 |
| **PCAN** | **Candelaria** | **1.47** | **136** | *e*P | Pn | 20 54 26.9 | -4.7 |
| PCAN | | | | *e*S | Sn | 20 54 43.4 | -7.5 |
| **PICO** | **Pico** | **1.47** | **134** | *e*P | Pn | 20 54 27.2 | -4.6 |
| PICO | | | | *e*S | Sn | 20 54 43.8 | -7.4 |
| **PICO** | **Pico** | **1.47** | **134** | *e*P | Pn | 20 54 27.2 | -4.6 |
| PICO | | | | *e*S | Sn | 20 54 43.8 | -7.4 |
| **PPNO** | **Prainha do Nor** | **1.58** | **131** | *e*P | Pn | 20 54 28.5 | -4.8 |
| PPNO | | | | *e*S | Sn | 20 54 46.5 | -7.4 |
| PPNO | | | | A | A | 20 54 48.6 | |
| | 16nm,0.2s | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.58** | **131** | *e*P | Pn | 20 54 28.5 | -4.8 |
| PPNO | | | | *e*S | Sn | 20 54 46.5 | -7.4 |

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*ISCJB* **14** *20:54:15.9±0.7,37.92°N±0.03°×29.13°E±0.05,h6km±11km, Error ellipse: s-maj=7.3km s-min=5.2km az=20.1*
*DDA* **14** *20:54:15.7,37.94°N×29.15°E,h7km, Md2.6*
*CSEM* **14** *20:54:15.9±0.3,37.89°N×29.11°E,h10km, MD2.8, Error ellipse: s-maj=7.1km s-min=4.9km az=111.0*
*ISK* **14** *20:54:15.6,37.88°N×29.09°E,h13km, MD2.8*
**ISC 14 20:54:16.0±1.0,37.92°N±0.03°×29.12°E±0.04,h8km±13km, n16,σ0s76/28,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DENT** | **Denizli** | **0.18** | **202** | *e*PG | **Pg** | **20 54 18.9** | **-0.8** |
| DENT | | | | *e*SG | **Sg** | **20 54 22.3** | **+0.1** |
| **DENT** | **Denizli** | **0.18** | **202** | *e*Pg | **Pg** | **20 54 18.9** | **-0.8** |
| DENT | | | | *e*Sg | **Sg** | **20 54 22.3** | **+0.1** |
| **DNZL** | **Cakiroluk** | **0.24** | **194** | *i* P | **Pg** | **20 54 21.6** | **+0.8** |
| DNZL | | | | *i* S | **Sg** | **20 54 24.4** | **+0.4** |
| **DNZL** | **Cakiroluk** | **0.24** | **194** | P | **Pg** | **20 54 21.6** | **+0.8** |
| DNZL | | | | S | **Sg** | **20 54 24.4** | **+0.4** |
| **KHL** | **Karahalli** | **0.51** | **38** | *e*PG | **Pb** | **20 54 27.4** | **+0.1** |
| **KHL** | **Karahalli** | **0.51** | **38** | *e*Pg | **Pb** | **20 54 27.4** | **+0.1** |
| **KHAL** | **Karahalli** | **0.54** | **33** | *i* P | **Pg** | **20 54 26.6** | **+0.2** |
| KHAL | | | | *i* S | **Sg** | **20 54 32.3** | **-1.1** |
| **KHAL** | **Karahalli** | **0.54** | **33** | P | **Pg** | **20 54 26.6** | **+0.2** |
| KHAL | | | | S | **Sg** | **20 54 32.3** | **-1.1** |
| **KULA** | **Kula-Manisa** | **0.69** | **329** | *e*PG | **Pb** | **20 54 30.5** | **+0.1** |
| KULA | | | | *e*SG | **Sb** | **20 54 40.1** | **0.0** |
| **KULA** | **Kula-Manisa** | **0.69** | **329** | *e*Pg | **Pb** | **20 54 30.5** | **+0.1** |
| KULA | | | | *e*Sg | **Sb** | **20 54 40.1** | **0.0** |
| **MANT** | **Manisa** | **0.72** | **322** | *i* S | **Sg** | **20 54 40.3** | **+1.0** |
| **MANT** | **Manisa** | **0.72** | **322** | P | Pn | 20 54 36.6 | +4.0 |
| MANT | | | | S | **Sg** | **20 54 40.3** | **+1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **272** | *e*PG | **Pg** | **20 54 33.5** | **-1.1** |
| AYDB | | | | *e*SG | **Sb** | **20 54 48.5** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **272** | *e*Pg | **Pg** | **20 54 33.5** | **-1.1** |
| AYDB | | | | *e*Sg | **Sb** | **20 54 48.5** | **+0.3** |
| **DEMI** | **Demirci** | **1.16** | **344** | *i* P | **Pg** | **20 54 39.1** | **+0.8** |
| DEMI | | | | *i* S | **Sb** | **20 54 52.7** | **-1.0** |
| **DEMI** | **Demirci** | **1.16** | **344** | P | **Pg** | **20 54 39.1** | **+0.8** |
| DEMI | | | | S | **Sb** | **20 54 52.7** | **-1.0** |

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*IDC* **14** *21:01:53.7±0.8,28.68°N×105.03°E,h0km,mb3.7/8, mb1 3.8/10,mb1mx3.6/36,mbtmp3.6/10,ML3.3/2, Error ellipse: s-maj=30.3km s-min=17.0km az=59.0*
*ISCJB* **14** *21:01:55.6±0.5,28.76°N±0.04°×105.10°E±0.08,h19km, mb3.7/7,Error ellipse: s-maj=9.6km s-min=5.5km az=10.3*
*BJI* **14** *21:01:56.9,28.68°N×104.98E,h9km, ML3.6/20,Ms3.5/6, Ms7 3.2/6*
**ISC 14 21:01:57.3±0.6,28.75°N±0.04°×105.05E±0.06,h19km,n15, σ1s78/25,mb3.8/7,1C,Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CD2** | **Chengdu** | **2.43** | **333** | Pn | **Pn** | **21 02 37.4** | **+1.4** |
| CD2 | | | | Pg | **Pg** | **21 02 43.1** | **-0.9** |
| CD2 | | | | Sn | **Sn** | **21 03 03.8** | **-1.5** |
| CD2 | | | | Sg | **Sg** | **21 03 13.0** | **-2.5** |
| CD2 | | | | SMN | | | |
| | 760nm,0.7s | | | | | | |
| CD2 | | | | SME | | | |
| | 2µm,0.6s | | | | | | |
| **GYA** | **Guiyang** | **2.69** | **148** | ↑*i*Pn | **Pn** | **21 02 40.3** | **+0.6** |
| GYA | | | | Pg | **Pg** | **21 02 48.0** | **-0.9** |
| GYA | | | | Sn | **Sn** | **21 03 13.3** | **+1.5** |
| GYA | | | | Sg | **Sg** | **21 03 20.8** | **-3.0** |
| GYA | | | | SMN | | | |
| | 460nm,0.8s | | | | | | |
| GYA | | | | SME | | | |
| | 310nm,0.8s | | | | | | |
| **KMI** | **Kunming** | **4.16** | **210** | Pn | **Pn** | **21 03 01.6** | **+1.7** |
| KMI | | | | Sn | **Sn** | **21 03 49.9** | **+1.8** |
| KMI | | | | SMN | | | |
| | 17nm,1.3s | | | | | | |
| KMI | | | | SME | | | |
| | 29nm,0.9s | | | | | | |
| KMI | | | | LN | | | |
| | 240nm,5.8s | | | | | | |
| KMI | | | | LE | | | |
| | 340nm,5.9s | | | | | | |
| KMI | | | | LZ | | | |
| | 130nm,6.0s | | | | | | |
| **XAN** | **Xi'an** | **6.23** | **31** | Pn | **Pn** | **21 03 29.8** | **+1.6** |
| XAN | | | | Sn | **Sn** | **21 04 38.6** | **-0.3** |
| XAN | | | | Sg | **Sg** | **21 05 16.6** | **-0.5** |
| XAN | | | | SMN | | | |
| | 150nm,1.0s | | | | | | |
| XAN | | | | SME | | | |
| | 130nm,0.9s | | | | | | |
| XAN | | | | LN | | | |
| | 110nm,7.3s | | | | | | |
| XAN | | | | LE | | | |
| | 130nm,4.4s | | | | | | |
| XAN | | | | LZ | | | |
| | 130nm,4.7s | | | | | | |
| **LZH** | **Lanzhou** | **7.39** | **352** | *e*Pn | **Pn** | **21 03 46.8** | **+2.5** |
| LZH | | | | *e*Sn | **Sn** | **21 05 12.6** | **+4.9** |
| LZH | | | | LN | | | |
| | 180nm,5.8s | | | | | | |
| LZH | | | | LE | | | |
| | 260nm,6.4s | | | | | | |
| LZH | | | | LZ | | | |
| | 290nm,7.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **11.67** | **210** | Pn | **Pn** | **21 04 42.0** | **-0.9** |
| | 0.1nm,0.3s,baz=30,slow=10,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **19.09** | **3** | P | **Pn** | **21 06 20.0** | **+0.3** |
| | 0.2nm,0.3s,baz=185,slow=11,SNR=8.0 | | | | | | |
| **KSRS** | **Korea Array** | **21.00** | **60** | P | **P** | **21 06 39.8** | **+0.3** |
| | 1.5nm,0.7s,baz=241,slow=12,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **25.31** | **322** | P | **P** | **21 07 22.3** | **-0.4** |
| | 0.5nm,0.6s,baz=123,slow=11,SNR=4.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.20** | **335** | P | **P** | **21 07 56.2** | **-1.2** |
| | 1.2nm,0.7s,baz=137,slow=8.8,SNR=6.0 | | | | | | |
| **GEYT** | **Alibeck** | **39.91** | **296** | P | **P** | **21 09 30.9** | **+0.7** |
| | 1.3nm,0.7s,baz=63,slow=7.2,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.06** | **146** | P | **P** | **21 11 34.2** | **-1.0** |
| | 1.0nm,0.6s,baz=337,slow=8.2,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **59.05** | **149** | P | **P** | **21 11 55.2** | **-1.1** |
| | 0.8nm,0.6s,baz=334,slow=6.4,SNR=13 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.08** | **328** | P | **P** | **21 12 48.5** | **-0.7** |
| | 0.6nm,0.7s,baz=74,slow=6.7,SNR=3.3 | | | | | | |
| **GERES** | **GERESS Array B** | **69.79** | **315** | P | **P** | **21 13 05.8** | **-0.6** |
| | 0.4nm,0.6s,baz=76,slow=7.0,SNR=4.0 | | | | | | |

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*ISCJB* **14** *21:29:14.8±0.5,24.93°N±0.03°×122.23E±0.02,h6km±4km, Error ellipse: s-maj=5.6km s-min=3.0km az=173.1*
*TAP* **14** *21:29:14.4,24.93°N×122.18E,h6km, ML3.1,D*
*JMA* **14** *21:29:14.8±0.1,24.88°N×122.19E,h3km, M2.9*
**ISC 14 21:29:15.0±1.1,24.91°N±0.03°×122.20E±0.02,h7km±9km, n37,σ0s58/63,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.22** | **298** | *i* P | **Pg** | **21 29 19.1** | **-0.1** |
| | baz=293 | | | | | | |
| TWB1 | | | | *i* S | **Sg** | **21 29 22.4** | **+0.2** |
| | baz=293 | | | | | | |
| **EGS** | | **0.25** | **256** | *i* P | **Pg** | **21 29 20.1** | **+0.2** |
| | baz=247 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.41** | **294** | P | **Pg** | **21 29 23.3** | **+0.3** |
| | baz=290 | | | | | | |
| NWF | | | | S | **Sg** | **21 29 29.3** | **+0.9** |
| | baz=290 | | | | | | |
| **ILA** | **Ilan** | **0.43** | **251** | *e*P | **Pg** | **21 29 23.4** | **+0.1** |
| | baz=246 | | | | | | |
| **TWC** | **Suao** | **0.43** | **227** | P | **Pg** | **21 29 23.9** | **+0.5** |
| | baz=222 | | | | | | |
| TWC | | | | *e*S | **Sb** | **21 29 31.4** | **-0.3** |
| | baz=222 | | | | | | |
| **TWE** | **Neicheng** | **0.52** | **249** | P | **Pb** | **21 29 25.4** | **-1.0** |
| | baz=244 | | | | | | |
| TWE | | | | S | **Sb** | **21 29 33.6** | **-0.5** |
| | baz=244 | | | | | | |
| **TWA** | **Mucha** | **0.56** | **278** | *e*P | **Pb** | **21 29 26.3** | **-0.9** |
| | baz=274 | | | | | | |
| TWA | | | | *e*S | **Sb** | **21 29 34.9** | **-0.6** |
| | baz=274 | | | | | | |
| **TAP1** | **Taipei** | **0.63** | **282** | *e*S | **Sb** | **21 29 37.1** | **-0.2** |
| | baz=279 | | | | | | |
| **ENA** | **Nanau** | **0.63** | **221** | *e*P | **Pb** | **21 29 27.8** | **-0.6** |
| | baz=218 | | | | | | |
| ENA | | | | *e*S | **Sb** | **21 29 37.5** | **0.0** |
| | baz=218 | | | | | | |
| **ENTT** | **Nioudou** | **0.63** | **245** | *e*P | **Pb** | **21 29 27.8** | **-0.6** |
| | baz=242 | | | | | | |
| ENTT | | | | *e*S | **Sb** | **21 29 37.5** | **0.0** |
| | baz=242 | | | | | | |
| **TAP** | **Taipei** | **0.64** | **282** | *e*S | **Sg** | **21 29 36.1** | **+0.4** |
| | baz=279 | | | | | | |
| **PCYT** | **Pengchaiyu** | **0.73** | **351** | *e*P | **Pg** | **21 29 28.5** | **-0.6** |
| | baz=352 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.73** | **286** | *e*P | **Pb** | **21 29 30.0** | **-0.2** |
| | baz=283 | | | | | | |
| TWS1 | | | | *e*S | **Sb** | **21 29 40.7** | **+0.3** |
| | baz=283 | | | | | | |
| **NSK** | **Sanguang** | **0.80** | **254** | *e*P | **Pb** | **21 29 30.7** | **-0.5** |
| | baz=250 | | | | | | |
| NSK | | | | *e*S | **Sb** | **21 29 42.0** | **-0.3** |
| | baz=250 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.82** | **123** | P | **Pg** | **21 29 29.9** | **-0.8** |
| JYNG | | | | S | **Sg** | **21 29 42.2** | **+0.9** |
| **YOJ** | **Yonaguni jima** | **0.86** | **121** | P | **Pg** | **21 29 31.5** | **0.0** |
| YOJ | | | | S | **Sg** | **21 29 42.8** | **+0.1** |
| **NNS** | **Nan Shan** | **0.88** | **238** | *e*P | **Pb** | **21 29 32.5** | **-0.2** |
| | baz=236 | | | | | | |
| NNS | | | | *e*S | **Sb** | **21 29 45.3** | **+0.5** |
| | baz=236 | | | | | | |
| **TWD** | **Chiawan** | **0.99** | **214** | *e*P | **Pb** | **21 29 34.0** | **-0.4** |
| | baz=211 | | | | | | |
| TWD | | | | *e*S | **Sb** | **21 29 48.6** | **+0.9** |
| | baz=211 | | | | | | |
| **NSTT** | **Nanjuang** | **1.12** | **256** | *e*P | **Pb** | **21 29 36.4** | **-0.3** |
| | baz=254 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **21 29 53.0** | **+0.1** |
| | baz=254 | | | | | | |
| **TWT** | **Tachien** | **1.14** | **235** | *e*P | **Pn** | **21 29 37.3** | **-0.2** |
| | baz=233 | | | | | | |
| TWT | | | | *e*S | **Sn** | **21 29 53.5** | **0.0** |
| | baz=233 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.14** | **228** | *e*P | **Pb** | **21 29 37.0** | **-0.3** |
| | baz=226 | | | | | | |
| WHF | | | | *e*S | **Sb** | **21 29 52.5** | **+0.1** |
| | baz=226 | | | | | | |
| **ESL** | **Shilin** | **1.29** | **213** | *e*P | **Pg** | **21 29 38.8** | **-1.0** |
| | baz=211 | | | | | | |
| ESL | | | | *e*S | **Sn** | **21 29 57.9** | **+0.8** |
| | baz=211 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.51** | **112** | P | **Pb** | **21 29 43.5** | **+0.2** |
| **SMLT** | **Sun Moon Lake** | **1.56** | **230** | *e*P | **Pn** | **21 29 43.6** | **+0.3** |
| | baz=228 | | | | | | |
| SMLT | | | | *e*S | **Sg** | **21 30 04.8** | **-0.3** |
| | baz=228 | | | | | | |
| **TYC** | **Yuchr** | **1.58** | **231** | *e*P | **Pb** | **21 29 43.9** | **-0.6** |
| | baz=229 | | | | | | |
| TYC | | | | *e*S | **Sg** | **21 30 05.0** | **-0.7** |
| | baz=229 | | | | | | |
| **EHY** | **Hungye** | **1.61** | **210** | *e*P | **Pn** | **21 29 43.1** | **-0.7** |
| | baz=208 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.69** | **120** | P | **Pb** | **21 29 46.1** | **-0.3** |
| HATJ | | | | S | **Sb** | **21 30 08.0** | **+0.1** |
| **TWF1** | **Yuli** | **1.75** | **208** | *e*P | **Pn** | **21 29 46.0** | **+0.2** |
| | baz=207 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.78** | **112** | P | **Pn** | **21 29 44.8** | **-1.4** |
| **YUS** | **Yu-Shan** | **1.81** | **219** | *e*P | **Pn** | **21 29 47.5** | **+0.5** |
| | baz=217 | | | | | | |
| YUS | | | | *e*S | **Sn** | **21 30 10.6** | **0.0** |
| | baz=217 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.85** | **107** | P | **Pn** | **21 29 47.7** | **+0.5** |
| JIJ | | | | S | **Sn** | **21 30 11.8** | **+0.9** |
| **ALS** | **Alishan** | **1.88** | **223** | *e*P | **Pn** | **21 29 48.3** | **+0.4** |
| | baz=221 | | | | | | |
| ALS | | | | *e*S | **Sn** | **21 30 12.5** | **+0.4** |
| | baz=221 | | | | | | |
| **CHN5** | **Tsauling** | **1.90** | **227** | *e*P | **Pn** | **21 29 48.6** | **+0.6** |
| | baz=225 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **21 30 13.5** | **-0.7** |
| | baz=225 | | | | | | |
| **CHKT** | **Chengkung** | **1.95** | **203** | *e*S | **Sn** | **21 30 13.1** | **-0.3** |
| | baz=202 | | | | | | |
| **STYT** | **Tauyuan** | **2.18** | **218** | *e*P | **Pn** | **21 29 52.4** | **+0.7** |
| | baz=216 | | | | | | |
| STYT | | | | *e*S | **Sn** | **21 30 20.2** | **+1.1** |
| | baz=216 | | | | | | |
| **CHN1** | **Nanshi** | **2.29** | **222** | *e*S | **Sn** | **21 30 22.7** | **+0.8** |
| | baz=221 | | | | | | |
| **SGST** | **Jiashian** | **2.34** | **219** | *e*P | **Pn** | **21 29 54.5** | **+0.6** |
| | baz=218 | | | | | | |
| SGST | | | | *e*S | **Sn** | **21 30 23.8** | **+0.8** |
| | baz=218 | | | | | | |

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*DDA* **14** *21:33:38.0,37.37°N×29.97E,h7km,Md2.9*
*CSEM* **14** *21:33:39.1±0.3,37.23°N×29.93E,h15km,MD2.9, Error ellipse: s-maj=8.4km s-min=7.7km az=43.0*
*ISK* **14** *21:33:40.1,37.10°N×29.93E,h22km, MD2.9*
**ISC 14 21:33:38.0±1.6,37.29°N±0.03°×29.89E±0.04,h0km±15km, n23,σ0s43/32,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GOLH** | **Golhisar** | **0.27** | **259** | *i* P | **Pb** | **21 33 45.5** | **-0.2** |
| GOLH | | | | *i* S | **Sb** | **21 33 51.1** | **+0.2** |
| **GOLH** | **Golhisar** | **0.27** | **259** | P | **Pb** | **21 33 45.5** | **-0.2** |
| GOLH | | | | S | **Sb** | **21 33 51.1** | **+0.2** |
| **KORT** | **Korkueli** | **0.47** | **128** | *i* P | **Pg** | **21 33 47.1** | **+0.2** |
| **KORT** | **Korkueli** | **0.47** | **128** | P | **Pg** | **21 33 47.1** | **+0.2** |
| KORT | | | | S | Sb | 21 34 02.2 | +5.6 |
| **ELL** | **Elmali** | **0.54** | **178** | *e*PG | **Pg** | **21 33 47.9** | **-0.4** |
| **ELL** | **Elmali** | **0.54** | **178** | *e*Pg | **Pg** | **21 33 47.9** | **-0.4** |
| **BCK** | **Bucak** | **0.58** | **73** | *e*PG | Pn | **21 33 52.9** | **-0.6** |
| BCK | | | | *e*SG | **Sn** | **21 34 03.2** | **-0.6** |
| **SUTC** | **Sutluce-Ispart** | **0.90** | **78** | *e*PG | Pn | **21 33 58.1** | **+0.1** |
| **SUTC** | **Sutluce-Ispart** | **0.90** | **78** | *e*Pg | Pn | **21 33 58.1** | **+0.1** |
| **FETY** | **Fethiye** | **0.92** | **225** | *e*PG | **Pb** | **21 33 57.0** | **+0.2** |
| **FETY** | **Fethiye** | **0.92** | **225** | *e*Pg | **Pb** | **21 33 57.0** | **+0.2** |
| **DALY** | **Dalyan (Mu¨la** | **1.10** | **245** | *e*PG | **Pb** | **21 34 00.3** | **+0.5** |
| **DALY** | **Dalyan (Mu¨la** | **1.10** | **245** | *e*Pg | **Pb** | **21 34 00.3** | **+0.5** |
| **KHAL** | **Karahalli** | **1.12** | **344** | *i* P | **Pg** | **21 33 59.2** | **-0.3** |
| KHAL | | | | *i* S | **Sb** | **21 34 15.9** | **+0.4** |
| **KHAL** | **Karahalli** | **1.12** | **344** | P | **Pg** | **21 33 59.2** | **-0.3** |
| KHAL | | | | S | **Sb** | **21 34 15.9** | **+0.4** |
| **YER** | **Yerkesik** | **1.29** | **264** | *e*PN | **Pb** | **21 34 04.0** | **+0.8** |
| **YER** | **Yerkesik** | **1.29** | **264** | *e*Pn | **Pb** | **21 34 04.0** | **+0.8** |
| **MANT** | **Manisa** | **1.60** | **319** | *i* P | **Pn** | **21 34 07.2** | **-0.5** |
| MANT | | | | *i* S | **Sb** | **21 34 29.8** | **+0.6** |
| **MANT** | **Manisa** | **1.60** | **319** | P | **Pn** | **21 34 07.2** | **-0.5** |
| MANT | | | | S | **Sb** | **21 34 29.8** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.72** | **293** | *e*PN | **Pb** | **21 34 10.6** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.72** | **293** | *e*Pn | **Pb** | **21 34 10.6** | **+0.1** |
| **DEMI** | **Demirci** | **1.98** | **332** | *i* P | **Pn** | **21 34 12.9** | **+0.1** |
| DEMI | | | | *i* S | **Sb** | **21 34 40.4** | **+0.3** |
| **DEMI** | **Demirci** | **1.98** | **332** | P | **Pn** | **21 34 12.9** | **+0.1** |
| DEMI | | | | S | **Sb** | **21 34 40.4** | **+0.3** |

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**MEX 14 21:53:26.2±0.5,17.99°N×100.25W,h40km±11km,MD3.8, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARIG** | **Puente Sto Nin** | **0.30** | **342** | *e*P | Pn | 21 53 33.1 | -1.5 |
| ARIG | | | | *i* S | Sn | 21 53 38.7 | -1.8 |
| **MEIG** | **Mezcala** | **0.60** | **96** | *i* P | Pn | 21 53 37.3 | -1.1 |
| MEIG | | | | *e*S | Sn | 21 53 44.9 | -2.3 |
| **PLIG** | **Platanillo** | **0.81** | **60** | *i* P | Pn | 21 53 39.7 | -1.6 |
| PLIG | | | | *i* S | Sn | 21 53 49.4 | -2.9 |
| **CAIG** | **El Cayaco** | **0.94** | **181** | *i* P | Pn | 21 53 41.0 | -1.9 |
| CAIG | | | | *i* S | Sn | 21 53 52.9 | -2.3 |
| **ZIIG** | **Zihuatanejo** | **1.22** | **252** | *i* P | Pn | 21 53 45.4 | -1.4 |
| ZIIG | | | | *i* S | Sn | 21 53 59.4 | -2.7 |

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**SJA 14 22:27:04.5±0.4,31.76S×69.72W,h86km±2km,MD3.1, ML5.4,San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLS** | **Leoncito** | **0.36** | **96** | *i* P | Pn | 22 27 19.7 | +1.5 |
| RTLS | | | | *i* S | Sn | 22 27 30.5 | +2.1 |
| **AUSP** | **Uspallata** | **0.54** | **149** | *i* P | Pn | 22 27 20.9 | +1.3 |
| AUSP | | | | *i* S | Sn | 22 27 32.4 | +1.6 |
| **RTCV** | **Cerro Valdivia** | **1.00** | **96** | *i* P | Pn | 22 27 25.2 | +1.1 |
| RTCV | | | | *i* S | Sn | 22 27 40.4 | +1.6 |
| **ASAL** | **Salagasta** | **1.11** | **138** | *i* P | Pn | 22 27 26.5 | +1.1 |
| **RTLL** | **Cerro Vilicun** | **1.14** | **68** | *i* P | Pn | 22 27 26.8 | +1.0 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ERZM** | **Erzurum** | **0.70** | **20** | *i* P | **Pg** | **22 41 20.8** | **+0.6** | | |
| ERZM | | | | *i* S | **Sg** | **22 41 28.1** | **-1.2** | | |
| **ERZM** | **Erzurum** | **0.70** | **20** | P | **Pg** | **22 41 20.8** | **+0.6** | | |
| ERZM | | | | S | **Sg** | **22 41 28.1** | **-1.2** | | |
| **EKAR** | **Karacoban** | **0.79** | **89** | *i* P | **Pb** | **22 41 23.2** | **-0.1** | | |
| EKAR | | | | *i* S | **Sb** | **22 41 34.7** | **+0.3** | | |
| **EKAR** | **Karacoban** | **0.79** | **89** | P | **Pb** | **22 41 23.2** | **-0.1** | | |
| EKAR | | | | S | **Sb** | **22 41 34.8** | **+0.3** | | |
| **SVAN** | **Silvan-Diyarba** | **1.11** | **174** | *e*PN | **Pn** | **22 41 29.6** | **+0.4** | | |
| **SVAN** | **Silvan-Diyarba** | **1.11** | **174** | *e*Pn | **Pn** | **22 41 29.6** | **+0.4** | | |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.34** | **329** | *e*PN | **Pn** | **22 41 31.4** | **-1.1** | | |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.34** | **329** | *e*Pn | **Pn** | **22 41 31.4** | **-1.1** | | |
| **PTK** | **Pertek** | **1.34** | **255** | *e*PN | **Pg** | **22 41 33.1** | **+0.6** | | |
| **PTK** | **Pertek** | **1.34** | **255** | *e*Pn | **Pg** | **22 41 33.1** | **+0.6** | | |
| **KELT** | **Kelkit** | **1.65** | **303** | P | **Pg** | **22 41 40.8** | **+2.4** | | |
| KELT | | | | S | **Sg** | **22 42 01.9** | **+2.1** | | |
| **DDEM** | **Demirkent** | **1.72** | **18** | *i* P | **Pg** | **22 41 40.0** | **+0.1** | | |
| DDEM | | | | *i* S | **Sb** | **22 42 00.9** | **-0.4** | | |
| **DDEM** | **Demirkent** | **1.72** | **18** | P | **Pg** | **22 41 40.0** | **+0.1** | | |
| DDEM | | | | S | **Sb** | **22 42 00.9** | **-0.4** | | |
| **MAZI** | **Mazidag** | **1.85** | **195** | *e*PN | **Pn** | **22 41 39.6** | **0.0** | | |
| **MAZI** | **Mazidag** | **1.85** | **195** | *e*Pn | **Pn** | **22 41 39.6** | **0.0** | | |
| **MARD** | **Mardin** | **1.95** | **186** | P | **Pb** | **22 41 43.8** | **+0.8** | | |
| MARD | | | | S | **Sb** | **22 42 08.1** | **+0.3** | | |

*SJA* ***14*** *22:52:08.8±0.5, 24˚.04S×66˚.60W, h239km±6km, ML3.0*
*IDC* ***14*** *22:52:09.5±1.7, 24˚.05S×66˚.80W, h195km±32km, mb3.1/1, mb1 3.2/3, mb1mx3.0/24, mbtmp3.7/3, MS3.1/1, Ms1 3.1/1, ms1mx2.6/9, Error ellipse: s-maj=44.8km s-min=24.2km az=87.0*
*ISCJB* ***14*** *22:52:11.8±0.7, 24˚.05S±0˚.09×66˚.89W±0˚.08, h181km, mb3.2/1, Error ellipse: s-maj=14.4km s-min=8.3km az=35.6*

**ISC 14 22:52:10.8±1.1, 23°.97S±0˚.09×66°.84W±0˚.08, h181km, n13, σ2s55/17, 1C, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.43** | **122** | *i* P | **Pn** | **22 52 44.7** | **+2.4** |
| SLA | | | | *i* P | **Pn** | **22 52 44.7** | **+2.4** |
| SLA | | | | *i* S | **Sn** | **22 53 10.7** | **+4.0** |
| SLA | | | | AML | AML | 22 53 13.3 | |
| | comp=Z,58nm,0.7s | | | | | | |
| **HJA** | **Humahuaca** | **1.52** | **60** | *i* P | **Pn** | **22 52 46.2** | **+2.8** |
| **AZAP** | **Zapla** | **1.64** | **99** | *i* P | **Pn** | **22 52 46.4** | **+1.9** |
| **ASTB** | **Santa Barbara** | **2.15** | **90** | *i* P | **Pn** | **22 52 50.6** | **+0.9** |
| **YJA** | **Yavi** | **2.16** | **35** | *i* P | **Pn** | **22 52 52.7** | **+2.5** |
| YJA | | | | *i* P | **Pn** | **22 52 52.7** | **+2.5** |
| YJA | | | | *i* P | **Pn** | **22 52 53.0** | **+2.8** |
| YJA | | | | AML | AML | 22 52 53.8 | |
| | comp=Z,68nm,0.2s | | | | | | |
| **FSA** | **Cafayete** | **2.24** | **161** | *i* P | **Pn** | **22 52 52.2** | **+1.5** |
| **LVC** | **Limon Verde** | **2.34** | **305** | P | **Pn** | **22 52 53.7** | **+1.7** |
| | comp=Z,575nm,0.3s,baz=128,slow=5.8,SNR=126 | | | | | | |
| LVC | | | | S | **Sn** | **22 53 25.9** | **+2.0** |
| | comp=Z,381nm,0.3s,baz=68,slow=19,SNR=23 | | | | | | |
| **ALOL** | **LOMAS DE OLMED** | **2.63** | **87** | *i* P | **Pn** | **22 52 54.4** | **-0.6** |
| **CFAA** | **Coronel Fontan** | **7.70** | **189** | P | **Pn** | **22 53 57.5** | **-2.7** |
| | comp=Z,0.0nm,0.3s,baz=12,slow=6.2,SNR=3.3 | | | | | | |
| CFAA | | | | S | Sn | 22 55 17.6 | -9.2 |
| | comp=Z,0.1nm,0.3s,baz=306,slow=19,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **7.74** | **351** | P | **Pn** | **22 54 00.5** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=171,slow=12,SNR=8.6 | | | | | | |
| **BDFB** | **Brasilia** | **19.54** | **68** | P | **P** | **22 56 22.4** | **-2.4** |
| | comp=Z,0.6nm,0.3s,baz=240,slow=9.5,SNR=6.7 | | | | | | |
| **RPN** | **Rapa Nui** | **38.34** | **256** | LR | LR | 23 10 45.9 | |
| | comp=Z,32nm,21.9s,baz=260,slow=29 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.42** | **69** | P | **P** | **23 03 38.0** | **-2.8** |
| | comp=Z,0.3nm,0.5s,baz=260,slow=5.5,SNR=13 | | | | | | |

**IDC 14 22:54:33.8±4.3, 4°.76S×147°.86E, h0km, mb3.8/2, mb1 4.2/2, mb1mx3.5/22, mbtmp3.9/2, Error ellipse: s-maj=154.9km s-min=46.2km az=108.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.03** | **220** | P | P | 22 59 08.9 | +0.4 |
| | 2.9nm,0.7s,baz=44,slow=11,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **23.12** | **214** | P | P | 22 59 41.4 | -0.3 |
| | 3.4nm,0.8s,baz=47,slow=7.8,SNR=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.59** | **286** | PKPbc | PKPdf | 23 14 14.6 | -0.7 |
| | 0.7nm,0.7s,baz=70,slow=3.4,SNR=7.8 | | | | | | |

**WEL 14 23:30:38.5±0.3, 39°.10S×174°.94E, h220km±2km, ML3.9/18, 14C-26D, Error ellipse: s-maj=1.9km s-min=1.9km az=0.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PKVZ** | **Pokaka** | **0.37** | **122** | PN | Pn | 23 31 07.3 | -0.3 |
| PKVZ | | | | SN | S | 23 31 29.0 | -1.3 |
| **TWVZ** | **Taurewa** | **0.39** | **87** | ⇓PN | Pn | 23 31 07.3 | -0.4 |
| TWVZ | | | | SN | S | 23 31 28.8 | -1.6 |
| **WPVZ** | **Whakapapa** | **0.48** | **103** | PN | Pn | 23 31 07.8 | -0.2 |
| **FWVZ** | **Far West T-bar** | **0.50** | **109** | ⇓PN | Pn | 23 31 07.9 | -0.2 |
| **MTVZ** | **Mangateitei** | **0.50** | **125** | PN | Pn | 23 31 07.8 | -0.1 |
| **WTVZ** | **West Tongariro** | **0.51** | **92** | ⇓PN | Pn | 23 31 07.8 | -0.2 |
| WTVZ | | | | SN | S | 23 31 29.6 | -1.4 |
| **NGZ** | **Ngauruhoe** | **0.52** | **99** | ⇓PN | Pn | 23 31 07.9 | -0.2 |
| NGZ | | | | SN | S | 23 31 29.8 | -1.4 |
| **KRVZ** | **Karewarewa** | **0.55** | **90** | ⇓PN | Pn | 23 31 07.9 | -0.2 |
| **LREZ** | **Lake Rotokare** | **0.55** | **229** | PN | Pn | 23 31 08.0 | 0.0 |
| **WNVZ** | **Wahianoa** | **0.56** | **114** | ⇑PN | Pn | 23 31 08.2 | 0.0 |
| **OTVZ** | **Oturere** | **0.57** | **97** | PN | Pn | 23 31 08.4 | +0.1 |
| **TUVZ** | **Tukino** | **0.58** | **107** | PN | Pn | 23 31 08.3 | 0.0 |
| **HIZ** | **Hauiti** | **0.58** | **354** | ⇑PN | Pn | 23 31 07.3 | -0.9 |
| HIZ | | | | SN | S | 23 31 29.6 | -1.8 |
| **KATZ** | **Kakaramea** | **0.60** | **79** | PN | Pn | 23 31 07.9 | -0.5 |
| **WAZ** | **Wanganui** | **0.66** | **177** | ⇑PN | Pn | 23 31 08.7 | +0.3 |
| **NEZ** | **North Egmont** | **0.68** | **255** | ⇑PN | Pn | 23 31 08.5 | -0.2 |
| NEZ | | | | SN | S | 23 31 31.4 | -0.8 |
| **MOVZ** | **Moawhango** | **0.70** | **116** | ⇓PN | Pn | 23 31 08.3 | -0.4 |
| **KHEZ** | **Kahui Hut** | **0.74** | **254** | PN | Pn | 23 31 08.7 | -0.2 |
| **PKE** | **Pukeiti** | **0.75** | **262** | ⇓PN | Pn | 23 31 08.6 | -0.2 |
| **NMEZ** | **Namu Road** | **0.88** | **249** | PN | Pn | 23 31 09.2 | -0.3 |
| **BHHZ** | **Black Hill Sta** | **0.96** | **115** | ⇓PN | Pn | 23 31 09.7 | -0.4 |
| **MRHZ** | **Matea Rd** | **1.18** | **78** | ⇓PN | Pn | 23 31 10.5 | -1.1 |
| **BKZ** | **Black Stump Fm** | **1.21** | **94** | PN | Pn | 23 31 11.1 | -0.6 |
| BKZ | | | | AML | AML | 23 31 35.5 | |
| BKZ | | | | AML | AML | 23 31 37.2 | |
| **KRHZ** | **Kereru** | **1.24** | **117** | ⇓PN | Pn | 23 31 11.8 | 0.0 |
| **TSZ** | **Takapari Road** | **1.25** | **141** | PN | Pn | 23 31 12.1 | +0.1 |
| TSZ | | | | AML | AML | 23 31 37.3 | |
| TSZ | | | | AML | AML | 23 31 38.5 | |
| **PNHZ** | **Pukenui** | **1.27** | **130** | ⇓PN | Pn | 23 31 12.2 | 0.0 |
| **MCHZ** | **McNeill Hill** | **1.41** | **105** | PN | Pn | 23 31 13.7 | +0.5 |
| **POWZ** | **Post Office Ro** | **1.44** | **154** | PN | Pn | 23 31 13.4 | 0.0 |
| **NMHZ** | **Naumai** | **1.45** | **91** | ⇓PN | Pn | 23 31 13.9 | +0.3 |
| **TARZ** | **Mount Tarawera** | **1.50** | **55** | PN | Pn | 23 31 13.1 | -1.0 |
| **WPHZ** | **Waipukurau** | **1.51** | **130** | ⇓PN | Pn | 23 31 14.2 | +0.2 |
| **DVHZ** | **Dannevirke** | **1.53** | **142** | ⇓PN | Pn | 23 31 14.0 | -0.2 |
| **ARHZ** | **Aropaoanui** | **1.61** | **97** | ⇑PN | Pn | 23 31 15.0 | +0.2 |
| **MRZ** | **Mangatainoka R** | **1.64** | **163** | ⇓PN | Pn | 23 31 14.8 | -0.3 |
| MRZ | | | | AML | AML | 23 31 42.3 | |
| MRZ | | | | AML | AML | 23 31 43.8 | |
| **KAHZ** | **Kahuranaki** | **1.66** | **116** | ⇓PN | Pn | 23 31 15.6 | +0.4 |
| **PRWZ** | **Pori Road** | **1.66** | **152** | PN | Pn | 23 31 15.4 | +0.1 |
| **RAHZ** | **Arahi** | **1.68** | **85** | PN | Pn | 23 31 15.3 | -0.3 |
| **OGWZ** | **Otaki Gorge** | **1.73** | **174** | ⇑PN | Pn | 23 31 15.6 | -0.2 |
| **CKHZ** | **Cape Kidnapper** | **1.75** | **109** | PN | Pn | 23 31 16.5 | +0.4 |
| **PRHZ** | **Porangahau** | **1.76** | **132** | ⇓PN | Pn | 23 31 16.2 | 0.0 |
| **PXZ** | **Pawanui** | **1.76** | **123** | ⇓PN | Pn | 23 31 16.1 | +0.1 |
| PXZ | | | | AML | AML | 23 31 45.0 | |
| PXZ | | | | AML | AML | 23 31 45.0 | |
| PXZ | | | | AML | AML | 23 31 46.8 | |
| PXZ | | | | AML | AML | 23 31 46.8 | |
| **KIW** | **Kapiti Island** | **1.76** | **181** | ⇑PN | Pn | 23 31 15.6 | -0.6 |
| KIW | | | | AML | AML | 23 31 44.4 | |
| KIW | | | | AML | AML | 23 31 44.5 | |
| **TIWZ** | **Tintock** | **1.83** | **157** | PN | Pn | 23 31 16.5 | -0.3 |
| TIWZ | | | | AML | AML | 23 31 47.9 | |
| TIWZ | | | | AML | AML | 23 31 47.9 | |
| **HOWZ** | **Holdsworth Sta** | **1.85** | **166** | PN | Pn | 23 31 16.4 | -0.7 |
| **DUWZ** | **D'Urville Isla** | **1.88** | **204** | ⇑PN | Pn | 23 31 16.6 | -0.7 |
| **BFZ** | **Birch Farm** | **1.88** | **148** | ⇓PN | Pn | 23 31 16.8 | -0.4 |
| BFZ | | | | AML | AML | 23 31 47.6 | |
| **URZ** | **Urewera** | **1.89** | **65** | ⇓PN | Pn | 23 31 15.7 | -1.8 |
| URZ | | | | AML | AML | 23 31 45.7 | |
| URZ | | | | AML | AML | 23 31 47.5 | |
| **SNGZ** | **Shannon Statio** | **1.90** | **81** | PN | Pn | 23 31 16.9 | -0.6 |
| **CAW** | **Cannon Point** | **2.01** | **177** | ⇑PN | Pn | 23 31 17.9 | -0.6 |
| CAW | | | | AML | AML | 23 31 48.1 | |
| CAW | | | | AML | AML | 23 31 51.0 | |
| **RAGZ** | **Rawiri** | **2.03** | **74** | ⇓PN | Pn | 23 31 17.7 | -1.1 |
| **CPWZ** | **Castlepoint** | **2.05** | **152** | ⇑PN | Pn | 23 31 19.1 | +0.2 |
| **MTW** | **Mount Morrison** | **2.10** | **168** | PN | Pn | 23 31 18.7 | -0.8 |
| MTW | | | | AML | AML | 23 31 51.2 | |
| MTW | | | | AML | AML | 23 31 51.6 | |
| **KNZ** | **Kokohu** | **2.13** | **89** | ⇓PN | Pn | 23 31 19.2 | -0.5 |
| KNZ | | | | AML | AML | 23 31 27.3 | |
| **TMWZ** | **Te Maipa** | **2.14** | **160** | PN | Pn | 23 31 19.2 | -0.6 |
| **MWZ** | **Matawai** | **2.16** | **70** | ⇓PN | Pn | 23 31 18.7 | -1.4 |
| MWZ | | | | AML | AML | 23 32 00.0 | |
| **TCW** | **Tory Channel** | **2.17** | **193** | PN | Pn | 23 31 19.7 | -0.5 |
| TCW | | | | AML | AML | 23 31 52.4 | |
| TCW | | | | AML | AML | 23 31 52.5 | |
| **WEL** | **Wellington** | **2.19** | **183** | PN | Pn | 23 31 19.3 | -1.0 |
| **RIGZ** | **Rimuhau** | **2.24** | **81** | PN | Pn | 23 31 20.2 | -0.7 |
| **BHW** | **Baring Head** | **2.31** | **181** | PN | Pn | 23 31 20.6 | -0.9 |
| BHW | | | | AML | AML | 23 31 53.4 | |
| BHW | | | | AML | AML | 23 31 54.4 | |
| **MHGZ** | **Mahia Peninsul** | **2.31** | **92** | PN | Pn | 23 31 21.3 | -0.3 |
| **PAWZ** | **Paruwai Farm** | **2.31** | **171** | PN | Pn | 23 31 20.7 | -0.8 |
| PAWZ | | | | AML | AML | 23 31 53.9 | |
| PAWZ | | | | AML | AML | 23 31 53.9 | |
| **MSWZ** | **Moikau Station** | **2.33** | **174** | ⇑PN | Pn | 23 31 20.8 | -0.9 |
| MSWZ | | | | AML | AML | 23 31 55.1 | |
| MSWZ | | | | AML | AML | 23 31 55.1 | |
| **TKGZ** | **Te Karaka** | **2.37** | **75** | ⇓PN | Pn | 23 31 21.3 | -0.8 |
| **TRWZ** | **Traveller** | **2.37** | **166** | AML | AML | 23 31 58.6 | |
| TRWZ | | | | AML | AML | 23 31 58.8 | |
| **NNZ** | **Nelson** | **2.43** | **209** | ⇑PN | Pn | 23 31 21.7 | -1.1 |
| **TUWZ** | **Tuamarina** | **2.45** | **198** | PN | Pn | 23 31 22.1 | -0.9 |
| **PLWZ** | **Palliser** | **2.48** | **175** | PN | Pn | 23 31 22.3 | -1.1 |
| **QRZ** | **Quartz Range** | **2.53** | **226** | ⇑PN | Pn | 23 31 21.8 | -2.1 |
| **TWGZ** | **Tauwhareparae** | **2.55** | **70** | PN | Pn | 23 31 23.3 | -1.0 |
| **HAZ** | **Te Kaha** | **2.60** | **60** | ⇓PN | Pn | 23 31 22.2 | -2.5 |
| **CNGZ** | **Carnagh Statio** | **2.63** | **78** | PN | Pn | 23 31 24.4 | -0.6 |
| **BSWZ** | **Blackbirch Sta** | **2.74** | **197** | PN | Pn | 23 31 25.6 | -0.5 |
| **PUZ** | **Puketiti** | **2.79** | **70** | PN | Pn | 23 31 25.1 | -1.8 |
| PUZ | | | | AML | AML | 23 32 02.3 | |
| **WMGZ** | **Waiomatatini S** | **3.01** | **66** | PN | Pn | 23 31 27.2 | -2.1 |
| **MXZ** | **Matakaoa Point** | **3.06** | **61** | PN | Pn | 23 31 28.1 | -1.7 |
| **THZ** | **Tophouse** | **3.08** | **210** | ⇑PN | Pn | 23 31 28.4 | -1.7 |
| **KHZ** | **Kahutara** | **3.48** | **197** | PN | Pn | 23 31 33.5 | -1.1 |
| **DSZ** | **Denniston Nort** | **3.57** | **221** | PN | Pn | 23 31 33.5 | -2.3 |
| **LTZ** | **Lake Taylor** | **4.20** | **208** | PN | Pn | 23 31 41.3 | -2.1 |
| **OXZ** | **Oxford** | **4.76** | **206** | PN | Pn | 23 31 47.5 | -2.8 |
| **MQZ** | **McQueen's Vall** | **4.92** | **200** | PN | Pn | 23 31 49.3 | -3.2 |
| **WVZ** | **Waitaha Valley** | **5.09** | **217** | ⇓PN | Pn | 23 31 51.6 | -2.7 |
| **FOZ** | **Fox Glacier** | **5.96** | **220** | PN | Pn | 23 31 59.3 | -6.0 |
| **ODZ** | **Otahua Downs** | **6.75** | **207** | PN | Pn | 23 32 13.3 | -2.2 |
| **JCZ** | **Jackson Bay** | **6.79** | **221** | PN | Pn | 23 32 12.5 | -3.8 |

*ISCJB* ***15*** *00:07:46.7±1.0, 19˚.34N±0˚.07×122˚.2E±0˚.1, h10km, mb3.5/5, MS3.5/1, Error ellipse: s-maj=16.6km s-min=8.0km az=23.7*
*MAN* ***15*** *00:07:46, 19˚.33N×122˚.15E, h4km, mb4.9, ML3.8, MS3.9*
*IDC* ***15*** *00:07:46.1±1.6, 19˚.32N×122˚.37E, h0km, mb3.5/5, mb1 3.7/5, mb1mx3.4/47, mbtmp3.5/5, MS3.5/1, Ms1 3.5/1, ms1mx2.4/30, Error ellipse: s-maj=58.7km s-min=24.6km az=61.0*

**ISC 15 00:07:48.0±1.3, 19°.23N±0˚.08×122°.1E±0˚.1, h10km, n16, σ0s87/12, mb3.5/5, 1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CVP** | **Callao Caves** | **1.54** | **191** | *e*P | **Pg** | **00 08 17.8** | **+0.2** |
| **APYP** | **Conner** | **1.60** | **212** | *e*P | **Pb** | **00 08 17.1** | **-0.4** |
| APYP | | | | *e*S | **Sg** | **00 08 40.0** | **+0.6** |
| **PIP** | **Pasuquin** | **1.69** | **238** | ⇓*e*P | **Pn** | **00 08 16.7** | **-0.8** |
| PIP | | | | *e*S | **Sg** | **00 08 41.9** | **-0.4** |
| **ABRA** | **Dolores** | **2.07** | **221** | *e*P | **Pb** | **00 08 24.4** | **-1.2** |
| ABRA | | | | *e*S | **Sn** | **00 08 49.6** | **+1.1** |
| **CMAR** | **Chiang Mai Arr** | **21.95** | **272** | P | **P** | **00 12 43.5** | **+1.4** |
| | 0.6nm,0.4s,baz=64,slow=10,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.73** | **162** | P | **P** | **00 15 28.9** | **-0.2** |
| | 0.5nm,0.9s,baz=349,slow=9.6,SNR=2.7 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.09** | **83** | T | T | 01 00 41.1 | |
| | baz=276,slow=75,SNR=58 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.10** | **83** | T | T | 01 00 43.8 | |
| | baz=276,slow=75,SNR=45 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.10** | **83** | T | T | 01 00 42.6 | |
| | baz=276,slow=75,SNR=41 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.11** | **82** | T | T | 01 00 42.9 | |
| | baz=277,slow=75,SNR=182 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.12** | **82** | T | T | 01 00 43.0 | |
| | baz=277,slow=75,SNR=80 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.13** | **82** | T | T | 01 00 44.1 | |
| | baz=277,slow=75,SNR=69 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.58** | **319** | P | **P** | **00 15 44.8** | **+0.7** |
| | 0.5nm,0.5s,baz=108,slow=8.8,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **44.15** | **164** | LR | LR | 00 34 27.1 | |
| | comp=Z,52nm,19.2s,baz=309,slow=36 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.91** | **330** | P | **P** | **00 16 02.2** | **-0.4** |
| | 1.5nm,0.8s,baz=127,slow=8.2,SNR=4.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.51** | **323** | P | **P** | **00 16 15.6** | **+0.1** |
| | 0.5nm,0.6s,baz=119,slow=7.8,SNR=3.5 | | | | | | |

*IDC* ***15*** *00:15:08.6±1.2, 54˚.12N×163˚.59W, h0km, mb3.8/10, mb1 3.9/12, mb1mx3.7/48, mbtmp3.8/12, ML3.5/2, MS3.1/1, Ms1 3.1/1, ms1mx2.4/42, Error ellipse: s-maj=35.9km s-min=16.9km az=4.0*
*ISCJB* ***15*** *00:15:09.6±1.4, 53˚.82N±0˚.07×163˚.50W±0˚.06, h27km±9km, mb3.8/10, MS2.9/1, Error ellipse: s-maj=11.8km s-min=4.3km az=160.3*
*NEIC* ***15*** *00:15:09.8, 53˚.80N×163˚.48W, h26km, ML3.5(AEIC), After AEIC.*

**ISC 15 00:15:11.8±1.9, 53°.91N±0˚.07×163°.56W±0˚.04, h27km±13km, n48, σ1s31/49, mb3.7/10, Unimak Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BRPK** | **Brown Peak** | **0.75** | **352** | P | **Pb** | **00 15 25.1** | **-1.1** |
| **ISLZ** | **Isanotski Laza** | **0.82** | **354** | P | **Pn** | **00 15 26.3** | **-1.4** |
| **SSLS** | **Shishaldin Sou** | **0.85** | **342** | P | **Pn** | **00 15 27.0** | **-1.0** |
| **WESN** | **West Dahl Nort** | **0.90** | **318** | P | **Pn** | **00 15 27.8** | **-0.9** |
| **SSBA** | **Shishaldin** | **0.93** | **339** | P | **Pn** | **00 15 28.1** | **-1.1** |
| SSBA | | | | S | **Sb** | **00 15 43.4** | **+2.1** |
| **WECS** | **Westdahl Cape** | **0.95** | **312** | P | **Pn** | **00 15 28.6** | **-0.8** |
| **FALS** | **False Pass** | **0.95** | **5** | *e*Pg | **Pn** | **00 15 28.3** | **-1.2** |
| FALS | | | | *e*S | **Sn** | **00 15 41.5** | **-0.6** |
| **WEBT** | **Westdahl Beart** | **0.98** | **315** | P | **Pn** | **00 15 29.6** | **-0.2** |
| **AKUT** | **Akutan** | **1.33** | **281** | *e*Pn | **Pn** | **00 15 32.9** | **-1.7** |
| AKUT | | | | S | **Sn** | **00 15 51.5** | **+0.2** |
| **DTU** | **Dutton Round H** | **1.41** | **31** | P | **Pn** | **00 15 34.3** | **-1.5** |
| **ZRO** | **Akutan Zero** | **1.44** | **278** | P | **Pn** | **00 15 35.3** | **-0.8** |
| **DTNA** | **Dutton South F** | **1.46** | **31** | P | **Pn** | **00 15 35.2** | **-1.2** |
| **AKGG** | **Akutan Green G** | **1.47** | **282** | P | **Pn** | **00 15 35.7** | **-0.7** |
| **AKRB** | **Akutan Reef Bi** | **1.50** | **280** | P | **Pn** | **00 15 35.8** | **-1.1** |
| **UNV** | **Unalaska Valle** | **1.75** | **269** | *e*Pn | Pn | 00 15 37.6 | -2.7 |
| UNV | | | | S | **Sn** | **00 16 00.5** | **-1.1** |
| **PS4A** | **Pavlof South-4** | **1.75** | **34** | P | **Pn** | **00 15 40.0** | **-0.4** |
| **PVV** | **Pavlof Volcano** | **1.79** | **34** | P | **Pn** | **00 15 40.8** | **-0.1** |
| **MSW** | **Makushin Switc** | **1.91** | **272** | P | **Pn** | **00 15 41.4** | **-1.2** |
| **MGOD** | **Makushin Gods** | **1.97** | **268** | P | **Pn** | **00 15 42.1** | **-1.3** |
| **MSOM** | **Makushin Julie** | **2.01** | **269** | P | **Pn** | **00 15 42.6** | **-1.4** |
| **SDPT** | **Sand Point** | **2.30** | **50** | *e*Pn | **Pn** | **00 15 47.0** | **-0.9** |
| SDPT | | | | *e*S | **Sn** | **00 16 15.9** | **+0.6** |
| **OKCE** | **Okmok Cone E** | **2.78** | **262** | P | **Pn** | **00 15 54.3** | **-0.3** |
| **NIKH** | **Nikolski High** | **3.30** | **256** | P | **Pn** | **00 16 01.8** | **+0.1** |
| **VNHG** | **Veniaminof 1** | **3.43** | **46** | P | **Pn** | **00 16 03.7** | **+0.2** |
| **CHGN** | **Chignik** | **3.81** | **49** | *e*Pn | **Pn** | **00 16 09.1** | **+0.5** |
| CHGN | | | | *e*S | **Sn** | **00 16 53.9** | **+1.5** |
| **SPIA** | **Saint Paul Isl** | **5.02** | **313** | P | **Pn** | **00 16 26.3** | **+1.1** |
| **OHAK** | **Old Harbor** | **6.70** | **56** | *e*Pn | **Pn** | **00 16 47.5** | **-0.8** |
| **KDAK** | **Kodiak Island** | **7.29** | **53** | Pn | **Pn** | **00 16 55.6** | **-0.8** |
| | 0.9nm,0.3s,baz=228,slow=8.4,SNR=18 | | | | | | |
| KDAK | | | | Sn | **Sn** | **00 18 14.2** | **-4.0** |
| | baz=158,slow=7.8,SNR=1.2 | | | | | | |
| **KDAK** | **Kodiak Island** | **7.29** | **53** | *e*Pn | **Pn** | **00 16 55.2** | **-1.3** |
| KDAK | | | | Sn | **Sn** | **00 18 14.2** | **-4.0** |
| **ILAR** | **Eielson Array** | **13.76** | **31** | Pn | **Pn** | **00 18 25.7** | **+0.9** |
| | 0.1nm,0.3s,baz=225,slow=16,SNR=3.3 | | | | | | |
| **INK** | **Inuvik** | **20.14** | **33** | P | **P** | **00 19 42.4** | **-1.0** |
| | 0.1nm,0.3s,baz=224,slow=16,SNR=4.8 | | | | | | |
| INK | | | | LR | LR | 00 27 52.7 | |
| | comp=Z,45nm,18.1s,baz=304,slow=38 | | | | | | |
| **PETK** | **Petropavlovsk-** | **22.87** | **284** | P | **P** | **00 20 12.7** | **-0.2** |
| | 1.2nm,0.5s,baz=89,slow=14,SNR=5.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.29** | **98** | P | **P** | **00 21 57.5** | **+1.7** |
| | 0.6nm,0.7s,baz=298,slow=8.3,SNR=4.0 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.94** | **225** | T | T | 01 06 27.4 | |
| | baz=26,slow=76,SNR=1115 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.94** | **225** | T | T | 01 06 26.6 | |
| | baz=26,slow=76,SNR=1258 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.95** | **225** | T | T | 01 06 27.9 | |
| | baz=26,slow=76,SNR=701 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.11** | **225** | T | T | 01 07 54.9 | |
| | baz=26,slow=76,SNR=1526 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.12** | **225** | T | T | 01 07 56.1 | |
| | baz=26,slow=76,SNR=1647 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.13** | **225** | T | T | 01 07 56.2 | |
| | baz=26,slow=76,SNR=1391 | | | | | | |
| **TXAR** | **Lajitas Array** | **49.30** | **95** | P | **P** | **00 23 58.9** | **+0.5** |
| | 0.6nm,0.6s,baz=300,slow=5.3,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **53.46** | **303** | P | **P** | **00 24 29.7** | **+0.3** |
| | 0.3nm,0.4s,baz=48,slow=6.4,SNR=4.1 | | | | | | |
| **KURK** | **Kurchatov** | **63.47** | **321** | P | **P** | **00 25 39.2** | **+0.3** |
| **KURBB** | **Kurchatov Arra** | **63.57** | **321** | P | **P** | **00 25 39.2** | **-0.4** |
| | 0.3nm,0.5s,baz=22,slow=7.9,SNR=5.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **64.40** | **327** | P | **P** | **00 25 45.1** | **+0.1** |
| | 1.2nm,0.6s,baz=44,slow=9.0,SNR=6.7 | | | | | | |
| **FINES** | **FINESS Array B** | **64.74** | **355** | P | **P** | **00 25 46.1** | **-0.9** |
| | 2.3nm,0.7s,baz=18,slow=2.2,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.20** | **316** | P | **P** | **00 25 49.3** | **-1.1** |
| | 0.2nm,0.5s,baz=37,slow=6.2,SNR=2.5 | | | | | | |
| **AAK** | **Ala-Archa** | **71.76** | **319** | P | **P** | **00 26 32.2** | **+0.6** |
| | 0.6nm,0.4s,baz=27,slow=4.5,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **79.61** | **287** | P | **P** | **00 27 17.2** | **+0.6** |
| | 0.7nm,0.3s,baz=35,slow=6.6,SNR=3.8 | | | | | | |

**IDC 15 00:34:14.9±1.5, 6°.74N×127°.06E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.3/40, mbtmp3.5/3, Error ellipse: s-maj=37.1km s-min=21.1km az=49.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **1.51** | **283** | Pn | Pg | 00 34 44.9 | +1.0 |
| | 81nm,0.3s,baz=206,slow=3.8,SNR=4.9 | | | | | | |
| DAV | | | | Sn | Sg | 00 35 03.2 | -0.4 |
| | 129nm,0.3s,baz=106,slow=24,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **27.47** | **165** | P | P | 00 40 04.2 | +1.2 |
| | 0.5nm,0.5s,baz=342,slow=10,SNR=2.5 | | | | | | |
| **ASAR** | **Alice Springs** | **30.95** | **168** | P | P | 00 40 33.8 | -0.2 |
| | 0.2nm,0.3s,baz=342,slow=7.4,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.31** | **324** | P | P | 00 43 50.3 | -0.1 |
| | 0.2nm,0.3s,baz=119,slow=8.5,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.25** | **290** | PKP | PKPdf | 00 53 11.2 | -1.8 |
| | 0.2nm,0.8s,baz=68,slow=1.3,SNR=4.6 | | | | | | |

*ISCJB* ***15*** *00:34:26.6±0.6, 7˚.28S±0˚.07×125˚.28E±0˚.1, h450km, mb3.7/4, Error ellipse: s-maj=13.5km s-min=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TWT** | **Tachien** | **1.03** | **286** | *e*P | | **Pn** | **00 40 04.5** | **+0.2** |
| | baz=284 | | | | | | | |
| TWT | | | | *e*S | | **Sn** | **00 40 18.7** | **+0.5** |
| | baz=284 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.06** | **346** | *e*P | | **Pb** | **00 40 04.7** | **+0.3** |
| | baz=345 | | | | | | | |
| TWB1 | | | | *e*S | | **Sn** | **00 40 18.5** | **-0.1** |
| | baz=345 | | | | | | | |
| **NSK** | **Sanguang** | **1.08** | **310** | *e*P | | **Pn** | **00 40 04.5** | **-0.3** |
| | baz=309 | | | | | | | |
| **TWF1** | **Yuli** | **1.08** | **235** | *e*P | | **Pn** | **00 40 04.8** | **0.0** |
| | baz=235 | | | | | | | |
| TWF1 | | | | *e*S | | **Sn** | **00 40 19.3** | **+0.1** |
| | baz=235 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.18** | **338** | *e*P | | **Pn** | **00 40 05.5** | **-0.7** |
| | baz=336 | | | | | | | |
| NWF | | | | *e*S | | **Sb** | **00 40 21.0** | **-0.4** |
| | baz=336 | | | | | | | |
| **CHKT** | **Chengkung** | **1.20** | **224** | *e*P | | **Pn** | **00 40 05.9** | **-0.5** |
| | baz=223 | | | | | | | |
| CHKT | | | | *e*S | | **Sb** | **00 40 22.6** | **+0.7** |
| | baz=223 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.25** | **266** | *e*P | | **Pb** | **00 40 07.7** | **-0.1** |
| | baz=265 | | | | | | | |
| SMLT | | | | *e*S | | **Sn** | **00 40 23.0** | **-0.5** |
| | baz=265 | | | | | | | |
| **TYC** | **Yuchr** | **1.29** | **267** | *e*P | | **Pb** | **00 40 08.5** | **+0.2** |
| | baz=266 | | | | | | | |
| TYC | | | | *e*S | | **Sb** | **00 40 25.4** | **+1.0** |
| | baz=266 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.29** | **248** | *e*S | | **Sn** | **00 40 25.2** | **+0.1** |
| | baz=248 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.32** | **300** | *e*P | | **Pb** | **00 40 09.2** | **+0.3** |
| | baz=298 | | | | | | | |
| NSTT | | | | *e*S | | **Sn** | **00 40 25.2** | **0.0** |
| | baz=298 | | | | | | | |
| **ELDTW** | **Lidau** | **1.39** | **236** | *e*S | | **Sn** | **00 40 26.1** | **-0.7** |
| | baz=235 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.39** | **75** | P | | **Pn** | **00 40 09.4** | **+0.4** |
| IRIF | | | | S | | **Sb** | **00 40 27.8** | **+0.5** |
| **HATJ** | **Hateruma jima** | **1.41** | **86** | P | | **Pb** | **00 40 10.2** | **-0.3** |
| **ALS** | **Alishan** | **1.41** | **251** | *e*S | | **Sn** | **00 40 28.2** | **+0.4** |
| | baz=250 | | | | | | | |
| **CHN5** | **Tsauling** | **1.50** | **256** | *e*P | | **Pb** | **00 40 11.9** | **-0.1** |
| | baz=255 | | | | | | | |
| CHN5 | | | | *e*S | | **Sb** | **00 40 30.8** | **+0.2** |
| | baz=255 | | | | | | | |
| **TWG** | **Pinlang** | **1.59** | **224** | *e*S | | **Sn** | **00 40 31.8** | **+0.2** |
| | baz=223 | | | | | | | |
| **STYT** | **Tauyuan** | **1.60** | **240** | *e*S | | **Sb** | **00 40 33.8** | **+0.2** |
| | baz=239 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.62** | **80** | S | | **Sb** | **00 40 33.4** | **-0.5** |
| **WTP** | **Ta-pu** | **1.68** | **245** | *e*P | | **Pn** | **00 40 13.8** | **+0.8** |
| | baz=244 | | | | | | | |
| WTP | | | | *e*S | | **Sb** | **00 40 35.4** | **-0.3** |
| | baz=244 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.76** | **77** | P | | **Pn** | **00 40 15.0** | **+0.9** |
| JIJ | | | | S | | **Sn** | **00 40 36.0** | **+0.1** |
| **CHN1** | **Nanshi** | **1.78** | **244** | *e*P | | **Pb** | **00 40 15.7** | **-1.0** |
| | baz=243 | | | | | | | |
| CHN1 | | | | *e*S | | **Sb** | **00 40 37.7** | **-0.8** |
| | baz=243 | | | | | | | |
| **SGST** | **Jiashian** | **1.78** | **240** | *e*S | | **Sb** | **00 40 38.4** | **-0.3** |
| | baz=240 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.96** | **72** | P | | **Pn** | **00 40 17.2** | **+0.3** |
| JISG | | | | S | | **Sn** | **00 40 40.9** | **-0.1** |
| **LAY** | **Lan-yu** | **2.04** | **199** | *e*P | | **Pn** | **00 40 17.9** | **-0.1** |
| | baz=199 | | | | | | | |
| LAY | | | | *e*S | | **Sn** | **00 40 40.8** | **-2.0** |
| | baz=199 | | | | | | | |
| **JTJ** | **Tarama** | **2.32** | **73** | P | | **Pn** | **00 40 23.0** | **+1.2** |
| JTJ | | | | S | | **Sn** | **00 40 49.7** | **-0.1** |

*ISCJB* ***15*** *00:47:13.7±0.9,25°.1S±0°.1×179°.2E±0°.2, h507km, mb3.6/4, Error ellipse: s-maj=23.4km s-min=13.4km az=9.2*
*IDC* ***15*** *00:47:15.7±4.9,25°.16S×179°.28E, h528km±55km, mb3.2/4, mb1 3.6/6, mb1mx3.2/17, mbtmp4.2/6, Error ellipse: s-maj=41.0km s-min=24.2km az=7.0*

**ISC 15 00:47:14.4±1.0, 25°.2S±0°.1×179°.3E±0°.2, h507km, n9, σ0s69/10, mb3.6/4, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **13.15** | **187** | P | **P** | **00 50 05.1** | **+0.1** |
| | 5.2nm,0.3s,baz=66,slow=3.6,SNR=30 | | | | | | |
| URZ | | | | S | **S** | **00 52 25.0** | **-0.6** |
| | 0.5nm,0.3s,baz=242,slow=9.1,SNR=1.6 | | | | | | |
| **RPZ** | **Rata Peaks** | **19.66** | **198** | P | **P** | **00 51 10.5** | **+1.1** |
| | 0.7nm,0.3s,baz=346,slow=4.2,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **41.18** | **262** | P | **P** | **00 54 14.9** | **+0.4** |
| | 2.6nm,0.8s,baz=89,slow=6.6,SNR=19 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 56 01.5** | **-0.3** |
| | 0.6nm,0.7s,baz=72,slow=5.9,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.67** | **268** | P | **P** | **00 54 17.8** | **-0.6** |
| | 5.0nm,0.5s,baz=104,slow=8.1,SNR=24 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 56 03.0** | **-0.5** |
| | 0.2nm,0.4s,baz=94,slow=2.9,SNR=3.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.14** | **44** | P | **P** | **00 59 01.2** | **-0.5** |
| | 0.3nm,0.7s,baz=193,slow=10,SNR=3.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **91.68** | **58** | P | **P** | **00 59 27.9** | **+0.3** |
| | 0.4nm,0.8s,baz=226,slow=6.7,SNR=4.9 | | | | | | |
| **NB2** | **NORSAR Subarra143.25 350** | | | PKP | PKPab | 01 05 45.5 | -2.4 |
| | comp=Z,1.4nm,0.8s,baz=16,slow=3.2 | | | | | | |
| **NOA** | **NORSAR Array B143.25 350** | | | PKP | PKPab | 01 05 46.4 | -1.5 |
| | comp=Z,0.4nm,0.5s,baz=57,slow=1.0,SNR=5.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.80** | **305** | PKPbc | **PKPdf** | **01 05 59.3** | **+0.7** |
| | comp=Z,0.9nm,0.6s,baz=130,slow=4.7,SNR=5.1 | | | | | | |

*ISCJB* ***15*** *01:07:09.4±0.5,51°.51N±0°.03×16°.09E±0°.03, h0km, Error ellipse: s-maj=3.9km s-min=2.4km az=9.5*
*IPEC* ***15*** *01:07:09.4±0.3,51°.67N×16°.20E, h0km, ML2.7/3, Error ellipse: s-maj=3.3km s-min=1.8km az=61.0*
*CSEM* ***15*** *01:07:10.8±0.2,51°.53N×16°.05E, h2km, ML3.4/16, Error ellipse: s-maj=3.7km s-min=2.5km az=175.0*
*VIE* ***15*** *01:07:13.8±0.4,51°.31N×16°.05E, h0km, mb2.6/6, ml2.8/6, Error ellipse: s-maj=2.6km s-min=2.2km az=4.0, Suspected Mining induced.*

**ISC 15 01:07:10.1±0.9,51°.58N±0°.03×16°.05E±0°.02, h0km, n51, σ0s88/97, 8C-2D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.75** | **168** | *e*Pg | **Pb** | **01 07 25.4** | **-0.6** |
| KSP | | | | *e*Sg | **Sg** | **01 07 35.1** | **+1.0** |
| **UPC** | **Upice** | **1.07** | **181** | *e*PG | **Pb** | **01 07 31.3** | **-0.2** |
| UPC | | | | *e*SG | **Sg** | **01 07 44.0** | **-0.4** |
| | comp=Z,123nm,0.5s | | | | | | |
| **UPC** | **Upice** | **1.07** | **181** | Pg | **Pb** | **01 07 31.3** | **-0.2** |
| UPC | | | | Sg | **Sg** | **01 07 44.0** | **-0.4** |
| | 123nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.24** | **172** | *e*PG | **Pb** | **01 07 34.2** | **-0.2** |
| DPC | | | | *e*SG | **Sg** | **01 07 49.5** | **-0.4** |
| | comp=Z,33nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.24** | **172** | Pg | **Pb** | **01 07 34.2** | **-0.2** |
| DPC | | | | Sg | **Sg** | **01 07 49.5** | **-0.4** |
| | 33nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **1.41** | **222** | *e*PG | **Pb** | **01 07 37.3** | **+0.1** |
| PVCC | | | | *e*SG | **Sn** | **01 07 56.6** | **+0.4** |
| | comp=Z,166nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.41** | **222** | Pg | **Pb** | **01 07 37.3** | **+0.1** |
| PVCC | | | | Sg | **Sn** | **01 07 56.6** | **+0.4** |
| | 166nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.50** | **243** | PN | **Pn** | **01 07 38.2** | **-0.1** |
| BRG | | | | PG | **Pg** | **01 07 39.8** | **+0.9** |
| BRG | | | | SG | **Sn** | **01 07 59.8** | **+1.3** |
| | 175nm,0.4s | | | | | | |
| **KRLC** | **Kraliky** | **1.57** | **163** | *e*PG | **Pn** | **01 07 39.5** | **+0.2** |
| KRLC | | | | *e*SG | **Sn** | **01 07 59.0** | **-1.4** |
| **KRLC** | **Kraliky** | **1.57** | **163** | Pg | **Pn** | **01 07 39.5** | **+0.2** |
| KRLC | | | | Sg | **Sn** | **01 07 59.0** | **-1.4** |
| **PRA** | **Prague** | **1.82** | **215** | *e*PN | **Pn** | **01 07 42.7** | **0.0** |
| PRA | | | | *e*PG | **Pg** | **01 07 45.0** | **0.0** |
| PRA | | | | *e*SG | **Sg** | **01 08 08.3** | **-0.4** |
| | comp=Z,57nm,0.7s | | | | | | |
| **PRA** | **Prague** | **1.82** | **215** | Pn | **Pn** | **01 07 42.7** | **0.0** |
| **GOPC** | **GO Pecny, Ondr** | **1.85** | **206** | *e*PN | **Pn** | **01 07 43.5** | **+0.4** |
| GOPC | | | | *e*PG | **Pg** | **01 07 45.2** | **-0.3** |
| GOPC | | | | *e*SG | **Sg** | **01 08 09.2** | **-0.2** |
| | comp=Z,25nm,0.3s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.85** | **206** | Pn | **Pn** | **01 07 43.5** | **+0.4** |
| **PRU** | **Pruhonice** | **1.86** | **212** | *e*PN | **Pn** | **01 07 43.3** | **+0.1** |
| PRU | | | | *e*PG | **Pg** | **01 07 45.4** | **-0.3** |
| PRU | | | | *e*SG | **Sg** | **01 08 09.1** | **-0.6** |
| | comp=Z,37nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.86** | **212** | Pn | **Pn** | **01 07 43.3** | **+0.1** |
| **CLL** | **Collm** | **1.93** | **263** | *i* Pn | **Pn** | **01 07 44.0** | **-0.1** |
| | comp=Z,14nm,0.5s | | | | | | |
| CLL | | | | *e*Pg | **Pg** | **01 07 47.0** | **0.0** |
| CLL | | | | *i* | | 01 07 51.1 | |
| CLL | | | | *e*Sg | **Sg** | **01 08 13.0** | **+1.0** |
| | comp=Z,28nm,0.6s | | | | | | |
| **RAC** | **Raciborz** | **2.02** | **137** | *e*Sg | **Sg** | **01 08 15.2** | **+0.3** |
| **MORC** | **Moravsky Berou** | **2.04** | **152** | ⇓*i*P | **Pg** | **01 07 50.0** | **+0.9** |
| **MORC** | **Moravsky Berou** | **2.04** | **152** | S | **Sg** | **01 08 17.8** | **+2.3** |
| **MORC** | **Moravsky Berou** | **2.04** | **152** | *e*Pn | **Pn** | **01 07 45.5** | **-0.2** |
| MORC | | | | *e*Sg | **Sb** | **01 08 14.3** | **+0.5** |
| | comp=Z,29nm,0.5s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.19** | **142** | *e*PN | **Pn** | **01 07 47.5** | **-0.3** |
| OKC | | | | *e*PG | **Pg** | **01 07 51.8** | **-0.3** |
| OKC | | | | *e*SG | **Sb** | **01 08 19.0** | **+0.7** |
| | comp=Z,75nm,0.6s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.19** | **142** | Pn | **Pn** | **01 07 47.5** | **-0.3** |
| **VRAC** | **Vranov** | **2.30** | **171** | ⇑*i*P | Pn | 01 07 44.0 | -5.2 |
| **VRAC** | **Vranov** | **2.30** | **171** | S | Sn | 01 08 08.6 | -10 |
| **VRAC** | **Vranov** | **2.30** | **171** | *e*Pn | **Pn** | **01 07 49.7** | **+0.5** |
| VRAC | | | | *e*Sg | **Sg** | **01 08 23.9** | **+0.1** |
| | comp=Z,42nm,0.8s | | | | | | |
| **KRUC** | **Moravsky** | **2.53** | **175** | *e*Pn | **Pn** | **01 07 53.0** | **+0.6** |
| KRUC | | | | *e*Sg | **Sg** | **01 08 31.1** | **-0.1** |
| | comp=Z,40nm,0.8s | | | | | | |
| **NKC** | **Novy Kostel** | **2.65** | **241** | *e*PN | **Pn** | **01 07 54.9** | **+0.8** |
| NKC | | | | *e*PG | **Pg** | **01 08 01.1** | **+0.3** |
| NKC | | | | *e*SG | **Sg** | **01 08 34.9** | **-0.2** |
| | comp=Z,56nm,0.5s | | | | | | |
| **NKC** | **Novy Kostel** | **2.65** | **241** | Pn | **Pn** | **01 07 54.9** | **+0.8** |
| **OJC** | **Ojcow** | **2.73** | **118** | *e*Pg | **Pg** | **01 08 02.3** | **-0.2** |
| OJC | | | | *e*Sg | **Sg** | **01 08 38.6** | **+0.7** |
| **OJC** | **Ojcow** | **2.73** | **118** | *e*Pg | **Pg** | **01 08 02.3** | **-0.2** |
| OJC | | | | *e*Sg | **Sg** | **01 08 38.6** | **+0.7** |
| **KHC** | **Kasperske Hory** | **2.92** | **214** | *e*PN | **Pn** | **01 07 57.9** | **+0.1** |
| KHC | | | | *e*PG | **Pb** | **01 08 04.3** | **+1.3** |
| KHC | | | | *e*SN | **Sn** | **01 08 31.3** | **-2.2** |
| KHC | | | | *e*SG | **Sg** | **01 08 41.7** | **-2.0** |
| | comp=Z,18nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.92** | **214** | Pn | **Pn** | **01 07 57.9** | **+0.1** |
| **LANS** | **Liptovska Anna** | **3.27** | **137** | *e*PN | **Pn** | **01 08 01.9** | **-0.7** |
| LANS | | | | *e*PG | **Pg** | **01 08 12.5** | **-0.2** |
| LANS | | | | *e*SG | **Sg** | **01 08 55.4** | **+0.4** |
| **NIE** | **Niedzica** | **3.47** | **127** | *e*P | **Sg** | **01 08 16.2** | **-0.3** |
| NIE | | | | *e*S | **Sg** | **01 09 02.9** | **+1.5** |
| **VYHS** | **Vyhne** | **3.57** | **149** | *e*PN | **Pn** | **01 08 06.7** | **0.0** |
| VYHS | | | | *e*PG | **Pg** | **01 08 19.8** | **+1.3** |
| VYHS | | | | *e*SG | **Sg** | **01 09 01.8** | **-2.9** |
| **VYHS** | **Vyhne** | **3.57** | **149** | *e*Pn | **Pn** | **01 08 06.7** | **0.0** |
| **BSD** | **Bornholm Skovb** | **3.61** | **350** | *i* P | **Pn** | **01 08 07.3** | **+0.1** |
| BSD | | | | *i* S | **Sn** | **01 08 47.6** | **-2.9** |
| **BSD** | **Bornholm Skovb** | **3.61** | **350** | *i* P | **Pn** | **01 08 07.3** | **+0.1** |
| **CONA** | **Conrad Observa** | **3.65** | **182** | ⇑*i*Pn | **Pn** | **01 08 08.8** | **+0.8** |
| CONA | | | | ⇑*i*Sg | **Sg** | **01 09 05.7** | **-1.7** |
| | comp=Z,19nm,0.4s | | | | | | |
| **CONA** | **Conrad Observa** | **3.65** | **182** | Pn | **Pn** | **01 08 08.8** | **+0.8** |
| CONA | | | | Sg | **Sg** | **01 09 05.7** | **-1.7** |
| | comp=Z,19nm,0.4s | | | | | | |
| **MOA** | **Molln** | **3.91** | **198** | ⇓*i*Pn | **Pn** | **01 08 12.2** | **+0.8** |
| MOA | | | | ⇑*i*Sg | **Sg** | **01 09 14.4** | **-1.1** |
| | comp=Z,12nm,0.4s | | | | | | |
| **MOA** | **Molln** | **3.91** | **198** | Pn | **Pn** | **01 08 12.2** | **+0.8** |
| MOA | | | | Sg | **Sg** | **01 09 14.4** | **-1.1** |
| | comp=Z,12nm,0.4s | | | | | | |
| **STHS** | **Stebnicka Huta** | **3.96** | **121** | *e*PN | **Pn** | **01 08 12.8** | **+0.7** |
| STHS | | | | *e*PG | **Pg** | **01 08 26.8** | **+0.9** |
| STHS | | | | *e*SG | **Sg** | **01 09 18.3** | **+1.1** |
| **STHS** | **Stebnicka Huta** | **3.96** | **121** | *e*Pn | **Pn** | **01 08 12.8** | **+0.7** |
| **ARSA** | **Arzberg** | **4.34** | **185** | ⇑*i*Pn | **Pn** | **01 08 18.0** | **+0.6** |
| ARSA | | | | ⇑*i*Sg | **Sg** | **01 09 28.6** | **-0.9** |
| | comp=Z,14nm,0.5s | | | | | | |
| **ARSA** | **Arzberg** | **4.34** | **185** | Pn | **Pn** | **01 08 18.0** | **+0.6** |
| ARSA | | | | Sg | **Sg** | **01 09 28.6** | **-0.9** |
| | comp=Z,14nm,0.5s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **4.79** | **121** | *e*PN | **Pn** | **01 08 22.9** | **-0.6** |
| KOLS | | | | *e*PG | **Pg** | **01 08 42.3** | **+0.5** |
| **KOLS** | **Kolonicke sedl** | **4.79** | **121** | *e*Pn | **Pn** | **01 08 22.9** | **-0.6** |
| **KBA** | **Koelnbreinsper** | **4.84** | **203** | ⇑*i*Pn | **Pn** | **01 08 25.0** | **+0.7** |
| KBA | | | | ⇑*i*Sg | **Sg** | **01 09 45.7** | **+0.3** |
| | comp=Z,15nm,0.7s | | | | | | |
| **KBA** | **Koelnbreinsper** | **4.84** | **203** | Pn | **Pn** | **01 08 25.0** | **+0.7** |
| KBA | | | | Sg | **Sg** | **01 09 45.7** | **+0.3** |
| | comp=Z,15nm,0.7s | | | | | | |

*NIED* ***15*** *01:13:00,37°.10N×135°.10E, h380km, Mw3.9 Best double couple: M0 9.03000×10^14 NP1:φs349.00000°, δ11.00000°, λ89.00000°. NP2:φs171.00000°, δ79.00000°, λ90.00000°.*
*ISCJB* ***15*** *01:13:50.9±0.3,37°.13N±0°.06×135°.11E±0°.06, h370km±4km, mb3.6/11, Error ellipse: s-maj=10.4km s-min=6.7km az=148.4*
*JMA* ***15*** *01:13:51.2±0.1,37°.08N×135°.10E, h372km±2km, M3.6*
*IDC* ***15*** *01:13:52.4±1.3,37°.06N×134°.98E, h373km±13km, mb3.4/11, mb1 3.5/14, mb1mx3.3/32, mbtmp4.0/14, Error ellipse: s-maj=16.9km s-min=11.8km az=96.0*

**ISC 15 01:13:51.4±0.6, 37°.17N±0°.07×135°.09E±0°.06, h361km±6km, n39, σ1s15/48, mb3.5/11, Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKG** | **Kaga** | **1.34** | **131** | P | **Pn** | **01 14 40.5** | **+0.7** |
| **JKY** | **Yasaka** | **1.54** | **179** | P | **Pn** | **01 14 41.4** | **+0.5** |
| JKY | | | | S | **S** | **01 15 20.6** | **0.0** |
| **JHG** | **Hegura jima** | **1.61** | **64** | P | **Pn** | **01 14 42.7** | **+1.6** |
| **JKSM** | **Kasumi** | **1.61** | **192** | P | **Pn** | **01 14 41.4** | **+0.1** |
| **SAI** | **Saigo** | **1.71** | **236** | P | **Pn** | **01 14 42.5** | **+0.7** |
| **JSZ** | **Suzu** | **1.84** | **81** | P | **Pn** | **01 14 43.9** | **+1.4** |
| **JWT** | **Wachi** | **1.90** | **172** | P | **Pn** | **01 14 43.6** | **+0.5** |
| JWT | | | | S | **S** | **01 15 24.3** | **-0.3** |
| **JGM** | **Miyama** | **1.97** | **138** | P | **Pn** | **01 14 43.9** | **+0.3** |
| JGM | | | | S | **S** | **01 15 25.1** | **-0.4** |
| **JNG** | **Nsakai** | **2.54** | **107** | P | **Pn** | **01 14 48.5** | **+0.7** |
| **MAT** | **Matsushiro** | **2.58** | **103** | P | **Pn** | **01 14 47.1** | **+0.7** |
| MAT | | | | S | **S** | **01 15 33.4** | **-0.2** |
| **MAT** | **Matsushiro** | **2.58** | **103** | P | **Pn** | **01 14 48.7** | **+0.7** |
| **JSD** | **Sado** | **2.67** | **70** | P | **Pn** | **01 14 49.6** | **+1.0** |
| **JHS** | **Saijyo** | **2.69** | **217** | P | **Pn** | **01 14 49.1** | **+0.1** |
| JHS | | | | S | **S** | **01 15 35.2** | **-0.1** |
| **JWY** | **Kouya** | **2.97** | **172** | P | **Pn** | **01 14 51.5** | **0.0** |
| **JIE** | **Ise** | **3.07** | **154** | S | **S** | **01 15 40.3** | **-0.9** |
| **JRY** | **Ryogami san** | **3.28** | **109** | P | **Pn** | **01 14 54.9** | **+0.8** |
| **JWZ** | **Kozaga** | **3.67** | **172** | P | **Pn** | **01 14 57.5** | **-0.3** |
| **JOD2** | **Odawara 2** | **3.75** | **119** | P | **Pn** | **01 14 58.9** | **+0.3** |
| JOD2 | | | | S | **S** | **01 15 53.3** | **+0.4** |
| **JFT** | **Otama** | **4.20** | **84** | P | **Pn** | **01 15 03.4** | **+0.4** |
| **JFK** | **Kawauchi** | **4.62** | **86** | P | **Pn** | **01 15 07.1** | **-0.4** |
| **JTO** | **Tosashimizu** | **4.69** | **204** | P | **Pn** | **01 15 08.3** | **0.0** |
| **JRG** | **Rokugo** | **4.90** | **61** | P | **Pn** | **01 15 11.1** | **+0.8** |
| **JNU** | **Nakatsue** | **5.31** | **222** | P | **Pn** | **01 15 14.9** | **-0.1** |
| | 1.6nm,0.3s,baz=57,slow=11,SNR=7.4 | | | | | | |
| JNU | | | | S | **S** | **01 16 22.6** | **-0.1** |
| | 0.4nm,0.3s,baz=52,slow=23,SNR=2.3 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **5.58** | **135** | S | **S** | **01 16 30.2** | **+2.2** |
| | 17nm,0.3s,baz=64,slow=23,SNR=7.4 | | | | | | |
| **KSRS** | **Korea Array** | **5.72** | **275** | P | **Pn** | **01 15 20.7** | **+1.4** |
| | 1.7nm,0.3s,baz=94,slow=12,SNR=27 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.41** | **342** | P | **P** | **01 15 40.9** | **+1.1** |
| | 0.9nm,0.3s,baz=158,slow=11,SNR=21 | | | | | | |
| **ASAJ** | **Asahikawa** | **8.98** | **37** | P | **Pn** | **01 15 56.5** | **-0.6** |
| | 12nm,0.3s,baz=235,slow=8.0,SNR=30 | | | | | | |
| ASAJ | | | | S | **S** | **01 17 35.0** | **-5.2** |
| | 1.8nm,0.3s,baz=312,slow=32,SNR=17 | | | | | | |
| **SONM** | **Songino Array** | **23.56** | **306** | P | **P** | **01 18 30.5** | **-0.4** |
| | 1.2nm,0.7s,baz=108,slow=10,SNR=5.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.72** | **249** | P | **P** | **01 20 26.2** | **+0.6** |
| | 0.4nm,0.3s,baz=53,slow=8.3,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.74** | **301** | P | **P** | **01 20 49.6** | **-0.7** |
| | 1.3nm,0.5s,baz=84,slow=12,SNR=18 | | | | | | |
| MKAR | | | | ScP | **ScP** | **01 26 00.3** | **-2.0** |
| | 0.7nm,0.7s,baz=83,slow=6.1,SNR=2.5 | | | | | | |
| **ILAR** | **Eielson Array** | **52.08** | **32** | P | **P** | **01 22 25.8** | **+0.6** |
| | 1.4nm,0.6s,baz=266,slow=6.1,SNR=28 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.81** | **181** | P | **P** | **01 22 58.0** | **-1.4** |
| | 1.4nm,0.4s,baz=357,slow=7.5,SNR=26 | | | | | | |
| **ASAR** | **Alice Springs** | **60.52** | **181** | P | **P** | **01 23 23.6** | **-1.1** |
| | 0.5nm,0.5s,baz=14,slow=14,SNR=8.8 | | | | | | |
| **FINES** | **FINESS Array B** | **66.26** | **330** | P | **P** | **01 24 01.1** | **-0.4** |
| | 6.3nm,1.0s,baz=46,slow=12,SNR=3.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **72.01** | **335** | P | **P** | **01 24 36.3** | **-0.2** |
| | 0.4nm,0.6s,baz=32,slow=4.7,SNR=2.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.87** | **50** | P | **P** | **01 25 17.0** | **+1.3** |
| | 0.9nm,0.5s,baz=289,slow=5.5,SNR=12 | | | | | | |
| **SCHQ** | **Schefferville** | **86.45** | **12** | P | **P** | **01 25 55.3** | **+1.5** |
| | 3.0nm,0.8s,baz=353,slow=8.1,SNR=3.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **93.93** | **48** | P | **P** | **01 26 29.6** | **+0.4** |
| | 0.7nm,0.7s,baz=275,slow=3.5,SNR=11 | | | | | | |
| **LPAZ** | **La Paz** | **150.78** | **51** | PKPbc | **PKPbc** | **01 33 02.8** | **0.0** |
| | 1.0nm,0.6s,baz=12,slow=0.8,SNR=5.8 | | | | | | |

*NIED* ***15*** *01:20:00,37°.70N×142°.00E, h8km, Mw3.6 Best double couple: M0 3.18000×10^14 NP1:φs84.00000°, δ45.00000°, λ-94.00000°. NP2:φs270.00000°, δ45.00000°, λ-86.00000°.*
*ISCJB* ***15*** *01:20:11.6±1.8,37°.69N±0°.04×142°.1E±0°.1, h15km±12km, mb3.7/6, MS3.1/1, Error ellipse: s-maj=15.1km s-min=5.8km az=11.9*
*IDC* ***15*** *01:20:12.3±0.9,37°.61N×142°.27E, h0km, mb3.7/6, mb1 3.9/9, mb1mx3.7/30, mbtmp3.7/9, ML3.7/2, MS2.8/2, Ms1 2.8/2, ms1mx2.3/37, Error ellipse: s-maj=26.6km s-min=19.9km az=102.0*
*JMA* ***15*** *01:20:13.8±0.1,37°.74N×141°.97E, h28km±2km, M3.9*

**ISC 15 01:20:13.0±1.9, 37°.75N±0°.04×141°.87E±0°.08, h6km±12km, n27, σ0s79/23, mb3.8/6, 3C, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JIO** | **Ouri** | **0.82** | **330** | ⇑P | **Pb** | **01 20 29.7** | **+0.1** |
| JIO | | | | *e*S | **Sb** | **01 20 41.0** | **+0.1** |
| **JMM** | **Marumori** | **0.86** | **278** | P | **Pb** | **01 20 30.6** | **+0.2** |
| JMM | | | | *e*S | **Sb** | **01 20 42.8** | **+0.6** |
| **JFK** | **Kawauchi** | **0.88** | **245** | P | **Pb** | **01 20 30.9** | **+0.2** |
| JFK | | | | *e*S | **Sb** | **01 20 43.0** | **+0.3** |
| **ONAJ** | **Iwakimizuishiy** | **1.07** | **233** | ⇑P | **Pg** | **01 20 33.6** | **+0.1** |
| ONAJ | | | | *e*S | **Sg** | **01 20 47.7** | **+0.4** |
| **JOU** | **Okura** | **1.13** | **303** | ⇑P | **Pb** | **01 20 35.6** | **+0.6** |
| JOU | | | | *e*S | **Sb** | **01 20 51.5** | **+1.4** |
| **JFT** | **Otama** | **1.24** | **260** | P | **Pb** | **01 20 37.2** | **+0.4** |
| **JMK** | **Ichinoseki** | **1.31** | **337** | P | **Pg** | **01 20 37.2** | **-0.8** |
| JMK | | | | *e*S | **Sg** | **01 20 53.9** | **-1.1** |
| **JRG** | **Rokugo** | **1.91** | **330** | P | **Pn** | **01 20 46.6** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **3.16** | **249** | Pn | Pn | 01 21 06.8 | +3.4 |
| | 2.8nm,0.3s,baz=82,slow=16,SNR=4.3 | | | | | | |
| **MAT** | **Matsushiro** | **3.16** | **249** | P | Pn | 01 21 06.9 | +3.5 |
| MAT | | | | *e*S | **Sb** | **01 21 47.6** | **-0.9** |
| **JHJ** | **Hachijo jima 2** | **4.92** | **201** | Pn | **Pn** | **01 21 28.3** | **+0.8** |
| | 19nm,0.3s,baz=0.0,slow=20,SNR=4.5 | | | | | | |
| JHJ | | | | Sn | **Sn** | **01 22 23.6** | **-1.2** |
| | 20nm,0.3s,baz=259,slow=22,SNR=1.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.86** | **314** | Pn | Pn | 01 22 41.8 | +6.5 |
| | 0.2nm,0.3s,baz=162,slow=28,SNR=3.1 | | | | | | |
| **JNU** | **Nakatsue** | **10.08** | **246** | LR | LR | 01 26 55.0 | |
| | comp=Z,31nm,21.9s,baz=115,slow=39 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.21** | **123** | T | T | 01 55 28.6 | |
| | baz=315,slow=75,SNR=384 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.22** | **123** | T | T | 01 55 31.1 | |
| | baz=315,slow=75,SNR=265 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.23** | **123** | T | T | 01 55 32.3 | |
| | baz=315,slow=75,SNR=232 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.95** | **125** | T | T | 01 56 23.5 | |
| | baz=317,slow=76,SNR=326 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.95** | **125** | T | T | 01 56 23.6 | |
| | baz=317,slow=76,SNR=334 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.97** | **125** | T | T | 01 56 24.8 | |
| | baz=317,slow=76,SNR=351 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.71** | **312** | P | **P** | **01 28 03.8** | **+1.3** |
| | 1.1nm,0.5s,baz=86,slow=6.4,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.05** | **302** | P | P | 01 28 24.9 | +3.3 |
| | 1.4nm,0.9s,baz=116,slow=6.6,SNR=3.8 | | | | | | |
| **KDAK** | **Kodiak Island** | **46.33** | **42** | LR | LR | 01 51 40.3 | |
| | comp=Z,20nm,18.6s,baz=96,slow=41 | | | | | | |
| **ILAR** | **Eielson Array** | **48.70** | **33** | P | **P** | **01 28 56.9** | **-0.9** |
| | 0.3nm,0.7s,baz=271,slow=6.0,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MGOD** | **Makushin Gods** | **2.28** | **63** | P | | **Pn** | **01 45 28.6** | **+0.7** |
| MGOD | | | | S | | **Sb** | **01 45 59.1** | **-0.6** |
| **KOSE** | **Korovin Southe** | **2.34** | **260** | P | | **Pn** | **01 45 29.1** | **+0.5** |
| **MSW** | **Makushin Switc** | **2.38** | **61** | P | | **Pn** | **01 45 30.3** | **+1.1** |
| MSW | | | | S | | **Sn** | **01 46 00.1** | **+1.2** |
| **KOFP** | **Korovin Flat P** | **2.38** | **259** | P | | **Pn** | **01 45 30.0** | **+0.7** |
| KOFP | | | | S | | **Sb** | **01 46 02.3** | **-0.4** |
| **MTBL** | **Makushin Table** | **2.46** | **60** | P | | **Pn** | **01 45 31.6** | **+1.3** |
| **ATKA** | **Atka Island** | **2.46** | **257** | P | | **Pn** | **01 45 30.4** | **+0.1** |
| ATKA | | | | S | | **Sn** | **01 46 01.5** | **+0.6** |
| **UNV** | **Unalaska Valle** | **2.50** | **64** | P | | **Pn** | **01 45 31.3** | **+0.4** |
| UNV | | | | S | | **Sb** | **01 46 05.1** | **-0.9** |
| **ZRO** | **Akutan Zero** | **2.88** | **62** | P | | **Pn** | **01 45 37.6** | **+1.5** |
| **AKGG** | **Akutan Green G** | **2.92** | **60** | P | | **Pn** | **01 45 37.2** | **+0.6** |
| **AKUT** | **Akutan** | **3.01** | **62** | *e*Pn | | **Pn** | **01 45 39.1** | **+1.2** |
| **GSCK** | **Great Sitkin C** | **3.68** | **260** | P | | **Pn** | **01 45 46.7** | **-0.4** |
| **SSLW** | **Shishaldin Wes** | **4.16** | **59** | P | | **Pn** | **01 45 54.5** | **+0.9** |
| **KDAK** | **Kodiak Island** | **11.25** | **57** | Pn | | **Pn** | **01 47 31.4** | **+0.7** |
| | 0.4nm,0.3s,baz=249,slow=8.6,SNR=2.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **16.92** | **36** | Pn | | **Pn** | **01 48 44.5** | **-2.3** |
| | 0.1nm,0.3s,baz=228,slow=9.5,SNR=3.7 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **37.45** | **217** | T | | T | 02 31 30.2 | |
| | baz=19,slow=76,SNR=3.9 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **37.46** | **217** | T | | T | 02 31 28.7 | |
| | baz=19,slow=76,SNR=6.5 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.47** | **217** | T | | T | 02 31 29.3 | |
| | baz=19,slow=76,SNR=6.6 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **38.23** | **91** | P | | **P** | **01 52 10.5** | **-0.1** |
| | 0.5nm,0.7s,baz=303,slow=8.4,SNR=5.1 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.65** | **216** | T | | T | 02 32 55.5 | |
| | baz=23,slow=76,SNR=52 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.66** | **216** | T | | T | 02 32 54.8 | |
| | baz=23,slow=76,SNR=28 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.66** | **216** | T | | T | 02 32 55.8 | |
| | baz=23,slow=76,SNR=22 | | | | | | | |
| **GUMO** | **Guam** | **52.84** | **239** | LR | | LR | 02 15 03.9 | |
| | comp=Z,48nm,19.4s,baz=357,slow=34 | | | | | | | |
| **TXAR** | **Lajitas Array** | **53.30** | **89** | P | | **P** | **01 54 08.8** | **-0.8** |
| | 0.4nm,0.7s,baz=303,slow=6.6,SNR=5.9 | | | | | | | |
| **SYO** | **Syowa Base** | **158.58** | **209** | ⇑*e*P | | **PKPab** | **02 05 23.5** | **+1.6** |

**DJA 15 02:38:06.0**±0.8, **8°S**±3°×**10°6E**±°, **h15**km±7km, **M3.9**/14, **MLv3.9**/14, **Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKJI** | **Sukabumi** | **0.87** | **46** | P | Pb | 02 38 21.2 | -1.7 |
| SKJI | | | | S | Sg | 02 38 34.7 | +0.3 |
| **CGJI** | **Cibinong** | **1.01** | **347** | P | Pb | 02 38 24.3 | -1.0 |
| CGJI | | | | S | Sb | 02 38 38.0 | -0.5 |
| **CNJI** | **Cibinong** | **1.24** | **76** | P | Pn | 02 38 26.6 | -2.2 |
| CNJI | | | | S | Sb | 02 38 45.0 | +0.2 |
| **SBJI** | **Serang** | **1.50** | **8** | P | Pn | 02 38 29.9 | -2.4 |
| **TNG** | **Tangerang** | **1.60** | **27** | P | Pn | 02 38 32.8 | -1.0 |
| **LEM** | **Lembang** | **1.85** | **65** | P | Pn | 02 38 37.4 | -0.1 |
| **CISI** | **Cisompet, Garu** | **1.88** | **88** | P | Pn | 02 38 36.7 | -1.0 |
| **KASI** | **Kota Agung** | **2.51** | **326** | P | Pn | 02 38 46.6 | +0.3 |
| **CMJI** | **Cimerak** | **2.51** | **94** | P | Pn | 02 38 46.2 | -0.1 |
| **KLSI** | | **3.13** | **338** | P | Pn | 02 38 55.1 | +0.2 |
| **MDSI** | **Maura Dua** | **3.55** | **331** | P | Pn | 02 39 01.0 | +0.3 |

*KLM **15** 02:49:05.5,6°.03N×123°.71E,h565km,mb4.7,MS6.0*
*ISCJB **15** 02:49:05.1±0.2,6°.04N±0°.03×123°.44E±0°.05,h574km, mb4.3/44,Error ellipse: s-maj=6.5km s-min=3.4km az=151.8*
*BJI **15** 02:49:05.6,6°.00N×123°.50E,h586km,mb4.5/21,mB4.5/11*
*NEIC **15** 02:49:06.8±0.5,6°.04N×123°.51E,h586km±7km,mb4.7/30, Error ellipse: s-maj=9.8km s-min=5.4km az=56.0*
*IDC **15** 02:49:07.2±1.1,6°.08N×123°.58E,h598km±13km,mb3.4/17, mb1 3.6/19,mb1mx3.3/42,mbtmp4.5/19,Error ellipse: s-maj=20.5km s-min=9.3km az=68.0*
*DJA **15** 02:49:08.8±0.4,6°N±6°×12°3E±°,h594km±4km,M4.6/14, mb4.6/14,mB4.9/6,MLv4.8/2,Mw(mB)4.2/6*
*AUST **15** 02:49:09.0±0.7,5°.68N×123°.05E,h621km,Error ellipse: s-maj=1.8km s-min=1.0km az=44.0*

**ISC 15 02:49:05.9**±0.3, **5°.95N**±0°.05×**123°.45E**±0°.07, **h574**km, **n133**, σ**1**§**53**/150, **mb4.3**/44, **4C-3D**, **Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **3.05** | **137** | P | **P** | **02 50 25.2** | **+1.9** |
| SGSI | | | | S | S | 02 51 32.8 | +6.6 |
| **MYLDM** | **Lahad Datu** | **4.99** | **261** | *e*P | P | 02 50 40.8 | +3.6 |
| **GTOI** | **Gorontalo** | **5.29** | **185** | P | **P** | **02 50 40.2** | **+0.5** |
| **SDKM** | **Sandakan** | **6.23** | **268** | ⇑P | **P** | **02 50 49.4** | **+1.5** |
| **TNTI** | **Ternate** | **6.46** | **143** | *e*P | **P** | **02 50 50.3** | **+0.4** |
| | 78nm,0.3s | | | | | | |
| TNTI | | | | *e*S | S | 02 52 05.9 | -8.9 |
| **LUWI** | **Luwuk** | **6.97** | **186** | P | **P** | **02 50 57.5** | **+2.8** |
| | baz=6.7,SNR=3.6 | | | | | | |
| **LUWI** | **Luwuk** | **6.97** | **186** | P | **P** | **02 50 53.3** | **-1.4** |
| LUWI | | | | S | **S** | **02 52 21.9** | **-1.7** |
| **LUWI** | **Luwuk** | **6.97** | **186** | *e*P | **P** | **02 50 56.0** | **+1.3** |
| **KKM** | **Kota Kinabalu** | **7.20** | **271** | P | **P** | **02 50 58.1** | **+1.2** |
| | baz=6.8,SNR=18 | | | | | | |
| **KKM** | **Kota Kinabalu** | **7.20** | **271** | ⇓P | **P** | **02 50 58.1** | **+1.2** |
| **KKM** | **Kota Kinabalu** | **7.20** | **271** | *e*P | **P** | **02 50 58.0** | **+1.2** |
| **LBMI** | **Labuha** | **7.69** | **148** | P | P | 02 51 05.1 | +3.6 |
| LBMI | | | | S | **S** | **02 52 38.3** | **+2.3** |
| **SANI** | **Sanana** | **8.34** | **162** | P | **P** | **02 51 08.7** | **+1.0** |
| **NLAI** | **Namlea** | **9.82** | **158** | P | **P** | **02 51 25.6** | **+3.1** |
| **SWI** | **Sorong** | **10.32** | **131** | P | P | 02 51 30.8 | +3.3 |
| | 36nm,0.8s,1μm | | | | | | |
| **SIJI** | **Sorong** | **10.33** | **131** | P | **P** | **02 51 29.6** | **+1.9** |
| | 5.3nm,0.3s,baz=332,slow=12,SNR=9.6 | | | | | | |
| **BTM** | **Bintulu** | **10.69** | **256** | ⇓P | **P** | **02 51 33.5** | **+2.2** |
| **KAPI** | **Kappang** | **11.50** | **199** | *e*P | **P** | **02 51 37.9** | **-1.6** |
| **SBUM** | **Sibu** | **11.72** | **253** | ⇑P | P | 02 51 45.6 | +3.7 |
| **SBUM** | **Sibu** | **11.72** | **253** | *e*P | P | 02 51 45.8 | +4.0 |
| **BNDI** | **Bandanaira** | **12.23** | **148** | P | P | 02 51 52.6 | +5.6 |
| **FAKI** | **Fak Fak** | **12.44** | **135** | P | **P** | **02 51 51.1** | **+1.9** |
| | baz=13,SNR=28 | | | | | | |
| **FAKI** | **Fak Fak** | **12.44** | **135** | P | **P** | **02 51 51.2** | **+1.9** |
| | 113nm,0.6s,1μm | | | | | | |
| **FAKI** | **Fak Fak** | **12.44** | **135** | *e*P | **P** | **02 51 51.0** | **+1.9** |
| **KSM** | **Kuching** | **13.84** | **252** | ⇑P | **P** | **02 52 05.3** | **+1.7** |
| **KSM** | **Kuching** | **13.84** | **252** | *e*P | **P** | **02 52 04.9** | **+1.3** |
| | 28nm,0.9s | | | | | | |
| **SOEI** | **Soe** | **15.62** | **177** | P | **P** | **02 52 22.5** | **+1.4** |
| | baz=16,SNR=3.3 | | | | | | |
| **SOEI** | **Soe** | **15.62** | **177** | *e*P | **P** | **02 52 22.5** | **+1.4** |
| | 19nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **16.05** | **179** | P | **P** | **02 52 25.6** | **+0.6** |
| | 18nm,0.3s,baz=48,slow=1.6,SNR=12 | | | | | | |
| **BATI** | **Baumata** | **16.05** | **179** | P | **P** | **02 52 25.8** | **+0.8** |
| | 58nm,0.6s | | | | | | |
| **SMPI** | **Sarmi** | **17.16** | **117** | P | **P** | **02 52 37.3** | **+2.2** |
| | 27nm,0.6s,10μm | | | | | | |
| **TPUB** | **Ta-pu** | **17.47** | **351** | *e*P | **P** | **02 52 38.2** | **+0.3** |
| | 42nm,0.3s | | | | | | |
| **YULB** | **Yu-li** | **17.47** | **353** | *e*P | **P** | **02 52 36.0** | **-1.9** |
| | 177nm,2.5s | | | | | | |
| **SSLB** | **Suanglung** | **17.90** | **353** | *e*P | **P** | **02 52 40.8** | **-1.0** |
| | 178nm,2.4s | | | | | | |
| **JAY** | **Jayapura** | **19.17** | **116** | P | **P** | **02 52 54.5** | **+1.0** |
| | baz=19,SNR=5.6 | | | | | | |
| **MYKOM** | **Kota Tinggi** | **19.98** | **259** | ⇑P | **P** | **02 53 02.2** | **+1.4** |
| **MTN** | **Manton Dam** | **20.17** | **158** | P | **P** | **02 53 02.9** | **+0.5** |
| | baz=20,SNR=13 | | | | | | |
| **MTN** | **Manton Dam** | **20.17** | **158** | *e*P | **P** | **02 53 02.9** | **+0.5** |
| | 12nm,0.5s | | | | | | |
| **KDU** | **Kakadu** | **20.57** | **154** | P | **P** | **02 53 06.5** | **+0.4** |
| | baz=21,SNR=11 | | | | | | |
| **KNRA** | **Kununurra** | **22.12** | **166** | P | **P** | **02 53 21.1** | **+1.2** |
| | baz=22,SNR=6.6 | | | | | | |
| **IPM** | **Ipoh** | **22.38** | **267** | *e*P | **P** | **02 53 22.8** | **+0.3** |
| | 7.9nm,0.6s | | | | | | |
| **KULM** | **Kulim** | **22.70** | **270** | *e*P | **P** | **02 53 27.0** | **+1.7** |
| | 7.4nm,0.8s | | | | | | |
| **PPI** | **Padang Panjang** | **23.88** | **255** | P | **P** | **02 53 36.4** | **+0.7** |
| | 25nm,0.7s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.99** | **175** | P | **P** | **02 53 37.2** | **+0.6** |
| | 1.9nm,0.3s,baz=3.7,slow=8.8,SNR=33 | | | | | | |
| FITZ | | | | ScP | **ScP** | **02 59 40.2** | **-2.9** |
| | 1.2nm,0.6s,baz=4.4,slow=12,SNR=5.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.99** | **175** | P | **P** | **02 53 37.5** | **+0.9** |
| | baz=24,SNR=7.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **23.99** | **175** | *e*P | **P** | **02 53 37.4** | **+0.9** |
| | 45nm,2.3s | | | | | | |
| **SISI** | **Saibi** | **25.38** | **254** | P | **P** | **02 53 49.2** | **+0.3** |
| | 69nm,2.0s | | | | | | |
| **GSI** | **Gunungsitoli** | **26.23** | **261** | P | **P** | **02 53 55.9** | **-0.6** |
| | 46nm,0.6s | | | | | | |
| **GSI** | **Gunungsitoli** | **26.23** | **261** | *e*P | **P** | **02 53 55.7** | **-0.7** |
| | 31nm,0.6s | | | | | | |
| **NJ2** | **Nanjing** | **26.33** | **351** | *e*P | **P** | **02 53 57.8** | **+0.8** |
| NJ2 | | | | PMZ | | | |
| | 30nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.94** | **300** | P | **P** | **02 54 03.7** | **+1.0** |
| | 4.0nm,0.7s,baz=112,slow=6.8,SNR=17 | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **26.99** | **268** | P | **P** | **02 54 02.8** | **-0.4** |
| | 50nm,0.6s | | | | | | |
| **CHTO** | **Chiang Mai** | **27.09** | **300** | *e*P | **P** | **02 54 04.8** | **+0.8** |
| | 5.9nm,0.5s | | | | | | |
| **MBWA** | **Marble Bar** | **27.18** | **188** | *e*P | **P** | **02 54 05.0** | **+0.3** |
| | 377nm,2.8s | | | | | | |
| **KMI** | **Kunming** | **27.52** | **316** | P | **P** | **02 54 12.3** | **+4.4** |
| KMI | | | | PMZ | | | |
| | 12nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | 38nm,3.1s | | | | | | |
| **COEN** | **Coen** | **27.82** | **135** | P | **P** | **02 54 10.1** | **-0.3** |
| | baz=28,SNR=10 | | | | | | |
| **COEN** | **Coen** | **27.82** | **135** | *e*P | **P** | **02 54 09.9** | **-0.5** |
| **WRAB** | **Tennant Creek** | **27.86** | **158** | *e*P | **P** | **02 54 11.2** | **+0.6** |
| | 36nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **27.87** | **158** | P | **P** | **02 54 11.2** | **+0.5** |
| | 28nm,0.4s,baz=338,slow=9.4,SNR=146 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 57 06.8** | **-0.8** |
| | 0.5nm,0.3s,baz=347,slow=2.9,SNR=4.0 | | | | | | |
| WRA | | | | S | **S** | **02 58 10.4** | **-4.3** |
| | 1.4nm,0.8s,baz=333,slow=15,SNR=6.3 | | | | | | |
| WRA | | | | ScP | **ScP** | **02 59 51.8** | **-2.8** |
| | 1.5nm,0.6s,baz=343,slow=3.2,SNR=8.1 | | | | | | |
| **QIS** | **Mount Isa** | **30.75** | **149** | P | **P** | **02 54 36.7** | **+1.1** |
| | baz=31,SNR=14 | | | | | | |
| **CD2** | **Chengdu** | **30.96** | **326** | *e*P | **P** | **02 54 38.3** | **+1.0** |
| CD2 | | | | PP | **PP** | **02 56 18.8** | **+1.1** |
| CD2 | | | | sP | **sP** | **02 57 21.8** | **+4.1** |
| CD2 | | | | S | **S** | **02 59 03.3** | **+1.0** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.4s | | | | | | |
| **ASAR** | **Alice Springs** | **31.15** | **161** | P | **P** | **02 54 40.0** | **+1.0** |
| | 14nm,0.3s,baz=340,slow=7.4,SNR=269 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 57 15.3** | **-0.8** |
| | 0.7nm,0.5s,baz=344,slow=2.8,SNR=3.5 | | | | | | |
| ASAR | | | | S | **S** | **02 59 05.1** | **-0.2** |
| | 3.3nm,0.7s,baz=351,slow=20,SNR=13 | | | | | | |
| ASAR | | | | ScP | **ScP** | **03 00 02.2** | **-3.1** |
| | 1.2nm,0.5s,baz=346,slow=3.1,SNR=7.5 | | | | | | |
| **WRKA** | **Warakurna** | **31.15** | **171** | P | **P** | **02 54 40.3** | **+1.2** |
| | baz=31,SNR=20 | | | | | | |
| **MEEK** | **Meekatharra** | **32.73** | **188** | P | **P** | **02 54 53.1** | **+0.8** |
| | baz=33,SNR=5.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **33.32** | **22** | P | **P** | **02 54 54.6** | **-2.7** |
| | 1.2nm,0.5s,baz=186,slow=9.8,SNR=4.2 | | | | | | |
| **BJI** | **Beijing** | **34.57** | **350** | P | **P** | **02 55 08.6** | **+1.0** |
| BJI | | | | PMZ | | | |
| | 9.0nm,0.6s | | | | | | |
| **LZH** | **Lanzhou** | **34.98** | **332** | *e*P | **P** | **02 55 12.3** | **+1.0** |
| LZH | | | | sP | **sP** | **02 57 52.6** | **-0.7** |
| LZH | | | | PMZ | | | |
| | 12nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **36.35** | **345** | *e*P | P | 02 55 26.9 | +4.5 |
| HHC | | | | S | S | 03 00 31.4 | +8.0 |
| HHC | | | | PMZ | | | |
| | 20nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | 55nm,6.2s | | | | | | |
| **FORT** | **Forrest** | **36.78** | **173** | *e*P | **P** | **02 55 26.9** | **+0.9** |
| | 22nm,0.6s | | | | | | |
| **KMBL** | **Kambalda** | **37.13** | **182** | P | **P** | **02 55 29.9** | **+1.1** |
| | baz=37,SNR=11 | | | | | | |
| **CN2** | **Changchun** | **37.74** | **2** | ⇓P | **P** | **02 55 34.6** | **+1.0** |
| CN2 | | | | *e*sP | **sP** | **02 58 18.6** | **+1.6** |
| CN2 | | | | *e*S | **S** | **03 00 45.1** | **+1.3** |
| CN2 | | | | PMZ | | | |
| | 10.0nm,0.7s | | | | | | |
| CN2 | | | | PMZ | | | |
| | 100nm,3.0s | | | | | | |
| **LSA** | **Lhasa** | **38.53** | **312** | *e*P | **P** | **02 55 42.1** | **+1.3** |
| | 6.4nm,0.8s | | | | | | |
| **GTA** | **Gaotai** | **39.56** | **331** | *e*P | **P** | **02 55 49.1** | **+0.6** |
| GTA | | | | pP | **pP** | **02 57 30.8** | **+3.3** |
| GTA | | | | PcP | **PcP** | **02 57 41.4** | **+0.1** |
| GTA | | | | sP | sP | 02 58 38.9 | +6.2 |
| GTA | | | | PMZ | | | |
| | 7.0nm,0.8s | | | | | | |
| **TAPN** | **Taplejung** | **40.08** | **306** | *e*P | **P** | **02 55 53.4** | **+0.3** |
| | 9.5nm,0.4s | | | | | | |
| **BBOO** | **Buckleboo** | **40.36** | **164** | P | **P** | **02 55 56.1** | **+1.2** |
| | baz=40,SNR=28 | | | | | | |
| **BBOO** | **Buckleboo** | **40.36** | **164** | *e*P | **P** | **02 55 56.0** | **+1.2** |
| | 229nm,1.9s | | | | | | |
| **RAMN** | **Ramite** | **40.81** | **305** | *e*P | **P** | **02 55 59.3** | **+0.4** |
| | 24nm,0.8s | | | | | | |
| **EIDS** | **Eidsvold** | **41.11** | **140** | P | **P** | **02 56 01.6** | **+0.7** |
| | baz=41,SNR=4.2 | | | | | | |
| **EIDS** | **Eidsvold** | **41.11** | **140** | *e*P | **P** | **02 56 01.5** | **+0.5** |
| | 14nm,0.9s | | | | | | |
| **ASAJ** | **Asahikawa** | **41.57** | **21** | *e*P | **P** | **02 56 04.4** | **+0.1** |
| | 157nm,2.2s | | | | | | |
| **GUN** | **Gumba** | **41.79** | **306** | *e*P | **P** | **02 56 07.0** | **+0.3** |
| | 25nm,0.4s | | | | | | |
| **HTT** | **Hallett** | **41.82** | **160** | P | **P** | **02 56 03.8** | **-2.6** |
| | baz=42,SNR=14 | | | | | | |
| **PKI** | **Pulchoki** | **42.03** | **305** | *e*P | **P** | **02 56 08.2** | **-0.4** |
| | 10nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **42.04** | **305** | *e*P | **P** | **02 56 08.2** | **-0.4** |
| | 8.8nm,0.8s | | | | | | |
| **PKIN** | **Phulchoki** | **42.04** | **305** | *e*P | **P** | **02 56 08.3** | **-0.4** |
| **KKN** | **Kakani** | **42.22** | **305** | *e*P | **P** | **02 56 09.8** | **-0.2** |
| | 13nm,0.4s | | | | | | |
| **DMN** | **Daman** | **42.29** | **305** | *e*P | **P** | **02 56 10.5** | **-0.1** |
| | 21nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | **42.83** | **305** | *e*P | **P** | **02 56 14.5** | **-0.1** |
| | 13nm,0.5s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **42.90** | **152** | P | **P** | **02 56 16.8** | **+2.0** |
| | baz=43,SNR=13 | | | | | | |
| **KOLN** | **Koldanda** | **43.59** | **305** | *e*P | **P** | **02 56 21.0** | **+0.4** |
| | 34nm,0.3s | | | | | | |
| **DANN** | **Dangsing** | **43.68** | **305** | *e*P | **P** | **02 56 21.5** | **+0.1** |
| | 6.6nm,0.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **44.06** | **344** | *e*P | **P** | **02 56 23.5** | **-0.3** |
| | 3.5nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **44.22** | **344** | P | **P** | **02 56 24.7** | **-0.3** |
| | 2.6nm,0.8s,baz=157,slow=7.8,SNR=4.8 | | | | | | |
| **ARMA** | **Armidale** | **45.12** | **145** | P | **P** | **02 56 34.7** | **+2.5** |
| | baz=45,SNR=5.0 | | | | | | |
| **ARMA** | **Armidale** | **45.12** | **145** | *e*P | **P** | **02 56 34.4** | **+2.2** |
| | 191nm,2.5s | | | | | | |
| **ARPS** | **Mount Arapiles** | **45.84** | **159** | P | **P** | **02 56 38.7** | **+1.3** |
| | baz=46,SNR=6.4 | | | | | | |
| **CAN** | **Canberra** | **47.57** | **151** | *e*P | **P** | **02 56 52.8** | **+2.2** |
| | 62nm,1.6s | | | | | | |
| **WMQ** | **Urumqi** | **49.06** | **326** | *e*P | **P** | **02 57 02.0** | **+0.5** |
| **DZM** | **Mont Dzumac** | **50.47** | **125** | *e*P | **P** | **02 57 12.9** | **+0.7** |
| | 10nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **53.89** | **326** | P | **P** | **02 57 36.1** | **-0.1** |
| | 7.0nm,0.3s,baz=121,slow=7.7,SNR=71 | | | | | | |
| MKAR | | | | PcP | **PcP** | **02 58 31.2** | **-1.3** |
| | 2.1nm,0.4s,baz=119,slow=3.7,SNR=9.8 | | | | | | |
| MKAR | | | | ScP | **ScP** | **03 01 32.1** | **-3.9** |
| | 0.7nm,0.6s,baz=136,slow=4.5,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.89** | **326** | *e*P | **P** | **02 57 36.2** | **0.0** |
| **MAKZ** | **Makanchi** | **54.08** | **326** | *e*P | **P** | **02 57 37.3** | **-0.1** |
| **KSH** | **Kashi** | **54.18** | **315** | *e*P | **P** | **02 57 38.6** | **+0.1** |
| KSH | | | | *e*pP | **pP** | **02 59 31.3** | **+4.1** |
| KSH | | | | *e*sP | sP | 03 00 35.9 | +6.6 |
| KSH | | | | *e*ScP | **ScP** | **03 01 34.5** | **-3.0** |
| KSH | | | | PcS | **PcS** | **03 02 33.3** | **-1.1** |
| KSH | | | | S | **S** | **03 04 30.8** | **-2.3** |
| KSH | | | | SS | **SS** | **03 08 28.8** | **+2.2** |
| KSH | | | | PMZ | | | |
| | 85nm,4.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **55.94** | **319** | *e*P | **P** | **02 57 50.6** | **-0.1** |
| | 5.4nm,0.9s | | | | | | |
| **EKS2** | **Erkin-Say** | **57.02** | **318** | *e*P | **P** | **02 57 58.0** | **-0.1** |
| | 5.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.16** | **334** | P | **P** | **02 57 56.8** | **-1.8** |
| | 1.2nm,0.5s,baz=134,slow=7.2,SNR=6.2 | | | | | | |
| **KURK** | **Kurchatov** | **58.14** | **328** | *e*P | **P** | **02 58 04.7** | **-0.6** |
| | 29nm,0.5s | | | | | | |
| **KKAR** | **Karatay Array** | **59.40** | **317** | *e*P | **P** | **02 58 13.4** | **-0.5** |
| | 2.8nm,0.7s | | | | | | |
| **BRVK** | **Borovoye** | **63.77** | **327** | *e*P | **P** | **02 58 41.3** | **-0.8** |
| | 4.1nm,0.9s | | | | | | |
| **IDAH** | **Dahanechah** | **64.64** | **303** | *e*P | **P** | **02 58 48.8** | **+0.4** |
| **IMON** | **Monand** | **64.88** | **304** | *e*P | **P** | **02 58 49.9** | **0.0** |
| **IKOO** | **Kooshah** | **65.31** | **303** | *e*P | **P** | **02 58 52.8** | **+0.1** |
| **GEYT** | **Alibeck** | **66.97** | **309** | P | **P** | **02 59 02.6** | **+0.1** |
| | 1.5nm,0.3s,baz=151,slow=3.4,SNR=3.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **68.38** | **321** | *e*P | **P** | **02 59 09.9** | **-1.0** |
| **IPAR** | **Pars** | **70.07** | **299** | *e*P | **P** | **02 59 20.7** | **-1.1** |
| **ARU** | **Arti** | **71.33** | **328** | *e*P | **P** | **02 59 26.5** | **-1.7** |
| | 8.2nm,0.5s | | | | | | |
| **IKLH** | **Kolahrood** | **71.62** | **303** | *e*P | **P** | **02 59 30.8** | **+0.1** |
| **IPIR** | **Pirpir** | **72.14** | **302** | *e*P | **P** | **02 59 32.7** | **-1.1** |
| **CASY** | **Casey** | **72.66** | **185** | *e*P | **P** | **02 59 35.5** | **-0.1** |
| | 1.3nm,0.7s | | | | | | |
| **KIV** | **Kislovodsk** | **79.25** | **313** | *e*P | **P** | **03 00 12.3** | **-0.3** |
| | 9.3nm,0.9s | | | | | | |
| **KDAK** | **Kodiak Island** | **81.78** | **33** | P | **P** | **03 00 24.8** | **-0.4** |
| | 2.7nm,0.5s,baz=243,slow=6.8,SNR=5.8 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **82.75** | **26** | *e*P | **P** | **03 00 29.8** | **-0.3** |
| | 0.3nm,0.4s | | | | | | |
| **ILAR** | **Eielson Array** | **84.52** | **26** | P | **P** | **03 00 36.6** | **-2.2** |
| | 0.5nm,0.5s,baz=251,slow=4.3,SNR=15 | | | | | | |
| **EIL** | **Elat** | **85.80** | **299** | P | **P** | **03 00 45.5** | **-0.1** |
| | baz=86,SNR=4.3 | | | | | | |
| **VNDA** | **Vanda** | **86.03** | **172** | P | **P** | **03 00 45.8** | **0.0** |
| | 0.8nm,0.9s,baz=9.5,slow=6.1,SNR=3.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **86.10** | **309** | P | **P** | **03 00 45.1** | **-2.0** |
| | 1.1nm,0.4s,baz=108,slow=4.6,SNR=13 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **86.33** | **268** | P | **P** | **03 00 47.8** | **-1.1** |
| | 1.5nm,0.8s,baz=45,slow=7.2,SNR=4.8 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **86.33** | **268** | *e*P | **P** | **03 00 48.5** | **-0.4** |
| | 3.0nm,1.1s | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.25** | **340** | P | **P** | **03 00 49.5** | **-2.2** |
| | 4.6nm,0.9s,baz=90,slow=6.1,SNR=7.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **88.12** | **321** | P | **P** | **03 00 53.8** | **-2.4** |
| | 0.6nm,0.4s,baz=71,slow=4.2,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **88.34** | **332** | P | **P** | **03 00 54.7** | **-2.2** |
| | 1.5nm,0.5s,baz=104,slow=5.9,SNR=10 | | | | | | |
| **TORD** | **Tordi E. Bea** | **119.12** | **289** | PKP | **PKPdf** | **03 06 49.6** | **-1.6** |
| | 1.0nm,0.6s,baz=65,slow=1.5,SNR=28 | | | | | | |
| **TXAR** | **Lajitas Array** | **122.74** | **50** | PKP | **PKPdf** | **03 06 56.2** | **-1.8** |
| | 0.1nm,0.6s,baz=204,slow=2.0,SNR=2.9 | | | | | | |

*IDC **15** 02:52:04.2±1.1,7°.47S×105°.76E,h0km,mb4.3/8, mb1 4.4/10,mb1mx4.0/35,mbtmp4.4/10,ML4.0/2,MS3.4/10, Ms1 3.5/10,ms1mx3.1/41,Error ellipse: s-maj=35.2km s-min=15.7km az=23.0*
*DJA **15** 02:52:08.3±0.4,8°S±3°×10°6E±°,h10km,M4.5/6,MLv4.5/6*
*ISCJB **15** 02:52:09.7±0.7,7°.58S±0°.06×105°.87E±0°.04,h60km±6km, mb4.4/17,MS3.5/10,Error ellipse: s-maj=10.5km s-min=5.5km az=29.0*
*NEIC **15** 02:52:10.0±0.7,7°.53S×105°.83E,h42km±7km,mb4.6/12, Error ellipse: s-maj=10.8km s-min=5.8km az=216.0*

**ISC 15 02:52:10.6**±1.2, **7°.57S**±0°.06×**105°.91E**±0°.05, **h48**km±11km, **n58**, σ**1**§**27**/50, **mb4.4**/17, **MS3.4**/10, **Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKJI** | **Sukabumi** | **0.85** | **49** | P | **Pn** | **02 52 24.7** | **-1.6** |
| SKJI | | | | S | **Sn** | **02 52 38.4** | **+0.7** |
| **CGJI** | **Cibinong** | **0.98** | **347** | P | **Pn** | **02 52 27.8** | **-0.2** |
| CGJI | | | | S | **Sn** | **02 52 42.8** | **+2.1** |
| **CNJI** | **Cibinong** | **1.23** | **78** | P | **Pn** | **02 52 29.8** | **-1.7** |
| CNJI | | | | S | **Sn** | **02 52 50.1** | **+3.1** |
| **SBJI** | **Serang** | **1.46** | **9** | P | **Pn** | **02 52 34.3** | **-0.2** |
| **CBJI** | **Citeko** | **1.47** | **39** | P | **Pn** | **02 52 32.1** | **-2.7** |
| CBJI | | | | S | **Sn** | **02 52 52.8** | **-0.1** |
| **TNG** | **Tangerang** | **1.57** | **28** | P | **Pn** | **02 52 36.0** | **-0.1** |
| **LEM** | **Lembang** | **1.85** | **66** | Pn | **Pn** | **02 52 40.8** | **+0.8** |
| | 96nm,0.3s,baz=297,slow=2.5,SNR=60 | | | | | | |
| LEM | | | | Sn | **Sn** | **02 53 05.0** | **+2.8** |
| | 114nm,0.3s,baz=299,slow=19,SNR=6.5 | | | | | | |
| **LEM** | **Lembang** | **1.85** | **66** | P | **Pn** | **02 52 41.0** | **+1.0** |
| **CISI** | **Cisompet, Garu** | **1.89** | **90** | *e*Pn | **Pn** | **02 52 40.0** | **-0.4** |
| CISI | | | | *e*Sn | **Sn** | **02 53 04.0** | **+1.0** |
| **KASI** | **Kota Agung** | **2.47** | **325** | P | **Pn** | **02 52 49.3** | **+0.8** |
| **CMJI** | **Cimerak** | **2.52** | **95** | P | **Pn** | **02 52 49.6** | **+0.5** |
| **XMIS** | **Christmas Isla** | **2.90** | **185** | *e*Pn | **Pn** | **02 52 53.3** | **-1.1** |
| **KLSI** | | **3.10** | **338** | P | **Pn** | **02 52 58.5** | **+1.5** |
| **MDSI

| WVT | Waverly | 148.92 | 22 | ePKPbc | PKPbc | 03 11 53.6 | -0.1 |
|---|---|---|---|---|---|---|---|

**SJA 15 03:07:37.5±0.5, 31°.16S×68°.44W, h105km±2km, ML4.6, MW3.9, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AMOG | MOGNA | 0.23 | 348 | eP | Pn | 03 07 53.2 | +0.6 |
| AMOG | | | | eS | Sn | 03 08 04.7 | +0.9 |
| CFAA | Coronel Fontan | 0.47 | 159 | eP | Pn | 03 07 54.1 | +0.4 |
| CFAA | | | | eS | Sn | 03 08 07.0 | +1.0 |
| CFAA | | | | IAML | | 03 08 07.7 | |
| | comp=Z,121μm,0.1s | | | | | | |
| RTCV | Cerro Valdivia | 0.70 | 187 | eP | Pn | 03 07 56.2 | +0.7 |
| RTCV | | | | eS | Sn | 03 08 10.1 | +1.0 |
| RTLS | Leoncito | 0.97 | 229 | eP | Pn | 03 07 59.8 | +1.4 |
| RTLS | | | | IAML | | 03 08 00.2 | |
| | comp=Z,348μm,0.1s | | | | | | |
| RTLS | | | | eS | Sn | 03 08 15.9 | +1.8 |
| AUSP | Uspallata | 1.33 | 217 | eP | Pn | 03 08 03.5 | +1.1 |
| AUSP | | | | eS | Sn | 03 08 23.1 | +1.8 |
| ASAL | Salagasta | 1.47 | 193 | eP | Pn | 03 08 04.7 | +0.9 |
| ASAL | | | | eS | Sn | 03 08 25.0 | +1.3 |
| AGUA | GUANDACOL | 1.67 | 358 | eP | Pn | 03 08 07.1 | +0.8 |
| AGUA | | | | eS | Sn | 03 08 29.4 | +1.3 |
| ARCO | CERRO ARCO | 1.73 | 194 | eP | Pn | 03 08 08.5 | +1.4 |
| ARCO | | | | eS | Sn | 03 08 30.9 | +1.3 |
| ARCO | | | | IAML | | 03 08 33.8 | |
| | comp=Z,13nm,0.3s | | | | | | |

**MEX 15 03:10:50.1±0.6, 14°.81N×92°.38W, h69km±39km, MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCIG | | 1.21 | 318 | iP | Pn | 03 11 10.0 | -1.2 |
| PCIG | | | | eS | Sn | 03 11 24.9 | -2.0 |

*ISCJB 15 03:30:18.8±0.6, 51°.47N±0°.03×16°.13E±0°.03, h0km, Error ellipse: s-maj=4.6km s-min=2.9km az=9.5*
*CSEM 15 03:30:20.0±0.3, 51°.47N×16°.13E, h2km, ML3.1/9, Error ellipse: s-maj=5.4km s-min=3.9km az=172.0*
*VIE 15 03:30:22.7±0.4, 51°.23N×16°.16E, h0km, mb2.2/2, ml2.5/3, Error ellipse: s-maj=2.7km s-min=1.9km az=4.0, Suspected Mining induced.*

**ISC 15 03:30:19.3±0.9, 51°.51N±0°.03×16°.13E±0°.02, h0km, n35, σ1℗11/64, 1C, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.68 | 171 | ePg | Pb | 03 30 33.1 | -0.9 |
| KSP | | | | eSg | Sg | 03 30 40.8 | -0.2 |
| UPC | Upice | 1.01 | 184 | ePG | Pb | 03 30 39.3 | -0.3 |
| UPC | | | | eSG | Sg | 03 30 51.2 | -0.4 |
| | comp=Z,37nm,0.4s | | | | | | |
| UPC | Upice | 1.01 | 184 | Pg | Pb | 03 30 39.3 | -0.3 |
| UPC | | | | Sg | Sg | 03 30 51.2 | -0.4 |
| | 37nm,0.4s | | | | | | |
| DPC | Dobruska-Polom | 1.17 | 174 | ePG | Pb | 03 30 41.9 | -0.5 |
| DPC | | | | eSG | Sg | 03 30 56.5 | -0.3 |
| | comp=Z,22nm,0.5s | | | | | | |
| DPC | Dobruska-Polom | 1.17 | 174 | Pg | Pb | 03 30 41.9 | -0.5 |
| DPC | | | | Sg | Sg | 03 30 56.5 | -0.3 |
| | 22nm,0.5s | | | | | | |
| PVCC | Panska Ves | 1.39 | 226 | ePG | Pb | 03 30 46.6 | +0.4 |
| PVCC | | | | eSG | Sn | 03 31 05.5 | +0.4 |
| | comp=Z,53nm,0.3s | | | | | | |
| PVCC | Panska Ves | 1.39 | 226 | Pg | Pb | 03 30 46.6 | +0.4 |
| PVCC | | | | Sg | Sn | 03 31 05.5 | +0.4 |
| | 53nm,0.3s | | | | | | |
| KRLC | Kraliky | 1.50 | 164 | ePG | Pn | 03 30 47.4 | -0.1 |
| KRLC | | | | eSG | Sg | 03 31 06.1 | -1.2 |
| KRLC | Kraliky | 1.50 | 164 | Pg | Pn | 03 30 47.4 | -0.1 |
| KRLC | | | | Sg | Sg | 03 31 06.1 | -1.2 |
| BRG | Berggiesshubel | 1.52 | 246 | PN | Pn | 03 30 47.6 | -0.1 |
| BRG | | | | PG | Pb | 03 30 49.9 | +1.6 |
| BRG | | | | SG | Sn | 03 31 09.9 | +1.8 |
| | 34nm,0.4s | | | | | | |
| PRA | Prague | 1.80 | 217 | eSG | Sg | 03 31 16.5 | -0.6 |
| | comp=Z,18nm,0.6s | | | | | | |
| PRA | Prague | 1.80 | 217 | Sg | Sg | 03 31 16.5 | -0.6 |
| | 18nm,0.6s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.81 | 209 | ePN | Pb | 03 30 52.6 | -0.8 |
| GOPC | | | | ePG | Pg | 03 30 53.9 | -0.1 |
| GOPC | | | | eSG | Sg | 03 31 17.1 | -0.4 |
| | comp=Z,17nm,0.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.81 | 209 | Pn | Pb | 03 30 52.6 | -0.8 |
| PRU | Pruhonice | 1.83 | 214 | ePG | Pg | 03 30 54.1 | -0.2 |
| PRU | | | | eSG | Sg | 03 31 17.7 | -0.3 |
| | comp=Z,20nm,0.3s | | | | | | |
| PRU | Pruhonice | 1.83 | 214 | Pg | Pg | 03 30 54.1 | -0.2 |
| PRU | | | | Sg | Sg | 03 31 17.7 | -0.3 |
| | 20nm,0.3s | | | | | | |
| MORC | Moravsky Berou | 1.96 | 152 | ePn | Pn | 03 30 53.3 | -0.5 |
| MORC | | | | eSn | Sn | 03 31 19.2 | +0.2 |
| CLL | Collm | 1.97 | 265 | ePg | Pg | 03 30 57.0 | 0.0 |
| CLL | | | | eSg | Sg | 03 31 24.0 | +1.5 |
| | comp=Z,9.0nm,0.5s | | | | | | |
| OKC | Ostrava-Krasne | 2.11 | 142 | eSG | Sg | 03 31 26.2 | -0.9 |
| OKC | Ostrava-Krasne | 2.11 | 142 | Sg | Sg | 03 31 26.2 | -0.9 |
| VRAC | Vranov | 2.22 | 172 | ePn | Pn | 03 30 57.9 | +0.4 |
| VRAC | | | | eSn | Sg | 03 31 29.3 | -1.4 |
| NKC | Novy Kostel | 2.66 | 243 | ePN | Pn | 03 31 04.9 | +1.5 |
| NKC | | | | ePG | Pg | 03 31 11.1 | +0.8 |
| NKC | | | | eSG | Sg | 03 31 44.7 | 0.0 |
| | comp=Z,16nm,0.4s | | | | | | |
| NKC | Novy Kostel | 2.66 | 243 | Pn | Pn | 03 31 04.9 | +1.5 |
| OJC | Ojcow | 2.66 | 118 | ePg | Pg | 03 31 10.6 | +0.3 |
| OJC | | | | eSg | Sg | 03 31 45.6 | +0.9 |
| OJC | Ojcow | 2.66 | 118 | ePg | Pg | 03 31 10.6 | +0.3 |
| OJC | | | | eSg | Sg | 03 31 45.6 | +0.9 |
| KHC | Kasperske Hory | 2.89 | 215 | ePN | Pn | 03 31 07.5 | +0.9 |
| KHC | | | | ePG | Pg | 03 31 13.5 | -1.2 |
| KHC | | | | eSN | Sn | 03 31 40.7 | -1.4 |
| KHC | | | | eSG | Sg | 03 31 50.5 | -1.6 |
| | comp=Z,6.5nm,0.4s | | | | | | |
| KHC | Kasperske Hory | 2.89 | 215 | Pn | Pn | 03 31 07.5 | +0.9 |
| VYHS | Vyhne | 3.49 | 149 | ePG | Pg | 03 31 28.2 | +2.1 |
| VYHS | Vyhne | 3.49 | 149 | ePg | Pg | 03 31 28.2 | +2.1 |
| BSD | Bornholm Skovb | 3.68 | 349 | iP | Pn | 03 31 17.5 | 0.0 |
| BSD | | | | iS | Sn | 03 31 58.7 | -2.8 |
| BSD | Bornholm Skovb | 3.68 | 349 | iP | Pn | 03 31 17.5 | 0.0 |
| BSD | | | | iS | Sn | 03 31 58.7 | -2.8 |
| MOA | Molln | 3.86 | 199 | iSg | Sg | 03 32 22.1 | -1.1 |
| | comp=Z,6.5nm,0.6s | | | | | | |
| MOA | Molln | 3.86 | 199 | Sg | Sg | 03 32 22.1 | -1.1 |
| | comp=Z,6.5nm,0.6s | | | | | | |
| STHS | Stebnicka Huta | 3.88 | 121 | ePN | Pn | 03 31 21.5 | +1.3 |
| STHS | | | | ePG | Pg | 03 31 32.7 | -1.0 |
| STHS | | | | eSG | Sg | 03 32 27.2 | +3.2 |
| STHS | Stebnicka Huta | 3.88 | 121 | ePn | Pn | 03 31 21.5 | +1.3 |

*CSEM 15 03:30:28.7, 38°.76N×26°.71W, h0km, ML3.1, After PDA*

**PDA 15 03:30:28.7±1.0, 38°.76N×26°.71W, h0km±5km, MD3.7, ML3.1, Error ellipse: s-maj=8.8km s-min=1.5km az=27.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ADH | Angra Heroismo | 0.43 | 256 | iP | Pg | 03 30 35.6 | -1.3 |
| ADH | | | | eS | Sg | 03 30 41.4 | -1.0 |
| ADH | | | | A | A | 03 30 43.6 | |
| | 868nm,0.5s | | | | | | |
| ADH | Angra Heroismo | 0.43 | 256 | iP | Pg | 03 30 35.6 | -1.3 |
| ADH | | | | eS | Sg | 03 30 41.4 | -1.0 |
| PGRA | Graciosa | 1.03 | 286 | eP | Pg | 03 30 45.3 | -3.2 |
| PGRA | | | | eS | Sg | 03 30 58.1 | -3.8 |
| PGRA | | | | A | A | 03 31 05.1 | |
| | 116nm,0.3s | | | | | | |
| PGRA | Graciosa | 1.03 | 286 | eP | Pg | 03 30 45.3 | -3.2 |
| PGRA | | | | eS | Sg | 03 30 58.1 | -3.8 |
| PMAN | Manadas | 1.09 | 264 | eP | Pg | 03 30 45.7 | -3.9 |
| PMAN | | | | eS | Sg | 03 30 59.4 | -4.4 |
| PMAN | | | | A | A | 03 31 00.2 | |
| | 274nm,0.3s | | | | | | |
| PMAN | Manadas | 1.09 | 264 | eP | Pg | 03 30 45.7 | -3.9 |
| PMAN | | | | eS | Sg | 03 30 59.4 | -4.4 |
| ROSA | Rosais | 1.20 | 269 | eP | Pg | 03 30 47.5 | -4.3 |
| ROSA | | | | eS | Sg | 03 31 02.6 | -4.8 |
| | 152nm,0.3s | | | | | | |
| ROSA | Rosais | 1.20 | 269 | eP | Pg | 03 30 47.5 | -4.3 |
| ROSA | | | | eS | Sg | 03 31 02.6 | -4.8 |
| PSET | Sete Cidades | 1.21 | 140 | eP | Pg | 03 30 47.8 | -4.2 |
| PSET | | | | eS | Sg | 03 31 02.5 | -5.3 |
| PSET | | | | A | A | 03 31 10.2 | |
| | 115nm,0.4s | | | | | | |
| PSET | Sete Cidades | 1.21 | 140 | eP | Pg | 03 30 47.8 | -4.2 |
| PSET | | | | eS | Sg | 03 31 02.5 | -5.3 |
| PPNO | Prainha do Nor | 1.25 | 257 | eP | Pg | 03 30 48.4 | -4.5 |
| PPNO | | | | eS | Sg | 03 31 03.4 | -5.8 |
| PPNO | | | | A | A | 03 31 05.5 | |
| | 278nm,0.2s | | | | | | |
| PPNO | Prainha do Nor | 1.25 | 257 | eP | Pg | 03 30 48.4 | -4.5 |
| PPNO | | | | eS | Sg | 03 31 03.4 | -5.8 |
| PDA | Ponta Delgada | 1.30 | 141 | eP | Pg | 03 30 49.3 | -4.3 |
| PDA | | | | eS | Sg | 03 31 04.9 | -5.6 |
| PDA | | | | A | A | 03 31 06.5 | |
| | 81nm,0.2s | | | | | | |
| PDA | Ponta Delgada | 1.30 | 141 | eP | Pg | 03 30 49.3 | -4.3 |
| PDA | | | | eS | Sg | 03 31 04.9 | -5.6 |
| GRON | Grota Negra | 1.35 | 137 | eP | Pg | 03 30 51.1 | -3.6 |
| GRON | | | | eS | Sg | 03 31 07.7 | -4.6 |
| GRON | | | | A | A | 03 31 10.5 | |
| | 19nm,0.2s | | | | | | |
| PICO | Pico | 1.37 | 260 | eP | Pg | 03 30 50.3 | -4.8 |
| PICO | | | | eS | Sg | 03 31 06.3 | -6.7 |
| PICO | Pico | 1.37 | 260 | eP | Pg | 03 30 50.3 | -4.8 |
| PICO | | | | eS | Sg | 03 31 06.3 | -6.7 |
| PCAN | Candelaria | 1.43 | 259 | eP | Pn | 03 30 50.6 | -5.3 |
| PCAN | | | | eS | Sg | 03 31 07.6 | -7.0 |
| PCAN | | | | A | A | 03 31 11.5 | |
| | 105nm,0.3s | | | | | | |
| PCAN | Candelaria | 1.43 | 259 | eP | Pn | 03 30 50.6 | -5.3 |
| PCAN | | | | eS | Sg | 03 31 07.6 | -7.0 |
| HOR | Horta | 1.52 | 262 | eP | Pn | 03 30 52.7 | -4.5 |
| HOR | | | | eS | Sg | 03 31 10.0 | -7.7 |
| HOR | Horta | 1.52 | 262 | eP | Pn | 03 30 52.7 | -4.5 |
| HOR | | | | eS | Sg | 03 31 10.0 | -7.7 |
| BART | Pico Bartolome | 1.56 | 128 | eP | Pn | 03 30 52.9 | -4.9 |
| BART | | | | eS | Sn | 03 31 11.1 | -7.6 |
| BART | | | | A | A | 03 31 12.5 | |
| | 60nm,0.4s | | | | | | |
| BART | Pico Bartolome | 1.56 | 128 | eP | Pn | 03 30 52.9 | -4.9 |
| BART | | | | eS | Sn | 03 31 11.1 | -7.6 |
| PCED | Cedros | 1.57 | 266 | eP | Pn | 03 30 52.9 | -4.9 |
| PCED | | | | eS | Sn | 03 31 13.1 | -7.5 |
| PCED | | | | A | A | 03 31 12.8 | |
| | 49nm,0.4s | | | | | | |
| PCED | Cedros | 1.57 | 266 | eP | Pn | 03 30 52.9 | -4.9 |
| PCED | | | | eS | Sn | 03 31 11.3 | -7.5 |
| CALA | Caldeira | 1.57 | 264 | eP | Pn | 03 30 53.6 | -4.4 |
| CALA | | | | eS | Sn | 03 31 11.5 | -7.6 |
| CALA | Caldeira | 1.57 | 264 | eP | Pn | 03 30 53.6 | -4.4 |
| CALA | | | | eS | Sn | 03 31 11.5 | -7.6 |
| PSMA | Santa Maria | 2.16 | 144 | eP | Pn | 03 31 01.0 | -4.9 |
| PSMA | | | | eS | Sn | 03 31 25.2 | -8.1 |
| PSMA | | | | A | A | 03 31 27.9 | |
| | 37nm,0.2s | | | | | | |
| PSMN | Pico do Norte, | 2.18 | 143 | eP | Pn | 03 31 01.5 | -4.7 |
| PSMN | | | | eS | Sn | 03 31 25.7 | -8.2 |
| PSMN | | | | A | A | 03 31 29.7 | |
| | 14nm,0.3s | | | | | | |
| PSMN | Pico do Norte, | 2.18 | 143 | eP | Pn | 03 31 01.5 | -4.7 |
| PSMN | | | | eS | Sn | 03 31 25.7 | -8.2 |

*ISCJB 15 03:41:11.6±0.4, 30°.09N±0°.04×139°.18E±0°.07, h400km, mb3.8/20, Error ellipse: s-maj=8.6km s-min=5.4km az=0.9*
*JMA 15 03:41:12.2±0.2, 30°.09N×139°.30E, h402km, M3.6*
*IDC 15 03:41:12.5±0.9, 30°.11N×138°.91E, h384km±9km, mb3.6/20, mb1 3.6/24, mb1mx3.5/39, mbtmp4.3/24, Error ellipse: s-maj=14.1km s-min=10.7km az=81.0*

**ISC 15 03:41:12.9±0.6, 30°.12N±0°.06×139°.20E±0°.09, h400km, n41, σ1℗44/52, mb3.9/20, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JHCJ | Hachijojimakas | 2.98 | 10 | P | Pn | 03 42 16.1 | +0.2 |
| JHCJ | | | | eS | S | 03 43 04.0 | -3.0 |
| JHJ2 | Mitsune | 3.03 | 10 | P | Pn | 03 42 16.5 | +0.3 |
| JHJ2 | | | | eS | S | 03 43 04.9 | -2.6 |
| JHJ | Hachijo jima 2 | 3.03 | 9 | P | Pn | 03 42 16.5 | +0.3 |
| | 75nm,0.3s,baz=74,slow=23,SNR=32 | | | | | | |
| JHJ | | | | S | S | 03 43 05.0 | -2.6 |
| | 68nm,0.3s,baz=73,slow=19,SNR=4.6 | | | | | | |
| CBIJ | Chichi jima | 4.00 | 138 | P | Pn | 03 42 23.4 | -1.7 |
| CBIJ | | | | eS | S | 03 43 20.0 | -3.5 |
| TK02 | Tokai 2 | 4.00 | 343 | P | Pn | 03 42 26.5 | +1.8 |
| JWZ | Kozaga | 4.51 | 320 | P | Pn | 03 42 30.2 | +0.3 |
| JIE | Ise | 4.75 | 334 | P | Pn | 03 42 33.5 | +1.2 |
| BSO1 | Boso 1 | 4.76 | 18 | P | Pn | 03 42 32.0 | +0.2 |
| BSO1 | | | | eS | S | 03 43 34.5 | -1.5 |
| JOD2 | Odawara 2 | 5.13 | 359 | P | Pn | 03 42 35.8 | -0.3 |
| JRY | Ryogami san | 5.88 | 358 | P | Pn | 03 42 43.6 | -0.6 |
| JRY | | | | eS | S | 03 43 55.9 | -2.7 |
| JTO | Tosashimizu | 6.11 | 298 | P | Pn | 03 42 46.6 | 0.0 |
| MJAR | Matsushiro Arr | 6.46 | 353 | P | Pn | 03 42 49.3 | -1.1 |
| | 5.1nm,0.3s,baz=171,slow=11,SNR=33 | | | | | | |
| MJAR | | | | S | S | 03 44 08.3 | -1.7 |
| | 0.9nm,0.3s,baz=252,slow=28,SNR=4.6 | | | | | | |
| MAT | Matsushiro | 6.46 | 353 | P | Pn | 03 42 49.6 | -0.8 |
| MAT | | | | S | S | 03 44 07.4 | -2.6 |
| JHS | Saijyo | 7.07 | 315 | P | P | 03 42 58.2 | +0.3 |
| JMK | Ichinoseki | 8.96 | 10 | P | P | 03 43 19.2 | +0.4 |
| JMK | | | | eS | S | 03 44 59.1 | -3.1 |
| JOT | Ohata | 11.34 | 7 | P | Pn | 03 43 47.7 | +1.5 |
| KSRS | Korea Array | 11.89 | 311 | P | P | 03 43 51.2 | 0.0 |
| | 0.1nm,0.3s,baz=116,slow=11,SNR=4.6 | | | | | | |
| ASAJ | Asahikawa | 14.23 | 10 | P | P | 03 44 18.8 | +2.0 |
| | 1.0nm,0.3s,baz=194,slow=8.3,SNR=5.9 | | | | | | |
| SONM | Songino Array | 30.72 | 314 | P | P | 03 46 52.5 | -0.4 |
| | 0.8nm,0.5s,baz=123,slow=8.9,SNR=4.3 | | | | | | |
| CMAR | Chiang Mai Arr | 38.30 | 262 | P | P | 03 47 55.6 | -1.7 |
| | 1.4nm,0.7s,baz=55,slow=6.0,SNR=8.5 | | | | | | |
| ZALV | Zalesovo Beam | 45.49 | 318 | P | P | 03 48 53.6 | -0.5 |
| | 1.1nm,0.5s,baz=92,slow=7.4,SNR=4.3 | | | | | | |
| ZALV | | | | PcP | PcP | 03 50 24.6 | -0.5 |
| | 1.1nm,0.4s,baz=114,slow=3.1,SNR=4.4 | | | | | | |
| MKAR | Makanchi Array | 46.54 | 308 | P | P | 03 49 01.8 | -0.5 |
| | 2.6nm,0.7s,baz=93,slow=9.6,SNR=13 | | | | | | |
| MKAR | | | | PcP | PcP | 03 50 29.2 | +0.1 |
| | 0.5nm,0.4s,baz=80,slow=3.2,SNR=3.7 | | | | | | |
| KURBB | Kurchatov Arra | 49.06 | 313 | P | P | 03 49 20.4 | -0.8 |
| | 3.0nm,0.5s,baz=91,slow=7.7,SNR=44 | | | | | | |
| WRA | Warramunga Arr | 49.99 | 186 | P | P | 03 49 29.0 | +0.4 |
| | 2.8nm,0.3s,baz=4.6,slow=7.9,SNR=43 | | | | | | |
| WRA | | | | PcP | PcP | 03 50 43.4 | +1.5 |
| | 1.0nm,0.5s,baz=358,slow=4.1,SNR=7.3 | | | | | | |
| AAK | Ala-Archa | 52.40 | 303 | P | P | 03 49 46.0 | -0.2 |
| | 2.0nm,0.4s,baz=127,slow=4.2,SNR=5.6 | | | | | | |
| KDAK | Kodiak Island | 53.57 | 38 | P | P | 03 49 56.6 | +2.5 |
| | 6.0nm,0.9s,baz=256,slow=4.2,SNR=9.5 | | | | | | |
| ASAR | Alice Springs | 53.72 | 186 | P | P | 03 49 56.2 | +0.5 |
| | 1.8nm,0.5s,baz=359,slow=5.4,SNR=8.8 | | | | | | |
| BVAR | Borovoye Array | 54.05 | 316 | P | P | 03 49 57.7 | 0.0 |
| | 3.9nm,0.7s,baz=93,slow=8.9,SNR=14 | | | | | | |
| ILAR | Eielson Array | 56.36 | 30 | P | P | 03 50 15.2 | +1.5 |
| | 0.2nm,0.6s,baz=258,slow=4.5,SNR=4.8 | | | | | | |
| ARU | Arti | 60.43 | 321 | P | P | 03 50 41.6 | -0.1 |
| | 2.8nm,0.2s,baz=108,slow=20,SNR=2.2 | | | | | | |
| INK | Inuvik | 61.39 | 25 | P | P | 03 50 49.9 | +2.0 |
| | 0.6nm,0.4s,baz=299,slow=6.5,SNR=4.7 | | | | | | |
| ARCES | ARCESS Array B | 69.82 | 340 | P | P | 03 51 42.2 | +1.2 |
| | 3.7nm,0.6s,baz=69,slow=9.0,SNR=12 | | | | | | |
| KBZ | Khabaz | 74.04 | 311 | P | P | 03 52 06.7 | +0.5 |
| | 6.1nm,0.8s,baz=80,slow=4.7,SNR=13 | | | | | | |
| FINES | FINESS Array B | 74.07 | 333 | P | P | 03 52 06.3 | +0.3 |
| | 2.0nm,0.3s,baz=74,slow=5.9,SNR=27 | | | | | | |
| AKASG | Malin Array Be | 78.63 | 322 | P | P | 03 52 31.1 | -0.5 |
| | 1.5nm,0.3s,baz=52,slow=5.5,SNR=7.1 | | | | | | |
| NB2 | NORSAR Subarra | 79.82 | 337 | P | P | 03 52 37.5 | -0.3 |
| | comp=Z,1.6nm,0.6s,baz=43,slow=5.3 | | | | | | |
| NOA | NORSAR Array B | 79.82 | 337 | P | P | 03 52 37.5 | -0.3 |
| | comp=Z,2.2nm,0.7s,baz=46,slow=5.2,SNR=9.2 | | | | | | |
| BRTR | Keskin Array B | 82.03 | 311 | P | P | 03 52 50.2 | +0.3 |
| | comp=Z,4.2nm,0.8s,baz=87,slow=3.8,SNR=17 | | | | | | |
| GERES | GERESS Array B | 87.56 | 327 | P | P | 03 53 16.4 | -0.5 |
| | comp=Z,0.3nm,0.4s,baz=30,slow=6.2,SNR=4.9 | | | | | | |
| TORD | Torodi Ar. Bea | 120.63 | 310 | PKP | PKPdf | 03 59 18.6 | 0.0 |
| | comp=Z,0.3nm,0.5s,baz=32,slow=1.3,SNR=15 | | | | | | |
| LPAZ | La Paz | 151.45 | 67 | PKPbc | PKPbc | 04 00 23.9 | +2.3 |
| | comp=Z,1.0nm,0.6s,baz=297,slow=2.3,SNR=6.8 | | | | | | |

*ISCJB 15 03:44:47.8±0.6, 13°.8S±0°.1×14°.4W±0°.1, h10km, mb4.1/14, MS3.5/15, Error ellipse: s-maj=15.7km s-min=14.8km az=155.7*
*IDC 15 03:44:48.7±1.9, 13°.69S×14°.40W, h0km, mb4.0/9, mb1 4.1/9, mb1mx3.8/39, mbtmp3.9/9, MS3.5/15, Ms1 3.5/15, ms1mx3.4/28, Error ellipse: s-maj=48.0km s-min=33.4km az=70.0*
*NEIC 15 03:44:49.7±0.6, 13°.81S×14°.46W, h10km, mb4.4/5, Error ellipse: s-maj=14.7km s-min=13.7km az=162.0*

**ISC 15 03:44:49.7±0.8, 13°.8S±0°.1×14°.5W±0°.1, h10km, n31, σ1℗07/15, mb4.1/14, MS3.5/15, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H10S2 | ASCENSION HYDR | 4.82 | 358 | T | T | 03 51 24.9 | |
| | baz=176,slow=74,SNR=369 | | | | | | |
| H10S3 | ASCENSION HYDR | 4.83 | 358 | T | T | 03 51 26.3 | |
| | baz=176,slow=74,SNR=296 | | | | | | |
| H10S1 | ASCENSION HYDR | 4.84 | 358 | T | T | 03 51 27.0 | |
| | baz=176,slow=74,SNR=291 | | | | | | |
| H10N1 | ASCENSION HYDR | 5.92 | 360 | T | T | 03 52 52.8 | |
| | baz=189,slow=78,SNR=11 | | | | | | |
| H10N3 | ASCENSION HYDR | 5.93 | 360 | T | T | 03 52 59.3 | |
| | baz=189,slow=78,SNR=70 | | | | | | |
| H10N2 | ASCENSION HYDR | 5.94 | 360 | T | T | 03 53 01.8 | |
| | baz=189,slow=78,SNR=22 | | | | | | |
| DBIC | Dimbokro | 22.47 | 26 | P | P | 03 49 49.6 | +0.4 |
| | 7.0nm,1.0s,baz=202,slow=9.0,SNR=3.7 | | | | | | |
| DBIC | | | | LR | LR | 03 56 32.3 | |
| | comp=Z,105nm,18.4s,baz=174,slow=32 | | | | | | |
| RCBR | Riachuelo | 22.55 | 288 | eP | P | 03 49 50.1 | -0.1 |
| | 42nm,1.2s | | | | | | |
| TSUM | Tsumeb | 31.16 | 104 | eP | P | 03 51 08.1 | -1.1 |
| | 40nm,1.7s | | | | | | |
| TORD | Torodi Ar. Bea | 31.20 | 32 | P | P | 03 51 09.1 | -0.2 |
| | 5.3nm,1.1s,baz=216,slow=8.5,SNR=16 | | | | | | |
| TORD | | | | LR | LR | 04 01 35.3 | |
| | comp=Z,134nm,21.1s,baz=235,slow=32 | | | | | | |
| BDFB | Brasilia | 32.49 | 263 | LR | LR | 04 02 03.9 | |
| | comp=Z,86nm,21.0s,baz=58,slow=32 | | | | | | |
| BOSA | Boshof | 39.65 | 118 | P | P | 03 52 23.3 | +1.2 |
| | 4.5nm,1.0s,baz=283,slow=6.8,SNR=3.8 | | | | | | |
| BOSA | | | | LR | LR | 04 04 55.4 | |
| | comp=Z,62nm,21.4s,baz=288,slow=30 | | | | | | |
| TAM | Tamanrasset | 41.30 | 29 | eP | P | 03 52 37.1 | +1.3 |
| | 3.6nm,1.4s | | | | | | |
| CPUP | Villa Florida | 41.96 | 246 | LR | LR | 04 07 35.5 | |
| | comp=Z,118nm,19.0s,baz=82,slow=32 | | | | | | |
| MDT | Midelt | 47.31 | 11 | P | P | 03 53 23.8 | +0.1 |
| | 2.8nm,1.1s,baz=184,slow=4.8,SNR=3.9 | | | | | | |
| SAML | Samuel | 47.95 | 270 | eP | P | 03 53 28.0 | -0.9 |
| | 5.5nm,1.1s | | | | | | |
| LPAZ | La Paz | 51.77 | 260 | LR | LR | 04 14 20.3 | |
| | comp=Z,41nm,21.2s,baz=87,slow=34 | | | | | | |
| H05S1 | Guadeloupe/Mar | 53.80 | 300 | T | T | 04 52 33.3 | |
| | SNR=6.4 | | | | | | |
| ESDC | Sonseca Array | 54.09 | 10 | P | P | 03 54 15.5 | +0.7 |
| | 0.4nm,0.5s,baz=183,slow=7.5,SNR=6.3 | | | | | | |
| KEST | Kesra | 54.18 | 24 | LR | LR | 04 16 32.8 | |
| | comp=Z,70nm,19.2s,baz=282,slow=35 | | | | | | |
| SNAA | Sanae | 58.26 | 176 | eP | P | 03 54 44.4 | +0.2 |
| | 1.5nm,1.1s | | | | | | |
| ATD | Arta Tunnel | 62.15 | 69 | LR | LR | 04 21 47.1 | |
| | comp=Z,52nm,18.2s,slow=36 | | | | | | |
| WLF | Walferdange | 65.76 | 15 | eP | P | 03 55 35.6 | +0.9 |
| GERES | GERESS Array B | 67.18 | 20 | P | P | 03 55 42.6 | -1.4 |
| | 0.2nm,0.4s,baz=247,slow=5.0,SNR=3.7 | | | | | | |
| GERES | | | | LR | LR | 04 24 09.3 | |
| | comp=Z,65nm,20.0s,baz=216,slow=35 | | | | | | |
| BRTR | Keskin Array B | 69.55 | 38 | P | P | 03 55 58.7 | -0.3 |
| | 0.7nm,0.6s,baz=217,slow=5.0,SNR=3.8 | | | | | | |
| BRTR | | | | LR | LR | 04 26 22.5 | |
| | comp=Z,16nm,21.3s,baz=285,slow=36 | | | | | | |
| AKASG | Malin Array Be | 74.71 | 27 | P | P | 03 56 27.6 | -1.8 |
| | 0.9nm,0.5s,baz=221,slow=6.6,SNR=7.5 | | | | | | |
| AKASG | | | | LR | LR | 04 29 58.2 | |
| | comp=Z,24nm,21.7s,baz=110,slow=36 | | | | | | |
| NOA | NORSAR Array B | 77.35 | 12 | LR | LR | 04 32 31.7 | |
| | comp=Z,12nm,18.2s,baz=190,slow=37 | | | | | | |
| FINES | FINESS Array B | 81.56 | 18 | LR | LR | 04 33 47.7 | |
| | comp=Z,31nm,18.3s,baz=210,slow=36 | | | | | | |
| GEYT | Albeck | 85.13 | 49 | LR | LR | 04 35 10.6 | |
| | comp=Z,19nm,20.5s,baz=185,slow=36 | | | | | | |
| ARCES | ARCESS Array B | 87.71 | 13 | LR | LR | 04 37 26.3 | |
| | comp=Z,30nm,18.1s,baz=328,slow=36 | | | | | | |
| TXAR | Lajitas Array | 95.96 | 299 | P | P | 03 58 18.8 | +1.3 |
| | 0.1nm,0.5s,baz=88,slow=6.4,SNR=2.8 | | | | | | |

*IDC 15 04:03:39.8±8.4, 3°.93S×153°.50E, h94km±61km, mb3.9/4, mb1 4.1/5, mb1mx3.5/30, mbtmp4.2/5, ML2.7/1, MS3.3/2, Ms1 3.3/2, ms1mx2.7/18, Error ellipse: s-maj=59.2km s-min=44.2km az=47.0*
*NEIC 15 04:03:40.5±1.4, 4°.00S×153°.54E, h100km, mb4.2/2, Error ellipse: s-maj=26.6km s-min=21.7km az=114.0*

**ISC 15 04:03:41.7±1.4, 4°.1S±0°.2×153°.4E±0°.2, h100km, n12, σ1℗44/12, mb4.0/6, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 8.11 | 230 | P | Pn | 04 05 38.7 | +1.9 |
| | 4.8nm,0.3s,baz=57,slow=6.1,SNR=8.6 | | | | | | |
| PMG | | | | S | Sn | 04 07 04.6 | -2.3 |
| | 6.7nm,0.3s,baz=114,slow=20,SNR=16 | | | | | | |
| COEN | Coen | 14.03 | 225 | ePn | Pn | 04 06 57.1 | +0.9 |
| FAKI | Fak Fak | 21.15 | 273 | eP | P | 04 08 19.3 | +0.4 |
| | 5.4nm,0.7s | | | | | | |
| SIJI | Sorong | 22.35 | 278 | LR | LR | 04 16 03.5 | |
| | comp=Z,69nm,19.1s,baz=150,slow=33 | | | | | | |
| WRAB | Tennant Creek | 24.32 | 228 | eP | P | 04 08 50.4 | +0.2 |
| | 8.6nm,0.6s | | | | | | |
| WRA | Warramunga Arr | 24.33 | 228 | P | P | 04 08 50.1 | -0.2 |
| | 7.3nm,0.5s,baz=49,slow=9.4,SNR=40 | | | | | | |
| WRA | | | | PcP | PcP | 04 12 27.5 | -0.2 |
| | 0.3nm,0.4s,baz=57,slow=2.9,SNR=4.8 | | | | | | |
| ASAR | Alice Springs | 27.04 | 222 | P | P | 04 09 17.4 | +2.6 |
| | 0.6nm,0.4s,baz=58,slow=8.2,SNR=8.7 | | | | | | |
| FITZ | Fitzoy Crossi | 30.50 | 241 | P | P | 04 09 44.7 | -0.9 |
| | 0.9nm,0.4s,baz=50,slow=7.9,SNR=6.7 | | | | | | |
| KULM | Kulim | 53.52 | 280 | eP | P | 04 12 52.2 | -0.3 |
| VNDA | Vanda | 73.47 | 178 | P | P | 04 15 02.0 | -0.8 |
| | 2.0nm,0.7s,baz=329,slow=6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NIE | | | | *e*Sg | **Sn** | **04 13 55.6** | **+0.2** |
| **KRLC** | **Kraliky** | **1.30** | **264** | *e*SG | **Sg** | **04 13 54.4** | **+0.2** |
| **KRLC** | **Kraliky** | **1.30** | **264** | Sg | **Sg** | **04 13 54.4** | **+0.2** |
| **DPC** | **Dobruska-Polom** | **1.58** | **276** | *e*PG | **Pn** | **04 13 42.0** | **+0.1** |
| DPC | | | | *e*SG | **Sn** | **04 14 02.6** | **-0.5** |
| | comp=Z,22nm,0.6s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.58** | **276** | Pg | **Pn** | **04 13 42.0** | **+0.1** |
| DPC | | | | Sg | **Sn** | **04 14 02.6** | **-0.5** |
| | 22nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **1.69** | **238** | *e*Pn | **Pb** | **04 13 44.8** | **+0.3** |
| VRAC | | | | *e*Sg | **Sg** | **04 14 07.5** | **+0.7** |
| **KSP** | **Ksiaz** | **1.71** | **292** | *e*Pg | **Pg** | **04 13 45.5** | **+0.3** |
| KSP | | | | *e*Sg | **Sg** | **04 14 08.6** | **+1.3** |
| **VYHS** | **Vyhne** | **1.73** | **179** | *e*PN | **Pn** | **04 13 43.8** | **-0.1** |
| VYHS | | | | *e*SN | **Sn** | **04 14 06.5** | **-0.2** |
| **VYHS** | **Vyhne** | **1.73** | **179** | *e*Pn | **Pn** | **04 13 43.8** | **-0.1** |
| VYHS | | | | *e*Sn | **Sn** | **04 14 06.5** | **-0.2** |
| **STHS** | **Stebnicka Huta** | **1.79** | **116** | *e*PG | **Pb** | **04 13 46.1** | **-0.1** |
| STHS | | | | *e*SG | **Sb** | **04 14 09.2** | **0.0** |
| **STHS** | **Stebnicka Huta** | **1.79** | **116** | *e*Pg | **Pb** | **04 13 46.1** | **-0.1** |
| STHS | | | | *e*Sg | **Sb** | **04 14 09.2** | **0.0** |
| **PVCC** | **Panska Ves** | **2.71** | **278** | *e*SG | **Sg** | **04 14 38.3** | **-1.4** |
| | comp=Z,14nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **2.71** | **278** | Sg | **Sg** | **04 14 38.3** | **-1.4** |
| | 14nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **2.74** | **267** | *e*SG | **Sb** | **04 14 38.2** | **+1.7** |
| | comp=Z,4.8nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **2.74** | **267** | Sg | **Sb** | **04 14 38.2** | **+1.7** |
| | 4.8nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.15** | **284** | SG | **Sg** | **04 14 53.8** | **-0.1** |
| | 5.1nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.55** | **254** | *e*PG | **Pg** | **04 14 20.0** | **-0.6** |
| KHC | | | | *e*SG | **Sg** | **04 15 06.1** | **-0.6** |
| | comp=Z,4.7nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.55** | **254** | Pg | **Pg** | **04 14 20.0** | **-0.6** |
| KHC | | | | Sg | **Sg** | **04 15 06.1** | **-0.6** |
| | 4.7nm,0.4s | | | | | | |
| **MOA** | **Molln** | **3.81** | **233** | ⇑*i*Sg | **Sg** | **04 15 14.4** | **-0.3** |
| | 3.9nm,0.5s | | | | | | |
| **MOA** | **Molln** | **3.81** | **233** | Sg | **Sg** | **04 15 14.4** | **-0.3** |
| | 3.9nm,0.5s | | | | | | |

**WEL 15 04:24:19.9±0.3, 36°07'S×177°63'E, h214$_{km}$±3$_{km}$, ML3.6/6, 3C, Error ellipse: s-maj=5.1km s-min=3.5km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.59** | **160** | PN | Pn | 04 24 55.7 | +0.2 |
| **HAZ** | **Te Kaha** | **1.69** | **176** | PN | Pn | 04 24 56.2 | -0.2 |
| HAZ | | | | SN | S | 04 25 25.2 | +0.4 |
| **WMGZ** | **Waiomatatini S** | **1.86** | **161** | ⇑PN | Pn | 04 24 58.3 | +0.3 |
| WMGZ | | | | SN | S | 04 25 27.1 | -0.4 |
| **PUZ** | **Puketiti** | **2.06** | **166** | ⇑PN | Pn | 04 24 60.0 | -0.1 |
| **URZ** | **Urewera** | **2.23** | **191** | PN | Pn | 04 25 02.2 | +0.5 |
| URZ | | | | SN | S | 04 25 34.2 | +0.1 |
| **MWZ** | **Matawai** | **2.27** | **182** | ⇑PN | Pn | 04 25 02.4 | +0.3 |
| **RIGZ** | **Rimuhau** | **2.63** | **178** | PN | Pn | 04 25 06.0 | -0.2 |
| RIGZ | | | | SN | S | 04 25 41.3 | -0.8 |
| **NMHZ** | **Naumai** | **3.10** | **192** | PN | Pn | 04 25 12.0 | +0.6 |
| **KRHZ** | **Kereru** | **3.71** | **195** | PN | Pn | 04 25 17.6 | -0.9 |
| KRHZ | | | | SN | S | 04 26 03.4 | -1.1 |
| **KAHZ** | **Kahuranaki** | **3.77** | **189** | PN | Pn | 04 25 18.2 | -1.2 |
| **BFZ** | **Birch Farm** | **4.73** | **193** | PN | Pn | 04 25 29.2 | -2.0 |
| **TIWZ** | **Tintock** | **4.90** | **196** | PN | Pn | 04 25 30.9 | -2.4 |
| **TCW** | **Tory Channel** | **5.77** | **206** | AML | AML | 04 26 48.7 | |

*IDC* ***15*** *04:41:06.7±3.0,5.°10S×133.°62E, h0$^{km}$, mb4.2/1, mb1 4.2/4, mb1mx3.8/28, mbtmp4.1/4, ML4.0/3, Error ellipse: s-maj=127.9km s-min=28.7km az=82.0*
*NEIC* ***15*** *04:41:07.4±6.8,5.°08S×133.°61E, h8$^{km}$±44$^{km}$, mb4.3/1, Error ellipse: s-maj=46.3km s-min=10.7km az=75.0*
*AUST* ***15*** *04:41:08.5±6.5,4.°84S×134.°04E, h24$^{km}$, Error ellipse: s-maj=1.1km s-min=0.9km az=240.0*
**ISC 15 04:41:07.2±1.0,5.°13S±0.°07×133.°6E±0.°1, h10$^{km}$, n14, σ1§43/12, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.55** | **329** | P | **Pn** | **04 41 49.0** | **+0.3** |
| | baz=2.6,SNR=130 | | | | | | |
| **FAKI** | **Fak Fak** | **2.55** | **329** | *e*Pn | **Pn** | **04 41 49.0** | **+0.3** |
| FAKI | | | | *e*Sn | **Sn** | **04 42 18.1** | **-1.8** |
| **KDU** | **Kakadu** | **7.58** | **188** | P | Pn | 04 43 04.1 | +6.2 |
| | baz=8.0,SNR=4.3 | | | | | | |
| **MTN** | **Manton Dam** | **8.03** | **197** | P | Pn | 04 43 10.4 | +6.4 |
| | baz=8.5,SNR=31 | | | | | | |
| **KNRA** | **Kununurra** | **11.49** | **204** | P | Pn | 04 43 56.5 | +5.1 |
| | baz=12,SNR=21 | | | | | | |
| **COEN** | **Coen** | **12.92** | **133** | P | **Pn** | **04 44 10.5** | **-0.6** |
| | baz=13,SNR=4.0 | | | | | | |
| **MANU** | **Manus Island** | **14.13** | **78** | P | Pn | 04 44 19.8 | -7.8 |
| | baz=14,SNR=7.1 | | | | | | |
| **WRAB** | **Tennant Creek** | **14.73** | **177** | *e*P | **Pn** | **04 44 37.8** | **+1.9** |
| | 5.1nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **14.74** | **177** | Pn | **Pn** | **04 44 36.2** | **+0.2** |
| | 0.4nm,0.3s,baz=355,slow=13,SNR=14 | | | | | | |
| WRA | | | | Sn | **Sn** | **04 47 17.7** | **-1.9** |
| | 0.1nm,0.3s,baz=1.9,slow=19,SNR=3.4 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.03** | **210** | Pn | **Pn** | **04 44 41.3** | **+1.4** |
| | 0.7nm,0.3s,baz=41,slow=14,SNR=18 | | | | | | |
| FITZ | | | | Sn | **Sn** | **04 47 25.0** | **-1.5** |
| | 0.2nm,0.3s,baz=104,slow=12,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **18.43** | **179** | P | **Pn** | **04 45 24.4** | **+1.3** |
| | 0.7nm,0.3s,baz=4.1,slow=11,SNR=33 | | | | | | |
| **WRKA** | **Warakurna** | **20.43** | **194** | P | Pn | 04 45 50.2 | +3.3 |
| | baz=21,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.67** | **325** | P | **P** | **04 52 12.1** | **+1.2** |
| | 1.7nm,0.6s,baz=118,slow=7.5,SNR=9.2 | | | | | | |
| **KURK** | **Kurchatov** | **72.83** | **327** | *e*P | **P** | **04 52 35.8** | **-0.3** |
| | 1.6nm,0.5s | | | | | | |

*IDC* ***15*** *05:06:17.2±5.7,5.°01S×133.°68E, h0$^{km}$, mb3.7/1, mb1 4.1/3, mb1mx3.7/24, mbtmp3.9/3, ML4.1/2, Error ellipse: s-maj=322.8km s-min=32.7km az=77.0*
*AUST* ***15*** *05:06:22.6,4.°96S×133.°53E, h100$^{km}$*
**ISC 15 05:06:18.8±1.1,5.°29S±0.°10×133.°4E±0.°2, h10$^{km}$, n9, σ2§75/8, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.60** | **335** | P | **Pn** | **05 07 00.2** | **-0.8** |
| | baz=2.4,SNR=43 | | | | | | |
| **KDU** | **Kakadu** | **7.40** | **187** | P | Pn | 05 08 14.8 | +7.8 |
| | baz=7.8,SNR=35 | | | | | | |
| **MTN** | **Manton Dam** | **7.82** | **196** | P | Pn | 05 08 20.5 | +7.8 |
| | baz=8.2,SNR=55 | | | | | | |
| **KNRA** | **Kununurra** | **11.27** | **203** | P | Pn | 05 09 07.6 | +7.6 |
| | baz=12,SNR=29 | | | | | | |
| **COEN** | **Coen** | **12.95** | **132** | P | **Pn** | **05 09 22.4** | **-0.6** |
| | baz=13,SNR=6.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.59** | **176** | Pn | **Pn** | **05 09 47.3** | **+1.8** |
| | 0.8nm,0.3s,baz=356,slow=13,SNR=14 | | | | | | |
| WRA | | | | Sn | **Sn** | **05 12 24.8** | **-2.7** |
| | 1.1nm,0.3s,baz=358,slow=23,SNR=10 | | | | | | |
| **QIS** | **Mount Isa** | **16.34** | **159** | P | **P** | **05 10 12.6** | **+1.1** |
| | baz=17,SNR=3.6 | | | | | | |
| **ASAR** | **Alice Springs** | **18.28** | **178** | P | **P** | **05 10 36.3** | **+3.5** |
| | 0.7nm,0.3s,baz=4.9,slow=13,SNR=18 | | | | | | |
| ASAR | | | | S | **Sn** | **05 13 53.4** | **-3.6** |
| | 0.3nm,0.3s,baz=354,slow=28,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.69** | **325** | P | **P** | **05 17 22.3** | **-0.4** |
| | 0.6nm,0.8s,baz=134,slow=6.2,SNR=3.5 | | | | | | |

*IDC* ***15*** *05:11:12.3±0.6,52.°71N×34.°74W, h0$^{km}$, mb3.9/15, mb1 4.1/16, mb1mx4.0/52, mbtmp4.0/16, ML3.9/1, MS3.5/13, Ms1 3.5/13, ms1mx3.2/40, Error ellipse: s-maj=20.3km s-min=13.8km az=155.0*
*ISCJB* ***15*** *05:11:13.7±0.4,52.°61N±0.°08×34.°75W±0.°10, h20$^{km}$, mb4.1/22, MS3.5/11, Error ellipse: s-maj=11.7km s-min=8.6km az=175.2*
*NEIC* ***15*** *05:11:14.0±0.4,52.°59N×34.°71W, h10$^{km}$, mb4.4/9, Error ellipse: s-maj=11.0km s-min=8.5km az=174.0*
**ISC 15 05:11:15.6±0.5,52.°6N±0.°1×34.°73W±0.°08, h20$^{km}$, n40, σ1§06/29, mb4.2/22, MS3.5/11, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BORG** | **Borgarnes** | **13.96** | **24** | LR | LR | 05 18 17.4 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,112nm,18.3s,baz=239,slow=31 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **16.39** | **338** | *e*P | **Pn** | **05 15 05.2** | **+1.0** |
| | 22nm,1.0s | | | | | | |
| **DSB** | **Dublin** | **17.06** | **77** | *e*P | **Pn** | **05 15 11.4** | **-1.3** |
| | 66nm,1.8s | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **18.68** | **69** | P | **Pn** | **05 15 33.3** | **+0.7** |
| | baz=284,slow=12,SNR=11 | | | | | | |
| **SCHQ** | **Schefferville** | **19.04** | **289** | LR | LR | 05 21 46.8 | |
| | comp=Z,115nm,20.1s,baz=72,slow=33 | | | | | | |
| **SUMG** | **Summit** | **20.09** | **357** | *i* P | Pn | 05 15 57.5 | +7.6 |
| **SUMG** | **Summit** | **20.09** | **357** | *e*P | Pn | 05 15 50.1 | +0.2 |
| | 6.9nm,1.0s | | | | | | |
| **FRB** | **Frobisher Bay** | **20.73** | **316** | LR | LR | 05 22 11.5 | |
| | comp=Z,126nm,18.2s,baz=56,slow=32 | | | | | | |
| **JMIC** | **Jan Mayen** | **21.85** | **23** | LR | LR | 05 21 45.8 | |
| | comp=Z,57nm,19.6s,baz=238,slow=29 | | | | | | |
| **ESDC** | **Sonseca Array** | **24.72** | **109** | P | **P** | **05 16 36.6** | **+1.1** |
| | 2.1nm,0.9s,baz=317,slow=9.5,SNR=8.0 | | | | | | |
| **DAG** | **Danmarks Havn** | **25.00** | **9** | *i* P | **P** | **05 16 38.2** | **+0.7** |
| **NOA** | **NORSAR Array B** | **26.00** | **53** | P | **P** | **05 16 44.5** | **-2.3** |
| | 1.8nm,1.0s,baz=272,slow=8.4,SNR=3.0 | | | | | | |
| NOA | | | | LR | LR | 05 24 49.7 | |
| | comp=Z,77nm,21.6s,baz=175,slow=32 | | | | | | |
| **BRG** | **Berggiesshubel** | **29.73** | **74** | *e*P | **P** | **05 17 22.7** | **+2.5** |
| | 4.6nm,1.0s | | | | | | |
| BRG | | | | *e* | | 05 17 27.9 | |
| | 20nm,1.8s | | | | | | |
| **SADO** | **Sadowa** | **29.94** | **273** | LR | LR | 05 28 15.7 | |
| | comp=Z,176nm,20.9s,baz=53,slow=34 | | | | | | |
| **GERES** | **GERESS Array B** | **30.42** | **77** | P | **P** | **05 17 26.6** | **+0.2** |
| | 0.4nm,0.5s,baz=294,slow=7.4,SNR=3.4 | | | | | | |
| **FINES** | **FINESS Array B** | **33.06** | **50** | LR | LR | 05 29 44.8 | |
| | comp=Z,90nm,19.2s,baz=254,slow=34 | | | | | | |
| **ULM** | **Lac du Bonnet** | **37.19** | **292** | LR | LR | 05 32 13.1 | |
| | comp=Z,47nm,20.8s,baz=18,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **38.55** | **66** | P | **P** | **05 18 35.3** | **-1.3** |
| | 0.3nm,0.3s,baz=299,slow=8.3,SNR=4.2 | | | | | | |
| AKASG | | | | LR | LR | 05 34 03.0 | |
| | comp=Z,83nm,18.1s,baz=215,slow=36 | | | | | | |
| **BRTR** | **Keskin Array B** | **47.32** | **77** | P | **P** | **05 19 47.8** | **0.0** |
| | 1.5nm,1.0s,baz=305,slow=8.6,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **48.93** | **130** | P | **P** | **05 19 59.9** | **-0.4** |
| | 2.0nm,0.8s,baz=331,slow=6.9,SNR=11 | | | | | | |
| **HWUT** | **Hardware Ranch** | **51.06** | **290** | *e*P | **P** | **05 20 16.6** | **+0.1** |
| | 2.6nm,0.7s | | | | | | |
| **HLID** | **Hailey** | **51.41** | **294** | *e*P | **P** | **05 20 19.0** | **-0.2** |
| | 1.6nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **51.85** | **330** | P | **P** | **05 20 21.6** | **-0.2** |
| | 1.2nm,0.9s,baz=50,slow=4.6,SNR=11 | | | | | | |
| **DBIC** | **Dimbokro** | **51.93** | **141** | LR | LR | 05 39 49.9 | |
| | comp=Z,48nm,18.6s,baz=3.5,slow=33 | | | | | | |
| **MCK** | **McKinley** | **53.23** | **330** | *e*P | **P** | **05 20 31.7** | **-0.4** |
| | 16nm,1.4s | | | | | | |
| **TXAR** | **Lajitas Array** | **54.72** | **273** | P | **P** | **05 20 42.1** | **-1.4** |
| | 1.2nm,1.1s,baz=85,slow=4.0,SNR=5.0 | | | | | | |
| TXAR | | | | LR | LR | 05 42 20.4 | |
| | comp=Z,69nm,20.6s,baz=0.0,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **57.03** | **292** | P | **P** | **05 20 59.8** | **-0.3** |
| | 0.3nm,0.7s,baz=48,slow=6.2,SNR=4.2 | | | | | | |
| NVAR | | | | LR | LR | 05 44 19.3 | |
| | comp=Z,75nm,19.6s,baz=52,slow=35 | | | | | | |
| **PTGA** | **Pitinga** | **57.23** | **210** | P | **P** | **05 21 01.5** | **+0.1** |
| | 4.7nm,1.1s,baz=3.7,slow=8.9,SNR=6.3 | | | | | | |
| **BRVK** | **Borovoye** | **57.54** | **44** | *e*P | **P** | **05 21 04.1** | **+0.9** |
| | 4.3nm,0.8s | | | | | | |
| **ROSC** | **El Rosal** | **57.68** | **229** | P | **P** | **05 21 06.9** | **+1.8** |
| | 12nm,0.8s,baz=86,slow=3.3,SNR=10 | | | | | | |
| **KURK** | **Kurchatov** | **62.72** | **41** | *e*P | **P** | **05 21 39.1** | **+0.3** |
| | 8.4nm,1.1s | | | | | | |
| **EKS2** | **Erkin-Say** | **66.89** | **50** | *e*P | **P** | **05 22 07.6** | **+1.4** |
| | 8.1nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.31** | **42** | P | **P** | **05 22 08.1** | **-0.6** |
| | 1.4nm,0.8s,baz=313,slow=7.3,SNR=4.7 | | | | | | |
| **LPAZ** | **La Paz** | **74.47** | **213** | P | **P** | **05 22 53.1** | **0.0** |
| | 2.3nm,0.9s,baz=9.0,slow=8.8,SNR=8.3 | | | | | | |
| **SONM** | **Songino Array** | **74.57** | **26** | P | **P** | **05 22 52.9** | **0.0** |
| | 1.9nm,0.8s,baz=316,slow=4.0,SNR=3.9 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **80.03** | **105** | LR | LR | 06 01 34.6 | |
| | comp=Z,19nm,18.5s,baz=340,slow=38 | | | | | | |
| **CPUP** | **Villa Florida** | **81.06** | **200** | P | **P** | **05 23 27.8** | **-1.0** |
| | 1.3nm,0.7s,baz=12,slow=10,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **146.29** | **19** | PKPbc | **PKPdf** | **05 30 53.9** | **+0.4** |
| | 2.8nm,0.9s,baz=343,slow=3.2,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **149.81** | **21** | PKPbc | **PKPbc** | **05 31 03.1** | **-0.9** |
| | 1.6nm,0.8s,baz=350,slow=2.3,SNR=12 | | | | | | |
| **VNDA** | **Vanda** | **154.27** | **188** | PKPbc | **PKPbc** | **05 31 12.9** | **+0.4** |
| | 0.5nm,0.8s,baz=206,slow=2.7,SNR=3.9 | | | | | | |

*ISCJB* ***15*** *05:12:41.5±0.5,21.°15S±0.°04×68.°8W±0.°1, h124$^{km}$±7$^{km}$, mb3.5/4, Error ellipse: s-maj=16.2km s-min=6.0km az=2.0*
*IDC* ***15*** *05:12:42.8±1.1,21.°10S×68.°63W, h112$^{km}$±12$^{km}$, mb3.3/5, mb1 3.4/7, mb1mx3.3/32, mbtmp3.7/7, Error ellipse: s-maj=27.8km s-min=13.8km az=105.0*
*GUC* ***15*** *05:12:42.6±0.3,21.°12S×68.°93W, h111$^{km}$±2$^{km}$, ML3.9*
**ISC 15 05:12:42.4±0.8,21.°11S±0.°04×68.°87W±0.°09, h115$^{km}$±9$^{km}$, n17, σ1§15/25, mb3.4/4, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **0.58** | **276** | *i* P | **Pn** | **05 13 00.1** | **-0.3** |
| PB01 | | | | *i* S | **Sn** | **05 13 13.2** | **-0.7** |
| PB01 | | | | AML | AML | 05 13 14.0 | |
| | comp=E,4μm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.13** | **237** | *i* P | **Pn** | **05 13 05.5** | **+0.1** |
| PB07 | | | | *i* S | **Sn** | **05 13 22.7** | **-0.3** |
| PB07 | | | | AML | AML | 05 13 24.3 | |
| | comp=E,2μm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **1.50** | **182** | P | **Pn** | **05 13 10.5** | **+0.8** |
| | comp=E,839nm,0.3s,baz=10,slow=10,SNR=199 | | | | | | |
| LVC | | | | S | **Sn** | **05 13 31.3** | **+0.8** |
| | comp=E,8μm,0.3s,baz=73,slow=19,SNR=120 | | | | | | |
| **LVC** | **Limon Verde** | **1.50** | **182** | *i* P | **Pn** | **05 13 10.6** | **+0.9** |
| LVC | | | | *i* S | **Sn** | **05 13 31.1** | **+0.6** |
| **PB04** | **IPOC Station P** | **1.71** | **224** | *i* P | **Pn** | **05 13 11.8** | **-0.3** |
| PB04 | | | | *i* S | **Sn** | **05 13 34.4** | **-0.3** |
| PB04 | | | | AML | AML | 05 13 39.7 | |
| | comp=N,976nm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **1.72** | **202** | *i* P | **Pn** | **05 13 12.5** | **+0.2** |
| PB06 | | | | *i* S | **Sn** | **05 13 35.1** | **0.0** |
| PB06 | | | | AML | AML | 05 13 36.5 | |
| | comp=E,2μm,0.4s | | | | | | |
| **MNMC** | **Minimini** | **2.08** | **341** | *e*P | **Pn** | **05 13 17.4** | **+0.5** |
| MNMC | | | | *e*S | **Sn** | **05 13 44.5** | **+1.2** |
| MNMC | | | | AML | AML | 05 13 47.2 | |
| | comp=N,879nm,0.2s | | | | | | |
| **PB13** | **IPOC Station P** | **2.82** | **348** | *e*P | **Pn** | **05 13 28.2** | **+1.4** |
| PB13 | | | | *e*S | **Sn** | **05 14 02.6** | **+1.9** |
| PB13 | | | | AML | AML | 05 14 05.5 | |
| | comp=E,812nm,0.4s | | | | | | |
| **PB10** | **IPOC Station P** | **2.86** | **213** | *e*P | **Pn** | **05 13 26.6** | **-0.1** |
| PB10 | | | | AML | AML | 05 14 25.9 | |
| | comp=N,620nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **4.84** | **8** | P | **Pn** | **05 13 55.4** | **+1.6** |
| | comp=N,1.1nm,0.3s,baz=144,slow=6.7,SNR=34 | | | | | | |
| LPAZ | | | | S | Sn | 05 14 41.1 | -8.0 |
| | comp=N,0.1nm,0.3s,baz=178,slow=18,SNR=4.2 | | | | | | |
| **SIV** | **San Ignacio** | **8.97** | **57** | P | **Pn** | **05 14 46.3** | **-2.8** |
| | comp=N,3.4nm,0.3s,baz=253,slow=11,SNR=37 | | | | | | |
| **BDFB** | **Brasilia** | **20.52** | **78** | P | **P** | **05 17 10.3** | **-1.5** |
| | comp=N,2.7nm,0.4s,baz=246,slow=9.5,SNR=7.4 | | | | | | |
| **PTGA** | **Pitinga** | **22.04** | **24** | P | **P** | **05 17 26.5** | **-1.4** |
| | comp=N,2.1nm,0.3s,baz=183,slow=19,SNR=9.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **60.33** | **325** | P | **P** | **05 22 40.1** | **+0.7** |
| | comp=N,0.2nm,0.6s,baz=143,slow=7.6,SNR=3.7 | | | | | | |
| **SNAA** | **Sanae** | **62.64** | **161** | P | **P** | **05 22 54.9** | **+0.6** |
| | comp=N,0.2nm,0.7s,baz=281,slow=7.1,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.19** | **70** | P | **P** | **05 24 23.3** | **-0.8** |
| | comp=N,0.4nm,0.5s,baz=253,slow=5.6,SNR=7.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **145.29** | **36** | PKPbc | **PKPab** | **05 32 07.8** | **+1.0** |
| | comp=N,0.9nm,0.6s,baz=316,slow=2.5,SNR=4.4 | | | | | | |

*IDC* ***15*** *05:21:14.8±0.8,38.°86N×16.°79E, h0$^{km}$, mb3.8/8, mb1 3.8/16, mb1mx3.7/39, mbtmp3.7/16, ML3.7/8, MS3.5/8, Ms1 3.5/8, ms1mx3.1/36, Error ellipse: s-maj=19.1km s-min=13.6km az=107.0*
*ISCJB* ***15*** *05:21:19.1±0.1,38.°92N±0.°01×16.°66E±0.°02, h53$^{km}$±3$^{km}$, mb3.8/8, MS3.5/7, Error ellipse: s-maj=2.7km s-min=2.0km az=142.4*
*ROM* ***15*** *05:21:19.8±0.1,38.°87N×16.°63E, h37$^{km}$±1$^{km}$, Ml4.2/30, Error ellipse: s-maj=2.7km s-min=1.5km az=105.0*
*BEO* ***15*** *05:21:19.0±2.4,38.°94N×16.°43E, h0$^{km}$, ML3.8/6*
*PDG* ***15*** *05:21:19.5±0.6,38.°95N×16.°57E, h39$^{km}$±1$^{km}$, ML3.9/11, Error ellipse: s-maj=0.9km s-min=1.6km az=0.0*
*NEIC* ***15*** *05:21:19.0,38.°87N×16.°66E, h35$^{km}$, mb4.1/1, ML4.1(ROM), After ROM.*
*NEIC Felt [IV] at Catanzaro, Montepaone, Serra San Bruno and Soverato; [III] at Lamezia Terme and Vibo Valentia; [II] at Cosenza. Felt in much of Calabria.*
*LDG* ***15*** *05:21:19.8±0.1,38.°87N×16.°61E, h25$^{km}$, Ml3.5/2, Error ellipse: s-maj=2.9km s-min=2.4km az=149.0*
*CSEM* ***15*** *05:21:20.1±0.1,38.°92N×16.°60E, h40$^{km}$, ML4.2, Error ellipse: s-maj=3.1km s-min=2.1km az=136.0*
*THE* ***15*** *05:21:22.1,38.°87N×16.°83E, h25$^{km}$±7$^{km}$, ML4.0/5, Error ellipse: s-maj=10.2km s-min=1.2km az=279.0*
*TIR* ***15*** *05:21:35.4,39.°20N×16.°71E, h8$^{km}$, ML4.1*
**ISC 15 05:21:19.3±0.7, 38.°91N±0.°02×16.°63E±0.°03, h35$^{km}$±2$^{km}$, n408, σ1§55/460, mb3.8/8, MS3.6/7, 18C-10D, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SERS** | **Sersale** | **0.14** | **21** | Pg | Pn | 05 21 26.4 | -1.3 |
| SERS | | | | Sg | Sn | 05 21 31.7 | -3.0 |
| | 19μm,0.4s | | | | | | |
| **SERS** | **Sersale** | **0.14** | **21** | Pg | Pn | 05 21 26.4 | -1.3 |
| SERS | | | | Sg | Sn | 05 21 31.7 | -3.0 |
| | 19μm,0.4s | | | | | | |
| **GRI** | **Girifalco** | **0.18** | **242** | Pg | Pn | 05 21 26.2 | -1.0 |
| GRI | | | | Sg | Sn | 05 21 32.2 | -1.4 |
| | 9μm,0.3s | | | | | | |
| **GRI** | **Girifalco** | **0.18** | **242** | P | Pn | 05 21 26.2 | -1.0 |
| GRI | | | | S | Sn | 05 21 32.4 | -1.2 |
| **GRI** | **Girifalco** | **0.18** | **242** | Pg | Pn | 05 21 26.2 | -1.0 |
| GRI | | | | Sg | Sn | 05 21 32.2 | -1.4 |
| | 9μm,0.3s | | | | | | |
| **TIP** | **Timpagrande** | **0.29** | **21** | P | **Pn** | **05 21 28.5** | **+1.1** |
| TIP | | | | S | **Sn** | **05 21 34.5** | **+1.0** |
| **TIP** | **Timpagrande** | **0.29** | **21** | *e*Pg | **Pn** | **05 21 28.0** | **+0.6** |
| TIP | | | | *e*Sg | **Sn** | **05 21 35.6** | **+2.1** |
| **TIP** | **Timpagrande** | **0.29** | **21** | *e*Pg | **Pn** | **05 21 28.0** | **+0.6** |
| **TIP** | **Timpagrande** | **0.29** | **21** | P | **Pn** | **05 21 28.5** | **+1.1** |
| TIP | | | | S | **Sn** | **05 21 34.5** | **+1.0** |
| TIP | | | | *e*Sg | **Sn** | **05 21 35.6** | **+2.1** |
| **LADO** | **San Nicola del** | **0.47** | **36** | Pg | **Pn** | **05 21 30.6** | **+1.1** |
| **LADO** | **San Nicola del** | **0.47** | **36** | Pg | **Pn** | **05 21 30.6** | **+1.1** |
| **CAR1** | **CAROLEI** | **0.47** | **317** | Pg | **Pn** | **05 21 30.5** | **+0.9** |
| CAR1 | | | | Sg | **Sn** | **05 21 39.3** | **+2.5** |
| | 13μm,0.5s | | | | | | |
| **CAR1** | **CAROLEI** | **0.47** | **317** | Pg | **Pn** | **05 21 30.5** | **+0.9** |
| **PLAC** | **Placanica** | **0.48** | **198** | Pg | **Pn** | **05 21 30.6** | **+1.1** |
| PLAC | | | | Sg | **Sn** | **05 21 38.6** | **+1.7** |
| | 187μm,0.9s | | | | | | |
| **PLAC** | **Placanica** | **0.48** | **198** | Pg | **Pn** | **05 21 30.2** | **+0.5** |
| PLAC | | | | Sg | **Sn** | **05 21 38.6** | **+1.7** |
| | 187μm,0.9s | | | | | | |
| **PIPA** | **Pietrapaola** | **0.60** | **14** | Pg | **Pn** | **05 21 32.8** | **+1.4** |
| PIPA | | | | Sg | **Sn** | **05 21 41.3** | **+1.4** |
| | 7μm,0.9s | | | | | | |
| **PIPA** | **Pietrapaola** | **0.60** | **14** | P | **Pn** | **05 21 32.9** | **+1.4** |
| PIPA | | | | S | **Sn** | **05 21 43.6** | **+3.7** |
| **PIPA** | **Pietrapaola** | **0.60** | **14** | P | **Pn** | **05 21 32.9** | **+1.4** |
| PIPA | | | | Sg | **Sn** | **05 21 41.3** | **+1.4** |
| | 7μm,0.9s | | | | | | |
| PIPA | | | | S | **Sn** | **05 21 43.6** | **+3.7** |
| **JOPP** | **Joppolo** | **0.65** | **243** | Pg | **Pn** | **05 21 32.8** | **+0.6** |
| JOPP | | | | Sg | **Sn** | **05 21 42.9** | **+1.7** |
| | 21μm,0.8s | | | | | | |
| **JOPP** | **Joppolo** | **0.65** | **243** | P | **Pn** | **05 21 32.8** | **+0.6** |
| JOPP | | | | S | **Sn** | **05 21 42.5** | **+1.3** |
| **JOPP** | **Joppolo** | **0.65** | **243** | Pg | **Pn** | **05 21 32.8** | **+0.6** |
| JOPP | | | | S | **Sn** | **05 21 42.5** | **+1.3** |
| JOPP | | | | Sg | **Sn** | **05 21 42.9** | **+1.7** |
| | 21μm,0.8s | | | | | | |
| **MSCL** | **Scilla** | **0.94** | **224** | Pg | **Pn** | **05 21 37.0** | **+0.9** |
| | 47μm,0.6s | | | | | | |
| **MSCL** | **Scilla** | **0.94** | **224** | Pg | **Pn** | **05 21 37.0** | **+0.9** |
| | 47μm,0.6s | | | | | | |
| **SOI** | **Samo** | **0.95** | **208** | Pg | **Pn** | **05 21 37.4** | **+1.3** |
| | 7μm,0.5s | | | | | | |
| **SOI** | **Samo** | **0.95** | **208** | P | **Pn** | **05 21 37.4** | **+1.3** |
| SOI | | | | S | **Sn** | **05 21 51.1** | **+2.7** |
| **SOI** | **Samo** | **0.95** | **208** | Pg | **Pn** | **05 21 37.4** | **+1.3** |
| | 7μm,0.5s | | | | | | |
| SOI | | | | S | **Sn** | **05 21 51.1** | **+2.7** |
| **SALB** | **San Lorenzo Be** | **0.99** | **347** | Pg | **Pn** | **05 21 39.0** | **+2.1** |
| | 1μm,0.5s | | | | | | |
| **SALB** | **San Lorenzo Be** | **0.99** | **347** | Pg | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AGST | **Augusta-Monte** | 1.98 | 214 | P | Pn | 05 21 50.4 | +0.1 | | |
| AGST | | | | S | Sn | 05 22 11.4 | -2.6 | | |
| **AGST** | **Augusta-Monte** | 1.98 | 214 | P | Pn | 05 21 50.4 | +0.1 | | |
| AGST | | | | S | Sn | 05 22 11.4 | -2.6 | | |
| **HAGA** | **Augusta** | 1.99 | 216 | Pg | Pn | 05 21 50.6 | +0.1 | | |
| | 2µm,0.9s | | | | | | | | |
| **HAGA** | **Augusta** | 1.99 | 216 | Pg | Pn | 05 21 50.6 | +0.1 | | |
| | 2µm,0.9s | | | | | | | | |
| **PE1** | **Pezze di Greco** | 1.99 | 18 | *e*Pn | Pn | 05 21 50.6 | +0.1 | | |
| **AMUR** | **Altamura** | 2.00 | 360 | Pg | Pn | 05 21 52.0 | +1.4 | | |
| | 1µm,1.7s | | | | | | | | |
| **AMUR** | **Altamura** | 2.00 | 360 | Pg | Pn | 05 21 52.0 | +1.4 | | |
| | 1µm,1.7s | | | | | | | | |
| **HCRL** | **Carlentini** | 2.05 | 218 | Pg | Pn | 05 21 51.6 | +0.3 | | |
| **HCRL** | **Carlentini** | 2.05 | 218 | Pg | Pn | 05 21 51.6 | +0.3 | | |
| **HLNI** | **Lentini** | 2.08 | 222 | Pg | Pn | 05 21 51.7 | 0.0 | | |
| | 3µm,0.8s | | | | | | | | |
| **HLNI** | **Lentini** | 2.08 | 222 | Pg | Pn | 05 21 51.7 | 0.0 | | |
| | 3µm,0.8s | | | | | | | | |
| **SSY** | **Sortino** | 2.14 | 216 | Pg | Pn | 05 21 51.7 | -0.8 | | |
| **SSY** | **Sortino** | 2.14 | 216 | Pg | Pn | 05 21 51.7 | -0.8 | | |
| **MRVN** | **Minervino Murg** | 2.18 | 351 | Pg | Pn | 05 21 55.4 | +2.3 | | |
| | 1µm,1.9s | | | | | | | | |
| **MRVN** | **Minervino Murg** | 2.18 | 351 | Pg | Pn | 05 21 55.4 | +2.3 | | |
| | 1µm,1.9s | | | | | | | | |
| **MCRV** | **Calabrutti - M** | 2.18 | 330 | Pg | Pn | 05 21 55.3 | +2.0 | | |
| | 436nm,0.7s | | | | | | | | |
| **MCRV** | **Calabrutti - M** | 2.18 | 330 | Pg | Pn | 05 21 55.3 | +2.0 | | |
| | 436nm,0.7s | | | | | | | | |
| **CDT** | **Castel del Mon** | 2.19 | 353 | *e*Pn | Pn | 05 21 54.4 | +1.2 | | |
| **BAI** | **Bari** | 2.21 | 5 | *e*Pn | Pn | 05 21 55.0 | +1.6 | | |
| **GIB** | **Gibilmanna** | 2.24 | 247 | Pg | Pn | 05 21 54.5 | +0.5 | | |
| | 4µm,1.1s | | | | | | | | |
| **GIB** | **Gibilmanna** | 2.24 | 247 | Pg | Pn | 05 21 54.5 | +0.5 | | |
| | 4µm,1.1s | | | | | | | | |
| **VAE** | **Valguarnera** | 2.25 | 231 | Pn | Pn | 05 21 56.5 | +2.4 | | |
| | 5.0nm,0.3s,baz=177,slow=8.0,SNR=14 | | | | | | | | |
| VAE | | | | Sn | Sn | 05 22 42.4 | +22 | | |
| | 13nm,0.3s,baz=207,slow=18,SNR=4.5 | | | | | | | | |
| **HAVL** | **Avola** | 2.28 | 212 | Pg | Pn | 05 21 53.8 | -0.6 | | |
| **HAVL** | **Avola** | 2.28 | 212 | Pg | Pn | 05 21 53.8 | -0.6 | | |
| **HVZN** | **Vizzini** | 2.29 | 222 | Pg | Pn | 05 21 55.2 | +0.5 | | |
| | 6µm,0.7s | | | | | | | | |
| **HVZN** | **Vizzini** | 2.29 | 222 | Pg | Pn | 05 21 55.2 | +0.5 | | |
| | 6µm,0.7s | | | | | | | | |
| **HMDC** | **Modica** | 2.43 | 217 | Pg | Pn | 05 21 56.5 | -0.1 | | |
| **HMDC** | **Modica** | 2.43 | 217 | Pg | Pn | 05 21 56.5 | -0.1 | | |
| **RAFF** | **Raffo Rosso** | 2.45 | 227 | Pg | Pn | 05 21 57.3 | +0.5 | | |
| **RAFF** | **Raffo Rosso** | 2.45 | 227 | Pg | Pn | 05 21 57.3 | +0.5 | | |
| **ALJA** | **Alia** | 2.54 | 244 | Pg | Pn | 05 21 59.6 | +1.6 | | |
| | 2µm,1.3s | | | | | | | | |
| **ALJA** | **Alia** | 2.54 | 244 | Pg | Pn | 05 21 59.6 | +1.6 | | |
| | 2µm,1.3s | | | | | | | | |
| **KEK** | **Kerkira** | 2.59 | 71 | *e*P | Pn | 05 21 59.6 | +0.9 | | |
| **KEK** | **Kerkira** | 2.59 | 71 | *e*P | Pn | 05 21 59.6 | +0.9 | | |
| **KEK** | **Kerkira** | 2.59 | 71 | P | Pn | 05 21 59.6 | +0.9 | | |
| KEK | | | | S | Sn | 05 22 29.8 | +0.9 | | |
| **KEK** | **Kerkira** | 2.59 | 71 | P | Pn | 05 21 59.6 | +0.9 | | |
| KEK | | | | S | Sn | 05 22 29.8 | +0.9 | | |
| **SRN** | **Sarande** | 2.79 | 69 | *i* PN | Pn | 05 22 01.3 | -0.1 | | |
| SRN | | | | *i* SN | Sn | 05 22 24.6 | -9.2 | | |
| **SRN** | **Sarande** | 2.79 | 69 | *i* Pn | Pn | 05 22 01.3 | -0.1 | | |
| **CORL** | **Corleone** | 2.80 | 250 | Pg | Pn | 05 22 03.3 | +1.7 | | |
| **CORL** | **Corleone** | 2.80 | 250 | Pg | Pn | 05 22 03.3 | +1.7 | | |
| **MS1** | **Monte Sant'Ang** | 2.84 | 350 | *e*Pn | Pn | 05 22 06.5 | +4.2 | | |
| **SGD** | **Sagiada** | 2.89 | 75 | *e*P | Pn | 05 22 03.5 | +0.7 | | |
| **SGD** | **Sagiada** | 2.89 | 75 | *e*P | Pn | 05 22 03.5 | +0.7 | | |
| **SGD** | **Sagiada** | 2.89 | 75 | P | Pn | 05 22 03.8 | +1.0 | | |
| **SGD** | **Sagiada** | 2.89 | 75 | P | Pn | 05 22 03.8 | +1.0 | | |
| **IGT** | **Igoumenitsa** | 2.95 | 77 | *e*P | Pn | 05 22 04.6 | +1.0 | | |
| **IGT** | **Igoumenitsa** | 2.95 | 77 | *e*P | Pn | 05 22 04.6 | +1.0 | | |
| **IGT** | **Igoumenitsa** | 2.95 | 77 | P | Pn | 05 22 04.7 | +1.1 | | |
| IGT | | | | S | Sn | 05 22 38.8 | +1.1 | | |
| **IGT** | **Igoumenitsa** | 2.95 | 77 | P | Pn | 05 22 04.7 | +1.1 | | |
| IGT | | | | S | Sn | 05 22 38.8 | +1.1 | | |
| **LKD2** | **Lefkada island** | 3.15 | 91 | *e*P | Pn | 05 22 07.7 | +1.3 | | |
| **LKD2** | **Lefkada island** | 3.15 | 91 | *e*P | Pn | 05 22 07.7 | +1.3 | | |
| **LKD2** | **Lefkada island** | 3.15 | 91 | P | Pn | 05 22 07.8 | +1.3 | | |
| LKD2 | | | | S | Sn | 05 22 43.1 | +0.3 | | |
| **LKD2** | **Lefkada island** | 3.15 | 91 | P | Pn | 05 22 07.8 | +1.3 | | |
| LKD2 | | | | S | Sn | 05 22 43.1 | +0.3 | | |
| **VLS** | **Valsamata** | 3.19 | 102 | *e*P | Pn | 05 22 07.4 | +0.4 | | |
| **VLS** | **Valsamata** | 3.19 | 102 | *e*P | Pn | 05 22 07.4 | +0.4 | | |
| **VLS** | **Valsamata** | 3.19 | 102 | P | Pn | 05 22 07.8 | +0.8 | | |
| **VLS** | **Valsamata** | 3.19 | 102 | P | Pn | 05 22 07.8 | +0.8 | | |
| **KFL** | **Anninata** | 3.36 | 102 | *e*P | Pn | 05 22 09.5 | +0.2 | | |
| **KFL** | **Anninata** | 3.36 | 102 | *e*P | Pn | 05 22 09.5 | +0.2 | | |
| **KFL** | **Anninata** | 3.36 | 102 | P | Pn | 05 22 09.6 | +0.2 | | |
| **KFL** | **Anninata** | 3.36 | 102 | P | Pn | 05 22 09.6 | +0.2 | | |
| **JAN** | **Janina** | 3.36 | 76 | *e*P | Pn | 05 22 11.0 | +1.6 | | |
| **JAN** | **Janina** | 3.36 | 76 | *e*P | Pn | 05 22 11.0 | +1.6 | | |
| **WDD** | **Wield Dalam** | 3.47 | 210 | *e*Pn | Pn | 05 22 11.2 | +0.5 | | |
| **WDD** | **Wield Dalam** | 3.47 | 210 | *e*Pn | Pn | 05 22 11.2 | +0.5 | | |
| **TIR** | **Tirane** | 3.48 | 44 | *e*Pn | Pn | 05 22 11.0 | +0.1 | | |
| TIR | | | | *e*Sn | Sn | 05 22 50.5 | -0.4 | | |
| **TIR** | **Tirane** | 3.48 | 44 | *e*Pn | Pn | 05 22 11.9 | +1.0 | | |
| **TIR** | **Tirane** | 3.48 | 44 | *e*Pn | Pn | 05 22 11.9 | +1.0 | | |
| TIR | | | | *e*Sn | Sn | 05 22 50.5 | -0.4 | | |
| **ZKS** | **Zakynthos** | 3.49 | 109 | *e*P | Pn | 05 22 11.4 | +0.3 | | |
| **ZKS** | **Zakynthos** | 3.49 | 109 | *e*P | Pn | 05 22 11.4 | +0.3 | | |
| **DSL** | **Palaion Diasel** | 3.49 | 85 | *e*P | Pn | 05 22 13.4 | +2.3 | | |
| **DSL** | **Palaion Diasel** | 3.49 | 85 | *e*P | Pn | 05 22 13.4 | +2.3 | | |
| **DSL** | **Palaion Diasel** | 3.49 | 85 | P | Pn | 05 22 13.5 | +2.3 | | |
| **DSL** | **Palaion Diasel** | 3.49 | 85 | P | Pn | 05 22 13.5 | +2.3 | | |
| **PDO** | **Prodromos** | 3.58 | 94 | *e*P | Pn | 05 22 13.6 | +1.3 | | |
| **PDO** | **Prodromos** | 3.58 | 94 | *e*P | Pn | 05 22 13.6 | +1.3 | | |
| **PDO** | **Prodromos** | 3.58 | 94 | P | Pn | 05 22 13.7 | +1.4 | | |
| PDO | | | | S | Sn | 05 22 53.9 | +0.6 | | |
| **PDO** | **Prodromos** | 3.58 | 94 | P | Pn | 05 22 13.7 | +1.4 | | |
| PDO | | | | S | Sn | 05 22 53.9 | +0.6 | | |
| **ULC** | **Ulcinj** | 3.65 | 32 | ⇓*i* Pn | Pn | 05 22 13.9 | +0.6 | | |
| ULC | | | | *e*Sn | Sn | 05 22 55.2 | +0.1 | | |
| **ULC** | **Ulcinj** | 3.65 | 32 | ⇓*i* Pn | Pn | 05 22 13.9 | +0.6 | | |
| ULC | | | | *e*Sn | Sn | 05 22 55.2 | +0.1 | | |
| **NEST** | **Nestorio** | 3.73 | 65 | *e*P | Pn | 05 22 17.1 | +2.6 | | |
| **NEST** | **Nestorio** | 3.73 | 65 | *e*P | Pn | 05 22 17.1 | +2.6 | | |
| **NEST** | **Nestorio** | 3.73 | 65 | P | Pn | 05 22 17.1 | +2.6 | | |
| **NEST** | **Nestorio** | 3.73 | 65 | P | Pn | 05 22 17.1 | +2.6 | | |
| **BUM** | **Brajici-Budva** | 3.81 | 26 | ⇓*i* Pn | Pn | 05 22 15.6 | +0.1 | | |
| BUM | | | | *e*Sn | Sn | 05 22 59.2 | +0.2 | | |
| **BUM** | **Brajici-Budva** | 3.81 | 26 | ⇓*i* Pn | Pn | 05 22 15.6 | +0.1 | | |
| BUM | | | | *e*Sn | Sn | 05 22 59.2 | +0.2 | | |
| **HCY** | **Herceg Novi** | 3.81 | 21 | ⇑*i* Pn | Pn | 05 22 16.4 | +0.9 | | |
| HCY | | | | *e*Sn | Sn | 05 22 58.6 | -0.5 | | |
| **HCY** | **Herceg Novi** | 3.81 | 21 | ⇑*i* Pn | Pn | 05 22 16.4 | +0.9 | | |
| HCY | | | | *e*Sn | Sn | 05 22 58.6 | -0.5 | | |
| **PVO** | **Paravola** | 3.84 | 93 | *e*P | Pn | 05 22 18.2 | +2.3 | | |
| **PVO** | **Paravola** | 3.84 | 93 | *e*P | Pn | 05 22 18.2 | +2.3 | | |
| **PVO** | **Paravola** | 3.84 | 93 | P | Pn | 05 22 18.1 | +2.2 | | |
| **PVO** | **Paravola** | 3.84 | 93 | P | Pn | 05 22 18.1 | +2.2 | | |
| **OHR** | **Ohrid** | 3.89 | 54 | *i* Pn | Pn | 05 22 18.9 | +2.3 | | |
| OHR | | | | *i* Sn | Sn | 05 23 02.5 | +1.5 | | |
| **OHR** | **Ohrid** | 3.89 | 54 | *i* Pn | Pn | 05 22 18.9 | +2.3 | | |
| OHR | | | | *i* Sn | Sn | 05 23 02.5 | +1.5 | | |
| **RLS** | **Riolos of Patr** | 3.89 | 101 | *e*P | Pn | 05 22 18.4 | +1.8 | | |
| **RLS** | **Riolos of Patr** | 3.89 | 101 | *e*P | Pn | 05 22 18.4 | +1.8 | | |
| **PHP** | **Peshkopia** | 4.03 | 45 | P | Pn | 05 22 19.6 | +1.1 | | |
| **PHP** | **Peshkopia** | 4.03 | 45 | P | Pn | 05 22 19.6 | +1.1 | | |
| **EVR** | **Evrytania** | 4.04 | 88 | *e*P | Pn | 05 22 21.7 | +2.9 | | |
| **EVR** | **Evrytania** | 4.04 | 88 | *e*P | Pn | 05 22 21.7 | +2.9 | | |
| **EVR** | **Evrytania** | 4.04 | 88 | P | Pn | 05 22 21.6 | +2.8 | | |
| **EVR** | **Evrytania** | 4.04 | 88 | P | Pn | 05 22 21.6 | +2.8 | | |
| **STON** | **Ston** | 4.04 | 11 | *e*Pn | Pn | 05 22 18.2 | -0.5 | | |
| STON | | | | *e*Sn | Sn | 05 23 02.8 | -1.9 | | |
| **STON** | **Ston** | 4.04 | 11 | *e*Pn | Pn | 05 22 18.2 | -0.5 | | |
| STON | | | | *e*Sn | Sn | 05 23 02.8 | -1.9 | | |
| **PDG** | **Podgorica** | 4.05 | 29 | *e*Pn | Pn | 05 22 18.3 | -0.4 | | |
| PDG | | | | *e*Sn | Sn | 05 23 03.3 | -1.6 | | |
| **PDG** | **Podgorica** | 4.05 | 29 | ⇑*i* Pn | Pn | 05 22 19.4 | +0.7 | | |
| PDG | | | | *e*Sn | Sn | 05 23 04.4 | -0.5 | | |
| **TTG** | **Podgorica** | 4.05 | 29 | ⇑*i* Pn | Pn | 05 22 19.4 | +0.7 | | |
| TTG | | | | *e*Sn | Sn | 05 23 04.4 | -0.5 | | |
| **DRO** | **Drossia** | 4.10 | 102 | *e*P | Pn | 05 22 21.0 | +1.4 | | |
| **DRO** | **Drossia** | 4.10 | 102 | *e*P | Pn | 05 22 21.0 | +1.4 | | |
| **FNA** | **Florina** | 4.11 | 61 | *e*P | Pn | 05 22 22.4 | +2.8 | | |
| **FNA** | **Florina** | 4.11 | 61 | *e*P | Pn | 05 22 22.4 | +2.8 | | |
| **FNA** | **Florina** | 4.11 | 61 | P | Pn | 05 22 22.4 | +2.8 | | |
| **FNA** | **Florina** | 4.11 | 61 | P | Pn | 05 22 22.4 | +2.8 | | |
| **EFP** | **Efpalio** | 4.16 | 95 | *e*P | Pn | 05 22 22.4 | +2.2 | | |
| **EFP** | **Efpalio** | 4.16 | 95 | *e*P | Pn | 05 22 22.4 | +2.2 | | |
| **EFP** | **Efpalio** | 4.16 | 95 | P | Pn | 05 22 22.5 | +2.2 | | |
| **EFP** | **Efpalio** | 4.16 | 95 | P | Pn | 05 22 22.5 | +2.2 | | |
| **KZN** | **Kozani** | 4.21 | 69 | *e*P | Pn | 05 22 23.5 | +2.4 | | |
| **KZN** | **Kozani** | 4.21 | 69 | *e*P | Pn | 05 22 23.5 | +2.4 | | |
| **AMT** | **Artemida-Makis** | 4.23 | 107 | *e*P | Pn | 05 22 22.7 | +1.4 | | |
| **AMT** | **Artemida-Makis** | 4.23 | 107 | *e*P | Pn | 05 22 22.7 | +1.4 | | |
| **AMT** | **Artemida-Makis** | 4.23 | 107 | P | Pn | 05 22 22.4 | +1.1 | | |
| AMT | | | | S | Sn | 05 23 08.6 | -0.9 | | |
| **AMT** | **Artemida-Makis** | 4.23 | 107 | P | Pn | 05 22 22.4 | +1.1 | | |
| AMT | | | | S | Sn | 05 23 08.6 | -0.9 | | |
| **THL** | **Klokotos Trika** | 4.24 | 79 | *e*P | Pn | 05 22 23.8 | +2.5 | | |
| **THL** | **Klokotos Trika** | 4.24 | 79 | *e*P | Pn | 05 22 23.8 | +2.5 | | |
| **THL** | **Klokotos Trika** | 4.24 | 79 | P | Pn | 05 22 23.8 | +2.5 | | |
| **THL** | **Klokotos Trika** | 4.24 | 79 | P | Pn | 05 22 23.8 | +2.5 | | |
| **NKME** | **Niksic** | 4.24 | 24 | *e*Pn | Pn | 05 22 21.4 | -0.1 | | |
| NKME | | | | *e*Sn | Sn | 05 23 09.2 | -0.5 | | |
| **NKME** | **Niksic** | 4.24 | 24 | *e*Pn | Pn | 05 22 21.4 | -0.1 | | |
| NKME | | | | *e*Sn | Sn | 05 23 09.2 | -0.5 | | |
| **BRY** | **Bratogost** | 4.25 | 19 | *e*Pn | Pn | 05 22 21.6 | 0.0 | | |
| BRY | | | | *e*Sn | Sn | 05 23 09.5 | -0.5 | | |
| **BRY** | **Bratogost** | 4.25 | 19 | *e*Pn | Pn | 05 22 21.6 | 0.0 | | |
| BRY | | | | *e*Sn | Sn | 05 23 09.5 | -0.5 | | |
| **LAKA** | **Lakka** | 4.25 | 97 | *e*P | Pn | 05 22 23.8 | +2.3 | | |
| **LAKA** | **Lakka** | 4.25 | 97 | *e*P | Pn | 05 22 23.8 | +2.3 | | |
| **SERG** | **Sergoula** | 4.28 | 95 | *e*P | Pn | 05 22 24.4 | +2.4 | | |
| **SERG** | **Sergoula** | 4.28 | 95 | *e*P | Pn | 05 22 24.4 | +2.4 | | |
| **SERG** | **Sergoula** | 4.28 | 95 | P | Pn | 05 22 24.2 | +2.2 | | |
| **SERG** | **Sergoula** | 4.28 | 95 | P | Pn | 05 22 24.2 | +2.2 | | |
| **MAKR** | **Makrakomi, Fth** | 4.29 | 87 | *e*P | Pn | 05 22 25.2 | +3.0 | | |
| **MAKR** | **Makrakomi, Fth** | 4.29 | 87 | *e*P | Pn | 05 22 25.2 | +3.0 | | |
| **MAKR** | **Makrakomi, Fth** | 4.29 | 87 | P | Pn | 05 22 25.4 | +3.2 | | |
| **MAKR** | **Makrakomi, Fth** | 4.29 | 87 | P | Pn | 05 22 25.4 | +3.2 | | |
| **NKY** | **Niksic** | 4.29 | 24 | ⇓*i* Pn | Pn | 05 22 23.3 | +1.0 | | |
| NKY | | | | *e*Sn | Sn | 05 23 10.8 | -0.4 | | |
| **NKY** | **Niksic** | 4.29 | 24 | ⇓*i* Pn | Pn | 05 22 23.3 | +1.0 | | |
| NKY | | | | *e*Sn | Sn | 05 23 10.8 | -0.4 | | |
| **KALE** | **Kalithea** | 4.35 | 95 | *e*P | Pn | 05 22 25.2 | +2.3 | | |
| **KALE** | **Kalithea** | 4.35 | 95 | *e*P | Pn | 05 22 25.2 | +2.3 | | |
| **KALE** | **Kalithea** | 4.35 | 95 | P | Pn | 05 22 25.1 | +2.2 | | |
| **KALE** | **Kalithea** | 4.35 | 95 | P | Pn | 05 22 25.1 | +2.2 | | |
| **KLV** | **Kalavryta, Ach** | 4.42 | 100 | *e*P | Pn | 05 22 25.5 | +1.6 | | |
| **KLV** | **Kalavryta, Ach** | 4.42 | 100 | *e*P | Pn | 05 22 25.5 | +1.6 | | |
| **AGG** | **Agios Georgios** | 4.45 | 87 | *e*P | Pn | 05 22 27.1 | +2.8 | | |
| **AGG** | **Agios Georgios** | 4.45 | 87 | *e*P | Pn | 05 22 27.1 | +2.8 | | |
| **AGG** | **Agios Georgios** | 4.45 | 87 | P | Pn | 05 22 26.7 | +2.4 | | |
| **AGG** | **Agios Georgios** | 4.45 | 87 | P | Pn | 05 22 26.7 | +2.4 | | |
| **PVY** | **Plav** | 4.47 | 33 | ⇓*i* Pn | Pn | 05 22 25.8 | +1.1 | | |
| PVY | | | | *e*Sn | Sn | 05 23 15.9 | +0.4 | | |
| **PVY** | **Plav** | 4.47 | 33 | ⇓*i* Pn | Pn | 05 22 25.8 | +1.1 | | |
| PVY | | | | *e*Sn | Sn | 05 23 15.9 | +0.4 | | |
| **PYL** | **PYLOS** | 4.52 | 115 | *e*P | Pn | 05 22 25.5 | +0.3 | | |
| **PYL** | **PYLOS** | 4.52 | 115 | *e*P | Pn | 05 22 25.5 | +0.3 | | |
| **ITM** | **Ithomi** | 4.53 | 111 | *e*P | Pn | 05 22 26.7 | +1.4 | | |
| **ITM** | **Ithomi** | 4.53 | 111 | *e*P | Pn | 05 22 26.7 | +1.4 | | |
| **GUR** | **Goura** | 4.59 | 100 | *e*P | Pn | 05 22 28.5 | +2.2 | | |
| **GUR** | **Goura** | 4.59 | 100 | *e*P | Pn | 05 22 28.5 | +2.2 | | |
| **UPM** | **Unac-Piva** | 4.62 | 21 | ⇑*i* Pn | Pn | 05 22 27.7 | +0.8 | | |
| UPM | | | | *e*Sn | Sn | 05 23 18.9 | -0.5 | | |
| **UPM** | **Unac-Piva** | 4.62 | 21 | ⇑*i* Pn | Pn | 05 22 27.7 | +0.8 | | |
| UPM | | | | *e*Sn | Sn | 05 23 18.9 | -0.5 | | |
| **DSF** | **Desfina** | 4.64 | 94 | *e*P | Pn | 05 22 29.5 | +2.5 | | |
| **DSF** | **Desfina** | 4.64 | 94 | *e*P | Pn | 05 22 29.5 | +2.5 | | |
| **DESF** | **Desfina** | 4.65 | 94 | *e*P | Pn | 05 22 29.6 | +2.5 | | |
| **DESF** | **Desfina** | 4.65 | 94 | *e*P | Pn | 05 22 29.6 | +2.5 | | |
| **BEY** | **Berane** | 4.67 | 31 | ⇑*i* Pn | Pn | 05 22 29.1 | +1.7 | | |
| BEY | | | | *e*Sn | Sn | 05 23 20.6 | +0.2 | | |
| **IVA** | **Berane** | 4.67 | 31 | ⇑*i* Pn | Pn | 05 22 29.1 | +1.7 | | |
| IVA | | | | *e*Sn | Sn | 05 23 20.6 | +0.2 | | |
| **LIT** | **Litokhoron** | 4.69 | 73 | *e*P | Pn | 05 22 29.0 | +1.4 | | |
| **LIT** | **Litokhoron** | 4.69 | 73 | *e*P | Pn | 05 22 29.0 | +1.4 | | |
| **AXAR** | **Agios Charalam** | 4.71 | 90 | *e*P | Pn | 05 22 30.2 | +2.3 | | |
| **AXAR** | **Agios Charalam** | 4.71 | 90 | *e*P | Pn | 05 22 30.2 | +2.3 | | |
| **AXAR** | **Agios Charalam** | 4.71 | 90 | P | Pn | 05 22 30.7 | +2.8 | | |
| **AXAR** | **Agios Charalam** | 4.71 | 90 | P | Pn | 05 22 30.7 | +2.8 | | |
| **SKO** | **Skopje** | 4.78 | 49 | *i* Sn | Sn | 05 23 22.4 | -0.6 | | |
| **SKO** | **Skopje** | 4.78 | 49 | *i* Sn | Sn | 05 23 22.3 | -0.6 | | |
| **PLE** | **Pljevlja** | 4.89 | 24 | ⇑*i* Pn | Pn | 05 22 31.9 | +1.5 | | |
| PLE | | | | *e*Sn | Sn | 05 23 25.6 | -0.1 | | |
| **PLE** | **Pljevlja** | 4.89 | 24 | ⇑*i* Pn | Pn | 05 22 31.9 | +1.5 | | |
| PLE | | | | *e*Sn | Sn | 05 23 25.6 | -0.1 | | |
| **GRG** | **Griva** | 4.89 | 63 | *e*P | Pn | 05 22 32.4 | +2.1 | | |
| **GRG** | **Griva** | 4.89 | 63 | *e*P | Pn | 05 22 32.4 | +2.1 | | |
| **LKR** | **Lokris** | 4.99 | 91 | *e*P | Pn | 05 22 33.0 | +1.4 | | |
| **LKR** | **Lokris** | 4.99 | 91 | *e*P | Pn | 05 22 33.0 | +1.4 | | |
| **LKR** | **Lokris** | 4.99 | 91 | P | Pn | 05 22 33.1 | +1.4 | | |
| **LKR** | **Lokris** | 4.99 | 91 | P | Pn | 05 22 33.1 | +1.4 | | |
| **SJES** | **Sjenica** | 5.03 | 29 | *e*Pn | Pn | 05 22 32.0 | -0.4 | | |
| SJES | | | | *e*Sn | Sn | 05 23 26.8 | -2.5 | | |
| **SJES** | **Sjenica** | 5.03 | 29 | *e*Pn | Pn | 05 22 32.0 | -0.4 | | |
| **LTK** | **Loutraki** | 5.05 | 98 | *e*P | Pn | 05 22 35.2 | +2.6 | | |
| **LTK** | **Loutraki** | 5.05 | 98 | *e*P | Pn | 05 22 35.2 | +2.6 | | |
| **XOR** | **Xorichti** | 5.13 | 83 | *e*P | Pn | 05 22 35.9 | +2.3 | | |
| **XOR** | **Xorichti** | 5.13 | 83 | *e*P | Pn | 05 22 35.9 | +2.3 | | |
| **XOR** | **Xorichti** | 5.13 | 83 | P | Pn | 05 22 35.2 | +1.6 | | |
| **XOR** | **Xorichti** | 5.13 | 83 | P | Pn | 05 22 35.2 | +1.6 | | |
| **NEO** | **Neokhori** | 5.15 | 83 | *e*P | Pn | 05 22 36.3 | +2.4 | | |
| **NEO** | **Neokhori** | 5.15 | 83 | *e*P | Pn | 05 22 36.3 | +2.4 | | |
| **VAY** | **Valandovo** | 5.16 | 60 | *i* Pn | Pn | 05 22 36.3 | +2.4 | | |
| VAY | | | | *i* Sn | Sn | 05 23 30.8 | -1.4 | | |
| **VAY** | **Valandovo** | 5.16 | 60 | *e*Pn | Pn | 05 22 35.5 | +1.5 | | |
| VAY | | | | *e*Sn | Sn | 05 23 30.7 | -1.4 | | |
| **VAY** | **Valandovo** | 5.16 | 60 | *e*Pn | Pn | 05 22 35.5 | +1.5 | | |
| VAY | | | | *e*Sn | Sn | 05 23 30.7 | -1.4 | | |
| **VIL2** | **Platees** | 5.25 | 96 | *e*P | Pn | 05 22 37.3 | +2.0 | | |
| **VIL2** | **Platees** | 5.25 | 96 | *e*P | Pn | 05 22 37.3 | +2.0 | | |
| **HORT** | **Hortiatis** | 5.27 | 69 | *e*P | Pn | 05 22 36.5 | +0.9 | | |
| **HORT** | **Hortiatis** | 5.27 | 69 | *e*P | Pn | 05 22 36.5 | +0.9 | | |
| **KNT** | **Kendrikon** | 5.32 | 63 | *e*P | Pn | 05 22 37.6 | +1.4 | | |
| **KNT** | **Kendrikon** | 5.32 | 63 | *e*P | Pn | 05 22 37.6 | +1.4 | | |
| **KNT** | **Kendrikon** | 5.32 | 63 | P | Pn | 05 22 37.3 | +1.1 | | |
| **KNT** | **Kendrikon** | 5.32 | 63 | P | Pn | 05 22 37.3 | +1.1 | | |
| **SKIA** | **Skiathos** | 5.33 | 85 | *e*P | Pn | 05 22 37.9 | +1.5 | | |
| **SKIA** | **Skiathos** | 5.33 | 85 | *e*P | Pn | 05 22 37.9 | +1.5 | | |
| **IVAS** | **Ivanjica** | 5.37 | 29 | *e*Pn | Pn | 05 22 35.9 | -1.1 | | |
| **IVAS** | **Ivanjica** | 5.37 | 29 | *e*Pn | Pn | 05 22 37.5 | +0.5 | | |
| IVAS | | | | *e*Sn | Sn | 05 23 35.1 | -2.4 | | |
| **IVAS** | **Ivanjica** | 5.37 | 29 | *e*Pn | Pn | 05 22 37.5 | +0.5 | | |
| IVAS | | | | *e*Sn | Sn | 05 23 35.1 | -2.4 | | |
| **BBLS** | **Lazi?i** | 5.38 | 22 | *e*Pn | Pn | 05 22 37.1 | 0.0 | | |
| BBLS | | | | *e*Sn | Sn | 05 23 35.0 | -2.8 | | |
| **BBLS** | **Lazi?i** | 5.38 | 22 | *e*Pn | Pn | 05 22 37.1 | 0.0 | | |
| BBLS | | | | *e*Sn | Sn | 05 23 35.0 | -2.8 | | |
| **DID** | **Didima** | 5.39 | 103 | *e*P | Pn | 05 22 39.1 | +1.9 | | |
| **DID** | **Didima** | 5.39 | 103 | *e*P | Pn | 05 22 39.1 | +1.9 | | |
| **MRKA** | **Markates** | 5.44 | 90 | *e*P | Pn | 05 22 39.1 | +1.2 | | |
| **MRKA** | **Markates** | 5.44 | 90 | *e*P | Pn | 05 22 39.1 | +1.2 | | |
| **VLI** | **Veliai** | 5.45 | 112 | *e*P | Pn | 05 22 39.8 | +1.7 | | |
| **VLI** | **Veliai** | 5.45 | 112 | *e*P | Pn | 05 22 39.8 | +1.7 | | |
| **PLG** | **Polygyros** | 5.46 | 72 | *e*P | Pn | 05 22 39.8 | +1.6 | | |
| **PLG** | **Polygyros** | 5.46 | 72 | *e*P | Pn | 05 22 39.8 | +1.6 | | |
| **PLG** | **Polygyros** | 5.46 | 72 | P | Pn | 05 22 39.9 | +1.7 | | |
| **PLG** | **Polygyros** | 5.46 | 72 | P | Pn | 05 22 39.9 | +1.7 | | |
| **SELS** | **Selova** | 5.49 | 37 | *e*Pn | Pn | 05 22 38.1 | -0.4 | | |
| SELS | | | | *e*Sn | Sn | 05 23 37.1 | -3.3 | | |
| **SELS** | **Selova** | 5.49 | 37 | *e*Pn | Pn | 05 22 38.1 | -0.4 | | |
| **NAIG** | **Nisos Aigina** | 5.52 | 100 | *e*P | Pn | 05 22 39.6 | +0.7 | | |
| **NAIG** | **Nisos Aigina** | 5.52 | 100 | *e*P | Pn | 05 22 39.6 | +0.7 | | |
| **SOH** | **Sokhos** | 5.52 | 68 | *e*P | Pn | 05 22 40.9 | +1.9 | | |
| **SOH** | **Sokhos** | 5.52 | 68 | *e*P | Pn | 05 22 40.9 | +1.9 | | |
| **BARS** | **Barje** | 5.54 | 44 | *e*Sn | Sn | 05 23 41.2 | -0.6 | | |
| **PAIG** | **Paliouri** | 5.56 | 77 | *e*P | Pn | 05 22 40.3 | +0.8 | | |
| **PAIG** | **Paliouri** | 5.56 | 77 | *e*P | Pn | 05 22 40.3 | +0.8 | | |
| **AOS** | **Alonnisos** | 5.65 | 85 | P | Pn | 05 22 41.7 | +0.9 | | |
| **AOS** | **Alonnisos** | 5.65 | 85 | P | Pn | 05 22 41.7 | +0.9 | | |
| **VSL** | **Villasalto** | 5.66 | 278 | *e*Pn | Pn | 05 22 40.7 | -0.2 | | |
| | 24nm,0.8s | | | | | | | | |
| VSL | | | | *e*Sn | Sn | 05 23 44.0 | -0.7 | | |
| **VSL** | **Villasalto** | 5.66 | 278 | *e*Pn | Pn | 05 22 40.7 | -0.2 | | |
| | 24nm,0.8s | | | | | | | | |
| VSL | | | | *e*Sn | Sn | 05 23 44.0 | -0.7 | | |
| **KYTH** | **Kithira** | 5.72 | 115 | *e*P | Pn | 05 22 43.9 | +2.1 | | |
| **KYTH** | **Kithira** | 5.72 | 115 | *e*P | Pn | 05 22 43.9 | +2.1 | | |
| **KYTH** | **Kithira** | 5.72 | 115 | P | Pn | 05 22 43.3 | +1.5 | | |
| **KYTH** | **Kithira** | 5.72 | 115 | P | Pn | 05 22 43.3 | +1.5 | | |
| **VLY** | **Voula,Athens** | 5.73 | 98 | *e*P | Pn | 05 22 43.0 | +1.1 | | |
| **VLY** | **Voula,Athens** | 5.73 | 98 | *e*P | Pn | 05 22 43.0 | +1.1 | | |
| **EREA** | **Eretria** | 5.74 | 93 | *e*P | Pn | 05 22 43.0 | +1.0 | | |
| **EREA** | **Eretria** | 5.74 | 93 | *e*P | Pn | 05 22 43.0 | +1.0 | | |
| **PTL** | **Penteli** | 5.74 | 96 | *e*P | Pn | 05 22 44.0 | +1.9 | | |
| **PTL** | **Penteli** | 5.74 | 96 | *e*P | Pn | 05 22 44.0 | +1.9 | | |
| **DIVS** | **Divibare** | 5.77 | 25 | *e*Pn | Pn | 05 22 40.6 | -1.9 | | |
| DIVS | | | | *e*Sn | Sn | 05 23 43.4 | -4.0 | | |
| **DIVS** | **Divibare** | 5.77 | 25 | ⇑*i* P | Pn | 05 22 54.8 | +12 | | |
| **DIVS** | **Divibare** | 5.77 | 25 | *e*Pn | Pn | 05 22 40.6 | -1.9 | | |
| **GRUS** | **Gruza** | 5.85 | 30 | *e*Pn | Pn | 05 22 43.4 | -0.1 | | |
| GRUS | | | | *e*Sn | Sn | 05 23 47.7 | -1.6 | | |
| **GRUS** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RTLS | | | | *e*S | Sn | 05 27 35.5 | +2.1 |
| **AVFE** | **Valle Fertil** | **1.01** | **58** | *e*P | Pn | 05 27 19.4 | +0.9 |
| AVFE | | | | *e*S | Sn | 05 27 35.5 | +1.2 |
| **AUSP** | **Uspallata** | **1.29** | **218** | *e*P | Pn | 05 27 23.2 | +1.3 |
| AUSP | | | | *e*S | Sn | 05 27 42.1 | +1.7 |
| **ASAL** | **Salagasta** | **1.42** | **193** | *e*P | Pn | 05 27 24.3 | +1.2 |
| ASAL | | | | *e*S | Sn | 05 27 43.7 | +1.1 |
| **ACAN** | **Cantantal** | **1.51** | **135** | *e*P | Pn | 05 27 25.6 | +1.5 |
| ACAN | | | | *e*S | Sn | 05 27 45.7 | +1.3 |
| **ARCO** | **CERRO ARCO** | **1.68** | **194** | *e*P | Pn | 05 27 27.7 | +1.3 |
| ARCO | | | | *e*S | Sn | 05 27 49.4 | +1.0 |
| ARCO | | | | IAML | | 05 27 53.1 | |
| | comp=Z,184nm,0.5s | | | | | | |
| **AGUA** | **GUANDACOL** | **1.71** | **359** | *e*P | Pn | 05 27 28.0 | +1.2 |
| AGUA | | | | *e*S | Sn | 05 27 50.3 | +1.1 |
| **APLL** | **PUNTA DE LOS L** | **1.84** | **64** | *e*P | Pn | 05 27 29.1 | +0.9 |
| APLL | | | | *e*S | Sn | 05 27 52.8 | +1.1 |
| **AAGR** | **Agrelo** | **1.90** | **190** | *e*P | Pn | 05 27 30.1 | +1.0 |
| AAGR | | | | *e*S | Sn | 05 27 54.4 | +1.1 |
| **VCA** | **Vinchina** | **2.47** | **5** | *e*P | Pn | 05 27 37.5 | +0.9 |
| VCA | | | | IAML | | 05 28 16.3 | |
| | comp=Z,54nm,0.2s | | | | | | |
| **MRA** | **San Martin** | **2.62** | **118** | *e*P | Pn | 05 27 39.6 | +1.2 |

*DDA* ***15*** *05:33:08.8, 35°.82N×30°.33E, h50km, Ml4.0*
*ISCJB* ***15*** *05:33:09.9±0.2, 35°.94N±0°.02×30°.42E±0°.02, h58km±4km, mb4.0/12, MS3.0/3, Error ellipse: s-maj=3.3km s-min=2.3km az=18.5*
*ISK* ***15*** *05:33:09.9, 35°.99N×30°.41E, h33km, ML3.7*
*NSSC* ***15*** *05:33:09.7±1.2, 35°.90N×30°.61E, h3km±78km, ML3.2*
*NIC* ***15*** *05:33:10.7, 36°.17N×30°.33E, h81km, mb4.4, ML4.1*
*CSEM* ***15*** *05:33:10.3±0.1, 35°.97N×30°.39E, h20km, ML4.0, Error ellipse: s-maj=3.9km s-min=2.4km az=33.0*
*THE* ***15*** *05:33:10.0, 35°.97N×30°.36E, h1km±1km, ML3.9/1, Error ellipse: s-maj=1.5km s-min=0.9km az=185.0*
*IDC* ***15*** *05:33:11.8±1.6, 36°.02N×30°.46E, h51km±17km, mb3.8/12, mb1 3.9/20, mb1mx3.8/47, mbtmp4.0/20, ML3.9/8, MS3.1/6, Ms1 3.1/6, ms1mx2.7/39, Error ellipse: s-maj=15.2km s-min=12.0km az=143.0*
*HLW* ***15*** *05:33:12.4, 35°.70N×30°.36E, h30km±7km, Md3.7, Ml3.1*
**ISC 15 05:33:11.1±0.9, 35°.95N±0°.03×30°.40E±0°.02, h46km±11km, n268, σ1°57/335, mb4.1/12, MS3.0/3, 2D, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.69** | **287** | *e*P | **Pn** | **05 33 24.2** | **-0.3** |
| **KSL** | **Kastellorizon** | **0.69** | **287** | *e*P | **Pn** | **05 33 24.2** | **-0.3** |
| **AKAS** | **Kas** | **0.70** | **294** | *i* P | **Pn** | **05 33 23.7** | **-1.1** |
| AKAS | | | | *i* S | **Sn** | **05 33 34.6** | **-0.1** |
| **AKAS** | **Kas** | **0.70** | **294** | P | **Pn** | **05 33 23.7** | **-1.1** |
| AKAS | | | | S | **Sn** | **05 33 34.6** | **-0.1** |
| **ELL** | **Elmali** | **0.89** | **334** | *e*PG | **Pn** | **05 33 26.0** | **-1.3** |
| ELL | | | | *e*SG | **Sn** | **05 33 38.2** | **-0.9** |
| **ELL** | **Elmali** | **0.89** | **334** | *e*Pg | **Pn** | **05 33 26.0** | **-1.3** |
| ELL | | | | *e*Sg | **Sn** | **05 33 38.3** | **-0.9** |
| **ANTB** | **Antalya** | **0.97** | **12** | *e*PG | **Pn** | **05 33 27.1** | **-1.2** |
| ANTB | | | | *e*SG | **Sn** | **05 33 40.3** | **-0.6** |
| **ANTB** | **Antalya** | **0.97** | **12** | *e*Pg | **Pn** | **05 33 27.1** | **-1.2** |
| ANTB | | | | *e*Sg | **Sn** | **05 33 40.3** | **-0.6** |
| **KORT** | **Korkueli** | **1.04** | **358** | *i* P | **Pn** | **05 33 29.4** | **-0.1** |
| KORT | | | | *i* S | **Sn** | **05 33 46.7** | **+3.7** |
| **KORT** | **Korkueli** | **1.04** | **358** | P | **Pn** | **05 33 29.4** | **-0.1** |
| KORT | | | | S | **Sn** | **05 33 46.7** | **+3.7** |
| **FETY** | **Fethiye** | **1.26** | **303** | *e*PN | **Pn** | **05 33 31.6** | **-0.7** |
| FETY | | | | *e*SN | **Sn** | **05 33 48.0** | **-0.1** |
| **FETY** | **Fethiye** | **1.26** | **303** | *e*Pn | **Pn** | **05 33 31.6** | **-0.7** |
| FETY | | | | *e*Sn | **Sn** | **05 33 48.0** | **-0.1** |
| **GLHS** | **Glhisar (BURDU** | **1.40** | **329** | *e*PN | **Pn** | **05 33 33.9** | **-0.4** |
| **GLHS** | **Glhisar (BURDU** | **1.40** | **329** | *e*Pn | **Pn** | **05 33 33.9** | **-0.4** |
| **GOLH** | **Golhisar** | **1.45** | **333** | *i* P | **Pn** | **05 33 36.5** | **+1.6** |
| GOLH | | | | *i* S | **Sn** | **05 33 56.0** | **+3.2** |
| **GOLH** | **Golhisar** | **1.45** | **333** | P | **Pn** | **05 33 36.5** | **+1.6** |
| GOLH | | | | S | **Sn** | **05 33 56.0** | **+3.2** |
| **BCK** | **Bucak** | **1.51** | **6** | *e*PN | **Pn** | **05 33 34.5** | **-1.3** |
| **BCK** | **Bucak** | **1.51** | **6** | *e*Pn | **Pn** | **05 33 34.5** | **-1.3** |
| **GAZI** | **Gazipasa** | **1.58** | **79** | *i* P | **Pn** | **05 33 37.2** | **+0.6** |
| GAZI | | | | *i* S | **Sn** | **05 33 57.5** | **+1.6** |
| **GAZI** | **Gazipasa** | **1.58** | **79** | P | **Pn** | **05 33 37.2** | **+0.6** |
| GAZI | | | | S | **Sn** | **05 33 57.5** | **+1.6** |
| **DALY** | **Dalyan (Mu¨la** | **1.65** | **302** | *e*PN | **Pn** | **05 33 37.1** | **-0.5** |
| **DALY** | **Dalyan (Mu¨la** | **1.65** | **302** | *e*Pn | **Pn** | **05 33 37.1** | **-0.5** |
| **TURN** | **Turunc** | **1.71** | **303** | *i* P | **Pn** | **05 33 41.6** | **+3.2** |
| TURN | | | | *i* S | **Sn** | **05 34 03.2** | **+4.0** |
| **TURN** | **Turunc** | **1.71** | **303** | P | **Pn** | **05 33 41.6** | **+3.2** |
| TURN | | | | S | **Sn** | **05 34 03.1** | **+4.0** |
| **AKMC** | **Akamas** | **1.83** | **120** | P | **Pn** | **05 33 42.8** | **+2.7** |
| | baz=305 | | | | | | |
| **AKMC** | **Akamas** | **1.83** | **120** | P | **Pn** | **05 33 42.8** | **+2.7** |
| **ARG** | **Arkhangelos** | **1.86** | **279** | *e*P | **Pn** | **05 33 41.0** | **+0.6** |
| **ARG** | **Arkhangelos** | **1.86** | **279** | *e*P | **Pn** | **05 33 41.0** | **+0.6** |
| **ARG** | **Arkhangelos** | **1.86** | **279** | P | **Pn** | **05 33 40.8** | **+0.4** |
| ARG | | | | S | **Sn** | **05 34 04.8** | **+2.1** |
| **ARG** | **Arkhangelos** | **1.86** | **279** | P | **Pn** | **05 33 40.8** | **+0.4** |
| ARG | | | | S | **Sn** | **05 34 04.8** | **+2.1** |
| **ISP** | **Isparta** | **1.87** | **3** | P | **Pn** | **05 33 41.4** | **+0.7** |
| ISP | | | | S | **Sn** | **05 34 06.4** | **+3.3** |
| **ISP** | **Isparta** | **1.87** | **3** | P | **Pn** | **05 33 41.4** | **+0.7** |
| ISP | | | | S | **Sn** | **05 34 06.4** | **+3.3** |
| **PPCY** | **Paphos** | **1.92** | **123** | P | **Pn** | **05 33 44.0** | **+2.8** |
| | baz=308 | | | | | | |
| **PPCY** | **Paphos** | **1.92** | **123** | P | **Pn** | **05 33 44.0** | **+2.8** |
| **HDMB** | **Hadim** | **1.96** | **58** | *e*PN | **Pn** | **05 33 41.8** | **-0.3** |
| **HDMB** | **Hadim** | **1.96** | **58** | *e*Pn | **Pn** | **05 33 41.8** | **-0.3** |
| **ALFC** | **Alevga** | **1.96** | **113** | ||P | Pn | 05 33 44.9 | +3.0 |
| | baz=299 | | | | | | |
| ALFC | | | | S | **Sn** | **05 34 10.6** | **+5.2** |
| **ALFC** | **Alevga** | **1.96** | **113** | ||P | Pn | 05 33 44.9 | +3.0 |
| ALFC | | | | S | **Sn** | **05 34 10.6** | **+5.2** |
| **BAGO** | **Egridir - ISPA** | **2.06** | **9** | P | **Pn** | **05 33 45.4** | **+2.1** |
| BAGO | | | | S | **Sn** | **05 34 11.8** | **+4.0** |
| **YER** | **Yerkesik** | **2.07** | **305** | *e*PN | **Pn** | **05 33 43.1** | **-0.3** |
| **YER** | **Yerkesik** | **2.07** | **305** | *e*Pn | **Pn** | **05 33 43.1** | **-0.3** |
| **LEF** | **Lefka** | **2.20** | **112** | *e*PN | **Pn** | **05 33 45.0** | **0.0** |
| **LEF** | **Lefka** | **2.20** | **112** | *e*Pn | **Pn** | **05 33 45.1** | **0.0** |
| **SZAC** | **Souni-Zanaja** | **2.36** | **120** | P | Pn | 05 33 50.8 | +3.5 |
| | baz=304 | | | | | | |
| SZAC | | | | S | Sn | 05 34 20.9 | +5.8 |
| **SZAC** | **Souni-Zanaja** | **2.36** | **120** | P | Pn | 05 33 50.8 | +3.5 |
| SZAC | | | | S | Sn | 05 34 20.9 | +5.8 |
| **KHAL** | **Karahalli** | **2.52** | **344** | *i* P | **Pn** | **05 33 49.9** | **+0.3** |
| KHAL | | | | *i* S | **Sn** | **05 34 19.3** | **+0.1** |
| **KHAL** | **Karahalli** | **2.52** | **344** | P | **Pn** | **05 33 49.9** | **+0.3** |
| KHAL | | | | S | **Sn** | **05 34 19.2** | **+0.1** |
| **KONT** | **Konya--Tatoy** | **2.54** | **38** | *e*PN | **Pn** | **05 33 48.9** | **-0.9** |
| **KONT** | **Konya--Tatoy** | **2.54** | **38** | *e*Pn | **Pn** | **05 33 48.9** | **-0.9** |
| **CSS** | **Prodhromos** | **2.59** | **112** | P | **Pn** | **05 33 52.7** | **+2.2** |
| | baz=296 | | | | | | |
| CSS | | | | S | Sn | 05 34 27.7 | +6.9 |
| **CSS** | **Prodhromos** | **2.59** | **112** | P | **Pn** | **05 33 51.5** | **+1.0** |
| CSS | | | | S | **Sn** | **05 34 24.7** | **+3.9** |
| **CSS** | **Prodhromos** | **2.59** | **112** | P | **Pn** | **05 33 51.5** | **+1.0** |
| CSS | | | | S | **Sn** | **05 34 24.7** | **+3.9** |
| **SHUT** | **Suhut-Afyon** | **2.60** | **3** | *e*PN | **Pn** | **05 33 49.7** | **-1.0** |
| **SHUT** | **Suhut-Afyon** | **2.60** | **3** | *e*Pn | **Pn** | **05 33 49.7** | **-1.0** |
| **BDRM** | **Kayabasi** | **2.62** | **296** | *i* P | **Pn** | **05 33 51.6** | **+0.6** |
| BDRM | | | | *i* S | **Sn** | **05 34 20.2** | **-1.4** |
| **BDRM** | **Kayabasi** | **2.62** | **296** | P | **Pn** | **05 33 51.6** | **+0.6** |
| BDRM | | | | S | **Sn** | **05 34 20.2** | **-1.4** |
| **LFK** | **Lefkose** | **2.64** | **104** | *e*PN | **Pn** | **05 33 51.2** | **-0.1** |
| **LFK** | **Lefkose** | **2.64** | **104** | *e*Pn | **Pn** | **05 33 51.2** | **-0.1** |
| **AYDN** | **Tasoluk** | **2.64** | **311** | *i* P | **Pn** | **05 33 54.1** | **+2.8** |
| AYDN | | | | *i* S | **Sn** | **05 34 23.4** | **+1.2** |
| **AYDN** | **Tasoluk** | **2.64** | **311** | P | **Pn** | **05 33 54.1** | **+2.8** |
| AYDN | | | | S | **Sn** | **05 34 23.4** | **+1.2** |
| **KARP** | **Karpathos** | **2.66** | **262** | *e*P | **Pn** | **05 33 52.9** | **+1.4** |
| **KARP** | **Karpathos** | **2.66** | **262** | *e*P | **Pn** | **05 33 52.9** | **+1.4** |
| **KARP** | **Karpathos** | **2.66** | **262** | P | **Pn** | **05 33 52.4** | **+0.9** |
| KARP | | | | S | **Sn** | **05 34 24.5** | **+1.9** |
| **KARP** | **Karpathos** | **2.66** | **262** | P | **Pn** | **05 33 52.4** | **+0.9** |
| KARP | | | | S | **Sn** | **05 34 24.5** | **+1.9** |
| **NIS1** | **Nisyros Isl.** | **2.68** | **285** | *e*P | **Pn** | **05 33 51.8** | **+0.1** |
| **NIS1** | **Nisyros Isl.** | **2.68** | **285** | *e*P | **Pn** | **05 33 51.8** | **+0.1** |
| **BODT** | **Bodrum** | **2.72** | **295** | *e*PN | **Pn** | **05 33 52.8** | **+0.5** |
| **BODT** | **Bodrum** | **2.72** | **295** | *e*Pn | **Pn** | **05 33 52.8** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.83** | **315** | *e*PN | **Pn** | **05 33 53.8** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.83** | **315** | *e*Pn | **Pn** | **05 33 53.8** | **-0.1** |
| **KDHN** | **Kadinhani** | **2.91** | **28** | *i* P | **Pn** | **05 33 56.0** | **+1.1** |
| KDHN | | | | *i* S | **Sn** | **05 34 30.0** | **+1.3** |
| **KDHN** | **Kadinhani** | **2.91** | **28** | P | **Pn** | **05 33 56.0** | **+1.1** |
| KDHN | | | | S | **Sn** | **05 34 30.0** | **+1.3** |
| **KULA** | **Kula-Manisa** | **2.91** | **332** | *e*PN | **Pn** | **05 33 54.7** | **-0.2** |
| **KULA** | **Kula-Manisa** | **2.91** | **332** | *e*Pn | **Pn** | **05 33 54.7** | **-0.2** |
| **MANT** | **Manisa** | **2.93** | **330** | *i* P | **Pn** | **05 33 55.0** | **-0.3** |
| MANT | | | | *i* S | **Sn** | **05 34 29.6** | **+0.3** |
| **MANT** | **Manisa** | **2.93** | **330** | P | **Pn** | **05 33 55.0** | **-0.3** |
| MANT | | | | S | **Sn** | **05 34 29.6** | **+0.3** |
| **GCAM** | **G?zelcaml?** | **3.08** | **305** | *i* P | **Pn** | **05 33 57.1** | **-0.1** |
| GCAM | | | | *i* S | **Sn** | **05 34 29.2** | **-3.5** |
| **GCAM** | **G?zelcaml?** | **3.08** | **305** | P | **Pn** | **05 33 57.1** | **-0.1** |
| GCAM | | | | S | **Sn** | **05 34 29.2** | **-3.5** |
| **EREN** | **Erenkoy** | **3.10** | **97** | *e*PN | **Pn** | **05 33 58.4** | **+1.0** |
| **EREN** | **Erenkoy** | **3.10** | **97** | *e*Pn | **Pn** | **05 33 58.4** | **+1.0** |
| **SMG** | **Samos** | **3.35** | **303** | *e*P | **Pn** | **05 34 00.7** | **-0.2** |
| **SMG** | **Samos** | **3.35** | **303** | *e*P | **Pn** | **05 34 00.7** | **-0.2** |
| **SMG** | **Samos** | **3.35** | **303** | P | **Pn** | **05 34 00.9** | **0.0** |
| **SMG** | **Samos** | **3.35** | **303** | P | **Pn** | **05 34 00.9** | **0.0** |
| **SULT** | **Sultanhani-AKS** | **3.35** | **47** | *e*PN | **Pn** | **05 34 00.7** | **-0.4** |
| **SULT** | **Sultanhani-AKS** | **3.35** | **47** | *e*Pn | **Pn** | **05 34 00.7** | **-0.4** |
| **DEMI** | **Demirci** | **3.36** | **337** | *i* P | **Pn** | **05 34 00.9** | **-0.3** |
| DEMI | | | | *i* S | **Sn** | **05 34 41.0** | **+1.2** |
| **DEMI** | **Demirci** | **3.36** | **337** | P | **Pn** | **05 34 00.8** | **-0.3** |
| DEMI | | | | S | **Sn** | **05 34 41.0** | **+1.2** |
| **ZKR** | **Zakros** | **3.51** | **257** | *e*P | **Pn** | **05 34 04.0** | **+0.9** |
| **ZKR** | **Zakros** | **3.51** | **257** | *e*P | **Pn** | **05 34 04.0** | **+0.9** |
| **ZKR** | **Zakros** | **3.51** | **257** | P | **Pn** | **05 34 04.4** | **+1.3** |
| **ZKR** | **Zakros** | **3.51** | **257** | P | **Pn** | **05 34 04.4** | **+1.3** |
| **AKHS** | **Akhisar** | **3.57** | **326** | *i* P | **Pn** | **05 34 03.4** | **-0.6** |
| AKHS | | | | *i* S | Sn | 05 34 21.1 | -24 |
| **AKHS** | **Akhisar** | **3.57** | **326** | P | **Pn** | **05 34 03.4** | **-0.6** |
| AKHS | | | | S | Sn | 05 34 21.1 | -24 |
| **SVRH** | **Sivrihisar-ESK** | **3.60** | **14** | *e*PN | **Pn** | **05 34 05.0** | **+0.5** |
| **SVRH** | **Sivrihisar-ESK** | **3.60** | **14** | *e*Pn | **Pn** | **05 34 05.0** | **+0.5** |
| **BLCB** | **Balcova** | **3.62** | **313** | *e*PN | **Pn** | **05 34 04.4** | **-0.2** |
| **BLCB** | **Balcova** | **3.62** | **313** | *e*Pn | **Pn** | **05 34 04.4** | **-0.2** |
| **ZEY** | **¨zmir** | **3.86** | **307** | P | **Pn** | **05 34 07.3** | **-0.5** |
| ZEY | | | | S | **Sn** | **05 34 49.5** | **-2.5** |
| **URLA** | **Izmir** | **3.87** | **309** | *i* P | **Pn** | **05 34 07.3** | **-0.8** |
| URLA | | | | *i* S | **Sn** | **05 34 48.0** | **-4.3** |
| **URLA** | **Izmir** | **3.87** | **309** | P | **Pn** | **05 34 07.3** | **-0.8** |
| URLA | | | | S | **Sn** | **05 34 48.0** | **-4.3** |
| **BORA** | **Eskisehir** | **3.92** | **1** | *i* P | **Pn** | **05 34 10.3** | **+1.5** |
| BORA | | | | *i* S | **Sn** | **05 34 54.4** | **+0.8** |
| **BORA** | **Eskisehir** | **3.92** | **1** | P | **Pn** | **05 34 10.3** | **+1.5** |
| BORA | | | | S | **Sn** | **05 34 54.4** | **+0.8** |
| **DURS** | **Dursunbey** | **3.95** | **338** | *i* P | **Pn** | **05 34 09.1** | **-0.1** |
| DURS | | | | *i* S | **Sn** | **05 34 57.2** | **+2.9** |
| **DURS** | **Dursunbey** | **3.95** | **338** | P | **Pn** | **05 34 09.1** | **-0.1** |
| DURS | | | | S | **Sn** | **05 34 57.2** | **+2.9** |
| **KARA** | **Karaisali** | **3.97** | **69** | *e*PN | **Pn** | **05 34 10.1** | **+0.7** |
| **KARA** | **Karaisali** | **3.97** | **69** | *e*Pn | **Pn** | **05 34 10.1** | **+0.7** |
| **THR3** | **Thira Island,** | **4.07** | **278** | P | **Pn** | **05 34 11.8** | **+1.1** |
| **THR3** | **Thira Island,** | **4.07** | **278** | P | **Pn** | **05 34 11.8** | **+1.1** |
| **KRTS** | **Karatas** | **4.07** | **80** | *e*PN | **Pn** | **05 34 11.8** | **+1.0** |
| **KRTS** | **Karatas** | **4.07** | **80** | *e*Pn | **Pn** | **05 34 11.8** | **+1.0** |
| **APE** | **Apeiranthos** | **4.07** | **287** | *e*P | **Pn** | **05 34 12.1** | **+1.2** |
| **APE** | **Apeiranthos** | **4.07** | **287** | *e*P | **Pn** | **05 34 12.1** | **+1.2** |
| **APE** | **Apeiranthos** | **4.07** | **287** | P | **Pn** | **05 34 12.1** | **+1.2** |
| **APE** | **Apeiranthos** | **4.07** | **287** | P | **Pn** | **05 34 12.1** | **+1.2** |
| **AFSR** | **Af¨ar-Bala (A** | **4.08** | **31** | *e*PN | **Pn** | **05 34 11.9** | **+0.9** |
| **AFSR** | **Af¨ar-Bala (A** | **4.08** | **31** | *e*Pn | **Pn** | **05 34 11.9** | **+0.9** |
| **LAST** | **Lasithi** | **4.09** | **260** | *e*P | **Pn** | **05 34 13.1** | **+2.0** |
| **LAST** | **Lasithi** | **4.09** | **260** | *e*P | **Pn** | **05 34 13.1** | **+2.0** |
| **BALB** | **Balikesir** | **4.18** | **332** | *e*PN | **Pn** | **05 34 12.5** | **+0.2** |
| **BALB** | **Balikesir** | **4.18** | **332** | *e*Pn | **Pn** | **05 34 12.5** | **+0.2** |
| **CHOS** | **Chios island** | **4.23** | **306** | *e*P | **Pn** | **05 34 13.2** | **+0.1** |
| **CHOS** | **Chios island** | **4.23** | **306** | *e*P | **Pn** | **05 34 13.2** | **+0.1** |
| **CHOS** | **Chios island** | **4.23** | **306** | P | **Pn** | **05 34 13.1** | **0.0** |
| **CHOS** | **Chios island** | **4.23** | **306** | P | **Pn** | **05 34 13.1** | **0.0** |
| **CAVI** | **Cavuskoy** | **4.26** | **354** | *e*PN | **Pn** | **05 34 14.1** | **+0.6** |
| **CAVI** | **Cavuskoy** | **4.26** | **354** | *e*Pn | **Pn** | **05 34 14.1** | **+0.6** |
| **ULDT** | **Uludag** | **4.30** | **347** | *i* P | **Pn** | **05 34 14.1** | **0.0** |
| ULDT | | | | *i* S | **Sn** | **05 35 02.0** | **-1.1** |
| **ULDT** | **Uludag** | **4.30** | **347** | P | **Pn** | **05 34 14.1** | **0.0** |
| ULDT | | | | S | **Sn** | **05 35 02.0** | **-1.1** |
| **BALY** | **Balya** | **4.37** | **331** | *i* P | **Pn** | **05 34 14.8** | **-0.2** |
| BALY | | | | *i* S | **Sn** | **05 35 05.8** | **+1.1** |
| **BALY** | **Balya** | **4.37** | **331** | P | **Pn** | **05 34 14.8** | **-0.2** |
| BALY | | | | S | **Sn** | **05 35 05.8** | **+1.1** |
| **CEYT** | **Ceyhan** | **4.44** | **75** | *e*PN | **Pn** | **05 34 16.5** | **+0.6** |
| **CEYT** | **Ceyhan** | **4.44** | **75** | *e*Pn | **Pn** | **05 34 16.5** | **+0.6** |
| **GULT** | **Gulveren** | **4.47** | **1** | *e*PN | **Pn** | **05 34 17.6** | **+1.2** |
| **GULT** | **Gulveren** | **4.47** | **1** | *e*PN | **Pn** | **05 34 17.6** | **+1.2** |
| **ADVT** | **Abdulvahap** | **4.50** | **354** | *e*PN | **Pn** | **05 34 18.1** | **+1.4** |
| **ADVT** | **Abdulvahap** | **4.50** | **354** | *e*Pn | **Pn** | **05 34 18.1** | **+1.4** |
| **ARNB** | **Al Arnab** | **4.53** | **90** | *e*P | **Pn** | **05 34 17.1** | **-0.1** |
| ARNB | | | | *e*S | **Sn** | **05 35 06.4** | **-2.2** |
| | comp=N,128nm,0.5s | | | | | | |
| ARNB | | | | AML | AML | 05 35 27.5 | |
| | comp=E,53nm,0.5s | | | | | | |
| **ARNB** | **Al Arnab** | **4.53** | **90** | *e*P | **Pn** | **05 34 17.1** | **-0.1** |
| ARNB | | | | *e*S | **Sn** | **05 35 06.4** | **-2.2** |
| | comp=E,53nm,0.5s | | | | | | |
| **IDI** | **Anoyia** | **4.54** | **263** | P | **Pn** | **05 34 17.4** | **+0.1** |
| | comp=E,9.9nm,0.3s,baz=95,slow=12,SNR=61 | | | | | | |
| IDI | | | | S | **Sn** | **05 35 07.6** | **-1.1** |
| | comp=E,22nm,0.3s,baz=331,slow=19,SNR=14 | | | | | | |
| **IDI** | **Anoyia** | **4.54** | **263** | *e*P | **Pn** | **05 34 17.9** | **+0.7** |
| **IDI** | **Anoyia** | **4.54** | **263** | *e*P | **Pn** | **05 34 17.9** | **+0.7** |
| **IDI** | **Anoyia** | **4.54** | **263** | P | **Pn** | **05 34 18.0** | **+0.7** |
| **IDI** | **Anoyia** | **4.54** | **263** | P | **Pn** | **05 34 18.0** | **+0.7** |
| **MDUB** | **Mudurnu** | **4.55** | **8** | *e*PN | **Pn** | **05 34 18.2** | **+0.6** |
| **MDUB** | **Mudurnu** | **4.55** | **8** | *e*Pn | **Pn** | **05 34 18.2** | **+0.6** |
| **BRTR** | **Keskin Array B** | **4.56** | **33** | P | **Pn** | **05 34 18.4** | **+0.7** |
| | comp=E,3.4nm,0.3s,baz=212,slow=15,SNR=60 | | | | | | |
| BRTR | | | | S | **Sn** | **05 35 08.2** | **-1.2** |
| | comp=E,3.4nm,0.3s,baz=201,slow=23,SNR=9.6 | | | | | | |
| BRTR | | | | LR | LR | 05 36 41.8 | |
| | comp=E,303nm,18.3s,baz=226,slow=47 | | | | | | |
| **MDNY** | **Mudanya-Bursa** | **4.57** | **345** | *e*PN | **Pn** | **05 34 18.6** | **+1.0** |
| **MDNY** | **Mudanya-Bursa** | **4.57** | **345** | *e*Pn | **Pn** | **05 34 18.6** | **+1.0** |
| **KCTX** | **Karacabey (Bur** | **4.59** | **340** | *e*PN | **Pn** | **05 34 18.8** | **+0.8** |
| **KCTX** | **Karacabey (Bur** | **4.59** | **340** | *e*Pn | **Pn** | **05 34 18.8** | **+0.8** |
| **GONE** | **Gonen-Balikesi** | **4.61** | **333** | *e*PN | **Pn** | **05 34 19.0** | **+0.8** |
| **GONE** | **Gonen-Balikesi** | **4.61** | **333** | *e*Pn | **Pn** | **05 34 19.0** | **+0.8** |
| **YAYL** | **Yayladag** | **4.63** | **87** | *i* P | **Pn** | **05 34 18.7** | **+0.1** |
| YAYL | | | | *i* S | **Sn** | **05 35 11.3** | **+0.1** |
| **YAYL** | **Yayladag** | **4.63** | **87** | P | **Pn** | **05 34 18.7** | **+0.1** |
| YAYL | | | | S | **Sn** | **05 35 11.3** | **+0.1** |
| **SIVA** | **Sivas** | **4.65** | **260** | *e*P | **Pn** | **05 34 20.2** | **+1.4** |
| **SIVA** | **Sivas** | **4.65** | **260** | *e*P | **Pn** | **05 34 20.2** | **+1.4** |
| **ARMT** | **Armutlu** | **4.76** | **346** | *e*PN | **Pn** | **05 34 20.4** | **+0.1** |
| **ARMT** | **Armutlu** | **4.76** | **346** | *e*Pn | **Pn** | **05 34 20.4** | **+0.1** |
| **SIGR** | **SIGRI** | **4.86** | **313** | *e*P | **Pn** | **05 34 21.7** | **+0.1** |
| **SIGR** | **SIGRI** | **4.86** | **313** | *e*P | **Pn** | **05 34 21.7** | **+0.1** |
| **MHLO** | **Agia Marina, M** | **4.90** | **280** | *e*P | **Pn** | **05 34 23.4** | **+1.3** |
| **MHLO** | **Agia Marina, M** | **4.90** | **280** | *e*P | **Pn** | **05 34 23.4** | **+1.3** |
| **SERI** | **Serifos** | **4.91** | **286** | *e*P | **Pn** | **05 34 23.4** | **+1.1** |
| **SERI** | **Serifos** | **4.91** | **286** | *e*P | **Pn** | **05 34 23.4** | **+1.1** |
| **BTCH** | **Batrach** | **4.92** | **87** | *e*P | **Pn** | **05 34 22.3** | **-0.2** |
| BTCH | | | | *e*S | **Sn** | **05 35 16.0** | **-2.1** |
| | comp=N,130nm,0.5s | | | | | | |
| **BIDA** | **Albida** | **4.92** | **99** | *e*P | **Pn** | **05 34 22.1** | **-0.5** |
| BIDA | | | | *e*S | **Sn** | **05 35 14.8** | **-3.6** |
| BIDA | | | | AML | AML | 05 35 32.7 | |
| | comp=N,260nm,0.5s | | | | | | |
| BIDA | | | | AML | AML | 05 35 33.4 | |
| | comp=E,207nm,0.4s | | | | | | |
| **BIDA** | **Albida** | **4.92** | **99** | *e*P | **Pn** | **05 34 22.1** | **-0.5** |
| BIDA | | | | *e*S | **Sn** | **05 35 14.8** | **-3.6** |
| | comp=E,207nm,0.4s | | | | | | |
| **EZN** | **Ezine** | **5.03** | **321** | *e*PN | **Pn** | **05 34 25.2** | **+1.2** |
| **EZN** | **Ezine** | **5.03** | **321** | *e*Pn | **Pn** | **05 34 25.2** | **+1.2** |
| **MMAI** | **Mount Meron Ar** | **5.07** | **124** | P | **Pn** | **05 34 25.2** | **+0.6** |
| | comp=E,33nm,0.3s,baz=301,slow=12,SNR=49 | | | | | | |
| MMAI | | | | S | **Sn** | **05 35 19.9** | **-2.0** |
| | comp=E,33nm,0.3s,baz=311,slow=24,SNR=7.4 | | | | | | |
| **VAM** | **Vamos** | **5.07** | **266** | *e*P | **Pn** | **05 34 26.9** | **+2.3** |
| **VAM** | **Vamos** | **5.07** | **266** | *e*P | **Pn** | **05 34 26.9** | **+2.3** |
| **HAWK** | **Haweek** | **5.12** | **104** | *e*P | **Pn** | **05 34 25.4** | **0.0** |
| HAWK | | | | *e*S | **Sn** | **05 35 20.8** | **-2.4** |
| HAWK | | | | AML | AML | 05 35 23.0 | |
| | comp=E,33nm,0.4s | | | | | | |
| HAWK | | | | AML | AML | 05 35 23.1 | |
| | comp=N,60nm,0.6s | | | | | | |
| **HAWK** | **Haweek** | **5.12** | **104** | *e*P | **Pn** | **05 34 25.4** | **0.0** |
| HAWK | | | | *e*S | **Sn** | **05 35 20.8** | **-2.4** |
| | comp=N,60nm,0.6s | | | | | | |
| **BRBR** | **Barbar** | **5.23** | **117** | *e*P | **Pn** | **05 34 27.1** | **+0.1** |
| BRBR | | | | *e*S | **Sn** | **05 35 22.5** | **-3.6** |
| BRBR | | | | AML | AML | 05 35 28.5 | |
| | comp=N,59nm,0.4s | | | | | | |
| **BRBR** | **Barbar** | **5.23** | **117** | *e*P | **Pn** | **05 34 27.1** | **+0.1** |
| BRBR | | | | *e*S | **Sn** | **05 35 22.5** | **-3.6** |
| | comp=N,59nm,0.4s | | | | | | |
| **IMMV** | **Iera Moni Meta** | **5.24** | **266** | *e*P | **Pn** | **05 34 28.9** | **+2.0** |
| **IMMV** | **Iera Moni Meta** | **5.24** | **266** | *e*P | **Pn** | **05 34 28.9** | **+2.0** |
| **LPK** | **Lapseki** | **5.26** | **328** | *e*PN | **Pn** | **05 34 28.3** | **+1.2** |
| **LPK** | **Lapseki** | **5.26** | **328** | *e*Pn | **Pn** | **05 34 28.3** | **+1.2** |
| **RKY** | **Sarkoy-Tekirda** | **5.36** | **333** | *e*PN | **Pn** | **05 34 29.1** | **+0.5** |
| **RKY** | **Sarkoy-Tekirda** | **5.36** | **333** | *e*Pn | **Pn** | **05 34 29.1** | **+0.5** |
| **GELI** | **Tayfur-Gelibol** | **5.41** | **326** | *e*PN | **Pn** | **05 34 29.9** | **+0.8** |
| **GELI** | **Tayfur-Gelibol** | **5.41** | **326** | *e*Pn | **Pn** | **05 34 29.9** | **+0.8** |
| **KMRS** | **Kahramanmaras** | **5.45** | **72** | *e*PN | **Pn** | **05 34 31.2** | **+1.4** |
| **KMRS** | **Kahramanmaras** | **5.45** | **72** | *e*Pn | **Pn** | **05 34 31.2** | **+1.4** |
| **GADA** | **Gvkgeada** | **5.52** | **321** | *e*PN | **Pn** | **05 34 31.5** | **+0.8** |
| **GADA** | **Gvkgeada** | **5.52** | **321** | *e*Pn | **Pn** | **05 34 31.5** | **+0.8** |
| **SLVT** | **Silivri** | **5.54** | **343** | *e*PN | **Pn** | **05 34 32.3** | **+1.3** |
| **SLVT** | **Silivri** | **5.54** | **343** | *e*Pn | **Pn** | **05 34 32.3** | **+1.3** |
| **HMAT** | **Matruh** | **5.58** | **211** | S | **Sn** | **05 35 30.2** | **-4.1** |
| | baz=212 | | | | | | |
| **HMAT** | **Matruh** | **5.58** | **211** | S | **Sn** | **05 35 30.2** | **-4.1** |
| **TOTH** | **TOTAH** | **5.60** | **116** | *e*P | **Pn** | **05 34 33.6** | **+1.7** |
| TOTH | | | | *e*S | **Sn** | **05 35 32.0** | **-3.0** |
| TOTH | | | | AML | AML | 05 35 34.2 | |
| | comp=E,29nm,0.3s | | | | | | |
| TOTH | |

**IDC 15 05:39:18.7±5.1, 20°14S×175°21W, h0km, mb4.4/3, mb1 4.6/3, mb1mx3.9/26, mbtmp4.4/3, Error ellipse: s-maj=244.1km s-min=82.2km az=158.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CTA** | **Charters Tower** | **36.13** | **263** | P | P | 05 46 24.1 | +1.2 |
| | 4.2nm,0.4s,baz=97,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **47.15** | **256** | P | P | 05 47 52.8 | -0.4 |
| | 2.5nm,0.6s,baz=94,slow=7.7,SNR=27 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.24** | **261** | P | P | 05 47 52.9 | -1.1 |
| | 2.2nm,0.6s,baz=98,slow=8.6,SNR=19 | | | | | | |
| **AKASG** | **Malin Array Be** | **143.91** | **333** | PKP | PKPdf | 05 58 55.5 | -0.4 |
| | 0.1nm,0.2s,baz=44,slow=4.8,SNR=6.2 | | | | | | |

*ISCJB 15 05:43:35.2±0.8, 7°.4N±0°.1×94°.14E±0°.08, h20km, mb4.0/14, MS3.4/6, Error ellipse: s-maj=18.3km s-min=6.9km az=33.2*

*IDC 15 05:43:36.7±0.9, 7°.73N×93°.65E, h0km, mb4.0/12, mb1 4.2/13, mb1mx4.0/37, mbtmp4.0/13, ML4.5/1, MS3.3/8, Ms1 3.3/8, ms1mx3.0/34, Error ellipse: s-maj=34.9km s-min=18.2km az=52.0*

*NEIC 15 05:43:39.5±0.6, 7°.42N×94°.08E, h35km, mb4.2/2, Error ellipse: s-maj=12.8km s-min=8.6km az=220.0*

**ISC 15 05:43:37.0±0.9, 7°.4N±0°.1×94°.1E±0°.1, h20km, n37, σ1s08/29, mb4.1/14, MS3.3/6, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KULM** | **Kulim** | **6.87** | **107** | *e*Pn | **Pn** | **05 45 17.8** | **+1.0** |
| | 16nm,0.4s | | | | | | |
| KULM | | | | *e*Sn | **Sn** | **05 46 33.1** | **-1.4** |
| **IPM** | **Ipoh** | **7.50** | **112** | *e*Pn | **Pn** | **05 45 25.9** | **+0.5** |
| | 17nm,0.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **12.01** | **23** | Pn | **Pn** | **05 46 27.0** | **-0.2** |
| | 0.9nm,0.3s,baz=213,slow=15,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 05 50 57.9 | |
| | comp=Z,97nm,18.2s,baz=188,slow=37 | | | | | | |
| **CHTO** | **Chiang Mai** | **12.33** | **22** | *e*Pn | **Pn** | **05 46 32.0** | **+0.4** |
| **PALK** | **Pallekele** | **13.24** | **270** | LR | LR | 05 51 13.4 | |
| | comp=Z,109nm,20.6s,baz=116,slow=36 | | | | | | |
| **ODAN** | **Odare** | **20.40** | **343** | *e*P | **P** | **05 48 13.4** | **+0.3** |
| | 14nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **20.73** | **341** | *e*P | **P** | **05 48 17.7** | **+1.1** |
| | 42nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **20.77** | **344** | *e*P | **P** | **05 48 17.1** | **-0.1** |
| | 12nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **21.70** | **339** | *e*P | **P** | **05 48 29.1** | **+1.8** |
| | 12nm,0.6s | | | | | | |
| **PKIN** | **Phulchoki** | **21.71** | **339** | *e*P | **P** | **05 48 29.1** | **+1.8** |
| **DMN** | **Daman** | **21.85** | **338** | *e*P | **P** | **05 48 31.3** | **+2.6** |
| **GUN** | **Gumba** | **21.85** | **340** | *e*P | **P** | **05 48 27.5** | **-1.4** |
| | 37nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **21.95** | **339** | *e*P | **P** | **05 48 31.1** | **+1.3** |
| **GKN** | **Gorkha** | **22.38** | **338** | *e*P | **P** | **05 48 33.2** | **-1.1** |
| **LSA** | **Lhasa** | **22.39** | **353** | *e*P | **P** | **05 48 36.3** | **+1.6** |
| | 7.5nm,0.6s | | | | | | |
| **KOLN** | **Koldanda** | **22.58** | **335** | *e*P | **P** | **05 48 36.5** | **-0.1** |
| | 13nm,0.7s | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.16** | **236** | T | T | 06 15 59.3 | |
| | baz=54,slow=75,SNR=78 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.16** | **236** | T | T | 06 16 10.0 | |
| | baz=54,slow=75,SNR=148 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.18** | **236** | T | T | 06 16 00.6 | |
| | baz=54,slow=75,SNR=114 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.56** | **348** | P | **P** | **05 51 14.4** | **-0.7** |
| | 3.3nm,0.7s,baz=167,slow=8.0,SNR=16 | | | | | | |
| **SONM** | **Songino Array** | **41.67** | **13** | P | **P** | **05 51 23.9** | **-0.5** |
| | 1.7nm,0.8s,baz=201,slow=7.6,SNR=4.0 | | | | | | |
| **KSRS** | **Korea Array** | **42.90** | **41** | LR | LR | 06 11 11.3 | |
| | comp=Z,29nm,19.9s,baz=243,slow=39 | | | | | | |
| **GEYT** | **Alibeck** | **44.52** | **319** | P | **P** | **05 51 46.6** | **-0.8** |
| | 1.9nm,0.4s,baz=139,slow=7.7,SNR=2.7 | | | | | | |
| GEYT | | | | LR | LR | 06 12 50.4 | |
| | comp=Z,18nm,18.3s,baz=115,slow=40 | | | | | | |
| **KURK** | **Kurchatov** | **45.08** | **346** | *e*P | **P** | **05 51 51.7** | **+0.1** |
| | 2.3nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **47.05** | **353** | P | **P** | **05 52 06.8** | **-0.2** |
| | 3.8nm,0.4s,baz=176,slow=8.6,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.04** | **125** | P | P | 05 52 23.7 | +8.4 |
| | 0.5nm,0.5s,baz=305,slow=8.6,SNR=6.0 | | | | | | |
| WRA | | | | LR | LR | 06 15 33.7 | |
| | comp=Z,103nm,18.0s,baz=200,slow=40 | | | | | | |
| **ASAR** | **Alice Springs** | **49.66** | **130** | P | P | 05 52 33.5 | +5.8 |
| | 0.2nm,0.3s,baz=308,slow=8.1,SNR=4.5 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **57.28** | **264** | LR | LR | 06 15 07.5 | |
| | comp=Z,26nm,19.5s,baz=94,slow=33 | | | | | | |
| **KBZ** | **Khabaz** | **57.40** | **318** | LR | LR | 06 21 07.0 | |
| | comp=Z,22nm,19.3s,baz=2.0,slow=40 | | | | | | |
| **BRTR** | **Keskin Array B** | **62.69** | **311** | P | **P** | **05 54 00.3** | **-0.6** |
| | 0.4nm,0.5s,baz=124,slow=7.2,SNR=3.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.50** | **322** | P | **P** | **05 54 36.8** | **-1.1** |
| | 0.2nm,0.3s,baz=88,slow=6.4,SNR=2.5 | | | | | | |
| **FINES** | **FINESS Array B** | **73.12** | **332** | P | **P** | **05 55 05.8** | **0.0** |
| | 4.4nm,0.7s,baz=123,slow=7.0,SNR=7.2 | | | | | | |
| FINES | | | | LR | LR | 06 31 02.9 | |
| | comp=Z,41nm,19.9s,baz=98,slow=39 | | | | | | |
| **ARCES** | **ARCESS Array B** | **75.71** | **340** | P | **P** | **05 55 21.4** | **+0.6** |
| | 3.7nm,0.9s,baz=90,slow=5.4,SNR=4.3 | | | | | | |
| **GERES** | **GERESS Array B** | **78.14** | **318** | P | **P** | **05 55 36.0** | **+0.9** |
| | 0.3nm,0.3s,baz=96,slow=6.0,SNR=4.4 | | | | | | |
| **NB2** | **NORSAR Subarra** | **80.13** | **331** | P | **P** | **05 55 45.9** | **+0.3** |
| | comp=Z,2.4nm,0.8s,baz=93,slow=5.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **80.13** | **331** | P | **P** | **05 55 45.4** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=93,slow=5.4,SNR=3.5 | | | | | | |
| **CPUP** | **Villa Florida** | **146.88** | **232** | PKPbc | **PKPbc** | **06 03 19.7** | **+0.9** |
| | comp=Z,1.3nm,0.9s,baz=260,slow=14,SNR=3.0 | | | | | | |

*IDC 15 05:59:17.8±3.2, 36°.26N×70°.84E, h189km±30km, mb3.5/9, mb1 3.6/15, mb1mx3.3/45, mbtmp4.1/15, MS3.0/3, Ms1 3.0/3, ms1mx2.5/28, Error ellipse: s-maj=23.6km s-min=16.8km az=12.0*

*ISCJB 15 05:59:18.2±0.3, 36°.49N±0°.03×70°.75E±0°.05, h188km, mb3.7/8, Error ellipse: s-maj=6.4km s-min=3.4km az=161.2*

*NNC 15 05:59:24.4±2.9, 36°.93N×70°.59E, h194km±18km, mb3.4, mpv4.4, Error ellipse: s-maj=28.8km s-min=13.4km az=163.0*

**ISC 15 05:59:18.6±0.6, 36°.49N±0°.05×70°.79E±0°.06, h188km, n58, σ1s55/62, mb3.7/8, 10C-12D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.79** | **327** | ⇑P | **Pn** | **06 00 06.1** | **+0.9** |
| | 194nm,0.5s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **06 00 39.4** | **-2.3** |
| | 670nm,0.4s | | | | | | |
| **CEP** | **Cherat** | **2.81** | **161** | ⇓P | **Pn** | **06 00 07.5** | **+2.0** |
| CEP | | | | S | **Sn** | **06 00 43.0** | **+0.9** |
| **CHCP** | **Chirah Chowk** | **3.47** | **144** | ⇓P | **Pn** | **06 00 15.6** | **+2.1** |
| **THW** | **Thamme Wali** | **3.77** | **168** | ⇓P | **Pn** | **06 00 18.6** | **+1.5** |
| **SFK** | **Sufi-Kurgan** | **4.12** | **30** | ⇑P | **Pn** | **06 00 23.7** | **+2.1** |
| | 50nm,0.3s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **06 01 11.0** | **-0.1** |
| | 394nm,0.4s | | | | | | |
| **SARP** | **Sargodha** | **4.81** | **161** | ⇓P | **Pn** | **06 00 30.9** | **+0.6** |
| **AML** | **Almayashu** | **6.07** | **21** | P | **Pn** | **06 00 48.2** | **+1.3** |
| | SNR=78 | | | | | | |
| **MNAS** | **Manas** | **6.14** | **12** | ⇑P | **Pn** | **06 00 48.9** | **+1.4** |
| | 13nm,0.3s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **06 01 56.3** | **-1.5** |
| | 444nm,0.6s | | | | | | |
| **UCH** | **Uchtor** | **6.42** | **26** | P | **Pn** | **06 00 53.0** | **+1.5** |
| | SNR=46 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.58** | **20** | P | **Pn** | **06 00 54.9** | **+1.5** |
| | SNR=32 | | | | | | |
| **KK31** | **Karatay Array** | **6.61** | **358** | P | **Pn** | **06 00 54.4** | **+0.8** |
| | 6.3nm,0.3s,baz=182,slow=12,SNR=111 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **06 02 05.4** | **-3.5** |
| | 108nm,0.3s,baz=190,slow=22 | | | | | | |
| **AAK** | **Ala-Archa** | **6.77** | **24** | ⇑P | **Pn** | **06 00 57.1** | **+1.3** |
| | 7.2nm,0.3s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **06 02 11.5** | **-1.3** |
| | 108nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **6.77** | **24** | P | **Pn** | **06 00 57.5** | **+1.7** |
| | 6.3nm,0.3s,baz=167,slow=4.9,SNR=43 | | | | | | |
| AAK | | | | S | **Sn** | **06 02 12.2** | **-0.6** |
| | 16nm,0.3s,baz=343,slow=20,SNR=38 | | | | | | |
| **AAK** | **Ala-Archa** | **6.77** | **24** | P | **Pn** | **06 00 57.6** | **+1.7** |
| | SNR=25 | | | | | | |
| **KBK** | **Karagaybulak** | **6.95** | **26** | P | **Pn** | **06 00 59.9** | **+1.8** |
| | SNR=9.7 | | | | | | |
| **ULHL** | **Ulahol** | **7.13** | **35** | P | **Pn** | **06 01 02.0** | **+1.4** |
| | SNR=9.1 | | | | | | |
| **CHMS** | **Chumysh** | **7.18** | **24** | P | **Pn** | **06 01 02.6** | **+1.5** |
| | SNR=8.6 | | | | | | |
| **USP** | **Ospenovka** | **7.35** | **22** | P | **Pn** | **06 01 04.5** | **+1.2** |
| | SNR=8.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.42** | **28** | ⇓P | **Pn** | **06 01 05.6** | **+1.3** |
| | 13nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **06 02 24.5** | **-3.6** |
| | 19nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.42** | **28** | P | **Pn** | **06 01 05.7** | **+1.3** |
| | SNR=26 | | | | | | |
| **SMLA** | **Simla** | **7.53** | **133** | *i* P | **Pn** | **06 01 05.9** | **+0.3** |
| SMLA | | | | *i* S | **Sn** | **06 02 26.8** | **-3.7** |
| SMLA | | | | AML | AML | 06 02 30.3 | |
| | comp=N,153nm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 06 02 30.6 | |
| | comp=E,129nm,0.3s | | | | | | |
| **KKR** | **Kurukshetra** | **8.23** | **140** | *e*S | Sn | 06 02 40.0 | -7.4 |
| **BHGR** | **Bahadurgarh** | **9.34** | **145** | *e*S | Sn | 06 03 06.3 | -7.6 |
| **KHET** | **Khetri** | **9.40** | **152** | *e*P | **Pn** | **06 01 28.4** | **-1.8** |
| KHET | | | | *e*S | Sn | 06 03 06.6 | -8.6 |
| KHET | | | | AML | AML | 06 03 10.0 | |
| | comp=E,61nm,0.5s | | | | | | |
| KHET | | | | AML | AML | 06 03 11.0 | |
| | comp=N,88nm,0.6s | | | | | | |
| **NDI** | **New Delhi** | **9.48** | **143** | *ex* | Pn | 06 01 26.5 | -4.8 |
| NDI | | | | *e*S | Sn | 06 03 11.0 | -6.1 |
| **JASL** | **Jaisalmer** | **9.53** | **179** | *e*S | Sn | 06 03 08.9 | -10 |
| **GEYT** | **Alibeck** | **10.21** | **282** | P | **Pn** | **06 01 42.3** | **+1.6** |
| | comp=N,1.8nm,0.3s,baz=99,slow=16,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.40** | **36** | P | **Pn** | **06 02 21.7** | **+0.3** |
| | comp=N,0.2nm,0.3s,baz=221,slow=11,SNR=6.5 | | | | | | |
| **KOLN** | **Koldanda** | **13.89** | **125** | *e*P | **Pn** | **06 02 27.3** | **-0.6** |
| **GKN** | **Gorkha** | **14.44** | **122** | *e*P | **Pn** | **06 02 34.7** | **+0.1** |
| | comp=N,32nm,0.3s | | | | | | |
| **DMN** | **Daman** | **15.01** | **122** | *e*P | **Pn** | **06 02 41.6** | **-0.1** |
| **KKN** | **Kakani** | **15.01** | **121** | *e*P | **Pn** | **06 02 41.8** | **+0.1** |
| | comp=N,34nm,0.6s | | | | | | |
| **AB31** | **Akbulak array** | **15.02** | **332** | ⇓P | **Pn** | **06 02 40.6** | **-0.7** |
| | comp=N,3.4nm,0.5s,baz=143,slow=11,SNR=74 | | | | | | |
| AB31 | | | | ⇑S | Sn | 06 05 19.4 | -10 |
| | comp=N,3.4nm,0.6s,baz=164,slow=20,SNR=6.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.19** | **19** | P | **Pn** | **06 02 43.0** | **-0.4** |
| | comp=N,0.3nm,0.3s,baz=208,slow=12,SNR=11 | | | | | | |
| **PKIN** | **Phulchoki** | **15.23** | **122** | *e*P | **Pn** | **06 02 44.8** | **+0.4** |
| | comp=N,30nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **15.24** | **122** | *e*P | **Pn** | **06 02 45.3** | **+0.7** |
| **GUN** | **Gumba** | **15.36** | **120** | *e*P | **Pn** | **06 02 46.3** | **+0.3** |
| | comp=N,14nm,0.3s | | | | | | |
| **VOSK** | **Vostochnaya** | **16.24** | **0** | ⇓P | **P** | **06 02 56.3** | **+0.6** |
| | comp=N,3.1nm,0.4s | | | | | | |
| **ZRNK** | **Zerenda** | **16.51** | **356** | ⇑P | **Pn** | **06 02 60.0** | **+0.6** |
| | comp=N,7.4nm,0.5s | | | | | | |
| **BVA0** | **Borovoye Array** | **16.54** | **359** | P | **Pn** | **06 03 00.3** | **+0.5** |
| | comp=N,3.3nm,0.5s,baz=165,slow=8.9,SNR=26 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.54** | **359** | P | **Pn** | **06 03 00.6** | **+0.9** |
| | comp=N,2.8nm,0.3s,baz=173,slow=13,SNR=25 | | | | | | |
| **BRVK** | **Borovoye** | **16.57** | **359** | ⇑P | **P** | **06 03 00.2** | **+0.9** |
| | comp=N,14nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.71** | **331** | ⇑P | **Pn** | **06 03 02.4** | **+0.6** |
| | comp=N,33nm,0.9s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.71** | **331** | P | **Pn** | **06 03 02.5** | **+0.7** |
| | comp=N,4.0nm,0.3s,baz=146,slow=12,SNR=56 | | | | | | |
| AKTO | | | | S | **S** | **06 06 01.2** | **-4.2** |
| | comp=N,0.2nm,0.3s,baz=300,slow=20,SNR=3.1 | | | | | | |
| **TAPN** | **Taplejung** | **16.99** | **118** | *e*P | **Pn** | **06 03 07.1** | **+1.4** |
| | comp=N,15nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **17.06** | **120** | *e*P | **Pn** | **06 03 08.1** | **+1.7** |
| | comp=N,9.7nm,0.4s | | | | | | |
| **CHKZ** | **Chkalovo** | **17.19** | **360** | ⇓P | **P** | **06 03 07.2** | **+1.1** |
| | comp=N,2.8nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.00** | **25** | P | **P** | **06 03 37.7** | **+1.2** |
| | comp=N,8.9nm,0.5s,baz=220,slow=12,SNR=18 | | | | | | |
| **ARU** | **Arti** | **21.59** | **341** | P | **P** | **06 03 55.0** | **+1.6** |
| | comp=N,0.4nm,0.3s,baz=288,slow=19,SNR=2.5 | | | | | | |
| ARU | | | | LR | LR | 06 14 08.6 | |
| | comp=N,21nm,18.9s,baz=322,slow=41 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **29.18** | **274** | LR | LR | 06 19 09.8 | |
| | comp=N,26nm,20.8s,baz=215,slow=41 | | | | | | |
| **AKASG** | **Malin Array Be** | **32.82** | **309** | P | **P** | **06 05 35.2** | **+1.2** |
| | comp=N,0.7nm,0.6s,baz=102,slow=9.8,SNR=2.0 | | | | | | |
| **FINES** | **FINESS Array B** | **37.40** | **326** | P | **P** | **06 06 13.8** | **+0.8** |
| | comp=N,6.7nm,1.1s,baz=116,slow=8.7,SNR=6.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.09** | **338** | P | **P** | **06 06 44.9** | **+1.4** |
| | comp=N,3.8nm,0.8s,baz=108,slow=8.6,SNR=2.9 | | | | | | |
| **GERES** | **GERESS Array B** | **42.80** | **305** | LR | LR | 06 26 21.0 | |
| | comp=N,41nm,18.5s,baz=268,slow=38 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.29** | **323** | P | **P** | **06 07 09.7** | **+0.4** |
| | comp=N,0.5nm,0.4s,baz=97,slow=7.7,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.55** | **269** | P | **P** | **06 09 40.8** | **-1.4** |
| | comp=N,0.7nm,0.4s,baz=53,slow=6.1,SNR=19 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.13** | **122** | P | **P** | **06 11 17.2** | **-1.2** |
| | comp=N,0.8nm,0.5s,baz=324,slow=4.9,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **84.39** | **125** | P | **P** | **06 11 28.5** | **-1.4** |
| | comp=N,0.8nm,0.6s,baz=311,slow=5.1,SNR=11 | | | | | | |

*CSEM 15 06:08:35.9, 39°.54N×29°.74W, h10km, ML3.5, After PDA*

**PDA 15 06:08:35.9±0.9, 39°.54N×29°.74W, h10km, MD3.8, ML3.5, Error ellipse: s-maj=5.3km s-min=2.2km az=27.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H07N1** | **FLORES T-PHASE** | **1.08** | **279** | *e*P | Pg | 06 08 52.4 | -4.3 |
| **H07S1** | **FLORES T-PHASE** | **1.15** | **263** | *e*P | Pb | 06 08 53.6 | -4.3 |
| H07S1 | | | | *e*S | Sb | 06 09 06.1 | -6.8 |
| **PCED** | **Cedros** | **1.21** | **138** | *e*P | Pn | 06 08 54.4 | -4.5 |
| PCED | | | | *e*S | Sb | 06 09 07.8 | -6.9 |
| PCED | | | | A | A | 06 09 13.8 | |
| | 274nm,0.5s | | | | | | |
| **PCED** | **Cedros** | **1.21** | **138** | *e*P | Pn | 06 08 54.4 | -4.5 |
| PCED | | | | *e*S | Sb | 06 09 07.8 | -6.9 |
| **CALA** | **Caldeira** | **1.25** | **140** | *e*P | Pn | 06 08 55.1 | -4.4 |
| CALA | | | | *e*S | Sb | 06 09 08.8 | -7.1 |
| **CALA** | **Caldeira** | **1.25** | **140** | *e*P | Pn | 06 08 55.1 | -4.4 |
| CALA | | | | *e*S | Sb | 06 09 08.8 | -7.1 |
| **HOR** | **Horta** | **1.33** | **139** | *e*P | Pn | 06 08 55.8 | -4.7 |
| HOR | | | | *e*S | Sb | 06 09 10.9 | -7.0 |
| **HOR** | **Horta** | **1.33** | **139** | *e*P | Pn | 06 08 55.8 | -4.7 |
| HOR | | | | *e*S | Sb | 06 09 10.9 | -7.0 |
| **ROSA** | **Rosais** | **1.42** | **125** | *e*P | Pn | 06 08 57.3 | -4.5 |
| ROSA | | | | *e*S | Sn | 06 09 12.7 | -7.9 |
| ROSA | | | | A | A | 06 09 18.9 | |
| | 152nm,0.4s | | | | | | |
| **ROSA** | **Rosais** | **1.42** | **125** | *e*P | Pn | 06 08 57.3 | -4.5 |
| ROSA | | | | *e*S | Sn | 06 09 12.7 | -7.9 |
| **PCAN** | **Candelaria** | **1.45** | **137** | *e*P | Pn | 06 08 57.5 | -4.7 |
| PCAN | | | | *e*S | Sn | 06 09 14.0 | -7.3 |
| PCAN | | | | A | A | 06 09 17.0 | |
| | 446nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.45** | **137** | *e*P | Pn | 06 08 57.5 | -4.7 |
| PCAN | | | | *e*S | Sn | 06 09 14.0 | -7.3 |
| **PGRA** | **Graciosa** | **1.45** | **110** | *e*P | Pn | 06 08 57.4 | -4.8 |
| PGRA | | | | *e*S | Sn | 06 09 13.0 | -8.4 |
| PGRA | | | | A | A | 06 09 14.0 | |
| | 202nm,0.5s | | | | | | |
| **PGRA** | **Graciosa** | **1.45** | **110** | *e*P | Pn | 06 08 57.4 | -4.8 |
| PGRA | | | | *e*S | Sn | 06 09 13.0 | -8.4 |
| **PICO** | **Pico** | **1.45** | **135** | *e*P | Pn | 06 08 57.6 | -4.7 |
| PICO | | | | *e*S | Sn | 06 09 13.9 | -7.6 |
| **PICO** | **Pico** | **1.45** | **135** | *e*P | Pn | 06 08 57.6 | -4.7 |
| PICO | | | | *e*S | Sn | 06 09 13.9 | -7.6 |
| **PPNO** | **Prainha do Nor** | **1.56** | **132** | *e*P | Pn | 06 08 58.9 | -4.9 |
| PPNO | | | | *e*S | Sn | 06 09 16.9 | -7.3 |
| PPNO | | | | A | A | 06 09 22.4 | |
| | 204nm,0.4s | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.56** | **132** | *e*P | Pn | 06 08 58.9 | -4.9 |
| PPNO | | | | *e*S | Sn | 06 09 16.9 | -7.3 |
| **PMAN** | **Manadas** | **1.57** | **125** | *e*P | Pn | 06 08 59.1 | -4.7 |
| PMAN | | | | *e*S | Sn | 06 09 16.5 | -7.7 |
| **ADH** | **Angra Heroismo** | **2.14** | **114** | *e*P | Pn | 06 09 07.4 | -4.2 |
| ADH | | | | A | A | 06 09 08.9 | |
| | 60nm,0.6s | | | | | | |
| ADH | | | | *e*S | Sn | 06 09 30.4 | -7.8 |
| ADH | | | | A | A | 06 09 37.0 | |
| | 28nm,0.3s | | | | | | |
| **ADH** | **Angra Heroismo** | **2.14** | **114** | *e*P | Pn | 06 09 07.4 | -4.2 |
| ADH | | | | *e*S | Sn | 06 09 30.4 | -7.8 |
| **PSET** | **Sete Cidades** | **3.58** | **117** | *e*P | Pn | 06 09 27.5 | -4.0 |
| PSET | | | | *e*S | Sn | 06 10 05.8 | -8.1 |
| PSET | | | | A | A | 06 10 08.4 | |
| | 35nm,0.6s | | | | | | |
| **PSET** | **Sete Cidades** | **3.58** | **117** | *e*P | Pn | 06 09 27.5 | -4.0 |
| PSET | | | | *e*S | Sn | 06 10 05.8 | -8.1 |
| **PDA** | **Ponta Delgada** | **3.66** | **118** | *e*P | Pn | 06 09 28.5 | -4.0 |
| **PDA** | **Ponta Delgada** | **3.66** | **118** | *e*P | Pn | 06 09 28.5 | -4.0 |
| **GRON** | **Grota Negra** | **3.73** | **117** | *e*P | Pn | 06 09 31.1 | -2.6 |
| **BART** | **Pico Bartolome** | **3.98** | **115** | *e*P | Pn | 06 09 32.7 | -4.4 |
| **BART** | **Pico Bartolome** | **3.98** | **115** | *e*P | Pn | 06 09 32.7 | -4.4 |
| **PSMA** | **Santa Maria** | **4.42** | **124** | *e*P | Pn | 06 09 38.9 | -4.2 |
| **PSMN** | **Pico do Norte,** | **4.46** | **123** | *e*P | Pn | 06 09 39.6 | -4.0 |
| **PSMN** | **Pico do Norte,** | **4.46** | **123** | *e*P | Pn | 06 09 39.6 | -4.0 |

**MEX 15 06:49:00.2±0.6, 15°.24N×92°.87W, h16km±9km, MD3.5, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.57** | **324** | *i* P | Pg | 06 49 10.0 | -1.6 |
| PCIG | | | | *i* S | Sg | 06 49 16.1 | -3.1 |
| **CCIG** | **Comitan** | **1.25** | **34** | *e*P | Pn | 06 49 19.8 | -3.5 |
| CCIG | | | | *i* S | Sb | 06 49 34.4 | -5.5 |

*NNC 15 06:59:51.9±4.5, 54°.17N×86°.46E, h0km, mb3.6, mpv3.3, Error ellipse: s-maj=52.5km s-min=40.4km az=162.0*

**IDC 15 06:59:52.0±2.4, 54°.17N×86°.26E, h0km, mb1 3.4/2, mb1mx3.1/38, mbtmp3.4/2, ML3.2/2, 3C-2D, Error ellipse: s-maj=18.9km s-min=11.8km az=57.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.88** | **256** | *i* | | 07 06 40.0 | |
| | baz=74,slow=324,SNR=1.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.88** | **256** | Pg | Pg | 07 00 07.5 | -1.4 |
| | 12nm,0.3s,baz=73,slow=16,SNR=73 | | | | | | |
| ZALV | | | | Lg | Lg | 07 00 21.4 | |
| | 10nm,0.3s,baz=78,slow=31,SNR=16 | | | | | | |
| **KURK** | **Kurchatov** | **5.82** | **237** | ⇓Pn | Pn | 07 01 20.3 | +0.8 |
| | 5.9nm,1.1s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 07 02 59.3 | |
| | 7.7nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.92** | **236** | ⇑Pn | Pn | 07 01 21.8 | +0.9 |
| | 1.9nm,0.3s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 07 03 03.9 | |
| | 5.4nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.92** | **236** | Pn | Pn | 07 01 22.0 | +1.2 |
| | 0.4nm,0.3s,baz=54,slow=14,SNR=12 | | | | | | |
| KURBB | | | | Lg | Lg | 07 03 02.1 | |
| | 0.1nm,0.3s,baz=59,slow=32,SNR=5.8 | | | | | | |
| **MK31** | **Makanchi Array** | **7.81** | **200** | Pn | Pn | 07 01 47.8 | +0.9 |
| | 0.1nm,0.2s,baz=27,slow=14,SNR=15 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 07 03 59.4 | |
| | 3.7nm,0.9s,baz=220,slow=43,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.81** | **200** | Pn | Pn | 07 01 47.6 | +0.7 |
| | 0.5nm,0.3s,baz=24,slow=13,SNR=12 | | | | | | |
| MKAR | | | | Lg | Lg | 07 04 02.0 | |
| | 0.1nm,0.3s,baz=34,slow=33,SNR=6.6 | | | | | | |

*IDC 15 07:02:31.6±2.4, 6°.34S×129°.68E, h0km, mb3.7/1, mb1 3.9/3, mb1mx3.5/25, mbtmp3.7/3, ML3.7/2, MS4.1/2, Ms1 4.1/2, ms1mx2.9/29, Error ellipse: s-maj=156.2km s-min=32.1km az=69.0*

*AUST 15 07:03:06.7, 7°.97S×131°.06E, h300km*

**ISC 15 07:02:33.8±1.3, 6°.44S±0°.09×129°.7E±0°.2, h10km, n11, σ1s73/6, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SWI** | **Sorong** | **5.75** | **16** | P | **Sn** | **07 05 06.2** | **+0.9** |
| | baz=7.1,SNR=5.9 | | | | | | |
| **KDU** | **Kakadu** | **6.78** | **157** | P | Pn | 07 04 18.8 | +5.4 |
| | baz=4.9,SNR=15 | | | | | | |
| **KNRA** | **Kununurra** | **9.23** | **186** | P | Pn | 07 04 55.5 | +8.4 |
| | baz=8.0,SNR=4.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.26** | **199** | P | Pn | 07 05 40.1 | +12 |
| | baz=11,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.16** | **162** | Pn | **Pn** | **07 05 53.4** | **-1.2** |
| | 0.3nm,0.3s,baz=344,slow=12,SNR=9.9 | | | | | | |
| WRA | | | | Sn | Sn | 07 08 20.6 | -11 |
| | 0.7nm,0.3s,baz=333,slow=23,SNR=10 | | | | | | |
| **COEN** | **Coen** | **15.21** | **120** | P | **Pn** | **07 06 09.2** | **+0.4** |
| | baz=13,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **17.60** | **167** | P | **P** | **07 06 40.9** | **+0.5** |
| | 0.5nm,0.3s,baz=345,slow=9.8,SNR=27 | | | | | | |
| ASAR | | | | S | Sn | 07 09 47.2 | -8.3 |
| | 0.1nm,0.3s,baz=359,slow=27,SNR=4.4 | | | | | | |
| **WRKA** | **Warakurna** | **18.54** | **184** | P | **Pn** | **07 06 53.2** | **+2.2** |
| | baz=17,SNR=3.2 | | | | | | |
| **RPZ** | **Rata Peaks** | **51.85** | **142** | LR | LR | 07 34 42.1 | |
| | comp=Z,168nm,18.9s,baz=272,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.60** | **327** | P | **P** | **07 13 29.6** | **-1.2** |
| | 0.4nm,0.5s,baz=122,slow=7.7,SNR=4.1 | | | | | | |
| **INK** | **Inuvik** | **98.45** | **22** | LR | LR | 07 57 15.4 | |
| | comp=Z,87nm,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BRVK** | **Borovoye** 4.6nm,0.8s | **6.04** | **303** | ⇑Pn | Pn | 07 37 40.5 | +4.5 |
| BRVK | 7.2nm,0.7s | | | ⇓Sn | Sn | 07 38 45.3 | -0.5 |
| BRVK | 5.1nm,0.6s | | | ⇑Lg | Lg | 07 39 14.5 | |
| **CHKZ** | **Chkalovo** 1.5nm,0.5s | **6.17** | **309** | ⇓Sn | Sn | 07 38 50.0 | +1.0 |
| CHKZ | 5.1nm,0.7s | | | ⇓Lg | Lg | 07 39 22.6 | |
| **ZRNK** | **Zerenda** 0.5nm,0.4s | **6.70** | **300** | ⇓Pn | Pn | 07 37 45.5 | +0.4 |
| ZRNK | 3.9nm,0.6s | | | ⇓Sn | Sn | 07 39 01.4 | -0.7 |
| ZRNK | 5.0nm,0.6s | | | ⇓Lg | Lg | 07 39 35.0 | |
| **PDGK** | **Podgornoye** 7.7nm,0.6s | **6.73** | **175** | ⇑Lg | Lg | 07 39 38.5 | |

*IDC **15** 07:39:00.3±1.6, 18°.67S×69°.25W, h88km±14km, mb4.1/15, mb1 4.3/19, mb1mx4.1/36, mbtmp4.5/19, MS3.0/2, Ms1 3.0/2, ms1mx2.6/22, Error ellipse: s-maj=15.0km s-min=11.1km az=72.0*
*BJI **15** 07:39:01.0, 18°.70S×69°.20W, h104km, mB5.1/5*
*NEIC **15** 07:39:02.0, 18°.83S×69°.36W, h103km, mb4.5/66, After GUC.*
*NEIC Felt at Tacna, Peru.*
*GUC **15** 07:39:02.3±0.4, 18°.83S×69°.36W, h103km±4km, ML4.6*
**ISC 15 07:39:01.7±0.4, 18°.80S±0°.03×69°.39W±0°.06, h103km, n446, σ0°.97/437, mb4.5/78, 4C-3D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNMC** | **Minimini** | **0.38** | **210** | ⇓*i*P | **Pn** | **07 39 19.1** | **+1.7** |
| MNMC | | | | *i* S | **Sn** | **07 39 31.5** | **+2.3** |
| MNMC | | | | AML | AML | 07 39 32.9 | |
| | comp=E,43μm,0.3s | | | | | | |
| **PB13** | **IPOC Station P** | **0.47** | **347** | ⇓*i*P | **Pn** | **07 39 20.3** | **+1.9** |
| PB13 | | | | *i* S | **Sn** | **07 39 33.4** | **+2.7** |
| **ARCH** | **Arica** | **0.91** | **289** | ⇑*i*P | **Pn** | **07 39 22.7** | **+1.3** |
| ARCH | | | | *i* S | **Sn** | **07 39 38.0** | **+1.9** |
| **PB01** | **IPOC Station P** | **2.24** | **182** | ⇑*i*P | **Pn** | **07 39 38.7** | **+1.1** |
| PB01 | | | | *e*S | **Sn** | **07 40 06.0** | **+1.0** |
| PB01 | | | | AML | AML | 07 40 07.4 | |
| | comp=E,1μm,0.2s | | | | | | |
| **LPAZ** | **La Paz** | **2.77** | **26** | P | **Pn** | **07 39 47.8** | **+2.7** |
| | comp=E,37nm,0.3s,baz=218,slow=7.1,SNR=1398 | | | | | | |
| **LPAZ** | **La Paz** | **2.77** | **26** | ⇑*i*P | **Pn** | **07 39 47.8** | **+2.7** |
| LPAZ | | | | *e*S | **Sn** | **07 40 21.2** | **+3.0** |
| **PB07** | **IPOC Station P** | **2.95** | **189** | ⇓*i*P | **Pn** | **07 39 48.6** | **+1.5** |
| PB07 | | | | AML | AML | 07 40 31.2 | |
| | comp=E,2μm,0.8s | | | | | | |
| **ARE** | **Arequipa** | **3.06** | **319** | ⇑*i*P | **Pn** | **07 39 49.2** | **+0.5** |
| ARE | | | | *i* S | **Sn** | **07 40 22.9** | **-1.9** |
| **PB04** | **IPOC Station P** | **3.59** | **191** | AML | AML | 07 41 11.7 | |
| | comp=E,850nm,0.6s | | | | | | |
| **LVC** | **Limon Verde** | **3.83** | **173** | P | **Pn** | **07 40 00.7** | **+1.9** |
| | comp=E,371nm,0.3s,baz=356,slow=13,SNR=63 | | | | | | |
| LVC | | | | S | **Sn** | **07 40 43.6** | **+0.6** |
| | comp=E,2μm,0.3s,baz=55,slow=13,SNR=9.0 | | | | | | |
| **LVC** | **Limon Verde** | **3.83** | **173** | *e*Pn | **Pn** | **07 40 01.2** | **+2.4** |
| LVC | | | | S | **Sn** | **07 40 43.6** | **+0.6** |
| **PB06** | **IPOC Station P** | **3.89** | **182** | AML | AML | 07 41 08.9 | |
| | comp=N,481nm,0.7s | | | | | | |
| **SIV** | **San Ignacio** | **8.42** | **72** | P | Pn | 07 40 59.1 | -1.9 |
| | comp=N,28nm,0.3s,baz=267,slow=12,SNR=218 | | | | | | |
| **NNA** | **Nana** | **9.87** | **312** | P | Pn | 07 41 18.7 | -2.0 |
| | comp=N,1.4nm,0.3s,baz=126,slow=16,SNR=4.5 | | | | | | |
| NNA | | | | S | **Sn** | **07 43 08.3** | **-1.4** |
| | comp=N,2.1nm,0.3s,baz=162,slow=19,SNR=2.9 | | | | | | |
| **NNA** | **Nana** | **9.87** | **312** | *e*Pn | Pn | 07 41 19.1 | -1.6 |
| NNA | | | | S | **Sn** | **07 43 08.3** | **-1.4** |
| NNA | | | | *e*Sn | Sn | 07 43 16.9 | +7.1 |
| **SAML** | **Samuel** | **11.49** | **32** | *e*Pn | Pn | 07 41 39.6 | -3.0 |
| **CFAA** | **Coronel Fontan** | **12.80** | **176** | P | Pn | 07 41 56.9 | -3.0 |
| | comp=N,0.0nm,0.3s,baz=355,slow=13,SNR=7.7 | | | | | | |
| **CPUP** | **Villa Florida** | **13.43** | **126** | P | Pn | 07 42 06.3 | -1.7 |
| | comp=N,0.3nm,0.3s,baz=295,slow=12,SNR=6.2 | | | | | | |
| CPUP | | | | LR | LR | 07 48 25.0 | |
| | comp=N,58nm,21.5s,baz=345,slow=42 | | | | | | |
| **CPUP** | **Villa Florida** | **13.43** | **126** | *e*Pn | **Pn** | **07 42 07.1** | **-1.0** |
| **PTGA** | **Pitinga** | **20.20** | **28** | P | **P** | **07 43 26.1** | **-2.3** |
| | comp=N,14nm,0.3s,baz=307,slow=22,SNR=59 | | | | | | |
| **TRQA** | **Tornquist** | **20.25** | **163** | *e*P | **P** | **07 43 28.4** | **-0.5** |
| | comp=N,5.4nm,0.6s | | | | | | |
| **BDFB** | **Brasilia** | **20.66** | **85** | P | **P** | **07 43 31.8** | **-1.7** |
| | comp=N,19nm,0.4s,baz=251,slow=8.5,SNR=58 | | | | | | |
| **BDFB** | **Brasilia** | **20.66** | **85** | *e*P | **P** | **07 43 32.2** | **-1.3** |
| | comp=N,38nm,0.4s | | | | | | |
| **OTAV** | **Otavalo** | **20.90** | **334** | *e*P | Pn | 07 43 41.1 | +1.0 |
| | comp=N,6.9nm,1.0s | | | | | | |
| **PLCA** | **Paso Flores** | **21.89** | **182** | *e*P | **P** | **07 43 47.1** | **+0.8** |
| | comp=N,16nm,0.9s | | | | | | |
| **RCBR** | **Riachuelo** | **35.08** | **73** | P | **P** | **07 45 45.1** | **-0.2** |
| | comp=N,10.0nm,0.9s,baz=224,slow=7.2,SNR=6.0 | | | | | | |
| RCBR | | | | LR | LR | 08 01 44.1 | |
| | comp=N,36nm,20.2s,baz=178,slow=39 | | | | | | |
| **OBIP** | **Obispado Ponce** | **36.71** | **4** | *e*P | **P** | **07 45 58.2** | **-0.8** |
| | comp=N,10nm,0.6s | | | | | | |
| **CELP** | **Cerrillos** | **36.74** | **4** | *e*P | P | 07 45 57.9 | -1.3 |
| **AOPR** | **Arecibo Observ** | **37.00** | **4** | *e*P | P | 07 45 59.6 | -1.8 |
| | comp=N,14nm,1.0s | | | | | | |
| **AGP** | **Aguadilla** | **37.04** | **4** | *e*P | **P** | **07 46 01.6** | **-0.2** |
| | comp=N,128nm,1.3s | | | | | | |
| **035Z** | **Hargill** | **52.91** | **327** | P | **P** | **07 48 08.5** | **+1.1** |
| | baz=53 | | | | | | |
| **035A** | **Encino** | **53.31** | **328** | P | **P** | **07 48 11.9** | **+1.6** |
| | baz=54 | | | | | | |
| **936A** | **North Padre Is** | **53.32** | **329** | P | **P** | **07 48 12.2** | **+1.9** |
| | baz=54 | | | | | | |
| **GOGA** | **Godfrey** | **53.62** | **345** | *e*P | **P** | **07 48 11.5** | **-1.0** |
| | comp=N,19nm,1.3s | | | | | | |
| **034A** | **Hebbronville** | **53.71** | **327** | P | **P** | **07 48 14.5** | **+1.3** |
| | baz=54 | | | | | | |
| **738A** | **Farr-Stevens R** | **53.72** | **331** | P | **P** | **07 48 14.7** | **+1.4** |
| | baz=54 | | | | | | |
| **737A** | **Port Lavaca** | **54.02** | **330** | P | **P** | **07 48 17.1** | **+1.6** |
| | baz=54 | | | | | | |
| **934A** | **Benavides** | **54.07** | **328** | P | **P** | **07 48 16.9** | **+1.1** |
| | baz=54 | | | | | | |
| **540A** | **Vidor** | **54.17** | **334** | P | **P** | **07 48 18.2** | **+1.7** |
| | baz=54 | | | | | | |
| **835A** | **Beeville** | **54.29** | **329** | P | **P** | **07 48 18.6** | **+1.2** |
| | baz=55 | | | | | | |
| **933A** | **Laredo** | **54.46** | **327** | P | **P** | **07 48 19.3** | **+0.7** |
| | baz=55 | | | | | | |
| **736A** | **Circle Diamond** | **54.48** | **330** | P | **P** | **07 48 20.4** | **+1.6** |
| | baz=55,SNR=8.1 | | | | | | |
| **834A** | **Tilden** | **54.51** | **328** | P | **P** | **07 48 20.3** | **+1.3** |
| | baz=55,SNR=5.5 | | | | | | |
| **636A** | **Smothers Creek** | **54.92** | **330** | P | **P** | **07 48 23.0** | **+1.1** |
| | baz=55 | | | | | | |
| **439A** | **Center Grove,** | **55.01** | **333** | P | **P** | **07 48 23.6** | **+1.1** |
| | baz=55 | | | | | | |
| **537A** | **Green Hill Far** | **55.08** | **331** | P | **P** | **07 48 24.1** | **+1.1** |
| | baz=55 | | | | | | |
| **833A** | **Chaparral WMA,** | **55.10** | **327** | P | **P** | **07 48 23.8** | **+0.5** |
| | baz=55,SNR=8.0 | | | | | | |
| **734A** | **La Parita Cree** | **55.11** | **329** | P | **P** | **07 48 23.8** | **+0.4** |
| | baz=55 | | | | | | |
| **635A** | **Leesville** | **55.18** | **330** | P | **P** | **07 48 24.6** | **+0.8** |
| | baz=56 | | | | | | |
| **340A** | **Bronson** | **55.19** | **334** | P | **P** | **07 48 24.7** | **+0.9** |
| | baz=56 | | | | | | |
| **438A** | **Sam Houston St** | **55.28** | **333** | P | **P** | **07 48 25.1** | **+0.6** |
| | baz=56 | | | | | | |
| **832A** | **Faith Ranch, C** | **55.37** | **327** | P | **P** | **07 48 25.6** | **+0.4** |
| | baz=56 | | | | | | |
| **733A** | **Divot King Ran** | **55.37** | **328** | P | **P** | **07 48 25.6** | **+0.4** |
| | baz=56 | | | | | | |
| **339A** | **Huntington** | **55.39** | **334** | P | **P** | **07 48 26.0** | **+0.7** |
| | baz=56 | | | | | | |
| **634A** | **China Grove, S** | **55.45** | **329** | P | **P** | **07 48 26.3** | **+0.5** |
| | baz=56 | | | | | | |
| **535A** | **Dale** | **55.62** | **330** | P | **P** | **07 48 27.6** | **+0.7** |
| | baz=56 | | | | | | |
| **732A** | **Laxson Ranch,** | **55.73** | **327** | P | **P** | **07 48 27.8** | **0.0** |
| | baz=56 | | | | | | |
| **338A** | **Crockett** | **55.73** | **333** | P | **P** | **07 48 29.0** | **+1.3** |
| | baz=56 | | | | | | |
| **CPCT** | **Cooper Cave** | **55.82** | **345** | *e*P | **P** | **07 48 27.5** | **-0.9** |
| **TKL** | **Tuckaleechee C** | **55.84** | **346** | *e*P | **P** | **07 48 27.7** | **-0.8** |
| **633A** | **Saathoff Ranch** | **55.92** | **328** | P | **P** | **07 48 29.4** | **+0.2** |
| | baz=56,SNR=9.5 | | | | | | |
| **337A** | **Centerville** | **55.94** | **333** | P | **P** | **07 48 29.9** | **+0.6** |
| | baz=56 | | | | | | |
| **239A** | **Gary** | **55.95** | **334** | P | **P** | **07 48 30.0** | **+0.7** |
| | baz=56 | | | | | | |
| **SWET** | **Sewanee** | **55.96** | **344** | *e*P | **P** | **07 48 28.4** | **-0.9** |
| | comp=N,18nm,0.6s | | | | | | |
| **534A** | **Blanco** | **56.05** | **329** | P | **P** | **07 48 29.7** | **-0.3** |
| | baz=56,SNR=5.1 | | | | | | |
| **238A** | **Jacksonville** | **56.21** | **334** | P | **P** | **07 48 31.8** | **+0.7** |
| | baz=56 | | | | | | |
| **632A** | **Uvalde** | **56.26** | **328** | P | **P** | **07 48 31.4** | **-0.2** |
| | baz=56 | | | | | | |
| **533A** | **Kerrville** | **56.35** | **329** | P | **P** | **07 48 32.0** | **-0.2** |
| | baz=57 | | | | | | |
| **336A** | **Riesel** | **56.43** | **332** | P | **P** | **07 48 33.3** | **+0.6** |
| | baz=57 | | | | | | |
| **237A** | **Washetta, Mont** | **56.50** | **333** | P | **P** | **07 48 33.1** | **0.0** |
| | baz=57 | | | | | | |
| **631A** | **Perdido Creek** | **56.59** | **327** | P | **P** | **07 48 33.7** | **-0.2** |
| | baz=57,SNR=6.9 | | | | | | |
| **434A** | **Burnet** | **56.60** | **330** | P | **P** | **07 48 33.6** | **-0.3** |
| | baz=57 | | | | | | |
| **335A** | **Moody** | **56.60** | **331** | P | **P** | **07 48 34.1** | **+0.2** |
| | baz=57 | | | | | | |
| **BLA** | **Blacksburg** | **56.67** | **349** | *e*P | **P** | **07 48 35.0** | **+0.7** |
| | comp=N,335nm,2.8s | | | | | | |
| **138A** | **Matatall Enter** | **56.77** | **334** | P | **P** | **07 48 36.1** | **+1.0** |
| | baz=57 | | | | | | |
| **236A** | **Katherine and** | **56.81** | **332** | P | **P** | **07 48 36.0** | **+0.6** |
| | baz=57 | | | | | | |
| **532A** | **Rocksprings** | **56.83** | **328** | P | **P** | **07 48 36.5** | **+0.9** |
| | baz=57 | | | | | | |
| **433A** | **Art** | **56.94** | **329** | P | **P** | **07 48 36.0** | **-0.4** |
| | baz=57,SNR=7.0 | | | | | | |
| **137A** | **Heron Place, G** | **56.99** | **333** | P | **P** | **07 48 37.6** | **+1.0** |
| | baz=57 | | | | | | |
| **334A** | **Lometa** | **57.02** | **331** | P | **P** | **07 48 36.8** | **-0.1** |
| | baz=57 | | | | | | |
| **JCT** | **Junction City** | **57.06** | **329** | P | **P** | **07 48 37.5** | **+0.2** |
| | baz=57 | | | | | | |
| **JCT** | **Junction City** | **57.06** | **329** | *e*P | **P** | **07 48 37.8** | **+0.5** |
| | comp=N,4.4nm,0.8s | | | | | | |
| **531A** | **Rocksprings** | **57.18** | **328** | P | **P** | **07 48 38.5** | **+0.4** |
| | baz=58,SNR=5.1 | | | | | | |
| **WHTX** | **Lake Whitney** | **57.22** | **332** | P | **P** | **07 48 38.5** | **+0.3** |
| | baz=58,SNR=6.5 | | | | | | |
| **WHTX** | **Lake Whitney** | **57.22** | **332** | *e*P | **P** | **07 48 38.3** | **+0.1** |
| | comp=N,8.4nm,0.6s | | | | | | |
| **136A** | **Ennis** | **57.22** | **333** | P | **P** | **07 48 38.6** | **+0.4** |
| | baz=58 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **57.24** | **335** | P | **P** | **07 48 39.0** | **+0.7** |
| | baz=58 | | | | | | |
| **WVT** | **Waverly** | **57.35** | **342** | *e*P | P | 07 48 37.5 | -1.6 |
| | comp=N,9.1nm,0.7s | | | | | | |
| **333A** | **Richland Sprin** | **57.37** | **330** | P | **P** | **07 48 39.0** | **-0.3** |
| | baz=58 | | | | | | |
| **432A** | **Menard** | **57.38** | **329** | P | **P** | **07 48 39.3** | **-0.2** |
| | baz=58,SNR=9.3 | | | | | | |
| **Z37A** | **Pogue Cattle C** | **57.45** | **334** | P | **P** | **07 48 40.4** | **+0.6** |
| | baz=58 | | | | | | |
| **Y39A** | **Lockesburg** | **57.48** | **336** | P | **P** | **07 48 40.2** | **+0.1** |
| | baz=58 | | | | | | |
| **234A** | **Clairette** | **57.54** | **331** | P | **P** | **07 48 40.7** | **+0.2** |
| | baz=58 | | | | | | |
| **530A** | **J-C Ranch, Com** | **57.57** | **327** | P | **P** | **07 48 41.1** | **+0.2** |
| | baz=58 | | | | | | |
| **431A** | **Sonora** | **57.63** | **328** | P | **P** | **07 48 41.2** | **-0.1** |
| | baz=58,SNR=6.0 | | | | | | |
| **135A** | **Vickery Place,** | **57.67** | **332** | P | **P** | **07 48 42.1** | **+0.6** |
| | baz=58 | | | | | | |
| **Y38A** | **Idabel** | **57.73** | **335** | P | **P** | **07 48 41.8** | **0.0** |
| | baz=58 | | | | | | |
| **332A** | **Millersview** | **57.78** | **329** | P | **P** | **07 48 42.3** | **0.0** |
| | baz=58 | | | | | | |
| **MIAR** | **Mount Ida** | **57.82** | **336** | P | **P** | **07 48 42.6** | **+0.2** |
| | baz=58 | | | | | | |
| **MIAR** | **Mount Ida** | **57.82** | **336** | *e*P | **P** | **07 48 41.8** | **-0.7** |
| | comp=N,3.3nm,0.7s | | | | | | |
| **Z36A** | **Blue Ridge** | **57.86** | **333** | P | **P** | **07 48 43.1** | **+0.4** |
| | baz=58,SNR=6.1 | | | | | | |
| **233A** | **Rising Star** | **57.90** | **330** | P | **P** | **07 48 43.2** | **+0.1** |
| | baz=58,SNR=9.2 | | | | | | |
| **134A** | **White-Moore Ra** | **57.99** | **331** | P | **P** | **07 48 44.7** | **+1.1** |
| | baz=58 | | | | | | |
| **529A** | **Stev Forest Ra** | **58.01** | **326** | P | **P** | **07 48 44.3** | **+0.4** |
| | baz=58,SNR=9.6 | | | | | | |
| **430A** | **Baggett Ranch,** | **58.03** | **328** | P | **P** | **07 48 44.0** | **-0.1** |
| | baz=58,SNR=6.2 | | | | | | |
| **331A** | **San Angelo** | **58.05** | **329** | P | **P** | **07 48 43.8** | **-0.4** |
| | baz=58 | | | | | | |
| **Y37A** | **Hugo** | **58.13** | **334** | P | **P** | **07 48 45.4** | **+0.8** |
| | baz=58,SNR=13 | | | | | | |
| **232A** | **Coleman** | **58.15** | **330** | P | **P** | **07 48 44.9** | **+0.1** |
| | baz=58,SNR=5.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **58.17** | **325** | P | **P** | **07 48 45.0** | **-0.1** |
| | comp=N,0.8nm,0.7s,baz=147,slow=8.0,SNR=11 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **58.17** | **325** | *e*P | **P** | **07 48 44.4** | **-0.7** |
| **429A** | **Davenport Ranc** | **58.24** | **327** | P | **P** | **07 48 45.4** | **-0.1** |
| | baz=58,SNR=8.0 | | | | | | |
| **Z35A** | **Perchaven, San** | **58.26** | **333** | P | **P** | **07 48 45.6** | **+0.1** |
| | baz=59 | | | | | | |
| **Y36A** | **Durant** | **58.34** | **334** | P | **P** | **07 48 46.1** | **0.0** |
| | baz=59 | | | | | | |
| **133A** | **Hamilton Ranch** | **58.40** | **331** | P | **P** | **07 48 46.7** | **+0.1** |
| | baz=59,SNR=7.0 | | | | | | |
| **X38A** | **Whitesboro** | **58.41** | **335** | P | **P** | **07 48 46.6** | **0.0** |
| | baz=59 | | | | | | |
| **330A** | **Mertzon** | **58.50** | **328** | P | **P** | **07 48 46.7** | **-0.7** |
| | baz=59 | | | | | | |
| **231A** | **Bronte** | **58.51** | **329** | P | **P** | **07 48 46.7** | **-0.6** |
| | baz=59 | | | | | | |
| **X37A** | **Clayton** | **58.56** | **335** | P | **P** | **07 48 47.8** | **+0.2** |
| | baz=59 | | | | | | |
| **Z34A** | **Collier Ranch,** | **58.59** | **332** | P | **P** | **07 48 48.1** | **+0.3** |
| | baz=59 | | | | | | |
| **W38A** | **Poteau** | **58.65** | **336** | P | **P** | **07 48 48.4** | **+0.2** |
| | baz=59 | | | | | | |
| **Y35A** | **Marietta** | **58.66** | **333** | P | **P** | **07 48 48.6** | **+0.3** |
| | baz=59 | | | | | | |
| **PBMO** | **Poplar Bluff** | **58.74** | **340** | *e*P | **P** | **07 48 47.9** | **-0.9** |
| | comp=N,16nm,1.1s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **58.75** | **330** | P | **P** | **07 48 48.9** | **-0.1** |
| | baz=59 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **58.75** | **330** | *e*P | **P** | **07 48 49.0** | **0.0** |
| | comp=N,2.6nm,0.6s | | | | | | |
| **230A** | **Sterling City** | **58.86** | **328** | P | **P** | **07 48 51.0** | **+1.2** |
| | baz=59 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **58.90** | **331** | P | **P** | **07 48 50.0** | **+0.1** |
| | baz=59,SNR=6.8 | | | | | | |
| **X36A** | **Centrahoma** | **58.94** | **334** | P | **P** | **07 48 49.6** | **-0.6** |
| | baz=59 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **58.97** | **328** | P | **P** | **07 48 50.4** | **-0.2** |
| | baz=59 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **59.02** | **333** | P | **P** | **07 48 50.8** | **0.0** |
| | baz=59,SNR=6.8 | | | | | | |
| **X35A** | **Drake** | **59.05** | **333** | P | **P** | **07 48 50.7** | **-0.4** |
| | baz=59 | | | | | | |
| **W37A** | **Quinton** | **59.06** | **335** | P | **P** | **07 48 51.3** | **+0.3** |
| | baz=59 | | | | | | |
| **131A** | **Roby** | **59.15** | **330** | P | **P** | **07 48 51.7** | **-0.1** |
| | baz=59 | | | | | | |
| **SIUC** | **Southern Illin** | **59.23** | **342** | *e*P | **P** | **07 48 52.0** | **-0.1** |
| | comp=N,24nm,0.7s | | | | | | |
| **Z32A** | **Haskell** | **59.24** | **331** | P | **P** | **07 48 52.2** | **-0.2** |
| | baz=60 | | | | | | |
| **V38A** | **Canehill** | **59.30** | **336** | P | **P** | **07 48 52.0** | **-0.7** |
| | baz=60,SNR=5.3 | | | | | | |
| **W36A** | **Wetumka** | **59.38** | **335** | P | **P** | **07 48 53.1** | **-0.2** |
| | baz=60 | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **59.44** | **332** | P | **P** | **07 48 53.5** | **-0.2** |
| | baz=60 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **59.56** | **330** | P | **P** | **07 48 54.4** | **-0.2** |
| | baz=60,SNR=8.1 | | | | | | |
| **X34A** | **Smith Ranch, M** | **59.59** | **333** | P | **P** | **07 48 55.0** | **+0.3** |
| | baz=60 | | | | | | |
| **V37A** | **Hulbert** | **59.60** | **336** | P | **P** | **07 48 54.4** | **-0.4** |
| | baz=60 | | | | | | |
| **W35A** | **Tecumseh** | **59.66** | **334** | P | **P** | **07 48 54.8** | **-0.4** |
| | baz=60 | | | | | | |
| **228A** | **UT Block 9, Go** | **59.79** | **327** | P | **P** | **07 48 55.9** | **-0.3** |
| | baz=60 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **59.80** | **331** | P | **P** | **07 48 56.1** | **-0.1** |
| | baz=60 | | | | | | |
| **V36A** | **Jenks** | **59.83** | **335** | P | **P** | **07 48 56.1** | **-0.3** |
| | baz=60,SNR=5.7 | | | | | | |
| **129A** | **Stewart Farms,** | **59.83** | **328** | P | **P** | **07 48 56.8** | **+0.3** |
| | baz=60 | | | | | | |
| **X33A** | **Lawton** | **59.84** | **332** | P | **P** | **07 48 57.6** | **+1.2** |
| | baz=60 | | | | | | |
| **TUL1** | **Tulsa** | **59.88** | **335** | P | **P** | **07 48 56.1** | **-0.5** |
| | baz=60 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **60.00** | **329** | P | **P** | **07 48 57.4** | **-0.3** |
| | baz=60 | | | | | | |
| **U37A** | **Salina** | **60.05** | **336** | P | **P** | **07 48 57.6** | **-0.2** |
| | baz=60 | | | | | | |
| **ACSO** | **Alum Creek Sta** | **60.07** | **348** | *e*P | P | 07 48 56.8 | -1.1 |
| | comp=N,7.6nm,0.6s | | | | | | |
| **X32A** | **Elmer** | **60.08** | **332** | P | **P** | **07 48 57.9** | **-0.2** |
| | baz=60 | | | | | | |
| **WMOK** | **Wichita Mounta** | **60.12** | **332** | *e*P | **P** | **07 48 57.6** | **-0.8** |
| | comp=N,1.3nm,0.4s | | | | | | |
| **128A** | **Castleberry Fa** | **60.14** | **328** | P | **P** | **07 48 58.0** | **-0.6** |
| | baz=60 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **60.15** | **331** | P | **P** | **07 48 58.5** | **-0.1** |
| | baz=60 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **60.17** | **334** | P | **P** | **07 48 58.0** | **-0.6** |
| | baz=60 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **60.26** | **329** | P | **P** | **07 49 00.4** | **+0.9** |
| | baz=61 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **60.34** | **333** | P | **P** | **07 49 00.2** | **+0.3** |
| | baz=61,SNR=9.7 | | | | | | |
| **Y30A** | **Stafford Cattl** | **60.38** | **330** | P | **P** | **07 49 00.5** | **+0.3** |
| | baz=61 | | | | | | |
| **V34A** | **Guthrie** | **60.51** | **334** | P | **P** | **07 49 00.6** | **-0.4** |
| | baz=61 | | | | | | |
| **V34A** | **Guthrie** | **60.51** | **334** | *e*P | **P** | **07 49 00.4** | **-0.6** |
| | comp=N,11nm,0.6s | | | | | | |
| **X31A** | **McDonald Ranch** | **60.57** | **331** | P | **P** | **07 49 01.4** | **0.0** |
| | baz=61,SNR=10 | | | | | | |
| **T37A** | **Cheneyville 18** | **60.60** | **337** | P | **P** | **07 49 01.4** | **-0.2** |
| | baz=61,SNR=12 | | | | | | |
| **Z28A** | **Tucker Farm, M** | **60.62** | **328** | P | **P** | **07 49 01.2** | **-0.7** |
| | baz=61 | | | | | | |
| **U35A** | **Pawnee** | **60.65** | **335** | P | **P** | **07 49 01.9** | **-0.1** |
| | baz=61 | | | | | | |
| **W32A** | **Sentinel** | **60.65** | **332** | P | **P** | **07 49 02.0** | **0.0** |
| | baz=61 | | | | | | |
| **Y29A** | **Porterfield Fa** | **60.73** | **329** | P | **P** | **07 49 01.9** | **-0.8** |
| | baz=61 | | | | | | |
| **V33A** | **Lossen Ranch,** | **60.83** | **333** | P | **P** | **07 49 03.0** | **-0.2** |
| | baz=61 | | | | | | |
| **X30A** | **Coker Ranch, T** | **60.83** | **330** | P | **P** | **07 49 03.4** | **+0.1** |
| | baz=61 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **60.92** | **336** | P | **P** | **07 49 03.3** | **-0.4** |
| | baz=61 | | | | | | |
| **MNTX** | **Cornudas Mount** | **60.93** | **325** | P | **P** | **07 49 04.1** | **+0.2** |
| | baz=61,SNR=5.2 | | | | | | |
| **MNTX** | **Cornudas Mount** | **60.93** | **325** | *e*P | **P** | **07 49 03.1** | **-0.8** |
| | comp=N,3.0nm,1.0s | | | | | | |
| MNTX | | | | *e*PcP | **PcP** | **07 49 45.8** | **-0.6** |
| **U34A** | **Anderson Ranch** | **61.04** | **334** | P | **P** | **07 49 04.8** | **+0.3** |
| | baz=61 | | | | | | |
| **T35A** | **Sooner Cattle** | **61.04** | **335** | P | **P** | **07 49 04.6** | **0.0** |
| | baz=61 | | | | | | |
| **Y28A** | **McKinney Farm,** | **61.05** | **329** | P | **P** | **07 49 04.1** | **-0.7** |
| | baz=61 | | | | | | |
| **V32A** | **Arapaho** | **61.07** | **333** | P | **P** | **07 49 04.5** | **-0.3** |
| | baz=61 | | | | | | |
| **S37A** | **Fort Scott** | **61.13** | **337** | P | **P** | **07 49 04.7** | **-0.5** |
| | baz=62,SNR=5.0 | | | | | | |
| **SFIN** | **Scholer Farm** | **61.13** | **345** | *e*P | P | 07 49 03.2 | -1.9 |
| | comp=N,22nm,0.8s | | | | | | |
| **X29A** | **Tulia** | **61.22** | **330** | P | **P** | **07 49 05.5** | **-0.5** |
| | baz=62 | | | | | | |
| **MSTX** | **Muleshoe** | **61.36** | **329** | P | **P** | **07 49 06.6** | **-0.4** |
| | baz=62 | | | | | | |
| **MSTX** | **Muleshoe** | **61.36** | **329** | *e*P | **P** | **07 49 06.6** | **-0.4** |
| | comp=N,7.7nm,0.9s | | | | | | |
| **S36A** | **Lake Cedric, C** | **61.39** | **336** | P | **P** | **07 49 06.7** | **-0.2** |
| | baz=62,SNR=5.4 | | | | | | |
| **T34A** | **McClaskey Farm** | **61.40** | **335** | P | **P** | **07 49 07.1** | **+0.1** |
| | baz=62 | | | | | | |
| **V31A** | **Spring Creek L** | **61.46** | **332** | P | **P** | **07 49 07.3** | **-0.2** |
| | baz=62 | | | | | | |
| **AMTX** | **Amarillo** | **61.57** | **330** | P | **P** | **07 49 08.0** | **-0.4** |
| | baz=62 | | | | | | |
| **AMTX** | **Amarillo** | **61.57** | **330** | *e*P | **P** | **07 49 07.9** | **-0.4** |
| | comp=N,4.4nm,0.6s | | | | | | |
| **U32A** | **Winter Ranch,** | **61.60** | **333** | P | **P** | **07 49 08.5** | **+0.1** |
| | baz=62 | | | | | | |
| **S35A** | **Otter Creek Ra** | **61.63** | **336** | P | **P** | **07 49 08.5** | **0.0** |
| | baz=62,SNR=14 | | | | | | |
| **W29A** | **Amarillo** | **61.75** | **330** | P | **P** | **07 49 09.3** | **-0.2** |
| | baz=62 | | | | | | |
| **V30A** | **Spur Ranch, Mi** | **61.83** | **331** | P | **P** | **07 49 10.6** | **+0.6** |
| | baz=62 | | | | | | |
| **R36A** | **Gordon, Harris** | **61.88** | **337** | P | **P** | **07 49 11.4** | **+1.2** |
| | baz=62 | | | | | | |
| **HDIL** | **Hopedale** | **61.88** | **343** | P | **P** | **07 49 11.7** | **+1.6** |
| | baz=62 | | | | | | |
| **HDIL** | **Hopedale** | **61.88** | **343** | *e*P | P | 07 49 08.4 | -1.7 |
| | comp=N,14nm,0.5s | | | | | | |
| **S34A** | **Willow Spring** | **61.95** | **335** | P | **P** | **07 49 12.1** | **+1.4** |
| | baz=62 | | | | | | |
| **U30A** | **WK&E Inc. Balk** | **62.45** | **332** | P | **P** | **07 49 14.2** | **+0.1** |
| | baz=63 | | | | | | |
| **T31A** | **Randall Ranch,** | **62.50** | **333** | P | **P** | **07 49 14.4** | **0.0** |
| | baz=63 | | | | | | |
| **R34A** | **Isabella, Hill** | **62.53** | **336** | P | **P** | **07 49 14.5** | **0.0** |
| | baz=63 | | | | | | |
| **V28A** | **Channing** | **62.53** | **330** | P | **P** | **07 49 14.8** | **0.0** |
| | baz=63 | | | | | | |
| **Q35A** | **Mercer Eighty,** | **62.55** | **337** | P | **P** | **07 49 14.2** | **-0.5** |
| | baz=63 | | | | | | |
| **S32A** | **Newby Ranch, P** | **62.70** | **334** | P | **P** | **07 49 15.9** | **+0.3** |
| | baz=63 | | | | | | |
| **R33A** | **Olander Ranch,** | **62.83** | **335** | P | **P** | **07 49 16.2** | **-0.3** |
| | baz=63 | | | | | | |
| **V27A** | **Dan Oppiter Fa** | **62.83** | **330** | P | **P** | **07 49 17.1** | **+0.3** |
| | baz=63 | | | | | | |
| **S31A** | **Mullinville** | **62.86** | **333** | P | **P** | **07 49 16.9** | **+0.1** |
| | baz=63 | | | | | | |
| **121A** | **Cookes Peak, D** | **62.88** | **324** | P | **P** | **07 49 17.0** | **-0.2** |
| | baz=63 | | | | | | |
| **P36A** | **Good Intent, A** | **62.92** | **338** | P | **P** | **07 49 17.1** | **0.0** |
| | baz=63 | | | | | | |
| **Q34A** | **Chapman** | **62.95** | **336** | P | **P** | **07 49 17.0** | **-0.2** |
| | baz=63 | | | | | | |
| **KSU1** | **Kansas State U** | **62.98** | **336** | P | **P** | **07 49 16.9** | **-0.6** |
| | baz=63 | | | | | | |
| **KSU1** | **Kansas State U** | **62.98** | **336** | *e*P | P | 07 49 16.1 | -1.3 |
| | comp=N,9.2nm,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=65 | | | | | | | |
| T26A | Comanche Natio | 64.33 | 330 | P | | P | 07 49 26.7 | +0.1 |
| | baz=65 | | | | | | | |
| JFWS | Jewell Farm | 64.34 | 343 | *e*P | | P | 07 49 25.2 | -1.1 |
| | comp=N,13nm,0.8s | | | | | | | |
| P31A | Stockton | 64.42 | 335 | P | | P | 07 49 26.9 | -0.1 |
| | baz=65 | | | | | | | |
| N34A | Lincoln | 64.46 | 337 | P | | P | 07 49 26.4 | -0.7 |
| | baz=65,SNR=5.6 | | | | | | | |
| R28A | Tribune | 64.47 | 332 | P | | P | 07 49 27.0 | -0.4 |
| | baz=65 | | | | | | | |
| Q29A | Oakley | 64.56 | 333 | P | | P | 07 49 27.8 | -0.1 |
| | baz=65 | | | | | | | |
| O32A | Brockman Farm, | 64.62 | 336 | P | | P | 07 49 28.0 | -0.3 |
| | baz=65 | | | | | | | |
| S26A | Kim | 64.64 | 331 | P | | P | 07 49 28.7 | +0.1 |
| | baz=65,SNR=7.8 | | | | | | | |
| T25A | Trinidad | 64.69 | 330 | P | | P | 07 49 29.3 | +0.3 |
| | baz=65 | | | | | | | |
| P30A | Selden | 64.80 | 334 | P | | P | 07 49 29.6 | +0.1 |
| | baz=65 | | | | | | | |
| K38A | Parkersburg | 64.83 | 341 | P | | P | 07 49 28.9 | -0.6 |
| | baz=65 | | | | | | | |
| R27A | Eads | 64.87 | 331 | P | | P | 07 49 30.1 | 0.0 |
| | baz=65 | | | | | | | |
| O31A | Woolen Ranch, | 64.94 | 335 | P | | P | 07 49 30.8 | +0.4 |
| | baz=65 | | | | | | | |
| SNAA | Sanae | 64.97 | 161 | P | | P | 07 49 30.3 | +0.1 |
| SNAA | Sanae | 64.97 | 161 | P | | P | 07 49 30.9 | +0.7 |
| | comp=N,0.9nm,0.6s,baz=278,slow=7.8,SNR=25 | | | | | | | |
| SNAA | Sanae | 64.97 | 161 | *e*P | | P | 07 49 30.3 | +0.1 |
| Q28A | Sharon Springs | 65.07 | 333 | P | | P | 07 49 31.3 | -0.1 |
| | baz=65 | | | | | | | |
| P29A | Atwood | 65.14 | 334 | P | | P | 07 49 31.8 | +0.1 |
| | baz=65 | | | | | | | |
| R26A | Arlington | 65.17 | 331 | P | | P | 07 49 32.0 | 0.0 |
| | baz=66 | | | | | | | |
| L35A | Bielow Farm, R | 65.24 | 339 | P | | P | 07 49 31.8 | -0.4 |
| | baz=66 | | | | | | | |
| O30A | MW Ranch, Wils | 65.26 | 335 | P | | P | 07 49 33.0 | +0.5 |
| | baz=66 | | | | | | | |
| M33A | Taylor Creek F | 65.35 | 337 | P | | P | 07 49 34.2 | +1.2 |
| | baz=66 | | | | | | | |
| KSCO | Kaye Shedlock' | 65.38 | 332 | P | | P | 07 49 33.7 | +0.4 |
| | baz=66 | | | | | | | |
| 214A | Organ Pipe Nat | 65.40 | 320 | P | | P | 07 49 34.9 | +1.4 |
| | baz=66 | | | | | | | |
| L34A | Svendsen Farm, | 65.40 | 338 | P | | P | 07 49 32.5 | -0.7 |
| | baz=66,SNR=6.2 | | | | | | | |
| P28A | Saint Francis | 65.46 | 333 | P | | P | 07 49 35.2 | +1.4 |
| | baz=66 | | | | | | | |
| O29A | 4D Ranch, Culb | 65.52 | 334 | P | | P | 07 49 34.5 | +0.4 |
| | baz=66 | | | | | | | |
| BGNE | Belgrade | 65.56 | 337 | P | | P | 07 49 34.1 | -0.2 |
| | baz=66 | | | | | | | |
| J37A | Redenius Farm, | 65.67 | 341 | P | | P | 07 49 34.0 | -0.9 |
| | baz=66 | | | | | | | |
| K35A | Storm Lake | 65.68 | 339 | P | | P | 07 49 34.4 | -0.7 |
| | baz=66 | | | | | | | |
| SDCO | Great Sand Dun | 65.70 | 329 | P | | P | 07 49 35.4 | -0.2 |
| | baz=66,SNR=11 | | | | | | | |
| SDCO | Great Sand Dun | 65.70 | 329 | *e*P | | P | 07 49 36.1 | +0.5 |
| | comp=N,4.2nm,0.7s | | | | | | | |
| Q26A | Hugo | 65.71 | 331 | P | | P | 07 49 35.2 | -0.4 |
| | baz=66 | | | | | | | |
| N30A | Hueftle Ranch, | 65.80 | 335 | P | | P | 07 49 36.1 | +0.2 |
| | baz=66 | | | | | | | |
| J36A | Seneca 1, Swea | 65.93 | 340 | P | | P | 07 49 35.9 | -0.8 |
| | baz=66 | | | | | | | |
| I38A | Scanlan Farm, | 65.96 | 342 | P | | P | 07 49 35.9 | -0.9 |
| | baz=66 | | | | | | | |
| L32A | Elgin | 66.03 | 337 | P | | P | 07 49 36.9 | -0.4 |
| | baz=66 | | | | | | | |
| K33A | Hardington | 66.19 | 338 | P | | P | 07 49 38.5 | +0.2 |
| | baz=66 | | | | | | | |
| I37A | Lemond, Waseca | 66.26 | 341 | P | | P | 07 49 38.1 | -0.6 |
| | baz=67 | | | | | | | |
| S22A | 4UR Ranch, Cre | 66.36 | 328 | P | | P | 07 49 39.5 | -0.4 |
| | baz=67 | | | | | | | |
| S22A | 4UR Ranch, Cre | 66.36 | 328 | *e*P | | P | 07 49 40.5 | +0.6 |
| | comp=N,5.8nm,0.3s | | | | | | | |
| J34A | George | 66.42 | 339 | P | | P | 07 49 39.2 | -0.6 |
| | baz=67 | | | | | | | |
| I36A | Fitzsimmons Fa | 66.45 | 341 | P | | P | 07 49 39.2 | -0.8 |
| | baz=67 | | | | | | | |
| L31A | Butterfield Fa | 66.48 | 337 | P | | P | 07 49 40.6 | +0.3 |
| | baz=67 | | | | | | | |
| Q24A | Divide | 66.50 | 330 | P | | P | 07 49 41.3 | +0.5 |
| | baz=67 | | | | | | | |
| K32A | Verdigre | 66.58 | 337 | P | | P | 07 49 41.7 | +0.8 |
| | baz=67 | | | | | | | |
| MVCO | Mesa Verde | 66.79 | 327 | P | | P | 07 49 42.9 | +0.3 |
| | baz=67 | | | | | | | |
| MVCO | Mesa Verde | 66.79 | 327 | *e*P | | P | 07 49 43.0 | +0.5 |
| | comp=N,1.9nm,0.5s | | | | | | | |
| J33A | Davis | 66.80 | 338 | P | | P | 07 49 41.3 | -0.9 |
| | baz=67,SNR=6.0 | | | | | | | |
| K31A | O'Neill | 66.84 | 337 | P | | P | 07 49 42.3 | -0.2 |
| | baz=67 | | | | | | | |
| ECSD | EROS Data Cent | 67.04 | 339 | P | | P | 07 49 43.1 | -0.7 |
| | baz=67 | | | | | | | |
| ECSD | EROS Data Cent | 67.04 | 339 | *e*P | | P | 07 49 42.8 | -0.9 |
| | comp=N,29nm,2.0s | | | | | | | |
| WUAZ | Wupatki | 67.09 | 324 | P | | P | 07 49 45.9 | +1.5 |
| | baz=67 | | | | | | | |
| WUAZ | Wupatki | 67.09 | 324 | *e*P | | P | 07 49 45.8 | +1.4 |
| | comp=N,2.9nm,0.8s | | | | | | | |
| J32A | Parkston | 67.16 | 338 | P | | P | 07 49 43.9 | -0.6 |
| | baz=68 | | | | | | | |
| SPMN | St. Paul | 67.18 | 342 | *e*P | | P | 07 49 43.7 | -0.9 |
| | comp=N,4.8nm,0.5s | | | | | | | |
| K30A | Basset | 67.21 | 336 | P | | P | 07 49 44.0 | -0.8 |
| | baz=68 | | | | | | | |
| ISCO | Idaho Springs | 67.38 | 330 | P | | P | 07 49 46.6 | +0.3 |
| | baz=68 | | | | | | | |
| ISCO | Idaho Springs | 67.38 | 330 | *e*P | | P | 07 49 46.8 | +0.5 |
| | comp=N,2.4nm,0.8s | | | | | | | |
| PV01 | Paradox Valley | 67.53 | 327 | *e*P | | P | 07 49 47.9 | +0.7 |
| K29A | Lazy Trails An | 67.55 | 336 | P | | P | 07 49 46.9 | -0.1 |
| | baz=68 | | | | | | | |
| H34A | Spellman Lake, | 67.59 | 340 | P | | P | 07 49 46.6 | -0.6 |
| | baz=68 | | | | | | | |
| J30A | Dallas | 67.72 | 337 | P | | P | 07 49 47.6 | -0.5 |
| | baz=68 | | | | | | | |
| H33A | Prehn Over Nor | 67.92 | 339 | P | | P | 07 49 48.9 | -0.3 |
| | baz=68 | | | | | | | |
| K28A | Ten Mile Ranch | 67.92 | 335 | P | | P | 07 49 49.8 | +0.5 |
| | baz=68 | | | | | | | |
| F36A | Milaca | 67.97 | 342 | P | | P | 07 49 48.6 | -0.9 |
| | baz=68 | | | | | | | |
| I31A | Royce, Wessing | 67.97 | 338 | P | | P | 07 49 49.4 | -0.2 |
| | baz=68 | | | | | | | |
| H32A | Carlson Farm, | 68.00 | 339 | P | | P | 07 49 49.2 | -0.6 |
| | baz=68 | | | | | | | |
| J29A | Okreek | 68.10 | 336 | P | | P | 07 49 50.3 | -0.1 |
| | baz=68 | | | | | | | |
| BC3 | Big Chuckawall | 68.18 | 320 | P | | P | 07 49 50.8 | -0.4 |
| | baz=68 | | | | | | | |
| I30A | Oacoma | 68.20 | 337 | P | | P | 07 49 50.8 | -0.2 |
| | baz=68 | | | | | | | |
| MONP | Monument Peak | 68.27 | 318 | P | | P | 07 49 52.8 | +0.8 |
| | baz=68 | | | | | | | |
| TIC | Toumodi | 68.27 | 75 | *e*P | | P | 07 49 57.0 | +4.9 |
| IRM | Iron Mountain | 68.34 | 320 | P | | P | 07 49 53.7 | +1.5 |
| | baz=69 | | | | | | | |
| N23A | Red Feather La | 68.40 | 331 | P | | P | 07 49 53.3 | +0.7 |
| | baz=69 | | | | | | | |
| KIC | Kosan Boka | 68.42 | 75 | *e*P | | P | 07 49 51.7 | -1.3 |
| | comp=N,8.5nm,0.3s | | | | | | | |
| DBIC | Dimbokro | 68.43 | 75 | P | | P | 07 49 51.8 | -1.3 |
| | comp=N,3.6nm,0.5s,baz=214,slow=5.4,SNR=5.7 | | | | | | | |
| DBIC | Dimbokro | 68.43 | 75 | *e*P | | P | 07 49 52.0 | -1.1 |
| | comp=N,60nm,1.8s | | | | | | | |
| J28A | Allard Ranch, | 68.47 | 336 | P | | P | 07 49 52.8 | 0.0 |
| | baz=69,SNR=5.6 | | | | | | | |
| I29A | Vivian Onida | 68.62 | 337 | P | | P | 07 49 53.2 | -0.4 |
| | baz=69 | | | | | | | |
| J27A | Elkhorn Farm, | 68.63 | 335 | P | | P | 07 49 54.5 | +0.7 |
| | baz=69 | | | | | | | |
| F33A | 5 Mile Ranch, | 68.80 | 340 | P | | P | 07 49 53.9 | -0.8 |
| | baz=69 | | | | | | | |
| D37A | Cotton | 68.85 | 343 | P | | P | 07 49 53.8 | -1.1 |
| | baz=69 | | | | | | | |
| E35A | Pequot Lakes | 68.86 | 342 | P | | P | 07 49 54.4 | -0.7 |
| | baz=69 | | | | | | | |
| O20A | White River Ci | 68.90 | 329 | P | | P | 07 49 55.7 | +0.1 |
| | baz=69 | | | | | | | |
| E34A | Wadena | 69.05 | 341 | P | | P | 07 49 55.5 | -0.8 |
| | baz=69 | | | | | | | |
| GMRC | Granite Mounta | 69.07 | 320 | P | | P | 07 49 58.1 | +1.3 |
| | baz=69 | | | | | | | |
| J26A | Sides Ranch, S | 69.11 | 334 | P | | P | 07 49 56.8 | 0.0 |
| | baz=69 | | | | | | | |
| SRU | San Rafael | 69.27 | 327 | *e*P | | P | 07 49 58.5 | +0.5 |
| | comp=N,2.8nm,0.7s | | | | | | | |
| C37A | Embarrass | 69.31 | 344 | P | | P | 07 49 56.6 | -1.2 |
| | baz=70 | | | | | | | |
| EYMN | Ely | 69.33 | 344 | P | | P | 07 49 57.1 | -0.8 |
| | baz=70 | | | | | | | |
| EYMN | Ely | 69.33 | 344 | *e*P | | P | 07 49 57.1 | -0.8 |
| | comp=N,35nm,1.8s | | | | | | | |
| I27A | Quinn | 69.33 | 335 | P | | P | 07 49 57.9 | -0.1 |
| | baz=70 | | | | | | | |
| H28A | Mission Ridge | 69.44 | 336 | P | | P | 07 49 58.4 | -0.3 |
| | baz=70 | | | | | | | |
| F31A | Hecla | 69.47 | 339 | P | | P | 07 49 58.6 | -0.2 |
| | baz=70 | | | | | | | |
| C36A | Pine Crest Far | 69.51 | 343 | P | | P | 07 49 58.2 | -0.8 |
| | baz=70 | | | | | | | |
| P18A | Preston Nutter | 69.52 | 327 | *e*P | | P | 07 50 00.4 | +0.8 |
| | comp=N,5.4nm,0.7s | | | | | | | |
| CCUT | Cedar City | 69.66 | 324 | *e*P | | P | 07 50 02.2 | +1.8 |
| | comp=N,3.8nm,0.8s | | | | | | | |
| MSU | Marysvale | 69.71 | 325 | *e*P | | P | 07 50 01.6 | +0.9 |
| | comp=N,4.3nm,1.0s | | | | | | | |
| G28A | Parade | 69.75 | 337 | P | | P | 07 50 01.1 | +0.5 |
| | baz=70 | | | | | | | |
| TMUT | Trail Mountain | 69.77 | 327 | *e*P | | P | 07 50 01.7 | +0.5 |
| | comp=N,13nm,0.8s | | | | | | | |
| H27A | Howes | 69.82 | 336 | P | | P | 07 50 00.9 | -0.1 |
| | baz=70 | | | | | | | |
| RRX | Edison Barstow | 69.95 | 320 | P | | P | 07 50 03.6 | +1.5 |
| | baz=70 | | | | | | | |
| I25A | Rochford | 69.97 | 334 | P | | P | 07 50 02.8 | +0.7 |
| | baz=70,SNR=8.8 | | | | | | | |
| F29A | Eureka | 70.00 | 338 | P | | P | 07 50 01.7 | -0.3 |
| | baz=70 | | | | | | | |
| K22A | Casper | 70.06 | 332 | P | | P | 07 50 03.0 | +0.3 |
| | baz=70 | | | | | | | |
| H26A | Fairpoint | 70.08 | 335 | P | | P | 07 50 03.8 | +1.2 |
| | baz=70 | | | | | | | |
| RSSD | Black Hills | 70.18 | 334 | *e*P | | P | 07 50 03.6 | +0.1 |
| | comp=N,2.1nm,0.6s | | | | | | | |
| C33A | Trail | 70.35 | 341 | P | | P | 07 50 03.2 | -0.9 |
| | baz=71 | | | | | | | |
| F28A | McLaughlin | 70.36 | 337 | P | | P | 07 50 04.7 | +0.4 |
| | baz=71 | | | | | | | |
| G27A | Dupree | 70.39 | 336 | P | | P | 07 50 04.6 | +0.1 |
| | baz=71 | | | | | | | |
| H25A | Fruitdale | 70.41 | 335 | P | | P | 07 50 04.6 | -0.1 |
| | baz=71 | | | | | | | |
| EDW2 | Edwards Air Fo | 70.56 | 319 | P | | P | 07 50 06.2 | +0.4 |
| | baz=71 | | | | | | | |
| E29A | Napoleon | 70.56 | 338 | P | | P | 07 50 05.5 | 0.0 |
| | baz=71 | | | | | | | |
| G26A | Maurine | 70.57 | 336 | P | | P | 07 50 05.3 | -0.3 |
| | baz=71 | | | | | | | |
| O16A | Springville | 70.59 | 327 | *e*P | | P | 07 49 57.7 | -8.4 |
| | comp=N,8.2nm,0.8s | | | | | | | |
| B34A | Aery, Baudette | 70.68 | 342 | P | | P | 07 50 05.9 | -0.2 |
| | baz=71 | | | | | | | |
| D30A | Buchanan | 70.73 | 339 | P | | P | 07 50 06.2 | -0.2 |
| | baz=71 | | | | | | | |
| LRMC | Laurel Mountai | 70.77 | 320 | P | | P | 07 50 07.1 | 0.0 |
| | baz=71 | | | | | | | |
| G25A | Newell | 70.81 | 335 | P | | P | 07 50 07.2 | +0.2 |
| | baz=71 | | | | | | | |
| F27A | Lemmon | 70.83 | 336 | P | | P | 07 50 07.3 | +0.1 |
| | baz=71 | | | | | | | |
| AGMN | Agassiz Nation | 70.86 | 342 | P | | P | 07 50 06.5 | -0.7 |
| | baz=71 | | | | | | | |
| TPNV | Topopah Spring | 70.89 | 322 | P | | P | 07 50 08.9 | +1.0 |
| | baz=71 | | | | | | | |
| TPNV | Topopah Spring | 70.89 | 322 | *e*P | | P | 07 50 09.4 | +1.5 |
| | comp=N,37nm,2.6s | | | | | | | |
| FURC | Furnace Creek, | 70.93 | 321 | P | | P | 07 50 08.7 | +0.8 |
| | baz=71 | | | | | | | |
| E28A | Huff | 70.94 | 338 | P | | P | 07 50 08.1 | +0.3 |
| | baz=71 | | | | | | | |
| C31A | Landman Farms, | 70.99 | 340 | P | | P | 07 50 07.4 | -0.7 |
| | baz=71 | | | | | | | |
| F26A | Lodgepole | 71.06 | 336 | P | | P | 07 50 08.6 | 0.0 |
| | baz=71 | | | | | | | |
| B32A | Ashes, Strandq | 71.15 | 341 | P | | P | 07 50 08.3 | -0.7 |
| | baz=72 | | | | | | | |
| ARVC | Arvin | 71.25 | 319 | *e*P | | P | 07 50 09.2 | -0.7 |
| DUG | Dugway | 71.27 | 326 | P | | P | 07 50 11.1 | +1.0 |
| | baz=72 | | | | | | | |
| DUG | Dugway | 71.27 | 326 | *e*P | | P | 07 50 10.5 | +0.4 |
| | comp=N,3.6nm,1.1s | | | | | | | |
| SBC | Santa Barbara | 71.36 | 318 | P | | P | 07 50 11.6 | +1.0 |
| | baz=72 | | | | | | | |
| ISA | Isabella | 71.37 | 320 | P | | P | 07 50 11.7 | +1.0 |
| | baz=72 | | | | | | | |
| ISA | Isabella | 71.37 | 320 | *e*P | | P | 07 50 11.8 | +1.1 |
| | comp=N,1.7nm,0.8s | | | | | | | |
| F25A | Bowman | 71.43 | 336 | P | | P | 07 50 11.6 | +0.8 |
| | baz=72 | | | | | | | |
| R11A | Troy Canyon, C | 71.47 | 323 | P | | P | 07 50 12.6 | +1.2 |
| | baz=72 | | | | | | | |
| R11A | Troy Canyon, C | 71.47 | 323 | *e*P | | P | 07 50 12.6 | +1.2 |
| | comp=N,4.8nm,1.5s | | | | | | | |
| E26A | Carlson Angus | 71.50 | 337 | P | | P | 07 50 10.9 | -0.3 |
| | baz=72 | | | | | | | |
| BW06 | Boulder Array | 71.55 | 330 | *e*P | | P | 07 50 11.5 | -0.3 |
| | comp=N,0.7nm,0.5s | | | | | | | |
| MDND | Maddock | 71.66 | 339 | P | | P | 07 50 12.2 | +0.1 |
| | baz=72 | | | | | | | |
| HWUT | Hardware Ranch | 71.66 | 328 | *e*P | | P | 07 50 12.9 | +0.5 |
| | comp=N,50nm,3.0s | | | | | | | |
| E25A | Miller Ranch, | 71.89 | 336 | P | | P | 07 50 13.5 | -0.1 |
| | baz=72 | | | | | | | |
| BGU | Big Grassy Mou | 71.91 | 327 | *e*P | | P | 07 50 13.8 | -0.1 |
| | comp=N,6.3nm,1.5s | | | | | | | |
| D25A | Fairfield | 72.40 | 336 | P | | P | 07 50 17.4 | +0.8 |
| | baz=73 | | | | | | | |
| A29A | Manning Farm, | 72.47 | 340 | P | | P | 07 50 16.8 | -0.1 |
| | baz=73 | | | | | | | |
| ULM | Lac du Bonnet | 72.61 | 343 | P | | P | 07 50 16.8 | -0.9 |
| | comp=N,4.2nm,0.5s,baz=148,slow=5.2,SNR=6.4 | | | | | | | |
| ULM | Lac du Bonnet | 72.61 | 343 | *e*P | | P | 07 50 16.6 | -1.1 |
| | comp=N,102nm,2.6s | | | | | | | |
| REDW | Red Top Meadow | 72.62 | 330 | *e*P | | P | 07 50 19.0 | +0.8 |
| | comp=N,11nm,1.6s | | | | | | | |
| LOHW | Long Holl9w | 72.69 | 330 | *e*P | | P | 07 50 19.0 | +0.4 |
| | comp=N,0.9nm,0.5s | | | | | | | |
| TPAW | Teton Pass | 72.77 | 330 | *e*P | | P | 07 50 19.6 | +0.4 |
| | comp=N,3.1nm,1.0s | | | | | | | |
| MOOW | Moose Ponds | 72.86 | 330 | *e*P | | P | 07 50 20.0 | +0.4 |
| | comp=N,1.8nm,0.9s | | | | | | | |
| MLAC | Mammoth Lakes | 72.88 | 321 | P | | P | 07 50 19.8 | -0.1 |
| | baz=73 | | | | | | | |
| FXWY | Fox Creek | 72.91 | 330 | *e*P | | P | 07 50 20.7 | +0.8 |
| | comp=N,4.3nm,1.2s | | | | | | | |
| B26A | Jensen Ranch, | 73.02 | 338 | P | | P | 07 50 20.3 | +0.1 |
| | baz=73 | | | | | | | |
| IMW | Indian Meadow | 73.07 | 330 | *e*P | | P | 07 50 21.7 | +0.8 |
| | comp=N,11nm,1.5s | | | | | | | |
| FLWY | Flagg Ranch | 73.09 | 330 | *e*P | | P | 07 50 22.1 | +1.1 |
| | comp=N,5.3nm,0.7s | | | | | | | |
| NV01 | Mina Array Sit | 73.10 | 322 | *e*P | | P | 07 50 22.2 | +1.1 |
| NVAR | Mina Array Bea | 73.10 | 322 | P | | P | 07 50 22.1 | +1.0 |
| | comp=N,0.9nm,0.8s,baz=144,slow=7.1,SNR=6.4 | | | | | | | |
| LAO | LASA Array | 73.16 | 334 | P | | P | 07 50 21.7 | +0.6 |
| | baz=74 | | | | | | | |
| A27A | Ledoux Ranch, | 73.17 | 339 | P | | P | 07 50 21.7 | +0.7 |
| | baz=74 | | | | | | | |
| RLMT | Red Lodge | 73.23 | 332 | P | | P | 07 50 22.5 | +0.8 |
| | baz=74 | | | | | | | |
| B25A | Knox Farm, Ray | 73.27 | 337 | P | | P | 07 50 22.4 | +0.7 |
| | baz=74 | | | | | | | |
| SCHQ | Schefferville | 73.36 | 2 | P | | P | 07 50 20.9 | -1.2 |
| | comp=N,3.7nm,0.8s,baz=213,slow=9.0,SNR=5.3 | | | | | | | |
| A26A | Wade Farm, Ken | 73.39 | 338 | P | | P | 07 50 23.5 | +1.2 |
| | baz=74 | | | | | | | |
| DGMT | Dagmar | 73.82 | 337 | P | | P | 07 50 26.2 | +1.3 |
| | baz=74 | | | | | | | |
| HLID | Hailey | 74.52 | 328 | P | | P | 07 50 30.2 | +1.0 |
| | baz=75,SNR=6.8 | | | | | | | |
| HLID | Hailey | 74.52 | 328 | *e*P | | P | 07 50 30.6 | +1.3 |
| | comp=N,2.8nm,0.8s | | | | | | | |
| MCMT | McKenzie Canyo | 74.67 | 330 | *e*P | | P | 07 50 31.3 | +1.1 |
| BOZ | Bozeman (W) | 74.71 | 331 | P | | P | 07 50 31.2 | +1.0 |
| | baz=75 | | | | | | | |
| DLMT | Dillon | 74.95 | 330 | *e*P | | P | 07 50 32.3 | +0.7 |
| | comp=N,2.6nm,0.9s | | | | | | | |
| MFID | Camas Ranch | 75.14 | 327 | *e*P | | P | 07 50 34.2 | +1.4 |
| | comp=N,4.8nm,0.9s | | | | | | | |
| EGMT | Eagleton | 75.69 | 333 | P | | P | 07 50 36.2 | +0.4 |
| | baz=76 | | | | | | | |
| MOD | Modoc | 76.54 | 323 | *e*P | | P | 07 50 41.7 | +0.9 |
| | comp=N,1.8nm,0.9s | | | | | | | |
| TOA0 | Torodi Ar. Sit | 76.90 | 71 | *e*P | | P | 07 50 43.5 | +0.3 |
| TOA0 | Torodi Ar. Sit | 76.90 | 71 | *e*P | | P | 07 50 41.2 | -2.0 |
| TORD | Torodi Ar. Bea | 76.90 | 71 | P | | P | 07 50 41.4 | -1.8 |
| | comp=N,2.6nm,0.4s,baz=253,slow=5.3,SNR=34 | | | | | | | |
| M04C | Macdoel | 77.33 | 323 | P | | P | 07 50 45.9 | +0.7 |
| | baz=78 | | | | | | | |
| I07A | Izee | 77.54 | 326 | *e*P | | P | 07 50 47.7 | +1.4 |
| | comp=N,58nm,2.6s | | | | | | | |
| F10A | Beach Ranch, E | 77.64 | 328 | *e*P | | P | 07 50 48.2 | +1.4 |
| | comp=N,71nm,3.0s | | | | | | | |
| J05D | Fort Rock, OR | 77.96 | 324 | P | | P | 07 50 50.1 | +1.4 |
| | baz=78 | | | | | | | |
| I05D | Terrebonne, OR | 78.70 | 325 | P | | P | 07 50 53.0 | +0.3 |
| | baz=79 | | | | | | | |
| NEW | Newport | 79.19 | 330 | P | | P | 07 50 56.6 | +1.4 |
| | comp=N,1.4nm,0.7s,baz=138,slow=14,SNR=2.2 | | | | | | | |
| NEW | Newport | 79.19 | 330 | P | | P | 07 50 56.2 | +1.0 |
| | baz=80 | | | | | | | |
| VNDA | Vanda | 79.42 | 190 | P | | P | 07 50 57.8 | +1.7 |
| | comp=N,0.7nm,0.7s,baz=120,slow=6.5,SNR=7.6 | | | | | | | |
| C09A | Chrisman Ranch | 79.43 | 329 | *e*P | | P | 07 50 57.6 | +1.1 |
| | comp=N,6.6nm,0.6s | | | | | | | |
| F04A | Amboy | 80.31 | 326 | *e*P | | P | 07 51 02.3 | +1.1 |
| | comp=N,167nm,2.4s | | | | | | | |
| B05A | Bryant | 81.65 | 328 | P | | P | 07 51 08.7 | +0.5 |
| | baz=82 | | | | | | | |
| YKA | Yellowknife Ar | 88.50 | 341 | P | | P | 07 51 42.0 | -0.1 |
| | comp=N,2.8nm,0.5s,baz=133,slow=4.7,SNR=14 | | | | | | | |
| DLBC | Dease Lake | 91.61 | 333 | P | | P | 07 51 57.5 | +0.6 |
| | comp=N,1.3nm,0.8s,baz=103,slow=15,SNR=4.7 | | | | | | | |
| INK | Inuvik | 98.26 | 340 | P | | P | 07 52 25.1 | -1.7 |
| | comp=N,2.0nm,0.9s,baz=170,slow=6.1,SNR=3.1 | | | | | | | |
| H11S2 | WAKE ISLAND Hy | 127.04 | 279 | T | | T | 10 17 19.4 | |
| | baz=100,slow=74,SNR=51 | | | | | | | |
| H11S1 | WAKE ISLAND Hy | 127.05 | 279 | T | | T | 10 17 22.5 | |
| | baz=100,slow=74,SNR=43 | | | | | | | |
| H11N3 | WAKE ISLAND Hy | 127.05 | 281 | T | | T | 10 17 19.8 | |
| | baz=100,slow=75,SNR=11 | | | | | | | |
| H11S3 | WAKE ISLAND Hy | 127.06 | 279 | T | | T | 10 17 20.6 | |
| | baz=100,slow=74,SNR=40 | | | | | | | |
| H11N2 | WAKE ISLAND Hy | 127.07 | 281 | T | | T | 10 17 20.5 | |
| | baz=100,slow=75,SNR=20 | | | | | | | |
| H11N1 | WAKE ISLAND Hy | 127.07 | 281 | T | | T | 10 17 20.8 | |
| | baz=100,slow=75,SNR=9.1 | | | | | | | |
| SEY | Seymchan | 127.44 | 337 | PKP | | PKPdf | 07 57 54.8 | +0.8 |
| | comp=N,0.7nm,0.5s,baz=174,slow=5.6,SNR=4.5 | | | | | | | |
| ABKAR | Akbulak array | 129.45 | 41 | *e*PKPdf | | PKPdf | 07 57 58.3 | +0.1 |
| PETK | Petropavlovsk- | 130.12 | 325 | PKP | | PKPdf | 07 57 59.4 | 0.0 |
| | comp=N,3.3nm,0.9s,baz=92,slow=4.6,SNR=3.1 | | | | | | | |
| ASAR | Alice Springs | 132.06 | 209 | PKP | | PKPdf | 07 58 03.5 | -0.6 |
| | comp=N,0.6nm,0.5s,baz=132,slow=2.0,SNR=12 | | | | | | | |
| WRA | Warramunga Arr | 135.01 | 212 | PKP | | PKPdf | 07 58 09.6 | -0.1 |
| | comp=N,1.5nm,0.6s,baz=149,slow=1.8,SNR=17 | | | | | | | |
| WRAB | Tennant Creek | 135.01 | 212 | *e*PKPdf | | PKPdf | 07 58 09.6 | -0.1 |
| ZALV | Zalesovo Beam | 139.69 | 23 | PKP | | PKPdf | 07 58 17.3 | +0.1 |
| | comp=N,2.7nm,0.5s,baz=273,slow=2.1,SNR=6.5 | | | | | | | |
| MKAR | Makanchi Array | 143.68 | 33 | PKhKP | | PKPpre | 07 58 20.9 | |
| | comp=N,0.3nm,0.5s,baz=303,slow=2.6,SNR=4.3 | | | | | | | |
| KSH | Kashi | 143.70 | 48 | *e*PKP | | PKPdf | 07 58 26.0 | +1.0 |
| KSH | | | | *e*pPKP | | *p*PKPdf | 07 58 52.5 | -0.8 |
| KSH | | | | *e*sPKP | | | 07 59 03.4 | |
| KSH | | | | PP | | PP | 08 01 39.6 | +1.0 |
| KSH | | | | SKS | | SKSdf | 08 05 24.4 | -1.0 |
| KSH | | | | SS | | SS | 08 20 08.3 | -4.9 |
| KSH | | | | PPMZ | | | | |
| | comp=N,110nm,5.1s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=N,150nm,7.0s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=N,140nm,9.7s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=N,150nm,5.5s | | | | | | | |
| WMQ | Urumqi | 148.49 | 33 | *e*PKPbc | | PKPdf | 07 58 34.0 | +1.1 |
| USRK | Ussuriysk Ar. | 148.98 | 329 | PKPbc | | PKPbc | 07 58 38.4 | +0.7 |
| | comp=N,4.9nm,0.7s,baz=64,slow=2.1,SNR=10 | | | | | | | |
| MJAR | Matsushiro Arr | 149.99 | 312 | PKPbc | | PKPbc | 07 58 40.8 | +0.3 |
| | comp=N,3.4nm,0.7s,baz=103,slow=1.4,SNR=10.0 | | | | | | | |
| SONM | Songino Array | 150.83 | 6 | PKPbc | | PKPbc | 07 58 42.4 | +0.1 |
| | comp=N,6.7nm,0.6s,baz=322,slow=1.6,SNR=18 | | | | | | | |
| HHC | Hu-ho-hao-te | 158.00 | 358 | *e*PKP | | PKPdf | 07 58 47.8 | +1.0 |
| HHC | | | | PP | | PP | 08 03 04.4 | +5.1 |
| HHC | | | | SKS | | SKSdf | 08 05 42.0 | -1.4 |
| HHC | | | | SS | | SS | 08 22 52.1 | +3.0 |
| HHC | | | | PPMZ | | | | |
| | comp=N,37nm,8.9s | | | | | | | |
| LZH | Lanzhou | 161.77 | 18 | *e*PKP | | PKPdf | 07 58 49.3 | -1.9 |
| LZH | | | | pPKP | | *p*PKPdf | 07 59 19.8 | +0.2 |
| LZH | | | | sPKP | | | 07 59 30.1 | |
| LZH | | | | LN | | | | |
| | comp=N,130nm,18.0s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=N,130nm,17.9s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=N,170nm,20.1s | | | | | | | |
| NJ2 | Nanjing | 164.85 | 332 | *e*PKP | | PKPdf | 07 58 51.5 | -2.5 |
| CD2 | Chengdu | 166.44 | 26 | PKP | | PKPdf | 07 58 53.3 | -2.1 |
| CD2 | | | | pPKP | | *p*PKPdf | 07 59 25.9 | +2.0 |
| CD2 | | | | sPKP | | | 07 59 38.6 | |
| CD2 | | | | PP | | PP | 08 03 43.0 | -1.4 |
| CD2 | | | | SKS | | SKSdf | 08 05 45.9 | -4.5 |
| CD2 | | | | SKKS | | SKKSac | 08 10 18.3 | -5.0 |
| CD2 | | | | SS | | SS | 08 24 14.6 | -2.7 |
| CD2 | | | | PPMZ | | | | |
| | comp=N,120nm,5.2s | | | | | | | |
| KMI | Kunming | 170.36 | 48 | PKP | | PKPdf | 07 58 50.8 | -7.6 |
| GYA | Guiyang | 171.55 | 25 | *e*PKP | | PKPdf | 07 58 56.8 | -2.1 |
| GYA | | | | PKPab | | PKPab | 08 00 20.0 | -0.3 |
| GYA | | | | PKS | | PKSdf | 08 02 27.3 | -4.1 |
| GYA | | | | PP | | PP | 08 04 12.5 | +2.2 |
| GYA | | | | PPMZ | | | | |
| | comp=N,90nm,8.4s | | | | | | | |

*ISCJB* ***15*** *08:08:29.9±0.5,51°.42N±0°.03×16°.20E±0°.02,h0km, Error ellipse: s-maj=4.2km s-min=2.1km az=12.5*
*CSEM* ***15*** *08:08:31.6±0.3,51°.43N×16°.21E,h2km,ML3.6/8, Error ellipse: s-maj=5.0km s-min=2.8km az=10.0*
*BGR* ***15*** *08:08:33.8±1.1,51°.37N×16°.17E,h1km,ML3.1/9, Error ellipse: s-maj=15.6km s-min=7.6km az=168.0*
*VIE* ***15*** *08:08:33.5±0.4,51°.27N×16°.28E, h0km, mb2.4/3, ml2.9/3, Error ellipse: s-maj=3.0km s-min=2.1km az=14.0, Suspected Mining induced.*

**ISC 15 08:08:31.5±0.8, 51°.50N±0°.03×16°.26E±0°.02, h0km, n55,**
**σ1§10/101, 2C, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| KSP | Ksiaz | 0.66 | 178 | *i* Pg | | Pg | 08 08 44.1 | 0.0 |
| KSP | | | | *e*Sg | | Sg | 08 08 52.3 | -0.3 |
| UPC | Upice | 1.00 | 189 | *e*PG | | Pg | 08 08 50.3

| | | | | | | |
|---|---|---|---|---|---|---|
| **PRA** | **Prague** | **1.84 220** | Pg | **Pn** | **08 09 05.3 +1.0** |
| PRA | | | Sg | **Sn** | **08 09 27.9 -0.4** |
| | 39nm,0.4s | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.84 211** | *e*PG | **Pn** | **08 09 05.3 +0.9** |
| GOPC | | | *e*SG | **Sn** | **08 09 28.5 +0.1** |
| | comp=Z,26nm,0.3s | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.84 211** | Pg | **Pn** | **08 09 05.3 +0.9** |
| GOPC | | | Sg | **Sn** | **08 09 28.5 +0.1** |
| | 26nm,0.3s | | | | |
| **PRU** | **Pruhonice** | **1.86 217** | *e*PG | **Pn** | **08 09 05.8 +1.1** |
| PRU | | | *e*SG | **Sn** | **08 09 29.0 +0.1** |
| | comp=Z,50nm,0.4s | | | | |
| **PRU** | **Pruhonice** | **1.86 217** | Pg | **Pn** | **08 09 05.8 +1.1** |
| PRU | | | Sg | **Sn** | **08 09 29.0 +0.1** |
| | 50nm,0.4s | | | | |
| **MORC** | **Moravsky Berou** | **1.91 154** | *e*Sg | **Sb** | **08 09 31.4 -0.1** |
| **FBE** | **Freiberg** | **1.92 254** | *e*Pg | **Pb** | **08 09 07.4 +0.1** |
| | SNR=5.6 | | | | |
| FBE | | | *e*Sg | **Sb** | **08 09 32.0 +0.2** |
| | SNR=6.1 | | | | |
| **FBE** | **Freiberg** | **1.92 254** | Pg | **Pb** | **08 09 07.4 +0.1** |
| | SNR=5.6 | | | | |
| FBE | | | Sg | **Sb** | **08 09 32.0 +0.2** |
| | SNR=6.1 | | | | |
| **CLL** | **Collm** | **2.05 266** | *e*Sg | **Sb** | **08 09 36.6 +1.0** |
| | SNR=3.3 | | | | |
| **CLL** | **Collm** | **2.05 266** | *e*Pg | **Pb** | **08 09 10.0 +0.4** |
| CLL | | | *e*Sg | **Sb** | **08 09 37.0 +1.4** |
| **CLL** | **Collm** | **2.05 266** | Sg | **Sb** | **08 09 36.6 +1.0** |
| | SNR=3.3 | | | | |
| **OKC** | **Ostrava-Krasne** | **2.05 143** | *e*PG | **Pg** | **08 09 10.6 -0.2** |
| OKC | | | *e*SG | **Sb** | **08 09 36.0 +0.4** |
| **OKC** | **Ostrava-Krasne** | **2.05 143** | Pg | **Pg** | **08 09 10.6 -0.2** |
| OKC | | | Sg | **Sb** | **08 09 36.0 +0.4** |
| **VRAC** | **Vranov** | **2.20 174** | *e*Pn | **Pn** | **08 09 09.4 +0.1** |
| VRAC | | | *e*Sg | **Sb** | **08 09 39.0 -1.0** |
| **OJC** | **Ojcow** | **2.58 118** | *e*Pg | **Pg** | **08 09 21.3 +0.3** |
| OJC | | | *e*Sg | **Sg** | **08 09 56.3 +1.9** |
| **TANN** | **Tannenbergstha** | **2.64 247** | *e*Pn | **Pn** | **08 09 15.2 -0.1** |
| | SNR=2.7 | | | | |
| TANN | | | *e*Sg | **Sb** | **08 09 53.9 +1.4** |
| | SNR=5.0 | | | | |
| **TANN** | **Tannenbergstha** | **2.64 247** | Pn | **Pn** | **08 09 15.2 -0.1** |
| | SNR=2.7 | | | | |
| TANN | | | Sg | **Sb** | **08 09 53.9 +1.4** |
| | SNR=5.0 | | | | |
| **WERD** | **Werda** | **2.71 249** | *e*Sg | **Sb** | **08 09 56.5 +1.8** |
| | SNR=6.6 | | | | |
| **WERD** | **Werda** | **2.71 249** | Sg | **Sb** | **08 09 56.5 +1.8** |
| | SNR=6.6 | | | | |
| **NKC** | **Novy Kostel** | **2.73 244** | *e*PN | **Pn** | **08 09 16.5 -0.1** |
| NKC | | | *e*PG | **Pb** | **08 09 22.3 +1.2** |
| NKC | | | *e*SG | **Sb** | **08 09 57.0 +1.9** |
| | comp=Z,62nm,0.3s | | | | |
| **NKC** | **Novy Kostel** | **2.73 244** | Pn | **Pn** | **08 09 16.5 -0.1** |
| **GUNZ** | **Gunzen** | **2.73 247** | *e*Sg | **Sb** | **08 09 57.3 +2.0** |
| | SNR=5.0 | | | | |
| **GUNZ** | **Gunzen** | **2.73 247** | Sg | **Sb** | **08 09 57.3 +2.0** |
| | SNR=5.0 | | | | |
| **WERN** | **Wernitzgruen** | **2.74 245** | *e*Pn | **Pn** | **08 09 16.9 +0.1** |
| | SNR=3.0 | | | | |
| WERN | | | *e*Sg | **Sb** | **08 09 57.7 +2.1** |
| | SNR=6.9 | | | | |
| **WERN** | **Wernitzgruen** | **2.74 245** | Pn | **Pn** | **08 09 16.9 +0.1** |
| | SNR=3.0 | | | | |
| WERN | | | Sg | **Sb** | **08 09 57.7 +2.1** |
| | SNR=6.9 | | | | |
| **PLN** | **Plauen** | **2.78 250** | *e*Sg | **Sb** | **08 09 58.8 +2.1** |
| | SNR=5.4 | | | | |
| **PLN** | **Plauen** | **2.78 250** | Sg | **Sb** | **08 09 58.8 +2.1** |
| | SNR=5.4 | | | | |
| **NEUB** | **Neuenburg** | **2.83 266** | *e*Sg | **Sg** | **08 10 02.2 -0.1** |
| | SNR=4.2 | | | | |
| **NEUB** | **Neuenburg** | **2.83 266** | Sg | **Sg** | **08 10 02.2 -0.1** |
| | SNR=4.2 | | | | |
| **KHC** | **Kasperske Hory** | **2.93 217** | *e*PN | **Pn** | **08 09 19.3 0.0** |
| KHC | | | *e*PG | **Pb** | **08 09 24.9 +0.3** |
| KHC | | | *e*SG | **Sb** | **08 10 01.7 +0.8** |
| | comp=Z,19nm,0.3s | | | | |
| **KHC** | **Kasperske Hory** | **2.93 217** | Pn | **Pn** | **08 09 19.3 0.0** |
| **LANS** | **Liptovska Anna** | **3.12 138** | *e*PG | **Pg** | **08 09 30.6 -0.7** |
| LANS | | | *e*SG | **Sg** | **08 10 09.7 -2.1** |
| **LANS** | **Liptovska Anna** | **3.12 138** | *e*Pg | **Pg** | **08 09 30.6 -0.7** |
| LANS | | | *e*Sg | **Sg** | **08 10 09.7 -2.1** |
| **VYHS** | **Vyhne** | **3.44 150** | *e*PG | **Pb** | **08 09 34.2 +1.0** |
| VYHS | | | *e*SG | **Sg** | **08 10 20.0 -1.8** |
| **VYHS** | **Vyhne** | **3.44 150** | *e*Pg | **Pb** | **08 09 34.2 +1.0** |
| VYHS | | | *e*Sg | **Sg** | **08 10 20.0 -1.8** |
| **BSD** | **Bornholm Skovb** | **3.71 348** | *i* P | **Pn** | **08 09 29.6 -0.4** |
| BSD | | | *i* S | **Sn** | **08 10 11.1 -3.3** |
| **BSD** | **Bornholm Skovb** | **3.71 348** | *i* P | **Pn** | **08 09 29.6 -0.4** |
| **STHS** | **Stebnicka Huta** | **3.81 121** | *e*PG | **Pg** | **08 09 45.6 +1.2** |
| STHS | | | *e*SG | **Sg** | **08 10 35.4 +1.7** |
| **STHS** | **Stebnicka Huta** | **3.81 121** | *e*Pg | **Pg** | **08 09 45.7 +1.3** |
| STHS | | | *e*Sg | **Sg** | **08 10 35.4 +1.7** |
| **MOA** | **Molln** | **3.88 200** | ⇑*i*Pn | **Pn** | **08 09 32.2 -0.1** |
| MOA | | | ⇑*i*Sg | **Sg** | **08 10 34.9 -1.0** |
| | 14nm,0.4s | | | | |
| **MOA** | **Molln** | **3.88 200** | Pn | **Pn** | **08 09 32.2 -0.1** |
| MOA | | | Sg | **Sg** | **08 10 34.9 -1.0** |
| | 14nm,0.4s | | | | |
| **KOLS** | **Kolonicke sedl** | **4.64 121** | *e*PG | **Pg** | **08 09 59.3 -1.0** |
| KOLS | | | *e*SG | **Sg** | **08 11 01.9 +1.5** |
| **KOLS** | **Kolonicke sedl** | **4.64 121** | *e*Pg | **Pg** | **08 09 59.3 -1.0** |

*CSEM* ***15*** *08:10:21.1±0.2,37.°85N×29.°13E,h10km,MD3.0, Error ellipse: s-maj=7.6km s-min=4.3km az=77.0*
*ISK* ***15*** *08:10:21.5,37.°79N×29.°03E,h9km,MD2.7*
**DDA 15 08:10:20.7, 37.°86N×29.°22E, h7km, Md3.0, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DNZL** | **Cakiroluk** | **0.22** | **219** | *i* P | Pg | 08 10 25.4 | +0.1 |
| DNZL | | | | *i* S | Sg | 08 10 29.2 | +0.7 |
| **DNZL** | **Cakiroluk** | **0.22** | **219** | P | Pg | 08 10 25.4 | +0.1 |
| DNZL | | | | S | Sg | 08 10 29.2 | +0.8 |
| **KHAL** | **Karahalli** | **0.55** | **23** | *i* P | Pg | 08 10 31.8 | +0.2 |
| KHAL | | | | *i* S | Sg | 08 10 39.4 | +0.5 |
| **KHAL** | **Karahalli** | **0.55** | **23** | P | Pg | 08 10 31.8 | +0.3 |
| KHAL | | | | S | Sg | 08 10 39.4 | +0.5 |
| **GOLH** | **Golhisar** | **0.68** | **156** | *i* P | Pg | 08 10 34.0 | +0.1 |
| GOLH | | | | *i* S | Sb | 08 10 45.8 | +1.0 |
| **GOLH** | **Golhisar** | **0.68** | **156** | P | Pg | 08 10 34.0 | 0.0 |
| GOLH | | | | S | Sb | 08 10 45.8 | +1.1 |
| **GLHS** | **Glhisar (BURDU** | **0.74** | **162** | *e*PG | Pb | 08 10 36.0 | -0.1 |
| GLHS | | | | *e*SG | Sb | 08 10 47.4 | +1.0 |
| **GLHS** | **Glhisar (BURDU** | **0.74** | **162** | *e*Pg | Pb | 08 10 36.0 | 0.0 |
| GLHS | | | | *e*Sg | Sb | 08 10 47.4 | +1.0 |
| **KULA** | **Kula-Manisa** | **0.79** | **326** | *e*PG | Pb | 08 10 36.8 | -0.1 |
| KULA | | | | *e*SG | Sb | 08 10 48.3 | +0.4 |
| **KULA** | **Kula-Manisa** | **0.79** | **326** | *e*Pg | Pb | 08 10 36.8 | -0.1 |
| KULA | | | | *e*Sg | Sb | 08 10 48.3 | +0.5 |
| **MANT** | **Manisa** | **0.82** | **321** | *i* P | Pg | 08 10 35.9 | -0.8 |
| **MANT** | **Manisa** | **0.82** | **321** | P | Pg | 08 10 35.9 | -0.8 |
| MANT | | | | S | Sb | 08 10 50.1 | +1.1 |
| **YER** | **Yerkesik** | **1.04** | **226** | *e*PG | Pg | 08 10 38.8 | -1.9 |
| **YER** | **Yerkesik** | **1.04** | **226** | *e*Pg | Pg | 08 10 38.8 | -1.9 |
| **AYDB** | **Zeytinkoy-Aydi** | **1.05** | **275** | *e*PG | Pg | 08 10 39.7 | -1.5 |
| **AYDB** | **Zeytinkoy-Aydi** | **1.05** | **275** | *e*Pg | Pg | 08 10 39.7 | -1.4 |
| **AYDN** | **Tasoluk** | **1.08** | **260** | P | Pn | 08 10 43.4 | +1.0 |
| AYDN | | | | S | Sn | 08 10 57.3 | -0.3 |
| **TURN** | **Turunc** | **1.10** | **207** | *i* P | Pn | 08 10 43.3 | +0.8 |
| **TURN** | **Turunc** | **1.10** | **207** | P | Pn | 08 10 43.3 | +0.8 |
| TURN | | | | S | Sn | 08 11 05.1 | +7.1 |
| **DALY** | **Dalyan (Mu˘la** | **1.14** | **204** | *e*PG | Pg | 08 10 41.2 | -1.3 |
| **DALY** | **Dalyan (Mu˘la** | **1.14** | **204** | *e*Pg | Pg | 08 10 41.2 | -1.3 |
| **FETY** | **Fethiye** | **1.23** | **185** | *e*PN | Pb | 08 10 43.8 | -0.5 |
| **FETY** | **Fethiye** | **1.23** | **185** | *e*Pn | Pb | 08 10 43.8 | -0.5 |
| **ELL** | **Elmali** | **1.24** | **153** | *e*PN | Pg | 08 10 45.6 | +0.9 |
| **ELL** | **Elmali** | **1.24** | **153** | *e*Pn | Pg | 08 10 45.6 | +0.9 |
| **DEMI** | **Demirci** | **1.24** | **342** | *i* P | Pg | 08 10 44.9 | +0.2 |
| DEMI | | | | *i* S | Sb | 08 11 01.2 | +0.2 |
| **DEMI** | **Demirci** | **1.24** | **342** | P | Pg | 08 10 44.9 | +0.1 |
| DEMI | | | | S | Sb | 08 11 01.2 | +0.2 |
| **BAGO** | **Egridir - ISPA** | **1.25** | **84** | P | Pn | 08 10 44.6 | -0.1 |
| BAGO | | | | S | Sn | 08 11 06.1 | +4.2 |
| **AKAS** | **Kas** | **1.65** | **169** | P | Pg | 08 10 54.0 | +1.3 |
| AKAS | | | | S | Sg | 08 11 16.8 | +2.6 |
| **BODT** | **Bodrum** | **1.71** | **243** | *e*PN | Pn | 08 10 50.3 | -0.7 |
| **BODT** | **Bodrum** | **1.71** | **243** | *e*Pn | Pn | 08 10 50.3 | -0.7 |

*BEO* ***15*** *08:13:58.2±0.5,46.°03N×22.°86E,h0km,ML1.8/3*
**BUC 15 08:13:57.8±0.5, 45.°97N×22.°79E, h5km±12km, MD2.5/2, 14C-3D, Error ellipse: s-maj=4.3km s-min=3.5km az=95.0, Romania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DEV** | **Deva** | **0.12** | **138** | *i* S | Sg | 08 14 03.0 | +1.1 |
| DEV | | | | ⇑*i* P | Pg | 08 14 00.2 | -0.1 |
| **DEV** | **Deva** | **0.12** | **138** | S | Sg | 08 14 03.0 | +1.1 |
| DEV | | | | ⇑*i* P | Pg | 08 14 00.2 | -0.1 |
| **GZR** | **Gura Zlata** | **0.58** | **181** | ⇓*i* Pg | Pg | 08 14 09.5 | +0.4 |
| GZR | | | | *e*Sg | Sb | 08 14 18.0 | -1.1 |
| **GZR** | **Gura Zlata** | **0.58** | **181** | ⇑*i* P | Pg | 08 14 09.7 | +0.6 |
| GZR | | | | *i* S | Sb | 08 14 19.6 | +0.5 |
| **GZR** | **Gura Zlata** | **0.58** | **181** | ⇑*i* P | Pg | 08 14 09.7 | +0.6 |
| **GZR** | **Gura Zlata** | **0.58** | **181** | S | Sb | 08 14 19.6 | +0.5 |
| **DRGR** | | **0.82** | **356** | *e*Sg | Sg | 08 14 22.1 | -2.4 |
| **DRGR** | | **0.82** | **356** | ⇑*i* P | Pb | 08 14 14.6 | -0.1 |
| DRGR | | | | *i* S | Sb | 08 14 26.6 | +0.4 |
| **DRGR** | | **0.82** | **356** | ⇑*i* P | Pb | 08 14 14.6 | -0.1 |
| **SIRR** | **Siria** | **0.84** | **291** | ⇓*i* P | Pb | 08 14 14.8 | -0.1 |
| SIRR | | | | *i* S | Sn | 08 14 28.2 | -0.9 |
| **SIRR** | **Siria** | **0.84** | **291** | ⇓*i* P | Pb | 08 14 14.8 | -0.1 |
| **LOT** | **Lotru** | **0.86** | **127** | ⇑*i* P | Pb | 08 14 15.2 | -0.3 |
| LOT | | | | *i* S | Sb | 08 14 27.8 | +0.3 |
| **LOT** | **Lotru** | **0.86** | **127** | ⇑*i* P | Pb | 08 14 15.2 | -0.3 |
| **BZS** | **Buzias** | **0.89** | **247** | *e*Pg | Pb | 08 14 16.1 | +0.3 |
| BZS | | | | *e*Sg | Sb | 08 14 28.5 | +0.5 |
| **BZS** | **Buzias** | **0.89** | **247** | ⇑*i* P | Pb | 08 14 16.0 | +0.2 |
| BZS | | | | *i* S | Sb | 08 14 28.4 | +0.4 |
| **BZS** | **Buzias** | **0.89** | **247** | ⇑*i* P | Pb | 08 14 16.0 | +0.2 |
| **CJR** | **Cluj-Napoca** | **0.93** | **37** | *i* S | Sb | 08 14 29.8 | +0.6 |
| **CJR** | **Cluj-Napoca** | **0.93** | **37** | S | Sb | 08 14 29.8 | +0.6 |
| **VOIR** | | **1.67** | **108** | *i* S | Sg | 08 14 51.6 | -0.2 |
| **VOIR** | | **1.67** | **108** | S | Sg | 08 14 51.6 | -0.2 |
| **KUBS** | **Kucevo** | **1.75** | **207** | *e*Sg | Sg | 08 14 55.4 | +1.4 |
| **DOPR** | **Dopca** | **1.81** | **89** | ⇑*i* P | Pn | 08 14 30.6 | +0.9 |
| DOPR | | | | *i* S | Sn | 08 14 53.8 | +0.7 |
| **DOPR** | **Dopca** | **1.81** | **89** | ⇑*i* P | Pn | 08 14 30.6 | +0.9 |
| **DOPR** | **Dopca** | **1.81** | **89** | S | Sn | 08 14 53.8 | +0.7 |
| **BURAR** | **Bucovina Array** | **2.34** | **45** | ⇑*i* P | Pn | 08 14 38.5 | +1.4 |
| BURAR | | | | *i* S | Sb | 08 15 08.8 | -1.2 |
| **BURAR** | **Bucovina Array** | **2.34** | **45** | ⇑*i* P | Pn | 08 14 38.5 | +1.4 |
| **GRUS** | **Gruza** | **2.55** | **216** | *e*Pn | Pb | 08 14 42.5 | -1.5 |
| **ZAPS** | **Zavoj** | **2.70** | **182** | *e*Pn | Pb | 08 14 44.5 | -2.2 |
| ZAPS | | | | *e*Sn | Sn | 08 15 17.2 | +2.2 |

*NIED* ***15*** *08:39:00,30.°80N×142.°80E,h8km,Mw3.8 Best double couple: M0=4.81000×10^14 NP1:ϕs=41.00000°,δ15.00000°, λ=-169.00000°. NP2:ϕs=300.00000°,δ87.00000°, λ=-76.00000°.*
*IDC* ***15*** *08:39:03.3±1.0,30.°69N×142.°91E,h0km,mb3.6/5, mb1 3.8/7,mb1mx3.7/30,mbtmp3.6/7,ML3.1/2,MS2.4/1, Ms1 2.4/1,ms1mx2.0/32, Error ellipse: s-maj=32.9km s-min=21.8km az=86.0*
*JMA* ***15*** *08:39:04.5±0.1,30.°77N×142.°83E,h45km,M4.1*
*ISCJB* ***15*** *08:39:06.0±0.8,30.°83N±0.°06×142.°7E±0.°1,h45km, mb3.6/6, Error ellipse: s-maj=15.0km s-min=5.5km az=155.6*
**ISC 15 08:39:08.5±1.0, 30.°81N±0.°08×142.°7E±0.°1, h45km, n20, σ1s60/23, mb3.6/6, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHCJ** | **Hachijojimakas** | **3.32** | **313** | S | **Sn** | **08 40 36.6** | **+0.4** |
| **JHJ2** | **Mitsune** | **3.33** | **314** | S | **Sn** | **08 40 38.3** | **+1.8** |
| **JHJ** | **Hachijo jima 2** | **3.36** | **314** | Pn | **Pn** | **08 39 58.8** | **+0.3** |
| | 2.5nm,0.3s,baz=346,slow=23,SNR=7.8 | | | | | | |
| JHJ | | | | Sn | **Sn** | **08 40 37.4** | **+0.2** |
| | 20nm,0.3s,baz=329,slow=23,SNR=8.3 | | | | | | |
| **CBIJ** | **Chichi jima** | **3.73** | **187** | P | **Pn** | **08 40 00.9** | **-2.7** |
| CBIJ | | | | S | Sn | 08 40 38.5 | -7.7 |
| **BSO1** | **Boso 1** | **4.09** | **340** | P | **Pn** | **08 40 07.5** | **-0.5** |
| BSO1 | | | | S | **Sn** | **08 40 54.1** | **-0.2** |
| **BSO2** | **Boso 2** | **4.25** | **338** | *e*S | **Sn** | **08 40 59.9** | **+1.3** |
| **BSO4** | **Boso 4** | **4.60** | **335** | S | **Sn** | **08 41 08.9** | **+1.3** |
| **JHU** | **Hanno** | **5.77** | **331** | S | **Sn** | **08 41 36.4** | **-0.1** |
| **JHO** | **Hitachi** | **6.04** | **344** | P | **Pn** | **08 40 35.0** | **-0.3** |
| JHO | | | | S | **Sn** | **08 41 39.7** | **-3.5** |
| **JRY** | **Ryogami san** | **6.07** | **330** | P | **Pn** | **08 40 36.6** | **+0.8** |
| JRY | | | | S | **Sn** | **08 41 42.9** | **-1.0** |
| **JAG** | **Ashikaga** | **6.21** | **335** | S | **Sn** | **08 41 45.5** | **-1.7** |
| **MJAR** | **Matsushiro Arr** | **6.81** | **328** | Pn | **Pn** | **08 40 45.9** | **-0.1** |
| | 0.6nm,0.3s,baz=253,slow=7.7,SNR=4.7 | | | | | | |
| MJAR | | | | Sn | **Sn** | **08 42 01.5** | **-0.8** |
| | 1.5nm,0.3s,baz=328,slow=26,SNR=8.2 | | | | | | |
| **MAT** | **Matsushiro** | **6.82** | **328** | P | **Pn** | **08 40 45.5** | **-0.5** |
| MAT | | | | *e*S | **Sn** | **08 41 58.3** | **-4.0** |
| **ASAJ** | **Asahikawa** | **13.28** | **360** | LR | LR | 08 47 35.7 | |
| | comp=Z,18nm,21.0s,baz=188,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **32.44** | **312** | P | P | 08 45 39.4 | +5.0 |
| | 0.7nm,0.7s,baz=108,slow=7.7,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **48.51** | **307** | P | P | 08 47 51.2 | +4.3 |
| | 0.8nm,0.7s,baz=93,slow=6.5,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **51.09** | **190** | P | **P** | **08 48 06.8** | **+0.1** |
| | 0.6nm,0.4s,baz=9.4,slow=7.8,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **54.27** | **30** | P | **P** | **08 48 30.1** | **+0.4** |
| | 0.3nm,0.7s,baz=244,slow=5.9,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **54.82** | **190** | P | **P** | **08 48 34.1** | **0.0** |
| | 0.2nm,0.4s,baz=8.6,slow=6.8,SNR=4.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.91** | **52** | P | **P** | **08 51 03.9** | **+1.7** |
| | 0.2nm,0.6s,baz=310,slow=4.2,SNR=3.7 | | | | | | |

**IDC 15 08:41:06.3±12.0, 15.°75S×173.°13W, h0km, mb3.4/3, mb1 3.6/4, mb1mx3.4/31, mbtmp3.4/4, ML3.1/1, Error ellipse: s-maj=578.7km s-min=25.0km az=139.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.25** | **36** | Pn | Pn | 08 41 42.9 | -2.0 |
| | 5.4nm,0.3s,baz=256,slow=5.4,SNR=8.8 | | | | | | |
| AFI | | | | Sn | Sn | 08 42 09.0 | -4.5 |
| | 14nm,0.3s,baz=220,slow=20,SNR=8.1 | | | | | | |
| AFI | | | | T | T | 08 44 06.3 | |
| | 8.3nm,0.3s,baz=117,slow=17,SNR=3.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.40** | **329** | T | T | 09 30 40.9 | |
| | baz=149,slow=75,SNR=6.4 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.41** | **329** | T | T | 09 30 40.9 | |
| | baz=149,slow=75,SNR=4.9 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.42** | **329** | T | T | 09 30 42.3 | |
| | baz=149,slow=75,SNR=5.6 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.34** | **330** | T | T | 09 31 55.6 | |
| | baz=150,slow=76,SNR=5.4 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.35** | **330** | T | T | 09 31 52.3 | |
| | baz=150,slow=76,SNR=4.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.36** | **330** | T | T | 09 31 50.8 | |
| | baz=150,slow=76,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.02** | **257** | P | P | 08 50 03.3 | +0.3 |
| | 0.1nm,0.4s,baz=83,slow=6.5,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **50.25** | **252** | P | P | 08 50 03.6 | -1.2 |
| | 0.4nm,0.4s,baz=88,slow=7.9,SNR=7.6 | | | | | | |
| **ILAR** | **Eielson Array** | **82.74** | **11** | P | P | 08 53 33.0 | +1.3 |
| | 0.3nm,0.6s,baz=229,slow=6.3,SNR=7.2 | | | | | | |

*ISCJB* ***15*** *08:54:30.1±0.4,40.°46N±0.°02×25.°85E±0.°03,h5km±4km, Error ellipse: s-maj=3.9km s-min=3.6km az=31.5*
*CSEM* ***15*** *08:54:30.3±0.1,40.°46N×25.°87E,h10km,ML2.1, Error ellipse: s-maj=3.1km s-min=2.7km az=148.0*
*ISK* ***15*** *08:54:30.5,40.°44N×25.°96E,h13km,MD2.8*
*THE* ***15*** *08:54:31.1,40.°46N×25.°79E,h9km±1km,ML2.1/4, Error ellipse: s-maj=1.0km s-min=0.5km az=316.0*
*DDA* ***15*** *08:54:34.0,40.°33N×26.°15E,h7km,Md2.9*
**ISC 15 08:54:30.3±0.9, 40.°47N±0.°02×25.°86E±0.°02, h11km±8km, n56, σ0s53/78, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMTH** | **Samothraki Isl** | **0.25** | **270** | P | **Pg** | **08 54 35.3** | **-0.2** |
| SMTH | | | | S | **Sg** | **08 54 38.5** | **-0.5** |
| **SMTH** | **Samothraki Isl** | **0.25** | **270** | P | **Pg** | **08 54 35.3** | **-0.2** |
| SMTH | | | | S | **Sg** | **08 54 38.5** | **-0.5** |
| **GADA** | **Gvkgeada** | **0.28** | **174** | *e*PG | **Pg** | **08 54 36.1** | **+0.1** |
| GADA | | | | *e*SG | **Sg** | **08 54 40.9** | **+1.1** |
| **GADA** | **Gvkgeada** | **0.28** | **174** | *e*Pg | **Pg** | **08 54 36.1** | **+0.1** |
| GADA | | | | *e*Sg | **Sg** | **08 54 40.9** | **+1.1** |
| **ENEZ** | **Enez** | **0.35** | **40** | *e*PG | **Pg** | **08 54 37.5** | **+0.3** |
| ENEZ | | | | *e*SG | **Sb** | **08 54 43.5** | **-0.5** |
| **ENEZ** | **Enez** | **0.35** | **40** | *e*Pg | **Pg** | **08 54 37.5** | **+0.3** |
| ENEZ | | | | *e*Sg | **Sb** | **08 54 43.5** | **-0.5** |
| **ALN** | **Alexandroupoli** | **0.45** | **18** | *e*PG | **Pb** | **08 54 40.1** | **-0.2** |
| **ALN** | **Alexandroupoli** | **0.45** | **18** | P | **Pb** | **08 54 40.2** | **-0.1** |
| ALN | | | | S | **Sb** | **08 54 47.0** | **0.0** |
| **ALN** | **Alexandroupoli** | **0.45** | **18** | *e*Pg | **Pb** | **08 54 40.1** | **-0.2** |
| ALN | | | | S | **Sb** | **08 54 47.0** | **0.0** |
| **GELI** | **Tayfur-Gelibol** | **0.47** | **99** | *e*PG | **Pg** | **08 54 38.8** | **-0.8** |
| **GELI** | **Tayfur-Gelibol** | **0.47** | **99** | *e*Pg | **Pg** | **08 54 38.8** | **-0.8** |
| **ERIK** | **Erikli-Kesan** | **0.54** | **68** | *e*PG | **Pg** | **08 54 40.5** | **-0.3** |
| **ERIK** | **Erikli-Kesan** | **0.54** | **68** | *e*Pg | **Pg** | **08 54 40.5** | **-0.3** |
| **BOZC** | **Bozcaada** | **0.65** | **167** | P | **Pg** | **08 54 42.8** | **0.0** |
| BOZC | | | | S | **Sg** | **08 54 51.6** | **+0.3** |
| **LPK** | **Lapseki** | **0.69** | **98** | *e*PG | **Pg** | **08 54 42.8** | **-1.0** |
| **LPK** | **Lapseki** | **0.69** | **98** | *e*Pg | **Pg** | **08 54 42.8** | **-1.0** |
| **EZN** | **Ezine** | **0.74** | **151** | *e*PG | **Pg** | **08 54 43.9** | **-0.6** |
| **EZN** | **Ezine** | **0.74** | **151** | *e*Pg | **Pg** | **08 54 43.9** | **-0.6** |
| **LIA** | **Limnos Island** | **0.77** | **222** | P | **Pg** | **08 54 45.2** | **0.0** |
| LIA | | | | S | **Sg** | **08 54 55.5** | **+0.2** |
| **LIA** | **Limnos Island** | **0.77** | **222** | P | **Pg** | **08 54 45.2** | **0.0** |
| LIA | | | | S | **Sg** | **08 54 55.5** | **+0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.03** | **77** | *e*PG | **Pg** | **08 54 49.3** | **-0.8** |
| **RKY** | **Sarkoy-Tekirda** | **1.03** | **77** | *e*Pg | **Pg** | **08 54 49.3** | **-0.8** |
| **SART** | **Tekirdag** | **1.03** | **77** | *i* P | **Pb** | **08 54 50.5** | **+0.3** |
| SART | | | | *i* S | **Sn** | **08 55 06.5** | **+1.3** |
| **SART** | **Tekirdag** | **1.03** | **77** | P | **Pb** | **08 54 50.5** | **+0.3** |
| SART | | | | S | **Sn** | **08 55 06.5** | **+1.3** |
| **KRBG** | **Karabiga-Canak** | **1.10** | **94** | *e*PG | **Pb** | **08 54 50.2** | **-1.1** |
| **KRBG** | **Karabiga-Canak** | **1.10** | **94** | *e*Pg | **Pb** | **08 54 50.3** | **-1.1** |
| **KAVA** | **Kavala** | **1.15** | **298** | P | **Pb** | **08 54 52.2** | **0.0** |
| KAVA | | | | S | **Sg** | **08 55 07.7** | **+0.3** |
| **KAVA** | **Kavala** | **1.15** | **298** | P | **Pb** | **08 54 52.2** | **0.0** |
| KAVA | | | | S | **Sg** | **08 55 07.7** | **+0.3** |
| **SIGR** | **SIGRI** | **1.26** | **180** | *e*PN | **Pn** | **08 54 53.8** | **-0.1** |
| **SIGR** | **SIGRI** | **1.26** | **180** | *e*Pn | **Pn** | **08 54 53.8** | **-0.1** |
| **AYVA** | **Ayvalik** | **1.33** | **151** | *i* P | **Pb** | **08 54 55.2** | **0.0** |
| AYVA | | | | *i* S | **Sg** | **08 55 13.5** | **+0.5** |
| **AYVA** | **Ayvalik** | **1.33** | **151** | P | **Pb** | **08 54 55.2** | **0.0** |
| AYVA | | | | S | **Sg** | **08 55 13.5** | **+0.5** |
| **MRMT** | **Marmara Adasi** | **1.33** | **84** | *e*PN | **Pn** | **08 54 54.7** | **-0.2** |
| **MRMT** | **Marmara Adasi** | **1.33** | **84** | *e*Pn | **Pn** | **08 54 54.7** | **-0.2** |
| **TKR** | **Tekirdag** | **1.37** | **67** | *e*PN | **Pn** | **08 54 55.1** | **-0.3** |
| **TKR** | **Tekirdag** | **1.37** | **67** | *e*Pn | **Pn** | **08 54 55.2** | **-0.3** |
| **OUR** | **Ouranopolis** | **1.44** | **265** | *e*PN | **Pg** | **08 54 57.7** | **-0.3** |
| **OUR** | **Ouranopolis** | **1.44** | **265** | P | **Pn** | **08 54 55.7** | **-0.7** |
| **OUR** | **Ouranopolis** | **1.44** | **265** | P | **Pn** | **08 54 55.7** | **-0.7** |
| **OUR** | **Ouranopolis** | **1.44** | **265** | *e*Pn | **Pg** | **08 54 57.7** | **-0.3** |
| **GONE** | **Gonen-Balikesi** | **1.46** | **106** | *e*PN | **Pn** | **08 54 56.6** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **1.46** | **106** | *e*Pn | **Pn** | **08 54 56.6** | **0.0** |
| **EDRB** | **Edirne** | **1.53** | **26** | *e*PN | **Pn** | **08 54 58.1** | **+0.5** |
| **EDRB** | **Edirne** | **1.53** | **26** | *e*Pn | **Pn** | **08 54 58.1** | **+0.5** |
| **BALY** | **Balya** | **1.53** | **118** | *i* P | **Pn** | **08 54 58.2** | **+0.5** |
| **BALY** | **Balya** | **1.53** | **118** | P | **Pn** | **08 54 58.2** | **+0.5** |
| BALY | | | | S | **Sg** | **08 55 20.0** | **+0.3** |
| **EDC** | **Edincik** | **1.53** | **94** | *e*PN | **Pn** | **08 54 57.1** | **-0.6** |
| **EDC** | **Edincik** | **1.53** | **94** | *e*Pn | **Pn** | **08 54 57.1** | **-0.6** |
| **BALB** | **Balikesir** | **1.76** | **118** | *e*PN | **Pn** | **08 55 00.5** | **-0.2** |
| **BALB** | **Balikesir** | **1.76** | **118** | *e*Pn | **Pn** | **08 55 00.5** | **-0.2** |
| **CHOS** | **Chios island** | **2.09** | **176** | P | **Pn** | **08 55 05.4** | **+0.1** |
| **CHOS** | **Chios island** | **2.09** | **176** | P | **Pn** | **08 55 05.4** | **+0.1** |
| **URLA** | **Izmir** | **2.18** | **165** | *i* P | **Pn** | **08 55 05.8** | **-0.8** |
| URLA | | | | *i* S | **Sn** | **08 55 33.9** | **+0.2** |
| **URLA** | **Izmir** | **2.18** | **165** | P | **Pn** | **08 55 05.8** | **

comp=Z,45nm,21.9s,baz=206,slow=38
**LPAZ La Paz 19.09 11** P **Pn** 09 09 14.1 **-0.1**
comp=Z,0.3nm,0.3s,baz=165,slow=5.9,SNR=8.5
**SIV San Ignacio 21.42 30** P **P** 09 09 35.8 **-1.8**
comp=Z,1.6nm,0.6s,baz=229,slow=10,SNR=3.8
**BDFB Brasilia 28.93 54** LR LR 09 22 36.2
comp=Z,67nm,21.3s,baz=64,slow=37
**SNAA Sanae 50.50 157** P **P** 09 13 46.6 **+0.2**
comp=Z,0.2nm,0.5s,baz=242,slow=5.1,SNR=4.3
**TXAR Lajitas Array 70.77 331** P **P** 09 16 05.7 **+0.7**
comp=Z,0.2nm,0.5s,baz=153,slow=8.1,SNR=6.1
**MAW Mawson 72.06 163** P **P** 09 16 12.9 **+0.7**
comp=Z,0.7nm,0.6s,baz=214,slow=7.3,SNR=3.6
**TORD Torodi Ar. Bea 84.53 70** P **P** 09 17 21.2 **-0.7**
comp=Z,0.2nm,0.4s,baz=250,slow=4.2,SNR=9.3
**WRA Warramunga Arr 119.79 209** PKP **PKPdf** 09 23 38.4 **-0.7**
comp=Z,0.5nm,0.9s,baz=148,slow=1.7,SNR=3.3

**IDC 15 09:09:17.5±2.5, 54°26N×86°17E, h0km, mb1 3.3/2, mb1mx3.1/33, mbtmp3.3/2, ML2.9/2, 4C, Error ellipse: s-maj=18.7km s-min=13.1km az=49.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **0.85** | **249** | *i* | | 09 15 20.0 | |
| | baz=69,slow=321,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.85** | **249** | Pg | Pg | 09 09 32.3 | -1.5 |
| | 1.8nm,0.3s,baz=71,slow=16,SNR=11 | | | | | | |
| ZALV | | | | Lg | Lg | 09 09 45.6 | |
| | 8.9nm,0.3s,baz=70,slow=26,SNR=19 | | | | | | |
| **KURK** | **Kurchatov** | **5.82** | **235** | ⇑Pn | Pn | 09 10 46.7 | +1.8 |
| | 3.9nm,0.8s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 09 12 23.0 | |
| | 7.5nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.92** | **235** | ⇑Pn | Pn | 09 10 47.9 | +1.5 |
| | 0.8nm,0.2s,baz=57,slow=14 | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 09 12 26.5 | |
| | 4.3nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.92** | **235** | Pn | Pn | 09 10 46.5 | +0.2 |
| | 0.3nm,0.3s,baz=51,slow=14,SNR=14 | | | | | | |
| KURBB | | | | Sn | Sn | 09 11 56.4 | +1.6 |
| | baz=35,slow=18,SNR=2.5 | | | | | | |
| KURBB | | | | Lg | Lg | 09 12 26.4 | |
| | 0.1nm,0.3s,baz=54,slow=35,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.87** | **200** | Pn | Pn | 09 11 14.6 | +1.4 |
| | 0.2nm,0.3s,baz=21,slow=12,SNR=6.8 | | | | | | |
| MKAR | | | | Lg | Lg | 09 13 27.2 | |
| | 0.1nm,0.3s,baz=30,slow=32,SNR=4.4 | | | | | | |

*DDA **15** 09:31:30.2, 37°.70N×34°.60E, h7km, Md2.8*
*ISK **15** 09:31:31.7, 37°.71N×34°.86E, h5km, MD2.6*
*ISCJB **15** 09:31:32.2±0.9, 37°.66N±0°.06×34°.8E±0°.1, h13km, Error ellipse: s-maj=16.6km s-min=4.0km az=154.1*
*CSEM **15** 09:31:32.2±0.4, 37°.67N×34°.82E, h5km, MD2.6, Error ellipse: s-maj=14.3km s-min=4.6km az=64.0*

**ISC 15 09:31:32.0±1.0, 37°.64N±0°.05×34°.72E±0°.10, h13km, n12, σ0§60/18, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GULE** | **Gulek** | **0.36** | **173** | *i* P | **Pg** | **09 31 39.1** | **-0.3** |
| GULE | | | | *i* S | **Sb** | **09 31 45.8** | **-0.2** |
| **GULE** | **Gulek** | **0.36** | **173** | P | **Pg** | **09 31 39.1** | **-0.3** |
| GULE | | | | S | **Sb** | **09 31 45.8** | **-0.2** |
| **KARA** | **Karaisali** | **0.46** | **145** | *e*PG | **Pg** | **09 31 41.2** | **0.0** |
| KARA | | | | *e*SG | **Sb** | **09 31 48.5** | **-0.3** |
| **KARA** | **Karaisali** | **0.46** | **145** | *e*Pg | **Pg** | **09 31 41.2** | **0.0** |
| KARA | | | | *e*Sg | **Sb** | **09 31 48.5** | **-0.3** |
| **YESY** | **Yesilyurt** | **0.79** | **281** | *e*PG | **Pn** | **09 31 49.2** | **+0.3** |
| **YESY** | **Yesilyurt** | **0.79** | **281** | *e*Pg | **Pn** | **09 31 49.3** | **+0.3** |
| **GULA** | **Gulagac** | **0.80** | **332** | *e*PG | **Pb** | **09 31 47.8** | **-0.1** |
| GULA | | | | *e*SG | **Sb** | **09 31 59.0** | **+0.3** |
| **GULA** | **Gulagac** | **0.80** | **332** | *e*Pg | **Pb** | **09 31 47.8** | **-0.1** |
| GULA | | | | *e*Sg | **Sb** | **09 31 59.0** | **+0.3** |
| **YAYX** | **Yaylak** | **1.48** | **331** | *e*PN | **Pg** | **09 31 59.8** | **-0.7** |
| **YAYX** | **Yaylak** | **1.48** | **331** | *e*Pn | **Pg** | **09 31 59.8** | **-0.7** |
| **MORC** | **Moravsky Berou** | **17.31** | **320** | S | **Sn** | **09 38 47.4** | **+1.7** |
| **VRAC** | **Vranov** | **17.53** | **317** | S | **Sn** | **09 38 50.1** | **-0.8** |

*ISCJB **15** 09:31:38.4±0.5, 43°.72S±0°.04×172°.70E±0°.05, h23km±3km, mb4.2/4, MS3.5/2, Error ellipse: s-maj=8.2km s-min=3.2km az=136.4*
*IDC **15** 09:31:39.1±1.0, 43°.39S×172°.47E, h0km, mb4.2/4, mb1 4.4/5, mb1mx4.1/26, mbtmp4.2/5, ML3.9/1, MS3.5/3, Ms1 3.5/3, ms1mx3.0/26, Error ellipse: s-maj=26.1km s-min=12.9km az=160.0*
*NEIC **15** 09:31:40.2, 43°.64S×172°.48E, h7km, ML4.6(WEL), After WEL.*
*NEIC Felt in Canterbury.*
*WEL **15** 09:31:40.5±0.1, 43°.64S×172°.48E, h5km, ML4.7/62, Error ellipse: s-maj=1.0km s-min=0.8km az=0.0*
*WEL Felt from Canterbury to Otago, maximum reported intensity MM 7.*

**ISC 15 09:31:40.0±0.7, 43°.63S±0°.04×172°.58E±0°.04, h17km±4km, n162, σ1§06/110, mb4.2/4, 3C-3D, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.06** | **28** | ⇑PG | **Pg** | **09 31 43.1** | **0.0** |
| CRLZ | | | | SG | **Sg** | **09 31 45.0** | **-0.2** |
| CRLZ | | | | AML | AML | 09 31 45.4 | |
| CRLZ | | | | AML | AML | 09 31 45.4 | |
| **CRLZ** | **Canterbury Las** | **0.06** | **28** | ⇑Pg | **Pg** | **09 31 43.1** | **0.0** |
| CRLZ | | | | Sg | **Sg** | **09 31 45.0** | **-0.2** |
| **MQZ** | **McQueen's Vall** | **0.09** | **149** | ⇓*e*PG | **Pg** | **09 31 43.7** | **+0.2** |
| MQZ | | | | SG | **Sg** | **09 31 46.1** | **+0.3** |
| MQZ | | | | AML | AML | 09 31 46.4 | |
| **MQZ** | **McQueen's Vall** | **0.09** | **149** | ⇓*e*Pg | **Pg** | **09 31 43.7** | **+0.2** |
| MQZ | | | | Sg | **Sg** | **09 31 46.1** | **+0.3** |
| **OXZ** | **Oxford** | **0.50** | **307** | *e*PG | **Pg** | **09 31 49.0** | **-1.0** |
| **OXZ** | **Oxford** | **0.50** | **307** | *e*Pg | **Pg** | **09 31 49.0** | **-1.0** |
| **LTZ** | **Lake Taylor** | **0.88** | **345** | *e*P* | **Pg** | **09 31 57.0** | **0.0** |
| LTZ | | | | S* | **Sg** | **09 32 08.7** | **+0.2** |
| LTZ | | | | AML | AML | 09 32 09.6 | |
| **LTZ** | **Lake Taylor** | **0.88** | **345** | *e*P* | **Pg** | **09 31 57.0** | **0.0** |
| LTZ | | | | S* | **Sg** | **09 32 08.7** | **+0.2** |
| **RPZ** | **Rata Peaks** | **1.11** | **265** | ⇑P* | **Pb** | **09 31 59.9** | **-0.9** |
| RPZ | | | | AML | AML | 09 32 15.1 | |
| RPZ | | | | AML | AML | 09 32 16.5 | |
| **RPZ** | **Rata Peaks** | **1.11** | **265** | Pg | **Pb** | **09 31 60.0** | **-0.9** |
| | 515nm,0.3s,baz=151,slow=1.7,SNR=1372 | | | | | | |
| RPZ | | | | Lg | Lg | 09 32 14.5 | |
| | 657nm,0.3s,baz=18,slow=20,SNR=45 | | | | | | |
| **KHZ** | **Kahutara** | **1.40** | **30** | PN | **Pn** | **09 32 04.4** | **-0.2** |
| KHZ | | | | AML | AML | 09 32 35.3 | |
| KHZ | | | | AML | AML | 09 32 38.0 | |
| **KHZ** | **Kahutara** | **1.40** | **30** | Pn | **Pn** | **09 32 04.5** | **-0.2** |
| **WVZ** | **Waitaha Valley** | **1.46** | **292** | AML | AML | 09 32 29.3 | |
| WVZ | | | | AML | AML | 09 32 31.7 | |
| **WVZ** | **Waitaha Valley** | **1.46** | **292** | Pn | **Pn** | **09 32 05.1** | **-0.4** |
| **THZ** | **Tophouse** | **1.88** | **7** | ⇓PN | **Pn** | **09 32 11.3** | **0.0** |
| THZ | | | | AML | AML | 09 32 49.0 | |
| THZ | | | | AML | AML | 09 32 49.2 | |
| **THZ** | **Tophouse** | **1.88** | **7** | Pn | **Pn** | **09 32 11.3** | **0.0** |
| **LBZ** | **Lake Benmore** | **1.89** | **245** | AML | AML | 09 32 46.3 | |
| LBZ | | | | AML | AML | 09 32 46.3 | |
| LBZ | | | | AML | AML | 09 32 46.5 | |
| LBZ | | | | AML | AML | 09 32 46.5 | |
| **LBZ** | **Lake Benmore** | **1.89** | **245** | Pn | **Pn** | **09 32 11.1** | **-0.4** |
| **DSZ** | **Denniston Nort** | **1.97** | **343** | AML | AML | 09 32 45.9 | |
| DSZ | | | | AML | AML | 09 32 45.9 | |
| DSZ | | | | AML | AML | 09 32 46.5 | |
| DSZ | | | | AML | AML | 09 32 48.4 | |
| **DSZ** | **Denniston Nort** | **1.97** | **343** | Pn | **Pn** | **09 32 12.6** | **+0.1** |
| **ODZ** | **Otahua Downs** | **1.99** | **224** | AML | AML | 09 32 49.6 | |
| ODZ | | | | AML | AML | 09 32 49.6 | |
| ODZ | | | | AML | AML | 09 32 51.3 | |
| ODZ | | | | AML | AML | 09 32 51.3 | |
| **ODZ** | **Otahua Downs** | **1.99** | **224** | Pn | **Pn** | **09 32 12.2** | **-0.6** |
| **FOZ** | **Fox Glacier** | **2.10** | **271** | AML | AML | 09 32 48.3 | |
| FOZ | | | | AML | AML | 09 32 48.3 | |
| FOZ | | | | AML | AML | 09 32 48.6 | |
| FOZ | | | | AML | AML | 09 32 48.6 | |
| **FOZ** | **Fox Glacier** | **2.10** | **271** | Pn | **Pn** | **09 32 13.5** | **-0.9** |
| **BSWZ** | **Blackbirch Sta** | **2.14** | **27** | AML | AML | 09 32 48.5 | |
| BSWZ | | | | AML | AML | 09 32 49.9 | |
| **BSWZ** | **Blackbirch Sta** | **2.14** | **27** | Pn | **Pn** | **09 32 15.2** | **+0.4** |
| **CMWZ** | **Cape Campbell** | **2.23** | **33** | AML | AML | 09 32 51.4 | |
| CMWZ | | | | AML | AML | 09 32 57.2 | |
| **TUWZ** | **Tuamarina** | **2.41** | **25** | AML | AML | 09 32 55.2 | |
| TUWZ | | | | AML | AML | 09 32 58.5 | |
| **TUWZ** | **Tuamarina** | **2.41** | **25** | Pn | **Pn** | **09 32 18.7** | **+0.1** |
| **NNZ** | **Nelson** | **2.48** | **14** | AML | AML | 09 33 05.1 | |
| NNZ | | | | AML | AML | 09 33 05.1 | |
| NNZ | | | | AML | AML | 09 33 09.4 | |
| NNZ | | | | AML | AML | 09 33 09.4 | |
| **NNZ** | **Nelson** | **2.48** | **14** | Pn | **Pn** | **09 32 20.2** | **+0.7** |
| **HHSZ** | **Highcliff Hill** | **2.67** | **211** | Pn | **Pn** | **09 32 21.7** | **-0.5** |
| **TCW** | **Tory Channel** | **2.72** | **28** | AML | AML | 09 32 58.2 | |
| TCW | | | | AML | AML | 09 33 09.6 | |
| **TCW** | **Tory Channel** | **2.72** | **28** | Pn | **Pn** | **09 32 22.6** | **-0.2** |
| **BHW** | **Baring Head** | **2.79** | **38** | AML | AML | 09 32 56.8 | |
| BHW | | | | AML | AML | 09 33 40.1 | |
| **BHW** | **Baring Head** | **2.79** | **38** | Pn | **Pn** | **09 32 23.5** | **-0.3** |
| **SNZO** | **South Karori** | **2.80** | **35** | *e*Pn | **Pn** | **09 32 23.4** | **-0.5** |
| SNZO | | | | *e*Sn | **Sb** | **09 33 02.7** | **-0.7** |
| **QRZ** | **Quartz Range** | **2.80** | **359** | AML | AML | 09 33 10.2 | |
| QRZ | | | | AML | AML | 09 33 16.2 | |
| QRZ | | | | AML | AML | 09 33 17.0 | |
| QRZ | | | | AML | AML | 09 33 17.0 | |
| **QRZ** | **Quartz Range** | **2.80** | **359** | Pn | **Pn** | **09 32 23.9** | **0.0** |
| **JCZ** | **Jackson Bay** | **2.80** | **260** | AML | AML | 09 33 09.5 | |
| JCZ | | | | AML | AML | 09 33 18.1 | |
| **JCZ** | **Jackson Bay** | **2.80** | **260** | Pn | **Pn** | **09 32 23.4** | **-0.7** |
| **WKZ** | **Wanaka** | **2.83** | **244** | AML | AML | 09 33 14.7 | |
| WKZ | | | | AML | AML | 09 33 15.8 | |
| WKZ | | | | AML | AML | 09 33 16.1 | |
| WKZ | | | | AML | AML | 09 33 27.5 | |
| **WKZ** | **Wanaka** | **2.83** | **244** | Pn | **Pn** | **09 32 23.7** | **-0.7** |
| **EAZ** | **Earnscleugh** | **2.84** | **235** | AML | AML | 09 33 12.3 | |
| EAZ | | | | AML | AML | 09 33 12.3 | |
| EAZ | | | | AML | AML | 09 33 14.5 | |
| EAZ | | | | AML | AML | 09 33 14.5 | |
| **EAZ** | **Earnscleugh** | **2.84** | **235** | Pn | **Pn** | **09 32 23.9** | **-0.6** |
| **WEL** | **Wellington** | **2.84** | **35** | AML | AML | 09 32 59.5 | |
| WEL | | | | AML | AML | 09 32 59.9 | |
| **WEL** | **Wellington** | **2.84** | **35** | Pn | **Pn** | **09 32 24.3** | **-0.3** |
| **PLWZ** | **Palliser** | **2.85** | **45** | Pn | **Pn** | **09 32 24.3** | **-0.3** |
| **MSWZ** | **Moikau Station** | **2.96** | **43** | AML | AML | 09 33 04.7 | |
| MSWZ | | | | AML | AML | 09 33 06.9 | |
| **MSWZ** | **Moikau Station** | **2.96** | **43** | Pn | **Pn** | **09 32 25.7** | **-0.5** |
| **DUWZ** | **D'Urville Isla** | **2.99** | **20** | AML | AML | 09 33 17.4 | |
| DUWZ | | | | AML | AML | 09 33 31.1 | |
| **PAWZ** | **Paruwai Farm** | **3.07** | **44** | AML | AML | 09 33 07.8 | |
| PAWZ | | | | AML | AML | 09 33 09.1 | |
| **PAWZ** | **Paruwai Farm** | **3.07** | **44** | Pn | **Pn** | **09 32 27.1** | **-0.6** |
| **CAW** | **Cannon Point** | **3.12** | **37** | AML | AML | 09 33 07.6 | |
| CAW | | | | AML | AML | 09 33 35.2 | |
| **CAW** | **Cannon Point** | **3.12** | **37** | Pn | **Pn** | **09 32 27.8** | **-0.6** |
| **TUZ** | **Tuapeka** | **3.14** | **221** | AML | AML | 09 33 25.9 | |
| TUZ | | | | AML | AML | 09 33 25.9 | |
| TUZ | | | | AML | AML | 09 33 28.5 | |
| TUZ | | | | AML | AML | 09 33 28.5 | |
| **TUZ** | **Tuapeka** | **3.14** | **221** | Pn | **Pn** | **09 32 28.1** | **-0.5** |
| **TRWZ** | **Traveller** | **3.20** | **47** | AML | AML | 09 33 10.3 | |
| TRWZ | | | | AML | AML | 09 33 13.4 | |
| **TRWZ** | **Traveller** | **3.20** | **47** | Pn | **Pn** | **09 32 29.2** | **-0.3** |
| **KIW** | **Kapiti Island** | **3.26** | **33** | AML | AML | 09 33 17.5 | |
| KIW | | | | AML | AML | 09 33 42.1 | |
| **KIW** | **Kapiti Island** | **3.26** | **33** | Pn | **Pn** | **09 32 30.0** | **-0.2** |
| **MTW** | **Mount Morrison** | **3.28** | **42** | AML | AML | 09 33 13.2 | |
| MTW | | | | AML | AML | 09 33 14.1 | |
| **MTW** | **Mount Morrison** | **3.28** | **42** | Pn | **Pn** | **09 32 29.8** | **-0.7** |
| **OGW** | **Otaki Gorge** | **3.40** | **35** | Pn | **Pn** | **09 32 31.1** | **-0.6** |
| **HOWZ** | **Holdsworth Sta** | **3.49** | **40** | Pn | **Pn** | **09 32 32.9** | **-0.5** |
| **MSZ** | **Milford Sound** | **3.51** | **251** | AML | AML | 09 33 39.1 | |
| MSZ | | | | AML | AML | 09 33 39.2 | |
| MSZ | | | | AML | AML | 09 33 49.0 | |
| MSZ | | | | AML | AML | 09 33 49.0 | |
| **MSZ** | **Milford Sound** | **3.51** | **251** | Pn | **Pn** | **09 32 32.7** | **-1.0** |
| **TMWZ** | **Te Maipa** | **3.51** | **45** | Pn | **Pn** | **09 32 33.3** | **-0.5** |
| **MLZ** | **Mavora Lakes** | **3.59** | **240** | AML | AML | 09 33 45.3 | |
| MLZ | | | | AML | AML | 09 33 48.5 | |
| **MLZ** | **Mavora Lakes** | **3.59** | **240** | Pn | **Pn** | **09 32 34.5** | **-0.4** |
| **MRZ** | **Mangatainoka R** | **3.71** | **38** | AML | AML | 09 33 25.1 | |
| MRZ | | | | AML | AML | 09 33 26.3 | |
| **MRZ** | **Mangatainoka R** | **3.71** | **38** | Pn | **Pn** | **09 32 35.4** | **-1.1** |
| **TIWZ** | **Tintock** | **3.76** | **42** | AML | AML | 09 33 22.9 | |
| TIWZ | | | | AML | AML | 09 33 30.7 | |
| **SYZ** | **Scrubby Hill** | **3.80** | **219** | AML | AML | 09 33 48.5 | |
| SYZ | | | | AML | AML | 09 33 48.5 | |
| SYZ | | | | AML | AML | 09 33 48.6 | |
| SYZ | | | | AML | AML | 09 33 48.6 | |
| **SYZ** | **Scrubby Hill** | **3.80** | **219** | Pn | **Pn** | **09 32 37.5** | **-0.2** |
| **WHZ** | **Wether Hill Ro** | **4.01** | **234** | AML | AML | 09 33 56.3 | |
| WHZ | | | | AML | AML | 09 34 02.2 | |
| **WHZ** | **Wether Hill Ro** | **4.01** | **234** | Pn | **Pn** | **09 32 38.9** | **-1.6** |
| **BFZ** | **Birch Farm** | **4.01** | **44** | AML | AML | 09 33 30.3 | |
| BFZ | | | | AML | AML | 09 33 30.3 | |
| BFZ | | | | AML | AML | 09 33 32.6 | |
| BFZ | | | | AML | AML | 09 33 32.6 | |
| **BFZ** | **Birch Farm** | **4.01** | **44** | Pn | **Pn** | **09 32 39.5** | **-1.1** |
| **DVHZ** | **Dannevirke** | **4.26** | **40** | Pn | **Pn** | **09 32 42.8** | **-1.4** |
| **WAZ** | **Wanganui** | **4.26** | **26** | AML | AML | 09 33 43.8 | |
| WAZ | | | | AML | AML | 09 34 12.8 | |
| **DCZ** | **Deep Cove** | **4.30** | **243** | AML | AML | 09 33 02.3 | |
| DCZ | | | | AML | AML | 09 33 02.3 | |
| DCZ | | | | AML | AML | 09 33 07.4 | |
| DCZ | | | | AML | AML | 09 33 07.4 | |
| **DCZ** | **Deep Cove** | **4.30** | **243** | Pn | **Pn** | **09 32 43.5** | **-1.0** |
| **NMEZ** | **Namu Road** | **4.32** | **13** | Pn | **Pn** | **09 32 47.0** | **+2.2** |
| **TSZ** | **Takapari Road** | **4.37** | **36** | AML | AML | 09 33 38.7 | |
| TSZ | | | | AML | AML | 09 34 16.5 | |
| **PREZ** | **Palmer Road** | **4.44** | **16** | Pn | **Pn** | **09 32 48.4** | **+1.9** |
| **NWEZ** | **Newall Road** | **4.45** | **13** | Pn | **Pn** | **09 32 48.8** | **+2.1** |
| **KHEZ** | **Kahui Hut** | **4.46** | **14** | Pn | **Pn** | **09 32 48.9** | **+2.0** |
| **NEZ** | **North Egmont** | **4.50** | **15** | Pn | **Pn** | **09 32 48.7** | **+1.3** |
| **PRHZ** | **Porangahau** | **4.52** | **43** | Pn | **Pn** | **09 32 47.3** | **-0.2** |
| **PKE** | **Pukeiti** | **4.55** | **14** | AML | AML | 09 33 46.9 | |
| PKE | | | | AML | AML | 09 33 50.4 | |
| **PKE** | **Pukeiti** | **4.55** | **14** | Pn | **Pn** | **09 32 49.4** | **+1.3** |
| **APZ** | **The Paps** | **4.56** | **224** | AML | AML | 09 34 12.8 | |
| APZ | | | | AML | AML | 09 34 19.5 | |
| **APZ** | **The Paps** | **4.56** | **224** | Pn | **Pn** | **09 32 47.4** | **-0.8** |
| **PNHZ** | **Pukenui** | **4.59** | **37** | Pn | **Pn** | **09 32 47.5** | **-1.2** |
| **DREZ** | **Durham Road** | **4.60** | **16** | Pn | **Pn** | **09 32 50.0** | **+1.3** |
| **MTVZ** | **Mangateitei** | **4.76** | **28** | AML | AML | 09 33 52.3 | |
| MTVZ | | | | AML | AML | 09 33 56.0 | |
| **MTVZ** | **Mangateitei** | **4.76** | **28** | Pn | **Pn** | **09 32 53.0** | **+2.0** |
| **VRZ** | **Vera Road** | **4.79** | **21** | AML | AML | 09 33 51.1 | |
| VRZ | | | | AML | AML | 09 34 26.7 | |
| **VRZ** | **Vera Road** | **4.79** | **21** | Pn | **Pn** | **09 32 52.5** | **+1.3** |
| **PKVZ** | **Pokaka** | **4.80** | **27** | AML | AML | 09 33 50.5 | |
| PKVZ | | | | AML | AML | 09 33 53.2 | |
| **PXZ** | **Pawanui** | **4.81** | **43** | AML | AML | 09 33 49.3 | |
| PXZ | | | | AML | AML | 09 33 50.8 | |
| **PXZ** | **Pawanui** | **4.81** | **43** | Pn | **Pn** | **09 32 50.4** | **-1.1** |
| **MOVZ** | **Moawhango** | **4.84** | **30** | AML | AML | 09 33 54.7 | |
| MOVZ | | | | AML | AML | 09 34 36.2 | |
| **MOVZ** | **Moawhango** | **4.84** | **30** | Pn | **Pn** | **09 32 51.6** | **-0.5** |
| **WNVZ** | **Wahianoa** | **4.86** | **29** | Pn | **Pn** | **09 32 53.4** | **+1.1** |
| **BHHZ** | **Black Hill Sta** | **4.89** | **33** | Pn | **Pn** | **09 32 52.7** | **-0.1** |
| **WHVZ** | **Whangaehu Hut** | **4.89** | **28** | Pn | **Pn** | **09 32 54.1** | **+1.2** |
| **FWVZ** | **Far West T-bar** | **4.90** | **28** | AML | AML | 09 34 13.2 | |
| FWVZ | | | | AML | AML | 09 34 22.8 | |
| **FWVZ** | **Far West T-bar** | **4.90** | **28** | Pn | **Pn** | **09 32 53.7** | **+0.6** |
| **PYZ** | **Puysegur Point** | **4.90** | **237** | Pn | **Pn** | **09 32 51.6** | **-1.3** |
| **TUVZ** | **Tukino** | **4.93** | **29** | AML | AML | 09 33 57.8 | |
| TUVZ | | | | AML | AML | 09 34 43.5 | |
| **TUVZ** | **Tukino** | **4.93** | **29** | Pn | **Pn** | **09 32 54.2** | **+0.9** |
| **WPVZ** | **Whakapapa** | **4.95** | **28** | AML | AML | 09 33 56.2 | |
| WPVZ | | | | AML | AML | 09 34 34.3 | |
| **WPVZ** | **Whakapapa** | **4.95** | **28** | Pn | **Pn** | **09 32 54.9** | **+1.3** |
| **COVZ** | **Chateau Observ** | **4.95** | **28** | Pn | **Pn** | **09 32 54.8** | **+1.1** |
| **NGZ** | **Ngauruhoe** | **4.99** | **28** | AML | AML | 09 33 59.4 | |
| NGZ | | | | AML | AML | 09 34 01.7 | |
| **NGZ** | **Ngauruhoe** | **4.99** | **28** | Pn | **Pn** | **09 32 55.2** | **+0.9** |
| **KAHZ** | **Kahuranaki** | **5.00** | **41** | Pn | **Pn** | **09 32 53.5** | **-0.7** |
| **OTVZ** | **Oturere** | **5.02** | **28** | AML | AML | 09 34 08.2 | |
| OTVZ | | | | AML | AML | 09 35 00.2 | |
| **OTVZ** | **Oturere** | **5.02** | **28** | Pn | **Pn** | **09 32 55.9** | **+1.2** |
| **TWVZ** | **Taurewa** | **5.03** | **26** | AML | AML | 09 34 17.0 | |
| **TWVZ** | **Taurewa** | **5.03** | **26** | Pn | **Pn** | **09 32 55.5** | **+0.7** |
| **WTVZ** | **West Tongariro** | **5.04** | **28** | AML | AML | 09 34 00.8 | |
| WTVZ | | | | AML | AML | 09 34 01.3 | |
| **WTVZ** | **West Tongariro** | **5.04** | **28** | Pn | **Pn** | **09 32 55.6** | **+0.7** |
| **KRVZ** | **Karewarewa** | **5.08** | **28** | AML | AML | 09 33 57.0 | |
| KRVZ | | | | AML | AML | 09 34 26.8 | |
| **KRVZ** | **Karewarewa** | **5.08** | **28** | Pn | **Pn** | **09 32 56.9** | **+1.5** |
| **MCHZ** | **McNeill Hill** | **5.20** | **38** | Pn | **Pn** | **09 32 56.9** | **0.0** |
| **BKZ** | **Black Stump Fm** | **5.34** | **35** | AML | AML | 09 34 03.3 | |
| BKZ | | | | AML | AML | 09 34 58.4 | |
| **BKZ** | **Black Stump Fm** | **5.34** | **35** | Pn | **Pn** | **09 32 57.5** | **-1.4** |
| **HIZ** | **Hauiti** | **5.39** | **19** | AML | AML | 09 34 35.9 | |
| HIZ | | | | AML | AML | 09 34 38.4 | |
| **HIZ** | **Hauiti** | **5.39** | **19** | Pn | **Pn** | **09 32 59.8** | **+0.3** |
| **ARHZ** | **Aropaoanui** | **5.48** | **39** | Pn | **Pn** | **09 32 59.8** | **-1.0** |
| **TLZ** | **Tolley Road** | **5.75** | **24** | Pn | **Pn** | **09 33 04.3** | **-0.2** |
| **KNZ** | **Kokohu** | **5.99** | **41** | Pn | **Pn** | **09 33 06.3** | **-1.5** |
| **MHGZ** | **Mahia Peninsul** | **6.00** | **44** | Pn | **Pn** | **09 33 06.9** | **-1.0** |
| **SNGZ** | **Shannon Statio** | **6.02** | **38** | Pn | **Pn** | **09 33 07.7** | **-0.6** |
| **TOZ** | **Tahuroa Road** | **6.29** | **22** | AML | AML | 09 35 17.0 | |
| **TOZ** | **Tahuroa Road** | **6.29** | **22** | Pn | **Pn** | **09 33 12.3** | **+0.3** |
| **URZ** | **Urewera** | **6.36** | **34** | AML | AML | 09 34 31.0 | |
| URZ | | | | AML | AML | 09 34 32.1 | |
| **URZ** | **Urewera** | **6.36** | **34** | Pn | **Pn** | **09 33 10.9** | **-2.0** |
| | 2.5nm,0.3s,baz=227,slow=4.7,SNR=19 | | | | | | |
| URZ | | | | Sn | **Sn** | **09 34 21.5** | **-3.7** |
| | 12nm,0.3s,baz=64,slow=18,SNR=7.2 | | | | | | |
| **MWZ** | **Matawai** | **6.47** | **37** | AML | AML | 09 34 26.3 | |
| MWZ | | | | AML | AML | 09 34 36.5 | |
| **MWZ** | **Matawai** | **6.47** | **37** | Pn | **Pn** | **09 33 12.4** | **-2.1** |
| **CNGZ** | **Carnagh Statio** | **6.67** | **41** | Pn | **Pn** | **09 33 16.7** | **-0.4** |
| **MKAZ** | **Moumakai** | **6.80** | **18** | AML | AML | 09 35 50.9 | |
| **TWGZ** | **Tauwhareparae** | **6.81** | **39** | Pn | **Pn** | **09 33 16.6** | **-2.5** |
| **PUZ** | **Puketiti** | **7.02** | **40** | AML | AML | 09 34 42.3 | |
| **PUZ** | **Puketiti** | **7.02** | **40** | Pn | **Pn** | **09 33 19.8** | **-2.1** |
| **KUZ** | **Kuaotunu** | **7.28** | **20** | Pn | **Pn** | **09 33 25.9** | **+0.5** |
| **MXZ** | **Matakaoa Point** | **7.46** | **38** | Pn | **Pn** | **09 33 26.3** | **-1.6** |
| **WCZ** | **Waipu Caves** | **7.79** | **11** | Pn | **Pn** | **09 33 34.2** | **+1.6** |
| **RAO** | **Raoul Island** | **16.24** | **31** | LR | LR | 09 41 31.1 | |
| | comp=Z,145nm,20.0s,baz=160,slow=37 | | | | | | |
| **VNDA** | **Vanda** | **34.28** | **184** | LR | LR | 09 49 25.0 | |
| | comp=Z,47nm,18.1s,baz=338,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **37.42** | **289** | P | **P** | **09 38 52.6** | **+0.4** |
| | 3.0nm,0.8s,baz=129,slow=7.8,SNR=29 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.68** | **294** | P | **P** | **09 39 11.6** | **+0.4** |
| | 3.4nm,0.6s,baz=137,slow=7.5,SNR=61 | | | | | | |
| **PPT** | **Papeete** | **41.12** | **63** | LR | LR | 09 53 28.7 | |
| | comp=Z,93nm,19.1s,baz=279,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **46.50** | **180** | P | P | 09 40 09.9 | +3.8 |
| | 2.1nm,0.7s,baz=148,slow=0.5,SNR=14 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **46.86** | **288** | P | **P** | **09 40 09.9** | **+0.7** |
| | 3.4nm,1.1s,baz=162,slow=7.5,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.63** | **197** | PKPbc | **PKPbc** | **09 51 27.8** | **+1.4** |
| | 1.8nm,0.8s,baz=142,slow=1.2,SNR=9.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **149.09** | **338** | PKPbc | **PKPbc** | **09 51 27.6** | **+1.6** |
| | 3.1nm,0.7s,baz=48,slow=2.8,SNR=4.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.31** | **277** | PKPbc | **PKPbc** | **09 51 28.6** | **+1.1** |
| | 1.1nm,0.6s,baz=143,slow=4.8,SNR=5.3 | | | | | | |
| **FINES** | **FINESS Array B** | **153.37** | **324** | PKPbc | **PKPbc** | **09 51 37.5** | **+1.5** |
| | 2.1nm,0.6s,baz=120,slow=2.6,SNR=4.0 | | | | | | |

*ISK **15** 09:32:18.3, 36°.79N×30°.38E, h22km, MD2.6*
*CSEM **15** 09:32:19.0±0.2, 36°.84N×30°.30E, h2km, MD2.8, Error ellipse: s-maj=7.1km s-min=3.9km az=149.0*
*DDA **15** 09:32:19.7, 36°.82N×30°.28E, h2km, Md2.8*

**ISC 15 09:32:19.2±1.1, 36°.83N±0°.03×30°.31E±0°.03, h5km±10km, n21, σ0§73/31, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KORT** | **Korkueli** | **0.17** | **10** | *i* P | **Pg** | **09 32 22.0** | **-0.7** |
| KORT | | | | *i* S | **Sg** | **09 32 24.5** | **-0.5** |
| **KORT** | **Korkueli** | **0.17** | **10** | P | **Pg** | **09 32 22.1** | **-0.7** |
| KORT | | | | S | **Sg** | **09 32 24.5** | **-0.5** |
| **ANTB** | **Antalya** | **0.28** | **76** | *e*PG | **Pg** | **09 32 24.4** | **-0.3** |
| ANTB | | | | *e*SG | **Sg** | **09 32 29.9** | **+1.5** |
| **ANTB** | **Antalya** | **0.28** | **76** | *e*Pg | **Pg** | **09 32 24.4** | **-0.3** |
| ANTB | | | | *e*Sg | **Sg** | **09 32 29.9** | **+1.5** |
| **ELL** | **Elmali** | **0.34** | **255** | *e*PG | **Pg** | **09 32 26.0** | **+0.2** |
| ELL | | | | *e*SG | **Sb** | **09 32 33.7** | **+0.2** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FORT** | **Forrest** | **45.70** | **249** | P | | **P** | **09 41 16.2** | **-0.2** |
| | baz=46,SNR=18 | | | | | | | | |
| **WRKA** | **Warakurna** | **46.13** | **257** | P | | **P** | **09 41 19.7** | **-0.1** |
| | baz=46,SNR=28 | | | | | | | | |
| **MTN** | **Manton Dam** | **46.59** | **274** | P | | **P** | **09 41 22.5** | **-0.8** |
| | baz=47,SNR=4.3 | | | | | | | | |
| **KNRA** | **Kununurra** | **47.86** | **270** | P | | **P** | **09 41 32.2** | **-0.7** |
| | baz=48,SNR=41 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.04** | **266** | P | | **P** | **09 41 48.1** | **-0.9** |
| | 3.0nm,0.4s,baz=87,slow=6.8,SNR=17 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **50.04** | **266** | P | | **P** | **09 41 49.1** | **+0.1** |
| | baz=50,SNR=6.3 | | | | | | | | |
| **SIJI** | **Sorong** | **51.49** | **289** | P | | **P** | **09 41 58.8** | **-1.0** |
| | 6.1nm,0.5s,baz=86,slow=8.6,SNR=7.8 | | | | | | | | |
| **KLBR** | **Kellerberrin** | **54.41** | **247** | P | | **P** | **09 42 19.9** | **-0.5** |
| | baz=55,SNR=4.7 | | | | | | | | |
| **MEEK** | **Meekatharra** | **54.46** | **253** | P | | **P** | **09 42 19.7** | **-1.1** |
| | baz=55,SNR=6.5 | | | | | | | | |
| **VNDA** | **Vanda** | **54.79** | **185** | P | | **P** | **09 42 24.1** | **+1.8** |
| | 1.0nm,0.7s,baz=356,slow=10.0,SNR=6.5 | | | | | | | | |
| **BLDU** | **Ballidu** | **55.44** | **248** | P | | **P** | **09 42 26.8** | **-0.8** |
| | baz=56,SNR=12 | | | | | | | | |
| **MORW** | **Morawa** | **56.26** | **250** | P | | **P** | **09 42 32.7** | **-0.6** |
| | baz=56,SNR=6.0 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **66.67** | **180** | P | | **P** | **09 43 42.4** | **+1.4** |
| | 19nm,1.0s,baz=18,slow=1.7,SNR=36 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **71.03** | **326** | P | | **P** | **09 44 06.3** | **-1.4** |
| | 2.0nm,0.7s,baz=163,slow=6.5,SNR=5.9 | | | | | | | | |
| **KSRS** | **Korea Array** | **77.34** | **321** | P | | **P** | **09 44 43.1** | **-0.2** |
| | 2.0nm,0.8s,baz=141,slow=5.2,SNR=5.9 | | | | | | | | |
| **MAW** | **Mawson** | **77.91** | **201** | P | | **P** | **09 44 46.4** | **+0.4** |
| | 4.2nm,0.8s,baz=138,slow=6.1,SNR=13 | | | | | | | | |
| **MAW** | **Mawson** | **77.91** | **201** | P | | **P** | **09 44 46.5** | **+0.6** |
| | baz=78,SNR=9.2 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **78.44** | **347** | P | | **P** | **09 44 48.6** | **-0.3** |
| | 2.2nm,0.7s,baz=95,slow=8.8,SNR=3.1 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **79.91** | **328** | P | | **P** | **09 44 56.1** | **-0.8** |
| | 3.1nm,0.9s,baz=123,slow=9.4,SNR=6.3 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.98** | **44** | P | | **P** | **09 45 23.8** | **+0.7** |
| | 1.0nm,0.7s,baz=224,slow=9.2,SNR=9.3 | | | | | | | | |
| **SNAA** | **Sanae** | **85.16** | **179** | P | | **P** | **09 45 22.3** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **88.58** | **291** | P | | **P** | **09 45 40.8** | **+0.5** |
| | 0.7nm,0.2s,baz=143,slow=2.7,SNR=6.2 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **90.88** | **58** | P | | **P** | **09 45 52.0** | **+1.2** |
| | 0.9nm,0.9s,baz=214,slow=6.0,SNR=12 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **127.38** | **316** | PKP | | **PKPdf** | **09 51 46.5** | **-1.4** |
| | 1.9nm,0.7s,baz=318,slow=2.3,SNR=5.6 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **141.47** | **351** | PKP | | PKPpre | 09 52 07.6 | | |
| | comp=Z,1.5nm,0.6s,baz=16,slow=2.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **141.47** | **351** | PKhKP | | PKPpre | 09 52 08.1 | | |
| | comp=Z,1.7nm,0.7s,baz=16,slow=4.7,SNR=7.1 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.12** | **327** | PKP | | PKPbc | 09 52 16.4 | -1.8 | |
| | comp=Z,0.8nm,0.4s,baz=43,slow=4.1,SNR=13 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.62** | **307** | PKPbc | | **PKPdf** | **09 52 25.0** | **+1.3** |
| | comp=Z,2.3nm,0.6s,baz=108,slow=4.0,SNR=5.1 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.75** | **295** | PKPbc | | **PKPbc** | **09 52 26.1** | **-0.5** |
| | comp=Z,3.2nm,0.7s,baz=67,slow=3.0,SNR=3.9 | | | | | | | | |
| **EIL** | **Elat** | **147.41** | **289** | PKPbc | | **PKPbc** | **09 52 28.1** | **-0.3** |
| | comp=Z,5.0nm,0.8s,baz=280,slow=4.3,SNR=4.4 | | | | | | | | |
| **CLL** | **Collm** | **150.15** | **342** | *i* PKP | | **PKPbc** | **09 52 33.5** | **-0.9** |
| | comp=Z,19nm,0.8s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **150.26** | **341** | *i* PKP | | **PKPbc** | **09 52 34.0** | **-0.7** |
| | comp=Z,10nm,0.6s | | | | | | | | |
| **GERES** | **GERESS Array B** | **152.11** | **339** | PKPbc | | **PKPbc** | **09 52 37.5** | **-1.6** |
| | comp=Z,1.3nm,0.6s,baz=225,slow=1.1,SNR=6.8 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.50** | **194** | PKP | | **PKPdf** | **09 52 49.2** | **-1.9** |
| | comp=Z,2.2nm,1.0s,baz=240,slow=1.0,SNR=5.0 | | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **09 54 07.3** | **-0.2** | |
| | comp=Z,3.3nm,0.9s,baz=159,slow=4.4,SNR=10.0 | | | | | | | | |
| TORD | | | | PP | | **PP** | **09 57 55.1** | **-1.7** | |
| | comp=Z,1.2nm,1.0s,baz=182,slow=4.8,SNR=4.7 | | | | | | | | |

**TRN 15 09:43:16.9, 18°.45N×63°.20W, h3km, MD3.7, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SABA** | **Saba** | **0.82** | **183** | *e*P | | Pn | 09 43 36.4 | +1.0 |
| SABA | | | | *e*S | | Sn | 09 43 50.9 | +2.9 |
| **SKI** | **Saint Kitts** | **1.19** | **158** | *e*P | | Pn | 09 43 42.9 | +2.5 |
| SKI | | | | *e*S | | Sn | 09 44 01.5 | +4.3 |
| **ANWB** | **Willy Bob** | **1.55** | **120** | *e*P | | Pg | 09 43 47.5 | +0.9 |
| ANWB | | | | *e*S | | Sg | 09 44 10.5 | +3.9 |
| **MLYT** | **Lee's Yard** | **1.96** | **151** | *e*P | | Pb | 09 43 53.7 | +0.3 |
| MLYT | | | | *e*S | | Sg | 09 44 20.4 | +0.3 |

*ISCJB **15** 09:52:40.9±0.5, 37°.98N±0°.03×21°.04E±0°.04, h22km±3km, Error ellipse: s-maj=5.4km s-min=4.7km az=14.0*
*CSEM **15** 09:52:40.5±0.1, 37°.96N×21°.03E, h20km, MD2.9, Error ellipse: s-maj=3.1km s-min=2.4km az=9.0*
*ATH **15** 09:52:40.3, 37°.94N×21°.00E, h2km±1km, MD2.9/16*
*THE **15** 09:52:41.6, 38°.00N×21°.05E, h9km±5km, ML2.2/2, Error ellipse: s-maj=5.0km s-min=0.5km az=292.0*

**ISC 15 09:52:40.6±1.0, 37°.96N±0°.03×21°.02E±0°.02, h19km±2km, n41, σ0°52'/71, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **VTN** | **Vitineika** | **0.14** | **107** | *e*PB | | **Pg** | **09 52 44.7** | **0.0** |
| VTN | | | | *e*SB | | **Sg** | **09 52 48.5** | **+1.0** |
| **VTN** | **Vitineika** | **0.14** | **107** | *e*Pn | | **Pg** | **09 52 44.7** | **0.0** |
| VTN | | | | *e*Sb | | **Sg** | **09 52 48.5** | **+1.0** |
| **KFL** | **Anninata** | **0.24** | **310** | *e*PB | | **Pg** | **09 52 46.5** | **+0.3** |
| KFL | | | | *e*SB | | **Sg** | **09 52 50.8** | **+0.7** |
| **KFL** | **Anninata** | **0.24** | **310** | P | | **Pg** | **09 52 46.3** | **+0.1** |
| KFL | | | | S | | **Sg** | **09 52 50.1** | **0.0** |
| **KFL** | **Anninata** | **0.24** | **310** | *e*Pb | | **Pg** | **09 52 46.5** | **+0.3** |
| KFL | | | | S | | **Sg** | **09 52 50.1** | **0.0** |
| KFL | | | | *e*Sb | | Sb | 09 52 50.8 | +1.1 |
| **ZKS** | **Zakynthos** | **0.32** | **216** | P | | **Pb** | **09 52 48.3** | **+0.6** |
| ZKS | | | | S | | **Sn** | **09 52 54.7** | **-1.7** |
| **ZKS** | **Zakynthos** | **0.32** | **216** | P | | **Pb** | **09 52 48.3** | **+0.6** |
| ZKS | | | | S | | **Sn** | **09 52 54.7** | **-1.7** |
| **RLS** | **Riolos of Patr** | **0.36** | **74** | *e*PB | | **Pg** | **09 52 48.2** | **-0.1** |
| RLS | | | | *e*SB | | **Sb** | **09 52 54.1** | **+0.2** |
| **RLS** | **Riolos of Patr** | **0.36** | **74** | *e*Pb | | **Pg** | **09 52 48.2** | **-0.1** |
| RLS | | | | *e*Sb | | **Sb** | **09 52 54.1** | **+0.2** |
| **AXS** | **Araxos** | **0.37** | **49** | P | | **Pg** | **09 52 47.7** | **-0.6** |
| AXS | | | | S | | **Sg** | **09 52 52.5** | **-1.1** |
| **AXS** | **Araxos** | **0.37** | **49** | P | | **Pg** | **09 52 47.7** | **-0.6** |
| AXS | | | | S | | **Sg** | **09 52 52.5** | **-1.1** |
| **VLS** | **Valsamata** | **0.41** | **303** | *e*PB | | **Pg** | **09 52 48.9** | **0.0** |
| VLS | | | | *e*SB | | **Sb** | **09 52 55.4** | **+0.2** |
| **VLS** | **Valsamata** | **0.41** | **303** | P | | **Pg** | **09 52 49.0** | **0.0** |
| VLS | | | | S | | **Sb** | **09 52 55.3** | **+0.1** |
| **VLS** | **Valsamata** | **0.41** | **303** | P | | **Pg** | **09 52 49.0** | **0.0** |
| VLS | | | | S | | **Sb** | **09 52 55.3** | **+0.1** |
| **DRO** | **Drossia** | **0.54** | **90** | *e*PN | | **Pg** | **09 52 51.8** | **+0.3** |
| DRO | | | | *e*SN | | **Sb** | **09 52 59.0** | **+0.1** |
| **DRO** | **Drossia** | **0.54** | **90** | P | | **Pb** | **09 52 51.4** | **0.0** |
| **DRO** | **Drossia** | **0.54** | **90** | P | | **Pb** | **09 52 51.4** | **0.0** |
| **DRO** | **Drossia** | **0.54** | **90** | *e*Pn | | **Pg** | **09 52 51.8** | **+0.3** |
| DRO | | | | *e*Sn | | **Sb** | **09 52 59.0** | **+0.1** |
| **PDO** | **Prodromos** | **0.65** | **11** | *e*PN | | **Pb** | **09 52 53.5** | **+0.2** |
| PDO | | | | *e*SN | | **Sg** | **09 53 03.1** | **+0.8** |
| **PDO** | **Prodromos** | **0.65** | **11** | P | | **Pb** | **09 52 53.5** | **+0.2** |
| PDO | | | | S | | **Sb** | **09 53 01.9** | **-0.1** |
| **PDO** | **Prodromos** | **0.65** | **11** | P | | **Pb** | **09 52 53.5** | **+0.2** |
| PDO | | | | S | | **Sb** | **09 53 01.9** | **-0.1** |
| PDO | | | | *e*Sn | | **Sg** | **09 53 03.1** | **+0.8** |
| **AMT** | **Artemida-Makis** | **0.69** | **128** | *e*PN | | **Pb** | **09 52 53.7** | **-0.3** |
| **AMT** | **Artemida-Makis** | **0.69** | **128** | *e*Pn | | **Pb** | **09 52 53.7** | **-0.3** |
| **PVO** | **Paravola** | **0.77** | **31** | *e*PN | | **Pn** | **09 52 56.3** | **-0.1** |
| PVO | | | | *e*SN | | **Sn** | **09 53 06.9** | **-0.6** |
| **PVO** | **Paravola** | **0.77** | **31** | *e*Pn | | **Pn** | **09 52 56.3** | **-0.1** |
| PVO | | | | *e*Sn | | **Sn** | **09 53 06.9** | **-0.6** |
| **LAKA** | **Lakka** | **0.81** | **69** | *e*PN | | **Pg** | **09 52 56.6** | **+0.3** |
| LAKA | | | | *e*SN | | **Sg** | **09 53 07.9** | **+0.9** |
| **LAKA** | **Lakka** | **0.81** | **69** | P | | **Pg** | **09 52 56.4** | **+0.1** |
| **LAKA** | **Lakka** | **0.81** | **69** | *e*Pn | | **Pg** | **09 52 56.6** | **+0.3** |
| LAKA | | | | *e*Sn | | **Sg** | **09 53 07.9** | **+0.9** |
| **EFP** | **Efpalio** | **0.84** | **56** | *e*PN | | **Pb** | **09 52 56.7** | **+0.2** |
| **EFP** | **Efpalio** | **0.84** | **56** | *e*Pn | | **Pb** | **09 52 56.7** | **+0.2** |
| **KLV** | **Kalavryta, Ach** | **0.90** | **84** | *e*PN | | **Pn** | **09 52 58.3** | **+0.1** |
| KLV | | | | *e*SN | | **Sn** | **09 53 10.9** | **+0.2** |
| **KLV** | **Kalavryta, Ach** | **0.90** | **84** | *e*Pn | | **Pn** | **09 52 58.3** | **+0.1** |
| KLV | | | | *e*Sn | | **Sn** | **09 53 10.9** | **+0.2** |
| **SERG** | **Sergoula** | **0.93** | **60** | *e*PB | | **Pb** | **09 52 58.1** | **-0.1** |
| **SERG** | **Sergoula** | **0.93** | **60** | *e*Pb | | **Pb** | **09 52 58.1** | **-0.1** |
| **KALE** | **Kalithea** | **0.98** | **63** | *e*PN | | **Pb** | **09 52 59.0** | **0.0** |
| KALE | | | | *e*SN | | **Sg** | **09 53 13.1** | **+0.5** |
| **KALE** | **Kalithea** | **0.98** | **63** | *e*Pn | | **Pb** | **09 52 59.0** | **0.0** |
| KALE | | | | *e*Sn | | **Sg** | **09 53 13.1** | **+0.5** |
| **GUR** | **Goura** | **1.04** | **91** | *e*PN | | **Pg** | **09 53 00.7** | **-0.1** |
| GUR | | | | *e*SN | | **Sg** | **09 53 14.9** | **+0.3** |
| **GUR** | **Goura** | **1.04** | **91** | *e*Pn | | **Pg** | **09 53 00.7** | **-0.1** |
| GUR | | | | *e*Sn | | **Sg** | **09 53 14.9** | **+0.3** |
| **ITM** | **Ithomi** | **1.06** | **137** | *e*PN | | **Pn** | **09 53 00.5** | **+0.1** |
| **ITM** | **Ithomi** | **1.06** | **137** | *e*Pn | | **Pn** | **09 53 00.5** | **+0.1** |
| **MAKR** | **Makrakomi, Fth** | **1.37** | **39** | *e*PN | | **Pg** | **09 53 07.7** | **+0.7** |

*BJI **15** 09:56:49.6, 4°.81S×153°.81E, h76km, mb4.8/25, mB4.9/20, Ms5.0/11, Ms7 4.7/11*
*ISCJB **15** 09:56:51.2±1.4, 4°.64S±0°.05×153°.59E±0°.05, h73km±12km, mb4.4/27, Error ellipse: s-maj=8.5km s-min=7.2km az=35.3*
*IDC **15** 09:56:52.1±0.7, 4°.63S×153°.62E, h74km±5km, mb4.0/16, mb1 4.1/16, mb1mx3.9/41, mbtmp4.3/16, MS3.1/5, Ms1 3.1/5, ms1mx2.8/23, Error ellipse: s-maj=17.6km s-min=12.0km az=90.0*
*DJA **15** 09:56:53.1±1.1, 5°.S±10°×15°.4E±1°.1, h82km±13km, M5.4/5, mb5.0/5, mB5.2/1, MLv5.6/1, Mw(mB)4.6/1*
*NEIC **15** 09:56:55.7±1.2, 4°.64S×153°.47E, h104km±11km, mb4.8/13, Error ellipse: s-maj=9.6km s-min=8.0km az=50.0*
*AUST **15** 09:57:31.0±10.0, 5°.65S×152°.95E, h437km±1km, Error ellipse: s-maj=6.8km s-min=1.6km az=44.0*

**ISC 15 09:56:53.1±0.4, 4°.69S±0°.05×153°.67E±0°.06, h77km±2km, h76km: pP-P, n77, σ1°71/109, mb4.5/27, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **HNR** | **Honiara** | **7.81** | **127** | P | | Pn | 09 58 50.4 | +6.3 |
| | 5.1nm,0.3s,baz=284,slow=4.2,SNR=5.8 | | | | | | | |
| HNR | | | | S | | **Sn** | **10 00 15.6** | **+4.6** |
| | 19nm,0.3s,baz=5.0,slow=17,SNR=3.0 | | | | | | | |
| HNR | | | | LR | | LR | 10 02 22.5 | |
| | comp=Z,78nm,18.8s,baz=256,slow=42 | | | | | | | |
| **PMG** | **Port Moresby** | **7.98** | **234** | *e*Pn | | **Pn** | **09 58 45.8** | **-0.5** |
| PMG | | | | *e*Sn | | **Sn** | **10 00 14.2** | **-0.9** |
| **GENI** | **Genyem** | **13.63** | **278** | P | | **P** | **10 00 11.5** | **+2.1** |
| **MMPI** | **Merauke** | **13.72** | **253** | P | | P | 10 00 21.1 | +11 |
| | baz=13,SNR=3.8 | | | | | | | |
| **COEN** | **Coen** | **13.85** | **228** | *e*Pn | | **Pn** | **10 00 06.0** | **0.0** |
| COEN | | | | *e*Sn | | **Sn** | **10 02 39.1** | **+0.8** |
| **SMPI** | **Sarmi** | **15.17** | **280** | P | | **Pn** | **10 00 23.8** | **+0.6** |
| | 247nm,0.9s | | | | | | | |
| **MTSU** | **Mount Surprise** | **16.19** | **214** | P | | **P** | **10 00 41.0** | **+3.2** |
| | baz=15,SNR=3.8 | | | | | | | |
| **GUMO** | **Guam** | **20.16** | **334** | LR | | LR | 10 09 28.4 | |
| | comp=Z,15nm,18.8s,baz=196,slow=38 | | | | | | | |
| **EIDS** | **Eidsvold** | **20.71** | **187** | P | | Pn | 10 01 30.8 | +0.5 |
| | baz=20,SNR=7.7 | | | | | | | |
| **EIDS** | **Eidsvold** | **20.71** | **187** | *e*P | | Pn | 10 01 30.7 | +0.4 |
| | 18nm,0.7s | | | | | | | |
| **QIS** | **Mount Isa** | **20.87** | **220** | P | | **P** | **10 01 28.7** | **-0.4** |
| | baz=20,SNR=7.0 | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.25** | **146** | P | | **P** | **10 01 34.1** | **+0.9** |
| | 6.7nm,0.6s,baz=360,slow=18,SNR=16 | | | | | | | |
| **FAKI** | **Fak Fak** | **21.44** | **274** | P | | **P** | **10 01 38.3** | **+3.0** |
| | baz=21,SNR=17 | | | | | | | |
| **FAKI** | **Fak Fak** | **21.44** | **274** | P | | **P** | **10 01 37.5** | **+2.2** |
| **FAKI** | **Fak Fak** | **21.44** | **274** | *e*P | | **P** | **10 01 33.2** | **-2.0** |
| | 46nm,0.8s | | | | | | | |
| **RMQ** | **Roma** | **22.17** | **192** | P | | **P** | **10 01 43.9** | **+1.0** |
| | baz=21,SNR=7.9 | | | | | | | |
| **KDU** | **Kakadu** | **22.39** | **248** | P | | **P** | **10 01 43.1** | **-2.3** |
| | baz=21,SNR=21 | | | | | | | |
| **SIJI** | **Sorong** | **22.69** | **279** | P | | **P** | **10 01 47.8** | **-0.9** |
| | 4.0nm,0.5s,baz=76,slow=7.7,SNR=4.3 | | | | | | | |
| SIJI | | | | LR | | LR | 10 10 26.4 | |
| | comp=Z,64nm,18.0s,baz=167,slow=36 | | | | | | | |
| **SWI** | **Sorong** | **22.70** | **279** | P | | P | 10 01 54.2 | +5.5 |
| **QLP** | **Quilpie** | **23.56** | **202** | P | | **P** | **10 01 57.2** | **+0.3** |
| | baz=22,SNR=13 | | | | | | | |
| **MTN** | **Manton Dam** | **23.68** | **249** | P | | **P** | **10 01 57.2** | **-0.8** |
| | baz=23,SNR=12 | | | | | | | |
| **MTN** | **Manton Dam** | **23.68** | **249** | *e*P | | **P** | **10 01 56.4** | **-1.7** |
| | 13nm,0.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.15** | **230** | P | | **P** | **10 02 02.0** | **-0.2** |
| | 203nm,0.5s,SNR=28 | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.15** | **230** | *e*P | | **P** | **10 02 02.1** | **-0.2** |
| | 18nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.17** | **230** | P | | **P** | **10 02 01.5** | **-0.9** |
| | 7.2nm,0.6s,baz=51,slow=10,SNR=91 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **10 05 40.9** | **-0.7** |
| | 2.9nm,0.7s,baz=52,slow=2.4,SNR=9.5 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **10 09 12.1** | **-1.5** |
| | 0.4nm,0.8s,baz=48,slow=3.0,SNR=4.0 | | | | | | | |
| **ARMA** | **Armidale** | **25.66** | **184** | P | | **P** | **10 02 16.9** | **+1.0** |
| | baz=25,SNR=6.7 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.38** | **29** | T | | T | 10 30 14.1 | |
| | baz=205 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.38** | **29** | T | | T | 10 30 42.9 | |
| | baz=205,slow=74,SNR=38 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.39** | **29** | T | | T | 10 30 25.8 | |
| | baz=205,slow=74,SNR=11 | | | | | | | |
| **AS01** | **Alice Springs** | **26.78** | **223** | *e*P | | P | 10 02 31.3 | +5.2 |
| AS01 | | | | *e*PcP | | **PcP** | **10 05 46.7** | **-0.9** |
| **KNRA** | **Kununurra** | **26.79** | **244** | P | | **P** | **10 02 24.8** | **-1.5** |
| | baz=26,SNR=26 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.82** | **223** | P | | **P** | **10 02 25.2** | **-1.2** |
| | 0.6nm,0.3s,baz=55,slow=8.9,SNR=19 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **10 05 47.0** | **-0.6** |
| | 3.1nm,0.6s,baz=59,slow=2.7,SNR=14 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **10 09 20.1** | **-1.1** |
| | 0.4nm,0.7s,baz=51,slow=3.2,SNR=4.8 | | | | | | | |
| ASAR | | | | LR | | LR | 10 14 18.9 | |
| | comp=Z,42nm,18.5s,baz=326,slow=39 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.47** | **242** | P | | **P** | **10 02 57.1** | **-1.7** |
| | 3.8nm,0.5s,baz=50,slow=9.1,SNR=25 | | | | | | | |
| FITZ | | | | pP | | **pP** | **10 03 16.9** | **0.0** |
| | 4.1nm,0.3s,baz=49,slow=9.0,SNR=7.1 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.47** | **242** | P | | **P** | **10 02 57.2** | **-1.7** |
| | baz=29,SNR=7.7 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.47** | **242** | *e*P | | **P** | **10 02 57.2** | **-1.7** |
| | 5.8nm,0.8s | | | | | | | |
| FITZ | | | | pP | | **pP** | **10 03 16.9** | **0.0** |
| **WRKA** | **Warakurna** | **31.67** | **228** | P | | **P** | **10 03 07.8** | **-1.7** |
| | baz=31,SNR=15 | | | | | | | |
| **HTT** | **Hallett** | **31.72** | **204** | P | | P | 10 03 04.9 | -5.0 |
| | baz=31,SNR=4.1 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **33.72** | **197** | P | | **P** | **10 03 27.6** | **+0.5** |
| | baz=33,SNR=5.0 | | | | | | | |
| **MEEK** | **Meekatharra** | **39.96** | **233** | P | | **P** | **10 04 18.3** | **-2.0** |
| | baz=39,SNR=12 | | | | | | | |
| **THZ** | **Tophouse** | **40.72** | **158** | *e*P | | **P** | **10 04 26.8** | **+0.4** |
| | 23nm,0.8s | | | | | | | |
| **OXZ** | **Oxford** | **41.77** | **160** | *e*P | | **P** | **10 04 34.8** | **-0.1** |
| | 108nm,1.9s | | | | | | | |
| **RPZ** | **Rata Peaks** | **41.78** | **161** | P | | **P** | **10 04 34.9** | **-0.2** |
| | 31nm,0.6s,baz=312,slow=1.4,SNR=21 | | | | | | | |
| **RPZ** | **Rata Peaks** | **41.78** | **161** | *e*P | | **P** | **10 04 35.6** | **+0.5** |
| | 30nm,0.7s | | | | | | | |
| **DCZ** | **Deep Cove** | **42.30** | **166** | *e*P | | **P** | **10 04 39.5** | **+0.4** |
| | 102nm,1.8s | | | | | | | |
| **JNU** | **Nakatsue** | **43.37** | **332** | P | | **P** | **10 04 45.6** | **-2.5** |
| | 4.5nm,0.5s,baz=44,slow=0.4,SNR=6.1 | | | | | | | |
| **KSRS** | **Korea Array** | **48.30** | **332** | P | | **P** | **10 05 26.2** | **-0.5** |
| | 0.3nm,0.3s,baz=146,slow=9.2,SNR=5.3 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.31** | **332** | P | | **P** | **10 05 26.2** | **-0.6** |
| **NJ2** | **Nanjing** | **49.31** | **320** | *e*P | | **P** | **10 05 32.9** | **-1.7** |
| NJ2 | | | | PMZ | | | | |
| | 30nm,0.7s | | | | | | | |
| **CN2** | **Changchun** | **54.56** | **335** | *e*P | | **P** | **10 06 15.0** | **+1.6** |
| CN2 | | | | *e*sP | | **sP** | **10 06 41.0** | **-0.4** |
| CN2 | | | | *e*S | | **S** | **10 13 47.0** | **-0.1** |
| CN2 | | | | PMZ | | | | |
| | 10.0nm,0.7s | | | | | | | |
| CN2 | | | | PMZ | | | | |
| | 100nm,4.0s | | | | | | | |
| CN2 | | | | LN | | | | |
| | 600nm,16.0s | | | | | | | |
| CN2 | | | | LE | | | | |
| | 700nm,16.0s | | | | | | | |
| CN2 | | | | LZ | | | | |
| | 1μm,18.0s | | | | | | | |
| **GYA** | **Guiyang** | **55.02** | **307** | P | | **P** | **10 06 18.0** | **+0.8** |
| GYA | | | | pP | | **pP** | **10 06 36.8** | **+0.2** |
| GYA | | | | sP | | **sP** | **10 06 45.3** | **+0.1** |
| GYA | | | | PP | | **PP** | **10 08 23.9** | **+2.7** |
| GYA | | | | S | | **S** | **10 13 52.4** | **-1.7** |
| GYA | | | | sS | | **sS** | **10 14 25.6** | **-1.5** |
| GYA | | | | PMZ | | | | |
| | 20nm,1.0s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | 130nm,6.2s | | | | | | | |
| **BJI** | **Beijing** | **56.29** | **326** | P | | **P** | **10 06 26.1** | **+0.2** |
| BJI | | | | PMZ | | | | |
| | 6.0nm,1.4s | | | | | | | |
| **KMI** | **Kunming** | **57.65** | **304** | P | | **P** | **10 06 35.9** | **-0.2** |
| KMI | | | | PMZ | | | | |
| | 6.0nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | 67nm,4.6s | | | | | | | |
| KMI | | | | LZ | | | | |
| | 53nm,16.5s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.69** | **3** | P | | **P** | **10 06 35.8** | **+0.2** |
| | 2.5nm,0.7s,baz=164,slow=5.9,SNR=3.6 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.62** | **295** | pP | | pP | 10 07 01.1 | -1.1 |
| | 1.1nm,0.3s,baz=122,slow=5.8,SNR=2.0 | | | | | | | |
| **CD2** | **Chengdu** | **59.33** | **310** | *e*P | | **P** | **10 06 47.0** | **-0.5** |
| CD2 | | | | pP | | **pP** | **10 07 06.0** | **-1.1** |
| CD2 | | | | PP | | **PP** | **10 08 58.9** | **-0.5** |
| CD2 | | | | PcS | | **PcS** | **10 11 36.3** | **-0.7** |
| CD2 | | | | S | | **S** | **10 14 50.8** | **+0.3** |
| CD2 | | | | sS | | **sS** | **10 15 23.6** | **-0.2** |
| CD2 | | | | SS | | **SS** | **10 18 48.0** | **+1.4** |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | 120nm,5.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **59.47** | **324** | *e*P | | **P** | **10 06 49.6** | **+1.3** |
| HHC | | | | sP | | sP | 10 07 21.4 | +4.9 |
| HHC | | | | PP | | PP | 10 09 06.1 | +5.6 |
| HHC | | | | S | | S | 10 14 45.4 | -6.7 |
| HHC | | | | SS | | **SS** | **10 18 53.3** | **+4.7** |
| HHC | | | | PMZ | | | | |
| | 24nm,0.8s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | 100nm,7.9s | | | | | | | |
| HHC | | | | LN | | | | |
| | 93nm,14.8s | | | | | | | |
| HHC | | | | LE | | | | |
| | 66nm,14.8s | | | | | | | |
| HHC | | | | LZ | | | | |
| | 49nm,14.8s | | | | | | | |
| **LZH** | **Lanzhou** | **61.76** | **315** | *e*P | | **P** | **10 07 05.0** | **+0.9** |
| LZH | | | | pP | | **pP** | **10 07 24.8** | **+1.0** |
| LZH | | | | sP | | **sP** | **10 07 31.8** | **-0.5** |
| LZH | | | | PP | | **PP** | **10 09 25.0** | **+4.1** |
| LZH | | | | *e*S | | **S** | **10 15 21.5** | **-0.1** |
| LZH | | | | sS | | **sS** | **10 15 50.3** | **-4.9** |
| LZH | | | | SS | | **SS** | **10 19 24.0** | **-0.8** |
| LZH | | | | PMZ | | | | |
| | 21nm,1.0s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | 120nm,4.9s | | | | | | | |
| LZH | | | | LN | | | | |
| | 250nm,15.2s | | | | | | | |
| LZH | | | | LE | | | | |
| | 400nm,15.7s | | | | | | | |
| LZH | | | | LZ | | | | |
| | 440nm,16.8s | | | | | | | |
| **GTA** | **Gaotai** | **66.17** | **317** | *e*P | | **P** | **10 07 33.1** | **+0.2** |
| GTA | | | | pP | | **pP** | **10 07 53.0** | **+0.2** |
| GTA | | | | sP | | **sP** | **10 08 01.4** | **+0.1** |
| GTA | | | | ScP | | | 10 11 58.4 | |
| GTA | | | | S | | **S** | **10 16 16.8** | **+0.8** |
| GTA | | | | sS | | **sS** | **10 16 50.4** | **+0.5** |
| GTA | | | | SS | | **SS** | **10 20 36.3** | **+2.9** |
| GTA | | | | PMZ | | | | |
| | 10.0nm,0.8s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | 52nm,6.6s | | | | | | | |
| GTA | | | | LN | | | | |
| | 63nm,15.4s | | | | | | | |
| GTA | | | | LE | | | | |
| | 57nm,17.6s | | | | | | | |
| GTA | | | | LZ | | | | |
| | 49nm,17.8s | | | | | | | |
| **SONM** | **Songino Array** | **66.70** | **327** | P | | **P** | **10 07 35.6** | **-0.5** |
| | 0.7nm,0.4s,baz=147,slow=7.1,SNR=5.4 | | | | | | | |
| SONM | | | | pP | | **pP** | **10 07 55.6** | **-0.5** |
| | 0.9nm,0.6s,baz=138,slow=6.2,SNR=3.3 | | | | | | | |
| SONM | | | | sP | | **sP** | **10 08 01.4** | **-3.1** |
| | 0.5nm,0.5s,baz=148,slow=5.3,SNR=2.5 | | | | | | | |
| **SEY** | **Seymchan** | **67.45** | **359** | P | | **P** | **10 07 39.4** | **-1.0** |
| | 0.8nm,0.3s,baz=217,slow=23,SNR=6.6 | | | | | | | |
| **VNDA** | **Vanda** | **72.91** | **178** | P | | **P** | **10 08 13.6** | **+0.1** |
| | 10nm,0.7s,baz=332,slow=6.4,SNR=98 | | | | | | | |
| **SBA** | **Scott Base** | **73.44** | **177** | *e*P | | **P** | **10 08 18.1** | **+1.4** |
| **WMQ** | **Urumqi** | **76

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **72.83** | **28** | P | **P** | **10 29 36.9** | **-0.2** |
| | 0.4nm,0.6s,baz=206,slow=6.0,SNR=3.7 | | | | | | |
| **RAO** | **Raoul Island** | **91.60** | **204** | *e*P | **P** | **10 31 14.9** | **-0.4** |
| | 125nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **149.69** | **86** | PKPbc | **PKPbc** | **10 37 57.3** | **0.0** |
| | 0.5nm,0.5s,baz=208,slow=4.0,SNR=3.8 | | | | | | |
| **ILAR** | **Eielson Array** | **151.12** | **311** | PKPbc | **PKPbc** | **10 38 00.3** | **+0.3** |
| | 1.3nm,0.9s,baz=114,slow=1.1,SNR=11 | | | | | | |

*ISCJB* ***15*** *10:20:16.2±0.3,35°.34N±0°.01×92°.36W±0°.01,h4km±2km, mb3.3/2,MS3.1/2,Error ellipse: s-maj=1.9km s-min=1.4km az=151.1*

*IDC* ***15*** *10:20:18.3±0.9,35°.33N×92°.28W,h0km,mb3.4/3, mb1 4.0/9,mb1mx3.7/41,mbtmp3.8/9,ML3.4/6,MS3.1/6, Ms1 3.1/6,ms1mx2.8/26,Error ellipse: s-maj=17.5km s-min=9.4km az=169.0*

*NEIC* ***15*** *10:20:19.0,35°.29N×92°.34W,h7km,mb3.7/5,MW3.8, Moment Tensor Solution. s47 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$-0.21; $M_{\theta\theta}$6.10; $M_{\phi\phi}$-5.89; $M_{r\theta}$0.11; $M_{\theta\phi}$3.34; $M_{\phi r}$1.34; Best double couple: $M_0$7.00000×$10^{14}$ NP1: $\phi_s$120.00000°,δ80.00000°,λ-5.00000°. NP2:$\phi_d$211.00000°, δ85.00000°,λ-170.00000°. Principal axes: T 7.0000, Plg4.0000°, Azm345.0000°; N 0.0000, Plg79.0000°, Azm237.0000°; P -7.0000, Plg11.0000°, Azm76.0000°; After CERI.*

*NEIC Felt [III] at Clinton, Greenbrier, Mayflower and Quitman; [II] at Batesville, Conway, Damascus, Heber Springs, Mountain Home and Mountain View. Felt widely in central and northern Arkansas. Also felt at Moody, Missouri.*

**ISC 15 10:20:18.2±0.8,35°.31N±0°.02×92°.32W±0°.02,h7km±5km, n384,σ1§23/468,1C-2D,Arkansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WHAR** | **Wooly Hollow** | **0.03** | **123** | ⇓*i*P | | **Pg** | **10 20 20.3** | **+0.7** |
| WHAR | | | | S | | **Sg** | **10 20 21.2** | **+0.5** |
| **SEAR** | **Searcy** | **0.50** | **96** | *e*P | | **Pg** | **10 20 28.4** | **+0.5** |
| SEAR | | | | *e*S | | **Sb** | **10 20 35.7** | **-1.0** |
| **UALR** | **University of** | **0.53** | **182** | *e*Pg | | **Pg** | **10 20 28.8** | **+0.3** |
| UALR | | | | *e*Sg | | **Sg** | **10 20 35.2** | **-0.2** |
| **FCAR** | **Ozark Folk Cen** | **0.60** | **15** | ⇑*e*P | | **Pg** | **10 20 30.6** | **+0.7** |
| FCAR | | | | *e*S | | **Sb** | **10 20 39.0** | **-0.8** |
| **LCAR** | **Lake Charles** | **1.22** | **51** | ⇓*e*P | | **Pb** | **10 20 41.3** | **-0.2** |
| LCAR | | | | *e*S | | **Sg** | **10 20 57.6** | **+0.2** |
| **MIAR** | **Mount Ida** baz=1.3 | **1.28** | **234** | P | | **Pn** | **10 20 41.9** | **-0.5** |
| MIAR | baz=1.3 | | | S | | **Sb** | **10 20 58.9** | **-0.3** |
| **MIAR** | **Mount Ida** | **1.28** | **234** | *e*Pg | | **Pn** | **10 20 42.0** | **-0.5** |
| MIAR | | | | *e*Sg | | **Sg** | **10 20 59.3** | **0.0** |
| **HBAR** | **Harrisburg** | **1.38** | **79** | *e*Pn | | **Pb** | **10 20 44.4** | **+0.1** |
| HBAR | | | | *e*Sg | | **Sg** | **10 21 04.3** | **+1.7** |
| **V38A** | **Canehill** baz=1.8 | **1.79** | **289** | P | | **Pb** | **10 20 50.5** | **-0.8** |
| V38A | baz=1.8 | | | S | | **Sb** | **10 21 14.7** | **+0.7** |
| **W38A** | **Poteau** baz=1.8,SNR=326 | **1.82** | **263** | P | | **Pb** | **10 20 51.3** | **-0.5** |
| W38A | baz=1.8 | | | S | | **Sb** | **10 21 15.5** | **+0.8** |
| **MET** | **Memphis--Engin** | **1.96** | **95** | *e*Pn | | **Pn** | **10 20 52.5** | **+0.7** |
| MET | | | | *e*Sn | | **Sb** | **10 21 18.0** | **-0.9** |
| **GNAR** | **Gosnell** | **1.99** | **70** | *e*Pn | | **Pb** | **10 20 53.5** | **-1.2** |
| GNAR | | | | *e*Sg | | **Sg** | **10 21 21.5** | **-0.6** |
| **Y39A** | **Lockesburg** baz=2.0 | **2.00** | **227** | P | | **Pn** | **10 20 53.2** | **+0.8** |
| Y39A | baz=2.0 | | | S | | **Sn** | **10 21 18.1** | **+0.4** |
| **U38A** | **Gravette** baz=2.0,SNR=123 | **2.02** | **305** | P | | **Pb** | **10 20 54.4** | **-0.9** |
| **X38A** | **Whitesboro** baz=2.1 | **2.16** | **254** | P | | **Pb** | **10 20 56.3** | **-1.3** |
| **V37A** | **Hulbert** baz=2.4 | **2.37** | **285** | P | | **Pn** | **10 20 58.6** | **+1.1** |
| V37A | baz=2.4 | | | S | | **Sb** | **10 21 28.9** | **-1.7** |
| **Y38A** | **Idabel** baz=2.4 | **2.42** | **236** | P | | **Pn** | **10 20 58.8** | **+0.7** |
| Y38A | baz=2.4 | | | S | | **Sn** | **10 21 29.2** | **+1.3** |
| **PARMO** | **Parma** | **2.48** | **56** | *e*Pn | | **Pn** | **10 21 00.8** | **+1.7** |
| PARMO | | | | *e*Sn | | **Sn** | **10 21 31.6** | **+2.1** |
| **HALT** | **Halls** | **2.50** | **75** | *e*Pn | | **Pn** | **10 21 00.1** | **+0.8** |
| HALT | | | | *e*Sn | | **Sn** | **10 21 31.5** | **+1.5** |
| **OXF** | **Oxford** | **2.52** | **108** | *e*Pn | | **Pn** | **10 21 00.1** | **+0.5** |
| OXF | | | | *e*Sn | | **Sn** | **10 21 31.5** | **+1.0** |
| **U37A** | **Salina** baz=2.5,SNR=82 | **2.52** | **297** | P | | **Pn** | **10 21 00.7** | **+1.1** |
| U37A | baz=2.5 | | | S | | **Sb** | **10 21 33.0** | **-2.1** |
| **W37A** | **Quinton** baz=2.5,SNR=50 | **2.55** | **267** | P | | **Pn** | **10 21 01.0** | **+1.1** |
| W37A | baz=2.5 | | | S | | **Sn** | **10 21 33.2** | **+2.0** |
| **Z39A** | **Irene McRaven,** baz=2.6 | **2.57** | **217** | P | | **Pn** | **10 21 00.8** | **+0.6** |
| Z39A | baz=2.6 | | | S | | **Sn** | **10 21 33.3** | **+1.5** |
| **X37A** | **Clayton** baz=2.6 | **2.61** | **255** | P | | **Pn** | **10 21 01.7** | **+0.9** |
| X37A | baz=2.6 | | | Sb | | **Sg** | **10 21 39.9** | **-2.1** |
| **GLAT** | **Glass** | **2.65** | **68** | *e*Pn | | **Pn** | **10 21 02.1** | **+0.9** |
| GLAT | | | | *e*Sn | | **Sn** | **10 21 35.8** | **+2.2** |
| **T37A** | **Cheneyville 18** baz=2.8 | **2.77** | **312** | P | | **Pn** | **10 21 04.0** | **+1.0** |
| T37A | baz=2.8 | | | S | | **Sn** | **10 21 39.1** | **+2.4** |
| **CCM** | **Cathedral Cave** | **2.88** | **17** | *e*Pn | | **Pn** | **10 21 05.8** | **+1.4** |
| **TUL1** | **Tulsa** baz=2.9,SNR=33 | **2.89** | **283** | P | | **Pn** | **10 21 05.7** | **+1.0** |
| TUL1 | baz=2.9 | | | S | | **Sn** | **10 21 41.5** | **+1.8** |
| **TUL1** | **Tulsa** | **2.89** | **283** | *e*Pn | | **Pn** | **10 21 05.7** | **+1.0** |
| TUL1 | | | | *e*Sn | | **Sn** | **10 21 39.7** | **0.0** |
| **U36A** | **Oologah** baz=3.0,SNR=20 | **2.98** | **292** | P | | **Pn** | **10 21 06.8** | **+1.0** |
| U36A | baz=3.0 | | | S | | **Sn** | **10 21 43.1** | **+1.4** |
| **UTMT** | **University of** | **2.99** | **69** | *e*Pn | | **Pn** | **10 21 07.2** | **+1.1** |
| UTMT | | | | *e*Sg | | **Sg** | **10 21 55.5** | **+1.2** |
| **V36A** | **Jenks** baz=3.0,SNR=34 | **2.99** | **280** | P | | **Pn** | **10 21 06.9** | **+0.9** |
| V36A | baz=3.0 | | | S | | **Sn** | **10 21 43.9** | **+1.7** |
| **Z38A** | **Mt. Pleasant** baz=3.0 | **3.01** | **228** | P | | **Pn** | **10 21 07.0** | **+0.6** |
| Z38A | baz=3.0 | | | Sb | | **Sg** | **10 21 51.9** | **-3.1** |
| **Y37A** | **Hugo** baz=3.0 | **3.03** | **245** | P | | **Pn** | **10 21 08.3** | **+1.8** |
| Y37A | baz=3.0 | | | Sb | | **Sg** | **10 21 53.2** | **-2.3** |
| **139A** | **Bunkhouse Ranc** baz=3.1 | **3.14** | **214** | P | | **Pn** | **10 21 08.4** | **+0.4** |
| 139A | baz=3.1 | | | S | | **Sn** | **10 21 46.1** | **+0.5** |
| **S37A** | **Fort Scott** baz=3.2 | **3.17** | **321** | P | | **Pn** | **10 21 09.7** | **+1.2** |
| S37A | baz=3.2 | | | Sb | | **Sg** | **10 21 57.4** | **-2.7** |
| **W36A** | **Wetumka** baz=3.2,SNR=20 | **3.20** | **268** | P | | **Pn** | **10 21 09.6** | **+0.7** |
| W36A | baz=3.2 | | | S | | **Sn** | **10 21 49.0** | **+1.7** |
| **T36A** | **Boggs Farm, Ca** baz=3.4,SNR=23 | **3.37** | **302** | P | | **Pn** | **10 21 12.4** | **+1.2** |
| T36A | baz=3.4 | | | Sb | | **Sg** | **10 22 03.6** | **-2.8** |
| **X36A** | **Centrahoma** baz=3.4 | **3.39** | **259** | P | | **Pn** | **10 21 13.0** | **+1.5** |
| X36A | baz=3.4 | | | Sb | | **Sb** | **10 22 02.5** | **+2.4** |
| **VBMS** | **Vicksburg** baz=3.4 | **3.43** | **154** | P | | **Pn** | **10 21 12.3** | **+0.3** |
| **Z37A** | **Pogue Cattle C** baz=3.4 | **3.45** | **233** | P | | **Pn** | **10 21 13.4** | **+1.1** |
| **SIUC** | **Southern Illin** | **3.47** | **45** | *e*Pn | | **Pn** | **10 21 14.6** | **+2.0** |
| SIUC | | | | *e*Sn | | **Sn** | **10 21 56.5** | **+2.7** |
| **138A** | **Matatall Enter** baz=3.5 | **3.50** | **222** | P | | **Pn** | **10 21 14.0** | **+1.0** |
| **Y36A** | **Durant** | **3.56** | **248** | P | | **Pn** | **10 21 15.5** | **+1.7** |
| | baz=3.5 | | | | | | | |
| **S36A** | **Lake Cedric, C** baz=3.6 | **3.57** | **313** | P | | **Pn** | **10 21 15.4** | **+1.4** |
| **V35A** | **Meyer Ranch, C** baz=3.7,SNR=32 | **3.71** | **278** | P | | **Pn** | **10 21 16.7** | **+0.7** |
| **SLM** | **Saint Louis** | **3.72** | **26** | *e*Pn | | **Pn** | **10 21 18.8** | **+2.8** |
| SLM | | | | *e*Sn | | **Sn** | **10 22 00.6** | **+0.5** |
| **W35A** | **Tecumseh** baz=3.7,SNR=50 | **3.73** | **269** | P | | **Pn** | **10 21 16.8** | **+0.6** |
| **239A** | **Gary** baz=3.7 | **3.74** | **209** | P | | **Pn** | **10 21 16.7** | **+0.4** |
| **U35A** | **Pawnee** baz=3.7,SNR=16 | **3.74** | **288** | P | | **Pn** | **10 21 16.7** | **+0.4** |
| **WVT** | **Waverly** | **3.75** | **76** | *e*Pn | | **Pn** | **10 21 16.9** | **+0.5** |
| WVT | | | | *e*Sn | | **Sn** | **10 22 02.6** | **+1.9** |
| **T35A** | **Sooner Cattle** baz=3.7,SNR=28 | **3.75** | **297** | P | | **Pn** | **10 21 17.3** | **+0.8** |
| **X35A** | **Drake** baz=3.9 | **3.93** | **258** | P | | **Pn** | **10 21 19.6** | **+0.6** |
| **R36A** | **Gordon, Harris** baz=3.9 | **3.95** | **321** | P | | **Pn** | **10 21 20.5** | **+1.3** |
| **Q37A** | **Longview Farm,** baz=4.0,SNR=7.5 | **3.95** | **335** | P | | **Pn** | **10 21 20.2** | **+1.0** |
| **Z36A** | **Blue Ridge** baz=3.9 | **3.97** | **240** | P | | **Pn** | **10 21 20.3** | **+0.9** |
| **S35A** | **Otter Creek Ra** baz=4.0,SNR=10 | **4.00** | **308** | P | | **Pn** | **10 21 20.9** | **+1.0** |
| **238A** | **Jacksonville** baz=4.0 | **4.04** | **216** | P | | **Pn** | **10 21 21.1** | **+0.7** |
| **NATX** | **Nacogdoches** baz=4.0 | **4.04** | **210** | P | | **Pn** | **10 21 21.0** | **+0.5** |
| **NATX** | **Nacogdoches** | **4.04** | **210** | *e*Pn | | **Pn** | **10 21 21.2** | **+0.7** |
| NATX | | | | *e*Sn | | **Sn** | **10 22 08.3** | **+0.3** |
| **340A** | **Bronson** baz=4.1 | **4.10** | **199** | P | | **Pn** | **10 21 21.6** | **+0.4** |
| **Y35A** | **Marietta** baz=4.1 | **4.13** | **252** | P | | **Pn** | **10 21 22.6** | **+0.9** |
| **V34A** | **Guthrie** baz=4.2,SNR=21 | **4.27** | **279** | P | | **Pn** | **10 21 24.4** | **+0.8** |
| **V34A** | **Guthrie** | **4.27** | **279** | *e*Pn | | **Pn** | **10 21 24.3** | **+0.7** |
| V34A | | | | *e*Pg | | **Pg** | **10 21 41.5** | **+1.4** |
| V34A | | | | *e*Sn | | **Sn** | **10 22 18.0** | **+4.4** |
| V34A | | | | *e*Sg | | **Sg** | **10 22 36.2** | **+0.9** |
| **T34A** | **McClaskey Farm** baz=4.3,SNR=6.6 | **4.29** | **295** | P | | **Pn** | **10 21 24.8** | **+0.8** |
| **U34A** | **Anderson Ranch** baz=4.4 | **4.38** | **286** | P | | **Pn** | **10 21 26.0** | **+0.9** |
| **U34A** | **Anderson Ranch** | **4.38** | **286** | *e*Pn | | **Pn** | **10 21 25.6** | **+0.4** |
| U34A | | | | *e*Sn | | **Sn** | **10 22 17.4** | **+1.0** |
| U34A | | | | *e*Sg | | **Sg** | **10 22 37.4** | **-1.6** |
| **237A** | **Washetta, Mont** baz=4.4 | **4.40** | **222** | P | | **Pn** | **10 21 26.0** | **+0.7** |
| **Q36A** | **Arnold C. Orve** baz=4.4 | **4.43** | **326** | P | | **Pn** | **10 21 27.3** | **+1.5** |
| **W34A** | **Bridge Creek,** baz=4.4 | **4.46** | **271** | P | | **Pn** | **10 21 27.1** | **+0.8** |
| **W34A** | **Bridge Creek,** | **4.46** | **271** | *e*Pn | | **Pn** | **10 21 27.1** | **+0.8** |
| W34A | | | | *e*Pg | | **Pg** | **10 21 45.3** | **+1.6** |
| W34A | | | | *e*Sg | | **Sg** | **10 22 37.8** | **-3.8** |
| **136A** | **Ennis** baz=4.5 | **4.50** | **232** | P | | **Pn** | **10 21 27.1** | **+0.3** |
| **Z35A** | **Perchaven, San** baz=4.5 | **4.53** | **246** | P | | **Pn** | **10 21 27.9** | **+0.6** |
| **S34A** | **Willow Spring** baz=4.5 | **4.54** | **303** | P | | **Pn** | **10 21 28.6** | **+1.2** |
| **X34A** | **Smith Ranch, M** baz=4.6,SNR=7.7 | **4.58** | **263** | P | | **Pn** | **10 21 28.9** | **+1.0** |
| **USIN** | **University of** | **4.59** | **53** | *e*Pn | | **Pn** | **10 21 29.4** | **+1.4** |
| USIN | | | | *e*Pg | | **Pg** | **10 21 45.1** | **-1.0** |
| USIN | | | | *e*Sg | | **Sg** | **10 22 46.4** | **+0.8** |
| **Q35A** | **Mercer Eighty,** baz=4.6 | **4.62** | **321** | P | | **Pn** | **10 21 29.8** | **+1.3** |
| **338A** | **Crockett** baz=4.7 | **4.67** | **213** | P | | **Pn** | **10 21 29.8** | **+0.7** |
| **Y34A** | **Reagan Ranch,** baz=4.7 | **4.68** | **255** | P | | **Pn** | **10 21 29.7** | **+0.5** |
| **440A** | **Kirbyville** baz=4.7 | **4.75** | **197** | P | | **Pn** | **10 21 31.0** | **+0.8** |
| **OLIL** | **Olney** | **4.81** | **43** | *e*Pn | | **Pn** | **10 21 32.4** | **+1.4** |
| OLIL | | | | *e*Sn | | **Sn** | **10 22 30.9** | **+4.0** |
| OLIL | | | | *e*Sg | | **Sg** | **10 22 49.5** | **-3.0** |
| **236A** | **Katherine and** baz=4.8 | **4.82** | **228** | P | | **Pn** | **10 21 32.0** | **+0.9** |
| **U33A** | **Lingo Farm, Me** baz=4.8 | **4.84** | **285** | P | | **Pn** | **10 21 32.3** | **+0.9** |
| **P36A** | **Good Intent, A** baz=4.9 | **4.88** | **333** | P | | **Pn** | **10 21 33.6** | **+1.6** |
| **V33A** | **Lossen Ranch,** baz=4.9 | **4.89** | **278** | P | | **Pn** | **10 21 33.0** | **+0.8** |
| **439A** | **Center Grove,** baz=4.9 | **4.95** | **205** | P | | **Pn** | **10 21 33.9** | **+1.0** |
| **R34A** | **Isella, Hill** baz=4.9 | **4.96** | **309** | P | | **Pn** | **10 21 34.0** | **+1.0** |
| **Z34A** | **Collier Ranch,** baz=5.0 | **5.02** | **249** | P | | **Pn** | **10 21 35.0** | **+1.1** |
| **W33A** | **Caddo, Fort Co** baz=5.0,SNR=38 | **5.04** | **270** | P | | **Pn** | **10 21 35.2** | **+1.1** |
| **135A** | **Vickery Place,** baz=5.0 | **5.04** | **238** | P | | **Pn** | **10 21 34.8** | **+0.6** |
| **KSU1** | **Kansas State U** baz=5.1 | **5.11** | **319** | P | | **Pn** | **10 21 35.4** | **+0.4** |
| **KSU1** | **Kansas State U** 202nm,0.6s | **5.11** | **319** | *e*Pn | | **Pn** | **10 21 35.7** | **+0.6** |
| KSU1 | | | | *e*Sn | | **Sn** | **10 22 33.7** | **-0.6** |
| **T33A** | **Patterson Ranc** baz=5.1 | **5.11** | **292** | P | | **Pn** | **10 21 36.6** | **+1.5** |
| **S33A** | **Kaszmaul Farm,** baz=5.1 | **5.12** | **298** | P | | **Pn** | **10 21 35.5** | **+0.2** |
| **X33A** | **Lawton** baz=5.1 | **5.13** | **263** | P | | **Pn** | **10 21 36.3** | **+0.8** |
| **P35A** | **Duane Minner,** baz=5.1 | **5.14** | **326** | P | | **Pn** | **10 21 36.4** | **+0.8** |
| **Q34A** | **Chapman** baz=5.2 | **5.16** | **316** | P | | **Pn** | **10 21 36.4** | **+0.5** |
| **SWET** | **Sewanee** 0.5nm,0.8s | **5.23** | **89** | *e*Pn | | **Pn** | **10 21 37.8** | **+0.9** |
| SWET | | | | *e*Sn | | **Sn** | **10 22 38.2** | **+0.8** |
| **O36A** | **Bolckow** baz=5.3 | **5.25** | **337** | P | | **Pn** | **10 21 38.1** | **+1.0** |
| **438A** | **Sam Houston St** baz=5.2 | **5.26** | **211** | P | | **Pn** | **10 21 38.0** | **+0.8** |
| **WMOK** | **Wichita Mounta** 188nm,0.3s | **5.33** | **266** | *e*Pn | | **Pn** | **10 21 39.2** | **+1.0** |
| WMOK | | | | *e*Sn | | **Sn** | **10 22 40.1** | **+0.2** |
| WMOK | | | | *e*Sg | | **Sg** | **10 23 11.3** | **+1.8** |
| **Y33A** | **Hilltop Ranch,** baz=5.3,SNR=9.6 | **5.36** | **258** | P | | **Pn** | **10 21 39.4** | **+0.8** |
| **WHTX** | **Lake Whitney** baz=5.4 | **5.41** | **234** | P | | **Pn** | **10 21 39.7** | **+0.4** |
| **WHTX** | **Lake Whitney** 43nm,0.4s | **5.41** | **234** | *e*Pn | | **Pn** | **10 21 39.8** | **+0.4** |
| WHTX | | | | *e*Sn | | **Sn** | **10 22 41.9** | **+0.1** |
| **336A** | **Riesel** baz=5.4 | **5.44** | **225** | P | | **Pn** | **10 21 39.9** | **+0.2** |
| **R33A** | **Olander Ranch,** baz=5.4 | **5.44** | **305** | P | | **Pn** | **10 21 40.2** | **+0.5** |
| **V32A** | **Arapaho** baz=5.5 | **5.50** | **276** | P | | **Pn** | **10 21 41.0** | **+0.5** |
| **134A** | **White-Moore Ra** baz=5.5 | **5.51** | **242** | P | | **Pn** | **10 21 40.9** | **+0.3** |
| **U32A** | **Winter Ranch,** baz=5.5 | **5.53** | **283** | P | | **Pn** | **10 21 41.5** | **+0.5** |
| **P34A** | **Walnut Farm, R** baz=5.5 | **5.55** | **321** | P | | **Pn** | **10 21 42.2** | **+1.0** |
| **539A** | **Cross D Ranch,** baz=5.6 | **5.56** | **202** | P | | **Pn** | **10 21 42.6** | **+1.2** |
| **WCI** | **Wyandotte Cave** 210nm,0.4s | **5.65** | **57** | *e*Pn | | **Pn** | **10 21 43.4** | **+0.8** |
| WCI | | | | *e*Sn | | **Sn** | **10 22 49.8** | **+2.1** |
| WCI | | | | *e*Sg | | **Sg** | **10 23 16.6** | **-3.0** |
| **W32A** | **Sentinel** baz=5.6 | **5.67** | **270** | P | | **Pn** | **10 21 43.1** | **+0.2** |
| **Z33A** | **Whitaker Ranch** baz=5.7 | **5.70** | **251** | P | | **Pn** | **10 21 44.1** | **+0.8** |
| **O35A** | **Humboldt** baz=5.7 | **5.71** | **331** | P | | **Pn** | **10 21 44.1** | **+0.7** |
| **Q33A** | **Connelly Farm,** baz=5.7 | **5.74** | **312** | P | | **Pn** | **10 21 44.5** | **+0.7** |
| **HDIL** | **Hopedale** baz=5.8 | **5.76** | **24** | P | | **Pn** | **10 21 45.1** | **+1.1** |
| **HDIL** | **Hopedale** 103nm,0.5s | **5.76** | **24** | *e*Pn | | **Pn** | **10 21 45.2** | **+1.1** |
| HDIL | | | | *e*Sn | | **Sn** | **10 22 51.1** | **+0.7** |
| **X32A** | **Elmer** baz=5.8,SNR=14 | **5.79** | **263** | P | | **Pn** | **10 21 45.3** | **+0.7** |
| **S32A** | **Newby Ranch, P** baz=5.8 | **5.84** | **296** | P | | **Pn** | **10 21 45.8** | **+0.6** |
| **234A** | **Clairette** baz=5.8 | **5.86** | **237** | P | | **Pn** | **10 21 45.7** | **+0.1** |
| **335A** | **Moody** baz=5.8 | **5.86** | **228** | P | | **Pn** | **10 21 46.0** | **+0.5** |
| **P33A** | **Williams Farm,** baz=5.9 | **5.94** | **316** | P | | **Pn** | **10 21 47.3** | **+0.7** |
| **O34A** | **Beatrice** baz=6.0 | **5.97** | **326** | P | | **Pn** | **10 21 47.5** | **+0.5** |
| **R32A** | **Long Quarter,** baz=6.0 | **5.99** | **303** | P | | **Pn** | **10 21 47.6** | **+0.3** |
| **Y32A** | **R-V Farms, Ver** baz=6.0 | **6.01** | **260** | P | | **Pn** | **10 21 47.8** | **+0.2** |
| **BLO** | **Bloomington** 153nm,0.6s | **6.02** | **48** | *e*Pn | | **Pn** | **10 21 48.6** | **+1.0** |
| BLO | | | | *e*Sn | | **Sn** | **10 22 58.1** | **+1.2** |
| **133A** | **Hamilton Ranch** baz=6.1 | **6.11** | **246** | P | | **Pn** | **10 21 48.8** | **-0.1** |
| **HKT** | **Hockley** 16nm,0.9s | **6.11** | **210** | *e*Pn | | **Pn** | **10 21 48.4** | **-0.4** |
| HKT | | | | *e*Sn | | **Sn** | **10 22 55.5** | **-3.3** |
| **N35A** | **Tabor** baz=6.1 | **6.13** | **336** | P | | **Pn** | **10 21 50.0** | **+0.8** |
| **BRAL** | **Brewton** 57nm,0.5s | **6.15** | **133** | *e*Pn | | **Pn** | **10 21 48.4** | **-1.0** |
| BRAL | | | | *e*Sn | | **Sn** | **10 22 56.6** | **-3.4** |
| **Q32A** | **Meitler Ranch,** baz=6.2 | **6.19** | **308** | P | | **Pn** | **10 21 50.4** | **+0.3** |
| **537A** | **Green Hill Far** baz=6.2 | **6.21** | **214** | P | | **Pn** | **10 21 50.2** | **0.0** |
| **U31A** | **Nine Bar Ranch** baz=6.2,SNR=12 | **6.21** | **282** | P | | **Pn** | **10 21 50.6** | **+0.3** |
| **T31A** | **Randall Ranch,** baz=6.2 | **6.21** | **289** | P | | **Pn** | **10 21 51.1** | **+0.8** |
| **S31A** | **Mullinville** baz=6.2 | **6.22** | **294** | P | | **Pn** | **10 21 51.1** | **+0.7** |
| **W31A** | **Holland Ranch,** baz=6.2,SNR=8.9 | **6.24** | **271** | P | | **Pn** | **10 21 50.8** | **+0.1** |
| **Z32A** | **Haskell** baz=6.2 | **6.25** | **253** | P | | **Pn** | **10 21 51.4** | **+0.6** |
| **435B** | **Jarrell** baz=6.3 | **6.32** | **226** | P | | **Pn** | **10 21 51.8** | **+0.1** |
| **X31A** | **McDonald Ranch** baz=6.3,SNR=22 | **6.33** | **266** | P | | **Pn** | **10 21 52.4** | **+0.5** |
| **O33A** | **Hebron** baz=6.3 | **6.33** | **320** | P | | **Pn** | **10 21 53.0** | **+1.1** |
| **334A** | **Lometa** baz=6.3 | **6.34** | **233** | P | | **Pn** | **10 21 52.1** | **0.0** |
| **CPCT** | **Cooper Cave** | **6.37** | **86** | *e*Pn | | **Pn** | **10 21 53.2** | **+0.7** |
| CPCT | | | | *e*Sn | | **Sn** | **10 23 06.1** | **+0.6** |
| **233A** | **Rising Star** baz=6.4 | **6.39** | **241** | P | | **Pn** | **10 21 52.4** | **-0.4** |
| **N34A** | **Lincoln** baz=6.4 | **6.43** | **330** | P | | **Pn** | **10 21 54.2** | **+0.9** |
| **R31A** | **Burdett** baz=6.5,SNR=9.0 | **6.50** | **299** | P | | **Pn** | **10 21 54.8** | **+0.4** |
| **SFIN** | **Scholer Farm** baz=6.6 | **6.54** | **38** | P | | **Pn** | **10 21 56.6** | **+1.9** |
| **SFIN** | **Scholer Farm** 45nm,0.5s | **6.54** | **38** | *e*Pn | | **Pn** | **10 21 57.6** | **+2.9** |
| SFIN | | | | *e*Sn | | **Sn** | **10 23 10.5** | **+1.1** |
| **P32A** | **Huiting Farm,** baz=6.6 | **6.59** | **313** | P | | **Pn** | **10 21 56.5** | **+0.9** |
| **SCIA** | **State Center** 178nm,0.6s | **6.63** | **354** | *e*Pn | | **Pn** | **10 21 56.3** | **+0.3** |
| SCIA | | | | *e*Sg | | **Sg** | **10 23 47.7** | **-3.2** |
| **ABTX** | **Abilene, Hawle** baz=6.6 | **6.65** | **248** | P | | **Pn** | **10 21 56.4** | **+0.1** |
| **ABTX** | **Abilene, Hawle** 62nm,0.5s | **6.65** | **248** | *e*Pn | | **Pn** | **10 21 56.3** | **+0.1** |
| ABTX | | | | *e*Sn | | **Sn** | **10 23 12.9** | **+0.6** |
| **Y31A** | **Rekieta Farm,** baz=6.7 | **6.68** | **261** | P | | **Pn** | **10 21 57.3** | **+0.5** |
| **M35A** | **Neola** baz=6.7 | **6.70** | **338** | P | | **Pn** | **10 21 58.5** | **+1.6** |
| **434A** | **Burnet** baz=6.7 | **6.71** | **230** | P | | **Pn** | **10 21 56.9** | **-0.2** |
| **Q31A** | **Ellis** baz=6.7 | **6.75** | **305** | P | | **Pn** | **10 21 58.4** | **+0.8** |
| **W30A** | **Crocket Farms** baz=6.7,SNR=6.1 | **6.76** | **271** | P | | **Pn** | **10 21 58.8** | **+1.0** |
| **N33A** | **J Bar K, Exete** baz=6.8 | **6.77** | **325** | P | | **Pn** | **10 21 58.3** | **+0.4** |
| **Z31A** | **Sharp Cattle R** baz=6.7 | **6.77** | **255** | P | | **Pn** | **10 21 59.0** | **+1.0** |
| **V30A** | **Spur Ranch, Mi** baz=6.8 | **6.84** | **276** | P | | **Pn** | **10 21 59.7** | **+0.7** |
| **333A** | **Richland Sprin** baz=6.8 | **6.85** | **236** | P | | **Pn** | **10 21 58.8** | **-0.3** |
| **T30A** | **Plains** baz=6.8 | **6.86** | **287** | P | | **Pn** | **10 22 00.4** | **+1.1** |
| **U30A** | **WK&E Inc. Balk** baz=6.8,SNR=8.9 | **6.87** | **283** | P | | **Pn** | **10 21 59.5** | **+0.1** |
| **535A** | **Dale** baz=6.9 | **6.88** | **222** | P | | **Pn** | **10 21 59.1** | **-0.3** |
| **CBKS** | **Cedar Bluff** baz=6.9,SNR=20 | **6.89** | **303** | P | | **Pn** | **10 22 00.4** | **+0.8** |
| **CBKS** | **Cedar Bluff** 54nm,0.5s | **6.89** | **303** | *e*Pn | | **Pn** | **10 22 00.5** | **+0.8** |
| CBKS | | | | *e*Sn | | **Sn** | **10 23 18.9** | **+0.7** |
| **S30A** | **Montezuma** baz=6.9 | **6.96** | **292** | P | | **Pn** | **10 22 00.9** | **+0.3** |
| **TKL** | **Tuckaleechee C** 1.1nm,0.3s,baz=253,slow=11,SNR=12 | **6.98** | **85** | Pn | | **Pn** | **10 22 01.4** | **+0.5** |
| TKL | 5.7nm,0.3s,baz=331,slow=23,SNR=3.6 | | | Sn | | **Sn** | **10 23 19.8** | **-0.7** |
| TKL | 28nm,0.3s,baz=37,slow=12,SNR=6.7 | | | Lg | | Lg | 10 23 52.0 | |
| TKL | comp=Z,152nm,18.2s,baz=326,slow=39 | | | LR | | LR | 10 24 46.6 | |
| **232A** | **Coleman** baz=7.0 | **7.00** | **243** | P | | **Pn** | **10 22 00.5** | **-0.7** |
| **P31A** | **Stockton** baz=7.0,SNR=9.7 | **7.02** | **309** | P | | **Pn** | **10 22 01.9** | **+0.6** |
| **M34A** | **Aspy Farms, Fr** baz=7.0 | **7.03** | **333** | P | | **Pn** | **10 22 02.6** | **+1.1** |
| **R30A** | **Dighton** baz=7.0,SNR=14 | **7.04** | **297** | P | | **Pn** | **10 22 02.0** | **+0.2** |
| **636A** | **Smothers Creek** baz=7.0 | **7.05** | **216** | P | | **Pn** | **10 22 02.4** | **+0.5** |
| **X30A** | **Coker Ranch, T** baz=7.1,SNR=17 | **7.08** | **265** | P | | **Pn** | **10 22 02.2** | **-0.1** |
| **131A** | **Roby** baz=7.2 | **7.20** | **251** | P | | **Pn** | **10 22 03.9** | **0.0** |
| **N32A** | **Stulken Farm,** baz=7.2 | **7.20** | **321** | P | | **Pn** | **10 22 04.8** | **+0.9** |
| **Y30A** | **Stafford Cattl** baz=7.2 | **7.22** | **261** | P | | **Pn** | **10 22 04.6** | **+0.4** |
| **TZTN** | **Tazewell** 19nm,0.5s | **7.22** | **78** | *e*Pn | | **Pn** | **10 22 05.3** | **+1.1** |
| TZTN | | | | *e*Sn | | **Sn** | **10 23 29.4** | **+2.9** |
| **L35A** | **Bielow Farm, R** baz=7.3 | **7.25** | **341** | P | | **Pn** | **10 22 06.1** | **+1.6** |
| **433A** | **Art** baz=7.3 | **7.27** | **233** | P | | **Pn** | **10 22 05.1** | **+0.2** |
| **Q30A** | **Quinter** baz=7.3,SNR=13 | **7.29** | **302** | P | | **Pn** | **10 22 06.3** | **+1.1** |
| **M33A** | **Taylor Creek F** baz=7.3 | **7.33** | **330** | P | | **Pn** | **10 22 05.9** | **+0.2** |
| **332A** | **Millersview** baz=7.3 | **7.34** | **240** | P | | **Pn** | **10 22 04.7** | **-1.1** |
| **U29A** | **Oasis Ranch, S** baz=7.3 | **7.36** | **282** | P | | **Pn** | **10 22 06.2** | **+0.1** |
| **O31A** | **Woolen Ranch,** baz=7.4 | **7.36** | **313** | P | | **Pn** | **10 22 06.4** | **+0.3** |
| **L34A** | **Svendsen Farm,** baz=7.4 | **7.37** | **336** | P | | **Pn** | **10 22 06.9** | **+0.8** |
| **534A** | **Blanco** baz=7.4 | **7.39** | **226** | P | | **Pn** | **10 22 05.8** | **-0.7** |
| **231A** | **Bronte** baz=7.4 | **7.47** | **245** | P | | **Pn** | **10 22 07.0** | **-0.6** |
| **T29A** | **Hugoton** baz=7.5 | **7.48** | **287** | P | | **Pn** | **10 22 07.9** | **+0.1** |
| **635A** | **Leesville** baz=7.5

baz=7.6
BGNE **Belgrade** 7.62 325 *e*Pn **Pn** 10 22 10.5 +0.9
6.6nm,1.4s
BGNE *e*Pg **Pg** 10 22 44.9 +0.8
BGNE *e*Sn **Sn** 10 23 38.5 +2.3
BGNE *e*Sg **Sg** 10 24 21.7 -1.0
**W29A Amraillo** 7.64 271 P **Pn** 10 22 09.7 -0.2
baz=7.6,SNR=11
**432A Menard** 7.67 237 P **Pn** 10 22 09.8 -0.6
baz=7.6
**130A Snyder** 7.67 252 P **Pn** 10 22 10.4 -0.1
baz=7.6
**AMTX Amarillo** 7.68 270 P **Pn** 10 22 10.3 -0.3
baz=7.7
**AMTX Amarillo** 7.68 270 *e*Pn **Pn** 10 22 10.4 -0.2
73nm,0.5s
AMTX *e*Pg Pg 10 22 41.3 -4.1
AMTX *e*Sn **Sn** 10 23 35.9 -2.0
AMTX *e*Sg **Sg** 10 24 24.7 -0.2
**533A Kerrville** 7.70 229 P **Pn** 10 22 10.1 -0.7
baz=7.7
**R29A Marienthal** 7.72 296 P **Pn** 10 22 11.3 +0.2
baz=7.7,SNR=6.8
**K35A Storm Lake** 7.74 344 P **Pn** 10 22 12.5 +1.2
baz=7.8
**X29A Tulia** 7.76 266 P **Pn** 10 22 11.6 0.0
baz=7.7
**JFWS Jewell Farm** 7.76 11 *e*Pn **Pn** 10 22 11.8 +0.2
151nm,0.8s
JFWS *e*Sn **Sn** 10 23 39.4 -0.3
**Q29A Oakley** 7.79 300 P **Pn** 10 22 12.1 +0.1
baz=7.8
**O30A MW Ranch, Wils** 7.82 311 P **Pn** 10 22 13.0 +0.6
baz=7.8
**Y29A Porterfield Fa** 7.85 262 P **Pn** 10 22 12.7 -0.1
baz=7.8,SNR=9.1
**331A San Angelo** 7.87 242 P **Pn** 10 22 12.2 -0.9
baz=7.8
**JCT Junction City** 7.92 235 P **Pn** 10 22 13.2 -0.6
baz=7.9
**JCT Junction City** 7.92 235 *e*Pn **Pn** 10 22 13.2 -0.6
31nm,0.6s
JCT *e*Sn **Sn** 10 23 40.4 -3.2
**K34A Le Mars** 7.93 339 P **Pn** 10 22 14.9 +0.9
baz=7.9
**735A Kenedy** 7.94 217 P **Pn** 10 22 14.1 +0.1
baz=7.9
**M31A Lambtecht Ranc** 7.98 321 P **Pn** 10 22 15.0 +0.5
baz=8.0
**L32A Elgin** 8.03 328 P **Pn** 10 22 16.2 +0.9
baz=8.0
**S28A Manter** 8.05 289 P **Pn** 10 22 15.2 -0.4
baz=8.0,SNR=12
**J37A Redenius Farm,** 8.05 354 P **Pn** 10 22 16.7 +1.2
baz=8.1
**P29A Atwood** 8.08 305 P **Pn** 10 22 16.2 +0.2
baz=8.1,SNR=9.6
**W28A Vega** 8.09 272 P **Pn** 10 22 16.0 -0.1
baz=8.1
**V28A Channing** 8.09 276 P **Pn** 10 22 15.9 -0.2
baz=8.1
**230A Sterling City** 8.09 248 P **Pn** 10 22 16.0 -0.2
baz=8.1
**U28A Mallet** 8.11 280 P **Pn** 10 22 16.4 -0.2
baz=8.1
**T28A Walsh** 8.12 286 P **Pn** 10 22 16.0 -0.6
baz=8.1,SNR=7.9
**K33A Hardington** 8.15 335 P **Pn** 10 22 17.5 +0.6
baz=8.2
**X28A Dimmitt** 8.15 267 P **Pn** 10 22 16.5 -0.5
baz=8.1
**J36A Seneca 1, Swea** 8.16 350 P **Pn** 10 22 17.7 +0.7
baz=8.2
**R28A Tribune** 8.19 294 P **Pn** 10 22 17.4 -0.2
baz=8.2,SNR=10
**532A Rocksprings** 8.21 233 P **Pn** 10 22 16.7 -1.1
baz=8.2
**633A Saathoff Ranch** 8.22 227 P **Pn** 10 22 17.1 -0.8
baz=8.2
**N30A Hueftle Ranch,** 8.22 314 P **Pn** 10 22 18.6 +0.6
baz=8.2
**TIGA Tifton** 8.26 115 P **Pn** 10 22 19.1 +0.8
baz=8.3
**O29A 4D Ranch, Culb** 8.26 308 P **Pn** 10 22 19.1 +0.6
baz=8.2
**Y28A McKinney Farm,** 8.30 263 P **Pn** 10 22 19.3 +0.2
baz=8.3
**431A Sonora** 8.35 239 P **Pn** 10 22 18.9 -0.8
baz=8.3
**J35A Milford** 8.35 345 P **Pn** 10 22 20.8 +1.1
baz=8.4
**330A Mertzon** 8.37 245 P **Pn** 10 22 19.4 -0.5
baz=8.3
**129A Stewart Farms,** 8.37 254 P **Pn** 10 22 19.8 -0.1
baz=8.3
**835A Beeville** 8.42 215 P **Pn** 10 22 20.9 +0.3
baz=8.4
**J34A George** 8.45 342 P **Pn** 10 22 21.6 +0.6
baz=8.5
**L31A Butterfield Fa** 8.54 325 P **Pn** 10 22 22.6 +0.3
baz=8.5
**N29A Votaw Ranch, W** 8.55 313 P **Pn** 10 22 23.6 +1.1
baz=8.5
**632A Uvalde** 8.56 230 P **Pn** 10 22 21.8 -0.7
baz=8.5
**K32A Verdigre** 8.56 331 P **Pn** 10 22 22.8 +0.4
baz=8.6
**Z28A Tucker Farm, M** 8.57 259 P **Pn** 10 22 23.0 +0.2
baz=8.5
**229A Bryant Ranch,** 8.59 250 P **Pn** 10 22 22.5 -0.4
baz=8.6
**V27A Dan Oppiter Fa** 8.59 276 P **Pn** 10 22 23.1 +0.1
baz=8.6
**T27A Campo** 8.59 285 P **Pn** 10 22 22.7 -0.4
baz=8.6,SNR=9.6
**U27A Thompson Grove** 8.60 280 P **Pn** 10 22 22.8 -0.5
baz=8.6
**531A Rocksprings** 8.62 236 P **Pn** 10 22 22.6 -0.8
baz=8.6
**P28A Saint Francis** 8.63 302 P **Pn** 10 22 23.8 +0.3
baz=8.6,SNR=8.2
**MSTX Muleshoe** 8.72 264 P **Pn** 10 22 24.3 -0.5
baz=8.7
**MSTX Muleshoe** 8.72 264 *e*Pn **Pn** 10 22 24.7 -0.1
68nm,0.7s
MSTX *e*Sn **Sn** 10 24 05.3 +2.0
**430A Baggett Ranch,** 8.73 241 P **Pn** 10 22 24.2 -0.8
baz=8.7
**J33A Davis** 8.77 337 P **Pn** 10 22 26.1 +0.7
baz=8.8
**I35A Creekview Farm** 8.78 347 P **Pn** 10 22 24.7 -0.9
baz=8.8
**L30A Spencer Herefo** 8.80 321 P **Pn** 10 22 25.9 0.0
baz=8.8
**733A Divot King Ran** 8.84 224 P **Pn** 10 22 25.8 -0.6
baz=8.8
**K31A O'Neill** 8.86 328 P **Pn** 10 22 27.3 +0.7
baz=8.9
**128A Castleberry Fa** 8.86 255 P **Pn** 10 22 26.4 -0.3
baz=8.8
**ACSO Alum Creek Sta** 8.88 54 *e*Pn **Pn** 10 22 26.7 -0.1
16nm,0.4s
ACSO *e*Sn **Sn** 10 24 03.1 -4.0
**O28A Krutsinger Ran** 8.90 306 P **Pn** 10 22 27.0 -0.3
baz=8.9,SNR=11
**R27A Eads** 8.91 293 P **Pn** 10 22 26.7 -0.8
baz=8.9,SNR=7.3
**329A Wagon Wheel Ra** 8.93 247 P **Pn** 10 22 26.9 -0.8
baz=8.9
**M29A Burnside Ranch** 8.98 316 P **Pn** 10 22 27.8 -0.6
baz=9.0
**KMSC Kings Mountain** 8.99 88 P **Pn** 10 22 28.6 +0.2
baz=9.0
**KSCO Kaye Shedlock'** 9.02 297 P **Pn** 10 22 28.8 -0.2
baz=9.0
**KSCO Kaye Shedlock'** 9.02 297 *e*Pn **Pn** 10 22 28.9 0.0
58nm,0.7s
KSCO *e*Sn **Sn** 10 24 12.1 +1.3
**N28A Pribbeno Ranch** 9.04 309 P **Pn** 10 22 28.7 -0.5
baz=9.0
**ECSD EROS Data Cent** 9.04 340 P **Pn** 10 22 29.5 +0.3
baz=9.1
**ECSD EROS Data Cent** 9.04 340 *e*Pn **Pn** 10 22 29.4 +0.3
14nm,0.3s
ECSD *e*Sn **Sn** 10 24 07.2 -4.0
**J32A Parkston** 9.12 334 P **Pn** 10 22 30.9 +0.7
baz=9.1
**631A Perdido Creek** 9.12 232 P **Pn** 10 22 29.8 -0.5
baz=9.1
**228A UT Block 9, Go** 9.13 253 P **Pn** 10 22 29.6 -0.8
baz=9.1
**I34A Hadley** 9.14 344 P **Pn** 10 22 31.2 +0.7
baz=9.2
**530A J-C Ranch, Com** 9.17 238 P **Pn** 10 22 30.6 -0.4
baz=9.1
**P27A Ficken Ranch,** 9.19 300 P **Pn** 10 22 32.4 +1.1
baz=9.2
**833A Chaparral WMA,** 9.20 223 P **Pn** 10 22 31.4 +0.1
baz=9.2
**732A Laxson Ranch,** 9.23 227 P **Pn** 10 22 30.5 -1.2
baz=9.2
**S26A Kim** 9.28 288 P **Pn** 10 22 32.0 -0.5
baz=9.2,SNR=12
**L29A Maesberg Ranch** 9.28 319 P **Pn** 10 22 32.9 +0.4
baz=9.3
**K30A Basset** 9.29 325 P **Pn** 10 22 33.2 +0.6
baz=9.3
**T26A Comanche Natio** 9.30 285 P **Pn** 10 22 32.5 -0.3
baz=9.3,SNR=8.2
**429A Davenport Ranc** 9.30 243 P **Pn** 10 22 31.2 -1.6
baz=9.3
**934A Benavides** 9.33 216 P **Pn** 10 22 33.1 0.0
baz=9.3
**H36A Jessenland, He** 9.34 353 P **Pn** 10 22 33.2 0.0
baz=9.4
**M28A Bar X Bar Ranc** 9.35 313 P **Pn** 10 22 33.3 -0.2
baz=9.3
**I33A Coleman** 9.38 340 P **Pn** 10 22 34.0 +0.1
baz=9.4
**J31A Geddes** 9.39 330 P **Pn** 10 22 34.5 +0.6
baz=9.4
**R26A Arlington** 9.41 292 P **Pn** 10 22 34.1 -0.2
baz=9.4
**OGNE Ogallala** 9.50 309 P **Pn** 10 22 35.9 +0.5
baz=9.5
**832A Faith Ranch, C** 9.56 225 P **Pn** 10 22 36.8 +0.6
baz=9.5
**I32A Karley and Nic** 9.57 337 P **Pn** 10 22 36.5 +0.2
baz=9.6
**H35A Sunnyside Ranc** 9.57 349 P **Pn** 10 22 36.6 +0.2
baz=9.6
**Q26A Hugo** 9.64 295 P **Pn** 10 22 37.2 -0.3
baz=9.6
**933A Laredo** 9.70 220 P **Pn** 10 22 38.1 0.0
baz=9.7
**K29A Lazy Trails An** 9.70 323 P **Pn** 10 22 38.7 +0.6
baz=9.7
**H34A Spellman Lake,** 9.72 345 P **Pn** 10 22 37.9 -0.4
baz=9.7
**J30A Dallas** 9.74 327 P **Pn** 10 22 38.9 +0.1
baz=9.7
**BLA Blacksburg** 9.80 75 *e*Pn **Pn** 10 22 39.5 0.0
22nm,0.6s
BLA *e*Sn **Sn** 10 24 31.2 +1.4
**529A Stev Forest Ra** 9.81 241 P **Pn** 10 22 38.5 -1.2
baz=9.8
**CPRX Cap Rock** 9.83 260 *e*Pn **Pn** 10 22 41.0 +0.8
71nm,0.9s
CPRX *e*Sn **Sn** 10 24 33.4 +2.5
**034A Hebbronville** 9.86 215 P **Pn** 10 22 38.9 -1.4
baz=9.9
**SPMN St. Paul** 9.91 358 P **Pn** 10 22 39.1 -2.0
baz=9.9
**SPMN St. Paul** 9.91 358 *e*Pn **Pn** 10 22 39.6 -1.4
24nm,0.4s
SPMN *e*Sn **Sn** 10 24 35.4 +2.8
**I31A Royce, Wessing** 9.94 333 P **Pn** 10 22 41.4 0.0
baz=9.9
**T25A Trinidad** 9.94 284 P **Pn** 10 22 41.3 -0.4
baz=9.9
**H33A Prehn Over Nor** 9.96 341 P **Pn** 10 22 43.0 +1.4
baz=10.0
**H32A Carlson Farm,** 9.99 338 P **Pn** 10 22 41.9 -0.2
baz=10.0
**G35A Watkins** 10.04 351 P **Pn** 10 22 43.1 +0.4
baz=10
**J29A Okreek** 10.18 325 P **Pn** 10 22 44.7 -0.1
baz=10
**I30A Oacoma** 10.19 330 P **Pn** 10 22 44.6 -0.3
baz=10
**K28A Ten Mile Ranch** 10.20 319 P **Pn** 10 22 45.3 +0.2
baz=10
**G34A Benson** 10.24 347 P **Pn** 10 22 45.8 +0.2
baz=10
**H31A Wolsey** 10.31 335 P **Pn** 10 22 46.4 0.0
baz=10
**SUSD South Dakota S** 10.45 333 P **Pn** 10 22 48.5 +0.1
baz=10
**J28A Allard Ranch,** 10.64 322 P **Pn** 10 22 50.3 -0.7
baz=11
**I29A Vivian Onida** 10.65 327 P **Pn** 10 22 50.2 -1.0
baz=11
**F34A Alexandria** 10.71 349 P **Pn** 10 22 52.9 +0.9
baz=11
**Q24A Divide** 10.87 293 P **Pn** 10 22 54.8 +0.3
baz=11
**SDCO Great Sand Dun** 10.88 287 P **Pn** 10 22 54.9 +0.2
baz=11
**SDCO Great Sand Dun** 10.88 287 *e*Pn **Pn** 10 22 55.1 +0.5
7.8nm,0.6s
SDCO *e*Sn **Sn** 10 24 59.3 +2.6
**J27A Elkhorn Farm,** 10.92 320 P **Pn** 10 22 54.7 -0.2
baz=11
**F33A 5 Mile Ranch,** 10.95 345 P **Pn** 10 22 54.7 -0.4
baz=11
**I28A Midland** 11.03 325 P **Pn** 10 22 56.3 -0.1
baz=11
**COWI Conover** 11.05 12 *e*Pn **Pn** 10 22 55.6 -1.0
16nm,0.5s
COWI *e*Sn Sn 10 24 53.0 -7.3
**H29A Onida** 11.10 329 P **Pn** 10 22 55.8 -1.5
baz=11
**TXAR Lajitas Array** 11.29 241 Pn **Pn** 10 22 58.6 -1.4
0.6nm,0.3s,baz=66,slow=13,SNR=39
TXAR LR LR 10 27 50.1
comp=Z,66nm,18.9s,baz=0.0,slow=40
**E35A Pequot Lakes** 11.35 353 P **Pn** 10 22 59.3 -1.4
baz=11
**E34A Wadena** 11.40 350 P **Pn** 10 23 00.7 -0.7
baz=11
**G29A Hoven** 11.45 332 P **Pn** 10 23 00.7 -1.4
baz=12
**ISCO Idaho Springs** 11.46 297 P **Pn** 10 23 02.0 -0.6
baz=11
**ISCO Idaho Springs** 11.46 297 *e*Pn **Pn** 10 23 01.4 -1.1
14nm,0.6s
ISCO *e*Sn **Sn** 10 25 10.2 -0.8
**MNTX Cornudas Mount** 11.48 255 P **Pn** 10 23 02.1 -0.5
baz=11
**MNTX Cornudas Mount** 11.48 255 *e*Pn **Pn** 10 23 01.3 -1.2
235nm,0.7s
MNTX *e*Sn **Sn** 10 25 11.2 +0.1
**H28A Mission Ridge** 11.48 327 P **Pn** 10 23 01.2 -1.4
baz=12
**I27A Quinn** 11.52 322 P **Pn** 10 23 02.5 -0.6
baz=12
**E33A Westby DABS, E** 11.53 347 P **Pn** 10 23 01.7 -1.4
baz=12
**J26A Sides Ranch, S** 11.54 317 P **Pn** 10 23 02.8 -0.6
baz=12
**ANMO Albuquerque** 11.58 272 Pn **Pn** 10 23 03.8 -0.4
0.1nm,0.3s,baz=91,slow=15,SNR=7.3
ANMO Lg Lg 10 26 23.3
1.9nm,0.3s,baz=9.1,slow=13,SNR=3.9
**ANMO Albuquerque** 11.58 272 *e*Pn **Pn** 10 23 03.6 -0.6
6.7nm,0.6s
ANMO *e*Sn **Sn** 10 25 14.8 +1.0
ANMO Lg Lg 10 26 23.3
**D35A Remer** 11.84 354 P **Pn** 10 23 05.8 -1.5
baz=12
**D37A Cotton** 11.84 360 P **Pn** 10 23 05.7 -1.7
baz=12
**H27A Howes** 11.94 324 P **Pn** 10 23 08.0 -0.8
baz=12
**D34A Park Rapids** 11.96 350 P **Pn** 10 23 08.8 -0.3
baz=12
**J25A Sunshine Ranch** 12.00 316 P **Pn** 10 23 08.8 -0.9
baz=12
**E31A Nome** 12.00 341 P **Pn** 10 23 08.9 -0.7
baz=12
**N23A Red Feather La** 12.09 302 P **Pn** 10 23 10.2 -0.9
baz=12
**D33A AnnSam, Waubun** 12.12 348 P **Pn** 10 23 10.0 -1.1
baz=12
**I25A Rochford** 12.36 318 P **Pn** 10 23 13.7 -1.0
baz=12
**G27A Dupree** 12.44 327 P **Pn** 10 23 15.1 -0.6
baz=12
**RSSD Black Hills** 12.59 318 *e*Pn **Pn** 10 23 19.0 +1.1
7.9nm,0.6s
RSSD *e*Sn **Sn** 10 25 39.4 +0.9
**EYMN Ely** 12.64 3 P Pn 10 23 14.9 -3.5
baz=13
**EYMN Ely** 12.64 3 *e*Pn **Pn** 10 23 15.8 -2.6
7.4nm,0.6s
EYMN *e*Sn Sn 10 25 31.1 -8.3
**G26A Maurine** 12.68 325 P **Pn** 10 23 17.1 -1.8
baz=13
**D30A Buchanan** 12.74 340 P **Pn** 10 23 17.4 -2.4
baz=13
**C31A Landman Farms,** 13.11 344 P Pn 10 23 21.5 -3.3
baz=13
**121A Cookes Peak, D** 13.14 262 P **Pn** 10 23 25.1 -0.3
baz=13
**AGMN Agassiz Nation** 13.24 350 P **Pn** 10 23 23.4 -3.1
baz=13
**AGMN Agassiz Nation** 13.24 350 *e*Pn **Pn** 10 23 24.1 -2.5
9.7nm,0.5s
AGMN *e*Sn **Sn** 10 25 54.8 +0.7
**B34A Aery, Baudette** 13.28 353 P **Pn** 10 23 24.2 -2.9
baz=13
**E26A Carlson Angus** 13.52 329 P **Pn** 10 23 27.9 -2.5
baz=14
**SADO Sadowa** 13.81 43 Pn Pn 10 23 30.5 -3.8
0.3nm,0.3s,baz=170,slow=11,SNR=2.1
SADO Sn Sn 10 25 55.9 -12
0.8nm,0.3s,baz=79,slow=16,SNR=2.9
SADO Lg Lg 10 27 22.3
1.5nm,0.3s,baz=143,slow=20,SNR=3.1
**B30A Myrvik Farm, E** 13.87 343 P Pn 10 23 31.6 -3.5
baz=14
**B29A Wagenman Farm,** 14.14 341 P Pn 10 23 34.9 -3.9
baz=14
**A30A Hoffart Farm,** 14.32 344 P Pn 10 23 38.0 -3.3
baz=14
**A29A Manning Farm,** 14.53 342 P Pn 10 23 40.7 -3.5
baz=14
**A27A Ledoux Ranch,** 15.14 337 P **Pn** 10 23 50.4 -2.0
baz=15
**ULM Lac du Bonnet** 15.16 351 Pn **Pn** 10 23 47.9 -4.7
0.7nm,0.3s,baz=168,slow=11,SNR=4.4
ULM Sn Sn 10 26 25.4 -15
0.7nm,0.3s,baz=270,slow=20,SNR=2.0
ULM Lg Lg 10 28 03.4
0.9nm,0.3s,baz=282,slow=19,SNR=2.0
ULM LR LR 10 29 52.4
comp=Z,95nm,19.5s,baz=134,slow=38
**BW06 Boulder Array** 15.31 304 *e*Pn **Pn** 10 23 56.8 +1.9
2.6nm,0.7s
BW06 *e*Sn **Sn** 10 26 46.3 +1.4
**A26A Wade Farm, Ken** 15.36 335 P **Pn** 10 23 52.9 -2.4
baz=15
**WUAZ Wupatki** 15.54 276 *e*Pn **Pn** 10 23 55.0 -2.9
5.3nm,1.1s
**TUC Tucson** 15.64 264 *e*Pn **Pn** 10 24 00.6 +1.5
4.1nm,0.8s
TUC *e*Sn **Sn** 10 26 54.4 +1.8
**DGMT Dagmar** 15.82 330 P **Pn** 10 23 58.3 -3.0
baz=16
**DGMT Dagmar** 15.82 330 *e*Pn **Pn** 10 23 58.4 -3.0
17nm,0.8s
DGMT *e*Sn **Sn** 10 27 00.6 +3.7
**MSU Marysvale** 16.20 287 *e*Pn **Pn** 10 24 06.6 +0.1
4.6nm,0.9s
**CMIG Matias Romero** 18.29 188 P **Pn** 10 24 31.8 -0.6
0.1nm,0.3s,baz=356,slow=16,SNR=3.1
CMIG LR LR 10 33 51.5
comp=Z,42nm,18.3s,baz=359,slow=44
**NVAR Mina Array Bea** 21.00 286 P **P** 10 25 05.0 +2.6
1.2nm,0.9s,baz=98,slow=8.5,SNR=7.4
**NEW Newport** 22.46 313 P **P** 10 25 20.7 +2.9
1.2nm,0.5s,baz=137,slow=8.9,SNR=4.0
**JTS JuntasAbangare** 25.79 163 LR LR 10 39 32.4
comp=Z,420nm,18.2s,baz=322,slow=45
**BBB Bella Bella** 30.48 315 LR LR 10 39 41.6
comp=Z,490nm,19.6s,baz=196,slow=38
**ILAR Eielson Array** 43.69 330 P **P** 10 28 24.6 +1.2
0.2nm,0.6s,baz=113,slow=7.5,SNR=4.9

*ISCJB **15** 10:39:53.0±0.6,50°.39N±0'.04×18°.81E±0'.03,h0km, Error ellipse: s-maj=6.0km s-min=2.3km az=12.9*
*CSEM **15** 10:39:54.3±0.3,50°.37N×18°.81E,h2km,ML3.0/9, Error ellipse: s-maj=7.5km s-min=3.1km az=10.0*
*PRU **15** 10:39:55.5,50°.35N×18°.79E,h0km*
*VIE **15** 10:39:57.9±1.1,49°.71N×18°.95E,h0km,mb2.2/2,ml2.5/3, Error ellipse: s-maj=7.3km s-min=5.1km az=131.0, Suspected Mining induced.*
**ISC 15 10:39:54.4±0.9,50°.33N±0'.04×18°.82E±0'.02,h0km,n35, σ0s82/60,1C,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | |
| **CHZP** | **Chorzow** | **0.12** | **108** | *e*Pg | **Pg** | **10 39 56.9** | **+0.2** |
| CHZP | | | | *e*Sg | **Sg** | **10 39 58.4** | **+0.2** |
| **OJC** | **Ojcow** | **0.64** | **99** | *e*Pg | **Pg** | **10 40 05.9** | **-0.8** |
| OJC | | | | *e*Sg | **Sg** | **10 40 14.3** | **-0.6** |
| **OJC** | **Ojcow** | **0.64** | **99** | *e*Pg | **Pg** | **10 40 05.9** | **-0.8** |
| OJC | | | | *e*Sg | **Sg** | **10 40 14.3** | **-0.6** |
| **OKC** | **Ostrava-Krasne** | **0.65** | **222** | *e*PG | **Pg** | **10 40 07.4** | **+0.5** |
| OKC | | | | *e*SG | **Sb** | **10 40 17.9** | **-0.4** |
| | comp=Z,53nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.65** | **222** | Pg | **Pg** | **10 40 07.4** | **+0.5** |
| OKC | | | | Sg | **Sb** | **10 40 17.9** | **-0.4** |
| | 53nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.99** | **237** | *e*Pg | **Pb** | **10 40 14.5** | **0.0** |
| MORC | | | | *e*Sg | **Sb** | **10 40 28.3** | **+0.2** |
| **LANS** | **Liptovska Anna** | **1.25** | **160** | *e*PG | **Pg** | **10 40 19.0** | **+0.6** |
| LANS | | | | *e*SG | **Sb** | **10 40 36.2** | **+0.6** |
| **LANS** | **Liptovska Anna** | **1.25** | **160** | *e*Pg | **Pg** | **10 40 19.0** | **+0.6** |
| LANS | | | | *e*Sg | **Sb** | **10 40 36.2** | **+0.6** |
| **KRLC** | **Kraliky** | **1.33** | **260** | *e*PG | **Pg** | **10 40 20.4** | **+0.5** |
| KRLC | | | | *e*SG | **Sg** | **10 40 37.9** | **+0.7** |
| **KRLC** | **Kraliky** | **1.33** | **260** | Pg | **Pg** | **10 40 20.4** | **+0.5** |
| KRLC | | | | Sg | **Sg** | **10 40 37.9** | **+0.7** |
| **DPC** | **Dobruska-Polom** | **1.60** | **272** | *e*PG | **Pn** | **10 40 23.7** | **-0.3** |
| DPC | | | | *e*SG | **Sg** | **10 40 46.5** | **+0.7** |
| | comp=Z,25nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.60** | **272** | Pg | **Pn** | **10 40 23.7** | **-0.3** |
| DPC | | | | Sg | **Sg** | **10 40 46.5** | **+0.7** |
| | 25nm,0.5s | | | | | | |
| **KSP** | **Ksiaz** | **1.69** | **289** | *e*Pg | **Pg** | **10 40 27.0** | **+0.2** |
| KSP | | | | *e*Sg | **Sg** | **10 40 50.1** | **+1.4** |
| **KSP** | **Ksiaz** | **1.69** | **289** | *e*Pg | **Pg** | **10 40 27.0** | **+0.2** |
| KSP | | | | *e*Sg | **Sg** | **10 40 50.1** | **+1.4** |
| **VRAC** | **Vranov** | **1.77** | **236** | *e*Pn | **Pb** | **10 40 27.4** | **-0.3** |
| VRAC | | | | *e*Sg | **Sg** | **10 40 51.9** | **+0.8** |
| **UPC** | **Upice** | **1.80** | **277** | *e*SG | **Sg** | **10 40 52.3** | **0.0** |
| | comp=Z,13nm,0.4s | | | | | | |
| **UPC** | **Upice** | **1.80** | **277** | Sg | **Sg** | **10 40 52.3** | **0.0** |
| | 13nm,0.4s | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.82** | **119** | *e*PN | **Pb** | **10 40 28.2** | **-0.3** |
| STHS | | | | *e*SN | **Sg** | **10 40 53.0** | **+0.3** |
| **STHS** | **Stebnicka Huta** | **1.82** | **119** | *e*Pn | **Pb** | **10 40 28.2** | **-0.3** |
| STHS | | | | *e*Sn | **Sg** | **10 40 53.0** | **+0.3** |
| **VYHS** | **Vyhne** | **1.83** | **180** | *e*PN | **Pn** | **10 40 26.9** | **-0.3** |
| VYHS | | | | *e*SN | **Sn** | **10 40 51.1** | **0.0** |
| **VYHS** | **Vyhne** | **1.83** | **180** | *e*Pn | **Pn** | **10 40 26.9** | **-0.3** |
| VYHS | | | | *e*Sn | **Sn** | **10 40 51.1** | **0.0** |
| **GOPC** | **GO Pecny, Ondr** | **2.63** | **262** | *e*PG | **Pb** | **10 40 43.0** | **+0.6** |
| GOPC | | | | *e*SG | **Sg** | **10 41 17.9** | **-0.9** |
| | comp=Z,23nm,1.0s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.63** | **262** | Pg | **Pb** | **10 40 43.0** | **+0.6** |
| GOPC | | | | Sg | **Sg** | **10 41 17.9** | **-0.9** |
| | 23nm,1.0s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **2.65** | **121** | *e*PG | **Pg** | **10 40 45.3** | **+0.2** |
| KOLS | | | | *e*SN | **Sn** | **10 41 11.1** | **0.0** |
| KOLS | | | | *e*SG | **Sg** | **10 41 21.4** | **+2.0** |
| **KOLS** | **Kolonicke sedl** | **2.65** | **121** | *e*Pg | **Pg** | **10 40 45.3** | **+0.2** |
| KOLS | | | | *e*Sn | **Sn** | **10 41 11.1** | **0.0** |
| KOLS | | | | *e*Sg | **Sg** | **10 41 21.4** | **+2.0** |
| **PVCC** | **Panska Ves** | **2.72** | **276** | *e*SG | **Sg** | **10 41 22.3** | **+0.4** |
| | comp=Z,38nm,0.7s | | | | | | |
| **PVCC** | **Panska Ves** | **2.72** | **276** | Sg | **Sg** | **10 41 22.3** | **+0.4** |
| | 38nm,0.7s | | | | | | |
| **PRU** | **Pruhonice** | **2.77** | **265** | *e*SG | **Sg** | **10 41 23.1** | **-0.3** |
| | comp=Z,10nm,0.7s | | | | | | |
| **PRU** | **Pruhonice** | **2.77** | **265** | Sg | **Sg** | **10 41 23.1** | **-0.3** |
| | 10nm,0.7s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.60** | **253** | *e*SG | **Sg** | **10 41 48.9** | **-1.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,15nm,0.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.60** | **253** | Sg | **Sg** | **10 41 48.9** | **-1.2** |
| | 15nm,0.8s | | | | | | |
| **MOA** | **Molln** | **3.88** | **232** | ⇑*i*Sg | **Sg** | **10 41 57.3** | **-1.9** |
| | 8.5nm,0.6s | | | | | | |
| **MOA** | **Molln** | **3.88** | **232** | Sg | **Sg** | **10 41 57.3** | **-1.9** |
| | 8.5nm,0.6s | | | | | | |
| **NKC** | **Novy Kostel** | **4.09** | **271** | *e*SG | **Sg** | **10 42 04.1** | **-1.5** |
| | comp=Z,8.5nm,0.5s | | | | | | |
| **NKC** | **Novy Kostel** | **4.09** | **271** | Sg | **Sg** | **10 42 04.1** | **-1.5** |
| | 8.5nm,0.5s | | | | | | |

*CSEM* ***15*** *10:41:51.6±0.4, 38°.89N×16°.55E, h26km±4km, MD1.9, Error ellipse: s-maj=12.6km s-min=6.9km az=111.0*

**ROM 15 10:41:50.6±0.5, 38°.89N×16°.62E, h35km±6km, Md1.9/5, Ml1.7/4, Error ellipse: s-maj=8.2km s-min=3.3km az=102.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SERS** | **Sersale** | **0.16** | **21** | Pg | Pn | 10 41 56.9 | +0.1 |
| SERS | | | | Sg | Sb | 10 42 02.1 | +0.3 |
| | 101nm,0.4s | | | | | | |
| **SERS** | **Sersale** | **0.16** | **21** | Pg | Pn | 10 41 56.9 | +0.1 |
| SERS | | | | Sg | Sb | 10 42 02.1 | +0.3 |
| | 101nm,0.4s | | | | | | |
| **TIP** | **Timpagrande** | **0.31** | **21** | Pg | Pn | 10 41 58.7 | -0.1 |
| TIP | | | | Sg | Sb | 10 42 05.1 | +0.7 |
| | 33nm,0.7s | | | | | | |
| **TIP** | **Timpagrande** | **0.31** | **21** | Pg | Pn | 10 41 58.7 | -0.1 |
| TIP | | | | Sg | Sb | 10 42 05.1 | +0.7 |
| | 33nm,0.7s | | | | | | |
| **PLAC** | **Placanica** | **0.46** | **198** | Pg | Pn | 10 42 00.8 | 0.0 |
| PLAC | | | | Sg | Sn | 10 42 09.2 | +1.4 |
| | 79nm,0.8s | | | | | | |
| **PLAC** | **Placanica** | **0.46** | **198** | Pg | Pn | 10 42 00.8 | 0.0 |
| PLAC | | | | Sg | Sn | 10 42 09.2 | +1.4 |
| | 79nm,0.8s | | | | | | |
| **CAR1** | **CAROLEI** | **0.48** | **319** | Pg | Pb | 10 42 01.2 | +0.1 |
| | 56nm,0.7s | | | | | | |
| **CAR1** | **CAROLEI** | **0.48** | **319** | Pg | Pb | 10 42 01.2 | +0.1 |
| | 56nm,0.7s | | | | | | |
| **PIPA** | **Pietrapaola** | **0.62** | **15** | Pg | Pb | 10 42 04.1 | +0.9 |
| **PIPA** | **Pietrapaola** | **0.62** | **15** | Pg | Pb | 10 42 04.1 | +0.9 |

**JMA 15 10:42:01.9, 35°.88N×138°.12E, h8km, M2.6, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JNT** | **Takato** | **0.01** | **109** | P | Pg | 10 42 03.4 | -0.1 |
| JNT | | | | S | Sg | 10 42 04.5 | -0.1 |
| **JYN** | **Shimob** | **0.52** | **138** | P | Pg | 10 42 12.0 | 0.0 |
| JYN | | | | S | Sg | 10 42 19.5 | +0.7 |
| **JNG** | **Nsakai** | **0.53** | **358** | P | Pg | 10 42 12.0 | -0.3 |
| JNG | | | | S | Sg | 10 42 19.1 | -0.2 |
| **JRY** | **Ryogami san** | **0.65** | **78** | P | Pg | 10 42 14.0 | -0.5 |
| JRY | | | | S | Sg | 10 42 22.0 | -1.0 |
| **MAT** | **Matsushiro** | **0.67** | **6** | P | Pg | 10 42 14.4 | -0.4 |
| MAT | | | | S | Sg | 10 42 22.9 | -0.6 |
| **MAT** | **Matsushiro** | **0.67** | **6** | P | Pg | 10 42 14.4 | -0.4 |
| MAT | | | | S | Sg | 10 42 23.0 | -0.5 |

**WEL 15 10:46:36.7±0.1, 38°.82S×178°.41E, h33km, ML3.6/10, 15C-7D, Error ellipse: s-maj=1.5km s-min=0.7km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CNGZ** | **Carnagh Statio** | **0.37** | **334** | ⇑PN | Pb | 10 46 45.5 | +0.1 |
| **PRGZ** | **Paritu Road** | **0.42** | **255** | ⇑PN | Pb | 10 46 46.0 | -0.2 |
| **MHGZ** | **Mahia Peninsul** | **0.52** | **229** | ⇑PN | Pb | 10 46 47.5 | -0.1 |
| **RIGZ** | **Rimuhau** | **0.52** | **282** | ⇑PN | Pb | 10 46 47.2 | -0.4 |
| RIGZ | | | | SN | Sn | 10 46 55.4 | -0.2 |
| **TKGZ** | **Te Karaka** | **0.58** | **310** | ⇑PN | Pb | 10 46 48.0 | -0.6 |
| TKGZ | | | | SN | Sb | 10 46 56.4 | -0.3 |
| **KNZ** | **Kokohu** | **0.61** | **250** | ⇑PN | Pn | 10 46 48.3 | -0.7 |
| KNZ | | | | AML | AML | 10 46 57.7 | |
| KNZ | | | | AML | AML | 10 46 58.3 | |
| **PUZ** | **Puketiti** | **0.75** | **351** | ⇑PN | Pn | 10 46 50.4 | -0.6 |
| PUZ | | | | SN | Sn | 10 47 01.0 | -0.3 |
| PUZ | | | | AML | AML | 10 47 01.1 | |
| **SNGZ** | **Shannon Statio** | **0.84** | **272** | ⇑PN | Pn | 10 46 51.5 | -0.7 |
| **MWZ** | **Matawai** | **0.84** | **305** | ⇑PN | Pn | 10 46 51.5 | -0.8 |
| MWZ | | | | SN | Sn | 10 47 02.5 | -1.1 |
| MWZ | | | | AML | AML | 10 47 02.7 | |
| MWZ | | | | AML | AML | 10 47 03.0 | |
| MWZ | | | | AML | AML | 10 47 03.0 | |
| **RAGZ** | **Rawiri** | **0.84** | **292** | ⇑PN | Pn | 10 46 51.0 | -0.8 |
| RAGZ | | | | SN | Sn | 10 47 02.7 | -1.0 |
| **WHHZ** | **Waihua** | **0.95** | **254** | ⇓PN | Pn | 10 46 53.3 | -0.4 |
| **WMGZ** | **Waiomatatini S** | **1.00** | **0** | PN | Pn | 10 46 54.3 | -0.1 |
| **RAHZ** | **Arahi** | **1.04** | **264** | PN | Pn | 10 46 54.5 | -0.5 |
| **URZ** | **Urewera** | **1.16** | **298** | ⇑PN | Pn | 10 46 55.9 | -0.7 |
| URZ | | | | AML | AML | 10 47 12.7 | |
| URZ | | | | AML | AML | 10 47 12.8 | |
| **HAZ** | **Te Kaha** | **1.17** | **335** | PN | Pn | 10 46 56.1 | -0.6 |
| **ARHZ** | **Aropaoanui** | **1.19** | **248** | PN | Pn | 10 46 56.4 | -0.6 |
| **MXZ** | **Matakaoa Point** | **1.25** | **356** | ⇑PN | Pn | 10 46 57.8 | -0.1 |
| MXZ | | | | AML | AML | 10 47 15.4 | |
| MXZ | | | | AML | AML | 10 47 15.4 | |
| MXZ | | | | AML | AML | 10 47 15.6 | |
| MXZ | | | | AML | AML | 10 47 15.6 | |
| **NMHZ** | **Naumai** | **1.28** | **257** | ⇓PN | Pn | 10 46 58.0 | -0.4 |
| **CKHZ** | **Cape Kidnapper** | **1.33** | **230** | PN | Pn | 10 46 58.2 | -0.8 |
| **MCHZ** | **McNeill Hill** | **1.47** | **244** | PN | Pn | 10 47 00.5 | -0.4 |
| **BKZ** | **Black Stump Fm** | **1.54** | **256** | ⇑PN | Pn | 10 47 01.1 | -0.7 |
| **KAHZ** | **Kahuranaki** | **1.54** | **230** | ⇓PN | Pn | 10 47 01.1 | -0.8 |
| **MRHZ** | **Matea Rd** | **1.56** | **269** | PN | Pn | 10 47 02.0 | -0.2 |
| **RRRZ** | **Republican Roa** | **1.56** | **287** | PN | Pn | 10 47 01.7 | -0.5 |
| **TARZ** | **Mount Tarawera** | **1.60** | **291** | PN | Pn | 10 47 03.0 | +0.1 |
| **PRRZ** | **Plateau Road** | **1.61** | **281** | PN | Pn | 10 47 02.6 | -0.3 |
| **ALRZ** | **Allen Road** | **1.64** | **278** | PN | Pn | 10 47 02.9 | -0.3 |
| **PXZ** | **Pawanui** | **1.71** | **224** | PN | Pn | 10 47 02.5 | -1.6 |
| PXZ | | | | AML | AML | 10 47 24.8 | |
| PXZ | | | | AML | AML | 10 47 25.2 | |
| PXZ | | | | AML | AML | 10 47 25.2 | |
| PXZ | | | | AML | AML | 10 47 25.7 | |
| **OPRZ** | **Ohinepanea** | **1.75** | **303** | ⇑PN | Pn | 10 47 03.9 | -0.8 |
| **KRHZ** | **Kereru** | **1.79** | **242** | PN | Pn | 10 47 04.2 | -1.1 |
| **BHHZ** | **Black Hill Sta** | **1.94** | **249** | PN | Pn | 10 47 06.5 | -1.0 |
| **WPHZ** | **Waipukurau** | **1.97** | **230** | PN | Pn | 10 47 06.4 | -1.4 |
| **PRHZ** | **Porangahau** | **2.00** | **223** | PN | Pn | 10 47 06.3 | -1.9 |
| **PNHZ** | **Pukenui** | **2.03** | **237** | ⇓PN | Pn | 10 47 07.7 | -1.0 |
| **MOVZ** | **Moawhango** | **2.15** | **253** | PN | Pn | 10 47 10.3 | 0.0 |
| **OTVZ** | **Oturere** | **2.17** | **260** | PN | Pn | 10 47 10.5 | -0.2 |
| **KRVZ** | **Karewarewa** | **2.18** | **262** | PN | Pn | 10 47 10.3 | -0.5 |
| **TUVZ** | **Tukino** | **2.19** | **257** | ⇓PN | Pn | 10 47 11.1 | 0.0 |
| **NGZ** | **Ngauruhoe** | **2.22** | **260** | PN | Pn | 10 47 11.1 | -0.2 |
| **ANWZ** | **Angora Road** | **2.22** | **222** | PN | Pn | 10 47 09.3 | -1.8 |
| **WNVZ** | **Wahianoa** | **2.25** | **256** | PN | Pn | 10 47 11.5 | -0.3 |
| **WPVZ** | **Whakapapa** | **2.27** | **259** | PN | Pn | 10 47 11.8 | -0.2 |
| **TSZ** | **Takapari Road** | **2.27** | **236** | PN | Pn | 10 47 10.4 | -1.5 |
| **FWVZ** | **Far West T-bar** | **2.27** | **258** | PN | Pn | 10 47 11.8 | -0.4 |
| **DVHZ** | **Dannevirke** | **2.28** | **229** | PN | Pn | 10 47 10.2 | -1.9 |
| **PKVZ** | **Pokaka** | **2.43** | **258** | ⇑PN | Pn | 10 47 14.2 | 0.0 |
| **BFZ** | **Birch Farm** | **2.50** | **221** | PN | Pn | 10 47 12.5 | -2.5 |
| BFZ | | | | AML | AML | 10 47 42.3 | |
| BFZ | | | | AML | AML | 10 47 42.3 | |
| BFZ | | | | AML | AML | 10 47 44.0 | |
| **PRWZ** | **Pori Road** | **2.56** | **227** | PN | Pn | 10 47 14.3 | -1.6 |
| **TIWZ** | **Tintock** | **2.76** | **224** | ⇓PN | Pn | 10 47 16.4 | -2.3 |
| TIWZ | | | | AML | AML | 10 47 49.3 | |
| TIWZ | | | | AML | AML | 10 47 50.4 | |
| **HIZ** | **Hauiti** | **2.80** | **275** | PN | Pn | 10 47 19.4 | +0.3 |
| **WAZ** | **Wanganui** | **2.82** | **250** | PN | Pn | 10 47 19.5 | +0.1 |
| **MRZ** | **Mangatainoka R** | **2.86** | **229** | ⇓PN | Pn | 10 47 17.9 | -2.1 |
| MRZ | | | | AML | AML | 10 47 51.1 | |
| MRZ | | | | AML | AML | 10 47 51.5 | |
| **TMWZ** | **Te Maipa** | **3.00** | **219** | PN | Pn | 10 47 18.9 | -3.1 |
| **HOWZ** | **Holdsworth Sta** | **3.05** | **226** | PN | Pn | 10 47 19.9 | -2.7 |
| **MTW** | **Mount Morrison** | **3.23** | **223** | PN | Pn | 10 47 21.7 | -3.5 |
| **TRWZ** | **Traveller** | **3.32** | **218** | PN | Pn | 10 47 22.8 | -3.5 |
| **PAWZ** | **Paruwai Farm** | **3.44** | **221** | PN | Pn | 10 47 24.3 | -3.6 |
| PAWZ | | | | AML | AML | 10 48 04.7 | |
| PAWZ | | | | AML | AML | 10 48 04.7 | |
| **MSWZ** | **Moikau Station** | **3.55** | **222** | PN | Pn | 10 47 25.7 | -3.8 |
| **PLWZ** | **Palliser** | **3.66** | **220** | PN | Pn | 10 47 27.0 | -4.1 |
| **TCW** | **Tory Channel** | **3.98** | **232** | PN | Pn | 10 47 32.2 | -3.1 |
| **TUWZ** | **Tuamarina** | **4.31** | **231** | PN | Pn | 10 47 36.3 | -3.5 |
| **NNZ** | **Nelson** | **4.55** | **237** | PN | Pn | 10 47 40.9 | -2.2 |
| **QRZ** | **Quartz Range** | **4.95** | **244** | PN | Pn | 10 47 45.6 | -3.1 |
| **THZ** | **Tophouse** | **5.14** | **233** | PN | Pn | 10 47 47.6 | -3.7 |
| **KHZ** | **Kahutara** | **5.16** | **224** | PN | Pn | 10 47 47.2 | -4.4 |
| **DSZ** | **Denniston Nort** | **5.84** | **238** | PN | Pn | 10 47 57.3 | -3.7 |
| **LTZ** | **Lake Taylor** | **6.12** | **228** | PN | Pn | 10 48 01.7 | -3.1 |
| **CTZ** | **Chatham Island** | **6.18** | **144** | PN | Pn | 10 48 06.0 | +0.4 |

**WEL 15 11:09:36.4±0.6, 35°.86S×178°.21E, h173km±6km, ML3.5/9, 1C, Error ellipse: s-maj=10.1km s-min=6.4km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.70** | **177** | PN | Pn | 11 10 09.3 | -0.5 |
| **HAZ** | **Te Kaha** | **1.93** | **190** | PN | Pn | 11 10 12.2 | +0.1 |
| HAZ | | | | SN | Sn | 11 10 39.9 | 0.0 |
| **WMGZ** | **Waiomatatini S** | **1.96** | **175** | PN | Pn | 11 10 12.8 | +0.3 |
| WMGZ | | | | SN | Sn | 11 10 40.5 | -0.3 |
| **PUZ** | **Puketiti** | **2.21** | **179** | ⇑PN | Pn | 11 10 15.3 | -0.1 |
| PUZ | | | | SN | Sn | 11 10 43.2 | -2.5 |
| **TWGZ** | **Tauwhareparae** | **2.32** | **184** | PN | Pn | 11 10 17.7 | +1.0 |
| TWGZ | | | | SN | Sn | 11 10 47.4 | -0.7 |
| **MWZ** | **Matawai** | **2.53** | **192** | PN | Pn | 11 10 23.1 | +1.0 |
| MWZ | | | | SN | Sn | 11 10 52.2 | -0.2 |
| **URZ** | **Urewera** | **2.55** | **200** | PN | Pn | 11 10 19.8 | +0.5 |
| **CNGZ** | **Carnagh Statio** | **2.62** | **180** | PN | Pn | 11 10 20.6 | +0.4 |
| **RIGZ** | **Rimuhau** | **2.87** | **187** | PN | Pn | 11 10 23.1 | 0.0 |
| **SNGZ** | **Shannon Statio** | **3.00** | **193** | PN | Pn | 11 10 25.3 | +0.5 |
| **MHGZ** | **Mahia Peninsul** | **3.30** | **184** | PN | Pn | 11 10 28.2 | -0.2 |
| **NMHZ** | **Naumai** | **3.42** | **199** | PN | Pn | 11 10 30.6 | +0.5 |
| **ARHZ** | **Aropaoanui** | **3.53** | **195** | PN | Pn | 11 10 31.4 | +0.1 |
| **BKZ** | **Black Stump Fm** | **3.57** | **202** | PN | Pn | 11 10 32.5 | +0.5 |
| **MCHZ** | **McNeill Hill** | **3.77** | **198** | PN | Pn | 11 10 34.8 | +0.4 |
| **BHHZ** | **Black Hill Sta** | **4.00** | **204** | PN | Pn | 11 10 37.3 | -0.1 |
| **KRHZ** | **Kereru** | **4.05** | **200** | PN | Pn | 11 10 37.3 | -0.6 |
| **KAHZ** | **Kahuranaki** | **4.07** | **195** | PN | Pn | 11 10 37.7 | -0.5 |
| **PXZ** | **Pawanui** | **4.30** | **194** | PN | Pn | 11 10 39.6 | -1.5 |
| **BFZ** | **Birch Farm** | **5.06** | **197** | PN | Pn | 11 10 49.1 | -1.9 |
| **MRZ** | **Mangatainoka R** | **5.22** | **203** | PN | Pn | 11 10 51.4 | -1.7 |
| **TIWZ** | **Tintock** | **5.24** | **200** | PN | Pn | 11 10 52.1 | -1.2 |
| **KIW** | **Kapiti Island** | **5.63** | **206** | PN | Pn | 11 10 57.0 | -1.4 |

*NEIC* ***15*** *11:23:25.8±0.5, 13°.99N×91°.46W, mb4.6/46, MD4.3(MEX), Error ellipse: s-maj=11.4km s-min=6.6km az=223.0*

*IDC* ***15*** *11:23:25.9±0.7, 14°.18N×91°.09W, h58km±5km, mb4.0/14, mb1 4.2/15, mb1mx4.0/40, mbtmp4.3/15, MS3.8/24, Ms1 3.8/24, ms1mx3.8/34, Error ellipse: s-maj=23.9km s-min=11.4km az=52.0*

*ISCJB* ***15*** *11:23:27.2±0.7, 14°.22N±0°.04×91°.34W±0°.04, h80km±6km, mb4.4/51, Error ellipse: s-maj=8.7km s-min=5.0km az=41.4*

*MEX* ***15*** *11:23:32.9±0.7, 14°.22N×92°.10W, h22km±25km, MD4.3*

**ISC 15 11:23:25.7±0.6, 14°.08N±0°.07×91°.52W±0°.06, h58km±5km, h57km:pP-P,n293,σ1$30/289, mb4.5/51, MS3.9/23, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNET** | **Serv Nac Est T** | **2.25** | **100** | *e*Pn | **Pn** | **11 24 01.3** | **+0.6** |
| **CCIG** | **Comitan** | **2.27** | **345** | *e*P | Pn | 11 24 04.4 | +3.4 |
| CCIG | | | | *i* S | **Sn** | **11 24 27.5** | **-0.5** |
| **CCIG** | **Comitan** | **2.27** | **345** | *e*P | Pn | 11 24 04.4 | +3.4 |
| CCIG | | | | *i* S | **Sn** | **11 24 27.5** | **-0.5** |
| **PCIG** | | **2.31** | **315** | *i* P | **Pn** | **11 24 00.9** | **-0.4** |
| PCIG | | | | *i* S | Sn | 11 24 21.6 | -7.0 |
| **PCIG** | | **2.31** | **315** | *i* P | **Pn** | **11 24 00.9** | **-0.4** |
| PCIG | | | | *i* S | Sn | 11 24 21.6 | -7.0 |
| **TGIG** | | **3.10** | **330** | *e*P | **Pn** | **11 24 13.4** | **+1.2** |
| TGIG | | | | *i* S | **Sn** | **11 24 44.5** | **-3.6** |
| **TGIG** | | **3.10** | **330** | *e*P | **Pn** | **11 24 13.4** | **+1.2** |
| TGIG | | | | *i* S | **Sn** | **11 24 44.5** | **-3.6** |
| **TGUH** | **Tegucigalpa,Un** | **4.12** | **90** | *e*Pn | **Pn** | **11 24 28.0** | **+1.9** |
| **CMIG** | **Matias Romero** | **4.42** | **313** | P | **Pn** | **11 24 30.1** | **-0.2** |
| | 26nm,0.3s,baz=148,slow=11,SNR=126 | | | | | | |
| CMIG | | | | S | **Sn** | **11 25 19.4** | **-1.0** |
| | 47nm,0.3s,baz=111,slow=15,SNR=3.7 | | | | | | |
| **HUIG** | **Huatulco** | **4.75** | **291** | *e*P | **Pn** | **11 24 32.8** | **-2.0** |
| HUIG | | | | *i* S | Sn | 11 25 11.3 | -17 |
| **HUIG** | **Huatulco** | **4.75** | **291** | *e*P | **Pn** | **11 24 32.8** | **-2.0** |
| HUIG | | | | *i* S | Sn | 11 25 11.3 | -17 |
| **TEIG** | **Tepich** | **6.85** | **26** | P | Pn | 11 25 07.3 | +3.7 |
| | 1.6nm,0.3s,baz=359,slow=23,SNR=85 | | | | | | |
| TEIG | | | | S | **Sn** | **11 26 17.9** | **-2.3** |
| | baz=180,slow=20,SNR=1.5 | | | | | | |
| **JTS** | **JuntasAbangare** | **7.44** | **120** | P | **Pn** | **11 25 14.2** | **+2.5** |
| | 3.4nm,0.3s,baz=306,slow=20,SNR=17 | | | | | | |
| **JTS** | **JuntasAbangare** | **7.44** | **120** | *e*Pn | **Pn** | **11 25 13.8** | **+2.0** |
| JTS | | | | *e*Sn | Sn | 11 26 27.0 | -7.8 |
| **MTDJ** | **Mount Denham** | **14.05** | **71** | Pn | **Pn** | **11 26 43.3** | **+1.3** |
| MTDJ | | | | *e*Sn | Sn | 11 29 01.1 | -15 |
| **034A** | **Hebbronville** | **14.55** | **334** | P | **Pn** | **11 26 49.9** | **+1.4** |
| | baz=15,SNR=6.3 | | | | | | |
| **934A** | **Benavides** | **14.95** | **335** | P | **Pn** | **11 26 55.2** | **+1.5** |
| | baz=15 | | | | | | |
| **738A** | **Farr-Stevens R** | **15.18** | **346** | P | **Pn** | **11 26 58.0** | **+1.4** |
| | baz=15 | | | | | | |
| **933A** | **Laredo** | **15.29** | **333** | P | **Pn** | **11 26 59.4** | **+1.4** |
| | baz=15 | | | | | | |
| **835A** | **Beeville** | **15.31** | **338** | P | **Pn** | **11 26 59.8** | **+1.5** |
| | baz=16 | | | | | | |
| **834A** | **Tilden** | **15.43** | **336** | P | **Pn** | **11 27 01.0** | **+1.1** |
| | baz=16 | | | | | | |
| **637A** | **Eagle Lake** | **15.92** | **345** | P | **P** | **11 27 07.5** | **-1.2** |
| | baz=16 | | | | | | |
| **833A** | **Chaparral WMA,** | **15.95** | **334** | P | **Pn** | **11 27 08.0** | **+1.5** |
| | baz=16 | | | | | | |
| **636A** | **Smothers Creek** | **16.16** | **342** | P | **P** | **11 27 10.8** | **-0.7** |
| | baz=16,SNR=6.3 | | | | | | |
| **832A** | **Faith Ranch, C** | **16.17** | **332** | P | **Pn** | **11 27 10.6** | **+1.2** |
| | baz=16,SNR=7.5 | | | | | | |
| **733A** | **Divot King Ran** | **16.26** | **335** | P | **P** | **11 27 11.8** | **-0.7** |
| | baz=16 | | | | | | |
| **HKT** | **Hockley** | **16.29** | **347** | *e*P | **P** | **11 27 13.2** | **+0.5** |
| | 39nm,1.6s | | | | | | |
| **537A** | **Green Hill Far** | **16.53** | **345** | P | **P** | **11 27 14.8** | **-0.7** |
| | baz=17 | | | | | | |
| **732A** | **Laxson Ranch,** | **16.55** | **333** | P | **P** | **11 27 15.6** | **-0.2** |
| | baz=17 | | | | | | |
| **DWPF** | **Disney** | **16.82** | **32** | *e*P | **Pn** | **11 27 14.2** | **-3.1** |
| **633A** | **Saathoff Ranch** | **16.87** | **336** | P | **P** | **11 27 19.0** | **-0.3** |
| | baz=17 | | | | | | |
| **534A** | **Blanco** | **17.12** | **339** | P | **Pn** | **11 27 21.8** | **+0.6** |
| | baz=17,SNR=5.5 | | | | | | |
| **632A** | **Uvalde** | **17.15** | **335** | P | **P** | **11 27 22.5** | **+0.1** |
| | baz=17 | | | | | | |
| **533A** | **Kerrville** | **17.36** | **338** | P | **Pn** | **11 27 24.7** | **+0.5** |
| | baz=18 | | | | | | |
| **340A** | **Bronson** | **17.39** | **353** | P | **P** | **11 27 25.3** | **+0.2** |
| | baz=18 | | | | | | |
| **339A** | **Huntington** | **17.40** | **351** | P | **P** | **11 27 25.2** | **+0.1** |
| | baz=18 | | | | | | |
| **631A** | **Perdido Creek** | **17.41** | **333** | P | **P** | **11 27 25.6** | **+0.3** |
| | baz=18 | | | | | | |
| **532A** | **Rocksprings** | **17.75** | **336** | P | **P** | **11 27 30.7** | **+1.6** |
| | baz=18,SNR=9.3 | | | | | | |
| **434A** | **Burnet** | **17.78** | **341** | P | **P** | **11 27 30.9** | **+1.6** |
| | baz=18 | | | | | | |
| **336A** | **Riesel** | **17.91** | **345** | P | **P** | **11 27 31.7** | **+0.9** |
| | baz=18 | | | | | | |
| **335A** | **Moody** | **17.96** | **343** | P | **Pn** | **11 27 32.6** | **+1.2** |
| | baz=18 | | | | | | |
| **433A** | **Art** | **18.00** | **338** | P | **Pn** | **11 27 32.7** | **+0.7** |
| | baz=18,SNR=15 | | | | | | |
| **JCT** | **Junction City** | **18.02** | **336** | P | **P** | **11 27 31.8** | **-0.2** |
| | baz=18 | | | | | | |
| **JCT** | **Junction City** | **18.02** | **336** | *e*P | **Pn** | **11 27 35.6** | **+3.4** |
| | 8.4nm,0.8s | | | | | | |
| **531A** | **Rocksprings** | **18.05** | **334** | P | **Pn** | **11 27 34.3** | **+1.7** |
| | baz=18,SNR=6.5 | | | | | | |
| **VBMS** | **Vicksburg** | **18.08** | **3** | P | **Pn** | **11 27 34.4** | **+1.6** |
| | baz=18 | | | | | | |
| **334A** | **Lometa** | **18.25** | **341** | P | **Pn** | **11 27 35.9** | **+0.9** |
| | baz=18,SNR=11 | | | | | | |
| **237A** | **Washetta, Mont** | **18.27** | **348** | P | **Pn** | **11 27 36.1** | **+1.0** |
| | baz=18 | | | | | | |
| **432A** | **Menard** | **18.37** | **337** | P | **Pn** | **11 27 36.9** | **+0.5** |
| | baz=18,SNR=5.3 | | | | | | |
| **530A** | **J-C Ranch, Com** | **18.38** | **332** | P | **Pn** | **11 27 37.3** | **+0.7** |
| | baz=19 | | | | | | |
| **236A** | **Katherine and** | **18.42** | **346** | P | **Pn** | **11 27 37.2** | **+0.2** |
| | baz=19 | | | | | | |
| **333A** | **Richland Sprin** | **18.48** | **339** | P | **Pn** | **11 27 38.1** | **+0.3** |
| | baz=19,SNR=12 | | | | | | |
| **431A** | **Sonora** | **18.52** | **335** | P | **Pn** | **11 27 39.1** | **+0.8** |
| | baz=19 | | | | | | |
| **WHTX** | **Lake Whitney** | **18.64** | **344** | P | **Pn** | **11 27 40.4** | **+0.7** |
| | baz=19 | | | | | | |
| **WHTX** | **Lake Whitney** | **18.64** | **344** | *e*P | **Pn** | **11 27 41.1** | **+1.4** |
| | 14nm,0.6s | | | | | | |
| **TIGA** | **Tifton** | **18.75** | **22** | P | **Pn** | **11 27 42.2** | **+1.2** |
| | baz=19 | | | | | | |
| **TIGA** | **Tifton** | **18.75** | **22** | *e*P | **Pn** | **11 27 43.9** | **+3.0** |
| | 90nm,1.0s | | | | | | |
| **529A** | **Stev Forest Ra** | **18.78** | **330** | P | **Pn** | **11 27 42.4** | **+1.0** |
| | baz=19 | | | | | | |
| **138A** | **Matatall Enter** | **18.78** | **351** | P | **Pn** | **11 27 41.9** | **+0.5** |
| | baz=19 | | | | | | |
| **332A** | **Millersview** | **18.80** | **338** | P | **Pn** | **11 27 42.3** | **+0.7** |
| | baz=19,SNR=9.9 | | | | | | |
| **137A** | **Heron Place, G** | **18.84** | **349** | P | **Pn** | **11 27 42.2** | **+0.2** |
| | baz=19 | | | | | | |
| **234A** | **Clairette** | **18.84** | **342** | P | **Pn** | **11 27 42.2** | **+0.1** |
| | baz=19,SNR=11 | | | | | | |
| **136A** | **Ennis** | **18.87** | **347** | P | **Pn** | **11 27 42.3** | **-0.2** |
| | baz=19 | | | | | | |
| **430A** | **Baggett Ranch,** | **18.88** | **333** | P | **Pn** | **11 27 42.4** | **-0.2** |
| | baz=19 | | | | | | |
| **TXAR** | **Lajitas Array** | **18.89** | **325** | P | **Pn** | **11 27 44.0** | **+1.2** |
| | 0.4nm,0.3s,baz=154,slow=12,SNR=82 | | | | | | |
| TXAR | | | | PcP | **PcP** | **11 32 06.0** | **-0.2** |
| | 0.1nm,0.3s,baz=151,slow=2.9,SNR=5.7 | | | | | | |
| TXAR | | | | ScP | **ScP** | **11 35 40.5** | **+3.4** |
| | 0.0nm,0.3s,baz=140,slow=4.2,SNR=21 | | | | | | |
| TXAR | | | | LR | LR | 11 36 57.1 | |
| | comp=Z,71nm,18.9s,baz=0.0,slow=43 | | | | | | |
| **331A** | **San Angelo** | **19.00** | **336** | P | **Pn** | **11 27 43.7** | **-0.3** |
| | baz=19 | | | | | | |
| **429A** | **Davenport Ranc** | **19.04** | **332** | P | **Pn** | **11 27 44.3** | **-0.2** |
| | baz=19 | | | | | | |
| **233A** | **Rising Star** | **19.09** | **340** | P | **P** | **11 27 44.6** | **+0.8** |
| | baz=19 | | | | | | |
| **135A** | **Vickery Place,** | **19.16** | **345** | P | **Pn** | **11 27 45.5** | **-0.4** |
| | baz=19 | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **19.19** | **287** | T | T | 11 47 03.4 | |
| | SNR=5.2 | | | | | | |
| **232A** | **Coleman** | **19.23** | **339** | P | **P** | **11 27 46.2** | **+0.9** |
| | baz=19,SNR=8.9 | | | | | | |
| **ROSC** | **El Rosal** | **19.25** | **117** | P | **Pn** | **11 27 48.3** | **+0.8** |
| | 1.4nm,0.3s,baz=75,slow=9.6,SNR=8.2 | | | | | | |
| **ROSC** | **El Rosal** | **19.25** | **117** | *e*P | **Pn** | **11 27 50.1** | **+2.6** |
| **LRAL** | **Lakeview Retre** | **19.31** | **12** | *e*P | **Pn** | **11 27 49.9** | **+2.2** |
| | 104nm,1.3s | | | | | | |
| **134A** | **White-Moore Ra** | **19.36** | **343** | P | **Pn** | **11 27 47.9** | **-0.4** |
| | baz=20 | | | | | | |
| **330A** | **Mertzon** | **19.39** | **334** | P | **P** | **11 27 47.1** | **0.0** |
| | baz=20 | | | | | | |
| **Z37A** | **Pogue Cattle C** | **19.40** | **350** | P | **Pn** | **11 27 48.2** | **-0.4** |
| | baz=20 | | | | | | |
| **231A** | **Bronte** | **19.51** | **337** | P | **P** | **11 27 48.4** | **0.0** |
| | baz=20 | | | | | | |
| **Z36A** | **Blue Ridge** | **19.62** | **348** | P | **P** | **11 27 49.6** | **+0.1** |
| | baz=20 | | | | | | |
| **133A** | **Hamilton Ranch** | **19.64** | **341** | P | **P** | **11 27 50.2** | **+0.5** |
| | baz=20,SNR=16 | | | | | | |
| **230A** | **Sterling City** | **19.78** | **335** | P | **P** | **11 27 52.0** | **+0.6** |
| | baz=20 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **19.81** | **333** | P | **P** | **11 27 52.7** | **+1.0** |
| | baz=20 | | | | | | |
| **Z35A** | **Perchaven, San** | **19.86** | **346** | P | **P** | **11 27 52.3** | **+0.2** |
| | baz=20 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **19.89** | **339** | P | **P** | **11 27 52.4** | **-0.1** |
| | baz=20 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **19.89** | **339** | *e*P | **P** | **11 27 53.2** | **+0.7** |
| | 28nm,1.0s | | | | | | |
| **Y39A** | **Lockesburg** | **19.91** | **354** | P | **P** | **11 27 52.4** | **-0.2** |
| | baz=20 | | | | | | |
| **Y38A** | **Idabel** | **19.97** | **352** | P | **P** | **11 27 53.3** | **0.0** |
| | baz=20 | | | | | | |
| **Z34A** | **Collier Ranch,** | **20.07** | **344** | P | **P** | **11 27 54.3** | **0.0** |
| | baz=20 | | | | | | |
| **229A** | **Bryant Ranch,** | **20.14** | **334** | P | **P** | **11 27 55.8** | **+0.5** |
| | baz=20 | | | | | | |
| **Y37A** | **Hugo** | **20.16** | **350** | P | **P** | **11 27 54.9** | **-0.4** |
| | baz=20 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **20.23** | **342** | P | **P** | **11 27 56.3** | **+0.2** |
| | baz=20,SNR=11 | | | | | | |
| **130A** | **Snyder** | **20.35** | **337** | P | **P** | **11 27 58.3** | **+0.8** |
| | baz=20 | | | | | | |
| **Y35A** | **Marietta** | **20.36** | **347** | P | **P** | **11 27 58.6** | **+1.0** |
| | baz=21,SNR=7.2 | | | | | | |
| **OXF** | **Oxford** | **20.43** | **5** | *e*P | **P** | **11 27 56.0** | **-2.2** |
| | 98nm,1.2s | | | | | | |
| **MIAR** | **Mount Ida** | **20.46** | **355** | P | **P** | **11 27 58.5** | **-0.1** |
| | baz=21,SNR=6.0 | | | | | | |
| **MIAR** | **Mount Ida** | **20.46** | **355** | *e*P | **P** | **11 27 59.0** | **+0.4** |
| | 140nm,1.4s | | | | | | |
| **Z32A** | **Haskell** | **20.46** | **341** | P | **P** | **11 27 57.8** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Y28A** | **McKinney Farm,** baz=22,SNR=5.4 | **22.01** | **336** | P | **P** | **11 28 14.8** | **-0.6** |
| **TUL1** | **Tulsa** 3.2nm,0.3s | **22.07** | **351** | *e*P | **P** | **11 28 17.9** | **+2.0** |
| **CPCT** | **Cooper Cave** | **22.19** | **15** | *e*P | **P** | **11 28 18.2** | **+1.0** |
| **WVT** | **Waverly** 30nm,1.3s | **22.20** | **8** | *e*P | **P** | **11 28 16.3** | **-1.0** |
| **X29A** | **Tulia** baz=22 | **22.27** | **337** | P | **P** | **11 28 17.6** | **-0.6** |
| **MSTX** | **Muleshoe** baz=22 | **22.28** | **335** | P | **P** | **11 28 18.0** | **-0.3** |
| **MSTX** | **Muleshoe** 20nm,1.1s | **22.28** | **335** | *e*P | **P** | **11 28 18.7** | **+0.4** |
| **U37A** | **Salina** baz=23 | **22.46** | **352** | P | **P** | **11 28 19.1** | **-1.1** |
| **V33A** | **Lossen Ranch,** baz=23 | **22.49** | **345** | P | **P** | **11 28 19.8** | **-0.6** |
| **X28A** | **Dimmitt** baz=23 | **22.53** | **336** | P | **P** | **11 28 20.2** | **-0.7** |
| **W30A** | **Crocket Farms** baz=23 | **22.54** | **340** | P | **P** | **11 28 20.1** | **-1.0** |
| **TKL** | **Tuckaleechee C** 6.4nm,0.7s,baz=183,slow=11,SNR=7.8 | **22.59** | **17** | P | **P** | **11 28 20.9** | **-0.5** |
| TKL | comp=Z,600nm,21.6s,baz=206,slow=39 | | | LR | LR | 11 38 04.5 | |
| **TKL** | **Tuckaleechee C** | **22.59** | **17** | *e*P | **P** | **11 28 22.6** | **+1.1** |
| **V32A** | **Arapaho** baz=23 | **22.59** | **344** | P | **P** | **11 28 20.5** | **-1.0** |
| **AMTX** | **Amarillo** baz=23 | **22.66** | **338** | P | **P** | **11 28 21.4** | **-0.9** |
| **AMTX** | **Amarillo** 14nm,0.4s | **22.66** | **338** | *e*P | **P** | **11 28 21.8** | **-0.5** |
| **W29A** | **Amraillo** baz=23,SNR=6.8 | **22.86** | **338** | P | **P** | **11 28 23.6** | **-0.8** |
| **KMSC** | **Kings Mountain** baz=23 | **22.89** | **22** | P | **P** | **11 28 24.5** | **-0.2** |
| **KMSC** | **Kings Mountain** 97nm,1.3s | **22.89** | **22** | *e*P | **P** | **11 28 26.4** | **+1.7** |
| **U33A** | **Lingo Farm, Me** baz=23,SNR=7.0 | **23.03** | **346** | P | **P** | **11 28 26.3** | **+0.3** |
| **V30A** | **Spur Ranch, Mi** baz=23 | **23.11** | **341** | P | **P** | **11 28 26.3** | **-0.6** |
| **T37A** | **Cheneyville 18** baz=23 | **23.15** | **353** | P | **P** | **11 28 26.0** | **-1.1** |
| **T35A** | **Sooner Cattle** baz=23 | **23.18** | **350** | P | **P** | **11 28 27.3** | **-0.2** |
| **W28A** | **Vega** baz=23 | **23.18** | **337** | P | **P** | **11 28 26.8** | **-0.8** |
| **T34A** | **McClaskey Farm** baz=24 | **23.40** | **349** | P | **P** | **11 28 30.5** | **+0.9** |
| **TZTN** | **Tazewell** 7.1nm,0.7s | **23.48** | **16** | *e*P | **P** | **11 28 30.6** | **+0.3** |
| **V29A** | **Stinnett** baz=24 | **23.49** | **339** | P | **P** | **11 28 29.5** | **-1.0** |
| **121A** | **Cookes Peak, D** baz=24 | **23.62** | **324** | P | **P** | **11 28 34.1** | **+2.2** |
| **121A** | **Cookes Peak, D** 174nm,1.7s | **23.62** | **324** | *e*P | **P** | **11 28 34.4** | **+2.6** |
| **SIUC** | **Southern Illin** | **23.63** | **5** | *e*P | **P** | **11 28 31.3** | **-0.3** |
| **V28A** | **Channing** baz=24 | **23.63** | **338** | P | **P** | **11 28 31.1** | **-0.7** |
| **S37A** | **Fort Scott** baz=24 | **23.77** | **353** | P | **P** | **11 28 32.1** | **-0.8** |
| **U30A** | **WK&E Inc. Balk** baz=24 | **23.80** | **342** | P | **P** | **11 28 32.6** | **-0.8** |
| **S36A** | **Lake Cedric, C** baz=24 | **23.82** | **352** | P | **P** | **11 28 32.8** | **-0.7** |
| **CCM** | **Cathedral Cave** 43nm,1.3s | **23.88** | **1** | *e*P | **P** | **11 28 32.9** | **-1.1** |
| **S35A** | **Otter Creek Ra** baz=24 | **23.89** | **351** | P | **P** | **11 28 34.2** | **+0.1** |
| **U29A** | **Oasis Ranch, S** baz=24 | **23.93** | **340** | P | **P** | **11 28 34.5** | **0.0** |
| **T31A** | **Randall Ranch,** baz=24 | **24.05** | **344** | P | **P** | **11 28 36.3** | **+0.8** |
| **U28A** | **Mallet** baz=24 | **24.19** | **339** | P | **P** | **11 28 37.4** | **+0.5** |
| **T30A** | **Plains** baz=24 | **24.25** | **342** | P | **P** | **11 28 38.4** | **+1.0** |
| **LPM** | **Los Pinos Moun** | **24.35** | **328** | *e*P | **P** | **11 28 42.0** | **+3.4** |
| **U27A** | **Thompson Grove** baz=25,SNR=5.9 | **24.45** | **338** | P | **P** | **11 28 40.1** | **+0.8** |
| **WCI** | **Wyandotte Cave** 76nm,0.8s | **24.49** | **10** | *e*P | **P** | **11 28 38.8** | **-0.7** |
| **T29A** | **Hugoton** baz=25 | **24.58** | **341** | P | **P** | **11 28 41.2** | **+0.7** |
| **LAZ** | **Ladron** 13nm,1.4s | **24.68** | **328** | *e*P | **P** | **11 28 43.5** | **+2.0** |
| **SJG** | **San Juan** comp=Z,189nm,21.0s,baz=265,slow=35 | **24.69** | **77** | LR | LR | 11 37 45.3 | |
| **OLIL** | **Olney** 15nm,0.8s | **24.74** | **6** | *e*P | **P** | **11 28 41.3** | **-0.4** |
| **ANMO** | **Albuquerque** 1.2nm,0.6s,baz=139,slow=13,SNR=11 | **24.77** | **330** | P | **P** | **11 28 43.5** | **+1.2** |
| **ATAH** | **Atahualpa** 14nm,0.9s,baz=334,slow=7.7,SNR=8.9 | **24.78** | **147** | P | **P** | **11 28 44.8** | **+2.0** |
| ATAH | comp=Z,75nm,20.2s,baz=319,slow=30 | | | LR | LR | 11 35 41.1 | |
| **T28A** | **Walsh** baz=25 | **24.82** | **339** | P | **P** | **11 28 43.1** | **+0.5** |
| **S29A** | **Ulysses** baz=25 | **24.95** | **342** | P | **P** | **11 28 43.2** | **-0.6** |
| **BLA** | **Blacksburg** | **25.07** | **21** | *e*P | **P** | **11 28 42.8** | **-2.1** |
| **S28A** | **Manter** baz=25 | **25.17** | **340** | P | **P** | **11 28 45.8** | **0.0** |
| **TUC** | **Tucson** 14nm,1.1s | **25.28** | **319** | *e*P | **P** | **11 28 48.5** | **+1.6** |
| **R30A** | **Dighton** baz=26 | **25.33** | **344** | P | **P** | **11 28 47.5** | **+0.3** |
| **Q32A** | **Meitler Ranch,** baz=26 | **25.58** | **347** | P | **P** | **11 28 49.6** | **+0.2** |
| **P36A** | **Good Intent, A** baz=26 | **25.65** | **353** | P | **P** | **11 28 50.8** | **+0.8** |
| **P35A** | **Duane Minner,** baz=26 | **25.66** | **352** | P | **P** | **11 28 50.4** | **+0.3** |
| **R28A** | **Tribune** baz=26 | **25.83** | **341** | P | **P** | **11 28 52.2** | **+0.3** |
| **Q29A** | **Oakley** baz=26 | **26.09** | **343** | P | **P** | **11 28 55.6** | **+1.5** |
| **R27A** | **Eads** baz=26 | **26.10** | **340** | P | **P** | **11 28 55.3** | **+1.0** |
| **R26A** | **Arlington** baz=26 | **26.34** | **338** | P | **P** | **11 28 57.8** | **+1.3** |
| **P29A** | **Atwood** baz=27 | **26.74** | **344** | P | **P** | **11 28 60.0** | **0.0** |
| **S22A** | **4UR Ranch, Cre** baz=27 | **27.22** | **333** | P | **P** | **11 29 04.8** | **+0.2** |
| **MVCO** | **Mesa Verde** baz=28 | **27.57** | **330** | P | **P** | **11 29 07.9** | **+0.3** |
| **MVCO** | **Mesa Verde** 28nm,1.5s | **27.57** | **330** | *e*P | **P** | **11 29 09.3** | **+1.7** |
| **WUAZ** | **Wupatki** baz=28 | **27.83** | **324** | P | **P** | **11 29 10.7** | **+0.8** |
| **WUAZ** | **Wupatki** 3.9nm,0.8s | **27.83** | **324** | *e*P | **P** | **11 29 12.0** | **+2.1** |
| WUAZ | | | | *e*SS | SS | 11 36 06.1 | +18 |
| **PV01** | **Paradox Valley** | **28.33** | **331** | *e*P | **P** | **11 29 14.0** | **-0.4** |
| **GLA** | **Glamis** baz=28 | **28.40** | **316** | P | **P** | **11 29 16.5** | **+1.6** |
| **ISCO** | **Idaho Springs** baz=29 | **28.46** | **337** | P | **P** | **11 29 16.5** | **+0.9** |
| **PDMCI** | **Parker Dam,Lak** baz=29,SNR=5.5 | **28.71** | **318** | P | **P** | **11 29 19.1** | **+1.6** |
| **SWSC** | **Sam W. Stewart** baz=29 | **29.00** | **315** | P | **P** | **11 29 21.4** | **+1.2** |
| **BC3** | **Big Chuckawall** baz=29 | **29.18** | **316** | P | **P** | **11 29 23.6** | **+1.7** |
| **MONP** | **Monument Peak** baz=30 | **29.41** | **314** | P | **P** | **11 29 26.0** | **+2.0** |
| **NNA** | **Nana** comp=Z,107nm,20.9s,baz=322,slow=32 | **29.70** | **150** | LR | LR | 11 39 17.3 | |
| **BELC** | **Belle Mtn. Jos** baz=30 | **29.75** | **316** | P | **P** | **11 29 29.4** | **+2.4** |
| **LDFC** | **Landfair** 44nm,1.1s | **29.82** | **319** | *e*P | P | 11 29 30.8 | +3.3 |
| **PFO** | **Pinyon Flat Ob** 0.4nm,0.3s,baz=132,slow=17,SNR=2.5 | **29.83** | **315** | P | **P** | **11 29 30.4** | **+2.7** |
| **PFO** | **Pinyon Flat Ob** | **29.83** | **315** | *e*P | P | 11 29 31.8 | +4.1 |
| **GMRC** | **Granite Mounta** baz=30,SNR=5.4 | **29.99** | **318** | P | **P** | **11 29 30.8** | **+1.7** |
| **HEC** | **Hector,Ludlow** baz=31,SNR=5.3 | **30.46** | **317** | P | **P** | **11 29 34.1** | **+0.9** |
| **SHPR** | **Sheep Range** 22nm,1.3s | **30.75** | **321** | *e*P | **P** | **11 29 37.8** | **+2.0** |
| SHPR | | | | *e*ScP | **ScP** | **11 36 16.1** | **+5.8** |
| **K22A** | **Casper** baz=32 | **31.28** | **338** | P | **P** | **11 29 41.1** | **+0.7** |
| **EDW2** | **Edwards Air Fo** | **31.60** | **316** | P | **P** | **11 29 44.6** | **+1.4** |
| **TPNV** | **Topopah Spring** baz=32 | **31.71** | **320** | P | **P** | **11 29 45.8** | **+1.5** |
| **LRMC** | **Laurel Mountai** baz=32 | **31.74** | **317** | P | **P** | **11 29 46.3** | **+1.8** |
| **FURC** | **Furnace Creek,** baz=32,SNR=5.1 | **31.79** | **319** | P | **P** | **11 29 46.2** | **+1.4** |
| **MPMC** | **Manual Prospec** baz=32,SNR=7.5 | **31.95** | **318** | P | **P** | **11 29 48.1** | **+1.7** |
| **DAC** | **Darwin (Calif)** 14nm,1.2s | **32.15** | **318** | *e*P | **P** | **11 29 50.2** | **+2.0** |
| **R11A** | **Troy Canyon, C** baz=32,SNR=7.3 | **32.22** | **323** | P | **P** | **11 29 50.4** | **+1.6** |
| **ARVC** | **Arvin** baz=32 | **32.31** | **315** | P | **P** | **11 29 51.1** | **+1.7** |
| **GRAC** | **Grapevine Rang** baz=33,SNR=5.6 | **32.44** | **319** | P | **P** | **11 29 51.9** | **+1.4** |
| **VES** | **Vestal, Richgr** baz=33 | **32.88** | **316** | P | **P** | **11 29 55.8** | **+1.5** |
| **REDW** | **Red Top Meadow** 4.9nm,0.7s | **33.57** | **334** | *e*P | **P** | **11 30 01.1** | **+0.6** |
| **SNOW** | **Snow King Moun** 8.4nm,0.6s | **33.62** | **334** | *e*P | **P** | **11 30 01.9** | **+0.9** |
| **LOHW** | **Long Hollow** 2.5nm,0.6s | **33.67** | **335** | *e*P | **P** | **11 30 03.0** | **+1.6** |
| **TPAW** | **Teton Pass** 12nm,1.4s | **33.72** | **334** | *e*P | **P** | **11 30 03.7** | **+1.8** |
| **NVAR** | **Mina Array Bea** 3.7nm,0.8s,baz=133,slow=8.6,SNR=34 | **33.91** | **321** | P | **P** | **11 30 06.1** | **+2.6** |
| NVAR | 30nm,1.0s,baz=135,slow=8.1,SNR=30 | | | pP | **pP** | **11 30 20.8** | **+2.8** |
| NVAR | 2.0nm,0.7s,baz=129,slow=3.0,SNR=7.3 | | | PcP | **PcP** | **11 32 41.4** | **+0.4** |
| NVAR | 2.0nm,0.8s,baz=153,slow=4.3,SNR=12 | | | ScP | **ScP** | **11 36 23.2** | **+2.2** |
| NVAR | comp=Z,259nm,19.1s,baz=125,slow=39 | | | LR | LR | 11 45 21.9 | |
| **IMW** | **Indian Meadow** 1.5nm,0.6s | **34.05** | **335** | *e*P | **P** | **11 30 05.3** | **+0.6** |
| **PTGA** | **Pitinga** 18nm,0.8s,baz=298,slow=10,SNR=44 | **34.53** | **113** | P | **P** | **11 30 06.4** | **-2.5** |
| **PTGA** | **Pitinga** 19nm,0.8s | **34.53** | **113** | *e*P | **P** | **11 30 08.8** | **-0.2** |
| **BMN** | **Battle Mountai** 2.4nm,0.7s | **34.56** | **324** | *e*P | **P** | **11 30 11.2** | **+2.1** |
| **CMB** | **Columbia Colle** 12nm,1.1s | **34.98** | **318** | *e*P | **P** | **11 30 14.8** | **+2.2** |
| **HLID** | **Hailey** baz=36 | **35.33** | **331** | P | **P** | **11 30 17.3** | **+1.6** |
| **HLID** | **Hailey** 11nm,1.3s | **35.33** | **331** | *e*P | **P** | **11 30 17.3** | **+1.6** |
| **DLMT** | **Dillon** 1.3nm,0.5s | **35.93** | **334** | *e*P | **P** | **11 30 22.5** | **+1.8** |
| **ULM** | **La Ladbonnet** comp=Z,162nm,21.3s,baz=148,slow=41 | **36.24** | **355** | LR | LR | 11 48 12.8 | |
| **SAML** | **Samuel** 24nm,1.3s | **36.25** | **128** | *e*P | **P** | **11 30 21.6** | **-2.0** |
| **WVOR** | **Wild Horse Val** 16nm,1.2s | **36.69** | **326** | *e*P | **P** | **11 30 28.9** | **+1.7** |
| **MSO** | **Missoula** baz=38 | **37.66** | **335** | P | **P** | **11 30 36.5** | **+1.1** |
| **LPAZ** | **La Paz** 1.8nm,0.8s,baz=333,slow=9.3,SNR=7.5 | **38.01** | **142** | P | **P** | **11 30 37.9** | **-1.3** |
| LPAZ | 0.8nm,0.6s,baz=324,slow=9.3,SNR=3.6 | | | PcP | **PcP** | **11 32 53.8** | **-0.2** |
| LPAZ | comp=Z,136nm,19.4s,baz=320,slow=36 | | | LR | LR | 11 45 55.3 | |
| **M04C** | **Macdoel** baz=38,SNR=7.5 | **38.10** | **322** | P | **P** | **11 30 40.6** | **+1.3** |
| **J04D** | **Umpqua Nationa** baz=39 | **39.16** | **324** | P | **P** | **11 30 49.8** | **+1.7** |
| **I05D** | **Terrebonne, OR** baz=40 | **39.43** | **326** | P | **P** | **11 30 51.4** | **+1.2** |
| **G05D** | **Wamic, OR** baz=40 | **40.01** | **327** | P | **P** | **11 30 56.5** | **+1.5** |
| **NEW** | **Newport** baz=40 | **40.13** | **333** | P | **P** | **11 30 56.9** | **+0.9** |
| **I03D** | **Drain, OR** baz=40 | **40.15** | **324** | P | **P** | **11 30 57.6** | **+1.5** |
| **SIV** | **San Ignacio** 9.7nm,0.9s,baz=320,slow=9.6,SNR=14 | **42.40** | **134** | P | **P** | **11 31 14.6** | **-0.4** |
| SIV | 3.0nm,0.8s,baz=280,slow=3.8,SNR=4.2 | | | PcP | **PcP** | **11 33 06.9** | **-0.5** |
| **B05A** | **Bryant** baz=43 | **42.43** | **330** | P | **P** | **11 31 15.9** | **+1.2** |
| **LVC** | **Limon Verde** comp=Z,372nm,21.2s,baz=317,slow=32 | **42.66** | **148** | LR | LR | 11 46 03.9 | |
| **SCHQ** | **Schefferville** 4.3nm,0.5s,baz=222,slow=7.5,SNR=10 | **44.98** | **20** | P | **P** | **11 31 33.8** | **-1.4** |
| SCHQ | 5.7nm,0.8s,baz=234,slow=8.9,SNR=3.2 | | | pP | **pP** | **11 31 49.4** | **-0.8** |
| SCHQ | 3.6nm,0.7s,baz=240,slow=8.1,SNR=3.4 | | | PcP | **PcP** | **11 33 14.2** | **-1.2** |
| SCHQ | comp=Z,497nm,21.7s,baz=235,slow=37 | | | LR | LR | 11 51 10.1 | |
| **YKA** | **Yellowknife Ar** 2.6nm,0.8s,baz=139,slow=9.2,SNR=4.6 | **51.06** | **346** | P | **P** | **11 32 21.4** | **-0.5** |
| YKA | 1.4nm,0.5s,baz=136,slow=9.3,SNR=3.0 | | | pP | **pP** | **11 32 36.4** | **-0.8** |
| **CPUP** | **Villa Florida** 5.9nm,0.9s,baz=343,slow=8.6,SNR=8.7 | **52.14** | **140** | P | **P** | **11 32 28.8** | **-1.7** |
| CPUP | comp=Z,82nm,18.4s,baz=344,slow=38 | | | LR | LR | 11 56 00.1 | |
| **BDFB** | **Brasilia** comp=Z,108nm,20.3s,baz=274,slow=37 | **52.17** | **123** | LR | LR | 11 55 05.2 | |
| **DLBC** | **Dease Lake** 18nm,1.5s | **52.77** | **336** | *e*P | **P** | **11 32 37.0** | **+2.1** |
| **RKT** | **Rikitea** 272nm,25.8s | **56.35** | **230** | *e*LR | LR | 11 49 19.2 | |
| **RKT** | **Rikitea** 5.1nm,0.3s | **56.35** | **230** | *e*T | T | 12 33 18.6 | |
| **PAX** | **Paxson** 6.3nm,0.7s | **61.58** | **335** | *e*P | **P** | **11 33 35.2** | **-1.8** |
| **ILAR** | **Eielson Array** 3.3nm,0.8s,baz=160,slow=4.4,SNR=28 | **62.95** | **337** | P | **P** | **11 33 46.1** | **+0.1** |
| ILAR | 2.5nm,0.9s,baz=123,slow=4.3,SNR=8.4 | | | pP | **pP** | **11 34 02.1** | **+0.4** |
| ILAR | comp=Z,66nm,18.0s,baz=146,slow=39 | | | LR | LR | 12 04 19.8 | |
| **TRF** | **Thorofare Moun** 6.9nm,0.7s | **63.77** | **335** | *e*P | **P** | **11 33 51.5** | **-0.1** |
| TRF | | | | *e*pP | **pP** | **11 34 09.0** | **+1.6** |
| **RSO** | **Redoubt South** 20nm,0.7s | **63.81** | **331** | *e*P | **P** | **11 33 52.8** | **+0.8** |
| **BPAW** | **Bear Paw Mtn.** 3.2nm,1.5s | **64.30** | **335** | *e*P | **P** | **11 33 55.0** | **+0.1** |
| BPAW | | | | *e*pP | **pP** | **11 34 10.4** | **-0.3** |
| **PPT** | **Papeete** comp=Z,145nm,18.8s,baz=59,slow=28 | **65.34** | **243** | LR | LR | 11 54 26.6 | |
| **PPT2** | **Papeete2** 255nm,26.0s | **65.35** | **243** | *e*LR | LR | 11 53 32.3 | |
| **TBI** | **Tubuai** 235nm,27.8s | **67.79** | **237** | *e*LR | LR | 11 54 42.9 | |
| **JMIC** | **Jan Mayen** comp=Z,108nm,21.8s,baz=254,slow=36 | **74.51** | **20** | LR | LR | 12 07 36.4 | |
| **EKA** | **Eskdalemuir Ar** 1.8nm,0.5s,baz=276,slow=5.8,SNR=10 | **77.62** | **36** | P | **P** | **11 35 13.4** | **-2.4** |
| EKA | 0.9nm,0.5s,baz=258,slow=5.8,SNR=4.3 | | | pP | **pP** | **11 35 29.2** | **-2.7** |
| **MDT** | **Midelt** comp=Z,23nm,19.7s,baz=335,slow=32 | **79.95** | **59** | LR | LR | 12 06 26.8 | |
| **NOA** | **NORSAR Array B** 1.3nm,0.8s,baz=290,slow=5.2,SNR=3.4 | **83.85** | **29** | P | **P** | **11 35 48.0** | **-0.9** |
| NOA | comp=Z,50nm,21.1s,baz=275,slow=35 | | | LR | LR | 12 11 36.4 | |
| **DBIC** | **Dimbokro** comp=Z,29nm,20.2s,baz=262,slow=34 | **85.18** | **84** | LR | LR | 12 11 00.3 | |
| **ARCES** | **ARCESS Array B** comp=Z,122nm,21.6s,baz=266,slow=35 | **85.91** | **18** | LR | LR | 12 13 41.8 | |
| **GERES** | **GERESS Array B** comp=Z,63nm,21.6s,baz=290,slow=31 | **89.24** | **40** | LR | LR | 12 09 51.2 | |
| **TORD** | **Torodi Ar. Bea** 0.2nm,0.5s,baz=305,slow=6.2,SNR=4.8 | **89.90** | **77** | P | **P** | **11 36 16.5** | **-2.8** |
| TORD | comp=Z,50nm,21.1s,baz=185,slow=34 | | | LR | LR | 12 13 35.1 | |
| **FINES** | **FINESS Array B** comp=Z,45nm,18.6s,baz=273,slow=36 | **90.22** | **25** | LR | LR | 12 17 32.6 | |
| **PETK** | **Petropavlovsk-** comp=Z,25nm,18.3s,baz=83,slow=36 | **90.84** | **326** | LR | LR | 12 18 34.4 | |
| **AKASG** | **Malin Array Be** comp=Z,20nm,18.9s,baz=260,slow=37 | **97.40** | **33** | LR | LR | 12 22 55.5 | |
| **KURK** | **Kurchatov** | **114.91** | **7** | PKP | PKPdf | 11 41 59.4 | -0.7 |
| **KURBB** | **Kurchatov Arra** 0.3nm,0.3s,baz=346,slow=2.2,SNR=7.9 | **114.99** | **7** | PKP | PKPdf | 11 41 59.4 | -0.8 |
| **SONM** | **Songino Array** 0.3nm,0.4s,baz=352,slow=5.8,SNR=3.0 | **116.32** | **347** | PKP | **PKPdf** | **11 42 02.6** | **-0.5** |
| **KSRS** | **Korea Array** 1.0nm,0.5s,baz=54,slow=0.5,SNR=3.8 | **116.74** | **326** | PKP | **PKPdf** | **11 42 04.0** | **0.0** |
| **KSAR** | **Wonju Array Be** | **116.77** | **326** | PKP | **PKPdf** | **11 42 04.0** | **-0.1** |
| **MKAR** | **Makanchi Array** 0.7nm,0.7s,baz=350,slow=3.7,SNR=4.8 | **119.15** | **5** | PKP | **PKPdf** | **11 42 07.5** | **-1.0** |
| **BOSA** | **Boshof** 6.1nm,1.0s,baz=252,slow=3.1,SNR=4.0 | **119.96** | **115** | PKP | **PKPdf** | **11 42 10.1** | **-0.4** |
| **GEYT** | **Alibeck** 1.6nm,0.4s,baz=291,slow=4.5,SNR=3.3 | **120.93** | **28** | PKP | **PKPdf** | **11 42 11.5** | **-0.7** |
| **WRA** | **Warramunga Arr** 1.3nm,0.8s,baz=88,slow=2.2,SNR=17 | **135.87** | **256** | PKP | **PKPdf** | **11 42 40.8** | **-0.2** |
| **ASAR** | **Alice Springs** 0.4nm,0.9s,baz=96,slow=2.3,SNR=4.5 | **136.14** | **250** | PKhKP | PKPpre | 11 42 30.5 | |
| ASAR | 1.1nm,0.9s,baz=86,slow=2.0,SNR=6.0 | | | PKP | **PKPdf** | **11 42 40.8** | **-0.6** |
| **FITZ** | **Fitzroy Crossi** 4.7nm,0.8s,baz=171,slow=2.5,SNR=11 | **144.12** | **259** | PKP | **PKPab** | **11 42 53.7** | **+0.1** |
| **CHTO** | **Chiang Mai** | **145.73** | **342** | *e*PKPdf | **PKPdf** | **11 42 58.0** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** 19nm,0.9s,baz=340,slow=4.0,SNR=84 | **146.06** | **342** | PKPbc | **PKPbc** | **11 43 00.1** | **0.0** |
| CMAR | 5.5nm,0.6s,baz=356,slow=2.1,SNR=5.5 | | | pPKPbc | pPKPbc | 11 43 16.5 | -0.6 |
| **KSM** | **Kuching** | **153.42** | **304** | *e*PKPbc | **PKPbc** | **11 43 18.7** | **0.0** |

*ISK* ***15*** *11:23:30.7,38°.01N×34°.96E,h7km,MD2.6*
*CSEM* ***15*** *11:23:32.9±0.4,37°.97N×34°.78E,h10km,MD2.6,Error ellipse: s-maj=15.1km s-min=6.4km az=53.0*
*ISCJB* ***15*** *11:23:33.3±0.7,37°.96N±0°.05×34°.78E±0°.07,h7km,Error ellipse: s-maj=9.1km s-min=4.2km az=141.0*
*DDA* ***15*** *11:23:38.8,37°.66N×35°.06E,h16km,Md3.0*

**ISC 15 11:23:32.9±0.9, 37°.93N±0°.04×34°.76E±0°.06, h7km, n12, σ0s76/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **NIG** | **Nigde** | **0.22** | **326** | *e*PG | | **Pg** | **11 23 37.3** | **0.0** |
| NIG | | | | *e*SG | | **Sg** | **11 23 41.4** | **+1.1** |
| **NIG** | **Nigde** | **0.22** | **326** | *e*Pg | | **Pg** | **11 23 37.3** | **0.0** |
| NIG | | | | *e*Sg | | **Sg** | **11 23 41.4** | **+1.1** |
| **GULA** | **Gulagac** | **0.59** | **315** | *e*PG | | **Pg** | **11 23 43.6** | **-0.6** |
| GULA | | | | *e*SG | | **Sb** | **11 23 53.6** | **-0.5** |
| **GULA** | **Gulagac** | **0.59** | **315** | *e*Pg | | **Pg** | **11 23 43.7** | **-0.6** |
| GULA | | | | *e*Sg | | **Sb** | **11 23 53.6** | **-0.5** |
| **GULE** | **Gulek** | **0.65** | **179** | *i* P | | **Pb** | **11 23 47.4** | **+0.8** |
| GULE | | | | *i* S | | **Sb** | **11 23 56.7** | **+0.8** |
| **GULE** | **Gulek** | **0.65** | **179** | P | | **Pb** | **11 23 47.4** | **+0.8** |
| GULE | | | | S | | **Sb** | **11 23 56.7** | **+0.8** |
| **KARA** | **Karaisali** | **0.71** | **161** | *e*PG | | **Pg** | **11 23 45.5** | **-1.0** |
| **KARA** | **Karaisali** | **0.71** | **161** | *e*Pg | | **Pg** | **11 23 45.5** | **-1.0** |
| **YAYX** | **Yaylak** | **1.25** | **324** | *e*PN | | **Pn** | **11 23 56.1** | **-0.9** |
| **YAYX** | **Yaylak** | **1.25** | **324** | *e*Pn | | **Pn** | **11 23 56.1** | **-0.9** |
| **ANDN** | **Andirin** | **1.30** | **105** | *i* P | | **Pg** | **11 23 57.7** | **-0.2** |
| ANDN | | | | *i* S | | **Sn** | **11 24 15.1** | **-0.2** |
| **ANDN** | **Andirin** | **1.30** | **105** | P | | **Pg** | **11 23 57.6** | **-0.2** |
| ANDN | | | | S | | **Sn** | **11 24 15.2** | **-0.2** |

**NEIC 15 11:28:17.6,52°.77N×169°.49W,h1km,ML2.8(AEIC), After AEIC.,Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **NIKH** | **Nikolski High** | **0.44** | **61** | P | | Pb | 11 28 28.0 | -0.1 |
| NIKH | | | | S | | Sb | 11 28 36.3 | +1.1 |
| **OKSO** | **Okmok South** | **1.00** | **53** | P | | Pb | 11 28 37.4 | -0.3 |
| OKSO | | | | S | | Sn | 11 28 53.6 | +0.1 |
| **OKCE** | **Okmok Cone E** | **1.04** | **50** | P | | Pb | 11 28 38.5 | +0.1 |
| OKCE | | | | S | | Sn | 11 28 55.7 | +1.2 |
| **OKFG** | **Magazine Ridge** | **1.15** | **55** | P | | Pb | 11 28 40.4 | +0.1 |
| OKFG | | | | S | | Sn | 11 28 58.2 | +1.0 |
| **MSOM** | **Makushin Julie** | **1.85** | **54** | P | | Pn | 11 28 51.3 | +0.9 |
| **MGOD** | **Makushin Gods** | **1.88** | **56** | P | | Pn | 11 28 51.4 | +0.5 |
| MGOD | | | | S | | Sb | 11 29 16.7 | -0.1 |
| **MSW** | **Makushin Switc** | **1.99** | **54** | P | | Pn | 11 28 52.8 | +0.4 |
| MSW | | | | S | | Sb | 11 29 20.4 | +0.5 |
| **MTBL** | **Makushin Table** | **2.07** | **53** | P | | Pn | 11 28 54.3 | +0.7 |
| **UNV** | **Unalaska Valle** | **2.09** | **58** | P | | Pn | 11 28 54.2 | +0.4 |
| UNV | | | | S | | Sb | 11 29 22.1 | -0.7 |
| **AKRB** | **Akutan Reef Bi** | **2.46** | **55** | P | | Pn | 11 28 59.1 | +0.3 |
| **KOFP** | **Korovin Flat P** | **2.86** | **262** | P | | Pn | 11 29 03.8 | -0.5 |
| **ATKA** | **Atka Island** | **2.93** | **261** | P | | Pn | 11 29 05.6 | +0.4 |

*DDA* ***15*** *11:35:06.2,40°.18N×29°.47E,h7km,Md2.6*
*CSEM* ***15*** *11:35:07.3±0.3,40°.15N×29°.46E,h2km,MD2.7,Error ellipse: s-maj=8.5km s-min=5.0km az=150.0*
*ISK* ***15*** *11:35:07.3,40°.15N×29°.47E,h14km,MD2.7*

**ISC 15 11:35:07.2±1.0, 40°.12N±0°.03×29°.45E±0°.03, h8km±9km, n25, σ0s85/41, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **IZI** | **Iznik** | **0.22** | **4** | *e*PG | | **Pg** | **11 35 11.4** | **-0.2** |
| IZI | | | | *e*SG | | **Sg** | **11 35 15.8** | **+1.2** |
| **IZI** | **Iznik** | **0.22** | **4** | *e*Pg | | **Pg** | **11 35 11.4** | **-0.2** |
| IZI | | | | *e*Sg | | **Sg** | **11 35 15.8** | **+1.2** |
| **IGD** | **Bursa** | **0.24** | **307** | P | | **Pg** | **11 35 11.1** | **-0.9** |
| IGD | | | | S | | **Sg** | **11 35 15.1** | **-0.1** |
| **ULDT** | **Uludag** | **0.24** | **275** | *i* P | | **Pg** | **11 35 11.4** | **-0.7** |
| ULDT | | | | *i* S | | **Sg** | **11 35 15.7** | **+0.3** |
| **ULDT** | **Uludag** | **0.24** | **275** | P | | **Pg** | **11 35 11.4** | **-0.7** |
| ULDT | | | | S | | **Sg** | **11 35 15.7** | **+0.3** |
| **CAVI** | **Cavuskoy** | **0.31** | **75** | *e*PG | | **Pg** | **11 35 13.4** | **+0.1** |
| CAVI | | | | *e*SG | | **Sb** | **11 35 19.0** | **-1.2** |
| **CAVI** | **Cavuskoy** | **0.31** | **75** | *e*Pg | | **Pg** | **11 35 13.4** | **+0.1** |
| CAVI | | | | *e*Sg | | **Sb** | **11 35 19.0** | **-1.2** |
| **BORA** | **Eskisehir** | **0.81** | **107** | *i* P | | **Pg** | **11 35 21.9** | **-0.7** |
| **BORA** | **Eskisehir** | **0.81** | **107** | P | | **Pg** | **11 35 21.9** | **-0.7** |
| BORA | | | | S | | **Sn** | **11 35 38.7** | **+1.6** |
| **KCTX** | **Karacabey (Bur** | **0.85** | **280** | *e*PG | | **Pn** | **11 35 25.2** | **-0.3** |
| **KCTX** | **Karacabey (Bur** | **0.85** | **280** | *e*Pg | | **Pn** | **11 35 25.3** | **-0.3** |
| **SPNC** | **Sapanca-Adapaz** | **0.86** | **49** | *e*PG | | **Pg** | **11 35 23.7** | **-0.1** |
| **SPNC** | **Sapanca-Adapaz** | **0.86** | **49** | *e*Pg | | **Pg** | **11 35 23.7** | **-0.1** |
| **GULT** | **Gulveren** | **0.87** | **69** | *e*PG | | **Pb** | **11 35 24.1** | **-0.5** |
| **GULT** | **Gulveren** | **0.87** | **69** | *e*Pg | | **Pb** | **11 35 24.1** | **-0.5** |
| **DURS** | **Dursunbey** | **0.92** | **236** | *i* P | | **Pg** | **11 35 24.4** | **-0.4** |
| DURS | | | | *i* S | | **Sn** | **11 35 39.7** | **-0.2** |
| **DURS** | **Dursunbey** | **0.92** | **236** | P | | **Pg** | **11 35 24.4** | **-0.4** |
| DURS | | | | S | | **Sn** | **11 35 39.7** | **-0.2** |
| **DEMI** | **Demirci** | **1.22** | **208** | *i* P | | **Pn** | **11 35 29.4** | **-1.2** |
| DEMI | | | | *i* S | | **Sn** | **11 35 49.1** | **+1.8** |
| **DEMI** | **Demirci** | **1.22** | **208** | P | | **Pn** | **11 35 29.4** | **-1.2** |
| DEMI | | | | S | | **Sn** | **11 35 49.1** | **+1.8** |
| **GONE** | **Gonen-Balikesi** | **1.36** | **267** | *e*PN | | **Pn** | **11 35 32.7** | **+0.2** |
| **GONE** | **Gonen-Balikesi** | **1.36**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CPBX | | | | IAML | | | | 11 52 21.6 | |
| | comp=E,30µm,0.3s | | | | | | | | |
| **CPBX** | **Cerro Prieto** | **0.21** | **360** | *eP* | | **Pg** | **11 52 16.9** | **+0.5** | |
| CPBX | | | | *i* S | | **Sg** | **11 52 19.7** | **+0.1** | |
| **MBIG** | **Mexicali** | **0.22** | **24** | *eP* | | **Pg** | **11 52 17.1** | **+0.6** | |
| MBIG | | | | *eS* | | **Sg** | **11 52 19.5** | **-0.3** | |
| **MBIG** | **Mexicali** | **0.22** | **24** | ⇓*eP* | | **Pb** | **11 52 17.5** | **-0.1** | |
| **SGL** | **Mount Signal** | **0.57** | **321** | ⇑*iP* | | **Pg** | **11 52 23.1** | **+0.2** | |
| **EMSC** | **East Mesa** | **0.60** | **27** | ⇓*iP* | | **Pg** | **11 52 23.6** | **+0.2** | |
| **RDX** | **Rancho Dawling** | **0.61** | **243** | ⇑*eP* | | **Pb** | **11 52 24.4** | **+0.1** | |
| RDX | | | | *eS* | | **Sg** | **11 52 32.7** | **+0.9** | |
| RDX | | | | IAML | | | 11 52 33.7 | | |
| | comp=N,1µm,0.2s | | | | | | | | |
| **DREC** | **Desert Rsrch C** | **0.61** | **349** | *eP* | | **Pb** | **11 52 24.2** | **-0.1** | |
| **WESC** | **Westside Schoo** | **0.66** | **327** | *eP* | | **Pg** | **11 52 24.8** | **+0.2** | |
| **COA** | **Coachella** | **0.67** | **13** | ⇓*iP* | | **Pg** | **11 52 24.6** | **-0.3** | |
| **YUH** | **Yuha Desert** | **0.68** | **310** | ⇑*iP* | | **Pg** | **11 52 24.9** | **-0.1** | |
| **COK** | **Cook Ranch** | **0.73** | **331** | ⇓*iP* | | **Pg** | **11 52 26.0** | **0.0** | |
| **ECBX** | **El Chinero** | **0.76** | **164** | ⇓*eP* | | **Pb** | **11 52 27.6** | **+0.7** | |
| ECBX | | | | *eS* | | **Sb** | **11 52 38.3** | **+1.2** | |
| **RMX** | **La Rumorosa** | **0.77** | **301** | ⇑*eP* | | **Pg** | **11 52 26.1** | **-0.5** | |
| RMX | | | | *eS* | | **Sg** | **11 52 35.8** | **-0.9** | |
| **IBP** | **Imperial Bould** | **0.81** | **304** | P | | **Pg** | **11 52 26.2** | **-1.2** | |
| | baz=0.8 | | | | | | | | |
| IBP | | | | S | | **Sg** | **11 52 37.5** | **-0.5** | |
| | baz=0.8 | | | | | | | | |
| **IBP** | **Imperial Bould** | **0.81** | **304** | *eP* | | **Pg** | **11 52 27.3** | **-0.1** | |
| **SWSC** | **Sam W. Stewart** | **0.84** | **331** | P | | **Pg** | **11 52 26.8** | **-1.2** | |
| | baz=0.8 | | | | | | | | |
| **GLA** | **Glamis** | **0.94** | **25** | P | | **Pg** | **11 52 28.2** | **-1.6** | |
| | baz=0.9 | | | | | | | | |
| **GLA** | **Glamis** | **0.94** | **25** | *e*Pg | | **Pg** | **11 52 28.2** | **-1.6** | |
| GLA | | | | *e*Sg | | **Sg** | **11 52 39.9** | **-2.2** | |
| **CBX** | **Cerro Bola** | **1.16** | **276** | *i* P | | **Pb** | **11 52 33.2** | **-0.5** | |
| CBX | | | | *e*S | | **Sb** | **11 52 48.1** | **-0.5** | |
| **CBX** | **Cerro Bola** | **1.16** | **276** | ⇑*eP* | | **Pb** | **11 52 33.2** | **-0.5** | |
| CBX | | | | *eS* | | **Sb** | **11 52 48.5** | **-0.1** | |
| CBX | | | | *e* | | | 11 52 50.0 | | |
| CBX | | | | IAML | | | 11 52 50.0 | | |
| | comp=E,577nm,0.4s | | | | | | | | |
| CBX | | | | IAML | | | 11 52 50.4 | | |
| | comp=N,584nm,0.2s | | | | | | | | |
| CBX | | | | ⇑*e* | | | 11 52 50.4 | | |
| **CBX** | **Cerro Bola** | **1.16** | **276** | *i* P | | **Pb** | **11 52 33.2** | **-0.5** | |
| CBX | | | | *e*S | | **Sb** | **11 52 48.1** | **-0.5** | |
| **MONP** | **Monument Peak** | **1.16** | **306** | P | | **Pb** | **11 52 32.4** | **-1.5** | |
| | baz=1.1 | | | | | | | | |
| MONP | | | | S | | **Sb** | **11 52 48.2** | **-0.7** | |
| | baz=1.1 | | | | | | | | |
| **SPIG** | **San Pedro Mart** | **1.17** | **187** | *eP* | | **Pb** | **11 52 33.8** | **-0.2** | |
| **SPIG** | **San Pedro Mart** | **1.17** | **187** | ⇓*eP* | | **Pb** | **11 52 33.9** | **0.0** | |
| **SPIG** | **San Pedro Mart** | **1.17** | **187** | *eP* | | **Pb** | **11 52 33.8** | **-0.2** | |
| **SPX** | **San Pedro Mart** | **1.17** | **187** | ⇓*eP* | | **Pb** | **11 52 34.0** | **0.0** | |
| **SPX** | **San Pedro Mart** | **1.17** | **187** | *eP* | | **Pb** | **11 52 33.7** | **-0.2** | |
| SPX | | | | *e*S | | **Sb** | **11 52 49.5** | **+0.4** | |
| **BAR** | **Barrett** | **1.25** | **293** | *eP* | | **Pn** | **11 52 34.3** | **-0.7** | |
| **BAR** | **Barrett** | **1.25** | **293** | *e*Pg | | **Pn** | **11 52 34.0** | **-1.0** | |
| BAR | | | | *e*Sg | | **Sb** | **11 52 51.3** | **+0.1** | |
| **BC3** | **Big Chuckawall** | **1.45** | **355** | P | | **Pn** | **11 52 35.8** | **-1.9** | |
| | baz=1.4 | | | | | | | | |
| **109C** | **Camp Elliot, M** | **1.67** | **295** | Sb | | **Sb** | **11 53 03.0** | **-0.2** | |
| | baz=1.6 | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.70** | **326** | *e*Pn | | **Pn** | **11 52 39.3** | **-2.0** | |
| PFO | | | | *e*Sn | | **Sn** | **11 53 02.6** | **-0.4** | |
| **MURC** | **Murrieta** | **2.12** | **312** | Sb | | **Sb** | **11 53 17.2** | **+1.1** | |
| | baz=2.1 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.13** | **96** | P | | **Pn** | **11 52 45.6** | **-1.4** | |
| | baz=2.1 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.13** | **96** | *e*Pn | | **Pn** | **11 52 45.4** | **-1.6** | |
| 214A | | | | *e*Sn | | **Sn** | **11 53 10.6** | **-2.8** | |
| **BFSC** | **Mount Baldy Ra** | **2.83** | **316** | Sb | | **Sb** | **11 53 38.6** | **+1.8** | |
| | baz=2.8 | | | | | | | | |
| **LDFC** | **Landfair** | **2.87** | **3** | *e*Pn | | **Pn** | **11 52 57.6** | **+0.3** | |
| **MWC** | **Mount Wilson** | **3.06** | **312** | *e*Pn | | **Pn** | **11 52 58.0** | **-2.0** | |
| MWC | | | | *e*Sn | | **Sn** | **11 53 38.8** | **+2.1** | |
| **GSC** | **Goldstone** | **3.33** | **338** | *e*Pn | | **Pn** | **11 53 02.6** | **-1.0** | |
| GSC | | | | *e*Pg | | **Pg** | **11 53 17.9** | **+2.4** | |
| **TUC** | **Tucson** | **3.83** | **87** | *e*Pn | | **Pn** | **11 53 09.3** | **-1.2** | |
| TUC | | | | *e*Pg | | **Pg** | **11 53 26.5** | **+1.3** | |
| TUC | | | | *e*Sg | | **Sg** | **11 54 15.0** | **+0.3** | |
| **SHPR** | **Sheep Range** | **4.29** | **2** | *e*Pn | | **Pn** | **11 53 15.6** | **-1.3** | |
| SHPR | | | | *e*Sn | | **Sn** | **11 54 07.7** | **+0.8** | |
| **ISA** | **Isabella** | **4.34** | **323** | *e*Pn | | **Pn** | **11 53 16.3** | **-1.2** | |
| ISA | | | | *e*Sn | | **Sn** | **11 54 10.0** | **+2.0** | |
| **R11A** | **Troy Canyon, C** | **6.13** | **358** | *e*Pn | | **Pn** | **11 53 43.7** | **+1.5** | |
| R11A | | | | *e*Pg | | **Pg** | **11 54 10.4** | **+1.2** | |
| R11A | | | | *e*Sg | | **Sg** | **11 55 32.8** | **+4.2** | |

*IDC* ***15*** *12:01:43.1±1.0,51.47N×171.23W,h0km, mb4.0/10, mb1 4.1/12,mb1mx3.9/38,mbtmp3.9/12,ML3.4/2,MS3.2/2, Ms1 3.2/2,ms1mx2.7/35, Error ellipse: s-maj=28.0km s-min=18.3km az=174.0*

*ISCJB* ***15*** *12:01:46.0±0.7,51.52N±0.08×171.15W±0.06,h30km, mb4.0/13,MS3.0/1, Error ellipse: s-maj=12.1km s-min=3.6km az=161.5*

*NEIC* ***15*** *12:01:46.3±2.1,51.50N×171.11W,h21km±14km,mb4.5/3, Error ellipse: s-maj=17.7km s-min=4.4km az=164.0*

**ISC 15 12:01:47.6±0.9, 51.6N±0.1×171.16W±0.05, h30km, n35, σ0.96/41, mb4.0/13, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KOFP** | **Korovin Flat P** | **1.95** | **292** | P | | **Pn** | **12 02 19.3** | **+0.7** |
| **ATKA** | **Atka Island** | **1.98** | **290** | P | | **Pn** | **12 02 19.1** | **0.0** |
| ATKA | | | | S | | **Sn** | **12 02 43.5** | **+0.7** |
| **NIKH** | **Nikolski High** | **2.00** | **44** | P | | **Pn** | **12 02 18.8** | **-0.5** |
| NIKH | | | | S | | **Sn** | **12 02 43.5** | **+0.3** |
| **KOKL** | **Mount Kliuchef** | **2.02** | **293** | P | | **Pn** | **12 02 20.5** | **+0.8** |
| **KOWE** | **Korovin West** | **2.07** | **294** | P | | **Pn** | **12 02 21.4** | **+1.1** |
| **OKFG** | **Magazine Ridge** | **2.71** | **46** | P | | **Pn** | **12 02 29.1** | **0.0** |
| OKFG | | | | S | | **Sn** | **12 03 02.9** | **+2.1** |
| **GSMY** | **Great Sitkin M** | **3.07** | **281** | P | | **Pn** | **12 02 34.0** | **0.0** |
| **GSTR** | **Great Sitkin T** | **3.08** | **282** | P | | **Pn** | **12 02 34.1** | **-0.1** |
| **GSTD** | **Great Sitkin T** | **3.13** | **281** | P | | **Pn** | **12 02 34.6** | **-0.3** |
| GSTD | | | | S | | **Sn** | **12 03 10.3** | **-0.9** |
| **GSCK** | **Great Sitkin C** | **3.13** | **280** | P | | **Pn** | **12 02 34.6** | **-0.3** |
| **ETKA** | **Kagalaska Isla** | **3.27** | **277** | P | | **Pn** | **12 02 36.5** | **-0.3** |
| **ADAG** | **Mount Adagdak** | **3.40** | **279** | P | | **Pn** | **12 02 39.4** | **+0.8** |
| **MSOM** | **Makushin Julie** | **3.41** | **47** | P | | **Pn** | **12 02 39.3** | **+0.6** |
| **UNV** | **Unalaska Valle** | **3.64** | **49** | P | | **Pn** | **12 02 41.6** | **-0.1** |
| UNV | | | | S | | **Sn** | **12 03 23.9** | **+0.3** |
| **KICM** | **Kanaga Island** | **3.77** | **278** | P | | **Pn** | **12 02 43.9** | **+0.4** |
| **TAPA** | **Tanaga Point A** | **4.14** | **276** | P | | **Pn** | **12 02 49.0** | **+0.2** |
| **TASE** | **Tanaga Southea** | **4.28** | **276** | P | | **Pn** | **12 02 51.0** | **+0.3** |
| **GANE** | **Gareloi Northe** | **4.74** | **276** | P | | **Pn** | **12 02 57.0** | **0.0** |
| **KDAK** | **Kodiak Island** | **12.40** | **53** | Pn | | **Pn** | **12 04 38.9** | **-2.9** |
| | 0.2nm,0.3s,baz=120,slow=8.1,SNR=3.4 | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **16.42** | **32** | *e*Pn | | **P** | **12 05 37.3** | **-0.8** |
| BPAW | | | | *e*Sn | | **Sn** | **12 08 34.8** | **-1.8** |
| **ILAR** | **Eielson Array** | **18.24** | **34** | P | | **Pn** | **12 05 57.2** | **-0.9** |
| | 0.1nm,0.3s,baz=224,slow=10,SNR=8.8 | | | | | | | |
| ILAR | | | | LR | | LR | 12 13 00.3 | |
| | comp=Z,65nm,19.3s,baz=172,slow=37 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **19.02** | **287** | P | | **Pn** | **12 06 07.8** | **+0.2** |
| | 0.4nm,0.3s,baz=97,slow=13,SNR=5.6 | | | | | | | |
| **SEY** | **Seymchan** | **22.42** | **315** | P | | **P** | **12 06 44.2** | **+0.8** |
| | 7.2nm,0.7s,baz=120,slow=9.2,SNR=19 | | | | | | | |
| **DLBC** | **Dease Lake** | **24.25** | **57** | P | | **P** | **12 07 04.1** | **+2.4** |
| | 5.7nm,1.1s,baz=270,slow=5.9,SNR=5.4 | | | | | | | |
| **INK** | **Inuvik** | **24.63** | **33** | P | | **P** | **12 07 04.7** | **-0.2** |
| | 2.6nm,0.5s,baz=234,slow=9.7,SNR=10 | | | | | | | |
| INK | | | | LR | | LR | 12 16 47.9 | |
| | comp=Z,56nm,21.6s,baz=239,slow=37 | | | | | | | |
| **HIA** | **Hailar** | **42.59** | **295** | *e*P | | **P** | **12 09 40.3** | **-0.3** |
| | 6.3nm,0.5s | | | | | | | |
| **SONM** | **Songino Array** | **50.75** | **300** | P | | **P** | **12 10 44.3** | **-0.3** |
| | 1.0nm,0.8s,baz=51,slow=10.0,SNR=6.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **53.89** | **87** | P | | **P** | **12 11 08.9** | **+0.9** |
| | 0.5nm,0.5s,baz=304,slow=5.6,SNR=12 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.26** | **317** | P | | **P** | **12 11 33.5** | **+1.7** |
| | 1.1nm,0.6s,baz=80,slow=1.7,SNR=3.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.54** | **313** | P | | **P** | **12 12 14.8** | **0.0** |
| | 1.7nm,0.5s,baz=53,slow=6.7,SNR=20 | | | | | | | |
| **AAK** | **Ala-Archa** | **70.28** | **314** | *e*P | | **P** | **12 12 58.5** | **+0.5** |
| | 3.8nm,0.9s | | | | | | | |
| **ABKAR** | **Akbulak array** | **70.52** | **327** | *e*P | | **P** | **12 12 58.4** | **-0.6** |
| | 4.0nm,1.0s | | | | | | | |
| **GERES** | **GERESS Array B** | **79.88** | **357** | P | | **P** | **12 13 52.9** | **-0.2** |
| | 0.2nm,0.5s,baz=3.6,slow=7.9,SNR=3.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **85.64** | **230** | P | | **P** | **12 14 22.0** | **-1.1** |
| | 0.5nm,0.9s,baz=38,slow=5.8,SNR=3.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **89.03** | **229** | P | | **P** | **12 14 39.6** | **+0.2** |
| | 0.7nm,0.8s,baz=27,slow=4.0,SNR=5.2 | | | | | | | |

**GUC 15 12:07:01.7±1.4, 39.92S×71.33W, h125km±56km, ML4.2, Southern Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **VLCH** | **Valdivia** | **1.48** | **274** | *e*P | | Pn | 12 07 28.9 | -0.3 |
| VLCH | | | | *e*S | | Sn | 12 07 49.4 | -0.7 |
| **OSCH** | **Osorno** | **1.52** | **244** | *e*P | | Pn | 12 07 29.2 | -0.5 |
| OSCH | | | | *e*S | | Sn | 12 07 50.5 | -0.5 |
| **PSCH** | **Puerto Saavedr** | **1.95** | **304** | *e*S | | Sn | 12 07 59.6 | -0.5 |
| **CCHI** | **Chillan** | **3.37** | **350** | *e*S | | Sn | 12 08 31.6 | -0.9 |
| CCHI | | | | AML | | AML | 12 08 33.5 | |
| | comp=N,264nm,1.3s | | | | | | | |
| **COCH** | **Cobquecura** | **3.96** | **343** | *e*P | | Pn | 12 08 00.7 | -0.1 |
| COCH | | | | AML | | AML | 12 08 45.4 | |
| | comp=N,170nm,1.7s | | | | | | | |

*CSEM* ***15*** *12:07:21.5,44.12N×22.09E,h0km,ML1.4,Mining explosion. After BEO*

**BEO 15 12:07:21.5±0.3, 44.12N×22.09E, h0km, ML1.4/4, Mining explosion., Romania**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KUBS** | **Kucevo** | **0.42** | **315** | *e*Pg | | Pg | 12 07 27.3 | -2.3 |
| KUBS | | | | *e*Sg | | Sg | 12 07 33.7 | -1.3 |
| **KUBS** | **Kucevo** | **0.42** | **315** | *e*Pg | | Pg | 12 07 27.3 | -2.3 |
| KUBS | | | | *e*Sg | | Sg | 12 07 33.7 | -1.3 |
| **ZAPS** | **Zavoj** | **0.93** | **155** | *e*Pg | | Pg | 12 07 38.3 | -1.2 |
| ZAPS | | | | *e*Sg | | Sg | 12 07 50.7 | -0.9 |
| **GRUS** | **Gruza** | **1.02** | **257** | *e*Pg | | Pg | 12 07 40.7 | -0.4 |
| GRUS | | | | *e*Sg | | Sg | 12 07 54.9 | +0.6 |
| **GRUS** | **Gruza** | **1.02** | **257** | *e*Pg | | Pg | 12 07 40.7 | -0.4 |
| GRUS | | | | *e*Sg | | Sg | 12 07 54.9 | +0.6 |
| **SELS** | **Selova** | **1.14** | **218** | *e*Pg | | Pg | 12 07 42.1 | -1.4 |
| SELS | | | | *e*Sg | | Sg | 12 07 57.5 | -0.9 |
| **BARS** | **Barje** | **1.32** | **189** | *e*Sg | | Sg | 12 08 03.1 | -0.8 |
| **BARS** | **Barje** | **1.32** | **189** | *e*Sg | | Sg | 12 08 03.1 | -0.8 |
| **GZR** | **Gura Zlata** | **1.36** | **21** | *e*Pg | | Pg | 12 07 46.2 | -1.6 |
| GZR | | | | *e*Sg | | Sg | 12 08 05.5 | -0.1 |
| **GZR** | **Gura Zlata** | **1.36** | **21** | *e*Pg | | Pg | 12 07 46.2 | -1.6 |
| GZR | | | | *e*Sg | | Sg | 12 08 05.5 | -0.1 |
| **IVAS** | **Ivanjica** | **1.50** | **249** | *e*Pg | | Pn | 12 07 49.0 | -0.8 |
| **IVAS** | **Ivanjica** | **1.50** | **249** | *e*Pg | | Pn | 12 07 49.0 | -0.8 |
| **BZS** | **Buzias** | **1.53** | **347** | *e*Sg | | Sn | 12 08 10.4 | -0.4 |
| **BZS** | **Buzias** | **1.53** | **347** | *e*Sg | | Sn | 12 08 10.4 | -0.4 |

*CSEM* ***15*** *12:24:01.0,40.65N×15.55E,h10km,MD1.9/4,After ROM*

**ROM 15 12:24:01.0±0.5, 40.65N×15.55E, h10km±2km, Md1.9/4, Ml1.4/1, Error ellipse: s-maj=7.7km s-min=2.6km az=87.0, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MRLC** | **Muro Lucano** | **0.12** | **338** | Pg | | Pg | 12 24 04.3 | +0.4 |
| MRLC | | | | Sg | | Sg | 12 24 06.4 | +0.4 |
| | 93nm,0.2s | | | | | | | |
| **MRLC** | **Muro Lucano** | **0.12** | **338** | Pg | | Pg | 12 24 04.3 | +0.4 |
| MRLC | | | | Sg | | Sg | 12 24 06.4 | +0.4 |
| | 93nm,0.2s | | | | | | | |
| **SGO** | **Sicignano** | **0.20** | **244** | Pg | | Pg | 12 24 06.2 | +0.9 |
| | 26nm,0.3s | | | | | | | |
| **SGO** | **Sicignano** | **0.20** | **244** | Pg | | Pg | 12 24 06.2 | +0.9 |
| | 26nm,0.3s | | | | | | | |
| **CDRU** | **Civita di Ruta** | **0.24** | **229** | Pg | | Pg | 12 24 06.6 | +0.5 |
| CDRU | | | | Sg | | Sg | 12 24 10.6 | +1.0 |
| **CDRU** | **Civita di Ruta** | **0.24** | **229** | Pg | | Pg | 12 24 06.6 | +0.5 |
| CDRU | | | | Sg | | Sg | 12 24 10.6 | +1.0 |
| **MCRV** | **Calabrutti - M** | **0.32** | **295** | Pg | | Pb | 12 24 08.3 | -0.6 |
| MCRV | | | | Sg | | Sb | 12 24 13.1 | -1.1 |
| **MCRV** | **Calabrutti - M** | **0.32** | **295** | Pg | | Pb | 12 24 08.3 | -0.6 |
| MCRV | | | | Sg | | Sb | 12 24 13.1 | -1.1 |

*IDC* ***15*** *12:36:41.8±1.5,51.79N×171.16W,h0km,mb3.8/8, mb1 3.9/10,mb1mx3.7/47,mbtmp3.7/10,ML3.4/2,MS3.5/1, Ms1 3.6/1,ms1mx2.7/34,Error ellipse: s-maj=48.9km s-min=17.3km az=11.0*

*NEIC* ***15*** *12:36:45.8,51.45N×171.18W,h47km,mb3.4/1, ML3.2(AEIC),After AEIC.*

**ISC 15 12:36:46.4±1.0, 51.8N±0.1×171.29W±0.04, h30km, n29, σ1.39/34, mb3.9/9, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KOSE** | **Korovin Southe** | **1.78** | **288** | P | | **Pn** | **12 37 16.4** | **+1.3** |
| **KOFP** | **Korovin Flat P** | **1.79** | **286** | P | | **Pn** | **12 37 16.4** | **+1.1** |
| **ATKA** | **Atka Island** | **1.84** | **283** | P | | **Pn** | **12 37 16.2** | **+0.4** |
| ATKA | | | | S | | **Sb** | **12 37 40.5** | **-1.2** |
| **KONE** | **Korovin Northe** | **1.84** | **289** | P | | **Pb** | **12 37 17.4** | **-1.8** |
| **NIKH** | **Nikolski High** | **1.88** | **51** | P | | **Pb** | **12 37 17.8** | **-2.3** |
| **KOWE** | **Korovin West** | **1.91** | **288** | P | | **Pb** | **12 37 19.0** | **-1.5** |
| **OKFG** | **Magazine Ridge** | **2.60** | **51** | P | | **Pn** | **12 37 26.6** | **+0.3** |
| OKFG | | | | S | | **Sb** | **12 38 01.3** | **-2.4** |
| **GSTR** | **Great Sitkin T** | **2.96** | **277** | P | | **Pn** | **12 37 30.6** | **-0.7** |
| **GSTD** | **Great Sitkin T** | **3.02** | **276** | P | | **Pn** | **12 37 32.4** | **+0.4** |
| GSTD | | | | S | | **Sn** | **12 38 08.1** | **+0.9** |
| **ETKA** | **Kagalaska Isla** | **3.17** | **273** | P | | **Pn** | **12 37 33.7** | **-0.5** |
| ETKA | | | | S | | **Sn** | **12 38 11.3** | **+0.2** |
| **ADAG** | **Mount Adagdak** | **3.29** | **275** | P | | **Pn** | **12 37 35.7** | **-0.2** |
| **MSOM** | **Makushin Julie** | **3.30** | **51** | P | | **Pn** | **12 37 36.4** | **+0.4** |
| **MSW** | **Makushin Switc** | **3.44** | **51** | P | | **Pn** | **12 37 38.8** | **+0.9** |
| **UNV** | **Unalaska Valle** | **3.54** | **53** | P | | **Pn** | **12 37 39.6** | **+0.5** |
| UNV | | | | S | | **Sn** | **12 38 23.7** | **+3.7** |
| **AMKA** | **Amchitka** | **5.88** | **269** | *e*Pn | | **Pn** | **12 38 12.0** | **+0.7** |
| AMKA | | | | *e*Sn | | **Sn** | **12 39 19.7** | **+2.0** |
| **KDAK** | **Kodiak Island** | **12.31** | **54** | Pn | | Pn | 12 39 35.3 | -4.0 |
| | 0.3nm,0.3s,baz=190,slow=17,SNR=4.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **18.07** | **35** | P | | **Pn** | **12 40 54.2** | **-0.6** |
| | 0.1nm,0.3s,baz=226,slow=10,SNR=8.2 | | | | | | | |
| ILAR | | | | LR | | LR | 12 48 30.2 | |
| | comp=Z,128nm,18.3s,baz=213,slow=39 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **18.87** | **286** | P | | **Pn** | **12 41 04.8** | **+0.2** |
| | 0.3nm,0.3s,baz=90,slow=13,SNR=5.2 | | | | | | | |
| **EGAK** | **Eagle** | **20.20** | **39** | *e*P | | **P** | **12 41 18.4** | **0.0** |
| | 0.7nm,0.4s | | | | | | | |
| EGAK | | | | *e*S | | Sn | 12 45 05.9 | -0.7 |
| **SEY** | **Seymchan** | **22.18** | **314** | P | | **P** | **12 41 39.3** | **-0.4** |
| | 4.0nm,0.8s,baz=45,slow=20,SNR=2.9 | | | | | | | |
| **DLBC** | **Dease Lake** | **24.18** | **58** | P | | **P** | **12 42 02.9** | **+3.1** |
| | 1.0nm,0.6s,baz=278,slow=7.1,SNR=4.8 | | | | | | | |
| **INK** | **Inuvik** | **24.45** | **33** | P | | **P** | **12 42 01.7** | **-0.4** |
| | 1.8nm,0.5s,baz=245,slow=8.1,SNR=4.5 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **38.85** | **89** | P | | **P** | **12 44 08.3** | **-0.6** |
| | 0.4nm,0.8s,baz=277,slow=7.0,SNR=3.5 | | | | | | | |
| **SONM** | **Songino Array** | **50.56** | **300** | P | | **P** | **12 45 42.3** | **+0.4** |
| | 0.6nm,0.9s,baz=105,slow=11,SNR=2.7 | | | | | | | |
| **TXAR** | **Lajitas Array** | **53.95** | **87** | P | | **P** | **12 46 06.1** | **-1.2** |
| | 1.0nm,0.5s,baz=297,slow=5.4,SNR=17 | | | | | | | |
| **KURK** | **Kurchatov** | **61.98** | **317** | P | | **P** | **12 47 04.4** | **+1.3** |
| **KURBB** | **Kurchatov Arra** | **62.09** | **317** | P | | **P** | **12 47 04.4** | **+0.5** |
| | 1.0nm,0.8s,baz=44,slow=7.1,SNR=10.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.31** | **312** | P | | **P** | **12 47 12.2** | **0.0** |
| | 0.7nm,0.4s,baz=42,slow=5.5,SNR=10 | | | | | | | |
| **AAK** | **Ala-Archa** | **70.05** | **314** | P | | **P** | **12 47 57.3** | **+2.0** |
| | 1.0nm,0.5s,baz=69,slow=3.0,SNR=4.2 | | | | | | | |

*BJI* ***15*** *12:43:52.5,3.69N×95.41E,h49km,mb5.1/65,mB4.8/40, Ms4.6/57,Ms7 4.4/53*

*ISCJB* ***15*** *12:43:52.6±0.4,3.66N±0.02×95.36E±0.02,h45km±4km, mb5.0/108,MS4.3/36,Error ellipse: s-maj=4.3km s-min=2.8km az=44.0*

*MOS* ***15*** *12:43:53.2±1.1,3.79N×95.48E,h49km,mb5.4/40, MS4.6/5,Error ellipse: s-maj=9.5km s-min=5.3km az=109.6*

*GCMT* ***15*** *12:43:54.4±0.3,3.60N×95.19E,h32km±2km,MW5.0/59, Moment Tensor Solution. s33,c44; s59,c84; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.95±.17; $M_{\theta\theta}$0.08±.10; $M_{\phi\phi}$-2.03±.12; $M_{r\theta}$0.77±.14; $M_{\theta\phi}$1.19±.09; $M_{r\phi}$-3.08±.26; Best double couple: $M_o$3.90300×1016 NP1:$\phi_s$165.00000°,δ73.00000°,λ97.00000°. NP2: $\phi_s$322.00000°,δ19.00000°,λ68.00000°. Principal axes: T 3.6300, Plg62.0000°, Azm86.0000°; N 0.5450, Plg7.0000°, Azm343.0000°; P -4.1750, Plg27.0000°, Azm249.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*IDC* ***15*** *12:43:54.1±0.6,3.77N×95.46E,h41km±4km,mb4.4/33, mb1 4.5/35,mb1mx4.4/41,mbtmp4.6/35,ML4.6/2,MS4.2/33, Ms1 4.2/33,ms1mx4.2/35 Error ellipse: s-maj=11.3km s-min=9.2km az=56.0*

*NEIC* ***15*** *12:43:54.4±0.5,3.66N×95.39E,h45km±4km,mb5.1/34, Error ellipse: s-maj=5.8km s-min=4.2km az=50.0*

*KLM* ***15*** *12:43:55.4,3.56N×95.32E,h49km,mb5.1,ML5.2,MS5.8*

*AUST* ***15*** *12:43:55.4±0.7,3.62N×95.43E,h49km±6km,Error ellipse: s-maj=7.3km s-min=5.7km az=47.0*

*DJA* ***15*** *12:43:56.1±0.6,4.N±2.×9.5E±.,h35km±5km,M5.0/83, mb5.2/83,mB5.5/46,MLv5.3/20,Mw(mB)5.0/46*

**ISC 15 12:43:54.3±0.3, 3.70N±0.03×95.38E±0.03, h43km±2km, h43km:pP-P,n400,σ1$40/473, mb5.1/111, MS4.3/36, 26C-16D, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MLSI** | **Meulaboh, Aceh** | **1.17** | **61** | P | | **Pn** | **12 44 14.9** | **+0.8** |
| MLSI | | | | S | | **Sn** | **12 44 30.6** | **+1.7** |
| **LHMI** | **Lhok Sumawe** | **2.18** | **46** | P | | **Pn** | **12 44 29.9** | **+1.9** |
| | baz=2.2,SNR=31 | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **2.18** | **46** | P | | **Pn** | **12 44 29.7** | **+1.7** |
| LHMI | | | | S | | **Sn** | **12 44 56.3** | **+2.5** |
| **LHMI** | **Lhok Sumawe** | **2.18** | **46** | *e*Pn | | **Pn** | **12 44 30.1** | **+2.1** |
| LHMI | | | | *e*Sn | | **Sn** | **12 44 52.6** | **-1.2** |
| **KCSI** | **Kotacane, Aceh** | **2.39** | **94** | P | | **Pn** | **12 44 32.1** | **+1.1** |
| KCSI | | | | S | | **Sn** | **12 44 59.3** | **+0.2** |
| **TSI** | **Tuntungan** | **3.18** | **93** | P | | **Pn** | **12 44 42.6** | **+0.7** |
| TSI | | | | S | | **Sn** | **12 45 19.2** | **+0.6** |
| **GSI** | **Gunungsitoli** | **3.24** | **137** | P | | **Pn** | **12 44 41.6** | **-1.0** |
| | baz=3.2 | | | | | | | |
| **GSI** | **Gunungsitoli** | **3.24** | **137** | P | | **Pn** | **12 44 41.8** | **-0.8** |
| GSI | | | | S | | **Sn** | **12 45 19.7** | **-0.2** |
| **GSI** | **Gunungsitoli** | **3.24** | **137** | *e*Pn | | **Pn** | **12 44 41.8** | **-0.8** |
| GSI | | | | *e*Sn | | **Sn** | **12 45 16.4** | **-3.6** |
| **CMBY** | **CAMPBELL BAY** | **3.59** | **336** | *e*P | | **Pn** | **12 44 47.4** | **-0.1** |
| CMBY | | | | AMB | | AMB | 12 45 03.6 | |
| | comp=Z,539nm,1.4s | | | | | | | |
| **PSI** | **Prapat** | **3.65** | **104** | P | | **Pn** | **12 44 49.3** | **+0.9** |
| | comp=Z,50nm,0.3s,baz=291,slow=8.8,SNR=63 | | | | | | | |
| PSI | | | | S | | Sn | 12 45 19.0 | -11 |
| | comp=Z,31nm,0.3s,baz=204,slow=7.0,SNR=6.8 | | | | | | | |
| PSI | | | | LR | | LR | 12 46 32.8 | |
| | comp=Z,7µm,21.1s,baz=265,slow=44 | | | | | | | |
| **PSI** | **Prapat** | **3.65** | **104** | *e*P | | **Pn** | **12 44 49.8** | **+1.4** |
| **PSI** | **Prapat** | **3.65** | **104** | P | | **Pn** | **12 44 49.9** | **+1.5** |
| | baz=3.6,SNR=42 | | | | | | | |
| **PSI** | **Prapat** | **3.65** | **104** | *e*Pn | | **Pn** | **12 44 49.8** | **+1.4** |
| PSI | | | | S | | Sn | 12 45 19.0 | -11 |
| **MNSI** | **Mandailing Nat** | **5.09** | **124** | P | | **Pn** | **12 45 08.0** | **-0.1** |
| MNSI | | | | S | | **Sn** | **12 46 05.7** | **0.0** |
| **KULM** | **Kulim** | **5.49** | **73** | ⇓P | | **Pn** | **12 45 15.0** | **+1.5** |
| **KULM** | **Kulim** | **5.49** | **73** | *e*Pn | | **Pn** | **12 45 14.3** | **+0.8** |
| KULM | | | | *e*Sn | | **Sn** | **12 46 20.2** | **+4.8** |
| **IPM** | **Ipoh** | **5.68** | **82** | ⇑P | | **Pn** | **12 45 17.5** | **+1.2** |
| **IPM** | **Ipoh** | **5.68** | **82** | *e*Pn | | **Pn** | **12 45 17.1** | **+0.9** |
| IPM | | | | *e*Sn | | **Sn** | **12 46 23.8** | **+3.5** |
| **SISI** | **Saibi** | **6.22** | **143** | P | | **Pn** | **12 45 22.7** | **-0.9** |
| | comp=Z,189nm,1.2s,comp=Z,1

comp=Z,770nm,4.0s
**CHLP Challavanipeta 18.42 324** *e*Pn **Pn** **12 48 07.2 +0.7**
CHLP lAmb lAmb 12 48 09.5
comp=Z,207nm,1.8s
CHLP *e* 12 51 16.0
CHLP lVMs_BB lVMs_BB 12 54 51.2
comp=Z,2µm,3.3s
**SMRI Semarang 18.44 125** P **P** **12 48 06.3 -0.1**
comp=Z,176nm,1.0s
**SMRI Semarang 18.44 125** *e*P **P** **12 48 06.3 -0.1**
comp=Z,181nm,1.1s
**UWJI Ujung Watu 18.51 123** P Pn 12 48 17.3 +10
**PVM Polavaram 19.06 316** *e*Pn **Pn** **12 48 15.1 +0.8**
PVM lAmb lAmb 12 48 15.9
comp=Z,41nm,1.1s
PVM *e* 12 51 32.2
PVM lVMs_BB lVMs_BB 12 54 02.3
comp=Z,636nm,3.6s
**WOJI Wonogiri, Jawa 19.28 126** P **Pn** **12 48 16.8 -0.1**
comp=Z,92nm,1.6s,comp=Z,6µm
**ADKI Addanki 19.38 310** *e*Pn **Pn** **12 48 18.2 +0.1**
ADKI lAmb lAmb 12 48 19.6
comp=Z,64nm,1.5s
ADKI *e* 12 51 34.9
ADKI lVMs_BB lVMs_BB 12 55 36.9
comp=Z,586nm,18.5s
**SLVN Son La 19.39 25** *e*P **P** **12 48 17.2 +0.5**
comp=Z,34nm,1.0s
**NGJI Ngawi 19.45 124** P **Pn** **12 48 18.7 -0.2**
comp=Z,79nm,1.2s
**TBJI Tambak Boyo 19.48 122** P **Pn** **12 48 19.0 -0.3**
comp=Z,118nm,1.0s
**NJS Nagarjunasagar 20.31 310** *e*P **P** **12 48 27.7 +0.9**
NJS lAmb lAmb 12 48 29.2
comp=Z,68nm,0.9s
NJS *e* 12 52 02.3
NJS lVMs_BB lVMs_BB 12 56 40.0
comp=Z,562nm,4.1s
**BBKI Banjar Baru 20.71 110** P **P** **12 48 32.1 +0.9**
comp=Z,261nm,1.2s,comp=Z,2µm
**QIZ Qiongzhong 20.78 42** P **P** **12 48 32.6 +0.7**
QIZ pP **pP** **12 48 42.9 +0.5**
QIZ S **S** **12 52 24.8 +3.2**
QIZ PMZ
comp=Z,55nm,1.2s
QIZ LN
comp=Z,1µm,20.1s
QIZ LZ
comp=Z,2µm,19.2s
**QIZ Qiongzhong 20.78 42** *e*P **P** **12 48 32.2 +0.3**
comp=Z,72nm,1.1s
**KKM Kota Kinabalu 20.89 83** P **P** **12 48 33.4 +0.2**
baz=21,SNR=23
**KKM Kota Kinabalu 20.89 83** *e*P **P** **12 48 32.9 -0.4**
comp=Z,121nm,0.8s
**URV Uravakonda 21.06 303** *e*P **P** **12 48 35.6 +0.7**
URV lAmb lAmb 12 48 36.7
comp=Z,42nm,0.8s
URV *e* 12 52 17.0
URV lVMs_BB lVMs_BB 12 55 56.5
comp=Z,473nm,3.9s
**HYB Hyderabad 21.40 311** ⇓*i*P **P** **12 48 39.0 +0.4**
HYB *ep*P **pP** **12 48 50.5 +1.3**
HYB *e*S **S** **12 52 32.0 -2.1**
**HYB Hyderabad 21.40 311** *e*P **P** **12 48 38.9 +0.2**
**KMMI Kalianget 21.41 120** P **P** **12 48 39.3 +0.7**
comp=Z,237nm,1.1s,comp=Z,3µm
**HYBB Hyderabad (bro 21.41 311** *e*P **P** **12 48 39.4 +0.7**
HYBB lAmb lAmb 12 48 41.2
comp=Z,65nm,1.3s
HYBB *e* 12 52 40.3
HYBB lVMs_BB lVMs_BB 12 56 29.2
comp=Z,380nm,3.9s
**BLJI Banyuglugur 21.44 122** P **P** **12 48 40.4 +1.4**
comp=Z,93nm,1.3s,comp=Z,4µm
**RPR Rampur 21.78 315** *e*P **P** **12 48 43.7 +1.1**
RPR lAmb lAmb 12 48 44.1
comp=Z,28nm,1.0s
RPR *e* 12 52 38.4
RPR lVMs_BB lVMs_BB 12 55 25.2
comp=Z,550nm,4.2s
**KBKI Kotaparu 21.91 108** P **P** **12 48 45.3 +1.3**
comp=Z,47nm,1.5s,comp=Z,843nm
**BOK Bokaro 21.98 336** *e*P **P** **12 48 43.2 -1.5**
**SHL Shillong 22.00 352** *ex* **P** **12 48 40.4 -4.7**
**ABJI Asem Bagus 22.00 121** P **P** **12 48 46.7 +1.6**
comp=Z,92nm,0.9s
**KMI Kunming 22.45 18** P **P** **12 48 49.9 -0.1**
KMI pP **pP** **12 49 00.3 -0.2**
KMI sP **sP** **12 49 06.0 +0.1**
KMI S **S** **12 52 51.6 -2.3**
KMI PMZ
comp=Z,110nm,0.8s
KMI PMZ
comp=Z,160nm,3.7s
KMI LN
comp=Z,360nm,23.5s
KMI LE
comp=Z,840nm,21.2s
KMI LZ
comp=Z,1µm,16.7s
**SRBI Singaraja 22.99 121** P **P** **12 48 56.5 +1.0**
comp=Z,154nm,1.0s,comp=Z,1µm
**MYLDM Lahad Datu 23.09 85** *e*P **P** **12 48 57.1 +0.5**
comp=Z,98nm,0.7s
**NGP Nagpur 23.52 319** *e*P **P** **12 49 00.5 -0.2**
**GOA Goa 24.24 300** *e*P **P** **12 49 07.4 0.0**
GOA AMB AMB 12 49 21.8
comp=Z,90nm,1.9s
**ODAN Odare 24.27 342** *e*P **P** **12 49 07.7 -0.1**
comp=Z,85nm,0.8s
**RAMN Ramite 24.60 341** *e*P **P** **12 49 11.3 +0.5**
comp=Z,66nm,0.5s
**TAPN Taplejung 24.63 343** *e*P **P** **12 49 10.2 -1.0**
comp=Z,42nm,0.5s
**MPSI Mapaga 24.73 97** P **P** **12 49 13.3 +1.4**
comp=Z,89nm,0.9s,comp=Z,910nm
**TWSI Taliwang, Sumb 24.74 120** P **P** **12 49 12.4 +0.4**
comp=Z,63nm,0.9s
**PCI Palu 24.87 100** P **P** **12 49 15.0 +1.8**
comp=Z,120nm,1.5s,comp=Z,1µm
**GYA Guiyang 25.08 24** P **P** **12 49 16.8 +1.7**
GYA pP **pP** **12 49 30.0 +3.4**
GYA sP **sP** **12 49 35.3 +3.6**
GYA PP **PnPn** **12 49 56.5 +6.3**
GYA PcP **PcP** **12 52 50.3 +1.3**
GYA S **S** **12 53 36.8 -0.1**
GYA sS **sS** **12 53 58.0 +1.9**
GYA PMZ
comp=Z,20nm,0.8s
GYA PMZ
comp=Z,130nm,4.9s
GYA LN
comp=Z,3µm,16.6s
GYA LE
comp=Z,2µm,17.0s
GYA LZ
comp=Z,2µm,16.9s
**TTSI Tana Toraja 25.33 105** P **P** **12 49 19.1 +1.8**
comp=Z,51nm,0.9s,comp=Z,1µm
**H08S2 Diego Garcia H 25.47 244** T T 13 15 31.7
baz=64,slow=75,SNR=3596
**H08S3 Diego Garcia H 25.47 244** T T 13 15 31.7
baz=64,slow=75,SNR=2928
**H08S1 Diego Garcia H 25.48 244** T T 13 15 32.9
baz=64,slow=75,SNR=2628
**SPSI Sidrap Palu 25.53 107** P **P** **12 49 20.0 +0.8**
comp=Z,26nm,0.9s,comp=Z,1µm
**PKI Pulchoki 25.58 339** *e*P **P** **12 49 19.6 -0.2**
comp=Z,38nm,0.7s
**PKIN Phulchoki 25.59 339** *e*P **P** **12 49 19.6 -0.2**
comp=Z,29nm,0.5s
**POO Poona 25.71 307** *e*P **P** **12 49 22.1 +1.3**
**DMN Daman 25.72 339** *e*P **P** **12 49 21.1 +0.1**
comp=Z,54nm,0.7s
**GUN Gumba 25.73 340** *e*P **P** **12 49 21.2 0.0**
comp=Z,184nm,0.7s
**KKN Kakani 25.82 339** *e*P **P** **12 49 21.9 0.0**
**KAPI Kappang 25.84 109** P **P** **12 49 22.0 +0.1**
comp=Z,86nm,0.9s,baz=283,slow=7.5,SNR=35
KAPI LR LR 13 00 45.7
comp=Z,1µm,18.5s,baz=298,slow=39
**KAPI Kappang 25.84 109** P **P** **12 49 24.0 +2.0**
comp=Z,554nm,0.9s,SNR=8.4
**KAPI Kappang 25.84 109** *e*P **P** **12 49 22.1 +0.1**
comp=Z,94nm,0.9s
**BHPL Bhopal 26.06 320** *e*P **P** **12 49 25.1 +1.2**
**LSA Lhasa 26.17 352** *e*P **P** **12 49 25.1 -0.2**
LSA pmax pmax
comp=Z,69nm,0.6s
**LSA Lhasa 26.17 352** *e*P **P** **12 49 25.1 -0.2**
comp=Z,69nm,0.6s
**GKN Gorkha 26.25 338** *e*P **P** **12 49 25.4 -0.3**
comp=Z,115nm,0.8s
**BKSI Bulukumba 26.29 110** P **P** **12 49 27.7 +1.7**
comp=Z,166nm,0.7s,comp=Z,1µm
**H08N1 Diego Carcia H 26.30 248** T T 13 17 25.1
baz=133,slow=75,SNR=6.3
**H08N2 Diego Garcia H 26.30 248** T T 13 17 22.9
baz=133,slow=75,SNR=6.7
**H08N3 Diego Garcia H 26.32 248** T T 13 16 44.3
baz=133,SNR=6.2
**KOLN Koldanda 26.44 336** *e*P **P** **12 49 28.5 +1.0**
comp=Z,139nm,0.7s
**APSI Ampana 26.65 99** P **P** **12 49 31.2 +1.9**
comp=Z,135nm,1.3s,comp=Z,1µm
**MRSI Marisa 26.73 96** P **P** **12 49 32.1 +2.1**
comp=Z,75nm,0.6s,comp=Z,776nm
**DANN Dangsing 26.90 337** *e*P **P** **12 49 31.7 0.0**
**GTOI Gorontalo 27.77 96** P **P** **12 49 39.5 +0.1**
comp=Z,96nm,1.2s,comp=Z,87µm
**LUWI Luwuk 27.78 99** P **P** **12 49 40.1 +0.7**
baz=28
**LUWI Luwuk 27.78 99** P **P** **12 49 41.1 +1.7**
comp=Z,103nm,1.2s
**LUWI Luwuk 27.78 99** *e*P **P** **12 49 39.9 +0.4**
comp=Z,101nm,1.0s
**CD2 Chengdu 28.20 15** *e*P **P** **12 49 42.0 -1.0**
CD2 pP **pP** **12 49 54.6 0.0**
CD2 S **S** **12 54 26.3 +0.5**
CD2 sS **sS** **12 54 48.3 +3.1**
CD2 PMZ
comp=Z,100nm,0.5s
CD2 PMZ
comp=Z,220nm,5.2s
CD2 LN
comp=Z,690nm,13.7s
CD2 LE
comp=Z,900nm,15.2s
CD2 LZ
comp=Z,820nm,15.2s
**ENH Enshi 29.61 25** *e*P **P** **12 49 54.2 -1.3**
comp=Z,3.8nm,0.4s
**DAV Davao City (W) 30.25 82** LR LR 13 03 34.2
comp=Z,470nm,21.8s,baz=259,slow=39
**SANI Sanana 31.12 100** P **P** **12 50 10.4 +1.3**
comp=Z,16nm,1.2s
**SOEI Soe 31.73 115** P **P** **12 50 11.9 -2.7**
**SOEI Soe 31.73 115** *e*P **P** **12 50 11.8 -2.7**
**WHN Wuhan 32.15 32** ⇓*i*P **P** **12 50 18.3 +0.3**
WHN pP **pP** **12 50 29.5 -0.1**
WHN S **S** **12 55 26.0 -1.8**
WHN PMZ
comp=Z,120nm,1.4s
WHN LN
comp=Z,2µm,16.2s
WHN LE
comp=Z,1µm,11.8s
WHN LZ
comp=Z,2µm,13.9s
**SMLA Simla 32.23 330** *e*P **P** **12 50 18.4 -0.2**
SMLA AMB AMB 12 50 25.1
comp=Z,19nm,0.4s
**LBMI Labuha 32.39 97** P **P** **12 50 22.1 +1.8**
comp=Z,54nm,1.1s,comp=Z,668nm
**NLAI Namlea 32.44 102** P **P** **12 50 23.3 +2.6**
comp=Z,27nm,0.8s,comp=Z,700nm
**XAN Xi'an 32.72 21** P **P** **12 50 21.5 -1.4**
XAN pP **pP** **12 50 32.6 -2.0**
XAN S S 12 55 29.9 -6.7
XAN PMZ
comp=Z,79nm,0.8s
XAN LN
comp=Z,330nm,21.4s
XAN LE
comp=Z,860nm,22.4s
XAN LZ
comp=Z,560nm,17.3s
**LZH Lanzhou 33.16 13** *e*P **P** **12 50 26.6 -0.3**
LZH pP **pP** **12 50 37.3 -1.3**
LZH sP **sP** **12 50 42.9 -0.8**
LZH S **S** **12 55 42.0 -1.7**
LZH sS **sS** **12 56 00.3 -2.9**
LZH SS **SnSn** **12 57 43.8 -2.1**
LZH PMZ
comp=Z,36nm,1.0s
LZH PMZ
comp=Z,170nm,4.5s
LZH LN
comp=Z,630nm,15.4s
LZH LE
comp=Z,880nm,14.1s
LZH LZ
comp=Z,990nm,15.6s
**DHRM DHARAMSHALA 33.57 330** *e*P **P** **12 50 31.1 +0.5**
DHRM AMB AMB 12 50 44.0
comp=Z,39nm,0.9s
**AAI Ambon 33.60 102** P **P** **12 50 32.2 +1.3**
comp=Z,40nm,1.0s
**MSAI Masohi 34.25 101** P **P** **12 50 38.7 +2.2**
comp=Z,10nm,0.6s,comp=Z,199nm
**GTA Gaotai 35.77 6** *e*P **P** **12 50 48.1 -1.3**
GTA pP **pP** **12 50 59.6 -1.6**
GTA sP **sP** **12 51 04.3 -2.0**
GTA PP **PnPn** **12 52 09.8 -0.6**
GTA PcP **PcP** **12 53 17.8 +1.2**
GTA S **S** **12 56 21.8 -2.1**
GTA sS **sS** **12 56 41.9 -1.6**
GTA ScP **ScP** **12 57 01.6 +2.1**
GTA SS **SnSn** **12 58 43.8 -5.3**
GTA PMZ
comp=Z,6.0nm,1.0s
GTA PMZ
comp=Z,64nm,6.2s
GTA LN
comp=Z,290nm,18.0s
GTA LE
comp=Z,230nm,16.2s
GTA LZ
comp=Z,390nm,18.5s
**NJ2 Nanjing 35.79 35** *e*P **P** **12 50 49.3 -0.2**
NJ2 S **S** **12 56 26.0 +2.0**
NJ2 PMZ
comp=Z,60nm,0.8s
NJ2 LN
comp=Z,2µm,28.3s
NJ2 LE
comp=Z,4µm,16.4s
NJ2 LZ
comp=Z,2µm,18.7s
**SWI Sorong 36.14 97** P **P** **12 50 52.5 -0.3**
baz=36,SNR=7.3
**SWI Sorong 36.14 97** P **P** **12 50 52.6 -0.2**
comp=Z,131nm,0.9s,comp=Z,991nm
**FITZ Fitzroy Crossi 36.86 127** P **P** **12 50 57.5 -1.4**
comp=Z,6.2nm,0.7s,baz=318,slow=5.1,SNR=18
**FITZ Fitzroy Crossi 36.86 127** P **P** **12 50 57.6 -1.2**
baz=37,SNR=7.2
**FITZ Fitzroy Crossi 36.86 127** *e*P **P** **12 50 57.6 -1.2**
comp=Z,7.0nm,0.8s
**FAKI Fak Fak 37.43 100** P **P** **12 51 03.1 -0.7**
baz=37,SNR=21
**FAKI Fak Fak 37.43 100** P **P** **12 51 03.6 -0.2**
comp=Z,95nm,0.9s,comp=Z,801nm
**FAKI Fak Fak 37.43 100** *e*P **P** **12 51 02.0 -1.8**
**MEEK Meekatharra 37.61 145** P **P** **12 51 05.8 +0.7**
baz=38,SNR=3.7
**TIA Tai'an 38.06 29** ⇑P **P** **12 51 08.3 -0.5**
TIA pP **pP** **12 51 19.5 -1.1**
TIA sP **sP** **12 51 26.5 +0.8**
TIA S **S** **12 56 54.6 -4.0**
TIA PMZ
comp=Z,10.0nm,0.9s
TIA LN
comp=Z,740nm,13.7s
TIA LE
comp=Z,420nm,14.3s
TIA LZ
comp=Z,950nm,16.0s
**MORW Morawa 38.14 150** P **P** **12 51 11.1 +1.6**
baz=38,SNR=3.1
**KNRA Kununurra 38.23 121** P **P** **12 51 08.9 -1.6**
baz=38,SNR=6.7
**BTO Baotou 39.04 18** *e*P **P** **12 51 16.3 -0.8**
**MTN Manton Dam 39.13 115** P **P** **12 51 16.5 -1.5**
baz=39,SNR=12
**HHC Hu-ho-hao-te 39.75 19** *e*P **P** **12 51 23.4 +0.4**
HHC S **S** **12 57 27.4 +3.3**
HHC PMZ
comp=Z,45nm,0.9s
HHC PMZ
comp=Z,110nm,5.4s
HHC LN
comp=Z,810nm,16.6s
HHC LE
comp=Z,540nm,17.6s
HHC LZ
comp=Z,740nm,17.6s
**KSH Kashi 39.76 336** P **P** **12 51 22.8 -0.3**
KSH *ep*P **pP** **12 51 35.1 +0.1**
KSH *es*P **sP** **12 51 40.3 +0.2**
KSH S **ScP** **12 57 19.3 +4.8**
KSH SS SS 13 00 06.4 -15
KSH ScS **ScS** **13 01 24.4 -3.0**
KSH PMZ
comp=Z,93nm,2.5s
KSH LN
comp=Z,110nm,7.2s
KSH LE
comp=Z,130nm,4.9s
KSH LZ
comp=Z,390nm,18.2s
**KDU Kakadu 40.28 114** P **P** **12 51 26.6 -1.0**
baz=40,SNR=3.8
**WMQ Urumqi 40.53 351** P **P** **12 51 28.5 -0.8**
**WMQ Urumqi 40.53 351** P **P** **12 51 30.0 +0.7**
WMQ pP **pP** **12 51 43.0 +1.8**
WMQ sP **sP** **12 51 50.0 +3.7**
WMQ PP **PnPn** **12 53 09.0 +1.5**
WMQ PcP **PcP** **12 53 33.0 +1.8**
WMQ ScP **ScP** **12 57 17.0 -0.4**
WMQ S **S** **12 57 38.0 +2.4**
WMQ SS **SS** **13 00 32.0 -4.5**
WMQ PMZ
comp=Z,12nm,1.0s
WMQ PMZ
comp=Z,90nm,4.5s
WMQ LN
comp=Z,290nm,16.0s
WMQ LE
comp=Z,360nm,18.0s
WMQ LZ
comp=Z,270nm,16.0s
**BJT Baijiatuau 40.75 25** *e*P **P** **12 51 32.3 +1.1**
BJT pmax pmax
comp=Z,55nm,0.8s
**BJT Baijiatuau 40.75 25** *e*P **P** **12 51 32.3 +1.1**
comp=Z,55nm,0.8s
**BJI Beijing 40.77 25** P **P** **12 51 32.3 +1.0**
BJI pP **pP** **12 51 43.1 -0.1**
BJI PP **PnPn** **12 53 12.0 +1.7**
BJI PMZ
comp=Z,30nm,0.8s
BJI PMZ
comp=Z,110nm,3.5s
BJI LN
comp=Z,200nm,13.4s
BJI LE
comp=Z,430nm,17.3s
BJI LZ
comp=Z,230nm,26.9s
**KLBR Kellerberrin 41.05 150** P **P** **12 51 32.7 -1.0**
baz=41,SNR=6.6
**SFK Sufi-Kurgan 41.21 334** P **P** **12 51 36.1 +0.9**
SFK pmax pmax
comp=Z,52nm,0.9s
**NWAO Narrogin (SRO) 41.90 152** P **P** **12 51 39.5 -1.1**
comp=Z,7.5nm,0.7s,baz=41,slow=0.2,SNR=8.0
**PDGK Podgornoye 41.91 343** P **P** **12 51 40.8 +0.3**
PDGK pmax pmax
comp=Z,22nm,0.6s
**H01W3 Cape Leeuwin H 42.24 157** T T 13 36 32.1
baz=332,slow=76,SNR=12
**H01W2 Cape Leeuwin H 42.25 157** T T 13 36 18.7
baz=332,slow=76,SNR=11
**H01W1 Cape Leeuwin H 42.25 157** T T 13 36 14.8
baz=332,slow=76,SNR=11
**DZET Dzherino 42.48 329** P **P** **12 51 45.0 -0.5**
DZET pmax pmax
comp=Z,14nm,0.9s
**UCH Uchtor 42.65 337** P **P** **12 51 48.0 +0.7**
SNR=16
**TKM2 Tokmak 2 42.84 339** *i*P **P** **12 51 49.0 +0.6**
TKM2 pmax pmax
comp=Z,11nm,0.8s
**TKM2 Tokmak 2 42.84 339** P **P** **12 51 49.3 +0.9**
SNR=12
**TKM2 Tokmak 2 42.84 339** *e*P **P** **12 51 49.3 +0.9**
comp=Z,37nm,1.1s
**KBK Karagaybulak 42.85 338** P **P** **12 51 49.7 +1.2**
SNR=17
**AML Almayashu 42.89 336** P **P** **12 51 49.9 +0.8**
SNR=14
**AAK Ala-Archa 43.00 337** P **P** **12 51 50.7 +1.0**
comp=Z,4.8nm,0.6s,baz=129,slow=3.9,SNR=13
**AAK Ala-Archa 43.00 337** ⇓*e*P **P** **12 51 50.5 +0.8**
AAK pmax pmax
comp=Z,23nm,0.8s
**AAK Ala-Archa 43.00 337** P **P** **12 51 51.2 +1.4**
comp=Z,78nm,0.8s,SNR=7.0
**AAK Ala-Archa 43.00 337** P **P** **12 51 51.1 +1.4**
SNR=8.9
**AAK Ala-Archa 43.00 337** *e*P **P** **12 51 51.1 +1.4**
comp=Z,4.0nm,0.6s
**FRU Bishkek 43.13 338** *e*P **P** **12 51 50.5 -0.1**
FRU *i* 12 52 06.0
FRU *e* 12 58 15.0
**EKS2 Erkin-Say 43.31 337** *e*P **P** **12 51 53.2 +1.1**
EKS2 pmax pmax
comp=Z,19nm,0.8s
**EKS2 Erkin-Say 43.31 337** P **P** **12 51 53.4 +1.3**
SNR=15
**EKS2 Erkin-Say 43.31 337** *e*P **P** **12 51 53.2 +1.1**
comp=Z,19nm,0.8s
**USP Ospenovka 43.54 338** P **P** **12 51 54.3 +0.4**
SNR=22
**SMPI Sarmi 43.67 97** P **P** **12 51 55.1 -0.3**
comp=Z,15nm,0.9s,comp=Z,7µm
**MNAS Manas 43.68 335** P **P** **12 51 55.8 +0.7**
MNAS pmax pmax
comp=Z,41nm,1.6s
**TJN Taejon 43.87 38** ⇑*i*P **P** **12 51 56.1 -0.4**
**JNU Nakatsue 44.22 44** P **P** **12 51 58.2 -1.3**
comp=Z,10.0nm,0.7s,baz=100,slow=1.9,SNR=7.6
**JNU Nakatsue 44.22 44** *e*P **P** **12 51 59.3 -0.2**
JNU *ep*P **pP** **12 52 11.2 -0.3**
**MK31 Makanchi Array 44.41 347** P **P** **12 52 00.3 -0.5**
MK31 pmax pmax
comp=Z,14nm,0.5s
**MKAR Makanchi Array 44.41 347** P **P** **12 52 00.3 -0.4**
comp=Z,7.0nm,0.4s,baz=160,slow=8.3,SNR=81
MKAR LR LR 13 14 41.3
comp=Z,179nm,19.3s,baz=162,slow=42
**KSAR Wonju Array Be 44.87 37** P **P** **12 52 03.9 -0.7**
KSAR *PP **pP** **12 52 14.3 -2.3**
**KSAR Wonju Array Be 44.87 37** P **P** **12 52 03.9 -0.7**
KSAR pP **pP** **12 52 14.3 -2.3**
**KSRS Korea Array 44.90 37** P **P** **12 52 03.9 -1.0**
comp=Z,7.6nm,0.6s,baz=229,slow=8.5,SNR=24
KSRS pP **pP** **12 52 14.3 -2.5**
comp=Z,15nm,0.8s,baz=224,slow=8.7,SNR=19
KSRS LR LR 13 13 16.6
comp=Z,396nm,18.4s,baz=240,slow=39
**WRA Warramunga Arr 44.90 123** P **P** **12 52 04.9 -0.2**
comp=Z,9.6nm,0.5s,baz=301,slow=9.1,SNR=85
WRA LR LR 13 11 29.1
comp=Z,220nm,20.5s,baz=165,slow=37
**WRAB Tennant Creek 44.91 123** ⇓*i*P **P** **12 52 04.6 -0.5**
WRAB pmax pmax
comp=Z,83nm,1.0s
**WRAB Tennant Creek 44.91 123** P **P** **12 52 05.0 -0.2**
comp=Z,164nm,0.7s,SNR=53
**WRAB Tennant Creek 44.91 123** *e*P **P** **12 52 05.0 -0.2**
comp=Z,22nm,0.6s
WRAB *ep*P **pP** **12 52 16.5 -0.6**
**SONM Songino Array 44.98 10** P **P** **12 52 04.6 -0.9**
comp=Z,7.5nm,0.7s,baz=189,slow=8.5,SNR=38
SONM pP **pP** **12 52 15.9 -1.5**

comp=Z,9.7nm,0.6s,baz=192,slow=8.6,SNR=9.4
SONM PcP **PcP** **12 53 46.7 +0.6**
comp=Z,4.7nm,0.6s,baz=192,slow=3.7,SNR=8.1
SONM LR LR 13 12 55.6
comp=Z,318nm,19.0s,baz=190,slow=39
**KKAR Karatay Array 45.03 334** *e*P **P** **12 52 06.4 +0.6**
KKAR *e**PP **pP** **12 52 19.8 +2.0**
KKAR pmax pmax
comp=Z,10.0nm,0.6s
**KKAR Karatay Array 45.03 334** *e*P **P** **12 52 06.4 +0.6**
comp=Z,10nm,0.6s
KKAR *ep*P **pP** **12 52 19.8 +2.0**
**ULN Ulaanbaatar 45.13 11** *e*P **P** **12 52 05.5 -1.2**
ULN *e**PP **pP** **12 52 17.0 -1.7**
**ULN Ulaanbaatar 45.13 11** *e*P **P** **12 52 05.5 -1.2**
ULN *ep*P **pP** **12 52 16.9 -1.7**
**GENI Genyem 45.20 97** P **P** **12 52 08.4 +0.9**
comp=Z,64nm,0.8s
**SNY Shenyang 45.58 30** ⇓P **P** **12 52 09.8 -0.3**
SNY PMZ
comp=Z,38nm,0.5s
SNY LN
comp=Z,460nm,17.4s
SNY LE
comp=Z,410nm,18.6s
SNY LZ
comp=Z,500nm,18.3s
**JAY Jayapura 45.72 97** P **P** **12 52 10.0 -1.8**
baz=46,SNR=6.3
**ASAR Alice Springs 46.35 128** P **P** **12 52 16.4 -0.2**
comp=Z,5.2nm,0.5s,baz=294,slow=7.8,SNR=49
ASAR PcP **PcP** **12 53 51.5 +0.3**
comp=Z,2.3nm,0.6s,baz=298,slow=4.1,SNR=3.0
ASAR LR LR 13 14 33.9
comp=Z,261nm,19.8s,baz=306,slow=40
**IBAF Bafgh 46.56 311** *e*P **P** **12 52 17.8 -0.4**
**ZAK Zakamensk 46.99 7** *e*P **P** **12 52 18.4 -2.8**
ZAK *e* 12 53 53.4
**HVS Khovu-Aksy 47.29 359**⇑ *i*P **P** **12 52 22.6 -0.9**
HVS pmax pmax
comp=Z,27nm,1.2s
**CN2 Changchun 47.97 29** *e*P P 12 52 32.0 +3.2
CN2 *es*P sP 12 52 51.0 +5.1
CN2 *eS* **S** **12 59 26.3 +2.7**
CN2 PMZ
comp=Z,10.0nm,0.8s
CN2 PMZ
comp=Z,200nm,4.0s
CN2 LN
comp=Z,700nm,17.0s
CN2 LE
comp=Z,800nm,17.0s
CN2 LZ
comp=Z,1μm,19.0s
**GEYT Alibeck 48.14 320** P **P** **12 52 30.8 +0.5**
comp=Z,9.0nm,0.8s,baz=147,slow=8.8,SNR=12
GEYT pP **pP** **12 52 43.0 +0.7**
comp=Z,18nm,0.7s,baz=142,slow=7.5,SNR=12
GEYT LR LR 13 14 38.1
comp=Z,212nm,19.8s,baz=140,slow=38
**TLY Talaya 48.31 7** *e*P **pP** **12 52 44.7 +1.2**
TLY *eS* S 12 59 40.7 +12
TLY *eSS* ScS 13 02 11.9 -8.7
TLY pmax pmax
comp=Z,13nm,1.0s
TLY MLR MLR
comp=Z,328nm,21.0s
**OTUK Ortayu 48.58 340** P **P** **12 52 33.1 -0.4**
OTUK pmax pmax
comp=Z,35nm,0.9s
**KURBB Kurchatov Arra 48.87 346** P **P** **12 52 35.5 -0.1**
comp=Z,18nm,0.7s,baz=167,slow=6.9,SNR=226
KURBB PcP **PcP** **12 54 00.5 +0.9**
comp=Z,4.5nm,0.8s,baz=150,slow=2.9,SNR=4.0
**KURK Kurchatov 48.93 346** *e*P **P** **12 52 36.0 -0.1**
KURK 12 54 00.5
**KURK Kurchatov 48.93 346** P **P** **12 52 36.4 +0.3**
comp=Z,154nm,0.7s,SNR=15
**KURK Kurchatov 48.93 346** *e*P **P** **12 52 36.0 -0.1**
KURK PcP **PcP** **12 54 00.5 +0.7**
**QIS Mount Isa 49.63 121** P **P** **12 52 41.3 -0.6**
baz=50,SNR=12
**HIA Hailar 49.91 21** *e*P **P** **12 52 43.3 -0.4**
HIA *e**PP **pP** **12 52 55.9 +0.1**
HIA pmax pmax
comp=Z,36nm,1.0s
**HIA Hailar 49.91 21** *e*P **P** **12 52 43.3 -0.4**
comp=Z,36nm,1.0s
HIA *ep*P **pP** **12 52 55.9 +0.1**
**IKLH Kolahrood 50.35 311** *e*P **P** **12 52 47.8 +0.3**
**COEN Coen 50.54 111** P **P** **12 52 47.6 -1.3**
baz=50,SNR=14
**COEN Coen 50.54 111** *e*P **P** **12 52 48.0 -0.9**
comp=Z,3.6nm,0.5s
COEN *e*PcP **PcP** **12 54 07.2 +0.7**
**MDJ Mudanjiang 50.63 31** P **P** **12 52 50.1 +1.0**
MDJ pP **pP** **12 53 02.3 +1.0**
MDJ sP **sP** **12 53 05.8 -0.5**
MDJ PP **PP** **12 54 42.1 -3.3**
MDJ PMZ
comp=Z,24nm,0.8s
MDJ PMZ
comp=Z,71nm,6.5s
MDJ LN
comp=Z,150nm,27.0s
MDJ LE
comp=Z,120nm,21.6s
MDJ LZ
comp=Z,220nm,19.8s
**MDJ Mudanjiang 50.63 31** *e*P **P** **12 52 49.5 +0.3**
comp=Z,4.7nm,0.6s
MDJ *ep*P **pP** **12 53 01.5 +0.2**
**ZALV Zalesovo Beam 50.83 352** P **P** **12 52 50.1 -0.4**
comp=Z,44nm,0.6s,baz=182,slow=7.1,SNR=111
ZALV S **S** **13 00 01.7 -1.7**
comp=Z,3.0nm,0.8s,baz=174,slow=19,SNR=12
ZALV LR LR 13 18 33.7
comp=Z,240nm,20.1s,baz=246,slow=41
**ZALV Zalesovo Beam 50.83 352** *i* P **P** **12 52 50.0 -0.4**
ZALV pmax pmax
comp=Z,46nm,0.6s
**MAJO Matsushiro 51.14 45**⇑ *i*P **P** **12 52 53.1 0.0**
MAJO pmax pmax
comp=Z,162nm,1.2s
**MAJO Matsushiro 51.14 45** *e*P **P** **12 52 52.6 -0.5**
comp=Z,9.3nm,0.6s
**MAT Matsushiro 51.14 45** P **P** **12 52 51.7 -1.4**
MAT *eS* **S** **13 00 07.8 -0.5**
**MJAR Matsushiro Arr 51.14 45** P **P** **12 52 52.0 -1.1**
comp=Z,7.0nm,0.7s,baz=238,slow=7.8,SNR=22
MJAR PcP **PcP** **12 54 09.1 +0.8**
comp=Z,3.4nm,0.9s,baz=244,slow=5.1,SNR=2.9
MJAR LR LR 13 16 15.4
comp=Z,306nm,19.5s,baz=255,slow=38
**USRK Ussuriysk Ar. 51.63 33** P **P** **12 52 56.3 -0.3**
comp=Z,13nm,0.6s,baz=232,slow=6.0,SNR=24
USRK pP **pP** **12 53 07.8 -1.0**
comp=Z,17nm,0.9s,baz=236,slow=5.3,SNR=7.6
USRK LR LR 13 17 17.2
comp=Z,546nm,19.1s,baz=213,slow=39
**NVS Novosibirsk 51.93 351**⇑ *i*P **P** **12 52 57.6 -1.0**
NVS *eS* **S** **13 00 16.2 -2.3**
NVS pmax pmax
comp=N,24nm,1.0s
NVS pmax pmax
comp=E,14nm,1.0s
NVS pmax pmax
comp=Z,31nm,1.0s
NVS smax smax
comp=N,18nm,1.5s
NVS smax smax
comp=E,23nm,1.5s
**MANU Manus Island 52.27 95** P **P** **12 53 02.2 +0.3**
baz=52
**OPO Ambohidratompo 52.36 243** P **P** **12 53 02.4 -0.2**
comp=E,9.7nm,1.1s,baz=86,slow=4.2,SNR=6.7
**VOSK Vostochnaya 52.87 342** *i* P **P** **12 53 04.8 -0.9**
VOSK pmax pmax
comp=Z,29nm,0.8s
**MTSU Mount Surprise 52.87 116** P **P** **12 53 06.5 +0.2**
baz=53,SNR=21
**PMG Port Moresby 53.21 105** *c i*P **P** **12 53 08.7 -0.1**
**PMG Port Moresby 53.21 105** *e*P **P** **12 53 08.9 0.0**
comp=Z,54nm,0.8s
**BVA0 Borovoye Array 53.31 341** *e*P **P** **12 53 08.0 -0.9**
BVA0 pmax pmax
comp=Z,26nm,0.8s
**BRVK Borovoye 53.38 341**⇑ *e*P **P** **12 53 08.9 -0.5**
BRVK pmax pmax
comp=Z,7.0nm,0.6s
**BRVK Borovoye 53.38 341** P **P** **12 53 09.7 +0.3**
comp=Z,147nm,0.8s,SNR=5.5
**BRVK Borovoye 53.38 341** *e*P **P** **12 53 08.7 -0.7**
comp=Z,23nm,0.8s
**ZRNK Zerenda 53.70 341** *i* P **P** **12 53 11.0 -0.8**
ZRNK pmax pmax
comp=Z,25nm,1.3s
**CHKZ Chkalovo 53.80 342** *i* P **P** **12 53 12.0 -0.4**
CHKZ pmax pmax
comp=Z,50nm,0.9s
**AB31 Akbulak array 54.47 332** *i* P **P** **12 53 17.3 -0.1**
AB31 pmax pmax
comp=Z,9.0nm,0.4s
**ABKAR Akbulak array 54.47 332** *e*P **P** **12 53 17.1 -0.3**
comp=Z,26nm,0.7s
ABKAR *ep*P **pP** **12 53 30.0 +0.3**
**KLR Kul'dur 54.89 28** *e*P P 12 53 17.2 -3.3
KLR *e* 12 53 25.8
KLR *e* 13 01 17.5
KLR pmax pmax
comp=E,43nm,1.2s
KLR pmax pmax
comp=Z,77nm,1.2s
KLR MLR MLR
comp=Z,800nm,12.0s
**BOD Bodaibo 55.93 12** *e*P **P** **12 53 27.0 -0.8**
BOD pmax pmax
comp=Z,20nm,1.1s
**QLP Quilpie 55.98 126** P **P** **12 53 29.6 +0.9**
baz=56,SNR=12
**HABR Khabarovsk 56.01 31** *e*P **P** **12 53 25.8 -2.7**
HABR *e**PP **pP** **12 53 37.2 -3.6**
HABR *e**SP **sP** **12 53 42.2 -3.6**
HABR *e* 12 54 23.7
HABR *e* 12 55 30.6
HABR *e*PPP PPP 12 56 44.6
HABR *eS* **S** **13 01 11.2 -2.6**
HABR *e**SS **sS** **13 01 31.0 -3.3**
HABR *e* 13 03 11.0
HABR *eSS* **SS** **13 04 58.5 -2.0**
HABR pmax pmax
comp=N,32nm,2.3s
HABR pmax pmax
comp=E,77nm,2.3s
HABR pmax pmax
comp=Z,44nm,2.3s
HABR MLR MLR
comp=Z,311nm,19.0s
**AKTO Aktyubinsk 56.19 332** P **P** **12 53 28.3 -1.5**
AKTO pmax pmax
comp=Z,25nm,1.0s
**ASAJ Asahikawa 57.81 39** P **P** **12 53 41.3 -0.1**
comp=Z,15nm,0.8s,baz=274,slow=13,SNR=7.6
**KMBO Kilima Mbogo 58.29 266** P **P** **12 53 46.9 +1.3**
comp=Z,6.4nm,0.7s,baz=66,slow=9.9,SNR=15
KMBO LR LR 13 16 40.0
comp=Z,436nm,18.6s,baz=97,slow=34
**KMBO Kilima Mbogo 58.29 266** P **P** **12 53 46.7 +1.1**
baz=58
**KMBO Kilima Mbogo 58.29 266** *e*P **P** **12 53 46.7 +1.1**
comp=Z,7.8nm,0.9s
**CMSA Cobar Meteorol 59.28 130** P **P** **12 53 52.5 +0.6**
baz=59,SNR=32
**YSS Yuzh-Sakhalins 59.36 36**⇑ *e*P **P** **12 53 52.0 -0.1**
YSS *e* 12 54 04.0
YSS pmax pmax
comp=Z,70nm,1.1s
**YSS Yuzh-Sakhalins 59.36 36** *e*P **P** **12 53 52.6 +0.5**
comp=Z,57nm,1.1s
YSS *ep*P **pP** **12 54 04.1 -0.4**
**RMQ Roma 59.66 124** P **P** **12 53 56.0 +1.4**
baz=60,SNR=5.0
**SVE Sverdlovsk 59.71 339**⇑ *i*P **P** **12 53 54.3 -0.1**
SVE *e* 12 56 06.9
SVE pmax pmax
comp=Z,23nm,0.8s
SVE MLR MLR
comp=Z,473nm,23.0s
**ARU Arti 60.19 337** *d i*P **P** **12 53 57.0 -0.6**
ARU 12 56 16.6
ARU S S 13 02 01.9 -6.3
ARU pmax pmax
comp=Z,15nm,1.7s
**ARU Arti 60.19 337** *e*P **P** **12 53 57.0 -0.6**
comp=Z,9.4nm,0.8s
**KBZ Khabaz 61.01 319** P **P** **12 54 04.2 +0.8**
comp=Z,4.2nm,0.8s,baz=171,slow=6.8,SNR=5.7
KBZ LR LR 13 24 24.6
comp=Z,88nm,20.6s,baz=119,slow=40
**YNG Young 62.54 132** P **P** **12 54 14.3 +0.3**
baz=62
**EIL Elat 62.60 302** P **P** **12 54 15.3 +0.8**
baz=63,SNR=3.6
**PATS Pohnpei 62.71 84** P **P** **12 54 16.3 +0.8**
baz=63
**YAK Yakutsk 63.56 17** P **P** **12 54 19.0 -1.1**
comp=Z,4.9nm,0.3s,baz=45,slow=20,SNR=7.5
**YAK Yakutsk 63.56 17** *c i*P **P** **12 54 19.2 -1.0**
YAK pmax pmax
comp=Z,58nm,1.2s
YAK pmax pmax
comp=N,11nm,1.0s
YAK pmax pmax
comp=E,18nm,1.4s
YAK MLR MLR
comp=E,358nm,21.0s
YAK MLR MLR
comp=N,434nm,16.0s
YAK MLR MLR
comp=Z,679nm,16.0s
**YAK Yakutsk 63.56 17** *e*P **P** **12 54 19.5 -0.7**
comp=Z,33nm,0.6s
**VRH Novokhopyorsk 65.05 326** *e*P **P** **12 54 29.2 -0.9**
VRH pmax pmax
comp=N,20nm,0.6s
VRH pmax pmax
comp=Z,20nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.5s
**BRTR Keskin Array B 66.10 312** P **P** **12 54 36.5 -0.9**
comp=E,2.4nm,0.9s,baz=137,slow=6.4,SNR=7.0
BRTR LR LR 13 25 06.5
comp=E,103nm,21.9s,baz=108,slow=37
**BRTR Keskin Array B 66.10 312** *ce*P **P** **12 54 37.2 -0.2**
**VORD Divnogorie 66.31 325** *e*P **P** **12 54 38.4 +0.1**
VORD pmax pmax
comp=Z,80nm,0.6s
VORD pmax pmax
comp=N,20nm,0.4s
VORD pmax pmax
comp=E,320nm,1.0s
**VSR Storozhevoye 66.49 325** *e*P **P** **12 54 39.5 0.0**
VSR pmax pmax
comp=Z,9.0nm,0.6s
VSR pmax pmax
comp=N,10.0nm,0.7s
VSR pmax pmax
comp=E,10.0nm,1.1s
**LPSR Galich'ya Gora 67.22 327** *e*P **P** **12 54 43.4 -0.7**
LPSR pmax pmax
comp=Z,9.0nm,0.9s
LPSR pmax pmax
comp=N,5.0nm,1.1s
LPSR pmax pmax
comp=E,5.0nm,1.0s
**MOS Moscow 69.27 329** *e*P P 12 55 03.9 +7.1
**OBN Obninsk 69.55 328** *e*P **P** **12 54 56.6 -1.9**
OBN pmax pmax
comp=Z,15nm,0.4s
**PETK Petropavlovsk- 70.69 34** P **P** **12 55 03.2 -2.5**
comp=Z,3.1nm,1.0s,baz=243,slow=3.8,SNR=4.2
PETK LR LR 13 27 38.2
comp=Z,206nm,19.7s,baz=231,slow=37
**KLMR Klimovskoe 70.73 335** *e*P P 12 55 01.6 -4.1
KLMR pmax pmax
comp=Z,35nm,1.4s
**TIRR Tirgusor 71.08 316**⇑ *i*P P 12 55 18.0 +10
**TLB Topalu 71.36 316**⇑ *i*P pP 12 55 22.5 0.0
**HARR Harsova 71.46 316**⇓ *i*P pP 12 55 21.4 -1.7
**AKASG Malin Array Be 72.18 322** P **P** **12 55 13.2 -1.4**
comp=Z,1.7nm,0.5s,baz=92,slow=4.9,SNR=11
AKASG LR LR 13 32 15.4
comp=Z,92nm,18.1s,baz=80,slow=40
**KIEV Kiev 72.19 322** *e*P **P** **12 55 15.4 +0.7**
KIEV pmax pmax
comp=Z,12nm,1.4s
**KIEV Kiev 72.19 322** *e*P **P** **12 55 15.2 +0.5**
comp=Z,8.5nm,0.6s
**SEY Seymchan 72.20 24**⇑ *i*P **P** **12 55 13.2 -1.3**
**VRI Vrincioaia 72.56 317**⇑ *i*P **P** **12 55 17.3 +0.2**
**PLOR Plostina 72.61 317**⇓ *i*P **P** **12 55 18.7 +1.3**
**TESR Tescani 72.76 318**⇑ *i*P **P** **12 55 18.2 0.0**
**MLR Muntele Rosu 73.02 316**⇑ *i*P P 12 55 29.7 +10
**DOPR Dopca 73.50 317**⇓ *i*P pP 12 55 36.7 +1.4
**BURAR Bucovina Array 73.96 319**⇓ *i*P **P** **12 55 28.5 +3.1**
**BOSA Boshof 74.47 239** P **P** **12 55 28.6 -0.2**
comp=Z,2.5nm,0.6s,baz=89,slow=4.9,SNR=6.4
BOSA LR LR 13 25 37.8
comp=Z,270nm,18.6s,baz=56,slow=34
**BOSA Boshof 74.47 239** P **P** **12 55 28.8 +0.1**
baz=74,SNR=3.8
**MAW Mawson 74.74 192** P **P** **12 55 29.9 +0.7**
comp=Z,1.6nm,0.7s,baz=63,slow=2.9,SNR=8.2
MAW LR LR 13 23 04.1
comp=Z,103nm,18.1s,baz=58,slow=31
**LVV L'vov 75.19 321** *e*P P 12 55 41.3 +8.9
**DRGR 75.47 317**⇑ *i*P P 12 55 37.5 +3.4
**KWP Kalwaria Pacla 76.00 320** *e*P P 12 55 47.8 +11
**KWP Kalwaria Pacla 76.00 320** *e*P pP 12 55 47.9 -1.9
**APA Apatity 76.17 340**⇑ *i*P P 12 55 47.0 +9.5
APA MLR MLR
comp=Z,2μm,15.0s
**SUW Suwalki 76.60 325** *e*P P 12 55 45.3 +5.0
**SUW Suwalki 76.60 325** *e*P P 12 55 45.4 +5.1
**DIVS Divibare 76.95 314**⇓ *i*P **P** **12 55 42.5 -0.1**
**FINES FINESS Array B 76.96 333** P **P** **12 55 41.7 -0.4**
comp=Z,5.7nm,0.6s,baz=108,slow=6.1,SNR=25
FINES LR LR 13 33 16.7
comp=Z,270nm,21.8s,baz=98,slow=38
**NIE Niedzica 77.51 320** *e*P pP 12 55 58.0 -0.3
**NIE Niedzica 77.51 320** *e*P pP 12 55 58.1 -0.3
**PSZ Piszkesteto 77.55 318** *e*P **P** **12 55 46.9 +1.1**
PSZ pmax pmax
comp=Z,11nm,0.7s
**PSZ Piszkesteto 77.55 318**⇑ *i*P P 12 55 55.6 +10
**PSZ Piszkesteto 77.55 318** *e*P **P** **12 55 46.9 +1.1**
comp=Z,11nm,0.7s
**OJC Ojcow 77.95 320** *e*P pP 12 55 58.6 -2.2
**OJC Ojcow 77.95 320** *e*P pP 12 55 58.7 -2.1
**OKC Ostrava-Krasne 78.95 320** *e*P pP 12 56 04.4 -1.9
**OKC Ostrava-Krasne 78.95 320** *ep*P pP 12 56 04.4 -1.9
**MORC Moravsky Berou 79.33 320** *e*P **P** **12 55 55.4 -0.2**
MORC pmax pmax
comp=Z,64nm,1.1s
**MORC Moravsky Berou 79.33 320**⇑ *i*P **P** **12 55 55.9 +0.3**
**MORC Moravsky Berou 79.33 320** *e*P **P** **12 55 55.4 -0.2**
comp=Z,64nm,1.1s
**ARCES ARCESS Array B 79.59 340** P **P** **12 55 55.8 -0.8**
comp=Z,4.1nm,0.6s,baz=96,slow=5.6,SNR=12
ARCES LR LR 13 33 50.5
comp=Z,191nm,20.4s,baz=87,slow=38
**KRLC Kraliky 79.86 320** *e*P **P** **12 55 59.6 +1.1**
KRLC *e* 12 56 09.4
**KRLC Kraliky 79.86 320** *e*P **P** **12 55 59.6 +1.1**
KRLC *ep*P **pP** **12 56 09.4 -1.9**
**DPC Dobruska-Polom 80.18 320** *e*P **P** **12 56 01.3 +1.1**
DPC *e* 12 56 11.2
**DPC Dobruska-Polom 80.18 320** *e*P **P** **12 56 01.3 +1.1**
DPC *ep*P **pP** **12 56 11.2 -1.9**
**PRU Pruhonice 81.29 320** *e*P **P** **12 56 07.8 +1.7**
PRU *e* 12 56 21.0
**PRU Pruhonice 81.29 320** *e*P **P** **12 56 07.8 +1.7**
PRU *ep*P **pP** **12 56 21.0 +2.1**
**BRG Berggiesshubel 81.74 321** *e*P **P** **12 56 09.8 +1.4**
comp=Z,3.2nm,0.7s
BRG *e* 12 56 20.6
comp=Z,13nm,1.3s
**BRG Berggiesshubel 81.74 321** *e*P **P** **12 56 09.8 +1.4**
BRG *e* 12 56 20.6
BRG pmax pmax
comp=Z,3.0nm,0.7s
**GERES GERESS Array B 81.75 319** P **P** **12 56 09.2 +0.5**
comp=Z,3.4nm,0.8s,baz=96,slow=5.9,SNR=21
GERES pP **pP** **12 56 20.8 -0.8**
comp=Z,12nm,0.8s,baz=97,slow=5.8,SNR=17
GERES LR LR 13 37 18.0
comp=Z,73nm,19.3s,baz=91,slow=39
**SYO Syowa Base 81.81 198**⇑ *e*P **P** **12 56 10.0 +1.6**
**KHC Kasperske Hory 81.85 319** *e*P **P** **12 56 10.1 +1.0**
**KHC Kasperske Hory 81.85 319** *e*P **P** **12 56 10.2 +1.0**
KHC *ep*P **pP** **12 56 20.7 -1.3**
**KHC Kasperske Hory 81.85 319** *e*P **P** **12 56 10.1 +1.0**
comp=Z,1.0nm,0.8s
**CLL Collm 82.36 321** *e*P P 12 56 15.0 +3.3
CLL *i* 12 56 26.2
**CLL Collm 82.36 321** *i* pP **pP** **12 56 26.2 +1.6**
comp=Z,7.0nm,1.1s
CLL *e* 12 56 41.0
CLL LmV 13 39 00.0
comp=Z,100nm,19.9s
**NB2 NORSAR Subarra 83.95 331** P **P** **12 56 19.5 -0.3**
comp=Z,5.5nm,1.1s,baz=97,slow=5.9
**NOA NORSAR Array B 83.95 331** P **P** **12 56 19.0 -0.7**
comp=Z,1.5nm,0.8s,baz=97,slow=5.4,SNR=4.6
NOA LR LR 13 36 55.6
comp=Z,131nm,21.0s,baz=105,slow=38
**SPITS Spitsbergen Ar 84.15 348** LR LR 13 38 42.5
comp=Z,234nm,21.9s,baz=120,slow=39
**KEST Kesra 84.64 305** P **P** **12 56 25.1 +1.3**
comp=Z,4.8nm,0.8s,baz=330,slow=2.7,SNR=5.2
**VNDA Vanda 88.62 168** P **P** **12 56 42.7 +0.4**
comp=Z,1.0nm,1.0s,baz=330,slow=5.1,SNR=4.7
VNDA LR LR 13 31 47.3
comp=Z,80nm,18.7s,baz=296,slow=32
**JMIC Jan Mayen 91.03 341** LR LR 13 40 03.1
comp=Z,48nm,21.3s,baz=73,slow=37
**TORD Torodi Ar. Bea 92.75 283** P **P** **12 57 03.0 +0.2**
comp=Z,1.0nm,0.9s,baz=73,slow=6.6,SNR=5.5
TORD PP **PP** **13 00 46.1 +0.8**
comp=Z,0.7nm,1.0s,baz=90,slow=5.8,SNR=3.9
TORD LR LR 13 38 38.8
comp=Z,146nm,18.6s,baz=95,slow=35
**ESDC Sonseca Array 94.83 310** pP **pP** **12 57 24.3 -0.8**
comp=Z,0.4nm,0.4s,baz=64,slow=4.6,SNR=2.8
ESDC LR LR 13 43 44.6
comp=Z,51nm,19.5s,baz=185,slow=38
**BORG Borgarnes 97.73 337** LR LR 13 43 56.8
comp=Z,128nm,21.0s,baz=111,slow=37
**ILAR Eielson Array 98.11 23** P **P** **12 57 24.4 -1.8**
comp=Z,0.4nm,0.7s,baz=292,slow=3.6,SNR=6.4
ILAR PP **PP** **13 01 20.2 -5.1**
comp=Z,0.6nm,0.9s,baz=274,slow=6.1,SNR=4.4
ILAR LR LR 13 44 22.9
comp=Z,82nm,19.0s,baz=310,slow=37
**DBIC Dimbokro 99.72 277** LR LR 13 41 19.9
comp=Z,233nm,20.0s,baz=70,slow=34
**EGMT Eagleton 123.98 20** P **PKPdf** **13 02 48.7 +0.5**
baz=124
**EGMT Eagleton 123.98 20** *e*PKPdf **PKPdf** **13 02 48.8 +0.6**
**BOZ Bozeman (W) 125.31 23** P **PKPdf** **13 02 51.3 +0.4**
baz=125
**ULM Lac du Bonnet 125.39 9** PKP **PKPdf** **13 02 50.8 +0.1**
comp=Z,3.3nm,0.6s,baz=63,slow=2.3,SNR=3.8
**HLID Hailey 125.84 26** P **PKPdf** **13 02 52.7 +0.7**
baz=126
**HLID Hailey 125.84 26** *e*PKPdf **PKPdf** **13 02 52.7 +0.7**
HLID *ep*PKPdf **pPKPdf** **13 03 07.1 +1.7**
**LAO LASA Array 126.31 18** P **PKPdf** **13 02 53.8 +1.1**
baz=126
**LAO LASA Array 126.31 18** *e*PKPdf **PKPdf** **13 02 53.9 +1.2**
LAO *ep*PKPdf **pPKPdf** **13 03 05.8 -0.3**
**A33A Warroad 126.75 9** P **PKPdf** **13 02 53.8 +0.5**
baz=127
**REDW Red Top Meadow 127.52 24** *e*PKPdf **PKPdf** **13 02 56.5 +1.2**
REDW *ep*PKPdf **pPKPdf** **13 03 10.7 +1.9**
**NVAR Mina Array Bea 127.77 33** PKP **PKPdf** **13 02 56.5 +0.6**
comp=Z,2.6nm,0.9s,baz=285,slow=1.7,SNR=19
NVAR pPKP **pPKPdf** **13 03 09.0 -0.4**
comp=Z,3.3nm,1.0s,baz=269,slow=1.8,SNR=7.7
**EYMN Ely 128.22 6** P **PKPdf** **13 02 56.9 +0.7**
baz=128
**BW06 Boulder Array 128.53 23** *e*PKPdf **PKPdf** **13 02 57.2 0.0**
BW06 *ep*PKPdf **pPKPdf** **13 03 09.2 -1.5**
**D34A Park Rapids 128.58 9** P **PKPdf** **13 02 57.0 +0.1**
baz=128
**G26A Maurine 128.65 16** P **PKPdf** **13 02 57.5 +0.3**
baz=128

| | | | | | | |
|---|---|---|---|---|---|---|
| **DUG** | **Dugway** | **129.24** | **28** | *e*PKIKP | **PKPdf** | **13 03 00.2 +1.6** |
| DUG | | | | *e* | | 13 03 12.0 |
| **DUG** | **Dugway** baz=129 | **129.24** | **28** | P | **PKPdf** | **13 02 59.8 +1.3** |
| **DUG** | **Dugway** | **129.24** | **28** | *e*PKPdf | **PKPdf** | **13 03 00.2 +1.6** |
| DUG | | | | *ep*PKPdf | **pPKPdf** | **13 03 12.0 0.0** |
| **R11A** | **Troy Canyon, C** baz=129 | **129.29** | **32** | P | **PKPdf** | **13 02 59.9 +1.1** |
| **R11A** | **Troy Canyon, C** | **129.29** | **32** | *e*PKPdf | **PKPdf** | **13 02 59.9 +1.1** |
| **MPMC** | **Manual Prospec** baz=130 | **129.91** | **35** | P | **PKPdf** | **13 03 01.4 +1.3** |
| **F36A** | **Milaca** baz=130 | **130.02** | **8** | P | **PKPdf** | **13 02 59.9 +0.2** |
| **CCUT** | **Cedar City** | **131.03** | **30** | *e*PKPdf | **PKPdf** | **13 03 04.3 +2.1** |
| **O20A** | **White River Ci** baz=131 | **131.28** | **24** | P | **PKPdf** | **13 03 03.1 +0.6** |
| **O20A** | **White River Ci** | **131.28** | **24** | *e*PKPdf | **PKPdf** | **13 03 03.6 +1.1** |
| O20A | | | | *ep*PKPdf | **pPKPdf** | **13 03 15.4 -0.6** |
| **ECSD** | **EROS Data Cent** | **131.56** | **12** | *e*PKPdf | **PKPdf** | **13 03 03.6 +0.9** |
| ECSD | | | | *ep*PKPdf | **pPKPdf** | **13 03 16.4 +0.3** |
| **MNTX** | **Cornudas Mount** | **139.63** | **28** | *e*PKPdf | **PKPdf** | **13 03 19.0 +0.9** |
| MNTX | | | | *ep*PKPdf | **pPKPdf** | **13 03 31.8 +0.3** |
| **TXAR** | **Lajitas Array** comp=Z,0.4nm,0.4s,baz=264,slow=0.9,SNR=5.1 | **142.41** | **28** | PKHKP | PKPpre | 13 03 18.4 |
| TXAR | | | | PKP | **PKPdf** | **13 03 22.3 -0.9** |
| | comp=Z,1.2nm,0.7s,baz=278,slow=0.3,SNR=8.2 | | | | | |
| **JCT** | **Junction City** | **143.04** | **22** | *e*PKIKP | **PKPdf** | **13 03 25.1 +0.8** |
| **JCT** | **Junction City** | **143.04** | **22** | *e*PKPdf | **PKPdf** | **13 03 25.1 +0.8** |
| **732A** | **Laxson Ranch,** baz=144 | **144.54** | **24** | P | **PKPab** | **13 03 25.3 +0.1** |
| **636A** | **Smothers Creek** baz=145 | **144.92** | **19** | P | PKPbc | 13 03 27.0 +0.3 |
| **832A** | **Faith Ranch, C** baz=145 | **144.93** | **24** | P | **PKPdf** | **13 03 27.2 -0.3** |
| **CPUP** | **Villa Florida** comp=Z,2.7nm,0.7s,baz=76,slow=3.3,SNR=5.0 | **145.51** | **227** | PKPbc | **PKPdf** | **13 03 28.3 -0.2** |
| **834A** | **Tilden** baz=146 | **145.63** | **22** | P | **PKPab** | **13 03 30.7 +1.4** |
| **835A** | **Beeville** baz=146 | **145.75** | **21** | P | **PKPab** | **13 03 30.7 +1.0** |
| **934A** | **Benavides** baz=146 | **146.12** | **22** | P | **PKPab** | **13 03 32.4 +1.3** |
| **LPAZ** | **La Paz** comp=Z,2.8nm,1.0s,baz=163,slow=6.5,SNR=4.9 | **159.53** | **231** | PKPab | **PKPab** | **13 04 27.4 -0.8** |

*DDA* ***15*** *12:49:46.6,37.90N×29.24E,h5km,Md2.7*
*ISCJB* ***15*** *12:49:47.3±0.5,37.88N±0.02×29.28E±0.05,h7km±5km, Error ellipse: s-maj=6.0km s-min=3.9km az=7.7*
*CSEM* ***15*** *12:49:47.3±0.3,37.88N×29.29E,h8km,MD2.7,Error ellipse: s-maj=6.3km s-min=4.6km az=94.0*
*ISK* ***15*** *12:49:47.9,37.86N×29.22E,h20km,MD2.9*
**ISC 15 12:49:47.4±1.0, 37.89N±0.02×29.26E±0.03, h11km±8km, n30, σ0961/46, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DNZL** | **Cakiroluk** | **0.26** | **220** | *i* P | **Pg** | **12 49 52.6** | **-0.3** |
| DNZL | | | | *i* S | **Sg** | **12 49 57.1** | **+0.6** |
| **DNZL** | **Cakiroluk** | **0.26** | **220** | P | **Pg** | **12 49 52.6** | **-0.3** |
| DNZL | | | | S | **Sg** | **12 49 57.1** | **+0.6** |
| **KHAL** | **Karahalli** | **0.51** | **21** | *i* P | **Pg** | **12 49 56.6** | **-0.8** |
| KHAL | | | | *i* S | **Sg** | **12 50 04.0** | **-0.2** |
| **KHAL** | **Karahalli** | **0.51** | **21** | P | **Pg** | **12 49 56.6** | **-0.8** |
| KHAL | | | | S | **Sg** | **12 50 04.0** | **-0.2** |
| **GOLH** | **Golhisar** | **0.70** | **160** | *i* P | **Pg** | **12 50 00.8** | **-0.1** |
| **GOLH** | **Golhisar** | **0.70** | **160** | P | **Pg** | **12 50 00.8** | **-0.1** |
| GOLH | | | | S | **Sb** | **12 50 12.2** | **+0.8** |
| **GLHS** | **Glhisar (BURDU** | **0.76** | **165** | *e*PG | **Pb** | **12 50 03.1** | **+0.4** |
| **GLHS** | **Glhisar (BURDU** | **0.76** | **165** | *e*Pg | **Pb** | **12 50 03.1** | **+0.4** |
| **KULA** | **Kula-Manisa** | **0.78** | **323** | *e*PG | **Pb** | **12 50 03.6** | **+0.5** |
| KULA | | | | *e*SG | **Sn** | **12 50 15.3** | **-0.9** |
| **KULA** | **Kula-Manisa** | **0.78** | **323** | *e*Pg | **Pb** | **12 50 03.6** | **+0.5** |
| **MANT** | **Manisa** | **0.81** | **317** | *i* P | **Pb** | **12 50 04.1** | **+0.4** |
| MANT | | | | *i* S | **Sb** | **12 50 15.7** | **+0.9** |
| **MANT** | **Manisa** | **0.81** | **317** | P | **Pb** | **12 50 04.1** | **+0.4** |
| MANT | | | | S | **Sb** | **12 50 15.7** | **+0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.08** | **273** | *e*PG | **Pb** | **12 50 08.1** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.08** | **273** | *e*Pg | **Pb** | **12 50 08.1** | **-0.2** |
| **YER** | **Yerkesik** | **1.08** | **226** | *e*PG | **Pb** | **12 50 07.3** | **-0.9** |
| YER | | | | *e*SG | **Sb** | **12 50 22.6** | **+0.2** |
| **YER** | **Yerkesik** | **1.08** | **226** | *e*Pg | **Pb** | **12 50 07.3** | **-0.9** |
| YER | | | | *e*Sg | **Sb** | **12 50 22.6** | **+0.2** |
| **AYDN** | **Tasoluk** | **1.12** | **258** | *i* P | **Pn** | **12 50 10.5** | **+1.4** |
| AYDN | | | | *i* S | **Sn** | **12 50 24.9** | **+0.3** |
| **AYDN** | **Tasoluk** | **1.12** | **258** | P | **Pn** | **12 50 10.5** | **+1.4** |
| AYDN | | | | S | **Sn** | **12 50 24.9** | **+0.3** |
| **DALY** | **Dalyan (Mu¨la** | **1.18** | **204** | *e*PN | **Pb** | **12 50 09.1** | **-0.7** |
| **DALY** | **Dalyan (Mu¨la** | **1.18** | **204** | *e*Pn | **Pb** | **12 50 09.1** | **-0.7** |
| **SHUT** | **Suhut-Afyon** | **1.21** | **57** | *e*PN | **Pg** | **12 50 11.0** | **+0.3** |
| **SHUT** | **Suhut-Afyon** | **1.21** | **57** | *e*Pn | **Pg** | **12 50 11.0** | **+0.3** |
| **DEMI** | **Demirci** | **1.23** | **340** | *i* P | **Pn** | **12 50 10.7** | **+0.1** |
| DEMI | | | | *i* S | **Sb** | **12 50 25.7** | **-0.8** |
| **DEMI** | **Demirci** | **1.23** | **340** | P | **Pn** | **12 50 10.7** | **+0.1** |
| DEMI | | | | S | **Sb** | **12 50 25.7** | **-0.8** |
| **FETY** | **Fethiye** | **1.26** | **186** | *e*PN | **Pn** | **12 50 10.8** | **-0.3** |
| **FETY** | **Fethiye** | **1.26** | **186** | *e*Pn | **Pn** | **12 50 10.8** | **-0.3** |
| **BDRM** | **Kayabasi** | **1.66** | **241** | *i* P | **Pg** | **12 50 19.1** | **-0.2** |
| BDRM | | | | *i* S | **Sn** | **12 50 37.4** | **-0.5** |
| **BDRM** | **Kayabasi** | **1.66** | **241** | P | **Pg** | **12 50 19.1** | **-0.2** |
| BDRM | | | | S | **Sn** | **12 50 37.4** | **-0.5** |
| **BODT** | **Bodrum** | **1.76** | **242** | *e*PN | **Pn** | **12 50 17.6** | **-0.3** |
| **BODT** | **Bodrum** | **1.76** | **242** | *e*Pn | **Pn** | **12 50 17.6** | **-0.3** |

*CSEM* ***15*** *12:51:53.2,38.88N×41.07E,h5km,MD2.6,After ISK*
*ISK* ***15*** *12:51:53.2,38.88N×41.07E,h5km,MD2.6*
*DDA* ***15*** *12:51:55.4,38.97N×41.05E,h7km,Md2.8*
**ISC 15 12:51:55.2±1.0, 38.91N±0.05×40.95E±0.03, h7km±10km, n13, σ1963/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNGL** | **BINGOL** | **0.16** | **76** | P | **Pg** | **12 51 57.7** | **-0.9** |
| BNGL | | | | S | **Sg** | **12 52 02.1** | **+1.1** |
| **BNGB** | **Bing¨l¶l** | **0.22** | **290** | *e*PG | **Pg** | **12 52 00.5** | **+0.8** |
| BNGB | | | | *e*SG | **Sg** | **12 52 05.4** | **+2.7** |
| **BINT** | **Bingol** | **0.36** | **264** | *e*Pg | **Pg** | **12 52 00.5** | **-1.8** |
| BINT | | | | *e*Sg | **Sg** | **12 52 05.4** | **-1.6** |
| **BEST** | **Besiri** | **1.05** | **166** | P | **Pn** | **12 52 17.1** | **+0.6** |
| BEST | | | | S | **Sn** | **12 52 32.1** | **+0.6** |
| **DYBB** | **Diyarbakir** | **1.15** | **214** | *e*PN | **Pb** | **12 52 16.6** | **-0.9** |
| **DIY** | **Diyarbakir** | **1.16** | **209** | *e*Pn | **Pb** | **12 52 16.6** | **-1.1** |
| **PTK** | **Pertek** | **1.21** | **269** | *e*PN | **Pb** | **12 52 18.1** | **-0.5** |
| PTK | | | | *e*SN | **Sn** | **12 52 37.4** | **+1.8** |
| **PTK** | **Pertek** | **1.21** | **269** | *e*Pn | **Pb** | **12 52 18.1** | **-0.5** |
| PTK | | | | *e*Sn | **Sn** | **12 52 37.4** | **+1.8** |
| **SVRC** | **Sivrice-ELAZID** | **1.39** | **248** | *e*PN | **Pn** | **12 52 20.5** | **-0.8** |
| **SVRC** | **Sivrice-ELAZID** | **1.39** | **248** | *e*Pn | **Pn** | **12 52 20.5** | **-0.8** |
| **MAZI** | **Mazidag** | **1.50** | **195** | *e*PN | **Pn** | **12 52 21.2** | **-1.6** |
| **MAZI** | **Mazidag** | **1.50** | **195** | *e*Pn | **Pn** | **12 52 21.2** | **-1.6** |
| **MARD** | **Mardin** | **1.60** | **185** | P | **Pg** | **12 52 26.1** | **+0.2** |
| MARD | | | | S | **Sg** | **12 52 50.0** | **+3.3** |

**NNC 15 12:54:06.4±4.0, 36.83N×70.89E, h0km, mb3.5, mpv3.2, 4C-2D, Error ellipse: s-maj=32.9km s-min=14.4km az=175.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** 1.3nm,0.3s | **2.56** | **321** | ⇑P | Pn | 12 54 49.3 | -0.1 |
| DZET | | | | ⇓S | Sn | 12 55 22.9 | +1.5 |
| | 6.4nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** 1.6nm,0.2s | **3.79** | **32** | ⇑P | Pn | 12 55 06.1 | -0.3 |
| SFK | | | | ⇑S | Sn | 12 55 54.1 | +2.3 |
| | 4.5nm,0.2s | | | | | | |
| **MNAS** | **Manas** 2.9nm,0.7s | **5.79** | **12** | ⇑S | Sn | 12 56 40.4 | -0.7 |
| **KK31** | **Karatay Array** 1.4nm,0.3s,baz=174,slow=12,SNR=7.6 | **6.28** | **357** | P | Pn | 12 55 39.0 | -1.3 |
| KK31 | | | | ⇓S | Sn | 12 56 52.5 | -0.2 |
| | 0.4nm,0.3s | | | | | | |

**NEIC 15 13:00:58.4, 50.23N×177.67E, h26km, ML3.5**(AEIC), **After AEIC., Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AMKA** | **Amchitka** | **1.55** | **41** | P | Pn | 13 01 23.6 | -0.7 |
| AMKA | | | | S | Sn | 13 01 42.3 | -1.3 |
| **LSSA** | **Little Sitkin** | **1.81** | **17** | P | Pn | 13 01 27.8 | -0.1 |
| **LSPA** | **Little Sitkin** | **1.82** | **18** | P | Pn | 13 01 28.8 | +0.7 |
| LSPA | | | | S | Sb | 13 01 52.3 | -1.3 |
| **LSNW** | **Little Sitkin** | **1.83** | **17** | P | Pn | 13 01 27.9 | -0.2 |
| **CESW** | **Semis' Southwe** | **2.06** | **35** | P | Pn | 13 01 31.7 | +0.4 |
| **CERAA** | **Semis' Rag'd T** | **2.11** | **36** | P | Pn | 13 01 32.4 | +0.4 |
| **CEAP** | **Semis' Anvil P** | **2.15** | **33** | P | Pn | 13 01 33.2 | +0.7 |
| **GAEA** | **Gareloi East** | **2.75** | **54** | P | Pn | 13 01 42.0 | +1.2 |
| **GANE** | **Gareloi Northe** | **2.75** | **53** | P | Pn | 13 01 41.6 | +0.8 |
| **TANO** | **Tanaga North** | **3.15** | **56** | P | Pn | 13 01 47.5 | +1.2 |
| **TASE** | **Tanaga Southea** | **3.15** | **58** | P | Pn | 13 01 47.5 | +1.1 |
| TASE | | | | S | Sn | 13 02 24.0 | +0.8 |
| **TAFP** | **Tanaga Falls P** | **3.21** | **57** | P | Pn | 13 01 48.6 | +1.4 |
| **KIKV** | **Kanaga Island** | **3.65** | **61** | P | Pn | 13 01 54.6 | +1.4 |
| **KICM** | **Kanaga Island** | **3.66** | **60** | P | Pn | 13 01 54.4 | +1.2 |
| **KIRH** | **Kanaga Island** | **3.71** | **61** | P | Pn | 13 01 55.6 | +1.7 |
| **ADAG** | **Mount Adagdak** | **4.02** | **62** | P | Pn | 13 01 59.8 | +1.6 |
| **GSCK** | **Great Sitkin C** | **4.28** | **63** | P | Pn | 13 02 02.8 | +1.0 |
| **GSTD** | **Great Sitkin T** | **4.30** | **62** | P | Pn | 13 02 03.0 | +0.8 |
| GSTD | | | | S | Sn | 13 02 52.9 | +1.2 |
| **GSMY** | **Great Sitkin M** | **4.35** | **63** | P | Pn | 13 02 03.6 | +0.8 |
| **GSTR** | **Great Sitkin T** | **4.37** | **62** | *e*Pn | Pn | 13 02 03.8 | +0.8 |
| GSTR | | | | *e*Sn | Sn | 13 02 52.9 | -0.2 |
| **ATKA** | **Atka Island** | **5.48** | **66** | P | Pn | 13 02 19.1 | +0.8 |
| ATKA | | | | S | Sn | 13 03 21.4 | +1.0 |
| **KOWE** | **Korovin West** | **5.50** | **64** | P | Pn | 13 02 20.4 | +1.7 |
| **KOKL** | **Mount Kliuchef** | **5.52** | **65** | P | Pn | 13 02 20.8 | +1.9 |
| **KOFP** | **Korovin Flat P** | **5.56** | **65** | P | Pn | 13 02 21.6 | +2.1 |

*ISCJB* ***15*** *13:01:43.2±0.4,46.66N±0.03×9.67E±0.03,h7km±11km, Error ellipse: s-maj=4.5km s-min=3.7km az=0.8*
*CSEM* ***15*** *13:01:43.5±0.1,46.65N×9.67E,h10km,ML2.2,Error ellipse: s-maj=2.1km s-min=1.6km az=174.0*
*VIE* ***15*** *13:01:43.6±0.4,46.69N×9.69E,h13km±2km,mb1.3/3, ml2.2/3,Error ellipse: s-maj=2.5km s-min=1.7km az=88.0*
*ZUR* ***15*** *13:01:43.7,46.65N×9.65E,h7km±3km,ML2.2/17*
**ISC 15 13:01:43.7±0.9, 46.65N±0.02×9.66E±0.02, h14km±8km, n44, σ0951/55, 16C-15D, Switzerland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAVOX** | **Davos/Dischmat** | **0.20** | **50** | ⇑*i*Pg | **Pg** | **13 01 48.2** | **-0.1** |
| **DAVOX** | **Davos/Dischmat** | **0.20** | **50** | ⇑*i*Pg | **Pg** | **13 01 48.2** | **-0.1** |
| **SCEL** | **Celerina** | **0.20** | **137** | ⇓*i*Pg | **Pg** | **13 01 48.1** | **-0.2** |
| **SCEL** | **Celerina** | **0.20** | **137** | ⇓*i*Pg | **Pg** | **13 01 48.1** | **-0.2** |
| **VDL** | **Val di Lei** 482nm,0.6s | **0.22** | **220** | ⇑*i*Pg | **Pg** | **13 01 48.5** | **-0.2** |
| **TUE** | **Stuetta** 491nm,10.0s | **0.28** | **230** | ⇑*i*Pg | **Pg** | **13 01 49.4** | **-0.2** |
| **TUE** | **Stuetta** 491nm,10.0s | **0.28** | **230** | ⇑*i*Pg | **Pg** | **13 01 49.4** | **-0.2** |
| **BERNI** | **Berninapass** 286nm,0.1s | **0.35** | **133** | ⇓*i*Pg | **Pg** | **13 01 50.7** | **-0.2** |
| **BERNI** | **Berninapass** 286nm,0.1s | **0.35** | **133** | ⇓*i*Pg | **Pg** | **13 01 50.7** | **-0.2** |
| **FUORN** | **Ofenpass-Fuorn** 303nm,0.4s | **0.42** | **94** | ⇑*i*Pg | **Pg** | **13 01 52.0** | **-0.1** |
| **FUORN** | **Ofenpass-Fuorn** 303nm,0.4s | **0.42** | **94** | ⇑*i*Pg | **Pg** | **13 01 52.0** | **-0.1** |
| **PLONS** | **Plons/SG** 272nm,0.2s | **0.44** | **335** | ⇓*i*Pg | **Pg** | **13 01 52.3** | **-0.1** |
| PLONS | 272nm,0.2s | | | *e*Sg | **Sg** | **13 01 58.2** | **-0.2** |
| **PLONS** | **Plons/SG** 272nm,0.2s | **0.44** | **335** | ⇓*i*Pg | **Pg** | **13 01 52.3** | **-0.1** |
| PLONS | 272nm,0.2s | | | *e*Sg | **Sg** | **13 01 58.2** | **-0.2** |
| **SBUB** | **Buchserberg Ma** | **0.52** | **343** | ⇑*i*Pg | **Pg** | **13 01 53.8** | **-0.1** |
| SBUB | | | | *i* Sg | **Sg** | **13 02 00.8** | **0.0** |
| **SBUB** | **Buchserberg Ma** | **0.52** | **343** | ⇑*i*Pg | **Pg** | **13 01 53.8** | **-0.1** |
| SBUB | | | | *i* Sg | **Sg** | **13 02 00.8** | **0.0** |
| **DOETR** | **Doetra (Olivon** 192nm,0.2s | **0.55** | **258** | ⇓*i*Pg | **Pg** | **13 01 54.1** | **-0.4** |
| **DOETR** | **Doetra (Olivon** 192nm,0.2s | **0.55** | **258** | ⇓*i*Pg | **Pg** | **13 01 54.1** | **-0.4** |
| **CUNA** | **Curaglia** 158nm,0.2s | **0.56** | **272** | *e*Pg | **Pb** | **13 01 56.1** | **+0.8** |
| **CUNA** | **Curaglia** 158nm,0.2s | **0.56** | **272** | *e*Pg | **Pb** | **13 01 56.1** | **+0.8** |
| **PIORA** | **Tunnel** 70nm,0.1s | **0.61** | **259** | *e*Pg | **Pg** | **13 01 55.4** | **-0.2** |
| **PIORA** | **Tunnel** 70nm,0.1s | **0.61** | **259** | *e*Pg | **Pg** | **13 01 55.4** | **-0.2** |
| **MOSI** | **Grossmontoni** 489nm,0.5s | **0.62** | **93** | *e*Pg | **Pg** | **13 01 55.7** | **-0.1** |
| **MOSI** | **Grossmontoni** 489nm,0.5s | **0.62** | **93** | *e*Pg | **Pg** | **13 01 55.7** | **-0.1** |
| MOSI | | | | *e*Sg | **Sg** | **13 02 04.2** | **+0.2** |
| **CURA** | **Stauanlage Cun** 385nm,0.3s | **0.65** | **269** | ⇓*i*Pg | **Pg** | **13 01 54.4** | **-2.0** |
| **CURA** | **Stauanlage Cun** 385nm,0.3s | **0.65** | **269** | ⇓*i*Pg | **Pg** | **13 01 54.4** | **-2.0** |
| **RITOM** | **Lago Ritom (SB** 122nm,0.1s | **0.68** | **260** | *e*Pg | **Pg** | **13 01 57.0** | **0.0** |
| **RITOM** | **Lago Ritom (SB** 122nm,0.1s | **0.68** | **260** | *e*Pg | **Pg** | **13 01 57.0** | **0.0** |
| **FUSIO** | **Fusio** 125nm,0.1s | **0.71** | **254** | ⇑*i*Pg | **Pg** | **13 01 57.1** | **-0.5** |
| **FUSIO** | **Fusio** 125nm,0.1s | **0.71** | **254** | ⇑*i*Pg | **Pg** | **13 01 57.1** | **-0.5** |
| **FETA** | **Feichten** | **0.82** | **63** | ⇑*i*Pg | **Pg** | **13 01 59.1** | **-0.6** |
| FETA | 6.8nm,0.1s | | | ⇑*i*Sg | **Sg** | **13 02 10.3** | **-0.2** |
| **FETA** | **Feichten** | **0.82** | **63** | Pg | **Pg** | **13 01 59.1** | **-0.6** |
| FETA | 6.8nm,0.1s | | | Sg | **Sg** | **13 02 10.3** | **-0.2** |
| **MUGIO** | **Muggio** 170nm,0.2s | **0.85** | **210** | *e*Pg | **Pg** | **13 01 59.8** | **-0.3** |
| **MUGIO** | **Muggio** 170nm,0.2s | **0.85** | **210** | *e*Pg | **Pg** | **13 01 59.8** | **-0.3** |
| **WILA** | **Wila** 152nm,0.4s | **0.92** | **326** | ⇓*i*P | **Pb** | **13 02 02.0** | **+0.6** |
| **WILA** | **Wila** 152nm,0.4s | **0.92** | **326** | ⇓*i*P | **Pb** | **13 02 02.0** | **+0.6** |
| **RNI** | **Roncone** | **0.96** | **134** | ⇑*e*Pg | **Pg** | **13 02 01.9** | **-0.4** |
| RNI | | | | *e*Sg | **Sg** | **13 02 14.6** | **-0.2** |
| **RNI** | **Roncone** | **0.96** | **134** | ⇑*e*Pg | **Pg** | **13 02 01.9** | **-0.3** |
| RNI | | | | *e*Sg | **Sg** | **13 02 14.6** | **-0.2** |
| **HASLI** | **Hasliberg/Brie** 116nm,0.3s | **1.04** | **276** | *e*Pg | **Pg** | **13 02 03.4** | **-0.3** |
| **HASLI** | **Hasliberg/Brie** 116nm,0.3s | **1.04** | **276** | *e*Pg | **Pg** | **13 02 03.4** | **-0.3** |
| **EWZT2** | **Wettswil, ZR** 402nm,0.5s | **1.05** | **311** | *e*P | **Pn** | **13 02 04.3** | **+0.3** |
| **FIESA** | **Fiescheralp** 19nm,0.2s | **1.09** | **259** | ⇓*i*P | **Pb** | **13 02 04.5** | **+0.1** |
| **FIESA** | **Fiescheralp** 19nm,0.2s | **1.09** | **259** | ⇓*i*P | **Pb** | **13 02 04.5** | **+0.1** |
| **RETA** | **Reutte** 2.0nm,0.1s | **1.13** | **42** | ⇑*i*Pg | **Pb** | **13 02 04.7** | **-0.3** |
| RETA | 7.2nm,0.2s | | | ⇓*i*Sg | **Sb** | **13 02 19.6** | **+0.1** |
| **RETA** | **Reutte** 2.0nm,0.1s | **1.13** | **42** | Pg | **Pb** | **13 02 04.7** | **-0.3** |
| RETA | 7.2nm,0.2s | | | Sg | **Sb** | **13 02 19.6** | **+0.1** |

*ISCJB* ***15*** *13:14:19.5±0.7,39.59N±0.04×35.96E±0.04,h5km±6km, Error ellipse: s-maj=7.4km s-min=4.6km az=14.7*
*ISK* ***15*** *13:14:19.3,39.58N×35.96E,h9km,MD2.8*
*DDA* ***15*** *13:14:19.3,39.58N×35.91E,h7km,Md2.8*
*CSEM* ***15*** *13:14:19.4±0.2,39.58N×35.95E,h2km,MD2.8,Error ellipse: s-maj=6.5km s-min=4.8km az=10.0*
**ISC 15 13:14:19.0±1.5, 39.58N±0.04×35.92E±0.04, h3km±16km, n26, σ0960/34, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CUSAR** | **Sarkisla-SIVAS** | **0.30** | **122** | P | **Pg** | **13 14 25.7** | **+0.8** |
| **YOZ** | **Yozgat** | **0.46** | **278** | *e*PG | **Pb** | **13 14 29.6** | **-0.3** |
| YOZ | | | | *e*SG | **Sb** | **13 14 36.7** | **-0.6** |
| **YOZ** | **Yozgat** | **0.46** | **278** | *e*Pg | **Pb** | **13 14 29.7** | **-0.3** |
| YOZ | | | | *e*Sg | **Sb** | **13 14 36.7** | **-0.6** |
| **CUALT** | **Altinyayla-SIV** | **0.72** | **115** | P | **Pg** | **13 14 33.6** | **+0.8** |
| CUALT | | | | S | **Sb** | **13 14 45.3** | **+0.6** |
| **BNN** | **Bunyan** | **0.73** | **184** | *e*PG | **Pg** | **13 14 33.8** | **+0.8** |
| BNN | | | | *e*SG | **Sb** | **13 14 44.4** | **-0.5** |
| **BNN** | **Bunyan** | **0.73** | **184** | *e*Pg | **Pg** | **13 14 33.8** | **+0.8** |
| BNN | | | | *e*Sg | **Sb** | **13 14 44.4** | **-0.5** |
| **SVSK** | **Karacayir** | **0.90** | **68** | *e*PG | **Pg** | **13 14 36.2** | **-0.1** |
| **SVSK** | **Karacayir** | **0.90** | **68** | *e*Pg | **Pg** | **13 14 36.2** | **-0.1** |
| **SCER** | **sogukcermik** | **0.98** | **73** | *i* P | **Pg** | **13 14 37.9** | **+0.1** |
| **SCER** | **sogukcermik** | **0.98** | **73** | P | **Pg** | **13 14 37.9** | **+0.1** |
| **PINB** | **Pinarbasi** | **0.98** | **157** | *i* P | **Pg** | **13 14 36.6** | **-1.2** |
| PINB | | | | *i* S | **Sb** | **13 14 52.0** | **-0.2** |
| **PINB** | **Pinarbasi** | **0.98** | **157** | P | **Pg** | **13 14 36.6** | **-1.2** |
| PINB | | | | S | **Sb** | **13 14 52.0** | **-0.2** |
| **CORM** | **Corum** | **1.16** | **302** | *e*PN | **Pn** | **13 14 42.6** | **+0.4** |
| **CORM** | **Corum** | **1.16** | **302** | *e*Pn | **Pn** | **13 14 42.6** | **+0.4** |
| **CDAG** | **Cicekdag** | **1.19** | **273** | *i* P | **Pb** | **13 14 42.5** | **+0.1** |
| **CDAG** | **Cicekdag** | **1.19** | **273** | P | **Pb** | **13 14 42.5** | **+0.1** |
| **CUKAN** | **kangal_SIVAS** | **1.23** | **102** | P | **Pg** | **13 14 42.3** | **-0.4** |
| CUKAN | | | | S | **Sg** | **13 14 57.8** | **-0.7** |
| **SARI** | **SarD1z-Kayseri** | **1.24** | **161** | *e*PN | **Pg** | **13 14 43.0** | **+0.3** |
| **KAMT** | **Kaman** | **1.72** | **264** | *e*PN | **Pn** | **13 14 50.6** | **+0.6** |
| **KAMT** | **Kaman** | **1.72** | **264** | *e*Pn | **Pn** | **13 14 50.6** | **+0.6** |
| **YAYX** | **Yaylak** | **1.75** | **249** | *e*PN | **Pb** | **13 14 51.7** | **-0.3** |
| **YAYX** | **Yaylak** | **1.75** | **249** | *e*Pn | **Pb** | **13 14 51.7** | **-0.2** |
| **GULA** | **Gulagac** | **1.80** | **227** | *e*PN | **Pn** | **13 14 51.5** | **+0.4** |
| **GULA** | **Gulagac** | **1.80** | **227** | *e*Pn | **Pn** | **13 14 51.5** | **+0.4** |
| **SERE** | **Sereflikochisa** | **1.93** | **252** | *e*PN | **Pn** | **13 14 53.6** | **+0.8** |
| **SERE** | **Sereflikochisa** | **1.93** | **252** | *e*Pn | **Pn** | **13 14 53.7** | **+0.8** |

**MEX 15 13:23:17.5±0.4, 15.50N×96.49W, h16km±177km, MD4.0, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HUIG** | **Huatulco** | **0.46** | **54** | *i* P | Pg | 13 23 25.4 | -1.3 |
| HUIG | | | | *e*S | Sg | 13 23 31.4 | -1.7 |
| **PNIG** | **Pinotepa** | **1.81** | **300** | *e*P | Pn | 13 23 44.7 | -3.4 |
| PNIG | | | | *e*S | Sn | 13 24 06.0 | -4.6 |
| **TLIG** | **Tlapa** | **2.86** | **316** | *e*P | Pn | 13 24 00.6 | -2.1 |
| TLIG | | | | *i* S | Sn | 13 24 33.0 | -3.9 |

*JMA* ***15*** *13:37:30.3±0.1,42.92N×146.66E,h63km±2km,M3.1*
*SKHL* ***15*** *13:37:30.1±0.2,42.86N×146.75E,h44km±4km,mb4.1/3*
**ISC 15 13:37:30.1±3.4, 42.89N±0.10×146.74E±0.08, h35km±12km, n14, σ0956/24, Off southeast coast of Hokkaido**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NEM2** | **Nemuro 2** | **0.87** | **303** | P | **Pn** | **13 37 46.2** | **+0.4** |
| NEM2 | | | | *e*S | **Sb** | **13 37 57.9** | **-0.3** |
| **SHO** | **Shikotan** | **0.98** | **4** | *i* P | **Pn** | **13 37 47.3** | **-0.1** |
| SHO | 86nm,0.5s | | | AMB | AMB | 13 37 47.8 | |
| SHO | | | | *i* S | **Sn** | **13 38 00.0** | **0.0** |
| SHO | 480nm,0.4s | | | A | A | 13 38 00.9 | |
| SHO | 370nm,0.4s | | | A | A | 13 38 00.9 | |
| **YUK** | **Yuzh-Kuril'sk** | **1.31** | **331** | *i* P | **Pn** | **13 37 51.5** | **-0.4** |
| YUK | 73nm,0.2s | | | AMB | AMB | 13 37 52.9 | |
| YUK | | | | *i* S | **Sn** | **13 38 07.7** | **-0.4** |
| YUK | 64nm,0.3s | | | A | A | 13 39 09.7 | |
| YUK | 133nm,0.3s | | | A | A | 13 39 09.7 | |
| YUK | 73nm,0.3s | | | A | A | 13 39 09.7 | |
| **JAK** | **Akkeshi** | **1.50** | **275** | P | **Pn** | **13 37 54.8** | **+0.3** |
| JAK | | | | *e*S | **Sn** | **13 38 12.8** | **-0.1** |
| **JRA** | **Rausu** | **1.57** | **312** | P | **Pn** | **13 37 55.6** | **+0.1** |
| JRA | | | | *e*S | **Sn** | **13 38 14.4** | **-0.3** |
| **JNK** | **Nakash** | **1.63** | **296** | P | **Pn** | **13 37 56.0** | **-0.3** |
| JNK | | | | *e*S | **Sn** | **13 38 14.9** | **-1.2** |
| **JOB** | **Onbets** | **2.13** | **271** | P | **Pn** | **13 38 03.5** | **+0.3** |
| JOB | | | | *e*S | **Sn** | **13 38 28.4** | **-0.1** |
| **JAR** | **Ashorobuto** | **2.21** | **282** | P | **Pn** | **13 38 04.8** | **+0.5** |
| JAR | | | | *e*S | **Sn** | **13 38 30.2** | **-0.2** |
| **JTKR** | **Abashiri--Toko** | **2.33** | **299** | P | **Pn** | **13 38 06.7** | **+0.8** |
| JTKR | | | | *e*S | **Sn** | **13 38 33.9** | **+0.7** |
| **KUR** | **Kuril'sk** | **2.48** | **19** | *e*P | **Pn** | **13 38 08.2** | **+0.3** |
| KUR | 33nm,0.5s | | | AMB | AMB | 13 38 16.6 | |
| KUR | | | | *e*S | **Sn** | **13 38 36.8** | **-0.2** |
| KUR | 39nm,0.5s | | | A | A | 13 38 48.5 | |
| **JCH** | **Churui** | **2.50** | **265** | *e*S | **Sn** | **13 38 37.0** | **-0.6** |
| **JMP** | **Maruseppu** | **2.70** | **296** | P | **Pn** | **13 38 12.0** | **+0.9** |
| **JNBK** | **Urakawa-nobuka** | **3.01** | **260** | *e*S | **Sn** | **13 38 49.0** | **-1.0** |
| **YSS** | **Yuzh-Sakhalins** | **4.95** | **327** | *e*S | **Sn** | **13 39 38.3** | **+0.4** |
| YSS | 82nm,0.3s | | | A | A | 13 39 42.4 | |

*ISCJB* ***15*** *13:46:09.7±1.8,26.16S×

comp=Z,6.7nm,0.4s

**WEL 15 14:03:15.4±0.4, 35°34S×178°60E, h221km±7km, ML3.4/5, 1C, Error ellipse: s-maj=6.1km s-min=4.6km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **2.23** | **186** | PN | Pn | 14 03 57.2 | -0.6 |
| MXZ | | | | SN | S | 14 04 30.5 | -0.4 |
| **WMGZ** | **Waiomatatini S** | **2.48** | **183** | PN | Pn | 14 04 00.5 | +0.2 |
| WMGZ | | | | SN | S | 14 04 35.1 | -0.3 |
| **HAZ** | **Te Kaha** | **2.50** | **195** | PN | Pn | 14 04 00.7 | +0.1 |
| **PUZ** | **Puketiti** | **2.74** | **186** | ⇑PN | Pn | 14 04 02.9 | -0.3 |
| PUZ | | | | SN | S | 14 04 38.7 | -1.9 |
| **MWZ** | **Matawai** | **3.11** | **196** | PN | Pn | 14 04 08.2 | +0.8 |
| **URZ** | **Urewera** | **3.15** | **202** | PN | Pn | 14 04 08.3 | +0.5 |
| **TKGZ** | **Te Karaka** | **3.15** | **191** | PN | Pn | 14 04 08.0 | +0.2 |
| TKGZ | | | | SN | S | 14 04 48.3 | -0.5 |
| **CNGZ** | **Carnagh Statio** | **3.16** | **186** | PN | Pn | 14 04 08.2 | +0.4 |
| **RIGZ** | **Rimuhau** | **3.43** | **191** | PN | Pn | 14 04 11.1 | 0.0 |
| **MHGZ** | **Mahia Peninsul** | **3.85** | **188** | PN | Pn | 14 04 16.0 | -0.1 |
| **ARHZ** | **Aropaoanui** | **4.12** | **198** | PN | Pn | 14 04 20.0 | +0.7 |
| **PXZ** | **Pawanui** | **4.88** | **196** | PN | Pn | 14 04 28.1 | -0.7 |

*IDC **15** 14:17:18.1±2.1, 1°09S×13°13W, h0km, mb4.1/9, mb1 4.2/10, mb1mx3.9/41, mbtmp4.2/10, ML4.0/1, MS3.4/21, Ms1 3.4/21, ms1mx3.3/34, Error ellipse: s-maj=56.9km s-min=21.3km az=76.0*

**ISC 15 14:17:19.9±1.5, 1°15S±0°2×13°1W±0°3, h11km, n34, σ0s90/15, mb4.2/8, MS3.3/20, North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N2** | **ASCENSION HYDR** | **6.86** | **192** | T | T | 14 26 13.0 | |
| | baz=8.7,slow=74,SNR=376 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **6.87** | **192** | T | T | 14 26 14.2 | |
| | baz=8.7,slow=74,SNR=484 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **6.87** | **192** | T | T | 14 26 14.1 | |
| | baz=8.7,slow=74,SNR=369 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **7.97** | **191** | T | T | 14 27 38.5 | |
| | baz=13,slow=75 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **7.99** | **191** | T | T | 14 27 38.8 | |
| | baz=13,slow=75 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **7.99** | **191** | T | T | 14 27 38.7 | |
| | baz=13,slow=75 | | | | | | |
| **LIC** | **Lamto** | **10.82** | **48** | *e*P | **Pn** | **14 19 56.1** | **+1.2** |
| | 80nm,1.3s | | | | | | |
| **TIC** | **Toumodi** | **11.11** | **46** | *e*P | **Pn** | **14 19 57.5** | **-1.4** |
| **KIC** | **Kosan Boka** | **11.13** | **48** | *e*P | **Pn** | **14 19 58.5** | **-0.6** |
| | 138nm,1.6s | | | | | | |
| **DBIC** | **Dimbokro** | **11.25** | **47** | Pn | **Pn** | **14 19 59.5** | **-1.2** |
| | 1.1nm,0.3s,baz=221,slow=14,SNR=18 | | | | | | |
| DBIC | | | | Sn | Sn | 14 21 55.8 | -11 |
| | 0.4nm,0.3s,baz=176,slow=19,SNR=2.7 | | | | | | |
| DBIC | | | | LR | LR | 14 23 43.9 | |
| | comp=Z,213nm,19.5s,baz=204,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **20.36** | **46** | P | **P** | **14 21 56.7** | **+0.1** |
| | 14nm,0.7s,baz=231,slow=11,SNR=87 | | | | | | |
| TORD | | | | S | S | 14 25 32.8 | -12 |
| | 1.5nm,0.7s,baz=222,slow=23,SNR=3.3 | | | | | | |
| TORD | | | | LR | LR | 14 29 09.3 | |
| | comp=Z,167nm,20.4s,baz=195,slow=35 | | | | | | |
| **MDT** | **Midelt** | **34.64** | **13** | LR | | 14 38 00.8 | |
| | comp=Z,100nm,18.4s,baz=152,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **41.40** | **11** | LR | LR | 14 41 36.3 | |
| | comp=Z,43nm,21.8s,baz=270,slow=35 | | | | | | |
| **KEST** | **Kesra** | **42.17** | **28** | LR | LR | 14 44 11.0 | |
| | comp=Z,120nm,19.0s,baz=272,slow=38 | | | | | | |
| **LBTB** | **Lobatse** | **44.28** | **126** | P | **P** | **14 25 31.0** | **+0.9** |
| | 1.8nm,0.6s,baz=312,slow=12,SNR=3.9 | | | | | | |
| **MATP** | **Matopo** | **44.94** | **118** | P | **P** | **14 25 35.5** | **0.0** |
| | 2.1nm,0.8s,baz=284,slow=8,3,SNR=3.2 | | | | | | |
| **BOSA** | **Boshof** | **45.70** | **130** | P | **P** | **14 25 40.6** | **-0.7** |
| | 4.3nm,1.0s,baz=270,slow=7.1,SNR=2.9 | | | | | | |
| BOSA | | | | LR | LR | 14 43 55.1 | |
| | comp=Z,43nm,18.5s,baz=192,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **49.39** | **236** | LR | LR | 14 46 26.3 | |
| | comp=Z,24nm,18.1s,baz=22,slow=35 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **51.74** | **20** | P | **P** | **14 26 28.0** | **+0.4** |
| | 2.2nm,0.6s,baz=209,slow=19,SNR=4.3 | | | | | | |
| DAVOX | | | | LR | LR | 14 49 09.0 | |
| | comp=Z,47nm,19.5s,baz=264,slow=37 | | | | | | |
| **GERES** | **GERESS Array B** | **54.85** | **21** | P | **P** | **14 26 50.7** | **+0.3** |
| | 1.6nm,0.8s,baz=190,slow=5.4,SNR=9.8 | | | | | | |
| GERES | | | | LR | LR | 14 51 13.0 | |
| | comp=Z,62nm,18.2s,baz=250,slow=37 | | | | | | |
| **LPAZ** | **La Paz** | **56.27** | **251** | LR | LR | 14 52 00.5 | |
| | comp=Z,20nm,18.1s,baz=64,slow=37 | | | | | | |
| **VRAC** | **Vranov** | **56.32** | **23** | LR | LR | 14 50 01.0 | |
| | comp=Z,36nm,18.3s,baz=216,slow=35 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **56.86** | **49** | LR | LR | 14 53 42.2 | |
| | comp=Z,18nm,18.5s,baz=35,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **58.88** | **41** | P | **P** | **14 27 20.2** | **+1.1** |
| | 0.4nm,0.5s,baz=215,slow=7.0,SNR=2.8 | | | | | | |
| BRTR | | | | LR | LR | 14 56 20.7 | |
| | comp=Z,20nm,18.1s,baz=243,slow=40 | | | | | | |
| **AKASG** | **Malin Array Be** | **62.88** | **29** | LR | LR | 14 55 58.4 | |
| | comp=Z,17nm,20.8s,baz=235,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **64.49** | **14** | P | **P** | **14 27 55.8** | **-0.6** |
| | 3.1nm,1.0s,baz=201,slow=7.7,SNR=4.2 | | | | | | |
| HFS | | | | LR | LR | 14 56 52.4 | |
| | comp=Z,15nm,18.1s,slow=37 | | | | | | |
| **NOA** | **NORSAR Array B** | **64.70** | **13** | LR | LR | 14 56 19.0 | |
| | comp=Z,13nm,20.3s,baz=225,slow=36 | | | | | | |
| **OBN** | **Obninsk** | **69.10** | **28** | LR | LR | 14 59 29.5 | |
| | comp=Z,45nm,19.9s,baz=269,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **69.13** | **19** | P | **P** | **14 28 25.9** | **-0.1** |
| | 2.5nm,0.8s,baz=282,slow=7.0,SNR=2.7 | | | | | | |
| FINES | | | | LR | LR | 14 58 51.7 | |
| | comp=Z,16nm,19.0s,baz=264,slow=36 | | | | | | |
| **JMIC** | **Jan Mayen** | **72.00** | **2** | LR | LR | 14 59 48.3 | |
| | comp=Z,18nm,19.8s,baz=218,slow=35 | | | | | | |
| **GEYT** | **Alibeck** | **75.91** | **51** | LR | LR | 15 04 51.1 | |
| | comp=Z,25nm,18.3s,baz=160,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **94.46** | **43** | LR | LR | 15 17 28.1 | |
| | comp=Z,9.9nm,19.3s,baz=204,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **139.58** | **130** | PKhKP | PKPpre | 14 36 43.1 | |
| | 0.3nm,0.8s,baz=211,slow=3.3,SNR=4.0 | | | | | | |
| ASAR | | | | PKP | **PKPdf** | **14 36 48.7** | **0.0** |
| | 0.5nm,0.8s,baz=231,slow=2.6,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **141.84** | **125** | PKP | **PKPdf** | **14 36 51.6** | **-1.2** |
| | 0.5nm,0.9s,baz=243,slow=3.0,SNR=3.7 | | | | | | |

*ISK **15** 14:21:09.8, 39°62N×27°52E, h16km, MD2.8*
*ISCJB **15** 14:21:10.1±0.5, 39°62N±0°03×27°49E±0°04, h11km±4km, Error ellipse: s-maj=5.7km s-min=4.5km az=22.4*
*CSEM **15** 14:21:10.2±0.1, 39°62N×27°51E, h12km, MD2.9, Error ellipse: s-maj=3.2km s-min=2.8km az=94.0*
*DDA **15** 14:21:10.2, 39°64N×27°51E, h13km, Md2.9*

**ISC 15 14:21:10.1±1.0, 39°63N±0°02×27°52E±0°02, h13km±8km, n43, σ0s40/54, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BALY** | **Balya** | **0.14** | **33** | *i* P | **Pg** | **14 21 13.7** | **0.0** |
| BALY | | | | *i* S | **Sb** | **14 21 17.2** | **-0.3** |
| **BALY** | **Balya** | **0.14** | **33** | P | **Pg** | **14 21 13.7** | **0.0** |
| BALY | | | | S | **Sb** | **14 21 17.1** | **-0.3** |
| **BALB** | **Balikesir** | **0.28** | **87** | *e*PG | **Pb** | **14 21 16.6** | **-0.3** |
| BALB | | | | *e*SG | **Sb** | **14 21 21.2** | **-0.3** |
| **BALB** | **Balikesir** | **0.28** | **87** | *e*Pg | **Pb** | **14 21 16.6** | **-0.3** |
| BALB | | | | *e*Sg | **Sb** | **14 21 21.2** | **-0.3** |
| **GONE** | **Gonen-Balikesi** | **0.44** | **17** | *e*PG | **Pg** | **14 21 19.0** | **+0.2** |
| GONE | | | | *e*SG | **Sb** | **14 21 25.9** | **-0.3** |
| **GONE** | **Gonen-Balikesi** | **0.44** | **17** | *e*Pg | **Pg** | **14 21 19.0** | **+0.2** |
| GONE | | | | *e*Sg | **Sb** | **14 21 25.9** | **-0.3** |
| **AYVA** | **Ayvalik** | **0.72** | **244** | *i* P | **Pg** | **14 21 24.0** | **-0.1** |
| **AYVA** | **Ayvalik** | **0.72** | **244** | P | **Pg** | **14 21 23.9** | **-0.1** |
| **DKL** | **Dikili** | **0.73** | **221** | *e*PG | **Pb** | **14 21 24.9** | **+0.2** |
| **DKL** | **Dikili** | **0.73** | **221** | *e*Pg | **Pb** | **14 21 24.9** | **+0.2** |
| **DURS** | **Dursunbey** | **0.74** | **92** | *i* P | **Pb** | **14 21 24.9** | **+0.1** |
| DURS | | | | *i* S | **Sg** | **14 21 34.4** | **+0.3** |
| **DURS** | **Dursunbey** | **0.74** | **92** | P | **Pb** | **14 21 24.9** | **+0.1** |
| DURS | | | | S | **Sg** | **14 21 34.4** | **+0.3** |
| **EDC** | **Edincik** | **0.77** | **20** | *e*PG | **Pg** | **14 21 24.9** | **-0.1** |
| **EDC** | **Edincik** | **0.77** | **20** | *e*Pg | **Pg** | **14 21 24.9** | **-0.1** |
| **AKS** | **Akhisar** | **0.78** | **163** | *e*PG | **Pg** | **14 21 24.9** | **-0.4** |
| **AKS** | **Akhisar** | **0.78** | **163** | *e*Pg | **Pg** | **14 21 24.9** | **-0.4** |
| **KRBG** | **Karabiga-Canak** | **0.78** | **347** | *e*PG | **Pb** | **14 21 26.0** | **+0.4** |
| **KRBG** | **Karabiga-Canak** | **0.78** | **347** | *e*Pg | **Pb** | **14 21 26.0** | **+0.4** |
| **DST** | **Dursunbey** | **0.85** | **91** | *e*PG | **Pg** | **14 21 26.1** | **-0.5** |
| **DST** | **Dursunbey** | **0.85** | **91** | *e*Pg | **Pg** | **14 21 26.1** | **-0.5** |
| **KCTX** | **Karacabey (Bur** | **0.90** | **45** | *e*PG | **Pb** | **14 21 26.9** | **-0.8** |
| **KCTX** | **Karacabey (Bur** | **0.90** | **45** | *e*Pg | **Pb** | **14 21 26.9** | **-0.8** |
| **MRMT** | **Marmara Adasi** | **0.98** | **3** | *e*PG | **Pn** | **14 21 29.4** | **-0.2** |
| **MRMT** | **Marmara Adasi** | **0.98** | **3** | *e*Pg | **Pn** | **14 21 29.4** | **-0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.09** | **346** | *e*PN | **Pg** | **14 21 31.3** | **+0.1** |
| **RKY** | **Sarkoy-Tekirda** | **1.09** | **346** | *e*Pn | **Pg** | **14 21 31.3** | **+0.1** |
| **DEMI** | **Demirci** | **1.09** | **122** | *i* P | **Pg** | **14 21 32.2** | **+1.0** |
| DEMI | | | | *i* S | **Sn** | **14 21 46.8** | **+0.6** |
| **DEMI** | **Demirci** | **1.09** | **122** | P | **Pg** | **14 21 32.2** | **+1.0** |
| DEMI | | | | S | **Sn** | **14 21 46.8** | **+0.6** |
| **GELI** | **Tayfur-Gelibol** | **1.11** | **314** | *e*PN | **Pg** | **14 21 31.8** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.11** | **314** | *e*Pn | **Pg** | **14 21 31.8** | **+0.2** |
| **BOZC** | **Bozcaada** | **1.15** | **281** | P | **Pg** | **14 21 32.2** | **-0.1** |
| BOZC | | | | S | **Sb** | **14 21 45.8** | **-0.9** |
| **BLCB** | **Balcova** | **1.29** | **197** | *e*PN | **Pn** | **14 21 33.6** | **-0.3** |
| **BLCB** | **Balcova** | **1.29** | **197** | *e*Pn | **Pn** | **14 21 33.6** | **-0.3** |
| **ERIK** | **Erikli-Kesan** | **1.30** | **324** | *e*PN | **Pn** | **14 21 33.8** | **-0.1** |
| **ERIK** | **Erikli-Kesan** | **1.30** | **324** | *e*Pn | **Pn** | **14 21 33.8** | **-0.1** |
| **ULDT** | **Uludag** | **1.34** | **67** | *i* P | **Pb** | **14 21 35.8** | **+0.5** |
| **ULDT** | **Uludag** | **1.34** | **67** | P | **Pb** | **14 21 35.8** | **+0.5** |
| **ARMT** | **Armutlu** | **1.39** | **47** | *e*PN | **Pn** | **14 21 35.0** | **-0.2** |
| **ARMT** | **Armutlu** | **1.39** | **47** | *e*Pn | **Pn** | **14 21 35.0** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.42** | **141** | *e*PN | **Pn** | **14 21 35.3** | **-0.4** |
| **KULA** | **Kula-Manisa** | **1.42** | **141** | *e*Pn | **Pn** | **14 21 35.3** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.70** | **170** | *e*PN | **Pn** | **14 21 39.5** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.70** | **170** | *e*Pn | **Pn** | **14 21 39.5** | **-0.1** |

*CSEM **15** 14:37:53.0±0.2, 38°10N×38°08E, h9km±2km, MD2.8, Error ellipse: s-maj=5.3km s-min=3.3km az=168.0*
*ISK **15** 14:37:54.6, 38°28N×38°12E, h9km, MD2.6*
*DDA **15** 14:37:55.1, 38°27N×38°12E, h7km, Md2.8*

**ISC 15 14:37:55.1±1.0, 38°31N±0°04×38°12E±0°03, h7km±8km, n17, σ0s52/28, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKCD** | **Akcadag** | **0.15** | **265** | *i* P | **Pg** | **14 37 58.1** | **-0.3** |
| AKCD | | | | *i* S | **Sg** | **14 38 01.1** | **+0.5** |
| **AKCD** | **Akcadag** | **0.15** | **265** | P | **Pg** | **14 37 58.1** | **-0.3** |
| AKCD | | | | S | **Sg** | **14 38 01.1** | **+0.5** |
| **DARE** | **Darende-Malaty** | **0.56** | **298** | *e*PG | **Pg** | **14 38 06.1** | **+0.1** |
| DARE | | | | *e*SG | **Sb** | **14 38 14.9** | **-0.7** |
| **DARE** | **Darende-Malaty** | **0.56** | **298** | *e*Pg | **Pg** | **14 38 06.1** | **+0.1** |
| DARE | | | | *e*Sg | **Sb** | **14 38 14.9** | **-0.7** |
| **ELZG** | **Elazig** | **0.71** | **74** | *i* P | **Pg** | **14 38 09.0** | **+0.2** |
| ELZG | | | | *i* S | **Sb** | **14 38 19.1** | **-0.8** |
| **ELZG** | **Elazig** | **0.71** | **74** | P | **Pg** | **14 38 08.9** | **+0.2** |
| ELZG | | | | S | **Sb** | **14 38 19.1** | **-0.8** |
| **SVRC** | **Sivrice-ELAZID** | **0.94** | **85** | *e*PG | **Pg** | **14 38 12.9** | **-0.3** |
| SVRC | | | | *e*SG | **Sb** | **14 38 27.0** | **+0.5** |
| **SVRC** | **Sivrice-ELAZID** | **0.94** | **85** | *e*Pg | **Pg** | **14 38 12.9** | **-0.3** |
| SVRC | | | | *e*Sg | **Sb** | **14 38 27.0** | **+0.5** |
| **GZT** | **Gaziantep** | **1.05** | **205** | P | **Pn** | **14 38 16.4** | **+0.1** |
| GZT | | | | S | **Sn** | **14 38 31.9** | **+0.6** |
| **CUKAN** | **kangal_SIVAS** | **1.13** | **333** | P | **Pn** | **14 38 17.5** | **0.0** |
| CUKAN | | | | S | **Sn** | **14 38 33.8** | **+0.5** |
| **PTK** | **Pertek** | **1.16** | **59** | *e*PN | **Pb** | **14 38 16.9** | **-0.6** |
| **PTK** | **Pertek** | **1.16** | **59** | *e*Pn | **Pb** | **14 38 16.9** | **-0.6** |
| **KMRS** | **Kahramanmaras** | **1.25** | **231** | *e*PN | **Pn** | **14 38 18.8** | **-0.3** |
| **KMRS** | **Kahramanmaras** | **1.25** | **231** | *e*Pn | **Pn** | **14 38 18.8** | **-0.3** |
| **AYKD** | **Aykdinkavak** | **1.37** | **230** | P | **Pg** | **14 38 21.4** | **0.0** |
| AYKD | | | | S | **Sg** | **14 38 40.1** | **+1.0** |
| **SVSK** | **Karacayir** | **1.83** | **332** | *e*PN | **Pn** | **14 38 27.4** | **+0.5** |
| **SVSK** | **Karacayir** | **1.83** | **332** | *e*Pn | **Pn** | **14 38 27.4** | **+0.5** |

**DJA 15 14:41:17.8±0.4, 5°S±3°×129°E±°, h17km, M3.8/14, mb4.3/3, MLv3.5/14, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDI** | **Bandanaira** | **1.23** | **48** | P | Pn | 14 41 37.7 | -2.6 |
| BNDI | | | | S | Sb | 14 41 56.2 | -0.1 |
| **AAI** | **Ambon** | **1.83** | **335** | P | Pn | 14 41 48.2 | -0.3 |
| AAI | | | | S | Sn | 14 42 10.5 | -0.8 |
| **MSAI** | **Masohi** | **1.99** | **359** | P | Pn | 14 41 51.7 | +1.0 |
| **NLAI** | **Namlea** | **2.81** | **318** | P | Pn | 14 42 02.5 | +0.5 |
| NLAI | | | | S | Sn | 14 42 37.6 | +2.0 |
| **SAUI** | **Saumlaki** | **3.49** | **139** | P | Pn | 14 42 09.9 | -1.4 |
| **FAKI** | **Fak Fak** | **4.06** | **54** | P | Pn | 14 42 19.3 | +0.1 |
| **SANI** | **Sanana** | **4.43** | **318** | P | Pn | 14 42 25.0 | +0.7 |
| **LBMI** | **Labuha** | **4.91** | **342** | P | Pn | 14 42 31.7 | +0.8 |
| **SWI** | **Sorong** | **5.00** | **27** | P | Pn | 14 42 32.7 | +0.5 |
| | 18nm,0.8s,0.1nm | | | | | | |
| **KDI** | **Kendari** | **6.49** | **282** | P | Pn | 14 42 52.2 | -0.4 |
| | 34nm,0.8s,0.2nm | | | | | | |
| **BATI** | **Baumata** | **7.14** | **227** | P | Pn | 14 43 01.5 | -0.1 |

**MEX 15 14:43:22.4±0.8, 19°70N×104°58W, h20km±150km, MD3.5, Near coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CJM** | **Chamela** | **0.47** | **246** | *i* P | Pb | 14 43 30.0 | -2.1 |
| CJM | | | | *i* S | Sb | 14 43 37.1 | -1.5 |
| **R15V** | | **0.77** | **133** | *i* P | Pb | 14 43 34.1 | -3.1 |
| R15V | | | | *i* S | Sb | 14 43 44.4 | -2.9 |
| **EZ5V** | | **0.95** | **103** | *i* P | Pb | 14 43 37.8 | -2.8 |
| EZ5V | | | | *e*S | Sb | 14 43 49.6 | -3.4 |
| **MMIG** | **Aquila** | **1.82** | **140** | *e*P | Pn | 14 43 50.5 | -2.2 |
| MMIG | | | | *e*S | Sn | 14 44 11.8 | -3.4 |

*ISK **15** 15:07:15.5, 41°42N×35°90E, h6km, MD2.7*
*DDA **15** 15:07:16.0, 41°39N×35°81E, h3km, Md2.7*
*CSEM **15** 15:07:16.2±0.3, 41°39N×35°85E, h2km, MD2.7, Error ellipse: s-maj=8.3km s-min=4.5km az=25.0*

**ISC 15 15:07:16.4±1.3, 41°39N±0°05×35°83E±0°03, h7km±12km, n21, σ0s69/32, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAVZ** | **Havza** | **0.33** | **195** | *i* P | **Pg** | **15 07 22.2** | **-0.6** |
| HAVZ | | | | *i* S | **Sg** | **15 07 27.7** | **+0.6** |
| **HAVZ** | **Havza** | **0.33** | **195** | P | **Pg** | **15 07 22.2** | **-0.6** |
| HAVZ | | | | S | **Sg** | **15 07 27.7** | **+0.6** |
| **KVT** | **Kavak** | **0.35** | **152** | *e*PG | **Pg** | **15 07 22.8** | **-0.4** |
| KVT | | | | *e*SG | **Sg** | **15 07 28.7** | **+0.8** |
| **KVT** | **Kavak** | **0.35** | **152** | *e*Pg | **Pg** | **15 07 22.8** | **-0.4** |
| KVT | | | | *e*Sg | **Sg** | **15 07 28.7** | **+0.8** |
| **DIKM** | **Dikmen** | **0.50** | **301** | *e*PG | **Pg** | **15 07 26.5** | **+0.4** |
| DIKM | | | | *e*SG | **Sb** | **15 07 34.2** | **-0.9** |
| **DIKM** | **Dikmen** | **0.50** | **301** | *e*Pg | **Pg** | **15 07 26.5** | **+0.4** |
| **BOYT** | **Boyabat** | **0.70** | **273** | *i* P | **Pg** | **15 07 29.1** | **-0.8** |
| BOYT | | | | *i* S | **Sb** | **15 07 41.2** | **+0.4** |
| **BOYT** | **Boyabat** | **0.70** | **273** | P | **Pg** | **15 07 29.1** | **-0.8** |
| BOYT | | | | S | **Sb** | **15 07 41.2** | **+0.4** |
| **BZK** | **Bozkurt** | **1.48** | **293** | *e*PN | **Pg** | **15 07 44.5** | **-0.4** |
| **BZK** | **Bozkurt** | **1.48** | **293** | *e*Pn | **Pg** | **15 07 44.5** | **-0.4** |
| **CORM** | **Corum** | **1.52** | **217** | *e*PN | **Pn** | **15 07 44.5** | **+0.4** |
| **CORM** | **Corum** | **1.52** | **217** | *e*Pn | **Pn** | **15 07 44.5** | **+0.4** |
| **SVSK** | **Karacayir** | **1.72** | **149** | *e*PN | **Pn** | **15 07 46.5** | **-0.2** |
| **SVSK** | **Karacayir** | **1.72** | **149** | *e*Pn | **Pn** | **15 07 46.5** | **-0.2** |
| **GRSN** | **GIRESUNGRSN** | **1.90** | **103** | *i* P | **Pn** | **15 07 49.1** | **-0.1** |
| GRSN | | | | *i* S | **Sb** | **15 08 15.0** | **-0.3** |
| **GRSN** | **GIRESUNGRSN** | **1.90** | **103** | P | **Pn** | **15 07 49.1** | **-0.1** |
| GRSN | | | | S | **Sb** | **15 08 15.0** | **-0.3** |
| **SUSE** | **Susehri** | **2.15** | **123** | *i* P | **Pn** | **15 07 54.3** | **+1.4** |
| **SUSE** | **Susehri** | **2.15** | **123** | P | **Pn** | **15 07 54.3** | **+1.4** |
| SUSE | | | | S | **Sb** | **15 08 23.0** | **+0.3** |
| **ESPY** | **Espiye-Giresun** | **2.24** | **101** | *e*PN | **Pn** | **15 07 53.5** | **-0.4** |
| **ESPY** | **Espiye-Giresun** | **2.24** | **101** | *e*Pn | **Pn** | **15 07 53.5** | **-0.4** |
| **KELT** | **Kelkit** | **2.88** | **114** | P | **Pb** | **15 08 07.5** | **-0.7** |
| KELT | | | | S | **Sb** | **15 08 45.0** | **+1.2** |

*IDC **15** 15:31:48.0±0.8, 22°59S×175°08W, h0km, mb4.3/11, mb1 4.5/12, mb1mx4.3/25, mbtmp4.2/12, ML3.9/1, MS3.4/2, Ms1 3.4/2, ms1mx2.8/21, Error ellipse: s-maj=31.8km s-min=20.2km az=128.0*
*ISCJB **15** 15:31:51.2±0.7, 22°7S±0°1×175°2W±0°1, h33km, mb4.2/13, MS3.1/1, Error ellipse: s-maj=19.9km s-min=13.6km az=28.8*
*NEIC **15** 15:31:56.0±2.3, 22°87S×175°10W, h68km±19km, mb4.1/1, Error ellipse: s-maj=19.0km s-min=13.6km az=96.0*

**ISC 15 15:31:52.6±0.7, 22°8S±0°1×175°1W±0°2, h33km, n28, σ1s30/23, mb4.2/13, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **8.13** | **307** | *e*Pn | Pn | 15 33 52.7 | +4.2 |
| | 64nm,1.1s | | | | | | |
| **AFI** | **Afiamalu** | **9.36** | **20** | Pn | Pn | 15 33 56.0 | -9.3 |
| | 2.0nm,0.3s,baz=29,slow=1.3,SNR=4.2 | | | | | | |
| AFI | | | | Sn | Sn | 15 35 25.1 | -24 |
| | 0.1nm,0.3s,baz=185,slow=19,SNR=1.7 | | | | | | |
| **RAR** | **Rarotonga** | **14.32** | **87** | LR | LR | 15 40 00.1 | |
| | comp=Z,158nm,18.9s,baz=282,slow=34 | | | | | | |
| **URZ** | **Urewera** | **16.82** | **202** | Pn | **P** | **15 35 46.8** | **-0.7** |
| | 0.4nm,0.3s,baz=335,slow=4.4,SNR=3.3 | | | | | | |
| URZ | | | | Sn | Sn | 15 38 41.1 | -10 |
| | 0.4nm,0.3s,baz=118,slow=15,SNR=4.9 | | | | | | |
| **URZ** | **Urewera** | **16.82** | **202** | *e*Pn | **Pn** | **15 35 45.5** | **-0.1** |
| URZ | | | | Sn | Sn | 15 38 41.0 | -10 |
| **RPZ** | **Rata Peaks** | **23.82** | **205** | P | **P** | **15 37 03.7** | **+1.2** |
| | 8.5nm,1.0s,baz=43,slow=18,SNR=2.8 | | | | | | |
| **RPZ** | **Rata Peaks** | **23.82** | **205** | *e*P | **P** | **15 37 03.2** | **+0.7** |
| **PAE** | **Paea** | **24.48** | **83** | *e*T | T | 16 02 22.6 | |
| | 4.2nm,0.4s | | | | | | |
| **PPT2** | **Papeete2** | **24.50** | **83** | *e*LR | LR | 15 43 10.1 | |
| | 58nm,21.5s | | | | | | |
| **PPT2** | **Papeete2** | **24.50** | **83** | *e*T | T | 16 02 25.3 | |
| | 3.6nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **24.51** | **82** | LR | LR | 15 45 00.2 | |
| | comp=Z,65nm,19.2s,baz=281,slow=32 | | | | | | |
| **COEN** | **Coen** | **40.43** | **275** | P | **P** | **15 39 26.6** | **-1.5** |
| **ASAR** | **Alice Springs** | **46.65** | **258** | P | **P** | **15 40 18.5** | **+0.2** |
| | 4.0nm,0.7s,baz=95,slow=6.7,SNR=48 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 41 53.0** | **+1.2** |
| | 0.9nm,0.9s,baz=96,slow=3.8,SNR=3.2 | | | | | | |
| **WRAB** | **Tennant Creek** | **46.97** | **264** | *e*P | **P** | **15 40 20.7** | **0.0** |
| | 2.0nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.98** | **263** | P | **P** | **15 40 20.7** | **-0.1** |
| | 2.3nm,0.6s,baz=95,slow=8.5,SNR=50 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 41 53.7** | **+0.7** |
| | 0.9nm,0.7s,baz=100,slow=3.1,SNR=4.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **55.41** | **263** | *e*P | **P** | **15 41 23.9** | **-0.2** |
| **SOEI** | **Soe** | **59.26** | **272** | *e*P | **P** | **15 41 49.5** | **-1.9** |
| | 11nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **67.32** | **180** | P | **P** | **15 42 41.6** | **-2.5** |
| **MJAR** | **Matsushiro Arr** | **73.62** | **322** | P | **P** | **15 43 22.1** | **-0.7** |
| | 0.9nm,0.7s,baz=155,slow=5.8,SNR=5.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.16** | **344** | P | **P** | **15 43 53.5** | **-0.2** |
| | 3.4nm,0.8s,baz=153,slow=8.1,SNR=4.5 | | | | | | |
| **MAW** | **Mawson** | **80.34** | **199** | P | **P** | **15 44 02.7** | **+2.7** |
| | 1.2nm,0.5s,baz=138,slow=6.1,SNR=6.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.87** | **42** | P | **P** | **15 44 02.9** | **-0.7** |
| | 1.3nm,0.8s,baz=225,slow=8.9,SNR=6.5 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **82.34** | **325** | P | **P** | **15 44 12.6** | **+1.6** |
| | 4.0nm,0.8s,baz=148,slow=2.8,SNR=8.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.05** | **56** | P | **P** | **15 44 30.3** | **+0.1** |
| | 1.3nm,1.0s,baz=216,slow=6.2,SNR=8.0 | | | | | | |
| **ILAR** | **Eielson Array** | **89.95** | **12** | P | **P** | **15 44 47.6** | **-0.3** |
| | 0.5nm,0.9s,baz=228,slow=6.7,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.39** | **288** | P | **P** | **15 45 07.3** | **+2.3** |
| | 2.4nm,0.8s,baz=120,slow=3.1,SNR=16 | | | | | | |
| **AKASG** | **Malin Array Be** | **146.28** | **332** | PKPbc | **PKPdf** | **15 51 28.2** | **-0.2** |
| | 1.9nm,0.6s,baz=41,slow=4.2,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **150.34** | **311** | PKPbc | **PKPbc** | **15 51 40.1** | **-0.7** |
| | 0.8nm,0.8s,baz=126,slow=3.7,SNR=3.1 | | | | | | |

*IDC **15** 15:36:52.2±1.6, 17°30S×178°90W, h496km±22km, mb3.1/9, mb1 3.4/10, mb1mx3.1/25, mbtmp4.0/10, Error ellipse: s-maj=18.5km s-min=11.9km az=125.0*
*ISCJB **15** 15:36:53.5±0.6, 17°4S±0°1×178°8W±0°1, h539km, mb3.6/9, Error ellipse: s-maj=20.7km s-min=10.1km az=144.8*

**ISC 15 15:36:54.2±0.8, 17°3S±0°1×178°7W±0°1, h539km, n10, σ1s16/10, mb3.3/9, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | IS

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LAO | **LASA Array** | **4.59** | **113** | *e*Pn | Pn | 15 44 53.6 | -3.5 |
| LAO | | | | *e*Pg | **Pb** | **15 45 09.0** | **+0.8** |
| LAO | | | | *e*Sg | **Sb** | **15 46 06.6** | **+3.1** |
| **EDM** | **Edmonton** | **4.66** | **353** | Sn | **Sn** | **15 45 50.8** | **-1.2** |
| EDM | | | | Sg | **Sg** | **15 46 11.5** | **-5.5** |
| **EDM** | **Edmonton** | **4.66** | **353** | *e*Pn | **Pn** | **15 44 58.4** | **+0.5** |
| **PNT** | **Penticton** | **4.82** | **281** | Sg | **Sg** | **15 46 18.2** | **-4.0** |
| **DOWB** | **Downie Slide** | **4.90** | **309** | Pn | **Pn** | **15 45 03.6** | **+2.2** |
| DOWB | | | | Sn | Sg | 15 46 19.8 | -5.1 |
| DOWB | | | | Sg | Sb | 15 46 27.1 | +14 |
| **DOWB** | **Downie Slide** | **4.90** | **309** | Pn | **Pn** | **15 45 03.6** | **+2.2** |
| DOWB | | | | Sg | **Sg** | **15 46 27.1** | **+2.2** |
| **HLID** | **Hailey** | **5.24** | **196** | *e*Pn | **Pn** | **15 45 05.4** | **-0.8** |
| **MNB** | **Mounoet Dainar** | **5.25** | **315** | Pn | **Pn** | **15 45 08.8** | **+2.4** |
| **MNB** | **Mounoet Dainar** | **5.25** | **315** | Pn | **Pn** | **15 45 08.8** | **+2.4** |
| **LTY** | **Liberty** | **5.73** | **259** | Pn | **Pn** | **15 45 13.0** | **+0.2** |
| LTY | | | | Sg | Sb | 15 46 44.7 | +8.3 |
| **LTY** | **Liberty** | **5.73** | **259** | Pn | **Pn** | **15 45 13.0** | **+0.2** |
| LTY | | | | Sg | Sb | 15 46 44.7 | +8.3 |
| **LLLB** | **Lillooet** | **6.49** | **291** | Sg | Sg | 15 47 10.3 | -5.5 |

**MEX 15 15:47:58.9±0.5, 15°18.N×91°12.W, h16km±76km, MD4.0, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCIG** | **Comitan** | **1.47** | **319** | *e*P | Pn | 15 48 21.0 | -4.0 |
| CCIG | | | | *e*S | Sn | 15 48 38.8 | -5.3 |
| **PCIG** | | **2.09** | **285** | *e*P | Pn | 15 48 30.1 | -3.1 |
| PCIG | | | | *i* S | Sn | 15 48 54.1 | -4.8 |

**SJA 15 15:50:44.4±0.7, 31°.57S×68°.97W, h106km±4km, ML4.4, MW3.8, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLS** | **Leoncito** | **0.36** | **231** | *e*P | Pn | 15 51 01.8 | +1.4 |
| RTLS | | | | *e*S | Sn | 15 51 13.7 | +1.4 |
| RTLS | | | | IAML | | 15 51 15.8 | |
| | comp=Z,556μm,0.1s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **0.47** | **129** | *e*P | Pn | 15 51 01.8 | +1.0 |
| RTCV | | | | *e*S | Sn | 15 51 14.2 | +1.2 |
| **CFAA** | **Coronel Fontan** | **0.62** | **93** | *e*P | Pn | 15 51 02.9 | +1.0 |
| CFAA | | | | *e*S | Sn | 15 51 15.8 | +0.9 |
| CFAA | | | | IAML | | 15 51 17.1 | |
| | comp=Z,42μm,0.2s | | | | | | |
| **AUSP** | **Uspallata** | **0.74** | **209** | *e*P | Pn | 15 51 04.2 | +1.1 |
| AUSP | | | | *e*S | Sn | 15 51 18.6 | +1.3 |
| **ASAL** | **Salagasta** | **1.02** | **174** | *e*P | Pn | 15 51 06.6 | +0.9 |
| ASAL | | | | *e*S | Sn | 15 51 22.9 | +1.2 |
| **ARCO** | **CERRO ARCO** | **1.27** | **179** | *e*P | Pn | 15 51 09.5 | +1.0 |
| ARCO | | | | *e*S | Sn | 15 51 27.7 | +1.0 |
| ARCO | | | | IAML | | 15 51 30.8 | |
| | comp=Z,20nm,0.6s | | | | | | |
| **AVFE** | **Valle Fertil** | **1.58** | **55** | *e*P | Pn | 15 51 12.9 | +0.8 |
| **ACHE** | **Chepes** | **2.01** | **79** | *e*P | Pn | 15 51 18.7 | +1.1 |
| ACHE | | | | *e*S | Sn | 15 51 44.1 | +1.1 |

*ISK **15** 15:55:02.5, 36°.62N×31°.40E, h18km, MD3.1*
*DDA **15** 15:55:06.0, 36°.87N×31°.30E, h39km, Md2.9*
*CSEM **15** 15:55:07.0±0.2, 36°.81N×31°.24E, h30km, MD3.1, Error ellipse: s-maj=7.3km s-min=5.1km az=179.0*

**ISC 15 15:55:06.9±1.0, 36°.80N±0°.03×31°.26E±0°.02, h31km±11km, n47, σ1s09/64, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANTB** | **Antalya** | **0.50** | **282** | *e*PG | **Pb** | **15 55 15.7** | **-1.7** |
| **ANTB** | **Antalya** | **0.50** | **282** | *e*Pg | **Pb** | **15 55 15.7** | **-1.7** |
| **SUTC** | **Sutluce-Ispart** | **0.71** | **343** | *e*PG | **Pn** | **15 55 20.9** | **-0.1** |
| SUTC | | | | *e*SG | **Sn** | **15 55 33.9** | **+2.9** |
| **SUTC** | **Sutluce-Ispart** | **0.71** | **343** | *e*Pg | **Pn** | **15 55 20.9** | **-0.1** |
| **KORT** | **Korkueli** | **0.76** | **286** | *i* P | **Pn** | **15 55 21.1** | **-0.5** |
| KORT | | | | *i* S | **Sn** | **15 55 33.2** | **+1.1** |
| **KORT** | **Korkueli** | **0.76** | **286** | P | **Pn** | **15 55 21.1** | **-0.5** |
| KORT | | | | S | **Sn** | **15 55 33.2** | **+1.1** |
| **BCK** | **Bucak** | **0.85** | **321** | *e*PG | **Pn** | **15 55 22.8** | **-0.1** |
| BCK | | | | *e*SG | **Sb** | **15 55 37.9** | **+3.3** |
| **BCK** | **Bucak** | **0.85** | **321** | *e*Pg | **Pn** | **15 55 22.8** | **-0.1** |
| **HDMB** | **Hadim** | **1.00** | **80** | *e*PG | Pn | 15 55 21.1 | -3.9 |
| **GAZI** | **Gazipasa** | **1.02** | **123** | *i* P | **Pn** | **15 55 24.8** | **-0.3** |
| GAZI | | | | *i* S | **Sb** | **15 55 40.5** | **+1.5** |
| **GAZI** | **Gazipasa** | **1.02** | **123** | P | **Pn** | **15 55 24.8** | **-0.3** |
| GAZI | | | | S | **Sb** | **15 55 40.5** | **+1.5** |
| **ELL** | **Elmali** | **1.09** | **268** | *e*PN | **Pn** | **15 55 25.3** | **-0.8** |
| **ELL** | **Elmali** | **1.09** | **268** | *e*Pn | **Pn** | **15 55 25.3** | **-0.8** |
| **BAGO** | **Egridir - ISPA** | **1.25** | **343** | P | **Pn** | **15 55 28.0** | **-0.4** |
| BAGO | | | | S | **Sb** | **15 55 45.1** | **-0.7** |
| **ERMK** | **Ermenek** | **1.33** | **96** | *i* P | **Pb** | **15 55 31.1** | **-0.4** |
| ERMK | | | | *i* S | **Sb** | **15 55 49.6** | **+1.3** |
| **ERMK** | **Ermenek** | **1.33** | **96** | P | **Pb** | **15 55 31.1** | **-0.4** |
| ERMK | | | | S | **Sb** | **15 55 49.5** | **+1.3** |
| **GOLH** | **Golhisar** | **1.43** | **288** | *i* P | **Pb** | **15 55 32.7** | **-0.4** |
| **GOLH** | **Golhisar** | **1.43** | **288** | P | **Pb** | **15 55 32.7** | **-0.4** |
| GOLH | | | | S | **Sb** | **15 55 53.6** | **+2.7** |
| **KONT** | **Konya--Tatoy** | **1.44** | **37** | *e*PN | **Pn** | **15 55 29.6** | **-1.4** |
| **KONT** | **Konya--Tatoy** | **1.44** | **37** | *e*Pn | **Pn** | **15 55 29.6** | **-1.4** |
| **AKAS** | **Kas** | **1.45** | **248** | *i* P | **Pn** | **15 55 30.3** | **-0.8** |
| AKAS | | | | *i* S | **Sn** | **15 55 48.6** | **-0.4** |
| **AKAS** | **Kas** | **1.45** | **248** | P | **Pn** | **15 55 30.3** | **-0.8** |
| AKAS | | | | S | **Sn** | **15 55 48.6** | **-0.4** |
| **GLHS** | **Glhisar (BURDU** | **1.46** | **285** | *e*PN | **Pn** | **15 55 30.8** | **-0.4** |
| **GLHS** | **Glhisar (BURDU** | **1.46** | **285** | *e*Pn | **Pn** | **15 55 30.8** | **-0.4** |
| **FETY** | **Fethiye** | **1.76** | **265** | *e*PN | **Pn** | **15 55 34.5** | **-0.7** |
| **FETY** | **Fethiye** | **1.76** | **265** | *e*Pn | **Pn** | **15 55 34.5** | **-0.7** |
| **KDHN** | **Kadinhani** | **1.85** | **21** | *i* P | **Pn** | **15 55 36.5** | **-0.1** |
| KDHN | | | | *i* S | **Sn** | **15 55 58.9** | **-0.1** |
| **KDHN** | **Kadinhani** | **1.85** | **21** | P | **Pn** | **15 55 36.5** | **-0.1** |
| KDHN | | | | S | **Sn** | **15 55 58.9** | **-0.1** |
| **BOLV** | **Bolvadin** | **1.94** | **353** | *i* P | **Pn** | **15 55 38.0** | **+0.2** |
| BOLV | | | | *i* S | **Sn** | **15 55 59.0** | **-2.2** |
| **BOLV** | **Bolvadin** | **1.94** | **353** | P | **Pn** | **15 55 38.0** | **+0.2** |
| BOLV | | | | S | **Sn** | **15 55 59.0** | **-2.2** |
| **DNZL** | **Cakiroluk** | **1.98** | **297** | *i* P | **Pn** | **15 55 39.5** | **+1.0** |
| **DNZL** | **Cakiroluk** | **1.98** | **297** | P | **Pn** | **15 55 39.5** | **+1.0** |
| DNZL | | | | S | **Sb** | **15 56 06.0** | **-0.8** |
| **DALY** | **Dalyan (Mu¨la** | **2.09** | **271** | *e*PN | **Pn** | **15 55 39.5** | **-0.3** |
| **DALY** | **Dalyan (Mu¨la** | **2.09** | **271** | *e*Pn | **Pn** | **15 55 39.5** | **-0.3** |
| **KHAL** | **Karahalli** | **2.11** | **319** | *i* P | **Pn** | **15 55 39.4** | **-0.8** |
| KHAL | | | | *i* S | **Sn** | **15 56 05.0** | **-0.4** |
| **KHAL** | **Karahalli** | **2.11** | **319** | P | **Pn** | **15 55 39.4** | **-0.8** |
| KHAL | | | | S | **Sn** | **15 56 05.0** | **-0.4** |
| **LEF** | **Lefka** | **2.13** | **141** | *e*PN | Pn | 15 55 35.2 | -5.2 |
| **YER** | **Yerkesik** | **2.41** | **279** | *e*PN | **Pn** | **15 55 44.0** | **-0.3** |
| **YER** | **Yerkesik** | **2.41** | **279** | *e*Pn | **Pn** | **15 55 44.0** | **-0.3** |
| **KULA** | **Kula-Manisa** | **2.69** | **311** | *e*PN | **Pn** | **15 55 48.4** | **+0.4** |
| **KULA** | **Kula-Manisa** | **2.69** | **311** | *e*Pn | **Pn** | **15 55 48.4** | **+0.4** |
| **AYDN** | **Tasoluk** | **2.83** | **289** | *i* P | **Pn** | **15 55 51.6** | **+1.5** |
| **AYDN** | **Tasoluk** | **2.83** | **289** | P | **Pn** | **15 55 51.6** | **+1.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.92** | **294** | *e*PN | **Pn** | **15 55 51.2** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.92** | **294** | *e*Pn | **Pn** | **15 55 51.2** | **-0.1** |
| **BODT** | **Bodrum** | **3.18** | **276** | *e*PN | **Pn** | **15 55 55.0** | **+0.3** |
| **BODT** | **Bodrum** | **3.18** | **276** | *e*Pn | **Pn** | **15 55 55.0** | **+0.3** |

**IDC 15 16:02:48.8±3.6, 24°.46S×24°.66E, h0km, mb1 2.8/1, mb1mx2.7/25, mbtmp2.8/1, ML2.2/1, Error ellipse: s-maj=26.0km s-min=16.0km az=102.0, Botswana**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LBTB** | **Lobatse** | **1.02** | **123** | Pg | Pg | 16 03 08.9 | +0.4 |
| | 0.7nm,0.3s,baz=309,slow=18,SNR=17 | | | | | | |
| LBTB | | | | Lg | Lg | 16 03 22.5 | |
| | 1.0nm,0.3s,baz=218,slow=23,SNR=7.2 | | | | | | |
| **BOSA** | **Boshof** | **4.17** | **173** | Pn | Pn | 16 03 54.2 | +0.3 |
| | 0.1nm,0.3s,baz=17,slow=16,SNR=1.9 | | | | | | |
| BOSA | | | | Sn | Sn | 16 04 42.6 | -0.9 |
| | 0.1nm,0.3s,baz=207,slow=11,SNR=2.5 | | | | | | |
| BOSA | | | | Lg | Lg | 16 04 59.2 | |
| | 0.4nm,0.3s,baz=54,slow=12,SNR=3.8 | | | | | | |
| **I47ZA** | **BOSHOF INFRASO** | **4.18** | **173** | *i* | | 16 29 40.0 | |
| | baz=353,slow=331,SNR=1.6 | | | | | | |
| **MATP** | **Matopo** | **5.36** | **42** | Pg | Pb | 16 04 27.3 | +3.8 |
| | 0.1nm,0.3s,baz=222,slow=15,SNR=2.5 | | | | | | |
| MATP | | | | Sn | Sn | 16 05 15.3 | +2.5 |
| | 0.1nm,0.3s,baz=180,slow=12,SNR=2.1 | | | | | | |
| MATP | | | | Lg | Lg | 16 05 36.4 | |
| | 0.2nm,0.3s,baz=305,slow=15,SNR=3.5 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **I35NA** | **TSUMEB INFRASO** | **8.41** | **307** | *i* | | 16 56 20.0 | |
| | baz=132,slow=317,SNR=1.0 | | | | | | |

*CSEM **15** 16:04:17.7±0.4, 39°.26N×40°.93E, h5km, MD2.7, Error ellipse: s-maj=10.4km s-min=7.8km az=152.0*
*ISCJB **15** 16:04:19.4±0.5, 39°.32N±0°.03×41°.04E±0°.05, h7km±7km, Error ellipse: s-maj=6.1km s-min=4.7km az=13.5*
*ISK **15** 16:04:19.2, 39°.26N×41°.07E, h14km, MD2.6*
*DDA **15** 16:04:19.0, 39°.32N×41°.00E, h7km, Md2.7*

**ISC 15 16:04:18.7±1.0, 39°.27N±0°.03×41°.04E±0°.03, h8km±9km, n19, σ0s96/27, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNGL** | **BINGOL** | **0.33** | **165** | P | **Pg** | **16 04 26.2** | **+0.9** |
| BNGL | | | | S | **Sb** | **16 04 32.8** | **+0.3** |
| **ECAT** | **Cat-ERZURUM** | **0.34** | **351** | *i* P | **Pg** | **16 04 25.0** | **-0.4** |
| ECAT | | | | *i* S | **Sg** | **16 04 30.3** | **+0.4** |
| **ECAT** | **Cat-ERZURUM** | **0.34** | **351** | P | **Pg** | **16 04 25.0** | **-0.4** |
| ECAT | | | | S | **Sg** | **16 04 30.3** | **+0.4** |
| **VRTB** | **Varto-Mus** | **0.34** | **109** | *e*PG | **Pg** | **16 04 26.3** | **+0.8** |
| **VRTB** | **Varto-Mus** | **0.34** | **109** | *e*Pg | **Pg** | **16 04 26.3** | **+0.8** |
| **BNGB** | **Bing¨ll** | **0.40** | **225** | *e*PG | **Pg** | **16 04 27.4** | **+0.9** |
| BNGB | | | | *e*SG | **Sb** | **16 04 34.3** | **0.0** |
| **BINT** | **Bingol** | **0.58** | **227** | *e*Pg | Pg | 16 04 27.4 | -2.6 |
| BINT | | | | *e*Sg | **Sg** | **16 04 34.3** | **-3.4** |
| **ERZM** | **Erzurum** | **0.68** | **22** | *i* P | **Pg** | **16 04 31.9** | **0.0** |
| ERZM | | | | *i* S | **Sg** | **16 04 40.7** | **-0.1** |
| **ERZM** | **Erzurum** | **0.68** | **22** | P | **Pg** | **16 04 31.9** | **0.0** |
| ERZM | | | | S | **Sg** | **16 04 40.7** | **-0.1** |
| **EKAR** | **Karacoban** | **0.79** | **91** | *i* P | **Pb** | **16 04 34.8** | **-0.1** |
| EKAR | | | | *i* S | **Sn** | **16 04 47.4** | **-1.2** |
| **EKAR** | **Karacoban** | **0.79** | **91** | P | **Pb** | **16 04 34.8** | **-0.1** |
| EKAR | | | | S | **Sn** | **16 04 47.4** | **-1.2** |
| **ERZN** | **Erzincan** | **1.07** | **287** | *e*PN | **Pn** | **16 04 40.4** | **+0.3** |
| ERZN | | | | *e*SN | **Sn** | **16 04 56.7** | **+1.5** |
| **BAYT** | **Ayd¨¨-ntepe-Bay** | **1.32** | **329** | *e*PN | **Pn** | **16 04 44.0** | **+0.5** |
| **BAYT** | **Ayd¨¨-ntepe-Bay** | **1.32** | **329** | *e*Pn | **Pn** | **16 04 44.0** | **+0.5** |
| **PTK** | **Pertek** | **1.34** | **254** | *e*PN | **Pn** | **16 04 44.0** | **+0.1** |
| **PTK** | **Pertek** | **1.34** | **254** | *e*Pn | **Pn** | **16 04 44.0** | **+0.1** |
| **EZC** | **Erzincan** | **1.39** | **291** | *e*Pn | Pn | 16 04 40.4 | -4.1 |
| EZC | | | | *e*Sn | Sn | 16 04 56.7 | -6.5 |
| **AGRB** | **Hanur-Agry** | **1.54** | **78** | *e*PN | **Pn** | **16 04 46.7** | **+0.1** |
| **AGRB** | **Hanur-Agry** | **1.54** | **78** | *e*Pn | **Pn** | **16 04 46.7** | **+0.1** |

*ISCJB **15** 16:05:19.7±0.6, 32°.17N±0°.02×115°.21W±0°.03, h12km±4km, Error ellipse: s-maj=4.7km s-min=3.4km az=177.1*
*ECX **15** 16:05:21.2±0.5, 32°.15N×115°.24W, h6km, MD3.2, ML3.4*
*NEIC **15** 16:05:21.2, 32°.15N×115°.25W, h6km, ML3.2(PAS), ML3.4(ECX), After ECX.*
*MEX **15** 16:05:22.4±0.4, 32°.21N×115°.19W, h10km, MD3.8*

**ISC 15 16:05:19.4±1.1, 32°.15N±0°.02×115°.24W±0°.03, h6km±10km, n40, σ0s80/58, 4C-10D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.26** | **8** | *e*P | **Pb** | **16 05 25.8** | **-0.7** |
| MBIG | | | | *e*S | **Sg** | **16 05 28.6** | **+0.5** |
| **MBIG** | **Mexicali** | **0.26** | **8⇓** | *e*P | **Pb** | **16 05 26.5** | **0.0** |
| **CPBX** | **Cerro Prieto** | **0.28** | **349⇓** | *e*P | **Pb** | **16 05 26.4** | **-0.3** |
| CPBX | | | | ⇓*e*P | **Pb** | **16 05 26.4** | **-0.3** |
| CPBX | | | | *e*S | **Sg** | **16 05 30.4** | **+1.9** |
| CPBX | | | | IAML | | 16 05 32.3 | |
| | comp=E,13μm,0.3s | | | | | | |
| CPBX | | | | *e* | | 16 05 32.3 | |
| **CPBX** | **Cerro Prieto** | **0.28** | **349** | *e*P | **Pb** | **16 05 26.3** | **-0.4** |
| CPBX | | | | *e*S | **Sg** | **16 05 29.2** | **+0.7** |
| **EMSC** | **East Mesa** | **0.63** | **20⇑** | *i*P | **Pb** | **16 05 32.6** | **-0.1** |
| **RDX** | **Rancho Dawling** | **0.63** | **250⇑** | *e*P | **Pb** | **16 05 32.7** | **-0.2** |
| RDX | | | | *e*S | **Sb** | **16 05 41.6** | **-0.5** |
| RDX | | | | ⇑*e* | | 16 05 42.8 | |
| RDX | | | | IAML | | 16 05 42.8 | |
| | comp=N,1μm,0.4s | | | | | | |
| **SGL** | **Mount Signal** | **0.65** | **321** | *e*P | **Pg** | **16 05 32.4** | **+0.6** |
| **DREC** | **Desert Rsrch C** | **0.68** | **345** | *e*P | **Pb** | **16 05 33.3** | **-0.3** |
| **ECBX** | **El Chinero** | **0.69** | **166⇓** | *e*P | **Pb** | **16 05 33.5** | **-0.3** |
| ECBX | | | | *e*S | **Sb** | **16 05 43.4** | **-0.2** |
| **YMD** | **Yuma Desert** | **0.72** | **55⇑** | *i*P | **Pg** | **16 05 33.2** | **0.0** |
| **COA** | **Coachella** | **0.72** | **8⇓** | *e*P | **Pg** | **16 05 33.5** | **+0.2** |
| **WESC** | **Westside Schoo** | **0.74** | **326** | *e*P | **Pb** | **16 05 34.5** | **-0.1** |
| **YUH** | **Yuha Desert** | **0.76** | **311⇓** | *i*P | **Pg** | **16 05 34.3** | **+0.3** |
| **COK** | **Cook Ranch** | **0.81** | **330** | *i* P | **Pg** | **16 05 35.4** | **+0.4** |
| **RMX** | **La Rumorosa** | **0.84** | **303⇓** | *e*P | **Pg** | **16 05 35.5** | **0.0** |
| RMX | | | | *e*S | **Sg** | **16 05 46.2** | **-0.4** |
| **IBP** | **Imperial Bould** | **0.89** | **306** | P | **Pg** | **16 05 36.5** | **+0.1** |
| | baz=0.9 | | | | | | |
| IBP | | | | S | **Sg** | **16 05 48.6** | **+0.7** |
| | baz=0.9 | | | | | | |
| **IBP** | **Imperial Bould** | **0.89** | **306⇓** | *i*P | **Pg** | **16 05 36.5** | **+0.1** |
| IBP | | | | *e*S | **Sg** | **16 05 48.5** | **+0.7** |
| **SWSC** | **Sam W. Stewart** | **0.92** | **330** | P | **Pg** | **16 05 36.2** | **-0.9** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.97** | **21** | P | **Pg** | **16 05 36.8** | **-1.1** |
| | baz=1.0 | | | | | | |
| GLA | | | | S | **Sg** | **16 05 48.5** | **-2.1** |
| | baz=1.0 | | | | | | |
| **GLA** | **Glamis** | **0.97** | **21** | *e*Pg | **Pg** | **16 05 36.9** | **-1.1** |
| GLA | | | | *e*Sg | **Sg** | **16 05 49.1** | **-1.5** |
| **ZAX** | **El Zacaton** | **1.08** | **235⇓** | *e*P | **Pg** | **16 05 40.0** | **-0.1** |
| **SPIG** | **San Pedro Mart** | **1.11** | **190** | *e*P | **Pn** | **16 05 42.0** | **+0.2** |
| SPIG | | | | *e*S | **Sb** | **16 05 56.7** | **+0.6** |
| **SPIG** | **San Pedro Mart** | **1.11** | **190** | *e*P | **Pg** | **16 05 40.8** | **+0.1** |
| **SPIG** | **San Pedro Mart** | **1.11** | **190** | *e*P | **Pn** | **16 05 42.0** | **+0.2** |
| SPIG | | | | *e*S | **Sb** | **16 05 56.7** | **+0.6** |
| **SPX** | **San Pedro Mart** | **1.11** | **190** | *e*P | **Pg** | **16 05 40.7** | **0.0** |
| SPX | | | | AML | AML | 16 05 58.0 | |
| | comp=E,488nm,0.3s | | | | | | |
| SPX | | | | *e* | | 16 05 58.0 | |
| **SPX** | **San Pedro Mart** | **1.11** | **190** | *e*P | **Pb** | **16 05 41.2** | **0.0** |
| SPX | | | | *e*S | **Sg** | **16 05 55.9** | **+0.6** |
| **CBX** | **Cerro Bola** | **1.22** | **278** | *e*P | **Pg** | **16 05 42.0** | **-0.6** |
| CBX | | | | *e*S | **Sg** | **16 05 58.0** | **-0.5** |
| **CBX** | **Cerro Bola** | **1.22** | **278⇓** | *e*P | **Pg** | **16 05 42.1** | **-0.6** |
| **CBX** | **Cerro Bola** | **1.22** | **278** | *e*P | **Pg** | **16 05 42.0** | **-0.6** |
| CBX | | | | *e*S | **Sg** | **16 05 58.0** | **-0.5** |
| **MONP** | **Monument Peak** | **1.24** | **307** | P | **Pg** | **16 05 41.8** | **-1.4** |
| | baz=1.2 | | | | | | |
| MONP | | | | S | **Sg** | **16 05 59.2** | **-0.1** |
| | baz=1.2 | | | | | | |
| **ECNX** | **Esteban Cantu** | **1.25** | **247** | *e*P | **Pg** | **16 05 42.9** | **-0.5** |
| **BAR** | **Barrett** | **1.32** | **294** | *e*Pn | **Pn** | **16 05 43.3** | **-1.1** |
| BAR | | | | *e*Sn | **Sb** | **16 06 01.4** | **-0.4** |
| **PBX** | **Punta Banda** | **1.32** | **253** | *e*P | **Pn** | **16 05 43.6** | **-0.8** |
| **109C** | **Camp Elliot, M** | **1.74** | **296** | Sb | **Sb** | **16 06 13.6** | **-0.2** |
| | baz=1.7 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.78** | **325** | *e*Pn | Pn | 16 05 47.1 | -3.7 |
| PFO | | | | *e*Sn | **Sn** | **16 06 14.7** | **+0.9** |
| **LDFC** | **Landfair** | **2.93** | **2** | *e*Pn | **Pn** | **16 06 08.5** | **+2.0** |
| LDFC | | | | *e*Sn | **Sn** | **16 06 42.6** | **+0.5** |
| **MWC** | **Mount Wilson** | **3.14** | **312** | *e*Pn | **Pn** | **16 06 10.8** | **+1.2** |
| **GSC** | **Goldstone** | **3.41** | **338** | *e*Pn | Pn | 16 06 08.9 | -4.2 |
| **ISA** | **Isabella** | **4.42** | **323** | *e*Pn | **Pn** | **16 06 28.1** | **+1.1** |
| **121A** | **Cookes Peak, D** | **6.32** | **85** | *e*Pn | **Pn** | **16 06 51.7** | **-1.6** |
| | comp=E,4.0nm,0.4s | | | | | | |

*DDA **15** 16:06:01.3, 38°.53N×39°.67E, h14km, Md3.0*
*ISK **15** 16:06:01.2, 38°.55N×39°.65E, h11km, MD2.8*
*CSEM **15** 16:06:01.2±0.2, 38°.52N×39°.67E, h8km, MD2.8, Error ellipse: s-maj=5.3km s-min=3.2km az=32.0*

**ISC 15 16:06:01.6±1.0, 38°.53N±0°.03×39°.67E±0°.02, h10km±11km, n27, σ0s54/38, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVRC** | **Sivrice-ELAZID** | **0.32** | **242** | *e*PG | **Pg** | **16 06 07.9** | **-0.2** |
| SVRC | | | | *e*SG | **Sg** | **16 06 13.1** | **+0.7** |
| **SVRC** | **Sivrice-ELAZID** | **0.32** | **242** | *e*Pg | **Pg** | **16 06 07.9** | **-0.2** |
| SVRC | | | | *e*Sg | **Sg** | **16 06 13.1** | **+0.7** |
| **PTK** | **Pertek** | **0.42** | **330** | *e*PG | **Pg** | **16 06 09.7** | **-0.3** |
| PTK | | | | *e*SG | **Sg** | **16 06 15.7** | **0.0** |
| **PTK** | **Pertek** | **0.42** | **330** | *e*Pg | **Pg** | **16 06 09.7** | **-0.3** |
| PTK | | | | *e*Sg | **Sg** | **16 06 15.7** | **0.0** |
| **ELZG** | **Elazig** | **0.54** | **267** | *i* P | **Pg** | **16 06 11.7** | **-0.4** |
| **ELZG** | **Elazig** | **0.54** | **267** | P | **Pg** | **16 06 11.7** | **-0.4** |
| **DYBB** | **Diyarbakir** | **0.68** | **147** | *e*PG | **Pb** | **16 06 15.8** | **+0.1** |
| DYBB | | | | *e*SG | **Sb** | **16 06 25.3** | **+0.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DIY** | **Diyarbakir** | **0.77** | **145** | *e*Pg | **Pg** | **16 06 15.8** | **-0.7** |
| DIY | | | | *e*Sg | **Sg** | **16 06 25.3** | **-1.2** |
| **BNGB** | **Bing¨ll** | **0.92** | **59** | *e*PG | **Pb** | **16 06 19.2** | **-0.5** |
| **ERZN** | **Erzincan** | **1.06** | **2** | *e*PG | **Pg** | **16 06 21.5** | **-0.6** |
| **MAZI** | **Mazidag** | **1.23** | **150** | *e*PN | **Pg** | **16 06 25.0** | **-0.3** |
| **MAZI** | **Mazidag** | **1.23** | **150** | *e*Pn | **Pg** | **16 06 25.0** | **-0.3** |
| **BNGL** | **BINGOL** | **1.24** | **69** | P | **Pg** | **16 06 26.6** | **+1.2** |
| **SVAN** | **Silvan-Diyarba** | **1.26** | **107** | *e*PN | **Pg** | **16 06 25.7** | **-0.2** |
| **SVAN** | **Silvan-Diyarba** | **1.26** | **107** | *e*Pn | **Pg** | **16 06 25.7** | **-0.2** |
| **AKCD** | **Akcadag** | **1.39** | **261** | *i* P | **Pn** | **16 06 26.6** | **-0.6** |
| AKCD | | | | *i* S | **Sg** | **16 06 46.9** | **+0.6** |
| **AKCD** | **Akcadag** | **1.39** | **261** | P | **Pn** | **16 06 26.6** | **-0.6** |
| AKCD | | | | S | **Sg** | **16 06 46.9** | **+0.6** |
| **BEST** | **Besiri** | **1.41** | **116** | P | **Pb** | **16 06 28.0** | **-0.1** |
| BEST | | | | S | **Sg** | **16 06 48.1** | **+0.9** |
| **MARD** | **Mardin** | **1.50** | **144** | P | **Pn** | **16 06 28.7** | **0.0** |
| MARD | | | | S | **Sb** | **16 06 48.6** | **-0.1** |
| **DARE** | **Darende-Malaty** | **1.71** | **272** | *e*PN | **Pn** | **16 06 31.5** | **-0.1** |
| **DARE** | **Darende-Malaty** | **1.71** | **272** | *e*Pn | **Pn** | **16 06 31.5** | **-0.1** |
| **CUKAN** | **kangal_SIVAS** | **1.89** | **295** | P | **Pb** | **16 06 36.2** | **-0.1** |
| **GZT** | **Gaziantep** | **2.03** | **236** | P | **Pg** | **16 06 40.7** | **+0.1** |
| **SVSK** | **Karacayir** | **2.49** | **305** | *e*PN | **Pn** | **16 06 42.6** | **+0.4** |
| **SVSK** | **Karacayir** | **2.49** | **305** | *e*Pn | **Pn** | **16 06 42.6** | **+0.4** |
| **AYKD** | **Aykdinkavak** | **2.52** | **245** | P | **Pg** | **16 06 48.9** | **-1.0** |
| AYKD | | | | S | **Sg** | **16 07 22.5** | **0.0** |
| **KUZU** | **Kuzuini** | **2.70** | **230** | P | **Pb** | **16 06 51.0** | **+0.9** |

*IDC **15** 16:12:29.7±1.4, 52°.58N×172°.07W, h0km, mb3.7/5, mb1 3.8/6, mb1mx3.5/47, mbtmp3.5/6, ML3.5/1, MS3.2/2, Ms1 3.2/2, ms1mx2.6/34, Error ellipse: s-maj=56.4km s-min=21.6km az=11.0*
*ISCJB **15** 16:12:33.3±1.2, 52°.8N±0°.2×172°.0W±0°.2, h33km, mb3.6/5, MS3.3/1, Error ellipse: s-maj=34.9km s-min=19.3km az=0.1*

**ISC 15 16:12:35.5±1.4, 52°.8N±0°.3×171°.9W±0°.2, h35km, n6, σ1s60/6, mb3.8/5, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **17.48** | **37** | P | **P** | **16 16 36.2** | **-0.9** |
| | 0.1nm,0.3s,baz=232,slow=9.4,SNR=5.9 | | | | | | |
| ILAR | | | | LR | LR | 16 24 20.4 | |
| | comp=Z,54nm,19.3s,baz=84,slow=40 | | | | | | |
| **NVAR** | **Mina Array Bea** | **39.21** | **90** | P | **P** | **16 19 59.1** | **-1.2** |
| | 0.2nm,0.7s,baz=316,slow=7.7,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **54.28** | **87** | P | **P** | **16 21 59.9** | **+1.7** |
| | 0.7nm,0.7s,baz=298,slow=4.7,SNR=6.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.36** | **312** | P | **P** | **16 22 54.1** | **-0.1** |
| | 0.6nm,0.4s,baz=45,slow=6.1,SNR=9.6 | | | | | | |
| MKAR | | | | LR | LR | 16 52 15.0 | |
| | comp=Z,19nm,18.3s,baz=104,slow=38 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.42** | **323** | P | **P** | **16 22 55.6** | **+1.2** |
| | 1.0nm,0.6s,baz=53,slow=7.9,SNR=7.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **75.01** | **281** | P | **P** | **16 24 12.4** | **-1.0** |
| | 0.3nm,0.6s,baz=22,slow=5.3,SNR=3.3 | | | | | | |

*ISCJB **15** 16:20:29.3±0.3, 5°.78N±0°.03×125°.99E±0°.05, h175km±3km, mb3.9/15, Error ellipse: s-maj=8.5km s-min=4.1km az=172.0*
*IDC **15** 16:20:31.1±0.6, 5°.86N×125°.93E, h174km±5km, mb3.7/15, mb1 3.9/18, mb1mx3.7/37, mbtmp4.2/18, Error ellipse: s-maj=21.3km s-min=8.7km az=77.0*
*MAN **15** 16:20:33, 6°.05N×125°.91E, h159km, mb5.1, ML4.0, MS

0.6nm,0.7s,baz=128,slow=5.3,SNR=4.1
**ZALV Zalesovo Beam 58.47 333** P **P** 16 30 07.2 **-1.0**
1.1nm,0.3s,baz=119,slow=6.0,SNR=3.0
ZALV PcP **PcP** 16 30 56.3 **-0.6**
0.4nm,0.3s,baz=3.8,slow=2.2,SNR=2.6
**ILAR Eielson Array 83.57 26** P **P** 16 32 39.5 **+0.5**
1.2nm,0.8s,baz=253,slow=4.7,SNR=13
**MAW Mawson 85.42 200** P **P** 16 32 48.9 **+0.8**
1.2nm,0.6s,baz=38,slow=2.6,SNR=4.3
**VNDA Vanda 85.53 173** P **P** 16 32 49.4 **+0.9**
0.3nm,0.6s,baz=337,slow=7.7,SNR=5.8
**ARCES ARCESS Array B 88.30 340** P **P** 16 33 01.3 **-0.8**
1.5nm,0.6s,baz=59,slow=7.5,SNR=4.2
**FINES FINESS Array B 89.72 332** P **P** 16 33 07.7 **-1.2**
1.1nm,0.5s,baz=90,slow=3.5,SNR=7.3
**NB2 NORSAR Subarra 96.66 334** P **P** 16 33 39.2 **-1.7**
comp=Z,0.7nm,0.5s,baz=66,slow=4.6
**NOA NORSAR Array B 96.66 334** P **P** 16 33 38.6 **-2.3**
comp=Z,1.1nm,0.7s,baz=66,slow=4.8,SNR=4.4
**TXAR Lajitas Array 120.88 51** PKP **PKPdf** 16 39 04.3 **+1.2**
comp=Z,0.3nm,0.6s,baz=318,slow=1.7,SNR=5.2
**TORD Torodi Ar. Bea 121.61 289** PKP **PKPdf** 16 39 03.6 **-1.1**
comp=Z,1.3nm,0.6s,baz=59,slow=1.8,SNR=8.5

*IDC* ***15*** *16:20:41.5±2.2, 17°.00S×174°.53W, h170km±20km, mb3.6/9, mb1 3.8/10, mb1mx3.7/24, mbtmp4.1/10, Error ellipse: s-maj=23.8km s-min=13.0km az=116.0*

**ISC 15 16:20:41.4±0.6, 16°.9S±0°.1×174°.4W±0°.2, h172km, n15, σ1§43/19, mb3.8/9, 1C, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **3.91** | **41** | P | | **Pn** | **16 21 41.9** | **+0.7** |
| | 23nm,0.3s,baz=210,slow=4.1,SNR=122 | | | | | | | |
| AFI | | | | S | | **Sn** | **16 22 24.1** | **-3.9** |
| | 188nm,0.3s,baz=36,slow=22,SNR=29 | | | | | | | |
| **URZ** | **Urewera** | **22.53** | **198** | P | | **P** | **16 25 26.9** | **0.0** |
| | 3.8nm,0.3s,baz=258,slow=3.3,SNR=10 | | | | | | | |
| URZ | | | | S | | **S** | **16 29 18.8** | **-2.1** |
| | 4.9nm,1.0s,baz=288,slow=13,SNR=2.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.58** | **258** | P | | **P** | **16 29 06.5** | **-1.4** |
| | 1.1nm,0.4s,baz=95,slow=7.1,SNR=12 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **16 30 31.1** | **+0.2** |
| | 2.1nm,1.0s,baz=92,slow=3.4,SNR=4.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.75** | **253** | P | | **P** | **16 29 08.1** | **-1.0** |
| | 13nm,0.7s,baz=86,slow=8.6,SNR=100 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **16 30 31.7** | **+0.2** |
| | 0.7nm,0.4s,baz=105,slow=3.9,SNR=6.6 | | | | | | | |
| **VNDA** | **Vanda** | **61.78** | **186** | P | | **P** | **16 30 41.4** | **+0.1** |
| | 0.5nm,0.7s,baz=2.4,slow=4.2,SNR=5.2 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.78** | **343** | P | | **P** | **16 31 57.5** | **+1.0** |
| | 1.8nm,0.6s,baz=119,slow=8.8,SNR=5.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.09** | **42** | P | | **P** | **16 32 12.2** | **+1.7** |
| | 0.4nm,0.6s,baz=235,slow=7.6,SNR=4.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **82.25** | **56** | P | | **P** | **16 32 44.9** | **+1.0** |
| | 0.2nm,0.3s,baz=222,slow=3.6,SNR=4.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.11** | **11** | P | | **P** | **16 32 53.0** | **+0.4** |
| | 0.6nm,0.5s,baz=229,slow=6.2,SNR=11 | | | | | | | |
| **MAW** | **Mawson** | **86.06** | **199** | P | | **P** | **16 33 02.9** | **+0.6** |
| | 1.4nm,0.8s,baz=354,slow=5.0,SNR=2.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **111.20** | **314** | PKiKP | | **PKiKP** | **16 38 53.0** | **-1.7** |
| | 0.2nm,0.3s,baz=104,slow=1.4,SNR=2.5 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **144.01** | **243** | PKP | | **PKPdf** | **16 39 57.4** | **-0.4** |
| | 1.1nm,0.4s,baz=32,slow=11,SNR=4.4 | | | | | | | |
| **CLL** | **Collm** | **145.19** | **352** | ⇑iP | | **PKPab** | **16 39 59.3** | **+0.8** |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.69** | **319** | PKPbc | | **PKPbc** | **16 40 03.8** | **+0.3** |
| | comp=Z,2.0nm,0.7s,baz=115,slow=1.9,SNR=9.7 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.48** | **350** | PKPbc | | **PKPbc** | **16 40 04.5** | **-0.7** |
| | comp=Z,0.8nm,0.7s,baz=4.3,slow=5.2,SNR=8.4 | | | | | | | |

**SJA 15 16:28:18.3±0.4, 31°.96S×69°.85W, h101km±2km, ML2.5, MW3.8, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AUSP** | **Uspallata** | **0.47** | **124** | *e*P | | Pn | 16 28 35.4 | +0.9 |
| AUSP | | | | *e*S | | Sn | 16 28 48.2 | +1.7 |
| **RTLS** | **Leoncito** | **0.49** | **72** | *e*P | | Pn | 16 28 36.0 | +1.4 |
| RTLS | | | | *e*S | | Sn | 16 28 48.4 | +1.8 |
| **ASAL** | **Salagasta** | **1.07** | **127** | *e*P | | Pn | 16 28 40.5 | +0.9 |
| ASAL | | | | *e*S | | Sn | 16 28 57.0 | +1.2 |
| **RTCV** | **Cerro Valdivia** | **1.11** | **86** | *e*P | | Pn | 16 28 41.0 | +0.8 |
| RTCV | | | | *e*S | | Sn | 16 28 58.0 | +1.3 |
| **ARCO** | **CERRO ARCO** | **1.17** | **139** | *e*P | | Pn | 16 28 42.0 | +1.0 |
| ARCO | | | | IAML | | | 16 28 42.7 | |
| | comp=Z,66nm,0.1s | | | | | | | |
| ARCO | | | | *e*S | | Sn | 16 28 59.4 | +1.3 |
| **CFAA** | **Coronel Fontan** | **1.42** | **76** | *e*P | | Pn | 16 28 44.6 | +0.9 |
| CFAA | | | | *e*S | | Sn | 16 29 04.2 | +1.3 |

*ISCJB* ***15*** *16:32:41.8±0.5, 26°.27S±0°.03×27°.43E±0°.03, h9km±5km, Error ellipse: s-maj=5.5km s-min=4.7km az=145.8*
*PRE* ***15*** *16:32:42.1±2.3, 26°.28S×27°.41E, h2km, ML2.7*

**ISC 15 16:32:42.3±1.0, 26°.27S±0°.03×27°.41E±0°.03, h8km±9km, n14, σ1§01/24, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WDLM** | **Western Deep L** | **0.16** | **177** | *e*P | | **Pg** | **16 32 46.4** | **+0.6** |
| WDLM | | | | *e*S | | **Sg** | **16 32 48.0** | **-0.2** |
| WDLM | | | | AML | | AML | 16 32 48.8 | |
| | comp=Z,6μm,0.3s | | | | | | | |
| **KLOF** | **Kloof** | **0.20** | **115** | *e*P | | **Pg** | **16 32 47.1** | **+0.7** |
| KLOF | | | | *e*S | | **Sg** | **16 32 48.1** | **-1.1** |
| KLOF | | | | AML | | AML | 16 32 50.3 | |
| | comp=Z,6μm,0.1s | | | | | | | |
| **OBSV** | **Observatory** | **0.60** | **82** | *e*P | | **Pg** | **16 32 53.1** | **-0.8** |
| OBSV | | | | *e*S | | **Sg** | **16 33 01.2** | **-0.6** |
| OBSV | | | | AML | | AML | 16 33 03.6 | |
| | comp=Z,201nm,0.4s | | | | | | | |
| **KSR** | **Koster** | **0.62** | **312** | *e*P | | **Pg** | **16 32 53.9** | **-0.4** |
| KSR | | | | *e*S | | **Sg** | **16 33 03.3** | **+0.8** |
| KSR | | | | AML | | AML | 16 33 19.3 | |
| | comp=Z,34nm,0.3s | | | | | | | |
| **PRYS** | **Parys** | **0.66** | **184** | *e*P | | **Pg** | **16 32 53.9** | **-1.2** |
| PRYS | | | | *e*S | | **Sg** | **16 33 02.2** | **-1.5** |
| PRYS | | | | AML | | AML | 16 33 07.5 | |
| | comp=Z,172nm,0.4s | | | | | | | |
| **ERPM** | **east rand prop** | **0.75** | **96** | *e*P | | **Pg** | **16 32 56.5** | **-0.2** |
| ERPM | | | | *e*S | | **Sg** | **16 33 07.4** | **+0.9** |
| ERPM | | | | AML | | AML | 16 33 15.9 | |
| | comp=Z,73nm,0.4s | | | | | | | |
| **BFSD** | **Buffelsfontein** | **0.82** | **223** | *e*P | | **Pb** | **16 32 59.5** | **+0.6** |
| BFSD | | | | *e*S | | **Sg** | **16 33 08.7** | **-0.1** |
| BFSD | | | | AML | | AML | 16 33 16.3 | |
| | comp=Z,122nm,0.5s | | | | | | | |
| **MOAB** | **Moab Khotsong** | **0.90** | **217** | *e*P | | **Pb** | **16 33 00.9** | **+0.6** |
| MOAB | | | | *e*S | | **Sg** | **16 33 11.1** | **-0.4** |
| MOAB | | | | AML | | AML | 16 33 18.7 | |
| | comp=Z,150nm,0.2s | | | | | | | |
| **TLEK** | **Tau Lekoa** | **0.96** | **224** | *e*P | | **Pg** | **16 33 00.3** | **-0.5** |
| TLEK | | | | *e*S | | **Sg** | **16 33 13.0** | **-0.3** |
| TLEK | | | | AML | | AML | 16 33 19.9 | |
| | comp=Z,112nm,0.3s | | | | | | | |
| **LBTB** | **Lobatse** | **2.06** | **307** | *i* P | | Pn | 16 33 13.8 | -3.4 |
| LBTB | | | | | | | 16 33 23.9 | |
| LBTB | | | | *i* S | | Sg | 16 34 01.2 | +12 |
| **SWZ** | **Schweizer** | **2.07** | **243** | *e*P | | **Pn** | **16 33 17.2** | **-0.3** |
| SWZ | | | | *e*S | | **Sn** | **16 33 44.9** | **+1.3** |
| SWZ | | | | AML | | AML | 16 33 49.3 | |
| | comp=Z,90nm,0.4s | | | | | | | |
| **BOSA** | **Boshof** | **3.02** | **219** | *i* P | | **Pn** | **16 33 29.6** | **-1.0** |
| BOSA | | | | *i* S | | Sg | 16 34 47.8 | +28 |
| **MATP** | **Matopo** | **5.90** | **10** | *i* P | | Pn | 16 34 03.4 | -6.6 |
| MATP | | | | *i* S | | **Sg** | **16 35 50.0** | **-1.7** |
| **BLWY** | **Bulawayo** | **6.20** | **10** | *i* P | | **Pn** | **16 34 15.3** | **+1.1** |
| BLWY | | | | *i* S | | **Sg** | **16 35 59.4** | **-1.9** |

**NNC 15 16:40:03.9±4.0, 37°.62N×71°.93E, h0km, mb3.6, mpv3.2, 3C, Error ellipse: s-maj=35.0km s-min=16.0km az=147.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.71** | **297** | P | | Pn | 16 40 48.6 | -0.4 |
| DZET | | | | S | | Sn | 16 41 24.0 | +1.4 |
| **MNAS** | **Manas** | **4.88** | **5** | ⇑Pn | | Pn | 16 41 19.3 | +0.6 |
| | 1.5nm,0.4s | | | | | | | |
| MNAS | | | | ⇑Sn | | Sn | 16 42 17.9 | +1.8 |
| | 1.5nm,0.6s | | | | | | | |
| **KK31** | **Karatay Array** | **5.58** | **349** | Pn | | Pn | 16 41 27.4 | -0.8 |
| | baz=150,slow=11 | | | | | | | |
| KK31 | | | | ⇑Sn | | Sn | 16 42 33.3 | +0.2 |
| | 0.2nm,0.2s,baz=171,slow=22,SNR=3.6 | | | | | | | |

**DJA 15 16:54:06.3±0.3, 0°.N±2°×12°.5E±°, h54km±8km, M4.0/13, mb4.3/2, mB4.6/2, MLv3.8/13, Mw(mB)3.8/2, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **0.82** | **312** | P | | Pn | 16 54 22.5 | +0.7 |
| KMSI | | | | S | | Sn | 16 54 35.1 | +2.0 |
| **LUWI** | **Luwuk** | **2.10** | **240** | P | | Pn | 16 54 39.4 | +0.3 |
| LUWI | | | | S | | Sn | 16 55 04.9 | +0.8 |
| **SANI** | **Sanana** | **2.49** | **146** | P | | Pn | 16 54 42.9 | -1.5 |
| SANI | | | | S | | Sn | 16 55 14.4 | +0.9 |
| **MRSI** | **Marisa** | **2.69** | **280** | P | | Pn | 16 54 45.3 | -1.8 |
| MRSI | | | | S | | Sn | 16 55 19.5 | +1.0 |
| **TNTI** | **Ternate** | **2.88** | **75** | P | | Pn | 16 54 50.1 | +0.4 |
| TNTI | | | | S | | Sn | 16 55 24.1 | +1.0 |
| **LBMI** | **Labuha** | **2.98** | **103** | P | | Pn | 16 54 51.9 | +0.7 |
| **APSI** | **Ampana** | **3.08** | **253** | P | | Pn | 16 54 53.2 | +0.7 |
| APSI | | | | S | | Sn | 16 55 30.0 | +1.8 |
| **SGSI** | **Sangihe** | **3.76** | **14** | P | | Pn | 16 55 02.5 | +0.6 |
| SGSI | | | | S | | Sn | 16 55 45.7 | +0.8 |
| **NLAI** | **Namlea** | **4.09** | **142** | P | | Pn | 16 55 06.1 | -0.3 |
| **MPSI** | **Mapaga** | **4.70** | **274** | P | | Pn | 16 55 15.6 | +0.8 |
| **TTSI** | **Tana Toraja** | **5.66** | **237** | P | | Pn | 16 55 28.0 | +0.1 |

**DJA 15 17:07:09.7±1.8, 7°S±4°×10°4E±°, h23km±24km, M4.4/7, mb6.1/1, mB7.1/1, MLv3.6/7, Mw(mB)7.0/1, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KASI** | **Kota Agung** | **1.67** | **25** | P | | Pn | 17 07 37.1 | -0.4 |
| KASI | | | | S | | Sn | 17 07 51.4 | -6.8 |
| **CGJI** | **Cibinong** | **1.93** | **77** | P | | Pn | 17 07 41.3 | +0.2 |
| CGJI | | | | S | | Sn | 17 08 05.8 | +1.1 |
| **LWLI** | **Liwa** | **2.04** | **7** | P | | Pn | 17 07 31.5 | -11 |
| LWLI | | | | S | | Sn | 17 08 08.8 | +1.2 |
| **KLI** | **Kotabumi** | **2.41** | **26** | P | | Pn | 17 07 48.4 | +0.6 |
| **SBJI** | **Serang** | **2.49** | **68** | P | | Pn | 17 07 49.1 | +0.2 |
| SBJI | | | | S | | Sn | 17 08 20.1 | +1.5 |
| **KLSI** | | **2.52** | **22** | P | | Pn | 17 07 49.5 | +0.2 |
| KLSI | | | | S | | Sn | 17 08 20.4 | +1.1 |
| **MDSI** | **Maura Dua** | **2.58** | **8** | P | | Pn | 17 07 50.3 | +0.3 |
| MDSI | | | | S | | Sn | 17 08 22.2 | +1.6 |
| **RGRI** | **Rengat** | **6.81** | **348** | P | | Pn | 17 08 47.9 | -0.5 |

*ISCJB* ***15*** *17:25:20.5±1.1, 3°.49N±0°.05×96°.02E±0°.08, h61km±10km, mb3.8/10, Error ellipse: s-maj=15.0km s-min=6.3km az=157.4*
*DJA* ***15*** *17:25:21.3±0.8, 3°N±3°×9°6E±°, h34km±11km, M4.0/11, mb4.0/1, MLv4.0/11*
*IDC* ***15*** *17:25:23.6±4.2, 3°.70N×96°.31E, h66km±36km, mb3.6/10, mb1 3.7/12, mb1mx3.5/38, mbtmp3.8/12, ML3.5/2, MS2.9/1, Ms1 3.1/1, ms1mx2.5/26, Error ellipse: s-maj=50.9km s-min=16.5km az=54.0*

**ISC 15 17:25:21.8±1.6, 3°.50N±0°.06×96°.1E±0°.1, h56km±14km, n22, σ1§04/27, mb4.0/10, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MLSI** | **Meulaboh, Aceh** | **0.84** | **25** | P | | **Pn** | **17 25 37.1** | **-0.4** |
| MLSI | | | | S | | **Sn** | **17 25 48.4** | **-0.7** |
| **KCSI** | **Kotacane, Aceh** | **1.72** | **89** | P | | **Pn** | **17 25 48.9** | **-0.4** |
| KCSI | | | | S | | **Sn** | **17 26 12.0** | **+1.8** |
| **LHMI** | **Lhok Sumawe** | **1.93** | **27** | P | | **Pn** | **17 25 53.2** | **+0.9** |
| LHMI | | | | S | | **Sn** | **17 26 11.1** | **+0.6** |
| **TSI** | **Tuntungan** | **2.51** | **90** | P | | **Pn** | **17 25 59.6** | **-0.5** |
| TSI | | | | S | | **Sn** | **17 26 29.6** | **0.0** |
| **GSI** | **Gunungsitoli** | **2.66** | **145** | P | | **Pn** | **17 26 01.4** | **-0.9** |
| GSI | | | | S | | **Sn** | **17 26 34.1** | **+0.8** |
| **PSI** | **Prapat** | **2.95** | **104** | P | | **Pn** | **17 26 06.1** | **-0.2** |
| | 3.3nm,0.3s,baz=352,slow=13,SNR=8.4 | | | | | | | |
| **MNSI** | **Mandailing Nat** | **4.43** | **127** | P | | **Pn** | **17 26 26.3** | **-0.2** |
| MNSI | | | | S | | **Sn** | **17 27 18.4** | **+1.5** |
| **CMAR** | **Chiang Mai Arr** | **15.13** | **11** | P | | **Pn** | **17 28 52.3** | **+0.2** |
| | 0.1nm,0.3s,baz=196,slow=13,SNR=8.3 | | | | | | | |
| CMAR | | | | LR | | LR | 17 35 10.4 | |
| | comp=Z,40nm,18.2s,baz=195,slow=39 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.98** | **245** | T | | T | 17 57 24.0 | |
| | baz=65 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.98** | **245** | T | | T | 17 57 24.3 | |
| | baz=65 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.00** | **245** | T | | T | 17 57 20.1 | |
| | baz=65 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.24** | **123** | P | | **P** | **17 33 25.8** | **-0.2** |
| | 0.3nm,0.6s,baz=301,slow=9.2,SNR=4.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.75** | **347** | P | | **P** | **17 33 28.9** | **-0.7** |
| | 1.8nm,0.5s,baz=159,slow=8.6,SNR=19 | | | | | | | |
| **SONM** | **Songino Array** | **45.06** | **10** | P | | **P** | **17 33 31.2** | **-1.0** |
| | 0.3nm,0.3s,baz=191,slow=7.9,SNR=5.0 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **17 35 12.5** | **+0.2** |
| | 0.6nm,0.5s,baz=194,slow=3.7,SNR=4.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **45.70** | **128** | P | | **P** | **17 33 37.3** | **-0.3** |
| | 0.1nm,0.4s,baz=299,slow=7.6,SNR=8.3 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **17 35 15.4** | **+0.5** |
| | 0.2nm,0.5s,baz=316,slow=2.6,SNR=4.0 | | | | | | | |
| **GEYT** | **Alibeck** | **48.72** | **320** | P | | **P** | **17 34 02.2** | **+1.2** |
| | 1.7nm,0.7s,baz=152,slow=7.9,SNR=4.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.12** | **351** | P | | **P** | **17 34 17.1** | **-1.7** |
| | 0.7nm,0.3s,baz=166,slow=6.1,SNR=5.8 | | | | | | | |
| **BRTR** | **Keskin Array B** | **66.73** | **312** | P | | **P** | **17 36 08.0** | **+0.5** |
| | 1.1nm,0.8s,baz=135,slow=8.7,SNR=5.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **77.44** | **332** | P | | **P** | **17 37 10.9** | **0.0** |
| | 4.7nm,1.0s,baz=95,slow=6.3,SNR=5.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.00** | **340** | P | | **P** | **17 37 24.9** | **0.0** |
| | 2.5nm,0.8s,baz=90,slow=4.9,SNR=7.0 | | | | | | | |
| **GERES** | **GERESS Array B** | **82.34** | **319** | P | | **P** | **17 37 39.5** | **+1.8** |
| | 0.4nm,0.5s,baz=104,slow=4.1,SNR=4.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **142.27** | **29** | PKP | | **PKPdf** | **17 44 46.5** | **-2.4** |
| | 0.2nm,0.6s,baz=358,slow=2.7,SNR=1.9 | | | | | | | |

*KRSC* ***15*** *17:27:30.7±0.7, 55°.17N×160°.42E, h-2km±4km, ML4.1*
*IDC* ***15*** *17:27:30.7±1.0, 55°.16N×160°.42E, h0km, mb3.5/6, mb1 3.8/8, mb1mx3.6/34, mbtmp3.6/8, ML3.4/2, Error ellipse: s-maj=35.0km s-min=20.5km az=158.0*
*MOS* ***15*** *17:27:31.6±0.9, 55°.19N×160°.38E, h8km, mb4.0/2, Error ellipse: s-maj=13.1km s-min=4.8km az=83.7*
*ISCJB* ***15*** *17:27:32.2±0.6, 55°.17N±0°.02×160°.47E±0°.05, h2km±4km, mb3.4/6, Error ellipse: s-maj=5.0km s-min=2.8km az=13.9*

**ISC 15 17:27:31.4±1.0, 55°.17N±0°.02×160°.37E±0°.03, h5km±7km, n71, σ1§22/99, mb3.6/6, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KZV** | **Kizimen** | **0.07** | **219** | *i* P | | **Pg** | **17 27 33.7** | **+0.6** |
| **TUMR** | **Tumrok** | **0.17** | **312** | *i* P | | **Pg** | **17 27 35.1** | **+0.2** |
| **TUMR** | **Tumrok** | **0.17** | **312** | PN | | **Pg** | **17 27 35.1** | **+0.2** |
| **KMNR** | **Kamenistaya** | **0.59** | **353** | *e*P | | **Pb** | **17 27 43.3** | **-1.1** |
| KMNR | | | | *e*S | | **Sb** | **17 27 52.7** | **-0.4** |
| **KMNR** | **Kamenistaya** | **0.59** | **353** | PN | | **Pb** | **17 27 43.3** | **-1.1** |
| KMNR | | | | S | | **Sb** | **17 27 52.7** | **-0.4** |
| **BZMR** | **Bezymyannaya** | **0.77** | **5** | *e*P | | **Pn** | **17 27 47.9** | **-1.2** |
| BZMR | | | | *e*S | | **Sb** | **17 27 59.4** | **+1.1** |
| **KIRR** | **Kirishev** | **0.79** | **359** | P | | **Pb** | **17 27 47.7** | **0.0** |
| KIRR | | | | S | | **Sn** | **17 28 00.3** | **-1.3** |
| **BZWR** | **Bezymyannyi-We** | **0.80** | **5** | *e*P | | **Pn** | **17 27 48.6** | **-1.0** |
| BZWR | | | | *e*S | | **Sb** | **17 28 00.1** | **+0.9** |
| **KPT** | **Kopyto** | **0.80** | **354** | P | | **Pn** | **17 27 48.7** | **-0.8** |
| KPT | | | | *e*S | | **Sb** | **17 28 00.0** | **+0.8** |
| **KPT** | **Kopyto** | **0.80** | **354** | PN | | **Pn** | **17 27 48.7** | **-0.8** |
| KPT | | | | S | | **Sb** | **17 28 00.0** | **+0.8** |
| **KOZ** | **Kozyrevsk** | **0.94** | **343** | *e*P | | **Pb** | **17 27 50.0** | **-0.1** |
| KOZ | | | | *e*S | | **Sn** | **17 28 04.1** | **-1.0** |
| **KOZ** | **Kozyrevsk** | **0.94** | **343** | PN | | **Pb** | **17 27 50.0** | **-0.1** |
| KOZ | | | | S | | **Sn** | **17 28 04.1** | **-1.0** |
| **MKZ** | **Mys Kozlova** | **1.00** | **127** | *e*P | | **Pb** | **17 27 50.4** | **-0.7** |
| MKZ | | | | *e*S | | **Sn** | **17 28 05.2** | **-1.3** |
| **MKZ** | **Mys Kozlova** | **1.00** | **127** | PN | | **Pb** | **17 27 50.4** | **-0.7** |
| MKZ | | | | S | | **Sn** | **17 28 05.2** | **-1.3** |
| **KLY** | **Klyuchi** | **1.16** | **8** | P | | **Pn** | **17 27 54.6** | **+0.3** |
| KLY | | | | S | | **Sn** | **17 28 11.7** | **+1.2** |
| **SRDR** | **Sredinnyy** | **1.21** | **342** | *e*P | | **Pg** | **17 27 53.7** | **-0.9** |
| **SRDR** | **Sredinnyy** | **1.21** | **342** | PN | | **Pg** | **17 27 53.7** | **-0.9** |
| **ESO** | **Esso** | **1.22** | **309** | *e*P | | **Pg** | **17 27 53.0** | **-1.7** |
| ESO | | | | S | | **Sb** | **17 28 10.5** | **-0.4** |
| **ESO** | **Esso** | **1.22** | **309** | PN | | **Pg** | **17 27 53.0** | **-1.7** |
| ESO | | | | S | | **Sb** | **17 28 10.5** | **-0.4** |
| **KII** | **Karymskiy** | **1.26** | **206** | P | | **Pn** | **17 27 56.0** | **+0.3** |
| KII | | | | S | | **Sn** | **17 28 15.4** | **+2.4** |
| **KII** | **Karymskiy** | **1.26** | **206** | PN | | **Pn** | **17 27 56.0** | **+0.3** |
| KII | | | | S | | **Sn** | **17 28 15.4** | **+2.4** |
| **BDR** | **Baidarnaya** | **1.48** | **18** | *e*P | | **Pg** | **17 27 59.9** | **+0.1** |
| **SMKR** | **Semkarok** | **1.55** | **23** | *e*P | | **Pg** | **17 28 00.6** | **-0.4** |
| SMKR | | | | *e*S | | **Sg** | **17 28 23.0** | **+2.0** |
| **SMKR** | **Semkarok** | **1.55** | **23** | PN | | **Pg** | **17 28 00.6** | **-0.4** |
| SMKR | | | | S | | **Sg** | **17 28 23.0** | **+2.0** |
| **SRKR** | **Sorokina** | **1.56** | **16** | *e*P | | **Pg** | **17 28 00.4** | **-0.8** |
| SRKR | | | | *e*S | | **Sg** | **17 28 22.6** | **+1.3** |
| **SRKR** | **Sorokina** | **1.56** | **16** | PN | | **Pg** | **17 28 00.4** | **-0.8** |
| SRKR | | | | S | | **Sg** | **17 28 22.6** | **+1.3** |
| **KBTR** | **Krutoberegovo** | **1.73** | **52** | *e*P | | **Pn** | **17 28 01.8** | **-0.4** |
| KBTR | | | | *e*S | | **Sb** | **17 28 24.7** | **-1.1** |
| **KBTR** | **Krutoberegovo** | **1.73** | **52** | PN | | **Pn** | **17 28 01.8** | **-0.4** |
| KBTR | | | | S | | **Sb** | **17 28 24.7** | **-1.1** |
| **GNL** | **Ganaly** | **2.05** | **225** | *e*P | | **Pn** | **17 28 07.3** | **+0.7** |
| GNL | | | | *e*S | | **Sg** | **17 28 36.5** | **-0.6** |
| **GNL** | **Ganaly** | **2.05** | **225** | PN | | **Pn** | **17 28 07.3** | **+0.7** |
| GNL | | | | S | | **Sg** | **17 28 36.5** | **-0.6** |
| **KRX** | **Arik** | **2.08** | **210** | P | | **Pb** | **17 28 08.8** | **-0.8** |
| **SPN** | **Mys Shipunski** | **2.08** | **186** | *e*P | | **Pn** | **17 28 06.8** | **-0.2** |
| **SPN** | **Mys Shipunski** | **2.08** | **186** | PN | | **Pn** | **17 28 06.8** | **-0.2** |
| **SDLR** | **Sedlovina** | **2.09** | **205** | P | | **Pb** | **17 28 08.6** | **-1.2** |
| SDLR | | | | S | | **Sg** | **17 28 37.8** | **-0.6** |
| **SDLR** | **Sedlovina** | **2.09** | **205** | PN | | **Pb** | **17 28 08.6** | **-1.2** |
| SDLR | | | | S | | **Sg** | **17 28 37.8** | **-0.6** |
| **NLC** | **Nalytchevo** | **2.09** | **197** | P | | **Pb** | **17 28 08.2** | **-1.6** |
| NLC | | | | S | | **Sg** | **17 28 36.6** | **-1.9** |
| **NLC** | **Nalytchevo** | **2.09** | **197** | PN | | **Pb** | **17 28 08.2** | **-1.6** |
| NLC | | | | S | | **Sg** | **17 28 36.6** | **-1.9** |
| **SMAR** | **Somma** | **2.12** | **206** | *e*P | | **Pb** | **17 28 10.1** | **-0.3** |
| SMAR | | | | S | | **Sg** | **17 28 38.4** | **-1.1** |
| **SMAR** | **Somma** | **2.12** | **206** | PN | | **Pb** | **17 28 10.1** | **-0.3** |
| SMAR | | | | S | | **Sg** | **17 28 38.4** | **-1.1** |
| **AVH** | **Avacha** | **2.13** | **207** | P | | Pn | 17 28 01.0 | -6.8 |
| **AVH** | **Avacha** | **2.13** | **207** | PN | | **Pb** | **17 28 10.0** | **-0.6** |
| **KOK** | **Koryaka** | **2.14** | **209** | P | | Pn | 17 28 01.0 | -6.9 |
| **KOK** | **Koryaka** | **2.14** | **209** | PN | | **Pb** | **17 28 10.0** | **-0.7** |
| **UGLR** | **Uglovaya** | **2.16** | **205** | *e*P | | **Pb** | **17 28 10.3** | **-0.8** |
| **PET** | **Petropavlovsk** | **2.38** | **206** | P | | **Pb** | **17 28 12.8** | **-1.8** |
| PET | | | | S | | **Sb** | **17 28 44.9** | **+0.7** |
| **PET** | **Petropavlovsk** | **2.38** | **206** | *e*PN | | **Pb** | **17 28 13.8** | **-0.8** |
| PET | | | | *e*S | | **Sg** | **17 28 49.2** | **+1.6** |
| PET | | | | pmax | | pmax | | |
| | comp=Z,75nm,0.5s | | | | | | | |
| PET | | | | smax | | smax | | |
| | comp=N,114nm,0.7s | | | | | | | |
| PET | | | | smax | | smax | | |
| | comp=E,115nm,0.9s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **2.59** | **218** | Pn | | **Pn** | **17 28 14.7** | **+0.6** |
| | comp=E,4.7nm,0.3s,baz=62,slow=16,SNR=52 | | | | | | | |
| PETK | | | | Sn | | **Sb** | **17 28 50.9** | **+0.3** |
| | comp=E,3.1nm,0.3s,baz=30,slow=13,SNR=4.3 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **2.59** | **218** | PN | | **Pn** | **17 28 14.7** | **+0.6** |
| PETK | | | | | | | 17 28 50.9 | |
| PETK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | | |
| PETK | | | | smax | | smax | | |
| | comp=N,3.0nm,0.3s | | | | | | | |
| **APC** | **Apacha** | **2.94** | **221** | P | | **Pn** | **17 28 20.5** | **+1.7** |
| APC | | | | S | | **Sb** | **17 29 02.0** | **+1.5** |
| **APC** | **Apacha** | **2.94** | **221** | PN | | **Pn** | **17 28 20.5** | **+1.7** |
| APC | | | | S | | **Sb** | **17 29 02.0** | **+1.5** |
| **RUS** | **Russkaya** | **2.95** | **203** | P | | **Pn** | **17 28 20.7** | **+1.7** |
| **RUS** | **Russkaya** | **2.95** | **203** | PN | | **Pn** | **17 28 20.7** | **+1.7** |
| **MTVR** | **Mutnovka** | **2.99** | **207** | P | | **Pb** | **17 28 22.2** | **-3.0** |
| **ASAK** | **Asacha** | **3.15** | **209** | P | | **Pb** | **17 28 26.0** | **-1.9** |
| **BKI** | **Bering** | **3.21** | **87** | P | | **Pn** | **17 28 22.8** | **+0.3** |
| **BKI** | **Bering** | **3.21** | **87** | PN | | **Pn** | **17 28 22.8** | **+0.3** |
| **MIPR** | **Malaya Ipel'ka** | **3.61** | **218** | P | | **Pb** | **17 28 32.6** | **-3.0** |
| **PAU** | **Pauzhetka** | **4.28** | **211** | P | | Pb | 17 28 42.0 | -5.1 |
| **PAU** | **Pauzhetka** | **4.28** | **211** | PN | | Pb | 17 28 

92nm,1.6s
**PMST Lisbon--Monsan 15.56 115** *e*P **Pn** **17 57 39.3 -2.4**
191nm,1.2s
**LIS Lisbon 15.60 115** *e*P **Pn** **17 57 39.9 -2.2**
LIS AMb AMB 17 57 43.6
comp=Z,273nm,1.2s
**LIS Lisbon 15.60 115** *e*P **Pn** **17 57 39.9 -2.2**
LIS pmax pmax
comp=Z,273nm,1.2s
**MVO Moncorvo 15.62 105** *e*P **Pn** **17 57 39.8 -2.7**
comp=Z,96nm,1.6s
MVO *e*LR LR 18 01 13.7
comp=Z,2µm,20.0s
**MTE Manteigas 15.66 108** *e*P **Pn** **17 57 39.7 -3.3**
comp=Z,65nm,1.7s
MTE *e*LR LR 18 01 14.6
comp=Z,2µm,20.0s
**MTE Manteigas 15.66 108** *e*Pn **Pn** **17 57 39.8 -3.3**
comp=Z,53nm,1.4s
**PMTG Montargil 15.96 113** *e*P **Pn** **17 57 42.5 -4.3**
comp=Z,150nm,1.6s
**PCBR Castelo Branco 16.00 109** *e*P **Pn** **17 57 46.6 -0.8**
comp=Z,58nm,1.7s
**PMOZ Porto Moniz, M 16.08 148** *e*LR LR 18 01 27.3
comp=Z,920nm,20.0s
**PMAR Madeira 16.27 147** *e*P **Pn** **17 57 49.1 -2.0**
comp=Z,245nm,1.8s
**PMRV Marv??o 16.29 110** *e*P **Pn** **17 57 47.0 -4.0**
comp=Z,87nm,1.5s
PMRV *e*LR LR 18 01 32.3
comp=Z,2µm,20.0s
**PNCL Nicolau / Gran 16.35 116** *e*P **Pn** **17 57 47.7 -4.1**
comp=Z,120nm,1.8s
**EVO Evora 16.41 114** *e*P **Pn** **17 57 50.1 -2.5**
comp=Z,59nm,1.5s
**PTEO Sao Teotonio 16.59 118** *e*P **Pn** **17 57 53.4 -1.5**
comp=Z,153nm,1.3s
**MESJ Messejana 16.71 116** *e*P **Pn** **17 57 54.2 -2.3**
MESJ AMb AMB 17 57 58.6
comp=Z,90nm,1.4s
**MESJ Messejana 16.71 116** *e*P **Pn** **17 57 54.0 -2.4**
comp=Z,91nm,1.6s
**MESJ Messejana 16.71 116** *e*P **Pn** **17 57 54.1 -2.3**
MESJ pmax pmax
comp=Z,91nm,1.4s
**MORF Marmelete 16.79 118** *e*P **Pn** **17 57 55.3 -2.3**
MORF AMb AMB 17 58 03.8
comp=Z,121nm,2.0s
**MORF Marmelete 16.79 118** *e*P **Pn** **17 57 55.2 -2.3**
comp=Z,127nm,1.4s
**MORF Marmelete 16.79 118** *e*P **Pn** **17 57 55.2 -2.3**
MORF pmax pmax
comp=Z,121nm,2.0s
**PFVI Vila Bisbo 16.80 119** *e*P **Pn** **17 57 56.0 -1.6**
comp=Z,107nm,1.8s
**PFVI Vila Bisbo 16.80 119** *e*Pn **Pn** **17 57 55.8 -1.8**
comp=Z,127nm,1.4s
**PBEJ Beja 16.81 115** *e*P **Pn** **17 57 55.9 -1.8**
comp=Z,50nm,1.5s
**PCVE Castro Verde 16.95 117** *e*P **Pn** **17 57 58.3 -1.2**
comp=Z,56nm,1.3s
**ESK Eskdalemuir 17.15 52** *e*P **P** **17 58 03.4 0.0**
ESK pmax pmax
comp=Z,20nm,1.0s
**ESK Eskdalemuir 17.15 52** *e*Pn **P** **17 58 03.4 0.0**
comp=Z,20nm,1.0s
**ESK Eskdalemuir 17.15 52** *e*P **P** **17 58 03.4 0.0**
comp=Z,20nm,1.0s
**EKA Eskdalemuir Ar 17.18 52** P **Pn** **17 58 01.8 -0.4**
baz=242,slow=9.0,SNR=8.9
EKA LR LR 18 03 22.6
comp=Z,1µm,20.1s,baz=250,slow=33
**PBAR Barrancos 17.24 113** *e*P **Pn** **17 57 59.5 -3.5**
comp=Z,142nm,1.7s
**PBDV Barranco-do-Ve 17.27 117** *e*P **Pn** **17 58 02.2 -1.3**
comp=Z,115nm,1.7s
**PVAQ Vaqueiros 17.30 117** *e*P **Pn** **17 58 00.0 -3.8**
comp=Z,70nm,1.8s
PVAQ *e*LR LR 18 01 59.1
comp=Z,1µm,20.0s
**BORG Borgarnes 18.09 8** LR LR 18 03 11.6
comp=Z,627nm,18.9s,baz=206,slow=30
**PAB San Pablo 18.20 106** *e*P **P** **17 58 15.2 0.0**
PAB pmax pmax
comp=Z,70nm,1.5s
**PAB San Pablo 18.20 106** *e*Pn **P** **17 58 15.2 0.0**
comp=Z,70nm,1.5s
**PAB San Pablo 18.20 106** *e*P **P** **17 58 15.2 0.0**
comp=Z,70nm,1.5s
**ESDC Sonseca Array 18.39 105** P **Pn** **17 58 17.4 +0.1**
comp=Z,5.2nm,0.3s,baz=290,slow=12,SNR=43
ESDC LR LR 18 04 11.4
comp=Z,1µm,18.0s,baz=305,slow=33
**ES19 SONSECA Array 18.42 105** *e*Pn **Pn** **17 58 18.4 +0.8**
**ES19 SONSECA Array 18.42 105** *e*Pn **Pn** **17 58 18.5 +0.8**
**OSSF Osses 18.66 92** *e*P **Pn** **17 58 21.6 +1.0**
**REYF Montagne du Re 19.32 92** *e*P **Pn** **17 58 28.9 +0.3**
**MENF Mencas 19.63 69⇑** *e*P **Pn** **17 58 31.7 -0.4**
**VIEF Viey 19.68 92⇑** *e*P **Pn** **17 58 32.2 -0.6**
**RESF Ens 19.92 92** *e*P **Pn** **17 58 35.1 -0.7**
**MELF Melles 20.18 92** *e*P **P** **17 58 37.4 +0.5**
**SALF Salau 20.52 91⇑** *e*P Pn 17 58 41.7 -1.1
**FRNF Fournols 20.63 83** *e*P Pn 17 58 43.7 -0.3
**PYM Petit Puy Mans 20.84 82** *e*P Pn 17 58 46.0 -0.5
**AGO Saint Agoulin 20.85 81** *e*P Pn 17 58 46.2 -0.4
**SNF Seneffe 20.99 69** P **P** **17 58 45.7 +0.3**
**SNF Seneffe 20.99 69** P **P** **17 58 45.7 +0.3**
**LBL Lubilhac 21.14 84⇑** *e*P **P** **17 58 49.6 +2.4**
**CARF Carcanieres 21.16 91⇑** *e*P **P** **17 58 47.9 +0.3**
**PLDF La Plantade 21.20 81** *e*P **P** **17 58 50.7 +2.8**
**DOU Dourbes 21.21 70** P **P** **17 58 48.2 +0.3**
comp=Z,40nm,1.9s
**DOU Dourbes 21.21 70** P **P** **17 58 48.1 +0.3**
comp=Z,40nm,1.9s
**COLF Collangettes 21.37 83** *e*P **P** **17 58 52.2 +2.6**
**LRDF Laroque-de-Fa 21.38 90** *e*P **P** **17 58 50.0 +0.3**
**KIB El Ksiba 21.64 124** *i* P **P** **17 58 51.0 -1.6**
**BCLA Clavier 21.64 69** P **P** **17 58 52.4 -0.1**
comp=Z,18nm,1.3s
**BCLA Clavier 21.64 69** P **P** **17 58 52.3 -0.1**
comp=Z,18nm,1.3s
**OUK Oukaimeden 21.68 130** *i* P **P** **17 58 53.0 -0.4**
**SSB Saint Sauveur 22.00 83** *e*P **P** **17 58 56.9 +0.4**
SSB pmax pmax
comp=Z,58nm,1.6s
**SSB Saint Sauveur 22.00 83** *e*P **P** **17 58 56.9 +0.4**
comp=Z,58nm,1.6s
**SSB Saint Sauveur 22.00 83** *e*P **P** **17 58 56.9 +0.4**
comp=Z,58nm,1.6s
**HGN Heimansgroeve 22.02 68** *e*P **P** **17 58 56.0 -0.5**
HGN *e*S **S** **18 02 56.2 -2.6**
HGN *e*L L 18 06 15.2
comp=Z,869nm,20.9s
**HGN Heimansgroeve 22.02 68** *e*P **P** **17 58 56.0 -0.5**
**MEM Membach 22.08 68** P **P** **17 58 57.4 +0.2**
**MEM Membach 22.08 68** P **P** **17 58 57.3 +0.2**
**WLF Walferdange 22.25 71** P **P** **17 59 02.9 +3.9**
comp=Z,26nm,1.9s
**WLF Walferdange 22.25 71** *e*P **P** **17 58 58.7 -0.3**
WLF pmax pmax
comp=Z,48nm,1.5s
**WLF Walferdange 22.25 71** *e*P **P** **17 58 59.2 +0.2**
baz=279,slow=9.7
**WLF Walferdange 22.25 71** *e*P **P** **17 58 58.7 -0.3**
comp=Z,48nm,1.5s
**WLF Walferdange 22.25 71** *e*P **P** **17 58 58.7 -0.3**
comp=Z,48nm,1.5s
**MDT Midelt 22.28 121** P **P** **17 58 59.7 +0.1**
comp=Z,10nm,0.9s,baz=318,slow=12,SNR=15
**THEF They Montfort 22.33 75** *e*P **P** **17 59 00.9 +1.0**
**WTSB Winterswijk 22.52 65** *e*P **P** **17 58 59.3 -2.6**
**BUG Bochum--Univer 22.83 66** *e*P **P** **17 59 06.4 +1.3**
baz=279,slow=9.7
**RUP Ruppelstein 22.83 70** *e*P **P** **17 59 06.6 +1.3**
**LOMF Lomont 23.05 77** *e*P **P** **17 59 09.4 +1.8**
**ECH Echery 23.11 74** *e*P **P** **17 59 10.0 +1.9**
**IBBN Ibbenburen 23.11 64** *e*P **P** **17 59 08.6 +0.6**
baz=279,slow=9.7
**MOF Molkenrain 23.16 75** *e*P **P** **17 59 10.9 +2.2**
**OG01 Vacheresse 23.18 79** *e*P **P** **17 59 11.7 +2.8**
**LANF Langenberg 23.41 72** *e*P **P** **17 59 11.3 +0.2**
**SFJD Kangerlussuaq 23.48 337** LR LR 18 06 20.6
comp=Z,1µm,20.2s,baz=142,slow=32
**SFJD Kangerlussuaq 23.48 337** P **P** **17 59 10.1 -1.5**
**SFJD Kangerlussuaq 23.48 337** P **P** **17 59 10.1 -1.5**
**SFJD Kangerlussuaq 23.48 337** P **P** **17 59 10.1 -1.5**

**BNI Bardonecchia 23.52 82** P **P** **17 59 12.5 +0.1**
BNI pmax pmax
comp=Z,39nm,1.5s
**BNI Bardonecchia 23.52 82** P **P** **17 59 12.5 +0.1**
comp=Z,39nm,1.5s
**BNI Bardonecchia 23.52 82** P **P** **17 59 12.5 +0.1**
comp=Z,39nm,1.5s
**KTD Kalmit 23.54 71** *e*P **P** **17 59 14.3 +1.8**
**SENIN Lac Senin/Sane 23.59 79** *e*P **P** **17 59 13.3 +0.1**
comp=Z,23nm,0.8s
**SENIN Lac Senin/Sane 23.59 79** *e*P **P** **17 59 13.3 +0.1**
comp=Z,23nm,0.8s
**TNS Taunus Mts 23.67 69** *e*P **P** **17 59 14.9 +1.2**
baz=279,slow=9.7
**FELD Feldberg im Sc 23.73 75** *e*P **P** **17 59 14.1 -0.3**
**BFO Black Forest 23.86 74** *e*P **P** **17 59 15.6 +0.1**
BFO pmax pmax
comp=Z,7.0nm,0.8s
**BFO Black Forest 23.86 74** *e*P **P** **17 59 14.5 -1.0**
baz=279,slow=9.7
BFO *e*L L 18 07 17.2
comp=Z,1µm,20.6s
**BFO Black Forest 23.86 74** *e*P **P** **17 59 15.6 +0.1**
comp=Z,7.0nm,0.8s
**BFO Black Forest 23.86 74** *e*P **P** **17 59 15.6 +0.1**
comp=Z,7.0nm,0.8s
**TOD Tromm 23.97 70** *e*P **P** **17 59 18.9 +2.4**
**MVIF Mont Vial 24.20 85** *e*P **P** **17 59 21.5 +2.6**
**LUCF Luceram 24.34 85** *e*P **P** **17 59 21.6 +1.5**
**STU Stuttgart 24.35 72** *e*P **P** **17 59 20.7 +0.7**
STU pmax pmax
comp=Z,19nm,0.7s
**STU Stuttgart 24.35 72** *e*P **P** **17 59 20.7 +0.7**
baz=279,slow=9.7
**STU Stuttgart 24.35 72** *e*P **P** **17 59 20.7 +0.7**
comp=Z,19nm,0.7s
**STU Stuttgart 24.35 72** *e*P **P** **17 59 20.7 +0.7**
comp=Z,19nm,0.7s
**NRDL Niedersach Rie 24.55 63** *e*P **P** **17 59 23.0 +1.3**
baz=279,slow=9.7
**BSEG Bad Segeberg 24.66 60** *e*P **P** **17 59 22.4 -0.3**
baz=279,slow=9.7
**CLZ Clausthal 24.74 65** *e*P **P** **17 59 23.7 +0.1**
comp=Z,68nm,1.6s,baz=279,slow=9.7
**ASSE Asse, Remlinge 24.91 64** *e*P **P** **17 59 28.7 +3.7**
comp=Z,34nm,1.3s,baz=279,slow=9.7
**TUE Stuetta 24.93 78** *e*P **P** **17 59 27.6 +2.0**
comp=Z,25nm,1.0s
**TUE Stuetta 24.93 78** *e*P **P** **17 59 27.6 +2.0**
comp=Z,25nm,1.0s
**KONO Kongsberg 25.01 46** *e*P **P** **17 59 24.6 -1.3**
KONO pmax pmax
comp=Z,20nm,1.0s
**KONO Kongsberg 25.01 46** *e*P **P** **17 59 24.6 -1.3**
comp=Z,20nm,1.0s
**KONO Kongsberg 25.01 46** *e*P **P** **17 59 24.6 -1.3**
comp=Z,20nm,1.0s
**DAVA Damuels 25.09 76** ⇓ *i* P **P** **17 59 27.8 +0.8**
comp=Z,59nm,1.6s
**DAVA Damuels 25.09 76** P **P** **17 59 27.8 +0.8**
comp=Z,59nm,1.6s
**DAVOX Davos/Dischmat 25.21 77** P **P** **17 59 29.4 +1.4**
comp=Z,19nm,0.7s,baz=279,slow=10.0,SNR=18
DAVOX LR LR 18 08 20.2
comp=Z,834nm,21.3s,baz=279,slow=34
**GRFO Grafenberg 25.51 70** P **P** **17 59 31.3 +0.7**
GRFO pmax pmax
comp=Z,80nm,1.6s
**GRFO Grafenberg 25.51 70** P **P** **17 59 31.3 +0.7**
comp=Z,80nm,1.6s
**GRFO Grafenberg 25.51 70** P **P** **17 59 31.3 +0.7**
comp=Z,80nm,1.6s
**GRF Grafenberg Arr 25.51 70** *e*L L 18 08 44.7
comp=Z,1µm,19.7s
**JMIC Jan Mayen 25.69 14** LR LR 18 07 20.3
comp=Z,202nm,18.2s,baz=244,slow=31
**FETA Feichten 25.72 76** ⇑ *i* P **P** **17 59 33.3 +0.7**
comp=Z,37nm,1.2s
**FETA Feichten 25.72 76** P **P** **17 59 33.3 +0.7**
comp=Z,37nm,1.2s
**FUR Furstenfeldbru 25.82 73** *e*L L 18 08 38.4
comp=Z,1µm,18.9s
**SCHQ Schefferville 25.89 302** P **P** **17 59 34.0 +0.1**
comp=Z,7.2nm,0.6s,baz=144,slow=19,SNR=3.6
SCHQ LR LR 18 07 50.9
comp=Z,1µm,19.6s,baz=91,slow=32
**SCHQ Schefferville 25.89 302** P **P** **17 59 34.0 +0.1**
**PLN Plauen 26.00 68** *e*P **P** **17 59 35.6 +0.7**
comp=Z,15nm,1.4s,baz=279,slow=9.7
**MANZ Manzenberg 26.04 69** *e*P **P** **17 59 36.4 +1.1**
comp=Z,42nm,1.6s,baz=279,slow=9.7
**WERD Werda 26.09 68** *e*P **P** **17 59 36.5 +0.6**
comp=Z,24nm,1.8s,baz=279,slow=9.7
**GUNZ Gunzen 26.12 68** *e*P **P** **17 59 36.8 +0.6**
comp=Z,24nm,1.7s,baz=279,slow=9.7
**ROTZ Rotzenuhle 26.13 69** *e*P **P** **17 59 37.3 +1.1**
comp=Z,34nm,2.0s,baz=279,slow=9.7
**NOA NORSAR Array B 26.14 43** P **P** **17 59 36.5 +0.3**
comp=Z,3.7nm,0.9s,baz=256,slow=9.7,SNR=4.6
NOA LR LR 18 08 31.5
comp=Z,329nm,21.3s,baz=255,slow=33
**WERN Wernitzgruen 26.16 68** *e*P **P** **17 59 37.3 +0.8**
comp=Z,39nm,2.2s,baz=279,slow=9.7
**SUMG Summit 26.19 352** *i* P **P** **17 59 37.0 +0.1**
SUMG pmax pmax
comp=Z,12nm,1.0s
**SUMG Summit 26.19 352** *i* P **P** **17 59 37.0 +0.1**
comp=Z,12nm,1.0s
**SUMG Summit 26.19 352** *e*P **P** **17 59 35.9 -1.0**
comp=Z,22nm,1.1s
**SUMG Summit 26.19 352** *i* P **P** **17 59 37.0 +0.1**
comp=Z,12nm,1.0s
**TANN Tannenbergstha 26.20 68** *e*P **P** **17 59 37.5 +0.6**
comp=Z,14nm,1.3s,baz=279,slow=9.7
**NKC Novy Kostel 26.21 68** *e*P P 17 59 42.7 +5.7
NKC MLR MLR
comp=Z,700nm,16.5s
**NKC Novy Kostel 26.21 68** *e*P P 17 59 42.7 +5.7
NKC *e*S S 18 04 18.5 +10
NKC AMS AMS 18 09 10.0
comp=Z,700nm,16.5s
**WTTA Wattenberg 26.26 75** ⇑ *i* P **P** **17 59 40.0 +2.4**
comp=Z,31nm,1.6s
**WTTA Wattenberg 26.26 75** P **P** **17 59 40.0 +2.4**
comp=Z,31nm,1.6s
**VLC Villacollemand 26.31 82** P **P** **17 59 39.5 +1.6**
**VLC Villacollemand 26.31 82** P **P** **17 59 39.5 +1.6**
**CLL Collm 26.43 66** *e*P **P** **17 59 39.0 +0.2**
CLL *e*S **S** **18 04 13.0 +1.4**
CLL pmax pmax
comp=Z,57nm,2.1s
CLL MLR MLR
comp=Z,500nm,21.8s
**CLL Collm 26.43 66** *e*P **P** **17 59 39.7 +0.9**
baz=279,slow=9.7
CLL *e*L L 18 08 51.0
comp=Z,525nm,21.7s
**CLL Collm 26.43 66** *e*P **P** **17 59 39.0 +0.2**
comp=Z,57nm,2.1s
CLL *i* 17 59 48.5
CLL *e*S **S** **18 04 13.0 +1.4**
CLL LmH 18 08 00.0
comp=Z,500nm,21.8s
**CLL Collm 26.43 66** *e*P **P** **17 59 39.0 +0.2**
comp=Z,500nm,21.8s
**WET Wettzell 26.67 70** *e*P **P** **17 59 40.5 -0.6**
baz=279,slow=9.7
WET *e*L L 18 09 27.5
comp=Z,1µm,19.7s
**FBE Freiberg 26.69 66** *e*P **P** **17 59 42.5 +1.3**
baz=279,slow=9.7
**BRG Berggiesshubel 27.07 66** *e*P **P** **17 59 47.3 +2.7**
comp=Z,31nm,1.5s
BRG SS S 18 04 14.0 -7.7
comp=N,620nm,15.5s
comp=E,660nm,15.3s
comp=Z,944nm,13.5s
**BRG Berggiesshubel 27.07 66** *e*P **P** **17 59 47.3 +2.7**
BRG SS S 18 04 14.0 -7.7
BRG pmax pmax
comp=Z,31nm,1.5s
BRG MLR MLR
comp=N,620nm,15.5s
BRG MLR MLR
comp=E,660nm,15.3s
BRG MLR MLR
comp=Z,944nm,13.5s

**BRG Berggiesshubel 27.07 66** *e*P **P** **17 59 44.9 +0.3**
baz=279,slow=9.7
**BRG Berggiesshubel 27.07 66** *e*P **P** **17 59 47.3 +2.7**
comp=Z,31nm,1.5s
**KHC Kasperske Hory 27.12 70** *e*P **P** **17 59 46.7 +1.5**
KHC pmax pmax
comp=Z,8.0nm,1.5s
**KHC Kasperske Hory 27.12 70** *e*P **P** **17 59 47.5 +2.3**
KHC *ex* x 18 00 30.0
KHC AMS AMS 18 10 00.0
comp=Z,1µm,16.7s
**KHC Kasperske Hory 27.12 70** *e*P **P** **17 59 46.7 +1.5**
comp=Z,7.5nm,1.5s
**KHC Kasperske Hory 27.12 70** *e*P **P** **17 59 46.7 +1.5**
comp=Z,8.0nm,1.5s
**HFS Hagfors 27.13 46** P **P** **17 59 44.7 -0.4**
comp=Z,2.3nm,0.8s,baz=249,slow=7.6,SNR=3.3
HFS LR LR 18 08 40.2
comp=Z,327nm,21.7s,baz=253,slow=32
**GEC2 GERESS Array S 27.26 71** *e*P **P** **17 59 48.4 +1.9**
**GEC2 GERESS Array S 27.26 71** *e*P **P** **17 59 47.4 +0.9**
baz=279,slow=9.7
GEC2 *e*L L 18 09 33.4
comp=Z,1µm,20.7s
**GEC2 GERESS Array S 27.26 71** *e*P **P** **17 59 48.4 +1.9**
**GEC2 GERESS Array S 27.26 71** *e*P **P** **17 59 48.4 +1.9**
**GERES GERESS Array B 27.26 71** P **P** **17 59 46.6 +0.2**
comp=Z,1.7nm,0.8s,baz=281,slow=8.0,SNR=11
GERES LR LR 18 10 23.0
comp=Z,1µm,18.1s,baz=261,slow=36
**PRA Prague 27.50 68** AMS AMS 18 10 00.0
comp=Z,1µm,22.9s
**PVCC Panska Ves 27.51 67** *e*P P 17 59 57.6 +9.0
**PVCC Panska Ves 27.51 67** *e*P P 17 59 57.6 +9.0
**PRU Pruhonice 27.58 68** *e*P **P** **17 59 52.1 +2.9**
PRU *e*S **S** **18 04 35.9 +6.0**
PRU MLR MLR
comp=Z,1µm,17.7s
**PRU Pruhonice 27.58 68** *e*P **P** **17 59 52.1 +2.9**
PRU *e*S S **18 04 35.9 +6.0**
PRU AMS AMS 18 10 00.0
comp=Z,1µm,17.7s
**PRU Pruhonice 27.58 68** *e*P **P** **17 59 52.1 +2.9**
comp=Z,1µm,17.7s
**GOPC GO Pecny, Ondr 27.75 68** *e*P P 17 59 57.1 +6.3
GOPC MLR MLR
comp=Z,1µm,17.9s
**GOPC GO Pecny, Ondr 27.75 68** *e*P P 17 59 57.1 +6.3
GOPC AMS AMS 18 10 30.0
comp=Z,1µm,17.9s
**FRB Frobisher Bay 28.18 322** LR LR 18 08 22.2
comp=Z,580nm,18.4s,baz=90,slow=31
**UPC Upice 28.43 67** *e*P **P** **17 59 59.0 +2.2**
UPC MLR MLR
comp=Z,600nm,17.3s
**UPC Upice 28.43 67** *e*P **P** **17 59 59.0 +2.2**
UPC AMS AMS 18 12 00.0
comp=Z,600nm,17.3s
**UPC Upice 28.43 67** *e*P **P** **17 59 59.0 +2.2**
comp=Z,600nm,17.3s
**DPC Dobruska-Polom 28.65 67** *e*P **P** **17 59 59.3 +0.5**
DPC *e* 18 00 04.7
DPC MLR MLR
comp=Z,700nm,19.4s
**DPC Dobruska-Polom 28.65 67** *e*P **P** **17 59 59.3 +0.5**
DPC *e*pP **pP** **18 00 04.7 +1.2**
DPC AMS AMS 18 08 40.0
comp=Z,700nm,19.4s
**DPC Dobruska-Polom 28.65 67** *e*P **P** **17 59 59.3 +0.5**
comp=Z,700nm,19.4s
**KRLC Kraliky 28.99 67** *e*P P 18 00 08.0 +6.2
**KRLC Kraliky 28.99 67** *e*pP P 18 00 08.0 +6.2
**VRAC Vranov 29.02 69** LR LR 18 11 11.8
comp=Z,1µm,19.6s,baz=266,slow=36
**KEST Kesra 29.41 99** P **P** **18 00 05.0 -0.8**
comp=Z,13nm,0.9s,baz=284,slow=2.1,SNR=11
KEST LR LR 18 11 02.6
comp=Z,2µm,18.4s,baz=307,slow=35
**KEST Kesra 29.41 99** *e*P **P** **18 00 05.1 -0.6**
**KEST Kesra 29.41 99** *e*P **P** **18 00 05.1 -0.6**
**MORC Moravsky Berou 29.53 68** ⇑ P **P** **18 00 07.3 +0.7**
**MORC Moravsky Berou 29.53 68** ⇑ *i* P **P** **18 00 07.3 +0.7**
**MORC Moravsky Berou 29.53 68** P **P** **18 00 05.8 -0.8**
**MORC Moravsky Berou 29.53 68** P **P** **18 00 07.3 +0.7**
**OKC Ostrava-Krasne 29.90 68** AMS AMS 18 11 10.0
comp=Z,1µm,17.6s
**DAG Danmarks Havn 30.09 4** *i* P **P** **18 00 11.9 +0.7**
DAG pmax pmax
comp=Z,2.0nm,0.8s
**DAG Danmarks Havn 30.09 4** *i* P **P** **18 00 11.9 +0.7**
comp=Z,2.8nm,0.8s
**DAG Danmarks Havn 30.09 4** *i* P **P** **18 00 11.9 +0.7**
comp=Z,2.0nm,0.8s
**VYHS Vyhne 30.65 70** *e*P **P** **18 00 15.4 -1.1**
**VYHS Vyhne 30.65 70** *e*P **P** **18 00 15.4 -1.1**
**VYHS Vyhne 30.65 70** *e*P **P** **18 00 15.4 -1.1**
comp=Z,582nm,6.3s
**LANS Liptovska Anna 30.89 69** *e*P **P** **18 00 18.4 -0.3**
**LANS Liptovska Anna 30.89 69** *e*P **P** **18 00 18.4 -0.3**
**LANS Liptovska Anna 30.89 69** *e*P **P** **18 00 18.4 -0.3**
**PSZ Piszkesteto 31.49 71** P **P** **18 00 24.5 +0.5**
PSZ pmax pmax
comp=Z,5.0nm,0.8s
**PSZ Piszkesteto 31.49 71** ⇓ *i* P **P** **18 00 25.1 +1.1**
**PSZ Piszkesteto 31.49 71** P **P** **18 00 24.5 +0.5**
comp=Z,5.2nm,0.8s
**PSZ Piszkesteto 31.49 71** P **P** **18 00 24.5 +0.5**
comp=Z,5.0nm,0.8s
**TIP Timpagrande 32.70 88** P **P** **18 00 35.2 +0.5**
**TIP Timpagrande 32.70 88** P **P** **18 00 35.2 +0.5**
**KOLS Kolonicke sedl 32.73 68** *e*P **P** **18 00 35.9 +1.1**
KOLS pmax pmax
comp=Z,36nm,2.9s
**KOLS Kolonicke sedl 32.73 68** *e*P **P** **18 00 35.9 +1.1**
**KOLS Kolonicke sedl 32.73 68** *e*P **P** **18 00 35.9 +1.1**
comp=Z,36nm,2.9s
**DIVS Divibare 32.80 77** ⇑ *i* P **P** **18 00 36.0 +0.4**
**UZH Uzhgorod 32.83 69** *e*P **P** **18 00 37.9 +2.3**
UZH *e* 18 01 48.7
UZH *e* 18 03 27.7
UZH *e*S **S** **18 05 53.1 +1.0**
UZH *e* 18 07 52.3
UZH MLR MLR
comp=N,700nm,18.0s
UZH MLR MLR
comp=E,1µm,18.0s
UZH MLR MLR
comp=Z,400nm,18.0s
**UZH Uzhgorod 32.83 69** *e*P **P** **18 00 37.9 +2.3**
UZH *e*S **S** **18 05 53.1 +1.0**
**SIRR Siria 33.14 73** ⇑ *i* P **P** **18 00 39.0 +0.6**
**FINES FINESS Array B 33.30 45** P **P** **18 00 39.7 +0.1**
comp=Z,17nm,1.2s,baz=234,slow=6.1,SNR=5.7
FINES LR LR 18 13 03.2
comp=Z,382nm,20.4s,baz=268,slow=34
**BZS Buzias 33.34 74** ⇑ P **P** **18 00 40.9 +0.8**
**BZS Buzias 33.34 74** ⇑ *i* P **P** **18 00 40.9 +0.8**
**BZS Buzias 33.34 74** P **P** **18 00 40.9 +0.8**
**LVV L'vov 33.61 66** *e*P **P** **18 00 42.1 -0.3**
**LVV L'vov 33.61 66** *e*P **P** **18 00 42.1 -0.3**
**DRGR 33.66 72** ⇑ P **P** **18 00 45.1 +2.1**
**DRGR 33.66 72** ⇑ *i* P **P** **18 00 45.1 +2.1**
**DRGR 33.66 72** P **P** **18 00 45.1 +2.1**
**ARCES ARCESS Array B 34.09 30** P **P** **18 00 45.7 -0.7**
comp=Z,2.2nm,0.6s,baz=269,slow=6.1,SNR=4.9
ARCES LR LR 18 13 40.2
comp=Z,232nm,19.0s,baz=260,slow=35
**GZR Gura Zlata 34.18 74** ⇑ P **P** **18 00 47.4 -0.1**
**GZR Gura Zlata 34.18 74** ⇑ *i* P **P** **18 00 47.4 -0.1**
**GZR Gura Zlata 34.18 74** P **P** **18 00 47.4 -0.1**
**BUR04 Bucovina Ar. S 35.00 69** *e*P **P** **18 00 55.1 +0.5**
**BUR04 Bucovina Ar. S 35.00 69** *e*P **P** **18 00 55.1 +0.5**
**BURAR Bucovina Array 35.01 69** ⇑ P **P** **18 00 56.9 +2.2**
**BURAR Bucovina Array 35.01 69** ⇑ *i* P **P** **18 00 56.9 +2.2**
**VOIR 35.65 73** ⇑ P **P** **18 01 02.4 +2.2**
**VOIR 35.65 73** ⇑ *i* P **P** **18 01 02.4 +2.2**
**VOIR 35.65 73** P **P** **18 01 02.4 +2.2**
**TAM Tamanrasset 35.69 121** *e*P **P** **18 01 02.6 +1.7**
TAM pmax pmax
comp=Z,32nm,1.9s
**TAM Tamanrasset 35.69 121** *e*P **P** **18 01 02.5 +1.7**
comp=Z,32nm,1.9s
**TAM Tamanrasset 35.69 121** *e*P **P** **18 01 02.5 +1.7**
comp=Z,32nm,1.9s

HUMR **Humele** 35.95 74⇑ *i*P P 18 01 03.8 +1.1
MLR **Muntele Rosu** 36.22 72 ⇑P P 18 01 01.6 -3.5
MLR **Muntele Rosu** 36.22 72⇑ *i*P P 18 01 01.6 -3.5
TESR **Tescani** 36.30 70⇑ *i*P P 18 01 03.0 -2.7
PLOR **Plostina** 36.54 71 ⇑P P 18 01 07.6 -0.2
PLOR **Plostina** 36.54 71⇑ *i*P P 18 01 07.6 -0.2
PLOR **Plostina** 36.54 71 P P 18 01 07.6 -0.2
KIEV **Kiev** 36.56 63 *i* P P 18 01 07.7 -0.1
KIEV pmax pmax
comp=Z,11nm,1.1s
KIEV **Kiev** 36.56 63 *e*P P 18 01 07.9 +0.1
comp=Z,8.3nm,1.0s
KIEV **Kiev** 36.56 63 *e*P P 18 01 07.9 +0.1
comp=Z,8.3nm,1.0s
AKASG **Malin Array Be** 36.57 63 P P 18 01 07.2 -0.7
comp=Z,2.3nm,0.6s,baz=281,slow=8.8,SNR=8.7
AKASG PcP PcP 18 03 29.8 -1.1
comp=Z,0.5nm,0.5s,baz=286,slow=3.2,SNR=4.9
AKASG LR LR 18 17 02.2
comp=Z,511nm,18.1s,baz=295,slow=38
AKASG **Malin Array Be** 36.57 63 *c*e P 18 01 08.6 +0.7
AKASG pmax pmax
comp=Z,2.0nm,0.6s
AKASG **Malin Array Be** 36.57 63 *e*P P 18 01 08.6 +0.7
comp=Z,2.0nm,0.6s
SSPA **Standing Stone** 36.57 279 P P 18 01 10.1 +2.1
comp=Z,143nm,1.4s
SSPA **Standing Stone** 36.57 279 P P 18 01 10.1 +2.1
comp=Z,143nm,1.4s
VRI **Vrincioaia** 36.59 71 ⇑P P 18 01 09.6 +1.5
VRI **Vrincioaia** 36.59 71⇑ *i*P P 18 01 09.6 +1.5
VRI **Vrincioaia** 36.59 71 P P 18 01 09.6 +1.5
CFR **Carcaliu** 37.77 72 ⇑P P 18 01 18.0 -0.1
CFR **Carcaliu** 37.77 72⇑ *i*P P 18 01 18.0 -0.1
CFR **Carcaliu** 37.77 72 P P 18 01 18.0 -0.1
OBN **Obninsk** 39.62 54⇑ *e*P P 18 01 34.1 +0.6
OBN *i* 18 03 10.3
OBN pmax pmax
comp=Z,61nm,2.4s
OBN MLR MLR
comp=Z,653nm,20.0s
OBN **Obninsk** 39.62 54 *e*P P 18 01 34.1 +0.6
comp=Z,61nm,2.4s
KLMR **Klimovskoe** 39.83 45 *e*P P 18 01 30.8 -4.4
KLMR pmax pmax
comp=Z,50nm,2.2s
H05N1 **Guadeloupe/Mar** 41.45 234 T T 18 45 38.7
SNR=27
TOA0 **Torodi Ar. Sit** 41.54 135 *e*P P 18 01 48.8 -1.0
TOA0 **Torodi Ar. Sit** 41.54 135 *e*P P 18 01 48.8 -1.0
TORD **Torodi Ar. Bea** 41.54 135 P P 18 01 48.9 -0.9
comp=Z,18nm,0.9s,baz=327,slow=7.1,SNR=51
TORD LR LR 18 18 00.7
comp=Z,2µm,18.7s,baz=325,slow=35
KMSC **Kings Mountain** 41.70 274 P P 18 01 51.6 +0.6
baz=42
LPSR **Galich'ya Gora** 41.72 57 *e*P P 18 01 49.2 -1.7
LPSR pmax pmax
comp=Z,4.0nm,0.7s
LPSR pmax pmax
comp=N,3.0nm,0.5s
LPSR pmax pmax
comp=E,5.0nm,0.9s
LPSR **Galich'ya Gora** 41.72 57 *e*P P 18 01 49.2 -1.7
comp=E,3.0nm,0.5s
JSC **Jenkinsville** 42.13 273 *e*P P 18 01 57.3 +2.8
JSC pmax pmax
comp=Z,19nm,0.7s
JSC **Jenkinsville** 42.13 273 *e*P P 18 01 57.3 +2.8
comp=Z,19nm,0.7s
EYMN **Ely** 42.32 296 P P 18 01 55.9 0.0
baz=42
EYMN **Ely** 42.32 296 *e*P P 18 01 55.7 -0.2
comp=Z,49nm,1.5s
EYMN **Ely** 42.32 296 *e*P P 18 01 55.7 -0.2
comp=Z,49nm,1.5s
VSR **Storozhevoye** 42.34 59 *e*P P 18 01 54.2 -1.8
VSR pmax pmax
comp=Z,3.0nm,0.5s
VSR pmax pmax
comp=N,10.0nm,1.3s
VSR pmax pmax
comp=E,10.0nm,1.1s
VSR **Storozhevoye** 42.34 59 *e*P P 18 01 54.2 -1.8
comp=E,10.0nm,1.3s
C37A **Embarrass** 42.83 296 P P 18 02 00.5 +0.4
baz=43
SFIN **Scholer Farm** 42.87 284 P P 18 02 01.1 +0.6
baz=43
D37A **Cotton** 43.22 295 P P 18 02 03.5 +0.2
baz=43
BR231 **Keskin MP Arra** 43.22 77 *e*P P 18 02 02.1 -1.3
BR231 **Keskin MP Arra** 43.22 77 *e*P P 18 02 02.1 -1.3
C36A **Pine Crest Far** 43.22 296 P P 18 02 03.1 -0.1
baz=43
D36A **Goodland** 43.67 296 P P 18 02 06.8 0.0
baz=44
VRH **Novokhopyorsk** 43.84 58 *e*P P 18 02 06.1 -2.0
VRH pmax pmax
comp=Z,3.0nm,0.4s
VRH pmax pmax
comp=N,10.0nm,1.2s
VRH pmax pmax
comp=E,20nm,1.7s
VRH **Novokhopyorsk** 43.84 58 *e*P P 18 02 06.1 -2.0
comp=E,10.0nm,1.2s
BRTR **Keskin Array B** 43.86 76 P P 18 02 09.6 +1.0
comp=E,3.4nm,0.8s,baz=312,slow=4.6,SNR=3.8
BRTR PcP PcP 18 03 53.1 -1.6
comp=E,2.2nm,0.9s,baz=335,slow=2.6,SNR=4.7
BRTR LR LR 18 20 26.0
comp=E,312nm,21.4s,baz=290,slow=36
BRTR **Keskin Array B** 43.86 76 *c*e P 18 02 06.0 -2.6
BRTR pmax pmax
comp=Z,2.0nm,0.9s
C35A **Jirik Farms, M** 43.95 297 P P 18 02 08.9 -0.1
baz=44
B34A **Aery, Baudette** 44.03 298 P P 18 02 10.2 +0.5
baz=44,SNR=9.4
ULM **Lac du Bonnet** 44.04 301 P P 18 02 09.5 -0.2
comp=Z,30nm,1.3s,baz=76,slow=7.9,SNR=7.5
ULM LR LR 18 18 39.5
comp=Z,563nm,18.7s,baz=106,slow=34
ULM **Lac du Bonnet** 44.04 301 P P 18 02 09.5 -0.2
ULM pmax pmax
comp=Z,30nm,1.3s
ULM MLR MLR
comp=Z,563nm,18.7s
ULM **Lac du Bonnet** 44.04 301 *e*P P 18 02 10.6 +0.9
comp=Z,54nm,1.5s
HDIL **Hopedale** 44.24 285 P P 18 02 10.8 -0.7
baz=44
SPMN **St. Paul** 44.30 293 P P 18 02 11.9 0.0
baz=44
DBIC **Dimbokro** 44.52 147 P P 18 02 15.8 +1.8
comp=Z,4.7nm,0.7s,baz=324,slow=9.6,SNR=7.0
DBIC LR LR 18 18 53.2
comp=Z,607nm,20.7s,baz=322,slow=34
SWET **Sewanee** 44.80 277 *e*P P 18 02 15.3 -0.7
comp=Z,21nm,1.6s
SWET **Sewanee** 44.80 277 *e*P P 18 02 15.3 -0.7
comp=Z,21nm,1.6s
AGMN **Agassiz Nation** 44.84 298 P P 18 02 15.9 -0.3
baz=45
B32A **Ashes, Strandq** 45.20 299 P P 18 02 18.9 -0.2
baz=45
I37A **Lemond, Waseca** 45.23 292 P P 18 02 19.5 +0.1
baz=45
H36A **Jessenland, He** 45.30 293 P P 18 02 19.4 -0.5
baz=45
G35A **Watkins** 45.36 294 P P 18 02 20.2 -0.1
baz=45
TIGA **Tifton** 45.38 271 P P 18 02 20.9 +0.3
baz=45
SDDR **Presa de Saban** 45.48 247 *e*P P 18 02 23.0 +1.4
comp=Z,36nm,1.2s
SDDR **Presa de Saban** 45.48 247 *e*P P 18 02 23.0 +1.4
comp=Z,36nm,1.2s
WVT **Waverly** 45.58 279 *e*P P 18 02 22.8 +0.6
WVT pmax pmax
comp=Z,23nm,1.4s
WVT **Waverly** 45.58 279 *e*P P 18 02 22.8 +0.6
comp=Z,23nm,1.4s
WVT **Waverly** 45.58 279 *e*P P 18 02 22.8 +0.6
comp=Z,23nm,1.4s
J37A **Redenius Farm,** 45.67 291 P P 18 02 22.4 -0.4
baz=46
E33A **Westby DABS, E** 45.72 296 P P 18 02 23.0 -0.2
baz=46
FFC **Flin Flon** 45.72 309 *e*P P 18 02 23.0 -0.1
FFC pmax pmax
comp=Z,32nm,1.3s
FFC **Flin Flon** 45.72 309 *e*P P 18 02 23.0 -0.1
comp=Z,32nm,1.3s
FFC **Flin Flon** 45.72 309 *e*P P 18 02 23.0 -0.1
comp=Z,32nm,1.3s
H35A **Sunnyside Ranc** 45.82 293 P P 18 02 24.0 0.0
baz=46
K37A **Belmond** 45.98 290 P P 18 02 25.2 -0.1
baz=46
D32A **Dogwood Acres,** 46.05 297 P P 18 02 25.2 -0.5
baz=46
G34A **Benson** 46.07 294 P P 18 02 26.2 +0.2
baz=46
C31A **Landman Farms,** 46.19 298 P P 18 02 26.8 -0.1
baz=46
CSS **Prodhromos** 46.19 82 P P 18 02 24.9 -2.2
CSS **Prodhromos** 46.19 82 P P 18 02 24.9 -2.2
B30A **Myrvik Farm, E** 46.25 299 P P 18 02 27.5 +0.2
baz=46
H34A **Spellman Lake,** 46.43 294 P P 18 02 29.1 +0.3
baz=46
D31A **Mcclaflin, Tow** 46.52 297 P P 18 02 29.3 -0.2
baz=46
A29A **Manning Farm,** 46.58 300 P P 18 02 30.1 +0.2
baz=46
LGNH **LØogne** 46.66 248 *e*P P 18 02 35.0 +4.1
comp=Z,164nm,1.5s
C30A **Mose, Pekin** 46.68 298 P P 18 02 30.9 +0.2
baz=46
J35A **Milford** 46.70 292 P P 18 02 31.4 +0.5
baz=46
CCM **Cathedral Cave** 46.83 283 *e*P P 18 02 32.6 +0.6
CCM pmax pmax
comp=Z,41nm,1.2s
CCM **Cathedral Cave** 46.83 283 *e*P P 18 02 32.6 +0.6
comp=Z,40nm,1.2s
CCM **Cathedral Cave** 46.83 283 *e*P P 18 02 32.6 +0.6
comp=Z,41nm,1.2s
B29A **Wagenman Farm,** 46.86 300 P P 18 02 32.0 -0.1
baz=47
PBMO **Poplar Bluff** 46.98 281 *e*P P 18 02 33.2 +0.1
comp=Z,69nm,1.6s
PBMO **Poplar Bluff** 46.98 281 *e*P P 18 02 33.2 +0.1
comp=Z,69nm,1.6s
H33A **Prehn Over Nor** 47.03 294 P P 18 02 33.9 +0.4
baz=47
K35A **Storm Lake** 47.03 291 P P 18 02 33.8 +0.2
baz=47
D30A **Buchanan** 47.12 298 P P 18 02 34.1 -0.1
baz=47
A28A **Rude Farm, Bot** 47.20 301 P P 18 02 34.8 0.0
baz=47
I33A **Coleman** 47.37 293 P P 18 02 35.1 -1.1
baz=47
F31A **Hecla** 47.40 296 P P 18 02 36.4 +0.1
baz=47
B28A **Dugan Ranch, T** 47.46 300 P P 18 02 37.0 +0.1
baz=47
E30A **Jud** 47.49 297 P P 18 02 36.9 -0.2
baz=47
KIV **Kislovodsk** 47.62 67 *e*P P 18 02 38.9 +0.7
KIV *i* S S 18 09 37.4 +4.3
KIV pmax pmax
comp=Z,10.0nm,1.1s
KIV MLR MLR
comp=Z,416nm,16.0s
KIV **Kislovodsk** 47.62 67 *e*P P 18 02 38.9 +0.7
comp=Z,10.0nm,1.1s
D29A **Pettibone, Tap** 47.65 298 P P 18 02 38.2 -0.1
baz=48
I32A **Karley and Nic** 47.80 294 P P 18 02 39.7 +0.2
baz=48
C28A **Hausauer Farms** 47.82 299 P P 18 02 39.1 -0.5
baz=48
KBZ **Khabaz** 47.87 67 P P 18 02 41.1 +1.2
comp=Z,2.8nm,0.9s,baz=321,slow=6.5,SNR=2.9
KBZ LR LR 18 24 27.4
comp=Z,282nm,18.8s,baz=292,slow=38
F30A **Leola** 47.88 296 P P 18 02 39.7 -0.5
baz=48
E29A **Napoleon** 47.91 298 P P 18 02 40.0 -0.4
baz=48
B27A **Peters Farms,** 48.01 300 P P 18 02 39.9 -1.2
baz=48
D28A **Regan** 48.17 299 P P 18 02 41.8 -0.6
baz=48
H31A **Wolsey** 48.21 295 P P 18 02 42.5 -0.2
baz=48
A26A **Wade Farm, Ken** 48.24 301 P P 18 02 42.5 -0.4
baz=48
PCRV **Puerto La Cruz** 48.45 233 LR LR 18 20 10.0
comp=Z,196nm,20.3s,slow=32
C27A **Sayler Ranch,** 48.48 300 P P 18 02 44.4 -0.4
baz=48
Q37A **Longview Farm,** 48.51 286 P P 18 02 45.0 -0.1
baz=48
B26A **Jensen Ranch,** 48.60 301 P P 18 02 45.5 -0.2
baz=48
YKA **Yellowknife Ar** 48.69 322 P P 18 02 44.9 -1.2
comp=Z,3.3nm,0.9s,baz=62,slow=7.9,SNR=3.4
O35A **Humboldt** 48.72 288 P P 18 02 46.4 -0.2
baz=49
D27A **Center** 48.78 299 P P 18 02 46.5 -0.6
baz=49
A25A **Svangstu Ranch** 48.85 302 P P 18 02 47.4 -0.1
baz=49,SNR=7.3
F28A **McLaughlin** 48.96 297 P P 18 02 48.1 -0.4
baz=49
E27A **Carson** 49.14 298 P P 18 02 49.9 +0.1
baz=49
P35A **Duane Minner,** 49.19 288 P P 18 02 49.4 -0.9
baz=49
B25A **Knox Farm, Ray** 49.20 301 P P 18 02 50.1 -0.2
baz=49
H29A **Onida** 49.21 296 P P 18 02 49.8 -0.6
baz=49
O34A **Beatrice** 49.28 289 P P 18 02 50.4 -0.5
baz=49
K31A **O'Neill** 49.32 293 P P 18 02 50.5 -0.7
baz=49
D26A **Manning** 49.37 299 P P 18 02 51.3 -0.3
baz=49
S37A **Fort Scott** 49.37 285 P P 18 02 51.7 +0.1
baz=49
J30A **Dallas** 49.42 294 P P 18 02 51.5 -0.5
baz=49
R36A **Gordon, Harris** 49.50 286 P P 18 02 52.0 -0.7
baz=49
C25A **Freed Ranch, W** 49.52 301 P P 18 02 52.8 +0.1
baz=49
Q35A **Mercer Eighty,** 49.56 287 P P 18 02 52.8 -0.4
baz=49
I29A **Vivian Onida** 49.57 295 P P 18 02 52.4 -0.7
baz=49
VBMS **Vicksburg** 49.64 276 P P 18 02 53.6 -0.1
baz=50
E26A **Carlson Angus** 49.66 299 P P 18 02 53.6 -0.2
baz=50
H28A **Mission Ridge** 49.68 296 P P 18 02 53.6 -0.4
baz=50
DGMT **Dagmar** 49.70 302 P P 18 02 53.6 -0.5
baz=50
P34A **Walnut Farm, R** 49.70 288 P P 18 02 54.0 -0.3
baz=50
T37A **Cheyville 18** 49.78 284 P P 18 02 54.0 -0.8
baz=50
KSU1 **Kansas State U** 49.80 288 P P 18 02 54.2 -0.7
baz=50
KSU1 **Kansas State U** 49.80 288 *e*P P 18 02 54.8 -0.2
KSU1 **Kansas State U** 49.80 288 *e*P P 18 02 54.8 -0.2
U38A **Gravette** 49.81 283 P P 18 02 54.4 -0.7
baz=50
K30A **Basset** 49.83 293 P P 18 02 54.3 -0.9
baz=50
D25A **Fairfield** 49.83 300 P P 18 02 54.6 -0.6
baz=50
G27A **Dupree** 49.88 297 P P 18 02 55.1 -0.4
baz=50,SNR=6.4
S36A **Lake Cedric, C** 49.89 285 P P 18 02 55.4 -0.2
baz=50
R35A **Emporia Munici** 49.96 286 P P 18 02 55.7 -0.5
baz=50
N32A **Stulken Farm,** 50.00 290 P P 18 02 55.9 -0.6
baz=50
F26A **Lodgepole** 50.09 298 P P 18 02 56.6 -0.6
baz=50
I28A **Midland** 50.12 295 P P 18 02 56.5 -0.9
baz=50
Q34A **Chapman** 50.12 288 P P 18 02 56.6 -0.7
baz=50
M31A **Lambtecht Ranc** 50.13 291 P P 18 02 56.6 -0.8
baz=50
V38A **Canehill** 50.15 283 P P 18 02 56.6 -1.0
baz=50,SNR=11
E25A **Miller Ranch,** 50.21 299 P P 18 02 57.7 -0.3
baz=50
K29A **Lazy Trails An** 50.23 294 P P 18 02 57.7 -0.5
baz=50
O32A **Brockman Farm,** 50.26 290 P P 18 02 57.5 -0.9
baz=50
L30A **Spencer Herefo** 50.28 292 P P 18 02 57.9 -0.7
baz=50
U37A **Salina** 50.31 284 P P 18 02 57.7 -1.2
baz=50,SNR=7.4
G26A **Maurine** 50.33 297 P P 18 02 57.5 -1.4
baz=50
MIAR **Mount Ida** 50.35 281 *e*P P 18 02 58.8 -0.3
MIAR pmax pmax
comp=Z,57nm,1.3s
MIAR **Mount Ida** 50.35 281 P P 18 02 58.8 -0.3
baz=50,SNR=18
MIAR **Mount Ida** 50.35 281 *e*P P 18 02 58.8 -0.3
comp=Z,57nm,1.3s
MIAR **Mount Ida** 50.35 281 *e*P P 18 02 58.8 -0.3
comp=Z,57nm,1.3s
H27A **Howes** 50.35 296 P P 18 02 58.6 -0.5
baz=50
S35A **Otter Creek Ra** 50.40 286 P P 18 02 58.4 -1.1
baz=50
T36A **Boggs Farm, Ca** 50.45 285 P P 18 02 58.6 -1.3
baz=50,SNR=6.6
J28A **Allard Ranch,** 50.46 295 P P 18 02 58.8 -1.1
baz=50
I27A **Quinn** 50.63 296 P P 18 03 00.8 -0.4
baz=50
V37A **Hulbert** 50.63 283 P P 18 03 01.1 -0.2
baz=50
ARU **Arti** 50.65 46 *d i*P P 18 03 01.6 +0.5
ARU 18 05 06.4
ARU S S 18 10 18.5 +3.4
ARU SS SS 18 13 51.6 +2.8
ARU pmax pmax
comp=Z,45nm,2.5s
ARU **Arti** 50.65 46 *e*P P 18 03 01.0 -0.1
comp=Z,11nm,0.9s
ARU **Arti** 50.65 46 *i* P P 18 03 01.6 +0.5
comp=Z,45nm,2.5s
R34A **Isabella, Hill** 50.66 287 P P 18 03 01.5 0.0
baz=50
W38A **Poteau** 50.68 282 P P 18 03 00.9 -0.8
baz=50,SNR=8.4
U36A **Oologah** 50.73 284 P P 18 03 01.0 -1.0
baz=51
H26A **Fairpoint** 50.79 297 P P 18 03 01.7 -0.7
baz=51
P32A **Huiting Farm,** 50.81 289 P P 18 03 01.6 -1.0
baz=51
G25A **Newell** 50.88 298 P P 18 03 03.3 +0.2
baz=51
GNI **Garni** 50.91 70⇓ *e*P P 18 03 03.6 +0.1
GNI pmax pmax
comp=Z,100nm,1.3s
GNI **Garni** 50.91 70 *e*P P 18 03 03.0 -0.5
GNI **Garni** 50.91 70 *e*P P 18 03 03.6 +0.1
comp=Z,100nm,1.3s
T35A **Sooner Cattle** 50.95 285 P P 18 03 02.6 -1.1
baz=51,SNR=7.0
O31A **Woolen Ranch,** 50.99 290 P P 18 03 02.8 -1.2
baz=51
J27A **Elkhorn Farm,** 51.03 295 P P 18 03 03.8 -0.4
baz=51
TUL1 **Tulsa** 51.05 284 P P 18 03 03.5 -0.9
baz=51
Y39A **Lockesburg** 51.05 281 P P 18 03 03.8 -0.6
baz=51
X38A **Whitesboro** 51.12 282 P P 18 03 04.2 -0.8
baz=51
Q32A **Meitler Ranch,** 51.13 289 P P 18 03 04.4 -0.7
baz=51
R33A **Olander Ranch,** 51.14 287 P P 18 03 04.3 -0.8
baz=51
I26A **New Underwood** 51.14 296 P P 18 03 04.8 -0.3
baz=51
M29A **Burnside Ranch** 51.16 292 P P 18 03 04.3 -1.0
baz=51
W37A **Quinton** 51.25 283 P P 18 03 05.5 -0.4
baz=51
T34A **McClaskey Farm** 51.34 286 P P 18 03 05.7 -0.8
baz=51
P31A **Stockton** 51.37 290 P P 18 03 05.3 -1.6
baz=51
L28A **Connealy Angus** 51.38 293 P P 18 03 06.2 -0.8
baz=51
U35A **Pawnee** 51.41 285 P P 18 03 06.1 -0.9
baz=51
O30A **MW Ranch, Wils** 51.45 291 P P 18 03 06.9 -0.5
baz=51
SVE **Sverdlovsk** 51.47 45 *e*P P 18 03 08.6 +1.3
SVE *e*S S 18 10 22.2 -4.2
SVE pmax pmax
comp=Z,24nm,1.6s
SVE **Sverdlovsk** 51.47 45 *e*P P 18 03 08.6 +1.3
comp=Z,24nm,1.6s
Y38A **Idabel** 51.48 281 P P 18 03 07.6 -0.1
baz=51
Z39A **Irene McRaven,** 51.52 280 P P 18 03 07.1 -0.8
baz=51
X37A **Clayton** 51.53 282 P P 18 03 07.1 -0.9
baz=51
R32A **Long Quarter,** 51.55 288 P P 18 03 07.3 -0.9
baz=51
S33A **Kaszmaul Farm,** 51.55 287 P P 18 03 07.4 -0.7
baz=51
M28A **Bar X Bar Ranc** 51.62 293 P P 18 03 08.2 -0.5
baz=51
J26A **Sides Ranch, S** 51.66 296 P P 18 03 09.0 +0.1
baz=52
I25A **Rochford** 51.69 297 P P 18 03 09.0 -0.3
baz=52,SNR=7.4
W36A **Wetumka** 51.78 283 P P 18 03 08.9 -1.0
baz=52
LAO **LASA Array** 51.78 301 P P 18 03 09.9 0.0
baz=52
LAO **LASA Array** 51.78 301 *e*P P 18 03 09.6 -0.3
comp=Z,39nm,1.2s
LAO **LASA Array** 51.78 301 *e*P P 18 03 09.6 -0.3
comp=Z,39nm,1.2s
RSSD **Black Hills** 51.82 297 *e*P P 18 03 10.3 0.0
RSSD **Black Hills** 51.82 297 *e*P P 18 03 10.3 0.0
RSSD **Black Hills** 51.82 297 *e*P P 18 03 10.3 0.0
V35A **Meyer Ranch, C** 51.83 284 P P 18 03 09.5 -0.7
baz=52
U34A **Anderson Ranch** 51.90 285 P P 18 03 10.0 -0.8
baz=52
P30A **Selden** 51.92 290 P P 18 03 09.7 -1.2
baz=52
O29A **4D Ranch, Culb** 51.95 291 P P 18 03 10.6 -0.6
baz=52
CBKS **Cedar Bluff** 52.00 289 P P 18 03 10.2 -1.3
baz=52
Y37A **Hugo** 52.05 282 P P 18 03 11.4 -0.5
baz=52
J25A **Sunshine Ranch** 52.06 296 P P 18 03 11.4 -0.6
baz=52
N28A **Pribbeno Ranch** 52.12 292 P P 18 03 11.3 -1.1
baz=52
R31A **Burdett** 52.16 288 P P 18 03 11.7 -1.1
baz=52
X36A **Centrahoma** 52.20 283 P P 18 03 12.6 -0.4
baz=52
W35A **Tecumseh** 52.20 284 P P 18 03 12.4 -0.7
baz=52
Q30A **Quinter** 52.22 289 P P 18 03 12.2 -1.0
baz=52
V34A **Guthrie** 52.23 285 P P 18 03 12.3 -0.9
baz=52
V34A **Guthrie** 52.23 285 *e*P P 18 03 13.2 -0.1
comp=Z,96nm,1.4s
V34A **Guthrie** 52.23 285 *e*P P 18 03 13.2 -0.1
comp=Z,96nm,1.4s
U33A **Lingo Farm, Me** 52.28 286 P P 18 03 12.8 -0.8
baz=52

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OGNE | Ogallala<br>baz=52 | 52.28 | 292 | P | | P | 18 03 12.3 | -1.4 |
| P29A | Atwood<br>baz=52 | 52.33 | 290 | P | | P | 18 03 12.5 | -1.5 |
| T32A | Huddler Ranch,<br>baz=52 | 52.39 | 287 | P | | P | 18 03 13.7 | -0.8 |
| EDM | Edmonton | 52.40 | 311 | eP | | P | 18 03 15.5 | +1.2 |
| EDM | comp=Z,36nm,1.1s<br>Edmonton<br>comp=Z,36nm,1.1s | 52.40 | 311 | eP | pmax | pmax | 18 03 15.5 | +1.2 |
| EDM | Edmonton<br>comp=Z,36nm,1.1s | 52.40 | 311 | eP | | P | 18 03 15.5 | +1.2 |
| 340A | Bronson<br>baz=52 | 52.42 | 278 | P | | P | 18 03 14.6 | 0.0 |
| 239A | Gary<br>baz=52 | 52.45 | 279 | P | | P | 18 03 14.6 | -0.3 |
| 138A | Matatall Enter<br>baz=52 | 52.48 | 280 | P | | P | 18 03 14.6 | -0.5 |
| S31A | Mullinville<br>baz=52 | 52.51 | 288 | P | | P | 18 03 15.3 | -0.1 |
| Z37A | Pogue Cattle C<br>baz=52 | 52.52 | 281 | P | | P | 18 03 15.1 | -0.2 |
| Y36A | Durant<br>baz=52 | 52.54 | 282 | P | | P | 18 03 15.1 | -0.5 |
| O28A | Krutsinger Ran<br>baz=52 | 52.57 | 291 | P | | P | 18 03 14.8 | -1.0 |
| R30A | Dighton<br>baz=52 | 52.64 | 289 | P | | P | 18 03 15.4 | -0.9 |
| X35A | Drake<br>baz=53 | 52.71 | 283 | P | | P | 18 03 15.8 | -1.0 |
| V33A | Lossen Ranch,<br>baz=53 | 52.75 | 285 | P | | P | 18 03 16.5 | -0.6 |
| W34A | Bridge Creek,<br>baz=53 | 52.75 | 284 | P | | P | 18 03 16.6 | -0.6 |
| INK | Inuvik<br>comp=Z,1.9nm,0.7s,baz=58,slow=6.5,SNR=3.3 | 52.76 | 333 | P | | P | 18 03 16.0 | -0.6 |
| Q29A | Oakley<br>baz=53 | 52.76 | 290 | P | | P | 18 03 16.5 | -0.7 |
| P28A | Saint Francis<br>baz=53 | 52.87 | 291 | P | | P | 18 03 17.5 | -0.5 |
| U32A | Winter Ranch,<br>baz=53 | 52.90 | 286 | P | | P | 18 03 18.1 | -0.1 |
| 339A | Huntington<br>baz=53 | 52.92 | 278 | P | | P | 18 03 17.5 | -0.9 |
| T31A | Randall Ranch,<br>baz=53 | 52.93 | 287 | P | | P | 18 03 17.8 | -0.6 |
| 137A | Heron Place, G<br>baz=53 | 52.97 | 280 | P | | P | 18 03 18.5 | -0.2 |
| Y35A | Marietta<br>baz=53 | 53.04 | 282 | P | | P | 18 03 18.8 | -0.5 |
| R29A | Marienthal<br>baz=53 | 53.12 | 289 | P | | P | 18 03 18.9 | -1.0 |
| EGMT | Eagleton<br>baz=53 | 53.13 | 304 | P | | P | 18 03 18.7 | -1.1 |
| S30A | Montezuma<br>baz=53 | 53.13 | 288 | P | | P | 18 03 19.6 | -0.3 |
| RCBR | Riachuelo<br>comp=Z,182nm,20.5s,baz=347,slow=30 | 53.14 | 191 | LR | | LR | 18 20 08.4 | |
| X34A | Smith Ranch, M<br>baz=53 | 53.16 | 284 | P | | P | 18 03 19.9 | -0.3 |
| Q28A | Sharon Springs<br>baz=53 | 53.21 | 290 | P | | P | 18 03 19.9 | -0.7 |
| W33A | Caddo, Fort Co<br>baz=53 | 53.26 | 284 | P | | P | 18 03 20.7 | -0.2 |
| V32A | Arapaho<br>baz=53 | 53.31 | 285 | P | | P | 18 03 19.9 | -1.4 |
| 439A | Center Grove,<br>baz=53 | 53.39 | 278 | P | | P | 18 03 21.6 | -0.3 |
| P27A | Ficken Ranch,<br>baz=53 | 53.41 | 291 | P | | P | 18 03 20.7 | -1.3 |
| Y34A | Reagan Ranch,<br>baz=53 | 53.49 | 283 | P | | P | 18 03 21.6 | -1.0 |
| Z35A | Perchaven, San<br>baz=53 | 53.53 | 282 | P | | P | 18 03 21.7 | -1.1 |
| 136A | Ennis<br>baz=53 | 53.56 | 281 | P | | P | 18 03 23.0 | -0.1 |
| R28A | Tribune<br>baz=53 | 53.60 | 290 | P | | P | 18 03 22.7 | -0.8 |
| X33A | Lawton<br>baz=54 | 53.64 | 284 | P | | P | 18 03 22.6 | -1.1 |
| WMOK | Wichita Mounta | 53.71 | 284 | eP | | P | 18 03 24.1 | -0.1 |
| WMOK | comp=Z,22nm,1.4s | | | | pmax | pmax | | |
| WMOK | Wichita Mounta<br>comp=Z,22nm,1.4s | 53.71 | 284 | eP | | P | 18 03 24.1 | -0.1 |
| WMOK | Wichita Mounta<br>comp=Z,22nm,1.4s | 53.71 | 284 | eP | | P | 18 03 24.1 | -0.1 |
| KSCO | Kaye Shedlock'<br>baz=54 | 53.75 | 291 | P | | P | 18 03 23.7 | -0.8 |
| W32A | Sentinel<br>baz=54 | 53.79 | 285 | P | | P | 18 03 25.0 | +0.1 |
| V31A | Spring Creek L<br>baz=54 | 53.81 | 286 | P | | P | 18 03 24.8 | -0.1 |
| 236A | Katherine and<br>baz=54 | 53.85 | 280 | P | | P | 18 03 25.0 | -0.2 |
| 438A | Sam Houston St<br>baz=54 | 53.90 | 278 | P | | P | 18 03 25.5 | 0.0 |
| Z34A | Collier Ranch,<br>baz=54 | 53.95 | 282 | P | | P | 18 03 25.3 | -0.7 |
| Y33A | Hilltop Ranch,<br>baz=54 | 54.04 | 283 | P | | P | 18 03 25.8 | -0.8 |
| S28A | Manter<br>baz=54 | 54.09 | 289 | P | | P | 18 03 26.7 | -0.4 |
| 135A | Vickery Place,<br>baz=54 | 54.10 | 281 | P | | P | 18 03 26.6 | -0.5 |
| K22A | Casper<br>baz=54,SNR=9.4 | 54.14 | 297 | P | | P | 18 03 26.6 | -0.8 |
| K22A | Casper<br>comp=Z,44nm,1.3s | 54.14 | 297 | eP | | P | 18 03 26.8 | -0.6 |
| K22A | Casper<br>comp=Z,44nm,1.3s | 54.14 | 297 | eP | | P | 18 03 26.8 | -0.6 |
| W31A | Holland Ranch,<br>baz=54 | 54.22 | 285 | P | | P | 18 03 28.1 | +0.1 |
| 538A | Harpers Horsep<br>baz=54 | 54.23 | 278 | P | | P | 18 03 27.5 | -0.5 |
| PHWY | Pilot Hill<br>comp=Z,8.0nm,0.9s | 54.24 | 295 | eP | | P | 18 03 27.7 | -0.6 |
| PHWY | Pilot Hill<br>comp=Z,8.0nm,0.9s | 54.24 | 295 | eP | | P | 18 03 27.7 | -0.6 |
| X32A | Elmer<br>baz=54 | 54.24 | 284 | P | | P | 18 03 28.0 | -0.1 |
| R27A | Eads<br>baz=54 | 54.27 | 290 | P | | P | 18 03 27.6 | -0.8 |
| GCMT | Greycliff<br>comp=Z,33nm,1.6s | 54.28 | 301 | eP | | P | 18 03 28.7 | +0.3 |
| GCMT | Greycliff<br>comp=Z,33nm,1.6s | 54.28 | 301 | eP | | P | 18 03 28.7 | +0.3 |
| 437A | Phantom Ranch,<br>baz=54 | 54.30 | 279 | P | | P | 18 03 28.2 | -0.3 |
| U29A | Oasis Ranch, S<br>baz=54 | 54.34 | 287 | P | | P | 18 03 27.9 | -1.0 |
| Q26A | Hugo<br>baz=54,SNR=7.1 | 54.37 | 291 | P | | P | 18 03 28.4 | -0.7 |
| V30A | Spur Ranch, Mi<br>baz=54 | 54.37 | 286 | P | | P | 18 03 28.4 | -0.7 |
| RLMT | Red Lodge<br>baz=54,SNR=13 | 54.42 | 300 | P | | P | 18 03 29.1 | -0.4 |
| RLMT | Red Lodge<br>comp=Z,40nm,1.4s | 54.42 | 300 | eP | | P | 18 03 28.8 | -0.7 |
| RLMT | Red Lodge<br>comp=Z,40nm,1.4s | 54.42 | 300 | eP | | P | 18 03 28.8 | -0.7 |
| 336A | Riesel<br>baz=54 | 54.43 | 280 | P | | P | 18 03 29.5 | 0.0 |
| WHTX | Lake Whitney<br>baz=54,SNR=6.6 | 54.48 | 281 | P | | P | 18 03 29.4 | -0.3 |
| WHTX | Lake Whitney<br>comp=Z,71nm,1.4s | 54.48 | 281 | eP | | P | 18 03 29.8 | 0.0 |
| WHTX | Lake Whitney<br>comp=Z,71nm,1.4s | 54.48 | 281 | eP | | P | 18 03 29.8 | 0.0 |
| T28A | Walsh<br>baz=54 | 54.50 | 289 | P | | P | 18 03 29.3 | -0.8 |
| 134A | White-Moore Ra<br>baz=54 | 54.54 | 282 | P | | P | 18 03 29.8 | -0.5 |
| Z33A | Whitaker Ranch<br>baz=54 | 54.57 | 283 | P | | P | 18 03 30.1 | -0.4 |
| X31A | McDonald Ranch<br>baz=54 | 54.57 | 285 | P | | P | 18 03 30.3 | -0.2 |
| Y32A | R-V Farms, Ver<br>baz=54 | 54.59 | 284 | P | | P | 18 03 30.2 | -0.4 |
| HKT | Hockley | 54.64 | 278 | eP | | P | 18 03 30.2 | -0.7 |
| HKT | comp=Z,17nm,1.4s | | | | pmax | pmax | | |
| HKT | Hockley<br>comp=Z,17nm,1.4s | 54.64 | 278 | eP | | P | 18 03 30.1 | -0.7 |
| HKT | Hockley<br>comp=Z,17nm,1.4s | 54.64 | 278 | eP | | P | 18 03 30.2 | -0.7 |
| W30A | Crocket Farms<br>baz=54 | 54.64 | 286 | P | | P | 18 03 30.9 | -0.2 |
| R26A | Arlington<br>baz=54,SNR=7.9 | 54.68 | 291 | P | | P | 18 03 30.9 | -0.4 |
| N23A | Red Feather La<br>baz=55,SNR=13 | 54.77 | 294 | P | | P | 18 03 32.3 | +0.2 |
| 436A | Wall Ranch, Ga<br>baz=55 | 54.78 | 279 | P | | P | 18 03 32.2 | +0.2 |
| V29A | Stinnett<br>baz=55 | 54.85 | 287 | P | | P | 18 03 33.1 | +0.5 |
| 537A | Green Hill Far<br>baz=55 | 54.88 | 278 | P | | P | 18 03 31.7 | -1.0 |
| 335A | Moody<br>baz=55 | 54.89 | 280 | P | | P | 18 03 32.5 | -0.3 |
| WALA | Waterton Lakes<br>comp=Z,35nm,1.3s | 54.90 | 307 | eP | | P | 18 03 31.7 | -1.1 |
| WALA | Waterton Lakes<br>comp=Z,35nm,1.3s | 54.90 | 307 | eP | | P | 18 03 31.7 | -1.1 |
| 234A | Clairette<br>baz=55 | 54.93 | 281 | P | | P | 18 03 32.2 | -0.9 |
| T27A | Campo<br>baz=55 | 54.93 | 289 | P | | P | 18 03 32.7 | -0.5 |
| U28A | Mallet<br>baz=55 | 55.01 | 288 | P | | P | 18 03 33.6 | -0.1 |
| HRY | Holter Researc | 55.03 | 303 | eP | | P | 18 03 34.1 | +0.3 |
| HRY | Holter Researc | 55.03 | 303 | eP | | P | 18 03 34.1 | +0.3 |
| Z32A | Haskell<br>baz=55,SNR=11 | 55.03 | 283 | P | | P | 18 03 33.3 | -0.6 |
| ABKAR | Akbulak array | 55.05 | 53 | eP | | P | 18 03 34.5 | +0.8 |
| ABKAR | Akbulak array | 55.05 | 53 | eP | | P | 18 03 34.5 | +0.8 |
| 133A | Hamilton Ranch<br>baz=55,SNR=6.4 | 55.08 | 282 | P | | P | 18 03 33.4 | -0.8 |
| S26A | Kim<br>baz=55 | 55.09 | 290 | P | | P | 18 03 33.8 | -0.6 |
| Y31A | Rekieta Farm,<br>baz=55 | 55.16 | 284 | P | | P | 18 03 34.7 | -0.1 |
| ISCO | Idaho Springs | 55.19 | 293 | eP | | P | 18 03 35.7 | +0.5 |
| ISCO | comp=Z,14nm,1.5s | | | | pmax | pmax | | |
| ISCO | Idaho Springs<br>baz=55 | 55.19 | 293 | P | | P | 18 03 34.7 | -0.6 |
| ISCO | Idaho Springs<br>comp=Z,14nm,1.5s | 55.19 | 293 | eP | | P | 18 03 35.7 | +0.5 |
| ISCO | Idaho Springs<br>comp=Z,14nm,1.5s | 55.19 | 293 | eP | | P | 18 03 35.7 | +0.5 |
| X30A | Coker Ranch, T<br>baz=55 | 55.27 | 285 | P | | P | 18 03 34.7 | -0.9 |
| 637A | Eagle Lake<br>baz=55 | 55.29 | 278 | P | | P | 18 03 35.0 | -0.8 |
| U27A | Thompson Grove<br>baz=55 | 55.38 | 288 | P | | P | 18 03 36.4 | 0.0 |
| W29A | Amarillo<br>baz=55 | 55.38 | 286 | P | | P | 18 03 36.1 | -0.3 |
| Q24A | Divide<br>baz=55 | 55.38 | 292 | P | | P | 18 03 35.8 | -0.8 |
| Q24A | Divide<br>comp=Z,10nm,0.8s | 55.38 | 292 | eP | | P | 18 03 38.0 | +1.4 |
| Q24A | Divide<br>comp=Z,10nm,0.8s | 55.38 | 292 | eP | | P | 18 03 38.0 | +1.4 |
| 334A | Lometa<br>baz=55 | 55.41 | 281 | P | | P | 18 03 35.7 | -0.9 |
| 233A | Rising Star<br>baz=55 | 55.43 | 282 | P | | P | 18 03 35.9 | -0.8 |
| Z31A | Sharp Cattle R<br>baz=55 | 55.47 | 284 | P | | P | 18 03 36.4 | -0.6 |
| PTGA | Pitinga<br>comp=Z,103nm,21.1s,baz=48,slow=32 | 55.49 | 221 | LR | | LR | 18 23 48.7 | |
| BOZ | Bozeman (W) | 55.51 | 302 | eP | | P | 18 03 37.2 | -0.1 |
| BOZ | comp=Z,17nm,1.3s | | | | pmax | pmax | | |
| BOZ | Bozeman (W)<br>baz=55,SNR=7.9 | 55.51 | 302 | P | | P | 18 03 37.0 | -0.2 |
| BOZ | Bozeman (W)<br>comp=Z,17nm,1.3s | 55.51 | 302 | eP | | P | 18 03 37.2 | -0.1 |
| BOZ | Bozeman (W)<br>comp=Z,17nm,1.3s | 55.51 | 302 | eP | | P | 18 03 37.2 | -0.1 |
| AMTX | Amarillo<br>baz=55 | 55.54 | 286 | P | | P | 18 03 36.6 | -0.9 |
| ABTX | Abilene, Hawle<br>baz=55 | 55.56 | 283 | P | | P | 18 03 37.0 | -0.7 |
| ABTX | Abilene, Hawle<br>comp=Z,26nm,1.4s | 55.56 | 283 | eP | | P | 18 03 35.6 | -2.1 |
| ABTX | Abilene, Hawle<br>comp=Z,26nm,1.4s | 55.56 | 283 | eP | | P | 18 03 35.6 | -2.1 |
| Y30A | Stafford Cattl<br>baz=56 | 55.63 | 285 | P | | P | 18 03 37.9 | -0.3 |
| YFT | Old Faithful<br>comp=Z,30nm,1.2s | 55.72 | 301 | eP | | P | 18 03 40.6 | +1.7 |
| YFT | Old Faithful<br>comp=Z,30nm,1.2s | 55.72 | 301 | eP | | P | 18 03 40.6 | +1.7 |
| CHMT | Chamberlain Mo | 55.73 | 304 | eP | | P | 18 03 38.7 | -0.2 |
| CHMT | Chamberlain Mo | 55.73 | 304 | eP | | P | 18 03 38.7 | -0.2 |
| H10N2 | ASCENSION HYDR<br>baz=350,slow=75,SNR=13 | 55.73 | 165 | T | | T | 19 03 29.2 | |
| H10N3 | ASCENSION HYDR<br>baz=350,slow=75,SNR=12 | 55.74 | 165 | T | | T | 19 03 29.2 | |
| 434A | Burnet<br>baz=56 | 55.75 | 280 | P | | P | 18 03 38.4 | -0.6 |
| H10N1 | ASCENSION HYDR<br>baz=350,slow=75,SNR=12 | 55.75 | 165 | T | | T | 19 03 28.8 | |
| 636A | Smothers Creek<br>baz=56 | 55.76 | 278 | P | | P | 18 03 38.9 | -0.1 |
| 737A | Port Lavaca<br>baz=56 | 55.79 | 277 | P | | P | 18 03 39.1 | -0.2 |
| X29A | Tulia<br>baz=56 | 55.82 | 286 | P | | P | 18 03 39.2 | -0.4 |
| FLWY | Flagg Ranch<br>comp=Z,202nm,1.8s | 55.85 | 300 | eP | | P | 18 03 41.5 | +1.7 |
| FLWY | Flagg Ranch<br>comp=Z,202nm,1.8s | 55.85 | 300 | eP | | P | 18 03 41.5 | +1.7 |
| 333A | Richland Sprin<br>baz=56,SNR=13 | 55.91 | 281 | P | | P | 18 03 39.2 | -1.0 |
| BW06 | Boulder Array | 55.92 | 298 | eP | | P | 18 03 39.3 | -1.1 |
| BW06 | Boulder Array | 55.92 | 298 | eP | | P | 18 03 39.3 | -1.1 |
| T25A | Trinidad<br>comp=Z,60nm,1.8s | 55.98 | 290 | eP | | P | 18 03 42.0 | +1.1 |
| T25A | Trinidad<br>comp=Z,60nm,1.8s | 55.98 | 290 | eP | | P | 18 03 42.0 | +1.1 |
| 232A | Coleman<br>baz=56,SNR=10 | 56.01 | 282 | P | | P | 18 03 39.9 | -1.1 |
| 131A | Roby<br>baz=56 | 56.02 | 283 | P | | P | 18 03 40.6 | -0.5 |
| LOHW | Long Hollow<br>comp=Z,19nm,0.9s | 56.06 | 300 | eP | | P | 18 03 41.2 | -0.1 |
| LOHW | Long Hollow<br>comp=Z,19nm,0.9s | 56.06 | 300 | eP | | P | 18 03 41.2 | -0.1 |
| MOOW | Moose Ponds<br>comp=Z,14nm,1.3s | 56.07 | 300 | eP | | P | 18 03 40.8 | -0.6 |
| MOOW | Moose Ponds<br>comp=Z,14nm,1.3s | 56.07 | 300 | eP | | P | 18 03 40.8 | -0.6 |
| 736A | Circle Diamond<br>baz=56 | 56.10 | 278 | P | | P | 18 03 41.6 | +0.1 |
| IMW | Indian Meadow<br>comp=Z,27nm,1.5s | 56.10 | 300 | eP | | P | 18 03 41.6 | -0.1 |
| IMW | Indian Meadow<br>comp=Z,27nm,1.5s | 56.10 | 300 | eP | | P | 18 03 41.6 | -0.1 |
| Z30A | Sanderson Ranc<br>baz=56 | 56.14 | 284 | P | | P | 18 03 41.0 | -0.9 |
| MSO | Missoula<br>baz=56 | 56.16 | 304 | P | | P | 18 03 41.6 | -0.3 |
| DLMT | Dillon<br>comp=Z,12nm,0.5s | 56.23 | 302 | eP | | P | 18 03 43.3 | +0.9 |
| DLMT | Dillon<br>comp=Z,12nm,0.5s | 56.23 | 302 | eP | | P | 18 03 43.3 | +0.9 |
| SNOW | Snow King Moun<br>comp=Z,35nm,0.4s | 56.24 | 300 | eP | | P | 18 03 42.3 | -0.3 |
| SNOW | Snow King Moun<br>comp=Z,35nm,0.4s | 56.24 | 300 | eP | | P | 18 03 42.3 | -0.3 |
| 635A | Leesville<br>baz=56 | 56.30 | 278 | P | | P | 18 03 42.4 | -0.5 |
| SDCO | Great Sand Dun<br>baz=56 | 56.32 | 291 | P | | P | 18 03 43.0 | -0.4 |
| SDCO | Great Sand Dun<br>comp=Z,18nm,1.9s | 56.32 | 291 | eP | | P | 18 03 43.7 | +0.3 |
| SDCO | Great Sand Dun<br>comp=Z,18nm,1.9s | 56.32 | 291 | eP | | P | 18 03 43.7 | +0.3 |
| 433A | Art<br>baz=56,SNR=9.6 | 56.34 | 281 | P | | P | 18 03 42.5 | -0.7 |
| TPAW | Teton Pass<br>comp=Z,22nm,1.5s | 56.34 | 300 | eP | | P | 18 03 42.6 | -0.8 |
| TPAW | Teton Pass<br>comp=Z,22nm,1.5s | 56.34 | 300 | eP | | P | 18 03 42.6 | -0.8 |
| REDW | Red Top Meadow<br>comp=Z,60nm,1.4s | 56.35 | 299 | eP | | P | 18 03 43.3 | -0.1 |
| REDW | Red Top Meadow<br>comp=Z,60nm,1.4s | 56.35 | 299 | eP | | P | 18 03 43.3 | -0.1 |
| 534A | Blanco<br>baz=56,SNR=8.2 | 56.38 | 280 | P | | P | 18 03 42.2 | -1.3 |
| 332A | Millersview<br>baz=56,SNR=13 | 56.38 | 282 | P | | P | 18 03 42.4 | -1.1 |
| 231A | Bronte<br>baz=56 | 56.43 | 282 | P | | P | 18 03 42.8 | -1.1 |
| 130A | Snyder<br>baz=56 | 56.45 | 284 | P | | P | 18 03 43.3 | -0.8 |
| Y28A | McKinney Farm,<br>baz=56 | 56.50 | 286 | P | | P | 18 03 43.6 | -0.9 |
| Z29A | Hungry Hill Ra<br>baz=56 | 56.54 | 285 | P | | P | 18 03 44.1 | -0.7 |
| O20A | White River Ci<br>baz=56 | 56.64 | 295 | P | | P | 18 03 44.3 | -1.2 |
| O20A | White River Ci<br>comp=Z,36nm,0.8s | 56.64 | 295 | eP | | P | 18 03 46.1 | +0.7 |
| O20A | White River Ci<br>comp=Z,36nm,0.8s | 56.64 | 295 | eP | | P | 18 03 46.2 | +0.7 |
| 735A | Kenedy<br>baz=56 | 56.66 | 278 | P | | P | 18 03 45.4 | -0.1 |
| MCMT | McKenzie Canyo<br>comp=Z,11nm,1.6s | 56.68 | 302 | eP | | P | 18 03 46.3 | +0.5 |
| MCMT | McKenzie Canyo<br>comp=Z,11nm,1.6s | 56.68 | 302 | eP | | P | 18 03 46.3 | +0.5 |
| 533A | Kerrville<br>baz=57 | 56.73 | 280 | P | | P | 18 03 44.9 | -1.1 |
| 432A | Menard<br>baz=57 | 56.73 | 281 | P | | P | 18 03 45.2 | -0.9 |
| H10S1 | ASCENSION HYDR<br>baz=350,slow=75,SNR=64 | 56.80 | 165 | T | | T | 19 04 45.8 | |
| H10S3 | ASCENSION HYDR<br>baz=350,slow=75,SNR=93 | 56.80 | 165 | T | | T | 19 04 48.0 | |
| H10S2 | ASCENSION HYDR<br>baz=350,slow=75,SNR=79 | 56.81 | 165 | T | | T | 19 04 47.1 | |
| MSTX | Muleshoe<br>baz=57,SNR=5.6 | 56.81 | 286 | P | | P | 18 03 45.9 | -0.8 |
| MSTX | Muleshoe<br>comp=Z,64nm,1.6s | 56.81 | 286 | eP | | P | 18 03 46.6 | -0.1 |
| MSTX | Muleshoe<br>comp=Z,64nm,1.6s | 56.81 | 286 | eP | | P | 18 03 46.6 | -0.1 |
| AHID | Auburn Hatcher<br>comp=Z,26nm,0.6s | 56.84 | 299 | eP | | P | 18 03 46.5 | -0.4 |
| AHID | Auburn Hatcher<br>comp=Z,26nm,0.6s | 56.84 | 299 | eP | | P | 18 03 46.5 | -0.4 |
| 331A | San Angelo<br>baz=57 | 56.89 | 282 | P | | P | 18 03 46.8 | -0.4 |
| Z28A | Tucker Farm, M<br>baz=57 | 56.97 | 285 | P | | P | 18 03 46.9 | -0.9 |
| JCT | Junction City | 56.99 | 281 | eP | | P | 18 03 46.4 | -1.5 |
| JCT | comp=Z,23nm,1.3s | | | | pmax | pmax | | |
| JCT | Junction City<br>baz=57 | 56.99 | 281 | P | | P | 18 03 46.9 | -1.0 |
| JCT | Junction City<br>comp=Z,23nm,1.3s | 56.99 | 281 | eP | | P | 18 03 46.4 | -1.5 |
| JCT | Junction City<br>comp=Z,23nm,1.3s | 56.99 | 281 | eP | | P | 18 03 46.4 | -1.5 |
| 230A | Sterling City<br>baz=57 | 56.99 | 283 | P | | P | 18 03 47.2 | -0.7 |
| 129A | Stewart Farms,<br>baz=57 | 57.03 | 284 | P | | P | 18 03 47.6 | -0.6 |
| 835A | Beeville<br>baz=57 | 57.04 | 277 | P | | P | 18 03 47.8 | -0.4 |
| NEW | Newport | 57.10 | 307 | eP | | P | 18 03 47.9 | -0.6 |
| NEW | comp=Z,23nm,1.4s | | | | pmax | pmax | | |
| NEW | Newport<br>baz=57 | 57.10 | 307 | P | | P | 18 03 47.5 | -1.0 |
| NEW | Newport<br>comp=Z,23nm,1.4s | 57.10 | 307 | eP | | P | 18 03 47.9 | -0.6 |
| NEW | Newport<br>comp=Z,23nm,1.4s | 57.10 | 307 | eP | | P | 18 03 47.9 | -0.6 |
| S22A | 4UR Ranch, Cre<br>baz=57 | 57.16 | 292 | P | | P | 18 03 47.8 | -1.5 |
| S22A | 4UR Ranch, Cre<br>comp=Z,25nm,1.9s | 57.16 | 292 | eP | | P | 18 03 50.5 | +1.2 |
| S22A | 4UR Ranch, Cre<br>comp=Z,25nm,1.9s | 57.16 | 292 | eP | | P | 18 03 50.5 | +1.2 |
| 633A | Saathoff Ranch<br>baz=57 | 57.21 | 279 | P | | P | 18 03 48.6 | -0.8 |
| DAWY | Dawson<br>comp=Z,14nm,1.1s | 57.24 | 331 | eP | | P | 18 03 49.7 | +0.5 |
| DAWY | Dawson<br>comp=Z,14nm,1.1s | 57.24 | 331 | eP | | P | 18 03 49.7 | +0.5 |
| 532A | Rocksprings<br>baz=57,SNR=8.1 | 57.28 | 281 | P | | P | 18 03 49.1 | -0.9 |
| 330A | Mertzon<br>baz=57 | 57.33 | 283 | P | | P | 18 03 49.8 | -0.6 |
| EGAK | Eagle<br>comp=Z,12nm,0.3s | 57.34 | 332 | eP | | P | 18 03 50.3 | +0.5 |
| EGAK | Eagle<br>comp=Z,12nm,0.3s | 57.34 | 332 | eP | | P | 18 03 50.3 | +0.5 |
| 431A | Sonora<br>baz=57,SNR=6.1 | 57.40 | 282 | P | | P | 18 03 50.5 | -0.3 |
| 128A | Castleberry Fa<br>baz=57 | 57.45 | 284 | P | | P | 18 03 50.9 | -0.3 |
| 632A | Uvalde<br>baz=57,SNR=5.9 | 57.59 | 280 | P | | P | 18 03 51.8 | -0.3 |
| 834A | Tilden<br>baz=58 | 57.63 | 278 | P | | P | 18 03 52.1 | -0.3 |
| 531A | Rocksprings<br>baz=58,SNR=12 | 57.69 | 281 | P | | P | 18 03 52.3 | -0.5 |
| 733A | Divot King Ran<br>baz=58 | 57.75 | 279 | P | | P | 18 03 53.1 | -0.2 |
| 430A | Baggett Ranch,<br>baz=58,SNR=5.4 | 57.76 | 282 | P | | P | 18 03 53.4 | +0.1 |
| HWUT | Hardware Ranch<br>comp=Z,4.4nm,0.3s | 57.80 | 298 | eP | | P | 18 03 53.3 | -0.4 |
| HWUT | Hardware Ranch<br>comp=Z,4.4nm,0.3s | 57.80 | 298 | eP | | P | 18 03 53.3 | -0.4 |
| 228A | UT Block 9, Go<br>baz=58 | 57.83 | 284 | P | | P | 18 03 53.3 | -0.6 |
| 934A | Benavides<br>baz=58 | 57.94 | 277 | P | | P | 18 03 54.4 | -0.2 |
| TCUT | Toone Canyon<br>comp=Z,30nm,0.5s | 58.00 | 298 | eP | | P | 18 03 55.0 | -0.2 |
| TCUT | Toone Canyon<br>comp=Z,30nm,0.5s | 58.00 | 298 | eP | | P | 18 03 55.0 | -0.2 |
| 833A | Chaparral WMA,<br>baz=58 | 58.07 | 279 | P | | P | 18 03 55.1 | -0.4 |
| 035A | Encino<br>baz=58 | 58.09 | 276 | P | | P | 18 03 55.4 | -0.2 |
| PV04 | Paradox Valley | 58.09 | 294 | eP | | P | 18 03 56.2 | +0.5 |
| PV04 | Paradox Valley | 58.09 | 294 | eP | | P | 18 03 56.2 | +0.5 |
| P18A | Preston Nutter<br>comp=Z,20nm,1.1s | 58.18 | 296 | eP | | P | 18 03 57.1 | +0.7 |
| P18A | Preston Nutter<br>comp=Z,20nm,1.1s | 58.18 | 296 | eP | | P | 18 03 57.2 | +0.7 |
| 631A | Perdido Creek<br>baz=58 | 58.18 | 280 | P | | P | 18 03 55.7 | -0.6 |
| PV10 | Paradox Valley | 58.18 | 294 | eP | | P | 18 03 58.1 | +1.6 |
| PV10 | Paradox Valley | 58.18 | 294 | eP | | P | 18 03 58.1 | +1.6 |
| BRVK | Borovoye | 58.19 | 45 | eP | | P | 18 03 56.7 | +0.8 |
| BRVK | comp=Z,30nm,2.5s | | | | pmax | pmax | | |
| BRVK | Borovoye<br>comp=Z,5.4nm,0.8s | 58.19 | 45 | eP | | P | 18 03 56.3 | +0.4 |
| BRVK | Borovoye<br>comp=Z,5.4nm,0.8s | 58.19 | 45 | eP | | P | 18 03 56.3 | +0.4 |
| 732A | Laxson Ranch,<br>baz=58 | 58.20 | 279 | P | | P | 18 03 55.8 | -0.7 |
| 530A | J-C Ranch, Com<br>baz=58,SNR=16 | 58.23 | 281 | P | | P | 18 03 55.7 | -0.9 |
| ROSC | El Rosal<br>comp=Z,218nm,21.0s,baz=28,slow=32 | 58.29 | 239 | LR | | LR | 18 25 08.5 | |
| 429A | Davenport Ranc<br>baz=58 | 58.30 | 282 | P | | P | 18 03 57.1 | -0.1 |
| HLID | Hailey<br>baz=58,SNR=13 | 58.34 | 301 | P | | P | 18 03 57.2 | -0.1 |
| HLID | Hailey<br>comp=Z,21nm,1.5s | 58.34 | 301 | eP | | P | 18 03 58.2 | +0.8 |
| HLID | Hailey<br>comp=Z,21nm,1.5s | 58.34 | 301 | eP | | P | 18 03 58.2 | +0.8 |
| 034A | Hebbronville<br>baz=58 | 58.40 | 277 | P | | P | 18 03 57.6 | -0.2 |
| HVU | Hansel Valley | 58.43 | 299 | eP | | P | 18 03 57.7 | -0.3 |
| HVU | comp=Z,15nm,1.4s | | | | pmax | pmax | | |
| HVU | Hansel Valley<br>comp=Z,15nm,1.4s | 58.43 | 299 | eP | | P | 18 03 57.7 | -0.3 |
| HVU | Hansel Valley<br>comp=Z,15nm,1.4s | 58.43 | 299 | eP | | P | 18 03 57.7 | -0.3 |
| 933A | Laredo<br>baz=58 | 58.45 | 278 | P | | P | 18 03 58.3 | +0.1 |
| 832A | Faith Ranch, C<br>baz=58,SNR=11 | 58.49 | 279 | P | | P | 18 03 58.3 | -0.2 |
| F10A | Beach Ranch, E<br>comp=Z,27nm,1.6s | 58.51 | 305 | eP | | P | 18 03 59.4 | +0.9 |
| F10A | Beach Ranch, E<br>comp=Z,27nm,1.6s | 58.51 | 305 | eP | | P | 18 03 59.3 | +0.9 |
| SPUT | South Promonto | 58.52 | 298 | eP | | P | 18 03 58.3 | -0.4 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,6.5nm,0.8s | | | | | | | | |
| SPUT | **South Promonto** | **58.52** | **298** | *e*P | | **P** | | **18 03 58.3** | **-0.4** |
| | comp=Z,6.5nm,0.8s | | | | | | | | |
| MVCO | **Mesa Verde** | **58.55** | **292** | *e*P | | **P** | | **18 04 00.2** | **+1.2** |
| | comp=Z,82nm,2.0s | | | | | | | | |
| MVCO | **Mesa Verde** | **58.55** | **292** | *e*P | | **P** | | **18 04 00.2** | **+1.2** |
| | comp=Z,82nm,2.0s | | | | | | | | |
| P17A | **Butcher Ranch,** | **58.58** | **296** | *e*P | | **P** | | **18 03 59.0** | **-0.1** |
| | comp=Z,10nm,0.7s | | | | | | | | |
| P17A | **Butcher Ranch,** | **58.58** | **296** | *e*P | | **P** | | **18 03 59.0** | **-0.1** |
| | comp=Z,10nm,0.7s | | | | | | | | |
| ANMO | **Albuquerque** | **58.62** | **289** | ⇑*i*P | | **P** | | **18 04 00.8** | **+1.3** |
| ANMO | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.8s | | | | | | | | |
| ANMO | **Albuquerque** | **58.62** | **289** | *e*P | | **P** | | **18 04 00.6** | **+1.1** |
| | comp=Z,22nm,1.6s | | | | | | | | |
| ANMO | **Albuquerque** | **58.62** | **289** | *e*P | | **P** | | **18 04 00.6** | **+1.1** |
| | comp=Z,22nm,1.6s | | | | | | | | |
| SRU | **San Rafael** | **58.66** | **295** | *e*P | | **P** | | **18 03 58.7** | **-1.0** |
| SRU | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| SRU | **San Rafael** | **58.66** | **295** | *e*P | | **P** | | **18 03 58.7** | **-1.0** |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| SRU | **San Rafael** | **58.66** | **295** | *e*P | | **P** | | **18 03 58.7** | **-1.0** |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| MPU | **Maple Canyon** | **58.80** | **297** | *e*P | | **P** | | **18 04 02.2** | **+1.5** |
| | comp=Z,9.2nm,0.7s | | | | | | | | |
| MPU | **Maple Canyon** | **58.80** | **297** | *e*P | | **P** | | **18 04 02.2** | **+1.5** |
| | comp=Z,9.2nm,0.7s | | | | | | | | |
| 529A | **Stev Forest Ra** | **58.83** | **282** | P | | **P** | | **18 04 00.6** | **-0.3** |
| | baz=59,SNR=15 | | | | | | | | |
| TMUT | **Trail Mountain** | **58.97** | **296** | *e*P | | **P** | | **18 04 02.3** | **+0.3** |
| | comp=Z,53nm,1.0s | | | | | | | | |
| TMUT | **Trail Mountain** | **58.97** | **296** | *e*P | | **P** | | **18 04 02.3** | **+0.3** |
| | comp=Z,53nm,1.0s | | | | | | | | |
| BGU | **Big Grassy Mou** | **59.10** | **298** | *e*P | | **P** | | **18 04 02.2** | **-0.5** |
| | comp=Z,21nm,1.6s | | | | | | | | |
| BGU | **Big Grassy Mou** | **59.10** | **298** | *e*P | | **P** | | **18 04 02.2** | **-0.5** |
| | comp=Z,21nm,1.6s | | | | | | | | |
| NLU | **North Lily Min** | **59.11** | **297** | *e*P | | **P** | | **18 04 03.2** | **+0.4** |
| | comp=Z,15nm,1.3s | | | | | | | | |
| NLU | **North Lily Min** | **59.11** | **297** | *e*P | | **P** | | **18 04 03.2** | **+0.4** |
| | comp=Z,15nm,1.3s | | | | | | | | |
| IL1 | **Eielson Array** | **59.11** | **334** | *e*P | | **P** | | **18 04 01.9** | **-0.3** |
| IL1 | **Eielson Array** | **59.11** | **334** | *e*P | | **P** | | **18 04 01.9** | **-0.3** |
| ILAR | **Eielson Array** | **59.11** | **334** | P | | **P** | | **18 04 02.3** | **+0.1** |
| | comp=Z,1.1nm,0.6s,baz=44,slow=5.5,SNR=15 | | | | | | | | |
| ILAR | | | | | PcP | | **PcP** | **18 04 50.1** | **-0.6** |
| | comp=Z,2.2nm,1.1s,baz=23,slow=3.3,SNR=4.5 | | | | | | | | |
| ILAR | | | | | LR | | LR | 18 28 09.7 | |
| | comp=Z,248nm,18.2s,baz=54,slow=35 | | | | | | | | |
| LPM | **Los Pinos Moun** | **59.13** | **289** | *e*P | | **P** | | **18 04 04.0** | **+1.0** |
| | comp=Z,8.2nm,1.3s | | | | | | | | |
| LPM | **Los Pinos Moun** | **59.13** | **289** | *e*P | | **P** | | **18 04 04.0** | **+1.0** |
| | comp=Z,8.2nm,1.3s | | | | | | | | |
| DUG | **Dugway** | **59.41** | **297** | *e*P | | **P** | | **18 04 04.8** | **0.0** |
| DUG | | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| DUG | **Dugway** | **59.41** | **297** | P | | **P** | | **18 04 04.4** | **-0.4** |
| | baz=59,SNR=14 | | | | | | | | |
| DUG | **Dugway** | **59.41** | **297** | *e*P | | **P** | | **18 04 04.8** | **0.0** |
| | comp=Z,20nm,1.1s | | | | | | | | |
| DUG | **Dugway** | **59.41** | **297** | *e*P | | **P** | | **18 04 04.8** | **0.0** |
| | comp=Z,20nm,1.1s | | | | | | | | |
| MENT | **Mentasta** | **59.44** | **332** | *e*P | | **P** | | **18 04 05.1** | **+0.6** |
| MENT | **Mentasta** | **59.44** | **332** | *e*P | | **P** | | **18 04 05.1** | **+0.6** |
| CCB | **Clear Creek Bu** | **59.48** | **335** | *e*P | | **P** | | **18 04 05.0** | **+0.3** |
| | comp=Z,18nm,1.6s | | | | | | | | |
| CCB | **Clear Creek Bu** | **59.48** | **335** | *e*P | | **P** | | **18 04 05.0** | **+0.3** |
| | comp=Z,18nm,1.6s | | | | | | | | |
| LTY | **Liberty** | **59.63** | **308** | *e*P | | **P** | | **18 04 05.5** | **-0.7** |
| | comp=Z,18nm,1.2s | | | | | | | | |
| LTY | **Liberty** | **59.63** | **308** | *e*P | | **P** | | **18 04 05.5** | **-0.7** |
| | comp=Z,18nm,1.2s | | | | | | | | |
| WRH | **Wood River Hil** | **59.69** | **334** | *e*P | | **P** | | **18 04 06.6** | **+0.4** |
| | comp=Z,15nm,1.2s | | | | | | | | |
| WRH | **Wood River Hil** | **59.69** | **334** | *e*P | | **P** | | **18 04 06.6** | **+0.4** |
| | comp=Z,15nm,1.2s | | | | | | | | |
| MNTX | **Cornudas Mount** | **59.94** | **285** | P | | **P** | | **18 04 07.9** | **-0.6** |
| | baz=60 | | | | | | | | |
| PAX | **Paxson** | **59.98** | **332** | *e*P | | **P** | | **18 04 08.4** | **+0.1** |
| PAX | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| PAX | **Paxson** | **59.98** | **332** | *e*P | | **P** | | **18 04 08.3** | **+0.1** |
| | comp=Z,10nm,1.2s | | | | | | | | |
| PAX | **Paxson** | **59.98** | **332** | *e*P | | **P** | | **18 04 08.4** | **+0.1** |
| | comp=Z,10.0nm,1.2s | | | | | | | | |
| MSU | **Marysvale** | **60.05** | **296** | *e*P | | **P** | | **18 04 09.7** | **+0.3** |
| MSU | **Marysvale** | **60.05** | **296** | *e*P | | **P** | | **18 04 09.7** | **+0.3** |
| MSU | **Marysvale** | **60.05** | **296** | *e*P | | **P** | | **18 04 09.7** | **+0.3** |
| TX31 | **Lajitas Ar. Si** | **60.30** | **282** | *e*P | | **P** | | **18 04 10.3** | **-0.8** |
| TX31 | **Lajitas Ar. Si** | **60.30** | **282** | *e*P | | **P** | | **18 04 10.3** | **-0.8** |
| TXAR | **Lajitas Array** | **60.30** | **282** | P | | **P** | | **18 04 11.1** | **0.0** |
| | comp=Z,1.7nm,0.6s,baz=68,slow=6.7,SNR=26 | | | | | | | | |
| TXAR | | | | | PcP | | **PcP** | **18 04 56.7** | **+0.5** |
| | comp=Z,1.7nm,1.1s,baz=42,slow=3.9,SNR=3.7 | | | | | | | | |
| TXAR | | | | | LR | | LR | 18 29 21.3 | |
| | comp=Z,622nm,21.3s,baz=0.0,slow=35 | | | | | | | | |
| MCK | **McKinley** | **60.49** | **334** | *e*P | | **P** | | **18 04 11.5** | **-0.2** |
| MCK | **McKinley** | **60.49** | **334** | *e*P | | **P** | | **18 04 11.5** | **-0.2** |
| MCK | **McKinley** | **60.49** | **334** | *e*P | | **P** | | **18 04 11.5** | **-0.2** |
| ELK | **Elko** | **60.53** | **299** | *e*P | | **P** | | **18 04 13.6** | **+0.9** |
| ELK | | | | | pmax | pmax | | | |
| | comp=Z,44nm,2.0s | | | | | | | | |
| ELK | **Elko** | **60.53** | **299** | *e*P | | **P** | | **18 04 13.6** | **+0.9** |
| | comp=Z,44nm,2.0s | | | | | | | | |
| ELK | **Elko** | **60.53** | **299** | *e*P | | **P** | | **18 04 13.6** | **+0.9** |
| | comp=Z,44nm,2.0s | | | | | | | | |
| GEYT | **Alibeck** | **60.65** | **65** | P | | **P** | | **18 04 13.4** | **+0.2** |
| | comp=Z,2.4nm,0.9s,baz=290,slow=9.3,SNR=7.0 | | | | | | | | |
| GEYT | | | | | LR | | LR | 18 31 50.6 | |
| | comp=Z,170nm,21.4s,baz=290,slow=37 | | | | | | | | |
| JTS | **JuntasAbangare** | **60.72** | **253** | LR | | LR | | 18 26 44.7 | |
| | comp=Z,172nm,21.2s,baz=19,slow=32 | | | | | | | | |
| J08A | **Circle Bar Ran** | **60.81** | **303** | *e*P | | **P** | | **18 04 15.0** | **+0.7** |
| | comp=Z,39nm,1.8s | | | | | | | | |
| J08A | **Circle Bar Ran** | **60.81** | **303** | *e*P | | **P** | | **18 04 15.0** | **+0.7** |
| | comp=Z,39nm,1.8s | | | | | | | | |
| 121A | **Cookes Peak, D** | **60.99** | **288** | P | | **P** | | **18 04 15.8** | **0.0** |
| | baz=61,SNR=5.4 | | | | | | | | |
| TRF | **Thorofare Moun** | **61.10** | **335** | *e*P | | **P** | | **18 04 15.8** | **-0.3** |
| | comp=Z,114nm,2.6s | | | | | | | | |
| TRF | **Thorofare Moun** | **61.10** | **335** | *e*P | | **P** | | **18 04 15.8** | **-0.3** |
| | comp=Z,114nm,2.6s | | | | | | | | |
| KTH | **Kantishna Hill** | **61.21** | **335** | *e*P | | **P** | | **18 04 16.0** | **-0.7** |
| | comp=Z,19nm,1.2s | | | | | | | | |
| KTH | **Kantishna Hill** | **61.21** | **335** | *e*P | | **P** | | **18 04 16.0** | **-0.7** |
| | comp=Z,19nm,1.2s | | | | | | | | |
| NLWA | **Neilton Lookou** | **61.25** | **310** | *e*P | | **P** | | **18 04 16.8** | **-0.4** |
| NLWA | **Neilton Lookou** | **61.25** | **310** | *e*P | | **P** | | **18 04 16.8** | **-0.4** |
| CCUT | **Cedar City** | **61.38** | **295** | *e*P | | **P** | | **18 04 18.8** | **+0.3** |
| | comp=Z,12nm,1.0s | | | | | | | | |
| CCUT | **Cedar City** | **61.38** | **295** | *e*P | | **P** | | **18 04 18.8** | **+0.3** |
| | comp=Z,12nm,1.0s | | | | | | | | |
| WUAZ | **Wupatki** | **61.41** | **292** | P | | **P** | | **18 04 18.8** | **+0.1** |
| | baz=61 | | | | | | | | |
| WVOR | **Wild Horse Val** | **61.48** | **303** | *e*P | | **P** | | **18 04 19.3** | **+0.4** |
| WVOR | | | | | pmax | pmax | | | |
| | comp=Z,35nm,1.4s | | | | | | | | |
| WVOR | **Wild Horse Val** | **61.48** | **303** | *e*P | | **P** | | **18 04 19.3** | **+0.4** |
| | comp=Z,35nm,1.4s | | | | | | | | |
| WVOR | **Wild Horse Val** | **61.48** | **303** | *e*P | | **P** | | **18 04 19.3** | **+0.4** |
| | comp=Z,35nm,1.4s | | | | | | | | |
| BMN | **Battle Mountai** | **61.91** | **300** | *e*P | | **P** | | **18 04 21.9** | **0.0** |
| BMN | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| BMN | **Battle Mountai** | **61.91** | **300** | *e*P | | **P** | | **18 04 21.9** | **0.0** |
| | comp=Z,13nm,1.3s | | | | | | | | |
| BMN | **Battle Mountai** | **61.91** | **300** | *e*P | | **P** | | **18 04 21.9** | **0.0** |
| | comp=Z,13nm,1.3s | | | | | | | | |
| PMR | **Palmer** | **62.15** | **333** | *e*P | | **P** | | **18 04 22.9** | **-0.1** |
| PMR | **Palmer** | **62.15** | **333** | *e*P | | **P** | | **18 04 22.9** | **-0.1** |
| PMR | **Palmer** | **62.15** | **333** | *e*P | | **P** | | **18 04 22.9** | **-0.1** |
| R11A | **Troy Canyon, C** | **62.24** | **297** | P | | **P** | | **18 04 23.5** | **-0.7** |
| | baz=62,SNR=11 | | | | | | | | |
| R11A | **Troy Canyon, C** | **62.24** | **297** | *e*P | | **P** | | **18 04 23.8** | **-0.4** |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| R11A | **Troy Canyon, C** | **62.24** | **297** | *e*P | | **P** | | **18 04 23.8** | **-0.4** |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| J05D | **Fort Rock, OR** | **62.42** | **305** | P | | **P** | | **18 04 25.6** | **+0.4** |
| | baz=62 | | | | | | | | |
| K05A | **Summer Lake** | **62.58** | **304** | *e*P | | **P** | | **18 04 28.1** | **+1.7** |
| | comp=Z,51nm,1.6s | | | | | | | | |
| K05A | **Summer Lake** | **62.58** | **304** | *e*P | | **P** | | **18 04 28.1** | **+1.7** |
| | comp=Z,51nm,1.6s | | | | | | | | |
| MOD | **Modoc** | **62.77** | **303** | *e*P | | **P** | | **18 04 27.5** | **-0.1** |
| | comp=Z,50nm,2.1s | | | | | | | | |
| MOD | **Modoc** | **62.77** | **303** | *e*P | | **P** | | **18 04 27.5** | **-0.1** |
| | comp=Z,50nm,2.1s | | | | | | | | |
| NVS | **Novosibirsk** | **62.86** | **38** | *e*P | | **P** | | **18 04 27.4** | **-0.4** |
| NVS | | | | | pmax | pmax | | | |
| | comp=N,4.0nm,1.7s | | | | | | | | |
| NVS | | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.7s | | | | | | | | |
| NVS | **Novosibirsk** | **62.86** | **38** | *e*P | | **P** | | **18 04 27.4** | **-0.4** |
| J04D | **Umpqua Nationa** | **62.94** | **305** | P | | **P** | | **18 04 27.5** | **-1.3** |
| | baz=63 | | | | | | | | |
| TUC | **Tucson** | **63.08** | **289** | *e*P | | **P** | | **18 04 29.3** | **-0.5** |
| TUC | | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.5s | | | | | | | | |
| TUC | **Tucson** | **63.08** | **289** | *e*P | | **P** | | **18 04 29.3** | **-0.5** |
| | comp=Z,16nm,1.5s | | | | | | | | |
| TUC | **Tucson** | **63.08** | **289** | *e*P | | **P** | | **18 04 29.3** | **-0.5** |
| | comp=Z,16nm,1.5s | | | | | | | | |
| SHPR | **Sheep Range** | **63.15** | **296** | *e*P | | **P** | | **18 04 29.9** | **-0.4** |
| SHPR | **Sheep Range** | **63.15** | **296** | *e*P | | **P** | | **18 04 29.9** | **-0.4** |
| TPNV | **Topopah Spring** | **63.54** | **297** | *e*P | | **P** | | **18 04 33.5** | **+0.7** |
| TPNV | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| TPNV | **Topopah Spring** | **63.54** | **297** | P | | **P** | | **18 04 32.1** | **-0.8** |
| | baz=63,SNR=11 | | | | | | | | |
| TPNV | **Topopah Spring** | **63.54** | **297** | *e*P | | **P** | | **18 04 33.5** | **+0.7** |
| | comp=Z,14nm,1.2s | | | | | | | | |
| TPNV | **Topopah Spring** | **63.54** | **297** | *e*P | | **P** | | **18 04 33.5** | **+0.7** |
| | comp=Z,14nm,1.2s | | | | | | | | |
| KURK | **Kurchatov** | **63.65** | **43** | P | | **P** | | **18 04 32.3** | **-0.8** |
| KURK | **Kurchatov** | **63.65** | **43** | P | | **P** | | **18 04 32.3** | **-0.8** |
| KURK | **Kurchatov** | **63.65** | **43** | P | | **P** | | **18 04 32.3** | **-0.8** |
| M04C | **Macdoel** | **63.73** | **304** | P | | **P** | | **18 04 33.0** | **-1.0** |
| | baz=64 | | | | | | | | |
| NVAR | **Mina Array Bea** | **63.83** | **299** | LR | | LR | | 18 30 48.1 | |
| | comp=Z,545nm,20.9s,baz=60,slow=35 | | | | | | | | |
| PDMCI | **Parker Dam,Lak** | **63.94** | **293** | P | | **P** | | **18 04 35.1** | **-0.1** |
| | baz=64 | | | | | | | | |
| ZAA0 | **Zalesovo Array** | **64.15** | **38** | *e*P | | **P** | | **18 04 36.5** | **+0.2** |
| ZAA0 | **Zalesovo Array** | **64.15** | **38** | *e*P | | **P** | | **18 04 36.5** | **+0.2** |
| ZALV | **Zalesovo Beam** | **64.15** | **38** | P | | **P** | | **18 04 36.9** | **+0.6** |
| | comp=Z,1.5nm,0.8s,baz=294,slow=7.5,SNR=8.2 | | | | | | | | |
| ZALV | | | | | LR | | LR | 18 32 33.1 | |
| | comp=Z,190nm,21.3s,baz=250,slow=36 | | | | | | | | |
| GRAC | **Grapevine Rang** | **64.19** | **297** | P | | **P** | | **18 04 37.1** | **+0.1** |
| | baz=64,SNR=20 | | | | | | | | |
| FURC | **Furnace Creek,** | **64.22** | **296** | P | | **P** | | **18 04 37.2** | **+0.1** |
| | baz=64 | | | | | | | | |
| SAML | **Samuel** | **64.22** | **220** | *e*P | | **P** | | **18 04 36.9** | **-0.4** |
| | comp=Z,19nm,1.3s | | | | | | | | |
| SAML | **Samuel** | **64.22** | **220** | *e*P | | **P** | | **18 04 36.8** | **-0.4** |
| | comp=Z,19nm,1.3s | | | | | | | | |
| OTAV | **Otavalo** | **64.42** | **240** | *e*P | | **P** | | **18 04 38.5** | **-0.7** |
| | comp=Z,26nm,1.3s | | | | | | | | |
| OTAV | **Otavalo** | **64.42** | **240** | *e*P | | **P** | | **18 04 38.5** | **-0.7** |
| | comp=Z,26nm,1.3s | | | | | | | | |
| GMRC | **Granite Mounta** | **64.58** | **294** | P | | **P** | | **18 04 39.6** | **-0.1** |
| | baz=64,SNR=6.1 | | | | | | | | |
| KKAR | **Karatay Array** | **64.61** | **53** | *e*P | | **P** | | **18 04 40.2** | **+0.6** |
| KKAR | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| KKAR | **Karatay Array** | **64.61** | **53** | *e*P | | **P** | | **18 04 40.2** | **+0.6** |
| | comp=Z,2.1nm,0.8s | | | | | | | | |
| KKAR | **Karatay Array** | **64.61** | **53** | *e*P | | **P** | | **18 04 40.2** | **+0.6** |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| 214A | **Organ Pipe Nat** | **64.62** | **290** | P | | **P** | | **18 04 39.7** | **-0.1** |
| | baz=64 | | | | | | | | |
| IRM | **Iron Mountain** | **64.66** | **294** | P | | **P** | | **18 04 39.0** | **-1.1** |
| | baz=64 | | | | | | | | |
| N02D | **Trinity Center** | **64.75** | **304** | P | | **P** | | **18 04 40.2** | **-0.4** |
| | baz=64 | | | | | | | | |
| DAC | **Darwin (Calif)** | **64.80** | **297** | *e*P | | **P** | | **18 04 40.7** | **-0.4** |
| DAC | | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| DAC | **Darwin (Calif)** | **64.80** | **297** | *e*P | | **P** | | **18 04 40.7** | **-0.4** |
| | comp=Z,12nm,1.1s | | | | | | | | |
| DAC | **Darwin (Calif)** | **64.80** | **297** | *e*P | | **P** | | **18 04 40.7** | **-0.4** |
| | comp=Z,12nm,1.1s | | | | | | | | |
| BILL | **Bilibino** | **64.85** | **354** | *e*P | | **P** | | **18 04 39.3** | **-1.4** |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,41nm,2.9s | | | | | | | | |
| BILL | **Bilibino** | **64.85** | **354** | *e*P | | **P** | | **18 04 39.3** | **-1.4** |
| | comp=Z,41nm,2.9s | | | | | | | | |
| MPMC | **Manual Prospec** | **64.88** | **296** | P | | **P** | | **18 04 42.0** | **+0.3** |
| | baz=65,SNR=22 | | | | | | | | |
| GSC | **Goldstone** | **64.95** | **295** | *e*P | | **P** | | **18 04 42.3** | **+0.3** |
| GSC | | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.2s | | | | | | | | |
| GSC | **Goldstone** | **64.95** | **295** | P | | **P** | | **18 04 42.3** | **+0.3** |
| | baz=65,SNR=10 | | | | | | | | |
| GSC | **Goldstone** | **64.95** | **295** | *e*P | | **P** | | **18 04 42.3** | **+0.3** |
| | comp=Z,21nm,1.2s | | | | | | | | |
| GSC | **Goldstone** | **64.95** | **295** | *e*P | | **P** | | **18 04 42.3** | **+0.3** |
| | comp=Z,21nm,1.2s | | | | | | | | |
| HEC | **Hector,Ludlow** | **64.96** | **295** | P | | **P** | | **18 04 41.7** | **-0.3** |
| | baz=65 | | | | | | | | |
| BDFB | **Brasilia** | **65.08** | **202** | P | | **P** | | **18 04 43.4** | **+0.5** |
| | comp=Z,14nm,1.2s,baz=7.5,slow=12,SNR=6.7 | | | | | | | | |
| BDFB | | | | | LR | | LR | 18 28 25.5 | |
| | comp=Z,314nm,20.6s,baz=31,slow=32 | | | | | | | | |
| BDFB | **Brasilia** | **65.08** | **202** | P | | **P** | | **18 04 43.4** | **+0.5** |
| BDFB | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| BDFB | | | | | MLR | MLR | | | |
| | comp=Z,314nm,20.6s | | | | | | | | |
| BDFB | **Brasilia** | **65.08** | **202** | *e*P | | **P** | | **18 04 44.3** | **+1.4** |
| | comp=Z,61nm,1.4s | | | | | | | | |
| GLA | **Glamis** | **65.18** | **292** | P | | **P** | | **18 04 43.2** | **-0.3** |
| | baz=65 | | | | | | | | |
| BELC | **Belle Mtn. Jos** | **65.30** | **294** | P | | **P** | | **18 04 44.4** | **+0.1** |
| | baz=65 | | | | | | | | |
| LRMC | **Laurel Mountai** | **65.38** | **296** | P | | **P** | | **18 04 44.8** | **0.0** |
| | baz=65 | | | | | | | | |
| ISA | **Isabella** | **65.74** | **297** | *e*P | | **P** | | **18 04 47.9** | **+0.8** |
| ISA | | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| ISA | **Isabella** | **65.74** | **297** | P | | **P** | | **18 04 46.8** | **-0.3** |
| | baz=66,SNR=13 | | | | | | | | |
| ISA | **Isabella** | **65.74** | **297** | *e*P | | **P** | | **18 04 47.9** | **+0.8** |
| | comp=Z,15nm,1.1s | | | | | | | | |
| ISA | **Isabella** | **65.74** | **297** | *e*P | | **P** | | **18 04 47.9** | **+0.8** |
| | comp=Z,15nm,1.1s | | | | | | | | |
| PFO | **Pinyon Flat Ob** | **65.84** | **294** | LR | | LR | | 18 33 10.3 | |
| | comp=Z,402nm,21.0s,baz=63,slow=36 | | | | | | | | |
| PFO | **Pinyon Flat Ob** | **65.84** | **294** | *e*P | | **P** | | **18 04 47.6** | **-0.3** |
| PFO | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| PFO | **Pinyon Flat Ob** | **65.84** | **294** | *e*P | | **P** | | **18 04 47.6** | **-0.3** |
| | comp=Z,13nm,1.4s | | | | | | | | |
| PFO | **Pinyon Flat Ob** | **65.84** | **294** | *e*P | | **P** | | **18 04 47.6** | **-0.3** |
| | comp=Z,13nm,1.4s | | | | | | | | |
| SWSC | **Sam W. Stewart** | **65.87** | **293** | P | | **P** | | **18 04 48.3** | **+0.4** |
| | baz=66 | | | | | | | | |
| EDW2 | **Edwards Air Fo** | **65.96** | **296** | P | | **P** | | **18 04 48.3** | **-0.2** |
| | baz=66 | | | | | | | | |
| BFSC | **Mount Baldy Ra** | **66.18** | **295** | P | | **P** | | **18 04 49.6** | **-0.4** |
| | baz=66 | | | | | | | | |
| IBP | **Imperial Bould** | **66.24** | **293** | P | | **P** | | **18 04 50.5** | **+0.2** |
| | baz=66 | | | | | | | | |
| MONP | **Monument Peak** | **66.30** | **293** | P | | **P** | | **18 04 50.4** | **-0.5** |
| | baz=66 | | | | | | | | |
| ARVC | **Arvin** | **66.31** | **297** | P | | **P** | | **18 04 50.6** | **0.0** |
| | baz=66 | | | | | | | | |
| CHNC | **Chino** | **66.35** | **295** | *e*P | | **P** | | **18 04 51.4** | **+0.5** |
| CHNC | **Chino** | **66.35** | **295** | *e*P | | **P** | | **18 04 51.4** | **+0.5** |
| BAR | **Barrett** | **66.59** | **293** | *e*P | | **P** | | **18 04 53.1** | **+0.5** |
| | comp=Z,10nm,1.2s | | | | | | | | |
| BAR | **Barrett** | **66.59** | **293** | *e*P | | **P** | | **18 04 53.1** | **+0.5** |
| | comp=Z,10nm,1.2s | | | | | | | | |
| EKS2 | **Erkin-Say** | **66.69** | **52** | *e*P | | **P** | | **18 04 54.1** | **+1.0** |
| EKS2 | | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| EKS2 | **Erkin-Say** | **66.69** | **52** | P | | **P** | | **18 04 55.7** | **+2.6** |
| | SNR=18 | | | | | | | | |
| EKS2 | **Erkin-Say** | **66.69** | **52** | *e*P | | **P** | | **18 04 54.1** | **+1.0** |
| | comp=Z,16nm,1.0s | | | | | | | | |
| EKS2 | **Erkin-Say** | **66.69** | **52** | *e*P | | **P** | | **18 04 54.1** | **+1.0** |
| | comp=Z,16nm,1.0s | | | | | | | | |
| AML | **Almayashu** | **67.00** | **53** | P | | **P** | | **18 04 57.2** | **+1.8** |
| | SNR=7.8 | | | | | | | | |
| FRU | **Bishkek** | **67.02** | **51** | *e*P | | **P** | | **18 04 58.0** | **+2.9** |
| PKM | **Peak Mountain** | **67.07** | **297** | P | | **P** | | **18 04 55.7** | **0.0** |
| | baz=67 | | | | | | | | |
| AAK | **Ala-Archa** | **67.09** | **52** | ⇑*i*P | | **P** | | **18 04 56.7** | **+1.0** |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,41nm,1.6s | | | | | | | | |
| AAK | **Ala-Archa** | **67.09** | **52** | P | | **P** | | **18 04 57.5** | **+1.8** |
| | SNR=7.5 | | | | | | | | |
| AAK | **Ala-Archa** | **67.09** | **52** | *e*P | | **P** | | **18 04 55.1** | **-0.6** |
| | comp=Z,31nm,1.7s | | | | | | | | |
| AAK | **Ala-Archa** | **67.09** | **52** | *e*P | | **P** | | **18 04 55.2** | **-0.6** |
| | comp=Z,31nm,1.7s | | | | | | | | |
| UCH | **Uchtor** | **67.38** | **52** | P | | **P** | | **18 04 59.4** | **+1.4** |
| | SNR=16 | | | | | | | | |
| TKM2 | **Tokmak 2** | **67.48** | **51** | *e*P | | **P** | | **18 04 59.6** | **+1.3** |
| TKM2 | | | | | pmax | pmax | | | |
| | comp=Z,45nm,2.0s | | | | | | | | |
| TKM2 | **Tokmak 2** | **67.48** | **51** | P | | **P** | | **18 05 00.1** | **+1.9** |
| | SNR=7.0 | | | | | | | | |
| TKM2 | **Tokmak 2** | **67.48** | **51** | *e*P | | **P** | | **18 04 59.6** | **+1.3** |
| | comp=Z,45nm,2.0s | | | | | | | | |
| TKM2 | **Tokmak 2** | **67.48** | **51** | *e*P | | **P** | | **18 04 59.6** | **+1.3** |
| | comp=Z,45nm,2.0s | | | | | | | | |
| UOSS | **Wadi Hilu** | **67.86** | **77** | P | | **P** | | **18 05 00.3** | **-0.4** |
| | comp=Z,95nm,0.7s,SNR=5.2 | | | | | | | | |
| UOSS | **Wadi Hilu** | **67.86** | **77** | *e*P | | **P** | | **18 05 00.4** | **-0.2** |
| | comp=Z,19nm,1.0s | | | | | | | | |
| UOSS | **Wadi Hilu** | **67.86** | **77** | *e*P | | **P** | | **18 05 00.4** | **-0.2** |
| | comp=Z,19nm,1.0s | | | | | | | | |
| MAKZ | **Makanchi** | **67.97** | **44** | *e*P | | **P** | | **18 05 02.0** | **+0.9** |
| MAKZ | **Makanchi** | **67.97** | **44** | *e*P | | **P** | | **18 05 02.0** | **+0.9** |
| MKAR | **Makanchi Array** | **68.13** | **44** | P | | **P** | | **18 05 01.4** | **-0.7** |
| | comp=Z,6.3nm,0.9s,baz=318,slow=5.3,SNR=20 | | | | | | | | |
| MKAR | | | | | LR | | LR | 18 36 20.2 | |
| | comp=Z,221nm,18.2s,baz=302,slow=37 | | | | | | | | |
| MKAR | **Makanchi Array** | **68.13** | **44** | P | | **P** | | **18 05 01.4** | **-0.7** |
| MKAR | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| MKAR | | | | | MLR | MLR | | | |
| | comp=Z,221nm,18.2s | | | | | | | | |
| MKAR | **Makanchi Array** | **68.13** | **44** | *e*P | | **P** | | **18 05 02.3** | **+0.2** |
| MKAR | **Makanchi Array** | **68.13** | **44** | *e*P | | **P** | | **18 05 02.3** | **+0.2** |
| MK01 | **Makanchi Array** | **68.15** | **44** | *e*P | | **P** | | **18 05 02.0** | **-0.2** |
| MK01 | **Makanchi Array** | **68.15** | **44** | *e*P | | **P** | | **18 05 02.0** | **-0.2** |
| LPIG | **La Paz** | **68.20** | **282** | LR | | LR | | 18 34 31.1 | |
| | comp=Z,794nm,20.3s,baz=46,slow=36 | | | | | | | | |
| YAK | **Yakutsk** | **69.76** | **11** | *e*P | | **P** | | **18 05 11.8** | **-0.1** |
| YAK | | | | | pmax | pmax | | | |
| | comp=N,10.0nm,1.3s | | | | | | | | |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| YAK | **Yakutsk** | **69.76** | **11** | *e*P | | **P** | | **18 05 12.8** | **+1.0** |
| | comp=Z,10nm,0.9s | | | | | | | | |
| YAK | **Yakutsk** | **69.76** | **11** | *e*P | | **P** | | **18 05 11.8** | **-0.1** |
| | comp=Z,17nm,1.5s | | | | | | | | |
| KSH | **Kashi** | **70.06** | **53** | P | | **P** | | **18 05 16.3** | **+2.0** |
| KSH | | | | *e*pP | | **pP** | | **18 05 20.8** | **+1.5** |
| KSH | | | | *e*PP | | **PP** | | **18 07 52.9** | **+4.1** |
| KSH | | | | S | | **S** | | **18 14 23.6** | **-0.8** |
| KSH | | | | SKS | | **SKSac** | | **18 15 09.3** | **-5.7** |
| KSH | | | | SS | | **SS** | | **18 18 54.5** | **+1.3** |
| KSH | | | | PMZ | | | | | |
| | comp=Z,29nm,1.1s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,75nm,5.4s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,150nm,6.9s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,340nm,20.0s | | | | | | | | |
| BOD | **Bodaibo** | **70.73** | **21** | *e*P | | **P** | | **18 05 17.1** | **-0.8** |
| BOD | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.8s | | | | | | | | |
| BOD | **Bodaibo** | **70.73** | **21** | *e*P | | **P** | | **18 05 17.1** | **-0.8** |
| | comp=Z,13nm,1.8s | | | | | | | | |
| MOY | **Mondy** | **72.15** | **31** | *e*P | | **P** | | **18 05 28.1** | **+1.4** |
| MOY | **Mondy** | **72.15** | **31** | *e*P | | **P** | | **18 05 28.1** | **+1.4** |
| WMQ | **Urumqi** | **72.89** | **43** | P | | **P** | | **18 05 32.0** | **+0.8** |
| WMQ | | | | PP | | **PP** | | **18 08 16.0** | **+3.1** |
| WMQ | | | | S | | **S** | | **18 14 57.0** | **+0.1** |
| WMQ | | | | SS | | **SS** | | **18 19 37.0** | **+0.8** |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,21nm,7.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,230nm,18.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,200nm,22.0s | | | | | | | | |
| WM

comp=Z,120nm,14.8s
HHC LE
comp=Z,100nm,13.6s
HHC LZ
comp=Z,56nm,14.8s
**LSA Lhasa 85.63 50** P **P 18 06 41.3 -0.2**
LSA PMZ
comp=Z,6.0nm,1.5s
**LSA Lhasa 85.63 50** *e*P **P 18 06 42.2 +0.7**
LSA pmax pmax
comp=Z,34nm,2.0s
**LSA Lhasa 85.63 50** *e*P **P 18 06 42.2 +0.7**
comp=Z,34nm,2.0s
**LSA Lhasa 85.63 50** *e*P **P 18 06 42.2 +0.7**
comp=Z,34nm,2.0s
**YSS Yuzh-Sakhalins 86.03 7** P **P 18 06 41.8 -0.8**
**YSS Yuzh-Sakhalins 86.03 7** P **P 18 06 41.8 -0.8**
**YSS Yuzh-Sakhalins 86.03 7** P **P 18 06 41.8 -0.8**
**LZH Lanzhou 86.38 38** *e*P **P 18 06 45.3 +0.6**
LZH pP **pP 18 06 49.4 -0.5**
LZH sP **sP 18 06 52.0 +0.3**
LZH PP **PP 18 10 08.3 +3.2**
LZH S **SKSac 18 17 10.0 -0.7**
LZH sS **sS 18 17 24.3 -4.2**
LZH SS **SS 18 23 00.8 +2.5**
LZH PMZ
comp=Z,28nm,1.2s
LZH PMZ
comp=Z,140nm,5.8s
LZH LN
comp=Z,220nm,15.4s
LZH LE
comp=Z,280nm,15.0s
LZH LZ
comp=Z,340nm,17.8s
**CN2 Changchun 86.42 19** *e*P **P 18 06 44.3 -0.3**
CN2 *es*P **sP 18 06 51.0 -0.6**
CN2 *e*S **SKKSac 18 17 16.8 -1.4**
CN2 PMZ
comp=Z,10.0nm,0.8s
CN2 PMZ
comp=Z,100nm,4.0s
CN2 LN
comp=Z,300nm,18.0s
CN2 LE
comp=Z,500nm,18.0s
CN2 LZ
comp=Z,600nm,20.0s
**USRK Ussuriysk Ar. 87.36 15** P **P 18 06 48.6 -0.5**
comp=Z,1.2nm,0.5s,baz=358,slow=4.6,SNR=4.4
**BJI Beijing 87.41 27** P **P 18 06 49.5 +0.1**
BJI SS SS 18 23 06.4 -6.3
BJI PMZ
comp=Z,12nm,0.8s
BJI PMZ
comp=Z,67nm,4.8s
BJI LN
comp=Z,130nm,16.7s
BJI LE
comp=Z,130nm,23.3s
BJI LZ
comp=Z,82nm,22.2s
**BOSA Boshof 88.89 136** LR LR 18 45 58.7
comp=Z,318nm,18.1s,baz=324,slow=35
**CD2 Chengdu 90.76 40** *e*P **P 18 07 04.3 -1.2**
CD2 pP **PcP 18 07 07.8 +1.3**
CD2 PP **PP 18 10 38.6 -1.6**
CD2 SKS **SKSac 18 17 35.3 -1.4**
CD2 S **S 18 17 59.6 -1.7**
CD2 sS **ScS 18 18 05.4 +0.6**
CD2 SS **SS 18 24 01.3 -0.7**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.3s
**KSRS Korea Array 93.04 20** P **P 18 07 14.0 -1.8**
comp=Z,1.4nm,0.8s,baz=355,slow=4.6,SNR=4.1
KSRS LR LR 18 51 08.6
comp=Z,36nm,19.9s,baz=352,slow=37
**KSRS Korea Array 93.04 20** P **P 18 07 14.0 -1.8**
KSRS pmax pmax
comp=Z,1.0nm,0.9s
KSRS MLR MLR
comp=Z,36nm,19.9s
**KSRS Korea Array 93.04 20** P **P 18 07 14.0 -1.8**
comp=Z,36nm,19.9s
**KSAR Wonju Array Be 93.04 20** P **P 18 07 14.0 -1.8**
**KSAR Wonju Array Be 93.04 20** P **P 18 07 14.0 -1.8**
**KSAR Wonju Array Be 93.04 20** P **P 18 07 14.0 -1.8**
**KMI Kunming 95.21 44** P **P 18 07 28.3 +2.0**
KMI S S 18 18 35.3 -6.1
KMI SS **SS 18 25 06.6 +0.2**
KMI PMZ
comp=Z,3.0nm,1.0s
KMI PMZ
comp=Z,81nm,4.0s
KMI LN
comp=Z,150nm,21.1s
KMI LE
comp=Z,180nm,17.6s
KMI LZ
comp=Z,120nm,30.3s
**WHN Wuhan 95.40 33** *e*P P 18 07 30.1 +3.4
WHN S **S 18 18 39.6 -2.7**
WHN LZ
comp=Z,370nm,12.7s
**GYA Guiyang 95.88 41** *e*P **P 18 07 29.0 -0.2**
GYA PMZ
comp=Z,10.0nm,1.0s
**CMAR Chiang Mai Arr 98.86 51** LR LR 18 57 41.7
comp=Z,62nm,18.4s,baz=298,slow=39
**PPT2 Papeete2 124.64 282** *e*SS SS 18 31 49.1 +6.6
comp=Z,109nm,31.0s
**PPT2 Papeete2 124.64 282** *e*LR LR 18 51 53.2
comp=Z,247nm,23.0s
**TBI Tubuai 128.53 276** *e*LR LR 18 53 41.8
comp=Z,312nm,33.0s
**SBA Scott Base 148.55 186** *e*PKP2 **PKPbc 18 13 48.2 +0.7**
**SBA Scott Base 148.55 186** *e*PKPbc **PKPbc 18 13 48.2 +0.7**
**SBA Scott Base 148.55 186** *e*PKPbc **PKPbc 18 13 48.2 +0.7**
**WRA Warramunga Arr 149.11 35** PKPbc **PKPbc 18 13 49.7 -0.9**
comp=Z,2.1nm,0.6s,baz=335,slow=3.4,SNR=15
**VNDA Vanda 149.15 184** PKPbc **PKPbc 18 13 49.1 0.0**
comp=Z,9.4nm,1.3s,baz=237,slow=3.4,SNR=11
**VNDA Vanda 149.15 184** PKP2 **PKPbc 18 13 49.1 0.0**
VNDA pmax pmax
comp=Z,9.0nm,1.3s
**VNDA Vanda 149.15 184** *e*PKPbc **PKPbc 18 13 50.0 +0.9**
**VNDA Vanda 149.15 184** *e*PKPbc **PKPbc 18 13 50.0 +0.9**
**ASAR Alice Springs 152.24 40** PKPbc **PKPbc 18 13 57.0 -1.1**
comp=Z,4.0nm,1.1s,baz=352,slow=2.0,SNR=17
**ASAR Alice Springs 152.24 40** PKIKP **PKPbc 18 13 57.0 -1.1**
**ASAR Alice Springs 152.24 40** PKPbc **PKPbc 18 13 57.0 -1.1**
**AS01 Alice Springs 152.26 39** *e*PKPbc **PKPbc 18 13 57.0 -1.1**
**AS01 Alice Springs 152.26 39** *e*PKPbc **PKPbc 18 13 57.0 -1.1**

**WEL 15 18:13:44.0±0.3, 38°.02S×175°.99E, h193km±2km, ML3.8/13, 20C-4D, Error ellipse: s-maj=2.8km s-min=2.1km az=0.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRHZ** | **Matea Rd** | **0.88** | **158** | ⇑PN | Pn | 18 14 12.3 | 0.0 |
| MRHZ | | | | SN | Sn | 18 14 33.4 | -1.1 |
| **URZ** | **Urewera** | **0.92** | **106** | PN | Pn | 18 14 12.1 | -0.3 |
| URZ | | | | SN | Sn | 18 14 33.7 | -0.8 |
| URZ | | | | AML | AML | 18 14 34.1 | |
| **HIZ** | **Hauiti** | **1.02** | **241** | PN | Pn | 18 14 13.6 | +0.4 |
| **KRVZ** | **Karewarewa** | **1.11** | **194** | PN | Pn | 18 14 14.0 | 0.0 |
| **TWVZ** | **Taurewa** | **1.14** | **202** | PN | Pn | 18 14 14.3 | +0.1 |
| **WTVZ** | **West Tongariro** | **1.14** | **196** | PN | Pn | 18 14 14.2 | -0.1 |
| **OTVZ** | **Oturere** | **1.17** | **192** | PN | Pn | 18 14 14.6 | +0.1 |
| OTVZ | | | | SN | Sn | 18 14 38.8 | +0.4 |
| **NGZ** | **Ngauruhoe** | **1.20** | **195** | ⇑PN | Pn | 18 14 14.8 | +0.1 |
| **BKZ** | **Black Stump Fm** | **1.21** | **161** | ⇑PN | Pn | 18 14 14.5 | -0.2 |
| BKZ | | | | SN | Sn | 18 14 37.2 | -1.5 |
| BKZ | | | | AML | AML | 18 14 37.4 | |
| **RAGZ** | **Rawiri** | **1.22** | **113** | PN | Pn | 18 14 14.9 | +0.1 |
| RAGZ | | | | SN | Sn | 18 14 38.5 | -0.2 |
| **COVZ** | **Chateau Observ** | **1.23** | **196** | ⇑PN | Pn | 18 14 14.9 | -0.1 |
| **WPVZ** | **Whakapapa** | **1.24** | **196** | PN | Pn | 18 14 15.0 | 0.0 |
| **RAHZ** | **Arahi** | **1.24** | **137** | PN | Pn | 18 14 15.5 | +0.6 |
| RAHZ | | | | SN | Sn | 18 14 39.0 | +0.1 |
| **MWZ** | **Matawai** | **1.25** | **105** | ⇓PN | Pn | 18 14 14.8 | -0.2 |
| MWZ | | | | AML | AML | 18 14 39.2 | |
| MWZ | | | | AML | AML | 18 14 39.2 | |
| MWZ | | | | AML | AML | 18 14 40.3 | |
| MWZ | | | | AML | AML | 18 14 40.7 | |
| **NMHZ** | **Naumai** | **1.25** | **150** | PN | Pn | 18 14 16.2 | +1.1 |
| **TUVZ** | **Tukino** | **1.28** | **192** | PN | Pn | 18 14 15.3 | -0.1 |
| **WHVZ** | **Whangaehu Hut** | **1.30** | **194** | ⇑PN | Pn | 18 14 15.5 | -0.2 |
| **SNGZ** | **Shannon Statio** | **1.30** | **126** | PN | Pn | 18 14 15.7 | +0.3 |
| SNGZ | | | | SN | Sn | 18 14 39.4 | -0.5 |
| **TRVZ** | **Turoa** | **1.33** | **195** | PN | Pn | 18 14 15.7 | -0.2 |
| **WNVZ** | **Wahianoa** | **1.34** | **193** | ⇑PN | Pn | 18 14 15.7 | -0.2 |
| **PKVZ** | **Pokaka** | **1.37** | **201** | ⇑PN | Pn | 18 14 15.8 | -0.2 |
| **MOVZ** | **Moawhango** | **1.40** | **188** | ⇑PN | Pn | 18 14 15.7 | -0.6 |
| **MTVZ** | **Mangateitei** | **1.43** | **196** | PN | Pn | 18 14 16.3 | -0.2 |
| **WHHZ** | **Waihua** | **1.44** | **138** | PN | Pn | 18 14 17.1 | +0.5 |
| **HAZ** | **Te Kaha** | **1.44** | **80** | PN | Pn | 18 14 16.1 | -0.5 |
| **BHHZ** | **Black Hill Sta** | **1.47** | **178** | PN | Pn | 18 14 16.3 | -0.6 |
| **ARHZ** | **Aropaoanui** | **1.47** | **148** | PN | Pn | 18 14 17.3 | +0.4 |
| **TKGZ** | **Te Karaka** | **1.52** | **107** | PN | Pn | 18 14 17.4 | +0.1 |
| **MCHZ** | **McNeill Hill** | **1.53** | **159** | PN | Pn | 18 14 17.7 | +0.3 |
| **RIGZ** | **Rimuhau** | **1.55** | **117** | PN | Pn | 18 14 17.8 | +0.1 |
| **TWGZ** | **Tauwhareparae** | **1.58** | **96** | ⇑PN | Pn | 18 14 18.1 | +0.2 |
| **KRHZ** | **Kereru** | **1.65** | **170** | ⇑PN | Pn | 18 14 18.2 | -0.3 |
| **KNZ** | **Kokohu** | **1.66** | **128** | PN | Pn | 18 14 18.5 | 0.0 |
| KNZ | | | | AML | AML | 18 14 45.7 | |
| KNZ | | | | AML | AML | 18 14 46.8 | |
| **PRGZ** | **Paritu Road** | **1.74** | **122** | PN | Pn | 18 14 19.3 | -0.1 |
| **PUZ** | **Puketiti** | **1.79** | **92** | PN | Pn | 18 14 19.2 | -0.7 |
| PUZ | | | | AML | AML | 18 14 49.0 | |
| **CNGZ** | **Carnagh Statio** | **1.81** | **106** | PN | Pn | 18 14 20.6 | +0.6 |
| **CKHZ** | **Cape Kidnapper** | **1.85** | **153** | PN | Pn | 18 14 20.5 | +0.1 |
| **MHGZ** | **Mahia Peninsul** | **1.88** | **128** | PN | Pn | 18 14 21.0 | +0.2 |
| **MXZ** | **Matakaoa Point** | **1.89** | **77** | PN | Pn | 18 14 20.7 | -0.2 |
| **PNHZ** | **Pukenui** | **1.90** | **175** | PN | Pn | 18 14 20.2 | -0.8 |
| **KAHZ** | **Kahuranaki** | **1.91** | **159** | ⇑PN | Pn | 18 14 21.0 | 0.0 |
| **WAZ** | **Wanganui** | **1.91** | **204** | ⇓PN | Pn | 18 14 20.3 | -0.7 |
| **WMGZ** | **Waiomatatini S** | **1.93** | **85** | ⇓PN | Pn | 18 14 20.8 | -0.4 |
| **NEZ** | **North Egmont** | **1.94** | **229** | PN | Pn | 18 14 21.9 | +0.4 |
| **PKE** | **Pukeiti** | **1.96** | **233** | PN | Pn | 18 14 22.0 | +0.3 |
| **KHEZ** | **Kahui Hut** | **2.00** | **230** | PN | Pn | 18 14 22.3 | +0.2 |
| **TSZ** | **Takapari Road** | **2.04** | **181** | ⇑PN | Pn | 18 14 21.5 | -0.9 |
| TSZ | | | | AML | AML | 18 14 22.0 | |
| TSZ | | | | AML | AML | 18 15 36.9 | |
| **WPHZ** | **Waipukurau** | **2.08** | **170** | ⇑PN | Pn | 18 14 22.0 | -0.8 |
| **PXZ** | **Pawanui** | **2.12** | **162** | PN | Pn | 18 14 22.6 | -0.7 |
| PXZ | | | | AML | AML | 18 14 52.7 | |
| PXZ | | | | AML | AML | 18 14 52.7 | |
| PXZ | | | | AML | AML | 18 14 53.8 | |
| PXZ | | | | AML | AML | 18 14 53.8 | |
| **DVHZ** | **Dannevirke** | **2.28** | **177** | ⇑PN | Pn | 18 14 23.7 | -1.4 |
| **PRHZ** | **Porangahau** | **2.30** | **168** | PN | Pn | 18 14 24.3 | -1.0 |
| **ANWZ** | **Angora Road** | **2.47** | **171** | PN | Pn | 18 14 26.0 | -1.1 |
| **PRWZ** | **Pori Road** | **2.54** | **180** | ⇑PN | Pn | 18 14 26.4 | -1.4 |
| **MRZ** | **Mangatainoka R** | **2.66** | **187** | ⇑PN | Pn | 18 14 27.3 | -2.0 |
| MRZ | | | | AML | AML | 18 15 03.2 | |
| MRZ | | | | AML | AML | 18 15 04.8 | |
| **BFZ** | **Birch Farm** | **2.67** | **176** | PN | Pn | 18 14 27.5 | -1.9 |
| BFZ | | | | AML | AML | 18 15 04.7 | |
| **TIWZ** | **Tintock** | **2.76** | **182** | ⇓PN | Pn | 18 14 28.5 | -1.9 |
| TIWZ | | | | AML | AML | 18 15 04.4 | |
| TIWZ | | | | AML | AML | 18 15 04.9 | |
| **OGWZ** | **Otaki Gorge** | **2.87** | **193** | PN | Pn | 18 14 29.5 | -2.2 |
| **CPWZ** | **Castlepoint** | **2.89** | **177** | PN | Pn | 18 14 30.5 | -1.4 |
| **HOWZ** | **Holdsworth Sta** | **2.90** | **187** | PN | Pn | 18 14 29.6 | -2.5 |
| **KIW** | **Kapiti Island** | **2.96** | **196** | ⇑PN | Pn | 18 14 30.2 | -2.6 |
| **TMWZ** | **Te Maipa** | **3.09** | **181** | PN | Pn | 18 14 31.9 | -2.4 |
| **MTW** | **Mount Morrison** | **3.16** | **187** | ⇑PN | Pn | 18 14 32.2 | -2.9 |
| **CAW** | **Cannon Point** | **3.17** | **193** | PN | Pn | 18 14 32.6 | -2.7 |
| CAW | | | | AML | AML | 18 14 33.5 | |
| CAW | | | | AML | AML | 18 15 14.4 | |
| **DUWZ** | **D'Urville Isla** | **3.21** | **209** | PN | Pn | 18 14 33.0 | -2.8 |
| **TRWZ** | **Traveller** | **3.38** | **184** | PN | Pn | 18 14 35.1 | -2.8 |
| **PAWZ** | **Paruwai Farm** | **3.39** | **187** | PN | Pn | 18 14 34.9 | -3.0 |
| **WEL** | **Wellington** | **3.40** | **196** | PN | Pn | 18 14 35.0 | -3.0 |
| **MSWZ** | **Moikau Station** | **3.44** | **189** | PN | Pn | 18 14 35.5 | -3.1 |
| MSWZ | | | | AML | AML | 18 15 18.0 | |
| MSWZ | | | | AML | AML | 18 15 18.3 | |
| **TCW** | **Tory Channel** | **3.46** | **202** | PN | Pn | 18 14 35.8 | -2.9 |
| TCW | | | | AML | AML | 18 15 19.4 | |
| TCW | | | | AML | AML | 18 15 19.7 | |
| **BHW** | **Baring Head** | **3.50** | **194** | PN | Pn | 18 14 36.0 | -3.2 |
| **PLWZ** | **Palliser** | **3.59** | **189** | PN | Pn | 18 14 37.1 | -3.4 |
| **TUWZ** | **Tuamarina** | **3.76** | **204** | PN | Pn | 18 14 38.9 | -3.5 |
| **NNZ** | **Nelson** | **3.78** | **211** | PN | Pn | 18 14 39.3 | -3.4 |
| **ORZ** | **Quartz Range** | **3.88** | **223** | PN | Pn | 18 14 40.1 | -4.0 |
| **BSWZ** | **Blackbirch Sta** | **4.04** | **203** | PN | Pn | 18 14 42.6 | -3.3 |
| **THZ** | **Tophouse** | **4.43** | **211** | ⇑PN | Pn | 18 14 47.5 | -3.6 |
| **KHZ** | **Kahutara** | **4.78** | **202** | ⇑PN | Pn | 18 14 51.7 | -3.6 |
| **DSZ** | **Dennistone Nort** | **4.92** | **220** | PN | Pn | 18 14 55.0 | -2.3 |
| **LTZ** | **Lake Taylor** | **5.54** | **210** | PN | Pn | 18 15 01.0 | -4.3 |

*ISCJB **15** 18:17:58.1±0.5, 19°.94S±0°.08×177°.41W±0°.08, h500km, mb4.1/5, Error ellipse: s-maj=11.7km s-min=8.1km az=135.1*
*IDC **15** 18:18:00.8±1.8, 19°.79S×177°.44W, h524km±21km, mb3.7/5, mb1 3.9/7, mb1mx3.4/28, mbtmp4.6/7, Error ellipse: s-maj=24.2km s-min=18.4km az=98.0*
*AUST **15** 18:18:49.2±7.9, 20°.14S×176°.99E, h655km±1km, Error ellipse: s-maj=3.0km s-min=1.3km az=336.0*

**ISC 15 18:17:58.8±0.7, 19°.9S±0°.1×177°.45W±0°.10, h500km, n33, σ1s97/38, mb3.8/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **8.09** | **43** | P | **P** | **18 19 57.7** | **+1.4** |
| AFI | 4.7nm,0.3s,baz=34,slow=6.6,SNR=5.3 | | | S | **S** | **18 21 29.3** | **-3.3** |
| **URZ** | 34nm,0.3s,baz=31,slow=22,SNR=13 **Urewera** | **18.86** | **193** | P | **P** | **18 21 47.1** | **+0.3** |
| URZ | 4.1nm,0.3s,baz=283,slow=2.8,SNR=20 | | | S | **S** | **18 24 48.5** | **-4.2** |
| **EIDS** | baz=65,slow=22,SNR=4.4 **Eidsvold** | **29.50** | **254** | P | **P** | **18 23 23.4** | **+1.5** |
| **ARMA** | baz=24,SNR=5.2 **Armidale** | **29.78** | **243** | P | **P** | **18 23 26.9** | **+2.5** |
| **RMQ** | baz=25,SNR=12 **Roma** | **31.67** | **252** | P | **P** | **18 23 42.9** | **+2.3** |
| **CMSA** | baz=27,SNR=17 **Cobar Meteorol** | **35.00** | **243** | P | **P** | **18 24 10.4** | **+1.7** |
| **QLP** | baz=30,SNR=21 **Quilpie** | **35.72** | **252** | P | **P** | **18 24 16.1** | **+1.3** |
| **MTSU** | baz=31,SNR=16 **Mount Surprise** | **36.14** | **266** | P | **P** | **18 24 19.6** | **+1.2** |
| **COEN** | baz=31,SNR=59 **Coen** | **38.07** | **273** | P | **P** | **18 24 35.5** | **+1.2** |
| **QIS** | baz=33,SNR=47 **Mount Isa** | **40.21** | **261** | P | **P** | **18 24 52.2** | **+0.6** |
| **HTT** | baz=35,SNR=12 **Hallett** | **40.94** | **242** | P | **P** | **18 24 54.5** | **-2.9** |
| **BBOO** | baz=36,SNR=6.2 **Buckleboo** | **43.26** | **243** | P | **P** | **18 25 16.7** | **+1.1** |
| **JAY** | baz=38,SNR=14 **Jayapura** | **44.36** | **288** | P | **P** | **18 25 25.4** | **+0.9** |
| **ASAR** | baz=40,SNR=11 **Alice Springs** | **45.15** | **256** | P | **P** | **18 25 31.2** | **+0.7** |
| ASAR | 17nm,0.3s,baz=87,slow=8.6,SNR=899 | | | PcP | **PcP** | **18 26 59.5** | **-1.1** |
| ASAR | 0.7nm,0.4s,baz=104,slow=3.9,SNR=2.1 | | | ScP | **ScP** | **18 30 00.8** | **-4.4** |
| ASAR | 0.4nm,0.8s,baz=96,slow=6.6,SNR=3.1 | | | S | **S** | **18 31 29.6** | **-3.7** |
| **WRA** | 2.8nm,0.7s,baz=94,slow=16,SNR=17 **Warramunga Arr** | **45.19** | **261** | P | **P** | **18 25 31.1** | **+0.3** |
| WRA | 15nm,0.3s,baz=98,slow=7.3,SNR=662 | | | S | **S** | **18 31 28.7** | **-5.1** |
| **KDU** | 1.5nm,1.1s,baz=95,slow=14,SNR=4.1 **Kakadu** | **48.46** | **271** | P | **P** | **18 25 55.8** | **+0.2** |
| **MTN** | baz=43,SNR=8.6 **Manton Dam** | **49.67** | **270** | P | **P** | **18 26 04.5** | **-0.1** |
| **WRKA** | baz=44,SNR=18 **Warakurna** | **50.12** | **254** | P | **P** | **18 26 08.2** | **+0.4** |
| **KNRA** | baz=45,SNR=53 **Kununurra** | **51.21** | **266** | P | **P** | **18 26 16.1** | **+0.2** |
| **SWI** | baz=46,SNR=26 **Sorong** | **53.60** | **284** | P | **P** | **18 26 33.3** | **+0.2** |
| **SOEI** | baz=49,SNR=10.0 **Soe** | **57.00** | **271** | P | **P** | **18 26 58.5** | **+1.5** |
| **VNDA** | baz=52,SNR=16 **Vanda** | **58.51** | **185** | P | **P** | **18 27 08.1** | **+2.1** |
| **MEEK** | 1.3nm,0.7s,baz=354,slow=7.5,SNR=13 **Meekatharra** | **58.59** | **250** | P | **P** | **18 27 07.1** | **-0.4** |
| **LUWI** | baz=54,SNR=6.5 **Luwuk** | **61.34** | **280** | P | **P** | **18 27 26.6** | **+0.7** |
| **MJAR** | baz=56,SNR=5.4 **Matsushiro Arr** | **70.07** | **323** | P | **P** | **18 28 19.2** | **-1.0** |
| **SNAA** | 1.1nm,0.5s,baz=158,slow=6.7,SNR=5.5 **Sanae** | **88.55** | **178** | P | **P** | **18 29 56.8** | **-0.7** |
| **VNA3** | **Neumayer Olymp** | **88.66** | **176** | P | **P** | **18 29 57.7** | **-0.2** |
| **VNA2** | **Neumayer--Watz** baz=186,slow=3.8 | **89.11** | **177** | P | **P** | **18 29 59.9** | **-0.1** |
| **VNA1** | **Neumayer--Stat** | **89.34** | **176** | P | **P** | **18 30 01.2** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** 1.0nm,0.8s,baz=135,slow=3.4,SNR=8.9 | **90.41** | **289** | P | **P** | **18 30 07.9** | **+0.9** |
| **AKASG** | **Malin Array Be** 0.9nm,0.5s,baz=45,slow=4.7,SNR=6.0 | **142.77** | **332** | PKhKP | PKPpre | 18 36 29.1 | |
| **BRTR** | **Keskin Array B** 1.1nm,0.7s,baz=128,slow=3.1,SNR=4.8 | **146.84** | **313** | PKPbc | **PKPdf** | **18 36 43.1** | **+0.8** |
| **GERES** | **GERESS Array B** 0.7nm,0.7s,baz=3.8,slow=4.0,SNR=6.5 | **149.80** | **345** | PKPbc | **PKPbc** | **18 36 50.6** | **-1.4** |

**CASC 15 18:19:57.1±2.0, 12°.65N×88°.27W, h35km±999km, MD4.1, ML4.0, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNCH** | **Conchagua** | **0.75** | **34** | *e*P | Pn | 18 20 11.5 | +0.1 |
| **VSM** | **San Miguel** | **0.77** | **360** | *e*P | Pn | 18 20 11.9 | +0.1 |
| VSM | | | | *e*P | Pn | 18 20 12.1 | +0.2 |
| **SNVI** | **San Vicente** | **1.10** | **330** | *e*P | Pn | 18 20 16.1 | -0.2 |
| SNVI | | | | *e*P | Pn | 18 20 16.1 | -0.2 |
| SNVI | | | | *e*S | Sn | 18 20 30.4 | -0.1 |
| SNVI | | | | *e*S | Sn | 18 20 30.8 | +0.3 |
| **CAHU** | **Cacacuatique** | **1.11** | **3** | *e*P | Pn | 18 20 16.5 | 0.0 |
| CAHU | | | | *e*P | Pn | 18 20 16.7 | +0.2 |
| CAHU | | | | *e*S | Sn | 18 20 32.3 | +1.5 |
| CAHU | | | | *e*S | Sn | 18 20 33.2 | +2.3 |
| **LFRS** | **El Faro** | **1.24** | **322** | *e*P | Pn | 18 20 17.8 | -0.3 |
| **LBRS** | **Las Brisas** | **1.32** | **325** | *e*P | Pn | 18 20 19.2 | +0.1 |
| **LFU** | **La Fuente** | **1.36** | **323** | *e*P | Pn | 18 20 19.8 | 0.0 |
| LFU | | | | *e*S | Sn | 18 20 37.7 | +0.9 |
| **SNET** | **Serv Nac Est T** | **1.39** | **318** | *e*P | Pn | 18 20 19.9 | -0.2 |
| SNET | | | | *e*P | Pn | 18 20 20.0 | -0.1 |
| SNET | | | | *e*S | Sn | 18 20 36.3 | -1.1 |
| SNET | | | | *e*S | Sn | 18 20 37.3 | -0.1 |
| SNET | | | | AML | AML | 18 20 40.2 | |
| **BOQS** | comp=Z,3μm,0.3s **Boqueron** | **1.46** | **318** | *e*P | Pn | 18 20 21.1 | -0.1 |
| BOQS | | | | *e*P | Pn | 18 20 21.3 | +0.1 |
| BOQS | | | | *e*S | Sn | 18 20 40.3 | +0.9 |
| BOQS | | | | *e*S | Sn | 18 20 40.4 | +1.1 |
| **TGUH** | **Tegucigalpa,Un** | **1.70** | **35** | *e*P | Pn | 18 20 24.5 | +0.2 |
| TGUH | | | | *e*P | Pn | 18 20 24.5 | +0.2 |
| **COPN** | **Copaltepe** | **1.71** | **106** | *e*P | Pn | 18 20 23.9 | -0.5 |
| **SBLS** | **San Blas** | **1.77** | **312** | *e*P | Pn | 18 20 25.5 | 0.0 |
| SBLS | | | | *e*P | Pn | 18 20 25.7 | +0.2 |
| **SNJE** | **San Jose** | **1.78** | **313** | *e*P | Pn | 18 20 25.9 | +0.3 |
| **RTR** | **El Retiro** | **1.82** | **313** | *e*P | Pn | 18 20 26.7 | +0.5 |
| **RBDL** | **Robledal** | **2.00** | **317** | *e*P | Pn | 18 20 28.9 | +0.3 |
| **IXG** | **Ixpaco** | **2.51** | **306** | *e*P | Pn | 18 20 37.3 | 0.0 |
| **MRL** | **Marmol** | **2.77** | **330** | *e*P | Pn | 18 20 40.6 | +1.4 |
| **NBG** | **Las Nubes** | **2.79** | **314** | *e*P | Pn | 18 20 41.2 | +1.6 |
| **FUG** | **Fuego 3** | **3.07** | **306** | *e*P | Pn | 18 20 44.7 | +1.2 |
| **JTS** | **JuntasAbangare** | **4.01** | **125** | *e*P | Pn | 18 21 04.5 | +8.4 |
| JTS | | | | *e*S | Sn | 18 21 55.1 | +13 |
| **JCR** | **Jicaral** | **4.17** | **132** | *e*P | Pn | 18 20 58.7 | +0.4 |
| **CGA2** | **Cerro Gallo 2** | **4.56** | **125** | *e*P | Pn | 18 21 06.2 | +2.3 |
| **BUS** | **Buena Vista** | **5.39** | **124** | *e*S | Sn | 18 22 17.8 | +0.9 |
| **TBS2** | | **6.72** | **124** | *e*S | Pn | 18 21 35.2 | +1.7 |

**IDC 15 18:23:49.5±16.0, 14°.64S×176°.11W, h366km±159km, mb2.8/4, mb1 3.2/4, mb1mx2.9/22, mbtmp3.6/4, Error ellipse: s-maj=103.6km s-min=34.3km az=142.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** 0.3nm,0.7s,baz=94,slow=6.9,SNR=4.9 | **47.48** | **256** | P | P | 18 31 49.3 | -0.2 |
| **ASAR** | **Alice Springs** 1.4nm,0.4s,baz=89,slow=7.8,SNR=38 | **47.87** | **251** | P | P | 18 31 52.3 | -0.1 |
| ASAR | 0.2nm,0.4s,baz=93,slow=4.4,SNR=4.7 | | | PcP | PcP | 18 33 14.4 | -0.2 |
| **ILAR** | **Eielson Array** 0.3nm,0.5s,baz=214,slow=5.4,SNR=6.0 | **82.23** | **12** | P | P | 18 35 30.0 | -0.3 |
| **TXAR** | **Lajitas Array** 0.2nm,0.9s,baz=201,slow=7.4,SNR=2.2 | **82.38** | **57** | P | P | 18 35 32.3 | +0.3 |

*TAP **15** 18:26:49.9, 24°.81N×121°.97E, h10km, ML3.4, D*
*JMA **15** 18:26:50.4±0.1, 24°.93N×121°.96E, h36km, M2.8*

**ISC 15 18:26:50.4±0.9, 24°.85N±0°.02×121°.98E±0°.02, h14km±6km, n44, σ1s09/72, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EGS** | | **0.05** | **270** | *i* P | **Pg** | **18 26 52.4** | **-0.6** |
| **TWB1** | baz=327 **Santiao Chiao** | **0.16** | **1** | P | **Pb** | **18 26 54.8** | **-0.4** |
| TWB1 | baz=8.0 | | | S | **Sb** | **18 26 57.5** | **-0.9** |
| **ILA** | baz=8.0 **Ilan** | **0.23** | **250** | P | **Pb** | **18 26 55.2** | **-1.1** |
| ILA | baz=256 | | | S | **Sb** | **18 26 59.3** | **-1.1** |
| **TWC** | baz=256 **Suao** | **0.27** | **208** | *i* P | **Pb** | **18 26 55.3** | **-1.7** |
| TWC | baz=205 | | | S | **Sb** | **18 26 58.2** | **-3.2** |
| **NWF** | baz=205 **Wu-fen Shan** | **0.29** | **321** | P | **Pg** | **18 26 57.4** | **+0.8** |
| NWF | baz=327 | | | S | **Sg** | **18 27 01.5** | **+0.8** |
| **TWE** | baz=327 **Neicheng** | **0.31** | **247** | P | **Pg** | **18 26 56.5** | **-0.4** |
| TWE | baz=250 | | | S | **Sb** | **18 27 00.4** | **-2.4** |
| **TWA** | baz=250 **Mucha** | **0.39** | **290** | P | **Pb** | **18 26 58.7** | **-0.4** |
| TWA | baz=296 | | | S | **Sg** | **18 27 04.1** | **+0.5** |
| **ENTT** | baz=296 **Nioudou** | **0.43** | **242** | P | **Pb** | **18 26 58.6** | **-1.2** |
| ENTT | baz=244 | | | *e*S | **Sg** | **18 27 04.5** | **-0.3** |
| **TAP1** | baz=244 **Taipei** | **0.46** | **295** | P | **Pg** | **18 27 00.6** | **+1.0** |
| TAP1 | baz=298 | | | S | **Sb** | **18 27 06.8** | **-0.2** |
| **ENA** | baz=298 **Nanau** | **0.47** | **208** | P | **Pb** | **18 26 59.6** | **-0.9** |
| ENA | baz=207 | | | S | **Sb** | **18 27 04.9** | **-2.4** |
| **TWS1** | baz=207 **Kuangyinshan** | **0.57** | **296** | P | **Pn** | **18 27 03.0** | **-1.1** |
| TWS1 | baz=300 | | | S | **Sg** | **18 27 10.7** | **+1.3** |
| **NSK** | baz=300 **Sanguang** | **0.59** | **254** | P | **Pb** | **18 27 01.4** | **-1.2** |
| NSK | baz=256 | | | *e*S | **Sb** | **18 27 10.3** | **-0.6** |
| **NNS** | baz=256 **Nan Shan** | **0.69** | **234** | P | **Pb** | **18 27 03.2** | **-1.0** |
| NNS | baz=235 | | | *e*S | **Sb** | **18 27 13.4** | **-0.2** |
| **NCU** | baz=235 **National Centr** | **0.73** | **280** | *e*P | **Pn** | **18 27 06.2** | **-0.2** |
| NCU | baz=282 | | | *e*S | **Sn** | **18 27 16.6** | **-0.8** |
| **TWD** | baz=282 **Chiawan** | **0.84** | **205** | P | **Pb** | **18 27 06.0** | **-0.8** |
| TWD | baz=204 | | | *e*S | **Sb** | **18 27 16.5** | **-1.4** |
| **HSN** | baz=204 **Hsinchu** | **0.92** | **268** | *e*S | **Sn** | **18 27 22.4** | **+0.3** |
| **TWT** | baz=271 **Tachien** | **0.94** | **232** | P | **Pn** | **18 27 08.9** | **-0.5** |
| TWT | baz=232 | | | *e*S | **Sg** | **18 27 21.9** | **+0.8** |
| **WHF** | baz=232 **Hehuan Shan** | **0.96** | **223** | P | **Pb** | **18 27 08.1** | **-0.9** |
| WHF | baz=223 | | | *e*S | **Sb** | **18 27 20.5** | **-1.3** |
| **JYNG** | **Yonagunijimaku** | **0.96** | **114** | P | **Pb** | **18 27 08.5** | **-0.3** |
| JYNG | | | | *e*S | **Sb** | **18 27 21.6** | **+0.3** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **YOJ** | **Yonaguni jima** | **1.01** | **112** | *P* | **Pb** | **18 27 09.2** | **-0.5** |
| YOJ | | | | *eS* | **Sb** | **18 27 22.3** | **-0.5** |
| **ESL** | **Shilin** | **1.14** | **206** | *P* | **Pn** | **18 27 11.3** | **-0.7** |
| | baz=205 | | | | | | |
| ESL | | | | *eS* | **Sb** | **18 27 26.0** | **-0.7** |
| | baz=205 | | | | | | |
| **NSY** | **Sanyi** | **1.19** | **249** | *eP* | **Pg** | **18 27 14.5** | **+1.1** |
| | baz=250 | | | | | | |
| NSY | | | | *eS* | **Sg** | **18 27 31.4** | **+2.5** |
| | baz=250 | | | | | | |
| **TWQ1** | **Liyutan** | **1.21** | **246** | *eP* | **Pg** | **18 27 14.4** | **+0.7** |
| | baz=246 | | | | | | |
| TWQ1 | | | | *eS* | **Sg** | **18 27 31.9** | **+2.5** |
| | baz=246 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.38** | **226** | *eP* | **Pg** | **18 27 18.1** | **+1.1** |
| | baz=226 | | | | | | |
| **TCU** | **Taichung** | **1.38** | **240** | *eP* | **Pg** | **18 27 18.6** | **+1.7** |
| | baz=240 | | | | | | |
| **TYC** | **Yuchr** | **1.39** | **228** | *eP* | **Pb** | **18 27 16.8** | **+0.6** |
| | baz=228 | | | | | | |
| **EHY** | **Hungye** | **1.46** | **205** | *eP* | **Pb** | **18 27 18.0** | **+0.6** |
| | baz=204 | | | | | | |
| EHY | | | | *eS* | **Sg** | **18 27 38.1** | **+0.5** |
| | baz=204 | | | | | | |
| **TWF1** | **Yuli** | **1.61** | **203** | *eP* | **Pb** | **18 27 20.9** | **+0.9** |
| | baz=202 | | | | | | |
| TWF1 | | | | *eS* | **Sb** | **18 27 41.2** | **+1.0** |
| | baz=202 | | | | | | |
| **YUS** | **Yu-Shan** | **1.65** | **215** | *eP* | **Pb** | **18 27 21.5** | **+0.7** |
| | baz=214 | | | | | | |
| YUS | | | | *eS* | **Sb** | **18 27 42.2** | **+0.6** |
| | baz=214 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.67** | **107** | *P* | **Pn** | **18 27 18.4** | **-0.8** |
| **ALS** | **Alishan** | **1.71** | **219** | *eP* | **Pg** | **18 27 24.0** | **+0.7** |
| | baz=219 | | | | | | |
| **CHN5** | **Tsauling** | **1.72** | **224** | *eP* | **Pg** | **18 27 23.3** | **-0.2** |
| | baz=224 | | | | | | |
| CHN5 | | | | *eS* | **Sg** | **18 27 46.2** | **+0.3** |
| | baz=224 | | | | | | |
| **WGK** | **Gukeng** | **1.74** | **229** | *eP* | **Pb** | **18 27 23.2** | **+1.1** |
| | baz=228 | | | | | | |
| **CHKT** | **Chengkung** | **1.83** | **198** | *eP* | **Pb** | **18 27 24.9** | **+1.3** |
| | baz=197 | | | | | | |
| CHKT | | | | *eS* | **Sb** | **18 27 47.6** | **+1.2** |
| | baz=197 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.83** | **115** | *P* | **Pn** | **18 27 21.3** | **-0.2** |
| **ELDTW** | **Lidau** | **1.87** | **208** | *eP* | **Pb** | **18 27 25.0** | **+0.6** |
| | baz=208 | | | | | | |
| ELDTW | | | | *eS* | **Sb** | **18 27 48.7** | **+0.9** |
| | baz=208 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.94** | **108** | *P* | **Pn** | **18 27 22.7** | **-0.3** |
| JKRS | | | | *eS* | **Sn** | **18 27 46.0** | **-1.2** |
| **STYT** | **Tauyuan** | **2.02** | **214** | *eP* | **Pb** | **18 27 28.1** | **+1.3** |
| | baz=213 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.02** | **103** | *P* | **Pn** | **18 27 24.0** | **-0.1** |
| **WTP** | **Ta-pu** | **2.03** | **218** | *eP* | **Pb** | **18 27 28.1** | **+1.0** |
| | baz=218 | | | | | | |
| **CHN1** | **Nanshi** | **2.12** | **219** | *eP* | **Pb** | **18 27 29.6** | **+0.9** |
| | baz=219 | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.13** | **96** | *P* | **Pn** | **18 27 25.6** | **0.0** |
| **SGST** | **Jiashian** | **2.17** | **216** | *eP* | **Pb** | **18 27 29.6** | **0.0** |
| | baz=216 | | | | | | |
| **ECL** | **Taimali** | **2.43** | **203** | *eS* | **Sb** | **18 28 03.4** | **-0.3** |
| | baz=202 | | | | | | |

*ISCJB* ***15*** *18:40:17.3±0.3,35.˚19N±0.˚02×92.˚24W±0.˚02, h10km, Error ellipse: s-maj=2.6km s-min=2.0km az=176.4*
*NEIC* ***15*** *18:40:17.0,35.˚30N×92.˚34W, h6km, MN3.0, After CERI.*
*NEIC Felt [III] at Greenbrier and [II] at Conway. Also felt at Damascus, Flippin, Jacksonville, Mayflower, Mountain Home and Quitman.*

**ISC 15 18:40:16.9±0.7,35.˚34N±0.˚02×92.˚34W±0.˚02, h10km, n72, σ1ş95/106, Arkansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UALR** | **University of** | **0.56** | **180** | *ePg* | **Pg** | **18 40 27.7** | **0.0** |
| **MIAR** | **Mount Ida** | **1.28** | **233** | *P* | **Pb** | **18 40 40.9** | **-0.3** |
| | baz=1.2,SNR=26 | | | | | | |
| MIAR | | | | *S* | **Sn** | **18 40 57.9** | **-0.2** |
| | baz=1.2 | | | | | | |
| **MIAR** | **Mount Ida** | **1.28** | **233** | *ePg* | **Pb** | **18 40 40.8** | **-0.3** |
| MIAR | | | | *eSg* | **Sb** | **18 40 56.6** | **-1.1** |
| **HBAR** | **Harrisburg** | **1.39** | **80** | *ePn* | **Pn** | **18 40 42.9** | **+0.5** |
| **QUAR** | **Qualls** | **1.41** | **77** | *ePn* | **Pb** | **18 40 43.8** | **+0.4** |
| QUAR | | | | *eSn* | **Sg** | **18 41 04.4** | **+2.1** |
| **V38A** | **Canehill** | **1.77** | **288** | *P* | **Pb** | **18 40 49.4** | **0.0** |
| | baz=1.8,SNR=62 | | | | | | |
| V38A | | | | *S* | **Sg** | **18 41 13.3** | **-0.4** |
| | baz=1.8 | | | | | | |
| **W38A** | **Poteau** | **1.81** | **262** | *P* | **Pb** | **18 40 49.8** | **-0.2** |
| | baz=1.8,SNR=38 | | | | | | |
| W38A | | | | *S* | **Sg** | **18 41 14.9** | **0.0** |
| | baz=1.8 | | | | | | |
| **SFTN** | **Shelby Forest** | **1.90** | **89** | *ePn* | **Pb** | **18 40 51.4** | **-0.1** |
| SFTN | | | | *eSn* | **Sg** | **18 41 16.9** | **-0.9** |
| **DLAR** | **Dell** | **1.96** | **75** | *ePn* | **Pb** | **18 40 53.0** | **+0.4** |
| **MET** | **Memphis--Engin** | **1.98** | **95** | *eSg* | **Sb** | **18 41 18.2** | **+0.5** |
| **GNAR** | **Gosnell** | **1.99** | **71** | *Pn* | **Pn** | **18 40 52.1** | **+1.5** |
| **U38A** | **Gravette** | **2.00** | **304** | *P* | **Pb** | **18 40 53.0** | **-0.3** |
| | baz=2.0,SNR=13 | | | | | | |
| U38A | | | | *S* | **Sb** | **18 41 20.3** | **+2.1** |
| | baz=2.0 | | | | | | |
| **Y39A** | **Lockesburg** | **2.01** | **227** | *Pb* | **Pb** | **18 40 53.8** | **+0.3** |
| | baz=2.0 | | | | | | |
| Y39A | | | | *S* | **Sb** | **18 41 17.6** | **-1.0** |
| | baz=2.0 | | | | | | |
| **PBMO** | **Poplar Bluff** | **2.11** | **46** | *ePn* | **Pb** | **18 40 55.1** | **-0.2** |
| **X38A** | **Whitesboro** | **2.15** | **253** | *Pb* | **Pb** | **18 40 56.2** | **+0.3** |
| | baz=2.1 | | | | | | |
| **V37A** | **Hulbert** | **2.35** | **284** | *P* | **Pn** | **18 40 57.4** | **+1.8** |
| | baz=2.4,SNR=20 | | | | | | |
| V37A | | | | *S* | **Sb** | **18 41 28.6** | **+0.2** |
| | baz=2.4 | | | | | | |
| **Y38A** | **Idabel** | **2.42** | **235** | *Pb* | **Pb** | **18 41 00.6** | **+0.1** |
| | baz=2.4 | | | | | | |
| Y38A | | | | *S* | **Sb** | **18 41 28.0** | **-2.4** |
| | baz=2.4 | | | | | | |
| **EBZ** | **Ebenezer Churc** | **2.45** | **94** | *eSn* | **Sn** | **18 41 28.6** | **+1.6** |
| **U37A** | **Salina** | **2.50** | **296** | *P* | **Pn** | **18 40 59.4** | **+1.8** |
| | baz=2.5 | | | | | | |
| U37A | | | | *S* | **Sb** | **18 41 32.7** | **+0.1** |
| | baz=2.5 | | | | | | |
| **HALT** | **Halls** | **2.51** | **76** | *ePn* | **Pn** | **18 40 59.2** | **+1.5** |
| **W37A** | **Quinton** | **2.54** | **266** | *P* | **Pn** | **18 40 59.6** | **+1.5** |
| | baz=2.5 | | | | | | |
| W37A | | | | *Pb* | **Pb** | **18 41 03.7** | **+1.2** |
| | baz=2.5 | | | | | | |
| W37A | | | | *S* | **Sb** | **18 41 33.1** | **-0.7** |
| | baz=2.5 | | | | | | |
| **OXF** | **Oxford** | **2.54** | **108** | *ePn* | **Pn** | **18 40 58.1** | **-0.1** |
| OXF | | | | *eSn* | **Sn** | **18 41 29.2** | **+0.1** |
| **Z39A** | **Irene McRaven,** | **2.59** | **217** | *S* | **Sn** | **18 41 31.4** | **+1.2** |
| | baz=2.5 | | | | | | |
| **X37A** | **Clayton** | **2.60** | **254** | *Pb* | **Pg** | **18 41 05.2** | **-1.5** |
| | baz=2.6 | | | | | | |
| **GLST** | **Glass** | **2.65** | **68** | *ePn* | **Pg** | **18 41 06.5** | **-1.1** |
| **GLAT** | **Glass** | **2.65** | **68** | *Pn* | **Pn** | **18 40 58.9** | **-0.8** |
| GLAT | | | | *ePg* | **Pb** | **18 41 06.3** | **+1.9** |
| GLAT | | | | *eSn* | **Sn** | **18 41 30.9** | **-0.9** |
| GLAT | | | | *eSg* | **Sb** | **18 41 39.5** | **+2.5** |
| **T37A** | **Cheneyville 18** | **2.75** | **311** | *P* | **Pn** | **18 41 03.3** | **+2.3** |
| | baz=2.8 | | | | | | |
| T37A | | | | *S* | **Sb** | **18 41 38.5** | **-1.3** |
| | baz=2.8 | | | | | | |
| **CCM** | **Cathedral Cave** | **2.85** | **18** | *ePn* | Pn | 18 40 58.3 | -4.2 |
| CCM | | | | *ePg* | **Pb** | **18 41 08.8** | **+0.9** |
| CCM | | | | *eSn* | **Sn** | **18 41 33.8** | **-3.1** |
| CCM | | | | *eSb* | **Sb** | **18 41 39.5** | **-3.4** |
| CCM | | | | *eSg* | **Sg** | **18 41 44.1** | **-4.5** |
| **TUL1** | **Tulsa** | **2.87** | **283** | *P* | **Pn** | **18 41 04.8** | **+2.0** |
| | baz=2.9 | | | | | | |
| TUL1 | | | | *S* | **Sb** | **18 41 40.8** | **-2.6** |
| | baz=2.9 | | | | | | |
| **TUL1** | **Tulsa** | **2.87** | **283** | *ePn* | **Pn** | **18 41 03.8** | **+1.0** |
| **U36A** | **Oologah** | **2.95** | **292** | *S* | **Sn** | **18 41 42.3** | **+3.0** |
| | baz=3.0 | | | | | | |
| **V36A** | **Jenks** | **2.97** | **280** | *P* | **Pn** | **18 41 06.0** | **+1.9** |
| | baz=3.0 | | | | | | |
| V36A | | | | *Sb* | **Sg** | **18 41 50.8** | **-1.6** |
| | baz=3.0 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **3.02** | **227** | *S* | **Sn** | **18 41 42.5** | **+1.5** |
| | baz=3.0 | | | | | | |
| **Y37A** | **Hugo** | **3.03** | **244** | *Pb* | **Pb** | **18 41 11.1** | **+0.3** |
| | baz=3.0 | | | | | | |
| Y37A | | | | *Sb* | **Sg** | **18 41 51.8** | **-2.3** |
| | baz=3.0 | | | | | | |
| **S37A** | **Fort Scott** | **3.14** | **321** | *P* | **Pn** | **18 41 09.2** | **+2.7** |
| | baz=3.2 | | | | | | |
| **139A** | **Bunkhouse Ranc** | **3.15** | **213** | *S* | **Sn** | **18 41 44.9** | **+0.7** |
| | baz=3.1 | | | | | | |
| **W36A** | **Wetumka** | **3.19** | **268** | *P* | **Pn** | **18 41 08.7** | **+1.6** |
| | baz=3.2 | | | | | | |
| W36A | | | | *Sb* | **Sg** | **18 41 57.0** | **-2.3** |
| | baz=3.2 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **3.34** | **302** | *P* | **Pn** | **18 41 11.2** | **+2.0** |
| | baz=3.4 | | | | | | |
| T36A | | | | *Sb* | **Sg** | **18 42 02.7** | **-1.5** |
| | baz=3.4 | | | | | | |
| **X36A** | **Centrahoma** | **3.38** | **258** | *P* | **Pn** | **18 41 11.4** | **+1.6** |
| | baz=3.4,SNR=7.5 | | | | | | |
| X36A | | | | *Sb* | **Sg** | **18 42 02.8** | **-2.8** |
| | baz=3.4 | | | | | | |
| **138A** | **Matatall Enter** | **3.51** | **221** | *S* | **Sn** | **18 41 53.8** | **+0.7** |
| | baz=3.5 | | | | | | |
| **S36A** | **Lake Cedric, C** | **3.54** | **313** | *P* | **Pn** | **18 41 14.5** | **+2.5** |
| | baz=3.6 | | | | | | |
| S36A | | | | *Sb* | **Sg** | **18 42 09.5** | **-1.2** |
| | baz=3.6 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **3.69** | **278** | *P* | **Pn** | **18 41 15.8** | **+1.7** |
| | baz=3.7 | | | | | | |
| V35A | | | | *S* | **Sn** | **18 42 00.8** | **+3.1** |
| | baz=3.7 | | | | | | |
| **U35A** | **Pawnee** | **3.72** | **287** | *Pb* | **Pb** | **18 41 24.3** | **+1.7** |
| | baz=3.7 | | | | | | |
| U35A | | | | *Sb* | **Sg** | **18 42 13.9** | **-2.3** |
| | baz=3.7 | | | | | | |
| **W35A** | **Tecumseh** | **3.72** | **269** | *P* | **Pn** | **18 41 16.0** | **+1.6** |
| | baz=3.7,SNR=6.5 | | | | | | |
| W35A | | | | *S* | **Sn** | **18 42 01.3** | **+3.0** |
| | baz=3.7 | | | | | | |
| **T35A** | **Sooner Cattle** | **3.73** | **296** | *P* | **Pn** | **18 41 16.5** | **+2.0** |
| | baz=3.8 | | | | | | |
| T35A | | | | *Sb* | **Sg** | **18 42 14.4** | **-2.2** |
| | baz=3.8 | | | | | | |
| **WVT** | **Waverly** | **3.75** | **76** | *ePn* | **Pn** | **18 41 16.0** | **+1.2** |
| WVT | | | | *eSn* | **Sn** | **18 41 60.0** | **+0.9** |
| **239A** | **Gary** | **3.76** | **209** | *S* | **Sn** | **18 41 58.6** | **-0.5** |
| | baz=3.7 | | | | | | |
| **Q37A** | **Longview Farm,** | **3.92** | **335** | *Pb* | **Pb** | **18 41 28.5** | **+2.5** |
| | baz=4.0 | | | | | | |
| Q37A | | | | *Sb* | **Sg** | **18 42 21.1** | **-1.6** |
| | baz=4.0 | | | | | | |
| **R36A** | **Gordon, Harris** | **3.92** | **321** | *P* | **Pn** | **18 41 19.6** | **+2.5** |
| | baz=4.0 | | | | | | |
| R36A | | | | *Sb* | **Sg** | **18 42 20.6** | **-2.1** |
| | baz=4.0 | | | | | | |
| **X35A** | **Drake** | **3.92** | **258** | *Pb* | **Pb** | **18 41 26.8** | **+0.7** |
| | baz=3.9 | | | | | | |
| **Z36A** | **Blue Ridge** | **3.97** | **240** | *Pb* | **Pb** | **18 41 27.5** | **+0.7** |
| | baz=3.9 | | | | | | |
| **S35A** | **Otter Creek Ra** | **3.97** | **307** | *Sb* | **Sg** | **18 42 21.7** | **-2.8** |
| | baz=4.0 | | | | | | |
| **238A** | **Jacksonville** | **4.05** | **216** | *S* | **Sn** | **18 42 06.7** | **+0.3** |
| | baz=4.0 | | | | | | |
| **340A** | **Bronson** | **4.12** | **199** | *S* | **Sn** | **18 42 07.9** | **-0.1** |
| | baz=4.1 | | | | | | |
| **Y35A** | **Marietta** | **4.13** | **251** | *Pb* | **Pb** | **18 41 30.3** | **+0.6** |
| | baz=4.1 | | | | | | |
| Y35A | | | | *Sb* | **Sg** | **18 42 25.3** | **-4.2** |
| | baz=4.1 | | | | | | |
| **V34A** | **Guthrie** | **4.25** | **278** | *P* | **Pn** | **18 41 23.6** | **+1.9** |
| | baz=4.2 | | | | | | |
| V34A | | | | *Sb* | **Sg** | **18 42 29.9** | **-3.5** |
| | baz=4.2 | | | | | | |
| **V34A** | **Guthrie** | **4.25** | **278** | *ePn* | Pn | 18 41 25.2 | +3.5 |
| **T34A** | **McClaskey Farm** | **4.27** | **295** | *Sb* | **Sg** | **18 42 30.4** | **-3.6** |
| | baz=4.3 | | | | | | |
| **R35A** | **Emporia Munici** | **4.30** | **315** | *Sb* | **Sg** | **18 42 31.4** | **-3.6** |
| | baz=4.3 | | | | | | |
| **U34A** | **Anderson Ranch** | **4.36** | **286** | *Sb* | **Sg** | **18 42 33.5** | **-3.5** |
| | baz=4.4 | | | | | | |
| **Q36A** | **Arnold C. Orve** | **4.40** | **326** | *Sb* | **Sg** | **18 42 34.9** | **-3.1** |
| | baz=4.5 | | | | | | |
| **237A** | **Washetta, Mont** | **4.41** | **222** | *S* | **Sn** | **18 42 16.1** | **+0.9** |
| | baz=4.3 | | | | | | |
| **W34A** | **Bridge Creek,** | **4.45** | **270** | *S* | **Sn** | **18 42 18.6** | **+2.4** |
| | baz=4.4 | | | | | | |
| **W34A** | **Bridge Creek,** | **4.45** | **270** | *ePn* | Pn | 18 41 28.1 | +3.7 |
| **S34A** | **Willow Spring** | **4.51** | **303** | *Sb* | **Sg** | **18 42 38.5** | **-3.3** |
| | baz=4.5 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **4.67** | **254** | *Sb* | **Sb** | **18 42 40.8** | **+5.5** |
| | baz=4.6 | | | | | | |
| **338A** | **Crockett** | **4.68** | **213** | *S* | **Sn** | **18 42 22.9** | **+0.9** |
| | baz=4.6 | | | | | | |
| **R34A** | **Isabella, Hill** | **4.93** | **308** | *P* | **Pn** | **18 41 32.6** | **+1.6** |
| | baz=5.0 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **5.02** | **270** | *P* | **Pn** | **18 41 34.4** | **+2.1** |
| | baz=5.0 | | | | | | |
| **KSU1** | **Kansas State U** | **5.08** | **319** | *Pn* | Pn | 18 41 37.3 | +4.3 |
| **SWET** | **Sewanee** | **5.24** | **89** | *Pn* | **Pn** | **18 41 36.9** | **+1.5** |
| **WMOK** | **Wichita Mounta** | **5.32** | **265** | *ePn* | **Pn** | **18 41 34.8** | **-1.6** |

*IDC* ***15*** *18:57:14.4±0.9, 18.˚13N×120.˚92E, h0km, mb3.6/10, mb1 3.8/10, mb1mx3.7/39, mbtmp3.7/10, MS2.7/1, Ms1 2.9/1, ms1mx2.4/25, Error ellipse: s-maj=30.9km s-min=18.2km az=67.0*
*MAN* ***15*** *18:57:21, 18.˚30N×120.˚52E, h31km, mb5.7, ML4.7, MS5.2*

**ISC 15 18:57:20.7±1.9, 18.˚32N±0.˚07×120.˚50E±0.˚07, h29km±15km, n20, σ1ş14/21, mb3.6/8, 1C-1D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABRA** | **Dolores** | **0.69** | **163** | *eP* | **Pn** | **18 57 35.2** | **+0.6** |
| ABRA | | | | *eS* | **Sn** | **18 57 45.2** | **+0.8** |
| **APYP** | **Conner** | **0.84** | **123** | *eP* | **Pb** | **18 57 36.9** | **+0.1** |
| APYP | | | | *eS* | **Sb** | **18 57 48.0** | **+0.4** |
| **CVP** | **Callao Caves** | **1.40** | **116** | *i P* | **Pn** | **18 57 44.6** | **+0.3** |
| CVP | | | | *i S* | **Sn** | **18 58 01.9** | **+0.1** |
| **SGCP** | **Mt. Cagua** | **1.47** | **93** | *eP* | **Pn** | **18 57 46.0** | **+0.7** |
| SGCP | | | | *eS* | **Sn** | **18 58 04.1** | **+0.6** |
| **CAUP** | **Cauayan** | **1.86** | **137** | *eP* | **Pb** | **18 57 52.6** | **-1.5** |
| **BCPH** | **Baguio City Da** | **1.93** | **178** | *i P* | **Pn** | **18 57 50.8** | **-1.0** |
| BCPH | | | | *i S* | **Sn** | **18 58 15.2** | **0.0** |
| **BOLP** | **Bolinao** | **2.01** | **196** | *eP* | **Pn** | **18 57 53.5** | **+0.8** |
| **PALP** | **Palanan** | **2.22** | **124** | *eP* | **Pn** | **18 57 57.1** | **+1.5** |
| **SCZP** | **Santa Cruz** | **2.59** | **193** | *eP* | **Pn** | **18 58 01.9** | **+1.1** |
| **GQP** | **Guinayangan** | **4.77** | **157** | *eP* | Pn | 18 58 34.2 | +3.5 |
| **KSRS** | **Korea Array** | **20.14** | **17** | *P* | **P** | **19 01 50.9** | **-1.7** |
| | 1.4nm,0.7s,baz=202,slow=12,SNR=2.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.46** | **274** | *P* | Pn | 19 01 59.0 | +0.4 |
| | 1.6nm,0.9s,baz=88,slow=8.5,SNR=11 | | | | | | |
| CMAR | | | | | LR | LR | 19 10 09.3 |
| | comp=Z,21nm,19.1s,baz=150,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **31.62** | **342** | *P* | **P** | **19 03 42.3** | **+1.0** |
| | 0.2nm,0.4s,baz=168,slow=8.8,SNR=3.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.37** | **160** | *P* | P | 19 04 51.3 | -5.0 |
| | 0.4nm,1.0s,baz=344,slow=8.8,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.28** | **321** | *P* | **P** | **19 05 13.3** | **+1.6** |
| | 4.5nm,0.8s,baz=114,slow=9.2,SNR=35 | | | | | | |
| **ASAR** | **Alice Springs** | **43.73** | **162** | *P* | P | 19 05 19.4 | -4.3 |
| | 0.1nm,0.3s,baz=342,slow=7.1,SNR=6.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **44.92** | **331** | *P* | **P** | **19 05 32.9** | **0.0** |
| | 2.1nm,0.8s,baz=110,slow=8.1,SNR=8.8 | | | | | | |
| **GEYT** | **Alibeck** | **57.36** | **304** | *P* | **P** | **19 07 07.8** | **+1.3** |
| | 1.9nm,0.9s,baz=96,slow=6.0,SNR=5.1 | | | | | | |
| **ILAR** | **Eielson Array** | **74.71** | **26** | *P* | **P** | **19 08 56.3** | **-1.2** |
| | 0.2nm,0.6s,baz=281,slow=7.4,SNR=2.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **83.10** | **332** | *P* | **P** | **19 09 41.9** | **-1.8** |
| | 0.8nm,0.8s,baz=63,slow=5.6,SNR=3.4 | | | | | | |

*GEN* ***15*** *19:01:49.1,45.˚80N×7.˚70E, h6km, ML1.0*
*CSEM* ***15*** *19:01:49.1±0.1,45.˚78N×7.˚70E, h1km, ML1.0, Error ellipse: s-maj=1.7km s-min=1.2km az=139.0*
*ZUR* ***15*** *19:01:49.7, 45.˚80N×7.˚71E, h2km±4km, ML1.4/9*
*LDG* ***15*** *19:01:49.4±0.1,45.˚77N×7.˚71E, h2km, Md1.9/3, Ml1.8/3, Error ellipse: s-maj=2.4km s-min=1.5km az=148.0*

**ROM 15 19:01:48.2±0.2, 45.79N×7.70E, h10km, Md1.9/4, Ml0.5/1, 1C-6D, Error ellipse: s-maj=2.8km s-min=1.8km az=106.0, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SATI** | **Passo dei Sala** | **0.15** | **53** | *Pg* | **Pg** | **19 01 52.5** | **+0.5** |
| SATI | | | | *Sg* | **Sg** | **19 01 54.7** | **0.0** |
| | 24nm,1.2s | | | | | | |
| **SATI** | **Passo dei Sala** | **0.15** | **53** | *Pg* | **Pg** | **19 01 52.5** | **+0.5** |
| SATI | | | | *S* | **Sg** | **19 01 54.7** | **0.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CIRO** | **Champorcher** | **0.20** | **206** | *Pg* | *Pg* | 19 01 53.7 | +0.8 |
| CIRO | | | | *Sg* | *Sg* | 19 01 56.6 | +0.5 |
| **CIRO** | **Champorcher** | **0.20** | **206** | *P* | *Pg* | 19 01 53.6 | +0.7 |
| CIRO | | | | *Sg* | *Sg* | 19 01 56.6 | +0.5 |
| **TRAV** | **Traversella** | **0.28** | **173** | *Pg* | *Pb* | 19 01 54.8 | -0.6 |
| TRAV | | | | *Sg* | *Sg* | 19 01 58.4 | +0.7 |
| **TRAV** | **Traversella** | **0.28** | **173** | *P* | *Pb* | 19 01 54.8 | -0.6 |
| TRAV | | | | *Sg* | *Sg* | 19 01 58.4 | +0.7 |
| **DIX** | **Grande Dixence** | **0.36** | **326** | *⇓iPg* | *Pb* | 19 01 56.4 | -0.7 |
| | 76nm,0.2s | | | | | | |
| DIX | | | | *eSg* | *Sg* | 19 02 01.1 | +0.3 |
| | 76nm,0.2s | | | | | | |
| **DIX** | **Grande Dixence** | **0.36** | **326** | *Pg* | *Pg* | 19 01 56.3 | +0.6 |
| DIX | | | | *Sg* | *Sg* | 19 02 01.1 | +0.3 |
| **DIX** | **Grande Dixence** | **0.36** | **326** | *⇓iPg* | *Pb* | 19 01 56.4 | -0.7 |
| | 76nm,0.2s | | | | | | |
| DIX | | | | *eSg* | *Sg* | 19 02 01.1 | +0.3 |
| | 76nm,0.2s | | | | | | |
| **MRGE** | **Morge** | **0.45** | **268** | *ePg* | *Pb* | 19 01 58.4 | 0.0 |
| | 39nm,0.1s | | | | | | |
| **MRGE** | **Morge** | **0.45** | **268** | *ePg* | *Pb* | 19 01 58.4 | 0.0 |
| | 39nm,0.1s | | | | | | |
| **SIMPL** | **Simplonpass** | **0.51** | **26** | *⇓iPg* | *Pb* | 19 01 59.3 | -0.2 |
| | 28nm,0.2s | | | | | | |
| **SIMPL** | **Simplonpass** | **0.51** | **26** | *⇓iPg* | *Pb* | 19 01 59.3 | -0.2 |
| | 28nm,0.2s | | | | | | |
| **LSD** | **Lago del Serru** | **0.51** | **231** | *⇑iPg* | *Pb* | 19 01 59.4 | -0.3 |
| | 39nm,0.1s | | | | | | |
| **EMV** | **Vieux Emosson** | **0.62** | **297** | *ePg* | *Pb* | 19 02 01.7 | +0.2 |
| | 4.5nm,0.3s | | | | | | |
| **EMV** | **Vieux Emosson** | **0.62** | **297** | *ePg* | *Pb* | 19 02 01.7 | +0.2 |
| | 4.5nm,0.3s | | | | | | |
| **FIESA** | **Fiescheralp** | **0.71** | **24** | *ePg* | *Pb* | 19 02 03.2 | +0.1 |
| | 14nm,0.5s | | | | | | |
| **FIESA** | **Fiescheralp** | **0.71** | **24** | *ePg* | *Pb* | 19 02 03.2 | +0.1 |
| | 14nm,0.5s | | | | | | |
| **LPG** | **La Plagne** | **0.72** | **247** | *ePg* | *Pb* | 19 02 03.1 | -0.2 |
| LPG | | | | *eSg* | *Sg* | 19 02 12.8 | +0.5 |
| | 3.8nm,0.2s | | | | | | |
| **LPG** | **La Plagne** | **0.72** | **247** | *ePg* | *Pb* | 19 02 03.1 | -0.2 |
| **LPL** | **La Plagne** | **0.73** | **249** | *ePg* | *Pb* | 19 02 03.3 | 0.0 |
| LPL | | | | *eSg* | *Sb* | 19 02 13.0 | -0.6 |
| | 3.6nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.73** | **249** | *ePg* | *Pb* | 19 02 03.3 | 0.0 |
| **VARE** | **Varese** | **0.75** | **83** | *ePg* | *Pb* | 19 02 03.8 | +0.2 |
| | 153nm,0.4s | | | | | | |
| **VARE** | **Varese** | **0.75** | **83** | *ePg* | *Pb* | 19 02 03.8 | +0.2 |
| | 153nm,0.4s | | | | | | |
| **FUSIO** | **Fusio** | **0.95** | **45** | *⇓iPg* | *Pn* | 19 02 07.4 | -0.4 |
| | 13nm,0.1s | | | | | | |
| **FUSIO** | **Fusio** | **0.95** | **45** | *⇓iPg* | *Pn* | 19 02 07.4 | -0.4 |
| | 13nm,0.1s | | | | | | |
| **MUGIO** | **Muggio** | **0.95** | **81** | *ePg* | *Pb* | 19 02 07.2 | +0.3 |
| | 22nm,0.2s | | | | | | |
| **MUGIO** | **Muggio** | **0.95** | **81** | *ePg* | *Pb* | 19 02 07.2 | +0.3 |
| | 22nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** | **1.24** | **212** | *ePg* | *Pg* | 19 02 12.6 | +0.3 |
| MBDF | | | | *eSg* | *Sb* | 19 02 28.2 | 0.0 |
| | 1.6nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** | **1.24** | **212** | *ePg* | *Pg* | 19 02 12.6 | +0.3 |
| **CABF** | **La Chapelle** | **1.39** | **307** | *ePg* | *Pg* | 19 02 16.3 | +1.2 |
| CABF | | | | *eSg* | *Sg* | 19 02 34.7 | +1.5 |
| | 2.2nm,0.4s | | | | | | |
| **CABF** | **La Chapelle** | **1.39** | **307** | *ePg* | *Pg* | 19 02 16.3 | +1.2 |
| CABF | | | | *eSg* | *Sg* | 19 02 34.7 | +1.5 |
| | 1.1nm,0.4s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.55** | **237** | *ePg* | *Pg* | 19 02 18.3 | +0.2 |
| ORIF | | | | *eSg* | *Sg* | 19 02 38.3 | +0.1 |
| | 5.9nm,0.8s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.55** | **237** | *ePg* | *Pg* | 19 02 18.3 | +0.2 |
| ORIF | | | | *eSg* | *Sg* | 19 02 38.3 | +0.1 |
| | 3.0nm,0.8s | | | | | | |
| **WATA** | **Walderalm** | **3.09** | **59** | *Pg* | *Pg* | 19 02 51.6 | +3.9 |

*BEO* ***15*** *19:05:08.6±0.8, 40.˚97N×19.˚86E, h0km, ML2.3/3*
*ATH* ***15*** *19:05:11.6, 41.˚23N×19.˚96E, h29km±4km, MD3.1/5*
*ISCJB* ***15*** *19:05:12.9±0.7, 41.˚19N±0.˚04×19.˚95E±0.˚06, h19km±7km, Error ellipse: s-maj=8.8km s-min=5.8km az=141.3*
*CSEM* ***15*** *19:05:12.9±0.3, 41.˚19N×19.˚92E, h20km, MD3.1, Error ellipse: s-maj=9.5km s-min=5.7km az=61.0*

**ISC 15 19:05:12.5±0.9, 41.˚16N±0.˚03×19.˚92E±0.˚04, h16km±7km, n26, σ0ş78/40, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.19** | **348** | *ePg* | **Pg** | **19 05 15.6** | **-1.5** |
| TIR | | | | *eSg* | **Sg** | **19 05 20.7** | **+0.5** |
| **TIR** | **Tirane** | **0.19** | **348** | *ePB* | **Pg** | **19 05 17.0** | **-0.1** |
| TIR | | | | *eSB* | **Sg** | **19 05 21.5** | **+1.3** |
| **TIR** | **Tirane** | **0.19** | **348** | *ePg* | **Pg** | **19 05 15.6** | **-1.5** |
| **TIR** | **Tirane** | **0.19** | **348** | *ePb* | **Pg** | **19 05 17.0** | **-0.1** |
| TIR | | | | *eSg* | **Sg** | **19 05 20.7** | **+0.5** |
| TIR | | | | *eSb* | **Sg** | **19 05 21.5** | **+1.3** |
| **OHR** | **Ohrid** | **0.67** | **94** | *ePg* | **Pg** | **19 05 25.3** | **-0.2** |
| OHR | | | | *eSg* | **Sg** | **19 05 34.2** | **-0.3** |
| **OHR** | **Ohrid** | **0.67** | **94** | *ePg* | **Pg** | **19 05 25.3** | **-0.2** |
| OHR | | | | *eSg* | **Sg** | **19 05 34.1** | **-0.3** |
| **NEST** | **Nestorio** | **1.14** | **131** | *ePN* | **Pb** | **19 05 33.1** | **-0.7** |

53nm,0.3s,baz=144,slow=3.3,SNR=17
HNR S **Sn** 19 28 56.0 -0.4
51nm,0.3s,baz=350,slow=18,SNR=9.5
**HNR Honiara 1.91 300** *e*P **Pn** 19 28 34.0 +0.6
HNR *e*S **Sn** 19 28 55.0 -1.4
**DZM Mont Dzumac 12.50 159** P **P** 19 31 06.1 -2.0
0.8nm,0.3s,baz=1.2,slow=8.7,SNR=21
DZM S **Sn** 19 33 16.7 +0.6
0.3nm,0.3s,baz=180,slow=19,SNR=3.1
**WRA Warramunga Arr 27.96 247** P **P** 19 33 48.3 +0.1
0.6nm,0.4s,baz=76,slow=9.0,SNR=13
WRA PcP **PcP** 19 37 01.8 -0.6
0.2nm,0.4s,baz=69,slow=3.3,SNR=3.8
**ASAR Alice Springs 29.54 240** P **P** 19 34 01.8 -0.4
0.3nm,0.7s,baz=61,slow=10,SNR=8.8
ASAR PcP **PcP** 19 37 06.5 +0.2
0.3nm,0.9s,baz=72,slow=3.0,SNR=3.0
**VNDA Vanda 67.11 180** P **P** 19 38 52.1 +2.2
0.4nm,0.6s,baz=341,slow=7.8,SNR=3.9
**SONM Songino Array 75.78 325** P **P** 19 39 42.5 -0.2
0.6nm,0.5s,baz=137,slow=6.2,SNR=6.2
**ILAR Eielson Array 84.22 20** P **P** 19 40 28.1 +0.3
0.1nm,0.4s,baz=244,slow=5.2,SNR=3.6
**MKAR Makanchi Array 90.29 318** P **P** 19 40 56.7 -0.8
0.1nm,0.5s,baz=90,slow=6.5,SNR=3.9

*DDA **15** 19:31:04.0, 38°.81N×27°.85E, h7km, Md2.9*
*THE **15** 19:31:03.3, 38°.81N×27°.92E, h0km±2km, ML3.2/4, Error ellipse: s-maj=6.2km s-min=0.8km az=75.0*
*ATH **15** 19:31:03.0, 38°.84N×27°.96E, h23km±6km, MD3.5/10*
*CSEM **15** 19:31:04.4±0.1, 38°.77N×27°.82E, h2km, MD2.9, Error ellipse: s-maj=2.3km s-min=2.1km az=76.0*
*ISK **15** 19:31:04.4, 38°.75N×27°.82E, h8km, MD3.1*
**ISC 15 19:31:04.4±0.9, 38°80N±0°.02×27°.83E±0°.02, h4km±7km, n135, σ0s82/177, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AKHS** | **Akhisar** | **0.08** | **354** | *i* P | | **Pg** | 19 31 06.1 | -0.1 |
| AKHS | | | | *i* S | | **Sg** | 19 31 07.5 | +0.1 |
| **AKHS** | **Akhisar** | **0.08** | **354** | P | | **Pg** | 19 31 06.0 | -0.1 |
| AKHS | | | | S | | **Sg** | 19 31 07.5 | +0.1 |
| **MANT** | **Manisa** | **0.65** | **118** | *i* P | | **Pg** | 19 31 16.6 | -0.3 |
| MANT | | | | *i* S | | **Sg** | 19 31 25.1 | -0.3 |
| **MANT** | **Manisa** | **0.65** | **118** | P | | **Pg** | 19 31 16.6 | -0.3 |
| MANT | | | | S | | **Sg** | 19 31 25.1 | -0.3 |
| **KULA** | **Kula-Manisa** | **0.71** | **113** | PG | | **Pg** | 19 31 17.8 | -0.3 |
| **KULA** | **Kula-Manisa** | **0.71** | **113** | Pg | | **Pg** | 19 31 17.8 | -0.3 |
| **DEMI** | **Demirci** | **0.74** | **70** | *i* P | | **Pg** | 19 31 18.1 | -0.4 |
| **DEMI** | **Demirci** | **0.74** | **70** | P | | **Pg** | 19 31 18.1 | -0.4 |
| **BLCB** | **Balcova** | **0.74** | **236** | *e*PG | | **Pg** | 19 31 18.3 | -0.3 |
| BLCB | | | | *e*SG | | **Sg** | 19 31 29.2 | +1.1 |
| **BLCB** | **Balcova** | **0.74** | **236** | *e*Pg | | **Pg** | 19 31 18.3 | -0.3 |
| BLCB | | | | *e*Sg | | **Sg** | 19 31 29.3 | +1.1 |
| **DKL** | **Dikili** | **0.77** | **291** | *e*PG | | **Pg** | 19 31 19.4 | +0.3 |
| DKL | | | | *e*SG | | **Sb** | 19 31 31.5 | +0.4 |
| **DKL** | **Dikili** | **0.77** | **291** | *e*Pg | | **Pg** | 19 31 19.4 | +0.3 |
| DKL | | | | *e*Sg | | **Sb** | 19 31 31.5 | +0.4 |
| **BALB** | **Balikesir** | **0.84** | **3** | *e*PG | | **Pn** | 19 31 22.4 | -0.7 |
| **BALB** | **Balikesir** | **0.84** | **3** | *e*Pg | | **Pn** | 19 31 22.4 | -0.7 |
| **AYDB** | **Zeytinkoy-Aydi** | **0.85** | **177** | *e*PG | | **Pg** | 19 31 20.5 | -0.2 |
| **AYDB** | **Zeytinkoy-Aydi** | **0.85** | **177** | *e*Pg | | **Pg** | 19 31 20.5 | -0.2 |
| **DURS** | **Dursunbey** | **0.95** | **32** | *i* P | | **Pg** | 19 31 22.0 | -0.6 |
| DURS | | | | *i* S | | **Sb** | 19 31 36.0 | -0.5 |
| **DURS** | **Dursunbey** | **0.95** | **32** | P | | **Pg** | 19 31 22.0 | -0.6 |
| DURS | | | | S | | **Sb** | 19 31 36.0 | -0.5 |
| **BALY** | **Balya** | **0.95** | **350** | *i* P | | **Pg** | 19 31 22.6 | -0.2 |
| BALY | | | | *i* S | | **Sb** | 19 31 35.7 | -0.9 |
| **BALY** | **Balya** | **0.95** | **350** | P | | **Pg** | 19 31 22.6 | -0.2 |
| BALY | | | | S | | **Sb** | 19 31 35.7 | -0.9 |
| **AYVA** | **Ayvalik** | **1.02** | **300** | *i* P | | **Pg** | 19 31 24.1 | +0.1 |
| AYVA | | | | *i* S | | **Sb** | 19 31 38.6 | +0.2 |
| **AYVA** | **Ayvalik** | **1.02** | **300** | P | | **Pg** | 19 31 24.1 | +0.1 |
| AYVA | | | | S | | **Sb** | 19 31 38.6 | +0.2 |
| **URLA** | **Izmir** | **1.06** | **246** | *i* P | | **Pg** | 19 31 24.1 | -0.6 |
| **URLA** | **Izmir** | **1.06** | **246** | P | | **Pg** | 19 31 24.1 | -0.6 |
| URLA | | | | S | | **Sn** | 19 31 40.6 | -0.7 |
| **AYDN** | **Tasoluk** | **1.14** | **178** | *i* P | | **Pn** | 19 31 27.5 | +0.3 |
| **AYDN** | **Tasoluk** | **1.14** | **178** | P | | **Pn** | 19 31 27.5 | +0.3 |
| AYDN | | | | S | | **Sn** | 19 31 43.5 | +0.3 |
| **ZEY** | **˜zmir** | **1.18** | **242** | P | | **Pg** | 19 31 26.4 | -0.5 |
| ZEY | | | | S | | **Sb** | 19 31 43.0 | +0.1 |
| **GCAM** | **G?zelcaml?** | **1.19** | **203** | *i* P | | **Pg** | 19 31 26.2 | -1.0 |
| GCAM | | | | *i* S | | **Sb** | 19 31 43.6 | +0.3 |
| **GCAM** | **G?zelcaml?** | **1.19** | **203** | P | | **Pg** | 19 31 26.2 | -1.0 |
| GCAM | | | | S | | **Sb** | 19 31 43.6 | +0.3 |
| **GONE** | **Gonen-Balikesi** | **1.25** | **355** | *e*PN | | **Pn** | 19 31 29.4 | +0.7 |
| **GONE** | **Gonen-Balikesi** | **1.25** | **355** | *e*Pn | | **Pn** | 19 31 29.4 | +0.7 |
| **PRK** | **Paraskevi** | **1.29** | **291** | *e*PN | | **Pb** | 19 31 29.6 | +0.3 |
| PRK | | | | *e*SN | | **Sn** | 19 31 47.7 | +0.8 |
| **PRK** | **Paraskevi** | **1.29** | **291** | P | | **Pn** | 19 31 28.4 | -0.8 |
| PRK | | | | S | | **Sn** | 19 31 47.7 | +0.8 |
| **PRK** | **Paraskevi** | **1.29** | **291** | P | | **Pn** | 19 31 28.4 | -0.8 |
| **PRK** | **Paraskevi** | **1.29** | **291** | *e*Pn | | **Pb** | 19 31 29.6 | +0.3 |
| PRK | | | | S | | **Sn** | 19 31 47.7 | +0.8 |
| **SMG** | **Samos** | **1.34** | **216** | *e*PN | | **Pn** | 19 31 29.3 | -0.6 |
| SMG | | | | *e*SN | | **Sn** | 19 31 49.4 | +1.3 |
| **SMG** | **Samos** | **1.34** | **216** | P | | **Pn** | 19 31 29.0 | -0.9 |
| SMG | | | | S | | **Sn** | 19 31 48.5 | +0.4 |
| **SMG** | **Samos** | **1.34** | **216** | P | | **Pn** | 19 31 29.0 | -0.9 |
| **SMG** | **Samos** | **1.34** | **216** | *e*Pn | | **Pn** | 19 31 29.3 | -0.6 |
| SMG | | | | S | | **Sn** | 19 31 48.5 | +0.4 |
| SMG | | | | *e*Sn | | **Sn** | 19 31 49.4 | +1.3 |
| **KHAL** | **Karahalli** | **1.37** | **108** | *i* P | | **Pn** | 19 31 29.7 | -0.8 |
| KHAL | | | | *i* S | | **Sn** | 19 31 48.7 | -0.5 |
| **KHAL** | **Karahalli** | **1.37** | **108** | P | | **Pn** | 19 31 29.7 | -0.8 |
| KHAL | | | | S | | **Sn** | 19 31 48.7 | -0.5 |
| **CHOS** | **Chios island** | **1.45** | **254** | *e*PB | | **Pn** | 19 31 30.2 | -1.2 |
| CHOS | | | | *e*SN | | **Sg** | 19 31 52.3 | +1.4 |
| **CHOS** | **Chios island** | **1.45** | **254** | P | | **Pn** | 19 31 30.3 | -1.2 |
| CHOS | | | | S | | **Sg** | 19 31 51.8 | +0.9 |
| **CHOS** | **Chios island** | **1.45** | **254** | P | | **Pn** | 19 31 30.3 | -1.2 |
| CHOS | | | | S | | **Sg** | 19 31 51.8 | +0.9 |
| CHOS | | | | *e*Sn | | **Sg** | 19 31 52.3 | +1.4 |
| **DNZL** | **Cakiroluk** | **1.47** | **139** | *i* P | | **Pn** | 19 31 31.2 | -0.6 |
| **DNZL** | **Cakiroluk** | **1.47** | **139** | P | | **Pn** | 19 31 31.2 | -0.6 |
| **KCTX** | **Karacabey (Bur** | **1.52** | **15** | *e*PN | | **Pb** | 19 31 32.5 | -0.7 |
| **KCTX** | **Karacabey (Bur** | **1.52** | **15** | *e*Pn | | **Pb** | 19 31 32.5 | -0.7 |
| **EDC** | **Edincik** | **1.55** | **1** | *e*PN | | **Pb** | 19 31 33.6 | -0.1 |
| **EDC** | **Edincik** | **1.55** | **1** | *e*Pn | | **Pb** | 19 31 33.6 | -0.1 |
| **EZN** | **Ezine** | **1.55** | **312** | *e*PN | | **Pn** | 19 31 32.9 | +0.1 |
| **EZN** | **Ezine** | **1.55** | **312** | *e*Pn | | **Pn** | 19 31 32.9 | +0.1 |
| **SIGR** | **SIGRI** | **1.59** | **286** | *e*PB | | **Pn** | 19 31 32.1 | -1.2 |
| SIGR | | | | *e*SN | | **Sg** | 19 31 56.2 | +0.7 |
| **SIGR** | **SIGRI** | **1.59** | **286** | P | | **Pn** | 19 31 32.3 | -1.0 |
| SIGR | | | | S | | **Sg** | 19 31 55.5 | 0.0 |
| **SIGR** | **SIGRI** | **1.59** | **286** | P | | **Pn** | 19 31 32.3 | -1.0 |
| SIGR | | | | S | | **Sg** | 19 31 55.5 | 0.0 |
| SIGR | | | | *e*Sn | | **Sg** | 19 31 56.2 | +0.7 |
| **KRBG** | **Karabiga-Canak** | **1.65** | **346** | *e*PN | | **Pb** | 19 31 34.6 | -0.7 |
| **KRBG** | **Karabiga-Canak** | **1.65** | **346** | *e*Pn | | **Pb** | 19 31 34.6 | -0.7 |
| **ULDT** | **Uludag** | **1.68** | **37** | *i* P | | **Pb** | 19 31 35.2 | -0.9 |
| **ULDT** | **Uludag** | **1.68** | **37** | P | | **Pb** | 19 31 35.2 | -0.9 |
| **YER** | **Yerkesik** | **1.70** | **168** | *e*PN | | **Pn** | 19 31 34.6 | -0.3 |
| **YER** | **Yerkesik** | **1.70** | **168** | *e*Pn | | **Pn** | 19 31 34.6 | -0.3 |
| **BOZC** | **Bozcaada** | **1.73** | **308** | P | | **Pb** | 19 31 35.8 | -0.9 |
| **BDRM** | **Kayabasi** | **1.75** | **190** | P | | **Pg** | 19 31 38.0 | +0.1 |
| **MDNY** | **Mudanya-Bursa** | **1.77** | **27** | *e*PN | | **Pb** | 19 31 36.8 | -0.6 |
| **MDNY** | **Mudanya-Bursa** | **1.77** | **27** | *e*Pn | | **Pb** | 19 31 36.8 | -0.6 |
| **LPK** | **Lapseki** | **1.78** | **333** | *e*PN | | **Pn** | 19 31 36.4 | +0.5 |
| **LPK** | **Lapseki** | **1.78** | **333** | *e*Pn | | **Pn** | 19 31 36.4 | +0.5 |
| **BODT** | **Bodrum** | **1.78** | **193** | *e*PN | | **Pn** | 19 31 35.7 | -0.3 |
| **BODT** | **Bodrum** | **1.78** | **193** | *e*Pn | | **Pn** | 19 31 35.7 | -0.3 |
| **IGD** | **Bursa** | **1.81** | **36** | P | | **Pb** | 19 31 38.0 | -0.1 |
| **MRMT** | **Marmara Adasi** | **1.81** | **354** | *e*PN | | **Pb** | 19 31 37.4 | -0.8 |
| **MRMT** | **Marmara Adasi** | **1.81** | **354** | *e*Pn | | **Pb** | 19 31 37.4 | -0.8 |
| **GELI** | **Tayfur-Gelibol** | **1.91** | **327** | *e*PN | | **Pn** | 19 31 37.7 | 0.0 |
| **GELI** | **Tayfur-Gelibol** | **1.91** | **327** | *e*Pn | | **Pn** | 19 31 37.7 | 0.0 |
| **ARMT** | **Armutlu** | **1.94** | **24** | *e*PN | | **Pb** | 19 31 39.4 | -0.9 |
| **ARMT** | **Armutlu** | **1.94** | **24** | *e*Pn | | **Pb** | 19 31 39.4 | -0.9 |
| **RKY** | **Sarkoy-Tekirda** | **1.95** | **345** | *e*PN | | **Pb** | 19 31 39.6 | -1.0 |
| **RKY** | **Sarkoy-Tekirda** | **1.95** | **345** | *e*Pn | | **Pb** | 19 31 39.6 | -1.0 |
| **IZI** | **Iznik** | **2.00** | **39** | *e*PN | | **Pn** | 19 31 39.8 | +0.8 |
| **IZI** | **Iznik** | **2.00** | **39** | *e*Pn | | **Pn** | 19 31 39.8 | +0.8 |
| **GADA** | **Gvkgeada** | **2.04** | **314** | *e*PN | | **Pn** | 19 31 40.5 | +1.0 |
| **GADA** | **Gvkgeada** | **2.04** | **314** | *e*Pn | | **Pn** | 19 31 40.5 | +1.0 |
| **GOLH** | **Golhisar** | **2.08** | **138** | *i* P | | **Pn** | 19 31 39.7 | -0.4 |
| **GOLH** | **Golhisar** | **2.08** | **138** | P | | **Pn** | 19 31 39.7 | -0.4 |
| **DALY** | **Dalyan (Mu˘la** | **2.08** | **161** | *e*PN | | **Pn** | 19 31 40.2 | +0.1 |
| **DALY** | **Dalyan (Mu˘la** | **2.08** | **161** | *e*Pn | | **Pn** | 19 31 40.2 | +0.1 |
| **CAVI** | **Cavuskoy** | **2.10** | **47** | *e*PN | | **Pb** | 19 31 41.6 | -1.5 |
| **CAVI** | **Cavuskoy** | **2.10** | **47** | *e*Pn | | **Pb** | 19 31 41.6 | -1.5 |
| **GLHS** | **Glhisar (BURDU** | **2.10** | **141** | *e*PN | | **Pn** | 19 31 40.5 | 0.0 |
| **GLHS** | **Glhisar (BURDU** | **2.10** | **141** | *e*Pn | | **Pn** | 19 31 40.5 | 0.0 |
| **ERIK** | **Erikli-Kesan** | **2.13** | **332** | *e*PN | | **Pb** | 19 31 42.0 | -1.5 |
| **ERIK** | **Erikli-Kesan** | **2.13** | **332** | *e*Pn | | **Pb** | 19 31 42.0 | -1.5 |
| **ADVT** | **Abdulvahap** | **2.20** | **42** | *e*PN | | **Pb** | 19 31 43.5 | -1.3 |
| **ADVT** | **Abdulvahap** | **2.20** | **42** | *e*Pn | | **Pb** | 19 31 43.5 | -1.3 |
| **NIS1** | **Nisyros Isl.** | **2.25** | **193** | *e*PB | | **Pn** | 19 31 43.3 | +0.9 |
| **NIS1** | **Nisyros Isl.** | **2.25** | **193** | *e*Pb | | **Pn** | 19 31 43.3 | +0.9 |
| **BORA** | **Eskisehir** | **2.31** | **61** | P | | **Pb** | 19 31 47.3 | +0.6 |
| **LIA** | **Limnos Island** | **2.33** | **299** | *e*PN | | **Pn** | 19 31 42.6 | -0.8 |
| LIA | | | | *e*SN | | **Sn** | 19 32 13.5 | +1.0 |
| **LIA** | **Limnos Island** | **2.33** | **299** | *e*Pn | | **Pn** | 19 31 42.6 | -0.8 |
| LIA | | | | *e*Sn | | **Sn** | 19 32 13.5 | +1.0 |
| **ENEZ** | **Enez** | **2.33** | **327** | *e*PN | | **Pn** | 19 31 44.4 | +1.0 |
| **ENEZ** | **Enez** | **2.33** | **327** | *e*Pn | | **Pn** | 19 31 44.4 | +1.0 |
| **CRLT** | **Corlu** | **2.33** | **358** | *e*PN | | **Pn** | 19 31 44.6 | +1.1 |
| **CRLT** | **Corlu** | **2.33** | **358** | *e*Pn | | **Pn** | 19 31 44.6 | +1.1 |
| **FETY** | **Fethiye** | **2.38** | **155** | *e*PN | | **Pn** | 19 31 43.5 | -0.6 |
| **FETY** | **Fethiye** | **2.38** | **155** | *e*Pn | | **Pn** | 19 31 43.6 | -0.6 |
| **SMTH** | **Samothraki Isl** | **2.44** | **314** | *e*PN | | **Pn** | 19 31 44.4 | -0.6 |
| SMTH | | | | *e*SN | | **Sn** | 19 32 13.8 | -1.5 |
| **SMTH** | **Samothraki Isl** | **2.44** | **314** | *e*Pn | | **Pn** | 19 31 44.4 | -0.6 |
| SMTH | | | | *e*Sn | | **Sn** | 19 32 13.8 | -1.5 |
| **SLVT** | **Silivri** | **2.45** | **7** | *e*PN | | **Pn** | 19 31 46.2 | +1.1 |
| **SLVT** | **Silivri** | **2.45** | **7** | *e*Pn | | **Pn** | 19 31 46.3 | +1.1 |
| **ISK** | **Istanbul-Kandi** | **2.46** | **22** | *e*PN | | **Pn** | 19 31 46.4 | +1.1 |
| **ISK** | **Istanbul-Kandi** | **2.46** | **22** | *e*Pn | | **Pn** | 19 31 46.4 | +1.1 |
| **ESKT** | **Eskisehir** | **2.46** | **72** | P | | **Pb** | 19 31 50.0 | +0.7 |
| **HRT** | **Hereke** | **2.47** | **34** | *e*PN | | **Pn** | 19 31 46.8 | +1.3 |
| **HRT** | **Hereke** | **2.47** | **34** | *e*Pn | | **Pn** | 19 31 46.8 | +1.3 |
| **BGKT** | **Bogazkoy** | **2.49** | **17** | *e*PN | | **Pn** | 19 31 46.8 | +1.1 |
| **BGKT** | **Bogazkoy** | **2.49** | **17** | *e*Pn | | **Pn** | 19 31 46.8 | +1.1 |
| **CTKS** | **Kestanelik-??a** | **2.49** | **12** | *e*PN | | **Pn** | 19 31 47.2 | +1.4 |
| **CTKS** | **Kestanelik-??a** | **2.49** | **12** | *e*Pn | | **Pn** | 19 31 47.2 | +1.4 |
| **ALN** | **Alexandroupoli** | **2.50** | **327** | *e*PN | | **Pn** | 19 31 45.1 | -0.8 |
| **ALN** | **Alexandroupoli** | **2.50** | **327** | *e*Pn | | **Pn** | 19 31 45.1 | -0.8 |
| **ARG** | **Arkhangelos** | **2.59** | **175** | *e*PB | | **Pn** | 19 31 47.2 | +0.1 |
| ARG | | | | *e*SN | | **Sn** | 19 32 17.8 | -1.2 |
| **ARG** | **Arkhangelos** | **2.59** | **175** | *e*Pb | | **Pn** | 19 31 47.2 | +0.1 |
| ARG | | | | *e*Sn | | **Sn** | 19 32 17.8 | -1.2 |
| **ELL** | **Elmali** | **2.63** | **140** | *e*PN | | **Pn** | 19 31 48.8 | +1.0 |
| **ELL** | **Elmali** | **2.63** | **140** | *e*Pn | | **Pn** | 19 31 48.8 | +1.0 |
| **GULT** | **Gulveren** | **2.64** | **51** | *e*PN | | **Pn** | 19 31 49.0 | +1.1 |
| **GULT** | **Gulveren** | **2.64** | **51** | *e*Pn | | **Pn** | 19 31 49.0 | +1.1 |
| **SUTC** | **Sutluce-Ispart** | **2.83** | **117** | *e*PN | | **Pn** | 19 31 51.2 | +0.7 |
| **SUTC** | **Sutluce-Ispart** | **2.83** | **117** | *e*Pn | | **Pn** | 19 31 51.2 | +0.7 |
| **SVRH** | **Sivrihisar-ESK** | **2.95** | **76** | *e*PN | | **Pn** | 19 31 53.1 | +1.0 |
| **SVRH** | **Sivrihisar-ESK** | **2.95** | **76** | *e*Pn | | **Pn** | 19 31 53.1 | +1.0 |
| **AUMIH** | **MIHALICIK** | **3.03** | **68** | S | | **Pb** | 19 32 00.9 | +1.9 |
| **MDUB** | **Mudurnu** | **3.09** | **56** | *e*PN | | **Pn** | 19 31 55.7 | +1.5 |
| **MDUB** | **Mudurnu** | **3.09** | **56** | *e*Pn | | **Pn** | 19 31 55.7 | +1.5 |
| **NVR** | **Nevrokopi** | **3.97** | **311** | *e*PN | | **Pn** | 19 32 06.0 | -0.1 |
| **NVR** | **Nevrokopi** | **3.97** | **311** | *e*Pn | | **Pn** | 19 32 06.0 | -0.1 |

*YARS **15** 19:31:47.0±0.2, 57°.40N±0°.01×120°.59E±0°.02, h10km, MSV2.5*
*BYKL **15** 19:31:48.4±1.0, 57°.32N×120°.52E*
**ISC 15 19:31:47.5±1.2, 57°36N±0°.03×120°59E±0°.02, h6km±11km, n20, σ1s70/39, 2C-1D, Southeastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KHNR** | **Khani** | **0.55** | **217** | ⇑*i*Pg | | **Pg** | 19 31 57.7 | -0.4 |
| KHNR | | | | *e*Sg | | **Sg** | 19 32 04.5 | -0.7 |
| **YKLR** | **Yuktali** | **0.97** | **142** | *e*Pg | | **Pb** | 19 32 06.5 | -0.2 |
| YKLR | | | | *e*Sg | | **Sg** | 19 32 18.4 | -0.1 |
| **YKLR** | **Yuktali** | **0.97** | **142** | *e*P | | **Pg** | 19 32 05.8 | -0.2 |
| YKLR | | | | Pm | | | 19 32 05.8 | |
| | comp=Z,20nm,0.1s | | | | | | | |
| YKLR | | | | *e*S | | **Sg** | 19 32 18.5 | -0.1 |
| YKLR | | | | Sm | | | 19 32 18.5 | |
| | comp=N,155nm,0.2s | | | | | | | |
| **CRS** | **Chara** | **1.34** | **251** | ⇓*i*Pg | | **Pg** | 19 32 12.6 | -0.7 |
| CRS | | | | *e*Sg | | **Sg** | 19 32 29.6 | -1.1 |
| CRS | | | | Pmax | | | | |
| | comp=N,27nm,0.2s | | | | | | | |
| CRS | | | | Smax | | | | |
| | comp=N,195nm,1.5s | | | | | | | |
| **CRS** | **Chara** | **1.34** | **251** | *e*P | | **Pg** | 19 32 12.4 | -0.9 |
| CRS | | | | Pm | | | 19 32 12.4 | |
| | comp=Z,27nm,0.2s | | | | | | | |
| CRS | | | | *e*S | | **Sg** | 19 32 29.5 | -1.1 |
| CRS | | | | Sm | | | 19 32 29.5 | |
| | comp=E,245nm,0.4s | | | | | | | |
| **CLNS** | **Chul'man** | **2.41** | **101** | *e*P | | **Pb** | 19 32 31.5 | +0.3 |
| CLNS | | | | Pm | | | 19 32 31.5 | |
| | comp=Z,4.0nm,0.1s | | | | | | | |
| CLNS | | | | *e*S | | **Sb** | 19 33 01.9 | +0.7 |
| CLNS | | | | Sm | | | 19 33 01.9 | |
| | comp=E,29nm,0.3s | | | | | | | |
| **IENR** | **Iengra** | **2.61** | **114** | *e*P | | **Pb** | 19 32 35.4 | +0.7 |
| IENR | | | | *e*S | | **Sb** | 19 33 08.6 | +1.6 |
| **NLYR** | **Nelyaty** | **2.81** | **254** | *e*Pn | | **Pn** | 19 32 34.2 | +1.2 |
| NLYR | | | | *e*Pg | | **Pb** | 19 32 38.4 | +0.3 |
| NLYR | | | | *e*Sg | | **Sb** | 19 33 13.8 | +1.0 |
| NLYR | | | | Pmax | | | | |
| | comp=E,36nm,0.3s | | | | | | | |
| NLYR | | | | Smax | | | | |
| | comp=E,149nm,0.7s | | | | | | | |
| **ALDR** | **Aldan** | **2.86** | **62** | *e*P | | **Pb** | 19 32 38.9 | 0.0 |
| ALDR | | | | Pm | | | 19 32 38.9 | |
| | comp=Z,7.0nm,0.1s | | | | | | | |
| ALDR | | | | *e*S | | **Sb** | 19 33 15.5 | +1.4 |
| ALDR | | | | Sm | | | 19 33 15.5 | |
| | comp=N,103nm,0.2s | | | | | | | |
| **TUP** | **Tupik** | **2.96** | **187** | *e*Pn | | **Pn** | 19 32 35.3 | +0.2 |
| TUP | | | | ⇑*i*Pg | | **Pb** | 19 32 39.9 | -0.7 |
| TUP | | | | *e*Sg | | **Sb** | 19 33 18.2 | +1.1 |
| TUP | | | | Pmax | | | | |
| | comp=N,43nm,0.5s | | | | | | | |
| TUP | | | | Smax | | | | |
| | comp=N,90nm,0.8s | | | | | | | |
| **TUP** | **Tupik** | **2.96** | **187** | *e*P | | **Pb** | 19 32 40.0 | -0.7 |
| TUP | | | | Pm | | | 19 32 40.0 | |
| | comp=Z,29nm,0.3s | | | | | | | |
| TUP | | | | *e*S | | **Sn** | 19 33 10.0 | -0.9 |
| TUP | | | | *e*S | | **Sb** | 19 33 18.5 | +1.4 |
| TUP | | | | Sm | | | 19 33 18.5 | |
| | comp=N,104nm,0.8s | | | | | | | |
| **OLMR** | **Olekminsk** | **3.03** | **359** | *e*P | | **Pb** | 19 32 41.8 | +0.1 |
| OLMR | | | | *e*S | | **Sb** | 19 33 19.5 | +0.6 |
| **TNDR** | **Tynda** | **3.20** | **132** | *e*P | | **Pb** | 19 32 45.2 | +0.5 |
| TNDR | | | | Pm | | | 19 32 45.2 | |
| | comp=Z,10.0nm,0.3s | | | | | | | |
| TNDR | | | | *e*S | | **Sb** | 19 33 26.0 | +2.1 |
| TNDR | | | | Sm | | | 19 33 26.0 | |
| | comp=N,30nm,0.1s | | | | | | | |
| **BOD** | **Bodaibo** | **3.57** | **280** | *e*Pn | | **Pn** | 19 32 44.0 | +0.6 |
| BOD | | | | *e*Pg | | **Pb** | 19 32 51.5 | +0.5 |
| BOD | | | | *e*Sg | | **Sb** | 19 33 36.5 | +1.9 |
| BOD | | | | Pmax | | | | |
| | comp=N,8.0nm,0.4s | | | | | | | |
| BOD | | | | Smax | | | | |
| | comp=N,35nm,1.0s | | | | | | | |
| **UKT** | **Uakit** | **4.29** | **247** | *e*Pg | | **Pb** | 19 33 05.3 | +1.9 |
| UKT | | | | *e*Sg | | **Sb** | 19 33 59.8 | +4.3 |
| UKT | | | | Pmax | | | | |
| | comp=N,4.0nm,0.5s | | | | | | | |
| UKT | | | | Smax | | | | |
| | comp=N,33nm,1.0s | | | | | | | |
| **BMKR** | **Bomnak** | **5.34** | **116** | *e*P | | Pb | 19 33 24.9 | +3.8 |
| BMKR | | | | *e*S | | Sb | 19 34 32.5 | +7.2 |
| BMKR | | | | Sm | | | 19 34 32.5 | |
| | comp=E,28nm,0.4s | | | | | | | |
| **CGD** | **Chagda** | **5.51** | **71** | *e*P | | **Pb** | 19 33 24.0 | 0.0 |
| CGD | | | | *e*S | | **Sb** | 19 34 35.3 | +5.1 |
| CGD | | | | Sm | | | 19 34 35.3 | |
| | comp=N,5.0nm,0.3s | | | | | | | |
| **YAK** | **Yakutsk** | **6.56** | **41** | *e*S | | **Sn** | 19 34 35.4 | -4.1 |
| YAK | | | | *e*S | | Sb | 19 35 08.5 | +7.9 |
| YAK | | | | Sm | | | 19 35 08.5 | |
| | comp=E,27nm,0.7s | | | | | | | |
| **NBS** | **Nizhniy Bestya** | **6.58** | **42** | *e*P | | **Pn** | 19 33 23.8 | -0.8 |
| NBS | | | | *e*P | | **Pb** | 19 33 45.1 | +3.0 |
| NBS | | | | *e*S | | Sn | 19 34 35.2 | -4.5 |
| NBS | | | | *e*S | | Sb | 19 35 08.8 | +8.0 |
| **USMR** | **Ust'-Maya** | **7.85** | **61** | *e*S | | Sb | 19 35 47.0 | +10 |

*CSEM **15** 19:49:58.1, 39°.55N×29°.62W, h10km, ML3.0, After PDA*
**PDA 15 19:49:58.1±1.1, 39°55N×29°62W, h10km, MD3.9, ML3.0, Error ellipse: s-maj=11.8km s-min=7.8km az=58.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PCED** | **Cedros** | **1.17** | **142** | *e*P | | Pb | 19 50 15.5 | -4.9 |
| PCED | | | | *e*S | | Sb | 19 50 28.8 | -6.8 |
| PCED | | | | A | | A | 19 50 31.2 | |
| | 91nm,0.3s | | | | | | | |
| **PCED** | **Cedros** | **1.17** | **142** | *e*P | | Pb | 19 50 15.5 | -4.9 |
| PCED | | | | *e*S | | Sb | 19 50 28.8 | -6.8 |
| **CALA** | **Caldeira** | **1.21** | **143** | *e*P | | Pn | 19 50 16.7 | -4.4 |
| CALA | | | | *e*S | | Sb | 19 50 29.8 | -7.0 |
| **CALA** | **Caldeira** | **1.21** | **143** | *e*P | | Pn | 19 50 16.7 | -4.4 |
| CALA | | | | *e*S | | Sb | 19 50 29.8 | -7.0 |
| **ROSA** | **Rosais** | **1.36** | **127** | *e*P | | Pn | 19 50 18.8 | -4.3 |
| ROSA | | | | *e*S | | Sb | 19 50 33.8 | -7.3 |
| ROSA | | | | A | | A | 19 50 39.9 | |
| | 38nm,0.4s | | | | | | | |
| **ROSA** | **Rosais** | **1.36** | **127** | *e*P | | Pn | 19 50 18.8 | -4.3 |
| ROSA | | | | *e*S | | Sb | 19 50 33.8 | -7.3 |
| **PGRA** | **Graciosa** | **1.38** | **112** | *e*S | | Sb | 19 50 33.9 | -7.7 |
| PGRA | | | | A | | A | 19 50 34.6 | |
| | 91nm,0.4s | | | | | | | |
| **PGRA** | **Graciosa** | **1.38** | **112** | *e*S | | Sb | 19 50 33.9 | -7.7 |
| **PCAN** | **Candelaria** | **1.40** | **140** | *e*P | | Pn | 19 50 18.8 | -5.0 |
| PCAN | | | | *e*S | | Sn | 19 50 35.0 | -7.3 |
| PCAN | | | | A | | A | 19 50 36.9 | |
| | 138nm,0.4s | | | | | | | |
| **PCAN** | **Candelaria** | **1.40** | **140** | *e*P | | Pn | 19 50 18.8 | -5.0 |
| PCAN | | | | *e*S | | Sn | 19 50 35.0 | -7.3 |
| **PICO** | **Pico** | **1.40** | **138** | *e*P | | Pn | 19 50 19.3 | -4.5 |
| PICO | | | | *e*S | | Sn | 19 50 35.2 | -7.3 |
| **PICO** | **Pico** | **1.40** | **138** | *e*P | | Pn | 19 50 19.3 | -4.5 |
| PICO | | | | *e*S | | Sn | 19 50 35.2 | -7.3 |
| **PPNO** | **Prainha do Nor** | **1.51** | **135** | *e*S | | Sn | 19 50 38.1 | -7.0 |
| PPNO | | | | A | | A | 19 50 42.5 | |
| | 46nm,0.3s | | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.51** | **135** | *e*S | | Sn | 19 50 38.1 | -7.0 |

*IDC **15** 20:05:08.0±2.4, 13°.72N×88°.82W, h0km, mb3.6/2, mb1 4.3/2, mb1mx3.6/20, mbtmp3.7/2, MS3.2/1, Ms1 3.2/1, ms1mx2.6/26, Error ellipse: s-maj=222.8km s-min=51.2km az=47.0*
*ISCJB **15** 20:05:15.8±0.6, 13°.16N±0°.05×90°.07W±0°.04, h58km, mb4.2/1, MS3.2/1, Error ellipse: s-maj=7.7km s-min=4.2km az=35.4.*
*CASC **15** 20:05:16.6±2.8, 13°.24N×90°.07W, h37km±999km, MD3.9, ML3.8*
**ISC 15 20:05:18.1±0.9, 13°29N±0°.06×90°02W±0°.05, h58km, n35, σ1s20/53, 2C-9D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SBLS** | **San Blas** | **0.68** | **35** | *e*P | | **Pn** | 20 05 30.8 | -1.3 |
| SBLS | | | | ⇓*i*P | | **Pn** | 20 05 30.9 | -1.3 |
| **SNJE** | **San Jose** | **0.71** | **35** | ⇓*i*P | | **Pn** | 20 05 31.2 | -1.4 |
| **RTR** | **El Retiro** | **0.71** | **31** | ⇓*i*P | | **Pn** | 20 05 31.4 | -1.2 |
| **

baz=347
**NSK Sanguang 0.87 257** *e*P **Pg 20 08 28.8 -0.6**
baz=254
NSK *e*S **Sb 20 08 41.6 +0.4**
baz=254
**NNS Nan Shan 0.94 243** *e*P **Pb 20 08 30.9 +0.1**
baz=239
NNS *e*S **Sb 20 08 43.4 +0.1**
baz=239
**WHF Hehuan Shan 1.18 232** *e*S **Sn 20 08 51.1 -0.4**
baz=229
**TWT Tachien 1.19 239** *e*P **Pb 20 08 34.9 -0.2**
baz=236
TWT *e*S **Sg 20 08 51.1 +0.2**
baz=236
**IRIF Iriomote-Funau 1.41 112** P **Pb 20 08 39.1 +0.3**
**SMLT Sun Moon Lake 1.61 232** *e*P **Pn 20 08 41.2 +0.4**
baz=230
**TYC Yuchr 1.63 234** *e*P **Pg 20 08 43.2 -0.5**
baz=231
**YUS Yu-Shan 1.84 222** *e*P **Pb 20 08 45.8 -0.7**
baz=220
YUS *e*S **Sb 20 09 09.6 -0.1**
baz=220
**ALS Alishan 1.92 225** *e*P **Pn 20 08 44.7 -0.5**
baz=223
**CHN5 Tsauling 1.95 230** *e*P **Pn 20 08 46.0 +0.5**
baz=227
CHN5 *e*S **Sn 20 09 10.1 +0.3**
baz=227

*CSEM* ***15*** *20:28:02.9, 39.60N×29.67W, h10km, ML2.6, After PDA*
**PDA 15 20:28:02.9±0.9, 39.60N×29.67W, h10km, MD3.6, ML2.6, Error ellipse: s-maj=23.4km s-min=8.2km az=55.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCED** | **Cedros** | **1.23** | **142** | *e*S | Sb | 20 28 35.0 | -7.1 |
| PCED | | | | A | A | 20 28 38.2 | |
| | 23nm,0.4s | | | | | | |
| **PCED** | **Cedros** | **1.23** | **142** | *e*S | Sb | 20 28 35.0 | -7.1 |
| **CALA** | **Caldeira** | **1.26** | **143** | *e*P | Pn | 20 28 21.6 | -5.1 |
| CALA | | | | *e*S | Sb | 20 28 36.7 | -6.6 |
| **CALA** | **Caldeira** | **1.26** | **143** | *e*P | Pn | 20 28 21.6 | -5.1 |
| CALA | | | | *e*S | Sb | 20 28 36.7 | -6.6 |
| **ROSA** | **Rosais** | **1.42** | **128** | *e*S | Sn | 20 28 39.8 | -7.7 |
| ROSA | | | | A | A | 20 28 45.8 | |
| | 16nm,0.4s | | | | | | |
| **ROSA** | **Rosais** | **1.42** | **128** | *e*S | Sn | 20 28 39.8 | -7.7 |
| **PCAN** | **Candelaria** | **1.46** | **140** | *e*P | Pn | 20 28 24.8 | -4.6 |
| PCAN | | | | *e*S | Sn | 20 28 41.1 | -7.5 |
| PCAN | | | | A | A | 20 28 42.9 | |
| | 46nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.46** | **140** | *e*P | Pn | 20 28 24.8 | -4.6 |
| PCAN | | | | *e*S | Sn | 20 28 41.1 | -7.5 |
| **PICO** | **Pico** | **1.46** | **138** | *e*P | Pn | 20 28 25.2 | -4.3 |
| PICO | | | | *e*S | Sn | 20 28 41.4 | -7.3 |
| **PICO** | **Pico** | **1.46** | **138** | *e*P | Pn | 20 28 25.2 | -4.3 |
| PICO | | | | *e*S | Sn | 20 28 41.4 | -7.3 |

*ISCJB* ***15*** *20:30:26.5±0.5, 31.84S±0.03×69.76W±0.04, h111km±6km, mb3.4/2, Error ellipse: s-maj=6.0km s-min=4.5km az=39.0*
*SJA* ***15*** *20:30:26.6±0.7, 31.87S×69.70W, h109km±5km, ML4.4, MW4.1*
*GUC* ***15*** *20:30:27.2±0.8, 31.86S×70.31W, h134km±15km, ML3.9*
*IDC* ***15*** *20:30:32.1±14.0, 32.05S×69.72W, h152km±116km, mb3.2/2, mb1 3.3/3, mb1mx3.2/22, mbtmp3.6/3, ML3.4/1, MS3.2/1, Ms1 3.2/1, ms1mx2.6/5, Error ellipse: s-maj=82.2km s-min=41.7km az=13.0*
**ISC 15 20:30:27.4±0.8, 31.86S±0.04×69.76W±0.04, h107km±7km, n25, σ0°78/39, 1C, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLS** | **Leoncito** | **0.40** | **82** | *e*P | **Pn** | **20 30 43.6** | **0.0** |
| **AUSP** | **Uspallata** | **0.48** | **139** | *e*P | **Pn** | **20 30 43.9** | **-0.3** |
| **RTCV** | **Cerro Valdivia** | **1.04** | **91** | *e*P | **Pn** | **20 30 48.7** | **-0.1** |
| RTCV | | | | *e*S | **Sn** | **20 31 04.4** | **-0.6** |
| **SJA** | **San Juan** | **1.08** | **72** | *e*P | **Pn** | **20 30 49.1** | **-0.1** |
| SJA | | | | ⇑*e*S | **Sn** | **20 31 05.5** | **-0.2** |
| **ARCO** | **CERRO ARCO** | **1.21** | **145** | *e*P | **Pn** | **20 30 50.8** | **0.0** |
| ARCO | | | | *e*S | **Sn** | **20 31 08.2** | **-0.3** |
| ARCO | | | | IAML | | 20 31 12.6 | |
| | comp=Z,958nm,0.3s | | | | | | |
| **RTLL** | **Cerro Villicun** | **1.22** | **65** | *e*P | **Pn** | **20 30 50.6** | **-0.1** |
| RTLL | | | | *e*S | **Sn** | **20 31 08.3** | **-0.2** |
| RTLL | | | | IAML | | 20 31 10.3 | |
| | comp=Z,1142μm,0.3s | | | | | | |
| **CFAA** | **Coronel Fontan** | **1.32** | **79** | *e*P | **Pn** | **20 30 51.9** | **-0.1** |
| CFAA | | | | *e*S | **Sn** | **20 31 10.2** | **-0.4** |
| CFAA | | | | IAML | | 20 31 11.6 | |
| | comp=Z,100nm,0.3s | | | | | | |
| **AAGR** | **Agrelo** | **1.46** | **147** | *e*P | **Pn** | **20 30 53.8** | **+0.2** |
| **PEL** | **Peldehue** | **1.50** | **211** | *e*P | **Pn** | **20 30 53.7** | **-0.4** |
| PEL | | | | *e*S | **Sn** | **20 31 14.4** | **0.0** |
| PEL | | | | AML | AML | 20 31 15.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| **ROCH** | **El Roble** | **1.53** | **223** | *e*P | **Pn** | **20 30 53.9** | **-0.8** |
| ROCH | | | | *e*S | **Sn** | **20 31 14.4** | **-0.9** |
| ROCH | | | | AML | AML | 20 31 17.5 | |
| | comp=N,1μm,1.2s | | | | | | |
| **RCDM** | **Rinconada Maip** | **1.85** | **208** | *e*P | **Pn** | **20 30 58.2** | **-0.1** |
| RCDM | | | | *e*S | **Sn** | **20 31 21.9** | **-0.1** |
| RCDM | | | | AML | AML | 20 31 22.9 | |
| | comp=E,2μm,0.6s | | | | | | |
| **ANTU** | **Antumapu** | **1.86** | **203** | *e*P | **Pn** | **20 30 58.8** | **+0.3** |
| ANTU | | | | *e*S | **Sn** | **20 31 22.6** | **+0.4** |
| ANTU | | | | AML | AML | 20 31 24.4 | |
| | comp=E,1μm,0.4s | | | | | | |
| **TLL** | **Tololo Astrono** | **1.91** | **332** | *e*P | **Pn** | **20 30 59.4** | **0.0** |
| TLL | | | | *e*S | **Sn** | **20 31 23.9** | **+0.3** |
| TLL | | | | AML | AML | 20 31 25.7 | |
| | comp=E,832nm,0.3s | | | | | | |
| **AVFE** | **Valle Fertil** | **2.31** | **59** | *e*P | **Pn** | **20 31 04.0** | **-0.4** |
| AVFE | | | | *e*S | **Sn** | **20 31 32.2** | **-0.4** |
| **AGUA** | **GUANDACOL** | **2.60** | **25** | *e*P | **Pn** | **20 31 08.8** | **+0.5** |
| **ACHE** | **Chepes** | **2.74** | **76** | *e*P | **Pn** | **20 31 09.5** | **-0.5** |
| ACHE | | | | *e*S | **Sn** | **20 31 42.0** | **-0.7** |
| **LCO** | **Las Campanas** | **2.95** | **344** | *e*P | **Pn** | **20 31 12.4** | **-0.5** |
| LCO | | | | *e*S | **Sn** | **20 31 46.6** | **-1.3** |
| LCO | | | | AML | AML | 20 31 49.2 | |
| | comp=E,400nm,0.4s | | | | | | |
| **VACH** | **Vallenar** | **3.38** | **345** | *e*P | **Pn** | **20 31 18.1** | **-0.4** |
| VACH | | | | *e*S | **Sn** | **20 31 56.9** | **-1.0** |
| **LPAZ** | **La Paz** | **15.57** | **6** | P | **P** | **20 34 06.9** | **+3.2** |
| | comp=E,0.1nm,0.3s,baz=190,slow=11,SNR=3.6 | | | | | | |
| **JTS** | **JuntasAbangare** | **44.36** | **338** | LR | LR | 20 54 37.5 | |
| | comp=E,25nm,18.9s,baz=5.5,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **68.86** | **329** | P | **P** | **20 41 21.4** | **+0.8** |
| | comp=E,0.3nm,0.7s,baz=154,slow=9.0,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **81.67** | **69** | P | **P** | **20 42 34.0** | **-0.2** |
| | comp=E,0.7nm,0.8s,baz=249,slow=5.2,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **123.55** | **207** | PKP | **PKPdf** | **20 49 11.6** | **-1.3** |
| | comp=E,0.2nm,0.3s,baz=157,slow=1.9,SNR=5.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **151.40** | **32** | PKPbc | **PKPbc** | **20 50 08.0** | **-0.1** |
| | comp=E,4.0nm,0.5s,baz=317,slow=3.1,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **153.91** | **47** | PKPbc | **PKPbc** | **20 50 13.2** | **-0.8** |
| | comp=E,0.2nm,0.3s,baz=338,slow=3.4,SNR=3.4 | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **20 50 26.8** | **-0.9** |
| | comp=E,0.4nm,0.7s,baz=306,slow=6.2,SNR=2.6 | | | | | | |

**IDC 15 20:39:36.0±2.1, 50.69N×29.95W, h0km, mb3.6/3, mb1 3.9/4, mb1mx3.4/50, mbtmp3.7/4, ML3.8/1, MS3.1/6, Ms1 3.1/6, ms1mx2.8/34, Error ellipse: s-maj=53.9km s-min=39.9km az=68.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EKA** | **Eskdalemuir Ar** | **16.73** | **64** | Pn | Pn | 20 43 30.1 | -1.4 |
| | baz=269,slow=9.9,SNR=3.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **21.26** | **111** | P | P | 20 44 24.2 | +0.5 |
| | 1.6nm,0.9s,baz=306,slow=9.4,SNR=5.5 | | | | | | |
| **JMIC** | **Jan Mayen** | **22.62** | **18** | LR | LR | 20 50 12.6 | |
| | comp=Z,40nm,20.1s,baz=90,slow=28 | | | | | | |
| **NOA** | **NORSAR Array B** | **24.89** | **50** | LR | LR | 20 53 17.8 | |
| | comp=Z,22nm,19.5s,baz=0.0,slow=33 | | | | | | |
| **GERES** | **GERESS Array B** | **27.96** | **77** | LR | LR | 20 55 42.0 | |
| | comp=Z,38nm,19.6s,baz=298,slow=35 | | | | | | |
| **FINES** | **FINESS Array B** | **32.06** | **49** | P | P | 20 46 04.4 | +0.3 |
| | 3.8nm,1.1s,baz=285,slow=7.5,SNR=3.6 | | | | | | |
| FINES | | | | PcP | PcP | 20 48 53.2 | -0.1 |
| | 2.9nm,0.9s,baz=270,slow=3.8,SNR=3.5 | | | | | | |
| **SADO** | **Sadowa** | **33.10** | **279** | LR | LR | 20 58 19.2 | |
| | comp=Z,32nm,18.2s,baz=310,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.60** | **66** | LR | LR | 21 01 58.0 | |
| | comp=Z,42nm,19.4s,baz=260,slow=37 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **45.42** | **134** | P | P | 20 47 56.0 | -0.4 |
| | 0.5nm,0.8s,baz=336,slow=8.1,SNR=3.8 | | | | | | |
| **KBZ** | **Khabaz** | **48.13** | **68** | LR | LR | 21 09 00.1 | |
| | comp=Z,28nm,18.8s,baz=340,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **150.25** | **31** | PKPbc | PKPbc | 20 59 28.4 | -0.5 |
| | 0.1nm,0.3s,baz=349,slow=1.9,SNR=2.6 | | | | | | |

*ISCJB* ***15*** *20:45:18.3±1.0, 17.7N±0.1×94.45W±0.06, h150km, mb3.6/2, Error ellipse: s-maj=19.4km s-min=7.1km az=15.7*
*IDC* ***15*** *20:45:19.8±1.5, 17.31N×94.58W, h163km±14km, mb3.4/2, mb1 3.8/3, mb1mx3.2/30, mbtmp4.0/3, Error ellipse: s-maj=97.3km s-min=20.7km az=45.0*
*MEX* ***15*** *20:45:22.3±0.7, 17.37N×94.62W, h139km±18km, MD4.0*
**ISC 15 20:45:19.3±1.0, 17.5N±0.1×94.53W±0.06, h150km, n11, σ1°86/14, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMIG** | **Matias Romero** | **0.53** | **220** | P | **Pn** | **20 45 42.9** | **+2.0** |
| | baz=64,slow=4.1 | | | | | | |
| CMIG | | | | S | **Sn** | **20 46 00.2** | **+2.9** |
| | 119nm,0.3s,baz=294,slow=19,SNR=114 | | | | | | |
| **TGIG** | | **1.53** | **118** | *i* P | **Pn** | **20 45 50.2** | **+0.9** |
| TGIG | | | | *i* S | **Sn** | **20 46 12.5** | **+0.3** |
| **OXX** | **Oaxaca** | **2.14** | **259** | *e*P | Pn | 20 46 00.3 | +4.0 |
| OXX | | | | *i* S | **Sn** | **20 46 26.7** | **+2.1** |
| **PCIG** | | **2.19** | **145** | *i* P | **Pn** | **20 45 57.4** | **+0.7** |
| **HUIG** | **Huatulco** | **2.29** | **221** | *e*P | **Pn** | **20 45 57.1** | **-0.9** |
| **TLIG** | **Tlapa** | **3.85** | **271** | *e*P | **Pn** | **20 46 18.7** | **+0.9** |
| **CAIG** | **El Cayaco** | **5.50** | **266** | *e*P | **Pn** | **20 46 39.1** | **-0.3** |
| **JTS** | **JuntasAbangare** | **11.74** | **126** | P | **Pn** | **20 48 01.0** | **-1.4** |
| | 1.3nm,0.3s,baz=306,slow=19,SNR=3.6 | | | | | | |
| JTS | | | | S | **Sn** | **20 50 15.1** | **+2.9** |
| | 0.7nm,0.3s,baz=248,slow=19,SNR=2.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **29.43** | **320** | P | **P** | **20 51 09.3** | **+0.1** |
| | 1.2nm,0.7s,baz=126,slow=9.2,SNR=8.2 | | | | | | |
| **LPAZ** | **La Paz** | **42.48** | **141** | P | **P** | **20 52 58.9** | **-1.7** |
| | 0.8nm,0.6s,baz=301,slow=5.9,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **133.78** | **259** | PKP | **PKPdf** | **21 04 17.1** | **-2.1** |
| | 0.4nm,0.7s,baz=79,slow=1.7,SNR=4.0 | | | | | | |

*ISCJB* ***15*** *21:00:51.3±0.6, 36.58N±0.04×4.78W±0.02, h67km±6km, Error ellipse: s-maj=6.2km s-min=2.7km az=175.2*
*MDD* ***15*** *21:00:51.4±0.5, 36.53N×4.78W, h64km±3km, mb2.9/30, Error ellipse: s-maj=4.3km s-min=2.2km az=174.0, PRXIMO*
*CSEM* ***15*** *21:00:52.6±0.2, 36.56N×4.76W, h51km±3km, mb2.9, Error ellipse: s-maj=4.4km s-min=1.9km az=174.0*
*INMG* ***15*** *21:00:53.9±1.6, 36.59N×4.77W, h31km±11km, ML1.7, Error ellipse: s-maj=4.5km s-min=3.8km az=180.0*
*SFS* ***15*** *21:00:53.0, 36.55N×4.72W, h0km, ML3.5*
**ISC 15 21:00:52.0±1.3, 36.52N±0.04×4.75W±0.02, h60km±7km, n106, σ0°98/176, 3C-1D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EMIJ** | **Mijas** | **0.05** | **339** | ⇓P | **Pn** | **21 01 00.7** | **-0.3** |
| | 4.7nm,0.2s,SNR=18 | | | | | | |
| EMIJ | | | | S | **Sn** | **21 01 06.6** | **-0.9** |
| | 28nm,0.1s,SNR=10 | | | | | | |
| **EMIJ** | **Mijas** | **0.05** | **339** | P | **Pn** | **21 01 00.7** | **-0.3** |
| | 4.7nm,0.2s,SNR=18 | | | | | | |
| EMIJ | | | | S | **Sn** | **21 01 06.6** | **-0.9** |
| | 28nm,0.1s,SNR=10 | | | | | | |
| **LIJA** | **Lijar** | **0.65** | **306** | P | Pn | 21 01 09.0 | +3.2 |
| LIJA | | | | *e*S | **Sn** | **21 01 19.0** | **+3.2** |
| **LIJA** | **Lijar** | **0.65** | **306** | *e*P | Pn | 21 01 09.0 | +3.2 |
| LIJA | | | | *e*S | **Sn** | **21 01 19.0** | **+3.2** |
| **ECEU** | **Ceuta** | **0.80** | **219** | S | **Sn** | **21 01 18.2** | **-0.7** |
| | 5.5nm,1.2s,SNR=7.9 | | | | | | |
| **ECEU** | **Ceuta** | **0.80** | **219** | S | **Sn** | **21 01 18.2** | **-0.7** |
| | 5.5nm,1.2s,SNR=7.9 | | | | | | |
| **ESPR** | **Espera** | **0.95** | **292** | P | **Pn** | **21 01 09.4** | **0.0** |
| | 0.1nm,0.2s,SNR=16 | | | | | | |
| ESPR | | | | S | **Sn** | **21 01 22.1** | **-0.2** |
| | 1.8nm,0.1s,SNR=5.0 | | | | | | |
| **ESPR** | **Espera** | **0.95** | **292** | P | **Pn** | **21 01 09.4** | **0.0** |
| | 0.1nm,0.2s,SNR=16 | | | | | | |
| ESPR | | | | S | **Sn** | **21 01 22.1** | **-0.2** |
| | 1.8nm,0.1s,SNR=5.0 | | | | | | |
| **EGUA** | **Guajares** | **1.00** | **71** | P | **Pn** | **21 01 09.6** | **-0.5** |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sn** | **21 01 22.9** | **-0.6** |
| | 11nm,0.2s,SNR=7.9 | | | | | | |
| **EGUA** | **Guajares** | **1.00** | **71** | P | **Pn** | **21 01 09.6** | **-0.5** |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sn** | **21 01 22.9** | **-0.6** |
| | 11nm,0.2s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **1.09** | **49** | P | **Pn** | **21 01 11.3** | **0.0** |
| | 1.3nm,0.2s,SNR=7.9 | | | | | | |
| SELV | | | | S | **Sn** | **21 01 26.0** | **+0.5** |
| | 1.0nm,0.3s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **1.09** | **49** | P | **Pn** | **21 01 11.3** | **0.0** |
| | 1.3nm,0.2s,SNR=7.9 | | | | | | |
| SELV | | | | S | **Sn** | **21 01 26.0** | **+0.5** |
| | 1.0nm,0.3s,SNR=7.9 | | | | | | |
| **ECOG** | **Cogollos-Vega** | **1.21** | **51** | S | **Sn** | **21 01 29.0** | **+0.4** |
| | 46nm,1.7s,SNR=7.9 | | | | | | |
| **ECOG** | **Cogollos-Vega** | **1.21** | **51** | S | **Sn** | **21 01 29.0** | **+0.4** |
| | 46nm,1.7s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **1.25** | **57** | P | **Pn** | **21 01 13.8** | **+0.3** |
| | 0.3nm,0.3s,SNR=5.1 | | | | | | |
| EQUE | | | | S | **Sn** | **21 01 30.8** | **+1.3** |
| | 1.2nm,0.2s,SNR=5.0 | | | | | | |
| **EQUE** | **Quentar** | **1.25** | **57** | P | **Pn** | **21 01 13.8** | **+0.3** |
| | 0.3nm,0.3s,SNR=5.1 | | | | | | |
| EQUE | | | | S | **Sn** | **21 01 30.8** | **+1.3** |
| | 1.2nm,0.2s,SNR=5.0 | | | | | | |
| **EBER** | **Berja** | **1.54** | **75** | P | **Pn** | **21 01 17.6** | **+0.2** |
| | 0.6nm,0.3s,SNR=7.9 | | | | | | |
| EBER | | | | S | **Sn** | **21 01 36.7** | **+0.1** |
| | 5.5nm,0.3s,SNR=7.9 | | | | | | |
| **EBER** | **Berja** | **1.54** | **75** | P | **Pn** | **21 01 17.6** | **+0.2** |
| | 0.6nm,0.3s,SNR=7.9 | | | | | | |
| EBER | | | | S | **Sn** | **21 01 36.7** | **+0.1** |
| | 5.5nm,0.3s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **1.64** | **341** | P | **Pn** | **21 01 19.0** | **+0.4** |
| | 0.0nm,0.0s,SNR=11 | | | | | | |
| ECAB | | | | S | **Sn** | **21 01 36.9** | **-1.8** |
| | 0.2nm,0.1s,SNR=15 | | | | | | |
| **ECAB** | **El Cabril** | **1.64** | **341** | P | **Pn** | **21 01 19.0** | **+0.4** |
| | SNR=11 | | | | | | |
| ECAB | | | | S | **Sn** | **21 01 36.9** | **-1.8** |
| | 0.2nm,0.1s,SNR=15 | | | | | | |
| **EADA** | **Adamuz** | **1.65** | **5** | P | **Pn** | **21 01 19.0** | **+0.2** |
| | 0.5nm,0.1s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **21 01 38.4** | **-0.6** |
| | 1.1nm,0.2s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **1.65** | **5** | P | **Pn** | **21 01 19.0** | **+0.2** |
| | 0.5nm,0.1s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **21 01 38.3** | **-0.6** |
| | 1.1nm,0.2s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **1.85** | **46** | P | **Pn** | **21 01 21.9** | **+0.3** |
| | 0.2nm,0.2s,SNR=8.2 | | | | | | |
| EQES | | | | S | **Sn** | **21 01 43.9** | **-0.1** |
| | 2.5nm,0.1s,SNR=5.0 | | | | | | |
| **EQES** | **Quesada** | **1.85** | **46** | P | **Pn** | **21 01 21.9** | **+0.3** |
| | 0.2nm,0.2s,SNR=8.2 | | | | | | |
| EQES | | | | S | **Sn** | **21 01 43.9** | **-0.1** |
| | 2.5nm,0.1s,SNR=5.0 | | | | | | |
| **EMIN** | **Mina Concepcio** | **1.98** | **310** | ⇑P | **Pn** | **21 01 23.8** | **+0.7** |
| | 1.8nm,0.2s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sn** | **21 01 45.8** | **-1.0** |
| | 1.6nm,0.1s,SNR=12 | | | | | | |
| **EMIN** | **Mina Concepcio** | **1.98** | **310** | P | **Pn** | **21 01 23.8** | **+0.7** |
| | 1.8nm,0.2s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sn** | **21 01 45.8** | **-1.0** |
| | 1.6nm,0.1s,SNR=12 | | | | | | |
| **EHUE** | **Huescar** | **2.15** | **53** | P | **Pn** | **21 01 25.4** | **-0.2** |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| EHUE | | | | S | **Sn** | **21 01 52.5** | **+1.2** |
| | 1.1nm,0.2s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **2.15** | **53** | P | **Pn** | **21 01 25.4** | **-0.2** |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| EHUE | | | | S | **Sn** | **21 01 52.5** | **+1.2** |
| | 1.1nm,0.2s,SNR=7.9 | | | | | | |

**SESP Santiago Espad 2.38 47** S **Sn 21 01 56.6 -0.2**
1.1nm,0.1s,SNR=7.9
**SESP Santiago Espad 2.38 47** S **Sn 21 01 56.6 -0.2**
1.1nm,0.1s,SNR=7.9
**EGRO El Granado 2.41 296** P **Pn 21 01 29.3 +0.3**
0.5nm,0.1s,SNR=7.9
EGRO S **Sn 21 01 56.5 -0.9**
1.5nm,0.2s,SNR=23
**EGRO El Granado 2.41 296** P **Pn 21 01 29.3 +0.3**
0.5nm,0.1s,SNR=7.9
EGRO S **Sn 21 01 56.5 -0.9**
1.5nm,0.2s,SNR=23
**PBAR Barrancos 2.46 313** *e*Pn **Pn 21 01 30.4 +0.7**
PBAR *e*Sn **Sn 21 01 57.2 -1.4**
PBAR A A 21 02 00.5
4.7nm,0.1s
**PBAR Barrancos 2.46 313** P **Pn 21 01 30.4 +0.7**
PBAR S **Sn 21 01 57.2 -1.4**
4.7nm,0.1s
**PBAR Barrancos 2.46 313** P **Pn 21 01 30.4 +0.7**
PBAR S **Sn 21 01 57.2 -1.4**
4.7nm,0.1s
**PVAQ Vaqueiros 2.53 291** *e*Pn **Pn 21 01 31.5 +0.8**
PVAQ *e*Sn **Sn 21 01 59.3 -1.1**
PVAQ A A 21 02 01.9
2.6nm,0.1s
**PVAQ Vaqueiros 2.53 291** P **Pn 21 01 31.5 +0.8**
PVAQ S **Sn 21 01 59.3 -1.1**
2.6nm,0.1s
**PVAQ Vaqueiros 2.53 291** P **Pn 21 01 31.5 +0.8**
PVAQ S **Sn 21 01 59.3 -1.1**
2.6nm,0.1s
**PBDV Barranco-do-Ve 2.65 287** *e*Pn **Pn 21 01 33.7 +1.4**
PBDV *e*Sn **Sn 21 02 02.7 -0.6**
PBDV A A 21 02 05.8
1.3nm,0.2s
**PBDV Barranco-do-Ve 2.65 287** P **Pn 21 01 33.7 +1.4**
PBDV S **Sn 21 02 02.7 -0.6**
1.3nm,0.2s
**PBDV Barranco-do-Ve 2.65 287** P **Pn 21 01 33.7 +1.4**
PBDV S **Sn 21 02 02.7 -0.6**
1.3nm,0.2s
**EVIA Vianos 2.77 40** P **Pn 21 01 34.3 +0.3**
0.5nm,0.1s,SNR=7.9
EVIA S **Sn 21 02 03.5 -2.8**
0.8nm,0.1s,SNR=7.9
**EVIA Vianos 2.77 40** P **Pn 21 01 34.3 +0.3**
0.5nm,0.1s,SNR=7.9
**PCVE Castro Verde 2.85 294** *e*Pn **Pn 21 01 36.1 +1.0**
PCVE *e*Sn **Sn 21 02 06.7 -1.5**
PCVE A A 21 02 09.4
0.9nm,0.2s
**PCVE Castro Verde 2.85 294** P **Pn 21 01 36.1 +1.0**
PCVE S **Sn 21 02 06.7 -1.5**
0.9nm,0.2s
**PCVE Castro Verde 2.85 294** P **Pn 21 01 36.1 +1.0**
PCVE S **Sn 21 02 06.7 -1.5**
0.9nm,0.2s
**EBAD Badajoz 2.86 322** ⇑P **Pn 21 01 35.4 +0.2**
1.3nm,0.1s,SNR=18
EBAD S **Sn 21 02 07.6 -0.9**
1.3nm,0.1s,SNR=8.9
**EBAD Badajoz 2.86 322** P **Pn 21 01 35.4 +0.2**
1.3nm,0.1s,SNR=18
EBAD S **Sn 21 02 07.6 -0.9**
1.3nm,0.1s,SNR=8.9
**MESJ Messejana 3.07 296** *e*Sn **Sn 21 02 12.1 -1.4**
MESJ A A 21 02 29.3
1.9nm,0.5s
**MESJ Messejana 3.07 296** S **Sn 21 02 12.1 -1.4**
1.9nm,0.5s
**MESJ Messejana 3.07 296** S **Sn 21 02 12.1 -1.4**
1.9nm,0.5s
**EMUR La Murta 3.10 64** P **Pn 21 01 38.5 +0.1**
0.9nm,1.2s,SNR=7.9
EMUR S **Sn 21 02 15.4 +1.1**
40nm,4.8s,SNR=7.9
**EMUR La Murta 3.10 64** P **Pn 21 01 38.5 +0.1**
0.9nm,1.2s,SNR=7.9
EMUR S **Sn 21 02 15.4 +1.1**
40nm,4.8s,SNR=7.9
**ESDC Sonseca Array 3.21 11** P **Pn 21 01 40.2 +0.2**
1.6nm,0.1s,baz=189,slow=12,SNR=4.3
ESDC S **Sn 21 02 16.7 -0.4**
0.4nm,0.1s,baz=161,slow=5.7,SNR=4.0
**ESDC Sonseca Array 3.21 11** P **Pn 21 01 40.2 +0.2**
1.6nm,0.1s,SNR=4.3
ESDC S **Sn 21 02 16.7 -0.4**
0.4nm,0.1s,SNR=4.0
**MORF Marmelete 3.22 285** *e*Sn **Sn 21 02 17.2 -0.1**
MORF A A 21 02 20.7
3.1nm,0.2s
**MORF Marmelete 3.22 285** S **Sn 21 02 17.2 -0.1**
3.1nm,0.2s
**MORF Marmelete 3.22 285** S **Sn 21 02 17.2 -0.1**
3.1nm,0.2s
**EVO Evora 3.28 309** *e*Pn **Pn 21 01 42.0 +1.1**
EVO *e*Sn **Sn 21 02 17.4 -1.3**
EVO A A 21 02 19.6
3.9nm,0.1s
**EVO Evora 3.28 309** P **Pn 21 01 42.0 +1.1**
EVO S **Sn 21 02 17.4 -1.3**
3.9nm,0.1s
**EVO Evora 3.28 309** P **Pn 21 01 42.0 +1.1**
EVO S **Sn 21 02 17.4 -1.3**
3.9nm,0.1s
**ETOB Tobarra 3.31 49** ⇑P **Pn 21 01 41.3 -0.1**
1.2nm,0.1s,SNR=18
ETOB S **Sn 21 02 15.8 -3.8**
0.4nm,0.1s
**ETOB Tobarra 3.31 49** P **Pn 21 01 41.3 -0.1**
1.2nm,0.1s,SNR=18
**PFVI Vila Bisbo 3.33 282** *e*Pn **Pn 21 01 43.2 +1.7**
PFVI *e*Sn **Sn 21 02 19.0 -0.8**
PFVI A A 21 02 23.0
1.5nm,0.2s
**PFVI Vila Bisbo 3.33 282** P **Pn 21 01 41.0 -0.6**
0.2nm,0.1s,SNR=7.9
PFVI S **Sn 21 02 19.7 -0.1**
2.7nm,0.2s,SNR=7.9
**PFVI Vila Bisbo 3.33 282** P **Pn 21 01 41.0 -0.6**
0.2nm,0.1s,SNR=7.9
**PFVI Vila Bisbo 3.33 282** *e*Pn **Pn 21 01 43.2 +1.7**
PFVI *e*Sn **Sn 21 02 19.0 -0.8**
1.5nm,0.2s
PFVI S **Sn 21 02 19.7 -0.1**
2.7nm,0.2s,SNR=7.9
**PNCL Nicolau / Gran 3.41 299** *e*Pn **Pn 21 01 43.6 +1.0**
PNCL *e*Sn **Sn 21 02 20.9 -0.8**
PNCL A A 21 02 23.0
0.8nm,0.1s
**PNCL Nicolau / Gran 3.41 299** *e*Pn **Pn 21 01 43.6 +1.0**
PNCL *e*Sn **Sn 21 02 20.9 -0.8**
0.8nm,0.1s
**PMRV Marv??o 3.58 325** *e*Pn **Pn 21 01 46.5 +1.5**
PMRV *e*Sn **Sn 21 02 24.5 -1.4**
PMRV A A 21 02 26.0
1.5nm,0.1s
**PMRV Marv??o 3.58 325** P **Pn 21 01 46.5 +1.5**
PMRV S **Sn 21 02 24.5 -1.4**
1.5nm,0.1s
**PMRV Marv??o 3.58 325** P **Pn 21 01 46.5 +1.5**
PMRV S **Sn 21 02 24.5 -1.4**
1.5nm,0.1s
**EPLA Plasencia 3.69 344** P **Pn 21 01 46.0 -0.5**
0.6nm,0.1s,SNR=7.1
EPLA S **Sn 21 02 27.7 -1.1**
1.6nm,0.6s
**EPLA Plasencia 3.69 344** P **Pn 21 01 46.0 -0.5**
0.6nm,0.1s,SNR=7.1
EPLA S **Sn 21 02 27.7 -1.1**
1.6nm,0.6s
**PMTG Montargil 3.75 314** *e*Pn **Pn 21 01 48.3 +1.0**
PMTG *e*Sn **Sn 21 02 28.4 -1.7**
PMTG A A 21 02 30.4
1.1nm,0.2s
**PMTG Montargil 3.75 314** *e*Pn **Pn 21 01 48.3 +1.0**
PMTG *e*Sn **Sn 21 02 28.4 -1.7**
1.1nm,0.2s
**GUD Guadarrama 4.14 6** P **Pn 21 01 52.5 -0.3**
1.4nm,0.2s,SNR=7.5
GUD S **Sn 21 02 41.1 +1.0**
0.8nm,0.3s,SNR=7.9
**GUD Guadarrama 4.14 6** P **Pn 21 01 52.5 -0.3**
1.4nm,0.2s,SNR=7.5
GUD S **Sn 21 02 41.1 +1.0**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 0.8nm,0.3s,SNR=7.9 | | | | | | | | |
| PMAFR | **Mafra** | **4.34** | **305** | S | **Sn** | | **21 02 45.0** | **+0.4** | |
| | 7.4nm,1.6s,SNR=7.9 | | | | | | | | |
| PMAFR | **Mafra** | **4.34** | **305** | S | **Sn** | | **21 02 45.0** | **+0.4** | |
| | 7.4nm,1.6s,SNR=7.9 | | | | | | | | |
| ETOR | **Torete** | **4.78** | **25** | P | **Pn** | | **21 02 01.6** | **0.0** | |
| | 4.5nm,0.2s,SNR=6.4 | | | | | | | | |
| ETOR | | | | S | **Sn** | | **21 02 54.2** | **-1.5** | |
| | 8.6nm,0.1s,SNR=5.7 | | | | | | | | |
| ETOR | **Torete** | **4.78** | **25** | P | **Pn** | | **21 02 01.6** | **0.0** | |
| | 4.5nm,0.2s,SNR=6.4 | | | | | | | | |
| ETOR | | | | S | **Sn** | | **21 02 54.2** | **-1.5** | |
| | 8.6nm,0.1s,SNR=5.7 | | | | | | | | |
| MVO | **Moncorvo** | **4.97** | **340** | P | **Pn** | | **21 02 04.1** | **+0.1** | |
| | 1.9nm,0.1s,SNR=8.2 | | | | | | | | |
| MVO | | | | S | **Sn** | | **21 03 00.5** | **+0.3** | |
| | 0.5nm,0.2s | | | | | | | | |
| MVO | **Moncorvo** | **4.97** | **340** | P | **Pn** | | **21 02 04.1** | **+0.1** | |
| | 1.9nm,0.1s,SNR=8.2 | | | | | | | | |
| MVO | | | | S | **Sn** | | **21 03 00.5** | **+0.3** | |
| | 0.5nm,0.2s | | | | | | | | |
| ECAL | **Calabor** | **5.63** | **345** | P | **Pn** | | **21 02 13.3** | **+0.2** | |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | | | |
| ECAL | | | | S | **Sn** | | **21 03 17.4** | **+1.0** | |
| | 24nm,3.8s,SNR=7.9 | | | | | | | | |
| ECAL | **Calabor** | **5.63** | **345** | P | **Pn** | | **21 02 13.3** | **+0.2** | |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | | | |
| ECAL | | | | S | **Sn** | | **21 03 17.4** | **+1.0** | |
| | 24nm,3.8s,SNR=7.9 | | | | | | | | |
| ELOB | **Lobios** | **5.93** | **335** | P | **Pn** | | **21 02 17.1** | **-0.1** | |
| | 1.3nm,1.8s,SNR=7.9 | | | | | | | | |
| ELOB | | | | S | **Sn** | | **21 03 24.8** | **+1.1** | |
| | 19nm,1.8s,SNR=7.9 | | | | | | | | |
| ELOB | **Lobios** | **5.93** | **335** | P | **Pn** | | **21 02 17.1** | **-0.1** | |
| | 1.3nm,1.8s,SNR=7.9 | | | | | | | | |
| ELOB | | | | S | **Sn** | | **21 03 24.8** | **+1.1** | |
| | 19nm,1.8s,SNR=7.9 | | | | | | | | |
| YBER | **Berdun** | **6.74** | **25** | P | **Pn** | | **21 02 28.4** | **+0.1** | |
| | 36nm,4.1s,SNR=7.9 | | | | | | | | |
| YBER | **Berdun** | **6.74** | **25** | P | **Pn** | | **21 02 28.4** | **+0.1** | |
| | 36nm,4.1s,SNR=7.9 | | | | | | | | |
| YSIG | **Sigues** | **6.76** | **24** | P | **Pn** | | **21 02 28.6** | **0.0** | |
| | 5.9nm,1.8s,SNR=7.9 | | | | | | | | |
| YSIG | **Sigues** | **6.76** | **24** | P | **Pn** | | **21 02 28.6** | **0.0** | |
| | 5.9nm,1.8s,SNR=7.9 | | | | | | | | |
| ELAN | **Lanestosa** | **6.78** | **8** | P | **Pn** | | **21 02 29.2** | **+0.4** | |
| | 1.3nm,4.7s,SNR=7.9 | | | | | | | | |
| ELAN | **Lanestosa** | **6.78** | **8** | P | **Pn** | | **21 02 29.2** | **+0.4** | |
| | 1.3nm,4.7s,SNR=7.9 | | | | | | | | |
| EARI | **Arriondas** | **6.78** | **357** | P | **Pn** | | **21 02 29.2** | **+0.3** | |
| | 0.8nm,1.8s,SNR=7.9 | | | | | | | | |
| EARI | **Arriondas** | **6.78** | **357** | P | **Pn** | | **21 02 29.2** | **+0.3** | |
| | 0.8nm,1.8s,SNR=7.9 | | | | | | | | |
| YASP | **Aspurt** | **6.79** | **23** | P | **Pn** | | **21 02 29.2** | **+0.2** | |
| | 49nm,3.6s,SNR=7.9 | | | | | | | | |
| YASP | **Aspurt** | **6.79** | **23** | P | **Pn** | | **21 02 29.2** | **+0.2** | |
| | 49nm,3.6s,SNR=7.9 | | | | | | | | |
| IEPA | **Eparoz** | **6.80** | **22** | P | **Pn** | | **21 02 29.6** | **+0.4** | |
| | 15nm,4.7s,SNR=7.9 | | | | | | | | |
| IEPA | **Eparoz** | **6.80** | **22** | P | **Pn** | | **21 02 29.6** | **+0.4** | |
| | 15nm,4.7s,SNR=7.9 | | | | | | | | |
| IELO | **Elcoad** | **6.87** | **22** | P | **Pn** | | **21 02 30.4** | **+0.3** | |
| | 0.5nm,0.6s,SNR=7.9 | | | | | | | | |
| IELO | **Elcoad** | **6.87** | **22** | P | **Pn** | | **21 02 30.4** | **+0.3** | |
| | 0.5nm,0.6s,SNR=7.9 | | | | | | | | |
| EALK | **Alkurruntz** | **7.14** | **19** | P | **Pn** | | **21 02 33.8** | **+0.1** | |
| | 3.2nm,2.3s,SNR=7.9 | | | | | | | | |
| EALK | **Alkurruntz** | **7.14** | **19** | P | **Pn** | | **21 02 33.8** | **+0.1** | |
| | 3.2nm,2.3s,SNR=7.9 | | | | | | | | |
| ATE | **Arette** | **7.26** | **24** | P | **Pn** | | **21 02 35.8** | **+0.4** | |
| | 0.2nm,1.2s,SNR=7.9 | | | | | | | | |
| ATE | **Arette** | **7.26** | **24** | P | **Pn** | | **21 02 35.8** | **+0.4** | |
| | 0.2nm,1.2s,SNR=7.9 | | | | | | | | |

**NNC 15 21:01:17.2±2.7, 36°88N×70°96E, h0km, mb3.7, mpv3.3, 5C-5D, Error ellipse: s-maj=22.3km s-min=10.2km az=175.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.56** | **319** | ⇑P | Pn | 21 01 60.0 | -0.2 |
| | 1.2nm,0.3s | | | | | | |
| DZET | | | | ⇓S | Sn | 21 02 33.9 | +1.8 |
| | 26nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.71** | **32** | ⇑P | Pn | 21 02 17.0 | +0.8 |
| | 2.2nm,0.3s | | | | | | |
| SFK | | | | ⇑S | Sn | 21 03 03.1 | +2.2 |
| | 8.6nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **5.73** | **12** | ⇓P | Pn | 21 02 43.1 | -0.7 |
| | 0.9nm,0.4s | | | | | | |
| MNAS | | | | ⇓S | Sn | 21 03 51.5 | +1.1 |
| **KK31** | **Karatay Array** | **6.23** | **357** | P | Pn | 21 02 50.0 | -0.4 |
| | 0.9nm,0.3s,baz=176,slow=12,SNR=64 | | | | | | |
| KK31 | | | | ⇑S | Sn | 21 04 00.4 | -2.0 |
| | 0.6nm,0.3s,baz=182,slow=20,SNR=4.3 | | | | | | |
| **AAK** | **Ala-Archa** | **6.36** | **24** | ⇓P | Pn | 21 02 51.4 | -1.1 |
| | 2.7nm,0.3s | | | | | | |
| AAK | | | | ⇑S | Sn | 21 04 06.9 | +0.9 |
| | 5.9nm,1.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.01** | **29** | ⇓P | Pn | 21 02 60.0 | -1.5 |
| | 2.3nm,0.5s | | | | | | |

**WEL 15 21:02:13.1±0.6, 39°70S×179°21E, h33km, ML3.4/20, 1C-3D, Error ellipse: s-maj=5.4km s-min=2.9km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MHGZ** | **Mahia Peninsul** | **1.15** | **298** | PN | Pn | 21 02 31.7 | -1.2 |
| **KNZ** | **Kokohu** | **1.37** | **299** | PN | Pn | 21 02 34.9 | -1.0 |
| **CNGZ** | **Carnagh Statio** | **1.45** | **327** | PN | Pn | 21 02 36.4 | -0.5 |
| **RIGZ** | **Rimuhau** | **1.50** | **311** | PN | Pn | 21 02 37.1 | -0.8 |
| **ARHZ** | **Aropaoanui** | **1.77** | **284** | PN | Pn | 21 02 41.2 | -0.2 |
| ARHZ | | | | SN | Sn | 21 03 02.2 | -0.7 |
| **PUZ** | **Puketiti** | **1.79** | **335** | PN | Pn | 21 02 40.7 | -1.1 |
| **TWGZ** | **Tauwhareparae** | **1.80** | **327** | PN | Pn | 21 02 41.5 | -0.4 |
| TWGZ | | | | SN | Sn | 21 03 01.5 | -2.2 |
| **KAHZ** | **Kahuranaki** | **1.80** | **266** | PN | Pn | 21 02 41.4 | -0.5 |
| **RAHZ** | **Arahi** | **1.83** | **295** | ⇓PN | Pn | 21 02 42.0 | -0.2 |
| RAHZ | | | | SN | Sn | 21 03 03.2 | -1.0 |
| **PXZ** | **Pawanui** | **1.84** | **259** | ⇑PN | Pn | 21 02 41.4 | -0.9 |
| PXZ | | | | SN | Sn | 21 03 02.1 | -2.4 |
| **RAGZ** | **Rawiri** | **1.85** | **310** | ⇓PN | Pn | 21 02 42.3 | -0.3 |
| **MWZ** | **Matawai** | **1.89** | **316** | PN | Pn | 21 02 42.6 | -0.6 |
| **NMHZ** | **Naumai** | **1.96** | **287** | PN | Pn | 21 02 44.1 | 0.0 |
| NMHZ | | | | SN | Sn | 21 03 06.9 | -0.7 |
| **WMGZ** | **Waiomatatini S** | **1.98** | **341** | PN | Pn | 21 02 44.1 | -0.2 |
| **BKZ** | **Black Stump Fm** | **2.17** | **283** | PN | Pn | 21 02 46.7 | -0.4 |
| BKZ | | | | SN | Sn | 21 03 11.0 | -1.9 |
| **URZ** | **Urewera** | **2.18** | **311** | PN | Pn | 21 02 46.7 | -0.3 |
| URZ | | | | SN | Sn | 21 03 11.1 | -1.8 |
| **HAZ** | **Te Kaha** | **2.24** | **330** | PN | Pn | 21 02 47.3 | -0.6 |
| **MXZ** | **Matakaoa Point** | **2.25** | **341** | PN | Pn | 21 02 47.9 | -0.1 |
| **PNHZ** | **Pukenui** | **2.33** | **264** | PN | Pn | 21 02 48.3 | -0.8 |
| **MRHZ** | **Matea Rd** | **2.34** | **291** | PN | Pn | 21 02 49.1 | -0.2 |
| **DVHZ** | **Dannevirke** | **2.42** | **255** | PN | Pn | 21 02 49.0 | -1.3 |
| **BHHZ** | **Black Hill Sta** | **2.44** | **274** | PN | Pn | 21 02 50.1 | -0.7 |
| **TSZ** | **Takapari Road** | **2.53** | **261** | PN | Pn | 21 02 50.8 | -1.1 |
| **TARZ** | **Mount Tarawera** | **2.57** | **304** | PN | Pn | 21 02 52.5 | -0.1 |
| **MOVZ** | **Moawhango** | **2.69** | **275** | PN | Pn | 21 02 54.1 | 0.0 |
| **TIWZ** | **Tintock** | **2.76** | **246** | AML | AML | 21 03 27.3 | |
| **TUVZ** | **Tukino** | **2.79** | **278** | PN | Pn | 21 02 56.0 | +0.4 |
| **WNVZ** | **Wahianoa** | **2.82** | **276** | PN | Pn | 21 02 56.3 | +0.2 |
| **KRVZ** | **Karewarewa** | **2.83** | **281** | PN | Pn | 21 02 56.2 | 0.0 |
| **WHVZ** | **Whangaehu Hut** | **2.83** | **277** | PN | Pn | 21 02 56.6 | +0.2 |
| **NGZ** | **Ngauruhoe** | **2.85** | **279** | ⇓PN | Pn | 21 02 56.6 | +0.2 |
| **MRZ** | **Mangatainoka R** | **2.94** | **250** | AML | AML | 21 03 29.6 | |
| **TRWZ** | **Traveller** | **3.18** | **237** | AML | AML | 21 03 38.4 | |
| **MTW** | **Mount Morrison** | **3.18** | **242** | AML | AML | 21 03 35.2 | |
| **PAWZ** | **Paruwai Farm** | **3.34** | **239** | AML | AML | 21 03 38.3 | |
| **CAW** | **Cannon Point** | **3.46** | **245** | AML | AML | 21 03 41.8 | |
| **KIW** | **Kapiti Island** | **3.49** | **249** | AML | AML | 21 03 41.9 | |
| **TCW** | **Tory Channel** | **4.06** | **247** | AML | AML | 21 03 55.3 | |

**IDC 15 21:08:18.5±3.3, 0°33N×28°95W, h0km, mb3.6/4, mb1 3.8/4, mb1mx3.5/26, mbtmp3.6/4, MS3.5/1, Ms1 3.5/1, ms1mx2.6/22, Error ellipse: s-maj=118.3km s-min=29.7km az=178.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N3** | **ASCENSION HYDR** | **16.54** | **120** | T | T | 21 29 16.1 | |
| | baz=300,slow=74,SNR=43 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **16.54** | **120** | T | T | 21 29 15.5 | |
| | baz=300,slow=74,SNR=41 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **16.56** | **120** | T | T | 21 29 15.5 | |
| | baz=300,slow=74,SNR=49 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **16.96** | **123** | T | T | 21 29 53.0 | |
| | baz=304,slow=74,SNR=35 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **16.96** | **123** | T | T | 21 29 49.7 | |
| | baz=304,slow=74,SNR=29 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **16.98** | **123** | T | T | 21 29 49.7 | |
| | baz=304,slow=74,SNR=21 | | | | | | |
| **DBIC** | **Dimbokro** | **24.85** | **75** | P | P | 21 13 43.3 | +0.4 |
| | 3.3nm,0.8s,baz=238,slow=14,SNR=6.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.93** | **66** | P | P | 21 14 54.5 | -0.5 |
| | 0.7nm,0.6s,baz=258,slow=9.4,SNR=5.2 | | | | | | |
| **CPUP** | **Villa Florida** | **38.09** | **224** | LR | LR | 21 31 15.1 | |
| | comp=Z,62nm,18.0s,baz=58,slow=36 | | | | | | |
| **GERES** | **CERESS Array B** | **60.65** | **31** | P | P | 21 18 31.5 | 0.0 |
| | 0.3nm,0.6s,baz=220,slow=5.9,SNR=3.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **76.53** | **300** | P | P | 21 20 11.2 | 0.0 |
| | 0.2nm,0.7s,baz=101,slow=5.5,SNR=3.2 | | | | | | |

*IDC* ***15*** *21:11:58.4±0.9, 11°61N×125°76E, h0km, mb4.1/11, mb1 4.2/11, mb1mx4.0/38, mbtmp4.1/11, MS3.4/3, Ms1 3.4/3, ms1mx2.9/25, Error ellipse: s-maj=59.8km s-min=16.9km az=66.0*

*ISCJB* ***15*** *21:12:01.7±0.6, 11°75N±0°04×125°93E±0°07, h33km, mb4.2/15, MS4.1/1, Error ellipse: s-maj=9.5km s-min=5.7km az=14.5*

*MAN* ***15*** *21:12:02, 11°75N×125°76E, h15km, mb4.8, ML3.7, MS3.7*

*NEIC* ***15*** *21:12:05.3±1.7, 11°57N×125°71E, h51km±14km, mb4.5/4, Error ellipse: s-maj=28.4km s-min=8.8km az=65.0*

**ISC 15 21:12:03.2±0.7, 11°58N±0°06×125°77E±0°08, h33km, n41, σ1§00/33, mb4.5/15, 1C-4D, Samar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLP** | **Palo** | **0.88** | **242** | ⇓*e*P | **Pn** | **21 12 19.0** | **-0.3** |
| PLP | | | | *i* S | **Sb** | **21 12 30.3** | **-1.3** |
| **OCLP** | **Ormoc** | **1.26** | **245** | *e*P | **Pb** | **21 12 27.0** | **+0.6** |
| **MSLP** | **Maasin** | **1.70** | **212** | *e*P | **Pb** | **21 12 34.5** | **+0.7** |
| MSLP | | | | *e*S | **Sb** | **21 12 54.2** | **-0.6** |
| **SCPH** | **Surigao** | **1.81** | **189** | ⇓*e*P | **Pb** | **21 12 35.6** | **-0.2** |
| **LLP** | **Lapu-Lapu** | **2.17** | **235** | ⇓*e*P | **Pb** | **21 12 39.8** | **-2.2** |
| LLP | | | | *e*S | **Sb** | **21 13 07.7** | **-0.8** |
| **PVCP** | **Virac** | **2.55** | **322** | ⇓*e*P | **Pn** | **21 12 41.8** | **-0.5** |
| PVCP | | | | *i* S | Sn | 21 13 04.5 | -7.7 |
| **BUTP** | **Butuan** | **2.60** | **183** | *e*P | Pb | 21 13 04.6 | +15 |
| **RCP** | **Roxas** | **2.97** | **270** | ⇑*e*P | **Pn** | **21 12 50.3** | **+2.2** |
| **GUIM** | **Jordan** | **3.27** | **253** | *e*P | **Pn** | **21 12 53.7** | **+1.5** |
| **SNPH** | **Sibulan** | **3.34** | **228** | *e*P | Pb | 21 12 57.3 | -4.6 |
| **AUQP** | **San Andres** | **3.48** | **300** | *e*P | Pn | 21 12 58.0 | +2.9 |
| **BUKP** | **Musuan** | **3.75** | **191** | *e*P | Pn | 21 13 02.1 | +3.3 |
| **OTRP** | **Odiongan** | **3.75** | **282** | *e*P | **Pn** | **21 12 60.0** | **+1.2** |
| **DAV** | **Davao City (W)** | **4.49** | **182** | LR | LR | 21 15 27.6 | |
| | comp=Z,398nm,19.0s,baz=326,slow=46 | | | | | | |
| **SJMP** | **San Jose** | **4.63** | **281** | *e*P | **Pn** | **21 13 13.0** | **+2.0** |
| **BUSP** | **Coron** | **5.47** | **275** | *e*P | **Pn** | **21 13 24.3** | **+1.8** |
| **SZP** | **Santa** | **7.85** | **320** | Pn | **Pn** | **21 13 56.4** | **+1.2** |
| **GUMO** | **Guam** | **18.74** | **82** | LR | LR | 21 22 05.6 | |
| | comp=Z,29nm,21.8s,baz=242,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.78** | **288** | P | **P** | **21 17 40.3** | **-0.1** |
| | 0.4nm,0.3s,baz=96,slow=8.8,SNR=4.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.44** | **165** | P | **P** | **21 18 30.7** | **+0.2** |
| | 0.4nm,0.7s,baz=346,slow=9.3,SNR=3.9 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 21 17.5** | **0.0** |
| | 0.6nm,0.6s,baz=341,slow=3.0,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **35.92** | **167** | P | **P** | **21 19 01.4** | **+0.6** |
| | 0.2nm,0.3s,baz=347,slow=7.0,SNR=5.3 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 21 27.9** | **+0.4** |
| | 0.5nm,0.5s,baz=341,slow=2.5,SNR=5.4 | | | | | | |
| **LSA** | **Lhasa** | **36.88** | **305** | *e*P | **P** | **21 19 09.3** | **-0.1** |
| | 1.4nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **39.62** | **339** | P | **P** | **21 19 32.1** | **+0.3** |
| | 0.7nm,0.5s,baz=157,slow=9.5,SNR=11 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.04** | **75** | T | T | 22 02 48.9 | |
| | baz=280 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.05** | **75** | T | T | 22 02 44.3 | |
| | baz=280 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.05** | **75** | T | T | 22 02 45.9 | |
| | baz=280 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.33** | **73** | T | T | 22 03 02.0 | |
| | baz=265,slow=75,SNR=43 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.33** | **73** | T | T | 22 03 02.5 | |
| | baz=265,slow=75,SNR=31 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.34** | **73** | T | T | 22 03 03.3 | |
| | baz=265,slow=75,SNR=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.69** | **322** | P | **P** | **21 21 00.3** | **+0.7** |
| | 5.2nm,0.7s,baz=120,slow=8.3,SNR=46 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.25** | **331** | P | **P** | **21 21 18.3** | **-0.2** |
| | 0.4nm,0.3s,baz=101,slow=7.9,SNR=3.5 | | | | | | |
| **EKS2** | **Erkin-Say** | **54.57** | **314** | *e*P | **P** | **21 21 28.9** | **+0.4** |
| | 2.2nm,0.4s | | | | | | |
| **KURK** | **Kurchatov** | **54.72** | **325** | P | **P** | **21 21 29.8** | **+0.5** |
| **KURBB** | **Kurchatov Arra** | **54.72** | **325** | P | **P** | **21 21 29.8** | **+0.4** |
| | 11nm,0.8s,baz=126,slow=7.1,SNR=57 | | | | | | |
| **BRVK** | **Borovoye** | **60.39** | **325** | *e*P | **P** | **21 22 08.9** | **-0.2** |
| | 2.3nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **65.57** | **319** | *e*P | **P** | **21 22 43.4** | **-0.3** |
| | 3.6nm,0.8s | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.80** | **340** | P | **P** | **21 24 23.8** | **0.0** |
| | 5.0nm,0.8s,baz=64,slow=6.2,SNR=6.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **84.33** | **309** | P | **P** | **21 24 31.6** | **-0.8** |
| | 0.9nm,0.8s,baz=131,slow=3.6,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **84.51** | **332** | P | **P** | **21 24 32.8** | **+0.2** |
| | 3.0nm,0.6s,baz=93,slow=5.0,SNR=22 | | | | | | |
| **AKASG** | **Malin Array Be** | **85.24** | **321** | P | **P** | **21 24 35.5** | **-1.1** |
| | 2.7nm,0.8s,baz=66,slow=5.2,SNR=6.2 | | | | | | |
| **PPT** | **Papeete** | **88.44** | **108** | LR | LR | 21 57 07.9 | |
| | comp=Z,73nm,21.3s,baz=357,slow=31 | | | | | | |

*NIED* ***15*** *21:14:00, 40°20N×142°50E, h44km, Mw4.6 Best double couple: M0 8.37000×10^15 NP1:φs183.00000°, δ13.00000°, λ71.00000°. NP2:φs22.00000°, δ77.00000°, λ94.00000°.*

*MOS* ***15*** *21:14:22.5±0.9, 40°09N×142°29E, h26km, mb4.9/40, Error ellipse: s-maj=8.1km s-min=4.9km az=101.1*

*BJI* ***15*** *21:14:26.1, 39°97N×142°63E, h57km, mb4.8/60, mB4.8/41, Ms4.2/38, Ms7 4.0/35*

*ISCJB* ***15*** *21:14:27.3±0.4, 40°18N±0°03×142°36E±0°04, h50km±3km, mb4.7/96, MS4.0/16, Error ellipse: s-maj=5.6km s-min=3.6km az=33.1*

*IDC* ***15*** *21:14:27.6±0.7, 40°09N×142°39E, h42km±6km, mb4.3/23, mb1 4.4/26, mb1mx4.4/34, mbtmp4.5/26, ML4.0/3, MS3.8/18, Ms1 3.8/18, ms1mx3.7/25, Error ellipse: s-maj=14.7km s-min=11.6km az=112.0*

*JMA* ***15*** *21:14:27.1±0.1, 40°16N×142°43E, h36km±1km, M4.6 Broadband fault plane solution: P waves. NP1: φs208.00000°, δ50.00000°, λ86.00000°. NP2:φs34.00000°, δ40.00000°, λ95.00000°. Principal axes: T Plg84.0000°, Azm90.0000°; N Plg3.0000°, Azm211.0000°; P Plg5.0000°, Azm301.0000°;*

*JMA Felt II J1.*

*NEIC* ***15*** *21:14:28.7±0.5, 40°19N×142°27E, h48km±4km, mb4.7/42, MW4.5(NIED) Error ellipse: s-maj=6.1km s-min=4.1km az=130.0*

*NEIC Recorded [2 JMA] in Aomori and Iwate and [1 JMA] in Miyagi.*

**ISC 15 21:14:28.4±0.5, 40°18N±0°04×142°41E±0°04, h47km±3km, h47km:pP-P,n319, σ1§31/339, mb4.7/98, MS3.9/17, 23C-26D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JTH** | **Tanohata** | **0.48** | **240** | ⇓P | **Pn** | **21 14 37.5** | **-1.8** |
| JTH | | | | *e*S | **Sn** | **21 14 45.1** | **-2.0** |
| **JANG** | **Nango** | **0.71** | **286** | ⇓P | **Pn** | **21 14 40.7** | **-1.5** |
| JANG | | | | S | **Sn** | **21 14 50.2** | **-2.0** |
| **MIYJ** | **Miyakonagasawa** | **0.76** | **217** | ⇑P | **Pn** | **21 14 40.9** | **-1.9** |
| MIYJ | | | | *e*S | **Sn** | **21 14 51.0** | **-2.2** |
| **JKZ** | **Kuzumaki** | **0.85** | **257** | ⇓P | **Pn** | **21 14 43.0** | **-1.1** |
| JKZ | | | | S | **Sn** | **21 14 54.7** | **-0.9** |
| **JOM** | **Ohasama** | **1.11** | **231** | ⇓P | **Pn** | **21 14 46.8** | **-0.8** |
| JOM | | | | *e*S | **Sn** | **21 15 01.4** | **-0.5** |
| **JTM** | **Tenmabayashi** | **1.19** | **301** | ⇓P | **Pn** | **21 14 48.2** | **-0.4** |
| **JAH** | **Hinai** | **1.36** | **271** | ⇓P | **Pn** | **21 14 50.7** | **-0.2** |
| JAH | | | | *e*S | **Sn** | **21 15 08.5** | **+0.7** |
| **JMK** | **Ichinoseki** | **1.54** | **217** | P | **Pn** | **21 14 52.7** | **-0.7** |
| JMK | | | | *e*S | **Sn** | **21 15 12.7** | **+0.6** |
| **JRG** | **Rokugo** | **1.58** | **241** | P | **Pn** | **21 14 53.5** | **-0.4** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ERM** | **Erimo** | **1.92** | **17** | *c*eP | **Pn** | | **21 14 59.0** | **+0.5** | |
| ERM | | | | pmax | pmax | | | | |
| | comp=Z,183nm,1.2s | | | | | | | | |
| **ERM** | **Erimo** | **1.92** | **17** | *e*Pn | **Pn** | | **21 14 59.0** | **+0.5** | |
| **ASAJ** | **Asahikawa** | **3.93** | **2** | P | **Pn** | | **21 15 27.2** | **+1.0** | |
| | comp=Z,12nm,0.3s,baz=202,slow=11,SNR=38 | | | | | | | | |
| ASAJ | | | | S | **Sn** | | **21 16 13.0** | **+1.9** | |
| | comp=Z,9.0nm,0.3s,baz=128,slow=26,SNR=4.6 | | | | | | | | |
| ASAJ | | | | LR | LR | | 21 17 25.8 | | |
| | comp=Z,1μm,21.6s,baz=166,slow=44 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **3.93** | **2** | P | **Pn** | | **21 15 27.2** | **+1.0** | |
| ASAJ | | | | S | **Sn** | | **21 16 13.0** | **+1.9** | |
| ASAJ | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.3s | | | | | | | | |
| ASAJ | | | | smax | smax | | | | |
| | comp=N,9.0nm,0.3s | | | | | | | | |
| ASAJ | | | | MLR | MLR | | | | |
| | comp=Z,1μm,21.6s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **4.63** | **33** | *d*iP | **Pn** | | **21 15 35.6** | **-0.1** | |
| YUK | | | | *i* S | **Sn** | | **21 16 26.4** | **-1.7** | |
| YUK | | | | pmax | pmax | | | | |
| | comp=Z,289nm,2.1s | | | | | | | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=N,77nm,0.3s | | | | | | | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=E,145nm,0.3s | | | | | | | | |
| YUK | | | | pmax | pmax | | | | |
| | comp=Z,217nm,0.3s | | | | | | | | |
| YUK | | | | smax | smax | | | | |
| | comp=N,1μm,0.3s | | | | | | | | |
| YUK | | | | smax | smax | | | | |
| | comp=E,292nm,0.3s | | | | | | | | |
| YUK | | | | smax | smax | | | | |
| | comp=N,2μm,2.0s | | | | | | | | |
| YUK | | | | smax | smax | | | | |
| | comp=E,905nm,2.0s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.91** | **224** | P | **Pn** | | **21 15 41.5** | **+1.8** | |
| | comp=E,12nm,0.3s,baz=32,slow=14,SNR=264 | | | | | | | | |
| MJAR | | | | S | Sn | | 21 16 45.3 | +10 | |
| | baz=19,slow=25,SNR=2.1 | | | | | | | | |
| MJAR | | | | LR | LR | | 21 17 49.6 | | |
| | comp=E,782nm,20.7s,baz=35,slow=42 | | | | | | | | |
| **MAJO** | **Matsushiro** | **4.91** | **224** | *c*iP | **Pn** | | **21 15 41.7** | **+2.0** | |
| MAJO | | | | pmax | pmax | | | | |
| | comp=Z,975nm,0.7s | | | | | | | | |
| **MAJO** | **Matsushiro** | **4.91** | **224** | *e*Pn | **Pn** | | **21 15 41.4** | **+1.7** | |
| **MAT** | **Matsushiro** | **4.91** | **224** | P | **Pn** | | **21 15 41.7** | **+2.0** | |
| MAT | | | | S | **Sn** | | **21 16 39.2** | **+4.0** | |
| **SHO** | **Shikotan** | **4.94** | **40** | *d*iP | **Pn** | | **21 15 37.8** | **-2.2** | |
| SHO | | | | *i* S | **Sn** | | **21 16 30.2** | **-5.6** | |
| **KUR** | **Kuril'sk** | **6.45** | **37** | *e*P | **Pn** | | **21 16 01.2** | **+0.5** | |
| KUR | | | | *i* S | **Sn** | | **21 17 09.7** | **-3.3** | |
| KUR | | | | pmax | pmax | | | | |
| | comp=Z,84nm,0.4s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=E,49nm,0.3s | | | | | | | | |
| KUR | | | | pmax | pmax | | | | |
| | comp=N,54nm,0.2s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=N,150nm,0.6s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=E,56nm,0.6s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=N,585nm,3.5s | | | | | | | | |
| KUR | | | | smax | smax | | | | |
| | comp=E,208nm,1.9s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **6.77** | **2** | ⇓*e*P | **Pn** | | **21 16 05.8** | **+0.7** | |
| YSS | | | | *e* | | | 21 17 23.0 | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=N,80nm,1.0s | | | | | | | | |
| YSS | | | | pmax | pmax | | | | |
| | comp=Z,60nm,1.0s | | | | | | | | |
| YSS | | | | MLR | MLR | | | | |
| | comp=Z,500nm,16.0s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **6.77** | **2** | *e*Pn | **Pn** | | **21 16 05.9** | **+0.8** | |
| **JHJ** | **Hachijo jima 2** | **7.36** | **197** | P | **Pn** | | **21 16 12.0** | **-1.2** | |
| | comp=Z,22nm,0.3s,baz=82,slow=23,SNR=10 | | | | | | | | |
| JHJ | | | | S | Sn | | 21 17 28.3 | -7.2 | |
| | comp=Z,13nm,0.3s,baz=315,slow=19,SNR=2.9 | | | | | | | | |
| **JHJ2** | **Mitsune** | **7.36** | **197** | *e*Pn | **Pn** | | **21 16 12.3** | **-1.0** | |
| **USRK** | **Ussuriysk Ar.** | **8.71** | **301** | P | **Pn** | | **21 16 34.8** | **+3.1** | |
| | comp=Z,1.8nm,0.3s,baz=104,slow=16,SNR=37 | | | | | | | | |
| USRK | | | | LR | LR | | 21 19 49.6 | | |
| | comp=Z,710nm,18.5s,baz=73,slow=37 | | | | | | | | |
| **HABR** | **Khabarovsk** | **9.82** | **330** | *e*P | **Pn** | | **21 16 45.5** | **-1.3** | |
| HABR | | | | *e*S | **Sn** | | **21 18 33.6** | **-1.9** | |
| HABR | | | | pmax | pmax | | | | |
| | comp=E,28nm,1.6s | | | | | | | | |
| HABR | | | | pmax | pmax | | | | |
| | comp=Z,26nm,1.6s | | | | | | | | |
| HABR | | | | pmax | pmax | | | | |
| | comp=N,7.0nm,0.8s | | | | | | | | |
| HABR | | | | MLR | MLR | | | | |
| | comp=Z,491nm,15.0s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **10.46** | **299** | P | Pn | | 21 16 59.6 | +3.9 | |
| MDJ | | | | S | Sn | | 21 19 02.6 | +11 | |
| MDJ | | | | ScP | ScP | | 21 26 17.6 | -8.6 | |
| MDJ | | | | PMZ | | | | | |
| | com

NJ2 PMZ
comp=N,20nm,0.5s
**YAK Yakutsk 23.20 345** P **P** **21 19 27.7 -3.1**
comp=N,5.7nm,0.3s,baz=129,slow=6.5,SNR=8.6
**YAK Yakutsk 23.20 345** *eP* **P** **21 19 28.8 -2.0**
YAK pmax pmax
comp=Z,45nm,0.9s
YAK pmax pmax
comp=E,4.0nm,0.7s
YAK pmax pmax
comp=N,17nm,0.9s
**YAK Yakutsk 23.20 345** *eP* **P** **21 19 28.4 -2.4**
comp=N,50nm,0.7s
**HHC Hu-ho-hao-te 23.40 282** *eP* **P** **21 19 30.4 -2.7**
HHC PMZ
comp=N,21nm,1.0s
HHC PMZ
comp=N,110nm,7.4s
HHC LN
comp=N,94nm,9.2s
HHC LE
comp=N,230nm,11.6s
HHC LZ
comp=N,320nm,16.9s
**SEY Seymchan 23.55 11** P **P** **21 19 33.2 -0.9**
comp=N,13nm,0.7s,baz=177,slow=23,SNR=19
**SEY Seymchan 23.55 11⇑** *eP* **P** **21 19 34.5 +0.3**
**WHN Wuhan 24.73 256⇓** *iP* **P** **21 19 44.6 -0.7**
WHN PMZ
comp=N,38nm,0.8s
WHN LZ
comp=N,620nm,15.4s
**BOD Bodaibo 25.37 324** *eP* **P** **21 19 50.0 -0.8**
BOD pmax pmax
comp=Z,25nm,0.9s
**ULN Ulaanbaatar 26.38 299** *ceP* **P** **21 19 59.8 -0.5**
ULN pmax pmax
comp=Z,4.0nm,0.6s
**ULN Ulaanbaatar 26.38 299** *eP* **P** **21 19 59.6 -0.6**
comp=Z,4.7nm,0.7s
**SONM Songino Array 26.82 299** P **P** **21 20 03.7 -0.5**
comp=Z,5.7nm,0.6s,baz=103,slow=8.7,SNR=34
**XAN Xi'an 27.29 268** P **P** **21 20 06.8 -1.7**
XAN PMZ
comp=Z,6.0nm,0.8s
XAN LE
comp=Z,170nm,13.2s
XAN LZ
comp=Z,170nm,14.3s
**ENH Enshi 28.51 260** *eP* **P** **21 20 18.5 -0.9**
comp=Z,10nm,0.8s
**ZAK Zakamensk 29.05 304** *eP* **P** **21 20 23.8 -0.3**
ZAK pmax pmax
comp=Z,10.0nm,1.4s
**H11N2 WAKE ISLAND Hy 29.25 127** T T 21 51 25.8
baz=319,slow=75,SNR=2059
**H11N1 WAKE ISLAND Hy 29.26 127** T T 21 51 21.0
baz=319,slow=75,SNR=833
**H11N3 WAKE ISLAND Hy 29.27 127** T T 21 51 09.1
baz=319,slow=75,SNR=862
**H11S1 WAKE ISLAND Hy 30.07 129** T T 21 52 17.0
baz=321,slow=76,SNR=296
**H11S3 WAKE ISLAND Hy 30.07 129** T T 21 52 21.6
baz=321,slow=76,SNR=144
**H11S2 WAKE ISLAND Hy 30.09 129** T T 21 52 24.5
baz=321,slow=76,SNR=159
**LZH Lanzhou 30.45 275** *eP* **P** **21 20 35.1 -1.5**
LZH PMZ
comp=Z,23nm,1.2s
LZH PMZ
comp=Z,76nm,4.3s
LZH LN
comp=Z,270nm,13.3s
LZH LE
comp=Z,280nm,14.0s
LZH LZ
comp=Z,370nm,14.5s
**MOY Mondy 30.61 306** *eP* **P** **21 20 37.8 -0.1**
**BILL Bilibino 30.79 17⇑** *eP* **P** **21 20 40.3 +1.2**
BILL *e* 21 21 43.1
BILL *eSS* SS 21 27 30.1 -21
BILL pmax pmax
comp=Z,11nm,1.1s
BILL MLR MLR
comp=Z,124nm,19.0s
**GTA Gaotai 32.51 283** *eP* **P** **21 20 54.6 -0.1**
GTA PcP **PcP** **21 23 41.8 +1.2**
GTA PMZ
comp=Z,5.0nm,1.1s
GTA PMZ
comp=Z,70nm,5.7s
GTA LN
comp=Z,180nm,19.0s
GTA LE
comp=Z,300nm,19.0s
GTA LZ
comp=Z,380nm,18.5s
**CD2 Chengdu 32.57 266** *eP* **P** **21 20 52.8 -2.4**
CD2 PP **PP** **21 22 07.3 -2.0**
CD2 SS SS 21 28 09.8 -19
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**GYA Guiyang 32.62 256** P **P** **21 20 55.0 -0.8**
GYA PP **PnPn** **21 22 05.4 +0.7**
GYA PcP **PcP** **21 23 44.0 +2.9**
GYA PMZ
comp=Z,10.0nm,0.8s
**QIZ Qiongzhong 35.00 243** P **P** **21 21 16.3 -0.1**
QIZ PMZ
comp=Z,38nm,1.5s
**KMI Kunming 36.30 258** P **P** **21 21 27.3 -0.4**
KMI PMZ
comp=Z,21nm,0.9s
KMI PMZ
comp=Z,110nm,4.4s
KMI LN
comp=Z,240nm,17.8s
KMI LE
comp=Z,190nm,20.3s
KMI LZ
comp=Z,220nm,17.5s
**SLVN Son La 37.68 252** *eP* **P** **21 21 39.5 +0.1**
comp=Z,11nm,0.9s
**WMQ Urumqi 40.20 294** P **P** **21 22 00.0 -0.2**
WMQ PP **PnPn** **21 23 43.0 +6.0**
WMQ PMZ
comp=Z,16nm,1.2s
WMQ PMZ
comp=Z,22nm,4.0s
WMQ LN
comp=Z,82nm,15.0s
WMQ LE
comp=Z,52nm,15.0s
WMQ LZ
comp=Z,87nm,15.0s
**ZAA0 Zalesovo Array 40.44 310** *eP* **P** **21 22 01.4 -0.5**
**ZALV Zalesovo Beam 40.44 310** P **P** **21 22 01.6 -0.2**
comp=Z,6.4nm,0.5s,baz=91,slow=7.4,SNR=29
ZALV PcP **PcP** **21 24 03.9 -0.1**
comp=Z,2.6nm,0.5s,baz=92,slow=2.9,SNR=4.7
ZALV LR LR 21 39 37.3
comp=Z,228nm,19.0s,baz=68,slow=37
**MYLDM Lahad Datu 40.96 218** *eP* **P** **21 22 08.1 +1.5**
comp=Z,21nm,1.0s
**NVS Novosibirsk 41.29 311** *eP* **P** **21 22 08.5 -0.4**
NVS pmax pmax
comp=E,7.0nm,0.9s
NVS pmax pmax
comp=Z,9.0nm,0.9s
**TNTI Ternate 41.55 203** *eP* **P** **21 22 12.0 +0.6**
**LSA Lhasa 42.78 272** P **P** **21 22 22.8 +0.9**
LSA PMZ
comp=Z,8.0nm,0.9s
**LSA Lhasa 42.78 272** *eP* **P** **21 22 22.2 +0.3**
LSA pmax pmax
comp=Z,7.0nm,0.7s
**LSA Lhasa 42.78 272** *eP* **P** **21 22 22.2 +0.3**
comp=Z,7.5nm,0.7s
**CHTO Chiang Mai 42.88 253** *eP* **P** **21 22 21.8 -0.5**
CHTO pmax pmax
comp=Z,13nm,1.0s
**CHTO Chiang Mai 42.88 253** *eP* **P** **21 22 21.8 -0.5**
comp=Z,13nm,1.0s
**CMAR Chiang Mai Arr 43.11 253** P **P** **21 22 23.7 -0.4**
comp=Z,2.4nm,0.8s,baz=50,slow=6.3,SNR=17
**CMAR Chiang Mai Arr 43.11 253** *iP* **P** **21 22 24.7 +0.6**
CMAR pmax pmax
comp=Z,4.0nm,0.9s
**CM01 Chiang Mai Arr 43.12 253** *eP* **P** **21 22 23.4 -0.8**
**MK01 Makanchi Array 43.18 299** *eP* **P** **21 22 23.1 -1.3**
**MKAR Makanchi Array 43.18 299** P **P** **21 22 24.5 +0.1**
comp=Z,6.1nm,0.6s,baz=85,slow=9.7,SNR=24
MKAR LR LR 21 41 13.3
comp=Z,176nm,19.9s,baz=81,slow=37
**MKAR Makanchi Array 43.18 299** *iP* P 21 22 33.9 +9.5
MKAR pmax pmax
comp=Z,5.0nm,0.7s
**MAKZ Makanchi 43.38 300** *eP* **P** **21 22 25.8 -0.3**
**MRSI Marisa 43.70 210** P **P** **21 22 29.8 +1.0**
comp=Z,31nm,1.1s
**FAKI Fak Fak 43.90 195** P **P** **21 22 31.5 +1.1**
comp=Z,16nm,1.0s
**FAKI Fak Fak 43.90 195** *eP* **P** **21 22 29.9 -0.5**
**KDAK Kodiak Island 44.27 44** P **P** **21 22 33.7 +0.8**
comp=Z,5.3nm,0.8s,baz=284,slow=13,SNR=4.7
**KDAK Kodiak Island 44.27 44** *iP* **P** **21 22 34.7 +1.8**
**SANI Sanana 44.64 204** P **P** **21 22 37.1 +0.8**
comp=Z,15nm,0.7s
**MPSI Mapaga 44.64 213** P **P** **21 22 37.0 +0.6**
comp=Z,6.8nm,0.4s,comp=Z,1μm
**KURK Kurchatov 44.66 306** P **P** **21 22 36.7 +0.5**
**KURK Kurchatov 44.66 306** P **P** **21 22 36.7 +0.5**
**KTH Kantishna Hill 44.72 36** *eP* **P** **21 22 37.8 +1.2**
comp=Z,8.4nm,0.9s
**KURBB Kurchatov Arra 44.74 306** P **P** **21 22 36.7 -0.1**
comp=Z,21nm,0.6s,baz=82,slow=8.7,SNR=52
**LUWI Luwuk 44.78 208** P **P** **21 22 38.3 +0.8**
comp=Z,17nm,1.4s
**APSI Ampana 45.08 210** P **P** **21 22 40.7 +0.9**
comp=Z,33nm,1.1s
**AAI Ambon 45.57 200** P **P** **21 22 44.7 +1.0**
comp=Z,19nm,0.8s
**MCK McKinley 45.60 35** *eP* **P** **21 22 44.2 +0.7**
MCK pmax pmax
comp=Z,8.0nm,0.9s
**MCK McKinley 45.60 35** *eP* **P** **21 22 44.2 +0.7**
comp=Z,8.1nm,0.9s
**COLA College 46.02 34** *eP* **P** **21 22 48.2 +1.5**
COLA pmax pmax
comp=Z,8.0nm,0.8s
**COLA College 46.02 34** *eP* **P** **21 22 48.2 +1.5**
comp=Z,7.8nm,0.8s
**PDGK Podgornoye 46.06 296** P **P** **21 22 48.7 +1.4**
PDGK pmax pmax
comp=Z,12nm,0.7s
**ILAR Eielson Array 46.43 34** P **P** **21 22 50.8 +0.7**
comp=Z,3.1nm,0.7s,baz=268,slow=6.2,SNR=37
ILAR LR LR 21 45 29.5
comp=Z,37nm,18.4s,baz=204,slow=40
**TAPN Taplejung 46.57 272** *eP* **P** **21 22 52.3 +0.4**
comp=Z,13nm,0.4s
**ODAN Odare 47.06 271** *eP* **P** **21 22 55.8 +0.1**
comp=Z,22nm,0.7s
**RAMN Ramite 47.62 272** *eP* **P** **21 23 00.1 0.0**
**GUN Gumba 47.69 273** *eP* **P** **21 23 01.0 +0.3**
comp=Z,100nm,0.8s
**MENT Mentasta 48.02 36** *eP* **P** **21 23 04.2 +1.8**
**KKN Kakani 48.20 274** *eP* **P** **21 23 04.8 +0.2**
comp=Z,77nm,0.8s
**PKI Pulchoki 48.22 273** *eP* **P** **21 23 04.6 -0.2**
comp=Z,19nm,0.7s
**PKIN Phulchoki 48.22 273** *eP* **P** **21 23 04.6 -0.2**
comp=Z,11nm,0.6s
**DMN Daman 48.43 273** *eP* **P** **21 23 06.2 -0.1**
comp=Z,37nm,0.9s
**GKN Gorkha 48.59 274** *eP* **P** **21 23 07.4 -0.1**
comp=Z,53nm,1.0s
**EGAK Eagle 48.87 34** *eP* **P** **21 23 09.6 +0.7**
comp=Z,6.1nm,0.8s
**TKM2 Tokmak 2 48.88 296** *eP* **P** **21 23 06.8 -2.7**
TKM2 pmax pmax
comp=Z,14nm,0.8s
**TKM2 Tokmak 2 48.88 296** *eP* **P** **21 23 06.8 -2.7**
comp=Z,14nm,0.8s
**DANN Dangsing 49.09 275** *eP* **P** **21 23 12.1 +0.7**
**BRVK Borovoye 49.13 311** *ceP* **P** **21 23 10.8 -0.2**
BRVK pmax pmax
comp=Z,15nm,0.8s
**BRVK Borovoye 49.13 311** *eP* **P** **21 23 10.2 -0.8**
comp=Z,17nm,1.0s
**OTUK Ortayu 49.26 304** P **P** **21 23 12.4 +0.2**
OTUK pmax pmax
comp=Z,14nm,0.9s
**KOLN Koldanda 49.50 275** *eP* **P** **21 23 14.7 +0.2**
comp=Z,17nm,0.5s
**KAPI Kappang 49.57 210** *eP* **P** **21 23 15.7 +0.9**
**AAK Ala-Archa 49.74 296⇑** *eP* **P** **21 23 16.2 +0.1**
AAK pmax pmax
comp=Z,9.0nm,0.7s
**AAK Ala-Archa 49.74 296** *eP* **P** **21 23 13.4 -2.6**
comp=Z,6.2nm,1.0s
**KSH Kashi 49.89 292** P **P** **21 23 20.3 +3.1**
KSH *ePcP* **PcP** **21 24 41.8 +4.7**
KSH PMZ
comp=Z,92nm,4.3s
KSH LN
comp=Z,160nm,6.0s
KSH LE
comp=Z,81nm,10.2s
KSH LZ
comp=Z,220nm,15.9s
**EKS2 Erkin-Say 50.22 297** *eP* **P** **21 23 19.0 -0.6**
EKS2 pmax pmax
comp=Z,7.0nm,0.8s
**EKS2 Erkin-Say 50.22 297** *eP* **P** **21 23 19.0 -0.6**
comp=Z,6.5nm,0.8s
**KULM Kulim 51.10 238** *eP* **P** **21 23 24.1 -2.3**
comp=Z,12nm,0.9s
**MNAS Manas 51.16 297** P **P** **21 23 27.2 +0.5**
MNAS pmax pmax
comp=Z,17nm,1.2s
**INK Inuvik 51.24 28** P **P** **21 23 27.9 +1.2**
comp=Z,5.4nm,0.6s,baz=280,slow=7.1,SNR=11
**INK Inuvik 51.24 28** *eP* **P** **21 23 28.0 +1.2**
INK pmax pmax
comp=Z,8.0nm,0.8s
**INK Inuvik 51.24 28** *eP* **P** **21 23 27.9 +1.2**
comp=Z,7.7nm,0.8s
**SFK Sufi-Kurgan 51.44 294** P **P** **21 23 29.4 +0.4**
SFK pmax pmax
comp=Z,13nm,0.0s
**IPM Ipoh 51.47 237** *eP* **P** **21 23 27.6 -1.6**
comp=Z,9.1nm,0.8s
**KKAR Karatay Array 52.27 298** *eP* **P** **21 23 34.6 -0.3**
KKAR pmax pmax
comp=Z,6.0nm,0.6s
**KKAR Karatay Array 52.27 298** *eP* **P** **21 23 34.5 -0.3**
comp=Z,5.9nm,0.6s
**SVE Sverdlovsk 53.33 317⇑** *iP* **P** **21 23 43.5 +1.0**
SVE pmax pmax
comp=Z,48nm,0.9s
SVE MLR MLR
comp=Z,878nm,21.0s
**ARU Arti 54.55 317** *dP* *i* **P** **21 23 51.9 +0.6**
ARU 21 24 53.0
ARU 21 25 50.2
ARU S **S** **21 31 28.5 +1.6**
ARU SS **SS** **21 35 05.0 -4.4**
ARU pmax pmax
comp=Z,39nm,1.0s
**ARU Arti 54.55 317** *eP* **P** **21 23 51.4 +0.1**
comp=Z,29nm,0.8s
**JMBI JAMBI 54.63 230** P **P** **21 23 50.1 -2.3**
**SDSI Sungai Dareh 55.40 233** P **P** **21 23 58.8 +0.8**
comp=Z,29nm,0.7s,comp=Z,37μm
**DLBC Dease Lake 55.69 40** pP pP 21 24 12.2 -0.6
comp=Z,3.5nm,0.7s,baz=289,slow=12,SNR=3.8
**ABKAR Akbulak array 56.54 309** *eP* **P** **21 24 06.0 +0.3**
**KBL Kabul 57.06 290** *eP* **P** **21 24 09.5 -0.4**
KBL pmax pmax
comp=Z,36nm,0.9s
**KBL Kabul 57.06 290** *eP* **P** **21 24 09.5 -0.4**
comp=Z,36nm,0.9s
**RES Resolute Bay 59.36 15** *eP* **P** **21 24 25.3 +0.2**
RES pmax pmax
comp=Z,7.0nm,0.8s
**RES Resolute Bay 59.36 15** *eP* **P** **21 24 25.3 +0.2**
comp=Z,6.7nm,0.8s
**WRAB Tennant Creek 60.27 189** *ceP* **P** **21 24 31.0 -1.0**
WRAB pmax pmax
comp=Z,52nm,2.5s
**WRAB Tennant Creek 60.27 189** *eP* **P** **21 24 31.1 -0.9**
comp=Z,15nm,1.3s
**WRA Warramunga Arr 60.29 189** P **P** **21 24 30.7 -1.4**
comp=Z,3.4nm,0.7s,baz=6.1,slow=6.9,SNR=29
WRA pP **pP** **21 24 42.9 -2.5**
comp=Z,3.1nm,0.5s,baz=6.4,slow=7.0,SNR=7.9
**YKA Yellowknife Ar 60.70 31** P **P** **21 24 34.5 0.0**
comp=Z,2.7nm,0.8s,baz=308,slow=6.6,SNR=3.5
YKA pP **pP** **21 24 46.8 -1.0**
comp=Z,2.2nm,0.6s,baz=305,slow=6.4,SNR=3.0
**ARCES ARCESS Array B 61.33 339** P **P** **21 24 39.1 +0.4**
comp=Z,5.8nm,0.8s,baz=55,slow=8.0,SNR=5.9
ARCES LR LR 21 57 24.4
comp=Z,56nm,18.4s,baz=54,slow=42
**KLMR Klimovskoe 61.53 327** *eP* **P** **21 24 38.2 -1.9**
KLMR *e* 21 26 55.3
KLMR pmax pmax
comp=Z,27nm,1.3s
**DAG Danmarks Havn 62.71 355** *iP* **P** **21 24 47.7 0.0**
**DAG Danmarks Havn 62.71 355** *iP* **P** **21 24 47.7 0.0**
DAG *i* 21 25 01.3
**IEMG Emamgholi 62.92 297** *eP* **P** **21 24 50.7 +0.5**
**GEYT Alibeck 63.02 298** P **P** **21 24 50.4 -0.2**
comp=Z,12nm,0.7s,baz=29,slow=3.4,SNR=31
**IKRD Kardeh 63.35 297** *eP* **P** **21 24 50.3 -2.7**
**ISFR Sfrayin 63.56 297** *eP* **P** **21 24 55.1 +0.7**
**ASAR Alice Springs 64.01 189** P **P** **21 24 56.5 -0.6**
comp=Z,2.5nm,0.9s,baz=7.7,slow=5.2,SNR=18
ASAR LR LR 21 52 14.9
comp=Z,50nm,21.1s,baz=353,slow=36
**IMON Monand 64.45 293** *eP* **P** **21 25 00.1 -0.1**
**IDAH Dahanechah 64.55 292** *eP* **P** **21 25 01.0 0.0**
**MBWA Marble Bar 64.59 203** *eP* **P** **21 24 60.0 -0.8**
comp=Z,27nm,1.2s
**ITEG Tejag 65.25 293** *eP* **P** **21 25 05.8 +0.4**
**IKOO Kooshah 65.33 292** *eP* **P** **21 25 06.0 0.0**
**VRH Novokhopyorsk 65.78 317** *eP* **P** **21 25 08.0 -0.3**
VRH pmax pmax
comp=Z,20nm,0.7s
VRH pmax pmax
comp=N,10.0nm,1.0s
VRH pmax pmax
comp=E,20nm,1.1s
**OBN Obninsk 66.05 323** *eP* **P** **21 25 10.0 +0.1**
OBN pmax pmax
comp=Z,24nm,1.1s
OBN MLR MLR
comp=Z,143nm,16.0s
**LPSR Galich'ya Gora 66.40 320** *eP* **P** **21 25 12.1 -0.1**
LPSR pmax pmax
comp=N,10.0nm,1.0s
LPSR pmax pmax
comp=Z,30nm,1.0s
LPSR pmax pmax
comp=E,10.0nm,1.3s
**FINES FINESS Array B 66.40 332** P **P** **21 25 12.2 +0.2**
comp=E,7.5nm,0.7s,baz=42,slow=8.1,SNR=16
FINES LR LR 21 55 45.2
comp=E,152nm,18.9s,baz=39,slow=37
**VSR Storozhevoye 67.09 318** *eP* **P** **21 25 16.8 +0.2**
VSR pmax pmax
comp=Z,20nm,1.0s
VSR pmax pmax
comp=N,20nm,1.3s
VSR pmax pmax
comp=E,10.0nm,0.9s
**VORD Divnogorie 67.17 318** *eP* **P** **21 25 16.4 -0.7**
VORD pmax pmax
comp=Z,10.0nm,1.0s
VORD pmax pmax
comp=N,30nm,0.6s
VORD pmax pmax
comp=E,40nm,0.6s
**NEW Newport 67.35 45** *eP* **P** **21 25 19.5 +1.1**
NEW pmax pmax
comp=Z,8.0nm,1.0s
**NEW Newport 67.35 45** *eP* **P** **21 25 19.5 +1.1**
comp=Z,8.2nm,1.0s
**SUMG Summit 67.54 0⇑** *iP* **P** **21 25 20.7 +1.1**
SUMG pmax pmax
comp=Z,8.0nm,0.7s
**SUMG Summit 67.54 0⇑** *iP* **P** **21 25 20.7 +1.1**
comp=Z,7.7nm,0.7s
SUMG *e* 21 25 33.6
**IFIR Firoozkooh 67.88 298** *eP* **P** **21 25 22.9 +0.7**
**IDMV Damavand 68.40 299** *eP* **P** **21 25 25.5 0.0**
**ISAD Sadrabad 69.35 295** *eP* **P** **21 25 31.3 -0.2**
**KIV Kislovodsk 69.44 311** *ceP* **P** **21 25 32.5 +0.8**
KIV pmax pmax
comp=Z,62nm,1.2s
KIV MLR MLR
comp=Z,131nm,18.0s
**KIV Kislovodsk 69.44 311⇓** *iP* **P** **21 25 32.5 +0.8**
SNR=10.0
**KIV Kislovodsk 69.44 311** *eP* **P** **21 25 30.4 -1.2**
comp=Z,39nm,0.9s
**KBZ Khabaz 69.45 310** P **P** **21 25 32.2 +0.7**
comp=Z,14nm,0.9s,baz=48,slow=3.3,SNR=14
KBZ LR LR 21 58 31.0
comp=Z,74nm,19.7s,baz=52,slow=38
**IZEF Zefreh 69.73 296** *eP* **P** **21 25 34.1 +0.3**
**QAM Ghamsar 69.84 297** *eP* **P** **21 25 34.4 0.0**
**WVOR Wild Horse Val 69.89 51** *eP* **P** **21 25 35.7 +1.2**
WVOR pmax pmax
comp=Z,1.0nm,0.8s
**WVOR Wild Horse Val 69.89 51** *eP* **P** **21 25 35.6 +1.2**
comp=Z,1.5nm,0.8s
**IRAZ Razeghan 69.90 300** *eP* **P** **21 25 34.9 +0.1**
**IKLH Kolahrood 70.00 297** *eP* **P** **21 25 35.8 +0.3**
**IRAM Ramesheh 70.32 295** *eP* **P** **21 25 36.8 -0.6**
**GNI Garni 70.46 306** *ceP* **P** **21 25 38.2 +0.2**
GNI pmax pmax
comp=Z,94nm,1.2s
**GNI Garni 70.46 306** *eP* **P** **21 25 38.4 +0.4**
comp=Z,123nm,1.1s
**FFC Flin Flon 70.65 34** *eP* **P** **21 25 38.7 0.0**
FFC pmax pmax
comp=Z,10.0nm,0.9s
**FFC Flin Flon 70.65 34** *eP* **P** **21 25 38.7 0.0**
comp=Z,10nm,0.9s
**IMRD Marand 70.71 305** *eP* **P** **21 25 39.7 +0.1**
**IPIR Pirpir 70.83 297** *eP* **P** **21 25 40.8 +0.2**
**FCC Fort Churchill 70.84 27** *eP* **P** **21 25 40.4 +0.6**
**FCC Fort Churchill 70.84 27** *eP* **P** **21 25 40.4 +0.6**
**BANOM Banah 70.96 288⇑** *iP* **P** **21 25 41.5 +0.4**
SNR=14
**IPAR Pars 71.00 293** *eP* **P** **21 25 41.6 -0.1**
**ISHB Shabestar 71.02 304** *eP* **P** **21 25 42.1 +0.5**
**ISRV Sarvestan 71.22 293** *eP* **P** **21 25 42.9 -0.1**
**LRM Limekiln Ridge 71.37 45** *eP* **P** **21 25 44.4 +0.9**
**NB2 NORSAR Subarra 71.59 337** P **P** **21 25 44.3 0.0**
comp=Z,10.0nm,0.9s,baz=40,slow=6.2
**NOA NORSAR Array B 71.59 337** P **P** **21 25 44.4 +0.1**
comp=Z,6.0nm,0.8s,baz=38,slow=6.0,SNR=21
NOA pP **pP** **21 25 57.1 -0.8**
comp=Z,0.4nm,0.4s,baz=208,slow=7.2,SNR=1.7
NOA LR LR 21 59 54.4
comp=Z,65nm,21.8s,baz=25,slow=38
**UOSS Wadi Hilu 71.60 287** *eP* **P** **21 25 44.3 -0.7**
comp=Z,14nm,0.8s
**HLID Hailey 71.67 48** *eP* **P** **21 25 47.1 +1.7**
comp=Z,2.2nm,1.0s
**HATD Hatta, Dubai 71.73 287** *iP* **P** **21 25 46.0 +0.3**
SNR=15
**IBZA Bozab 71.83 300** *eP* **P** **21 25 46.5 0.0**
**ASHO Ashiyiah 71.86 287⇑** *iP* **P** **21 25 46.6 0.0**
SNR=8.8
**IKAZ Kazeroun 71.88 294** *eP* **P** **21 25 47.1 +0.1**
**BOZ Bozeman (W) 71.92 45** *eP* **P** **21 25 48.0 +1.2**
BOZ pmax pmax
comp=Z,8.0nm,0.8s
**BOZ Bozeman (W) 71.92 45** *eP* **P** **21 25 48.0 +1.2**
comp=Z,8.5nm,0.8s
**FAQ Al Faqa, Dubai 72.17 288** ⇓P **P** **21 25 48.4 +0.1**
**IKOM Komasi 72.23 300** *eP* **P** **21 25 48.6 -0.2**
**AKASG Malin Array Be 72.29 322** P **P** **21 25 48.6 -0.1**
comp=Z,4.8nm,0.6s,baz=44,slow=6.4,SNR=32
AKASG LR LR 22 00 47.6
comp=Z,69nm,19.3s,baz=25,slow=38
**KIEV Kiev 72.30 322** *eP* **P** **21 25 48.5 -0.2**
KIEV pmax pmax
comp=Z,14nm,1.0s
**KIEV Kiev 72.30 322** *eP* **P** **21 25 48.5 -0.2**
comp=Z,14nm,1.0s
**AK11 Malin Array Si 72.33 322** *eP* **P** **21 25 49.0 +0.1**
**ASUD Al Ashush, Dub 72.43 288** ⇓P **P** **21 25 50.4 +0.5**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| IVIS | Veis | 72.46 | 300 | eP | | P | 21 25 49.3 | -0.8 |
| NVAR | Mina Array Bea | 72.50 | 54 | P | | P | 21 25 51.0 | +0.6 |
| | comp=Z,0.4nm,0.7s,baz=336,slow=3.3,SNR=3.8 | | | | | | | |
| IDHR | Dehrash | 72.66 | 301 | eP | | P | 21 25 50.4 | -1.0 |
| IGHG | Ghaleghazi | 72.77 | 300 | eP | | P | 21 25 51.5 | -0.6 |
| DUG | Dugway | 74.72 | 50 | eP | | P | 21 26 04.5 | +1.1 |
| DUG | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| DUG | Dugway | 74.72 | 50 | eP | | P | 21 26 04.5 | +1.1 |
| | comp=Z,4.3nm,0.9s | | | | | | | |
| MALT | Malatya | 75.45 | 308 | ⇓iP | | P | 21 26 09.3 | +1.8 |
| KWP | Kalwaria Pacla | 76.03 | 324 | eP | | P | 21 26 11.7 | +1.2 |
| KWP | Kalwaria Pacla | 76.03 | 324 | eP | | P | 21 26 11.7 | +1.2 |
| BUR04 | Bucovina Ar. S | 76.33 | 322 | eP | | P | 21 26 12.7 | +0.3 |
| BURAR | Bucovina Array | 76.33 | 322 | ⇓iP | | P | 21 26 13.2 | +0.9 |
| TESR | Tescani | 76.42 | 320 | ⇓iP | | P | 21 26 13.5 | +0.8 |
| KOLS | Kolonicke sedl | 76.73 | 324 | eP | | P | 21 26 15.1 | +0.6 |
| KOLS | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| KOLS | Kolonicke sedl | 76.73 | 324 | eP | | P | 21 26 15.1 | +0.6 |
| KOLS | | | | epP | | pP | 21 26 31.7 | +3.5 |
| KOLS | | | | esP | | sP | 21 26 36.7 | +3.1 |
| STHS | Stebnicka Huta | 76.83 | 325 | eP | | P | 21 26 15.4 | +0.3 |
| STHS | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | |
| STHS | Stebnicka Huta | 76.83 | 325 | eP | | P | 21 26 15.4 | +0.3 |
| STHS | | | | epP | | pP | 21 26 31.9 | +3.1 |
| STHS | | | | esP | | sP | 21 26 36.8 | +2.6 |
| STHS | | | | e | | | 21 31 55.7 | |
| OJC | Ojcow | 76.86 | 326 | eP | | P | 21 26 15.7 | +0.6 |
| OJC | Ojcow | 76.86 | 326 | eP | | P | 21 26 15.8 | +0.6 |
| TRPA | Tarpa | 77.20 | 323 | ⇓iP | | P | 21 26 18.3 | +1.2 |
| NIE | Niedzica | 77.24 | 325 | eP | | P | 21 26 18.3 | +0.9 |
| NIE | Niedzica | 77.24 | 325 | eP | | P | 21 26 18.4 | +1.0 |
| BRTR | Keskin Array B | 77.35 | 312 | P | | P | 21 26 18.8 | +0.5 |
| | comp=Z,2.0nm,0.7s,baz=90,slow=3.8,SNR=10.0 | | | | | | | |
| BRTR | | | | LR | | LR | 22 05 16.0 | |
| | comp=Z,42nm,19.0s,baz=34,slow=39 | | | | | | | |
| BRTR | Keskin Array B | 77.35 | 312 | iP | | P | 21 26 18.7 | +0.5 |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| ANTO | Ankara | 77.73 | 312 | eP | | P | 21 26 20.5 | +0.1 |
| ANTO | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| ANTO | Ankara | 77.73 | 312 | ⇓iP | | P | 21 26 20.7 | +0.3 |
| ANTO | Ankara | 77.73 | 312 | eP | | P | 21 26 20.5 | +0.1 |
| | comp=Z,14nm,0.9s | | | | | | | |
| BR231 | Keskin MP Arra | 77.76 | 312 | eP | | P | 21 26 19.7 | -0.9 |
| LANS | Liptovska Anna | 77.81 | 326 | eP | | P | 21 26 22.1 | +1.6 |
| LANS | Liptovska Anna | 77.81 | 326 | eP | | P | 21 26 22.1 | +1.6 |
| KSP | Ksiaz | 77.83 | 328 | eP | | P | 21 26 21.2 | +0.6 |
| KSP | Ksiaz | 77.83 | 328 | eP | | P | 21 26 21.3 | +0.6 |
| OKC | Ostrava-Krasne | 77.85 | 327 | eP | | P | 21 26 21.5 | +0.8 |
| OKC | Ostrava-Krasne | 77.85 | 327 | eP | | P | 21 26 21.5 | +0.8 |
| DRGR | | 78.10 | 322 | ⇑iP | | P | 21 26 22.8 | +0.5 |
| MORC | Moravsky Berou | 78.14 | 327 | eP | | P | 21 26 23.0 | +0.6 |
| MORC | | | | pmax | pmax | | | |
| | comp=Z,29nm,0.9s | | | | | | | |
| MORC | Moravsky Berou | 78.14 | 327 | ⇓iP | | P | 21 26 23.6 | +1.2 |
| MORC | Moravsky Berou | 78.14 | 327 | eP | | P | 21 26 23.0 | +0.6 |
| | comp=Z,29nm,0.9s | | | | | | | |
| DPC | Dobruska-Polom | 78.20 | 328 | eP | | P | 21 26 23.8 | +1.1 |
| DPC | | | | e | | | 21 26 36.6 | |
| DPC | Dobruska-Polom | 78.20 | 328 | eP | | P | 21 26 23.8 | +1.1 |
| DPC | | | | epP | | pP | 21 26 36.6 | +0.1 |
| UPC | Upice | 78.21 | 328 | eP | | P | 21 26 23.4 | +0.7 |
| UPC | Upice | 78.21 | 328 | eP | | P | 21 26 23.4 | +0.7 |
| KRLC | Kraliky | 78.23 | 328 | eP | | P | 21 26 23.7 | +0.8 |
| KRLC | | | | e | | | 21 26 38.1 | |
| KRLC | Kraliky | 78.23 | 328 | eP | | P | 21 26 23.7 | +0.8 |
| KRLC | | | | epP | | pP | 21 26 38.1 | +1.4 |
| VYHS | Vyhne | 78.58 | 326 | eP | | P | 21 26 25.4 | +0.6 |
| VYHS | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| VYHS | Vyhne | 78.58 | 326 | eP | | P | 21 26 25.4 | +0.6 |
| VYHS | | | | ePCP | | PcP | 21 26 32.3 | -1.4 |
| VYHS | | | | epP | | pP | 21 26 40.0 | +1.4 |
| BRG | Berggiesshubel | 78.74 | 330 | eP | | P | 21 26 27.5 | +1.9 |
| | comp=Z,10nm,1.5s | | | | | | | |
| BRG | Berggiesshubel | 78.74 | 330 | eP | | P | 21 26 27.5 | +1.9 |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.5s | | | | | | | |
| CLL | Collm | 78.75 | 330 | iP | | P | 21 26 26.0 | +0.4 |
| CLL | | | | e*PP | | pP | 21 26 40.0 | +0.5 |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| CLL | Collm | 78.75 | 330 | iP | | P | 21 26 26.0 | +0.4 |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| CLL | | | | epP | | pP | 21 26 40.0 | +0.5 |
| CLL | | | | ePP | | PP | 21 29 22.0 | -1.6 |
| CLL | | | | Lm | | MLR | 22 02 00.0 | |
| | comp=Z,100nm,18.6s | | | | | | | |
| PVCC | Panska Ves | 78.77 | 329 | eP | | P | 21 26 26.3 | +0.6 |
| PVCC | | | | e | | | 21 26 42.1 | |
| PVCC | Panska Ves | 78.77 | 329 | eP | | P | 21 26 26.3 | +0.6 |
| PVCC | | | | epP | | pP | 21 26 42.1 | +2.5 |
| VRAC | Vranov | 78.90 | 327 | ⇓iP | | P | 21 26 27.9 | +1.4 |
| SIRR | Siria | 78.98 | 323 | ⇓iP | | P | 21 26 28.2 | +1.2 |
| GOPC | GO Pecny, Ondr | 79.16 | 329 | eP | | P | 21 26 27.7 | -0.3 |
| GOPC | GO Pecny, Ondr | 79.16 | 329 | eP | | P | 21 26 27.7 | -0.3 |
| PRU | Pruhonice | 79.20 | 329 | eP | | P | 21 26 28.9 | +0.8 |
| PRU | Pruhonice | 79.20 | 329 | eP | | P | 21 26 28.9 | +0.8 |
| RAYN | Ar Rayn | 80.18 | 292 | eP | | P | 21 26 33.4 | -0.6 |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| KHC | Kasperske Hory | 80.27 | 329 | eP | | P | 21 26 33.3 | -0.7 |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| KHC | Kasperske Hory | 80.27 | 329 | eP | | P | 21 26 34.4 | +0.4 |
| KHC | | | | epP | | pP | 21 26 48.2 | +0.4 |
| KHC | Kasperske Hory | 80.27 | 329 | eP | | P | 21 26 33.3 | -0.7 |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| CONA | Conrad Observa | 80.28 | 327 | ⇑iP | | P | 21 26 35.2 | +1.1 |
| | comp=Z,7.3nm,1.0s | | | | | | | |
| GERES | GERESS Array B | 80.44 | 328 | P | | P | 21 26 35.1 | +0.1 |
| | comp=Z,1.9nm,0.7s,baz=36,slow=5.4,SNR=16 | | | | | | | |
| GERES | | | | LR | | LR | 22 05 11.7 | |
| | comp=Z,104nm,18.3s,baz=30,slow=38 | | | | | | | |
| CSS | Prodhromos | 80.74 | 308 | eP | | P | 21 26 37.0 | +0.2 |
| | comp=Z,5.3nm,1.3s | | | | | | | |
| DIVS | Divibare | 81.38 | 322 | ⇓iP | | P | 21 26 40.6 | +0.5 |
| SOKA | Soboth | 81.61 | 326 | ⇓iP | | P | 21 26 42.0 | +0.7 |
| | comp=Z,16nm,1.4s | | | | | | | |
| ANMO | Albuquerque | 81.98 | 51 | eP | | P | 21 26 45.4 | +1.8 |
| ANMO | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| ANMO | Albuquerque | 81.98 | 51 | eP | | P | 21 26 45.4 | +1.8 |
| | comp=Z,1.9nm,0.9s | | | | | | | |
| KBA | Koelnbreinsper | 82.00 | 328 | ⇓iPcP | | P | 21 26 44.7 | +1.3 |
| | comp=Z,7.7nm,0.8s | | | | | | | |
| SCHQ | Schefferville | 82.10 | 17 | pP | | pP | 21 26 58.0 | +0.5 |
| | comp=Z,7.6nm,0.8s,baz=340,slow=6.7,SNR=4.5 | | | | | | | |
| RETA | Reutte | 82.70 | 329 | ⇑iP | | P | 21 26 47.6 | +0.7 |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| FETA | Feichten | 83.10 | 329 | ⇑iPcP | | P | 21 26 49.7 | +0.6 |
| | comp=Z,5.5nm,1.0s | | | | | | | |
| DAVA | Damuels | 83.21 | 330 | ⇑iP | | P | 21 26 49.2 | -0.5 |
| | comp=Z,8.4nm,1.1s | | | | | | | |
| LAST | Lasithi | 85.17 | 313 | eP | | P | 21 27 00.4 | +0.7 |
| PPT | Papeete | 85.37 | 117 | LR | | LR | 22 07 40.0 | |
| | comp=Z,42nm,18.6s,baz=356,slow=37 | | | | | | | |
| WMOK | Wichita Mounta | 86.53 | 46 | eP | | P | 21 27 06.6 | +0.1 |
| WMOK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| WMOK | Wichita Mounta | 86.53 | 46 | eP | | P | 21 27 06.6 | +0.1 |
| | comp=Z,2.3nm,0.8s | | | | | | | |
| TXAR | Lajitas Array | 87.59 | 53 | P | | P | 21 27 11.8 | 0.0 |
| | comp=Z,0.3nm,0.5s,baz=339,slow=3.1,SNR=5.2 | | | | | | | |
| CCM | Cathedral Cave | 87.93 | 40 | eP | | P | 21 27 13.3 | +0.2 |
| CCM | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| CCM | Cathedral Cave | 87.93 | 40 | eP | | P | 21 27 13.3 | +0.2 |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| ESDC | Sonseca Array | 94.80 | 335 | P | | P | 21 27 44.0 | -1.0 |
| | comp=Z,0.8nm,0.7s,baz=24,slow=4.1,SNR=5.6 | | | | | | | |
| TORD | Torodi Ar. Bea | 115.62 | 317 | PKP | | PKPdf | 21 33 04.3 | -1.5 |
| | comp=Z,0.3nm,0.6s,baz=5.1,slow=2.1,SNR=4.1 | | | | | | | |
| MAW | Mawson | 122.71 | 207 | PKP | | PKPdf | 21 33 16.3 | -1.4 |
| | comp=Z,1.0nm,0.6s,baz=78,slow=9.3,SNR=4.3 | | | | | | | |
| DBIC | Dimbokro | 124.47 | 319 | PKP | | PKPdf | 21 33 22.0 | -0.8 |
| | comp=Z,7.7nm,1.2s,baz=60,slow=8.1,SNR=3.0 | | | | | | | |
| SNAA | Sanae | 143.98 | 198 | P | | PKPab | 21 33 55.0 | +0.1 |
| SNAA | Sanae | 143.98 | 198 | ePKIKP | | PKPab | 21 33 54.5 | -0.4 |
| SNAA | Sanae | 143.98 | 198 | ePKPdf | | PKPab | 21 33 54.5 | -0.4 |
| LPAZ | La Paz | 144.37 | 57 | PKP | | PKPbc | 21 33 59.2 | +0.3 |
| | comp=Z,0.5nm,0.4s,baz=346,slow=4.2,SNR=2.7 | | | | | | | |
| VNA2 | Neumayer--Watz | 145.56 | 197 | P | | PKPdf | 21 34 00.0 | 0.0 |
| | baz=106,slow=2.4 | | | | | | | |
| VNA3 | Neumayer Olymp | 145.81 | 196 | P | | PKPdf | 21 34 00.7 | +0.2 |
| VNA1 | Neumayer--Stat | 145.95 | 197 | P | | PKPbc | 21 34 01.6 | +0.1 |

**SJA 15 21:18:23.8±0.8, 31°.35S×68°.76W, h103km±3km, ML4.4, MW4.7, L1C, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| RTLL | Cerro Villicun | 0.24 | 85 | eP | | Pn | 21 18 39.4 | +0.8 |
| RTLL | | | | eS | | Sn | 21 18 50.5 | +0.9 |
| RTLL | | | | IAML | | | 21 18 52.1 | |
| | comp=Z,374µm,0.3s | | | | | | | |
| AMOG | MOGNA | 0.47 | 29 | eP | | Pn | 21 18 40.6 | +0.8 |
| CFAA | Coronel Fontan | 0.51 | 120 | eP | | Pn | 21 18 41.1 | +1.1 |
| CFAA | | | | IAML | | | 21 18 41.8 | |
| CFAA | | | | eS | | Sn | 21 18 53.4 | +1.2 |
| RTCV | Cerro Valdivia | 0.54 | 160 | eS | | Sn | 21 18 53.7 | +1.0 |
| RTLS | Leoncito | 0.64 | 226 | eP | | Pn | 21 18 42.2 | +0.9 |
| RTLS | | | | eS | | Sn | 21 18 56.1 | +1.6 |
| RTLS | | | | IAML | | | 21 18 57.1 | |
| AUSP | Uspallata | 1.02 | 211 | eP | | Pn | 21 18 46.4 | +1.3 |
| AUSP | | | | eS | | Sn | 21 19 02.4 | +1.3 |
| ASAL | Salagasta | 1.24 | 183 | eP | | Pn | 21 18 48.6 | +1.4 |
| ASAL | | | | eS | | Sn | 21 19 06.7 | +1.8 |
| AVFE | Valle Fertil | 1.32 | 59 | eP | | Pn | 21 18 49.3 | +1.2 |
| AVFE | | | | ⇑eS | | Sn | 21 19 07.5 | +1.0 |
| ARCO | CERRO ARCO | 1.49 | 186 | eP | | Pn | 21 18 51.6 | +1.2 |
| ARCO | | | | IAML | | | 21 18 52.7 | |
| | comp=Z,117nm,0.2s | | | | | | | |
| ARCO | | | | eS | | Sn | 21 19 11.4 | +0.9 |
| ACHE | Chepes | 1.81 | 85 | eP | | Pn | 21 18 55.1 | +0.9 |
| ACHE | | | | eS | | Sn | 21 19 18.8 | +1.4 |
| AGUA | GUANDACOL | 1.87 | 7 | eP | | Pn | 21 18 56.0 | +1.0 |
| AGUA | | | | eS | | Sn | 21 19 20.2 | +1.4 |
| APLL | PUNTA DE LOS L | 2.14 | 64 | eP | | Pn | 21 18 59.6 | +1.2 |
| APLL | | | | eS | | Sn | 21 19 25.9 | +1.0 |

*KRNET 15 21:19:37.4±0.1, 39°.30N×72°.56E, mb2.3*
*ISCJB 15 21:19:38.4±1.6, 39°.17N±0°.08×72°.57E±0°.07, h10km, Error ellipse: s-maj=12.4km s-min=6.9km az=165.3*
*NNC 15 21:19:39.4±2.7, 39°.25N×72°.87E, h0km, mb3.2, mpv2.8, Error ellipse: s-maj=29.1km s-min=9.3km az=144.0*

**ISC 15 21:19:38.2±1.6, 39°.31N±0°.08×72°.62E±0°.05, h10km, n12, σ2s22/22, 14C-10D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| SFK | Sufi-Kurgan | 0.98 | 44 | ⇑P | | Pg | 21 19 55.9 | -1.2 |
| | 3.8nm,0.4s | | | | | | | |
| SFK | | | | ⇑S | | Sg | 21 20 10.3 | +0.5 |
| | 7.0nm,0.2s | | | | | | | |
| SFK | Sufi-Kurgan | 0.98 | 44 | ⇓eP | | Pg | 21 19 56.6 | -0.5 |
| | baz=45 | | | | | | | |
| SFK | | | | ⇓iS | | Sg | 21 20 10.6 | +0.7 |
| | baz=45 | | | | | | | |
| BTK | Batken | 1.58 | 299 | ⇑eP | | Pb | 21 20 06.5 | -1.0 |
| | baz=300 | | | | | | | |
| BTK | | | | ⇑iS | | Sg | 21 20 27.9 | -1.1 |
| | baz=300 | | | | | | | |
| ARSB | Arslanbob | 2.03 | 8 | ⇓eP | | Pb | 21 20 15.2 | -0.1 |
| | baz=9.0 | | | | | | | |
| ARSB | | | | ⇓eS | | Sg | 21 20 43.0 | -0.6 |
| | baz=9.0 | | | | | | | |
| ARK | Arkit | 2.54 | 349 | ⇑eP | | Pb | 21 20 22.5 | -1.4 |
| | baz=350 | | | | | | | |
| ARK | | | | ⇑eS | | Sb | 21 20 54.4 | -0.8 |
| | baz=350 | | | | | | | |
| AML | Almayashu | 2.94 | 16 | ⇑iP | | Pb | 21 20 28.7 | -2.2 |
| | baz=16 | | | | | | | |
| AML | | | | ⇑iS | | Sb | 21 21 06.7 | -0.3 |
| | baz=16 | | | | | | | |
| DZET | Dzherino | 3.00 | 262 | ⇓P | | Pb | 21 20 32.0 | +0.3 |
| | 3.0nm,0.4s | | | | | | | |
| DZET | | | | ⇓S | | Sg | 21 21 11.6 | -2.8 |
| | 14nm,0.5s | | | | | | | |
| MNAS | Manas | 3.18 | 358 | ⇓P | | Pb | 21 20 32.5 | -2.3 |
| | 1.7nm,0.4s | | | | | | | |
| MNAS | | | | ⇓S | | Sb | 21 21 13.5 | -0.2 |
| | 4.3nm,0.5s | | | | | | | |
| UCH | Uchtor | 3.25 | 26 | ⇑iP | | Pb | 21 20 34.2 | -2.1 |
| | baz=26 | | | | | | | |
| UCH | | | | ⇑iS | | Sb | 21 21 13.5 | -2.6 |
| | baz=26 | | | | | | | |
| EKS2 | Erkin-Say | 3.46 | 14 | ⇑iP | | Pn | 21 20 35.2 | +2.9 |
| | baz=15 | | | | | | | |
| EKS2 | | | | ⇑iS | | Sb | 21 21 18.0 | -3.9 |
| | baz=15 | | | | | | | |
| AAK | Ala-Archa | 3.61 | 23 | ⇓P | | Pn | 21 20 38.0 | +3.6 |
| | 2.1nm,0.6s | | | | | | | |
| AAK | | | | ⇑S | | Sn | 21 21 21.8 | +4.7 |
| | 6.0nm,1.2s | | | | | | | |
| KK31 | Karatay Array | 4.11 | 338 | ⇑P | | Pn | 21 20 43.4 | +2.3 |
| | 0.3nm,0.3s,baz=148,slow=11,SNR=20 | | | | | | | |
| KK31 | | | | ⇓S | | Sn | 21 21 33.2 | +3.9 |
| | 4.0nm,0.7s,baz=157,slow=23 | | | | | | | |

**DJA 15 21:22:56.8±0.5, 7°.3S×107°.5E±°, h11km±3km, M3.6/13, MLv3.6/13, Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| CGJI | Cibinong | 0.45 | 103 | P | | Pg | 21 23 05.8 | +0.1 |
| CGJI | | | | S | | Sg | 21 23 12.5 | +0.8 |
| SBJI | Serang | 0.96 | 66 | P | | Pg | 21 23 14.8 | -0.5 |
| SBJI | | | | S | | Sg | 21 23 27.9 | +0.2 |
| KASI | Kota Agung | 1.23 | 323 | P | | Pn | 21 23 18.4 | -1.6 |
| KASI | | | | S | | Sb | 21 23 35.7 | -0.4 |
| SKJI | Sukabumi | 1.39 | 111 | P | | Pn | 21 23 21.4 | -0.7 |
| SKJI | | | | S | | Sn | 21 23 40.2 | -0.3 |
| TNG | Tangerang | 1.43 | 76 | P | | Pn | 21 23 22.3 | -0.4 |
| TNG | | | | S | | Sn | 21 23 40.4 | -1.1 |
| CBJI | Citeko | 1.59 | 87 | P | | Pb | 21 23 26.1 | -0.2 |
| CBJI | | | | S | | Sg | 21 23 47.8 | -0.3 |
| KLI | Kotabumi | 1.68 | 347 | P | | Pn | 21 23 25.2 | -1.0 |
| KLI | | | | S | | Sn | 21 23 48.1 | +0.3 |
| LWLI | Liwa | 1.90 | 321 | P | | Pn | 21 23 28.7 | -0.6 |
| LWLI | | | | S | | Sn | 21 23 53.8 | +0.5 |
| CNJI | Cibinong | 2.03 | 113 | P | | Pn | 21 23 31.1 | +0.2 |
| CNJI | | | | S | | Sn | 21 23 57.0 | +0.7 |
| MDSI | Maura Dua | 2.28 | 332 | P | | Pn | 21 23 34.2 | -0.2 |
| MDSI | | | | S | | Sn | 21 24 03.0 | +0.6 |
| CISI | Cisompet, Garu | 2.75 | 112 | P | | Pn | 21 23 40.3 | -0.7 |
| CISI | | | | S | | Sn | 21 24 15.1 | +0.8 |
| KSI | Kapahiang | 3.88 | 317 | P | | Pn | 21 23 56.7 | +0.2 |
| KSI | | | | S | | Sn | 21 24 43.2 | +1.0 |

**IGQ 15 21:34:43±0.6, 0°.06S×81°.38W, h5km±163km, Mb4.1, 1C, Error ellipse: s-maj=6.2km s-min=4.2km az=17.0, Off coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| CHIS | Cerro-Chispas- | 1.18 | 146 | P | | Pg | 21 35 04.3 | -1.4 |
| CHIS | Cerro-Chispas- | 1.18 | 146 | S | | Sg | 21 35 15.5 | -5.6 |
| PECV | Mancha de Ca P | 1.51 | 118 | P | | Pn | 21 35 04.4 | -6.3 |
| PECV | Mancha de Ca P | 1.51 | 118 | S | | Pn | 21 35 14.2 | +3.4 |
| MAG1 | Magdalena | 1.61 | 90 | P | | Pg | 21 35 13.7 | -0.2 |
| PINO | Pino | 2.77 | 92 | P | | Pn | 21 35 28.2 | -0.7 |
| GGP | Refugio Guagua | 2.79 | 92 | P | | Pn | 21 35 28.2 | -0.8 |
| YANA | Yana | 2.81 | 91 | P | | Pn | 21 35 29.8 | +0.5 |
| PAST | Pastocalle | 2.81 | 103 | P | | Pn | 21 35 29.8 | +0.6 |
| PAST | Pastocalle | 2.81 | 103 | S | | Sn | 21 36 01.0 | -2.9 |
| CAMI | Rancho Maria | 2.94 | 102 | P | | Pn | 21 35 32.5 | +1.5 |
| OTAV | Otavalo | 2.94 | 84 | P | | Pn | 21 35 31.6 | +0.5 |
| BNAS | Cotopaxi Volca | 2.96 | 102 | P | | Pn | 21 35 32.9 | +1.5 |
| BNAS | Cotopaxi Volca | 2.96 | 102 | S | | Sn | 21 36 05.4 | -2.4 |
| NAS2 | Nasa | 2.97 | 101 | P | | Pn | 21 35 32.2 | +0.8 |
| NAS2 | Nasa | 2.97 | 101 | S | | Sn | 21 36 05.5 | -2.5 |
| PITA | Cotopaxi Volc | 2.99 | 100 | P | | Pn | 21 35 32.3 | +0.6 |
| BMOR | Cotopaxi Volca | 3.00 | 103 | P | | Pn | 21 35 32.9 | +0.9 |
| BREF | Cotopaxi Volca | 3.00 | 102 | ⇑P | | Pn | 21 35 33.7 | +1.6 |
| BVC2 | Cotopaxi Volca | 3.03 | 101 | P | | Pn | 21 35 33.9 | +1.5 |
| VC1 | Cotopaxi 1 | 3.03 | 101 | P | | Pn | 21 35 33.1 | +0.8 |
| BTAM | Cotopaxi Volca | 3.04 | 102 | S | | Sn | 21 36 08.4 | -1.6 |
| BTAM | Cotopaxi Volca | 3.04 | 102 | P | | Pn | 21 35 33.3 | +0.7 |
| COTA | Cotacachi | 3.07 | 83 | P | | Pn | 21 35 34.8 | +1.9 |
| TAMB | Tambo | 3.08 | 102 | S | | Sn | 21 36 11.3 | +0.6 |
| TAMB | Tambo | 3.08 | 102 | P | | Pn | 21 35 34.5 | +1.5 |
| IGUA | Igualata | 3.09 | 117 | P | | Pn | 21 35 34.5 | +1.4 |
| COV1 | Cotopaxi Volc | 3.10 | 101 | P | | Pn | 21 35 34.0 | +0.6 |
| COV1 | Cotopaxi Volc | 3.10 | 101 | S | | Sn | 21 36 08.2 | -3.2 |
| LITE | Lita | 3.14 | 74 | P | | Pn | 21 35 34.5 | +1.2 |
| PISA | Pisayambo | 3.15 | 108 | P | | Pn | 21 35 35.0 | +1.0 |
| BBIL | Ulba Tungurahu | 3.21 | 116 | P | | Pn | 21 35 35.5 | +1.0 |
| JUI6 | Juive | 3.21 | 115 | P | | Pn | 21 35 32.3 | -2.3 |
| RIOE | Riobamba | 3.22 | 121 | P | | Pn | 21 35 35.1 | +0.4 |
| BMAS | Trigal station | 3.23 | 116 | P | | Pn | 21 35 36.9 | +1.9 |
| RETU | Refugio | 3.24 | 115 | P | | Pn | 21 35 35.4 | +0.1 |
| RUN5 | Runtun | 3.25 | 115 | P | | Pn | 21 35 36.7 | +1.6 |
| BRUN | Tungurahua Vol | 3.26 | 115 | P | | Pn | 21 35 36.5 | +1.2 |
| BRUN | Tungurahua Vol | 3.26 | 115 | S | | Sn | 21 36 10.5 | -4.4 |
| BULB | Ulba Tungurahu | 3.27 | 115 | S | | Sn | 21 36 11.9 | -3.2 |
| BULB | Ulba Tungurahu | 3.27 | 115 | P | | Pn | 21 35 36.3 | +0.9 |
| PAT1 | Patacocha | 3.27 | 116 | P | | Pn | 21 35 37.9 | +2.2 |
| BPAT | Tungurahua Vol | 3.28 | 116 | S | | Sn | 21 36 11.1 | -4.4 |
| BPAT | Tungurahua Vol | 3.28 | 116 | P | | Pn | 21 35 37.7 | +2.0 |
| CAYA | Cayambe | 3.39 | 88 | P | | Pn | 21 35 39.9 | +2.5 |

*KRNET 15 22:04:38.0±0.1, 40°.34N×74°.05E, h18km, mb2.7*
*NNC 15 22:04:38.2±1.2, 40°.39N×73°.79E, h23km±19km, mb3.3, mpv3.0, Error ellipse: s-maj=24.9km s-min=7.7km az=110.0*

**ISC 15 22:04:36.1±3.0, 40°.17N±0°.05×74°.12E±0°.04, h4km±23km, n36, σ1s72/50, 31C-16D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| SFK | Sufi-Kurgan | 0.50 | 252 | ⇑P | | Pb | 22 04 49.1 | +1.4 |
| | 7.0nm,0.3s | | | | | | | |
| SFK | | | | ⇑S | | Sb | 22 04 56.1 | +0.7 |
| | 18nm,0.3s | | | | | | | |
| SFK | Sufi-Kurgan | 0.50 | 252 | ⇑eP | | Pb | 22 04 48.8 | +1.2 |
| | baz=233 | | | | | | | |
| SFK | | | | ⇑iS | | Sb | 22 04 55.8 | +0.5 |
| | baz=233 | | | | | | | |
| SFK | Sufi-Kurgan | 0.50 | 252 | ⇑iP | | Pb | 22 04 49.0 | +1.4 |
| | baz=233 | | | | | | | |
| SFK | | | | ⇑iS | | Sb | 22 04 55.9 | +0.6 |
| | baz=233 | | | | | | | |
| ARSB | Arslanbob | 1.44 | 324 | ⇓iP | | Pn | 22 05 01.4 | -1.8 |
| | baz=321 | | | | | | | |
| ARSB | | | | ⇓iS | | Sn | 22 05 22.2 | -0.5 |
| | baz=321 | | | | | | | |
| ARLS | Aral | 1.70 | 5 | ⇑eP | | Pn | 22 05 06.7 | 0.0 |
| | baz=8.0 | | | | | | | |
| ARLS | | | | ⇑eS | | Sn | 22 05 27.6 | -1.4 |
| | baz=8.0 | | | | | | | |
| NRN | Naryn | 1.91 | 48 | ⇑eP | | Pb | 22 05 13.0 | +1.3 |
| | baz=53 | | | | | | | |
| NRN | | | | ⇑iS | | Sb | 22 05 37.6 | +1.6 |
| | baz=53 | | | | | | | |
| AML | Almayashu | 1.99 | 351 | ⇑iP | | Pn | 22 05 10.7 | -0.2 |
| | baz=351 | | | | | | | |
| AML | | | | ⇑iS | | Sn | 22 05 33.2 | -3.3 |
| | baz=351 | | | | | | | |
| AML | Almayashu | 1.99 | 351 | P | | Pn | 22 05 12.6 | +1.6 |
| | SNR=6.9 | | | | | | | |
| UCH | Uchtor | 2.08 | 8 | ⇑iP | | Pn | 22 05 13.3 | +1.1 |
| | baz=10.0 | | | | | | | |
| UCH | | | | ⇑iS | | Sn | 22 05 37.9 | -0.9 |
| | baz=10.0 | | | | | | | |
| UCH | Uchtor | 2.08 | 8 | P | | Pb | 22 05 15.0 | +0.3 |
| | SNR=33 | | | | | | | |
| KZA | Kyzart | 2.09 | 24 | ⇑iP | | Pn | 22 05 14.7 | +2.4 |
| | baz=27 | | | | | | | |
| KZA | | | | ⇑iS | | Sn | 22 05 39.9 | +0.9 |
| | baz=27 | | | | | | | |
| ARK | Arkit | 2.31 | 316 | ⇓iP | | Pn | 22 05 16.8 | +1.8 |
| | baz=313 | | | | | | | |
| ARK | | | | ⇓iS | | Sn | 22 05 45.3 | +1.4 |
| | baz=313 | | | | | | | |
| AAK | Ala-Archa | 2.48 | 6 | ⇑Pg | | Pb | 22 05 20.9 | -0.4 |
| | 3.4nm,0.4s | | | | | | | |
| AAK | | | | ⇑Lg | | Lg | 22 05 51.0 | |
| | 9.0nm,0.5s | | | | | | | |
| AAK | Ala-Archa | 2.48 | 6 | ⇓iP | | Pn | 22 05 19.2 | +1.7 |
| | baz=8.0 | | | | | | | |
| AAK | | | | ⇓iS | | Sn | 22 05 47.6 | -0.7 |
| | baz=8.0 | | | | | | | |
| AAK | Ala-Archa | 2.48 | 6 | P | | Pb | 22 05 21.0 | -0.4 |
| | SNR=6.5 | | | | | | | |
| EKS2 | Erkin-Say | 2.50 | 354 | P | | Pn | 22 05 20.5 | +2.7 |
| | SNR=8.1 | | | | | | | |
| EKS | Erkin-Say | 2.51 | 354 | ⇓eP | | Pn | 22 05 20.4 | +2.6 |
| | baz=355 | | | | | | | |
| EKS | | | | ⇓iS | | Sn | 22 05 51.1 | +2.1 |
| | baz=355 | | | | | | | |
| KBK | Karagaybulak | 2.56 | 14 | ⇓iP | | Pn | 22 05 20.5 | +1.9 |
| | baz=16 | | | | | | | |
| KBK | | | | ⇓iS | | Sn | 22 05 51.1 | +0.7 |
| | baz=16 | | | | | | | |
| KBK | Karagaybulak | 2.56 | 14 | P | | Pb | 22 05 22.5 | -0.3 |
| | SNR=14 | | | | | | | |
| MNAS | Manas | 2.62 | 333 | ⇑Pg | | Pn | 22 05 21.1 | +1.7 |
| | 3.7nm,0.5s | | | | | | | |
| MNAS | Manas | 2.62 | 333 | ⇑iP | | Pn | 22 05 21.2 | +1.9 |
| | baz=332 | | | | | | | |
| MNAS | | | | ⇑iS | | Sn | 22 05 52.1 | +0.4 |
| | baz=332 | | | | | | | |
| MNAS | Manas | 2.62 | 333 | ⇓iP | | Pn | 22 05 20.5 | +1.2 |
| | baz=332 | | | | | | | |
| MNAS | | | | ⇓iS | | Sn | 22 05 50.8 | -0.9 |
| | baz=332 | | | | | | | |
| ULHL | Ulahol | 2.62 | 37 | ⇑iP | | Pb | 22 05 24.4 | +0.6 |
| | baz=40 | | | | | | | |
| ULHL | | | | ⇑iS | | Sb | 22 05 57.6 | +1.2 |
| | baz=40 | | | | | | | |
| ULHL | Ulahol | 2.62 | 37 | P | | Pb | 22 05 24.6 | +0.8 |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SMY** | **Shemya** | **3.00** | **103** | *e*PN | **Pn** | **22 13 11.3** | **-1.2** |
| SMY | | | | *e* | | 22 13 46.5 | |
| **SMY** | **Shemya** | **3.00** | **103** | *e*Pn | **Pn** | **22 13 11.3** | **-1.2** |
| SMY | | | | *e*Sn | **Sn** | **22 13 46.5** | **-0.7** |
| **MKZ** | **Mys Kozlova** | **4.58** | **286** | *e*P | **Pn** | **22 13 33.7** | **-0.5** |
| MKZ | | | | *e*S | **Sn** | **22 14 24.9** | **-1.3** |
| **MKZ** | **Mys Kozlova** | **4.58** | **286** | PN | **Pn** | **22 13 33.7** | **-0.5** |
| **KBTR** | **Krutoberegovo** | **4.62** | **308** | *e*P | **Pn** | **22 13 34.2** | **-0.5** |
| KBTR | | | | *e*S | **Sn** | **22 14 25.1** | **-2.0** |
| **KBTR** | **Krutoberegovo** | **4.62** | **308** | PN | **Pn** | **22 13 34.2** | **-0.5** |
| **KZV** | **Kizimen** | **5.51** | **291** | *e*P | **Pn** | **22 13 46.7** | **-0.5** |
| KZV | | | | *e*S | **Sn** | **22 14 48.2** | **-1.1** |
| **SPN** | **Mys Shipunski** | **5.57** | **270** | *e*P | **Pn** | **22 13 47.6** | **-0.3** |
| SPN | | | | *e*S | Sn | 22 14 47.4 | -3.3 |
| **SPN** | **Mys Shipunski** | **5.57** | **270** | PN | **Pn** | **22 13 47.6** | **-0.3** |
| **TUMR** | **Tumrok** | **5.63** | **292** | *e*P | **Pn** | **22 13 49.8** | **+1.0** |
| **TUMR** | **Tumrok** | **5.63** | **292** | PN | **Pn** | **22 13 49.8** | **+1.0** |
| **KMNR** | **Kamenistaya** | **5.72** | **297** | *e*P | **Pn** | **22 13 51.9** | **+1.9** |
| **KMNR** | **Kamenistaya** | **5.72** | **297** | PN | **Pn** | **22 13 51.9** | **+1.9** |
| **NLC** | **Nalytchevo** | **5.97** | **271** | *e*P | **Pn** | **22 13 53.4** | **+0.1** |
| NLC | | | | *e*S | Sn | 22 14 57.3 | -3.1 |
| **NLC** | **Nalytchevo** | **5.97** | **271** | PN | **Pn** | **22 13 53.4** | **+0.1** |
| **SDLR** | **Sedlovina** | **6.23** | **272** | *e*P | **Pn** | **22 13 57.0** | **-0.1** |
| SDLR | | | | *e*S | **Sn** | **22 15 04.6** | **-2.5** |
| **SDLR** | **Sedlovina** | **6.23** | **272** | PN | **Pn** | **22 13 57.0** | **-0.1** |
| **UGLR** | **Uglovaya** | **6.28** | **271** | *e*P | **Pn** | **22 13 58.1** | **+0.5** |
| **SMAR** | **Somma** | **6.28** | **272** | *e*P | **Pn** | **22 13 58.0** | **+0.2** |
| **SMAR** | **Somma** | **6.28** | **272** | PN | **Pn** | **22 13 58.0** | **+0.2** |
| **AVH** | **Avacha** | **6.32** | **272** | *e*P | **Pn** | **22 13 58.6** | **+0.4** |
| AVH | | | | *e*S | **Sn** | **22 15 07.4** | **-1.8** |
| **AVH** | **Avacha** | **6.32** | **272** | PN | **Pn** | **22 13 58.6** | **+0.4** |
| **KRX** | **Arik** | **6.36** | **273** | *e*P | **Pn** | **22 13 58.7** | **-0.2** |
| **KOK** | **Koryaka** | **6.38** | **272** | *e*P | **Pn** | **22 13 59.1** | **+0.1** |
| **KOK** | **Koryaka** | **6.38** | **272** | PN | **Pn** | **22 13 59.1** | **+0.1** |
| **PET** | **Petropavlovsk** | **6.40** | **270** | *e*P | **Pn** | **22 14 00.2** | **+0.9** |
| PET | | | | *e*S | **Sn** | **22 15 09.8** | **-1.2** |
| **PET** | **Petropavlovsk** | **6.40** | **270** | *e*PN | **Pn** | **22 13 59.6** | **+0.3** |
| PET | comp=Z,21nm,0.3s | | | pmax | pmax | | |
| **RUS** | **Russkaya** | **6.60** | **265** | *e*P | **Pn** | **22 14 02.1** | **+0.1** |
| RUS | | | | *e*S | **Sn** | **22 15 14.1** | **-1.8** |
| **RUS** | **Russkaya** | **6.60** | **265** | PN | **Pn** | **22 14 02.1** | **+0.1** |
| **OSSR** | **Ossora** | **6.71** | **332** | *e*P | **Pn** | **22 14 04.9** | **+1.4** |
| **GNL** | **Ganaly** | **6.76** | **276** | *e*P | **Pn** | **22 14 05.2** | **+0.9** |
| GNL | | | | *e*S | **Sn** | **22 15 18.8** | **-1.2** |
| **GNL** | **Ganaly** | **6.76** | **276** | PN | **Pn** | **22 14 05.2** | **+0.9** |
| **MTVR** | **Mutnovka** | **6.79** | **266** | *e*P | **Pn** | **22 14 04.7** | **0.0** |
| MTVR | | | | *e*S | **Sn** | **22 15 18.6** | **-2.1** |
| **PETK** | **Petropavlovsk-** | **6.96** | **271** | Pn | **Pn** | **22 14 07.7** | **+0.7** |
| PETK | comp=Z,9.2nm,0.3s,baz=97,slow=19,SNR=55 | | | Sn | **Sn** | **22 15 22.6** | **-2.3** |
| **ASAK** | **Asacha** | **6.98** | **265** | *e*P | **Pn** | **22 14 08.0** | **+0.8** |
| **TILK** | **Tilichiki** | **7.17** | **347** | *e*P | Pn | 22 14 12.2 | +2.5 |
| **APC** | **Apacha** | **7.31** | **270** | *e*P | **Pn** | **22 14 12.9** | **+1.2** |
| APC | | | | *e*S | **Sn** | **22 15 32.9** | **-0.5** |
| **APC** | **Apacha** | **7.31** | **270** | PN | **Pn** | **22 14 12.9** | **+1.2** |
| **MIPR** | **Malaya Ipel'ka** | **7.68** | **266** | *e*P | **Pn** | **22 14 18.1** | **+1.2** |
| **SKR** | **Severo-Kuril's** | **8.59** | **256** | *e*P | **Pn** | **22 14 29.2** | **-0.1** |
| **KDAK** | **Kodiak Island** | **21.73** | **63** | P | **P** | **22 17 14.2** | **-1.2** |
| **YAK** | **Yakutsk** | **22.45** | **308** | LR | LR | 22 24 58.5 | |
| MCK | comp=Z,22nm,20.4s,baz=170,slow=34 **McKinley** | **23.59** | **48** | *e*P | **P** | **22 17 33.6** | **-1.1** |
| MCK | comp=Z,3.0nm,0.8s | | | pmax | pmax | | |
| **MCK** | **McKinley** | **23.59** | **48** | *e*P | **P** | **22 17 33.6** | **-1.1** |
| **ILAR** | comp=Z,3.3nm,0.8s **Eielson Array** | **24.59** | **45** | P | **P** | **22 17 41.8** | **-2.1** |
| **H11N2** | comp=Z,0.8nm,0.5s,baz=254,slow=7.2,SNR=12 **WAKE ISLAND Hy** | **33.76** | **184** | T | T | 22 55 25.5 | |
| **H11N3** | baz=2.8,slow=76,SNR=208 **WAKE ISLAND Hy** | **33.78** | **184** | T | T | 22 55 26.6 | |
| **H11N1** | baz=2.8,slow=76,SNR=160 **WAKE ISLAND Hy** | **33.78** | **184** | T | T | 22 55 27.0 | |
| **H11S1** | baz=2.8,slow=76,SNR=223 **WAKE ISLAND Hy** | **34.99** | **184** | T | T | 22 56 57.4 | |
| **H11S3** | baz=3.2,slow=76,SNR=159 **WAKE ISLAND Hy** | **35.00** | **184** | T | T | 22 56 58.5 | |
| **H11S2** | baz=3.2,slow=76,SNR=48 **WAKE ISLAND Hy** | **35.01** | **184** | T | T | 22 56 58.6 | |
| **SONM** | baz=3.2,slow=76,SNR=116 **Songino Array** | **39.10** | **288** | P | **P** | **22 19 52.3** | **+1.0** |
| SONM | comp=Z,0.5nm,0.5s,baz=67,slow=7.2,SNR=6.1 | | | LR | LR | 22 37 06.7 | |
| **MKAR** | comp=Z,25nm,19.3s,baz=246,slow=38 **Makanchi Array** | **52.83** | **301** | P | **P** | **22 21 38.6** | **-0.6** |
| MKAR | comp=Z,0.3nm,0.3s,baz=46,slow=6.2,SNR=3.0 | | | LR | LR | 22 45 55.6 | |
| **BRVK** | comp=Z,21nm,19.8s,baz=34,slow=38 **Borovoye** | **54.34** | **313** | *e*P | **P** | **22 21 50.0** | **-0.2** |
| BRVK | comp=Z,4.0nm,0.6s | | | pmax | pmax | | |
| **BRVK** | **Borovoye** | **54.34** | **313** | *e*P | **P** | **22 21 50.0** | **-0.2** |
| **ARU** | comp=Z,4.1nm,0.6s **Arti** | **56.67** | **322** | *e*P | **P** | **22 22 06.2** | **-0.7** |
| ARU | comp=Z,2.0nm,0.5s | | | pmax | pmax | | |
| **ARU** | **Arti** | **56.67** | **322** | *e*P | **P** | **22 22 06.2** | **-0.7** |
| **TUC** | comp=Z,1.5nm,0.5s **Tucson** | **58.99** | **77** | *e*P | **P** | **22 22 24.1** | **+0.5** |
| TUC | comp=Z,1.0nm,0.4s | | | pmax | pmax | | |
| **TUC** | **Tucson** | **58.99** | **77** | *e*P | **P** | **22 22 24.1** | **+0.5** |
| **AAK** | comp=Z,1.4nm,0.4s **Ala-Archa** | **59.71** | **302** | *e*P | **P** | **22 22 28.8** | **+0.2** |
| AAK | comp=Z,2.0nm,0.8s | | | pmax | pmax | | |
| **AAK** | **Ala-Archa** | **59.71** | **302** | *e*P | **P** | **22 22 28.8** | **+0.2** |
| **LSA** | comp=Z,1.8nm,0.8s **Lhasa** | **59.86** | **280** | *e*P | **P** | **22 22 31.5** | **+1.4** |
| LSA | comp=Z,2.0nm,0.7s | | | pmax | pmax | | |
| **LSA** | **Lhasa** | **59.86** | **280** | *e*P | **P** | **22 22 31.5** | **+1.4** |
| **FINES** | comp=Z,2.0nm,0.7s **FINESS Array B** | **61.74** | **341** | P | **P** | **22 22 41.4** | **-0.4** |
| **CMAR** | comp=Z,6.0nm,1.1s,baz=45,slow=0.8,SNR=4.4 **Chiang Mai Arr** | **63.70** | **266** | P | **P** | **22 22 57.4** | **+1.9** |
| **NB2** | comp=Z,0.5nm,0.5s,baz=28,slow=5.9,SNR=3.4 **NORSAR Subarra** | **64.47** | **348** | P | **P** | **22 22 59.7** | **-0.3** |
| **NOA** | comp=Z,0.2nm,0.6s,baz=18,slow=6.5 **NORSAR Array B** | **64.47** | **348** | P | **P** | **22 22 59.8** | **-0.3** |
| **TXAR** | comp=Z,1.3nm,0.7s,baz=16,slow=6.7,SNR=5.2 **Lajitas Array** | **65.30** | **74** | P | **P** | **22 23 06.5** | **+0.5** |
| **AKASG** | comp=Z,0.4nm,0.6s,baz=304,slow=5.3,SNR=8.2 **Malin Array Be** | **70.87** | **334** | P | **P** | **22 23 40.4** | **0.0** |
| **GEYT** | comp=Z,0.3nm,0.3s,baz=23,slow=6.7,SNR=3.6 **Alibeck** | **71.32** | **309** | P | **P** | **22 23 43.0** | **-0.4** |
| GEYT | comp=Z,0.9nm,0.5s,baz=325,slow=7.4,SNR=3.9 | | | LR | LR | 22 57 02.6 | |
| **GERES** | comp=Z,20nm,18.6s,baz=125,slow=38 **GERESS Array B** | **75.95** | **344** | P | **P** | **22 24 11.0** | **+0.5** |
| **GERES** | comp=Z,0.5nm,0.5s,baz=44,slow=5.9,SNR=5.6 **GERESS Array B** | **75.95** | **344** | P | **P** | **22 24 11.0** | **+0.5** |
| **ASAR** | **Alice Springs** | **82.74** | **212** | P | P | 22 24 51.8 | +4.2 |
| | comp=Z,0.2nm,0.7s,baz=17,slow=6.8,SNR=2.8 | | | | | | |

*ISCJB **15** 22:12:35.4±0.7, 36°.85N±0°.05×71°.45E±0°.09, h200km, Error ellipse: s-maj=11.3km s-min=5.3km az=157.1*
*NNC **15** 22:12:39.4±0.8, 37°.05N×71°.31E, h173km±6km, mb2.9, mpv3.9, Error ellipse: s-maj=7.4km s-min=3.1km az=160.0*

**ISC 15 22:12:36.6**±1.1, **36°.87N**±0°.09×**71°.37E**±0°.08, **h200**km, **n14, s72/16, 6C-6D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DZET** | **Dzherino** | **2.79** | **315** | ⇓P | | **Pn** | **22 13 23.1** | **-0.8** |
| DZET | 54nm,0.4s | | | ⇑S | | **Sn** | **22 13 58.1** | **-2.7** |
| **SFK** | **Sufi-Kurgan** | **3.56** | **27** | ⇑P | | **Pn** | **22 13 33.2** | **+0.1** |
| SFK | 14nm,0.4s | | | ⇓S | | **Sn** | **22 14 15.9** | **-1.6** |
| **MNAS** | 59nm,0.3s **Manas** | **5.68** | **9** | ⇑P | | **Pn** | **22 14 00.2** | **+0.4** |
| MNAS | 4.3nm,0.4s | | | ⇑S | | **Sn** | **22 15 03.2** | **-2.3** |
| **AAK** | 13nm,0.4s **Ala-Archa** | **6.24** | **22** | ⇓P | | **Pn** | **22 14 07.4** | **+0.3** |
| AAK | 2.7nm,0.5s | | | ⇑S | | **Sn** | **22 15 17.7** | **-0.9** |
| **KK31** | 6.5nm,0.6s **Karatay Array** | **6.26** | **354** | ⇓P | | **Pn** | **22 14 07.8** | **+0.7** |
| | 2.2nm,0.2s,baz=172,slow=12,SNR=253 | | | | | | | |
| KK31 | | | | ⇓S | | **Sn** | **22 15 16.8** | **-2.1** |
| | 3.8nm,0.5s,baz=180,slow=20,SNR=6.8 | | | | | | | |
| **GKN** | **Gorkha** | **14.26** | **125** | *e*P | | Pn | 22 15 48.0 | -2.0 |
| **KKN** | **Kakani** | **14.83** | **124** | *e*P | | Pn | 22 15 54.8 | -2.2 |
| **DMN** | **Daman** | **14.83** | **125** | *e*P | | Pn | 22 15 55.2 | -1.9 |
| **AB31** | **Akbulak array** | **14.91** | **330** | ⇓P | | **P** | **22 15 59.8** | **+1.5** |
| | 0.9nm,0.5s,baz=163,slow=8.7,SNR=30 | | | | | | | |
| **PKIN** | **Phulchoki** | **15.05** | **124** | *e*P | | **Pn** | **22 15 58.0** | **-1.7** |
| **PKI** | **Pulchoki** | **15.06** | **124** | *e*P | | **Pn** | **22 15 58.1** | **-1.8** |
| **AKTO** | **Aktyubinsk** | **16.61** | **329** | ⇑P | | **Pn** | **22 16 20.4** | **+2.4** |
| | 4.4nm,1.4s | | | | | | | |
| **TAPN** | **Taplejung** | **16.77** | **120** | *e*P | | **P** | **22 16 19.6** | **+0.3** |
| **ODAN** | **Odare** | **16.86** | **122** | *e*P | | **P** | **22 16 21.6** | **+1.4** |

**SJA 15 22:27:15.6**±0.6, **32°.97S**×**69°.13W**, **h23**km±1km, **ML3.7, MW3.4, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ARCO** | **CERRO ARCO** | **0.21** | **52** | *e*P | | Pb | 22 27 21.9 | +0.4 |
| ARCO | | | | *e*S | | Sb | 22 27 26.0 | +0.5 |
| ARCO | comp=Z,370nm,0.2s | | | IAML | | | 22 27 28.6 | |
| **AAGR** | **Agrelo** | **0.28** | **114** | *e*P | | Pb | 22 27 22.7 | +0.4 |
| AAGR | | | | *e*S | | Sb | 22 27 27.7 | +0.8 |
| **ASAL** | **Salagasta** | **0.46** | **33** | *e*P | | Pb | 22 27 25.4 | +0.3 |
| ASAL | | | | *e*S | | Sb | 22 27 33.0 | +1.3 |
| **AUSP** | **Uspallata** | **0.78** | **344** | *e*P | | Pn | 22 27 31.4 | -0.2 |
| **CFAA** | **Coronel Fontan** | **1.56** | **29** | *e*P | | Pb | 22 27 44.0 | +0.2 |
| CFAA | | | | *e*S | | Sb | 22 28 04.7 | +1.5 |
| CFAA | comp=Z,28μm,0.1s | | | IAML | | | 22 28 09.4 | |
| **AVFE** | **Valle Fertil** | **2.71** | **32** | *e*P | | Pb | 22 28 00.8 | -2.8 |
| AVFE | | | | *e*S | | Sb | 22 28 34.1 | -2.4 |

*IDC **15** 22:52:30.7±3.5, 4°.71S×134°.69E, h0km, mb3.6/1, mb1 3.9/3, mb1mx3.5/17, mbtmp3.7/3, ML3.9/2, Error ellipse: s-maj=161.2km s-min=32.5km az=79.0*
*AUST **15** 22:52:37.1, 4°.83S×133°.38E, h0km*

**ISC 15 22:52:36.2**±1.0, **4°.74S**±0°.10×**133°.7E**±0°.1, **h28**km, **n9, s184/9, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.33** | **321** | P | | **Pb** | **22 53 16.6** | **-0.9** |
| | baz=2.2,SNR=9.8 | | | | | | | |
| **KDU** | **Kakadu** | **8.00** | **189** | P | | **Pn** | **22 54 31.2** | **+0.7** |
| | baz=7.9,SNR=12 | | | | | | | |
| **MTN** | **Manton Dam** | **8.45** | **197** | P | | **Pn** | **22 54 38.2** | **+1.4** |
| | baz=8.3,SNR=13 | | | | | | | |
| **LUWI** | **Luwuk** | **11.54** | **288** | P | | **Pn** | **22 55 18.2** | **-1.0** |
| | baz=11,SNR=5.8 | | | | | | | |
| **KNRA** | **Kununurra** | **11.92** | **204** | P | | **Pn** | **22 55 24.7** | **+0.4** |
| | baz=12,SNR=6.4 | | | | | | | |
| **MANU** | **Manus Island** | **13.88** | **79** | P | | **P** | **22 55 59.1** | **+0.1** |
| | baz=14,SNR=4.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **15.13** | **178** | Pn | | **Pn** | **22 56 04.9** | **-3.2** |
| | 0.4nm,0.3s,baz=0.2,slow=13,SNR=6.6 | | | | | | | |
| WRA | | | | Sn | | Sn | 22 58 42.9 | -12 |
| | 0.4nm,0.3s,baz=350,slow=23,SNR=4.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.82** | **179** | P | | **P** | **22 56 53.0** | **-0.8** |
| | 0.4nm,0.3s,baz=4.1,slow=11,SNR=23 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.45** | **325** | P | | **P** | **23 03 38.0** | **+2.3** |
| | 0.3nm,0.4s,baz=116,slow=6.6,SNR=3.8 | | | | | | | |

*ISK **15** 23:06:41.8, 39°.11N×28°.04E, h11km, MD2.6*
*ISCJB **15** 23:06:43.3±0.5, 39°.12N±0°.03×28°.05E±0°.04, h25km±7km, Error ellipse: s-maj=6.4km s-min=4.8km az=42.3*
*CSEM **15** 23:06:43.1±0.1, 39°.11N×28°.05E, h20km, MD2.6, Error ellipse: s-maj=4.1km s-min=3.2km az=53.0*
*DDA **15** 23:06:43.6, 39°.13N×28°.08E, h7km, Md2.6*

**ISC 15 23:06:43.1**±1.0, **39°.11N**±0°.03×**28°.05E**±0°.03, **h27**km±9km, **n24**, σ0**946**/36, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **AKHS** | **Akhisar** | **0.30** | **219** | *i* P | | **Pb** | **23 06 49.9** | **-0.3** |
| AKHS | | | | *i* S | | **Sb** | **23 06 55.7** | **+0.6** |
| **AKHS** | **Akhisar** | **0.30** | **219** | P | | **Pb** | **23 06 49.9** | **-0.3** |
| AKHS | | | | S | | **Sb** | **23 06 55.7** | **+0.6** |
| **DEMI** | **Demirci** | **0.52** | **97** | *i* P | | **Pb** | **23 06 53.7** | **0.0** |
| DEMI | | | | *i* S | | **Sb** | **23 07 01.2** | **+0.2** |
| **DEMI** | **Demirci** | **0.52** | **97** | P | | **Pb** | **23 06 53.7** | **0.0** |
| DEMI | | | | S | | **Sb** | **23 07 01.2** | **+0.2** |
| **DURS** | **Dursunbey** | **0.59** | **34** | *i* P | | **Pb** | **23 06 54.3** | **-0.6** |
| **DURS** | **Dursunbey** | **0.59** | **34** | P | | **Pb** | **23 06 54.3** | **-0.6** |
| **BALY** | **Balya** | **0.71** | **332** | *i* P | | **Pn** | **23 06 57.8** | **+0.3** |
| BALY | | | | *i* S | | **Sb** | **23 07 06.3** | **-0.1** |
| **BALY** | **Balya** | **0.71** | **332** | P | | **Pn** | **23 06 57.8** | **+0.3** |
| BALY | | | | S | | **Sb** | **23 07 06.3** | **-0.1** |
| **MANT** | **Manisa** | **0.73** | **147** | *i* P | | **Pn** | **23 06 58.2** | **+0.3** |
| MANT | | | | *i* S | | **Sb** | **23 07 07.5** | **+0.3** |
| **MANT** | **Manisa** | **0.73** | **147** | P | | **Pn** | **23 06 58.2** | **+0.3** |
| MANT | | | | S | | **Sb** | **23 07 07.5** | **+0.3** |
| **KULA** | **Kula-Manisa** | **0.76** | **141** | *e*PG | | **Pb** | **23 06 56.9** | **-0.9** |
| KULA | | | | *e*SG | | **Sb** | **23 07 08.3** | **+0.5** |
| **KULA** | **Kula-Manisa** | **0.76** | **141** | *e*Pg | | **Pb** | **23 06 56.9** | **-0.9** |
| KULA | | | | *e*Sg | | **Sb** | **23 07 08.3** | **+0.5** |
| **DKL** | **Dikili** | **0.90** | **268** | *e*PG | | **Pn** | **23 06 58.9** | **-1.0** |
| DKL | | | | *e*SG | | **Sn** | **23 07 11.9** | **0.0** |
| **DKL** | **Dikili** | **0.90** | **268** | *e*Pg | | **Pn** | **23 06 58.9** | **-1.0** |
| DKL | | | | *e*Sg | | **Sn** | **23 07 12.0** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **0.98** | **343** | *e*PG | | **Pn** | **23 07 00.9** | **-0.1** |
| **GONE** | **Gonen-Balikesi** | **0.98** | **343** | *e*Pg | | **Pn** | **23 07 01.0** | **-0.1** |
| **BLCB** | **Balcova** | **1.07** | **228** | *e*PG | | **Pb** | **23 07 03.3** | **+0.3** |
| **BLCB** | **Balcova** | **1.07** | **228** | *e*Pg | | **Pb** | **23 07 03.3** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.17** | **186** | *e*PN | | **Pb** | **23 07 04.5** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.17** | **186** | *e*Pn | | **Pb** | **23 07 04.5** | **-0.2** |
| **KCTX** | **Karacabey (Bur** | **1.18** | **11** | *e*PN | | **Pb** | **23 07 05.0** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **1.18** | **11** | *e*Pn | | **Pb** | **23 07 05.0** | **+0.2** |
| **EZN** | **Ezine** | **1.52** | **299** | *e*PN | | **Pn** | **23 07 08.7** | **+0.3** |
| **EZN** | **Ezine** | **1.52** | **299** | *e*Pn | | **Pn** | **23 07 08.7** | **+0.3** |

*ISCJB **15** 23:07:36.6±0.8, 39°.10N±0°.03×29°.08E±0°.06, h5km±9km, Error ellipse: s-maj=8.3km s-min=4.7km az=160.8*
*CSEM **15** 23:07:36.9±0.1, 39°.10N×29°.07E, h8km, MD2.7, Error ellipse: s-maj=2.0km s-min=1.4km az=98.0*
*DDA **15** 23:07:36.8, 39°.13N×29°.05E, h7km, Md2.7*
*ISK **15** 23:07:36.2, 39°.09N×29°.09E, h8km, MD2.6*

**ISC 15 23:07:36.9**±1.1, **39°.10N**±0°.02×**29°.09E**±0°.04, **h6**km±12km, **n27**, σ0**933**/40, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DEMI** | **Demirci** | **0.30** | **259** | *i* P | | **Pg** | **23 07 42.7** | **0.0** |
| DEMI | | | | *i* S | | **Sg** | **23 07 46.8** | **+0.1** |
| **DEMI** | **Demirci** | **0.30** | **259** | P | | **Pg** | **23 07 42.8** | **0.0** |
| DEMI | | | | S | | **Sg** | **23 07 46.8** | **+0.1** |
| **KULA** | **Kula-Manisa** | **0.68** | **210** | *e*PG | | **Pg** | **23 07 49.6** | **-0.2** |
| KULA | | | | *e*SG | | **Sg** | **23 07 59.0** | **+0.4** |
| **KULA** | **Kula-Manisa** | **0.68** | **210** | *e*Pg | | **Pg** | **23 07 49.6** | **-0.2** |
| KULA | | | | *e*Sg | | **Sg** | **23 07 59.0** | **+0.4** |
| **DURS** | **Dursunbey** | **0.69** | **316** | *i* P | | **Pg** | **23 07 50.4** | **+0.2** |
| DURS | | | | *i* S | | **Sg** | **23 07 59.3** | **+0.1** |
| **DURS** | **Dursunbey** | **0.69** | **316** | P | | **Pg** | **23 07 50.4** | **+0.2** |
| DURS | | | | S | | **Sg** | **23 07 59.3** | **+0.1** |
| **MANT** | **Manisa** | **0.74** | **215** | *i* P | | **Pg** | **23 07 51.1** | **0.0** |
| MANT | | | | *i* S | | **Sg** | **23 08 00.4** | **-0.3** |
| **MANT** | **Manisa** | **0.74** | **215** | P | | **Pg** | **23 07 51.1** | **0.0** |
| MANT | | | | S | | **Sg** | **23 08 00.3** | **-0.3** |
| **KHAL** | **Karahalli** | **0.79** | **157** | *i* P | | **Pb** | **23 07 52.9** | **-0.2** |
| KHAL | | | | *i* S | | **Sg** | **23 08 03.3** | **+0.9** |
| **KHAL** | **Karahalli** | **0.79** | **157** | P | | **Pb** | **23 07 52.9** | **-0.2** |
| KHAL | | | | S | | **Sg** | **23 08 03.3** | **+0.9** |
| **IGD** | **Bursa** | **1.17** | **4** | P | | **Pg** | **23 07 58.5** | **-0.7** |
| IGD | | | | S | | **Sg** | **23 08 14.3** | **0.0** |
| **SHUT** | **Suhut-Afyon** | **1.27** | **115** | *e*PN | | **Pn** | **23 08 00.8** | **-0.4** |
| **SHUT** | **Suhut-Afyon** | **1.27** | **115** | *e*Pn | | **Pn** | **23 08 00.8** | **-0.4** |
| **IZI** | **Iznik** | **1.27** | **13** | *e*PN | | **Pn** | **23 08 01.0** | **-0.2** |
| IZI | | | | *e*SN | | **Sn** | **23 08 19.1** | **+0.5** |
| **IZI** | **Iznik** | **1.27** | **13** | *e*Pn | | **Pn** | **23 08 01.0** | **-0.2** |
| IZI | | | | *e*Sn | | **Sn** | **23 08 19.1** | **+0.5** |
| **KCTX** | **Karacabey (Bur** | **1.29** | **334** | *e*PN | | **Pn** | **23 08 01.2** | **-0.3** |
| **KCTX** | **Karacabey (Bur** | **1.29** | **334** | *e*Pn | | **Pn** | **23 08 01.2** | **-0.3** |
| **BORA** | **Eskisehir** | **1.31** | **53** | *i* P | | **Pn** | **23 08 01.8** | **+0.1** |
| **BORA** | **Eskisehir** | **1.31** | **53** | P | | **Pn** | **23 08 01.8** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.44** | **311** | *e*PN | | **Pn** | **23 08 03.4** | **-0.1** |
| **GONE** | **Gonen-Balikesi** | **1.44** | **311** | *e*Pn | | **Pn** | **23 08 03.4** | **-0.1** |
| **ARMT** | **Armutlu** | **1.47** | **353** | *e*PN | | **Pn** | **23 08 04.0** | **+0.1** |
| **ARMT** | **Armutlu** | **1.47** | **353** | *e*Pn | | **Pn** | **23 08 04.0** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.49** | **220** | *e*PN | | **Pn** | **23 08 04.0** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.49** | **220** | *e*Pn | | **Pn** | **23 08 04.0** | **-0.2** |
| **GULT** | **Gulveren** | **1.72** | **39** | *e*PN | | **Pn** | **23 08 07.2** | **-0.3** |
| **GULT** | **Gulveren** | **1.72** | **39** | *e*Pn | | **Pn** | **23 08 07.2** | **-0.3** |

*SJA **15** 23:25:18.9±0.5, 26°.26S×71°.47W, h10km, ML3.5, MW3.2*
*IDC **15** 23:25:22.1±1.9, 26°.48S×70°.46W, h0km, mb3.8/2, mb1 3.9/5, mb1mx3.6/28, mbtmp3.8/5, ML3.7/2, MS3.6/2, Ms1 3.6/2, ms1mx2.7/26, Error ellipse: s-maj=81.0km s-min=25.1km az=97.0*
*ISCJB **15** 23:25:24.1±1.0, 26°.31S±0°.04×71°.2W±0°.1, h34km, mb3.7/2, MS4.2/1, Error ellipse: s-maj=16.8km s-min=5.1km az=11.6*
*GUC **15** 23:25:25.6±0.6, 26°.44S×70°.61W, h33km±3km, ML3.7*

**ISC 15 23:25:25.6**±1.1, **26°.34S**±0°.05×**71°.1W**±0°.1, **h34**km, **n33,** σ1**873**/31, **3C-2D, Off coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CDCH** | **Caldera** | **0.77** | **161** | *i* P | | **Pn** | **23 25 38.6** | **-1.5** |
| CDCH | | | | *i* S | | **Sn** | **23 25 47.5** | **-2.8** |
| **CPCH** | **Copiapo** | **1.21** | **147** | ⇑*i* P | | Pn | 23 25 42.6 | -3.7 |
| CPCH | | | | *i* S | | Sn | 23 25 55.6 | -5.9 |
| **VACH** | **Vallenar** | **2.25** | **172** | *e*P | | **Pn** | **23 26 01.2** | **+0.7** |
| VACH | | | | *i* S | | **Sn** | **23 26 27.4** | **+0.4** |
| **LCO** | **Las Campanas** | **2.68** | **172** | ⇑*i* P | | **Pn** | **23 26 06.7** | **0.0** |
| LCO | | | | *e*S | | **Sn** | **23 26 38.3** | **+0.2** |
| LCO | comp=N,380nm,0.5s | | | AML | AML | | 23 26 52.5 | |
| **LCO** | **Las Campanas** | **2.68** | **172** | *e*P | | **Pn** | **23 26 06.8** | **0.0** |
| LCO | | | | *e*S | | **Sb** | **23 26 44.2** | **-1.6** |
| **VCA** | **Vinchina** | **3.51** | **134** | *e*P | | **Pn** | **23 26 20.6** | **+2.7** |
| VCA | comp=Z,167nm,0.2s | | | IAML | | | 23 26 34.2 | |
| **TLL** | **Tololo Astrono** | **3.82** | **176** | *e*P | | **Pn** | **23 26 23.2** | **+0.9** |
| TLL | | | | *e*S | | **Sn** | **23 27 05.4** | **-0.8** |
| **AGUA** | **GUANDACOL** | **3.89** | **144** | *e*P | | **Pn** | **23 26 26.1** | **+2.9** |
| **LVC** | **Limon Verde** | **4.21** | **29** | Pn | | **Pn** | **23 26 28.0** | **+0.2** |
| LVC | comp=Z,132nm,0.3s,baz=204,slow=7.8,SNR=93 | | | Pg | | Pb | 23 26 35.9 | -3.4 |
| LVC | comp=Z,351nm,0.3s,baz=170,slow=8.9,SNR=35 | | | Lg | | Lg | 23 27 25.7 | |
| **LVC** | comp=Z,1μm,0.3s,baz=273,slow=9.3,SNR=8.1 **Limon Verde** | **4.21** | **29** | ⇑*i* P | | **Pn** | **23 26 28.0** | **+0.2** |
| **LVC** | **Limon Verde** | **4.21** | **29** | *e*P | | **Pn** | **23 26 28.3** | **+0.6** |
| LVC | | | | ⇓*e*S | | **Sb** | **23 27 25.9** | **-3.9** |
| **CYA** | **Choya** | **5.15** | **115** | *e*P | | **Pn** | **23 26 39.9** | **-0.6** |
| CYA | comp=Z,20nm,0.6s | | | IAML | | | 23 26 43.6 | |
| **AHML** | **Horco Molle** | **5.18** | **96** | *e*P | | **Pn** | **23 26 43.6** | **+2.7** |
| AHML | comp=Z,14nm,0.6s | | | IAML | | | 23 27 04.7 | |
| **SLA** | **San Lorenzo** | **5.31** | **74** | ⇓*e*P | | Pn | 23 26 48.4 | +5.7 |
| SLA | comp=Z,7.4nm,0.6s | | | IAML | | | 23 26 51.1 | |
| **AVFE** | **Valle Fertil** | **5.37** | **144** | *e*P | | **Pn** | **23 26 44.1** | **+0.7** |
| AVFE | comp=Z,46nm,0.3s | | | IAML | | | 23 27 55.9 | |
| **RTLL** | **Cerro Villicun** | **5.48** | **156** | *e*P | | **Pn** | **23 26 47.2** | **+2.3** |
| **RTLS** | **Leoncito** | **5.66** | **164** | *e*P | | **Pn** | **23 26 49.6** | **+2.0** |
| **CFAA** | **Coronel Fontan** | **5.81** | **155** | Pn | | **Pn** | **23 26 50.4** | **+0.8** |
| CFAA | comp=Z,0.1nm,0.3s,baz=343,slow=11,SNR=16 | | | Sn | | **Sn** | **23 27 52.0** | **-3.0** |
| **CFAA** | comp=Z,0.3nm,0.3s,baz=308,slow=18,SNR=2.2 **Coronel Fontan** | **5.81** | **155** | *e*P | | **Pn** | **23 26 50.8** | **+1.2** |
| **RTCV** | **Cerro Valdivia** | **5.94** | **158** | *e*P | | Pn | 23 26 55.5 | +4.3 |
| **HJA** | **Humahu

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SERS | **Sersale** | 1.35 | 135 | ⇓ | *i*Pg | **Pn** | 23 34 19.5 +0.5 |
| SERS | | | | | Sg | **S** | 23 34 49.9 -0.7 |
| | 43nm,0.3s | | | | | | |
| SERS | **Sersale** | 1.35 | 135 | ⇓ | *i*Pg | **Pn** | 23 34 19.5 +0.5 |
| SERS | | | | | Sg | **S** | 23 34 49.9 -0.7 |
| | 43nm,0.3s | | | | | | |
| LADO | **San Nicola del** | 1.37 | 121 | | Pg | **Pn** | 23 34 19.6 +0.6 |
| LADO | **San Nicola del** | 1.37 | 121 | | Pg | **Pn** | 23 34 19.6 +0.6 |
| GRI | **Girifalco** | 1.39 | 147 | | Pg | **Pn** | 23 34 19.6 +0.4 |
| | 31µm,16.0s | | | | | | |
| GRI | **Girifalco** | 1.39 | 147 | | Pg | **Pn** | 23 34 19.6 +0.4 |
| | 31µm,16.0s | | | | | | |
| JOPP | **Joppolo** | 1.43 | 166 | | Pg | **Pn** | 23 34 19.9 +0.5 |
| | 42nm,0.3s | | | | | | |
| JOPP | **Joppolo** | 1.43 | 166 | | Pg | **Pn** | 23 34 19.9 +0.5 |
| | 42nm,0.3s | | | | | | |
| NOCI | **Noci** | 1.46 | 57 | ⇑ | *i*Pg | **Pn** | 23 34 20.2 +0.7 |
| NOCI | | | | | Sg | **S** | 23 34 51.3 -0.3 |
| | 61nm,0.6s | | | | | | |
| NOCI | **Noci** | 1.46 | 57 | ⇑ | *i*Pg | **Pn** | 23 34 20.2 +0.7 |
| NOCI | | | | | Sg | **S** | 23 34 51.3 -0.3 |
| | 61nm,0.6s | | | | | | |
| SGG | **Gregorio Mates** | 1.61 | 330 | | Pg | **Pn** | 23 34 21.4 +0.7 |
| | 21nm,0.6s | | | | | | |
| SGG | **Gregorio Mates** | 1.61 | 330 | | Pg | **Pn** | 23 34 21.4 +0.7 |
| | 21nm,0.6s | | | | | | |
| PE1 | **Pezze di Greco** | 1.71 | 61 | | *e*P | **Pn** | 23 34 22.1 +0.9 |
| PLAC | **Placanica** | 1.72 | 153 | | Pg | **Pn** | 23 34 21.5 -0.1 |
| | 60nm,0.5s | | | | | | |
| PLAC | **Placanica** | 1.72 | 153 | | Pg | **Pn** | 23 34 21.5 -0.1 |
| | 60nm,0.5s | | | | | | |
| MILZ | **Milazzo** | 1.73 | 186 | | Pg | **Pn** | 23 34 22.2 +0.7 |
| MILZ | **Milazzo** | 1.73 | 186 | | Pg | **Pn** | 23 34 22.2 +0.7 |
| MSRU | **Castanea** | 1.73 | 179 | | Pg | **Pn** | 23 34 21.0 -0.6 |
| MSRU | | | | | Sg | **S** | 23 34 54.6 -0.7 |
| MSRU | **Castanea** | 1.73 | 179 | | Pg | **Pn** | 23 34 21.0 -0.6 |
| MSRU | | | | | Sg | **S** | 23 34 54.6 -0.7 |
| MSCL | **Scilla** | 1.78 | 171 | | Pg | **Pn** | 23 34 21.4 -0.7 |
| MSCL | **Scilla** | 1.78 | 171 | | Pg | **Pn** | 23 34 21.4 -0.7 |
| MIDA | **Miranda** | 1.88 | 331 | | Pg | **Pn** | 23 34 23.8 +1.1 |
| | 94nm,2.0s | | | | | | |
| MIDA | **Miranda** | 1.88 | 331 | | Pg | **Pn** | 23 34 23.8 +1.1 |
| | 94nm,2.0s | | | | | | |
| MESG | **Mesagne** | 1.93 | 71 | | Pg | **Pn** | 23 34 24.0 +1.0 |
| MESG | **Mesagne** | 1.93 | 71 | | Pg | **Pn** | 23 34 24.0 +1.0 |
| SOI | **Samo** | 1.98 | 166 | | Pg | **Pn** | 23 34 23.3 -0.3 |
| | 45nm,0.5s | | | | | | |
| SOI | **Samo** | 1.98 | 166 | | Pg | **Pn** | 23 34 23.3 -0.3 |
| | 45nm,0.5s | | | | | | |
| MTTG | **Motta San Giov** | 2.00 | 175 | | Pg | **Pn** | 23 34 24.1 +0.3 |
| MTTG | **Motta San Giov** | 2.00 | 175 | | Pg | **Pn** | 23 34 24.1 +0.3 |
| MMME | **Mongiuffi-Meli** | 2.06 | 184 | | Pg | **Pn** | 23 34 25.1 +0.7 |
| MMME | **Mongiuffi-Meli** | 2.06 | 184 | | Pg | **Pn** | 23 34 25.1 +0.7 |
| MPAZ | **Palizzi** | 2.08 | 168 | | Pg | **Pn** | 23 34 24.4 -0.1 |
| | 90nm,0.5s | | | | | | |
| MPAZ | **Palizzi** | 2.08 | 168 | | Pg | **Pn** | 23 34 24.4 -0.1 |
| | 90nm,0.5s | | | | | | |
| SDI | **San Donato** | 2.12 | 324 | | Pg | **Pn** | 23 34 25.0 +0.3 |
| | 13nm,0.6s | | | | | | |
| SDI | **San Donato** | 2.12 | 324 | | Pg | **Pn** | 23 34 25.0 +0.3 |
| | 13nm,0.6s | | | | | | |
| POFI | **Posta Fibreno** | 2.17 | 323 | | Pg | **Pn** | 23 34 25.6 +0.4 |
| | 41nm,1.5s | | | | | | |
| POFI | **Posta Fibreno** | 2.17 | 323 | | Pg | **Pn** | 23 34 25.6 +0.4 |
| | 41nm,1.5s | | | | | | |
| CAGR | **Agira** | 2.48 | 198 | | Pg | **Pn** | 23 34 29.9 +1.7 |
| | 102nm,0.7s | | | | | | |
| CAGR | **Agira** | 2.48 | 198 | | Pg | **Pn** | 23 34 29.9 +1.7 |
| | 102nm,0.7s | | | | | | |
| PTQR | **Pietraquaria** | 2.55 | 323 | | Pg | **Pn** | 23 34 29.6 +0.9 |
| | 7.0nm,0.7s | | | | | | |
| PTQR | **Pietraquaria** | 2.55 | 323 | | Pg | **Pn** | 23 34 29.6 +0.9 |
| | 7.0nm,0.7s | | | | | | |
| RESU | **Resuttano** | 2.59 | 205 | | Pg | **Pn** | 23 34 31.2 +2.0 |
| RESU | **Resuttano** | 2.59 | 205 | | Pg | **Pn** | 23 34 31.2 +2.0 |
| ALJA | **Alia** | 2.61 | 211 | | Pg | **Pn** | 23 34 29.8 +0.5 |
| | 71nm,1.3s | | | | | | |
| ALJA | **Alia** | 2.61 | 211 | | Pg | **Pn** | 23 34 29.8 +0.5 |
| | 71nm,1.3s | | | | | | |
| VAE | **Valguarnera** | 2.64 | 198 | | P | **Pn** | 23 34 31.8 +2.1 |
| | 0.2nm,0.3s,baz=49,slow=18,SNR=7.4 | | | | | | |
| VAE | | | | | S | **S** | 23 35 13.0 +3.1 |
| | 0.1nm,0.3s,baz=283,slow=18,SNR=1.9 | | | | | | |
| FAGN | **Fagnano** | 2.67 | 329 | | Pg | **Pn** | 23 34 31.1 +1.2 |
| | 29nm,1.0s | | | | | | |
| FAGN | **Fagnano** | 2.67 | 329 | | Pg | **Pn** | 23 34 31.1 +1.2 |
| | 29nm,1.0s | | | | | | |
| HLNI | **Lentini** | 2.68 | 190 | | Pg | **Pn** | 23 34 29.8 -0.2 |
| | 31nm,0.8s | | | | | | |
| HLNI | **Lentini** | 2.68 | 190 | | Pg | **Pn** | 23 34 29.8 -0.2 |
| | 31nm,0.8s | | | | | | |
| HVZN | **Vizzini** | 2.87 | 192 | | Pg | **Pn** | 23 34 32.4 +0.4 |
| | 122nm,1.0s | | | | | | |
| HVZN | **Vizzini** | 2.87 | 192 | | Pg | **Pn** | 23 34 32.4 +0.4 |
| | 122nm,1.0s | | | | | | |
| CLTB | **Caltabellotta** | 2.98 | 217 | | Pg | **Pn** | 23 34 34.5 +1.4 |
| | 84nm,1.1s | | | | | | |
| CLTB | **Caltabellotta** | 2.98 | 217 | | Pg | **Pn** | 23 34 34.5 +1.4 |
| | 84nm,1.1s | | | | | | |
| HAVL | **Avola** | 3.04 | 185 | | Pg | **Pn** | 23 34 33.4 -0.3 |
| HAVL | **Avola** | 3.04 | 185 | | Pg | **Pn** | 23 34 33.4 -0.3 |
| BOJS | **Bojanci** | 5.51 | 359 | | *i*P | **Pn** | 23 35 02.7 +1.1 |
| LEGS | **Legarje** | 5.95 | 359 | | *i*P | **Pn** | 23 35 07.6 +0.6 |
| CRNS | **Crni Vrh** | 6.15 | 352 | | *i*P | **Pn** | 23 35 10.0 +0.5 |
| KEST | **Kesra** | 6.44 | 231 | | P | Pn | 23 35 17.5 +4.3 |
| | 0.2nm,0.3s,baz=18,slow=5.5,SNR=4.2 | | | | | | |
| OBKA | **Obir** | 6.55 | 354 | ⇑ | *i*Pn | **Pn** | 23 35 15.1 +0.7 |
| SOKA | **Soboth** | 6.69 | 357 | ⇑ | *i*Pn | **Pn** | 23 35 16.6 +0.5 |
| ABTA | **Abfaltersbach** | 7.08 | 343 | ⇑ | *i*Pn | **Pn** | 23 35 21.4 +0.4 |
| BZS | **Buzias** | 7.22 | 37 | ⇓ | *i*P | **Pn** | 23 35 24.3 +1.7 |
| GZR | **Gura Zlata** | 7.63 | 43 | ⇓ | *i*P | Pn | 23 35 31.8 +4.0 |
| SIRR | **Siria** | 7.74 | 34 | ⇑ | *i*P | **Pn** | 23 35 30.1 +1.0 |
| DAVOX | **Davos/Dischmat** | 7.90 | 331 | | P | **Pn** | 23 35 32.5 +1.1 |
| | 0.3nm,0.3s,baz=155,slow=16,SNR=4.0 | | | | | | |
| IDI | **Anoyia** | 8.83 | 119 | | P | **Pn** | 23 35 45.8 +2.8 |
| | 0.8nm,0.3s,baz=237,slow=6.1,SNR=8.5 | | | | | | |
| VOIR | | 8.91 | 49 | ⇓ | *i*P | **P** | 23 35 47.4 -2.4 |
| GERES | **GERESS Array B** | 8.94 | 353 | | P | **Pn** | 23 35 44.0 -0.1 |
| | 0.3nm,0.3s,baz=166,slow=13,SNR=12 | | | | | | |
| GERES | | | | | S | S | 23 37 18.7 -6.8 |
| | 0.0nm,0.3s,baz=192,slow=19,SNR=2.7 | | | | | | |
| MLR | **Muntele Rosu** | 9.47 | 51 | ⇑ | *i*P | **P** | 23 35 54.4 -1.8 |
| BRTR | **Keskin Array B** | 13.97 | 85 | | P | P | 23 36 49.6 +3.4 |
| | 0.2nm,0.3s,baz=272,slow=13,SNR=9.2 | | | | | | |
| AKASG | **Malin Array Be** | 14.41 | 37 | | P | **Pn** | 23 36 52.0 +0.9 |
| | 2.1nm,0.3s,baz=231,slow=10,SNR=7.8 | | | | | | |
| ESDC | **Sonseca Array** | 14.93 | 275 | | P | **P** | 23 36 56.6 -0.1 |
| | 0.1nm,0.3s,baz=74,slow=11,SNR=4.2 | | | | | | |
| MMAI | **Mount Meron Ar** | 17.46 | 107 | | P | **Pn** | 23 37 27.1 -0.2 |
| | 2.0nm,0.3s,baz=301,slow=9.7,SNR=16 | | | | | | |
| EIL | **Elat** | 18.99 | 117 | | P | **P** | 23 37 42.6 +1.7 |
| | 0.3nm,0.3s,baz=338,slow=19,SNR=3.5 | | | | | | |
| HFS | **Hagfors** | 20.19 | 357 | | P | **P** | 23 37 52.1 -1.1 |
| | 1.1nm,0.5s,baz=180,slow=11,SNR=5.7 | | | | | | |
| FINES | **FINESS Array B** | 22.45 | 13 | | P | **P** | 23 38 14.5 -0.2 |
| | 1.5nm,0.7s,baz=182,slow=9.3,SNR=7.6 | | | | | | |
| TORD | **Torodi Ar. Bea** | 29.36 | 208 | | P | **P** | 23 39 16.1 -1.0 |
| | 0.4nm,0.3s,baz=15,slow=9.1,SNR=21 | | | | | | |
| GEYT | **Alibeck** | 33.01 | 80 | | P | **P** | 23 39 50.0 +1.2 |
| | 1.0nm,0.5s,baz=264,slow=12,SNR=4.5 | | | | | | |
| DBIC | **Dimbokro** | 37.86 | 214 | | P | **P** | 23 40 28.9 -1.1 |
| | 3.6nm,0.9s,baz=17,slow=7.5,SNR=8.5 | | | | | | |
| ZALV | **Zalesovo Beam** | 47.44 | 49 | | P | **P** | 23 41 46.8 +0.7 |
| | 1.1nm,0.3s,baz=282,slow=6.3,SNR=6.2 | | | | | | |
| MKAR | **Makanchi Array** | 47.72 | 59 | | P | **P** | 23 41 49.3 +0.9 |
| | 1.4nm,0.3s,baz=284,slow=7.1,SNR=23 | | | | | | |

*IDC **15** 23:36:23.8±2.9, 39.35N×30.48W, h0km, mb3.7/7, mb1 3.8/7, mb1mx3.6/43, mbtmp3.7/7, MS3.3/8, Ms1 3.3/8, ms1mx3.1/27, Error ellipse: s-maj=68.1km s-min=34.6km az=66.0*

*ISCJB **15** 23:36:25.8±0.4, 39.35N±0.06×29.82W±0.05, h10km, mb3.6/6, MS3.2/8, Error ellipse: s-maj=10.0km s-min=3.0km az=27.5*

*PDA **15** 23:36:28.7±0.9, 39.64N×29.73W, h10km, ML3.2, Error ellipse: s-maj=6.7km s-min=1.8km az=29.0*

*CSEM **15** 23:36:28.7, 39.64N×29.73W, h10km, ML3.2, After PDA*

**ISC 15 23:36:25.5±0.7, 39.42N±0.08×29.77W±0.04, h10km, n34, σ1§51/46, mb3.7/6, MS3.2/8, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| H07N1 | **FLORES T-PHASE** | 1.08 | 285 | *e*P | | **Pb** | 23 36 45.5 | -0.8 |
| H07N1 | | | | *e*S | | **Sg** | 23 36 57.5 | -2.7 |
| H07N1 | **FLORES T-PHASE** | 1.08 | 285 | Pn | | **Pn** | 23 36 46.5 | -0.2 |
| H07S1 | **FLORES T-PHASE** | 1.11 | 268 | *e*P | | **Pb** | 23 36 46.6 | -0.2 |
| H07S1 | | | | *e*S | | **Sb** | 23 36 59.4 | -2.0 |
| H07S1 | **FLORES T-PHASE** | 1.11 | 268 | Pn | | **Pn** | 23 36 47.4 | +0.2 |
| PCED | **Cedros** | 1.15 | 133 | *e*P | | **Pn** | 23 36 47.8 | +0.2 |
| PCED | | | | *e*S | | **Sg** | 23 37 02.2 | -0.2 |
| PCED | | | | A | | A | 23 37 04.6 | |
| | 140nm,0.4s | | | | | | | |
| PCED | **Cedros** | 1.15 | 133 | *e*P | | **Pn** | 23 36 47.8 | +0.2 |
| PCED | | | | *e*S | | **Sg** | 23 37 02.2 | -0.2 |
| CALA | **Caldeira** | 1.18 | 135 | *e*P | | **Pg** | 23 36 49.1 | +0.9 |
| CALA | | | | *e*S | | **Sn** | 23 37 03.7 | -0.6 |
| CALA | **Caldeira** | 1.18 | 135 | *e*P | | **Pg** | 23 36 49.1 | +0.9 |
| CALA | | | | *e*S | | **Sn** | 23 37 03.7 | -0.6 |
| HOR | **Horta** | 1.26 | 135 | *e*P | | **Pg** | 23 36 49.6 | -0.1 |
| HOR | | | | *e*S | | **Sg** | 23 37 05.5 | -0.5 |
| HOR | **Horta** | 1.26 | 135 | *e*P | | **Pg** | 23 36 49.6 | -0.1 |
| HOR | | | | *e*S | | **Sg** | 23 37 05.5 | -0.5 |
| ROSA | **Rosais** | 1.38 | 120 | *e*P | | **Pn** | 23 36 50.3 | -0.5 |
| ROSA | | | | *e*S | | **Sb** | 23 37 06.8 | -2.3 |
| ROSA | | | | A | | A | 23 37 15.7 | |
| | 111nm,0.5s | | | | | | | |
| ROSA | **Rosais** | 1.38 | 120 | *e*P | | **Pn** | 23 36 50.3 | -0.5 |
| ROSA | | | | *e*S | | **Sb** | 23 37 06.8 | -2.3 |
| PCAN | **Candelaria** | 1.38 | 133 | *e*P | | **Pb** | 23 36 51.1 | -0.4 |
| PCAN | | | | *e*S | | **Sb** | 23 37 08.6 | -0.6 |
| PCAN | | | | A | | A | 23 37 08.9 | |
| | 233nm,0.4s | | | | | | | |
| PCAN | **Candelaria** | 1.38 | 133 | *e*P | | **Pb** | 23 36 51.1 | -0.4 |
| PCAN | | | | *e*S | | **Sb** | 23 37 08.6 | -0.6 |
| PICO | **Pico** | 1.39 | 131 | *e*P | | **Pb** | 23 36 51.5 | -0.1 |
| PICO | | | | *e*S | | **Sb** | 23 37 08.5 | -1.0 |
| PICO | **Pico** | 1.39 | 131 | *e*P | | **Pb** | 23 36 51.5 | -0.1 |
| PICO | | | | *e*S | | **Sb** | 23 37 08.5 | -1.0 |
| PGRA | **Graciosa** | 1.44 | 105 | *e*P | | **Pn** | 23 36 50.6 | -1.1 |
| PGRA | | | | *e*S | | **Sn** | 23 37 06.7 | -4.0 |
| PGRA | | | | A | | A | 23 37 08.5 | |
| | 106nm,0.4s | | | | | | | |
| PGRA | **Graciosa** | 1.44 | 105 | *e*P | | **Pn** | 23 36 50.6 | -1.1 |
| PGRA | | | | *e*S | | **Sn** | 23 37 06.7 | -4.0 |
| PPNO | **Prainha do Nor** | 1.51 | 128 | *e*P | | **Pb** | 23 36 52.9 | -0.7 |
| PPNO | | | | *e*S | | **Sn** | 23 37 11.1 | -1.3 |
| PPNO | | | | A | | A | 23 37 13.1 | |
| | 45nm,0.3s | | | | | | | |
| PPNO | **Prainha do Nor** | 1.51 | 128 | *e*P | | **Pb** | 23 36 52.9 | -0.7 |
| PPNO | | | | *e*S | | **Sn** | 23 37 11.1 | -1.3 |
| PMAN | **Manadas** | 1.53 | 120 | *e*P | | **Pn** | 23 36 52.9 | +0.1 |
| PMAN | | | | *e*S | | **Sn** | 23 37 10.4 | -2.3 |
| PMAN | | | | A | | A | 23 37 20.4 | |
| | 45nm,0.5s | | | | | | | |
| PMAN | **Manadas** | 1.53 | 120 | *e*P | | **Pn** | 23 36 52.9 | +0.1 |
| PMAN | | | | *e*S | | **Sn** | 23 37 10.4 | -2.3 |
| ESDC | **Sonseca Array** | 19.89 | 81 | P | | **Pn** | 23 41 01.8 | +3.2 |
| | 2.5nm,1.1s,baz=276,slow=8.8,SNR=4.0 | | | | | | | |
| GERES | **GERESS Array B** | 32.20 | 59 | LR | | LR | 23 54 45.7 | |
| | comp=Z,27nm,19.5s,baz=240,slow=34 | | | | | | | |
| NOA | **NORSAR Array B** | 33.17 | 36 | LR | | LR | 23 54 17.0 | |
| | comp=Z,38nm,20.9s,baz=275,slow=32 | | | | | | | |
| TORD | **Torodi Ar. Bea** | 38.13 | 125 | P | | P | 23 43 48.7 | +3.8 |
| | 0.6nm,0.9s,baz=309,slow=9.1,SNR=3.5 | | | | | | | |
| TORD | | | | LR | | LR | 23 57 27.9 | |
| | comp=Z,40nm,21.7s,baz=235,slow=33 | | | | | | | |
| DBIC | **Dimbokro** | 39.57 | 139 | LR | | LR | 23 58 31.1 | |
| | comp=Z,48nm,21.0s,baz=222,slow=33 | | | | | | | |
| FINES | **FINESS Array B** | 40.22 | 38 | P | | P | 23 44 06.4 | +4.5 |
| | 3.7nm,1.0s,baz=276,slow=12,SNR=3.4 | | | | | | | |
| FINES | | | | LR | | LR | 23 59 17.2 | |
| | comp=Z,46nm,19.1s,baz=207,slow=34 | | | | | | | |
| AKASG | **Malin Array Be** | 42.11 | 54 | P | | P | 23 44 21.2 | +3.6 |
| | 0.7nm,0.4s,baz=275,slow=8.3,SNR=2.7 | | | | | | | |
| AKASG | | | | LR | | LR | 00 01 27.0 | |
| | comp=Z,54nm,18.1s,baz=280,slow=35 | | | | | | | |
| BRTR | **Keskin Array B** | 47.93 | 68 | LR | | LR | 00 05 29.9 | |
| | comp=Z,15nm,20.0s,baz=268,slow=36 | | | | | | | |
| TXAR | **Lajitas Array** | 60.27 | 285 | LR | | LR | 00 10 40.2 | |
| | comp=Z,44nm,21.1s,baz=0.0,slow=34 | | | | | | | |
| ZALV | **Zalesovo Beam** | 71.36 | 35 | P | | **P** | 23 47 47.7 | +2.4 |
| | 0.4nm,0.4s,baz=302,slow=8.3,SNR=2.9 | | | | | | | |
| MKAR | **Makanchi Array** | 74.95 | 41 | P | | **P** | 23 48 08.0 | +1.3 |
| | 0.1nm,0.3s,baz=297,slow=6.3,SNR=2.7 | | | | | | | |
| SONM | **Songino Array** | 84.78 | 28 | P | | **P** | 23 49 01.6 | +1.5 |
| | 0.5nm,0.9s,baz=291,slow=4.5,SNR=3.1 | | | | | | | |

*ISCJB **15** 23:37:18.9±0.7, 41.27N±0.06×22.71E±0.05, h12km±5km, Error ellipse: s-maj=9.6km s-min=5.8km az=2.6*

*CSEM **15** 23:37:18.5±0.2, 41.28N×22.73E, h15km, MD2.8, Error ellipse: s-maj=4.0km s-min=2.4km az=4.0*

*ATH **15** 23:37:18.5, 41.30N×22.73E, h13km±2km, MD2.8/6*

**ISC 15 23:37:18.6±1.0, 41.29N±0.05×22.74E±0.03, h15km±6km, n14, σ0§31/26, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| VAY | **Valandovo** | 0.13 | 284 | *e*Pg | | **Pb** | 23 37 22.6 | -0.2 |
| VAY | | | | *i* Sg | | **Sg** | 23 37 24.8 | +0.3 |
| VAY | **Valandovo** | 0.13 | 284 | *e*Pg | | **Pb** | 23 37 22.5 | -0.2 |
| VAY | | | | *i* Sg | | **Sg** | 23 37 24.8 | +0.3 |
| KNT | **Kendrikon** | 0.18 | 136 | *e*PG | | **Pg** | 23 37 22.9 | 0.0 |
| KNT | | | | *e*SG | | **Sg** | 23 37 25.5 | -0.3 |
| KNT | **Kendrikon** | 0.18 | 136 | *e*Pg | | **Pg** | 23 37 22.9 | 0.0 |
| KNT | | | | *e*Sg | | **Sg** | 23 37 25.5 | -0.3 |
| GRG | **Griva** | 0.42 | 217 | *e*PB | | **Pg** | 23 37 27.1 | +0.1 |
| GRG | | | | *e*SB | | **Sg** | 23 37 33.1 | +0.4 |
| GRG | **Griva** | 0.42 | 217 | *e*Pb | | **Pg** | 23 37 27.1 | +0.1 |
| GRG | | | | *e*Sb | | **Sg** | 23 37 33.1 | +0.4 |
| SOH | **Sokhos** | 0.66 | 135 | *e*PB | | **Pg** | 23 37 31.6 | +0.1 |
| SOH | | | | *e*SB | | **Sb** | 23 37 40.8 | -0.1 |
| SOH | **Sokhos** | 0.66 | 135 | *e*Pb | | **Pg** | 23 37 31.6 | +0.1 |
| SOH | | | | *e*Sb | | **Sb** | 23 37 40.8 | -0.1 |
| HORT | **Hortiatis** | 0.74 | 158 | *e*PB | | **Pg** | 23 37 33.0 | -0.1 |
| HORT | | | | *e*SB | | **Sb** | 23 37 43.7 | +0.4 |
| HORT | **Hortiatis** | 0.74 | 158 | *e*Pb | | **Pg** | 23 37 33.0 | -0.1 |
| HORT | | | | *e*Sb | | **Sb** | 23 37 43.7 | +0.4 |
| NVR | **Nevrokopi** | 0.85 | 86 | *e*PB | | **Pg** | 23 37 35.0 | -0.1 |
| NVR | | | | *e*SB | | **Sg** | 23 37 47.0 | +0.7 |
| NVR | **Nevrokopi** | 0.85 | 86 | *e*Pb | | **Pg** | 23 37 35.0 | -0.1 |
| NVR | | | | *e*Sb | | **Sg** | 23 37 47.0 | +0.7 |
| FNA | **Florina** | 1.15 | 244 | *e*PG | | **Pn** | 23 37 39.9 | -0.2 |
| FNA | **Florina** | 1.15 | 244 | *e*Pg | | **Pn** | 23 37 39.9 | -0.2 |

*CSEM **15** 23:39:48.0, 39.00N×29.02W, h5km, ML2.3, After PDA*

**PDA 15 23:39:48.0±0.7, 39.00N×29.02W, h5km, MD3.6, ML2.3, Error ellipse: s-maj=9.4km s-min=4.3km az=83.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| PCED | **Cedros** | 0.45 | 145 | *e*S | | Sg | 23 40 01.2 | -1.2 |
| PCED | | | | A | | A | 23 40 03.7 | |
| | 65nm,0.4s | | | | | | | |
| PCED | **Cedros** | 0.45 | 145 | *e*S | | Sg | 23 40 01.2 | -1.2 |
| CALA | **Caldeira** | 0.48 | 149 | *e*S | | Sg | 23 40 02.9 | -1.0 |
| CALA | **Caldeira** | 0.48 | 149 | *e*S | | Sg | 23 40 02.9 | -1.0 |
| HOR | **Horta** | 0.56 | 147 | *e*S | | Sg | 23 40 04.5 | -1.6 |
| HOR | **Horta** | 0.56 | 147 | *e*S | | Sg | 23 40 04.5 | -1.6 |
| ROSA | **Rosais** | 0.67 | 114 | *e*P | | Pg | 23 39 59.1 | -1.8 |
| ROSA | | | | *e*S | | Sg | 23 40 07.3 | -2.4 |
| ROSA | | | | A | | A | 23 40 15.0 | |
| | 24nm,0.5s | | | | | | | |
| ROSA | **Rosais** | 0.67 | 114 | *e*P | | Pg | 23 39 59.1 | -1.8 |
| ROSA | | | | *e*S | | Sg | 23 40 07.3 | -2.4 |
| PCAN | **Candelaria** | 0.68 | 141 | *e*P | | Pg | 23 39 59.2 | -1.9 |
| PCAN | | | | *e*S | | Sg | 23 40 07.9 | -2.0 |
| PCAN | | | | A | | A | 23 40 11.2 | |
| | 124nm,0.3s | | | | | | | |
| PCAN | **Candelaria** | 0.68 | 141 | *e*P | | Pg | 23 39 59.2 | -1.9 |
| PCAN | | | | *e*S | | Sg | 23 40 07.9 | -2.0 |
| PICO | **Pico** | 0.68 | 136 | *e*P | | Pg | 23 39 59.4 | -1.8 |
| PICO | | | | *e*S | | Sg | 23 40 08.4 | -1.7 |
| PICO | **Pico** | 0.68 | 136 | *e*P | | Pg | 23 39 59.4 | -1.8 |
| PICO | | | | *e*S | | Sg | 23 40 08.4 | -1.7 |

*IDC **15** 23:41:05.7±0.8, 14.38N×90.91W, h47km±5km, mb4.3/19, mb1 4.5/20, mb1mx4.4/27, mbtmp4.6/20, MS3.9/21, Ms1 3.9/21, ms1mx3.8/26, Error ellipse: s-maj=23.5km s-min=11.2km az=55.0*

*ISCJB **15** 23:41:05.6±0.2, 14.19N±0.03×91.44W±0.02, h58km, mb5.0/162, MS3.9/19, Error ellipse: s-maj=5.0km s-min=2.1km az=36.8*

*NEIC **15** 23:41:06.5±0.2, 14.08N×91.37W, mb5.0/156, MD4.9(MEX), MD4.9(SNET), Error ellipse: s-maj=6.5km s-min=3.9km az=40.0*

*NEIC Felt [III] at Antigua Guatemala, Guatemala and San Lucas Sacatepequez; [II] at Mixco. Felt in much of southern Guatemala and [II] at San Salvador, El Salvador.*

*MEX **15** 23:41:06.3±0.7, 13.82N×91.82W, h20km±71km, MD4.9*

*CASC **15** 23:41:07.7±2.1, 13.93N×91.45W, h23km±10km, MD4.7, ML4.7, mb5.0(NEIC)*

*BJI **15** 23:41:08.5, 14.10N×91.40W, h60km, mB5.0/11, Ms5.1/10, Ms7 4.6/10*

*GCMT **15** 23:41:11.4±0.4, 14.04N×91.76W, h56km±3km, MW5.0/72, Moment Tensor Solution. s34,c40; s72,c104; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr~1.72±.15; Mθθ 0.50±.13; Mϕϕ 1.22±.13; Mrθ 1.88±.09; Mϕr -1.77±.11; Mϕr~1.70±.10; Best double couple: Mo3.36300×10¹⁶ NP1:ϕs312.00000°, δ70.00000°, λ-99.00000°. NP2: ϕs156.00000°, δ22.00000°, λ-67.00000°. Principal axes: T 3.8090, Plg24.0000°, Azm49.0000°; N -0.8900, Plg8.0000°, Azm315.0000°; P -2.9180, Plg64.0000°, Azm208.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 15 23:41:06.9±0.5, 14.23N±0.05×91.40W±0.05, h59km±3km, h59km:pP-P, n629, σ1§55/739, mb5.0/162, MS4.0/19, 8C-4D, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| JAT | **Jato** | 0.24 | 291 | ⇓ | *i*P | **Pn** | 23 41 17.8 | +1.3 |
| FUG | **Fuego 3** | 0.58 | 68 | ⇓ | *e*P | Pn | 23 41 23.8 | +3.9 |
| PCG | **Pacaya** | 0.79 | 78 | | *e*P | Pn | 23 41 26.5 | +4.1 |
| IXG | **Ixpaco** | 0.92 | 93 | ⇓ | *i*P | **Pn** | 23 41 25.8 | +1.7 |
| IXG | | | | | *e*S | **Sn** | 23 41 40.1 | +3.5 |
| NBG | **Las Nubes** | 1.08 | 71 | ⇑ | *e*P | Pn | 23 41 31.6 | +5.4 |
| RBDL | **Robledal** | 1.67 | 94 | ⇑ | *i*P | **Pn** | 23 41 36.9 | +2.8 |
| RTR | **El Retiro** | 1.74 | 101 | | *e*P | **Pn** | 23 41 37.2 | +2.2 |
| SBLS | **San Blas** | 1.77 | 102 | | *e*P | **Pn** | 23 41 37.2 | +1.8 |
| SBLS | | | | | *e*P | **Pn** | 23 41 37.3 | +1.8 |
| SBLS | | | | | *e*S | **Sn** | 23 42 00.6 | +3.6 |
| SNJE | **San Jose** | 1.78 | 101 | | *e*P | **Pn** | 23 41 37.5 | +2.0 |
| MRL | **Marmol** | 1.85 | 63 | | *i*P | Pn | 23 41 41.2 | +4.6 |
| MRL | | | | | *e*S | Sn | 23 42 06.8 | +7.9 |
| BOQS | **Boqueron** | 2.12 | 103 | | *e*P | **Pn** | 23 41 42.3 | +2.1 |
| BOQS | | | | | *e*P | Pn | 23 41 43.4 | +3.2 |
| SNET | **Serv Nac Est T** | 2.17 | 104 | ⇑ | *i*P | **Pn** | 23 41 42.8 | +2.0 |
| SNET | | | | | *e*S | **Sn** | 23 42 09.8 | +3.0 |
| SNET | | | | | AML | AML | 23 42 14.0 | |
| | comp=Z,8µm,0.4s | | | | | | | |
| SNET | **Serv Nac Est T** | 2.17 | 104 | | *e*Pn | **Pn** | 23 41 42.9 | +2.1 |
| LFU | **La Fuente** | 2.27 | 102 | | *e*P | **Pn** | 23 41 44.3 | +2.1 |
| PCIG | | 2.29 | 310 | | *e*P | **Pn** | 23 41 41.3 | -1.0 |
| PCIG | | | | | *i* S | **Sn** | 23 42 07.6 | -1.7 |
| PCIG | | 2.29 | 310 | | *e*P | **Pn** | 23 41 41.3 | -1.0 |
| PCIG | | | | | *i* S | **Sn** | 23 42 07.6 | -1.7 |
| LBRS | **Las Brisas** | 2.34 | 102 | ⇑ | *i*P | **Pn** | 23 41 45.2 | +2.1 |
| LFRS | **El Faro** | 2.35 | 105 | | *e*P | **Pn** | 23 41 44.9 | +1.6 |
| SNVI | **San Vicente** | 2.56 | 104 | | *e*P | **Pn** | 23 41 48.2 | +2.1 |
| SNVI | | | | | *e*P | **Pn** | 23 41 48.3 | +2.1 |
| SNVI | | | | | *e*S | **Sn** | 23 42 19.2 | +2.9 |
| CAHU | **Cacacuatique** | 3.13 | 98 | | *e*P | **Pn** | 23 41 55.8 | +1.8 |
| CAHU | | | | | *e*P | **Pn** | 23 41 55.9 | +1.9 |
| VSM | **San Miguel** | 3.14 | 104 | | *e*P | **Pn** | 23 41 56.7 | +2.5 |
| CNCH | **Conchagua** | 3.59 | 105 | | *e*P | **Pn** | 23 42 02.2 | +2.0 |
| TGUH | **Tegucigalpa,Un** | 4.01 | 92 | | *e*P | **Pn** | 23 42 08.1 | +2.2 |
| TGUH | | | | ⇑ | *i*P | **Pn** | 23 42 08.2 | +2.3 |
| TGUH | | | | | *e*S | **Sn** | 23 42 56.2 | +4.7 |
| TGUH | **Tegucigalpa,Un** | 4.01 | 92 | | *e*Pn | **Pn** | 23 42 08.4 | +2.5 |
| TGUH | | | | | *e*Sn | **Sn** | 23 42 49.0 | -2.5 |
| CMIG | **Matias Romero** | 4.40 | 311 | | P | **Pn** | 23 42 10.7 | -0.5 |
| | comp=Z,33nm,0.3s,baz=125,slow=10,SNR=111 | | | | | | | |
| CMIG | | | | | S | Sn | 23 43 11.0 | +10 |
| | comp=Z,268nm,0.3s,baz=31,slow=21,SNR=5.3 | | | | | | | |
| CMIG | | | | | LR | LR | 23 44 20.8 | |
| | comp=Z,1µm,18.1s,baz=151,slow=42 | | | | | | | |
| TEL3 | **Telica 3** | 4.73 | 110 | | *e*P | **Pn** | 23 42 16.6 | +0.8 |
| TEL3 | | | | | *e*S | **Sn** | 23 43 14.8 | +5.5 |
| HUIG | **Huat

comp=Z,607nm,1.0s
**535A Dale** 16.72 341 P P 23 44 59.4 +0.6
baz=17
**439A Center Grove,** 16.77 350 P P 23 44 59.9 +0.6
baz=17
**633A Saathoff Ranch** 16.77 336 P P 23 44 59.8 +0.4
baz=17,SNR=11
**438A Sam Houston St** 16.86 348 P P 23 45 00.8 +0.5
baz=17
**534A Blanco** 17.02 339 P P 23 45 03.2 +1.1
baz=17,SNR=23
**632A Uvalde** 17.07 334 P P 23 45 03.2 +0.6
baz=17,SNR=13
**437A Phantom Ranch,** 17.09 346 P P 23 45 03.2 +0.5
baz=17
**BRAL Brewton** 17.17 13 *e*Pn P 23 45 08.1 +4.4
comp=Z,270nm,0.9s
**436A Wall Ranch, Ga** 17.19 344 P P 23 45 04.6 +0.6
baz=17
**340A Bronson** 17.26 353 P P 23 45 05.8 +1.2
baz=18,SNR=12
**339A Huntington** 17.27 351 P P 23 45 05.6 +0.8
baz=18,SNR=8.6
**533A Kerrville** 17.27 337 P P 23 45 05.8 +1.0
baz=18
**631A Perdido Creek** 17.33 332 P P 23 45 06.1 +0.6
baz=18,SNR=9.6
**338A Crockett** 17.42 349 P P 23 45 07.3 +0.8
baz=18,SNR=15
**435B Jarrell** 17.43 342 P P 23 45 06.8 +0.2
baz=18
**532A Rocksprings** 17.66 335 P P 23 45 10.4 +1.3
baz=18,SNR=21
**434A Burnet** 17.67 340 P P 23 45 10.0 +0.7
baz=18,SNR=22
**NATX Nacogdoches** 17.70 351 P P 23 45 10.7 +1.1
baz=18
**NATX Nacogdoches** 17.70 351 *e*Pn P 23 45 11.2 +1.7
comp=Z,399nm,1.0s
**336A Riesel** 17.79 345 P P 23 45 11.6 +1.0
baz=18
**335A Moody** 17.85 343 P P 23 45 12.2 +1.0
baz=18,SNR=12
**433A Art** 17.90 338 P Pn 23 45 12.9 +1.0
baz=18,SNR=30
**VBMS Vicksburg** 17.93 2 P Pn 23 45 13.1 +1.1
baz=18
**239A Gary** 17.93 352 P Pn 23 45 13.5 +1.4
baz=18
**JCT Junction City** 17.93 336 P Pn 23 45 13.7 +1.4
baz=18
**JCT Junction City** 17.93 336 *e*Pn Pn 23 45 14.2 +2.0
comp=Z,29nm,0.9s
**531A Rocksprings** 17.96 333 P Pn 23 45 13.8 +1.2
baz=18
**238A Jacksonville** 18.02 350 P Pn 23 45 14.5 +1.3
baz=18
**334A Lometa** 18.14 341 P Pn 23 45 15.5 +0.8
baz=18,SNR=24
**237A Washetta, Mont** 18.14 348 P Pn 23 45 15.8 +1.0
baz=18
**432A Menard** 18.28 336 P Pn 23 45 17.0 +0.5
baz=18,SNR=9.6
**236A Katherine and** 18.30 346 P Pn 23 45 17.3 +0.6
baz=18
**530A J-C Ranch, Com** 18.30 332 P Pn 23 45 17.5 +0.7
baz=18,SNR=13
**333A Richland Sprin** 18.38 339 P Pn 23 45 18.1 +0.3
baz=19,SNR=16
**431A Sonora** 18.44 334 P Pn 23 45 18.9 +0.5
baz=19,SNR=16
**WHTX Lake Whitney** 18.53 344 P Pn 23 45 19.7 +0.3
baz=19
**WHTX Lake Whitney** 18.53 344 *e*P Pn 23 45 20.1 +0.6
comp=Z,60nm,0.9s
WHTX *e*Sn Sn 23 48 37.2 -8.6
**TIGA Tifton** 18.57 21 P Pn 23 45 20.3 +0.5
baz=19,SNR=14
**TIGA Tifton** 18.57 21 *e*P Pn 23 45 22.2 +2.3
comp=Z,185nm,0.6s
**139A Bunkhouse Ranc** 18.57 352 P Pn 23 45 20.0 +0.2
baz=19
**138A Matatall Enter** 18.65 350 P Pn 23 45 21.1 +0.2
baz=19,SNR=8.6
**529A Stev Forest Ra** 18.70 330 P Pn 23 45 22.3 +0.7
baz=19
**332A Millersview** 18.71 337 P Pn 23 45 22.1 +0.5
baz=19,SNR=22
**137A Heron Place, G** 18.71 348 P Pn 23 45 21.7 +0.1
baz=19
**234A Clairette** 18.73 342 P Pn 23 45 21.9 -0.1
baz=19
**136A Ennis** 18.76 346 P P 23 45 21.9 +0.8
baz=19
**430A Baggett Ranch,** 18.80 333 P Pn 23 45 23.4 +0.6
baz=19,SNR=11
**TXAR Lajitas Array** 18.83 325 P Pn 23 45 24.2 +0.9
comp=Z,0.6nm,0.3s,baz=151,slow=12,SNR=109
TXAR PcP PcP 23 49 47.0 -0.2
comp=Z,0.5nm,0.3s,baz=165,slow=2.2,SNR=11
TXAR ScP ScP 23 53 21.2 +3.3
comp=Z,0.1nm,0.3s,baz=156,slow=4.6,SNR=22
TXAR LR LR 23 53 37.9
comp=Z,94nm,18.8s,baz=0.0,slow=40
**TX31 Lajitas Ar. Si** 18.84 325 *e*P Pn 23 45 24.3 +1.1
TX31 *e*PcP PcP 23 49 47.7 +0.5
TX31 *e*ScP ScP 23 53 22.0 +4.0
**OTAV Otavalo** 18.91 136 *e*P P 23 45 23.1 -0.3
comp=Z,11nm,0.9s
**331A San Angelo** 18.91 336 P Pn 23 45 24.2 +0.2
baz=19,SNR=24
**429A Davenport Ranc** 18.96 331 P Pn 23 45 25.1 +0.4
baz=19,SNR=21
**233A Rising Star** 18.99 340 P Pn 23 45 24.9 -0.1
baz=19,SNR=27
**135A Vickery Place,** 19.05 344 P P 23 45 25.1 +0.7
baz=19,SNR=10
**Z39A Irene McRaven,** 19.09 353 P Pn 23 45 26.1 -0.1
baz=19
**232A Coleman** 19.13 338 P P 23 45 26.3 +1.0
baz=19,SNR=27
**LRAL Lakeview Retre** 19.14 11 *e*P Pn 23 45 28.1 +1.3
comp=Z,133nm,0.9s
**Z38A Mt. Pleasant** 19.21 351 P Pn 23 45 27.3 -0.3
baz=20
**ROSC El Rosal** 19.22 117 P P 23 45 27.8 +0.9
comp=Z,1.1nm,0.3s,baz=95,slow=20,SNR=23
**ROSC El Rosal** 19.22 117 *e*P Pn 23 45 28.6 +0.3
**134A White-Moore Ra** 19.25 343 P P 23 45 27.6 +1.0
baz=20,SNR=23
**Z37A Pogue Cattle C** 19.27 349 P P 23 45 27.8 +1.1
baz=20,SNR=6.4
**330A Mertzon** 19.30 334 P Pn 23 45 28.4 -0.3
baz=20,SNR=16
**231A Bronte** 19.42 337 P P 23 45 29.3 +0.8
baz=20,SNR=21
**Z36A Blue Ridge** 19.50 347 P P 23 45 29.4 +0.2
baz=20
**133A Hamilton Ranch** 19.54 341 P Pn 23 45 31.0 -0.5
baz=20,SNR=25
**230A Sterling City** 19.70 335 P P 23 45 31.8 +0.3
baz=20,SNR=15
**329A Wagon Wheel Ra** 19.73 332 P Pn 23 45 33.3 -0.4
baz=20,SNR=13
**Z35A Perchaven, San** 19.75 345 P P 23 45 32.3 +0.3
baz=20,SNR=9.6
**Y39A Lockesburg** 19.77 353 P P 23 45 32.8 +0.5
baz=20,SNR=8.0
**ABTX Abilene, Hawle** 19.79 339 P P 23 45 33.1 +0.6
baz=20,SNR=18
**ABTX Abilene, Hawle** 19.79 339 *e*P P 23 45 33.8 +1.2
comp=Z,63nm,1.0s
ABTX *e*ScP ScP 23 53 24.3 +4.3
**SDDR Presa de Saban** 19.84 73 *e*P Pn 23 45 34.8 -0.4
comp=Z,27nm,0.9s
**Y38A Idabel** 19.84 352 P P 23 45 33.6 +0.7
baz=20,SNR=18
**Z34A Collier Ranch,** 19.95 344 P P 23 45 34.7 +0.5
baz=20,SNR=8.1
**Y37A Hugo** 20.03 350 P P 23 45 35.6 +0.6
baz=20,SNR=10
**229A Bryant Ranch,** 20.06 333 P P 23 45 36.1 +0.7
baz=20
**131A Roby** 20.11 337 P P 23 45 36.4 +0.4
baz=20
**Z33A Whitaker Ranch** 20.12 342 P P 23 45 36.6 +0.6
baz=20,SNR=12
**Y35A Marietta** 20.25 346 P P 23 45 37.7 +0.3
baz=20,SNR=18
**130A Snyder** 20.26 336 P P 23 45 37.9 +0.3
baz=20,SNR=16
**OXF Oxford** 20.27 5 *e*P P 23 45 38.8 +1.1
comp=Z,330nm,1.3s
**MIAR Mount Ida** 20.32 355 P P 23 45 38.7 +0.5
baz=21,SNR=17
**MIAR Mount Ida** 20.32 355 *e*P P 23 45 38.8 +0.5
comp=Z,166nm,1.2s
**Z32A Haskell** 20.36 340 P P 23 45 39.1 +0.4
baz=21,SNR=35
**GOGA Godfrey** 20.41 19 *e*P Pn 23 45 41.6 -0.1
comp=Z,70nm,0.8s
**Y34A Reagan Ranch,** 20.47 345 P P 23 45 39.6 -0.2
baz=21
**UALR University of** 20.47 358 *e*P P 23 45 40.8 +0.9
comp=Z,627nm,1.9s
**228A UT Block 9, Go** 20.54 332 P P 23 45 41.3 +0.6
baz=21,SNR=5.5
**X38A Whitesboro** 20.59 352 P P 23 45 42.0 +0.9
baz=21,SNR=24
**X37A Clayton** 20.59 351 P P 23 45 41.8 +0.8
baz=21,SNR=21
**GRTK Grand Turk** 20.59 67 *e*P P 23 45 43.0 +1.8
**Z31A Sharp Cattle R** 20.60 339 P P 23 45 41.5 +0.2
baz=21,SNR=36
**129A Stewart Farms,** 20.66 334 P P 23 45 42.1 +0.2
baz=21
**X35A Drake** 20.70 347 P P 23 45 42.9 +0.6
baz=21,SNR=15
**X36A Centrahoma** 20.74 348 P P 23 45 43.4 +0.7
baz=21
**Y33A Hilltop Ranch,** 20.75 343 P P 23 45 42.9 +0.1
baz=21
**128A Castleberry Fa** 20.91 333 P P 23 45 45.3 +0.5
baz=21,SNR=26
**Z30A Sanderson Ranc** 20.93 337 P P 23 45 44.5 -0.4
baz=21,SNR=22
**W38A Poteau** 20.94 353 P P 23 45 45.4 +0.5
baz=21
**Y32A R-V Farms, Ver** 20.99 341 P P 23 45 45.6 +0.1
baz=21,SNR=11
**SDV Santo Domingo** 21.02 102 *e*P P 23 45 44.4 -1.7
comp=Z,27nm,0.6s
**X34A Smith Ranch, M** 21.10 345 P P 23 45 48.3 +1.7
baz=21,SNR=5.5
**W37A Quinton** 21.13 351 P P 23 45 47.7 +0.8
baz=21,SNR=13
**Z29A Hungry Hill Ra** 21.14 335 P P 23 45 46.3 -0.8
baz=21,SNR=15
**RGRS Roger Stewart** 21.21 27 *e*P P 23 45 51.0 +3.2
**X33A Lawton** 21.22 344 P P 23 45 48.5 +0.6
baz=22
**Y31A Rekieta Farm,** 21.22 339 P P 23 45 48.3 +0.4
baz=22,SNR=43
**W36A Wetumka** 21.27 349 P P 23 45 49.4 +1.0
baz=22
**X32A Elmer** 21.33 342 P P 23 45 49.2 +0.1
baz=22,SNR=12
**Y30A Stafford Cattl** 21.37 338 P P 23 45 49.3 -0.3
baz=22,SNR=20
**NHSC New Hope** 21.39 27 *e*P P 23 45 50.0 +0.3
comp=Z,383nm,1.4s
**W35A Tecumseh** 21.41 348 P P 23 45 49.2 -0.7
baz=22,SNR=7.3
**Z28A Tucker Farm, M** 21.44 334 P P 23 45 50.2 -0.2
baz=22,SNR=6.9
**SWET Sewanee** 21.47 12 *e*P P 23 45 52.3 +1.7
comp=Z,77nm,0.8s
**WMOK Wichita Mounta** 21.48 343 *e*P P 23 45 50.7 0.0
comp=Z,34nm,1.0s
WMOK *e*ScP ScP 23 53 25.8 +1.8
**MNTX Cornudas Mount** 21.59 326 P P 23 45 52.4 +0.4
baz=22,SNR=75
**MNTX Cornudas Mount** 21.59 326 *e*P P 23 45 52.5 +0.6
comp=Z,45nm,0.9s
MNTX *e*PcP PcP 23 49 52.4 +0.3
MNTX *e*ScP ScP 23 53 28.1 +3.8
**W34A Bridge Creek,** 21.69 346 P P 23 45 52.3 -0.6
baz=22,SNR=6.0
**W34A Bridge Creek,** 21.69 346 *e*P P 23 45 52.9 0.0
comp=Z,114nm,0.7s
**V38A Canehill** 21.71 353 P P 23 45 52.1 -1.0
baz=22,SNR=15
**X31A McDonald Ranch** 21.74 341 P P 23 45 53.0 -0.4
baz=22,SNR=22
**W33A Caddo, Fort Co** 21.78 344 P P 23 45 53.7 -0.2
baz=22,SNR=8.6
**V37A Hulbert** 21.82 352 P P 23 45 53.6 -0.7
baz=22,SNR=18
**V36A Jenks** 21.85 350 P P 23 45 53.3 -1.3
baz=22
**X30A Coker Ranch, T** 21.88 339 P P 23 45 54.8 -0.1
baz=22,SNR=21
**Y28A McKinney Farm,** 21.92 335 P P 23 45 55.2 -0.4
baz=22
**TUL1 Tulsa** 21.95 350 P P 23 45 55.4 -0.2
baz=22
**TUL1 Tulsa** 21.95 350 *e*P P 23 45 56.9 +1.3
comp=Z,68nm,0.9s
**JSC Jenkinsville** 21.97 23 *e*P P 23 45 58.6 +2.6
comp=Z,55nm,0.9s
**W32A Sentinel** 21.97 343 P P 23 45 55.8 -0.2
baz=22,SNR=12
**V35A Meyer Ranch, C** 21.99 348 P P 23 45 55.3 -0.8
baz=22
**CPCT Cooper Cave** 22.02 15 *e*P P 23 45 58.3 +1.9
**WVT Waverly** 22.04 8 *e*P P 23 45 56.6 0.0
comp=Z,33nm,0.9s
**X29A Tulia** 22.18 337 P P 23 45 57.4 -0.8
baz=22,SNR=6.3
**MSTX Muleshoe** 22.19 334 P P 23 45 56.7 -1.8
baz=22,SNR=11
**MSTX Muleshoe** 22.19 334 *e*P P 23 45 57.9 -0.6
comp=Z,49nm,1.0s
**V34A Guthrie** 22.20 347 P P 23 45 56.7 -1.7
baz=22,SNR=7.6
**V34A Guthrie** 22.20 347 *e*P P 23 45 57.4 -1.0
comp=Z,41nm,0.8s
**W31A Holland Ranch,** 22.24 341 P P 23 45 58.1 -0.7
baz=22
**U38A Gravette** 22.28 354 P P 23 45 58.8 -0.5
baz=22,SNR=13
**U37A Salina** 22.33 352 P P 23 45 58.8 -1.0
baz=23,SNR=25
**V33A Lossen Ranch,** 22.37 345 P P 23 45 59.5 -0.7
baz=23
**PARMO Parma** 22.39 3 *e*P P 23 46 01.8 +1.4
**U36A Oologah** 22.41 351 P P 23 45 59.8 -0.8
baz=23
**TKL Tuckaleechee C** 22.41 16 P P 23 46 01.9 +1.3
comp=Z,42nm,0.6s,baz=182,slow=10,SNR=62
TKL LR LR 23 55 43.9
comp=Z,834nm,21.5s,baz=211,slow=40
**TKL Tuckaleechee C** 22.41 16 *e*P P 23 46 02.1 +1.4
**X28A Dimmitt** 22.43 336 P P 23 45 60.0 -1.1
baz=23
**W30A Crocket Farms** 22.44 340 P P 23 46 00.6 -0.4
baz=23,SNR=6.5
**PBMO Poplar Bluff** 22.47 2 *e*P P 23 46 01.0 -0.3
comp=Z,90nm,0.8s
**V32A Arapaho** 22.47 344 P P 23 46 00.5 -0.9
baz=23
**AMTX Amarillo** 22.56 338 P P 23 46 01.8 -0.6
baz=23
**AMTX Amarillo** 22.56 338 *e*P P 23 46 02.0 -0.4
comp=Z,62nm,0.5s
**U35A Pawnee** 22.56 349 P P 23 46 01.3 -0.9
baz=23
**KMSC Kings Mountain** 22.71 22 P P 23 46 03.8 0.0
baz=23,SNR=12
**KMSC Kings Mountain** 22.71 22 *e*P P 23 46 05.0 +1.1
comp=Z,121nm,0.6s
**V31A Spring Creek L** 22.75 342 P P 23 46 04.1 -0.3
baz=23
**W29A Amraillo** 22.76 338 P P 23 46 03.8 -0.7
baz=23,SNR=15
**U34A Anderson Ranch** 22.79 347 P P 23 46 03.5 -1.1
baz=23
**U33A Lingo Farm, Me** 22.91 346 P P 23 46 04.7 -1.2
baz=23
**V30A Spur Ranch, Mi** 23.01 340 P P 23 46 06.9 -0.1
baz=23
**T37A Cheneyville 18** 23.01 353 P P 23 46 05.8 -1.1
baz=23,SNR=18
**T35A Sooner Cattle** 23.05 349 P P 23 46 06.2 -1.1
baz=23
**T36A Boggs Farm, Ca** 23.09 351 P P 23 46 06.5 -1.1
baz=23
**W28A Vega** 23.09 337 P P 23 46 06.9 -0.9
baz=23,SNR=13
**T34A McClaskey Farm** 23.28 348 P P 23 46 08.9 -0.6
baz=24
**TZTN Tazewell** 23.31 16 *e*P P 23 46 10.6 +0.8
comp=Z,77nm,0.8s
**V29A Stinnett** 23.39 339 P P 23 46 10.3 -0.4
baz=24
**SIUC Southern Illin** 23.47 4 *e*P P 23 46 11.6 +0.3
comp=Z,128nm,0.8s
**V28A Channing** 23.53 338 P P 23 46 11.9 -0.1
baz=24,SNR=5.9
**T33A Patterson Ranc** 23.56 346 P P 23 46 11.8 -0.4
baz=24
**121A Cookes Peak, D** 23.57 323 P P 23 46 13.2 +0.8
baz=24,SNR=30
**121A Cookes Peak, D** 23.57 323 *e*P P 23 46 13.5 +1.1
comp=Z,41nm,1.0s
121A *e*ScP ScP 23 53 30.2 +0.6
**S37A Fort Scott** 23.63 353 P P 23 46 12.1 -0.7
baz=24,SNR=11
**S36A Lake Cedric, C** 23.69 352 P P 23 46 12.5 -0.9
baz=24,SNR=16
**U30A WK&E Inc. Balk** 23.70 341 P P 23 46 13.9 +0.3
baz=24
**CCM Cathedral Cave** 23.73 0 *e*P P 23 46 13.0 -0.7
comp=Z,149nm,1.3s
CCM *e*ScP ScP 23 53 30.1 +0.4
**S35A Otter Creek Ra** 23.76 350 P P 23 46 14.0 0.0
baz=24,SNR=7.9
**V27A Dan Oppiter Fa** 23.77 336 P P 23 46 14.9 +0.7
baz=24
**T32A Huddler Ranch,** 23.82 345 P P 23 46 14.9 +0.4
baz=24
**U29A Oasis Ranch, S** 23.83 340 P P 23 46 15.0 +0.3
baz=24
**USIN University of** 23.87 7 *e*P P 23 46 15.9 +1.0
comp=Z,88nm,0.6s
**S34A Willow Spring** 23.92 349 P P 23 46 15.4 0.0
baz=24
**T31A Randall Ranch,** 23.94 344 P P 23 46 16.5 +0.9
baz=24
**AOPR Arecibo Observ** 24.00 77 *e*P P 23 46 15.5 -0.9
comp=Z,81nm,1.9s
**U28A Mallet** 24.09 338 P P 23 46 18.1 +0.9
baz=24
**T30A Plains** 24.14 342 P P 23 46 18.5 +1.0
baz=24
**BNM Barren Site** 24.15 328 *e*P P 23 46 20.0 +2.2
BNM *e*ScP ScP 23 53 35.4 +4.1
**CNNC Cliffs of the** 24.20 28 *e*P P 23 46 18.9 +0.9
comp=Z,172nm,0.4s
**Y22D IRIS PASSCAL I** 24.25 327 P P 23 46 19.4 +0.7
baz=24
**R36A Gordon, Harris** 24.27 352 P P 23 46 19.0 +0.4
baz=24
**LPM Los Pinos Moun** 24.28 328 *e*P P 23 46 20.8 +1.9
**S32A Newby Ranch, P** 24.32 345 P P 23 46 19.3 +0.3
baz=25
**WCI Wyandotte Cave** 24.33 10 *e*P P 23 46 18.9 -0.3
comp=Z,320nm,0.6s
**SLM Saint Louis** 24.33 2 *e*P P 23 46 19.1 -0.1
comp=Z,122nm,0.6s
SLM *e*pP pP 23 46 34.9 +1.2
**U27A Thompson Grove** 24.35 337 P P 23 46 20.0 +0.5
baz=25,SNR=7.7
**R35A Emporia Munici** 24.37 351 P P 23 46 20.4 +0.9
baz=25
**S31A Mullinville** 24.38 344 P P 23 46 20.5 +0.9
baz=25
**T29A Hugoton** 24.48 341 P P 23 46 21.0 +0.4
baz=25
**R34A Isabella, Hill** 24.53 349 P P 23 46 20.5 -0.4
baz=25
**OLIL Olney** 24.58 6 *e*P P 23 46 22.1 +0.7
comp=Z,82nm,0.7s
**LAZ Ladron** 24.61 327 *e*P P 23 46 24.3 +2.2
LAZ *e*ScP ScP 23 53 36.8 +4.2
**S30A Montezuma** 24.67 343 P P 23 46 22.8 +0.5
baz=25
**R33A Olander Ranch,** 24.68 348 P P 23 46 22.9 +0.5
baz=25
**ANMO Albuquerque** 24.69 329 P P 23 46 24.4 +1.6
comp=Z,3.9nm,0.6s,baz=149,slow=11,SNR=16
ANMO PcP PcP 23 49 59.7 +1.0
comp=Z,2.7nm,0.7s,baz=168,slow=4.2,SNR=3.9
ANMO ScP ScP 23 53 35.6 +2.8
comp=Z,5.5nm,0.9s,baz=145,slow=3.6,SNR=5.8
ANMO LR LR 23 57 34.8
comp=Z,87nm,19.0s,baz=122,slow=40
**ANMO Albuquerque** 24.69 329 *e*P P 23 46 24.5 +1.7
comp=Z,7.8nm,0.9s
ANMO PcP PcP 23 49 59.7 +1.0
ANMO *e*ScP ScP 23 53 36.3 +3.6
**Q37A Longview Farm,** 24.70 354 P P 23 46 23.0 +0.5
baz=25
**T28A Walsh** 24.72 339 P P 23 46 23.5 +0.7
baz=25
**ATAH Atahualpa** 24.84 148 P P 23 46 24.1 -0.3
comp=Z,18nm,0.9s,baz=359,slow=4.7,SNR=9.4
**S29A Ulysses** 24.85 341 P P 23 46 24.3 +0.4
baz=25,SNR=6.1
**Q35A Mercer Eighty,** 24.87 351 P P 23 46 24.6 +0.5
baz=25
**BLA Blacksburg** 24.89 21 *e*P P 23 46 25.9 +1.5
BLA *e*pP pP 23 46 41.5 +2.6
**Q36A Arnold C. Orve** 24.89 352 P P 23 46 24.5 +0.2
baz=25
**R32A Long Quarter,** 24.95 346 P P 23 46 25.1 +0.3
baz=25
**R31A Burdett** 25.02 345 P P 23 46 25.6 +0.1
baz=25
**S28A Manter** 25.07 340 P P 23 46 26.1 +0.1
baz=25
**Q34A Chapman** 25.08 350 P P 23 46 26.2 +0.3
baz=25
**KSU1 Kansas State U** 25.20 350 P P 23 46 27.5 +0.5
baz=25
**KSU1 Kansas State U** 25.20 350 *e*P P 23 46 27.0 0.0
**BLO Bloomington** 25.21 9 *e*P P 23 46 28.3 +1.1
comp=Z,46nm,0.8s
**R30A Dighton** 25.22 343 P P 23 46 27.9 +0.6
baz=26
**TUC Tucson** 25.24 319 *e*P P 23 46 28.3 +0.7
comp=Z,16nm,0.8s
TUC *e*PcP PcP 23 50 01.8 +1.9
**T26A Comanche Natio** 25.30 337 P P 23 46 29.0 +0.7
baz=26
**Q33A Connelly Farm,** 25.32 348 P P 23 46 29.4 +1.3
baz=26
**Q32A Meitler Ranch,** 25.46 347 P P 23 46 29.7 +0.2
baz=26,SNR=5.6
**P36A Good Intent, A** 25.51 353 P P 23 46 30.3 +0.4
baz=26
**P35A Duane Minner,** 25.53 352 P P 23 46 30.8 +0.7
baz=26
**T25A Trinidad** 25.59 335 P P 23 46 32.4 +1.4
baz=26
**T25A Trinidad** 25.59 335 *e*P P 23 46 33.6 +2.7
comp=Z,27nm,1.0s
**S26A Kim** 25.65 337 P P 23 46 32.1 +0.8
baz=26
**Q31A Ellis** 25.67 346 P P 23 46 32.4 +1.0
baz=26
**P34A Walnut Farm, R** 25.67 350 P P 23 46 32.2 +0.9
baz=26
**R28A Tribune** 25.73 341 P P 23 46 32.6 +0.6
baz=26
**Q30A Quinter** 25.85 344 P P 23 46 33.3 +0.3
baz=26
**Q29A Oakley** 25.98 343 P P 23 46 34.5 +0.3
baz=26
**R27A Eads** 26.00 339 P P 23 46 33.8 -0.7
baz=26
**R26A Arlington** 26.24 338 P P 23 46 36.5 -0.2
baz=26
**O34A Beatrice** 26.27 351 P P 23 46 37.2 +0.4
baz=26
**HDIL Hopedale** 26.29 4 P P 23 46 36.6 -0.3
baz=26
**HDIL Hopedale** 26.29 4 *e*P P 23 46 37.1 +0.2
HDIL *e*pP pP 23 46 52.6 +1.2
**SFIN Scholer Farm** 26.32 7 P P 23 46 37.4 +0.3
baz=27
**SFIN Scholer Farm** 26.32 7 *e*P P 23 46 37.6 +0.4
comp=Z,40nm,0.7s
**214A Organ Pipe Nat** 26.35 316 P P 23 46 38.1 +0.5

baz=26,SNR=15
**214A Organ Pipe Nat** 26.35 316 *e*P P 23 46 38.5 +0.8
comp=Z,47nm,0.7s
214A *e*PcP PcP 23 50 03.4 +1.1
**P30A Selden** 26.39 344 P P 23 46 38.9 +1.0
baz=27
**Q28A Sharon Springs** 26.39 342 P P 23 46 39.7 +1.7
baz=27
**W18A Petrified Fore** 26.56 325 P P 23 46 40.2 +0.5
baz=27
**SDCO Great Sand Dun** 26.56 334 P P 23 46 40.1 +0.4
baz=27
**SDCO Great Sand Dun** 26.56 334 *e*P P 23 46 42.5 +2.7
comp=Z,10nm,1.2s
**ACSO Alum Creek Sta** 26.93 14 *e*P P 23 46 43.1 +0.4
comp=Z,45nm,0.7s
**S22A 4UR Ranch, Cre** 27.14 332 P P 23 46 46.5 +1.6
baz=27
**S22A 4UR Ranch, Cre** 27.14 332 *e*P P 23 46 46.1 +1.1
comp=Z,6.5nm,0.9s
S22A *e*ScP ScP 23 53 43.5 +3.6
**MVCO Mesa Verde** 27.49 329 P P 23 46 50.4 +2.4
baz=28
**MVCO Mesa Verde** 27.49 329 *e*P P 23 46 50.2 +2.2
comp=Z,13nm,0.9s
**WUAZ Wupatki** 27.78 323 P P 23 46 51.7 +1.2
baz=28,SNR=9.1
**WUAZ Wupatki** 27.78 323 *e*P P 23 46 52.5 +1.9
comp=Z,20nm,0.9s
WUAZ *e*ScP ScP 23 53 45.8 +4.0
**SDMD Soldier's Deli** 28.17 24 *e*P P 23 46 54.3 +0.6
**PV01 Paradox Valley** 28.26 331 *e*P P 23 46 56.6 +1.8
**ISCO Idaho Springs** 28.37 337 P P 23 46 57.0 +1.1
baz=29
**ISCO Idaho Springs** 28.37 337 *e*P P 23 46 57.5 +1.6
comp=Z,52nm,2.5s
ISCO *e*SS SS 23 53 46.6 +5.7
**GLA Glamis** 28.37 315 P P 23 46 57.1 +1.3
baz=28
**GLA Glamis** 28.37 315 *e*P P 23 46 57.2 +1.4
comp=Z,21nm,0.8s
GLA *e*PcP PcP 23 50 07.8 +0.6
**PV05 Paradox Valley** 28.47 330 *e*P P 23 46 58.8 +2.0
**L31A Butterfield Fa** 28.58 348 P P 23 46 59.3 +1.9
baz=29
**Y12C Blythe** 28.58 317 P P 23 46 58.8 +1.3
baz=29
**JFWS Jewell Farm** 28.60 2 *e*P P 23 46 57.0 -0.6
comp=Z,23nm,0.6s
**PV04 Paradox Valley** 28.62 330 *e*P P 23 46 59.0 +1.0
**PDMCI Parker Dam,Lak** 28.67 318 P P 23 46 59.5 +1.2
baz=29,SNR=13
**PV10 Paradox Valley** 28.68 330 *e*P P 23 47 02.2 +3.6
PV10 *e*PcP PcP 23 50 09.4 +1.2
**SWSC Sam W. Stewart** 28.98 314 P P 23 47 02.6 +1.6
baz=29
**IBP Imperial Bould** 29.03 313 P P 23 47 03.0 +1.4
baz=29
**J37A Redenius Farm,** 29.04 357 P P 23 47 02.4 +1.0
baz=29
**BC3 Big Chuckawall** 29.15 316 P P 23 47 03.8 +1.1
baz=29,SNR=18
**IRM Iron Mountain** 29.25 317 P P 23 47 04.5 +1.0
baz=29,SNR=5.9
**MONP Monument Peak** 29.38 314 P P 23 47 05.2 +0.3
baz=30
**BELC Belle Mtn. Jos** 29.72 316 P P 23 47 08.6 +0.8
baz=30,SNR=7.9
**I38A Scanlan Farm,** 29.72 359 P P 23 47 06.7 -0.8
baz=30
**O20A White River Ci** 29.73 333 P P 23 47 08.1 +0.2
baz=30
**I37A Lemond, Waseca** 29.73 357 P P 23 47 07.2 -0.4
baz=30
**ECSD EROS Data Cent** 29.74 352 P P 23 47 07.0 -0.7
baz=30
**LUPA Lehigh Univers** 29.77 25 *e*P P 23 47 08.3 +0.3
comp=Z,24nm,0.6s
**LDFC Landfair** 29.78 318 *e*P P 23 47 10.9 +2.6
comp=Z,58nm,0.8s
**NNA Nana** 29.78 150 LR LR 23 58 44.7
comp=Z,43nm,20.3s,baz=322,slow=36
**PFO Pinyon Flat Ob** 29.81 315 *e*P P 23 47 10.1 +1.5
comp=Z,12nm,1.0s
PFO *e*PcP PcP 23 50 13.4 +2.5
**GMRC Granite Mounta** 29.95 317 P P 23 47 10.4 +0.5
baz=30
**MURC Murrieta** 30.32 314 P P 23 47 13.6 +0.6
baz=30
**CCUT Cedar City** 30.34 324 *e*P P 23 47 16.2 +2.8
comp=Z,20nm,0.9s
CCUT *e*PcP PcP 23 50 13.6 +1.2
CCUT *e*ScP ScP 23 53 52.8 +2.9
**P17A Butcher Ranch,** 30.36 330 *e*P P 23 47 18.0 +4.6
comp=Z,6.0nm,0.8s
**MSU Marysvale** 30.37 327 *e*P P 23 47 15.3 +1.7
comp=Z,6.8nm,0.8s
MSU *e*ScP ScP 23 53 53.1 +3.1
**HEC Hector,Ludlow** 30.43 317 P P 23 47 15.8 +1.8
baz=31
**TMUT Trail Mountain** 30.46 329 *e*P P 23 47 16.3 +1.9
comp=Z,22nm,1.0s
TMUT *e*PcP PcP 23 50 13.4 +0.6
**J26A Sides Ranch, S** 30.67 343 P P 23 47 16.8 +0.9
baz=31
**MMNY Mt. Morris Dam** 30.69 20 *e*P P 23 47 16.5 +0.5
comp=Z,39nm,1.1s
**SHPR Sheep Range** 30.71 321 *e*P P 23 47 18.4 +1.9
SHPR *e*PcP PcP 23 50 13.7 +0.4
SHPR *e*ScP ScP 23 53 54.3 +3.3
**BINY Binghamton** 30.90 23 *e*P P 23 47 18.6 +0.7
comp=Z,680nm,2.9s
**SPMN St. Paul** 30.92 358 P P 23 47 17.5 -0.5
baz=31
**SPMN St. Paul** 30.92 358 *e*P P 23 47 17.3 -0.7
comp=Z,28nm,0.4s
**BFSC Mount Baldy Ra** 30.99 315 P P 23 47 19.1 +0.1
baz=31
**G35A Watkins** 31.00 356 P P 23 47 19.7 +0.9
baz=31
**GSC Goldstone** 31.02 317 P P 23 47 20.6 +1.4
baz=31
**GSC Goldstone** 31.02 317 *e*P P 23 47 20.5 +1.3
GSC *e*pP pP 23 47 35.9 +2.1
GSC *e*PcP PcP 23 50 14.3 +0.3
**K22A Casper** 31.18 338 P P 23 47 21.0 +0.4
baz=31
**O16A Springville** 31.30 330 *e*P P 23 47 14.5 -7.2
comp=Z,11nm,1.0s
**NLU North Lily Min** 31.39 329 *e*P P 23 47 25.0 +2.4
comp=Z,86nm,2.8s
**I25A Rochford** 31.50 343 P P 23 47 23.3 -0.2
baz=32
**EDW2 Edwards Air Fo** 31.57 315 P P 23 47 24.1 +0.1
baz=32
**F36A Milaca** 31.58 357 P P 23 47 23.6 -0.3
baz=32
**TPNV Topopah Spring** 31.67 320 P P 23 47 26.0 +1.1
baz=32
**TPNV Topopah Spring** 31.67 320 *e*P P 23 47 27.2 +2.3
comp=Z,15nm,0.8s
TPNV *e*PcP PcP 23 50 16.3 +0.5
TPNV *e*ScP ScP 23 53 57.7 +3.4
**LRMC Laurel Mountai** 31.71 317 P P 23 47 25.6 +0.3
baz=32
**FURC Furnace Creek,** 31.75 319 P P 23 47 27.1 +1.6
baz=32
**CTU Camp Tracy** 31.79 330 *e*P P 23 47 29.4 +3.3
comp=Z,8.9nm,1.0s
**COWI Conover** 31.83 3 *e*P P 23 47 24.4 -1.6
comp=Z,8.1nm,0.4s
**MPMC Manual Prospec** 31.91 318 P P 23 47 28.7 +1.5
baz=32
**DUG Dugway** 31.95 328 P P 23 47 29.3 +1.9
baz=32
**DUG Dugway** 31.95 328 *e*P P 23 47 29.3 +1.9
comp=Z,35nm,2.0s
DUG *e*PcP PcP 23 50 16.3 -0.2
DUG *e*ScP ScP 23 53 57.7 +2.6
**TCUT Toone Canyon** 31.95 331 *e*P P 23 47 29.3 +1.7
comp=Z,19nm,0.9s
**DAC Darwin (Calif)** 32.11 318 *e*P P 23 47 30.3 +1.4
comp=Z,18nm,0.9s
DAC *e*PcP PcP 23 50 19.1 +2.0
DAC *e*ScP ScP 23 53 59.2 +3.4
**R11A Troy Canyon, C** 32.17 323 P P 23 47 30.6 +1.2
baz=32
**R11A Troy Canyon, C** 32.17 323 *e*P P 23 47 31.2 +1.8
comp=Z,15nm,1.0s
R11A *e*PcP PcP 23 50 18.8 +1.6
R11A *e*ScP ScP 23 54 00.1 +4.1
**SADO Sadowa** 32.17 17 *e*P P 23 47 28.9 -0.2
comp=Z,166nm,2.0s
**ARVC Arvin** 32.28 315 P P 23 47 31.3 +1.1
baz=32
**ISA Isabella** 32.34 316 P P 23 47 31.5 +0.8
baz=32
**ISA Isabella** 32.34 316 *e*P P 23 47 32.5 +1.8
comp=Z,19nm,1.3s
ISA *e*PcP PcP 23 50 18.0 +0.4
ISA *e*ScP ScP 23 54 02.2 +5.8
**GRAC Grapevine Rang** 32.40 319 P P 23 47 32.5 +1.3
baz=33
**E33A Westby DABS, E** 32.40 354 P P 23 47 32.3 +1.2
baz=33
**HWUT Hardware Ranch** 32.41 331 *e*P P 23 47 33.2 +1.8
comp=Z,16nm,0.4s
HWUT *e*PcP PcP 23 50 18.0 +0.2
HWUT *e*ScP ScP 23 53 59.5 +2.8
**BW06 Boulder Array** 32.46 335 *e*P P 23 47 30.7 -1.2
BW06 *e*PcP PcP 23 50 17.1 -0.9
BW06 *e*ScP ScP 23 53 58.1 +1.2
**CWC Cottonwood Cre** 32.52 318 P P 23 47 33.1 +0.6
baz=33
**BGU Big Grassy Mou** 32.60 329 *e*P P 23 47 35.1 +2.0
comp=Z,7.6nm,0.9s
BGU *e*PcP PcP 23 50 19.4 +1.2
BGU *e*ScP ScP 23 54 00.5 +3.1
**SPUT South Promonto** 32.60 330 *e*P P 23 47 35.0 +1.9
comp=Z,12nm,1.2s
SPUT *e*ScP ScP 23 54 00.3 +3.0
**D35A Remer** 32.83 357 P P 23 47 34.1 -0.7
baz=33
**D37A Cotton** 32.84 359 P P 23 47 34.4 -0.5
baz=33
**PKM Peak Mountain** 32.84 314 P P 23 47 34.0 -1.4
baz=33
**VES Vestal, Richgr** 32.85 316 P P 23 47 34.7 -0.4
baz=33
**D36A Goodland** 32.88 358 P P 23 47 33.7 -1.6
baz=33
**HVU Hansel Valley** 33.12 330 *e*P P 23 47 39.0 +1.4
comp=Z,101nm,2.2s
HVU *e*PcP PcP 23 50 20.5 +0.8
**SMMC Simmler** 33.19 314 P P 23 47 39.1 +1.0
baz=33
**F25A Bowman** 33.19 345 P P 23 47 39.3 +1.2
baz=33
**RCTC Rector, Farmer** 33.22 316 P P 23 47 39.5 +1.2
baz=33
**D30A Buchanan** 33.35 351 P P 23 47 38.7 -0.6
baz=34
**MTUM Tungsten Hills** 33.38 319 *e*P P 23 47 43.7 +3.8
MTUM *e*pP pP 23 47 57.0 +2.3
MTUM *e*PcP PcP 23 50 22.4 +1.8
**C38A Sawbill Land.** 33.39 0 P P 23 47 38.1 -1.6
baz=34
**C37A Embarrass** 33.40 359 P P 23 47 38.7 -1.1
baz=34
**C35A Jirik Farms, M** 33.44 357 P P 23 47 38.9 -1.2
baz=34
**C36A Pine Crest Far** 33.45 358 P P 23 47 39.4 -0.8
baz=34
**E26A Carlson Angus** 33.46 346 P P 23 47 39.8 -0.5
baz=34
**REDW Red Top Meadow** 33.49 334 *e*P P 23 47 41.6 +0.7
comp=Z,12nm,0.8s
**LONY Lake Ozonia** 33.50 22 *e*P P 23 47 41.0 +0.3
comp=Z,26nm,1.0s
**C39A Grand Marais** 33.50 2 P P 23 47 39.7 -1.0
baz=34
**SNOW Snow King Moun** 33.53 334 *e*P P 23 47 42.0 +0.8
comp=Z,20nm,0.6s
**LOHW Long Hollow** 33.59 334 *e*P P 23 47 42.2 +0.5
comp=Z,5.0nm,0.8s
LOHW *e*ScP ScP 23 54 03.5 +2.7
**EYMN Ely** 33.62 360 P P 23 47 40.2 -1.5
baz=34
**EYMN Ely** 33.62 360 *e*P P 23 47 40.3 -1.3
comp=Z,216nm,2.9s
**ELK Elko** 33.62 326 *e*P P 23 47 43.9 +1.8
comp=Z,7.3nm,0.9s
ELK *e*PcP PcP 23 50 21.6 +0.4
ELK *e*ScP ScP 23 54 04.2 +3.2
**TPAW Teton Pass** 33.63 334 *e*P P 23 47 43.2 +1.0
comp=Z,9.4nm,0.9s
TPAW *e*PcP PcP 23 50 22.9 +1.7
TPAW *e*ScP ScP 23 54 04.4 +3.4
**MOOW Moose Ponds** 33.76 334 *e*P P 23 47 43.6 +0.4
comp=Z,3.8nm,0.9s
MOOW *e*PcP PcP 23 50 21.4 -0.1
MOOW *e*ScP ScP 23 54 04.0 +2.7
**FXWY Fox Creek** 33.79 334 *e*P P 23 47 45.0 +1.5
comp=Z,51nm,2.5s
FXWY *e*PcP PcP 23 50 21.8 +0.2
FXWY *e*ScP ScP 23 54 03.8 +2.3
**NV01 Mina Array Sit** 33.86 320 *e*P P 23 47 45.8 +1.6
NV01 *e*PcP PcP 23 50 22.0 0.0
NV01 *e*ScP ScP 23 54 03.9 +2.0
**NVAR Mina Array Bea** 33.86 320 P P 23 47 45.6 +1.4
comp=Z,17nm,0.8s,baz=137,slow=8.3,SNR=59
NVAR PcP PcP 23 50 21.9 -0.1
comp=Z,6.8nm,0.6s,baz=134,slow=3.9,SNR=20
NVAR ScP ScP 23 54 04.4 +2.5
comp=Z,3.3nm,0.9s,baz=140,slow=3.4,SNR=13
NVAR LR LR 00 03 04.7
comp=Z,350nm,19.6s,baz=127,slow=39
**IMW Indian Meadow** 33.96 334 *e*P P 23 47 47.2 +2.2
comp=Z,4.6nm,0.5s
**D26A Manning** 33.98 346 P P 23 47 44.6 -0.3
baz=34
**AGMN Agassiz Nation** 34.17 355 P P 23 47 45.9 -0.6
baz=34
**B34A Aery, Baudette** 34.26 356 P P 23 47 46.4 -0.8
baz=34
**RLMT Red Lodge** 34.32 337 P P 23 47 47.8 -0.2
baz=34
**RLMT Red Lodge** 34.32 337 *e*P P 23 47 48.4 +0.3
comp=Z,4.6nm,0.8s
**B32A Ashes, Strandq** 34.33 354 P P 23 47 47.4 -0.4
baz=35
**PTGA Pitinga** 34.49 113 *e*P P 23 47 47.8 -1.8
comp=Z,27nm,0.8s
PTGA *e*PcP PcP 23 50 23.7 -0.2
**BMN Battle Mountai** 34.50 324 *e*P P 23 47 51.5 +1.9
comp=Z,23nm,0.8s
**A33A Warroad** 34.76 355 P P 23 47 50.5 -1.1
baz=35
**CMB Columbia Colle** 34.95 318 *e*P P 23 47 54.7 +1.3
comp=Z,13nm,0.9s
CMB *e*PcP PcP 23 50 26.9 +2.0
**B26A Jensen Ranch,** 35.21 347 P P 23 47 56.3 +0.9
baz=36
**HLID Hailey** 35.26 331 P P 23 47 57.6 +1.5
baz=36
**HLID Hailey** 35.26 331 *e*P P 23 47 57.2 +1.0
comp=Z,16nm,1.3s
HLID *e*PcP PcP 23 50 27.8 +1.9
HLID *e*ScP ScP 23 54 10.7 +4.0
**MCMT McKenzie Canyo** 35.52 333 *e*P P 23 48 00.1 +1.6
**A26A Wade Farm, Ken** 35.66 348 P P 23 47 59.3 -0.1
baz=36
**BOZ Bozeman (W)** 35.67 335 P P 23 48 00.2 +0.5
baz=36
**BOZ Bozeman (W)** 35.67 335 *e*P P 23 47 59.9 +0.3
comp=Z,7.9nm,1.3s
**MFID Camas Ranch** 35.84 329 *e*P P 23 48 02.5 +1.4
comp=Z,13nm,0.8s
MFID *e*ScP ScP 23 54 12.1 +3.3
**DLMT Dillon** 35.84 334 *e*P P 23 48 03.6 +2.5
comp=Z,11nm,1.1s
DLMT *e*PcP PcP 23 50 29.4 +2.0
DLMT *e*ScP ScP 23 54 12.2 +3.5
**A25A Svangstu Ranch** 35.93 347 P P 23 48 01.6 -0.1
baz=36
**ULM Lac du Bonnet** 36.11 355 P P 23 48 01.1 -1.9
comp=Z,7.5nm,0.8s,baz=204,slow=8.9,SNR=6.6
ULM PcP PcP 23 50 28.7 +0.8
comp=Z,1.2nm,0.3s,baz=204,slow=3.9,SNR=3.1
ULM ScP ScP 23 54 10.0 +0.6
comp=Z,5.0nm,0.8s,baz=88,slow=5.3,SNR=3.3
ULM LR LR 00 05 41.2
comp=Z,226nm,21.8s,baz=113,slow=41
**ULM Lac du Bonnet** 36.11 355 *e*P P 23 48 01.9 -1.1
comp=Z,96nm,2.3s
ULM PcP PcP 23 50 28.7 +0.8
ULM ScP ScP 23 54 10.0 +0.6
**LRM Limekiln Ridge** 36.15 335 *e*P P 23 48 04.4 +0.6
LRM *e*PcP PcP 23 50 29.8 +1.3
LRM *e*ScP ScP 23 54 13.4 +3.4
**SAML Samuel** 36.25 128 *e*P P 23 48 02.2 -2.5
comp=Z,9.7nm,0.8s
SAML *e*ScP ScP 23 54 14.7 +4.2
**WVOR Wild Horse Val** 36.63 325 *e*P P 23 48 09.4 +1.6
comp=Z,22nm,1.0s
WVOR *e*PcP PcP 23 50 32.0 +2.2
WVOR *e*ScP ScP 23 54 16.0 +4.3
**O03D Paynes Creek** 37.15 320 P P 23 48 13.7 +1.5
baz=37
**J08A Circle Bar Ran** 37.17 327 *e*P P 23 48 13.7 +1.4
comp=Z,52nm,0.9s
J08A *e*ScP ScP 23 54 18.0 +4.3
**MOD Modoc** 37.23 323 *e*P P 23 48 13.8 +0.8
comp=Z,17nm,1.1s
**CHMT Chamberlain Mo** 37.36 335 *e*P P 23 48 15.5 +1.5
**MSO Missoula** 37.58 334 P P 23 48 17.4 +1.6
baz=38
**MSO Missoula** 37.58 334 *e*P P 23 48 17.3 +1.5
comp=Z,16nm,1.4s
MSO *e*PcP PcP 23 50 33.5 +0.9
MSO *e*ScP ScP 23 54 18.9 +3.7
**LASM Arnica Sink** 37.79 322 P P 23 48 19.7 +1.9
**M04C Macdoel** 38.05 322 P P 23 48 21.4 +1.5
baz=38
**LPAZ La Paz** 38.05 142 P P 23 48 18.5 -2.2
comp=Z,2.4nm,0.7s,baz=327,slow=8.8,SNR=11
LPAZ PcP PcP 23 50 36.0 +0.8
comp=Z,2.4nm,0.6s,baz=354,slow=7.8,SNR=3.8
LPAZ LR LR 00 03 35.3
comp=Z,60nm,20.8s,baz=322,slow=36
**LPAZ La Paz** 38.05 142 *e*P P 23 48 19.1 -1.6
comp=Z,3.7nm,0.9s
LPAZ PcP PcP 23 50 36.0 +0.8
**I07A Izee** 38.20 327 *e*P P 23 48 21.9 +0.8
comp=Z,16nm,1.0s
I07A *e*PcP PcP 23 50 36.0 +1.4
I07A *e*S S 23 54 21.5 +11
**F10A Beach Ranch, E** 38.39 331 *e*P P 23 48 22.7 +0.1
comp=Z,37nm,0.8s
**M02C Callahan** 38.44 321 P P 23 48 24.1 +1.0
baz=39
**J05D Fort Rock, OR** 38.63 324 P P 23 48 25.7 +1.0
baz=39
**G08A Pilot Rock** 38.75 329 *e*P P 23 48 29.2 +3.5
comp=Z,24nm,1.8s
G08A *e*PcP PcP 23 50 36.7 +0.3
**J04D Umpqua Nationa** 39.10 324 P P 23 48 29.8 +1.0
baz=39
**I05D Terrebonne, OR** 39.37 326 P P 23 48 31.8 +1.1
baz=40
**G06A Carlson Farm,** 39.58 327 *e*P P 23 48 33.8 +1.3
comp=Z,53nm,2.1s
**I04A Tendick Farm,** 39.62 324 P P 23 48 34.1 +1.2
baz=40
**IRO Indian Ridge** 39.66 325 P P 23 48 34.7 +1.4
**BPO Bald Peter** 39.76 326 P P 23 48 36.3 +2.1
**HAWA Hanford** 39.81 329 *e*P P 23 48 34.6 +0.3
comp=Z,6.0nm,0.9s
**G05D Wamic, OR** 39.94 327 P P 23 48 36.5 +1.0
baz=40
**D08A Wollman Farm,** 39.98 331 *e*P P 23 48 37.0 +1.2
comp=Z,13nm,1.3s
**NEW Newport** 40.05 333 P P 23 48 37.1 +0.8
baz=40
**NEW Newport** 40.05 333 *e*P P 23 48 36.8 +0.4
comp=Z,4.4nm,0.6s
NEW *e*PcP PcP 23 50 40.3 +0.1
**H04A Detroit Lake** 40.05 325 *e*P P 23 48 37.1 +0.7
comp=Z,39nm,0.7s
**VFP Flag Point** 40.07 327 P P 23 48 38.7 +1.9
**E07A Sunnyside** 40.08 329 *e*P P 23 48 37.5 +0.9
E07A *e*pP pP 23 48 53.5 +1.9
**I03D Drain, OR** 40.10 323 P P 23 48 38.1 +1.4
baz=40
**OD2 Odessa Site #2** 40.12 331 P P 23 48 37.9 +0.9
**GL2 New Goldendale** 40.16 328 P P 23 48 39.3 +1.9
**C09A Chrisman Ranch** 40.22 332 *e*P P 23 48 39.1 +1.3
comp=Z,20nm,0.6s
**TRW Toppenish Ridg** 40.24 328 P P 23 48 39.9 +1.9
**VLL Laurance Lake** 40.28 327 P P 23 48 40.5 +2.1
**SAW Saint Andrews** 40.67 331 P P 23 48 43.0 +1.5
**TBM Table Mountain** 40.88 329 P P 23 48 44.7 +1.4
**WTV Waterville** 40.93 330 P P 23 48 45.2 +1.5
**LTY Liberty** 40.97 329 *e*P P 23 48 44.6 +0.6
comp=Z,26nm,1.3s
LTY *e*PcP PcP 23 50 43.1 -0.2
**G03D McMinnville, O** 40.98 325 P P 23 48 45.1 +1.1
baz=41
**LON Longmire** 41.20 328 *e*P P 23 48 46.8 +0.9
comp=Z,20nm,0.8s
**FFC Flin Flon** 41.24 351 *e*P P 23 48 46.2 +0.2
comp=Z,3.6nm,0.6s
**F04D Rainier, OR** 41.39 327 P P 23 48 48.7 +1.3
baz=42
**D05A Enumclaw** 41.58 328 *e*P P 23 48 50.5 +1.6
comp=Z,26nm,1.0s
**F03A Seaside** 41.59 326 *e*P P 23 48 51.4 +2.3
comp=Z,63nm,1.0s
**E03A Lebam** 41.98 327 *e*P P 23 48 53.6 +1.5
comp=Z,52nm,0.9s
**RPW Rockport** 42.20 330 P P 23 48 54.6 +0.5
**B05A Bryant** 42.36 330 P P 23 48 55.6 +0.3
baz=43
**CMW Cultus Mountai** 42.48 330 P P 23 48 56.6 +0.2
**BLN Blyn Mountain** 42.62 329 P P 23 48 58.3 +0.9
**NLWA Neilton Lookou** 42.68 327 *e*P P 23 48 59.5 +1.5
comp=Z,52nm,1.3s
**LVC Limon Verde** 42.73 149 *e*P P 23 48 58.4 -0.5
comp=Z,24nm,1.4s
**A04D Lummi Island** 42.97 330 P P 23 49 01.3 +1.2
baz=43
**PGC Sidney** 43.29 329 *e*P P 23 49 03.0 +0.3
comp=Z,20nm,0.8s
**FCC Fort Churchill** 44.50 358 *e*P P 23 49 11.4 -0.9
**SCHQ Schefferville** 44.81 20 P P 23 49 13.8 -1.1
comp=Z,43nm,0.6s,baz=221,slow=7.1,SNR=88
SCHQ LR LR 00 08 59.9
comp=Z,752nm,20.9s,baz=214,slow=38
**SCHQ Schefferville** 44.81 20 *e*P P 23 49 13.9 -0.9
comp=Z,45nm,0.6s
**LCO Las Campanas** 47.42 155 *e*P P 23 49 33.5 -2.4
comp=Z,25nm,1.0s
**YKA Yellowknife Ar** 50.94 346 P P 23 50 01.2 -0.9
comp=Z,7.4nm,0.7s,baz=145,slow=7.8,SNR=11
YKA pP pP 23 50 15.5 -2.0
comp=Z,7.7nm,0.7s,baz=150,slow=7.5,SNR=7.8
YKA PcP PcP 23 51 17.1 -0.5
comp=Z,3.5nm,0.6s,baz=153,slow=3.9,SNR=6.1
**BDFB Brasilia** 52.16 123 P P 23 50 11.0 -1.0
comp=Z,2.3nm,0.5s,baz=282,slow=13,SNR=5.9
BDFB LR LR 00 13 55.1
comp=Z,66nm,21.9s,baz=290,slow=38
**CPUP Villa Florida** 52.19 140 P P 23 50 08.8 -3.1
comp=Z,10.0nm,1.0s,baz=324,slow=6.5,SNR=15
CPUP ScP ScP 23 55 17.9 +2.9
comp=Z,1.9nm,0.8s,baz=316,slow=5.5,SNR=4.3
CPUP LR LR 00 11 06.4
comp=Z,98nm,19.8s,baz=326,slow=35
**DLBC Dease Lake** 52.68 336 *e*P P 23 50 16.9 +1.6
comp=Z,20nm,0.8s
**TAOE Nuku Hiva Isla** 53.52 248 *e*T T 00 47 02.4
comp=Z,171nm,0.3s
**RKT Rikitea** 56.53 230 *e*LR LR 00 07 00.5
comp=Z,622nm,29.8s
**RKT Rikitea** 56.53 230 *e*T T 00 50 51.1
comp=Z,10.0nm,0.3s
**NRS Narsarsuaq** 57.29 24 *i* P P 23 50 44.2 -4.2
**PLCA Paso Flores** 58.00 161 *e*P P 23 50 51.3 -2.5
PLCA *e*pP pP 23 51 11.1 +1.6
**TRQA Tornquist** 58.88 153 *e*P P 23 50 57.0 -2.8
comp=Z,15nm,1.1s
**SFJD Kangerlussuaq** 59.12 17 *i* P P 23 50 59.1 -1.9
comp=Z,7.1nm,0.7s
**BMRM Bremner River** 60.23 333 *e*P P 23 51 10.6 +1.8
comp=Z,19nm,0.7s
**INK Inuvik** 60.38 343 *e*P P 23 51 08.7 -1.0
comp=Z,9.2nm,0.8s
**RES Resolute Bay** 60.48 359 *e*P P 23 51 07.9 -2.4
comp=Z,13nm,1.3s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **EGAK** | **Eagle** | **60.72** | **338** | *e*P | | **P** | **23 51 10.6** | **-1.4** |
| | comp=Z,87nm,2.4s | | | | | | | | |
| **DIV** | **Divide** | **60.81** | **333** | *e*P | | **P** | **23 51 13.2** | **+0.4** |
| | comp=Z,19nm,1.0s | | | | | | | | |
| **KLU** | **Klutina** | **61.03** | **333** | *e*P | | **P** | **23 51 15.0** | **+0.6** |
| | comp=Z,88nm,1.8s | | | | | | | | |
| **HARP** | **HAARP** | **61.11** | **335** | *e*P | | **P** | **23 51 16.9** | **+2.1** |
| | comp=Z,49nm,1.2s | | | | | | | | |
| **PAX** | **Paxson** | **61.49** | **335** | *e*P | | **P** | **23 51 17.0** | **-0.5** |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **61.78** | **334** | *e*P | | **P** | **23 51 20.4** | **+1.0** |
| | comp=Z,83nm,1.7s | | | | | | | | |
| **SML** | **Sawmill** | **62.21** | **333** | *e*P | | **P** | **23 51 22.3** | **+0.1** |
| | comp=Z,3.4nm,0.9s | | | | | | | | |
| **PMR** | **Palmer** | **62.48** | **333** | *e*P | | **P** | **23 51 24.4** | **+0.4** |
| | comp=Z,10nm,0.7s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **62.56** | **332** | *e*P | | **P** | **23 51 24.9** | **+0.4** |
| | comp=Z,11nm,0.5s | | | | | | | | |
| **BRLK** | **Bradley Lake** | **62.62** | **331** | *e*P | | **P** | **23 51 25.8** | **+0.8** |
| | comp=Z,33nm,0.8s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **62.83** | **328** | P | | **P** | **23 51 26.5** | **+0.2** |
| | comp=Z,108nm,0.8s,SNR=5.3 | | | | | | | | |
| **IL1** | **Eielson Array** | **62.86** | **337** | *e*P | | **P** | **23 51 25.7** | **-0.8** |
| **ILAR** | **Eielson Array** | **62.86** | **337** | P | | **P** | **23 51 26.0** | **-0.5** |
| | comp=Z,6.6nm,0.7s,baz=123,slow=5.0,SNR=30 | | | | | | | | |
| ILAR | | | | pP | | **pP** | **23 51 40.8** | **-1.6** |
| | comp=Z,6.8nm,0.8s,baz=128,slow=4.6,SNR=9.5 | | | | | | | | |
| ILAR | | | | LR | | LR | 00 21 42.2 | | |
| | comp=Z,95nm,19.5s,baz=126,slow=39 | | | | | | | | |
| **PMOR** | **Pomariorio Ree** | **62.97** | **245** | *e*T | | T | 00 58 50.2 | | |
| | comp=Z,4.9nm,0.3s | | | | | | | | |
| **RND** | **Reindeer** | **63.07** | **335** | *e*P | | **P** | **23 51 28.5** | **+0.6** |
| | comp=Z,35nm,1.0s | | | | | | | | |
| **SUA** | **Susitna One** | **63.15** | **332** | *e*P | | **P** | **23 51 29.3** | **+0.7** |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **63.16** | **336** | *e*P | | **P** | **23 51 28.1** | **-0.4** |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **WRH** | **Wood River Hil** | **63.20** | **336** | *e*P | | **P** | **23 51 28.0** | **-0.7** |
| | comp=Z,8.2nm,0.9s | | | | | | | | |
| **MCK** | **McKinley** | **63.23** | **335** | *e*P | | **P** | **23 51 30.5** | **+1.5** |
| | comp=Z,21nm,1.1s | | | | | | | | |
| **COLA** | **College** | **63.27** | **337** | *e*P | | **P** | **23 51 28.2** | **-1.0** |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **MDM** | **Murphy Dome** | **63.46** | **337** | *e*P | | **P** | **23 51 30.1** | **-0.4** |
| | comp=Z,9.6nm,0.8s | | | | | | | | |
| **BWN** | **Browne** | **63.62** | **335** | *e*P | | **P** | **23 51 31.5** | **0.0** |
| | comp=Z,45nm,0.8s | | | | | | | | |
| **SPU** | **Mount Spurr** | **63.64** | **332** | *e*P | | **P** | **23 51 32.1** | **+0.3** |
| **TRF** | **Thorofare Moun** | **63.68** | **335** | *e*P | | **P** | **23 51 32.3** | **+0.2** |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **RSO** | **Redoubt South** | **63.73** | **331** | *e*P | | **P** | **23 51 32.7** | **+0.1** |
| **KTH** | **Kantishna Hill** | **63.98** | **335** | *e*P | | **P** | **23 51 33.9** | **-0.1** |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **64.21** | **335** | *e*P | | **P** | **23 51 35.3** | **-0.2** |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **PPLA** | **Purkeypile** | **64.28** | **334** | *e*P | | **P** | **23 51 36.1** | **+0.1** |
| | comp=Z,105nm,1.8s | | | | | | | | |
| **MLY** | **Manley** | **64.46** | **336** | *e*P | | **P** | **23 51 35.8** | **-1.3** |
| | comp=Z,23nm,0.6s | | | | | | | | |
| **COLD** | **Coldfoot** | **65.13** | **338** | *e*P | | **P** | **23 51 41.6** | **+0.3** |
| COLD | | | | *e*pP | | **pP** | **23 51 57.2** | **-0.1** |
| **SVW2** | **Sparrevohn** | **65.25** | **331** | *e*P | | **P** | **23 51 41.5** | **-0.7** |
| | comp=Z,40nm,1.4s | | | | | | | | |
| **PPT** | **Papeete** | **65.51** | **243** | LR | | LR | 00 12 29.5 | | |
| | comp=Z,145nm,20.9s,baz=9.0,slow=28 | | | | | | | | |
| **PPT2** | **Papeete2** | **65.52** | **243** | *e*LR | | LR | 00 11 03.2 | | |
| | comp=Z,473nm,27.0s | | | | | | | | |
| **CHGN** | **Chignik** | **65.55** | **326** | *e*P | | **P** | **23 51 44.5** | **+0.4** |
| **SUMG** | **Summit** | **65.86** | **15** | *i* P | | **P** | **23 51 45.1** | **-1.3** |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **SUMG** | **Summit** | **65.86** | **15** | *e*P | | **P** | **23 51 44.8** | **-1.7** |
| | comp=Z,62nm,1.6s | | | | | | | | |
| SUMG | | | | *e*PcP | | **PcP** | **23 52 12.2** | **-4.8** |
| **TBI** | **Tubuai** | **67.96** | **237** | *e*LR | | LR | 00 12 23.0 | | |
| | comp=Z,420nm,30.5s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **72.31** | **13** | ⇑*i*P | | **P** | **23 52 23.9** | **-1.9** |
| | comp=Z,16nm,0.5s | | | | | | | | |
| **ESK** | **Eskdalemuir** | **77.42** | **36** | P | | **P** | **23 52 53.5** | **-2.2** |
| | comp=Z,120nm,0.5s,SNR=7.5 | | | | | | | | |
| **ESK** | **Eskdalemuir** | **77.42** | **36** | *e*P | | **P** | **23 52 53.0** | **-2.7** |
| **AMKA** | **Amchitka** | **78.59** | **320** | *e*P | | **P** | **23 53 03.5** | **+1.2** |
| **ESDC** | **Sonseca Array** | **79.12** | **52** | P | | **P** | **23 53 02.8** | **-2.7** |
| | comp=Z,2.1nm,0.6s,baz=288,slow=4.8,SNR=20 | | | | | | | | |
| ESDC | | | | pP | | **PcP** | **23 53 17.2** | **+3.4** |
| | comp=Z,1.4nm,0.5s,baz=289,slow=4.6,SNR=11 | | | | | | | | |
| ESDC | | | | LR | | LR | 00 23 33.7 | | |
| | comp=Z,53nm,21.6s,baz=15,slow=32 | | | | | | | | |
| **ES19** | **SONSECA Array** | **79.16** | **52** | *e*P | | P | 23 53 02.9 | -2.9 | |
| ES19 | | | | *e*pP | | pP | 23 53 19.4 | -2.8 | |
| **NB2** | **NORSAR Subarra** | **83.67** | **29** | P | | **P** | **23 53 27.9** | **-1.2** |
| | comp=Z,7.1nm,1.2s,baz=289,slow=5.3 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **83.67** | **29** | P | | **P** | **23 53 27.6** | **-1.5** |
| | comp=Z,3.0nm,0.9s,baz=290,slow=5.2,SNR=6.1 | | | | | | | | |
| NOA | | | | LR | | LR | 00 29 26.8 | | |
| | comp=Z,62nm,21.3s,baz=280,slow=35 | | | | | | | | |
| **DBIC** | **Dimbokro** | **85.05** | **84** | P | | **P** | **23 53 34.9** | **-2.1** |
| | comp=Z,5.1nm,0.9s,baz=283,slow=2.3,SNR=11 | | | | | | | | |
| DBIC | | | | LR | | LR | 00 26 14.0 | | |
| | comp=Z,78nm,20.1s,baz=267,slow=32 | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **85.72** | **43** | *e*P | | **P** | **23 53 38.5** | **-1.6** |
| | comp=Z,23nm,1.6s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.74** | **18** | P | | **P** | **23 53 37.2** | **-2.1** |
| | comp=Z,2.9nm,0.5s,baz=316,slow=3.3,SNR=13 | | | | | | | | |
| ARCES | | | | LR | | LR | 00 31 21.2 | | |
| | comp=Z,186nm,22.0s,baz=282,slow=35 | | | | | | | | |
| **DAVA** | **Damuels** | **87.15** | **42** | ⇓*i*P | | **P** | **23 53 45.0** | **-1.9** |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **87.60** | **43** | *e*P | | **P** | **23 53 48.2** | **-1.1** |
| | comp=Z,7.1nm,0.8s | | | | | | | | |
| **RETA** | **Reutte** | **87.65** | **42** | ⇑*i*P | | **P** | **23 53 47.1** | **-2.1** |
| | comp=Z,7.8nm,1.1s | | | | | | | | |
| **CLL** | **Collm** | **87.78** | **37** | *e*P | | **P** | **23 53 49.0** | **-0.6** |
| CLL | | | | *e*S | | **S** | **00 04 24.0** | **-3.5** |
| CLL | | | | *e*PS | | **PnS** | **00 05 36.0** | **+0.5** |
| CLL | | | | *e*SSS | | SSS | 00 13 48.0 | | |
| **GERES** | **GERESS Array B** | **89.06** | **40** | P | | **P** | **23 53 53.9** | **-2.0** |
| | comp=Z,0.4nm,0.6s,baz=209,slow=4.4,SNR=4.4 | | | | | | | | |
| GERES | | | | LR | | LR | 00 29 52.6 | | |
| | comp=Z,85nm,21.8s,baz=292,slow=33 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **89.76** | **77** | P | | P | 23 53 55.4 | -4.2 | |
| | comp=Z,0.5nm,0.5s,baz=289,slow=4.7,SNR=9.6 | | | | | | | | |
| TORD | | | | LR | | LR | 00 31 13.6 | | |
| | comp=Z,80nm,21.3s,baz=240,slow=34 | | | | | | | | |
| **FINES** | **FINESS Array B** | **90.04** | **25** | P | | **P** | **23 53 58.1** | **-2.0** |
| | comp=Z,3.7nm,0.9s,baz=336,slow=4.2,SNR=4.6 | | | | | | | | |
| FINES | | | | LR | | LR | 00 33 27.7 | | |
| | comp=Z,62nm,20.1s,baz=286,slow=35 | | | | | | | | |
| **KEST** | **Kesra** | **90.29** | **53** | P | | **P** | **23 53 59.8** | **-2.2** |
| | comp=Z,2.7nm,0.7s,baz=203,slow=1.6,SNR=8.2 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **90.78** | **326** | P | | **P** | **23 54 03.5** | **-0.2** |
| | comp=Z,5.8nm,0.8s,baz=69,slow=8.4,SNR=6.3 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **97.22** | **33** | LR | | LR | 00 38 34.1 | | |
| | comp=Z,27nm,19.7s,baz=270,slow=36 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **105.90** | **41** | PKiKP | | **PKiKP** | **23 59 23.4** | **-1.2** |
| | comp=Z,0.6nm,0.7s,baz=318,slow=3.9,SNR=3.1 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **112.02** | **2** | PKiKP | | **PKiKP** | **23 59 34.6** | **-0.9** |
| | comp=Z,0.9nm,0.4s,baz=217,slow=1.8,SNR=3.7 | | | | | | | | |
| **SONM** | **Songino Array** | **116.20** | **347** | PKP | | **PKPdf** | **23 59 42.9** | **-1.0** |
| | comp=Z,1.0nm,0.8s,baz=72,slow=1.8,SNR=6.4 | | | | | | | | |
| SONM | | | | PKKPbc | | **PKKPbc** | **00 10 11.2** | **-4.0** |
| | comp=Z,0.6nm,0.6s,baz=193,slow=2.3,SNR=5.2 | | | | | | | | |
| **KSRS** | **Korea Array** | **116.68** | **326** | PKP | | **PKPdf** | **23 59 44.0** | **-1.0** |
| | comp=Z,2.7nm,0.6s,baz=354,slow=1.6,SNR=8.4 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **116.71** | **326** | PKP | | **PKPdf** | **23 59 44.0** | **-1.1** |
| **MKAR** | **Makanchi Array** | **119.00** | **5** | PKP | | **PKPdf** | **23 59 47.5** | **-1.7** |
| | comp=Z,0.8nm,0.4s,baz=296,slow=2.6,SNR=8.3 | | | | | | | | |
| MKAR | | | | pPKP | | **pPKPdf** | **00 00 03.4** | **-3.2** |
| | comp=Z,0.5nm,0.5s,baz=20,slow=3.9,SNR=3.3 | | | | | | | | |
| **BOSA** | **Boshof** | **119.93** | **115** | PKP | | **PKPdf** | **23 59 50.2** | **-1.3** |
| | comp=Z,6.1nm,0.7s,baz=328,slow=0.9,SNR=9.5 | | | | | | | | |
| **BJI** | **Beijing** | **120.22** | **336** | PKP | | **PKPdf** | **23 59 51.1** | **-0.6** |
| BJI | | | | PP | | **PP** | **00 01 18.6** | **+2.0** |
| BJI | | | | SS | | SS | 00 17 39.8 | +0.8 | |
| BJI | | | | LN | | | | | |
| | comp=Z,150nm,16.0s | | | | | | | | |
| BJI | | | | LE | | | | | |
| | comp=Z,80nm,17.4s | | | | | | | | |
| **GEYT** | **Alibeck** | **120.75** | **28** | PKP | | **PKPdf** | **23 59 51.3** | **-1.6** |
| | comp=Z,4.5nm,0.6s,baz=271,slow=4.3,SNR=11 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **121.21** | **340** | *e*PKP | | **PKPdf** | **23 59 49.3** | **-4.4** |
| HHC | | | | PPMZ | | | | | |
| | comp=Z,42nm,9.9s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | comp=Z,78nm,18.5s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | comp=Z,120nm,17.3s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | comp=Z,59nm,18.5s | | | | | | | | |
| **LSZ** | **Lusaka** | **121.74** | **99** | *e*PKPdf | | **PKPdf** | **23 59 55.6** | **+0.2** |
| **EKS2** | **Erkin-Say** | **121.77** | **13** | *e*PKPdf | | **PKPdf** | **23 59 54.8** | **0.0** |
| **TKM2** | **Tokmak 2** | **121.89** | **11** | *e*PKPdf | | **PKPdf** | **23 59 53.7** | **-1.4** |
| **AAK** | **Ala-Archa** | **121.95** | **12** | *e*PKPdf | | **PKPdf** | **23 59 55.3** | **+0.1** |
| **WMQ** | **Urumqi** | **122.23** | **1** | PKP | | **PKPdf** | **23 59 59.6** | **+4.0** |
| WMQ | | | | PP | | PP | 00 01 40.0 | +10 | |
| WMQ | | | | PKS | | **PKSdf** | **00 03 35.0** | **+2.8** |
| WMQ | | | | PPMZ | | | | | |
| | comp=Z,13nm,8.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,130nm,28.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,77nm,26.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,120nm,26.0s | | | | | | | | |
| **MAW** | **Mawson** | **124.08** | **168** | PKP | | **PKPdf** | **00 00 00.0** | **+1.9** |
| | comp=Z,1.5nm,0.5s,baz=202,slow=1.0,SNR=11 | | | | | | | | |
| **KSH** | **Kashi** | **125.25** | **12** | *e*PKP | | **PKPdf** | **00 00 05.1** | **+3.5** |
| KSH | | | | *e*sPKP | | | 00 00 19.3 | | |
| KSH | | | | *e*PP | | PP | 00 01 58.0 | +7.5 | |
| KSH | | | | PKS | | **PKSdf** | **00 03 41.8** | **+3.5** |
| **KSH** | **Kashi** | **125.25** | **12** | SS | | SS | 00 18 50.0 | +7.2 | |
| KSH | | | | AMB | | AMB | | | |
| | comp=Z,70nm,6.1s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=N,130nm,5.1s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=E,95nm,6.7s | | | | | | | | |
| KSH | | | | LR | | LR | | | |
| | comp=Z,130nm,5.3s | | | | | | | | |
| **KSH** | **Kashi** | **125.25** | **12** | *e*PKP | | **PKPdf** | **00 00 05.1** | **+3.5** |
| KSH | | | | *e*PP | | PP | 00 01 58.0 | +7.5 | |
| KSH | | | | PKS | | **PKSdf** | **00 03 41.8** | **+3.5** |
| KSH | | | | SS | | SS | 00 18 50.0 | +7.2 | |
| KSH | | | | PPMZ | | | | | |
| | comp=Z,70nm,6.1s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,130nm,5.1s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,95nm,6.7s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,130nm,5.3s | | | | | | | | |
| **GTA** | **Gaotai** | **125.62** | **349** | *e*PKP | | **PKPdf** | **00 00 04.8** | **+2.5** |
| GTA | | | | sPKP | | | 00 00 31.1 | | |
| GTA | | | | PP | | PP | 00 02 01.1 | +8.2 | |
| GTA | | | | SKS | | **SKSdf** | **00 07 11.3** | **+1.8** |
| GTA | | | | SKKS | | **SKKSac** | **00 08 49.0** | **+1.4** |
| GTA | | | | SS | | SS | 00 18 55.6 | +8.3 | |
| GTA | | | | PPMZ | | | | | |
| | comp=Z,40nm,6.9s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | comp=Z,100nm,16.6s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | comp=Z,100nm,17.6s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | comp=Z,120nm,17.6s | | | | | | | | |
| **CD2** | **Chengdu** | **132.81** | **342** | PKP | | **PKPdf** | **00 00 15.6** | **-0.5** |
| CD2 | | | | pPKP | | **pPKPdf** | **00 00 33.4** | **0.0** |
| CD2 | | | | sPKP | | | 00 00 40.1 | | |
| CD2 | | | | PP | | **PP** | **00 02 40.4** | **+0.5** |
| CD2 | | | | SKS | | **SKSdf** | **00 07 21.5** | **-1.3** |
| CD2 | | | | SKKS | | **SKKSac** | **00 09 29.5** | **-2.9** |
| **CD2** | **Chengdu** | **132.81** | **342** | SS | | SS | 00 20 17.3 | +1.2 | |
| CD2 | | | | AMB | | AMB | | | |
| | comp=Z,120nm,5.2s | | | | | | | | |
| **CD2** | **Chengdu** | **132.81** | **342** | PKP | | **PKPdf** | **00 00 15.6** | **-0.5** |
| CD2 | | | | sPKP | | | 00 00 40.1 | | |
| CD2 | | | | SKS | | **SKSdf** | **00 07 21.5** | **-1.3** |
| CD2 | | | | SKKS | | **SKKSac** | **00 09 29.5** | **-2.9** |
| CD2 | | | | SS | | **SS** | **00 20 17.3** | **+1.2** |
| CD2 | | | | PPMZ | | | | | |
| | comp=Z,120nm,5.2s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **136.00** | **256** | *e*PKPdf | | **PKPdf** | **00 00 21.0** | **-1.2** |
| **WRA** | **Warramunga Arr** | **136.01** | **256** | PKP | | **PKPdf** | **00 00 20.4** | **-1.8** |
| | comp=Z,2.1nm,0.7s,baz=88,slow=1.8,SNR=10 | | | | | | | | |
| WRA | | | | SKPab | | **SKiKP** | **00 03 57.7** | **+2.6** |
| | comp=Z,0.3nm,0.3s,baz=84,slow=2.0,SNR=4.5 | | | | | | | | |
| **LSA** | **Lhasa** | **136.26** | **357** | *e*PKPdf | | **PKPdf** | **00 00 23.2** | **+0.1** |
| **ASAR** | **Alice Springs** | **136.29** | **251** | PKiKP | | PKPpre | 00 00 10.4 | | |
| | comp=Z,1.0nm,1.1s,baz=98,slow=3.9,SNR=5.6 | | | | | | | | |
| ASAR | | | | PKP | | **PKPdf** | **00 00 21.0** | **-1.7** |
| | comp=Z,1.4nm,0.8s,baz=90,slow=1.8,SNR=7.7 | | | | | | | | |
| ASAR | | | | SKP | | | 00 03 54.8 | | |
| | comp=Z,0.6nm,0.8s,baz=65,slow=2.1,SNR=3.2 | | | | | | | | |
| **KMI** | **Kunming** | **138.53** | **340** | PKP | | **PKPdf** | **00 00 29.3** | **+2.2** |
| KMI | | | | pPKP | | **pPKPdf** | **00 00 45.0** | **+0.6** |
| KMI | | | | sPKP | | | 00 00 51.8 | | |
| **KMI** | **Kunming** | **138.53** | **340** | PKP | | **PKPdf** | **00 00 29.3** | **+2.2** |
| KMI | | | | sPKP | | | 00 00 51.8 | | |
| KMI | | | | SS | | SS | 00 21 29.3 | +4.3 | |
| KMI | | | | LZ | | | | | |
| | comp=Z,76nm,24.8s | | | | | | | | |
| **LUWI** | **Luwuk** | **143.76** | **288** | *e*PKPdf | | **PKPdf** | **00 00 36.9** | **+0.5** |
| **SOEI** | **Soe** | **144.85** | **273** | *e*PKPdf | | **PKPab** | **00 00 36.7** | **-0.9** |
| **CHTO** | **Chiang Mai** | **145.62** | **342** | *e*PKPbc | | **PKPdf** | **00 00 38.8** | **-0.8** |
| **RPR** | **Rampur** | **145.87** | **16** | *e*PKPdf | | **PKPdf** | **00 00 38.0** | **-1.9** |
| **CMAR** | **Chiang Mai Arr** | **145.96** | **342** | PKPbc | | **PKPdf** | **00 00 40.1** | **-0.1** |
| | comp=Z,33nm,0.8s,baz=337,slow=3.4,SNR=55 | | | | | | | | |
| CMAR | | | | SKPbc | | **SKiKP** | **00 04 17.9** | **+2.1** |
| | comp=Z,1.3nm,0.4s,baz=332,slow=2.8,SNR=5.0 | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **145.99** | **304** | *e*PKPbc | | **PKPab** | **00 00 42.2** | **+0.3** |
| **MMRI** | **Maumere** | **146.59** | **276** | *e*PKPbc | | **PKPdf** | **00 00 42.1** | **+0.8** |
| **HYBB** | **Hyderabad (bro** | **147.03** | **18** | *e*PKPbc | | **PKPdf** | **00 00 41.7** | **-0.4** |
| **CHLP** | **Challavanipeta** | **147.16** | **8** | *e*PKPab | | **PKPbc** | **00 00 45.1** | **+0.8** |
| **PVM** | **Polavaram** | **147.97** | **13** | *e*PKPbc | | **PKPdf** | **00 00 44.7** | **+1.1** |
| **URV** | **Uravakonda** | **148.92** | **22** | *e*PKPbc | | **PKPdf** | **00 00 47.4** | **+2.3** |
| **MBWA** | **Marble Bar** | **149.59** | **252** | *e*PKPbc | | **PKPdf** | **00 00 48.1** | **+2.1** |
| **SKHT** | **Srikalahasti** | **150.85** | **18** | *e*PKPdf | | **PKPdf** | **00 00 47.3** | **-0.9** |
| SKHT | | | | *e*PKiKP | | **PKPbc** | **00 00 53.1** | **-0.7** |

*CSEM* ***15*** *23:52:54.0, 39.52N×29.74W, h10km, ML2.2, After PDA*

**PDA 15 23:52:54.0±0.5, 39.52N×29.74W, h10km, MD3.5, ML2.2, Error ellipse: s-maj=6.2km s-min=1.6km az=24.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H07S1** | **FLORES T-PHASE** | **1.15** | **263** | *e*S | Sb | 23 53 24.5 | -6.5 |
| **PCED** | **Cedros** | **1.20** | **138** | *e*S | Sb | 23 53 25.6 | -6.9 |
| PCED | | | | A | A | 23 53 27.4 | |
| | 22nm,0.4s | | | | | | |
| **PCED** | **Cedros** | **1.20** | **138** | *e*S | Sb | 23 53 25.6 | -6.9 |
| PCED | | | | A | A | 23 53 26.8 | |
| | 11nm,0.1s | | | | | | |
| **PCED** | **Cedros** | **1.20** | **138** | *e*S | Sb | 23 53 25.6 | -6.9 |
| **CALA** | **Caldeira** | **1.24** | **139** | *e*S | Sb | 23 53 26.9 | -6.8 |
| **CALA** | **Caldeira** | **1.24** | **139** | *e*S | Sb | 23 53 26.6 | -7.1 |
| **CALA** | **Caldeira** | **1.24** | **139** | *e*S | Sb | 23 53 26.9 | -6.8 |
| **ROSA** | **Rosais** | **1.41** | **124** | *e*P | Pn | 23 53 15.2 | -4.6 |
| ROSA | | | | *e*S | Sn | 23 53 30.6 | -7.9 |
| ROSA | | | | A | A | 23 53 31.6 | |
| | 8.8nm,0.1s | | | | | | |
| **ROSA** | **Rosais** | **1.41** | **124** | *e*P | Pn | 23 53 15.5 | -4.3 |
| ROSA | | | | *e*S | Sn | 23 53 30.4 | -8.1 |
| ROSA | | | | A | A | 23 53 30.5 | |
| | 50nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **1.41** | **124** | *e*P | Pn | 23 53 15.2 | -4.6 |
| ROSA | | | | *e*S | Sn | 23 53 30.6 | -7.9 |
| **PCAN** | **Candelaria** | **1.44** | **137** | *e*P | Pn | 23 53 15.3 | -4.8 |
| PCAN | | | | *e*S | Sn | 23 53 31.7 | -7.4 |
| PCAN | | | | A | A | 23 53 33.7 | |
| | 41nm,0.2s | | | | | | |
| **PCAN** | **Candelaria** | **1.44** | **137** | *e*P | Pn | 23 53 15.4 | -4.7 |
| PCAN | | | | *e*S | Sn | 23 53 31.5 | -7.6 |
| PCAN | | | | A | A | 23 53 33.7 | |
| | 41nm,0.1s | | | | | | |
| **PCAN** | **Candelaria** | **1.44** | **137** | *e*P | Pn | 23 53 15.3 | -4.8 |
| PCAN | | | | *e*S | Sn | 23 53 31.7 | -7.4 |
| **PICO** | **Pico** | **1.44** | **135** | *e*P | Pn | 23 53 15.7 | -4.6 |
| PICO | | | | *e*S | Sn | 23 53 31.9 | -7.4 |
| **PICO** | **Pico** | **1.44** | **135** | *e*P | Pn | 23 53 15.9 | -4.4 |
| PICO | | | | *e*S | Sn | 23 53 31.2 | -8.1 |
| **PICO** | **Pico** | **1.44** | **135** | *e*P | Pn | 23 53 15.7 | -4.6 |
| PICO | | | | *e*S | Sn | 23 53 31.9 | -7.4 |
| **PGRA** | **Graciosa** | **1.45** | **109** | *e*S | Sn | 23 53 30.8 | -8.5 |
| PGRA | | | | A | A | 23 53 34.1 | |
| | 19nm,0.5s | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.55** | **132** | *e*S | Sn | 23 53 34.4 | -7.7 |
| PPNO | | | | A | A | 23 53 36.0 | |
| | 29nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.56** | **124** | *e*S | Sn | 23 53 34.4 | -7.7 |
| PMAN | | | | A | A | 23 53 36.5 | |
| | 12nm,0.3s | | | | | | |
| **PMAN** | **Manadas** | **1.56** | **124** | *e*S | Sn | 23 53 34.5 | -7.6 |
| PMAN | | | | A | A | 23 53 35.5 | |
| | 7.3nm,0.1s | | | | | | |
| **PMAN** | **Manadas** | **1.56** | **124** | *e*S | Sn | 23 53 34.4 | -7.7 |

**IDC 15 23:55:19.5±6.0, 6.11N×72.67W, h182km±42km, mb2.7/1, mb1 3.0/2, mb1mx2.7/22, mbtmp3.4/2, Error ellipse: s-maj=286.5km s-min=31.4km az=158.0, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ROSC** | **El Rosal** | **2.07** | **233** | P | Pn | 23 55 58.4 | +0.5 |
| | 31nm,0.3s,baz=319,slow=17,SNR=56 | | | | | | |
| ROSC | | | | S | Sn | 23 56 27.8 | 0.0 |
| | 44nm,0.3s,baz=85,slow=23,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.45** | **78** | P | P | 00 06 32.5 | -0.1 |
| | 0.1nm,0.6s,baz=281,slow=6.8,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **149.05** | **233** | PKPbc | PKPbc | 00 14 46.8 | -0.3 |
| | 0.5nm,0.7s,baz=113,slow=3.2,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **150.38** | **240** | PKPbc | PKPbc | 00 14 49.8 | -0.5 |
| | 0.6nm,0.4s,baz=106,slow=2.6,SNR=2.9 | | | | | | |

**SKHL 16 00:19:00.9±0.7, 48.80N×142.20E, h10km, mb5.4/1, 1C, Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UGL** | **Uglegorsk** | **0.29** | **342** | ⇑*i*Pg | Pg | 00 19 07.4 | +0.6 |
| UGL | | | | AMB | AMB | 00 19 10.5 | |
| | 2μm,0.3s | | | | | | |
| UGL | | | | *e*Sg | Sg | 00 19 11.8 | +1.1 |
| UGL | | | | A | A | 00 19 13.0 | |
| | 4μm,0.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **1.89** | **168** | *e*Pg | Pg | 00 19 39.0 | +2.0 |
| YSS | | | | *e*Sg | Sg | 00 20 05.7 | +4.2 |
| YSS | | | | A | A | 00 20 10.6 | |
| | 200nm,0.5s | | | | | | |
| **TYV** | **Tymovskoe** | **2.09** | **8** | *e*Pg | Pg | 00 19 42.0 | +1.1 |
| TYV | | | | AMB | AMB | 00 19 42.5 | |
| | 7.0nm,0.6s | | | | | | |
| TYV | | | | *e*Sg | Sg | 00 20 11.5 | +3.5 |

*IDC* ***16*** *00:45:34.4±8.1, 14.90N×120.77E, h175km±79km, mb3.5/9, mb1 3.6/9, mb1mx3.3/33, mbtmp4.0/9, Error ellipse: s-maj=46.6km s-min=13.0km az=61.0*

**ISC 16 00:45:32.3±1.0, 14.8N±0.2×120.6E±0.2, h150km, n10, σ0°99/10, mb3.8/9, 1C, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCPH** | **Palayan** | **0.88** | **32** | ⇑*e*P | Pn | **00 45 57.4** | **+1.4** |
| **CMAR** | **Chiang Mai Arr** | **21.08** | **283** | P | P | **00 50 06.2** | **+1.2** |
| | 1.2nm,0.5s,baz=95,slow=8.1,SNR=9.4 | | | | | | |
| **SONM** | **Songino Array** | **34.98** | **343** | P | P | **00 52 09.6** | **-0.5** |
| | 1.4nm,0.5s,baz=162,slow=10,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.08** | **158** | P | P | **00 52 27.7** | **-0.5** |
| | 1.1nm,0.5s,baz=339,slow=9.2,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **40.39** | **161** | P | P | **00 52 55.9** | **+0.1** |
| | 1.2nm,0.5s,baz=338,slow=6.7,SNR=22 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.10** | **323** | P | P | **00 53 33.4** | **-0.1** |
| | 0.3nm,0.3s,baz=109,slow=8.4,SNR=9.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **48.04** | **332** | P | P | **00 53 55.4** | **-0.8** |
| | 0.8nm,0.5s,baz=130,slow=7.8,SNR=4.1 | | | | | | |
| **GEYT** | **Alibeck** | **59.43** | **305** | P | P | **00 55 19.8** | **+0.4** |
| | 2.4nm,0.7s,baz=132,slow=2.1,SNR=6.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.03** | **339** | P | P | **00 57 13.1** | **-0.8** |
| | 4.0nm,1.0s,baz=81,slow=7.5,SNR=7.7 | | | | | | |
| **FINES** | **FINESS Array B** | **79.28** | **331** | P | P | **00 57 19.6** | **-1.2** |
| | 1.2nm,0.7s,baz=69,slow=7.6,SNR=7.0 | | | | | | |

*ISCJB* ***16*** *01:06:45.4±0.5, 19.44S±0.08×168.88E±0.08, h10km, mb4.1/13, MS3.7/1, Error ellipse: s-maj=12.7km s-min=9.3km az=135.9*

*IDC* ***16*** *01:06:45.2±0.8, 19.39S×168.94E, h0km, mb4.1/11, mb1 4.3/12, mb1mx4.1/36, mbtmp4.1/12, ML4.1/1, MS3.2/3, Ms1 3.3/3, ms1mx2.9/22, Error ellipse: s-maj=24.5km s-min=20.2km az=123.0*

*NEIC* ***16*** *01:06:48.8±3.9, 19.42S×168.92E, h23km±27

PMG Sn **Sn** **01 10 03.9 +0.6**
26nm,0.3s,baz=252,slow=20,SNR=3.9
PMG LR LR 01 10 59.2
comp=Z,198nm,19.2s,baz=56,slow=48
**PMG Port Moresby 2.85 196** *e*Pn **Pn** **01 09 30.6 +0.4**
PMG Sn **Sn** **01 10 03.9 +0.6**
**COEN Coen 8.66 213** *e*Pn **Pn** **01 10 49.2 -0.6**
**SIJI Sorong 17.63 288** P **P** **01 12 49.3 -0.4**
1.2nm,0.3s,baz=208,slow=21,SNR=4.4
**WRAB Tennant Creek 18.69 224** *e*P **P** **01 13 00.7 -0.7**
3.1nm,0.5s
**WRA Warramunga Arr 18.70 224** P **P** **01 13 00.9 -0.6**
0.7nm,0.3s,baz=51,slow=11,SNR=5.2
**ASAR Alice Springs 21.66 217** P **P** **01 13 32.2 -1.3**
2.0nm,0.3s,baz=52,slow=9.1,SNR=28
ASAR S **S** **01 17 26.9 -3.9**
1.6nm,0.9s,baz=36,slow=22,SNR=5.2
**FITZ Fitzroy Crossi 24.57 240** P **P** **01 14 02.0 -0.5**
8.5nm,0.4s,baz=52,slow=8.6,SNR=69
FITZ S **S** **01 18 25.8 +5.7**
5.2nm,0.5s,baz=66,slow=13,SNR=6.7
**URZ Urewera 41.06 144** LR LR 01 32 35.1
comp=Z,56nm,18.2s,baz=282,slow=35
**RPZ Rata Peaks 42.11 155** LR LR 01 31 13.9
comp=Z,102nm,21.7s,baz=218,slow=32
**JNU Nakatsue 42.76 339** LR LR 01 31 45.5
comp=Z,12nm,19.9s,baz=115,slow=32
**CMAR Chiang Mai Arr 54.41 298** P **P** **01 18 10.3 +0.8**
0.7nm,0.3s,baz=137,slow=6.7,SNR=4.1
**VNDA Vanda 71.21 177** P **P** **01 20 00.2 -0.1**
0.6nm,0.9s,baz=270,slow=3.0,SNR=3.7
**MKAR Makanchi Array 78.61 320** P **P** **01 20 42.2 -1.4**
0.3nm,0.5s,baz=107,slow=5.5,SNR=3.6
**AAK Ala-Archa 82.48 314** P **P** **01 21 04.7 +0.1**
0.7nm,0.4s,baz=146,slow=3.6,SNR=3.1
**QSPA South Pole Qui 83.32 180** P **P** **01 21 09.0 +0.6**
1.4nm,0.6s,baz=284,slow=4.2,SNR=16
**BRVK Borovoye 87.93 324** *e*P **P** **01 21 30.5 -0.9**
1.7nm,0.8s
**ABKAR Akbulak array 93.70 319** *e*P **P** **01 21 57.9 -0.4**
**GERES GERESS Array B 122.99 326** PKP **PKPdf** **01 27 39.1 +1.0**
0.3nm,0.5s,baz=17,slow=4.1,SNR=2.2
**TORD Torodi Ar. Bea 146.19 284** PKPbc **PKPab** **01 28 23.6 -0.1**
1.1nm,0.4s,baz=73,slow=3.7,SNR=28
**BDFB Brasilia 152.77 145** PKPbc **PKPbc** **01 28 40.7 +1.1**
1.1nm,0.5s,baz=233,slow=5.1,SNR=3.5

*ISCJB **16** 01:13:56.8±0.6, 7°.41S±0°.05×128°.46E±0°.08, h151km,*
*mb3.5/3, Error ellipse: s-maj=11.0km s-min=6.8km*
*az=17.3*
*IDC **16** 01:13:58.7±1.6, 7°.38S×128°.39E, h159km±15km, mb3.3/3,*
*mb1 3.5/8, mb1mx3.2/41, mbtmp3.9/8, Error ellipse:*
*s-maj=24.7km s-min=13.6km az=120.0*
**ISC 16 01:13:57.6±0.8, 7°.54S±0°.07×128°.6E±0°.1, h151km, n9,**
**σ2s09/12, mb3.6/3, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **5.54** | **241** | P | **Pn** | **01 15 18.4** | **+0.2** |
| | 32nm,0.3s,baz=115,slow=2.5,SNR=14 | | | | | | |
| BATI | | | | S | **Sn** | **01 16 21.3** | **+0.2** |
| | 18nm,0.3s,baz=219,slow=7.7,SNR=8.4 | | | | | | |
| **SIJI** | **Sorong** | **7.14** | **22** | P | **Pn** | **01 15 41.4** | **+1.8** |
| | 3.9nm,0.3s,baz=255,slow=20,SNR=11 | | | | | | |
| SIJI | | | | S | **Sn** | **01 16 58.4** | **-1.3** |
| | 0.6nm,0.3s,baz=107,slow=19,SNR=1.3 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.89** | **195** | P | **Pn** | **01 16 29.7** | **+0.4** |
| | 0.6nm,0.3s,baz=22,slow=13,SNR=3.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.54** | **156** | P | **P** | **01 17 06.5** | **-1.1** |
| | 0.4nm,0.3s,baz=332,slow=14,SNR=1.9 | | | | | | |
| WRA | | | | S | Sn | 01 19 27.6 | -6.1 |
| | 0.7nm,0.3s,baz=337,slow=22,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **16.83** | **163** | P | **Pn** | **01 17 48.4** | **+3.9** |
| | 0.2nm,0.3s,baz=337,slow=10,SNR=9.2 | | | | | | |
| ASAR | | | | S | **S** | **01 20 48.4** | **-3.3** |
| | 0.2nm,0.3s,baz=314,slow=19,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.91** | **328** | P | **P** | **01 24 39.5** | **-0.4** |
| | 0.3nm,0.6s,baz=118,slow=10.0,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.45** | **334** | P | **P** | **01 25 00.3** | **-1.1** |
| | 0.4nm,0.3s,baz=137,slow=6.9,SNR=3.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **72.24** | **329** | P | **P** | **01 25 03.8** | **-2.3** |
| | 0.6nm,0.4s,baz=126,slow=4.7,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.53** | **281** | PKP | **PKPdf** | **01 32 46.1** | **+0.4** |
| | 0.3nm,0.7s,baz=97,slow=1.2,SNR=1.9 | | | | | | |

*IDC **16** 01:25:09.4±1.0, 30°.05S×177°.69W, h0km, mb4.0/5,*
*mb1 4.2/7, mb1mx4.0/21, mbtmp4.0/7, ML3.7/2, Error*
*ellipse: s-maj=32.0km s-min=17.4km az=92.0*
*ISCJB **16** 01:25:14.0±1.0, 30°.05S±0°.06×177°.8W±0°.2, h35km,*
*mb4.0/6, Error ellipse: s-maj=25.5km s-min=8.7km az=5.7*
*NEIC **16** 01:25:15.3±1.4, 29°.97S×177°.73W, h41km±12km, mb4.4/1,*
*Error ellipse: s-maj=19.5km s-min=10.9km az=104.0*
**ISC 16 01:25:14.9±0.8, 30°.03S±0°.08×177°.8W±0°.2, h35km, n17,**
**σ0s97/17, mb3.9/6, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **0.78** | **355** | Pn | **Pn** | **01 25 29.2** | **-0.1** |
| | 525nm,0.3s,baz=18,slow=18,SNR=34 | | | | | | |
| RAO | | | | S | **Sn** | **01 25 39.5** | **-0.2** |
| | 1µm,0.3s,baz=18,slow=19,SNR=10 | | | | | | |
| **OUZ** | **Omahuta** | **8.88** | **232** | *e*Pn | Pn | 01 27 28.9 | +8.2 |
| **URZ** | **Urewera** | **9.21** | **206** | Pn | Pn | 01 27 21.9 | -3.3 |
| | 0.3nm,0.3s,baz=0.0,slow=20,SNR=1.9 | | | | | | |
| URZ | | | | S | **Sn** | **01 29 05.4** | **-2.2** |
| | 1.3nm,0.3s,baz=135,slow=22,SNR=7.5 | | | | | | |
| **RPZ** | **Rata Peaks** | **16.27** | **210** | Pn | **Pn** | **01 29 01.4** | **+0.7** |
| | 0.7nm,0.3s,baz=84,slow=18,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **43.27** | **266** | P | **P** | **01 33 13.6** | **+0.4** |
| | 0.8nm,0.5s,baz=105,slow=6.7,SNR=11 | | | | | | |
| **WRAB** | **Tennant Creek** | **44.22** | **272** | *e*P | **P** | **01 33 22.2** | **+1.4** |
| | 5.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.22** | **272** | P | **P** | **01 33 22.1** | **+1.1** |
| | 2.3nm,0.3s,baz=111,slow=8.0,SNR=13 | | | | | | |
| **VNDA** | **Vanda** | **48.48** | **186** | P | **P** | **01 33 54.8** | **+1.2** |
| | 0.4nm,0.6s,baz=10.0,slow=4.4 | | | | | | |
| **MAW** | **Mawson** | **72.70** | **200** | P | **P** | **01 36 39.3** | **+0.5** |
| | 1.3nm,0.8s,baz=145,slow=8.0,SNR=6.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.87** | **43** | P | **P** | **01 38 01.1** | **+0.1** |
| | 0.3nm,0.7s,baz=224,slow=6.3,SNR=2.9 | | | | | | |
| **BRVK** | **Borovoye** | **126.30** | **316** | *e*PKPdf | **PKPdf** | **01 44 12.9** | **-0.4** |
| **FINES** | **FINESS Array B** | **144.84** | **340** | PKP | **PKPab** | **01 44 45.6** | **-0.8** |
| | 4.4nm,0.5s,baz=83,slow=3.2,SNR=41 | | | | | | |
| **NB2** | **NORSAR Subarra** | **148.41** | **352** | PKP | **PKPbc** | **01 44 56.2** | **-0.8** |
| | comp=Z,0.6nm,0.6s,baz=11,slow=2.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **148.41** | **352** | PKPbc | **PKPbc** | **01 44 56.2** | **-0.8** |
| | comp=Z,0.7nm,0.6s,baz=14,slow=4.4,SNR=3.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **151.09** | **323** | PKPbc | **PKPbc** | **01 45 03.1** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=48,slow=2.9,SNR=2.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **152.54** | **299** | PKPbc | **PKPbc** | **01 45 07.1** | **-0.6** |
| | comp=Z,0.3nm,0.5s,baz=154,slow=6.2,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.20** | **178** | PKPab | **PKPab** | **01 46 04.3** | **-0.1** |
| | comp=Z,0.3nm,0.9s,baz=174,slow=5.0,SNR=1.5 | | | | | | |

*CSEM **16** 01:30:26.4, 39°.53N×29°.70W, h10km, ML3.4, After PDA*
**PDA 16 01:30:26.4±0.9, 39°.53N×29°.70W, h10km, MD3.6, ML3.4,**
**Error ellipse: s-maj=7.6km s-min=2.7km az=36.0,**
**Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H07N1** | **FLORES T-PHASE** | **1.11** | **279** | *e*P | Pb | 01 30 43.4 | -4.3 |
| **H07S1** | **FLORES T-PHASE** | **1.17** | **263** | *e*P | Pb | 01 30 43.7 | -5.1 |
| **PCED** | **Cedros** | **1.19** | **139** | *e*P | Pb | 01 30 44.2 | -4.9 |
| PCED | | | | *e*S | Sb | 01 30 57.5 | -7.0 |
| PCED | | | | A | A | 01 31 00.0 | |
| | 228nm,0.3s | | | | | | |
| **PCED** | **Cedros** | **1.19** | **139** | *e*P | Pb | 01 30 44.2 | -4.9 |
| PCED | | | | *e*S | Sb | 01 30 57.5 | -7.0 |
| **CALA** | **Caldeira** | **1.23** | **140** | *e*P | Pn | 01 30 45.5 | -4.2 |
| CALA | | | | *e*S | Sb | 01 30 58.8 | -7.0 |
| **CALA** | **Caldeira** | **1.23** | **140** | *e*P | Pn | 01 30 45.5 | -4.2 |
| CALA | | | | *e*S | Sb | 01 30 58.8 | -7.0 |
| **HOR** | **Horta** | **1.30** | **140** | *e*P | Pn | 01 30 45.9 | -4.8 |
| HOR | | | | *e*S | Sb | 01 31 00.8 | -7.0 |
| **HOR** | **Horta** | **1.30** | **140** | *e*P | Pn | 01 30 45.9 | -4.8 |
| HOR | | | | *e*S | Sb | 01 31 00.8 | -7.0 |
| **ROSA** | **Rosais** | **1.40** | **125** | *e*P | Pn | 01 30 47.3 | -4.7 |
| ROSA | | | | *e*S | Sn | 01 31 02.9 | -7.5 |
| ROSA | | | | A | A | 01 31 06.1 | |
| | 70nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **1.40** | **125** | *e*P | Pn | 01 30 47.3 | -4.7 |
| ROSA | | | | *e*S | Sn | 01 31 02.9 | -7.5 |
| **PCAN** | **Candelaria** | **1.43** | **138** | *e*P | Pn | 01 30 47.9 | -4.5 |
| PCAN | | | | *e*S | Sn | 01 31 03.7 | -7.5 |
| PCAN | | | | A | A | 01 31 05.3 | |
| | 430nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.43** | **138** | *e*P | Pn | 01 30 47.9 | -4.5 |
| PCAN | | | | *e*S | Sn | 01 31 03.7 | -7.5 |
| **PGRA** | **Graciosa** | **1.43** | **110** | *e*P | Pn | 01 30 48.1 | -4.3 |
| PGRA | | | | *e*S | Sn | 01 31 03.0 | -8.2 |
| PGRA | | | | A | A | 01 31 03.6 | |
| | 124nm,0.5s | | | | | | |
| **PGRA** | **Graciosa** | **1.43** | **110** | *e*P | Pn | 01 30 48.1 | -4.3 |
| PGRA | | | | *e*S | Sn | 01 31 03.0 | -8.2 |
| **PICO** | **Pico** | **1.43** | **136** | *e*P | Pn | 01 30 47.9 | -4.6 |
| PICO | | | | *e*S | Sn | 01 31 03.9 | -7.6 |
| **PICO** | **Pico** | **1.43** | **136** | *e*P | Pn | 01 30 47.9 | -4.6 |
| PICO | | | | *e*S | Sn | 01 31 03.9 | -7.6 |
| **PPNO** | **Prainha do Nor** | **1.54** | **133** | *e*P | Pn | 01 30 49.2 | -4.8 |
| PPNO | | | | *e*S | Sn | 01 31 06.7 | -7.5 |
| PPNO | | | | A | A | 01 31 12.1 | |
| | 149nm,0.4s | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.54** | **133** | *e*P | Pn | 01 30 49.2 | -4.8 |
| PPNO | | | | *e*S | Sn | 01 31 06.7 | -7.5 |

**MEX 16 01:41:01.5±0.4, 16°.45N×98°.37W, h15km, MD3.8, Near**
**coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PNIG** | **Pinotepa** | **0.24** | **103** | *i* P | Pg | 01 41 06.1 | -0.8 |
| PNIG | | | | *i* S | Sg | 01 41 10.3 | -0.2 |
| **TLIG** | **Tlapa** | **1.12** | **351** | *e*P | Pb | 01 41 19.3 | -3.5 |
| TLIG | | | | *e*S | Sb | 01 41 32.6 | -4.8 |
| **ACX** | **Acapulco** | **1.48** | **287** | *e*P | Pg | 01 41 35.9 | +5.8 |
| ACX | | | | *i* S | Sg | 01 41 54.7 | +5.2 |
| **MEIG** | **Mezcala** | **1.89** | **321** | *e*P | Pn | 01 41 30.0 | -3.4 |
| MEIG | | | | *e*S | Sn | 01 41 52.3 | -4.8 |

*IDC **16** 01:47:43.7±1.2, 34°.54N×69°.91E, h0km, mb3.7/8,*
*mb1 3.8/14, mb1mx3.6/45, mbtmp3.7/14, ML3.6/5, MS2.8/3,*
*Ms1 2.8/3, ms1mx2.5/34, Error ellipse: s-maj=25.6km*
*s-min=19.0km az=140.0*
*ISCJB **16** 01:47:48.6±0.5, 34°.55N±0°.03×70°.02E±0°.06, h63km,*
*mb3.6/8, Error ellipse: s-maj=8.1km s-min=3.3km*
*az=153.1*
*NNC **16** 01:47:53.0±2.2, 34°.72N×69°.65E, h88km±18km, mb3.8,*
*mpv4.4, Error ellipse: s-maj=16.5km s-min=14.7km*
*az=165.0*
**ISC 16 01:47:50.4±0.7, 34°.54N±0°.06×69°.90E±0°.07, h63km, n48,**
**σ1s77/55, mb3.6/8, 14C-6D, Southeastern Afghanistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **4.34** | **349** | ⇓P | **Pn** | **01 48 53.5** | **-0.5** |
| | 79nm,0.7s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **01 49 42.2** | **-1.1** |
| | 237nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **6.17** | **27** | ⇑P | Pn | 01 49 21.5 | +2.4 |
| | 27nm,0.4s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **01 50 31.7** | **+3.3** |
| | 16nm,0.4s | | | | | | |
| **SMLA** | **Simla** | **7.00** | **117** | *i* P | **Pn** | **01 49 32.6** | **+2.3** |
| SMLA | | | | *e*S | **Sn** | **01 50 52.4** | **+4.0** |
| SMLA | | | | AML | AML | 01 50 56.9 | |
| | comp=N,203nm,0.4s | | | | | | |
| SMLA | | | | AML | AML | 01 50 57.3 | |
| | comp=E,160nm,0.4s | | | | | | |
| **AML** | **Almayashu** | **8.14** | **20** | P | **Pn** | **01 49 47.8** | **+1.5** |
| | SNR=28 | | | | | | |
| **KHET** | **Khetri** | **8.19** | **140** | *e*P | **Pn** | **01 49 45.4** | **-1.2** |
| KHET | | | | *e*S | **Sn** | **01 51 16.4** | **-1.3** |
| KHET | | | | AML | AML | 01 52 22.5 | |
| | comp=E,18nm,0.5s | | | | | | |
| KHET | | | | AML | AML | 01 52 24.9 | |
| | comp=N,12nm,0.0s | | | | | | |
| **MNAS** | **Manas** | **8.19** | **14** | ⇓P | **Pn** | **01 49 47.8** | **+1.1** |
| | comp=N,10nm,0.7s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **01 51 16.2** | **-1.6** |
| | comp=N,19nm,0.8s | | | | | | |
| **BHGR** | **Bahadurgarh** | **8.37** | **132** | *e*S | **Sn** | **01 51 21.6** | **-0.5** |
| **UCH** | **Uchtor** | **8.49** | **24** | P | **Pn** | **01 49 52.2** | **+1.2** |
| | SNR=11 | | | | | | |
| **NDI** | **New Delhi** | **8.54** | **131** | *e*P | **Pn** | **01 49 52.0** | **+0.6** |
| NDI | | | | *e*S | **Sn** | **01 51 25.0** | **-1.4** |
| **KK31** | **Karatay Array** | **8.56** | **3** | ⇑P | **Pn** | **01 49 50.9** | **-0.7** |
| | comp=N,2.5nm,0.3s,baz=192,slow=15,SNR=60 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **01 51 25.3** | **-1.4** |
| | comp=N,6.7nm,0.5s,baz=195,slow=22,SNR=5.4 | | | | | | |
| **EKS2** | **Erkin-Say** | **8.66** | **19** | P | Pn | 01 49 56.6 | +3.6 |
| | SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **8.85** | **23** | ⇑P | **Pn** | **01 49 56.3** | **+0.7** |
| | comp=N,12nm,0.7s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **01 51 33.3** | **-0.5** |
| | comp=N,14nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **8.85** | **23** | Pn | **Pn** | **01 49 54.3** | **-1.3** |
| | comp=N,1.5nm,0.3s,baz=176,slow=4.7,SNR=17 | | | | | | |
| AAK | | | | Sn | **Sn** | **01 51 33.3** | **-0.5** |
| | comp=N,1.0nm,0.3s,baz=19,slow=12,SNR=3.9 | | | | | | |
| AAK | | | | LR | LR | 01 53 17.8 | |
| | comp=N,56nm,18.6s,baz=186,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **8.85** | **23** | P | Pn | 01 49 59.6 | +4.0 |
| | SNR=18 | | | | | | |
| **CHMS** | **Chumysh** | **9.26** | **23** | P | **Pn** | **01 50 01.9** | **+0.8** |
| | SNR=15 | | | | | | |
| **TKM2** | **Tokmak 2** | **9.48** | **26** | ⇑P | **Pn** | **01 50 05.7** | **+1.4** |
| | comp=N,8.9nm,0.7s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **01 51 49.7** | **+0.4** |
| | comp=N,7.2nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **9.48** | **26** | P | Pn | 01 50 08.6 | +4.3 |
| | SNR=12 | | | | | | |
| **GEYT** | **Alibeck** | **10.10** | **293** | Pn | **Pn** | **01 50 10.2** | **-2.4** |
| | baz=119,slow=12,SNR=2.2 | | | | | | |
| **DANN** | **Dangsing** | **13.34** | **114** | *e*P | **Pn** | **01 50 55.1** | **-2.1** |
| **KOLN** | **Koldanda** | **13.53** | **116** | *e*P | **Pn** | **01 50 58.4** | **-1.2** |
| | comp=N,10nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **14.19** | **113** | *e*P | **Pn** | **01 51 06.2** | **-2.1** |
| | comp=N,17nm,0.3s | | | | | | |
| GKN | | | | *e*S | **Sn** | **01 53 40.6** | **-3.6** |
| **DMN** | **Daman** | **14.74** | **114** | *e*P | **Pn** | **01 51 13.5** | **-2.2** |
| | comp=N,22nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **14.78** | **113** | *e*P | **Pn** | **01 51 14.5** | **-1.6** |
| | comp=N,21nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **14.98** | **113** | *e*P | **Pn** | **01 51 16.5** | **-2.2** |
| | comp=N,22nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **14.99** | **113** | *e*P | **Pn** | **01 51 16.7** | **-2.3** |
| | comp=N,15nm,0.3s | | | | | | |
| **GUN** | **Gumba** | **15.18** | **111** | *e*P | **Pn** | **01 51 19.5** | **-1.9** |
| | comp=N,19nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **15.41** | **34** | ⇓P | **P** | **01 51 25.6** | **-1.7** |
| | comp=N,1.8nm,0.7s,baz=216,slow=10.0,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **15.41** | **34** | Pn | **Pn** | **01 51 23.7** | **-0.2** |
| | comp=N,0.2nm,0.3s,baz=216,slow=12,SNR=3.9 | | | | | | |
| MKAR | | | | LR | LR | 01 58 08.3 | |
| | comp=N,25nm,19.7s,baz=214,slow=41 | | | | | | |
| **AB31** | **Akbulak array** | **16.44** | **336** | ⇓P | **Pn** | **01 51 34.8** | **-2.1** |
| | comp=N,1.1nm,0.5s,baz=156,slow=12,SNR=43 | | | | | | |
| **TAPN** | **Taplejung** | **16.87** | **110** | *e*P | **Pn** | **01 51 41.7** | **-1.0** |
| **KURBB** | **Kurchatov Arra** | **17.26** | **19** | P | **Pn** | **01 51 44.5** | **-2.6** |
| | comp=N,0.1nm,0.3s,baz=209,slow=11,SNR=5.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.10** | **335** | ⇑P | **Pn** | **01 51 59.8** | **+2.5** |
| | comp=N,8.0nm,0.9s | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.10** | **335** | P | **Pn** | **01 51 57.0** | **-0.3** |
| | comp=N,0.2nm,0.3s,baz=138,slow=16,SNR=4.4 | | | | | | |
| **VOSK** | **Vostochnaya** | **18.19** | **2** | ⇑P | **P** | **01 51 55.3** | **-2.6** |
| | comp=N,4.8nm,1.0s | | | | | | |
| **ZRNK** | **Zerenda** | **18.42** | **358** | ⇑P | **P** | **01 51 59.2** | **-1.1** |
| | comp=N,3.7nm,0.7s | | | | | | |
| **BVA0** | **Borovoye Array** | **18.48** | **1** | ⇑P | **P** | **01 51 58.9** | **-2.2** |
| | comp=N,4.5nm,1.2s,baz=150,slow=9.7,SNR=17 | | | | | | |
| **BVAR** | **Borovoye Array** | **18.48** | **1** | P | **Pn** | **01 52 01.3** | **-0.6** |
| | comp=N,0.5nm,0.3s,baz=172,slow=11,SNR=14 | | | | | | |
| **BRVK** | **Borovoye** | **18.52** | **1** | ⇑P | **P** | **01 52 01.1** | **-0.3** |
| | comp=N,8.7nm,1.0s | | | | | | |
| **CHKZ** | **Chkalovo** | **19.14** | **1** | ⇑P | **Pn** | **01 52 08.6** | **-1.1** |
| | comp=N,2.1nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.07** | **24** | P | **P** | **01 52 39.5** | **-0.4** |
| | comp=N,0.9nm,0.3s,baz=219,slow=11,SNR=5.0 | | | | | | |
| **ARU** | **Arti** | **23.23** | **344** | P | **P** | **01 52 52.8** | **+0.9** |
| | comp=N,0.5nm,0.2s,baz=163,slow=19,SNR=1.5 | | | | | | |
| ARU | | | | LR | LR | 02 02 07.1 | |
| | comp=N,38nm,18.8s,baz=135,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **30.21** | **53** | P | **P** | **01 53 54.7** | **-0.3** |
| | comp=N,0.4nm,0.7s,baz=270,slow=10,SNR=1.9 | | | | | | |
| **FINES** | **FINESS Array B** | **38.63** | **328** | P | **P** | **01 55 09.8** | **+2.6** |
| | comp=N,2.1nm,1.0s,baz=133,slow=12,SNR=1.5 | | | | | | |
| **NB2** | **NORSAR Subarra** | **45.42** | **324** | P | **P** | **01 56 03.1** | **+0.5** |
| | comp=Z,0.7nm,0.7s,baz=99,slow=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **45.42** | **324** | P | **P** | **01 56 03.2** | **+0.6** |
| | comp=Z,0.7nm,0.8s,baz=100,slow=8.1,SNR=2.2 | | | | | | |
| **ESDC** | **Sonseca Array** | **57.59** | **299** | P | **P** | **01 57 35.5** | **+1.7** |
| | comp=Z,0.4nm,0.7s,baz=62,slow=7.5,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **64.77** | **269** | P | **P** | **01 58 23.6** | **+1.0** |
| | comp=Z,0.8nm,0.5s,baz=50,slow=5.9,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **83.89** | **124** | P | **P** | **02 00 16.6** | **+3.0** |
| | comp=Z,0.4nm,0.7s,baz=327,slow=5.0,SNR=4.9 | | | | | | |

**IDC 16 01:53:37.7±5.6, 34°.56N×69°.30E, h0km, mb3.4/2,**
**mb1 3.5/5, mb1mx3.3/39, mbtmp3.5/5, ML3.2/3, Error**
**ellipse: s-maj=177.6km s-min=24.2km az=134.0,**
**Southeastern Afghanistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **9.03** | **25** | Pn | Pn | 01 55 50.2 | +0.7 |
| | 0.4nm,0.3s,baz=207,slow=11,SNR=5.2 | | | | | | |
| AAK | | | | Sn | Sn | 01 57 31.5 | -0.6 |
| | 0.2nm,0.3s,baz=342,slow=20,SNR=3.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **15.67** | **35** | Pn | Pn | 01 57 20.9 | +1.0 |
| | 0.1nm,0.3s,baz=218,slow=11,SNR=2.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.41** | **20** | Pn | Pn | 01 57 40.1 | -1.8 |
| | 0.1nm,0.3s,baz=209,slow=11,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.25** | **25** | P | P | 01 58 34.3 | -1.7 |
| | 0.8nm,0.4s,baz=234,slow=12,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **64.28** | **269** | P | P | 02 04 15.3 | +0.1 |
| | 0.2nm,0.6s,baz=55,slow=5.3,SNR=4.1 | | | | | | |

*IDC **16** 02:05:39.0±3.4, 34°.43N×69°.51E, h0km, mb3.5/2,*
*mb1 3.4/5, mb1mx3.2/32, mbtmp3.4/5, ML3.1/4, MS2.5/2,*
*Ms1 2.5/2, ms1mx2.3/36, Error ellipse: s-maj=81.7km*
*s-min=27.9km az=135.0*
*ISCJB **16** 02:05:41.1±1.4, 34°.6N±0°.1×69°.5E±0°.1, h24km, mb3.6/2,*
*Error ellipse: s-maj=17.5km s-min=12.2km az=38.3*
*NNC **16** 02:05:48.1±6.2, 35°.02N×69°.61E, h0km, mb4.0, mpv3.9,*
*Error ellipse: s-maj=47.4km s-min=43.0km az=26.0*
**ISC 16 02:05:43.4±1.8, 34°.6N±0°.1×69°.5E±0°.1, h24km, n13,**
**σ1s72/16, 4C-6D, Southeastern Afghanistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **4.23** | **353** | ⇓Pn | **Pn** | **02 06 49.2** | **+2.7** |
| | 11nm,0.4s | | | | | | |
| DZET | | | | ⇓Sn | **Sn** | **02 07 35.5** | **+0.3** |
| | 62nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **6.29** | **30** | ⇑Pn | **Pn** | **02 07 16.2** | **+1.4** |
| | 12nm,0.5s | | | | | | |
| SFK | | | | ⇑Sn | **Sn** | **02 08 27.9** | **+1.8** |
| | 6.7nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **8.23** | **16** | ⇓Pn | **Pn** | **02 07 42.0** | **+0.6** |
| | 2.3nm,0.5s | | | | | | |
| MNAS | | | | ⇑Sn | **Sn** | **02 09 11.3** | **-2.3** |
| | 3.5nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **8.53** | **5** | ⇓Pn | **Pn** | **02 07 47.1** | **+1.7** |
| | 2.2nm,0.5s,baz=172,slow=12,SNR=17 | | | | | | |
| KK31 | | | | ⇓Sn | **Sn** | **02 09 19.0** | **-1.9** |
| | 1.9nm,0.3s | | | | | | |
| **GEYT** | **Alibeck** | **9.75** | **293** | LR | LR | 02 11 59.1 | |
| | comp=Z,27nm,22.0s,baz=170,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **15.56** | **35** | Pn | **Pn** | **02 09 20.4** | **-0.8** |
| | 0.1nm,0.3s,baz=209,slow=12,SNR=2.2 | | | | | | |
| MKAR | | | | LR | LR | 02 15 57.4 | |
| | comp=Z,22nm,18.8s,baz=185,slow=39 | | | | | | |
| **AB31** | **Akbulak array** | **16.25** | **337** | ⇑Pn | **Pn** | **02 09 31.0** | **+1.0** |
| | 0.7nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.33** | **20** | Pn | **Pn** | **02 09 41.4** | **-2.1** |
| | 0.0nm,0.3s,baz=209,slow=10,SNR=3.4 | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.90** | **336** | ⇓Pn | **Pn** | **02 09 48.0** | **-2.6** |
| | 3.5nm,1.4s | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.90** | **336** | P | **P** | **02 09 51.4** | **+0.3** |
| | 0.0nm,0.3s,baz=138,slow=14,SNR=2.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **18.43** | **2** | P | **Pn** | **02 09 57.3** | **+0.2** |
| | 0.2nm,0.3s,baz=173,slow=11,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.16** | **25** | P | **P** | **02 10 37.8** | **+0.4** |
| | 0.9nm,0.3s,baz=219,slow=11,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **64.42** | **269** | P | **P** | **02 16 17.6** | **-0.3** |
| | 0.5nm,0.9s,baz=45,slow=5.5,SNR=4.9 | | | | | | |

*CSEM **16** 02:22:22.1, 34°.44N×26°.33E, h19km, MD3.6, After ATH*
**ATH 16 02:22:22.2, 34°.45N×26°.33E, h19km±5km, MD3.6/5, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZKR** | **Zakros** | **0.67** | **352** | *e*PB | Pb | 02 22 34.8 | -0.5 |
| ZKR | | | | *e*SN | Sg | 02 22 45.2 | +0.7 |
| **ZKR** | **Zakros** | **0.67** | **352** | *e*Pb | Pb | 02 22 34.8 | -0.5 |
| ZKR | | | | *e*Sn | Sg | 02 22 45.2 | +0.7 |
| **LAST** | **Lasithi** | **1.00** | **316** | *e*PN | Pb | 02 22 40.8 | -0.2 |
| **LAST** | **Lasithi

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=115,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sn** | 02 26 17.0 | **0.0** |
| | baz=120,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 02 26 28.6 | |
| | baz=111,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.42** | **307** | Pn | **Pn** | 02 25 35.6 | **-0.1** |
| | baz=122,slow=16 | | | | | | |
| ARA0 | | | | Pg | **Pb** | 02 25 43.5 | **+0.9** |
| | baz=115,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sn** | 02 26 17.0 | **0.0** |
| | baz=120,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 02 26 28.6 | |
| | baz=111,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.42** | **307** | Pn | **Pn** | 02 25 35.6 | **-0.1** |
| | SNR=5.2 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.42** | **307** | Pg | **Pb** | 02 25 43.5 | **+0.9** |
| | SNR=90 | | | | | | |
| ARA0 | | | | Sn | **Sn** | 02 26 17.0 | **0.0** |
| | SNR=8.4 | | | | | | |
| ARA0 | | | | Lg | Lg | 02 26 28.5 | |
| | SNR=50 | | | | | | |
| **ARE0** | **ARCESS Array S** | **3.42** | **307** | *e*P | **Pn** | 02 25 35.2 | **-0.6** |
| ARE0 | | | | *e*S | **Sn** | 02 26 16.8 | **-0.2** |
| **ARE0** | **ARCESS Array S** | **3.42** | **307** | P | **Pn** | 02 25 35.1 | **-0.6** |
| ARE0 | | | | S | **Sn** | 02 26 16.7 | **-0.2** |
| **HEF** | **Hetta** | **3.70** | **286** | *e*P | **Pn** | 02 25 38.8 | **-0.7** |
| HEF | | | | *e*S | **Sn** | 02 26 22.9 | **-0.8** |
| **HEF** | **Hetta** | **3.70** | **286** | P | **Pn** | 02 25 38.7 | **-0.7** |
| HEF | | | | S | **Sn** | 02 26 22.9 | **-0.8** |
| **OUL** | **Oulu** | **3.93** | **233** | *e*S | **Sn** | 02 26 29.0 | **-0.3** |
| **OUL** | **Oulu** | **3.93** | **233** | S | **Sn** | 02 26 29.0 | **-0.3** |
| **KJN** | **Kajaani** | **4.24** | **215** | *e*P | **Pn** | 02 25 46.2 | **-0.8** |
| KJN | | | | *e*S | **Sn** | 02 26 35.8 | **-1.3** |
| **KJN** | **Kajaani** | **4.24** | **215** | P | **Pn** | 02 25 46.1 | **-0.8** |
| KJN | | | | S | **Sn** | 02 26 35.7 | **-1.3** |
| **LANU** | **Lannavaara** | **4.29** | **281** | *e*P | **Pn** | 02 25 47.5 | **-0.2** |
| LANU | | | | *e*S | **Sn** | 02 26 37.8 | **-0.7** |
| **LANU** | **Lannavaara** | **4.29** | **281** | P | **Pn** | 02 25 47.5 | **-0.2** |
| LANU | | | | S | **Sn** | 02 26 37.7 | **-0.7** |
| **ERTU** | **Ertsjaerv** | **4.47** | **261** | *e*P | **Pn** | 02 25 49.8 | **-0.2** |
| ERTU | | | | *e*S | **Sn** | 02 26 42.2 | **-0.5** |
| **ERTU** | **Ertsjaerv** | **4.47** | **261** | P | **Pn** | 02 25 49.8 | **-0.2** |
| ERTU | | | | S | **Sn** | 02 26 42.1 | **-0.5** |
| **FIA0** | **FINESS Array S** | **6.95** | **210** | Lg | Lg | 02 28 11.3 | |
| | baz=17,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.95** | **210** | Lg | Lg | 02 28 11.3 | |
| | baz=17,slow=28 | | | | | | |

*ISCJB **16** 02:26:03.9±0.5, 50.°40N×0.°04×18.°81E×0.°03, h0km, Error ellipse: s-maj=5.6km s-min=2.0km az=16.0*
*IPEC **16** 02:26:04.2±0.3, 50.°41N×18.°98E, h0km, ML2.1/3, Error ellipse: s-maj=2.6km s-min=2.2km az=157.0*
*CSEM **16** 02:26:04.9±0.3, 50.°41N×18.°82E, h2km, ML2.9/10, Error ellipse: s-maj=7.7km s-min=2.9km az=11.0*
*PRU **16** 02:26:06.1, 50.°39N×18.°82E, h0km*
**ISC 16 02:26:05.7±0.8, 50°33N±0.°04×18°82E±0.°02, h0km, n35, σ0°72/67, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHZP** | **Chorzow** | **0.11** | **107** | *e*Pg | **Pg** | **02 26 07.8** | **-0.1** |
| CHZP | | | | *e*Sg | **Sg** | **02 26 09.8** | **+0.4** |
| **OJC** | **Ojcow** | **0.64** | **99** | *e*Pg | **Pg** | **02 26 17.0** | **-0.9** |
| OJC | | | | *e*Sg | **Sg** | **02 26 25.9** | **-0.2** |
| **OJC** | **Ojcow** | **0.64** | **99** | *e*Pg | **Pg** | **02 26 17.0** | **-0.9** |
| OJC | | | | *e*Sg | **Sg** | **02 26 25.9** | **-0.2** |
| **OKC** | **Ostrava-Krasne** | **0.65** | **222** | *e*PG | **Pg** | **02 26 19.0** | **+0.8** |
| OKC | | | | *e*SG | **Sb** | **02 26 29.7** | **+0.1** |
| | comp=Z,31nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.65** | **222** | Pg | **Pg** | **02 26 19.0** | **+0.8** |
| OKC | | | | Sg | **Sb** | **02 26 29.7** | **+0.1** |
| | 31nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.99** | **237** | *e*Pg | **Pb** | **02 26 25.4** | **-0.4** |
| MORC | | | | *e*Sg | **Sb** | **02 26 39.7** | **+0.3** |
| | 44nm,0.4s,baz=55 | | | | | | |
| **LANS** | **Liptovska Anna** | **1.25** | **160** | *e*PG | **Pg** | **02 26 30.0** | **+0.4** |
| LANS | | | | *e*SG | **Sb** | **02 26 47.4** | **+0.6** |
| **LANS** | **Liptovska Anna** | **1.25** | **160** | *e*Pg | **Pg** | **02 26 30.0** | **+0.4** |
| LANS | | | | *e*Sg | **Sb** | **02 26 47.4** | **+0.6** |
| **NIE** | **Niedzica** | **1.32** | **133** | *e*Pg | **Pg** | **02 26 31.2** | **+0.2** |
| NIE | | | | *e*Sg | **Sb** | **02 26 48.9** | **+0.1** |
| **KRLC** | **Kraliky** | **1.33** | **260** | *e*PG | **Pg** | **02 26 30.9** | **-0.4** |
| KRLC | | | | *e*SG | **Sg** | **02 26 48.7** | **+0.1** |
| **KRLC** | **Kraliky** | **1.33** | **260** | Pg | **Pg** | **02 26 30.9** | **-0.4** |
| KRLC | | | | Sg | **Sg** | **02 26 48.7** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **1.60** | **272** | *e*PG | **Pn** | **02 26 35.3** | **0.0** |
| DPC | | | | *e*SG | **Sg** | **02 26 57.3** | **+0.1** |
| | comp=Z,12nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.60** | **272** | Pg | **Pn** | **02 26 35.3** | **0.0** |
| DPC | | | | Sg | **Sg** | **02 26 57.3** | **+0.1** |
| | 12nm,0.3s | | | | | | |
| **KSP** | **Ksiaz** | **1.69** | **289** | *e*Pg | **Pg** | **02 26 38.5** | **+0.3** |
| KSP | | | | *e*Sg | **Sg** | **02 27 01.5** | **+1.4** |
| **KSP** | **Ksiaz** | **1.69** | **289** | *e*Pg | **Pg** | **02 26 38.5** | **+0.3** |
| KSP | | | | *e*Sg | **Sg** | **02 27 01.5** | **+1.4** |
| **VRAC** | **Vranov** | **1.77** | **236** | *e*Pn | **Pn** | **02 26 37.7** | **+0.1** |
| | baz=54 | | | | | | |
| VRAC | | | | *e*Sg | **Sg** | **02 27 03.2** | **+0.8** |
| | 11nm,0.3s,baz=54 | | | | | | |
| **UPC** | **Upice** | **1.81** | **277** | *e*SG | **Sb** | **02 27 03.0** | **+0.2** |
| | comp=Z,10nm,0.4s | | | | | | |
| **UPC** | **Upice** | **1.81** | **277** | Sg | **Sb** | **02 27 03.0** | **+0.2** |
| | 10nm,0.4s | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.81** | **119** | *e*PN | **Pb** | **02 26 39.4** | **-0.4** |
| STHS | | | | *e*SN | **Sn** | **02 27 01.6** | **-0.3** |
| **STHS** | **Stebnicka Huta** | **1.81** | **119** | *e*Pn | **Pb** | **02 26 39.4** | **-0.4** |
| STHS | | | | *e*Sn | **Sn** | **02 27 01.6** | **-0.3** |
| **VYHS** | **Vyhne** | **1.83** | **180** | *e*PN | **Pn** | **02 26 38.4** | **-0.1** |
| VYHS | | | | *e*SN | **Sn** | **02 27 02.0** | **-0.4** |
| **VYHS** | **Vyhne** | **1.83** | **180** | *e*Pn | **Pn** | **02 26 38.4** | **-0.1** |
| VYHS | | | | *e*Sn | **Sn** | **02 27 02.0** | **-0.4** |
| **KRUC** | **Moravsky** | **2.02** | **232** | *e*Pn | **Pn** | **02 26 41.2** | **+0.2** |
| | baz=50 | | | | | | |
| KRUC | | | | *e*Sn | **Sg** | **02 27 10.0** | **-0.6** |
| | 7.8nm,0.4s,baz=50 | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.63** | **263** | *e*PG | **Pb** | **02 26 53.3** | **-0.4** |
| GOPC | | | | *e*SG | **Sg** | **02 27 28.9** | **-1.3** |
| | comp=Z,11nm,0.5s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.63** | **263** | Pg | **Pb** | **02 26 53.3** | **-0.4** |
| GOPC | | | | Sg | **Sg** | **02 27 28.9** | **-1.3** |
| | 11nm,0.5s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **2.64** | **121** | *e*PN | **Pn** | **02 26 50.8** | **+1.2** |
| KOLS | | | | *e*PG | **Pg** | **02 26 55.4** | **-0.9** |
| KOLS | | | | *e*SN | **Sn** | **02 27 22.6** | **+0.3** |
| KOLS | | | | *e*SG | **Sg** | **02 27 31.9** | **+1.4** |
| **KOLS** | **Kolonicke sedl** | **2.64** | **121** | *e*Pn | **Pn** | **02 26 50.8** | **+1.2** |
| **PVCC** | **Panska Ves** | **2.73** | **276** | *e*SG | **Sg** | **02 27 33.1** | **-0.2** |
| | comp=Z,14nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **2.73** | **276** | Sg | **Sg** | **02 27 33.1** | **-0.2** |
| | 14nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **2.77** | **265** | *e*PG | **Pb** | **02 26 56.7** | **+0.6** |
| PRU | | | | *e*SG | **Sg** | **02 27 33.9** | **-0.9** |
| | comp=Z,2.2nm,0.6s | | | | | | |
| **PRU** | **Pruhonice** | **2.77** | **265** | Pg | **Pb** | **02 26 56.7** | **+0.6** |
| PRU | | | | Sg | **Sg** | **02 27 33.9** | **-0.9** |
| | 2.2nm,0.6s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.16** | **282** | PG | **Pg** | **02 27 06.5** | **+0.3** |
| BRG | | | | SG | **Sg** | **02 27 46.7** | **-0.4** |
| | 5.6nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.61** | **253** | *e*PN | **Pn** | **02 27 01.5** | **-1.4** |
| KHC | | | | *e*PG | **Pb** | **02 27 09.8** | **-0.5** |
| KHC | | | | *e*SG | **Sg** | **02 28 01.2** | **-0.3** |
| | comp=Z,6.9nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.61** | **253** | Pn | **Pn** | **02 27 01.5** | **-1.4** |
| KHC | | | | Sg | **Sg** | **02 28 01.2** | **-0.3** |
| | 6.9nm,0.4s | | | | | | |
| **CLL** | **Collm** | **3.82** | **287** | *e*Sg | **Sg** | **02 28 11.0** | **+2.7** |
| | comp=Z,6.0nm,0.7s | | | | | | |

*DDA **16** 02:30:28.7, 38.°18N×37.°16E, h11km, Md3.0*
*ISK **16** 02:30:28.7, 38.°11N×37.°37E, h5km, MD2.8*
*CSEM **16** 02:30:29.6±0.2, 38.°13N×37.°28E, h2km, MD2.8, Error ellipse: s-maj=8.4km s-min=4.3km az=120.0*
**ISC 16 02:30:28.7±1.1, 38°18N±0.°02×37°14E±0.°03, h9km±10km, n27, σ0°80/44, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DARE** | **Darende-Malaty** | **0.47** | **35** | *e*PG | **Pg** | **02 30 37.9** | **-0.1** |
| DARE | | | | *e*SG | **Sb** | **02 30 45.4** | **-1.0** |
| **DARE** | **Darende-Malaty** | **0.47** | **35** | *e*Pg | **Pg** | **02 30 37.9** | **-0.1** |
| DARE | | | | *e*Sg | **Sb** | **02 30 45.4** | **-1.0** |
| **CUGUR** | **Gurin_S¨VAS** | **0.55** | **11** | P | **Pg** | **02 30 39.4** | **-0.1** |
| CUGUR | | | | S | **Sg** | **02 30 47.8** | **+1.1** |
| **AKCD** | **Akcadag** | **0.62** | **79** | *i* P | **Pg** | **02 30 40.3** | **-0.6** |
| AKCD | | | | *i* S | **Sb** | **02 30 49.8** | **-1.0** |
| **AKCD** | **Akcadag** | **0.62** | **79** | P | **Pg** | **02 30 40.3** | **-0.6** |
| AKCD | | | | S | **Sb** | **02 30 49.8** | **-1.0** |
| **KMRS** | **Kahramanmaras** | **0.70** | **196** | *e*PG | **Pb** | **02 30 43.0** | **-0.2** |
| KMRS | | | | *e*SG | **Sb** | **02 30 52.4** | **-0.6** |
| **KMRS** | **Kahramanmaras** | **0.70** | **196** | *e*Pg | **Pb** | **02 30 43.0** | **-0.2** |
| KMRS | | | | *e*Sg | **Sb** | **02 30 52.4** | **-0.6** |
| **PINB** | **Pinarbasi** | **0.76** | **311** | *i* S | **Sg** | **02 30 54.4** | **+1.0** |
| **PINB** | **Pinarbasi** | **0.76** | **311** | P | **Pg** | **02 30 41.1** | **-2.4** |
| PINB | | | | S | **Sg** | **02 30 54.4** | **+1.0** |
| **AYKD** | **Aykdinkavak** | **0.81** | **199** | P | **Pb** | **02 30 44.8** | **-0.3** |
| AYKD | | | | S | **Sg** | **02 30 55.5** | **+0.5** |
| **ANDN** | **Andirin** | **0.87** | **227** | *i* P | **Pn** | **02 30 47.2** | **-0.1** |
| ANDN | | | | *i* S | **Sb** | **02 30 58.0** | **+0.1** |
| **ANDN** | **Andirin** | **0.87** | **227** | P | **Pn** | **02 30 47.2** | **-0.1** |
| ANDN | | | | S | **Sb** | **02 30 58.0** | **+0.1** |
| **GZT** | **Gaziantep** | **0.89** | **158** | P | **Pn** | **02 30 48.5** | **+0.8** |
| GZT | | | | S | **Sn** | **02 31 02.4** | **+1.7** |
| **KAMA** | **Osmaniye** | **1.06** | **201** | P | **Pn** | **02 30 49.5** | **-0.4** |
| KAMA | | | | S | **Sn** | **02 31 05.1** | **+0.2** |
| **CUALT** | **Altinyayla-SIV** | **1.13** | **345** | P | **Pb** | **02 30 50.6** | **0.0** |
| CUALT | | | | S | **Sn** | **02 31 07.5** | **+0.9** |
| **CUKAN** | **kangal_SIVAS** | **1.16** | **13** | P | **Pb** | **02 30 51.0** | **-0.1** |
| CUKAN | | | | S | **Sn** | **02 31 07.9** | **+0.5** |
| **KUZU** | **Kuzuini** | **1.41** | **182** | *i* S | **Sg** | **02 31 14.5** | **+0.4** |
| **KUZU** | **Kuzuini** | **1.41** | **182** | P | **Pg** | **02 30 56.1** | **+0.3** |
| KUZU | | | | S | **Sg** | **02 31 14.5** | **+0.4** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.42** | **331** | P | **Pg** | **02 30 56.2** | **+0.3** |
| CUSAR | | | | S | **Sg** | **02 31 16.4** | **+2.0** |
| **SVSK** | **Karacayir** | **1.73** | **356** | *e*PN | **Pg** | **02 31 01.9** | **-0.1** |
| **SVSK** | **Karacayir** | **1.73** | **356** | *e*Pn | **Pg** | **02 31 01.9** | **-0.1** |
| **PTK** | **Pertek** | **1.90** | **67** | *e*PN | **Pn** | **02 31 01.1** | **-0.4** |
| **PTK** | **Pertek** | **1.90** | **67** | *e*Pn | **Pn** | **02 31 01.1** | **-0.4** |
| **TAHT** | **Tahtakopru-Hat** | **1.96** | **203** | *e*PN | **Pb** | **02 31 03.9** | **-0.7** |
| **TAHT** | **Tahtakopru-Hat** | **1.96** | **203** | *e*Pn | **Pb** | **02 31 03.9** | **-0.7** |
| **CORM** | **Corum** | **2.79** | **316** | *e*PN | **Pb** | **02 31 18.4** | **-0.5** |
| **CORM** | **Corum** | **2.79** | **316** | *e*Pn | **Pb** | **02 31 18.4** | **-0.5** |

**WEL 16 02:50:26.6±0.1, 38.°58S×176.°84E, h66km±1km, ML3.7/14, 9C-28D, Error ellipse: s-maj=0.8km s-min=0.7km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RRRZ** | **Republican Roa** | **0.34** | **313** | P* | Pn | 02 50 37.4 | -0.3 |
| **PRRZ** | **Plateau Road** | **0.36** | **282** | ⇓P* | Pn | 02 50 37.3 | -0.4 |
| PRRZ | | | | S* | Sn | 02 50 45.0 | -0.9 |
| **URZ** | **Urewera** | **0.38** | **34** | P* | Pn | 02 50 37.3 | -0.7 |
| URZ | | | | S* | Sn | 02 50 44.9 | -1.3 |
| URZ | | | | AML | AML | 02 50 45.4 | |
| **ALRZ** | **Allen Road** | **0.39** | **272** | ⇓P* | Pn | 02 50 37.7 | -0.3 |
| ALRZ | | | | S* | Sn | 02 50 45.8 | -0.5 |
| **RAHZ** | **Arahi** | **0.39** | **150** | ⇑PN | Pn | 02 50 37.8 | -0.3 |
| RAHZ | | | | SN | Sn | 02 50 46.5 | +0.1 |
| **MRHZ** | **Matea Rd** | **0.42** | **232** | P* | Pn | 02 50 37.9 | -0.7 |
| MRHZ | | | | S* | Sn | 02 50 45.9 | -1.0 |
| **TARZ** | **Mount Tarawera** | **0.43** | **323** | ⇑P* | Pn | 02 50 38.5 | 0.0 |
| **SNGZ** | **Shannon Statio** | **0.45** | **118** | PN | Pn | 02 50 38.5 | -0.1 |
| SNGZ | | | | SN | Sn | 02 50 48.4 | +1.1 |
| **RAGZ** | **Rawiri** | **0.46** | **80** | ⇓P* | Pn | 02 50 38.4 | -0.4 |
| **HRRZ** | **Handcock Road** | **0.47** | **293** | P* | Pn | 02 50 38.7 | -0.1 |
| **EDRZ** | **Edgecumbe** | **0.47** | **351** | ⇓P* | Pn | 02 50 38.6 | -0.3 |
| **HLRZ** | **Highlands Stat** | **0.50** | **310** | P* | Pn | 02 50 40.6 | +1.5 |
| **NMHZ** | **Naumai** | **0.52** | **183** | ⇑PN | Pn | 02 50 39.4 | 0.0 |
| **WPRZ** | **Whakapapataran** | **0.53** | **276** | ⇓P* | Pn | 02 50 39.2 | -0.2 |
| **HSRZ** | **Hossack Road** | **0.53** | **299** | ⇓P* | Pn | 02 50 39.7 | +0.3 |
| **WHHZ** | **Waihua** | **0.59** | **148** | ⇑PN | Pn | 02 50 40.1 | +0.2 |
| WHHZ | | | | SN | Sn | 02 50 50.6 | +0.9 |
| **MWZ** | **Matawai** | **0.59** | **66** | ⇓P* | Pn | 02 50 39.7 | -0.4 |
| MWZ | | | | S* | Sn | 02 50 49.5 | -0.5 |
| MWZ | | | | AML | AML | 02 50 53.6 | |
| **MARZ** | **Manawahe** | **0.60** | **348** | P* | Pn | 02 50 40.5 | +0.4 |
| **BKZ** | **Black Stump Fm** | **0.65** | **204** | P* | Pn | 02 50 40.1 | -0.6 |
| BKZ | | | | AML | AML | 02 50 50.7 | |
| BKZ | | | | AML | AML | 02 50 52.8 | |
| **HATZ** | **Hinemaiaia** | **0.66** | **241** | ⇓P* | Pn | 02 50 40.3 | -0.5 |
| **WHTZ** | **Whakaora** | **0.69** | **262** | P* | Pn | 02 50 41.3 | +0.1 |
| **ARHZ** | **Aropaoanui** | **0.70** | **170** | ⇑PN | Pn | 02 50 41.6 | +0.4 |
| **KARZ** | **Kaharoa** | **0.72** | **320** | ⇑P* | Pn | 02 50 41.3 | -0.2 |
| **RIGZ** | **Rimuhau** | **0.74** | **100** | PN | Pn | 02 50 41.9 | +0.2 |
| **OPRZ** | **Ohinepanea** | **0.76** | **343** | P* | Pn | 02 50 41.5 | -0.4 |
| **KNZ** | **Kokohu** | **0.79** | **124** | PN | Pn | 02 50 41.6 | -0.6 |
| KNZ | | | | AML | AML | 02 51 00.3 | |
| KNZ | | | | AML | AML | 02 51 07.5 | |
| **KUTZ** | **Kaahu Road** | **0.80** | **276** | ⇓P* | Pn | 02 50 42.4 | 0.0 |
| **TKGZ** | **Te Karaka** | **0.81** | **81** | PN | Pn | 02 50 42.8 | +0.3 |
| **RITZ** | **Rihia Road** | **0.86** | **242** | ⇓P* | Pn | 02 50 43.2 | 0.0 |
| **MCHZ** | **McNeill Hill** | **0.87** | **187** | ⇑PN | Pn | 02 50 43.8 | +0.5 |
| **RATZ** | **Rangitukua** | **0.88** | **250** | ⇓P* | Pn | 02 50 43.3 | -0.2 |
| **KATZ** | **Kakaramea** | **0.98** | **246** | P* | Pn | 02 50 44.5 | -0.2 |
| **TWGZ** | **Tauwhareparae** | **0.98** | **66** | PN | Pn | 02 50 45.5 | +0.7 |
| **KRVZ** | **Karewarewa** | **1.07** | **241** | ⇓P* | Pn | 02 50 45.7 | -0.2 |
| **WIZ** | **White Island** | **1.08** | **15** | P* | Pn | 02 50 45.7 | -0.2 |
| **OTVZ** | **Oturere** | **1.09** | **237** | ⇓P* | Pn | 02 50 46.0 | -0.2 |
| **BHHZ** | **Black Hill Sta** | **1.09** | **213** | ⇓P* | Pn | 02 50 45.8 | -0.4 |
| **CKHZ** | **Cape Kidnapper** | **1.10** | **170** | ⇑PN | Pn | 02 50 45.8 | -0.3 |
| **HAZ** | **Te Kaha** | **1.11** | **43** | ⇓P* | Pn | 02 50 45.7 | -0.6 |
| **WTVZ** | **West Tongariro** | **1.11** | **241** | ⇓P* | Pn | 02 50 46.3 | -0.2 |
| **NGZ** | **Ngauruhoe** | **1.14** | **238** | ⇓P* | Pn | 02 50 46.7 | -0.2 |
| **TUVZ** | **Tukino** | **1.15** | **233** | ⇓P* | Pn | 02 50 46.9 | -0.2 |
| **MOVZ** | **Moawhango** | **1.19** | **225** | ⇓P* | Pn | 02 50 47.0 | -0.4 |
| **COVZ** | **Chateau Observ** | **1.19** | **238** | ⇓P* | Pn | 02 50 47.3 | -0.1 |
| **WPVZ** | **Whakapapa** | **1.19** | **238** | P* | Pn | 02 50 47.4 | -0.1 |
| **TWVZ** | **Taurewa** | **1.20** | **245** | P* | Pn | 02 50 47.2 | -0.4 |
| **WHVZ** | **Whangaehu Hut** | **1.20** | **234** | ⇓P* | Pn | 02 50 47.5 | -0.3 |
| **FWVZ** | **Far West T-bar** | **1.21** | **235** | ⇓P* | Pn | 02 50 47.6 | -0.3 |
| **DRZ** | **Dome Shelter** | **1.21** | **234** | P* | Pn | 02 50 47.8 | -0.3 |
| **KAHZ** | **Kahuranaki** | **1.22** | **179** | PN | Pn | 02 50 47.4 | -0.4 |
| **WNVZ** | **Wahianoa** | **1.22** | **232** | ⇓P* | Pn | 02 50 47.7 | -0.3 |
| **PUZ** | **Puketiti** | **1.23** | **66** | PN | Pn | 02 50 48.0 | +0.2 |
| PUZ | | | | AML | AML | 02 51 13.7 | |
| PUZ | | | | AML | AML | 02 51 13.9 | |
| **MTVZ** | **Mangateitei** | **1.34** | **232** | ⇓P* | Pn | 02 50 49.2 | -0.1 |
| **TOZ** | **Tahuroa Road** | **1.35** | **308** | P* | Pn | 02 50 49.6 | +0.2 |
| **PNHZ** | **Pukenui** | **1.43** | **200** | PN | Pn | 02 50 49.7 | -0.8 |
| **PXZ** | **Pawanui** | **1.46** | **179** | ⇓PN | Pn | 02 50 49.9 | -0.9 |
| PXZ | | | | AML | AML | 02 51 19.8 | |
| PXZ | | | | AML | AML | 02 51 19.8 | |
| PXZ | | | | AML | AML | 02 51 20.4 | |
| PXZ | | | | AML | AML | 02 51 20.4 | |
| **WPHZ** | **Waipukurau** | **1.52** | **192** | PN | Pn | 02 50 50.8 | -0.9 |
| **MXZ** | **Matakaoa Point** | **1.54** | **49** | P* | Pn | 02 50 53.0 | +1.1 |
| MXZ | | | | AML | AML | 02 51 21.5 | |
| MXZ | | | | AML | AML | 02 51 22.7 | |
| **HIZ** | **Hauiti** | **1.55** | **272** | ⇓PN | Pn | 02 50 52.9 | +0.7 |
| **TSZ** | **Takapari Road** | **1.63** | **204** | PN | Pn | 02 50 52.2 | -1.1 |
| TSZ | | | | AML | AML | 02 51 20.0 | |
| TSZ | | | | AML | AML | 02 51 20.2 | |
| **PRHZ** | **Porangahau** | **1.70** | **185** | PN | Pn | 02 50 52.7 | -1.4 |
| **VRZ** | **Vera Road** | **1.71** | **251** | P* | Pn | 02 50 54.9 | +0.6 |
| **WAZ** | **Wanganui** | **1.86** | **230** | ⇓PN | Pn | 02 50 57.0 | +0.7 |
| **ANWZ** | **Angora Road** | **1.90** | **188** | PN | Pn | 02 50 55.4 | -1.5 |
| **MKAZ** | **Moumakai** | **1.97** | **317** | PN | Pn | 02 50 58.5 | +0.7 |
| **KUZ** | **Kuaotunu** | **2.03** | **334** | ⇓PN | Pn | 02 50 58.8 | +0.3 |
| **LREZ** | **Lake Rotokare** | **2.09** | **244** | PN | Pn | 02 51 00.6 | +1.2 |
| **BFZ** | **Birch Farm** | **2.15** | **192** | PN | Pn | 02 50 58.3 | -1.9 |
| BFZ | | | | AML | AML | 02 51 24.9 | |
| BFZ | | | | AML | AML | 02 51 24.9 | |
| BFZ | | | | AML | AML | 02 51 25.5 | |
| BFZ | | | | AML | AML | 02 51 25.5 | |
| **NEZ** | **North Egmont** | **2.25** | **251** | PN | Pn | 02 51 03.6 | +1.9 |
| **MRZ** | **Mangatainoka R** | **2.30** | **205** | PN | Pn | 02 51 00.1 | -2.1 |
| MRZ | | | | AML | AML | 02 51 27.4 | |
| MRZ | | | | AML | AML | 02 51 32.3 | |
| **PKE** | **Pukeiti** | **2.31** | **254** | PN | Pn | 02 51 03.9 | +1.6 |
| **KHEZ** | **Kahui Hut** | **2.31** | **251** | PN | Pn | 02 51 04.3 | +1.8 |
| **TIWZ** | **Tintock** | **2.32** | **198** | PN | Pn | 02 51 02.2 | -0.3 |
| TIWZ | | | | AML | AML | 02 51 28.4 | |
| TIWZ | | | | AML | AML | 02 51 29.2 | |
| **MTAZ** | **Motutapu** | **2.35** | **319** | ⇑PN | Pn | 02 51 04.1 | +1.2 |
| **CPWZ** | **Castlepoint** | **2.38** | **192** | PN | Pn | 02 51 01.6 | -1.7 |
| **OGWZ** | **Otaki Gorge** | **2.58** | **209** | PN | Pn | 02 51 04.0 | -2.1 |
| **TMWZ** | **Te Maipa** | **2.63** | **196** | PN | Pn | 02 51 04.2 | -2.5 |
| **MTW** | **Mount Morrison** | **2.78** | **201** | AML | AML | 02 51 37.8 | |
| MTW | | | | AML | AML | 02 51 41.6 | |
| **PAWZ** | **Paruwai Farm** | **3.00** | **201** | AML | AML | 02 51 43.3 | |
| **MSWZ** | **Moikau Station** | **3.09** | **203** | AML | AML | 02 51 45.2 | |
| **DUWZ** | **D'Urville Isla** | **3.16** | **224** | PN | Pn | 02 51 16.5 | +2.5 |
| **WCZ** | **Waipu Caves** | **3.30** | **322** | PN | Pn | 02 51 17.0 | +1.2 |
| **NNZ** | **Nelson** | **3.75** | **224** | PN | Pn | 02 51 19.5 | -2.5 |
| **BSWZ** | **Blackbirch Sta** | **3.87** | **215** | PN | Pn | 02 51 20.2 | -3.4 |
| **THZ** | **Tophouse** | **4.38** | **222** | PN | Pn | 02 51 27.7 | -3.0 |
| **KHZ** | **Kahutara** | **4.59** | **212** | PN | Pn | 02 51 30.9 | -2.5 |

*NEIC **16** 02:57:09.7, 43.°65S×172.°37E, h5km, ML3.9(WEL), After WEL.*
*NEIC Felt in Canterbury.*
**WEL 16 02:57:10.0±0.1, 43°63S×172°38E, h5km, ML3.8/18, 5C-2D, Error ellipse: s-maj=0.9km s-min=0.7km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CRLZ** | **Canterbury Las** | **0.19** | **73** | ⇑PG | Pg | 02 57 13.8 | +0.1 |
| CRLZ | | | | SG | Sg | 02 57 16.1 | 0.0 |
| CRLZ | | | | AML | AML | 02 57 16.6 | |
| CRLZ | | | | AML | AML | 02 57 16.6 | |
| CRLZ | | | | AML | AML | 02 57 16.8 | |
| **MQZ** | **McQueen's Vall** | **0.21** | **111** | ⇓PG | Pg | 02 57 14.5 | +0.2 |
| MQZ | | | | SG | Sg | 02 57 17.5 | +0.4 |
| MQZ | | | | AML | AML | 02 57 17.9 | |
| **OXZ** | **Oxford** | **0.39** | **321** | PG | Pg | 02 57 17.8 | +0.2 |
| **LTZ** | **Lake Taylor** | **0.85** | **355** | P* | Pg | 02 57 26.2 | -0.2 |
| LTZ | | | | AML | AML | 02 57 38.0 | |
| LTZ | | | | AML | AML | 02 57 38.3 | |
| **RPZ** | **Rata Peaks** | **0.96** | **264** | ⇑P* | Pg | 02 57 28.8 | +0.3 |
| RPZ | | | | AML | AML | 02 57 47.2 | |
| RPZ | | | | AML | AML | 02 57 49.4 | |
| **RPZ** | **Rata Peaks** | **0.96** | **264** | *e*Pg | Pg | 02 57 28.4 | -0.2 |
| RPZ | | | | *e*Sg | Sg | 02 57 39.7 | -1.4 |
| **WVZ** | **Waitaha Valley** | **1.32** | **294** | ⇑P* | Pn | 02 57 34.0 | -1.0 |
| WVZ | | | | AML | AML | 02 57 58.0 | |
| WVZ | | | | AML | AML | 02 57 58.2 | |
| **KHZ** | **Kahutara** | **1.48** | **36** | PN | Pn | 02 57 34.6 | -2.7 |
| KHZ | | | | AML | AML | 02 57 43.4 | |
| KHZ | | | | AML | AML | 02 57 58.2 | |
| **KHZ** | **Kahutara** | **1.48** | **36** | *e*Pn | Pn | 02 57 34.6 | -2.7 |
| **LBZ** | **Lake Benmore** | **1.75** | **244** | PN | Pn | 02 57 39.9 | -1.2 |
| LBZ | | | | AML | AML | 02 58 13.8 | |
| LBZ | | | | AML | AML | 02 58 16.2 | |
| LBZ | | | | AML | AML | 02 58 16.2 | |
| **ODZ** | **Otahua Downs** | **1.88** | **221** | ⇑PN | Pn | 02 57 41.4 | -1.5 |
| ODZ | | | | AML | AML | 02 58 15.7 | |
| ODZ | | | | AML | AML | 02 58 15.7 | |
| ODZ | | | | AML | AML | 02 58 17.5 | |
| ODZ | | | | AML | AML | 02 58 17.5 | |
| **ODZ** | **Otahua Downs** | **1.88** | **221** | *e*Pn | Pn | 02 57 41.4 | -1.4 |
| ODZ | | | | *e*Pg | Pg | 02 57 45.6 | -0.6 |
| ODZ | | | | *e*Sg | Sb | 02 58 09.2 | +0.5 |
| **THZ** | **Tophouse** | **1.91** | **12** | ⇑PN | Pn | 02 57 40.9 | -2.4 |
| THZ | | | | AML | AML | 02 58 15.6 | |
| THZ | | | | AML | AML | 02 58 21.5 | |
| **DSZ** | **Denniston Nort** | **1.93** | **347** | PN | Pn | 02 57 41.8 | -1.8 |
| DSZ | | | | AML | AML | 02 58 09.3 | |
| DSZ | | | | AML | AML | 02 58 09.3 | |
| DSZ | | | | AML | AML | 02 58 12.3 | |
| DSZ | | | | AML | AML | 02 58 12.3 | |
| **FOZ** | **Fox Glacier** | **1.95** | **271** | ⇓PN | Pn | 02 57 42.9 | -0.8 |
| FOZ | | | | AML | AML | 02 58 18.9 | |
| FOZ | | | | AML | AML | 02 58 18.9 | |
| FOZ | | | | AML | AML | 02 58 19.3 | |
| FOZ | | | | A

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| ZEY | ˜zmir | 1.30 | 136 | P | Pn | 03 06 13.8 | -0.1 | SRS | Serrai | 2.36 | 326 | P | Pn | 03 06 28.6 | 0.0 |
| ZEY | | | | S | Sb | 03 06 29.4 | -1.6 | THAL | Thalero | 2.39 | 242 | *e*PN | Pn | 03 06 29.4 | +0.4 |
| SMTH | Samothraki Isl | 1.30 | 6 | *e*PN | Pn | 03 06 13.0 | -1.0 | THAL | Thalero | 2.39 | 242 | P | Pn | 03 06 28.8 | -0.2 |
| SMTH | Samothraki Isl | 1.30 | 6 | P | Pn | 03 06 13.2 | -0.8 | THAL | Thalero | 2.39 | 242 | P | Pn | 03 06 28.8 | -0.2 |
| SMTH | Samothraki Isl | 1.30 | 6 | P | Pn | 03 06 13.2 | -0.8 | THAL | Thalero | 2.39 | 242 | *e*Pn | Pn | 03 06 29.4 | +0.4 |
| EREA | Eretria | 1.34 | 236 | *e*PN | Pn | 03 06 14.2 | -0.3 | LIT | Litokhoron | 2.39 | 294 | *e*PN | Pn | 03 06 29.6 | +0.6 |
| EREA | | | | *e*SN | Sg | 03 06 33.0 | +0.1 | LIT | | | | *e*SN | Sn | 03 06 58.0 | -0.4 |
| EREA | Eretria | 1.34 | 236 | P | Pn | 03 06 14.1 | -0.4 | LIT | Litokhoron | 2.39 | 294 | P | Pn | 03 06 29.6 | +0.6 |
| EREA | | | | S | Sg | 03 06 33.1 | +0.1 | LIT | Litokhoron | 2.39 | 294 | P | Pn | 03 06 29.6 | +0.6 |
| EREA | Eretria | 1.34 | 236 | *e*Pn | Pn | 03 06 14.2 | -0.3 | LIT | | | | *e*Sn | Sn | 03 06 58.0 | -0.4 |
| EREA | | | | *e*Sn | Sg | 03 06 33.0 | +0.1 | NVR | Nevrokopi | 2.45 | 333 | *e*PN | Pn | 03 06 29.9 | 0.0 |
| KARY | Karystos | 1.35 | 212 | P | Pn | 03 06 14.0 | -0.6 | NVR | Nevrokopi | 2.45 | 333 | P | Pn | 03 06 29.6 | -0.3 |
| MRKA | Markates | 1.45 | 252 | *e*PN | Pn | 03 06 15.6 | -0.5 | NVR | Nevrokopi | 2.45 | 333 | P | Pn | 03 06 29.6 | -0.3 |
| MRKA | | | | *e*SN | Sb | 03 06 35.5 | +0.1 | NVR | Nevrokopi | 2.45 | 333 | *e*Pn | Pn | 03 06 29.9 | 0.0 |
| MRKA | Markates | 1.45 | 252 | P | Pn | 03 06 15.6 | -0.5 | DURS | Dursunbey | 2.46 | 79 | *i* P | Pn | 03 06 29.9 | -0.1 |
| MRKA | | | | S | Sb | 03 06 35.5 | +0.1 | DURS | Dursunbey | 2.46 | 79 | P | Pn | 03 06 29.9 | -0.1 |
| MRKA | Markates | 1.45 | 252 | P | Pn | 03 06 15.6 | -0.5 | TKR | Tekirdag | 2.47 | 42 | *e*PN | Pn | 03 06 30.1 | +0.1 |
| MRKA | | | | S | Sb | 03 06 35.5 | +0.1 | TKR | Tekirdag | 2.47 | 42 | *e*Pn | Pn | 03 06 30.1 | +0.1 |
| SKIA | Skiathos | 1.46 | 270 | *e*PN | Pn | 03 06 16.0 | -0.3 | KRND | KRANIDI | 2.49 | 225 | *e*PN | Pn | 03 06 29.8 | -0.5 |
| SKIA | Skiathos | 1.46 | 270 | P | Pn | 03 06 15.9 | -0.3 | KRND | KRANIDI | 2.49 | 225 | P | Pn | 03 06 29.9 | -0.4 |
| SKIA | Skiathos | 1.46 | 270 | *e*Pn | Pn | 03 06 16.0 | -0.3 | KRND | KRANIDI | 2.49 | 225 | P | Pn | 03 06 29.9 | -0.4 |
| PAIG | Paliouri | 1.49 | 301 | *e*PN | Pn | 03 06 16.2 | -0.3 | AYDN | Tasoluk | 2.50 | 126 | *i* P | Pb | 03 06 32.8 | -2.0 |
| PAIG | Paliouri | 1.49 | 301 | P | Pn | 03 06 16.3 | -0.3 | AYDN | Tasoluk | 2.50 | 126 | P | Pb | 03 06 32.8 | -2.0 |
| PAIG | | | | S | Sb | 03 06 37.1 | +0.5 | AYDN | | | | S | Sg | 03 07 11.6 | +1.5 |
| PAIG | Paliouri | 1.49 | 301 | P | Pn | 03 06 16.3 | -0.3 | MAKR | Makrakomi, Fth | 2.51 | 267 | *e*PN | Pn | 03 06 31.4 | +0.8 |
| PAIG | | | | S | Sb | 03 06 37.1 | +0.5 | MAKR | Makrakomi, Fth | 2.51 | 267 | P | Pn | 03 06 31.3 | +0.7 |
| GELI | Tayfur-Gelibol | 1.50 | 35 | *e*PN | Pn | 03 06 16.2 | -0.5 | MAKR | Makrakomi, Fth | 2.51 | 267 | P | Pn | 03 06 31.3 | +0.7 |
| GELI | Tayfur-Gelibol | 1.50 | 35 | *e*Pn | Pn | 03 06 16.2 | -0.5 | KCTX | Karacabey (Bur | 2.56 | 64 | *e*PN | Pn | 03 06 31.8 | +0.5 |
| BLCB | Balcova | 1.54 | 120 | *e*PN | Pb | 03 06 17.8 | -0.6 | KCTX | Karacabey (Bur | 2.56 | 64 | *e*Pn | Pn | 03 06 31.8 | +0.5 |
| BLCB | Balcova | 1.54 | 120 | *e*Pn | Pb | 03 06 17.8 | -0.6 | MHLO | Agia Marina, M | 2.59 | 197 | P | Pn | 03 06 31.6 | -0.1 |
| OUR | Ouranopolis | 1.56 | 318 | *e*PN | Pn | 03 06 17.7 | +0.1 | MHLO | Agia Marina, M | 2.59 | 197 | P | Pn | 03 06 31.6 | -0.1 |
| OUR | | | | *e*SN | Sb | 03 06 38.9 | +0.3 | MANT | Manisa | 2.60 | 104 | P | Pn | 03 06 32.3 | +0.3 |
| OUR | Ouranopolis | 1.56 | 318 | P | Pn | 03 06 17.6 | 0.0 | MANT | Manisa | 2.60 | 104 | P | Pn | 03 06 32.3 | +0.3 |
| OUR | | | | S | Sb | 03 06 39.2 | +0.6 | BODT | Bodrum | 2.62 | 143 | *e*PN | Pn | 03 06 32.8 | +0.7 |
| OUR | Ouranopolis | 1.56 | 318 | P | Pn | 03 06 17.6 | 0.0 | BODT | Bodrum | 2.62 | 143 | *e*Pn | Pn | 03 06 32.8 | +0.7 |
| OUR | | | | *e*Sn | Sb | 03 06 38.9 | +0.3 | KALE | Kalithea | 2.63 | 254 | *e*PN | Pn | 03 06 32.4 | +0.1 |
| OUR | | | | S | Sb | 03 06 39.2 | +0.6 | KALE | Kalithea | 2.63 | 254 | P | Pn | 03 06 32.0 | -0.3 |
| LPK | Lapseki | 1.62 | 42 | *e*PN | Pn | 03 06 18.1 | -0.2 | KALE | Kalithea | 2.63 | 254 | P | Pn | 03 06 32.0 | -0.3 |
| LPK | Lapseki | 1.62 | 42 | *e*Pn | Pn | 03 06 18.1 | -0.2 | KALE | Kalithea | 2.63 | 254 | *e*Pn | Pn | 03 06 32.4 | +0.1 |
| PTL | Penteli | 1.62 | 226 | *e*PN | Pn | 03 06 17.9 | -0.5 | GUR | Goura | 2.66 | 243 | *e*PN | Pn | 03 06 32.8 | -0.1 |
| PTL | Penteli | 1.62 | 226 | P | Pn | 03 06 17.8 | -0.6 | GUR | Goura | 2.66 | 243 | P | Pn | 03 06 32.7 | -0.1 |
| PTL | Penteli | 1.62 | 226 | *e*Pn | Pn | 03 06 17.9 | -0.5 | GUR | Goura | 2.66 | 243 | P | Pn | 03 06 32.7 | -0.1 |
| NEO | Neokhori | 1.66 | 275 | *e*PB | Pn | 03 06 18.5 | -0.4 | KULA | Kula-Manisa | 2.67 | 103 | *e*PN | Pn | 03 06 33.3 | +0.4 |
| NEO | Neokhori | 1.66 | 275 | P | Pn | 03 06 18.5 | -0.4 | KULA | Kula-Manisa | 2.67 | 103 | *e*Pn | Pn | 03 06 33.3 | +0.4 |
| NEO | | | | S | Sb | 03 06 41.4 | +0.1 | CRLT | Corlu | 2.67 | 42 | *e*PN | Pn | 03 06 32.9 | 0.0 |
| NEO | Neokhori | 1.66 | 275 | P | Pn | 03 06 18.5 | -0.4 | CRLT | Corlu | 2.67 | 42 | *e*Pn | Pn | 03 06 32.9 | 0.0 |
| NEO | | | | S | Sb | 03 06 41.4 | +0.1 | BDRM | Kayabasi | 2.68 | 141 | *i* P | Pn | 03 06 33.0 | +0.1 |
| ENEZ | Enez | 1.68 | 21 | *e*PN | Pn | 03 06 18.8 | -0.4 | BDRM | Kayabasi | 2.68 | 141 | P | Pn | 03 06 33.0 | +0.1 |
| ENEZ | Enez | 1.68 | 21 | *e*Pn | Pn | 03 06 18.8 | -0.4 | SERG | Sergoula | 2.68 | 255 | P | Pn | 03 06 32.1 | -0.1 |
| SMIA | Simia | 1.69 | 261 | *e*PN | Pn | 03 06 19.3 | -0.2 | SERG | Sergoula | 2.68 | 255 | P | Pn | 03 06 32.9 | +0.1 |
| SMIA | | | | *e*SN | Sn | 03 06 40.2 | +0.9 | KNT | Kendrikon | 2.73 | 317 | *e*PB | Pn | 03 06 34.8 | +1.1 |
| SMIA | Simia | 1.69 | 261 | P | Pn | 03 06 19.2 | -0.2 | KNT | Kendrikon | 2.73 | 317 | *e*Pb | Pn | 03 06 34.8 | +1.1 |
| SMIA | Simia | 1.69 | 261 | P | Pn | 03 06 19.2 | -0.2 | KLV | Kalavryta, Ach | 2.75 | 247 | *e*PN | Pn | 03 06 34.0 | 0.0 |
| SMIA | | | | *e*Sn | Sn | 03 06 40.2 | -0.9 | KLV | Kalavryta, Ach | 2.75 | 247 | P | Pn | 03 06 33.8 | -0.2 |
| ATHU | Athens Univers | 1.72 | 226 | P | Pn | 03 06 19.1 | -0.7 | KLV | Kalavryta, Ach | 2.75 | 247 | P | Pn | 03 06 33.8 | -0.2 |
| ATHU | Athens Univers | 1.72 | 226 | P | Pn | 03 06 19.1 | -0.7 | EVR | Evrytania | 2.77 | 266 | *e*PN | Pn | 03 06 35.2 | +0.9 |
| ERIK | Erikli-Kesan | 1.74 | 31 | *e*PN | Pn | 03 06 19.6 | -0.4 | EVR | Evrytania | 2.77 | 266 | P | Pn | 03 06 34.9 | +0.6 |
| ERIK | Erikli-Kesan | 1.74 | 31 | *e*Pn | Pn | 03 06 19.6 | -0.4 | EVR | Evrytania | 2.77 | 266 | P | Pn | 03 06 34.9 | +0.6 |
| ATH | Athens Observa | 1.75 | 227 | *e*PN | Pn | 03 06 20.0 | -0.2 | EVR | Evrytania | 2.77 | 266 | *e*Pn | Pn | 03 06 35.2 | +0.9 |
| ATH | Athens Observa | 1.75 | 227 | P | Pn | 03 06 19.7 | -0.5 | EFP | Efpalio | 2.79 | 256 | *e*PN | Pn | 03 06 35.0 | +0.5 |
| ATH | Athens Observa | 1.75 | 227 | P | Pn | 03 06 19.7 | -0.5 | EFP | Efpalio | 2.79 | 256 | *e*Pn | Pn | 03 06 35.0 | +0.5 |
| ATH | Athens Observa | 1.75 | 227 | *e*Pn | Pn | 03 06 20.0 | -0.2 | LAKA | Lakka | 2.80 | 252 | *e*PN | Pn | 03 06 35.3 | +0.7 |
| VLY | Voula,Athens | 1.80 | 223 | *e*PB | Pn | 03 06 20.4 | -0.4 | LAKA | Lakka | 2.80 | 252 | P | Pn | 03 06 34.8 | +0.2 |
| VLY | Voula,Athens | 1.80 | 223 | P | Pn | 03 06 20.1 | -0.7 | LAKA | Lakka | 2.80 | 252 | P | Pn | 03 06 34.8 | +0.2 |
| VLY | | | | S | Sb | 03 06 44.8 | -0.5 | LAKA | Lakka | 2.80 | 252 | *e*Pn | Pn | 03 06 35.3 | +0.7 |
| VLY | Voula,Athens | 1.80 | 223 | P | Pn | 03 06 20.1 | -0.7 | EDRB | Edirne | 2.87 | 21 | *e*PN | Pn | 03 06 35.6 | 0.0 |
| VLY | Voula,Athens | 1.80 | 223 | *e*Pb | Pn | 03 06 20.4 | -0.4 | EDRB | Edirne | 2.87 | 21 | *e*Pn | Pn | 03 06 35.6 | 0.0 |
| VLY | | | | S | Sb | 03 06 44.8 | -0.5 | GRG | Griva | 2.88 | 309 | *e*PN | Pn | 03 06 36.8 | +1.0 |
| ALN | Alexandroupoli | 1.80 | 17 | *e*PB | Pn | 03 06 20.0 | -0.9 | GRG | Griva | 2.88 | 309 | P | Pn | 03 06 36.7 | +1.0 |
| ALN | Alexandroupoli | 1.80 | 17 | P | Pn | 03 06 19.9 | -0.9 | GRG | Griva | 2.88 | 309 | P | Pn | 03 06 36.7 | +1.0 |
| ALN | | | | S | Sn | 03 06 44.7 | +1.0 | NIS1 | Nisyros Isl. | 2.95 | 150 | *e*PB | Pn | 03 06 38.0 | +1.3 |
| ALN | Alexandroupoli | 1.80 | 17 | P | Pn | 03 06 19.9 | -0.9 | NIS1 | Nisyros Isl. | 2.95 | 150 | *e*Pb | Pn | 03 06 38.0 | +1.3 |
| ALN | | | | S | Sn | 03 06 44.7 | +1.0 | VLX | Vlachokerasia | 2.95 | 233 | P | Pn | 03 06 36.9 | +0.1 |
| BALY | Balya | 1.85 | 72 | *i* P | Pn | 03 06 21.2 | -0.4 | VLX | Vlachokerasia | 2.95 | 233 | P | Pn | 03 06 36.9 | +0.1 |
| BALY | | | | *i* S | Sn | 03 06 45.8 | +0.9 | PHSR | Pinarhisar | 2.96 | 33 | *e*PN | Pn | 03 06 37.1 | +0.3 |
| BALY | Balya | 1.85 | 72 | P | Pn | 03 06 21.2 | -0.4 | PHSR | Pinarhisar | 2.96 | 33 | *e*Pn | Pn | 03 06 37.1 | +0.3 |
| BALY | | | | S | Sn | 03 06 45.8 | +0.9 | MDNY | Mudanya-Bursa | 2.97 | 65 | *e*PN | Pn | 03 06 37.3 | +0.3 |
| SMG | Samos | 1.87 | 141 | *e*PB | Pn | 03 06 21.9 | 0.0 | MDNY | Mudanya-Bursa | 2.97 | 65 | *e*Pn | Pn | 03 06 37.3 | +0.3 |
| SMG | Samos | 1.87 | 141 | P | Pn | 03 06 21.7 | -0.2 | SLVT | Silivri | 3.00 | 46 | *e*PN | Pn | 03 06 38.0 | +0.6 |
| SMG | | | | S | Sb | 03 06 46.5 | -1.0 | SLVT | Silivri | 3.00 | 46 | *e*Pn | Pn | 03 06 38.0 | +0.6 |
| SMG | Samos | 1.87 | 141 | P | Pn | 03 06 21.7 | -0.2 | VAY | Valandovo | 3.02 | 316 | *e*Pg | Pb | 03 06 41.3 | -2.3 |
| SMG | | | | S | Sb | 03 06 46.5 | -1.0 | VAY | | | | *e*Sg | Sg | 03 07 28.8 | +2.0 |
| ATAL | Atalanti | 1.88 | 256 | P | Pn | 03 06 21.7 | -0.2 | VAY | Valandovo | 3.02 | 316 | *e*Pg | Pb | 03 06 41.3 | -2.3 |
| ATAL | Atalanti | 1.88 | 256 | P | Pn | 03 06 21.7 | -0.2 | ARMT | Armutlu | 3.04 | 62 | *e*PN | Pn | 03 06 38.7 | +0.8 |
| FYTO | Fytoko, Volos | 1.88 | 278 | P | Pn | 03 06 21.8 | -0.1 | ARMT | Armutlu | 3.04 | 62 | *e*Pn | Pn | 03 06 38.7 | +0.8 |
| FYTO | Fytoko, Volos | 1.88 | 278 | P | Pn | 03 06 21.9 | -0.1 | YER | Yerkesik | 3.08 | 130 | *e*PN | Pn | 03 06 39.9 | +1.3 |
| VILL | Villia | 1.89 | 238 | P | Pn | 03 06 21.4 | -0.7 | YER | Yerkesik | 3.08 | 130 | *e*Pn | Pn | 03 06 39.9 | +1.3 |
| VILL | Villia | 1.89 | 238 | P | Pn | 03 06 21.4 | -0.7 | DRO | Drossia | 3.10 | 248 | *e*PN | Pn | 03 06 39.5 | +0.7 |
| VILL | Villia | 1.89 | 238 | *e*Pn | Pn | 03 06 21.7 | -0.4 | DRO | Drossia | 3.10 | 248 | P | Pn | 03 06 38.9 | +0.1 |
| VIL2 | Platees | 1.89 | 240 | *e*PN | Pn | 03 06 21.7 | -0.4 | DRO | Drossia | 3.10 | 248 | P | Pn | 03 06 38.9 | +0.1 |
| PLG | Polygyros | 1.89 | 310 | *e*PB | Pn | 03 06 22.1 | -0.1 | DRO | Drossia | 3.10 | 248 | *e*Pn | Pn | 03 06 39.5 | +0.7 |
| PLG | Polygyros | 1.89 | 310 | P | Pn | 03 06 21.9 | -0.3 | VLI | Veliai | 3.11 | 219 | *e*PN | Pn | 03 06 38.5 | -0.3 |
| PLG | Polygyros | 1.89 | 310 | P | Pn | 03 06 21.9 | -0.3 | VLI | Veliai | 3.11 | 219 | P | Pn | 03 06 38.5 | -0.3 |
| LKR | Lokris | 1.91 | 255 | *e*PN | Pn | 03 06 21.9 | -0.4 | VLI | Veliai | 3.11 | 219 | P | Pn | 03 06 38.5 | -0.3 |
| LKR | Lokris | 1.91 | 255 | P | Pn | 03 06 21.7 | -0.6 | CTKS | Kestanelik-??a | 3.18 | 49 | *e*PN | Pn | 03 06 40.4 | +0.6 |
| LKR | Lokris | 1.91 | 255 | *e*Pn | Pn | 03 06 21.9 | -0.4 | CTKS | Kestanelik-??a | 3.18 | 49 | *e*Pn | Pn | 03 06 40.4 | +0.6 |
| KAVA | Kavala | 1.93 | 341 | P | Pn | 03 06 22.3 | -0.3 | CTYL | Yal??k??y-??at | 3.21 | 43 | *e*PN | Pn | 03 06 41.1 | +0.8 |
| KAVA | Kavala | 1.93 | 341 | P | Pn | 03 06 22.3 | -0.3 | CTYL | Yal??k??y-??at | 3.21 | 43 | *e*Pn | Pn | 03 06 41.1 | +0.8 |
| KRBG | Karabiga-Canak | 1.93 | 50 | *e*PN | Pn | 03 06 22.3 | -0.4 | DNZL | Cakiroluk | 3.26 | 116 | *i* P | Pn | 03 06 37.5 | -3.6 |
| KRBG | Karabiga-Canak | 1.93 | 50 | *e*Pn | Pn | 03 06 22.3 | -0.4 | DNZL | Cakiroluk | 3.26 | 116 | P | Pn | 03 06 37.5 | -3.6 |
| AKHS | Akhisar | 1.94 | 98 | *i* P | Pn | 03 06 22.9 | +0.1 | BGKT | Bogazkoy | 3.30 | 52 | *e*PN | Pn | 03 06 42.1 | +0.6 |
| AKHS | | | | *i* S | Sg | 03 06 51.5 | -0.8 | BGKT | Bogazkoy | 3.30 | 52 | *e*Pn | Pn | 03 06 42.1 | +0.6 |
| AKHS | Akhisar | 1.94 | 98 | P | Pn | 03 06 22.9 | +0.1 | PDO | Prodromos | 3.30 | 261 | P | Pn | 03 06 41.8 | +0.3 |
| AKHS | | | | S | Sg | 03 06 51.5 | -0.8 | PDO | Prodromos | 3.30 | 261 | P | Pn | 03 06 41.8 | +0.3 |
| GONE | Gonen-Balikesi | 2.00 | 64 | *e*PN | Pn | 03 06 24.0 | +0.4 | ITM | Ithomi | 3.35 | 235 | *e*PN | Pn | 03 06 43.2 | +1.0 |
| GONE | Gonen-Balikesi | 2.00 | 64 | *e*Pn | Pn | 03 06 24.0 | +0.4 | ITM | Ithomi | 3.35 | 235 | *e*Pn | Pn | 03 06 43.2 | +1.0 |
| BALB | Balikesir | 2.02 | 76 | *e*PN | Pn | 03 06 24.3 | +0.5 | ISK | Istanbul-Kandi | 3.41 | 55 | *e*PN | Pn | 03 06 43.8 | +0.8 |
| BALB | Balikesir | 2.02 | 76 | *e*Pn | Pn | 03 06 24.3 | +0.5 | ISK | Istanbul-Kandi | 3.41 | 55 | *e*Pn | Pn | 03 06 43.8 | +0.8 |
| NAIG | Nisos Aigina | 2.03 | 226 | *e*PN | Pn | 03 06 23.6 | -0.4 | KYTH | Kithira | 3.42 | 213 | *e*PN | Pn | 03 06 43.5 | +0.3 |
| NAIG | Nisos Aigina | 2.03 | 226 | *e*Pn | Pn | 03 06 23.6 | -0.4 | KYTH | Kithira | 3.42 | 213 | P | Pn | 03 06 43.3 | +0.1 |
| RKY | Sarkoy-Tekirda | 2.06 | 42 | *e*PN | Pn | 03 06 24.5 | 0.0 | KYTH | Kithira | 3.42 | 213 | P | Pn | 03 06 43.3 | +0.1 |
| RKY | Sarkoy-Tekirda | 2.06 | 42 | *e*Pn | Pn | 03 06 24.5 | 0.0 | FNA | Florina | 3.45 | 299 | *e*PN | Pn | 03 06 45.0 | +1.4 |
| SART | Tekirdag | 2.07 | 42 | *i* P | Pn | 03 06 23.4 | -1.2 | FNA | Florina | 3.45 | 299 | *e*Pn | Pn | 03 06 45.0 | +1.4 |
| SART | Tekirdag | 2.07 | 42 | P | Pn | 03 06 23.4 | -1.2 | KLYT | Kilyos | 3.51 | 53 | *e*PN | Pn | 03 06 45.1 | +0.9 |
| APE | Apeiranthos | 2.11 | 176 | ⫴ *i*P | Sg | 03 07 01.9 | +4.3 | KLYT | Kilyos | 3.51 | 53 | *e*Pn | Pn | 03 06 45.2 | +0.9 |
| APE | Apeiranthos | 2.11 | 176 | *e*PN | Pn | 03 06 24.5 | -0.7 | ADVT | Abdulvahap | 3.61 | 68 | *e*PN | Pn | 03 06 46.9 | +1.2 |
| APE | Apeiranthos | 2.11 | 176 | P | Pn | 03 06 24.4 | -0.7 | ADVT | Abdulvahap | 3.61 | 68 | *e*Pn | Pn | 03 06 46.9 | +1.2 |
| APE | Apeiranthos | 2.11 | 176 | *e*Pn | Pn | 03 06 24.5 | -0.7 | CAVI | Cavuskoy | 3.62 | 72 | *e*PN | Pn | 03 06 47.2 | +1.4 |
| SERI | Serifos | 2.12 | 199 | *e*PN | Pn | 03 06 24.9 | -0.4 | CAVI | Cavuskoy | 3.62 | 72 | *e*Pn | Pn | 03 06 47.2 | +1.4 |
| SERI | Serifos | 2.12 | 199 | *e*Pn | Pn | 03 06 24.9 | -0.4 | HRT | Hereke | 3.70 | 62 | *e*PN | Pn | 03 06 47.2 | +1.2 |
| AXAR | Agios Charalam | 2.14 | 260 | *e*PB | Pn | 03 06 25.8 | +0.3 | HRT | Hereke | 3.70 | 62 | *e*Pn | Pn | 03 06 48.2 | +1.2 |
| AXAR | Agios Charalam | 2.14 | 260 | P | Pn | 03 06 25.4 | -0.1 | SILT | Sile | 3.84 | 58 | *e*PN | Pn | 03 06 50.3 | +1.4 |
| AXAR | | | | S | Sn | 03 06 52.9 | +0.9 | SILT | Sile | 3.84 | 58 | *e*Pn | Pn | 03 06 50.3 | +1.4 |
| AXAR | Agios Charalam | 2.14 | 260 | P | Pn | 03 06 25.4 | -0.1 | BORA | Eskisehir | 4.01 | 78 | *i* P | Pn | 03 06 51.6 | +0.3 |
| AXAR | Agios Charalam | 2.14 | 260 | *e*Pb | Pn | 03 06 25.8 | +0.3 | BORA | Eskisehir | 4.01 | 78 | P | Pn | 03 06 51.6 | +0.3 |
| AXAR | | | | S | Sn | 03 06 52.9 | +0.9 | GULT | Gulveren | 4.17 | 71 | *e*PN | Pn | 03 06 55.4 | +1.9 |
| LTK | Loutraki | 2.19 | 239 | *e*PN | Pn | 03 06 26.0 | -0.3 | GULT | Gulveren | 4.17 | 71 | *e*Pn | Pn | 03 06 55.4 | +1.9 |
| LTK | Loutraki | 2.19 | 239 | P | Pn | 03 06 26.0 | -0.3 | BARS | Barje | 4.51 | 325 | ⫴ *i*Pn | Pn | 03 06 59.4 | +1.2 |
| LTK | Loutraki | 2.19 | 239 | P | Pn | 03 06 26.0 | -0.3 | BOVS | Bovan | 5.23 | 330 | *e*Pn | Pn | 03 07 08.6 | +0.6 |
| HORT | Hortiatis | 2.24 | 310 | *e*PB | Pn | 03 06 27.4 | +0.4 | BOLS | Boljevac | 5.30 | 332 | *e*Pn | Pn | 03 07 08.6 | -0.4 |
| HORT | Hortiatis | 2.24 | 310 | P | Pn | 03 06 27.3 | +0.3 | TLB | Topalu | 5.77 | 20 | ⫴ *i*P | Pn | 03 07 15.1 | -0.2 |
| HORT | Hortiatis | 2.24 | 310 | *e*Pb | Pn | 03 06 27.4 | +0.4 | GRUS | Gruza | 5.85 | 325 | *e*Pn | Pn | 03 07 16.9 | +0.4 |
| MRMT | Marmara Adasi | 2.24 | 50 | *e*PN | Pn | 03 06 27.1 | +0.1 | IVAS | Ivanjica | 5.88 | 320 | *e*Pn | Pn | 03 07 17.8 | +0.8 |
| MRMT | Marmara Adasi | 2.24 | 50 | *e*Pn | Pn | 03 06 27.1 | +0.1 | KUBS | Kucevo | 5.91 | 334 | *e*Pn | Pn | 03 07 16.7 | -0.6 |
| SOH | Sokhos | 2.25 | 318 | *e*PB | Pn | 03 06 27.5 | +0.4 | ARR | Arges | 6.21 | 355 | ⫴ *i*P | Pn | 03 07 20.1 | -1.4 |
| SOH | Sokhos | 2.25 | 318 | P | Pn | 03 06 27.4 | +0.4 | VOIR | | 6.26 | 358 | ⫴ *i*P | Pn | 03 07 22.6 | +0.4 |
| SOH | Sokhos | 2.25 | 318 | *e*Pb | Pn | 03 06 27.5 | +0.4 | MLR | Muntele Rosu | 6.33 | 4 | ⫴ *i*P | Pn | 03 07 24.5 | +1.3 |
| EDC | Edincik | 2.26 | 58 | *e*PN | Pn | 03 06 27.4 | +0.2 | DVS | Divbare | 6.35 | 323 | *e*Pn | Pn | 03 07 22.9 | -0.5 |
| EDC | Edincik | 2.26 | 58 | *e*Pn | Pn | 03 06 27.4 | +0.2 | GZR | Gura Zlata | 6.50 | 344 | ⫴ *i*P | Pn | 03 07 25.6 | +0.1 |
| DESF | Desfina | 2.33 | 252 | *e*PN | Pn | 03 06 27.9 | -0.3 | PLOR | Plostina | 6.74 | 8 | ⫴ *i*P | Pn | 03 07 29.6 | +0.8 |
| DESF | Desfina | 2.33 | 252 | *e*Pn | Pn | 03 06 27.9 | -0.3 | VRI | Vrincioaia | 6.76 | 8 | ⫴ *i*P | Pn | 03 07 30.3 | +1.2 |
| DSF | Desfina | 2.33 | 252 | *e*PN | Pn | 03 06 28.0 | -0.2 | DOPR | Dopca | 6.79 | 0 | ⫴ *i*P | Pn | 03 07 31.1 | +1.7 |
| DSF | Desfina | 2.33 | 252 | P | Pn | 03 06 27.8 | -0.4 | BZS | Buzias | 7.00 | 338 | ⫴ *i*P | Pn | 03 07 32.5 | +0.2 |
| DSF | Desfina | 2.33 | 252 | *e*Pn | Pn | 03 06 28.0 | -0.2 | TESR | Tescani | 7.39 | 7 | ⫴ *i*P | Pn | 03 07 39.4 | +1.7 |
| AYDB | Zeytinkoy-Aydi | 2.34 | 121 | *e*PN | Pn | 03 06 28.8 | +0.4 | DRGR | | 7.85 | 347 | ⫴ *i*P | Pn | 03 07 52.6 | +8.5 |
| AYDB | Zeytinkoy-Aydi | 2.34 | 121 | *e*Pn | Pn | 03 06 28.8 | +0.4 | BURAR | Bucovina Array | 8.44 | 359 | ⫴ *i*P | Pn | 03 07 53.6 | +1.5 |
| THE | Thessaloniki | 2.34 | 309 | P | Pn | 03 06 28.7 | +0.4 | | | | | | | | |
| THE | Thessaloniki | 2.34 | 309 | P | Pn | 03 06 28.7 | +0.4 | | | | | | | | |
| AGG | Agios Georgios | 2.35 | 267 | *e*PN | Pn | 03 06 28.7 | +0.2 | | | | | | | | |
| AGG | Agios Georgios | 2.35 | 267 | P | Pn | 03 06 28.4 | -0.1 | | | | | | | | |
| AGG | | | | S | Sn | 03 06 58.5 | +1.1 | | | | | | | | |
| AGG | Agios Georgios | 2.35 | 267 | P | Pn | 03 06 28.4 | -0.1 | | | | | | | | |
| AGG | Agios Georgios | 2.35 | 267 | *e*Pn | Pn | 03 06 28.7 | +0.2 | | | | | | | | |
| AGG | | | | S | Sn | 03 06 58.5 | +1.1 | | | | | | | | |
| DID | Didima | 2.35 | 226 | *e*PN | Pn | 03 06 27.9 | -0.5 | | | | | | | | |
| DID | Didima | 2.35 | 226 | P | Pn | 03 06 28.0 | -0.5 | | | | | | | | |
| DID | Didima | 2.35 | 226 | P | Pn | 03 06 28.0 | -0.5 | | | | | | | | |
| SRS | Serrai | 2.36 | 326 | *e*PN | Pn | 03 06 28.6 | 0.0 | | | | | | | | |
| SRS | Serrai | 2.36 | 326 | P | Pn | 03 06 28.6 | 0.0 | | | | | | | | |

*ISCJB **16** 03:09:36.9±0.6,38°.17N±0′.04×37°.19E±0′.06,h11km, Error ellipse: s-maj=8.8km s-min=4.0km az=38.7*
*DDA **16** 03:09:36.3,38°.27N×37°.14E,h7km,Md2.6*
*ISK **16** 03:09:36.2,38°.09N×37°.39E,h10km,MD2.5*
*CSEM **16** 03:09:37.2±0.3,38°.13N×37°.26E,h15km,MD2.5, Error ellipse: s-maj=11.8km s-min=5.1km az=130.0*

**ISC 16 03:09:36.0**±0.9,**38°.18N**±0′.04×**37°.17E**±0′.04,**h11km**,**n15**, σ0.69/23,**Turkey**

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

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DARE | Darende-Malaty | 0.47 | 32 | *e*PG | Pg | 03 09 45.9 | +0.7 | | | | |
| DARE | | | | *e*SG | Sb | 03 09 53.5 | +0.2 | | | | |
| DARE | Darende-Malaty | 0.47 | 32 | *e*Pg | Pg | 03 09 45.9 | +0.7 | | | | |
| DARE | | | | *e*Sg | Sb | 03 09 53.5 | +0.2 | | | | |
| AKCD | Akcadag | 0.61 | 78 | *i* P | Pb | 03 09 48.7 | -0.1 | | | | |
| AKCD | | | | *i* S | Sb | 03 09 57.4 | 0.0 | | | | |
| AKCD | Akcadag | 0.61 | 78 | P | Pb | 03 09 48.7 | -0.1 | | | | |
| AKCD | | | | S | Sb | 03 09 57.4 | 0.0 | | | | |
| KMRS | Kahramanmaras | 0.70 | 198 | *e*PG | Pb | 03 09 50.1 | -0.2 | | | | |
| KMRS | | | | *e*SG | Sb | 03 10 00.3 | +0.4 | | | | |
| KMRS | Kahramanmaras | 0.70 | 198 | *e*Pg | Pb | 03 09 50.1 | -0.2 | | | | |
| KMRS | | | | *e*Sg | Sb | 03 10 00.4 | +0.4 | | | | |
| PINB | Pinarbasi | 0.78 | 310 | *i* P | Pg | 03 09 50.0 | -1.2 | | | | |
| PINB | Pinarbasi | 0.78 | 310 | P | Pg | 03 09 50.0 | -1.2 | | | | |
| AYKD | Aykdinkavak | 0.81 | 201 | P | Pn | 03 09 53.1 | -0.4 | | | | |
| ANDN | Andirin | 0.88 | 228 | *i* P | Pn | 03 09 54.7 | +0.2 | | | | |
| ANDN | | | | *i* S | Sb | 03 10 06.5 | +1.3 | | | | |
| ANDN | Andirin | 0.88 | 228 | P | Pn | 03 09 54.7 | +0.2 | | | | |
| ANDN | | | | S | Sb | 03 10 06.5 | +1.3 | | | | |
| SVSK | Karacayir | 1.74 | 356 | *e*PN | Pb | 03 10 08.7 | +0.6 | | | | |
| SVSK | Karacayir | 1.74 | 356 | *e*Pn | Pb | 03 10 08.7 | +0.6 | | | | |
| PTK | Pertek | 1.89 | 67 | *e*PN | Pn | 03 10 07.7 | -0.7 | | | | |
| PTK | Pertek | 1.89 | 67 | *e*Pn | Pn | 03 10 07.7 | -0.7 | | | | |

*JMA **16** 03:15:48.2±0.2,43°.55N×147°.62E,h16km,M3.5*
*SKHL **16** 03:15:49.6±0.0,43°.63N×147°.75E,h38km±6km,mb4.3/3*

**ISC 16 03:15:48.0**±2.7,**43°.61N**±0′.09×**147°.8E**±0′.1,**h28**km±15km, **n14**,σ1.907/25,**Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SHO | **Shikotan** | **0.75** | **290** | *e*P | **Pb** | **03 16 02.3** | **-0.1** |
| SHO | | | | AMB | AMB | 03 16 02.8 | |
| | 389nm,0.5s | | | | | | |
| SHO | | | | *i* S | **Sb** | **03 16 11.8** | **-0.4** |
| SHO | | | | A | A | 03 16 12.9 | |
| | 763nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.46** | **287** | *e*P | **Pn** | **03 16 12.4** | **-0.1** |
| YUK | | | | AMB | AMB | 03

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 9.1nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.76** | **267** | P | | **P** | **03 31 13.8** | **-0.8** |
| | 5.7nm,0.6s,baz=104,slow=8.0,SNR=35 | | | | | | | | |
| WRA | | | | S | | **S** | **03 36 58.2** | **-4.3** |
| | 1.8nm,0.9s,baz=101,slow=17,SNR=3.5 | | | | | | | | |
| **FORT** | **Forrest** | **46.41** | **250** | *e*P | | **P** | **03 31 41.5** | **-1.2** |
| | 22nm,0.7s | | | | | | | | |
| **WRKA** | **Warakurna** | **47.06** | **258** | P | | **P** | **03 31 47.2** | **-0.6** |
| | baz=48,SNR=8.6 | | | | | | | | |
| **MTN** | **Manton Dam** | **47.92** | **275** | P | | P | 03 31 46.0 | -8.3 |
| | baz=49,SNR=3.6 | | | | | | | | |
| **KNRA** | **Kununurra** | **49.09** | **270** | P | | **P** | **03 32 03.1** | **+0.1** |
| | baz=50,SNR=4.9 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.17** | **266** | P | | **P** | **03 32 18.1** | **-0.2** |
| | 4.0nm,0.8s,baz=162,slow=7.4,SNR=5.0 | | | | | | | | |
| FITZ | | | | S | | **S** | **03 39 00.8** | **+1.2** |
| | 4.1nm,1.0s,baz=303,slow=17,SNR=1.9 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **51.17** | **266** | P | | **P** | **03 32 20.0** | **+1.8** |
| | baz=52,SNR=3.8 | | | | | | | | |
| **SIJI** | **Sorong** | **53.07** | **289** | P | | **P** | **03 32 31.4** | **-0.6** |
| | 3.4nm,0.3s,baz=106,slow=20,SNR=3.7 | | | | | | | | |
| **VNDA** | **Vanda** | **53.62** | **185** | P | | **P** | **03 32 36.8** | **+1.9** |
| | 0.5nm,0.4s,baz=6.4,slow=8.5,SNR=7.0 | | | | | | | | |
| **VNDA** | **Vanda** | **53.62** | **185** | *e*P | | **P** | **03 32 36.7** | **+1.8** |
| **CASY** | **Casey** | **59.57** | **206** | *e*P | | **P** | **03 33 16.2** | **0.0** |
| | 4.2nm,0.5s | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **69.52** | **287** | *e*P | | **P** | **03 34 19.9** | **-0.4** |
| | 7.1nm,0.5s | | | | | | | | |
| **MNAI** | **Manna** | **76.83** | **271** | *e*P | | **P** | **03 35 02.2** | **0.0** |
| | 190nm,1.1s | | | | | | | | |
| **MAW** | **Mawson** | **77.14** | **200** | P | | **P** | **03 35 04.5** | **+1.6** |
| | 2.4nm,0.6s,baz=140,slow=5.9,SNR=13 | | | | | | | | |
| **KSRS** | **Korea Array** | **79.12** | **320** | P | | **P** | **03 35 13.9** | **0.0** |
| | 2.3nm,0.7s,baz=131,slow=5.7,SNR=7.4 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **79.97** | **346** | P | | **P** | **03 35 17.7** | **-0.4** |
| | 3.1nm,0.6s,baz=126,slow=7.5,SNR=3.8 | | | | | | | | |
| **NJ2** | **Nanjing** | **81.49** | **311** | *e*P | | **P** | **03 35 27.8** | **+1.3** |
| NJ2 | | | | PMZ | | | | | |
| | 20nm,0.6s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **81.65** | **327** | P | | **P** | **03 35 27.9** | **+0.8** |
| | 2.5nm,0.6s,baz=156,slow=4.3,SNR=5.0 | | | | | | | | |
| **ISA** | **Isabella** | **83.29** | **46** | *e*P | | **P** | **03 35 37.2** | **+1.6** |
| | 3.0nm,1.0s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.05** | **44** | P | | **P** | **03 35 43.7** | **-0.8** |
| | 0.7nm,0.7s,baz=219,slow=7.0,SNR=5.5 | | | | | | | | |
| **LDFC** | **Landfair** | **85.18** | **48** | *e*P | | **P** | **03 35 47.1** | **+2.0** |
| **TUC** | **Tucson** | **86.69** | **52** | *e*P | | **P** | **03 35 54.6** | **+2.3** |
| **GYA** | **Guiyang** | **87.50** | **301** | *e*P | | **P** | **03 35 57.3** | **+1.0** |
| GYA | | | | pP | | **pP** | **03 37 44.0** | **-1.4** |
| GYA | | | | sP | | **sP** | **03 38 32.4** | **-2.9** |
| GYA | | | | PP | | **PP** | **03 39 31.8** | **+1.5** |
| GYA | | | | SKS | | **SKSac** | **03 45 38.3** | **+0.9** |
| GYA | | | | S | | **S** | **03 45 57.0** | **+0.7** |
| GYA | | | | sS | | **sS** | **03 49 06.9** | **-3.7** |
| GYA | | | | PMZ | | | | | |
| | 20nm,1.0s | | | | | | | | |
| GYA | | | | PMZ | | | | | |
| | 120nm,5.8s | | | | | | | | |
| **I07A** | **Izee** | **87.76** | **39** | *e*P | | **P** | **03 35 58.6** | **+1.5** |
| | 7.8nm,1.1s | | | | | | | | |
| **BJI** | **Beijing** | **87.89** | **316** | P | | **P** | **03 35 59.9** | **+2.3** |
| BJI | | | | PMZ | | | | | |
| | 9.0nm,1.1s | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **87.91** | **40** | *e*P | | **P** | **03 35 59.2** | **+1.4** |
| | 58nm,2.7s | | | | | | | | |
| **G08A** | **Pilot Rock** | **88.81** | **38** | *e*P | | **P** | **03 36 03.3** | **+1.3** |
| | 3.0nm,0.7s | | | | | | | | |
| **MFID** | **Camas Ranch** | **89.50** | **41** | *e*P | | **P** | **03 36 06.5** | **+1.2** |
| | 2.8nm,0.8s | | | | | | | | |
| **KMI** | **Kunming** | **89.99** | **298** | P | | **P** | **03 36 08.8** | **+0.7** |
| KMI | | | | PMZ | | | | | |
| | 9.0nm,0.6s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | 33nm,3.1s | | | | | | | | |
| **TMUT** | **Trail Mountain** | **90.10** | **46** | *e*P | | **P** | **03 36 10.3** | **+1.9** |
| | 30nm,1.4s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.18** | **290** | P | | **P** | **03 36 10.2** | **+1.4** |
| | 0.9nm,0.3s,baz=140,slow=3.9,SNR=4.7 | | | | | | | | |
| **SPUT** | **South Promonto** | **90.39** | **44** | *e*P | | **P** | **03 36 11.1** | **+1.6** |
| | 49nm,2.9s | | | | | | | | |
| **HLID** | **Hailey** | **90.43** | **41** | *e*P | | **P** | **03 36 11.0** | **+1.4** |
| | 15nm,2.2s | | | | | | | | |
| **HVU** | **Hansel Valley** | **90.44** | **43** | *e*P | | **P** | **03 36 11.3** | **+1.6** |
| | 35nm,2.6s | | | | | | | | |
| **SRU** | **San Rafael** | **90.45** | **47** | *e*P | | **P** | **03 36 11.5** | **+1.6** |
| | 2.9nm,0.7s | | | | | | | | |
| **HRU** | **Hogsback Ridge** | **90.46** | **45** | *e*P | | **P** | **03 36 07.2** | **-2.6** |
| **TX31** | **Lajitas Ar. Si** | **90.51** | **58** | *e*P | | **P** | **03 36 11.9** | **+1.6** |
| **TXAR** | **Lajitas Array** | **90.51** | **58** | P | | **P** | **03 36 11.8** | **+1.5** |
| | 1.3nm,0.8s,baz=209,slow=6.7,SNR=16 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **91.27** | **315** | *e*P | | **P** | **03 36 15.5** | **+2.0** |
| HHC | | | | pP | | pP | 03 38 09.0 | +5.8 |
| HHC | | | | S | | **S** | **03 46 31.9** | **+2.0** |
| HHC | | | | PMZ | | | | | |
| | 41nm,0.7s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | 110nm,6.2s | | | | | | | | |
| **CD2** | **Chengdu** | **91.85** | **303** | *e*P | | **P** | **03 36 17.8** | **+1.5** |
| CD2 | | | | pP | | **pP** | **03 38 04.4** | **-1.7** |
| CD2 | | | | sP | | **sP** | **03 38 53.0** | **-2.8** |
| CD2 | | | | SKS | | **SKSac** | **03 46 04.0** | **+2.0** |
| CD2 | | | | S | | **ScS** | **03 46 38.0** | **+1.1** |
| CD2 | | | | sS | | **sS** | **03 49 50.3** | **-1.7** |
| CD2 | | | | SS | | **SS** | **03 53 02.1** | **+3.5** |
| CD2 | | | | PMZ | | | | | |
| | 10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | 120nm,5.2s | | | | | | | | |
| **ILAR** | **Eielson Array** | **92.71** | **13** | P | | **P** | **03 36 18.3** | **-1.1** |
| | 0.3nm,0.6s,baz=225,slow=5.7,SNR=6.3 | | | | | | | | |
| **LZH** | **Lanzhou** | **94.18** | **308** | *e*P | | **P** | **03 36 29.3** | **+2.3** |
| LZH | | | | pP | | **pP** | **03 38 17.3** | **+0.3** |
| LZH | | | | sP | | **sP** | **03 39 06.5** | **-0.1** |
| LZH | | | | PMZ | | | | | |
| | 23nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | 77nm,4.5s | | | | | | | | |
| **LAO** | **LASA Array** | **97.00** | **42** | *e*P | | **P** | **03 36 38.9** | **-0.5** |
| | 20nm,0.8s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **112.82** | **320** | PKiKP | | **PKiKP** | **03 41 39.6** | **-1.4** |
| | 0.5nm,0.4s,baz=27,slow=6.3,SNR=2.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **112.99** | **312** | PKiKP | | **PKiKP** | **03 41 40.6** | **-1.1** |
| | 0.2nm,0.3s,baz=106,slow=3.2,SNR=2.2 | | | | | | | | |
| **KSH** | **Kashi** | **116.05** | **304** | *e*PKP | | **PKPdf** | **03 41 46.6** | **-1.3** |
| KSH | | | | *es*PKP | | | 03 44 22.8 | | |
| KSH | | | | PKS | | **PKSdf** | **03 45 23.3** | **-1.4** |
| KSH | | | | SKS | | **SKSdf** | **03 48 12.8** | **-0.5** |
| KSH | | | | PPMZ | | | | | |
| | 59nm,5.2s | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **125.94** | **356** | PKP | | **PKPdf** | **03 42 05.8** | **+0.1** |
| | 9.5nm,0.9s,baz=70,slow=4.7,SNR=3.4 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **132.75** | **348** | PKP | | **PKPdf** | **03 42 18.4** | **-0.3** |
| | 1.8nm,0.6s,baz=14,slow=5.6,SNR=5.1 | | | | | | | | |
| **JMIC** | **Jan Mayen** | **133.40** | **4** | PKP | | **PKPdf** | **03 42 20.0** | **+0.1** |
| | 17nm,0.5s,baz=174,slow=5.6,SNR=2.7 | | | | | | | | |
| **FINES** | **FINESS Array B** | **139.33** | **341** | PKhKP | | PKPpre | 03 42 22.1 | | |
| | 3.2nm,0.9s,baz=88,slow=6.3,SNR=4.4 | | | | | | | | |
| FINES | | | | PKP | | **PKPdf** | **03 42 30.5** | **-0.6** |
| | 2.8nm,0.7s,baz=306,slow=2.6,SNR=5.9 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **142.93** | **351** | PKP | | PKPpre | 03 42 34.2 | | |
| | comp=Z,1.4nm,0.7s,baz=13,slow=3.4 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **142.93** | **351** | PKhKP | | PKPpre | 03 42 34.5 | | |
| | comp=Z,1.7nm,0.8s,baz=15,slow=2.4,SNR=7.9 | | | | | | | | |
| **NACGM** | **Naroch** | **144.10** | **334** | *e* | | PKPbc | 03 42 37.0 | -2.2 | |
| **AKASG** | **Malin Array Be** | **145.86** | **327** | PKPbc | | **PKPdf** | **03 42 43.7** | **+0.7** |
| | comp=Z,3.0nm,0.5s,baz=42,slow=4.2,SNR=18 | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **147.21** | **292** | PKPbc | | **PKPbc** | **03 42 50.2** | **+1.2** |
| | comp=Z,2.0nm,0.7s,baz=80,slow=6.1,SNR=4.5 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **148.38** | **306** | PKPbc | | **PKPbc** | **03 42 51.7** | **-0.2** |
| | comp=Z,1.3nm,0.7s,baz=143,slow=5.2,SNR=8.8 | | | | | | | | |
| BRTR | | | | PKPab | | **PKPab** | **03 42 56.5** | **-0.5** |
| | comp=Z,1.6nm,0.7s,baz=112,slow=3.0,SNR=7.8 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **148.39** | **293** | PKPbc | | **PKPbc** | **03 42 52.6** | **+0.5** |
| | comp=Z,3.3nm,0.4s,baz=76,slow=7.0,SNR=25 | | | | | | | | |
| **EIL** | **Elat** | **148.98** | **287** | PKPbc | | **PKPbc** | **03 42 52.9** | **-0.6** |
| | comp=Z,1.9nm,0.7s,baz=135,slow=4.3,SNR=3.7 | | | | | | | | |
| **OJC** | **Ojcow** | **150.43** | **334** | *e*PKP | | **PKPbc** | **03 42 56.5** | **+0.2** |
| **KSP** | **Ksiaz** | **151.18** | **339** | *e*PKP | | **PKPbc** | **03 42 58.5** | **+0.5** |
| **CLL** | **Collm** | **151.74** | **343** | *i*PKPbc | | **PKPbc** | **03 42 59.3** | **+0.1** |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| CLL | | | | *e*PKPab | | **PKPab** | **03 43 10.0** | **-0.3** |
| **GERES** | **GERESS Array B** | **153.74** | **340** | PKPbc | | **PKPbc** | **03 43 02.6** | **-1.2** |
| | comp=Z,0.3nm,0.5s,baz=30,slow=6.0,SNR=3.0 | | | | | | | | |
| GERES | | | | PKPab | | **PKPab** | **03 43 18.9** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=64,slow=6.7,SNR=2.9 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **164.62** | **13** | PKPab | | **PKPab** | **03 44 06.6** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=1.3,slow=3.8,SNR=3.6 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **168.45** | **186** | PKP | | **PKPdf** | **03 43 11.1** | **-0.5** |
| | comp=Z,0.4nm,0.8s,baz=177,slow=2.8,SNR=3.3 | | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **03 44 24.3** | **+0.4** |
| | comp=Z,0.1nm,0.5s,baz=186,slow=4.5,SNR=4.1 | | | | | | | | |

*ISCJB* ***16*** *03:27:46.9±0.1,51°.48N±0°.01×16°.15E±0°.02,h0km, mb4.1/28, Error ellipse: s-maj=1.7km s-min=1.5km az=178.5*

*MOS* ***16*** *03:27:47.7±1.2,51°.52N×15°.97E,h10km,mb4.3/11, Error ellipse: s-maj=5.9km s-min=3.7km az=73.4*

*LDG* ***16*** *03:27:48.4±0.1,51°.47N×16°.25E,h1km,Ml4.4/22, Error ellipse: s-maj=2.5km s-min=1.5km az=174.0,Suspected Mining induced.*

*CSEM* ***16*** *03:27:48.7±0.1,51°.50N×16°.17E,h2km,mb4.2/15, ML4.3/18, Ms4.2, Error ellipse: s-maj=2.2km s-min=2.0km az=144.0*

*NEIC* ***16*** *03:27:49.3±0.3,51°.45N×16°.05E,h5km,mb4.2/16, ML3.9(CSEM), Error ellipse: s-maj=5.5km s-min=4.0km az=155.0*

*IDC* ***16*** *03:27:49.3±0.4,51°.47N×16°.13E,h0km,mb4.1/14, mb1 4.1/21,mb1mx3.9/43,mbtmp4.0/21,ML3.7/7, Error ellipse: s-maj=8.7km s-min=5.4km az=110.0*

*PRU* ***16*** *03:27:50.1,51°.44N×16°.17E,h0km,Felt In Harrachov*

*BGR* ***16*** *03:27:50.7±0.4,51°.48N×16°.15E,h1km,ML3.9/5, Error ellipse: s-maj=4.4km s-min=4.4km az=114.0*

*BNS* ***16*** *03:27:51.3±0.5,51°.43N×16°.17E,h5km,ML3.7*

*UPP* ***16*** *03:27:52.6,51°.71N×15°.67E,h0km,ML3.3,Suspected Mining explosion.*

*VIE* ***16*** *03:27:52.4±0.4,51°.23N×16°.06E,h0km,mb3.5/19, ml3.5/18,ms4.2/3,Error ellipse: s-maj=2.6km s-min=2.0km az=1.0,Suspected Mining induced.*

**ISC 16 03:27:48.4±0.4,51°.48N±0°.02×16°.15E±0°.02,h0km,n434, σ1§61/577,mb4.2/28,26C-17D,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h | m | s | ISC |
| **KSP** | **Ksiaz** | **0.64** | **172** | *i* Pg | | **Pb** | **03** | **28** | **02.2** | **-0.2** |
| KSP | | | | *e*Sg | | **Sg** | **03** | **28** | **10.1** | **+1.2** |
| KSP | | | | *e* | | | 03 | 28 | 14.0 | |
| **KSP** | **Ksiaz** | **0.64** | **172** | *i*P | | **Pb** | **03** | **28** | **02.2** | **-0.2** |
| KSP | | | | *e* | | | 03 | 28 | 14.0 | |
| **KSP** | **Ksiaz** | **0.64** | **172** | P | | **Pb** | **03** | **28** | **02.2** | **-0.2** |
| **KSP** | **Ksiaz** | **0.64** | **172** | P | | **Pb** | **03** | **28** | **02.2** | **-0.2** |
| KSP | | | | *e*Sg | | **Sg** | **03** | **28** | **10.1** | **+1.2** |
| KSP | | | | *e*S | | **Sb** | **03** | **28** | **14.0** | **+2.1** |
| **UPC** | **Upice** | **0.97** | **185** | *e*P | | **Pb** | **03** | **28** | **08.4** | **+0.3** |
| UPC | | | | *e* | | | 03 | 28 | 20.9 | |
| UPC | | | | smax | | smax | | | | |
| | comp=N,1μm,0.4s | | | | | | | | | |
| UPC | | | | MLR | | MLR | | | | |
| | comp=Z,2μm,2.0s | | | | | | | | | |
| **UPC** | **Upice** | **0.97** | **185** | *e*PG | | **Pb** | **03** | **28** | **08.4** | **+0.3** |
| UPC | | | | *e*SG | | **Sg** | **03** | **28** | **20.9** | **+1.2** |
| | comp=Z,1μm,0.4s | | | | | | | | | |
| UPC | | | | AMS | | AMS | 03 | 28 | 40.0 | |
| | comp=Z,2μm,2.0s | | | | | | | | | |
| **UPC** | **Upice** | **0.97** | **185** | Pg | | **Pb** | **03** | **28** | **08.4** | **+0.3** |
| UPC | | | | Sg | | **Sg** | **03** | **28** | **20.9** | **+1.2** |
| | comp=Z,1μm,0.4s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.13** | **175** | *e*P | | **Pb** | **03** | **28** | **11.1** | **+0.2** |
| DPC | | | | *e* | | | 03 | 28 | 25.6 | |
| DPC | | | | smax | | smax | | | | |
| | comp=N,736nm,0.5s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.13** | **175** | *e*PG | | **Pb** | **03** | **28** | **11.1** | **+0.2** |
| DPC | | | | *e*SG | | **Sg** | **03** | **28** | **25.6** | **+0.9** |
| | comp=N,736nm,0.5s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.13** | **175** | Pg | | **Pb** | **03** | **28** | **11.1** | **+0.2** |
| DPC | | | | Sg | | **Sg** | **03** | **28** | **25.6** | **+0.9** |
| | comp=N,736nm,0.5s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **1.38** | **227** | *e*P | | **Pb** | **03** | **28** | **15.8** | **+0.8** |
| PVCC | | | | *e* | | | 03 | 28 | 34.7 | |
| PVCC | | | | smax | | smax | | | | |
| | comp=N,1μm,0.4s | | | | | | | | | |
| PVCC | | | | MLR | | MLR | | | | |
| | comp=Z,2μm,2.0s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **1.38** | **227** | *e*PG | | **Pb** | **03** | **28** | **15.8** | **+0.8** |
| PVCC | | | | *e*SG | | **Sn** | **03** | **28** | **34.7** | **+0.9** |
| | comp=Z,1μm,0.4s | | | | | | | | | |
| PVCC | | | | AMS | | AMS | 03 | 29 | 00.0 | |
| | comp=Z,2μm,2.0s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **1.38** | **227** | Pg | | **Pb** | **03** | **28** | **15.8** | **+0.8** |
| PVCC | | | | Sg | | **Sn** | **03** | **28** | **34.7** | **+0.9** |
| | comp=Z,1μm,0.4s | | | | | | | | | |
| **KRLC** | **Kraliky** | **1.46** | **164** | *e*P | | **Pg** | **03** | **28** | **16.6** | **+0.3** |
| KRLC | | | | *e* | | | 03 | 28 | 35.9 | |
| **KRLC** | **Kraliky** | **1.46** | **164** | *e*PG | | **Pg** | **03** | **28** | **16.6** | **+0.3** |
| KRLC | | | | *e*SG | | **Sb** | **03** | **28** | **35.9** | **+0.4** |
| **KRLC** | **Kraliky** | **1.46** | **164** | Pg | | **Pg** | **03** | **28** | **16.6** | **+0.3** |
| KRLC | | | | Sg | | **Sb** | **03** | **28** | **35.9** | **+0.4** |
| **BRG** | **Berggiesshubel** | **1.52** | **247** | PN | | **Pn** | **03** | **28** | **16.9** | **+0.1** |
| BRG | | | | PG | | **Pg** | **03** | **28** | **19.0** | **+1.6** |
| BRG | | | | SG | | **Sn** | **03** | **28** | **39.0** | **+1.8** |
| | comp=Z,474nm,0.5s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **247** | *e*Pn | | **Pn** | **03** | **28** | **16.8** | **+0.1** |
| | SNR=124 | | | | | | | | | |
| BRG | | | | *e*Pg | | **Pg** | **03** | **28** | **18.6** | **+1.1** |
| | SNR=7.9 | | | | | | | | | |
| BRG | | | | *e*Sg | | **Sn** | **03** | **28** | **39.1** | **+1.9** |
| | SNR=6.3 | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **247** | *e*P | | **Pn** | **03** | **28** | **16.8** | **0.0** |
| BRG | | | | *e* | | | 03 | 28 | 39.1 | |
| **BRG** | **Berggiesshubel** | **1.52** | **247** | *e*Pn | | **Pn** | **03** | **28** | **16.8** | **0.0** |
| BRG | | | | *e*Pg | | **Pg** | **03** | **28** | **18.6** | **+1.1** |
| BRG | | | | *e*Sg | | **Sn** | **03** | **28** | **39.1** | **+1.9** |
| **BRG** | **Berggiesshubel** | **1.52** | **247** | Pn | | **Pn** | **03** | **28** | **16.8** | **0.0** |
| | SNR=124 | | | | | | | | | |
| **RUE** | **Ruedersdorf** | **1.78** | **305** | *e*Pn | | **Pn** | **03** | **28** | **20.5** | **+0.2** |
| | SNR=55 | | | | | | | | | |
| RUE | | | | *e*Sg | | **Sg** | **03** | **28** | **48.1** | **+2.6** |
| | SNR=6.0 | | | | | | | | | |
| **RUE** | **Ruedersdorf** | **1.78** | **305** | *e*Pn | | **Pn** | **03** | **28** | **20.5** | **+0.2** |
| RUE | | | | *e*Sg | | **Sg** | **03** | **28** | **48.1** | **+2.6** |
| **RUE** | **Ruedersdorf** | **1.78** | **305** | Pn | | **Pn** | **03** | **28** | **20.5** | **+0.2** |
| | SNR=55 | | | | | | | | | |
| RUE | | | | Sg | | **Sg** | **03** | **28** | **48.1** | **+2.6** |
| | SNR=6.0 | | | | | | | | | |
| **PRA** | **Prague** | **1.78** | **218** | *e*P | | **Pn** | **03** | **28** | **20.7** | **+0.3** |
| PRA | | | | *e* | | | 03 | 28 | 44.7 | |
| PRA | | | | smax | | smax | | | | |
| | comp=N,487nm,0.7s | | | | | | | | | |
| PRA | | | | MLR | | MLR | | | | |
| | comp=Z,2μm,2.7s | | | | | | | | | |
| **PRA** | **Prague** | **1.78** | **218** | *e*PN | | **Pn** | **03** | **28** | **20.7** | **+0.3** |
| PRA | | | | *e*PG | | **Pg** | **03** | **28** | **22.9** | **+0.4** |
| PRA | | | | *e*SG | | **Sb** | **03** | **28** | **44.7** | **-0.1** |
| | comp=Z,487nm,0.7s | | | | | | | | | |
| PRA | | | | AMS | | AMS | 03 | 29 | 10.0 | |
| | comp=Z,2μm,2.7s | | | | | | | | | |
| **PRA** | **Prague** | **1.78** | **218** | Pn | | **Pn** | **03** | **28** | **20.7** | **+0.3** |
| **GOPC** | **GO Pecny, Ondr** | **1.79** | **210** | *e*P | | **Pn** | **03** | **28** | **21.1** | **+0.5** |
| GOPC | | | | *e* | | | 03 | 28 | 45.9 | |
| GOPC | | | | smax | | smax | | | | |
| | comp=N,269nm,0.6s | | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.79** | **210** | *e*PN | | **Pn** | **03** | **28** | **21.1** | **+0.5** |
| GOPC | | | | *e*PG | | **Pg** | **03** | **28** | **22.9** | **+0.2** |
| GOPC | | | | *e*SG | | **Sg** | **03** | **28** | **45.9** | **+0.1** |
| | comp=N,269nm,0.6s | | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.79** | **210** | Pn | | **Pn** | **03** | **28** | **21.1** | **+0.5** |
| **PRU** | **Pruhonice** | **1.81** | **215** | *e*P | | **Pn** | **03** | **28** | **21.1** | **+0.3** |
| PRU | | | | *e* | | | 03 | 28 | 47.1 | |
| PRU | | | | smax | | smax | | | | |
| | comp=N,140nm,0.4s | | | | | | | | | |
| PRU | | | | MLR | | MLR | | | | |
| | comp=Z,500nm,4.3s | | | | | | | | | |
| **PRU** | **Pruhonice** | **1.81** | **215** | *e*PN | | **Pn** | **03** | **28** | **21.1** | **+0.3** |
| PRU | | | | *e*PG | | **Pg** | **03** | **28** | **23.2** | **+0.2** |
| PRU | | | | *e*SG | | **Sg** | **03** | **28** | **47.1** | **+0.7** |
| | comp=Z,140nm,0.4s | | | | | | | | | |
| PRU | | | | AMS | | AMS | 03 | 29 | 00.0 | |
| | comp=Z,500nm,4.3s | | | | | | | | | |
| **PRU** | **Pruhonice** | **1.81** | **215** | Pn | | **Pn** | **03** | **28** | **21.1** | **+0.3** |
| **FBE** | **Freiberg** | **1.85** | **254** | *e*Pn | | **Pn** | **03** | **28** | **21.6** | **+0.3** |
| | SNR=66 | | | | | | | | | |
| FBE | | | | *e*Sg | | **Sg** | **03** | **28** | **48.9** | **+1.2** |
| | SNR=3.8 | | | | | | | | | |
| **FBE** | **Freiberg** | **1.85** | **254** | Pn | | **Pn** | **03** | **28** | **21.6** | **+0.3** |
| | SNR=66 | | | | | | | | | |
| FBE | | | | Sg | | **Sg** | **03** | **28** | **48.9** | **+1.2** |
| | SNR=3.8 | | | | | | | | | |
| **RAC** | **Raciborz** | **1.90** | **136** | *e*P | | **Pn** | **03** | **28** | **22.0** | **-0.1** |
| RAC | | | | *e* | | | 03 | 28 | 50.2 | |
| **RAC** | **Raciborz** | **1.90** | **136** | *e*P | | **Pn** | **03** | **28** | **22.0** | **-0.1** |
| **RAC** | **Raciborz** | **1.90** | **136** | *e*Pg | | **Pg** | **03** | **28** | **25.8** | **+1.0** |
| RAC | | | | *e*S | | **Sg** | **03** | **28** | **50.2** | **+0.7** |
| **GKP** | **Gorka Klasztor** | **1.92** | **20** | *e*Pn | | **Pb** | **03** | **28** | **23.4** | **-0.8** |
| GKP | | | | *e*Pg | | **Pg** | **03** | **28** | **27.9** | **+2.8** |
| GKP | | | | *e*PP | | PnPn | 03 | 28 | 31.3 | +1.7 |
| GKP | | | | *e*Sn | | **Sg** | **03** | **28** | **51.5** | **+1.6** |
| GKP | | | | *e*Sg | | Sb | 03 | 28 | 56.3 | +7.7 |
| **GKP** | **Gorka Klasztor** | **1.92** | **20** | *e*P | | **Pb** | **03** | **28** | **23.4** | **-0.8** |
| GKP | | | | *e* | | | 03 | 28 | 51.6 | |
| **GKP** | **Gorka Klasztor** | **1.92** | **20** | *e*P | | **Pb** | **03** | **28** | **23.4** | **-0.8** |
| **MORC** | **Moravsky Berou** | **1.92** | **152** | *e*P | | **Pn** | **03** | **28** | **22.6** | **+0.2** |
| MORC | | | | *e* | | | 03 | 28 | 48.3 | |
| **MORC** | **Moravsky Berou** | **1.92** | **152** | *i*P | | **Pn** | **03** | **28** | **22.7** | **+0.4** |
| **MORC** | **Moravsky Berou** | **1.92** | **152** | S | | **Sg** | **03** | **28** | **50.1** | **+0.1** |
| **MORC** | **Moravsky Berou** | **1.92** | **152** | *e*Pn | | **Pn** | **03** | **28** | **22.6** | **+0.2** |
| MORC | | | | *e*Sn | | **Sn** | **03** | **28** | **48.3** | **+1.1** |
| MORC | | | | *e*Sg | | **Sg** | **03** | **28** | **51.7** | **+1.8** |
| **MORC** | **Moravsky Berou** | **1.92** | **152** | *e*P | | **Pn** | **03** | **28** | **22.6** | **+0.2** |
| MORC | | | | *e*S | | **Sn** | **03** | **28** | **48.3** | **+1.1** |
| **CLL** | **Collm** | **1.98** | **266** | *e*Pn | | **Pn** | **03** | **28** | **23.2** | **0.0** |
| | SNR=207 | | | | | | | | | |
| CLL | | | | *e*Sg | | **Sg** | **03** | **28** | **53.7** | **+1.7** |
| | SNR=4.5 | | | | | | | | | |
| **CLL** | **Collm** | **1.98** | **266** | *e*P | | **Pn** | **03** | **28** | **23.0** | **-0.2** |
| CLL | | | | *i* | | | 03 | 28 | 53.9 | |
| **CLL** | **Collm** | **1.98** | **266** | *e*Pn | | **Pn** | **03** | **28** | **23.0** | **-0.2** |
| CLL | | | | *e*Pg | | **Pg** | **03** | **28** | **26.0** | **-0.3** |
| CLL | | | | *i* | | | 03 | 28 | 30.8 | |
| CLL | | | | *i* Sg | | **Sg** | **03** | **28** | **53.9** | **+1.9** |
| | comp=Z,352nm,0.6s | | | | | | | | | |
| **CLL** | **Collm** | **1.98** | **266** | *e*Pn | | **Pn** | **03** | **28** | **23.2** | **0.0** |
| CLL | | | | *e*Sg | | **Sg** | **03** | **28** | **53.7** | **+1.7** |
| **CLL** | **Collm** | **1.98** | **266** | Pn | | **Pn** | **03** | **28** | **23.2** | **0.0** |
| | SNR=207 | | | | | | | | | |
| CLL | | | | Sg | | **Sg** | **03** | **28** | **53.7** | **+1.7** |
| | SNR=4.5 | | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.07** | **142** | *e*SG | | **Sb** | **03** | **28** | **54.1** | **+0.9** |
| **OKC** | **Ostrava-Krasne** | **2.07** | **142** | Sg | | **Sb** | **03** | **28** | **54.1** | **+0.9** |
| **CHZP** | **Chorzow** | **2.15** | **122** | *e*Pn | | **Pn** | **03** | **28** | **24.9** | **-0.6** |
| CHZP | | | | *e*Pg | | **Pg** | **03** | **28** | **31.8** | **+2.1** |
| CHZP | | | | *e*SG | | **Sg** | **03** | **28** | **58.6** | **+1.1** |
| **VRAC** | **Vranov** | **2.19** | **172** | Pn | | **Pn** | **03** | **28** | **26.8** | **+0.8** |
| | comp=Z,13nm,0.3s,baz=346,slow=14,SNR=59 | | | | | | | | | |
| VRAC | | | | Lg | | Lg | 03 | 28 | 58.4 | |
| | comp=Z,34nm,0.3s,baz=262,slow=21,SNR=9.5 | | | | | | | | | |
| **VRAC** | **Vranov** | **2.19** | **172** | *i*P | | **Pn** | **03** | **28** | **26.8** | **+0.8** |
| **VRAC** | **Vranov** | **2.19** | **172** | S | | **Sg** | **03** | **29** | **00.3** | **+1.6** |
| **VRAC** | **Vranov** | **2.19** | **172** | P | | **Pn** | **03** | **28** | **26.8** | **+0.8** |
| VRAC | | | | *e*Sg | | **Sb** | **03** | **28** | **57.6** | **+1.1** |
| **TANN** | **Tannenbergstha** | **2.57** | **247** | *e*Pn | | **Pn** | **03** | **28** | **32.3** | **+1.0** |
| | SNR=133 | | | | | | | | | |
| TANN | | | | *e*Pg | | **Pg** | **03** | **28** | **39.2** | **+1.7** |
| | SNR=29 | | | | | | | | | |
| **TANN** | **Tannenbergstha** | **2.57** | **247** | Pn | | **Pn** | **03** | **28** | **32.3** | **+1.0** |
| | SNR=133 | | | | | | | | | |
| **OJC** | **Ojcow** | **2.63** | **117** | *e*Pn | | **Pn** | **03** | **28** | **30.9** | **-1.2** |
| OJC | | | | *e*Pg | | **Pg** | **03** | **28** | **38.0** | **-0.8** |
| OJC | | | | *e*Sg | | **Sg** | **03** | **29** | **13.9** | **+1.0** |
| **OJC** | **Ojcow** | **2.63** | **117** | *e*P | | **Pn** | **03** | **28** | **30.9** | **-1.2** |
| OJC | | | | *e* | | | 03 | 29 | 13.9 | |
| **OJC** | **Ojcow** | **2.63** | **117** | *e*P | | **Pn** | **03** | **28** | **30.9** | **-1.2** |
| **WERD** | **Werda** | **2.64** | **249** | *e

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SMOL | Smolenice | 3.08 164 | *e*P | | Pn | 03 28 39.4 | +1.2 |
| WET | Wettzell | 3.14 223 | *e*Pn | | Pn | 03 28 40.0 | +0.9 |
| | SNR=14 | | | | | | |
| WET | Wettzell | 3.14 223 | Pn | | Pn | 03 28 40.0 | +0.9 |
| | SNR=14 | | | | | | |
| LANS | Liptovska Anna | 3.15 136 | *e*P | | Pn | 03 28 39.8 | +0.5 |
| LANS | | | *e* | | | 03 29 27.5 | |
| LANS | Liptovska Anna | 3.15 136 | *e*PN | | Pn | 03 28 39.8 | +0.5 |
| LANS | | | *e*PG | | Pg | 03 28 47.8 | -1.0 |
| LANS | | | *e*SG | | Sg | 03 29 27.5 | -2.1 |
| LANS | Liptovska Anna | 3.15 136 | *e*P | | Pn | 03 28 39.8 | +0.5 |
| NIE | Niedzica | 3.36 126 | *e*Pn | | Pn | 03 28 43.0 | +0.9 |
| NIE | | | *e*Pg | | Pg | 03 28 51.9 | -0.8 |
| NIE | | | *e*Sg | | Sg | 03 29 36.4 | +0.2 |
| NIE | Niedzica | 3.36 126 | *e*P | | Pn | 03 28 43.0 | +0.9 |
| NIE | Niedzica | 3.36 126 | *e*P | | Pn | 03 28 43.0 | +0.9 |
| VYHS | Vyhne | 3.45 149 | *e*P | | Pn | 03 28 43.7 | +0.3 |
| VYHS | | | *e* | | | 03 29 35.4 | |
| VYHS | | | smax | | smax | | |
| | comp=N,65nm,1.3s | | | | | | |
| VYHS | Vyhne | 3.45 149 | *e*PN | | Pn | 03 28 43.7 | +0.3 |
| VYHS | | | *e*PG | | Pg | 03 28 53.8 | -0.7 |
| VYHS | | | *e*SG | | Sb | 03 29 35.4 | +2.6 |
| VYHS | Vyhne | 3.45 149 | *e*P | | Pn | 03 28 43.7 | +0.3 |
| ASSE | Asse, Remlinge | 3.46 283 | *e*Pn | | Pn | 03 28 44.6 | +1.1 |
| | SNR=7.1 | | | | | | |
| ASSE | Asse, Remlinge | 3.46 283 | Pn | | Pn | 03 28 44.6 | +1.1 |
| | SNR=7.1 | | | | | | |
| CONA | Conrad Observa | 3.56 183 | *i* Pn | | Pn | 03 28 46.3 | +1.4 |
| | SNR=22 | | | | | | |
| CONA | | | ⇓*i*Sg | | Sg | 03 29 42.5 | -0.1 |
| | comp=N,157nm,0.5s | | | | | | |
| CONA | Conrad Observa | 3.56 183 | Pn | | Pn | 03 28 46.3 | +1.4 |
| | SNR=22 | | | | | | |
| CONA | | | Sg | | Sg | 03 29 42.5 | -0.1 |
| | comp=N,157nm,0.5s | | | | | | |
| GRA1 | Grafenberg Arr | 3.62 242 | Pn | | Pn | 03 28 47.0 | +1.3 |
| | SNR=23 | | | | | | |
| GRF | Grafenberg Arr | 3.62 242 | *e*Pn | | Pn | 03 28 47.0 | +1.3 |
| | SNR=23 | | | | | | |
| GRFO | Grafenberg | 3.62 242 | *e*P | | Pn | 03 28 46.7 | +1.1 |
| GRFO | Grafenberg | 3.62 242 | *e*Pn | | Pn | 03 28 46.7 | +1.1 |
| GRFO | | | *e*Pg | | Pg | 03 28 59.2 | +1.6 |
| GRFO | | | *e*Sg | | Sg | 03 29 46.7 | +2.2 |
| GRFO | Grafenberg | 3.62 242 | *e*P | | Pn | 03 28 46.7 | +1.1 |
| CLZ | Clausthal | 3.62 278 | *e*Pn | | Pn | 03 28 47.1 | +1.4 |
| | SNR=14 | | | | | | |
| CLZ | Clausthal | 3.62 278 | Pn | | Pn | 03 28 47.1 | +1.4 |
| | SNR=14 | | | | | | |
| BSD | Bornholm Skovb | 3.72 349 | ⇑*i*P | | Pn | 03 28 46.4 | -0.6 |
| BSD | | | *i* S | | Sn | 03 29 28.4 | -3.1 |
| BSD | Bornholm Skovb | 3.72 349 | ⇑*i*P | | Pn | 03 28 46.4 | -0.6 |
| BSD | | | *i* S | | Sn | 03 29 28.4 | -3.1 |
| BSD | Bornholm Skovb | 3.72 349 | *i* P | | Pn | 03 28 46.4 | -0.6 |
| BSD | | | *i* S | | Sn | 03 29 28.4 | -3.1 |
| SOP | Sopron | 3.81 176 | ⇓*e*Pn | | Pn | 03 28 48.2 | 0.0 |
| MOA | Molln | 3.83 199 | ⇓*i*Pn | | Pn | 03 28 49.7 | +1.1 |
| | SNR=24 | | | | | | |
| MOA | | | ⇑*i*Sg | | Sg | 03 29 51.5 | +0.1 |
| | comp=N,193nm,0.6s | | | | | | |
| MOA | Molln | 3.83 199 | Pn | | Pn | 03 28 49.7 | +1.1 |
| | SNR=24 | | | | | | |
| MOA | | | Sg | | Sg | 03 29 51.5 | +0.1 |
| | comp=N,193nm,0.6s | | | | | | |
| STHS | Stebnicka Huta | 3.85 120 | *e*P | | Pn | 03 28 49.9 | +1.0 |
| STHS | Stebnicka Huta | 3.85 120 | *e*PN | | Pn | 03 28 49.9 | +1.0 |
| STHS | | | *e*PG | | Pg | 03 29 02.6 | +0.4 |
| STHS | | | *e*SG | | Sg | 03 29 52.0 | -0.1 |
| STHS | Stebnicka Huta | 3.85 120 | *e*P | | Pn | 03 28 49.9 | +1.0 |
| NRDL | Niedersach Rie | 3.87 288 | *e*Pn | | Pn | 03 28 50.6 | +1.5 |
| | SNR=12 | | | | | | |
| NRDL | Niedersach Rie | 3.87 288 | Pn | | Pn | 03 28 50.6 | +1.5 |
| | SNR=12 | | | | | | |
| ARSA | Arzberg | 4.25 186 | ⇓*i*Pn | | Pn | 03 28 55.6 | +1.2 |
| | SNR=11 | | | | | | |
| ARSA | | | ⇑*i*Sg | | Sg | 03 30 03.4 | -1.5 |
| | comp=N,114nm,0.6s | | | | | | |
| ARSA | Arzberg | 4.25 186 | Pn | | Pn | 03 28 55.6 | +1.2 |
| | SNR=11 | | | | | | |
| ARSA | | | Sg | | Sg | 03 30 03.4 | -1.5 |
| | comp=N,114nm,0.6s | | | | | | |
| PSZ | Piszkesteto | 4.31 144 | *e*P | | Pn | 03 28 56.2 | +1.0 |
| PSZ | Piszkesteto | 4.31 144 | ⇑*i*P | | Pn | 03 28 56.0 | +0.8 |
| PSZ | Piszkesteto | 4.31 144 | ⇑*e*Pn | | Pn | 03 28 56.5 | +1.3 |
| PSZ | Piszkesteto | 4.31 144 | *e*Pn | | Pn | 03 28 56.2 | +1.0 |
| PSZ | Piszkesteto | 4.31 144 | *e*P | | Pn | 03 28 56.2 | +1.0 |
| BSEG | Bad Segeberg | 4.32 307 | *e*Pn | | Pn | 03 28 54.5 | -0.8 |
| | SNR=16 | | | | | | |
| BSEG | Bad Segeberg | 4.32 307 | Pn | | Pn | 03 28 54.5 | -0.8 |
| | SNR=16 | | | | | | |
| RJOB | Jochberg | 4.33 212 | *e*Pn | | Pn | 03 28 57.8 | +2.3 |
| | SNR=28 | | | | | | |
| RJOB | Jochberg | 4.33 212 | Pn | | Pn | 03 28 57.8 | +2.3 |
| | SNR=28 | | | | | | |
| PKSG | | 4.34 159 | ⇑*e*pPn | | Pn | 03 28 56.6 | +1.0 |
| PKSG | | 4.34 159 | ⇑*e*P | | Pn | 03 28 56.6 | +1.0 |
| PKST | T"s | 4.40 163 | *e*pPn | | Pn | 03 28 58.2 | +1.8 |
| PKST | T"s | 4.40 163 | *e*P | | Pn | 03 28 58.2 | +1.8 |
| LUNU | Lund | 4.46 340 | P | | Pn | 03 28 56.1 | -1.2 |
| LUNU | | | S | | Sn | 03 29 47.4 | -2.5 |
| KWP | Kalwaria Pacla | 4.57 111 | *e*Pn | | Pn | 03 28 58.8 | +0.1 |
| KWP | | | *e*Pb | | Pg | 03 29 13.1 | -2.8 |
| KWP | | | *e*Pg | | Pg | 03 29 18.9 | +3.1 |
| KWP | | | *e*Sg | | Sg | 03 30 24.0 | +8.9 |
| KWP | Kalwaria Pacla | 4.57 111 | *e*P | | Pn | 03 28 58.8 | +0.1 |
| KWP | Kalwaria Pacla | 4.57 111 | *e*P | | Pn | 03 28 58.8 | +0.1 |
| KWP | Kalwaria Pacla | 4.57 111 | *e*Pg | | Pg | 03 29 19.0 | +3.1 |
| FUR | Furstenfeldbru | 4.58 226 | *e*Pn | | Pn | 03 29 00.3 | +1.4 |
| | SNR=5.4 | | | | | | |
| FUR | Furstenfeldbru | 4.58 226 | Pn | | Pn | 03 29 00.3 | +1.4 |
| | SNR=5.4 | | | | | | |
| KOLS | Kolonicke sedl | 4.68 121 | *e*P | | Pn | 03 29 00.4 | +0.1 |
| KOLS | Kolonicke sedl | 4.68 121 | *e*PN | | Pn | 03 29 00.4 | +0.1 |
| KOLS | | | *e*PG | | Pg | 03 29 20.4 | +2.3 |
| KOLS | | | *e*SG | | Sg | 03 30 17.0 | -1.7 |
| KOLS | Kolonicke sedl | 4.68 121 | *e*P | | Pn | 03 29 00.4 | +0.1 |
| KBA | Koelnbreinsper | 4.77 204 | ⇓*i*Pn | | Pn | 03 29 03.0 | +1.4 |
| | SNR=16 | | | | | | |
| KBA | | | ⇑*i*Sg | | Sg | 03 30 22.1 | +0.5 |
| | comp=N,64nm,0.5s | | | | | | |
| KBA | Koelnbreinsper | 4.77 204 | Pn | | Pn | 03 29 03.0 | +1.4 |
| | SNR=16 | | | | | | |
| KBA | | | Sg | | Sg | 03 30 22.1 | +0.5 |
| | comp=N,64nm,0.5s | | | | | | |
| BLEU | Blekinge | 4.84 358 | P | | Pn | 03 29 02.1 | -0.3 |
| BLEU | | | S | | Sn | 03 29 54.4 | -4.7 |
| SOKA | Soboth | 4.86 189 | ⇑*i*Pn | | Pn | 03 29 04.0 | +1.2 |
| SOKA | Soboth | 4.86 189 | Pn | | Pn | 03 29 04.0 | +1.2 |
| UZH | Uzhgorod | 4.87 123 | *e*P | | Pn | 03 29 04.4 | +1.5 |
| UZH | | | *e*S | | Sn | 03 30 01.4 | +1.4 |
| UZH | | | MLR | | MLR | | |
| | comp=Z,60nm,1.2s | | | | | | |
| UZH | Uzhgorod | 4.87 123 | *e*P | | Pn | 03 29 03.0 | +0.1 |
| UZH | Uzhgorod | 4.87 123 | *e*P | | Pn | 03 29 03.0 | +0.1 |
| UZH | | | *e*S | | Sn | 03 30 01.4 | +1.4 |
| | comp=Z,60nm,1.2s | | | | | | |
| PERS | Pernice | 4.89 188 | *i* Pn | | Pn | 03 29 05.3 | +2.1 |
| PERS | Pernice | 4.89 188 | Pn | | Pn | 03 29 05.3 | +2.1 |
| BJUU | Bjuv | 4.97 339 | P | | Pn | 03 29 02.7 | -1.4 |
| BEHE | Becsehely | 5.03 175 | *e*pPn | | Pn | 03 29 07.5 | +2.5 |
| BEHE | Becsehely | 5.03 175 | *e*P | | Pn | 03 29 07.5 | +2.5 |
| KOGS | Kog | 5.03 179 | *i* Pn | | Pn | 03 29 07.0 | +1.9 |
| KOGS | Kog | 5.03 179 | *i* Pn | | Pn | 03 29 07.0 | +1.9 |
| TNS | Taunus Mts | 5.04 259 | *e*Pn | | Pn | 03 29 06.1 | +0.9 |
| | SNR=19 | | | | | | |
| TNS | Taunus Mts | 5.04 259 | Pn | | Pn | 03 29 06.1 | +0.9 |
| | SNR=19 | | | | | | |
| OBKA | Obir | 5.08 193 | ⇓*i*Pn | | Pn | 03 29 07.4 | +1.5 |
| OBKA | | | ⇓*i*Sg | | Sg | 03 30 32.8 | +1.2 |
| | comp=Z,51nm,0.6s | | | | | | |
| OBKA | Obir | 5.08 193 | Pn | | Pn | 03 29 07.4 | +1.5 |
| OBKA | | | Sg | | Sg | 03 30 32.8 | +1.2 |
| | comp=Z,51nm,0.6s | | | | | | |
| WATA | Walderalm | 5.11 218 | *i* Pn | | Pn | 03 29 08.2 | +1.9 |
| | SNR=17 | | | | | | |
| WATA | Walderalm | 5.11 218 | Pn | | Pn | 03 29 08.2 | +1.9 |
| | SNR=17 | | | | | | |
| MYKA | Terra Mystica | 5.12 200 | ⇑*i*Pn | | Pn | 03 29 07.6 | +1.2 |
| MYKA | Terra Mystica | 5.12 200 | Pn | | Pn | 03 29 07.6 | +1.2 |
| WTTA | Wattenberg | 5.15 217 | ⇑*i*Pn | | Pn | 03 29 08.0 | +1.2 |
| | SNR=11 | | | | | | |
| WTTA | | | ⇑*i*Sg | | Sg | 03 30 34.4 | +0.8 |
| | comp=Z,77nm,0.5s | | | | | | |
| WTTA | Wattenberg | 5.15 217 | Pn | | Pn | 03 29 08.0 | +1.2 |
| | SNR=11 | | | | | | |
| WTTA | | | Sg | | Sg | 03 30 34.4 | +0.8 |
| | comp=Z,77nm,0.5s | | | | | | |
| DEL | Delary | 5.18 346 | P | | Pn | 03 29 06.3 | -0.8 |
| STU | Stuttgart | 5.23 242 | *e*P | | Pn | 03 29 07.4 | -0.4 |
| STU | | | *e* | | | 03 30 09.2 | |
| STU | | | pmax | | pmax | | |
| | comp=Z,26nm,0.6s | | | | | | |
| STU | Stuttgart | 5.23 242 | *e*Pn | | Pn | 03 29 07.4 | -0.4 |
| | comp=Z,26nm,0.6s | | | | | | |
| STU | | | *e*Pg | | Pg | 03 29 28.8 | +0.2 |
| STU | | | *e*Sn | | Sn | 03 30 09.2 | +0.4 |
| STU | | | *e*Sg | | Sg | 03 30 35.0 | -1.3 |
| STU | Stuttgart | 5.23 242 | *e*P | | Pn | 03 29 07.4 | -0.4 |
| | comp=Z,26nm,0.6s | | | | | | |
| STU | Stuttgart | 5.23 242 | *e*Pg | | Pg | 03 29 28.8 | +0.2 |
| STU | | | *e*S | | Sn | 03 30 09.2 | +0.4 |
| IBBN | Ibbenburen | 5.27 282 | *e*Pn | | Pn | 03 29 09.6 | +1.3 |
| | SNR=5.0 | | | | | | |
| IBBN | Ibbenburen | 5.27 282 | Pn | | Pn | 03 29 09.6 | +1.3 |
| | SNR=5.0 | | | | | | |
| LVV | L'vov | 5.28 105 | *e*P | | Pn | 03 29 10.0 | +1.5 |
| LVV | | | *e*S | | Sn | 03 30 08.0 | -2.0 |
| LVV | | | MLR | | MLR | | |
| | comp=Z,160nm,1.6s | | | | | | |
| LVV | L'vov | 5.28 105 | *e*P | | Pn | 03 29 10.0 | +1.5 |
| LVV | L'vov | 5.28 105 | *e*P | | Pn | 03 29 10.0 | +1.5 |
| | comp=Z,160nm,1.6s | | | | | | |
| LVV | | | *e*S | | Sn | 03 30 08.0 | -2.0 |
| MOTA | Moosalm | 5.29 221 | ⇑*i*Pn | | Pn | 03 29 10.0 | +1.2 |
| | SNR=26 | | | | | | |
| MOTA | | | ⇑*i*Sg | | Sg | 03 30 38.7 | +0.5 |
| | comp=Z,48nm,0.5s | | | | | | |
| MOTA | Moosalm | 5.29 221 | Pn | | Pn | 03 29 10.0 | +1.2 |
| | SNR=26 | | | | | | |
| MOTA | | | Sg | | Sg | 03 30 38.7 | +0.5 |
| | comp=Z,48nm,0.5s | | | | | | |
| ABTA | Abfaltersbach | 5.30 208 | ⇑*i*Pn | | Pn | 03 29 10.7 | +1.8 |
| | SNR=11 | | | | | | |
| ABTA | | | ⇑*i*Sg | | Sg | 03 30 39.3 | +0.6 |
| | comp=Z,70nm,0.7s | | | | | | |
| ABTA | Abfaltersbach | 5.30 208 | Pn | | Pn | 03 29 10.7 | +1.8 |
| | SNR=11 | | | | | | |
| ABTA | | | Sg | | Sg | 03 30 39.3 | +0.6 |
| | comp=Z,70nm,0.7s | | | | | | |
| RETA | Reutte | 5.32 223 | ⇑*i*Pn | | Pn | 03 29 09.5 | +0.4 |
| | SNR=9.4 | | | | | | |
| RETA | | | ⇓*i*Sg | | Sg | 03 30 41.7 | +2.5 |
| | comp=Z,33nm,0.6s | | | | | | |
| RETA | Reutte | 5.32 223 | Pn | | Pn | 03 29 09.5 | +0.4 |
| | SNR=9.4 | | | | | | |
| RETA | | | Sg | | Sg | 03 30 41.7 | +2.5 |
| | comp=Z,33nm,0.6s | | | | | | |
| TRPA | Tarpa | 5.32 127 | ⇓*i*P | | Pn | 03 29 09.0 | 0.0 |
| TRPA | Tarpa | 5.32 127 | *e*SKKPdf | | Pn | 03 29 09.0 | 0.0 |
| TRPA | Tarpa | 5.32 127 | *e*P | | Pn | 03 29 09.0 | 0.0 |
| KOE | Koeppel | 5.43 262 | *e*Pn | | Pn | 03 29 11.6 | +1.1 |
| KOE | Koeppel | 5.43 262 | Pn | | Pn | 03 29 11.6 | +1.1 |
| FETA | Feichten | 5.70 221 | ⇓*i*Pn | | Pn | 03 29 15.4 | +1.0 |
| | SNR=6.2 | | | | | | |
| FETA | | | ⇓*i*Sg | | Sg | 03 30 53.0 | +1.6 |
| | comp=Z,22nm,0.5s | | | | | | |
| FETA | Feichten | 5.70 221 | Pn | | Pn | 03 29 15.4 | +1.0 |
| | SNR=6.2 | | | | | | |
| FETA | | | Sg | | Sg | 03 30 53.0 | +1.6 |
| | comp=Z,22nm,0.5s | | | | | | |
| BGG | Burgeitz | 5.73 261 | *e*Pn | | Pn | 03 29 15.3 | +0.7 |
| BGG | Burgeitz | 5.73 261 | Pn | | Pn | 03 29 15.3 | +0.7 |
| OSKU | Oskarshamn | 5.73 360 | P | | Pn | 03 29 14.5 | -0.1 |
| JAVS | Javornik | 5.76 195 | *i* Pn | | Pn | 03 29 15.9 | +0.8 |
| WTSB | Winterswijk | 5.84 278 | *e*S | | Sg | 03 30 50.3 | -5.4 |
| BYXU | Byxelkrok | 5.85 5 | P | | Pn | 03 29 16.5 | +0.3 |
| DAVA | Damuels | 5.86 227 | ⇓*i*Pn | | Pn | 03 29 17.0 | +0.4 |
| | SNR=5.7 | | | | | | |
| DAVA | Damuels | 5.86 227 | Pn | | Pn | 03 29 17.0 | +0.4 |
| | SNR=5.7 | | | | | | |
| FABU | Falkenberg | 5.89 341 | P | | Pn | 03 29 15.7 | -1.1 |
| STB | Steinbach | 5.94 265 | *e*Pn | | Pn | 03 29 19.1 | +1.5 |
| STB | Steinbach | 5.94 265 | Pn | | Pn | 03 29 19.1 | +1.5 |
| BFO | Black Forest | 5.96 241 | *e*P | | Pn | 03 29 17.5 | -0.3 |
| BFO | | | *e* | | | 03 30 26.5 | |
| BFO | | | pmax | | pmax | | |
| | comp=Z,21nm,0.6s | | | | | | |
| BFO | Black Forest | 5.96 241 | *e*Pn | | Pn | 03 29 17.5 | -0.3 |
| | comp=Z,21nm,0.6s | | | | | | |
| BFO | | | *e*Pg | | Pg | 03 29 43.1 | +0.7 |
| BFO | | | *e*Sn | | Sn | 03 30 26.5 | -0.2 |
| BFO | | | *e*Sg | | Sg | 03 30 59.4 | -0.2 |
| BFO | Black Forest | 5.96 241 | *e*P | | Pn | 03 29 17.5 | -0.3 |
| | comp=Z,21nm,0.6s | | | | | | |
| BFO | Black Forest | 5.96 241 | *e*Pg | | Pg | 03 29 43.1 | +0.7 |
| BFO | | | *e*S | | Sn | 03 30 26.5 | -0.2 |
| ASPU | Aespoe | 5.96 2 | P | | Pn | 03 29 17.8 | 0.0 |
| GNOU | Gnosjoe | 5.99 347 | P | | Pn | 03 29 17.6 | -0.6 |
| BOJS | Bojanci | 6.01 186 | *i* Pn | | Pn | 03 29 20.2 | +1.8 |
| BMR | Baia Mare | 6.11 126 | ⇓*i*P | | Pn | 03 29 20.8 | +1.0 |
| HILG | Hillesheim | 6.11 263 | *e*Pn | | Pn | 03 29 21.1 | +1.2 |
| HILG | Hillesheim | 6.11 263 | Pn | | Pn | 03 29 21.1 | +1.2 |
| EKSU | Eksjoe | 6.13 356 | P | | Pn | 03 29 19.9 | -0.2 |
| VSTU | Vaestervik | 6.20 2 | P | | Pn | 03 29 20.9 | -0.2 |
| DAVOX | Davos/Dischmat | 6.25 224 | Pn | | Pn | 03 29 21.7 | -0.2 |
| | comp=Z,1.3nm,0.3s,baz=23,slow=14,SNR=27 | | | | | | |
| DAVOX | | | Sn | | Sn | 03 30 33.5 | -0.6 |
| | comp=Z,2.1nm,0.3s,baz=163,slow=19,SNR=2.9 | | | | | | |
| DAVOX | | | Lg | | Lg | 03 31 06.8 | |
| | comp=Z,3.0nm,0.3s,baz=322,slow=18,SNR=5.0 | | | | | | |
| KLL | Kalltalsperre | 6.26 266 | *e*Pn | | Pn | 03 29 23.1 | +1.1 |
| KLL | Kalltalsperre | 6.26 266 | Pn | | Pn | 03 29 23.1 | +1.1 |
| SIRR | Siria | 6.35 143 | ⇑*i*P | | Pn | 03 29 24.0 | +0.8 |
| DRGR | | 6.36 135 | ⇑*i*P | | Pn | 03 29 23.8 | +0.4 |
| MEM | Membach | 6.46 266 | PN | | Pn | 03 29 26.2 | +1.6 |
| HGN | Heimansgroeve | 6.48 268 | eS | | Sb | 03 31 01.2 | +1.4 |
| BORU | Boraas | 6.48 344 | P | | Pn | 03 29 24.4 | -0.5 |
| CDF | Champ du Feu | 6.50 245 | *e*Pn | | Pn | 03 29 24.4 | -0.9 |
| CDF | | | *e*Sg | | Sg | 03 31 13.7 | -3.3 |
| | comp=Z,242nm,1.2s | | | | | | |
| CDF | Champ du Feu | 6.50 245 | *e*P | | Pn | 03 29 24.4 | -0.9 |
| CDF | Champ du Feu | 6.50 245 | *e*Pn | | Pn | 03 29 24.4 | -0.9 |
| CDF | | | *e*Sg | | Sg | 03 31 13.7 | -3.3 |
| CDF | Champ du Feu | 6.50 245 | *e*Pn | | Pn | 03 29 24.4 | -0.9 |
| WLF | Walferdange | 6.62 258 | PN | | Pn | 03 29 28.7 | +1.7 |
| WLF | Walferdange | 6.62 258 | *e*P | | Pn | 03 29 27.2 | +0.3 |
| WLF | | | *e* | | | 03 30 43.3 | |
| WLF | Walferdange | 6.62 258 | *e*Pn | | Pn | 03 29 27.2 | +0.3 |
| WLF | | | *e*Pg | | Pg | 03 29 52.1 | -3.1 |
| WLF | | | *e*Sn | | Sn | 03 30 43.3 | +0.2 |
| WLF | | | *e*Sg | | Sg | 03 31 21.2 | +0.2 |
| WLF | Walferdange | 6.62 258 | *e*P | | Pn | 03 29 27.2 | +0.3 |
| WLF | | | *e*S | | Sn | 03 30 43.3 | +0.2 |
| TUE | Stuetta | 6.72 224 | *e*Pn | | Pn | 03 29 28.7 | +0.3 |
| | comp=Z,7.3nm,0.6s | | | | | | |
| TUE | Stuetta | 6.72 224 | *e*Pn | | Pn | 03 29 28.7 | +0.3 |
| | comp=Z,7.3nm,0.6s | | | | | | |
| LNKU | Linkoeping | 6.77 357 | P | | Pn | 03 29 28.4 | -0.5 |
| FKPU | Falk | 6.84 349 | P | | Pn | 03 29 29.8 | -0.1 |
| BZS | Buzias | 6.89 146 | ⇑*i*P | | Pn | 03 29 33.0 | +2.4 |
| ARCR | ARCALIA | 6.93 126 | ⇑*i*P | | Pn | 03 29 32.9 | +1.7 |
| BCLA | Clavier | 6.94 265 | PN | | Pn | 03 29 33.0 | +1.8 |
| BURAR | Bucovina Array | 7.05 120 | ⇑*i*P | | Pn | 03 29 33.3 | +0.4 |
| HINF | Hinteralfeld | 7.06 242 | *e*Pn | | Pn | 03 29 31.2 | -1.8 |
| HINF | | | *e*Sg | | Sg | 03 31 31.1 | -3.9 |
| | comp=Z,123nm,1.0s | | | | | | |
| HINF | Hinteralfeld | 7.06 242 | *e*P | | Pn | 03 29 31.2 | -1.8 |
| HINF | Hinteralfeld | 7.06 242 | *e*Pn | | Pn | 03 29 31.2 | -1.8 |
| HINF | | | *e*Sg | | Sg | 03 31 31.1 | -3.9 |
| IIGN | Ignalina | 7.16 53 | *e*P | | Pn | 03 29 35.5 | +1.3 |
| IIGN | | | IAmb | | IAmb | 03 30 13.4 | |
| | comp=Z,10nm,0.8s | | | | | | |
| IIGN | Ignalina | 7.16 53 | *e*P | | Pn | 03 29 35.5 | +1.3 |
| ISAL | Salakas | 7.22 51 | *e*P | | Pn | 03 29 34.7 | -0.4 |
| ISAL | | | IAmb | | IAmb | 03 30 15.4 | |
| | comp=Z,7.3nm,0.4s | | | | | | |
| ISAL | Salakas | 7.22 51 | *e*P | | Pn | 03 29 34.7 | -0.4 |
| HAU | Haudompre | 7.24 245 | *e*Pn | | Pn | 03 29 33.8 | -1.6 |
| HAU | | | *e*Sg | | Sg | 03 31 36.5 | -4.3 |
| | comp=Z,121nm,1.1s | | | | | | |
| HAU | Haudompre | 7.24 245 | *e*P | | Pn | 03 29 33.8 | -1.6 |
| HAU | Haudompre | 7.24 245 | *e*Pn | | Pn | 03 29 33.8 | -1.6 |
| HAU | | | *e*Sg | | Sg | 03 31 36.5 | -4.3 |
| HAU | Haudompre | 7.24 245 | *e*Pn | | Pn | 03 29 33.8 | -1.6 |
| NACGM | Naroch | 7.25 58 | *e* | | Pg | 03 30 08.0 | +0.8 |
| GIVF | Givet | 7.31 264 | *e*Pn | | Pn | 03 29 34.9 | -1.5 |
| GIVF | | | *e*Sg | | Sg | 03 31 39.0 | -4.1 |
| | comp=Z,110nm,1.0s | | | | | | |
| GIVF | Givet | 7.31 264 | *e*P | | Pn | 03 29 34.9 | -1.5 |
| GIVF | Givet | 7.31 264 | *e*Pn | | Pn | 03 29 34.9 | -1.5 |
| GIVF | | | *e*Sg | | Sg | 03 31 39.0 | -4.1 |
| GIVF | Givet | 7.31 264 | *e*Pn | | Pn | 03 29 34.9 | -1.5 |
| PAGF | Fort de Pagny | 7.33 251 | *e*Pn | | Pn | 03 29 35.5 | -1.1 |
| PAGF | | | *e*Sg | | Sg | 03 31 39.4 | -4.2 |
| | comp=Z,44nm,1.1s | | | | | | |
| PAGF | Fort de Pagny | 7.33 251 | *e*Pn | | Pn | 03 29 35.5 | -1.1 |
| PAGF | | | *e*Sg | | Sg | 03 31 39.4 | -4.2 |
| PAGF | Fort de Pagny | 7.33 251 | *e*Pn | | Pn | 03 29 35.5 | -1.1 |
| IZAR | Zarasai | 7.37 51 | *e*P | | Pn | 03 29 36.1 | -1.0 |
| IZAR | | | IAmb | | IAmb | 03 30 18.5 | |
| | comp=Z,8.2nm,0.8s | | | | | | |
| IZAR | Zarasai | 7.37 51 | *e*P | | Pn | 03 29 36.1 | -1.0 |
| IDID | Didziasalis | 7.40 55 | *e*P | | Pn | 03 29 35.5 | -2.1 |
| IDID | | | IAmb | | IAmb | 03 30 19.9 | |
| | comp=Z,12nm,1.2s | | | | | | |
| IDID | Didziasalis | 7.40 55 | *e*P | | Pn | 03 29 35.5 | -2.1 |
| DOU | Dourbes | 7.46 264 | PN | | Pn | 03 29 41.0 | +2.7 |
| DOU | | | SG | | Sg | 03 31 58.1 | +10 |
| | comp=N,12nm,0.0s | | | | | | |
| GZR | Gura Zlata | 7.51 142 | ⇓*i*P | | Pn | 03 29 41.1 | +1.9 |
| MICGM | Minsk | 7.70 62 | *e*P | | Pg | 03 30 14.0 | -1.8 |
| BAIF | Baives | 7.71 264 | *e*Pn | | Pn | 03 29 40.1 | -1.7 |
| BAIF | | | *e*Sg | | Sg | 03 31 51.3 | -4.5 |
| | comp=N,114nm,1.3s | | | | | | |
| BAIF | Baives | 7.71 264 | *e*P | | Pn | 03 29 40.1 | -1.7 |
| BAIF | Baives | 7.71 264 | *e*Pn | | Pn | 03 29 40.1 | -1.7 |
| BAIF | | | *e*Sg | | Sg | 03 31 51.3 | -4.5 |
| BAIF | Baives | 7.71 264 | *e*Pn | | Pn | 03 29 40.1 | -1.7 |
| MEZF | Maizieres J'vi | 7.75 252 | *e*Pn | | Pn | 03 29 40.6 | -1.8 |
| | baz=70 | | | | | | |
| MEZF | | | *e*Sg | | Sg | 03 31 52.7 | -4.4 |
| | comp=N,162nm,1.3s | | | | | | |
| MEZF | Maizieres J'vi | 7.75 252 | *e*Pn | | Pn | 03 29 40.6 | -1.8 |
| MEZF | | | *e*Sg | | Sg | 03 31 52.7 | -4.4 |
| MEZF | Maizieres J'vi | 7.75 252 | *e*Pn | | Pn | 03 29 40.6 | -1.8 |
| SFTF | Sexfontaines | 7.90 250 | *e*Pn | | Pn | 03 29 42.7 | -1.7 |
| SFTF | | | *e*Sg | | Sg | 03 31 57.0 | -4.8 |
| | comp=N,275nm,1.5s | | | | | | |
| SFTF | Sexfontaines | 7.90 250 | *e*Pn | | Pn | 03 29 42.7 | -1.7 |
| SFTF | | | *e*Sg | | Sg | 03 31 57.0 | -4.8 |
| SFTF | Sexfontaines | 7.90 250 | *e*Pn | | Pn | 03 29 42.7 | -1.7 |
| CABF | La Chapelle | 8.21 238 | *e*Pn | | Pn | 03 29 47.4 | -1.4 |
| CABF | | | *e*Sg | | Sg | 03 32 06.9 | -4.9 |
| | comp=N,174nm,1.2s | | | | | | |
| CABF | La Chapelle | 8.21 238 | *e*P | | Pn | 03 29 47.4 | -1.4 |
| CABF | La Chapelle | 8.21 238 | *e*Pn | | Pn | 03 29 47.4 | -1.4 |
| CABF | | | *e*Sg | | Sg | 03 32 06.9 | -4.9 |
| CABF | La Chapelle | 8.21 238 | *e*Pn | | Pn | 03 29 47.4 | -1.4 |
| DOPR | Dopca | 8.22 128 | ⇓*i*P | | Pn | 03 29 59.0 | +10 |
| KIEV | Kiev | 8.26 90 | *i* P | | Pn | 03 29 48.1 | -1.2 |
| KIEV | | | pmax | | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | |
| KIEV | Kiev | 8.26 90 | *e*Pn | | Pn | 03 29 48.5 | -0.9 |
| | comp=Z,20nm,0.5s | | | | | | |
| KIEV | | | *e*Pg | | Pg | 03 30 23.4 | -3.1 |
| KIEV | | | *e*Sn | | Sn | 03 31 20.9 | -2.4 |
| KIEV | Kiev | 8.26 90 | *i* P | | Pn | 03 29 48.1 | -1.2 |
| | comp=Z,18nm,0.6s | | | | | | |
| KIEV | Kiev | 8.26 90 | *e*Pn | | Pn | 03 29 48.5 | -0.9 |
| | comp=Z,20nm,0.5s | | | | | | |
| AKASG | Malin Array Be | 8.27 90 | Pn | | Pn | 03 29 47.9 | -1.6 |
| | comp=Z,5.8nm,0.3s,baz=280,slow=12,SNR=27 | | | | | | |
| AKASG | | | Sn | | Sn | 03 31 16.6 | -6.9 |
| | comp=Z,4.1nm,0.3s,baz=266,slow=25,SNR=6.3 | | | | | | |
| AKASG | | | Lg | | Lg | 03 32 15.1 | |
| | comp=Z,0.8nm,0.3s,baz=272,slow=26,SNR=4.2 | | | | | | |
| LPL | La Plagne | 8.64 230 | *e*Pn | | Pn | 03 29 54.0 | -0.8 |
| LPL | | | *e*Sg | | Sg | 03 32 20.0 | -5.6 |
| | comp=Z,50nm,1.2s | | | | | | |
| LPL | La Plagne | 8.64 230 | *e*P | | Pn | 03 29 54.0 | -0.8 |
| LPL | La Plagne | 8.64 230 | *e*Pn | | Pn | 03 29 54.0 | -0.8 |
| LPL | | | *e*Sg | | Sg | 03 32 20.0 | -5.6 |
| LPL | La Plagne | 8.64 230 | *e*Pn | | Pn | 03 29 54.0 | -0.8 |
| LPG | La Plagne | 8.64 230 | *e*Pn | | Pn | 03 29 54.0 | -0.9 |
| LPG | | | *e*Sg | | Sg | 03 32 20.5 | -5.3 |
| | comp=Z,66nm,1.1s | | | | | | |
| LPG | La Plagne | 8.64 230 | *e*P | | Pn | 03 29 54.0 | -0.9 |
| LPG | La Plagne | 8.64 230 | *e*Pn | | Pn | 03 29 54.0 | -0.9 |
| LPG | | | *e*Sg | | Sg | 03 32 20.5 | -5.3 |
| LPG | La Plagne | 8.64 230 | *e*Pn | | Pn | 03 29 54.0 | -0.9 |
| HFS | Hagfors | 8.79 352 | Pn | | Pn | 03 29 55.1 | -1.4 |
| | comp=Z,0.6nm,0.3s,baz=162,slow=14,SNR=31 | | | | | | |
| HFS | | | Sn | | Sn | 03 31 30.8 | -5.4 |
| | comp=Z,0.4nm,0.3s,baz=171,slow=23,SNR=3.2 | | | | | | |
| BNI | Bardonecchia | 9.01 228 | *e*P | | Pn | 03 30 00.7 | +0.9 |
| BNI | Bardonecchia | 9.01 228 | *e*Pn | | Pn | 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **LMR** | **La Mourre** | **10.44** | **222** | *e*Pn | | **Pn** | **03 30 18.9** | **-0.3** |
| **TCF** | **Toulx Ste Croi** | **10.54** | **246** | *e*Pn | | **Pn** | **03 30 18.7** | **-2.0** |
| TCF | | | | *e*Sg | | Sn | 03 33 19.4 | +60 |
| | comp=Z,53nm,1.2s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **10.54** | **246** | *e*P | | **Pn** | **03 30 18.7** | **-2.0** |
| **TCF** | **Toulx Ste Croi** | **10.54** | **246** | *e*Pn | | **Pn** | **03 30 18.7** | **-2.0** |
| TCF | | | | *e*Sg | | Sn | 03 33 19.4 | +60 |
| **FINES** | **FINESS Array B** | **11.38** | **25** | Pn | | **Pn** | **03 30 29.5** | **-2.5** |
| | comp=Z,0.9nm,0.3s,baz=208,slow=12,SNR=23 | | | | | | | |
| FINES | | | | Sn | | Sn | 03 32 31.0 | -8.8 |
| | comp=Z,0.7nm,0.3s,baz=215,slow=22,SNR=4.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **11.38** | **25** | *e*P | | **Pn** | **03 30 30.4** | **-1.6** |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **11.38** | **25** | *e*P | | **Pn** | **03 30 30.4** | **-1.6** |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **12.14** | **296** | Pn | | Pn | 03 30 38.8 | -3.7 |
| | baz=100,slow=14,SNR=15 | | | | | | | |
| **ESK** | **Eskdalemuir** | **12.17** | **296** | *e*P | | **Pn** | **03 30 40.0** | **-2.8** |
| **ESK** | **Eskdalemuir** | **12.17** | **296** | *e*Pn | | **Pn** | **03 30 40.0** | **-2.8** |
| **OBN** | **Obninsk** | **12.73** | **65** | *i* P | | Pn | 03 30 46.6 | -3.9 |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| **KLMR** | **Klimovskoe** | **15.96** | **45** | *e*P | | Pn | 03 31 22.3 | -12 |
| KLMR | | | | pmax | | pmax | | |
| | comp=Z,27nm,1.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.65** | **10** | P | | **P** | **03 32 03.7** | **-3.7** |
| | comp=Z,0.8nm,0.3s,baz=193,slow=10.0,SNR=12 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.65** | **10** | *e*P | | **P** | **03 32 05.5** | **-1.9** |
| ARCES | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.65** | **10** | *e*P | | **P** | **03 32 05.5** | **-1.9** |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **CSS** | **Prodhromos** | **20.63** | **136** | *e*P | | **P** | **03 32 29.0** | **-0.3** |
| | comp=Z,1.2nm,0.7s | | | | | | | |
| **CSS** | **Prodhromos** | **20.63** | **136** | *e*P | | **P** | **03 32 29.0** | **-0.3** |
| | comp=Z,1.1nm,0.7s | | | | | | | |
| **ARU** | **Arti** | **25.13** | **62** | P | | **P** | **03 33 14.5** | **-0.2** |
| | comp=Z,0.5nm,0.2s,baz=315,slow=1.4,SNR=2.9 | | | | | | | |
| **ARU** | **Arti** | **25.13** | **62** | *c i* P | | **P** | **03 33 14.9** | **+0.2** |
| ARU | | | | | | | 03 33 47.6 | |
| ARU | | | | S | | **S** | **03 37 41.6** | **+1.4** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **ARU** | **Arti** | **25.13** | **62** | *e*P | | **P** | **03 33 14.8** | **+0.1** |
| | comp=Z,5.7nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **25.13** | **62** | *i* P | | **P** | **03 33 14.9** | **+0.2** |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| ARU | | | | S | | **S** | **03 37 41.6** | **+1.4** |
| **EIL** | **Elat** | **25.90** | **140** | P | | **P** | **03 33 21.5** | **-0.4** |
| | comp=Z,2.4nm,0.7s,baz=348,slow=7.0,SNR=3.4 | | | | | | | |
| **AKTK** | **Aktyubinsk** | **26.14** | **76** | P | | **P** | **03 33 23.7** | **-0.2** |
| **AKTO** | **Aktyubinsk** | **26.14** | **76** | P | | **P** | **03 33 23.7** | **-0.2** |
| | comp=Z,3.5nm,0.6s,baz=291,slow=11,SNR=10 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **26.81** | **0** | P | | **P** | **03 33 30.7** | **+0.9** |
| | comp=Z,17nm,1.1s,baz=143,slow=12,SNR=4.3 | | | | | | | |
| **BRVK** | **Borovoye** | **32.51** | **66** | *e*P | | **P** | **03 34 21.6** | **+1.1** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **32.51** | **66** | *e*P | | **P** | **03 34 21.6** | **+1.1** |
| | comp=Z,2.2nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **32.51** | **66** | *e*P | | **P** | **03 34 21.6** | **+1.1** |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **BVAR** | **Borovoye Array** | **32.58** | **66** | P | | **P** | **03 34 22.7** | **+1.6** |
| | comp=Z,1.9nm,0.5s,baz=293,slow=7.7,SNR=13 | | | | | | | |
| **EKS2** | **Erkin-Say** | **39.30** | **80** | *e*P | | **P** | **03 35 18.3** | **-0.6** |
| EKS2 | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **EKS2** | **Erkin-Say** | **39.30** | **80** | *e*P | | **P** | **03 35 18.3** | **-0.6** |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **EKS2** | **Erkin-Say** | **39.30** | **80** | *e*P | | **P** | **03 35 18.3** | **-0.6** |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **AAK** | **Ala-Archa** | **39.75** | **79** | *e*P | | **P** | **03 35 24.6** | **+1.8** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **39.75** | **79** | *e*P | | **P** | **03 35 24.6** | **+1.8** |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **39.75** | **79** | *e*P | | **P** | **03 35 24.6** | **+1.8** |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **39.98** | **202** | P | | **P** | **03 35 24.9** | **+0.3** |
| | comp=Z,2.0nm,0.8s,baz=9.3,slow=8.2,SNR=14 | | | | | | | |
| TORD | | | | PcP | | **PcP** | **03 37 29.9** | **0.0** |
| | comp=Z,0.3nm,0.9s,baz=14,slow=2.5,SNR=2.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.19** | **59** | P | | **P** | **03 35 27.0** | **+1.0** |
| | comp=Z,0.7nm,0.5s,baz=302,slow=8.5,SNR=4.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.19** | **59** | *e*P | | **P** | **03 35 28.7** | **+2.7** |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.20** | **69** | P | | **P** | **03 35 43.2** | **+0.5** |
| | comp=Z,0.4nm,0.4s,baz=289,slow=4.9,SNR=4.4 | | | | | | | |
| **RES** | **Resolute Bay** | **46.17** | **340** | *e*P | | **P** | **03 36 13.1** | **-1.0** |
| RES | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **RES** | **Resolute Bay** | **46.17** | **340** | *e*P | | **P** | **03 36 13.1** | **-1.0** |
| | comp=Z,2.4nm,0.8s | | | | | | | |
| **RES** | **Resolute Bay** | **46.17** | **340** | *e*P | | **P** | **03 36 13.1** | **-1.0** |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **SCHQ** | **Schefferville** | **47.11** | **308** | P | | **P** | **03 36 21.7** | **0.0** |
| | comp=Z,3.9nm,0.9s,baz=30,slow=18,SNR=2.9 | | | | | | | |
| **SONM** | **Songino Array** | **54.91** | **55** | P | | **P** | **03 37 20.3** | **-0.4** |
| | comp=Z,0.5nm,0.5s,baz=81,slow=7.6,SNR=6.1 | | | | | | | |
| **SONM** | **Songino Array** | **54.91** | **55** | *e*P | | **P** | **03 37 22.5** | **+1.8** |
| SONM | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **59.90** | **336** | P | | **P** | **03 37 56.6** | **+1.1** |
| | comp=Z,0.5nm,0.5s,baz=41,slow=5.8,SNR=4.9 | | | | | | | |
| **HRY** | **Holter Researc** | **72.46** | **325** | *e*P | | **P** | **03 39 17.8** | **+1.3** |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **HRY** | **Holter Researc** | **72.46** | **325** | *e*P | | **P** | **03 39 17.8** | **+1.3** |
| | comp=Z,2.9nm,0.7s | | | | | | | |
| **NEW** | **Newport** | **72.90** | **329** | *e*P | | **P** | **03 39 17.0** | **-2.0** |
| **NEW** | **Newport** | **72.90** | **329** | *e*P | | **P** | **03 39 17.0** | **-2.0** |
| **NEW** | **Newport** | **72.90** | **329** | *e*P | | **P** | **03 39 17.0** | **-2.0** |
| **BOZ** | **Bozeman (W)** | **73.30** | **325** | *e*P | | **P** | **03 39 23.3** | **+1.7** |
| BOZ | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **73.30** | **325** | *e*P | | **P** | **03 39 23.3** | **+1.7** |
| | comp=Z,1.3nm,0.5s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **73.30** | **325** | *e*P | | **P** | **03 39 23.3** | **+1.7** |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **IMW** | **Indian Meadow** | **74.55** | **323** | *e*P | | **P** | **03 39 31.7** | **+2.6** |
| | comp=Z,4.9nm,1.2s | | | | | | | |
| **IMW** | **Indian Meadow** | **74.55** | **323** | *e*P | | **P** | **03 39 31.7** | **+2.6** |
| | comp=Z,4.9nm,1.2s | | | | | | | |
| **MOOW** | **Moose Ponds** | **74.60** | **323** | *e*P | | **P** | **03 39 31.4** | **+2.1** |
| | comp=Z,3.5nm,1.1s | | | | | | | |
| **MOOW** | **Moose Ponds** | **74.60** | **323** | *e*P | | **P** | **03 39 31.4** | **+2.1** |
| | comp=Z,3.5nm,1.1s | | | | | | | |
| **LOHW** | **Long Hollow** | **74.66** | **323** | *e*P | | **P** | **03 39 31.9** | **+2.2** |
| | comp=Z,2.8nm,1.2s | | | | | | | |
| **LOHW** | **Long Hollow** | **74.66** | **323** | *e*P | | **P** | **03 39 31.9** | **+2.2** |
| | comp=Z,2.8nm,1.2s | | | | | | | |
| **HLID** | **Hailey** | **76.10** | **325** | *e*P | | **P** | **03 39 39.7** | **+1.8** |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **HLID** | **Hailey** | **76.10** | **325** | *e*P | | **P** | **03 39 39.7** | **+1.8** |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **76.75** | **322** | *e*P | | **P** | **03 39 42.6** | **+1.0** |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **76.75** | **322** | *e*P | | **P** | **03 39 42.6** | **+1.0** |
| | comp=Z,1.3nm,0.6s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **77.56** | **316** | *e*P | | **P** | **03 39 48.5** | **+2.2** |
| | comp=Z,2.3nm,1.2s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **77.56** | **316** | *e*P | | **P** | **03 39 48.5** | **+2.2** |
| | comp=Z,2.3nm,1.2s | | | | | | | |
| **DUG** | **Dugway** | **78.44** | **323** | *e*P | | **P** | **03 39 52.9** | **+1.9** |
| DUG | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **DUG** | **Dugway** | **78.44** | **323** | *e*P | | **P** | **03 39 52.9** | **+1.9** |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **DUG** | **Dugway** | **78.44** | **323** | *e*P | | **P** | **03 39 52.9** | **+1.9** |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **BOSA** | **Boshof** | **80.14** | **172** | P | | **P** | **03 40 01.0** | **+0.9** |
| | comp=Z,1.8nm,0.8s,baz=0.0,slow=9.1,SNR=3.0 | | | | | | | |
| **ANMO** | **Albuquerque** | **80.33** | **315** | *e*P | | **P** | **03 40 03.6** | **+2.1** |
| ANMO | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **ANMO** | **Albuquerque** | **80.33** | **315** | *e*P | | **P** | **03 40 03.6** | **+2.1** |
| | comp=Z,1.7nm,1.0s | | | | | | | |
| **ANMO** | **Albuquerque** | **80.33** | **315** | *e*P | | **P** | **03 40 03.6** | **+2.1** |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.01** | **326** | P | | **P** | **03 40 11.6** | **+1.2** |
| | comp=Z,0.4nm,0.7s,baz=28,slow=4.1,SNR=4.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **83.76** | **310** | P | | **P** | **03 40 21.1** | **+1.7** |
| | comp=Z,0.4nm,0.6s,baz=69,slow=3.6,SNR=7.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **125.34** | **84** | PKP | | **PKPdf** | **03 46 50.7** | **-0.4** |
| | comp=Z,0.2nm,0.6s,baz=3.7,slow=2.9,SNR=3.9 | | | | | | | |

*ISCJB* ***16*** *03:30:25.6±1.3, 6.2°S±0.2°×128.2°E±0.2°, h200km, mb3.2/1, Error ellipse: s-maj=26.9km s-min=18.7km az=150.1*
*IDC* ***16*** *03:30:27.0±12.0, 6.25°S×129.00°E, h207km±138km, mb3.0/1, mb1 3.5/4, mb1mx3.1/33, mbtmp4.0/4, Error ellipse: s-maj=98.2km s-min=48.5km az=46.0*
*AUST* ***16*** *03:31:07.9±0.0, 9.57°S×129.49°E, h387km, Error ellipse: s-maj=1.3km s-min=1.1km az=268.0*
**ISC 16 03:30:27.2±1.5, 6.2°S±0.2°×128.8°E±0.2°, h200km, n10, σ2≥15/8, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MTN** | **Manton Dam** | **6.94** | **161** | P | Pn | 03 32 15.6 | +8.8 |
| | baz=3.7,SNR=3.3 | | | | | | |
| **KDU** | **Kakadu** | **7.34** | **151** | P | Pn | 03 32 20.5 | +8.6 |
| | baz=4.3,SNR=3.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.20** | **195** | P | **Pn** | **03 33 16.2** | **+1.5** |
| | 0.3nm,0.3s,baz=33,slow=12,SNR=5.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.20** | **195** | P | **Pn** | **03 33 16.2** | **+1.5** |
| | baz=9.3,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.63** | **159** | P | **Pn** | **03 33 44.1** | **-1.0** |
| | 0.7nm,0.3s,baz=337,slow=12,SNR=7.3 | | | | | | |
| **COEN** | **Coen** | **16.05** | **120** | P | **Pn** | **03 34 05.0** | **+2.6** |
| | baz=14,SNR=7.8 | | | | | | |
| **QIS** | **Mount Isa** | **17.66** | **145** | P | **P** | **03 34 19.7** | **+0.3** |
| | baz=15,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **18.00** | **165** | P | **P** | **03 34 21.5** | **-1.7** |
| | 1.7nm,0.3s,baz=344,slow=11,SNR=106 | | | | | | |
| **WRKA** | **Warakurna** | **18.70** | **182** | P | **P** | **03 34 28.0** | **-2.8** |
| | baz=16,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.96** | **327** | P | **P** | **03 40 58.0** | **-0.4** |
| | 0.3nm,0.4s,baz=129,slow=8.5,SNR=3.0 | | | | | | |

*CNRM* ***16*** *03:52:49.4, 35.75°N×3.49°W, h30km, MD3.5*
*SFS* ***16*** *03:52:50.0, 35.52°N×3.81°W, h0km, ML3.1*
*INMG* ***16*** *03:52:50.7±1.7, 35.53°N×3.84°W, h0km, ML2.9, Error ellipse: s-maj=3.7km s-min=3.2km az=155.0*
*ISCJB* ***16*** *03:52:50.6±0.5, 35.55°N±0.02°×3.83°W±0.02, h24km±5km, Error ellipse: s-maj=3.2km s-min=2.3km az=30.5*
*IGIL* ***16*** *03:52:50.9, 35.52°N×3.82°W, h2km, ML2.9*
*CSEM* ***16*** *03:52:51.6±0.1, 35.52°N×3.80°W, h20km, ML3.6/7, Error ellipse: s-maj=2.3km s-min=2.1km az=131.0*
*MDD* ***16*** *03:52:51.0±0.1, 35.40°N×3.77°W, h0km, mbLg3.0/45, Error ellipse: s-maj=1.2km s-min=0.8km az=4.0, PRXIMO*
**ISC 16 03:52:50.8±1.3, 35.53°N±0.02°×3.78°W±0.02, h18km±9km, n194, σ1≥28/339, 1D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EMEL** | **Melilla** | **0.71** | **108** | ⇓P | **Pb** | **03 53 04.1** | **-0.6** |
| | 570nm,0.1s,SNR=18 | | | | | | |
| EMEL | | | | S | **Sb** | **03 53 13.6** | **-0.5** |
| | 5μm,0.2s,SNR=5.0 | | | | | | |
| **EMLI** | **Melilla** | **0.72** | **108** | P | **Pb** | **03 53 04.1** | **-0.6** |
| | 570nm,0.1s,SNR=18 | | | | | | |
| EMLI | | | | S | **Sb** | **03 53 13.6** | **-0.6** |
| | 5μm,0.2s,SNR=5.0 | | | | | | |
| **MELI** | **Melilla** | **0.73** | **108** | *i* P | **Pb** | **03 53 04.3** | **-0.7** |
| MELI | | | | *i* S | **Sb** | **03 53 13.9** | **-0.7** |
| **EALB** | **Alboran** | **0.73** | **56** | P | **Pb** | **03 53 05.0** | **-0.1** |
| | 197nm,0.2s,SNR=44 | | | | | | |
| EALB | | | | S | **Sn** | **03 53 16.6** | **-0.5** |
| | 2μm,0.3s,SNR=12 | | | | | | |
| **EALB** | **Alboran** | **0.73** | **56** | P | **Pb** | **03 53 05.0** | **-0.1** |
| | 197nm,0.2s,SNR=44 | | | | | | |
| EALB | | | | S | **Sn** | **03 53 16.6** | **-0.5** |
| | 2μm,0.3s,SNR=12 | | | | | | |
| **DKH** | **Dar Kharkhour** | **1.29** | **269** | P | **Pn** | **03 53 14.0** | **-0.1** |
| DKH | | | | S | **Sb** | **03 53 31.0** | **+0.1** |
| **DKH** | **Dar Kharkhour** | **1.29** | **269** | P | **Pn** | **03 53 14.0** | **-0.1** |
| DKH | | | | S | **Sb** | **03 53 31.0** | **+0.1** |
| **EMIJ** | **Mijas** | **1.31** | **323** | P | **Pn** | **03 53 14.1** | **-0.2** |
| | 9.7nm,0.1s,SNR=10 | | | | | | |
| EMIJ | | | | S | **Sb** | **03 53 31.7** | **+0.3** |
| | 270nm,0.3s,SNR=11 | | | | | | |
| **EMIJ** | **Mijas** | **1.31** | **323** | P | **Pn** | **03 53 14.1** | **-0.2** |
| | 9.7nm,0.1s,SNR=10 | | | | | | |
| EMIJ | | | | S | **Sb** | **03 53 31.7** | **+0.3** |
| | 270nm,0.3s,SNR=11 | | | | | | |
| **EGUA** | **Guajares** | **1.32** | **8** | P | **Pn** | **03 53 14.2** | **-0.1** |
| | 9.0nm,0.2s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sb** | **03 53 32.7** | **+1.1** |
| | 179nm,0.4s,SNR=7.9 | | | | | | |
| **EGUA** | **Guajares** | **1.32** | **8** | P | **Pn** | **03 53 14.2** | **-0.1** |
| | 9.0nm,0.2s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sb** | **03 53 32.7** | **+1.1** |
| | 179nm,0.4s,SNR=7.9 | | | | | | |
| **ECEU** | **Ceuta** | **1.35** | **286** | P | **Pn** | **03 53 14.4** | **-0.4** |
| | 5.9nm,0.7s,SNR=7.9 | | | | | | |
| ECEU | | | | S | **Sb** | **03 53 32.4** | **-0.2** |
| | 160nm,1.2s,SNR=7.9 | | | | | | |
| **ECEU** | **Ceuta** | **1.35** | **286** | P | **Pn** | **03 53 14.4** | **-0.4** |
| | 5.9nm,0.7s,SNR=7.9 | | | | | | |
| ECEU | | | | S | **Sb** | **03 53 32.4** | **-0.2** |
| | 160nm,1.2s,SNR=7.9 | | | | | | |
| **TZK** | **Tazeka** | **1.47** | **193** | Pg | **Pn** | **03 53 16.5** | **-0.2** |
| TZK | | | | Lg | | 03 53 36.0 | |
| **TZK** | **Tazeka** | **1.47** | **193** | *i* P | **Pn** | **03 53 16.5** | **-0.2** |
| TZK | | | | *i* S | **Sn** | **03 53 36.0** | **+0.4** |
| **REAL** | **Reales** | **1.50** | **310** | Pg | **Pb** | **03 53 19.0** | **+0.8** |
| **REAL** | **Reales** | **1.50** | **310** | *e*P | **Pb** | **03 53 19.0** | **+0.8** |
| REAL | | | | *e*S | **Sn** | **03 53 34.0** | **-2.2** |
| **EBER** | **Berja** | **1.55** | **28** | P | **Pn** | **03 53 17.8** | **+0.1** |
| | 0.3nm,0.4s,SNR=7.9 | | | | | | |
| EBER | | | | S | **Sb** | **03 53 38.7** | **+0.3** |
| | 120nm,0.4s,SNR=9.9 | | | | | | |
| **EBER** | **Berja** | **1.55** | **28** | P | **Pn** | **03 53 17.8** | **+0.1** |
| | 0.3nm,0.4s,SNR=7.9 | | | | | | |
| EBER | | | | S | **Sb** | **03 53 38.7** | **+0.3** |
| | 120nm,0.4s,SNR=9.9 | | | | | | |
| **EQUE** | **Quentar** | **1.70** | **9** | P | **Pn** | **03 53 20.6** | **+0.9** |
| | 1.3nm,3.0s,SNR=7.9 | | | | | | |
| EQUE | | | | S | **Sb** | **03 53 42.5** | **-0.2** |
| | 65nm,0.4s,SNR=11 | | | | | | |
| **EQUE** | **Quentar** | **1.70** | **9** | P | **Pn** | **03 53 20.6** | **+0.9** |
| | 1.3nm,3.0s,SNR=7.9 | | | | | | |
| EQUE | | | | S | **Sb** | **03 53 42.5** | **-0.2** |
| | 65nm,0.4s,SNR=11 | | | | | | |
| **SELV** | **Sierra Elvira** | **1.71** | **1** | P | **Pn** | **03 53 20.6** | **+0.8** |
| | 16nm,0.6s,SNR=7.9 | | | | | | |
| SELV | | | | S | **Sb** | **03 53 42.6** | **-0.4** |
| | 84nm,0.6s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **1.71** | **1** | P | **Pn** | **03 53 20.6** | **+0.8** |
| | 16nm,0.6s,SNR=7.9 | | | | | | |
| SELV | | | | S | **Sb** | **03 53 42.6** | **-0.4** |
| | 84nm,0.6s,SNR=7.9 | | | | | | |
| **ECOG** | **Cogollos-Vega** | **1.76** | **6** | P | **Pn** | **03 53 20.8** | **+0.3** |
| | 2.3nm,1.2s,SNR=7.9 | | | | | | |
| ECOG | | | | S | **Sb** | **03 53 44.0** | **-0.4** |
| | 178nm,1.3s,SNR=7.9 | | | | | | |
| **ECOG** | **Cogollos-Vega** | **1.76** | **6** | P | **Pn** | **03 53 20.8** | **+0.3** |
| | 2.3nm,1.2s,SNR=7.9 | | | | | | |
| ECOG | | | | S | **Sb** | **03 53 44.0** | **-0.4** |
| | 178nm,1.3s,SNR=7.9 | | | | | | |
| **TGT** | **Taghat** | **1.79** | **216** | Pg | **Pn** | **03 53 21.0** | **+0.1** |
| TGT | | | | Sn | **Sb** | **03 53 46.0** | **+0.7** |
| **TGT** | **Taghat** | **1.79** | **216** | *e*P | **Pn** | **03 53 21.0** | **+0.1** |
| TGT | | | | *i* S | **Sb** | **03 53 46.0** | **+0.7** |
| **ALJ** | **Aljibe** | **1.82** | **304** | Pg | **Pg** | **03 53 26.0** | **+0.3** |
| ALJ | | | | Sn | **Sg** | **03 53 50.8** | **+1.4** |
| **ALJ** | **Aljibe** | **1.82** | **304** | *i* P | **Pg** | **03 53 26.0** | **+0.3** |
| **LIJA** | **Lijar** | **1.90** | **317** | Pn | **Pg** | **03 53 26.5** | **-0.8** |
| **LIJA** | **Lijar** | **1.90** | **317** | *i* P | **Pg** | **03 53 26.5** | **-0.8** |
| **ENIJ** | **Nijar** | **1.92** | **41** | P | **Pn** | **03 53 23.0** | **+0.3** |
| | 11nm,0.5s,SNR=7.9 | | | | | | |
| ENIJ | | | | S | **Sn** | **03 53 47.2** | **+0.7** |
| | 113nm,0.5s,SNR=7.9 | | | | | | |
| **ENIJ** | **Nijar** | **1.92** | **41** | P | **Pn** | **03 53 23.0** | **+0.3** |
| | 11nm,0.5s,SNR=7.9 | | | | | | |
| ENIJ | | | | S | **Sn** | **03 53 47.2** | **+0.7** |
| | 113nm,0.5s,SNR=7.9 | | | | | | |
| **CNIL** | **Conil** | **2.03** | **295** | Pn | **Pb** | **03 53 28.0** | **+0.9** |
| **CNIL** | **Conil** | **2.03** | **295** | *e*P | **Pb** | **03 53 28.0** | **+0.9** |
| **GORA** | **Gorafe** | **2.04** | **17** | P | **Pn** | **03 53 25.4** | **+1.0** |
| | 3.9nm,0.2s,SNR=7.9 | | | | | | |
| GORA | | | | S | **Sn** | **03 53 50.4** | **+1.0** |
| | 104nm,0.6s,SNR=7.9 | | | | | | |
| **GORA** | **Gorafe** | **2.04** | **17** | P | **Pn** | **03 53 25.4** | **+1.0** |
| | 3.9nm,0.2s,SNR=7.9 | | | | | | |
| GORA | | | | S | **Sn** | **03 53 50.4** | **+1.0** |
| | 104nm,0.6s,SNR=7.9 | | | | | | |
| **ESPR** | **Espera** | **2.15** | **309** | P | **Pn** | **03 53 26.9** | **+1.1** |
| | 6.8nm,0.4s,SNR=11 | | | | | | |
| ESPR | | | | Sn | **Sg** | **03 53 57.8** | **-2.1** |
| | 47nm,0.3s,SNR=5.9 | | | | | | |
| **ESPR** | **Espera** | **2.15** | **309** | P | **Pn** | **03 53 26.9** | **+1.1** |
| | 6.8nm,0.4s,SNR=11 | | | | | | |
| **EQES** | **Quesada** | **2.34** | **14** | P | **Pn** | **03 53 29.6** | **+1.0** |
| | 11nm,0.1s,SNR=8.5 | | | | | | |
| EQES | | | | S | **Sn** | **03 53 58.0** | **+1.0** |
| | 44nm,0.4s,SNR=71 | | | | | | |
| **EQES** | **Quesada** | **2.34** | **14** | P | **Pn** | **03 53 29.6** | **+1.0** |
| | 11nm,0.1s,SNR=8.5 | | | | | | |
| EQES | | | | S | **Sn** | **03 53 58.0** | **+1.0** |
| | 44nm,0.4s,SNR=71 | | | | | | |
| **MIF** | **Mishlifen** | **2.43** | **210** | P | **Pn** | **03 53 29.0** | **-0.8** |
| MIF | | | | Sn | **Sn** | **03 54 01.0** | **+1.8** |
| **MIF** | **Mishlifen** | **2.43** | **210** | P | **Pn** | **03 53 29.0** | **-0.8** |
| MIF | | | | *i* S | **Sn** | **03 54 01.0** | **+1.8** |
| **EHUE** | **Huescar** | **2.48** | **22** | P | **Pn** | **03 53 31.2** | **+0.8** |
| | 7.6nm,0.2s,SNR=7.9 | | | | | | |
| EHUE | | | | S | **Sn** | **03 54 01.0** | **+0.8** |
| | 42nm,0.6s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **2.48** | **22** | P | **Pn** | **03 53 31.2** | **+0.8** |
| | 7.6nm,0.2s,SNR=7.9 | | | | | | |
| EHUE | | | | S | **Sn** | **03 54 01.0** | **+0.8** |
| | 42nm,0.6s,SNR=7.9 | | | | | | |
| **CZD** | **Col de Zad** | **2.70** | **203** | Pn | **Pn** | **03 53 34.0** | **+0.4** |
| CZD | | | | Sn | **Sn** | **03 54 07.0** | **+1.1** |
| **CZD** | **Col de Zad** | **2.70** | **203** | *e*P | **Pn** | **03 53 34.0** | **+0.4** |
| CZD | | | | *i* S | **Sn** | **03 54 07.0** | **+1.1** |
| **EADA** | **Adamuz** | **2.71** | **347** | P | **Pn** | **03 53 33.6** | **+0.1** |
| | 2.4nm,0.1s,SNR=22 | | | | | | |
| EADA | | | | S | **Sn** | **03 54 07.2** | **+1.2** |
| | 49nm,0.4s,SNR=5.0 | | | | | | |
| **EADA** | **Adamuz** | **2.71** | **347** | P | **Pn** | **03 53 33.6** | **+0.1** |
| | 2.4nm,0.1s,SNR=22 | | | | | | |
| EADA | | | | S | **Sn** | **03 54 07.2** | **+1.2** |
| | 49nm,0.4s,SNR=5.0 | | | | | | |
| **SESP** | **Santiago Espad** | **2.77** | **21** | P | **Pn** | **03 53 35.2** | **+0.7** |
| | 3.0nm,0.4s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **03 54 08.1** | **+0.5** |
| | 60nm,0.3s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **2.77** | **21** | P | **Pn** | **03 53 35.2** | **+0.7** |
| | 3.0nm,0.4s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **03 54 08.1** | **+0.5** |
| | 60nm,0.3s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **2.86** | **333** | P | **Pn** | **03 53 36.7** | **+1.0** |
| | 1.1nm,0.1s,SNR=9.8 | | | | | | |
| ECAB | | | | S | **Sn** | **03 54 10.5** | **+0.8** |
| | 17nm,0.2s,SNR=7.1 | | | | | | |
| **ECAB** | **El Cabril** | **2.86** | **333** | P | **Pn** | **03 53 36.7** | **+1.0** |
| | 1.1nm,0.1s,SNR=9.8 | | | | | | |
| ECAB | | | | S | **Sn** | **03 54 10.5** | **+0.8** |
| | 17nm,0.2s,SNR=7.1 | | | | | | |
| **EMUR** | **La Murta** | **3.08** | **41** | P | **Pn** | **03 53 39.2** | **+0.5** |
| | 3.6nm,0.5s,SNR=6.2 | | | | | | |
| EMUR | | | | S | **Sn** | **03 54 14.9** | **-0.2** |
| | 15nm,0.4s,SNR=5.5 | | | | | | |
| **EMUR** | **La Murta** | **3.08** | **41** | P | **Pn** | **03 53 39.2** | **+0.5** |
| | 3.6nm,0.5s,SNR=6.2 | | | | | | |
| EMUR | | | | S | **Sn** | **03 54 14.9** | **-0.2** |
| | 15nm,0.4s,SNR=5.5 | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.23** | **315** | P | **Pn** | **03 53 41.0** | **+0.4** |
| | 2.6nm,0.1s,SNR=17 | | | | | | |
| EMIN | | | | S | **Sn** | **03 54 17.9** | **-0.7** |
| | 12nm,0.4s,SNR=5.0 | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.23** | **315** | P | **Pn** | **03 53 41.0** | **+0.4** |
| | 2.6nm,0.1s,SNR=17 | | | | | | |
| EMIN | | | | S | **Sn** | **03 54 17.9** | **-0.7** |
| | 12nm,0.4s,SNR=5.0 | | | | | | |
| **EVIA** | **Vianos** | **3.27** | **18** | P | **Pn** | **03 53 42.0** | **+0.7** |
| | 0.4nm,0.2s,SNR=8.0 | | | | | | |
| EVIA | | | | S | **Sn** | **03 54 20.8** | **+1.0** |
| | 38nm,0.7s,SNR=7.9 | | | | | | |
| **EVIA** | **Vianos** | **3.27** | **18** | P | **Pn** | **03 53 42.0** | **+0.7** |
| | 0.4nm,0.2s,SNR=8.0 | | | | | | |
| EVIA | | | | S | **Sn** | **03 54 20.8** | **+1.0** |
| | 38nm,0.7s,SNR=7.9 | | | | | | |
| **KIB** | **El Ksiba** | **3.49** | **213** | Pn | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EBAD | | | | S | | Sn | 03 54 40.8 | -0.1 | |
| | 13nm,0.2s,SNR=5.0 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.14** | **358** | P | | Pn | 03 53 55.0 | +1.7 | |
| | 7.4nm,0.2s,baz=175,slow=12,SNR=5.1 | | | | | | | | |
| ESDC | | | | S | | Sn | 03 54 41.6 | +0.3 | |
| | 3.4nm,0.5s,baz=302,slow=22,SNR=5.2 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.14** | **358** | P | | Pn | 03 53 55.0 | +1.7 | |
| | 7.4nm,0.2s,SNR=5.1 | | | | | | | | |
| ESDC | | | | S | | Sn | 03 54 41.6 | +0.3 | |
| | 3.4nm,0.5s,SNR=5.2 | | | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **304** | *e*P | | Pn | 03 53 54.8 | +0.2 | |
| MESJ | | | | *e*S | | Sn | 03 54 40.9 | -2.9 | |
| MESJ | | | | AML | | AML | 03 54 43.4 | | |
| | comp=E,18nm,0.3s | | | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **304** | *e*Pn | | Pn | 03 53 54.8 | +0.2 | |
| MESJ | | | | *e*Sn | | Sn | 03 54 41.7 | -2.1 | |
| MESJ | | | | A | | A | 03 54 47.1 | | |
| | comp=E,21nm,0.4s | | | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **304** | P | | Pn | 03 53 55.0 | +0.3 | |
| MESJ | | | | S | | Sn | 03 54 40.9 | -2.9 | |
| | comp=E,18nm,0.3s | | | | | | | | |
| **MESJ** | **Messejana** | **4.25** | **304** | *e*Pn | | Pn | 03 53 54.8 | +0.2 | |
| MESJ | | | | *e*Sn | | Sn | 03 54 41.7 | -2.1 | |
| | comp=E,21nm,0.4s | | | | | | | | |
| **EBEN** | **Beniarda** | **4.26** | **41** | P | | Pn | 03 53 54.9 | 0.0 | |
| | comp=E,0.2nm,0.4s,SNR=7.9 | | | | | | | | |
| EBEN | | | | S | | Sn | 03 54 42.6 | -1.6 | |
| | comp=E,2.1nm,0.7s,SNR=7.9 | | | | | | | | |
| **EBEN** | **Beniarda** | **4.26** | **41** | P | | Pn | 03 53 54.9 | 0.0 | |
| | comp=E,0.2nm,0.4s,SNR=7.9 | | | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **296** | *e*P | | Pn | 03 53 55.2 | -0.4 | |
| MORF | | | | *e*S | | Sn | 03 54 42.0 | -3.3 | |
| MORF | | | | AML | | AML | 03 54 45.0 | | |
| | comp=N,35nm,0.3s | | | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **296** | *e*Pn | | Pn | 03 53 55.3 | -0.2 | |
| MORF | | | | *e*Sn | | Sn | 03 54 42.5 | -2.9 | |
| MORF | | | | A | | A | 03 54 49.4 | | |
| | comp=N,10.0nm,0.2s | | | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **296** | P | | Pn | 03 53 55.2 | -0.4 | |
| MORF | | | | S | | Sn | 03 54 42.0 | -3.3 | |
| | comp=N,35nm,0.3s | | | | | | | | |
| **MORF** | **Marmelete** | **4.31** | **296** | *e*Pn | | Pn | 03 53 55.3 | -0.2 | |
| MORF | | | | *e*Sn | | Sn | 03 54 42.5 | -2.9 | |
| | comp=N,10.0nm,0.2s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.38** | **293** | *e*Pn | | Pn | 03 53 56.6 | +0.2 | |
| PFVI | | | | *e*Sn | | Sn | 03 54 44.8 | -2.2 | |
| PFVI | | | | A | | A | 03 55 00.4 | | |
| | comp=N,14nm,0.6s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.38** | **293** | P | | Pn | 03 53 56.6 | +0.2 | |
| | comp=N,4.7nm,0.3s,SNR=10 | | | | | | | | |
| PFVI | | | | S | | Sn | 03 54 45.8 | -1.2 | |
| | comp=N,14nm,0.2s,SNR=8.4 | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.38** | **293** | P | | Pn | 03 53 56.6 | +0.2 | |
| | comp=N,4.7nm,0.3s,SNR=10 | | | | | | | | |
| PFVI | | | | *e*Sn | | Sn | 03 54 44.8 | -2.2 | |
| | comp=N,14nm,0.6s | | | | | | | | |
| PFVI | | | | S | | Sn | 03 54 45.8 | -1.2 | |
| | comp=N,14nm,0.2s,SNR=8.4 | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.46** | **298** | *e*Pn | | Pn | 03 53 58.0 | +0.5 | |
| PTEO | | | | *e*Sn | | Sn | 03 54 47.7 | -1.3 | |
| PTEO | | | | A | | A | 03 54 55.6 | | |
| | comp=N,15nm,0.4s | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.46** | **298** | P | | Pn | 03 53 58.0 | +0.5 | |
| PTEO | | | | S | | Sn | 03 54 47.7 | -1.3 | |
| | comp=N,7.4nm,0.4s | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.46** | **298** | P | | Pn | 03 53 58.0 | +0.5 | |
| PTEO | | | | S | | Sn | 03 54 47.7 | -1.3 | |
| | comp=N,7.4nm,0.4s | | | | | | | | |
| **EVO** | **Evora** | **4.52** | **313** | *e*Pn | | Pn | 03 53 59.5 | +1.1 | |
| EVO | | | | *e*Sn | | Sn | 03 54 49.1 | -1.5 | |
| EVO | | | | A | | A | 03 54 55.9 | | |
| | comp=N,17nm,0.5s | | | | | | | | |
| **EVO** | **Evora** | **4.52** | **313** | P | | Pn | 03 53 59.5 | +1.1 | |
| EVO | | | | S | | Sn | 03 54 49.1 | -1.5 | |
| | comp=N,17nm,0.5s | | | | | | | | |
| **EVO** | **Evora** | **4.52** | **313** | P | | Pn | 03 53 59.5 | +1.1 | |
| EVO | | | | S | | Sn | 03 54 49.1 | -1.5 | |
| | comp=N,17nm,0.5s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.60** | **306** | *e*Pn | | Pn | 03 53 59.6 | +0.1 | |
| PNCL | | | | *e*Sn | | Sn | 03 54 50.6 | -1.9 | |
| PNCL | | | | A | | A | 03 54 58.2 | | |
| | comp=N,13nm,0.4s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.60** | **306** | *e*Pn | | Pn | 03 53 59.6 | +0.1 | |
| PNCL | | | | *e*Sn | | Sn | 03 54 50.6 | -1.9 | |
| | comp=N,13nm,0.4s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.84** | **325** | *e*Pn | | Pn | 03 54 04.1 | +1.3 | |
| PMRV | | | | *e*Sn | | Sn | 03 54 57.7 | -0.7 | |
| PMRV | | | | A | | A | 03 55 25.7 | | |
| | comp=N,12nm,0.5s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.84** | **325** | P | | Pn | 03 54 04.1 | +1.3 | |
| PMRV | | | | S | | Sn | 03 54 57.7 | -0.7 | |
| | comp=N,12nm,0.5s | | | | | | | | |
| **PMRV** | **Marv??o** | **4.84** | **325** | P | | Pn | 03 54 04.1 | +1.3 | |
| PMRV | | | | S | | Sn | 03 54 57.7 | -0.7 | |
| | comp=N,12nm,0.5s | | | | | | | | |
| **EPLA** | **Plasencia** | **4.88** | **339** | P | | Pn | 03 54 04.1 | +0.7 | |
| | comp=N,1.0nm,0.3s,SNR=10 | | | | | | | | |
| EPLA | | | | S | | Sn | 03 54 59.4 | -0.1 | |
| | comp=N,5.7nm,0.4s,SNR=5.0 | | | | | | | | |
| **EPLA** | **Plasencia** | **4.88** | **339** | P | | Pn | 03 54 04.1 | +0.7 | |
| | comp=N,1.0nm,0.3s,SNR=10 | | | | | | | | |
| EPLA | | | | S | | Sn | 03 54 59.4 | -0.1 | |
| | comp=N,5.7nm,0.4s,SNR=5.0 | | | | | | | | |
| **PMTG** | **Montargil** | **5.00** | **316** | *e*Pn | | Pn | 03 54 06.0 | +1.0 | |
| PMTG | | | | *e*Sn | | Sn | 03 55 01.5 | -0.9 | |
| PMTG | | | | A | | A | 03 55 07.0 | | |
| | comp=N,14nm,0.5s | | | | | | | | |
| **PMTG** | **Montargil** | **5.00** | **316** | *e*Pn | | Pn | 03 54 06.0 | +1.0 | |
| PMTG | | | | *e*Sn | | Sn | 03 55 01.5 | -0.9 | |
| | comp=N,14nm,0.5s | | | | | | | | |
| **GUD** | **Guadarrama** | **5.12** | **357** | P | | Pn | 03 54 07.6 | +0.9 | |
| | comp=N,1.0nm,0.2s,SNR=7.9 | | | | | | | | |
| GUD | | | | S | | Sn | 03 55 04.9 | -0.5 | |
| | comp=N,7.3nm,0.6s,SNR=5.0 | | | | | | | | |
| **GUD** | **Guadarrama** | **5.12** | **357** | P | | Pn | 03 54 07.6 | +0.9 | |
| | comp=N,1.0nm,0.2s,SNR=7.9 | | | | | | | | |
| GUD | | | | S | | Sn | 03 55 04.9 | -0.5 | |
| | comp=N,7.3nm,0.6s,SNR=5.0 | | | | | | | | |
| **PACT** | **Alcochete** | **5.17** | **310** | *e*Pn | | Pn | 03 54 03.7 | -3.6 | |
| PACT | | | | *e*Sn | | Sn | 03 55 01.6 | -4.9 | |
| PACT | | | | A | | A | 03 55 27.3 | | |
| | comp=N,20nm,0.6s | | | | | | | | |
| **PACT** | **Alcochete** | **5.17** | **310** | *e*Pn | | Pn | 03 54 03.7 | -3.6 | |
| PACT | | | | *e*Sn | | Sn | 03 55 01.6 | -4.9 | |
| | comp=N,20nm,0.6s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.21** | **327** | *e*Pn | | Pn | 03 54 10.0 | +2.2 | |
| PCBR | | | | *e*Sn | | Sn | 03 55 08.5 | +1.0 | |
| PCBR | | | | A | | A | 03 55 17.8 | | |
| | comp=N,11nm,0.5s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.21** | **327** | P | | Pn | 03 54 10.0 | +2.2 | |
| PCBR | | | | S | | Sn | 03 55 08.5 | +1.0 | |
| | comp=N,5.3nm,0.5s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **5.21** | **327** | P | | Pn | 03 54 10.0 | +2.2 | |
| PCBR | | | | S | | Sn | 03 55 08.5 | +1.0 | |
| | comp=N,5.3nm,0.5s | | | | | | | | |
| **EIBI** | **Ibiza** | **5.38** | **48** | P | | Pn | 03 54 09.8 | -0.3 | |
| | comp=N,2.2nm,0.2s,SNR=7.9 | | | | | | | | |
| EIBI | | | | S | | Sn | 03 55 08.5 | -3.1 | |
| | comp=N,3.6nm,0.4s,SNR=7.0 | | | | | | | | |
| **EIBI** | **Ibiza** | **5.38** | **48** | P | | Pn | 03 54 09.8 | -0.3 | |
| | comp=N,2.2nm,0.2s,SNR=7.9 | | | | | | | | |
| **ETOR** | **Torete** | **5.46** | **14** | P | | Pn | 03 54 12.0 | +0.7 | |
| | comp=N,2.3nm,0.7s,SNR=7.9 | | | | | | | | |
| ETOR | | | | S | | Sn | 03 55 12.1 | -1.6 | |
| | comp=N,19nm,1.7s,SNR=7.9 | | | | | | | | |
| **ETOR** | **Torete** | **5.46** | **14** | P | | Pn | 03 54 12.0 | +0.7 | |
| | comp=N,2.3nm,0.7s,SNR=7.9 | | | | | | | | |
| ETOR | | | | S | | Sn | 03 55 12.1 | -1.6 | |
| | comp=N,19nm,1.7s,SNR=7.9 | | | | | | | | |
| **EMOS** | **Mosqueruela** | **5.49** | **27** | P | | Pn | 03 54 12.9 | +1.0 | |
| | comp=N,0.4nm,0.3s,SNR=7.9 | | | | | | | | |
| EMOS | | | | S | | Sn | 03 55 13.2 | -1.5 | |
| | comp=N,6.8nm,0.8s,SNR=7.9 | | | | | | | | |
| **EMOS** | **Mosqueruela** | **5.49** | **27** | P | | Pn | 03 54 12.9 | +1.0 | |
| | comp=N,0.4nm,0.3s,SNR=7.9 | | | | | | | | |
| **PTOM** | **Tomar** | **5.50** | **319** | *e*Pn | | Pn | 03 54 13.1 | +1.3 | |
| PTOM | | | | *e*Sn | | Sn | 03 55 12.6 | -1.9 | |
| PTOM | | | | A | | A | 03 55 26.6 | | |
| | comp=N,13nm,0.5s | | | | | | | | |
| **PTOM** | **Tomar** | **5.50** | **319** | P | | Pn | 03 54 13.1 | +1.3 | |
| PTOM | | | | S | | Sn | 03 55 12.6 | -1.9 | |
| | comp=N,6.6nm,0.5s | | | | | | | | |
| **PTOM** | **Tomar** | **5.50** | **319** | P | | Pn | 03 54 13.1 | +1.3 | |
| PTOM | | | | S | | Sn | 03 55 12.6 | -1.9 | |
| | comp=N,6.6nm,0.5s | | | | | | | | |
| **OUK** | **Oukaimeden** | **5.50** | **220** | P | | Pn | 03 54 12.0 | -0.1 | |
| **OUK** | **Oukaimeden** | **5.50** | **220** | P | | Pn | 03 54 12.0 | -0.1 | |
| OUK | | | | *i* S | | Sn | 03 55 14.0 | -1.1 | |
| **PMAFR** | **Mafra** | **5.56** | **310** | *e*Pn | | Pn | 03 54 13.8 | +1.1 | |
| PMAFR | | | | *e*Sn | | Sn | 03 55 14.4 | -1.9 | |
| PMAFR | | | | A | | A | 03 55 33.4 | | |
| | comp=N,18nm,0.6s | | | | | | | | |
| **PMAFR** | **Mafra** | **5.56** | **310** | P | | Pn | 03 54 13.5 | +0.7 | |
| | comp=N,5.1nm,0.2s,SNR=7.9 | | | | | | | | |
| PMAFR | | | | S | | Sn | 03 55 14.1 | -2.2 | |
| | comp=N,5.0nm,0.2s,SNR=5.7 | | | | | | | | |
| **PMAFR** | **Mafra** | **5.56** | **310** | P | | Pn | 03 54 13.5 | +0.7 | |
| | comp=N,5.1nm,0.2s,SNR=7.9 | | | | | | | | |
| **PMAFR** | **Mafra** | **5.56** | **310** | *e*Pn | | Pn | 03 54 13.8 | +1.1 | |
| PMAFR | | | | S | | Sn | 03 55 14.1 | -2.2 | |
| | comp=N,5.0nm,0.2s,SNR=5.7 | | | | | | | | |
| PMAFR | | | | *e*Sn | | Sn | 03 55 14.4 | -1.9 | |
| | comp=N,18nm,0.6s | | | | | | | | |
| **MTE** | **Manteigas** | **5.70** | **330** | *e*Pn | | Pn | 03 54 16.8 | +2.1 | |
| MTE | | | | *e*Sn | | Sn | 03 55 19.1 | -0.6 | |
| MTE | | | | A | | A | 03 55 54.8 | | |
| | comp=N,15nm,0.7s | | | | | | | | |
| **MTE** | **Manteigas** | **5.70** | **330** | P | | Pn | 03 54 16.8 | +2.1 | |
| MTE | | | | S | | Sn | 03 55 19.1 | -0.6 | |
| | comp=N,7.4nm,0.7s | | | | | | | | |
| **MTE** | **Manteigas** | **5.70** | **330** | P | | Pn | 03 54 16.8 | +2.1 | |
| MTE | | | | S | | Sn | 03 55 19.1 | -0.6 | |
| | comp=N,7.4nm,0.7s | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **5.86** | **322** | *e*Pn | | Pn | 03 54 19.8 | +3.0 | |
| PCAS | | | | *e*Sn | | Sn | 03 55 24.6 | +1.0 | |
| **PVIS** | **Viseu** | **6.11** | **329** | *e*Pn | | Pn | 03 54 21.8 | +1.5 | |
| PVIS | | | | *e*Sn | | Sn | 03 55 29.0 | -0.8 | |
| PVIS | | | | A | | A | 03 56 14.2 | | |
| | comp=N,8.5nm,0.7s | | | | | | | | |
| **PVIS** | **Viseu** | **6.11** | **329** | P | | Pn | 03 54 21.8 | +1.5 | |
| PVIS | | | | S | | Sn | 03 55 29.0 | -0.8 | |
| | comp=N,4.2nm,0.7s | | | | | | | | |
| **PVIS** | **Viseu** | **6.11** | **329** | P | | Pn | 03 54 21.8 | +1.5 | |
| PVIS | | | | S | | Sn | 03 55 29.0 | -0.8 | |
| | comp=N,4.2nm,0.7s | | | | | | | | |
| **MVO** | **Moncorvo** | **6.18** | **337** | *e*Pn | | Pn | 03 54 23.0 | +1.8 | |
| MVO | | | | *e*Sn | | Sn | 03 55 29.1 | -2.4 | |
| MVO | | | | A | | A | 03 55 41.0 | | |
| | comp=N,12nm,0.7s | | | | | | | | |
| **MVO** | **Moncorvo** | **6.18** | **337** | P | | Pn | 03 54 22.6 | +1.4 | |
| | comp=N,8.8nm,0.3s,SNR=13 | | | | | | | | |
| MVO | | | | S | | Sn | 03 55 29.5 | -2.0 | |
| | comp=N,5.9nm,0.4s,SNR=5.0 | | | | | | | | |
| **MVO** | **Moncorvo** | **6.18** | **337** | P | | Pn | 03 54 22.6 | +1.4 | |
| | comp=N,8.8nm,0.3s,SNR=13 | | | | | | | | |
| **MVO** | **Moncorvo** | **6.18** | **337** | *e*Pn | | Pn | 03 54 23.0 | +1.8 | |
| MVO | | | | S | | Sn | 03 55 29.5 | -2.0 | |
| | comp=N,5.9nm,0.4s,SNR=5.0 | | | | | | | | |
| **ERTA** | **Horta de San J** | **6.32** | **30** | P | | Pn | 03 54 23.7 | +0.6 | |
| | comp=N,4.0nm,0.6s,SNR=7.9 | | | | | | | | |
| **ERTA** | **Horta de San J** | **6.32** | **30** | P | | Pn | 03 54 23.7 | +0.6 | |
| | comp=N,4.0nm,0.6s,SNR=7.9 | | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.63** | **333** | *e*Pn | | Pn | 03 54 28.9 | +1.4 | |
| POLO | | | | *e*Sn | | Sn | 03 55 40.4 | -2.3 | |
| POLO | | | | A | | A | 03 55 56.9 | | |
| | comp=N,3.7nm,0.7s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **6.63** | **333** | *e*Pn | | Pn | 03 54 28.9 | +1.4 | |
| POLO | | | | *e*Sn | | Sn | 03 55 40.4 | -2.3 | |
| | comp=N,3.7nm,0.7s | | | | | | | | |
| **PBRG** | **Braganca** | **6.68** | **341** | *e*Pn | | Pn | 03 54 29.5 | +1.4 | |
| PBRG | | | | *e*Sn | | Sn | 03 55 41.3 | -2.5 | |
| PBRG | | | | A | | A | 03 55 50.1 | | |
| | comp=N,5.7nm,0.7s | | | | | | | | |
| **PBRG** | **Braganca** | **6.68** | **341** | P | | Pn | 03 54 29.5 | +1.4 | |
| PBRG | | | | S | | Sn | 03 55 41.3 | -2.5 | |
| | comp=N,2.8nm,0.7s | | | | | | | | |
| **PBRG** | **Braganca** | **6.68** | **341** | P | | Pn | 03 54 29.5 | +1.4 | |
| **ETOS** | **Mallorca** | **6.73** | **49** | P | | Pn | 03 54 29.4 | +0.6 | |
| | comp=N,2.4nm,0.5s,SNR=7.9 | | | | | | | | |
| ETOS | | | | S | | Sn | 03 55 42.1 | -2.9 | |
| | comp=N,5.0nm,0.6s,SNR=7.9 | | | | | | | | |
| **ETOS** | **Mallorca** | **6.73** | **49** | P | | Pn | 03 54 29.4 | +0.6 | |
| | comp=N,2.4nm,0.5s,SNR=7.9 | | | | | | | | |
| **ECAL** | **Calabor** | **6.81** | **341** | P | | Pn | 03 54 31.2 | +1.3 | |
| | comp=N,0.9nm,0.2s,SNR=7.7 | | | | | | | | |
| ECAL | | | | S | | Sn | 03 55 44.9 | -2.1 | |
| | comp=N,2.3nm,0.3s,SNR=5.0 | | | | | | | | |
| **ECAL** | **Calabor** | **6.81** | **341** | P | | Pn | 03 54 31.2 | +1.3 | |
| | comp=N,0.9nm,0.2s,SNR=7.7 | | | | | | | | |
| ECAL | | | | S | | Sn | 03 55 44.9 | -2.1 | |
| | comp=N,2.3nm,0.3s,SNR=5.0 | | | | | | | | |
| **ELOB** | **Lobios** | **7.16** | **333** | P | | Pn | 03 54 35.7 | +1.0 | |
| | comp=N,0.2nm,0.2s,SNR=4.7 | | | | | | | | |
| ELOB | | | | S | | Sn | 03 55 53.2 | -2.5 | |
| | comp=N,2.6nm,0.4s,SNR=5.0 | | | | | | | | |
| **ELOB** | **Lobios** | **7.16** | **333** | P | | Pn | 03 54 35.7 | +1.0 | |
| | comp=N,0.2nm,0.2s,SNR=4.7 | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.32** | **333** | *e*Pn | | Pn | 03 54 38.9 | +2.0 | |
| PGAV | | | | *e*Sn | | Sn | 03 56 00.5 | +0.8 | |
| PGAV | | | | A | | A | 03 56 11.1 | | |
| | comp=N,7.3nm,0.6s | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.32** | **333** | *e*Pn | | Pn | 03 54 38.9 | +2.0 | |
| PGAV | | | | *e*Sn | | Sn | 03 56 00.5 | +0.8 | |
| | comp=N,7.3nm,0.6s | | | | | | | | |
| **YMUS** | **Pe¯a Musera** | **7.37** | **16** | P | | Pn | 03 54 38.7 | +1.2 | |
| | comp=N,0.1nm,0.2s,SNR=7.9 | | | | | | | | |
| **YMUS** | **Pe¯a Musera** | **7.37** | **16** | P | | Pn | 03 54 38.7 | +1.2 | |
| | comp=N,0.1nm,0.2s,SNR=7.9 | | | | | | | | |
| **YBER** | **Berdun** | **7.39** | **17** | P | | Pn | 03 54 38.8 | +1.0 | |
| | comp=N,1.8nm,0.7s,SNR=7.9 | | | | | | | | |
| **YBER** | **Berdun** | **7.39** | **17** | P | | Pn | 03 54 38.8 | +1.0 | |
| | comp=N,1.8nm,0.7s,SNR=7.9 | | | | | | | | |
| **YARA** | **Arangoiti** | **7.39** | **15** | P | | Pn | 03 54 39.1 | +1.2 | |
| | comp=N,3.1nm,0.5s,SNR=7.9 | | | | | | | | |
| **YARA** | **Arangoiti** | **7.39** | **15** | P | | Pn | 03 54 39.1 | +1.2 | |
| | comp=N,3.1nm,0.5s,SNR=7.9 | | | | | | | | |
| **YSIG** | **Sigues** | **7.43** | **16** | P | | Pn | 03 54 39.4 | +1.1 | |
| | comp=N,1.2nm,0.6s,SNR=7.9 | | | | | | | | |
| **YSIG** | **Sigues** | **7.43** | **16** | P | | Pn | 03 54 39.4 | +1.1 | |
| | comp=N,1.2nm,0.6s,SNR=7.9 | | | | | | | | |
| **YASP** | **Aspurt** | **7.47** | **15** | P | | Pn | 03 54 40.4 | +1.4 | |
| | comp=N,0.2nm,0.4s,SNR=7.9 | | | | | | | | |
| **YASP** | **Aspurt** | **7.47** | **15** | P | | Pn | 03 54 40.4 | +1.4 | |
| | comp=N,0.2nm,0.4s,SNR=7.9 | | | | | | | | |
| **IEPA** | **Eparoz** | **7.50** | **14** | P | | Pn | 03 54 40.6 | +1.2 | |
| | comp=N,0.6nm,0.4s,SNR=7.9 | | | | | | | | |
| **IEPA** | **Eparoz** | **7.50** | **14** | P | | Pn | 03 54 40.6 | +1.2 | |
| | comp=N,0.6nm,0.4s,SNR=7.9 | | | | | | | | |
| **IELO** | **Elad** | **7.57** | **14** | P | | Pn | 03 54 41.6 | +1.3 | |
| | comp=N,0.7nm,0.4s,SNR=7.9 | | | | | | | | |
| **IELO** | **Elcoad** | **7.57** | **14** | P | | Pn | 03 54 41.6 | +1.3 | |
| | comp=N,0.7nm,0.4s,SNR=7.9 | | | | | | | | |
| **ELAN** | **Lanestosa** | **7.70** | **2** | P | | Pn | 03 54 43.5 | +1.5 | |
| | comp=N,1.8nm,0.5s,SNR=7.9 | | | | | | | | |
| **ELAN** | **Lanestosa** | **7.70** | **2** | P | | Pn | 03 54 43.5 | +1.5 | |
| | comp=N,1.8nm,0.5s,SNR=7.9 | | | | | | | | |
| **ELIZ** | **Elizondo** | **7.83** | **12** | P | | Pn | 03 54 44.8 | +1.0 | |
| | comp=N,0.2nm,0.2s,SNR=7.9 | | | | | | | | |
| **ELIZ** | **Elizondo** | **7.83** | **12** | P | | Pn | 03 54 44.8 | +1.0 | |
| | comp=N,0.2nm,0.2s,SNR=7.9 | | | | | | | | |
| **CSOR** | **Sort** | **7.84** | **28** | P | | Pn | 03 54 44.9 | +0.9 | |
| | comp=N,0.5nm,0.4s,SNR=7.9 | | | | | | | | |
| **CSOR** | **Sort** | **7.84** | **28** | P | | Pn | 03 54 44.9 | +0.9 | |
| | comp=N,0.5nm,0.4s,SNR=7.9 | | | | | | | | |
| **EARI** | **Arriondas** | **7.84** | **352** | P | | Pn | 03 54 44.6 | +0.6 | |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | | | |
| **EARI** | **Arriondas** | **7.84** | **352** | P | | Pn | 03 54 44.6 | +0.6 | |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | | | |
| **EALK** | **Alkurruntz** | **7.88** | **12** | P | | Pn | 03 54 45.4 | +0.9 | |
| | comp=N,0.7nm,0.3s,SNR=7.9 | | | | | | | | |
| **EALK** | **Alkurruntz** | **7.88** | **12** | P | | Pn | 03 54 45.4 | +0.9 | |
| | comp=N,0.7nm,0.3s,SNR=7.9 | | | | | | | | |
| **ATE** | **Arette** | **7.92** | **17** | P | | Pn | 03 54 45.8 | +0.7 | |
| | comp=N,0.3nm,0.2s,SNR=7.9 | | | | | | | | |
| **ATE** | **Arette** | **7.92** | **17** | P | | Pn | 03 54 45.8 | +0.7 | |
| | comp=N,0.3nm,0.2s,SNR=7.9 | | | | | | | | |
| **EPON** | **Pontenova** | **8.21** | **343** | P | | Pn | 03 54 49.9 | +0.8 | |
| | comp=N,0.5nm,0.4s,SNR=7.9 | | | | | | | | |
| **EPON** | **Pontenova** | **8.21** | **343** | P | | Pn | 03 54 49.9 | +0.8 | |
| | comp=N,0.5nm,0.4s,SNR=7.9 | | | | | | | | |

*CSEM* ***16*** *03:59:56.8±0.2, 38°.81N×27°.87E, h2km, MD2.7, Error ellipse: s-maj=4.3km s-min=3.0km az=81.0*
*DDA* ***16*** *03:59:56.1, 38°.82N×27°.85E, h7km, Md2.7*
*ISK* ***16*** *03:59:56.2, 38°.75N×27°.88E, h9km, MD2.6*

**ISC 16 03:59:56.3±1.1, 38°.82N±0°.03×27°.86E±0°.03, h5km±11km, n27, σ0s47/42, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MANT** | **Manisa** | **0.64** | **121** | *i* | P | **Pg** | **04 00 08.6** | **0.0** |
| MANT | | | | *i* | S | **Sg** | **04 00 17.4** | **+0.4** |
| **MANT** | **Manisa** | **0.64** | **121** | | P | **Pg** | **04 00 08.6** | **0.0** |
| MANT | | | | | S | **Sg** | **04 00 17.4** | **+0.4** |
| **KULA** | **Kula-Manisa** | **0.70** | **116** | *e* | PG | **Pg** | **04 00 09.8** | **+0.1** |
| KULA | | | | *e* | SG | **Sg** | **04 00 18.5** | **-0.3** |
| **KULA** | **Kula-Manisa** | **0.70** | **116** | *e* | Pg | **Pg** | **04 00 09.8** | **+0.1** |
| KULA | | | | *e* | Sg | **Sg** | **04 00 18.5** | **-0.3** |
| **BLCB** | **Balcova** | **0.78** | **236** | *e* | PG | **Pg** | **04 00 11.3** | **+0.1** |
| BLCB | | | | *e* | SG | **Sg** | **04 00 21.5** | **+0.2** |
| **BLCB** | **Balcova** | **0.78** | **236** | *e* | Pg | **Pg** | **04 00 11.3** | **+0.1** |
| BLCB | | | | *e* | Sg | **Sg** | **04 00 21.5** | **+0.2** |
| **BALB** | **Balikesir** | **0.81** | **1** | *e* | PG | **Pn** | **04 00 13.7** | **-0.7** |
| **BALB** | **Balikesir** | **0.81** | **1** | *e* | Pg | **Pn** | **04 00 13.7** | **-0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.88** | **178** | *e* | PG | **Pg** | **04 00 12.4** | **-0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.88** | **178** | *e* | Pg | **Pg** | **04 00 12.4** | **-0.7** |
| **DURS** | **Dursunbey** | **0.91** | **31** | *i* | P | **Pb** | **04 00 14.4** | **-0.2** |
| DURS | | | | *i* | S | **Sb** | **04 00 27.0** | **-0.1** |
| **DURS** | **Dursunbey** | **0.91** | **31** | | P | **Pb** | **04 00 14.4** | **-0.2** |
| DURS | | | | | S | **Sb** | **04 00 27.0** | **-0.1** |
| **BALY** | **Balya** | **0.93** | **349** | *i* | P | **Pg** | **04 00 14.5** | **+0.2** |
| BALY | | | | *i* | S | **Sb** | **04 00 27.6** | **-0.1** |
| **BALY** | **Balya** | **0.93** | **349** | | P | **Pg** | **04 00 14.5** | **+0.2** |
| BALY | | | | | S | **Sb** | **04 00 27.6** | **-0.1** |
| **AYDN** | **Tasoluk** | **1.16** | **179** | *i* | P | **Pn** | **04 00 20.3** | **+1.0** |
| AYDN | | | | *i* | S | **Sn** | **04 00 35.3** | **-0.2** |
| **AYDN** | **Tasoluk** | **1.16** | **179** | | P | **Pn** | **04 00 20.3** | **+1.0** |
| AYDN | | | | | S | **Sn** | **04 00 35.3** | **-0.2** |
| **ZEY** | **¯zmir** | **1.21** | **242** | | P | **Pg** | **04 00 19.1** | **-0.5** |
| ZEY | | | | | S | **Sg** | **04 00 35.5** | **+0.2** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **354** | *e* | PN | **Pn** | **04 00 21.2** | **+1.1** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **354** | *e* | Pn | **Pn** | **04 00 21.2** | **+1.1** |
| **KHAL** | **Karahalli** | **1.36** | **109** | *i* | P | **Pg** | **04 00 22.4** | **+0.1** |
| KHAL | | | | *i* | S | **Sb** | **04 00 39.8** | **-0.1** |
| **KHAL** | **Karahalli** | **1.36** | **109** | | P | **Pg** | **04 00 22.4** | **+0.1** |
| KHAL | | | | | S | **Sb** | **04 00 39.8** | **-0.1** |
| **KCTX** | **Karacabey (Bur** | **1.49** | **15** | *e* | PN | **Pb** | **04 00 24.2** | **-0.3** |
| **KCTX** | **Karacabey (Bur** | **1.49** | **15** | *e* | Pn | **Pb** | **04 00 24.2** | **-0.3** |
| **EDC** | **Edincik** | **1.52** | **0** | *e* | PN | **Pg** | **04 00 25.6** | **+0.1** |
| **EDC** | **Edincik** | **1.52** | **0** | *e* | Pn | **Pg** | **04 00 25.6** | **+0.1** |
| **ARMT** | **Armutlu** | **1.90** | **24** | *e* | PN | **Pb** | **04 00 31.0** | **-0.5** |
| **ARMT** | **Armutlu** | **1.90** | **24** | *e* | Pn | **Pb** | **04 00 31.0** | **-0.5** |

*ISCJB* ***16*** *04:03:42.5±0.5, 45°.51N±0°.03×21°.36E±0°.04, h13km±5km, Error ellipse: s-maj=6.7km s-min=4.0km az=140.8*
*BUC* ***16*** *04:03:42.9±0.3, 45°.63N×21°.32E, h11km±2km, MD2.5/3, Error ellipse: s-maj=3.2km s-min=1.3km az=325.0*
*BEO* ***16*** *04:03:43.0±0.4, 45°.58N×21°.40E, h13km±4km, ML1.5/6*

**ISC 16 04:03:43.2±0.9, 45°.57N±0°.03×21°.39E±0°.03, h15km±7km, n21, σ0s57/31, 8C-2D, Romania**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BZS** | **Buzias** | **0.17** | **74** | *e* | Pg | **Pg** | **04 03 47.4** | **+0.1** |
| **BZS** | **Buzias** | **0.17** | **74** | ⇓*i* | P | **Pg** | **04 03 47.6** | **+0.3** |
| BZS | | | | | S | **Sb** | **04 03 51.0** | **-0.1** |
| **BZS** | **Buzias** | **0.17** | **74** | ⇓*i* | P | **Pg** | **04 03 47.6** | **+0.3** |
| **BZS** | **Buzias** | **0.17** | **74** | | S | **Sb** | **04 03 51.0** | **-0.1** |
| **BANR** | **Banloc** | **0.26** | **223** | ⇑*i* | P | **Pg** | **04 03 49.0** | **+0.2** |
| BANR | | | | *i* | S | **Sb** | **04 03 53.9** | **+0.1** |
| **BANR** | **Banloc** | **0.26** | **223** | ⇑*i* | P | **Pg** | **04 03 49.0** | **+0.2** |
| **BANR** | **Banloc** | **0.26** | **223** | | S | **Sb** | **04 03 53.9** | **+0.1** |
| **SIRR** | **Siria** | **0.72** | **15** | ⇑*i* | P | **Pg** | **04 03 57.1** | **-0.1** |
| SIRR | | | | *i* | S | **Sg** | **04 04 06.9** | **+0.1** |
| **SIRR** | **Siria** | **0.72**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ENA | | | | *i* S | | **Sn** | **04 30 53.4** | **0.0** |
| | baz=223 | | | | | | | | |
| **ILA** | **Ilan** | **0.27** | **333** | *i* P | | **Pb** | **04 30 51.0** | **+0.1** |
| | baz=338 | | | | | | | | |
| ILA | | | | *i* S | | **Sb** | **04 30 56.3** | **+0.7** |
| | baz=338 | | | | | | | | |
| **TWE** | **Neicheng** | **0.28** | **315** | ⇑*i* P | | **Pb** | **04 30 51.1** | **0.0** |
| | baz=319 | | | | | | | | |
| TWE | | | | *i* S | | **Sb** | **04 30 55.7** | **-0.1** |
| | baz=319 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.31** | **292** | ⇑*i* P | | **Pb** | **04 30 51.5** | **-0.1** |
| | baz=292 | | | | | | | | |
| ENTT | | | | *i* S | | **Sb** | **04 30 56.4** | **-0.2** |
| | baz=292 | | | | | | | | |
| **NNS** | **Nan Shan** | **0.47** | **260** | *i* P | | **Pb** | **04 30 53.7** | **-0.5** |
| | baz=255 | | | | | | | | |
| NNS | | | | S | | **Sb** | **04 31 00.1** | **-0.8** |
| | baz=255 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.49** | **11** | P | | **Pb** | **04 30 54.6** | **+0.2** |
| | baz=15 | | | | | | | | |
| TWB1 | | | | *i* S | | **Sb** | **04 31 01.4** | **+0.1** |
| | baz=15 | | | | | | | | |
| **NSK** | **Sanguang** | **0.50** | **288** | ⇑*i* P | | **Pb** | **04 30 54.3** | **-0.3** |
| | baz=288 | | | | | | | | |
| NSK | | | | *i* S | | **Sb** | **04 31 00.8** | **-0.8** |
| | baz=288 | | | | | | | | |
| **TWD** | **Chiawan** | **0.51** | **211** | *i* P | | **Pb** | **04 30 54.8** | **+0.1** |
| | baz=207 | | | | | | | | |
| TWD | | | | *e*S | | **Sb** | **04 31 01.7** | **-0.2** |
| | baz=207 | | | | | | | | |
| **TWA** | **Mucha** | **0.53** | **329** | *i* P | | **Pn** | **04 30 55.2** | **-0.9** |
| | baz=326 | | | | | | | | |
| TWA | | | | *i* S | | **Sb** | **04 31 02.4** | **0.0** |
| | baz=326 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.55** | **350** | ⇑*i* P | | **Pn** | **04 30 55.8** | **-0.6** |
| | baz=347 | | | | | | | | |
| NWF | | | | *i* S | | **Sb** | **04 31 03.5** | **+0.4** |
| | baz=347 | | | | | | | | |
| **HWA** | **Hwalien** | **0.60** | **205** | *e*P | | **Pn** | **04 30 57.7** | **+0.6** |
| | baz=209 | | | | | | | | |
| **TAP1** | **Taipei** | **0.61** | **328** | P | | **Pn** | **04 30 56.8** | **-0.3** |
| | baz=328 | | | | | | | | |
| TAP1 | | | | *i* S | | **Sn** | **04 31 05.0** | **-1.0** |
| | baz=328 | | | | | | | | |
| **TAP** | **Taipei** | **0.62** | **326** | *e*P | | **Pn** | **04 30 56.5** | **-0.7** |
| | baz=328 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.68** | **236** | P | | **Pn** | **04 30 57.5** | **-1.0** |
| | baz=234 | | | | | | | | |
| WHF | | | | S | | **Sn** | **04 31 06.8** | **-1.6** |
| | baz=234 | | | | | | | | |
| **TWT** | **Tachien** | **0.70** | **247** | P | | **Pb** | **04 30 57.7** | **-0.3** |
| | baz=242 | | | | | | | | |
| TWT | | | | S | | **Sn** | **04 31 08.7** | **+0.1** |
| | baz=242 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.71** | **324** | P | | **Pb** | **04 30 58.5** | **+0.4** |
| | baz=335 | | | | | | | | |
| TWS1 | | | | *i* S | | **Sn** | **04 31 09.0** | **+0.3** |
| | baz=335 | | | | | | | | |
| **NCU** | **National Centr** | **0.77** | **305** | *e*P | | **Pb** | **04 30 58.8** | **-0.3** |
| | baz=292 | | | | | | | | |
| NCU | | | | S | | **Sb** | **04 31 11.3** | **+2.1** |
| | baz=292 | | | | | | | | |
| **NSTT** | **Nanjuang** | **0.81** | **278** | ⇓*i* P | | **Pb** | **04 31 00.1** | **+0.4** |
| | baz=277 | | | | | | | | |
| NSTT | | | | *i* S | | **Sb** | **04 31 10.8** | **+0.5** |
| | baz=277 | | | | | | | | |
| **ESL** | **Shilin** | **0.82** | **210** | *e*P | | **Pn** | **04 30 59.1** | **-0.9** |
| | baz=220 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.88** | **289** | *e*P | | **Pb** | **04 31 01.2** | **+0.4** |
| | baz=291 | | | | | | | | |
| HSN | | | | *e*S | | **Sb** | **04 31 13.3** | **+1.1** |
| | baz=291 | | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.97** | **94** | P | | **Pn** | **04 31 01.7** | **-0.4** |
| JYNG | | | | *e*S | | **Sb** | **04 31 15.5** | **+0.6** |
| **TWQ1** | **Liyutan** | **1.03** | **260** | P | | **Pb** | **04 31 04.1** | **+0.7** |
| | baz=260 | | | | | | | | |
| TWQ1 | | | | S | | **Sb** | **04 31 18.7** | **+2.2** |
| | baz=260 | | | | | | | | |
| **WDT** | **Danda** | **1.03** | **222** | *e*P | | **Pb** | **04 31 03.2** | **-0.4** |
| | baz=208 | | | | | | | | |
| WDT | | | | *e*S | | **Sb** | **04 31 17.5** | **+0.7** |
| | baz=208 | | | | | | | | |
| **NSY** | **Sanyi** | **1.03** | **264** | P | | **Pb** | **04 31 04.1** | **+0.7** |
| | baz=272 | | | | | | | | |
| NSY | | | | *e*S | | **Sb** | **04 31 19.3** | **+2.8** |
| | baz=272 | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.03** | **93** | P | | **Pn** | **04 31 02.9** | **0.0** |
| YOJ | | | | *e*S | | **Sb** | **04 31 17.1** | **+0.6** |
| **YOJ** | **Yonaguni jima** | **1.03** | **93** | *e*P | | **Pn** | **04 31 02.9** | **0.0** |
| | baz=82 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.10** | **235** | *e*P | | **Pb** | **04 31 04.3** | **-0.4** |
| | baz=225 | | | | | | | | |
| **TYC** | **Yuchr** | **1.12** | **237** | P | | **Pb** | **04 31 04.9** | **-0.1** |
| | baz=236 | | | | | | | | |
| TYC | | | | *e*S | | **Sb** | **04 31 20.7** | **+1.5** |
| | baz=236 | | | | | | | | |
| **EHY** | **Hungye** | **1.14** | **207** | *e*P | | **Pb** | **04 31 04.6** | **-0.6** |
| | baz=206 | | | | | | | | |
| **TWF1** | **Yuli** | **1.28** | **205** | *e*P | | **Pn** | **04 31 05.8** | **-0.7** |
| | baz=214 | | | | | | | | |
| **YUS** | **Yu-Shan** | **1.34** | **220** | *e*P | | **Pb** | **04 31 08.2** | **-0.7** |
| | baz=208 | | | | | | | | |
| **ALS** | **Alishan** | **1.41** | **225** | *e*P | | **Pb** | **04 31 09.8** | **-0.3** |
| | baz=213 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.44** | **230** | *e*P | | **Pb** | **04 31 10.4** | **-0.1** |
| | baz=229 | | | | | | | | |
| CHN5 | | | | *e*S | | **Sb** | **04 31 31.1** | **+2.7** |
| | baz=229 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.50** | **199** | *e*P | | **Pn** | **04 31 09.9** | **+0.5** |
| | baz=185 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.55** | **211** | *e*P | | **Pn** | **04 31 10.4** | **+0.2** |
| | baz=199 | | | | | | | | |
| **CHN2** | **Minshiung** | **1.62** | **233** | *e*P | | **Pb** | **04 31 11.7** | **-1.8** |
| | baz=221 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.69** | **96** | P | | **Pn** | **04 31 11.6** | **-0.5** |
| IRIF | | | | *e*S | | **Sn** | **04 31 32.5** | **-0.4** |
| **STYT** | **Tauyuan** | **1.70** | **217** | *e*P | | **Pb** | **04 31 13.1** | **-1.8** |
| | baz=207 | | | | | | | | |
| STYT | | | | *e*S | | **Sb** | **04 31 36.3** | **+0.3** |
| | baz=207 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.72** | **223** | *e*P | | **Pb** | **04 31 14.7** | **-0.6** |
| | baz=211 | | | | | | | | |
| WTP | | | | *e*S | | **Sb** | **04 31 38.7** | **+2.2** |
| | baz=211 | | | | | | | | |
| **TWK** | **Hsinying** | **1.79** | **226** | *e*P | | **Pb** | **04 31 15.9** | **-0.5** |
| | baz=226 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.82** | **223** | *e*P | | **Pb** | **04 31 15.4** | **-1.5** |
| | baz=211 | | | | | | | | |
| CHN1 | | | | *e*S | | **Sb** | **04 31 40.0** | **+0.7** |
| | baz=211 | | | | | | | | |
| **TWG** | **Pinlang** | **1.85** | **204** | *e*P | | **Pn** | **04 31 14.9** | **+0.6** |
| | baz=190 | | | | | | | | |
| **SGST** | **Jiashian** | **1.86** | **220** | *e*P | | **Pb** | **04 31 16.1** | **-1.6** |
| | baz=207 | | | | | | | | |
| SGST | | | | *e*S | | **Sb** | **04 31 41.3** | **+0.7** |
| | baz=207 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.96** | **98** | P | | **Pn** | **04 31 16.3** | **+0.6** |
| JKRS | | | | *e*S | | **Sn** | **04 31 39.9** | **+0.4** |
| **JIJ** | **Ishigaki jima** | **2.07** | **94** | P | | **Pn** | **04 31 18.2** | **+1.0** |
| JIJ | | | | *e*S | | **Sn** | **04 31 41.2** | **-0.9** |
| **JISG** | **Ishigakijimahi** | **2.21** | **88** | P | | **Pn** | **04 31 18.4** | **-0.8** |
| **EAST** | **Anshuo** | **2.33** | **204** | *e*P | | **Pn** | **04 31 22.2** | **+1.3** |
| | baz=193 | | | | | | | | |

*IGQ* ***16*** *05:12:25.±0.4, 1.°36S×80.°48W, h8km±4km, Mb4.3, Error ellipse: s-maj=5.6km s-min=2.8km az=19.0*
*BJI* ***16*** *05:12:29.9, 1.°40S×80.°30W, h68km, mB5.2/4, Ms5.3/4, Ms7 5.0/3*
*NEIC* ***16*** *05:12:30.0±1.4, 1.°44S×80.°34W, h68km±14km, mb4.5/22, MD4.4(IGQ), Error ellipse: s-maj=17.5km s-min=7.5km az=72.0*
*NEIC Felt at Guayaquil.*
*IDC* ***16*** *05:12:32.8±4.7, 1.°32S×80.°37W, h88km±40km, mb3.5/3, mb1 3.6/5, mb1mx3.4/20, mbtmp3.8/5, MS3.5/6, Ms1 3.5/6, ms1mx3.4/13, Error ellipse: s-maj=35.7km s-min=24.6km az=48.0*

**ISC 16 05:12:23.6±0.5, 1.°38S±0.°04×80.°54W±0.°04, h11km, n94, σ1§48/95, mb4.4/24, MS3.6/6, 13D, Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHIS** | **Cerro-Chispas-** | **0.37** | **331** | P | **Pb** | **05 12 33.5** | **+1.3** |
| **PECV** | **Mancha de Ca P** | **0.77** | **40** | P | **Pg** | **05 12 37.1** | **-1.4** |
| **MAG1** | **Magdalena** | **1.51** | **31** | P | **Pb** | **05 12 52.0** | **+0.4** |
| **IGUA** | **Igualata** | **1.91** | **93** | P | **Pb** | **05 12 58.9** | **+0.1** |
| **RIOE** | **Riobamba** | **1.95** | **101** | ⇓S | **Sb** | **05 13 24.6** | **+0.8** |
| **RIOE** | **Riobamba** | **1.95** | **101** | ⇓P | **Pb** | **05 12 58.9** | **-0.5** |
| **PAST** | **Pastocalle** | **2.02** | **70** | P | **Pn** | **05 12 58.4** | **+0.4** |
| **BIL2** | **Estacion Bilba** | **2.04** | **92** | P | **Pb** | **05 13 00.4** | **-0.5** |
| **BBIL** | **Ulba Tungurahu** | **2.06** | **92** | ⇓P | **Pn** | **05 13 00.1** | **+1.7** |
| **BMAS** | **Trigal station** | **2.07** | **94** | ⇓P | **Pn** | **05 13 00.4** | **+1.8** |
| **BMAS** | **Trigal station** | **2.07** | **94** | ⇓S | **Sg** | **05 13 32.1** | **+2.0** |
| **JUI6** | **Juive** | **2.08** | **91** | P | **Pb** | **05 13 02.5** | **+1.1** |
| **ARRY** | **Arrayan** | **2.09** | **94** | ⇓P | **Pb** | **05 13 01.5** | **-0.2** |
| **RETU** | **Refugio** | **2.10** | **92** | P | **Pb** | **05 13 01.2** | **-0.7** |
| **PAT1** | **Patacocha** | **2.11** | **94** | P | **Pn** | **05 13 01.2** | **+1.9** |
| **BPAT** | **Tungurahua Vol** | **2.11** | **93** | ⇓P | **Pb** | **05 13 01.3** | **-0.9** |
| **RUN5** | **Runtun** | **2.12** | **91** | S | **Sg** | **05 13 34.5** | **+2.7** |
| **RUN5** | **Runtun** | **2.12** | **91** | P | **Pn** | **05 13 01.1** | **+1.9** |
| **BRUN** | **Tungurahua Vol** | **2.13** | **91** | P | **Pn** | **05 13 01.0** | **+1.6** |
| **BRUN** | **Tungurahua Vol** | **2.13** | **91** | S | **Sg** | **05 13 34.5** | **+2.3** |
| **BULB** | **Ulba Tungurahu** | **2.13** | **92** | ⇓P | **Pn** | **05 13 01.4** | **+1.9** |
| **CAMI** | **Rancho Maria** | **2.15** | **71** | P | **Pn** | **05 13 01.1** | **+1.3** |
| **BNAS** | **Cotopaxi Volca** | **2.18** | **71** | ⇓P | **Pn** | **05 13 01.5** | **+1.3** |
| **BMOR** | **Cotopaxi Volca** | **2.18** | **73** | P | **Pn** | **05 13 01.5** | **+1.2** |
| **PISA** | **Pisayambo** | **2.18** | **82** | P | **Pn** | **05 13 02.2** | **+2.0** |
| **NAS2** | **Nasa** | **2.20** | **71** | P | **Pn** | **05 13 02.2** | **+1.7** |
| **MOV1** | **Cotopaxi Vol s** | **2.20** | **73** | P | **Pb** | **05 13 03.4** | **-0.4** |
| **BREF** | **Cotopaxi Volca** | **2.22** | **72** | ⇓P | **Pb** | **05 13 03.5** | **-0.5** |
| **BVC2** | **Cotopaxi Volca** | **2.25** | **72** | ⇓P | **Pb** | **05 13 03.8** | **-0.8** |
| **BTAM** | **Cotopaxi Volca** | **2.26** | **72** | P | **Pn** | **05 13 03.2** | **+1.9** |
| **PITA** | **Cotopaxi Volc** | **2.26** | **69** | P | **Pb** | **05 13 03.9** | **-0.8** |
| **VC1** | **Cotopaxi 1** | **2.26** | **71** | P | **Pb** | **05 13 03.7** | **-1.1** |
| **TERV** | **Terraza Guagua** | **2.28** | **58** | P | **Pn** | **05 13 02.2** | **+0.6** |
| **TAMB** | **Tambo** | **2.28** | **73** | P | **Pb** | **05 13 04.0** | **-1.0** |
| **GGP** | **Refugio Guagua** | **2.29** | **59** | P | **Pn** | **05 13 02.9** | **+1.2** |
| **COV1** | **Cotopaxi Volc** | **2.31** | **72** | P | **Pn** | **05 13 02.4** | **+0.2** |
| **YANA** | **Yana** | **2.33** | **58** | P | **Pn** | **05 13 03.7** | **+1.3** |
| **ANTI** | **Antisana** | **2.55** | **69** | ⇓P | **Pb** | **05 13 08.9** | **-0.9** |
| **OTAV** | **Otavalo** | **2.64** | **53** | ⇓P | **Pn** | **05 13 07.7** | **+1.2** |
| **OTAV** | **Otavalo** | **2.64** | **53** | *e*Pn | **Pn** | **05 13 07.0** | **+0.6** |
| OTAV | | | | *e*Sn | **Sb** | **05 13 43.0** | **-0.6** |
| **CUIC** | **Volcan Cuicoch** | **2.75** | **53** | P | **Pn** | **05 13 08.4** | **+0.5** |
| **COTA** | **Cotacachi** | **2.78** | **52** | P | **Pn** | **05 13 10.4** | **+1.9** |
| **CAYA** | **Cayambe** | **2.93** | **61** | P | **Pn** | **05 13 13.1** | **+2.5** |
| **CHAR** | **Charly** | **3.15** | **66** | P | **Pb** | **05 13 19.0** | **-0.8** |
| **ROSC** | **El Rosal** | **8.77** | **45** | P | Pn | 05 14 35.0 | +4.2 |
| | 1.7nm,0.3s,baz=232,slow=4.5,SNR=8.4 | | | | | | |
| ROSC | | | | S | **Sn** | **05 16 10.8** | **+1.0** |
| | 0.5nm,0.3s,baz=90,slow=20,SNR=1.6 | | | | | | |
| **ROSC** | **El Rosal** | **8.77** | **45** | *e*Pn | Pn | 05 14 36.2 | +5.4 |
| **NNA** | **Nana** | **11.16** | **161** | *e*Pn | **Pn** | **05 15 04.9** | **+1.6** |
| NNA | | | | *e*Sn | **Sn** | **05 17 08.3** | **+0.1** |
| **SAML** | **Samuel** | **18.84** | **114** | *e*P | **P** | **05 16 42.1** | **-1.6** |
| | 18nm,1.1s | | | | | | |
| SAML | | | | *e*Sn | **Sn** | **05 20 15.2** | **-0.2** |
| **LPAZ** | **La Paz** | **19.21** | **141** | P | **P** | **05 16 49.9** | **+1.5** |
| | 0.2nm,0.3s,baz=314,slow=9.2,SNR=10.0 | | | | | | |
| **HKT** | **Hockley** | **34.40** | **336** | *e*P | **P** | **05 19 12.1** | **+1.2** |
| | 2.5nm,0.4s | | | | | | |
| **CPCT** | **Cooper Cave** | **36.82** | **355** | *e*P | **P** | **05 19 31.6** | **-0.1** |
| **TXAR** | **Lajitas Array** | **37.70** | **326** | P | **P** | **05 19 40.5** | **+1.0** |
| | 0.2nm,0.5s,baz=142,slow=10,SNR=2.7 | | | | | | |
| TXAR | | | | LR | LR | 05 33 54.6 | |
| | comp=Z,53nm,19.0s,baz=0.0,slow=34 | | | | | | |
| **MIAR** | **Mount Ida** | **37.77** | **342** | *e*P | **P** | **05 19 40.4** | **+0.6** |
| | 26nm,1.8s | | | | | | |
| **WVT** | **Waverly** | **37.93** | **350** | *e*P | **P** | **05 19 40.2** | **-0.9** |
| | 2.8nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **40.21** | **168** | *e*P | **P** | **05 19 58.6** | **-1.7** |
| **TRQA** | **Tornquist** | **40.29** | **157** | *e*P | **P** | **05 20 00.3** | **-0.6** |
| | 6.4nm,0.9s | | | | | | |
| **U34A** | **Anderson Ranch** | **40.81** | **339** | *e*P | **P** | **05 20 05.9** | **+0.7** |
| | 6.4nm,0.5s | | | | | | |
| **MSTX** | **Muleshoe** | **40.90** | **331** | *e*P | **P** | **05 20 07.2** | **+1.1** |
| | 5.8nm,1.0s | | | | | | |
| **KSU1** | **Kansas State U** | **42.90** | **342** | *e*P | **P** | **05 20 22.4** | **+0.1** |
| | 12nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **43.52** | **329** | *e*P | **P** | **05 20 28.7** | **+1.1** |
| | 22nm,1.9s | | | | | | |
| **T25A** | **Trinidad** | **44.26** | **332** | *e*P | **P** | **05 20 35.6** | **+2.2** |
| | 14nm,1.4s | | | | | | |
| **SDCO** | **Great Sand Dun** | **45.26** | **332** | *e*P | **P** | **05 20 42.2** | **+0.7** |
| | 3.2nm,0.8s | | | | | | |
| **WUAZ** | **Wupatki** | **46.65** | **325** | *e*P | **P** | **05 20 53.9** | **+1.5** |
| | 3.0nm,0.8s | | | | | | |
| **CCUT** | **Cedar City** | **49.21** | **325** | *e*P | **P** | **05 21 14.4** | **+2.0** |
| | 8.1nm,1.7s | | | | | | |
| **MSU** | **Marysvale** | **49.23** | **327** | *e*P | **P** | **05 21 13.7** | **+1.2** |
| **RSSD** | **Black Hills** | **49.93** | **338** | *e*P | **P** | **05 21 18.6** | **+1.0** |
| | 2.8nm,0.9s | | | | | | |
| **TPNV** | **Topopah Spring** | **50.50** | **323** | *e*P | **P** | **05 21 24.0** | **+1.9** |
| | 40nm,2.5s | | | | | | |
| **HWUT** | **Hardware Ranch** | **51.19** | **330** | *e*P | **P** | **05 21 28.0** | **+0.8** |
| | 10nm,1.5s | | | | | | |
| **REDW** | **Red Top Meadow** | **52.18** | **332** | *e*P | **P** | **05 21 34.6** | **-0.1** |
| | 16nm,1.5s | | | | | | |
| **NV01** | **Mina Array Sit** | **52.70** | **323** | *e*P | **P** | **05 21 40.0** | **+1.4** |
| **NVAR** | **Mina Array Bea** | **52.70** | **323** | LR | LR | 05 42 55.3 | |
| | comp=Z,78nm,18.1s,baz=100,slow=35 | | | | | | |
| **HLID** | **Hailey** | **54.05** | **330** | *e*P | **P** | **05 21 47.8** | **-0.6** |
| | 2.9nm,1.3s | | | | | | |
| **WVOR** | **Wild Horse Val** | **55.50** | **326** | *e*P | **P** | **05 21 59.5** | **+0.6** |
| | 3.0nm,1.2s | | | | | | |
| **SCHQ** | **Schefferville** | **57.15** | **9** | LR | LR | 05 46 36.7 | |
| | comp=Z,14nm,20.4s,baz=8.5,slow=36 | | | | | | |
| **PPT** | **Papeete** | **69.61** | **252** | LR | LR | 05 47 19.1 | |
| | comp=Z,134nm,18.7s,baz=94,slow=30 | | | | | | |
| **DBIC** | **Dimbokro** | **75.95** | **83** | P | **P** | **05 24 10.2** | **-1.0** |
| | 2.5nm,0.8s,baz=256,slow=8.3,SNR=2.6 | | | | | | |
| DBIC | | | | LR | LR | 05 55 55.3 | |
| | comp=Z,65nm,18.0s,baz=144,slow=34 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **82.62** | **162** | P | **P** | **05 24 45.8** | **-0.8** |
| **TOA0** | **Torodi Ar. Sit** | **82.75** | **77** | *e*P | **P** | **05 24 46.7** | **-1.7** |
| **TORD** | **Torodi Ar. Bea** | **82.75** | **77** | P | **P** | **05 24 46.5** | **-1.9** |
| | 1.2nm,1.0s,baz=276,slow=6.0,SNR=5.5 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **82.79** | **335** | *e*P | **P** | **05 24 46.5** | **-1.1** |
| | 0.5nm,0.7s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **82.88** | **161** | P | **P** | **05 24 47.9** | **0.0** |
| **PPLA** | **Purkeypile** | **82.93** | **334** | *e*P | **P** | **05 24 48.0** | **-0.5** |
| | 12nm,2.3s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **83.23** | **162** | P | **P** | **05 24 49.1** | **-0.6** |
| | baz=294,slow=4.1 | | | | | | |
| **SNAA** | **Sanae** | **84.84** | **162** | P | **P** | **05 24 56.4** | **-1.6** |
| **QSPA** | **South Pole Qui** | **88.68** | **180** | *e*P | **P** | **05 25 16.6** | **-0.4** |
| | 3.4nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **92.05** | **29** | LR | LR | 06 05 37.3 | |
| | comp=Z,7.4nm,19.5s,baz=265,slow=35 | | | | | | |
| **KSH** | **Kashi** | **136.42** | **27** | *e*PKP | **PKPdf** | **05 31 47.5** | **+1.3** |
| KSH | | | | *e*PP | **PP** | **05 34 29.8** | **+3.7** |
| KSH | | | | SS | SS | 05 52 23.1 | -4.5 |
| KSH | | | | PPMZ | | | |
| | 80nm,5.8s | | | | | | |
| KSH | | | | LN | | | |
| | 110nm,5.6s | | | | | | |
| KSH | | | | LE | | | |
| | 91nm,6.0s | | | | | | |
| KSH | | | | LZ | | | |
| | 140nm,6.1s | | | | | | |
| **WMQ** | **Urumqi** | **136.46** | **12** | *e*PKP | PKPdf | 05 31 40.0 | -6.1 |
| **ASAR** | **Alice Springs** | **138.28** | **231** | PKP | **PKPdf** | **05 31 46.9** | **-3.1** |
| | 0.4nm,0.6s,baz=116,slow=2.1,SNR=3.7 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **139.21** | **346** | *e*PKP | **PKPdf** | **05 31 52.5** | **+1.2** |
| HHC | | | | PP | PP | 05 34 49.6 | +6.5 |
| HHC | | | | SS | SS | 05 53 00.3 | +0.3 |
| HHC | | | | PPMZ | | | |
| | 39nm,7.4s | | | | | | |
| HHC | | | | LN | | | |
| | 84nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | 190nm,14.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **139.77** | **236** | PKP | **PKPdf** | **05 31 51.9** | **-0.9** |
| | 0.8nm,0.8s,baz=148,slow=0.8,SNR=3.8 | | | | | | |
| **LZH** | **Lanzhou** | **145.22** | **354** | *e*PKPbc | **PKPbc** | **05 31 59.6** | **-2.1** |
| LZH | | | | sPKP | | 05 32 30.4 | |
| LZH | | | | LN | | | |
| | 120nm,16.0s | | | | | | |
| LZH | | | | LE | | | |
| | 140nm,17.4s | | | | | | |
| LZH | | | | LZ | | | |
| | 180nm,19.2s | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **147.77** | **232** | *e*PKPbc | **PKPdf** | **05 32 07.7** | **+1.0** |
| **CD2** | **Chengdu** | **150.34** | **353** | PKPbc | **PKPdf** | **05 32 07.4** | **-3.2** |
| CD2 | | | | pPKP | **PKPab** | **05 32 25.6** | **+3.7** |
| CD2 | | | | sPKP | | 05 32 32.5 | |
| CD2 | | | | PP | **PP** | **05 35 48.9** | **-0.5** |
| CD2 | | | | SKS | SKSdf | 05 39 09.8 | -9.1 |
| CD2 | | | | SKKS | SKKSac | 05 42 33.3 | -8.9 |
| CD2 | | | | SS | **SS** | **05 55 03.4** | **-3.8** |
| CD2 | | | | PPMZ | | | |
| | 120nm,5.0s | | | | | | |

*NIED* ***16*** *05:36:00,31.°30N×142.°20E, h5km, Mw3.9 Best double couple: M0 9.21000×10^14 NP1:φ1=175.00000°, δ27.00000°, λ60.00000°. NP2:φ2=27.00000°, δ67.00000°, λ104.00000°.*
*JMA* ***16*** *05:36:18.7±0.6, 31.°26N×142.°16E, h10km, M4.1*
*IDC* ***16*** *05:36:19.4±0.7, 31.°12N×141.°90E, h0km, mb4.1/12, mb1 4.2/13, mb1mx4.1/32, mbtmp4.0/13, ML3.1/2, MS3.0/3, Ms1 3.0/3, ms1mx2.6/30, Error ellipse: s-maj=23.5km s-min=16.7km az=58.0*
*BJI* ***16*** *05:36:21.3, 31.°01N×142.°09E, h43km, mb4.5/26, mB4.8/21, Ms4.6/11, Ms7 4.4/8*
*ISCJB* ***16*** *05:36:21.4±0.3, 31.°16N±0.°03×141.°80E±0.°04, h24km, mb4.4/30, MS3.5/1, Error ellipse: s-maj=5.6km s-min=4.0km az=152.7*
*MOS* ***16*** *05:36:22.3±0.9, 31.°11N×141.°82E, h33km, mb4.6/10, Error ellipse: s-maj=15.9km s-min=8.2km az=113.2*
*NEIC* ***16*** *05:36:25.1±0.8, 31.°13N×141.°83E, h39km±8km, mb4.6/15, MW3.9(NIED), Error ellipse: s-maj=7.1km s-min=6.1km az=71.0*

**ISC 16 05:36:23.3±0.4, 31.°18N±0.°05×141.°96E±0.°06, h24km, n107, σ1§60/124, mb4.3/30, 4C-2D, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHCJ** | **Hachijojimakas** | **2.64** | **316** | P | **Pn** | **05 37 04.2** | **-0.1** |
| **JHJ2** | **Mitsune** | **2.65** | **317** | P | **Pn** | **05 37 02.5** | **-2.1** |
| **JHJ2** | **Mitsune** | **2.65** | **317** | *e*Pn | **Pn** | **05 37 04.9** | **+0.3** |
| JHJ2 | | | | *e*Sn | **Sn** | **05 37 33.1** | **-2.9** |
| **JHJ** | **Hachijo jima 2** | **2.68** | **317** | Pn | Pn | 05 37 01.5 | -3.4 |
| | 5.6nm,0.3s,baz=52,slow=20,SNR=3.9 | | | | | | |
| JHJ | | | | Sn | **Sn** | **05 37 38.5** | **+1.9** |
| | 17nm,0.3s,baz=219,slow=8.8,SNR=5.1 | | | | | | |
| **BSO1** | **Boso 1** | **3.57** | **347** | P | **Pn** | **05 37 14.6** | **-2.0** |
| **BSO3** | **Boso 3** | **3.82** | **342** | P | **Pn** | **05 37 21.0** | **+0.7** |
| **BSO4** | **Boso 4** | **4.04** | **341** | P | **Pn** | **05 37 23.8** | **+0.2** |
| **CBIJ** | **Chichi jima** | **4.07** | **177** | P | **Pn** | **05 37 23.8** | **-0.3** |
| CBIJ | | | | S | **Sn** | **05 38 08.3** | **-2.7** |
| **CBIJ** | **Chichi jima** | **4.07** | **177** | *e*Pn | **Pn** | **05 37 23.7** | **-0.4** |
| CBIJ | | | | *e*Sn | **Sn** | **05 38 11.9** | **+0.9** |
| **JHU** | **Hanno** | **5.17** | **335** | P | **Pn** | **05 37 39.3** | **+0.1** |
| JHU | | | | *e*S | **Sn** | **05 38 34.3** | **-3.8** |
| **JYT** | **Yasato** | **5.25** | **344** | P | **Pn** | **05 37 39.5** | **-0.8** |
| **JNY** | **Yasuok** | **5.40** | **322** | P | **Pn** | **05 37 44.4** | **+2.0** |
| **JRY** | **Ryogami san** | **5.46** | **333** | P | **Pn** | **05 37 43.3** | **+0.1** |
| JRY | | | | S | **Sn** | **05 38 45.2** | **-0.1** |
| **JHO** | **Hitachi** | **5.54** | **348** | P | **Pn** | **05 37 42.7** | **-1.6** |
| JHO | | | | *e*S | Sn | 05 38 40.2 | -7.1 |
| **JAG** | **Ashikaga** | **5.64** | **339** | P | **Pn** | **05 37 44.7** | **-0.9** |
| JAG | | | | *e*S | **Sn** | **05 38 47.0** | **-2.6** |
| **MAJO** | **Matsushiro** | **6.20** | **331** | ⇓*i*P | **Pn** | **05 37 54.2** | **+0.9** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,54nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **6.20** | **331** | *e*Pn | **Pn** | **05 37 54.0** | **+0.7** |
| **MAT** | **Matsushiro** | **6.20** | **331** | P | **Pn** | **05 37 53.2** | **-0.1** |
| MAT | | | | *e*S | Sn | 05 39 09.8 | +6.4 |
| **JFK** | **Kawauchi** | **6.24** | **352** | P | **Pn** | **05 37 51.9** | **-2.0** |
| **JMK** | **Ichinoseki** | **7.78** | **356** | P | **Pn** | **05 38 13.2** | **-1.8** |
| JMK | | | | S | Sn | 05 39 33.2 | -9.1 |
| **JNU** | **Nakatsue** | **9.60** | **285** | LR | LR | 05 42 21.7 | |
| | comp=Z,70nm,18.1s,baz=115,slow=38 | | | | | | |
| **JNU** | **Nakatsue** | **9.60** | **285** | *e*Pn | **Pn** | **05 38 40.5** | **+0.6** |
| **ASAJ** | **Asahikawa** | **12.93** | **2** | LR | LR | 05 45 28.3 | |
| | comp=Z,82nm,19.9s,baz=190,slow=42 | | | | | | |
| **KSRS** | **Korea Array** | **13.18** | **302** | Pn | **Pn** | **05 39 28.9** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=106,slow=12,SNR=2.5 | | | | | | |
| KSRS | | | | LR | LR | 05 44 27.6 | |
| | comp=Z,56nm,19.0s,baz=105,slow=37 | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **13.20** | **12** | *c iP* | **P** | **05 39 39.7** | **+0.8** |
| YUK | | | | pmax | pmax | | |
| | comp=N,80nm,0.9s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,95nm,0.9s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,40nm,0.4s | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.20** | **302** | P | **Pn** | **05 39 28.9** | **-0.4** |
| **KSAR** | **Wonju Array Be** | **13.20** | **302** | Pn | **Pn** | **05 39 28.9** | **-0.4** |
| **YSS** | **Yuzh-Sakhalins** | **15.77** | **2** | *i* P | **Pn** | **05 40 03.6** | **-0.1** |
| **HABR** | **Khabarovsk** | **18.06** | **345** | *e*P | **Pn** | **05 40 30.8** | **-1.7** |
| HABR | | | | *e*S | **Sn** | **05 43 53.1** | **-0.1** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,42nm,2.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,77nm,17.0s | | | | | | |
| **CN2** | **Changchun** | **18.14** | **319** | *e*P | **P** | **05 40 37.1** | **+3.4** |
| **KLR** | **Kul'dur** | **19.61** | **340** | *e*P | **Pn** | **05 40 50.6** | **-0.7** |
| **NJ2** | **Nanjing**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,16nm,1.1s | | | | | | | | |
| TLY | | | | | MLR | MLR | | | |
| | comp=Z,71nm,18.0s | | | | | | | | |
| **KMI** | **Kunming** | **34.97** | **270** | | P | **P** | **05 43 13.8** | **-0.2** | |
| KMI | | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| KMI | | | | | PMZ | | | | |
| | comp=Z,59nm,4.6s | | | | | | | | |
| **WMQ** | **Urumqi** | **44.13** | **302** | *e* | P | **P** | **05 44 30.0** | **+0.1** | |
| **COEN** | **Coen** | **44.89** | **178** | *e* | P | **P** | **05 44 37.3** | **+1.3** | |
| | comp=Z,7.6nm,1.0s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **46.34** | **317** | *e* | P | **P** | **05 44 46.0** | **-1.2** | |
| **ZALV** | **Zalesovo Beam** | **46.34** | **317** | | P | **P** | **05 44 46.0** | **-1.1** | |
| | comp=Z,1.3nm,0.6s,baz=96,slow=6.6,SNR=5.1 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.34** | **317** | *i* | P | **P** | **05 44 46.9** | **-0.3** | |
| ZALV | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **MK01** | **Makanchi Array** | **47.80** | **307** | *e* | P | **P** | **05 44 57.6** | **-1.1** | |
| **MKAR** | **Makanchi Array** | **47.80** | **307** | | P | **P** | **05 44 57.8** | **-1.0** | |
| | comp=Z,1.5nm,0.6s,baz=91,slow=8.8,SNR=8.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.80** | **307** | | P | **P** | **05 44 57.8** | **-1.0** | |
| MKAR | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.80** | **307** | *e* | P | **P** | **05 44 56.9** | **-1.9** | |
| **MAKZ** | **Makanchi** | **48.02** | **307** | *e* | P | **P** | **05 44 59.7** | **-0.8** | |
| **RSO** | **Redoubt South** | **51.32** | **35** | *e* | P | **P** | **05 45 25.1** | **-0.4** | |
| **WRAB** | **Tennant Creek** | **51.34** | **189** | ⇑*e* | P | **P** | **05 45 24.2** | **-1.7** | |
| WRAB | | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **51.34** | **189** | | P | **P** | **05 45 25.0** | **-0.9** | |
| | comp=Z,36nm,1.1s,SNR=6.1 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **51.34** | **189** | *e* | P | **P** | **05 45 24.8** | **-1.0** | |
| | comp=Z,9.8nm,1.1s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **51.35** | **189** | | P | **P** | **05 45 24.9** | **-1.1** | |
| | comp=Z,1.2nm,0.4s,baz=7.0,slow=7.7,SNR=10 | | | | | | | | |
| **SPU** | **Mount Spurr** | **51.71** | **34** | *e* | P | **P** | **05 45 28.8** | **+0.5** | |
| **PPLA** | **Purkeypile** | **51.79** | **32** | *e* | P | **P** | **05 45 31.3** | **+2.3** | |
| | comp=Z,61nm,1.9s | | | | | | | | |
| **KSH** | **Kashi** | **53.40** | **298** | *e* | P | P | 05 45 45.3 | +4.1 | |
| KSH | | | | *es* | P | sP | 05 46 03.3 | +12 | |
| KSH | | | | *e* | PP | **PP** | **05 47 45.8** | **+4.3** | |
| KSH | | | | | S | **S** | **05 53 14.8** | **+2.6** | |
| KSH | | | | | sS | sS | 05 53 36.0 | +12 | |
| KSH | | | | | ScS | **ScS** | **05 55 27.5** | **-2.0** | |
| KSH | | | | | SS | **SKiKP** | **05 56 56.8** | **+0.6** | |
| KSH | | | | | PMZ | | | | |
| | comp=Z,50nm,3.8s | | | | | | | | |
| KSH | | | | | LN | | | | |
| | comp=Z,130nm,4.9s | | | | | | | | |
| KSH | | | | | LE | | | | |
| | comp=Z,100nm,4.9s | | | | | | | | |
| KSH | | | | | LZ | | | | |
| | comp=Z,180nm,5.5s | | | | | | | | |
| **AAK** | **Ala-Archa** | **53.84** | **302** | ⇓*e* | P | **P** | **05 45 42.8** | **-1.7** | |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.6s | | | | | | | | |
| **HDA** | **Harding Lake** | **54.22** | **30** | *e* | P | **P** | **05 45 45.1** | **-1.6** | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **ILAR** | **Eielson Array** | **54.26** | **30** | | P | **P** | **05 45 46.4** | **-0.6** | |
| | comp=Z,0.9nm,0.9s,baz=263,slow=6.7,SNR=9.5 | | | | | | | | |
| **AS01** | **Alice Springs** | **55.07** | **189** | *e* | P | **P** | **05 45 53.2** | **-0.1** | |
| **ASAR** | **Alice Springs** | **55.07** | **189** | | P | **P** | **05 45 52.8** | **-0.6** | |
| | comp=Z,1.0nm,0.6s,baz=356,slow=5.1,SNR=17 | | | | | | | | |
| **KKAR** | **Karatay Array** | **56.60** | **304** | *e* | P | **P** | **05 46 03.2** | **-1.0** | |
| KKAR | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| **KKAR** | **Karatay Array** | **56.60** | **304** | *e* | P | **P** | **05 46 03.2** | **-1.0** | |
| | comp=Z,6.5nm,0.8s | | | | | | | | |
| **ARU** | **Arti** | **61.12** | **321** | *c i* | P | P | 05 46 45.9 | +11 | |
| ARU | | | | | S | S | 05 55 15.3 | +22 | |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.15** | **313** | *e* | P | **P** | **05 46 41.7** | **-0.7** | |
| | comp=Z,2.8nm,0.6s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **63.01** | **314** | | P | **P** | **05 46 49.5** | **+1.3** | |
| | comp=Z,1.3nm,0.7s,baz=81,slow=15,SNR=4.5 | | | | | | | | |
| **E03A** | **Lebam** | **70.94** | **47** | *e* | P | **P** | **05 47 40.2** | **+1.7** | |
| | comp=Z,50nm,1.4s | | | | | | | | |
| **RAO** | **Raoul Island** | **71.20** | **143** | *e* | P | **P** | **05 47 39.5** | **-0.7** | |
| **RAO** | **Raoul Island** | **71.20** | **143** | *e* | P | **P** | **05 47 39.5** | **-0.7** | |
| | comp=Z,306nm,0.9s | | | | | | | | |
| **FINES** | **FINESS Array B** | **74.22** | **333** | | P | **P** | **05 47 59.9** | **+2.1** | |
| | comp=Z,3.4nm,1.0s,baz=90,slow=5.7,SNR=5.4 | | | | | | | | |
| **SWMT** | **Swartz Lake** | **76.25** | **43** | *e* | P | **P** | **05 48 10.4** | **+0.5** | |
| **SLMT** | **Seeley Lake** | **76.68** | **43** | *e* | P | **P** | **05 48 12.4** | **-0.1** | |
| **LRM** | **Limekiln Ridge** | **78.04** | **44** | *e* | P | **P** | **05 48 21.2** | **+1.0** | |
| **HLID** | **Hailey** | **78.06** | **46** | *e* | P | **P** | **05 48 20.1** | **-0.2** | |
| | comp=Z,2.1nm,1.2s | | | | | | | | |
| **NV01** | **Mina Array Sit** | **78.17** | **52** | *e* | P | **P** | **05 48 21.2** | **+0.1** | |
| **NVAR** | **Mina Array Bea** | **78.17** | **52** | | P | **P** | **05 48 21.4** | **+0.3** | |
| | comp=Z,1.0nm,0.7s,baz=284,slow=5.8,SNR=9.0 | | | | | | | | |
| **MTUM** | **Tungsten Hills** | **78.53** | **53** | *e* | P | **P** | **05 48 22.8** | **-0.2** | |
| **AKASG** | **Malin Array Be** | **79.23** | **323** | | P | **P** | **05 48 26.5** | **+0.2** | |
| | comp=Z,0.3nm,0.4s,baz=50,slow=5.3,SNR=3.7 | | | | | | | | |
| **HVU** | **Hansel Valley** | **80.03** | **47** | *e* | P | **P** | **05 48 31.0** | **-0.1** | |
| HVU | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **HVU** | **Hansel Valley** | **80.03** | **47** | *e* | P | **P** | **05 48 31.0** | **-0.1** | |
| | comp=Z,1.7nm,0.9s | | | | | | | | |
| **TPNV** | **Topopah Spring** | **80.33** | **53** | *e* | P | **P** | **05 48 32.9** | **+0.1** | |
| TPNV | | | | | pmax | pmax | | | |
| | comp=Z,34nm,2.5s | | | | | | | | |
| **TPNV** | **Topopah Spring** | **80.33** | **53** | *e* | P | **P** | **05 48 32.9** | **+0.1** | |
| | comp=Z,34nm,2.5s | | | | | | | | |
| **DUG** | **Dugway** | **80.87** | **48** | *e* | P | **P** | **05 48 36.0** | **+0.4** | |
| DUG | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | | |
| **DUG** | **Dugway** | **80.87** | **48** | *e* | P | **P** | **05 48 36.0** | **+0.4** | |
| | comp=Z,2.2nm,1.0s | | | | | | | | |
| **IBP** | **Imperial Bould** | **82.70** | **56** | *e* | P | **P** | **05 48 45.7** | **+0.4** | |
| **SRU** | **San Rafael** | **82.94** | **48** | *e* | P | **P** | **05 48 46.8** | **+0.2** | |
| SRU | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **SRU** | **San Rafael** | **82.94** | **48** | *e* | P | **P** | **05 48 46.8** | **+0.2** | |
| | comp=Z,3.6nm,1.0s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **83.10** | **312** | | P | **P** | **05 48 47.0** | **-0.3** | |
| | comp=Z,1.2nm,0.8s,baz=79,slow=3.0,SNR=4.6 | | | | | | | | |
| **BR231** | **Keskin MP Arra** | **83.58** | **313** | *e* | P | **P** | **05 48 48.4** | **-1.4** | |
| **PV09** | **Paradox Valley** | **84.18** | **48** | *e* | P | **P** | **05 48 53.4** | **+0.3** | |
| **PV10** | **Paradox Valley** | **84.31** | **48** | *e* | P | **P** | **05 48 54.1** | **+0.3** | |
| **PV05** | **Paradox Valley** | **84.44** | **49** | *e* | P | **P** | **05 48 55.1** | **+0.7** | |
| **PV01** | **Paradox Valley** | **84.75** | **48** | *e* | P | **P** | **05 48 56.1** | **+0.2** | |
| **TX31** | **Lajitas Ar. Si** | **93.31** | **53** | *e* | P | **P** | **05 49 37.1** | **+0.5** | |
| **TXAR** | **Lajitas Array** | **93.31** | **53** | | P | **P** | **05 49 36.9** | **+0.3** | |
| | comp=Z,1.4nm,0.8s,baz=300,slow=3.1,SNR=17 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.71** | **313** | | PKP | **PKPdf** | **05 55 13.7** | **-2.2** | |
| | comp=Z,0.2nm,0.6s,baz=68,slow=2.9,SNR=2.8 | | | | | | | | |
| **LPAZ** | **La Paz** | **148.85** | **69** | | PKPbc | **PKPbc** | **05 56 11.5** | **+1.2** | |
| | comp=Z,0.7nm,0.8s,baz=225,slow=5.7,SNR=2.8 | | | | | | | | |

*NIED* ***16*** *05:54:00,27.°30N×128.°30E,h50km,Mw4.1 Best double couple: M0 1.64000×10^15 NP1:φs=147.00000°,δ32.00000°, λ66.00000°. NP2:φs=355.00000°,δ61.00000°,λ104.00000°.*
*ISCJB* ***16*** *05:54:04.9±0.3,27.°25N±0.°04×128.°28E±0.°06,h65km±3km, mb3.9/13,Error ellipse: s-maj=10.6km s-min=3.4km az=38.4*
*IDC* ***16*** *05:54:05.6±0.6,27.°20N×128.°17E,h52km±8km,mb3.8/12, mb1 4.0/14,mb1mx3.8/36,mbtmp4.1/14,MS3.1/3, Ms1 3.2/3,ms1mx2.7/27,Error ellipse: s-maj=23.9km s-min=11.5km az=91.0*
*JMA* ***16*** *05:54:06.0±0.1,27.°25N×128.°31E,h60km±1km,M4.1*
*JMA Felt II J1.*
*NEIC* ***16*** *05:54:06.5±0.8,27.°14N×128.°16E,h62km±8km,mb4.7/1, MW4.1(NIED),Error ellipse: s-maj=14.4km s-min=9.6km az=123.0*
*NEIC Recorded [2 JMA] on Okino-erabu-shima and [1 JMA] on Okinawa, Tokuno-shima and Yoron-jima.*

**ISC 16 05:54:06.2±0.7,27.°20N±0.°05×128.°35E±0.°05,h62km±6km, n57,σ1°17°62,mb4.1/13,Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JOKE** | **Okinoerabujima** | **0.25** | **51** | P | **Pn** | **05 54 15.8** | **-0.4** |
| JOKE | | | | *e*S | **Sn** | **05 54 22.7** | **-0.8** |
| **JOW** | **Kunigami** | **0.37** | **191** | P | **Pn** | **05 54 17.1** | **0.0** |
| JOW | | | | *e*S | **Sn** | **05 54 25.2** | **+0.1** |
| **JOW** | **Kunigami** | **0.37** | **191** | P | **Pn** | **05 54 17.2** | **0.0** |
| | 99nm,0.3s,baz=102,slow=28,SNR=4627 | | | | | | |
| JOW | | | | S | **Sn** | **05 54 25.2** | **+0.1** |
| | 484nm,0.3s,baz=105,slow=20,SNR=180 | | | | | | |
| **JOW** | **Kunigami** | **0.37** | **191** | *e*Pg | **Pn** | **05 54 17.1** | **0.0** |
| JOW | | | | *e*Sg | **Sn** | **05 54 24.6** | **-0.4** |
| **JIH** | **Iheya** | **0.38** | **244** | P | **Pn** | **05 54 16.7** | **-0.5** |
| JIH | | | | *e*S | **Sn** | **05 54 24.1** | **-1.0** |
| **JNTH** | **Nagotoyohara** | **0.74** | **203** | P | **Pn** | **05 54 21.1** | **0.0** |
| JNTH | | | | *e*S | **Sn** | **05 54 32.1** | **+0.2** |
| **JTK** | **Tokunoshima** | **0.79** | **42** | P | **Pn** | **05 54 21.4** | **-0.3** |
| JTK | | | | *e*S | **Sn** | **05 54 32.0** | **-1.0** |
| **JAGN** | **Aguni-jima** | **1.16** | **239** | P | **Pn** | **05 54 26.1** | **-0.3** |
| JAGN | | | | *e*S | **Sn** | **05 54 40.9** | **-0.6** |
| **JJT2** | **Tamagusuku 2** | **1.19** | **207** | P | **Pn** | **05 54 27.3** | **+0.5** |
| **JAMN** | **Amaminishikomi** | **1.27** | **35** | P | **Pn** | **05 54 27.1** | **-0.8** |
| JAMN | | | | *e*S | **Sn** | **05 54 42.7** | **-1.3** |
| **JAM** | **Amami Oshima** | **1.64** | **42** | P | **Pn** | **05 54 32.6** | **-0.2** |
| JAM | | | | *e*S | **Sn** | **05 54 52.9** | **0.0** |
| **JKE** | **Kume jima 2** | **1.65** | **238** | P | **Pn** | **05 54 32.5** | **-0.4** |
| **JZK** | **Kikaishima** | **1.81** | **52** | P | **Pn** | **05 54 35.7** | **+0.5** |
| **JTAJ** | **Takarajima** | **2.08** | **21** | P | **Pn** | **05 54 38.2** | **-0.6** |
| JTAJ | | | | *e*S | **Sn** | **05 55 02.3** | **-1.4** |
| **JMZ** | **Minamidaito 2** | **2.92** | **118** | *e*S | **Sn** | **05 55 20.5** | **-3.6** |
| **JNN** | **Nakanoshima** | **2.95** | **27** | P | **Pn** | **05 54 50.2** | **-0.5** |
| **JYAK** | **Yakushimahirau** | **3.57** | **32** | P | **Pn** | **05 54 58.4** | **-0.7** |
| JYAK | | | | *e*S | **Sn** | **05 55 37.9** | **-2.2** |
| **JIKM** | **Ikemajima** | **3.60** | **232** | P | **Pn** | **05 54 58.6** | **-0.9** |
| **JOGS** | **Gusukube** | **3.60** | **228** | P | **Pn** | **05 54 59.0** | **-0.5** |
| **JKC** | **Kuchinoerabu** | **3.63** | **26** | P | **Pn** | **05 55 00.2** | **+0.3** |
| **JMJ** | **Miyako jima 2** | **3.64** | **230** | P | **Pn** | **05 54 59.5** | **-0.5** |
| **JIRB** | **Irabujima** | **3.71** | **231** | P | **Pn** | **05 54 59.7** | **-1.3** |
| **JTN** | **Tanegashima 3** | **4.14** | **33** | P | **Pn** | **05 55 06.2** | **-0.7** |
| **JTJ** | **Tarama** | **4.16** | **233** | P | **Pn** | **05 55 05.9** | **-1.3** |
| **JNU** | **Nakatsue** | **6.29** | **20** | P | **Pn** | **05 55 37.8** | **+1.4** |
| | 16nm,0.3s,baz=208,slow=7.6,SNR=96 | | | | | | |
| JNU | | | | S | **Sn** | **05 56 47.1** | **+0.1** |
| | 0.4nm,0.3s,baz=315,slow=13,SNR=1.2 | | | | | | |
| **TATO** | **Taipei** | **6.56** | **252** | *e*Pn | **Pn** | **05 55 40.3** | **+0.3** |
| **YHNB** | **Yeheng** | **6.77** | **250** | *e*Pn | **Pn** | **05 55 43.3** | **+0.3** |
| | 50nm,0.6s | | | | | | |
| **NACB** | **Ninganchiao** | **6.80** | **245** | *e*Pn | **Pn** | **05 55 40.9** | **-2.5** |
| | 31nm,0.3s | | | | | | |
| **YULB** | **Yu-li** | **7.42** | **241** | *e*Pn | Pn | 05 55 47.7 | -4.3 |
| | 72nm,0.3s | | | | | | |
| **SSLB** | **Suanglung** | **7.50** | **245** | *e*Pn | **Pn** | **05 55 50.3** | **-2.7** |
| | 42nm,0.3s | | | | | | |
| **TWG** | **Pinlang** | **7.91** | **238** | *e*Pn | Pn | 05 55 53.9 | -4.7 |
| **TPUB** | **Ta-pu** | **8.00** | **243** | *e*Pn | **Pn** | **05 55 57.8** | **-2.0** |
| | 54nm,0.4s | | | | | | |
| **KSAR** | **Wonju Array Be** | **10.22** | **358** | P | **Pn** | **05 56 31.5** | **+1.4** |
| **KSRS** | **Korea Array** | **10.23** | **358** | P | **Pn** | **05 56 31.5** | **+1.3** |
| | 0.3nm,0.3s,baz=180,slow=15,SNR=5.3 | | | | | | |
| KSRS | | | | LR | LR | 06 00 52.4 | |
| | comp=Z,18nm,18.9s,baz=174,slow=40 | | | | | | |
| **MAJO** | **Matsushiro** | **12.52** | **39** | *e*Pn | **P** | **05 57 12.5** | **+1.4** |
| | 14nm,0.8s | | | | | | |
| **MAT** | **Matsushiro** | **12.52** | **39** | P | **P** | **05 57 13.0** | **+1.9** |
| **SONM** | **Songino Array** | **26.80** | **326** | P | **P** | **05 59 41.6** | **+1.0** |
| | 0.7nm,0.6s,baz=139,slow=11,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.41** | **258** | P | **P** | **05 59 55.2** | **+0.1** |
| | 0.6nm,0.4s,baz=58,slow=7.3,SNR=5.2 | | | | | | |
| CMAR | | | | LR | LR | 06 11 00.7 | |
| | comp=Z,61nm,18.6s,baz=139,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **36.02** | **94** | T | T | 06 38 56.0 | |
| | baz=290,slow=74,SNR=10 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **36.02** | **94** | T | T | 06 39 00.9 | |
| | baz=290,slow=74,SNR=10 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **36.04** | **94** | T | T | 06 39 03.7 | |
| | baz=290,slow=74,SNR=17 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **36.26** | **96** | T | T | 06 39 22.0 | |
| | baz=292,slow=74,SNR=3.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.27** | **96** | T | T | 06 39 25.9 | |
| | baz=292,slow=74,SNR=3.8 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **36.28** | **96** | T | T | 06 39 25.8 | |
| | baz=292,slow=74,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.98** | **311** | P | **P** | **06 01 42.3** | **-0.6** |
| | 0.5nm,0.4s,baz=101,slow=10.0,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.55** | **322** | P | **P** | **06 01 47.9** | **+0.4** |
| | 0.9nm,0.3s,baz=92,slow=6.9,SNR=4.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.23** | **316** | P | **P** | **06 02 08.5** | **-0.7** |
| | 1.7nm,0.3s,baz=102,slow=9.0,SNR=14 | | | | | | |
| **WRAB** | **Tennant Creek** | **47.22** | **172** | *e*P | **P** | **06 02 33.1** | **0.0** |
| | 9.5nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.22** | **172** | P | **P** | **06 02 33.4** | **+0.3** |
| | 4.9nm,0.7s,baz=353,slow=8.3,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **50.85** | **173** | P | **P** | **06 03 01.6** | **+0.8** |
| | 2.3nm,0.5s,baz=6.0,slow=14,SNR=49 | | | | | | |
| ASAR | | | | LR | LR | 06 25 29.2 | |
| | comp=Z,48nm,19.5s,baz=126,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **63.53** | **28** | P | **P** | **06 04 32.5** | **+2.7** |
| | 0.2nm,0.6s,baz=284,slow=8.0,SNR=5.8 | | | | | | |
| **FINES** | **FINESS Array B** | **72.07** | **330** | P | **P** | **06 05 22.2** | **-1.3** |
| | 1.9nm,0.7s,baz=110,slow=2.8,SNR=9.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.87** | **319** | P | **P** | **06 05 38.8** | **-1.3** |
| | 1.0nm,0.4s,baz=58,slow=6.2,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.53** | **308** | P | **P** | **06 05 49.5** | **-0.5** |
| | 1.5nm,0.6s,baz=87,slow=5.0,SNR=8.7 | | | | | | |
| **NB2** | **NORSAR Subarra** | **78.49** | **334** | P | **P** | **06 05 59.0** | **-1.5** |
| | comp=Z,1.3nm,0.6s,baz=54,slow=5.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **78.49** | **334** | P | **P** | **06 05 59.4** | **-1.1** |
| | comp=Z,1.9nm,0.6s,baz=52,slow=5.6,SNR=9.6 | | | | | | |
| **CLL** | **Collm** | **83.42** | **325** | *e*P | **P** | **06 06 27.0** | **+0.2** |

*ISCJB* ***16*** *06:03:02.8±0.3,24.°52N±0.°02×121.°91E±0.°02,h25km±3km, Error ellipse: s-maj=4.0km s-min=2.9km az=139.3*
*JMA* ***16*** *06:03:02.1±0.2,24.°48N×121.°77E,h43km±4km,M2.6*
*TAP* ***16*** *06:03:02.5,24.°53N×121.°85E,h27km,ML3.3,B*

**ISC 16 06:03:02.6±0.9,24.°54N±0.°02×121.°87E±0.°02,h27km±5km, n38,σ0°83/64,5C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWC** | **Suao** | **0.07** | **344** | ⇑*i* P | **Pb** | **06 03 07.4** | **0.0** |
| | baz=4.0 | | | | | | |
| TWC | | | | *i* S | **Sb** | **06 03 10.6** | **0.0** |
| | baz=4.0 | | | | | | |
| **ENA** | **Nanau** | **0.16** | **227** | ⇑*i* P | **Pb** | **06 03 08.0** | **-0.1** |
| | baz=223 | | | | | | |
| ENA | | | | S | **Sb** | **06 03 11.7** | **-0.2** |
| | baz=223 | | | | | | |
| **ILA** | **Ilan** | **0.25** | **334** | *i* P | **Pn** | **06 03 09.5** | **-1.0** |
| | baz=340 | | | | | | |
| ILA | | | | *i* S | **Sn** | **06 03 14.7** | **-0.9** |
| | baz=340 | | | | | | |
| **TWE** | **Neicheng** | **0.26** | **314** | ⇑*i* P | **Pb** | **06 03 09.4** | **+0.1** |
| | baz=321 | | | | | | |
| TWE | | | | *i* S | **Sb** | **06 03 14.0** | **+0.2** |
| | baz=321 | | | | | | |
| **ENTT** | **Nioudou** | **0.30** | **290** | ⇑*i* P | **Pb** | **06 03 09.8** | **0.0** |
| | baz=294 | | | | | | |
| ENTT | | | | *i* S | **Sb** | **06 03 14.6** | **-0.1** |
| | baz=294 | | | | | | |
| **EGS** | | **0.31** | **10** | *e* P | **Pn** | **06 03 10.4** | **-1.0** |
| | baz=14 | | | | | | |
| EGS | | | | *e*S | **Sb** | **06 03 15.5** | **+0.5** |
| | baz=14 | | | | | | |
| **NNS** | **Nan Shan** | **0.47** | **258** | *i* P | **Pb** | **06 03 12.1** | **-0.4** |
| | baz=256 | | | | | | |
| NNS | | | | *i* S | **Sb** | **06 03 18.6** | **-0.5** |
| | baz=256 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.48** | **13** | *e*P | **Pn** | **06 03 12.8** | **-0.9** |
| | baz=15 | | | | | | |
| TWB1 | | | | S | **Sb** | **06 03 19.7** | **+0.3** |
| | baz=15 | | | | | | |
| **NSK** | **Sanguang** | **0.49** | **286** | ⇑*i* P | **Pb** | **06 03 12.7** | **-0.1** |
| | baz=294 | | | | | | |
| NSK | | | | *i* S | **Sb** | **06 03 19.1** | **-0.6** |
| | baz=294 | | | | | | |
| **TWA** | **Mucha** | **0.51** | **329** | *i* P | **Pn** | **06 03 13.5** | **-0.6** |
| | baz=327 | | | | | | |
| TWA | | | | *i* S | **Sn** | **06 03 21.0** | **-1.1** |
| | baz=327 | | | | | | |
| **TWD** | **Chiawan** | **0.52** | **209** | P | **Pb** | **06 03 13.0** | **-0.3** |
| | baz=207 | | | | | | |
| TWD | | | | S | **Sb** | **06 03 20.9** | **+0.4** |
| | baz=207 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.54** | **351** | *i* P | **Pn** | **06 03 14.2** | **-0.3** |
| | baz=348 | | | | | | |
| NWF | | | | *i* S | **Sb** | **06 03 21.4** | **+0.4** |
| | baz=348 | | | | | | |
| **TAP1** | **Taipei** | **0.59** | **328** | P | **Pn** | **06 03 15.1** | **-0.2** |
| | baz=329 | | | | | | |
| TAP1 | | | | S | **Sn** | **06 03 23.4** | **-0.5** |
| | baz=329 | | | | | | |
| **TAP** | **Taipei** | **0.60** | **326** | *e*P | **Pn** | **06 03 15.1** | **-0.2** |
| | baz=329 | | | | | | |
| **HWA** | **Hwalien** | **0.61** | **204** | *e*P | **Pn** | **06 03 14.9** | **-0.6** |
| | baz=209 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.68** | **235** | P | **Pb** | **06 03 15.7** | **-0.5** |
| | baz=234 | | | | | | |
| WHF | | | | S | **Sb** | **06 03 25.2** | **-0.2** |
| | baz=234 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.69** | **324** | P | **Pn** | **06 03 17.3** | **+0.7** |
| | baz=336 | | | | | | |
| TWS1 | | | | S | **Sn** | **06 03 27.4** | **+0.8** |
| | baz=336 | | | | | | |
| **TWT** | **Tachien** | **0.69** | **246** | *e*P | **Pn** | **06 03 16.4** | **-0.5** |
| | baz=242 | | | | | | |
| TWT | | | | S | **Sn** | **06 03 27.3** | **+0.5** |
| | baz=242 | | | | | | |
| **NSTT** | **Nanjuang** | **0.80** | **277** | P | **Pn** | **06 03 18.4** | **+0.4** |
| | baz=278 | | | | | | |
| NSTT | | | | S | **Sn** | **06 03 29.2** | **+0.1** |
| | baz=278 | | | | | | |
| **ESL** | **Shilin** | **0.82** | **209** | *e*P | **Pb** | **06 03 17.4** | **-0.9** |
| | baz=208 | | | | | | |
| ESL | | | | *e*S | **Sn** | **06 03 30.1** | **+0.3** |
| | baz=208 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.98** | **95** | P | **Pb** | **06 03 20.7** | **-0.3** |
| JYNG | | | | S | **Sn** | **06 03 34.3** | **+0.7** |
| **TWQ1** | **Liyutan** | **1.02** | **259** | P | **Pb** | **06 03 22.5** | **+0.9** |
| | baz=260 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **06 03 37.0** | **+2.4** |
| | baz=260 | | | | | | |
| **WDT** | **Danda** | **1.03** | **221** | *e*P | **Pn** | **06 03 21.3** | **-0.2** |
| | baz=208 | | | | | | |
| WDT | | | | S | **Sn** | **06 03 35.9** | **+0.7** |
| | baz=208 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.04** | **94** | P | **Pb** | **06 03 21.6** | **-0.4** |
| **YOJ** | **Yonaguni jima** | **1.04** | **94** | *e*P | **Pb** | **06 03 21.9** | **-0.1** |
| | baz=82 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.10** | **234** | *e*P | **Pb** | **06 03 23.2** | **+0.1** |
| | baz=225 | | | | | | |
| **TYC** | **Yuchr** | **1.12** | **236** | *e*P | **Pb** | **06 03 23.3** | **-0.1** |
| | baz=236 | | | | | | |
| TYC | | | | *e*S | **Sb** | **06 03 38.5** | **+0.9** |
| | baz=236 | | | | | | |
| **EHY** | **Hungye** | **1.15** | **206** | *e*P | **Pn** | **06 03 21.5** | **-1.4** |
| | baz=206 | | | | | | |
| **TWF1** | **Yuli** | **1.29** | **204** | *e*P | **Pn** | **06 03 22.8** | **-2.1** |
| | baz=214 | | | | | | |
| **YUS** | **Yu-Shan** | **1.34** | **219** | *e*P | **Pb** | **06 03 26.6** | **-0.8** |
| | baz=208 | | | | | | |
| **ALS** | **Alishan** | **1.41** | **224** | *e*P | **Pb** | **06 03 27.9** | **-0.7** |
| | baz=212 | | | | | | |
| **CHN5** | **Tsauling** | **1.44** | **230** | *e*P | **Pb** | **06 03 28.9** | **+0.1** |
| | baz=230 | | | | | | |
| CHN5 | | | | S | **Sb** | **06 03 49.4** | **+2.6** |
| | baz=230 | | | | | | |
| **STYT** | **Tauyuan** | **1.71** | **217** | *e*P | **Pn** | **06 03 31.6** | **+1.0** |
| | baz=207 | | | | | | |
| **CHN1** | **Nanshi** | **1.82** | **223** | *e*P | **Pb** | **06 03 34.2** | **-1.1** |
| | baz=224 | | | | | | |
| **SGST** | **Jiashian** | **1.87** | **219** | *e*P | **Pb** | **06 03 34.2** | **-1.9** |
| | baz=208 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.97** | **98** | P | **Pn** | **06 03 34.8** | **+0.6** |
| JKRS | | | | S | **Sn** | **06 03 58.3** | **+0.2** |
| **JIJ** | **Ishigaki jima** | **2.08** | **94** | P | **Pn** | **06 03 36.5** | **+0.8** |
| JIJ | | | | S | **Sn** | **06 04 00.1** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **2.22** | **88** | P | **Pn** | **06 03 37.9** | **+0.2** |
| JISG | | | | S | **Sn** | **06 04 05.1** | **+0.9** |

*GUC* ***16*** *06:25:52.9±0.6,26.°36S×70.°11W,h39km±3km,ML3.6*
*ISCJB* ***16*** *06:25:55.3±1.2,26.°40S±0.°07×70.°36W±0.°08,h33km,Error ellipse: s-maj=13.8km s-min=4.9km az=41.9*

**ISC 16 06:25:58.3±1.7,26.°53S±0.°09×70.°34W±0.°08,h35km,n10, σ2°10°18,1C,Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CDCH** | **Caldera** | **0.69** | **218** | *e*P | **Pn** | **06 26 10.7** | **-0.8** |
| CDCH | | | | *i* S | **Sn** | **06 26 23.1** | **+2.1** |
| **CPCH** | **Copiapo** | **0.83** | **181** | ⇑*i* P | **Pn** | **06 26 11.4** | **-2.1** |
| CPCH | | | | *i* S | **Sn** | **06 26 25.4** | **+0.9** |
| **VACH** | **Vallenar** | **2.08** | **190** | *e*P | **Pn** | **06 26 29.3** | **-1.3** |
| VACH | | | | *i* S | **Sn** | **06 26 57.2** | **+1.9** |
| **LCO** | **Las Campanas** | **2.50** | **187** | *e*P | **Pn** | **06 26 35.3** | **-1.4** |
| LCO | | | | *e*S | **Sn** | **06 27 08.0** | **+2.0** |
| LCO | | | | AML | AML | 06 27 25.2 | |
| | comp=N,276nm,0.5s | | | | | | |
| **TLL** | **Tololo Astrono** | **3.65** | **186** | *e*P | **Pn** | **06 26 51.0** | **-1.5** |
| **FSA** | **Cafayete** | **3.91** | **85** | *e*P | **Pn** | **06 26 54.5** | **-1.6** |
| FSA | | | | *i* S | **Sn** | **06 27 45.0** | **+4.2** |
| **CYA** | **Choya** | **4.46** | **116** | *i* P | **Pn** | **06 27 01.3** | **-2.2** |
| CYA | | | | *i*

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PCIG** | | **2.37** | **321** | *e*P | **Pn** | **06 43 46.2** | **-1.5** |
| PCIG | | | | *i* S | **Sn** | **06 44 12.6** | **-3.0** |
| **PCIG** | | **2.37** | **321** | *e*P | **Pn** | **06 43 46.2** | **-1.5** |
| PCIG | | | | *i* S | **Sn** | **06 44 12.6** | **-3.0** |
| **SNET** | **Serv Nac Est T** | **2.38** | **94** | *e*P | **Pn** | **06 43 47.9** | **+0.1** |
| SNET | | | | *e*S | **Sn** | **06 44 13.6** | **-2.3** |
| SNET | | | | AML | AML | 06 44 19.4 | |
| | comp=Z,4µm,0.3s | | | | | | |
| **CCIG** | **Comitan** | **2.45** | **349** | *e*P | **Pn** | **06 43 48.8** | **-0.2** |
| CCIG | | | | *e*S | **Sn** | **06 44 19.1** | **+1.2** |
| **CCIG** | **Comitan** | **2.45** | **349** | *e*P | **Pn** | **06 43 48.8** | **-0.2** |
| CCIG | | | | *e*S | **Sn** | **06 44 19.1** | **+1.2** |
| **LFIJ** | **La Fuente** | **2.49** | **92**⇧ | *e*P | **Pn** | **06 43 49.6** | **+0.2** |
| **LFRS** | **El Faro** | **2.54** | **95** | *e*P | **Pn** | **06 43 50.4** | **+0.2** |
| **LBRS** | **Las Brisas** | **2.55** | **92**⇧ | *e*P | **Pn** | **06 43 50.4** | **+0.1** |
| **SNVI** | **San Vicente** | **2.76** | **95** | *e*P | **Pn** | **06 43 53.8** | **+0.6** |
| SNVI | | | | *e*S | **Sn** | **06 44 23.7** | **-1.8** |
| **TGIG** | | **3.23** | **334** | *e*P | **Pn** | **06 43 58.9** | **-0.5** |
| TGIG | | | | *i* S | **Sn** | **06 44 34.4** | **-2.3** |
| **TGIG** | | **3.23** | **334** | *e*P | **Pn** | **06 43 58.9** | **-0.5** |
| TGIG | | | | *i* S | **Sn** | **06 44 34.4** | **-2.3** |
| **VSM** | **San Miguel** | **3.33** | **97** | *e*P | **Pn** | **06 44 01.5** | **+0.4** |
| VSM | | | | *e*S | **Sn** | **06 44 38.0** | **-1.5** |
| **CAHU** | **Cacacuatique** | **3.36** | **91**⇩ | *i* P | **Pn** | **06 44 01.4** | **0.0** |
| **TGUH** | **Tegucigalpa,Un** | **4.27** | **87** | *e*P | **Pn** | **06 44 13.4** | **-0.3** |
| TGUH | | | | ⇑*i* P | **Pn** | **06 44 13.4** | **-0.3** |
| TGUH | | | | *e*S | **Sn** | **06 45 04.3** | **+2.0** |
| **TGUH** | **Tegucigalpa,Un** | **4.27** | **87** | *e*Pn | **Pn** | **06 44 13.4** | **-0.3** |
| **CMIG** | **Matias Romero** | **4.47** | **316** | P | **Pn** | **06 44 15.5** | **-0.9** |
| | comp=Z,21nm,0.3s,baz=151,slow=12,SNR=176 | | | | | | |
| CMIG | | | | S | **Sn** | **06 45 04.9** | **-2.2** |
| | comp=Z,34nm,0.3s,baz=298,slow=22,SNR=6.5 | | | | | | |
| CMIG | | | | LR | LR | 06 46 26.0 | |
| | comp=Z,642nm,19.4s,baz=144,slow=41 | | | | | | |
| **HUIG** | **Huatulco** | **4.69** | **294** | *e*P | **Pn** | **06 44 17.4** | **-2.1** |
| HUIG | | | | *i* S | **Sn** | **06 45 08.7** | **-4.1** |
| **HUIG** | **Huatulco** | **4.69** | **294** | *e*P | **Pn** | **06 44 17.4** | **-2.1** |
| HUIG | | | | *i* S | **Sn** | **06 45 08.7** | **-4.1** |
| **TEL3** | **Telica 3** | **4.87** | **105** | *e*P | **Pn** | **06 44 22.1** | **+0.2** |
| **CNGN** | **Cerro Negro** | **5.03** | **105** | *e*P | **Pn** | **06 44 23.4** | **-0.8** |
| CNGN | | | | *e*S | **Sn** | **06 45 21.6** | **+0.7** |
| CNGN | | | | AML | AML | 06 45 27.6 | |
| | comp=N,140nm,0.2s | | | | | | |
| **MOMN** | **Momotombo** | **5.20** | **105** | *e*P | **Pn** | **06 44 25.6** | **-0.9** |
| **COPN** | **Copaltepe** | **5.22** | **108** | *e*P | **Pn** | **06 44 26.0** | **-0.8** |
| **APYN** | **Apoyeque** | **5.43** | **107** | *e*P | **Pn** | **06 44 29.8** | **+0.2** |
| **TISN** | **Laguna Tiscapa** | **5.53** | **107** | *e*P | **Pn** | **06 44 30.0** | **-1.1** |
| **MGAN** | **Managua** | **5.55** | **107** | *e*P | **Pn** | **06 44 30.6** | **-0.7** |
| **OXX** | **Oaxaca** | **5.83** | **304** | *e*P | Pn | 06 44 38.9 | +3.6 |
| OXX | | | | *e*S | **Sn** | **06 45 42.1** | **+1.1** |
| **OXX** | **Oaxaca** | **5.83** | **304** | *e*P | Pn | 06 44 38.9 | +3.6 |
| OXX | | | | *e*S | **Sn** | **06 45 42.1** | **+1.1** |
| **BOAB** | **BOACO BROADBAN** | **6.01** | **103** | *e*P | **Pn** | **06 44 36.6** | **-1.0** |
| **TEIG** | **Tepich** | **7.12** | **27** | *e*P | **Pn** | **06 44 52.3** | **-0.4** |
| **TEIG** | **Tepich** | **7.12** | **27** | *e*Pn | **Pn** | **06 44 53.0** | **+0.3** |
| | comp=N,36nm,0.5s | | | | | | |
| **JTS** | **JuntasAbangare** | **7.46** | **118** | P | **Pn** | **06 44 59.0** | **+1.5** |
| | comp=N,10nm,0.3s,baz=316,slow=18,SNR=49 | | | | | | |
| JTS | | | | S | **Sn** | **06 46 17.1** | **-3.7** |
| | baz=133,slow=18,SNR=1.3 | | | | | | |
| **JTS** | **JuntasAbangare** | **7.46** | **118** | *e*Pn | **Pn** | **06 44 59.9** | **+2.3** |
| JTS | | | | S | **Sn** | **06 46 17.1** | **-3.7** |
| **JCR** | **Jicaral** | **7.55** | **121** | *e*P | **Pn** | **06 45 01.0** | **+2.2** |
| JCR | | | | *e*S | | 06 45 14.1 | |
| **TLIG** | **Tlapa** | **7.59** | **300** | *e*P | **Pn** | **06 45 00.7** | **+1.3** |
| TLIG | | | | *e*S | Sn | 06 46 16.8 | -7.4 |
| **CGA2** | **Cerro Gallo 2** | **8.02** | **118** | *e*P | **Pn** | **06 45 07.8** | **+2.6** |
| **ACX** | **Acapulco** | **8.45** | **292** | *i* P | **Pn** | **06 45 12.4** | **+1.4** |
| ACX | | | | *i* S | **Sn** | **06 46 44.8** | **-0.1** |
| **ACX** | **Acapulco** | **8.45** | **292** | *i* P | **Pn** | **06 45 12.4** | **+1.4** |
| **BUS** | **Buena Vista** | **8.85** | **118** | *e*P | **Pn** | **06 45 19.5** | **+2.6** |
| **SFJM** | **Santa Fe** | **12.71** | **303** | *i* P | Pn | 06 46 12.5 | +3.2 |
| **SFJM** | **Santa Fe** | **12.71** | **303** | *i* P | Pn | 06 46 12.5 | +3.2 |
| **MTDJ** | **Mount Denham** | **14.26** | **70** | *e*Pn | **Pn** | **06 46 31.6** | **+1.3** |
| **035A** | **Encino** | **14.34** | **336** | P | **Pn** | **06 46 31.3** | **+0.2** |
| | baz=14 | | | | | | |
| **034A** | **Hebbronville** | **14.69** | **335** | P | **Pn** | **06 46 36.1** | **+0.4** |
| | baz=15 | | | | | | |
| 034A | | | | S | **Sn** | **06 49 16.0** | **-1.2** |
| | baz=15 | | | | | | |
| **934A** | **Benavides** | **15.10** | **336** | P | **Pn** | **06 46 41.3** | **+0.4** |
| | baz=15 | | | | | | |
| **933A** | **Laredo** | **15.42** | **334** | P | **Pn** | **06 46 45.5** | **+0.4** |
| | baz=15 | | | | | | |
| **737A** | **Port Lavaca** | **15.48** | **344** | P | **Pn** | **06 46 45.8** | **-0.2** |
| | baz=16 | | | | | | |
| **834A** | **Tilden** | **15.58** | **337** | P | **Pn** | **06 46 46.9** | **-0.2** |
| | baz=16 | | | | | | |
| **735A** | **Kenedy** | **15.98** | **340** | P | **Pn** | **06 46 52.4** | **+0.1** |
| | baz=16 | | | | | | |
| **833A** | **Chaparral WMA,** | **16.09** | **335** | P | **Pn** | **06 46 53.8** | **+0.1** |
| | baz=16 | | | | | | |
| **637A** | **Eagle Lake** | **16.10** | **345** | P | **Pn** | **06 46 53.8** | **0.0** |
| | baz=16 | | | | | | |
| **832A** | **Faith Ranch, C** | **16.30** | **333** | P | **Pn** | **06 46 56.8** | **+0.3** |
| | baz=16 | | | | | | |
| **636A** | **Smothers Creek** | **16.33** | **343** | P | **Pn** | **06 46 56.5** | **-0.2** |
| | baz=16 | | | | | | |
| **733A** | **Divot King Ran** | **16.40** | **336** | P | **Pn** | **06 46 57.8** | **+0.2** |
| | baz=16 | | | | | | |
| **HKT** | **Hockley** | **16.47** | **347** | *e*P | **Pn** | **06 46 57.7** | **-0.7** |
| HKT | | | | *e* | | 06 47 11.3 | |
| **732A** | **Laxson Ranch,** | **16.69** | **334** | P | **Pn** | **06 47 01.7** | **+0.5** |
| | baz=17 | | | | | | |
| **537A** | **Green Hill Far** | **16.71** | **346** | P | **Pn** | **06 47 01.8** | **+0.4** |
| | baz=17 | | | | | | |
| **536A** | **Bastrop** | **16.89** | **344** | P | **Pn** | **06 47 03.8** | **+0.1** |
| | baz=17 | | | | | | |
| **GTBY** | **Guantanamo Bay** | **16.95** | **67** | *e*P | **Pn** | **06 47 01.4** | **-3.1** |
| | comp=N,28nm,1.2s | | | | | | |
| GTBY | | | | *e* | | 06 47 19.0 | |
| **535A** | **Dale** | **16.99** | **342** | P | **Pn** | **06 47 05.1** | **+0.1** |
| | baz=17 | | | | | | |
| **633A** | **Saathoff Ranch** | **17.01** | **337** | P | **Pn** | **06 47 05.1** | **-0.1** |
| | baz=17 | | | | | | |
| **DWPF** | **Disney** | **17.09** | **32** | *e*P | **Pn** | **06 47 04.0** | **-2.2** |
| | comp=N,412nm,1.2s | | | | | | |
| **439A** | **Center Grove,** | **17.10** | **351** | P | **Pn** | **06 47 06.1** | **-0.2** |
| | baz=17 | | | | | | |
| **438A** | **Sam Houston St** | **17.18** | **349** | P | **Pn** | **06 47 07.3** | **+0.1** |
| | baz=17 | | | | | | |
| **534A** | **Blanco** | **17.28** | **340** | P | **Pn** | **06 47 08.8** | **+0.2** |
| | baz=17 | | | | | | |
| **632A** | **Uvalde** | **17.29** | **336** | P | **Pn** | **06 47 09.1** | **+0.4** |
| | baz=17 | | | | | | |
| **533A** | **Kerrville** | **17.51** | **338** | P | **Pn** | **06 47 11.7** | **+0.3** |
| | baz=18 | | | | | | |
| **631A** | **Perdido Creek** | **17.54** | **333** | P | **Pn** | **06 47 11.9** | **+0.1** |
| | baz=18 | | | | | | |
| **BRAL** | **Brewton** | **17.59** | **13** | *e*P | **Pn** | **06 47 11.5** | **-0.9** |
| **339A** | **Huntington** | **17.60** | **352** | P | **Pn** | **06 47 12.5** | **+0.1** |
| | baz=18 | | | | | | |
| **340A** | **Bronson** | **17.60** | **354** | P | **Pn** | **06 47 12.3** | **-0.1** |
| | baz=18 | | | | | | |
| **435B** | **Jarrell** | **17.70** | **343** | P | **Pn** | **06 47 13.9** | **+0.1** |
| | baz=18 | | | | | | |
| **338A** | **Crockett** | **17.74** | **350** | P | **P** | **06 47 14.3** | **0.0** |
| | baz=18 | | | | | | |
| **337A** | **Centerville** | **17.80** | **348** | P | **Pn** | **06 47 14.7** | **-0.3** |
| | baz=18 | | | | | | |
| **532A** | **Rocksprings** | **17.89** | **336** | P | **Pn** | **06 47 16.1** | **+0.1** |
| | baz=18,SNR=6.6 | | | | | | |
| **434A** | **Burnet** | **17.94** | **341** | P | **Pn** | **06 47 16.8** | **+0.2** |
| | baz=18 | | | | | | |
| **336A** | **Riesel** | **18.08** | **346** | P | **P** | **06 47 18.0** | **-0.1** |
| | baz=18 | | | | | | |
| **335A** | **Moody** | **18.13** | **344** | P | **P** | **06 47 18.8** | **+0.1** |
| | baz=18 | | | | | | |
| **433A** | **Art** | **18.15** | **339** | P | **P** | **06 47 19.1** | **+0.2** |
| | baz=18,SNR=7.0 | | | | | | |
| **JCT** | **Junction City** | **18.16** | **337** | P | **Pn** | **06 47 19.4** | **0.0** |
| | baz=18 | | | | | | |
| **JCT** | **Junction City** | **18.16** | **337** | *e*P | **Pn** | **06 47 19.6** | **+0.1** |
| | comp=N,11nm,0.8s | | | | | | |
| **531A** | **Rocksprings** | **18.18** | **335** | P | **Pn** | **06 47 19.6** | **0.0** |
| | baz=18 | | | | | | |
| **239A** | **Gary** | **18.26** | **352** | P | **P** | **06 47 19.9** | **-0.1** |
| | baz=18 | | | | | | |
| **VBMS** | **Vicksburg** | **18.31** | **3** | P | **P** | **06 47 20.5** | **0.0** |
| | baz=18 | | | | | | |
| **334A** | **Lometa** | **18.41** | **342** | P | **P** | **06 47 22.1** | **+0.4** |
| | baz=18 | | | | | | |
| **237A** | **Washetta, Mont** | **18.45** | **349** | P | **P** | **06 47 22.4** | **+0.2** |
| | baz=18 | | | | | | |
| **530A** | **J-C Ranch, Com** | **18.51** | **333** | P | **P** | **06 47 23.3** | **+0.4** |
| | baz=18 | | | | | | |
| **432A** | **Menard** | **18.52** | **338** | P | **P** | **06 47 23.3** | **+0.4** |
| | baz=18 | | | | | | |
| **333A** | **Richland Sprin** | **18.64** | **340** | P | **Pn** | **06 47 24.8** | **-0.3** |
| | baz=19 | | | | | | |
| **431A** | **Sonora** | **18.66** | **335** | P | **P** | **06 47 25.1** | **+0.6** |
| | baz=19 | | | | | | |
| **WHTX** | **Lake Whitney** | **18.81** | **345** | P | **P** | **06 47 26.5** | **+0.4** |
| | baz=19 | | | | | | |
| **OTAV** | **Otavalo** | **18.82** | **135** | *e*P | **Pn** | **06 47 29.4** | **+1.5** |
| | comp=N,8.7nm,1.4s | | | | | | |
| **529A** | **Stev Forest Ra** | **18.89** | **331** | P | **P** | **06 47 27.7** | **+0.6** |
| | baz=19 | | | | | | |
| **139A** | **Bunkhouse Ranc** | **18.90** | **353** | P | **P** | **06 47 27.3** | **+0.2** |
| | baz=19 | | | | | | |
| **332A** | **Millersview** | **18.95** | **338** | P | **P** | **06 47 28.0** | **+0.2** |
| | baz=19,SNR=8.2 | | | | | | |
| **138A** | **Matatall Enter** | **18.98** | **351** | P | **P** | **06 47 28.0** | **+0.1** |
| | baz=19 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **18.99** | **326** | *e*P | **Pn** | **06 47 29.4** | **0.0** |
| **TXAR** | **Lajitas Array** | **18.99** | **326** | P | **Pn** | **06 47 29.4** | **0.0** |
| | comp=N,0.2nm,0.3s,baz=154,slow=13,SNR=46 | | | | | | |
| TXAR | | | | PcP | **PcP** | **06 51 53.8** | **+2.0** |
| | comp=N,0.1nm,0.3s,baz=153,slow=2.1,SNR=8.5 | | | | | | |
| TXAR | | | | ScP | **ScP** | **06 55 25.6** | **+2.8** |
| | comp=N,0.1nm,0.3s,baz=138,slow=5.2,SNR=11 | | | | | | |
| TXAR | | | | LR | LR | 06 56 29.9 | |
| | comp=N,53nm,18.5s,baz=0.0,slow=42 | | | | | | |
| **TIGA** | **Tifton** | **19.01** | **22** | P | **P** | **06 47 27.7** | **-0.5** |
| | baz=19 | | | | | | |
| **TIGA** | **Tifton** | **19.01** | **22** | *e*P | **P** | **06 47 28.1** | **-0.1** |
| | comp=N,88nm,0.8s | | | | | | |
| **234A** | **Clairette** | **19.01** | **343** | P | **P** | **06 47 28.6** | **+0.3** |
| | baz=19,SNR=8.8 | | | | | | |
| **430A** | **Baggett Ranch,** | **19.01** | **334** | P | **P** | **06 47 28.9** | **+0.5** |
| | baz=19 | | | | | | |
| **137A** | **Heron Place, G** | **19.02** | **349** | P | **P** | **06 47 28.6** | **+0.2** |
| | baz=19 | | | | | | |
| **136A** | **Ennis** | **19.06** | **347** | P | **P** | **06 47 29.1** | **+0.3** |
| | baz=19 | | | | | | |
| **331A** | **San Angelo** | **19.14** | **337** | P | **P** | **06 47 30.2** | **+0.4** |
| | baz=19 | | | | | | |
| **429A** | **Davenport Ranc** | **19.16** | **332** | P | **P** | **06 47 30.6** | **+0.6** |
| | baz=19 | | | | | | |
| **PAPH** | **Port-au-Prince** | **19.17** | **73** | *e*P | **Pn** | **06 47 33.7** | **+2.2** |
| | comp=N,116nm,1.3s | | | | | | |
| **233A** | **Rising Star** | **19.25** | **341** | P | **P** | **06 47 31.6** | **+0.6** |
| | baz=19 | | | | | | |
| **ROSC** | **El Rosal** | **19.29** | **116** | P | **Pn** | **06 47 34.2** | **+0.8** |
| | comp=N,0.9nm,0.3s,baz=72,slow=1.1,SNR=13 | | | | | | |
| **ROSC** | **El Rosal** | **19.29** | **116** | *e*P | **Pn** | **06 47 35.4** | **+2.0** |
| **135A** | **Vickery Place,** | **19.34** | **345** | P | **P** | **06 47 32.2** | **+0.3** |
| | baz=19 | | | | | | |
| **232A** | **Coleman** | **19.38** | **339** | P | **P** | **06 47 32.9** | **+0.5** |
| | baz=19 | | | | | | |
| **Z39A** | **Irene McRaven,** | **19.43** | **354** | P | **P** | **06 47 32.9** | **0.0** |
| | baz=19 | | | | | | |
| **330A** | **Mertzon** | **19.53** | **335** | P | **P** | **06 47 34.5** | **+0.5** |
| | baz=20 | | | | | | |
| **134A** | **White-Moore Ra** | **19.53** | **344** | P | **P** | **06 47 34.2** | **+0.2** |
| | baz=20 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **19.54** | **352** | P | **P** | **06 47 34.0** | **0.0** |
| | baz=20 | | | | | | |
| **Z37A** | **Pogue Cattle C** | **19.59** | **350** | P | **P** | **06 47 34.8** | **+0.2** |
| | baz=20 | | | | | | |
| **231A** | **Bronte** | **19.66** | **338** | P | **P** | **06 47 36.0** | **+0.6** |
| | baz=20 | | | | | | |
| **133A** | **Hamilton Ranch** | **19.80** | **342** | P | **P** | **06 47 37.2** | **+0.2** |
| | baz=20 | | | | | | |
| **Z36A** | **Blue Ridge** | **19.81** | **348** | P | **P** | **06 47 37.0** | **0.0** |
| | baz=20 | | | | | | |
| **230A** | **Sterling City** | **19.93** | **336** | P | **P** | **06 47 38.7** | **+0.4** |
| | baz=20 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **19.94** | **333** | P | **P** | **06 47 39.0** | **+0.5** |
| | baz=20 | | | | | | |
| **Z35A** | **Perchaven, San** | **20.04** | **346** | P | **P** | **06 47 39.8** | **+0.3** |
| | baz=20 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **20.05** | **340** | P | **P** | **06 47 39.5** | **-0.1** |
| | baz=20 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **20.05** | **340** | *e*P | **P** | **06 47 39.8** | **+0.1** |
| | comp=N,27nm,0.9s | | | | | | |
| **Y39A** | **Lockesburg** | **20.11** | **354** | P | **P** | **06 47 39.8** | **-0.5** |
| | baz=20 | | | | | | |
| **Y38A** | **Idabel** | **20.18** | **353** | P | **P** | **06 47 40.5** | **-0.4** |
| | baz=20 | | | | | | |
| **Z34A** | **Collier Ranch,** | **20.24** | **345** | P | **P** | **06 47 41.4** | **-0.3** |
| | baz=20 | | | | | | |
| **229A** | **Bryant Ranch,** | **20.28** | **334** | P | **P** | **06 47 42.5** | **+0.3** |
| | baz=20 | | | | | | |
| **Y37A** | **Hugo** | **20.35** | **351** | P | **P** | **06 47 42.7** | **-0.2** |
| | baz=20 | | | | | | |
| **Y36A** | **Durant** | **20.39** | **349** | P | **P** | **06 47 43.6** | **+0.3** |
| | baz=20 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **20.39** | **343** | P | **P** | **06 47 43.8** | **+0.5** |
| | baz=20 | | | | | | |
| **130A** | **Snyder** | **20.50** | **337** | P | **P** | **06 47 45.0** | **+0.5** |
| | baz=20 | | | | | | |
| **Y35A** | **Marietta** | **20.55** | **347** | P | **P** | **06 47 45.3** | **+0.3** |
| | baz=20,SNR=5.1 | | | | | | |
| **Z32A** | **Haskell** | **20.63** | **341** | P | **P** | **06 47 46.1** | **+0.2** |
| | baz=21,SNR=12 | | | | | | |
| **OXF** | **Oxford** | **20.67** | **5** | *e*P | Pn | 06 47 48.7 | -0.3 |
| | comp=N,110nm,1.0s | | | | | | |
| OXF | | | | *e* | | 06 48 03.8 | |
| **MIAR** | **Mount Ida** | **20.67** | **356** | P | **P** | **06 47 46.7** | **+0.4** |
| | baz=21,SNR=7.2 | | | | | | |
| **MIAR** | **Mount Ida** | **20.67** | **356** | *e*P | **P** | **06 47 46.2** | **-0.1** |
| | comp=N,98nm,1.3s | | | | | | |
| MIAR | | | | *e* | | 06 48 01.3 | |
| **228A** | **UT Block 9, Go** | **20.75** | **333** | P | **P** | **06 47 47.3** | **0.0** |
| | baz=21 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **20.76** | **346** | P | **P** | **06 47 47.8** | **+0.5** |
| | baz=21 | | | | | | |
| **UALR** | **University of** | **20.84** | **358** | *e*P | **P** | **06 47 47.8** | **-0.3** |
| UALR | | | | *e* | | 06 48 02.0 | |
| **GOGA** | **Godfrey** | **20.85** | **20** | *e*P | **P** | **06 47 47.0** | **-1.3** |
| | comp=N,23nm,0.8s | | | | | | |
| **Z31A** | **Sharp Cattle R** | **20.85** | **340** | P | **P** | **06 47 48.4** | **+0.1** |
| | baz=21,SNR=10 | | | | | | |
| **129A** | **Stewart Farms,** | **20.88** | **335** | P | **P** | **06 47 48.5** | **-0.2** |
| | baz=21,SNR=9.7 | | | | | | |
| **X37A** | **Clayton** | **20.91** | **351** | P | **P** | **06 47 48.8** | **-0.1** |
| | baz=21,SNR=6.9 | | | | | | |
| **X38A** | **Whitesboro** | **20.92** | **353** | P | **P** | **06 47 48.6** | **-0.4** |
| | baz=21 | | | | | | |
| **X35A** | **Drake** | **21.01** | **348** | P | **P** | **06 47 49.4** | **-0.5** |
| | baz=21 | | | | | | |
| **X36A** | **Centrahoma** | **21.05** | **349** | P | **P** | **06 47 50.5** | **0.0** |
| | baz=21 | | | | | | |
| **128A** | **Castleberry Fa** | **21.13** | **334** | P | **P** | **06 47 51.3** | **-0.1** |
| | baz=21,SNR=7.0 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **21.26** | **342** | P | **P** | **06 47 52.5** | **-0.2** |
| | baz=21 | | | | | | |
| **W38A** | **Poteau** | **21.28** | **354** | P | **P** | **06 47 52.4** | **-0.5** |
| | baz=21 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **21.37** | **336** | P | **P** | **06 47 54.0** | **+0.1** |
| | baz=21 | | | | | | |
| **CLNB** | **Carlsbad** | **21.46** | **331** | *e*P | **P** | **06 47 56.1** | **+1.2** |
| CLNB | | | | *e* | | 06 48 08.9 | |
| **W37A** | **Quinton** | **21.46** | **352** | P | **P** | **06 47 55.1** | **+0.3** |
| | baz=21 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **21.48** | **340** | P | **P** | **06 47 56.2** | **+1.1** |
| | baz=22,SNR=15 | | | | | | |
| **Y30A** | **Stafford Cattl** | **21.62** | **339** | P | **P** | **06 47 57.2** | **+0.6** |
| | baz=22 | | | | | | |
| **Z28A** | **Tucker Farm, M** | **21.67** | **335** | P | **P** | **06 47 57.5** | **+0.4** |
| | baz=22,SNR=8.6 | | | | | | |
| **W35A** | **Tecumseh** | **21.72** | **348** | P | **P** | **06 47 56.8** | **-0.8** |
| | baz=22 | | | | | | |
| **MNTX** | **Cornudas Mount** | **21.76** | **327** | P | **P** | **06 47 57.6** | **-0.5** |
| | baz=22,SNR=16 | | | | | | |
| **MNTX** | **Cornudas Mount** | **21.76** | **327** | *e*P | **P** | **06 47 57.9** | **-0.2** |
| | comp=N,15nm,0.8s | | | | | | |
| MNTX | | | | *e* | | 06 48 14.2 | |
| **WMOK** | **Wichita Mounta** | **21.76** | **344** | *e*P | **P** | **06 47 57.3** | **-0.7** |
| | comp=N,14nm,0.9s | | | | | | |
| WMOK | | | | *e* | | 06 48 09.0 | |
| **Y29A** | **Porterfield Fa** | **21.89** | **337** | P | **P** | **06 47 58.5** | **-1.0** |
| | baz=22 | | | | | | |
| **SWET** | **Sewanee** | **21.89** | **13** | *e*P | **P** | **06 47 59.1** | **-0.3** |
| | comp=N,25nm,0.8s | | | | | | |
| SWET | | | | *e* | | 06 48 13.1 | |
| **W34A** | **Bridge Creek,** | **21.99** | **347** | P | **P** | **06 47 59.2** | **-1.2** |
| | baz=22,SNR=8.6 | | | | | | |
| **W34A** | **Bridge Creek,** | **21.99** | **347** | *e*P | **P** | **06 47 59.2** | **-1.2** |
| | comp=N,49nm,0.7s | | | | | | |
| W34A | | | | *e* | | 06 48 12.4 | |
| **X31A** | **McDonald Ranch** | **22.01** | **341** | P | **P** | **06 47 59.3** | **-1.4** |
| | baz=22 | | | | | | |
| **V38A** | **Canehill** | **22.05** | **354** | P | **P** | **06 47 59.7** | **-1.4** |
| | baz=22 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **22.07** | **345** | P | **P** | **06 48 00.1** | **-1.3** |
| | baz=22,SNR=6.9 | | | | | | |
| **X30A** | **Coker Ranch, T** | **22.13** | **339** | P | **P** | **06 48 01.1** | **-0.9** |
| | baz=22,SNR=9.2 | | | | | | |
| **Y28A** | **McKinney Farm,** | **22.15** | **336** | P | **P** | **06 48 01.1** | **-1.2** |
| | baz=22 | | | | | | |
| **V37A** | **Hulbert** | **22.15** | **353** | P | **P** | **06 48 01.6** | **-0.6** |
| | baz=22 | | | | | | |
| **V36A** | **Jenks** | **22.17** | **351** | P | **P** | **06 48 01.6** | **-0.8** |
| | baz=22 | | | | | | |
| **W32A** | **Sentinel** | **22.25** | **343** | P | **P** | **06 48 02.1** | **-1.3** |
| | baz=22,SNR=6.5 | | | | | | |
| **TUL1** | **Tulsa** | **22.27** | **351** | P | **P** | **06 48 02.4** | **-1.0** |
| | baz=22 | | | | | | |
| **TUL1** | **Tulsa** | **22.27** | **351** | *e*P | **P** | **06 48 02.8** | **-0.7** |
| | comp=N,9.5nm,0.7s | | | | | | |
| **V35A** | **Meyer Ranch, C** | **22.30** | **349** | P | **P** | **06 48 02.9** | **-0.9** |
| | baz=22 | | | | | | |
| **MSTX** | **Muleshoe** | **22.42** | **335** | P | **P** | **06 48 04.9** | **-0.3** |
| | baz=22 | | | | | | |
| **MSTX** | **Muleshoe** | **22.42** | **335** | *e*P | **P** | **06 48 04.5** | **-0.7** |
| | comp=N,7.7nm,0.8s | | | | | | |
| **X29A** | **Tulia** | **22.42** | **338** | P | **P** | **06 48 04.6** | **-0.7** |
| | baz=22,SNR=5.7 | | | | | | |
| **GLAT** | **Glass** | **22.42** | **5** | *e*P | **P** | **06 48 03.2** | **-1.9** |
| GLAT | | | | *e* | | 06 48 17.3 | |
| **CPCT** | **Cooper Cave** | **22.45** | **15** | *e*P | **P** | **06 48 03.5** | **-1.9** |
| **WVT** | **Waverly** | **22.45** | **8** | *e*P | **P** | **06 48 01.7** | **-3.6** |
| | comp=N,12nm,0.7s | | | | | | |
| **V34A** | **Guthrie** | **22.51** | **348** | P | **P** | **06 48 05.8** | **-0.2** |
| | baz=22 | | | | | | |
| **V34A** | **Guthrie** | **22.51** | **348** | *e*P | **P** | **06 48 06.3** | **+0.3** |
| | comp=N,7.0nm,0.6s | | | | | | |
| V34A | | | | *e* | | 06 48 17.5 | |
| **U38A** | **Gravette** | **22.62** | **354** | P | **P** | **06 48 06.9** | **-0.3** |
| | baz=23 | | | | | | |
| **U37A** | **Salina** | **22.67** | **353** | P | **P** | **06 48 07.3** | **-0.4** |
| | baz=23 | | | | | | |
| **X28A** | **Dimmitt** | **22.67** | **337** | P | **P** | **06 48 07.4** | **-0.5** |
| | baz=23 | | | | | | |
| **W30A** | **Crocket Farms** | **22.70** | **341** | P | **P** | **06 48 07.6** | **-0.6** |
| | baz=23 | | | | | | |
| **U36A** | **Oologah** | **22.74** | **351** | P | **P** | **06 48 08.0** | **-0.5** |
| | baz=23 | | | | | | |
| **PARMO** | **Parma** | **22.78** | **4** | *e*P | **P** | **06 48 07.0** | **-1.9** |
| PARMO | | | | *e* | | 06 48 21.6 | |
| **AMTX** | **Amarillo** | **22.81** | **338** | P | **P** | **06 48 09.1** | **-0.2** |
| | baz=23 | | | | | | |
| **AMTX** | **Amarillo** | **22.81** | **338** | *e*P | **P** | **06 48 08.2** | **-1.0** |
| | comp=N,20nm,0.8s | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.84** | **17** | P | **P** | **06 48 07.0** | **-2.6** |
| | comp=N,6.1nm,0.6s,baz=174,slow=11,SNR=14 | | | | | | |
| TKL | | | | LR | LR | 06 57 49.8 | |
| | comp=N,290nm,21.9s,baz=201,slow=40 | | | | | | |
| **TKL** | **Tuckaleechee C** | **22.84** | **17** | *e*P | **P** | **06 48 08.1** | **-1.5** |
| **PBMO** | **Poplar Bluff** | **22.85** | **3** | *e*P | **P** | **06 48 06.3** | **-3.4** |
| | comp=N,30nm,0.8s | | | | | | |
| **U35A** | **Pawnee** | **22.88** | **349** | P | **P** | **06 48 09.0** | **-0.9** |
| | baz=23 | | | | | | |
| **W29A** | **Amraillo** | **23.01** | **339** | P | **P** | **06 48 10.3** | **-1.1** |
| | baz=23 | | | | | | |
| **V31A** | **Spring Creek L** | **23.03** | **343** | P | **P** | **06 48 10.5** | **-1.0** |
| | baz=23 | | | | | | |
| **U34A** | **Anderson Ranch** | **23.09** | **348** | P | **P** | **06 48 11.3** | **-0.8** |
| | baz=23 | | | | | | |
| **KMSC** | **Kings Mountain** | **23.16** | **22** | P | **P** | **06 48 10.7** | **-2.0** |
| | baz=23 | | | | | | |
| **KMSC** | **Kings Mountain** | **23.16** | **22** | *e*P | **P** | **06 48 10.8** | **-1.9** |
| | comp=N,80nm,1.2s | | | | | | |
| KMSC | | | | *e* | | 06 48 28.3 | |
| **V30A** | **Spur Ranch, Mi** | **23.27** | **341** | P | **P** | **06 48 13.0** | **-0.9** |
| | baz=23 | | | | | | |
| **W28A** | **Vega** | **23.33** | **338** | P | **P** | **06 48 13.1** | **-1.4** |
| | baz=23 | | | | | | |
| **T37A** | **Cheneyville 18** | **23.35** | **353** | P | **P** | **06 48 13.2** | **-1.3** |
| | baz=23 | | | | | | |
| **T35A** | **Sooner Cattle** | **23.37** | **350** | P | **P** | **06 48 13.6** | **-1.1** |
| | baz=23 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **23.41** | **352** | P | **P** | **06 48 13.9** | **-1.3** |
| | baz=23 | | | | | | |
| **U31A** | **Nine Bar Ranch** | **23.59** | **343** | P | **P** | **06 48 16.1** | **-0.7** |
| | baz=24 | | | | | | |
| **T34A** | **McClaskey Farm** | **23.59** | **349** | P | **P** | **06 48 15.3** | **-1.5** |
| | baz=24 | | | | | | |
| **121A** | **Cookes Peak, D** | **23.71** | **324** | P | **P** | **06 48 18.2** | **0.0** |
| | baz=24 | | | | | | |
| **121A** | **Cookes Peak, D** | **23.71** | **324** | *e*P | **P** | **06 48 19.5** | **+1.3** |
| | comp=N,19nm,0.9s | | | | | | |
| 121A | | | | *e* | | 06 48 33.7 | |
| **TZTN** | **Tazewell** | **23.73** | **16** | *e*P | **P** | **06 48 15.9** | **-2.2** |
| | comp=N,32nm,1.0s | | | | | | |
| TZTN | | | | *e* | | 06 48 31.7 | |
| **V28A** | **Channing** | **23.78** | **338** | P | **P** | **06 48 18.3** | **-0.3** |
| | baz=24,SNR=8.7 | | | | | | |
| **SIUC** | **Southern Illin** | **23.86** | **5** | *e*P | **P** | **06 48 17.1** | **-2.1** |
| | comp=N,72nm,0.8s | | | | | | |
| SIUC | | | | *e* | | 06 48 31.1 | |
| **U30A** | **WK&E Inc. Balk** | **23.97** | **342** | P | **P** | **06 48 19.7** | **-0.7** |
| | baz=24,SNR=7.3 | | | | | | |
| **S37A** | **Fort Scott** | **23.97** | **354** | P | **P** | **06 48 19.7** | **-0.5** |
| | baz=24 | |

comp=N,38nm,0.7s
OLIL e 06 48 41.9
**R33A Olander Ranch, 24.99 348** P **P** **06 48 29.9 +0.3**
baz=25
**Q37A Longview Farm, 25.04 355** P **P** **06 48 30.4 +0.5**
baz=25
**S29A Ulysses 25.12 342** P **P** **06 48 31.0 +0.2**
baz=25
**T27A Campo 25.13 339** P **P** **06 48 31.5 +0.6**
baz=25
**Q35A Mercer Eighty, 25.20 352** P **P** **06 48 32.1 +0.6**
baz=25
**Q36A Arnold C. Orve 25.23 353** P **P** **06 48 32.5 +0.9**
baz=25
**R31A Burdett 25.31 345** P **P** **06 48 32.9 +0.4**
baz=25
**S28A Manter 25.33 341** P **P** **06 48 33.0 +0.3**
baz=25
**TUC Tucson 25.35 320** *eP* **P** **06 48 34.0 +1.1**
comp=N,8.4nm,0.9s
TUC e 06 48 48.9
**Q34A Chapman 25.40 350** P **P** **06 48 33.7 +0.5**
baz=25
**R30A Dighton 25.50 344** P **P** **06 48 34.8 +0.6**
baz=26
**KSU1 Kansas State U 25.52 351** P **P** **06 48 34.6 +0.3**
baz=26
**T26A Comanche Natio 25.55 338** P **P** **06 48 35.2 +0.4**
baz=26
**BLO Bloomington 25.62 9** *eP* **P** **06 48 34.6 -0.6**
comp=N,55nm,1.3s
BLO e 06 48 48.2
**Q33A Connelly Farm, 25.63 349** P **P** **06 48 35.6 +0.3**
baz=26
**Q32A Meitler Ranch, 25.77 348** P **P** **06 48 37.1 +0.5**
baz=26
**T25A Trinidad 25.83 336** P **P** **06 48 37.7 +0.3**
baz=26
**T25A Trinidad 25.83 336** *epP* pP 06 48 52.4 +0.7
**P35A Duane Minner, 25.86 352** P **P** **06 48 38.0 +0.6**
baz=26
**CBKS Cedar Bluff 25.86 345** P **P** **06 48 38.2 +0.7**
baz=26
**R29A Marienthal 25.87 343** P **P** **06 48 38.1 +0.5**
baz=26
**S26A Kim 25.90 338** P **P** **06 48 38.6 +0.7**
baz=26
**P34A Walnut Farm, R 25.99 351** P **P** **06 48 39.0 +0.5**
baz=26
**R28A Tribune 25.99 342** P **P** **06 48 38.5 -0.2**
baz=26,SNR=5.5
**Q30A Quinter 26.14 345** P **P** **06 48 40.2 +0.2**
baz=26
**Q29A Oakley 26.26 343** P **P** **06 48 41.3 +0.2**
baz=26
**R27A Eads 26.26 340** P **P** **06 48 41.2 0.0**
baz=26
**P32A Huiting Farm, 26.38 348** P **P** **06 48 42.9 +0.7**
baz=26
**214A Organ Pipe Nat 26.44 316** P **P** **06 48 43.8 +1.0**
baz=26,SNR=6.0
**214A Organ Pipe Nat 26.44 316** *eP* **P** **06 48 43.5 +0.7**
comp=N,27nm,0.9s
214A e 06 48 57.6
**P31A Stockton 26.45 347** P **P** **06 48 43.5 +0.7**
baz=26
**R26A Arlington 26.49 339** P **P** **06 48 43.7 +0.4**
baz=26
**O35A Humboldt 26.57 353** P **P** **06 48 44.2 +0.4**
baz=26
**O34A Beatrice 26.59 351** P **P** **06 48 44.3 +0.2**
baz=27
**O33A Hebron 26.63 350** P **P** **06 48 45.0 +0.6**
baz=27
**Q28A Sharon Springs 26.66 342** P **P** **06 48 45.4 +0.6**
baz=27
**HDIL Hopedale 26.68 4** P **P** **06 48 45.2 +0.4**
baz=27
**HDIL Hopedale 26.68 4** *eP* **P** **06 48 45.2 +0.4**
comp=N,43nm,1.1s
HDIL e 06 48 57.2
**P30A Selden 26.68 345** P **P** **06 48 45.6 +0.7**
baz=27
**W18A Petrified Fore 26.71 326** P **P** **06 48 46.1 +0.8**
baz=27
**SFIN Scholer Farm 26.72 8** P **P** **06 48 45.4 +0.3**
baz=27
**SFIN Scholer Farm 26.72 8** *eP* **P** **06 48 44.5 -0.6**
comp=N,30nm,1.0s
SFIN e 06 48 57.3
**SDCO Great Sand Dun 26.79 335** P **P** **06 48 46.8 +0.6**
baz=27
**KSCO Kaye Shedlock' 26.86 341** P **P** **06 48 47.4 +0.8**
baz=27
**KSCO Kaye Shedlock' 26.86 341** *eP* **P** **06 48 47.7 +1.1**
comp=N,7.5nm,0.7s
KSCO e 06 49 02.9
**P29A Atwood 26.91 344** P **P** **06 48 47.6 +0.7**
baz=27
**O32A Brockman Farm, 26.93 349** P **P** **06 48 47.8 +0.7**
baz=27
**O31A Woolen Ranch, 27.04 347** P **P** **06 48 48.8 +0.7**
baz=27
**Q26A Hugo 27.08 339** P **P** **06 48 48.8 +0.3**
baz=27
**P28A Saint Francis 27.11 343** P **P** **06 48 49.5 +0.7**
baz=27
**N35A Tabor 27.13 353** P **P** **06 48 49.5 +0.7**
baz=27
**O30A MW Ranch, Wils 27.24 346** P **P** **06 48 50.8 +1.0**
baz=27
**S22A 4UR Ranch, Cre 27.35 333** P **P** **06 48 51.7 +0.5**
baz=27
**N32A Stulken Farm, 27.43 349** P **P** **06 48 52.1 +0.6**
baz=27
**N31A Bailey Ranch, 27.61 348** P **P** **06 48 53.6 +0.4**
baz=28
**MVCO Mesa Verde 27.68 330** P **P** **06 48 54.9 +0.8**
baz=28
**MVCO Mesa Verde 27.68 330** *eP* **P** **06 48 55.0 +0.8**
MVCO e 06 49 08.8
**Q24A Divide 27.70 337** P **P** **06 48 54.5 +0.1**
baz=28
**M34A Aspy Farms, Fr 27.88 352** P **P** **06 48 56.3 +0.8**
baz=28
**WUAZ Wupatki 27.92 324** P **P** **06 48 57.4 +1.3**
baz=28
**WUAZ Wupatki 27.92 324** *eP* **P** **06 48 57.4 +1.3**
WUAZ e 06 49 12.2
**N29A Votaw Ranch, W 27.98 345** P **P** **06 48 57.2 +0.7**
baz=28
**L35A Bielow Farm, R 28.35 354** P **P** **06 48 59.9 +0.2**
baz=28
**PV01 Paradox Valley 28.46 331** *eP* **P** **06 49 02.2 +1.3**
comp=N,558nm,1.3s
PV01 e 06 49 15.2
**GLA Glamis 28.46 316** P **P** **06 49 01.8 +1.0**
baz=28
**GLA Glamis 28.46 316** *eP* **P** **06 48 59.2 -1.6**
comp=N,22nm,1.1s
GLA e 06 49 17.2
**OGNE Ogallala 28.46 343** P **P** **06 49 01.5 +0.7**
baz=28
**M30A Dale-Ortello V 28.49 347** P **P** **06 49 01.2 +0.1**
baz=28
**PV05 Paradox Valley 28.66 330** *eP* **P** **06 49 03.2 +0.4**
PV05 *epP* **pP** **06 49 19.0 +1.7**
**Y12C Blythe 28.68 318** P **P** **06 49 03.7 +1.0**
baz=29
**M28A Bar X Bar Ranc 28.71 345** P **P** **06 49 03.5 +0.4**
baz=29
**PDMCI Parker Dam,Lak 28.77 319** P **P** **06 49 05.1 +1.5**
baz=29
**PV04 Paradox Valley 28.82 331** *eP* **P** **06 49 04.8 +0.6**
**L30A Spencer Herefo 28.85 347** P **P** **06 49 05.0 +0.8**
baz=29
**PV10 Paradox Valley 28.87 331** *eP* **P** **06 49 04.0 -0.6**
**L31A Butterfield Fa 28.89 349** P **P** **06 49 05.2 +0.6**
baz=29
**SWSC Sam W. Stewart 29.05 315** P **P** **06 49 07.4 +1.4**
baz=29
**IBP Imperial Bould 29.10 314** P **P** **06 49 07.9 +1.3**
baz=29
**L29A Maesberg Ranch 29.13 346** P **P** **06 49 07.4 +0.7**
baz=29
**K32A Verdigre 29.21 350** P **P** **06 49 07.8 +0.5**
baz=29
**BC3 Big Chuckawall 29.24 316** P **P** **06 49 09.2 +1.4**
baz=29,SNR=8.1
**IRM Iron Mountain 29.34 318** P **P** **06 49 09.7 +1.0**
baz=29
**MONP Monument Peak 29.45 314** P **P** **06 49 11.1 +1.2**
baz=30
**NNA Nana 29.59 150** LR LR 06 59 57.0
comp=N,34nm,22.0s,baz=310,slow=34
**BELC Belle Mtn. Jos 29.81 316** P **P** **06 49 14.0 +1.1**
baz=30
**LDFC Landfair 29.89 319** *eP* **P** **06 49 15.9 +2.4**
comp=N,26nm,0.9s
LDFC e 06 49 31.0
**PFO Pinyon Flat Ob 29.89 315** LR LR 07 01 50.0
comp=N,117nm,21.2s,baz=134,slow=37
**PFO Pinyon Flat Ob 29.89 315** *eP* **P** **06 49 14.3 +0.7**
comp=N,18nm,1.7s
PFO e 06 49 30.9
**O20A White River Ci 29.95 334** P **P** **06 49 14.6 +0.5**
baz=30
**GMRC Granite Mounta 30.05 318** P **P** **06 49 16.4 +1.3**
baz=30
**MURC Murrieta 30.39 315** P **P** **06 49 19.3 +1.3**
baz=30
**I32A Karley and Nic 30.47 352** P **P** **06 49 19.0 +0.4**
baz=30
**CCUT Cedar City 30.49 325** *eP* **P** **06 49 21.4 +2.3**
comp=N,10nm,0.9s
CCUT *epP* **pP** **06 49 35.5 +2.0**
**HEC Hector,Ludlow 30.52 317** P **P** **06 49 20.1 +0.9**
baz=31
**MSU Marysvale 30.54 327** *eP* **P** **06 49 21.1 +1.7**
comp=N,6.9nm,1.0s
**P17A Butcher Ranch, 30.55 330** *eP* **P** **06 49 19.9 +0.5**
comp=N,14nm,1.6s
**H36A Jessenland, He 30.68 357** P **P** **06 49 20.7 +0.4**
baz=31
**SHPR Sheep Range 30.83 321** *eP* **P** **06 49 23.4 +1.4**
SHPR *epP* **pP** **06 49 37.5 +1.1**
**H33A Prehn Over Nor 31.02 353** P **P** **06 49 24.4 +1.0**
baz=31
**BFSC Mount Baldy Ra 31.07 315** P **P** **06 49 25.2 +1.1**
baz=31
**GSC Goldstone 31.12 318** P **P** **06 49 25.5 +1.1**
baz=31
**K22A Casper 31.43 339** P **P** **06 49 28.3 +1.1**
baz=31
**O16A Springville 31.49 330** *eP* P 06 49 18.3 -9.4
O16A *epP* pP 06 49 34.1 -8.1
**H29A Onida 31.52 348** P **P** **06 49 28.4 +0.6**
baz=32
**WMUT West Mountain 31.55 330** *eP* P 06 49 34.0 +5.8
**I26A New Underwood 31.56 344** P **P** **06 49 28.7 +0.5**
baz=32
**EDW2 Edwards Air Fo 31.66 316** P **P** **06 49 30.4 +1.3**
baz=32
**G32A Webster 31.68 352** P **P** **06 49 29.8 +0.6**
baz=32
**H28A Mission Ridge 31.73 347** P **P** **06 49 30.3 +0.7**
baz=32
**I25A Rochford 31.79 343** P **P** **06 49 30.4 +0.1**
baz=32
**TPNV Topopah Spring 31.79 321** P **P** **06 49 31.5 +1.2**
baz=32
**TPNV Topopah Spring 31.79 321** *eP* **P** **06 49 32.2 +1.9**
comp=N,35nm,1.8s
**LRMC Laurel Mountai 31.80 317** P **P** **06 49 31.3 +0.9**
baz=32
**FURC Furnace Creek, 31.86 319** P **P** **06 49 32.1 +1.3**
baz=32
**H27A Howes 31.93 346** P **P** **06 49 32.3 +0.9**
baz=32
**BLG Laguna Peak 31.97 314** P **P** **06 49 33.0 +1.2**
baz=32
**G29A Hoven 32.01 349** P **P** **06 49 32.2 +0.2**
baz=32
**MPMC Manual Prospec 32.02 318** P **P** **06 49 33.2 +0.8**
baz=32,SNR=7.8
**F33A 5 Mile Ranch, 32.12 354** P **P** **06 49 33.8 +0.9**
baz=32
**DUG Dugway 32.13 329** P **P** **06 49 33.8 +0.5**
baz=32
**TCUT Toone Canyon 32.15 331** *eP* **P** **06 49 34.1 +0.5**
comp=N,15nm,1.3s
TCUT *epP* **pP** **06 49 49.2 +1.1**
**DAC Darwin (Calif) 32.21 318** *eP* **P** **06 49 35.2 +1.0**
DAC *epP* **pP** **06 49 50.3 +1.6**
**R11A Troy Canyon, C 32.31 323** P **P** **06 49 35.9 +0.9**
baz=32
**R11A Troy Canyon, C 32.31 323** *eP* **P** **06 49 36.5 +1.5**
comp=N,6.9nm,1.0s
R11A *epP* **pP** **06 49 51.1 +1.6**
**ARVC Arvin 32.36 316** P **P** **06 49 36.5 +1.2**
baz=32
**ISA Isabella 32.43 317** P **P** **06 49 36.9 +1.0**
baz=32
**ISA Isabella 32.43 317** *eP* **P** **06 49 37.5 +1.6**
ISA *epP* **pP** **06 49 52.8 +2.3**
**GRAC Grapevine Rang 32.51 320** P **P** **06 49 37.9 +1.2**
baz=33
**HWUT Hardware Ranch 32.61 332** *eP* **P** **06 49 38.5 +0.9**
comp=N,3.2nm,0.8s
HWUT *epP* **pP** **06 49 51.8 -0.3**
**BGU Big Grassy Mou 32.78 329** *eP* **P** **06 49 39.7 +0.7**
comp=N,2.2nm,0.8s
BGU *epP* **pP** **06 49 53.6 0.0**
**PKM Peak Mountain 32.91 314** P **P** **06 49 41.2 +0.8**
baz=33
**VES Vestal, Richgr 32.94 317** P **P** **06 49 41.7 +1.4**
baz=33
**F26A Lodgepole 33.22 346** P **P** **06 49 43.4 +0.8**
baz=33
**D34A Park Rapids 33.26 356** P **P** **06 49 43.4 +0.5**
baz=33
**SMMC Simmler 33.26 315** P **P** **06 49 44.3 +1.1**
baz=33
**HVU Hansel Valley 33.31 331** *eP* **P** **06 49 43.5 -0.2**
HVU *epP* **pP** **06 49 59.4 +1.2**
**D33A AnnSam, Waubun 33.37 355** P **P** **06 49 44.4 +0.5**
baz=33
**F25A Bowman 33.48 345** P **P** **06 49 45.9 +0.9**
baz=34
**E28A Huff 33.49 349** P **P** **06 49 45.8 +0.9**
baz=34
**D30A Buchanan 33.68 351** P **P** **06 49 46.9 +0.4**
baz=34
**REDW Red Top Meadow 33.71 334** *eP* **P** **06 49 46.9 -0.2**
comp=N,5.9nm,0.8s
REDW *epP* **pP** **06 50 01.5 -0.2**
**SNOW Snow King Moun 33.75 335** *eP* **P** **06 49 47.7 +0.1**
comp=N,8.6nm,0.8s
SNOW *epP* **pP** **06 50 01.5 -0.6**
**E26A Carlson Angus 33.76 347** P **P** **06 49 47.8 +0.5**
baz=34
**ELK Elko 33.79 327** *eP* **P** **06 49 49.3 +1.4**
comp=N,6.1nm,1.0s
ELK *epP* **pP** **06 50 03.6 +1.2**
**LOHW Long Hollow 33.81 335** *eP* **P** **06 49 47.8 -0.2**
comp=N,18nm,2.0s
**TPAW Teton Pass 33.86 334** *eP* **P** **06 49 48.7 +0.2**
comp=N,2.8nm,0.8s
**C39A Grand Marais 33.88 2** P **P** **06 49 48.7 +0.4**
baz=34
**NV01 Mina Array Sit 33.98 321** *eP* **P** **06 49 51.1 +1.5**
**NVAR Mina Array Bea 33.98 321** P **P** **06 49 51.5 +1.9**
comp=N,4.7nm,0.8s,baz=135,slow=8.5,SNR=49
NVAR *epP* **pP** **06 50 05.8 +1.7**
comp=N,26nm,0.8s,baz=131,slow=8.3,SNR=42
NVAR PcP **PcP** **06 52 27.1 +0.4**
comp=N,2.0nm,0.7s,baz=139,slow=3.1,SNR=5.4
NVAR ScP **ScP** **06 56 08.7 +1.9**
comp=N,0.5nm,0.6s,baz=135,slow=4.4,SNR=5.6
NVAR LR LR 07 05 07.1
comp=N,187nm,18.0s,baz=119,slow=39
**D27A Center 34.16 348** P **P** **06 49 51.7 +0.9**
baz=34
**AGMN Agassiz Nation 34.52 355** P **P** **06 49 54.3 +0.5**
baz=34
**MDND Maddock 34.53 351** P **P** **06 49 54.2 +0.3**
baz=34
**C28A Hausauer Farms 34.53 350** P **P** **06 49 54.6 +0.6**
baz=34
**LRV Little Rabbit 34.56 316** *eP* **P** **06 49 55.3 +0.9**
**RLMT Red Lodge 34.56 338** P **P** **06 49 55.2 +0.7**
baz=35
**BMN Battle Mountai 34.65 325** *eP* **P** **06 49 56.0 +0.7**
comp=N,26nm,1.2s
BMN *epP* **pP** **06 50 11.1 +1.2**
**B32A Ashes, Strandq 34.67 354** P **P** **06 49 55.7 +0.6**
baz=35
**C27A Sayler Ranch, 34.74 348** P **P** **06 49 56.5 +0.8**
baz=35
**C26A Wahner Farm, P 34.96 348** P **P** **06 49 58.3 +0.6**
baz=35
**CMB Columbia Colle 35.05 319** *eP* **P** **06 49 59.3 +0.7**
comp=N,8.3nm,1.1s
CMB *epP* **pP** **06 50 14.7 +1.5**
**A31A Linda, St. Vin 35.27 354** P **P** **06 50 01.0 +0.7**
baz=35
**HLID Hailey 35.45 331** P **P** **06 50 02.5 +0.4**
baz=36,SNR=5.6
**HLID Hailey 35.45 331** *eP* **P** **06 50 02.0 -0.2**
comp=N,35nm,2.1s
**A29A Manning Farm, 35.52 351** P **P** **06 50 03.5 +1.0**
baz=36
**MCMT McKenzie Canyo 35.74 334** *eP* **P** **06 50 05.8 +1.1**
MCMT *epP* **pP** **06 50 19.7 +0.4**
**BOZ Bozeman (W) 35.90 336** P **P** **06 50 06.5 +0.5**
baz=36
**A26A Wade Farm, Ken 35.97 348** P **P** **06 50 07.2 +0.8**
baz=36
**MFID Camas Ranch 36.03 330** *eP* **P** **06 50 07.9 +0.9**
MFID *epP* **pP** **06 50 22.4 +0.7**
**DGMT Dagmar 36.04 346** P **P** **06 50 07.9 +1.0**
baz=36
**SAML Samuel 36.23 127** *eP* **P** **06 50 07.7 -1.2**
comp=N,9.8nm,1.2s
**LRM Limekiln Ridge 36.38 335** *eP* **P** **06 50 10.6 +0.4**
**ULM Lac du Bonnet 36.45 355** LR LR 07 07 11.7
comp=N,87nm,20.4s,baz=98,slow=40
**OHCM Honcut 36.51 320** *eP* **P** **06 50 12.5 +1.5**
OHCM *epP* **pP** **06 50 27.7 +2.1**
**WVOR Wild Horse Val 36.79 326** *eP* **P** **06 50 15.8 +2.2**
comp=N,8.2nm,0.9s
WVOR *epP* **pP** **06 50 28.1 -0.1**
**EGMT Eagleton 37.23 340** P **P** **06 50 18.0 +0.9**
baz=37
**O03D Paynes Creek 37.27 321** P **P** **06 50 18.2 +0.7**
baz=37
**MOD Modoc 37.37 324** *eP* **P** **06 50 17.8 -0.7**
MOD *epP* **pP** **06 50 34.0 +0.8**
**MSO Missoula 37.80 335** P **P** **06 50 22.5 +0.5**
baz=38
**LPAZ La Paz 37.92 141** P **P** **06 50 23.6 -0.3**
comp=N,0.8nm,0.8s,baz=351,slow=11,SNR=3.7
LPAZ LR LR 07 05 36.4
comp=N,43nm,18.1s,baz=313,slow=36
**M04C Macdoel 38.19 323** P **P** **06 50 25.9 +0.5**
baz=38
**N02D Trinity Center 38.22 321** P **P** **06 50 26.5 +0.9**
baz=38
**I07A Izee 38.38 327** *eP* **P** **06 50 26.3 -0.6**
I07A *epP* **pP** **06 50 42.3 +0.7**
**M02C Callahan 38.56 321** P **P** **06 50 29.3 +0.8**
baz=39
**F10A Beach Ranch, E 38.59 331** *eP* **P** **06 50 28.0 -0.6**
comp=N,18nm,0.9s
**K04D Chiloquin, OR 38.66 324** P **P** **06 50 30.2 +0.8**
baz=39
**J05D Fort Rock, OR 38.78 325** P **P** **06 50 31.3 +0.9**
baz=39
**J04D Umpqua Nationa 39.25 324** P **P** **06 50 34.8 +0.4**
baz=39
**L02D Cave Junction, 39.46 322** P **P** **06 50 36.3 +0.3**
baz=40
**I05D Terrebonne, OR 39.53 326** P **P** **06 50 36.6 +0.2**
baz=40
**I04A Tendick Farm, 39.77 325** P **P** **06 50 39.2 +0.7**
baz=40
**G05D Wamic, OR 40.11 327** P **P** **06 50 42.4 +1.1**
baz=40
**H04A Detroit Lake 40.21 326** *eP* **P** **06 50 44.0 +1.9**
comp=N,20nm,0.8s
**NEW Newport 40.27 334** P **P** **06 50 40.8 -1.7**
comp=N,1.1nm,0.7s,baz=330,slow=18,SNR=3.0
**C09A Chrisman Ranch 40.43 332** *eP* **P** **06 50 44.1 +0.3**
comp=N,6.1nm,0.8s
**LON Longmire 41.38 329** *eP* **P** **06 50 51.9 +0.1**
comp=N,16nm,1.2s
LON *epP* **pP** **06 51 06.7 +0.1**
**SIV San Ignacio 42.36 133** P **P** **06 50 58.7 -1.3**
comp=N,5.7nm,1.0s,baz=313,slow=7.5,SNR=7.3
**B05A Bryant 42.55 330** P **P** **06 51 02.3 +1.2**
baz=43
**SCHQ Schefferville 45.24 20** P P 06 51 18.2 -4.5
comp=N,7.1nm,0.5s,baz=219,slow=7.6,SNR=24
SCHQ pP pP 06 51 34.5 -3.3
comp=N,8.0nm,0.8s,baz=230,slow=9.0,SNR=4.0
SCHQ LR LR 07 11 05.5
comp=N,292nm,20.4s,baz=247,slow=38
**YKA Yellowknife Ar 51.24 347** P **P** **06 52 05.7 -3.0**
comp=N,1.3nm,0.6s,baz=139,slow=8.7,SNR=4.1
YKA pP **pP** **06 52 22.0 -2.0**
comp=N,3.0nm,0.6s,baz=146,slow=7.7,SNR=7.3
YKA PcP **PcP** **06 53 23.7 +0.5**
comp=N,2.1nm,0.7s,baz=151,slow=4.1,SNR=5.3
**CPUP Villa Florida 52.07 140** P **P** **06 52 14.1 -1.3**
comp=N,3.2nm,0.9s,baz=342,slow=9.1,SNR=5.7
CPUP LR LR 07 12 47.8
comp=N,48nm,19.5s,baz=243,slow=34
**BDFB Brasilia 52.17 123** LR LR 07 14 20.0
comp=N,100nm,18.1s,baz=93,slow=36
**TAOE Nuku Hiva Isla 53.14 248** *eT* T 07 49 13.2
comp=N,133nm,0.3s
**RKT Rikitea 56.09 230** *eLR* LR 07 09 20.6
comp=N,195nm,28.5s
**RKT Rikitea 56.09 230** *eT* T 07 53 02.4
comp=N,6.4nm,0.3s
**EGAK Eagle 60.96 338** *eP* **P** **06 53 19.4 +1.3**
comp=N,3.0nm,0.8s
EGAK *epP* **pP** **06 53 33.0 -0.7**
**KLU Klutina 61.25 334** *eP* **P** **06 53 20.5 +0.3**
**PMOR Pomariorio Ree 62.58 245** *eT* T 08 01 01.4
comp=N,2.9nm,0.3s
**PMR Palmer 62.69 333** *eP* **P** **06 53 31.2 +1.5**
comp=N,11nm,1.1s
**ILAR Eielson Array 63.10 337** P **P** **06 53 31.1 -1.4**
comp=N,2.2nm,0.9s,baz=132,slow=4.2,SNR=19
ILAR pP **pP** **06 53 48.5 +0.4**
comp=N,3.1nm,0.9s,baz=134,slow=4.5,SNR=12
ILAR LR LR 07 23 33.9
comp=N,86nm,18.7s,baz=141,slow=38
**COLA College 63.51 337** *eP* **P** **06 53 35.6 +0.5**
comp=N,3.5nm,0.8s
COLA *epP* **pP** **06 53 50.1 -0.7**
**TRF Thorofare Moun 63.90 335** *eP* **P** **06 53 37.2 -0.8**
comp=N,6.8nm,0.7s
TRF *epP* **pP** **06 53 53.5 -0.2**
**BPAW Bear Paw Mtn. 64.44 335** *eP* **P** **06 53 40.2 -1.1**
comp=N,1.0nm,0.8s
BPAW *epP* **pP** **06 53 56.4 -0.6**
**PPT Papeete 65.11 243** LR LR 07 14 01.8
comp=N,116nm,18.9s,baz=129,slow=28
**PPT2 Papete2 65.12 243** *eLR* LR 07 13 20.9
comp=N,170nm,25.2s
**ESDC Sonseca Array 79.55 52** P P 06 55 08.2 -4.0
comp=N,0.2nm,0.3s,baz=295,slow=5.8,SNR=3.5
**NOA NORSAR Array B 84.12 28** P **P** **06 55 33.4 -2.4**
comp=N,0.9nm,0.9s,baz=294,slow=5.4,SNR=3.0
NOA LR LR 07 31 32.1
comp=N,30nm,20.1s,baz=270,slow=35
**DBIC Dimbokro 85.35 84** LR LR 07 30 02.8
comp=N,15nm,20.1s,baz=262,slow=33
**ARCES ARCESS Array B 86.17 18** P P 06 55 42.7 -3.1
comp=N,6.5nm,0.9s,baz=291,slow=5.5,SNR=6.5
ARCES pP pP 06 55 59.8 -2.5
comp=N,5.6nm,0.9s,baz=29,slow=8.3,SNR=2.3
ARCES LR LR 07 33 15.3
comp=N,81nm,21.9s,baz=290,slow=35
**GERES GERESS Array B 89.51 40** LR LR 07 31 58.5
comp=N,40nm,21.4s,baz=296,slow=33
**TORD Torodi Ar. Bea 90.10 77** P P 06 56 01.2 -4.4
comp=N,0.3nm,0.7s,baz=291,slow=5.2,SNR=4.5
TORD LR LR 07 32 58.5
comp=N,40nm,21.8s,baz=150,slow=33
**FINES FINESS Array B 90.49 25** LR LR 07 36 36.7
comp=N,35nm,18.8s,baz=288,slow=36
**AKASG Malin Array Be 97.67 33** LR LR 07 43 08.2
comp=N,14nm,18.5s,baz=255,slow=37
**MKAR Makanchi Array 119.39 5** PKP **PKPdf** **07 01 52.9 -1.4**
comp=N,0.4nm,0.7s,baz=9.5,slow=1.5,SNR=5.9
**HHC Hu-ho-hao-te 121.47 339** *ePKP* **PKPdf** **07 02 02.3 +3.7**
HHC PP PP 07 03 36.0 +6.5
HHC SS SS 07 20 03.0 +3.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HHC | | | | LN | | | | |
| | comp=N,120nm,14.8s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=N,200nm,17.3s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=N,45nm,18.5s | | | | | | | |
| **WMQ** | **Urumqi** | **122.60** | **1** | *e*PKP | **PKPdf** | **07 02 05.0** | **+4.3** | |
| **LZH** | **Lanzhou** | **128.21** | **344** | *e*PKP | **PKPdf** | **07 02 12.0** | **+0.2** | |
| LZH | | | | sPKP | | 07 02 37.4 | | |
| LZH | | | | LN | | | | |
| | comp=N,150nm,16.0s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=N,150nm,16.6s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=N,180nm,18.7s | | | | | | | |
| **CD2** | **Chengdu** | **133.08** | **342** | PKP | **PKPdf** | **07 02 20.8** | **-0.2** | |
| CD2 | | | | sPKP | | 07 02 45.1 | | |
| CD2 | | | | PP | **PP** | **07 04 45.8** | **-0.3** | |
| CD2 | | | | SKS | **SKSdf** | **07 09 26.8** | **-1.0** | |
| CD2 | | | | SS | **SS** | **07 22 22.8** | **-1.1** | |
| CD2 | | | | PPMZ | | | | |
| | comp=N,120nm,5.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **135.67** | **256** | PKP | **PKPdf** | **07 02 26.1** | **+0.1** | |
| | comp=N,0.7nm,0.6s,baz=86,slow=2.5,SNR=6.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **135.92** | **250** | PKP | **PKPdf** | **07 02 26.1** | **-0.3** | |
| | comp=N,0.8nm,1.0s,baz=116,slow=4.2,SNR=3.9 | | | | | | | |
| **CHTO** | **Chiang Mai** | **145.89** | **342** | *e*PKPdf | **PKPdf** | **07 02 43.9** | **-0.6** | |
| **CMAR** | **Chiang Mai Arr** | **146.23** | **342** | PKPbc | **PKPdf** | **07 02 45.7** | **+0.7** | |
| | comp=N,14nm,0.8s,baz=340,slow=4.1,SNR=39 | | | | | | | |
| CMAR | | | | pPKPbc | pPKPbc | 07 03 02.2 | -0.8 | |
| | comp=N,7.2nm,0.7s,baz=359,slow=5.7,SNR=5.3 | | | | | | | |
| **KSM** | **Kuching** | **153.42** | **303** | *e*PKPbc | **PKPbc** | **07 03 04.1** | **0.0** | |

*ISCJB **16** 06:52:31.1±0.5,39°.28N±0°.03×22°.69E±0°.03,h24km±4km, Error ellipse: s-maj=5.5km s-min=3.9km az=147.2*
*CSEM **16** 06:52:31.1±0.2,39°.27N×22°.67E,h20km,ML2.1, Error ellipse: s-maj=3.9km s-min=2.9km az=142.0*
*THE **16** 06:52:31.2,39°.27N×22°.67E,h18km,ML2.1/4, Error ellipse: s-maj=1.0km s-min=0.5km az=349.0*
*ATH **16** 06:52:31.0,39°.25N×22°.67E,h24km±2km,MD3.0/11*
**ISC 16 06:52:30.5±1.3,39°.27N±0°.03×22°.66E±0°.02,h12km±11km, n39,σ0°43/69,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FYTO** | **Fytoko, Volos** | **0.25** | **58** | P | **Pb** | **06 52 36.8** | **-0.2** |
| FYTO | | | | S | **Sb** | **06 52 40.9** | **-0.4** |
| **FYTO** | **Fytoko, Volos** | **0.25** | **58** | P | **Pb** | **06 52 36.8** | **-0.2** |
| FYTO | | | | S | **Sb** | **06 52 40.9** | **-0.4** |
| **AGG** | **Agios Georgios** | **0.36** | **226** | *e*PB | **Pb** | **06 52 38.6** | **-0.2** |
| AGG | | | | *e*SB | **Sb** | **06 52 44.7** | **+0.3** |
| **AGG** | **Agios Georgios** | **0.36** | **226** | P | **Pb** | **06 52 38.6** | **-0.2** |
| AGG | | | | S | **Sb** | **06 52 44.3** | **-0.1** |
| **AGG** | **Agios Georgios** | **0.36** | **226** | P | **Pb** | **06 52 38.6** | **-0.2** |
| AGG | | | | S | **Sb** | **06 52 44.3** | **-0.1** |
| AGG | | | | *e*Sb | **Sb** | **06 52 44.7** | **+0.3** |
| **NEO** | **Neokhori** | **0.44** | **86** | P | **Pb** | **06 52 40.6** | **+0.5** |
| NEO | | | | S | **Sb** | **06 52 46.1** | **-0.5** |
| **NEO** | **Neokhori** | **0.44** | **86** | P | **Pb** | **06 52 40.6** | **+0.5** |
| NEO | | | | S | **Sb** | **06 52 46.1** | **-0.5** |
| **MAKR** | **Makrakomi, Fth** | **0.49** | **238** | *e*PB | **Pb** | **06 52 41.3** | **+0.3** |
| MAKR | | | | *e*SB | **Sb** | **06 52 48.6** | **+0.5** |
| **MAKR** | **Makrakomi, Fth** | **0.49** | **238** | P | **Pb** | **06 52 41.1** | **+0.1** |
| MAKR | | | | S | **Sb** | **06 52 48.5** | **+0.5** |
| **MAKR** | **Makrakomi, Fth** | **0.49** | **238** | P | **Pb** | **06 52 41.1** | **+0.1** |
| MAKR | | | | S | **Sb** | **06 52 48.5** | **+0.4** |
| **AXAR** | **Agios Charalam** | **0.51** | **180** | *e*PB | **Pb** | **06 52 41.0** | **-0.3** |
| **AXAR** | **Agios Charalam** | **0.51** | **180** | P | **Pb** | **06 52 41.0** | **-0.3** |
| AXAR | | | | S | **Sb** | **06 52 49.5** | **+0.9** |
| **AXAR** | **Agios Charalam** | **0.51** | **180** | P | **Pb** | **06 52 41.0** | **-0.3** |
| AXAR | | | | S | **Sb** | **06 52 49.5** | **+0.9** |
| **SMIA** | **Simia** | **0.58** | **133** | *e*PN | **Pb** | **06 52 42.0** | **-0.5** |
| **SMIA** | **Simia** | **0.58** | **133** | P | **Pb** | **06 52 42.0** | **-0.5** |
| SMIA | | | | S | **Sb** | **06 52 50.4** | **-0.3** |
| **SMIA** | **Simia** | **0.58** | **133** | P | **Pb** | **06 52 42.0** | **-0.5** |
| SMIA | | | | S | **Sb** | **06 52 50.4** | **-0.3** |
| **THL** | **Klokotos Trika** | **0.58** | **300** | P | **Pb** | **06 52 42.6** | **+0.1** |
| THL | | | | S | **Sb** | **06 52 50.9** | **+0.2** |
| **THL** | **Klokotos Trika** | **0.58** | **300** | P | **Pb** | **06 52 42.6** | **+0.1** |
| THL | | | | S | **Sb** | **06 52 50.9** | **+0.2** |
| **SKIA** | **Skiathos** | **0.63** | **100** | *e*PN | **Pb** | **06 52 43.9** | **+0.5** |
| SKIA | | | | *e*SN | **Sb** | **06 52 52.6** | **+0.3** |
| **SKIA** | **Skiathos** | **0.63** | **100** | P | **Pb** | **06 52 43.9** | **+0.5** |
| SKIA | | | | S | **Sb** | **06 52 52.6** | **+0.3** |
| **SKIA** | **Skiathos** | **0.63** | **100** | P | **Pb** | **06 52 43.9** | **+0.5** |
| SKIA | | | | S | **Sb** | **06 52 52.6** | **+0.3** |
| **LIT** | **Litokhoron** | **0.84** | **351** | *e*PN | **Pn** | **06 52 47.6** | **-0.5** |
| **LIT** | **Litokhoron** | **0.84** | **351** | *e*Pn | **Pn** | **06 52 47.6** | **-0.5** |
| **DESF** | **Desfina** | **0.87** | **187** | *e*PN | **Pg** | **06 52 47.1** | **-0.1** |
| DESF | | | | *e*SN | **Sb** | **06 52 59.3** | **+0.3** |
| **DESF** | **Desfina** | **0.87** | **187** | *e*Pn | **Pg** | **06 52 47.1** | **-0.1** |
| DESF | | | | *e*Sn | **Sb** | **06 52 59.3** | **+0.3** |
| **DSF** | **Desfina** | **0.87** | **187** | *e*PB | **Pg** | **06 52 46.8** | **-0.4** |
| **DSF** | **Desfina** | **0.87** | **187** | *e*Pb | **Pg** | **06 52 46.8** | **-0.4** |
| **KALE** | **Kalithea** | **0.97** | **205** | *e*PB | **Pg** | **06 52 48.5** | **-0.7** |
| KALE | | | | *e*SN | **Sb** | **06 53 02.0** | **0.0** |
| **KALE** | **Kalithea** | **0.97** | **205** | P | **Pb** | **06 52 49.1** | **-0.1** |
| KALE | | | | S | **Sb** | **06 53 02.6** | **+0.6** |
| **KALE** | **Kalithea** | **0.97** | **205** | *e*Pb | **Pg** | **06 52 48.5** | **-0.7** |
| **KALE** | **Kalithea** | **0.97** | **205** | P | **Pb** | **06 52 49.1** | **-0.1** |
| KALE | | | | *e*Sn | **Sb** | **06 53 02.0** | **0.0** |
| KALE | | | | S | **Sg** | **06 53 02.6** | **+0.7** |
| **SERG** | **Sergoula** | **0.98** | **209** | P | **Pg** | **06 52 48.9** | **-0.5** |
| SERG | | | | S | **Sn** | **06 53 03.2** | **-0.7** |
| **SERG** | **Sergoula** | **0.98** | **209** | P | **Pg** | **06 52 48.9** | **-0.5** |
| SERG | | | | S | **Sn** | **06 53 03.2** | **-0.7** |
| **PAIG** | **Paliouri** | **1.02** | **50** | *e*PN | **Pn** | **06 52 51.4** | **+0.8** |
| **PAIG** | **Paliouri** | **1.02** | **50** | *e*Pn | **Pn** | **06 52 51.4** | **+0.8** |
| **EFP** | **Efpalio** | **1.03** | **215** | *e*PN | **Pn** | **06 52 50.7** | **0.0** |
| EFP | | | | *e*SN | **Sn** | **06 53 05.2** | **+0.1** |
| **EFP** | **Efpalio** | **1.03** | **215** | *e*Pn | **Pn** | **06 52 50.7** | **0.0** |
| EFP | | | | *e*Sn | **Sn** | **06 53 05.2** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **1.29** | **198** | *e*PN | **Pg** | **06 52 55.4** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **1.29** | **198** | *e*Pn | **Pg** | **06 52 55.4** | **+0.1** |

*DDA **16** 06:58:07.3,38°.79N×27°.86E,h7km,Md2.6*
*ISK **16** 06:58:07.3,38°.83N×27°.92E,h5km,MD2.6*
*ISCJB **16** 06:58:08.2±0.7,38°.81N±0°.04×27°.86E±0°.05,h6km±6km, Error ellipse: s-maj=8.5km s-min=5.2km az=43.2*
*CSEM **16** 06:58:08.5±0.2,38°.84N×27°.90E,h2km,MD2.6, Error ellipse: s-maj=5.5km s-min=4.1km az=39.0*
**ISC 16 06:58:07.7±0.9,38°.82N±0°.04×27°.87E±0°.04,h7km±6km, n16,σ0°61/26,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKS** | **Akhisar** | **0.07** | **324** | *e*PG | **Pg** | **06 58 09.3** | **-0.3** |
| AKS | | | | *e*SG | **Sg** | **06 58 11.5** | **+0.5** |
| **AKS** | **Akhisar** | **0.07** | **324** | *e*Pg | **Pg** | **06 58 09.3** | **-0.3** |
| AKS | | | | *e*Sg | **Sg** | **06 58 11.5** | **+0.5** |
| **KULA** | **Kula-Manisa** | **0.69** | **116** | *e*PG | **Pb** | **06 58 21.9** | **-0.2** |
| KULA | | | | *e*SG | **Sg** | **06 58 30.8** | **+0.7** |
| **KULA** | **Kula-Manisa** | **0.69** | **116** | *e*Pg | **Pb** | **06 58 21.9** | **-0.2** |
| KULA | | | | *e*Sg | **Sg** | **06 58 30.8** | **+0.7** |
| **DEMI** | **Demirci** | **0.70** | **71** | *i* P | **Pb** | **06 58 21.6** | **-0.6** |
| DEMI | | | | *i* S | **Sn** | **06 58 34.1** | **-1.0** |
| **DEMI** | **Demirci** | **0.70** | **71** | P | **Pb** | **06 58 21.6** | **-0.6** |
| DEMI | | | | S | **Sn** | **06 58 34.1** | **-1.0** |
| **BLCB** | **Balcova** | **0.78** | **236** | *e*PG | **Pn** | **06 58 25.0** | **0.0** |
| **BLCB** | **Balcova** | **0.78** | **236** | *e*Pg | **Pn** | **06 58 25.0** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.87** | **179** | *e*PG | **Pb** | **06 58 25.0** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.87** | **179** | *e*Pg | **Pb** | **06 58 25.0** | **-0.2** |
| **BALY** | **Balya** | **0.94** | **348** | *i* P | **Pg** | **06 58 25.9** | **+0.2** |
| BALY | | | | *i* S | **Sb** | **06 58 39.4** | **+0.5** |
| **BALY** | **Balya** | **0.94** | **348** | P | **Pg** | **06 58 25.9** | **+0.2** |
| BALY | | | | S | **Sb** | **06 58 39.5** | **+0.5** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **354** | *e*PN | **Pg** | **06 58 32.2** | **+0.9** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **354** | *e*Pn | **Pg** | **06 58 32.2** | **+0.9** |
| **KHAL** | **Karahalli** | **1.35** | **109** | *i* P | **Pg** | **06 58 34.3** | **+0.7** |
| KHAL | | | | *i* S | **Sb** | **06 58 50.4** | **-0.4** |
| **KHAL** | **Karahalli** | **1.35** | **109** | P | **Pg** | **06 58 34.3** | **+0.7** |
| KHAL | | | | S | **Sb** | **06 58 50.4** | **-0.4** |

*AUST **16** 07:13:07.4,5°.98S×129°.53E,h100km*
*IDC **16** 07:13:10.9±2.7,6°.12S×129°.91E,h128km±38km,mb3.3/1, mb1 3.5/5,mb1mx3.2/24,mbtmp3.8/5,MS3.1/3,Ms1 3.1/3, ms1mx2.7/12,Error ellipse: s-maj=69.4km s-min=16.6km az=91.0*
**ISC 16 07:13:10.0±1.1,6°.02S±0°.07×129°.7E±0°.2,h209km,n14, σ2s84/14,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **3.98** | **39** | P | **Pn** | **07 14 11.9** | **0.0** |
| | baz=4.1,SNR=33 | | | | | | |
| **SIJI** | **Sorong** | **5.34** | **17** | P | **Pn** | **07 14 31.2** | **+2.1** |
| | 3.7nm,0.3s,baz=131,slow=23,SNR=22 | | | | | | |
| SIJI | | | | S | **S** | **07 15 29.5** | **-1.8** |
| | 2.4nm,0.3s,baz=228,slow=23,SNR=6.5 | | | | | | |
| **SWI** | **Sorong** | **5.35** | **17** | P | **Pn** | **07 14 27.0** | **-2.1** |
| | baz=5.4,SNR=3.2 | | | | | | |
| **MTN** | **Manton Dam** | **6.92** | **169** | P | **Pn** | **07 14 46.5** | **-2.9** |
| | baz=7.0,SNR=3.3 | | | | | | |
| **KDU** | **Kakadu** | **7.16** | **158** | P | **Pn** | **07 14 52.5** | **+0.1** |
| | baz=7.3,SNR=25 | | | | | | |
| **KNRA** | **Kununurra** | **9.64** | **186** | P | **Pn** | **07 15 26.5** | **+2.0** |
| | baz=9.7,SNR=10 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.65** | **198** | P | **P** | **07 16 05.6** | **-0.8** |
| | 0.3nm,0.3s,baz=22,slow=9.5,SNR=11 | | | | | | |
| FITZ | | | | S | **S** | **07 18 17.6** | **-5.7** |
| | 0.2nm,0.3s,baz=90,slow=20,SNR=4.7 | | | | | | |
| FITZ | | | | LR | LR | 07 21 54.6 | |
| | comp=Z,45nm,18.9s,baz=182,slow=42 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.65** | **198** | P | **P** | **07 16 08.0** | **+1.6** |
| | baz=13,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.55** | **162** | P | **P** | **07 16 27.1** | **-0.4** |
| | 0.2nm,0.3s,baz=345,slow=13,SNR=4.2 | | | | | | |
| WRA | | | | S | S | 07 18 57.1 | -11 |
| | 0.7nm,0.3s,baz=323,slow=24,SNR=8.3 | | | | | | |
| **COEN** | **Coen** | **15.41** | **122** | P | P | 07 16 42.9 | +5.8 |
| | baz=16,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **18.00** | **168** | P | **Pn** | **07 17 11.4** | **+3.7** |
| | 0.6nm,0.3s,baz=347,slow=9.5,SNR=48 | | | | | | |
| ASAR | | | | S | **S** | **07 20 21.8** | **+0.7** |
| | 0.1nm,0.3s,baz=356,slow=26,SNR=4.5 | | | | | | |
| ASAR | | | | LR | LR | 07 25 17.9 | |
| | comp=Z,64nm,20.8s,baz=122,slow=41 | | | | | | |
| **WRKA** | **Warakurna** | **18.96** | **184** | P | **Pn** | **07 17 22.7** | **+3.7** |
| | baz=19,SNR=10 | | | | | | |
| **DZM** | **Mont Dzumac** | **38.89** | **118** | LR | LR | 07 35 31.3 | |
| | comp=Z,55nm,21.2s,baz=1.0,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.26** | **327** | P | P | 07 23 52.9 | +11 |
| | 0.4nm,0.5s,baz=119,slow=7.9,SNR=6.0 | | | | | | |

*ISCJB **16** 07:13:18.7±0.7,41°.37N±0°.04×43°.87E±0°.04,h4km±7km, Error ellipse: s-maj=7.8km s-min=4.4km az=160.4*
*CSEM **16** 07:13:18.6±0.2,41°.37N×43°.86E,h5km,ML1.9, Error ellipse: s-maj=5.0km s-min=2.8km az=152.0*
*DDA **16** 07:13:18.1,41°.41N×43°.83E,h7km,Md2.8*
*TIF **16** 07:13:18.5,41°.41N×43°.89E,h13km*
**ISC 16 07:13:18.8±1.0,41°.36N±0°.04×43°.88E±0°.03,h9km±9km, n14,σ0°34/27,Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKH** | **Akhalkalaki** | **0.29** | **280** | P | **Pg** | **07 13 24.8** | **0.0** |
| AKH | | | | S | **Sg** | **07 13 29.0** | **+0.3** |
| **AKH** | **Akhalkalaki** | **0.29** | **280** | P | **Pg** | **07 13 24.8** | **0.0** |
| AKH | | | | S | **Sg** | **07 13 29.0** | **+0.3** |
| **EAK** | **Akyaka** | **0.70** | **197** | *i* P | **Pg** | **07 13 32.0** | **-0.4** |
| EAK | | | | *i* S | **Sb** | **07 13 43.0** | **-0.1** |
| **EAK** | **Akyaka** | **0.70** | **197** | P | **Pg** | **07 13 32.0** | **-0.4** |
| EAK | | | | S | **Sb** | **07 13 43.0** | **-0.1** |
| **TBLG** | **Delisi** | **0.75** | **60** | P | **Pg** | **07 13 32.8** | **-0.5** |
| TBLG | | | | S | **Sg** | **07 13 43.4** | **+0.4** |
| **TBLG** | **Delisi** | **0.75** | **60** | *i* P | **Pg** | **07 13 33.0** | **-0.3** |
| TBLG | | | | *i* S | **Sg** | **07 13 43.1** | **+0.1** |
| **DIGO** | **Kars** | **1.02** | **202** | *i* P | **Pg** | **07 13 38.5** | **+0.1** |
| DIGO | | | | *i* S | **Sg** | **07 13 51.8** | **+0.2** |
| **DIGO** | **Kars** | **1.02** | **202** | P | **Pg** | **07 13 38.5** | **+0.1** |
| DIGO | | | | S | **Sg** | **07 13 51.8** | **+0.2** |
| **DGRG** | **David-gareji** | **1.13** | **85** | P | **Pb** | **07 13 40.5** | **-0.1** |
| DGRG | | | | S | **Sn** | **07 13 57.3** | **+0.8** |
| **DGRG** | **David-gareji** | **1.13** | **85** | *i* P | **Pb** | **07 13 40.4** | **-0.1** |
| DGRG | | | | *i* S | **Sn** | **07 13 57.2** | **+0.7** |
| **ARTV** | **Artvin** | **1.48** | **264** | *i* P | **Pn** | **07 13 45.4** | **-0.4** |
| ARTV | | | | *i* S | **Sn** | **07 14 05.3** | **0.0** |
| **ARTV** | **Artvin** | **1.48** | **264** | P | **Pn** | **07 13 45.4** | **-0.4** |
| ARTV | | | | S | **Sn** | **07 14 05.3** | **0.0** |
| **DDEM** | **Demirkent** | **1.67** | **255** | *i* S | **Sb** | **07 14 10.8** | **-0.2** |
| **DDEM** | **Demirkent** | **1.67** | **255** | S | **Pn** | **07 13 48.7** | **+0.4** |
| DDEM | | | | S | **Sb** | **07 14 10.8** | **-0.2** |

**IDC 16 07:15:20.6±1.1,14°.86N×145°.81E,h0km,mb3.5/4, mb1 3.9/4,mb1mx3.5/32,mbtmp3.5/4,Error ellipse: s-maj=50.7km s-min=20.0km az=115.0,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.56** | **216** | Pn | Pn | 07 15 49.2 | -0.3 |
| | 223nm,0.3s,baz=94,slow=2.4,SNR=141 | | | | | | |
| GUMO | | | | Sn | Sn | 07 16 04.0 | -6.5 |
| | 288nm,0.3s,baz=344,slow=20,SNR=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.38** | **198** | P | P | 07 22 27.0 | +0.2 |
| | 0.3nm,0.6s,baz=21,slow=9.6,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.22** | **315** | P | P | 07 25 37.4 | 0.0 |
| | 0.1nm,0.3s,baz=94,slow=7.2,SNR=2.6 | | | | | | |
| **ILAR** | **Eielson Array** | **67.03** | **25** | P | P | 07 26 15.2 | -0.1 |
| | 0.3nm,0.4s,baz=252,slow=5.8,SNR=16 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.32** | **28** | P | P | 07 27 38.7 | 0.0 |
| | 1.0nm,0.8s,baz=287,slow=4.7,SNR=2.8 | | | | | | |

*SJA **16** 07:32:55.9±0.5,33°.45S×72°.26W,h11km±4km,ML3.5*
*ISCJB **16** 07:32:56.3±1.4,33°.78S±0°.04×72°.08W±0°.08,h12km±10km, Error ellipse: s-maj=12.3km s-min=5.0km az=23.6*
*GUC **16** 07:32:56.3±0.7,33°.76S×72°.10W,h37km±4km,ML3.6*
**ISC 16 07:32:57.4±2.7,33°.84S±0°.06×72°.0W±0°.1,h16km±14km, n17,σ1s23/25,3C-3D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.55** | **184** | *e*P | **Pb** | **07 33 08.5** | **-0.2** |
| CHPI | | | | *i* S | **Sn** | **07 33 18.4** | **-1.0** |
| **TACH** | **Talagante** | **0.87** | **78** | *i* P | **Pb** | **07 33 13.6** | **-0.5** |
| **ANTU** | **Antumapu** | **1.13** | **77** | *e*P | **Pb** | **07 33 18.1** | **-0.6** |
| ANTU | | | | *e*S | **Sg** | **07 33 34.4** | **+0.2** |
| ANTU | | | | AML | AML | 07 33 36.9 | |
| | comp=N,2μm,0.3s | | | | | | |
| **SAN** | **Santiago** | **1.15** | **71** | *i* P | **Pn** | **07 33 18.0** | **-0.8** |
| SAN | | | | *i* S | **Sn** | **07 33 34.3** | **+0.1** |
| **ROC1** | **El Roble** | **1.17** | **43** | *i* P | **Pn** | **07 33 17.8** | **-1.5** |
| ROC1 | | | | *i* S | **Sb** | **07 33 34.0** | **-0.4** |
| **PCH** | **Pirque** | **1.22** | **80** | *i* P | **Pn** | **07 33 19.5** | **-0.4** |
| PCH | | | | *e*S | **Sg** | **07 33 37.9** | **+1.0** |
| **LACH** | **Col Las Americ** | **1.25** | **72** | *e*P | **Pn** | **07 33 19.5** | **-0.8** |
| LACH | | | | *e*S | **Sn** | **07 33 37.2** | **+0.4** |
| **CLCH** | **Cerro Calan** | **1.26** | **70** | *i* P | **Pn** | **07 33 20.3** | **-0.2** |
| CLCH | | | | *i* S | **Sg** | **07 33 38.6** | **+0.4** |
| CLCH | | | | AML | AML | 07 33 47.0 | |
| | comp=E,1μm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **1.27** | **57** | *i* P | **Pn** | **07 33 20.0** | **-0.5** |
| PEL | | | | *i* S | **Sn** | **07 33 37.5** | **+0.2** |
| PEL | | | | AML | AML | 07 33 42.6 | |
| | comp=N,3μm,0.6s | | | | | | |
| **NICH** | **Los Niches** | **1.30** | **153** | *i* P | **Pn** | **07 33 21.3** | **+0.3** |
| NICH | | | | *i* S | **Sg** | **07 33 40.5** | **+0.9** |
| **TALC** | **Talca** | **1.57** | **170** | *e*P | **Pn** | **07 33 24.8** | **+0.1** |
| TALC | | | | *i* S | **Sb** | **07 33 45.6** | **-0.3** |
| **AUSP** | **Uspallata** | **2.69** | **54** | *e*P | **Pn** | **07 33 42.2** | **+1.8** |
| **ARCO** | **CERRO ARCO** | **2.72** | **69** | AML | AML | 07 33 49.2 | |
| | comp=Z,155nm,0.5s | | | | | | |
| **ASAL** | **Salagasta** | **2.90** | **65** | *e*P | **Pb** | **07 33 46.3** | **-2.5** |
| **RTLS** | **Leoncito** | **3.02** | **48** | *e*P | **Pn** | **07 33 46.8** | **+1.9** |
| RTLS | | | | *i* S | **Sn** | **07 34 24.2** | **+3.2** |
| **AVFE** | **Valle Fertil** | **4.96** | **51** | AML | AML | 07 35 25.3 | |
| | comp=Z,29nm,0.4s | | | | | | |
| **VCA** | **Vinchina** | **6.01** | **33** | AML | AML | 07 36 00.8 | |
| | comp=Z,28nm,0.5s | | | | | | |

*ISK **16** 07:55:33.9,37°.19N×28°.16E,h5km,MD2.9*
*ISCJB **16** 07:55:34.7±0.9,37°.19N±0°.05×28°.19E±0°.07,h8km±8km, Error ellipse: s-maj=9.9km s-min=7.3km az=146.8*
*DDA **16** 07:55:34.0,37°.22N×28°.26E,h7km,Md2.6*
*CSEM **16** 07:55:35.1±0.3,37°.19N×28°.17E,h2km,MD2.9, Error ellipse: s-maj=7.5km s-min=4.8km az=29.0*

**ISC 16 07:55:34.3±1.0,37°.22N±0°.06×28°.19E±0°.05,h8km±10km, n12,σ0°33/20,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.12** | **140** | *e*PG | **Pg** | **07 55 36.7** | **-0.2** |
| YER | | | | *e*SG | **Sg** | **07 55 39.0** | **+0.2** |
| **YER** | **Yerkesik** | **0.12** | **140** | *e*Pg | **Pg** | **07 55 36.7** | **-0.2** |
| YER | | | | *e*Sg | **Sg** | **07 55 39.0** | **+0.2** |
| **AYDN** | **Tasoluk** | **0.50** | **331** | *i* P | **Pb** | **07 55 45.3** | **-0.2** |
| AYDN | | | | *i* S | **Sb** | **07 55 52.8** | **-0.1** |
| **AYDN** | **Tasoluk** | **0.50** | **331** | P | **Pb** | **07 55 45.3** | **-0.2** |
| AYDN | | | | S | **Sb** | **07 55 52.8** | **-0.1** |
| **BDRM** | **Kayabasi** | **0.62** | **255** | *i* P | **Pg** | **07 55 45.8** | **-0.4** |
| BDRM | | | | *i* S | **Sb** | **07 55 56.6** | **+0.5** |
| **BDRM** | **Kayabasi** | **0.62** | **255** | P | **Pg** | **07 55 45.8** | **-0.4** |
| BDRM | | | | S | **Sb** | **07 55 56.6** | **+0.5** |
| **BODT** | **Bodrum** | **0.72** | **257** | *e*PG | **Pg** | **07 55 48.2** | **0.0** |
| BODT | | | | *e*SG | **Sb** | **07 55 58.9** | **-0.3** |
| **BODT** | **Bodrum** | **0.72** | **257** | *e*Pg | **Pg** | **07 55 48.2** | **0.0** |
| BODT | | | | *e*Sg | **Sb** | **07 55 58.9** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.76** | **342** | *e*PG | **Pb** | **07 55 50.4** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.76** | **342** | *e*Pg | **Pb** | **07 55 50.4** | **+0.5** |
| **FETY** | **Fethiye** | **0.93** | **129** | *e*PG | **Pn** | **07 55 53.5** | **-0.1** |
| **FETY** | **Fethiye** | **0.93** | **129** | *e*Pg | **Pn** | **07 55 53.5** | **-0.1** |

*IDC **16** 08:45:10.9±0.8,14°.14N×146°.71E,h0km,mb4.2/13, mb1 4.3/13,mb1mx4.0/43,mbtmp4.2/13,MS3.1/3, Ms1 3.2/3,ms1mx2.8/23,Error ellipse: s-maj=23.3km s-min=16.5km az=112.0*
*ISCJB **16** 08:45:14.4±0.6,14°.12N±0°.08×146°.75E±0°.08,h37km, mb4.3/19,MS3.1/3,Error ellipse: s-maj=13.1km s-min=9.1km az=135.3*
*NEIC **16** 08:45:16.2±0.4,14°.10N×146°.63E,h35km,mb4.6/6,Error ellipse: s-maj=11.0km s-min=7.7km az=110.0*
**ISC 16 08:45:16.3±0.8,14°.1N±0°.1×146°.7E±0°.1,h37km,n27, σ0s92/29,mb4.3/19,MS3.1/3,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.88** | **254** | Pn | **Pn** | **08 45 45.1** | **-0.8** |
| | 117nm,0.3s,baz=118,slow=6.1,SNR=81 | | | | | | |
| GUMO | | | | Sn | **Sn** | **08 46 10.0** | **+1.6** |
| | 70nm,0.3s,baz=5.3,slow=22,SNR=6.4 | | | | | | |
| GUMO | | | | LR | LR | 08 47 09.1 | |
| | comp=Z,482nm,18.3s,baz=166,slow=63 | | | | | | |
| **GUMO** | **Guam** | **1.88** | **254** | *e*Pn | **Pn** | **08 45 44.8** | **-1.1** |
| GUMO | | | | Sn | **Sn** | **08 46 10.0** | **+1.6** |
| **JNU** | **Nakatsue** | **23.79** | **325** | P | **P** | **08 50 24.4** | **-1.4** |
| | 7.3nm,0.8s,baz=115,slow=1.0,SNR=5.9 | | | | | | |
| **KSRS** | **Korea Array** | **28.64** | **328** | P | **P** | **08 51 09.2** | **-0.2** |
| | 3.4nm,0.8s,baz=149,slow=11,SNR=10 | | | | | | |
| KSRS | | | | LR | LR | 09 02 29.1 | |
| | comp=Z,47nm,18.1s,baz=81,slow=36 | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.65** | **328** | P | **P** | **08 51 09.2** | **-0.3** |
| **WRAB** | **Tennant Creek** | **35.96** | **200** | *e*P | **P** | **08 52 12.9** | **-0.8** |
| | 8.0nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **35.97** | **200** | P | **P** | **08 52 13.2** | **-0.6** |
| | 4.4nm,0.7s,baz=22,slow=9.4,SNR=19 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **38.18** | **214** | *e*P | **P** | **08 52 32.0** | **-0.5** |
| | 20nm,1.5s | | | | | | |
| **ASAR** | **Alice Springs** | **39.59** | **199** | P | **P** | **08 52 43.7** | **-0.6** |
| | 1.0nm,0.8s,baz=18,slow=8.8,SNR=9.0 | | | | | | |
| **SLVN** | **Son La** | **41.32** | **286** | *e*P | **P** | **08 52 58.9** | **+0.1** |
| | 28nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.97** | **282** | P | **P** | **08 53 36.1** | **-0.1** |
| | 1.1nm,0.4s,baz=80,slow=6.9,SNR=4.7 | | | | | | |
| CMAR | | | | PcP | **PcP** | **08 55 13.9** | **+1.3** |
| | 1.3nm,0.4s,baz=90,slow=2.9,SNR=6.9 | | | | | | |
| CMAR | | | | LR | LR | 09 12 24.7 | |
| | comp=Z,8.7nm,20.5s,baz=180,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **47.36** | **324** | P | **P** | **08 53 46.5** | **-0.4** |
| | 1.8nm,0.7s,baz=128,slow=8.6,SNR=6.5 | | | | | | |
| **SEY** | **Seymchan** | **48.91** | **3** | P | **P** | **08 53 59.0** | **+0.6** |
| | 2.9nm,0.9s,baz=198,slow=2.1,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.26** | **324** | P | **P** | **08 55 34.1** | **-0.3** |
| | 1.9nm,0.3s,baz=98,slow=7.6,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.37** | **316** | P | **P** | **08 55 35.0** | **-0.4** |
| | 0.6nm,0.4s,baz=94,slow=8.5,SNR=5.6 | | | | | | |
| **ILAR** | **Eielson Array** | **67.32** | **25** | P | **P** | **08 56 06.8** | **-0.5** |
| | 0.4nm,0.5s,baz=246,slow=6.2,S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=218 | | | | | | | |
| WDT | | | | *e*S | | **Sb** | **08 47 02.9** | **+0.5** |
| | baz=218 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.59** | **229** | *e*P | | **Pb** | **08 46 43.4** | **-0.6** |
| | baz=227 | | | | | | | |
| **TYC** | **Yuchr** | **1.61** | **230** | *e*P | | **Pn** | **08 46 43.4** | **+1.0** |
| | baz=228 | | | | | | | |
| TYC | | | | *e*S | | **Sb** | **08 47 04.9** | **+0.7** |
| | baz=228 | | | | | | | |
| **ALS** | **Alishan** | **1.92** | **222** | *e*P | | **Pb** | **08 46 48.5** | **-1.2** |
| | baz=220 | | | | | | | |
| ALS | | | | *e*S | | **Sn** | **08 47 12.1** | **+1.3** |
| | baz=220 | | | | | | | |

*MEX **16** 09:06:55.3±0.3, 13°.80N×92°.06W, h17km±999km, MD4.1*
*CASC **16** 09:06:57.4±2.7, 13°.91N×91°.43W, h37km±109km, MD3.7*
**ISC 16 09:06:51.4±2.0, 13°.7N±0°.1×91°.82W±0°.08, h61km±30km, n15, σ2$^{2}$03/22, 1C-2D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAT** | **Jato** | **0.62** | **17** | *i*P | **Pn** | **09 07 06.5** | **+1.7** |
| **FUG** | **Fuego 3** | **1.20** | **53** | *e*P | **Pn** | **09 07 12.5** | **+0.2** |
| **PCG** | **Pacaya** | **1.36** | **60** | *e*P | **Pn** | **09 07 15.4** | **+1.0** |
| PCG | | | | *e*S | **Sn** | **09 07 30.6** | **-1.1** |
| **NBG** | **Las Nubes** | **1.67** | **59** | *e*P | **Pn** | **09 07 20.7** | **+2.0** |
| NBG | | | | *e*S | **Sn** | **09 07 40.7** | **+1.4** |
| **RBDL** | **Robledal** | **2.11** | **79** | *e*P | **Pn** | **09 07 25.6** | **+1.1** |
| **RTR** | **El Retiro** | **2.12** | **85** | *e*P | **Pn** | **09 07 25.9** | **+1.2** |
| RTR | | | | *e*S | **Sn** | **09 07 46.2** | **-3.9** |
| **SBLS** | **San Blas** | **2.14** | **87** | *e*P | **Pn** | **09 07 26.0** | **+1.0** |
| SBLS | | | | *e*S | **Sn** | **09 07 47.7** | **-2.9** |
| **SNJE** | **San Jose** | **2.16** | **86** | *e*P | **Pn** | **09 07 26.5** | **+1.2** |
| SNJE | | | | *e*S | **Sn** | **09 07 47.8** | **-3.3** |
| **PCIG** | | **2.39** | **326** | *e*P | **Pn** | **09 07 28.4** | **+0.2** |
| PCIG | | | | *e*S | **Sn** | **09 07 53.7** | **-2.8** |
| **MRL** | **Marmol** | **2.46** | **57** | *e*P | **Pn** | **09 07 29.8** | **+0.5** |
| **BOQS** | **Boqueron** | **2.47** | **89** | *e*P | **Pn** | **09 07 31.0** | **+1.5** |
| **CCIG** | **Comitan** | **2.57** | **353** | *e*P | **Pn** | **09 07 32.4** | **+1.6** |
| CCIG | | | | *e*S | **Sn** | **09 08 01.1** | **+0.2** |
| **LFU** | **La Fuente** | **2.63** | **89** | *e*P | **Pn** | **09 07 33.0** | **+1.4** |
| **LBRS** | **Las Brisas** | **2.70** | **89** | *e*P | **Pn** | **09 07 34.1** | **+1.5** |
| **COPN** | **Copaltepe** | **5.32** | **106** | *e*P | **Pn** | **09 08 11.0** | **+2.6** |

*ISCJB **16** 09:11:12.4±0.7, 37°.08N±0°.05×27°.94E±0°.03, h0km, Error ellipse: s-maj=7.0km s-min=4.0km az=2.1*
*CSEM **16** 09:11:12.8±0.4, 37°.10N×27°.92E, h2km, MD2.7, Error ellipse: s-maj=9.5km s-min=5.9km az=178.0, Mining explosion.*
*DDA **16** 09:11:12.7, 37°.16N×27°.87E, h7km, Md2.6*
*ISK **16** 09:11:12.7, 37°.19N×27°.91E, h6km, MD2.7*
**ISC 16 09:11:11.7±1.0, 37°.12N±0°.04×27°.92E±0°.02, h0km, n14, σ0$^{0}$95/22, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.29** | **87** | *e*PG | **Pg** | **09 11 18.7** | **+1.4** |
| YER | | | | *e*SG | **Sb** | **09 11 24.2** | **-1.0** |
| **YER** | **Yerkesik** | **0.29** | **87** | *e*Pg | **Pg** | **09 11 18.7** | **+1.4** |
| YER | | | | *e*Sg | **Sb** | **09 11 24.3** | **-1.0** |
| **BDRM** | **Kayabasi** | **0.39** | **262** | *i* P | **Pg** | **09 11 19.4** | **+0.3** |
| BDRM | | | | *i* S | **Sg** | **09 11 25.5** | **+1.4** |
| **BDRM** | **Kayabasi** | **0.39** | **262** | P | **Pg** | **09 11 19.4** | **+0.3** |
| BDRM | | | | S | **Sg** | **09 11 25.5** | **+1.4** |
| **BODT** | **Bodrum** | **0.49** | **263** | *e*PG | **Pb** | **09 11 22.4** | **-0.8** |
| BODT | | | | *e*SG | **Sb** | **09 11 30.7** | **-0.3** |
| **BODT** | **Bodrum** | **0.49** | **263** | *e*Pg | **Pb** | **09 11 22.4** | **-0.8** |
| BODT | | | | *e*Sg | **Sb** | **09 11 30.7** | **-0.3** |
| **AYDN** | **Tasoluk** | **0.54** | **357** | *i* P | **Pb** | **09 11 24.3** | **+0.2** |
| AYDN | | | | *i* S | **Sb** | **09 11 31.4** | **-1.1** |
| **AYDN** | **Tasoluk** | **0.54** | **357** | P | **Pb** | **09 11 24.3** | **+0.2** |
| AYDN | | | | S | **Sb** | **09 11 31.4** | **-1.1** |
| **TURN** | **Turunc** | **0.60** | **114** | *i* P | Pg | 09 11 20.3 | -2.9 |
| TURN | | | | *i* S | **Sg** | **09 11 29.8** | **-1.2** |
| **TURN** | **Turunc** | **0.60** | **114** | P | Pg | 09 11 20.3 | -2.9 |
| TURN | | | | S | **Sg** | **09 11 29.8** | **-1.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.82** | **358** | *e*PG | **Pg** | **09 11 27.9** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.82** | **358** | *e*Pg | **Pg** | **09 11 27.9** | **+0.3** |
| **ELL** | **Elmali** | **1.64** | **103** | *e*PN | **Pb** | **09 11 43.1** | **+0.3** |
| **ELL** | **Elmali** | **1.64** | **103** | *e*Pn | **Pb** | **09 11 43.1** | **+0.3** |

*ISCJB **16** 09:32:43.4±0.8, 41°.1N±0°.2×34°.2E±0°.1, h11km±14km, Error ellipse: s-maj=33.2km s-min=4.8km az=153.1*
*CSEM **16** 09:32:43.6±0.2, 41°.14N×34°.16E, h10km, MD2.7, Error ellipse: s-maj=17.6km s-min=3.5km az=146.0*
*DDA **16** 09:32:43.6, 41°.09N×34°.17E, h25km, Md2.7*
**ISC 16 09:32:43.2±0.9, 41°.09N±0°.10×34°.19E±0°.06, h15km±7km, n12, σ0$^{0}$32/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TOS** | **Tosya** | **0.13** | **249** | *e*PG | **Pg** | **09 32 47.0** | **0.0** |
| TOS | | | | *e*SG | **Sg** | **09 32 49.4** | **0.0** |
| **TOS** | **Tosya** | **0.13** | **249** | *e*Pg | **Pg** | **09 32 47.0** | **0.0** |
| TOS | | | | *e*Sg | **Sg** | **09 32 49.4** | **0.0** |
| **ILGA** | **Ilgaz** | **0.36** | **265** | *i* P | **Pg** | **09 32 50.8** | **+0.2** |
| ILGA | | | | *i* S | **Sb** | **09 32 56.7** | **-0.3** |
| **ILGA** | **Ilgaz** | **0.36** | **265** | P | **Pg** | **09 32 50.8** | **+0.2** |
| ILGA | | | | S | **Sb** | **09 32 56.7** | **-0.3** |
| **BYBT** | **Boyabat** | **0.58** | **49** | *e*PG | **Pg** | **09 32 54.7** | **0.0** |
| **BYBT** | **Boyabat** | **0.58** | **49** | *e*Pg | **Pg** | **09 32 54.7** | **0.0** |
| **BOYT** | **Boyabat** | **0.64** | **58** | *i* P | **Pb** | **09 32 56.1** | **0.0** |
| BOYT | | | | *i* S | **Sb** | **09 33 05.0** | **+0.1** |
| **BOYT** | **Boyabat** | **0.64** | **58** | P | **Pb** | **09 32 56.1** | **0.0** |
| BOYT | | | | S | **Sb** | **09 33 05.0** | **+0.1** |
| **ELDT** | **Eldivan** | **0.83** | **224** | *i* P | **Pn** | **09 33 01.0** | **+0.4** |
| ELDT | | | | *i* S | **Sb** | **09 33 10.1** | **-0.4** |
| **ELDT** | **Eldivan** | **0.83** | **224** | P | **Pn** | **09 33 00.9** | **+0.4** |
| ELDT | | | | S | **Sb** | **09 33 10.1** | **-0.4** |
| **DIKM** | **Dikmen** | **0.98** | **55** | *e*PG | **Pb** | **09 33 01.4** | **-0.6** |
| **DIKM** | **Dikmen** | **0.98** | **55** | *e*Pg | **Pb** | **09 33 01.4** | **-0.6** |

*ISCJB **16** 09:43:17.7±0.4, 35°.29N±0°.02×92°.28W±0°.02, h8km±2km, Error ellipse: s-maj=3.7km s-min=2.1km az=159.6*
*NEIC **16** 09:43:18.0, 35°.29N×92°.33W, h6km, MW3.5, Moment Tensor Solution. s16 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$0.29; $M_{\theta\theta}$1.50; $M_{\phi\phi}$-1.79; $M_{r\theta}$-0.84; $M_{\theta\phi}$0.75; $M_{r\phi}$0.20; Best double couple: $M_0$2.00000×$10^{14}$ NP1:$\phi_s$210.00000°, δ65.00000°, λ169.00000°. NP2:$\phi_s$305.00000°, δ80.00000°, λ25.00000°. Principal axes: T 2.0200, Plg25.0000°, Azm170.0000°; N 0.0000, Plg63.0000°, Azm325.0000°; P -2.0200, Plg10.0000°, Azm76.0000°; After CERI.*
*NEIC Felt (II) at Greenbrier, Mountain View and Quitman. Also felt at Batesville, Corning, Cotter, Drasco, Eureka Springs, Glencoe, Guion, Hardy, Harriet, Harrison, Heber Springs, Marshall, Mount Vernon, Mountain Home, Parthenon, Peel, Rogers, Rose Bud and Springdale. Felt at Coahoma, Mississippi.*
**ISC 16 09:43:17.8±0.8, 35°.33N±0°.03×92°.36W±0°.02, h10km±6km, n89, σ1$^{1}$84/131, Arkansas**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WHAR** | **Wooly Hollow** | **0.07** | **125** | *e*Pg | **Pg** | **09 43 20.1** | **+0.2** |
| WHAR | | | | *e*Sg | **Sg** | **09 43 21.1** | **-0.4** |
| **UALR** | **University of** | **0.55** | **179** | *e*Pg | **Pg** | **09 43 28.5** | **0.0** |
| **FCAR** | **Ozark Folk Cen** | **0.59** | **18** | *e*Pg | **Pb** | **09 43 30.6** | **+0.3** |
| FCAR | | | | *e*Sg | **Sb** | **09 43 39.3** | **+0.6** |
| **LCAR** | **Lake Charles** | **1.23** | **53** | *e*Pg | **Pn** | **09 43 47.7** | **+0.3** |
| LCAR | | | | *e*Sg | **Sg** | **09 43 57.5** | **+0.2** |
| **MIAR** | **Mount Ida** | **1.27** | **232** | P | **Pb** | **09 43 42.0** | **+0.2** |
| | baz=1.2,SNR=90 | | | | | | |
| MIAR | | | | S | **Sg** | **09 43 58.8** | **+0.2** |
| | baz=1.2 | | | | | | |
| **MIAR** | **Mount Ida** | **1.27** | **232** | *e*Pg | **Pb** | **09 43 42.0** | **+0.2** |
| MIAR | | | | *e*S | **Sn** | **09 43 59.0** | **+0.3** |
| **V38A** | **Canehill** | **1.76** | **288** | P | **Pb** | **09 43 50.4** | **+0.2** |
| | baz=1.8,SNR=555 | | | | | | |
| V38A | | | | S | **Sg** | **09 44 14.4** | **+0.2** |
| | baz=1.8 | | | | | | |
| **W38A** | **Poteau** | **1.79** | **262** | P | **Pb** | **09 43 50.9** | **+0.2** |
| | baz=1.8,SNR=112 | | | | | | |
| W38A | | | | S | **Sg** | **09 44 15.0** | **-0.4** |
| | baz=1.8 | | | | | | |
| **U38A** | **Gravette** | **1.99** | **305** | P | **Pb** | **09 43 54.2** | **+0.1** |
| | baz=2.0,SNR=54 | | | | | | |
| U38A | | | | S | **Sg** | **09 44 21.4** | **-0.3** |
| | baz=2.0 | | | | | | |
| **MET** | **Memphis--Engin** | **1.99** | **95** | *e*Pn | **Pb** | **09 43 53.1** | **-1.0** |
| MET | | | | *e*Sn | **Sn** | **09 44 17.5** | **+0.9** |
| **Y39A** | **Lockesburg** | **2.00** | **226** | P | **Pn** | **09 43 52.4** | **+0.8** |
| | baz=2.0,SNR=53 | | | | | | |
| Y39A | | | | S | **Sb** | **09 44 18.7** | **-0.4** |
| | baz=2.0 | | | | | | |
| **GNAR** | **Gosnell** | **2.01** | **71** | *e*Pn | **Pb** | **09 43 53.5** | **-0.9** |
| GNAR | | | | *e*Sn | **Sb** | **09 44 19.9** | **+0.5** |
| **X38A** | **Whitesboro** | **2.13** | **253** | P | **Pb** | **09 43 56.2** | **-0.4** |
| | baz=2.1,SNR=170 | | | | | | |
| X38A | | | | S | **Sb** | **09 44 24.8** | **+1.7** |
| | baz=2.1 | | | | | | |
| **V37A** | **Hulbert** | **2.34** | **285** | P | **Pb** | **09 43 58.5** | **-1.6** |
| | baz=2.4,SNR=44 | | | | | | |
| V37A | | | | S | **Sb** | **09 44 29.3** | **+0.4** |
| | baz=2.4 | | | | | | |
| **Y38A** | **Idabel** | **2.41** | **235** | P | **Pn** | **09 43 59.2** | **+2.0** |
| | baz=2.4,SNR=63 | | | | | | |
| Y38A | | | | S | **Sb** | **09 44 29.4** | **-1.5** |
| | baz=2.4 | | | | | | |
| **U37A** | **Salina** | **2.49** | **296** | P | **Pn** | **09 44 00.6** | **+2.2** |
| | baz=2.5,SNR=59 | | | | | | |
| U37A | | | | S | **Sb** | **09 44 33.2** | **-0.1** |
| | baz=2.5 | | | | | | |
| **PARMO** | **Parma** | **2.50** | **57** | *e*Pn | **Pn** | **09 44 00.5** | **+2.0** |
| **W37A** | **Quinton** | **2.52** | **267** | P | **Pn** | **09 44 00.9** | **+2.0** |
| | baz=2.5,SNR=77 | | | | | | |
| W37A | | | | S | **Sb** | **09 44 33.3** | **-1.0** |
| | baz=2.5 | | | | | | |
| **HALT** | **Halls** | **2.52** | **76** | *e*Pn | **Pn** | **09 43 59.9** | **+1.1** |
| HALT | | | | *e*Sn | **Sn** | **09 44 32.2** | **+2.5** |
| **OXF** | **Oxford** | **2.55** | **108** | *e*Pn | **Pn** | **09 43 59.8** | **+0.6** |
| OXF | | | | *e*Sn | **Sn** | **09 44 30.7** | **+0.3** |
| **Z39A** | **Irene McRaven,** | **2.57** | **217** | P | **Pn** | **09 44 00.4** | **+0.8** |
| | baz=2.5 | | | | | | |
| **X37A** | **Clayton** | **2.58** | **254** | P | **Pn** | **09 44 01.9** | **+2.2** |
| | baz=2.6,SNR=66 | | | | | | |
| X37A | | | | Sb | **Sg** | **09 44 39.4** | **-1.5** |
| | baz=2.6 | | | | | | |
| **GLAT** | **Glass** | **2.66** | **68** | *e*Pn | **Pn** | **09 44 02.1** | **+1.3** |
| **T37A** | **Cheneyville 18** | **2.74** | **312** | P | **Pb** | **09 44 04.7** | **-2.2** |
| | baz=2.8,SNR=24 | | | | | | |
| **TUL1** | **Tulsa** | **2.86** | **283** | P | **Pn** | **09 44 05.7** | **+2.1** |
| | baz=2.9,SNR=25 | | | | | | |
| **TUL1** | **Tulsa** | **2.86** | **283** | *e*Pn | **Pn** | **09 44 05.3** | **+1.8** |
| TUL1 | | | | *e*Sg | **Sg** | **09 44 50.2** | **+0.5** |
| **CCM** | **Cathedral Cave** | **2.87** | **18** | *e*Pn | **Pn** | **09 44 05.9** | **+2.4** |
| CCM | | | | *e*Sn | **Sb** | **09 44 42.0** | **-2.2** |
| **U36A** | **Oologah** | **2.94** | **292** | P | **Pn** | **09 44 06.7** | **+2.1** |
| | baz=3.0,SNR=7.9 | | | | | | |
| **V36A** | **Jenks** | **2.96** | **280** | P | **Pn** | **09 44 07.1** | **+2.2** |
| | baz=3.0,SNR=17 | | | | | | |
| **Y37A** | **Hugo** | **3.01** | **244** | P | **Pn** | **09 44 08.1** | **+2.5** |
| | baz=3.0,SNR=104 | | | | | | |
| **UTMT** | **University of** | **3.01** | **69** | *e*Pn | **Pn** | **09 44 07.5** | **+1.9** |
| UTMT | | | | *e*Sg | **Sg** | **09 44 55.1** | **+0.5** |
| **S37A** | **Fort Scott** | **3.14** | **321** | P | **Pn** | **09 44 10.5** | **+3.2** |
| | baz=3.2,SNR=16 | | | | | | |
| **W36A** | **Wetumka** | **3.17** | **268** | P | **Pn** | **09 44 09.4** | **+1.6** |
| | baz=3.2,SNR=59 | | | | | | |
| W36A | | | | Sb | **Sg** | **09 44 57.6** | **-2.1** |
| | baz=3.2 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **3.33** | **302** | P | **Pn** | **09 44 12.8** | **+2.8** |
| | baz=3.4,SNR=11 | | | | | | |
| T36A | | | | Sb | **Sg** | **09 45 03.5** | **-1.4** |
| | baz=3.4 | | | | | | |
| **X36A** | **Centrahoma** | **3.37** | **258** | P | **Pn** | **09 44 13.1** | **+2.6** |
| | baz=3.4,SNR=9.1 | | | | | | |
| **SIUC** | **Southern Illin** | **3.47** | **46** | *e*Pn | **Pn** | **09 44 13.1** | **+1.2** |
| SIUC | | | | *e*Sg | **Sg** | **09 45 07.2** | **-2.1** |
| **138A** | **Matatall Enter** | **3.50** | **221** | S | **Sn** | **09 44 54.2** | **+0.5** |
| | baz=3.5 | | | | | | |
| **S36A** | **Lake Cedric, C** | **3.54** | **313** | P | **Pn** | **09 44 15.7** | **+2.9** |
| | baz=3.6 | | | | | | |
| S36A | | | | Sb | **Sg** | **09 45 10.1** | **-1.3** |
| | baz=3.6 | | | | | | |
| **Y36A** | **Durant** | **3.54** | **247** | P | **Pn** | **09 44 15.5** | **+2.6** |
| | baz=3.5,SNR=34 | | | | | | |
| Y36A | | | | Sb | **Sb** | **09 45 07.7** | **+4.1** |
| | baz=3.5 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **3.68** | **278** | P | **Pn** | **09 44 16.7** | **+1.9** |
| | baz=3.7,SNR=11 | | | | | | |
| V35A | | | | S | **Sn** | **09 45 01.6** | **+3.3** |
| | baz=3.7 | | | | | | |
| **W35A** | **Tecumseh** | **3.70** | **269** | P | **Pn** | **09 44 16.9** | **+1.8** |
| | baz=3.7 | | | | | | |
| W35A | | | | S | **Sn** | **09 45 02.0** | **+3.1** |
| | baz=3.7 | | | | | | |
| **U35A** | **Pawnee** | **3.71** | **288** | P | **Pn** | **09 44 17.6** | **+2.4** |
| | baz=3.7,SNR=8.9 | | | | | | |
| U35A | | | | S | **Sn** | **09 45 02.6** | **+3.7** |
| | baz=3.7 | | | | | | |
| **SLM** | **Saint Louis** | **3.71** | **27** | *e*Pn | **Pn** | **09 44 15.2** | **-0.1** |
| SLM | | | | Sn | **Sn** | **09 45 02.1** | **+3.1** |
| **T35A** | **Sooner Cattle** | **3.72** | **296** | P | **Pn** | **09 44 17.4** | **+2.1** |
| | baz=3.7,SNR=5.9 | | | | | | |
| **239A** | **Gary** | **3.74** | **209** | S | **Sn** | **09 45 00.1** | **+0.3** |
| | baz=3.7 | | | | | | |
| **WVT** | **Waverly** | **3.77** | **76** | *e*Pn | **Pn** | **09 44 16.8** | **+0.8** |
| WVT | | | | *e*Sn | **Sn** | **09 44 59.9** | **-0.5** |
| **X35A** | **Drake** | **3.91** | **258** | P | **Pn** | **09 44 19.5** | **+1.6** |
| | baz=3.9,SNR=33 | | | | | | |
| **R36A** | **Gordon, Harris** | **3.91** | **321** | P | **Pn** | **09 44 21.1** | **+3.1** |
| | baz=4.0,SNR=10 | | | | | | |
| **Q37A** | **Longview Farm,** | **3.92** | **335** | P | Pn | 09 44 21.5 | +3.4 |
| | baz=4.0,SNR=15 | | | | | | |
| **Z36A** | **Blue Ridge** | **3.95** | **240** | P | **Pn** | **09 44 20.9** | **+2.4** |
| | baz=3.9,SNR=16 | | | | | | |
| **Y35A** | **Marietta** | **4.11** | **251** | P | **Pn** | **09 44 23.3** | **+2.6** |
| | baz=4.1,SNR=28 | | | | | | |
| **V34A** | **Guthrie** | **4.24** | **278** | P | **Pn** | **09 44 24.3** | **+1.8** |
| | baz=4.2,SNR=8.2 | | | | | | |
| **V34A** | **Guthrie** | **4.24** | **278** | *e*Pn | **Pn** | **09 44 23.9** | **+1.4** |
| V34A | | | | *e*Sg | **Sg** | **09 45 30.4** | **-3.5** |
| **U34A** | **Anderson Ranch** | **4.35** | **286** | Pb | **Pb** | **09 44 34.1** | **-0.2** |
| | baz=4.4,SNR=12 | | | | | | |
| **U34A** | **Anderson Ranch** | **4.35** | **286** | Pn | **Pn** | **09 44 26.8** | **+2.8** |
| U34A | | | | *e*Sn | **Sn** | **09 45 16.2** | **+1.4** |
| **Q36A** | **Arnold C. Orve** | **4.39** | **327** | P | Pn | 09 44 27.9 | +3.3 |
| | baz=4.4,SNR=8.6 | | | | | | |
| **W34A** | **Bridge Creek,** | **4.43** | **270** | *e*Pn | **Pn** | **09 44 27.4** | **+2.2** |
| W34A | | | | *e*Sg | **Sg** | **09 45 37.6** | **-2.6** |
| **X34A** | **Smith Ranch, M** | **4.56** | **262** | P | **Pn** | **09 44 28.9** | **+2.0** |
| | baz=4.5,SNR=10.0 | | | | | | |
| **Q35A** | **Mercer Eighty,** | **4.59** | **321** | P | Pn | **09 44 30.1** | **+2.7** |
| | baz=4.6,SNR=9.5 | | | | | | |
| **OLIL** | **Olney** | **4.81** | **44** | *e*Pn | **Pn** | **09 44 32.2** | **+1.9** |
| **W33A** | **Caddo, Fort Co** | **5.01** | **270** | P | **Pn** | **09 44 35.8** | **+2.8** |
| | baz=5.0,SNR=9.1 | | | | | | |
| **KSU1** | **Kansas State U** | **5.07** | **319** | *e*Pn | **Pn** | **09 44 36.3** | **+2.4** |
| **SWET** | **Sewanee** | **5.26** | **89** | *e*Pn | **Pn** | **09 44 37.6** | **+1.1** |
| SWET | | | | *e*Sn | **Sn** | **09 45 39.4** | **+2.2** |
| **WMOK** | **Wichita Mounta** | **5.30** | **265** | *e*Pn | **Pn** | **09 44 38.7** | **+1.6** |
| WMOK | | | | *e*Sn | **Sn** | **09 45 38.4** | **0.0** |
| **U32A** | **Winter Ranch,** | **5.50** | **283** | P | **Pn** | **09 44 41.8** | **+2.0** |
| | baz=5.5 | | | | | | |
| **W32A** | **Sentinel** | **5.64** | **270** | P | **Pn** | **09 44 43.6** | **+1.7** |
| | baz=5.6 | | | | | | |
| **WCI** | **Wyandotte Cave** | **5.66** | **57** | *e*Pn | **Pn** | **09 44 43.4** | **+1.3** |
| WCI | | | | *e*Sn | **Sn** | **09 45 47.1** | **0.0** |
| **Z33A** | **Whitaker Ranch** | **5.68** | **251** | P | **Pn** | **09 44 44.1** | **+1.8** |
| | baz=5.7,SNR=7.5 | | | | | | |
| **HDIL** | **Hopedale** | **5.75** | **24** | *e*Pn | **Pn** | **09 44 45.5** | **+2.2** |
| HDIL | | | | *e*Pg | Pg | 09 45 04.9 | -3.0 |
| HDIL | | | | *e*Sn | **Sn** | **09 45 50.3** | **+1.0** |
| **X32A** | **Elmer** | **5.77** | **263** | P | **Pn** | **09 44 46.3** | **+2.8** |
| | baz=5.8 | | | | | | |
| **335A** | **Moody** | **5.86** | **228** | P | **Pn** | **09 44 46.0** | **+1.3** |
| | baz=5.8 | | | | | | |
| **BLO** | **Bloomington** | **6.03** | **49** | *e*Pn | **Pn** | **09 44 48.7** | **+1.7** |
| BLO | | | | *e*Sn | **Sn** | **09 45 52.9** | **-3.3** |
| **X31A** | **McDonald Ranch** | **6.30** | **266** | P | **Pn** | **09 44 53.3** | **+2.5** |
| | baz=6.3,SNR=10 | | | | | | |
| **CPCT** | **Cooper Cave** | **6.40** | **87** | *e*Pn | **Pn** | **09 44 53.3** | **+1.2** |
| CPCT | | | | *e*Sn | **Sn** | **09 46 05.0** | **-0.3** |
| **SFIN** | **Scholer Farm** | **6.54** | **38** | *e*Pn | **Pn** | **09 44 55.7** | **+1.7** |
| SFIN | | | | *e*Sg | Sb | 09 46 38.6 | +8.9 |
| **SCIA** | **State Center** | **6.60** | **354** | Pn | **Pn** | **09 44 56.2** | **+1.3** |
| SCIA | | | | *e*Sn | **Sn** | **09 46 12.7** | **+2.5** |
| **ABTX** | **Abilene, Hawle** | **6.63** | **248** | *e*Pn | **Pn** | **09 44 55.3** | **0.0** |
| **Z30A** | **Sanderson Ranc** | **7.54** | **257** | P | **Pn** | **09 45 09.4** | **+1.5** |
| | baz=7.5,SNR=12 | | | | | | |
| **AMTX** | **Amarillo** | **7.66** | **269** | *e*Pn | **Pn** | **09 45 11.3** | **+1.8** |
| AMTX | | | | *e*Sn | **Sn** | **09 46 33.2** | **-3.2** |
| **JCT** | **Junction City** | **7.91** | **234** | *e*Pn | **Pn** | **09 45 13.4** | **+0.5** |
| JCT | | | | *e*Sn | **Sn** | **09 46 39.9** | **-2.6** |
| **230A** | **Sterling City** | **8.07** | **247** | P | **Pn** | **09 45 15.9** | **+0.7** |
| | baz=8.0,SNR=5.2 | | | | | | |
| **P28A** | **Saint Francis** | **8.59** | **302** | P | Pn | 09 45 25.7 | +3.3 |
| | baz=8.6 | | | | | | |
| **MSTX** | **Muleshoe** | **8.69** | **264** | *e*Pn | **Pn** | **09 45 24.5** | **+0.8** |
| **128A** | **Castleberry Fa** | **8.84** | **255** | P | **Pn** | **09 45 26.5** | **+0.8** |
| | baz=8.8,SNR=7.0 | | | | | | |
| **ECSD** | **EROS Data Cent** | **9.02** | **340** | *e*Pn | **Pn** | **09 45 29.2** | **+1.2** |
| ECSD | | | | *e*Sn | **Sn** | **09 47 05.6** | **-4.0** |
| **SDCO** | **Great Sand Dun** | **10.85** | **287** | Pn | **Pn** | **09 45 55.3** | **+1.9** |
| **MNTX** | **Cornudas Mount** | **11.46** | **255** | P | **Pn** | **09 46 02.3** | **+0.8** |
| | baz=11,SNR=7.9 | | | | | | |
| **MNTX** | **Cornudas Mount** | **11.46** | **255** | *e*Pn | **Pn** | **09 46 01.4** | **-0.1** |
| **EYMN** | **Ely** | **12.62** | **3** | *e*Pn | **Pn** | **09 46 16.5** | **-0.9** |
| EYMN | | | | *e*Sn | Sn | 09 48 30.2 | -7.9 |

*ISCJB **16** 09:47:09.2±0.7, 6°.95N±0°.07×73°.09W±0°.09, h166km, Error ellipse: s-maj=13.8km s-min=6.3km az=34.4*
*FUNV **16** 09:47:10.4, 6°.85N×73°.15W, h164km, MW3.2*
*IDC **16** 09:47:11.9±7.3, 6°.17N×76°.38W, h111km±69km, mb1 3.3/1, mb1mx2.8/26, mbtmp3.8/1, Error ellipse: s-maj=133.8km s-min=73.0km az=37.0*
**ISC 16 09:47:09.4±1.2, 6°.92N±0°.07×73°.08W±0°.09, h166km, n19, σ0$^{0}$81/24, 2C, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAPV** | **Capacho** | **1.21** | **39** | *e*P | **Pn** | **09 47 38.6** | **+0.9** |
| CAPV | | | | *e*S | **Sn** | **09 47 59.9** | **+0.4** |
| **ROSC** | **El Rosal** | **2.40** | **211** | P | **Pn** | **09 47 51.0** | **+0.5** |
| | 18nm,0.3s,baz=302,slow=1.0,SNR=71 | | | | | | |
| ROSC | | | | S | **Sn** | **09 48 21.4** | **-1.0** |
| | 49nm,0.3s,baz=89,slow=21,SNR=9.5 | | | | | | |
| **VIGV** | **El Vigia** | **2.55** | **42** | *e*P | **Pn** | **09 47 53.4** | **+1.3** |
| VIGV | | | | *e*S | **Sn** | **09 48 24.3** | **-0.8** |
| **SOCV** | **Socops** | **2.59** | **58** | *e*P | **Pn** | **09 47 53.5** | **+1.1** |
| SOCV | | | | *e*S | **Sn** | **09 48 25.2** | **-0.6** |
| **ELOV** | **Elorza** | **3.58** | **89** | *e*P | **Pn** | **09 48 04.9** | **+0.2** |
| **VIRV** | **Villa del Rosa** | **3.62** | **11** | *e*P | **Pn** | **09 48 05.5** | **+0.2** |
| VIRV | | | | *e*S | **Sn** | **09 48 46.9** | **-1.8** |
| **SANV** | **Sanarito** | **4.35** | **54** | *e*P | **Pn** | **09 48 15.3** | **+0.6** |
| **CURV** | **Curarigua** | **4.35** | **45** | *e*P | **Pn** | **09 48 15.4** | **+0.6** |
| **DABV** | **Dabajuro** | **4.65** | **31** | *e*P | **Pn** | **09 48 19.1** | **+0.6** |
| **TEPV** | **Terepaima** | **4.89** | **52** | *e*P | **Pn** | **09 48 22.2** | **+0.4** |
| **SIQV** | **Siquisique** | **4.92** | **41** | *e*P | **Pn** | **09 48 23.5** | **+1.4** |
| **BAUV** | **El Baul** | **5.38** | **68** | *e*P | **Pn** | **09 48 27.8** | **-0.3** |
| **MAPV** | **Macapo** | **5.41** | **57** | *e*P | **Pn** | **09 48 28.8** | **+0.2** |
| **MONV** | **Montecano** | **5.87** | **31** | *e*P | **Pn** | **09 48 34.6** | **+0.1** |
| **TURV** | **Turiamo** | **6.26** | **56** | *e*P | **Pn** | **09 48 40.2** | **+0.6** |
| **BIRV** | **Birongo** | **7.60** | **62** | *e*P | **Pn** | **09 48 57.9** | **+0.4** |
| **CUPV** | **Cœpira** | **7.86** | **66** | *e*P | **Pn** | **09 49 00.5** | **-0.5** |
| **ASAR** | **Alice Springs** | **149.20** | **234** | PKPbc | **PKPbc** | **10 06 39.3** | **+0.1** |
| | 0.2nm,0.5s,baz=114,slow=3.3,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **150.42** | **241** | PKPbc | **PKPbc** | **10 06 42.4** | **+0.1** |
| | 0.2nm,0.4s,baz=107,slow=2.9,SNR=9.2 | | | | | | |

*NIED **16** 09:56:00, 45°.00N×149°.10E, h44km, Mw3.6 Best double couple: $M_0$3.34000×$10^{14}$ NP1:$\phi_s$312.00000°, δ64.00000°, λ29.00000°. NP2:$\phi_s$209.00000°, δ65.00000°, λ151.00000°.*
*SKHL **16** 09:56:51.9±0.2, 44°.81N×149°.18E, h42km±7km, mb4.7/3*
*JMA **16** 09:56:51.6±0.6, 44°.96N×149°.13E, h30km, M4.1*
**ISC 16 09:56:50.5±4.0, 44°.77N±0°.07×149°.3E±0°.2, h35km, n21, σ1$^{1}$70/30, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.11** | **295** | *i* P | **Pn** | **09 57 09.0** | **-0.6** |
| KUR | | | | AMB | AMB | 09 57 09.8 | |
| | 38nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 09 57 09.8 | |
| | 41nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 09 57 09.8 | |
| | 241nm,0.2s | | | | | | |
| KUR | | | | *i* S | **Sn** | **09 57 21.8** | **-1.9** |
| KUR | | | | A | A | 09 57 22.6 | |
| | 160nm,0.2s | | | | | | |
| KUR | | | | A | A | 09 57 22.6 | |
| | 190nm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **1.98** | **244** | *i* P | **Pn** | **09 57 22.3** | **+0.8** |
| SHO | | | | AMB | AMB | 09 57 31.5 | |
| | 78nm,0.2s | | | | | | |
| SHO | | | | *i* S | **Sn** | **09 57 44.9** | **-0.2** |
| SHO | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ULM** | **Lac du Bonnet** | **71.28** | **342** | P | **P** | **10 30 27.0** | **-0.9** |
| | 4.9nm,0.5s,baz=154,slow=7.3,SNR=9.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.51** | **71** | P | **P** | **10 30 58.1** | **-1.0** |
| | 1.6nm,0.6s,baz=260,slow=5.1,SNR=16 | | | | | | |
| **YKA** | **Yellowknife Ar** | **87.18** | **341** | P | **P** | **10 31 54.0** | **+0.2** |
| | 0.8nm,0.6s,baz=130,slow=4.4,SNR=3.4 | | | | | | |

*IDC **16** 10:38:39.6±6.1,27.6ºN×55.1ºE,h0km, mb3.7/4, mb1 3.8/4, mb1mx3.3/36, mbtmp3.7/4, Error ellipse: s-maj=122.8km s-min=46.6km az=114.0*
*ISCJB **16** 10:38:45.5±1.1,27.7ºN±0.1×54.58ºE±0.10,h25km, mb3.5/4, Error ellipse: s-maj=21.1km s-min=12.1km az=8.8*
*CSEM **16** 10:38:45.9,27.61ºN×54.66ºE,h38km, ML3.4, After THR*
**ISC 16 10:38:46.1±1.2,27.6ºN±0.2×54.66E±0.06,h25km,n9,**
**σ1º17/9,mb3.6/4,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDS** | **Bandar-Abbas** | **1.36** | **99** | *e*Pg | **Pb** | **10 39 10.8** | **-0.1** |
| **GHIR** | **Ghir-Karzin** | **1.63** | **295** | *e*Pg | **Pb** | **10 39 15.4** | **-0.1** |
| **KRBR** | **Kerman** | **2.99** | **37** | *e*Pn | **Pn** | **10 39 33.2** | **+0.9** |
| **AHBU** | **AHRAM** | **3.22** | **294** | *e*Pn | **Pn** | **10 39 35.9** | **+0.8** |
| **NASN** | **Na'in** | **5.41** | **343** | *e*Pn | **Pn** | **10 40 06.2** | **+0.7** |
| **BRTR** | **Keskin Array B** | **21.20** | **310** | P | **P** | **10 43 30.6** | **+0.6** |
| | 1.1nm,0.7s,baz=131,slow=12,SNR=7.1 | | | | | | |
| **FINES** | **FINESS Array B** | **38.85** | **338** | P | **P** | **10 46 08.3** | **-0.7** |
| | 1.5nm,0.7s,baz=154,slow=10.0,SNR=3.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.25** | **331** | P | **P** | **10 46 51.0** | **-2.3** |
| | 0.6nm,0.8s,baz=117,slow=8.0,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.33** | **265** | P | **P** | **10 47 49.3** | **+0.6** |
| | 0.4nm,0.5s,baz=63,slow=8.0,SNR=7.8 | | | | | | |

*AUST **16** 10:58:32.2±0.0,6.45ºS×129.95ºE,h118km, Error ellipse: s-maj=1.1km s-min=0.8km az=298.0*
*ISCJB **16** 10:58:35.0±0.3,6.59ºS±0.03×130.05ºE±0.05,h146km, mb3.9/5, Error ellipse: s-maj=6.6km s-min=4.0km az=167.3*
*IDC **16** 10:58:35.8±1.9,6.51ºS×130.18ºE,h156km±16km, mb3.7/5, mb1 3.9/11,mb1mx3.6/28, mbtmp4.3/11, Error ellipse: s-maj=29.1km s-min=14.1km az=87.0*
*DJA **16** 10:58:36.8±0.3,6.7ºS±3.3ºx13.0ºE±.4,h163km±11km, M4.7/12, mb4.5/12, mB5.2/5, MLv4.9/9, Mw(mB)4.6/5*
**ISC 16 10:58:35.0±0.6,6.54S±0.05×130.09E±0.07,h146km,n42,**
**σ1º85/45,mb3.9/5,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.87** | **140** | P | Pn | 10 59 12.7 | +4.3 |
| SAUI | | | | S | **Sn** | **10 59 36.2** | **+2.2** |
| **BNDI** | **Bandanaira** | **2.01** | **355** | P | **Pn** | **10 59 12.7** | **+2.6** |
| BNDI | | | | S | Sn | 10 59 53.4 | +16 |
| **MSAI** | **Masohi** | **3.38** | **340** | P | **Pn** | **10 59 27.6** | **+0.5** |
| MSAI | | | | S | **Sn** | **11 00 10.6** | **+3.2** |
| **AAI** | **Ambon** | **3.40** | **326** | P | Pn | 10 59 31.0 | +3.6 |
| **FAKI** | **Fak Fak** | **4.19** | **31** | P | **Pn** | **10 59 38.4** | **+0.6** |
| | baz=4.2,SNR=51 | | | | | | |
| **FAKI** | **Fak Fak** | **4.19** | **31** | P | **Pn** | **10 59 38.3** | **+0.6** |
| **NLAI** | **Namlea** | **4.43** | **318** | P | Pn | 10 59 46.4 | +5.6 |
| NLAI | | | | S | Sn | 11 00 43.7 | +12 |
| **SIJI** | **Sorong** | **5.75** | **12** | P | **Pn** | **10 59 58.8** | **+0.4** |
| | 4.9nm,0.3s,baz=187,slow=22,SNR=34 | | | | | | |
| SIJI | | | | S | **Sn** | **11 00 58.6** | **-5.1** |
| | 10nm,0.3s,baz=267,slow=22,SNR=9.0 | | | | | | |
| **SWI** | **Sorong** | **5.76** | **12** | P | **Pn** | **10 59 59.0** | **+0.5** |
| | baz=5.7,SNR=6.5 | | | | | | |
| **SWI** | **Sorong** | **5.76** | **12** | P | **Pn** | **10 59 58.4** | **-0.1** |
| | 21nm,0.4s,4µm0.9nm | | | | | | |
| **SANI** | **Sanana** | **6.05** | **317** | P | Pn | 11 00 06.2 | +3.8 |
| SANI | | | | S | Sn | 11 01 22.8 | +12 |
| **MTN** | **Manton Dam** | **6.35** | **171** | P | **Pn** | **11 00 07.8** | **+1.5** |
| | baz=6.5,SNR=100 | | | | | | |
| **LBMI** | **Labuha** | **6.41** | **336** | P | **Pn** | **11 00 09.3** | **+2.1** |
| | 61nm,0.8s,951nm0.2nm | | | | | | |
| LBMI | | | | S | **Sn** | **11 01 20.8** | **+1.5** |
| | 61nm,0.8s,951nm0.2nm | | | | | | |
| **SOEI** | **Soe** | **6.59** | **241** | P | **Pn** | **11 00 11.8** | **+2.2** |
| | baz=6.5,SNR=6.0 | | | | | | |
| **SOEI** | **Soe** | **6.59** | **241** | P | **Pn** | **11 00 11.9** | **+2.2** |
| | 70nm,1.0s,0.9nm | | | | | | |
| **BATI** | **Baumata** | **7.33** | **240** | P | **Pn** | **11 00 21.2** | **+1.8** |
| | 16nm,0.3s,baz=110,slow=1.5,SNR=13 | | | | | | |
| BATI | | | | S | **Sn** | **11 01 39.5** | **-1.9** |
| | 22nm,0.3s,baz=352,slow=23,SNR=10 | | | | | | |
| **BATI** | **Baumata** | **7.33** | **240** | P | **Pn** | **11 00 21.5** | **+2.0** |
| | 57nm,0.6s,2µm0.7nm | | | | | | |
| **KNRA** | **Kununurra** | **9.17** | **188** | P | **Pn** | **11 00 43.9** | **-0.2** |
| | baz=9.3,SNR=27 | | | | | | |
| **BASI** | **Baing, Sumba** | **10.09** | **248** | P | **Pn** | **11 00 57.0** | **+0.6** |
| | 108nm,1.3s | | | | | | |
| **KAPI** | **Kappang** | **10.39** | **278** | P | **Pn** | **11 01 02.9** | **+2.5** |
| | 0.5nm,0.3s,baz=205,slow=17,SNR=1.9 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.28** | **200** | P | **Pn** | **11 01 24.6** | **-0.5** |
| | 2.7nm,0.3s,baz=35,slow=11,SNR=38 | | | | | | |
| FITZ | | | | S | Sn | 11 03 31.9 | -9.0 |
| | 3.3nm,0.3s,baz=66,slow=20,SNR=7.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **12.28** | **200** | P | **Pn** | **11 01 24.6** | **-0.5** |
| | baz=12,SNR=15 | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **13.27** | **260** | P | **Pn** | **11 01 35.1** | **-2.8** |
| | 17nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **13.95** | **163** | P | **Pn** | **11 01 45.0** | **-1.5** |
| | 1.1nm,0.3s,baz=330,slow=13,SNR=38 | | | | | | |
| WRA | | | | S | Sn | 11 04 14.2 | -6.8 |
| | 3.3nm,0.3s,baz=338,slow=23,SNR=9.1 | | | | | | |
| **COEN** | **Coen** | **14.83** | **121** | P | **P** | **11 01 59.9** | **+0.1** |
| | baz=15,SNR=55 | | | | | | |
| **QIS** | **Mount Isa** | **16.71** | **147** | P | **Pn** | **11 02 22.6** | **+1.9** |
| | baz=17,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **17.42** | **168** | P | **Pn** | **11 02 30.2** | **+1.0** |
| | 0.9nm,0.3s,baz=339,slow=9.5,SNR=73 | | | | | | |
| ASAR | | | | S | **S** | **11 05 37.4** | **-5.0** |
| | 0.9nm,0.3s,baz=0.0,slow=25,SNR=5.9 | | | | | | |
| ASAR | | | | ScP | **ScP** | **11 10 20.6** | **-3.1** |
| | 0.1nm,0.3s,baz=350,slow=1.5,SNR=4.1 | | | | | | |
| **MTSU** | **Mount Surprise** | **18.04** | **131** | P | **Pn** | **11 02 38.0** | **+1.4** |
| | baz=18,SNR=11 | | | | | | |
| **WRKA** | **Warakurna** | **18.47** | **185** | P | **Pn** | **11 02 41.5** | **-0.2** |
| | baz=19,SNR=28 | | | | | | |
| **MEEK** | **Meekatharra** | **22.78** | **207** | P | **P** | **11 03 25.6** | **+0.4** |
| | baz=23,SNR=8.3 | | | | | | |
| **QLP** | **Quilpie** | **24.06** | **148** | P | **P** | **11 03 38.4** | **+1.6** |
| | baz=24,SNR=5.4 | | | | | | |
| **MORW** | **Morawa** | **26.04** | **209** | P | **P** | **11 03 55.0** | **+0.2** |
| | baz=26,SNR=3.9 | | | | | | |
| **BLDU** | **Ballidu** | **27.04** | **206** | P | **P** | **11 04 04.1** | **+0.3** |
| | baz=27,SNR=7.5 | | | | | | |
| **KLBR** | **Kellerberrin** | **27.46** | **203** | P | **P** | **11 04 08.2** | **+0.7** |
| | baz=28,SNR=6.5 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.85** | **203** | P | **P** | **11 04 20.4** | **+0.7** |
| | baz=29,SNR=10 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.51** | **309** | P | **P** | **11 05 51.5** | **-0.2** |
| | 1.4nm,0.5s,baz=138,slow=7.5,SNR=5.7 | | | | | | |
| **SONM** | **Songino Array** | **58.04** | **341** | P | **P** | **11 08 13.1** | **+0.4** |
| | 0.4nm,0.5s,baz=155,slow=4.4,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.89** | **327** | P | **P** | **11 09 17.9** | **+0.1** |
| | 3.7nm,0.5s,baz=120,slow=8.1,SNR=35 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.21** | **334** | P | **P** | **11 09 36.7** | **-1.2** |
| | 0.6nm,0.3s,baz=127,slow=3.8,SNR=2.7 | | | | | | |
| **MAW** | **Mawson** | **75.41** | **201** | P | **P** | **11 10 03.0** | **+0.8** |
| | 2.2nm,0.6s,baz=69,slow=4.0,SNR=16 | | | | | | |
| **MAW** | **Mawson** | **75.41** | **201** | P | **P** | **11 10 03.1** | **+0.8** |
| | baz=75,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.81** | **282** | PKP | **PKPdf** | **11 17 25.4** | **-0.8** |
| | 0.5nm,0.5s,baz=83,slow=1.9,SNR=4.6 | | | | | | |

*ISK **16** 11:15:34.1,38.67ºN×37.50E,h5km, MD2.7*
*ISCJB **16** 11:15:35.3±0.7,38.68ºN±0.04×37.51E±0.04,h1km±8km, Error ellipse: s-maj=6.6km s-min=4.9km az=24.0*
*CSEM **16** 11:15:35.6±0.6,38.69ºN×37.62E,h5km, MD2.7, Error ellipse: s-maj=18.9km s-min=13.5km az=28.0*
*DDA **16** 11:15:36.7,38.67ºN×37.56E,h5km, Md2.8*
**ISC 16 11:15:34.9±1.2,38.66N±0.03×37.52E±0.03,h7km±9km,**
**n20,σ0º81/26,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DARE** | **Darende-Malaty** | **0.09** | **200** | *e*PG | **Pg** | **11 15 36.3** | **-0.8** |
| **CUGUR** | **Gurin_S¨VAS** | **0.21** | **289** | P | **Pg** | **11 15 39.0** | **-0.1** |
| **AKCD** | **Akcadag** | **0.48** | **139** | *i* P | **Pg** | **11 15 44.1** | **-0.1** |
| AKCD | | | | *i* S | **Sb** | **11 15 53.2** | **+0.3** |
| **AKCD** | **Akcadag** | **0.48** | **139** | P | **Pg** | **11 15 44.1** | **-0.1** |
| AKCD | | | | S | **Sb** | **11 15 53.2** | **+0.3** |
| **CUKAN** | **kangal_SIVAS** | **0.66** | **356** | P | **Pn** | **11 15 50.1** | **-0.7** |
| **MALT** | **Malatya** | **0.79** | **115** | *e*PG | **Pb** | **11 15 50.6** | **-0.3** |
| MALT | | | | *e*SG | **Sn** | **11 16 03.9** | **-0.6** |
| **MALT** | **Malatya** | **0.79** | **115** | *e*Pg | **Pb** | **11 15 50.6** | **-0.3** |
| **SARI** | **SarD1z-Kayseri** | **0.90** | **254** | *e*PG | **Pb** | **11 15 52.3** | **-0.6** |
| SARI | | | | *e*SG | **Sn** | **11 16 06.0** | **-1.4** |
| **ILIC** | **ilic-Erzincan** | **1.14** | **45** | *e*PN | **Pn** | **11 15 56.9** | **-0.4** |
| **ILIC** | **ilic-Erzincan** | **1.14** | **45** | *e*Pn | **Pn** | **11 15 56.9** | **-0.4** |
| **KMRS** | **Kahramanmaras** | **1.25** | **203** | *e*PN | **Pg** | **11 15 58.8** | **-0.1** |
| **KMRS** | **Kahramanmaras** | **1.25** | **203** | *e*Pn | **Pg** | **11 15 58.8** | **-0.1** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.25** | **308** | P | **Pg** | **11 15 58.1** | **-0.8** |
| CUSAR | | | | S | **Sn** | **11 16 17.6** | **+1.5** |
| **SVSK** | **Karacayir** | **1.32** | **342** | *e*PN | **Pg** | **11 16 00.6** | **+0.3** |
| **SVSK** | **Karacayir** | **1.32** | **342** | *e*Pn | **Pg** | **11 16 00.6** | **+0.3** |
| **BNN** | **Bunyan** | **1.32** | **279** | *e*PN | **Pg** | **11 16 00.3** | **0.0** |
| **BNN** | **Bunyan** | **1.32** | **279** | *e*Pn | **Pg** | **11 16 00.3** | **0.0** |
| **AYKD** | **Aykdinkavak** | **1.36** | **205** | P | **Pg** | **11 16 01.2** | **+0.2** |
| AYKD | | | | S | **Sg** | **11 16 21.2** | **+2.6** |
| **PTK** | **Pertek** | **1.48** | **80** | *e*PN | **Pb** | **11 16 02.5** | **-0.3** |
| **PTK** | **Pertek** | **1.48** | **80** | *e*Pn | **Pb** | **11 16 02.5** | **-0.3** |

*GCMT **16** 11:31:44.0±0.4,60.78Sº×153.47E,h24km±2km, MW4.9/64, Moment Tensor Solution. s18,c20; s64,c86; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr=0.52±.23; Mθθ=2.42±.16; Mφφ=-1.90±.15; Mrθ=-0.27±.22; Mrφ=-2.00±.13; Mθφ=0.38±.25; Best double couple: Mw=2.97900×10^16 NP1:φs=156.00000º, δ89.00000º, λ=-9.00000º. NP2: φs=246.00000º, δ81.00000º, λ=-179.00000º. Principal axes: T 3.2430, Plg6.0000º, Azm202.0000º; N -0.5310, Plg81.0000º, Azm332.0000º; P -2.7140, Plg7.0000º, Azm111.0000º; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
**IDC 16 11:31:51.2±4.8,61.14S×152.96E,h0km,mb4.0/2,**
**mb1 4.2/3,mb1mx3.7/24,mbtmp3.9/3,ML3.8/1,MS3.9/9,**
**Ms1 3.9/9,ms1mx3.7/20 Error ellipse: s-maj=354.4km**
**s-min=37.5km az=75.0,Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNDA** | **Vanda** | **16.72** | **173** | Pn | Pn | 11 35 46.4 | 0.0 |
| | 0.3nm,0.3s,baz=342,slow=11,SNR=17 | | | | | | |
| VNDA | | | | LR | LR | 11 41 30.9 | |
| | comp=Z,613nm,19.9s,baz=354,slow=35 | | | | | | |
| **RPZ** | **Rata Peaks** | **20.51** | **40** | LR | LR | 11 42 25.5 | |
| | comp=Z,485nm,20.9s,baz=195,slow=31 | | | | | | |
| **URZ** | **Urewera** | **27.41** | **44** | LR | LR | 11 46 29.0 | |
| | comp=Z,163nm,20.7s,baz=214,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **28.96** | **180** | LR | LR | 11 48 57.8 | |
| | comp=Z,328nm,20.3s,baz=16,slow=36 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **36.03** | **299** | T | T | 12 17 26.6 | |
| | baz=147,slow=75,SNR=73 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **36.03** | **299** | T | T | 12 17 26.9 | |
| | baz=147,slow=75,SNR=84 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **36.04** | **299** | T | T | 12 17 27.8 | |
| | baz=147,slow=75,SNR=72 | | | | | | |
| **MAW** | **Mawson** | **36.16** | **220** | LR | LR | 11 53 58.3 | |
| | comp=Z,214nm,19.4s,baz=70,slow=37 | | | | | | |
| **ASAR** | **Alice Springs** | **39.69** | **332** | P | P | 11 39 25.3 | +0.4 |
| | 1.9nm,1.0s,baz=163,slow=8.6,SNR=9.1 | | | | | | |
| **DZM** | **Mont Dzumac** | **40.15** | **20** | *e*LR | LR | 11 50 27.3 | |
| | 464nm,26.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.19** | **334** | P | P | 11 39 53.0 | -0.6 |
| | 2.8nm,0.9s,baz=166,slow=7.3,SNR=10 | | | | | | |
| **TBI** | **Tubuai** | **54.29** | **73** | *e*LR | LR | 11 56 31.6 | |
| | 140nm,27.8s | | | | | | |
| **TBI** | **Tubuai** | **54.29** | **73** | *e*T | T | 12 38 58.8 | |
| | 15nm,0.3s | | | | | | |
| **PAE** | **Paea** | **59.17** | **69** | *e*T | T | 12 45 04.4 | |
| | 2.1nm,0.3s | | | | | | |
| **TVO** | **Taravao** | **59.21** | **70** | *e*T | T | 12 45 07.8 | |
| | 1.1nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **59.23** | **69** | *e*LR | LR | 11 59 00.8 | |
| | 109nm,23.2s | | | | | | |
| **PPT2** | **Papeete2** | **59.23** | **69** | *e*T | T | 12 45 09.7 | |
| | 3.2nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **59.25** | **69** | LR | LR | 12 03 11.3 | |
| | comp=Z,74nm,18.1s,baz=159,slow=32 | | | | | | |
| **KAPI** | **Kappang** | **61.29** | **322** | LR | LR | 12 06 28.3 | |
| | comp=Z,50nm,18.9s,baz=119,slow=34 | | | | | | |
| **RKT** | **Rikitea** | **61.38** | **86** | *e*T | T | 12 47 50.5 | |
| | 5.9nm,0.2s | | | | | | |
| **VAH** | **Vaihoa** | **62.18** | **70** | *e*T | T | 12 48 49.8 | |
| | 7.3nm,0.2s | | | | | | |
| **H08S2** | **Diego Garcia H** | **78.74** | **275** | T | T | 13 11 17.0 | |
| | baz=148 | | | | | | |
| **H08S1** | **Diego Garcia H** | **78.75** | **275** | T | T | 13 11 17.8 | |
| | baz=148 | | | | | | |
| **H08S3** | **Diego Garcia H** | **78.76** | **275** | T | T | 13 11 18.7 | |
| | baz=148 | | | | | | |
| **BOSA** | **Boshof** | **81.05** | **225** | LR | LR | 12 18 16.8 | |
| | comp=Z,51nm,18.1s,baz=153,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **90.26** | **310** | LR | LR | 12 22 41.2 | |
| | comp=Z,34nm,20.9s,baz=168,slow=34 | | | | | | |

*ISCJB **16** 11:53:48.5±0.5,39.99Nº±0.03×27.36E±0.04,h2km±6km, Error ellipse: s-maj=4.9km s-min=4.4km az=32.9*
*DDA **16** 11:53:48.4,39.96ºN×27.37E,h2km,Md2.7*
*CSEM **16** 11:53:48.7±0.1,39.98ºN×27.36E,h10km, MD2.6, Error ellipse: s-maj=3.1km s-min=2.7km az=31.0*
*ISK **16** 11:53:48.1,39.96ºN×27.34E,h10km, MD2.6*
**ISC 16 11:53:48.6±1.1,39.96N±0.02×27.34E±0.02,h12km±9km,**
**n39,σ0º56/50,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GONE** | **Gonen-Balikesi** | **0.28** | **71** | *e*PG | **Pg** | **11 53 54.4** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **0.28** | **71** | *e*Pg | **Pg** | **11 53 54.4** | **0.0** |
| **BALY** | **Balya** | **0.31** | **135** | *i* P | **Pg** | **11 53 54.4** | **-0.5** |
| **BALY** | **Balya** | **0.31** | **135** | P | **Pg** | **11 53 54.4** | **-0.5** |
| **KRBG** | **Karabiga-Canak** | **0.44** | **356** | *e*PG | **Pg** | **11 53 57.2** | **-0.1** |
| KRBG | | | | *e*SG | **Sb** | **11 54 03.9** | **-0.8** |
| **KRBG** | **Karabiga-Canak** | **0.44** | **356** | *e*Pg | **Pg** | **11 53 57.2** | **-0.1** |
| KRBG | | | | *e*Sg | **Sb** | **11 54 03.9** | **-0.8** |
| **BALB** | **Balikesir** | **0.52** | **127** | *e*PG | **Pg** | **11 53 58.6** | **-0.3** |
| BALB | | | | *e*SG | **Sb** | **11 54 06.5** | **-0.6** |
| **BALB** | **Balikesir** | **0.52** | **127** | *e*Pg | **Pg** | **11 53 58.6** | **-0.3** |
| BALB | | | | *e*Sg | **Sb** | **11 54 06.6** | **-0.6** |
| **EDC** | **Edincik** | **0.56** | **46** | *e*PG | **Pg** | **11 53 59.3** | **-0.3** |
| **EDC** | **Edincik** | **0.56** | **46** | *e*Pg | **Pg** | **11 53 59.3** | **-0.3** |
| **LPK** | **Lapseki** | **0.61** | **313** | *e*PG | **Pg** | **11 53 59.7** | **-0.8** |
| **LPK** | **Lapseki** | **0.61** | **313** | *e*Pg | **Pg** | **11 53 59.7** | **-0.8** |
| **MRMT** | **Marmara Adasi** | **0.67** | **17** | *e*PG | **Pg** | **11 54 01.9** | **+0.1** |
| **MRMT** | **Marmara Adasi** | **0.67** | **17** | *e*Pg | **Pg** | **11 54 01.9** | **+0.1** |
| **RKY** | **Sarkoy-Tekirda** | **0.74** | **350** | *e*PG | **Pg** | **11 54 02.7** | **-0.3** |
| **RKY** | **Sarkoy-Tekirda** | **0.74** | **350** | *e*Pg | **Pg** | **11 54 02.7** | **-0.3** |
| **SART** | **Tekirdag** | **0.74** | **351** | *i* P | **Pg** | **11 54 03.1** | **+0.1** |
| SART | | | | *i* S | **Sn** | **11 54 17.0** | **+0.8** |
| **SART** | **Tekirdag** | **0.74** | **351** | P | **Pg** | **11 54 03.1** | **+0.1** |
| SART | | | | S | **Sn** | **11 54 16.9** | **+0.8** |
| **EZN** | **Ezine** | **0.79** | **261** | *e*PG | **Pb** | **11 54 04.3** | **+0.1** |
| **EZN** | **Ezine** | **0.79** | **261** | *e*Pg | **Pb** | **11 54 04.3** | **+0.1** |
| **GELI** | **Tayfur-Gelibol** | **0.80** | **304** | *e*PG | **Pg** | **11 54 03.9** | **-0.1** |
| **GELI** | **Tayfur-Gelibol** | **0.80** | **304** | *e*Pg | **Pg** | **11 54 03.9** | **-0.1** |
| **AYVA** | **Ayvalik** | **0.82** | **218** | *i* P | Pn | 11 54 05.6 | -0.3 |
| AYVA | | | | *i* S | **Sn** | **11 54 17.6** | **-0.4** |
| **AYVA** | **Ayvalik** | **0.82** | **218** | P | **Pn** | **11 54 05.6** | **-0.3** |
| AYVA | | | | S | **Sn** | **11 54 17.6** | **-0.4** |
| **KCTX** | **Karacabey (Bur** | **0.84** | **68** | *e*PG | **Pg** | **11 54 03.9** | **-1.0** |
| **KCTX** | **Karacabey (Bur** | **0.84** | **68** | *e*Pg | **Pg** | **11 54 03.9** | **-1.0** |
| **ERIK** | **Erikli-Kesan** | **0.95** | **319** | *e*PG | **Pg** | **11 54 06.5** | **-0.5** |
| **ERIK** | **Erikli-Kesan** | **0.95** | **319** | *e*Pg | **Pg** | **11 54 06.5** | **-0.5** |
| **BOZC** | **Bozcaada** | **1.00** | **264** | P | **Pg** | **11 54 07.8** | **0.0** |
| BOZC | | | | S | **Sn** | **11 54 23.7** | **+1.3** |
| **GADA** | **Gvkgeada** | **1.13** | **282** | *e*PN | **Pn** | **11 54 10.2** | **0.0** |
| **GADA** | **Gvkgeada** | **1.13** | **282** | *e*Pn | **Pn** | **11 54 10.2** | **0.0** |
| **MDNY** | **Mudanya-Bursa** | **1.25** | **70** | *e*PN | **Pb** | **11 54 12.1** | **0.0** |
| **MDNY** | **Mudanya-Bursa** | **1.25** | **70** | *e*Pn | **Pb** | **11 54 12.1** | **0.0** |
| **ARMT** | **Armutlu** | **1.31** | **62** | *e*PN | **Pn** | **11 54 12.1** | **-0.7** |
| **ARMT** | **Armutlu** | **1.31** | **62** | *e*Pn | **Pn** | **11 54 12.1** | **-0.7** |
| **IZI** | **Iznik** | **1.68** | **76** | *e*PN | **Pn** | **11 54 18.4** | **+0.6** |
| **IZI** | **Iznik** | **1.68** | **76** | *e*Pn | **Pn** | **11 54 18.4** | **+0.6** |
| **MANT** | **Manisa** | **1.74** | **147** | *i* P | Pn | 11 54 19.7 | +0.8 |
| MANT | | | | *i* S | **Sg** | **11 54 45.5** | **+0.8** |
| **MANT** | **Manisa** | **1.74** | **147** | P | **Pn** | **11 54 19.6** | **+0.8** |
| MANT | | | | S | **Sg** | **11 54 45.5** | **+0.8** |

*IDC **16** 12:01:17.0±2.0,0.44Sº×124.89E,h0km, mb3.2/3, mb1 3.4/3, mb1mx3.3/28, mbtmp3.3/3, Error ellipse: s-maj=198.8km s-min=29.0km az=63.0*
*ISCJB **16** 12:01:23.0±0.7,0.3Sº±0.1×125.33E±0.06,h57km, mb3.1/3, Error ellipse: s-maj=16.4km s-min=6.4km az=23.7*
*DJA **16** 12:01:23.9±4.1,0.1ºS±8.2×12.5E±.4,h33km±51km, M3.6/6, MLv3.6/6*
**ISC 16 12:01:24.0±1.1,0.3S±0.1×125.36E±0.06,h57km,n8,**
**σ0º90/10,mb3.1/3,Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **1.60** | **301** | P | **Pn** | **12 01 50.6** | **+0.5** |
| KMSI | | | | S | **Sn** | **12 02 08.8** | **-0.9** |
| **SANI** | **Sanana** | **1.89** | **160** | P | **Pn** | **12 01 54.0** | **0.0** |
| **LBMI** | **Labuha** | **2.18** | **100** | P | **Pn** | **12 01 57.4** | **-0.5** |
| LBMI | | | | S | **Sn** | **12 02 25.2** | **+1.4** |
| **MRSI** | **Marisa** | **3.49** | **282** | P | **Pn** | **12 02 16.3** | **+0.4** |
| **APSI** | **Ampana** | **3.76** | **260** | P | **Pn** | **12 02 20.0** | **+0.4** |
| **WRA** | **Warramunga Arr** | **21.45** | **156** | P | **P** | **12 06 06.5** | **-1.2** |
| | 0.8nm,1.0s,baz=334,slow=11,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **24.71** | **161** | P | **P** | **12 06 40.6** | **+0.6** |
| | 0.1nm,0.3s,baz=328,slow=9.9,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.09** | **327** | P | **P** | **12 11 25.3** | **-0.1** |
| | 0.2nm,0.3s,baz=131,slow=7.9,SNR=3.6 | | | | | | |

*ISCJB **16** 12:03:05.2±0.8,35.21Sº±0.03×72.36Wº±0.05,h28km±6km, mb4.6/46, MS3.8/5, Error ellipse: s-maj=6.8km s-min=4.4km az=13.1*
*GUC **16** 12:03:05.8±0.6,35.14S×72.25W,h28km±2km, ML5.1*
*IDC **16** 12:03:06.7±0.7,35.21S×72.18W,h29km±4km, mb4.1/12, mb1 4.2/17,mb1mx4.1/31,mbtmp4.2/17, ML4.2/5, MS3.6/8, Ms1 3.6/8,ms1mx3.4/17, Error ellipse: s-maj=22.2km s-min=12.5km az=94.0*
*BJI **16** 12:03:06.4,35.20S×72.04W,h33km,mB5.0/4, Ms5.3/4, Ms7 4.9/4*
*NEIC **16** 12:03:07.1±0.2,35.12S×72.20W, mb4.8/34, ML5.1(GUC), Error ellipse: s-maj=7.9km s-min=5.8km az=74.0*
*NEIC Felt [IV] at Constitucion and Curico; [III] at Cauquenes, Licanten, Linares, Paredones, Santa Cruz, Talca and Vichuquen; [II] at Molina, Navidad, Pichilemu, Rancagua, Romeral and San Fernando. Also felt at Santiago and Vina del Mar.*
**ISC 16 12:03:06.7±0.5,35.16S±0.03×72.24W±0.06,h29km±3km,**
**h28km:pP-P,n248,σ1º09/265,mb4.7/47,MS3.8/5,3C-1D,**
**Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TALC** | **Talca** | **0.55** | **116** | ⇑*i*P | **Pb** | **12 03 17.5** | **-0.3** |
| TALC | | | | *i* S | **Sn** | **12 03 26.2** | **-0.6** |
| **CHPI** | **Pichilemu** | **0.79** | **14** | *e*P | **Pn** | **12 03 20.9** | **-1.0** |
| CHPI | | | | *e*S | **Sb** | **12 03 32.0** | **-0.3** |
| **NICH** | **Los Niches** | **0.84** | **80** | ⇑*i*P | **Pn** | **12 03 22.4** | **-0.2** |
| NICH | | | | *e*S | **Sn** | **12 03 34.4** | **+0.4** |
| **LNCH** | **Linares** | **0.86** | **143** | ⇑*e*P | **Pn** | **12 03 22.1** | **-0.8** |
| LNCH | | | | *e*S | **Sn** | **12 03 34.5** | **0.0** |
| **CCHI** | **Chillan** | **1.45** | **175** | *e*P | **Pb** | **12 03 32.0** | **-1.0** |
| CCHI | | | | *i* S | **Sb** | **12 03 51.6** | **+0.6** |
| **RCDM** | **Rinconada Maip** | **2.04** | **36** | *e*P | **Pn** | **12 03 40.6** | **+1.3** |
| RCDM | | | | *e*S | **Sb** | **12 04 07.2** | **-0.9** |
| **ANTU** | **Antumapu** | **2.07** | **40** | *e*P | **Pb** | **12 03 41.6** | **-2.0** |
| ANTU | | | | *e*S | **Sb** | **12 04 08.3** | **-0.6** |
| ANTU | | | | AML | AML | 12 04 15.1 | |
| | comp=N,15µm,0.5s | | | | | | |
| **SAN** | **Santiago** | **2.14** | **38** | *i* P | **Pb** | **12 03 43.2** | **-1.7** |
| SAN | | | | *e*S | **Sb** | **12 04 10.1** | **-1.0** |
| **CLCH** | **Cerro Calan** | **2.25** | **39** | *e*P | **Pn** | **12 03 43.9** | **+1.8** |
| CLCH | | | | *i* P | **Pb** | **12 03 45.1** | **-1.6** |
| CLCH | | | | *e*S | **Sb** | **12 04 12.6** | **-1.7** |
| CLCH | | | | *i* S | **Sn** | **12 04 14.6** | **+5.6** |
| CLCH | | | | AML | AML | 12 04 17.5 | |
| | comp=E,17µm,0.4s | | | | | | |
| **YECH** | **El Yeso** | **2.32** | **51** | *e*P | **Pn** | **12 03 45.5** | **+2.2** |
| YECH | | | | AML | AML | 12 04 24.5 | |
| | comp=N,8µm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **2.39** | **33** | *e*P | **Pn** | **12 03 44.9** | **+0.9** |
| PEL | | | | AML | AML | 12 04 23.0 | |
| | comp=N,15µm,0.9s | | | | | | |
| **ROC1** | **El Roble** | **2.40

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=68 | | | | | | |
| 832A | **Faith Ranch, C** | 68.32 | 334 | P | | P | 12 14 05.7 +0.5 |
| | baz=69 | | | | | | |
| 635A | **Leesville** | 68.57 | 336 | P | | P | 12 14 07.6 +0.9 |
| | baz=69 | | | | | | |
| 732A | **Laxson Ranch,** | 68.73 | 334 | P | | P | 12 14 08.2 +0.5 |
| | baz=69,SNR=7.2 | | | | | | |
| 632A | **Uvalde** | 69.37 | 334 | P | | P | 12 14 12.0 +0.3 |
| | baz=70 | | | | | | |
| PPT2 | **Papeete2** | 69.91 | 262 | *e*LR | | LR | 12 35 30.0 |
| | comp=Z,132nm,24.2s | | | | | | |
| PPT | **Papeete** | 69.92 | 262 | LR | | LR | 12 38 47.7 |
| | comp=Z,36nm,18.8s,baz=135,slow=31 | | | | | | |
| 532A | **Rocksprings** | 69.98 | 335 | P | | P | 12 14 15.8 +0.3 |
| | baz=70,SNR=9.6 | | | | | | |
| 434A | **Burnet** | 70.05 | 336 | P | | P | 12 14 16.0 +0.1 |
| | baz=70 | | | | | | |
| 335A | **Moody** | 70.21 | 337 | P | | P | 12 14 17.8 +1.0 |
| | baz=70 | | | | | | |
| 531A | **Rocksprings** | 70.24 | 334 | P | | P | 12 14 17.6 +0.5 |
| | baz=70 | | | | | | |
| JCT | **Junction City** | 70.26 | 335 | P | | P | 12 14 17.3 +0.1 |
| | baz=71 | | | | | | |
| JCT | **Junction City** | 70.26 | 335 | *e*P | | P | 12 14 17.0 -0.2 |
| | comp=Z,9.1nm,1.0s | | | | | | |
| 433A | **Art** | 70.27 | 336 | P | | P | 12 14 17.3 +0.1 |
| | baz=71,SNR=6.3 | | | | | | |
| 530A | **J-C Ranch, Com** | 70.51 | 333 | P | | P | 12 14 19.4 +0.7 |
| | baz=71,SNR=6.6 | | | | | | |
| 334A | **Lometa** | 70.52 | 337 | P | | P | 12 14 18.9 +0.2 |
| | baz=71 | | | | | | |
| 432A | **Menard** | 70.62 | 335 | P | | P | 12 14 19.7 +0.3 |
| | baz=71 | | | | | | |
| TX31 | **Lajitas Ar. Si** | 70.67 | 331 | *e*P | | P | 12 14 19.6 -0.2 |
| TXAR | **Lajitas Array** | 70.67 | 331 | P | | P | 12 14 19.8 0.0 |
| | comp=Z,1.1nm,0.4s,baz=155,slow=8.6,SNR=36 | | | | | | |
| 431A | **Sonora** | 70.73 | 334 | P | | P | 12 14 20.5 +0.4 |
| | baz=71 | | | | | | |
| 333A | **Richland Sprin** | 70.76 | 336 | P | | P | 12 14 20.2 0.0 |
| | baz=71 | | | | | | |
| 529A | **Stev Forest Ra** | 70.81 | 333 | P | | P | 12 14 20.9 +0.3 |
| | baz=71,SNR=6.9 | | | | | | |
| 430A | **Baggett Ranch,** | 71.05 | 334 | P | | P | 12 14 22.6 +0.6 |
| | baz=71,SNR=6.3 | | | | | | |
| 332A | **Millersview** | 71.07 | 335 | P | | P | 12 14 22.8 +0.7 |
| | baz=71 | | | | | | |
| 429A | **Davenport Ranc** | 71.14 | 333 | P | | P | 12 14 22.9 +0.3 |
| | baz=71,SNR=5.2 | | | | | | |
| SWET | **Sewanee** | 71.17 | 348 | *e*P | | P | 12 14 22.3 -0.4 |
| | comp=Z,17nm,0.9s | | | | | | |
| SWET | | | | *e*pP | | pP | 12 14 31.6 -0.1 |
| 331A | **San Angelo** | 71.23 | 335 | P | | P | 12 14 23.2 0.0 |
| | baz=72,SNR=5.2 | | | | | | |
| 232A | **Coleman** | 71.50 | 336 | P | | P | 12 14 24.6 -0.1 |
| | baz=72 | | | | | | |
| 330A | **Mertzon** | 71.59 | 334 | P | | P | 12 14 25.4 +0.1 |
| | baz=72 | | | | | | |
| 231A | **Bronte** | 71.77 | 335 | P | | P | 12 14 26.3 0.0 |
| | baz=72 | | | | | | |
| 133A | **Hamilton Ranch** | 71.91 | 337 | P | | P | 12 14 27.2 +0.1 |
| | baz=72 | | | | | | |
| 329A | **Wagon Wheel Ra** | 71.95 | 334 | P | | P | 12 14 27.5 0.0 |
| | baz=72 | | | | | | |
| MAW | **Mawson** | 72.12 | 163 | P | | P | 12 14 27.2 -0.8 |
| | comp=Z,1.6nm,0.8s,baz=240,slow=7.5,SNR=5.7 | | | | | | |
| MAW | | | | pP | | pP | 12 14 36.3 -0.7 |
| | comp=Z,3.5nm,0.8s,baz=215,slow=8.3,SNR=8.1 | | | | | | |
| ABTX | **Abilene, Hawle** | 72.17 | 336 | P | | P | 12 14 28.8 +0.1 |
| | baz=72 | | | | | | |
| WVT | **Waverly** | 72.40 | 347 | *e*P | | P | 12 14 28.5 -1.4 |
| | comp=Z,16nm,0.9s | | | | | | |
| WVT | | | | *e*pP | | pP | 12 14 40.0 +1.1 |
| BLA | **Blacksburg** | 72.41 | 353 | *e*P | | P | 12 14 28.5 -1.5 |
| 131A | **Roby** | 72.47 | 335 | P | | P | 12 14 30.6 +0.1 |
| | baz=73 | | | | | | |
| Z33A | **Whitaker Ranch** | 72.49 | 337 | P | | P | 12 14 30.8 +0.2 |
| | baz=73 | | | | | | |
| Y35A | **Marietta** | 72.53 | 339 | P | | P | 12 14 32.1 +1.4 |
| | baz=73 | | | | | | |
| 130A | **Snyder** | 72.59 | 335 | P | | P | 12 14 32.3 +1.0 |
| | baz=73 | | | | | | |
| Z32A | **Haskell** | 72.74 | 336 | P | | P | 12 14 32.1 +0.1 |
| | baz=73 | | | | | | |
| 228A | **UT Block 9, Go** | 72.74 | 333 | P | | P | 12 14 32.0 -0.2 |
| | baz=73 | | | | | | |
| Y34A | **Reagan Ranch,** | 72.79 | 338 | P | | P | 12 14 32.3 0.0 |
| | baz=73 | | | | | | |
| 129A | **Stewart Farms,** | 72.94 | 334 | P | | P | 12 14 34.4 +1.1 |
| | baz=73 | | | | | | |
| X35A | **Drake** | 72.97 | 339 | P | | P | 12 14 33.9 +0.5 |
| | baz=73 | | | | | | |
| Z31A | **Sharp Cattle R** | 72.97 | 336 | P | | P | 12 14 34.1 +0.6 |
| | baz=73 | | | | | | |
| Y33A | **Hilltop Ranch,** | 73.11 | 337 | P | | P | 12 14 34.7 +0.5 |
| | baz=73 | | | | | | |
| 128A | **Castleberry Fa** | 73.16 | 334 | P | | P | 12 14 35.1 +0.5 |
| | baz=74 | | | | | | |
| Z30A | **Sanderson Ranc** | 73.28 | 335 | P | | P | 12 14 35.3 0.0 |
| | baz=74 | | | | | | |
| Y32A | **R-V Farms, Ver** | 73.37 | 337 | P | | P | 12 14 35.8 +0.1 |
| | baz=74 | | | | | | |
| X34A | **Smith Ranch, M** | 73.41 | 338 | P | | P | 12 14 36.3 +0.3 |
| | baz=74 | | | | | | |
| MNTX | **Cornudas Mount** | 73.44 | 331 | P | | P | 12 14 35.8 -0.4 |
| | baz=74,SNR=6.7 | | | | | | |
| MNTX | **Cornudas Mount** | 73.44 | 331 | *e*P | | P | 12 14 35.2 -1.0 |
| | comp=Z,4.1nm,0.9s | | | | | | |
| Z29A | **Hungry Hill Ra** | 73.45 | 335 | P | | P | 12 14 36.1 -0.3 |
| | baz=74 | | | | | | |
| PBMO | **Poplar Bluff** | 73.55 | 345 | *e*P | | P | 12 14 35.9 -0.8 |
| | comp=Z,9.3nm,1.1s | | | | | | |
| Y31A | **Rekieta Farm,** | 73.60 | 336 | P | | P | 12 14 37.2 0.0 |
| | baz=74 | | | | | | |
| X32A | **Elmer** | 73.70 | 337 | P | | P | 12 14 37.9 +0.2 |
| | baz=74 | | | | | | |
| Y29A | **Porterfield Fa** | 73.99 | 335 | P | | P | 12 14 39.6 +0.1 |
| | baz=74 | | | | | | |
| W33A | **Caddo, Fort Co** | 74.12 | 338 | P | | P | 12 14 40.5 +0.4 |
| | baz=74 | | | | | | |
| X31A | **McDonald Ranch** | 74.12 | 336 | P | | P | 12 14 40.3 +0.1 |
| | baz=74 | | | | | | |
| Y28A | **McKinney Farm,** | 74.23 | 334 | P | | P | 12 14 40.9 0.0 |
| | baz=74 | | | | | | |
| W32A | **Sentinel** | 74.33 | 337 | P | | P | 12 14 41.3 -0.1 |
| | baz=75 | | | | | | |
| V33A | **Lossen Ranch,** | 74.68 | 338 | P | | P | 12 14 43.6 +0.2 |
| | baz=75 | | | | | | |
| U35A | **Pawnee** | 74.73 | 340 | P | | P | 12 14 43.8 +0.1 |
| | baz=75 | | | | | | |
| V32A | **Arapaho** | 74.82 | 338 | P | | P | 12 14 44.6 +0.3 |
| | baz=75 | | | | | | |
| AMTX | **Amarillo** | 74.92 | 335 | P | | P | 12 14 45.3 +0.4 |
| | baz=75 | | | | | | |
| CCM | **Cathedral Cave** | 74.95 | 345 | *e*P | | P | 12 14 43.7 -1.1 |
| | comp=Z,11nm,0.9s | | | | | | |
| W29A | **Amraillo** | 75.12 | 335 | P | | P | 12 14 46.4 +0.3 |
| | baz=75 | | | | | | |
| 121A | **Cookes Peak, D** | 75.15 | 329 | P | | P | 12 14 47.4 +1.1 |
| | baz=75,SNR=7.9 | | | | | | |
| T34A | **McClaskey Farm** | 75.47 | 340 | P | | P | 12 14 48.1 +0.2 |
| | baz=76 | | | | | | |
| TIC | **Toumodi** | 75.56 | 71 | *e*P | | P | 12 14 49.4 +0.4 |
| KIC | **Kosan Boka** | 75.60 | 71 | *e*P | | P | 12 14 48.9 -0.3 |
| | comp=Z,120nm,1.9s | | | | | | |
| DBIC | **Dimbokro** | 75.71 | 71 | P | | P | 12 14 48.7 -1.2 |
| | comp=Z,5.7nm,0.8s,baz=174,slow=2.4,SNR=5.0 | | | | | | |
| DBIC | | | | pP | | pP | 12 14 58.6 -0.3 |
| | comp=Z,6.2nm,0.9s,baz=183,slow=6.9,SNR=3.8 | | | | | | |
| TUC | **Tucson** | 76.25 | 327 | *e*P | | P | 12 14 53.3 +0.7 |
| | comp=Z,45nm,2.8s | | | | | | |
| LAZ | **Ladron** | 76.51 | 331 | *e*P | | P | 12 14 52.9 -1.2 |
| | comp=Z,1.0nm,0.8s | | | | | | |
| ANMO | **Albuquerque** | 76.72 | 332 | *e*P | | P | 12 14 55.9 +0.5 |
| | comp=Z,3.6nm,1.0s | | | | | | |
| 214A | **Organ Pipe Nat** | 76.88 | 325 | P | | P | 12 14 57.7 +1.6 |
| | baz=77 | | | | | | |
| T28A | **Walsh** | 77.09 | 336 | P | | P | 12 14 57.4 +0.2 |
| | baz=77 | | | | | | |
| S29A | **Ulysses** | 77.22 | 337 | P | | P | 12 14 58.3 +0.4 |
| | baz=78 | | | | | | |
| T27A | **Campo** | 77.24 | 335 | P | | P | 12 14 58.7 +0.6 |
| | baz=78 | | | | | | |
| R31A | **Burdett** | 77.33 | 338 | P | | P | 12 14 59.7 +1.2 |
| | baz=78 | | | | | | |
| S28A | **Manter** | 77.44 | 336 | P | | P | 12 15 00.1 +0.9 |
| | baz=78 | | | | | | |
| T26A | **Comanche Natio** | 77.65 | 335 | P | | P | 12 15 01.0 +0.5 |
| | baz=78 | | | | | | |
| Q32A | **Meitler Ranch,** | 77.70 | 339 | P | | P | 12 15 01.3 +0.8 |
| | baz=78 | | | | | | |
| P33A | **Williams Farm,** | 77.86 | 340 | P | | P | 12 15 02.7 +1.3 |
| | baz=78 | | | | | | |
| CBKS | **Cedar Bluff** | 77.88 | 338 | P | | P | 12 15 02.5 +1.0 |
| | baz=78 | | | | | | |
| T25A | **Trinidad** | 77.90 | 334 | P | | P | 12 15 02.4 +0.4 |
| | baz=78 | | | | | | |
| T25A | **Trinidad** | 77.90 | 334 | *e*P | | P | 12 15 02.3 +0.4 |
| | comp=Z,12nm,1.0s | | | | | | |
| Q31A | **Ellis** | 77.95 | 339 | P | | P | 12 15 02.5 +0.6 |
| | baz=78 | | | | | | |
| R29A | **Marienthal** | 77.96 | 337 | P | | P | 12 15 02.8 +0.8 |
| | baz=78 | | | | | | |
| S26A | **Kim** | 78.00 | 335 | P | | P | 12 15 03.0 +0.6 |
| | baz=78 | | | | | | |
| R28A | **Tribune** | 78.10 | 337 | P | | P | 12 15 03.4 +0.5 |
| | baz=78 | | | | | | |
| Q30A | **Quinter** | 78.18 | 338 | P | | P | 12 15 03.7 +0.5 |
| | baz=78 | | | | | | |
| W18A | **Petrified Fore** | 78.19 | 329 | P | | P | 12 15 04.2 +0.7 |
| | baz=78 | | | | | | |
| P32A | **Huiting Farm,** | 78.29 | 339 | P | | P | 12 15 04.6 +0.8 |
| | baz=79 | | | | | | |
| Q29A | **Oakley** | 78.33 | 337 | P | | P | 12 15 04.3 +0.3 |
| | baz=79 | | | | | | |
| P31A | **Stockton** | 78.43 | 339 | P | | P | 12 15 05.0 +0.5 |
| | baz=79 | | | | | | |
| R26A | **Arlington** | 78.61 | 335 | P | | P | 12 15 07.1 +1.4 |
| | baz=79 | | | | | | |
| Q28A | **Sharon Springs** | 78.76 | 337 | P | | P | 12 15 07.1 +0.6 |
| | baz=79 | | | | | | |
| SDCO | **Great Sand Dun** | 78.83 | 334 | P | | P | 12 15 07.4 +0.3 |
| | baz=79 | | | | | | |
| P29A | **Atwood** | 78.97 | 338 | P | | P | 12 15 08.1 +0.5 |
| | baz=79 | | | | | | |
| KSCO | **Kaye Shedlock'** | 78.97 | 336 | P | | P | 12 15 08.4 +0.7 |
| | baz=79 | | | | | | |
| O31A | **Woolen Ranch,** | 78.99 | 339 | P | | P | 12 15 08.7 +1.1 |
| | baz=79 | | | | | | |
| Q26A | **Hugo** | 79.19 | 336 | P | | P | 12 15 10.4 +1.4 |
| | baz=80 | | | | | | |
| P28A | **Saint Francis** | 79.20 | 337 | P | | P | 12 15 09.9 +1.1 |
| | baz=80 | | | | | | |
| WUAZ | **Wupatki** | 79.23 | 328 | P | | P | 12 15 10.7 +1.5 |
| | baz=80 | | | | | | |
| WUAZ | **Wupatki** | 79.23 | 328 | *e*P | | P | 12 15 09.6 +0.4 |
| | comp=Z,5.0nm,1.0s | | | | | | |
| S22A | **4UR Ranch, Cre** | 79.33 | 333 | P | | P | 12 15 10.5 +0.7 |
| | baz=80 | | | | | | |
| P27A | **Ficken Ranch,** | 79.45 | 337 | P | | P | 12 15 11.2 +0.9 |
| | baz=80 | | | | | | |
| MVCO | **Mesa Verde** | 79.50 | 331 | P | | P | 12 15 11.7 +0.9 |
| | baz=80 | | | | | | |
| MVCO | **Mesa Verde** | 79.50 | 331 | *e*P | | P | 12 15 10.8 0.0 |
| | comp=Z,21nm,1.8s | | | | | | |
| BC3 | **Big Chuckawall** | 79.52 | 324 | P | | P | 12 15 12.6 +1.8 |
| | baz=80 | | | | | | |
| BOSA | **Boshof** | 79.68 | 118 | P | | P | 12 15 11.8 -0.3 |
| | comp=Z,3.5nm,0.5s,baz=248,slow=4.5,SNR=16 | | | | | | |
| BOSA | | | | pP | | pP | 12 15 21.4 +0.3 |
| | comp=Z,9.0nm,0.7s,baz=233,slow=4.6,SNR=9.4 | | | | | | |
| BOSA | | | | LR | | LR | 12 44 33.6 |
| | comp=Z,28nm,19.6s,baz=205,slow=31 | | | | | | |
| PFO | **Pinyon Flat Ob** | 79.97 | 324 | *e*P | | P | 12 15 13.8 +0.5 |
| | comp=Z,6.0nm,1.0s | | | | | | |
| N29A | **Votaw Ranch, W** | 79.99 | 339 | P | | P | 12 15 14.7 +1.6 |
| | baz=80 | | | | | | |
| SMCO | **Snowmass** | 80.64 | 333 | *e*P | | P | 12 15 17.1 0.0 |
| | comp=Z,3.3nm,0.8s | | | | | | |
| ISCO | **Idaho Springs** | 80.70 | 335 | P | | P | 12 15 18.2 +0.9 |
| | baz=81 | | | | | | |
| L31A | **Butterfield Fa** | 80.73 | 340 | P | | P | 12 15 18.2 +1.2 |
| | baz=81 | | | | | | |
| M28A | **Bar X Bar Ranc** | 80.75 | 338 | P | | P | 12 15 18.2 +1.0 |
| | baz=81 | | | | | | |
| L29A | **Maesberg Ranch** | 81.09 | 339 | P | | P | 12 15 19.9 +0.9 |
| | baz=81 | | | | | | |
| GSC | **Goldstone** | 81.51 | 325 | *e*P | | P | 12 15 22.2 +0.8 |
| ECSD | **EROS Data Cent** | 81.60 | 342 | *e*P | | P | 12 15 20.9 -0.6 |
| | comp=Z,7.7nm,0.8s | | | | | | |
| SHPR | **Sheep Range** | 81.73 | 326 | *e*P | | P | 12 15 23.1 +0.5 |
| | comp=Z,10nm,2.0s | | | | | | |
| EDW2 | **Edwards Air Fo** | 81.74 | 323 | P | | P | 12 15 23.9 +1.3 |
| | baz=82 | | | | | | |
| N23A | **Red Feather La** | 81.79 | 335 | P | | P | 12 15 24.1 +1.2 |
| | baz=82 | | | | | | |
| CCUT | **Cedar City** | 81.80 | 328 | *e*P | | P | 12 15 24.1 +1.1 |
| | comp=Z,5.1nm,1.0s | | | | | | |
| O20A | **White River Ci** | 81.95 | 333 | P | | P | 12 15 25.0 +1.3 |
| | baz=82 | | | | | | |
| K28A | **Ten Mile Ranch** | 81.95 | 339 | P | | P | 12 15 24.9 +1.3 |
| | baz=82 | | | | | | |
| LRMC | **Laurel Mountai** | 82.07 | 324 | P | | P | 12 15 25.4 +1.0 |
| | baz=82 | | | | | | |
| P18A | **Preston Nutter** | 82.28 | 331 | *e*P | | P | 12 15 25.6 0.0 |
| | comp=Z,7.3nm,1.0s | | | | | | |
| MPMC | **Manual Prospec** | 82.45 | 325 | P | | P | 12 15 27.4 +0.9 |
| | baz=83 | | | | | | |
| H33A | **Prehn Over Nor** | 82.52 | 343 | P | | P | 12 15 28.3 +1.9 |
| | baz=83 | | | | | | |
| H32A | **Carlson Farm,** | 82.53 | 342 | P | | P | 12 15 28.4 +1.9 |
| | baz=83 | | | | | | |
| J28A | **Allard Ranch,** | 82.56 | 339 | P | | P | 12 15 28.1 +1.4 |
| | baz=83 | | | | | | |
| TPNV | **Topopah Spring** | 82.59 | 326 | P | | P | 12 15 28.6 +1.5 |
| | baz=83 | | | | | | |
| TPNV | **Topopah Spring** | 82.59 | 326 | *e*P | | P | 12 15 27.7 +0.6 |
| | comp=Z,40nm,2.7s | | | | | | |
| ISA | **Isabella** | 82.60 | 324 | P | | P | 12 15 28.3 +1.2 |
| | baz=83 | | | | | | |
| ISA | **Isabella** | 82.60 | 324 | *e*P | | P | 12 15 28.0 +0.9 |
| | comp=Z,45nm,2.9s | | | | | | |
| J27A | **Elkhorn Farm,** | 82.63 | 339 | P | | P | 12 15 28.1 +1.0 |
| | baz=83 | | | | | | |
| PKM | **Peak Mountain** | 82.66 | 322 | P | | P | 12 15 28.5 +1.0 |
| | baz=83 | | | | | | |
| DAC | **Darwin (Calif)** | 82.67 | 325 | *e*P | | P | 12 15 28.1 +0.5 |
| | comp=Z,76nm,2.9s | | | | | | |
| I28A | **Midland** | 83.07 | 339 | P | | P | 12 15 30.6 +1.3 |
| | baz=83 | | | | | | |
| R11A | **Troy Canyon, C** | 83.44 | 327 | P | | P | 12 15 32.3 +0.7 |
| | baz=84 | | | | | | |
| R11A | **Troy Canyon, C** | 83.44 | 327 | *e*P | | P | 12 15 32.0 +0.5 |
| | comp=Z,3.0nm,1.0s | | | | | | |
| K22A | **Casper** | 83.54 | 335 | P | | P | 12 15 32.5 +0.6 |
| | baz=84 | | | | | | |
| DUG | **Dugway** | 83.79 | 330 | P | | P | 12 15 33.8 +0.6 |
| | baz=84 | | | | | | |
| DUG | **Dugway** | 83.79 | 330 | *e*P | | P | 12 15 33.2 0.0 |
| | comp=Z,10nm,1.4s | | | | | | |
| I25A | **Rochford** | 83.86 | 338 | P | | P | 12 15 33.8 +0.3 |
| | baz=84 | | | | | | |
| HWUT | **Hardware Ranch** | 84.49 | 331 | *e*P | | P | 12 15 36.6 -0.2 |
| | comp=Z,6.9nm,1.1s | | | | | | |
| BW06 | **Boulder Array** | 84.72 | 333 | *e*P | | P | 12 15 36.8 -1.2 |
| NV01 | **Mina Array Sit** | 84.74 | 325 | *e*P | | P | 12 15 38.2 0.0 |
| NVAR | **Mina Array Bea** | 84.74 | 325 | P | | P | 12 15 38.6 +0.4 |
| | comp=Z,1.0nm,0.8s,baz=165,slow=5.7,SNR=12 | | | | | | |
| TOA0 | **Torodi Ar. Sit** | 84.76 | 70 | *e*P | | P | 12 15 47.5 +9.0 |
| TORD | **Torodi Ar. Bea** | 84.76 | 70 | P | | P | 12 15 37.8 -0.8 |
| | comp=Z,0.7nm,0.6s,baz=231,slow=5.0,SNR=5.2 | | | | | | |
| TORD | | | | pP | | pP | 12 15 48.2 +0.5 |
| | comp=Z,6.6nm,0.8s,baz=247,slow=4.0,SNR=27 | | | | | | |
| TORD | | | | LR | | LR | 12 50 25.2 |
| | comp=Z,40nm,20.3s,baz=185,slow=34 | | | | | | |
| G25A | **Newell** | 84.82 | 338 | P | | P | 12 15 38.6 +0.4 |
| | baz=85 | | | | | | |
| HVU | **Hansel Valley** | 85.11 | 331 | *e*P | | P | 12 15 39.7 -0.2 |
| REDW | **Red Top Meadow** | 85.72 | 333 | *e*P | | P | 12 15 42.3 -0.7 |
| LOHW | **Long Hollow** | 85.84 | 333 | *e*P | | P | 12 15 43.4 -0.2 |
| | comp=Z,48nm,2.9s | | | | | | |
| IMW | **Indian Meadow** | 86.21 | 333 | *e*P | | P | 12 15 45.8 +0.4 |
| | comp=Z,7.0nm,1.2s | | | | | | |
| FLWY | **Flagg Ranch** | 86.28 | 333 | *e*P | | P | 12 15 45.8 +0.1 |
| | comp=Z,6.6nm,1.1s | | | | | | |
| RLMT | **Red Lodge** | 86.66 | 335 | P | | P | 12 15 48.5 +0.9 |
| | baz=87 | | | | | | |
| RLMT | **Red Lodge** | 86.66 | 335 | *e*P | | P | 12 15 47.3 -0.3 |
| | comp=Z,98nm,2.9s | | | | | | |
| YMR | **Madison River** | 86.88 | 333 | *e*P | | P | 12 15 49.1 +0.5 |
| | comp=Z,8.5nm,1.1s | | | | | | |
| LAO | **LASA Array** | 87.03 | 337 | P | | P | 12 15 49.0 -0.1 |
| | baz=87 | | | | | | |
| LAO | **LASA Array** | 87.03 | 337 | *e*P | | P | 12 15 48.7 -0.4 |
| | comp=Z,167nm,3.0s | | | | | | |
| LAO | | | | *e*pP | | pP | 12 15 58.6 +0.3 |
| A29A | **Manning Farm,** | 87.10 | 343 | P | | P | 12 15 49.7 +0.4 |
| | baz=87 | | | | | | |
| HLID | **Hailey** | 87.27 | 331 | P | | P | 12 15 50.9 +0.4 |
| | baz=88 | | | | | | |
| HLID | **Hailey** | 87.27 | 331 | *e*P | | P | 12 15 51.0 +0.6 |
| | comp=Z,2.7nm,0.9s | | | | | | |
| A27A | **Ledoux Ranch,** | 87.63 | 341 | P | | P | 12 15 52.4 +0.5 |
| | baz=88 | | | | | | |
| MCMT | **McKenzie Canyo** | 87.72 | 332 | *e*P | | P | 12 15 53.3 +0.6 |
| O03D | **Paynes Creek** | 87.87 | 324 | P | | P | 12 15 53.8 +0.5 |
| | baz=88 | | | | | | |
| BOZ | **Bozeman (W)** | 87.96 | 334 | P | | P | 12 15 53.3 -0.4 |
| | baz=88 | | | | | | |
| DGMT | **Dagmar** | 88.01 | 339 | P | | P | 12 15 54.4 +0.7 |
| | baz=88 | | | | | | |
| DGMT | **Dagmar** | 88.01 | 339 | *e*P | | P | 12 15 53.7 0.0 |
| | comp=Z,13nm,0.8s | | | | | | |
| MOD | **Modoc** | 88.44 | 326 | *e*P | | P | 12 15 57.2 +1.1 |
| | comp=Z,3.9nm,0.8s | | | | | | |
| J08A | **Circle Bar Ran** | 88.79 | 328 | *e*P | | P | 12 15 58.5 +0.8 |
| | comp=Z,8.2nm,1.1s | | | | | | |
| M04C | **Macdoel** | 89.05 | 325 | P | | P | 12 15 59.9 +0.9 |
| | baz=89 | | | | | | |
| SCHQ | **Schefferville** | 89.75 | 3 | LR | | LR | 12 57 49.6 |
| | comp=Z,43nm,18.6s,baz=12,slow=37 | | | | | | |
| WRA | **Warramunga Arr** | 119.67 | 209 | PKP | | PKPdf | 12 21 52.4 -2.0 |
| | comp=Z,0.4nm,0.8s,baz=155,slow=1.6,SNR=3.4 | | | | | | |
| H11S2 | **WAKE ISLAND Hyl** | 25.58 | 268 | T | | T | 14 40 23.8 |
| | baz=118,slow=74,SNR=5.9 | | | | | | |
| H11S1 | **WAKE ISLAND Hyl** | 25.60 | 268 | T | | T | 14 40 19.3 |
| | baz=118,slow=74,SNR=7.7 | | | | | | |
| H11S3 | **WAKE ISLAND Hyl** | 25.60 | 268 | T | | T | 14 40 25.8 |
| | baz=118,slow=74,SNR=4.8 | | | | | | |
| H11N3 | **WAKE ISLAND Hyl** | 26.03 | 270 | T | | T | 14 40 53.7 |
| | baz=115,slow=78,SNR=4.8 | | | | | | |
| H11N1 | **WAKE ISLAND Hyl** | 26.04 | 270 | T | | T | 14 40 50.9 |
| | baz=115,slow=78,SNR=11 | | | | | | |
| H11N2 | **WAKE ISLAND Hyl** | 26.04 | 270 | T | | T | 14 40 52.3 |
| | baz=115,slow=78,SNR=7.7 | | | | | | |
| BVAR | **Borovoye Array** | 148.23 | 44 | PKPbc | | PKPbc | 12 22 48.9 -0.5 |
| | comp=Z,0.7nm,0.8s,baz=318,slow=3.9,SNR=3.1 | | | | | | |
| EKS2 | **Erkin-Say** | 152.65 | 64 | *e*PKPbc | | PKPbc | 12 23 00.5 0.0 |
| EKS2 | | | | *e*PKPab | | PKPab | 12 23 11.4 +0.2 |
| AAK | **Ala-Archa** | 153.18 | 64 | PKPbc | | PKPbc | 12 23 01.8 +0.1 |
| | comp=Z,0.9nm,0.4s,baz=214,slow=3.6,SNR=5.1 | | | | | | |
| AAK | **Ala-Archa** | 153.18 | 64 | *e*PKPdf | | PKPdf | 12 22 54.1 -0.1 |
| AAK | | | | *e*PKPbc | | PKiKP | 12 23 02.1 +0.3 |
| AAK | | | | *e*PKPab | | PKPab | 12 23 13.6 0.0 |
| KURBB | **Kurchatov Arra** | 153.81 | 45 | PKPbc | | PKPbc | 12 23 04.6 +2.0 |
| | comp=Z,0.2nm,0.5s,baz=299,slow=3.1,SNR=3.2 | | | | | | |
| KURK | **Kurchatov** | 153.83 | 45 | PKPbc | | PKPbc | 12 23 04.6 +2.0 |
| KSH | **Kashi** | 154.43 | 71 | *e*PKPbc | | PKPdf | 12 22 55.8 -0.3 |
| KSH | | | | *ep*PKP | | pPKPdf | 12 23 06.8 +1.2 |
| KSH | | | | *e*PP | | PP | 12 26 56.0 +1.3 |
| KSH | | | | SKKS | | | 12 33 39.3 |
| KSH | | | | PPMZ | | | |
| | comp=Z,65nm,4.0s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,110nm,5.2s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,100nm,5.3s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,130nm,6.8s | | | | | | |
| ZALV | **Zalesovo Beam** | 155.29 | 33 | PKPab | | PKPab | 12 23 19.4 -2.4 |
| | comp=Z,0.5nm,0.4s,baz=354,slow=1.4,SNR=3.7 | | | | | | |
| WMQ | **Urumqi** | 162.29 | 55 | *e*PKP | | PKPdf | 12 23 05.0 -0.3 |
| SONM | **Songino Array** | 167.29 | 4 | PKPab | | PKPab | 12 24 13.1 -1.4 |
| | comp=Z,0.9nm,0.8s,baz=343,slow=4.6,SNR=4.5 | | | | | | |
| GYA | **Guiyang** | 171.28 | 173 | *e*PKP | | PKPdf | 12 23 12.0 -0.7 |
| GYA | | | | sPKP | | | 12 23 27.8 |
| GYA | | | | PKPab | | PKPab | 12 24 35.0 +2.4 |
| GYA | | | | PKS | | PKSdf | 12 26 42.4 -2.9 |
| GYA | | | | PP | | PP | 12 28 26.6 +4.3 |
| GYA | | | | PPMZ | | | |
| | comp=Z,120nm,8.2s | | | | | | |
| HHC | **Hu-ho-hao-te** | 173.58 | 333 | *e*PKP | | PKPdf | 12 23 13.6 +0.3 |
| HHC | | | | PP | | PP | 12 28 37.5 +3.5 |
| HHC | | | | SS | | SS | 12 49 47.4 -1.0 |
| HHC | | | | PPMZ | | | |
| | comp=Z,44nm,7.4s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,120nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,230nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,52nm,18.5s | | | | | | |
| CD2 | **Chengdu** | 174.59 | 140 | PKP | | PKPdf | 12 23 13.0 -0.9 |
| LZH | **Lanzhou** | 176.68 | 73 | *e*PKP | | PKPdf | 12 23 14.5 +0.1 |
| LZH | | | | pPKP | | pPKPdf | 12 23 25.4 +1.5 |
| LZH | | | | sPKP | | | 12 23 29.3 |
| LZH | | | | PKPab | | PKPab | 12 24 57.8 +1.0 |
| LZH | | | | LN | | | |
| | comp=Z,140nm,16.2s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,180nm,18.7s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,190nm,20.1s | | | | | | |

*ISCJB* ***16*** *12:07:50.3±0.6, 32.°28N±0.°04×115.°33W±0.°04, h18km±6km, Error ellipse: s-maj=7.3km s-min=5.1km az=167.1*
*ECX* ***16*** *12:07:51.6±0.5, 32.°28N×115.°36W, h4km, MD2.8, ML3.0*
*MEX* ***16*** *12:07:52.6±0.6, 32.°39N×115.°27W, h12km±999km, MD3.9*

**ISC 16 12:07:50.3**±1.0, **32.°29N**±0.°04×**115.°36W**±0.°03, **h17**km±7km, **n22**, σ0°**48**/32, **6C-1D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h | m | s | ISC |
| CPBX | **Cerro Prieto** | 0.14 | 20 | *e*P | | **Pg** | **12** | **07** | **54.3** | **0.0** |
| CPBX | | | | *e*P | | **Pg** | **12** | **07** | **54.4** | **0.0** |
| CPBX | | | | *e*S | | **Sg** | **12** | **07** | **56.9** | **-0.1** |
| CPBX | | | | *e*S | | **Sg** | **12** | **07** | **57.0** | **-0.1** |
| CPBX | | | | IAML | | | 12 | 07 | 59.0 | |
| | comp=E,18μm,0.2s | | | | | | | | | |
| CPBX | | | | ⇑*e* | | | 12 | 07 | 59.0 | |
| MBIG | **Mexicali** | 0.18 | 49 | *e*P | | **Pb** | **12** | **07** | **55.4** | **+0.3** |
| MBIG | | | | *i* S | | **Sg** | **12** | **07** | **57.8** | **-0.2** |
| SGL | **Mount Signal** | 0.47 | 320 | ⇑*i*P | | **Pg** | **12** | **08** | **00.0** | **+0.2** |
| YUH | **Yuha Desert** | 0.60 | 307 | ⇑*i*P | | **Pg** | **12** | **08** | **01.9** | **-0.2** |
| COA | **Coachella** | 0.61 | 19 | ⇓*i*P | | **Pb** | **12** | **08** | **02.9** | **+0.5** |
| RDX | **Rancho Dawling** | 0.61 | 234 | *e*P | | **Pg** | **12** | **08** | **02.3** | **-0.2** |
| RDX | | | | *e*S | | **Sg** | **12** | **08** | **10.6** | **0.0** |
| RDX | | | | IAML | | | 12 | 08 | 13.9 | |
| | comp=N,454nm,0.3s | | | | | | | | | |
| RDX | | | | *e* | | | 12 | 08 | 13.9 | |
| COK | **Cook Ranch** | 0.64 | 331 | *e*P | | **Pb** | **12** | **08** | **03.4** | **+0.4** |
| RMX | **La Rumorosa** | 0.68 | 298 | ⇑*e*P | | **Pg** | **12** | **08** | **03.1** | **-0.7** |
| RMX | | | | *e*S | | **Sg** | **12** | **08** | **11.9** | **-1.0** |
| IBP | **Imperial Bould** | 0.72 | 301 | P | | **Pg** | **12** | **08** | **04.2** | **-0.2** |
| | baz=0.7 | | | | | | | | | |
| IBP | | | | S | | **Sg** | **12** | **08** | **13.9** | **-0.2** |
| | baz=0.7 | | | | | | | | | |
| SWSC |

*s-maj=42.0km s-min=30.8km az=26.0*
*ISCJB* ***16*** *12:15:46.3±0.9, 32°.63S±0°.05×179°.8E±0°.2, h150km, mb3.4/3, Error ellipse: s-maj=18.0km s-min=7.4km az=1.2*

**ISC 16 12:15:45.2±1.1, 32°.52S±0°.09×179°.9E±0°.2, h150km, n39, σ1°37/38, mb3.4/3, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **5.19** | **194** | *e*PN | **Pn** | **12 17 02.8** | **+1.7** |
| MXZ | | | | *e*SN | **Sn** | **12 17 59.7** | **-0.7** |
| **WMGZ** | **Waiomatatini S** | **5.42** | **192** | *e*PN | **Pn** | **12 17 04.8** | **+0.7** |
| **HAZ** | **Te Kaha** | **5.50** | **197** | PN | **Pn** | **12 17 05.8** | **+0.6** |
| **PUZ** | **Puketiti** | **5.70** | **193** | *e*PN | **Pn** | **12 17 07.0** | **-0.8** |
| PUZ | | | | SN | **Sn** | **12 18 12.1** | **-0.4** |
| **MWZ** | **Matawai** | **6.11** | **198** | *e*PN | **Pn** | **12 17 14.7** | **+1.4** |
| **TKGZ** | **Te Karaka** | **6.13** | **195** | *e*PN | **Pn** | **12 17 15.8** | **+2.2** |
| **URZ** | **Urewera** | **6.15** | **201** | P | **Pn** | **12 17 14.4** | **+0.5** |
| | 2.4nm,0.3s,baz=264,slow=3.3,SNR=45 | | | | | | |
| **URZ** | **Urewera** | **6.15** | **201** | *e*PN | **Pn** | **12 17 14.8** | **+0.9** |
| **SNGZ** | **Shannon Statio** | **6.58** | **197** | PN | Pn | 12 17 22.5 | +2.9 |
| **KNZ** | **Kokohu** | **6.73** | **195** | *e*PN | **Pn** | **12 17 23.5** | **+1.9** |
| **MHGZ** | **Mahia Peninsul** | **6.81** | **193** | *e*PN | **Pn** | **12 17 24.1** | **+1.4** |
| **MRHZ** | **Matea Rd** | **6.90** | **203** | PN | **Pn** | **12 17 26.2** | **+2.4** |
| **ARHZ** | **Aropaoanui** | **7.12** | **198** | *e*PN | **Pn** | **12 17 27.7** | **+0.9** |
| **BKZ** | **Black Stump Fm** | **7.18** | **201** | *e*PN | **Pn** | **12 17 27.9** | **+0.3** |
| **BHHZ** | **Black Hill Sta** | **7.61** | **203** | PN | **Pn** | **12 17 34.7** | **+1.4** |
| **WNVZ** | **Wahianoa** | **7.62** | **206** | PN | Pn | 12 17 36.6 | +2.9 |
| **MOVZ** | **Moawhango** | **7.64** | **205** | PN | Pn | 12 17 36.7 | +3.0 |
| **KRHZ** | **Kereru** | **7.65** | **201** | PN | **Pn** | **12 17 34.2** | **+0.3** |
| **KAHZ** | **Kahuranaki** | **7.65** | **198** | PN | **Pn** | **12 17 34.9** | **+0.9** |
| **PXZ** | **Pawanui** | **7.88** | **197** | PN | **Pn** | **12 17 36.5** | **-0.4** |
| PXZ | | | | *e*SN | **Sn** | **12 19 03.0** | **-1.7** |
| **PNHZ** | **Pukenui** | **7.95** | **201** | PN | **Pn** | **12 17 37.9** | **0.0** |
| **PRHZ** | **Porangahau** | **8.16** | **198** | PN | **Pn** | **12 17 39.6** | **-1.0** |
| **HOWZ** | **Holdsworth Sta** | **9.06** | **201** | *e*PN | **Pn** | **12 17 51.3** | **-1.4** |
| **OGWZ** | **Otaki Gorge** | **9.10** | **203** | *e*PN | **Pn** | **12 17 51.7** | **-1.4** |
| **KIW** | **Kapiti Island** | **9.23** | **204** | *e*PN | **Pn** | **12 17 53.6** | **-1.2** |
| **MTW** | **Mount Morrison** | **9.30** | **201** | *e*PN | **Pn** | **12 17 54.2** | **-1.7** |
| **NNZ** | **Nelson** | **10.11** | **209** | *e*PN | **Pn** | **12 18 05.8** | **-0.8** |
| NNZ | | | | *e*SN | **Sn** | **12 19 58.6** | **+0.1** |
| **QRZ** | **Quartz Range** | **10.17** | **213** | *e*PN | **Pn** | **12 18 07.3** | **-0.1** |
| **THZ** | **Tophouse** | **10.77** | **209** | *e*PN | **Pn** | **12 18 14.2** | **-1.1** |
| THZ | | | | *e*SN | **Sn** | **12 20 13.6** | **-0.7** |
| **KHZ** | **Kahutara** | **11.08** | **205** | *e*PN | **Pn** | **12 18 17.0** | **-2.3** |
| **DZM** | **Mont Dzumac** | **15.81** | **308** | P | **P** | **12 19 22.1** | **+1.6** |
| | 0.1nm,0.3s,baz=179,slow=14,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **41.23** | **270** | P | P | 12 23 18.9 | +3.3 |
| | 0.5nm,0.5s,baz=110,slow=7.9,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.41** | **276** | P | P | 12 23 27.7 | +2.5 |
| | 0.9nm,0.3s,baz=112,slow=8.1,SNR=25 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **76.31** | **177** | P | **P** | **12 27 19.0** | **+2.0** |
| **VNA2** | **Neumayer--Watz** | **76.72** | **178** | P | **P** | **12 27 21.5** | **+2.1** |
| | baz=169,slow=5.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.03** | **44** | P | **P** | **12 28 30.2** | **-2.4** |
| | 0.1nm,0.6s,baz=216,slow=11,SNR=3.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **140.24** | **346** | PKhKP | PKPpre | 12 34 49.0 | |
| | 2.5nm,0.8s,baz=90,slow=2.8,SNR=7.3 | | | | | | |
| **FINES** | **FINESS Array B** | **146.45** | **337** | PKPbc | **PKPbc** | **12 35 07.2** | **-0.6** |
| | 3.5nm,0.3s,baz=63,slow=3.2,SNR=81 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **160.65** | **185** | PKPab | **PKPab** | **12 36 09.9** | **-0.1** |
| | 0.3nm,0.5s,baz=184,slow=5.8,SNR=3.1 | | | | | | |

*IDC* ***16*** *12:17:32.1±5.8, 7°.26N×91°.96E, h0km, mb4.0/8, mb1 4.0/10, mb1mx3.7/42, mbtmp4.0/10, ML4.2/1, Error ellipse: s-maj=122.4km s-min=34.6km az=148.0*
*ISCJB* ***16*** *12:17:34.2±2.3, 7°.3N±0°.3×91°.9E±0°.2, h24km, mb4.2/9, Error ellipse: s-maj=40.9km s-min=15.3km az=149.8*

**ISC 16 12:17:35.9±3.4, 7°.3N±0°.4×92°.0E±0°.2, h24km, n21, σ0°92/19, mb4.0/9, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALK** | **Pallekele** | **11.16** | **271** | **Pn** | **Pn** | **12 20 14.4** | **+0.3** |
| | 1.6nm,0.3s,baz=114,slow=14,SNR=7.0 | | | | | | |
| PALK | | | | Sn | Sn | 12 22 05.7 | -13 |
| | 4.6nm,0.3s,baz=115,slow=16,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **13.03** | **31** | Pn | **Pn** | **12 20 40.6** | **+1.0** |
| | baz=228,slow=13,SNR=4.3 | | | | | | |
| **TAPN** | **Taplejung** | **20.36** | **349** | *e*P | Pn | 12 22 11.9 | -1.4 |
| **PKI** | **Pulchoki** | **21.11** | **344** | *e*P | **P** | **12 22 19.5** | **+0.2** |
| **PKIN** | **Phulchoki** | **21.12** | **344** | *e*P | **P** | **12 22 19.3** | **0.0** |
| **GUN** | **Gumba** | **21.31** | **345** | *e*P | **P** | **12 22 21.2** | **-0.2** |
| | 16nm,0.8s | | | | | | |
| **KKN** | **Kakani** | **21.36** | **344** | *e*P | **P** | **12 22 21.5** | **-0.3** |
| **GKN** | **Gorkha** | **21.74** | **342** | *e*P | **P** | **12 22 25.6** | **-0.3** |
| | 20nm,1.0s | | | | | | |
| **KOLN** | **Koldanda** | **21.86** | **340** | *e*P | **P** | **12 22 27.3** | **+0.1** |
| | 18nm,0.7s | | | | | | |
| **H08S3** | **Diego Garcia H** | **24.42** | **233** | T | T | 12 49 14.1 | |
| | baz=57,slow=74 | | | | | | |
| **H08S2** | **Diego Garcia H** | **24.42** | **233** | T | T | 12 49 15.9 | |
| | baz=57 | | | | | | |
| **H08S1** | **Diego Garcia H** | **24.44** | **233** | T | T | 12 49 18.3 | |
| | baz=57,slow=74 | | | | | | |
| **GTA** | **Gaotai** | **32.76** | **11** | *e*P | **P** | **12 24 08.4** | **+1.2** |
| GTA | | | | pP | **pP** | **12 24 12.6** | **-1.8** |
| GTA | | | | sP | **sP** | **12 24 15.3** | **-2.0** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,570nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **38.43** | **339** | P | **P** | **12 24 56.3** | **+0.4** |
| | comp=Z,0.6nm,0.3s,baz=276,slow=12,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.23** | **350** | P | **P** | **12 25 09.6** | **-1.0** |
| | comp=Z,1.5nm,0.7s,baz=163,slow=7.5,SNR=6.7 | | | | | | |
| **SONM** | **Songino Array** | **42.24** | **14** | P | **P** | **12 25 27.4** | **+0.1** |
| | comp=Z,1.3nm,0.7s,baz=197,slow=8.2,SNR=8.9 | | | | | | |
| **KURBB** | **Kurchatov Array** | **44.63** | **348** | P | **P** | **12 25 47.0** | **+0.6** |
| | comp=Z,2.1nm,0.8s,baz=171,slow=7.2,SNR=31 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.89** | **354** | P | **P** | **12 26 04.3** | **+0.2** |
| | comp=Z,0.9nm,0.4s,baz=177,slow=8.7,SNR=4.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **48.88** | **343** | P | **P** | **12 26 19.1** | **-0.5** |
| | comp=Z,0.7nm,0.5s,baz=152,slow=10.0,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **72.23** | **333** | P | **P** | **12 28 57.9** | **-0.9** |
| | comp=Z,3.3nm,0.9s,baz=107,slow=12,SNR=3.9 | | | | | | |
| **GERES** | **GERESS Array B** | **76.82** | **318** | P | **P** | **12 29 26.6** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=78,slow=9.4,SNR=3.9 | | | | | | |

**WEL 16 12:17:37.9±0.4, 38°.32S×175°.83E, h176km±2km, ML3.7/11, Error ellipse: s-maj=3.8km s-min=3.5km az=0.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRHZ** | **Matea Rd** | **0.69** | **138** | PN | Pn | 12 18 02.9 | -0.3 |
| MRHZ | | | | SN | Sn | 12 18 22.8 | -0.1 |
| **WPVZ** | **Whakapapa** | **0.92** | **194** | PN | Pn | 12 18 04.8 | +0.1 |
| **FWVZ** | **Far West T-bar** | **0.96** | **193** | PN | Pn | 12 18 05.3 | +0.1 |
| FWVZ | | | | SN | Sn | 12 18 27.0 | +0.6 |
| **BKZ** | **Black Stump Fm** | **1.00** | **149** | PN | Pn | 12 18 05.1 | -0.1 |
| BKZ | | | | SN | Sn | 12 18 26.3 | -0.2 |
| **URZ** | **Urewera** | **1.01** | **87** | PN | Pn | 12 18 03.9 | -1.3 |
| URZ | | | | SN | Sn | 12 18 25.5 | -0.8 |
| **WNVZ** | **Wahianoa** | **1.03** | **190** | PN | Pn | 12 18 05.7 | 0.0 |
| WNVZ | | | | SN | Sn | 12 18 27.4 | +0.2 |
| **MOVZ** | **Moawhango** | **1.09** | **183** | PN | Pn | 12 18 05.6 | -0.4 |
| MOVZ | | | | SN | Sn | 12 18 27.1 | -0.8 |
| **BHHZ** | **Black Hill Sta** | **1.19** | **171** | PN | Pn | 12 18 06.4 | -0.3 |
| BHHZ | | | | SN | Sn | 12 18 28.4 | -0.9 |
| **SNGZ** | **Shannon Statio** | **1.27** | **112** | PN | Pn | 12 18 07.6 | +0.2 |
| **ARHZ** | **Aropaoanui** | **1.31** | **136** | PN | Pn | 12 18 08.2 | +0.4 |
| **MCHZ** | **McNeill Hill** | **1.32** | **149** | PN | Pn | 12 18 08.6 | +0.8 |
| **MWZ** | **Matawai** | **1.34** | **91** | PN | Pn | 12 18 07.5 | -0.5 |
| MWZ | | | | AML | AML | 12 18 31.8 | |
| MWZ | | | | AML | AML | 12 18 32.4 | |
| **WHHZ** | **Waihua** | **1.34** | **125** | PN | Pn | 12 18 08.6 | +0.6 |
| **KRHZ** | **Kereru** | **1.39** | **163** | PN | Pn | 12 18 08.4 | -0.1 |
| **RIGZ** | **Rimuhau** | **1.57** | **105** | PN | Pn | 12 18 10.4 | +0.2 |
| **WAZ** | **Wanganui** | **1.58** | **204** | PN | Pn | 12 18 09.9 | -0.4 |
| **TKGZ** | **Te Karaka** | **1.59** | **95** | PN | Pn | 12 18 10.3 | -0.1 |
| **KNZ** | **Kokohu** | **1.61** | **117** | PN | Pn | 12 18 10.2 | -0.4 |
| **PNHZ** | **Pukenui** | **1.62** | **170** | PN | Pn | 12 18 10.5 | -0.3 |
| **CKHZ** | **Cape Kidnapper** | **1.66** | **144** | PN | Pn | 12 18 11.4 | +0.4 |
| **KAHZ** | **Kahuranaki** | **1.69** | **151** | PN | Pn | 12 18 11.6 | +0.1 |
| **TSZ** | **Takapari Road** | **1.75** | **177** | PN | Pn | 12 18 11.2 | -0.8 |
| TSZ | | | | AML | AML | 12 18 39.4 | |
| **WPHZ** | **Waipukurau** | **1.81** | **165** | PN | Pn | 12 18 12.3 | -0.3 |
| **MHGZ** | **Mahia Peninsul** | **1.83** | **118** | PN | Pn | 12 18 12.7 | -0.2 |
| **PXZ** | **Pawanui** | **1.89** | **155** | PN | Pn | 12 18 13.1 | -0.4 |
| PXZ | | | | SN | Sn | 12 18 40.6 | -0.6 |
| **PUZ** | **Puketiti** | **1.93** | **84** | AML | AML | 12 18 42.8 | |
| **PRHZ** | **Porangahau** | **2.05** | **162** | PN | Pn | 12 18 14.4 | -0.8 |
| **MXZ** | **Matakaoa Point** | **2.10** | **70** | PN | Pn | 12 18 14.4 | -1.4 |
| **ANWZ** | **Angora Road** | **2.20** | **167** | PN | Pn | 12 18 16.1 | -0.7 |
| **MRZ** | **Mangatainoka R** | **2.35** | **185** | PN | Pn | 12 18 17.1 | -1.5 |
| MRZ | | | | AML | AML | 12 18 49.8 | |
| MRZ | | | | AML | AML | 12 18 50.4 | |
| **BFZ** | **Birch Farm** | **2.38** | **172** | PN | Pn | 12 18 17.9 | -1.1 |
| **OGWZ** | **Otaki Gorge** | **2.55** | **191** | PN | Pn | 12 18 19.1 | -1.9 |
| **HOWZ** | **Holdsworth Sta** | **2.59** | **185** | PN | Pn | 12 18 19.4 | -2.1 |
| **KIW** | **Kapiti Island** | **2.64** | **195** | PN | Pn | 12 18 19.7 | -2.3 |
| **CAW** | **Cannon Point** | **2.85** | **192** | PN | Pn | 12 18 22.2 | -2.3 |
| CAW | | | | AML | AML | 12 18 58.8 | |
| CAW | | | | AML | AML | 12 18 59.7 | |
| **MTW** | **Mount Morrison** | **2.85** | **185** | PN | Pn | 12 18 21.8 | -2.7 |
| MTW | | | | AML | AML | 12 18 59.6 | |
| MTW | | | | AML | AML | 12 18 59.9 | |
| **DUWZ** | **D'Urville Isla** | **2.89** | **210** | PN | Pn | 12 18 22.0 | -3.0 |
| **TRWZ** | **Traveller** | **3.08** | **182** | PN | Pn | 12 18 25.0 | -2.3 |
| TRWZ | | | | AML | AML | 12 19 04.3 | |
| TRWZ | | | | AML | AML | 12 19 05.3 | |
| **TCW** | **Tory Channel** | **3.13** | **202** | PN | Pn | 12 18 25.1 | -2.8 |
| TCW | | | | AML | AML | 12 19 06.1 | |
| TCW | | | | AML | AML | 12 19 06.2 | |
| **TUWZ** | **Tuamarina** | **3.43** | **204** | PN | Pn | 12 18 28.6 | -3.0 |
| TUWZ | | | | AML | AML | 12 19 12.1 | |
| TUWZ | | | | AML | AML | 12 19 12.7 | |
| **NNZ** | **Nelson** | **3.46** | **212** | PN | Pn | 12 18 28.7 | -3.3 |
| **QRZ** | **Quartz Range** | **3.58** | **224** | PN | Pn | 12 18 29.1 | -4.3 |
| **THZ** | **Tophouse** | **4.11** | **212** | PN | Pn | 12 18 37.0 | -3.3 |
| **KHZ** | **Kahutara** | **4.46** | **202** | PN | Pn | 12 18 40.9 | -3.7 |

*NIED* ***16*** *12:17:00, 37°.00N×142°.30E, h20km, Mw3.5 Best double couple: M0 1.84000×10^14 NP1:ϕs=261.00000°, δ51.00000°, λ-153.00000°. NP2:ϕs=154.00000°, δ70.00000°, λ-42.00000°.*

**JMA 16 12:17:38.6±0.2, 37°.02N×142°.35E, h32km, M3.6, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JFK** | **Kawauchi** | **1.23** | **287** | P | Pn | 12 17 59.9 | +0.3 |
| JFK | | | | *e*S | Sn | 12 18 15.2 | +0.1 |
| **ONAJ** | **Iwakimizuishiy** | **1.24** | **274** | P | Pn | 12 18 00.3 | +0.5 |
| ONAJ | | | | *e*S | Sn | 12 18 16.4 | +0.8 |
| **JHO** | **Hitachi** | **1.49** | **255** | P | Pn | 12 18 03.7 | +0.6 |
| JHO | | | | *e*S | Sn | 12 18 21.6 | +0.2 |
| **JMM** | **Marumori** | **1.50** | **305** | P | Pn | 12 18 03.8 | +0.5 |
| JMM | | | | *e*S | Sn | 12 18 22.4 | +0.7 |
| **JIO** | **Ouri** | **1.64** | **331** | P | Pn | 12 18 05.8 | +0.6 |
| JIO | | | | *e*S | Sn | 12 18 25.4 | +0.3 |
| **JFT** | **Otama** | **1.68** | **288** | P | Pb | 12 18 07.5 | -1.5 |
| JFT | | | | *e*S | Sb | 12 18 28.5 | -1.3 |
| **JOU** | **Okura** | **1.90** | **316** | P | Pn | 12 18 10.4 | +1.6 |
| JOU | | | | *e*S | Sn | 12 18 33.2 | +1.6 |
| **JMK** | **Ichinoseki** | **2.12** | **335** | P | Pb | 12 18 14.3 | -2.1 |
| JMK | | | | *e*S | Sb | 12 18 39.9 | -2.5 |
| **JFY** | **Yanaizu** | **2.15** | **281** | P | Pb | 12 18 14.9 | -2.0 |
| JFY | | | | *e*S | Sb | 12 18 40.7 | -2.4 |
| **JYS** | **Shirataka** | **2.17** | **304** | P | Pb | 12 18 15.1 | -2.2 |
| JYS | | | | *e*S | Sb | 12 18 41.3 | -2.6 |
| **JAG** | **Ashikaga** | **2.40** | **257** | P | Pn | 12 18 17.3 | +1.6 |
| JAG | | | | *e*S | Sn | 12 18 46.8 | +2.8 |
| **JYK** | **Kaneyama** | **2.46** | **321** | P | Pn | 12 18 18.5 | +2.0 |
| JYK | | | | *e*S | Sn | 12 18 48.1 | +2.6 |
| **JOM** | **Ohasama** | **2.59** | **342** | *e*S | Sn | 12 18 51.1 | +2.5 |
| **MAT** | **Matsushiro** | **3.36** | **263** | P | Pn | 12 18 32.8 | +3.9 |
| MAT | | | | *e*S | Sb | 12 19 14.2 | -3.8 |

*NIED* ***16*** *12:38:00, 36°.40N×141°.10E, h41km, Mw3.6 Best double couple: M0 2.79000×10^14 NP1:ϕs=210.00000°, δ18.00000°, λ97.00000°. NP2:ϕs=23.00000°, δ72.00000°, λ88.00000°.*
*ISCJB* ***16*** *12:38:35.5±1.4, 36°.38N±0°.07×141°.2E±0°.1, h43km±10km, mb3.5/5, Error ellipse: s-maj=17.0km s-min=8.1km az=32.6*
*JMA* ***16*** *12:38:37.1±0.1, 36°.40N×141°.03E, h47km±1km, M3.8*
*JMA Felt I J1.*
*IDC* ***16*** *12:38:43.1±5.9, 36°.37N×140°.96E, h98km±54km, mb3.3/5, mb1 3.4/6, mb1mx3.2/25, mbtmp3.6/6, Error ellipse: s-maj=34.2km s-min=27.0km az=78.0*

**ISC 16 12:38:34.9±2.2, 36°.38N±0°.07×141°.19E±0°.09, h25km±13km, n19, σ1°03/19, mb3.5/5, 5D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.55** | **295** | ↓P | **Pn** | **12 38 47.2** | **0.0** |
| JHO | | | | ↓S | **Sb** | **12 38 54.1** | **+0.6** |
| **ONAJ** | **Iwakimizuishiy** | **0.78** | **336** | ↓P | **Pn** | **12 38 50.7** | **+0.3** |
| ONAJ | | | | ↓S | **Sb** | **12 39 00.0** | **-0.2** |
| **JYT** | **Yasato** | **0.82** | **259** | ↓P | **Pb** | **12 38 50.7** | **+0.2** |
| JYT | | | | ↓S | **Sb** | **12 38 59.9** | **-1.2** |
| **JFK** | **Kawauchi** | **1.01** | **346** | ↓P | **Pn** | **12 38 53.9** | **+0.3** |
| JFK | | | | ↓S | **Sb** | **12 39 05.8** | **-1.0** |
| **JFT** | **Otama** | **1.32** | **329** | P | **Pb** | **12 38 59.3** | **+0.2** |
| JFT | | | | ↓S | **Sn** | **12 39 14.8** | **+0.1** |
| **JAG** | **Ashikaga** | **1.40** | **272** | ↓P | **Pn** | **12 38 58.9** | **0.0** |
| JAG | | | | ↓S | **Sn** | **12 39 14.8** | **-1.8** |
| **MAT** | **Matsushiro** | **2.41** | **275** | P | **Pn** | **12 39 14.1** | **+1.4** |
| MAT | | | | ↓S | **Sn** | **12 39 43.8** | **+2.3** |
| **KSRS** | **Korea Array** | **10.68** | **280** | P | Pn | 12 41 11.0 | +4.8 |
| | 0.2nm,0.3s,baz=93,slow=14,SNR=3.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.98** | **119** | T | T | 13 14 34.7 | |
| | baz=313,slow=75,SNR=22 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.98** | **119** | T | T | 13 14 26.6 | |
| | baz=313,slow=75,SNR=35 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.00** | **119** | T | T | 13 14 27.5 | |
| | baz=313,slow=75,SNR=23 | | | | | | |
| **SONM** | **Songino Array** | **28.00** | **305** | P | **P** | **12 44 23.1** | **-0.8** |
| | 0.5nm,0.6s,baz=102,slow=10,SNR=3.3 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.66** | **122** | T | T | 13 15 13.9 | |
| | baz=314,slow=75,SNR=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.66** | **122** | T | T | 13 15 15.8 | |
| | baz=314,slow=75,SNR=61 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.68** | **122** | T | T | 13 15 18.3 | |
| | baz=314,slow=75,SNR=52 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.22** | **313** | P | **P** | **12 46 25.2** | **-0.5** |
| | 0.8nm,0.3s,baz=85,slow=8.8,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.31** | **303** | P | **P** | **12 46 42.1** | **-0.6** |
| | 0.4nm,0.7s,baz=90,slow=8.8,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **50.14** | **32** | P | **P** | **12 47 28.8** | **+1.0** |
| | 0.5nm,0.8s,baz=254,slow=6.3,SNR=6.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.39** | **188** | P | **P** | **12 48 13.9** | **-0.3** |
| | 0.3nm,0.6s,baz=4.6,slow=7.2,SNR=5.1 | | | | | | |

*ISCJB* ***16*** *12:50:32.8±0.6, 26°.43N±0°.05×141°.71E±0°.08, h50km, mb4.1/12, Error ellipse: s-maj=10.0km s-min=7.1km az=3.0*
*NEIC* ***16*** *12:50:33.5±1.3, 26°.47N×141°.68E, h41km±11km, mb4.4/1, Error ellipse: s-maj=17.2km s-min=10.6km az=98.0*
*JMA* ***16*** *12:50:35.0±0.2, 26°.46N×142°.52E, h45km*
*IDC* ***16*** *12:50:37.0±4.2, 26°.42N×141°.72E, h73km±37km, mb3.6/10, mb1 3.9/11, mb1mx3.6/33, mbtmp4.0/11, ML3.9/1, MS2.5/1, Ms1 2.5/1, ms1mx2.0/35, Error ellipse: s-maj=32.9km s-min=16.5km az=95.0*

**ISC 16 12:50:35.0±0.8, 26°.42N±0°.07×141°.9E±0°.1, h50km, n24, σ1°23/25, mb4.1/12, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHHJ** | **Haha-jima-NKT** | **0.31** | **48** | P | **Pn** | **12 50 44.2** | **0.0** |
| JHHJ | | | | S | **Sn** | **12 50 50.5** | **-0.3** |
| **CBIJ** | **Chichi jima** | **0.71** | **19** | P | **Pn** | **12 50 48.5** | **-0.4** |
| CBIJ | | | | S | **Sn** | **12 50 59.2** | **+0.2** |
| **CBIJ** | **Chichi jima** | **0.71** | **19** | *e*Pn | **Pn** | **12 50 48.5** | **-0.4** |
| CBIJ | | | | *e*Sn | **Sn** | **12 51 00.0** | **+1.0** |
| **JHJ** | **Hachijo jima 2** | **6.93** | **345** | P | **Pn** | **12 52 15.6** | **+1.7** |
| | 6.6nm,0.3s,baz=92,slow=22,SNR=6.1 | | | | | | |
| JHJ | | | | S | **Sn** | **12 53 29.5** | **-1.9** |
| | 4.5nm,0.3s,baz=73,slow=19,SNR=2.1 | | | | | | |
| **JHU** | **Hanno** | **9.67** | **347** | P | **Pn** | **12 52 53.9** | **+2.5** |
| JHU | | | | *e*S | **Sn** | **12 54 37.1** | **-1.5** |
| **JRY** | **Ryogami san** | **9.91** | **346** | P | **Pn** | **12 52 56.8** | **+2.1** |
| **MAJO** | **Matsushiro** | **10.57** | **343** | *e*Pn | Pn | 12 53 00.3 | -3.5 |
| **JNU** | **Nakatsue** | **11.68** | **307** | LR | LR | 12 57 10.8 | |
| | comp=Z,24nm,20.7s,baz=300,slow=34 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.90** | **101** | T | T | 13 21 43.1 | |
| | baz=290,slow=75,SNR=12 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.90** | **101** | T | T | 13 21 43.2 | |
| | baz=290,slow=75,SNR=8.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.91** | **101** | T | T | 13 21 44.2 | |
| | baz=290,slow=75,SNR=10 | | | | | | |
| **WRAB** | **Tennant Creek** | **46.66** | **190** | *e*P | **P** | **12 58 58.3** | **-0.4** |
| | 3.8nm,0.8s | | | | | | |
| WRAB | | | | *e*pP | **pP** | **12 59 14.7** | **+2.5** |
| WRAB | | | | *e*PcP | **PcP** | **13 00 30.7** | **-1.2** |
| **WRA** | **Warramunga Arr** | **46.67** | **190** | P | **P** | **12 58 58.3** | **-0.5** |
| | 3.4nm,0.5s,baz=12,slow=8.8,SNR=58 | | | | | | |
| **ASAR** | **Alice Springs** | **50.39** | **190** | P | P | 12 59 26.7 | -0.7 |
| | 0.3nm,0.3s,baz=18,slow=9.1,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.72** | **310** | P | P | 12 59 27.3 | -2.5 |
| | 0.2nm,0.3s,baz=83,slow=11,SNR=7.2 | | | | | | |
| **ILAR** | **Eielson Array** | **58.41** | **28** | P | **P** | **13 00 25.0** | **-0.2** |
| | 0.4nm,0.8s,baz=273,slow=6.5,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **58.41** | **28** | P | **P** | **13 00 25.0** | **-0.2** |
| **PAX** | **Paxson** | **58.93** | **31** | *e*P | **P** | **13 00 27.3** | **-1.5** |
| | 3.7nm,0.1s | | | | | | |
| **INK** | **Inuvik** | **63.74** | **24** | P | **P** | **13 01 00.7** | **-0.5** |
| | 1.2nm,0.5s,baz=247,slow=7.7,SNR=5.0 | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.84** | **28** | P | **P** | **13 01 58.5** | **+0.3** |
| | 0.7nm,0.4s,baz=296,slow=6.1,SNR=4.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **74.10** | **341** | P | **P** | **13 02 05.5** | **0.0** |
| | 5.1nm,0.9s,baz=66,slow=9.0,SNR=6.2 | | | | | | |
| **FINES** | **FINESS Array B** | **78.44** | **334** | P | **P** | **13 02 29.6** | **-0.6** |
| | 1.8nm,0.4s,baz=84,slow=4.8,SNR=33 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.12** | **52** | P | **P** | **13 02 45.5** | **0.0** |
| | 0.2nm,0.5s,baz=290,slow=5.6,SNR=3.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **84.15** | **338** | P | **P** | **13 02 59.6** | **-0.9** |
| | 0.9nm,0.8s,baz=48,slow=4.7,SNR=3.6 | | | | | | |

*ISK* ***16*** *12:54:08.7, 38°.86N×27°.84E, h5km, MD2.3*
*DDA* ***16*** *12:54:09.5, 38°.85N×27°.86E, h7km, Md2.6*
*CSEM* ***16*** *12:54:09.1±0.7, 38°.86N×27°.78E, h2km, MD2.3, Error ellipse: s-maj=14.2km s-min=9.9km az=81.0*

**ISC 16 12:54:08.6±1.5, 38°.88N±0°.09×27°.8E±0°.1, h3km±6km, n12, σ0°81/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKS** | **Akhisar** | **0.01** | **94** | PG | **Pg** | **12 54 08.7** | **-0.4** |
| AKS | | | | *e*SG | **Sg** | **12 54 10.4** | **+0.8** |
| **AKS** | **Akhisar** | **0.01** | **94** | *i* Pg | **Pg** | **12 54 08.7** | **-0.5** |
| AKS | | | | *e*Sg | **Sg** | **12 54 10.4** | **+0.8** |
| **MANT** | **Manisa** | **0.71** | **123** | *i* P | **Pg** | **12 54 22.0** | **-0.2** |
| MANT | | | | *i* S | **Sb** | **12 54 32.4** | **-1.6** |
| **MANT** | **Manisa** | **0.71** | **123** | P | **Pg** | **12 54 22.0** | **-0.2** |
| MANT | | | | S | **Sb** | **12 54 32.4** | **-1.6** |
| **KULA** | **Kula-Manisa** | **0.77** | **118** | *e*PG | **Pg** | **12 54 23.7** | **+0.4** |
| KULA | | | | *e*SG | **Sb** | **12 54 34.5** | **-1.0** |
| **KULA** | **Kula-Manisa** | **0.77** | **118** | *e*Pg | **Pg** | **12 54 23.7** | **+0.4** |
| KULA | | | | *e*Sg | **Sb** | **12 54 34.5** | **-1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.94** | **175** | *e*PG | **Pb** | **12 54 27.9** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.94** | **175** | *e*Pg | **Pb** | **12 54 27.9** | **+0.4** |
| **DST** | **Dursunbey** | **0.96** | **41** | *e*PG | **Pn** | **12 54 29.1** | **0.0** |
| **DST** | **Dursunbey** | **0.96** | **41** | *e*Pg | **Pn** | **12 54 29.1** | **0.0** |
| **KHAL** | **Karahalli** | **1.42** | **110** | *i* P | **Pg** | **12 54 36.4** | **+0.6** |
| KHAL | | | | *i* S | **Sn** | **12 54 55.0** | **+0.3** |
| **KHAL** | **Karahalli** | **1.42** | **110** | P | **Pg** | **12 54 36.4** | **+0.6** |
| KHAL | | | | S | **Sn** | **12 54 55.0** | **+0.3** |

*ISCJB* ***16*** *13:03:20.7±0.7, 38°.17N±0°.04×28°.87E±0°.04, h11km±8km, Error ellipse: s-maj=6.6km s-min=5.0km az=44.5*
*DDA* ***16*** *13:03:21.0, 38°.17N×28°.86E, h7km, Md2.6*
*ISK* ***16*** *13:03:20.4, 38°.18N×28°.88E, h5km, MD2.3*
*CSEM* ***16*** *13:03:20.9±0.1, 38°.17N×28°.86E, h10km, MD2.6, Error ellipse: s-maj=2.0km s-min=1.7km az=43.0*

**ISC 16 13:03:20.7±1.2, 38°.18N±0°.03×28°.86E±0°.

KAPI LR LR 13 18 46.5
comp=Z,84nm,21.3s,baz=293,slow=38
**BKSI Bulukumba 16.30 89** P **P** **13 12 25.9 -0.6**
25nm,1.0s,546nm
**MPSI Mapaga 17.22 70** P **P** **13 12 38.3 +1.5**
13nm,1.2s
**MMRI Maumere 18.55 100** P **P** **13 12 51.8 +0.4**
**MMRI Maumere 18.55 100** *e*Pn **P** **13 12 47.7 -3.8**
42nm,0.6s
**MRSI Marisa 19.19 72** P **Pn** **13 12 59.7 0.0**
29nm,0.6s
**BATI Baumata 20.19 104** P **P** **13 13 09.3 -0.1**
54nm,0.4s,baz=252,slow=1.4,SNR=18
BATI LR LR 13 21 42.0
comp=Z,95nm,19.8s,baz=282,slow=39
**BATI Baumata 20.19 104** P Pn 13 13 12.1 +0.5
52nm,0.7s,818nm
**SOEI Soe 20.70 102** *e*P **P** **13 13 14.2 -0.8**
53nm,0.8s
**LBMI Labuha 24.24 79** P **P** **13 13 52.0 +0.7**
54nm,0.9s
**CMAR Chiang Mai Arr 24.55 349** P **P** **13 13 53.4 -0.6**
7.5nm,0.7s,baz=182,slow=8.9,SNR=48
CMAR LR LR 13 24 23.0
comp=Z,46nm,18.3s,baz=177,slow=39
**FITZ Fitzroy Crossi 24.62 122** P **P** **13 13 54.8 +0.2**
9.2nm,0.7s,baz=282,slow=6.0,SNR=19
**CHTO Chiang Mai 24.90 349** *e*P **P** **13 13 55.3 -1.8**
3.2nm,0.6s
**SIJI Sorong 27.89 81** P **P** **13 14 21.6 -2.6**
7.5nm,0.9s,baz=287,slow=19,SNR=2.9
**H01W3 Cape Leeuwin H 30.51 163** T T 13 46 59.5
baz=340,slow=76,SNR=24
**H01W1 Cape Leeuwin H 30.52 163** T T 13 46 53.4
baz=340,slow=76,SNR=34
**H01W2 Cape Leeuwin H 30.52 163** T T 13 47 00.8
baz=340,slow=76,SNR=29
**H08S2 Diego Garcia H 31.10 265** T T 13 48 35.1
baz=88,slow=75,SNR=67
**H08S3 Diego Garcia H 31.11 265** T T 13 48 35.8
baz=88,slow=75,SNR=47
**H08S1 Diego Garcia H 31.12 265** T T 13 48 30.1
baz=88,slow=75,SNR=10
**H08N1 Diego Garcia H 32.56 267** T T 13 51 05.5
baz=18,slow=75,SNR=2.9
**H08N2 Diego Garcia H 32.58 267** T T 13 51 05.3
baz=18,slow=75,SNR=3.4
**H08N3 Diego Garcia H 32.58 267** T T 13 50 59.4
baz=18,slow=75,SNR=3.1
**WRA Warramunga Arr 32.88 118** P **P** **13 15 07.9 -0.4**
2.2nm,0.6s,baz=298,slow=11,SNR=43
WRA pP **pP** **13 15 24.0 +3.6**
1.6nm,0.4s,baz=292,slow=9.8,SNR=4.5
WRA PcP **PcP** **13 17 52.9 +0.6**
1.2nm,0.7s,baz=303,slow=1.9,SNR=4.7
**ASAR Alice Springs 34.02 125** P **P** **13 15 18.6 +0.3**
2.2nm,0.6s,baz=302,slow=7.9,SNR=32
ASAR PcP **PcP** **13 17 56.4 +0.9**
1.5nm,0.8s,baz=300,slow=2.4,SNR=9.1
ASAR S **S** **13 20 36.8 -3.9**
0.8nm,1.0s,baz=299,slow=16,SNR=4.2
**ODAN Odare 36.11 335** *e*P **P** **13 15 36.1 -0.3**
11nm,0.6s
**TAPN Taplejung 36.41 336** *e*P **P** **13 15 38.2 -0.8**
14nm,0.8s
**RAMN Ramite 36.53 334** *e*P **P** **13 15 39.9 -0.1**
5.8nm,0.4s
**PKI Pulchoki 37.60 333** *e*P **P** **13 15 48.4 -0.7**
**PKIN Phulchoki 37.61 333** *e*P **P** **13 15 48.4 -0.7**
5.9nm,0.6s
**GUN Gumba 37.68 334** *e*P **P** **13 15 49.5 -0.3**
**DMN Daman 37.77 332** *e*P **P** **13 15 50.1 -0.4**
**KKN Kakani 37.85 333** *e*P **P** **13 15 50.6 -0.5**
**GKN Gorkha 38.32 332** *e*P **P** **13 15 54.7 -0.3**
6.9nm,0.3s
**KSAR Wonju Array Be 48.53 26** P **P** **13 17 16.4 -0.5**
**KSRS Korea Array 48.56 26** P **P** **13 17 16.4 -0.7**
4.6nm,0.6s,baz=222,slow=7.4,SNR=27
**SONM Songino Array 53.44 2** P **P** **13 17 53.2 -0.6**
4.0nm,0.7s,baz=179,slow=8.8,SNR=20
SONM pP **pP** **13 18 07.9 +1.4**
1.8nm,0.6s,baz=182,slow=9.0,SNR=5.0
SONM PcP **PcP** **13 19 00.3 -0.2**
2.0nm,0.7s,baz=188,slow=3.2,SNR=5.0
**TKM2 Tokmak 2 54.80 335** *e*P **P** **13 18 01.3 -2.6**
7.2nm,0.6s
**EKS2 Erkin-Say 55.38 333** *e*P **P** **13 18 05.7 -2.4**
7.7nm,0.8s
**MKAR Makanchi Array 55.70 342** P **P** **13 18 09.3 -0.8**
6.9nm,0.5s,baz=148,slow=8.1,SNR=98
**USRK Ussuriysk Ar. 55.88 24** P **P** **13 18 10.1 -1.2**
6.0nm,0.6s,baz=218,slow=5.4,SNR=13
**KURK Kurchatov 60.30 342** *e*P **P** **13 18 39.4 -2.8**
20nm,0.8s
**GEYT Alibeck 60.73 320** P **P** **13 18 45.9 +0.3**
1.8nm,0.3s,baz=134,slow=8.5,SNR=6.0
**ZALV Zalesovo Beam 61.60 347** P **P** **13 18 49.6 -1.3**
6.1nm,0.3s,baz=164,slow=4.9,SNR=34
**MAW Mawson 67.62 196** P **P** **13 19 31.8 +1.8**
0.7nm,0.8s,baz=303,slow=17,SNR=1.4
**ARU Arti 72.16 336** *e*P **P** **13 19 57.5 -0.6**
8.2nm,0.9s
**KBZ Khabaz 73.60 319** P **P** **13 20 07.3 +0.4**
3.3nm,0.8s,baz=98,slow=4.0,SNR=5.0
**PETK Petropavlovsk- 74.14 30** P **P** **13 20 08.1 -1.8**
1.0nm,0.6s,baz=238,slow=5.0,SNR=3.3
**MATP Matopo 74.20 250** P **P** **13 20 11.7 +0.5**
1.6nm,0.4s,baz=102,slow=4.6,SNR=7.2
**BOSA Boshof 77.17 242** P **P** **13 20 29.3 +1.4**
2.8nm,0.9s,baz=226,slow=4.6,SNR=3.0
**BRTR Keskin Array B 78.62 312** P **P** **13 20 35.5 -0.3**
2.3nm,0.8s,baz=132,slow=7.7,SNR=11
BRTR pP **pP** **13 20 52.1 +3.1**
1.1nm,0.7s,baz=124,slow=8.0,SNR=3.3
**TSUM Tsumeb 84.52 251** LR LR 13 51 56.3
comp=Z,140nm,20.2s,baz=140,slow=31
**FINES FINESS Array B 89.18 332** P **P** **13 21 29.3 +0.4**
1.0nm,0.5s,baz=124,slow=5.1,SNR=12
FINES pP **pP** **13 21 44.8 +2.5**
1.1nm,0.6s,baz=120,slow=7.3,SNR=1.7
**ARCES ARCESS Array B 91.28 340** P **P** **13 21 38.3 -0.2**
6.2nm,1.0s,baz=76,slow=5.1,SNR=3.9
**GERES GERESS Array B 94.34 319** P **P** **13 21 54.0 +0.7**
0.4nm,0.4s,baz=117,slow=6.1,SNR=1.6
**BDFB Brasilia 144.86 232** PKPbc **PKPdf** **13 28 11.8 +0.2**
2.5nm,0.5s,baz=216,slow=6.5,SNR=4.9
**TXAR Lajitas Array 145.08 45** PKP **PKPab** **13 28 11.5 +0.4**
4.6nm,0.7s,baz=276,slow=1.3,SNR=53
**LPAZ La Paz 156.65 200** PKPab **PKPab** **13 28 59.7 +0.4**
0.8nm,0.3s,baz=312,slow=16,SNR=18

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*ISCJB **16** 13:27:44.8±0.1,20.46S±0.03×173.90W±0.02,h10km, mb5.7/264,MS5.7/384, Error ellipse: s-maj=4.6km s-min=2.3km az=151.4*

*IDC **16** 13:27:44.7±0.4,20.35S×173.85W,h0km,mb5.2/27, mb1 5.2/29,mb1mx5.2/31,mbtmp5.2/29,ML5.2/2,MS5.4/19, Ms1 5.4/19,ms1mx5.4/22,Error ellipse: s-maj=15.9km s-min=12.9km az=131.0*

*AUST **16** 13:27:45.4±0.4,20.31S×173.95W,h0km,Error ellipse: s-maj=9.3km s-min=8.2km az=140.0*

*GCMT **16** 13:27:45.7±0.1,20.57S×173.19W,h12km,MW5.6/123, Moment Tensor Solution. s95,c179; s123,c319; Duration: 1ᵗ6 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$2.27±.02; $M_{\theta\theta}$-0.69±.02; $M_{\phi\phi}$-1.58±.02; $M_{r\theta}$1.13±.06; $M_{\theta\phi}$-1.08±.02; $M_{r\phi}$2.53±.06; Best double couple: $M_o$3.59300×$10^{17}$ NP1:$\phi_s$26.00000°,δ70.00000°, λ85.00000°. NP2:$\phi_s$221.00000°,δ20.00000°,λ104.00000°. Principal axes: T 3.5960, Plg64.0000°, Azm288.0000°; N -0.0100, Plg5.0000°, Azm28.0000°; P -3.5900, Plg25.0000°, Azm120.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*NEIC **16** 13:27:45.7±3.0,20.46S×173.92W,h7km±18km,mb5.7/198, MS5.7/299,MW5.6 Error ellipse: s-maj=5.9km s-min=3.5km az=149.0,Moment Tensor Solution. s62 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$2.59; $M_{\theta\theta}$-0.31; $M_{\phi\phi}$-2.29; $M_{r\theta}$0.99; $M_{\theta\phi}$-1.45; $M_{r\phi}$1.57; Best double couple: $M_o$3.40000×$10^{17}$ NP1:$\phi_s$204.00000°,δ28.00000°, λ85.00000°. NP2:$\phi_s$31.00000°,δ62.00000°,λ93.00000°. Principal axes: T 3.1500, Plg73.0000°, Azm308.0000°; N 0.4500, Plg3.0000°, Azm209.0000°; P -3.6100,*

*Plg17.0000°, Azm118.0000°;*
*BJI **16** 13:27:46.0,20.14S×173.70W,h12km,mb5.6/58, mB6.1/56,Ms5.6/70,Ms7 5.3/67*
*MOS **16** 13:27:48.9±1.1,20.28S×173.95W,h33km,mb5.6/69, MS5.6/81,Error ellipse: s-maj=8.8km s-min=7.2km az=68.9*

**ISC 16 13:27:47.4±0.4,20.45S±0.05×173.84W±0.05,h18km±1km, h17km:pP-P,n1438,σ1.25/1315,mb5.7/265,MS5.7/384, 102C-34D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.79** | **17** | Pn | | Pn | Pn | 13 29 17.6 | -8.8 |
| | 23nm,0.3s,baz=14,slow=2.2,SNR=27 | | | | | | | | |
| AFI | | | | Sn | | Sn | Sn | 13 30 30.6 | -13 |
| | 27nm,0.3s,baz=144,slow=19,SNR=4.1 | | | | | | | | |
| **AFI** | **Afiamalu** | **6.79** | **17** | *e*Pn | | Pn | Pn | 13 29 17.2 | -9.2 |
| AFI | | | | Sn | | Sn | Sn | 13 30 30.6 | -13 |
| AFI | | | | Sn | | Sb | Sb | 13 30 43.7 | -23 |
| **MSVF** | **Nonsavu** | **8.13** | **288** | Pn | | Pn | Pn | 13 29 52.2 | +7.5 |
| | 4μm,1.1s,SNR=45 | | | | | | | | |
| **RAR** | **Rarotonga** | **13.18** | **96** | Pn | | Pn | Pn | 13 30 44.3 | -9.5 |
| | 17nm,0.3s,baz=250,slow=8.3,SNR=18 | | | | | | | | |
| RAR | | | | Sn | | Sn | Sn | 13 32 58.7 | -21 |
| | 8.1nm,0.3s,baz=151,slow=20,SNR=4.2 | | | | | | | | |
| RAR | | | | LR | | LR | LR | 13 35 20.0 | |
| | comp=Z,18μm,19.6s,baz=254,slow=34 | | | | | | | | |
| **OUZ** | **Omahuta** | **18.41** | **214** | *e*Pn | | P | **P** | **13 31 59.8** | **-1.9** |
| | 188nm,1.4s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.45** | **261** | *e*P | | | **Pn** | **13 32 04.6** | **+2.1** |
| | 1μm,1.4s | | | | | | | | |
| DZM | | | | *e*LR | | | LR | 13 36 26.2 | |
| | 13μm,20.9s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.45** | **261** | P | | | **Pn** | **13 32 02.9** | **+0.4** |
| | 4.9nm,0.3s,baz=359,slow=0.8,SNR=58 | | | | | | | | |
| **WCZ** | **Waipu Caves** | **18.59** | **211** | *e*P* | | | **Pn** | **13 32 04.5** | **+0.5** |
| **HAZ** | **Te Kaha** | **18.72** | **201** | *e*P* | | | **P** | **13 32 02.1** | **-2.9** |
| HAZ | | | | SN | | | Sn | 13 35 17.6 | -17 |
| **PUZ** | **Puketiti** | **18.85** | **200** | P* | | | **P** | **13 32 05.7** | **-0.9** |
| PUZ | | | | *e*SN | | | Sn | 13 35 20.9 | -17 |
| **KBAZ** | **Karaka Road Bo** | **19.28** | **208** | P* | | | **Pn** | **13 32 13.6** | **+1.3** |
| **WTAZ** | **Waiatarua** | **19.29** | **209** | *e*P* | | | **Pn** | **13 32 14.1** | **+1.7** |
| **URZ** | **Urewera** | **19.40** | **202** | P | | | **P** | **13 32 13.2** | **+0.6** |
| | 8.9nm,0.3s,baz=22,slow=5.9,SNR=46 | | | | | | | | |
| URZ | | | | S | | | Sn | 13 35 41.8 | -9.3 |
| | 2.2nm,0.3s,baz=325,slow=18,SNR=5.7 | | | | | | | | |
| **URZ** | **Urewera** | **19.40** | **202** | P* | | | **P** | **13 32 12.8** | **+0.2** |
| URZ | | | | SN | | | Sn | 13 35 32.9 | -18 |
| **URZ** | **Urewera** | **19.40** | **202** | *e*P | | | **P** | **13 32 11.6** | **-1.0** |
| | 201nm,0.8s | | | | | | | | |
| URZ | | | | S | | | Sn | 13 35 41.8 | -9.3 |
| **TOZ** | **Tahuroa Road** | **19.55** | **206** | P* | | | **Pn** | **13 32 16.1** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **20.43** | **202** | *e*P | | | **P** | **13 32 20.6** | **-3.3** |
| | 65nm,0.8s | | | | | | | | |
| BKZ | | | | LR | | | LR | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **HIZ** | **Hauiti** | **20.49** | **206** | P* | | | Pn | 13 32 25.9 | -0.7 |
| **HIZ** | **Hauiti** | **20.49** | **206** | *e*P | | | **P** | **13 32 25.0** | **+0.6** |
| | comp=Z,466nm,1.2s | | | | | | | | |
| HIZ | | | | LR | | | LR | | |
| | comp=Z,7μm,18.0s | | | | | | | | |
| **BFZ** | **Birch Farm** | **21.87** | **201** | *e*P | | | **P** | **13 32 40.0** | **+0.7** |
| | comp=Z,127nm,0.9s | | | | | | | | |
| BFZ | | | | LR | | | LR | | |
| | comp=Z,9μm,19.0s | | | | | | | | |
| **TBI** | **Tubuai** | **22.80** | **102** | *e*P | | | P | 13 32 42.2 | -7.2 |
| | comp=Z,733nm,1.2s | | | | | | | | |
| TBI | | | | *e*S | | | S | 13 36 40.4 | -17 |
| | comp=Z,2μm,30.8s | | | | | | | | |
| TBI | | | | *e*LQ | | | LQ | 13 37 06.1 | |
| | comp=Z,11μm,28.0s | | | | | | | | |
| TBI | | | | *e*LR | | | LR | 13 38 07.2 | |
| | comp=Z,9μm,22.5s,baz=278 | | | | | | | | |
| **TBI** | **Tubuai** | **22.80** | **102** | *e*T | | | T | 13 55 43.2 | |
| | comp=Z,10nm,0.3s | | | | | | | | |
| **SNZO** | **South Karori** | **22.96** | **203** | *e*P | | | **P** | **13 32 49.6** | **-1.3** |
| | comp=Z,221nm,1.1s | | | | | | | | |
| SNZO | | | | LR | | | LR | | |
| | comp=Z,5μm,20.0s | | | | | | | | |
| **PAE** | **Paea** | **23.09** | **87** | *e*P | | | P | 13 32 45.8 | -6.7 |
| | comp=Z,35nm,1.0s | | | | | | | | |
| **PAE** | **Paea** | **23.09** | **87** | *e*T | | | T | 13 56 07.8 | |
| | comp=Z,2.9nm,0.3s | | | | | | | | |
| **PPT2** | **Papeete2** | **23.11** | **87** | *e*P | | | P | 13 32 46.4 | -6.4 |
| | comp=Z,265nm,1.4s | | | | | | | | |
| PPT2 | | | | *e*S | | | S | 13 36 47.4 | -16 |
| | comp=Z,2μm,23.5s | | | | | | | | |
| PPT2 | | | | *e*LQ | | | LQ | 13 37 06.0 | |
| | comp=Z,17μm,26.2s | | | | | | | | |
| PPT2 | | | | *e*LR | | | LR | 13 38 19.3 | |
| | comp=Z,10μm,21.5s,baz=254 | | | | | | | | |
| **PPT2** | **Papeete2** | **23.11** | **87** | *e*T | | | T | 13 56 09.9 | |
| | comp=Z,2.8nm,0.3s | | | | | | | | |
| **PPT** | **Papeete** | **23.12** | **87** | P | | | **P** | **13 32 51.9** | **-0.9** |
| | comp=Z,66nm,1.0s,baz=185,slow=0.6,SNR=3.3 | | | | | | | | |
| PPT | | | | LR | | | LR | 13 40 13.0 | |
| | comp=Z,12μm,18.3s,baz=258,slow=32 | | | | | | | | |
| **TIAR** | **Tiarei** | **23.33** | **87** | *e*P | | | P | 13 32 48.4 | -6.5 |
| | comp=Z,70nm,1.3s | | | | | | | | |
| **TVO** | **Taravao** | **23.38** | **88** | *e*P | | | P | 13 32 48.6 | -6.8 |
| | comp=Z,97nm,1.4s | | | | | | | | |
| **THZ** | **Tophouse** | **24.03** | **205** | *e*P* | | | **P** | **13 33 00.1** | **-1.4** |
| **THZ** | **Tophouse** | **24.03** | **205** | *e*P | | | **P** | **13 33 00.5** | **-1.0** |
| | comp=Z,66nm,0.7s | | | | | | | | |
| THZ | | | | LR | | | LR | | |
| | comp=Z,10μm,18.0s | | | | | | | | |
| **KHZ** | **Kahutara** | **24.35** | **203** | *e*P* | | | **P** | **13 33 03.7** | **-0.6** |
| **KHZ** | **Kahutara** | **24.35** | **203** | *e*P | | | **P** | **13 33 03.0** | **-1.4** |
| | comp=Z,119nm,0.9s | | | | | | | | |
| KHZ | | | | LR | | | LR | | |
| | comp=Z,7μm,20.0s | | | | | | | | |
| **MEH** | **Mehetia** | **24.47** | **88** | *e*T | | | T | 13 57 51.1 | |
| | comp=Z,18nm,0.3s | | | | | | | | |
| **LTZ** | **Lake Taylor** | **25.15** | **205** | P* | | | **P** | **13 33 11.8** | **+0.1** |
| **TARA** | **Tarawa** | **25.25** | **328** | *e*P | | | **P** | **13 33 11.3** | **-1.4** |
| | comp=Z,202nm,1.1s | | | | | | | | |
| TARA | | | | LR | | | LR | | |
| | comp=Z,9μm,19.0s | | | | | | | | |
| **OXZ** | **Oxford** | **25.70** | **204** | *e*P | | | **P** | **13 33 16.1** | **-0.5** |
| | comp=Z,265nm,1.0s | | | | | | | | |
| OXZ | | | | LR | | | LR | | |
| | comp=Z,8μm,18.0s | | | | | | | | |
| **WVZ** | **Waitaha Valley** | **26.01** | **206** | *e*P* | | | **P** | **13 33 18.3** | **-1.1** |
| **RPZ** | **Rata Peaks** | **26.41** | **205** | P | | | **P** | **13 33 23.4** | **+0.4** |
| | comp=Z,31nm,0.7s,baz=207,slow=6.8,SNR=3.3 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.41** | **205** | *e*P | | | **P** | **13 33 23.2** | **+0.2** |
| | comp=Z,144nm,1.1s | | | | | | | | |
| RPZ | | | | LR | | | LR | | |
| | comp=Z,13μm,19.0s | | | | | | | | |
| **LHI** | **Lord Howe Isla** | **26.66** | **240** | PFAKE | | | | 13 33 40.0 | +15 |
| LHI | | | | LR | | | LR | | |
| | comp=Z,5μm,20.0s | | | | | | | | |
| **LBZ** | **Lake Benmore** | **27.32** | **205** | P* | | | **P** | **13 33 32.5** | **+1.2** |
| **XMAS** | **Kiritimati** | **27.53** | **38** | PFAKE | | | | 13 33 50.0 | +17 |
| XMAS | | | | LR | | | LR | | |
| | comp=Z,13μm,18.0s | | | | | | | | |
| **HNR** | **Honiara** | **27.55** | **290** | P | | | **P** | **13 33 32.5** | **-1.1** |
| | comp=Z,66nm,0.8s,baz=203,slow=5.5,SNR=7.3 | | | | | | | | |
| HNR | | | | LR | | | LR | 13 44 45.2 | |
| | comp=Z,6μm,18.2s,baz=130,slow=37 | | | | | | | | |
| **HNR** | **Honiara** | **27.55** | **290** | P | | | **P** | **13 33 32.5** | **-1.1** |
| HNR | | | | pmax | | | pmax | | |
| | comp=Z,66nm,0.8s | | | | | | | | |
| HNR | | | | MLR | | | MLR | | |
| | comp=Z,6μm,18.2s | | | | | | | | |
| **HNR** | **Honiara** | **27.55** | **290** | *e*P | | | P | 13 33 28.0 | -5.6 |
| | comp=Z,132nm,1.0s | | | | | | | | |
| **ODZ** | **Otahua Downs** | **27.68** | **204** | *e*P | | | **P** | **13 33 34.7** | **+0.2** |
| | comp=Z,206nm,1.6s | | | | | | | | |
| **WKZ** | **Wanaka** | **28.16** | **206** | PFAKE | | | | 13 33 50.0 | +11 |
| WKZ | | | | LR | | | LR | | |
| | comp=Z,15μm,18.0s | | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.46** | **206** | *e*P | | | **P** | **13 33 48.5** | **-1.8** |
| | comp=Z,274nm,1.4s | | | | | | | | |
| **ARMA** | **Armidale** | **32.61** | **245** | P | | | **P** | **13 34 18.4** | **0.0** |
| | baz=32,SNR=11 | | | | | | | | |
| **ARMA** | **Armidale** | **32.61** | **245** | *e*P | | | **P** | **13 34 16.4** | **-2.1** |
| | comp=Z,86nm,1.4s | | | | | | | | |
| **EIDS** | **Eidsvold** | **32.62** | **255** | P | | | **P** | **13 34 17.6** | **-0.8** |
| | baz=32,SNR=11 | | | | | | | | |
| **EIDS** | **Eidsvold** | **32.62** | **255** | *e*P | | | **P** | **13 34 16.7** | **-1.7** |
| | comp=Z,31nm,0.8s | | | | | | | | |
| EIDS | | | | LR | | | LR | | |
| | comp=Z,8μm,20.0s | | | | | | | | |
| **MGCD** | **Mangrove Creek** | **33.60** | **240** | P | | | **P** | **13 34 27.8** | **+0.9** |
| | baz=34,SNR=11 | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **34.50** | **75** | *e*T | | | T | 14 10 26.2 | |
| | comp=Z,66nm,0.3s | | | | | | | | |
| **RMQ** | **Roma** | **34.74** | **253** | P | | | **P** | **13 34 36.5** | **-0.4** |
| | baz=35,SNR=62 | | | | | | | | |
| **CNB** | **Canberra Magne** | **35.51** | **237** | P | | | **P** | **13 34 43.5** | **0.0** |
| | baz=36,SNR=24 | | | | | | | | |
| **CAN** | **Canberra** | **35.80** | **238** | *e*P | | | **P** | **13 34 45.7** | **-0.3** |
| CAN | | | | pmax | | | pmax | | |
| | comp=Z,142nm,1.0s | | | | | | | | |
| CAN | | | | MLR | | | MLR | | |
| | comp=Z,6μm,18.0s | | | | | | | | |
| **CAN** | **Canberra** | **35.80** | **238** | *e*P | | | **P** | **13 34 45.6** | **-0.3** |
| | comp=Z,142nm,1.0s | | | | | | | | |
| CAN | | | | LR | | | LR | | |
| | comp=Z,6μm,18.0s | | | | | | | | |
| **YNG** | **Young** | **36.05** | **239** | P | | | **P** | **13 34 48.8** | **+0.8** |
| | baz=36,SNR=4.9 | | | | | | | | |
| **RKT** | **Rikitea** | **36.12** | **101** | *e*S | | | S | 13 40 17.1 | -11 |
| | comp=Z,1μm,27.0s | | | | | | | | |
| RKT | | | | *e*LQ | | | LQ | 13 42 55.9 | |
| | comp=Z,1μm,26.5s | | | | | | | | |
| RKT | | | | *e*LR | | | LR | 13 43 58.6 | |
| | comp=Z,7μm,31.5s,baz=266 | | | | | | | | |
| **MILA** | **Mila** | **36.15** | **235** | P | | | **P** | **13 34 49.7** | **+0.8** |
| | baz=36,SNR=5.4 | | | | | | | | |
| **JOHN** | **Johnston Islan** | **37.19** | **7** | PFAKE | | | | 13 35 10.0 | +12 |
| JOHN | | | | LR | | | LR | | |
| | comp=Z,8μm,20.0s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **37.82** | **245** | P | | | **P** | **13 35 01.8** | **-1.3** |
| | baz=38,SNR=41 | | | | | | | | |
| **QLP** | **Quilpie** | **38.80** | **253** | P | | | **P** | **13 35 10.2** | **-1.2** |
| | baz=39,SNR=37 | | | | | | | | |
| **TOO** | **Toolangi** | **39.10** | **235** | P | | | **P** | **13 35 13.4** | **-0.4** |
| | baz=39,SNR=43 | | | | | | | | |
| **PMG** | **Port Moresby** | **39.15** | **280** | *de*P | | | **P** | **13 35 13.3** | **-1.2** |
| PMG | | | | MLR | | | MLR | | |
| | comp=Z,25μm,18.0s | | | | | | | | |
| **PMG** | **Port Moresby** | **39.15** | **280** | *e*P | | | **P** | **13 35 12.8** | **-1.7** |
| | comp=Z,128nm,0.9s | | | | | | | | |
| PMG | | | | LR | | | LR | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **MOO** | **Moorlands** | **39.36** | **227** | P | | | **P** | **13 35 17.9** | **+2.0** |
| | baz=39,SNR=5.8 | | | | | | | | |
| **TAU** | **Tasmania Unive** | **39.44** | **226** | P | | | **P** | **13 35 18.9** | **+2.3** |
| | comp=Z,904nm,0.9s,SNR=7.6 | | | | | | | | |
| **MTSU** | **Mount Surprise** | **39.48** | **266** | P | | | **P** | **13 35 16.4** | **-0.8** |
| | baz=39,SNR=40 | | | | | | | | |
| **PTCN** | **Pitcairn Islan** | **40.47** | **105** | PFAKE | | | | 13 35 40.0 | +15 |
| PTCN | | | | LR | | | LR | | |
| | comp=Z,10μm,19.0s | | | | | | | | |
| **COEN** | **Coen** | **41.47** | **272** | P | | | **P** | **13 35 32.6** | **-1.2** |
| | baz=41,SNR=26 | | | | | | | | |
| **COEN** | **Coen** | **41.47** | **272** | P | | | **P** | **13 35 31.9** | **-1.9** |
| | comp=Z,171nm,1.5s | | | | | | | | |
| COEN | | | | LR | | | LR | | |
| | comp=Z,5μm,18.0s | | | | | | | | |
| **ARPS** | **Mount Arapiles** | **41.78** | **237** | P | | | **P** | **13 35 36.3** | **+0.3** |
| | baz=42,SNR=16 | | | | | | | | |
| **MANU** | **Manus Island** | **42.03** | **291** | P | | | **P** | **13 35 37.2** | **-1.2** |
| | baz=42,SNR=4.2 | | | | | | | | |
| **QIS** | **Mount Isa** | **43.49** | **261** | P | | | **P** | **13 35 48.8** | **-1.3** |
| | baz=43,SNR=3.8 | | | | | | | | |
| **WAKE** | **Wake Island** | **43.87** | **333** | PFAKE | | | | 13 36 00.0 | +7.0 |
| WAKE | | | | LR | | | LR | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **KIP** | **Kipapa** | **44.40** | **21** | ↓*e*P | | | **P** | **13 35 56.9** | **-0.3** |
| KIP | | | | MLR | | | MLR | | |
| | comp=Z,20μm,16.0s | | | | | | | | |
| **KIP** | **Kipapa** | **44.40** | **21** | *e*P | | | **P** | **13 35 56.5** | **-0.8** |
| | comp=Z,772nm,1.1s | | | | | | | | |
| **BBOO** | **Buckleboo** | **46.06** | **244** | P | | | **P** | **13 36 09.1** | **-1.4** |
| | baz=46,SNR=20 | | | | | | | | |
| **BBOO** | **Buckleboo** | **46.06** | **244** | *e*P | | | **P** | **13 36 07.5** | **-3.0** |
| BBOO | | | | LR | | | LR | | |
| | comp=Z,8μm,18.0s | | | | | | | | |
| **JAY** | **Jayapura** | **47.75** | **286** | P | | | **P** | **13 36 23.1** | **-0.8** |
| | baz=48,SNR=49 | | | | | | | | |
| **GENI** | **Genyem** | **48.20** | **285** | P | | | **P** | **13 36 27.1** | **-0.3** |
| | comp=Z,579nm,1.5s,comp=Z,9μm | | | | | | | | |
| **AS01** | **Alice Springs** | **48.28** | **256** | *e*P | | | P | 13 36 24.2 | -3.7 |
| **AS31** | **Alice Springs** | **48.32** | **256** | PFAKE | | | | 13 36 40.0 | +12 |
| AS31 | | | | LR | | | LR | | |
| | comp=Z,100nm,18.0s | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.32** | **256** | P | | | **P** | **13 36 26.4** | **-1.8** |
| | comp=Z,75nm,0.8s,baz=89,slow=8.3,SNR=215 | | | | | | | | |
| ASAR | | | | PcP | | | **PcP** | **13 37 56.5** | **+1.5** |
| | comp=Z,34nm,0.9s,baz=102,slow=3.6,SNR=11 | | | | | | | | |
| ASAR | | | | S | | | **S** | **13 43 23.7** | **-4.2** |
| | comp=Z,3.0nm,1.0s,baz=93,slow=16,SNR=6.0 | | | | | | | | |
| ASAR | | | | LR | | | LR | 13 56 14.7 | |
| | comp=Z,5μm,19.2s,baz=98,slow=35 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **48.46** | **261** | *c i*P | | | **P** | **13 36 27.5** | **-1.8** |
| WRAB | | | | pmax | | | pmax | | |
| | comp=Z,253nm,1.0s | | | | | | | | |
| WRAB | | | | MLR | | | MLR | | |
| | comp=Z,10μm,15.0s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **48.46** | **261** | P | | | **P** | **13 36 27.0** | **-2.3** |
| | comp=Z,463nm,1.0s,SNR=29 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **48.46** | **261** | *e*P | | | **P** | **13 36 27.1** | **-2.3** |
| | comp=Z,66nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.46** | **261** | P | | | **P** | **13 36 27.7** | **-1.7** |
| | comp=Z,47nm,0.8s,baz=97,slow=7.0,SNR=131 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **13 37 56.2** | **+0.7** |
| | comp=Z,35nm,0.9s,baz=96,slow=3.7,SNR=10 | | | | | | | | |
| WRA | | | | S | | | **S** | **13 43 26.9** | **-3.1** |
| | comp=Z,1.4nm,1.0s,baz=93,slow=13,SNR=3.8 | | | | | | | | |
| WRA | | | | LR | | | LR | 13 56 21.4 | |
| | comp=Z,4μm,18.1s,baz=105,slow=35 | | | | | | | | |
| **SMPI** | **Sarmi** | **49.78** | **285** | P | | | **P** | **13 36 38.7** | **-0.8** |
| | comp=Z,94nm,1.2s,comp=Z,22μm | | | | | | | | |
| **KDU** | **Kakadu** | **51.85** | **270** | P | | | **P** | **13 36 54.0** | **-1.1** |
| | baz=52,SNR=14 | | | | | | | | |
| **FORT** | **Forrest** | **52.89** | **246** | P | | | **P** | **13 37 01.3** | **-1.4** |
| | baz=53,SNR=40 | | | | | | | | |
| **FORT** | **Forrest** | **52.89** | **246** | *e*P | | | **P** | **13 37 01.2** | **-1.4** |
| | comp=Z,156nm,0.8s | | | | | | | | |
| FORT | | | | LR | | | LR | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **MTN** | **Manton Dam** | **53.06** | **269** | P | | | **P** | **13 37 02.4** | **-1.6** |
| | baz=53,SNR=26 | | | | | | | | |
| **MTN** | **Manton Dam** | **53.06** | **269** | PFAKE | | | | 13 37 20.0 | +16 |
| MTN | | | | LR | | | LR | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **WRKA** | **Warakurna** | **53.22** | **254** | P | | | **P** | **13 37 03.2** | **-2.1** |
| | baz=53,SNR=193 | | | | | | | | |
| **SAUI** | **Saumlaki** | **54.37** | **275** | PFAKE | | | | 13 37 30.0 | +16 |
| SAUI | | | | LR | | | LR | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **KNRA** | **Kununurra** | **54.55** | **265** | P | | | **P** | **13 37 13.4** | **-1.5** |
| | baz=54,SNR=32 | | | | | | | | |
| **FAKI** | **Fak Fak** | **55.30** | **281** | P | | | **P** | **13 37 20.1** | **-0.4** |
| | baz=55,SNR=4.6 | | | | | | | | |
| **FAKI** | **Fak Fak** | **55.30** | **281** | P | | | **P** | **13 37 21.1** | **+0.6** |
| | comp=Z,174nm,2.4s,comp=Z,3μm | | | | | | | | |
| **FAKI** | **Fak Fak** | **55.30** | **281** | *e*P | | | **P** | **13 37 18.1** | **-2.4** |
| | comp=Z,1μm,2.8s | | | | | | | | |
| FAKI | | | | LR | | | LR | | |
| | comp=Z,4μm,19.0s | | | | | | | | |
| **BNDI** | **Bandanaira** | **56.87** | **278** | P | | | **P** | **13 37 32.5

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,38nm,1.1s | | | | | | | | |
| **VNDA** | **Vanda** | **58.34** | **186** | *e*P | | **P** | **13 37 43.0** | **+2.0** |
| | comp=Z,38nm,1.1s | | | | | | | | |
| **AAI** | **Ambon** | **58.76** | **278** | P | | **P** | **13 37 45.3** | **+0.3** |
| | comp=Z,110nm,1.4s,comp=Z,2µm | | | | | | | | |
| **NLAI** | **Namlea** | **59.94** | **278** | P | | **P** | **13 37 51.4** | **-1.7** |
| | comp=Z,116nm,1.5s,comp=Z,2µm | | | | | | | | |
| **SOEI** | **Soe** | **60.40** | **270** | P | | **P** | **13 37 56.6** | **+0.2** |
| | baz=60,SNR=28 | | | | | | | | |
| **SOEI** | **Soe** | **60.40** | **270** | P | | **P** | **13 37 56.9** | **+0.5** |
| | comp=Z,313nm,0.9s,comp=Z,4µm | | | | | | | | |
| **SOEI** | **Soe** | **60.40** | **270** | *e*P | | **P** | **13 37 56.6** | **+0.2** |
| | comp=Z,211nm,0.8s | | | | | | | | |
| SOEI | | | | LR | | LR | | | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **LBMI** | **Labuha** | **60.55** | **281** | P | | **P** | **13 37 57.5** | **+0.1** |
| | comp=Z,150nm,1.2s,comp=Z,2µm | | | | | | | | |
| **BATI** | **Baumata** | **60.83** | **270** | P | | **P** | **13 37 59.3** | **+0.1** |
| | comp=Z,58nm,1.0s,comp=Z,2µm | | | | | | | | |
| **TNTI** | **Ternate** | **61.23** | **283** | *e*P | | **P** | **13 38 01.2** | **-0.8** |
| | comp=Z,423nm,1.0s | | | | | | | | |
| TNTI | | | | LR | | LR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **SANI** | **Sanana** | **61.41** | **279** | P | | **P** | **13 38 02.0** | **-1.2** |
| | comp=Z,131nm,1.2s,comp=Z,2µm | | | | | | | | |
| **KLBR** | **Kellerberrin** | **61.60** | **244** | P | | **P** | **13 38 03.9** | **-0.4** |
| | baz=62,SNR=62 | | | | | | | | |
| **MEEK** | **Meekatharra** | **61.61** | **250** | P | | **P** | **13 38 03.2** | **-1.2** |
| | baz=62,SNR=20 | | | | | | | | |
| **MBWA** | **Marble Bar** | **61.66** | **256** | *e*P | | **P** | **13 38 03.2** | **-1.5** |
| | comp=Z,62nm,0.8s | | | | | | | | |
| MBWA | | | | LR | | LR | | | |
| | comp=Z,9µm,18.0s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **61.87** | **243** | *e*P | | **P** | **13 38 06.6** | **+0.6** |
| NWAO | | | | pmax | | pmax | | | |
| | comp=Z,64nm,0.9s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **61.87** | **243** | P | | **P** | **13 38 06.6** | **+0.6** |
| | baz=62,SNR=14 | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **61.87** | **243** | P | | **P** | **13 38 06.7** | **+0.6** |
| | SNR=5.7 | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **61.87** | **243** | *e*P | | **P** | **13 38 06.6** | **+0.6** |
| | comp=Z,64nm,0.9s | | | | | | | | |
| **RKGY** | **Rocky Gully** | **61.88** | **241** | P | | **P** | **13 38 07.3** | **+1.2** |
| | baz=62,SNR=12 | | | | | | | | |
| **BLDU** | **Ballidu** | **62.63** | **245** | P | | **P** | **13 38 10.8** | **-0.4** |
| | baz=62,SNR=47 | | | | | | | | |
| **MMRI** | **Maumere** | **62.65** | **271** | P | | **P** | **13 38 10.6** | **-0.9** |
| | comp=Z,104nm,0.8s,comp=Z,2µm | | | | | | | | |
| **MMRI** | **Maumere** | **62.65** | **271** | *e*P | | **P** | **13 38 10.5** | **-0.9** |
| | comp=Z,81nm,1.0s | | | | | | | | |
| **MORW** | **Morawa** | **63.45** | **247** | P | | **P** | **13 38 16.2** | **-0.4** |
| | baz=63,SNR=31 | | | | | | | | |
| **CBIJ** | **Chichi jima** | **63.62** | **316** | *e*P | | **P** | **13 38 16.5** | **-1.1** |
| | comp=Z,191nm,1.0s | | | | | | | | |
| CBIJ | | | | LR | | LR | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **SGSI** | **Sangihe** | **64.10** | **285** | P | | **P** | **13 38 21.8** | **+0.7** |
| | comp=Z,230nm,0.9s,comp=Z,20µm | | | | | | | | |
| **WSI** | **Waingapu** | **64.15** | **269** | P | | **P** | **13 38 22.0** | **+0.6** |
| | comp=Z,399nm,0.5s | | | | | | | | |
| **KMSI** | **Cibinong** | **64.27** | **281** | P | | **P** | **13 38 23.9** | **+1.7** |
| | comp=Z,262nm,1.1s | | | | | | | | |
| **LUWI** | **Luwuk** | **64.77** | **279** | P | | **P** | **13 38 26.1** | **+0.6** |
| | baz=65,SNR=10 | | | | | | | | |
| **LUWI** | **Luwuk** | **64.77** | **279** | P | | **P** | **13 38 24.6** | **-0.9** |
| | comp=Z,234nm,1.4s,comp=Z,3µm | | | | | | | | |
| **LUWI** | **Luwuk** | **64.77** | **279** | *e*P | | **P** | **13 38 25.1** | **-0.3** |
| | comp=Z,198nm,1.0s | | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **65.09** | **273** | P | | **P** | **13 38 26.3** | **-1.3** |
| | comp=Z,72nm,2.0s,comp=Z,1µm | | | | | | | | |
| **CASY** | **Casey** | **65.68** | **205** | *e*P | | **P** | **13 38 31.5** | **+1.0** |
| | comp=Z,54nm,1.0s | | | | | | | | |
| CASY | | | | LR | | LR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **BKSI** | **Bulukumba** | **65.72** | **273** | P | | **P** | **13 38 30.3** | **-1.3** |
| | comp=Z,37nm,1.9s,comp=Z,964nm | | | | | | | | |
| **APSI** | **Ampana** | **65.86** | **278** | P | | **P** | **13 38 33.0** | **+0.5** |
| | comp=Z,210nm,1.4s,comp=Z,3µm | | | | | | | | |
| **MRSI** | **Marisa** | **66.11** | **280** | P | | **P** | **13 38 35.2** | **+1.0** |
| | comp=Z,61nm,1.3s,comp=Z,2µm | | | | | | | | |
| **KAPI** | **Kappang** | **66.17** | **274** | LR | | LR | 14 07 47.9 | | |
| | comp=Z,910nm,19.2s,baz=129,slow=36 | | | | | | | | |
| **KAPI** | **Kappang** | **66.17** | **274** | P | | **P** | **13 38 34.0** | **-0.5** |
| | comp=Z,123nm,0.9s,SNR=8.6 | | | | | | | | |
| **KAPI** | **Kappang** | **66.17** | **274** | P | | **P** | **13 38 34.5** | **0.0** |
| | SNR=9.1 | | | | | | | | |
| **KAPI** | **Kappang** | **66.17** | **274** | *e*P | | **P** | **13 38 33.9** | **-0.7** |
| | comp=Z,559nm,2.8s | | | | | | | | |
| **SPSI** | **Sidrap Palu** | **66.51** | **275** | P | | **P** | **13 38 35.9** | **-0.8** |
| | comp=Z,43nm,1.1s,comp=Z,936nm | | | | | | | | |
| **PCI** | **Palu** | **67.54** | **278** | P | | **P** | **13 38 44.5** | **+1.2** |
| | comp=Z,260nm,1.2s,comp=Z,4µm | | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **67.64** | **269** | P | | **P** | **13 38 43.5** | **-0.4** |
| | comp=Z,100nm,1.5s,comp=Z,2µm | | | | | | | | |
| **MPSI** | **Mapaga** | **67.94** | **279** | P | | **P** | **13 38 45.3** | **-0.5** |
| | comp=Z,80nm,1.1s,comp=Z,1µm | | | | | | | | |
| **JHJ2** | **Mitsune** | **69.24** | **320** | *e*P | | **P** | **13 38 53.8** | **+0.4** |
| | comp=Z,4µm,2.7s | | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **69.26** | **319** | P | | **P** | **13 38 52.4** | **-1.2** |
| | comp=Z,142nm,0.9s,baz=234,slow=17,SNR=6.5 | | | | | | | | |
| **SRBI** | **Singaraja** | **69.41** | **269** | P | | **P** | **13 38 54.1** | **-0.9** |
| | comp=Z,76nm,1.2s,comp=Z,2µm | | | | | | | | |
| **KBKI** | **Kotabaru** | **70.11** | **274** | P | | **P** | **13 38 59.0** | **-0.3** |
| | comp=Z,66nm,1.3s,comp=Z,3µm | | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **70.28** | **268** | *e*P | | **P** | **13 38 58.8** | **-1.6** |
| | comp=Z,72nm,1.0s | | | | | | | | |
| **BLJI** | **Banyuglugur** | **71.04** | **269** | P | | **P** | **13 39 05.9** | **+0.9** |
| | comp=Z,77nm,1.0s,comp=Z,2µm | | | | | | | | |
| **MYLDM** | **Lahad Datu** | **71.10** | **283** | *e*P | | **P** | **13 39 06.5** | **+1.1** |
| | comp=Z,1µm,3.0s | | | | | | | | |
| **BBKI** | **Banjar Baru** | **71.30** | **273** | P | | **P** | **13 39 07.1** | **+0.6** |
| | comp=Z,103nm,2.1s,comp=Z,3µm | | | | | | | | |
| **TSM** | **Tawau** | **71.33** | **282** | ⇑P | | **P** | **13 39 07.2** | **+0.5** |
| **ATKA** | **Atka Island** | **72.34** | **360** | *e*P | | **P** | **13 39 12.5** | **+0.7** |
| | comp=Z,1µm,2.4s | | | | | | | | |
| **SDKM** | **Sandakan** | **72.48** | **283** | ⇓P | | **P** | **13 39 14.2** | **+0.5** |
| **MAJO** | **Matsushiro** | **72.55** | **321***c* | *i*P | | **P** | **13 39 13.5** | **-0.1** |
| MAJO | | | | pmax | | pmax | | | |
| | comp=Z,969nm,2.9s | | | | | | | | |
| MAJO | | | | MLR | | MLR | | | |
| | comp=Z,7µm,18.0s | | | | | | | | |
| **MAJO** | **Matsushiro** | **72.55** | **321** | *e*P | | **P** | **13 39 13.5** | **-0.1** |
| | comp=Z,487nm,2.5s | | | | | | | | |
| MAJO | | | | LR | | LR | | | |
| | comp=Z,1µm,19.0s | | | | | | | | |
| **MAT** | **Matsushiro** | **72.55** | **321** | P | | **P** | **13 39 13.2** | **-0.4** |
| MAT | | | | S | | **S** | **13 48 40.0** | **+2.6** |
| **MIR** | **Mirnyy** | **72.68** | **205** | ⇑*i*P | | P | 13 39 25.0 | +11 |
| MIR | | | | pmax | | pmax | | | |
| | comp=Z,100nm,2.0s | | | | | | | | |
| **PCJI** | **Pacitan** | **73.16** | **267** | P | | **P** | **13 39 19.7** | **+2.0** |
| | comp=Z,215nm,1.0s | | | | | | | | |
| **NGJI** | **Ngawi** | **73.16** | **268** | P | | P | 13 39 31.4 | +14 |
| **WOJI** | **Wonogiri, Jawa** | **73.51** | **268** | P | | **P** | **13 39 22.7** | **+2.9** |
| | comp=Z,158nm,1.4s,comp=Z,8µm | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **73.53** | **283** | P | | **P** | **13 39 20.3** | **+0.3** |
| | baz=73,SNR=15 | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **73.53** | **283** | ⇑P | | **P** | **13 39 21.0** | **+1.0** |
| **KKM** | **Kota Kinabalu** | **73.53** | **283** | *e*P | | **P** | **13 39 19.9** | **0.0** |
| | comp=Z,40nm,0.9s | | | | | | | | |
| KKM | | | | LR | | LR | | | |
| | comp=Z,999nm,21.0s | | | | | | | | |
| **SMY** | **Shemya** | **73.62** | **352** | PFAKE | | | 13 39 30.0 | +11 | |
| SMY | | | | LR | | LR | | | |
| | comp=Z,4µm,21.0s | | | | | | | | |
| **ERM** | **Erimo** | **73.77** | **328** | P | | **P** | **13 39 20.0** | **-0.6** |
| **ERM** | **Erimo** | **73.77** | **328** | PFAKE | | | 13 39 30.0 | +9.4 | |
| ERM | | | | LR | | LR | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **UGM** | **Wanagama** | **73.86** | **267** | P | | **P** | **13 39 21.2** | **-0.7** |
| | baz=74,SNR=4.2 | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **74.02** | **331***c* | *i*P | | **P** | **13 39 20.8** | **-1.2** |
| YUK | | | | *i* | | | 13 39 33.3 | | |
| YUK | | | | *i*S | | **S** | **13 48 55.1** | **+1.4** |
| YUK | | | | *i* | | | 13 49 32.8 | | |
| YUK | | | | pmax | | pmax | | | |
| | comp=Z,760nm,3.0s | | | | | | | | |
| YUK | | | | pmax | | pmax | | | |
| | comp=N,190nm,1.2s | | | | | | | | |
| YUK | | | | pmax | | pmax | | | |
| | comp=E,71nm,1.2s | | | | | | | | |
| YUK | | | | pmax | | pmax | | | |
| | comp=Z,192nm,1.2s | | | | | | | | |
| **KUR** | **Kuril'sk** | **74.08** | **333***c* | *i*P | | **P** | **13 39 22.6** | **+0.3** |
| KUR | | | | *e* | | | 13 42 12.1 | | |
| KUR | | | | *i* PPP | | PPP | 13 43 49.0 | | |
| KUR | | | | *i*S | | **S** | **13 48 55.1** | **+0.8** |
| KUR | | | | *i* | | | 13 49 31.9 | | |
| KUR | | | | *i* SS | | **SS** | **13 53 42.0** | **+2.0** |
| KUR | | | | *e*SSS | | SSS | 13 56 55.6 | | |
| KUR | | | | pmax | | pmax | | | |
| | comp=E,43nm,2.4s | | | | | | | | |
| KUR | | | | pmax | | pmax | | | |
| | comp=Z,131nm,2.4s | | | | | | | | |
| KUR | | | | pmax | | pmax | | | |
| | comp=N,34nm,1.2s | | | | | | | | |
| KUR | | | | pmax | | pmax | | | |
| | comp=Z,870nm,3.0s | | | | | | | | |
| **SMRI** | **Semarang** | **74.22** | **268** | P | | **P** | **13 39 26.6** | **+2.7** |
| | comp=Z,102nm,2.2s,comp=Z,4µm | | | | | | | | |
| **SNCC** | **San Nicolas Is** | **74.40** | **45** | P | | **P** | **13 39 25.3** | **+0.7** |
| | baz=75 | | | | | | | | |
| **BSC** | **Santa Cruz Isl** | **74.79** | **44** | P | | **P** | **13 39 27.2** | **+0.4** |
| | baz=75,SNR=5.4 | | | | | | | | |
| **SCI** | **San Clemente I** | **74.89** | **46** | P | | **P** | **13 39 27.7** | **+0.3** |
| | baz=75,SNR=6.2 | | | | | | | | |
| **JNU** | **Nakatsue** | **74.97** | **314** | P | | **P** | **13 39 28.3** | **+0.4** |
| | comp=Z,28nm,0.9s,baz=103,slow=5.8,SNR=16 | | | | | | | | |
| **JNU** | **Nakatsue** | **74.97** | **314** | *e*P | | **P** | **13 39 27.9** | **+0.1** |
| | comp=Z,225nm,1.6s | | | | | | | | |
| JNU | | | | LR | | LR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **SBC** | **Santa Barbara** | **75.01** | **44** | P | | **P** | **13 39 28.4** | **+0.4** |
| | baz=75 | | | | | | | | |
| **PKM** | **Peak Mountain** | **75.22** | **43** | P | | **P** | **13 39 29.9** | **+0.4** |
| | baz=76,SNR=12 | | | | | | | | |
| **SMMC** | **Simmler** | **75.36** | **43** | P | | **P** | **13 39 30.5** | **+0.4** |
| | baz=76 | | | | | | | | |
| **SAO** | **San Andreas Ge** | **75.37** | **41** | *e*P | | **P** | **13 39 30.6** | **+0.5** |
| SAO | | | | pmax | | pmax | | | |
| | comp=Z,42nm,1.1s | | | | | | | | |
| SAO | | | | MLR | | MLR | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **SAO** | **San Andreas Ge** | **75.37** | **41** | *e*P | | **P** | **13 39 30.6** | **+0.5** |
| | comp=Z,42nm,1.1s | | | | | | | | |
| SAO | | | | LR | | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **LRV** | **Little Rabbit** | **75.42** | **42** | *e*P | | **P** | **13 39 31.2** | **+0.8** |
| **ASAJ** | **Asahikawa** | **75.61** | **329** | P | | **P** | **13 39 31.8** | **+0.6** |
| | comp=Z,15nm,1.0s,baz=324,slow=22,SNR=4.2 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **75.61** | **329** | P | | **P** | **13 39 31.8** | **+0.6** |
| ASAJ | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **75.61** | **341** | ⇑*i*P | | P | 13 39 24.0 | -7.1 | |
| SKR | | | | *e* | | | 13 39 34.0 | | |
| SKR | | | | *e* | | | 13 39 37.0 | | |
| SKR | | | | *e* | | | 13 42 25.0 | | |
| SKR | | | | *e*PPP | | PPP | 13 44 08.0 | | |
| SKR | | | | *e*S | | **S** | **13 49 06.0** | **-5.2** |
| SKR | | | | *e* | | | 13 49 43.0 | | |
| SKR | | | | *e*PS | | PnS | 13 50 00.0 | +11 | |
| SKR | | | | *e*SSS | | SSS | 13 57 14.0 | | |
| SKR | | | | pmax | | pmax | | | |
| | comp=N,800nm,4.0s | | | | | | | | |
| SKR | | | | pmax | | pmax | | | |
| | comp=E,2µm,4.0s | | | | | | | | |
| SKR | | | | pmax | | pmax | | | |
| | comp=Z,2µm,4.0s | | | | | | | | |
| SKR | | | | pmax | | pmax | | | |
| | comp=Z,110nm,1.0s | | | | | | | | |
| SKR | | | | smax | | smax | | | |
| | comp=N,3µm,12.0s | | | | | | | | |
| SKR | | | | smax | | smax | | | |
| | comp=E,2µm,12.0s | | | | | | | | |
| SKR | | | | MLR | | MLR | | | |
| | comp=N,1µm,18.0s | | | | | | | | |
| SKR | | | | MLR | | MLR | | | |
| | comp=E,1µm,18.0s | | | | | | | | |
| SKR | | | | MLR | | MLR | | | |
| | comp=Z,1µm,18.0s | | | | | | | | |
| **OSI** | **Osito Adit** | **75.76** | **44** | P | | **P** | **13 39 33.1** | **+0.7** |
| | baz=76 | | | | | | | | |
| **OSI** | **Osito Adit** | **75.76** | **44** | *e*P | | **P** | **13 39 33.1** | **+0.7** |
| | comp=Z,66nm,1.4s | | | | | | | | |
| OSI | | | | LR | | LR | | | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **DECC** | **Green Verdugo** | **75.80** | **45** | P | | **P** | **13 39 33.0** | **+0.4** |
| | baz=76 | | | | | | | | |
| **109C** | **Camp Elliot, M** | **75.81** | **47** | P | | **P** | **13 39 33.3** | **+0.6** |
| | baz=76 | | | | | | | | |
| **HOPS** | **Hopland** | **75.85** | **39** | PFAKE | | | 13 39 40.0 | +7.3 | |
| HOPS | | | | LR | | LR | | | |
| | comp=Z,3µm,20.0s | | | | | | | | |
| **SBUM** | **Sibu** | **75.85** | **278** | *e*P | | **P** | **13 39 33.4** | **0.0** |
| | comp=Z,145nm,1.8s | | | | | | | | |
| SBUM | | | | LR | | LR | | | |
| | comp=Z,800nm,22.0s | | | | | | | | |
| **PASC** | **Pasadena Art C** | **75.85** | **45** | *e*P | | **P** | **13 39 34.7** | **+1.8** |
| | comp=Z,35nm,1.1s | | | | | | | | |
| PASC | | | | LR | | LR | | | |
| | comp=Z,3µm,20.0s | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **75.94** | **303** | *e*P | | **P** | **13 39 34.6** | **+1.1** |
| YOJ | | | | pmax | | pmax | | | |
| | comp=Z,214nm,0.9s | | | | | | | | |
| **YOJ** | **Yonaguni jima** | **75.94** | **303** | *e*P | | **P** | **13 39 34.6** | **+1.1** |
| | comp=Z,214nm,0.9s | | | | | | | | |
| **MWC** | **Mount Wilson** | **75.97** | **45** | *e*P | | **P** | **13 39 32.6** | **-1.2** |
| MWC | | | | pmax | | pmax | | | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **MWC** | **Mount Wilson** | **75.97** | **45** | *e*P | | **P** | **13 39 32.6** | **-1.2** |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **BAR** | **Barrett** | **75.99** | **47** | *e*P | | **P** | **13 39 33.8** | **+0.1** |
| | comp=Z,121nm,2.2s | | | | | | | | |
| BAR | | | | LR | | LR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **ARVC** | **Arvin** | **76.00** | **44** | P | | **P** | **13 39 33.9** | **+0.2** |
| | baz=76 | | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **76.14** | **58** | PFAKE | | | 13 39 50.0 | +15 | |
| SLBS | | | | LR | | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **KIPM** | **Iron Peak** | **76.15** | **38** | *e*P | | P | 13 39 38.0 | +3.4 | |
| **MURC** | **Murrieta** | **76.17** | **46** | P | | **P** | **13 39 35.3** | **+0.6** |
| | baz=76,SNR=5.3 | | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **76.24** | **45** | P | | **P** | **13 39 35.2** | **0.0** |
| | baz=76,SNR=7.1 | | | | | | | | |
| **VES** | **Vestal, Richgr** | **76.28** | **43** | P | | **P** | **13 39 35.6** | **+0.4** |
| | baz=76,SNR=15 | | | | | | | | |
| **MONP** | **Monument Peak** | **76.28** | **47** | P | | **P** | **13 39 35.6** | **0.0** |
| | baz=76,SNR=33 | | | | | | | | |
| **KMRM** | **Mail Ridge** | **76.30** | **37** | *e*P | | **P** | **13 39 36.4** | **+1.0** |
| | comp=Z,72nm,1.2s | | | | | | | | |
| KMRM | | | | LR | | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **IBP** | **Imperial Bould** | **76.37** | **47** | P | | **P** | **13 39 36.1** | **+0.1** |
| | baz=77,SNR=17 | | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **76.40** | **44** | P | | **P** | **13 39 36.3** | **+0.2** |
| | baz=77,SNR=60 | | | | | | | | |
| **CISI** | **Cisompet, Garu** | **76.51** | **267** | P | | **P** | **13 39 37.8** | **+0.6** |
| | comp=Z,232nm,1.4s,comp=Z,3µm | | | | | | | | |
| **CISI** | **Cisompet, Garu** | **76.51** | **267** | *e*P | | **P** | **13 39 36.6** | **-0.6** |
| | comp=Z,102nm,0.9s | | | | | | | | |
| CISI | | | | LR | | LR | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| **ISA** | **Isabella** | **76.56** | **44** | *e*P | | **P** | **13 39 37.1** | **+0.1** |
| ISA | | | | pmax | | pmax | | | |
| | comp=Z,49nm,1.1s | | | | | | | | |
| ISA | | | | MLR | | MLR | | | |
| | comp=Z,3µm,20.0s | | | | | | | | |
| **ISA** | **Isabella** | **76.56** | **44** | P | | **P** | **13 39 37.2** | **+0.2** |
| | baz=77,SNR=52 | | | | | | | | |
| **ISA** | **Isabella** | **76.56** | **44** | *e*P | | **P** | **13 39 37.1** | **+0.2** |
| | comp=Z,49nm,1.1s | | | | | | | | |
| ISA | | | | LR | | LR | | | |
| | comp=Z,3µm,20.0s | | | | | | | | |
| **TWG** | **Pinlang** | **76.67** | **301** | *e*P | | **P** | **13 39 36.4** | **-1.4** |
| | comp=Z,883nm,1.7s | | | | | | | | |
| TWG | | | | LR | | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.68** | **46** | *e*P | | **P** | **13 39 37.2** | **-0.5** |
| PFO | | | | pmax | | pmax | | | |
| | comp=Z,57nm,1.3s | | | | | | | | |
| PFO | | | | MLR | | MLR | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.68** | **46** | P | | **P** | **13 39 37.0** | **-0.7** |
| | comp=Z,162nm,1.2s,SNR=20 | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.68** | **46** | P | | **P** | **13 39 37.3** | **-0.5** |
| | comp=Z,162nm,1.2s,SNR=20 | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.68** | **46** | *e*P | | **P** | **13 39 37.2** | **-0.5** |
| | comp=Z,57nm,1.3s | | | | | | | | |
| PFO | | | | LR | | LR | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **KHMM** | **Horse Mountain** | **76.72** | **37** | PFAKE | | | 13 39 50.0 | +12 | |
| KHMM | | | | LR | | LR | | | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **76.74** | **47** | P | | **P** | **13 39 38.1** | **+0.1** |
| | baz=77 | | | | | | | | |
| **BBRC** | **Big Bear Solar** | **76.75** | **45** | P | | **P** | **13 39 38.5** | **+0.3** |
| | baz=77 | | | | | | | | |
| **YULB** | **Yu-li** | **76.77** | **301** | *e*P | | **P** | **13 39 37.1** | **-1.2** |
| | comp=Z,202nm,1.8s | | | | | | | | |
| **CMB** | **Columbia Colle** | **76.83** | **41** | *e*P | | **P** | **13 39 38.0** | **-0.4** |
| CMB | | | | pmax | | pmax | | | |
| | comp=Z,32nm,1.1s | | | | | | | | |
| CMB | | | | MLR | | MLR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **CMB** | **Columbia Colle** | **76.83** | **41** | *e*P | | **P** | **13 39 38.0** | **-0.4** |
| | comp=Z,32nm,1.1s | | | | | | | | |
| CMB | | | | LR | | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **NACB** | **Ninganchiao** | **76.91** | **302** | *e*P | | **P** | **13 39 39.0** | **0.0** |
| | comp=Z,253nm,1.1s | | | | | | | | |
| **PET** | **Petropavlovsk** | **76.96** | **343***c* | *i*P | | **P** | **13 39 36.9** | **-1.7** |
| PET | | | | *e*S | | **S** | **13 49 27.1** | **+1.3** |
| PET | | | | *e*PS | | **PnS** | **13 50 05.5** | **-0.3** |
| PET | | | | pmax | | pmax | | | |
| | comp=Z,58nm,3.0s | | | | | | | | |
| PET | | | | pmax | | pmax | | | |
| | comp=Z,800nm,14.3s | | | | | | | | |
| PET | | | | pmax | | pmax | | | |
| | comp=Z,800nm,7.8s | | | | | | | | |
| **PET** | **Petropavlovsk** | **76.96** | **343** | PFAKE | | | 13 39 50.0 | +11 | |
| PET | | | | LR | | LR | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **LRMC** | **Laurel Mountai** | **76.96** | **44** | P | | **P** | **13 39 39.6** | **+0.3** |
| | baz=77,SNR=31 | | | | | | | | |
| **OHCM** | **Honcut** | **77.00** | **39** | *e*P | | **P** | **13 39 39.0** | **-0.3** |
| **WDC** | **Whiskeytown Da** | **77.20** | **38** | *e*P | | **P** | **13 39 40.5** | **+0.2** |
| WDC | | | | pmax | | pmax | | | |
| | comp=Z,40nm,1.4s | | | | | | | | |
| WDC | | | | MLR | | MLR | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **WDC** | **Whiskeytown Da** | **77.20** | **38** | *e*P | | **P** | **13 39 40.5** | **+0.2** |
| | comp=Z,40nm,1.4s | | | | | | | | |
| WDC | | | | LR | | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **77.21** | **46** | P | | **P** | **13 39 40.9** | **+0.1** |
| | baz=78,SNR=36 | | | | | | | | |
| **SSLB** | **Suanglung** | **77.23** | **301** | *e*P | | **P** | **13 39 40.8** | **-0.2** |
| | comp=Z,84nm,1.1s | | | | | | | | |
| SSLB | | | | LR | | LR | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| **TPUB** | **Ta-pu** | **77.26** | **301** | *e*P | | **P** | **13 39 40.0** | **-1.1** |
| | comp=Z,215nm,0.9s | | | | | | | | |
| TPUB | | | | LR | | LR | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **KSM** | **Kuching** | **77.27** | **276** | P | | **P** | **13 39 42.5** | **+1.1** |
| | baz=77,SNR=52 | | | | | | | | |
| **KSM** | **Kuching** | **77.27** | **276** | *e*P | | **P** | **13 39 42.0** | **+0.7** |
| | comp=Z,437nm,1.9s | | | | | | | | |
| KSM | | | | LR | | LR | | | |
| | comp=Z,1µm,19.0s | | | | | | | | |
| **CWC** | **Cottonwood Cre** | **77.29** | **43** | P | | **P** | **13 39 41.5** | **+0.3** |
| | baz=78 | | | | | | | | |
| **PEA0** | **Petropavlovsk-** | **77.29** | **343** | *e*P | | **P** | **13 39 40.5** | **0.0** |
| **PETK** | **Petropavlovsk-** | **77.29** | **343** | P | | **P** | **13 39 40.4** | **-0.2** |
| | comp=Z,36nm,1.0s,baz=123,slow=7.9,SNR=20 | | | | | | | | |
| PETK | | | | LR | | LR | 14 09 38.8 | | |
| | comp=Z,674nm,20.6s,baz=162,slow=33 | | | | | | | | |
| **YHNB** | **Yeheng** | **77.33** | **302** | *e*P | | **P** | **13 39 41.1** | **-0.4** |
| | comp=Z,221nm,1.2s | | | | | | | | |
| YHNB | | | | LR | | LR | | | |
| | comp=Z,2µm,19.0s | | | | | | | | |
| **N02D** | **Trinity Center** | **77.37** | **37** | P | | **P** | **13 39 41.9** | **+0.5** |
| | baz=78 | | | | | | | | |
| **BC3** | **Big Chuckawall** | **77.38** | **47** | P | | **P** | **13 39 42.0** | **+0.3** |
| | baz=78,SNR=18 | | | | | | | | |
| **TATO** | **Taipei** | **77.39** | **303** | *e*P | | **P** | **13 39 40.2** | **-1.5** |
| | comp=Z,690nm,1.8s | | | | | | | | |
| **GSC** | **Goldstone** | **77.44** | **45** | *e*P | | **P** | **13 39 41.4** | **-0.5** |
| GSC | | | | pmax | | pmax | | | |
| | comp=Z,44nm,1.3s | | | | | | | | |
| GSC | | | | MLR | | MLR | | | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **GSC** | **Goldstone** | **77.44** | **45** | P | | **P** | **13 39 42.2** | **+0.3** |
| | baz=78,SNR=25 | | | | | | | | |
| **GSC** | **Goldstone** | **77.44** | **45** | *e*P | | **P** | **13 39 41.4** | **-0.5** |
| | comp=Z,44nm,1.3s | | | | | | | | |
| GSC | | | | LR | | LR | | | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **MPMC** | **Manual Prospec** | **77.44** | **44** | P | | **P** | **13 39 42.4** | **+0.4** |
| | baz=78,SNR=78 | | | | | | | | |
| **O03D** | **Paynes Creek** | **77.44** | **38** | P | | **P** | **13 39 42.2** | **+0.4** |
| | baz=78 | | | | | | | | |
| **GLA** | **Glamis** | **77.47** | **48** | *e*P | | **P** | **13 39 43.1** | **+1.0** |
| GLA | | | | pmax | | pmax | | | |
| | comp=Z,68nm,1.3s | | | | | | | | |
| GLA | | | | MLR | | MLR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **GLA** | **Glamis** | **77.47** | **48** | P | | **P** | **13 39 42.3** | **+0.1** |
| | baz=78,SNR=8.3 | | | | | | | | |
| **GLA** | **Glamis** | **77.47** | **48** | *e*P | | **P** | **13 39 43.1** | **+1.0** |
| | comp=Z,68nm,1.3s | | | | | | | | |
| GLA | | | | LR | | LR | | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **HEC** | **Hector,Ludlow** | **77.47** | **45** | P | | **P** | **13 39 42.6** | **+0.4** |
| | baz=78,SNR=17 | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **77.50** | **43** | *e*P | | **P** | **13 39 42.9** | **+0.5** |
| DAC | | | | pmax | | pmax | | | |
| | comp=Z,94nm,1.8s | | | | | | | | |
| DAC | | | | MLR | | MLR | | | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **77.50** | **43** | *e*P | | **P** | **13 39 42.9** | **+0.5** |
| | comp=Z,94nm,1.8s | | | | | | | | |
| DAC | | | | LR | | LR | | | |
| | comp=Z,4µm,19.0s | | | | | | | | |
| **MLAC** | **Mammoth Lakes** | **77.54** | **42** | P | | **P** | **13 39 42.8** | **+0.2** |
| | baz=78,SNR=11 | | | | | | | | |
| **MTUM** | **Tungsten Hills** | **77.54** | **42** | *e*P | | **P** | **13 39 43.0** | **+0.4** |
| **M02C** | **Callahan** | **77.56** | **37** | P | | **P** | **13 39 43.4** | **+0.9** |
| | baz=78 | | | | | | | | |
| **TIN** | **Tinemaha** | **77.57** | **43** | P | | **P** | **13 39 43.2** | **+0.5** |
| | baz=78 | | | | | | | | |
| **L02D** | **Cave Junction,** | **77.66** | **36** | P | | **P** | **13 39 43.4** | **+0.5** |
| | baz=78 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **77.66** | **331***o* | *e*

**Y12C Blythe** 78.08 47 P P 13 39 45.7 +0.3
baz=78,SNR=16
**GRAC Grapevine Rang** 78.08 43 P P 13 39 46.0 +0.6
baz=78,SNR=10
**KSULJ Uljin** 78.08 317 P P 13 39 47.8 +2.4
SNR=5.3
**KSULJ Uljin** 78.08 317 P P 13 39 47.8 +2.4
SNR=5.3
**FURC Furnace Creek,** 78.09 44 P P 13 39 46.1 +0.7
baz=78
**KSJJU Jeju** 78.10 313 P P 13 39 47.9 +2.3
SNR=6.0
**KSJJU Jeju** 78.10 313 P P 13 39 47.9 +2.3
SNR=6.0
**TPI Tanjungpandan** 78.27 271 P P 13 39 48.2 +1.2
comp=Z,71nm,1.9s,comp=Z,2µm
**214A Organ Pipe Nat** 78.28 49 P P 13 39 47.1 +0.5
baz=78,SNR=16
**214A Organ Pipe Nat** 78.28 49 P P 13 39 44.8 -1.8
comp=Z,253nm,1.3s
**HUMO Hull Mountain** 78.32 36 eP P 13 39 46.5 0.0
comp=Z,398nm,1.9s
**NV01 Mina Array Sit** 78.36 41 eP P 13 39 46.8 -0.4
**NVAR Mina Array Bea** 78.36 41 P P 13 39 47.1 0.0
comp=Z,38nm,0.9s,baz=225,slow=9.3,SNR=108
NVAR LR LR 14 09 47.7
comp=Z,6µm,18.5s,baz=248,slow=32
**M04C Macdoel** 78.39 37 P P 13 39 47.9 +0.7
baz=79
**LDFC Landfair** 78.43 46 eP P 13 39 48.0 +0.5
comp=Z,88nm,1.1s
LDFC LR LR
comp=Z,3µm,21.0s
**SII Sitkinak Islan** 78.48 11 PFAKE 13 40 00.0 +13
SII LR LR
comp=Z,4µm,20.0s
**SBJI Serang** 78.56 268 P P 13 39 50.5 +1.9
comp=Z,245nm,1.5s,comp=Z,8µm
**PDMCI Parker Dam,Lak** 78.65 47 P P 13 39 49.1 +0.6
baz=79,SNR=16
**TPNV Topopah Spring** 78.77 44 eP P 13 39 49.6 +0.2
TPNV pmax pmax
comp=Z,56nm,1.1s
TPNV MLR MLR
comp=Z,4µm,19.0s
**TPNV Topopah Spring** 78.77 44 P P 13 39 49.5 +0.1
baz=79,SNR=48
**TPNV Topopah Spring** 78.77 44 eP P 13 39 49.6 +0.2
comp=Z,56nm,1.1s
TPNV LR LR
comp=Z,4µm,19.0s
**KSKWJ Gwangju** 78.77 314 P P 13 39 51.7 +2.4
SNR=7.7
**CGJI Cibinong** 78.81 267 P P 13 39 49.6 -0.3
comp=Z,241nm,1.2s,comp=Z,3µm
**KSJES JEONGSEON** 78.99 317 P P 13 39 53.0 +2.6
SNR=5.3
**K04D Chiloquin, OR** 78.99 36 P P 13 39 51.1 +0.7
baz=79
**KSDGY Daegwallycong** 79.14 317 P P 13 39 53.5 +2.3
SNR=8.1
**KSDGY Daegwallycong** 79.14 317 P P 13 39 53.5 +2.3
SNR=8.1
**KSJMJ Jumunjin** 79.20 317 P P 13 39 53.6 +2.2
SNR=9.4
**KSJMJ Jumunjin** 79.20 317 P P 13 39 53.6 +2.2
SNR=9.4
**J04D Umpqua Nationa** 79.20 36 P P 13 39 52.4 +0.8
baz=80
**SHPR Sheep Range** 79.22 44 eP P 13 39 52.2 +0.4
**TJN Taejon** 79.22 315 c iP P 13 39 52.5 +0.9
**OHAK Old Harbor** 79.27 11 PFAKE 13 40 00.0 +8.6
OHAK LR LR
comp=Z,5µm,20.0s
**MOD Modoc** 79.34 38 eP P 13 39 52.4 0.0
comp=Z,45nm,1.4s
MOD LR LR
comp=Z,4µm,20.0s
**I04A Tendick Farm,** 79.41 35 P P 13 39 53.1 +0.6
baz=80
**COR Corvallis** 79.46 34 PFAKE 13 40 00.0 +7.3
COR LR LR
comp=Z,8µm,19.0s
**KSRS Korea Array** 79.48 317 P P 13 39 53.6 +0.6
comp=Z,16nm,0.9s,baz=138,slow=5.9,SNR=43
KSRS LR LR 14 09 38.8
comp=Z,1µm,21.9s,baz=120,slow=32
**KSAR Wonju Array Be** 79.50 316 P P 13 39 53.6 +0.5
**KSAR Wonju Array Be** 79.50 316 P P 13 39 53.6 +0.5
**KS01 Wonju Array Si** 79.51 317 eP P 13 39 54.3 +1.1
**K05A Summer Lake** 79.54 37 eP P 13 39 53.8 +0.2
comp=Z,192nm,1.8s
K05A LR LR
comp=Z,5µm,20.0s
**QZH Quanzhou** 79.68 301 ⇑ iP P 13 39 56.9 +2.5
QZH S S 13 50 01.1 +4.8
QZH PMZ
comp=Z,3µm,3.9s
QZH LN
comp=Z,1µm,14.9s
QZH LE
comp=Z,2µm,13.8s
QZH LZ
comp=Z,2µm,21.5s
**J05D Fort Rock, OR** 79.71 36 P P 13 39 54.8 +0.4
baz=80,SNR=13
**KSCHC Chuncheon** 79.74 317 P P 13 39 56.1 +1.7
SNR=12
**KSCHC Chuncheon** 79.74 317 P P 13 39 56.1 +1.7
SNR=12
**TUC Tucson** 79.92 50 eP P 13 39 56.3 +0.6
TUC pmax pmax
comp=Z,49nm,1.1s
TUC MLR MLR
comp=Z,4µm,19.0s
**TUC Tucson** 79.92 50 eP P 13 39 56.3 +0.6
comp=Z,49nm,1.1s
TUC LR LR
comp=Z,4µm,19.0s
**KDAK Kodiak Island** 79.93 11 P P 13 39 55.0 +0.1
comp=Z,14nm,1.0s,baz=293,slow=14,SNR=3.8
**KDAK Kodiak Island** 79.93 11 P P 13 39 55.0 +0.1
KDAK MLR MLR
comp=Z,3µm,20.0s
**KDAK Kodiak Island** 79.93 11 P P 13 39 55.0 +0.1
KDAK LR LR
comp=Z,3µm,20.0s
**R11A Troy Canyon, C** 80.02 43 P P 13 39 56.2 0.0
baz=80,SNR=45
**R11A Troy Canyon, C** 80.02 43 eP P 13 39 56.2 0.0
comp=Z,26nm,1.1s
R11A LR LR
comp=Z,3µm,20.0s
**KSCWO Cheorwon** 80.11 317 P P 13 39 58.6 +2.1
SNR=9.2
**KSCWO Cheorwon** 80.11 317 P P 13 39 58.6 +2.1
SNR=9.2
**H04A Detroit Lake** 80.12 35 eP P 13 39 56.5 +0.1
comp=Z,102nm,2.1s
H04A LR LR
comp=Z,6µm,19.0s
**KSSEO Seoul** 80.15 316 P P 13 39 59.8 +3.2
SNR=6.6
**F03A Seaside** 80.24 33 PFAKE 13 40 10.0 +13
F03A LR LR
comp=Z,3µm,19.0s
**BMN Battle Mountai** 80.24 40 eP P 13 39 57.4 +0.1
BMN pmax pmax
comp=Z,44nm,1.2s
BMN MLR MLR
comp=Z,4µm,19.0s
**BMN Battle Mountai** 80.24 40 eP P 13 39 57.4 +0.1
comp=Z,44nm,1.2s
BMN LR LR
comp=Z,4µm,19.0s
**KASI Kota Agung** 80.30 268 P P 13 39 57.6 -0.4
comp=Z,247nm,1.0s,comp=Z,3µm
**KSDDC Dongducheon** 80.30 316 P P 13 39 60.0 +2.5
SNR=7.2
**KSDDC Dongducheon** 80.30 316 P P 13 39 60.0 +2.5
SNR=7.2
**INCN Inchon** 80.33 316 PFAKE 13 40 10.0 +12
INCN LR LR
comp=Z,1µm,21.0s
**I05D Terrebonne, OR** 80.34 35 P P 13 39 58.2 +0.5
baz=81
**KLSI** 80.36 269 P P 13 39 58.0 -0.4
comp=Z,153nm,1.5s,comp=Z,2µm
**YNCB YEONCHEON** 80.46 317 P P 13 40 00.4 +2.0
SNR=7.3
**YNCB YEONCHEON** 80.46 317 P P 13 40 00.4 +2.0
SNR=7.3
**VLA Vladivostok** 80.54 323 c iP P 13 39 59.7 +1.1
VLA pmax pmax
comp=Z,70nm,1.6s
VLA MLR MLR
comp=Z,1µm,19.0s
**KSGAH Ganghwa** 80.58 316 P P 13 40 01.1 +2.1
SNR=7.0
**MSHR Mys Shultsa** 80.61 322 P P 13 40 00.0 +1.0
**F04D Rainier, OR** 80.62 33 P P 13 39 59.7 +0.7
baz=81
**WVOR Wild Horse Val** 80.64 38 eP P 13 39 58.3 -1.1
WVOR pmax pmax
comp=Z,33nm,1.2s
WVOR MLR MLR
comp=Z,4µm,20.0s
**WVOR Wild Horse Val** 80.64 38 eP P 13 39 58.3 -1.1
comp=Z,33nm,1.2s
WVOR LR LR
comp=Z,4µm,20.0s
**E03A Lebam** 80.66 33 PFAKE 13 40 10.0 +11
E03A LR LR
comp=Z,6µm,19.0s
**SSE Sheshan** 80.69 308 P P 13 39 58.6 -1.1
SSE S S 13 50 10.8 +4.2
SSE PMZ
comp=Z,24nm,0.7s
SSE PMZ
comp=Z,720nm,7.2s
SSE LN
comp=Z,470nm,29.0s
SSE LE
comp=Z,740nm,29.0s
SSE LZ
comp=Z,1µm,30.0s
**F04A Amboy** 80.83 34 PFAKE 13 40 10.0 +10
F04A LR LR
comp=Z,4µm,19.0s
**LWLI Liwa** 80.88 268 P P 13 40 01.9 +0.6
comp=Z,199nm,0.9s
**PMBI Palembang** 80.92 270 P P 13 40 03.5 +2.1
comp=Z,333nm,1.3s
**MDSI Maura Dua** 80.94 269 P P 13 40 00.3 -1.2
comp=Z,138nm,1.1s,comp=Z,3µm
**G05D Wamic, OR** 80.95 35 P P 13 40 01.3 +0.5
baz=81
**CCUT Cedar City** 81.00 44 eP P 13 40 02.3 +0.7
comp=Z,49nm,1.1s
CCUT LR LR
comp=Z,2µm,20.0s
**USRK Ussuriysk Ar.** 81.17 324 P P 13 40 03.0 +1.1
comp=Z,14nm,1.1s,baz=111,slow=4.3,SNR=17
USRK LR LR 14 11 58.8
comp=Z,3µm,20.0s,baz=120,slow=33
**I07A Izee** 81.19 36 eP P 13 40 02.3 0.0
comp=Z,267nm,2.5s
I07A LR LR
comp=Z,5µm,19.0s
**WUAZ Wupatki** 81.21 47 P P 13 40 02.5 -0.2
baz=82
**WUAZ Wupatki** 81.21 47 eP P 13 40 03.3 +0.6
comp=Z,66nm,1.3s
WUAZ LR LR
comp=Z,2µm,18.0s
**J08A Circle Bar Ran** 81.31 37 eP P 13 40 03.3 +0.4
comp=Z,44nm,1.4s
J08A LR LR
comp=Z,4µm,20.0s
**G06A Carlson Farm,** 81.31 35 eP P 13 40 03.0 +0.2
comp=Z,165nm,2.1s
G06A LR LR
comp=Z,5µm,20.0s
**ELK Elko** 81.64 41 eP P 13 40 04.9 0.0
ELK pmax pmax
comp=Z,28nm,1.2s
**ELK Elko** 81.64 41 eP P 13 40 04.8 0.0
comp=Z,28nm,1.2s
**LON Longmire** 81.69 33 eP P 13 40 04.7 -0.1
LON pmax pmax
comp=Z,30nm,1.6s
LON MLR MLR
comp=Z,2µm,19.0s
**LON Longmire** 81.69 33 eP P 13 40 04.7 -0.1
comp=Z,30nm,1.6s
LON LR LR
comp=Z,2µm,19.0s
**CNPM China Poot** 81.81 11 eP P 13 40 05.8 +0.8
comp=Z,58nm,1.3s
CNPM LR LR
comp=Z,4µm,20.0s
**HOM Homer** 81.86 11 PFAKE 13 40 20.0 +15
HOM LR LR
comp=Z,4µm,20.0s
**D05A Enumclaw** 81.89 33 eP P 13 40 06.7 +1.0
comp=Z,80nm,1.4s
D05A LR LR
comp=Z,3µm,19.0s
**BRLK Bradley Lake** 82.10 11 eP P 13 40 06.6 +0.1
comp=Z,51nm,1.2s
**W18A Petrified Fore** 82.14 48 P P 13 40 07.5 0.0
baz=82
**W18A Petrified Fore** 82.14 48 PFAKE 13 40 20.0 +12
W18A LR LR
comp=Z,2µm,18.0s
**PGC Sidney** 82.15 31 PFAKE 13 40 20.0 +13
PGC LR LR
comp=Z,3µm,20.0s
**FSU Fish Springs** 82.21 43 eP P 13 40 08.2 +0.5
**121A Cookes Peak, D** 82.21 51 P P 13 40 07.9 -0.2
baz=82,SNR=16
**121A Cookes Peak, D** 82.21 51 eP P 13 40 07.8 -0.2
comp=Z,62nm,1.3s
**G08A Pilot Rock** 82.25 36 eP P 13 40 07.8 -0.1
comp=Z,270nm,2.5s
G08A LR LR
comp=Z,4µm,20.0s
**MSU Marysvale** 82.31 44 eP P 13 40 09.5 +1.0
**MSU Marysvale** 82.31 44 eP P 13 40 09.5 +1.0
**HABR Khabarovsk** 82.38 328 c eP P 13 40 06.8 -1.4
HABR e 13 40 11.8
HABR e 13 43 14.8
HABR ePPP PPP 13 45 05.7
HABR eS S 13 50 23.0 -0.4
HABR e*SS SKSac 13 50 28.8 +0.6
HABR eSS SS 13 55 43.6 -1.3
HABR eSSS SSS 13 59 12.1
HABR pmax pmax
comp=Z,258nm,2.4s
HABR pmax pmax
comp=Z,1µm,3.5s
HABR MLR MLR
comp=Z,1µm,17.0s
**JMBI JAMBI** 82.42 271 P P 13 40 11.9 +2.6
comp=Z,499nm,0.4s,comp=Z,8µm
**B05A Bryant** 82.56 32 P P 13 40 09.7 +0.5
baz=83
**A04D Lummi Island** 82.56 31 P P 13 40 09.9 +0.8
baz=83
**E07A Sunnyside** 82.58 34 eP P 13 40 10.0 +0.6
comp=Z,56nm,1.4s
**SVW2 Sparrevohn** 82.58 9 PFAKE 13 40 20.0 +11
SVW2 LR LR
comp=Z,2µm,21.0s
**LTY Liberty** 82.61 33 eP P 13 40 09.6 0.0
comp=Z,216nm,2.6s
LTY LR LR
comp=Z,3µm,19.0s
**HAWA Hanford** 82.65 35 eP P 13 40 10.2 +0.5
comp=Z,97nm,1.8s
HAWA LR LR
comp=Z,8µm,19.0s
**SEW Seward** 82.69 12 eP P 13 40 09.6 0.0
comp=Z,67nm,1.4s
SEW LR LR
comp=Z,3µm,19.0s
**KSI Kapahiang** 82.71 269 P P 13 40 10.6 -0.3
**MDJ Mudanjiang** 82.77 323 P P 13 40 12.0 +1.7
MDJ PP PP 13 43 43.4 +23
**MDJ Mudanjiang** 82.77 323 S S 13 50 33.3 +5.7
**MDJ Mudanjiang** 82.77 323 P P 13 40 12.1 +1.7
MDJ PP PP 13 43 17.9 -2.9
MDJ S S 13 50 32.3 +4.7
MDJ SS SS 13 55 54.6 +3.8
MDJ PMZ
comp=Z,55nm,1.3s
MDJ PMZ
comp=Z,1µm,6.2s
MDJ LN
comp=Z,1µm,19.8s
MDJ LE
comp=Z,1µm,18.6s
MDJ LZ
comp=Z,2µm,22.1s
**MDJ Mudanjiang** 82.77 323 eP P 13 40 12.1 +1.7
comp=Z,729nm,2.7s
MDJ LR LR
comp=Z,2µm,20.0s
**DUG Dugway** 82.84 42 eP P 13 40 11.1 0.0
DUG pmax pmax
comp=Z,44nm,1.4s
DUG MLR MLR
comp=Z,3µm,19.0s
**DUG Dugway** 82.84 42 P P 13 40 11.2 +0.2
baz=83
**DUG Dugway** 82.84 42 eP P 13 40 11.1 0.0
comp=Z,44nm,1.4s
DUG LR LR
comp=Z,3µm,19.0s
**DLV T Lat** 82.85 286 eP P 13 40 12.1 +0.4
comp=Z,1µm,2.8s
**MFID Camas Ranch** 82.87 39 eP P 13 40 11.0 -0.1
comp=Z,74nm,1.6s
MFID LR LR
comp=Z,2µm,19.0s
**NJ2 Nanjing** 82.89 308 eP P 13 40 12.0 +0.7
NJ2 pP PcP 13 40 15.0 -1.0
NJ2 sP sP 13 40 18.5 -0.7
NJ2 S SKSac 13 50 32.3 0.0
NJ2 sS sS 13 50 40.6 +1.7
NJ2 PMZ
comp=Z,220nm,0.7s
NJ2 PMZ
comp=Z,3µm,6.8s
NJ2 LN
comp=Z,3µm,22.8s
NJ2 LE
comp=Z,3µm,24.0s
NJ2 LZ
comp=Z,4µm,23.8s
**MAW Mawson** 82.90 199 P P 13 40 12.0 +1.2
comp=Z,25nm,0.9s,baz=124,slow=6.3,SNR=58
MAW LR LR 14 17 03.1
comp=Z,5µm,18.3s,baz=112,slow=36
**MAW Mawson** 82.90 199 eP P 13 40 12.0 +1.2
MAW pmax pmax
comp=Z,26nm,1.6s
**MAW Mawson** 82.90 199 P P 13 40 12.0 +1.2
baz=83,SNR=39
**MAW Mawson** 82.90 199 eP P 13 40 12.0 +1.2
comp=Z,26nm,1.6s
**BGU Big Grassy Mou** 83.11 42 eP P 13 40 12.8 +0.3
comp=Z,109nm,2.0s
BGU LR LR
comp=Z,4µm,19.0s
**NLU North Lily Min** 83.17 43 PFAKE 13 40 20.0 +7.1
NLU LR LR
comp=Z,4µm,18.0s
**SPU Mount Spurr** 83.22 10 eP P 13 40 11.7 -0.7
**BTDF Bukit Timah Da** 83.34 274 P P 13 40 14.4 +0.3
baz=83,SNR=4.3
**TMUT Trail Mountain** 83.37 44 eP P 13 40 14.8 +0.7
comp=Z,264nm,1.0s
TMUT LR LR
comp=Z,12µm,20.0s
**D08A Wollman Farm,** 83.39 34 eP P 13 40 13.3 -0.2
comp=Z,75nm,1.4s
D08A LR LR
comp=Z,8µm,19.0s
**MYKOM Kota Tinggi** 83.42 274 eP P 13 40 14.8 +0.4
comp=Z,1µm,2.7s
**RC01 Rabbit Creek A** 83.55 12 PFAKE 13 40 30.0 +16
RC01 LR LR
comp=Z,2µm,18.0s
**MNTX Cornudas Mount** 83.58 53 P P 13 40 14.9 0.0
baz=84
**MNTX Cornudas Mount** 83.58 53 eP P 13 40 14.6 -0.3
comp=Z,35nm,1.0s
MNTX LR LR
comp=Z,3µm,20.0s
**LAZ Ladron** 83.61 50 eP P 13 40 16.4 +1.2
**F10A Beach Ranch, E** 83.63 36 eP P 13 40 14.3 -0.6
comp=Z,303nm,2.3s
F10A LR LR
comp=Z,4µm,20.0s
**O16A Springville** 83.68 43 eP P 13 40 14.1 -1.4
comp=Z,647nm,2.7s
O16A LR LR
comp=Z,2µm,19.0s
**SPUT South Promonto** 83.69 42 eP P 13 40 15.7 +0.2
comp=Z,372nm,2.5s
SPUT LR LR
comp=Z,5µm,19.0s
**SUA Susitna One** 83.71 11 PFAKE 13 40 30.0 +15
SUA LR LR
comp=Z,4µm,20.0s
**SRU San Rafael** 83.72 44 eP P 13 40 16.1 +0.4
SRU pmax pmax
comp=Z,126nm,1.3s
SRU MLR MLR
comp=Z,2µm,18.0s
**SRU San Rafael** 83.72 44 eP P 13 40 16.1 +0.4
comp=Z,126nm,1.3s
SRU LR LR
comp=Z,2µm,18.0s
**PAYG Puerto Ayora** 83.72 88 PFAKE 13 40 30.0 +14
PAYG LR LR
comp=Z,6µm,18.0s
**HVU Hansel Valley** 83.75 41 eP P 13 40 15.8 0.0
HVU pmax pmax
comp=Z,49nm,1.2s
HVU MLR MLR
comp=Z,4µm,19.0s
**HVU Hansel Valley** 83.75 41 eP P 13 40 15.8 0.0
comp=Z,49nm,1.2s
HVU LR LR
comp=Z,4µm,19.0s
**P17A Butcher Ranch,** 83.77 44 eP P 13 40 17.2 +1.3
comp=Z,99nm,1.2s
P17A LR LR
comp=Z,4µm,19.0s
**TX31 Lajitas Ar. Si** 83.77 56 eP P 13 40 15.6 -0.5
**TXAR Lajitas Array** 83.78 56 P P 13 40 16.0 -0.1
comp=Z,13nm,0.9s,baz=218,slow=7.8,SNR=60
TXAR LR LR 14 10 57.6
comp=Z,3µm,19.6s,baz=0.0,slow=31
**HLID Hailey** 83.79 39 P P 13 40 16.2 +0.3
baz=84
**HLID Hailey** 83.79 39 eP P 13 40 15.9 0.0
comp=Z,56nm,1.2s
HLID LR LR
comp=Z,1µm,18.0s
**CTU Camp Tracy** 83.79 43 eP P 13 40 16.5 +0.5
comp=Z,36nm,1.1s
**BNM Barren Site** 83.85 50 eP P 13 40 17.3 +0.7
**EYAK Cordova Ski Ar** 83.86 14 PFAKE 13 40 30.0 +14
EYAK LR LR
comp=Z,4µm,18.0s
**LPM Los Pinos Moun** 83.93 50 eP P 13 40 17.5 +0.7
**RAGM Ragged Mountai** 83.96 14 PFAKE 13 40 30.0 +14
RAGM LR LR
comp=Z,6µm,18.0s
**MVCO Mesa Verde** 84.08 47 P P 13 40 17.6 0.0
baz=84,SNR=7.9
**MVCO Mesa Verde** 84.08 47 eP P 13 40 18.3 +0.7
comp=Z,116nm,1.6s
MVCO LR LR
comp=Z,2µm,18.0s
**PV05 Paradox Valley** 84.12 46 eP P 13 40 18.8 +0.9
**PMR Palmer** 84.12 12 eP P 13 40 16.2 -0.7
PMR pmax pmax
comp=Z,229nm,2.3s
PMR MLR MLR
comp=Z,2µm,18.0s
**PMR Palmer** 84.12 12 eP P 13 40 16.1 -0.7
comp=Z,230nm,2.3s
PMR LR LR
comp=Z,2µm,18.0s
**WVUT Wellsville** 84.17 42 eP P 13 40 17.6 -0.3
**WRAK Wrangell Islan** 84.17 22 PFAKE 13 40 30.0 +13
WRAK LR LR

comp=Z,1µm,19.0s
**P18A Preston Nutter 84.18 44** *e*P **P** 13 40 19.0 +0.9
comp=Z,76nm,1.2s
P18A LR LR
comp=Z,3µm,20.0s
**C09A Chrisman Ranch 84.20 34** *e*P **P** 13 40 17.5 -0.2
comp=Z,37nm,1.3s
C09A LR LR
comp=Z,7µm,19.0s
**TCUT Toone Canyon 84.24 42** *e*P **P** 13 40 18.8 +0.4
comp=Z,147nm,1.1s
TCUT LR LR
comp=Z,4µm,18.0s
**PV10 Paradox Valley 84.31 46** *e*P **P** 13 40 18.7 -0.1
**PV09 Paradox Valley 84.31 45** *e*P **P** 13 40 19.5 +0.6
**ANMO Albuquerque 84.36 50** *c i*P **P** 13 40 19.3 +0.2
ANMO pmax pmax
comp=Z,143nm,2.5s
ANMO MLR MLR
comp=Z,2µm,16.0s
**ANMO Albuquerque 84.36 50** *e*P **P** 13 40 19.6 +0.5
comp=Z,77nm,1.3s
ANMO LR LR
comp=Z,2µm,19.0s
**DIV Divide 84.38 13** *e*P **P** 13 40 18.4 +0.1
comp=Z,42nm,1.0s
DIV LR LR
comp=Z,3µm,18.0s
**DL2 Dalian 84.41 315**⇑ *i*P **P** 13 40 20.3 +1.4
DL2 S **S** 13 50 47.6 +3.2
DL2 PMZ
comp=Z,95nm,2.3s
DL2 PMZ
comp=Z,1µm,3.9s
DL2 LZ
comp=Z,590nm,19.6s
**HWUT Hardware Ranch 84.41 42** *e*P **P** 13 40 19.2 +0.1
comp=Z,272nm,2.5s
HWUT LR LR
comp=Z,4µm,18.0s
**PV04 Paradox Valley 84.41 46** *e*P **P** 13 40 18.4 -0.8
**QIZ Qiongzhong 84.42 293** P **P** 13 40 20.3 +0.9
QIZ pP **pP** 13 40 24.5 -0.7
QIZ S **S** 13 50 48.3 +3.0
QIZ SS **SS** 13 56 18.4 +2.3
QIZ PMZ
comp=Z,54nm,2.2s
QIZ PMZ
comp=Z,1µm,4.2s
QIZ LE
comp=Z,580nm,15.4s
QIZ LZ
comp=Z,1µm,16.1s
**SML Sawmill 84.47 12** PFAKE 13 40 30.0 +11
SML LR LR
comp=Z,2µm,20.0s
**DHAK Deception Hill 84.49 18** PFAKE 13 40 30.0 +11
DHAK LR LR
comp=Z,2µm,20.0s
**BMRM Bremner River 84.49 14** *e*P **P** 13 40 18.8 -0.1
comp=Z,174nm,1.8s
BMRM LR LR
comp=Z,4µm,19.0s
**PV01 Paradox Valley 84.50 46** *e*P **P** 13 40 19.8 +0.1
**KLR Kul'dur 84.52 328** *e*P **P** 13 40 16.7 -2.5
KLR *es*S **S** 13 50 40.0 -5.1
KLR *e* 13 56 17.5
KLR pmax pmax
comp=Z,400nm,2.6s
KLR pmax pmax
comp=Z,2µm,7.5s
**KLU Klutina 84.68 13** *e*P **P** 13 40 20.0 +0.1
comp=Z,240nm,2.6s
KLU LR LR
comp=Z,3µm,20.0s
**CN2 Changchun 84.68 321** *e*P **P** 13 40 21.3 +1.1
CN2 *es*P **sP** 13 40 32.6 +4.5
CN2 *e*S **S** 13 50 46.3 -0.7
CN2 PMZ
comp=Z,40nm,1.2s
CN2 PMZ
comp=Z,200nm,4.0s
CN2 LN
comp=Z,700nm,20.0s
CN2 LE
comp=Z,800nm,20.0s
CN2 LZ
comp=Z,900nm,20.0s
**SCM Sheep Creek Mo 84.69 12** *e*P **P** 13 40 20.3 +0.3
SCM pmax pmax
comp=Z,44nm,1.0s
SCM MLR MLR
comp=Z,3µm,20.0s
**SCM Sheep Creek Mo 84.69 12** *e*P **P** 13 40 20.3 +0.3
comp=Z,44nm,1.0s
SCM LR LR
comp=Z,3µm,20.0s
**PCA Pinnacle 84.79 16** PFAKE 13 40 30.0 +10
PCA LR LR
comp=Z,3µm,20.0s
**PPLA Purkeypile 84.81 10** PFAKE 13 40 30.0 +9.4
PPLA LR LR
comp=Z,4µm,20.0s
**MA2 Magadan 84.83 343** *i* P **P** 13 40 20.7 +0.1
**BESE Bessie Mountai 85.06 19** PFAKE 13 40 30.0 +8.1
BESE LR LR
comp=Z,2µm,18.0s
**NEW Newport 85.10 34** P **P** 13 40 21.5 -0.8
comp=Z,1.7nm,0.6s,baz=251,slow=6.8,SNR=6.2
**NEW Newport 85.10 34** *e*P **P** 13 40 21.9 -0.3
NEW pmax pmax
comp=Z,146nm,2.5s
NEW MLR MLR
comp=Z,8µm,19.0s
**NEW Newport 85.10 34** P **P** 13 40 22.5 +0.2
baz=85
**NEW Newport 85.10 34** *e*P **P** 13 40 21.9 -0.3
comp=Z,146nm,2.5s
NEW LR LR
comp=Z,8µm,19.0s
**COCO West Island 85.20 259** PFAKE 13 40 30.0 +6.5
COCO LR LR
comp=Z,2µm,20.0s
**529A Stev Forest Ra 85.25 56** P **P** 13 40 23.6 0.0
baz=86,SNR=25
**CAST Castle Rocks 85.32 10** PFAKE 13 40 30.0 +7.0
CAST LR LR
comp=Z,3µm,20.0s
**AHID Auburn Hatcher 85.33 41** *e*P P 13 40 27.6 +3.8
comp=Z,53nm,1.0s
AHID LR LR
comp=Z,4µm,19.0s
**MCMT McKenzie Canyo 85.44 39** *e*P **P** 13 40 24.4 +0.1
**S22A 4UR Ranch, Cre 85.49 47** P **P** 13 40 24.8 0.0
baz=86,SNR=56
**S22A 4UR Ranch, Cre 85.49 47** *e*P **P** 13 40 25.4 +0.6
comp=Z,64nm,1.2s
S22A LR LR
comp=Z,2µm,18.0s
**BKNI Bangkinang 85.54 272** PFAKE 13 40 40.0 +15
BKNI LR LR
comp=Z,1µm,19.0s
**WHN Wuhan 85.59 305** ‖P **P** 13 40 27.0 +2.0
WHN S **S** 13 50 54.3 -2.1
WHN PMZ
comp=Z,1µm,2.4s
WHN LN
comp=Z,3µm,20.4s
WHN LE
comp=Z,970nm,12.4s
WHN LZ
comp=Z,2µm,18.4s
**KTH Kantishna Hill 85.63 10** *e*P **P** 13 40 23.3 -1.3
comp=Z,155nm,1.9s
**SKAG Skagway 85.64 19** *e*P **P** 13 40 25.8 +1.2
comp=Z,52nm,1.2s
SKAG LR LR
comp=Z,2µm,20.0s
**TRF Thorofare Moun 85.64 10** *e*P **P** 13 40 24.0 -0.7
comp=Z,40nm,0.8s
TRF LR LR
comp=Z,6µm,20.0s
**HARP HAARP 85.66 13** *e*P **P** 13 40 25.2 +0.5
comp=Z,60nm,1.2s
HARP LR LR
comp=Z,3µm,20.0s
**429A Davenport Ranc 85.73 55** P **P** 13 40 25.9 0.0
baz=86,SNR=79
**O20A White River Ci 85.76 44** P **P** 13 40 25.8 -0.1
baz=86
**O20A White River Ci 85.76 44** *e*P **P** 13 40 26.2 +0.2
comp=Z,420nm,2.8s
O20A LR LR
comp=Z,1µm,19.0s
**REDW Red Top Meadow 85.81 41** *e*P **P** 13 40 26.5 +0.3
comp=Z,48nm,1.3s
REDW LR LR
comp=Z,4µm,19.0s
**TPAW Teton Pass 85.82 41** *e*P **P** 13 40 26.7 +0.4
comp=Z,42nm,1.3s
TPAW LR LR
comp=Z,3µm,18.0s
**RND Reindeer 85.85 11** *e*P **P** 13 40 25.6 -0.1
RND pmax pmax
comp=Z,398nm,2.2s
RND MLR MLR
comp=Z,3µm,20.0s
**RND Reindeer 85.85 11** *e*P **P** 13 40 25.6 -0.1
comp=Z,398nm,2.2s
RND LR LR
comp=Z,3µm,20.0s
**TNA Tin City 85.86 2** PFAKE
TNA LR LR 13 40 40.0 +14
comp=Z,2µm,20.0s
**FXWY Fox Creek 85.86 40** *e*P **P** 13 40 26.9 +0.5
comp=Z,33nm,1.3s
FXWY LR LR
comp=Z,3µm,19.0s
**228A UT Block 9, Go 85.87 54** P **P** 13 40 26.4 -0.1
baz=86,SNR=8.6
**DLMT Dillon 85.89 38** *e*P **P** 13 40 26.4 0.0
comp=Z,36nm,1.3s
DLMT LR LR
comp=Z,3µm,19.0s
**SNOW Snow King Moun 85.93 41** *e*P **P** 13 40 26.8 0.0
comp=Z,111nm,1.6s
SNOW LR LR
comp=Z,4µm,18.0s
**530A J-C Ranch, Com 85.95 56** P **P** 13 40 26.6 -0.3
baz=86,SNR=21
**MSO Missoula 85.96 37** P **P** 13 40 26.8 +0.1
baz=86
**MSO Missoula 85.96 37** *e*P **P** 13 40 26.2 -0.5
comp=Z,59nm,1.8s
MSO LR LR
comp=Z,5µm,20.0s
**329A Wagon Wheel Ra 86.05 54** P **P** 13 40 27.3 -0.2
baz=86
**IMW Indian Meadow 86.05 40** *e*P **P** 13 40 27.1 -0.3
comp=Z,44nm,1.4s
**MOOW Moose Ponds 86.09 40** *e*P **P** 13 40 27.7 +0.1
comp=Z,61nm,1.8s
MOOW LR LR
comp=Z,3µm,18.0s
**BSMT Bassoo Peak 86.10 35** *e*P **P** 13 40 27.5 +0.1
**PAX Paxson 86.10 13** *e*P **P** 13 40 26.4 -0.6
PAX pmax pmax
comp=Z,50nm,1.5s
**PAX Paxson 86.10 13** *e*P **P** 13 40 26.4 -0.6
comp=Z,50nm,1.5s
**LOHW Long Hollow 86.10 41** *e*P **P** 13 40 27.4 -0.2
comp=Z,31nm,1.3s
LOHW LR LR
comp=Z,3µm,20.0s
**SMCO Snowmass 86.11 46** *e*P **P** 13 40 28.3 +0.3
comp=Z,53nm,1.4s
SMCO LR LR
comp=Z,2µm,20.0s
**BPAW Bear Paw Mtn. 86.13 10** PFAKE
BPAW LR LR 13 40 40.0 +13
comp=Z,3µm,20.0s
**MCK McKinley 86.13 11** *e*P **P** 13 40 26.7 -0.3
MCK pmax pmax
comp=Z,82nm,1.0s
MCK MLR MLR
comp=Z,3µm,20.0s
**MCK McKinley 86.13 11** *e*P **P** 13 40 26.7 -0.3
comp=Z,82nm,1.0s
MCK LR LR
comp=Z,3µm,20.0s
**TIA Tai'an 86.15 311**⇑ P **P** 13 40 29.0 +1.2
TIA S S 13 50 54.9 -6.9
TIA PMZ
comp=Z,80nm,1.0s
TIA PMZ
comp=Z,2µm,10.0s
TIA LN
comp=Z,1µm,16.1s
TIA LE
comp=Z,1µm,16.1s
TIA LZ
comp=Z,2µm,17.3s
**128A Castleberry Fa 86.18 53** P **P** 13 40 28.1 +0.1
baz=86,SNR=33
**832A Faith Ranch, C 86.21 58** P **P** 13 40 28.0 -0.2
baz=86,SNR=20
**631A Perdido Creek 86.22 57** P **P** 13 40 28.1 -0.2
baz=86,SNR=46
**LRM Limekiln Ridge 86.23 38** *e*P **P** 13 40 28.4 +0.2
**QLMT Earthquake Lak 86.27 39** *e*P **P** 13 40 29.0 +0.6
**BW06 Boulder Array 86.29 42** *e*P **P** 13 40 27.8 -0.8
BW06 LR LR
comp=Z,3µm,18.0s
**FLWY Flagg Ranch 86.30 40** P **P** 13 40 28.9 +0.4
comp=Z,68nm,1.5s
FLWY LR LR
comp=Z,3µm,19.0s
**430A Baggett Ranch, 86.31 55** P **P** 13 40 28.4 -0.3
baz=86,SNR=7.4
**SWMT Swartz Lake 86.33 36** *e*P **P** 13 40 28.6 +0.1
**229A Bryant Ranch, 86.39 54** P **P** 13 40 29.0 -0.1
baz=87,SNR=9.5
**CHMT Chamberlain Mo 86.40 37** *e*P **P** 13 40 28.3 -0.7
**732A Laxson Ranch, 86.40 58** P **P** 13 40 29.3 +0.1
baz=87,SNR=12
**SDCO Great Sand Dun 86.41 48** P **P** 13 40 29.3 0.0
baz=87,SNR=8.6
**SDCO Great Sand Dun 86.41 48** *e*P **P** 13 40 29.6 +0.3
comp=Z,25nm,1.4s
SDCO LR LR
comp=Z,2µm,19.0s
**MENT Mentasta 86.44 13** *e*P **P** 13 40 28.6 +0.1
**BWN Browne 86.45 10** *e*P **P** 13 40 28.6 +0.1
comp=Z,209nm,1.6s
BWN LR LR
comp=Z,6µm,20.0s
**PLCA Paso Flores 86.45 132** *e*P **P** 13 40 29.7 +0.3
PLCA pmax pmax
comp=Z,39nm,1.4s
**PLCA Paso Flores 86.45 132** P **P** 13 40 30.2 +0.8
baz=86,SNR=6.1
**PLCA Paso Flores 86.45 132** *e*P **P** 13 40 29.7 +0.3
comp=Z,39nm,1.4s
**SLMT Seeley Lake 86.45 36** *e*P **P** 13 40 28.5 -0.7
**933A Laredo 86.48 59** P **P** 13 40 29.5 -0.1
baz=87,SNR=11
**DLBC Dease Lake 86.53 21** P **P** 13 40 28.9 -0.2
comp=Z,4.2nm,0.8s,baz=189,slow=19
**DLBC Dease Lake 86.53 21** P **P** 13 40 28.9 -0.2
DLBC LR LR
comp=Z,2µm,20.0s
**H17A Grant Village 86.54 40** P **P** 13 40 30.1 +0.3
baz=87
**H17A Grant Village 86.54 40** *e*P **P** 13 40 31.3 +1.5
comp=Z,76nm,2.1s
H17A LR LR
comp=Z,3µm,19.0s
**Z28A Tucker Farm, M 86.56 53** P **P** 13 40 29.5 -0.4
baz=87,SNR=10
**531A Rocksprings 86.57 56** P **P** 13 40 29.9 -0.1
baz=87,SNR=47
**MSTX Muleshoe 86.58 52** P **P** 13 40 30.0 -0.1
baz=87,SNR=10.0
**MSTX Muleshoe 86.58 52** *e*P **P** 13 40 30.4 +0.3
comp=Z,122nm,1.1s
MSTX LR LR
comp=Z,5µm,20.0s
**BOZ Bozeman (W) 86.61 38** *e*P **P** 13 40 29.8 -0.2
BOZ pmax pmax
comp=Z,45nm,1.3s
BOZ MLR MLR
comp=Z,3µm,20.0s
**BOZ Bozeman (W) 86.61 38** P **P** 13 40 29.9 0.0
baz=87,SNR=24
**BOZ Bozeman (W) 86.61 38** *e*P **P** 13 40 29.8 -0.2
comp=Z,45nm,1.3s
BOZ LR LR
comp=Z,3µm,20.0s
**330A Mertzon 86.63 55** P **P** 13 40 29.8 -0.5
baz=87,SNR=9.3
**129A Stewart Farms, 86.65 53** P **P** 13 40 30.0 -0.4
baz=87
**833A Chaparral WMA, 86.69 58** P **P** 13 40 30.5 -0.1
baz=87,SNR=18
**034A Hebbronville 86.73 60** P **P** 13 40 30.9 +0.1
baz=87,SNR=15
**LKWY Lake 86.74 40** PFAKE 13 40 40.0 +9.2
LKWY LR LR
comp=Z,4µm,18.0s
**431A Sonora 86.75 56** P **P** 13 40 30.9 0.0
baz=87,SNR=7.2
**T25A Trinidad 86.88 49** P **P** 13 40 31.7 +0.1
baz=87,SNR=6.1
**T25A Trinidad 86.88 49** *e*P **P** 13 40 34.1 +2.6
comp=Z,107nm,2.0s
T25A LR LR
comp=Z,2µm,19.0s
**632A Uvalde 86.88 57** P **P** 13 40 31.2 -0.3
baz=87,SNR=37
**230A Sterling City 86.89 54** P **P** 13 40 31.6 0.0
baz=87,SNR=6.1
**733A Divot King Ran 86.94 58** P **P** 13 40 31.8 0.0
baz=87
**Y28A McKinney Farm, 86.94 52** P **P** 13 40 31.8 0.0
baz=87,SNR=17
**WRH Wood River Hil 86.96 11** *e*P **P** 13 40 30.4 -0.6
comp=Z,542nm,2.2s
WRH LR LR
comp=Z,2µm,20.0s
**035Z Hargill 86.98 60** P **P** 13 40 32.0 0.0
baz=87
**IPM Ipoh 87.00 276** *e*P **P** 13 40 33.1 +0.7
comp=Z,82nm,0.9s
IPM LR LR
comp=Z,800nm,19.0s
**Z29A Hungry Hill Ra 87.05 53** P **P** 13 40 32.2 -0.1
baz=87,SNR=19
**532A Rocksprings 87.06 56** P **P** 13 40 32.3 -0.1
baz=87,SNR=50
**HRY Holter Researc 87.09 37** *e*P **P** 13 40 32.5 +0.3
**934A Benavides 87.09 59** P **P** 13 40 32.5 0.0
baz=87
**HDA Harding Lake 87.11 11** PFAKE 13 40 40.0 +8.2
HDA LR LR
comp=Z,2µm,19.0s
**035A Encino 87.15 60** P **P** 13 40 32.9 +0.1
baz=87
**331A San Angelo 87.16 55** P **P** 13 40 32.7 -0.1
baz=87
**CCB Clear Creek Bu 87.17 11** *e*P **P** 13 40 31.2 -0.8
comp=Z,374nm,2.3s
CCB LR LR
comp=Z,2µm,20.0s
**Q24A Divide 87.24 47** P **P** 13 40 33.4 0.0
baz=88
**Q24A Divide 87.24 47** PFAKE 13 40 40.0 +6.6
Q24A LR LR
comp=Z,2µm,18.0s
**X28A Dimmitt 87.25 52** P **P** 13 40 33.6 +0.3
baz=88
**SEY Seymchan 87.26 345** P **P** 13 40 32.0 -0.5
comp=Z,46nm,1.0s,baz=144,slow=5.1,SNR=35
**SEY Seymchan 87.26 345** *ce*P **P** 13 40 33.0 +0.5
**WALA Waterton Lakes 87.28 35** *e*P **P** 13 40 33.1 0.0
comp=Z,86nm,1.8s
WALA LR LR
comp=Z,6µm,19.0s
**834A Tilden 87.28 59** P **P** 13 40 33.6 +0.1
baz=88,SNR=8.2
**JCT Junction City 87.29 56** *e*P **P** 13 40 34.6 +1.1
JCT pmax pmax
comp=Z,42nm,1.4s
JCT MLR MLR
comp=Z,4µm,19.0s
**JCT Junction City 87.29 56** P **P** 13 40 33.4 -0.1
baz=88
**JCT Junction City 87.29 56** *e*P **P** 13 40 34.6 +1.1
comp=Z,42nm,1.4s
JCT LR LR
comp=Z,4µm,19.0s
**130A Snyder 87.31 54** P **P** 13 40 33.4 -0.2
baz=88
**ISCO Idaho Springs 87.33 46** *e*P **P** 13 40 35.2 +1.4
ISCO pmax pmax
comp=Z,108nm,2.7s
ISCO MLR MLR
comp=Z,2µm,19.0s
**ISCO Idaho Springs 87.33 46** P **P** 13 40 33.6 -0.2
baz=88
**ISCO Idaho Springs 87.33 46** *e*P **P** 13 40 35.2 +1.4
comp=Z,108nm,2.7s
ISCO LR LR
comp=Z,2µm,19.0s
**633A Saathoff Ranch 87.34 57** P **P** 13 40 33.9 +0.2
baz=88,SNR=25
**Y29A Porterfield Fa 87.34 52** P **P** 13 40 33.9 +0.1
baz=88,SNR=22
**V27A Dan Oppiter Fa 87.35 50** P **P** 13 40 34.0 +0.2
baz=88,SNR=8.7
**COLA College 87.37 11** *c i*P **P** 13 40 32.7 -0.3
COLA pmax pmax
comp=Z,96nm,1.4s
COLA MLR MLR
comp=Z,1µm,18.0s
**COLA College 87.37 11** *e*P **P** 13 40 32.5 -0.5
comp=Z,118nm,1.4s
COLA LR LR
comp=Z,3µm,20.0s
**MDM Murphy Dome 87.39 11** *e*P **P** 13 40 32.6 -0.5
comp=Z,245nm,2.0s
MDM LR LR
comp=Z,4µm,21.0s
**IL1 Eielson Array 87.45 11** *e*P **P** 13 40 31.9 -1.5
**ILAR Eielson Array 87.45 11** P **P** 13 40 32.5 -0.9
comp=Z,6.1nm,0.9s,baz=226,slow=6.0,SNR=32
ILAR LR 14 18 34.1
comp=Z,989nm,18.1s,baz=209,slow=35
**432A Menard 87.46 56** P **P** 13 40 33.9 -0.4
baz=88,SNR=14
**T26A Comanche Natio 87.47 49** P **P** 13 40 34.3 -0.1
baz=88,SNR=5.5
**Z30A Sanderson Ranc 87.50 53** P **P** 13 40 34.4 -0.1
baz=88,SNR=16
**231A Bronte 87.52 55** P **P** 13 40 34.1 -0.4
baz=88,SNR=25
**KVTX Kingsville 87.57 60** PFAKE 13 40 50.0 +15
KVTX LR LR
comp=Z,3µm,18.0s
**734A La Parita Cree 87.58 58** P **P** 13 40 34.9 0.0
baz=88
**W28A Vega 87.58 51** P **P** 13 40 34.8 0.0
baz=88
**X29A Tulia 87.58 52** P **P** 13 40 35.1 +0.2
baz=88
**SYO Syowa Base 87.59 191** ‖ *i*P **P** 13 40 32.5 -1.7
**KULM Kulim 87.63 276** *e*P **P** 13 40 36.5 +1.0
comp=Z,106nm,1.4s
KULM LR LR
comp=Z,1µm,20.0s
**N23A Red Feather La 87.65 45** P **P** 13 40 35.3 0.0
baz=88
**N23A Red Feather La 87.65 45** *e*P **P** 13 40 35.3 0.0
comp=Z,291nm,2.8s
N23A LR LR
comp=Z,2µm,18.0s
**U27A Thompson Grove 87.67 50** P **P** 13 40 35.1 -0.2
baz=88
**533A Kerrville 87.71 57** P **P** 13 40 35.4 -0.1
baz=88,SNR=27
**RLMT Red Lodge 87.72 40** P **P** 13 40 35.2 -0.2
baz=88
**RLMT Red Lodge 87.72 40** *e*P **P** 13 40 35.9 +0.4
comp=Z,181nm,2.7s
RLMT LR LR
comp=Z,3µm,19.0s
**332A Millersview 87.72 55** P **P** 13 40 35.3 -0.3
baz=88,SNR=28
**S26A Kim 87.76 48** P **P** 13 40 35.4 -0.4
baz=88
**131A Roby 87.78 54** P **P** 13 40 35.8 0.0
baz=88,SNR=7.2
**V28A Channing 87.79 51** P **P** 13 40 35.4 -0.5

baz=88
**AMTX Amarillo** 87.80 52 P P 13 40 35.5 -0.4
baz=88
**AMTX Amarillo** 87.80 52 eP P 13 40 36.1 +0.2
comp=Z,57nm,1.1s
**GCMT Greycliff** 87.84 39 eP P 13 40 38.6 +2.7
**VNA3 Neumayer Olymp** 87.89 175 P P 13 40 35.7 0.0
**SNAA Sanae** 87.91 177 P P 13 40 35.7 -0.2
**SNAA Sanae** 87.91 177⇓ eP P 13 40 35.7 -0.2
SNAA pmax pmax
comp=Z,12nm,1.2s
SNAA MLR MLR
comp=Z,1μm,18.0s
**SNAA Sanae** 87.91 177 eP P 13 40 35.5 -0.4
comp=Z,16nm,1.3s
SNAA LR LR
comp=Z,1μm,20.0s
**835A Beeville** 87.93 59 P P 13 40 36.2 -0.4
baz=88
**W29A Amraillo** 87.93 51 P P 13 40 36.2 -0.3
baz=88
**Y30A Stafford Cattl** 87.93 53 P P 13 40 36.2 -0.4
baz=88
**433A Art** 87.96 56 P P 13 40 36.5 -0.2
baz=88,SNR=48
**634A China Grove, S** 87.96 58 P P 13 40 36.7 0.0
baz=88
**232A Coleman** 88.01 55 P P 13 40 36.8 -0.1
baz=88,SNR=24
**T27A Campo** 88.03 49 P P 13 40 37.1 0.0
baz=88
**U28A Mallet** 88.08 50 P P 13 40 37.0 -0.2
baz=88
**R26A Arlington** 88.10 48 P P 13 40 37.2 -0.1
baz=88
**534A Blanco** 88.14 57 P P 13 40 37.2 -0.3
baz=88,SNR=31
**K22A Casper** 88.15 43 P P 13 40 37.5 0.0
baz=88
**K22A Casper** 88.15 43 eP P 13 40 37.5 0.0
comp=Z,18nm,1.0s
K22A LR LR
comp=Z,5μm,19.0s
**PHWY Pilot Hill** 88.17 44 eP P 13 40 42.5 +4.7
comp=Z,42nm,1.8s
PHWY LR LR
comp=Z,1μm,18.0s
**S27A Las Animas** 88.19 49 P P 13 40 37.9 +0.1
baz=88
**Z31A Sharp Cattle R** 88.25 54 P P 13 40 38.0 0.0
baz=88,SNR=15
**333A Richland Sprin** 88.28 56 P P 13 40 38.0 -0.2
baz=88,SNR=15
**ABTX Abilene, Hawle** 88.33 54 P P 13 40 38.6 +0.2
baz=88,SNR=13
**ABTX Abilene, Hawle** 88.33 54 eP P 13 40 37.9 -0.5
comp=Z,55nm,1.1s
ABTX LR LR
comp=Z,5μm,19.0s
**Q26A Hugo** 88.34 47 P P 13 40 38.2 -0.3
baz=89
**V29A Stinnett** 88.36 51 P P 13 40 38.2 -0.3
baz=89
**PSI Prapat** 88.38 274 eP P 13 40 39.1 -0.1
PSI pmax pmax
comp=Z,58nm,1.1s
PSI MLR MLR
comp=Z,2μm,20.0s
**PSI Prapat** 88.38 274 P P 13 40 39.0 -0.1
baz=88,SNR=12
**PSI Prapat** 88.38 274 eP P 13 40 39.1 -0.1
comp=Z,58nm,1.1s
PSI LR LR
comp=Z,2μm,20.0s
**VNA2 Neumayer--Watz** 88.38 176 P P 13 40 38.6 +0.6
baz=172,slow=3.1
**DAWY Dawson** 88.39 14 eP P 13 40 37.4 -0.6
comp=Z,47nm,1.3s
**635A Leesville** 88.42 58 P P 13 40 38.4 -0.5
baz=89
**Y31A Rekieta Farm,** 88.44 53 P P 13 40 38.7 -0.2
baz=89,SNR=6.2
**T28A Walsh** 88.49 49 P P 13 40 39.2 0.0
baz=89
**R27A Eads** 88.54 48 P P 13 40 39.5 +0.1
baz=89
**VNA1 Neumayer--Stat** 88.58 175 P P 13 40 39.8 +0.9
**EGAK Eagle** 88.60 13 eP P 13 40 39.2 +0.4
comp=Z,389nm,2.7s
EGAK LR LR
comp=Z,3μm,18.0s
**434A Burnet** 88.63 56 P P 13 40 39.7 -0.2
baz=89,SNR=15
**BJT Baijiatuau** 88.63 314 eP P 13 40 41.7 +2.1
**BJT Baijiatuau** 88.63 314 eP P 13 40 41.7 +2.1
comp=Z,1μm,3.0s
**BJI Beijing** 88.63 314 P P 13 40 40.8 +1.2
BJI PP **PP** 13 44 04.6 -3.9
BJI SKS **SKSac** 13 51 08.5 +0.4
BJI S **ScS** 13 51 31.9 +1.0
BJI SS **SS** 13 57 18.3 +1.1
BJI PMZ
comp=Z,71nm,2.2s
BJI PMZ
comp=Z,2μm,4.1s
BJI LN
comp=Z,530nm,18.1s
BJI LE
comp=Z,720nm,21.7s
BJI LZ
comp=Z,790nm,23.6s
**233A Rising Star** 88.64 55 P P 13 40 39.7 -0.2
baz=89
**Z32A Haskell** 88.75 54 P P 13 40 40.4 +0.1
baz=89,SNR=21
**U29A Oasis Ranch, S** 88.80 50 P P 13 40 40.6 0.0
baz=89
**S28A Manter** 88.86 49 P P 13 40 40.9 +0.1
baz=89
**334A Lometa** 88.87 56 P P 13 40 40.7 -0.3
baz=89,SNR=8.2
**133A Hamilton Ranch** 88.88 55 P P 13 40 41.1 +0.1
baz=89
**NVL N'lazarevskaya** 88.94 182 iP P 13 40 43.7 +3.1
NVL eS SKSac 13 51 09.7 +0.5
NVL pmax pmax
comp=Z,4.0nm,0.5s
NVL MLR MLR
comp=Z,1μm,14.0s
**EGMT Eagleton** 88.99 37 P P 13 40 41.6 +0.4
baz=89
**EGMT Eagleton** 88.99 37 PFAKE 13 40 50.0 +8.8
EGMT LR LR
comp=Z,4μm,20.0s
**KSCO Kaye Shedlock'** 89.00 48 eP P 13 40 44.4 +2.8
comp=Z,44nm,1.3s
KSCO LR LR
comp=Z,1μm,20.0s
**636A Smothers Creek** 89.03 58 P P 13 40 41.9 +0.2
baz=89
**Y32A R-V Farms, Ver** 89.07 53 P P 13 40 41.8 0.0
baz=89,SNR=7.5
**GSI Gunungsitoli** 89.12 272 eP P 13 40 44.2 +1.7
comp=Z,211nm,1.4s
**435B Jarrell** 89.15 57 P P 13 40 42.4 +0.1
baz=89
**COLD Coldfoot** 89.17 9 eP P 13 40 42.6 +1.1
comp=Z,298nm,2.8s
**W31A Holland Ranch,** 89.21 52 P P 13 40 42.7 +0.2
baz=89
**234A Clairette** 89.22 55 P P 13 40 42.7 0.0
baz=89,SNR=6.3
**737A Port Lavaca** 89.24 59 P P 13 40 42.8 +0.1
baz=89
**R28A Tribune** 89.26 48 P P 13 40 43.1 +0.4
baz=90
**ENH Enshi** 89.27 303 eP P 13 40 45.0 +2.1
comp=Z,216nm,2.1s
ENH LR LR
comp=Z,800nm,19.0s
**Z33A Whitaker Ranch** 89.28 54 P P 13 40 42.9 +0.1
baz=90,SNR=8.3
**X32A Elmer** 89.37 53 P P 13 40 43.3 +0.1
baz=90
**FYU Fort Yukon** 89.37 11 PFAKE 13 40 50.0 +7.6
FYU LR LR
comp=Z,2μm,22.0s
**S29A Ulysses** 89.42 49 P P 13 40 43.5 0.0
baz=90
**BILL Bilibino** 89.43 353 iP P 13 40 42.8 +0.1
BILL *i* 13 40 48.7
BILL *i* S SKSac 13 51 08.0 -3.6
BILL pmax pmax
comp=Z,18nm,1.0s
BILL MLR MLR
comp=Z,2μm,18.0s
**BILL Bilibino** 89.43 353 eP P 13 40 43.6 +0.9
comp=Z,240nm,2.4s
**335A Moody** 89.48 56 P P 13 40 44.1 +0.3
baz=90
**134A White-Moore Ra** 89.50 55 P P 13 40 44.0 +0.1
baz=90,SNR=6.5
**V31A Spring Creek L** 89.54 51 P P 13 40 44.3 +0.2
baz=90
**Y33A Hilltop Ranch,** 89.69 53 P P 13 40 44.8 +0.1
baz=90
**W32A Sentinel** 89.70 52 P P 13 40 45.1 +0.4
baz=90
**R29A Marienthal** 89.77 49 P P 13 40 45.2 +0.1
baz=90
**SNET Serv Nac Est T** 89.77 75 PFAKE 13 41 00.0 +14
SNET LR LR
comp=Z,4μm,18.0s
**U31A Nine Bar Ranch** 89.79 51 P P 13 40 45.6 +0.4
baz=90
**P28A Saint Francis** 89.85 47 P P 13 40 46.1 +0.6
baz=90
**WMOK Wichita Mounta** 89.88 53 eP P 13 40 47.3 +1.7
WMOK pmax pmax
comp=Z,13nm,1.3s
WMOK MLR MLR
comp=Z,2μm,20.0s
**WMOK Wichita Mounta** 89.88 53 eP P 13 40 47.3 +1.7
comp=Z,13nm,1.3s
WMOK LR LR
comp=Z,2μm,20.0s
**Z34A Collier Ranch,** 89.96 54 P P 13 40 46.0 -0.1
baz=90
**336A Riesel** 89.97 56 P P 13 40 46.6 +0.5
baz=90
**EDM Edmonton** 89.99 32 eP P 13 40 45.8 +0.1
EDM pmax pmax
comp=Z,92nm,1.4s
EDM MLR MLR
comp=Z,3μm,20.0s
**EDM Edmonton** 89.99 32 eP P 13 40 45.8 +0.1
comp=Z,92nm,1.4s
EDM LR LR
comp=Z,3μm,20.0s
**GYA Guiyang** 90.04 298 P P 13 40 47.3 +0.6
GYA PP **PP** 13 44 22.4 +2.2
GYA SKS **SKSac** 13 51 16.6 -0.7
GYA S **S** 13 51 38.8 -0.7
GYA SS **SS** 13 57 40.0 +1.6
GYA PMZ
comp=Z,40nm,1.0s
GYA PMZ
comp=Z,210nm,5.9s
GYA LN
comp=Z,4μm,20.8s
GYA LE
comp=Z,3μm,21.2s
GYA LZ
comp=Z,4μm,20.6s
**TIY Taiyuan** 90.18 310 eP P 13 40 48.4 +1.4
TIY PP **PP** 13 44 19.3 -1.7
TIY S **S** 13 51 45.1 +4.9
TIY PMZ
comp=Z,750nm,5.9s
TIY LN
comp=Z,400nm,14.8s
TIY LE
comp=Z,1μm,16.8s
TIY LZ
comp=Z,1μm,17.4s
**HKT Hockley** 90.20 58 eP P 13 40 47.3 +0.2
HKT pmax pmax
comp=Z,54nm,1.6s
HKT MLR MLR
comp=Z,3μm,19.0s
**HKT Hockley** 90.20 58 eP P 13 40 47.3 +0.2
comp=Z,54nm,1.6s
HKT LR LR
comp=Z,3μm,19.0s
**T31A Randall Ranch,** 90.23 50 P P 13 40 47.5 +0.3
baz=90
**J25A Sunshine Ranch** 90.25 43 P P 13 40 47.7 +0.4
baz=90
**OGNE Ogallala** 90.28 46 P P 13 40 48.0 +0.6
baz=90
**OGNE Ogallala** 90.28 46 PFAKE 13 41 00.0 +13
OGNE LR LR
comp=Z,2μm,19.0s
**LAO LASA Array** 90.35 40 eP P 13 40 48.7 +1.1
comp=Z,398nm,2.5s
LAO LR LR
comp=Z,1μm,19.0s
**U32A Winter Ranch,** 90.41 51 P P 13 40 48.3 +0.2
baz=91
**RSSD Black Hills** 90.45 43 eP P 13 40 48.1 -0.2
RSSD pmax pmax
comp=Z,42nm,1.3s
RSSD MLR MLR
comp=Z,3μm,18.0s
**RSSD Black Hills** 90.45 43 eP P 13 40 48.1 -0.2
comp=Z,42nm,1.3s
RSSD LR LR
comp=Z,3μm,18.0s
**Z35A Perchaven, San** 90.45 55 P P 13 40 48.1 -0.2
baz=91
**X34A Smith Ranch, M** 90.53 53 P P 13 40 48.6 0.0
baz=91
**S31A Mullinville** 90.59 50 P P 13 40 49.2 +0.3
baz=91
**I25A Rochford** 90.59 43 P P 13 40 48.9 -0.1
baz=91,SNR=9.7
**Q30A Quinter** 90.66 48 P P 13 40 49.2 0.0
baz=91
**J26A Sides Ranch, S** 90.68 44 P P 13 40 49.4 +0.2
baz=91
**V33A Lossen Ranch,** 90.70 52 P P 13 40 49.8 +0.4
baz=91
**438A Sam Houston St** 90.80 57 P P 13 40 50.1 +0.1
baz=91
**T32A Huddler Ranch,** 90.81 50 P P 13 40 50.1 +0.2
baz=91
**W34A Bridge Creek,** 90.84 53 P P 13 40 50.3 +0.2
baz=91
**W34A Bridge Creek,** 90.84 53 eP P 13 40 52.3 +2.2
comp=Z,71nm,1.4s
W34A LR LR
comp=Z,3μm,20.0s
**P30A Selden** 90.89 48 P P 13 40 50.5 +0.2
baz=91
**CBKS Cedar Bluff** 90.92 49 PFAKE 13 41 00.0 +10
CBKS LR LR
comp=Z,2μm,20.0s
**HIA Hailar** 90.95 323 PFAKE 13 41 00.0 +10
HIA LR LR
comp=Z,3μm,20.0s
**237A Washetta, Mont** 91.03 56 P P 13 40 51.0 0.0
baz=91
**Z36A Blue Ridge** 91.05 55 P P 13 40 51.3 +0.3
baz=91
**LCO Las Campanas** 91.10 121 PFAKE 13 41 00.0 +8.1
LCO LR LR
comp=Z,5μm,19.0s
**I26A New Underwood** 91.15 43 P P 13 40 51.6 +0.2
baz=91
**XAN Xi'an** 91.23 306 P P 13 40 53.4 +1.4
XAN sP **sP** 13 41 00.5 +0.6
XAN SKS **SKSac** 13 51 25.4 +1.7
XAN S **ScS** 13 51 53.6 +0.6
XAN PMZ
comp=Z,45nm,1.1s
XAN PMZ
comp=Z,670nm,10.3s
XAN LN
comp=Z,260nm,18.2s
XAN LE
comp=Z,610nm,18.4s
XAN LZ
comp=Z,730nm,16.5s
**Q31A Ellis** 91.25 49 P P 13 40 52.4 +0.4
baz=92
**V34A Guthrie** 91.28 52 P P 13 40 52.1 0.0
baz=92
**V34A Guthrie** 91.28 52 PFAKE 13 41 00.0 +7.9
V34A LR LR
comp=Z,4μm,19.0s
**137A Heron Place, G** 91.31 56 P P 13 40 52.6 +0.3
baz=92
**G25A Newell** 91.34 42 P P 13 40 52.6 +0.4
baz=92
**J27A Elkhorn Farm,** 91.35 44 P P 13 40 52.7 +0.3
baz=92
**Y36A Durant** 91.42 54 P P 13 40 52.9 +0.1
baz=92,SNR=6.9
**W35A Tecumseh** 91.48 53 P P 13 40 53.2 +0.2
baz=92,SNR=6.1
**H26A Fairpoint** 91.48 43 P P 13 40 53.2 +0.3
baz=92
**P31A Stockton** 91.48 48 P P 13 40 53.3 +0.3
baz=92
**R32A Long Quarter,** 91.48 49 P P 13 40 53.1 +0.1
baz=92
**U34A Anderson Ranch** 91.51 52 PFAKE 13 41 00.0 +6.8
U34A LR LR
comp=Z,4μm,19.0s
**238A Jacksonville** 91.57 56 P P 13 40 53.5 0.0
baz=92
**X36A Centrahoma** 91.64 54 P P 13 40 53.8 0.0
baz=92,SNR=5.4
**F25A Bowman** 91.66 41 P P 13 40 54.2 +0.5
baz=92
**TGUH Tegucigalpa,Un** 91.68 76 PFAKE 13 41 10.0 +16
TGUH LR LR
comp=Z,3μm,19.0s
**I27A Quinn** 91.69 43 P P 13 40 54.2 +0.4
baz=92
**339A Huntington** 91.75 57 P P 13 40 54.7 +0.4
baz=92
**V35A Meyer Ranch, C** 91.75 52 P P 13 40 54.5 +0.2
baz=92
**O31A Woolen Ranch,** 91.79 48 P P 13 40 54.4 0.0
baz=92
**L29A Maesberg Ranch** 91.83 46 P P 13 40 55.0 +0.4
baz=92
**NATX Nacogdoches** 91.83 57 P P 13 40 55.1 +0.3
baz=92
**NATX Nacogdoches** 91.83 57 PFAKE 13 41 10.0 +15
NATX LR LR
comp=Z,2μm,19.0s
**Q32A Meitler Ranch,** 91.83 49 P P 13 40 55.0 +0.4
baz=92
**138A Matatall Enter** 91.85 56 P P 13 40 54.8 0.0
baz=92
**G26A Maurine** 91.90 42 P P 13 40 55.0 +0.2
baz=92
**H27A Howes** 91.93 43 P P 13 40 55.1 +0.2
baz=92
**Y37A Hugo** 91.96 54 P P 13 40 55.1 -0.1
baz=92
**R33A Olander Ranch,** 91.96 50 P P 13 40 55.4 +0.2
baz=92
**W36A Wetumka** 91.96 53 P P 13 40 55.3 +0.1
baz=92,SNR=6.7
**E25A Miller Ranch,** 91.96 41 P P 13 40 55.6 +0.5
baz=92
**T34A McClaskey Farm** 92.00 51 P P 13 40 55.3 -0.2
baz=92,SNR=6.2
**P32A Huiting Farm,** 92.07 48 P P 13 40 56.0 +0.3
baz=92
**U35A Pawnee** 92.08 52 P P 13 40 56.0 +0.2
baz=92
**239A Gary** 92.08 57 P P 13 40 56.1 +0.2
baz=92
**F26A Lodgepole** 92.11 41 P P 13 40 55.7 -0.1
baz=92
**HHC Hu-ho-hao-te** 92.14 313 eP P 13 40 57.8 +1.7
HHC pP **pP** 13 41 04.3 +2.3
HHC PP **PP** 13 44 33.8 -2.7
HHC SKS **SKSac** 13 51 31.8 +3.2
HHC S **ScS** 13 52 03.6 +3.3
HHC PMZ
comp=Z,58nm,1.3s
HHC PMZ
comp=Z,760nm,10.4s
HHC LN
comp=Z,680nm,15.5s
HHC LE
comp=Z,650nm,19.2s
HHC LZ
comp=Z,570nm,20.9s
**Z38A Mt. Pleasant** 92.16 55 P P 13 40 56.4 +0.2
baz=92
**I28A Midland** 92.23 44 P P 13 40 56.5 +0.2
baz=92
**K29A Lazy Trails An** 92.24 45 P P 13 40 56.7 +0.2
baz=92
**L30A Spencer Herefo** 92.29 46 P P 13 40 56.8 +0.1
baz=92
**NNA Nana** 92.30 104 PFAKE 13 41 10.0 +13
NNA LR LR
comp=Z,3μm,18.0s
**340A Bronson** 92.31 57 P P 13 40 57.0 +0.1
baz=92
**D25A Fairfield** 92.32 40 P P 13 40 57.1 +0.4
baz=93
**S34A Willow Spring** 92.34 51 P P 13 40 57.1 +0.1
baz=93
**Q33A Connelly Farm,** 92.35 49 P P 13 40 57.2 +0.2
baz=93
**G27A Dupree** 92.36 42 P P 13 40 56.9 0.0
baz=93
**X37A Clayton** 92.39 54 P P 13 40 57.2 0.0
baz=93
**DGMT Dagmar** 92.42 39 P P 13 40 57.6 +0.6
baz=93
**DGMT Dagmar** 92.42 39 eP P 13 41 00.0 +2.9
comp=Z,141nm,1.3s
DGMT LR LR
comp=Z,3μm,20.0s
**CLNS Chul'man** 92.43 331 eP P 13 40 56.4 -0.5
CLNS pmax pmax
comp=Z,24nm,1.0s
CLNS pmax pmax
comp=N,12nm,0.9s
CLNS pmax pmax
comp=E,10.0nm,0.8s
**V36A Jenks** 92.43 53 P P 13 40 57.4 0.0
baz=93,SNR=6.5
**T35A Sooner Cattle** 92.46 52 P P 13 40 57.6 0.0
baz=93,SNR=13
**R34A Isabella, Hill** 92.48 50 P P 13 40 57.7 0.0
baz=93
**JTS JuntasAbangare** 92.51 80⇑ eP P 13 40 59.3 +1.0
JTS pmax pmax
comp=Z,109nm,1.1s
JTS MLR MLR
comp=Z,3μm,17.0s
**JTS JuntasAbangare** 92.51 80 P P 13 40 59.4 +1.1
comp=Z,310nm,1.0s,SNR=5.2
**JTS JuntasAbangare** 92.51 80 eP P 13 40 59.9 +1.6
comp=Z,54nm,1.0s
JTS LR LR
comp=Z,2μm,20.0s
**J29A Okreek** 92.52 44 P P 13 40 58.0 +0.3
baz=93
**E26A Carlson Angus** 92.53 41 P P 13 40 58.2 +0.5
baz=93
**F27A Lemmon** 92.53 42 P P 13 40 57.9 +0.2
baz=93
**W37A Quinton** 92.56 53 P P 13 40 58.0 -0.1
baz=93,SNR=7.6
**TUL1 Tulsa** 92.59 53 P P 13 40 58.1 0.0
baz=93
**TUL1 Tulsa** 92.59 53 eP P 13 40 58.2 0.0
comp=Z,39nm,1.3s
TUL1 LR LR
comp=Z,4μm,19.0s
**C25A Freed Ranch, W** 92.62 40 P P 13 40 58.2 +0.1
baz=93
**Y38A Idabel** 92.62 55 P P 13 40 58.5 +0.2
baz=93
**H28A Mission Ridge** 92.62 43 P P 13 40 58.9 +0.7
baz=93
**K30A Basset** 92.67 45 P P 13 40 58.7 +0.3
baz=93
**Z39A Irene McRaven,** 92.78 56 P P 13 40 59.3 +0.3
baz=93
**D26A Manning** 92.80 40 P P 13 40 59.3 +0.4
baz=93

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **I29A** | **Vivian Onida** | **92.80** | **44** | P | **P** | 13 40 59.4 | +0.4 | | | |
| | baz=93 | | | | | | | | | |
| **KMI** | **Kunming** | **92.82** | **296** | P | **P** | **13 41 00.3** | **+0.5** | | | |
| KMI | | | | PP | **PP** | **13 44 40.6** | **-1.8** | | | |
| KMI | | | | SKS | **SKSac** | **13 51 34.1** | **+0.7** | | | |
| KMI | | | | S | **S** | **13 52 04.4** | **-0.6** | | | |
| KMI | | | | PMZ | | | | | | |
| | comp=Z,38nm,1.9s | | | | | | | | | |
| KMI | | | | PMZ | | | | | | |
| | comp=Z,750nm,9.8s | | | | | | | | | |
| KMI | | | | LN | | | | | | |
| | comp=Z,680nm,20.1s | | | | | | | | | |
| KMI | | | | LE | | | | | | |
| | comp=Z,1µm,20.1s | | | | | | | | | |
| KMI | | | | LZ | | | | | | |
| | comp=Z,2µm,20.7s | | | | | | | | | |
| **U36A** | **Oologah** | **92.82** | **52** | P | **P** | **13 40 59.5** | **+0.2** | | | |
| | baz=93 | | | | | | | | | |
| **X38A** | **Whitesboro** | **92.83** | **54** | P | **P** | **13 40 59.4** | **+0.1** | | | |
| | baz=93,SNR=11 | | | | | | | | | |
| **G28A** | **Parade** | **92.86** | **43** | P | **P** | **13 40 59.6** | **+0.4** | | | |
| | baz=93 | | | | | | | | | |
| **S35A** | **Otter Creek Ra** | **92.90** | **51** | P | **P** | **13 40 59.7** | **+0.1** | | | |
| | baz=93,SNR=9.3 | | | | | | | | | |
| **B25A** | **Knox Farm, Ray** | **92.93** | **39** | P | **P** | **13 40 59.8** | **+0.3** | | | |
| | baz=93 | | | | | | | | | |
| **TEIG** | **Tepich** | **92.94** | **70** | PFAKE | | 13 41 10.0 | +10 | | | |
| TEIG | | | | LR | LR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **Q34A** | **Chapman** | **92.95** | **50** | P | **P** | **13 41 00.1** | **+0.4** | | | |
| | baz=93,SNR=6.1 | | | | | | | | | |
| **O33A** | **Hebron** | **92.97** | **48** | P | **P** | **13 40 59.9** | **+0.1** | | | |
| | baz=93,SNR=5.4 | | | | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **92.98** | **52** | P | **P** | **13 40 59.9** | **0.0** | | | |
| | baz=93,SNR=5.5 | | | | | | | | | |
| **J30A** | **Dallas** | **93.03** | **45** | P | **P** | **13 41 00.4** | **+0.3** | | | |
| | baz=93 | | | | | | | | | |
| **E27A** | **Carson** | **93.06** | **41** | P | **P** | **13 41 00.5** | **+0.3** | | | |
| | baz=93 | | | | | | | | | |
| **V37A** | **Hulbert** | **93.06** | **53** | P | **P** | **13 41 00.2** | **-0.1** | | | |
| | baz=93,SNR=13 | | | | | | | | | |
| **BTO** | **Baotou** | **93.10** | **312** | *e*P | **P** | **13 41 01.1** | **+0.6** | | | |
| **Y39A** | **Lockesburg** | **93.11** | **55** | P | **P** | **13 41 00.8** | **+0.2** | | | |
| | baz=93 | | | | | | | | | |
| **BGNE** | **Belgrade** | **93.12** | **47** | P | **P** | **13 41 00.9** | **+0.4** | | | |
| | baz=93 | | | | | | | | | |
| **BGNE** | **Belgrade** | **93.12** | **47** | PFAKE | | 13 41 10.0 | +9.5 | | | |
| BGNE | | | | LR | LR | | | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| **W38A** | **Poteau** | **93.22** | **54** | P | **P** | **13 41 01.1** | **+0.1** | | | |
| | baz=93 | | | | | | | | | |
| **INK** | **Inuvik** | **93.24** | **14** | P | **P** | **13 40 59.4** | **-1.0** | | | |
| | comp=Z,8.4nm,1.2s,baz=218,slow=5.4,SNR=7.5 | | | | | | | | | |
| **INK** | **Inuvik** | **93.24** | **14** | P | **P** | **13 40 59.4** | **-1.0** | | | |
| INK | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | | |
| **INK** | **Inuvik** | **93.24** | **14** | *e*P | **P** | **13 41 00.7** | **+0.3** | | | |
| | comp=Z,49nm,1.4s | | | | | | | | | |
| **R35A** | **Emporia Munici** | **93.25** | **50** | P | **P** | **13 41 01.3** | **+0.2** | | | |
| | baz=94 | | | | | | | | | |
| **KSU1** | **Kansas State U** | **93.26** | **49** | P | **P** | **13 41 01.4** | **+0.2** | | | |
| | baz=94 | | | | | | | | | |
| **KSU1** | **Kansas State U** | **93.26** | **49** | *e*P | **P** | **13 41 02.0** | **+0.8** | | | |
| | comp=Z,23nm,0.8s | | | | | | | | | |
| KSU1 | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **A25A** | **Svangstu Ranch** | **93.27** | **39** | P | **P** | **13 41 01.3** | **+0.3** | | | |
| | baz=94 | | | | | | | | | |
| **F28A** | **McLaughlin** | **93.28** | **42** | P | **P** | **13 41 01.3** | **+0.2** | | | |
| | baz=94 | | | | | | | | | |
| **P34A** | **Walnut Farm, R** | **93.29** | **49** | P | **P** | **13 41 01.5** | **+0.2** | | | |
| | baz=94 | | | | | | | | | |
| **U37A** | **Salina** | **93.29** | **52** | P | **P** | **13 41 01.6** | **+0.2** | | | |
| | baz=94,SNR=5.7 | | | | | | | | | |
| **D27A** | **Center** | **93.39** | **41** | P | **P** | **13 41 02.0** | **+0.4** | | | |
| | baz=94 | | | | | | | | | |
| **S36A** | **Lake Cedric, C** | **93.45** | **51** | P | **P** | **13 41 02.1** | **+0.1** | | | |
| | baz=94,SNR=5.8 | | | | | | | | | |
| **L32A** | **Elgin** | **93.47** | **46** | P | **P** | **13 41 02.5** | **+0.4** | | | |
| | baz=94 | | | | | | | | | |
| **YAK** | **Yakutsk** | **93.56** | **337** | *e*P | **P** | **13 41 01.2** | **-0.8** | | | |
| YAK | | | | *e**PP | **pP** | **13 41 07.3** | **-0.5** | | | |
| YAK | | | | *e*S | **SKSac** | **13 51 35.9** | **+0.7** | | | |
| YAK | | | | *e* | | 13 52 03.8 | | | | |
| YAK | | | | *e*SSS | SSS | 14 01 57.8 | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=E,4.0nm,1.1s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=Z,19nm,0.9s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=N,6.0nm,1.1s | | | | | | | | | |
| YAK | | | | smax | smax | | | | | |
| | comp=N,147nm,2.7s | | | | | | | | | |
| YAK | | | | smax | smax | | | | | |
| | comp=E,86nm,3.1s | | | | | | | | | |
| **YAK** | **Yakutsk** | **93.56** | **337** | *e*P | **P** | **13 41 00.2** | **-1.8** | | | |
| | comp=E,48nm,1.3s | | | | | | | | | |
| YAK | | | | LR | LR | | | | | |
| | comp=Z,600nm,20.0s | | | | | | | | | |
| **TRQA** | **Tornquist** | **93.58** | **133** | PFAKE | | 13 41 10.0 | +7.1 | | | |
| TRQA | | | | LR | LR | | | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| **V38A** | **Canehill** | **93.61** | **53** | P | **P** | **13 41 02.8** | **-0.1** | | | |
| | baz=94,SNR=5.5 | | | | | | | | | |
| **O34A** | **Beatrice** | **93.64** | **48** | P | **P** | **13 41 02.9** | **0.0** | | | |
| | baz=94 | | | | | | | | | |
| **T37A** | **Cheneyville 18** | **93.71** | **52** | P | **P** | **13 41 03.3** | **0.0** | | | |
| | baz=94,SNR=13 | | | | | | | | | |
| **MIAR** | **Mount Ida** | **93.74** | **55** | *e*P | **P** | **13 41 04.9** | **+1.4** | | | |
| MIAR | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | | |
| MIAR | | | | MLR | MLR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **MIAR** | **Mount Ida** | **93.74** | **55** | P | **P** | **13 41 03.2** | **-0.2** | | | |
| | baz=94 | | | | | | | | | |
| **MIAR** | **Mount Ida** | **93.74** | **55** | *e*P | **P** | **13 41 04.8** | **+1.4** | | | |
| | comp=Z,9.8nm,1.0s | | | | | | | | | |
| MIAR | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **R36A** | **Gordon, Harris** | **93.75** | **51** | P | **P** | **13 41 03.3** | **-0.2** | | | |
| | baz=94 | | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **93.76** | **288** | *e*P | **P** | **13 41 05.2** | **+1.3** | | | |
| **CMAR** | **Chiang Mai Arr** | **93.79** | **288** | P | **P** | **13 41 05.5** | **+1.4** | | | |
| | comp=Z,12nm,1.0s,baz=117,slow=2.9,SNR=56 | | | | | | | | | |
| CMAR | | | | LR | LR | 14 23 53.9 | | | | |
| | comp=Z,485nm,18.9s,baz=130,slow=36 | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.79** | **288** | *i* P | **P** | **13 41 05.6** | **+1.5** | | | |
| CMAR | | | | pmax | pmax | | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | | |
| **U38A** | **Gravette** | **93.84** | **53** | P | **P** | **13 41 03.5** | **-0.4** | | | |
| | baz=94,SNR=6.6 | | | | | | | | | |
| **M33A** | **Taylor Creek F** | **93.85** | **47** | P | **P** | **13 41 04.0** | **+0.2** | | | |
| | baz=94 | | | | | | | | | |
| **P35A** | **Duane Minner,** | **93.85** | **49** | P | **P** | **13 41 04.1** | **+0.2** | | | |
| | baz=94 | | | | | | | | | |
| **A26A** | **Wade Farm, Ken** | **93.88** | **39** | P | **P** | **13 41 04.0** | **+0.2** | | | |
| | baz=94 | | | | | | | | | |
| **F29A** | **Eureka** | **93.89** | **42** | P | **P** | **13 41 04.0** | **+0.1** | | | |
| | baz=94 | | | | | | | | | |
| **CHTO** | **Chiang Mai** | **93.91** | **289** | *e*P | **P** | **13 41 06.1** | **+1.5** | | | |
| CHTO | | | | pmax | pmax | | | | | |
| | comp=Z,44nm,1.3s | | | | | | | | | |
| CHTO | | | | MLR | MLR | | | | | |
| | comp=Z,800nm,20.0s | | | | | | | | | |
| **CHTO** | **Chiang Mai** | **93.91** | **289** | P | **P** | **13 41 06.7** | **+2.0** | | | |
| | SNR=9.6 | | | | | | | | | |
| **CHTO** | **Chiang Mai** | **93.91** | **289** | *e*P | **P** | **13 41 06.1** | **+1.5** | | | |
| | comp=Z,44nm,1.3s | | | | | | | | | |
| CHTO | | | | LR | LR | | | | | |
| | comp=Z,800nm,20.0s | | | | | | | | | |
| **S37A** | **Fort Scott** | **94.02** | **51** | P | **P** | **13 41 04.6** | **-0.1** | | | |
| | baz=94,SNR=7.2 | | | | | | | | | |
| **Q36A** | **Arnold C. Orve** | **94.03** | **50** | P | **P** | **13 41 04.5** | **-0.2** | | | |
| | baz=94 | | | | | | | | | |
| **CD2** | **Chengdu** | **94.07** | **301** | P | **P** | **13 41 06.0** | **+0.8** | | | |
| CD2 | | | | pP | **pP** | **13 41 09.3** | **-1.7** | | | |
| CD2 | | | | PP | **PP** | **13 44 52.0** | **+0.2** | | | |
| CD2 | | | | SKS | **SKSac** | **13 51 40.8** | **+1.2** | | | |
| CD2 | | | | S | **ScS** | **13 52 16.8** | **+0.1** | | | |
| CD2 | | | | sS | **sS** | **13 52 22.4** | **-2.7** | | | |
| CD2 | | | | SS | **SS** | **13 58 38.3** | **+2.1** | | | |
| CD2 | | | | PMZ | | | | | | |
| | comp=Z,20nm,0.5s | | | | | | | | | |
| CD2 | | | | PMZ | | | | | | |
| | comp=Z,640nm,5.0s | | | | | | | | | |
| CD2 | | | | LN | | | | | | |
| | comp=Z,910nm,12.5s | | | | | | | | | |
| CD2 | | | | LE | | | | | | |
| | comp=Z,740nm,16.0s | | | | | | | | | |
| CD2 | | | | LZ | | | | | | |
| | comp=Z,760nm,15.6s | | | | | | | | | |
| **M34A** | **Aspy Farms, Fr** | **94.24** | **47** | P | **P** | **13 41 05.7** | **+0.1** | | | |
| | baz=94 | | | | | | | | | |
| **A27A** | **Ledoux Ranch,** | **94.38** | **39** | P | **P** | **13 41 06.7** | **+0.6** | | | |
| | baz=95 | | | | | | | | | |
| **I32A** | **Karley and Nic** | **94.66** | **45** | P | **P** | **13 41 07.7** | **+0.2** | | | |
| | baz=95 | | | | | | | | | |
| **G31A** | **Conde** | **94.66** | **43** | P | **P** | **13 41 07.5** | **0.0** | | | |
| | baz=95 | | | | | | | | | |
| **B28A** | **Dugan Ranch, T** | **94.68** | **40** | P | **P** | **13 41 07.7** | **+0.2** | | | |
| | baz=95 | | | | | | | | | |
| **J33A** | **Davis** | **94.70** | **45** | P | **P** | **13 41 08.0** | **+0.3** | | | |
| | baz=95 | | | | | | | | | |
| **Q37A** | **Longview Farm,** | **94.72** | **50** | P | **P** | **13 41 07.6** | **-0.3** | | | |
| | baz=95 | | | | | | | | | |
| **E30A** | **Jud** | **94.75** | **42** | P | **P** | **13 41 07.6** | **-0.3** | | | |
| | baz=95 | | | | | | | | | |
| **UALR** | **University of** | **94.77** | **55** | PFAKE | | 13 41 20.0 | +12 | | | |
| UALR | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **H32A** | **Carlson Farm,** | **94.87** | **44** | P | **P** | **13 41 08.5** | **0.0** | | | |
| | baz=95 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.87** | **24** | P | **P** | **13 41 07.4** | **-0.5** | | | |
| | comp=Z,3.1nm,0.8s,baz=244,slow=4.1,SNR=5.7 | | | | | | | | | |
| **MDND** | **Maddock** | **94.88** | **41** | P | **P** | **13 41 08.7** | **+0.2** | | | |
| | baz=95 | | | | | | | | | |
| **MDND** | **Maddock** | **94.88** | **41** | *e*P | **P** | **13 41 08.4** | **0.0** | | | |
| | comp=Z,76nm,1.1s | | | | | | | | | |
| MDND | | | | LR | LR | | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| **F31A** | **Hecla** | **94.89** | **43** | P | **P** | **13 41 08.4** | **-0.1** | | | |
| | baz=95 | | | | | | | | | |
| **A28A** | **Rude Farm, Bot** | **94.94** | **39** | P | **P** | **13 41 08.8** | **+0.1** | | | |
| | baz=95 | | | | | | | | | |
| **K34A** | **Le Mars** | **95.04** | **46** | P | **P** | **13 41 09.3** | **0.0** | | | |
| | baz=95 | | | | | | | | | |
| **D30A** | **Buchanan** | **95.09** | **42** | P | **P** | **13 41 09.3** | **-0.1** | | | |
| | baz=95 | | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **95.10** | **45** | P | **P** | **13 41 09.5** | **-0.1** | | | |
| | baz=95 | | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **95.10** | **45** | *e*P | **P** | **13 41 08.8** | **-0.7** | | | |
| | comp=Z,76nm,1.3s | | | | | | | | | |
| ECSD | | | | LR | LR | | | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| **G32A** | **Webster** | **95.13** | **44** | P | **P** | **13 41 09.8** | **+0.2** | | | |
| | baz=95 | | | | | | | | | |
| **OTAV** | **Otavalo** | **95.14** | **92** | PFAKE | | 13 41 20.0 | +9.0 | | | |
| OTAV | | | | LR | LR | | | | | |
| | comp=Z,4µm,18.0s | | | | | | | | | |
| **L35A** | **Bielow Farm, R** | **95.19** | **47** | P | **P** | **13 41 10.0** | **0.0** | | | |
| | baz=95 | | | | | | | | | |
| **LVC** | **Limon Verde** | **95.19** | **116** | *e*P | P | 13 41 15.3 | +4.4 | | | |
| | comp=Z,32nm,0.3s | | | | | | | | | |
| LVC | | | | LR | LR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **VBMS** | **Vicksburg** | **95.27** | **58** | P | **P** | **13 41 10.5** | **-0.1** | | | |
| | baz=96 | | | | | | | | | |
| **VBMS** | **Vicksburg** | **95.27** | **58** | PFAKE | | 13 41 20.0 | +9.5 | | | |
| VBMS | | | | LR | LR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **B29A** | **Wagenman Farm,** | **95.30** | **40** | P | **P** | **13 41 10.5** | **+0.2** | | | |
| | baz=96 | | | | | | | | | |
| **H33A** | **Prehn Over Nor** | **95.39** | **44** | P | **P** | **13 41 10.9** | **0.0** | | | |
| | baz=96 | | | | | | | | | |
| **E31A** | **Nome** | **95.41** | **42** | P | **P** | **13 41 10.7** | **-0.2** | | | |
| | baz=96 | | | | | | | | | |
| **C30A** | **Mose, Pekin** | **95.51** | **41** | P | **P** | **13 41 11.1** | **-0.3** | | | |
| | baz=96 | | | | | | | | | |
| **A29A** | **Manning Farm,** | **95.56** | **40** | P | **P** | **13 41 11.7** | **+0.1** | | | |
| | baz=96 | | | | | | | | | |
| **LZH** | **Lanzhou** | **95.86** | **306** | *e*P | **P** | **13 41 15.0** | **+1.6** | | | |
| LZH | | | | pP | **pP** | **13 41 21.0** | **+1.7** | | | |
| LZH | | | | sP | **sP** | **13 41 23.8** | **+2.5** | | | |
| LZH | | | | PP | **PP** | **13 45 09.3** | **+3.5** | | | |
| LZH | | | | SKS | **SKSac** | **13 51 52.3** | **+3.1** | | | |
| LZH | | | | S | **ScS** | **13 52 34.0** | **+2.3** | | | |
| LZH | | | | sS | **sS** | **13 52 45.0** | **+4.2** | | | |
| LZH | | | | SS | **SS** | **13 59 03.4** | **+1.7** | | | |
| LZH | | | | PMZ | | | | | | |
| | comp=Z,54nm,1.1s | | | | | | | | | |
| LZH | | | | PMZ | | | | | | |
| | comp=Z,380nm,4.6s | | | | | | | | | |
| LZH | | | | LN | | | | | | |
| | comp=Z,920nm,16.5s | | | | | | | | | |
| LZH | | | | LE | | | | | | |
| | comp=Z,1µm,17.4s | | | | | | | | | |
| LZH | | | | LZ | | | | | | |
| | comp=Z,2µm,19.1s | | | | | | | | | |
| **A30A** | **Hoffart Farm,** | **96.13** | **40** | P | **P** | **13 41 14.1** | **0.0** | | | |
| | baz=96 | | | | | | | | | |
| **FFC** | **Flin Flon** | **96.52** | **34** | PFAKE | | 13 41 30.0 | +14 | | | |
| FFC | | | | LR | LR | | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **SCIA** | **State Center** | **96.72** | **48** | PFAKE | | 13 41 30.0 | +13 | | | |
| SCIA | | | | LR | LR | | | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| **MET** | **Memphis--Engin** | **96.74** | **55** | PFAKE | | 13 41 30.0 | +13 | | | |
| MET | | | | LR | LR | | | | | |
| | comp=Z,4µm,20.0s | | | | | | | | | |
| **CCM** | **Cathedral Cave** | **96.77** | **52** | PFAKE | | 13 41 30.0 | +13 | | | |
| CCM | | | | LR | LR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **BCIP** | **Isla Barro Col** | **96.87** | **83** | PFAKE | | 13 41 30.0 | +12 | | | |
| BCIP | | | | LR | LR | | | | | |
| | comp=Z,2µm,18.0s | | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **96.93** | **53** | PFAKE | | 13 41 30.0 | +12 | | | |
| PBMO | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **B32A** | **Ashes, Strandq** | **96.98** | **41** | P | **P** | **13 41 18.2** | **+0.3** | | | |
| | baz=97 | | | | | | | | | |
| **HOPE** | **Hope Point** | **97.07** | **156** | PFAKE | | 13 41 30.0 | +12 | | | |
| HOPE | | | | LR | LR | | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **E34A** | **Wadena** | **97.12** | **43** | P | **P** | **13 41 18.6** | **-0.1** | | | |
| | baz=97 | | | | | | | | | |
| **F35A** | **Swanville** | **97.26** | **44** | P | Pdif | 13 41 19.4 | 0.0 | | | |
| | baz=98 | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **97.36** | **41** | P | Pdif | 13 41 19.9 | +0.2 | | | |
| | baz=98 | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **97.36** | **41** | *e*P | **P** | **13 41 19.3** | **-0.4** | | | |
| | comp=Z,82nm,1.8s | | | | | | | | | |
| AGMN | | | | LR | LR | | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| **BRAL** | **Brewton** | **97.64** | **60** | PFAKE | | 13 41 30.0 | +8.6 | | | |
| BRAL | | | | LR | LR | | | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| **SLM** | **Saint Louis** | **97.71** | **52** | PFAKE | | 13 41 30.0 | +8.5 | | | |
| SLM | | | | LR | LR | | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **A33A** | **Warroad** | **97.89** | **41** | P | **P** | **13 41 21.7** | **-0.3** | | | |
| | baz=98 | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **97.90** | **318** | *c i*P | Pdif | 13 41 22.4 | 0.0 | | | |
| ULN | | | | pmax | pmax | | | | | |
| | comp=Z,17nm,2.3s | | | | | | | | | |
| ULN | | | | MLR | MLR | | | | | |
| | comp=Z,771nm,20.0s | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **97.90** | **318** | *e*P | Pdif | 13 41 22.9 | +0.6 | | | |
| | comp=Z,10nm,1.2s | | | | | | | | | |
| ULN | | | | LR | LR | | | | | |
| | comp=Z,900nm,18.0s | | | | | | | | | |
| **F36A** | **Milaca** | **97.94** | **44** | P | **P** | **13 41 21.9** | **-0.4** | | | |
| | baz=98 | | | | | | | | | |
| **BOD** | **Bodaibo** | **98.02** | **329** | *e*P | **P** | **13 41 19.5** | **-2.9** | | | |
| BOD | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,2.2s | | | | | | | | | |
| **D35A** | **Remer** | **98.04** | **43** | P | **P** | **13 41 22.8** | **0.0** | | | |
| | baz=98 | | | | | | | | | |
| **I38A** | **Scanlan Farm,** | **98.09** | **46** | P | **P** | **13 41 22.7** | **-0.4** | | | |
| | baz=98 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **98.09** | **39** | P | **P** | **13 41 21.6** | **-1.3** | | | |
| | comp=Z,2.0nm,0.6s,baz=281,slow=10,SNR=2.7 | | | | | | | | | |
| ULM | | | | LR | LR | 14 20 15.8 | | | | |
| | comp=Z,3µm,19.8s,baz=257,slow=32 | | | | | | | | | |
| **SIUC** | **Southern Illin** | **98.16** | **53** | PFAKE | | 13 41 30.0 | +6.5 | | | |
| SIUC | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **B34A** | **Aery, Baudette** | **98.18** | **41** | P | Pdif | 13 41 23.6 | +0.2 | | | |
| | baz=98 | | | | | | | | | |
| **SPMN** | **St. Paul** | **98.19** | **45** | *e*P | Pdif | 13 41 26.9 | +3.3 | | | |
| | comp=Z,31nm,1.3s | | | | | | | | | |
| SPMN | | | | LR | LR | | | | | |
| | comp=Z,2µm,19.0s | | | | | | | | | |
| **SONA1** | **Songino Array** | **98.30** | **318** | *e*P | **P** | **13 41 23.8** | **-0.3** | | | |
| SONA1 | | | | *e*PP | **PP** | **13 45 21.8** | **-2.5** | | | |
| **SONM** | **Songino Array** | **98.30** | **318** | P | **P** | **13 41 24.1** | **0.0** | | | |
| | comp=Z,2.5nm,1.0s,baz=126,slow=3.0,SNR=10 | | | | | | | | | |
| SONM | | | | PP | **PP** | **13 45 21.2** | **-3.0** | | | |
| | comp=Z,2.0nm,1.0s,baz=122,slow=7.7,SNR=5.8 | | | | | | | | | |
| SONM | | | | LR | LR | 14 23 46.7 | | | | |
| | comp=Z,766nm,19.3s,baz=104,slow=34 | | | | | | | | | |
| **C35A** | **Jirik Farms, M** | **98.32** | **42** | P | **P** | **13 41 23.8** | **-0.2** | | | |
| | baz=98 | | | | | | | | | |
| **LPAZ** | **La Paz** | **98.46** | **111** | P | Pdif | 13 41 27.2 | +1.0 | | | |
| | comp=Z,3.3nm,1.1s,baz=248,slow=5.3,SNR=6.6 | | | | | | | | | |
| LPAZ | | | | PP | **PP** | **13 45 23.7** | **-2.6** | | | |
| | comp=Z,2.2nm,1.1s,baz=276,slow=4.4,SNR=3.1 | | | | | | | | | |
| LPAZ | | | | LR | LR | 14 18 29.4 | | | | |
| | comp=Z,2µm,18.2s,baz=256,slow=31 | | | | | | | | | |
| **LPAZ** | **La Paz** | **98.46** | **111** | P | Pdif | 13 41 27.2 | +1.0 | | | |
| LPAZ | | | | | | 13 45 23.7 | | | | |
| LPAZ | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | | |
| LPAZ | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | | |
| **LPAZ** | **La Paz** | **98.46** | **111** | *e*P | Pdif | 13 41 27.7 | +1.5 | | | |
| | comp=Z,26nm,2.1s | | | | | | | | | |
| LPAZ | | | | PP | **PP** | **13 45 23.7** | **-2.6** | | | |
| **D36A** | **Goodland** | **98.64** | **43** | P | **P** | **13 41 25.2** | **-0.3** | | | |
| | baz=99 | | | | | | | | | |
| **WVT** | **Waverly** | **98.69** | **55** | PFAKE | | 13 41 40.0 | +14 | | | |
| WVT | | | | LR | LR | | | | | |
| | comp=Z,5µm,19.0s | | | | | | | | | |
| **HDIL** | **Hopedale** | **99.03** | **50** | PFAKE | | 13 41 40.0 | +13 | | | |
| HDIL | | | | LR | LR | | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **C36A** | **Pine Crest Far** | **99.06** | **42** | P | **Pdif** | **13 41 27.5** | **+0.2** | | | |
| | baz=99 | | | | | | | | | |
| **D37A** | **Cotton** | **99.11** | **43** | P | **Pdif** | **13 41 27.7** | **+0.1** | | | |
| | baz=99 | | | | | | | | | |
| **JFWS** | **Jewell Farm** | **99.14** | **48** | PFAKE | | 13 41 40.0 | +12 | | | |
| JFWS | | | | LR | LR | | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| **OLIL** | **Olney** | **99.32** | **52** | PFAKE | | 13 41 40.0 | +11 | | | |
| OLIL | | | | LR | LR | | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **USIN** | **University of** | **99.40** | **53** | *e*PP | PP | 13 45 25.3 | -7.5 | | | |
| USIN | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **C37A** | **Embarrass** | **99.46** | **43** | P | **Pdif** | **13 41 28.8** | **-0.3** | | | |
| | baz=100 | | | | | | | | | |
| **EYMN** | **Ely** | **99.97** | **43** | PFAKE | | 13 41 40.0 | +8.6 | | | |
| EYMN | | | | LR | LR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **GTA** | **Gaotai** | **99.98** | **308** | *e*P | **Pdif** | **13 41 32.6** | **+0.8** | | | |
| GTA | | | | pP | **pP** | **13 41 37.4** | **-0.3** | | | |
| GTA | | | | sP | **sP** | **13 41 39.6** | **-0.2** | | | |
| GTA | | | | PP | **PP** | **13 45 40.3** | **+3.0** | | | |
| GTA | | | | SKS | **SKSac** | **13 52 09.3** | **-0.7** | | | |
| GTA | | | | S | **ScS** | **13 53 03.3** | **-2.5** | | | |
| GTA | | | | sS | **sS** | **13 53 12.1** | **-3.5** | | | |
| GTA | | | | SS | **SS** | **13 59 59.9** | **+0.4** | | | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,280nm,6.8s | | | | | | | | | |
| GTA | | | | LN | | | | | | |
| | comp=Z,350nm,20.0s | | | | | | | | | |
| GTA | | | | LE | | | | | | |
| | comp=Z,890nm,18.5s | | | | | | | | | |
| GTA | | | | LZ | | | | | | |
| | comp=Z,1µm,21.9s | | | | | | | | | |
| **SFIN** | **Scholer Farm** | **100.57** | **51** | *e*PP | PP | 13 45 48.6 | +7.0 | | | |
| SFIN | | | | LR | LR | | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| **BLO** | **Bloomington** | **100.63** | **52** | PFAKE | | 13 41 50.0 | +15 | | | |
| BLO | | | | LR | LR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **GOGA** | **Godfrey** | **101.27** | **59** | PFAKE | | 13 41 50.0 | +12 | | | |
| GOGA | | | | LR | LR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **TLY** | **Talaya** | **101.29** | **321** | *e*P | Pdif | 13 41 26.9 | -10 | | | |
| TLY | | | | *e*S | SKSac | 13 52 06.0 | -10 | | | |
| TLY | | | | *e*PS | **PS** | **13 54 48.1** | **-1.7** | | | |
| TLY | | | | *e*SS | **SS** | **14 00 12.4** | **-4.5** | | | |
| TLY | | | | pmax | pmax | | | | | |
| | comp=Z,25nm,1.5s | | | | | | | | | |
| **MTDJ** | **Mount Denham** | **101.88** | **75** | PFAKE | | 13 41 50.0 | +9.3 | | | |
| MTDJ | | | | LR | LR | | | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| **FCC** | **Fort Churchill** | **102.09** | **32** | PFAKE | | 13 41 50.0 | +10 | | | |
| FCC | | | | LR | LR | | | | | |
| | comp=Z,2µm,20.0s | | | | | | | | | |
| **KMSC** | **Kings Mountain** | **103.45** | **57** | PFAKE | | 13 42 00.0 | +13 | | | |
| KMSC | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **ACSO** | **Alum Creek Sta** | **103.55** | **52** | PFAKE | | 13 42 00.0 | +13 | | | |
| ACSO | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **AAM** | **Ann Arbor** | **103.60** | **50** | PFAKE | | 13 42 00.0 | +12 | | | |
| AAM | | | | LR | LR | | | | | |
| | comp=Z,4µm,19.0s | | | | | | | | | |
| **NHSC** | **New Hope** | **103.83** | **60** | PFAKE | | 13 42 00.0 | +11 | | | |
| NHSC | | | | LR | LR | | | | | |
| | comp=Z,2µm,18.0s | | | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **104.57** | **74** | PFAKE | | 13 42 00.0 | +7.5 | | | |
| GTBY | | | | LR | LR | | | | | |
| | comp=Z,900nm,18.0s | | | | | | | | | |
| **BLA** | **Blacksburg** | **104.70** | **55** | PFAKE | | 13 42 00.0 | +7.2 | | | |
| BLA | | | | LR | LR | | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | | |
| **SDV** | **Santo Domingo** | **105.37** | **86** | PFAKE | | 13 46 20.0 | | | | |
| SDV | | | | LR | LR | | | | | |
| | comp=Z,900nm,19.0s | | | | | | | | | |
| **MCWV** | **Mont Chateau** | **105.74** | **53** | PFAKE | | 13 46 20.0 | | | | |
| MCWV | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **SAML** | **Samuel** | **105.86** | **106** | PFAKE | | 13 46 20.0 | | | | |
| SAML | | | | LR | LR | | | | | |
| | comp=Z,800nm,20.0s | | | | | | | | | |
| **ERPA** | **Erie** | **106.20** | **51** | PFAKE | | 13 46 20.0 | | | | |
| ERPA | | | | LR | LR | | | | | |
| | comp=Z,3µm,19.0s | | | | | | | | | |
| **CNNC** | **Cliffs of the** | **106.21** | **58** | PFAKE | | 13 46 20.0 | | | | |
| CNNC | | | | LR | LR | | | | | |
| | comp=Z,2µm,18.0s | | | | | | | | | |
| **LGNH** | **LØogne** | **106.44** | **76** | PFAKE | | 13 46 20.0 | | | | |
| LGNH | | | | LR | LR | | | | | |
| | comp=Z,3µm,20.0s | | | | | | | | | |
| **PAPH** | **Port-au-Prince** | **106.72** | **76** | PFAKE | | 13 46 20.0 | | | | |
| PAPH | | | | LR | LR | | | | | |
| | comp=Z,2µm,21.0s | | | | | | | | | |
| **PALK** | **Pallekele** | **106.95** | **272** | PFAKE | | 13 46 20.0 | | | | |
| PALK | | |

LUPA LR LR
comp=Z,4µm,20.0s
**WMQ Urumqi 109.85 310** Pdif **Pdif** **13 42 12.0 -3.5**
WMQ PP **PP** **13 46 53.0 +2.7**
WMQ SS SS 14 02 15.0 +0.7
WMQ PPMZ
comp=Z,85nm,8.0s
WMQ LN
comp=Z,310nm,20.0s
WMQ LE
comp=Z,520nm,22.0s
WMQ LZ
comp=Z,710nm,23.0s
**SKHT Srikalahasti 109.88 278** *e*P **Pdif** **13 42 16.2 +0.1**
SKHT *e*PP **PP** **13 46 51.6 +0.6**
SKHT *e*SKSac **SKSac** **13 52 51.9 -3.7**
SKHT *e* 13 56 04.2
**BRNJ Basking Ridge 109.91 53** PFAKE 13 46 30.0
BRNJ LR LR
comp=Z,6µm,20.0s
**ODNJ Ogdensburg 109.95 53** PFAKE 13 46 30.0
ODNJ LR LR
comp=Z,3µm,20.0s
**ADKI Addanki 110.24 280** *e*Pdif **Pdif** **13 42 16.9 -0.8**
ADKI *e*PP **PP** **13 46 52.8 -0.9**
ADKI *e* 13 56 27.6
**PAL Palisades 110.45 53** PFAKE 13 46 30.0
PAL LR LR
comp=Z,5µm,20.0s
**NCB Newcomb 110.70 50** PFAKE 13 46 30.0
NCB LR LR
comp=Z,3µm,20.0s
**ACCN Adirondack Com 111.01 50** PFAKE 13 46 30.0
ACCN LR LR
comp=Z,1µm,20.0s
**NJS Nagarjunasagar 111.04 280** *e*Pdif **Pdif** **13 42 17.7 -3.6**
NJS *e*PP **PP** **13 46 55.9 -3.6**
NJS *e* 13 56 27.1
**YLE Yale 111.23 53** PFAKE 13 46 30.0
YLE LR LR
comp=Z,6µm,20.0s
**CRPR Cabo Rojo, PR 111.32 78** PFAKE 13 46 30.0
CRPR LR LR
comp=Z,2µm,20.0s
**RPR Rampur 111.67 283** *e*Pdif **Pdif** **13 42 23.6 -0.5**
RPR *e*PP PP 13 46 58.4 -5.6
RPR *e*SKSac **SKSac** **13 52 57.1 -5.7**
RPR *e* 13 56 35.4
**HYB Hyderabad 111.97 281** *i* P **Pdif** **13 42 24.0 -1.5**
HYB *e*PP **PP** **13 47 04.0 -2.2**
HYB *e*SKS **SKSac** **13 53 08.0 +3.8**
HYB *e*SKKS **SKKSac** **13 54 06.0 -2.2**
HYB *e*SP **SP** **13 56 44.0 +6.6**
**HYBB Hyderabad (bro 111.97 281** *e*Pdif **Pdif** **13 42 24.6 -0.9**
HYBB *e*PP **PP** **13 47 03.0 -3.2**
HYBB *e* 13 56 45.8
**PTGA Pitinga 112.03 99** *e*PKKPbc PKKPbc 13 57 15.4 +1.7
**SJG San Juan 112.23 78** PFAKE 13 46 30.0
SJG LR LR
comp=Z,1µm,18.0s
**LBNH Lisbon 112.37 50** PFAKE 13 46 30.0
LBNH LR LR
comp=Z,4µm,19.0s
**HRV Adam Dziewonsk 112.42 51** PFAKE 13 46 30.0
HRV LR LR
comp=Z,4µm,19.0s
**CPD Cerro la Pandu 112.43 78** *e*PKKPdf PKKPdf 13 57 33.5 +0.5
CPD LR LR
comp=Z,5µm,19.0s
**URV Uravakonda 112.50 278** *e*Pdif **Pdif** **13 42 25.8 -2.0**
URV *e*PP PP 13 47 04.3 -5.7
URV *e*SKSac **SKSac** **13 53 06.1 -0.2**
URV *e* 13 56 40.4
**ZAA0 Zalesovo Array 112.90 321** *e*PP PP 13 47 07.9 -3.9
**ZALV Zalesovo Beam 112.90 321** PKiKP **PKiKP** **13 46 22.6 -0.5**
comp=Z,1.0nm,0.5s,baz=78,slow=0.6,SNR=6.1
ZALV PP PP 13 47 06.6 -5.3
comp=Z,6.8nm,1.1s,baz=93,slow=6.1,SNR=8.0
**MKAR Makanchi Array 114.00 313** Pdiff **Pdif** **13 42 38.0 +4.1**
comp=Z,0.9nm,1.0s,baz=60,slow=5.8,SNR=4.6
MKAR PKiKP PKPdf 13 46 24.0 -1.5
comp=Z,1.8nm,0.7s,baz=58,slow=2.5,SNR=14
MKAR PP PP 13 47 14.2 -5.8
comp=Z,3.7nm,1.1s,baz=98,slow=11,SNR=5.6
MKAR PKKPbc **PKKPbc** **13 57 07.7 -0.4**
comp=Z,0.4nm,0.7s,baz=274,slow=3.8,SNR=4.4
**WVL Waterville 114.03 49** PFAKE 13 46 40.0 +14
WVL LR LR
comp=Z,5µm,20.0s
**GRGR Grenville 114.76 86** PFAKE 13 46 40.0 +12
GRGR LR LR
comp=Z,900nm,18.0s
**SEUS St. Eustatius 114.99 80** PFAKE 13 46 40.0 +12
SEUS LR LR
comp=Z,900nm,20.0s
**EMMW East Machias 115.60 49** PFAKE 13 46 40.0 +11
EMMW LR LR
comp=Z,3µm,18.0s
**BDFB Brasilia 115.84 120** PFAKE 13 46 40.0 +10
BDFB LR LR
comp=Z,4µm,18.0s
**FDF Fort de France 115.96 83** PFAKE 13 46 40.0 +10
FDF LR LR
comp=Z,1µm,18.0s
**SCHQ Schefferville 116.23 38** PFAKE 13 46 40.0 +10
SCHQ LR LR
comp=Z,2µm,19.0s
**BBSR BB Station 116.44 63** PFAKE 13 46 40.0 +9.4
BBSR LR LR
comp=Z,1µm,20.0s
**KURK Kurchatov 116.60 317** PKIKP **PKPdf** **13 46 29.1 -1.2**
KURK pmax pmax
comp=Z,3.0nm,1.0s
**KURK Kurchatov 116.60 317** PKP **PKPdf** **13 46 29.1 -1.2**
KURK PP PP 13 47 31.1 -6.8
**KURBB Kurchatov Arra 116.66 317** PKP **PKPdf** **13 46 29.1 -1.3**
comp=Z,3.3nm,0.9s,baz=106,slow=1.9,SNR=23
KURBB PP PP 13 47 31.1 -7.3
comp=Z,4.6nm,1.1s,baz=98,slow=6.2,SNR=13
**AAA Alma-Ata 117.55 309** *e*PKIKP PKPdf 13 46 47.9 +15
AAA MLR MLR
comp=Z,1µm,19.0s
**KSH Kashi 118.06 305** *e*PKP **PKPdf** **13 46 35.3 +1.6**
KSH PP PP 13 47 55.5 +6.7
KSH PKS **PKSdf** **13 50 12.5 +2.0**
KSH SKS **SKSdf** **13 53 46.8 +1.6**
KSH PPMZ
comp=Z,420nm,4.9s
KSH LN
comp=Z,210nm,12.3s
KSH LE
comp=Z,380nm,12.8s
KSH LZ
comp=Z,640nm,19.5s
**TKM2 Tokmak 2 118.53 308** *e*PKIKP **PKPdf** **13 46 34.0 -0.6**
TKM2 MLR MLR
comp=Z,700nm,22.0s
**TKM2 Tokmak 2 118.53 308** *e*PKPdf **PKPdf** **13 46 34.0 -0.6**
TKM2 LR LR
comp=Z,700nm,22.0s
**FRU Bishkek 119.25 308** *e*PKIKP **PKPdf** **13 46 34.0 -1.7**
FRU *e* 13 46 40.0
FRU *e* 13 47 52.0
**AAK Ala-Archa 119.33 308** *i*PKIKP **PKPdf** **13 46 35.7 -0.4**
**AAK Ala-Archa 119.33 308** *e*PKPdf **PKPdf** **13 46 36.2 +0.1**
AAK *e*PP PP 13 47 49.4 -8.1
AAK LR LR
comp=Z,600nm,18.0s
**EKS2 Erkin-Say 119.86 308** *e*PKIKP **PKPdf** **13 46 37.0 -0.1**
EKS2 MLR MLR
comp=Z,800nm,19.0s
**EKS2 Erkin-Say 119.86 308** *e*PKPdf **PKPdf** **13 46 37.0 -0.1**
EKS2 LR LR
comp=Z,800nm,19.0s
**SFJD Kangerlussuaq 121.42 23** PFAKE 13 46 50.0 +11
SFJD LR LR
comp=Z,2µm,19.0s
**BVAR Borovoye Array 121.54 320** PKP **PKPdf** **13 46 38.5 -1.2**
comp=Z,3.7nm,0.7s,baz=77,slow=3.2,SNR=17
**BRVK Borovoye 121.59 320***c* *i*PKIKP **PKPdf** **13 46 39.2 -0.7**
BRVK pmax pmax
comp=Z,23nm,2.5s
BRVK MLR MLR
comp=Z,1µm,19.0s
**BRVK Borovoye 121.59 320** PKPdf **PKPdf** **13 46 40.0 +0.1**
SNR=6.9
**BRVK Borovoye 121.59 320** *e*PKPdf **PKPdf** **13 46 39.5 -0.3**
BRVK LR LR
comp=Z,2µm,19.0s
**SPITS Spitsbergen Ar 122.01 358** PKP **PKPdf** **13 46 39.1 -0.9**
comp=Z,11nm,0.9s,baz=332,slow=4.9,SNR=4.0
**SUMG Summit 122.16 14** PFAKE 13 46 50.0 +9.1
SUMG LR LR
comp=Z,3µm,20.0s
**DRLN Deer Lake 122.34 44** PFAKE 13 46 50.0 +8.6
DRLN LR LR
comp=Z,5µm,19.0s
**KBL Kabul 123.29 298** *e*PKIKP **PKPdf** **13 46 44.9 +0.9**
KBL MLR MLR
comp=Z,700nm,19.0s
**KBL Kabul 123.29 298** *e*PKPdf **PKPdf** **13 46 44.9 +0.9**
KBL LR LR
comp=Z,700nm,19.0s
**ABPO Ambohimpanom 123.81 228** PFAKE 13 47 00.0 +15
ABPO LR LR
comp=Z,4µm,18.0s
**OPO Ambohidratompo 124.13 229** PKP **PKPdf** **13 46 46.5 +0.4**
comp=Z,8.4nm,0.9s,baz=55,slow=2.2,SNR=8.6
**SUR Sutherland 125.63 195** PFAKE 13 47 00.0 +11
SUR LR LR
comp=Z,4µm,19.0s
**SVE Sverdlovsk 126.13 326** *i* PKIKP **PKPdf** **13 46 48.9 +0.5**
SVE pmax pmax
comp=Z,21nm,1.5s
SVE MLR MLR
comp=Z,2µm,23.0s
**SCO Scoresbysund 127.23 11** *i* P PP 13 48 41.1 -8.3
**ARU Arti 127.34 326** *i* PKIKP **PKPdf** **13 46 51.1 +0.3**
ARU 13 48 47.3
ARU 13 53 55.8
ARU SP SP 13 58 49.5 -3.4
ARU MLR MLR
comp=Z,2µm,21.0s
**ARU Arti 127.34 326** *e*PKPdf **PKPdf** **13 46 51.0 +0.3**
ARU LR LR
comp=Z,2µm,20.0s
**BOSA Boshof 127.85 201** PKP **PKPdf** **13 46 53.4 +0.5**
comp=Z,10nm,1.1s,baz=109,slow=1.8,SNR=4.5
**ARCES ARCESS Array B 129.52 351** PKP **PKPdf** **13 46 54.5 -0.1**
comp=Z,6.2nm,0.8s,baz=9.6,slow=2.6,SNR=13
**APA Apatity 129.84 347**⇑ *i*PKIKP **PKPdf** **13 46 56.0 +0.8**
APA *i* PS PS 13 59 06.0 -11
APA MLR MLR
comp=Z,2µm,19.0s
**LBTB Lobatse 131.02 204** PKP **PKPdf** **13 46 59.5 +0.5**
comp=Z,4.4nm,1.0s,baz=171,slow=10,SNR=2.3
**RCBR Riachuelo 131.12 118** PFAKE 13 47 10.0 +11
RCBR LR LR
comp=Z,4µm,18.0s
**GEYT Alibeck 132.03 303** PKP **PKPdf** **13 46 59.1 -1.3**
comp=Z,4.5nm,0.8s,baz=327,slow=2.5,SNR=9.6
GEYT PP **PP** **13 49 19.0 -3.1**
comp=Z,4.2nm,0.9s,baz=22,slow=5.1,SNR=4.8
GEYT SKPbc **SKPab** **13 50 28.5 +1.8**
comp=Z,1.8nm,0.7s,baz=70,slow=4.9,SNR=4.3
**KLMR Klimovskoe 133.34 338** *e*PKIKP PKPdf 13 46 55.2 -6.8
KLMR *e* 13 49 31.2
KLMR pmax pmax
comp=Z,45nm,1.8s
**BANOM Banah 133.81 287**⇑PKiKP **PKPdf** **13 47 03.9 -0.2**
**UOSS Wadi Hilu 133.81 285** *e*PKPdf PKPdf 13 47 09.6 +5.5
UOSS LR LR
comp=Z,400nm,19.0s
**HATD Hatta, Dubai 133.87 285**⇓ *i*PKiKP **PKiKP** **13 47 05.3 -0.2**
SNR=5.8
**ASHO Ashiyiah 133.92 285**⇓ *i*PKiKP **PKPdf** **13 47 03.9 -0.4**
SNR=7
**NAZ Nazwa, Dubai 134.31 285**⇑PKiKP **PKiKP** **13 47 05.7 -0.6**
**FAQ Al Faqa, Dubai 134.35 285**⇑ *i*PKiKP **PKiKP** **13 47 06.0 -0.4**
SNR=5.2
**ASUD Al Ashush, Dub 134.58 285**⇓PKiKP **PKiKP** **13 47 06.8 -0.1**
**FINES FINESS Array B 136.74 346** PKhKP PKPpre 13 47 00.8
comp=Z,1.7nm,0.8s,baz=55,slow=7.2,SNR=3.7
FINES PKP **PKPdf** **13 47 07.7 -0.6**
comp=Z,3.2nm,0.7s,baz=71,slow=0.8,SNR=7.0
**FINES FINESS Array B 136.74 346***c* *i*PKIKP **PKPdf** **13 47 10.6 +2.3**
FINES pmax pmax
comp=Z,15nm,1.1s
**LSZ Lusaka 138.42 213** PKP **PKPdf** **13 47 12.6 -0.4**
comp=Z,3.8nm,0.9s,baz=90,slow=6.1,SNR=2.7
**OBN Obninsk 138.50 334** PKP **PKPdf** **13 47 11.9 +0.2**
comp=Z,7.2nm,0.4s,baz=32,slow=16,SNR=4.9
**OBN Obninsk 138.50 334** *i* PKIKP **PKPdf** **13 47 10.6 -1.1**
OBN pmax pmax
comp=Z,29nm,1.3s
**VRH Novokhopyorsk 138.58 326** *e*PKIKP **PKPdf** **13 47 11.4 -0.6**
VRH pmax pmax
comp=Z,10.0nm,1.2s
VRH pmax pmax
comp=N,9.0nm,0.6s
VRH pmax pmax
comp=E,9.0nm,0.6s
**TSUM Tsumeb 139.04 197** PP PP 13 50 05.2 +0.3
comp=E,2.9nm,0.9s,baz=130,slow=8.9,SNR=3.2
**TSUM Tsumeb 139.04 197** PP PP 13 50 05.2 +0.3
TSUM LR LR
comp=Z,3µm,18.0s
**LPSR Galich'ya Gora 139.13 330** *e*PKIKP **PKPdf** **13 47 09.3 -3.7**
LPSR pmax pmax
comp=Z,5.0nm,0.7s
LPSR pmax pmax
comp=N,3.0nm,0.6s
LPSR pmax pmax
comp=E,6.0nm,0.5s
**VSU Vasula 139.19 344** PKIKP **PKPdf** **13 47 12.0 -0.9**
**NOA NORSAR Array B 139.29 356** PKhKP PKPpre 13 47 06.1
comp=E,1.2nm,0.9s,baz=7.3,slow=4.1,SNR=3.2
**VSR Storozhevoye 139.87 328** *e*PKIKP **PKPdf** **13 47 12.6 -1.8**
VSR pmax pmax
comp=Z,10.0nm,1.2s
VSR pmax pmax
comp=N,9.0nm,1.1s
VSR pmax pmax
comp=E,3.0nm,0.5s
**VORD Divnogorie 139.96 328** *e*PKIKP **PKPdf** **13 47 12.6 -2.0**
VORD pmax pmax
comp=N,20nm,0.8s
VORD pmax pmax
comp=Z,6.0nm,0.8s
VORD pmax pmax
comp=E,9.0nm,0.6s
**HFS Hagfors 139.99 354** PKhKP PKPpre 13 47 06.2
comp=E,2.0nm,0.6s,baz=104,slow=1.8,SNR=7.6
**DGRG David-gareji 140.82 311** P PKPpre 13 47 09.3
**DGRG David-gareji 140.82 311** *e*PKHKP PKPpre 13 47 09.2
**TBLG Delisi 141.17 312** P PKPpre 13 47 11.0
**TBLG Delisi 141.17 312** *e*PKHKP PKPpre 13 47 10.9
**NCK Nalchik 141.27 315**⇓ *i*PKIKP **PKPdf** **13 47 16.0 -1.2**
**KBZ Khabaz 141.63 316** PKP **PKPdf** **13 47 15.9 -1.9**
comp=E,3.4nm,0.9s,baz=195,slow=2.5,SNR=4.3
**KIV Kislovodsk 141.67 316** *i* PKIKP **PKPdf** **13 47 18.2 +0.2**
KIV *i* 13 50 19.3
KIV pmax pmax
comp=Z,9.0nm,1.2s
**KIV Kislovodsk 141.67 316**⇑PKPdf PKPpre 13 47 12.7
**KIV Kislovodsk 141.67 316** PFAKE 13 47 30.0 +12
KIV LR LR
comp=Z,1µm,20.0s
**GNI Garni 141.71 310**⇓ *i*PKIKP **PKPdf** **13 47 20.4 +2.1**
**GNI Garni 141.71 310**⇓PKPdf **PKPdf** **13 47 14.4 -3.9**
**ONI Oni 141.73 314** P PKPpre 13 47 12.8
**ONI Oni 141.73 314** *e*PKHKP PKPpre 13 47 12.7
**NEY Neytrino 141.95 315** *i* PKIKP **PKPdf** **13 47 16.9 -1.8**
**AKH Akhalkalaki 142.16 312** P **PKPdf** **13 47 15.0 -4.2**
**AKH Akhalkalaki 142.16 312** *e*PKIKP **PKPdf** **13 47 14.9 -4.2**
**MICGM Minsk 142.21 339** *e*PKP **PKPdf** **13 47 15.0 -3.5**
**MNK Minsk 142.22 339** *e*PKIKP **PKPdf** **13 47 15.0 -3.5**
MNK *e* 13 50 23.0
**KMBO Kilima Mbogo 142.76 239** PKP **PKPdf** **13 47 18.6 -2.5**
comp=Z,12nm,0.9s,baz=340,slow=1.3,SNR=22
KMBO PP **PP** **13 50 28.1 -1.1**
comp=Z,1.2nm,0.5s,baz=110,slow=1.9,SNR=3.4
**KMBO Kilima Mbogo 142.76 239***c* *i*PKIKP **PKPdf** **13 47 19.7 -1.4**
KMBO pmax pmax
comp=Z,12nm,0.9s
**KMBO Kilima Mbogo 142.76 239** PKPdf **PKPdf** **13 47 18.8 -2.3**
SNR=8.4
**KMBO Kilima Mbogo 142.76 239** *e*PKPdf **PKPdf** **13 47 18.5 -2.6**
KMBO PP **PP** **13 50 28.1 -1.1**
KMBO LR LR
comp=Z,1µm,19.0s
**DAMY Dhamar 143.13 267** *e*PKPdf **PKPdf** **13 47 21.2 -0.5**
DAMY LR LR
comp=Z,1µm,20.0s
**EDU Dundee 143.31 8** *e*P PKPab 13 47 15.8 -0.6
**EAB Aberfoyle 143.46 10**⇑*e*P PKPab 13 47 16.9 0.0
**RAYN Ar Rayn 143.46 282** *e*PKPdf PKPbc 13 47 19.0 0.0
RAYN LR LR
comp=Z,1µm,18.0s
**ATD Arta Tunnel 143.70 262** PKP PKPbc 13 47 21.0 +1.1
comp=Z,21nm,0.8s,baz=270,slow=20
**SOC Sochi 143.75 317***c* *i*PKIKP PKPab 13 47 18.2 -0.2
SOC *e* 13 50 32.3
SOC *e*PPP PPP 13 53 42.9
SOC *e*SS SS 14 09 07.7 -8.7
SOC *e*SSS SSS 14 14 42.1
SOC pmax pmax
comp=Z,19nm,0.6s
**PGBU Glenifferbraes 143.80 10** *e*P PKPab 13 47 17.6 -0.6
PGBU AMB AMB 13 47 25.2
comp=Z,100nm,1.6s
**EDI Edinburgh 143.89 9** *e*P PKPab 13 47 18.6 0.0
EDI AMB AMB 13 47 25.6
comp=Z,86nm,1.7s
EDI AMS AMS 14 47 00.6
comp=Z,1µm,18.3s
**MUD Monsted U'grnd 143.97 357** *e*PKHKP PKPpre 13 47 13.8
MUD MLR MLR
comp=Z,2µm,17.0s
**ESY Stoneypath 143.98 8**⇑*e*P PKPab 13 47 18.6 -0.3
**SUW Suwalki 144.05 343** *e*PKP **PKPab** **13 47 19.3 +0.1**
**SUW Suwalki 144.05 343** *e*PKIKP **PKPab** **13 47 19.4 +0.2**
**KLNR Kaliningrad 144.26 346** *i* PKIKP **PKPab** **13 47 20.1 +0.1**
**EKA Eskdalemuir Ar 144.47 9** PKP **PKPab** **13 47 20.3 -0.5**
comp=Z,18nm,0.9s,baz=339,slow=2.8,SNR=33
**ESK Eskdalemuir 144.47 9** *e*P **PKPab** **13 47 19.4 -1.4**
ESK AMB AMB 13 47 26.6
comp=Z,65nm,1.5s
ESK AMS AMS 14 55 33.1
comp=Z,1µm,16.5s
**ESK Eskdalemuir 144.47 9** *e*PKIKP **PKPab** **13 47 20.2 -0.6**
ESK MLR MLR
comp=Z,2µm,19.0s
**ESK Eskdalemuir 144.47 9** *e*PKPdf **PKPab** **13 47 20.2 -0.6**
ESK LR LR
comp=Z,2µm,19.0s
**COP Copenhagen 144.50 354** *e*PKHKP PKPpre 13 47 10.7
**COP Copenhagen 144.50 354** *i* P PKPpre 13 47 10.7
**ANN Anapa 144.54 320** *i* PKIKP PKPbc 13 47 21.6 +0.1
ANN *e*PPP PPP 13 53 48.2
ANN pmax pmax
comp=Z,114nm,1.4s
ANN MLR MLR
comp=E,545nm,21.0s
ANN MLR MLR
comp=N,517nm,21.0s
ANN MLR MLR
comp=Z,694nm,21.0s
**BWH Wardlaw 144.54 10** *e*P **PKPab** **13 47 19.8 -1.2**
**ECK Cauldkaine Hil 144.62 9**⇑*e*P **PKPab** **13 47 20.4 -1.0**
**GAL1 Galloway 144.66 11**⇑*e*P **PKPab** **13 47 20.8 -0.6**
GAL1 AMB AMB 13 47 28.1
comp=Z,93nm,1.3s
**BHH Howats Hill 144.69 9**⇑*e*P **PKPab** **13 47 21.2 -0.4**
**AKASG Malin Array Be 144.75 334** PKP **PKPab** **13 47 20.9 -1.0**
comp=Z,33nm,1.0s,baz=37,slow=4.1,SNR=143
**BSD Bornholm Skovb 144.76 351** *e*PKHKP PKPpre 13 47 11.1
BSD MLR MLR
comp=Z,1µm,16.0s
**BSD Bornholm Skovb 144.76 351** *i* P PKPpre 13 47 11.1
comp=Z,1µm,16.0s
**KIEV Kiev 144.77 334**⇑ *i*PKIKP **PKPab** **13 47 20.7 -1.3**
KIEV MLR MLR
comp=Z,707nm,19.0s
**KIEV Kiev 144.77 334** *e*PKPdf **PKPab** **13 47 21.1 -0.9**
KIEV LR LR
comp=Z,900nm,19.0s
**AK11 Malin Array Si 144.79 334** *e*PKPdf **PKPab** **13 47 21.3 -0.8**
**PCED Cedros 144.95 51** *e*PKP **PKPdf** **13 47 26.9 +3.0**
**BBO1 Bothel 145.03 10**⇑*e*P **PKPbc** **13 47 22.4 -0.4**
**PCAN Candelaria 145.16 51** *e*PKP **PKPdf** **13 47 27.3 +3.0**
**KESW Keswick, Cumbr 145.19 9**⇑*e*P **PKPbc** **13 47 22.9 -0.4**
KESW AMB AMB 13 47 29.5
comp=Z,142nm,1.3s
**BINT Bingol 145.24 309** PKIKP **PKPdf** **13 47 25.2 +0.7**
**ROSA Rosais 145.25 51** *e*PKP **PKPdf** **13 47 27.3 +2.9**
**LCP Cassop 145.28 8**⇑*e*P **PKPbc** **13 47 23.5 -0.1**
**PGRA Graciosa 145.32 50** *e*PKP **PKPdf** **13 47 28.6 +4.1**
**PPNO Prainha do Nor 145.32 51** *e*PKP PKPdf 13 47 31.7 +7.1
**PMAN Manadas 145.39 51** *e*PKP PKPab 13 47 30.8 +6.1
**DSB Dublin 145.87 13** *e*PKPdf **PKPab** **13 47 25.8 -0.1**
DSB LR LR
comp=Z,2µm,19.0s
**ADH Angra Heroismo 146.00 50** *e*PKP **PKPab** **13 47 31.3 +4.3**
**HPK Haverah Park 146.02 8** *e*P **PKPbc** **13 47 26.0 0.0**
HPK AMB AMB 13 47 33.3
comp=Z,244nm,1.5s
HPK AMS AMS 14 56 31.7
comp=Z,1µm,15.5s
**VAL Valentia 146.06 18** *e*P **PKPdf** **13 47 24.3 -1.0**
**GKP Gorka Klasztor 146.14 348** *e*PKP **PKPdf** **13 47 25.1 -0.3**
**GKP Gorka Klasztor 146.14 348** *e*PKP2 **PKPdf** **13 47 25.1 -0.3**
**WLF1 Llynfaes 146.22 11** *e*P **PKPdf** **13 47 26.0 +0.4**
WLF1 AMB AMB 13 47 29.7
comp=Z,125nm,2.3s
WLF1 AMS AMS 14 54 19.6
comp=Z,2µm,20.9s
**SIM Simferopol'** **146.38 323***ce*PKP2 PKPab 13 47 39.3 +11
SIM pmax pmax
comp=Z,49nm,0.9s
**LHO Holmfirth 146.39 9**⇑*e*P **PKPbc** **13 47 26.5 -0.6**
**BSEG Bad Segeberg 146.42 356** *e*PKP **PKPab** **13 47 27.7 -0.3**
baz=9.9,slow=2.5
**FURI Furi 146.58 255** *e*PKPdf **PKPab** **13 47 32.9 +2.6**
FURI LR LR
comp=Z,1µm,20.0s
**BEL Belsk 146.65 343** *e*PKP **PKPab** **13 47 28.6 -0.4**
**BEL Belsk 146.65 343** *e*PKP2 **PKPab** **13 47 28.7 -0.3**
**STNC Stoke 146.78 9** *e*P **PKPbc** **13 47 28.1 -0.1**
STNC AMS AMS 14 57 00.7
comp=Z,2µm,19.0s
**FOEL Foel Wylfa 146.82 10**⇑*e*P **PKPbc** **13 47 28.0 -0.4**
FOEL AMB AMB 13 47 34.6
comp=Z,133nm,1.5s
**MALT Malatya 146.95 310**⇓PKP2 **PKPdf** **13 47 27.6 +0.2**
**MALT Malatya 146.95 310**⇓*i*P **PKPdf** **13 47 27.6 +0.2**
**SORM Soroca 147.09 332**⇑PKP2 **PKPbc** **13 47 29.3 0.0**
**SORM Soroca 147.09 332**⇑*i*P **PKPbc** **13 47 29.3 0.0**
**HLM1 Long Mynd 147.23 10** *e*P **PKPbc** **13 47 28.8 -0.7**
HLM1 AMB AMB 13 47 32.1
comp=Z,124nm,1.7s
**CWF Charnwood Fore 147.25 8** *e*P **PKPbc** **13 47 29.0 -0.6**
CWF AMB AMB 13 47 33.0
comp=Z,97nm,1.9s
CWF AMS AMS 14 57 28.9
comp=Z,1µm,20.2s
**CWF Charnwood Fore 147.25 8** *e*PKPdf **PKPbc** **13 47 29.7 +0.1**
CWF LR LR
comp=Z,2µm,19.0s
**KSRV Kasrt alli 147.41 305** *e*P **PKPab** **13 47 31.9 -0.7**
**PSET Sete Cidades 147.42 51** *e*PKP **PKPab** **13 47 35.2 +2.6**
**LVV L'vov 147.43 338** *i* PKP2 **PKPbc** **13 47 30.0 -0.2**
LVV *e* 13 54 32.8
LVV *e*SS SS 14 10 36.8 +40
**RUE Ruedersdorf 147.48 351** *e*PKP **PKPbc** **13 47 30.6 +0.4**
baz=9.9,slow=2.5
**PDA Ponta Delgada 147.50 51** *e*PKP **PKPab** **13 47 36.1 +3.3**
**KIS Kishinev 147.73 330**⇑ *i*PKIKP **PKPbc** **13 47 30.0 -1.1**
KIS M M 13 47 32.0
comp=Z,1µm,3.0s
**KIS Kishinev 147.73 330** *e*PP PP 13 51 03.0 +5.5
KIS *e*SKKS 14 01 12.0
KIS LRM MLR 14 52 20.0
comp=Z,2µm,24.0s
**KIS Kishinev 147.73 330**α *i*PKP2 **PKPbc** **13 47 30.0 -1.1**
KIS *e* 13 51 03.0
KIS *e* 14 10 44.0
KIS pmax pmax
comp=Z,1µm,3.0s
KIS pmax pmax
comp=Z,1µm,6.0s
KIS MLR MLR
comp=N,1µm,22.0s

KIS MLR MLR
comp=Z,2µm,22.0s
KIS MLR MLR
comp=E,1µm,21.0s
KIS MLR MLR
comp=Z,2µm,24.0s
**BART Pico Bartolome 147.84 51** *e*PKP **PKPab 13 47 34.8 +0.5**
**NRDL Niedersach Rie 147.87 355** *e*PKP **PKPbc 13 47 31.7 +0.5**
baz=9.9,slow=2.5
**MONM Monmouth 147.90 10** *e*P **PKPbc 13 47 30.1 -1.3**
MONM AMB AMB 13 47 37.1
comp=Z,164nm,1.4s
MONM AMS AMS 14 55 15.9
comp=Z,1µm,17.0s
**JHLN Al Jahlan 147.90 305** *e*P **PKPbc 13 47 33.1 +1.2**
**KWP Kalwaria Pacla 148.03 340** *e*PKP **PKPbc 13 47 31.3 -0.6**
**KWP Kalwaria Pacla 148.03 340** *e*PKP2 **PKPbc 13 47 31.3 -0.6**
**STRD Stroud 148.06 10** *e*P **PKPab 13 47 33.6 -1.0**
STRD AMS AMS 14 53 32.2
comp=Z,1µm,18.7s
**SLMH Al Salmeh 148.11 306** *e*P **PKPbc 13 47 33.0 +0.5**
**MBAR Mbarara 148.12 232** PKPbc **PKPbc 13 47 33.6 +0.2**
comp=Z,22nm,0.8s,baz=136,slow=11,SNR=2.7
**MBAR Mbarara 148.12 232** *e*PKP2 **PKPbc 13 47 33.0 -0.4**
MBAR MLR MLR
comp=Z,400nm,18.0s
**MBAR Mbarara 148.12 232** *e*PKPbc **PKPbc 13 47 33.0 -0.4**
MBAR LR LR
comp=Z,400nm,18.0s
**PSMA Santa Maria 148.18 52** *e*PKP **PKPab 13 47 38.3 +2.7**
**ASSE Asse, Remlinge 148.18 355** *e*PKP **PKPbc 13 47 32.5 +0.4**
baz=9.9,slow=2.5
**PSMN Pico do Norte, 148.22 52** *e*PKP **PKPab 13 47 38.3 +2.5**
**SWN1 Swindon 148.37 9** *e*P **PKPdf 13 47 27.8 -1.4**
SWN1 AMS AMS 14 55 33.4
comp=Z,2µm,23.3s
**OJC Ojcow 148.38 343** *e*PKP **PKPdf 13 47 28.4 -0.9**
**OJC Ojcow 148.38 343** *e*PKIKP **PKPdf 13 47 29.3 0.0**
**OJC Ojcow 148.38 343** *e*PKPdf **PKPdf 13 47 29.3 0.0**
**CLZ Clausthal 148.49 355** *e*PKP **PKPbc 13 47 33.6 +0.6**
baz=9.9,slow=2.5
CLZ *e*L L 15 00 20.8
comp=Z,1µm,18.8s
**KSP Ksiaz 148.63 348** *e*PKP **PKPbc 13 47 31.7 -1.6**
**KSP Ksiaz 148.63 348** *e*PKP2 **PKPbc 13 47 31.8 -1.6**
**STHS Stebnicka Huta 148.69 341** *e*PKP2 **PKPbc 13 47 34.6 +1.0**
**STHS Stebnicka Huta 148.69 341** *e*PKP **PKPbc 13 47 34.6 +1.0**
**CLL Collm 148.74 352** ⇓*i*PKP2 **PKPbc 13 47 33.5 -0.1**
CLL pmax pmax
comp=Z,74nm,1.2s
CLL MLR MLR
comp=Z,1µm,18.5s
**CLL Collm 148.74 352** *e*PKP **PKPbc 13 47 33.9 +0.3**
baz=9.9,slow=2.5
CLL *e*L L 15 04 29.6
comp=Z,1µm,18.6s
**CLL Collm 148.74 352** ⇓*i*PKPbc **PKPbc 13 47 33.5 -0.1**
comp=Z,74nm,1.2s
CLL ⇑*i*PKiKP **PKiKP 13 47 36.1 +1.1**
comp=Z,204nm,1.7s
CLL *i* PKPab **PKPab 13 47 38.8 +1.5**
CLL *e*PKPlp 13 47 54.0
comp=Z,300nm,23.3s
CLL *e*SKPdf **SKPdf 13 51 00.0 -2.9**
CLL *e*PPP PPP 13 54 24.0
CLL *e*SKKSac **SKKSac 13 57 56.0 +1.9**
CLL *e*PSKS 14 01 17.0
CLL *e*SKKSdf **SKKSdf 14 03 36.0 +0.1**
CLL *e*SS **SS 14 10 06.0 -5.3**
CLL *e*PSPS 14 11 11.0
CLL *e*SSS SSS 14 15 54.0
CLL *e*SSSS 14 19 54.0
CLL LmH 15 03 00.0
comp=N,700nm,18.4s
CLL LmH 15 03 00.0
comp=E,600nm,19.9s
CLL LmV 15 04 00.0
comp=Z,1µm,18.5s
**CLL Collm 148.74 352** *e*PKPbc **PKPbc 13 47 33.8 +0.2**
CLL LR LR
comp=Z,2µm,19.0s
**KOLS Kolonicke sedl 148.78 339** *e*PKP2 **PKPbc 13 47 34.5 +0.7**
**KOLS Kolonicke sedl 148.78 339** *e*PKP **PKPbc 13 47 34.5 +0.7**
KOLS *e* 13 47 38.0
**BUR04 Bucovina Ar. S 148.81 335** *e*PKPdf **PKPdf 13 47 30.1 -0.1**
**BURAR Bucovina Array 148.81 335** ⇑PKP2 **PKPbc 13 47 35.0 +0.9**
**BURAR Bucovina Array 148.81 335** ⇑*i*P **PKPbc 13 47 35.0 +0.9**
**GTTG Gyttingen 148.82 355** *e*PKP **PKPbc 13 47 34.2 +0.4**
baz=9.9,slow=2.5
**NIE Niedzica 148.97 342** *e*PKP **PKPbc 13 47 35.3 +1.0**
**NIE Niedzica 148.97 342** *e*PKP2 **PKPbc 13 47 35.4 +1.1**
**NEUB Neuenburg 148.99 353** *e*PKP **PKPbc 13 47 34.7 +0.5**
baz=9.9,slow=2.5
**UPC Upice 149.01 348** *e*PKP2 **PKPbc 13 47 34.8 +0.5**
UPC *e*SS SS 14 10 15.8 +1.4
UPC MLR MLR
comp=Z,2µm,17.6s
**UPC Upice 149.01 348** ⇑*e*PKP **PKPbc 13 47 34.8 +0.5**
UPC *e*PKPAB **PKPab 13 47 39.6 +1.2**
UPC *e*SS SS 14 10 15.8 +1.4
UPC AMS AMS 15 05 30.0
comp=Z,2µm,17.6s
**BRG Berggiesshubel 149.02 350** *e*PKP **PKPdf 13 47 30.3 0.0**
comp=Z,15nm,1.5s
BRG *i* 13 47 34.6
comp=Z,71nm,1.3s
BRG *i* 13 47 39.1
comp=Z,103nm,1.3s
BRG SS SS 14 10 10.0 -4.5
comp=N,1µm,23.8s
comp=E,475nm,26.4s
comp=Z,1µm,20.8s
**BRG Berggiesshubel 149.02 350** *e*PKIKP **PKPdf 13 47 30.3 0.0**
BRG *i* 13 47 34.7
BRG *i* 13 47 39.1
BRG SS SS 14 10 10.0 -4.5
BRG pmax pmax
comp=Z,15nm,1.5s
BRG MLR MLR
comp=N,1µm,23.8s
BRG MLR MLR
comp=E,475nm,26.4s
BRG MLR MLR
comp=Z,1µm,20.8s
**BRG Berggiesshubel 149.02 350** *e*PKP **PKPbc 13 47 34.9 +0.6**
baz=9.9,slow=2.5
**DYA Yadsworthy 149.03 13** *e*PKPbc **PKPbc 13 47 34.7 +0.3**
**UZH Uzhgorod 149.03 339** ⇓*i*PKP2 **PKPbc 13 47 34.8 +0.4**
UZH *e* 13 51 04.2
**TLCR 149.04 328** ⇑PKP2 **PKPbc 13 47 35.9 +1.3**
**TLCR 149.04 328** ⇑*i*P **PKPbc 13 47 35.8 +1.2**
**BUG Bochum--Univer 149.06 359** *e*PKP **PKPbc 13 47 34.6 +0.2**
baz=9.9,slow=2.5
**FBE Freiberg 149.06 351** *e*PKP **PKPbc 13 47 35.4 +0.9**
baz=9.9,slow=2.5
**TESR Tescani 149.07 332** ⇑*i*P **PKPbc 13 47 35.0 +0.4**
**DPC Dobruska-Polom 149.09 347** *e*PKP2 **PKPbc 13 47 35.2 +0.6**
DPC *e*SS SS 14 10 17.5 +2.0
DPC MLR MLR
comp=Z,1µm,18.6s
**DPC Dobruska-Polom 149.09 347** ⇑*e*PKP **PKPbc 13 47 35.2 +0.6**
DPC *e*pPKP **PKPab 13 47 41.3 +2.5**
DPC *e*SS SS 14 10 17.5 +2.0
DPC AMS AMS 15 02 40.0
comp=Z,1µm,18.6s
**OKC Ostrava-Krasne 149.16 345** *e*PKP2 **PKPbc 13 47 35.6 +0.9**
OKC *e*SS SS 14 10 17.9 +1.7
OKC MLR MLR
comp=Z,2µm,18.1s
**OKC Ostrava-Krasne 149.16 345** ⇑*e*PKP **PKPbc 13 47 35.6 +0.9**
OKC *e*SS SS 14 10 17.9 +1.7
OKC AMS AMS 15 03 20.0
comp=Z,2µm,18.1s
**PVCC Panska Ves 149.25 349** *e*PKP2 **PKPbc 13 47 36.2 +1.3**
PVCC MLR MLR
comp=Z,1µm,17.4s
**PVCC Panska Ves 149.25 349** ⇑*e*PKP **PKPbc 13 47 36.2 +1.3**
PVCC *e*SS SS 14 10 25.5 +8.4
PVCC AMS AMS 15 04 10.0
comp=Z,1µm,17.4s
**KRLC Kraliky 149.25 347** *e*PKP2 **PKPbc 13 47 35.0 0.0**
**KRLC Kraliky 149.25 347** ⇑*e*PKP **PKPbc 13 47 35.0 0.0**
**RABH Abou Rabah 149.26 303** *e*P **PKPab 13 47 39.1 -1.0**
**BTCH Batrach 149.28 307** *e*P **PKPdf 13 47 30.9 -0.3**

**ROOS tl_alroos 149.28 303** *e*P **PKPbc 13 47 37.3 +1.6**
**MORC Moravsky Berou 149.36 345** ⇓*i*P **PKPbc 13 47 35.5 +0.2**
**MORC Moravsky Berou 149.36 345** *e*PKPdf **PKPdf 13 47 31.1 +0.1**
MORC LR LR
comp=Z,8µm,19.0s
**TRPA Tarpa 149.38 338** ⇑*i*P **PKPbc 13 47 35.7 +0.4**
**TRPA Tarpa 149.38 338** ⇑*e*PKPPKPdf **PKPbc 13 47 35.7 +0.4**
**CFR Carcaliu 149.38 329** ⇓PKP2 **PKPbc 13 47 35.6 +0.2**
**CFR Carcaliu 149.38 329** ⇓*i*P **PKPbc 13 47 35.6 +0.2**
**JOSR Joseni 149.41 333** ⇓*i*P **PKPbc 13 47 35.4 -0.1**
**BMR Baia Mare 149.42 337** ⇑PKP2 **PKPbc 13 47 36.8 +1.3**
**BMR Baia Mare 149.42 337** ⇑*i*P **PKPbc 13 47 36.8 +1.3**
**LANS Liptovska Anna 149.44 343** *e*PKP2 **PKPbc 13 47 37.3 +1.8**
**LANS Liptovska Anna 149.44 343** *e*PKP **PKPbc 13 47 37.3 +1.8**
LANS *e* 13 47 41.5
**WRDH Warideh 149.51 306** *e*P **PKPbc 13 47 36.2 0.0**
**VRI Vrincioaia 149.53 331** ⇑PKP2 **PKPbc 13 47 36.0 +0.2**
**VRI Vrincioaia 149.53 331** ⇑*i*P **PKPbc 13 47 36.0 +0.2**
**MOX Moxa 149.56 353** *e*PKP **PKPbc 13 47 36.2 +0.5**
baz=9.9,slow=2.5
**ARCR ARCALIA 149.58 335** ⇑*i*P **PKPbc 13 47 36.5 +0.6**
**PLOR Plostina 149.58 331** ⇓PKP2 **PKPbc 13 47 36.4 +0.4**
**PLOR Plostina 149.58 331** ⇓*i*P **PKPbc 13 47 36.4 +0.4**
**ZALF Zalf 149.62 301** *e*P **PKPbc 13 47 35.5 -1.0**
**BRTR Keskin Array B 149.62 315** PKP **PKPdf 13 47 31.6 -0.2**
comp=Z,3.5nm,1.0s,baz=103,slow=3.1,SNR=9.1
BRTR PKPbc **PKPbc 13 47 36.0 -0.4**
comp=Z,9.6nm,0.9s,baz=123,slow=2.3,SNR=31
BRTR PP PP 13 51 06.4 -2.9
comp=Z,1.0nm,0.8s,baz=29,slow=3.3,SNR=3.0
**PLN Plauen 149.65 352** *e*PKP **PKPbc 13 47 36.6 +0.7**
baz=9.9,slow=2.5
**WERD Werda 149.67 352** *e*PKP **PKPbc 13 47 36.6 +0.5**
baz=9.9,slow=2.5
**TANN Tannenbergstha 149.68 352** *e*PKP **PKPbc 13 47 36.6 +0.5**
baz=9.9,slow=2.5
**ARNB Al Arnab 149.71 307** *e*P **PKPbc 13 47 37.3 +0.6**
**BEBN Eben Emael 149.71 1** PKPab **PKPab 13 47 40.3 -0.9**
**PRA Prague 149.72 349** *e*PKP2 **PKPbc 13 47 36.9 +0.8**
PRA MLR MLR
comp=Z,2µm,17.5s
**PRA Prague 149.72 349** ⇑*e*PKP **PKPbc 13 47 36.9 +0.8**
PRA *e*PKPAB **PKPab 13 47 40.5 -0.8**
PRA *e*SS SS 14 10 30.4 +8.1
PRA AMS AMS 15 02 00.0
comp=Z,2µm,17.5s
**GUNZ Gunzen 149.75 352** *e*PKP **PKPbc 13 47 36.9 +0.6**
baz=9.9,slow=2.5
**BIDA Albida 149.75 305** *e*P **PKPdf 13 47 34.4 +2.3**
**TIRR Tirgusor 149.76 327** ⇑PKP2 **PKPbc 13 47 37.8 +1.4**
**TIRR Tirgusor 149.76 327** ⇑*i*P **PKPbc 13 47 37.8 +1.4**
**TIRR Tirgusor 149.76 327** PFAKE 13 47 40.0 -1.7
TIRR LR LR
comp=Z,2µm,20.0s
**PRU Pruhonice 149.78 349** *e*PKP2 **PKPbc 13 47 36.7 +0.4**
PRU *e*SS SS 14 10 27.3 +4.3
PRU MLR MLR
comp=Z,700nm,17.5s
**PRU Pruhonice 149.78 349** ⇑*e*PKP **PKPbc 13 47 36.7 +0.4**
PRU *e*PKPAB **PKPab 13 47 40.8 -0.8**
PRU *e*SS SS 14 10 27.3 +4.3
PRU AMS AMS 15 01 40.0
comp=Z,700nm,17.5s
**GRER 149.79 330** ⇓*i*P **PKPbc 13 47 38.5 +2.1**
**GOPC GO Pecny, Ondr 149.81 349** *e*PKP2 **PKPbc 13 47 36.9 +0.5**
GOPC MLR MLR
comp=Z,2µm,19.5s
**GOPC GO Pecny, Ondr 149.81 349** ⇑*e*PKP **PKPbc 13 47 36.9 +0.5**
GOPC *ex* x 13 47 55.5
GOPC *e*SS SS 14 10 28.6 +5.2
GOPC AMS AMS 15 03 10.0
comp=Z,2µm,19.5s
**WERN Wernitzgruen 149.82 352** *e*PKP **PKPbc 13 47 37.3 +0.9**
baz=9.9,slow=2.5
**HARR Harsova 149.83 328** ⇑PKP2 **PKPbc 13 47 37.8 +1.2**
**HARR Harsova 149.83 328** ⇑*i*P **PKPbc 13 47 37.8 +1.2**
**TLB Topalu 149.85 328** ⇑PKP2 **PKPbc 13 47 37.4 +0.8**
**TLB Topalu 149.85 328** ⇑*i*P **PKPbc 13 47 37.4 +0.8**
**HAWK Haweek 149.86 304** *e*P **PKPbc 13 47 38.4 +1.3**
**NKC Novy Kostel 149.86 352** *e*PKP2 **PKPbc 13 47 36.9 +0.4**
**NKC Novy Kostel 149.86 352** ⇑*e*PKP **PKPbc 13 47 36.9 +0.4**
NKC *ex* x 13 47 53.2
**MEM Membach 149.90 0** PKPbc **PKPbc 13 47 37.1 +0.6**
**SNF Seneffe 149.97 2** PKPbc **PKPbc 13 47 37.5 +0.8**
**VRAC Vranov 150.02 346** PKPbc **PKPbc 13 47 36.9 0.0**
comp=Z,11nm,0.9s,baz=21,slow=5.1,SNR=14
**VRAC Vranov 150.02 346** ⇓PKP2 **PKPbc 13 47 36.8 -0.1**
**VRAC Vranov 150.02 346** ⇓*i*P **PKPbc 13 47 36.8 -0.1**
**DOPR Dopca 150.05 333** ⇑*i*P **PKPbc 13 47 37.9 +0.8**
**BCLA Clavier 150.08 1** PKPbc **PKPbc 13 47 37.6 +0.6**
**ANTO Ankara 150.10 316** ⇑*i*P **PKPdf 13 47 31.6 -0.9**
**ANTO Ankara 150.10 316** PKPdf **PKPbc 13 47 39.1 +1.6**
SNR=16
**ANTO Ankara 150.10 316** *e*PKPbc **PKPbc 13 47 38.1 +0.6**
ANTO LR LR
comp=Z,900nm,20.0s
**BR231 Keskin MP Arra 150.12 316** *e*PKPdf **PKPdf 13 47 32.2 -0.3**
BR231 *e*PP PP 13 51 13.9 +1.8
**MANZ Manzenberg 150.15 352** *e*PKP **PKPbc 13 47 37.8 +0.5**
baz=9.9,slow=2.5
**SALA Sala 150.16 300** *e*P **PKPbc 13 47 38.4 +0.4**
**MLR Muntele Rosu 150.17 331** ⇑PKP2 **PKPbc 13 47 37.6 0.0**
**MLR Muntele Rosu 150.17 331** ⇑*i*P **PKPbc 13 47 37.6 0.0**
**ASF Jabal al Asfar 150.18 299** PKPbc **PKPbc 13 47 37.7 -0.2**
comp=Z,22nm,1.1s,baz=288,slow=4.4,SNR=15
**CJR Cluj-Napoca 150.18 335** ⇓PKP2 **PKPbc 13 47 38.4 +1.0**
**CJR Cluj-Napoca 150.18 335** ⇓*i*P **PKPbc 13 47 38.4 +1.0**
**ISR Istrita 150.18 330** ⇓PKP2 **PKPbc 13 47 38.4 +0.9**
**ISR Istrita 150.18 330** ⇓*i*P **PKPbc 13 47 38.4 +0.9**
**VYHS Vyhne 150.22 343** *e*PKIKP **PKPbc 13 47 38.1 +0.6**
**VYHS Vyhne 150.22 343** *e*PKP **PKPbc 13 47 38.0 +0.6**
**TOTH TOTAH 150.22 302** *e*P **PKPbc 13 47 38.7 +0.7**
**TNS Taunus Mts 150.23 357** *e*PKP **PKPbc 13 47 37.8 +0.3**
baz=9.9,slow=2.5
**MSAB Monastry St. A 150.32 328** ⇓*i*P **PKPbc 13 47 37.9 +0.2**
**ROTZ Rotzenmuhle 150.35 352** *e*PKP **PKPbc 13 47 38.4 +0.7**
baz=9.9,slow=2.5
**DOU Dourbes 150.39 2** PKPbc **PKPbc 13 47 37.8 +0.1**
**PSZ Piszkesteto 150.43 341** *e*PKIKP **PKPbc 13 47 38.2 +0.2**
PSZ MLR MLR
comp=Z,1µm,18.0s
**PSZ Piszkesteto 150.43 341** ⇑*i*P **PKPbc 13 47 38.4 +0.4**
**PSZ Piszkesteto 150.43 341** ⇑*e*PKPPKPdf **PKPbc 13 47 38.4 +0.4**
**PSZ Piszkesteto 150.43 341** *e*PKPbc **PKPbc 13 47 38.2 +0.2**
PSZ LR LR
comp=Z,1µm,18.0s
**DRGR 150.45 337** ⇑PKIKP **PKPbc 13 47 38.5 +0.4**
**DRGR 150.45 337** ⇑*i*P **PKPbc 13 47 38.5 +0.4**
**SECR 150.47 331** ⇑*i*P **PKPbc 13 47 39.4 +1.3**
**GRF Grafenberg Arr 150.54 353** *e*PKP **PKPbc 13 47 38.8 +0.7**
baz=9.9,slow=2.5
GRF *e*L L 14 59 02.1
comp=Z,1µm,20.1s
**GRFO Grafenberg 150.54 353** *e*PKIKP **PKPbc 13 47 39.1 +0.9**
GRFO MLR MLR
comp=Z,1µm,20.0s
**GRFO Grafenberg 150.54 353** *e*PKPbc **PKPbc 13 47 39.0 +0.9**
GRFO LR LR
comp=Z,1µm,20.0s
**SMOL Smolenice 150.56 345** *e*PKP **PKPbc 13 47 39.7 +1.5**
SMOL *e* 13 47 44.1
**BRBR Barbar 150.58 302** *e*P **PKPab 13 47 43.7 -2.1**
**VOIR 150.61 332** ⇑*i*P **PKPbc 13 47 40.2 +1.7**
**SULR 150.65 330** ⇑*i*P **PKPbc 13 47 39.6 +1.1**
**KHC Kasperske Hory 150.77 350** *e*PKIKP **PKPdf 13 47 33.0 -0.2**
KHC *e* 13 47 39.5
KHC *e*SS SS 14 10 30.3 -3.8
KHC MLR MLR
comp=Z,2µm,16.9s
**KHC Kasperske Hory 150.77 350** *e*PKPDF **PKPdf 13 47 33.0 -0.2**
KHC ⇑*e*PKP **PKiKP 13 47 39.5 +0.1**
KHC *ex* x 13 47 56.9
KHC *e*SS SS 14 10 30.3 -3.8
KHC AMS AMS 15 01 30.0
comp=Z,2µm,16.9s
**KHC Kasperske Hory 150.77 350** *e*PKPdf **PKPdf 13 47 33.6 +0.5**
KHC LR LR
comp=Z,600nm,20.0s
**TCHB Talchebab 150.79 301** *e*P **PKPbc 13 47 40.1 +0.8**
**ARR Arges 150.85 333** ⇑*i*P **PKPbc 13 47 40.4 +1.3**
**WLF Walferdange 150.85 0** PKPbc **PKPbc 13 47 39.9 +1.0**
**WLF Walferdange 150.85 0** *e*PKP **PKPbc 13 47 39.7 +0.9**
baz=9.9,slow=2.5

**WLF Walferdange 150.85 0** *e*PKPbc **PKPbc 13 47 40.0 +1.2**
WLF LR LR
comp=Z,2µm,20.0s
**WET Wettzell 150.87 351** *e*PKP **PKPbc 13 47 39.4 +0.5**
baz=9.9,slow=2.5
**GEC2 GERESS Array S 151.03 350** *e*PKIKP **PKPdf 13 47 33.1 -0.6**
GEC2 *e* 13 47 34.0
**GEC2 GERESS Array S 151.03 350** *e*PKP **PKPbc 13 47 39.7 +0.2**
baz=9.9,slow=2.5
GEC2 *e*L L 15 02 21.4
comp=Z,1µm,18.8s
**GEC2 GERESS Array S 151.03 350** *e*PKPdf **PKPdf 13 47 33.0 -0.6**
GEC2 *e*PKPdf PKPbc 13 47 34.0 -5.4
**GERES GERESS Array B 151.03 350** PKP **PKPdf 13 47 33.4 -0.3**
comp=Z,1.4nm,0.9s,baz=72,slow=1.6,SNR=7.7
GERES PKPbc **PKiKP 13 47 39.8 -0.2**
comp=Z,8.3nm,0.9s,baz=18,slow=1.7,SNR=8.0
**DEV Deva 151.14 335** ⇑*i*P **PKPbc 13 47 40.6 +1.0**
**MMAI Mount Meron Ar 151.14 302** PKPbc **PKPbc 13 47 40.8 +0.6**
comp=Z,24nm,0.9s,baz=76,slow=2.1,SNR=15
**SIRR Siria 151.28 337** ⇑*i*P **PKPbc 13 47 40.3 +0.3**
**PKSG 151.34 343** ⇑*e*PKPdf **PKPbc 13 47 40.9 +0.8**
**CONA Conrad Observa 151.48 346** ⇑*p*PKPdf **PKPdf 13 47 35.1 +0.7**
comp=Z,47nm,1.1s
**GZR Gura Zlata 151.59 335** ⇑*i*P **PKPbc 13 47 39.4 -1.4**
**GZR Gura Zlata 151.59 335** ⇓*i*P **PKPbc 13 47 41.7 +0.9**
**STU Stuttgart 151.64 356** *e*PKIKP **PKPbc 13 47 40.0 -0.7**
STU MLR MLR
comp=Z,1µm,20.0s
**STU Stuttgart 151.64 356** *e*PKP **PKPbc 13 47 41.1 +0.4**
baz=9.9,slow=2.5
**STU Stuttgart 151.64 356** *e*PKPbc **PKPbc 13 47 40.0 -0.7**
STU LR LR
comp=Z,1µm,20.0s
**BZS Buzias 151.85 337** ⇓PKIKP **PKPbc 13 47 39.6 -1.7**
**BZS Buzias 151.85 337** ⇓*i*P **PKPbc 13 47 39.6 -1.7**
**SRE Strehaia 152.02 334** ⇑*i*P **PKPbc 13 47 40.8 -0.9**
**CSS Prodhromos 152.04 307** *e*PKPbc **PKPbc 13 47 42.3 +0.2**
CSS LR LR
comp=Z,300nm,20.0s
**BFO Black Forest 152.13 357** *e*PKP **PKPbc 13 47 41.9 0.0**
baz=9.9,slow=2.5
BFO *e*L L 15 02 15.5
comp=Z,1µm,19.2s
**BFO Black Forest 152.13 357** *e*PKPbc **PKPbc 13 47 41.3 -0.6**
BFO LR LR
comp=Z,1µm,20.0s
**EIL Elat 152.41 295** PKP **PKPdf 13 47 35.5 -0.8**
comp=Z,2.3nm,0.8s,baz=337,slow=1.1,SNR=7.0
EIL PKPbc **PKiKP 13 47 43.5 +0.1**
comp=Z,14nm,1.1s,baz=54,slow=1.0,SNR=18
**ISP Isparta 152.69 315** PFAKE 13 47 50.0 -4.3
ISP LR LR
comp=Z,1µm,20.0s
**SOKA Soboth 152.85 347** ⇑*i*PKPdf **PKPdf 13 47 32.6 -3.9**
comp=Z,18nm,1.1s
**PERS Pernice 152.87 346** *i* PKPbc **PKPbc 13 47 43.6 0.0**
**DAVA Damuels 153.06 354** ⇑*i*PKPbc **PKPbc 13 47 43.3 -0.9**
comp=Z,32nm,1.5s
**FETA Feichten 153.23 353** ⇑*i*PKPdf **PKPdf 13 47 36.8 -0.3**
comp=Z,30nm,1.3s
**LJU Ljubljana 153.56 347** *e*PKPdf **PKPdf 13 47 37.5 +0.1**
LJU *i* PKPbc **PKiKP 13 47 45.7 +0.5**
**FUORN Ofenpass-Fuorn 153.68 354** PFAKE 13 47 50.0 +4.3
FUORN LR LR
comp=Z,1µm,19.0s
**DIVS Divibare 153.75 337** ⇑*i*P **PKPdf 13 47 38.4 +0.6**
**JAVS Javornik 153.80 347** *i* PKPbc **PKPbc 13 47 46.0 +0.2**
**TUE Stuetta 153.91 355** *e*PKPbc **PKPbc 13 47 45.4 -0.7**
TUE LR LR
comp=Z,1µm,20.0s
**TRI Trieste 154.04 348** PFAKE 13 47 50.0 +3.9
TRI LR LR
comp=Z,1µm,20.0s
**SENIN Lac Senin/Sane 154.13 358** *e*PKPbc **PKPbc 13 47 46.2 -0.4**
**SSB Saint Sauveur 155.20 3** *e*PKP2 **PKPab 13 48 03.8 -0.7**
SSB MLR MLR
comp=Z,1µm,19.0s
**SSB Saint Sauveur 155.20 3** *e*PKPab **PKPab 13 48 03.8 -0.7**
SSB LR LR
comp=Z,1µm,19.0s
**PGAV Gavieira, Arco 155.32 26** *e*PP PP 13 51 42.1 +1.1
**PGAV Gavieira, Arco 155.32 26** *e*SS SS 14 11 06.9 -18
**PGAV Gavieira, Arco 155.32 26** *e*LR LR 14 48 40.6
comp=Z,2µm,22.0s
**BNI Bardonecchia 155.46 359** *e*PKP2 **PKPab 13 48 07.2 +1.5**
BNI MLR MLR
comp=Z,2µm,20.0s
**BNI Bardonecchia 155.46 359** *e*PKPab **PKPab 13 48 07.2 +1.5**
BNI LR LR
comp=Z,2µm,20.0s
**PMOZ Porto Moniz, M 155.82 55** *e*PKPdf **PKPdf 13 47 46.1 +5.0**
**PMOZ Porto Moniz, M 155.82 55** *e*PP PP 13 51 52.7 +7.9
**PMOZ Porto Moniz, M 155.82 55** *e*LR LR 14 45 31.1
comp=Z,1µm,18.0s
**POLO Lamas de Olo 156.01 27** *e*PKPdf **PKPdf 13 47 40.5 -0.5**
**POLO Lamas de Olo 156.01 27** *e*PKPab **PKPab 13 48 08.2 0.0**
**POLO Lamas de Olo 156.01 27** *e*SS SS 14 11 43.5 +11
**PBRG Braganca 156.07 24** *e*PKPab **PKPab 13 48 08.4 0.0**
**PBRG Braganca 156.07 24** *e*PP PP 13 51 43.6 -1.4
**PMAR Madeira 156.08 55** *e*PKPdf **PKPdf 13 47 44.9 +3.4**
**FUL Funchal 156.12 55** *e*PKPdf **PKPdf 13 47 41.3 0.0**
**FUL Funchal 156.12 55** *e*PP PP 13 51 54.7 +8.4
**PVRL Vila Real 156.12 27** *e*PKPdf **PKPdf 13 47 42.0 +0.9**
**PVRL Vila Real 156.12 27** *e*PKPab **PKPab 13 48 08.0 -0.6**
**TIR Tirane 156.13 334** PFAKE 13 47 50.0 +8.9
TIR LR LR
comp=Z,2µm,21.0s
**PMPST Porto Santo, M 156.36 53** *e*SS SS 14 11 51.0 +13
**PMPS Porto Santo 156.37 53** *e*PKPdf **PKPdf 13 47 46.2 +4.6**
**PMPS Porto Santo 156.37 53** *e*PP PP 13 51 54.8 +7.2
**MVO Moncorvo 156.50 26** *e*PKPdf **PKPdf 13 47 41.0 -0.7**
**MVO Moncorvo 156.50 26** *e*PKPab **PKPab 13 48 10.5 +0.2**
**MVO Moncorvo 156.50 26** *e*PP PP 13 51 46.8 -0.6
**MVO Moncorvo 156.50 26** *e*SS SS 14 11 41.4 +4.0
**MVO Moncorvo 156.50 26** *e*LR LR 14 47 43.9
comp=Z,2µm,20.0s
**PCAS Casmilo, Conde 156.78 30** *e*PKPdf **PKPdf 13 47 43.4 +1.4**
**PCAS Casmilo, Conde 156.78 30** *e*PKPab **PKPab 13 48 13.3 +1.9**
**PCAS Casmilo, Conde 156.78 30** *e*SS SS 14 11 49.2 +8.8
**SANT Santorini 156.83 317** PFAKE 13 47 50.0 +7.8
SANT LR LR
comp=Z,600nm,22.0s
**MTE Manteigas 156.92 27** *e*PKPdf **PKPdf 13 47 42.1 -0.1**
**MTE Manteigas 156.92 27** *e*PKPab **PKPab 13 48 12.1 0.0**
**MTE Manteigas 156.92 27** *e*SS SS 14 11 46.4 +4.4
**MTE Manteigas 156.92 27** *e*LR LR 14 47 29.6
comp=Z,2µm,18.0s
**MTE Manteigas 156.92 27** PFAKE 13 47 50.0 +7.8
MTE LR LR
comp=Z,2µm,20.0s
**PTOM Tomar 157.16 30** *e*PKPdf **PKPdf 13 47 42.4 0.0**
**PTOM Tomar 157.16 30** *e*PKPab **PKPab 13 48 13.3 +0.2**
**PMAFR Mafra 157.25 32** *e*PKPab **PKPab 13 48 13.8 +0.3**
**PMAFR Mafra 157.25 32** *e*PP PP 13 51 50.7 -1.1
**PMAFR Mafra 157.25 32** *e*SS SS 14 11 48.9 +3.1
**PCBR Castelo Branco 157.41 28** *e*PKPdf **PKPdf 13 47 43.4 +0.7**
**PCBR Castelo Branco 157.41 28** *e*PKPab **PKPab 13 48 13.1 -1.0**
**PMST Lisbon--Monsan 157.47 33** *e*PKPdf **PKPdf 13 47 42.8 -0.1**
**PMST Lisbon--Monsan 157.47 33** *e*PKPab **PKPab 13 48 16.0 +1.6**
**LAST Lasithi 157.54 315** *e*PKPab **PKPab 13 48 15.5 +0.5**
**PACT Alcochete 157.62 32** *e*PKPdf **PKPdf 13 47 40.5 -2.5**
**PMTG Montargil 157.69 31** *e*PKPdf **PKPdf 13 47 42.6 -0.5**
**PMTG Montargil 157.69 31** *e*PKPab **PKPab 13 48 15.5 +0.2**
**PMTG Montargil 157.69 31** *e*SS SS 14 11 56.2 +6.0
**PMRV Marv??o 157.78 29** *e*PKPab **PKPab 13 48 15.5 -0.3**
**PMRV Marv??o 157.78 29** SS SS 14 11 56.2 +5.0
**PMRV Marv??o 157.78 29** *e*LR LR 14 46 33.4
comp=Z,2µm,18.0s
**IDI Anoyia 157.86 316** PKPab **PKPab 13 48 16.4 0.0**
comp=Z,14nm,0.9s,baz=199,slow=5.8,SNR=4.6
**IDI Anoyia 157.86 316** PKPab **PKPab 13 48 16.4 0.0**
IDI LR LR
comp=Z,600nm,18.0s
**PESTR Estremoz 158.15 30** *e*SS SS 14 11 44.5 -11
**EVO Evora 158.21 31** *e*PKPdf **PKPdf 13 47 43.6 -0.2**
**EVO Evora 158.21 31** *e*PKPab **PKPab 13 48 19.4 +1.8**
**PNCL Nicolau / Gran 158.28 33** *e*PKPdf **PKPdf 13 47 44.4 +0.5**
**PNCL Nicolau / Gran 158.28 33** *e*PKPab **PKPab 13 48 19.3 +1.4**
**PNCL Nicolau / Gran 158.28 33** *e*SS SS 14 12 08.1 +11
**PTEO Sao Teotonio 158.61 34** *e*PKPdf **PKPdf 13 47 40.8 -3.5**
**PTEO Sao Teotonio 158.61 34** *e*PKPab **PKPab 13 48 21.4 +2.0**
**MESJ Messejana 158.65 33** *e*P **PKPdf 13 47 44.5 +0.1**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MESJ | | | | | AMS | AMS | 14 55 41.5 | | |
| | comp=Z,2µm,20.4s | | | | | | | | |
| **MESJ** | **Messejana** | **158.65** | **33** | *e*PKPdf | **PKPdf** | | **13 47 44.5** | **+0.1** | |
| **MESJ** | **Messejana** | **158.65** | **33** | *e*PKPab | PKPab | | 13 48 24.8 | +5.3 | |
| **MESJ** | **Messejana** | **158.65** | **33** | *e*PKIKP | **PKPdf** | | **13 47 44.4** | **+0.1** | |
| **PBEJ** | **Beja** | **158.68** | **32** | *e*PKPdf | **PKPdf** | | **13 47 45.4** | **+1.0** | |
| **PBEJ** | **Beja** | **158.68** | **32** | *e*PKPab | **PKPab** | | **13 48 19.6** | **-0.1** | |
| **MORF** | **Marmelete** | **158.83** | **34** | *e*P | **PKPdf** | | **13 47 44.7** | **+0.1** | |
| MORF | | | | | AMS | AMS | 14 58 01.2 | | |
| | comp=Z,2µm,18.8s | | | | | | | | |
| **MORF** | **Marmelete** | **158.83** | **34** | *e*PKPdf | **PKPdf** | | **13 47 45.2** | **+0.6** | |
| **MORF** | **Marmelete** | **158.83** | **34** | *e*PKPab | **PKPab** | | **13 48 20.3** | **-0.1** | |
| **MORF** | **Marmelete** | **158.83** | **34** | *e*LR | LR | | 14 47 50.8 | | |
| **MORF** | **Marmelete** | **158.83** | **34** | *e*PKIKP | **PKPdf** | | **13 47 44.7** | **+0.1** | |
| **PFVI** | **Vila Bisbo** | **158.86** | **35** | *e*PKPdf | **PKPdf** | | **13 47 44.8** | **+0.2** | |
| **PFVI** | **Vila Bisbo** | **158.86** | **35** | *e*PKPab | **PKPab** | | **13 48 19.6** | **-0.9** | |
| **PFVI** | **Vila Bisbo** | **158.86** | **35** | *e*PP | PP | | 13 51 57.3 | -3.3 | |
| **PFVI** | **Vila Bisbo** | **158.86** | **35** | *e*SS | SS | | 14 12 06.0 | +3.0 | |
| **PFVI** | **Vila Bisbo** | **158.86** | **35** | *e*PKPdf | **PKPdf** | | **13 47 45.9** | **+1.2** | |
| PFVI | | | | | LR | LR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **PCVE** | **Castro Verde** | **158.90** | **33** | *e*PKPdf | **PKPdf** | | **13 47 46.5** | **+1.9** | |
| **PCVE** | **Castro Verde** | **158.90** | **33** | *e*SS | SS | | 14 12 14.2 | +11 | |
| **PAB** | **San Pablo** | **158.93** | **23** | *e*PKIKP | **PKPdf** | | **13 47 43.8** | **-0.9** | |
| PAB | | | | | MLR | MLR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **PAB** | **San Pablo** | **158.93** | **23** | *e*PKPdf | **PKPdf** | | **13 47 43.8** | **-0.9** | |
| PAB | | | | | LR | LR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **ES19** | **SONSECA Array** | **158.96** | **22** | *e*PKPdf | **PKPdf** | | **13 47 45.5** | **+0.8** | |
| ES19 | | | | | *e*PKPab | **PKPab** | **13 48 21.3** | **+0.4** | |
| **ESDC** | **Sonseca Array** | **158.96** | **22** | PKP | **PKPdf** | | **13 47 45.0** | **+0.3** | |
| | comp=Z,2.4nm,1.0s,baz=352,slow=4.3,SNR=7.8 | | | | | | | | |
| ESDC | | | | | PKPab | **PKPab** | **13 48 20.7** | **-0.1** | |
| | comp=Z,1.1nm,0.6s,baz=311,slow=2.9,SNR=5.5 | | | | | | | | |
| **PBAR** | **Barrancos** | **158.96** | **30** | *e*PKPdf | **PKPdf** | | **13 47 45.0** | **+0.3** | |
| **PBAR** | **Barrancos** | **158.96** | **30** | *e*PKPab | **PKPab** | | **13 48 20.8** | **-0.1** | |
| **PBAR** | **Barrancos** | **158.96** | **30** | *e*SS | SS | | 14 12 09.7 | +6.0 | |
| **TIP** | **Timpagrande** | **159.22** | **336** | *e*PKPab | **PKPab** | | **13 48 23.1** | **+1.0** | |
| **PVAQ** | **Vaqueiros** | **159.24** | **33** | *e*PKPdf | **PKPdf** | | **13 47 42.9** | **-2.1** | |
| **PVAQ** | **Vaqueiros** | **159.24** | **33** | *e*PKPab | **PKPab** | | **13 48 21.4** | **-0.7** | |
| **PVAQ** | **Vaqueiros** | **159.24** | **33** | *e*PP | PP | | 13 52 06.6 | +4.0 | |
| **PVAQ** | **Vaqueiros** | **159.24** | **33** | *e*SS | SS | | 14 12 13.9 | +7.1 | |
| **PVAQ** | **Vaqueiros** | **159.24** | **33** | *e*LR | LR | | 14 49 13.9 | | |
| | comp=Z,2µm,18.0s | | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **159.25** | **33** | *e*PKPdf | **PKPdf** | | **13 47 45.8** | **+0.7** | |
| **PBDV** | **Barranco-do-Ve** | **159.25** | **33** | *e*PKPab | **PKPab** | | **13 48 22.5** | **+0.3** | |
| **KIC** | **Kosan Boka** | **162.45** | **141** | *e*PKP1 | **PKPdf** | | **13 47 48.2** | **-1.0** | |
| | comp=Z,36nm,1.2s | | | | | | | | |
| **TIC** | **Toumodi** | **162.51** | **140** | *e*PKP1 | **PKPdf** | | **13 47 47.3** | **-2.0** | |
| **DBIC** | **Dimbokro** | **162.63** | **141** | PKP | **PKPdf** | | **13 47 48.0** | **-1.4** | |
| | comp=Z,6.6nm,0.9s,baz=265,slow=0.4,SNR=5.7 | | | | | | | | |
| **DBIC** | **Dimbokro** | **162.63** | **141** | PKIKP | **PKPdf** | | **13 47 48.0** | **-1.4** | |
| **MDT** | **Midelt** | **164.38** | **36** | PKP | **PKPdf** | | **13 47 50.4** | **-0.3** | |
| | comp=Z,1.2nm,0.4s,baz=328,slow=2.4,SNR=6.8 | | | | | | | | |
| MDT | | | | | PKPab | **PKPab** | **13 48 45.1** | **+0.2** | |
| | comp=Z,6.4nm,1.1s,baz=305,slow=4.8,SNR=4.1 | | | | | | | | |
| **KEST** | **Kesra** | **164.52** | **350** | PKP | **PKPdf** | | **13 47 49.2** | **-1.4** | |
| | comp=Z,4.0nm,1.1s,baz=94,slow=14,SNR=2.3 | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **171.58** | **149** | *e*PKP1 | **PKPdf** | | **13 47 53.4** | **-2.5** | |
| **TOA0** | **Torodi Ar. Sit** | **171.58** | **149** | *e*PKPdf | **PKPdf** | | **13 47 54.4** | **-1.5** | |
| **TORD** | **Torodi Ar. Bea** | **171.58** | **149** | PKP | **PKPdf** | | **13 47 54.6** | **-1.3** | |
| | comp=Z,3.8nm,0.9s,baz=346,slow=0.8,SNR=16 | | | | | | | | |
| TORD | | | | | PKPab | **PKPab** | **13 49 16.9** | **+0.1** | |
| | comp=Z,2.5nm,1.0s,baz=227,slow=3.9,SNR=3.3 | | | | | | | | |
| TORD | | | | | PP | PP | 13 53 14.7 | +8.0 | |
| | comp=Z,2.2nm,1.0s,baz=197,slow=3.5,SNR=4.5 | | | | | | | | |

*ISK **16** 13:28:07.9, 37.03N×30.30E, h5km, MD2.6*
*ISCJB **16** 13:28:09.0±0.7, 37.06N±0.06×30.29E±0.07, h10km, Error ellipse: s-maj=10.6km s-min=4.8km az=140.6*
*CSEM **16** 13:28:09.1±0.4, 37.07N×30.32E, h5km, MD2.6, Error ellipse: s-maj=15.1km s-min=6.9km az=140.0*
*DDA **16** 13:28:10.6, 37.00N×30.36E, h1km, Md2.7*

**ISC 16 13:28:10.3±1.0, 37.04N±0.05×30.32E±0.04, h10km, n14, σ1§90/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KORT** | **Korkueli** | **0.05** | **151** | *i* P | **Pg** | **13 28 10.8** | **-1.6** |
| KORT | | | | *i* S | **Sg** | **13 28 13.2** | **-0.7** |
| **KORT** | **Korkueli** | **0.05** | **151** | P | **Pg** | **13 28 10.8** | **-1.6** |
| KORT | | | | S | **Sg** | **13 28 13.2** | **-0.7** |
| **ANTB** | **Antalya** | **0.30** | **118** | *e*PG | **Pg** | **13 28 15.0** | **-1.3** |
| **ANTB** | **Antalya** | **0.30** | **118** | *e*Pg | **Pg** | **13 28 15.0** | **-1.3** |
| **ELL** | **Elmali** | **0.44** | **228** | *e*PG | **Pg** | **13 28 16.8** | **-2.2** |
| ELL | | | | *e*SG | **Sg** | **13 28 24.5** | **-0.3** |
| **ELL** | **Elmali** | **0.44** | **228** | *e*Pg | **Pg** | **13 28 16.8** | **-2.2** |
| ELL | | | | *e*Sg | **Sg** | **13 28 24.5** | **-0.3** |
| **BCK** | **Bucak** | **0.47** | **27** | *e*PG | **Pg** | **13 28 18.4** | **-1.1** |
| **BCK** | **Bucak** | **0.47** | **27** | *e*Pg | **Pg** | **13 28 18.4** | **-1.1** |
| **SUTC** | **Sutluce-Ispart** | **0.69** | **51** | *e*PG | **Pg** | **13 28 22.2** | **-1.5** |
| SUTC | | | | *e*SG | **Sb** | **13 28 34.5** | **+0.3** |
| **SUTC** | **Sutluce-Ispart** | **0.69** | **51** | *e*Pg | **Pg** | **13 28 22.2** | **-1.5** |
| **AKAS** | **Kas** | **0.99** | **216** | *i* P | **Pn** | **13 28 30.3** | **-0.1** |
| **AKAS** | **Kas** | **0.99** | **216** | P | **Pn** | **13 28 30.3** | **-0.1** |
| AKAS | | | | S | **Sn** | **13 28 50.1** | **+5.6** |
| **FETY** | **Fethiye** | **1.07** | **248** | *e*PG | **Pg** | **13 28 29.5** | **-1.4** |
| **FETY** | **Fethiye** | **1.07** | **248** | *e*Pg | **Pg** | **13 28 29.5** | **-1.4** |

**ISK 16 13:30:32.8, 38.44N×39.25E, h10km, MD2.2, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SVRC** | **Sivrice-ELAZID** | **0.07** | **142** | *e*PG | Pg | 13 30 35.4 | +0.1 |
| SVRC | | | | *e*SG | Sg | 13 30 37.4 | +0.2 |
| **PTK** | **Pertek** | **0.47** | **14** | *e*PG | Pg | 13 30 42.5 | +0.2 |
| PTK | | | | *e*SG | Sg | 13 30 49.4 | +0.8 |
| **MALT** | **Malatya** | **0.66** | **259** | *e*PG | Pg | 13 30 46.0 | +0.3 |

*ISCJB **16** 13:46:00.1±1.4, 29.25±0.03×74.79E±0.2, h10km, mb3.6/6, MS4.3/2, Error ellipse: s-maj=44.9km s-min=25.8km az=24.4*
*IDC **16** 13:46:00.1±1.6, 29.18S×74.76E, h0km, mb3.7/6, mb1 3.9/6, mb1mx3.6/35, mbtmp3.7/6, MS4.2/2, Ms1 4.2/2, ms1mx3.5/35, Error ellipse: s-maj=53.5km s-min=31.1km az=19.0*

**ISC 16 13:46:01.7±1.7, 29.25±0.03×74.8E±0.2, h10km, n14, σ0§42/6, mb3.7/6, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **21.53** | **354** | T | T | 14 12 52.9 | |
| | baz=174,slow=74 | | | | | | |
| **H08S1** | **Diego Garcia H** | **21.53** | **354** | T | T | 14 12 58.2 | |
| | baz=174,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **21.55** | **354** | T | T | 14 12 58.0 | |
| | baz=174 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.70** | **110** | T | T | 14 28 08.4 | |
| | baz=267 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.70** | **110** | T | T | 14 28 10.5 | |
| | baz=267 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.71** | **110** | T | T | 14 28 11.7 | |
| | baz=267 | | | | | | |
| **BOSA** | **Boshof** | **43.09** | **258** | LR | LR | 14 07 09.0 | |
| | comp=Z,165nm,20.2s,baz=205,slow=30 | | | | | | |
| **ASAR** | **Alice Springs** | **52.77** | **99** | P | **P** | **13 55 17.3** | **0.0** |
| | 0.4nm,0.8s,baz=255,slow=6.6,SNR=3.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.80** | **29** | P | **P** | **13 55 17.8** | **+0.5** |
| | 0.3nm,0.3s,baz=206,slow=6.0,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **54.47** | **95** | P | **P** | **13 55 29.7** | **0.0** |
| | 1.5nm,0.8s,baz=253,slow=7.3,SNR=5.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.93** | **5** | P | **P** | **13 57 48.0** | **-0.3** |
| | 0.7nm,0.9s,baz=202,slow=7.3,SNR=3.7 | | | | | | |
| MKAR | | | | LR | LR | 14 31 08.2 | |
| | comp=Z,323nm,19.9s,baz=90,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **81.77** | **21** | P | **P** | **13 58 20.2** | **-0.4** |
| | 0.2nm,0.4s,baz=190,slow=7.3,SNR=3.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.05** | **290** | P | **P** | **13 58 22.8** | **+0.2** |
| | 0.7nm,1.1s,baz=108,slow=4.7,SNR=2.2 | | | | | | |
| **TBI** | **Tubuai** | **112.62** | **136** | *e*LR | LR | 14 14 48.4 | |
| | 752nm,30.5s | | | | | | |

**KRSC 16 13:47:35.4±0.1, 60.88N×165.90E, h16km±2km, ML4.1, Eastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TILK** | **Tilichiki** | **0.45** | **165** | *e*P | Pb | 13 47 44.9 | 0.0 |
| TILK | | | | *e*S | Sb | 13 47 51.7 | +0.3 |
| **OSSR** | **Ossora** | **2.17** | **222** | *e*P | Pb | 13 48 12.5 | -1.7 |
| OSSR | | | | *e*S | Sb | 13 48 39.6 | -1.2 |
| **KBTR** | **Krutoberegovo** | **4.96** | **200** | *e*P | Pn | 13 48 53.5 | +4.4 |

*ISCJB **16** 13:47:44.0±0.9, 29.25S±0.2×74.8E±0.2, h10km, mb3.8/8, MS4.1/1, Error ellipse: s-maj=27.0km s-min=24.2km az=165.2*
*IDC **16** 13:47:44.1±1.0, 29.21S×74.78E, h0km, mb3.8/8, mb1 4.0/8, mb1mx3.8/34, mbtmp3.8/8, MS4.2/1, Ms1 4.2/1, ms1mx3.4/30, Error ellipse: s-maj=31.1km s-min=28.3km az=51.0*

**ISC 16 13:47:45.6±1.0, 29.2S±0.2×74.8E±0.2, h10km, n15, σ0§75/8, mb3.8/8, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **21.58** | **354** | T | T | 14 15 10.5 | |
| | baz=176,slow=74 | | | | | | |
| **H08S1** | **Diego Garcia H** | **21.58** | **354** | T | T | 14 15 12.1 | |
| | baz=176 | | | | | | |
| **H08S3** | **Diego Garcia H** | **21.60** | **354** | T | T | 14 15 11.9 | |
| | baz=176,slow=74 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.65** | **110** | T | T | 14 30 10.1 | |
| | baz=262 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.66** | **110** | T | T | 14 30 05.4 | |
| | baz=262 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.67** | **110** | T | T | 14 30 15.4 | |
| | baz=262 | | | | | | |
| **PSI** | **Prapat** | **39.35** | **40** | LR | LR | 14 08 51.0 | |
| | comp=Z,312nm,20.2s,baz=85,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **52.74** | **99** | P | **P** | **13 57 01.8** | **+0.8** |
| | 1.5nm,1.2s,baz=253,slow=6.7,SNR=4.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.83** | **29** | P | **P** | **13 57 01.6** | **+0.1** |
| | 0.8nm,0.8s,baz=210,slow=7.7,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **54.43** | **95** | P | **P** | **13 57 13.9** | **+0.5** |
| | 2.4nm,0.9s,baz=253,slow=7.2,SNR=7.9 | | | | | | |
| **QSPA** | **South Pole Qui** | **60.91** | **180** | P | **P** | **13 57 57.9** | **-0.6** |
| | 1.7nm,1.0s,baz=243,slow=2.5,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **75.97** | **5** | P | **P** | **13 59 31.9** | **-0.7** |
| | 0.7nm,0.8s,baz=186,slow=5.5,SNR=5.6 | | | | | | |
| **SONM** | **Songino Array** | **81.80** | **21** | P | **P** | **14 00 04.7** | **+0.1** |
| | 0.4nm,0.7s,baz=179,slow=5.8,SNR=3.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.09** | **290** | P | **P** | **14 00 07.7** | **+0.9** |
| | 0.6nm,0.9s,baz=131,slow=4.3,SNR=2.7 | | | | | | |
| **KSRS** | **Korea Array** | **82.92** | **40** | P | **P** | **14 00 10.0** | **-0.6** |
| | 0.8nm,0.8s,baz=251,slow=3.7,SNR=2.9 | | | | | | |

*ISK **16** 13:49:41.8, 38.59N×28.63E, h2km, MD2.4*
*DDA **16** 13:49:42.1, 38.57N×28.61E, h6km, Md2.6*
*CSEM **16** 13:49:42.4±0.2, 38.59N×28.65E, h2km, MD2.4, Error ellipse: s-maj=4.8km s-min=3.2km az=41.0*

**ISC 16 13:49:42.0±1.0, 38.59N±0.03×28.62E±0.03, h5km±7km, n18, σ0§38/32, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KULA** | **Kula-Manisa** | **0.08** | **154** | *e*PG | **Pg** | **13 49 43.7** | **-0.1** |
| KULA | | | | *e*SG | **Sg** | **13 49 45.1** | **0.0** |
| **KULA** | **Kula-Manisa** | **0.08** | **154** | *e*Pg | **Pg** | **13 49 43.7** | **-0.1** |
| KULA | | | | *e*Sg | **Sg** | **13 49 45.1** | **0.0** |
| **MANT** | **Manisa** | **0.10** | **206** | *i* P | **Pg** | **13 49 44.4** | **0.0** |
| MANT | | | | *i* S | **Sg** | **13 49 46.2** | **+0.3** |
| **MANT** | **Manisa** | **0.10** | **206** | P | **Pg** | **13 49 44.4** | **0.0** |
| MANT | | | | S | **Sg** | **13 49 46.2** | **+0.3** |
| **DEMI** | **Demirci** | **0.46** | **10** | *i* P | **Pg** | **13 49 51.5** | **+0.5** |
| DEMI | | | | *i* S | **Sg** | **13 49 56.5** | **-0.6** |
| **DEMI** | **Demirci** | **0.46** | **10** | P | **Pg** | **13 49 51.5** | **+0.5** |
| DEMI | | | | S | **Sg** | **13 49 56.5** | **-0.6** |
| **AKHS** | **Akhisar** | **0.69** | **295** | *i* P | **Pg** | **13 49 55.8** | **+0.5** |
| AKHS | | | | *i* S | **Sb** | **13 50 06.2** | **-0.3** |
| **AKHS** | **Akhisar** | **0.69** | **295** | P | **Pg** | **13 49 55.8** | **+0.5** |
| AKHS | | | | S | **Sb** | **13 50 06.2** | **-0.3** |
| **AKS** | **Akhisar** | **0.69** | **295** | *e*PG | **Pb** | **13 49 56.4** | **-0.2** |
| AKS | | | | *e*SG | **Sb** | **13 50 06.5** | **0.0** |
| **AKS** | **Akhisar** | **0.69** | **295** | *e*Pg | **Pb** | **13 49 56.4** | **-0.2** |
| AKS | | | | *e*Sg | **Sb** | **13 50 06.5** | **0.0** |
| **KHAL** | **Karahalli** | **0.72** | **107** | *i* P | **Pg** | **13 49 56.1** | **+0.2** |
| KHAL | | | | *i* S | **Sg** | **13 50 05.4** | **+0.2** |
| **KHAL** | **Karahalli** | **0.72** | **107** | P | **Pg** | **13 49 56.1** | **+0.2** |
| KHAL | | | | S | **Sg** | **13 50 05.4** | **+0.2** |
| **KHL** | **Karahalli** | **0.76** | **110** | *e*PG | **Pg** | **13 49 57.2** | **+0.6** |
| **KHL** | **Karahalli** | **0.76** | **110** | *e*Pg | **Pg** | **13 49 57.2** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.86** | **222** | *e*PG | **Pb** | **13 49 59.9** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.86** | **222** | *e*Pg | **Pb** | **13 49 59.9** | **+0.4** |
| **DNZL** | **Cakiroluk** | **0.96** | **159** | *i* P | **Pg** | **13 50 00.5** | **+0.1** |
| DNZL | | | | *i* S | **Sn** | **13 50 15.8** | **-0.6** |
| **DNZL** | **Cakiroluk** | **0.96** | **159** | P | **Pg** | **13 50 00.5** | **+0.1** |
| DNZL | | | | S | **Sn** | **13 50 15.8** | **-0.6** |

*IDC **16** 13:51:37.6±0.5, 55.61S×158.55E, h0km, mb4.9/19, mb1 5.0/20, mb1mx4.9/26, mbtmp4.9/20, ML4.5/1, MS4.7/3, Ms1 4.7/3, ms1mx4.2/17, Error ellipse: s-maj=19.7km s-min=13.8km az=78.0*
*ISCJB **16** 13:51:37.9±0.2, 55.58S±0.03×158.54E±0.07, h10km, mb5.2/56, MS5.0/5, Error ellipse: s-maj=5.8km s-min=3.9km az=32.2*
*NEIC **16** 13:51:39.5±2.3, 55.59S×158.37E, h11km±13km, mb5.2/30, Error ellipse: s-maj=6.0km s-min=5.9km az=185.0*
*MOS **16** 13:51:39.3±1.7, 55.52S×158.45E, h10km, mb5.2/9, Error ellipse: s-maj=24.9km s-min=9.0km az=97.4*
*GCMT **16** 13:51:39.5±0.4, 55.71S×158.24E, h28km±1km, MW5.1/66, Moment Tensor Solution. s22,c30; s66,c87; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr4.35±.50; Mθθ0.12±.29; Mϕϕ-4.47±.30; Mrθ2.32±.48; Mrϕ2.85±.23; Mθϕ-1.09±.42; Best double couple: Mo5.79800×10^16 NP1:ϕs134.00000°, δ59.00000°, λ65.00000°. NP2: ϕs357.00000°, δ39.00000°, λ126.00000°. Principal axes: T 5.3780, Plg66.0000°, Azm357.0000°; N 0.8450, Plg21.0000°, Azm148.0000°; P -6.2190, Plg11.0000°, Azm242.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*AUST **16** 13:51:39.1±0.6, 55.51S×158.52E, h0km Error ellipse: s-maj=13.7km s-min=7.0km az=94.0*
*BJI **16** 13:51:40.2, 55.64S×158.33E, h21km, mb5.5/14, mB5.6/14, Ms5.6/11, MS7 5.2/6*

**ISC 16 13:51:39.8±1.7, 55.62S±0.05×158.57E±0.07, h13km±10km, n382, σ1§22/390, mb5.3/56, MS5.0/5, 38C-16D, Macquarie Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MCQ** | **Macquarie Isla** | **1.15** | **11** | *e*P | Pb | 13 51 57.6 | -3.8 |
| MCQ | | | | *e* | | 13 52 14.4 | |
| **MCQ** | **Macquarie Isla** | **1.15** | **11** | P | Pb | 13 51 57.3 | -4.1 |
| | baz=1.0,SNR=1000 | | | | | | |
| **MCQ** | **Macquarie Isla** | **1.15** | **11** | *e*Pg | Pb | 13 51 57.6 | -3.8 |
| MCQ | | | | *e*Sg | **Sb** | **13 52 14.3** | **-1.8** |
| **APZ** | **The Paps** | **10.59** | **38** | PN | **Pn** | **13 54 08.9** | **-2.2** |
| APZ | | | | *e*SN | Sn | 13 56 02.7 | -6.7 |
| **SYZ** | **Scrubby Hill** | **11.25** | **40** | PN | **Pn** | **13 54 17.6** | **-2.5** |
| SYZ | | | | SN | Sn | 13 56 19.2 | -6.4 |
| **WHZ** | **Wether Hill Ro** | **11.39** | **35** | *e*Pn | **Pn** | **13 54 21.1** | **-1.0** |
| WHZ | | | | *e*Sn | **Sn** | **13 56 28.3** | **-0.8** |
| **DCZ** | **Deep Cove** | **11.52** | **32** | *e*Pn | **Pn** | **13 54 24.1** | **+0.3** |
| **TUZ** | **Tuapeka** | **11.92** | **40** | PN | **Pn** | **13 54 28.9** | **-0.5** |
| **MLZ** | **Mavora Lakes** | **11.95** | **35** | PN | **Pn** | **13 54 30.1** | **+0.3** |
| **WKZ** | **Wanaka** | **12.69** | **36** | *e*Pn | **Pn** | **13 54 41.8** | **+2.0** |
| **ODZ** | **Otahua Downs** | **13.07** | **41** | PN | **Pn** | **13 54 44.0** | **-1.0** |
| **ODZ** | **Otahua Downs** | **13.07** | **41** | *e*Pn | **Pn** | **13 54 46.2** | **+1.1** |
| **RPZ** | **Rata Peaks** | **14.37** | **39** | Pn | **Pn** | **13 55 03.7** | **+0.9** |
| | 2.3nm,0.3s,baz=186,slow=19,SNR=2.5 | | | | | | |
| **TAU** | **Tasmania Unive** | **14.66** | **326** | *e*P | **Pn** | **13 55 05.0** | **-1.7** |
| TAU | | | | pmax | pmax | | |
| | comp=Z,122nm,0.6s | | | | | | |
| **TAU** | **Tasmania Unive** | **14.66** | **326** | Pn | **Pn** | **13 55 04.0** | **-2.7** |
| | comp=Z,1µm,0.5s,SNR=62 | | | | | | |
| **TAU** | **Tasmania Unive** | **14.66** | **326** | *e*P | **Pn** | **13 55 05.0** | **-1.7** |
| | comp=Z,122nm,0.6s | | | | | | |
| **MQZ** | **McQueen's Vall** | **14.97** | **43** | PN | **Pn** | **13 55 12.5** | **+1.6** |
| **MQZ** | **McQueen's Vall** | **14.97** | **43** | *e*Pn | **Pn** | **13 55 11.3** | **+0.5** |
| **OXZ** | **Oxford** | **15.06** | **41** | *e*PN | **Pn** | **13 55 12.7** | **+0.6** |
| **OXZ** | **Oxford** | **15.06** | **41** | *e*Pn | **Pn** | **13 55 12.1** | **-0.1** |
| | comp=Z,136nm,1.2s | | | | | | |
| **CRLZ** | **Canterbury Las** | **15.07** | **43** | PN | **Pn** | **13 55 13.7** | **+1.5** |
| **MOO** | **Moorlands** | **15.12** | **326** | P | **Pn** | **13 55 11.4** | **-1.6** |
| | baz=15,SNR=47 | | | | | | |
| **KHZ** | **Kahutara** | **16.41** | **43** | *e*Pn | **Pn** | **13 55 28.2** | **-1.3** |
| | comp=Z,114nm,1.0s | | | | | | |
| **THZ** | **Tophouse** | **16.73** | **40** | PN | **P** | **13 55 35.8** | **-0.3** |
| **THZ** | **Tophouse** | **16.73** | **40** | *e*Pn | **Pn** | **13 55 33.8** | **0.0** |
| | comp=Z,105nm,1.0s | | | | | | |
| **BFZ** | **Birch Farm** | **18.95** | **45** | *e*P | **Pn** | **13 56 01.1** | **0.0** |
| | comp=Z,68nm,1.0s | | | | | | |
| **TOO** | **Toolangi** | **20.11** | **328** | P | Pn | 13 56 14.8 | -0.1 |
| | baz=20,SNR=10 | | | | | | |
| **BKZ** | **Black Stump Fm** | **20.34** | **43** | *e*P | Pn | 13 56 16.9 | -0.9 |
| | comp=Z,92nm,0.9s | | | | | | |
| **CNB** | **Canberra Magne** | **21.27** | **339** | P | **P** | **13 56 27.5** | **+1.8** |
| | baz=21,SNR=27 | | | | | | |
| **CAN** | **Canberra** | **21.34** | **338** | *e*P | **P** | **13 56 27.2** | **+0.7** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,90nm,1.1s | | | | | | |
| **CAN** | **Canberra** | **21.34** | **338** | *e*P | **P** | **13 56 27.2** | **+0.7** |
| | comp=Z,90nm,1.1s | | | | | | |
| **URZ** | **Urewera** | **21.37** | **43** | P | **P** | **13 56 27.5** | **+0.8** |
| | comp=Z,52nm,0.8s,baz=238,slow=6.6,SNR=21 | | | | | | |
| **URZ** | **Urewera** | **21.37** | **43** | *e*P* | **P** | **13 56 27.9** | **+1.2** |
| **URZ** | **Urewera** | **21.37** | **43** | *e*P | **P** | **13 56 27.2** | **+0.5** |
| | comp=Z,66nm,0.8s | | | | | | |
| **OPRZ** | **Ohinepanea** | **21.52** | **42** | P* | **P** | **13 56 29.6** | **+1.3** |
| **PUZ** | **Puketiti** | **21.99** | **45** | P* | **P** | **13 56 35.8** | **+2.5** |
| **ARPS** | **Mount Arapiles** | **22.02** | **322** | P | **P** | **13 56 34.8** | **+1.1** |
| | baz=22,SNR=8.9 | | | | | | |
| **VNDA** | **Vanda** | **22.03** | **178** | P | **P** | **13 56 33.8** | **+0.4** |
| | comp=Z,13nm,1.1s,baz=347,slow=11,SNR=15 | | | | | | |
| **VNDA** | **Vanda** | **22.03** | **178** | *e*P | **P** | **13 56 34.1** | **+0.6** |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,75nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **22.03** | **178** | *e*P | **P** | **13 56 34.1** | **+0.6** |
| | comp=Z,75nm,1.4s | | | | | | |
| **HAZ** | **Te Kaha** | **22.07** | **44** | P* | **P** | **13 56 35.7** | **+1.4** |
| **YNG** | **Young** | **22.46** | **337** | P | **P** | **13 56 40.4** | **+2.0** |
| | baz=22,SNR=15 | | | | | | |
| **SBA** | **Scott Base** | **22.51** | **175** | *e*P | **P** | **13 56 38.8** | **+0.2** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,349nm,2.5s | | | | | | |
| **SBA** | **Scott Base** | **22.51** | **175** | *e*P | **P** | **13 56 38.8** | **+0.2** |
| | comp=Z,349nm,2.5s | | | | | | |
| **OUZ** | **Omahuta** | **22.87** | **33** | *e*P | **P** | **13 56 44.7** | **+2.0** |
| | comp=Z,88nm,1.0s | | | | | | |
| **MGCD** | **Mangrove Creek** | **23.00** | **344** | P | **P** | **13 56 45.9** | **+1.7** |
| | baz=23,SNR=5.5 | | | | | | |
| **CASY** | **Casey** | **24.96** | **225** | *e*P | **P** | **13 57 01.3** | **-1.2** |
| | comp=Z,16nm,0.9s | | | | | | |
| **ARMA** | **Armidale** | **25.67** | **346** | P | **P** | **13 57 10.9** | **+1.6** |
| | baz=26,SNR=11 | | | | | | |
| **ARMA** | **Armidale** | **25.67** | **346** | *e*P | **P** | **13 57 09.0** | **-0.3** |
| | comp=Z,88nm,1.3s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.73** | **334** | P | **P** | **13 57 10.7** | **+1.0** |
| | baz=26,SNR=15 | | | | | | |
| **BBOO** | **Buckleboo** | **27.70** | **316** | *e*P | **P** | **13 57 24.7** | **-2.7** |
| | comp=Z,75nm,1.2s | | | | | | |
| **RMQ** | **Roma** | **29.97** | **342** | P | **P** | **13 57 49.0** | **+1.3** |
| | baz=30,SNR=9.4 | | | | | | |
| **EIDS** | **Eidsvold** | **30.71** | **347** | P | **P** | **13 57 54.6** | **+0.4** |
| | baz=31,SNR=6.0 | | | | | | |
| **EIDS** | **Eidsvold** | **30.71** | **347** | *e*P | **P** | **13 57 53.0** | **-1.2** |
| | comp=Z,36nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **30.83** | **334** | P | **P** | **13 57 56.5** | **+1.3** |
| | baz=31,SNR=42 | | | | | | |
| **FORT** | **Forrest** | **32.87** | **306** | P | **P** | **13 58 13.7** | **+0.5** |
| | baz=33,SNR=13 | | | | | | |
| **FORT** | **Forrest** | **32.87** | **306** | *e*P | **P** | **13 58 13.2** | **0.0** |
| | comp=Z,52nm,0.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **34.01** | **13** | P | **P** | **13 58 22.6** | **-0.7** |
| | comp=Z,43nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.49** | **180** | P | **P** | **13 58 27.6** | **+0.5** |
| | comp=Z,5.1nm,1.1s,baz=359,slow=2.7,SNR=11 | | | | | | |
| QSPA | | | | PcP | **PcP** | **14 01 01.4** | **-0.4** |
| | comp=Z,5.9nm,1.0s,baz=83,slow=1.4,SNR=8.1 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **36.51** | **291** | P | **P** | **13 58 44.5** | **-0.1** |
| | comp=Z,35nm,0.9s,baz=100,slow=0.1,SNR=15 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SNAA | **Sanae** | **52.33** | **187** | P | P | 14 00 46.9 | -3.7 | |
| | comp=Z,14nm,1.3s | | | | | | | |
| SNAA | | | | *e*PcP | **PcP** | **14 02 00.5** | **-1.0** | |
| **VNA3** | **Neumayer Olymp** | **53.16** | **185** | P | **P** | **14 00 56.2** | **-0.5** | |
| **VNA2** | **Neumayer--Watz** | **53.36** | **186** | P | **P** | **14 00 57.7** | **-0.4** | |
| | baz=162,slow=6.2 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **53.68** | **185** | P | **P** | **14 01 00.6** | **+0.2** | |
| **PPT** | **Papeete** | **54.46** | **67** | LR | LR | 14 19 46.8 | | |
| | comp=Z,390nm,20.0s,baz=246,slow=31 | | | | | | | |
| **FAKI** | **Fak Fak** | **56.67** | **328** | P | **P** | **14 01 23.4** | **+0.7** | |
| | baz=57,SNR=5.3 | | | | | | | |
| **FAKI** | **Fak Fak** | **56.67** | **328** | P | **P** | **14 01 23.7** | **+1.0** | |
| | comp=Z,142nm,1.0s | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **57.11** | **308** | P | **P** | **14 01 26.4** | **+0.6** | |
| | comp=Z,62nm,0.9s | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **57.89** | **314** | P | **P** | **14 01 31.6** | **+0.3** | |
| | comp=Z,104nm,1.0s | | | | | | | |
| **NLAI** | **Namlea** | **58.04** | **322** | P | **P** | **14 01 33.0** | **+0.6** | |
| | comp=Z,200nm,1.0s,comp=Z,2µm | | | | | | | |
| **SRBI** | **Singaraja** | **58.44** | **307** | P | **P** | **14 01 36.0** | **+0.9** | |
| | comp=Z,90nm,1.2s | | | | | | | |
| **SWI** | **Sorong** | **58.92** | **328** | P | **P** | **14 01 39.2** | **+0.7** | |
| | comp=Z,73nm,1.0s | | | | | | | |
| **KAPI** | **Kappang** | **59.22** | **313** | P | **P** | **14 01 40.4** | **-0.1** | |
| | comp=Z,19nm,1.1s,baz=215,slow=16 | | | | | | | |
| KAPI | | | | PcP | **PcP** | **14 02 29.7** | **+0.8** | |
| | comp=Z,6.8nm,0.4s,baz=216,slow=9.0,SNR=4.6 | | | | | | | |
| **KAPI** | **Kappang** | **59.22** | **313** | *e*P | **P** | **14 01 38.7** | **-1.9** | |
| | comp=Z,45nm,1.4s | | | | | | | |
| KAPI | | | | PcP | **PcP** | **14 02 29.7** | **+0.8** | |
| KAPI | | | | *e*PcP | **PcP** | **14 02 30.0** | **+1.2** | |
| **SANI** | **Sanana** | **59.54** | **321** | P | **P** | **14 01 43.4** | **+0.6** | |
| | comp=Z,91nm,1.0s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **60.16** | **314** | P | **P** | **14 01 47.6** | **+0.5** | |
| | comp=Z,37nm,1.3s | | | | | | | |
| **LBMI** | **Labuha** | **60.33** | **324** | P | **P** | **14 01 49.0** | **+0.8** | |
| | comp=Z,51nm,1.3s,comp=Z,1µm | | | | | | | |
| **LUWI** | **Luwuk** | **61.65** | **318** | *e*P | **P** | **14 01 55.8** | **-1.4** | |
| | comp=Z,83nm,1.1s | | | | | | | |
| LUWI | | | | *e*PcP | **PcP** | **14 02 36.9** | **-1.7** | |
| **BBKI** | **Banjar Baru** | **62.71** | **309** | P | **P** | **14 02 05.2** | **+0.9** | |
| | comp=Z,84nm,1.2s | | | | | | | |
| **MRSI** | **Marisa** | **63.36** | **318** | P | **P** | **14 02 08.4** | **-0.2** | |
| | comp=Z,43nm,1.0s | | | | | | | |
| **MPSI** | **Mapaga** | **64.02** | **316** | P | **P** | **14 02 13.6** | **+0.6** | |
| | comp=Z,78nm,1.0s | | | | | | | |
| **LWLI** | **Liwa** | **66.45** | **298** | P | **P** | **14 02 29.7** | **+0.8** | |
| | comp=Z,88nm,0.9s | | | | | | | |
| **TPI** | **Tanjungpandan** | **66.64** | **302** | P | **P** | **14 02 30.1** | **+0.2** | |
| | comp=Z,76nm,1.0s | | | | | | | |
| **MDSI** | **Maura Dua** | **66.84** | **298** | P | **P** | **14 02 31.5** | **+0.2** | |
| | comp=Z,29nm,1.2s | | | | | | | |
| **KSI** | **Kapahiang** | **68.36** | **297** | P | **P** | **14 02 41.9** | **+1.0** | |
| | comp=Z,72nm,1.7s | | | | | | | |
| **TSM** | **Tawau** | **68.43** | **316** | ⇓P | **P** | **14 02 42.1** | **+0.9** | |
| **KSM** | **Kuching** | **69.12** | **307** | P | **P** | **14 02 46.1** | **+0.5** | |
| | baz=69,SNR=8.2 | | | | | | | |
| **KSM** | **Kuching** | **69.12** | **307** | ⇓P | **P** | **14 02 46.0** | **+0.5** | |
| **KSM** | **Kuching** | **69.12** | **307** | *e*P | **P** | **14 02 45.3** | **-0.2** | |
| **SBUM** | **Sibu** | **69.13** | **309** | ⇑P | **P** | **14 02 46.8** | **+1.2** | |
| **SBUM** | **Sibu** | **69.13** | **309** | *e*P | **P** | **14 02 44.8** | **-0.9** | |
| **KKM** | **Kota Kinabalu** | **70.69** | **315** | *e*P | **P** | **14 02 53.3** | **-2.0** | |
| **PDSI** | **Padang** | **71.78** | **297** | P | **P** | **14 03 01.6** | **-0.3** | |
| | comp=Z,53nm,0.7s | | | | | | | |
| MYKOM | **Kota Tinggi** | **72.43** | **301** | *e*P | **P** | **14 03 05.9** | **+0.2** | |
| | comp=Z,26nm,1.0s | | | | | | | |
| **KGM** | **Kluang** | **72.88** | **301** | ⇓P | **P** | **14 03 09.7** | **+1.3** | |
| **FRIM** | **Kepong** | **74.77** | **300** | ⇓P | **P** | **14 03 20.2** | **+0.7** | |
| **PLCA** | **Paso Flores** | **75.33** | **144** | *e*P | **P** | **14 03 22.3** | **-0.3** | |
| PLCA | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **PLCA** | **Paso Flores** | **75.33** | **144** | P | **P** | **14 03 23.4** | **+0.9** | |
| | baz=75,SNR=4.2 | | | | | | | |
| **PLCA** | **Paso Flores** | **75.33** | **144** | *e*P | **P** | **14 03 22.3** | **-0.3** | |
| | comp=Z,19nm,1.4s | | | | | | | |
| **PSI** | **Prapat** | **75.74** | **297** | P | **P** | **14 03 23.4** | **-1.8** | |
| | comp=Z,8.4nm,0.6s,baz=183,slow=12,SNR=5.8 | | | | | | | |
| **IPM** | **Ipoh** | **76.14** | **300** | P | **P** | **14 03 26.6** | **-0.8** | |
| | comp=Z,29nm,1.0s | | | | | | | |
| **KULM** | **Kulim** | **77.02** | **300** | *e*P | **P** | **14 03 30.5** | **-1.8** | |
| **H08S2** | **Diego Garcia H** | **81.53** | **269** | T | T | 15 33 47.0 | | |
| | baz=144,slow=76,SNR=689 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **81.54** | **269** | T | T | 15 33 46.9 | | |
| | baz=144,slow=76,SNR=310 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **81.55** | **269** | T | T | 15 33 50.4 | | |
| | baz=144,slow=76,SNR=533 | | | | | | | |
| **H08N1** | **Diego Garcia H** | **83.43** | **268** | T | T | 15 36 24.2 | | |
| | baz=141 | | | | | | | |
| **H08N3** | **Diego Garcia H** | **83.44** | **268** | T | T | 15 36 13.7 | | |
| | baz=141 | | | | | | | |
| **H08N2** | **Diego Garcia H** | **83.45** | **268** | T | T | 15 36 26.3 | | |
| | baz=141 | | | | | | | |
| **ABPO** | **Ambohimpanom** | **85.91** | **242** | *e*P | **P** | **14 04 21.1** | **+1.5** | |
| ABPO | | | | pmax | pmax | | | |
| | comp=Z,139nm,1.5s | | | | | | | |
| **ABPO** | **Ambohimpanom** | **85.91** | **242** | *e*P | **P** | **14 04 21.1** | **+1.5** | |
| | comp=Z,139nm,1.5s | | | | | | | |
| **OPO** | **Ambohidratompo** | **86.30** | **242** | P | **P** | **14 04 22.6** | **+1.0** | |
| | comp=Z,8.8nm,1.0s,baz=103,slow=2.2,SNR=5.5 | | | | | | | |
| **BOSA** | **Boshof** | **87.12** | **220** | P | **P** | **14 04 25.0** | **-0.4** | |
| | comp=Z,12nm,0.9s,baz=142,slow=4.4,SNR=12 | | | | | | | |
| **BOSA** | **Boshof** | **87.12** | **220** | P | **P** | **14 04 25.0** | **-0.4** | |
| **BOSA** | **Boshof** | **87.12** | **220** | P | **P** | **14 04 25.0** | **-0.4** | |
| | baz=87,SNR=8.6 | | | | | | | |
| **PALK** | **Pallekele** | **89.16** | **284** | P | **P** | **14 04 34.6** | **-0.5** | |
| | comp=Z,24nm,1.0s,baz=115,slow=4.6,SNR=3.5 | | | | | | | |
| **PALK** | **Pallekele** | **89.16** | **284** | *i* P | **P** | **14 04 36.7** | **+1.6** | |
| **CM01** | **Chiang Mai Arr** | **89.21** | **305** | *e*P | **P** | **14 04 35.3** | **+0.2** | |
| **CMAR** | **Chiang Mai Arr** | **89.25** | **305** | P | **P** | **14 04 35.9** | **+0.6** | |
| | comp=Z,12nm,0.9s,baz=177,slow=4.0,SNR=67 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.25** | **305** | *i* P | **P** | **14 04 36.0** | **+0.7** | |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **CHTO** | **Chiang Mai** | **89.56** | **305** | *e*P | **P** | **14 04 36.3** | **-0.4** | |
| **CHTO** | **Chiang Mai** | **89.56** | **305** | *e*P | **P** | **14 04 36.3** | **-0.4** | |
| **LBTB** | **Lobatse** | **90.26** | **222** | P | **P** | **14 04 40.8** | **+0.5** | |
| | comp=Z,4.9nm,0.9s,baz=160,slow=3.9,SNR=3.8 | | | | | | | |
| **CPUP** | **Villa Florida** | **92.81** | **148** | P | **P** | **14 04 51.6** | **-0.4** | |
| | comp=Z,1.7nm,0.9s,baz=238,slow=6.9,SNR=3.1 | | | | | | | |
| **GYA** | **Guiyang** | **92.94** | **315** | P | **P** | **14 04 53.8** | **+1.4** | |
| GYA | | | | PP | **PP** | **14 08 40.3** | **+4.8** | |
| GYA | | | | SKS | **SKSac** | **14 15 26.6** | **+0.9** | |
| GYA | | | | SS | **SS** | **14 22 16.5** | **+4.0** | |
| GYA | | | | PMZ | | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=Z,130nm,6.4s | | | | | | | |
| GYA | | | | LN | | | | |
| | comp=Z,490nm,20.2s | | | | | | | |
| GYA | | | | LE | | | | |
| | comp=Z,420nm,21.0s | | | | | | | |
| **MATP** | **Matopo** | **93.25** | **226** | P | **P** | **14 04 52.8** | **-1.5** | |
| | comp=Z,4.1nm,1.0s,baz=198,slow=9.6,SNR=2.1 | | | | | | | |
| **KMI** | **Kunming** | **93.38** | **311** | P | **P** | **14 04 56.8** | **+2.2** | |
| KMI | | | | PMZ | | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,67nm,4.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **93.44** | **344**⇓ | *e*P | **P** | **14 04 55.7** | **+1.4** | |
| **MAJO** | **Matsushiro** | **93.44** | **344** | *e*P | **P** | **14 04 55.8** | **+1.4** | |
| **MAT** | **Matsushiro** | **93.44** | **344** | P | **P** | **14 04 54.8** | **+0.5** | |
| **NJ2** | **Nanjing** | **93.69** | **327** | *e*P | **P** | **14 04 57.0** | **+1.5** | |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,40nm,1.0s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **96.33** | **336** | P | **P** | **14 05 07.2** | **-0.3** | |
| KSAR | | | | | | 14 09 01.5 | | |
| **KSAR** | **Wonju Array Be** | **96.33** | **336** | P | **P** | **14 05 07.2** | **-0.3** | |
| KSAR | | | | PP | **PP** | **14 09 01.5** | **-0.2** | |
| **KSRS** | **Korea Array** | **96.33** | **336** | P | **P** | **14 05 07.2** | **-0.2** | |
| | comp=Z,1.5nm,1.0s,baz=172,slow=3.8,SNR=4.4 | | | | | | | |
| KSRS | | | | PP | **PP** | **14 09 01.5** | **-0.2** | |
| | comp=Z,1.8nm,0.9s,baz=173,slow=11,SNR=4.6 | | | | | | | |
| **CD2** | **Chengdu** | **98.05** | **315** | *e*P | Pdif | 14 05 17.0 | +1.4 | |
| CD2 | | | | pP | pP | 14 05 22.8 | +2.9 | |
| CD2 | | | | PP | **PP** | **14 09 16.5** | **+1.5** | |
| CD2 | | | | SKS | **SKSac** | **14 15 53.6** | **+1.1** | |
| CD2 | | | | S | **ScS** | **14 16 43.4** | **+1.5** | |
| CD2 | | | | sS | sS | 14 16 52.9 | +3.8 | |
| CD2 | | | | SS | **SS** | **14 23 28.3** | **+3.4** | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,120nm,5.0s | | | | | | | |
| **TSUM** | **Tsumeb** | **98.47** | **217** | P | **P** | **14 05 17.9** | **-0.1** | |
| | comp=Z,3.1nm,0.9s,baz=230,slow=12,SNR=3.3 | | | | | | | |
| **BJI** | **Beijing** | **101.89** | **328** | P | **Pdif** | **14 05 30.8** | **-1.5** | |
| BJI | | | | PMZ | | | | |
| | comp=Z,13nm,2.3s | | | | | | | |
| BJI | | | | PMZ | | | | |
| | comp=Z,290nm,8.1s | | | | | | | |
| **LZH** | **Lanzhou** | **102.57** | **317** | *e*P | **Pdif** | **14 05 37.3** | **+1.6** | |
| LZH | | | | pP | | 14 05 42.8 | | |
| LZH | | | | sP | | 14 05 45.4 | | |
| LZH | | | | SKS | **SKSac** | **14 16 13.0** | **-1.6** | |
| LZH | | | | *e*S | **Sdif** | **14 17 13.1** | **-6.5** | |
| LZH | | | | SS | **SS** | **14 24 24.1** | **-4.0** | |
| LZH | | | | PMZ | | | | |
| | comp=Z,23nm,1.0s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,110nm,4.9s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,690nm,16.2s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,860nm,17.5s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,1µm,19.8s | | | | | | | |
| **CN2** | **Changchun** | **102.95** | **336** | *e*P | **Pdif** | **14 05 41.0** | **+4.1** | |
| **SONM** | **Songino Array** | **111.97** | **325** | PKiKP | **PKiKP** | **14 10 11.4** | **-2.3** | |
| | comp=Z,0.3nm,0.6s,baz=57,slow=5.3,SNR=2.1 | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **114.22** | **65** | P | PKPdf | 14 10 19.0 | +0.6 | |
| | baz=114 | | | | | | | |
| **WMQ** | **Urumqi** | **115.70** | **311** | PKP | **PKPdf** | **14 10 20.0** | **-0.9** | |
| **NVAR** | **Mina Array Bea** | **117.16** | **61** | PKP | **PKPdf** | **14 10 24.7** | **+0.5** | |
| | comp=Z,1.5nm,0.9s,baz=208,slow=4.3,SNR=9.8 | | | | | | | |
| NVAR | | | | PKKPbc | **PKKPab** | **14 20 49.5** | **-0.8** | |
| | comp=Z,0.2nm,0.3s,baz=212,slow=2.9,SNR=4.5 | | | | | | | |
| **KSH** | **Kashi** | **117.74** | **300** | *e*PKP | **PKPdf** | **14 10 26.3** | **+1.2** | |
| KSH | | | | SKS | **SKSdf** | **14 17 35.3** | **-1.2** | |
| KSH | | | | PPMZ | | | | |
| | comp=Z,120nm,5.5s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,210nm,10.1s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,150nm,6.7s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,220nm,12.3s | | | | | | | |
| **TXAR** | **Lajitas Array** | **117.92** | **78** | PKP | **PKPdf** | **14 10 25.2** | **-0.5** | |
| | comp=Z,0.3nm,0.8s,baz=198,slow=6.6,SNR=5.0 | | | | | | | |
| TXAR | | | | PKKPbc | **PKKPab** | **14 20 46.0** | **-1.7** | |
| | comp=Z,0.5nm,0.8s,baz=102,slow=3.1,SNR=5.1 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **118.79** | **75** | *e*PKPdf | **PKPdf** | **14 10 27.2** | **0.0** | |
| **YAK** | **Yakutsk** | **119.48** | **345** | *e*PKIKP | **PKPdf** | **14 10 28.0** | **+0.5** | |
| **MKAR** | **Makanchi Array** | **120.39** | **309** | PKP | **PKPdf** | **14 10 29.2** | **-0.6** | |
| | comp=Z,3.1nm,1.0s,baz=154,slow=4.3,SNR=10 | | | | | | | |
| **TKM2** | **Tokmak 2** | **120.52** | **302** | *e*PKIKP | **PKPdf** | **14 10 30.3** | **-0.2** | |
| **TKM2** | **Tokmak 2** | **120.52** | **302** | *e*PKPdf | **PKPdf** | **14 10 30.3** | **-0.2** | |
| **AAK** | **Ala-Archa** | **120.83** | **301**⇓ | *e*PKIKP | **PKPdf** | **14 10 31.2** | **+0.2** | |
| **DUG** | **Dugway** | **121.26** | **64** | P | **PKPdf** | **14 10 32.4** | **+0.5** | |
| | baz=122 | | | | | | | |
| **433A** | **Art** | **121.56** | **81** | P | **PKPdf** | **14 10 32.5** | **-0.1** | |
| | baz=122 | | | | | | | |
| **333A** | **Richland Sprin** | **122.05** | **80** | P | **PKPdf** | **14 10 33.5** | **0.0** | |
| | baz=122 | | | | | | | |
| **RAYN** | **Ar Rayn** | **122.06** | **265** | *e*PKPdf | **PKPdf** | **14 10 34.2** | **+0.5** | |
| **S22A** | **4UR Ranch, Cre** | **122.55** | **70** | P | **PKPdf** | **14 10 34.9** | **+0.3** | |
| | baz=123 | | | | | | | |
| **HAWA** | **Hanford** | **122.62** | **54** | *e*PKPdf | **PKPdf** | **14 10 34.3** | **+0.2** | |
| **HKT** | **Hockley** | **122.78** | **84** | *e*PKIKP | **PKPdf** | **14 10 34.4** | **-0.4** | |
| **B05A** | **Bryant** | **122.86** | **51** | P | **PKPdf** | **14 10 35.3** | **+0.9** | |
| | baz=123 | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **122.90** | **78** | P | **PKPdf** | **14 10 35.4** | **+0.3** | |
| | baz=123 | | | | | | | |
| **Z32A** | **Haskell** | **123.26** | **78** | P | **PKPdf** | **14 10 36.3** | **+0.5** | |
| | baz=124 | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **123.64** | **79** | P | **PKPdf** | **14 10 36.8** | **+0.4** | |
| | baz=124 | | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **123.80** | **78** | P | **PKPdf** | **14 10 37.3** | **+0.6** | |
| | baz=124 | | | | | | | |
| **REDW** | **Red Top Meadow** | **124.58** | **62** | *e*PKPdf | **PKPdf** | **14 10 38.5** | **+0.3** | |
| **TPAW** | **Teton Pass** | **124.62** | **62** | *e*PKPdf | **PKPdf** | **14 10 39.0** | **+0.6** | |
| **ISCO** | **Idaho Springs** | **124.70** | **69** | P | **PKPdf** | **14 10 39.6** | **+0.9** | |
| | baz=125 | | | | | | | |
| **R26A** | **Arlington** | **124.77** | **72** | P | **PKPdf** | **14 10 39.2** | **+0.6** | |
| | baz=125 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **124.78** | **316** | PKP | **PKPdf** | **14 10 36.6** | **-1.3** | |
| | comp=Z,0.5nm,0.4s,baz=347,slow=4.4,SNR=3.5 | | | | | | | |
| MOOW | **Moose Ponds** | **124.92** | **62** | *e*PKPdf | **PKPdf** | **14 10 39.8** | **+0.9** | |
| **IMW** | **Indian Meadow** | **124.93** | **62** | *e*PKPdf | **PKPdf** | **14 10 39.7** | **+0.8** | |
| **NEW** | **Newport** | **125.11** | **54** | *e*PKIKP | **PKPdf** | **14 10 39.2** | **+0.3** | |
| **NEW** | **Newport** | **125.11** | **54** | P | **PKPdf** | **14 10 39.4** | **+0.6** | |
| | baz=125 | | | | | | | |
| **NEW** | **Newport** | **125.11** | **54** | *e*PKPdf | **PKPdf** | **14 10 39.1** | **+0.3** | |
| **TRF** | **Thorofare Moun** | **125.15** | **25** | *e*PKPdf | **PKPdf** | **14 10 38.6** | **0.0** | |
| **DLMT** | **Dillon** | **125.16** | **60** | *e*PKPdf | **PKPdf** | **14 10 40.1** | **+0.9** | |
| **FLWY** | **Flagg Ranch** | **125.18** | **62** | *e*PKPdf | **PKPdf** | **14 10 40.5** | **+1.2** | |
| **LRM** | **Limekiln Ridge** | **125.56** | **59** | *e*PKPdf | **PKPdf** | **14 10 40.7** | **+0.6** | |
| **MSO** | **Missoula** | **125.57** | **57** | P | **PKPdf** | **14 10 40.6** | **+0.7** | |
| | baz=126 | | | | | | | |
| **GEYT** | **Alibeck** | **125.84** | **286** | PKP | **PKPdf** | **14 10 40.8** | **+0.2** | |
| | comp=Z,3.1nm,0.7s,baz=289,slow=4.5,SNR=6.2 | | | | | | | |
| **BOZ** | **Bozeman (W)** | **125.84** | **60** | *e*PKIKP | **PKPdf** | **14 10 40.1** | **-0.4** | |
| **BOZ** | **Bozeman (W)** | **125.84** | **60** | P | **PKPdf** | **14 10 41.3** | **+0.8** | |
| | baz=126 | | | | | | | |
| **BOZ** | **Bozeman (W)** | **125.84** | **60** | *e*PKPdf | **PKPdf** | **14 10 40.1** | **-0.4** | |
| **X38A** | **Whitesboro** | **126.86** | **81** | P | **PKPdf** | **14 10 42.5** | **0.0** | |
| | baz=127 | | | | | | | |
| **W37A** | **Quinton** | **126.87** | **80** | P | **PKPdf** | **14 10 42.8** | **+0.2** | |
| | baz=127 | | | | | | | |
| **COLA** | **College** | **126.93** | **25** | *i* PKIKP | **PKPdf** | **14 10 43.2** | **+1.5** | |
| **V36A** | **Jenks** | **127.06** | **79** | P | **PKPdf** | **14 10 43.5** | **+0.6** | |
| | baz=127 | | | | | | | |
| **ILAR** | **Eielson Array** | **127.09** | **26** | PKP | **PKPdf** | **14 10 42.1** | **0.0** | |
| | comp=Z,6.1nm,1.1s,baz=268,slow=3.6,SNR=19 | | | | | | | |
| **T35A** | **Sooner Cattle** | **127.56** | **78** | P | **PKPdf** | **14 10 44.3** | **+0.5** | |
| | baz=128 | | | | | | | |
| **Q32A** | **Meitler Ranch,** | **127.92** | **74** | P | **PKPdf** | **14 10 44.9** | **+0.4** | |
| | baz=128 | | | | | | | |
| **U37A** | **Salina** | **127.97** | **79** | P | **PKPdf** | **14 10 44.9** | **+0.2** | |
| | baz=128 | | | | | | | |
| **J25A** | **Sunshine Ranch** | **128.21** | **67** | P | **PKPdf** | **14 10 45.2** | **+0.2** | |
| | baz=128 | | | | | | | |
| **U38A** | **Gravette** | **128.40** | **80** | P | **PKPdf** | **14 10 45.5** | **0.0** | |
| | baz=129 | | | | | | | |
| **J26A** | **Sides Ranch, S** | **128.54** | **67** | P | **PKPdf** | **14 10 46.1** | **+0.5** | |
| | baz=129 | | | | | | | |
| **R35A** | **Emporia Munici** | **128.74** | **77** | P | **PKPdf** | **14 10 46.7** | **+0.6** | |
| | baz=129 | | | | | | | |
| **O32A** | **Brockman Farm,** | **128.97** | **73** | P | **PKPdf** | **14 10 46.6** | **+0.1** | |
| | baz=129 | | | | | | | |
| **DBIC** | **Dimbokro** | **129.43** | **202** | PKP | **PKPdf** | **14 10 48.0** | **-0.1** | |
| | comp=Z,4.1nm,0.8s,baz=356,slow=0.6,SNR=4.2 | | | | | | | |
| **BRVK** | **Borovoye** | **130.27** | **308**‖ | *e*PKIKP | **PKPdf** | **14 10 48.7** | **+0.3** | |
| **BRVK** | **Borovoye** | **130.27** | **308** | *e*PKPdf | **PKPdf** | **14 10 48.4** | **-0.1** | |
| **TORD** | **Torodi Ar. Bea** | **133.97** | **212** | PKhKP | PKPpre | 14 10 45.6 | | |
| | comp=Z,0.4nm,0.7s,baz=165,slow=3.2,SNR=3.3 | | | | | | | |
| TORD | | | | PKP | **PKPdf** | **14 10 55.7** | **-0.9** | |
| | comp=Z,2.2nm,0.9s,baz=172,slow=0.9,SNR=11 | | | | | | | |
| **WCI** | **Wyandotte Cave** | **134.21** | **84** | *e*PKIKP | **PKPdf** | **14 10 55.8** | **-0.6** | |
| **WCI** | **Wyandotte Cave** | **134.21** | **84** | *e*PKPdf | **PKPdf** | **14 10 55.8** | **-0.6** | |
| **GNI** | **Garni** | **134.80** | **279** | *i* PKIKP | **PKPdf** | **14 11 00.0** | **+2.3** | |
| **YKA** | **Yellowknife Ar** | **135.63** | **42** | PKP | **PKPdf** | **14 10 58.1** | **-0.1** | |
| | comp=Z,1.6nm,0.7s,baz=266,slow=1.1,SNR=4.0 | | | | | | | |
| **ARU** | **Arti** | **137.69** | **306** | *i* PKIKP | **PKPdf** | **14 11 02.2** | **0.0** | |
| **KBZ** | **Khabaz** | **138.20** | **281** | PKP | **PKPdf** | **14 11 01.7** | **-1.9** | |
| | comp=Z,2.4nm,0.9s,baz=45,slow=3.8,SNR=4.5 | | | | | | | |
| **KIV** | **Kislovodsk** | **138.46** | **282** | *i* PKIKP | **PKPdf** | **14 11 06.1** | **+1.9** | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| KIV | | | | MLR | MLR | | | |
| | comp=Z,725nm,19.0s | | | | | | | |
| **BRTR** | **Keskin Array B** | **140.78** | **270** | PKhKP | PKPpre | 14 11 01.8 | | |
| | comp=Z,0.3nm,0.4s,baz=23,slow=6.5,SNR=3.5 | | | | | | | |
| BRTR | | | | PKP | **PKPdf** | **14 11 08.4** | **-0.3** | |
| | comp=Z,0.9nm,0.8s,baz=141,slow=5.2,SNR=3.6 | | | | | | | |
| **TAM** | **Tamanrasset** | **141.61** | **222** | PKIKP | **PKPdf** | **14 11 10.0** | **-0.7** | |
| **ANN** | **Anapa** | **141.92** | **279** | *i* PKIKP | **PKPdf** | **14 11 13.7** | **+3.4** | |
| ANN | | | | *e* | | 14 11 17.8 | | |
| ANN | | | | *e* | | 14 14 15.9 | | |
| ANN | | | | *e* | | 14 18 26.1 | | |
| ANN | | | | *e*SS | SS | 14 32 54.9 | +6.4 | |
| ANN | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.3s | | | | | | | |
| ANN | | | | MLR | MLR | | | |
| | comp=N,434nm,16.0s | | | | | | | |
| ANN | | | | MLR | MLR | | | |
| | comp=Z,635nm,16.0s | | | | | | | |
| ANN | | | | MLR | MLR | | | |
| | comp=E,172nm,16.0s | | | | | | | |
| **VRH** | **Novokhopyorsk** | **143.26** | **290** | *e*PKIKP | **PKPdf** | **14 11 12.5** | **0.0** | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=N,10.0nm,1.0s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.5s | | | | | | | |
| **CHOS** | **Chios island** | **144.15** | **261** | P | PKPbc | 14 11 13.2 | +0.4 | |
| **CHOS** | **Chios island** | **144.15** | **261** | P | PKPbc | 14 11 13.2 | +0.4 | |
| **VORD** | **Divnogorie** | **144.43** | **289** | *e*PKHKP | PKPpre | 14 11 10.5 | | |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.4s | | | | | | | |
| VORD | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.6s | | | | | | | |
| VORD | | | | pmax | pmax | | | |
| | comp=E,20nm,0.6s | | | | | | | |
| **VSR** | **Storozhevoye** | **144.63** | **289** | *e*PKIKP | **PKPab** | **14 11 12.5** | **-1.1** | |
| VSR | | | | pmax | pmax | | | |
| | comp=N,8.0nm,0.7s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=E,9.0nm,0.9s | | | | | | | |
| **SIGR** | **SIGRI** | **144.83** | **262** | P | **PKPab** | **14 11 13.1** | **-1.6** | |
| **SIGR** | **SIGRI** | **144.83** | **262** | P | **PKPab** | **14 11 13.1** | **-1.6** | |
| **LONY** | **Lake Ozonia** | **145.03** | **86** | *e*PKPdf | **PKPbc** | **14 11 15.2** | **-0.1** | |
| **VLY** | **Voula,Athens** | **145.04** | **259** | P | **PKPbc** | **14 11 14.3** | **-1.2** | |
| **VLY** | **Voula,Athens** | **145.04** | **259** | P | **PKPbc** | **14 11 14.3** | **-1.2** | |
| **KRND** | **KRANIDI** | **145.06** | **257** | P | **PKPbc** | **14 11 14.1** | **-1.5** | |
| **DID** | **Didima** | **145.10** | **258** | P | **PKPbc** | **14 11 14.3** | **-1.4** | |
| **DID** | **Didima** | **145.10** | **258** | P | **PKPbc** | **14 11 14.3** | **-1.4** | |
| **ATHU** | **Athens Univers** | **145.12** | **259** | P | **PKPbc** | **14 11 14.5** | **-1.3** | |
| **ATHU** | **Athens Univers** | **145.12** | **259** | P | **PKPbc** | **14 11 14.5** | **-1.3** | |
| **PTL** | **Penteli** | **145.14** | **259** | P | **PKPbc** | **14 11 14.8** | **-1.0** | |
| **PTL** | **Penteli** | **145.14** | **259** | P | **PKPbc** | **14 11 14.8** | **-1.0** | |
| **LPSR** | **Galich'ya Gora** | **145.46** | **291** | *e*PKP2 | **PKPdf** | **14 11 16.0** | **-0.3** | |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,70nm,0.9s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=N,5.0nm,1.0s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=E,30nm,1.3s | | | | | | | |
| **LTK** | **Loutraki** | **145.62** | **258** | P | **PKPdf** | **14 11 15.9** | **-1.2** | |
| **LTK** | **Loutraki** | **145.62** | **258** | P | **PKPdf** | **14 11 15.9** | **-1.2** | |
| **LIA** | **Limnos Island** | **145.68** | **263** | P | **PKPdf** | **14 11 16.6** | **-0.5** | |
| **LIA** | **Limnos Island** | **145.68** | **263** | P | **PKPdf** | **14 11 16.6** | **-0.5** | |
| **ALN** | **Alexandroupoli** | **145.87** | **265** | PKIKP | **PKPdf** | **14 11 17.1** | **-0.3** | |
| **ALN** | **Alexandroupoli** | **145.87** | **265** | P | **PKPdf** | **14 11 17.1** | **-0.3** | |
| **ALN** | **Alexandroupoli** | **145.87** | **265** | P | **PKPdf** | **14 11 17.1** | **-0.3** | |
| **SMTH** | **Samothraki Isl** | **145.88** | **264** | P | **PKPdf** | **14 11 17.2** | **-0.2** | |
| **SMTH** | **Samothraki Isl** | **145.88** | **264** | P | **PKPdf** | **14 11 17.2** | **-0.2** | |
| **KLV** | **Kalavryta, Ach** | **146.08** | **257** | P | **PKPdf** | **14 11 18.2** | **+0.3** | |
| **KLV** | **Kalavryta, Ach** | **146.08** | **257** | P | **PKPdf** | **14 11 18.2** | **+0.3** | |
| **SKIA** | **Skiathos** | **146.14** | **260** | P | **PKPdf** | **14 11 17.8** | **-0.1** | |
| **LAKA** | **Lakka** | **146.32** | **257** | P | **PKPbc** | **14 11 19.6** | **+0.1** | |
| **LAKA** | **Lakka** | **146.32** | **257** | P | **PKPbc** | **14 11 19.6** | **+0.1** | |
| **NEO** | **Neokhori** | **146.38** | **260** | P | **PKPdf** | **14 11 18.8** | **+0.5** | |
| **NEO** | **Neokhori** | **146.38** | **260** | P | **PKPdf** | **14 11 18.8** | **+0.5** | |
| **SERG** | **Sergoula** | **146.40** | **258** | P | **PKPbc** | **14 11 19.2** | **-0.5** | |
| **EFP** | **Efpalio** | **146.49** | **258** | P | **PKPbc** | **14 11 19.8** | **-0.2** | |
| **PRD** | **Provadia** | **146.60** | **269** | *i* P | **PKPbc** | **14 11 19.9** | **-0.2** | |
| **KAVA** | **Kavala** | **146.80** | **263** | P | **PKPbc** | **14 11 20.1** | **-0.7** | |
| **KAVA** | **Kavala** | **146.80**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KRLC** | **Kraliky** | **156.49** | **272** | *e*PKIKP | **PKPdf** | **14** | **11** | **37.3 +4.0** |
| KRLC | | | | *e* | | 14 | 11 | 44.9 |
| **KRLC** | **Kraliky** | **156.49** | **272** | *e*PKPDF | **PKPdf** | **14** | **11** | **37.3 +4.0** |
| KRLC | | | | *ex* | x | 14 | 11 | 44.9 |
| KRLC | | | | *e*PKPAB | **PKPab** | **14** | **12** | **02.6 +0.4** |
| **DPC** | **Dobruska-Polom** | **156.88** | **273** | *e*PKIKP | **PKPdf** | **14** | **11** | **38.1 +4.3** |
| **DPC** | **Dobruska-Polom** | **156.88** | **273** | *e*PKPDF | **PKPdf** | **14** | **11** | **38.1 +4.3** |
| DPC | | | | *ex* | x | 14 | 11 | 52.3 |
| DPC | | | | *e*PKPAB | **PKPab** | **14** | **12** | **04.3 +0.4** |
| **UPC** | **Upice** | **157.13** | **273** | *e*PKP2 | **PKPab** | **14** | **12** | **04.9 0.0** |
| **UPC** | **Upice** | **157.13** | **273** | *e*PKPAB | **PKPab** | **14** | **12** | **04.9 0.0** |
| **GERES** | **GERESS Array B** | **157.63** | **267** | PKP | **PKPdf** | **14** | **11** | **35.6 +0.7** |
| | comp=Z,0.3nm,0.4s,baz=111,slow=3.0,SNR=4.0 | | | | | | | |
| GERES | | | | PKPab | **PKPab** | **14** | **12** | **06.2 -1.0** |
| | comp=Z,1.3nm,0.9s,baz=140,slow=6.4,SNR=5.1 | | | | | | | |
| **PRU** | **Pruhonice** | **157.72** | **270** | *e*PKP2 | **PKPab** | **14** | **12** | **07.7 +0.2** |
| **PRU** | **Pruhonice** | **157.72** | **270** | *e*PKPAB | **PKPab** | **14** | **12** | **07.7 +0.2** |
| **KHC** | **Kasperske Hory** | **157.84** | **268** | *e*PKP2 | **PKPab** | **14** | **12** | **05.7 -2.4** |
| **KHC** | **Kasperske Hory** | **157.84** | **268** | *e*PKPAB | **PKPab** | **14** | **12** | **05.7 -2.4** |
| **MOTA** | **Moosalm** | **158.28** | **261** | ⇑*i*PKPab | **PKPab** | **14** | **12** | **07.0 -3.2** |
| | comp=Z,13nm,1.2s | | | | | | | |
| **FETA** | **Feichten** | **158.31** | **260** | ⇓*i*PKPab | **PKPab** | **14** | **12** | **10.3 0.0** |
| | comp=Z,13nm,1.1s | | | | | | | |
| **BRG** | **Berggiesshubel** | **158.47** | **272** | *e*P | PKPdf | 14 | 11 | 46.4 +11 |
| | comp=Z,9.8nm,1.6s | | | | | | | |
| BRG | | | | *e* | | 14 | 12 | 10.7 |
| | comp=Z,12nm,1.4s | | | | | | | |
| **BRG** | **Berggiesshubel** | **158.47** | **272** | *e*PKIKP | PKPdf | 14 | 11 | 46.3 +11 |
| BRG | | | | *e* | | 14 | 12 | 10.6 |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.6s | | | | | | | |
| **DAVA** | **Damuels** | **158.94** | **260** | ⇑*i*PKPab | **PKPab** | **14** | **12** | **10.0 -3.0** |
| | comp=Z,16nm,1.1s | | | | | | | |
| **CLL** | **Collm** | **159.19** | **272** | *i* PKP2 | **PKPab** | **14** | **12** | **12.8 -1.0** |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **CLL** | **Collm** | **159.19** | **272** | *i* PKPab | **PKPab** | **14** | **12** | **12.8 -1.0** |
| | comp=Z,11nm,1.2s | | | | | | | |
| **ESDC** | **Sonseca Array** | **160.27** | **223** | PKPab | **PKPab** | **14** | **12** | **17.4 -1.5** |
| | comp=Z,0.3nm,0.3s,baz=155,slow=5.0,SNR=8.7 | | | | | | | |
| **NOA** | **NORSAR Array B** | **162.16** | **301** | PKPab | **PKPab** | **14** | **12** | **25.9 -0.6** |
| | comp=Z,3.3nm,0.8s,baz=89,slow=4.6,SNR=8.9 | | | | | | | |

*IDC* ***16*** *14:01:48.5±2.2,2°.43N×95°.29E, h0km, mb3.7/5, mb1 3.8/7, mb1mx3.6/36, mbtmp3.6/7, ML3.7/2, Error ellipse: s-maj=63.6km s-min=22.6km az=56.0*

**ISC 16 14:01:52.8±2.0, 2.7N±0.2×95.5E±0.2, h25km, n13, σ0s71/6, mb3.8/5, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **PSI** | **Prapat** | **3.42** | **88** | Pn | **Pn** | **14** | **02** | **44.9 +0.3** |
| | 1.6nm,0.3s,baz=341,slow=12,SNR=4.8 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **16.03** | **12** | Pn | **P** | **14** | **05** | **39.5 -0.5** |
| | 0.2nm,0.3s,baz=202,slow=11,SNR=5.0 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.15** | **246** | T | T | 14 | 33 | 24.3 |
| | baz=66,slow=75,SNR=146 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.15** | **246** | T | T | 14 | 33 | 24.4 |
| | baz=66,slow=75,SNR=143 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **25.17** | **246** | T | T | 14 | 33 | 25.6 |
| | baz=66,slow=75,SNR=144 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **41.26** | **157** | T | T | 14 | 53 | 16.3 |
| | baz=332,slow=76,SNR=8.9 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **41.27** | **157** | T | T | 14 | 53 | 17.3 |
| | baz=332,slow=76,SNR=7.6 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **41.28** | **157** | T | T | 14 | 53 | 17.6 |
| | baz=332,slow=76,SNR=7.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.25** | **122** | P | **P** | **14** | **10** | **00.2 -0.4** |
| | 0.3nm,0.6s,baz=296,slow=10.0,SNR=3.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.42** | **347** | P | **P** | **14** | **10** | **10.4 +0.9** |
| | 1.1nm,0.5s,baz=167,slow=8.1,SNR=7.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **45.63** | **127** | P | **P** | **14** | **10** | **11.6 0.0** |
| | 0.2nm,0.6s,baz=309,slow=8.3,SNR=4.2 | | | | | | | |
| **SONM** | **Songino Array** | **45.95** | **10** | P | P | 14 | 10 | 17.3 +3.5 |
| | 0.9nm,0.8s,baz=178,slow=7.2,SNR=4.4 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.85** | **352** | P | **P** | **14** | **10** | **58.3 -0.5** |
| | 1.2nm,0.5s,baz=185,slow=6.8,SNR=4.0 | | | | | | | |

*ISCJB* ***16*** *14:02:05.4±0.5, 37°.44N±0°.03×28°.10E±0°.04, h0km, Error ellipse: s-maj=4.4km s-min=4.0km az=20.3*
*DDA* ***16*** *14:02:05.3, 37°.42N×28°.07E, h7km, Md2.7*
*CSEM* ***16*** *14:02:05.4±0.3, 37°.44N×28°.12E, h1km, MD2.7, Error ellipse: s-maj=6.7km s-min=6.1km az=48.0, Mining explosion.*
*ISK* ***16*** *14:02:05.1, 37°.45N×28°.10E, h5km, MD2.7*

**ISC 16 14:02:05.3±1.0, 37°.47N±0°.02×28°.09E±0°.02, h0km, n20, σ0s75/33, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **AYDN** | **Tasoluk** | **0.26** | **319** | *i* P | **Pb** | **14** | **02** | **12.9 0.0** |
| AYDN | | | | *i* S | **Sb** | **14** | **02** | **17.3 -0.7** |
| **AYDN** | **Tasoluk** | **0.26** | **319** | P | **Pb** | **14** | **02** | **12.9 0.0** |
| AYDN | | | | S | **Sb** | **14** | **02** | **17.3 -0.7** |
| **YER** | **Yerkesik** | **0.36** | **155** | *e*PG | **Pg** | **14** | **02** | **12.4 +0.2** |
| YER | | | | *e*SG | **Sg** | **14** | **02** | **17.7 +0.8** |
| **YER** | **Yerkesik** | **0.36** | **155** | *e*Pg | **Pg** | **14** | **02** | **12.4 +0.2** |
| YER | | | | *e*Sg | **Sg** | **14** | **02** | **17.7 +0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.51** | **342** | *e*PG | **Pg** | **14** | **02** | **15.7 +0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.51** | **342** | *e*Pg | **Pg** | **14** | **02** | **15.7 +0.7** |
| **BDRM** | **Kayabasi** | **0.66** | **233** | *i* P | **Pg** | **14** | **02** | **17.6 -0.2** |
| **BDRM** | **Kayabasi** | **0.66** | **233** | P | **Pg** | **14** | **02** | **17.6 -0.2** |
| BDRM | | | | S | **Sb** | **14** | **02** | **30.6 +1.3** |
| **TURN** | **Turunc** | **0.72** | **145** | *i* P | **Pg** | **14** | **02** | **17.9 -1.1** |
| **TURN** | **Turunc** | **0.72** | **145** | P | **Pg** | **14** | **02** | **17.9 -1.1** |
| **GCAM** | **G?zelcaml?** | **0.72** | **289** | *i* P | **Pg** | **14** | **02** | **19.4 +0.3** |
| GCAM | | | | *i* S | **Sg** | **14** | **02** | **28.8 +0.3** |
| **GCAM** | **G?zelcaml?** | **0.72** | **289** | P | **Pg** | **14** | **02** | **19.4 +0.3** |
| GCAM | | | | S | **Sg** | **14** | **02** | **28.8 +0.3** |
| **BODT** | **Bodrum** | **0.74** | **237** | *e*PG | **Pg** | **14** | **02** | **19.8 +0.2** |
| BODT | | | | *e*SG | **Sb** | **14** | **02** | **30.6 -1.2** |
| **BODT** | **Bodrum** | **0.74** | **237** | *e*Pg | **Pg** | **14** | **02** | **19.8 +0.2** |
| BODT | | | | *e*Sg | **Sb** | **14** | **02** | **30.6 -1.2** |
| **DNZL** | **Cakiroluk** | **0.79** | **73** | *i* P | **Pg** | **14** | **02** | **21.3 +0.9** |
| DNZL | | | | *i* S | **Sb** | **14** | **02** | **33.1 -0.2** |
| **DNZL** | **Cakiroluk** | **0.79** | **73** | P | **Pg** | **14** | **02** | **21.3 +0.9** |
| DNZL | | | | S | **Sb** | **14** | **02** | **33.1 -0.2** |
| **MANT** | **Manisa** | **1.09** | **20** | *i* P | **Pg** | **14** | **02** | **24.7 -1.5** |
| MANT | | | | *i* S | **Sb** | **14** | **02** | **42.0 +0.1** |
| **MANT** | **Manisa** | **1.09** | **20** | P | **Pg** | **14** | **02** | **24.7 -1.5** |
| MANT | | | | S | **Sb** | **14** | **02** | **42.0 +0.1** |
| **FETY** | **Fethiye** | **1.15** | **136** | *e*PN | **Pg** | **14** | **02** | **27.3 0.0** |
| **FETY** | **Fethiye** | **1.15** | **136** | *e*Pn | **Pg** | **14** | **02** | **27.3 0.0** |

*ISCJB* ***16*** *14:22:11.9±1.9, 17°.5S±0°.7×178°.1W±0°.4, h550km, mb3.6/4, Error ellipse: s-maj=111.2km s-min=19.8km az=151.4*
*IDC* ***16*** *14:22:11.7±5.6, 17°.72S×177°.89W, h545km±58km, mb3.2/4, mb1 3.4/5, mb1mx3.0/24, mbtmp4.0/5, Error ellipse: s-maj=43.3km s-min=29.8km az=143.0*

**ISC 16 14:22:12.1±1.1, 17°.7S±0°.4×178°.0W±0°.2, h550km, n8, σ0s98/9, mb3.5/4, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **DZM** | **Mont Dzumac** | **15.23** | **251** | P | **P** | **14** | **25** | **22.9 -1.2** |
| | 0.1nm,0.3s,baz=0.0,slow=20,SNR=2.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.02** | **259** | P | **P** | **14** | **29** | **40.4 +1.1** |
| | 2.1nm,0.4s,baz=94,slow=7.1,SNR=82 | | | | | | | |
| WRA | | | | PcP | **PcP** | **14** | **31** | **07.7 -0.9** |
| | 0.3nm,0.4s,baz=100,slow=3.5,SNR=3.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **45.19** | **254** | P | **P** | **14** | **29** | **41.8 +1.2** |
| | 14nm,1.0s,baz=91,slow=8.0,SNR=145 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **14** | **31** | **08.4 -0.7** |
| | 0.8nm,0.6s,baz=109,slow=4.2,SNR=7.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.59** | **57** | P | **P** | **14** | **33** | **53.4 +0.4** |
| | 0.3nm,1.0s,baz=218,slow=5.5,SNR=3.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **85.62** | **13** | P | **P** | **14** | **33** | **52.0 -0.2** |
| | 0.2nm,0.5s,baz=219,slow=4.4,SNR=5.3 | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.90** | **315** | PKPbc | PKPbc | 14 | 40 | 47.4 -0.5 |
| | 1.1nm,0.8s,baz=124,slow=3.9,SNR=4.5 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.51** | **346** | PKPbc | **PKPbc** | **14** | **40** | **54.5 -0.3** |
| | 0.5nm,0.5s,baz=32,slow=4.1,SNR=5.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **175.45** | **177** | PKPab | **PKPab** | **14** | **43** | **00.8 0.0** |
| | 0.4nm,0.9s,baz=197,slow=4.5,SNR=2.8 | | | | | | | |

*ISCJB* ***16*** *14:35:55.2±1.0, 18°.54N±0°.09×146°.6E±0°.3, h64km, mb3.8/6, Error ellipse: s-maj=41.4km s-min=10.3km az=12.3*

*IDC* ***16*** *14:35:55.1±5.5, 18°.60N×146°.73E, h52km±49km, mb3.6/6, mb1 3.8/7, mb1mx3.5/44, mbtmp3.9/7, ML3.9/1, Error ellipse: s-maj=54.2km s-min=24.1km az=89.0*

**ISC 16 14:35:56.4±1.1, 18°.6N±0°.1×146°.7E±0°.3, h64km, n7, σ0s56/8, mb3.5/6, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **GUMO** | **Guam** | **5.26** | **200** | P | **Pn** | **14** | **37** | **12.6 +0.1** |
| | 3.7nm,0.3s,baz=40,slow=17,SNR=3.5 | | | | | | | |
| GUMO | | | | S | **Sn** | **14** | **38** | **11.3 -0.4** |
| | 2.5nm,0.3s,baz=198,slow=20,SNR=2.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **40.15** | **198** | P | **P** | **14** | **43** | **26.4 +0.1** |
| | 0.3nm,0.4s,baz=26,slow=8.4,SNR=9.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.80** | **197** | P | **P** | **14** | **43** | **56.7 +0.6** |
| | 0.2nm,0.3s,baz=29,slow=6.9,SNR=9.5 | | | | | | | |
| **SONM** | **Songino Array** | **43.84** | **321** | P | **P** | **14** | **43** | **56.4 +0.1** |
| | 0.5nm,0.5s,baz=142,slow=6.3,SNR=3.9 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.47** | **52** | P | **P** | **14** | **48** | **12.3 -0.2** |
| | 0.4nm,0.7s,baz=285,slow=7.3,SNR=3.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.91** | **342** | P | **P** | **14** | **48** | **14.4 +0.6** |
| | 5.0nm,1.1s,baz=48,slow=5.4,SNR=4.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **87.40** | **336** | P | **P** | **14** | **48** | **35.6 -0.8** |
| | 1.1nm,0.5s,baz=82,slow=4.9,SNR=15 | | | | | | | |

**IDC 16 14:44:00.1±2.3, 5°.11S×133°.49E, h0km, mb3.3/1, mb1 4.0/5, mb1mx3.6/33, mbtmp3.9/5, ML3.9/4, MS3.6/1, Ms1 3.6/1, ms1mx3.2/9, Error ellipse: s-maj=74.3km s-min=26.9km az=75.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **SIJI** | **Sorong** | **4.76** | **332** | Pn | Pn | 14 | 45 | 12.0 -1.2 |
| | 2.2nm,0.3s,baz=156,slow=18,SNR=6.5 | | | | | | | |
| SIJI | | | | Sn | Sn | 14 | 46 | 00.1 -9.2 |
| | 2.1nm,0.3s,baz=172,slow=22,SNR=5.9 | | | | | | | |
| **KAPI** | **Kappang** | **13.68** | **270** | Pn | Pn | 14 | 47 | 15.8 +0.3 |
| | 2.1nm,0.3s,baz=95,slow=12,SNR=7.9 | | | | | | | |
| **PMG** | **Port Moresby** | **14.22** | **108** | LR | LR | 14 | 54 | 39.8 |
| | comp=Z,248nm,18.4s,baz=214,slow=45 | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.76** | **177** | Pn | Pn | 14 | 47 | 28.8 -1.6 |
| | 0.4nm,0.3s,baz=355,slow=13,SNR=15 | | | | | | | |
| WRA | | | | Sn | Sn | 14 | 50 | 04.1 -11 |
| | 0.1nm,0.3s,baz=358,slow=24,SNR=3.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.45** | **179** | P | P | 14 | 48 | 17.8 +0.2 |
| | 0.4nm,0.3s,baz=3.1,slow=13,SNR=36 | | | | | | | |
| ASAR | | | | S | Sn | 14 | 51 | 37.0 -7.5 |
| | 0.1nm,0.3s,baz=359,slow=27,SNR=3.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.62** | **325** | P | P | 14 | 55 | 05.5 +0.3 |
| | 0.1nm,0.3s,baz=119,slow=7.4,SNR=2.6 | | | | | | | |

**IDC 16 14:45:08.9±1.5, 19°.53S×174°.32W, h0km, mb3.6/4, mb1 3.9/5, mb1mx3.7/28, mbtmp3.6/5, ML3.6/1, Error ellipse: s-maj=69.9km s-min=22.7km az=144.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **AFI** | **Afiamalu** | **6.10** | **24** | Pn | Pn | 14 | 46 | 39.0 -1.5 |
| | 1.4nm,0.3s,baz=37,slow=20,SNR=3.0 | | | | | | | |
| AFI | | | | Sn | Sn | 14 | 47 | 54.6 +3.5 |
| | 4.5nm,0.3s,baz=52,slow=21,SNR=4.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.11** | **255** | P | P | 14 | 53 | 50.4 -0.5 |
| | 1.0nm,0.9s,baz=93,slow=8.4,SNR=7.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.17** | **260** | P | P | 14 | 53 | 51.8 +0.4 |
| | 0.4nm,0.5s,baz=96,slow=7.6,SNR=5.1 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.97** | **42** | P | P | 14 | 57 | 10.6 +1.2 |
| | 0.4nm,0.7s,baz=235,slow=7.6,SNR=4.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **83.63** | **56** | P | P | 14 | 57 | 38.9 -0.9 |
| | 0.2nm,0.8s,baz=224,slow=5.0,SNR=3.4 | | | | | | | |

*ISCJB* ***16*** *14:51:08.8±0.2, 62°.26N±0°.02×149°.34W±0°.04, h73km±3km, mb3.6/8, Error ellipse: s-maj=3.0km s-min=2.9km az=147.9*
*IDC* ***16*** *14:51:08.6±2.2, 62°.33N×149°.64W, h52km±22km, mb3.4/8, mb1 3.7/12, mb1mx3.5/37, mbtmp3.7/12, ML3.4/4, Error ellipse: s-maj=18.9km s-min=13.3km az=81.0*
*NEIC* ***16*** *14:51:10.9, 62°.24N×149°.33W, h47km, ML3.5(AEIC), After AEIC.*

**ISC 16 14:51:09.7±0.8, 62°.25N±0°.03×149°.37W±0°.03, h62km±7km, n111, σ0s85/125, mb3.6/8, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| **TRAP** | **Trapper Creek** | **0.41** | **282** | P | **Pn** | **14** | **51** | **20.6 -0.2** |
| TRAP | | | | S | **Sn** | **14** | **51** | **29.4 +0.4** |
| **CUT** | **Chulitna** | **0.45** | **290** | P | **Pn** | **14** | **51** | **21.0 -0.1** |
| **SML** | **Sawmill** | **0.66** | **132** | P | **Pn** | **14** | **51** | **23.0 -0.6** |
| SML | | | | S | **Sn** | **14** | **51** | **33.8 0.0** |
| **PMR** | **Palmer** | **0.67** | **170** | P | **Pn** | **14** | **51** | **22.9 -0.7** |
| PMR | | | | S | **Sn** | **14** | **51** | **33.3 -0.6** |
| **HUR** | **Hurricane** | **0.74** | **351** | P | **Pn** | **14** | **51** | **24.5 +0.1** |
| **SUA** | **Susitna One** | **1.02** | **220** | P | **Pn** | **14** | **51** | **28.3 +0.2** |
| SUA | | | | S | **Sn** | **14** | **51** | **43.5 +1.7** |
| **SKT** | **Skwentna** | **1.05** | **256** | P | **Pn** | **14** | **51** | **28.2 -0.2** |
| SKT | | | | S | **Sn** | **14** | **51** | **43.3 +1.0** |
| **SCM** | **Sheep Creek Mo** | **1.05** | **113** | P | **Pn** | **14** | **51** | **28.0 -0.4** |
| SCM | | | | S | **Sn** | **14** | **51** | **43.5 +1.0** |
| **FIB** | **Fire Island** | **1.16** | **200** | P | **Pn** | **14** | **51** | **30.6 +0.9** |
| **RND** | **Reindeer** | **1.18** | **11** | P | **Pn** | **14** | **51** | **30.3 +0.1** |
| **RC01** | **Rabbit Creek A** | **1.18** | **189** | P | **Pn** | **14** | **51** | **30.1 0.0** |
| RC01 | | | | S | **Sn** | **14** | **51** | **46.1 +0.8** |
| **TRF** | **Thorofare Moun** | **1.27** | **341** | P | **Pn** | **14** | **51** | **31.9 +0.4** |
| TRF | | | | S | **Sn** | **14** | **51** | **48.4 +0.6** |
| **VOGL** | **Vogel Lake** | **1.36** | **202** | P | **Pn** | **14** | **51** | **33.8 +1.3** |
| **STLK** | **Strandline Lak** | **1.39** | **238** | P | **Pn** | **14** | **51** | **33.1 +0.1** |
| **PTE** | **Portage** | **1.41** | **173** | P | **Pn** | **14** | **51** | **33.2 +0.2** |
| **KTH** | **Kantishna Hill** | **1.48** | **332** | P | **Pn** | **14** | **51** | **34.9 +0.7** |
| **PWL** | **Port Wells** | **1.49** | **160** | P | **Pn** | **14** | **51** | **34.0 -0.2** |
| **MCK** | **McKinley** | **1.50** | **7** | P | **Pn** | **14** | **51** | **35.0 +0.6** |
| **CKN** | **Chakachatna No** | **1.69** | **234** | P | **Pn** | **14** | **51** | **38.4 +1.4** |
| **SPCR** | **Spurr Chakacha** | **1.71** | **233** | P | **Pn** | **14** | **51** | **38.1 +0.8** |
| **SPBG** | **Spurr Blockage** | **1.74** | **236** | P | **Pn** | **14** | **51** | **39.0 +1.4** |
| **BGL** | **Barrier Glacie** | **1.75** | **237** | P | **Pn** | **14** | **51** | **38.9 +1.1** |
| **GLI** | **Glacier Island** | **1.76** | **141** | P | **Pn** | **14** | **51** | **38.9 +1.1** |
| GLI | | | | S | **Sn** | **14** | **52** | **00.7 +1.5** |
| **CKL** | **Chakachamna La** | **1.77** | **234** | P | **Pn** | **14** | **51** | **38.6 +0.6** |
| **JPK** | **Jack Peak** | **1.79** | **131** | P | **Pn** | **14** | **51** | **38.1 -0.2** |
| **SLKM** | **Skilak Lake** | **1.80** | **193** | P | **Pn** | **14** | **51** | **38.3 -0.2** |
| **KLU** | **Klutina** | **1.81** | **114** | P | **Pn** | **14** | **51** | **38.7 +0.2** |
| **VLZ** | **Valdez** | **1.84** | **127** | P | **Pn** | **14** | **51** | **38.5 -0.3** |
| VLZ | | | | S | **Sn** | **14** | **52** | **01.5 +0.5** |
| **PS11** | **TAPS Pump St11** | **1.84** | **94** | P | **Pn** | **14** | **51** | **40.5 +1.6** |
| **VMT** | **TAPS TI Valdez** | **1.85** | **128** | P | **Pn** | **14** | **51** | **39.5 +0.4** |
| VMT | | | | S | **Sn** | **14** | **52** | **02.8 +1.4** |
| **BWN** | **Browne** | **1.93** | **359** | P | **Pn** | **14** | **51** | **40.9 +0.8** |
| **PAX** | **Paxson** | **1.94** | **67** | P | **Pn** | **14** | **51** | **41.5 +1.1** |
| **HARP** | **HAARP** | **1.98** | **84** | P | **Pn** | **14** | **51** | **42.1 +1.4** |
| **BPAW** | **Bear Paw Mtn.** | **1.99** | **339** | P | **Pn** | **14** | **51** | **41.2 +0.2** |
| **PS10** | **TAPS Pump St10** | **2.03** | **53** | P | **Pn** | **14** | **51** | **42.6 +1.1** |
| **FID** | **Port Fidalgo** | **2.05** | **136** | P | **Pn** | **14** | **51** | **41.4 -0.4** |
| **DIV** | **Divide** | **2.05** | **122** | P | **Pn** | **14** | **51** | **41.5 -0.4** |
| **BGRM** | **Barrier Glacie** | **2.09** | **226** | P | **Pn** | **14** | **51** | **43.5 +1.0** |
| **CHUM** | **Lake Minchumin** | **2.11** | **322** | P | **Pn** | **14** | **51** | **43.3 +0.7** |
| **PS12** | **TAPS Pump St12** | **2.15** | **109** | P | **Pn** | **14** | **51** | **43.4 +0.2** |
| **SEW** | **Seward** | **2.16** | **181** | P | **Pn** | **14** | **51** | **44.4 +1.2** |
| **WRH** | **Wood River Hil** | **2.30** | **14** | P | **Pn** | **14** | **51** | **45.5 +0.3** |
| **HIN** | **Hinchinbrook I** | **2.32** | **142** | P | **Pn** | **14** | **51** | **45.2 -0.3** |
| **NEA** | **Nenana** | **2.34** | **3** | P | **Pn** | **14** | **51** | **46.5 +0.9** |
| **RDN** | **Redoubt North** | **2.39** | **225** | P | **Pn** | **14** | **51** | **47.1 +0.6** |
| **NCT** | **North Crescent** | **2.41** | **227** | P | **Pn** | **14** | **51** | **47.9 +1.1** |
| **HDA** | **Harding Lake** | **2.42** | **26** | P | **Pn** | **14** | **51** | **47.6 +0.8** |
| **RSO** | **Redoubt South** | **2.43** | **224** | *e*Pn | **Pn** | **14** | **51** | **47.7 +0.6** |
| **RDWB** | **Redoubt West** | **2.43** | **225** | P | **Pn** | **14** | **51** | **47.6 +0.5** |
| **EYAK** | **Cordova Ski Ar** | **2.44** | **133** | P | **Pn** | **14** | **51** | **47.2 +0.1** |
| **CCB** | **Clear Creek Bu** | **2.50** | **16** | P | **Pn** | **14** | **51** | **48.0 +0.2** |
| **PS08** | **TAPS Pump Stn8** | **2.57** | **25** | P | **Pn** | **14** | **51** | **49.6 +0.8** |
| **BRLK** | **Bradley Lake** | **2.60** | **197** | P | **Pn** | **14** | **51** | **49.9 +0.5** |
| **BMRM** | **Bremner River** | **2.62** | **117** | P | **Pn** | **14** | **51** | **49.1 -0.5** |
| **SGAM** | **Sherman Glacie** | **2.67** | **129** | P | **Pn** | **14** | **51** | **50.5 +0.3** |
| **MENT** | **Mentasta** | **2.70** | **73** | *e*Pn | **Pn** | **14** | **51** | **51.2 +0.5** |
| **COLA** | **College** | **2.72** | **14** | P | **Pn** | **14** | **51** | **51.1 +0.3** |
| **GLB** | **Gilahina Butte** | **2.76** | **105** | P | **Pn** | **14** | **51** | **51.8 +0.3** |
| **ILAR** | **Eielson Array** | **2.76** | **23** | P | **Pn** | **14** | **51** | **51.0 -0.5** |
| | 6.9nm,0.3s,baz=207,slow=14,SNR=273 | | | | | | | |
| ILAR | | | | S | **Sn** | **14** | **52** | **22.5 -1.1** |
| | 20nm,0.3s,baz=208,slow=24,SNR=28 | | | | | | | |
| **ILB** | **Eielson Array** | **2.76** | **23** | P | **Pn** | **14** | **51** | **51.5 +0.1** |
| **MDM** | **Murphy Dome** | **2.76** | **10** | P | **Pn** | **14** | **51** | **51.9 +0.4** |
| **GOAT** | **Goat Mountain** | **2.79** | **125** | P | **Pn** | **14** | **51** | **51.8 -0.2** |
| **HOM** | **Homer** | **2.83** | **204** | P | **Pn** | **14** | **51** | **53.6 +1.2** |
| **MLY** | **Manley** | **2.85** | **348** | P | **Pn** | **14** | **51** | **53.2 +0.5** |
| **ILW** | **Iliamna West** | **2.86** | **221** | P | **Pn** | **14** | **51** | **53.8 +0.8** |
| **CNPM** | **China Poot** | **2.88** | **199** | P | **Pn** | **14** | **51** | **53.5 +0.3** |
| **RAGM** | **Ragged Mountai** | **2.94** | **128** | P | **Pn** | **14** | **51** | **53.8 -0.1** |
| **VRDI** | **Verde Repeater** | **3.00** | **107** | P | **Pn** | **14** | **51** | **54.7 -0.2** |
| **MCARA** | **McCarthy VSAT** | **3.14** | **103** | P | **Pn** | **14** | **51** | **57.5 +0.9** |
| **TT01** | **Tatalina** | **3.15** | **285** | P | **Pn** | **14** | **51** | **56.8 +0.1** |
| **OPT** | **Oil Point** | **3.22** | **217** | P | **Pn** | **14** | **51** | **58.3 +0.6** |
| **NICHA** | **Nichawak Mount** | **3.31** | **125** | P | **Pn** | **14** | **51** | **58.7 -0.2** |
| **BERG** | **Berg Lake** | **3.31** | **122** | P | **Pn** | **14** | **51** | **58.5 -0.4** |
| **PTPK** | **Patty Peak** | **3.46** | **105** | P | **Pn** | **14** | **52** | **01.6 +0.4** |
| **KHIT** | **Khitrov Hills** | **3.46** | **119** | P | **Pn** | **14** | **52** | **01.2 +0.1** |
| **AUP** | **Augustine Pinn** | **3.51** | **216** | P | **Pn** | **14** | **52** | **02.6 +0.8** |
| **GRIN** | **Grindle Hills** | **3.53** | **121** | P | **Pn** | **14** | **52** | **03.1 +1.1** |
| **BALM** | **Baldy** | **3.57** | **107** | P | **Pn** | **14** | **52** | **02.5 -0.1** |
| **BCA3** | **Beaver Creek A** | **3.59** | **74** | P | **Pn** | **14** | **52** | **03.1 +0.2** |
| **KIAG** | **Kiagna River** | **3.61** | **109** | P | **Pn** | **14** | **52** | **02.8 -0.4** |
| **ISLE** | **Juniper Island** | **3.76** | **113** | P | **Pn** | **14** | **52** | **04.7 -0.5** |
| **KULT** | **Kultieth River** | **3.79** | **119** | P | **Pn** | **14** | **52** | **06.0 +0.4** |
| **BARK** | **Barkley Ridge** | **3.80** | **116** | P | **Pn** | **14** | **52** | **05.6 -0.1** |
| **BARN** | **Barnard Glacie** | **3.87** | **105** | P | **Pn** | **14** | **52** | **07.5 +0.7** |
| **BAGL** | **Bagley Icefiel** | **3.93** | **114** | P | **Pn** | **14** | **52** | **07.0 -0.3** |
| **CDD** | **Cape Douglas** | **3.94** | **214** | P | **Pn** | **14** | **52** | **08.5 +0.8** |
| **FOPK** | **Fourpeaked Vol** | **4.05** | **212** | P | **Pn** | **14** | **52** | **09.5 +0.4** |
| **CTGM** | **Chitina Glacie** | **4.05** | **105** | P | **Pn** | **14** | **52** | **09.8 +0.6** |
| **MESA** | **MESA** | **4.15** | **117** | P | **Pn** | **14** | **52** | **10.5 -0.1** |
| **IM3** | **Indian Mountai** | **4.21** | **335** | P | **Pn** | **14** | **52** | **11.8 +0.6** |
| **LOGN** | **Logan Glacier** | **4.25** | **106** | P | **Pn** | **14** | **52** | **12.2 +0.2** |
| **RKAV** | **Rock Avalanche** | **4.34** | **113** | P | **Pn** | **14** | **52** | **14.0 +0.8** |
| **TABL** | **Table Mountain** | **4.36** | **111** | P | **Pn** | **14** | **52** | **13.8 +0.3** |
| **KAPH** | **Katmai Pasha** | **4.42** | **216** | P | **Pn** | **14** | **52** | **15.2 +1.0** |
| **EGAK** | **Eagle** | **4.46** | **52** | P | **Pn** | **14** | **52** | **15.2 +0.5** |
| **KDAK** | **Kodiak Island** | **4.77** | **201** | P | **Pn** | **14** | **52** | **17.6 -1.3** |
| | 4.6nm,0.3s,baz=27,slow=14,SNR=84 | | | | | | | |
| KDAK | | | | S | **Sn** | **14** | **53** | **08.5 -4.2** |
| | 7.1nm,0.3s,baz=301,slow=23,SNR=12 | | | | | | | |
| **DAWY** | **Dawson** | **4.88** | **64**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| URLA | | | | | S | **Sg** | **15 02 45.1 +0.7** | | |
| **APE** | **Apeiranthos** | **1.65** | **272** | *e* | PN | **Pb** | **15 02 25.0 +0.3** | | |
| **APE** | **Apeiranthos** | **1.65** | **272** | *e* | PN | **Pn** | **15 02 23.2 +0.1** | | |
| APE | | | | *e* | SN | **Sn** | **15 02 43.7 -0.4** | | |
| **APE** | **Apeiranthos** | **1.65** | **272** | *e* | Pn | **Pn** | **15 02 23.2 +0.1** | | |
| APE | | | | *e* | Sn | **Sn** | **15 02 43.7 -0.4** | | |
| **MANT** | **Manisa** | **1.65** | **28** | *i* | P | **Pg** | **15 02 26.7 +0.4** | | |
| **MANT** | **Manisa** | **1.65** | **28** | | P | **Pg** | **15 02 26.7 +0.4** | | |
| MANT | | | | | S | **Sn** | **15 02 43.1 -1.3** | | |
| **KULA** | **Kula-Manisa** | **1.71** | **30** | *e* | PN | **Pb** | **15 02 25.7 -0.2** | | |
| **KULA** | **Kula-Manisa** | **1.71** | **30** | *e* | Pn | **Pb** | **15 02 25.7 -0.2** | | |
| **AKAS** | **Kas** | **1.81** | **115** | *i* | P | **Pb** | **15 02 28.2 +0.7** | | |
| AKAS | | | | *i* | S | **Sg** | **15 02 52.2 -0.6** | | |
| **AKAS** | **Kas** | **1.81** | **115** | | P | **Pb** | **15 02 28.2 +0.7** | | |
| AKAS | | | | | S | **Sg** | **15 02 52.2 -0.6** | | |
| **CHOS** | **Chios island** | **1.82** | **319** | *e* | PN | **Pn** | **15 02 25.4 -0.1** | | |
| **CHOS** | **Chios island** | **1.82** | **319** | *e* | Pn | **Pn** | **15 02 25.4 -0.1** | | |
| **AKS** | **Akhisar** | **1.86** | **5** | *e* | PN | **Pb** | **15 02 27.6 -0.7** | | |
| **AKS** | **Akhisar** | **1.86** | **5** | *e* | Pn | **Pb** | **15 02 27.6 -0.7** | | |
| **ELL** | **Elmali** | **1.88** | **98** | *e* | PN | **Pb** | **15 02 29.2 +0.4** | | |
| **ELL** | **Elmali** | **1.88** | **98** | *e* | Pn | **Pb** | **15 02 29.2 +0.4** | | |

**IDC 16 15:22:09.3±2.1, 6°23S×148°19E, h0km, mb3.4/2, mb1 3.7/3, mb1mx3.4/22, mbtmp3.4/3, ML3.5/1, Error ellipse: s-maj=115.5km s-min=30.6km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **19.15** | **223** | P | | P | 15 26 34.0 | -0.4 |
| | 0.2nm,0.3s,baz=49,slow=11,SNR=7.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **22.12** | **217** | P | | P | 15 27 07.2 | +0.6 |
| | 0.8nm,0.5s,baz=52,slow=9.2,SNR=28 | | | | | | | |
| **ILAR** | **Eielson Array** | **85.23** | **23** | P | | P | 15 34 47.6 | +0.1 |
| | 0.2nm,0.8s,baz=234,slow=4.0,SNR=2.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.29** | **284** | PKPbc | | PKPdf | 15 41 51.7 | -0.2 |
| | 0.3nm,0.6s,baz=64,slow=4.9,SNR=3.4 | | | | | | | |

*NIED* ***16*** *15:22:00, 46°.20N×153°.10E, h26km, Mw4.2 Best double couple: M0 2.59000×10^15 NP1:φ=23.00000°, δ=9.00000°, λ=-142.00000°. NP2:φ=255.00000°, δ=85.00000°, λ=-83.00000°.*

*ISCJB* ***16*** *15:22:40.8±0.4, 45°.96N±0°.05×153°.02E±0°.06, h31km, mb4.1/26, Error ellipse: s-maj=8.9km s-min=3.6km az=143.5*

*MOS* ***16*** *15:22:41.2±0.9, 45°.99N×153°.16E, h36km, mb4.4/19, Error ellipse: s-maj=9.7km s-min=8.6km az=82.9*

*JMA* ***16*** *15:22:41.0±0.5, 46°.15N×153°.14E, h30km, M4.8*

*SKHL* ***16*** *15:22:41.8±0.1, 45°.98N×153°.27E, h59km±3km, mb4.7/6*

*IDC* ***16*** *15:22:45.2±0.6, 46°.01N×153°.11E, h54km±5km, mb3.7/22, mb1 3.9/26, mb1mx3.8/34, mbtmp4.0/26, Error ellipse: s-maj=16.1km s-min=11.1km az=140.0*

**ISC 16 15:22:42.7±0.5, 45°.95N±0°.06×153°.03E±0°.06, h31km, n127, s29/03/136, mb4.1/26, 2C-3D, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **3.70** | **261** | ⇑*i* | PN | **Pn** | **15 23 40.1** | **+2.5** |
| KUR | | | | *i* | S | **Sn** | **15 24 23.1** | **+3.0** |
| KUR | | | | | pmax | pmax | | |
| | comp=N,109nm,0.3s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,52nm,0.3s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,312nm,0.3s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,155nm,0.3s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,257nm,0.3s | | | | | | | |
| **KUR** | **Kuril'sk** | **3.70** | **261** | *i* | P | **Pn** | **15 23 39.0** | **+1.4** |
| KUR | | | | | AMB | AMB | 15 23 43.7 | |
| | comp=E,130nm,0.5s | | | | | | | |
| KUR | | | | *i* | S | **Sn** | **15 24 22.0** | **+1.9** |
| KUR | | | | | A | A | 15 24 25.4 | |
| | comp=E,240nm,0.6s | | | | | | | |
| KUR | | | | | A | A | 15 24 25.4 | |
| | comp=E,260nm,0.6s | | | | | | | |
| **SHO** | **Shikotan** | **4.87** | **247** | *d i* | PN | **Pn** | **15 23 53.6** | **-0.2** |
| SHO | | | | | pmax | pmax | | |
| | comp=N,22nm,0.5s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=E,32nm,0.5s | | | | | | | |
| SHO | | | | | pmax | pmax | | |
| | comp=Z,65nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **4.87** | **247** | *i* | P | **Pn** | **15 23 54.2** | **+0.4** |
| SHO | | | | | AMB | AMB | 15 23 59.1 | |
| | comp=Z,65nm,0.5s | | | | | | | |
| SHO | | | | *i* | S | **Sn** | **15 24 48.0** | **-1.1** |
| SHO | | | | | A | A | 15 24 52.0 | |
| | comp=Z,170nm,0.6s | | | | | | | |
| SHO | | | | | A | A | 15 24 52.0 | |
| | comp=Z,144nm,0.6s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **5.16** | **22** | *e* | PN | Pn | 15 23 50.0 | -7.7 |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,50nm,0.5s | | | | | | | |
| SKR | | | | | pmax | pmax | | |
| | comp=N,40nm,0.3s | | | | | | | |
| SKR | | | | | pmax | pmax | | |
| | comp=E,40nm,0.3s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **5.16** | **22** | *e* | P | **Pn** | **15 23 56.2** | **-1.5** |
| SKR | | | | *e* | S | **Sn** | **15 24 51.9** | **-4.2** |
| SKR | | | | | A | A | 15 24 53.7 | |
| | comp=E,96nm,0.3s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.44** | **252** | *c i* | PN | **Pn** | **15 24 02.9** | **+1.4** |
| YUK | | | | | pmax | pmax | | |
| | comp=E,27nm,0.3s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,83nm,0.3s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=N,36nm,0.2s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.44** | **252** | *e* | P | **Pn** | **15 24 02.9** | **+1.4** |
| YUK | | | | | AMB | AMB | 15 24 09.7 | |
| | comp=N,36nm,0.3s | | | | | | | |
| YUK | | | | | AMB | AMB | 15 24 09.7 | |
| | comp=N,27nm,0.3s | | | | | | | |
| YUK | | | | | AMB | AMB | 15 24 09.7 | |
| | comp=N,83nm,0.3s | | | | | | | |
| YUK | | | | *e* | S | **Sn** | **15 25 03.7** | **+0.7** |
| YUK | | | | | A | A | 15 25 08.1 | |
| | comp=N,122nm,0.4s | | | | | | | |
| YUK | | | | | A | A | 15 25 08.1 | |
| | comp=N,77nm,0.4s | | | | | | | |
| **NEM2** | **Nemuro 2** | **5.81** | **246** | | P | **Pn** | **15 24 06.0** | **-0.6** |
| NEM2 | | | | *e* | S | **Sn** | **15 25 09.2** | **-2.9** |
| **JRA** | **Rausu** | **5.96** | **253** | | P | **Pn** | **15 24 10.8** | **+2.0** |
| **PAU** | **Pauzhetka** | **6.06** | **23** | *e* | P | **Pn** | **15 24 09.0** | **-1.0** |
| PAU | | | | | AMB | AMB | 15 24 10.7 | |
| | comp=N,139nm,1.0s | | | | | | | |
| PAU | | | | *e* | S | **Sn** | **15 25 14.0** | **-4.2** |
| PAU | | | | | A | A | 15 25 25.9 | |
| | comp=N,237nm,0.8s | | | | | | | |
| **JNK** | **Nakash** | **6.37** | **251** | | P | **Pn** | **15 24 15.8** | **+1.4** |
| JNK | | | | *e* | S | **Sn** | **15 25 26.1** | **0.0** |
| **JAK** | **Akkeshi** | **6.66** | **247** | | P | **Pn** | **15 24 18.0** | **-0.3** |
| JAK | | | | *e* | S | **Sn** | **15 25 29.7** | **-3.3** |
| **JTKR** | **Abashiri--Toko** | **6.77** | **256** | | P | **Pn** | **15 24 22.2** | **+2.4** |
| **JAR** | **Ashorobuto** | **7.12** | **251** | | P | **Pn** | **15 24 26.3** | **+1.6** |
| JAR | | | | *e* | S | **Sn** | **15 25 43.9** | **-0.6** |
| **JMP** | **Maruseppu** | **7.13** | **258** | | P | **Pn** | **15 24 27.9** | **+3.1** |
| **YSS** | **Yuzh-Sakhalins** | **7.17** | **282** | *e* | PN | Pn | 15 24 32.0 | +6.7 |
| **YSS** | **Yuzh-Sakhalins** | **7.17** | **282** | *e* | P | **Pn** | **15 25 25.8** | **+0.5** |
| YSS | | | | | AMB | AMB | 15 24 32.6 | |
| | comp=N,38nm,1.0s | | | | | | | |
| YSS | | | | *e* | S | **Sn** | **15 25 45.0** | **-0.7** |
| YSS | | | | | A | A | 15 25 53.2 | |
| | comp=N,10.0nm,0.2s | | | | | | | |
| **JOB** | **Onbets** | **7.26** | **248** | | P | **Pn** | **15 24 27.1** | **+0.6** |
| JOB | | | | *e* | S | **Sn** | **15 25 45.7** | **-2.1** |
| **JKA** | **Kamikawa-asahi** | **7.62** | **260** | *e* | P | **Pn** | **15 24 34.2** | **+2.7** |
| **ASAJ** | **Asahikawa** | **7.62** | **260** | | P | **Pn** | **15 24 34.6** | **+3.1** |
| **ASAJ** | **Asahikawa** | **7.62** | **260** | | P | **Pn** | **15 24 34.2** | **+2.7** |
| | comp=N,2.2nm,0.3s,baz=77,slow=21,SNR=22 | | | | | | | |
| **ASAJ** | **Asahikawa** | **7.62** | **260** | | PN | **Pn** | **15 24 34.2** | **+2.7** |
| ASAJ | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| **JCH** | **Churui** | **7.70** | **248** | | P | **Pn** | **15 24 32.8** | **+0.2** |
| JCH | | | | *e* | S | **Sn** | **15 25 54.4** | **-4.3** |
| **PETK** | **Petropavlovsk-** | **7.78** | **21** | | P | **Pn** | **15 24 32.6** | **-1.0** |
| | comp=Z,0.8nm,0.3s,baz=181,slow=15,SNR=16 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **7.78** | **21** | | PN | **Pn** | **15 24 32.6** | **-1.0** |
| PETK | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **MYR** | **Moyori** | **7.91** | **246** | *e* | P | **Pn** | **15 24 35.5** | **0.0** |
| **JFR** | **Furan** | **7.96** | **253** | | P | **Pn** | **15 24 38.8** | **+2.6** |
| **PET** | **Petropavlovsk** | **7.96** | **25** | *e* | S | Sn | 15 25 59.0 | -6.1 |
| PET | | | | | A | A | 15 26 05.3 | |
| | comp=Z,30nm,0.4s | | | | | | | |
| **UGL** | **Uglegorsk** | **8.06** | **297** | *e* | PN | **Pn** | **15 24 39.4** | **+2.0** |
| **UGL** | **Uglegorsk** | **8.06** | **297** | *e* | P | **Pn** | **15 24 39.4** | **+2.0** |
| **ERM** | **Erimo** | **8.13** | **245** | | PN | Pn | 15 24 42.0 | +3.4 |
| **ERM** | **Erimo** | **8.13** | **245** | *e* | P | Pn | 15 24 42.0 | +3.4 |
| **JEM** | **Erimo** | **8.13** | **245** | *e* | S | **Sn** | **15 26 04.3** | **-5.1** |
| **JNBK** | **Urakawa-nobuka** | **8.26** | **247** | | P | **Pn** | **15 24 40.2** | **0.0** |
| JNBK | | | | *e* | S | **Sn** | **15 26 07.7** | **-4.7** |
| **JBT2** | **Biratori 2** | **8.28** | **251** | | P | **Pn** | **15 24 41.2** | **+0.7** |
| **JKB** | **Kayabe** | **9.56** | **249** | | P | **Pn** | **15 24 57.7** | **-0.4** |
| JKB | | | | *e* | S | Sn | 15 26 38.0 | -6.5 |
| **JYM2** | **Yakumo 2** | **9.89** | **252** | | P | **Pn** | **15 25 03.1** | **+0.5** |
| **JANG** | **Nango** | **10.09** | **241** | | P | **Pn** | **15 25 02.8** | **-2.6** |
| JANG | | | | *e* | S | Sn | 15 26 48.3 | -9.1 |
| **JTM** | **Tenmabayashi** | **10.12** | **244** | | P | **Pn** | **15 25 04.6** | **-1.2** |
| JTM | | | | *e* | S | Sn | 15 26 50.2 | -8.0 |
| **JTH** | **Tanohata** | **10.15** | **238** | | P | **Pn** | **15 25 03.4** | **-2.8** |
| JTH | | | | *e* | S | Sn | 15 26 49.6 | -9.4 |
| **OFUJ** | **Ofunato** | **10.83** | **235** | | P | **Pn** | **15 25 13.1** | **-2.5** |
| **JRG** | **Rokugo** | **11.23** | **239** | | P | **Pn** | **15 25 19.3** | **-1.7** |
| JRG | | | | *e* | S | Sn | 15 27 17.8 | -7.5 |
| **JIO** | **Ouri** | **11.45** | **233** | | P | **Pn** | **15 25 21.1** | **-2.8** |
| JIO | | | | *e* | S | Sn | 15 27 20.0 | -11 |
| **HABR** | **Khabarovsk** | **12.48** | **288** | *e* | PN | **Pn** | **15 25 39.8** | **+1.7** |
| HABR | | | | | pmax | pmax | | |
| | comp=Z,51nm,2.0s | | | | | | | |
| HABR | | | | | MLR | MLR | | |
| | comp=Z,134nm,18.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **14.56** | **235** | ⇓*e* | P | **Pn** | **15 26 07.8** | **+1.2** |
| **MAT** | **Matsushiro** | **14.56** | **235** | | P | **Pn** | **15 26 07.3** | **+0.7** |
| **EKMR** | **Ekimchan** | **14.83** | **306** | *e* | P | **P** | **15 26 13.5** | **-2.1** |
| EKMR | | | | | AMB | AMB | 15 26 18.4 | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **14.97** | **271** | | P | **Pn** | **15 26 12.6** | **+0.6** |
| | comp=Z,0.3nm,0.3s,baz=82,slow=12,SNR=4.3 | | | | | | | |
| **SEY** | **Seymchan** | **17.02** | **359** | | P | **Pn** | **15 26 37.4** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=210,slow=20,SNR=4.9 | | | | | | | |
| **BMKR** | **Bomnak** | **17.68** | **308** | *e* | P | **Pn** | **15 26 44.5** | **-1.9** |
| BMKR | | | | | AMB | AMB | 15 26 50.5 | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **KROS** | **Kirovskiy** | **18.63** | **307** | *e* | P | **Pn** | **15 26 58.1** | **+0.1** |
| KROS | | | | | AMB | AMB | 15 27 02.2 | |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **KSRS** | **Korea Array** | **20.52** | **254** | | P | Pn | 15 27 19.8 | -0.8 |
| | comp=Z,1.0nm,0.7s,baz=54,slow=12,SNR=6.0 | | | | | | | |
| **YAK** | **Yakutsk** | **20.97** | **329** | | P | **P** | **15 27 22.7** | **-0.2** |
| | comp=Z,4.0nm,0.4s,baz=311,slow=9.3,SNR=4.2 | | | | | | | |
| **YAK** | **Yakutsk** | **20.97** | **329** | *e* | P | **P** | **15 27 22.4** | **-0.5** |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=E,6.0nm,1.1s | | | | | | | |
| **YAK** | **Yakutsk** | **20.97** | **329** | *e* | P | **P** | **15 27 23.0** | **+0.1** |
| **JNU** | **Nakatsue** | **21.27** | **241** | | P | **P** | **15 27 27.4** | **+1.0** |
| | comp=E,5.6nm,0.9s,baz=39,slow=14,SNR=3.9 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.54** | **152** | | T | T | 15 58 15.4 | |
| | baz=337 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.55** | **152** | | T | T | 15 58 10.9 | |
| | baz=337 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.56** | **152** | | T | T | 15 58 14.1 | |
| | baz=337 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.62** | **153** | | T | T | 15 59 35.6 | |
| | baz=340 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.63** | **153** | | T | T | 15 59 34.8 | |
| | baz=340 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.64** | **153** | | T | T | 15 59 36.8 | |
| | baz=340 | | | | | | | |
| **SONM** | **Songino Array** | **31.55** | **291** | | P | **P** | **15 29 01.6** | **-0.6** |
| | comp=E,0.5nm,0.7s,baz=64,slow=6.6,SNR=2.8 | | | | | | | |
| **SONM** | **Songino Array** | **31.55** | **291** | | P | **P** | **15 29 01.6** | **-0.6** |
| SONM | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **37.21** | **38** | | P | **P** | **15 29 49.4** | **-1.3** |
| | comp=Z,0.6nm,0.7s,baz=253,slow=7.6,SNR=7.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **37.21** | **38** | | P | **P** | **15 29 49.4** | **-1.3** |
| ILAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **INK** | **Inuvik** | **42.36** | **32** | | P | **P** | **15 30 31.7** | **-1.7** |
| | comp=Z,1.5nm,0.4s,baz=287,slow=5.5,SNR=5.3 | | | | | | | |
| **INK** | **Inuvik** | **42.36** | **32** | | P | **P** | **15 30 31.7** | **-1.7** |
| INK | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.04** | **306** | | P | **P** | **15 30 38.3** | **-0.8** |
| | comp=Z,0.5nm,0.3s,baz=76,slow=7.6,SNR=2.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.04** | **306** | | P | **P** | **15 30 38.3** | **-0.8** |
| ZALV | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.26** | **298** | | P | **P** | **15 31 12.3** | **-0.5** |
| | comp=Z,1.5nm,0.6s,baz=67,slow=8.7,SNR=12 | | | | | | | |
| MKAR | | | | | PcP | **PcP** | **15 32 43.2** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=58,slow=2.8,SNR=2.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.26** | **298** | *e* | P | **P** | **15 31 13.4** | **+0.6** |
| MKAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **MKAR** | **Makanchi Array** | **47.26** | **298** | *e* | P | **P** | **15 31 13.4** | **+0.6** |
| **YKA** | **Yellowknife Ar** | **51.60** | **36** | | P | **P** | **15 31 44.3** | **-1.3** |
| | comp=Z,1.3nm,0.7s,baz=294,slow=6.8,SNR=2.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **51.60** | **36** | | P | **P** | **15 31 44.3** | **-1.3** |
| YKA | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.13** | **257** | | P | **P** | **15 31 50.4** | **+0.2** |
| | comp=Z,1.4nm,0.6s,baz=38,slow=7.4,SNR=16 | | | | | | | |
| CMAR | | | | | PcP | **PcP** | **15 33 02.0** | **+0.2** |
| | comp=Z,0.6nm,0.7s,baz=31,slow=2.6,SNR=4.5 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.13** | **257** | | P | **P** | **15 31 50.4** | **+0.2** |
| CMAR | | | | | | | 15 33 02.0 | |
| CMAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **TAPN** | **Taplejung** | **54.09** | **274** | *e* | P | **P** | **15 32 06.0** | **+1.1** |
| **GUN** | **Gumba** | **55.02** | **276** | *e* | P | **P** | **15 32 13.9** | **+2.2** |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **RAMN** | **Ramite** | **55.11** | **274** | *e* | P | **P** | **15 32 14.3** | **+2.1** |
| | comp=Z,14nm,0.5s | | | | | | | |
| **KKN** | **Kakani** | **55.51** | **276** | *e* | P | **P** | **15 32 17.6** | **+2.6** |
| | comp=Z,6.2nm,0.5s | | | | | | | |
| **PKIN** | **Phulchoki** | **55.56** | **276** | *e* | P | **P** | **15 32 17.5** | **+2.0** |
| | comp=Z,14nm,1.0s | | | | | | | |
| **ARU** | **Arti** | **55.56** | **318** | *d i* | P | **P** | **15 32 14.7** | **0.0** |
| ARU | | | | | | | 15 33 09.8 | |
| ARU | | | | | S | **S** | **15 39 55.4** | **-2.5** |
| ARU | | | | | pmax | pmax | | |
| | comp=Z,19nm,2.5s | | | | | | | |
| **ARU** | **Arti** | **55.56** | **318** | *e* | P | **P** | **15 32 14.7** | **0.0** |
| **DMN** | **Daman** | **55.74** | **276** | *e* | P | **P** | **15 32 18.7** | **+1.9** |
| **GKN** | **Gorkha** | **55.82** | **276** | *e* | P | **P** | **15 32 19.6** | **+2.4** |
| | comp=Z,11nm,0.7s | | | | | | | |
| **DAG** | **Danmarks Havn** | **57.44** | **358** | *e* | P | **P** | **15 32 29.6** | **+1.8** |
| **DAG** | **Danmarks Havn** | **57.44** | **358** | *i* | P | **P** | **15 32 29.6** | **+1.8** |
| **ARCES** | **ARCESS Array B** | **58.59** | **341** | | P | **P** | **15 32 35.4** | **-0.6** |
| | comp=Z,2.4nm,0.9s,baz=34,slow=6.7,SNR=5.8 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.59** | **341** | | P | **P** | **15 32 35.4** | **-0.6** |
| ARCES | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **SUMG** | **Summit** | **61.50** | **4** | *i* | P | **P** | **15 32 58.8** | **+2.5** |
| SUMG | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **SUMG** | **Summit** | **61.50** | **4** | *i* | P | **P** | **15 32 58.8** | **+2.5** |
| | comp=Z,11nm,0.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.85** | **62** | | P | **P** | **15 33 04.3** | **-1.4** |
| | comp=Z,0.6nm,0.7s,baz=297,slow=7.1,SNR=4.8 | | | | | | | |
| NVAR | | | | | pP | pP | 15 33 20.7 | +5.4 |
| | comp=Z,1.0nm,0.6s,baz=299,slow=7.0,SNR=7.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **64.74** | **335** | | P | **P** | **15 33 17.3** | **-0.2** |
| | comp=Z,3.8nm,0.6s,baz=39,slow=6.7,SNR=17 | | | | | | | |
| **FINES** | **FINESS Array B** | **64.74** | **335** | *e* | P | **P** | **15 33 17.9** | **+0.4** |
| FINES | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **64.74** | **335** | *e* | P | **P** | **15 33 17.9** | **+0.4** |
| **VRH** | **Novokhopyorsk** | **66.59** | **320** | *e* | P | **P** | **15 33 30.1** | **+0.6** |
| VRH | | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.7s | | | | | | | |
| VRH | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| VRH | | | | | pmax | pmax | | |
| | comp=N,8.0nm,0.8s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **66.80** | **323** | *e* | P | **P** | **15 33 29.8** | **-1.1** |
| LPSR | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| LPSR | | | | | pmax | pmax | | |
| | comp=N,3.0nm,0.6s | | | | | | | |
| LPSR | | | | | pmax | pmax | | |
| | comp=E,20nm,1.8s | | | | | | | |
| **GEYT** | **Alibeck** | **66.97** | **301** | | P | **P** | **15 33 30.9** | **-1.4** |
| | comp=E,1.0nm,0.5s,baz=46,slow=4.2,SNR=2.1 | | | | | | | |
| **VSR** | **Storozhevoye** | **67.70** | **322** | *e* | P | **P** | **15 33 36.6** | **0.0** |
| VSR | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| VSR | | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.4s | | | | | | | |
| VSR | | | | | pmax | pmax | | |
| | comp=E,9.0nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **67.74** | **199** | | P | **P** | **15 33 36.5** | **-0.7** |
| | comp=E,0.9nm,0.7s,baz=16,slow=6.7,SNR=4.6 | | | | | | | |
| WRA | | | | | pP | **pP** | **15 33 51.9** | **+5.1** |
| | comp=E,2.1nm,0.7s,baz=16,slow=6.5,SNR=8.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **67.74** | **199** | | P | **P** | **15 33 36.5** | **-0.7** |
| WRA | | | | | *PP | **pP** | **15 33 51.9** | **+5.1** |
| WRA | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **VORD** | **Divnogorie** | **67.83** | **321** | *e* | P | **P** | **15 33 34.5** | **-2.9** |
| VORD | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| VORD | | | | | pmax | pmax | | |
| | comp=N,9.0nm,0.5s | | | | | | | |
| VORD | | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.0s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **68.97** | **341** | | P | **P** | **15 33 45.2** | **+0.8** |
| | comp=Z,0.9nm,0.5s,baz=29,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.97** | **341** | | P | **P** | **15 33 45.2** | **+0.8** |
| | comp=Z,0.6nm,0.5s,baz=29,slow=6.6,SNR=11 | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.97** | **341** | *e* | P | **P** | **15 33 45.2** | **+0.8** |
| NOA | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **KBZ** | **Khabaz** | **71.38** | **314** | | P | **P** | **15 34 00.2** | **+0.8** |
| | comp=Z,4.8nm,0.9s,baz=74,slow=6.4,SNR=6.4 | | | | | | | |
| **KBZ** | **Khabaz** | **71.38** | **314** | | P | **P** | **15 34 00.2** | **+0.8** |
| KBZ | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **71.43** | **198** | | P | **P** | **15 34 00.3** | **+0.5** |
| | comp=Z,0.8nm,0.7s,baz=13,slow=6.9,SNR=14 | | | | | | | |
| ASAR | | | | | pP | **PcP** | **15 34 15.8** | **-3.5** |
| | comp=Z,2.0nm,0.9s,baz=17,slow=5.9,SNR=10 | | | | | | | |
| **ASAR** | **Alice Springs** | **71.43** | **198** | | P | **P** | **15 34 00.4** | **+0.5** |
| ASAR | | | | | *PP | **PcP** | **15 34 15.8** | **-3.5** |
| ASAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.18** | **326** | | P | **P** | **15 34 04.7** | **+0.6** |
| | comp=Z,2.8nm,0.5s,baz=34,slow=6.3,SNR=12 | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.18** | **326** | | P | **P** | **15 34 04.7** | **+0.6** |
| AKASG | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **77.01** | **333** | *e* | P | P | 15 34 42.1 | +10 |
| DPC | | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **77.01** | **333** | *e* | PCP | P | 15 34 42.1 | +10 |
| **CLL** | **Collm** | **77.17** | **336** | *e* | P | **P** | **15 34 34.0** | **+1.0** |
| CLL | | | | *i* | *PP | **PcP** | **15 34 48.5** | **+4.8** |
| **CLL** | **Collm** | **77.17** | **336** | *e* | P | **P** | **15 34 34.0** | **+1.0** |
| **CLL** | **Collm** | **77.17** | **336** | *e* | P | **P** | **15 34 34.0** | **+1.0** |
| CLL | | | | *i* | pP | **PcP** | **15 34 48.5** | **+4.8** |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **77.93** | **60** | | P | **P** | **15 34 37.4** | **-0.5** |
| | comp=Z,0.9nm,0.5s,baz=301,slow=3.6,SNR=16 | | | | | | | |
| TXAR | | | | | pP | **pP** | **15 34 52.6** | **+5.0** |
| | comp=Z,1.3nm,0.7s,baz=300,slow=4.1,SNR=9.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **77.93** | **60** | | P | **P** | **15 34 37.4** | **-0.5** |
| TXAR | | | | | *PP | **pP** | **15 34 52.6** | **+5.0** |
| TXAR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **KHC** | **Kasperske Hory** | **78.93** | **334** | *e* | P | P | 15 34 46.4 | +3.5 |
| KHC | | | | *e* | | | 15 35 02.3 | |
| **KHC** | **Kasperske Hory** | **78.93** | **334** | *e* | PCP | P | 15 34 46.4 | +3.5 |
| KHC | | | | *e* | pP | pP | 15 35 02.3 | +10 |
| **BRTR** | **Keskin Array B** | **78.93** | **317** | | P | **P** | **15 34 43.8** | **+0.6** |
| | comp=Z,0.6nm,0.8s,baz=48,slow=2.1,SNR=3.8 | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.93** | **317** | | P | **P** | **15 34 43.8** | **+0.6** |
| BRTR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **GERES** | **GERESS Array B** | **79.15** | **334** | | P | **P** | **15 34 44.4** | **+0.2** |
| | comp=Z,0.4nm,0.5s,baz=30,slow=6.2,SNR=4.8 | | | | | | | |
| **CPUP** | **Villa Florida** | **148.90** | **61** | | PKPbc | **PKPbc** | **15 42 26.3** | **-0.9** |
| | comp=Z,0.9nm,0.7s,baz=270,slow=5.1,SNR=3.0 | | | | | | | |
| **CPUP** | **Villa Florida** | **148.90** | **61** | | PKP2 | **PKPbc** | **15 42 26.3** | **-0.9** |
| CPUP | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |

**WEL 16 15:29:11.4±0.3, 37°.92S×176°.26E, h145km±3km, ML3.6/11, 5C-1D, Error ellipse: s-maj=2.7km s-min=2.5km az=90.0, North Island**

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

*NEIC Felt at Dili, Timor-Leste.*
*AUST* ***16*** *15:44:30.1±0.2, 7˚.41S×125˚.68E, h0km Error ellipse: s-maj=4.1km s-min=3.5km az=26.0*
*ISCJB* ***16*** *15:44:30.4±0.5, 7˚.33S±0˚.02×125˚.70E±0˚.02, h16km±3km, mb6.0/151, MS5.3/364, Error ellipse: s-maj=2.7km s-min=2.7km az=10.6*
*GCMT* ***16*** *15:44:30.5±0.1, 7˚.31S×125˚.73E, h12km, MW5.9/136, Moment Tensor Solution. s126,c262; s136,c472; Duration: 2s2 Moment tensor: Scale 10¹⁸Nm; Mrr0.87±.01; Mθθ-0.94±.01; Mϕϕ0.07±.01; Mrθ-0.07±.02; Mθϕ0.09±.01; Mrϕ0.03±.02; Best double couple: M=0.91300×10¹⁸ NP1:ϕ≈277.00000°, δ47.00000°, λ93.00000°. NP2:ϕ≈93.00000°, δ43.00000°, λ87.00000°. Principal axes: T 0.8720, Plg87.0000°, Azm226.0000°; N 0.0830, Plg2.0000°, Azm95.0000°; P -0.9540, Plg2.0000°, Azm5.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*NEIC* ***16*** *15:44:32.0±0.0, 7˚.34S×125˚.66E, h21km, Moment Tensor Solution. s29 Moment tensor: Scale 10¹⁷Nm; Mrr6.74; Mθθ-6.74; Mϕϕ0.00; Mrθ1.40; Mϕθ0.92; Mrr0.49; Best double couple: M=7.00000×10¹⁷ NP1:ϕ≈92.00000°, δ50.00000°, λ82.00000°. NP2:ϕ≈283.00000°, δ39.00000°, λ98.00000°. Principal axes: T 6.9300, Plg82.0000°, Azm322.0000°; N 0.0600, Plg6.0000°, Azm97.0000°; P -6.9900, Plg6.0000°, Azm187.0000°;*
*MOS* ***16*** *15:44:33.4±1.0, 7˚.23S×125˚.62E, h33km, mb6.2/62, MS5.2/74 Error ellipse: s-maj=8.9km s-min=5.1km az=113.3*
*KLM* ***16*** *15:44:33.2, 7˚.46S×125˚.80E, h26km, mb6.1, ML5.8, MS6.3*
*IDC* ***16*** *15:44:33.7±4.6, 7˚.31S×125˚.66E, h26km±30km, mb5.4/31, mb1 5.4/35, mb1mx5.3/38, mbtmp5.6/35, ML5.4/4, MS5.1/26, Ms1 5.1/26, ms1mx5.1/28, Error ellipse: s-maj=12.1km s-min=9.0km az=60.0*
*DJA* ***16*** *15:44:36.1±0.4, 7˚.5±1˚×12˚.6E±˚, h37km±4km, M6.1/148, mb5.9/148, mB6.4/138, MLv6.1/22, Mw(mB)6.1/138, Mwp6.0/39*
**ISC 16 15:44:32.9±0.3, 7˚.37S±0˚.02×125˚.69E±0˚.03, h24km±1km, h24km:pP-P,n1456,σ1s37/1398, mb6.1/158, MS5.3/364, 94C-34D, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **2.76** | **211** | P | **Pn** | **15 45 16.7** | **+0.9** |
| | baz=2.7,SNR=307 | | | | | | |
| **SOEI** | **Soe** | **2.76** | **211** | P | **Pb** | **15 45 19.4** | **-2.3** |
| **BATI** | **Baumata** | **3.46** | **215** | P | **Pn** | **15 45 28.3** | **+2.9** |
| | 535nm,0.3s,baz=74,slow=1.5,SNR=564 | | | | | | |
| BATI | | | | Sn | **Sb** | **15 46 12.4** | **-2.8** |
| | 494nm,0.3s,baz=335,slow=21,SNR=5.0 | | | | | | |
| BATI | | | | LR | LR | 15 46 36.7 | |
| | comp=Z,43μm,20.9s,baz=50,slow=35 | | | | | | |
| **BATI** | **Baumata** | **3.46** | **215** | P | **Pn** | **15 45 28.5** | **+3.1** |
| **BBSI** | **Bau Bau** | **3.62** | **301** | P | **Pn** | **15 45 28.6** | **+1.1** |
| BBSI | | | | S | **Sn** | **15 46 07.1** | **-2.5** |
| **MMRI** | **Maumere** | **3.65** | **250** | P | **Pn** | **15 45 29.0** | **+1.1** |
| **MMRI** | **Maumere** | **3.65** | **250** | *e*Pn | **Pn** | **15 45 28.6** | **+0.7** |
| MMRI | | | | *e*Sn | **Sn** | **15 46 10.3** | **+0.1** |
| **EDFI** | **Ende, Flores** | **4.20** | **251** | P | **Pn** | **15 45 36.6** | **+1.1** |
| **NLAI** | **Namlea** | **4.33** | **19** | P | **Pn** | **15 45 37.3** | **0.0** |
| **AAI** | **Ambon** | **4.42** | **34** | P | **Pn** | **15 45 38.3** | **-0.2** |
| | baz=4.5,SNR=84 | | | | | | |
| **AAI** | **Ambon** | **4.42** | **34** | P | **Pn** | **15 45 38.4** | **-0.2** |
| AAI | | | | S | **Sn** | **15 46 24.0** | **-5.3** |
| **KDI** | **Kendari** | **4.56** | **318** | P | **Pn** | **15 45 39.1** | **-1.4** |
| **BNDI** | **Bandanaira** | **5.05** | **56** | P | **Pn** | **15 45 45.1** | **-2.1** |
| **MSAI** | **Masohi** | **5.13** | **39** | P | **Pn** | **15 45 47.8** | **-0.5** |
| | 547nm,0.9s,6μm38μm1.6nm | | | | | | |
| **SANI** | **Sanana** | **5.29** | **3** | P | **Pn** | **15 45 50.2** | **-0.3** |
| | 1μm,1.5s,32μm153μm7.4nm | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.31** | **283** | P | **Pn** | **15 45 50.3** | **-0.5** |
| | 3μm,0.6s,35μm47μm17nm | | | | | | |
| **SAUI** | **Saumlaki** | **5.59** | **97** | P | **Pn** | **15 45 57.0** | **+2.4** |
| | 866nm,0.8s,15μm7.4nm | | | | | | |
| **BASI** | **Baing, Sumba** | **5.80** | **240** | P | **Pn** | **15 46 00.6** | **+3.2** |
| | 16μm,1.2s,171μm57nm | | | | | | |
| **WSI** | **Waingapu** | **5.81** | **246** | P | **Pn** | **15 45 58.9** | **+1.3** |
| | 14μm,1.5s,178μm134μm65nm | | | | | | |
| **BKSI** | **Bulukumba** | **5.90** | **290** | P | **Pn** | **15 45 58.9** | **+0.1** |
| | 4μm,1.2s,27μm11nm | | | | | | |
| **KAPI** | **Kappang** | **6.35** | **291** | Pn | **Pn** | **15 46 05.7** | **+0.6** |
| | 94nm,0.3s,baz=149,slow=7.2,SNR=96 | | | | | | |
| KAPI | | | | Sn | **Sn** | **15 47 16.1** | **-0.9** |
| | 126nm,0.3s,baz=320,slow=18,SNR=6.7 | | | | | | |
| **KAPI** | **Kappang** | **6.35** | **291** | Pn | **Pn** | **15 46 05.0** | **-0.1** |
| | 4μm,0.6s,SNR=73 | | | | | | |
| **KAPI** | **Kappang** | **6.35** | **291** | P | **Pn** | **15 46 05.9** | **+0.8** |
| | SNR=224 | | | | | | |
| **KAPI** | **Kappang** | **6.35** | **291** | Sn | **Sn** | **15 47 16.1** | **-0.9** |
| KAPI | | | | *e*Sn | **Sn** | **15 47 16.3** | **-0.6** |
| **SPSI** | **Sidrap Palu** | **6.79** | **300** | P | **Pn** | **15 46 12.0** | **+0.8** |
| | 2μm,1.5s,32μm49μm7.5nm | | | | | | |
| **LBMI** | **Labuha** | **6.92** | **15** | P | **Pn** | **15 46 15.3** | **+2.4** |
| | 3μm,1.6s,36μm119μm12nm | | | | | | |
| **LUWI** | **Luwuk** | **6.92** | **335** | P | **Pn** | **15 46 13.3** | **+0.3** |
| | baz=7.0,SNR=43 | | | | | | |
| **LUWI** | **Luwuk** | **6.92** | **335** | P | **Pn** | **15 46 12.5** | **-0.5** |
| | 2μm,1.1s,32μm167μm8.5nm | | | | | | |
| **LUWI** | **Luwuk** | **6.92** | **335** | *e*Pn | **Pn** | **15 46 12.6** | **-0.3** |
| LUWI | | | | *e*Sn | **Sn** | **15 47 30.5** | **-0.5** |
| **TTSI** | **Tana Toraja** | **7.26** | **306** | P | **Pn** | **15 46 18.8** | **+1.3** |
| | 2μm,1.0s,17μm62μm4.4nm | | | | | | |
| **APSI** | **Ampana** | **7.58** | **328** | P | **Pn** | **15 46 22.0** | **+0.1** |
| | 4μm,1.7s,47μm84μm14nm | | | | | | |
| **MTN** | **Manton Dam** | **7.63** | **136** | P | **Pn** | **15 46 22.9** | **+0.2** |
| | baz=7.6,SNR=173 | | | | | | |
| **MTN** | **Manton Dam** | **7.63** | **136** | *e*Pn | **Pn** | **15 46 22.9** | **+0.2** |
| **FAKI** | **Fak Fak** | **7.88** | **56** | P | **Pn** | **15 46 27.1** | **+1.0** |
| | baz=7.9,SNR=98 | | | | | | |
| **FAKI** | **Fak Fak** | **7.88** | **56** | P | **Pn** | **15 46 26.7** | **+0.6** |
| | 556nm,1.1s,9μm76μm | | | | | | |
| **FAKI** | **Fak Fak** | **7.88** | **56** | *e*Pn | **Pn** | **15 46 26.2** | **+0.1** |
| **KMSI** | **Cibinong** | **8.07** | **348** | P | **Pn** | **15 46 29.1** | **+0.4** |
| | 2μm,1.2s,28μm111μm | | | | | | |
| **TNTI** | **Ternate** | **8.26** | **12** | P | **Pn** | **15 46 33.1** | **+1.9** |
| | 2μm,1.5s,30μm129μm | | | | | | |
| **KDU** | **Kakadu** | **8.51** | **129** | P | **Pn** | **15 46 34.1** | **-0.7** |
| | baz=8.5,SNR=99 | | | | | | |
| **SIJI** | **Sorong** | **8.52** | **41** | Pn | **Pn** | **15 46 35.0** | **+0.2** |
| | 17nm,0.3s,baz=211,slow=8.0,SNR=231 | | | | | | |
| SIJI | | | | Sn | **Sn** | **15 48 07.8** | **-2.4** |
| | baz=255,slow=20,SNR=2.3 | | | | | | |
| **SWI** | **Sorong** | **8.52** | **41** | P | **Pn** | **15 46 36.2** | **+1.4** |
| | baz=8.6,SNR=100 | | | | | | |
| **SWI** | **Sorong** | **8.52** | **41** | P | **Pn** | **15 46 35.4** | **+0.6** |
| | 968nm,1.0s,13μm | | | | | | |
| **MRSI** | **Marisa** | **8.64** | **334** | P | **Pn** | **15 46 36.4** | **-0.2** |
| | 600nm,1.6s,9μm | | | | | | |
| **PCI** | **Palu** | **8.68** | **317** | P | **Pn** | **15 46 38.0** | **+1.0** |
| | 2μm,1.5s,32μm112μm | | | | | | |
| **KNRA** | **Kununurra** | **8.79** | **160** | P | **Pn** | **15 46 38.1** | **-0.5** |
| | baz=8.8,SNR=225 | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **8.83** | **261** | P | **Pn** | **15 46 39.5** | **+0.4** |
| | 909nm,1.2s,10μm | | | | | | |
| **MPSI** | **Mapaga** | **9.59** | **323** | P | **Pn** | **15 46 49.2** | **-0.4** |
| | 876nm,2.1s,13μm | | | | | | |
| **RKPI** | **Ransiki, Papua** | **10.26** | **56** | P | **Pn** | **15 47 00.1** | **+1.3** |
| | 1μm,1.1s,12μm | | | | | | |
| **KBKI** | **Kotabaru** | **10.31** | **293** | P | **Pn** | **15 46 59.9** | **+0.5** |
| | 157nm,1.2s,4μm19μm | | | | | | |
| **SRBI** | **Singaraja** | **10.41** | **265** | P | Pn | 15 47 04.2 | +3.4 |
| | 738nm,1.2s,13μm20μm | | | | | | |
| **DNP** | **Denpasar** | **10.46** | **262** | P | **Pn** | **15 47 00.6** | **-0.9** |
| | 1μm,1.3s,23μm | | | | | | |
| **IGBI** | **Denpasar** | **10.54** | **261** | P | **Pn** | **15 47 03.2** | **+0.6** |
| | 622nm,1.2s,9μm | | | | | | |
| **BKB** | **Balikpapan** | **10.66** | **304** | P | Pn | 15 47 09.4 | +5.1 |
| | 923nm,1.7s,15μm65μm | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.67** | **180** | Pn | **Pn** | **15 47 02.3** | **-2.0** |
| | 22nm,0.3s,baz=5.0,slow=12,SNR=246 | | | | | | |
| FITZ | | | | Sn | Sn | 15 48 55.2 | -8.0 |
| | 26nm,0.3s,baz=72,slow=20,SNR=7.7 | | | | | | |
| FITZ | | | | LR | LR | 15 51 30.3 | |
| | comp=Z,17μm,21.1s,baz=358,slow=39 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.67** | **180** | *e*Pn | **Pn** | **15 47 02.0** | **-2.4** |
| FITZ | | | | Sn | Sn | 15 48 55.2 | -8.0 |
| FITZ | | | | Sn | Sn | 15 49 01.1 | -2.1 |
| **ABJI** | **Asem Bagus** | **11.37** | **267** | P | **Pn** | **15 47 15.7** | **+1.8** |
| | 1μm,1.4s,23μm | | | | | | |
| **BBKI** | **Banjar Baru** | **11.48** | **289** | P | **Pn** | **15 47 18.1** | **+2.7** |
| | 616nm,1.3s,12μm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **11.48** | **264** | P | **Pn** | **15 47 16.5** | **+0.9** |
| | baz=12,SNR=13 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **11.48** | **264** | P | **Pn** | **15 47 18.6** | **+3.1** |
| | 354nm,1.5s,10μm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **11.48** | **264** | *e*Pn | **Pn** | **15 47 14.6** | **-1.0** |
| JAGI | | | | *e*Sn | **Sn** | **15 49 17.5** | **-5.7** |
| **KMMI** | **Kalianget** | **11.64** | **271** | P | Pn | 15 47 23.5 | +5.9 |
| | 744nm,1.0s,13μm39μm | | | | | | |
| **BLJI** | **Banyuglugur** | **12.00** | **267** | P | Pn | 15 47 27.0 | +4.4 |
| | 1μm,1.1s,19μm | | | | | | |
| **BWJI** | **Bawean** | **13.04** | **276** | P | Pn | 15 47 40.0 | +3.2 |
| | 206nm,1.2s,3μm | | | | | | |
| **GRJI** | **Gresik** | **13.12** | **271** | P | Pn | 15 47 42.8 | +4.9 |
| | 809nm,1.4s,11μm | | | | | | |
| **TBJI** | **Tambak Boyo** | **13.75** | **271** | P | **P** | **15 47 54.8** | **-0.1** |
| **PWJI** | **Pagerwojo** | **13.78** | **266** | P | Pn | 15 47 50.6 | +3.7 |
| | 470nm,1.6s,9μm | | | | | | |
| **SMPI** | **Sarmi** | **14.03** | **68** | P | **Pn** | **15 47 51.9** | **+1.6** |
| | 260nm,1.2s,29μm | | | | | | |
| **NGJI** | **Ngawi** | **14.12** | **269** | P | **P** | **15 47 56.1** | **-2.8** |
| | 835nm,1.4s,28μm | | | | | | |
| **MATI** | **Mati** | **14.23** | **2** | *e*P | **Pn** | **15 47 52.7** | **-0.3** |
| **KCP** | **Kidapawan** | **14.29** | **358** | ⇑*e*P | **Pn** | **15 47 53.6** | **-0.4** |
| **DAV** | **Davao City (W)** | **14.34** | **360** | Pn | **Pn** | **15 47 54.1** | **-0.5** |
| | 30nm,0.3s,baz=114,slow=3.0,SNR=22 | | | | | | |
| DAV | | | | LR | LR | 15 53 36.0 | |
| | comp=Z,15μm,21.6s,baz=205,slow=38 | | | | | | |
| **DAV** | **Davao City (W)** | **14.34** | **360** | P | **Pn** | **15 47 54.5** | **-0.1** |
| | SNR=32 | | | | | | |
| **DAV** | **Davao City (W)** | **14.34** | **360** | ⇓*e*P | **Pn** | **15 47 53.9** | **-0.7** |
| **DAV** | **Davao City (W)** | **14.34** | **360** | *e*Pn | **Pn** | **15 47 53.1** | **-1.5** |
| **MYLDM** | **Lahad Datu** | **14.38** | **330** | ⇑P | **Pn** | **15 47 58.2** | **+3.0** |
| **PCJI** | **Pacitan** | **14.41** | **266** | P | **Pn** | **15 47 56.0** | **+0.5** |
| | 690nm,1.4s,10μm | | | | | | |
| **CTBH** | **Cotabato--PC H** | **14.56** | **354** | *e*P | **Pn** | **15 47 57.5** | **-0.1** |
| **MMPI** | **Merauke** | **14.59** | **95** | P | **P** | **15 48 03.5** | **-0.7** |
| | 959nm,0.9s,10μm | | | | | | |
| **WOJI** | **Wonogiri, Jawa** | **14.65** | **267** | P | **Pn** | **15 48 00.2** | **+1.4** |
| | 710nm,1.3s,14μm | | | | | | |
| **UWJI** | **Ujung Watu** | **14.67** | **273** | P | **P** | **15 48 06.9** | **+1.8** |
| **PBKI** | **Pangkalan Bun** | **14.71** | **288** | P | **P** | **15 48 05.2** | **-0.4** |
| | 1μm,1.2s,19μm | | | | | | |
| **MBWA** | **Marble Bar** | **14.87** | **202** | P | **Pn** | **15 47 59.8** | **-2.0** |
| | SNR=59 | | | | | | |
| **MBWA** | **Marble Bar** | **14.87** | **202** | *e*Pn | **Pn** | **15 47 59.4** | **-2.4** |
| **UGM** | **Wanagama** | **15.05** | **267** | P | **Pn** | **15 48 04.5** | **+0.3** |
| | baz=15,SNR=11 | | | | | | |
| **UGM** | **Wanagama** | **15.05** | **267** | P | **P** | **15 48 09.3** | **0.0** |
| | 755nm,1.4s,12μm | | | | | | |
| **UGM** | **Wanagama** | **15.05** | **267** | *e*Pn | **Pn** | **15 48 04.9** | **+0.7** |
| | 820nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.05** | **147** | *d*iP | Pn | 15 47 59.0 | -5.2 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,2μm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **15.05** | **147** | Pn | Pn | 15 47 59.0 | -5.2 |
| | comp=Z,3μm,1.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.05** | **147** | Pn | Pn | 15 47 59.1 | -5.1 |
| | comp=Z,5.0nm,0.3s,baz=321,slow=13,SNR=147 | | | | | | |
| WRA | | | | Sn | Sn | 15 50 37.2 | -13 |
| | comp=Z,27nm,0.3s,baz=330,slow=22,SNR=6.3 | | | | | | |
| WRA | | | | LR | LR | 15 54 38.7 | |
| | comp=Z,15μm,20.1s,baz=320,slow=40 | | | | | | |
| **SMRI** | **Semarang** | **15.14** | **270** | P | **Pn** | **15 48 07.8** | **+2.4** |
| | comp=Z,953nm,1.7s,comp=Z,23μm | | | | | | |
| **SMRI** | **Semarang** | **15.14** | **270** | *e*Pn | **Pn** | **15 48 07.3** | **+1.9** |
| | comp=Z,2μm,1.3s | | | | | | |
| **BUKP** | **Musuan** | **15.16** | **358** | *e*P | **Pn** | **15 48 04.2** | **-1.5** |
| **GENI** | **Genyem** | **15.18** | **73** | P | **Pn** | **15 48 07.3** | **+1.4** |
| | comp=Z,449nm,1.2s,comp=Z,13μmcomp=Z,23μm | | | | | | |
| **PAGZ** | **Pagadian** | **15.29** | **351** | *e*P | **Pn** | **15 48 07.9** | **+0.6** |
| **IPIL** | **Ipil** | **15.37** | **348** | *e*P | **Pn** | **15 48 10.2** | **+1.7** |
| **SDKM** | **Sandakan** | **15.46** | **327** | ⇑P | **P** | **15 48 13.0** | **-0.9** |
| **JAY** | **Jayapura** | **15.71** | **73** | P | **Pn** | **15 48 13.5** | **+0.6** |
| | baz=16,SNR=13 | | | | | | |
| **DCPH** | **Dipolog City** | **16.02** | **352** | *e*P | **Pn** | **15 48 18.1** | **+1.4** |
| **BUTP** | **Butuan** | **16.23** | **360** | *e*P | **Pn** | **15 48 18.7** | **-0.7** |
| **KKM** | **Kota Kinabalu** | **16.34** | **324** | P | **Pn** | **15 48 22.2** | **+1.2** |
| | baz=16,SNR=25 | | | | | | |
| **KKM** | **Kota Kinabalu** | **16.34** | **324** | ⇑P | **P** | **15 48 22.7** | **-1.0** |
| **KKM** | **Kota Kinabalu** | **16.34** | **324** | *e*Pn | **Pn** | **15 48 21.8** | **+0.8** |
| | comp=Z,3μm,2.1s | | | | | | |
| **BTM** | **Bintulu** | **16.39** | **309** | ⇑P | **P** | **15 48 23.5** | **-0.7** |
| **SBUM** | **Sibu** | **16.61** | **305** | ⇑P | **P** | **15 48 27.0** | **+0.3** |
| **SBUM** | **Sibu** | **16.61** | **305** | *e*Pn | **P** | **15 48 25.9** | **-0.8** |
| | comp=Z,2μm,1.7s | | | | | | |
| **KDM** | **Kudat** | **16.72** | **328** | ⇑P | **P** | **15 48 27.2** | **-0.6** |
| **PALU** | **Palau** | **17.04** | **31** | P | **P** | **15 48 31.0** | **-0.4** |
| | baz=17,SNR=14 | | | | | | |
| **CMJI** | **Cimerak** | **17.10** | **267** | P | **Pn** | **15 48 29.8** | **-0.7** |
| | comp=Z,565nm,1.2s,comp=Z,7μm | | | | | | |
| **MSLP** | **Maasin** | **17.41** | **357** | *e*P | **Pn** | **15 48 33.0** | **-1.3** |
| **LLP** | **Lapu-Lapu** | **17.65** | **354** | ⇓*e*P | **P** | **15 48 38.1** | **-0.1** |
| LLP | | | | *e*S | S | 15 52 19.9 | +19 |
| **KSM** | **Kuching** | **17.68** | **299** | P | **P** | **15 48 38.8** | **+0.3** |
| | baz=18,SNR=90 | | | | | | |
| **KSM** | **Kuching** | **17.68** | **299** | ⇑P | **P** | **15 48 39.4** | **+0.9** |
| **KSM** | **Kuching** | **17.68** | **299** | *e*Pn | **P** | **15 48 38.6** | **+0.1** |
| | comp=Z,579nm,1.2s | | | | | | |
| **CISI** | **Cisompet, Garu** | **17.73** | **268** | P | **Pn** | **15 48 38.3** | **-0.1** |
| | baz=18,SNR=16 | | | | | | |
| **CISI** | **Cisompet, Garu** | **17.73** | **268** | P | **P** | **15 48 39.1** | **0.0** |
| | comp=Z,564nm,1.3s,comp=Z,9μm | | | | | | |
| **CISI** | **Cisompet, Garu** | **17.73** | **268** | *e*Pn | **Pn** | **15 48 36.8** | **-1.6** |
| | comp=Z,1μm,1.5s | | | | | | |
| CISI | | | | *e*Sn | **Sn** | **15 51 54.9** | **-0.6** |
| **ASAR** | **Alice Springs** | **18.02** | **155** | P | **Pn** | **15 48 38.1** | **-3.8** |
| | comp=Z,2.7nm,0.3s,baz=328,slow=10.0,SNR=125 | | | | | | |
| ASAR | | | | S | Sn | 15 51 51.2 | -11 |
| | comp=Z,11nm,0.3s,baz=322,slow=19,SNR=6.2 | | | | | | |
| ASAR | | | | LR | LR | 15 55 54.3 | |
| | comp=Z,39μm,21.9s,baz=332,slow=38 | | | | | | |
| ASAR | | | | P3KPbc | | 16 23 30.1 | |
| | comp=Z,0.1nm,0.3s,baz=149,slow=4.3,SNR=14 | | | | | | |
| ASAR | | | | P3KP | | 16 24 18.1 | |
| | baz=149,slow=2.9,SNR=4.2 | | | | | | |
| **AS01** | **Alice Springs** | **18.04** | **155** | *e*Pn | **Pn** | **15 48 39.4** | **-2.8** |
| **GUIM** | **Jordan** | **18.14** | **350** | *e*P | **Pn** | **15 48 41.4** | **-2.0** |
| **OCLP** | **Ormoc** | **18.33** | **357** | *e*P | **P** | **15 48 45.5** | **-0.1** |
| **COEN** | **Coen** | **18.38** | **112** | P | **P** | **15 48 45.1** | **-1.1** |
| | baz=18,SNR=126 | | | | | | |
| **CNJI** | **Cibinong** | **18.41** | **269** | P | **P** | **15 48 46.4** | **-0.2** |
| | comp=Z,690nm,1.3s,comp=Z,9μm | | | | | | |
| **PLP** | **Palo** | **18.42** | **358** | ⇓*e*P | **P** | **15 48 46.6** | **0.0** |
| **TPI** | **Tanjungpandan** | **18.54** | **283** | P | **Pn** | **15 48 50.0** | **+1.7** |
| | comp=Z,771nm,1.8s,comp=Z,18μm | | | | | | |
| **CUYO** | **Cuyo Island** | **18.69** | **346** | *e*P | **Pn** | **15 48 52.4** | **+2.3** |
| **CBJI** | **Citeko** | **18.73** | **272** | P | **P** | **15 48 49.0** | **-1.1** |
| | comp=Z,2μm,1.5s,comp=Z,41μm | | | | | | |
| **GIRL** | **Giralia** | **18.77** | **215** | P | **Pn** | **15 48 52.5** | **+1.4** |
| | baz=19,SNR=25 | | | | | | |
| **TNG** | **Tangerang** | **18.95** | **272** | P | **Pn** | **15 48 55.2** | **+1.9** |
| | comp=Z,3μm,1.7s,comp=Z,50μmcomp=Z,33μm | | | | | | |
| **SKJI** | **Sukabumi** | **18.99** | **270** | P | **P** | **15 48 52.8** | **-0.2** |
| | comp=Z,1μm,1.3s,comp=Z,14μm | | | | | | |
| **RCP** | **Roxas** | **19.03** | **351** | ⇑*e*P | **Pn** | **15 48 55.5** | **+1.3** |
| **SBJI** | **Serang** | **19.47** | **272** | P | **P** | **15 48 58.5** | **+0.3** |
| | comp=Z,647nm,1.5s,comp=Z,11μm | | | | | | |
| **ENPP** | **El Nido** | **19.48** | **341** | *e*P | **Pn** | **15 49 00.5** | **+1.0** |
| **CGJI** | **Cibinong** | **19.87** | **271** | P | **P** | **15 49 00.9** | **-1.6** |
| | comp=Z,672nm,1.3s,comp=Z,9μm | | | | | | |
| **XMI** | **Christmas Isla** | **20.00** | **260** | P | **P** | **15 49 03.9** | **-0.1** |
| | baz=20,SNR=9.8 | | | | | | |
| **BUSP** | **Coron** | **20.00** | **344** | *e*P | Pn | 15 49 06.6 | +0.8 |
| **XMIS** | **Christmas Isla** | **20.04** | **260** | P | **P** | **15 49 03.9** | **-0.5** |
| | baz=20,SNR=18 | | | | | | |
| **XMIS** | **Christmas Isla** | **20.04** | **260** | *e*P | **P** | **15 49 02.9** | **-1.5** |
| | comp=Z,2μm,1.6s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **20.16** | **284** | P | Pn | 15 49 07.8 | +0.1 |
| | comp=Z,715nm,1.3s,comp=Z,17μm | | | | | | |
| **SJMP** | **San Jose** | **20.22** | **347** | *e*P | Pn | 15 49 09.0 | +0.7 |
| **MEEK** | **Meekatharra** | **20.31** | **199** | P | **P** | **15 49 07.9** | **+0.6** |
| | baz=20,SNR=213 | | | | | | |
| **AUQP** | **San Andres** | **20.77** | **352** | *e*P | Pn | 15 49 16.6 | +1.8 |
| **KLI** | **Kotabumi** | **20.87** | **276** | P | Pn | 15 49 15.8 | -0.2 |
| | comp=Z,274nm,1.4s,comp=Z,5μm | | | | | | |
| **PVCP** | **Virac** | **20.88** | **356** | ⇑*e*P | Pn | 15 49 16.9 | +0.8 |
| **KLSI** | | **21.02** | **276** | P | **P** | **15 49 17.2** | **+2.2** |
| | comp=Z,187nm,1.7s,comp=Z,5μmcomp=Z,25μm | | | | | | |
| **MTSU** | **Mount Surprise** | **21.06** | **122** | P | **P** | **15 49 16.3** | **+0.8** |
| | baz=21,SNR=90 | | | | | | |
| **KASI** | **Kota Agung** | **21.14** | **274** | P | **P** | **15 49 16.4** | **0.0** |
| | comp=Z,204nm,1.1s,comp=Z,4μm | | | | | | |
| **PMBI** | **Palembang** | **21.29** | **281** | P | **P** | **15 49 21.5** | **+3.5** |
| | comp=Z,2μm,1.3s,comp=Z,41μmcomp=Z,21μm | | | | | | |
| **PMG** | **Port Moresby** | **21.33** | **97** | P | **P** | **15 49 20.1** | **+1.7** |
| | comp=Z,166nm,0.7s,baz=284,slow=3.3,SNR=106 | | | | | | |
| PMG | | | | LR | LR | 15 59 23.1 | |
| | comp=Z,8μm,18.3s,baz=276,slow=42 | | | | | | |
| **PMG** | **Port Moresby** | **21.33** | **97** | P | **P** | **15 49 20.0** | **+1.6** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,2μm,1.2s | | | | | | |
| PMG | | | | MLR | MLR | | |
| | comp=Z,31μm,15.0s | | | | | | |
| **PMG** | **Port Moresby** | **21.33** | **97** | *e*P | **P** | **15 49 19.6** | **+1.2** |
| | comp=Z,334nm,0.9s | | | | | | |
| **MDSI** | **Maura Dua** | **21.59** | **276** | P | **P** | **15 49 20.5** | **-0.7** |
| | comp=Z,109nm,1.0s,comp=Z,3μm | | | | | | |
| **LWLI** | **Liwa** | **21.63** | **275** | P | **P** | **15 49 23.6** | **+1.8** |
| | comp=Z,150nm,0.8s,comp=Z,7μm | | | | | | |
| **MANU** | **Manus Island** | **22.23** | **77** | P | **P** | **15 49 28.7** | **+0.5** |
| | baz=22,SNR=12 | | | | | | |
| **TPRI** | **Tanjung Pinang** | **22.66** | **290** | P | **P** | **15 49 34.6** | **+1.9** |
| | comp=Z,792nm,1.5s,comp=Z,18μm | | | | | | |
| **JMBI** | **JAMBI** | **22.70** | **283** | P | **P** | **15 49 36.4** | **+3.3** |
| | comp=Z,5μm,2.0s,comp=Z,120μmcomp=Z,63μm | | | | | | |
| **MNAI** | **Manna** | **22.81** | **276** | PFAKE | | 15 49 40.0 | +5.7 |
| MNAI | | | | LR | LR | | |
| | comp=Z,13μm,20.5s | | | | | | |
| **KSI** | **Kapahiang** | **23.28** | **278** | P | **P** | **15 49 37.7** | **-1.5** |
| | comp=Z,280nm,1.5s,comp=Z,9μm | | | | | | |
| **FORT** | **Forrest** | **23.40** | **175** | P | **P** | **15 49 40.9** | **+0.8** |
| | baz=24,SNR=59 | | | | | | |
| **FORT** | **Forrest** | **23.40** | **175** | *e*P | **P** | **15 49 39.4** | **-0.7** |
| | comp=Z,1μm,0.9s | | | | | | |
| **MORW** | **Morawa** | **23.43** | **202** | P | **P** | **15 49 40.1** | **-0.3** |
| | baz=24,SNR=92 | | | | | | |
| **BTDF** | **Bukit Timah Da** | **23.52** | **291** | P | **P** | **15 49 43.1** | **+1.6** |
| | baz=24,SNR=13 | | | | | | |
| **MYKOM** | **Kota Tinggi** | **23.62** | **292** | ⇑P | **P** | **15 49 43.8** | **+1.5** |
| **MYKOM** | **Kota Tinggi** | **23.62** | **292** | *e*P | **P** | **15 49 43.7** | **+1.3** |
| | comp=Z,2μm,1.8s | | | | | | |
| MYKOM | | | | LR | LR | | |
| | comp=Z,7μm,18.7s | | | | | | |
| **BCPH** | **Baguio City Da** | **24.13** | **348** | ⇑*e*P | **P** | **15 49 45.1** | **-2.2** |
| **KGM** | **Kluang** | **24.19** | **292** | ⇑P | **P** | **15 49 48.9** | **+1.0** |
| **BOLP** | **Bolinao** | **24.28** | **346** | *e*P | **P** | **15 49 46.3** | **-2.2** |
| **RGRI** | **Rengat** | **24.31** | **286** | P | **P** | **15 49 51.2** | **+2.3** |
| | comp=Z,720nm,1.6s,comp=Z,106μm | | | | | | |
| **BLDU** | **Ballidu** | **24.61** | **199** | P | **P** | **15 49 51.2** | **-0.3** |
| | baz=25,SNR=119 | | | | | | |
| **SDSI** | **Sungai Dareh** | **25.02** | **284** | P | **P** | **15 49 56.2** | **+0.9** |
| | comp=Z,652nm,1.7s,comp=Z,34μm | | | | | | |
| **KLBR** | **Kellerberrin** | **25.22** | **196** | P | **P** | **15 49 56.9** | **0.0** |
| | baz=25,SNR=21 | | | | | | |
| **SZP** | **Santa** | **25.29** | **348** | *e*P | **P** | **15 49 57.5** | **-0.1** |
| | comp=Z,2μm,1.9s | | | | | | |
| **DLV** | **T Lat** | **25.71** | **318** | *e*P | **P** | **15 50 02.0** | **+0.2** |
| | comp=Z,675nm,1.6s | | | | | | |
| **BKNI** | **Bangkinang** | **25.75** | **286** | P | **P** | **15 50 03.3** | **+1.4** |
| | baz=26,SNR=6.2 | | | | | | |
| **BKNI** | **Bangkinang** | **25.75** | **286** | P | **P** | **15 50 03.5** | **+1.5** |
| | comp=Z,536nm,1.4s,comp=Z,8μmcomp=Z,18μm | | | | | | |
| **BKNI** | **Bangkinang** | **25.75** | **286** | *e*P | **P** | **15 50 02.7** | **+0.7** |
| | comp=Z,905nm,1.3s | | | | | | |
| **PDSI** | **Padang** | **25.96** | **283** | P | P | 15 50 10.4 | +6.5 |
| | comp=Z,98nm,1.2s,comp=Z,3μm | | | | | | |
| **QLP** | **Quilpie** | **26.00** | **139** | P | **P** | **15 50 05.7** | **+1.5** |
| | baz=26,SNR=265 | | | | | | |
| **PPI** | **Padang Panjang** | **26.14** | **284** | P | **P** | **15 50 06.0** | **+0.4** |
| | baz=26,SNR=17 | | | | | | |
| **PPI** | **Padang Panjang** | **26.14** | **284** | P | **P** | **15 50 05.5** | **0.0** |
| | comp=Z,484nm,1.0s,comp=Z,7μm | | | | | | |
| **FRIM** | **Kepong** | **26.23** | **293** | ⇑P | **P** | **15 50 07.8** | **+1.5** |
| **RABL** | **Rabaul** | **26.52** | **85** | P | **P** | **15 50 09.6** | **+0.6** |
| | baz=26,SNR=6.8 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **26.62** | **196** | P | **P** | **15 50 09.7** | **+0.1**

comp=Z,48nm,0.7s
SSLB LR LR

comp=Z,4µm,21.7s
**MLSI Meulaboh, Aceh 31.43 291 P P 15 50 52.1 -0.6**
comp=Z,665nm,1.3s,comp=Z,9µm
**HKC Hong Kong Obse 31.57 339⇑** *i* P **P 15 50 56.0 +2.3**
HKC *i* S **S 15 56 04.0 +2.8**
**NACB Ninganchiao 31.60 353** PFAKE 15 51 00.0 +6.0
NACB LR LR

comp=Z,4µm,19.9s
**YOJ Yonaguni jima 31.74 355** PFAKE 15 51 10.0 +15
YOJ LR LR

comp=Z,2µm,21.1s
**YHNB Yeheng 32.12 353** PFAKE 15 51 10.0 +11
YHNB LR LR

comp=Z,3µm,19.1s
**TATO Taipei 32.41 353** PFAKE 15 51 10.0 +9.0
TATO LR LR

comp=Z,4µm,21.6s
**GZH Guangzhou 32.59 339⇑** *i* P P 15 51 07.1 +4.5
GZH S **S** **15 56 22.1 +5.0**
GZH PcS **PcS** **15 57 36.0 +1.9**
GZH LN

comp=Z,8µm,15.5s
GZH LE

comp=Z,6µm,12.5s
**ARPS Mount Arapiles 32.76 156** P **P** **15 51 06.6 +2.5**
baz=33,SNR=64
**QZH Quanzhou 32.85 348⇑** *i* P **P** **15 51 06.3 +1.4**
QZH S **S** **15 56 21.3 +0.2**
QZH PMZ

comp=Z,4µm,3.2s
QZH LN

comp=Z,5µm,13.0s
QZH LE

comp=Z,3µm,13.8s
QZH LZ

comp=Z,7µm,14.5s
**ARMA Armidale 33.42 137** P **P** **15 51 11.9 +1.9**
baz=34,SNR=5.3
**ARMA Armidale 33.42 137** *e*P **P** **15 51 09.3 -0.7**
comp=Z,78nm,0.9s
ARMA LR LR

comp=Z,10µm,20.1s
**HNR Honiara 33.94 96** P **P** **15 51 13.7 -0.9**
comp=Z,92nm,0.7s,baz=144,slow=11,SNR=14
**HNR Honiara 33.94 96** *e*P **P** **15 51 12.3 -2.3**
HNR pmax pmax

comp=Z,1µm,2.0s
HNR MLR MLR

comp=Z,2µm,18.0s
**HNR Honiara 33.94 96** *e*P **P** **15 51 12.0 -2.6**
HNR *e*S **PcP** **15 53 50.0 -2.9**
**HNR Honiara 33.94 96** *e*P **P** **15 51 12.3 -2.3**
comp=Z,1µm,2.0s
HNR LR LR

comp=Z,2µm,18.0s
**YNG Young 34.01 145** P **P** **15 51 17.3 +2.3**
baz=34,SNR=37
**JOW Kunigami 34.09 4** PFAKE 15 51 30.0 +14
JOW LR LR

comp=Z,1µm,21.2s
**CMBY CAMPBELL BAY 34.75 294** *e*P **P** **15 51 21.1 -0.5**
CMBY AMB AMB 15 51 22.9

comp=Z,582nm,1.4s
**CAN Canberra 35.09 146** *e*P **P** **15 51 25.7 +1.3**
CAN pmax pmax

comp=Z,568nm,1.2s
**CAN Canberra 35.09 146** *e*P **P** **15 51 25.7 +1.3**
comp=Z,568nm,1.2s
**CNB Canberra Magne 35.29 145** P **P** **15 51 28.6 +2.4**
baz=35,SNR=15
**SLVN Son La 35.65 324** P **P** **15 51 28.8 -0.6**
**MILA Mila 36.46 148** P **P** **15 51 38.7 +2.6**
baz=36,SNR=4.6
**CM01 Chiang Mai Arr 36.77 314** *e*P **P** **15 51 38.5 -0.4**
**CM31 Chiang Mai Arr 36.81 315** P **P** **15 51 40.7 +1.4**
baz=37,SNR=26
**CMAR Chiang Mai Arr 36.81 315** P **P** **15 51 39.9 +0.6**
comp=Z,73nm,0.8s,baz=145,slow=6.9,SNR=346
CMAR PcP **PcP** **15 54 01.9 +0.7**
comp=Z,13nm,0.8s,baz=161,slow=2.2,SNR=7.0
CMAR LR LR 16 08 15.4

comp=Z,4µm,19.0s,baz=176,slow=39
CMAR PKPPKP P'P'df 16 24 25.8 -7.6
comp=Z,0.7nm,1.0s,baz=298,slow=3.1,SNR=4.1
**CMAR Chiang Mai Arr 36.81 315** *ce*P **P** **15 51 40.5 +1.2**
CMAR pmax pmax

comp=Z,73nm,0.8s
**CHTO Chiang Mai 37.05 315** *e*P **P** **15 51 42.5 +1.2**
CHTO pmax pmax

comp=Z,973nm,1.5s
**CHTO Chiang Mai 37.05 315** P **P** **15 51 42.8 +1.5**
SNR=109
**CHTO Chiang Mai 37.05 315** *e*P **P** **15 51 42.5 +1.2**
comp=Z,973nm,1.5s
**CBIJ Chichi jima 37.80 24** PFAKE 15 52 00.0 +12
CBIJ LR LR

comp=Z,1µm,21.8s
**PBA Port Blair 37.83 300** *e*P P 15 51 48.9 +0.9
**GYA Guiyang 38.36 332⇑** *i* P **P** **15 51 53.5 +1.1**
GYA sP **sP** **15 52 04.8 +2.1**
GYA PP **PnPn** **15 53 27.0 +4.7**
GYA PcP **PcP** **15 54 07.6 +1.6**
GYA S **S** **15 57 46.4 +0.4**
GYA ScP **ScP** **15 57 55.0 +2.5**
GYA SS **SnSn** **16 00 29.3 -3.2**
GYA ScS **ScS** **16 02 02.8 +0.1**
GYA PMZ

comp=Z,220nm,1.0s
GYA PMZ

comp=Z,2µm,6.2s
GYA LN

comp=Z,4µm,17.9s
GYA LE

comp=Z,3µm,18.0s
GYA LZ

comp=Z,2µm,17.8s
**DGPR DIGLIPUR 38.41 302** *e*P **P** **15 51 51.9 -1.0**
**SSE Sheshan 38.49 354** P **P** **15 51 53.3 +0.1**
SSE S **S** **15 57 47.4 0.0**
SSE PMZ

comp=Z,33nm,0.8s
SSE PMZ

comp=Z,1µm,5.3s
SSE LN

comp=Z,840nm,14.1s
SSE LE

comp=Z,1µm,14.3s
SSE LZ

comp=Z,1µm,17.0s
**WHN Wuhan 39.23 344⇑** *i* P **P** **15 52 01.0 +1.5**
WHN sP **sP** **15 52 09.8 0.0**
WHN PP **PnPn** **15 53 38.3 +5.7**
WHN S **S** **15 58 01.8 +3.1**
WHN PMZ

comp=Z,1µm,1.5s
WHN PMZ

comp=Z,7µm,6.7s
WHN LN

comp=Z,4µm,10.1s
WHN LE

comp=Z,11µm,20.8s
WHN LZ

comp=Z,5µm,16.8s
**KMI Kunming 39.27 326** P **P** **15 52 02.8 +2.6**
KMI pP **pP** **15 52 11.6 +4.1**
KMI PP **PnPn** **15 53 37.0 +3.6**
KMI S **S** **15 58 03.9 +4.0**
KMI PMZ

comp=Z,380nm,1.6s
KMI PMZ

comp=Z,3µm,6.1s
KMI LN

comp=Z,2µm,14.9s
KMI LE

comp=Z,2µm,15.9s
KMI LZ

comp=Z,3µm,17.3s
**LHI Lord Howe Isla 39.31 132** PFAKE 15 52 10.0 +10
LHI LR LR

comp=Z,6µm,18.8s
**NJ2 Nanjing 39.74 351** *e*P **P** **15 52 04.0 +0.3**
NJ2 pP **pP** **15 52 10.0 -1.0**
NJ2 sP **sP** **15 52 13.5 -0.4**
NJ2 S **S** **15 58 07.0 +0.8**
NJ2 sS **sS** **15 58 18.0 -0.3**
NJ2 PMZ

comp=Z,280nm,0.6s
NJ2 PMZ

comp=Z,3µm,7.3s
NJ2 LN

comp=Z,3µm,19.8s
NJ2 LE

comp=Z,4µm,20.4s
NJ2 LZ

comp=Z,4µm,19.5s
**MOO Moorlands 39.76 155** P **P** **15 52 05.7 +1.9**
baz=40,SNR=4.4
**TAU Tasmania Unive 40.20 155** P **P** **15 52 06.7 -0.7**
TAU pmax pmax

comp=Z,309nm,1.2s
**TAU Tasmania Unive 40.20 155** P **P** **15 52 06.7 -0.7**
comp=Z,309nm,1.2s
**ENH Enshi 40.53 338** *e*P **P** **15 52 11.2 +0.8**
comp=Z,888nm,1.9s
ENH LR LR

comp=Z,4µm,22.0s
**JNU Nakatsue 40.56 7** P **P** **15 52 09.9 -0.7**
comp=Z,13nm,0.8s,baz=171,slow=10,SNR=12
**JNU Nakatsue 40.56 7** *e*P **P** **15 52 09.1 -1.5**
comp=Z,274nm,2.1s
JNU LR LR

comp=Z,900nm,20.5s
**KSJJU Jeju 40.58 1** P **P** **15 52 11.6 +0.9**
SNR=7.2
**KSJJU Jeju 40.58 1** P **P** **15 52 11.6 +0.9**
SNR=7.2
**KSKOH Goheung 41.77 2** P **P** **15 52 21.4 +1.0**
SNR=7.8
**KSKOH Goheung 41.77 2** P **P** **15 52 21.4 +1.0**
SNR=7.8
**DZM Mont Dzumac 41.88 115** *e*P **P** **15 52 21.2 -0.5**
comp=Z,219nm,2.0s
**DZM Mont Dzumac 41.88 115** *e*LR LR 16 03 54.6
comp=Z,10µm,23.6s
**DZM Mont Dzumac 41.88 115** P **P** **15 52 20.8 -0.9**
comp=Z,16nm,0.9s,baz=22,slow=3.1,SNR=9.8
**KSNAH Namhae 42.01 3** P **P** **15 52 22.8 +0.4**
SNR=6.7
**KSNAH Namhae 42.01 3** P **P** **15 52 22.8 +0.4**
SNR=6.7
**JHJ2 Mitsune 42.44 18** PFAKE 15 52 40.0 +14
JHJ2 LR LR

comp=Z,2µm,18.5s
**KSBUS Busan 42.51 4** P **P** **15 52 27.0 +0.6**
SNR=13
**KSBUS Busan 42.51 4** P **P** **15 52 27.0 +0.6**
SNR=13
**KSDAG Daegu 43.01 4** P **P** **15 52 31.0 +0.5**
SNR=7.4
**KSDAG Daegu 43.01 4** P **P** **15 52 31.0 +0.5**
SNR=7.4
**KSCPR CHUPUNGNYEONG 43.41 3** P **P** **15 52 34.8 +1.0**
SNR=6.6
**KSCPR CHUPUNGNYEONG 43.41 3** P **P** **15 52 34.7 +1.0**
SNR=7.9
**CD2 Chengdu 43.48 332⇑** *i* P **P** **15 52 35.8 +1.4**
CD2 pP **pP** **15 52 42.1 +0.3**
CD2 PP **PP** **15 54 17.4 +1.5**
CD2 PcS **PcS** **15 58 15.6 +0.4**
CD2 S **S** **15 59 04.9 +3.1**
CD2 sS **sS** **15 59 15.8 +1.8**
CD2 PMZ

comp=Z,230nm,0.9s
CD2 PMZ

comp=Z,3µm,5.3s
CD2 LN

comp=Z,5µm,17.6s
CD2 LE

comp=Z,5µm,16.6s
CD2 LZ

comp=Z,4µm,18.6s
**TJN Taejon 43.54 2***c* *i* P **P** **15 52 34.3 -0.5**
**KSEUS ULSEONG 43.58 4** P **P** **15 52 36.1 +1.0**
SNR=5.5
**KSSAJ Sangju 43.60 3** P **P** **15 52 35.6 +0.3**
SNR=6.4
**KSBON Boeun 43.68 2** P **P** **15 52 37.0 +1.0**
SNR=18
**KSBON Boeun 43.68 2** P **P** **15 52 37.0 +1.0**
SNR=18
**KSULJ Ulijn 43.97 4** P **P** **15 52 39.2 +1.0**
SNR=6.6
**KSCEA Cheonan 43.98 2** P **P** **15 52 39.1 +0.8**
SNR=10.0
**KSCEA Cheonan 43.98 2** P **P** **15 52 39.1 +0.8**
SNR=10.0
**KSCHJ Chungju 44.06 3** P **P** **15 52 39.2 +0.2**
SNR=10
**KSCHJ Chungju 44.06 3** P **P** **15 52 39.2 +0.2**
SNR=10
**TIA Tai'an 44.09 350⇑** P **P** **15 52 38.8 -0.4**
TIA PP **PcP** **15 54 24.8 +0.5**
TIA PcS **PcS** **15 58 19.6 +2.2**
TIA S **S** **15 59 16.5 +6.0**
TIA PMZ

comp=Z,80nm,1.7s
TIA PMZ

comp=Z,3µm,5.0s
TIA LN

comp=Z,2µm,17.5s
TIA LE

comp=Z,980nm,16.7s
TIA LZ

comp=Z,4µm,16.1s
**XAN Xi'an 44.14 340** P **P** **15 52 39.6 -0.1**
XAN sP **sP** **15 52 48.3 -1.8**
XAN PP **PcP** **15 54 24.3 -0.3**
XAN PcP **PP** **15 54 27.0 +4.0**
XAN ScS **ScS** **16 02 35.5 -1.7**
XAN PMZ

comp=Z,170nm,1.5s
XAN PMZ

comp=Z,2µm,7.4s
XAN LN

comp=Z,1µm,22.3s
XAN LE

comp=Z,3µm,19.5s
XAN LZ

comp=Z,4µm,25.1s
**KSTBA Taebaek 44.36 4** P **P** **15 52 42.6 +1.1**
SNR=13
**KSTBA Taebaek 44.36 4** P **P** **15 52 42.6 +1.1**
SNR=13
**KSSWO Suwon 44.41 1** P **P** **15 52 42.8 +1.0**
SNR=8.0
**KSICN Icheon 44.45 2** P **P** **15 52 42.8 +0.7**
SNR=7.0
**KSAR Wonju Array Be 44.62 2** P **P** **15 52 43.8 +0.4**
KSAR 15 54 26.0
**KSAR Wonju Array Be 44.62 2** P **P** **15 52 43.8 +0.4**
KSAR PcP **PcP** **15 54 26.0 0.0**
**INCN Inchon 44.62 1** *e*P **P** **15 52 43.5 0.0**
comp=Z,250nm,2.1s
**KSRS Korea Array 44.63 3** P **P** **15 52 43.8 +0.3**
comp=Z,18nm,1.0s,baz=178,slow=10,SNR=47
KSRS PcP **PcP** **15 54 26.0 -0.1**
comp=Z,17nm,0.8s,baz=185,slow=3.9,SNR=15
KSRS LR LR 16 11 01.2
comp=Z,2µm,20.9s,baz=191,slow=36
**KSRS Korea Array 44.63 3** P **P** **15 52 43.8 +0.3**
KSRS 15 54 26.0
KSRS pmax pmax

comp=Z,19nm,1.0s
KSRS MLR MLR

comp=Z,2µm,20.9s
**KSSEO Seoul 44.63 1** P **P** **15 52 44.7 +1.1**
SNR=6.7
**KSSEO Seoul 44.63 1** P **P** **15 52 44.7 +1.1**
SNR=6.7
**KS01 Wonju Array Si 44.66 2** *e*P **P** **15 52 43.1 -0.6**
**KWAJ Kwajalein Atol 44.76 70** PFAKE 15 52 50.0 +5.1
KWAJ LR LR

comp=Z,2µm,18.9s
**KSDGY Daegwallycong 44.91 3** P **P** **15 52 46.7 +0.8**
SNR=14
**KSMUS Musan 45.03 1** P **P** **15 52 47.8 +1.1**
SNR=9.7
**MAJO Matsushiro 45.23 14***c* *i* P **P** **15 52 47.4 -0.9**
MAJO pmax pmax

comp=Z,496nm,0.8s
MAJO MLR MLR

comp=Z,11µm,18.0s
**MAJO Matsushiro 45.23 14** *e*P **P** **15 52 47.7 -0.6**
comp=Z,97nm,0.8s
MAJO LR LR

comp=Z,3µm,20.3s
**MAT Matsushiro 45.23 14** P **P** **15 52 47.4 -0.9**
MAT S **S** **15 59 26.8 -0.3**
**MJAR Matsushiro Arr 45.23 14** LR LR 16 09 05.7
comp=Z,3µm,21.8s,baz=195,slow=33
**DL2 Dalian 46.19 356⇑** *i* P **P** **15 52 55.6 -0.2**
DL2 PP **PP** **15 54 47.8 +3.2**
DL2 S **S** **15 59 42.6 +1.8**
DL2 PMZ

comp=Z,220nm,2.0s
DL2 PMZ

comp=Z,1µm,6.9s
DL2 LE

comp=Z,1µm,14.5s
DL2 LZ

comp=Z,2µm,23.1s
**SHL Shillong 46.40 316** *e*P **P** **15 52 57.5 -0.4**
**TIY Taiyuan 46.52 345** *e*P **P** **15 52 58.8 +0.2**
TIY PP **PP** **15 54 49.8 +1.5**
TIY S **S** **15 59 47.9 +2.1**
TIY PMZ

comp=Z,35nm,0.7s
TIY PMZ

comp=Z,1µm,6.4s
TIY LN

comp=Z,2µm,15.2s
TIY LE

comp=Z,1µm,12.0s
TIY LZ

comp=Z,2µm,13.6s
**PALK Pallekele 47.17 287** P **P** **15 53 03.4 -0.6**
comp=Z,78nm,1.2s,baz=116,slow=10,SNR=17
**PALK Pallekele 47.17 287** *e*P **P** **15 53 02.7 -1.3**
PALK pmax pmax

comp=Z,639nm,1.8s
PALK MLR MLR

comp=Z,4µm,22.0s
**PALK Pallekele 47.17 287** P **P** **15 53 03.3 -0.7**
comp=Z,616nm,1.5s,SNR=7.2
**PALK Pallekele 47.17 287** P **P** **15 53 03.8 -0.2**
SNR=13
**PALK Pallekele 47.17 287⇑** *i* P **P** **15 53 03.5 -0.6**
SNR=11
**PALK Pallekele 47.17 287** *e*P **P** **15 53 02.7 -1.3**
comp=Z,639nm,1.8s
PALK LR LR

comp=Z,4µm,22.0s
**LZH Lanzhou 47.86 336⇑** P **P** **15 53 10.5 +1.4**
LZH pP **pP** **15 53 15.4 -1.2**
LZH sP **sP** **15 53 19.6 +0.1**
LZH PcP **PcP** **15 54 39.6 +1.9**
LZH PP **PP** **15 55 02.0 +0.7**
LZH PcS **PcS** **15 58 33.8 +0.4**
LZH S **S** **16 00 03.0 -2.1**
LZH sS **sS** **16 00 13.8 -3.5**
LZH SS **SS** **16 03 28.6 -5.5**
LZH PMZ

comp=Z,370nm,1.4s
LZH PMZ

comp=Z,2µm,6.4s
LZH LN

comp=Z,8µm,13.4s
LZH LE

comp=Z,9µm,16.3s
LZH LZ

comp=Z,9µm,16.6s
**BJT Baijiatuau 47.96 350** *e*P **P** **15 53 09.4 -0.3**
BJT pmax pmax

comp=Z,623nm,1.9s
BJT MLR MLR

comp=Z,3µm,19.8s
**BJT Baijiatuau 47.96 350** *e*P **P** **15 53 09.4 -0.3**
comp=Z,623nm,1.9s
BJT LR LR

comp=Z,3µm,19.8s
**BJI Beijing 47.98 350** P **P** **15 53 09.3 -0.5**
BJI PcP **PcP** **15 54 38.4 +0.6**
BJI S **S** **16 00 04.6 -1.7**
BJI PMZ

comp=Z,120nm,1.6s
BJI LN

comp=Z,2µm,28.7s
BJI LE

comp=Z,1µm,22.4s
BJI LZ

comp=Z,6µm,42.1s
**WAKE Wake Island 48.26 56** PFAKE 15 53 20.0 +7.6
WAKE LR LR

comp=Z,2µm,19.2s
**CHLP Challavanipeta 48.45 303** *e*P **P** **15 53 13.9 +0.1**
CHLP IAmb IAmb 15 53 15.4

comp=Z,557nm,1.5s
CHLP *e*S **S** **16 00 16.0 +2.4**
CHLP IVMs_BB IVMs_BB 16 14 54.0
comp=Z,730nm,3.6s
**VIS Vishakhapatnam 48.70 301** *e*P **P** **15 53 15.3 -0.4**
**SNY Shenyang 48.99 358⇑** P **P** **15 53 16.8 -0.8**
SNY PMZ

comp=Z,88nm,1.1s
SNY PMZ

comp=Z,9µm,11.0s
SNY LN

comp=Z,3µm,24.5s
SNY LE

comp=Z,2µm,25.0s
SNY LZ

comp=Z,4µm,26.5s
**MDRS Chennai 49.50 294** *e*P **P** **15 53 22.2 +0.2**
MDRS AMB AMB 15 53 24.5

comp=Z,906nm,1.4s
**LSA Lhasa 49.61 320** P **P** **15 53 23.5 +0.4**
LSA pP **pP** **15 53 35.5 +5.0**
LSA PP **PP** **15 55 16.1 -1.6**
LSA sS S 16 00 43.1 +12
LSA PMZ

comp=Z,270nm,1.4s
LSA PMZ

comp=Z,2µm,6.8s
LSA LN

comp=Z,2µm,25.4s
LSA LE

comp=Z,4µm,23.1s
LSA LZ

comp=Z,3µm,26.5s
**LSA Lhasa 49.61 320** *e*P **P** **15 53 24.0 +0.9**
LSA pmax pmax

comp=Z,1µm,1.8s
**LSA Lhasa 49.61 320** *e*P **P** **15 53 24.0 +0.9**
comp=Z,1µm,1.8s
**BOK Bokaro 49.70 310** *e*P **P** **15 53 23.3 -0.1**
BOK AMB AMB 15 53 25.9

comp=Z,224nm,1.0s
**HHC Hu-ho-hao-te 49.71 346** *e*P **P** **15 53 23.3 +0.1**
HHC sP **sP** **15 53 32.8 -0.8**
HHC S **S** **16 00 30.4 -0.5**
HHC sS **sS** **16 00 40.4 -2.8**
HHC PMZ

comp=Z,120nm,1.1s
HHC PMZ

comp=Z,1µm,5.3s
HHC LN

comp=Z,1µm,13.9s
HHC LE

comp=Z,940nm,11.2s
HHC LZ

comp=Z,2µm,20.0s
**BTO Baotou 49.87 344** *e*P **P** **15 53 23.0 -1.5**
**PVM Polavaram 49.95 300** *e*P **P** **15 53 25.0 -0.3**
PVM IAmb IAmb 15 53 27.7

comp=Z,347nm,1.4s
PVM *e*S **S** **16 00 36.5 +1.7**
PVM IVMs_BB IVMs_BB 16 15 16.5
comp=Z,853nm,13.3s
**MSHR Mys Shultsa 49.96 5***c* *i* P **P** **15 53 25.3 +0.4**
**SKHT Srikalahasti 50.23 295** *e*P **P** **15 53 27.2 -0.3**
SKHT IAmb IAmb 15 53 30.1

comp=Z,1µm,1.4s
SKHT *e*S **S** **16 00 39.5 +0.7**
SKHT IVMs_BB IVMs_BB 16 15 57.5
comp=Z,1µm,14.9s
**ODAN Odare 50.35 314** *e*P **P** **15 53 28.7 +0.2**
**TAPN Taplejung 50.42 315** *e*P **P** **15 53 29.4 +0.3**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,1μm,1.4s | | | | | | | | |
| **VLA** | **Vladivostok** | **50.56** | **6** | *c* | *i*P | | **P** | **15 53 29.3** | **-0.2** |
| **ADKI** | **Addanki** | **50.81** | **297** | | *e*P | | **P** | **15 53 31.6** | **-0.3** |
| ADKI | | | | | | IAmb | IAmb | 15 53 33.9 | |
| | comp=Z,831nm,1.5s | | | | | | | | |
| ADKI | | | | | *e*S | | **S** | **16 00 47.7** | **+0.9** |
| ADKI | | | | | | IVMs_BB | IVMs_BB | 16 16 35.6 | |
| | comp=Z,2μm,23.0s | | | | | | | | |
| **CN2** | **Changchun** | **50.93** | **360** | ⇑ | P | | **P** | **15 53 31.3** | **-0.9** |
| CN2 | | | | | *e*pP | | **pP** | **15 53 44.0** | **+4.3** |
| CN2 | | | | | *e*PcP | | **PcP** | **15 54 48.0** | **-0.4** |
| CN2 | | | | | *e*S | | **S** | **16 00 44.3** | **-3.2** |
| CN2 | | | | | | PMZ | | | |
| | comp=Z,40nm,1.2s | | | | | | | | |
| CN2 | | | | | | PMZ | | | |
| | comp=Z,200nm,7.0s | | | | | | | | |
| CN2 | | | | | | LN | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| CN2 | | | | | | LE | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| CN2 | | | | | | LZ | | | |
| | comp=Z,3μm,24.0s | | | | | | | | |
| **RAMN** | **Ramite** | **50.97** | **314** | | *e*P | | **P** | **15 53 33.8** | **+0.6** |
| **TRD** | **Trivandrum** | **51.07** | **287** | | *e*P | | **P** | **15 53 33.6** | **-0.3** |
| TRD | | | | | | AMB | AMB | 15 53 36.4 | |
| | comp=Z,364nm,1.2s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.64** | **6** | | P | | **P** | **15 53 37.9** | **+0.3** |
| | comp=Z,29nm,0.6s,baz=189,slow=7.1,SNR=60 | | | | | | | | |
| USRK | | | | | | LR | LR | 16 17 37.6 | |
| | comp=Z,522nm,20.2s,baz=165,slow=38 | | | | | | | | |
| **ERM** | **Erimo** | **51.67** | **17** | *d* | *i*P | | **P** | **15 53 38.9** | **+1.0** |
| ERM | | | | | | pmax | pmax | | |
| | comp=Z,132nm,1.9s | | | | | | | | |
| **ERM** | **Erimo** | **51.67** | **17** | | *e*P | | **P** | **15 53 39.4** | **+1.6** |
| ERM | | | | | | LR | LR | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **NJS** | **Nagarjunasagar** | **51.68** | **298** | | *e*P | | **P** | **15 53 37.5** | **-0.9** |
| NJS | | | | | | IAmb | IAmb | 15 53 39.8 | |
| | comp=Z,459nm,1.4s | | | | | | | | |
| NJS | | | | | *e*S | | **S** | **16 00 58.7** | **0.0** |
| NJS | | | | | | IVMs_BB | IVMs_BB | 16 15 44.9 | |
| | comp=Z,948nm,21.0s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **51.86** | **4** | | P | | **P** | **15 53 39.8** | **+0.6** |
| MDJ | | | | | pP | | **pP** | **15 53 45.9** | **-0.8** |
| MDJ | | | | | sP | | **sP** | **15 53 48.5** | **-1.1** |
| MDJ | | | | | PcP | | **PcP** | **15 54 52.3** | **+0.4** |
| MDJ | | | | | PP | | **PP** | **15 55 37.3** | **-0.1** |
| MDJ | | | | | ScP | | **ScP** | **15 58 47.8** | **+0.4** |
| MDJ | | | | | S | | **S** | **16 00 59.8** | **-0.6** |
| MDJ | | | | | sS | | **sS** | **16 01 12.3** | **-0.4** |
| MDJ | | | | | SS | | **SS** | **16 04 37.6** | **0.0** |
| MDJ | | | | | | PMZ | | | |
| | comp=Z,180nm,1.6s | | | | | | | | |
| MDJ | | | | | | PMZ | | | |
| | comp=Z,2μm,6.7s | | | | | | | | |
| MDJ | | | | | | LN | | | |
| | comp=Z,2μm,21.8s | | | | | | | | |
| MDJ | | | | | | LE | | | |
| | comp=Z,1μm,16.7s | | | | | | | | |
| MDJ | | | | | | LZ | | | |
| | comp=Z,3μm,21.8s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **51.86** | **4** | | *e*P | | **P** | **15 53 39.9** | **+0.6** |
| | comp=Z,1μm,2.3s | | | | | | | | |
| MDJ | | | | | | LR | LR | | |
| | comp=Z,3μm,22.0s | | | | | | | | |
| **OUZ** | **Omahuta** | **51.86** | **129** | | *e*P | | **P** | **15 53 41.3** | **+1.8** |
| | comp=Z,81nm,1.3s | | | | | | | | |
| OUZ | | | | | | LR | LR | | |
| | comp=Z,11μm,18.1s | | | | | | | | |
| **MSVF** | **Nonsavu** | **51.98** | **107** | | *e*P | | **P** | **15 53 41.1** | **+0.3** |
| MSVF | | | | | | MLR | MLR | | |
| | comp=Z,3μm,19.8s | | | | | | | | |
| **MSVF** | **Nonsavu** | **51.98** | **107** | | P | | **P** | **15 53 41.0** | **+0.3** |
| | comp=Z,187nm,1.4s,SNR=7.0 | | | | | | | | |
| **MSVF** | **Nonsavu** | **51.98** | **107** | | *e*P | | **P** | **15 53 41.1** | **+0.3** |
| MSVF | | | | | | LR | LR | | |
| | comp=Z,3μm,19.8s | | | | | | | | |
| **GUN** | **Gumba** | **52.05** | **314** | | *e*P | | **P** | **15 53 41.7** | **+0.3** |
| **DCZ** | **Deep Cove** | **52.16** | **144** | | *e*P | | **P** | **15 53 42.8** | **+1.3** |
| | comp=Z,253nm,1.2s | | | | | | | | |
| DCZ | | | | | | LR | LR | | |
| | comp=Z,6μm,18.6s | | | | | | | | |
| **PKI** | **Pulchoki** | **52.19** | **313** | | *e*P | | **P** | **15 53 42.3** | **-0.1** |
| | comp=Z,414nm,0.9s | | | | | | | | |
| **PKIN** | **Phulchoki** | **52.20** | **313** | | *e*P | | **P** | **15 53 42.3** | **-0.2** |
| | comp=Z,317nm,0.9s | | | | | | | | |
| **GTA** | **Gaotai** | **52.35** | **335** | ⇑ | P | | **P** | **15 53 44.0** | **+0.8** |
| GTA | | | | | pP | | **pP** | **15 53 50.1** | **-0.6** |
| GTA | | | | | sP | | **sP** | **15 53 52.8** | **-0.8** |
| GTA | | | | | PcP | | **PcP** | **15 54 55.5** | **+1.4** |
| GTA | | | | | ScP | | **ScP** | **15 58 52.0** | **+2.1** |
| GTA | | | | | S | | **S** | **16 01 07.0** | **-0.6** |
| GTA | | | | | sS | | **sS** | **16 01 17.4** | **-2.6** |
| GTA | | | | | SS | | **SS** | **16 04 42.8** | **-3.0** |
| GTA | | | | | | PMZ | | | |
| | comp=Z,180nm,1.5s | | | | | | | | |
| GTA | | | | | | PMZ | | | |
| | comp=Z,2μm,6.4s | | | | | | | | |
| GTA | | | | | | LN | | | |
| | comp=Z,2μm,17.6s | | | | | | | | |
| GTA | | | | | | LE | | | |
| | comp=Z,2μm,20.4s | | | | | | | | |
| GTA | | | | | | LZ | | | |
| | comp=Z,3μm,24.2s | | | | | | | | |
| **KKN** | **Kakani** | **52.41** | **314** | | *e*P | | **P** | **15 53 44.1** | **+0.2** |
| | comp=Z,2μm,1.5s | | | | | | | | |
| **DMN** | **Daman** | **52.43** | **313** | | *e*P | | **P** | **15 53 44.3** | **+0.2** |
| | comp=Z,2μm,1.4s | | | | | | | | |
| **RPR** | **Rampur** | **52.64** | **300** | | *e*P | | **P** | **15 53 44.7** | **-0.8** |
| RPR | | | | | | IAmb | IAmb | 15 53 47.3 | |
| | comp=Z,389nm,1.4s | | | | | | | | |
| RPR | | | | | *e*S | | **S** | **16 01 13.5** | **+1.6** |
| RPR | | | | | | IVMs_BB | IVMs_BB | 16 16 06.5 | |
| | comp=Z,892nm,19.3s | | | | | | | | |
| **HYB** | **Hyderabad** | **52.68** | **298** | ⇑ | *i*P | | **P** | **15 53 44.0** | **-1.9** |
| | comp=Z,300nm,1.0s | | | | | | | | |
| HYB | | | | | *e* | | | 15 53 53.5 | |
| HYB | | | | | *e*S | | **S** | **16 01 08.0** | **-4.6** |
| **HYB** | **Hyderabad** | **52.68** | **298** | | *e*P | | **P** | **15 53 44.6** | **-1.3** |
| HYB | | | | | | AMB | AMB | 15 53 47.5 | |
| | comp=Z,289nm,0.5s | | | | | | | | |
| **HYBB** | **Hyderabad (bro** | **52.69** | **298** | | *e*P | | **P** | **15 53 44.7** | **-1.2** |
| HYBB | | | | | | IAmb | IAmb | 15 53 47.1 | |
| | comp=Z,451nm,1.4s | | | | | | | | |
| HYBB | | | | | *e*S | | **S** | **16 01 11.8** | **-0.9** |
| HYBB | | | | | | IVMs_BB | IVMs_BB | 16 19 47.4 | |
| | comp=Z,944nm,19.2s | | | | | | | | |
| **DGAR** | **Diego Garcia** | **52.77** | **266** | | PFAKE | | | 15 54 00.0 | +13 |
| DGAR | | | | | | LR | LR | | |
| | comp=Z,2μm,19.2s | | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **52.85** | **144** | | *e*P | | **P** | **15 53 47.7** | **+1.0** |
| | comp=Z,212nm,0.9s | | | | | | | | |
| WHZ | | | | | | LR | LR | | |
| | comp=Z,7μm,19.7s | | | | | | | | |
| **URV** | **Uravakonda** | **52.88** | **295** | | *e*P | | **P** | **15 53 46.1** | **-1.3** |
| URV | | | | | | IAmb | IAmb | 15 53 48.3 | |
| | comp=Z,590nm,1.5s | | | | | | | | |
| URV | | | | | *e*S | | **S** | **16 01 15.7** | **+0.3** |
| URV | | | | | | IVMs_BB | IVMs_BB | 16 16 23.6 | |
| | comp=Z,1μm,21.9s | | | | | | | | |
| **WKZ** | **Wanaka** | **52.92** | **142** | | *e*P | | **P** | **15 53 48.8** | **+1.5** |
| | comp=Z,742nm,1.9s | | | | | | | | |
| **GKN** | **Gorkha** | **53.00** | **313** | | *e*P | | **P** | **15 53 48.3** | **+0.1** |
| | comp=Z,2μm,1.4s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **53.48** | **15** | | *e*P | | **P** | **15 53 52.1** | **+0.9** |
| | comp=Z,610nm,1.7s | | | | | | | | |
| ASAJ | | | | | | LR | LR | | |
| | comp=Z,1μm,19.4s | | | | | | | | |
| **KOLN** | **Koldanda** | **53.62** | **312** | | *e*P | | **P** | **15 53 53.1** | **+0.3** |
| | comp=Z,654nm,0.9s | | | | | | | | |
| **RPZ** | **Rata Peaks** | **53.63** | **140** | | P | | **P** | **15 53 54.1** | **+1.7** |
| | comp=Z,231nm,0.9s,baz=271,slow=2.9,SNR=20 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **53.63** | **140** | | *e*P | | **P** | **15 53 54.1** | **+1.7** |
| | comp=Z,579nm,1.0s | | | | | | | | |
| RPZ | | | | | | LR | LR | | |
| | comp=Z,9μm,20.6s | | | | | | | | |
| **DANN** | **Dangsing** | **53.83** | **313** | | *e*P | | **P** | **15 53 54.6** | **+0.1** |
| **NGP** | **Nagpur** | **53.85** | **303** | | *e*P | | **P** | **15 53 53.2** | **-1.1** |
| NGP | | | | | | AMP | | 15 53 56.3 | |
| | comp=Z,360nm,1.7s | | | | | | | | |
| NGP | | | | | *e*S | | **S** | **16 01 29.1** | **+0.7** |
| **THZ** | **Tophouse** | **53.94** | **137** | | *e*P | | **P** | **15 53 56.4** | **+1.5** |
| | comp=Z,128nm,0.9s | | | | | | | | |
| **ODZ** | **Otahua Downs** | **54.02** | **142** | | *e*P | | **P** | **15 53 56.3** | **+1.0** |
| | comp=Z,79nm,1.0s | | | | | | | | |
| ODZ | | | | | | LR | LR | | |
| | comp=Z,7μm,20.0s | | | | | | | | |
| **MCQ** | **Macquarie Isla** | **54.04** | **157** | | P | | **P** | **15 53 58.0** | **+2.8** |
| | baz=54,SNR=5.3 | | | | | | | | |
| **OXZ** | **Oxford** | **54.07** | **139** | | *e*P | | **P** | **15 53 56.5** | **+0.8** |
| | comp=Z,101nm,0.9s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **54.32** | **18** | *d* | *i*P | | **P** | **15 53 56.9** | **-0.4** |
| YUK | | | | | *i* | | | 15 55 00.6 | |
| YUK | | | | | *e* | | | 15 55 57.7 | |
| YUK | | | | | *i* | PPP | PPP | 15 57 06.3 | |
| YUK | | | | | *i* | S | **S** | **16 01 35.0** | **+1.2** |
| YUK | | | | | *e* | SS | **SS** | **16 05 14.3** | **-2.1** |
| YUK | | | | | | pmax | pmax | | |
| | comp=N,203nm,1.6s | | | | | | | | |
| YUK | | | | | | pmax | pmax | | |
| | comp=E,79nm,1.6s | | | | | | | | |
| YUK | | | | | | pmax | pmax | | |
| | comp=Z,291nm,1.6s | | | | | | | | |
| YUK | | | | | | pmax | pmax | | |
| | comp=Z,618nm,2.5s | | | | | | | | |
| **KHZ** | **Kahutara** | **54.65** | **138** | | *e*P | | **P** | **15 54 00.6** | **+0.7** |
| | comp=Z,170nm,1.2s | | | | | | | | |
| KHZ | | | | | | LR | LR | | |
| | comp=Z,7μm,20.2s | | | | | | | | |
| **SNZO** | **South Karori** | **54.98** | **136** | | *e*P | | **P** | **15 54 00.4** | **-1.9** |
| | comp=Z,108nm,0.9s | | | | | | | | |
| SNZO | | | | | | LR | LR | | |
| | comp=Z,5μm,20.3s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **55.43** | **133** | | *e*P | | **P** | **15 54 06.2** | **+0.6** |
| | comp=Z,238nm,1.8s | | | | | | | | |
| BKZ | | | | | | LR | LR | | |
| | comp=Z,5μm,21.2s | | | | | | | | |
| **URZ** | **Urewera** | **55.56** | **132** | | *e*P | | **P** | **15 54 06.7** | **+0.2** |
| | comp=Z,111nm,1.3s | | | | | | | | |
| URZ | | | | | | LR | LR | | |
| | comp=Z,5μm,19.7s | | | | | | | | |
| **BFZ** | **Birch Farm** | **55.81** | **135** | | PFAKE | | | 15 54 20.0 | +12 |
| BFZ | | | | | | LR | LR | | |
| | comp=Z,11μm,19.6s | | | | | | | | |
| **KUR** | **Kuril'sk** | **56.02** | **19** | ⇑ | *i*P | | **P** | **15 54 09.8** | **+0.2** |
| KUR | | | | | *i* | | | 15 56 14.8 | |
| KUR | | | | | *i* | S | **S** | **16 01 55.6** | **-1.0** |
| KUR | | | | | *i* | SS | **SS** | **16 05 41.9** | **-1.3** |
| KUR | | | | | | pmax | pmax | | |
| | comp=Z,187nm,1.8s | | | | | | | | |
| KUR | | | | | | pmax | pmax | | |
| | comp=Z,1μm,2.5s | | | | | | | | |
| **BHPL** | **Bhopal** | **56.13** | **304** | | *e*P | | **P** | **15 54 09.7** | **-1.2** |
| **YSS** | **Yuzh-Sakhalins** | **56.17** | **14** | | *oe*P | | **P** | **15 54 11.0** | **+0.4** |
| YSS | | | | | *e* | | | 15 56 24.0 | |
| YSS | | | | | *e* | S | **S** | **16 02 00.0** | **+1.5** |
| YSS | | | | | *e* | PS | **PnS** | **16 02 10.0** | **-0.6** |
| YSS | | | | | *e* | SS | SS | 16 05 36.0 | -9.5 |
| YSS | | | | | *e* | SSS | SSS | 16 07 44.0 | |
| YSS | | | | | | pmax | pmax | | |
| | comp=Z,410nm,1.8s | | | | | | | | |
| YSS | | | | | | pmax | pmax | | |
| | comp=Z,2μm,6.0s | | | | | | | | |
| YSS | | | | | | MLR | MLR | | |
| | comp=Z,700nm,17.0s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **56.17** | **14** | | *e*P | | P | 15 54 07.0 | -3.7 |
| | comp=Z,414nm,1.7s | | | | | | | | |
| YSS | | | | | | LR | LR | | |
| | comp=Z,2μm,20.2s | | | | | | | | |
| **GOA** | **Goa** | **56.17** | **294** | | *e*P | | **P** | **15 54 11.3** | **+0.1** |
| GOA | | | | | | AMB | AMB | 15 54 14.1 | |
| | comp=Z,574nm,2.3s | | | | | | | | |
| **HABR** | **Khabarovsk** | **56.21** | **7** | *c* | *i*P | | **P** | **15 54 10.9** | **0.0** |
| HABR | | | | | *e**SP | | **sP** | **15 54 17.9** | **-3.4** |
| HABR | | | | | *e* | | | 15 55 06.1 | |
| HABR | | | | | *e* | | | 15 56 14.1 | |
| HABR | | | | | *e* | PPP | PPP | 15 57 28.4 | |
| HABR | | | | | *e* | S | **S** | **16 02 00.5** | **+1.6** |
| HABR | | | | | *e**SS | | **sS** | **16 02 09.4** | **-2.0** |
| HABR | | | | | *e* | | | 16 03 57.1 | |
| HABR | | | | | *e* | SS | **SS** | **16 05 46.9** | **+0.9** |
| HABR | | | | | | pmax | pmax | | |
| | comp=E,127nm,2.7s | | | | | | | | |
| HABR | | | | | | pmax | pmax | | |
| | comp=Z,175nm,1.3s | | | | | | | | |
| HABR | | | | | | pmax | pmax | | |
| | comp=N,124nm,2.7s | | | | | | | | |
| HABR | | | | | | pmax | pmax | | |
| | comp=Z,1μm,2.5s | | | | | | | | |
| HABR | | | | | | MLR | MLR | | |
| | comp=Z,2μm,18.0s | | | | | | | | |
| **KLR** | **Kul'dur** | **56.61** | **5** | ⇓ | *i*P | | P | 15 54 10.2 | -3.5 |
| KLR | | | | | *e*S | | **S** | **16 02 06.0** | **+1.7** |
| KLR | | | | | | pmax | pmax | | |
| | comp=E,64nm,1.8s | | | | | | | | |
| KLR | | | | | | pmax | pmax | | |
| | comp=Z,300nm,1.8s | | | | | | | | |
| KLR | | | | | | pmax | pmax | | |
| | comp=Z,4μm,7.0s | | | | | | | | |
| KLR | | | | | | MLR | MLR | | |
| | comp=Z,2μm,12.0s | | | | | | | | |
| **HIA** | **Hailar** | **56.63** | **355** | | *e*P | | **P** | **15 54 13.9** | **-0.1** |
| HIA | | | | | | pmax | pmax | | |
| | comp=Z,678nm,1.8s | | | | | | | | |
| HIA | | | | | | MLR | MLR | | |
| | comp=Z,2μm,21.3s | | | | | | | | |
| **HIA** | **Hailar** | **56.63** | **355** | | *e*P | | **P** | **15 54 13.9** | **-0.1** |
| | comp=Z,678nm,1.8s | | | | | | | | |
| HIA | | | | | | LR | LR | | |
| | comp=Z,2μm,21.3s | | | | | | | | |
| **POO** | **Poona** | **57.24** | **297** | | *e*P | | **P** | **15 54 17.5** | **-1.3** |
| **ULN** | **Ulaanbaatar** | **57.41** | **345** | *c* | *i*P | | **P** | **15 54 19.9** | **+0.3** |
| ULN | | | | | | pmax | pmax | | |
| | comp=Z,340nm,1.7s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.41** | **345** | | P | | **P** | **15 54 20.3** | **+0.7** |
| | SNR=128 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.41** | **345** | | *e*P | | **P** | **15 54 20.1** | **+0.5** |
| **SONM** | **Songino Array** | **57.55** | **345** | | P | | **P** | **15 54 20.9** | **+0.3** |
| | comp=Z,40nm,0.8s,baz=163,slow=8.2,SNR=279 | | | | | | | | |
| SONM | | | | | | PcP | **PcP** | **15 55 13.5** | **-0.4** |
| | comp=Z,39nm,0.9s,baz=161,slow=5.1,SNR=6.8 | | | | | | | | |
| SONM | | | | | | LR | LR | 16 19 27.8 | |
| | comp=Z,886nm,21.7s,baz=170,slow=36 | | | | | | | | |
| SONM | | | | | | PKPPKP | **P'P'df** | **16 24 06.1** | **+1.4** |
| | comp=Z,0.8nm,0.9s,baz=323,slow=2.2,SNR=5.0 | | | | | | | | |
| SONM | | | | | | PKP2bc | | 16 24 16.3 | |
| | comp=Z,3.9nm,1.1s,baz=333,slow=2.3,SNR=12 | | | | | | | | |
| **SONA1** | **Songino Array** | **57.56** | **345** | | *e*P | | **P** | **15 54 19.6** | **-1.1** |
| **NDI** | **New Delhi** | **58.88** | **310** | | *e*P | | **P** | **15 54 28.0** | **-2.1** |
| NDI | | | | | *e*S | | **S** | **16 02 36.0** | **+1.2** |
| **DDI** | **Dehra Dun** | **59.08** | **312** | | *e*P | | **P** | **15 54 31.1** | **-0.4** |
| DDI | | | | | | AMB | AMB | 15 54 31.7 | |
| | comp=Z,362nm,1.0s | | | | | | | | |
| **KUDL** | **Kundal** | **59.17** | **309** | | *e*P | | **P** | **15 54 30.4** | **-1.7** |
| **CASY** | **Casey** | **59.75** | **187** | | *e*P | | **P** | **15 54 36.5** | **+1.0** |
| | comp=Z,258nm,0.9s | | | | | | | | |
| CASY | | | | | | LR | LR | | |
| | comp=Z,4μm,21.6s | | | | | | | | |
| **KKR** | **Kurukshetra** | **59.81** | **311** | | *e*P | | **P** | **15 54 36.2** | **-0.3** |
| **DRV** | **Dumont d'Urvil** | **60.02** | **173** | | P | | P | 15 54 20.0 | -17 |
| DRV | | | | | S | | S | 16 02 26.0 | -22 |
| DRV | | | | | SS | | **SS** | **16 06 46.0** | **+0.8** |
| DRV | | | | | R | | | 16 13 00.0 | |
| **CIT** | **Chita** | **60.06** | **351** | | *e*P | | **P** | **15 54 36.0** | **-1.9** |
| CIT | | | | | *e* | | | 15 54 53.0 | |
| CIT | | | | | *e* | | | 15 55 24.8 | |
| CIT | | | | | *e* | | | 15 58 15.2 | |
| CIT | | | | | | pmax | pmax | | |
| | comp=Z,441nm,2.0s | | | | | | | | |
| **SMLA** | **Simla** | **60.15** | **312** | | *i*P | | **P** | **15 54 38.9** | **+0.1** |
| SMLA | | | | | | AMB | AMB | 15 54 39.6 | |
| | comp=Z,1μm,0.9s | | | | | | | | |
| SMLA | | | | | *i* | S | **S** | **16 02 50.9** | **-0.2** |
| **ZAK** | **Zakamensk** | **60.71** | **344** | | *e*P | | **P** | **15 54 41.8** | **-0.7** |
| ZAK | | | | | *e* | | | 15 55 26.3 | |
| ZAK | | | | | | pmax | pmax | | |
| | comp=Z,73nm,1.6s | | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **61.36** | **313** | | *e*P | | **P** | **15 54 46.9** | **-0.4** |
| DHRM | | | | | | AMB | AMB | 15 54 49.4 | |
| | comp=Z,721nm,2.1s | | | | | | | | |
| **WMQ** | **Urumqi** | **61.45** | **330** | ⇑ | *i*P | | **P** | **15 54 48.0** | **+0.4** |
| WMQ | | | | | | sP | **sP** | **15 54 59.0** | **+0.9** |
| WMQ | | | | | | PcP | **PcP** | **15 55 29.0** | **-0.5** |
| WMQ | | | | | | PP | **PP** | **15 57 05.0** | **+1.8** |
| WMQ | | | | | | ScP | **ScP** | **15 59 29.0** | **-0.8** |
| WMQ | | | | | | S | **S** | **16 03 03.0** | **-4.5** |
| WMQ | | | | | | ScS | **SKKSac** | **16 04 33.0** | **-4.7** |
| WMQ | | | | | | SS | **SS** | **16 07 07.0** | **-1.9** |
| WMQ | | | | | | PMZ | | | |
| | comp=Z,200nm,1.4s | | | | | | | | |
| WMQ | | | | | | PMZ | | | |
| | comp=Z,3μm,6.0s | | | | | | | | |
| WMQ | | | | | | LN | | | |
| | comp=Z,2μm,18.0s | | | | | | | | |
| WMQ | | | | | | LE | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| WMQ | | | | | | LZ | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **AFI** | **Afiamalu** | **61.66** | **102** | | *e*P | | **P** | **15 54 50.3** | **+0.8** |
| AFI | | | | | | pmax | pmax | | |
| | comp=Z,146nm,1.2s | | | | | | | | |
| AFI | | | | | | MLR | MLR | | |
| | comp=Z,2μm,18.5s | | | | | | | | |
| **AFI** | **Afiamalu** | **61.66** | **102** | | *e*P | | **P** | **15 54 50.3** | **+0.8** |
| | comp=Z,146nm,1.2s | | | | | | | | |
| AFI | | | | | | LR | LR | | |
| | comp=Z,2μm,18.5s | | | | | | | | |
| **TLY** | **Talaya** | **61.79** | **345** | | P | | **P** | **15 54 50.0** | **+0.4** |
| | comp=Z,19nm,0.8s,baz=176,slow=7.4,SNR=8.8 | | | | | | | | |
| TLY | | | | | | PcP | **PcP** | **15 55 30.8** | **+0.2** |
| | comp=Z,14nm,0.9s,baz=254,slow=3.7,SNR=4.4 | | | | | | | | |
| **TLY** | **Talaya** | **61.79** | **345** | | *i*P | | **P** | **15 54 50.0** | **+0.4** |
| TLY | | | | | *e* | | | 15 55 31.3 | |
| TLY | | | | | *e* | | | 15 57 02.1 | |
| TLY | | | | | *e* | S | **S** | **16 03 09.4** | **-2.0** |
| TLY | | | | | *e* | | | 16 04 34.8 | |
| TLY | | | | | *e* | SS | **SS** | **16 07 09.8** | **-4.0** |
| TLY | | | | | | pmax | pmax | | |
| | comp=Z,169nm,1.9s | | | | | | | | |
| TLY | | | | | | MLR | MLR | | |
| | comp=Z,2μm,23.0s | | | | | | | | |
| **TLY** | **Talaya** | **61.79** | **345** | | P | | **P** | **15 54 50.4** | **+0.7** |
| | comp=Z,370nm,1.9s,SNR=5.9 | | | | | | | | |
| **TLY** | **Talaya** | **61.79** | **345** | | P | | **P** | **15 54 50.7** | **+1.1** |
| | SNR=8.4 | | | | | | | | |
| **TLY** | **Talaya** | **61.79** | **345** | | *e*P | | **P** | **15 54 50.3** | **+0.7** |
| TLY | | | | | | PcP | **PcP** | **15 55 30.8** | **+0.2** |
| TLY | | | | | | LR | LR | | |
| | comp=Z,2μm,19.8s | | | | | | | | |
| **IRK** | **Irkutsk** | **62.14** | **345** | | *e*P | | **P** | **15 54 51.3** | **-0.7** |
| IRK | | | | | *e* | | | 15 55 29.4 | |
| IRK | | | | | *e* | S | S | 16 03 27.9 | +12 |
| IRK | | | | | | pmax | pmax | | |
| | comp=Z,399nm,2.0s | | | | | | | | |
| **MOY** | **Mondy** | **62.51** | **343** | | *e*P | | **P** | **15 54 55.2** | **+0.6** |
| MOY | | | | | | pmax | pmax | | |
| | comp=Z,501nm,2.0s | | | | | | | | |
| **BHJ** | **Bhuj** | **62.64** | **301** | | *e*P | | **P** | **15 54 55.7** | **-0.2** |
| BHJ | | | | | | AMB | AMB | 15 54 58.1 | |
| | comp=Z,245nm,0.8s | | | | | | | | |
| **MIR** | **Mirnyy** | **63.20** | **194** | ⇑ | *i*P | | P | 15 55 07.0 | +8.2 |
| MIR | | | | | | pmax | pmax | | |
| | comp=Z,360nm,1.5s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **63.52** | **21** | | *e*P | | P | 15 54 55.0 | -6.1 |
| SKR | | | | | *e* | | | 15 57 26.0 | |
| SKR | | | | | *e* | PPP | PPP | 15 58 50.0 | |
| SKR | | | | | *e* | S | **S** | **16 03 30.0** | **-3.1** |
| SKR | | | | | *e* | PS | **PnS** | **16 03 54.0** | **+2.5** |
| SKR | | | | | *e* | SS | SS | 16 07 32.0 | -8.8 |
| SKR | | | | | *e* | SSS | SSS | 16 10 20.0 | |
| SKR | | | | | | pmax | pmax | | |
| | comp=N,1μm,5.0s | | | | | | | | |
| SKR | | | | | | pmax | pmax | | |
| | comp=E,2μm,5.0s | | | | | | | | |
| SKR | | | | | | pmax | pmax | | |
| | comp=Z,3μm,5.0s | | | | | | | | |
| SKR | | | | | | pmax | pmax | | |
| | comp=E,40nm,0.5s | | | | | | | | |
| SKR | | | | | | pmax | pmax | | |
| | comp=Z,40nm,0.5s | | | | | | | | |
| SKR | | | | | | smax | smax | | |
| | comp=E,2μm,16.0s | | | | | | | | |
| SKR | | | | | | smax | smax | | |
| | comp=N,1μm,14.0s | | | | | | | | |
| SKR | | | | | | MLR | MLR | | |
| | comp=E,800nm,14.0s | | | | | | | | |
| SKR | | | | | | MLR | MLR | | |
| | comp=Z,1μm,14.0s | | | | | | | | |
| **CLNS** | **Chul'man** | **63.98** | **360** | | *e*P | | **P** | **15 55 03.2** | **-0.9** |
| CLNS | | | | | *e**PP | | **pP** | **15 55 14.1** | **+2.3** |
| CLNS | | | | | *e* | | | 15 55 38.9 | |
| CLNS | | | | | *e* | | | 15 57 22.5 | |
| CLNS | | | | | *e* | S | **S** | **16 03 37.0** | **-1.7** |
| CLNS | | | | | *e* | SSS | SSS | 16 10 38.2 | |
| CLNS | | | | | | pmax | pmax | | |
| | comp=Z,143nm,1.6s | | | | | | | | |
| CLNS | | | | | | pmax | pmax | | |
| | comp=E,22nm,1.2s | | | | | | | | |
| CLNS | | | | | | pmax | pmax | | |
| | comp=N,97nm,1.5s | | | | | | | | |
| CLNS | | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| CLNS | | | | | | pmax | pmax | | |
| | comp=E,14nm,1.1s | | | | | | | | |
| CLNS | | | | | | pmax | pmax | | |
| | comp=N,13nm,1.2s | | | | | | | | |
| CLNS | | | | | | smax | smax | | |
| | comp=E,282nm,11.0s | | | | | | | | |
| CLNS | | | | | | smax | smax | | |
| | comp=N,377nm,9.0s | | | | | | | | |
| CLNS | | | | | | MLR | MLR | | |
| | comp=Z,1μm,17.0s | | | | | | | | |
| CLNS | | | | | | MLR | MLR | | |
| | comp=N,560nm,14.0s | | | | | | | | |
| CLNS | | | | | | MLR | MLR | | |
| | comp=E,347nm,13.0s | | | | | | | | |
| **HVS** | **Khovu-Aksy** | **64.46** | **338** | *d* | *i*P | | **P** | **15 55 07.5** | **0.0** |
| HVS | | | | | | pmax | pmax | | |
| | comp=Z,335nm,1.2s | | | | | | | | |
| **KSH** | **Kashi** | **65.46** | **320** | ⇑ | *i*P | | **P** | **15 55 14.8** | **+0.5** |
| KSH | | | | | *e*pP | | **pP** | **15 55 20.1** | **-1.8** |
| KSH | | | | | *e*sP | | **sP** | **15 55 23.8** | **-1.0** |
| KSH | | | | | *e*PcP | | **PcP** | **15 55 47.4** | **+1.3** |
| KSH | | | | | *e*PP | | **PP** | **15 57 40.4** | **+1.8** |
| KSH | | | | | S | | **S** | **16 03 55.8** | **-2.0** |
| KSH | | | | | | PMZ | | | |
| | comp=Z,520nm,1.8s | | | | | | | | |
| KSH | | | | | | PMZ | | | |
| | comp=Z,2μm,4.9s | | | | | | | | |
| KSH | | | | | | LN | | | |
| | comp=Z,2μm,18.1s | | | | | | | | |
| KSH | | | | | | LE | | | |
| | comp=Z,920nm,15.7s | | | | | | | | |
| KSH | | | | | | LZ | | | |
| | comp=Z,4μm,32.5s | | | | | | | | |
| **BOD** | **Bodaibo** | **65.66** | **353** | ⇓ | *i*P | | **P** | **15 55 15.3** | **+0.4** |
| BOD | | | | | | pmax | pmax | | |
| | comp=Z,295nm,1.6s | | | | | | | | |
| **PEA0** | **Petropavlovsk-** | **66.08** | **20** | | *e*P | | **P** | **15 55 18.9** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **66.08** | **20** | | P | | **P** | **15 55 19.5** | **+1.7** |
| | comp=Z,114nm,0.7s,baz=191,slow=5.5,SNR=76 | | | | | | | | |
| PETK | | | | | | LR | LR | 16 21 35.1 | |
| | comp=Z,442nm,21.9s,baz=207,slow=34 | | | | | | | | |
| **MK01** | **Makanchi Array** | **66.24** | **329** | | *e*P | | **P** | **15 55 17.5** | **-1.5** |
| **MKAR** | **Makanchi Array** | **66.26** | **329** | | P | | **P** | **15 55 19.1** | **-0.1** |
| | comp=Z,36nm,0.8s,baz=131,slow=6.9,SNR=302 | | | | | | | | |
| MKAR | | | | | | PKPPKP | **P'P'df** | **16 23 52.2** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=316,slow=3.3,SNR=5.2 | | | | | | | | |
| MKAR | | | | | | LR | LR | 16 27 41.2 | |
| | comp=Z,752nm,20.8s,baz=125,slow=39 | | | | | | | | |
| **PET** | **Petropavlovsk** | **66.35** | **21** | ⇑ | *i*P | | **P** | **15 55 21.1** | **+1.6** |
| PET | | | | | *e*S | | **S** | **16 04 10.2** | **+2.5** |
| PET | | | | | *e*SS | | **SS** | **16 08 27.0** | **+2.3** |
| PET | | | | | | pmax | pmax | | |
| | comp=Z,361nm,1.3s | | | | | | | | |
| PET | | | | | | pmax | pmax | | |
| | comp=Z,3μm,6.2s | | | | | | | | |
| PET | | | | | | pmax | pmax | | |
| | comp=Z,2μm,7.1s | | | | | | | | |
| PET | | | | | | MLR | MLR | | |
| | comp=Z,1μm,18.0s | | | | | | | | |
| PET | | | | | |

comp=Z,1μm,18.0s
**TKM2 Tokmak 2 67.61 322 P P 15 55 28.3 +0.2**
SNR=81
**TKM2 Tokmak 2 67.61 322 *e*P P 15 55 28.2 +0.2**
TKM2 LR LR
comp=Z,1μm,18.0s
**KBL Kabul 67.78 312 *e*P P 15 55 29.2 -0.1**
KBL MLR MLR
comp=Z,2μm,21.2s
**KBL Kabul 67.78 312 *e*P P 15 55 29.2 -0.1**
KBL LR LR
comp=Z,2μm,21.2s
**UCH Uchtor 67.88 321 P P 15 55 30.4 +0.4**
SNR=76
**AAK Ala-Archa 68.12 322 P P 15 55 31.8 +0.6**
comp=Z,33nm,0.8s,baz=119,slow=5.3,SNR=126
**AAK Ala-Archa 68.12 322*c* *i*P P 15 55 31.5 +0.3**
AAK pmax pmax
comp=Z,642nm,1.7s
**AAK Ala-Archa 68.12 322 P P 15 55 31.0 -0.2**
comp=Z,641nm,1.8s,SNR=67
**AAK Ala-Archa 68.12 322 P P 15 55 31.9 +0.7**
SNR=120
**AAK Ala-Archa 68.12 322 P P 15 55 31.8 +0.6**
SNR=98
**AAK Ala-Archa 68.12 322 *e*P P 15 55 31.7 +0.6**
AAK LR LR
comp=Z,2μm,21.2s
**FRU Bishkek 68.15 322**⇑ *i*P P 15 55 30.5 -0.7
FRU *i* 15 55 49.0
FRU *e* 15 58 00.0
FRU *e*S S **16 04 30.0 0.0**
FRU *e* 16 08 55.0
FRU pmax pmax
comp=Z,460nm,2.0s
FRU MLR MLR
comp=E,2μm,23.0s
FRU MLR MLR
comp=Z,2μm,23.0s
**CHMS Chumysh 68.16 322 P P 15 55 31.1 -0.2**
SNR=24
**AML Almayashu 68.34 321 P P 15 55 33.4 +0.5**
SNR=44
**USP Ospenovka 68.47 322 P P 15 55 33.4 +0.2**
SNR=115
**EKS2 Erkin-Say 68.58 321 *e*P P 15 55 34.5 +0.5**
EKS2 MLR MLR
comp=Z,1μm,20.1s
**EKS2 Erkin-Say 68.58 321 P P 15 55 34.6 +0.5**
SNR=114
**EKS2 Erkin-Say 68.58 321 *e*P P 15 55 34.5 +0.5**
EKS2 LR LR
comp=Z,1μm,20.1s
**RER Riviere de l'E 68.71 250 *e*P P 15 55 35.6 +0.4**
**KRAR Krasnoyarsk 68.73 341*c* *i*P P 15 55 34.5 0.0**
KRAR pmax pmax
comp=Z,166nm,1.6s
**YAK Yakutsk 69.26 2*c* *i*P P 15 55 38.2 +0.6**
YAK *e**PP **pP 15 55 48.5 +3.2**
YAK *e* 15 56 01.2
YAK *e* 15 58 12.8
YAK *e*S S **16 04 41.9 -0.3**
YAK *e* 16 05 36.6
YAK *e*SSS SSS 16 12 14.1
YAK pmax pmax
comp=Z,252nm,0.9s
YAK pmax pmax
comp=N,170nm,1.3s
YAK pmax pmax
comp=E,66nm,1.1s
YAK pmax pmax
comp=E,164nm,3.0s
YAK pmax pmax
comp=N,105nm,1.7s
YAK pmax pmax
comp=Z,164nm,2.3s
YAK smax smax
comp=E,518nm,3.8s
YAK smax smax
comp=N,1μm,3.3s
**YAK Yakutsk 69.26 2 *e*P P 15 55 37.8 +0.2**
comp=N,338nm,1.0s
YAK LR LR
comp=Z,2μm,19.4s
**MA2 Magadan 69.66 13 *i*P P 15 55 41.7 +1.5**
**ZALV Zalesovo Beam 70.09 336 P P 15 55 42.0 -0.9**
comp=Z,85nm,1.0s,baz=128,slow=4.3,SNR=186
ZALV PKPPKP **P'P'df 16 23 44.4 -0.2**
comp=Z,1.0nm,0.7s,baz=318,slow=2.0,SNR=7.6
ZALV LR LR 16 28 36.8
comp=Z,607nm,21.4s,baz=132,slow=38
**ZALV Zalesovo Beam 70.09 336 P P 15 55 42.0 -0.9**
ZALV pmax pmax
comp=Z,85nm,1.0s
**KURBB Kurchatov Arra 70.65 330 P P 15 55 46.0 -0.4**
comp=Z,57nm,1.0s,baz=138,slow=5.0,SNR=270
**KURK Kurchatov 70.66 330 P P 15 55 46.1 -0.5**
KURK pmax pmax
comp=Z,57nm,1.0s
**KURK Kurchatov 70.66 330 P P 15 55 46.0 -0.5**
comp=Z,923nm,1.3s,SNR=94
**KURK Kurchatov 70.66 330 P P 15 55 46.0 -0.5**
**NVS Novosibirsk 71.38 336**⇑ *i*P P **15 55 49.6 -1.1**
NVS *i* 15 58 27.7
NVS *e*S S 16 04 56.7 -11
NVS *e* 16 05 46.0
NVS pmax pmax
comp=N,156nm,1.6s
NVS pmax pmax
comp=Z,308nm,1.6s
NVS pmax pmax
comp=E,134nm,1.4s
NVS pmax pmax
comp=Z,102nm,2.0s
NVS pmax pmax
comp=N,73nm,1.8s
NVS pmax pmax
comp=E,82nm,2.1s
NVS smax smax
comp=E,54nm,2.5s
**WBK Wadi Bani Khal 71.73 297 P P 15 55 53.9 +0.3**
SNR=19
**SMY Shemya 72.58 28** PFAKE 15 56 10.0 +12
SMY LR LR
comp=Z,2μm,21.6s
**VNDA Vanda 72.63 172 P P 15 55 58.6 +0.6**
comp=Z,57nm,0.9s,baz=319,slow=6.1,SNR=202
VNDA LR LR 16 25 38.7
comp=Z,7μm,21.8s,baz=344,slow=34
**VNDA Vanda 72.63 172 P P 15 55 58.6 +0.6**
VNDA pmax pmax
comp=Z,57nm,0.9s
VNDA MLR MLR
comp=Z,7μm,21.8s
**VNDA Vanda 72.63 172 *e*P P 15 55 58.5 +0.5**
**SMDO Samad 72.67 297 P P 15 55 59.3 -0.1**
SNR=17
**RAR Rarotonga 72.98 110** LR LR 16 29 09.2
comp=Z,653nm,18.1s,baz=253,slow=37
**SEY Seymchan 73.01 12*c* *i*P P 15 56 01.8 +1.4**
**MAW Mawson 73.07 201 P P 15 56 01.5 +0.8**
comp=Z,74nm,1.1s,baz=69,slow=7.3,SNR=25
MAW LR LR 16 27 01.3
comp=Z,2μm,18.5s,baz=58,slow=35
**MAW Mawson 73.07 201 P P 15 56 01.5 +0.8**
MAW pmax pmax
comp=Z,74nm,1.1s
MAW MLR MLR
comp=Z,2μm,18.5s
**MAW Mawson 73.07 201 P P 15 56 01.6 +0.8**
baz=73,SNR=16
**HOQ Hoqain 73.47 297 P P 15 56 04.0 +0.1**
SNR=41
**SBA Scott Base 73.57 172 *e*P P 15 56 05.1 +1.6**
SBA MLR MLR
comp=Z,4μm,20.4s
**SBA Scott Base 73.57 172 *e*P P 15 56 05.1 +1.6**
SBA LR LR
comp=Z,4μm,20.4s
**SHAO Shalim 73.59 291 P P 15 56 05.7 +1.0**
SNR=12
**ARQ Araqi 74.10 297 P P 15 56 07.6 -0.1**
SNR=35
**IDAH Dahanechah 74.11 307 *e*P P 15 56 08.2 +0.4**
**IMON Monand 74.42 307 *e*P P 15 56 10.1 +0.4**
**IKOO Kooshah 74.69 306 *e*P P 15 56 11.1 -0.1**

**RBK Rabkut 74.79 290 P P 15 56 11.8 0.0**
SNR=48
**UOSS Wadi Hilu 74.81 298 P P 15 56 11.0 -0.7**
comp=Z,537nm,1.5s,SNR=34
**UOSS Wadi Hilu 74.81 298 *e*P P 15 56 11.1 -0.7**
UOSS LR LR
comp=Z,700nm,20.6s
**HATD Hatta, Dubai 74.84 298**⇓ *i*P P 15 56 11.8 -0.1
SNR=31
**ASHO Ashiyiah 74.86 298 P P 15 56 12.1 0.0**
SNR=49
**ASHO Ashiyiah 74.86 298** *i*P P 15 56 11.9 -0.2
SNR=33
**BANOM Banah 74.99 299 P P 15 56 12.9 +0.1**
SNR=40
**BANOM Banah 74.99 299** *i*P P 15 56 12.9 +0.1
SNR=54
**ITEG Tejag 75.05 307 *e*P P 15 56 13.2 0.0**
**IMYA Miami 75.18 310 *e*P P 15 56 14.5 +0.6**
**FAQ Al Faqa, Dubai 75.29 298**⇓ *i*P P 15 56 14.2 -0.3
SNR=28
**NAZ Nazwa, Dubai 75.29 298**⇓ *i*P P 15 56 14.1 -0.4
SNR=18
**ASUD Al Ashush, Dub 75.49 298**⇓ *i*P P 15 56 15.9 +0.2
SNR=13
**ABTO Aybut 75.60 290 P P 15 56 16.3 -0.2**
SNR=43
**ISRO Mashad 75.65 310 *e*P P 15 56 17.6 +1.1**
**IMOG Moghan 75.68 310 *e*P P 15 56 17.7 +0.8**
**IPAY Payeh 76.05 310 *e*P P 15 56 20.2 +1.2**
**BVAR Borovoye Array 76.14 329 P P 15 56 18.5 -0.3**
comp=Z,30nm,0.9s,baz=138,slow=7.6,SNR=111
**BVAR Borovoye Array 76.14 329 P P 15 56 18.5 -0.3**
BVAR pmax pmax
comp=Z,31nm,0.9s
**BRVK Borovoye 76.21 329*c* *i*P P 15 56 18.7 -0.5**
BRVK pmax pmax
comp=Z,260nm,1.7s
**BRVK Borovoye 76.21 329 P P 15 56 19.1 -0.1**
comp=Z,587nm,1.2s,SNR=54
**BRVK Borovoye 76.21 329 P P 15 56 19.4 +0.2**
SNR=99
**BRVK Borovoye 76.21 329 *e*P P 15 56 18.2 -1.0**
BRVK LR LR
comp=Z,1μm,21.6s
**IAKL Akhelmad 76.29 310 *e*P P 15 56 20.1 -0.3**
**IKRD Kardeh 76.53 310 *e*P** P 15 56 18.2 -3.4
**IEMG Emamgholi 76.64 311 *e*P P 15 56 22.6 +0.2**
**ABPO Ambohimpanom 76.77 252 *e*P P 15 56 23.2 -0.1**
ABPO MLR MLR
comp=Z,900nm,22.0s
**ABPO Ambohimpanom 76.77 252 P P 15 56 23.0 -0.3**
comp=Z,386nm,1.4s,SNR=14
**ABPO Ambohimpanom 76.77 252 *e*P P 15 56 23.2 -0.1**
ABPO LR LR
comp=Z,900nm,22.0s
**ISFR Sfrayin 77.01 311 *e*P P 15 56 24.8 +0.3**
**IBAF Bafgh 77.21 305 *e*P P 15 56 25.1 -0.4**
**ABKT Ailbek 77.22 311 P P 15 56 25.3 0.0**
comp=Z,534nm,1.1s,SNR=45
**GEYT Alibeck 77.22 311 P P 15 56 25.6 +0.4**
comp=Z,36nm,0.8s,baz=151,slow=3.4,SNR=79
GEYT PP **PP 15 59 23.5 +4.0**
comp=Z,29nm,1.3s,baz=90,slow=4.4,SNR=4.2
GEYT LR LR 16 35 54.8
comp=Z,2μm,21.4s,baz=110,slow=40
**ISHV Shirvan 77.40 311 *e*P P 15 56 27.1 +0.6**
**IMEH Mehriz 77.94 304 *e*P P 15 56 28.5 -1.2**
**ATKA Atka Island 78.24 33 *e*P P 15 56 32.0 +1.5**
ATKA LR LR
comp=Z,2μm,20.2s
**ICHK Chekchek 78.34 305 *e*P P 15 56 31.4 -0.5**
**ISAD Sadrabad 78.84 304 *e*P P 15 56 34.2 -0.6**
**IRAM Ramesheh 79.88 304 *e*P P 15 56 39.1 -1.2**
**IGLO Ghaloghah 80.02 309 *e*P P 15 56 40.9 -0.1**
**IZEF Zefreh 80.21 305 *e*P P 15 56 40.9 -1.2**
**IGAR Gharneh 80.31 305 *e*P P 15 56 42.3 -0.4**
**BILL Bilibino 80.48 14*c* *i*P P 15 56 42.5 0.0**
BILL *i* 15 56 47.9
BILL *i*S SS 16 11 56.9 -2.9
BILL pmax pmax
comp=Z,34nm,1.6s
BILL MLR MLR
comp=Z,758nm,17.0s
**BILL Bilibino 80.48 14 *e*P P 15 56 42.8 +0.4**
BILL LR LR
comp=Z,2μm,21.5s
**IFIR Firoozkooh 80.61 308 *e*P P 15 56 44.5 +0.3**
**IALA Alasht 80.69 308 *e*P P 15 56 44.8 +0.1**
**IKLH Kolahrood 80.93 305 *e*P P 15 56 45.6 -0.4**
**IPRN Peran 81.10 308 *e*P P 15 56 46.4 -0.3**
**QAM Ghamsar 81.15 306 *e*P P 15 56 47.6 +0.5**
**IDMV Damavand 81.16 308 *e*P P 15 56 46.8 -0.4**
**IPIR Pirpir 81.33 305 *e*P P 15 56 47.6 -0.6**
**NIKH Nikolski High 81.50 34** PFAKE 15 57 00.0 +12
NIKH LR LR
comp=Z,4μm,20.9s
**SYO Syowa Base 81.77 201**⇓ *i*P P 15 56 48.0 -1.4
**SYO Syowa Base 81.77 201**⇑ *i*P P 15 56 57.6 +8.2
**AKTO Aktyubinsk 81.78 323 P P 15 56 49.7 -0.1**
comp=Z,103nm,1.0s,baz=108,slow=6.4,SNR=91
AKTO PKKPbc **PKKPbc 16 15 21.6 -1.9**
comp=Z,3.2nm,1.0s,baz=271,slow=3.8,SNR=9.7
**IR3 Iran Long-Peri 81.93 307 *e*P P 15 56 51.6 +0.6**
**IR5 Iran Long-Peri 82.21 307 *e*P P 15 56 52.8 +0.3**
**IMHD Mahdasht 82.26 307 *e*P P 15 56 53.0 +0.2**
**TBI Tubuai 82.41 113 *e*S S 16 07 06.2 -2.8**
comp=Z,800nm,27.0s
**TBI Tubuai 82.41 113 *e*LQ LQ 16 19 16.7**
comp=Z,2μm,36.5s
TBI *e*LR LR 16 22 48.4
comp=Z,2μm,29.0s
**QSPA South Pole Qui 82.61 180** PKKPbc PKKPbc 16 15 19.8 -2.6
comp=Z,1.3nm,0.9s,baz=215,slow=1.6,SNR=4.8
**IRAZ Razeghan 82.77 307 *e*P P 15 56 55.9 +0.3**
**IGZV Ghazvin 82.79 308 *e*P P 15 56 55.5 -0.1**
**PPT2 Papeete2 82.81 107 *e*S S 16 07 10.6 -2.8**
comp=Z,812nm,23.2s
**PPT2 Papeete2 82.81 107 *e*LQ LQ 16 19 26.1**
comp=Z,4μm,37.0s
PPT2 *e*LR LR 16 22 53.3
comp=Z,1μm,23.2s
**PPT Papeete 82.81 107** LR LR 16 30 42.7
comp=Z,514nm,20.8s,baz=258,slow=33
**SVE Sverdlovsk 82.90 330*d* *i*P P 15 56 55.5 0.0**
SVE *e* 16 00 06.9
SVE *e*S S **16 07 13.3 +0.7**
SVE pmax pmax
comp=Z,568nm,1.5s
SVE pmax pmax
comp=Z,1μm,7.3s
**UNV Unalaska Valle 83.14 34 *e*P P 15 56 58.0 +1.3**
UNV LR LR
comp=Z,2μm,21.7s
**DAMY Dhamar 83.49 286 *e*P P 15 57 01.5 +1.7**
DAMY LR LR
comp=Z,2μm,21.4s
**AKUT Akutan 83.65 33 *e*P P 15 57 00.3 +1.0**
AKUT LR LR
comp=Z,4μm,21.6s
**ARU Arti 83.79 329 P P 15 56 59.6 -0.5**
comp=Z,0.6nm,0.5s,baz=107,slow=20,SNR=18
**ARU Arti 83.79 329*c* *i*P P 15 56 59.5 -0.5**
ARU 16 00 10.5
ARU S S **16 07 20.7 -0.9**
ARU SS SS 16 12 41.1 -8.2
ARU SSS SSS 16 16 16.8
ARU pmax pmax
comp=Z,524nm,1.7s
ARU MLR MLR
comp=Z,1μm,24.0s
**ARU Arti 83.79 329 P P 15 56 59.4 -0.6**
comp=Z,1μm,1.6s,SNR=65
**ARU Arti 83.79 329 *e*P P 15 56 59.6 -0.5**
ARU LR LR
comp=Z,1μm,21.8s
**RAYN Ar Rayn 84.00 295 P P 15 57 02.0 +0.1**
comp=Z,2μm,1.1s
**RAYN Ar Rayn 84.00 295 *e*P P 15 57 01.4 -0.6**
**IKOM Komasi 84.42 305 *e*P P 15 57 03.0 -1.0**
**GAMB Gambell 84.92 23 *e*P P 15 57 07.6 +2.0**
GAMB LR LR
comp=Z,1μm,19.8s
**ILIN Lien 85.03 306 *e*P P 15 57 06.4 -0.8**
**IVIS Veis 85.03 306 *e*P P 15 57 06.2 -0.8**

**FALS False Pass 85.19 33 *e*P P 15 57 08.2 +1.0**
FALS LR LR
comp=Z,3μm,20.7s
**IGHG Ghaleghazi 85.22 305 *e*P P 15 57 07.4 -0.7**
**IDHR Dehrash 85.44 306 *e*P P 15 57 08.0 -1.2**
**IBST Bostanabad 85.69 309 *e*P P 15 57 09.8 -0.5**
**IHRS Heris 85.71 309 *e*P P 15 57 10.1 -0.4**
**ITBZ Tabriz 86.38 309 *e*P P 15 57 14.0 +0.3**
**IAZR Azarshahr 86.39 309 *e*P P 15 57 14.2 +0.3**
**MAK Makhachkala 86.41 314**α *i*P P 15 57 14.4 +0.9**
MAK *e* 16 00 34.6
MAK *e*PPP PPP 16 02 26.7
MAK *e* 16 07 38.6
MAK *e* 16 07 43.0
MAK *e*SS SS 16 13 26.7 -1.9
MAK pmax pmax
comp=Z,2μm,3.0s
MAK pmax pmax
comp=Z,5μm,2.9s
MAK pmax pmax
comp=E,821nm,1.5s
MAK pmax pmax
comp=N,765nm,1.7s
MAK pmax pmax
comp=N,690nm,2.9s
MAK pmax pmax
comp=E,649nm,2.5s
MAK MLR MLR
comp=N,1μm,23.0s
MAK MLR MLR
comp=E,2μm,24.0s
**ISHB Shabestar 86.79 309 *e*P P 15 57 16.2 +0.4**
**IMRD Marand 86.82 310 *e*P P 15 57 15.9 +0.1**
**SDPT Sand Point 86.95 33 *e*P P 15 57 16.1 +0.3**
SDPT LR LR
comp=Z,4μm,21.5s
**TNA Tin City 87.16 22** PFAKE 15 57 30.0 +13
TNA LR LR
comp=Z,1μm,21.3s
**DGRG David-gareji 87.63 312 P P 15 57 21.3 +1.8**
**DGRG David-gareji 87.63 312 *e*P P 15 57 21.3 +1.8**
**GNI Garni 87.84 311*c* *i*P P 15 57 21.7 +1.0**
**GNI Garni 87.84 311 P P 15 57 22.1 +1.3**
SNR=40
**GNI Garni 87.84 311** *i*P P **15 57 21.9 +1.1**
SNR=31
**GNI Garni 87.84 311 *e*P P 15 57 21.8 +1.0**
comp=Z,4μm,1.6s
GNI LR LR
comp=Z,3μm,21.3s
**HKR Hakkari 88.11 308 *e*P P 15 57 22.3 +0.2**
**TBLG Delisi 88.15 312 *e*P P 15 57 23.2 +1.2**
**TBLG Delisi 88.15 312 P P 15 57 23.0 +0.9**
**TBLG Delisi 88.15 312 *e*P P 15 57 22.9 +0.9**
**CUKT Cukurca 88.15 308 *e*P P 15 57 22.7 +0.5**
**FURI Furi 88.20 279 *e*P P 15 57 25.7 +2.5**
FURI LR LR
comp=Z,2μm,18.7s
**DUS Dusheti 88.25 313 P P 15 57 24.0 +1.5**
**DUS Dusheti 88.25 313 *e*P P 15 57 24.0 +1.5**
**CLDR Calderan 88.27 310 *e*P P 15 57 23.5 +0.6**
**KMBO Kilima Mbogo 88.31 269 P P 15 57 23.6 0.0**
comp=Z,25nm,1.1s,baz=82,slow=5.0,SNR=78
KMBO LR LR 16 33 05.1
comp=Z,741nm,21.3s,baz=96,slow=33
**KMBO Kilima Mbogo 88.31 269** P P **15 57 23.6 0.0**
KMBO pmax pmax
comp=Z,25nm,1.1s
KMBO MLR MLR
comp=Z,741nm,21.3s
**KMBO Kilima Mbogo 88.31 269 P P 15 57 23.9 +0.2**
SNR=71
**KMBO Kilima Mbogo 88.31 269 *e*P P 15 57 23.5 -0.2**
**AKH Akhalkalaki 89.01 312 *e*P P 15 57 27.6 +1.3**
**AKH Akhalkalaki 89.01 312 P P 15 57 27.7 +1.4**
**AKH Akhalkalaki 89.01 312 *e*P P 15 57 27.6 +1.4**
**AKH Akhalkalaki 89.01 312**⇑ *i*P P 15 57 27.8 +1.5
**AGRB Hanur-Agry 89.05 310 *e*P P 15 57 27.7 +1.2**
**SIRT Sirnak 89.11 308 *e*P P 15 57 26.6 -0.1**
**KARS Kars 89.17 311 *e*P P 15 57 27.0 0.0**
**ONI Oni 89.25 313 P P 15 57 28.3 +1.0**
**ONI Oni 89.25 313 *e*P P 15 57 28.2 +1.0**
**NCK Nalchik 89.32 314*c* *i*P P 15 57 28.0 +0.5**
**KBZ Khabaz 89.86 314 P P 15 57 30.1 +0.2**
comp=Z,51nm,0.9s,baz=109,slow=2.2,SNR=75
KBZ LR LR 16 47 21.6
comp=Z,416nm,19.0s,baz=91,slow=42
**KBZ Khabaz 89.86 314 P P 15 57 30.1 +0.2**
KBZ pmax pmax
comp=Z,51nm,0.9s
KBZ MLR MLR
comp=Z,416nm,19.0s
**NEY Neytrino 89.90 314*c* *i*P P 15 57 31.2 +0.8**
NEY pmax pmax
comp=Z,110nm,1.6s
**KIV Kislovodsk 90.05 314*d* *i*P P 15 57 29.3 -1.7**
KIV *i* 15 57 43.8
KIV *i*S SS 16 14 16.0 -5.9
KIV pmax pmax
comp=Z,74nm,1.3s
**KIV Kislovodsk 90.05 314 P P 15 57 31.5 +0.5**
comp=Z,433nm,1.4s,SNR=22
**KIV Kislovodsk 90.05 314 P P 15 57 31.4 +0.4**
SNR=22
**KIV Kislovodsk 90.05 314**⇓ *i*P P **15 57 31.2 +0.3**
SNR=12
**KIV Kislovodsk 90.05 314 *e*P P 15 57 31.3 +0.3**
KIV LR LR
comp=Z,700nm,21.1s
**VRTB Varto-Mus 90.15 309 *e*P P 15 57 34.6 +2.9**
**SVAN Silvan-Diyarba 90.19 308 *e*P P 15 57 32.4 +0.7**
**CHVG Ch'k'valeri 90.27 313 P P 15 57 33.2 +1.3**
**EZM Erzurum 90.34 310 *e*P P 15 57 32.2 -0.5**
**BCA Borcka 90.40 312 *e*P P 15 57 33.2 +0.6**
**MAZI Mazidag 90.67 308 *e*P P 15 57 34.6 +0.6**
**SII Sitkinak Islan 90.68 33** PFAKE 15 57 40.0 +6.5
SII LR LR
comp=Z,2μm,20.1s
**BNGB Bing¯||| 90.72 309 *e*P P 15 57 35.1 +0.8**
**NVL N'lazarevskaya 90.73 198*c* *i*P P 15 57 34.5 +1.0**
NVL *i*S **SKSac 16 08 00.9 -2.5**
NVL pmax pmax
comp=Z,39nm,1.2s
NVL MLR MLR
comp=Z,1μm,14.0s
**SVW2 Sparrevohn 90.98 28** PFAKE 15 57 40.0 +5.2
SVW2 LR LR
comp=Z,1μm,20.3s
**DYBB Diyarbakir 90.99 308 *e*P P 15 57 36.3 +0.8**
**TTA Tatalina 91.22 27** PFAKE 15 57 50.0 +14
TTA LR LR
comp=Z,700nm,19.0s
**OHAK Old Harbor 91.30 33 *e*P P 15 57 37.3 +1.0**
**BAYT Ayd¯–ntepe-Bay 91.34 310 *e*P P 15 57 38.4 +1.2**
**MNKR ALMNKUR 91.39 306 *e*P** P 15 57 32.9 -4.4
**ERZN Erzincan 91.55 310 *e*P P 15 57 38.5 +0.4**
**KSRV Kasrt alli 91.59 306 *e*P P 15 57 36.3 -1.9**
**SVRC Sivrice-ELAZID 91.70 308 *e*P P 15 57 39.6 +0.7**
**PTK Pertek 91.70 309 *e*P P 15 57 39.6 +0.7**
**KTUT Trabzon 91.71 311 *e*P P 15 57 38.9 +0.2**
**KDAK Kodiak Island 91.78 32 *e*P P 15 57 39.1 +0.6**
KDAK pmax pmax
comp=Z,77nm,1.1s
KDAK MLR MLR
comp=Z,2μm,21.9s
**KDAK Kodiak Island 91.78 32 *e*P P 15 57 39.1 +0.6**
comp=Z,77nm,1.1s
KDAK LR LR
comp=Z,2μm,21.9s
**VRH Novokhopyorsk 91.92 321 *e*P P 15 57 38.7 -0.6**
VRH *e* 16 01 17.7
VRH pmax pmax
comp=Z,270nm,1.0s
VRH pmax pmax
comp=N,150nm,1.6s
VRH pmax pmax
comp=E,320nm,1.4s
VRH pmax pmax
comp=E,60nm,2.2s
VRH pmax pmax
comp=Z,50nm,2.2s
VRH pmax pmax
comp=N,80nm,1.5s
**URFA Urfa 91.95 307 *e*P P 15 57 40.8 +0.8**

**JHLN Al Jahlan 92.02 306** *e*P **P** 15 57 43.4 +3.2
**SOC Sochi 92.12 313***c i*P **P** 15 57 39.6 -0.8
SOC *e**SP **sP** 15 57 47.8 -3.4
SOC *e* 16 01 16.6
SOC *e*PPP PPP 16 03 17.0
SOC *e*S **SKSac** 16 08 11.3 -0.9
SOC *e* 16 08 42.4
SOC *e*SSS SSS 16 18 26.4
SOC pmax pmax
comp=Z,93nm,1.2s
SOC MLR MLR
comp=Z,884nm,21.0s
**MALT Malatya 92.37 308** *e*P **P** 15 57 42.9 +1.0
**MALT Malatya 92.37 308**⇑*i*P **P** 15 57 42.4 +0.5
**MALT Malatya 92.37 308**⇑*i*P **P** 15 57 42.4 +0.5
**ILIC ilic-Erzincan 92.41 309** *e*P **P** 15 57 43.1 +1.0
**SLMH Al Salmeh 92.50 306** *e*P P 15 57 36.1 -6.4
**ZALF Zalf 92.58 303** *e*P **P** 15 57 43.3 +0.4
**HOM Homer 92.60 30** PFAKE 15 57 50.0 +7.7
HOM LR LR
comp=Z,2μm,20.1s
**ROOS tl_alroos 92.77 304** *e*P **P** 15 57 45.0 +1.2
**CNPM China Poot 92.78 30** *e*P **P** 15 57 43.5 +0.3
comp=Z,338nm,1.6s
CNPM LR LR
comp=Z,1μm,21.9s
**PPLA Purkeypile 92.92 27** PFAKE 15 57 50.0 +6.1
PPLA LR LR
comp=Z,1μm,21.0s
**BRLK Bradley Lake 93.00 30** *e*P **P** 15 57 41.3 -2.9
BRLK LR LR
comp=Z,900nm,21.2s
**CAST Castle Rocks 93.06 27** PFAKE 15 57 50.0 +5.6
CAST LR LR
comp=Z,2μm,21.7s
**DARE Darende-Malaty 93.14 308** *e*P **P** 15 57 46.4 +1.0
**SUA Susitna One 93.34 29** PFAKE 15 58 00.0 +14
SUA LR LR
comp=Z,1μm,21.7s
**TOTH TOTAH 93.39 303** *e*P **P** 15 57 46.9 +0.2
**VORD Divnogorie 93.40 321** *e*P **P** 15 57 45.1 -1.1
VORD *e* 16 01 32.1
VORD pmax pmax
comp=Z,190nm,1.1s
VORD pmax pmax
comp=N,20nm,0.6s
VORD pmax pmax
comp=E,120nm,0.9s
VORD pmax pmax
comp=Z,40nm,1.8s
VORD pmax pmax
comp=N,30nm,0.9s
VORD pmax pmax
comp=E,40nm,1.0s
**KMRS Kahramanmaras 93.47 307** *e*P **P** 15 57 46.8 -0.2
**RSDY Resadiye-TOKAT 93.48 310** *e*P **P** 15 57 46.9 0.0
**VSR Storozhevoye 93.51 321** *e*P **P** 15 57 45.9 -0.8
VSR *e* 16 01 28.8
VSR pmax pmax
comp=Z,400nm,1.7s
VSR pmax pmax
comp=N,30nm,1.1s
VSR pmax pmax
comp=E,160nm,1.1s
VSR pmax pmax
comp=N,20nm,1.4s
VSR pmax pmax
comp=Z,40nm,1.4s
VSR pmax pmax
comp=E,50nm,1.8s
**HAWK Haweek 93.54 304** *e*P **P** 15 57 47.4 +0.1
**VORR Voronezh 93.54 321**⇓*i*P **P** 15 57 46.0 -0.8
VORR pmax pmax
comp=Z,450nm,1.6s
**DRWC Darouich 93.56 306** *e*P **P** 15 57 46.9 -0.5
**KTH Kantishna Hill 93.60 26** PFAKE 15 58 00.0 +13
KTH LR LR
comp=Z,1μm,21.7s
**WRDH Warideh 93.64 305** *e*P **P** 15 57 48.5 +0.7
**BPAW Bear Paw Mtn. 93.66 26** PFAKE 15 58 00.0 +13
BPAW LR LR
comp=Z,900nm,19.9s
**BIDA Albida 93.66 305** *e*P **P** 15 57 47.8 -0.1
**BTCH Batrach 93.66 306** *e*P **P** 15 57 46.4 -1.5
**SVSK Karacayir 93.67 310** *e*P **P** 15 57 48.7 +1.0
**TCHB Talchebab 93.69 302** *e*P **P** 15 57 48.5 +0.5
**SEW Seward 93.77 30** PFAKE 15 58 00.0 +12
SEW LR LR
comp=Z,1μm,20.0s
**LPSR Galich'ya Gora 93.83 322** *e*P **P** 15 57 47.6 -0.5
LPSR *e* 16 01 32.4
LPSR pmax pmax
comp=Z,240nm,1.1s
LPSR pmax pmax
comp=N,10.0nm,0.7s
LPSR pmax pmax
comp=E,100nm,1.2s
LPSR pmax pmax
comp=Z,30nm,2.0s
LPSR pmax pmax
comp=N,30nm,2.2s
LPSR pmax pmax
comp=E,40nm,1.7s
**TRF Thorofare Moun 93.86 27** PFAKE 15 58 00.0 +12
TRF LR LR
comp=Z,900nm,21.7s
**ANN Anapa 93.90 314** *e*P **P** 15 57 46.4 -2.2
ANN *e**PP **pP** 15 57 53.0 -3.5
ANN *e* 16 01 32.0
ANN *e*PPP PPP 16 03 33.0
ANN *e*S **SKSac** 16 08 19.7 -2.3
ANN *e*SS **SS** 16 15 18.5 +1.6
ANN *e*SSS SSS 16 18 53.5
ANN pmax pmax
comp=N,34nm,1.1s
ANN pmax pmax
comp=Z,88nm,1.2s
ANN pmax pmax
comp=E,7.0nm,1.1s
**TAHT Tahtakopru-Hat 93.92 306** *e*P **P** 15 57 49.4 +0.4
**SARI SarD1z-Kayseri 93.95 308** *e*P **P** 15 57 49.6 +0.3
**TOKT Tokat 94.06 310** *e*P **P** 15 57 49.5 -0.1
**PMR Palmer 94.13 29** PFAKE 15 58 00.0 +11
PMR LR LR
comp=Z,1μm,20.8s
**EIL Elat 94.24 299** P **P** 15 57 50.5 0.0
comp=Z,11nm,1.1s,baz=109,slow=2.1,SNR=28
**SNAA Sanae 94.28 194** P **P** 15 57 50.2 +0.2
**SNAA Sanae 94.28 194** PKKP **PKKPbc** 16 14 50.0 -3.1
comp=Z,0.5nm,0.7s,baz=336,slow=6.0,SNR=4.7
**SNAA Sanae 94.28 194***c i*P **P** 15 57 49.8 -0.2
SNAA pmax pmax
comp=Z,30nm,1.9s
**SNAA Sanae 94.28 194** *e*P **P** 15 57 50.1 +0.1
SNAA PKKP **PKKPbc** 16 14 50.0 -3.1
SNAA LR LR
comp=Z,1μm,21.0s
**BWN Browne 94.33 26** PFAKE 15 58 00.0 +10
BWN LR LR
comp=Z,1μm,20.7s
**CEYT Ceyhan 94.33 307** *e*P **P** 15 57 51.2 +0.4
**BNN Bunyan 94.45 308** *e*P **P** 15 57 51.7 +0.2
**COLD Coldfoot 94.45 23** *e*P **P** 15 57 51.5 +0.8
comp=Z,109nm,1.2s
COLD LR LR
comp=Z,700nm,19.2s
**RND Reindeer 94.49 27** PFAKE 15 58 00.0 +8.9
RND LR LR
comp=Z,1μm,20.9s
**MCK McKinley 94.50 26** PFAKE 15 58 00.0 +9.0
MCK LR LR
comp=Z,1μm,22.0s
**KLMR Klimovskoe 94.51 331***c i*P **P** 15 57 49.4 -1.6
KLMR pmax pmax
comp=Z,321nm,1.5s
KLMR MLR MLR
comp=Z,1μm,17.0s
**KVT Kavak 94.52 311** *e*P **P** 15 57 52.4 +0.7
**SML Sawmill 94.53 28** PFAKE 15 58 00.0 +8.8
SML LR LR
comp=Z,1μm,21.2s
**KRTS Karatas 94.59 306** *e*P **P** 15 57 51.9 -0.1
**MBAR Mbarara 94.84 269** *e*P **P** 15 57 52.6 -1.3
MBAR MLR MLR
comp=Z,900nm,19.8s

**MBAR Mbarara 94.84 269** *e*P **P** 15 57 52.6 -1.3
MBAR LR LR
comp=Z,900nm,19.8s
**KARA Karaisali 94.91 307** *e*P **P** 15 57 53.1 -0.4
**MOS Moscow 94.94 325** *e*P P 15 57 49.4 -3.7
MOS *e* 16 01 38.0
MOS pmax pmax
comp=Z,356nm,1.9s
**MDM Murphy Dome 94.95 25** PFAKE 15 58 00.0 +6.9
MDM LR LR
comp=Z,600nm,20.2s
**WRH Wood River Hil 94.96 26** PFAKE 15 58 00.0 +7.0
WRH LR LR
comp=Z,1μm,21.1s
**SCM Sheep Creek Mo 95.01 28** PFAKE 15 58 00.0 +6.5
SCM LR LR
comp=Z,700nm,21.1s
**CCB Clear Creek Bu 95.10 26** PFAKE 15 58 00.0 +6.3
CCB LR LR
comp=Z,800nm,20.1s
**COLA College 95.11 25***c i*P **P** 15 57 52.6 -1.1
COLA pmax pmax
comp=Z,91nm,1.7s
**COLA College 95.11 25** PFAKE 15 58 00.0 +6.3
COLA LR LR
comp=Z,1μm,21.3s
**LSZ Lusaka 95.26 254** *e*P **P** 15 57 53.8 -1.9
LSZ pmax pmax
comp=Z,126nm,1.5s
**LSZ Lusaka 95.26 254** *e*P **P** 15 57 53.8 -1.9
comp=Z,126nm,1.5s
**NIG Nigde 95.34 308** *e*P **P** 15 57 55.8 +0.1
**HDA Harding Lake 95.44 26** *e*P **P** 15 57 54.6 -0.7
HDA LR LR
comp=Z,1μm,20.0s
**OBN Obninsk 95.48 325***c i*P **P** 15 57 54.9 -0.7
OBN *i* 15 58 02.4
OBN *i* 16 01 46.8
OBN *i*S **SKSac** 16 08 23.8 -6.2
OBN pmax pmax
comp=Z,445nm,1.7s
OBN MLR MLR
comp=Z,2μm,24.0s
**OBN Obninsk 95.48 325** P **P** 15 57 55.6 0.0
comp=Z,913nm,1.6s,SNR=9.7
**OBN Obninsk 95.48 325** *e*P **P** 15 57 55.0 -0.6
OBN LR LR
comp=Z,1μm,20.0s
**ILAR Eielson Array 95.51 25** P **P** 15 57 53.6 -1.9
comp=Z,19nm,0.9s,baz=274,slow=4.4,SNR=47
ILAR PP PP 16 01 53.8 +7.2
comp=Z,2.9nm,1.1s,baz=264,slow=6.5,SNR=4.5
ILAR PKKPbc **PKKPbc** 16 14 46.8 -3.1
comp=Z,0.9nm,0.8s,baz=74,slow=1.1,SNR=5.3
ILAR LR LR 16 41 22.6
comp=Z,289nm,18.8s,baz=271,slow=36
**ILAR Eielson Array 95.51 25** P **P** 15 57 53.7 -1.9
ILAR 16 01 53.8
ILAR pmax pmax
comp=Z,19nm,0.9s
ILAR pmax pmax
comp=Z,3.0nm,1.1s
ILAR MLR MLR
comp=Z,289nm,18.8s
**CORM Corum 95.51 310** *e*P **P** 15 57 56.5 +0.2
**TMCR Tamitsa 95.55 334** *e*P **P** 15 57 54.9 -0.8
TMCR pmax pmax
comp=Z,65nm,0.9s
**BOSA Boshof 95.58 240** P **P** 15 57 56.4 -0.5
comp=Z,51nm,1.3s,baz=112,slow=5.4,SNR=16
BOSA LR LR 16 34 25.3
comp=Z,988nm,21.8s,baz=102,slow=31
**BOSA Boshof 95.58 240** P **P** 15 57 56.4 -0.5
BOSA pmax pmax
comp=Z,51nm,1.3s
BOSA MLR MLR
comp=Z,988nm,21.8s
**RKT Rikitea 95.64 114** *e*LR LR 16 28 51.6
comp=Z,1μm,25.5s
**KLU Klutina 95.64 29** PFAKE 15 58 10.0 +14
KLU LR LR
comp=Z,1μm,20.6s
**EYAK Cordova Ski Ar 95.65 30** PFAKE 15 58 10.0 +14
EYAK LR LR
comp=Z,1μm,19.5s
**GULA Gulagac 95.66 308** *e*P **P** 15 57 55.9 -1.1
**DIV Divide 95.69 29** PFAKE 15 58 10.0 +13
DIV LR LR
comp=Z,1μm,21.4s
**VNA2 Neumayer--Watz 95.88 194** P **P** 15 57 57.6 +0.4
baz=123,slow=4.8
**LBTB Lobatse 95.98 244** *e*P **P** 15 57 58.8 0.0
LBTB MLR MLR
comp=Z,2μm,19.8s
**LBTB Lobatse 95.98 244** *e*P **P** 15 57 58.8 0.0
LBTB LR LR
comp=Z,2μm,19.8s
**YESY Yesilyurt 96.00 307** *e*P **P** 15 57 57.4 -1.2
**YAYX Yaylak 96.03 308** *e*P **P** 15 57 56.5 -2.3
**HARP HAARP 96.08 28** PFAKE 15 58 10.0 +12
HARP LR LR
comp=Z,1μm,21.3s
**CSS Prodhromos 96.10 304** *e*P **P** 15 57 58.6 -0.3
CSS LR LR
comp=Z,400nm,18.3s
**KAMT Kaman 96.14 309** *e*P P 15 57 54.4 -4.8
**RAGM Ragged Mountai 96.17 30** PFAKE 15 58 10.0 +11
RAGM LR LR
comp=Z,800nm,20.7s
**VNA3 Neumayer Olymp 96.19 193** P **P** 15 57 58.7 +0.1
**SULT Sultanhani-AKS 96.21 308** *e*P **P** 15 57 57.0 -2.5
**SERE Sereflikochisa 96.23 308** *e*P **P** 15 57 59.1 -0.5
**BRTR Keskin Array B 96.23 309** P **P** 15 57 58.4 -1.2
comp=Z,15nm,0.8s,baz=130,slow=5.7,SNR=77
BRTR PP **PP** 16 01 49.1 -3.9
comp=Z,5.2nm,1.0s,baz=100,slow=6.4,SNR=4.9
BRTR LR LR 16 48 44.4
comp=Z,312nm,19.5s,baz=89,slow=40
**BRTR Keskin Array B 96.23 309***ce*P **P** 15 57 58.7 -0.9
BRTR pmax pmax
comp=Z,15nm,0.9s
**BMRM Bremner River 96.24 29** *e*P **P** 15 57 58.4 -0.7
comp=Z,150nm,1.3s
BMRM LR LR
comp=Z,1μm,20.2s
**SIM Simferopol'** **96.26 314***ce*P **P** 15 57 58.9 -0.5
SIM *PP **pP** 15 58 08.0 +0.6
SIM *e* 16 01 53.0
SIM *e*S **S** 16 09 15.0 -2.9
SIM pmax pmax
comp=Z,49nm,1.3s
SIM pmax pmax
comp=Z,190nm,2.1s
**VNA1 Neumayer--Stat 96.28 194** P **P** 15 57 59.8 +0.8
**CANT Cankiri 96.31 310** *e*P **P** 15 57 58.6 -1.3
**FYU Fort Yukon 96.33 24** PFAKE 15 58 10.0 +11
FYU LR LR
comp=Z,700nm,20.2s
**ANTO Ankara 96.89 309** *e*P **P** 15 58 02.4 -0.1
ANTO MLR MLR
comp=Z,600nm,21.5s
**ANTO Ankara 96.89 309**⇑*i*P **P** 15 58 01.8 -0.7
**ANTO Ankara 96.89 309** P **P** 15 58 02.1 -0.4
SNR=14
**ANTO Ankara 96.89 309** *e*P **P** 15 58 02.4 -0.1
ANTO LR LR
comp=Z,600nm,21.5s
**LVZ Lovozero 97.17 338** PFAKE 15 58 10.0 +6.8
LVZ LR LR
comp=Z,2μm,19.4s
**APA Apatity 97.63 337**⇑*i*P **P** 15 58 04.0 -1.1
APA *i* 16 01 59.0
APA *i* 16 08 32.0
APA *i*S **S** 16 09 23.0 -5.6
**EGAK Eagle 97.96 26** *e*P **P** 15 58 05.7 -0.9
comp=Z,106nm,1.5s
EGAK LR LR
comp=Z,900nm,22.0s
**PCA Pinnacle 98.36 30** *e*P Pdif 15 58 11.1 +2.4
PCA LR LR
comp=Z,2μm,19.9s
**PCA Pinnacle 98.36 30** *e*P Pdif 15 58 11.1 +2.4
comp=Z,39nm,0.9s
**SUR Sutherland 98.49 236** *e*P Pdif 15 58 11.4 +1.3
SUR *e*PP **PP** 16 02 10.8 +0.3

SUR LR LR
comp=Z,3μm,21.3s
**ISP Isparta 98.55 307** *i*P **P** 15 58 08.4 -1.7
ISP pmax pmax
comp=Z,78nm,1.8s
**ISP Isparta 98.55 307** PFAKE 15 58 20.0 +10
ISP LR LR
comp=Z,800nm,22.0s
**YKU2 Yakutat 98.65 31** PFAKE 15 58 20.0 +10
YKU2 LR LR
comp=Z,3μm,20.6s
**DHAK Deception Hill 99.41 31** PFAKE 15 58 20.0 +6.7
DHAK LR LR
comp=Z,900nm,21.5s
**PTCN Pitcairn Islan 99.62 117** PFAKE 15 58 30.0 +15
PTCN LR LR
comp=Z,3μm,18.1s
**AKASG Malin Array Be 99.75 320** P **Pdif** 15 58 14.1 -0.9
comp=Z,24nm,0.9s,baz=80,slow=3.9,SNR=152
AKASG PP **PP** 16 02 16.6 -2.9
comp=Z,0.8nm,0.6s,baz=79,slow=5.8,SNR=4.2
AKASG LR LR 16 48 25.1
comp=Z,523nm,20.6s,baz=75,slow=38
**AKASG Malin Array Be 99.75 320** P **Pdif** 15 58 14.1 -0.9
AKASG 16 02 16.6
AKASG pmax pmax
comp=Z,25nm,0.9s
AKASG pmax pmax
comp=Z,1.0nm,0.6s
AKASG MLR MLR
comp=Z,523nm,20.6s
**KIEV Kiev 99.76 320***c i*P **Pdif** 15 58 13.9 -1.1
KIEV pmax pmax
comp=Z,163nm,1.7s
**KIEV Kiev 99.76 320** *e*Pdif **Pdif** 15 58 14.2 -0.8
comp=Z,300nm,1.8s
KIEV LR LR
comp=Z,1μm,19.9s
**TLCR 100.02 315**⇓P **Pdif** 15 58 16.2 -0.1
**TLCR 100.02 315**⇓*i*P **Pdif** 15 58 16.2 -0.1
**KIS Kishinev 100.03 316** *e*P **Pdif** 15 58 16.0 -0.3
**KIS Kishinev 100.03 316** *e*PP PP 16 02 23.0 +1.3
**KIS Kishinev 100.03 316** *e*PS **Sdif** 16 09 43.0 -6.7
KIS LRM MLR 16 43 36.0
comp=Z,2μm,24.0s
**KIS Kishinev 100.03 316** *e*P **Pdif** 15 58 16.0 -0.3
KIS *e* 16 02 23.0
KIS *e* 16 08 50.0
KIS *e*PS **Sdif** 16 09 43.0 -6.7
KIS MLR MLR
comp=Z,1μm,22.0s
KIS MLR MLR
comp=E,500nm,23.0s
KIS MLR MLR
comp=Z,2μm,24.0s
**TIRR Tirgusor 100.31 314** *e*P **Pdif** 15 58 17.5 -0.1
TIRR MLR MLR
comp=Z,800nm,21.9s
**TIRR Tirgusor 100.31 314**⇓*i*P **Pdif** 15 58 17.7 +0.1
**TIRR Tirgusor 100.31 314** *e*Pdif **Pdif** 15 58 17.5 -0.1
TIRR LR LR
comp=Z,800nm,21.9s
**ARCES ARCESS Array B 100.42 339** P **Pdif** 15 58 16.9 -0.6
comp=Z,11nm,0.8s,baz=76,slow=2.5,SNR=17
**ARCES ARCESS Array B 100.42 339** P **Pdif** 15 58 17.0 -0.6
ARCES pmax pmax
comp=Z,11nm,0.8s
**MICGM Minsk 100.49 324**⇓*i*P **Pdif** 15 58 18.0 -0.2
**CFR Carcaliu 100.50 315**⇓P **Pdif** 15 58 17.6 -0.8
**CFR Carcaliu 100.50 315**⇓*i*P **Pdif** 15 58 17.6 -0.8
**MNK Minsk 100.52 324**⇓*i*P **Pdif** 15 58 18.0 -0.3
MNK *e*S **Sdif** 16 09 46.0 -7.5
MNK *e*PS PS 16 11 15.0 -11
MNK pmax pmax
comp=E,470nm,1.2s
MNK pmax pmax
comp=Z,440nm,1.0s
**TLB Topalu 100.57 314**⇑P **Pdif** 15 58 18.1 -0.7
**TLB Topalu 100.57 314**⇑*i*P **Pdif** 15 58 18.1 -0.7
**SKAG Skagway 100.87 31** *e*Pdif **Pdif** 15 58 21.1 +1.3
SKAG LR LR
comp=Z,700nm,20.7s
**VSU Vasula 100.93 328***c i*P **Pdif** 15 58 19.2 -0.8
VSU pmax pmax
comp=Z,250nm,1.7s
**FINES FINESS Array B 101.03 331** P **Pdif** 15 58 19.1 -1.3
comp=Z,3.6nm,0.8s,baz=30,slow=12,SNR=6.4
FINES PKiKP **PKiKP** 16 02 46.9 +1.4
comp=Z,3.2nm,0.7s,baz=48,slow=2.1,SNR=5.4
**PRD Provadia 101.04 313** *i*P **Pdif** 15 58 21.0 +0.1
**PRD Provadia 101.04 313** *i*P **PP** 16 02 32.1 +2.6
**SPB1 Spitsbergen Ar 101.08 349** *e*Pdif **Pdif** 15 58 21.1 +0.7
**SPA1 Spitsbergen Ar 101.09 349** *e*Pdif **Pdif** 15 58 21.1 +0.6
**SPB2 Spitsbergen Ar 101.09 349** *e*Pdif **Pdif** 15 58 21.0 +0.6
**SPA2 Spitsbergen Ar 101.09 349** *e*Pdif **Pdif** 15 58 20.6 +0.2
**SPB5 Spitsbergen Ar 101.09 349** *e*Pdif **Pdif** 15 58 21.1 +0.7
**SPA0 Spitsbergen Ar 101.09 349** *e*Pdif **Pdif** 15 58 21.0 +0.6
**SPA3 Spitsbergen Ar 101.09 349** *e*Pdif **Pdif** 15 58 20.9 +0.4
**SPB3 Spitsbergen Ar 101.09 349** *e*Pdif **Pdif** 15 58 20.5 +0.1
**SPB4 Spitsbergen Ar 101.09 349** *e*Pdif **Pdif** 15 58 21.1 +0.6
**NACGM Naroch 101.11 324** *e* **Pdif** 15 58 20.0 -0.9
**IDID Didziasalis 101.11 325** *e*P **Pdif** 15 58 20.6 -0.3
IDID IAmb IAmb 15 58 21.7
comp=Z,40nm,1.2s
**BESE Bessie Mountai 101.18 32** PFAKE 15 58 30.0 +8.8
BESE LR LR
comp=Z,1μm,21.5s
**IZAR Zarasai 101.37 325** *e*P **Pdif** 15 58 21.1 -0.9
IZAR IAmb IAmb 15 58 23.0
comp=Z,16nm,0.8s
**IIGN Ignalina 101.41 325** *e*P **Pdif** 15 58 22.0 -0.2
IIGN IAmb IAmb 15 58 24.4
comp=Z,38nm,1.2s
**ISAL Salakas 101.45 325** *e*P **Pdif** 15 58 21.9 -0.5
ISAL IAmb IAmb 15 58 24.6
comp=Z,58nm,1.6s
**VRI Vrincioaia 101.49 315**⇓P **Pdif** 15 58 23.4 +0.5
**VRI Vrincioaia 101.49 315**⇓*i*P **Pdif** 15 58 23.4 +0.5
**TESR Tescani 101.53 316**⇑*i*P **Pdif** 15 58 22.8 -0.2
**PLOR Plostina 101.54 315**⇑P **Pdif** 15 58 23.0 -0.1
**PLOR Plostina 101.54 315**⇑*i*P **Pdif** 15 58 23.0 -0.1
**KBS Kingsbay 101.67 350** PFAKE 15 58 30.0 +7.1
KBS LR LR
comp=Z,1μm,20.7s
**SULR 101.85 314**⇑*i*P **Pdif** 15 58 25.1 +0.7
**MLR Muntele Rosu 102.05 315**⇓P **Pdif** 15 58 24.8 -0.7
**MLR Muntele Rosu 102.05 315**⇓*i*P **Pdif** 15 58 24.8 -0.7
**SZH Strazhica 102.11 313** *i*P **Pdif** 15 58 25.9 +0.2
**DOPR Dopca 102.42 315**⇓*i*P **Pdif** 15 58 27.4 +0.4
**BURAR Bucovina Array 102.46 317**⇑P **Pdif** 15 58 27.7 +0.4
**BURAR Bucovina Array 102.46 317**⇑*i*P **Pdif** 15 58 27.7 +0.4
**KDZ Kurdzhali 102.53 311** *i*P **Pdif** 15 58 25.9 -1.7
**KDZ Kurdzhali 102.53 311** *i*P **PP** 16 02 40.3 -0.5
**SANT Santorini 102.56 306** PFAKE 15 58 40.0 +12
SANT LR LR
comp=Z,600nm,22.0s
**VOIR 102.68 315**⇑P **Pdif** 15 58 31.0 +2.8
**VOIR 102.68 315**⇑*i*P **Pdif** 15 58 31.0 +2.8
**WRAK Wrangell Islan 102.72 34** PFAKE 15 58 40.0 +12
WRAK LR LR
comp=Z,900nm,20.9s
**ARR Arges 102.97 315**⇓*i*P **Pdif** 15 58 29.6 +0.1
**IDI Anoyia 103.02 304** PFAKE 15 58 40.0 +10
IDI LR LR
comp=Z,400nm,18.1s
**PLD Plovdiv 103.05 311** *i*P **Pdif** 15 58 29.9 0.0
**RZN Rozhen 103.05 311** *i*P **PP** 16 02 44.9 -0.1
**LVV L'vov 103.11 319** *e*P **Pdif** 15 58 29.2 -0.8
LVV *i* 16 02 50.8
LVV *e* 16 09 08.8
LVV *e*S Sdif 16 10 00.6 -15
LVV *e*PS **PS** 16 11 53.2 -0.8
LVV *e*SS **SS** 16 17 31.6 +5.7
**SUW Suwalki 103.28 324** *e*P **Pdif** 15 58 30.3 -0.3
SUW *e*PP **PKiKP** 16 02 49.2 -0.6
SUW LMZ LR 16 45 36.3
**SUW Suwalki 103.28 324** *e*P **Pdif** 15 58 30.4 -0.2
SUW *e* 16 02 49.3
SUW MLR MLR
comp=Z,2μm,27.3s
**PGB Panagyurishte 103.43 312** *i*P **PP** 16 02 45.7 -1.9
**LOT Lotru 103.58 315**⇓*i*P **Pdif** 15 58 32.0 -0.3
**MPEP Malo Peshtene 103.71 313** *i*P **Pdif** 15 58 32.8 0.0

**MPEP Malo Peshtene 103.71 313** *i* P **PP** **16 02 49.3 -0.3**
**DLBC Dease Lake 103.71 32** PFAKE 15 58 40.0 +7.5
DLBC LR LR
comp=Z,700nm,20.9s
**KWP Kalwaria Pacla 103.99 319** *e*P **Pdif** **15 58 34.4 +0.5**
KWP LMZ LR 16 44 37.9
**KWP Kalwaria Pacla 103.99 319** *e*P **Pdif** **15 58 34.4 +0.5**
**VTS Vitosha 104.14 312** *i* P **Pdif** **15 58 33.8 -1.1**
**VTS Vitosha 104.14 312** *i* P **PP** **16 02 52.6 -0.4**
**DRGR 104.22 316** ⇑P **Pdif** **15 58 35.1 0.0**
**DRGR 104.22 316** ⇑*i*P **Pdif** **15 58 35.1 0.0**
**TRPA Tarpa 104.23 318** ⇑*i*P **Pdif** **15 58 35.0 +0.1**
**KKB Krupnik 104.27 311** *i* P **Pdif** **15 58 35.1 -0.2**
**KKB Krupnik 104.27 311** *i* P **PP** **16 02 53.6 -0.2**
**KOLS Kolonicke sedl 104.33 319** *i* P **Pdif** **15 58 36.5 +1.1**
**KOLS Kolonicke sedl 104.33 319** PDIF **Pdif** **15 58 36.5 +1.1**
**KOLS Kolonicke sedl 104.33 319** *e*PKP 16 02 51.2
KOLS *e*PP **PP** **16 02 54.8 +0.8**
**UZH Uzhgorod 104.35 318** ⇓*i*P **Pdif** **15 58 35.2 -0.3**
**TSUM Tsumeb 104.46 248** *e*Pdif **Pdif** **15 58 36.6 -0.2**
TSUM LR LR
comp=Z,1μm,21.0s
**STHS Stebnicka Huta 104.96 319** *i* P **Pdif** **15 58 39.4 +1.2**
**STHS Stebnicka Huta 104.96 319** PDIF **Pdif** **15 58 39.4 +1.2**
**STHS Stebnicka Huta 104.96 319** *e*PKP 16 02 53.0
STHS *e*PP **PP** **16 03 00.0 +1.3**
**BEL Belsk 104.96 322** *e*P **Pdif** **15 58 39.1 +1.0**
BEL *e*PP **PP** **16 03 01.8 +3.2**
BEL LMZ LR 16 40 49.6
**BEL Belsk 104.96 322** *e*P **Pdif** **15 58 39.1 +1.0**
BEL *e* 16 03 01.8
**BZS Buzias 105.07 315** ⇑P **Pdif** **15 58 38.1 -0.7**
**BZS Buzias 105.07 315** ⇑*i*P **Pdif** **15 58 38.1 -0.7**
**NIE Niedzica 105.57 319** *e*P **Pdif** **15 58 41.7 +0.8**
NIE LMZ LR 16 46 21.6
**NIE Niedzica 105.57 319** *e*P **Pdif** **15 58 41.8 +0.8**
NIE MLR MLR
comp=Z,1μm,27.2s
**OJC Ojcow 105.79 320** *e*P **Pdif** **15 58 42.3 +0.4**
OJC LMZ LR 16 44 21.5
**OJC Ojcow 105.79 320** *e*P **Pdif** **15 58 42.4 +0.5**
OJC MLR MLR
comp=Z,1μm,25.4s
**OJC Ojcow 105.79 320** *e*Pdif **Pdif** **15 58 42.2 +0.4**
OJC LR LR
comp=Z,700nm,19.8s
**PSZ Piszkesteto 106.02 318** *e*P **Pdif** **15 58 43.7 +0.7**
PSZ MLR MLR
comp=Z,800nm,21.3s
**PSZ Piszkesteto 106.02 318** ⇑*e*Pdiff **Pdif** **15 58 42.9 -0.1**
**PSZ Piszkesteto 106.02 318** *e*Pdif **Pdif** **15 58 43.7 +0.7**
PSZ LR LR
comp=Z,800nm,21.3s
**LANS Liptovska Anna 106.14 319** *i* P **Pdif** **15 58 44.9 +1.4**
**LANS Liptovska Anna 106.14 319** PDIF **Pdif** **15 58 44.9 +1.4**
**DIVS Divibare 106.36 314** ⇓*i*P **Pdif** **15 58 44.2 -0.5**
**VYHS Vyhne 106.64 318** *i* P **Pdif** **15 58 45.6 -0.2**
**VYHS Vyhne 106.64 318** PDIF **Pdif** **15 58 45.5 -0.2**
**VYHS Vyhne 106.64 318** *e*PKP 16 02 55.2
VYHS *e*PP **PP** **16 03 11.0 -0.1**
**BUD Budapest 106.65 317** ⇑*e*Pdiff **Pdif** **15 58 46.3 +0.5**
**TIR Tirane 106.71 311** PFAKE 16 03 10.0
TIR LR LR
comp=Z,700nm,21.6s
**GKP Gorka Klasztor 106.89 323** *e*P **Pdif** **15 58 47.0 +0.4**
GKP *e*PP **PP** **16 03 15.6 +2.9**
GKP LMZ LR 16 43 58.2
**GKP Gorka Klasztor 106.89 323** *e*P **Pdif** **15 58 47.0 +0.4**
GKP *e* 16 03 15.6
GKP MLR MLR
comp=Z,2μm,27.6s
**OKC Ostrava-Krasne 106.90 320** *e*P **Pdif** **15 58 48.0 +1.2**
OKC *e*SP SP 16 12 33.1 +3.4
OKC MLR MLR
comp=Z,700nm,19.6s
**OKC Ostrava-Krasne 106.90 320** *e*PDIFF **Pdif** **15 58 48.0 +1.2**
OKC *e*PP PP 16 03 07.7 -5.2
OKC *e*SP SP 16 12 33.1 +3.4
OKC AMS AMS 16 51 50.0
comp=Z,700nm,19.6s
**MORC Moravsky Berou 107.30 320** *e*P **Pdif** **15 58 49.1 +0.5**
MORC MLR MLR
comp=Z,3μm,18.9s
**MORC Moravsky Berou 107.30 320** *e*Pdif **Pdif** **15 58 49.1 +0.5**
MORC LR LR
comp=Z,3μm,18.9s
**PMSA Palmer Station 107.69 176** PFAKE 16 03 10.0
PMSA LR LR
comp=Z,4μm,20.0s
**KRLC Kraliky 107.73 320** *e*P **Pdif** **15 58 51.6 +1.0**
**KRLC Kraliky 107.73 320** *e*PDIFF **Pdif** **15 58 51.6 +1.0**
KRLC *ex* x 15 59 02.0
KRLC *ex* x 16 02 02.5
**KSP Ksiaz 107.90 321** *e*P **Pdif** **15 58 52.2 +1.0**
KSP LMZ LR 16 42 25.3
**KSP Ksiaz 107.90 321** *e*P **Pdif** **15 58 52.3 +1.0**
**DPC Dobruska-Polom 107.97 321** *e*P **Pdif** **15 58 52.4 +0.8**
DPC *e*SP SP 16 12 33.2 -7.6
DPC MLR MLR
comp=Z,800nm,22.3s
**DPC Dobruska-Polom 107.97 321** *e*PDIFF **Pdif** **15 58 52.4 +0.8**
DPC *e*pP 15 59 00.8
DPC *ex* x 16 02 20.5
DPC *e*PP PP 16 03 13.8 -7.0
DPC *ex* x 16 12 33.2
DPC AMS AMS 16 51 10.0
comp=Z,800nm,22.3s
**NB2 NORSAR Subarra108.14 332** P **Pdif** **15 58 50.2 -1.9**
comp=Z,13nm,1.1s,baz=75,slow=4.6
**NB2 NORSAR Subarra108.14 332** P **Pdif** **15 58 50.2 -1.9**
baz=75,slow=4.6
**NOA NORSAR Array B108.14 332** Pdiff **Pdif** **15 58 51.5 -0.6**
comp=Z,3.6nm,0.9s,baz=73,slow=4.6,SNR=12
NOA PKiKP **PKiKP** **16 02 57.8 -0.8**
comp=Z,0.9nm,0.9s,baz=261,slow=3.1,SNR=3.9
NOA PP PP 16 03 28.0 +6.3
comp=Z,1.3nm,0.8s,baz=94,slow=7.6,SNR=3.7
**UPC Upice 108.14 321** *e*P **Pdif** **15 58 53.0 +0.7**
UPC *e*SP SP 16 12 39.7 -2.7
UPC MLR MLR
comp=Z,900nm,21.7s
**UPC Upice 108.14 321** *e*PDIFF **Pdif** **15 58 53.0 +0.7**
UPC *e*SP SP 16 12 39.7 -2.7
UPC AMS AMS 16 48 30.0
comp=Z,900nm,21.7s
**BEHE Becsehely 108.32 316** ⇑*e*Pdiff **Pdif** **15 58 54.1 +0.9**
**RGN Rugen 108.87 325** PFAKE 16 03 10.0
RGN LR LR
comp=Z,1μm,20.9s
**GOPC GO Pecny, Ondr 109.03 320** *e*P **Pdif** **15 58 58.0 +1.7**
GOPC MLR MLR
comp=Z,1μm,20.0s
**GOPC GO Pecny, Ondr 109.03 320** *e*PDIFF **Pdif** **15 58 58.0 +1.7**
GOPC *ex* x 16 03 17.4
GOPC AMS AMS 16 57 40.0
comp=Z,1μm,20.0s
**PVCC Panska Ves 109.04 321** *e*P **Pdif** **15 58 57.2 +0.9**
PVCC MLR MLR
comp=Z,900nm,20.4s
**PVCC Panska Ves 109.04 321** *e*PDIFF **Pdif** **15 58 57.2 +0.9**
PVCC *e*PP PP 16 03 20.8 -7.7
PVCC AMS AMS 16 52 00.0
comp=Z,900nm,20.4s
**PRU Pruhonice 109.17 320** *e*P **Pdif** **15 58 57.6 +0.7**
PRU *e* 16 03 31.2
PRU *e*SP SP 16 12 45.1 -7.7
PRU MLR MLR
comp=Z,400nm,20.0s
**PRU Pruhonice 109.17 320** *e*PDIFF **Pdif** **15 58 57.6 +0.7**
PRU *e*PP **PP** **16 03 31.2 +1.8**
PRU *ex* x 16 12 45.1
PRU AMS AMS 16 57 50.0
comp=Z,400nm,20.0s
**PRA Prague 109.22 321** AMS AMS 16 52 10.0
comp=Z,800nm,18.8s
**PGC Sidney 109.24 41** PFAKE 16 03 10.0
PGC LR LR
comp=Z,800nm,22.0s
**TIP Timpagrande 109.29 309** PFAKE 16 03 10.0
TIP LR LR
comp=Z,300nm,21.1s
**KONO Kongsberg 109.35 331** PFAKE 16 03 10.0
KONO LR LR
comp=Z,1μm,20.0s
**BRG Berggiesshubel 109.36 321** *e*PDIF **Pdif** **15 58 58.0 +0.3**
comp=Z,56nm,1.7s
**BRG Berggiesshubel 109.36 321** *e*PKP 16 02 20.1
comp=Z,37nm,2.1s
BRG PP PKiKP 16 03 14.0 +13
BRG *e* 16 05 56.3
comp=Z,52nm,2.1s
BRG SKS **SKSac** **16 09 35.0 -1.0**
BRG SDIFF **Sdif** **16 11 03.0 -4.4**
BRG SS SS 16 19 20.0 +29
comp=N,2μm,26.9s
comp=E,977nm,29.5s
comp=Z,1μm,29.4s
**BRG Berggiesshubel 109.36 321** *e*P **Pdif** **15 58 58.0 +0.3**
BRG pmax pmax
comp=Z,56nm,1.7s
**BOJS Bojanci 109.52 316** *i* Pdiff **Pdif** **15 58 59.6 +1.0**
BOJS *e* 16 03 28.6
**E03A Lebam 109.55 43** PFAKE 16 03 10.0
E03A LR LR
comp=Z,1μm,20.4s
**KEBM Edson Butte 109.60 47** PFAKE 16 03 10.0
KEBM LR LR
comp=Z,1μm,20.0s
**F03A Seaside 109.66 44** PFAKE 16 03 10.0
F03A LR LR
comp=Z,1μm,20.3s
**KBO Bosley Butte 109.77 48** PFAKE 16 03 10.0
KBO LR LR
comp=Z,1μm,21.9s
**CLL Collm 109.84 322** *e*P **Pdif** **15 59 00.5 +0.7**
CLL *e* 16 03 34.2
CLL MLR MLR
comp=Z,2μm,22.0s
**CLL Collm 109.84 322** ⇑*i*Pdif **Pdif** **15 59 00.0 +0.2**
comp=Z,77nm,2.1s
CLL *e* 15 59 09.0
CLL *e*PKiKP **PKiKP** **16 03 04.0 +1.9**
CLL *i* PP **PP** **16 03 32.7 -1.5**
comp=Z,36nm,1.4s
CLL *e*PPlp 16 03 36.0
comp=Z,500nm,18.4s
CLL *i* 16 03 40.1
CLL *e*PPPP 16 07 41.0
CLL *e*SKSac **SKSac** **16 09 36.0 -2.0**
CLL *e*Sdif **Sdif** **16 11 12.0 +0.6**
CLL *e*SP **SP** **16 12 56.0 -3.5**
CLL *e*PS **PS** **16 13 13.0 +10**
CLL *e*PPS PPS 16 14 05.0
CLL *e*SS SS 16 19 06.0 +9.0
CLL *e* 16 22 06.0
CLL *e*SSS SSS 16 22 54.0
CLL *e* 16 24 18.0
CLL *e* 16 29 57.0
CLL LmV 16 59 00.0
comp=Z,900nm,19.7s
**CLL Collm 109.84 322** *e*Pdif **Pdif** **15 59 00.5 +0.7**
CLL *e*PP **PP** **16 03 34.1 -0.1**
CLL LR LR
comp=Z,2μm,22.0s
**LJU Ljubljana 109.93 316** *e*Pdiff **Pdif** **15 59 00.3 -0.1**
LJU *i* 16 03 28.1
**GEC2 GERESS Array S 109.94 319** *e*P **Pdif** **15 59 01.2 +0.7**
GEC2 *e* 16 03 38.2
**GEC2 GERESS Array S 109.94 319** *e*Pdif **Pdif** **15 59 01.2 +0.7**
GEC2 *e*PP **PP** **16 03 38.2 +3.0**
**GERES GERESS Array B 109.94 319** Pdiff **Pdif** **15 59 01.1 +0.6**
comp=Z,0.5nm,0.6s,baz=79,slow=2.9,SNR=10
GERES PKiKP **PKiKP** **16 03 01.8 -0.7**
comp=Z,0.9nm,0.7s,baz=64,slow=3.1,SNR=5.7
GERES PP **PP** **16 03 34.1 -1.1**
comp=Z,5.2nm,1.1s,baz=77,slow=6.0,SNR=3.4
GERES PKKPab **PKKPab** **16 14 17.2 +0.9**
comp=Z,0.7nm,0.8s,baz=262,slow=2.7,SNR=5.3
**YKA Yellowknife Ar 109.94 25** Pdiff **Pdif** **15 59 00.4 +0.4**
comp=Z,1.9nm,0.8s,baz=306,slow=5.2,SNR=2.7
YKA PKKPab **PKKPab** **16 14 13.5 -2.5**
comp=Z,1.8nm,0.8s,baz=93,slow=2.8,SNR=4.6
**YKA Yellowknife Ar 109.94 25** P **Pdif** **15 59 00.4 +0.4**
YKA 16 14 13.5
YKA pmax pmax
comp=Z,2.0nm,0.9s
**KHC Kasperske Hory 109.96 320** *e*P **Pdif** **15 59 00.9 +0.4**
KHC *e* 16 03 36.7
KHC *e*SP SP 16 12 54.1 -6.8
**KHC Kasperske Hory 109.96 320** *e*PDIFF **Pdif** **15 59 00.9 +0.4**
KHC *ex* x 16 02 10.5
KHC *e*PP **PP** **16 03 36.7 +1.4**
KHC *e*SP SP 16 12 54.1 -6.8
KHC AMS AMS 16 52 00.0
comp=Z,1μm,28.4s
**KHC Kasperske Hory 109.96 320** *e*Pdif **Pdif** **15 59 01.3 +0.8**
KHC LR LR
comp=Z,300nm,19.1s
**COR Corvallis 110.07 45** PFAKE 16 03 10.0
COR LR LR
comp=Z,2μm,20.5s
**B05A Bryant 110.20 41** P **PKiKP** **16 03 02.6 -0.2**
baz=110
**JAVS Javornik 110.27 316** *e*Pdiff **Pdif** **15 59 01.1 -0.9**
JAVS *e* 16 03 38.8
**KHMM Horse Mountain 110.33 49** PFAKE 16 03 10.0
KHMM LR LR
comp=Z,800nm,20.0s
**KMRM Mail Ridge 110.43 50** PFAKE 16 03 10.0
KMRM LR LR
comp=Z,1μm,18.9s
**F04A Amboy 110.44 44** PFAKE 16 03 10.0
F04A LR LR
comp=Z,1μm,20.9s
**D05A Enumclaw 110.49 42** *e*PP PP 16 03 38.6 -0.6
**TRI Trieste 110.51 316** PFAKE 16 03 10.0
TRI LR LR
comp=Z,600nm,21.5s
**KCPM Cahto Peak 110.60 50** PFAKE 16 03 10.0
KCPM LR LR
comp=Z,700nm,20.1s
**LON Longmire 110.70 43** PFAKE 16 03 10.0
LON LR LR
comp=Z,500nm,20.0s
**I04A Tendick Farm, 110.83 46** P **PKiKP** **16 03 04.6 +0.3**
baz=111
**H04A Detroit Lake 110.84 45** PFAKE 16 03 10.0
H04A LR LR
comp=Z,1μm,21.4s
**YBH Yreka Blue Hor 110.96 48** PFAKE 16 03 10.0
YBH LR LR
comp=Z,1μm,21.0s
**N02D Trinity Center 111.08 49** P **PKiKP** **16 03 05.5 +0.6**
baz=111
**HOPS Hopland 111.09 51** PFAKE 16 03 20.0
HOPS LR LR
comp=Z,1μm,20.0s
**G05D Wamic, OR 111.33 44** P **PKiKP** **16 03 04.4 -0.7**
baz=111
**LTY Liberty 111.35 42** PFAKE 16 03 20.0
LTY LR LR
comp=Z,800nm,21.8s
**WDD Wield Dalam 111.42 306** PFAKE 16 03 20.0
WDD LR LR
comp=Z,400nm,20.8s
**J05D Fort Rock, OR 111.77 46** P **PKiKP** **16 03 06.2 0.0**
baz=112
**G06A Carlson Farm, 111.81 44** PFAKE 16 03 20.0
G06A LR LR
comp=Z,1μm,21.4s
**E07A Sunnyside 112.05 43** PFAKE 16 03 20.0
E07A LR LR
comp=Z,600nm,19.9s
**K05A Summer Lake 112.12 47** PFAKE 16 03 20.0
K05A LR LR
comp=Z,800nm,18.5s
**HAWA Hanford 112.31 43** *e*PKPdf **PKiKP** **16 03 06.0 -1.0**
HAWA LR LR
comp=Z,900nm,18.1s
**D08A Wollman Farm, 112.56 42** *e*PKKPab PKKPab 16 14 05.2 +0.6
D08A LR LR
comp=Z,800nm,21.0s
**SAO San Andreas Ge 112.66 53** PFAKE 16 03 20.0
SAO LR LR
comp=Z,900nm,19.1s
**MOD Modoc 112.70 48** PFAKE 16 03 20.0
MOD LR LR
comp=Z,800nm,19.6s
**C09A Chrisman Ranch 112.80 41** PFAKE 16 03 20.0
C09A LR LR
comp=Z,800nm,20.0s
**STU Stuttgart 112.85 320** PFAKE 16 03 20.0
STU LR LR
comp=Z,900nm,21.1s
**G08A Pilot Rock 112.95 44** *e*PKiKP **PKiKP** **16 03 09.4 +1.0**
G08A *e*PKKPab **PKKPab** **16 14 02.4 -0.8**
G08A LR LR
comp=Z,800nm,20.4s
**CMB Columbia Colle 113.31 52** *e*PKKPab PKKPab 16 14 02.5 +0.9
CMB LR LR
comp=Z,800nm,18.1s
**TUE Stuetta 113.35 318** PFAKE 16 03 20.0
TUE LR LR
comp=Z,800nm,22.0s
**NEW Newport 113.42 40** PFAKE 16 03 20.0
NEW LR LR
comp=Z,900nm,20.8s
**BFO Black Forest 113.52 320** PFAKE 16 03 20.0
BFO LR LR
comp=Z,700nm,19.6s
**J08A Circle Bar Ran 113.73 46** *e*PKKPab PKKPab 16 14 00.9 +1.2
J08A LR LR
comp=Z,1μm,21.5s
**WVOR Wild Horse Val 113.81 47** *e*PKIKP 16 03 08.7
WVOR MLR MLR
comp=Z,800nm,18.9s
**WVOR Wild Horse Val 113.81 47** *e*PKPdf 16 03 08.7
WVOR LR LR
comp=Z,800nm,18.9s
**F10A Beach Ranch, E 113.96 43** PFAKE 16 03 20.0
F10A LR LR
comp=Z,900nm,21.0s
**EDM Edmonton 114.11 34** PFAKE 16 03 20.0 +10
EDM LR LR
comp=Z,1μm,20.3s
**BMO Blue Mountains 114.19 44** PFAKE 16 03 20.0 +9.3
BMO LR LR
comp=Z,900nm,21.0s
**SENIN Lac Senin/Sane 114.74 318** *e*PP PP 16 04 12.2 +2.5
SENIN LR LR
comp=Z,900nm,21.4s
**NVAR Mina Array Bea 114.86 51** PKP PKPdf 16 03 12.7 +0.3
comp=Z,1.3nm,0.7s,baz=288,slow=0.9,SNR=8.4
NVAR PP **PP** **16 04 10.2 -0.6**
comp=Z,3.6nm,1.1s,baz=276,slow=9.0,SNR=5.8
NVAR PKKPbc **PKKPbc** **16 13 48.2 -2.0**
comp=Z,1.1nm,1.0s,baz=129,slow=4.2,SNR=5.6
NVAR SKKPbc SKKPbc 16 17 44.6 +9.4
comp=Z,1.0nm,0.9s,baz=151,slow=3.4,SNR=3.8
**VSL Villasalto 114.89 310** PFAKE 16 03 20.0 +7.9
VSL LR LR
comp=Z,600nm,19.9s
**ISA Isabella 115.21 54** P **PKPdf** **16 03 13.2 +0.3**
baz=115
**ISA Isabella 115.21 54** *e*PKKPbc PKKPbc 16 13 48.9 +0.3
**WALA Waterton Lakes 115.22 39** PFAKE 16 03 20.0 +7.4
WALA LR LR
comp=Z,1μm,21.9s
**CWC Cottonwood Cre 115.39 53** P **PKPdf** **16 03 13.5 +0.1**
baz=115
**MFID Camas Ranch 115.59 45** *e*PKKPab PKKPab 16 13 53.2 +1.7
MFID LR LR
comp=Z,1μm,21.9s
**KEST Kesra 115.61 306** PKP **PKPdf** **16 03 15.1 +1.5**
comp=Z,4.5nm,0.8s,baz=90,slow=1.0,SNR=5.7
KEST PP **PP** **16 04 11.4 -4.6**
comp=Z,28nm,1.2s,baz=352,slow=5.2,SNR=6.6
**KEST Kesra 115.61 306** PKP **PKPdf** **16 03 15.1 +1.5**
KEST PP **PP** **16 04 11.4 -4.6**
KEST *e*PP **PP** **16 04 12.5 -3.6**
**PASC Pasadena Art C 115.67 56** PFAKE 16 03 20.0 +6.2
PASC LR LR
comp=Z,1μm,19.2s
**EDW2 Edwards Air Fo 115.72 55** P **PKPdf** **16 03 14.1 +0.2**
baz=116
**MWC Mount Wilson 115.77 56** PFAKE 16 03 20.0 +5.8
MWC LR LR
comp=Z,1μm,19.0s
**DAC Darwin (Calif) 115.81 53** PFAKE 16 03 20.0 +5.8
DAC LR LR
comp=Z,1μm,20.4s
**GRAC Grapevine Rang 115.85 52** P **PKPdf** **16 03 14.5 +0.4**
baz=116
**LRMC Laurel Mountai 115.87 54** P **PKPdf** **16 03 14.4 +0.2**
baz=116
**MSO Missoula 115.90 41** P **PKPdf** **16 03 14.1 +0.2**
baz=116
**MSO Missoula 115.90 41** *e*PKiKP **PKPdf** **16 03 14.2 +0.2**
MSO *e*PP **PP** **16 04 15.9 -1.8**
MSO LR LR
comp=Z,900nm,22.0s
**MPMC Manual Prospec 115.93 54** P **PKPdf** **16 03 15.0 +0.6**
baz=116
**SLMT Seeley Lake 116.07 41** *e*PKPdf **PKPdf** **16 03 14.2 -0.1**
**FURC Furnace Creek, 116.35 53** P **PKPdf** **16 03 15.8 +0.9**
baz=116
**HLID Hailey 116.54 45** P **PKPdf** **16 03 16.1 +0.7**
baz=116
**HLID Hailey 116.54 45** *e*PKPdf **PKPdf** **16 03 16.1 +0.7**
HLID *e*PKKPab **PKKPab** **16 13 48.5 +1.2**
HLID LR LR
comp=Z,900nm,21.9s
**GSC Goldstone 116.61 54** *e*PKIKP **PKPdf** **16 03 16.5 +0.9**
GSC *e* 16 04 22.2
GSC MLR MLR
comp=Z,800nm,20.6s
**GSC Goldstone 116.61 54** P **PKPdf** **16 03 15.9 +0.3**
baz=117
**GSC Goldstone 116.61 54** *e*PKPdf **PKPdf** **16 03 16.5 +0.9**
GSC *e*PP **PP** **16 04 22.2 -0.9**
GSC *e*PKKPbc **PKKPbc** **16 13 43.2 -0.6**
GSC *e*PKKPab **PKKPab** **16 13 48.4 +1.2**
GSC LR LR
comp=Z,800nm,20.6s
**ELK Elko 116.68 48** *e*PKIKP **PKPdf** **16 03 15.8 0.0**
ELK MLR MLR
comp=Z,500nm,20.9s
**ELK Elko 116.68 48** *e*PKPdf **PKPdf** **16 03 15.8 0.0**
ELK LR LR
comp=Z,500nm,20.9s
**TPNV Topopah Spring 116.74 52** P **PKPdf** **16 03 16.4 +0.5**
baz=117
**TPNV Topopah Spring 116.74 52** PFAKE 16 03 30.0 +14
TPNV LR LR
comp=Z,700nm,20.4s
**HOPE Hope Point 116.78 192** PFAKE 16 03 30.0 +15
HOPE LR LR
comp=Z,3μm,18.5s
**R11A Troy Canyon, C 116.97 51** P **PKPdf** **16 03 16.7 +0.4**
baz=117
**R11A Troy Canyon, C 116.97 51** *e*PKPdf **PKPdf** **16 03 17.0 +0.6**
R11A *e*PKKPbc PKKPbc 16 13 35.4 -7.4
R11A LR LR
comp=Z,600nm,18.3s
**CMAH Djebel Manchou 116.98 307** P **PP** **16 04 23.6 -2.0**
**ABSA Djebel Abassia 117.00 307** P **PP** **16 04 24.6 -1.2**
**BAR Barrett 117.16 57** *e*PKPdf **PKPdf** **16 03 17.5 +0.8**
BAR LR LR
comp=Z,800nm,19.9s
**PFO Pinyon Flat Ob 117.19 56** *e*PKIKP **PKPdf** **16 03 17.3 +0.5**
PFO MLR MLR
comp=Z,1μm,19.0s
**PFO Pinyon Flat Ob 117.19 56** *e*PKPdf **PKPdf** **16 03 17.3 +0.5**
PFO *e*PKKPab **PKKPab** **16 13 45.7 +1.0**
PFO LR LR
comp=Z,1μm,19.0s
**MCMT McKenzie Canyo 117.25 43** *e*PKKPab PKKPab 16 13 45.0 +0.7
**DLMT Dillon 117.25 42** *e*PKPdf **PKPdf** **16 03 16.9 +0.2**
**MONP Monument Peak 117.33 57** P **PKPdf** **16 03 17.7 +0.4**
baz=117
**CAEH `Ain El Ouahch 117.39 308** P **PP** **16 04 26.7 -1.7**
**BELC Belle Mtn. Jos 117.49 56** P **PKPdf** **16 03 17.9 +0.5**
baz=118
**CKFL Kef-Lekhel 117.57 307** P **PP** **16 04 27.5 -2.3**
**GMRC Granite Mounta 117.63 55** P **PKPdf** **16 03 18.5 +0.8**
baz=118
**IBP Imperial Bould 117.64 57** P **PKPdf** **16 03 17.6 -0.1**
baz=118
**CWF Charnwood Fore 117.65 327** PFAKE 16 03 30.0 +13
CWF LR LR
comp=Z,1μm,20.3s
**SHPR Sheep Range 117.69 53** *e*PKPdf **PKPdf** **16 03 18.9 +1.2**
SHPR *e*PKKPbc **PKKPbc** **16 13 40.3 +0.2**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CASM** | **Ain Smara** | **117.78** | **307** | P | **PP** | **16 04 28.5** | **-2.7** | | |
| **BOZ** | **Bozeman (W)** | **117.80** | **42** | *e*PKIKP | **PKPdf** | **16 03 18.3** | **+0.6** | | |
| **BOZ** | **Bozeman (W)** | **117.80** | **42** | P | **PKPdf** | **16 03 18.2** | **+0.4** | | |
| | baz=118 | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **117.80** | **42** | *e*PKPdf | **PKPdf** | **16 03 18.3** | **+0.6** | | |
| BOZ | | | | *e*PKKPab | **PKKPab** | **16 13 41.8** | **0.0** | | |
| **CTEI** | **Djebel Teioual** | **117.89** | **307** | P | **PP** | **16 04 29.8** | **-2.3** | | |
| **BC3** | **Big Chuckawall** | **118.00** | **56** | P | **PKPdf** | **16 03 18.7** | **+0.3** | | |
| | baz=118 | | | | | | | | |
| **LDFC** | **Landfair** | **118.02** | **54** | *e*PKPdf | **PKPdf** | **16 03 19.9** | **+1.6** | | |
| LDFC | | | | *e*PKKPbc | **PKKPbc** | **16 13 39.3** | **+0.5** | | |
| **IRM** | **Iron Mountain** | **118.16** | **55** | P | **PKPdf** | **16 03 19.2** | **+0.6** | | |
| | baz=118 | | | | | | | | |
| **EGMT** | **Eagleton** | **118.17** | **39** | P | **PKPdf** | **16 03 18.5** | **+0.3** | | |
| | baz=118 | | | | | | | | |
| **EGMT** | **Eagleton** | **118.17** | **39** | *e*PKPdf | **PKPdf** | **16 03 18.1** | **-0.2** | | |
| EGMT | | | | LR | LR | | | | |
| | comp=Z,900nm,22.0s | | | | | | | | |
| **HVU** | **Hansel Valley** | **118.20** | **46** | *e*PKIKP | **PKPdf** | **16 03 18.9** | **+0.3** | | |
| HVU | | | | *e* | | 16 04 31.9 | | | |
| HVU | | | | MLR | MLR | | | | |
| | comp=Z,800nm,19.9s | | | | | | | | |
| **HVU** | **Hansel Valley** | **118.20** | **46** | *e*PKPdf | **PKPdf** | **16 03 18.9** | **+0.3** | | |
| HVU | | | | *e*PP | **PP** | **16 04 31.9** | **-2.1** | | |
| HVU | | | | *e*PKKPab | **PKKPab** | **16 13 40.1** | **-0.1** | | |
| HVU | | | | LR | LR | | | | |
| | comp=Z,800nm,19.9s | | | | | | | | |
| **DFRA** | **Djebel Bou Aff** | **118.21** | **308** | P | **PP** | **16 04 32.4** | **-1.8** | | |
| **BGU** | **Big Grassy Mou** | **118.25** | **47** | PFAKE | | 16 03 30.0 | +11 | | |
| BGU | | | | LR | LR | | | | |
| | comp=Z,700nm,21.7s | | | | | | | | |
| **SPUT** | **South Promonto** | **118.56** | **47** | PFAKE | | 16 03 30.0 | +11 | | |
| SPUT | | | | LR | LR | | | | |
| | comp=Z,800nm,19.6s | | | | | | | | |
| **DUG** | **Dugway** | **118.61** | **48** | P | **PKPdf** | **16 03 19.5** | **+0.1** | | |
| | baz=119 | | | | | | | | |
| **DUG** | **Dugway** | **118.61** | **48** | *e*PKKPbc | PKKPbc | 16 13 36.5 | -0.4 | | |
| DUG | | | | LR | LR | | | | |
| | comp=Z,700nm,20.8s | | | | | | | | |
| **CKHR** | **Kef el Ahmar** | **118.61** | **307** | P | **PP** | **16 04 34.7** | **-2.3** | | |
| **GLA** | **Glamis** | **118.62** | **56** | PFAKE | | 16 03 30.0 | +10 | | |
| GLA | | | | LR | LR | | | | |
| | comp=Z,800nm,19.6s | | | | | | | | |
| **SET** | **Setif** | **118.66** | **307** | P | **PP** | **16 04 37.0** | **-0.3** | | |
| **YFT** | **Old Faithful** | **118.73** | **43** | PFAKE | | 16 03 30.0 | +10 | | |
| YFT | | | | LR | LR | | | | |
| | comp=Z,1µm,21.3s | | | | | | | | |
| **YNR** | **Norris Junctio** | **118.75** | **43** | *e*PKKPab | PKKPab | 16 13 39.3 | +1.6 | | |
| YNR | | | | LR | LR | | | | |
| | comp=Z,700nm,20.3s | | | | | | | | |
| **IMW** | **Indian Meadow** | **118.84** | **44** | *e*PKKPbc | PKKPbc | 16 13 35.4 | -1.0 | | |
| IMW | | | | LR | LR | | | | |
| | comp=Z,700nm,21.9s | | | | | | | | |
| **CCUT** | **Cedar City** | **118.86** | **51** | PFAKE | | 16 03 30.0 | +10 | | |
| CCUT | | | | LR | LR | | | | |
| | comp=Z,1µm,19.3s | | | | | | | | |
| **FXWY** | **Fox Creek** | **118.86** | **44** | PFAKE | | 16 03 30.0 | +10 | | |
| FXWY | | | | LR | LR | | | | |
| | comp=Z,800nm,21.4s | | | | | | | | |
| **H17A** | **Grant Village** | **118.92** | **43** | *e*PP | PP | 16 04 39.0 | -0.1 | | |
| H17A | | | | LR | LR | | | | |
| | comp=Z,800nm,20.4s | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **118.94** | **43** | PFAKE | | 16 03 30.0 | +10 | | |
| FLWY | | | | LR | LR | | | | |
| | comp=Z,800nm,21.1s | | | | | | | | |
| **TPAW** | **Teton Pass** | **118.96** | **44** | *e*PKPdf | **PKPdf** | **16 03 21.4** | **+1.3** | | |
| TPAW | | | | *e*PKKPbc | **PKKPbc** | **16 13 34.9** | **-1.0** | | |
| **LKWY** | **Lake** | **118.98** | **43** | PFAKE | | 16 03 30.0 | +10 | | |
| LKWY | | | | LR | LR | | | | |
| | comp=Z,1µm,21.0s | | | | | | | | |
| **MOOW** | **Moose Ponds** | **119.02** | **44** | *e*PKPdf | **PKPdf** | **16 03 20.0** | **-0.2** | | |
| **GCMT** | **Greycliff** | **119.04** | **41** | *e*PKPdf | **PKPdf** | **16 03 20.4** | **+0.4** | | |
| **REDW** | **Red Top Meadow** | **119.07** | **44** | *e*PKPdf | **PKPdf** | **16 03 20.1** | **-0.2** | | |
| **AHID** | **Auburn Hatcher** | **119.09** | **45** | PFAKE | | 16 03 30.0 | +10 | | |
| AHID | | | | LR | LR | | | | |
| | comp=Z,600nm,19.5s | | | | | | | | |
| **SNOW** | **Snow King Moun** | **119.11** | **44** | *e*PKPdf | **PKPdf** | **16 03 21.7** | **+1.3** | | |
| SNOW | | | | *e*PKKPab | **PKKPab** | **16 13 37.0** | **+0.8** | | |
| SNOW | | | | LR | LR | | | | |
| | comp=Z,800nm,21.3s | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **119.11** | **46** | *e*PKKPab | PKKPab | 16 13 36.5 | +0.4 | | |
| **LOHW** | **Long Hollow** | **119.16** | **44** | *e*PKPdf | **PKPdf** | **16 03 20.1** | **-0.4** | | |
| LOHW | | | | LR | LR | | | | |
| | comp=Z,700nm,18.4s | | | | | | | | |
| **NLU** | **North Lily Min** | **119.22** | **48** | *e*PKPdf | **PKPdf** | **16 03 21.8** | **+1.1** | | |
| NLU | | | | *e*PKKPbc | **PKKPbc** | **16 13 35.0** | **+0.2** | | |
| NLU | | | | LR | LR | | | | |
| | comp=Z,800nm,19.5s | | | | | | | | |
| **TCUT** | **Toone Canyon** | **119.37** | **47** | PFAKE | | 16 03 30.0 | +9.0 | | |
| TCUT | | | | LR | LR | | | | |
| | comp=Z,1µm,19.5s | | | | | | | | |
| **FFC** | **Flin Flon** | **119.42** | **29** | PFAKE | | 16 03 30.0 | +10 | | |
| FFC | | | | LR | LR | | | | |
| | comp=Z,800nm,19.0s | | | | | | | | |
| **MSU** | **Marysvale** | **119.53** | **50** | *e*PKIKP | **PKPdf** | **16 03 22.1** | **+0.7** | | |
| **MSU** | **Marysvale** | **119.53** | **50** | *e*PKPdf | **PKPdf** | **16 03 22.1** | **+0.7** | | |
| **RLMT** | **Red Lodge** | **119.55** | **42** | *e*PP | PP | 16 04 41.7 | -1.5 | | |
| RLMT | | | | *e*PKKPbc | **PKKPbc** | **16 13 33.2** | **-0.5** | | |
| RLMT | | | | LR | LR | | | | |
| | comp=Z,1µm,22.0s | | | | | | | | |
| **O16A** | **Springville** | **119.57** | **48** | *e*PKPdf | **PKPdf** | **16 03 23.8** | **+2.5** | | |
| O16A | | | | LR | LR | | | | |
| | comp=Z,700nm,21.1s | | | | | | | | |
| **TMUT** | **Trail Mountain** | **120.04** | **49** | *e*PKPdf | **PKPdf** | **16 03 22.6** | **+0.2** | | |
| **DSB** | **Dublin** | **120.08** | **329** | PFAKE | | 16 03 30.0 | +8.4 | | |
| DSB | | | | LR | LR | | | | |
| | comp=Z,900nm,22.0s | | | | | | | | |
| **BW06** | **Boulder Array** | **120.16** | **44** | *e*PKPdf | **PKPdf** | **16 03 21.8** | **-0.7** | | |
| BW06 | | | | *e*PKKPbc | **PKKPbc** | **16 13 30.3** | **-1.0** | | |
| BW06 | | | | LR | LR | | | | |
| | comp=Z,800nm,20.6s | | | | | | | | |
| **P17A** | **Butcher Ranch,** | **120.34** | **48** | *e*PKPdf | **PKPdf** | **16 03 23.3** | **+0.5** | | |
| P17A | | | | *e*PKKPab | **PKKPab** | **16 13 31.8** | **+0.9** | | |
| P17A | | | | LR | LR | | | | |
| | comp=Z,800nm,19.2s | | | | | | | | |
| **FCC** | **Fort Churchill** | **120.39** | **23** | PFAKE | | 16 03 30.0 | +8.0 | | |
| FCC | | | | LR | LR | | | | |
| | comp=Z,800nm,18.8s | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **120.41** | **358** | PFAKE | | 16 03 30.0 | +8.2 | | |
| SFJD | | | | LR | LR | | | | |
| | comp=Z,1µm,19.0s | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **120.50** | **57** | P | **PKPdf** | **16 03 23.6** | **+0.4** | | |
| | baz=120 | | | | | | | | |
| **214A** | **Organ Pipe Nat** | **120.50** | **57** | *e*PKPdf | **PKPdf** | **16 03 22.0** | **-1.2** | | |
| **TAM** | **Tamanrasset** | **120.60** | **292** | *e*PKIKP | **PKPdf** | **16 03 24.5** | **+0.8** | | |
| **TAM** | **Tamanrasset** | **120.60** | **292** | *e*PKPdf | **PKPdf** | **16 03 24.5** | **+0.8** | | |
| **SRU** | **San Rafael** | **120.60** | **49** | *e*PKPdf | PKPdf | 16 03 18.0 | -5.3 | | |
| **P18A** | **Preston Nutter** | **120.66** | **48** | *e*PKPdf | **PKPdf** | **16 03 24.1** | **+0.5** | | |
| P18A | | | | *e*PKKPab | **PKKPab** | **16 13 30.0** | **+0.4** | | |
| P18A | | | | LR | LR | | | | |
| | comp=Z,800nm,20.6s | | | | | | | | |
| **LAO** | **LASA Array** | **120.90** | **39** | P | **PKPdf** | **16 03 24.0** | **+0.5** | | |
| | baz=121 | | | | | | | | |
| **LAO** | **LASA Array** | **120.90** | **39** | *e*PKPdf | **PKPdf** | **16 03 24.2** | **+0.7** | | |
| LAO | | | | *e*PKKPab | **PKKPbc** | **16 13 29.3** | **+0.8** | | |
| LAO | | | | LR | LR | | | | |
| | comp=Z,900nm,21.8s | | | | | | | | |
| **WUAZ** | **Wupatki** | **120.90** | **53** | P | **PKPdf** | **16 03 24.2** | **+0.2** | | |
| | baz=121 | | | | | | | | |
| **WUAZ** | **Wupatki** | **120.90** | **53** | *e*PKPdf | **PKPdf** | **16 03 24.1** | **+0.1** | | |
| WUAZ | | | | *e*PKKPab | **PKKPbc** | **16 13 28.3** | **0.0** | | |
| WUAZ | | | | LR | LR | | | | |
| | comp=Z,600nm,20.0s | | | | | | | | |
| **EFI** | **East Falkland** | **121.11** | **177** | PFAKE | | 16 03 30.0 | +6.3 | | |
| EFI | | | | LR | LR | | | | |
| | comp=Z,3µm,18.0s | | | | | | | | |
| **DGMT** | **Dagmar** | **121.36** | **37** | PFAKE | | 16 03 30.0 | +5.7 | | |
| DGMT | | | | LR | LR | | | | |
| | comp=Z,700nm,19.7s | | | | | | | | |
| **A25A** | **Svangstu Ranch** | **121.77** | **36** | P | **PKPdf** | **16 03 25.5** | **+0.5** | | |
| | baz=122 | | | | | | | | |
| **O20A** | **White River Ci** | **121.97** | **47** | P | **PKPdf** | **16 03 26.0** | **+0.1** | | |
| | baz=122 | | | | | | | | |
| **O20A** | **White River Ci** | **121.97** | **47** | *e*PKPdf | **PKPdf** | **16 03 26.5** | **+0.6** | | |
| **PV04** | **Paradox Valley** | **122.02** | **49** | *e*PKPdf | **PKPdf** | **16 03 26.8** | **+0.7** | | |
| PV04 | | | | *e*PKKPab | **PKKPbc** | **16 13 24.1** | **-0.1** | | |
| **B25A** | **Knox Farm, Ray** | **122.06** | **36** | P | **PKPdf** | **16 03 26.2** | **+0.6** | | |
| | baz=122 | | | | | | | | |
| **EANR** | **'Ain N'Sour** | **122.10** | **308** | P | **PP** | **16 05 02.6** | **+1.8** | | |
| **TUC** | **Tucson** | **122.11** | **56** | *e*PKIKP | **PKPdf** | **16 03 26.9** | **+0.6** | | |
| TUC | | | | MLR | MLR | | | | |
| | comp=Z,600nm,18.6s | | | | | | | | |
| **TUC** | **Tucson** | **122.11** | **56** | *e*PKPdf | **PKPdf** | **16 03 26.9** | **+0.6** | | |
| TUC | | | | LR | LR | | | | |
| | comp=Z,600nm,18.6s | | | | | | | | |
| **K22A** | **Casper** | **122.30** | **44** | P | **PKPdf** | **16 03 25.5** | **-0.9** | | |
| | baz=122 | | | | | | | | |
| **K22A** | **Casper** | **122.30** | **44** | *e*PP | PP | 16 05 01.1 | -0.9 | | |
| K22A | | | | LR | LR | | | | |
| | comp=Z,800nm,21.2s | | | | | | | | |
| **W18A** | **Petrified Fore** | **122.30** | **53** | P | **PKPdf** | **16 03 26.8** | **0.0** | | |
| | baz=122 | | | | | | | | |
| **W18A** | **Petrified Fore** | **122.30** | **53** | *e*PKPdf | **PKPdf** | **16 03 27.4** | **+0.7** | | |
| W18A | | | | LR | LR | | | | |
| | comp=Z,1µm,19.9s | | | | | | | | |
| **D25A** | **Fairfield** | **122.49** | **38** | P | **PKPdf** | **16 03 26.6** | **0.0** | | |
| | baz=122 | | | | | | | | |
| **MVCO** | **Mesa Verde** | **122.68** | **50** | P | **PKPdf** | **16 03 27.6** | **+0.2** | | |
| | baz=123 | | | | | | | | |
| **MVCO** | **Mesa Verde** | **122.68** | **50** | *e*PKPdf | **PKPdf** | **16 03 28.2** | **+0.7** | | |
| MVCO | | | | LR | LR | | | | |
| | comp=Z,1µm,19.5s | | | | | | | | |
| **C26A** | **Wahner Farm, P** | **122.90** | **36** | P | **PKPdf** | **16 03 27.6** | **+0.3** | | |
| | baz=123 | | | | | | | | |
| **F25A** | **Bowman** | **122.96** | **39** | P | **PKPdf** | **16 03 27.3** | **-0.2** | | |
| | baz=123 | | | | | | | | |
| **SMCO** | **Snowmass** | **123.21** | **48** | PFAKE | | 16 03 40.0 | +11 | | |
| SMCO | | | | LR | LR | | | | |
| | comp=Z,700nm,18.2s | | | | | | | | |
| **G25A** | **Newell** | **123.31** | **40** | P | **PKPdf** | **16 03 27.7** | **-0.5** | | |
| | baz=123 | | | | | | | | |
| **E26A** | **Carlson Angus** | **123.32** | **38** | P | **PKPdf** | **16 03 28.0** | **-0.1** | | |
| | baz=123 | | | | | | | | |
| **N23A** | **Red Feather La** | **123.35** | **45** | P | **PKPdf** | **16 03 28.7** | **0.0** | | |
| | baz=123 | | | | | | | | |
| **N23A** | **Red Feather La** | **123.35** | **45** | PFAKE | | 16 03 40.0 | +11 | | |
| N23A | | | | LR | LR | | | | |
| | comp=Z,900nm,20.3s | | | | | | | | |
| **RSSD** | **Black Hills** | **123.38** | **41** | *e*PKIKP | **PKPdf** | **16 03 27.9** | **-0.7** | | |
| RSSD | | | | MLR | MLR | | | | |
| | comp=Z,700nm,21.9s | | | | | | | | |
| **RSSD** | **Black Hills** | **123.38** | **41** | *e*PKPdf | **PKPdf** | **16 03 27.9** | **-0.7** | | |
| RSSD | | | | LR | LR | | | | |
| | comp=Z,700nm,21.9s | | | | | | | | |
| **A28A** | **Rude Farm, Bot** | **123.41** | **35** | P | **PKPdf** | **16 03 28.5** | **+0.3** | | |
| | baz=123 | | | | | | | | |
| **F26A** | **Lodgepole** | **123.48** | **39** | P | **PKPdf** | **16 03 28.2** | **-0.3** | | |
| | baz=123 | | | | | | | | |
| **PHWY** | **Pilot Hill** | **123.54** | **45** | PFAKE | | 16 03 40.0 | +11 | | |
| PHWY | | | | LR | LR | | | | |
| | comp=Z,600nm,20.7s | | | | | | | | |
| **I25A** | **Rochford** | **123.62** | **41** | P | **PKPdf** | **16 03 28.3** | **-0.6** | | |
| | baz=124 | | | | | | | | |
| **G26A** | **Maurine** | **123.78** | **39** | P | **PKPdf** | **16 03 28.6** | **-0.4** | | |
| | baz=124 | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **123.78** | **49** | P | **PKPdf** | **16 03 29.9** | **+0.3** | | |
| | baz=124 | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **123.78** | **49** | PFAKE | | 16 03 40.0 | +10 | | |
| S22A | | | | LR | LR | | | | |
| | comp=Z,900nm,20.3s | | | | | | | | |
| **J25A** | **Sunshine Ranch** | **123.84** | **42** | P | **PKPdf** | **16 03 28.4** | **-1.0** | | |
| | baz=124 | | | | | | | | |
| **F27A** | **Lemmon** | **123.88** | **39** | P | **PKPdf** | **16 03 28.7** | **-0.6** | | |
| | baz=124 | | | | | | | | |
| **H26A** | **Fairpoint** | **123.97** | **40** | P | **PKPdf** | **16 03 28.7** | **-0.8** | | |
| | baz=124 | | | | | | | | |
| **ISCO** | **Idaho Springs** | **123.98** | **46** | *e*PKIKP | **PKPdf** | **16 03 30.4** | **+0.4** | | |
| ISCO | | | | MLR | MLR | | | | |
| | comp=Z,800nm,20.5s | | | | | | | | |
| **ISCO** | **Idaho Springs** | **123.98** | **46** | P | **PKPdf** | **16 03 29.9** | **0.0** | | |
| | baz=124 | | | | | | | | |
| **ISCO** | **Idaho Springs** | **123.98** | **46** | *e*PKPdf | **PKPdf** | **16 03 30.4** | **+0.4** | | |
| ISCO | | | | LR | LR | | | | |
| | comp=Z,800nm,20.5s | | | | | | | | |
| **A29A** | **Manning Farm,** | **123.98** | **34** | P | **PKPdf** | **16 03 28.8** | **-0.5** | | |
| | baz=124 | | | | | | | | |
| **B29A** | **Wagenman Farm,** | **124.16** | **35** | P | **PKPdf** | **16 03 29.8** | **+0.2** | | |
| | baz=124 | | | | | | | | |
| **G27A** | **Dupree** | **124.16** | **39** | P | **PKPdf** | **16 03 28.9** | **-0.9** | | |
| | baz=124 | | | | | | | | |
| **I26A** | **New Underwood** | **124.18** | **41** | P | **PKPdf** | **16 03 29.2** | **-0.7** | | |
| | baz=124 | | | | | | | | |
| **MDND** | **Maddock** | **124.34** | **35** | PFAKE | | 16 03 40.0 | +10 | | |
| MDND | | | | LR | LR | | | | |
| | comp=Z,700nm,21.9s | | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **124.34** | **66** | PFAKE | | 16 03 40.0 | +9.2 | | |
| SLBS | | | | LR | LR | | | | |
| | comp=Z,1µm,22.0s | | | | | | | | |
| **E28A** | **Huff** | **124.34** | **37** | P | **PKPdf** | **16 03 30.0** | **-0.1** | | |
| | baz=124 | | | | | | | | |
| **J26A** | **Sides Ranch, S** | **124.35** | **42** | P | **PKPdf** | **16 03 30.1** | **-0.2** | | |
| | baz=124 | | | | | | | | |
| **H27A** | **Howes** | **124.41** | **40** | P | **PKPdf** | **16 03 29.2** | **-1.1** | | |
| | baz=124 | | | | | | | | |
| **121A** | **Cookes Peak, D** | **124.53** | **55** | P | **PKPdf** | **16 03 31.1** | **0.0** | | |
| | baz=124 | | | | | | | | |
| **121A** | **Cookes Peak, D** | **124.53** | **55** | *e*PKPdf | **PKPdf** | **16 03 31.4** | **+0.4** | | |
| **Q24A** | **Divide** | **124.61** | **47** | PFAKE | | 16 03 40.0 | +8.8 | | |
| Q24A | | | | LR | LR | | | | |
| | comp=Z,900nm,19.3s | | | | | | | | |
| **F28A** | **McLaughlin** | **124.64** | **38** | P | **PKPdf** | **16 03 30.8** | **+0.2** | | |
| | baz=125 | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **124.69** | **281** | *e*P | **PKPdf** | **16 03 29.3** | **-2.3** | | |
| **TORD** | **Torodi Ar. Bea** | **124.69** | **281** | PKP | **PKPdf** | **16 03 30.1** | **-1.5** | | |
| | comp=Z,21nm,0.9s,baz=68,slow=1.7,SNR=84 | | | | | | | | |
| TORD | | | | PKKPbc | **PKKPbc** | **16 13 13.6** | **+0.6** | | |
| | comp=Z,1.5nm,1.0s,baz=264,slow=3.3,SNR=4.8 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **124.72** | **314** | PKP | **PKPdf** | **16 03 30.8** | **-0.2** | | |
| | comp=Z,1.1nm,0.7s,baz=24,slow=1.6,SNR=12 | | | | | | | | |
| ESDC | | | | PP | **PP** | **16 05 17.7** | **-0.6** | | |
| | comp=Z,9.3nm,1.1s,baz=65,slow=6.2,SNR=9.0 | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **124.78** | **49** | P | **PKPdf** | **16 03 31.9** | **+0.3** | | |
| | baz=125 | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **124.78** | **49** | PFAKE | | 16 03 40.0 | +8.5 | | |
| SDCO | | | | LR | LR | | | | |
| | comp=Z,800nm,20.3s | | | | | | | | |
| **ANMO** | **Albuquerque** | **124.93** | **52** | *c i*PKIKP | **PKPdf** | **16 03 32.0** | **+0.2** | | |
| ANMO | | | | pmax | pmax | | | | |
| | comp=Z,36nm,2.5s | | | | | | | | |
| **ANMO** | **Albuquerque** | **124.93** | **52** | *e*PKPdf | **PKPdf** | **16 03 32.4** | **+0.6** | | |
| ANMO | | | | *e*PKKPbc | **PKKPbc** | **16 13 12.4** | **-0.2** | | |
| ANMO | | | | LR | LR | | | | |
| | comp=Z,700nm,20.5s | | | | | | | | |
| **G28A** | **Parade** | **124.94** | **39** | P | **PKPdf** | **16 03 30.1** | **-1.2** | | |
| | baz=125 | | | | | | | | |
| **LPM** | **Los Pinos Moun** | **124.98** | **53** | *e*PKPdf | **PKPdf** | **16 03 31.4** | **-0.5** | | |
| **ULM** | **Lac du Bonnet** | **125.03** | **31** | PKP | **PKPdf** | **16 03 30.3** | **-0.9** | | |
| | comp=Z,11nm,1.1s,baz=198,slow=4.1,SNR=4.3 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **125.03** | **31** | PKIKP | **PKPdf** | **16 03 30.3** | **-0.9** | | |
| ULM | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **125.03** | **31** | PKP | **PKPdf** | **16 03 30.3** | **-0.9** | | |
| ULM | | | | LR | LR | | | | |
| | comp=Z,900nm,19.5s | | | | | | | | |
| **PAB** | **San Pablo** | **125.04** | **314** | *e*PKIKP | **PKPdf** | **16 03 31.6** | **-0.1** | | |
| PAB | | | | *e* | | 16 05 17.4 | | | |
| PAB | | | | MLR | MLR | | | | |
| | comp=Z,500nm,20.9s | | | | | | | | |
| **PAB** | **San Pablo** | **125.04** | **314** | *e*PKPdf | **PKPdf** | **16 03 31.6** | **-0.1** | | |
| PAB | | | | *e*PP | **PP** | **16 05 17.4** | **-3.1** | | |
| PAB | | | | LR | LR | | | | |
| | comp=Z,500nm,20.9s | | | | | | | | |
| **C30A** | **Mose, Pekin** | **125.06** | **35** | P | **PKPdf** | **16 03 31.9** | **+0.5** | | |
| | baz=125 | | | | | | | | |
| **J27A** | **Elkhorn Farm,** | **125.08** | **41** | P | **PKPdf** | **16 03 31.6** | **-0.1** | | |
| | baz=125 | | | | | | | | |
| **D30A** | **Buchanan** | **125.22** | **36** | P | **PKPdf** | **16 03 30.6** | **-1.2** | | |
| | baz=125 | | | | | | | | |
| **I28A** | **Midland** | **125.28** | **40** | P | **PKPdf** | **16 03 31.2** | **-0.8** | | |
| | baz=125 | | | | | | | | |
| **C31A** | **Landman Farms,** | **125.44** | **35** | P | **PKPdf** | **16 03 31.1** | **-1.0** | | |
| | baz=125 | | | | | | | | |
| **E30A** | **Jud** | **125.44** | **37** | P | **PKPdf** | **16 03 31.1** | **-1.1** | | |
| | baz=125 | | | | | | | | |
| **G29A** | **Hoven** | **125.49** | **38** | P | **PKPdf** | **16 03 31.3** | **-1.1** | | |
| | baz=125 | | | | | | | | |
| **J28A** | **Allard Ranch,** | **125.50** | **41** | P | **PKPdf** | **16 03 31.6** | **-0.8** | | |
| | baz=126 | | | | | | | | |
| **B32A** | **Ashes, Strandq** | **125.76** | **34** | P | **PKPdf** | **16 03 31.7** | **-1.0** | | |
| | baz=126 | | | | | | | | |
| **T25A** | **Trinidad** | **125.80** | **49** | P | **PKPdf** | **16 03 33.2** | **-0.3** | | |
| | baz=126 | | | | | | | | |
| **T25A** | **Trinidad** | **125.80** | **49** | PFAKE | | 16 03 40.0 | +6.6 | | |
| T25A | | | | LR | LR | | | | |
| | comp=Z,800nm,22.0s | | | | | | | | |
| **PBRG** | **Braganca** | **125.80** | **317** | *e*PKPdf | **PKPdf** | **16 03 33.6** | **+0.6** | | |
| **OGNE** | **Ogallala** | **126.06** | **44** | PFAKE | | 16 03 40.0 | +6.4 | | |
| OGNE | | | | LR | LR | | | | |
| | comp=Z,700nm,20.3s | | | | | | | | |
| **R26A** | **Arlington** | **126.10** | **47** | P | **PKPdf** | **16 03 33.8** | **0.0** | | |
| | baz=126 | | | | | | | | |
| **J29A** | **Okreek** | **126.10** | **40** | P | **PKPdf** | **16 03 33.5** | **-0.1** | | |
| | baz=126 | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **126.19** | **33** | PFAKE | | 16 03 40.0 | +6.5 | | |
| AGMN | | | | LR | LR | | | | |
| | comp=Z,900nm,20.9s | | | | | | | | |
| **MVO** | **Moncorvo** | **126.27** | **317** | *e*PKPdf | **PKPdf** | **16 03 34.0** | **0.0** | | |
| **MVO** | **Moncorvo** | **126.27** | **317** | *e*PP | PP | 16 05 27.8 | -0.7 | | |
| **MVO** | **Moncorvo** | **126.27** | **317** | *e*LQ | LQ | 16 37 09.3 | | | |
| MVO | | | | *e*LR | LR | 16 46 44.7 | | | |
| | comp=Z,404nm,22.0s | | | | | | | | |
| **S26A** | **Kim** | **126.33** | **48** | P | **PKPdf** | **16 03 34.6** | **+0.3** | | |
| | baz=126 | | | | | | | | |
| **T26A** | **Comanche Natio** | **126.40** | **49** | P | **PKPdf** | **16 03 34.6** | **+0.1** | | |
| | baz=126 | | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **126.42** | **46** | PFAKE | | 16 03 40.0 | +5.6 | | |
| KSCO | | | | LR | LR | | | | |
| | comp=Z,600nm,20.2s | | | | | | | | |
| **N28A** | **Pribbeno Ranch** | **126.50** | **44** | P | **PKPdf** | **16 03 33.8** | **-0.7** | | |
| | baz=126 | | | | | | | | |
| **R27A** | **Eads** | **126.58** | **47** | P | **PKPdf** | **16 03 34.5** | **-0.3** | | |
| | baz=126 | | | | | | | | |
| **J30A** | **Dallas** | **126.67** | **40** | P | **PKPdf** | **16 03 33.4** | **-1.2** | | |
| | baz=127 | | | | | | | | |
| **PVRL** | **Vila Real** | **126.69** | **317** | *e*PP | PP | 16 05 34.6 | +3.3 | | |
| **POLO** | **Lamas de Olo** | **126.70** | **317** | *e*PKPdf | **PKPdf** | **16 03 34.5** | **-0.3** | | |
| **POLO** | **Lamas de Olo** | **126.70** | **317** | *e*PP | PP | 16 05 33.4 | +2.0 | | |
| **PCAB** | **Cabril** | **126.70** | **318** | *e*PKPdf | **PKPdf** | **16 03 39.2** | **+4.4** | | |
| **PCAB** | **Cabril** | **126.70** | **318** | *e*PP | PP | 16 05 32.2 | +0.9 | | |
| **MNTX** | **Cornudas Mount** | **126.71** | **56** | P | **PKPdf** | **16 03 35.2** | **+0.1** | | |
| | baz=127 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **126.71** | **56** | *e*PKPdf | **PKPdf** | **16 03 35.2** | **+0.1** | | |
| MNTX | | | | LR | LR | | | | |
| | comp=Z,500nm,20.0s | | | | | | | | |
| **S27A** | **Las Animas** | **126.73** | **48** | P | **PKPdf** | **16 03 35.2** | **+0.2** | | |
| | baz=127 | | | | | | | | |
| **B34A** | **Aery, Baudette** | **126.73** | **33** | P | **PKPdf** | **16 03 33.2** | **-1.4** | | |
| | baz=127 | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **126.75** | **318** | *e*PKPdf | **PKPdf** | **16 03 35.2** | **+0.3** | | |
| **PGAV** | **Gavieira, Arco** | **126.75** | **318** | *e*PP | PP | 16 05 34.8 | +3.1 | | |
| **PGAV** | **Gavieira, Arco** | **126.75** | **318** | *e*LQ | LQ | 16 37 18.0 | | | |
| PGAV | | | | *e*LR | LR | 16 47 08.6 | | | |
| | comp=Z,613nm,20.0s | | | | | | | | |
| **MTE** | **Manteigas** | **126.95** | **316** | *e*PKPdf | **PKPdf** | **16 03 35.0** | **-0.3** | | |
| **MTE** | **Manteigas** | **126.95** | **316** | *e*PP | PP | 16 05 34.8 | +1.7 | | |
| **MTE** | **Manteigas** | **126.95** | **316** | *e*LQ | LQ | 16 37 27.2 | | | |
| MTE | | | | *e*LR | LR | 16 47 22.2 | | | |
| | comp=Z,250nm,18.0s | | | | | | | | |
| **MTE** | **Manteigas** | **126.95** | **316** | *e*PP | PP | 16 05 33.6 | +0.5 | | |
| MTE | | | | LR | LR | | | | |
| | comp=Z,500nm,20.0s | | | | | | | | |
| **Q28A** | **Sharon Springs** | **126.97** | **46** | P | **PKPdf** | **16 03 35.7** | **+0.2** | | |
| | baz=127 | | | | | | | | |
| **PVIS** | **Viseu** | **127.06** | **316** | *e*PP | PP | 16 05 36.6 | +2.9 | | |
| **PCBR** | **Castelo Branco** | **127.14** | **315** | *e*PKPdf | **PKPdf** | **16 03 36.5** | **+0.9** | | |
| **PCBR** | **Castelo Branco** | **127.14** | **315** | *e*PP | PP | 16 05 36.8 | +2.6 | | |
| **U27A** | **Thompson Grove** | **127.24** | **49** | P | **PKPdf** | **16 03 35.7** | **-0.3** | | |
| | baz=127 | | | | | | | | |
| **PMRV** | **Marv??o** | **127.25** | **315** | *e*PKPdf | **PKPdf** | **16 03 35.3** | **-0.6** | | |
| **PMRV** | **Marv??o** | **127.25** | **315** | *e*PP | PP | 16 05 35.4 | +0.4 | | |
| **PMRV** | **Marv??o** | **127.25** | **315** | *e*LQ | LQ | 16 37 51.3 | | | |
| PMRV | | | | *e*LR | LR | 16 45 18.0 | | | |
| | comp=Z,409nm,22.0s | | | | | | | | |
| **R28A** | **Tribune** | **127.27** | **47** | P | **PKPdf** | **16 03 35.8** | **-0.3** | | |
| | baz=127 | | | | | | | | |
| **PBAR** | **Barrancos** | **127.51** | **313** | *e*PKPdf | **PKPdf** | **16 03 36.1** | **-0.2** | | |
| **PBAR** | **Barrancos** | **127.51** | **313** | *e*PP | PP | 16 05 33.5 | -3.2 | | |
| **T28A** | **Walsh** | **127.52** | **48** | P | **PKPdf** | **16 03 35.9** | **-0.6** | | |
| | baz=128 | | | | | | | | |
| **I32A** | **Karley and Nic** | **127.60** | **39** | P | **PKPdf** | **16 03 36.0** | **-0.4** | | |
| | baz=128 | | | | | | | | |
| **E34A** | **Wadena** | **127.60** | **35** | P | **PKPdf** | **16 03 35.1** | **-1.1** | | |
| | baz=128 | | | | | | | | |
| **G33A** | **Ortonville** | **127.60** | **37** | P | **PKPdf** | **16 03 35.4** | **-0.9** | | |
| | baz=128 | | | | | | | | |
| **H33A** | **Prehn Over Nor** | **127.69** | **37** | P | **PKPdf** | **16 03 36.6** | **+0.1** | | |
| | baz=128 | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **127.76** | **316** | *e*PKPdf | **PKPdf** | **16 03 37.5** | **+0.7** | | |
| **PCAS** | **Casmilo, Conde** | **127.76** | **316**

U31A Nine Bar Ranch 129.48 48 P PKPdf 16 03 40.3 0.0
baz=129
Y30A Stafford Cattl 129.62 52 P PKPdf 16 03 40.8 +0.2
baz=130
SPMN St. Paul 129.70 35 ePKPdf PKPdf 16 03 40.5 +0.2
SPMN LR LR
comp=Z,800nm,20.7s
529A Stev Forest Ra 129.76 57 P PKPdf 16 03 40.6 -0.4
baz=130
W31A Holland Ranch, 129.88 50 P PKPdf 16 03 41.0 0.0
baz=130
429A Davenport Ranc 129.88 56 P PKPdf 16 03 40.9 -0.3
baz=130
R33A Olander Ranch, 130.01 45 P PKPdf 16 03 41.3 +0.1
baz=130
X31A McDonald Ranch 130.06 50 P PKPdf 16 03 41.6 +0.3
baz=130
230A Sterling City 130.13 54 P PKPdf 16 03 41.3 -0.3
baz=130
P34A Walnut Farm, R 130.24 43 P PKPdf 16 03 41.3 -0.3
baz=130
V32A Arapaho 130.34 49 P PKPdf 16 03 41.8 -0.1
baz=130
430A Baggett Ranch, 130.37 56 P PKPdf 16 03 41.8 -0.3
baz=130
Z31A Sharp Cattle R 130.41 52 P PKPdf 16 03 42.3 +0.2
baz=130
131A Roby 130.44 53 P PKPdf 16 03 43.0 +0.8
baz=130
530A J-C Ranch, Com 130.48 56 P PKPdf 16 03 42.1 -0.2
baz=130
R34A Isabella, Hill 130.53 45 P PKPdf 16 03 40.0 -2.1
baz=130
KSU1 Kansas State U 130.60 44 PFAKE 16 03 50.0 +7.8
KSU1 LR LR
comp=Z,1µm,18.6s
231A Bronte 130.75 54 P PKPdf 16 03 42.0 -0.7
baz=131
KIC Kosan Boka 130.80 272 eP PKPdf 16 03 42.3 -1.0
comp=Z,242nm,1.6s
331A San Angelo 130.87 55 P PKPdf 16 03 42.3 -0.7
baz=131
431A Sonora 130.92 56 P PKPdf 16 03 43.3 +0.1
baz=131
WMOK Wichita Mounta 130.93 50 ePKIKP PKPdf 16 03 42.5 -0.5
WMOK MLR MLR
comp=Z,600nm,19.5s
WMOK Wichita Mounta 130.93 50 ePKPdf PKPdf 16 03 42.5 -0.5
WMOK LR LR
comp=Z,600nm,19.5s
Z32A Haskell 130.93 52 P PKPdf 16 03 43.1 +0.1
baz=131
DBIC Dimbokro 130.94 272 PKP PKPdf 16 03 43.2 -0.4
comp=Z,22nm,1.0s,baz=73,slow=2.3,SNR=14
DBIC Dimbokro 130.94 272 PKIKP PKPdf 16 03 43.2 -0.4
DBIC pmax pmax
comp=Z,22nm,1.0s
DBIC Dimbokro 130.94 272 PKP PKPdf 16 03 43.2 -0.4
DBIC LR LR
comp=Z,800nm,20.9s
ABTX Abilene, Hawle 131.05 53 P PKPdf 16 03 43.2 -0.1
baz=131
ABTX Abilene, Hawle 131.05 53 ePKPdf PKPdf 16 03 44.3 +1.0
LIC Lamto 131.07 272 eP PKPdf 16 03 42.7 -1.1
comp=Z,184nm,1.9s
TIC Toumodi 131.10 272 eP PKPdf 16 03 44.2 +0.3
531A Rocksprings 131.13 56 P PKPdf 16 03 42.9 -0.7
baz=131
COWI Conover 131.15 32 PFAKE 16 03 50.0 +6.9
COWI LR LR
comp=Z,800nm,19.9s
U34A Anderson Ranch 131.16 47 P PKPdf 16 03 43.1 -0.3
baz=131
U34A Anderson Ranch 131.16 47 PFAKE 16 03 50.0 +6.6
U34A LR LR
comp=Z,900nm,21.9s
232A Coleman 131.30 54 P PKPdf 16 03 43.9 +0.1
baz=131
Y33A Hilltop Ranch, 131.33 51 P PKPdf 16 03 43.5 -0.2
baz=131
631A Perdido Creek 131.34 57 P PKPdf 16 03 43.5 -0.4
baz=131
SCIA State Center 131.37 39 PFAKE 16 03 50.0 +6.4
SCIA LR LR
comp=Z,1µm,21.9s
332A Millersview 131.40 54 P PKPdf 16 03 43.6 -0.4
baz=131
V34A Guthrie 131.43 48 PFAKE 16 03 50.0 +6.1
V34A LR LR
comp=Z,1µm,21.4s
S35A Otter Creek Ra 131.47 45 P PKPdf 16 03 43.4 -0.5
baz=131
W34A Bridge Creek, 131.49 49 PFAKE 16 03 50.0 +6.0
W34A LR LR
comp=Z,1µm,20.6s
Z33A Whitaker Ranch 131.50 52 P PKPdf 16 03 44.0 -0.1
baz=132
432A Menard 131.52 55 P PKPdf 16 03 43.7 -0.5
baz=132
SCHQ Schefferville 131.61 10 PKP PKPdf 16 03 43.6 -0.1
comp=Z,7.3nm,0.8s,baz=346,slow=3.7,SNR=3.9
SCHQ Schefferville 131.61 10 PKP PKPdf 16 03 43.6 -0.1
SCHQ LR LR
comp=Z,900nm,18.5s
133A Hamilton Ranch 131.63 52 P PKPdf 16 03 44.2 -0.2
baz=132
JCT Junction City 131.64 55 ePKIKP PKPdf 16 03 45.6 +1.1
JCT MLR MLR
comp=Z,800nm,21.2s
JCT Junction City 131.64 55 P PKPdf 16 03 43.7 -0.8
baz=132
JCT Junction City 131.64 55 ePKPdf PKPdf 16 03 45.6 +1.1
JCT LR LR
comp=Z,800nm,21.2s
532A Rocksprings 131.67 56 P PKPdf 16 03 43.9 -0.6
baz=132
632A Uvalde 131.96 57 P PKPdf 16 03 45.1 -0.1
baz=132
333A Richland Sprin 132.03 54 P PKPdf 16 03 44.8 -0.4
baz=132
732A Laxson Ranch, 132.04 58 P PKPdf 16 03 44.8 -0.4
baz=132
T36A Boggs Farm, Ca 132.07 46 P PKPdf 16 03 44.6 -0.5
baz=132
433A Art 132.13 55 P PKPdf 16 03 44.6 -0.8
baz=132
832A Faith Ranch, C 132.17 58 P PKPdf 16 03 45.2 -0.3
baz=132
W35A Tecumseh 132.19 48 P PKPdf 16 03 44.7 -0.6
baz=132
134A White-Moore Ra 132.30 52 P PKPdf 16 03 45.0 -0.6
baz=132
X35A Drake 132.43 49 P PKPdf 16 03 45.3 -0.5
baz=132
234A Clairette 132.46 53 P PKPdf 16 03 45.5 -0.5
baz=132
S37A Fort Scott 132.47 44 P PKPdf 16 03 45.1 -0.7
baz=132
633A Saathoff Ranch 132.48 57 P PKPdf 16 03 46.1 0.0
baz=132
JFWS Jewell Farm 132.56 36 PFAKE 16 04 00.0 +14
JFWS LR LR
comp=Z,900nm,20.0s
V36A Jenks 132.60 47 P PKPdf 16 03 45.6 -0.5
baz=132
334A Lometa 132.62 54 P PKPdf 16 03 45.4 -0.9
baz=133
833A Chaparral WMA, 132.65 58 P PKPdf 16 03 46.1 -0.3
baz=133
TUL1 Tulsa 132.65 47 P PKPdf 16 03 45.5 -0.7
baz=133
TUL1 Tulsa 132.65 47 PFAKE 16 04 00.0 +14
TUL1 LR LR
comp=Z,800nm,20.5s
W36A Wetumka 132.68 48 P PKPdf 16 03 45.8 -0.5
baz=133
434A Burnet 132.78 54 P PKPdf 16 03 45.8 -0.8
baz=133
534A Blanco 132.88 56 P PKPdf 16 03 46.0 -0.8
baz=133
933A Laredo 132.96 59 P PKPdf 16 03 47.6 +0.6
baz=133
WHTX Lake Whitney 133.00 53 P PKPdf 16 03 46.7 -0.3
baz=133
335A Moody 133.29 54 P PKPdf 16 03 47.1 -0.4
baz=133

136A Ennis 133.54 52 P PKPdf 16 03 47.5 -0.4
baz=134
034A Hebbronville 133.62 59 P PKPdf 16 03 49.1 +0.9
baz=134
V38A Canehill 133.67 46 P PKPdf 16 03 47.5 -0.7
baz=134
336A Riesel 133.71 53 P PKPdf 16 03 48.0 -0.3
baz=134
236A Katherine and 133.73 52 P PKPdf 16 03 48.0 -0.3
baz=134
735A Kenedy 133.81 57 P PKPdf 16 03 48.7 +0.1
baz=134
X38A Whitesboro 133.91 48 P PKPdf 16 03 48.2 -0.4
baz=134
Z37A Pogue Cattle C 133.95 50 P PKPdf 16 03 48.7 0.0
baz=134
436A Wall Ranch, Ga 133.98 54 P PKPdf 16 03 49.6 +0.8
baz=134
137A Heron Place, G 134.09 51 P PKPdf 16 03 49.2 +0.3
baz=134
KVTX Kingsville 134.15 59 PFAKE 16 04 00.0 +11
KVTX LR LR
comp=Z,600nm,19.7s
035A Encino 134.15 59 P PKPdf 16 03 50.3 +1.0
baz=134
636A Smothers Creek 134.22 56 P PKPdf 16 03 50.1 +0.8
baz=134
TRQA Tornquist 134.25 172 ePKPdf PKPdf 16 03 48.8 -0.4
TRQA ePP PP 16 06 27.5 +8.4
TRQA LR LR
comp=Z,3µm,21.5s
237A Washetta, Mont 134.29 52 P PKPdf 16 03 50.5 +1.1
baz=134
736A Circle Diamond 134.39 56 P PKPdf 16 03 50.9 +1.2
baz=134
337A Centerville 134.50 53 P PKPdf 16 03 50.2 +0.5
baz=134
HDIL Hopedale 134.56 38 PFAKE 16 04 00.0 +10
HDIL LR LR
comp=Z,1µm,21.3s
138A Matatall Enter 134.58 51 P PKPdf 16 03 50.3 +0.4
baz=134
537A Green Hill Far 134.61 55 P PKPdf 16 03 50.9 +0.9
baz=135
CCM Cathedral Cave 134.75 42 ePKIKP PKPdf 16 03 49.7 -0.4
CCM Cathedral Cave 134.75 42 ePKPdf PKPdf 16 03 49.7 -0.4
Y39A Lockesburg 134.78 49 P PKPdf 16 03 50.8 +0.6
baz=135
238A Jacksonville 134.83 52 P PKPdf 16 03 50.7 +0.3
baz=135
MIAR Mount Ida 134.89 48 ePKIKP PKPdf 16 03 50.6 +0.2
MIAR MLR MLR
comp=Z,1µm,20.5s
MIAR Mount Ida 134.89 48 P PKPdf 16 03 51.2 +0.7
baz=135
MIAR Mount Ida 134.89 48 ePKPdf PKPdf 16 03 50.6 +0.2
MIAR LR LR
comp=Z,1µm,20.5s
HKT Hockley 135.05 55 ePKIKP PKPdf 16 03 52.5 +1.8
HKT MLR MLR
comp=Z,1µm,20.1s
HKT Hockley 135.05 55 ePKPdf PKPdf 16 03 52.5 +1.8
HKT LR LR
comp=Z,1µm,20.1s
SLM Saint Louis 135.09 41 PFAKE 16 04 00.0 +9.3
SLM LR LR
comp=Z,800nm,18.9s
139A Bunkhouse Ranc 135.11 50 P PKPdf 16 03 51.0 +0.2
baz=135
NATX Nacogdoches 135.28 52 PFAKE 16 04 00.0 +8.8
NATX LR LR
comp=Z,200nm,21.3s
UALR University of 135.68 47 PFAKE 16 04 00.0 +8.1
UALR LR LR
comp=Z,1µm,20.4s
SFIN Scholer Farm 135.99 37 ePP PP 16 06 30.2 -0.7
SFIN LR LR
comp=Z,1µm,20.1s
PBMO Poplar Bluff 135.99 43 PFAKE 16 04 00.0 +7.6
PBMO LR LR
comp=Z,800nm,20.4s
340A Bronson 136.02 52 P PKPdf 16 03 52.6 0.0
baz=136
SIUC Southern Illin 136.27 41 PFAKE 16 04 00.0 +7.1
SIUC LR LR
comp=Z,800nm,20.3s
OLIL Olney 136.39 39 PFAKE 16 04 00.0 +6.9
OLIL LR LR
comp=Z,900nm,21.6s
PMPST Porto Santo, M 136.52 311 ePP PP 16 06 36.7 +1.9
PMPS Porto Santo 136.53 311 ePKPdf PKPdf 16 03 55.9 +2.4
PMPS Porto Santo 136.53 311 ePP PP 16 06 36.4 +1.5
AAM Ann Arbor 136.62 32 PFAKE 16 04 00.0 +6.6
AAM LR LR
comp=Z,800nm,18.9s
SADO Sadowa 136.93 26 PFAKE 16 04 00.0 +6.1
SADO LR LR
comp=Z,1µm,21.8s
BLO Bloomington 137.09 37 PFAKE 16 04 00.0 +5.6
BLO LR LR
comp=Z,1µm,21.1s
USIN University of 137.12 40 PFAKE 16 04 00.0 +5.5
USIN LR LR
comp=Z,1µm,19.0s
MET Memphis--Engin 137.21 45 PFAKE 16 04 00.0 +5.3
MET LR LR
comp=Z,800nm,20.5s
UTMT University of 137.28 42 PFAKE 16 04 10.0 +15
UTMT LR LR
comp=Z,800nm,18.9s
PMOZ Porto Moniz, M 137.28 312 ePKPdf PKPdf 16 03 57.3 +2.2
PMOZ Porto Moniz, M 137.28 312 ePP PP 16 06 38.5 -1.2
PMOZ Porto Moniz, M 137.28 312 eLR LR 16 52 41.8
comp=Z,468nm,24.0s
WCI Wyandotte Cave 137.82 38 ePP PP 16 06 40.6 -1.9
WCI LR LR
comp=Z,4µm,21.5s
WVT Waverly 138.09 42 ePP PP 16 06 41.7 -2.6
DRLN Deer Lake 138.16 3 PFAKE 16 04 10.0 +14
DRLN LR LR
comp=Z,2µm,20.0s
VBMS Vicksburg 138.24 49 PFAKE 16 04 10.0 +13
VBMS LR LR
comp=Z,900nm,20.0s
ACSO Alum Creek Sta 138.43 34 ePKPdf PKPdf 16 03 57.1 +0.3
ACSO LR LR
comp=Z,1µm,22.0s
ERPA Erie 138.60 29 PFAKE 16 04 10.0 +13
ERPA LR LR
comp=Z,800nm,20.9s
ALLY Alegheny Colle 138.88 30 PFAKE 16 04 10.0 +12
ALLY LR LR
comp=Z,700nm,19.9s
LONY Lake Ozonia 138.90 22 PFAKE 16 04 10.0 +12
LONY LR LR
comp=Z,1µm,19.4s
CFAA Coronel Fontan 139.02 162 PKhKP PKPpre 16 03 49.1
comp=Z,0.7nm,0.7s,baz=217,slow=2.4,SNR=11
CFAA PKP PKPdf 16 03 58.0 -0.3
comp=Z,2.8nm,0.8s,baz=220,slow=2.1,SNR=19
CFAA PP PP 16 06 51.2 +2.0
comp=Z,0.2nm,0.3s,baz=200,slow=6.6,SNR=3.4
FRNY Flat Rock 139.08 21 PFAKE 16 04 10.0 +12
FRNY LR LR
comp=Z,1µm,20.6s
MMNY Mt. Morris Dam 139.09 27 PFAKE 16 04 10.0 +12
MMNY LR LR
comp=Z,1µm,20.3s
NCB Newcomb 139.59 22 PFAKE 16 04 10.0 +11
NCB LR LR
comp=Z,1µm,21.1s
BART Pico Bartolome 139.83 323 ePP PP 16 07 00.8 +5.8
PSET Sete Cidades 140.13 324 ePP PP 16 06 57.6 +0.9
LBNH Lisbon 140.18 20 PFAKE 16 04 10.0 +10
LBNH LR LR
comp=Z,1µm,20.6s
PSMN Pico do Norte, 140.28 322 ePP PP 16 07 00.8 +3.1
ACCN Adirondack Com 140.30 22 PFAKE 16 04 10.0 +10
ACCN LR LR
comp=Z,700nm,21.9s
PSMA Santa Maria 140.32 322 ePP PP 16 07 03.2 +5.3
BINY Binghamton 140.36 25 PFAKE 16 04 10.0 +10
BINY LR LR
comp=Z,1µm,21.0s
LRAL Lakeview Retre 140.38 45 ePKPdf PKPdf 16 04 00.5 -0.1
ADH Angra Heroismo 140.42 326 ePP PP 16 06 49.1 -9.2

MCWV Mont Chateau 140.52 32 PFAKE 16 04 10.0 +9.3
MCWV LR LR
comp=Z,600nm,18.7s
LCO Las Campanas 140.53 157 ePKPdf PKPdf 16 03 59.4 -2.0
LCO LR LR
comp=Z,2µm,20.3s
PGRA Graciosa 140.56 327 ePP PP 16 06 59.2 0.0
WVL Waterville 140.60 17 PFAKE 16 04 10.0 +9.4
WVL LR LR
comp=Z,2µm,20.5s
SSPA Standing Stone 140.75 29 PFAKE 16 04 10.0 +9.0
SSPA LR LR
comp=Z,4µm,20.1s
TRY Troy 140.86 23 PFAKE 16 04 10.0 +8.9
TRY LR LR
comp=Z,2µm,21.3s
PMAN Manadas 140.91 327 ePP PP 16 07 05.0 +3.7
ROSA Rosais 140.93 327 ePP PP 16 07 02.4 +1.0
KSPA Keystone Colle 140.98 26 PFAKE 16 04 10.0 +8.6
KSPA LR LR
comp=Z,2µm,21.9s
TKL Tuckaleechee C 141.00 40 PKhKP PKPpre 16 03 53.7
TKL PKP PKPdf 16 04 01.7 0.0
comp=Z,14nm,0.8s,baz=319,slow=11
TKL PP PP 16 07 00.3 -1.8
comp=Z,9.2nm,1.1s,baz=291,slow=5.3,SNR=3.6
TKL Tuckaleechee C 141.00 40 i PKHKP PKPpre 16 03 53.7
TKL 16 04 01.7
TKL 16 07 00.3
TKL pmax pmax
comp=Z,15nm,0.8s
TKL pmax pmax
comp=Z,9.0nm,1.1s
EMMW East Machias 141.08 15 PFAKE 16 04 10.0 +8.5
EMMW LR LR
comp=Z,7µm,21.6s
PPNO Prainha do Nor 141.12 327 ePP PP 16 07 08.8 +6.1
PICO Pico 141.18 327 ePP PP 16 06 47.3 -16
PCED Cedros 141.24 327 ePP PP 16 07 10.4 +7.1
CALA Caldeira 141.27 327 ePP PP 16 06 53.6 -10
HRV Adam Dziewonsk 141.83 21 PFAKE 16 04 10.0 +7.1
HRV LR LR
comp=Z,2µm,19.3s
ODNJ Ogdensburg 141.87 25 PFAKE 16 04 10.0 +7.0
ODNJ LR LR
comp=Z,1µm,20.6s
LUPA Lehigh Univers 141.94 26 PFAKE 16 04 10.0 +6.8
LUPA LR LR
comp=Z,900nm,19.9s
BRNJ Basking Ridge 142.22 25 PFAKE 16 04 10.0 +6.4
BRNJ LR LR
comp=Z,1µm,21.4s
PAL Palisades 142.22 24 PFAKE 16 04 10.0 +6.4
PAL LR LR
comp=Z,1µm,18.4s
YLE Yale 142.35 23 PFAKE 16 04 10.0 +6.2
YLE LR LR
comp=Z,1µm,18.1s
BRYW Bryant College 142.35 21 PFAKE 16 04 10.0 +6.1
BRYW LR LR
comp=Z,3µm,20.9s
CPNY Central Park 142.38 25 PFAKE 16 04 10.0 +6.1
CPNY LR LR
comp=Z,1µm,20.3s
KMSC Kings Mountain 142.85 38 ePKPdf PKPdf 16 04 01.2 -3.7
CBN Corbin 142.88 31 PFAKE 16 04 20.0 +15
CBN LR LR
comp=Z,1µm,19.4s
PAYG Puerto Ayora 143.24 101 PFAKE 16 04 20.0 +14
PAYG LR LR
comp=Z,1µm,19.0s
TIGA Tifton 143.66 45 P PKPab 16 04 03.5 +0.4
baz=144
TIGA Tifton 143.66 45 PFAKE 16 04 20.0 +14
TIGA LR LR
comp=Z,700nm,19.6s
TEIG Tepich 144.71 65 eP PKPab 16 04 07.4 +0.1
TEIG Tepich 144.71 65 ePKPdf PKPbc 16 04 07.7 +0.2
CNNC Cliffs of the 144.81 35 ePKPdf PKPbc 16 04 07.7 +0.3
CNNC LR LR
comp=Z,1µm,21.6s
NHSC New Hope 144.91 40 ePKPdf PKPbc 16 04 08.2 +0.4
NHSC LR LR
comp=Z,1µm,20.4s
RGRS Roger Stewart 145.03 40 ePKPdf PKPdf 16 04 09.1 +0.3
CPUP Villa Florida 146.38 175 PKPbc PKPdf 16 04 11.5 +0.2
comp=Z,114nm,1.2s,baz=196,slow=2.3,SNR=56
CPUP PP PP 16 07 35.0 +1.6
comp=Z,9.0nm,0.9s,baz=174,slow=5.5,SNR=4.1
CPUP Villa Florida 146.38 175 PKIKP PKPdf 16 04 11.5 +0.2
CPUP 16 07 35.0
CPUP pmax pmax
comp=Z,114nm,1.2s
LVC Limon Verde 146.95 155 PKPbc PKPbc 16 04 14.1 -0.5
comp=Z,185nm,0.9s,baz=159,slow=2.3,SNR=36
LVC PP PP 16 07 38.9 +1.3
comp=Z,28nm,1.0s,baz=168,slow=4.9,SNR=3.1
LVC Limon Verde 146.95 155 ePKPdf PKPdf 16 04 13.6 +0.8
LVC PKPbc PKPbc 16 04 14.1 -0.5
LVC PP PP 16 07 38.9 +1.3
TGUH Tegucigalpa,Un 146.96 76 eP PKPbc 16 04 14.3 -0.2
TGUH Tegucigalpa,Un 146.96 76 ePKPab PKPbc 16 04 14.9 +0.4
TGUH LR LR
comp=Z,700nm,21.2s
TEL3 Telica 3 147.56 78 eP PKPbc 16 04 15.5 -0.8
TEL3 AML AML 16 04 20.9
comp=Z,391nm,0.8s
CNGN Cerro Negro 147.71 78 eP PKPdf 16 04 14.4 +0.5
COPN Copaltepe 147.84 79 eP PKPdf 16 04 14.6 +0.5
COPN AML AML 16 04 17.2
comp=Z,1µm,1.6s
MOMN Momotombo 147.87 78 eP PKPdf 16 04 13.6 -0.6
BOAB BOACO BROADBA 147.71 78 eP PKPdf 16 04 10.4 -5.1
JCR Jicaral 149.45 83 eP PKPbc 16 04 21.7 +0.4
JTS JuntasAbangare 149.59 82 PKPbc PKPbc 16 04 21.5 0.0
comp=Z,53nm,0.8s,baz=274,slow=3.9,SNR=24
JTS JuntasAbangare 149.59 82 PKP2 PKPbc 16 04 21.5 0.0
JTS pmax pmax
comp=Z,53nm,0.8s
JTS JuntasAbangare 149.59 82 eP PKPdf 16 04 11.9 -5.1
CGA2 Cerro Gallo 2 150.08 83 eP PKPbc 16 04 23.4 +0.6
NNA Nana 150.47 130 PKP PKPdf 16 04 18.8 +0.4
comp=Z,59nm,1.0s,baz=275,slow=3.7,SNR=7.7
NNA PKPbc PKPbc 16 04 23.9 +0.2
comp=Z,112nm,1.1s,baz=266,slow=4.1,SNR=16
NNA PKPab PKPab 16 04 31.9 +1.7
comp=Z,82nm,1.1s,baz=241,slow=5.9,SNR=6.1
NNA Nana 150.47 130 PKIKP PKPdf 16 04 18.8 +0.4
NNA 16 04 23.9
NNA 16 04 31.9
NNA pmax pmax
comp=Z,59nm,1.0s
NNA Nana 150.47 130 ePKPdf PKPdf 16 04 18.7 +0.3
NNA PKP PKPdf 16 04 18.8 +0.4
NNA PKPbc PKPbc 16 04 23.9 +0.2
NNA PKPab PKPab 16 04 31.9 +1.7
BUS Buena Vista 150.79 84 eP PKPdf 16 04 21.6 +2.2
ATAH Atahualpa 151.99 120 PKP PKPdf 16 04 22.4 +1.2
comp=Z,31nm,1.0s,baz=235,slow=2.0,SNR=27
ATAH PKPbc PKiKP 16 04 29.1 +1.0
comp=Z,50nm,0.9s,baz=209,slow=4.5,SNR=16
ATAH PKPab PKPab 16 04 38.0 +1.0
comp=Z,70nm,0.9s,baz=291,slow=3.4,SNR=9.9
LPAZ La Paz 152.80 150 PKP PKPdf 16 04 22.6 0.0
comp=Z,21nm,1.1s,baz=17,slow=0.9,SNR=54
LPAZ PKPbc PKiKP 16 04 30.2 +0.3
comp=Z,158nm,1.4s,baz=201,slow=2.7,SNR=26
LPAZ La Paz 152.80 150 PKIKP PKPdf 16 04 22.6 0.0
LPAZ 16 04 30.2
LPAZ pmax pmax
comp=Z,21nm,1.1s
BBSR BB Station 153.31 20 ePKPab PKPab 16 04 42.7 +1.3
OTAV Otavalo 154.90 105 ePKPdf PKPdf 16 04 24.8 -0.7
SIV San Ignacio 155.84 164 PKP PKPdf 16 04 26.2 +0.1
comp=Z,8.5nm,0.9s,baz=231,slow=2.3,SNR=20
SIV PKPab PKPab 16 04 53.0 +0.5
comp=Z,11nm,0.6s,baz=212,slow=6.4,SNR=14
SIV PP PP 16 08 33.4 +5.4
comp=Z,6.9nm,1.0s,baz=204,slow=6.6,SNR=6.4
GTBY Guantanamo Bay 156.28 56 ePKPab PKPab 16 04 55.3 +0.8
BDFB Brasilia 156.31 195 PKP PKPdf 16 04 26.7 -0.1
comp=Z,4.2nm,0.8s,baz=166,slow=4.2,SNR=5.6
BDFB PKPab PKPab 16 04 55.1 +0.5
comp=Z,6.2nm,0.8s,baz=138,slow=5.4,SNR=4.4
BDFB PP PP 16 08 33.3 +2.7

comp=Z,2.5nm,0.5s,baz=155,slow=7.0,SNR=2.6
**BDFB Brasilia 156.31 195** PKP **PKPdf 16 04 26.7 -0.1**
BDFB ePKPdf **PKPdf 16 04 26.9 +0.1**
BDFB PKPab **PKPab 16 04 55.1 +0.5**
BDFB ePKPab PKPab 16 04 55.7 +1.1
BDFB PP **PP 16 08 33.3 +2.7**
**RCBR Riachuelo 157.44 235** PKP **PKPdf 16 04 28.6 +0.4**
comp=Z,12nm,1.0s,baz=118,slow=2.9,SNR=3.8
RCBR PKPab **PKPab 16 05 00.6 +0.9**
comp=Z,52nm,1.2s,baz=127,slow=5.5,SNR=8.0
**ROSC El Rosal 159.94 96** PKP **PKPdf 16 04 32.0 +0.3**
comp=Z,8.9nm,0.7s,baz=277,slow=0.8,SNR=15
ROSC PKPab **PKPab 16 05 12.8 +1.7**
comp=Z,15nm,0.8s,baz=276,slow=4.2,SNR=5.7
**ROSC El Rosal 159.94 96** ePKPdf **PKPdf 16 04 31.8 +0.2**
ROSC PKP **PKPdf 16 04 32.0 +0.3**
ROSC PKPab **PKPab 16 05 12.8 +1.7**
ROSC ePKPab PKPab 16 05 13.4 +2.3
**SAML Samuel 161.53 151** ePKPdf **PKPdf 16 04 32.5 -0.3**
SAML ePKPab **PKPab 16 05 18.2 +1.0**
**SJG San Juan 164.28 46** PKP **PKPdf 16 04 34.2 -1.2**
comp=Z,2.6nm,0.4s,baz=321,slow=1.8,SNR=7.9
SJG PKPab **PKPab 16 05 29.9 +0.6**
comp=Z,12nm,0.5s,baz=298,slow=5.8,SNR=14
**SJG San Juan 164.28 46** PKIKP **PKPdf 16 04 34.2 -1.2**
SJG 16 05 29.9
SJG pmax pmax
comp=Z,3.0nm,0.4s
SJG pmax pmax
comp=Z,12nm,0.5s
**STVI Saint Thomas 164.94 43** ePKPab **PKPab 16 05 32.6 +0.4**
**PTGA Pitinga 170.17 145** PKP **PKPdf 16 04 38.9 -1.0**
comp=Z,8.1nm,1.1s,baz=208,slow=1.9,SNR=28
PTGA PKPab **PKPab 16 05 55.5 +0.1**
comp=Z,7.0nm,1.0s,baz=221,slow=5.5,SNR=4.9
PTGA PP **PP 16 09 44.2 -0.2**
comp=Z,2.3nm,0.3s,baz=222,slow=6.5,SNR=4.7

*CSEM **16** 15:52:07.0, 51.52N×16.05E, h0km, After GFU*
**PRU 16 15:52:05.6, 51.56N×16.06E, h0km, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.73** | **168** | *e*Pg | Pg | 15 52 19.8 | +0.1 |
| KSP | | | | *e*Sg | Sg | 15 52 30.2 | +1.0 |
| **UPC** | **Upice** | **1.05** | **182** | *e*PG | Pg | 15 52 25.0 | -0.8 |
| UPC | | | | *e*SG | Sg | 15 52 39.4 | -0.1 |
| comp=Z,5.7nm,0.4s | | | | | | | |
| **UPC** | **Upice** | **1.05** | **182** | Pg | Pg | 15 52 25.0 | -0.8 |
| UPC | | | | Sg | Sg | 15 52 39.4 | -0.1 |
| 5.7nm,0.4s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.22** | **172** | *e*PG | Pg | 15 52 28.6 | -0.5 |
| DPC | | | | *e*SG | Sg | 15 52 44.4 | -0.6 |
| comp=Z,2.4nm,0.3s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.22** | **172** | Pg | Pg | 15 52 28.6 | -0.5 |
| DPC | | | | Sg | Sg | 15 52 44.4 | -0.6 |
| 2.4nm,0.3s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.22** | **172** | *e* | Pg | 15 52 28.6 | -0.5 |
| **PVCC** | **Panska Ves** | **1.40** | **223** | *e*PG | Pn | 15 52 31.7 | -0.7 |
| PVCC | | | | *e*SG | Sb | 15 52 51.0 | 0.0 |
| comp=Z,10nm,0.2s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.40** | **223** | Pg | Pn | 15 52 31.7 | -0.7 |
| PVCC | | | | Sg | Sb | 15 52 51.0 | 0.0 |
| 10nm,0.2s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.50** | **244** | PG | Pn | 15 52 33.2 | -0.5 |
| BRG | | | | SG | Sg | 15 52 53.3 | -0.5 |
| 2.6nm,0.3s | | | | | | | |
| **KRLC** | **Kraliky** | **1.56** | **163** | *e*SG | Sb | 15 52 55.6 | 0.0 |
| **KRLC** | **Kraliky** | **1.56** | **163** | Sg | Sb | 15 52 55.6 | 0.0 |
| **GOPC** | **GO Pecny, Ondr** | **1.84** | **207** | *e*SG | Sg | 15 53 04.6 | -0.1 |
| **GOPC** | **GO Pecny, Ondr** | **1.84** | **207** | Sg | Sg | 15 53 04.6 | -0.1 |
| **PRU** | **Pruhonice** | **1.84** | **212** | *e*SG | Sb | 15 53 04.1 | +0.2 |
| **PRU** | **Pruhonice** | **1.84** | **212** | Sg | Sb | 15 53 04.1 | +0.2 |
| **KHC** | **Kasperske Hory** | **2.91** | **214** | *e*SG | Sg | 15 53 37.5 | -1.6 |
| **KHC** | **Kasperske Hory** | **2.91** | **214** | Sg | Sg | 15 53 37.5 | -1.6 |

*ISCJB **16** 15:53:15.3±0.5, 7.33S±0.06×125.79E±0.09, h33km, mb4.0/13, Error ellipse: s-maj=12.8km s-min=8.4km az=13.0*
*IDC **16** 15:53:16.3±0.8, 7.35S×125.70E, h24km±4km, mb3.9/13, mb1 4.1/17, mb1mx4.0/34, mbtmp4.2/17, ML4.2/4, Error ellipse: s-maj=24.1km s-min=15.3km az=76.0*
**ISC 16 15:53:17.3±0.6, 7.28S±0.06×125.77E±0.08, h35km, n20, σ1s68/26, mb4.0/13, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BATI** | **Baumata** | **3.57** | **215** | Pn | **Pn** | **15 54 08.8** | **-1.4** |
| 20nm,0.3s,baz=299,slow=4.3,SNR=18 | | | | | | | |
| BATI | | | | Sn | **Sn** | **15 54 52.6** | **+1.3** |
| 28nm,0.3s,baz=5.2,slow=20,SNR=9.6 | | | | | | | |
| **KAPI** | **Kappang** | **6.39** | **290** | Sn | **Sn** | **15 55 59.7** | **-1.1** |
| 1.6nm,0.3s,baz=102,slow=18,SNR=2.8 | | | | | | | |
| **SIJI** | **Sorong** | **8.41** | **41** | Pn | **Pn** | **15 55 16.7** | **+0.1** |
| 0.8nm,0.3s,baz=250,slow=15,SNR=4.9 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.76** | **181** | Pn | **Pn** | **15 55 46.6** | **-2.2** |
| 1.3nm,0.3s,baz=10.0,slow=17,SNR=6.4 | | | | | | | |
| FITZ | | | | Sn | Sn | 15 57 38.3 | -10 |
| 2.2nm,0.3s,baz=298,slow=17,SNR=6.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **15.08** | **147** | Pn | Pn | 15 56 42.2 | -5.7 |
| 0.4nm,0.3s,baz=319,slow=14,SNR=4.5 | | | | | | | |
| WRA | | | | Sn | Sn | 15 59 20.2 | -14 |
| 0.9nm,0.3s,baz=333,slow=21,SNR=5.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.07** | **155** | P | **P** | **15 57 25.3** | **-0.5** |
| 2.3nm,0.3s,baz=338,slow=12,SNR=11 | | | | | | | |
| ASAR | | | | S | Sn | 16 00 33.9 | -12 |
| 0.2nm,0.3s,baz=323,slow=19,SNR=3.4 | | | | | | | |
| **PMG** | **Port Moresby** | **21.27** | **97** | P | **P** | **15 58 03.2** | **+2.4** |
| 24nm,1.0s,baz=183,slow=4.6,SNR=5.9 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.80** | **314** | P | **P** | **16 00 23.2** | **+1.1** |
| 1.3nm,0.8s,baz=141,slow=6.6,SNR=5.1 | | | | | | | |
| CMAR | | | | pP | **pP** | **16 00 31.2** | **-1.1** |
| 1.9nm,0.7s,baz=144,slow=7.1,SNR=6.7 | | | | | | | |
| **SONM** | **Songino Array** | **57.49** | **345** | P | **P** | **16 03 05.3** | **+2.3** |
| 0.9nm,0.8s,baz=154,slow=7.5,SNR=3.1 | | | | | | | |
| SONM | | | | pP | **pP** | **16 03 11.6** | **-2.1** |
| 1.9nm,0.9s,baz=163,slow=6.3,SNR=5.0 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **65.98** | **20** | P | **P** | **16 04 00.4** | **+0.5** |
| 1.9nm,0.6s,baz=179,slow=11,SNR=2.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **66.23** | **329** | P | **P** | **16 04 02.3** | **+0.6** |
| 0.9nm,0.6s,baz=126,slow=7.4,SNR=8.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.04** | **336** | P | **P** | **16 04 25.2** | **-0.3** |
| 0.9nm,0.6s,baz=132,slow=6.4,SNR=3.2 | | | | | | | |
| ZALV | | | | pP | **pP** | **16 04 33.0** | **-3.3** |
| 1.8nm,0.7s,baz=145,slow=3.6,SNR=4.0 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.61** | **330** | P | **P** | **16 04 29.2** | **+0.2** |
| 0.7nm,0.6s,baz=140,slow=5.1,SNR=3.4 | | | | | | | |
| KURBB | | | | pP | **pP** | **16 04 37.0** | **-2.9** |
| 2.5nm,0.8s,baz=135,slow=5.1,SNR=6.8 | | | | | | | |
| **VNDA** | **Vanda** | **72.70** | **172** | P | **P** | **16 04 41.4** | **+0.2** |
| 1.4nm,0.6s,baz=325,slow=8.2,SNR=8.9 | | | | | | | |
| **MAW** | **Mawson** | **73.17** | **201** | P | **P** | **16 04 44.3** | **+0.2** |
| 1.0nm,0.5s,baz=81,slow=3.0,SNR=5.0 | | | | | | | |
| **BVAR** | **Borovoye Array** | **76.11** | **329** | P | **P** | **16 05 01.5** | **+0.2** |
| 0.3nm,0.5s,baz=156,slow=8.7,SNR=2.3 | | | | | | | |
| BVAR | | | | pP | **pP** | **16 05 10.2** | **-2.1** |
| 1.3nm,0.7s,baz=144,slow=5.5,SNR=4.5 | | | | | | | |
| **GEYT** | **Alibeck** | **77.22** | **311** | P | **P** | **16 05 07.8** | **-0.2** |
| 1.2nm,0.6s,baz=93,slow=3.0,SNR=3.0 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **81.76** | **323** | P | **P** | **16 05 33.6** | **+1.2** |
| 1.1nm,0.6s,baz=139,slow=9.1,SNR=3.7 | | | | | | | |
| AKTO | | | | pP | **pP** | **16 05 41.1** | **-2.3** |
| 1.3nm,0.5s,baz=111,slow=7.0,SNR=3.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **96.23** | **309** | P | **P** | **16 06 44.5** | **+2.2** |
| 0.3nm,0.6s,baz=104,slow=3.8,SNR=2.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.74** | **281** | PKP | **PKPdf** | **16 12 13.2** | **-1.1** |
| 1.4nm,1.1s,baz=74,slow=1.5,SNR=3.1 | | | | | | | |

**KRSC 16 15:53:18.4±1.7, 51.03N×157.91E, h47km±18km, ML3.6, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAU** | **Pauzhetka** | **0.82** | **303** | *e*P | Pn | 15 53 35.1 | +1.5 |
| PAU | | | | *e*S | Sn | 15 53 45.8 | +1.1 |
| **SKR** | **Severo-Kuril's** | **1.19** | **254** | *e*P | Pn | 15 53 39.3 | +0.7 |
| SKR | | | | *e*S | Sn | 15 53 53.4 | -0.2 |
| **ASAK** | **Asacha** | **1.36** | **360** | *e*P | Pn | 15 53 43.5 | +2.5 |
| ASAK | | | | *e*S | Sn | 15 54 00.0 | +2.0 |
| **MIPR** | **Malaya Ipel'ka** | **1.44** | **331** | *e*P | Pn | 15 53 43.7 | +1.6 |
| MIPR | | | | *e*S | Sn | 15 54 01.2 | +1.3 |
| **RUS** | **Russkaya** | **1.46** | **15** | *e*P | Pn | 15 53 43.9 | +1.7 |
| RUS | | | | *e*S | Sn | 15 54 00.8 | +0.7 |
| **MTVR** | **Mutnovka** | **1.47** | **6** | *e*P | Pn | 15 53 44.8 | +2.2 |
| MTVR | | | | *e*S | Sn | 15 54 02.4 | +1.6 |
| **APC** | **Apacha** | **1.96** | **346** | *e*P | Pn | 15 53 51.3 | +2.2 |
| **PET** | **Petropavlovsk** | **2.05** | **13** | *e*P | Pn | 15 53 53.5 | +3.1 |
| PET | | | | *e*S | Sn | 15 54 17.4 | +2.7 |
| **UGLR** | **Uglovaya** | **2.26** | **14** | *e*P | Pn | 15 53 56.5 | +3.1 |
| **AVH** | **Avacha** | **2.30** | **12** | *e*P | Pn | 15 53 57.9 | +4.0 |
| AVH | | | | *e*S | Sn | 15 54 25.7 | +4.7 |
| **SMAR** | **Somma** | **2.31** | **13** | *e*P | Pn | 15 53 57.3 | +3.1 |
| **KOK** | **Koryaka** | **2.31** | **11** | *e*P | Pn | 15 53 57.7 | +3.6 |
| **NLC** | **Nalytchevo** | **2.32** | **22** | *e*P | Pn | 15 53 56.4 | +2.3 |
| NLC | | | | *e*S | Sn | 15 54 22.0 | +0.7 |
| **SDLR** | **Sedlovina** | **2.33** | **14** | *e*P | Pn | 15 53 57.0 | +2.6 |
| SDLR | | | | *e*S | Sn | 15 54 24.4 | +2.4 |
| **KRX** | **Arik** | **2.38** | **11** | *e*P | Pn | 15 53 58.4 | +3.3 |
| KRX | | | | *e*S | Sn | 15 54 26.6 | +3.4 |
| **SPN** | **Mys Shipunski** | **2.45** | **31** | *e*P | Pn | 15 53 58.7 | +2.9 |
| SPN | | | | *e*S | Sn | 15 54 27.0 | +2.5 |
| **GNL** | **Ganaly** | **2.67** | **0** | *e*P | Pn | 15 54 02.0 | +2.9 |
| **MKZ** | **Mys Kozlova** | **4.23** | **32** | *e*P | Pn | 15 54 22.2 | +2.0 |
| **KZV** | **Kizimen** | **4.34** | **18** | *e*P | Pn | 15 54 27.3 | +5.4 |
| **TUMR** | **Tumrok** | **4.47** | **17** | *e*P | Pn | 15 54 29.6 | +5.9 |
| **KBTR** | **Krutoberegovo** | **5.95** | **27** | *e*P | Pn | 15 54 46.6 | +2.7 |

*CSEM **16** 15:56:05.3, 38.75N×23.95E, h13km, MD2.8, After ATH*
**ATH 16 15:56:05.4, 38.74N×23.95E, h14km±5km, MD2.8/9, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRKA** | **Markates** | **0.29** | **263** | *e*PG | Pg | 15 56 11.1 | -0.3 |
| MRKA | | | | *e*SG | Sg | 15 56 15.3 | -0.2 |
| **MRKA** | **Markates** | **0.29** | **263** | *e*Pg | Pg | 15 56 11.1 | -0.3 |
| MRKA | | | | *e*Sg | Sg | 15 56 15.3 | -0.2 |
| **SKIA** | **Skiathos** | **0.57** | **319** | *e*PB | Pb | 15 56 17.1 | -0.1 |
| SKIA | | | | *e*SB | Sb | 15 56 25.0 | -0.2 |
| **SKIA** | **Skiathos** | **0.57** | **319** | *e*Pb | Pb | 15 56 17.1 | -0.1 |
| SKIA | | | | *e*Sb | Sb | 15 56 25.0 | -0.2 |
| **PTL** | **Penteli** | **0.69** | **186** | *e*PG | Pg | 15 56 18.7 | -0.3 |
| PTL | | | | *e*SB | Sb | 15 56 28.7 | -0.1 |
| **PTL** | **Penteli** | **0.69** | **186** | *e*Pg | Pg | 15 56 18.7 | -0.3 |
| PTL | | | | *e*Sb | Sb | 15 56 28.7 | -0.1 |
| **VIL2** | **Platees** | **0.75** | **226** | *e*PB | Pg | 15 56 19.4 | -0.7 |
| VIL2 | | | | *e*SB | Sb | 15 56 30.8 | +0.4 |
| **VILL** | **Villia** | **0.76** | **221** | *e*Pb | Pg | 15 56 19.4 | -0.9 |
| VILL | | | | *e*Sb | Sb | 15 56 30.8 | 0.0 |
| **NEO** | **Neokhori** | **0.80** | **315** | *e*PG | Pg | 15 56 20.1 | -0.9 |
| NEO | | | | *e*SB | Sg | 15 56 31.7 | +0.1 |
| **NEO** | **Neokhori** | **0.80** | **315** | *e*Pg | Pg | 15 56 20.1 | -0.9 |
| NEO | | | | *e*Sb | Sg | 15 56 31.7 | +0.1 |
| **VLY** | **Voula,Athens** | **0.90** | **188** | *e*PG | Pb | 15 56 22.0 | -0.7 |
| VLY | | | | *e*SB | Sb | 15 56 35.3 | +0.8 |
| **VLY** | **Voula,Athens** | **0.90** | **188** | *e*Pg | Pb | 15 56 22.0 | -0.7 |
| VLY | | | | *e*Sb | Sb | 15 56 35.3 | +0.8 |
| **LTK** | **Loutraki** | **1.05** | **227** | *e*PG | Pb | 15 56 25.1 | -0.4 |
| LTK | | | | *e*SB | Sb | 15 56 40.7 | +0.4 |
| **LTK** | **Loutraki** | **1.05** | **227** | *e*Pg | Pb | 15 56 25.1 | -0.4 |
| LTK | | | | *e*Sb | Sn | 15 56 40.7 | +0.4 |
| **DSF** | **Desfina** | **1.16** | **254** | *e*PG | Pn | 15 56 27.0 | -0.3 |
| DSF | | | | *e*SB | Sg | 15 56 43.2 | +0.1 |
| **DSF** | **Desfina** | **1.16** | **254** | *e*Pn | Pn | 15 56 27.0 | -0.3 |
| DSF | | | | *e*Sb | Sg | 15 56 43.2 | +0.1 |
| **AGG** | **Agios Georgios** | **1.29** | **283** | *e*PB | Pb | 15 56 29.8 | +0.2 |
| **AGG** | **Agios Georgios** | **1.29** | **283** | *e*Pb | Pb | 15 56 29.8 | +0.2 |

**NEIC 16 15:56:43.8, 62.16N×151.16W, h82km, MG2.9(AEIC), After AEIC., Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKT** | **Skwentna** | **0.25** | **225** | P | Pn | 15 56 55.4 | -0.7 |
| SKT | | | | S | Sn | 15 57 04.8 | -0.5 |
| **TRAP** | **Trapper Creek** | **0.46** | **67** | P | Pn | 15 56 57.1 | -0.3 |
| TRAP | | | | S | Sn | 15 57 08.1 | +0.6 |
| **CUT** | **Chulitna** | **0.48** | **59** | P | Pn | 15 56 57.2 | -0.4 |
| **SUA** | **Susitna One** | **0.72** | **164** | P | Pn | 15 56 59.6 | -0.4 |
| SUA | | | | S | Sn | 15 57 12.2 | +0.1 |
| **STLK** | **Strandline Lak** | **0.73** | **206** | P | Pn | 15 56 59.4 | -0.7 |
| **NCG** | **North Capps Gl** | **0.89** | **213** | P | Pn | 15 57 01.0 | -0.9 |
| **SPCG** | **Spurr Capps Gl** | **0.96** | **206** | P | Pn | 15 57 01.9 | -0.8 |
| SPCG | | | | S | Sn | 15 57 16.2 | -0.6 |
| **CKN** | **Chakachatna No** | **1.06** | **208** | P | Pn | 15 57 03.2 | -0.5 |
| **SPBG** | **Spurr Blockage** | **1.07** | **213** | P | Pn | 15 57 03.3 | -0.7 |
| **BGL** | **Barrier Glacie** | **1.07** | **214** | P | Pn | 15 57 03.5 | -0.5 |
| **SPCR** | **Spurr Chakacha** | **1.08** | **208** | P | Pn | 15 57 03.0 | -1.1 |
| **HUR** | **Hurricane** | **1.08** | **40** | P | Pn | 15 57 03.5 | -0.5 |
| **FIB** | **Fire Island** | **1.10** | **154** | P | Pn | 15 57 05.0 | +0.9 |
| **PMR** | **Palmer** | **1.11** | **120** | P | Pn | 15 57 03.5 | -0.8 |
| PMR | | | | S | Sn | 15 57 20.4 | +0.7 |
| **CKL** | **Chakachamna La** | **1.12** | **211** | P | Pn | 15 57 03.6 | -1.0 |
| **VOGL** | **Vogel Lake** | **1.22** | **163** | P | Pn | 15 57 05.9 | +0.4 |
| **RC01** | **Rabbit Creek A** | **1.27** | **147** | P | Pn | 15 57 05.4 | -0.8 |
| RC01 | | | | S | Sn | 15 57 23.1 | 0.0 |
| **CAST** | **Castle Rocks** | **1.34** | **342** | P | Pn | 15 57 06.0 | -1.1 |
| **TRF** | **Thorofare Moun** | **1.36** | **17** | P | Pn | 15 57 07.0 | -0.6 |
| TRF | | | | S | Sn | 15 57 25.1 | -0.4 |
| **SML** | **Sawmill** | **1.38** | **103** | P | Pn | 15 57 07.2 | -0.5 |
| SML | | | | S | Sn | 15 57 26.2 | +0.5 |
| **RND** | **Reindeer** | **1.64** | **39** | P | Pn | 15 57 10.5 | -0.6 |
| RND | | | | S | Sn | 15 57 32.0 | +0.1 |
| **PTE** | **Portage** | **1.65** | **141** | P | Pn | 15 57 10.2 | -1.0 |
| **SLKM** | **Skilak Lake** | **1.71** | **164** | P | Pn | 15 57 11.9 | -0.1 |
| **RDJH** | **Redoubt Jeurge** | **1.76** | **208** | P | Pn | 15 57 12.1 | -0.7 |
| **CHUM** | **Lake Minchumin** | **1.81** | **344** | P | Pn | 15 57 12.5 | -0.7 |
| CHUM | | | | S | Sn | 15 57 34.9 | -0.6 |
| **SCM** | **Sheep Creek Mo** | **1.84** | **99** | P | Pn | 15 57 12.8 | -0.9 |
| **RDWB** | **Redoubt West** | **1.86** | **207** | P | Pn | 15 57 13.3 | -0.8 |
| **RSO** | **Redoubt South** | **1.87** | **205** | *e*Pn | Pn | 15 57 13.5 | -0.7 |
| **PWL** | **Port Wells** | **1.88** | **133** | P | Pn | 15 57 12.7 | -1.5 |
| PWL | | | | S | Sn | 15 57 36.2 | -1.0 |
| **MCK** | **McKinley** | **1.88** | **32** | P | Pn | 15 57 13.8 | -0.4 |
| MCK | | | | S | Sn | 15 57 36.9 | -0.4 |
| **BPAW** | **Bear Paw Mtn.** | **1.95** | **2** | P | Pn | 15 57 14.0 | -1.1 |
| BPAW | | | | S | Sn | 15 57 36.5 | -2.5 |
| **BWN** | **Browne** | **2.16** | **20** | P | Pn | 15 57 17.5 | -0.4 |
| **SEW** | **Seward** | **2.22** | **157** | P | Pn | 15 57 18.0 | -0.6 |
| SEW | | | | S | Sn | 15 57 42.9 | -2.3 |
| **GLI** | **Glacier Island** | **2.33** | **122** | P | Pn | 15 57 18.3 | -1.9 |
| GLI | | | | S | Sn | 15 57 46.4 | -1.6 |
| **SVW2** | **Sparrevohn** | **2.37** | **245** | P | Pn | 15 57 19.4 | -1.3 |
| **TT01** | **Tatalina** | **2.38** | **291** | P | Pn | 15 57 19.6 | -1.2 |
| **BRLK** | **Bradley Lake** | **2.41** | **177** | P | Pn | 15 57 21.5 | +0.3 |
| **JPK** | **Jack Peak** | **2.44** | **115** | P | Pn | 15 57 20.4 | -1.4 |
| **VLZ** | **Valdez** | **2.52** | **112** | P | Pn | 15 57 21.2 | -1.4 |
| VLZ | | | | S | Sn | 15 57 51.5 | -0.9 |
| **KLU** | **Klutina** | **2.57** | **103** | P | Pn | 15 57 22.0 | -1.5 |
| KLU | | | | S | Sn | 15 57 52.8 | -1.2 |
| **NEA** | **Nenana** | **2.60** | **20** | P | Pn | 15 57 22.7 | -1.1 |
| **CNPM** | **China Poot** | **2.64** | **181** | P | Pn | 15 57 24.8 | +0.5 |
| **FID** | **Port Fidalgo** | **2.65** | **120** | P | Pn | 15 57 22.3 | -2.2 |
| FID | | | | S | Sn | 15 57 54.0 | -1.8 |
| **WRH** | **Wood River Hil** | **2.70** | **29** | P | Pn | 15 57 24.1 | -1.1 |
| **PAX** | **Paxson** | **2.76** | **70** | P | Pn | 15 57 25.5 | -0.5 |
| **DIV** | **Divide** | **2.77** | **109** | P | Pn | 15 57 24.9 | -1.2 |
| **HARP** | **HAARP** | **2.82** | **82** | P | Pn | 15 57 26.4 | -0.3 |
| **HIN** | **Hinchinbrook I** | **2.86** | **126** | P | Pn | 15 57 25.5 | -1.8 |
| **CCB** | **Clear Creek Bu** | **2.92** | **30** | P | Pn | 15 57 26.8 | -1.2 |
| **HDA** | **Harding Lake** | **2.95** | **38** | P | Pn | 15 57 27.6 | -0.9 |
| **MDM** | **Murphy Dome** | **3.10** | **24** | P | Pn | 15 57 29.6 | -1.0 |
| **COLA** | **College** | **3.10** | **27** | P | Pn | 15 57 29.5 | -1.0 |
| **ILB** | **Eielson Array** | **3.25** | **34** | P | Pn | 15 57 31.3 | -1.2 |
| **IL1** | **Eielson Array** | **3.25** | **34** | P | Pn | 15 57 31.4 | -1.2 |
| **NICHA** | **Nichawak Mount** | **3.98** | **116** | P | Pn | 15 57 40.4 | -2.0 |
| **IM3** | **Indian Mountai** | **4.01** | **345** | P | Pn | 15 57 41.9 | -0.9 |
| **PTPK** | **Patty Peak** | **4.25** | **99** | P | Pn | 15 57 45.8 | -0.6 |
| **BALM** | **Baldy** | **4.36** | **101** | P | Pn | 15 57 46.9 | -0.9 |
| **KIAG** | **Kiagna River** | **4.39** | **102** | P | Pn | 15 57 46.5 | -1.7 |
| **BCA3** | **Beaver Creek A** | **4.42** | **74** | P | Pn | 15 57 46.7 | -1.8 |
| **ISLE** | **Juniper Island** | **4.52** | **106** | P | Pn | 15 57 48.6 | -1.3 |
| **BARK** | **Barkley Ridge** | **4.54** | **109** | P | Pn | 15 57 49.5 | -0.6 |

**IDC 16 16:31:22.8±2.0, 16.43S×173.10W, h0km, mb4.0/5, mb1 4.4/5, mb1mx3.9/30, mbtmp4.0/5, MS3.7/3, Ms1 3.7/3, ms1mx3.4/30, Error ellipse: s-maj=126.1km s-min=23.9km az=151.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **2.82** | **27** | LR | LR | 16 32 46.1 | |
| comp=Z,731nm,19.8s,baz=242,slow=30 | | | | | | | |
| **RAR** | **Rarotonga** | **13.48** | **113** | LR | LR | 16 38 19.0 | |
| comp=Z,300nm,21.2s,baz=260,slow=31 | | | | | | | |
| **HNR** | **Honiara** | **27.15** | **282** | LR | LR | 16 45 12.8 | |
| comp=Z,246nm,21.1s,baz=124,slow=31 | | | | | | | |
| **WRA** | **Warramunga Arr** | **49.89** | **258** | P | P | 16 40 18.1 | -0.5 |
| 1.1nm,0.9s,baz=90,slow=7.6,SNR=7.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **50.07** | **253** | P | P | 16 40 20.4 | +0.4 |
| 4.5nm,0.6s,baz=87,slow=7.8,SNR=42 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.90** | **42** | P | P | 16 43 05.8 | -0.2 |
| 0.7nm,0.7s,baz=226,slow=9.8,SNR=7.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.95** | **56** | P | P | 16 43 40.0 | +0.3 |
| 1.3nm,1.1s,baz=228,slow=3.5,SNR=6.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.40** | **11** | P | P | 16 43 52.6 | +1.0 |
| 0.6nm,0.9s,baz=226,slow=5.8,SNR=4.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.13** | **320** | PKPbc | PKPdf | 16 51 07.0 | +0.7 |
| 1.4nm,0.8s,baz=71,slow=2.6,SNR=7.3 | | | | | | | |
| **GERES** | **GERESS Array B** | **147.20** | **352** | PKPbc | PKPdf | 16 51 06.7 | +0.7 |
| 0.4nm,0.6s,baz=21,slow=3.3,SNR=4.7 | | | | | | | |

**MEX 16 17:10:49.0±0.5, 16.90N×99.78W, h37km±10km, MD4.2, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ACX** | **Acapulco** | **0.08** | **249** | *e*P | Pn | 17 10 54.1 | -1.2 |
| ACX | | | | *i* S | Sn | 17 10 58.0 | -1.6 |
| **CAIG** | **El Cayaco** | **0.49** | **287** | *i* P | Pn | 17 10 57.7 | -1.8 |
| CAIG | | | | *e*S | Sn | 17 11 05.0 | -1.8 |
| **TLIG** | **Tlapa** | **1.33** | **60** | *i* P | Pn | 17 11 09.4 | -1.8 |
| TLIG | | | | *e*S | Sn | 17 11 25.3 | -2.5 |
| **ARIG** | **Puente Sto Nin** | **1.48** | **338** | *e*P | Pn | 17 11 11.2 | -1.9 |
| ARIG | | | | *i* S | Sn | 17 11 29.4 | -1.8 |
| **PNIG** | **Pinotepa** | **1.66** | **107** | *i* P | Pn | 17 11 14.3 | -1.3 |
| PNIG | | | | *i* S | Sn | 17 11 33.3 | -2.4 |
| **HUIG** | **Huatulco** | **3.70** | **107** | *e*P | Pn | 17 11 43.0 | -0.6 |

*ISCJB **16** 17:12:37.4±0.6, 7.99S±0.07×74.48W±0.06, h151km, mb3.7/6, Error ellipse: s-maj=9.7km s-min=7.8km az=8.3*
*IDC **16** 17:12:38.2±1.8, 7.98S×74.46W, h149km±22km, mb3.5/6, mb1 3.8/11, mb1mx3.5/31, mbtmp4.1/11, Error ellipse: s-maj=33.0km s-min=12.3km az=36.0*
**ISC 16 17:12:38.4±0.7, 7.99S±0.08×74.47W±0.08, h151km, n13, σ0s99/15, mb3.6/6, Peru-Brazil border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATAH** | **Atahualpa** | **3.99** | **282** | P | **Pn** | **17 13 39.0** | **+0.1** |
| 43nm,0.3s,baz=82,slow=2.8,SNR=259 | | | | | | | |
| ATAH | | | | S | **Sn** | **17 14 25.0** | **-0.9** |
| 28nm,0.3s,baz=236,slow=23,SNR=21 | | | | | | | |
| **NNA** | **Nana** | **4.61** | **210** | P | **Pn** | **17 13 48.6** | **+1.8** |
| 3.8nm,0.3s,baz=110,slow=8.6,SNR=11 | | | | | | | |
| NNA | | | | S | **Sn** | **17 14 38.5** | **-1.6** |
| 22nm,0.3s,baz=238,slow=9.0,SNR=8.3 | | | | | | | |
| **LPAZ** | **La Paz** | **10.31** | **144** | P | **Pn** | **17 15 03.2** | **0.0** |
| 0.8nm,0.3s,baz=318,slow=8.3,SNR=22 | | | | | | | |
| **SIV** | **San Ignacio** | **15.32** | **123** | P | **P** | **17 16 08.0** | **-0.3** |
| 1.1nm,0.3s,baz=316,slow=13,SNR=14 | | | | | | | |
| **PTGA** | **Pitinga** | **16.15** | **64** | P | **P** | **17 16 18.6** | **+1.2** |
| 2.5nm,0.3s,baz=257,slow=17,SNR=12 | | | | | | | |
| **CPUP** | **Villa Florida** | **24.46** | **140** | P | **P** | **17 17 42.5** | **-0.9** |
| 2.1nm,0.6s,baz=318,slow=8.8,SNR=6.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.56** | **324** | P | **P** | **17 20 51.9** | **+0.6** |
| 0.6nm,0.6s,baz=144,slow=8.3,SNR=8.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.60** | **322** | P | **P** | **17 22 41.1** | **+0.8** |
| 0.4nm,0.5s,baz=133,slow=5.9,SNR=4.9 | | | | | | | |
| **DBIC** | **Dimbokro** | **70.92** | **80** | P | **P** | **17 23 39.0** | **-0.9** |
| 2.6nm,0.4s,baz=239,slow=6.6,SNR=6.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.49** | **75** | P | **P** | **17 24 22.6** | **-0.9** |
| 0.6nm,0.4s,baz=264,slow=4.9,SNR=6.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **89.80** | **336** | P | **P** | **17 25 19.4** | **-0.2** |
| 0.2nm,0.6s,baz=146,slow=3.5,SNR=3.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **138.07** | **221** | PKP | **PKPdf** | **17 31 46.4**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APE** | **Apeiranthos** | **3.40** | **320** | *e*Pn | **Pn** | **18 05 30.5** | **+0.1** |
| **VAM** | **Vamos** | **3.46** | **287** | *e*PN | **Pn** | **18 05 31.6** | **+0.5** |
| **VAM** | **Vamos** | **3.46** | **287** | *e*Pn | **Pn** | **18 05 31.6** | **+0.5** |
| **IMMV** | **Iera Moni Meta** | **3.64** | **287** | *e*PN | **Pn** | **18 05 34.3** | **+0.6** |
| **IMMV** | **Iera Moni Meta** | **3.64** | **287** | *e*Pn | **Pn** | **18 05 34.3** | **+0.6** |
| **ANKY** | **Antikythira Is** | **4.29** | **290** | *e*PN | **Pn** | **18 05 43.6** | **+1.1** |
| **ANKY** | **Antikythira Is** | **4.29** | **290** | *e*Pn | **Pn** | **18 05 43.6** | **+1.1** |

*ISCJB **16** 18:05:23.2±0.4, 32.°40N±0.°03×115.°46W±0.°03, h11km±4km, Error ellipse: s-maj=5.7km s-min=3.6km az=178.7*
*MEX **16** 18:05:23.8±0.8, 32.°61N×115.°28W, h14km±30km, MD3.6*
*ECX **16** 18:05:24.9±0.7, 32.°38N×115.°48W, h4km, MD2.7, ML2.9*
*NEIC **16** 18:05:25.0, 32.°38N×115.°48W, h4km, ML2.9(PAS), ML3.1(ECX), After ECX.*
**ISC 16 18:05:23.2**±0.9**, 32.°42N**±0.°03×**115.°46W**±0.°02**, h16**km±8km**, n27, σ0.s53**/41**, 11C-4D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPBX** | **Cerro Prieto** | **0.13** | **90** | ⇑*e*P | **Pb** | **18 05 27.7** | **+0.3** |
| CPBX | | | | *e*S | **Sb** | **18 05 31.0** | **+0.9** |
| CPBX | | | | IAML | | 18 05 32.9 | |
| | comp=E,13μm,0.2s | | | | | | |
| CPBX | | | | *e* | | 18 05 32.9 | |
| **CPBX** | **Cerro Prieto** | **0.13** | **90** | *e*P | **Pb** | **18 05 27.6** | **+0.3** |
| CPBX | | | | *i* S | **Sb** | **18 05 30.3** | **+0.2** |
| **MBIG** | **Mexicali** | **0.22** | **93** | *e*P | **Pg** | **18 05 28.3** | **+0.1** |
| MBIG | | | | *i* S | **Sg** | **18 05 31.8** | **+0.2** |
| **MBIG** | **Mexicali** | **0.22** | **93** | ⇑*e*P | **Pb** | **18 05 29.7** | **+0.8** |
| **SGL** | **Mount Signal** | **0.32** | **316** | ⇑*i*P | **Pb** | **18 05 30.9** | **+0.3** |
| **WESC** | **Westside Schoo** | **0.41** | **326** | ⇑*i*P | **Pb** | **18 05 32.9** | **+0.8** |
| **YUH** | **Yuha Desert** | **0.46** | **300** | ⇑*i*P | **Pb** | **18 05 33.0** | **+0.1** |
| **COK** | **Cook Ranch** | **0.49** | **332** | ⇓*i*P | **Pb** | **18 05 34.2** | **+0.8** |
| **EMSC** | **East Mesa** | **0.51** | **51** | ⇑*i*P | **Pb** | **18 05 34.7** | **+0.9** |
| **COA** | **Coachella** | **0.53** | **32** | ⇓*i*P | **Pb** | **18 05 34.8** | **+0.7** |
| **RMX** | **La Rumorosa** | **0.56** | **289** | ⇑*e*P | **Pg** | **18 05 34.3** | **0.0** |
| RMX | | | | *e*S | **Sg** | **18 05 41.7** | **-0.1** |
| **IBP** | **Imperial Bould** | **0.59** | **294** | ⇑*i*P | **Pb** | **18 05 35.5** | **+0.3** |
| IBP | | | | *e*S | **Sb** | **18 05 43.4** | **+0.1** |
| **RDX** | **Rancho Dawling** | **0.64** | **220** | ⇓*e*P | **Pg** | **18 05 35.8** | **-0.1** |
| RDX | | | | *e*S | **Sg** | **18 05 43.9** | **-0.5** |
| RDX | | | | ⇑*e* | | 18 05 45.8 | |
| RDX | | | | IAML | | 18 05 45.8 | |
| | comp=N,480nm,0.3s | | | | | | |
| **GLA** | **Glamis** | **0.83** | **40** | *e*Pg | **Pg** | **18 05 39.0** | **-0.3** |
| GLA | | | | *e*Sg | **Sg** | **18 05 49.4** | **-0.9** |
| **CBX** | **Cerro Bola** | **1.03** | **264** | *e*P | **Pb** | **18 05 43.0** | **+0.3** |
| CBX | | | | *i* S | **Sg** | **18 05 56.5** | **-0.1** |
| **CBX** | **Cerro Bola** | **1.03** | **264** | *e*P | **Pn** | **18 05 43.3** | **+0.2** |
| CBX | | | | *e*S | **Sg** | **18 05 56.5** | **-0.1** |
| CBX | | | | ⇑*e* | | 18 05 57.5 | |
| CBX | | | | IAML | | 18 05 57.5 | |
| | comp=E,390nm,0.2s | | | | | | |
| **CBX** | **Cerro Bola** | **1.03** | **264** | *e*P | **Pb** | **18 05 43.0** | **+0.3** |
| CBX | | | | *i* S | **Sg** | **18 05 56.5** | **-0.1** |
| **BAR** | **Barrett** | **1.06** | **285** | ⇑*i*P | **Pn** | **18 05 43.7** | **+0.2** |
| BAR | | | | *e*S | **Sg** | **18 05 57.4** | **-0.2** |
| **BAR** | **Barrett** | **1.06** | **285** | *e*Pg | **Pn** | **18 05 43.5** | **+0.1** |
| BAR | | | | *e*Sg | **Sb** | **18 05 57.0** | **+0.2** |
| **SPX** | **San Pedro Mart** | **1.37** | **180** | ⇓*e*P | **Pn** | **18 05 48.0** | **0.0** |
| **SPX** | **San Pedro Mart** | **1.37** | **180** | *e*P | **Pn** | **18 05 47.7** | **-0.3** |
| **PFO** | **Pinyon Flat Ob** | **1.45** | **325** | *e*Pn | **Pn** | **18 05 48.2** | **-0.8** |
| **214A** | **Organ Pipe Nat** | **2.29** | **101** | *e*Pn | **Pn** | **18 05 59.4** | **-1.0** |
| 214A | | | | *e*Pg | **Pg** | **18 06 07.0** | **-0.2** |
| **LDFC** | **Landfair** | **2.67** | **6** | Pn | **Pb** | **18 06 10.2** | **-0.5** |
| **MWC** | **Mount Wilson** | **2.83** | **310** | *e*Pn | **Pb** | **18 06 13.7** | **+0.2** |
| MWC | | | | *e*Sn | **Sb** | **18 06 46.7** | **-1.2** |
| **GSC** | **Goldstone** | **3.09** | **339** | *e*Pg | **Pg** | **18 06 23.4** | **+1.0** |
| **SHPR** | **Sheep Range** | **4.08** | **3** | Pn | **Pn** | **18 06 25.2** | **0.0** |

*JMA **16** 18:34:08.8±0.1, 24.°21N×122.°08E, h51km±3km, M2.1*
*ISCJB **16** 18:34:09.8±0.4, 24.°29N±0.°03×122.°12E±0.°02, h31km±4km, Error ellipse: s-maj=5.4km s-min=3.3km az=166.4*
*TAP **16** 18:34:09.7, 24.°30N×122.°10E, h28km, ML3.0, D*
**ISC 16 18:34:09.9**±1.0**, 24.°30N**±0.°04×**122.°10E**±0.°03**, h30**km±9km**, n33, σ0.s61**/50**, 1C-3D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ENA** | **Nanau** | **0.35** | **291** | *i* P | **Pb** | **18 34 18.0** | **-0.2** |
| | baz=291 | | | | | | |
| ENA | | | | S | **Sn** | **18 34 24.3** | **-0.7** |
| | baz=291 | | | | | | |
| **TWC** | **Suao** | **0.38** | **323** | ⇑P | **Pb** | **18 34 18.2** | **-0.4** |
| | baz=324 | | | | | | |
| TWC | | | | *e*S | **Sb** | **18 34 24.1** | **-0.4** |
| | baz=324 | | | | | | |
| **TWD** | **Chiawan** | **0.51** | **244** | P | **Pb** | **18 34 20.8** | **+0.2** |
| | baz=244 | | | | | | |
| TWD | | | | S | **Sb** | **18 34 28.3** | **+0.4** |
| | baz=244 | | | | | | |
| **HWA** | **Hwalien** | **0.56** | **235** | *e*P | **Pn** | **18 34 21.5** | **-0.3** |
| | baz=233 | | | | | | |
| HWA | | | | *e*S | **Sn** | **18 34 29.9** | **-0.1** |
| | baz=233 | | | | | | |
| **ILA** | **Ilan** | **0.56** | **325** | *e*P | **Pn** | **18 34 21.7** | **-0.2** |
| | baz=326 | | | | | | |
| ILA | | | | *e*S | **Sn** | **18 34 30.1** | **-0.1** |
| | baz=326 | | | | | | |
| **TWE** | **Neicheng** | **0.57** | **316** | ⇓P | **Pn** | **18 34 21.5** | **-0.6** |
| | baz=317 | | | | | | |
| TWE | | | | S | **Sb** | **18 34 29.9** | **+0.3** |
| | baz=317 | | | | | | |
| **ENTT** | **Nioudou** | **0.59** | **305** | ⇓*i*P | **Pn** | **18 34 21.8** | **-0.5** |
| | baz=305 | | | | | | |
| ENTT | | | | *e*S | **Sb** | **18 34 30.8** | **+0.7** |
| | baz=305 | | | | | | |
| **NNS** | **Nan Shan** | **0.68** | **282** | P | **Pn** | **18 34 23.1** | **-0.5** |
| | baz=281 | | | | | | |
| NNS | | | | S | **Sn** | **18 34 32.9** | **-0.4** |
| | baz=281 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.71** | **352** | *e*P | **Pb** | **18 34 24.3** | **+0.4** |
| | baz=352 | | | | | | |
| **NSK** | **Sanguang** | **0.77** | **299** | ⇓P | **Pn** | **18 34 24.5** | **-0.4** |
| | baz=299 | | | | | | |
| NSK | | | | *e*S | **Sn** | **18 34 35.4** | **-0.1** |
| | baz=299 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.78** | **259** | P | **Pn** | **18 34 24.6** | **-0.7** |
| | baz=258 | | | | | | |
| WHF | | | | *e*S | **Sn** | **18 34 35.5** | **-0.7** |
| | baz=258 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.78** | **79** | P | **Pn** | **18 34 24.2** | **-0.7** |
| JYNG | | | | *e*S | **Sn** | **18 34 35.6** | **0.0** |
| **NWF** | **Wu-fen Shan** | **0.82** | **339** | *e*P | **Pn** | **18 34 25.5** | **0.0** |
| | baz=339 | | | | | | |
| NWF | | | | *e*S | **Sb** | **18 34 37.2** | **+0.7** |
| | baz=339 | | | | | | |
| **TWA** | **Mucha** | **0.82** | **325** | *e*P | **Pb** | **18 34 26.3** | **+0.5** |
| | baz=325 | | | | | | |
| TWA | | | | *e*S | **Sb** | **18 34 37.2** | **+0.6** |
| | baz=325 | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.84** | **79** | P | **Pn** | **18 34 25.3** | **-0.4** |
| YOJ | | | | *e*S | **Sn** | **18 34 37.2** | **+0.1** |
| **TWT** | **Tachien** | **0.85** | **267** | *e*P | **Pn** | **18 34 25.2** | **-0.7** |
| | baz=266 | | | | | | |
| **NSTT** | **Nanjuang** | **1.06** | **288** | *e*P | **Pb** | **18 34 29.5** | **-0.2** |
| | baz=288 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.18** | **249** | *e*P | **Pb** | **18 34 32.0** | **+0.2** |
| | baz=248 | | | | | | |
| **TWF1** | **Yuli** | **1.20** | **218** | *e*P | **Pn** | **18 34 29.2** | **-1.5** |
| | baz=217 | | | | | | |
| **TYC** | **Yuchr** | **1.21** | **251** | *e*P | **Pn** | **18 34 31.1** | **+0.4** |
| | baz=250 | | | | | | |
| **TWQ1** | **Liyutan** | **1.21** | **272** | *e*P | **Pb** | **18 34 32.4** | **+0.1** |
| | baz=272 | | | | | | |
| **YUS** | **Yu-Shan** | **1.33** | **233** | *e*P | **Pn** | **18 34 32.4** | **-0.5** |
| | baz=232 | | | | | | |
| **ALS** | **Alishan** | **1.43** | **237** | *e*P | **Pn** | **18 34 34.4** | **+0.3** |
| | baz=236 | | | | | | |
| **CHN5** | **Tsauling** | **1.48** | **242** | *e*P | **Pn** | **18 34 35.1** | **+0.5** |
| | baz=241 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.48** | **88** | P | **Pn** | **18 34 34.5** | **-0.1** |
| IRIF | | | | *e*S | **Sn** | **18 34 53.6** | **+0.7** |
| **ELDTW** | **Lidau** | **1.49** | **222** | *e*P | **Pn** | **18 34 33.5** | **-1.2** |
| | baz=221 | | | | | | |
| **WGK** | **Gukeng** | **1.54** | **247** | *e*P | **Pn** | **18 34 35.9** | **+0.6** |
| | baz=246 | | | | | | |
| **STYT** | **Tauyuan** | **1.68** | **228** | *e*P | **Pn** | **18 34 38.6** | **+1.3** |
| | baz=227 | | | | | | |
| **WTP** | **Ta-pu** | **1.72** | **233** | *e*P | **Pn** | **18 34 39.2** | **+1.2** |
| | baz=232 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.74** | **92** | P | **Pn** | **18 34 37.9** | **-0.2** |
| JKRS | | | | *e*S | **Sn** | **18 34 59.7** | **+0.4** |
| **CHN1** | **Nanshi** | **1.82** | **233** | *e*P | **Pn** | **18 34 39.2** | **-0.1** |
| | baz=232 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.86** | **88** | P | **Pn** | **18 34 39.2** | **-0.6** |
| JIJ | | | | *e*S | **Sn** | **18 35 01.6** | **-0.7** |
| **JISG** | **Ishigakijimahi** | **2.03** | **82** | P | **Pn** | **18 34 41.2** | **-0.9** |

*CSEM **16** 19:01:52.3±0.2, 38.°28N×22.°33E, h15km, MD2.6, Error ellipse: s-maj=4.1km s-min=2.9km az=143.0*
**ATH 16 19:01:52.6, 38.°26N×22.°35E, h5**km**, MD2.6**/10**, Greece**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DSF** | **Desfina** | **0.20** | **43** | *e*PG | Pg | 19 01 56.6 | -0.2 |
| DSF | | | | *e*SG | Sg | 19 02 00.0 | +0.4 |
| **DSF** | **Desfina** | **0.20** | **43** | *e*Pg | Pg | 19 01 56.6 | -0.2 |
| DSF | | | | *e*Sg | Sg | 19 02 00.0 | +0.4 |
| **DESF** | **Desfina** | **0.21** | **43** | *e*PG | Pg | 19 01 56.9 | +0.1 |
| DESF | | | | *e*SG | Sg | 19 02 00.2 | +0.5 |
| **DESF** | **Desfina** | **0.21** | **43** | *e*Pg | Pg | 19 01 56.9 | +0.1 |
| DESF | | | | *e*Sg | Sg | 19 02 00.2 | +0.5 |
| **KALE** | **Kalithea** | **0.21** | **308** | *e*PG | Pg | 19 01 56.8 | -0.1 |
| KALE | | | | *e*SG | Sg | 19 02 00.1 | +0.3 |
| **KALE** | **Kalithea** | **0.21** | **308** | *e*Pg | Pg | 19 01 56.8 | -0.1 |
| KALE | | | | *e*Sg | Sg | 19 02 00.1 | +0.3 |
| **KLV** | **Kalavryta, Ach** | **0.27** | **216** | *e*PG | Pg | 19 01 57.9 | 0.0 |
| KLV | | | | *e*SG | Sg | 19 02 01.8 | +0.3 |
| **KLV** | **Kalavryta, Ach** | **0.27** | **216** | *e*Pg | Pg | 19 01 57.9 | 0.0 |
| KLV | | | | *e*Sg | Sg | 19 02 01.8 | +0.3 |
| **LAKA** | **Lakka** | **0.29** | **266** | *e*PG | Pg | 19 01 59.1 | +0.7 |
| LAKA | | | | *e*SG | Sg | 19 02 02.5 | +0.2 |
| **LAKA** | **Lakka** | **0.29** | **266** | *e*Pg | Pg | 19 01 59.1 | +0.7 |
| LAKA | | | | *e*Sg | Sg | 19 02 02.5 | +0.2 |
| **GUR** | **Goura** | **0.32** | **181** | *e*PB | Pg | 19 01 58.9 | -0.1 |
| GUR | | | | *e*SB | Sg | 19 02 03.2 | -0.2 |
| **GUR** | **Goura** | **0.32** | **181** | *e*Pb | Pg | 19 01 58.9 | -0.1 |
| GUR | | | | *e*Sb | Sg | 19 02 03.2 | -0.2 |
| **EFP** | **Efpalio** | **0.39** | **296** | *e*PG | Pg | 19 02 00.1 | 0.0 |
| EFP | | | | *e*SB | Sg | 19 02 05.6 | +0.4 |
| **EFP** | **Efpalio** | **0.39** | **296** | *e*Pb | Pg | 19 02 00.1 | 0.0 |
| EFP | | | | *e*Sb | Sg | 19 02 05.6 | +0.4 |
| **AXAR** | **Agios Charalam** | **0.56** | **26** | *e*PB | Pg | 19 02 03.1 | -0.4 |
| AXAR | | | | *e*SB | Sg | 19 02 11.6 | +0.8 |
| **AXAR** | **Agios Charalam** | **0.56** | **26** | *e*Pb | Pg | 19 02 03.1 | -0.4 |
| AXAR | | | | *e*Sb | Sg | 19 02 11.6 | +0.8 |
| **DRO** | **Drossia** | **0.59** | **239** | *e*PB | Pg | 19 02 04.4 | +0.4 |
| DRO | | | | *e*SB | Sg | 19 02 12.6 | +0.9 |
| **DRO** | **Drossia** | **0.59** | **239** | *e*Pb | Pg | 19 02 04.4 | +0.4 |
| DRO | | | | *e*Sb | Sg | 19 02 12.6 | +0.9 |
| **AGG** | **Agios Georgios** | **0.76** | **359** | *e*PB | Pg | 19 02 06.3 | -1.0 |
| AGG | | | | *e*SB | Sg | 19 02 17.6 | +0.3 |
| **AGG** | **Agios Georgios** | **0.76** | **359** | *e*Pb | Pg | 19 02 06.3 | -1.0 |
| AGG | | | | *e*Sb | Sg | 19 02 17.6 | +0.3 |

*ISK **16** 19:03:14.8, 38.°78N×27.°93E, h5km, MD2.7*
*DDA **16** 19:03:15.3, 38.°81N×27.°88E, h6km, Md2.7*
*CSEM **16** 19:03:16.2±0.1, 38.°81N×27.°87E, h2km, MD2.7, Error ellipse: s-maj=4.1km s-min=2.6km az=60.0*
**ISC 16 19:03:15.7**±1.0**, 38.°80N**±0.°02×**27.°84E**±0.°03**, h4**km±8km**, n34, σ0.s49**/50**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKHS** | **Akhisar** | **0.09** | **347** | *i* P | **Pg** | **19 03 17.4** | **-0.1** |
| AKHS | | | | *i* S | **Sg** | **19 03 18.8** | **+0.1** |
| **AKHS** | **Akhisar** | **0.09** | **347** | P | **Pg** | **19 03 17.4** | **-0.1** |
| AKHS | | | | S | **Sg** | **19 03 18.8** | **+0.1** |
| **AKS** | **Akhisar** | **0.09** | **346** | *e*PG | **Pg** | **19 03 17.3** | **-0.2** |
| **AKS** | **Akhisar** | **0.09** | **346** | *e*Pg | **Pg** | **19 03 17.3** | **-0.2** |
| **MANT** | **Manisa** | **0.64** | **118** | *i* P | **Pg** | **19 03 28.7** | **+0.7** |
| MANT | | | | *i* S | **Sg** | **19 03 36.5** | **+0.2** |
| **MANT** | **Manisa** | **0.64** | **118** | P | **Pg** | **19 03 28.7** | **+0.7** |
| MANT | | | | S | **Sg** | **19 03 36.5** | **+0.2** |
| **KULA** | **Kula-Manisa** | **0.70** | **113** | *e*PG | **Pg** | **19 03 28.4** | **-0.8** |
| KULA | | | | *e*SG | **Sg** | **19 03 37.7** | **-0.6** |
| **KULA** | **Kula-Manisa** | **0.70** | **113** | *e*Sg | **Sg** | **19 03 37.7** | **-0.6** |
| **KULA** | **Kula-Manisa** | **0.70** | **113** | *e*Pg | **Pg** | **19 03 28.4** | **-0.8** |
| **DEMI** | **Demirci** | **0.73** | **70** | *i* P | **Pg** | **19 03 29.3** | **-0.3** |
| **DEMI** | **Demirci** | **0.73** | **70** | P | **Pg** | **19 03 29.3** | **-0.3** |
| DEMI | | | | S | **Sb** | **19 03 41.5** | **+0.1** |
| **DKL** | **Dikili** | **0.78** | **291** | *e*PG | **Pb** | **19 03 32.2** | **+0.4** |
| **DKL** | **Dikili** | **0.78** | **291** | *e*Pg | **Pb** | **19 03 32.2** | **+0.4** |
| **BALB** | **Balikesir** | **0.84** | **2** | *e*PG | **Pb** | **19 03 32.8** | **-0.1** |
| **BALB** | **Balikesir** | **0.84** | **2** | *e*Pg | **Pb** | **19 03 32.8** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.85** | **177** | *e*PG | **Pg** | **19 03 31.9** | **-0.1** |
| AYDB | | | | *e*SG | **Sb** | **19 03 44.8** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.85** | **177** | *e*Pg | **Pg** | **19 03 31.9** | **-0.1** |
| AYDB | | | | *e*Sg | **Sb** | **19 03 44.8** | **-0.1** |
| **BALY** | **Balya** | **0.96** | **350** | *i* P | **Pg** | **19 03 34.0** | **-0.1** |
| BALY | | | | *i* S | **Sg** | **19 03 47.2** | **+0.7** |
| **BALY** | **Balya** | **0.96** | **350** | P | **Pg** | **19 03 34.0** | **-0.1** |
| BALY | | | | S | **Sg** | **19 03 47.2** | **+0.7** |
| **AYVA** | **Ayvalik** | **1.03** | **300** | *i* P | **Pg** | **19 03 35.4** | **-0.1** |
| **AYVA** | **Ayvalik** | **1.03** | **300** | P | **Pg** | **19 03 35.4** | **-0.1** |
| AYVA | | | | S | **Sg** | **19 03 46.8** | **-2.0** |
| **AYDN** | **Tasoluk** | **1.13** | **178** | *i* P | **Pn** | **19 03 38.8** | **+0.4** |
| AYDN | | | | *i* S | **Sn** | **19 03 53.9** | **-0.5** |
| **AYDN** | **Tasoluk** | **1.13** | **178** | P | **Pn** | **19 03 38.8** | **+0.4** |
| AYDN | | | | S | **Sn** | **19 03 53.9** | **-0.5** |
| **GONE** | **Gonen-Balikesi** | **1.25** | **355** | *e*PN | **Pn** | **19 03 40.5** | **+0.5** |
| **GONE** | **Gonen-Balikesi** | **1.25** | **355** | *e*Pn | **Pn** | **19 03 40.5** | **+0.5** |
| **KHAL** | **Karahalli** | **1.36** | **108** | *i* P | **Pg** | **19 03 42.1** | **+0.3** |
| KHAL | | | | *i* S | **Sb** | **19 03 59.6** | **-0.1** |
| **KHAL** | **Karahalli** | **1.36** | **108** | P | **Pg** | **19 03 42.1** | **+0.3** |
| KHAL | | | | S | **Sb** | **19 03 59.6** | **-0.1** |
| **KCTX** | **Karacabey (Bur** | **1.52** | **15** | *e*PN | **Pb** | **19 03 44.4** | **-0.1** |
| **KCTX** | **Karacabey (Bur** | **1.52** | **15** | *e*Pn | **Pb** | **19 03 44.4** | **-0.1** |
| **KRBG** | **Karabiga-Canak** | **1.65** | **345** | *e*PN | **Pb** | **19 03 46.7** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **1.65** | **345** | *e*Pn | **Pb** | **19 03 46.7** | **+0.1** |
| **BOZC** | **Bozcaada** | **1.73** | **308** | P | **Pb** | **19 03 48.4** | **+0.3** |
| BOZC | | | | S | **Sn** | **19 04 09.2** | **0.0** |
| **MRMT** | **Marmara Adasi** | **1.81** | **354** | *e*PN | **Pb** | **19 03 49.0** | **-0.5** |
| **MRMT** | **Marmara Adasi** | **1.81** | **354** | *e*Pn | **Pb** | **19 03 49.0** | **-0.5** |

*ISCJB **16** 19:11:12.7±0.5, 40.°72N±0.°03×29.°09E±0.°05, h13km±4km, Error ellipse: s-maj=6.5km s-min=5.1km az=14.3*
*CSEM **16** 19:11:12.7±0.1, 40.°73N×29.°09E, h12km, MD2.6, Error ellipse: s-maj=2.6km s-min=2.3km az=173.0*
*ISK **16** 19:11:12.2, 40.°73N×29.°09E, h10km, MD2.6*
*DDA **16** 19:11:13.1, 40.°71N×29.°05E, h12km, Md2.3*
**ISC 16 19:11:12.7**±1.0**, 40.°73N**±0.°03×**29.°09E**±0.°03**, h14**km±10km**, n31, σ0.s28**/38**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BUY** | **Buyukada** | **0.12** | **9** | *i* P | **Pb** | **19 11 16.9** | **+0.1** |
| BUY | | | | *i* S | **Sb** | **19 11 19.4** | **-0.2** |
| **BUY** | **Buyukada** | **0.12** | **9** | P | **Pb** | **19 11 16.9** | **+0.1** |
| BUY | | | | S | **Sb** | **19 11 19.4** | **-0.2** |
| **ARMT** | **Armutlu** | **0.24** | **227** | *e*PG | **Pg** | **19 11 17.6** | **-0.3** |
| ARMT | | | | *e*SG | **Sb** | **19 11 22.4** | **-0.5** |
| **ARMT** | **Armutlu** | **0.24** | **227** | *e*Pg | **Pg** | **19 11 17.6** | **-0.3** |
| ARMT | | | | *e*Sg | **Sb** | **19 11 22.4** | **-0.5** |
| **MDNY** | **Mudanya-Bursa** | **0.39** | **204** | *e*PG | **Pg** | **19 11 20.3** | **-0.2** |
| MDNY | | | | *e*SG | **Sg** | **19 11 26.2** | **+0.3** |
| **MDNY** | **Mudanya-Bursa** | **0.39** | **204** | *e*Pg | **Pg** | **19 11 20.3** | **-0.2** |
| MDNY | | | | *e*Sg | **Sg** | **19 11 26.2** | **+0.3** |
| **IGD** | **Bursa** | **0.47** | **170** | P | **Pg** | **19 11 22.4** | **+0.4** |
| IGD | | | | S | **Sg** | **19 11 28.7** | **+0.4** |
| **IZI** | **Iznik** | **0.49** | **143** | *e*PG | **Pg** | **19 11 22.4** | **+0.1** |
| **IZI** | **Iznik** | **0.49** | **143** | *e*Pg | **Pg** | **19 11 22.4** | **+0.1** |
| **KLYT** | **Kilyos** | **0.53** | **356** | *e*PG | **Pg** | **19 11 22.7** | **-0.3** |
| **KLYT** | **Kilyos** | **0.53** | **356** | *e*Pg | **Pg** | **19 11 22.7** | **-0.3** |
| **ADVT** | **Abdulvahap** | **0.57** | **121** | *e*PG | **Pg** | **19 11 23.8** | **-0.1** |
| **ADVT** | **Abdulvahap** | **0.57** | **121** | *e*Pg | **Pg** | **19 11 23.8** | **-0.1** |
| **CTKS** | **Kestanelik-??a** | **0.67** | **319** | *e*PG | **Pg** | **19 11 25.9** | **+0.1** |
| **CTKS** | **Kestanelik-??a** | **0.67** | **319** | *e*Pg | **Pg** | **19 11 25.9** | **+0.1** |
| **KCTX** | **Karacabey (Bur** | **0.73** | **231** | *e*PG | **Pg** | **19 11 26.5** | **-0.3** |
| **KCTX** | **Karacabey (Bur** | **0.73** | **231** | *e*Pg | **Pg** | **19 11 26.5** | **-0.3** |
| **EDC** | **Edincik** | **1.01** | **248** | *e*PG | **Pb** | **19 11 31.8** | **-0.1** |
| **EDC** | **Edincik** | **1.01** | **248** | *e*Pg | **Pb** | **19 11 31.8** | **-0.1** |
| **GULT** | **Gulveren** | **1.12** | **105** | *e*PN | **Pn** | **19 11 34.2** | **+0.2** |
| **GULT** | **Gulveren** | **1.12** | **105** | *e*Pn | **Pn** | **19 11 34.2** | **+0.2** |
| **MRMT** | **Marmara Adasi** | **1.15** | **264** | *e*PN | **Pn** | **19 11 34.6** | **+0.3** |
| **MRMT** | **Marmara Adasi** | **1.15** | **264** | *e*Pn | **Pn** | **19 11 34.6** | **+0.3** |
| **GONE** | **Gonen-Balikesi** | **1.27** | **238** | *e*PN | **Pb** | **19 11 36.5** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.27** | **238** | *e*Pn | **Pb** | **19 11 36.5** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **1.41** | **257** | *e*PN | **Pb** | **19 11 38.8** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **1.41** | **257** | *e*Pn | **Pb** | **19 11 38.8** | **+0.1** |
| **RKY** | **Sarkoy-Tekirda** | **1.46** | **269** | *e*PN | **Pn** | **19 11 38.9** | **+0.3** |
| **RKY** | **Sarkoy-Tekirda** | **1.46** | **269** | *e*Pn | **Pn** | **19 11 38.9** | **+0.3** |
| **MDUB** | **Mudurnu** | **1.62** | **98** | *e*PN | **Pb** | **19 11 42.0** | **-0.4** |
| **MDUB** | **Mudurnu** | **1.62** | **98** | *e*Pn | **Pb** | **19 11 42.0** | **-0.4** |

*DDA **16** 19:14:30.5, 36.°98N×35.°63E, h7km, Md2.9*
*ISCJB **16** 19:14:31.5±0.5, 36.°98N±0.°03×35.°64E±0.°04, h23km±6km, Error ellipse: s-maj=5.1km s-min=5.0km az=137.0*
*CSEM **16** 19:14:31.2±0.3, 36.°98N×35.°64E, h20km, MD2.6, Error ellipse: s-maj=7.4km s-min=6.9km az=47.0*
*ISK **16** 19:14:31.0, 37.°09N×35.°66E, h6km, MD2.6*
**ISC 16 19:14:30.7**±1.1**, 36.°98N**±0.°03×**35.°67E**±0.°02**, h19**km±3km**, n26, σ1.s17**/40**, Turkey**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CEYT** | **Ceyhan** | **0.07** | **64** | *e*PG | **Pg** | **19 14 34.2** | **-0.1** |
| **CEYT** | **Ceyhan** | **0.07** | **64** | *e*Pg | **Pg** | **19 14 34.3** | **-0.1** |
| **KRTS** | **Karatas** | **0.47** | **210** | *e*PG | **Pn** | **19 14 41.9** | **-0.5** |
| KRTS | | | | *e*SG | **Sn** | **19 14 51.0** | **+1.0** |
| **KRTS** | **Karatas** | **0.47** | **210** | *e*Pg | **Pn** | **19 14 41.9** | **-0.5** |
| **KARA** | **Karaisali** | **0.56** | **300** | *e*PG | **Pg** | **19 14 41.2** | **-0.9** |
| KARA | | | | *e*SG | **Sg** | **19 14 49.0** | **-0.7** |
| **KARA** | **Karaisali** | **0.56** | **300** | *e*Pg | **Pg** | **19 14 41.2** | **-0.9** |
| KARA | | | | *e*Sg | **Sg** | **19 14 49.0** | **-0.7** |
| **TAHT** | **Tahtakopru-Hat** | **0.73** | **145** | *e*PG | **Pn** | **19 14 46.7** | **+0.7** |
| **TAHT** | **Tahtakopru-Hat** | **0.73** | **145** | *e*Pg | **Pn** | **19 14 46.7** | **+0.7** |
| **ANDN** | **Andirin** | **0.81** | **42** | *i* P | **Pg** | **19 14 47.0** | **+0.4** |
| ANDN | | | | *i* S | **Sn** | **19 14 58.6** | **-0.1** |
| **ANDN** | **Andirin** | **0.81** | **42** | P | **Pg** | **19 14 47.0** | **+0.4** |
| ANDN | | | | S | **Sn** | **19 14 58.6** | **-0.1** |
| **KAMA** | **Osmaniye** | **0.83** | **75** | P | **Pb** | **19 14 46.5** | **0.0** |
| KAMA | | | | S | **Sb** | **19 14 53.9** | **-3.4** |
| **YAYL** | **Yayladag** | **1.01** | **159** | *i* P | **Pn** | **19 14 50.5** | **+0.6** |
| YAYL | | | | *i* S | **Sn** | **19 15 05.0** | **+1.4** |
| **YAYL** | **Yayladag** | **1.01** | **159** | P | **Pn** | **19 14 50.5** | **+0.6** |
| YAYL | | | | S | **Sn** | **19 15 05.0** | **+1.4** |
| **AYKD** | **Aykdinkavak** | **1.01** | **64** | P | **Pb** | **19 14 49.9** | **+0.4** |
| AYKD | | | | S | **Sn** | **19 15 04.5** | **+0.9** |
| **KMRS** | **Kahramanmaras** | **1.12** | **62** | *e*PG | **Pb** | **19 14 52.0** | **+0.7** |
| **KMRS** | **Kahramanmaras** | **1.12** | **62** | *e*Pg | **Pb** | **19 14 52.1** | **+0.7** |
| **BTCH** | **Batrach** | **1.14** | **146** | *e*P | Pn | 19 14 45.4 | -6.2 |
| BTCH | | | | *e*S | **Sb** | **19 15 02.5** | **-3.6** |
| | 65nm,0.3s | | | | | | |
| **ARNB** | **Al Arnab** | **1.14** | **167** | *e*P | **Pn** | **19 14 49.4** | **-2.3** |
| ARNB | | | | *e*S | **Sb** | **19 15 06.4** | **+0.1** |
| | 5.0nm,0.7s | | | | | | |
| **KUZU** | **Kuzuini** | **1.15** | **100** | *i* P | **Pb** | **19 14 52.8** | **+0.8** |
| KUZU | | | | *i* S | **Sg** | **19 15 08.2** | **+0.1** |
| **KUZU** | **Kuzuini** | **1.15** | **100** | P | **Pb** | **19 14 52.8** | **+0.8** |
| KUZU | | | | S | **Sg** | **19 15 08.2** | **+0.1** |
| **KIZK** | **Mersin** | **1.32** | **248** | *i* P | **Pn** | **19 14 54.3** | **+0.2** |
| KIZK | | | | *i* S | **Sb** | **19 15 12.8** | **+1.4** |
| **KIZK** | **Mersin** | **1.32** | **248** | P | **Pn** | **19 14 54.3** | **+0.2** |
| KIZK | | | | S | **Sb** | **19 15 12.8** | **+1.4** |
| **NIG** | **Nigde** | **1.41** | **324** | *e*PN | **Pb** | **19 14 56.6** | **+0.1** |
| **NIG** | **Nigde** | **1.41** | **324** | *e*Pn | **Pb** | **19 14 56.6** | **+0.1** |
| **SARI** | **SarD1z-Kayseri** | **1.55** | **22** | *e*PN | **Pn** | **19 14 58.4** | **+1.0** |
| **WRDH** | **Warideh** | **1.59** | **157** | *e*P | Pn | 19 14 54.9 | -2.9 |
| WRDH | | | | *e*S | **Sn** | **19 15 16.9** | **-0.9** |
| | 18nm,0.5s | | | | | | |

*NEIC **16** 19:45:47.0, 39.°54S×177.°10E, h31km, mb4.0/1, ML3.9(WEL), After WEL.*
*NEIC Felt [IV] at Taradale. Felt in the Napier area.*
**WEL 16 19:45:47.1**±0.1**, 39.°55S**×**177.°11E, h33**km**, ML3.9**/38**, 16C-6D, Error ellipse: s-maj=1.1km s-min=0.7km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CKHZ** | **Cape Kidnapper** | **0.11** | **194** | ⇑P* | Pb | 19 45 52.9 | 0.0 |
| CKHZ | | | | S* | Sb | 19 45 57.9 | +1.0 |
| **CKHZ** | **Cape Kidnapper** | **0.11** | **194** | P* | Pb | 19 45 52.9 | 0.0 |
| CKHZ | | | | S* | Sb | 19 45 57.9 | +1.0 |
| **KAHZ** | **Kahuranaki** | **0.30** | **217** | ⇑P* | Pn | 19 45 55.2 | 0.0 |
| KAHZ | | | | S* | Sn | 19 46 02.1 | +1.8 |
| **KAHZ** | **Kahuranaki** | **0.30** | **217** | P* | Pn | 19 45 55.2 | 0.0 |
| KAHZ | | | | S* | Sn | 19 46 02.1 | +1.8 |
| **ARHZ** | **Aropaoanui** | **0.30** | **343** | ⇓P* | Pb | 19 45 53.6 | -1.2 |
| **ARHZ** | **Aropaoanui** | **0.30** | **343** | P* | Pb | 19 45 53.7 | -1.2 |
| **MCHZ** | **McNeill Hill** | **0.34** | **289** | ⇓P* | Pb | 19 45 53.9 | -1.4 |
| **MCHZ** | **McNeill Hill** | **0.34** | **289** | P* | Pb | 19 45 53.9 | -1.4 |
| **WHHZ** | **Waihua** | **0.49** | **11** | PN | Pb | 19 45 57.1 | -0.4 |
| WHHZ | | | | SN | Sn | 19 46 05.5 | +0.4 |
| **NMHZ** | **Naumai** | **0.51** | **332** | ⇑PN | Pb | 19 45 56.7 | -1.3 |
| **NMHZ** | **Naumai** | **0.51** | **332** | P* | Pb | 19 45 56.7 | -1.3 |
| **PXZ** | **Pawanui** | **0.52** | **202** | PN | Pb | 19 45 57.8 | 0.0 |
| PXZ | | | | AML | AML | 19 46 10.0 | |
| PXZ | | | | AML | AML | 19 46 10.0 | |
| PXZ | | | | AML | AML | 19 46 10.9 | |
| PXZ | | | | AML | AML | 19 46 10.9 | |
| **PXZ** | **Pawanui** | **0.52** | **202** | P* | Pb | 19 45 57.9 | 0.0 |
| **KRHZ** | **Kereru** | **0.58** | **261** | ⇑PN | Pb | 19 45 57.8 | -1.2 |
| **BKZ** | **Black Stump Fm** | **0.62** | **309** | ⇓PN | Pn | 19 45 57.6 | -1.9 |
| BKZ | | | | AML | AML | 19 46 07.1 | |
| BKZ | | | | AML | AML | 19 46 07.2 | |
| **BKZ** | **Black Stump Fm** | **0.62** | **309** | Pn | Pn | 19 45 57.6 | -1.9 |
| **RAHZ** | **Arahi** | **0.64** | **358** | ⇑PN | Pn | 19 45 59.0 | -0.7 |
| **RAHZ** | **Arahi** | **0.64** | **358** | Pn | Pn | 19 45 59.0 | -0.7 |
| **KNZ** | **Kokohu** | **0.69** | **40** | PN | Pn | 19 45 60.0 | -0.5 |
| KNZ | | | | AML | AML | 19 46 27.1 | |
| KNZ | | | | AML | AML | 19 46 30.3 | |
| **KNZ** | **Kokohu** | **0.69** | **40** | Pn | Pn | 19 45 59.8 | -0.7 |
| **WPHZ** | **Waipukurau** | **0.73** | **225** | PN | Pn | 19 46 00.8 | -0.3 |
| **WPHZ** | **Waipukurau** | **0.73** | **225** | Pn | Pn | 19 46 00.8 | -0.3 |
| **MHGZ** | **Mahia Peninsul** | **0.73** | **57** | ⇓PN | Pn | 19 46 01.1 | 0.0 |
| **MHGZ** | **Mahia Peninsul** | **0.73** | **57** | Pn | Pn | 19 46 01.1 | 0.0 |
| **PNHZ** | **Pukenui** | **0.79** | **243** | PN | Pn | 19 46 01.2 | -0.8 |
| **PNHZ** | **Pukenui** | **0.79** | **243** | Pn | Pn | 19 46 01.2 | -0.8 |
| **SNGZ** | **Shannon Statio** | **0.79** | **13** | PN | Pn | 19 46 01.6 | -0.4 |
| **SNGZ** | **Shannon Statio** | **0.79** | **13** | Pn | Pn | 19 46 01.6 | -0.4 |
| **PRHZ** | **Porangahau** | **0.80** | **207** | ⇓PN | Pn | 19 46 01.5 | -0.5 |
| **PRHZ** | **Porangahau** | **0.80** | **207** | Pn | Pn | 19 46 01.6 | -0.5 |
| **BHHZ** | **Black Hill Sta** | **0.81** | **274** | ⇑PN | Pn | 19 46 01.0 | -1.3 |
| **BHHZ** | **Black Hill Sta** | **0.81** | **274** | Pn | Pn | 19 46 01.0 | -1.3 |
| **PRGZ** | **Paritu Road** | **0.87** | **44** | PN | Pn | 19 46 02.5 | -0.5 |
| **PRGZ** | **Paritu Road** | **0.87** | **44** | Pn | Pn | 19 46 02.5 | -0.5 |
| **MRHZ** | **Matea Rd** | **0.90** | **323** | ⇑PN | Pn | 19 46 02.5 | -1.0 |
| **RIGZ** | **Rimuhau** | **0.99** | **31** | ⇑PN | Pn | 19 46 04.3 | -0.4 |
| **TSZ** | **Takapari Road** | **1.02** | **240** | PN | Pn | 19 46 04.1 | -1.0 |
| TSZ | | | | AML | AML | 19 46 21.9 | |
| TSZ | | | | AML | AML | 19 46 23.6 | |
| **TSZ** | **Takapari Road** | **1.02** | **240** | Pn | Pn | 19 46 04.1 | -1.0 |
| **DVHZ** | **Dannevirke** | **1.04** | **224** | PN | Pn | 19 46 04.7 | -0.7 |
| **DVHZ** | **Dannevirke** | **1.04** | **224** | Pn | Pn | 19 46 04.7 | -0.7 |
| **MOVZ** | **Moawhango** | **1.06** | **277** | ⇑PN | Pn | 19 46 05.2 | -0.6 |
| MOVZ | | | | AML | AML | 19 46 19.0 | |
| MOVZ | | | | AML | AML | 19 46 19.9 | |
| **MOVZ** | **Moawhango** | **1.06** | **277** | Pn | Pn | 19 46 05.2 | -0.6 |
| **RITZ** | **Rihia Road** | **1.13** | **300** | PN | Pn | 19 46 06.3 | -0.3 |
| RITZ | | | | AML | AML | 19 46 27.3 | |
| RITZ | | | | AML | AML | 19 46 31.6 | |
| **RITZ** | **Rihia Road** | **1.13** | **300** | Pn | Pn | 19 46 06.3 | -0.3 |
| **ALRZ** | **Allen Road** | **1.16** | **329** | PN | Pn | 19 46 06.4 | -0.5 |
| **ALRZ** | **Allen Road** | **1.16** | **329** | Pn | Pn | 19 46 06.5 | -0.5 |
| **TUVZ** | **Tukino** | **1.16** | **284** | PN | Pn | 19 46 07.2 | 0.0 |
| TUVZ | | | | AML | AML | 19 46 26.8 | |
| TUVZ | | | | AML | AML | 19 46 31.1 | |
| **TUVZ** | **Tukino** | **1.16** | **284** | Pn | Pn | 19 46 07.2 | 0.0 |
| **OTVZ** | **Oturere** | **1.19** | **289** | PN | Pn | 19 46 07.2 | -0.4 |
| OTVZ | | | | AML | AML | 19 46 26.5 | |
| OTVZ | | | | AML | AML | 19 46 28.0 | |
| **OTVZ** | **Oturere** | **1.19** | **289** | Pn | Pn | 19 46 07.2 | -0.4 |
| **PRRZ** | **Plateau Road** | **1.19** | **332** | PN | Pn | 19 46 06.8 | -0.7 |
| **PRRZ** | **Plateau Road** | **1.19** | **332** | Pn | Pn | 19 46 06.8 | -0.7 |
| **WNVZ** | **Wahianoa** | **1.19** | **280** | ⇑PN | Pn | 19 46 07.6 | -0.1 |
| **WNVZ** | **Wahianoa** | **1.19** | **280** | Pn | Pn | 19 46 07.6 | -0.1 |
| **WHVZ** | **Whangaehu Hut** | **1.21** | **282** | PN | Pn | 19 46 07.7 | -0.3 |
| **WHVZ** | **Whangaehu Hut** | **1.21** | **282** | Pn | Pn | 19 46 07.7 | -0.3 |
| **KRVZ** | **Karewarewa** | **1.23** | **291** | ⇑PN | Pn | 19 46 07.5 | -0.6 |
| KRVZ | | | | AML | AML | 19 46 27.1 | |
| KRVZ | | | | AML | AML | 19 46 31.9 | |
| **KRVZ** | **Karewarewa** | **1.23** | **291** | Pn | Pn | 19 46 07.5 | -0.6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DRZ** | **Dome Shelter** | **1.23 283** | PN | Pn | 19 46 08.3 | 0.0 | | |
| DRZ | | | AML | AML | 19 46 26.5 | | | |
| DRZ | | | AML | AML | 19 46 27.9 | | | |
| **DRZ** | **Dome Shelter** | **1.23 283** | Pn | Pn | 19 46 08.3 | 0.0 | | |
| **NGZ** | **Ngauruhoe** | **1.23 287** | PN | Pn | 19 46 07.7 | -0.4 | | |
| NGZ | | | AML | AML | 19 46 26.8 | | | |
| NGZ | | | AML | AML | 19 46 27.6 | | | |
| **TRVZ** | **Turoa** | **1.24 281** | PN | Pn | 19 46 08.3 | -0.1 | | |
| TRVZ | | | AML | AML | 19 46 26.1 | | | |
| TRVZ | | | AML | AML | 19 46 26.3 | | | |
| **KATZ** | **Kakaramea** | **1.24 297** ⇑Pn | | Pn | 19 46 07.7 | -0.6 | | |
| KATZ | | | AML | AML | 19 46 26.7 | | | |
| **KATZ** | **Kakaramea** | **1.24 297** | Pn | Pn | 19 46 07.7 | -0.6 | | |
| **FWVZ** | **Far West T-bar** | **1.24 283** ⇑Pn | | Pn | 19 46 07.7 | -0.7 | | |
| FWVZ | | | AML | AML | 19 46 25.0 | | | |
| FWVZ | | | AML | AML | 19 46 26.1 | | | |
| **FWVZ** | **Far West T-bar** | **1.24 283** | Pn | Pn | 19 46 07.7 | -0.7 | | |
| **RATZ** | **Rangitukua** | **1.25 303** | PN | Pn | 19 46 07.5 | -0.7 | | |
| RATZ | | | AML | AML | 19 46 29.5 | | | |
| RATZ | | | AML | AML | 19 46 34.2 | | | |
| **RATZ** | **Rangitukua** | **1.25 303** | Pn | Pn | 19 46 07.5 | -0.7 | | |
| **TKGZ** | **Te Karaka** | **1.25 28** | PN | Pn | 19 46 07.4 | -0.8 | | |
| **TKGZ** | **Te Karaka** | **1.25 28** | Pn | Pn | 19 46 07.4 | -0.8 | | |
| **WTVZ** | **West Tongariro** | **1.26 290** | PN | Pn | 19 46 08.0 | -0.5 | | |
| WTVZ | | | AML | AML | 19 46 11.4 | | | |
| WTVZ | | | AML | AML | 19 46 28.0 | | | |
| **WTVZ** | **West Tongariro** | **1.26 290** | Pn | Pn | 19 46 08.0 | -0.5 | | |
| **MWZ** | **Matawai** | **1.26 15** ⇓PN | | Pn | 19 46 07.5 | -0.9 | | |
| MWZ | | | AML | AML | 19 46 29.1 | | | |
| MWZ | | | AML | AML | 19 46 29.1 | | | |
| MWZ | | | AML | AML | 19 46 43.9 | | | |
| MWZ | | | AML | AML | 19 46 44.0 | | | |
| **MWZ** | **Matawai** | **1.26 15** | Pn | Pn | 19 46 07.5 | -0.9 | | |
| **WHTZ** | **Whakaora** | **1.26 314** | PN | Pn | 19 46 08.3 | -0.1 | | |
| **WHTZ** | **Whakaora** | **1.26 314** | Pn | Pn | 19 46 08.3 | -0.1 | | |
| **WPVZ** | **Whakapapa** | **1.26 286** | PN | Pn | 19 46 08.0 | -0.5 | | |
| WPVZ | | | AML | AML | 19 46 27.7 | | | |
| WPVZ | | | AML | AML | 19 46 29.8 | | | |
| **WPVZ** | **Whakapapa** | **1.26 286** | Pn | Pn | 19 46 08.1 | -0.5 | | |
| **COVZ** | **Chateau Observ** | **1.27 286** | PN | Pn | 19 46 08.0 | -0.6 | | |
| **COVZ** | **Chateau Observ** | **1.27 286** | Pn | Pn | 19 46 08.1 | -0.6 | | |
| **WPRZ** | **Whakapapatarin** | **1.27 324** | PN | Pn | 19 46 07.6 | -1.0 | | |
| **WPRZ** | **Whakapapatarin** | **1.27 324** | Pn | Pn | 19 46 07.6 | -1.0 | | |
| **MTVZ** | **Mangateitei** | **1.28 277** | AML | AML | 19 46 27.4 | | | |
| MTVZ | | | AML | AML | 19 46 30.0 | | | |
| **URZ** | **Urewera** | **1.29 360** ⇑PN | | Pn | 19 46 07.9 | -0.8 | | |
| URZ | | | AML | AML | 19 46 32.7 | | | |
| URZ | | | AML | AML | 19 46 33.9 | | | |
| **URZ** | **Urewera** | **1.29 360** ePn | | Pn | 19 46 07.5 | -1.3 | | |
| **RRRZ** | **Republican Roa** | **1.30 339** | PN | Pn | 19 46 08.1 | -0.8 | | |
| **RRRZ** | **Republican Roa** | **1.30 339** | Pn | Pn | 19 46 08.1 | -0.8 | | |
| **BFZ** | **Birch Farm** | **1.31 210** | PN | Pn | 19 46 07.8 | -1.2 | | |
| BFZ | | | AML | AML | 19 46 50.1 | | | |
| BFZ | | | AML | AML | 19 46 56.7 | | | |
| BFZ | | | AML | AML | 19 46 56.7 | | | |
| BFZ | | | AML | AML | 19 46 57.0 | | | |
| **BFZ** | **Birch Farm** | **1.31 210** | Pn | Pn | 19 46 07.8 | -1.2 | | |
| **HRRZ** | **Handcock Road** | **1.33 331** | PN | Pn | 19 46 09.1 | -0.3 | | |
| **HRRZ** | **Handcock Road** | **1.33 331** | Pn | Pn | 19 46 09.1 | -0.3 | | |
| **POWZ** | **Post Office Ro** | **1.33 230** | PN | Pn | 19 46 08.9 | -0.5 | | |
| **POWZ** | **Post Office Ro** | **1.33 230** | Pn | Pn | 19 46 08.9 | -0.5 | | |
| **PRWZ** | **Pori Road** | **1.33 221** ⇑PN | | Pn | 19 46 08.9 | -0.4 | | |
| **PRWZ** | **Pori Road** | **1.33 221** | Pn | Pn | 19 46 08.9 | -0.4 | | |
| **WATZ** | **Wairara** | **1.36 308** | PN | Pn | 19 46 08.9 | -1.0 | | |
| WATZ | | | AML | AML | 19 46 23.3 | | | |
| WATZ | | | AML | AML | 19 46 40.7 | | | |
| **WATZ** | **Wairara** | **1.36 308** | Pn | Pn | 19 46 08.9 | -1.0 | | |
| **TWVZ** | **Taurewa** | **1.39 290** | PN | Pn | 19 46 09.3 | -0.9 | | |
| TWVZ | | | AML | AML | 19 46 27.0 | | | |
| TWVZ | | | AML | AML | 19 46 31.2 | | | |
| **TWVZ** | **Taurewa** | **1.39 290** | Pn | Pn | 19 46 09.3 | -0.9 | | |
| **TARZ** | **Mount Tarawera** | **1.40 340** | PN | Pn | 19 46 09.7 | -0.7 | | |
| **TARZ** | **Mount Tarawera** | **1.40 340** | Pn | Pn | 19 46 10.0 | -0.4 | | |
| **HSRZ** | **Hossack Road** | **1.41 331** | PN | Pn | 19 46 09.5 | -1.0 | | |
| **HLRZ** | **Highlands Stat** | **1.43 335** | PN | Pb | 19 46 12.0 | -1.2 | | |
| **GRRZ** | **Galatos Road** | **1.43 327** | PN | Pn | 19 46 10.2 | -0.6 | | |
| **KUTZ** | **Kaahu Road** | **1.46 316** | PN | Pn | 19 46 10.3 | -0.9 | | |
| **KUTZ** | **Kaahu Road** | **1.46 316** | Pn | Pn | 19 46 10.3 | -0.9 | | |
| **MRZ** | **Mangatainoka R** | **1.61 226** ⇑PN | | Pn | 19 46 12.0 | -1.3 | | |
| MRZ | | | AML | AML | 19 46 39.4 | | | |
| MRZ | | | AML | AML | 19 46 50.3 | | | |
| **MRZ** | **Mangatainoka R** | **1.61 226** | Pn | Pn | 19 46 12.0 | -1.3 | | |
| **WAZ** | **Wanganui** | **1.65 262** | PN | Pn | 19 46 14.3 | +0.5 | | |
| WAZ | | | AML | AML | 19 46 43.7 | | | |
| WAZ | | | AML | AML | 19 46 44.0 | | | |
| **WAZ** | **Wanganui** | **1.65 262** | Pn | Pn | 19 46 13.3 | +0.5 | | |
| **TLZ** | **Tolley Road** | **1.73 314** | Pn | Pn | 19 46 13.7 | -1.3 | | |
| **OPRZ** | **Ohinepanea** | **1.76 346** | PN | Pn | 19 46 14.6 | -0.6 | | |
| **OPRZ** | **Ohinepanea** | **1.76 346** | Pn | Pn | 19 46 14.6 | -0.6 | | |
| **HOWZ** | **Holdsworth Sta** | **1.82 222** | PN | Pn | 19 46 14.6 | -1.4 | | |
| **HOWZ** | **Holdsworth Sta** | **1.82 222** | Pn | Pn | 19 46 14.6 | -1.4 | | |
| **HAZ** | **Te Kaha** | **1.87 17** | PN | Pn | 19 46 16.0 | -0.7 | | |
| **VRZ** | **Vera Road** | **1.87 282** | AML | AML | 19 46 50.5 | | | |
| VRZ | | | AML | AML | 19 46 57.0 | | | |
| **VRZ** | **Vera Road** | **1.87 282** | Pn | Pn | 19 46 17.4 | +0.6 | | |
| **OGWZ** | **Otaki Gorge** | **1.95 229** | PN | Pn | 19 46 16.6 | -1.2 | | |
| **OGWZ** | **Otaki Gorge** | **1.95 229** | Pn | Pn | 19 46 16.6 | -1.2 | | |
| **WMGZ** | **Waiomatatini S** | **2.01 31** | PN | Pn | 19 46 17.3 | -1.3 | | |
| **WMGZ** | **Waiomatatini S** | **2.01 31** | Pn | Pn | 19 46 17.4 | -1.2 | | |
| **MTW** | **Mount Morrison** | **2.02 217** | PN | Pn | 19 46 17.1 | -1.8 | | |
| MTW | | | AML | AML | 19 46 42.0 | | | |
| MTW | | | AML | AML | 19 46 42.6 | | | |
| **MTW** | **Mount Morrison** | **2.02 217** | Pn | Pn | 19 46 17.1 | -1.8 | | |
| **HIZ** | **Hauiti** | **2.04 300** | PN | Pn | 19 46 18.1 | -1.0 | | |
| HIZ | | | AML | AML | 19 46 58.4 | | | |
| HIZ | | | AML | AML | 19 47 01.5 | | | |
| **HIZ** | **Hauiti** | **2.04 300** | Pn | Pn | 19 46 18.1 | -1.0 | | |
| **KIW** | **Kapiti Island** | **2.13 232** | PN | Pn | 19 46 19.9 | -0.5 | | |
| KIW | | | AML | AML | 19 46 45.8 | | | |
| KIW | | | AML | AML | 19 47 19.4 | | | |
| **KIW** | **Kapiti Island** | **2.13 232** | Pn | Pn | 19 46 19.9 | -0.5 | | |
| **TRWZ** | **Traveller** | **2.14 210** | PN | Pn | 19 46 18.0 | -2.5 | | |
| TRWZ | | | AML | AML | 19 47 09.7 | | | |
| TRWZ | | | AML | AML | 19 47 28.5 | | | |
| **TRWZ** | **Traveller** | **2.14 210** | Pn | Pn | 19 46 18.0 | -2.5 | | |
| **MXZ** | **Matakaoa Point** | **2.20 26** | PN | Pn | 19 46 21.2 | 0.0 | | |
| MXZ | | | AML | AML | 19 47 09.3 | | | |
| **MXZ** | **Matakaoa Point** | **2.20 26** | Pn | Pn | 19 46 21.2 | 0.0 | | |
| **CAW** | **Cannon Point** | **2.20 225** | PN | Pn | 19 46 19.7 | -1.7 | | |
| CAW | | | AML | AML | 19 47 12.2 | | | |
| CAW | | | AML | AML | 19 47 18.2 | | | |
| **CAW** | **Cannon Point** | **2.20 225** | Pn | Pn | 19 46 19.7 | -1.7 | | |
| **PAWZ** | **Paruwai Farm** | **2.23 215** | PN | Pn | 19 46 19.8 | -2.0 | | |
| PAWZ | | | AML | AML | 19 46 50.5 | | | |
| PAWZ | | | AML | AML | 19 47 23.7 | | | |
| **PAWZ** | **Paruwai Farm** | **2.23 215** | Pn | Pn | 19 46 19.8 | -2.0 | | |
| **TCW** | **Tory Channel** | **2.73 232** | AML | AML | 19 47 00.9 | | | |
| TCW | | | AML | AML | 19 47 01.1 | | | |
| **TUWZ** | **Tuamarina** | **3.06 231** | AML | AML | 19 47 08.7 | | | |
| **BSWZ** | **Blackbirch Sta** | **3.27 228** | PN | Pn | 19 46 34.2 | -1.9 | | |
| **BSWZ** | **Blackbirch Sta** | **3.27 228** | Pn | Pn | 19 46 34.2 | -1.9 | | |
| **NNZ** | **Nelson** | **3.30 239** | PN | Pn | 19 46 35.2 | -1.2 | | |
| NNZ | | | AML | AML | 19 47 16.3 | | | |
| **NNZ** | **Nelson** | **3.30 239** | Pn | Pn | 19 46 35.2 | -1.2 | | |
| **THZ** | **Tophouse** | **3.89 234** | PN | Pn | 19 46 41.9 | -2.7 | | |
| THZ | | | AML | AML | 19 47 56.4 | | | |
| THZ | | | AML | AML | 19 48 03.9 | | | |
| **THZ** | **Tophouse** | **3.89 234** | Pn | Pn | 19 46 41.9 | -2.7 | | |
| **KHZ** | **Kahutara** | **3.94 222** | PN | Pn | 19 46 43.3 | -1.8 | | |
| **KHZ** | **Kahutara** | **3.94 222** | Pn | Pn | 19 46 43.3 | -1.8 | | |
| **MQZ** | **McQueen's Vall** | **5.33 217** | PN | Pn | 19 47 00.6 | -3.6 | | |
| MQZ | | | AML | AML | 19 47 58.5 | | | |
| **ODZ** | **Otahua Downs** | **7.28 219** | PN | Pn | 19 47 27.8 | -3.3 | | |
| **WRAB** | **Tennant Creek** | **41.50 285** *e*P | | P | 19 53 30.4 | -0.8 | | |
| | 2.5nm,0.7s | | | | | | | |

**ROM 16 19:46:31.7±0.1, 42.82N×13.12E, h6km±4km, Md1.5/3, Ml0.6/3, Error ellipse: s-maj=0.9km s-min=0.4km az=60.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LNSS** | **Leonessa** | **0.22** | **194** | Pg | Pg | 19 46 36.9 | +0.6 |
| LNSS | | | | Sg | Sg | 19 46 40.5 | +1.2 |
| | 10.0nm,0.2s | | | | | | |
| **CESI** | **CESI - Serrava** | **0.24** | **320** | Pg | Pg | 19 46 37.2 | +0.6 |
| CESI | | | | Sg | Sg | 19 46 41.2 | +1.3 |
| | 23nm,2.0s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.25** | **139** | Pg | Pg | 19 46 37.3 | +0.6 |
| SMA1 | | | | Sg | Sg | 19 46 41.6 | +1.4 |
| | 17nm,0.7s | | | | | | |

**IDC 16 19:49:04.4±1.1, 13.17N×145.52E, h0km, mb3.5/4, mb1 3.8/4, mb1mx3.5/33, mbtmp3.5/4, Error ellipse: s-maj=26.3km s-min=22.4km az=74.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **0.76** | **304** | Pn | Pn | 19 49 22.5 | 0.0 |
| | 370nm,0.3s,baz=142,slow=8.0,SNR=231 | | | | | | |
| GUMO | | | | Sn | Sb | 19 49 30.9 | -0.6 |
| | 684nm,0.3s,baz=359,slow=16,SNR=42 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **21.03** | **73** | T | T | 20 16 34.0 | |
| | SNR=3.1 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.05** | **73** | T | T | 20 16 32.9 | |
| **H11S2** | **WAKE ISLAND Hy** | **21.05** | **73** | T | T | 20 16 32.9 | |
| **H11N1** | **WAKE ISLAND Hy** | **21.49** | **70** | T | T | 20 17 05.5 | |
| | baz=256,slow=75,SNR=5.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.50** | **70** | T | T | 20 16 59.0 | |
| | baz=256,slow=75,SNR=4.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.51** | **70** | T | T | 20 17 14.2 | |
| | baz=256,slow=75,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.69** | **199** | P | P | 19 55 54.6 | -1.5 |
| | 0.3nm,0.6s,baz=20,slow=9.8,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.33** | **197** | P | P | 19 56 28.7 | +1.5 |
| | 0.3nm,0.6s,baz=24,slow=12,SNR=2.3 | | | | | | |
| **ILAR** | **Eielson Array** | **68.68** | **25** | P | P | 20 00 08.8 | -0.6 |
| | 0.3nm,0.4s,baz=254,slow=5.7,SNR=14 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.94** | **27** | P | P | 20 01 32.0 | +0.9 |
| | 0.5nm,0.6s,baz=285,slow=5.2,SNR=3.3 | | | | | | |

*BJI* ***16*** *19:51:46.6, 6.44N×94.25E, h87km, mb5.6/74, mB5.1/42, Ms4.7/65, Ms7 4.4/54*

*SZGRF* ***16*** *19:51:47.3, 5.82N×94.82E, h33km, mb5.9/29(BGR)*

*MOS* ***16*** *19:51:47.6±1.0, 6.88N×94.29E, h65km, mb6.0/98, Error ellipse: s-maj=7.1km s-min=4.0km az=114.9*

*ISCJB* ***16*** *19:51:49.6±0.3, 6.67N±0.02×94.38E±0.02, h92km±2km, mb5.6/306, Error ellipse: s-maj=3.3km s-min=2.0km az=33.3*

*KLM* ***16*** *19:51:50.7, 6.42N×94.27E, h72km, mb5.6, MS6.4*

*GCMT* ***16*** *19:51:51.3±0.2, 6.68N×94.51E, h84km±1km, MW5.3/98, Moment Tensor Solution. s87,c143; s98,c187; Duration: 1s1 Moment tensor: Scale 10^17 Nm; Mrr0.89±.02; Mθθ-1.01±.02; Mϕϕ0.11±.02; Mrθ0.39±.02; Mθϕ-0.68±.02; Mϕr-0.29±.02; Best double couple: M0 1.25900×10^17 NP1:ϕs91.00000°, δ58.00000°, λ126.00000°. NP2:ϕs217.00000°, δ47.00000°, λ47.00000°. Principal axes: T 1.1660, Plg59.0000°, Azm56.0000°; N 0.1800, Plg30.0000°, Azm250.0000°; P -1.3520, Plg6.0000°, Azm156.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*NEIC* ***16*** *19:51:51.3±0.5, 6.63N×94.34E, h94km±3km, mb5.7/134, MW5.3 Error ellipse: s-maj=4.5km s-min=3.1km az=215.0, Moment Tensor Solution. s15 Moment tensor: Scale 10^17 Nm; Mrr1.32; Mθθ-1.15; Mϕϕ-0.17; Mrθ0.16; Mθϕ-0.28; Mϕr-0.18; Best double couple: M0 1.30000×10^17 NP1: ϕs84.00000°, δ48.00000°, λ101.00000°. NP2: ϕs247.00000°, δ43.00000°, λ78.00000°. Principal axes: T 1.3600, Plg81.0000°, Azm59.0000°; N -0.1300, Plg8.0000°, Azm256.0000°; P -1.2300, Plg3.0000°, Azm166.00.00°;*

*IDC* ***16*** *19:51:52.8±1.1, 6.72N×94.47E, h103km±9km, mb5.2/35, mb1 5.3/38, mb1mx5.2/40, mbtmp5.5/38, MS4.3/18, Ms1 4.4/18, ms1mx4.2/40 Error ellipse: s-maj=8.9km s-min=7.9km az=32.0*

*AUST* ***16*** *19:51:52.5±0.8, 6.68N×94.53E, h100km±7km, Error ellipse: s-maj=8.2km s-min=5.0km az=50.0*

*DJA* ***16*** *19:51:53.0±0.3, 7.N±2.×9.5E±.°, h89km±3km, M5.3/127, mB5.7/89, mb5.6/127, MLv5.7/8, Mw(mB)5.2/89, Mwp5.0/2*

**ISC 16 19:51:50.8±0.3, 6.78N±0.03×94.43E±0.03, h88km±1km, h89km:pP-P,n1661,σ1930/1794, mb5.7/316, 152C-53D, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMBY** | **CAMPBELL BAY** | **0.55** | **295** | *e*P | **Pn** | **19 52 07.0** | **+1.2** |
| CMBY | | | | *e*S | **Sn** | **19 52 18.5** | **+1.5** |
| **LHMI** | **Lhok Sumawe** | **2.94** | **122** | P | **Pn** | **19 52 36.5** | **+1.0** |
| | baz=2.8,SNR=618 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **2.94** | **122** | P | **Pn** | **19 52 36.5** | **+1.0** |
| **LHMI** | **Lhok Sumawe** | **2.94** | **122** | *e*Pn | **Pn** | **19 52 36.5** | **+1.0** |
| **MLSI** | **Meulaboh, Aceh** | **3.18** | **142** | P | **Pn** | **19 52 38.3** | **-0.4** |
| **KCSI** | **Kotacane, Aceh** | **4.64** | **134** | P | **Pn** | **19 52 59.0** | **+0.4** |
| **PBA** | **Port Blair** | **5.12** | **341** | *e*P | Pn | 19 53 05.0 | -0.1 |
| PBA | | | | *e*S | Sn | 19 54 03.2 | +0.2 |
| **PSI** | **Prapat** | **5.97** | **131** | P | **Pn** | **19 53 17.4** | **+0.5** |
| | 153nm,0.3s,baz=298,slow=10,SNR=554 | | | | | | |
| PSI | | | | LR | LR | 19 55 15.3 | |
| | comp=Z,2μm,21.7s,baz=326,slow=34 | | | | | | |
| **PSI** | **Prapat** | **5.97** | **131** | P | **Pn** | **19 53 17.1** | **+0.3** |
| | baz=5.9,SNR=506 | | | | | | |
| **PSI** | **Prapat** | **5.97** | **131** | *e*Pn | **Pn** | **19 53 17.2** | **+0.3** |
| **GSI** | **Gunungsitoli** | **6.28** | **150** | P | Pn | 19 53 16.6 | -4.3 |
| | 997nm,1.2s,9μm2.9nm | | | | | | |
| **GSI** | **Gunungsitoli** | **6.28** | **150** | *e*Pn | Pn | 19 53 17.1 | -3.9 |
| **KULM** | **Kulim** | **6.36** | **103** | ⇓P | **Pn** | **19 53 22.5** | **+0.5** |
| **KULM** | **Kulim** | **6.36** | **103** | *e*Pn | **Pn** | **19 53 21.9** | **-0.1** |
| **DGPR** | **DIGLIPUR** | **6.53** | **347** | *e*P | **Pn** | **19 53 25.4** | **+1.1** |
| DGPR | | | | *e*S | **Sn** | **19 54 36.3** | **-0.9** |
| **IPM** | **Ipoh** | **6.95** | **109** | ⇑P | **Pn** | **19 53 30.2** | **+0.2** |
| **IPM** | **Ipoh** | **6.95** | **109** | *e*Pn | **Pn** | **19 53 29.6** | **-0.5** |
| **MNSI** | **Mandailing Nat** | **7.86** | **139** | P | **Pn** | **19 53 39.9** | **-2.5** |
| | 589nm,0.8s,20μm | | | | | | |
| **FRIM** | **Kepong** | **7.98** | **116** | ⇓P | **Pn** | **19 53 44.2** | **0.0** |
| **KTGM** | **Kuala Trenggan** | **8.77** | **99** | ⇓P | **Pn** | **19 53 56.3** | **+1.4** |
| **BKNI** | **Bangkinang** | **9.20** | **134** | P | **Pn** | **19 53 58.9** | **-1.8** |
| | baz=8.1,SNR=41 | | | | | | |
| **BKNI** | **Bangkinang** | **9.20** | **134** | P | **Pn** | **19 53 58.3** | **-2.4** |
| | 1μm,1.1s,12μm | | | | | | |
| **BKNI** | **Bangkinang** | **9.20** | **134** | *e*Pn | **Pn** | **19 53 58.5** | **-2.3** |
| **SISI** | **Saibi** | **9.30** | **150** | P | Pn | 19 53 58.8 | -3.3 |
| | 331nm,0.7s,3μm | | | | | | |
| **PPI** | **Padang Panjang** | **9.34** | **140** | P | **Pn** | **19 54 00.1** | **-2.5** |
| | 734nm,0.8s,5μm | | | | | | |
| **PDSI** | **Padang** | **9.73** | **142** | P | **Pn** | **19 54 05.2** | **-2.8** |
| **KGM** | **Kluang** | **10.04** | **118** | ⇑P | **Pn** | **19 54 12.6** | **+0.3** |
| **SDSI** | **Sungai Dareh** | **10.37** | **137** | P | **Pn** | **19 54 13.7** | **-3.0** |
| | 187nm,1.3s | | | | | | |
| **RGRI** | **Rengat** | **10.60** | **132** | P | **Pn** | **19 54 18.0** | **-1.9** |
| | 692nm,0.9s,87μm | | | | | | |
| **MYKOM** | **Kota Tinggi** | **10.62** | **117** | ⇓P | **Pn** | **19 54 20.4** | **+0.3** |
| **MYKOM** | **Kota Tinggi** | **10.62** | **117** | *e*Pn | **Pn** | **19 54 18.6** | **-1.5** |
| **BTDF** | **Bukit Timah Da** | **10.76** | **120** | P | **Pn** | **19 54 22.0** | **0.0** |
| | baz=11,SNR=35 | | | | | | |
| **PPSI** | **Pulau Pagai** | **10.99** | **149** | P | **Pn** | **19 54 25.1** | **-0.1** |
| **TPRI** | **Tanjung Pinang** | **11.63** | **120** | P | **Pn** | **19 54 33.3** | **-0.6** |
| | 410nm,0.9s,4μm | | | | | | |
| **CM01** | **Chiang Mai Arr** | **12.38** | **20** | *e*Pn | **Pn** | **19 54 46.3** | **+2.4** |
| **CM31** | **Chiang Mai Arr** | **12.41** | **20** | P | Pn | 19 54 48.4 | +4.1 |
| | baz=12,SNR=50 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **12.41** | **20** | P | Pn | 19 54 47.8 | +3.5 |
| | 14nm,0.3s,baz=210,slow=16,SNR=223 | | | | | | |
| CMAR | | | | LR | LR | 19 59 19.4 | |
| | comp=Z,862nm,20.2s,baz=206,slow=36 | | | | | | |
| CMAR | | | | ScP | **ScP** | **20 03 42.2** | **-1.1** |
| | 0.2nm,0.3s,baz=239,slow=3.0,SNR=14 | | | | | | |
| **JMBI** | **JAMBI** | **12.43** | **132** | P | **Pn** | **19 54 42.8** | **-1.7** |
| | 1μm,1.1s,9μm | | | | | | |
| **CHTO** | **Chiang Mai** | **12.74** | **20** | *e*P | **Pn** | **19 54 51.9** | **+3.2** |
| **CHTO** | **Chiang Mai** | **12.74** | **20** | P | Pn | 19 54 52.5 | +3.8 |
| | SNR=28 | | | | | | |
| **CHTO** | **Chiang Mai** | **12.74** | **20** | *e*Pn | **Pn** | **19 54 51.9** | **+3.2** |
| **KSI** | **Kapahiang** | **13.18** | **142** | P | Pn | 19 54 51.1 | -3.6 |
| | 474nm,0.9s,5μm | | | | | | |
| **PALK** | **Pallekele** | **13.63** | **273** | P | **Pn** | **19 55 01.8** | **+1.2** |
| | 32nm,0.3s,baz=116,slow=12,SNR=113 | | | | | | |
| PALK | | | | LR | LR | 19 59 53.4 | |
| | comp=Z,2μm,21.6s,baz=116,slow=35 | | | | | | |
| **PALK** | **Pallekele** | **13.63** | **273** | Pn | **Pn** | **19 55 02.9** | **+2.3** |
| | 971nm,0.3s,SNR=85 | | | | | | |
| **PALK** | **Pallekele** | **13.63** | **273** | *i* P | **Pn** | **19 55 01.8** | **+1.2** |
| | SNR=144 | | | | | | |
| **PALK** | **Pallekele** | **13.63** | **273** | *i* Pn | **Pn** | **19 55 01.8** | **+1.2** |
| | SNR=144 | | | | | | |
| **PALK** | **Pallekele** | **13.63** | **273** | *e*Pn | **Pn** | **19 55 01.5** | **+0.9** |
| **MNAI** | **Manna** | **13.96** | **142** | P | Pn | 19 55 01.1 | -3.7 |
| | 568nm,1.0s | | | | | | |
| **MNAI** | **Manna** | **13.96** | **142** | *e*Pn | Pn | 19 54 59.6 | -5.2 |
| **PMBI** | **Palembang** | **14.13** | **133** | P | **Pn** | **19 55 05.3** | **-1.7** |
| | 401nm,1.0s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **14.68** | **127** | P | **Pn** | **19 55 12.7** | **-1.4** |
| | 112nm,1.7s,2μm | | | | | | |
| **DLV** | **T Lat** | **14.78** | **69** | *e*P | **P** | **19 55 19.2** | **-0.1** |
| **MDSI** | **Maura Dua** | **14.83** | **139** | P | Pn | 19 55 12.2 | -3.8 |
| | 269nm,1.2s,2μm | | | | | | |
| **LWLI** | **Liwa** | **15.16** | **140** | P | **Pn** | **19 55 16.3** | **-4.0** |
| | 565nm,0.7s,5μm | | | | | | |
| **MDRS** | **Chennai** | **15.30** | **295** | *e*P | **Pn** | **19 55 22.5** | **+0.5** |
| MDRS | | | | AMB | AMB | 19 55 29.7 | |
| | comp=Z,347nm,1.1s | | | | | | |
| **VIS** | **Vishakhapatnam** | **15.35** | **316** | *e*P | **Pn** | **19 55 23.4** | **+0.8** |
| VIS | | | | AMB | AMB | 19 55 26.1 | |
| | comp=Z,619nm,1.1s | | | | | | |
| **CHLP** | **Challavanipeta** | **15.43** | **320** | *e*Pn | **Pn** | **19 55 24.4** | **+0.9** |
| CHLP | | | | IAmb | IAmb | 19 55 26.0 | |
| | comp=Z,483nm,1.1s | | | | | | |
| CHLP | | | | *e* | | 19 57 59.5 | |
| **KLI** | **Kotabumi** | **15.56** | **138** | P | **Pn** | **19 55 26.0** | **+0.7** |
| | comp=Z,245nm,1.0s,comp=Z,2μm | | | | | | |
| **KASI** | **Kota Agung** | **15.82** | **140** | P | Pn | 19 55 23.6 | -5.0 |
| | comp=Z,296nm,0.8s,comp=Z,3μm | | | | | | |
| **SKHT** | **Srikalahasti** | **16.05** | **297** | *e*P | **P** | **19 55 32.9** | **-0.2** |
| SKHT | | | | IAmb | IAmb | 19 55 38.0 | |
| | comp=Z,281nm,0.9s | | | | | | |
| SKHT | | | | *e* | | 19 58 15.6 | |
| **TPI** | **Tanjungpandan** | **16.25** | **125** | P | **Pn** | **19 55 32.5** | **-1.4** |
| | comp=Z,156nm,1.7s,comp=Z,2μm | | | | | | |
| **PVM** | **Polavaram** | **16.27** | **311** | *e*Pn | **P** | **19 55 34.9** | **-0.6** |
| PVM | | | | IAmb | IAmb | 19 55 37.0 | |
| | comp=Z,420nm,1.3s | | | | | | |
| PVM | | | | *e* | | 19 58 22.9 | |
| PVM | | | | *e*Sn | **Sn** | **19 58 35.7** | **+1.4** |
| **KSM** | **Kuching** | **16.69** | **108** | P | **P** | **19 55 40.2** | **0.0** |
| | baz=17,SNR=3.6 | | | | | | |
| **KSM** | **Kuching** | **16.69** | **108** | ⇑P | **P** | **19 55 41.4** | **+1.2** |
| **KSM** | **Kuching** | **16.69** | **108** | *e*Pn | **P** | **19 55 40.2** | **0.0** |
| | comp=Z,133nm,1.1s | | | | | | |
| **ADKI** | **Addanki** | **16.79** | **304** | *e*P | **P** | **19 55 41.8** | **+0.5** |
| ADKI | | | | IAmb | IAmb | 19 55 46.1 | |
| | comp=Z,338nm,1.1s | | | | | | |
| ADKI | | | | *e* | | 19 58 32.4 | |
| **SLVN** | **Son La** | **17.13** | **31** | *e*Pn | **P** | **19 55 48.5** | **+3.4** |
| **TRD** | **Trivandrum** | **17.40** | **277** | *e*P | **Pn** | **19 55 47.8** | **-0.3** |
| **CGJI** | **Cibinong** | **17.42** | **140** | P | **P** | **19 55 43.5** | **-4.8** |
| | comp=Z,148nm,1.1s,comp=Z,2μm | | | | | | |
| **NJS** | **Nagarjunasagar** | **17.70** | **305** | *e*Pn | **Pn** | **19 55 52.2** | **+0.5** |
| NJS | | | | IAmb | IAmb | 19 55 55.4 | |
| | comp=Z,154nm,0.8s | | | | | | |
| NJS | | | | *e* | | 19 58 53.5 | |
| NJS | | | | *e*Sn | **Sn** | **19 59 09.2** | **+0.4** |
| **SBUM** | **Sibu** | **18.24** | **103** | ⇓P | **Pn** | **19 55 60.0** | **+1.7** |
| **SBUM** | **Sibu** | **18.24** | **103** | *e*P | **Pn** | **19 55 58.4** | **+0.1** |
| | comp=Z,97nm,1.1s | | | | | | |
| **SKJI** | **Sukabumi** | **18.27** | **138** | P | **P** | **19 55 55.7** | **-2.0** |
| | comp=Z,262nm,0.9s,comp=Z,7μm | | | | | | |
| **URV** | **Uravakonda** | **18.70** | **297** | *e*Pn | **Pn** | **19 56 04.2** | **+0.4** |
| URV | | | | IAmb | IAmb | 19 56 05.9 | |
| | comp=Z,65nm,0.8s | | | | | | |
| URV | | | | *e* | | 19 59 18.8 | |
| URV | | | | *e*S | **S** | **19 59 30.1** | **-0.7** |
| **HYB** | **Hyderabad** | **18.76** | **306** | ⇓*i*P | **Pn** | **19 56 04.0** | **-0.6** |
| | comp=Z,220nm,1.0s | | | | | | |
| HYB | | | | *e*S | S | 19 59 23.0 | -9.0 |
| **HYB** | **Hyderabad** | **18.76** | **306** | *e*P | **Pn** | **19 56 03.9** | **-0.6** |
| **HYBB** | **Hyderabad (bro** | **18.77** | **306** | *e*Pn | **Pn** | **19 56 05.0** | **+0.4** |
| HYBB | | | | IAmb | IAmb | 19 56 08.6 | |
| | comp=Z,238nm,1.2s | | | | | | |
| HYBB | | | | *e* | | 19 59 25.3 | |
| HYBB | | | | *e*S | **S** | **19 59 31.0** | **-1.1** |
| **BOK** | **Bokaro** | **18.80** | **335** | *e*P | **Pn** | **19 56 04.7** | **-0.2** |
| BOK | | | | AMB | AMB | 19 56 07.9 | |
| | comp=Z,375nm,0.8s | | | | | | |
| **SHL** | **Shillong** | **18.84** | **353** | *e*P | **P** | **19 56 03.4** | **-0.6** |
| **CNJI** | **Cibinong** | **18.88** | **138** | P | **P** | **19 56 03.3** | **-1.0** |
| | comp=Z,141nm,0.9s,comp=Z,1μm | | | | | | |
| **BTM** | **Bintulu** | **18.92** | **100** | ⇓P | **Pn** | **19 56 08.1** | **+1.

comp=Z,257nm,0.6s
**PKI Pulchoki 22.38 339** *e*P S 20 00 33.1 -10
comp=Z,92nm,0.9s
**PKI Pulchoki 22.38 339** *e*P **ScP 20 04 02.7 -1.5**
comp=Z,39nm,0.9s
**PKIN Phulchoki 22.39 339** *e*P **P 19 56 41.7 -0.6**
comp=Z,218nm,0.6s
**PKIN Phulchoki 22.39 339** *e*P S 20 00 33.2 -9.5
comp=Z,63nm,0.9s
**PKIN Phulchoki 22.39 339** *e*P **ScP 20 04 02.4 -1.8**
comp=Z,34nm,0.9s
**GUN Gumba 22.52 340** *e*P **P 19 56 43.0 -0.8**
comp=Z,233nm,0.6s
**GUN Gumba 22.52 340** *e*P **ScP 20 04 03.5 -1.1**
comp=Z,54nm,0.9s
**DMN Daman 22.53 338** *e*P **P 19 56 43.2 -0.6**
comp=Z,430nm,0.9s
**DMN Daman 22.53 338** *e*P S 20 00 35.3 -10
comp=Z,95nm,0.9s
**DMN Daman 22.53 338** *e*P **ScP 20 04 03.6 -0.9**
comp=Z,94nm,1.0s
**KKN Kakani 22.63 339** *e*P **P 19 56 43.6 -1.2**
comp=Z,135nm,0.9s
**KKN Kakani 22.63 339** *e*P S 20 00 35.2 -11
**KKN Kakani 22.63 339** *e*P **ScP 20 04 03.1 -1.6**
comp=Z,34nm,0.9s
**PWJI Pagerwojo 22.72 130** P **P 19 56 49.1 +3.5**
comp=Z,124nm,1.1s
**BBKI Banjar Baru 22.77 116** P **P 19 56 45.9 -0.3**
comp=Z,344nm,0.9s,comp=Z,5µm
**GYA Guiyang 22.78 29**⇑*i*P **P 19 56 47.8 +1.6**
GYA pP **pP 19 57 04.3 +0.3**
GYA sP **sP 19 57 15.0 0.0**
GYA PP **PnPn 19 57 20.6 +5.7**
GYA PcP **PcP 20 00 37.4 +2.4**
GYA S **S 20 00 46.9 -1.8**
GYA sS **sS 20 01 17.0 -3.7**
GYA SS **SnSn 20 01 35.5 +6.9**
GYA ScP **ScP 20 04 05.8 +0.8**
GYA PMZ
comp=Z,430nm,1.2s
GYA PMZ
comp=Z,610nm,4.0s
GYA LN
comp=Z,2µm,16.4s
GYA LE
comp=Z,2µm,15.6s
GYA LZ
comp=Z,2µm,16.0s
**LSA Lhasa 23.01 353** P **P 19 56 48.6 -0.3**
LSA S **S 20 00 47.1 -5.8**
**GKN Gorkha 23.06 337** *e*P **P 19 56 48.3 -0.7**
comp=Z,110nm,0.5s
**GKN Gorkha 23.06 337** *e*P **ScP 20 04 03.8 -2.0**
**BHPL Bhopal 23.14 317** *e*P **P 19 56 51.8 +2.1**
**POO Poona 23.20 302** *e*P **P 19 56 50.5 +0.2**
**KOLN Koldanda 23.27 335** *e*P **P 19 56 51.4 +0.4**
comp=Z,181nm,0.6s
**KOLN Koldanda 23.27 335** *e*P **ScP 20 04 04.9 -1.5**
comp=Z,31nm,0.8s
**DANN Dangsing 23.71 336** *e*P **P 19 56 55.6 +0.4**
**DANN Dangsing 23.71 336** *e*P **ScP 20 04 06.3 -1.4**
**BKB Balikpapan 23.80 109** P **P 19 56 58.1 +2.3**
comp=Z,202nm,0.9s,comp=Z,2µm
**KMMI Kalianget 23.84 125** P **P 19 56 58.0 +1.9**
comp=Z,293nm,0.9s,comp=Z,3µm
**KBKI Kotabaru 23.90 114** P **P 19 56 57.6 +1.0**
comp=Z,52nm,1.5s,comp=Z,1µm
**BLJI Banyuglugur 23.95 127** P **P 19 56 57.8 +0.7**
comp=Z,437nm,0.9s,comp=Z,4µm
**MYLDM Lahad Datu 23.99 92** *e*P **P 19 56 58.8 +1.3**
comp=Z,770nm,1.2s
**ABJI Asem Bagus 24.49 126** P **P 19 57 02.7 +0.7**
comp=Z,534nm,0.9s,comp=Z,4µm
**HKC Hong Kong Obse 24.51 49** P **P 19 57 04.0 +1.9**
**JAGI Jajag, Banyuwa 24.82 127** P **P 19 57 03.7 -1.3**
baz=25,SNR=11
**JAGI Jajag, Banyuwa 24.82 127** P **P 19 57 03.8 -1.3**
comp=Z,106nm,0.9s,comp=Z,1µm
**JAGI Jajag, Banyuwa 24.82 127** *e*P **P 19 57 02.6 -2.4**
comp=Z,73nm,0.8s
**ENPP El Nido 25.07 78** *e*P **P 19 57 08.4 +1.1**
**SRBI Singaraja 25.45 125** P **P 19 57 11.4 +0.7**
comp=Z,227nm,0.9s,comp=Z,5µm
**CD2 Chengdu 25.55 19** P **P 19 57 12.5 +1.0**
CD2 pP **pP 19 57 31.3 -0.2**
CD2 sP **sP 19 57 41.3 -0.5**
CD2 PcP **PcP 20 00 40.6 -0.2**
CD2 S **S 20 01 35.8 +3.0**
CD2 sS **sS 20 02 09.1 +1.5**
CD2 PMZ
comp=Z,410nm,0.8s
CD2 PMZ
comp=Z,240nm,4.5s
CD2 LE
comp=Z,790nm,11.2s
CD2 LZ
comp=Z,530nm,10.8s
**BUSP Coron 25.94 77** *e*P **P 19 57 16.5 +1.3**
**H08S3 Diego Garcia H 26.15 237** T T 20 23 28.2
SNR=222
**H08S2 Diego Garcia H 26.16 237** T T 20 24 10.4
baz=59,slow=74,SNR=238
**H08S1 Diego Carcia H 26.17 237** T T 20 24 01.0
baz=121,slow=74,SNR=199
**MPSI Mapaga 26.20 103** P **P 19 57 18.1 +0.6**
comp=Z,220nm,1.1s,comp=Z,2µm
**PCI Palu 26.48 106** P **P 19 57 20.9 +0.8**
comp=Z,87nm,1.2s,comp=Z,1µm
**SCZP Santa Cruz 26.51 68** *e*P **P 19 57 21.0 +0.7**
**CUYO Cuyo Island 26.57 79** *e*P **P 19 57 21.5 +0.6**
**BOLP Bolinao 26.69 67** *e*P **P 19 57 23.7 +1.8**
**H08N1 Diego Garcia H 26.76 241** T T 20 24 54.6
baz=45,slow=74,SNR=4.0
**H08N2 Diego Garcia H 26.76 241** T T 20 24 57.5
baz=45,slow=74,SNR=9.7
**H08N3 Diego Garcia H 26.78 241** T T 20 25 09.1
baz=45,slow=74,SNR=6.8
**SJMP San Jose 26.90 76** *e*P **P 19 57 25.5 +1.7**
**TTSI Tana Toraja 27.16 110** P **P 19 57 27.7 +1.6**
comp=Z,61nm,0.8s,comp=Z,777nm
**TWSI Taliwang, Sumb 27.18 124** P **P 19 57 24.1 -2.2**
comp=Z,34nm,0.6s,comp=Z,910nm
**NDI New Delhi 27.19 325** *e*P **P 19 57 25.5 -0.8**
NDI *ex* x 20 01 56.5
**BCPH Baguio City Da 27.30 67**⇓*i*P **P 19 57 28.4 +0.8**
**ENH Enshi 27.32 29** *e*P **P 19 57 28.6 +1.2**
comp=Z,82nm,1.0s
ENH *e*S **S 20 01 58.1 -2.7**
**SPSI Sidrap Palu 27.45 112** P **P 19 57 28.1 -0.7**
comp=Z,26nm,1.1s,comp=Z,485nm
**SZP Santa 27.56 65** *e*P **P 19 57 32.2 +2.5**
comp=Z,776nm,0.8s
**ABRA Dolores 27.82 65** *e*P **P 19 57 34.0 +1.9**
**KAPI Kappang 27.86 114** P **P 19 57 31.7 -0.7**
comp=Z,19nm,0.4s,baz=296,slow=7.9,SNR=27
KAPI PcP **PcP 20 00 47.0 +0.5**
comp=Z,30nm,0.7s,baz=288,slow=2.2,SNR=10
**KAPI Kappang 27.86 114** P **P 19 57 32.6 +0.2**
comp=Z,352nm,1.2s,SNR=13
**KAPI Kappang 27.86 114** P **P 19 57 31.9 -0.5**
SNR=19
**KAPI Kappang 27.86 114** *e*P **P 19 57 30.4 -2.0**
comp=Z,84nm,1.1s
**DDI Dehra Dun 28.02 329** *e*P **P 19 57 35.0 +1.3**
**BALP Baler 28.04 69** *e*P **P 19 57 36.0 +2.0**
**MRSI Marisa 28.15 102** P **P 19 57 35.1 +0.1**
comp=Z,150nm,0.8s,comp=Z,968nm
**APSI Ampana 28.22 105** P **P 19 57 36.3 +0.7**
comp=Z,165nm,1.2s,comp=Z,2µm
**BKSI Bulukumba 28.32 115** P **P 19 57 36.1 -0.4**
comp=Z,291nm,0.7s,comp=Z,2µm
**RCP Roxas 28.34 78**⇓*e*P **P 19 57 39.2 +2.5**
**APYP Conner 28.37 65** *e*P **P 19 57 38.8 +1.9**
**AUQP San Andres 28.54 75** *e*P **P 19 57 40.4 +1.9**
**CAUP Cauayan 28.61 67** *e*P **P 19 57 40.6 +1.6**
**BHJ Bhuj 28.91 307** *e*P **P 19 57 42.7 +1.0**
**BSSI Bau Bau, Buton 29.00 116** P **P 19 57 42.5 -0.1**
comp=Z,62nm,0.6s,comp=Z,591nm
**SMLA Simla 29.12 328** *e*P **P 19 57 44.1 +0.7**
**GTOI Gorontalo 29.15 101** P **P 19 57 43.5 -0.4**
comp=Z,260nm,1.4s,comp=Z,69µm
**PALP Palanan 29.19 67** *e*P **P 19 57 43.3 -0.9**
**LUWI Luwuk 29.33 104** P **P 19 57 45.9 +0.5**
baz=29,SNR=44
**LUWI Luwuk 29.33 104** P **P 19 57 46.0 +0.5**
comp=Z,530nm,0.7s,comp=Z,5µm
**LUWI Luwuk 29.33 104** *e*P **P 19 57 45.6 +0.1**
comp=Z,388nm,0.7s
**QZH Quanzhou 29.34 49**⇑*i*P P 19 57 49.4 +4.0
QZH S **S 20 02 34.5 +1.9**
QZH PMZ
comp=Z,240nm,0.9s
QZH LN
comp=Z,1µm,11.4s
QZH LE
comp=Z,2µm,12.4s
QZH LZ
comp=Z,1µm,15.3s
**PVCP Virac 30.00 75**⇓*i*P **P 19 57 52.3 +0.9**
**TPUB Ta-pu 30.07 54** *e*P **P 19 57 54.8 +2.8**
comp=Z,69nm,1.0s
**KDI Kendari 30.09 110** P **P 19 57 52.3 +0.1**
comp=Z,94nm,0.7s
**KMSI Cibinong 30.11 101** P **P 19 57 54.3 +1.9**
comp=Z,340nm,1.0s,comp=Z,3µm
**WHN Wuhan 30.14 36**⇑P **P 19 57 54.1 +1.7**
WHN S **S 20 02 45.3 +0.3**
WHN PMZ
comp=Z,270nm,0.8s
WHN PMZ
comp=Z,620nm,7.2s
WHN LN
comp=Z,1µm,13.2s
WHN LE
comp=Z,1µm,9.8s
WHN LZ
comp=Z,2µm,30.2s
**TWG Pinlang 30.20 55** *e*P **P 19 57 55.8 +2.6**
comp=Z,572nm,0.9s
**XAN Xi'an 30.26 24** P **P 19 57 54.0 +0.5**
XAN pP **pP 19 58 12.5 -1.2**
XAN PP **PnPn 19 58 54.9 -0.3**
XAN PcP **PcP 20 00 52.4 +0.1**
XAN S **S 20 02 43.3 -3.6**
XAN PMZ
comp=Z,350nm,0.9s
XAN PMZ
comp=Z,220nm,5.2s
XAN LN
comp=Z,540nm,25.6s
XAN LE
comp=Z,1µm,26.7s
XAN LZ
comp=Z,680nm,15.9s
**LZH Lanzhou 30.42 15**⇑P **P 19 57 56.1 +1.1**
LZH PP **PnPn 19 58 59.3 +2.0**
LZH PcP **PcP 20 00 54.4 +1.6**
LZH S **S 20 02 46.0 -3.6**
LZH PMZ
comp=Z,140nm,1.0s
LZH PMZ
comp=Z,460nm,4.5s
LZH LN
comp=Z,1µm,14.1s
LZH LE
comp=Z,1µm,13.6s
LZH LZ
comp=Z,2µm,15.0s
**DHRM DHARAMSHALA 30.46 329** *e*P **P 19 57 55.9 +0.3**
DHRM AMB AMB 19 58 05.2
comp=Z,44nm,0.3s
**SSLB Suanglung 30.57 54** *e*P **P 19 57 59.0 +2.6**
comp=Z,140nm,1.1s
**BBSI Bau Bau 30.61 113** P **P 19 57 57.9 +1.1**
comp=Z,169nm,0.7s,comp=Z,1µm
**YULB Yu-li 30.66 55** *e*P P 19 58 00.5 +3.4
comp=Z,120nm,0.9s
**DAV Davao City (W) 30.92 88** P **P 19 58 01.1 +1.5**
comp=Z,81nm,0.4s,baz=101,slow=1.2,SNR=11
**DAV Davao City (W) 30.92 88** P **P 19 58 02.0 +2.4**
SNR=6.1
**NACB Ninganchiao 31.27 53** *e*P P 19 58 05.8 +3.3
comp=Z,122nm,0.9s
**YHNB Yeheng 31.34 52** *e*P **P 19 58 05.9 +2.7**
comp=Z,125nm,1.0s
**TATO Taipei 31.58 52** *e*P **P 19 58 08.4 +3.2**
comp=Z,154nm,0.8s
**MMRI Maumere 31.67 119** P **P 19 58 04.8 -1.3**
comp=Z,84nm,0.8s,comp=Z,942nm
**MMRI Maumere 31.67 119** *e*P **P 19 58 03.3 -2.8**
comp=Z,74nm,1.0s
**SANI Sanana 32.70 104** P **P 19 58 14.6 -0.5**
comp=Z,71nm,1.2s,comp=Z,768nm
**GTA Gaotai 32.85 8**⇑P **P 19 58 17.0 +0.7**
GTA pP **pP 19 58 36.8 +0.2**
GTA sP **sP 19 58 46.0 -0.9**
GTA PcP **PcP 20 01 00.3 +1.0**
GTA S **S 20 03 29.3 +1.9**
GTA ScP **ScP 20 04 34.5 -1.1**
GTA PcS **PcS 20 04 44.3 -0.4**
GTA SS **SnSn 20 05 32.6 -0.5**
GTA ScS **ScS 20 08 32.9 -2.8**
GTA PMZ
comp=Z,42nm,0.9s
GTA PMZ
comp=Z,190nm,5.1s
GTA LN
comp=Z,370nm,19.9s
GTA LE
comp=Z,420nm,12.4s
GTA LZ
comp=Z,650nm,22.2s
**BATI Baumata 33.65 120** P **P 19 58 20.3 -3.2**
comp=Z,70nm,0.7s,comp=Z,912nm
**LBMI Labuha 33.81 101** P **P 19 58 25.5 +0.6**
comp=Z,68nm,1.3s,comp=Z,964nm
**NJ2 Nanjing 33.92 39** *e*P **P 19 58 25.0 -0.6**
**SOEI Soe 33.96 119** P **P 19 58 23.9 -2.4**
comp=Z,96nm,0.9s,comp=Z,1µm
**SOEI Soe 33.96 119** *e*P P 19 58 22.3 -3.9
comp=Z,109nm,0.8s
**NLAI Namlea 34.10 106** P **P 19 58 27.9 +0.6**
comp=Z,151nm,0.7s,comp=Z,1µm
**SSE Sheshan 34.82 43** P **P 19 58 35.5 +2.2**
SSE S **S 20 03 52.8 -4.9**
SSE PMZ
comp=Z,120nm,0.8s
SSE PMZ
comp=Z,230nm,4.9s
SSE LN
comp=Z,670nm,24.8s
SSE LE
comp=Z,320nm,25.1s
SSE LZ
comp=Z,380nm,25.5s
**TIY Taiyuan 34.87 25** *e*P **P 19 58 35.3 +1.5**
TIY S **S 20 03 58.0 -0.5**
TIY sS **sS 20 04 33.8 -0.1**
TIY PMZ
comp=Z,63nm,0.8s
TIY PMZ
comp=Z,140nm,6.2s
TIY LN
comp=Z,490nm,12.2s
TIY LE
comp=Z,680nm,7.9s
TIY LZ
comp=Z,540nm,13.2s
**GIRL Giralia 35.09 147** P **P 19 58 36.4 +0.7**
baz=35,SNR=4.0
**AAI Ambon 35.27 106** P **P 19 58 37.1 -0.4**
baz=35,SNR=18
**AAI Ambon 35.27 106** P **P 19 58 36.7 -0.8**
comp=Z,182nm,1.1s,comp=Z,2µm
**MSAI Masohi 35.88 105** P **P 19 58 42.7 +0.1**
comp=Z,23nm,1.4s,comp=Z,246nm
**TIA Tai'an 35.91 32**⇑P **P 19 58 44.3 +1.7**
TIA PMZ
comp=Z,250nm,0.9s
**KBL Kabul 36.21 323** *e*P **P 19 58 45.3 -0.2**
KBL pmax pmax
comp=Z,23nm,1.1s
**KBL Kabul 36.21 323** *e*P **P 19 58 45.3 -0.2**
comp=Z,23nm,1.1s
**BTO Baotou 36.45 20** *e*P **P 19 58 47.8 +0.5**
BTO PMZ
comp=Z,28nm,1.0s
**KSH Kashi 36.58 336** P **P 19 58 47.4 -1.1**
KSH *e*pP **pP 19 59 05.5 -3.6**
KSH *e*PP **PP 20 00 10.8 -2.6**
KSH *e*PcP **PcP 20 01 11.3 +1.2**
KSH S **S 20 04 20.1 -4.7**
KSH ScS **ScS 20 08 54.8 -1.0**
KSH PMZ
comp=Z,22nm,0.8s
KSH PMZ
comp=Z,160nm,5.5s
KSH LN
comp=Z,190nm,6.4s
KSH LE
comp=Z,150nm,5.8s
KSH LZ
comp=Z,650nm,25.3s
**BNDI Bandanaira 37.15 107** P **P 19 58 51.2 -2.2**
comp=Z,271nm,0.8s,comp=Z,2µm
**HHC Hu-ho-hao-te 37.22 22** *e*P **P 19 58 55.6 +1.8**
HHC S **S 20 04 30.9 -3.5**
HHC PMZ
comp=Z,180nm,0.9s
HHC PMZ
comp=Z,140nm,7.4s
HHC LN
comp=Z,330nm,11.2s
HHC LE
comp=Z,490nm,15.1s
HHC LZ
comp=Z,460nm,19.1s
**MBWA Marble Bar 37.26 139** *e*P **P 19 58 52.8 -1.4**
comp=Z,37nm,1.3s
**WMQ Urumqi 37.36 352** P **P 19 58 56.4 +1.4**
WMQ pP **pP 19 59 14.0 -1.6**
WMQ PP **PP 20 00 20.0 -1.9**
WMQ PcP **PcP 20 01 14.0 +1.7**
WMQ S **S 20 04 35.0 -1.5**
WMQ sS **sS 20 05 13.0 +0.9**
WMQ SS SnSn 20 07 12.0 -10
WMQ PMZ
comp=Z,56nm,1.0s
WMQ PMZ
comp=Z,230nm,4.5s
WMQ LN
comp=Z,440nm,17.0s
WMQ LE
comp=Z,670nm,16.0s
WMQ LZ
comp=Z,620nm,16.0s
**SWI Sorong 37.53 100** P **P 19 58 56.2 -0.4**
baz=37,SNR=15
**SWI Sorong 37.53 100** P **P 19 58 55.9 -0.8**
comp=Z,159nm,1.1s,comp=Z,1µm
**SIJI Sorong 37.53 100** P **P 19 58 56.0 -0.8**
comp=Z,92nm,0.9s,baz=308,slow=8.6,SNR=47
**WBK Wadi Bani Khal 37.60 299** P P 19 59 00.6 +3.4
SNR=6.6
**JOW Kunigami 37.84 54** P **P 19 59 01.4 +2.2**
comp=Z,11nm,0.7s,baz=352,slow=16,SNR=20
**BJT Baijiatuan 38.41 27** *e*P **P 19 59 06.4 +2.6**
BJT pmax pmax
comp=Z,452nm,1.3s
**BJT Baijiatuan 38.41 27** *e*P **P 19 59 06.4 +2.6**
comp=Z,452nm,1.3s
**BJI Beijing 38.43 27** P **P 19 59 06.0 +2.1**
BJI sP **sP 19 59 34.3 -0.5**
BJI PcP **PcP 20 01 15.5 -0.1**
BJI S **ScP 20 04 56.1 +0.4**
BJI PMZ
comp=Z,250nm,1.2s
BJI LN
comp=Z,400nm,21.4s
BJI LE
comp=Z,630nm,27.0s
BJI LZ
comp=Z,480nm,27.0s
**SMDO Samad 38.55 299** P P 19 59 08.8 +3.5
SNR=9.0
**ULHL Ulahol 38.82 338** P **P 19 59 08.6 +1.2**
SNR=13
**FAKI Fak Fak 38.96 103** P **P 19 59 08.1 -0.6**
comp=Z,112nm,1.1s,comp=Z,1µm
**FAKI Fak Fak 38.96 103** *e*P **P 19 59 07.0 -1.7**
comp=Z,172nm,1.3s
**UCH Uchtor 39.47 337** P **P 19 59 14.4 +1.4**
SNR=46
**AAA Alma-Ata 39.47 340** *e*P **P 19 59 13.9 +1.3**
AAA *e*S **S 20 05 08.3 +0.1**
AAA pmax pmax
comp=Z,400nm,2.2s
AAA smax smax
comp=E,1µm,2.3s
**TKM2 Tokmak 2 39.64 338** P **P 19 59 15.4 +1.2**
SNR=23
**AML Almayashu 39.71 336** P **P 19 59 16.5 +1.5**
SNR=85
**KSSGP Seogwipo 39.72 44**⇓P **P 19 59 16.8 +2.1**
SNR=19
**PALU Palau 39.73 87** P **P 19 59 15.4 +0.3**
baz=40,SNR=12
**AAK Ala-Archa 39.82 337** P **P 19 59 17.3 +1.7**
comp=E,20nm,0.9s,baz=148,slow=7.3,SNR=3.1
AAK PcP **PcP 20 01 21.2 +1.1**
comp=E,34nm,0.8s,baz=156,slow=4.0,SNR=7.4
AAK ScP **ScP 20 05 00.8 -0.5**
comp=E,13nm,1.0s,baz=221,slow=2.4,SNR=5.4
AAK LR LR 20 17 24.0
comp=E,482nm,21.6s,baz=134,slow=38
**AAK Ala-Archa 39.82 337***c* *i*P **P 19 59 17.1 +1.5**
AAK pmax pmax
comp=Z,93nm,1.0s
**AAK Ala-Archa 39.82 337** P **P 19 59 17.9 +2.3**
comp=Z,226nm,0.7s,SNR=31
**AAK Ala-Archa 39.82 337** P **P 19 59 17.4 +1.7**
SNR=33
**AAK Ala-Archa 39.82 337** P **P 19 59 17.2 +1.5**
SNR=35
**AAK Ala-Archa 39.82 337** *e*P **P 19 59 17.2 +1.5**
comp=Z,27nm,0.8s
AAK *e*S **S 20 05 16.8 +3.2**
**KSHUK Heuksando 39.84 42**⇓P **P 19 59 17.3 +1.6**
SNR=7.4
**KSJJU Jeju 39.85 44**⇑P **P 19 59 17.8 +1.9**
SNR=10
**FRU Bishkek 39.94 337**⇑*i*P **P 19 59 17.0 +0.5**
FRU *i* 19 59 34.0
FRU *i* S **S 20 05 16.0 +0.8**
FRU pmax pmax
comp=Z,120nm,1.8s
FRU smax smax
comp=N,200nm,2.0s
**ARQ Araqi 39.97 298** P P 19 59 20.6 +3.5
SNR=11
**CHMS Chumysh 40.03 337** P **P 19 59 18.3 +1.0**
SNR=16
**EKS2 Erkin-Say 40.12 336** *e*P **P 19 59 19.9 +1.8**
**EKS2 Erkin-Say 40.12 336** P **P 19 59 19.7 +1.6**
SNR=62
**EKS2 Erkin-Say 40.12 336** *e*P **P 19 59 19.9 +1.8**
**KSJDO Jindo 40.29 42**⇓P **P 19 59 21.0 +1.4**
SNR=8.7
**USP Ospenovka 40.35 337** P **P 19 59 21.1 +1.2**
SNR=22
**MEEK Meekatharra 40.66 146** P **P 19 59 22.0 -0.6**
baz=41,SNR=38
**KNRA Kununurra 40.67 124** P **P 19 59 20.8 -2.0**
baz=41,SNR=11
**UOSS Wadi Hilu 40.76 301** *e*P **P 19 59 24.6 +1.1**
comp=N,29nm,1.0s
**HATD Hatta, Dubai 40.79 300**⇑*i*P **P 19 59 26.4 +2.7**
SNR=13
**HATD Hatta, Dubai 40.79 300**⇑*i*P **P 19 59 26.4 +2.7**
SNR=13
**ASHO Ashiyiah 40.80 300** P **P 19 59 26.6 +2.7**
SNR=8.2
**ASHO Ashiyiah 40.80 300**⇓*i*P **P 19 59 26.3 +2.4**
SNR=20
**ASHO Ashiyiah 40.80 300**⇓*i*P **P 19 59 26.3 +2.4**
SNR=20
**BANOM Banah 41.02 302**⇑*i*P **P 19 59 28.3 +2.6**
SNR=7.1
**BANOM Banah 41.02 302**⇑*i*P **P 19 59 28.3 +2.6**
SNR=7.1
**KSKWJ Gwangju 41.14 42**⇓P **P 19 59 27.8 +1.3**
SNR=20
**MK01 Makanchi Array 41.19 347** *e*P **P 19 59 26.2 -0.5**
**IDAH Dahanechah 41.20 313** *e*P **P 19 59 29.0 +1.7**
**MKAR Makanchi Array 41.21 347** P **P 19 59 27.9 +1.0**
comp=N,56nm,0.7s,baz=165,slow=8.3,SNR=398
MKAR LR LR 20 20 35.5
comp=N,113nm,19.8s,baz=174,slow=42

FAQ Al Faqa, Dubai 41.22 300⇓*i*P P 19 59 29.4 +2.1
SNR=5.5
FAQ Al Faqa, Dubai 41.22 300⇓*i*P P 19 59 29.4 +2.1
SNR=5.5
NAZ Nazwa, Dubai 41.24 300 ⇓P P 19 59 29.4 +1.9
NAZ Nazwa, Dubai 41.24 300 ⇓P P 19 59 29.4 +1.9
MORW Morawa 41.27 151 P P 19 59 27.7 +0.1
baz=41,SNR=13
MAKZ Makanchi 41.29 347 *e*P P 19 59 28.1 +0.6
KSJEU Jeongeup 41.30 42 ⇑P P 19 59 29.1 +1.3
SNR=20
MTN Manton Dam 41.35 118 P P 19 59 26.4 -2.0
baz=41,SNR=49
MTN Manton Dam 41.35 118 *e*P P 19 59 26.5 -2.0
comp=N,108nm,0.4s
ASUD Al Ashush, Dub 41.41 300⇑*i*P P 19 59 31.7 +2.8
SNR=9.8
ASUD Al Ashush, Dub 41.41 300⇑*i*P P 19 59 31.7 +2.8
SNR=9.8
ABTO Aybut 41.49 288 P P 19 59 32.5 +2.9
SNR=5.5
IKOO Kooshah 41.67 312 *e*P P 19 59 31.9 +0.7
TJN Taejon 42.10 41*c i*P P 19 59 35.6 +1.3
SONM Songino Array 42.16 12 P P 19 59 35.5 +0.7
comp=N,56nm,1.0s,baz=195,slow=8.5,SNR=178
SONM PcP PcP 20 01 28.4 +0.7
comp=N,35nm,0.8s,baz=200,slow=3.5,SNR=15
SONM ScP ScP 20 05 08.5 -1.9
comp=N,6.0nm,0.9s,baz=201,slow=4.0,SNR=6.5
SONM LR LR 20 18 48.6
comp=N,298nm,21.8s,baz=191,slow=38
SONA1 Songino Array 42.18 12 *e*P P 19 59 35.2 +0.3
INCN Inchon 42.31 39 P P 19 59 37.6 +1.6
SNR=7.6
INCN Inchon 42.31 39 *e*P P 19 59 36.9 +0.9
comp=N,264nm,1.0s
ULN Ulaanbaatar 42.33 13*c i*P P 19 59 36.6 +0.4
ULN pmax pmax
comp=Z,94nm,1.7s
ULN Ulaanbaatar 42.33 13 P P 19 59 37.1 +0.9
SNR=22
ULN Ulaanbaatar 42.33 13 *e*P P 19 59 36.6 +0.4
comp=Z,134nm,1.6s
KDU Kakadu 42.47 117 P P 19 59 35.5 -2.1
baz=42,SNR=15
JNU Nakatsue 42.76 47 P P 19 59 41.3 +1.6
comp=Z,232nm,0.9s,baz=233,slow=4.0,SNR=112
JNU Nakatsue 42.76 47 *e*P P 19 59 41.4 +1.6
comp=Z,212nm,0.8s
BLDU Ballidu 42.88 151 P P 19 59 40.2 -0.4
baz=43,SNR=5.5
IMYA Miami 43.00 318 *e*P P 19 59 42.2 +0.4
KSAR Wonju Array Be 43.07 40 P P 19 59 43.1 +1.0
KSAR Wonju Array Be 43.07 40 P P 19 59 43.0 +1.0
KS01 Wonju Array Si 43.10 40 *e*P P 19 59 42.4 0.0
KSRS Korea Array 43.10 40 P P 19 59 43.0 +0.7
comp=Z,61nm,0.8s,baz=218,slow=8.6,SNR=139
KSRS PcP PcP 20 01 31.1 +0.3
comp=Z,5.7nm,0.6s,baz=231,slow=2.7,SNR=8.9
KSRS ScP ScP 20 05 11.2 -3.0
comp=Z,3.0nm,1.1s,baz=216,slow=5.4,SNR=5.6
KSRS S S 20 06 07.0 +5.0
comp=Z,4.2nm,1.1s,baz=235,slow=15,SNR=4.8
KSRS Korea Array 43.10 40 P P 19 59 43.1 +0.7
KSRS 20 01 31.1
KSRS S S 20 06 07.0 +5.0
KSRS pmax pmax
comp=Z,61nm,0.8s
KSRS smax smax
comp=N,4.0nm,1.1s
IMOG Moghan 43.38 317 *e*P P 19 59 46.4 +1.4
IPAY Payeh 43.80 318 *e*P P 19 59 49.2 +0.9
IAKL Akhelmad 44.04 318 *e*P P 19 59 51.2 +0.9
ZAK Zakamensk 44.08 8 *e*P P 19 59 50.8 +0.6
ZAK *e* 20 01 34.3
ZAK pmax pmax
comp=Z,21nm,1.8s
ZAK pmax pmax
comp=Z,32nm,1.2s
KLBR Kellerberrin 44.19 151 P P 19 59 50.7 -0.4
baz=44,SNR=8.4
HVS Khovu-Aksy 44.22 359*de*P P 19 59 52.0 +0.8
HVS pmax pmax
comp=Z,117nm,1.1s
IKRD Kardeh 44.30 318 *e*P P 19 59 48.1 -4.2
IEMG Emamgholi 44.56 318 *e*P P 19 59 55.7 +1.2
ISFR Sfrayin 44.80 318 *e*P P 19 59 56.9 +0.6
ISRV Sarvestan 44.91 305 *e*P P 19 59 58.3 +0.9
SMPI Sarmi 45.05 100 P P 19 59 57.9 -0.4
comp=Z,72nm,0.8s
NWAO Narrogin (SRO) 45.05 153 ScP ScP 20 05 20.9 -1.3
comp=Z,8.0nm,0.9s,baz=21,slow=0.0,SNR=3.9
NWAO Narrogin (SRO) 45.05 153 P P 19 59 58.0 0.0
baz=45,SNR=12
MOY Mondy 45.07 6 *e*P P 19 59 59.0 +1.0
MOY *e* 20 01 38.4
MOY pmax pmax
comp=Z,28nm,2.4s
IPAR Pars 45.13 306 *e*P P 19 59 59.6 +0.5
MRIV Mauritius Mete 45.20 233 *e*P P 20 00 01.4 +2.0
ABKT Ailbek 45.20 319 P P 20 00 00.7 +1.5
comp=Z,521nm,0.7s,SNR=32
GEYT Alibeck 45.20 319 P P 20 00 00.4 +1.1
comp=Z,48nm,0.8s,baz=148,slow=8.7,SNR=146
GEYT ScP ScP 20 05 21.0 -1.9
comp=Z,4.2nm,0.7s,baz=164,slow=2.6,SNR=3.7
GEYT LR LR 20 21 54.8
comp=Z,146nm,20.6s,baz=135,slow=40
ISHV Shirvan 45.26 318 *e*P P 20 00 01.5 +1.6
TLY Talaya 45.40 8 PcP PcP 20 01 39.4 +1.0
comp=Z,20nm,0.8s,baz=178,slow=3.8,SNR=5.5
TLY Talaya 45.40 8 *e*P P 20 00 02.1 +1.6
TLY pmax pmax
comp=Z,55nm,1.7s
H01W3 Cape Leeuwin H 45.42 157 T T 20 48 51.9
baz=332,slow=75,SNR=3.1
H01W2 Cape Leeuwin H 45.44 157 T T 20 48 51.5
baz=332,slow=75,SNR=1.8
H01W1 Cape Leeuwin H 45.44 157 T T 20 48 45.2
baz=332,slow=75,SNR=4.8
ISAD Sadrabad 45.45 309 *e*P P 20 00 01.4 -0.1
KURBB Kurchatov Arra 45.67 346 P P 20 00 03.6 +1.0
comp=Z,80nm,0.8s,baz=170,slow=6.9,SNR=11
KURBB PcP PcP 20 01 40.0 +0.7
comp=Z,33nm,0.9s,baz=169,slow=2.6,SNR=8.1
KURBB ScP ScP 20 05 23.0 -1.4
comp=Z,11nm,1.0s,baz=165,slow=3.7,SNR=13
KURBB S S 20 06 40.3 +1.4
comp=Z,6.1nm,1.1s,baz=162,slow=13,SNR=7.7
WRKA Warakurna 45.68 135 P P 20 00 02.6 -0.6
baz=46,SNR=148
KURK Kurchatov 45.73 346 P P 20 00 03.7 +0.6
KURK 20 01 40.0
KURK S S 20 06 40.3 +0.5
KURK pmax pmax
comp=Z,80nm,0.8s
KURK smax smax
comp=N,6.0nm,1.1s
KURK Kurchatov 45.73 346 P P 20 00 04.2 +1.1
comp=N,588nm,0.7s,SNR=83
KURK Kurchatov 45.73 346 *e*P P 20 00 03.8 +0.7
comp=N,228nm,1.0s
CN2 Changchun 45.80 31 ⇑P P 20 00 04.8 +1.0
CN2 *e*PP PP 20 00 28.6 +3.6
CN2 PcP PcP 20 01 39.3 -0.6
CN2 *e*S S 20 06 38.6 -2.4
CN2 PMZ
comp=N,20nm,0.8s
CN2 PMZ
comp=N,200nm,3.0s
IKAZ Kazeroun 46.09 305 *e*P P 20 00 06.5 -0.1
RKGY Rocky Gully 46.35 154 P P 20 00 08.2 0.0
baz=46,SNR=5.8
IRAM Ramesheh 46.42 308 *e*P P 20 00 07.7 -1.4
GENI Genyem 46.59 100 P P 20 00 09.1 -1.4
comp=N,103nm,1.1s
IZEF Zefreh 46.90 309 *e*P P 20 00 12.3 -0.6
IGAR Gharneh 46.92 309 *e*P P 20 00 13.1 +0.1
RER Riviere de l'E 47.04 233 *e*P P 20 00 16.6 +2.7
comp=N,126nm,0.9s
JAY Jayapura 47.10 100 P P 20 00 13.4 -1.1
baz=47,SNR=4.6
IGLO Ghaloghah 47.39 315 *e*P P 20 00 17.0 +0.4
WRA Warramunga Arr 47.40 125 P P 20 00 15.4 -1.2
comp=N,149nm,0.8s,baz=306,slow=8.7,SNR=731
WRA ScP ScP 20 05 28.5 -3.8
comp=N,16nm,0.9s,baz=314,slow=3.6,SNR=13
WRA S S 20 06 55.5 -9.0
comp=N,22nm,1.0s,baz=295,slow=16,SNR=17
WRAB Tennant Creek 47.40 125*c i*P P 20 00 15.5 -1.2
WRAB pmax pmax
comp=Z,604nm,0.7s
WRAB Tennant Creek 47.40 125 P P 20 00 15.3 -1.4
comp=Z,2μm,0.6s
HIA Hailar 47.41 22 *e*P P 20 00 17.5 +1.2
HIA pmax pmax
comp=Z,129nm,0.9s
HIA Hailar 47.41 22 *e*P P 20 00 17.5 +1.2
comp=Z,129nm,0.9s
IKLH Kolahrood 47.64 310 *e*P P 20 00 18.1 -0.6
ZAA0 Zalesovo Array 47.67 352 P P 20 00 18.9 +0.8
baz=48,SNR=49
ZAA0 Zalesovo Array 47.67 352 *e*P P 20 00 18.1 -0.1
ZALV Zalesovo Beam 47.67 352 P P 20 00 18.9 +0.8
comp=Z,105nm,0.9s,baz=174,slow=7.0,SNR=350
ZALV ScP ScP 20 05 30.4 -2.3
comp=Z,8.6nm,0.8s,baz=183,slow=3.5,SNR=7.8
ZALV S S 20 07 06.2 -1.1
comp=Z,5.0nm,0.8s,baz=181,slow=12,SNR=7.1
ZALV ScS ScS 20 09 58.4 -4.6
comp=Z,3.1nm,0.8s,baz=167,slow=7.0,SNR=4.7
ZALV PKPPKP P'P'df 20 31 30.5 0.0
comp=Z,1.2nm,0.7s,baz=255,slow=2.9,SNR=4.2
IFIR Firoozkooh 47.76 313 *e*P P 20 00 20.0 +0.4
CIT Chita 47.78 16 *e*P P 20 00 20.4 +1.3
CIT *e* 20 00 42.8
CIT *e* 20 01 47.3
CIT *e* 20 02 13.1
CIT pmax pmax
comp=Z,369nm,1.4s
IPIR Pirpir 47.92 308 *e*P P 20 00 20.6 -0.3
QAM Ghamsar 47.93 310 *e*P P 20 00 21.3 +0.4
MSHR Mys Shultsa 48.17 36*de*P P 20 00 24.1 +1.9
IDMV Damavand 48.26 313 *e*P P 20 00 23.9 +0.4
IPRN Peran 48.33 313 *e*P P 20 00 24.0 +0.2
MDJ Mudanjiang 48.55 33 P P 20 00 27.3 +2.2
MDJ pP pP 20 00 45.6 -1.0
MDJ sP sP 20 00 54.9 -1.7
MDJ PP PP 20 02 24.5 +5.7
MDJ S S 20 07 20.4 +0.3
MDJ ScS ScS 20 10 11.9 +2.7
MDJ Mudanjiang 48.55 33 SS SS 20 10 58.0 +6.8
MDJ pmax pmax
comp=Z,220nm,1.2s
MDJ pmax pmax
comp=Z,250nm,6.2s
MDJ LR LR
comp=N,220nm,21.2s
MDJ LR LR
comp=E,180nm,21.8s
MDJ LR LR
comp=Z,260nm,20.1s
MDJ Mudanjiang 48.55 33 P P 20 00 26.8 +1.7
MDJ pP pP 20 00 46.4 -0.2
MDJ sP sP 20 00 55.6 -1.0
MDJ PP PP 20 02 19.3 +0.5
MDJ S S 20 07 19.3 -0.8
MDJ sS sS 20 07 56.4 -0.4
MDJ PMZ
comp=Z,210nm,1.2s
MDJ LN
comp=Z,210nm,20.4s
MDJ LE
comp=Z,270nm,16.0s
MDJ LZ
comp=Z,240nm,24.3s
MDJ Mudanjiang 48.55 33 *e*P P 20 00 27.0 +1.9
comp=Z,316nm,1.1s
NVS Novosibirsk 48.76 351⇑*i*P P 20 00 26.7 +0.2
NVS *e*PP pP 20 00 45.3 -2.7
NVS *e* 20 01 44.5
NVS *e*S S 20 07 19.2 -3.5
NVS pmax pmax
comp=N,43nm,1.0s
NVS pmax pmax
comp=Z,70nm,1.0s
NVS pmax pmax
comp=E,35nm,1.2s
NVS smax smax
comp=N,89nm,2.0s
NVS smax smax
comp=E,159nm,2.0s
VLA Vladivostok 48.92 36*c i*P P 20 00 29.0 +1.1
VLA pmax pmax
comp=Z,339nm,1.8s
ASAR Alice Springs 49.00 129 P P 20 00 27.8 -1.1
comp=Z,118nm,0.8s,baz=302,slow=7.6,SNR=1168
ASAR PcP PcP 20 01 51.8 0.0
comp=Z,28nm,0.8s,baz=311,slow=3.7,SNR=9.4
ASAR ScP ScP 20 05 35.0 -4.1
comp=Z,10nm,0.8s,baz=304,slow=4.6,SNR=9.4
ASAR S S 20 07 19.1 -7.9
comp=Z,25nm,1.0s,baz=297,slow=14,SNR=26
ASAR ScS ScS 20 10 08.0 -5.0
comp=Z,6.3nm,0.8s,baz=292,slow=7.0,SNR=9.5
ASAR PKPPKP P'P'df 20 31 23.8 -6.2
comp=Z,0.5nm,0.8s,baz=138,slow=5.4,SNR=4.3
AS01 Alice Springs 49.03 129 *e*P P 20 00 26.6 -2.6
KRAR Krasnoyarsk 49.11 359*c i*P P 20 00 30.4 +1.2
KRAR pmax pmax
comp=Z,179nm,1.2s
FORT Forrest 49.31 141 P P 20 00 31.6 +0.5
baz=49,SNR=38
FORT Forrest 49.31 141 *e*P P 20 00 31.6 +0.5
comp=Z,128nm,0.9s
JHJ Hachijo jima 2 49.50 52 P P 20 00 33.2 +0.6
comp=Z,109nm,0.8s,baz=192,slow=23,SNR=6.1
CBIJ Chichi jima 49.58 60 *e*P P 20 00 33.2 -0.1
comp=Z,272nm,0.7s
USRK Ussuriysk Ar. 49.63 35 P P 20 00 34.9 +1.5
comp=Z,70nm,0.8s,baz=240,slow=7.4,SNR=107
USRK PcP PcP 20 01 53.1 -0.6
comp=Z,7.5nm,0.7s,baz=242,slow=2.5,SNR=3.2
USRK LR LR 20 22 41.9
comp=Z,415nm,19.6s,baz=234,slow=37
MAJO Matsushiro 49.68 47*c i*P P 20 00 35.0 +1.0
MAJO pmax pmax
comp=Z,687nm,0.8s
MAJO Matsushiro 49.68 47 *e*P P 20 00 35.0 +1.0
comp=Z,102nm,0.8s
MAT Matsushiro 49.68 47 P P 20 00 34.5 +0.5
MAT *e*S S 20 07 37.2 +0.9
DAMY Dhamar 49.69 283 *e*P P 20 00 37.3 +2.6
comp=Z,103nm,1.2s
IRAZ Razeghan 49.74 311 *e*P P 20 00 35.0 +0.3
RAYN Ar Rayn 49.80 295 P P 20 00 36.0 +0.9
comp=Z,437nm,0.9s,SNR=52
RAYN Ar Rayn 49.80 295 *e*P P 20 00 36.5 +1.4
comp=Z,50nm,0.8s
IGZV Ghazvin 49.93 313 *e*P P 20 00 36.5 +0.4
BRVK Borovoye 50.17 341*c i*P P 20 00 37.7 +0.4
BRVK pmax pmax
comp=Z,111nm,1.2s
BRVK Borovoye 50.17 341 P P 20 00 37.1 -0.2
comp=Z,443nm,1.0s,SNR=28
BRVK Borovoye 50.17 341 P P 20 00 38.2 +0.9
SNR=26
BRVK Borovoye 50.17 341 *e*P P 20 00 37.9 +0.5
comp=Z,72nm,0.9s
IBZA Bozab 50.94 309 *e*P P 20 00 42.4 -1.4
ATD Arta Tunnel 51.09 279 P P 20 00 47.3 +2.3
comp=Z,51nm,1.0s,baz=68,slow=3.3,SNR=8.3
ATD LR LR 20 19 31.6
comp=Z,128nm,19.6s,baz=82,slow=32
IKOM Komasi 51.10 309 *e*P P 20 00 43.4 -1.5
IVIS Veis 51.74 309 *e*P P 20 00 47.6 -2.0
ILIN Lien 51.79 310 *e*P P 20 00 48.6 -1.5
IGHG Ghaleghazi 51.88 309 *e*P P 20 00 49.4 -1.4
QIS Mount Isa 52.04 123 P P 20 00 50.7 -1.2
baz=52,SNR=47
IDHR Dehrash 52.16 309 *e*P P 20 00 51.4 -1.4
COEN Coen 52.58 113 P P 20 00 54.2 -1.7
baz=52,SNR=17
COEN Coen 52.58 113 *e*P P 20 00 54.2 -1.7
comp=Z,45nm,0.9s
KLR Kul'dur 52.68 30⇓*i*P P 20 00 54.0 -2.1
KLR pmax pmax
comp=E,160nm,1.6s
KLR pmax pmax
comp=Z,340nm,1.6s
IBST Bostanabad 52.90 313 *e*P P 20 00 57.2 -1.1
OPO Ambohidratompo 52.96 241 P P 20 01 01.0 +2.1
comp=Z,31nm,0.7s,baz=73,slow=7.3,SNR=7.9
AKTO Aktyubinsk 53.04 332 S S 20 08 20.2 -1.8
comp=Z,12nm,1.0s,baz=14,slow=20,SNR=21
ABPO Ambohimpanom 53.11 240 *e*P P 20 01 02.4 +2.5
ABPO pmax pmax
comp=Z,244nm,1.1s
ABPO Ambohimpanom 53.11 240 P P 20 01 02.5 +2.5
comp=Z,316nm,1.1s,SNR=11
ABPO Ambohimpanom 53.11 240 *e*P P 20 01 02.4 +2.5
comp=Z,244nm,1.1s
BOD Bodaibo 53.14 13⇓*i*P P 20 00 59.7 +0.4
BOD pmax pmax
comp=Z,155nm,1.2s
MANU Manus Island 53.56 98 P P 20 01 03.5 +0.3
baz=54,SNR=3.6
ITBZ Tabriz 53.65 313 *e*P P 20 01 02.9 -0.8
HABR Khabarovsk 53.90 32*de*P P 20 01 03.9 -1.2
HABR *e*PP pP 20 01 23.9 -3.0
HABR *e* 20 02 08.1
HABR *e* 20 03 05.9
HABR *e*PPP PPP 20 04 15.6
HABR *e*S S 20 08 34.3 +0.7
HABR *e*SS sS 20 09 08.5 -2.4
HABR *e* 20 10 45.3
HABR *e*SS SS 20 12 17.4 +1.5
HABR pmax pmax
comp=Z,302nm,1.1s
HABR pmax pmax
comp=N,54nm,1.3s
HABR pmax pmax
comp=Z,311nm,1.3s
HABR pmax pmax
comp=E,135nm,1.3s
HABR MLR MLR
comp=Z,405nm,19.0s
ISHB Shabestar 54.05 313 *e*P P 20 01 06.3 -0.4
IMRD Marand 54.16 314 *e*P P 20 01 07.4 0.0
PMG Port Moresby 54.94 106*c i*P P 20 01 12.4 -0.8
PMG pmax pmax
comp=Z,645nm,1.0s
PMG Port Moresby 54.94 106 *e*P P 20 01 12.8 -0.4
comp=Z,119nm,0.8s
MTSU Mount Surprise 55.10 118 P P 20 01 13.6 -0.7
baz=55,SNR=31
FURI Furi 55.23 276 *e*P P 20 01 19.8 +4.1
comp=Z,105nm,1.1s
GNI Garni 55.41 315*c i*P P 20 01 16.3 0.0
GNI pmax pmax
comp=Z,490nm,1.2s
GNI Garni 55.41 315 P P 20 01 16.8 +0.5
SNR=19
GNI Garni 55.41 315⇓*i*P P 20 01 16.7 +0.3
SNR=16
GNI Garni 55.41 315⇓*i*P P 20 01 16.7 +0.3
SNR=16
DGRG David-gareji 55.49 316 P P 20 01 17.3 +0.5
DGRG David-gareji 55.49 316 *e*P P 20 01 17.3 +0.5
ERM Erimo 55.50 43*c i*P P 20 01 18.9 +2.2
ERM pmax pmax
comp=Z,132nm,1.7s
ERM Erimo 55.50 43 P P 20 01 18.8 +2.0
comp=Z,622nm,0.6s,SNR=17
ERM Erimo 55.50 43 *e*P P 20 01 18.8 +2.0
comp=Z,71nm,0.7s
BBOO Buckleboo 55.81 137 P P 20 01 18.4 -0.8
baz=56,SNR=64
BBOO Buckleboo 55.81 137 *e*P P 20 01 18.7 -0.4
comp=Z,82nm,0.7s
TBLG Delisi 56.04 317 P P 20 01 20.9 +0.2
TBLG Delisi 56.04 317 *e*P P 20 01 20.9 +0.2
ASAJ Asahikawa 56.05 40 *e*P P 20 01 22.2 +1.5
comp=Z,149nm,1.0s
SIRT Sirnak 56.12 311 *e*P P 20 01 20.2 -1.2
AGRB Hanur-Agry 56.44 314 *e*P P 20 01 23.4 -0.4
SVE Sverdlovsk 56.52 338*d i*P P 20 01 24.7 +1.0
SVE *e* 20 04 50.7
SVE *e*S S 20 09 05.8 -2.5
SVE pmax pmax
comp=Z,329nm,1.2s
SVE MLR MLR
comp=Z,758nm,24.0s
AKH Akhalkalaki 56.77 316 P P 20 01 26.5 +0.4
AKH Akhalkalaki 56.77 316 *e*P P 20 01 26.4 +0.4
ARU Arti 57.00 337 S S 20 09 14.3 -0.4
comp=Z,0.2nm,0.3s,baz=313,slow=24,SNR=43
ARU LR LR 20 27 51.9
comp=Z,332nm,21.3s,baz=150,slow=38
ARU Arti 57.00 337*c i*P P 20 01 27.6 +0.4
ARU *PP pP 20 01 47.2 -2.0
ARU 20 02 19.6
ARU S S 20 09 14.6 -0.1
ARU pmax pmax
comp=Z,276nm,1.7s
ARU Arti 57.00 337 P P 20 01 27.9 +0.7
comp=Z,785nm,0.9s,SNR=54
ARU Arti 57.00 337 *e*P P 20 01 27.5 +0.4
comp=Z,147nm,1.0s
ARU S S 20 09 14.3 -0.4
ONI Oni 57.26 317 P P 20 01 29.8 +0.4
ONI Oni 57.26 317 *e*P P 20 01 29.8 +0.4
YSS Yuzh-Sakhalins 57.47 37⇑*i*P P 20 01 31.5 +0.9
YSS pmax pmax
comp=Z,220nm,1.0s
YSS Yuzh-Sakhalins 57.47 37 *e*P P 20 01 32.2 +1.6
comp=Z,291nm,1.1s
NCK Nalchik 57.53 318⇓*e*P P 20 01 31.4 +0.2
KMBO Kilima Mbogo 57.60 264 P P 20 01 34.9 +2.4
comp=Z,49nm,0.9s,baz=62,slow=9.1,SNR=119
KMBO Kilima Mbogo 57.60 264 *e*P P 20 01 34.8 +2.4
KMBO pmax pmax
comp=Z,74nm,1.0s
KMBO Kilima Mbogo 57.60 264 P P 20 01 34.5 +2.1
baz=58,SNR=5.1
KMBO Kilima Mbogo 57.60 264 P P 20 01 35.1 +2.7
SNR=24
KMBO Kilima Mbogo 57.60 264 *e*P P 20 01 34.8 +2.4
comp=Z,74nm,1.0s
EZM Erzurum 57.73 313 *e*P P 20 01 33.5 +0.5
BNGB Bing˜ll 57.92 312 *e*P P 20 01 32.7 -1.4
NEY Neytrino 58.01 317⇓*e*P P 20 01 35.7 +0.9
KBZ Khabaz 58.09 318 P P 20 01 34.9 -0.1
comp=Z,34nm,0.9s,baz=127,slow=6.1,SNR=56
KBZ PcP PcP 20 02 26.6 +0.7
comp=Z,23nm,0.9s,baz=160,slow=3.6,SNR=6.5
KBZ PKPPKP P'P'df 20 31 14.3 -2.7
comp=Z,4.7nm,1.1s,baz=40,slow=5.8,SNR=4.8
YUK Yuzh-Kuril'sk 58.14 42*c i*P P 20 01 36.6 +1.2
YUK *i* *PP pP 20 01 54.9 -2.6
YUK *i* 20 02 24.9
YUK *i* 20 03 42.4
YUK S S 20 09 32.9 +2.9
YUK *e*SS SS 20 13 25.4 +2.5
YUK pmax pmax
comp=N,248nm,1.3s
YUK pmax pmax
comp=E,53nm,1.3s
YUK pmax pmax
comp=Z,398nm,1.3s
YUK pmax pmax
comp=Z,455nm,1.9s
KIV Kislovodsk 58.32 318*c i*P P 20 01 36.2 -0.6
KIV *i* 20 01 52.7
KIV pmax pmax
comp=Z,110nm,1.0s
KIV Kislovodsk 58.32 318 P P 20 01 36.4 -0.4
comp=Z,565nm,0.9s,SNR=16
KIV Kislovodsk 58.32 318 P P 20 01 37.0 +0.3
SNR=17
KIV Kislovodsk 58.32 318⇑*i*P P 20 01 36.6 -0.1
SNR=9.5
KIV Kislovodsk 58.32 318⇑*i*P P 20 01 36.6 -0.1
SNR=9.5
KIV Kislovodsk 58.32 318 *e*P P 20 01 36.6 -0.1
comp=Z,85nm,0.9s
QLP Quilpie 58.55 127 P P 20 01 38.2 -0.3
baz=58,SNR=130
BAYT Ayd˜–ntepe-Bay 58.77 314 *e*P P 20 01 38.9 -1.2
PTK Pertek 58.84 312 *e*P P 20 01 39.7 -0.9
MALT Malatya 59.39 311⇑*i*P P 20 01 44.7 +0.4
KUR Kuril'sk 59.93 41⇑*i*P P 20 01 48.5 +0.8
KUR *i* *PP pP 20 02 10.0 +0.1
KUR *i* S S 20 09 55.5 +2.4
KUR pmax pmax
comp=Z,530nm,3.6s
KUR pmax pmax

comp=N,62nm,2.2s
KUR pmax pmax
comp=E,54nm,1.1s
**SOC Sochi 60.17 317***c iP* **P 20 01 47.7 -1.7**
SOC *e**PP **pP 20 02 07.4 -4.2**
SOC *e**SP **sP 20 02 17.0 -4.4**
SOC *e* 20 04 07.8
SOC *e*S **S 20 09 55.3 -1.0**
SOC *e**SS sS 20 10 26.5 -7.7
SOC *e*SS **SS 20 13 56.5 +1.7**
SOC pmax pmax
comp=Z,59nm,0.9s
**EIL Elat 60.22 300** LR LR 20 30 13.5
comp=Z,174nm,18.1s,baz=105,slow=38
**EIL Elat 60.22 300** P **P 20 01 51.3 +1.3**
baz=60,SNR=21
**KMRS Kahramanmaras 60.32 309** *eP* **P 20 01 50.2 -0.4**
**MMAI Mount Meron Ar 60.46 304** LR LR 20 32 30.2
comp=Z,523nm,18.3s,baz=60,slow=40
**TAHT Tahtakopru-Hat 60.59 308** *eP* **P 20 01 53.4 +0.9**
**SARI SarD1z-Kayseri 60.93 310** *eP* **P 20 01 54.1 -0.8**
**YAK Yakutsk 60.94 18***c iP* **P 20 01 54.2 0.0**
YAK *e**PP **pP 20 02 15.4 -1.1**
YAK *e* 20 02 34.0
YAK *e* 20 04 08.1
YAK *e*S **S 20 10 02.2 -3.2**
YAK *e**SS **sS 20 10 40.1 -3.3**
YAK *e*SS **SS 20 14 05.5 -0.5**
YAK *e*SSS SSS 20 16 45.3
YAK pmax pmax
comp=Z,303nm,0.9s
YAK pmax pmax
comp=N,131nm,1.1s
YAK pmax pmax
comp=E,149nm,1.4s
YAK pmax pmax
comp=Z,12nm,0.6s
YAK pmax pmax
comp=E,46nm,1.1s
YAK pmax pmax
comp=N,58nm,1.8s
YAK smax smax
comp=N,88nm,1.4s
YAK smax smax
comp=E,374nm,2.0s
**YAK Yakutsk 60.94 18** *eP* **P 20 01 54.2 0.0**
comp=E,417nm,0.6s
**CEYT Ceyhan 61.09 309** *eP* **P 20 01 55.8 0.0**
**KARA Karaisali 61.68 309** *eP* **P 20 01 57.2 -2.6**
**ARPS Mount Arapiles 61.98 138** P **P 20 02 01.8 +0.1**
baz=62,SNR=15
**VRH Novokhopyorsk 61.98 325** *eP* **P 20 02 00.8 -0.7**
VRH *e*S **S 20 10 13.6 -5.4**
VRH pmax pmax
comp=Z,150nm,0.8s
VRH pmax pmax
comp=N,70nm,0.9s
VRH pmax pmax
comp=E,180nm,1.6s
VRH smax smax
comp=E,100nm,1.6s
VRH smax smax
comp=Z,20nm,1.9s
VRH smax smax
comp=N,100nm,1.5s
**CMSA Cobar Meteorol 61.99 131** P **P 20 02 01.7 -0.2**
baz=62,SNR=167
**ANN Anapa 62.13 318** *eP* **P 20 01 59.7 -2.9**
ANN *e**PP **pP 20 02 20.7 -4.3**
ANN *e* 20 04 18.0
ANN *e*PPP PPP 20 05 46.1
ANN *e*S **S 20 10 18.0 -3.1**
ANN *e*SS **SS 20 14 26.3 +0.9**
ANN pmax pmax
comp=Z,61nm,1.4s
**RMQ Roma 62.16 125** P **P 20 02 03.8 +0.6**
baz=62,SNR=29
**NIG Nigde 62.23 310** *eP* **P 20 02 03.9 +0.1**
**LFK Lefkose 62.44 306** *eP* **P 20 02 04.6 -0.4**
**CSS Prodhromos 62.54 306** P **P 20 02 05.2 -0.4**
**CSS Prodhromos 62.54 306** *eP* **P 20 02 05.2 -0.4**
comp=Z,13nm,1.1s
**CORM Corum 62.73 312** *eP* **P 20 02 05.7 -1.3**
**LEF Lefka 62.93 306** *eP* **P 20 02 08.4 +0.3**
**VORD Divnogorie 63.27 324** *eP* **P 20 02 08.8 -1.3**
VORD *e*S **S 20 10 29.8 -5.3**
VORD pmax pmax
comp=N,50nm,0.9s
VORD pmax pmax
comp=E,100nm,0.9s
VORD pmax pmax
comp=Z,80nm,0.9s
VORD smax smax
comp=N,50nm,0.9s
VORD smax smax
comp=E,50nm,0.9s
VORD smax smax
comp=Z,10.0nm,1.4s
**BR131 Keskin Array S 63.36 311** P **P 20 02 10.5 -0.6**
baz=64,SNR=38
**BRTR Keskin Array B 63.36 311** P **P 20 02 10.1 -1.0**
comp=Z,45nm,0.8s,baz=121,slow=7.1,SNR=241
BRTR LR LR 20 32 33.9
comp=Z,489nm,18.1s,baz=138,slow=38
**BRTR Keskin Array B 63.36 311** P **P 20 02 10.1 -1.0**
BRTR pmax pmax
comp=Z,45nm,0.8s
BRTR MLR MLR
comp=Z,489nm,18.1s
**VSR Storozhevoye 63.44 325** *eP* **P 20 02 09.9 -1.3**
VSR *e*S **S 20 10 31.5 -5.8**
VSR pmax pmax
comp=N,10.0nm,0.8s
VSR pmax pmax
comp=Z,70nm,0.8s
VSR pmax pmax
comp=E,70nm,1.0s
VSR smax smax
comp=E,40nm,1.0s
VSR smax smax
comp=Z,4.0nm,0.8s
VSR smax smax
comp=N,40nm,0.9s
**CANT Cankiri 63.59 312** *eP* **P 20 02 12.0 -0.5**
**VORR Voronezh 63.61 325** P **P 20 02 13.0 +0.7**
VORR pmax pmax
comp=Z,250nm,1.2s
**EIDS Eidsvold 63.65 123** P **P 20 02 12.4 -0.6**
baz=64,SNR=8.6
**EIDS Eidsvold 63.65 123** *eP* **P 20 02 12.5 -0.6**
comp=Z,64nm,1.4s
**BZK Bozkurt 63.66 314** *eP* **P 20 02 12.1 -0.8**
**AFSR Af˙ar-Bala (A 63.72 311** *eP* **P 20 02 12.4 -1.1**
**KONT Konya--Tatoy 63.92 309** *eP* **P 20 02 14.4 -0.3**
**MBAR Mbarara 63.97 266** *eP* **P 20 02 17.0 +1.4**
MBAR *e* 20 02 38.6
MBAR pmax pmax
comp=Z,99nm,1.4s
**MBAR Mbarara 63.97 266** *eP* **P 20 02 17.0 +1.4**
comp=Z,99nm,1.4s
MBAR *e* 20 02 38.6
**ANTO Ankara 64.03 311** *eP* **P 20 02 15.2 -0.2**
ANTO pmax pmax
comp=Z,51nm,0.9s
**ANTO Ankara 64.03 311** P **P 20 02 15.1 -0.3**
SNR=11
**ANTO Ankara 64.03 311** *eP* **P 20 02 15.2 -0.2**
comp=Z,51nm,0.9s
**BR231 Keskin MP Arra 64.03 311** *eP* P 20 02 10.8 -4.7
**LPSR Galich˙ya Gora 64.15 326** *eP* **P 20 02 15.2 -0.6**
LPSR *e*S **S 20 10 40.6 -5.4**
LPSR pmax pmax
comp=E,50nm,0.9s
LPSR pmax pmax
comp=Z,80nm,0.9s
LPSR pmax pmax
comp=N,6.0nm,0.4s
LPSR smax smax
comp=E,110nm,1.8s
LPSR smax smax
comp=Z,5.0nm,0.9s
LPSR smax smax
comp=N,40nm,1.5s
**SIM Simferopol'** **64.42 317***ceP* **P 20 02 17.3 -0.5**
SIM *e**PP pP 20 02 34.0 -6.2
SIM *e*S **S 20 10 48.0 -1.6**
SIM *e*SS **SS 20 15 04.0 +2.9**
SIM pmax pmax
comp=Z,96nm,0.7s
**SAFT Safranbolu 64.43 313** *eP* **P 20 02 16.7 -1.2**
**KIZT Kizilcal 64.49 310** *eP* **P 20 02 16.3 -2.2**
**TOO Toolangi 64.87 137** P **P 20 02 21.7 +0.9**
baz=65,SNR=30
**SUTC Sutluce-Ispart 64.89 308** *eP* **P 20 02 20.6 -0.5**
**SVRH Sivrihisar-ESK 64.89 310** *eP* **P 20 02 19.5 -1.6**
**BCK Bucak 65.20 308** *eP* **P 20 02 21.4 -1.7**
**YNG Young 65.30 133** P **P 20 02 23.6 0.0**
baz=65,SNR=6.5
**ISP Isparta 65.32 308** *eP* **P 20 02 23.3 -0.6**
ISP pmax pmax
comp=Z,123nm,1.4s
**ISP Isparta 65.32 308**⇑ *iP* **P 20 02 23.3 -0.6**
**ISP Isparta 65.32 308** *eP* **P 20 02 23.3 -0.6**
comp=Z,123nm,1.4s
**MDUB Mudurnu 65.35 311** *eP* **P 20 02 22.9 -1.1**
**ELL Elmali 65.61 307** *eP* **P 20 02 26.1 +0.3**
**GULT Gulveren 65.85 311** *eP* **P 20 02 27.4 +0.1**
**ARMA Armidale 66.07 127** P **P 20 02 29.9 +1.1**
baz=66,SNR=19
**ARMA Armidale 66.07 127** *eP* **P 20 02 29.9 +1.1**
comp=Z,121nm,1.1s
**MOS Moscow 66.16 329** *eP* **P 20 02 28.0 -0.8**
MOS *e* 20 02 48.8
MOS *e* 20 02 55.5
MOS *e*S **S 20 11 09.4 -1.0**
MOS pmax pmax
comp=Z,500nm,1.5s
MOS pmax pmax
comp=Z,336nm,1.3s
**CAN Canberra 66.22 133** *eP* **P 20 02 29.7 +0.1**
CAN pmax pmax
comp=Z,119nm,0.7s
**CAN Canberra 66.22 133** *eP* **P 20 02 29.7 +0.1**
comp=Z,119nm,0.7s
**FETY Fethiye 66.24 307** *eP* **P 20 02 28.1 -1.6**
**ADVT Abdulvahap 66.43 311** *eP* **P 20 02 29.3 -1.5**
**OBN Obninsk 66.45 328** LR LR 20 35 45.5
comp=Z,306nm,18.4s,baz=98,slow=40
**OBN Obninsk 66.45 328***c iP* **P 20 02 30.4 -0.2**
OBN *i* 20 02 50.0
OBN *i* 20 02 56.8
OBN *i* 20 04 58.2
OBN pmax pmax
comp=Z,263nm,1.2s
OBN MLR MLR
comp=Z,514nm,18.0s
**CNB Canberra Magne 66.48 133** P **P 20 02 31.4 +0.1**
baz=66,SNR=35
**DALY Dalyan (Mu˙la 66.61 307** *eP* **P 20 02 31.5 -0.5**
**MGCD Mangrove Creek 66.83 130** P **P 20 02 34.6 +1.1**
baz=67,SNR=7.8
**SKR Severo-Kuril's 67.04 37** *eP* P 20 02 28.7 -5.7
SKR pmax pmax
comp=E,40nm,0.6s
SKR pmax pmax
comp=Z,90nm,0.6s
SKR pmax pmax
comp=Z,1µm,3.0s
**ARMT Armutlu 67.11 311** *eP* **P 20 02 34.6 -0.6**
**DST Dursunbey 67.12 310** *eP* **P 20 02 34.5 -0.9**
**HNR Honiara 67.23 103** P **P 20 02 35.4 -1.0**
comp=Z,94nm,0.9s,baz=184,slow=4.0,SNR=13
**HNR Honiara 67.23 103** *eP* **P 20 02 35.9 -0.5**
HNR pmax pmax
comp=Z,143nm,1.0s
**HNR Honiara 67.23 103** *eP* **P 20 02 35.9 -0.5**
comp=Z,143nm,1.0s
**AYDB Zeytinkoy-Aydi 67.39 308** *eP* **P 20 02 37.4 +0.2**
**KLMR Klimovskoe 67.56 334***c iP* **P 20 02 37.5 -0.1**
KLMR pmax pmax
comp=Z,152nm,0.8s
**MA2 Magadan 67.60 27** *i* P **P 20 02 38.2 +0.3**
**KARP Karpathos 67.62 306** P **P 20 02 38.5 0.0**
**KARP Karpathos 67.62 306** *eP* **P 20 02 38.5 0.0**
**GONE Gonen-Balikesi 67.90 310** *eP* **P 20 02 38.4 -1.8**
**MRMT Marmara Adasi 68.07 311** *eP* **P 20 02 40.0 -1.3**
**TLCR 68.11 316**⇑ *iP* **P 20 02 41.5 +0.2**
**TIRR Tirgusor 68.23 315** *eP* **P 20 02 42.1 0.0**
TIRR pmax pmax
comp=Z,31nm,0.8s
**TIRR Tirgusor 68.23 315**⇓ *iP* **P 20 02 42.2 +0.1**
**TIRR Tirgusor 68.23 315** *eP* **P 20 02 42.1 0.0**
comp=Z,31nm,0.8s
**KRBG Karabiga-Canak 68.26 311** *eP* **P 20 02 40.8 -1.6**
**DKL Dikili 68.34 309** *eP* **P 20 02 42.3 -0.5**
**RKY Sarkoy-Tekirda 68.40 311** *eP* **P 20 02 41.1 -2.2**
**TLB Topalu 68.51 315**⇑ *iP* **P 20 02 43.8 -0.1**
**KIS Kishinev 68.52 318** *eP* **P 20 02 43.0 -0.9**
**KIS Kishinev 68.52 318** *eP* **P 20 02 43.0 -0.9**
**MSAB Monastry St. A 68.56 315**⇑ *iP* **P 20 02 44.4 +0.2**
**CFR Carcaliu 68.57 316**⇓ *iP* **P 20 02 44.3 +0.1**
**HARR Harsova 68.61 315**⇑ *iP* **P 20 02 44.8 +0.3**
**PRD Provadia 68.69 314** *i P* **P 20 02 45.4 +0.4**
**PETK Petropavlovsk- 68.72 35** P **P 20 02 44.2 -0.8**
comp=Z,9.5nm,1.0s,baz=224,slow=7.7,SNR=4.9
PETK PKPPKP **P'P'df** **20 31 01.6 +2.2**
comp=Z,9.0nm,0.9s,baz=61,slow=11,SNR=5.9
**PRK Paraskevi 68.85 309** *eP* **P 20 02 45.6 -0.5**
**PRK Paraskevi 68.85 309** P **P 20 02 45.6 -0.5**
**PRK Paraskevi 68.85 309** *eP* **P 20 02 45.6 -0.5**
**GELI Tayfur-Gelibol 68.88 311** *eP* **P 20 02 46.3 0.0**
**CHOS Chios island 68.89 308** P **P 20 02 46.9 +0.4**
**CHOS Chios island 68.89 308** *eP* **P 20 02 46.9 +0.4**
**ERIK Erikli-Kesan 68.89 311** *eP* **P 20 02 45.5 -0.8**
**EDRB Edirne 68.92 312** *eP* **P 20 02 44.7 -1.8**
**LAST Lasithi 68.93 305** P **P 20 02 47.1 +0.3**
**LAST Lasithi 68.93 305** *eP* **P 20 02 47.1 +0.3**
**SANT Santorini 69.09 306** *eP* **P 20 02 46.9 -0.9**
comp=Z,103nm,0.8s
**SORM Soroca 69.09 319**⇑ *iP* **P 20 02 47.5 +0.1**
**THR2 Thira island, 69.12 306** P **P 20 02 47.9 +0.1**
**THR2 Thira island, 69.12 306** *eP* **P 20 02 47.9 +0.1**
**APE Apeiranthos 69.12 307***ceP* **P 20 02 47.0 -0.9**
APE pmax pmax
comp=Z,46nm,0.9s
**APE Apeiranthos 69.12 307**⇓ *iP* **P 20 02 47.0 -0.9**
**THR3 Thira Island, 69.14 306** P **P 20 02 47.3 -0.7**
**THR3 Thira Island, 69.14 306** *eP* **P 20 02 47.3 -0.7**
**SIGR SIGRI 69.17 309** P **P 20 02 47.8 -0.2**
**SIGR SIGRI 69.17 309** *eP* **P 20 02 47.8 -0.2**
**ENEZ Enez 69.17 311** *eP* **P 20 02 47.5 -0.6**
**LSZ Lusaka 69.18 251** *eP* **P 20 02 49.9 +1.2**
LSZ pmax pmax
comp=Z,52nm,1.0s
**LSZ Lusaka 69.18 251** *eP* **P 20 02 49.9 +1.2**
comp=Z,52nm,1.0s
**AKASG Malin Array Be 69.19 322** P **P 20 02 46.8 -1.1**
comp=Z,30nm,0.8s,baz=89,slow=4.8,SNR=113
**AKASG Malin Array Be 69.19 322** *i P* **P 20 02 46.7 -1.2**
AKASG pmax pmax
comp=Z,30nm,0.8s
**KIEV Kiev 69.19 322** *eP* **P 20 02 46.9 -1.1**
KIEV pmax pmax
comp=Z,40nm,0.9s
**KIEV Kiev 69.19 322** *eP* **P 20 02 46.9 -1.1**
comp=Z,40nm,0.9s
**AK11 Malin Array Si 69.21 322** *eP* **P 20 02 46.9 -1.2**
**PET Petropavlovsk 69.25 36** *i P* **P 20 02 47.6 -0.6**
PET pmax pmax
comp=Z,39nm,1.0s
**PET Petropavlovsk 69.25 36** *eP* **P 20 02 47.4 -0.9**
comp=Z,66nm,1.3s
**ALN Alexandroupoli 69.28 311** *eP* **P 20 02 47.6 -1.1**
**ALN Alexandroupoli 69.28 311** P **P 20 02 47.6 -1.1**
**ALN Alexandroupoli 69.28 311** *eP* **P 20 02 47.6 -1.1**
**PETR Petresti 69.31 316**⇑ *iP* **P 20 02 50.4 +1.6**
**PGOR Pogoanele 69.32 315**⇓ *iP* **P 20 02 50.4 +1.6**
**MSNA Messina 69.34 243** *eP* **P 20 02 50.1 +0.7**
MSNA AMB AMB 20 02 51.7
comp=Z,69nm,1.4s
**GRER 69.42 316**⇓ *iP* **P 20 02 50.5 +1.0**
**IDI Anoyia 69.42 305** P **P 20 02 49.3 -0.5**
**IDI Anoyia 69.42 305** *eP* **P 20 02 49.3 -0.5**
comp=Z,101nm,0.7s
**SIVA Sivas 69.46 305** P **P 20 02 49.9 0.0**
**SIVA Sivas 69.46 305** *eP* **P 20 02 49.9 0.0**
**SMTH Samothraki Isl 69.60 311** P **P 20 02 50.1 -0.6**
**SMTH Samothraki Isl 69.60 311** *eP* **P 20 02 50.1 -0.6**
**ISR Istrita 69.67 316**⇑ *iP* **P 20 02 52.5 +1.4**
**VRI Vrincioaia 69.69 316**⇓ *iP* **P 20 02 52.0 +0.8**
**VRI Vrincioaia 69.69 316**⇓ *iP* **P 20 02 52.5 +1.3**
**TMCR Tamitsa 69.74 337** *i* P **P 20 02 52.1 +1.1**
TMCR *e*S S 20 12 01.2 +8.4
TMCR pmax pmax
comp=Z,136nm,0.8s
**SZH Strazhica 69.76 314** *i* P **P 20 02 51.6 0.0**
**LIA Limnos Island 69.78 310** P **P 20 02 51.1 -0.7**
**LIA Limnos Island 69.78 310** *eP* **P 20 02 51.1 -0.7**
**SULR 69.78 315**⇑ *iP* **P 20 02 52.2 +0.5**
**SEY Seymchan 69.80 24***deP* **P 20 02 51.9 +0.5**
**KDZ Kurdzhali 69.87 312** *i P* **P 20 02 52.8 +0.4**
**TESR Tescani 69.87 317**⇑ *iP* **P 20 02 52.4 +0.1**
**SECR 69.98 315**⇓ *iP* **P 20 02 54.3 +1.3**
**PLAR PLOIESTI 69.99 315**⇓ *iP* **P 20 02 52.4 -0.6**
**VAM Vamos 70.00 305** *eP* **P 20 02 53.2 -0.1**
**VAM Vamos 70.00 305** P **P 20 02 53.2 -0.1**
**VAM Vamos 70.00 305** *eP* **P 20 02 53.2 -0.1**
**KARY Karystos 70.11 308** P **P 20 02 52.9 -1.0**
**MLR Muntele Rosu 70.15 316**⇑ *iP* **P 20 02 54.5 +0.3**
**PVL Pavlikeni 70.18 313** *i P* **P 20 02 55.5 +1.3**
**PRAR RASCA 70.32 318**⇓ *iP* **P 20 02 55.1 +0.1**
**KAVA Kavala 70.44 311** P **P 20 02 54.0 -1.8**
**KAVA Kavala 70.44 311** *eP* **P 20 02 54.0 -1.8**
**PTL Penteli 70.56 308** P **P 20 02 55.8 -0.9**
**PTL Penteli 70.56 308** *eP* **P 20 02 55.8 -0.9**
**VLY Voula,Athens 70.59 308** P P 20 02 53.0 -3.8
**VLY Voula,Athens 70.59 308** *eP* P 20 02 53.0 -3.8
**ATHU Athens Univers 70.61 308** P **P 20 02 55.0 -2.0**
**ATHU Athens Univers 70.61 308** *eP* **P 20 02 55.0 -2.0**
**DOPR Dopca 70.62 316**⇑ *iP* **P 20 02 56.8 -0.1**
**HUMR Humele 70.65 315**⇓ *iP* **P 20 02 57.2 +0.1**
**GOLR 70.72 315**⇑ *iP* **P 20 02 58.0 +0.5**
**OUR Ouranopolis 70.75 310** *eP* **P 20 02 55.8 -1.9**
**OUR Ouranopolis 70.75 310** P **P 20 02 55.8 -1.9**
**OUR Ouranopolis 70.75 310** *eP* **P 20 02 55.8 -1.9**
**VOIR 70.76 316**⇓ *iP* **P 20 02 57.5 -0.3**
**PGB Panagyurishte 70.92 313** *i P* **P 20 02 58.9 +0.1**
**PAIG Paliouri 70.93 310** *eP* **P 20 02 57.6 -1.2**
**PAIG Paliouri 70.93 310** P **P 20 02 57.6 -1.2**
**PAIG Paliouri 70.93 310** *eP* **P 20 02 57.6 -1.2**
**NVR Nevrokopi 70.98 311** P **P 20 02 58.4 -0.8**
**NVR Nevrokopi 70.98 311** *eP* **P 20 02 58.4 -0.8**
**MICGM Minsk 70.99 326**⇑ *iP* **P 20 02 57.0 -1.9**
**DID Didima 70.99 307** P P 20 02 55.7 -3.6
**DID Didima 70.99 307** *eP* P 20 02 55.7 -3.6
**VILL Villia 71.00 308** P **P 20 02 56.3 -3.1**
**MNK Minsk 71.01 326**⇑ *iP* **P 20 02 57.0 -2.0**
MNK pmax pmax
comp=E,570nm,1.0s
**ARR Arges 71.04 316**⇓ *iP* **P 20 02 59.4 -0.1**
**BURAR Bucovina Array 71.05 318**⇑ *iP* **P 20 03 00.2 +0.7**
**KRND KRANIDI 71.05 307** P P 20 02 55.9 -3.7
**BUR04 Bucovina Ar. S 71.05 318** *eP* **P 20 02 58.9 -0.6**
**MMB Musomiste 71.11 312** *i P* **P 20 02 59.6 -0.4**
**SRS Serrai 71.15 311** *eP* **P 20 02 58.3 -1.9**
**SRS Serrai 71.15 311** P **P 20 02 58.3 -1.9**
**SRS Serrai 71.15 311** *eP* **P 20 02 58.3 -1.9**
**PLG Polygyros 71.16 310** *eP* **P 20 02 59.6 -0.7**
**PLG Polygyros 71.16 310** P **P 20 02 59.6 -0.7**
**PLG Polygyros 71.16 310** *eP* **P 20 02 59.6 -0.7**
**LTK Loutraki 71.26 308** P P 20 02 56.6 -4.3
**LTK Loutraki 71.26 308** *eP* P 20 02 56.6 -4.3
**SOH Sokhos 71.29 311** *eP* **P 20 03 00.5 -0.6**
**SOH Sokhos 71.29 311** P **P 20 03 00.5 -0.6**
**SOH Sokhos 71.29 311** *eP* **P 20 03 00.5 -0.6**
**ATAL Atalanti 71.29 308** P **P 20 02 59.3 -1.8**
**ATAL Atalanti 71.29 308** *eP* **P 20 02 59.3 -1.8**
**LKR Lokris 71.30 308** P **P 20 02 59.4 -1.7**
**LKR Lokris 71.30 308** *eP* **P 20 02 59.4 -1.7**
**MDB Medias 71.34 316**⇓ *iP* **P 20 03 02.6 +1.4**
**MPEP Malo Peshtene 71.35 313** *i P* **P 20 03 01.9 +0.6**
**HORT Hortiatis 71.45 310** P **P 20 02 58.9 -3.2**
**HORT Hortiatis 71.45 310** *eP* **P 20 02 58.9 -3.2**
**THAL Thalero 71.50 308** P **P 20 03 00.2 -2.1**
**ARCR ARCALIA 71.53 317**⇑ *iP* **P 20 03 03.2 +0.9**
**KKB Krupnik 71.62 312** *i P* **P 20 03 02.6 -0.4**
**VTS Vitosha 71.63 313** *i P* **P 20 03 03.2 0.0**
**DSF Desfina 71.64 308** P **P 20 03 00.8 -2.5**
**DSF Desfina 71.64 308** *eP* **P 20 03 00.8 -2.5**
**LOT Lotru 71.65 316**⇑ *iP* **P 20 03 02.7 -0.5**
**VLX Vlachokerasia 71.66 307** P **P 20 03 02.4 -1.0**
**VLX Vlachokerasia 71.66 307** *eP* **P 20 03 02.4 -1.0**
**KNT Kendrikon 71.67 311** *eP* **P 20 03 02.4 -0.9**
**KNT Kendrikon 71.67 311** P **P 20 03 02.4 -0.9**
**KNT Kendrikon 71.67 311** *eP* **P 20 03 02.4 -0.9**
**NACGM Naroch 71.71 326** *eP* **P 20 03 03.0 -0.2**
**GUR Goura 71.74 308** P **P 20 03 02.1 -1.8**
**GUR Goura 71.74 308** *eP* **P 20 03 02.1 -1.8**
**IDID Didziasalis 71.84 326** *eP* **P 20 03 04.3 +0.3**
IDID IAmb IAmb 20 03 05.5
comp=Z,736nm,0.9s
**SLR Silverton 71.85 240** *eP* **P 20 03 04.9 +0.1**
**LIT Litokhoron 71.86 310** *eP* **P 20 03 03.3 -1.2**
**LIT Litokhoron 71.86 310** P **P 20 03 03.3 -1.2**
**LIT Litokhoron 71.86 310** *eP* **P 20 03 03.3 -1.2**
**AGG Agios Georgios 71.86 309** *eP* **P 20 03 02.1 -2.4**
**AGG Agios Georgios 71.86 309** P **P 20 03 02.1 -2.4**
**AGG Agios Georgios 71.86 309** *eP* **P 20 03 02.1 -2.4**
**KLV Kalavryta, Ach 71.90 308** P **P 20 03 03.2 -1.6**
**KLV Kalavryta, Ach 71.90 308** *eP* **P 20 03 03.2 -1.6**
**VAY Valandovo 71.94 311** *i P* **P 20 03 04.5 -0.4**
**VAY Valandovo 71.94 311** *eP* **P 20 03 03.7 -1.2**
**VAY Valandovo 71.94 311** P **P 20 03 03.7 -1.2**
**VAY Valandovo 71.94 311** *eP* **P 20 03 03.7 -1.2**
**KALE Kalithea 71.94 308** P **P 20 03 03.2 -1.9**
**KALE Kalithea 71.94 308** *eP* **P 20 03 03.2 -1.9**
**CJR Cluj-Napoca 71.97 317**⇓ *iP* **P 20 03 06.0 +0.9**
**ITM Ithomi 72.00 307** P **P 20 03 04.3 -1.1**
**ITM Ithomi 72.00 307** *eP* **P 20 03 04.3 -1.1**
**SERG Sergoula 72.01 308** P **P 20 03 03.6 -1.8**
**GRG Griva 72.02 311** *eP* **P 20 03 04.1 -1.3**
**GRG Griva 72.02 311** P **P 20 03 04.1 -1.3**
**GRG Griva 72.02 311** *eP* **P 20 03 04.1 -1.3**
**LAKA Lakka 72.06 308** P **P 20 03 03.7 -2.0**
**LAKA Lakka 72.06 308** *eP* **P 20 03 03.7 -2.0**
**PYL PYLOS 72.12 306** P **P 20 03 04.4 -1.7**
**PYL PYLOS 72.12 306** *eP* **P 20 03 04.4 -1.7**
**IIGN Ignalina 72.13 326** *eP* **P 20 03 06.0 +0.3**
IIGN IAmb IAmb 20 03 07.4
comp=Z,885nm,1.1s
**EFP Efpalio 72.13 308** P **P 20 03 04.8 -1.3**
**THL Klokotos Trika 72.16 309** P **P 20 03 04.2 -2.0**
**BMR Baia Mare 72.20 318**⇑ *iP* **P 20 03 07.6 +1.3**
**IZAR Zarasai 72.22 327** *eP* **P 20 03 06.6 +0.4**
IZAR IAmb IAmb 20 03 07.8
comp=Z,595nm,1.0s
**LVV L'vov 72.23 320** *i P* **P 20 03 05.6 -0.9**
LVV *e*S S 20 12 16.0 -6.3
**ISAL Salakas 72.24 326** *eP* **P 20 03 06.7 +0.3**
ISAL IAmb IAmb 20 03 08.0
comp=Z,622nm,1.1s
**DRO Drossia 72.24 308** P **P 20 03 05.4 -1.4**
**EVR Evrytania 72.25 309** P **P 20 03 05.8 -1.2**
**EVR Evrytania 72.25 309** *eP* **P 20 03 05.8 -1.2**
**DEV Deva 72.32 316**⇑ *iP* **P 20 03 07.8 +0.8**
**GZR Gura Zlata 72.33 315**⇑ *iP* **P 20 03 06.8 -0.5**
**KSD Kokstad 72.39 235** *eP* **P 20 03 08.4 +0.5**
KSD AMB AMB 20 03 10.0
comp=Z,76nm,1.1s
**KZN Kozani 72.43 310** *eP* **P 20 03 06.0 -1.9**
**KZN Kozani 72.43 310** P **P 20 03 06.0 -1.9**
**KZN Kozani 72.43 310** *eP* **P 20 03 06.0 -1.9**
**RLS Riolos of Patr 72.44 308** P **P 20 03 07.6 -0.3**
**RLS Riolos of Patr 72.44 308** *eP* **P 20 03 07.6 -0.3**
**AXS Araxos 72.53 308** P **P 20 03 08.2 -0.2**
**DRGR 72.59 317**⇑ *iP* **P 20 03 09.1 +0.4**
**VSU Vasula 72.67 329***c iP* **P 20 03 08.8 0.0**
VSU pmax pmax
comp=Z,788nm,1.0s
**LVZ Lovozero 72.68 340***ceP* **P 20 03 08.8 0.0**
LVZ pmax pmax
comp=Z,171nm,1.4s
**LVZ Lovozero 72.68 340** P **P 20 03 09.2 +0.4**
comp=Z,719nm,0.7s,SNR=19
**LVZ Lovozero 72.68 340** *eP* **P 20 03 09.3 +0.4**
comp=Z,84nm,0.7s
**PDO Prodromos 72.71 308** P **P 20 03 07.6 -1.9**
**SKO Skopje 72.86 312** *eP* **P 20 03 09.9 -0.4**

TRPA **Tarpa** 72.91 318⇑ *i*P P 20 03 11.2 +0.7
TRPA **Tarpa** 72.91 318⇓ *e*P P 20 03 10.8 +0.3
APA **Apatity** 72.97 339⇓ *i*P P 20 03 10.8 +0.4
APA *i* S S 20 12 27.0 -3.0
APA *i* 20 13 06.0
APA pmax pmax
comp=Z,140nm,1.0s
APA MLR MLR
comp=Z,1µm,13.0s
NEST **Nestorio** 72.99 310 P P 20 03 09.6 -1.7
PRYS **Parys** 72.99 239 *e*P P 20 03 12.5 +1.0
PRYS AMB AMB 20 03 13.1
comp=Z,100nm,1.4s
KWP **Kalwaria Pacla** 73.05 320 *e*P P 20 03 11.5 +0.2
KWP **Kalwaria Pacla** 73.05 320 *e*P P 20 03 11.6 +0.2
JAN **Janina** 73.07 309 *e*P P 20 03 11.0 -0.7
JAN **Janina** 73.07 309 P P 20 03 11.0 -0.7
JAN **Janina** 73.07 309 *e*P P 20 03 11.0 -0.7
KSR **Koster** 73.08 241 *e*P P 20 03 13.4 +1.2
LKD2 **Lefkada island** 73.14 308 P P 20 03 10.5 -1.6
LKD2 **Lefkada island** 73.14 308 *e*P P 20 03 10.5 -1.6
UZH **Uzhgorod** 73.15 319⇓ *i*P P 20 03 11.4 -0.5
UZH *e* 20 03 28.9
BZS **Buzias** 73.17 316⇑ *i*P P 20 03 12.2 +0.1
SEK **Senekal** 73.17 238 *e*P P 20 03 12.8 +0.2
SEK AMB AMB 20 03 14.7
comp=Z,372nm,1.1s
KOLS **Kolonicke sedl** 73.21 319 *e*P P 20 03 13.0 +0.7
KOLS pmax pmax
comp=Z,64nm,1.2s
KOLS **Kolonicke sedl** 73.21 319 *e*P P 20 03 13.0 +0.7
KOLS *e*PCP PcP 20 03 28.3 -0.1
SIRR **Siria** 73.23 316⇓ *i*P P 20 03 12.8 +0.3
OHR **Ohrid** 73.24 311 *i* P P 20 03 11.5 -1.2
BFSD **Buffelsfontein** 73.46 240 *e*P P 20 03 14.6 +0.2
BANR **Banloc** 73.48 315⇓ *i*P P 20 03 14.8 +0.9
SUW **Suwalki** 73.56 324 *e*P P 20 03 13.6 -0.6
SUW **Suwalki** 73.56 324 *e*P P 20 03 13.7 -0.5
FINES **FINESS Array B** 73.81 332 P P 20 03 15.5 0.0
comp=Z,118nm,0.6s,baz=105,slow=5.7,SNR=572
FINES **FINESS Array B** 73.81 332 P P 20 03 15.5 0.0
FINES pmax pmax
comp=Z,118nm,0.6s
CASY **Casey** 73.82 173 *e*P P 20 03 15.9 +0.5
comp=Z,51nm,0.9s
STHS **Stebnicka Huta** 73.95 319 *e*P P 20 03 17.3 +0.6
STHS pmax pmax
comp=Z,50nm,1.2s
STHS **Stebnicka Huta** 73.95 319 *e*P P 20 03 17.3 +0.6
STHS *e*PCP PcP 20 03 30.4 -1.2
LBTB **Lobatse** 73.98 242 *e*P P 20 03 16.9 -0.4
LBTB AMB AMB 20 03 19.4
comp=Z,94nm,1.1s
LBTB **Lobatse** 73.98 242 *e*P P 20 03 18.6 +1.3
LBTB pmax pmax
comp=Z,109nm,1.0s
LBTB **Lobatse** 73.98 242 *e*P P 20 03 18.6 +1.3
comp=Z,109nm,1.0s
PVY **Plav** 74.01 312 *e*P P 20 03 15.9 -1.4
IVA **Berane** 74.09 313⇑ *i*P P 20 03 16.2 -1.5
DIVS **Divibare** 74.14 314⇑ *i*P P 20 03 17.3 -0.6
DIVS **Divibare** 74.14 314 P P 20 03 15.9 -2.0
PLE **Pljevlja** 74.50 313 *e*P P 20 03 19.6 -0.5
TTG **Podgorica** 74.52 312⇑ *i*P P 20 03 18.9 -1.1
PKSN **Nyarlorinc** 74.54 317⇑ *e*P P 20 03 20.5 +0.5
DRME **Dracevica, Mon** 74.55 312⇑ *i*P P 20 03 19.0 -1.2
NIE **Niedzica** 74.56 319 *e*P P 20 03 20.8 +0.6
NIE **Niedzica** 74.56 319 *e*P P 20 03 20.8 +0.6
BEL **Belsk** 74.60 322 *e*P P 20 03 20.6 +0.3
BEL **Belsk** 74.60 322 *e*P P 20 03 20.7 +0.4
PSZ **Piszkesteto** 74.64 318 *e*P P 20 03 20.8 +0.1
PSZ pmax pmax
comp=Z,114nm,1.3s
PSZ **Piszkesteto** 74.64 318⇑ *i*P P 20 03 20.9 +0.2
PSZ **Piszkesteto** 74.64 318⇑ *e*P P 20 03 20.8 +0.1
PSZ **Piszkesteto** 74.64 318 *e*P P 20 03 20.8 +0.1
comp=Z,114nm,1.3s
PKS6 **Bocsa** 74.71 316⇓ *e*P P 20 03 21.6 +0.6
NKY **Niksic** 74.74 312⇑ *i*P P 20 03 20.6 -0.9
NKME **Niksic** 74.77 312⇑ *i*P P 20 03 20.7 -0.9
BUM **Brajici-Budva** 74.77 312⇑ *i*P P 20 03 20.3 -1.3
SWZ **Schweizer** 74.79 240 *e*P P 20 03 21.6 -0.5
UPM **Unac-Piva** 74.84 313⇑ *i*P P 20 03 21.2 -0.9
OJC **Ojcow** 74.99 320 *e*P P 20 03 22.9 +0.3
OJC **Ojcow** 74.99 320 *e*P P 20 03 22.3 -0.3
OJC pmax pmax
comp=Z,199nm,1.0s
OJC **Ojcow** 74.99 320 *e*P P 20 03 22.3 -0.3
comp=Z,198nm,1.0s
PKS7 **Kunszentmiklos** 75.03 317⇓ *e*P P 20 03 23.4 +0.5
LANS **Liptovska Anna** 75.07 319 *e*P P 20 03 23.8 +0.6
LANS *e* 20 03 34.5
LANS **Liptovska Anna** 75.07 319 *e*P P 20 03 23.8 +0.6
LANS *e*PCP PcP 20 03 34.5 -1.9
HCY **Herceg Novi** 75.08 312 *e*P P 20 03 22.0 -1.3
BRY **Bratogost** 75.08 312⇑ *i*P P 20 03 22.7 -0.8
BUD **Budapest** 75.17 317⇑ *e*P P 20 03 23.6 -0.1
BOSA **Boshof** 75.25 238 *e*P P 20 03 25.7 +1.1
BOSA AMB AMB 20 03 26.4
comp=Z,124nm,1.0s
BOSA **Boshof** 75.25 238 P P 20 03 25.8 +1.1
comp=Z,109nm,1.0s,baz=80,slow=5.1,SNR=127
BOSA LR LR 20 32 18.9
comp=Z,217nm,19.3s,baz=195,slow=32
BOSA **Boshof** 75.25 238 P P 20 03 25.8 +1.1
BOSA pmax pmax
comp=Z,109nm,1.0s
BOSA MLR MLR
comp=Z,217nm,19.3s
BOSA **Boshof** 75.25 238 P P 20 03 25.7 +1.1
baz=75,SNR=67
KLNR **Kaliningrad** 75.37 325 *e*P P 20 03 25.0 +0.3
VYHS **Vyhne** 75.41 318 *e*P P 20 03 25.0 -0.1
VYHS pmax pmax
comp=Z,52nm,1.3s
VYHS **Vyhne** 75.41 318 *e*P P 20 03 25.0 -0.1
GRM **Grahamstown** 75.61 233 *e*P P 20 03 26.6 0.0
HVD **Gariep Dam** 75.62 236 *e*P P 20 03 27.8 +1.0
HVD AMB AMB 20 03 29.1
comp=Z,276nm,1.2s
PKST **T''s** 75.82 317⇑ *e*P P 20 03 27.6 +0.1
RAC **Raciborz** 76.00 320 *e*P P 20 03 28.6 +0.2
OKC **Ostrava-Krasne** 76.00 320⇑ *i*P P 20 03 29.1 +0.7
OKC *e* 20 03 37.2
OKC **Ostrava-Krasne** 76.00 320⇑ *i*P P 20 03 29.1 +0.7
OKC *e*PCP PcP 20 03 37.2 -3.2
DZM **Mont Dzumac** 76.08 115 *e*P P 20 03 29.9 +0.4
comp=Z,89nm,1.0s
SOE **Somerset East** 76.19 234 *e*P P 20 03 30.4 +0.6
TIP **Timpagrande** 76.20 309 P P 20 03 24.4 -5.4
TIP **Timpagrande** 76.20 309 P P 20 03 24.4 -5.4
SMOL **Smolenice** 76.34 318 *e*P P 20 03 30.8 +0.4
SMOL *e* 20 03 43.1
SMOL **Smolenice** 76.34 318 *e*P P 20 03 30.8 +0.4
SMOL *e*PCP PcP 20 03 43.1 +1.2
ARA0 **ARCESS Array S** 76.39 340 *e*P P 20 03 30.8 +0.6
ARCES **ARCESS Array B** 76.39 340 P P 20 03 30.8 +0.6
comp=Z,39nm,0.5s,baz=91,slow=5.3,SNR=256
ARCES LR LR 20 39 39.2
comp=Z,418nm,21.2s,baz=112,slow=38
ARCES **ARCESS Array B** 76.39 340 P P 20 03 30.8 +0.6
ARCES pmax pmax
comp=Z,39nm,0.5s
ARCES MLR MLR
comp=Z,418nm,21.2s
ARE0 **ARCESS Array S** 76.39 340 *e*P P 20 03 30.9 +0.7
ARE0 IAmb IAmb 20 03 31.9
comp=Z,368nm,1.4s
MORC **Moravsky Berou** 76.39 319 *e*P P 20 03 31.2 +0.6
MORC pmax pmax
comp=Z,771nm,1.2s
MORC **Moravsky Berou** 76.39 319⇑ *i*P P 20 03 31.3 +0.6
MORC **Moravsky Berou** 76.39 319 *e*P P 20 03 31.2 +0.6
comp=Z,771nm,1.2s
BEHE **Becsehely** 76.61 316⇑ *e*P P 20 03 32.7 +0.8
SOP **Sopron** 76.85 317⇑ *e*P P 20 03 33.6 +0.3
KRLC **Kraliky** 76.91 320⇑ *i*P P 20 03 34.3 +0.7
KRLC *e* 20 03 44.2
KRLC **Kraliky** 76.91 320⇑ *i*P P 20 03 34.3 +0.7
KRLC *e*PCP PcP 20 03 44.2 -0.1
GKP **Gorka Klasztor** 76.94 323 *e*P P 20 03 33.4 -0.1
GKP **Gorka Klasztor** 76.94 323 *e*P P 20 03 33.5 -0.1
CUC **Castrocucco** 76.96 309 *e*P P 20 03 33.9 -0.2
comp=Z,35nm,1.2s
VRAC **Vranov** 76.96 319⇓ *i*P P 20 03 34.6 +0.7
BILL **Bilibino** 76.99 22⇑ *i*P P 20 03 33.0 -0.6
BILL *i* 20 03 48.7
BILL pmax pmax
comp=Z,60nm,1.7s
BILL **Bilibino** 76.99 22 *e*P P 20 03 33.6 0.0
comp=Z,25nm,0.8s
KTK1 **Kautokeino** 77.01 340 *e*P P 20 03 34.0 +0.3
KTK1 IAmb IAmb 20 03 35.1
comp=Z,125nm,0.8s
DPC **Dobruska-Polom** 77.22 320⇑ *i*P P 20 03 36.4 +1.1
DPC *e*S S 20 13 13.0 -5.0
DPC **Dobruska-Polom** 77.22 320⇑ *i*P P 20 03 36.4 +1.1
DPC *e*S S 20 13 13.0 -5.0
BUFB **Buffelsbos** 77.27 233 *e*P P 20 03 37.2 +1.4
BUFB AMB AMB 20 03 38.6
comp=Z,96nm,1.2s
KSP **Ksiaz** 77.28 321 *e*P P 20 03 36.4 +0.8
KSP **Ksiaz** 77.28 321 *e*P P 20 03 36.5 +0.8
HAMF **Hammerfest** 77.30 341 *e*P P 20 03 36.1 +0.8
HAMF IAmb IAmb 20 03 36.9
comp=Z,256nm,1.2s
CONA **Conrad Observa** 77.34 317⇑ *i*P P 20 03 36.2 +0.1
comp=Z,67nm,1.1s,SNR=36
UPC **Upice** 77.43 320⇑ *i*P P 20 03 37.2 +0.7
UPC **Upice** 77.43 320⇑ *i*P P 20 03 37.2 +0.7
ARSA **Arzberg** 77.52 317⇑ *i*P P 20 03 37.6 +0.5
comp=Z,134nm,1.2s,SNR=60
MAW **Mawson** 77.53 192 P P 20 03 38.1 +1.6
comp=Z,36nm,1.0s,baz=24,slow=6.3,SNR=72
MAW **Mawson** 77.53 192 *e*P P 20 03 37.9 +1.4
MAW pmax pmax
comp=Z,15nm,1.2s
MAW **Mawson** 77.53 192 P P 20 03 38.0 +1.4
baz=78,SNR=27
MAW **Mawson** 77.53 192 *e*P P 20 03 37.9 +1.4
comp=Z,15nm,1.2s
SOKA **Soboth** 77.83 316⇑ *i*P P 20 03 39.2 +0.4
comp=Z,221nm,1.1s,SNR=106
OBKA **Obir** 78.15 316⇑ *i*P P 20 03 41.1 +0.4
comp=Z,180nm,1.4s,SNR=35
GOPC **GO Pecny, Ondr** 78.18 319⇑ *i*P P 20 03 41.4 +0.8
GOPC *e*S S 20 13 25.2 -3.0
GOPC **GO Pecny, Ondr** 78.18 319⇑ *i*P P 20 03 41.4 +0.8
GOPC *e*S S 20 13 25.2 -3.0
PRU **Pruhonice** 78.34 320⇑ *i*P P 20 03 42.0 +0.5
PRU *e* 20 03 52.0
PRU *e*S S 20 13 24.0 -5.9
PRU **Pruhonice** 78.34 320⇑ *i*P P 20 03 42.0 +0.5
PRU *e*PCP PcP 20 03 52.0 +1.5
PRU *e*S S 20 13 24.0 -5.9
PVCC **Panska Ves** 78.35 320⇑ *i*P P 20 03 42.3 +0.7
PVCC **Panska Ves** 78.35 320⇑ *i*P P 20 03 42.3 +0.7
MOA **Molln** 78.41 317⇑ *i*P P 20 03 41.9 0.0
comp=Z,88nm,1.1s,SNR=46
PRA **Prague** 78.41 320 *e*P P 20 03 42.4 +0.5
PRA **Prague** 78.41 320⇑ *e*P P 20 03 42.4 +0.5
BSD **Bornholm Skovb** 78.47 325⇑ *i*P P 20 03 41.6 -0.5
BSD pmax pmax
comp=Z,98nm,0.8s
BSD **Bornholm Skovb** 78.47 325⇑ *i*P P 20 03 41.6 -0.5
comp=Z,98nm,0.8s
UPI **Upington** 78.59 239 *e*P P 20 03 43.8 +0.4
UPI AMB AMB 20 03 45.4
comp=Z,39nm,1.2s
TRO **Tromso** 78.64 340 *e*P P 20 03 43.3 +0.6
TRO IAML 20 03 44.4
comp=Z,31nm,0.6s
TRI **Trieste** 78.67 315 *e*P P 20 03 43.2 -0.2
TRI pmax pmax
comp=Z,58nm,0.8s
TRI **Trieste** 78.67 315 *e*P P 20 03 43.2 -0.2
comp=Z,58nm,0.8s
BRG **Berggiesshubel** 78.77 320⇑ *i*P P 20 03 44.4 +0.5
comp=Z,97nm,1.0s
BRG *e* 20 04 06.1
comp=Z,23nm,1.1s
BRG **Berggiesshubel** 78.77 320⇑ *i*P P 20 03 44.4 +0.5
BRG *e* 20 04 06.1
BRG pmax pmax
comp=Z,97nm,1.0s
BRG **Berggiesshubel** 78.77 320 *e*P P 20 03 44.5 +0.7
comp=Z,98nm,1.0s,baz=91,slow=5.3
MYKA **Terra Mystica** 78.78 316 *i* P P 20 03 44.3 +0.2
comp=Z,83nm,1.4s,SNR=25
GEC2 **GERESS Array S** 78.83 318 *e*P P 20 03 44.8 +0.4
GEC2 **GERESS Array S** 78.83 318 *e*P P 20 03 45.0 +0.6
comp=Z,206nm,1.0s,baz=91,slow=5.3
GEC2 **GERESS Array S** 78.83 318 *e*P P 20 03 44.8 +0.4
GERES **GERESS Array B** 78.83 318 P P 20 03 44.8 +0.4
comp=Z,98nm,0.8s,baz=90,slow=5.3,SNR=646
GERES **GERESS Array B** 78.83 318 P P 20 03 44.8 +0.4
GERES pmax pmax
comp=Z,98nm,0.8s
KHC **Kasperske Hory** 78.92 319 *e*P P 20 03 44.9 +0.1
KHC pmax pmax
comp=Z,27nm,0.9s
KHC **Kasperske Hory** 78.92 319⇑ *i*P P 20 03 45.6 +0.8
KHC *e*PCP PcP 20 03 53.6 +0.5
KHC *e*pP pP 20 04 12.0 +4.0
KHC *e*S S 20 13 32.4 -3.8
KHC *ex* x 20 14 08.1
KHC **Kasperske Hory** 78.92 319 *e*P P 20 03 44.9 +0.1
comp=Z,27nm,0.9s
CLTB **Caltabellotta** 78.95 307 *e*P P 20 03 45.5 +0.3
comp=Z,98nm,1.5s
RUE **Ruedersdorf** 78.96 322 *e*P P 20 03 45.5 +0.7
comp=Z,291nm,0.9s,baz=91,slow=5.3
KBA **Koelnbreinsper** 79.00 317⇑ *i*P P 20 03 45.0 -0.5
comp=Z,106nm,1.3s,SNR=38
FBE **Freiberg** 79.15 320 *e*P P 20 03 46.9 +1.0
comp=Z,167nm,0.9s,baz=91,slow=5.3
WET **Wettzell** 79.38 319 *e*P P 20 03 47.9 +0.7
comp=Z,128nm,1.0s,baz=91,slow=5.3
CLL **Collm** 79.38 321⇑ *i*P P 20 03 47.4 +0.2
CLL *e*S S 20 13 34.0 -6.9
CLL pmax pmax
comp=Z,77nm,1.0s
CLL MLR MLR
comp=Z,500nm,18.0s
CLL **Collm** 79.38 321 *e*P P 20 03 47.4 +0.2
comp=Z,76nm,1.0s,baz=91,slow=5.3
CLL **Collm** 79.38 321⇑ *i*P P 20 03 47.4 +0.2
comp=Z,77nm,1.0s
CLL *e*S S 20 13 40.0 -0.9
CLL *e*PS PnS 20 14 39.0 +3.4
CLL *e*SS SS 20 18 48.0 -1.7
CLL *e* 20 23 42.0
CLL *e* 20 26 00.0
CLL Lm MLR 20 42 00.0
comp=Z,500nm,18.0s
CLL **Collm** 79.38 321 *e*P P 20 03 46.5 -0.7
comp=Z,72nm,0.9s
RJOB **Jochberg** 79.39 317 *e*P P 20 03 47.3 -0.1
comp=Z,113nm,1.1s,baz=91,slow=5.3
ABTA **Abfaltersbach** 79.56 316⇑ *i*P P 20 03 47.9 -0.5
comp=Z,103nm,1.2s,SNR=38
STEI **Steigen** 79.69 338 *e*P P 20 03 49.1 +0.7
STEI IAmb IAmb 20 03 49.6
comp=Z,166nm,1.1s
TANN **Tannenbergstha** 79.69 320 *e*P P 20 03 49.4 +0.4
comp=Z,79nm,1.4s,baz=91,slow=5.3
WERN **Wernitzgruen** 79.74 320 *e*P P 20 03 49.9 +0.7
comp=Z,56nm,1.0s,baz=91,slow=5.3
GUNZ **Gunzen** 79.78 320 *e*P P 20 03 50.0 +0.6
comp=Z,82nm,1.1s,baz=91,slow=5.3
MOR8 **Moi Rana** 79.79 336 *e*P P 20 03 48.5 -0.6
MOR8 IAmb IAmb 20 03 49.6
comp=Z,57nm,0.9s
MOR8 *e*pP pP 20 04 10.5 -1.8
WERD **Werda** 79.79 320 *e*P P 20 03 49.9 +0.4
comp=Z,65nm,0.9s,baz=91,slow=5.3
ROTZ **Rotzenmuhle** 79.84 319 *e*P P 20 03 50.8 +1.1
comp=Z,114nm,1.0s,baz=91,slow=5.3
PLN **Plauen** 79.89 320 *e*P P 20 03 50.4 +0.4
comp=Z,50nm,0.9s,baz=91,slow=5.3
MANZ **Manzenberg** 79.91 319 *e*P P 20 03 51.1 +1.0
comp=Z,180nm,1.2s,baz=91,slow=5.3
TSUM **Tsumeb** 79.91 249 *e*P P 20 03 52.5 +1.7
comp=Z,56nm,1.0s
COP **Copenhagen** 79.92 325⇑ *i*P P 20 03 50.3 +0.3
COP pmax pmax
comp=Z,59nm,0.9s
COP **Copenhagen** 79.92 325⇑ *i*P P 20 03 50.3 +0.3
comp=Z,59nm,0.9s
SUR **Sutherland** 79.95 236 P P 20 03 53.5 +2.6
comp=Z,1µm,0.9s,SNR=13
SUR **Sutherland** 79.95 236 P P 20 03 53.1 +2.3
SNR=5.1
SUR **Sutherland** 79.95 236 *e*P P 20 03 52.9 +2.1
comp=Z,125nm,0.9s
NEUB **Neuenburg** 80.15 321 *e*P P 20 03 51.7 +0.4
comp=Z,123nm,0.9s,baz=91,slow=5.3
WATA **Walderalm** 80.21 317⇑ *i*P P 20 03 51.3 -0.6
comp=Z,55nm,0.7s,SNR=36
MOX **Moxa** 80.24 320 *e*P P 20 03 52.3 +0.4
comp=Z,107nm,1.5s,baz=91,slow=5.3
LOF **Lofoten** 80.35 338 *e*P P 20 03 52.6 +0.6
FUR **Furstenfeldbru** 80.42 318 *e*P P 20 03 53.0 +0.1
comp=Z,117nm,1.0s,baz=91,slow=5.3
GRF **Grafenberg Arr** 80.48 319 *e*P P 20 03 54.0 +0.8
baz=91,slow=5.3
GRFO **Grafenberg** 80.48 319 *e*P P 20 03 53.2 +0.1
GRFO pmax pmax
comp=Z,132nm,1.0s
GRFO **Grafenberg** 80.48 319 *e*P P 20 03 53.1 +0.1
comp=Z,132nm,1.0s
MOTA **Moosalm** 80.53 317⇑ *i*P P 20 03 53.1 -0.6
comp=Z,137nm,0.9s,SNR=110
CVNA **Calvinia** 80.60 237 *e*P P 20 03 55.0 +0.7
NC602 **NORSAR Array S** 80.64 330 *e*P P 20 03 54.0 +0.2
NC602 IAmb IAmb 20 03 54.4
comp=Z,109nm,1.3s
NSS **Namsos** 80.67 334 *e*P P 20 03 54.4 +0.6
NSS IAmb IAmb 20 03 54.7
comp=Z,119nm,1.1s
NSS *e*pP pP 20 04 15.9 -1.2
RETA **Reutte** 80.77 317⇑ *i*P P 20 03 54.6 -0.2
comp=Z,145nm,0.7s,SNR=61
FETA **Feichten** 80.79 316⇑ *i*P P 20 03 55.0 -0.1
comp=Z,124nm,1.0s,SNR=55
NB2 **NORSAR Subarra** 80.82 331 P P 20 03 54.4 -0.4
comp=Z,115nm,1.2s,baz=97,slow=5.3
NB2 **NORSAR Subarra** 80.82 331 P P 20 03 54.4 -0.4
baz=97,slow=5.3
NOA **NORSAR Array B** 80.82 331 P P 20 03 54.2 -0.5
comp=Z,37nm,1.0s,baz=94,slow=5.4,SNR=49
NOA LR LR 20 44 00.9
comp=Z,162nm,18.1s,baz=100,slow=39
NOA **NORSAR Array B** 80.82 331 P P 20 03 54.3 -0.5
NOA pmax pmax
comp=Z,37nm,1.0s
NOA MLR MLR
comp=Z,162nm,18.1s
ASSE **Asse, Remlinge** 80.86 322 *e*P P 20 03 55.3 +0.3
comp=Z,96nm,1.1s,baz=91,slow=5.3
SPB1 **Spitsbergen Ar** 80.95 348 *e*P P 20 03 55.7 +0.5
SPB2 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.6 +0.5
SPA1 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.7 +0.5
SPA2 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.7 +0.5
SPA0 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.4 +0.3
SPA0 IAmb IAmb 20 03 56.3
comp=Z,334nm,1.2s
SPA0 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.7 +0.5
SPB5 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.7 +0.5
SPA3 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.4 +0.2
SPB3 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.6 +0.5
SPB4 **Spitsbergen Ar** 80.96 348 *e*P P 20 03 55.7 +0.5
NBO02 **NORSAR Array S** 80.99 331 *e*P P 20 03 55.4 -0.3
NBO02 *e*pP pP 20 04 16.9 -2.0
OSL **Oslo** 81.02 330 *e*P P 20 03 56.8 +1.1
CLZ **Clausthal** 81.04 321 *e*P P 20 03 56.5 +0.4
comp=Z,137nm,0.9s,baz=91,slow=5.3
VLC **Villacollemand** 81.05 314 *e*P P 20 03 58.3 +2.0
comp=Z,37nm,0.9s
BSEG **Bad Segeberg** 81.09 323 *e*P P 20 03 57.1 +0.8
comp=Z,181nm,0.9s,baz=91,slow=5.3
FUORN **Ofenpass-Fuorn** 81.11 316 *e*P P 20 03 57.3 +0.4
comp=Z,286nm,1.6s
FUORN *e*S S 20 14 03.9 +4.1
NRDL **Niedersach Rie** 81.21 322 *e*P P 20 03 57.8 +1.0
baz=91,slow=5.3
GTTG **Gvttingen** 81.29 321 *e*P P 20 03 57.8 +0.4
comp=Z,120nm,1.1s,baz=91,slow=5.3
DAVA **Damuels** 81.37 317 *i* P P 20 03 58.1 0.0
comp=Z,173nm,1.1s,SNR=50
CER **Ceres** 81.43 235 *e*P P 20 04 00.8 +2.2
CER AMB AMB 20 04 01.0
comp=Z,166nm,1.0s
KONO **Kongsberg** 81.58 329 *e*P P 20 03 59.3 +0.6
KONO **Kongsberg** 81.58 329 *e*P P 20 03 58.8 +0.1
KONO pmax pmax
comp=Z,141nm,1.4s
KONO **Kongsberg** 81.58 329 *e*P P 20 03 58.8 +0.1
comp=Z,141nm,1.4s
TUE **Stuetta** 81.74 316 *e*P P 20 04 00.3 +0.1
comp=Z,88nm,0.9s
MUD **Monsted U'grnd** 81.77 326 *i* P P 20 04 00.6 +0.8
MUD pmax pmax
comp=Z,63nm,1.0s
MUD **Monsted U'grnd** 81.77 326 *i* P P 20 04 00.6 +0.8
comp=Z,63nm,1.0s
STU **Stuttgart** 81.81 318 *e*P P 20 04 00.3 +0.1
STU pmax pmax
comp=Z,56nm,0.7s
STU **Stuttgart** 81.81 318 *e*P P 20 04 00.4 +0.3
comp=Z,61nm,0.8s,baz=91,slow=5.3
STU **Stuttgart** 81.81 318 *e*P P 20 04 00.3 +0.1
comp=Z,56nm,0.7s
VSL **Villasalto** 81.92 309 *e*P P 20 04 00.2 -0.8
comp=Z,96nm,1.0s
KBS **Kingsbay** 81.94 349 *e*P P 20 04 00.5 +0.2
KBS pmax pmax
comp=Z,107nm,1.0s
KBS **Kingsbay** 81.94 349 *e*P P 20 04 00.5 +0.2
comp=Z,107nm,1.0s
KEST **Kesra** 82.10 305 P P 20 04 03.0 +0.9
comp=Z,92nm,1.0s,baz=30,slow=1.1,SNR=70
KOMG **Komaggas** 82.13 239 *e*P P 20 04 02.6 +0.4
TNS **Taunus Mts** 82.27 320 *e*P P 20 04 03.0 +0.4
comp=Z,72nm,1.0s,baz=91,slow=5.3
BFO **Black Forest** 82.39 318 *e*P P 20 04 03.1 -0.2
BFO pmax pmax
comp=Z,77nm,0.9s
BFO **Black Forest** 82.39 318 P P 20 04 03.0 -0.2
comp=Z,494nm,0.8s,SNR=33
BFO **Black Forest** 82.39 318 *e*P P 20 04 03.1 -0.2
comp=Z,86nm,0.9s,baz=91,slow=5.3
BFO **Black Forest** 82.39 318 *e*P P 20 04 03.1 -0.2
comp=Z,77nm,0.9s
MOL **Molde** 82.59 332 *e*P P 20 04 05.2 +1.3
IBBN **Ibbenburen** 82.65 322 *e*P P 20 04 05.1 +0.6
comp=Z,155nm,0.9s,baz=91,slow=5.3
SNART **Snartemo** 82.82 328 *e*P P 20 04 04.6 -0.6
BUG **Bochum--Univer** 82.98 321 *e*P P 20 04 06.7 +0.6
comp=Z,120nm,1.1s,baz=91,slow=5.3
ODD1 **Odda** 83.08 330 *e*P P 20 04 06.6 0.0
ODD1 IAmb IAmb 20 04 07.9
comp=Z,70nm,1.4s
SENIN **Lac Senin/Sane** 83.16 316 *e*P P 20 04 07.7 +0.1
comp=Z,85nm,0.8s
BLS5 **Blasjo** 83.18 329 *e*P P 20 04 08.4 +1.3
BLS5 IAmb IAmb 20 04 08.7
comp=Z,99nm,1.0s
WTSB **Winterswijk** 83.25 322 *e*P P 20 04 07.7 +0.2
comp=Z,112nm,0.8s
HYA **Hoyanger** 83.26 331 *e*P P 20 04 08.1 +0.7
HYA IAmb IAmb 20 04 08.8
comp=Z,74nm,1.1s
ABSA **Djebel Ababsia** 83.58 306 P P 20 04 10.8 +1.0
CMAH **Djebel Manchou** 83.61 306 P P 20 04 10.8 +0.9
BNI **Bardonecchia** 83.67 315 *e*P P 20 04 09.7 -0.4
BNI pmax pmax
comp=Z,81nm,0.9s
BNI **Bardonecchia** 83.67 315 *e*P P 20 04 09.7 -0.4
comp=Z,81nm,0.9s
RUND **Rundenannen** 83.69 330 *e*P P 20 04 10.3 +0.6
WLF **Walferdange** 83.77 319 P P 20 04 11.4 +1.1
comp=Z,68nm,1.6s
WLF **Walferdange** 83.77 319 *e*P P 20 04 11.4 +1.1
WLF pmax pmax
comp=Z,90nm,1.1s
WLF **Walferdange** 83.77 319 *e*P P 20 04 11.1 +0.8
comp=Z,107nm,1.1s,baz=91,slow=5.3
WLF **Walferdange** 83.77 319 *e*P P 20 04 11.4 +1.1
comp=Z,90nm,1.1s
ASK **Askoy** 83.77 330 *e*P P 20 04 11.0 +1.0
KMY **Karmoy** 83.81 329 *e*P P 20 04 10.7 +0.4
KMY IAmb IAmb 20 04 11.7
comp=Z,117nm,1.3s

**MEM Membach** 83.81 320 P P 20 04 10.7 +0.2
comp=Z,34nm,1.2s
**HGN Heimansgroeve** 83.85 320 *e*P P 20 04 10.6 0.0
comp=Z,51nm,1.3s
HGN *e*S S 20 14 09.6 -17
**BEBN Eben Emael** 84.01 320 P P 20 04 12.1 +0.6
**CAEH 'Ain El Ouahch** 84.06 306 P P 20 04 12.2 +0.1
**CKFL Kef-Lekhel** 84.19 306 P P 20 04 13.6 +0.7
**BCLA Clavier** 84.27 320 P P 20 04 12.6 -0.2
comp=Z,26nm,1.3s
**CASM Ain Smara** 84.38 306 P P 20 04 14.6 +0.8
**SYO Syowa Base** 84.45 197⇑ *e*P P 20 04 11.8 -1.5
**SYO Syowa Base** 84.45 197‖ *i*PcP P 20 04 13.2 -0.1
**SYO Syowa Base** 84.45 197⇑ *i*pP pP 20 04 35.4 -1.3
**CTEI Djebel Teioual** 84.46 306 P P 20 04 15.6 +1.3
**DOU Dourbes** 84.75 320 P P 20 04 15.2 0.0
comp=Z,26nm,1.3s
**DFRA Djebel Bou Aff** 84.85 306 P P 20 04 17.4 +1.1
**SNF Seneffe** 84.92 320 P P 20 04 16.3 +0.2
SNF AP pP 20 04 38.7 -0.8
**SSB Saint Sauveur** 85.16 315 *e*P P 20 04 17.7 +0.2
SSB pmax pmax
comp=Z,73nm,0.8s
**SSB Saint Sauveur** 85.16 315 *e*P P 20 04 17.7 +0.2
comp=Z,73nm,0.8s
**CKHR Kef el Ahmar** 85.19 306 P P 20 04 18.5 +0.5
**SET Setif** 85.26 306 P P 20 04 21.0 +2.7
**OXZ Oxford** 85.68 134 *e*P P 20 04 19.7 -0.3
comp=Z,69nm,0.9s
**MSVF Nonsavu** 86.00 108 *e*P P 20 04 23.2 +1.0
MSVF pmax pmax
comp=Z,54nm,1.0s
**MSVF Nonsavu** 86.00 108 P P 20 04 23.2 +1.0
comp=Z,302nm,1.1s,SNR=13
**MSVF Nonsavu** 86.00 108 *e*P P 20 04 23.2 +1.0
comp=Z,54nm,1.0s
**TAM Tamanrasset** 86.41 292 *e*P P 20 04 26.0 +1.7
TAM pmax pmax
comp=Z,82nm,1.1s
**TAM Tamanrasset** 86.41 292 *e*P P 20 04 26.0 +1.7
comp=Z,82nm,1.1s
**ELSH Elham, Standar** 86.84 321 *e*P P 20 04 25.7 +0.1
ELSH AMB AMB 20 04 27.0
comp=Z,266nm,1.0s
**YEL1 Yell** 86.86 330 *e*P P 20 04 26.2 +0.7
**WAL1 Walls** 87.16 330⇑ *e*P P 20 04 28.1 +1.2
**EMHD Djebel Mahouad** 87.23 306 P P 20 04 30.0 +2.0
**LCP Cassop** 87.92 325⇑ *e*P P 20 04 31.1 +0.5
**BKZ Black Stump Fm** 88.12 130 *e*P P 20 04 31.1 -0.9
comp=Z,86nm,0.4s
**CWF Charnwood Fore** 88.12 323⇑ *e*P P 20 04 31.5 -0.2
CWF AMB AMB 20 04 32.5
comp=Z,50nm,1.1s
**CWF Charnwood Fore** 88.12 323 *e*P P 20 04 32.2 +0.5
comp=Z,78nm,1.3s
**HPK Haverah Park** 88.12 324⇑ *e*P P 20 04 32.0 +0.4
HPK AMB AMB 20 04 33.4
comp=Z,106nm,1.3s
**BFZ Birch Farm** 88.20 131 *e*P P 20 04 31.9 -0.4
comp=Z,86nm,1.0s
**WOL Wolverton** 88.29 321 *e*P P 20 04 33.2 +0.7
WOL AMB AMB 20 04 33.8
comp=Z,140nm,1.0s
**LHO Holmfirth** 88.33 324⇑ *e*P P 20 04 33.0 +0.3
**EBNR Beni Rached** 88.37 306 P P 20 04 35.3 +2.0
**ESY Stoneypath** 88.37 326⇑ *e*P P 20 04 32.8 0.0
**MCD Coleburn Disti** 88.44 326⇑ *e*P P 20 04 33.5 +0.4
**URZ Urewera** 88.44 129 *e*P P 20 04 31.9 -1.5
comp=Z,45nm,0.9s
**ECHA Ech Chlef** 88.52 306 P P 20 04 36.0 +2.1
**DAG Danmarks Havn** 88.60 348 *i* P P 20 04 32.7 -0.8
DAG pmax pmax
comp=Z,29nm,0.9s
**DAG Danmarks Havn** 88.60 348 *i* P P 20 04 32.7 -0.8
comp=Z,35nm,0.9s
**SWN1 Swindon** 88.61 322 *e*P P 20 04 34.1 +0.1
SWN1 AMB AMB 20 04 35.7
comp=Z,129nm,1.7s
**BIGH Upper Bighouse** 88.62 329 *e*P P 20 04 34.7 +0.8
**ETRT Tiaret** 88.66 305 P P 20 04 37.1 +2.3
**EDI Edinburgh** 88.69 326 *e*P P 20 04 34.7 +0.4
EDI AMB AMB 20 04 35.4
comp=Z,57nm,1.4s
**EANR 'Ain N'Sour** 88.75 306 P P 20 04 36.8 +1.7
**ECK Cauldkaine Hil** 88.79 325⇑ *e*P P 20 04 34.7 -0.1
**STRD Stroud** 88.79 322 *e*P P 20 04 35.0 +0.1
STRD AMB AMB 20 04 35.8
comp=Z,88nm,1.2s
**ESK Eskdalemuir** 88.81 325⇑ *e*P P 20 04 34.9 0.0
ESK AMB AMB 20 04 36.0
comp=Z,46nm,1.1s
**ESK Eskdalemuir** 88.81 325 *e*P P 20 04 35.7 +0.9
ESK pmax pmax
comp=Z,54nm,1.0s
**ESK Eskdalemuir** 88.81 325 P P 20 04 35.8 +0.9
comp=Z,263nm,0.9s,SNR=6.2
**ESK Eskdalemuir** 88.81 325 *e*P P 20 04 35.7 +0.9
comp=Z,54nm,1.0s
**BHH Howats Hill** 88.85 325⇑ *e*P P 20 04 35.5 +0.4
**MDO Dochfour** 89.05 328⇑ *e*P P 20 04 36.2 +0.3
**BWH Wardlaw** 89.09 325⇑ *e*P P 20 04 36.4 +0.2
**HLM1 Long Mynd** 89.11 323⇑ *e*P P 20 04 36.2 -0.1
HLM1 AMB AMB 20 04 37.5
comp=Z,53nm,1.2s
**MONM Monmouth** 89.18 322 *e*P P 20 04 36.5 -0.1
MONM AMB AMB 20 04 39.7
comp=Z,49nm,1.3s
**JSA Saint Aubin** 89.22 319 *e*P P 20 04 36.6 -0.3
JSA AMB AMB 20 04 38.3
comp=Z,73nm,1.1s
**FOEL Foel Wylfa** 89.23 323⇑ *e*P P 20 04 37.4 +0.5
FOEL AMB AMB 20 04 38.2
comp=Z,57nm,1.1s
**MCH1 Michaelchurch** 89.27 322⇑ *e*P P 20 04 36.6 -0.4
MCH1 AMB AMB 20 04 38.4
comp=Z,24nm,0.9s
**EAB Aberfoyle** 89.28 326⇑ *e*P P 20 04 37.6 +0.6
**KAC Achnashellach** 89.53 328 *e*P P 20 04 38.4 +0.1
**WPM1 Penmaenmawr** 89.58 324⇑ *e*P P 20 04 39.0 +0.4
**RRR Rubha Reidh** 89.73 328 *e*P P 20 04 39.6 +0.6
**GAL1 Galloway** 89.74 325⇑ *e*P P 20 04 39.1 -0.1
**KPL Plockton** 89.75 328⇑ *e*P P 20 04 39.6 +0.4
**YLL Llanberis** 89.76 323 *e*P P 20 04 39.7 +0.3
**WME Myndd Eilian** 89.79 324⇑ *e*P P 20 04 40.0 +0.6
**WLF1 Llynfaes** 89.87 324 *e*P P 20 04 40.7 +0.9
WLF1 AMB AMB 20 04 41.8
comp=Z,59nm,1.7s
**LPW Lampeter** 89.89 322⇑ *e*P P 20 04 40.4 +0.3
**YRE Yr Eifl** 89.94 323 *e*P P 20 04 41.0 +0.8
**RRH Rhenigidale** 90.17 328⇑ *e*P P 20 04 41.6 +0.5
**ALE Alert** 90.20 357 P P 20 04 41.0 +0.1
comp=Z,607nm,0.9s,SNR=35
**TOA0 Torodi Ar. Sit** 91.13 283 *e*P P 20 04 45.9 -0.6
**TOA0 Torodi Ar. Sit** 91.13 283 P P 20 04 47.2 +0.6
baz=91,SNR=39
**TOA0 Torodi Ar. Sit** 91.13 283 *e*P P 20 04 47.0 +0.5
**TORD Torodi Ar. Bea** 91.13 283 P P 20 04 47.2 +0.7
comp=Z,23nm,0.7s,baz=88,slow=4.6,SNR=180
TORD PP PP 20 08 25.1 +0.7
comp=Z,2.1nm,1.0s,baz=104,slow=6.3,SNR=3.5
TORD PKKP PKKPbc 20 22 09.6 +0.5
comp=Z,1.9nm,0.5s,baz=304,slow=2.7,SNR=40
**RAO Raoul Island** 91.23 119 *e*P P 20 04 47.1 +0.4
**RAO Raoul Island** 91.23 119 *e*P P 20 04 47.1 +0.4
**VNDA Vanda** 91.81 168 P P 20 04 48.4 +0.1
comp=Z,7.1nm,1.0s,baz=294,slow=5.1,SNR=38
**VNDA Vanda** 91.81 168 P P 20 04 48.4 +0.1
VNDA pmax pmax
comp=Z,7.0nm,1.0s
**VNDA Vanda** 91.81 168 *e*P P 20 04 48.4 +0.1
comp=Z,76nm,2.1s
**ES19 SONSECA Array** 92.08 310 *e*P P 20 04 51.1 +0.5
**ESDC Sonseca Array** 92.14 310 P P 20 04 51.3 +0.5
comp=Z,25nm,0.8s,baz=59,slow=4.4,SNR=142
ESDC PKKP PKKPbc 20 22 07.2 -0.3
comp=Z,1.9nm,0.9s,baz=251,slow=2.3,SNR=8.8
**PAB San Pablo** 92.45 310 *e*P P 20 04 52.9 +0.6
PAB pmax pmax
comp=Z,45nm,1.0s
**PAB San Pablo** 92.45 310 *e*P P 20 04 52.9 +0.6
comp=Z,45nm,1.0s
**SBA Scott Base** 92.91 168 *e*P P 20 04 54.6 +1.2
SBA pmax pmax
comp=Z,19nm,0.9s
**SBA Scott Base** 92.91 168 *e*P P 20 04 54.5 +1.2
comp=Z,19nm,0.9s
**COLD Coldfoot** 93.30 21 *e*P P 20 04 56.4 +0.8
comp=Z,12nm,0.9s
**MVO Moncorvo** 94.13 312 *e*P P 20 05 00.7 +0.7
comp=Z,34nm,1.1s
**CAST Castle Rocks** 94.20 24 *e*P P 20 05 00.5 +0.8
comp=Z,51nm,0.8s
**BPAW Bear Paw Mtn.** 94.36 24 *e*P P 20 05 01.0 +0.5
comp=Z,88nm,1.3s
**PPLA Purkeypile** 94.37 25 *e*P P 20 05 01.2 +0.5
comp=Z,73nm,1.6s
**MTE Manteigas** 94.68 311 *e*P P 20 05 04.0 +1.5
comp=Z,40nm,1.6s
**MTE Manteigas** 94.68 311 *e*P P 20 05 03.6 +1.1
comp=Z,26nm,1.2s
**PCBR Castelo Branco** 94.76 311 *e*P P 20 05 00.5 -2.3
comp=Z,30nm,1.1s
**PMRV Marv??o** 94.78 310 *e*P P 20 05 03.4 +0.5
comp=Z,28nm,1.7s
**PBAR Barrancos** 94.79 309 *e*P P 20 05 03.6 +0.6
comp=Z,80nm,1.1s
**TRF Thorofare Moun** 94.92 24 *e*P P 20 05 04.1 +0.9
comp=Z,253nm,2.8s
**BWN Browne** 94.93 23 *e*PP PP 20 08 55.8 +3.1
**MDM Murphy Dome** 95.05 22 *e*P P 20 05 03.7 +0.1
comp=Z,23nm,1.2s
**SPU Mount Spurr** 95.13 26 *e*P P 20 05 03.8 -0.3
**COLA College** 95.23 22 P P 20 05 06.0 +1.7
COLA pmax pmax
comp=Z,10.0nm,1.2s
**SUMG Summit** 95.27 347 *i* P P 20 05 05.1 +0.2
SUMG pmax pmax
comp=Z,42nm,1.1s
**SUMG Summit** 95.27 347 *i* P P 20 05 05.1 +0.2
comp=Z,42nm,1.1s
**SUMG Summit** 95.27 347 *e*P P 20 05 05.0 +0.2
comp=Z,40nm,1.1s
**WRH Wood River Hil** 95.33 23 *e*P P 20 05 05.4 +0.6
comp=Z,103nm,2.4s
**MCK McKinley** 95.34 24 *e*P P 20 05 04.9 -0.1
MCK pmax pmax
comp=Z,16nm,0.9s
**MCK McKinley** 95.34 24 *e*P P 20 05 04.9 -0.1
comp=Z,16nm,0.9s
**FYU Fort Yukon** 95.34 20 *e*P P 20 05 06.0 +1.2
comp=Z,304nm,2.4s
**CCB Clear Creek Bu** 95.35 22 *e*P P 20 05 05.5 +0.6
comp=Z,60nm,2.3s
**EVO Evora** 95.45 310 *e*P P 20 05 06.8 +0.8
comp=Z,11nm,1.5s
**PBEJ Beja** 95.46 309 *e*P P 20 05 07.5 +1.5
comp=Z,13nm,1.4s
**PVAQ Vaqueiros** 95.48 309 *e*P P 20 05 06.4 +0.3
comp=Z,27nm,1.5s
**SUA Susitna One** 95.59 26 *e*P P 20 05 06.6 +0.4
comp=Z,36nm,1.0s
**IL1 Eielson Array** 95.64 22 *e*P P 20 05 04.5 -1.8
**ILAR Eielson Array** 95.64 22 P P 20 05 06.0 -0.3
comp=Z,3.2nm,0.5s,baz=288,slow=4.0,SNR=63
ILAR PP PP 20 09 00.6 +2.4
comp=Z,3.9nm,1.0s,baz=295,slow=8.5,SNR=5.8
**ILAR Eielson Array** 95.64 22 P P 20 05 06.0 -0.3
ILAR 20 09 00.6
ILAR pmax pmax
comp=Z,3.0nm,0.5s
ILAR pmax pmax
comp=Z,4.0nm,1.0s
**PCVE Castro Verde** 95.68 309 *e*P P 20 05 08.5 +1.5
comp=Z,20nm,2.0s
**PBDV Barranco-do-Ve** 95.68 308 *e*P P 20 05 08.0 +0.9
comp=Z,35nm,1.8s
**MESJ Messejana** 95.77 309 *e*P P 20 05 08.9 +1.5
comp=Z,17nm,2.0s
**PNCL Nicolau / Gran** 95.95 309 *e*P P 20 05 08.9 +0.7
comp=Z,15nm,1.4s
**RC01 Rabbit Creek A** 96.19 26 *e*P P 20 05 08.7 -0.1
comp=Z,60nm,1.1s
**PMR Palmer** 96.22 26 *e*P P 20 05 09.0 +0.1
PMR pmax pmax
comp=Z,32nm,1.1s
**PMR Palmer** 96.22 26 *e*P P 20 05 09.0 +0.1
comp=Z,32nm,1.1s
**KDAK Kodiak Island** 96.24 30 *i* P P 20 05 09.8 +0.7
**BRLK Bradley Lake** 96.24 28 *e*P P 20 05 08.7 -0.4
comp=Z,42nm,0.8s
**PFVI Vila Bisbo** 96.40 308 *e*P P 20 05 10.9 +0.6
comp=Z,31nm,1.6s
**SML Sawmill** 96.47 25 *e*P P 20 05 09.8 -0.4
SML pmax pmax
comp=Z,68nm,1.4s
**SML Sawmill** 96.47 25 *e*P P 20 05 09.8 -0.4
comp=Z,68nm,1.4s
**QSPA South Pole Qui** 96.69 180 *e*P P 20 05 11.5 +0.4
comp=Z,102nm,2.8s
**SCM Sheep Creek Mo** 96.88 25 *e*P P 20 05 12.4 +0.4
SCM pmax pmax
comp=Z,96nm,1.8s
**SCM Sheep Creek Mo** 96.88 25 *e*P P 20 05 12.4 +0.4
comp=Z,96nm,1.8s
**KULLO Kullorsuaq** 96.94 353 *i* P P 20 05 12.3 +0.4
comp=Z,65nm,1.0s
**PAX Paxson** 97.08 23 *e*P Pdif 20 05 13.3 +0.3
PAX pmax pmax
comp=Z,5.0nm,0.7s
**PAX Paxson** 97.08 23 *e*P Pdif 20 05 13.2 +0.2
comp=Z,4.6nm,0.7s
**HARP HAARP** 97.49 24 *e*P Pdif 20 05 15.9 +1.1
comp=Z,421nm,2.9s
**KLU Klutina** 97.63 25 *e*P Pdif 20 05 16.0 +0.5
comp=Z,10.0nm,1.0s
**EGAK Eagle** 97.73 21 *e*PP PP 20 09 16.7 +2.5
**INK Inuvik** 97.95 16 LR LR 20 56 12.3
comp=Z,1µm,21.6s,baz=210,slow=39
**INK Inuvik** 97.95 16 *e*P P 20 05 16.4 -0.2
INK pmax pmax
comp=Z,27nm,1.0s
**INK Inuvik** 97.95 16 *e*P P 20 05 16.4 -0.2
comp=Z,27nm,1.0s
**KIC Kosan Boka** 98.30 277 *e*P Pdif 20 05 20.1 +0.7
comp=Z,32nm,1.0s
**DBIC Dimbokro** 98.38 278 P Pdif 20 05 20.6 +0.9
comp=Z,11nm,0.8s,baz=66,slow=6.5,SNR=10
DBIC PKKPbc PKKPbc 20 21 50.8 +0.8
comp=Z,4.1nm,0.8s,baz=251,slow=6.6,SNR=4.1
**DBIC Dimbokro** 98.38 278 *e*P Pdif 20 05 21.0 +1.3
comp=Z,21nm,1.0s
DBIC PKKPbc PKKPbc 20 21 50.8 +0.8
**BMRM Bremner River** 98.44 25 *e*P Pdif 20 05 19.6 +0.5
comp=Z,22nm,0.9s
**RES Resolute Bay** 98.47 2 *e*P Pdif 20 05 19.6 +0.8
RES pmax pmax
comp=Z,40nm,0.8s
**RES Resolute Bay** 98.47 2 *e*P Pdif 20 05 19.6 +0.7
comp=Z,40nm,0.8s
**TIC Tomodi** 98.54 278 *e*P Pdif 20 05 21.1 +0.6
**SNAA Sanae** 98.69 199 P Pdif 20 05 22.0 +2.1
SNAA pmax pmax
comp=Z,3.0nm,1.6s
**DAWY Dawson** 98.77 21 *e*P Pdif 20 05 20.8 +0.3
comp=Z,32nm,1.8s
**YKA Yellowknife Ar** 107.41 14 PP PP 20 10 23.2 -3.2
comp=Z,6.3nm,0.9s,baz=330,slow=7.7,SNR=9.3
YKA PKKPbc PKKPbc 20 21 21.6 -3.4
comp=Z,2.2nm,0.7s,baz=149,slow=3.7,SNR=7.1
YKA PKKP PKKPdf 20 21 36.5 -0.5
comp=Z,2.9nm,0.8s,baz=144,slow=4.5,SNR=8.1
**B05A Bryant** 116.48 26 P PKPdf 20 10 23.5 -1.0
baz=116
**E03A Lebam** 117.08 29 *e*PKPdf PKPdf 20 10 26.3 +0.6
**D05A Enumclaw** 117.34 27 *e*PKPdf PKPdf 20 10 26.9 +0.6
**LON Longmire** 117.75 27 *e*PKIKP PKPdf 20 10 27.4 +0.2
**LON Longmire** 117.75 27 *e*PKPdf PKPdf 20 10 27.4 +0.2
**WTV Waterville** 117.85 26 P PKPdf 20 10 26.8 -0.5
**TDL Tradedollar La** 117.86 28 P PKPdf 20 10 27.7 +0.2
**LTY Liberty** 117.88 26 *e*PKPdf PKPdf 20 10 27.0 -0.4
**F04A Amboy** 118.07 28 *e*PKPdf PKPdf 20 10 27.8 +0.1
**C09A Chrisman Ranch** 118.47 24 *e*PKPdf PKPdf 20 10 28.4 0.0
**NEW Newport** 118.57 23 *e*PKIKP PKPdf 20 10 28.6 -0.1
**NEW Newport** 118.57 23 P PKPdf 20 10 27.3 -1.3
baz=118
**NEW Newport** 118.57 23 *e*PKPdf PKPdf 20 10 28.6 -0.1
NEW *e*PKKPbc PKKPbc 20 20 45.2 -2.0
**E07A Sunnyside** 118.77 26 *e*PKPdf PKPdf 20 10 29.4 +0.3
**D08A Wollman Farm,** 118.79 25 *e*PKPdf PKPdf 20 10 29.2 +0.1
**HAWA Hanford** 119.04 26 *e*PKPdf PKPdf 20 10 29.9 +0.3
**G05D Wamic, OR** 119.11 28 P PKPdf 20 10 28.5 -1.3
baz=119
**H04A Detroit Lake** 119.11 29 *e*PKPdf PKPdf 20 10 29.6 -0.2
**WALA Waterton Lakes** 119.12 21 *e*PKKPbc PKKPbc 20 20 43.4 -2.0
**I03D Drain, OR** 119.25 31 P PKPdf 20 10 28.6 -1.5
baz=119
**G06A Carlson Farm,** 119.43 28 *e*PKPdf PKPdf 20 10 30.7 +0.2
G06A *e*PP PP 20 11 53.8 +1.7
**CROR Criterion Ridg** 119.45 28 P PKPdf 20 10 30.9 +0.3
**I04A Tendick Farm,** 119.65 30 P PKPdf 20 10 29.8 -1.1
baz=120,SNR=9.4
**I05D Terrebonne, OR** 119.77 29 P PKPdf 20 10 29.8 -1.3
baz=120,SNR=9.6
**BSMT Bassoo Peak** 119.81 22 P PKPdf 20 10 31.4 +0.1
**JTMT Jette** 120.08 22 *e*PKPdf PKPdf 20 10 31.1 -0.7
JTMT *e*PP PP 20 11 57.8 +1.2
JTMT *e*PKKPbc PKKPbc 20 20 40.2 -1.7
**G08A Pilot Rock** 120.15 27 *e*PKPdf PKPdf 20 10 32.0 +0.1
G08A *e*PKKPbc PKKPbc 20 20 39.5 -1.9
**J04D Umpqua Nationa** 120.20 30 P PKPdf 20 10 30.9 -1.3
baz=120,SNR=12
**L02D Cave Junction,** 120.21 32 P PKPdf 20 10 30.8 -1.1
baz=120
**F10A Beach Ranch, E** 120.36 25 *e*PKPdf PKPdf 20 10 32.1 -0.1
**SWMT Swartz Lake** 120.39 22 *e*PKPdf PKPdf 20 10 31.6 -0.6
SWMT *e*PP PP 20 12 00.7 +2.0
**J05D Fort Rock, OR** 120.60 30 P PKPdf 20 10 31.6 -1.3
baz=121,SNR=11
**SLMT Seeley Lake** 120.80 22 *e*PKPdf PKPdf 20 10 32.4 -0.8
**K04D Chiloquin, OR** 120.83 30 P PKPdf 20 10 31.9 -1.4
baz=121
**I07A Izee** 120.83 28 *e*PKPdf PKPdf 20 10 33.4 +0.2
I07A *e*PKKPbc PKKPbc 20 20 38.2 -0.7
**MSO Missoula** 120.98 22 P PKPdf 20 10 32.0 -1.4
baz=121
**MSO Missoula** 120.98 22 *e*PKPdf PKPdf 20 10 32.5 -0.9
MSO *e*PKKPbc PKKPbc 20 20 37.6 -0.8
**KHMM Horse Mountain** 121.04 33 *e*PKPdf PKPdf 20 10 34.2 +0.4
**M02C Callahan** 121.15 32 P PKPdf 20 10 32.3 -1.6
baz=121,SNR=8.3
**CHMT Chamberlain Mo** 121.16 22 P PKPdf 20 10 33.4 -0.6
**K05A Summer Lake** 121.18 30 *e*PKPdf PKPdf 20 10 34.7 +0.6
**M04C Macdoel** 121.40 31 P PKPdf 20 10 33.0 -1.4
baz=121,SNR=7.2
**EGMT Eagleton** 121.41 19 P PKPdf 20 10 32.8 -1.4
baz=121
**EGMT Eagleton** 121.41 19 *e*PKPdf PKPdf 20 10 34.3 +0.1
**N02D Trinity Center** 121.52 32 P PKPdf 20 10 33.3 -1.4
baz=122,SNR=8.6
**J08A Circle Bar Ran** 121.86 28 *e*PKPdf PKPdf 20 10 35.8 +0.5
J08A *e*PKKPbc PKKPbc 20 20 34.2 -0.8
**WDC Whiskeytown Da** 121.89 33 *e*PKIKP PKPdf 20 10 35.0 -0.2
**WDC Whiskeytown Da** 121.89 33 *e*PKPdf PKPdf 20 10 35.0 -0.2
**MOD Modoc** 122.09 30 *e*PKPdf PKPdf 20 10 36.1 +0.3
**LRM Limekiln Ridge** 122.38 22 *e*PKPdf PKPdf 20 10 36.0 -0.3
**O03D Paynes Creek** 122.49 32 P PKPdf 20 10 35.1 -1.4
baz=122
**WVOR Wild Horse Val** 122.50 29 *e*PKIKP PKPdf 20 10 36.8 +0.3
**WVOR Wild Horse Val** 122.50 29 *e*PKPdf PKPdf 20 10 36.8 +0.3
**ULM Lac du Bonnet** 122.50 8 PKIKP PKPdf 20 10 35.4 -0.7
comp=Z,20nm,0.8s,baz=340,slow=2.5,SNR=13
ULM PP PP 20 12 09.9 -2.6
comp=Z,18nm,1.2s,baz=335,slow=10,SNR=4.3
ULM PKKPbc PKKPab 20 20 29.6 -2.9
comp=Z,5.2nm,0.6s,baz=185,slow=4.2,SNR=5.7
**ULM Lac du Bonnet** 122.50 8 PKIKP PKPdf 20 10 35.4 -0.7
ULM 20 12 10.0
ULM pmax pmax
comp=Z,20nm,0.8s
ULM pmax pmax
comp=Z,18nm,1.2s
**A26A Wade Farm, Ken** 122.71 13 P PKPdf 20 10 35.3 -1.3
baz=123
**HOPS Hopland** 122.71 34 *e*PKPdf PKPdf 20 10 37.4 +0.6
**DLMT Dillon** 122.72 22 *e*PKPdf PKPdf 20 10 37.2 +0.3
DLMT *e*PKKPbc PKKPab 20 20 31.2 -0.6
**A27A Ledoux Ranch,** 122.83 12 P PKPdf 20 10 35.8 -1.0
baz=123
**BOZ Bozeman (W)** 122.83 22 *e*PKIKP PKPdf 20 10 36.9 -0.2
**BOZ Bozeman (W)** 122.83 22 P PKPdf 20 10 35.8 -1.3
baz=123
**BOZ Bozeman (W)** 122.83 22 *e*PKPdf PKPdf 20 10 36.9 -0.2
**MFID Camas Ranch** 123.01 26 *e*PKPdf PKPdf 20 10 37.8 +0.4
**B25A Knox Farm, Ray** 123.04 14 P PKPdf 20 10 36.2 -1.1
baz=123
**MCMT McKenzie Canyo** 123.07 23 *e*PKPdf PKPdf 20 10 38.1 +0.4
MCMT *e*PP PP 20 12 16.4 -0.6
**B26A Jensen Ranch,** 123.15 13 P PKPdf 20 10 36.4 -1.1
baz=123
**A29A Manning Farm,** 123.25 11 P PKPdf 20 10 36.6 -1.0
baz=123
**NSHM Saint Helena R** 123.30 34 *e*PKPdf PKPdf 20 10 38.6 +0.6
**B27A Peters Farms,** 123.34 12 P PKPdf 20 10 36.9 -0.9
baz=123
**GCMT Greycliff** 123.40 20 *e*PKPdf PKPdf 20 10 38.4 +0.2
GCMT *e*PP PP 20 12 20.8 +1.8
**HLID Hailey** 123.49 25 P PKPdf 20 10 37.2 -1.3
baz=124
**HLID Hailey** 123.49 25 *e*PKPdf PKPdf 20 10 38.6 +0.2
HLID *e*PKKPbc PKKPab 20 20 27.9 -0.6
**C25A Freed Ranch, W** 123.53 14 P PKPdf 20 10 37.1 -1.1
baz=124
**QLMT Earthquake Lak** 123.61 22 *e*PKPdf PKPdf 20 10 39.5 +0.8
QLMT *e*PP PP 20 12 22.3 +1.7
**B29A Wagenman Farm,** 123.67 11 P PKPdf 20 10 37.6 -0.9
baz=124
**LAO LASA Array** 123.69 17 P PKPdf 20 10 37.5 -1.1
baz=124
**LAO LASA Array** 123.69 17 *e*PKPdf PKPdf 20 10 39.5 +0.9
**C26A Wahner Farm, P** 123.70 13 P PKPdf 20 10 37.6 -0.9
baz=124
**A33A Warroad** 123.85 8 P PKPdf 20 10 38.0 -0.7
baz=124
**RLMT Red Lodge** 124.12 20 P PKPdf 20 10 38.5 -1.2
baz=124
**RLMT Red Lodge** 124.12 20 *e*PKPdf PKPdf 20 10 40.3 +0.6
RLMT *e*PP PP 20 12 24.8 +0.8
**MDND Maddock** 124.21 11 P PKPdf 20 10 38.7 -0.8
baz=124
**H17A Grant Village** 124.29 22 *e*PKPdf PKPdf 20 10 41.8 +1.8
**D26A Manning** 124.37 14 P PKPdf 20 10 38.8 -1.0
baz=124,SNR=6.9
**B34A Aery, Baudette** 124.39 7 P PKPdf 20 10 39.0 -0.8
baz=124
**AGMN Agassiz Nation** 124.41 8 *e*PKPdf PKPdf 20 10 39.1 -0.7
**D27A Center** 124.51 13 P PKPdf 20 10 38.9 -1.2
baz=124
**FLWY Flagg Ranch** 124.52 22 *e*PKPdf PKPdf 20 10 41.1 +0.6
**C30A Mose, Pekin** 124.56 11 P PKPdf 20 10 39.6 -0.6
baz=124
**IMW Indian Meadow** 124.59 22 *e*PKPdf PKPdf 20 10 41.3 +0.6
IMW *e*Sdif Sdif 20 20 23.2 +3.6
**C31A Landman Farms,** 124.61 10 P PKPdf 20 10 39.7 -0.6
baz=124
**E25A Miller Ranch,** 124.63 15 P PKPdf 20 10 39.6 -0.8
baz=125
**D28A Regan** 124.64 12 P PKPdf 20 10 39.6 -0.8
baz=125,SNR=9.3
**BMN Battle Mountai** 124.72 29 *e*PKIKP PKPdf 20 10 41.5 +0.6
**BMN Battle Mountai** 124.72 29 *e*PKPdf PKPdf 20 10 41.5 +0.6
**FXWY Fox Creek** 124.77 22 *e*PKPdf PKPdf 20 10 41.4 +0.4
**MOOW Moose Ponds** 124.78 22 *e*PKPdf PKPdf 20 10 41.0 0.0
**CMB Columbia Colle** 124.88 33 *e*PKIKP PKPdf 20 10 39.9 -1.2
**CMB Columbia Colle** 124.88 33 *e*PKPdf PKPdf 20 10 39.9 -1.2
**E26A Carlson Angus** 124.89 14 P PKPdf 20 10 40.1 -0.8
baz=125,SNR=9.0
**TPAW Teton Pass** 124.93 22 *e*PKPdf PKPdf 20 10 41.8 +0.5
TPAW *e*PP PP 20 12 30.8 +1.2
**C33A Trail** 124.95 8 P PKPdf 20 10 40.2 -0.7
baz=125
**LOHW Long Hollow** 124.95 22 *e*PKPdf PKPdf 20 10 41.2 -0.1
**D29A Pettibone, Tap** 124.97 12 P PKPdf 20 10 40.2 -0.8
baz=125
**SNOW Snow King Moun** 125.03 22 *e*PKPdf PKPdf 20 10 41.9 +0.4
**REDW Red Top Meadow** 125.08 22 *e*PKPdf PKPdf 20 10 41.7 +0.1
REDW *e*PP PP 20 12 32.4 +2.0
**D30A Buchanan** 125.08 11 P PKPdf 20 10 40.4 -0.7
baz=125
**E27A Carson** 125.14 13 P PKPdf 20 10 40.8 -0.6
baz=125
**F25A Bowman** 125.15 15 P PKPdf 20 10 40.6 -0.8
baz=125
**SAO San Andreas Ge** 125.19 35 *e*PKIKP PKPdf 20 10 42.1 +0.4
**SAO San Andreas Ge** 125.19 35 *e*PKPdf PKPdf 20 10 42.1 +0.4

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| EYMN | Ely | 125.26 | 5 | P | | PKPdf | 20 10 41.1 | -0.4 | |
| | baz=125 | | | | | | | | |
| C36A | Pine Crest Far | 125.32 | 6 | P | | PKPdf | 20 10 41.2 | -0.4 | |
| | baz=125 | | | | | | | | |
| D31A | Mcclaflin, Tow | 125.33 | 10 | P | | PKPdf | 20 10 41.0 | -0.7 | |
| | baz=125 | | | | | | | | |
| ELK | Elko | 125.41 | 27 | *e*PKIKP | | PKPdf | 20 10 42.5 | +0.2 | |
| ELK | | | | *e* | | | 20 11 06.0 | | |
| ELK | Elko | 125.41 | 27 | *e*PKPdf | | PKPdf | 20 10 42.5 | +0.2 | |
| ELK | | | | *ep*PKPdf | | pPKPdf | 20 11 06.0 | -0.9 | |
| C37A | Embarrass | 125.41 | 5 | P | | PKPdf | 20 10 41.1 | -0.7 | |
| | baz=125 | | | | | | | | |
| F26A | Lodgepole | 125.42 | 15 | P | | PKPdf | 20 10 41.0 | -0.9 | |
| | baz=125,SNR=10 | | | | | | | | |
| D33A | AnnSam, Waubun | 125.55 | 9 | P | | PKPdf | 20 10 41.5 | -0.6 | |
| | baz=126 | | | | | | | | |
| F27A | Lemmon | 125.56 | 14 | P | | PKPdf | 20 10 41.3 | -0.9 | |
| | baz=126,SNR=8.2 | | | | | | | | |
| E30A | Jud | 125.64 | 11 | P | | PKPdf | 20 10 41.5 | -0.7 | |
| | baz=126 | | | | | | | | |
| HVU | Hansel Valley | 125.64 | 25 | *e*PKIKP | | PKPdf | 20 10 42.8 | +0.2 | |
| HVU | | | | *e* | | | 20 12 35.3 | | |
| HVU | Hansel Valley | 125.64 | 25 | *e*PKPdf | | PKPdf | 20 10 42.8 | +0.2 | |
| HVU | | | | *e*PP | | PP | 20 12 35.2 | +1.0 | |
| D34A | Park Rapids | 125.69 | 8 | P | | PKPdf | 20 10 41.7 | -0.7 | |
| | baz=126 | | | | | | | | |
| NV01 | Mina Array Sit | 125.70 | 32 | *e*PKPdf | | PKPdf | 20 10 40.5 | -2.4 | |
| NVAR | Mina Array Bea | 125.70 | 32 | PKP | | PKPdf | 20 10 43.7 | +0.8 | |
| | comp=Z,16nm,0.8s,baz=299,slow=1.7,SNR=81 | | | | | | | | |
| NVAR | | | | PKKPbc | | PKKPbc | 20 20 19.7 | -0.4 | |
| | comp=Z,0.3nm,0.2s,baz=140,slow=6.6,SNR=5.9 | | | | | | | | |
| MLI | Malad Range | 125.70 | 24 | *e*PKPdf | | PKPdf | 20 10 42.2 | -0.6 | |
| G25A | Newell | 125.84 | 16 | P | | PKPdf | 20 10 42.1 | -0.6 | |
| | baz=126 | | | | | | | | |
| D35A | Remer | 125.85 | 7 | P | | PKPdf | 20 10 42.0 | -0.6 | |
| | baz=126 | | | | | | | | |
| F28A | McLaughlin | 125.86 | 13 | P | | PKPdf | 20 10 42.3 | -0.4 | |
| | baz=126 | | | | | | | | |
| E32A | Braaten, Kindr | 125.89 | 10 | P | | PKPdf | 20 10 42.3 | -0.4 | |
| | baz=126 | | | | | | | | |
| D37A | Cotton | 125.95 | 6 | P | | PKPdf | 20 10 42.3 | -0.6 | |
| | baz=126 | | | | | | | | |
| G26A | Maurine | 125.96 | 15 | P | | PKPdf | 20 10 42.3 | -0.7 | |
| | baz=126,SNR=13 | | | | | | | | |
| G27A | Dupree | 126.04 | 14 | P | | PKPdf | 20 10 42.5 | -0.6 | |
| | baz=126,SNR=7.3 | | | | | | | | |
| BW06 | Boulder Array | 126.07 | 22 | *e*PKPpre | | PKPpre | 20 10 36.2 | | |
| BW06 | | | | *e*PKPdf | | PKPdf | 20 10 43.2 | -0.3 | |
| F29A | Eureka | 126.09 | 12 | P | | PKPdf | 20 10 42.5 | -0.6 | |
| | baz=126 | | | | | | | | |
| E33A | Westby DABS, E | 126.14 | 9 | P | | PKPdf | 20 10 42.5 | -0.7 | |
| | baz=126 | | | | | | | | |
| SPUT | South Promonto | 126.17 | 25 | *e*PKPdf | | PKPdf | 20 10 44.1 | +0.5 | |
| BGU | Big Grassy Mou | 126.24 | 26 | *e*PKPdf | | PKPdf | 20 10 44.2 | +0.5 | |
| F30A | Leola | 126.25 | 12 | P | | PKPdf | 20 10 42.9 | -0.6 | |
| | baz=126 | | | | | | | | |
| HWUT | Hardware Ranch | 126.28 | 24 | *e*PKPdf | | PKPdf | 20 10 43.3 | -0.6 | |
| E35A | Pequot Lakes | 126.32 | 8 | P | | PKPdf | 20 10 43.0 | -0.6 | |
| | baz=126 | | | | | | | | |
| MTUM | Tungsten Hills | 126.36 | 33 | *e*PKPdf | | PKPdf | 20 10 45.0 | +0.8 | |
| H26A | Fairpoint | 126.54 | 15 | P | | PKPdf | 20 10 43.4 | -0.7 | |
| | baz=126 | | | | | | | | |
| G28A | Parade | 126.57 | 14 | P | | PKPdf | 20 10 43.6 | -0.5 | |
| | baz=126 | | | | | | | | |
| RSSD | Black Hills | 126.66 | 17 | *e*PKIKP | | PKPdf | 20 10 44.0 | -0.6 | |
| RSSD | Black Hills | 126.66 | 17 | *e*PKPdf | | PKPdf | 20 10 44.0 | -0.6 | |
| G29A | Hoven | 126.68 | 13 | P | | PKPdf | 20 10 43.7 | -0.6 | |
| | baz=127 | | | | | | | | |
| H27A | Howes | 126.70 | 15 | P | | PKPdf | 20 10 43.7 | -0.7 | |
| | baz=127 | | | | | | | | |
| F33A | 5 Mile Ranch, | 126.75 | 9 | P | | PKPdf | 20 10 43.9 | -0.4 | |
| | baz=127 | | | | | | | | |
| TCUT | Toone Canyon | 126.76 | 24 | *e*PKPpre | | PKPpre | 20 10 36.1 | | |
| I25A | Rochford | 126.84 | 16 | P | | PKPdf | 20 10 44.2 | -0.7 | |
| | baz=127,SNR=6.9 | | | | | | | | |
| H28A | Mission Ridge | 126.92 | 14 | P | | PKPdf | 20 10 44.3 | -0.5 | |
| | baz=127 | | | | | | | | |
| DUG | Dugway | 126.94 | 26 | *e*PKIKP | | PKPdf | 20 10 45.8 | +0.7 | |
| DUG | Dugway | 126.94 | 26 | P | | PKPdf | 20 10 44.1 | -1.0 | |
| | baz=127 | | | | | | | | |
| DUG | Dugway | 126.94 | 26 | *e*PKPdf | | PKPdf | 20 10 45.8 | +0.7 | |
| CTU | Camp Tracy | 126.98 | 25 | *e*PKPdf | | PKPdf | 20 10 45.8 | +0.5 | |
| SMMC | Simmler | 127.04 | 35 | P | | PKPdf | 20 10 44.4 | -0.9 | |
| | baz=127 | | | | | | | | |
| G32A | Webster | 127.10 | 11 | P | | PKPdf | 20 10 44.7 | -0.5 | |
| | baz=127 | | | | | | | | |
| F36A | Milaca | 127.11 | 7 | P | | PKPdf | 20 10 45.0 | -0.1 | |
| | baz=127 | | | | | | | | |
| R11A | Troy Canyon, C | 127.13 | 30 | P | | PKPdf | 20 10 45.3 | -0.3 | |
| | baz=127 | | | | | | | | |
| R11A | Troy Canyon, C | 127.13 | 30 | *e*PKPdf | | PKPdf | 20 10 46.0 | +0.4 | |
| H29A | Onida | 127.16 | 13 | P | | PKPdf | 20 10 45.1 | -0.1 | |
| | baz=127 | | | | | | | | |
| VES | Vestal, Richgr | 127.18 | 34 | P | | PKPdf | 20 10 45.2 | -0.2 | |
| | baz=127 | | | | | | | | |
| K22A | Casper | 127.23 | 19 | P | | PKPdf | 20 10 44.7 | -0.9 | |
| | baz=127 | | | | | | | | |
| K22A | Casper | 127.23 | 19 | *e*PKPdf | | PKPdf | 20 10 45.1 | -0.5 | |
| I27A | Quinn | 127.24 | 15 | P | | PKPdf | 20 10 44.9 | -0.6 | |
| | baz=127 | | | | | | | | |
| GRAC | Grapevine Rang | 127.26 | 32 | P | | PKPdf | 20 10 45.3 | -0.4 | |
| | baz=127 | | | | | | | | |
| J25A | Sunshine Ranch | 127.40 | 17 | P | | PKPdf | 20 10 45.2 | -0.7 | |
| | baz=127,SNR=12 | | | | | | | | |
| PKM | Peak Mountain | 127.44 | 36 | P | | PKPdf | 20 10 45.0 | -1.3 | |
| | baz=128 | | | | | | | | |
| NLU | North Lily Min | 127.45 | 26 | *e*PKPdf | | PKPdf | 20 10 47.0 | +0.8 | |
| NLU | | | | *e*PP | | PP | 20 12 46.8 | +0.5 | |
| O16A | Springville | 127.48 | 25 | *e*PKPdf | | PKPdf | 20 10 49.3 | +3.1 | |
| I28A | Midland | 127.52 | 14 | P | | PKPdf | 20 10 45.3 | -0.7 | |
| | baz=128 | | | | | | | | |
| MPU | Maple Canyon | 127.59 | 25 | *e*PKPdf | | PKPdf | 20 10 47.3 | +0.8 | |
| SUSD | South Dakota S | 127.60 | 12 | P | | PKPdf | 20 10 45.2 | -0.8 | |
| | baz=128 | | | | | | | | |
| ISA | Isabella | 127.65 | 34 | *e*PKIKP | | PKPpre | 20 10 42.4 | | |
| ISA | Isabella | 127.65 | 34 | P | | PKPdf | 20 10 45.3 | -1.3 | |
| | baz=128 | | | | | | | | |
| ISA | Isabella | 127.65 | 34 | *e*PKPdf | | PKPpre | 20 10 42.4 | | |
| H31A | Wolsey | 127.67 | 12 | P | | PKPdf | 20 10 45.7 | -0.5 | |
| | baz=128 | | | | | | | | |
| J26A | Sides Ranch, S | 127.67 | 16 | P | | PKPdf | 20 10 45.8 | -0.6 | |
| | baz=128,SNR=9.1 | | | | | | | | |
| DAC | Darwin (Calif) | 127.68 | 33 | *e*PKIKP | | PKPdf | 20 10 45.9 | -0.8 | |
| DAC | Darwin (Calif) | 127.68 | 33 | *e*PKPdf | | PKPdf | 20 10 45.9 | -0.8 | |
| G36A | St. Michael | 127.70 | 7 | P | | PKPdf | 20 10 45.4 | -0.8 | |
| | baz=128 | | | | | | | | |
| I29A | Vivian Onida | 127.71 | 13 | P | | PKPdf | 20 10 45.5 | -0.8 | |
| | baz=128 | | | | | | | | |
| SPMN | St. Paul | 127.83 | 6 | P | | PKPdf | 20 10 45.9 | -0.6 | |
| | baz=128 | | | | | | | | |
| SPMN | St. Paul | 127.83 | 6 | *e*PKPdf | | PKPdf | 20 10 46.8 | +0.3 | |
| ARVC | Arvin | 127.84 | 35 | P | | PKPdf | 20 10 45.7 | -1.1 | |
| | baz=128 | | | | | | | | |
| H32A | Carlson Farm, | 127.84 | 11 | P | | PKPdf | 20 10 46.1 | -0.5 | |
| | baz=128 | | | | | | | | |
| TPNV | Topopah Spring | 127.88 | 31 | *e*PKIKP | | PKPdf | 20 10 47.6 | +0.6 | |
| TPNV | Topopah Spring | 127.88 | 31 | P | | PKPdf | 20 10 45.6 | -1.5 | |
| | baz=128 | | | | | | | | |
| TPNV | Topopah Spring | 127.88 | 31 | *e*PKPdf | | PKPdf | 20 10 47.6 | +0.6 | |
| LONY | Lake Ozonia | 127.89 | 350 | *e*PKPdf | | PKPdf | 20 10 46.9 | +0.3 | |
| MPMC | Manual Prospec | 127.90 | 33 | P | | PKPdf | 20 10 45.9 | -1.2 | |
| | baz=128 | | | | | | | | |
| FURC | Furnace Creek, | 127.93 | 32 | P | | PKPdf | 20 10 46.0 | -0.8 | |
| | baz=128 | | | | | | | | |
| I30A | Oacoma | 128.01 | 13 | P | | PKPdf | 20 10 47.0 | +0.1 | |
| | baz=128 | | | | | | | | |
| J27A | Elkhorn Farm, | 128.01 | 15 | P | | PKPdf | 20 10 46.7 | -0.3 | |
| | baz=128 | | | | | | | | |
| J28A | Allard Ranch, | 128.05 | 14 | P | | PKPdf | 20 10 46.6 | -0.5 | |
| | baz=128 | | | | | | | | |
| H35A | Sunnyside Ranc | 128.08 | 8 | P | | PKPdf | 20 10 46.7 | -0.3 | |
| | baz=128 | | | | | | | | |
| LRMC | Laurel Mountai | 128.22 | 34 | P | | PKPdf | 20 10 46.3 | -1.3 | |
| | baz=128 | | | | | | | | |
| J29A | Okreek | 128.29 | 14 | P | | PKPdf | 20 10 47.4 | 0.0 | |
| | baz=128 | | | | | | | | |
| I32A | Karley and Nic | 128.30 | 11 | P | | PKPdf | 20 10 46.7 | -0.7 | |
| | baz=128 | | | | | | | | |
| SADO | Sadowa | 128.36 | 354 | *e*PKPdf | | PKPdf | 20 10 47.0 | -0.5 | |
| TMUT | Trail Mountain | 128.37 | 25 | *e*PKPdf | | PKPdf | 20 10 48.7 | +0.6 | |
| I33A | Coleman | 128.40 | 10 | P | | PKPdf | 20 10 47.3 | -0.3 | |
| | baz=128 | | | | | | | | |
| P17A | Butcher Ranch, | 128.42 | 25 | *e*PKPdf | | PKPdf | 20 10 48.5 | +0.5 | |
| P18A | Preston Nutter | 128.49 | 24 | *e*PKPdf | | PKPdf | 20 10 48.7 | +0.4 | |
| EDW2 | Edwards Air Fo | 128.49 | 34 | P | | PKPdf | 20 10 47.3 | -0.8 | |
| | baz=128 | | | | | | | | |
| J30A | Dallas | 128.55 | 13 | P | | PKPdf | 20 10 48.0 | +0.1 | |
| | baz=128 | | | | | | | | |
| K28A | Ten Mile Ranch | 128.68 | 15 | P | | PKPdf | 20 10 48.4 | +0.1 | |
| | baz=129 | | | | | | | | |
| ECSD | EROS Data Cent | 128.74 | 10 | P | | PKPdf | 20 10 47.7 | -0.5 | |
| | baz=129 | | | | | | | | |
| ECSD | EROS Data Cent | 128.74 | 10 | *e*PKPdf | | PKPdf | 20 10 47.9 | -0.4 | |
| ECSD | | | | *ep*PKPdf | | pPKPdf | 20 11 11.3 | -1.6 | |
| J31A | Geddes | 128.75 | 12 | P | | PKPdf | 20 10 48.2 | -0.1 | |
| | baz=129 | | | | | | | | |
| SHPR | Sheep Range | 128.78 | 31 | *e*PKPdf | | PKPdf | 20 10 49.0 | +0.3 | |
| PHWY | Pilot Hill | 128.79 | 19 | *e*PKPdf | | PKPdf | 20 10 48.3 | -0.5 | |
| SRU | San Rafael | 128.81 | 25 | *e*PKIKP | | PKPdf | 20 10 49.6 | +0.8 | |
| SRU | San Rafael | 128.81 | 25 | *e*PKPdf | | PKPdf | 20 10 49.6 | +0.8 | |
| CCUT | Cedar City | 128.83 | 28 | *e*PKPdf | | PKPdf | 20 10 49.6 | +0.7 | |
| GSC | Goldstone | 128.83 | 33 | *e*PKIKP | | PKPdf | 20 10 46.9 | -1.9 | |
| GSC | | | | *e* | | | 20 11 13.5 | | |
| GSC | Goldstone | 128.83 | 33 | P | | PKPdf | 20 10 48.9 | +0.1 | |
| | baz=129 | | | | | | | | |
| GSC | Goldstone | 128.83 | 33 | *e*PKPdf | | PKPdf | 20 10 46.9 | -1.9 | |
| GSC | | | | *ep*PKPdf | | pPKPdf | 20 11 13.5 | +0.1 | |
| O20A | White River Ci | 128.84 | 22 | P | | PKPdf | 20 10 48.1 | -0.7 | |
| | baz=129 | | | | | | | | |
| O20A | White River Ci | 128.84 | 22 | *e*PKPdf | | PKPdf | 20 10 48.8 | 0.0 | |
| I37A | Lemond, Waseca | 128.95 | 7 | P | | PKPdf | 20 10 48.6 | -0.1 | |
| | baz=129 | | | | | | | | |
| N23A | Red Feather La | 129.00 | 20 | P | | PKPdf | 20 10 48.3 | -0.9 | |
| | baz=129 | | | | | | | | |
| N23A | Red Feather La | 129.00 | 20 | *e*PKPdf | | PKPdf | 20 10 49.1 | -0.1 | |
| I38A | Scanlan Farm, | 129.05 | 6 | P | | PKPdf | 20 10 48.2 | -0.6 | |
| | baz=129 | | | | | | | | |
| K30A | Basset | 129.15 | 13 | P | | PKPdf | 20 10 49.4 | +0.3 | |
| | baz=129 | | | | | | | | |
| HEC | Hector,Ludlow | 129.44 | 33 | P | | PKPdf | 20 10 49.7 | -0.3 | |
| | baz=129 | | | | | | | | |
| J36A | Seneca 1, Swea | 129.50 | 8 | P | | PKPdf | 20 10 49.6 | -0.1 | |
| | baz=129 | | | | | | | | |
| K32A | Verdigre | 129.51 | 12 | P | | PKPdf | 20 10 49.9 | +0.1 | |
| | baz=130 | | | | | | | | |
| L29A | Maesberg Ranch | 129.52 | 14 | P | | PKPdf | 20 10 49.5 | -0.4 | |
| | baz=130 | | | | | | | | |
| J37A | Redenius Farm, | 129.62 | 8 | P | | PKPdf | 20 10 49.4 | -0.6 | |
| | baz=130 | | | | | | | | |
| L30A | Spencer Herefo | 129.81 | 14 | P | | PKPdf | 20 10 50.4 | -0.1 | |
| | baz=130 | | | | | | | | |
| PV09 | Paradox Valley | 129.91 | 24 | *e*PKPdf | | PKPdf | 20 10 52.4 | +1.4 | |
| PV09 | | | | *e*PP | | PP | 20 13 00.2 | -2.2 | |
| M28A | Bar X Bar Ranc | 129.92 | 15 | P | | PKPdf | 20 10 49.4 | -1.2 | |
| | baz=130 | | | | | | | | |
| PV10 | Paradox Valley | 130.05 | 24 | *e*PKPdf | | PKPdf | 20 10 52.6 | +1.4 | |
| PV10 | | | | *e*PP | | PP | 20 13 06.0 | +2.8 | |
| ISCO | Idaho Springs | 130.09 | 20 | *e*PKIKP | | PKPdf | 20 10 51.1 | -0.3 | |
| ISCO | | | | *e* | | | 20 13 05.3 | | |
| ISCO | Idaho Springs | 130.09 | 20 | P | | PKPdf | 20 10 51.0 | -0.4 | |
| | baz=130 | | | | | | | | |
| ISCO | Idaho Springs | 130.09 | 20 | *e*PKPdf | | PKPdf | 20 10 51.1 | -0.3 | |
| ISCO | | | | *e*PP | | PP | 20 13 05.3 | +1.8 | |
| K37A | Belmond | 130.14 | 8 | P | | PKPdf | 20 10 51.2 | +0.3 | |
| | baz=130 | | | | | | | | |
| OGNE | Ogallala | 130.16 | 16 | P | | PKPdf | 20 10 50.6 | -0.5 | |
| | baz=130 | | | | | | | | |
| SMCO | Snowmass | 130.16 | 22 | *e*PKPdf | | PKPdf | 20 10 51.7 | +0.1 | |
| MMNY | Mt. Morris Dam | 130.23 | 353 | *e*PKPdf | | PKPdf | 20 10 51.7 | +0.6 | |
| MMNY | | | | *e*SKPbc | | SKPab | 20 14 04.7 | -1.5 | |
| BELC | Belle Mtn. Jos | 130.25 | 33 | P | | PKPdf | 20 10 50.8 | -0.8 | |
| | baz=130 | | | | | | | | |
| PV05 | Paradox Valley | 130.28 | 24 | *e*PKPdf | | PKPdf | 20 10 52.2 | +0.6 | |
| PFO | Pinyon Flat Ob | 130.29 | 34 | *e*PKIKP | | PKPpre | 20 10 46.6 | | |
| PFO | Pinyon Flat Ob | 130.29 | 34 | *e*PKPpre | | PKPpre | 20 10 46.6 | | |
| PFO | | | | *e*PKPdf | | PKiKP | 20 10 52.7 | +0.2 | |
| JFWS | Jewell Farm | 130.36 | 5 | *e*PKIKP | | PKPdf | 20 10 51.5 | +0.1 | |
| JFWS | Jewell Farm | 130.36 | 5 | *e*PKPdf | | PKPdf | 20 10 51.5 | +0.1 | |
| JFWS | | | | *e*SKPbc | | SKPab | 20 14 04.5 | -2.3 | |
| K38A | Parkersburg | 130.37 | 7 | P | | PKPdf | 20 10 51.4 | 0.0 | |
| | baz=130 | | | | | | | | |
| PV01 | Paradox Valley | 130.45 | 24 | *e*PKPdf | | PKPdf | 20 10 52.5 | +0.6 | |
| PV01 | | | | *e*PP | | PP | 20 13 08.3 | +2.5 | |
| N28A | Pribbeno Ranch | 130.53 | 16 | P | | PKPdf | 20 10 51.8 | 0.0 | |
| | baz=130 | | | | | | | | |
| IRM | Iron Mountain | 130.59 | 33 | P | | PKPdf | 20 10 51.6 | -0.5 | |
| | baz=131 | | | | | | | | |
| N29A | Votaw Ranch, W | 130.65 | 15 | P | | PKPdf | 20 10 52.3 | +0.2 | |
| | baz=131 | | | | | | | | |
| BGNE | Belgrade | 130.68 | 12 | P | | PKPdf | 20 10 52.1 | +0.1 | |
| | baz=131 | | | | | | | | |
| BGNE | Belgrade | 130.68 | 12 | *e*PKPdf | | PKPdf | 20 10 52.2 | +0.1 | |
| BGNE | | | | *e*SKPbc | | SKPbc | 20 14 06.6 | -1.5 | |
| BC3 | Big Chuckawall | 130.81 | 33 | P | | PKPdf | 20 10 53.0 | +0.4 | |
| | baz=131 | | | | | | | | |
| N30A | Hueftle Ranch, | 130.81 | 15 | P | | PKPdf | 20 10 52.6 | +0.3 | |
| | baz=131 | | | | | | | | |
| BAR | Barrett | 130.85 | 35 | *e*PKPdf | | PKPdf | 20 10 54.4 | +1.8 | |
| M34A | Aspy Farms, Fr | 130.90 | 11 | P | | PKPdf | 20 10 52.6 | +0.1 | |
| | baz=131 | | | | | | | | |
| O28A | Krutsinger Ran | 130.99 | 16 | P | | PKPdf | 20 10 52.8 | +0.1 | |
| | baz=131 | | | | | | | | |
| PDMCI | Parker Dam,Lak | 131.01 | 32 | P | | PKPdf | 20 10 52.5 | -0.3 | |
| | baz=131 | | | | | | | | |
| N31A | Bailey Ranch, | 131.06 | 13 | P | | PKPdf | 20 10 52.3 | -0.5 | |
| | baz=131 | | | | | | | | |
| AAM | Ann Arbor | 131.12 | 358 | *e*SKPbc | | SKPbc | 20 14 08.3 | -1.3 | |
| SWSC | Sam W. Stewart | 131.15 | 34 | P | | PKPdf | 20 10 53.0 | -0.2 | |
| | baz=131 | | | | | | | | |
| IBP | Imperial Bould | 131.19 | 35 | P | | PKPdf | 20 10 52.7 | -0.6 | |
| | baz=131 | | | | | | | | |
| Y12C | Blythe | 131.23 | 32 | P | | PKPdf | 20 10 52.8 | -0.5 | |
| | baz=131 | | | | | | | | |
| MVCO | Mesa Verde | 131.27 | 24 | P | | PKPdf | 20 10 52.7 | -0.8 | |
| | baz=131 | | | | | | | | |
| MVCO | Mesa Verde | 131.27 | 24 | *e*PKPdf | | PKPdf | 20 10 54.9 | +1.3 | |
| MVCO | | | | *e*SKPbc | | SKPbc | 20 14 09.0 | -1.7 | |
| O30A | MW Ranch, Wils | 131.40 | 15 | P | | PKPdf | 20 10 53.1 | -0.4 | |
| | baz=131 | | | | | | | | |
| WUAZ | Wupatki | 131.42 | 28 | P | | PKPdf | 20 10 53.0 | -0.8 | |
| | baz=131 | | | | | | | | |
| WUAZ | Wupatki | 131.42 | 28 | *e*PKPdf | | PKPdf | 20 10 54.8 | +1.0 | |
| WUAZ | | | | *e*SKPbc | | SKPbc | 20 14 09.7 | -1.5 | |
| S22A | 4UR Ranch, Cre | 131.47 | 23 | P | | PKPdf | 20 10 53.4 | -0.6 | |
| | baz=131 | | | | | | | | |
| S22A | 4UR Ranch, Cre | 131.47 | 23 | *e*PKPdf | | PKPdf | 20 10 53.8 | -0.3 | |
| S22A | | | | *e*SKPbc | | SKPbc | 20 14 09.5 | -2.0 | |
| P28A | Saint Francis | 131.51 | 17 | P | | PKPdf | 20 10 53.6 | -0.1 | |
| | baz=132 | | | | | | | | |
| Q26A | Hugo | 131.57 | 19 | P | | PKPdf | 20 10 54.1 | +0.1 | |
| | baz=132 | | | | | | | | |
| GLA | Glamis | 131.60 | 33 | *e*PKIKP | | PKPdf | 20 10 56.2 | +2.2 | |
| GLA | Glamis | 131.60 | 33 | P | | PKPdf | 20 10 53.8 | -0.3 | |
| | baz=132 | | | | | | | | |
| GLA | Glamis | 131.60 | 33 | *e*PKPdf | | PKPdf | 20 10 56.2 | +2.2 | |
| O31A | Woolen Ranch, | 131.61 | 14 | P | | PKPdf | 20 10 53.8 | -0.1 | |
| | baz=132 | | | | | | | | |
| KSCO | Kaye Shedlock' | 131.77 | 18 | P | | PKPdf | 20 10 54.5 | +0.2 | |
| | baz=132 | | | | | | | | |
| KSCO | Kaye Shedlock' | 131.77 | 18 | *e*SKPbc | | SKPbc | 20 14 10.7 | -1.6 | |
| P30A | Selden | 131.95 | 15 | P | | PKPdf | 20 10 54.8 | +0.2 | |
| | baz=132 | | | | | | | | |
| SDCO | Great Sand Dun | 131.96 | 21 | P | | PKPdf | 20 10 54.5 | -0.5 | |
| | baz=132 | | | | | | | | |
| SDCO | Great Sand Dun | 131.96 | 21 | *e*PKPdf | | PKPdf | 20 10 54.9 | 0.0 | |
| SDCO | | | | *e*SKPbc | | SKPbc | 20 14 11.2 | -2.1 | |
| O33A | Hebron | 132.08 | 12 | P | | PKPdf | 20 10 54.8 | 0.0 | |
| | baz=132 | | | | | | | | |
| O34A | Beatrice | 132.16 | 12 | P | | PKPdf | 20 10 54.9 | 0.0 | |
| | baz=132 | | | | | | | | |
| R26A | Arlington | 132.16 | 19 | P | | PKPdf | 20 10 54.7 | -0.3 | |
| | baz=132 | | | | | | | | |
| P31A | Stockton | 132.19 | 14 | P | | PKPdf | 20 10 55.2 | +0.2 | |
| | baz=132 | | | | | | | | |
| Q29A | Oakley | 132.36 | 16 | P | | PKPdf | 20 10 55.1 | -0.3 | |
| | baz=132 | | | | | | | | |
| R27A | Ede | 132.38 | 18 | P | | PKPdf | 20 10 55.2 | -0.3 | |
| | baz=132,SNR=5.1 | | | | | | | | |
| Q30A | Quinter | 132.49 | 16 | P | | PKPdf | 20 10 55.2 | -0.4 | |
| | baz=132 | | | | | | | | |
| W18A | Petrified Fore | 132.50 | 27 | P | | PKPdf | 20 10 55.4 | -0.5 | |
| | baz=132 | | | | | | | | |
| W18A | Petrified Fore | 132.50 | 27 | *e*PKPdf | | PKPdf | 20 10 57.4 | +1.5 | |
| O36A | Bolckow | 132.52 | 10 | P | | PKPdf | 20 10 55.1 | -0.4 | |
| | baz=132 | | | | | | | | |
| R28A | Tribune | 132.63 | 17 | P | | PKPdf | 20 10 55.2 | -0.7 | |
| | baz=133 | | | | | | | | |
| P33A | Williams Farm, | 132.66 | 13 | P | | PKPdf | 20 10 55.6 | -0.3 | |
| | baz=133 | | | | | | | | |
| MVL | Millersville | 132.68 | 350 | *e*PKPdf | | PKPdf | 20 10 57.2 | +1.4 | |
| P34A | Walnut Farm, R | 132.74 | 12 | P | | PKPdf | 20 10 55.4 | -0.6 | |
| | baz=133 | | | | | | | | |
| S26A | Kim | 132.77 | 19 | P | | PKPdf | 20 10 55.5 | -0.7 | |
| | baz=133,SNR=5.6 | | | | | | | | |
| HDIL | Hopedale | 132.77 | 4 | *e*SKPbc | | SKPbc | 20 14 13.7 | -2.0 | |
| T25A | Trinidad | 132.89 | 21 | P | | PKPdf | 20 10 55.9 | -0.7 | |
| | baz=133,SNR=7.3 | | | | | | | | |
| T25A | Trinidad | 132.89 | 21 | *e*PKPpre | | PKPpre | 20 10 45.7 | | |
| T25A | | | | *e*PKPdf | | PKPdf | 20 10 56.3 | -0.3 | |
| Q32A | Meitler Ranch, | 132.89 | 14 | P | | PKPdf | 20 10 56.1 | -0.2 | |
| | baz=133 | | | | | | | | |
| P35A | Duane Minner, | 132.92 | 11 | P | | PKPdf | 20 10 55.7 | -0.6 | |
| | baz=133 | | | | | | | | |
| P36A | Good Intent, A | 132.98 | 10 | P | | PKPdf | 20 10 55.8 | -0.6 | |
| | baz=133 | | | | | | | | |
| Q33A | Connelly Farm, | 133.05 | 13 | P | | PKPdf | 20 10 56.4 | -0.2 | |
| | baz=133 | | | | | | | | |
| SFIN | Scholer Farm | 133.05 | 2 | *e*SKPbc | | SKPbc | 20 14 14.9 | -1.6 | |
| T26A | Comanche Natio | 133.14 | 20 | P | | PKPdf | 20 10 56.5 | -0.5 | |
| | baz=133,SNR=5.4 | | | | | | | | |
| ACSO | Alum Creek Sta | 133.16 | 357 | *e*PKPdf | | PKPdf | 20 10 56.5 | -0.3 | |
| ACSO | | | | *e*SKPbc | | SKPbc | 20 14 15.0 | -2.0 | |
| KSU1 | Kansas State U | 133.22 | 12 | P | | PKPdf | 20 10 56.6 | -0.3 | |
| | baz=133 | | | | | | | | |
| KSU1 | Kansas State U | 133.22 | 12 | *e*PKPdf | | PKPdf | 20 10 57.0 | +0.1 | |
| KSU1 | | | | *e*SKPbc | | SKPbc | 20 14 15.6 | -1.6 | |
| S28A | Manter | 133.30 | 18 | P | | PKPdf | 20 10 56.9 | -0.3 | |
| | baz=133 | | | | | | | | |
| R31A | Burdett | 133.32 | 15 | P | | PKPdf | 20 10 57.1 | -0.1 | |
| | baz=133 | | | | | | | | |
| Q34A | Chapman | 133.32 | 12 | P | | PKPdf | 20 10 56.6 | -0.5 | |
| | baz=133 | | | | | | | | |
| R32A | Long Quarter, | 133.40 | 14 | P | | PKPdf | 20 10 57.0 | -0.2 | |
| | baz=133 | | | | | | | | |
| T27A | Campo | 133.53 | 19 | P | | PKPdf | 20 10 57.2 | -0.5 | |
| | baz=134 | | | | | | | | |
| 214A | Organ Pipe Nat | 133.53 | 32 | P | | PKPdf | 20 10 57.4 | -0.3 | |
| | baz=134 | | | | | | | | |
| Q35A | Mercer Eighty, | 133.56 | 11 | P | | PKPdf | 20 10 57.1 | -0.5 | |
| | baz=134 | | | | | | | | |
| Q36A | Arnold C. Orve | 133.57 | 11 | P | | PKPdf | 20 10 57.2 | -0.3 | |
| | baz=134 | | | | | | | | |
| T28A | Walsh | 133.66 | 18 | P | | PKPdf | 20 10 57.9 | 0.0 | |
| | baz=134 | | | | | | | | |
| R33A | Olander Ranch, | 133.68 | 14 | P | | PKPdf | 20 10 57.2 | -0.6 | |
| | baz=134 | | | | | | | | |
| R34A | Isabella, Hill | 133.85 | 13 | P | | PKPdf | 20 10 58.1 | -0.1 | |
| | baz=134 | | | | | | | | |
| T29A | Hugoton | 133.88 | 17 | P | | PKPdf | 20 10 58.1 | -0.2 | |
| | baz=134 | | | | | | | | |
| ANMO | Albuquerque | 134.05 | 24 | *e*PKHKP | | PKPpre | 20 10 45.3 | | |
| ANMO | | | | *e* | | | 20 10 59.6 | | |
| ANMO | Albuquerque | 134.05 | 24 | *e*PKPpre | | PKPpre | 20 10 45.3 | | |
| ANMO | | | | *e*PKPdf | | PKiKP | 20 10 59.6 | -0.5 | |
| ANMO | | | | *e*SKPbc | | SKPbc | 20 14 19.5 | -0.9 | |
| U27A | Thompson Grove | 134.08 | 19 | P | | PKPdf | 20 10 58.3 | -0.4 | |
| | baz=134 | | | | | | | | |
| R36A | Gordon, Harris | 134.18 | 11 | P | | PKPdf | 20 10 58.5 | -0.2 | |
| | baz=134 | | | | | | | | |
| T30A | Plains | 134.20 | 17 | P | | PKPdf | 20 10 58.7 | -0.1 | |
| | baz=134 | | | | | | | | |
| LAZ | Ladron | 134.24 | 25 | *e*PKPdf | | PKPdf | 20 11 00.0 | +0.8 | |
| BLO | Bloomington | 134.27 | 1 | *e*SKPbc | | SKPbc | 20 14 18.8 | -1.8 | |
| TUC | Tucson | 134.30 | 30 | *e*PKIKP | | PKPdf | 20 10 59.9 | +0.7 | |
| TUC | Tucson | 134.30 | 30 | *e*PKPdf | | PKPdf | 20 10 59.9 | +0.7 | |
| TUC | | | | *e*SKPbc | | SKPbc | 20 14 19.9 | -1.2 | |
| U28A | Mallet | 134.31 | 19 | P | | PKPdf | 20 10 59.0 | -0.1 | |
| | baz=134 | | | | | | | | |
| T31A | Randall Ranch, | 134.40 | 16 | P | | PKPdf | 20 10 59.1 | -0.1 | |
| | baz=134 | | | | | | | | |
| S34A | Willow Spring | 134.46 | 13 | P | | PKPdf | 20 10 59.1 | -0.2 | |
| | baz=134 | | | | | | | | |
| LPM | Los Pinos Moun | 134.53 | 25 | *e*PKPdf | | PKPdf | 20 11 00.5 | +0.7 | |
| S35A | Otter Creek Ra | 134.64 | 12 | P | | PKPdf | 20 10 59.4 | -0.2 | |
| | baz=135 | | | | | | | | |
| U30A | WK&E Inc. Balk | 134.65 | 17 | P | | PKPdf | 20 10 59.4 | -0.4 | |
| | baz=135 | | | | | | | | |
| BNM | Barren Site | 134.67 | 25 | *e*PKPdf | | PKPdf | 20 11 00.7 | +0.6 | |
| S36A | Lake Cedric, C | 134.75 | 11 | P | | PKPdf | 20 10 59.4 | -0.4 | |
| | baz=135 | | | | | | | | |
| T33A | Patterson Ranc | 134.78 | 14 | P | | PKPdf | 20 10 59.8 | -0.1 | |
| | baz=135 | | | | | | | | |
| S37A | Fort Scott | 134.85 | 

baz=137
**MNTX Cornudas Mount 137.31 25** P **PKPdf 20 11 04.9 +0.2**
baz=137
**MNTX Cornudas Mount 137.31 25** *e*PKPpre PKPpre 20 10 55.6
MNTX *e*SKPbc **SKPbc 20 14 28.6 -1.7**
**Z29A Hungry Hill Ra 137.33 20** P **PKPdf 20 11 04.9 +0.1**
baz=137,SNR=5.8
**Z30A Sanderson Ranc 137.50 19** P **PKPdf 20 11 05.0 -0.1**
baz=138
**W38A Poteau 137.53 11** P **PKPdf 20 11 05.0 -0.1**
baz=138
**Y33A Hilltop Ranch, 137.59 16** P **PKPdf 20 11 05.5 +0.4**
baz=138
**X36A Centrahoma 137.63 13** P **PKPdf 20 11 05.1 -0.1**
baz=138
**128A Castleberry Fa 137.63 21** P **PKPdf 20 11 05.4 0.0**
baz=138
**TKL Tuckaleechee C 137.75 358** *e*PKIKP **PKPdf 20 11 05.3 -0.1**
**TKL Tuckaleechee C 137.75 358** *e*PKPdf **PKPdf 20 11 05.3 -0.1**
**Z31A Sharp Cattle R 137.79 18** P **PKPdf 20 11 05.5 -0.1**
baz=138
**X37A Clayton 137.82 12** P **PKPdf 20 11 05.6 0.0**
baz=138
**129A Stewart Farms, 137.85 21** P **PKPdf 20 11 05.7 -0.1**
baz=138
**X38A Whitesboro 137.86 11** P **PKPdf 20 11 06.0 +0.4**
baz=138
**Y34A Reagan Ranch, 137.87 15** P **PKPdf 20 11 05.5 -0.2**
baz=138
**CPCT Cooper Cave 137.98 359** *e*PKPdf **PKPdf 20 11 05.9 +0.1**
**228A UT Block 9, Go 138.05 22** P **PKPdf 20 11 06.3 +0.1**
baz=138
**KMSC Kings Mountain 138.11 355** P **PKPdf 20 11 06.2 +0.1**
baz=138
**KMSC Kings Mountain 138.11 355** *e*PKPdf **PKPdf 20 11 05.9 -0.2**
**UALR University of 138.18 8** *e*PKPdf **PKPdf 20 11 06.1 -0.1**
**MIAR Mount Ida 138.21 10** *e*PKHKP PKPpre 20 10 55.6
**MIAR Mount Ida 138.21 10** P **PKPdf 20 11 06.7 +0.4**
baz=138
**MIAR Mount Ida 138.21 10** *e*PKPpre PKPpre 20 10 55.6
MIAR *e*SKPbc **SKPbc 20 14 31.2 -1.6**
**SWET Sewanee 138.23 0** *e*PKPdf **PKPdf 20 11 06.0 -0.3**
**131A Roby 138.31 19** P **PKPdf 20 11 07.0 +0.5**
baz=138,SNR=5.1
**ABTX Abilene, Hawle 138.59 18** P **PKPdf 20 11 07.2 +0.1**
baz=139
**Y38A Idabel 138.59 12** P **PKPdf 20 11 07.4 +0.4**
baz=138
**Y39A Lockesburg 138.71 11** P **PKPdf 20 11 07.9 +0.7**
baz=139
**133A Hamilton Ranch 138.82 17** P **PKPdf 20 11 07.9 +0.4**
baz=139
**JSC Jenkinsville 138.96 355** *e*PKIKP **PKPdf 20 11 08.2 +0.6**
JSC *e* 20 14 00.1
**JSC Jenkinsville 138.96 355** *e*PKPdf **PKPdf 20 11 08.2 +0.6**
JSC *e*PP **PP 20 14 00.1 +1.2**
**233A Rising Star 139.38 18** P **PKPdf 20 11 08.7 +0.2**
baz=139
**331A San Angelo 139.55 20** P **PKPdf 20 11 09.8 +0.9**
baz=140
**234A Clairette 139.61 17** P **PKPdf 20 11 09.9 +0.9**
baz=140
**137A Heron Place, G 139.66 13** P **PKPdf 20 11 09.9 +1.0**
baz=140
**332A Millersview 139.70 19** P **PKPdf 20 11 09.4 +0.2**
baz=140
**430A Baggett Ranch, 139.74 21** P **PKPdf 20 11 09.5 +0.2**
baz=140,SNR=6.8
**138A Matatall Enter 139.74 12** P **PKPdf 20 11 10.1 +1.0**
baz=140
**WHTX Lake Whitney 139.81 16** *e*PKPpre PKPpre 20 11 00.9
**529A Stev Forest Ra 139.97 23** P **PKPdf 20 11 10.4 +0.7**
baz=140
**GOGA Godfrey 139.98 357** *e*PKIKP **PKPdf 20 11 12.0 +2.4**
**GOGA Godfrey 139.98 357** *e*PKPdf **PKPdf 20 11 12.0 +2.4**
**236A Katherine and 140.04 15** P **PKPdf 20 11 10.6 +0.9**
baz=140
**431A Sonora 140.06 20** P **PKPdf 20 11 10.4 +0.5**
baz=140
**TX31 Lajitas Ar. Si 140.09 25** *e*PKPpre PKPpre 20 11 00.8
**TXAR Lajitas Array 140.09 25** PKhKP PKPpre 20 11 01.3
comp=Z,2.9nm,0.6s,baz=262,slow=1.5,SNR=22
TXAR PP **PP 20 14 08.7 +2.2**
comp=Z,7.6nm,0.9s,baz=359,slow=5.0,SNR=13
TXAR SKPbc **SKPbc 20 14 36.0 -2.3**
comp=Z,3.3nm,0.8s,baz=22,slow=0.8,SNR=11
TXAR PKKP **PKKPdf 20 20 32.6 -2.0**
comp=Z,0.5nm,0.9s,baz=188,slow=3.8,SNR=4.0
**JCT Junction City 140.52 20** *e*PKHKP PKPpre 20 11 02.8
**JCT Junction City 140.52 20** *e*PKPpre PKPpre 20 11 02.8
JCT *e*SKPdf **SKPdf 20 14 38.0 +0.3**
**531A Rocksprings 140.55 21** P **PKPdf 20 11 11.1 +0.4**
baz=140,SNR=13
**434A Burnet 140.69 17** P **PKPdf 20 11 10.9 -0.1**
baz=141
**532A Rocksprings 140.81 20** P **PKPdf 20 11 12.1 +0.8**
baz=141,SNR=19
**340A Bronson 141.19 11** P **PKPdf 20 11 12.7 +1.0**
baz=141
**631A Perdido Creek 141.23 21** P **PKPdf 20 11 12.7 +0.7**
baz=141,SNR=15
**534A Blanco 141.36 18** P **PKPdf 20 11 13.2 +1.0**
baz=141
**632A Uvalde 141.42 20** P **PKPdf 20 11 13.1 +0.8**
baz=141
**438A Sam Houston St 141.49 14** P **PKPdf 20 11 13.5 +1.2**
baz=142
**633A Saathoff Ranch 141.66 19** P **PKPdf 20 11 13.4 +0.7**
baz=142,SNR=7.5
**440A Kirbyville 141.83 12** P **PKPdf 20 11 13.9 +0.9**
baz=142
**537A Green Hill Far 141.93 15** P **PKPdf 20 11 14.5 +1.3**
baz=142
**TIGA Tifton 141.95 357** P **PKPdf 20 11 14.0 +0.8**
baz=142
**HKT Hockley 142.17 15** *e*PKHKP PKPpre 20 11 08.0
HKT *e* 20 14 17.8
**HKT Hockley 142.17 15** *e*PKPpre PKPpre 20 11 08.0
HKT *e*PP **PP 20 14 17.8 -0.9**
**BDFB Brasilia 142.18 253** PKP **PKPdf 20 11 14.0 -0.1**
comp=Z,32nm,0.9s,baz=88,slow=1.2,SNR=27
BDFB SKPbc **SKPbc 20 14 41.6 -2.3**
comp=Z,3.7nm,0.7s,baz=89,slow=6.1,SNR=3.2
**BDFB Brasilia 142.18 253** PKIKP **PKPdf 20 11 14.0 -0.1**
BDFB pmax pmax
comp=Z,32nm,0.9s
**BDFB Brasilia 142.18 253** *e*PKPdf **PKPdf 20 11 10.8 -3.2**
BDFB SKPbc **SKPbc 20 14 41.6 -2.3**
**TRQA Tornquist 142.23 211** *e*PKPpre PKPpre 20 11 08.2
**733A Divot King Ran 142.31 20** P **PKPdf 20 11 14.7 +0.8**
baz=142,SNR=9.5
**PLCA Paso Flores 143.62 199** *e*PKIKP PKPbc 20 11 13.7 +0.2
**PLCA Paso Flores 143.62 199** *e*PKPdf PKPbc 20 11 13.7 +0.1
**ANWB Willy Bob 146.21 316** *e*P **PKPbc 20 11 21.4 -0.6**
**ANWB Willy Bob 146.21 316** *e*PKPdf **PKPbc 20 11 22.0 0.0**
**DEG La Desirade 146.61 314** *e*P **PKPdf 20 11 21.0 -0.6**
**CPUP Villa Florida 146.81 231** PKPbc **PKPbc 20 11 23.6 0.0**
comp=Z,80nm,0.8s,baz=103,slow=2.7,SNR=131
**CPUP Villa Florida 146.81 231** PKP2 **PKPbc 20 11 23.6 0.0**
CPUP pmax pmax
comp=Z,80nm,0.8s
**CPUP Villa Florida 146.81 231** *e*PKPdf **PKPdf 20 11 22.3 +0.6**
**MBWH 147.12 316** *e*P **PKPdf 20 11 22.1 -0.4**
**SSG Sans Toucher 147.20 314** *e*P **PKPdf 20 11 22.6 -0.2**
**SABA Saba 147.22 318** *e*PKPbc **PKPbc 20 11 25.2 +0.3**
**MLG Mont-d'or 147.24 314** *e*P **PKPdf 20 11 22.9 +0.2**
**HMG Houelmont 147.29 314** *e*P **PKPdf 20 11 22.7 -0.1**
**CXM Morne La Croix 147.66 312** *e*P **PKPbc 20 11 26.1 -0.2**
**FDF Fort de France 147.70 312** *e*PKIKP **PKPdf 20 11 23.9 +0.4**
**FDF Fort de France 147.70 312** *e*P **PKPdf 20 11 23.7 +0.2**
**FDF Fort de France 147.70 312** *e*PKPdf **PKPdf 20 11 23.9 +0.4**
**BIM Bigot 147.78 311** *e*P **PKPdf 20 11 24.6 +1.0**
**STVI Saint Thomas 147.79 321** *e*PKPdf **PKPdf 20 11 23.5 0.0**
**HUMP Col San Antoni 148.50 322** *e*PKPdf **PKPdf 20 11 24.9 +0.2**
**GRTK Grand Turk 148.52 334** *e*PKPbc **PKPbc 20 11 28.4 +0.1**
**CPD Cerro la Pandu 148.62 322** *e*PKIKP **PKPdf 20 11 25.0 +0.1**
**CPD Cerro la Pandu 148.62 322** *e*PKPdf **PKPdf 20 11 25.0 +0.1**
**SVB Belmont 148.69 310** *e*P **PKPbc 20 11 28.4 -0.6**
**SJG San Juan 148.71 322** *e*PKIKP **PKPdf 20 11 25.0 0.0**
**SJG San Juan 148.71 322** *e*PKPdf **PKPdf 20 11 25.0 0.0**
**AOPR Arecibo Observ 148.89 324** *e*PKPdf **PKPdf 20 11 23.8 -1.6**
**LRS Lares 148.98 324** *e*PKPdf **PKPdf 20 11 25.4 -0.1**
**CELP Cerrillos 148.99 323** *e*PKPdf **PKPdf 20 11 25.7 +0.2**
**OBIP Obispado Ponce 149.03 323** *e*PKPdf **PKPdf 20 11 25.6 0.0**
**AGP Aguadilla 149.06 324** *e*PKPbc **PKPbc 20 11 29.6 -0.2**

**LSP Las Mesas 149.21 324** *e*PKPdf **PKPdf 20 11 26.5 +0.6**
**TOSP Speyside 149.29 306** *e*P **PKPbc 20 11 31.1 +0.7**
**CRPR Cabo Rojo, PR 149.36 324** *e*PKPdf **PKPdf 20 11 26.3 +0.2**
**GRGR Grenville 149.69 308** *e*P **PKPbc 20 11 31.1 -0.4**
**GRGR Grenville 149.69 308** *e*PKPbc **PKPbc 20 11 31.5 +0.1**
**SDD Santo Domingo 150.55 329** *e*PKPbc **PKPbc 20 11 33.5 +0.1**
**SDDR Presa de Saban 150.78 331** *e*PKPbc **PKPbc 20 11 34.3 +0.3**
**BANI BANI 150.83 329** *e*PKPbc **PKPbc 20 11 34.5 +0.3**
**GTBY Guantanamo Bay 151.53 339** *e*PKPbc **PKPbc 20 11 35.9 +0.3**
**PAPH Port-au-Prince 151.65 333** *e*PKPdf **PKPdf 20 11 30.0 +0.3**
**LGNH LÖogne 151.80 333** *e*PKPbc **PKPbc 20 11 37.4 +1.2**
**PTGA Pitinga 153.77 282** *e*PKPdf **PKPdf 20 11 33.2 +0.3**
**LCO Las Campanas 153.81 211** *e*PKPdf **PKPdf 20 11 33.9 +1.0**
LCO *e*PKPbc **PKiKP 20 11 41.1 +0.2**
**LVC Limon Verde 157.52 224** *e*PKPdf **PKPdf 20 11 39.7 +1.7**
**SAML Samuel 157.72 263** *e*PKPdf **PKPdf 20 11 38.2 +0.1**
**TGUH Tegucigalpa,Un 159.23 5** *e*PKPab **PKPab 20 12 19.6 +2.6**
**LPAZ La Paz 160.49 240** PKP **PKPdf 20 11 42.2 +0.1**
comp=Z,22nm,0.9s,baz=60,slow=1.9,SNR=72
LPAZ PKPab **PKPab 20 12 23.1 -0.5**
comp=Z,18nm,1.0s,baz=103,slow=5.2,SNR=9.8
**LPAZ La Paz 160.49 240** PKIKP **PKPdf 20 11 42.2 +0.1**
LPAZ 20 12 23.1
LPAZ pmax pmax
comp=Z,22nm,0.9s
LPAZ pmax pmax
comp=Z,18nm,1.0s
**ROSC El Rosal 163.89 316** PKP **PKPdf 20 11 45.5 +0.2**
comp=Z,21nm,0.8s,baz=118,slow=2.0,SNR=15
**ROSC El Rosal 163.89 316** *e*PKPdf **PKPdf 20 11 45.9 +0.5**
**OTAV Otavalo 170.05 314** *e*PKPdf **PKPdf 20 11 50.3 +0.3**

**WEL 16 19:59:42.5±0.2, 36.47S×177.32E, h186km±3km, ML4.1/9, 3C-1D, Error ellipse: s-maj=4.7km s-min=3.6km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **1.34** | **164** | | PN | Pn | 20 00 13.6 | +0.2 |
| HAZ | | | | | SN | Sn | 20 00 37.5 | -0.1 |
| **MXZ** | **Matakaoa Point** | **1.35** | **144** | | PN | Pn | 20 00 13.6 | +0.1 |
| MXZ | | | | | SN | Sn | 20 00 37.8 | +0.1 |
| MXZ | | | | | AML | AML | 20 00 42.0 | |
| **OPRZ** | **Ohinepanea** | **1.50** | **204** | | PN | Pn | 20 00 16.5 | +1.6 |
| **WMGZ** | **Waiomatatini S** | **1.60** | **147** | ⇑ | PN | Pn | 20 00 16.1 | +0.2 |
| WMGZ | | | | | SN | Sn | 20 00 41.3 | -0.7 |
| **PUZ** | **Puketiti** | **1.77** | **155** | | PN | Pn | 20 00 17.3 | -0.3 |
| PUZ | | | | | SN | Sn | 20 00 43.7 | -1.2 |
| PUZ | | | | | AML | AML | 20 00 45.4 | |
| **TWGZ** | **Tauwhareparae** | **1.78** | **163** | ⇑ | PN | Pn | 20 00 18.2 | +0.5 |
| TWGZ | | | | | SN | Sn | 20 00 45.1 | -0.3 |
| **URZ** | **Urewera** | **1.79** | **185** | ⇑ | PN | Pn | 20 00 18.2 | +0.4 |
| URZ | | | | | AML | AML | 20 00 46.1 | |
| URZ | | | | | AML | AML | 20 00 46.3 | |
| **MWZ** | **Matawai** | **1.87** | **175** | | PN | Pn | 20 00 18.7 | +0.1 |
| MWZ | | | | | SN | Sn | 20 00 46.5 | -0.4 |
| MWZ | | | | | AML | AML | 20 00 47.1 | |
| MWZ | | | | | AML | AML | 20 00 48.8 | |
| **TKGZ** | **Te Karaka** | **2.01** | **168** | | PN | Pn | 20 00 19.7 | -0.3 |
| **CNGZ** | **Carnagh Statio** | **2.13** | **161** | | PN | Pn | 20 00 21.1 | -0.2 |
| **ALRZ** | **Allen Road** | **2.23** | **200** | | PN | Pn | 20 00 23.5 | +1.1 |
| **RIGZ** | **Rimuhau** | **2.26** | **171** | | PN | Pn | 20 00 22.2 | -0.6 |
| **SNGZ** | **Shannon Statio** | **2.31** | **180** | | PN | Pn | 20 00 22.9 | -0.4 |
| **MRHZ** | **Matea Rd** | **2.47** | **197** | | PN | Pn | 20 00 24.8 | -0.4 |
| **PRGZ** | **Paritu Road** | **2.49** | **170** | | PN | Pn | 20 00 24.9 | -0.5 |
| **KNZ** | **Kokohu** | **2.56** | **174** | | PN | Pn | 20 00 24.9 | -1.3 |
| **WHHZ** | **Waihua** | **2.60** | **181** | | PN | Pn | 20 00 26.1 | -0.6 |
| **MHGZ** | **Mahia Peninsul** | **2.72** | **170** | | PN | Pn | 20 00 26.9 | -1.1 |
| **BKZ** | **Black Stump Fm** | **2.77** | **193** | | PN | Pn | 20 00 27.6 | -1.1 |
| BKZ | | | | | AML | AML | 20 01 05.3 | |
| BKZ | | | | | AML | AML | 20 01 08.5 | |
| **ARHZ** | **Aropaoanui** | **2.80** | **185** | | PN | Pn | 20 00 28.2 | -0.7 |
| **MCHZ** | **McNeill Hill** | **3.01** | **189** | | PN | Pn | 20 00 30.8 | -0.7 |
| **FWVZ** | **Far West T-bar** | **3.11** | **206** | | PN | Pn | 20 00 32.1 | -0.9 |
| **BHHZ** | **Black Hill Sta** | **3.17** | **198** | | PN | Pn | 20 00 32.2 | -1.4 |
| **CKHZ** | **Cape Kidnapper** | **3.19** | **183** | | PN | Pn | 20 00 32.3 | -1.3 |
| **KRHZ** | **Kereru** | **3.26** | **193** | | PN | Pn | 20 00 32.8 | -1.7 |
| **KAHZ** | **Kahuranaki** | **3.34** | **186** | | PN | Pn | 20 00 33.9 | -1.6 |
| **PNHZ** | **Pukenui** | **3.55** | **194** | | PN | Pn | 20 00 35.9 | -2.2 |
| **PXZ** | **Pawanui** | **3.58** | **186** | ⇓ | PN | Pn | 20 00 35.9 | -2.4 |
| PXZ | | | | | AML | AML | 20 01 20.2 | |
| PXZ | | | | | AML | AML | 20 01 20.2 | |
| PXZ | | | | | AML | AML | 20 01 21.1 | |
| PXZ | | | | | AML | AML | 20 01 21.1 | |
| **WPHZ** | **Waipukurau** | **3.66** | **191** | | PN | Pn | 20 00 37.2 | -2.2 |
| **TSZ** | **Takapari Road** | **3.74** | **196** | | PN | Pn | 20 00 38.1 | -2.4 |
| **PRHZ** | **Porangahau** | **3.83** | **188** | | PN | Pn | 20 00 39.3 | -2.3 |
| **POWZ** | **Post Office Ro** | **4.10** | **197** | | PN | Pn | 20 00 42.3 | -2.7 |
| **BFZ** | **Birch Farm** | **4.29** | **191** | | PN | Pn | 20 00 44.4 | -3.0 |
| **MRZ** | **Mangatainoka R** | **4.40** | **198** | | PN | Pn | 20 00 45.5 | -3.3 |
| MRZ | | | | | AML | AML | 20 01 37.4 | |
| **OGWZ** | **Otaki Gorge** | **4.66** | **201** | | PN | Pn | 20 00 48.8 | -3.2 |
| **KIW** | **Kapiti Island** | **4.77** | **203** | | PN | Pn | 20 00 47.2 | -6.4 |
| KIW | | | | | AML | AML | 20 01 02.2 | |
| KIW | | | | | AML | AML | 20 01 02.8 | |
| **TCW** | **Tory Channel** | **5.30** | **206** | | PN | Pn | 20 00 56.6 | -3.7 |
| TCW | | | | | AML | AML | 20 01 57.6 | |
| TCW | | | | | AML | AML | 20 01 58.3 | |
| **TUWZ** | **Tuamarina** | **5.61** | **207** | | PN | Pn | 20 01 00.1 | -4.2 |
| **KHZ** | **Kahutara** | **6.62** | **205** | | PN | Pn | 20 01 13.0 | -4.5 |

*ISCJB **16** 20:08:29.3±0.1, 20.47S±0.03×173.86W±0.02, h10km, mb5.9/272, MS5.9/424, Error ellipse: s-maj=4.8km s-min=2.3km az=157.9*
*BJI **16** 20:08:29.6, 20.05S×173.65W, h7km, mb5.6/50, mB6.4/64, Ms5.9/78, Ms7 5.6/75*
*IDC **16** 20:08:29.1±0.4, 20.39S×173.63W, h0km, mb5.1/17, mb1 5.2/19, mb1mx5.2/20, mbtmp5.0/19, ML5.0/2, MS5.7/22, Ms1 5.7/22, ms1mx5.6/30, Error ellipse: s-maj=18.4km s-min=15.2km az=107.0*
*NEIC **16** 20:08:30.1±0.1, 20.41S×173.85W, h8km, mb6.1/223, ME5.8, MS5.9/299, MW5.9, Error ellipse: s-maj=7.0km s-min=3.9km az=144.0, Moment Tensor Solution. s70 Moment tensor: Scale 10^17^Nm; Mrr8.45; Mθθ-5.12; Mφφ-3.33; Mrθ0.59; Mrφ-5.52; Mθφ2.41; Best double couple: Mo9.50000×10^17^ NP1:φ241.00000°, δ40.00000°, λ107.00000°. NP2:φ39.00000°, δ52.00000°, λ76.00000°. Principal axes: T 8.9000, Plg78.0000°, Azm259.0000°; N 1.1000, Plg11.0000°, Azm48.0000°; P -10.0000, Plg6.0000°, Azm139.0000°; Broadband fault plane solution: P waves. NP1:φ190.00000°, δ10.00000°, λ90.00000°. NP2:φ10.00000°, δ80.00000°, λ90.00000°. Principal axes: T Plg55.0000°, Azm280.0000°; N Plg0.0000°, Azm0.0000°; P Plg35.0000°, Azm100.0000°; Depth from synthetics of broadband displacement seismograms. Energy computed from BB mechanism.*
*GCMT **16** 20:08:30.1±0.1, 20.52S×173.19W, h12km, MW5.8/135, Moment Tensor Solution. s113,c222; s135,c412; Duration: 2e0 Moment tensor: Scale 10^17^Nm; Mrr5.12±.04; Mθθ-0.77±.04; Mφφ-4.35±.03; Mrθ1.63±.11; Mθφ-2.55±.03; Mrφ3.69±.10; Best double couple: Mo6.73900×10^17^ NP1:φ25.00000°, δ63.00000°, λ88.00000°. NP2:φ210.00000°, δ27.00000°, λ95.00000°. Principal axes: T 6.4660, Plg72.0000°, Azm290.0000°; N 0.5500, Plg2.0000°, Azm26.0000°; P -7.0110, Plg18.0000°, Azm117.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*MOS **16** 20:08:31.9±1.1, 20.28S×173.64W, h23km, mb6.0/51, MS5.8/103 Error ellipse: s-maj=9.9km s-min=7.2km az=78.7*
*AUST **16** 20:08:35.4±10.0, 20.38S×173.91W, h34km, Error ellipse: s-maj=1.8km s-min=1.2km az=252.0*

**ISC 16 20:08:31.2±0.3, 20.44S±0.04×173.76W±0.04, h15km±1km, h15km:pP-P, n1735, σ1938/1600, mb6.0/270, MS6.0/424, 108C-29D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.77** | **17** | | Pn | Pn | 20 10 04.4 | -5.7 |
| | 35nm,0.3s,baz=117,slow=8.4,SNR=13 | | | | | | | |
| AFI | | | | | Sn | Sn | 20 11 12.1 | -15 |
| | 44nm,0.3s,baz=35,slow=23,SNR=2.6 | | | | | | | |
| **MSVF** | **Nonsavu** | **8.20** | **288** | *e* | Pn | Pn | 20 10 36.1 | +6.3 |
| **MSVF** | **Nonsavu** | **8.20** | **288** | | Pn | Pn | 20 10 36.2 | +6.4 |
| | 3μm,1.8s,SNR=66 | | | | | | | |
| **MSVF** | **Nonsavu** | **8.20** | **288** | *e* | Pn | Pn | 20 10 36.1 | +6.3 |
| **RAR** | **Rarotonga** | **13.10** | **96** | | Pn | Pn | 20 11 27.2 | -10 |
| | 22nm,0.3s,baz=252,slow=7.1,SNR=24 | | | | | | | |
| RAR | | | | | LR | LR | 20 16 03.6 | |
| | comp=Z,32μm,19.6s,baz=251,slow=35 | | | | | | | |
| **RAR** | **Rarotonga** | **13.10** | **96** | | P | Pn | 20 11 27.2 | -10 |
| RAR | | | | | pmax | pmax | | |
| | comp=Z,22nm,0.3s | | | | | | | |
| RAR | | | | | MLR | MLR | | |
| | comp=Z,32μm,19.7s | | | | | | | |
| **RAR** | **Rarotonga** | **13.10** | **96** | *e* | Pn | Pn | 20 11 27.9 | -8.9 |
| RAR | | | | *e* | Sn | Sn | 20 13 41.4 | -21 |
| **OUZ** | **Omahuta** | **18.46** | **214** | ⇑ | *i*P | **P** | **20 12 46.2** | **-0.1** |
| | comp=Z,828nm,2.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.52** | **261** | *e* | P | **Pn** | **20 12 48.9** | **+1.4** |
| | comp=Z,1μm,1.6s | | | | | | | |
| DZM | | | | *e* | S | **Sn** | **20 16 14.7** | **+0.2** |
| | comp=Z,8μm,23.9s | | | | | | | |
| DZM | | | | *e* | LR | LR | 20 17 08.6 | |
| | comp=Z,26μm,21.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.52** | **261** | | P | **Pn** | **20 12 47.6** | **+0.1** |
| | comp=Z,2.2nm,0.3s,baz=22,slow=1.5,SNR=37 | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.52** | **261** | ⇑ | *i*P | **Pn** | **20 12 48.4** | **+0.9** |
| | comp=Z,592nm,1.4s | | | | | | | |
| **URZ** | **Urewera** | **19.44** | **202** | | P | **Pn** | **20 12 57.7** | **-0.6** |
| | comp=Z,11nm,0.3s,baz=11,slow=5.4,SNR=38 | | | | | | | |
| **URZ** | **Urewera** | **19.44** | **202** | *e* | P | **Pn** | **20 12 58.6** | **+0.4** |
| | comp=Z,166nm,1.1s | | | | | | | |
| URZ | | | | *e* | S | Sn | 20 16 16.4 | -20 |
| **BKZ** | **Black Stump Fm** | **20.46** | **202** | *e* | P | Pn | 20 13 09.8 | -0.8 |
| | comp=Z,398nm,1.9s | | | | | | | |
| BKZ | | | | *e* | S | S | 20 16 46.6 | -10 |
| BKZ | | | | | LR | LR | | |
| | comp=Z,11μm,19.0s | | | | | | | |
| **HIZ** | **Hauiti** | **20.52** | **206** | *e* | P | Pn | 20 13 12.3 | +1.1 |
| | comp=Z,536nm,1.2s | | | | | | | |
| HIZ | | | | | LR | LR | | |
| | comp=Z,12μm,19.0s | | | | | | | |
| **BFZ** | **Birch Farm** | **21.90** | **201** | *e* | P | **P** | **20 13 27.0** | **+3.2** |
| | comp=Z,2μm,2.4s | | | | | | | |
| BFZ | | | | *e* | S | **S** | **20 17 28.0** | **+2.8** |
| BFZ | | | | *e* | ScS | **ScS** | **20 24 42.6** | **-1.6** |
| BFZ | | | | | LR | LR | | |
| | comp=Z,16μm,18.0s | | | | | | | |
| **TBI** | **Tubuai** | **22.72** | **102** | *e* | P | **P** | **20 13 30.1** | **-2.6** |
| | comp=Z,1μm,1.3s | | | | | | | |
| TBI | | | | *e* | S | S | 20 17 32.6 | -8.3 |
| | comp=Z,18μm,29.2s | | | | | | | |
| TBI | | | | *e* | LR | LR | 20 18 32.6 | |
| | comp=Z,27μm,31.5s,baz=270 | | | | | | | |
| **TBI** | **Tubuai** | **22.72** | **102** | *e* | T | T | 20 36 35.5 | |
| | comp=Z,9.4nm,0.4s | | | | | | | |
| **SNZO** | **South Karori** | **23.00** | **203** | *e* | P | **P** | **20 13 33.4** | **-2.0** |
| | comp=Z,124nm,0.9s | | | | | | | |
| SNZO | | | | | LR | LR | | |
| | comp=Z,10μm,20.0s | | | | | | | |
| **PAE** | **Paea** | **23.02** | **87** | *e* | P | **P** | **20 13 33.3** | **-2.5** |
| | comp=Z,58nm,1.4s | | | | | | | |
| **PAE** | **Paea** | **23.02** | **87** | *e* | T | T | 20 37 01.1 | |
| | comp=Z,3.3nm,0.3s | | | | | | | |
| **PPT2** | **Papeete2** | **23.03** | **87** | *e* | P | **P** | **20 13 34.0** | **-2.1** |
| | comp=Z,371nm,1.5s | | | | | | | |
| PPT2 | | | | *e* | S | S | 20 17 38.6 | -7.9 |
| | comp=Z,35μm,26.8s | | | | | | | |
| PPT2 | | | | *e* | LR | LR | 20 19 07.7 | |
| | comp=Z,17μm,21.8s,baz=254 | | | | | | | |
| **PPT** | **Papeete** | **23.04** | **87** | *e* | P | **P** | **20 13 34.3** | **-1.7** |
| | comp=Z,126nm,1.0s,baz=253,slow=0.3,SNR=7.6 | | | | | | | |
| PPT | | | | | LR | LR | 20 20 56.5 | |
| | comp=Z,22μm,18.2s,baz=256,slow=33 | | | | | | | |
| **PPT** | **Papeete** | **23.04** | **87** | *e* | P | **P** | **20 13 34.3** | **-1.7** |
| PPT | | | | | pmax | pmax | | |
| | comp=Z,126nm,1.0s | | | | | | | |
| PPT | | | | | MLR | MLR | | |
| | comp=Z,22μm,18.2s | | | | | | | |
| **TIAR** | **Tiarei** | **23.25** | **87** | *e* | P | **P** | **20 13 36.0** | **-2.3** |
| | comp=Z,138nm,1.6s | | | | | | | |
| **TVO** | **Taravao** | **23.30** | **88** | *e* | P | **P** | **20 13 36.3** | **-2.5** |
| | comp=Z,102nm,1.4s | | | | | | | |
| **TVO** | **Taravao** | **23.30** | **88** | *e* | T | T | 20 37 21.8 | |
| | comp=Z,1.7nm,0.4s | | | | | | | |
| **THZ** | **Tophouse** | **24.07** | **205** | *e* | P | **P** | **20 13 48.2** | **+2.2** |
| | comp=Z,78nm,0.8s | | | | | | | |
| THZ | | | | *e* | S | **S** | **20 18 04.1** | **+1.2** |
| THZ | | | | | LR | LR | | |
| | comp=Z,18μm,18.0s | | | | | | | |
| **KHZ** | **Kahutara** | **24.39** | **203** | *e* | P | **P** | **20 13 49.7** | **+0.9** |
| | comp=Z,123nm,1.0s | | | | | | | |
| KHZ | | | | | LR | LR | | |
| | comp=Z,12μm,18.0s | | | | | | | |
| **PMOR** | **Pomariorio Ree** | **25.21** | **82** | *e* | P | **P** | **20 13 54.5** | **-2.0** |
| | comp=Z,430nm,1.4s | | | | | | | |
| **TARA** | **Tarawa** | **25.29** | **327** | | PFAKE | | 20 14 10.0 | +13 |
| TARA | | | | | LR | LR | | |
| | comp=Z,18μm,20.0s | | | | | | | |
| **VAH** | **Vaihoa** | **25.39** | **82** | *e* | P | **P** | **20 13 55.8** | **-2.4** |
| | comp=Z,254nm,1.5s | | | | | | | |
| **OXZ** | **Oxford** | **25.73** | **204** | *e* | P | **P** | **20 14 00.8** | **-0.3** |
| | comp=Z,180nm,0.9s | | | | | | | |
| OXZ | | | | | LR | LR | | |
| | comp=Z,11μm,20.0s | | | | | | | |
| **MQZ** | **McQueen's Vall** | **25.83** | **203** | *e* | P | **P** | **20 14 03.3** | **+1.4** |
| | comp=Z,646nm,2.4s | | | | | | | |
| MQZ | | | | | LR | LR | | |
| | comp=Z,12μm,18.0s | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.45** | **205** | | P | **P** | **20 14 07.3** | **-0.3** |
| | comp=Z,65nm,0.8s,baz=251,slow=5.2,SNR=11 | | | | | | | |
| RPZ | | | | | LR | LR | 20 25 23.6 | |
| | comp=Z,20μm,18.2s,baz=34,slow=38 | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.45** | **205** | *e* | P | **P** | **20 14 08.3** | **+0.8** |
| | comp=Z,1μm,2.1s | | | | | | | |
| **LHI** | **Lord Howe Isla** | **26.73** | **240** | | PFAKE | | 20 14 20.0 | +10 |
| LHI | | | | | LR | LR | | |
| | comp=Z,10μm,18.0s | | | | | | | |
| **XMAS** | **Kiritimati** | **27.48** | **37** | *e* | P | P | 20 14 12.2 | -4.9 |
| | comp=Z,290nm,1.4s | | | | | | | |
| XMAS | | | | | LR | LR | | |
| | comp=Z,22μm,19.0s | | | | | | | |
| **HNR** | **Honiara** | **27.62** | **289** | | P | **P** | **20 14 15.4** | **-2.9** |
| | comp=Z,19nm,0.3s,baz=198,slow=6.1,SNR=9.6 | | | | | | | |
| HNR | | | | | LR | LR | 20 24 25.3 | |
| | comp=Z,14μm,18.7s,baz=128,slow=34 | | | | | | | |
| **HNR** | **Honiara** | **27.62** | **289** | | P | **P** | **20 14 15.4** | **-2.9** |
| HNR | | | | | pmax | pmax | | |
| | comp=Z,19nm,0.3s | | | | | | | |
| HNR | | | | | MLR | MLR | | |
| | comp=Z,14μm,18.7s | | | | | | | |
| **HNR** | **Honiara** | **27.62** | **289** | *e* | P | **P** | **20 14 14.7** | **-3.6** |
| | comp=Z,137nm,1.1s | | | | | | | |
| **ODZ** | **Otahua Downs** | **27.72** | **204** | *e* | P | **P** | **20 14 22.4** | **+3.4** |
| | comp=Z,368nm,1.9s | | | | | | | |
| **WKZ** | **Wanaka** | **28.20** | **206** | | PFAKE | | 20 14 40.0 | +17 |
| WKZ | | | | | LR | LR | | |
| | comp=Z,14μm,19.0s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.50** | **206** | *e* | P | **P** | **20 14 37.4** | **+2.6** |
| **ARMA** | **Armidale** | **32.69** | **245** | *e* | P | **P** | **20 15 04.0** | **+0.8** |
| | baz=33,SNR=4.6 | | | | | | | |
| **ARMA** | **Armidale** | **32.69** | **245** | | PFAKE | | 20 15 10.0 | +6.8 |
| ARMA | | | | | LR | LR | | |
| | comp=Z,16μm,18.0s | | | | | | | |
| **EIDS** | **Eidsvold** | **32.70** | **255** | | P | **P** | **20 15 02.6** | **-0.6** |
| | baz=32,SNR=5.2 | | | | | | | |
| **EIDS** | **Eidsvold** | **32.70** | **255** | *e* | P | **P** | **20 15 01.6** | **-1.6** |
| | comp=Z,265nm,2.0s | | | | | | | |
| EIDS | | | | | LR | LR | | |
| | comp=Z,16μm,19.0s |

baz=38,SNR=26
**PATS Pohnpei** 38.59 312 P **P** 20 15 55.9 +2.1
baz=39,SNR=3.8
**QLP Quilpie** 38.87 253 P P 20 15 51.7 -4.5
baz=39,SNR=3.8
**TOO Toolangi** 39.17 235 P **P** 20 15 58.1 -0.4
baz=39,SNR=29
**PMG Port Moresby** 39.23 280 *c iP* **P** 20 15 57.7 -1.6
PMG pmax pmax
comp=Z,748nm,1.7s
PMG MLR MLR
comp=Z,31µm,18.0s
**PMG Port Moresby** 39.23 280 *eP* **P** 20 15 57.5 -1.7
comp=Z,139nm,1.1s
PMG LR LR
comp=Z,9µm,20.0s
**MOO Moorlands** 39.42 227 P **P** 20 16 02.7 +2.1
baz=39,SNR=4.9
**TAU Tasmania Unive** 39.50 227 *eP* **P** 20 16 02.2 +0.9
TAU pmax pmax
comp=Z,171nm,1.4s
**TAU Tasmania Unive** 39.50 227 P **P** 20 16 02.0 +0.8
comp=Z,370nm,1.2s,SNR=8.4
**TAU Tasmania Unive** 39.50 227 *eP* **P** 20 16 02.2 +0.9
comp=Z,171nm,1.4s
**MTSU Mount Surprise** 39.56 266 P **P** 20 16 01.3 -0.8
baz=39,SNR=14
**PTCN Pitcairn Islan** 40.40 105 PFAKE 20 16 20.0 +11
PTCN LR LR
comp=Z,14µm,18.0s
**COEN Coen** 41.55 272 P **P** 20 16 17.7 -0.9
baz=41,SNR=11
**COEN Coen** 41.55 272⇑ *eP* **P** 20 16 16.6 -1.9
comp=Z,364nm,2.1s
COEN LR LR
comp=Z,8µm,18.0s
**ARPS Mount Arapiles** 41.85 237 P **P** 20 16 20.1 -0.6
baz=42,SNR=11
**MANU Manus Island** 42.11 291 P **P** 20 16 22.3 -0.8
baz=42,SNR=5.4
**QIS Mount Isa** 43.56 261 P **P** 20 16 34.2 -0.7
baz=43,SNR=3.1
**POHA Pohakuloa** 43.76 25 PFAKE 20 16 50.0 +13
POHA LR LR
comp=Z,5µm,21.0s
**HTT Hallett** 43.78 243 P P 20 16 31.4 -5.1
baz=44,SNR=10.0
**WAKE Wake Island** 43.90 333 PFAKE 20 16 50.0 +13
WAKE LR LR
comp=Z,8µm,19.0s
**KIP Kipapa** 44.37 21 P **P** 20 16 42.0 +0.9
KIP pmax pmax
comp=Z,1µm,1.7s
KIP MLR MLR
comp=Z,36µm,17.0s
**KIP Kipapa** 44.37 21 P **P** 20 16 41.2 +0.1
comp=Z,1µm,1.4s
**BBOO Buckleboo** 46.14 244 P **P** 20 16 53.8 -1.4
baz=46,SNR=9.3
**BBOO Buckleboo** 46.14 244 *eP* **P** 20 16 53.4 -1.9
comp=Z,375nm,2.5s
BBOO LR LR
comp=Z,13µm,18.0s
**JAY Jayapura** 47.83 286 P **P** 20 17 07.9 -0.8
baz=48,SNR=45
**GENI Genyem** 48.28 285 P **P** 20 17 11.4 -0.7
comp=Z,542nm,1.6s,comp=Z,16µm
**AS01 Alice Springs** 48.35 256 *eP* **P** 20 17 09.8 -2.9
**AS31 Alice Springs** 48.40 256 PFAKE 20 17 20.0 +7.0
AS31 LR LR
comp=Z,200nm,18.0s
**ASAR Alice Springs** 48.40 256 P **P** 20 17 11.1 -2.0
comp=Z,19nm,0.7s,baz=95,slow=7.4,SNR=90
ASAR PcP **PcP** 20 18 40.8 +1.3
comp=Z,7.8nm,0.6s,baz=103,slow=4.3,SNR=6.3
ASAR S **S** 20 24 08.4 -4.9
comp=Z,3.8nm,1.2s,baz=93,slow=14,SNR=5.9
ASAR LR LR 20 36 59.9
comp=Z,11µm,19.2s,baz=98,slow=35
**ASAR Alice Springs** 48.40 256 P **P** 20 17 11.1 -2.0
ASAR 20 18 40.8
ASAR S **S** 20 24 08.5 -4.9
ASAR pmax pmax
comp=Z,19nm,0.7s
ASAR smax smax
comp=N,4.0nm,1.2s
ASAR MLR MLR
comp=Z,11µm,19.2s
**MIDW Midway** 48.50 356 PFAKE 20 17 30.0 +17
MIDW LR LR
comp=Z,9µm,20.0s
**WRAB Tennant Creek** 48.53 261 *c iP* **P** 20 17 11.6 -2.5
WRAB pmax pmax
comp=Z,466nm,2.5s
WRAB MLR MLR
comp=Z,18µm,15.0s
**WRAB Tennant Creek** 48.53 261 P **P** 20 17 11.6 -2.5
comp=Z,243nm,1.3s,SNR=13
**WRAB Tennant Creek** 48.53 261⇑ *iP* **P** 20 17 11.6 -2.5
comp=Z,62nm,1.3s
**WRA Warramunga Arr** 48.54 261 P **P** 20 17 11.6 -2.6
comp=Z,13nm,0.8s,baz=96,slow=7.1,SNR=73
WRA PcP **PcP** 20 18 41.6 +1.6
comp=Z,11nm,0.8s,baz=94,slow=3.8,SNR=5.4
WRA S **S** 20 24 16.7 +1.3
comp=Z,1.4nm,0.9s,baz=99,slow=13,SNR=5.0
WRA LR LR 20 36 57.9
comp=Z,7µm,18.9s,baz=100,slow=35
**WRA Warramunga Arr** 48.54 261 P **P** 20 17 11.6 -2.6
WRA 20 18 41.6
WRA S **S** 20 24 16.7 +1.3
WRA pmax pmax
comp=Z,13nm,0.8s
WRA smax smax
comp=N,1.0nm,0.9s
WRA MLR MLR
comp=Z,7µm,18.9s
**SMPI Sarmi** 49.85 285 P **P** 20 17 24.1 -0.1
**KDU Kakadu** 51.93 270 P **P** 20 17 39.4 -0.4
baz=52,SNR=5.2
**GUMO Guam** 52.90 306 *eP* **P** 20 17 47.2 +0.2
GUMO pmax pmax
comp=Z,360nm,1.5s
**GUMO Guam** 52.90 306 *eP* **P** 20 17 47.2 +0.2
comp=Z,360nm,1.5s
**FORT Forrest** 52.96 246 P **P** 20 17 46.0 -1.4
baz=53,SNR=9.1
**FORT Forrest** 52.96 246 *eP* **P** 20 17 45.6 -1.7
comp=Z,288nm,1.6s
FORT LR LR
comp=Z,9µm,18.0s
**MTN Manton Dam** 53.14 269 P **P** 20 17 47.0 -1.8
baz=53,SNR=4.7
**MTN Manton Dam** 53.14 269 *eP* **P** 20 17 48.2 -0.6
comp=Z,216nm,1.9s
MTN LR LR
comp=Z,6µm,22.0s
**WRKA Warakurna** 53.30 254 P **P** 20 17 48.6 -1.4
baz=53,SNR=61
**RKPI Ransiki, Papua** 54.17 283 P **P** 20 17 55.5 -0.9
comp=Z,202nm,0.9s,comp=Z,7µm
**SAUI Saumlaki** 54.45 275 P **P** 20 17 57.9 -0.5
comp=Z,90nm,2.1s,comp=Z,3µm
**SAUI Saumlaki** 54.45 275 PFAKE 20 18 10.0 +12
SAUI LR LR
comp=Z,9µm,18.0s
**KNRA Kununurra** 54.63 265 P **P** 20 17 57.9 -1.8
baz=54,SNR=7.3
**FAKI Fak Fak** 55.38 281 P **P** 20 18 04.4 -0.8
baz=55,SNR=3.3
**FAKI Fak Fak** 55.38 281⇑ *iP* **P** 20 18 03.4 -1.8
comp=Z,698nm,2.3s
FAKI LR LR
comp=Z,6µm,20.0s
**BNDI Bandanaira** 56.95 278 P **P** 20 18 15.1 -1.3
comp=Z,418nm,2.7s,comp=Z,11µm
**SWI Sorong** 57.09 283 P **P** 20 18 16.6 -0.8
baz=57,SNR=28
**SWI Sorong** 57.09 283 P **P** 20 18 18.0 +0.6
**PALU Palau** 57.89 293 P **P** 20 18 23.9 +0.9
baz=58,SNR=7.9
**SBA Scott Base** 58.22 185 *eP* **P** 20 18 27.3 +2.9
SBA pmax pmax
comp=Z,299nm,1.6s
SBA MLR MLR
comp=Z,6µm,19.0s
**SBA Scott Base** 58.22 185 *eP* **P** 20 18 27.3 +2.9
comp=Z,299nm,1.6s
SBA LR LR
comp=Z,6µm,19.0s
**MSAI Masohi** 58.28 279 P **P** 20 18 24.1 -1.7
comp=Z,17nm,1.9s,comp=Z,644nm
**VNDA Vanda** 58.35 186 P **P** 20 18 27.1 +1.8
comp=Z,16nm,1.0s,baz=8.4,slow=7.1,SNR=45
**VNDA Vanda** 58.35 186 P **P** 20 18 27.1 +1.8
VNDA pmax pmax
comp=Z,16nm,1.0s
**VNDA Vanda** 58.35 186 *eP* **P** 20 18 27.4 +2.1
comp=Z,324nm,2.4s
**AAI Ambon** 58.84 278 P **P** 20 18 27.9 -1.8
comp=Z,144nm,1.5s,comp=Z,5µm
**NLAI Namlea** 60.02 278 P **P** 20 18 36.5 -1.3
comp=Z,102nm,1.4s,comp=Z,3µm
**SOEI Soe** 60.48 270 P **P** 20 18 41.6 +0.5
baz=60,SNR=13
**SOEI Soe** 60.48 270 P P 20 18 37.0 -4.1
**SOEI Soe** 60.48 270⇑ *eP* **P** 20 18 40.6 -0.5
comp=Z,406nm,1.2s
SOEI LR LR
comp=Z,6µm,19.0s
**LBMI Labuha** 60.63 281 P **P** 20 18 41.4 -0.6
comp=Z,166nm,2.4s,comp=Z,4µm
**BATI Baumata** 60.91 269 P **P** 20 18 43.8 -0.1
comp=Z,59nm,3.6s,comp=Z,3µm
**TNTI Ternate** 61.31 283 P **P** 20 18 45.5 -1.1
comp=Z,409nm,1.7s,comp=Z,6µm
**TNTI Ternate** 61.31 283⇑ *iP* **P** 20 18 45.6 -1.0
comp=Z,429nm,1.2s
TNTI LR LR
comp=Z,2µm,18.0s
**SANI Sanana** 61.49 279 P **P** 20 18 46.8 -1.1
comp=Z,117nm,1.4s,comp=Z,4µm
**KLBR Kelleberrin** 61.67 244 P **P** 20 18 49.0 +0.1
baz=62,SNR=19
**MEEK Meekatharra** 61.69 250 P **P** 20 18 47.9 -1.2
baz=62,SNR=9.1
**MBWA Marble Bar** 61.74 256⇑ *eP* **P** 20 18 47.7 -1.8
comp=Z,42nm,1.0s
MBWA LR LR
comp=Z,13µm,18.0s
**NWAO Narrogin (SRO)** 61.94 243⇑ *iP* **P** 20 18 50.1 -0.6
NWAO pmax pmax
comp=Z,382nm,1.9s
**NWAO Narrogin (SRO)** 61.94 243 P **P** 20 18 51.6 +0.9
baz=62,SNR=8.1
**NWAO Narrogin (SRO)** 61.94 243 P **P** 20 18 51.6 +0.9
SNR=7.7
**NWAO Narrogin (SRO)** 61.94 243⇑ *iP* **P** 20 18 50.1 -0.6
comp=Z,382nm,1.9s
**RKGY Rocky Gully** 61.95 241 P **P** 20 18 51.7 +0.9
baz=62,SNR=9.0
**BLDU Balidu** 62.70 245 P **P** 20 18 55.6 -0.2
baz=62,SNR=19
**MMRI Maumere** 62.73 271 P **P** 20 18 54.1 -2.1
comp=Z,105nm,2.3s,comp=Z,4µm
**MMRI Maumere** 62.73 271⇑ *iP* **P** 20 18 54.3 -1.9
comp=Z,599nm,2.1s
MMRI *eS* **S** 20 27 21.1 -3.8
**BBSI Bau Bau** 63.45 274 P **P** 20 19 00.1 -0.9
comp=Z,67nm,2.1s,comp=Z,3µm
**MORW Morawa** 63.52 247 P **P** 20 19 00.7 -0.6
baz=63,SNR=14
**CBIJ Chichi jima** 63.67 316 PFAKE 20 19 10.0 +7.9
CBIJ LR LR
comp=Z,4µm,20.0s
**BASI Baing, Sumba** 63.80 268 P **P** 20 19 02.3 -0.9
comp=Z,223nm,1.6s,comp=Z,5µm
**WSI Waingapu** 64.22 269 P **P** 20 19 04.7 -1.4
comp=Z,196nm,1.7s,comp=Z,4µm
**H01W1 Cape Leeuwin H** 64.23 240 P **P** 20 19 08.3 +2.8
baz=94,slow=8.0,SNR=4.8
**H01W2 Cape Leeuwin H** 64.24 240 P **P** 20 19 07.1 +1.5
baz=94,slow=8.0,SNR=5.1
**H01W3 Cape Leeuwin H** 64.24 240 P **P** 20 19 08.1 +2.5
baz=94,slow=8.0,SNR=3.4
**KMSI Cibinong** 64.34 281 P **P** 20 19 05.4 -1.4
comp=Z,262nm,1.6s,comp=Z,4µm
**LUWI Luwuk** 64.84 279 P **P** 20 19 11.1 +1.0
baz=65,SNR=6.6
**LUWI Luwuk** 64.84 279⇑ *iP* **P** 20 19 09.4 -0.8
comp=Z,529nm,1.7s
**BSSI Bau Bau, Buton** 65.17 273 P **P** 20 19 10.7 -1.6
comp=Z,89nm,1.6s,comp=Z,2µm
**DAV Davao City (W)** 65.57 288⇑ *eP* **P** 20 19 12.4 -2.4
**DAV Davao City (W)** 65.57 288 *eP* **P** 20 19 13.7 -1.2
DAV LR LR
comp=Z,4µm,21.0s
**CASY Casey** 65.72 205 *eP* **P** 20 19 16.3 +1.4
comp=Z,675nm,2.3s
CASY LR LR
comp=Z,2µm,18.0s
**BKSI Bulukumba** 65.79 273 P **P** 20 19 16.1 -0.2
**APSI Ampana** 65.94 278 P **P** 20 19 16.9 -0.3
**MRSI Marisa** 66.19 280 P **P** 20 19 19.8 +1.0
**KAPI Kappang** 66.25 274 P **P** 20 19 18.4 -0.8
comp=Z,114nm,1.5s,SNR=8.8
**KAPI Kappang** 66.25 274 P **P** 20 19 18.4 -0.8
SNR=11
**KAPI Kappang** 66.25 274⇑ *iP* **P** 20 19 17.9 -1.3
comp=Z,114nm,1.7s
**GIRL Giralia** 66.39 254 P **P** 20 19 19.7 -0.3
baz=66,SNR=4.8
**SPSI Sidrap Palu** 66.59 275 P **P** 20 19 21.6 +0.2
**CTBH Cotabato--PC H** 66.83 288 *eP* **P** 20 19 22.3 -0.5
**TTSI Tana Toraja** 66.86 276 P **P** 20 19 21.0 -2.2
comp=Z,35nm,1.8s,comp=Z,2µm
**PCI Palu** 67.62 278 P **P** 20 19 28.5 +0.5
comp=Z,203nm,1.3s,comp=Z,6µm
**TWSI Taliwang, Sumb** 67.72 269 P **P** 20 19 25.4 -3.2
**MPSI Mapaga** 68.02 279 P **P** 20 19 31.0 +0.5
**JHJ2 Mitsune** 69.28 319 PFAKE 20 19 50.0 +12
JHJ2 LR LR
comp=Z,4µm,18.0s
**IGBI Denpasar** 69.32 268 P **P** 20 19 37.1 -1.5
comp=Z,122nm,2.2s,comp=Z,4µm
**SRBI Singaraja** 69.49 269 P **P** 20 19 38.1 -1.5
comp=Z,82nm,3.0s,comp=Z,4µm
**QSPA South Pole Qui** 69.63 180 *eP* **P** 20 19 40.4 +0.6
comp=Z,934nm,2.6s
QSPA LR LR
comp=Z,7µm,18.0s
**PVCP Virac** 69.77 294⇑ *iP* **P** 20 19 42.6 +1.3
**KBKI Kotabaru** 70.19 274 P **P** 20 19 43.4 -0.6
comp=Z,60nm,3.0s,comp=Z,3µm
**BKB Balikpapan** 70.23 276 P **P** 20 19 45.0 +0.8
comp=Z,102nm,1.8s,comp=Z,5µmcomp=Z,13µm
**JAGI Jajag, Banyuwa** 70.36 268 P **P** 20 19 42.4 -2.6
comp=Z,66nm,1.2s,comp=Z,3µm
**ABJI Asem Bagus** 70.50 269 P **P** 20 19 44.9 -1.0
comp=Z,78nm,2.0s,comp=Z,5µm
**KMMI Kalianget** 70.99 269 P **P** 20 19 49.0 +0.1
comp=Z,84nm,3.1s,comp=Z,5µm
**BLJI Banyuglugur** 71.11 269 P **P** 20 19 48.6 -1.0
comp=Z,78nm,3.0s,comp=Z,5µm
**MYLDM Lahad Datu** 71.18 283 ⇑P **P** 20 19 51.4 +1.4
**MYLDM Lahad Datu** 71.18 283 *eP* **P** 20 19 51.1 +1.1
comp=Z,2µm,3.0s
**BBKI Banjar Baru** 71.37 273 P **P** 20 19 50.9 -0.3
comp=Z,128nm,2.8s,comp=Z,6µmcomp=Z,32µm
**TSM Tawau** 71.40 282 ⇑P **P** 20 19 52.2 +0.9
**SDKM Sandakan** 72.55 283 ⇑P **P** 20 19 58.5 +0.2
**MAJO Matsushiro** 72.59 321 *c iP* **P** 20 19 57.5 -0.5
MAJO pmax pmax
comp=Z,2µm,3.6s
MAJO MLR MLR
comp=Z,13µm,18.0s
**MAJO Matsushiro** 72.59 321⇑ *iP* **P** 20 19 57.5 -0.5
comp=Z,116nm,1.4s
MAJO LR LR
comp=Z,3µm,18.0s
**MAT Matsushiro** 72.59 321 P **P** 20 19 57.3 -0.7
MAT S **S** 20 29 25.6 +3.2
**MIR Mirnyy** 72.72 205⇑ *iP* P 20 20 10.0 +12
MIR pmax pmax
comp=Z,180nm,2.0s
MIR MLR MLR
comp=Z,220nm,8.0s
**TBJI Tambak Boyo** 73.05 269 P **P** 20 20 00.7 -0.5
comp=Z,218nm,2.1s,comp=Z,10µm
**PCJI Pacitan** 73.24 267 P **P** 20 20 01.8 -0.5
**KDM Kudat** 73.39 284 ⇑P **P** 20 20 03.6 +0.5
**KKM Kota Kinabalu** 73.61 283 P **P** 20 20 04.4 -0.2
baz=74,SNR=36
**KKM Kota Kinabalu** 73.61 283⇑ *eP* **P** 20 20 03.7 -0.9
comp=Z,224nm,1.7s
**SMY Shemya** 73.62 352 PFAKE 20 20 20.0 +16
SMY LR LR
comp=Z,7µm,21.0s
**ERM Erimo** 73.81 328 *d iP* **P** 20 20 05.8 +0.8
ERM MLR MLR
comp=Z,3µm,17.0s
**ERM Erimo** 73.81 328 PFAKE 20 20 20.0 +15
ERM LR LR
comp=Z,5µm,18.0s
**UGM Wanagama** 73.94 267 P **P** 20 20 07.0 +0.5
baz=74,SNR=4.0
**YUK Yuzh-Kuril'sk** 74.06 331 *c iP* **P** 20 20 07.4 +1.0
YUK *i* 20 20 23.2
YUK *i* S **S** 20 29 42.3 +3.8
YUK *i* 20 30 13.7
YUK pmax pmax
comp=N,169nm,1.5s
YUK pmax pmax
comp=E,37nm,1.5s
YUK pmax pmax
comp=Z,356nm,1.5s
YUK pmax pmax
comp=Z,816nm,2.4s
**KUR Kuril'sk** 74.11 333⇑ *iP* **P** 20 20 06.7 0.0
KUR *i* 20 22 56.0
KUR *i* S **S** 20 29 40.9 +1.8
KUR *i* SS **SS** 20 34 26.7 +1.9
KUR pmax pmax
comp=Z,2µm,2.6s
KUR pmax pmax
comp=N,44nm,1.5s
KUR pmax pmax
comp=E,39nm,1.5s
KUR pmax pmax
comp=Z,178nm,1.5s
**UNV Unalaska Valle** 74.25 4 PFAKE 20 20 20.0 +13
UNV LR LR
comp=Z,5µm,21.0s
**SNCC San Nicolas Is** 74.35 45 P **P** 20 20 09.6 +1.3
baz=75
**SNCC San Nicolas Is** 74.35 45 *eP* **P** 20 20 07.6 -0.8
comp=Z,511nm,2.1s
**BSC Santa Cruz Isl** 74.73 44 P **P** 20 20 11.7 +1.1
baz=75
**SZP Santa** 74.76 296 PFAKE 20 20 20.0 +8.9
SZP LR LR
comp=Z,4µm,21.0s
**SCI San Clemente I** 74.83 46 P **P** 20 20 12.6 +1.4
baz=75
**SBC Santa Barbara** 74.95 44 P **P** 20 20 13.3 +1.5
baz=75
**JNU Nakatsue** 75.02 314⇑ *eP* **P** 20 20 11.7 -0.6
comp=Z,415nm,2.0s
JNU LR LR
comp=Z,3µm,18.0s
**PKM Peak Mountain** 75.17 43 P **P** 20 20 14.3 +0.9
baz=75
**BLG Laguna Peak** 75.17 44 P **P** 20 20 14.4 +1.2
baz=75
**SMMC Simmler** 75.31 43 P **P** 20 20 15.4 +1.5
baz=76
**SAO San Andreas Ge** 75.32 41 *eP* **P** 20 20 14.5 +0.6
SAO pmax pmax
comp=Z,434nm,2.4s
SAO MLR MLR
comp=Z,8µm,19.0s
**SAO San Andreas Ge** 75.32 41 *eP* **P** 20 20 14.5 +0.6
comp=Z,434nm,2.4s
SAO LR LR
comp=Z,8µm,19.0s
**FMP Fort Macarthur** 75.44 45 P **P** 20 20 16.1 +1.4
baz=76
**FALS False Pass** 75.52 6 PFAKE 20 20 30.0 +15
FALS LR LR
comp=Z,8µm,21.0s
**SKR Severo-Kuril's** 75.64 341⇑ *iP* P 20 20 08.0 -7.4
SKR *e* 20 20 15.0
SKR *e* 20 20 18.0
SKR *e* 20 20 36.0
SKR *e* 20 23 08.0
SKR *eS* **S** 20 29 50.0 -5.8
SKR *ePS* PnS 20 30 22.0 -11
SKR *e* 20 30 28.0
SKR *eSSS* SSS 20 38 05.0
SKR pmax pmax
comp=N,1µm,5.0s
SKR pmax pmax
comp=E,2µm,5.0s
SKR pmax pmax
comp=Z,3µm,5.0s
SKR pmax pmax
comp=Z,60nm,0.8s
SKR smax smax
comp=E,4µm,12.0s
SKR smax smax
comp=N,4.0nm,12.0s
SKR MLR MLR
comp=N,1µm,18.0s
SKR MLR MLR
comp=E,2µm,18.0s
SKR MLR MLR
comp=Z,4µm,18.0s
**ASAJ Asahikawa** 75.65 329 *eP* P 20 20 20.1 +4.5
comp=Z,591nm,2.2s
ASAJ LR LR
comp=Z,4µm,19.0s
**OSI Osito Adit** 75.70 44 P **P** 20 20 17.6 +1.4
baz=76
**OSI Osito Adit** 75.70 44 *eP* **P** 20 20 17.5 +1.2
comp=Z,741nm,2.6s
OSI LR LR
comp=Z,6µm,20.0s
**DECC Green Verdugo** 75.74 45 P **P** 20 20 17.8 +1.4
baz=76
**109C Camp Elliot, M** 75.75 46 P **P** 20 20 17.8 +1.3
baz=76
**PASC Pasadena Art C** 75.79 45 *eP* **P** 20 20 18.6 +1.9
comp=Z,388nm,2.5s
PASC LR LR
comp=Z,6µm,18.0s
**HOPS Hopland** 75.79 38 *eP* **P** 20 20 19.4 +2.8
comp=Z,368nm,2.3s
HOPS LR LR
comp=Z,6µm,20.0s
**MWC Mount Wilson** 75.91 45 *eP* **P** 20 20 17.3 -0.3
MWC pmax pmax
comp=Z,428nm,2.2s
**MWC Mount Wilson** 75.91 45 *eP* **P** 20 20 17.3 -0.3
comp=Z,428nm,2.2s
**BAR Barrett** 75.93 47 *eP* **P** 20 20 16.9 -0.7
comp=Z,243nm,2.0s
BAR LR LR
comp=Z,4µm,18.0s
**SBUM Sibu** 75.93 278 *eP* **P** 20 20 18.3 +0.3
comp=Z,303nm,2.0s
**ARVC Arvin** 75.95 44 P **P** 20 20 19.0 +1.4
baz=76
**KCPM Cahto Peak** 75.96 38 PFAKE 20 20 30.0 +12
KCPM LR LR
comp=Z,5µm,19.0s
**LPIG La Paz** 75.99 57 LR LR 20 47 14.6
comp=Z,10µm,18.9s,baz=223,slow=31
**YOJ Yonaguni jima** 76.00 303 *eP* P 20 20 21.8 +3.7
YOJ pmax pmax
comp=Z,293nm,1.1s
**YOJ Yonaguni jima** 76.00 303 *eP* P 20 20 21.8 +3.7
comp=Z,293nm,1.1s
**SLBS Sierra La Lagu** 76.07 58 *eP* **P** 20 20 19.7 +1.0
comp=Z,308nm,2.3s
SLBS LR LR
comp=Z,10µm,19.0s
**KIPM Iron Peak** 76.10 38 *eP* **P** 20 20 20.8 +2.3
**MURC Murrieta** 76.11 46 P **P** 20 20 20.0 +1.4
baz=76,SNR=15
**BFSC Mount Baldy Ra** 76.18 45 P **P** 20 20 20.2 +1.1
baz=76,SNR=5.7
**BFSC Mount Baldy Ra** 76.18 45 *eP* **P** 20 20 17.9 -1.2
**VES Vestal, Richgr** 76.22 43 P **P** 20 20 20.6 +1.5
baz=76,SNR=13
**MONP Monument Peak** 76.22 47 P **P** 20 20 20.5 +1.0
baz=76,SNR=27
**KMRM Mail Ridge** 76.25 37 *eP* **P** 20 20 20.3 +1.0
comp=Z,152nm,1.3s
KMRM LR LR
comp=Z,11µm,18.0s
**IBP Imperial Bould** 76.31 47 P **P** 20 20 20.8 +1.0

baz=76,SNR=13
**SDPT Sand Point 76.33 8** PFAKE 20 20 30.0 +11
SDPT LR LR
comp=Z,7μm,21.0s
**EDW2 Edwards Air Fo 76.35 44** P **P 20 20 20.9 +1.0**
baz=77,SNR=39
**DNR Dunn Ranch,Anz 76.47 46** *e*P **P 20 20 20.7 0.0**
**ISA Isabella 76.50 44** *e*P **P 20 20 20.1 -0.7**
ISA pmax pmax
comp=Z,643nm,2.5s
ISA MLR MLR
comp=Z,5μm,19.0s
**ISA Isabella 76.50 44** P **P 20 20 22.0 +1.2**
baz=77,SNR=54
**ISA Isabella 76.50 44** *e*P **P 20 20 20.1 -0.7**
comp=Z,643nm,2.5s
ISA LR LR
comp=Z,5μm,19.0s
**CISI Cisompet, Garu 76.59 267** P **P 20 20 21.7 -0.1**
baz=76,SNR=3.5
**CISI Cisompet, Garu 76.59 267** *e*P **P 20 20 20.9 -0.9**
comp=Z,572nm,1.8s
CISI LR LR
comp=Z,2μm,21.0s
**PFO Pinyon Flat Ob 76.62 46** LR LR 20 48 20.2
comp=Z,4μm,18.0s,baz=253,slow=31
**PFO Pinyon Flat Ob 76.62 46** *e*P **P 20 20 21.1 -0.5**
PFO pmax pmax
comp=Z,518nm,2.5s
**PFO Pinyon Flat Ob 76.62 46** P **P 20 20 21.8 +0.2**
comp=Z,200nm,2.5s,SNR=16
**PFO Pinyon Flat Ob 76.62 46** P **P 20 20 21.8 +0.2**
comp=Z,200nm,2.5s,SNR=16
**PFO Pinyon Flat Ob 76.62 46** *e*P **P 20 20 21.1 -0.5**
comp=Z,518nm,2.5s
**KHMM Horse Mountain 76.67 37** *e*P **P 20 20 23.9 +2.2**
comp=Z,88nm,1.5s
KHMM LR LR
comp=Z,9μm,20.0s
**SWSC Sam W. Stewart 76.68 47** P **P 20 20 22.8 +1.0**
baz=77,SNR=16
**TWG Pinlang 76.74 301** PFAKE 20 20 30.0 +7.7
TWG LR LR
comp=Z,9μm,21.0s
**CMB Columbia Colle 76.78 41** *e*P **P 20 20 21.5 -0.8**
CMB pmax pmax
comp=Z,56nm,1.3s
CMB MLR MLR
comp=Z,8μm,19.0s
**CMB Columbia Colle 76.78 41** *e*P **P 20 20 21.5 -0.8**
comp=Z,56nm,1.3s
CMB LR LR
comp=Z,8μm,19.0s
**YULB Yu-li 76.83 301** *e*P **P 20 20 24.2 +1.3**
comp=Z,265nm,1.7s
YULB LR LR
comp=Z,2μm,21.0s
**LRMC Laurel Mountai 76.90 44** P **P 20 20 24.3 +1.1**
baz=77,SNR=24
**OHCM Honcut 76.95 39** *e*P **P 20 20 24.9 +1.7**
**NACB Ninganchiao 76.98 302** *e*P **P 20 20 23.3 -0.3**
comp=Z,366nm,1.3s
**PET Petropavlovsk 76.98 343** *c i*P **P 20 20 22.6 -0.3**
PET *e*S **S 20 30 09.2 -1.3**
PET *e*PS **PnS 20 30 51.4 +1.3**
PET *e*SS **SS 20 35 09.6 +1.6**
PET pmax pmax
comp=Z,90nm,2.1s
PET pmax pmax
comp=Z,2μm,13.8s
PET pmax pmax
comp=Z,1μm,12.4s
**PET Petropavlovsk 76.98 343** *e*P **P 20 20 23.9 +0.9**
comp=Z,476nm,2.0s
PET LR LR
comp=Z,3μm,19.0s
**RRX Edison Barstow 77.00 45** P **P 20 20 24.7 +1.2**
baz=77
**WDC Whiskeytown Da 77.15 38** *e*P **P 20 20 24.4 +0.1**
WDC pmax pmax
comp=Z,90nm,1.5s
WDC MLR MLR
comp=Z,8μm,20.0s
**WDC Whiskeytown Da 77.15 38** *e*P **P 20 20 24.4 +0.1**
comp=Z,90nm,1.5s
WDC LR LR
comp=Z,8μm,20.0s
**BELC Belle Mtn. Jos 77.15 46** P **P 20 20 25.4 +0.7**
baz=77,SNR=36
**CWC Cottonwood Cre 77.23 43** P **P 20 20 25.8 +0.8**
baz=78
**SSLB Suanglung 77.30 301** *e*P **P 20 20 25.1 -0.4**
comp=Z,176nm,1.6s
SSLB LR LR
comp=Z,2μm,22.0s
**KBO Bosley Butte 77.31 35** PFAKE 20 20 40.0 +15
KBO LR LR
comp=Z,10μm,19.0s
**PEA0 Petropavlovsk- 77.31 343** *e*P **P 20 20 24.6 -0.3**
**PETK Petropavlovsk- 77.31 343** P **P 20 20 25.0 +0.1**
comp=Z,22nm,0.8s,baz=123,slow=7.3,SNR=17
PETK LR LR 20 50 31.7
comp=Z,1μm,20.6s,baz=168,slow=33
**PETK Petropavlovsk- 77.31 343** P **P 20 20 25.0 +0.1**
PETK pmax pmax
comp=Z,22nm,0.8s
PETK MLR MLR
comp=Z,1μm,20.7s
**N02D Trinity Center 77.32 37** P **P 20 20 26.6 +1.3**
baz=78,SNR=9.9
**BC3 Big Chuckawall 77.32 47** P **P 20 20 26.5 +0.9**
baz=78,SNR=44
**TPUB Ta-pu 77.32 301** *e*P **P 20 20 24.6 -1.1**
comp=Z,179nm,1.0s
TPUB LR LR
comp=Z,2μm,21.0s
**KSM Kuching 77.35 276** P **P 20 20 26.0 0.0**
baz=77,SNR=77
**KSM Kuching 77.35 276** *e*P **P 20 20 24.6 -1.4**
comp=Z,635nm,2.1s
KSM LR LR
comp=Z,2μm,19.0s
**GSC Goldstone 77.38 45** *e*P **P 20 20 25.0 -0.7**
GSC pmax pmax
comp=Z,556nm,2.6s
GSC MLR MLR
comp=Z,6μm,19.0s
**GSC Goldstone 77.38 45** P **P 20 20 26.7 +0.9**
baz=78,SNR=33
**GSC Goldstone 77.38 45** *e*P **P 20 20 25.0 -0.7**
comp=Z,556nm,2.6s
GSC LR LR
comp=Z,6μm,19.0s
**MPMC Manual Prospec 77.38 44** P **P 20 20 26.8 +0.9**
baz=78,SNR=53
**O03D Paynes Creek 77.39 38** P **P 20 20 26.9 +1.2**
baz=78,SNR=12
**YHNB Yeheng 77.39 302** *e*P **P 20 20 27.2 +1.1**
comp=Z,294nm,1.4s
YHNB LR LR
comp=Z,4μm,22.0s
**GLA Glamis 77.41 47** *e*P **P 20 20 26.6 +0.6**
GLA pmax pmax
comp=Z,513nm,2.2s
GLA MLR MLR
comp=Z,3μm,19.0s
**GLA Glamis 77.41 47** P **P 20 20 26.8 +0.9**
baz=78,SNR=8.9
**GLA Glamis 77.41 47** *e*P **P 20 20 26.6 +0.6**
comp=Z,514nm,2.2s
GLA LR LR
comp=Z,3μm,19.0s
**HEC Hector,Ludlow 77.41 45** P **P 20 20 26.7 +0.7**
baz=78,SNR=31
**DAC Darwin (Calif) 77.44 43** *e*P **P 20 20 26.2 -0.1**
DAC pmax pmax
comp=Z,272nm,2.1s
DAC MLR MLR
comp=Z,7μm,19.0s
**DAC Darwin (Calif) 77.44 43** *e*P **P 20 20 26.2 -0.1**
comp=Z,272nm,2.1s
DAC LR LR
comp=Z,7μm,19.0s
**TATO Taipei 77.46 303** *e*P **P 20 20 27.4 +1.1**
comp=Z,986nm,1.8s
TATO LR LR
comp=Z,4μm,22.0s

**KSBUS Busan 77.46 315** P **P 20 20 27.1 +1.0**
SNR=20
**KSBUS Busan 77.46 315** P **P 20 20 27.1 +1.0**
SNR=20
**MLAC Mammoth Lakes 77.48 42** P **P 20 20 27.6 +1.1**
baz=78
**MTUM Tungsten Hills 77.48 42** *e*P **P 20 20 26.8 +0.3**
**M02C Callahan 77.51 37** P **P 20 20 27.8 +1.4**
baz=78,SNR=9.8
**XMIS Christmas Isla 77.67 263** PFAKE 20 20 40.0 +12
XMIS LR LR
comp=Z,6μm,20.0s
**YSS Yuzh-Sakhalins 77.69 331** *αe*P **P 20 20 27.6 +0.5**
YSS *e**SP **sP 20 20 36.0 +2.1**
YSS *e*S **S 20 30 18.0 -0.5**
YSS *e*PS PnS 20 30 46.0 -14
YSS *e*PPS PPS 20 31 06.0
YSS pmax pmax
comp=Z,540nm,2.0s
YSS pmax pmax
comp=Z,3μm,6.0s
YSS MLR MLR
comp=N,2μm,18.0s
YSS MLR MLR
comp=E,2μm,18.0s
YSS MLR MLR
comp=Z,2μm,18.0s
**YSS Yuzh-Sakhalins 77.69 331** *e*P **P 20 20 28.6 +1.5**
comp=Z,836nm,2.3s
YSS LR LR
comp=Z,1μm,20.0s
**KEBM Edson Butte 77.70 35** PFAKE 20 20 40.0 +13
KEBM LR LR
comp=Z,11μm,18.0s
**YBH Yreka Blue Hor 77.82 37** *e*P **P 20 20 28.6 +0.5**
YBH pmax pmax
comp=Z,346nm,2.5s
YBH MLR MLR
comp=Z,7μm,20.0s
**YBH Yreka Blue Hor 77.82 37** *e*P **P 20 20 28.6 +0.5**
comp=Z,346nm,2.5s
YBH LR LR
comp=Z,7μm,20.0s
**IRM Iron Mountain 77.82 46** P **P 20 20 29.1 +0.9**
baz=78,SNR=52
**GMRC Granite Mounta 77.83 46** P **P 20 20 29.3 +0.9**
baz=78,SNR=33
**KSPHA Pohang 77.85 316** P **P 20 20 30.5 +2.3**
SNR=8.3
**KSPHA Pohang 77.85 316** P **P 20 20 30.5 +2.3**
SNR=8.3
**KSDAG Daegu 77.91 316** P **P 20 20 29.6 +1.0**
SNR=13
**KSDAG Daegu 77.91 316** P **P 20 20 29.6 +1.0**
SNR=13
**KSNAH Namhae 78.00 314** P **P 20 20 30.9 +1.8**
SNR=14
**KSNAH Namhae 78.00 314** P **P 20 20 30.9 +1.8**
SNR=14
**Y12C Blythe 78.01 47** P **P 20 20 30.4 +1.2**
baz=78
**GRAC Grapevine Rang 78.02 43** P **P 20 20 30.4 +1.1**
baz=78,SNR=36
**FURC Furnace Creek, 78.03 44** P **P 20 20 30.9 +1.7**
baz=78,SNR=16
**KSULJ Uljin 78.13 317** P **P 20 20 31.0 +1.2**
SNR=13
**KSULJ Uljin 78.13 317** P **P 20 20 31.0 +1.2**
SNR=13
**KSJJU Jeju 78.15 312** P **P 20 20 32.2 +2.1**
SNR=8.2
**214A Organ Pipe Nat 78.22 49** P **P 20 20 31.2 +0.8**
baz=78
**214A Organ Pipe Nat 78.22 49** *e*P **P 20 20 30.4 -0.1**
comp=Z,1μm,2.0s
**NV01 Mina Array Sit 78.30 41** *e*P **P 20 20 30.5 -0.5**
**NVAR Mina Array Bea 78.30 41** P **P 20 20 31.1 0.0**
comp=Z,34nm,1.0s,baz=225,slow=9.4,SNR=57
NVAR LR LR 20 50 39.3
comp=Z,10μm,18.4s,baz=249,slow=32
**KSKOH Goheung 78.32 314** P **P 20 20 32.5 +1.6**
SNR=8.0
**KSKOH Goheung 78.32 314** P **P 20 20 32.5 +1.6**
SNR=8.0
**M04C Macdoel 78.34 37** P **P 20 20 32.1 +1.1**
baz=79,SNR=8.8
**LDFC Landfair 78.37 46** *e*P **P 20 20 31.9 +0.6**
comp=Z,1μm,2.6s
LDFC LR LR
comp=Z,4μm,20.0s
**KSEUS ULSEONG 78.39 316** P **P 20 20 32.9 +1.7**
SNR=9.2
**KSEUS ULSEONG 78.39 316** P **P 20 20 32.9 +1.7**
SNR=9.2
**SII Sitkinak Islan 78.46 11** PFAKE 20 20 40.0 +8.8
SII LR LR
comp=Z,9μm,20.0s
**PDMCI Parker Dam,Lak 78.59 47** P **P 20 20 33.3 +0.9**
baz=79,SNR=15
**TPNV Topopah Spring 78.71 44** *e*P **P 20 20 33.5 +0.2**
TPNV pmax pmax
comp=Z,219nm,1.7s
TPNV MLR MLR
comp=Z,7μm,19.0s
**TPNV Topopah Spring 78.71 44** P **P 20 20 34.1 +0.8**
baz=79,SNR=38
**TPNV Topopah Spring 78.71 44** *e*P **P 20 20 33.5 +0.2**
comp=Z,219nm,1.7s
TPNV LR LR
comp=Z,7μm,19.0s
**KSSAJ Sangju 78.77 316** P **P 20 20 34.2 +0.8**
SNR=6.1
**KSKWJ Gwangju 78.83 314** P **P 20 20 35.0 +1.3**
SNR=14
**KSKWJ Gwangju 78.83 314** P **P 20 20 35.0 +1.3**
SNR=14
**KSGWJ Gwangju-acc 78.90 314** P **P 20 20 35.7 +1.7**
SNR=8.9
**KSGWJ Gwangju-acc 78.90 314** P **P 20 20 35.7 +1.7**
SNR=8.9
**K04D Chiloquin, OR 78.94 36** P **P 20 20 35.5 +1.2**
baz=79
**KSJES JEONGSEON 79.04 317** P **P 20 20 37.1 +2.2**
SNR=7.7
**KSJES JEONGSEON 79.04 317** P **P 20 20 37.1 +2.2**
SNR=7.7
**KSJEU Jeongeup 79.06 314** P **P 20 20 36.8 +1.9**
SNR=6.0
**J04D Umpqua Nationa 79.15 36** P **P 20 20 36.8 +1.2**
baz=79
**KSCHJ Chungju 79.16 316** P **P 20 20 37.7 +2.2**
SNR=7.7
**SHPR Sheep Range 79.16 44** *e*P **P 20 20 36.1 +0.4**
**KSDGY Daegwallycong 79.19 317** P **P 20 20 38.4 +2.7**
SNR=13
**KSDGY Daegwallycong 79.19 317** P **P 20 20 38.4 +2.7**
SNR=13
**OHAK Old Harbor 79.25 11** PFAKE 20 20 50.0 +15
OHAK LR LR
comp=Z,9μm,20.0s
**TJN Taejon 79.27 315** *c i*P **P 20 20 36.5 +0.4**
**MOD Modoc 79.29 38** *e*P **P 20 20 33.6 -2.7**
comp=Z,115nm,1.6s
MOD LR LR
comp=Z,6μm,20.0s
**MOD Modoc 79.29 38** *e*PKKPbc **P 20 20 33.6 -2.7**
**I04A Tendick Farm, 79.36 35** P **P 20 20 38.0 +1.6**
baz=80
**COR Corvallis 79.41 34** PFAKE 20 20 50.0 +13
COR LR LR
comp=Z,14μm,19.0s
**K05A Summer Lake 79.49 37** *e*P **P 20 20 37.5 +0.1**
comp=Z,704nm,2.4s
K05A LR LR
comp=Z,8μm,20.0s
**KSRS Korea Array 79.53 316** P **P 20 20 38.8 +1.3**
comp=Z,11nm,0.9s,baz=127,slow=5.7,SNR=22
KSRS LR LR 20 50 33.3
comp=Z,2μm,21.6s,baz=122,slow=32
**KSRS Korea Array 79.53 316** P **P 20 20 38.8 +1.3**
KSRS pmax pmax
comp=Z,11nm,0.9s
KSRS MLR MLR
comp=Z,2μm,21.6s
**KSAR Wonju Array Be 79.55 316** P **P 20 20 38.8 +1.2**
**KSAR Wonju Array Be 79.55 316** P **P 20 20 38.8 +1.2**
**KS01 Wonju Array Si 79.56 316** *e*P **P 20 20 38.0 +0.3**

**KSHUK Heuksando 79.60 313** P **P 20 20 40.9 +3.0**
SNR=6.1
**J05D Fort Rock, OR 79.66 36** P **P 20 20 39.5 +1.2**
baz=80,SNR=20
**KSIJA INJE 79.72 317** P **P 20 20 41.4 +2.9**
SNR=5.2
**QZH Quanzhou 79.74 301** *i*P **P 20 20 41.3 +2.4**
QZH S **S 20 30 46.0 +4.6**
QZH PMZ
comp=Z,440nm,1.4s
QZH PMZ
comp=Z,7μm,6.1s
QZH LN
comp=Z,2μm,13.7s
QZH LE
comp=Z,2μm,13.3s
QZH LZ
comp=Z,3μm,13.0s
**KSICN Icheon 79.77 316** P **P 20 20 41.2 +2.4**
SNR=9.1
**KSCHC Chuncheon 79.79 317** P **P 20 20 41.9 +3.0**
SNR=12
**SEHB SEOHWA 79.80 317** P P 20 20 42.2 +3.3
SNR=8.2
**TUC Tucson 79.86 50** *e*P **P 20 20 40.0 +0.5**
TUC pmax pmax
comp=Z,659nm,2.5s
TUC MLR MLR
comp=Z,6μm,19.0s
**TUC Tucson 79.86 50** *e*P **P 20 20 40.0 +0.5**
comp=Z,659nm,2.5s
TUC LR LR
comp=Z,6μm,19.0s
**KDAK Kodiak Island 79.91 11** PFAKE 20 20 50.0 +11
KDAK LR LR
comp=Z,6μm,20.0s
**R11A Troy Canyon, C 79.96 43** P **P 20 20 41.1 +1.1**
baz=80,SNR=36
**R11A Troy Canyon, C 79.96 43** *e*P **P 20 20 39.9 -0.1**
comp=Z,133nm,1.8s
R11A LR LR
comp=Z,5μm,19.0s
**KSSWO Suwon 80.05 316** P **P 20 20 42.7 +2.5**
SNR=7.0
**H04A Detroit Lake 80.07 35** *e*P **P 20 20 42.3 +2.0**
comp=Z,227nm,2.1s
**KSCWO Cheorwon 80.16 317** P **P 20 20 43.9 +3.0**
SNR=8.3
**BMN Battle Mountai 80.19 40** *e*P **P 20 20 40.6 -0.6**
BMN pmax pmax
comp=Z,468nm,2.4s
BMN MLR MLR
comp=Z,6μm,18.0s
**BMN Battle Mountai 80.19 40** *e*P **P 20 20 40.6 -0.6**
comp=Z,468nm,2.4s
BMN LR LR
comp=Z,6μm,18.0s
**F03A Seaside 80.19 33** PFAKE 20 20 50.0 +9.1
F03A LR LR
comp=Z,6μm,19.0s
**KSSEO Seoul 80.20 316** P **P 20 20 44.0 +2.9**
SNR=8.6
**I05D Terrebonne, OR 80.30 35** P **P 20 20 42.8 +1.2**
baz=80,SNR=8.5
**KSDDC Dongducheon 80.35 316** P **P 20 20 44.4 +2.5**
SNR=10
**INCN Inchon 80.39 316** P **P 20 20 43.2 +1.1**
comp=Z,919nm,2.5s
INCN LR LR
comp=Z,3μm,22.0s
**YNCB YEONCHEON 80.52 316** P **P 20 20 45.8 +3.0**
SNR=12
**KSMUS Musan 80.54 316** P **P 20 20 45.2 +2.3**
SNR=5.6
**F04D Rainier, OR 80.58 33** P **P 20 20 44.6 +1.7**
baz=81
**VLA Vladivostok 80.58 323** *c i*P **P 20 20 43.2 +0.2**
VLA pmax pmax
comp=Z,108nm,2.1s
VLA MLR MLR
comp=Z,3μm,18.0s
**WVOR Wild Horse Val 80.59 38** *e*P **P 20 20 43.3 +0.1**
WVOR MLR MLR
comp=Z,6μm,20.0s
**WVOR Wild Horse Val 80.59 38** *e*P **P 20 20 43.3 +0.1**
WVOR LR LR
comp=Z,6μm,20.0s
**E03A Lebam 80.61 33** *e*P **P 20 20 44.4 +1.3**
comp=Z,100nm,1.5s
**KSGAH Ganghwa 80.64 316** P **P 20 20 46.1 +2.6**
SNR=7.7
**MSHR Mys Shultsa 80.66 322** *c i*P **P 20 20 44.8 +1.4**
**SSE Sheshan 80.75 308** P **P 20 20 44.4 +0.2**
SSE S **S 20 30 55.5 +3.8**
SSE PMZ
comp=Z,32nm,1.0s
SSE PMZ
comp=Z,2μm,5.7s
SSE LN
comp=Z,1μm,29.2s
SSE LE
comp=Z,2μm,28.7s
SSE LZ
comp=Z,2μm,30.3s
**F04A Amboy 80.78 34** *e*P **P 20 20 46.5 +2.4**
comp=Z,376nm,2.3s
**G05D Wamic, OR 80.90 35** P **P 20 20 46.2 +1.4**
baz=81,SNR=5.3
**CCUT Cedar City 80.94 44** *e*P **P 20 20 46.3 +0.9**
comp=Z,146nm,1.6s
CCUT LR LR
comp=Z,4μm,20.0s
**I07A Izee 81.14 36** *e*P **P 20 20 45.6 -0.5**
comp=Z,420nm,2.7s
I07A LR LR
comp=Z,9μm,18.0s
**WUAZ Wupatki 81.15 47** P **P 20 20 47.7 +1.2**
baz=81
**WUAZ Wupatki 81.15 47** *e*P **P 20 20 47.2 +0.7**
comp=Z,558nm,2.5s
WUAZ LR LR
comp=Z,4μm,18.0s
**USRK Ussuriysk Ar. 81.21 324** P **P 20 20 47.6 +1.3**
comp=Z,14nm,1.1s,baz=128,slow=3.1,SNR=19
USRK LR LR 20 52 10.9
comp=Z,8μm,20.2s,baz=120,slow=32
**J08A Circle Bar Ran 81.26 37** *e*P **P 20 20 46.7 -0.1**
comp=Z,448nm,2.5s
J08A LR LR
comp=Z,8μm,20.0s
**G06A Carlson Farm, 81.26 35** *e*P **P 20 20 46.2 -0.5**
comp=Z,345nm,2.2s
**ELK Elko 81.59 41** *e*P **P 20 20 49.2 +0.4**
ELK pmax pmax
comp=Z,220nm,2.1s
**ELK Elko 81.59 41** *e*P **P 20 20 49.1 +0.4**
comp=Z,220nm,2.1s
**LON Longmire 81.64 33** *e*P **P 20 20 47.0 -1.7**
**LON Longmire 81.64 33** *e*P **P 20 20 47.0 -1.7**
**CNPM China Poot 81.79 11** PFAKE 20 21 00.0 +11
CNPM LR LR
comp=Z,7μm,19.0s
**HOM Homer 81.84 11** PFAKE 20 21 00.0 +11
HOM LR LR
comp=Z,7μm,20.0s
**D05A Enumclaw 81.84 33** *e*P **P 20 20 52.8 +3.1**
comp=Z,277nm,1.8s
D05A LR LR
comp=Z,6μm,19.0s
**BTU Barney Top 82.03 45** *e*P **P 20 20 52.5 +1.1**
**W18A Petrified Fore 82.07 48** P **P 20 20 51.9 +0.5**
baz=82
**W18A Petrified Fore 82.07 48** *e*P **P 20 20 52.2 +0.8**
comp=Z,365nm,2.0s
W18A LR LR
comp=Z,3μm,18.0s
**BRLK Bradley Lake 82.08 11** *e*P **P 20 20 53.0 +2.4**
comp=Z,146nm,1.6s
BRLK LR LR
comp=Z,6μm,20.0s
**PGC Sidney 82.11 31** *e*P **P 20 20 50.2 -0.7**
comp=Z,92nm,1.5s
PGC LR LR
comp=Z,6μm,20.0s
**121A Cookes Peak, D 82.14 51** P **P 20 20 52.4 +0.6**
baz=82
**121A Cookes Peak, D 82.14 51** *e*P **P 20 20 52.7 +0.9**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,312nm,2.0s | | | | | | | | |
| **HKC** | **Hong Kong Obse** | **82.16** | **297** | *i* | P | | **P** | **20 20 52.0** | **+0.1** |
| **G08A** | **Pilot Rock** | **82.20** | **36** | *e* | P | | **P** | **20 20 49.2** | **-2.6** |
| | comp=Z,139nm,1.6s | | | | | | | | |
| G08A | | | | | LR | LR | | | |
| | comp=Z,7μm,20.0s | | | | | | | | |
| **HABR** | **Khabarovsk** | **82.42** | **328** | *ce* | P | | **P** | **20 20 52.0** | **-0.6** |
| HABR | | | | *e* | *SP | | **sP** | **20 20 58.9** | **-0.5** |
| HABR | | | | *e* | | | | 20 24 00.2 | |
| HABR | | | | | *PPP | PPP | | 20 25 51.0 | |
| HABR | | | | *e* | S | | **S** | **20 31 07.7** | **-0.5** |
| HABR | | | | *e* | S | | **SKSac** | **20 31 14.1** | **+1.2** |
| HABR | | | | *e* | SS | | **SS** | **20 36 28.6** | **-1.2** |
| HABR | | | | *e* | SSS | SSS | | 20 39 56.7 | |
| HABR | | | | | pmax | pmax | | | |
| | comp=Z,2μm,3.0s | | | | | | | | |
| HABR | | | | | pmax | pmax | | | |
| | comp=Z,407nm,2.3s | | | | | | | | |
| **A04D** | **Lummi Island** | **82.52** | **31** | | P | | **P** | **20 20 54.8** | **+1.7** |
| | baz=83 | | | | | | | | |
| **E07A** | **Sunnyside** | **82.53** | **34** | *e* | P | | **P** | **20 20 54.4** | **+1.0** |
| | comp=Z,556nm,2.5s | | | | | | | | |
| E07A | | | | | LR | LR | | | |
| | comp=Z,15μm,19.0s | | | | | | | | |
| **JCW** | **Jim Creek** | **82.55** | **32** | | P | | **P** | **20 20 52.6** | **-0.8** |
| **LTY** | **Liberty** | **82.56** | **33** | *e* | P | | **P** | **20 20 53.9** | **+0.4** |
| | comp=Z,349nm,2.5s | | | | | | | | |
| LTY | | | | | LR | LR | | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **HAWA** | **Hanford** | **82.60** | **34** | *e* | P | | **P** | **20 20 54.2** | **+0.5** |
| | comp=Z,155nm,1.6s | | | | | | | | |
| HAWA | | | | | LR | LR | | | |
| | comp=Z,14μm,19.0s | | | | | | | | |
| **SEW** | **Seward** | **82.67** | **12** | | PFAKE | | | 20 21 00.0 | +6.4 |
| SEW | | | | | LR | LR | | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **DUG** | **Dugway** | **82.78** | **42** | *e* | P | | **P** | **20 20 55.4** | **+0.5** |
| DUG | | | | | pmax | pmax | | | |
| | comp=Z,106nm,1.6s | | | | | | | | |
| DUG | | | | | MLR | MLR | | | |
| | comp=Z,4μm,19.0s | | | | | | | | |
| **DUG** | **Dugway** | **82.78** | **42** | | P | | **P** | **20 20 56.1** | **+1.2** |
| | baz=83,SNR=18 | | | | | | | | |
| **DUG** | **Dugway** | **82.78** | **42** | *e* | P | | **P** | **20 20 55.4** | **+0.5** |
| | comp=Z,106nm,1.6s | | | | | | | | |
| DUG | | | | | LR | LR | | | |
| | comp=Z,4μm,19.0s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **82.81** | **323** | | P | | **P** | **20 20 56.1** | **+1.3** |
| MDJ | | | | | pP | | **PcP** | **20 20 59.4** | **-0.2** |
| MDJ | | | | | sP | | **sP** | **20 21 00.8** | **-0.8** |
| MDJ | | | | | PP | | **PP** | **20 24 05.3** | **0.0** |
| **MDJ** | **Mudanjiang** | **82.81** | **323** | | S | | **S** | **20 31 13.8** | **+1.3** |
| **MDJ** | **Mudanjiang** | **82.81** | **323** | | SS | SS | | 20 36 37.1 | +1.2 |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,93nm,2.9s | | | | | | | | |
| MDJ | | | | | pmax | pmax | | | |
| | comp=Z,3μm,7.1s | | | | | | | | |
| MDJ | | | | | LR | LR | | | |
| | comp=N,2μm,19.2s | | | | | | | | |
| MDJ | | | | | LR | LR | | | |
| | comp=E,1μm,19.2s | | | | | | | | |
| MDJ | | | | | LR | LR | | | |
| | comp=Z,770nm,15.6s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **82.81** | **323** | | P | | **P** | **20 20 55.8** | **+1.0** |
| MDJ | | | | | pP | | **PcP** | **20 20 59.3** | **-0.3** |
| MDJ | | | | | sP | | **sP** | **20 21 01.3** | **-0.3** |
| MDJ | | | | | PP | | **PP** | **20 24 07.3** | **+2.0** |
| MDJ | | | | | S | | **SKSac** | **20 31 16.4** | **+0.7** |
| MDJ | | | | | PMZ | | | | |
| | comp=Z,88nm,1.7s | | | | | | | | |
| MDJ | | | | | PMZ | | | | |
| | comp=Z,3μm,6.4s | | | | | | | | |
| MDJ | | | | | LN | | | | |
| | comp=Z,2μm,21.5s | | | | | | | | |
| MDJ | | | | | LE | | | | |
| | comp=Z,3μm,21.5s | | | | | | | | |
| MDJ | | | | | LZ | | | | |
| | comp=Z,5μm,21.5s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **82.81** | **323** | *e* | P | | **P** | **20 20 55.9** | **+1.2** |
| | comp=Z,375nm,1.8s | | | | | | | | |
| MDJ | | | | | LR | LR | | | |
| | comp=Z,5μm,20.0s | | | | | | | | |
| **MFID** | **Camas Ranch** | **82.82** | **38** | *e* | P | | **P** | **20 20 54.9** | **-0.1** |
| | comp=Z,334nm,2.3s | | | | | | | | |
| MFID | | | | | LR | LR | | | |
| | comp=Z,3μm,19.0s | | | | | | | | |
| **C06D** | **Leavenworth** | **82.89** | **33** | | P | | **P** | **20 20 56.9** | **+1.8** |
| | baz=83 | | | | | | | | |
| **DLV** | **T Lat** | **82.92** | **285** | *e* | P | | **P** | **20 20 56.9** | **+0.6** |
| | comp=Z,216nm,1.5s | | | | | | | | |
| DLV | | | | | LR | LR | | | |
| | comp=Z,2μm,21.0s | | | | | | | | |
| **MAW** | **Mawson** | **82.93** | **199** | | P | | **P** | **20 20 56.8** | **+1.7** |
| | comp=Z,20nm,1.1s,baz=122,slow=6.5,SNR=28 | | | | | | | | |
| MAW | | | | | LR | LR | | 20 57 40.4 | |
| | comp=Z,7μm,18.7s,baz=112,slow=36 | | | | | | | | |
| **MAW** | **Mawson** | **82.93** | **199** | | P | | **P** | **20 20 56.8** | **+1.7** |
| MAW | | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.1s | | | | | | | | |
| MAW | | | | | MLR | MLR | | | |
| | comp=Z,7μm,18.7s | | | | | | | | |
| **MAW** | **Mawson** | **82.93** | **199** | | P | | **P** | **20 20 56.4** | **+1.3** |
| | baz=83,SNR=19 | | | | | | | | |
| **MAW** | **Mawson** | **82.93** | **199** | *e* | P | | **P** | **20 20 56.4** | **+1.3** |
| | comp=Z,43nm,1.8s | | | | | | | | |
| **NJ2** | **Nanjing** | **82.95** | **308** | *e* | P | | **P** | **20 20 57.5** | **+1.7** |
| NJ2 | | | | | pP | | **PcP** | **20 21 00.0** | **-0.5** |
| NJ2 | | | | | sP | | **sP** | **20 21 01.5** | **-1.1** |
| NJ2 | | | | | S | | **SKSac** | **20 31 16.0** | **-1.2** |
| NJ2 | | | | | sS | | **sS** | **20 31 22.0** | **-0.7** |
| NJ2 | | | | | PMZ | | | | |
| | comp=Z,150nm,0.8s | | | | | | | | |
| NJ2 | | | | | PMZ | | | | |
| | comp=Z,4μm,6.4s | | | | | | | | |
| NJ2 | | | | | LN | | | | |
| | comp=Z,3μm,26.8s | | | | | | | | |
| NJ2 | | | | | LE | | | | |
| | comp=Z,3μm,24.2s | | | | | | | | |
| NJ2 | | | | | LZ | | | | |
| | comp=Z,3μm,24.2s | | | | | | | | |
| **BGU** | **Big Grassy Mou** | **83.06** | **42** | *e* | P | | **P** | **20 20 56.4** | **0.0** |
| | comp=Z,202nm,1.9s | | | | | | | | |
| BGU | | | | | LR | LR | | | |
| | comp=Z,7μm,19.0s | | | | | | | | |
| **NLU** | **North Lily Min** | **83.12** | **43** | *e* | P | | **P** | **20 20 57.3** | **+0.6** |
| | comp=Z,222nm,2.0s | | | | | | | | |
| NLU | | | | | LR | LR | | | |
| | comp=Z,7μm,19.0s | | | | | | | | |
| **GZH** | **Guangzhou** | **83.19** | **298** | ⇑*i* | P | | **P** | **20 20 56.4** | **-0.8** |
| GZH | | | | | PP | | **PP** | **20 24 06.3** | **-2.6** |
| GZH | | | | | S | | **S** | **20 31 15.6** | **-1.6** |
| GZH | | | | | SS | | **SS** | **20 36 47.6** | **+5.4** |
| GZH | | | | | PMZ | | | | |
| | comp=Z,5μm,5.8s | | | | | | | | |
| **SPU** | **Mount Spurr** | **83.20** | **10** | *e* | P | | **P** | **20 20 57.2** | **+0.8** |
| **TMUT** | **Trail Mountain** | **83.31** | **44** | *e* | P | | **P** | **20 20 58.5** | **+0.6** |
| | comp=Z,4μm,2.5s | | | | | | | | |
| TMUT | | | | | LR | LR | | | |
| | comp=Z,20μm,20.0s | | | | | | | | |
| **D08A** | **Wollman Farm,** | **83.35** | **34** | *e* | P | | **P** | **20 20 58.1** | **+0.6** |
| | comp=Z,730nm,2.6s | | | | | | | | |
| **MPU** | **Maple Canyon** | **83.43** | **43** | *e* | P | | **P** | **20 20 59.3** | **+0.9** |
| | comp=Z,506nm,2.5s | | | | | | | | |
| **MYKOM** | **Kota Tinggi** | **83.49** | **274** | ⇑ | P | | **P** | **20 20 59.7** | **+0.6** |
| **MYKOM** | **Kota Tinggi** | **83.49** | **274** | *e* | P | | **P** | **20 20 59.5** | **+0.4** |
| | comp=Z,1μm,2.7s | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **83.51** | **53** | | P | | **P** | **20 20 59.5** | **+0.7** |
| | baz=84 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **83.51** | **53** | *e* | P | | **P** | **20 20 58.9** | **+0.1** |
| | comp=Z,158nm,1.8s | | | | | | | | |
| MNTX | | | | | LR | LR | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **83.53** | **11** | | PFAKE | | | 20 21 10.0 | +12 |
| RC01 | | | | | LR | LR | | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **83.54** | **50** | | P | | **P** | **20 20 59.7** | **+0.7** |
| | baz=84 | | | | | | | | |
| **LAZ** | **Ladron** | **83.54** | **50** | *e* | P | | **P** | **20 20 59.9** | **+0.9** |
| **F10A** | **Beach Ranch, E** | **83.58** | **36** | *e* | P | | **P** | **20 20 58.1** | **-0.7** |
| | comp=Z,710nm,2.5s | | | | | | | | |
| **O16A** | **Springville** | **83.62** | **43** | *e* | P | | **P** | **20 20 58.3** | **-1.1** |
| | comp=Z,570nm,2.0s | | | | | | | | |
| O16A | | | | | LR | LR | | | |
| | comp=Z,4μm,19.0s | | | | | | | | |
| **SPUT** | **South Promonto** | **83.64** | **42** | *e* | P | | **P** | **20 20 59.7** | **+0.3** |
| | comp=Z,615nm,2.3s | | | | | | | | |
| SPUT | | | | | LR | LR | | | |
| | comp=Z,8μm,19.0s | | | | | | | | |
| **PAYG** | **Puerto Ayora** | **83.65** | **88** | | PFAKE | | | 20 21 10.0 | +10 |
| PAYG | | | | | LR | LR | | | |
| | comp=Z,9μm,18.0s | | | | | | | | |
| **SRU** | **San Rafael** | **83.66** | **44** | *e* | P | | **P** | **20 21 00.1** | **+0.5** |
| SRU | | | | | pmax | pmax | | | |
| | comp=Z,796nm,2.2s | | | | | | | | |
| SRU | | | | | MLR | MLR | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **SRU** | **San Rafael** | **83.66** | **44** | *e* | P | | **P** | **20 21 00.1** | **+0.5** |
| | comp=Z,796nm,2.2s | | | | | | | | |
| SRU | | | | | LR | LR | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **SUA** | **Susitna One** | **83.69** | **11** | | PFAKE | | | 20 21 10.0 | +11 |
| SUA | | | | | LR | LR | | | |
| | comp=Z,7μm,20.0s | | | | | | | | |
| **HVU** | **Hansel Valley** | **83.70** | **41** | *e* | P | | **P** | **20 20 59.2** | **-0.5** |
| HVU | | | | | pmax | pmax | | | |
| | comp=Z,531nm,2.3s | | | | | | | | |
| HVU | | | | | MLR | MLR | | | |
| | comp=Z,7μm,19.0s | | | | | | | | |
| **HVU** | **Hansel Valley** | **83.70** | **41** | *e* | P | | **P** | **20 20 59.2** | **-0.5** |
| | comp=Z,531nm,2.3s | | | | | | | | |
| HVU | | | | | LR | LR | | | |
| | comp=Z,7μm,19.0s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **83.71** | **56** | | P | | **P** | **20 21 00.2** | **+0.3** |
| | comp=Z,7.2nm,0.9s,baz=215,slow=7.7,SNR=28 | | | | | | | | |
| TXAR | | | | | LR | LR | | 20 51 40.2 | |
| | comp=Z,5μm,19.6s,baz=0.0,slow=31 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **83.71** | **56** | | P | | **P** | **20 21 00.2** | **+0.3** |
| TXAR | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| TXAR | | | | | MLR | MLR | | | |
| | comp=Z,5μm,19.6s | | | | | | | | |
| **P17A** | **Butcher Ranch,** | **83.72** | **44** | *e* | P | | **P** | **20 21 00.9** | **+1.1** |
| | comp=Z,1μm,2.4s | | | | | | | | |
| P17A | | | | | LR | LR | | | |
| | comp=Z,6μm,18.0s | | | | | | | | |
| **CTU** | **Camp Tracy** | **83.73** | **42** | *e* | P | | **P** | **20 21 00.0** | **+0.1** |
| | comp=Z,668nm,2.6s | | | | | | | | |
| CTU | | | | | LR | LR | | | |
| | comp=Z,5μm,21.0s | | | | | | | | |
| **HLID** | **Hailey** | **83.73** | **39** | | P | | **P** | **20 21 00.4** | **+0.6** |
| | baz=84 | | | | | | | | |
| **HLID** | **Hailey** | **83.73** | **39** | *e* | P | | **P** | **20 20 59.4** | **-0.5** |
| | comp=Z,717nm,2.6s | | | | | | | | |
| HLID | | | | | LR | LR | | | |
| | comp=Z,2μm,21.0s | | | | | | | | |
| **BNM** | **Barren Site** | **83.79** | **50** | *e* | P | | **P** | **20 21 01.1** | **+0.7** |
| **EYAK** | **Cordova Ski Ar** | **83.84** | **13** | | PFAKE | | | 20 21 10.0 | +10 |
| EYAK | | | | | LR | LR | | | |
| | comp=Z,7μm,20.0s | | | | | | | | |
| **LPM** | **Los Pinos Moun** | **83.86** | **50** | *e* | P | | **P** | **20 21 00.7** | **0.0** |
| **RAGM** | **Ragged Mountai** | **83.94** | **14** | | PFAKE | | | 20 21 10.0 | +10 |
| RAGM | | | | | LR | LR | | | |
| | comp=Z,10μm,18.0s | | | | | | | | |
| **MVCO** | **Mesa Verde** | **84.02** | **47** | | P | | **P** | **20 21 02.1** | **+0.6** |
| | baz=84 | | | | | | | | |
| **MVCO** | **Mesa Verde** | **84.02** | **47** | *e* | P | | **P** | **20 21 02.2** | **+0.7** |
| | comp=Z,232nm,1.8s | | | | | | | | |
| MVCO | | | | | LR | LR | | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **PV05** | **Paradox Valley** | **84.06** | **46** | *e* | P | | **P** | **20 21 02.6** | **+0.9** |
| **PMR** | **Palmer** | **84.10** | **12** | *e* | P | | **P** | **20 20 59.3** | **-1.7** |
| PMR | | | | | pmax | pmax | | | |
| | comp=Z,515nm,2.6s | | | | | | | | |
| PMR | | | | | MLR | MLR | | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **PMR** | **Palmer** | **84.10** | **12** | *e* | P | | **P** | **20 20 59.3** | **-1.7** |
| | comp=Z,514nm,2.6s | | | | | | | | |
| PMR | | | | | LR | LR | | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **P18A** | **Preston Nutter** | **84.12** | **44** | *e* | P | | **P** | **20 21 02.9** | **+0.8** |
| | comp=Z,846nm,2.6s | | | | | | | | |
| P18A | | | | | LR | LR | | | |
| | comp=Z,6μm,19.0s | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **84.14** | **22** | | PFAKE | | | 20 21 10.0 | +8.7 |
| WRAK | | | | | LR | LR | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| **C09A** | **Chrisman Ranch** | **84.16** | **34** | *e* | P | | **P** | **20 21 01.4** | **-0.3** |
| | comp=Z,492nm,2.5s | | | | | | | | |
| C09A | | | | | LR | LR | | | |
| | comp=Z,13μm,19.0s | | | | | | | | |
| **TCUT** | **Toone Canyon** | **84.18** | **42** | *e* | P | | **P** | **20 21 02.6** | **+0.3** |
| | comp=Z,1μm,2.1s | | | | | | | | |
| TCUT | | | | | LR | LR | | | |
| | comp=Z,6μm,19.0s | | | | | | | | |
| **MLI** | **Malad Range** | **84.24** | **41** | *e* | P | | **P** | **20 21 02.4** | **0.0** |
| **PV10** | **Paradox Valley** | **84.25** | **46** | *e* | P | | **P** | **20 21 03.1** | **+0.4** |
| **ANMO** | **Albuquerque** | **84.30** | **50** | *de* | P | | **P** | **20 21 03.1** | **+0.2** |
| ANMO | | | | | pmax | pmax | | | |
| | comp=Z,280nm,2.5s | | | | | | | | |
| **ANMO** | **Albuquerque** | **84.30** | **50** | *e* | P | | **P** | **20 21 03.3** | **+0.3** |
| | comp=Z,766nm,2.3s | | | | | | | | |
| ANMO | | | | | LR | LR | | | |
| | comp=Z,4μm,19.0s | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **84.35** | **42** | *e* | P | | **P** | **20 21 02.7** | **-0.3** |
| | comp=Z,101nm,1.4s | | | | | | | | |
| **PV04** | **Paradox Valley** | **84.35** | **46** | *e* | P | | **P** | **20 21 03.4** | **+0.3** |
| **DIV** | **Divide** | **84.36** | **13** | *e* | P | | **P** | **20 21 00.9** | **-1.5** |
| | comp=Z,47nm,0.9s | | | | | | | | |
| DIV | | | | | LR | LR | | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **PV01** | **Paradox Valley** | **84.44** | **46** | *e* | P | | **P** | **20 21 03.8** | **+0.1** |
| **SML** | **Sawmill** | **84.45** | **12** | *e* | P | | **P** | **20 21 03.1** | **+0.2** |
| SML | | | | | pmax | pmax | | | |
| | comp=Z,310nm,2.2s | | | | | | | | |
| SML | | | | | MLR | MLR | | | |
| | comp=Z,5μm,19.0s | | | | | | | | |
| **SML** | **Sawmill** | **84.45** | **12** | *e* | P | | **P** | **20 21 03.1** | **+0.2** |
| | comp=Z,310nm,2.2s | | | | | | | | |
| SML | | | | | LR | LR | | | |
| | comp=Z,5μm,19.0s | | | | | | | | |
| **DHAK** | **Deception Hill** | **84.46** | **18** | | PFAKE | | | 20 21 10.0 | +7.0 |
| DHAK | | | | | LR | LR | | | |
| | comp=Z,3μm,19.0s | | | | | | | | |
| **DL2** | **Dalian** | **84.46** | **315** | ⇑*i* | P | | **P** | **20 21 04.5** | **+1.1** |
| DL2 | | | | | S | | **S** | **20 31 30.4** | **+1.0** |
| DL2 | | | | | PMZ | | | | |
| | comp=Z,2μm,6.5s | | | | | | | | |
| DL2 | | | | | LN | | | | |
| | comp=Z,1μm,19.1s | | | | | | | | |
| DL2 | | | | | LZ | | | | |
| | comp=Z,1μm,18.1s | | | | | | | | |
| **BMRM** | **Bremner River** | **84.47** | **14** | *e* | P | | **P** | **20 21 03.4** | **+0.4** |
| | comp=Z,898nm,2.8s | | | | | | | | |
| BMRM | | | | | LR | LR | | | |
| | comp=Z,6μm,18.0s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **84.49** | **293** | | P | | **P** | **20 21 05.3** | **+1.3** |
| QIZ | | | | | sP | | **sP** | **20 21 10.0** | **-0.8** |
| QIZ | | | | | S | | **SKKSac** | **20 31 33.0** | **-0.4** |
| QIZ | | | | | sS | | **sS** | **20 31 38.8** | **0.0** |
| QIZ | | | | | SS | | **SS** | **20 37 03.8** | **+2.2** |
| QIZ | | | | | PMZ | | | | |
| | comp=Z,43nm,2.0s | | | | | | | | |
| QIZ | | | | | PMZ | | | | |
| | comp=Z,2μm,7.8s | | | | | | | | |
| QIZ | | | | | LN | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | |
| QIZ | | | | | LZ | | | | |
| | comp=Z,2μm,28.0s | | | | | | | | |
| **GDL2** | **Guadalupe Moun** | **84.51** | **53** | *e* | P | | **P** | **20 21 03.9** | **-0.1** |
| | comp=Z,32nm,0.7s | | | | | | | | |
| **KLR** | **Kul'dur** | **84.56** | **328** | *e* | P | | **P** | **20 21 01.3** | **-2.3** |
| KLR | | | | *e* | S | | **S** | **20 31 27.5** | **-2.4** |
| KLR | | | | *e* | | | | 20 37 02.0 | |
| KLR | | | | | pmax | pmax | | | |
| | comp=E,260nm,2.8s | | | | | | | | |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,750nm,2.8s | | | | | | | | |
| KLR | | | | | pmax | pmax | | | |
| | comp=Z,4μm,7.0s | | | | | | | | |
| KLR | | | | | MLR | MLR | | | |
| | comp=Z,3μm,12.0s | | | | | | | | |
| **KLU** | **Klutina** | **84.65** | **13** | *e* | P | | **P** | **20 21 05.9** | **+2.0** |
| | comp=Z,43nm,1.2s | | | | | | | | |
| KLU | | | | | LR | LR | | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **84.67** | **12** | *e* | P | | **P** | **20 21 04.7** | **+0.7** |
| SCM | | | | | pmax | pmax | | | |
| | comp=Z,88nm,0.9s | | | | | | | | |
| SCM | | | | | MLR | MLR | | | |
| | comp=Z,5μm,20.0s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **84.67** | **12** | *e* | P | | **P** | **20 21 04.7** | **+0.7** |
| | comp=Z,88nm,0.9s | | | | | | | | |
| SCM | | | | | LR | LR | | | |
| | comp=Z,5μm,20.0s | | | | | | | | |
| **CN2** | **Changchun** | **84.73** | **321** | ⇑*i* | P | | **P** | **20 21 04.8** | **+0.2** |
| CN2 | | | | | PMZ | | | | |
| | comp=Z,80nm,1.4s | | | | | | | | |
| CN2 | | | | | PMZ | | | | |
| | comp=Z,200nm,6.0s | | | | | | | | |
| CN2 | | | | | LN | | | | |
| | comp=Z,500nm,18.0s | | | | | | | | |
| CN2 | | | | | LE | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | |
| CN2 | | | | | LZ | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | |
| **PCA** | **Pinnacle** | **84.76** | **16** | | PFAKE | | | 20 21 20.0 | +16 |
| PCA | | | | | LR | LR | | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **SNY** | **Shenyang** | **84.77** | **318** | ⇑ | P | | **P** | **20 21 05.3** | **+0.5** |
| SNY | | | | | S | | **S** | **20 31 29.6** | **-2.7** |
| SNY | | | | | PMZ | | | | |
| | comp=Z,110nm,1.4s | | | | | | | | |
| SNY | | | | | PMZ | | | | |
| | comp=Z,9μm,10.1s | | | | | | | | |
| SNY | | | | | LN | | | | |
| | comp=Z,1μm,18.4s | | | | | | | | |
| SNY | | | | | LE | | | | |
| | comp=Z,970nm,20.0s | | | | | | | | |
| SNY | | | | | LZ | | | | |
| | comp=Z,2μm,21.2s | | | | | | | | |
| **PPLA** | **Purkeypile** | **84.79** | **10** | | PFAKE | | | 20 21 20.0 | +15 |
| PPLA | | | | | LR | LR | | | |
| | comp=Z,8μm,20.0s | | | | | | | | |
| **MA2** | **Magadan** | **84.85** | **343** | | P | | **P** | **20 21 05.1** | **+0.3** |
| **MA2** | **Magadan** | **84.85** | **343** | | P | | **P** | **20 21 05.1** | **+0.3** |
| **CLNB** | **Carlsbad** | **84.90** | **53** | *e* | P | | **P** | **20 21 05.7** | **-0.2** |
| | comp=Z,3.0nm,0.3s | | | | | | | | |
| **BESE** | **Bessie Mountai** | **85.03** | **19** | *e* | P | | **P** | **20 21 08.8** | **+2.9** |
| | comp=Z,485nm,2.8s | | | | | | | | |
| BESE | | | | | LR | LR | | | |
| | comp=Z,3μm,18.0s | | | | | | | | |
| **NEW** | **Newport** | **85.05** | **34** | | LR | LR | | 20 55 04.6 | |
| | comp=Z,15μm,18.3s,baz=220,slow=33 | | | | | | | | |
| **NEW** | **Newport** | **85.05** | **34** | *e* | P | | **P** | **20 21 05.9** | **-0.3** |
| NEW | | | | | pmax | pmax | | | |
| | comp=Z,268nm,2.5s | | | | | | | | |
| **NEW** | **Newport** | **85.05** | **34** | | P | | **P** | **20 21 07.7** | **+1.5** |
| | baz=85,SNR=6.9 | | | | | | | | |
| **NEW** | **Newport** | **85.05** | **34** | *e* | P | | **P** | **20 21 05.9** | **-0.3** |
| | comp=Z,268nm,2.5s | | | | | | | | |
| **529A** | **Stev Forest Ra** | **85.19** | **56** | | P | | **P** | **20 21 08.1** | **+0.8** |
| | baz=85 | | | | | | | | |
| **CPRX** | **Cap Rock** | **85.27** | **52** | *e* | P | | **P** | **20 21 08.2** | **+0.4** |
| | comp=Z,86nm,1.3s | | | | | | | | |
| **COCO** | **West Island** | **85.28** | **259** | | P | | **P** | **20 21 08.8** | **+0.7** |
| COCO | | | | | MLR | MLR | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **COCO** | **West Island** | **85.28** | **259** | | P | | **P** | **20 21 08.8** | **+0.7** |
| COCO | | | | | LR | LR | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **AHID** | **Auburn Hatcher** | **85.28** | **41** | *e* | P | | **P** | **20 21 07.9** | **+0.2** |
| | comp=Z,1μm,2.8s | | | | | | | | |
| AHID | | | | | LR | LR | | | |
| | comp=Z,6μm,19.0s | | | | | | | | |
| **CAST** | **Castle Rocks** | **85.30** | **10** | *e* | P | | **P** | **20 21 06.7** | **-0.4** |
| | comp=Z,193nm,2.1s | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **85.38** | **39** | *e* | P | | **P** | **20 21 08.2** | **0.0** |
| **KTGM** | **Kuala Trenggan** | **85.41** | **277** | ⇑ | P | | **P** | **20 21 09.0** | **+0.3** |
| **S22A** | **4UR Ranch, Cre** | **85.43** | **47** | | P | | **P** | **20 21 09.7** | **+1.0** |
| | baz=86,SNR=60 | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **85.43** | **47** | *e* | P | | **P** | **20 21 09.2** | **+0.5** |
| | comp=Z,267nm,1.7s | | | | | | | | |
| S22A | | | | | LR | LR | | | |
| | comp=Z,4μm,18.0s | | | | | | | | |
| **SKAG** | **Skagway** | **85.61** | **19** | *e* | P | | **P** | **20 21 08.3** | **-0.3** |
| | comp=Z,388nm,2.2s | | | | | | | | |
| SKAG | | | | | LR | LR | | | |
| | comp=Z,3μm,20.0s | | | | | | | | |
| **KTH** | **Kantishna Hill** | **85.61** | **10** | *e* | P | | **P** | **20 21 07.4** | **-1.3** |
| | comp=Z,224nm,1.9s | | | | | | | | |
| **BKNI** | **Bangkinang** | **85.61** | **272** | | PFAKE | | | 20 21 20.0 | +10 |
| BKNI | | | | | LR | LR | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **85.62** | **10** | *e* | P | | **P** | **20 21 08.1** | **-0.7** |
| | comp=Z,125nm,1.2s | | | | | | | | |
| TRF | | | | | LR | LR | | | |
| | comp=Z,11μm,20.0s | | | | | | | | |
| **HARP** | **HAARP** | **85.64** | **13** | *e* | P | | **P** | **20 21 11.5** | **+2.7** |
| | comp=Z,439nm,2.3s | | | | | | | | |
| HARP | | | | | LR | LR | | | |
| | comp=Z,5μm,20.0s | | | | | | | | |
| **WHN** | **Wuhan** | **85.65** | **305** | | P | | **P** | **20 21 10.3** | **+0.8** |
| WHN | | | | | S | | **S** | **20 31 38.8** | **-2.7** |
| WHN | | | | | PMZ | | | | |
| | comp=Z,8μm,5.4s | | | | | | | | |
| WHN | | | | | LN | | | | |
| | comp=Z,2μm,14.6s | | | | | | | | |
| WHN | | | | | LE | | | | |
| | comp=Z,1μm,14.2s | | | | | | | | |
| WHN | | | | | LZ | | | | |
| | comp=Z,3μm,14.5s | | | | | | | | |
| **429A** | **Davenport Ranc** | **85.66** | **55** | | P | | **P** | **20 21 10.4** | **+0.7** |
| | baz=86,SNR=64 | | | | | | | | |
| **O20A** | **White River Ci** | **85.70** | **44** | | P | | **P** | **20 21 10.7** | **+0.9** |
| | baz=86,SNR=11 | | | | | | | | |
| **O20A** | **White River Ci** | **85.70** | **44** | *e* | P | | **P** | **20 21 09.8** | **0.0** |
| **REDW** | **Red Top Meadow** | **85.76** | **41** | *e* | P | | **P** | **20 21 10.5** | **+0.4** |
| | comp=Z,600nm,2.5s | | | | | | | | |
| REDW | | | | | LR | LR | | | |
| | comp=Z,6μm,19.0s | | | | | | | | |
| **TPAW** | **Teton Pass** | **85.77** | **40** | *e* | P | | **P** | **20 21 10.3** | **+0.1** |
| | comp=Z,411nm,2.4s | | | | | | | | |
| TPAW | | | | | LR | LR | | | |
| | comp=Z,6μm,19.0s | | | | | | | | |
| **228A** | **UT Block 9, Go** | **85.80** | **54** | | P | | **P** | **20 21 11.2** | **+0.8** |
| | baz=86,SNR=8.6 | | | | | | | | |
| **FXWY** | **Fox Creek** | **85.80** | **40** | *e* | P | | **P** | **20 21 10.8** | **+0.5** |
| | comp=Z,133nm,1.8s | | | | | | | | |
| FXWY | | | | | LR | LR | | | |
| | comp=Z,5μm,19.0s | | | | | | | | |
| **RND** | **Reindeer** | **85.83** | **11** | *e* | P | | **P** | **20 21 10.7** | **+1.0** |
| RND | | | | | pmax | pmax | | | |
| | comp=Z,944nm,2.5s | | | | | | | | |
| RND | | | | | MLR | MLR | | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **RND** | **Reindeer** | **85.83** | **11** | *e* | P | | **P** | **20 21 10.7** | **+1.0** |
| | comp=Z,944nm,2.5s | | | | | | | | |
| RND | | | | | LR | LR | | | |
| | comp=Z,6μm,20.0s | | | | | | | | |
| **DLMT** | **Dillon** | **85.83** | **38** | *e* | P | | **P** | **20 21 08.2** | **-2.1** |
| | comp=Z,534nm,2.6s | | | | | | | | |
| DLMT | | | | | LR | LR | | | |
| | comp=Z,5μm,20.0s | | | | | | | | |
| **TNA** | **Tin City** | **85.85** | **2** | | PFAKE | | | 20 21 20.0 | +10 |
| TNA | | | | | LR | LR | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **SNOW** | **Snow King Moun** | **85.87** | **41** | *e* | P | | **P** | **20 21 11.0** | **+0.3** |
| | comp=Z,682nm,2.5s | | | | | | | | |
| SNOW | | | | | LR | LR | | | |
| | comp=Z,6μm,19.0s | | | | | | | | |
| **530A** | **J-C Ranch, Com** | **85.88** | **56** | | P | | **P** | **20 21 11.2** | **+0.4** |
| | baz=86,SNR=33 | | | | | | | | |
| **CMIG** | **Matias Romero** | **85.89** | **70** | | LR | LR | | 20 53 21.3 | |
| | comp=Z,8μm,18.1s,baz=226,slow=31 | | | | | | | | |
| **MSO** | **Missoula** | **85.91** | **37** | | P | | **P** | **20 21 11.7** | **+1.1** |
| | baz=86,SNR=9.9 | | | | | | | | |
| **MSO** | **Missoula** | **85.91** | **37** | *e* | P | | **P** | **20 21 11.6** | **+0.9** |
| | comp=Z,135nm,1.9s | | | | | | | | |
| MSO | | | | | LR | LR | | | |
| | comp=Z,9μm,20.0s | | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **85.98** | **54** | | P | | **P** | **20 21 11.8** | **+0.5** |
| | baz=86 | | | | | | | | |
| **IMW** | **Indian Meadow** | **86.00** | **40** | *e* | P | | **P** | **20 21 11.6** | **+0.2** |
| | comp=Z,114nm,1.6s | | | | | | | | |
| IMW | | | | | LR | LR | | | |
| | comp=Z,4μm,19.0s | | | | | | | | |
|

PAX MLR MLR
comp=Z,5µm,20.0s
**PAX Paxson** 86.08 13 eP P 20 21 10.5 -0.5
comp=Z,260nm,2.5s
PAX LR LR
comp=Z,5µm,20.0s
**128A Castleberry Fa** 86.11 53 P P 20 21 12.4 +0.4
baz=86,SNR=19
**BPAW Bear Paw Mtn.** 86.11 10 eP P 20 21 10.6 -0.5
comp=Z,269nm,2.4s
BPAW LR LR
comp=Z,6µm,20.0s
**MCK McKinley** 86.11 11 eP P 20 21 10.2 -0.9
MCK pmax pmax
comp=Z,859nm,2.5s
MCK MLR MLR
comp=Z,6µm,19.0s
**MCK McKinley** 86.11 11 eP P 20 21 10.2 -0.9
comp=Z,859nm,2.5s
MCK LR LR
comp=Z,6µm,19.0s
**832A Faith Ranch, C** 86.14 58 P P 20 21 12.4 +0.3
baz=86,SNR=27
**631A Perdido Creek** 86.15 57 P P 20 21 12.8 +0.7
baz=86,SNR=35
**LRM Limekiln Ridge** 86.18 38 eP P 20 21 12.7 +0.5
**TIA Tai'an** 86.21 311 ↑P P 20 21 12.8 +0.6
TIA S S 20 31 40.8 -6.0
TIA PMZ
comp=Z,110nm,1.3s
TIA PMZ
comp=Z,4µm,5.7s
TIA LN
comp=Z,620nm,15.5s
TIA LE
comp=Z,2µm,20.8s
TIA LZ
comp=Z,2µm,19.6s
**QLMT Earthquake Lak** 86.22 39 eP P 20 21 13.1 +0.8
**BW06 Boulder Array** 86.24 42 eP P 20 21 11.9 -0.6
comp=Z,92nm,1.6s
BW06 LR LR
comp=Z,5µm,19.0s
**430A Baggett Ranch,** 86.24 55 P P 20 21 13.2 +0.6
baz=86,SNR=7.7
**FLWY Flagg Ranch** 86.25 40 eP P 20 21 12.8 +0.3
comp=Z,152nm,1.6s
FLWY LR LR
comp=Z,4µm,19.0s
**JTMT Jette** 86.26 36 eP P 20 21 12.0 -0.4
**SWMT Swartz Lake** 86.28 36 eP P 20 21 12.5 +0.1
**229A Bryant Ranch,** 86.33 54 P P 20 21 13.7 +0.7
baz=86
**732A Laxson Ranch,** 86.33 58 P P 20 21 13.2 +0.3
baz=86,SNR=20
**SDCO Great Sand Dun** 86.35 48 P P 20 21 13.9 +0.6
baz=87,SNR=24
**SDCO Great Sand Dun** 86.35 48 eP P 20 21 13.3 +0.1
comp=Z,113nm,1.8s
SDCO LR LR
comp=Z,2µm,18.0s
**CHMT Chamberlain Mo** 86.35 37 eP P 20 21 13.2 +0.3
**YFT Old Faithful** 86.36 40 eP P 20 21 14.3 +1.2
comp=Z,100nm,1.5s
**BLMT Blacktail Moun** 86.37 35 eP P 20 21 13.6 +0.6
**PLCA Paso Flores** 86.39 132 eP P 20 21 13.5 +0.2
PLCA pmax pmax
comp=Z,68nm,1.8s
**PLCA Paso Flores** 86.39 132 P P 20 21 13.5 +0.2
baz=86,SNR=5.2
**PLCA Paso Flores** 86.39 132 eP P 20 21 13.5 +0.2
comp=Z,68nm,1.8s
**SLMT Seeley Lake** 86.40 36 eP P 20 21 13.4 +0.3
**YMR Madison River** 86.41 39 eP P 20 21 15.2 +1.9
comp=Z,298nm,1.7s
**933A Laredo** 86.42 59 P P 20 21 13.6 +0.2
baz=87,SNR=11
**MENT Mentasta** 86.42 13 eP P 20 21 12.9 +0.3
**BWN Browne** 86.43 10 eP P 20 21 13.4 +0.8
comp=Z,143nm,1.1s
BWN LR LR
comp=Z,11µm,20.0s
**YBMT Yellow Bay** 86.48 36 eP P 20 21 13.8 +0.4
**H17A Grant Village** 86.49 40 P P 20 21 14.3 +0.5
baz=87
**H17A Grant Village** 86.49 40 eP P 20 21 15.0 +1.2
comp=Z,217nm,2.4s
H17A LR LR
comp=Z,5µm,19.0s
**Z28A Tucker Farm, M** 86.49 53 P P 20 21 14.2 +0.4
baz=87
**DLBC Dease Lake** 86.50 21 eP P 20 21 13.6 +0.5
comp=Z,231nm,2.5s
DLBC LR LR
comp=Z,3µm,20.0s
**531A Rocksprings** 86.50 56 P P 20 21 14.1 +0.3
baz=87,SNR=45
**MSTX Muleshoe** 86.51 52 P P 20 21 14.4 +0.5
baz=87,SNR=27
**MSTX Muleshoe** 86.51 52 eP P 20 21 13.9 0.0
comp=Z,1µm,2.5s
MSTX LR LR
comp=Z,8µm,19.0s
**BOZ Bozeman (W)** 86.56 38 eP P 20 21 13.8 -0.1
BOZ pmax pmax
comp=Z,141nm,1.6s
BOZ MLR MLR
comp=Z,5µm,20.0s
**BOZ Bozeman (W)** 86.56 38 P P 20 21 14.8 +1.0
baz=87,SNR=34
**BOZ Bozeman (W)** 86.56 38 eP P 20 21 13.8 -0.1
comp=Z,141nm,1.6s
BOZ LR LR
comp=Z,5µm,20.0s
**129A Stewart Farms,** 86.58 53 P P 20 21 14.7 +0.5
baz=87
**YNR Norris Junctio** 86.60 40 eP P 20 21 16.8 +2.6
comp=Z,248nm,2.0s
**833A Chaparral WMA,** 86.62 58 P P 20 21 14.9 +0.5
baz=87,SNR=9.4
**034A Hebbronville** 86.66 60 P P 20 21 15.2 +0.6
baz=87,SNR=27
**431A Sonora** 86.68 56 P P 20 21 15.4 +0.6
baz=87,SNR=10
**LKWY Lake** 86.69 40 PFAKE 20 21 30.0 +15
LKWY LR LR
comp=Z,6µm,19.0s
**T25A Trinidad** 86.81 48 P P 20 21 15.9 +0.5
baz=87,SNR=12
**T25A Trinidad** 86.81 48 eP P 20 21 16.4 +0.9
comp=Z,311nm,2.4s
T25A LR LR
comp=Z,3µm,18.0s
**632A Uvalde** 86.81 57 P P 20 21 15.8 +0.5
baz=87,SNR=27
**230A Sterling City** 86.82 54 P P 20 21 16.0 +0.6
baz=87,SNR=8.2
**733A Divot King Ran** 86.87 58 P P 20 21 16.3 +0.7
baz=87,SNR=9.8
**Y28A McKinney Farm,** 86.87 52 P P 20 21 16.2 +0.5
baz=87
**035Z Hargill** 86.91 60 P P 20 21 16.5 +0.7
baz=87
**WRH Wood River Hil** 86.94 11 eP P 20 21 14.8 -0.3
comp=Z,764nm,2.1s
WRH LR LR
comp=Z,4µm,20.0s
**Z29A Hungry Hill Ra** 86.98 53 P P 20 21 16.8 +0.6
baz=87,SNR=19
**532A Rocksprings** 86.99 56 P P 20 21 16.6 +0.3
baz=87,SNR=50
**934A Benavides** 87.02 59 P P 20 21 16.8 +0.4
baz=87,SNR=5.3
**HRY Holter Researc** 87.03 37 eP P 20 21 17.6 +1.5
**IPM Ipoh** 87.08 276 eP P 20 21 17.5 +0.5
comp=Z,286nm,1.8s
IPM LR LR
comp=Z,2µm,19.0s
**035A Encino** 87.08 60 P P 20 21 17.2 +0.5
baz=87
**HDA Harding Lake** 87.09 11 PFAKE 20 21 30.0 +14
HDA LR LR
comp=Z,4µm,18.0s
**331A San Angelo** 87.09 55 P P 20 21 17.4 +0.7
baz=87,SNR=11
**CCB Clear Creek Bu** 87.15 11 eP P 20 21 15.6 -0.5
comp=Z,453nm,2.2s
CCB LR LR
comp=Z,4µm,20.0s
**Q24A Divide** 87.18 47 P P 20 21 18.0 +0.7
baz=87
**X28A Dimmitt** 87.19 52 P P 20 21 17.7 +0.5
baz=87
**834A Tilden** 87.21 59 P P 20 21 17.8 +0.6
baz=87
**JCT Junction City** 87.22 56 eP P 20 21 16.4 -1.0
JCT pmax pmax
comp=Z,124nm,1.7s
JCT MLR MLR
comp=Z,6µm,20.0s
**JCT Junction City** 87.22 56 P P 20 21 17.8 +0.5
baz=87,SNR=8.4
**JCT Junction City** 87.22 56 eP P 20 21 16.4 -1.0
comp=Z,124nm,1.7s
JCT LR LR
comp=Z,6µm,20.0s
**WALA Waterton Lakes** 87.23 35 eP P 20 21 17.6 +0.5
comp=Z,369nm,2.5s
WALA LR LR
comp=Z,10µm,19.0s
**130A Snyder** 87.25 54 P P 20 21 18.3 +0.9
baz=87,SNR=11
**ISCO Idaho Springs** 87.27 46 eP P 20 21 17.7 0.0
ISCO pmax pmax
comp=Z,239nm,3.0s
ISCO MLR MLR
comp=Z,3µm,18.0s
**ISCO Idaho Springs** 87.27 46 P P 20 21 18.2 +0.5
baz=88
**ISCO Idaho Springs** 87.27 46 eP P 20 21 17.7 0.0
comp=Z,239nm,3.0s
ISCO LR LR
comp=Z,3µm,18.0s
**633A Saathoff Ranch** 87.28 57 P P 20 21 18.6 +1.0
baz=88,SNR=18
**SEY Seymchan** 87.28 345 c iP P 20 21 16.4 -0.4
**Y29A Porterfield Fa** 87.28 52 P P 20 21 18.2 +0.6
baz=88,SNR=8.9
**V27A Dan Oppiter Fa** 87.29 50 P P 20 21 18.3 +0.6
baz=88,SNR=8.3
**COLA College** 87.35 11 eP P 20 21 16.1 -1.0
COLA pmax pmax
comp=Z,746nm,2.3s
COLA MLR MLR
comp=Z,6µm,20.0s
**COLA College** 87.35 11 eP P 20 21 16.1 -1.0
comp=Z,746nm,2.3s
COLA LR LR
comp=Z,6µm,20.0s
**MDM Murphy Dome** 87.37 11 eP P 20 21 16.6 -0.6
comp=Z,726nm,2.3s
MDM LR LR
comp=Z,9µm,21.0s
**432A Menard** 87.40 56 P P 20 21 19.2 +1.0
baz=88,SNR=15
**T26A Comanche Natio** 87.41 49 P P 20 21 19.1 +0.8
baz=88
**Z30A Sanderson Ranc** 87.43 53 P P 20 21 18.7 +0.4
baz=88,SNR=25
**IL1 Eielson Array** 87.43 11 eP P 20 21 15.8 -1.7
**ILAR Eielson Array** 87.43 11 P P 20 21 17.1 -0.4
comp=Z,5.4nm,0.8s,baz=224,slow=5.9,SNR=51
ILAR LR LR 20 58 49.3
comp=Z,2µm,18.1s,baz=209,slow=35
**ILAR Eielson Array** 87.43 11 P P 20 21 17.1 -0.4
ILAR pmax pmax
comp=Z,5.0nm,0.8s
ILAR MLR MLR
comp=Z,2µm,18.2s
**231A Bronte** 87.45 55 P P 20 21 18.8 +0.4
baz=88,SNR=17
**KVTX Kingsville** 87.50 60 PFAKE 20 21 30.0 +11
KVTX LR LR
comp=Z,5µm,18.0s
**W28A Vega** 87.52 51 P P 20 21 19.2 +0.5
baz=88
**X29A Tulia** 87.52 52 P P 20 21 19.1 +0.4
baz=88
**N23A Red Feather La** 87.59 45 P P 20 21 19.6 +0.4
baz=88,SNR=9.9
**N23A Red Feather La** 87.59 45 eP P 20 21 19.5 +0.3
comp=Z,356nm,2.6s
N23A LR LR
comp=Z,3µm,19.0s
**U27A Thompson Grove** 87.60 50 P P 20 21 19.7 +0.5
baz=88
**SYO Syowa Base** 87.61 191 ‖eP P 20 21 17.2 -1.3
**533A Kerrville** 87.65 57 P P 20 21 19.7 +0.3
baz=88,SNR=19
**332A Millersview** 87.65 55 P P 20 21 19.9 +0.5
baz=88,SNR=20
**RLMT Red Lodge** 87.67 40 P P 20 21 20.1 +0.8
baz=88
**RLMT Red Lodge** 87.67 40 eP P 20 21 20.2 +0.8
comp=Z,155nm,2.3s
RLMT LR LR
comp=Z,4µm,19.0s
**S26A Kim** 87.70 48 P P 20 21 20.4 +0.8
baz=88,SNR=6.4
**KULM Kulim** 87.71 276 eP P 20 21 20.4 +0.3
comp=Z,309nm,2.1s
KULM LR LR
comp=Z,2µm,20.0s
**131A Roby** 87.72 54 P P 20 21 20.4 +0.7
baz=88,SNR=10.0
**V28A Channing** 87.73 51 P P 20 21 20.3 +0.5
baz=88
**AMTX Amarillo** 87.73 52 P P 20 21 20.3 +0.6
baz=88
**AMTX Amarillo** 87.73 52 eP P 20 21 18.5 -1.3
comp=Z,615nm,2.3s
AMTX LR LR
comp=Z,9µm,19.0s
**GCMT Greycliff** 87.79 39 eP P 20 21 21.0 +1.2
**835A Beeville** 87.86 59 P P 20 21 20.8 +0.5
baz=88
**W29A Amraillo** 87.86 51 P P 20 21 21.0 +0.6
baz=88,SNR=5.2
**Y30A Stafford Catti** 87.86 53 P P 20 21 20.9 +0.5
baz=88,SNR=6.8
**433A Art** 87.89 56 P P 20 21 21.1 +0.6
baz=88,SNR=37
**VNA3 Neumayer Olymp** 87.89 175 P P 20 21 19.9 0.0
**634A China Grove, S** 87.89 58 P P 20 21 21.1 +0.5
baz=88
**SNAA Sanae** 87.91 177 P P 20 21 19.7 -0.3
**SNAA Sanae** 87.91 177 c iP P 20 21 19.8 -0.3
SNAA pmax pmax
comp=Z,17nm,1.5s
SNAA MLR MLR
comp=Z,2µm,18.0s
**SNAA Sanae** 87.91 177 eP P 20 21 19.3 -0.8
comp=Z,65nm,2.1s
SNAA LR LR
comp=Z,2µm,20.0s
**232A Coleman** 87.94 55 P P 20 21 21.2 +0.4
baz=88,SNR=30
**T27A Campo** 87.97 49 P P 20 21 21.8 +0.9
baz=88
**U28A Mallet** 88.01 50 P P 20 21 21.8 +0.7
baz=88
**534A Blanco** 88.07 57 P P 20 21 21.9 +0.5
baz=88,SNR=20
**K22A Casper** 88.09 43 P P 20 21 22.3 +0.9
baz=88
**K22A Casper** 88.09 43 eP P 20 21 20.3 -1.1
comp=Z,78nm,1.6s
**735A Kenedy** 88.11 58 P P 20 21 22.5 +0.9
baz=88
**PHWY Pilot Hill** 88.11 44 eP P 20 21 22.6 +0.9
comp=Z,228nm,2.5s
PHWY LR LR
comp=Z,2µm,18.0s
**S27A Las Animas** 88.13 49 P P 20 21 22.5 +0.8
baz=88
**X30A Coker Ranch, T** 88.13 52 P P 20 21 22.2 +0.6
baz=88
**Z31A Sharp Cattle R** 88.19 53 P P 20 21 22.4 +0.5
baz=88,SNR=16
**333A Richland Sprin** 88.22 56 P P 20 21 22.7 +0.6
baz=88,SNR=13
**ABTX Abilene, Hawle** 88.26 54 P P 20 21 22.7 +0.5
baz=88,SNR=18
**ABTX Abilene, Hawle** 88.26 54 eP P 20 21 22.0 -0.2
comp=Z,514nm,2.1s
ABTX LR LR
comp=Z,9µm,19.0s
**Q26A Hugo** 88.28 47 P P 20 21 23.2 +0.8
baz=88
**V29A Stinnett** 88.29 51 P P 20 21 23.4 +1.0
baz=88
**635A Leesville** 88.36 58 P P 20 21 23.4 +0.7
baz=88
**DAWY Dawson** 88.36 14 eP P 20 21 21.8 -0.2
comp=Z,172nm,1.8s
DAWY LR LR
comp=Z,4µm,19.0s
**Y31A Rekieta Farm,** 88.38 53 P P 20 21 23.6 +0.8
baz=89,SNR=9.8
**VNA2 Neumayer--Watz** 88.38 176 P P 20 21 22.5 +0.3
baz=169,slow=3.0
**T28A Walsh** 88.43 49 P P 20 21 23.9 +0.9
baz=89,SNR=7.7
**PSI Prapat** 88.45 274 eP P 20 21 23.1 -0.6
PSI pmax pmax
comp=Z,363nm,2.1s
PSI MLR MLR
comp=Z,4µm,20.0s
**PSI Prapat** 88.45 274 P P 20 21 23.4 -0.4
baz=88,SNR=27
**PSI Prapat** 88.45 274 eP P 20 21 23.1 -0.6
comp=Z,362nm,2.1s
PSI LR LR
comp=Z,4µm,20.0s
**R27A Eads** 88.48 48 P P 20 21 24.3 +1.0
baz=89,SNR=5.4
**434A Burnet** 88.56 56 P P 20 21 24.3 +0.6
baz=89,SNR=26
**233A Rising Star** 88.57 55 P P 20 21 24.6 +0.8
baz=89
**EGAK Eagle** 88.58 13 eP P 20 21 22.9 0.0
comp=Z,325nm,2.0s
EGAK LR LR
comp=Z,5µm,20.0s
**VNA1 Neumayer--Stat** 88.58 175 P P 20 21 23.5 +0.4
**BJT Baijiatuau** 88.68 314 eP P 20 21 25.3 +1.3
BJT pmax pmax
comp=Z,456nm,1.8s
BJT MLR MLR
comp=Z,3µm,18.0s
**BJT Baijiatuau** 88.68 314 eP P 20 21 25.3 +1.3
comp=Z,456nm,1.8s
BJT LR LR
comp=Z,3µm,18.0s
**BJI Beijing** 88.69 314 P P 20 21 24.5 +0.5
BJI SKS SKSac 20 31 51.0 -1.8
BJI S ScS 20 32 15.5 -0.3
BJI SS SS 20 38 01.8 -0.6
BJI PMZ
comp=Z,4µm,5.4s
BJI LN
comp=Z,790nm,20.9s
BJI LE
comp=Z,1µm,19.6s
BJI LZ
comp=Z,2µm,24.1s
**U29A Oasis Ranch, S** 88.73 50 P P 20 21 25.1 +0.7
baz=89
**736A Circle Diamond** 88.74 59 P P 20 21 25.4 +0.9
baz=89
**535A Dale** 88.78 57 P P 20 21 25.5 +0.8
baz=89
**S28A Manter** 88.80 49 P P 20 21 25.7 +1.0
baz=89
**334A Lometa** 88.80 56 P P 20 21 24.7 -0.1
baz=89,SNR=16
**133A Hamilton Ranch** 88.81 55 P P 20 21 25.5 +0.7
baz=89,SNR=13
**V30A Spur Ranch, Mi** 88.85 51 P P 20 21 25.7 +0.6
baz=89
**X31A McDonald Ranch** 88.88 52 P P 20 21 26.2 +1.0
baz=89
**KSCO Kaye Shedlock'** 88.93 48 eP P 20 21 26.6 +1.1
comp=Z,176nm,2.0s
KSCO LR LR
comp=Z,2µm,19.0s
**EGMT Eagleton** 88.94 37 P P 20 21 26.3 +1.2
baz=89
**EGMT Eagleton** 88.94 37 P P 20 21 24.0 -1.1
comp=Z,556nm,2.8s
EGMT LR LR
comp=Z,8µm,18.0s
**EFI East Falkland** 88.94 146 P P 20 21 24.6 -0.5
EFI MLR MLR
comp=Z,4µm,20.0s
**EFI East Falkland** 88.94 146 P P 20 21 24.6 -0.5
EFI LR LR
comp=Z,4µm,20.0s
**NVL N'lazarevskaya** 88.95 182 d iP P 20 21 26.5 +1.7
NVL eS SKSac 20 31 54.4 +0.7
NVL pmax pmax
comp=Z,16nm,1.2s
NVL MLR MLR
comp=Z,3µm,16.0s
**636A Smothers Creek** 88.96 58 P P 20 21 26.2 +0.6
baz=89
**Y32A R-V Farms, Ver** 89.01 53 P P 20 21 26.7 +1.0
baz=89,SNR=11
**T29A Hugoton** 89.03 50 P P 20 21 26.7 +0.8
baz=89
**435B Jarrell** 89.08 57 P P 20 21 26.8 +0.7
baz=89
**W31A Holland Ranch,** 89.14 52 P P 20 21 27.4 +1.0
baz=89,SNR=8.3
**COLD Coldfoot** 89.15 9 eP P 20 21 26.8 +1.2
comp=Z,245nm,2.2s
COLD LR LR
comp=Z,3µm,21.0s
**234A Clairette** 89.16 55 P P 20 21 26.9 +0.5
baz=89,SNR=6.3
**737A Port Lavaca** 89.17 59 P P 20 21 27.3 +0.7
baz=89
**R28A Tribune** 89.20 48 P P 20 21 27.5 +0.8
baz=89
**536A Bastrop** 89.20 58 P P 20 21 27.3 +0.6
baz=89
**GSI Gunungsitoli** 89.20 272 eP P 20 21 28.0 +0.9
comp=Z,2µm,2.6s
GSI LR LR
comp=Z,4µm,20.0s
**Z33A Whitaker Ranch** 89.21 54 P P 20 21 27.4 +0.7
baz=89,SNR=8.9
**X32A Elmer** 89.30 53 P P 20 21 28.0 +0.9
baz=90,SNR=10
**ENH Enshi** 89.33 303 eP P 20 21 29.7 +2.3
comp=Z,229nm,1.9s
ENH LR LR
comp=Z,1µm,21.0s
**FYU Fort Yukon** 89.35 11 eP P 20 21 30.5 +4.0
comp=Z,256nm,2.1s
FYU LR LR
comp=Z,3µm,21.0s
**S29A Ulysses** 89.36 49 P P 20 21 28.3 +0.9
baz=90
**134A White-Moore Ra** 89.44 55 P P 20 21 28.5 +0.7
baz=90,SNR=14
**BILL Bilibino** 89.44 353 i P P 20 21 25.8 -1.1
BILL i 20 21 30.0
BILL i 20 24 54.0
BILL pmax pmax
comp=Z,72nm,1.7s
BILL MLR MLR
comp=Z,4µm,18.0s
**BILL Bilibino** 89.44 353 eP P 20 21 28.3 +1.4
comp=Z,142nm,1.8s
BILL LR LR
comp=Z,6µm,20.0s
**V31A Spring Creek L** 89.47 51 P P 20 21 28.8 +0.9
baz=90
**Q28A Sharon Springs** 89.51 48 P P 20 21 29.1 +1.1
baz=90
**637A Eagle Lake** 89.53 58 P P 20 21 28.9 +0.7
baz=90
**Y33A Hilltop Ranch,** 89.62 53 P P 20 21 29.2 +0.6
baz=90,SNR=9.2
**W32A Sentinel** 89.63 52 P P 20 21 29.4 +0.8
baz=90
**WHTX Lake Whitney** 89.68 56 P P 20 21 29.7 +0.9
baz=90
**WHTX Lake Whitney** 89.68 56 eP P 20 21 29.5 +0.6
comp=Z,256nm,2.0s
WHTX LR LR
comp=Z,10µm,19.0s

**436A Wall Ranch, Ga** 89.69 57 P P 20 21 29.6 +0.6
baz=90
**SNET Serv Nac Est T** 89.70 75 PFAKE 20 21 40.0 +11
SNET LR LR
comp=Z,8µm,18.0s
**P28A Saint Francis** 89.79 47 P P 20 21 30.3 +0.9
baz=90
**537A Green Hill Far** 89.80 58 P P 20 21 30.2 +0.7
baz=90
**WMOK Wichita Mounta** 89.81 53 eP P 20 21 29.6 +0.1
WMOK pmax pmax
comp=Z,79nm,1.8s
WMOK MLR MLR
comp=Z,4µm,20.0s
**WMOK Wichita Mounta** 89.81 53 eP P 20 21 29.6 +0.1
comp=Z,79nm,1.8s
WMOK LR LR
comp=Z,4µm,20.0s
**738A Farr-Stevens R** 89.83 59 P P 20 21 30.5 +0.8
baz=90
**S30A Montezuma** 89.84 49 P P 20 21 30.7 +1.1
baz=90
**336A Riesel** 89.91 56 P P 20 21 30.7 +0.7
baz=90
**EDM Edmonton** 89.94 32 eP P 20 21 30.8 +1.1
EDM pmax pmax
comp=Z,577nm,2.1s
EDM MLR MLR
comp=Z,6µm,19.0s
**EDM Edmonton** 89.94 32 eP P 20 21 30.8 +1.1
comp=Z,577nm,2.1s
EDM LR LR
comp=Z,6µm,19.0s
**O28A Krutsinger Ran** 90.03 47 P P 20 21 31.2 +0.8
baz=90
**GYA Guiyang** 90.10 298 i*P P 20 21 31.8 +0.6
GYA PP PP 20 25 09.3 +4.4
GYA S S 20 32 24.3 -0.2
GYA SS SS 20 38 27.8 +4.0
GYA PMZ
comp=Z,50nm,1.0s
GYA PMZ
comp=Z,1µm,8.0s
GYA LN
comp=Z,1µm,18.0s
GYA LE
comp=Z,2µm,18.2s
GYA LZ
comp=Z,2µm,18.6s
**HKT Hockley** 90.13 58 eP P 20 21 30.8 -0.2
HKT pmax pmax
comp=Z,206nm,1.8s
HKT MLR MLR
comp=Z,6µm,19.0s
**HKT Hockley** 90.13 58 eP P 20 21 30.8 -0.2
comp=Z,206nm,1.8s
HKT LR LR
comp=Z,6µm,19.0s
**T31A Randall Ranch,** 90.17 50 P P 20 21 31.8 +0.7
baz=90
**J25A Sunshine Ranch** 90.19 43 P P 20 21 32.1 +0.9
baz=90
**W33A Caddo, Fort Co** 90.22 52 P P 20 21 32.3 +0.9
baz=90
**OGNE Ogallala** 90.22 46 PFAKE 20 21 40.0 +8.6
OGNE LR LR
comp=Z,4µm,18.0s
**TIY Taiyuan** 90.24 310 eP P 20 21 32.9 +1.4
TIY PMZ
comp=Z,2µm,7.0s
**R30A Dighton** 90.25 49 P P 20 21 32.4 +0.9
baz=90
**Y34A Reagan Ranch,** 90.26 54 P P 20 21 32.2 +0.6
baz=90,SNR=5.6
**LAO LASA Array** 90.30 40 P P 20 21 32.8 +1.3
baz=90,SNR=8.5
**LAO LASA Array** 90.30 40 eP P 20 21 33.3 +1.8
comp=Z,572nm,2.3s
LAO LR LR
comp=Z,2µm,18.0s
**Z35A Perchaven, San** 90.38 54 P P 20 21 32.9 +0.8
baz=91
**RSSD Black Hills** 90.39 42 eP P 20 21 31.2 -1.0
RSSD pmax pmax
comp=Z,83nm,1.5s
RSSD MLR MLR
comp=Z,4µm,19.0s
**RSSD Black Hills** 90.39 42 eP P 20 21 31.2 -1.0
comp=Z,83nm,1.5s
RSSD LR LR
comp=Z,4µm,19.0s
**X34A Smith Ranch, M** 90.47 53 P P 20 21 33.2 +0.6
baz=91
**538A Harpers Horsep** 90.51 58 P P 20 21 33.5 +0.7
baz=91
**SLVN Son La** 90.52 292 eP P 20 21 35.0 +1.9
**S31A Mullinville** 90.53 50 P P 20 21 33.6 +0.8
baz=91
**I25A Rochford** 90.53 43 P P 20 21 33.6 +0.8
baz=91,SNR=18
**136A Ennis** 90.59 56 P P 20 21 33.8 +0.7
baz=91
**Q30A Quinter** 90.59 48 P P 20 21 33.8 +0.7
baz=91
**J26A Sides Ranch, S** 90.62 44 P P 20 21 34.1 +1.0
baz=91
**337A Centerville** 90.63 57 P P 20 21 33.9 +0.6
baz=91
**V33A Lossen Ranch,** 90.64 52 P P 20 21 34.2 +0.9
baz=91
**O29A 4D Ranch, Culb** 90.70 47 P P 20 21 34.5 +0.9
baz=91
**438A Sam Houston St** 90.73 57 P P 20 21 34.6 +0.7
baz=91
**T32A Huddler Ranch,** 90.74 50 P P 20 21 34.6 +0.8
baz=91
**W34A Bridge Creek,** 90.77 53 P P 20 21 34.8 +0.8
baz=91
**W34A Bridge Creek,** 90.77 53 eP P 20 21 34.1 +0.2
comp=Z,243nm,1.8s
W34A LR LR
comp=Z,4µm,20.0s
**Y35A Marietta** 90.78 54 P P 20 21 34.9 +0.9
baz=91
**R31A Burdett** 90.79 49 P P 20 21 35.0 +1.0
baz=91
**P30A Selden** 90.82 48 P P 20 21 35.1 +1.0
baz=91
**CBKS Cedar Bluff** 90.86 49 P P 20 21 35.3 +1.0
baz=91
**CBKS Cedar Bluff** 90.86 49 PFAKE 20 21 50.0 +16
CBKS LR LR
comp=Z,3µm,20.0s
**H25A Fruitdale** 90.90 42 P P 20 21 35.4 +1.0
baz=91
**S32A Newby Ranch, P** 90.96 50 P P 20 21 35.7 +0.9
baz=91
**237A Washetta, Mont** 90.96 56 P P 20 21 35.5 +0.7
baz=91
**Z36A Blue Ridge** 90.98 55 P P 20 21 35.8 +0.9
baz=91
**HIA Hailar** 91.00 323 eP P 20 21 36.4 +1.7
HIA pmax pmax
comp=Z,83nm,1.6s
HIA MLR MLR
comp=Z,6µm,20.0s
**HIA Hailar** 91.00 323 eP P 20 21 36.4 +1.7
comp=Z,83nm,1.6s
HIA LR LR
comp=Z,6µm,20.0s
**X35A Drake** 91.03 54 P P 20 21 35.8 +0.7
baz=91
**LCO Las Campanas** 91.03 121 eP P 20 21 35.6 -0.1
comp=Z,178nm,1.8s
LCO LR LR
comp=Z,8µm,18.0s
**338A Crockett** 91.10 57 P P 20 21 36.2 +0.7
baz=91
**I26A New Underwood** 91.10 43 P P 20 21 36.4 +1.1
baz=91
**N29A Votaw Ranch, W** 91.12 47 P P 20 21 36.4 +0.9
baz=91
**LHMI Lhok Sumawe** 91.14 275 PFAKE 20 21 50.0 +14
LHMI LR LR
comp=Z,3µm,20.0s
**Q31A Ellis** 91.19 49 P P 20 21 36.9 +1.1
baz=91
**T33A Patterson Ranc** 91.20 51 P P 20 21 36.7 +0.9
baz=91
**V34A Guthrie** 91.21 52 P P 20 21 36.8 +0.9
baz=91
**V34A Guthrie** 91.21 52 P P 20 21 35.2 -0.8
comp=Z,259nm,2.3s
V34A LR LR
comp=Z,6µm,19.0s
**137A Henn Place, G** 91.24 56 P P 20 21 36.9 +0.7
baz=91
**G25A Newell** 91.29 42 P P 20 21 37.2 +1.0
baz=92
**J27A Elkhorn Farm,** 91.29 44 P P 20 21 37.3 +1.0
baz=92
**XAN Xi'an** 91.29 306 P P 20 21 37.3 +0.9
XAN sP sP 20 21 44.6 +1.3
XAN SKS SKSac 20 32 09.3 +0.8
XAN S ScS 20 32 40.1 +2.2
XAN PMZ
comp=Z,78nm,1.5s
XAN PMZ
comp=Z,1µm,7.1s
XAN LN
comp=Z,630nm,22.4s
XAN LE
comp=Z,1µm,33.0s
XAN LZ
comp=Z,2µm,34.6s
**439A Center Grove,** 91.31 58 P P 20 21 37.2 +0.7
baz=92
**Y36A Durant** 91.35 54 P P 20 21 37.4 +0.8
baz=92
**W35A Tecumseh** 91.41 53 P P 20 21 37.6 +0.7
baz=92,SNR=13
**P31A Stockton** 91.42 48 P P 20 21 37.8 +0.9
baz=92
**H26A Fairpoint** 91.42 42 P P 20 21 37.7 +0.9
baz=92
**R32A Long Quarter,** 91.42 49 P P 20 21 37.6 +0.7
baz=92,SNR=5.0
**U34A Anderson Ranch** 91.45 52 PFAKE 20 21 50.0 +13
U34A LR LR
comp=Z,7µm,19.0s
**K28A Ten Mile Ranch** 91.47 45 P P 20 21 38.0 +0.9
baz=92
**238A Jacksonville** 91.50 56 P P 20 21 38.1 +0.8
baz=92
**X36A Centrahoma** 91.57 54 P P 20 21 38.4 +0.7
baz=92
**Z37A Pogue Cattle C** 91.58 55 P P 20 21 38.3 +0.6
baz=92
**S33A Kaszmaul Farm,** 91.58 50 P P 20 21 38.4 +0.8
baz=92
**F25A Bowman** 91.60 41 P P 20 21 38.8 +1.1
baz=92,SNR=5.4
**TGUH Tegucigalpa,Un** 91.61 76 eP P 20 21 39.2 +1.1
comp=Z,469nm,1.9s
TGUH LR LR
comp=Z,5µm,18.0s
**339A Huntington** 91.68 57 P P 20 21 39.2 +1.0
baz=92
**V35A Meyer Ranch, C** 91.69 52 P P 20 21 39.1 +0.9
baz=92
**O31A Woolen Ranch,** 91.72 48 P P 20 21 39.4 +1.1
baz=92
**NATX Nacogdoches** 91.76 57 PFAKE 20 21 50.0 +11
NATX LR LR
comp=Z,5µm,18.0s
**L29A Maesberg Ranch** 91.77 46 P P 20 21 39.6 +1.1
baz=92
**Q32A Meitler Ranch,** 91.77 49 P P 20 21 39.3 +0.8
baz=92
**138A Matatall Enter** 91.78 56 P P 20 21 39.3 +0.7
baz=92
**G26A Maurine** 91.84 42 P P 20 21 39.5 +0.7
baz=92,SNR=10
**J28A Allard Ranch,** 91.87 44 P P 20 21 39.8 +0.9
baz=92,SNR=8.2
**H27A Howes** 91.87 43 P P 20 21 39.7 +0.9
baz=92
**Y37A Hugo** 91.89 54 P P 20 21 39.8 +0.7
baz=92
**W36A Wetumka** 91.89 53 P P 20 21 39.7 +0.6
baz=92
**CFAA Coronel Fontan** 91.89 125 P P 20 21 39.4 -0.1
comp=Z,0.6nm,0.6s,baz=267,slow=4.4
**E25A Miller Ranch,** 91.91 41 P P 20 21 40.2 +1.2
baz=92
**440A Kirbyville** 91.93 58 P P 20 21 40.2 +0.9
baz=92
**T34A McClaskey Farm** 91.94 51 P P 20 21 40.2 +0.9
baz=92
**M30A Dale-Ortello V** 91.95 46 P P 20 21 40.3 +1.0
baz=92
**U35A Pawnee** 92.01 52 P P 20 21 40.4 +0.8
baz=92
**239A Gary** 92.01 57 P P 20 21 40.6 +0.9
baz=92
**F26A Lodgepole** 92.06 41 P P 20 21 40.6 +0.9
baz=92
**Z38A Mt. Pleasant** 92.09 55 P P 20 21 40.9 +0.8
baz=92
**I28A Midland** 92.17 44 P P 20 21 41.1 +0.9
baz=92
**K29A Lazy Trails An** 92.18 45 P P 20 21 41.2 +0.8
baz=92,SNR=8.5
**HHC Hu-ho-hao-te** 92.19 313 eP P 20 21 41.5 +1.0
HHC sP sP 20 21 50.0 +2.6
HHC SKS SKSac 20 32 15.0 +1.6
HHC sS sS 20 32 52.1 +0.7
HHC SS SS 20 38 55.4 +2.0
HHC PMZ
comp=Z,57nm,1.3s
HHC PMZ
comp=Z,1µm,6.8s
HHC LN
comp=Z,1µm,20.0s
HHC LE
comp=Z,1µm,20.4s
HHC LZ
comp=Z,2µm,21.8s
**NNA Nana** 92.22 104 PFAKE 20 21 50.0 +8.8
NNA LR LR
comp=Z,5µm,19.0s
**L30A Spencer Herefo** 92.23 46 P P 20 21 41.5 +0.9
baz=92
**340A Bronson** 92.24 57 P P 20 21 41.7 +0.9
baz=92
**D25A Fairfield** 92.26 40 P P 20 21 41.8 +1.2
baz=92
**S34A Willow Spring** 92.27 51 P P 20 21 41.8 +0.9
baz=92
**Q33A Connelly Farm,** 92.29 49 P P 20 21 41.8 +0.9
baz=92,SNR=5.1
**G27A Dupree** 92.30 42 P P 20 21 41.7 +0.9
baz=92
**X37A Clayton** 92.32 54 P P 20 21 41.9 +0.8
baz=92
**139A Bunkhouse Ranc** 92.33 56 P P 20 21 41.8 +0.6
baz=92
**V36A Jenks** 92.36 53 P P 20 21 41.9 +0.6
baz=93
**DGMT Dagmar** 92.36 39 P P 20 21 42.1 +1.1
baz=93
**DGMT Dagmar** 92.36 39 eP P 20 21 44.3 +3.3
comp=Z,317nm,1.6s
DGMT LR LR
comp=Z,5µm,20.0s
**T35A Sooner Cattle** 92.39 51 P P 20 21 41.9 +0.5
baz=93,SNR=6.5
**R34A Isabella, Hill** 92.42 50 P P 20 21 42.1 +0.6
baz=93
**JTS JuntasAbangare** 92.43 80 LR LR 20 53 53.2
comp=Z,4µm,20.2s,baz=242,slow=30
**JTS JuntasAbangare** 92.43 80 d*iP P 20 21 42.1 0.0
JTS pmax pmax
comp=Z,285nm,1.7s
JTS MLR MLR
comp=Z,5µm,16.0s
**JTS JuntasAbangare** 92.43 80 P P 20 21 42.1 0.0
comp=Z,394nm,1.3s,SNR=6.6
**JTS JuntasAbangare** 92.43 80 eP P 20 21 42.6 +0.5
comp=Z,367nm,1.9s
**J29A Okreek** 92.46 44 P P 20 21 42.5 +0.9
baz=93
**E26A Carlson Angus** 92.47 41 P P 20 21 42.7 +1.1
baz=93,SNR=6.9
**F27A Lemmon** 92.47 42 P P 20 21 42.5 +0.9
baz=93,SNR=7.7
**W37A Quinton** 92.49 53 P P 20 21 42.6 +0.7
baz=93
**O32A Brockman Farm,** 92.50 48 P P 20 21 42.6 +0.7
baz=93
**TUL1 Tulsa** 92.52 53 P P 20 21 42.6 +0.6
baz=93
**TUL1 Tulsa** 92.52 53 eP P 20 21 41.7 -0.3
comp=Z,75nm,1.4s
TUL1 LR LR
comp=Z,6µm,20.0s
**Y38A Idabel** 92.55 55 P P 20 21 42.9 +0.7
baz=93
**C25A Freed Ranch, W** 92.56 40 P P 20 21 43.1 +1.2
baz=93
**H28A Mission Ridge** 92.56 43 P P 20 21 42.8 +0.7
baz=93
**K30A Basset** 92.61 45 P P 20 21 43.3 +1.0
baz=93,SNR=6.5
**Z39A Irene McRaven,** 92.71 56 P P 20 21 43.7 +0.8
baz=93
**I29A Vivian Onida** 92.74 44 P P 20 21 43.6 +0.7
baz=93
**D26A Manning** 92.74 40 P P 20 21 43.7 +0.9
baz=93,SNR=7.4
**U36A Oologah** 92.76 52 P P 20 21 43.9 +0.9
baz=93
**X38A Whitesboro** 92.76 54 P P 20 21 43.8 +0.6
baz=93,SNR=12
**G28A Parade** 92.81 43 P P 20 21 44.0 +0.8
baz=93,SNR=7.0
**S35A Otter Creek Ra** 92.84 51 P P 20 21 44.1 +0.6
baz=93
**TEIG Tepich** 92.86 70 PFAKE 20 22 00.0 +16
TEIG LR LR
comp=Z,5µm,19.0s
**KMI Kunming** 92.89 296 P P 20 21 45.9 +1.6
KMI pP pP 20 21 51.6 +2.3
KMI PP PP 20 25 28.6 +1.5
KMI SKS SKSac 20 32 18.8 +0.6
KMI PMZ
comp=Z,55nm,2.0s
KMI PMZ
comp=Z,2µm,5.6s
KMI LN
comp=Z,940nm,20.5s
KMI LE
comp=Z,2µm,21.3s
KMI LZ
comp=Z,3µm,22.9s
**Q34A Chapman** 92.89 50 P P 20 21 44.6 +0.9
baz=93
**O33A Hebron** 92.91 48 P P 20 21 44.4 +0.7
baz=93
**T36A Boggs Farm, Ca** 92.91 52 P P 20 21 44.4 +0.6
baz=93,SNR=5.4
**L31A Butterfield Fa** 92.92 46 P P 20 21 44.7 +1.0
baz=93
**J30A Dallas** 92.97 45 P P 20 21 44.7 +0.7
baz=93
**V37A Hulbert** 93.00 53 P P 20 21 44.8 +0.6
baz=93,SNR=10
**E27A Carson** 93.00 41 P P 20 21 44.9 +0.9
baz=93
**Y39A Lockesburg** 93.04 55 P P 20 21 45.1 +0.7
baz=93
**H29A Onida** 93.06 43 P P 20 21 45.4 +1.1
baz=93
**BGNE Belgrade** 93.06 47 P P 20 21 45.1 +0.6
baz=93
**BGNE Belgrade** 93.06 47 PFAKE 20 22 00.0 +16
BGNE LR LR
comp=Z,4µm,18.0s
**W38A Poteau** 93.15 54 P P 20 21 45.4 +0.5
baz=93
**R35A Emporia Munici** 93.18 50 P P 20 21 45.6 +0.5
baz=93
**KSU1 Kansas State U** 93.20 49 P P 20 21 45.8 +0.7
baz=93
**KSU1 Kansas State U** 93.20 49 eP P 20 21 45.1 0.0
comp=Z,19nm,0.8s
**INK Inuvik** 93.22 14 P P 20 21 43.7 -0.7
comp=Z,1.9nm,0.7s,baz=220,slow=6.1,SNR=13
**INK Inuvik** 93.22 14 eP P 20 21 45.5 +1.0
comp=Z,249nm,2.2s
**U37A Salina** 93.22 52 P P 20 21 46.1 +0.8
baz=93
**F28A McLaughlin** 93.22 42 P P 20 21 46.2 +1.1
baz=93
**P34A Walnut Farm, R** 93.22 49 P P 20 21 45.8 +0.6
baz=93
**I30A Oacoma** 93.27 44 P P 20 21 46.5 +1.2
baz=94
**N33A J Bar K, Exete** 93.27 48 P P 20 21 46.7 +1.3
baz=94
**C26A Wahner Farm, P** 93.31 40 P P 20 21 46.3 +0.8
baz=94
**D27A Center** 93.33 41 P P 20 21 46.6 +1.0
baz=94
**S36A Lake Cedric, C** 93.39 51 P P 20 21 46.7 +0.8
baz=94
**J31A Geddes** 93.45 45 P P 20 21 47.0 +0.8
baz=94
**B26A Jensen Ranch,** 93.48 39 P P 20 21 47.3 +1.1
baz=94
**G29A Hoven** 93.49 43 P P 20 21 47.5 +1.2
baz=94
**Q35A Mercer Eighty,** 93.51 50 P P 20 21 47.1 +0.5
baz=94
**TRQA Tornquist** 93.53 133 PFAKE 20 22 00.0 +13
TRQA LR LR
comp=Z,5µm,18.0s
**V38A Canehill** 93.54 53 P P 20 21 47.3 +0.6
baz=94,SNR=14
**O34A Beatrice** 93.57 48 P P 20 21 47.4 +0.7
baz=94
**YAK Yakutsk** 93.59 337 c*iP P 20 21 44.9 -1.4
YAK e*SS S 20 32 56.8 +2.8
YAK eSS SS 20 39 15.5 +3.3
YAK eSSS SSS 20 42 46.7
YAK pmax pmax
comp=E,4.0nm,1.0s
YAK pmax pmax
comp=N,7.0nm,1.3s
YAK pmax pmax
comp=Z,20nm,1.1s
**YAK Yakutsk** 93.59 337 eP P 20 21 45.7 -0.6
comp=Z,113nm,1.8s
YAK LR LR
comp=Z,1µm,21.0s
**E28A Huff** 93.61 41 P P 20 21 47.8 +1.0
baz=94,SNR=5.3
**C27A Sayler Ranch,** 93.62 40 P P 20 21 47.7 +0.8
baz=94
**T37A Cheneyville 18** 93.65 52 P P 20 21 47.7 +0.5
baz=94,SNR=11
**MIAR Mount Ida** 93.67 55 eP P 20 21 45.6 -1.8
MIAR pmax pmax
comp=Z,51nm,1.5s
MIAR MLR MLR
comp=Z,5µm,20.0s
**MIAR Mount Ida** 93.67 55 P P 20 21 48.1 +0.7
baz=94,SNR=7.5
**MIAR Mount Ida** 93.67 55 eP P 20 21 45.6 -1.8
comp=Z,51nm,1.5s
MIAR LR LR
comp=Z,5µm,20.0s
**R36A Gordon, Harris** 93.69 51 P P 20 21 48.2 +0.9
baz=94
**K32A Verdigre** 93.70 46 P P 20 21 48.2 +0.9
baz=94
**U38A Gravette** 93.78 53 P P 20 21 48.7 +0.9
baz=94,SNR=6.0
**A26A Wade Farm, Ken** 93.83 39 P P 20 21 48.6 +0.8
baz=94
**F29A Eureka** 93.83 42 P P 20 21 48.8 +0.9
baz=94
**CM01 Chiang Mai Arr** 93.83 288 eP P 20 21 49.0 +0.6
**CMAR Chiang Mai Arr** 93.86 288 P P 20 21 49.2 +0.7
comp=Z,2.0nm,0.8s,baz=124,slow=3.0,SNR=22
CMAR LR LR 21 01 36.2
comp=Z,656nm,20.9s,baz=130,slow=34
**CMAR Chiang Mai Arr** 93.86 288 P P 20 21 49.3 +0.7
CMAR pmax pmax
comp=Z,2.0nm,0.8s
CMAR MLR MLR
comp=Z,657nm,20.9s
**S37A Fort Scott** 93.96 51 P P 20 21 49.1 +0.5
baz=94

**Q36A Arnold C. Orve** 93.97 50 P P 20 21 49.1 +0.5
baz=94
**N34A Lincoln** 93.97 48 P P 20 21 49.5 +0.9
baz=94
**L33A Hoskins** 93.97 46 P P 20 21 49.3 +0.7
baz=94
**CHTO Chiang Mai** 93.98 288 eP P 20 21 51.1 +2.0
CHTO pmax pmax
comp=Z,198nm,1.9s
CHTO MLR MLR
comp=Z,1µm,20.0s
**CHTO Chiang Mai** 93.98 288 P P 20 21 51.3 +2.2
SNR=18
**CHTO Chiang Mai** 93.98 288 eP P 20 21 51.1 +2.0
comp=Z,198nm,1.9s
CHTO LR LR
comp=Z,1µm,20.0s
**B27A Peters Farms,** 94.07 40 P P 20 21 50.1 +1.2
baz=94
**H31A Wolsey** 94.12 44 P P 20 21 50.3 +1.1
baz=94
**CD2 Chengdu** 94.13 301 ⇑P P 20 21 49.8 +0.2
CD2 pP **pP** 20 21 53.9 -0.8
CD2 PP **PP** 20 25 36.3 -0.2
CD2 SKS **SKSac** 20 32 24.1 -0.3
CD2 S **S** 20 33 00.8 +0.4
CD2 sS **sS** 20 33 07.9 -0.9
CD2 SS **SS** 20 39 23.0 +1.5
CD2 PMZ
comp=Z,30nm,0.5s
CD2 PMZ
comp=Z,2µm,5.6s
CD2 LN
comp=Z,1µm,14.2s
CD2 LE
comp=Z,1µm,17.6s
CD2 LZ
comp=Z,1µm,19.6s
**O35A Humboldt** 94.16 49 P P 20 21 50.2 +0.8
baz=94
**M34A Aspy Farms, Fr** 94.18 47 P P 20 21 50.2 +0.6
baz=94
**E29A Napoleon** 94.26 42 P P 20 21 50.8 +0.9
baz=94
**A27A Ledoux Ranch,** 94.32 39 P P 20 21 51.2 +1.2
baz=94
**F30A Leola** 94.34 43 P P 20 21 51.0 +0.8
baz=94
**P36A Good Intent, A** 94.40 49 P P 20 21 51.5 +0.9
baz=95
**D29A Pettibone, Tap** 94.50 41 P P 20 21 51.9 +1.0
baz=95
**CMBY CAMPBELL BAY** 94.57 276 eP P 20 21 50.9 -1.1
**B28A Dugan Ranch, T** 94.63 40 P P 20 21 52.3 +0.8
baz=95
**J33A Davis** 94.64 45 P P 20 21 52.3 +0.7
baz=95
**Q37A Longview Farm,** 94.66 50 P P 20 21 52.2 +0.4
baz=95
**E30A Jud** 94.69 42 P P 20 21 52.7 +0.9
baz=95
**UALR University of** 94.70 55 PFAKE 20 22 00.0 +7.9
UALR LR LR
comp=Z,6µm,20.0s
**H32A Carlson Farm,** 94.81 44 P P 20 21 53.3 +0.9
baz=95
**MDND Maddock** 94.83 41 P P 20 21 53.3 +1.0
baz=95
**MDND Maddock** 94.83 41 PFAKE 20 22 00.0 +7.6
MDND LR LR
comp=Z,6µm,19.0s
**YKA Yellowknife Ar** 94.83 24 P P 20 21 52.0 0.0
comp=Z,3.3nm,0.9s,baz=235,slow=4.1,SNR=5.8
**YKA Yellowknife Ar** 94.83 24 P P 20 21 52.0 0.0
YKA pmax pmax
comp=Z,3.0nm,0.9s
**F31A Hecla** 94.84 43 P P 20 21 53.5 +1.0
baz=95
**A28A Rude Farm, Bot** 94.88 39 P P 20 21 53.4 +0.8
baz=95
**K34A Le Mars** 94.98 46 P P 20 21 54.4 +1.2
baz=95
**D30A Buchanan** 95.04 41 P P 20 21 54.1 +0.7
baz=95
**ECSD EROS Data Cent** 95.05 45 P P 20 21 54.4 +1.0
baz=95
**ECSD EROS Data Cent** 95.05 45 eP P 20 21 52.7 -0.8
comp=Z,528nm,2.2s
ECSD LR LR
comp=Z,4µm,19.0s
**I33A Coleman** 95.05 45 P P 20 21 54.3 +0.9
baz=95
**OTAV Otavalo** 95.06 92 PFAKE 20 22 10.0 +15
OTAV LR LR
comp=Z,6µm,18.0s
**G32A Webster** 95.08 44 P P 20 21 54.4 +0.8
baz=95
**LVC Limon Verde** 95.12 116 P P 20 21 55.2 +0.5
comp=Z,7.9nm,0.5s,baz=253,slow=5.2,SNR=7.3
**LVC Limon Verde** 95.12 116 eP P 20 21 54.9 +0.2
comp=Z,90nm,1.8s
LVC LR LR
comp=Z,5µm,19.0s
**VBMS Vicksburg** 95.20 58 PFAKE 20 22 10.0 +16
VBMS LR LR
comp=Z,5µm,20.0s
**B29A Wagenman Farm,** 95.24 40 P P 20 21 55.0 +0.8
baz=95
**J34A George** 95.31 46 P P 20 21 55.5 +0.8
baz=96
**H33A Prehn Over Nor** 95.34 44 P P 20 21 55.8 +1.0
baz=96
**C30A Mose, Pekin** 95.46 41 P P 20 21 56.1 +0.9
baz=96
**A29A Manning Farm,** 95.51 40 P P 20 21 56.5 +1.1
baz=96
**K35A Storm Lake** 95.58 47 P P 20 21 56.5 +0.6
baz=96
**D31A Mcclaflin, Tow** 95.66 42 P P 20 21 57.2 +1.1
baz=96
**I34A Hadley** 95.67 45 P P 20 21 57.2 +0.8
baz=96
**G33A Ortonville** 95.74 44 P P 20 21 57.6 +1.0
baz=96
**CIT Chita** 95.77 324 eP P 20 21 58.0 +1.4
CIT e 20 22 07.2
CIT pmax pmax
comp=Z,115nm,2.8s
**B30A Myrvik Farm, E** 95.86 40 P P 20 21 58.0 +0.9
baz=96
**LZH Lanzhou** 95.92 306 eP P 20 21 59.8 +2.0
LZH pP pP 20 22 10.0 +7.1
LZH PP **PP** 20 25 46.3 -4.1
LZH SKS **SKSac** 20 32 31.1 -2.9
LZH S **S** 20 33 14.6 -1.4
LZH sS **sS** 20 33 27.0 +2.6
LZH SS **SS** 20 39 46.8 -0.2
LZH PMZ
comp=Z,89nm,1.1s
LZH PMZ
comp=Z,810nm,4.7s
LZH LN
comp=Z,2µm,16.4s
LZH LE
comp=Z,2µm,17.8s
LZH LZ
comp=Z,3µm,19.9s
**H34A Spellman Lake,** 95.97 45 P P 20 21 58.4 +0.8
baz=96
**A30A Hoffart Farm,** 96.07 40 P P 20 21 59.1 +1.1
baz=96
**F33A 5 Mile Ranch,** 96.08 43 P P 20 21 59.3 +1.2
baz=96
**I35A Creekview Farm** 96.18 46 P P 20 21 59.6 +0.9
baz=96
**J36A Seneca 1, Swea** 96.42 46 P P 20 22 00.8 +1.0
baz=97
**FFC Flin Flon** 96.47 34 eP P 20 22 01.9 +2.2
FFC pmax pmax
comp=Z,139nm,2.0s
FFC MLR MLR
comp=Z,8µm,19.0s
**FFC Flin Flon** 96.47 34 eP P 20 22 01.9 +2.2
comp=Z,139nm,2.0s
FFC LR LR
comp=Z,8µm,19.0s
**E33A Westby DABS, E** 96.53 43 P P 20 22 01.0 +0.9
baz=97
**H35A Sunnyside Ranc** 96.60 45 P P 20 22 01.6 +1.1
baz=97
**SCIA State Center** 96.66 48 PFAKE 20 22 10.0 +9.1
SCIA LR LR
comp=Z,3µm,19.0s
**MET Memphis--Engin** 96.67 55 PFAKE 20 22 10.0 +9.0
MET LR LR
comp=Z,6µm,20.0s
**CCM Cathedral Cave** 96.70 52 PFAKE 20 22 10.0 +8.9
CCM LR LR
comp=Z,6µm,20.0s
**F34A Alexandria** 96.74 44 P P 20 22 02.2 +1.1
baz=97
**BCIP Isla Barro Col** 96.79 83 PFAKE 20 22 10.0 +7.9
BCIP LR LR
comp=Z,2µm,18.0s
**PBMO Poplar Bluff** 96.86 53 PFAKE 20 22 10.0 +8.1
PBMO LR LR
comp=Z,6µm,19.0s
**OXF Oxford** 96.87 56 PFAKE 20 22 10.0 +8.1
OXF LR LR
comp=Z,9µm,20.0s
**B32A Ashes, Strandq** 96.93 41 P P 20 22 03.1 +1.2
baz=97
**J37A Redenius Farm,** 96.94 46 P P 20 22 03.1 +1.0
baz=97
**G35A Watkins** 97.02 44 P Pdif 20 22 03.4 +0.9
baz=97
**HOPE Hope Point** 97.05 156 PFAKE 20 22 10.0 +7.5
HOPE LR LR
comp=Z,6µm,18.0s
**E34A Wadena** 97.06 43 P Pdif 20 22 03.8 +1.1
baz=97
**F35A Swanville** 97.20 44 P Pdif 20 22 04.1 +0.8
baz=97
**PBA Port Blair** 97.23 280 eP P 20 22 03.1 -0.9
PBA AMS AMS 21 10 33.6
comp=Z,3µm,14.0s
**I37A Lemond, Waseca** 97.30 46 P Pdif 20 22 04.8 +1.0
baz=98
**AGMN Agassiz Nation** 97.31 41 P Pdif 20 22 04.6 +1.0
baz=98
**AGMN Agassiz Nation** 97.31 41 eP P 20 22 02.7 -0.9
comp=Z,440nm,2.6s
AGMN LR LR
comp=Z,3µm,18.0s
**DGPR DIGLIPUR** 97.55 281 eP P 20 22 05.4 -0.1
DGPR AMS AMS 21 11 49.0
comp=Z,3µm,13.4s
**BRAL Brewton** 97.57 60 PFAKE 20 22 20.0 +15
BRAL LR LR
comp=Z,4µm,20.0s
**E35A Pequot Lakes** 97.57 43 P Pdif 20 22 06.0 +1.1
baz=98
**SLM Saint Louis** 97.65 52 PFAKE 20 22 20.0 +15
SLM LR LR
comp=Z,6µm,19.0s
**A33A Warroad** 97.84 41 P Pdif 20 22 06.8 +0.8
baz=98
**F36A Milaca** 97.89 44 P Pdif 20 22 06.9 +0.6
baz=98
**ULN Ulaanbaatar** 97.95 318 ci P Pdif 20 22 07.0 +0.2
ULN pmax pmax
comp=Z,13nm,1.7s
ULN MLR MLR
comp=Z,2µm,18.0s
**ULN Ulaanbaatar** 97.95 318 eP Pdif 20 22 06.9 +0.1
comp=Z,63nm,2.2s
ULN LR LR
comp=Z,2µm,20.0s
**I38A Scanlan Farm,** 98.03 46 P Pdif 20 22 07.9 +0.9
baz=98
**ULM Lac du Bonnet** 98.04 39 P Pdif 20 22 07.4 +0.5
comp=Z,9.7nm,1.1s,baz=211,slow=3.1,SNR=6.5
ULM LR LR 21 03 11.1
comp=Z,6µm,18.6s,baz=257,slow=34
**ULM Lac du Bonnet** 98.04 39 P Pdif 20 22 07.4 +0.5
ULM pmax pmax
comp=Z,10.0nm,1.1s
ULM MLR MLR
comp=Z,6µm,18.6s
**ULM Lac du Bonnet** 98.04 39 eP Pdif 20 22 08.3 +1.4
comp=Z,127nm,1.8s
**BOD Bodaibo** 98.06 329 eP P 20 21 54.9 -12
BOD pmax pmax
comp=Z,12nm,2.3s
**SIUC Southern Illin** 98.09 53 PFAKE 20 22 20.0 +13
SIUC LR LR
comp=Z,4µm,20.0s
**B34A Aery, Baudette** 98.12 41 P Pdif 20 22 08.6 +1.2
baz=98
**SPMN St. Paul** 98.13 45 P Pdif 20 22 08.0 +0.6
baz=98
**SPMN St. Paul** 98.13 45 eP Pdif 20 22 09.5 +2.1
comp=Z,91nm,1.6s
SPMN LR LR
comp=Z,4µm,18.0s
**C35A Jirik Farms, M** 98.26 42 P Pdif 20 22 09.0 +1.1
baz=98
**SONA1 Songino Array** 98.35 318 eP P 20 22 08.5 0.0
**SONM Songino Array** 98.35 318 P Pdif 20 22 08.8 +0.3
comp=Z,2.2nm,1.1s,baz=134,slow=5.6,SNR=7.1
SONM PP **PP** 20 26 09.1 +0.3
comp=Z,5.8nm,1.2s,baz=121,slow=6.5,SNR=7.7
SONM LR LR 21 04 38.9
comp=Z,2µm,19.2s,baz=104,slow=34
**SONM Songino Array** 98.35 318 P Pdif 20 22 08.8 +0.3
SONM 20 26 09.1
SONM pmax pmax
comp=Z,2.0nm,1.1s
SONM pmax pmax
comp=Z,6.0nm,1.2s
SONM MLR MLR
comp=Z,2µm,19.2s
**LPAZ La Paz** 98.39 111 P Pdif 20 22 10.8 +0.7
comp=Z,1.5nm,0.9s,baz=325,slow=3.6,SNR=5.6
LPAZ PP **PP** 20 26 08.2 -1.7
comp=Z,1.8nm,0.9s,baz=228,slow=6.5,SNR=5.5
LPAZ LR LR 20 59 13.2
comp=Z,3µm,18.4s,baz=256,slow=31
**LPAZ La Paz** 98.39 111 P Pdif 20 22 10.8 +0.7
LPAZ 20 26 08.3
LPAZ pmax pmax
comp=Z,2.0nm,0.9s
LPAZ MLR MLR
comp=Z,3µm,18.4s
**LPAZ La Paz** 98.39 111 eP Pdif 20 22 10.9 +0.8
comp=Z,49nm,2.2s
LPAZ ePP **PP** 20 26 09.1 -0.8
**D36A Goodland** 98.59 43 P Pdif 20 22 09.8 +0.4
baz=99
**WVT Waverly** 98.62 55 PFAKE 20 22 20.0 +10
WVT LR LR
comp=Z,8µm,19.0s
**HDIL Hopedale** 98.97 50 PFAKE 20 22 20.0 +8.7
HDIL LR LR
comp=Z,7µm,19.0s
**C36A Pine Crest Far** 99.00 42 P Pdif 20 22 11.9 +0.6
baz=99
**D37A Cotton** 99.05 43 P Pdif 20 22 12.2 +0.7
baz=99
**JFWS Jewell Farm** 99.07 48 PFAKE 20 22 20.0 +8.3
JFWS LR LR
comp=Z,4µm,18.0s
**OLIL Olney** 99.26 52 PFAKE 20 22 20.0 +7.4
OLIL LR LR
comp=Z,6µm,19.0s
**USIN University of** 99.33 53 PFAKE 20 22 20.0 +7.0
USIN LR LR
comp=Z,5µm,20.0s
**SWET Sewanee** 99.80 56 PFAKE 20 22 30.0 +15
SWET LR LR
comp=Z,6µm,20.0s
**EYMN Ely** 99.91 43 PFAKE 20 22 30.0 +15
EYMN LR LR
comp=Z,5µm,19.0s
**GTA Gaotai** 100.04 308 P Pdif 20 22 18.1 +1.9
GTA pP pP 20 22 23.0 +1.6
GTA sP sP 20 22 25.3 +2.1
GTA PP **PP** 20 26 26.8 +4.9
GTA SKS **SKSac** 20 32 55.8 +1.1
GTA S **Sdif** 20 33 49.8 -1.0
GTA sS **sS** 20 33 57.4 -1.9
GTA SS **SS** 20 40 47.3 +2.6
GTA PMZ
comp=Z,10.0nm,1.0s
GTA PMZ
comp=Z,430nm,4.5s
GTA LN
comp=Z,530nm,22.3s
GTA LE
comp=Z,1µm,23.7s
GTA LZ
comp=Z,2µm,26.1s
**TIGA Tifton** 100.52 60 PFAKE 20 22 30.0 +12
TIGA LR LR
comp=Z,2µm,19.0s
**BLO Bloomington** 100.56 52 PFAKE 20 22 30.0 +12
BLO LR LR
comp=Z,6µm,19.0s
**COWI Conover** 100.85 45 eP Pdif 20 22 20.6 +1.1
comp=Z,111nm,1.9s
**ZAK Zakamensk** 101.14 320 eP Pdif 20 22 18.3 -2.5
ZAK pmax pmax
comp=Z,5.0nm,1.8s
**GOGA Godfrey** 101.20 59 PFAKE 20 22 30.0 +8.6
GOGA LR LR
comp=Z,6µm,19.0s
**TLY Talaya** 101.33 321 PFAKE 20 22 30.0 +8.4
TLY LR LR
comp=Z,3µm,20.0s
**MTDJ Mount Denham** 101.80 75 PFAKE 20 22 40.0 +15
MTDJ LR LR
comp=Z,3µm,20.0s
**FCC Fort Churchill** 102.05 32 PFAKE 20 22 40.0 +16
FCC LR LR
comp=Z,4µm,20.0s
**SHL Shillong** 102.32 293 eP Pdif 20 22 27.1 +0.3
**JSC Jenkinsville** 103.21 58 PFAKE 20 22 40.0 +10
JSC LR LR
comp=Z,3µm,18.0s
**ACSO Alum Creek Sta** 103.48 52 PFAKE 20 22 40.0 +8.6
ACSO LR LR
comp=Z,5µm,20.0s
**AAM Ann Arbor** 103.54 50 PFAKE 20 22 40.0 +8.5
AAM LR LR
comp=Z,6µm,19.0s
**NHSC New Hope** 103.76 60 PFAKE 20 22 40.0 +7.2
NHSC LR LR
comp=Z,4µm,19.0s
**LSA Lhasa** 104.10 297 PFAKE 20 22 50.0 +15
LSA LR LR
comp=Z,1µm,22.0s
**GTBY Guantanamo Bay** 104.50 74 PFAKE 20 22 50.0 +14
GTBY LR LR
comp=Z,2µm,18.0s
**BLA Blacksburg** 104.64 55 PFAKE 20 22 50.0 +13
BLA LR LR
comp=Z,6µm,18.0s
**SDV Santo Domingo** 105.29 86 PFAKE 20 27 10.0
SDV LR LR
comp=Z,2µm,20.0s
**MCWV Mont Chateau** 105.67 53 PFAKE 20 27 10.0
MCWV LR LR
comp=Z,4µm,20.0s
**SAML Samuel** 105.78 106 PFAKE 20 27 10.0
SAML LR LR
comp=Z,1µm,20.0s
**ERPA Erie** 106.13 51 PFAKE 20 27 10.0
ERPA LR LR
comp=Z,4µm,20.0s
**CNNC Cliffs of the** 106.14 58 PFAKE 20 27 10.0
CNNC LR LR
comp=Z,5µm,18.0s
**LGNH LØogne** 106.36 76 PFAKE 20 27 10.0
LGNH LR LR
comp=Z,5µm,20.0s
**PAPH Port-au-Prince** 106.64 76 PFAKE 20 27 10.0
PAPH LR LR
comp=Z,4µm,21.0s
**RES Resolute Bay** 106.65 16 PFAKE 20 27 10.0
RES LR LR
comp=Z,4µm,19.0s
**PALK Pallekele** 107.03 272 PFAKE 20 27 10.0
PALK LR LR
comp=Z,4µm,20.0s
**BOK Bokaro** 107.08 289 eP Pdif 20 22 46.5 -1.2
**CBN Corbin** 107.22 55 PFAKE 20 27 10.0
CBN LR LR
comp=Z,6µm,18.0s
**CHLP Challavanipeta** 107.30 284 ePdif Pdif 20 22 48.1 -0.7
CHLP ePP **PP** 20 27 15.6 -0.8
**SADO Sadowa** 107.31 48 PFAKE 20 27 10.0
SADO LR LR
comp=Z,4µm,20.0s
**SDDR Presa de Saban** 107.69 76 PFAKE 20 27 10.0
SDDR LR LR
comp=Z,4µm,20.0s
**VIS Vishakhapatnam** 107.75 283 eP Pdif 20 22 48.6 -2.2
**MMNY Mt. Morris Dam** 107.77 50 PFAKE 20 27 10.0
MMNY LR LR
comp=Z,5µm,18.0s
**GRTK Grand Turk** 108.51 73 PFAKE 20 27 10.0
GRTK LR LR
comp=Z,2µm,18.0s
**SDD Santo Domingo** 108.80 77 PFAKE 20 27 10.0
SDD LR LR
comp=Z,4µm,19.0s
**BINY Binghamton** 109.06 51 PFAKE 20 27 10.0
BINY LR LR
comp=Z,6µm,20.0s
**KSPA Keystone Colle** 109.11 52 PFAKE 20 27 10.0
KSPA LR LR
comp=Z,6µm,18.0s
**PVM Polavaram** 109.18 282 epPdif Pdif 20 22 57.3 +0.1
PVM ePKiKP PKiKP 20 26 55.8 -5.5
PVM ePP PP 20 27 24.9 -5.2
PVM eSKSac **SKSac** 20 33 36.5 -0.5
PVM e 20 36 59.7
**LUPA Lehigh Univers** 109.22 53 PFAKE 20 27 10.0
LUPA LR LR
comp=Z,7µm,20.0s
**DGAR Diego Garcia** 109.31 254 PFAKE 20 27 10.0
DGAR LR LR
comp=Z,4µm,20.0s
**BRNJ Basking Ridge** 109.84 53 PFAKE 20 27 10.0
BRNJ LR LR
comp=Z,10µm,20.0s
**ODNJ Ogdensburg** 109.88 53 PFAKE 20 27 10.0
ODNJ LR LR
comp=Z,5µm,20.0s
**WMQ Urumqi** 109.91 310 Pdif Pdif 20 23 00.0 +0.1
WMQ PP **PP** 20 27 37.0 +2.1
WMQ S **Sdif** 20 35 10.0 -2.8
WMQ SS **SS** 20 43 00.0 +0.5
WMQ PPMZ
comp=Z,160nm,8.0s
WMQ LN
comp=Z,810nm,22.0s
WMQ LE
comp=Z,1µm,25.0s
WMQ LZ
comp=Z,1µm,24.0s
**SKHT Srikalahasti** 109.95 278 ePdif Pdif 20 22 59.8 -0.9
SKHT ePP **PP** 20 27 31.5 -4.3
SKHT eSKSac **SKSac** 20 33 33.5 -6.9
SKHT e 20 37 04.7
**CPNY Central Park** 110.31 53 PFAKE 20 27 10.0
CPNY LR LR
comp=Z,10µm,19.0s
**ADKI Addanki** 110.31 280 epPdif Pdif 20 23 02.5 +0.2
ADKI ePP **PP** 20 27 34.2 -4.2
ADKI eSKSac **SKSac** 20 33 45.7 +3.9
ADKI e 20 37 11.2
**PAL Palisades** 110.39 53 PFAKE 20 27 10.0
PAL LR LR
comp=Z,9µm,20.0s
**LONY Lake Ozonia** 110.48 49 PFAKE 20 27 10.0
LONY LR LR
comp=Z,4µm,19.0s
**TRY Troy** 110.84 51 PFAKE 20 27 20.0
TRY LR LR
comp=Z,8µm,20.0s
**TRD Trivandrum** 110.94 271 eP PKiKP 20 27 02.2 -2.6
**ACCN Adirondack Com** 110.94 50 PFAKE 20 27 20.0
ACCN LR LR
comp=Z,2µm,19.0s
**YLE Yale** 111.16 53 PFAKE 20 27 20.0
YLE LR LR
comp=Z,9µm,20.0s

**CRPR Cabo Rojo, PR 111.25 78** PFAKE 20 27 20.0
CRPR LR LR
comp=Z,3µm,19.0s
**AGP Aguadilla 111.32 78** PFAKE 20 27 20.0
AGP LR LR
comp=Z,3µm,19.0s
**RPR Rampur 111.74 283** *e*Pdif **Pdif 20 23 08.3 -0.3**
RPR *e*PP **PP 20 27 45.4 -3.2**
RPR *e*SKSac **SKSac 20 33 51.3 +3.7**
RPR *e* 20 37 24.6
**PTGA Pitinga 111.95 99** PFAKE 20 27 20.0
PTGA LR LR
comp=Z,5µm,19.0s
**HYB Hyderabad 112.05 281** *e*P **PKiKP 20 27 05.4 -1.4**
**HYBB Hyderabad (bro 112.05 281** *e*Pdif **Pdif 20 23 08.6 -1.4**
HYBB *e*PP **PP 20 27 47.7 -3.2**
HYBB *e*SKSac **SKSac 20 33 47.9 -1.0**
HYBB *e* 20 37 27.4
**SJG San Juan 112.15 78** PFAKE 20 27 20.0
SJG LR LR
comp=Z,2µm,18.0s
**BRYW Bryant College 112.29 52** PFAKE 20 27 20.0
BRYW LR LR
comp=Z,7µm,20.0s
**LBNH Lisbon 112.31 50** PFAKE 20 27 20.0
LBNH LR LR
comp=Z,6µm,19.0s
**CPD Cerro la Pandu 112.35 78** PFAKE 20 27 20.0
CPD LR LR
comp=Z,9µm,18.0s
**HRV Adam Dziewonsk 112.35 51** PFAKE 20 27 20.0
HRV LR LR
comp=Z,7µm,19.0s
**HUMP Col San Antoni 112.44 78** PFAKE 20 27 20.0
HUMP LR LR
comp=Z,3µm,18.0s
**URV Uravakonda 112.57 278** *e*Pdif **Pdif 20 23 11.4 -1.0**
URV *e*PP PP 20 27 46.3 -8.4
URV *e*SKSac **SKSac 20 33 50.9 -0.2**
URV *e* 20 37 23.3
**ZALV Zalesovo Beam 112.95 321** PKiKP **PKiKP 20 27 06.0 -1.4**
comp=Z,1.7nm,0.5s,baz=180,slow=0.4,SNR=8.9
ZALV PP **PP 20 27 51.9 -4.4**
comp=Z,3.8nm,0.9s,baz=100,slow=4.7,SNR=8.1
**ZALV Zalesovo Beam 112.95 321** *i* PKIKP **PKiKP 20 27 06.0 -1.4**
ZALV pmax pmax
comp=Z,2.0nm,0.5s
**STVI Saint Thomas 113.31 78** PFAKE 20 27 20.0
STVI LR LR
comp=Z,2µm,20.0s
**WVL Waterville 113.96 49** PFAKE 20 27 20.0
WVL LR LR
comp=Z,7µm,19.0s
**MKAR Makanchi Array 114.06 313** PKP PKPdf 20 27 09.4 -0.4
comp=Z,2.0nm,0.7s,baz=77,slow=0.2,SNR=13
MKAR PP PP 20 27 59.2 -5.3
comp=Z,2.8nm,0.9s,baz=96,slow=6.2,SNR=6.5
**BHPL Bhopal 114.49 287** *e*P PKPdf 20 27 09.9 -1.4
**GRGR Grenville 114.68 86** PFAKE 20 27 20.0 +8.1
GRGR LR LR
comp=Z,1µm,18.0s
**SABA Saba 114.70 79** PFAKE 20 27 20.0 +8.2
SABA LR LR
comp=Z,3µm,20.0s
**SEUS St. Eustatius 114.91 80** PFAKE 20 27 20.0 +7.8
SEUS LR LR
comp=Z,2µm,18.0s
**DDI Dehra Dun 115.31 295** *e*P **PKPdf 20 27 10.0 -2.7**
**BDFB Brasilia 115.77 120** PFAKE 20 27 30.0 +16
BDFB LR LR
comp=Z,7µm,19.0s
**FDF Fort de France 115.88 83** PFAKE 20 27 30.0 +16
FDF LR LR
comp=Z,2µm,19.0s
**GOA Goa 115.91 278** *e*P **PKPdf 20 27 11.8 -2.3**
**ANWB Willy Bob 116.06 80** PFAKE 20 27 30.0 +16
ANWB LR LR
comp=Z,2µm,19.0s
**SCHQ Schefferville 116.18 38** PFAKE 20 27 30.0 +16
SCHQ LR LR
comp=Z,4µm,19.0s
**SMLA Simla 116.20 295** *e*P **PKPdf 20 27 13.9 -0.4**
SMLA AMB AMB 20 27 34.4
comp=Z,18nm,3.4s
**BBSR BB Station 116.37 63** PFAKE 20 27 30.0 +15
BBSR LR LR
comp=Z,2µm,19.0s
**KURK Kurchatov 116.65 317** PKIKP **PKPdf 20 27 14.2 -0.4**
KURK pmax pmax
comp=Z,2.0nm,0.8s
**KURK Kurchatov 116.65 317** PKP **PKPdf 20 27 14.2 -0.4**
KURK PP PP 20 28 16.4 -6.1
**POO Poona 116.66 281** *e*P **PKPdf 20 27 15.6 0.0**
**KURBB Kurchatov Arra 116.70 317** PKP **PKPdf 20 27 14.2 -0.5**
comp=Z,2.0nm,0.8s,baz=81,slow=1.7,SNR=12
KURBB PP PP 20 28 16.4 -6.5
comp=Z,6.1nm,1.2s,baz=101,slow=5.5,SNR=12
**BBGH Gun Hill 116.93 85** PFAKE 20 27 30.0 +14
BBGH LR LR
comp=Z,2µm,20.0s
**DHRM DHARAMSHALA 117.09 297** *e*P **PKPdf 20 27 15.5 -0.9**
**KSH Kashi 118.12 305** PKP **PKPdf 20 27 19.8 +1.8**
KSH *e*PP **PP 20 28 34.8 +1.4**
KSH PKS **PKSdf 20 30 54.0 -0.8**
KSH SKS **SKSdf 20 34 27.0 -2.8**
KSH PPMZ
comp=Z,360nm,4.1s
KSH LN
comp=Z,1µm,18.6s
KSH LE
comp=Z,1µm,17.4s
KSH LZ
comp=Z,2µm,21.1s
**TKM2 Tokmak 2 118.59 308** *e*PKIKP **PKPdf 20 27 18.5 -0.4**
**TKM2 Tokmak 2 118.59 308** *e*PKPdf **PKPdf 20 27 18.5 -0.4**
TKM2 *e*PP PP 20 28 29.0 -7.6
**FRU Bishkek 119.30 308** *e*PKIKP **PKPdf 20 27 20.0 0.0**
FRU *e* 20 34 18.0
FRU *e* 20 38 26.0
FRU pmax pmax
comp=Z,60nm,2.2s
**AAK Ala-Archa 119.39 308** PKP **PKPdf 20 27 19.6 -0.7**
comp=Z,2.2nm,0.9s,baz=164,slow=4.5,SNR=8.3
**AAK Ala-Archa 119.39 308** *i* PKIKP **PKPdf 20 27 20.0 -0.4**
**AAK Ala-Archa 119.39 308** PKPdf **PKPdf 20 27 23.3 +2.9**
SNR=5.7
**AAK Ala-Archa 119.39 308** *e*PKPdf **PKPdf 20 27 20.2 -0.2**
AAK *e*PKPdf **PKiKP 20 27 20.6 +0.1**
AAK *e*PP PP 20 28 34.7 -7.3
AAK LR LR
comp=Z,1µm,18.0s
**EKS2 Erkin-Say 119.92 308** *e*PKIKP **PKPdf 20 27 20.5 -0.9**
EKS2 MLR MLR
comp=Z,2µm,19.0s
**EKS2 Erkin-Say 119.92 308** *e*PKPdf **PKPdf 20 27 20.5 -0.9**
EKS2 LR LR
comp=Z,2µm,19.0s
**SFJD Kangerlussuaq 121.38 23** PFAKE 20 27 30.0 +6.8
SFJD LR LR
comp=Z,4µm,20.0s
**KBS Kingsbay 121.41 359** *e*PP PP 20 28 52.1 -2.3
KBS *e*SS SS 20 45 28.4 +0.6
**BRVK Borovoye 121.64 320** *e*PKIKP **PKPdf 20 27 24.3 +0.1**
BRVK MLR MLR
comp=Z,3µm,19.0s
**BRVK Borovoye 121.64 320** PKPdf **PKPdf 20 27 24.7 +0.6**
SNR=9.3
**BRVK Borovoye 121.64 320** *e*PKPdf **PKPdf 20 27 24.3 +0.1**
BRVK *e*PP PP 20 28 50.9 -6.0
BRVK LR LR
comp=Z,3µm,19.0s
**SPA0 Spitsbergen Ar 122.01 358** *e*PP PP 20 28 57.7 -0.9
SPA0 *e*SS SS 20 45 34.5 -1.1
**SPITS Spitsbergen Ar 122.01 358** PKP **PKPdf 20 27 23.7 -0.6**
comp=Z,11nm,0.9s,baz=54,slow=6.3,SNR=4.8
**SPITS Spitsbergen Ar 122.01 358** PKIKP **PKPdf 20 27 23.7 -0.6**
SPITS pmax pmax
comp=Z,11nm,0.9s
**SUMG Summit 122.14 14** PFAKE 20 27 40.0 +15
SUMG LR LR
comp=Z,5µm,20.0s
**DRLN Deer Lake 122.28 44** PFAKE 20 27 40.0 +15
DRLN LR LR
comp=Z,8µm,19.0s

**KBL Kabul 123.36 298** *e*PKIKP **PKPdf 20 27 29.2 +0.9**
KBL MLR MLR
comp=Z,1µm,21.0s
**KBL Kabul 123.36 298** *e*PKPdf **PKPdf 20 27 29.2 +0.9**
KBL LR LR
comp=Z,1µm,21.0s
**ABPO Ambohimpanom 123.87 228** PFAKE 20 27 40.0 +10
ABPO LR LR
comp=Z,8µm,20.0s
**SUR Sutherland 125.66 195** PFAKE 20 27 40.0 +7.1
SUR LR LR
comp=Z,6µm,18.0s
**SVE Sverdlovsk 126.17 326** *i* PKIKP **PKPdf 20 27 33.3 +0.6**
SVE *e* 20 29 24.7
SVE *e*PPP PPP 20 32 13.4
SVE *e* 20 39 30.1
SVE *e* 20 46 30.6
SVE pmax pmax
comp=Z,35nm,1.6s
SVE MLR MLR
comp=E,3µm,19.0s
SVE MLR MLR
comp=Z,4µm,19.0s
**ARU Arti 127.39 326** PKP **PKPdf 20 27 35.6 +0.6**
comp=Z,0.5nm,0.2s,baz=124,slow=23,SNR=2.0
**ARU Arti 127.39 326** *i* PKIKP **PKPdf 20 27 35.3 +0.3**
ARU 20 29 36.1
ARU 20 34 40.3
ARU SP SP 20 39 33.3 -4.4
ARU PS **PS 20 39 45.6 +4.9**
ARU SS **SS 20 46 41.5 -2.8**
ARU SSS SSS 20 51 29.4
ARU MLR MLR
comp=Z,4µm,22.0s
**ARU Arti 127.39 326** *e*PKPdf **PKPdf 20 27 34.3 -0.7**
ARU LR LR
comp=Z,4µm,20.0s
**BOSA Boshof 127.89 201** PKP **PKPdf 20 27 38.7 +1.5**
comp=Z,5.7nm,1.0s,baz=131,slow=5.2,SNR=5.3
**BOSA Boshof 127.89 201** PKIKP **PKPdf 20 27 38.7 +1.5**
BOSA pmax pmax
comp=Z,6.0nm,1.0s
**BOSA Boshof 127.89 201** *e*PKPdf **PKPdf 20 27 41.2 +4.0**
**JMIC Jan Mayen 128.70 6** *e*PP PP 20 29 42.9 -0.2
JMIC *e*SS SS 20 47 02.3 +2.8
**LVZ Lovozero 129.31 347** PFAKE 20 27 50.0 +12
LVZ LR LR
comp=Z,4µm,21.0s
**ARCES ARCESS Array B 129.52 351** PKP **PKPdf 20 27 39.0 +0.2**
comp=Z,4.2nm,0.6s,baz=11,slow=1.1,SNR=22
**ARCES ARCESS Array B 129.52 351** PKIKP **PKPdf 20 27 39.0 +0.2**
ARCES pmax pmax
comp=Z,4.0nm,0.6s
**ARE0 ARCESS Array S 129.52 351** *e*SS SS 20 47 09.6 -0.1
**AKTO Aktyubinsk 129.64 319** PKP **PKPdf 20 27 39.8 +0.2**
comp=Z,1.3nm,0.6s,baz=106,slow=4.1,SNR=11
AKTO PP **PP 20 29 45.2 -4.9**
comp=Z,1.7nm,1.0s,baz=43,slow=4.1,SNR=6.0
**APA Apatity 129.85 347**⇑ *i*PKIKP PKPdf 20 27 49.8 +10
APA *i* 20 34 40.0
**TRO Tromso 130.21 354** *e*PP PP 20 29 52.2 -0.7
TRO *e*SS SS 20 47 18.0 +0.1
**RCBR Riachuelo 131.05 118** PFAKE 20 28 00.0 +17
RCBR LR LR
comp=Z,6µm,18.0s
**GEYT Alibeck 132.10 303** PKP **PKPdf 20 27 45.5 +0.9**
comp=Z,3.2nm,0.8s,baz=234,slow=1.3,SNR=10
GEYT PP **PP 20 30 04.3 -2.4**
comp=Z,2.4nm,0.8s,baz=59,slow=7.1,SNR=5.2
**BANOM Banah 133.88 287**⇓ *i*PKIKP **PKPdf 20 27 48.4 0.0**
SNR=6.3
**UOSS Wadi Hilu 133.89 285** PFAKE 20 28 00.0 +12
UOSS LR LR
comp=Z,800nm,20.0s
**HATD Hatta, Dubai 133.94 285**⇑ *i*PKPdf **PKPdf 20 27 48.3 -0.2**
SNR=11
**ASHO Ashiyiah 134.00 285** PKPdf **PKPdf 20 27 50.1 +1.5**
SNR=7.8
**ASHO Ashiyiah 134.00 285**⇓ *i*PKPdf **PKPdf 20 27 48.1 -0.5**
SNR=14
**NAZ Nazwa, Dubai 134.38 285**⇓ *i*PKiKP **PKiKP 20 27 50.5 -0.2**
SNR=5.6
**FAQ Al Faqa, Dubai 134.43 285** *i* PKiKP **PKiKP 20 27 50.3 -0.4**
SNR=6.1
**ASUD Al Ashush, Dub 134.66 285** ⇓PKiKP **PKiKP 20 27 50.9 -0.3**
**FINES FINESS Array B 136.75 346** PKP **PKPdf 20 27 52.9 +0.3**
comp=Z,3.4nm,0.8s,baz=42,slow=6.2,SNR=8.0
**FINES FINESS Array B 136.75 346** PKIKP **PKPdf 20 27 52.9 +0.3**
FINES pmax pmax
comp=Z,3.0nm,0.8s
**LSZ Lusaka 138.47 213** *e*PKIKP **PKPdf 20 27 57.2 -0.1**
**LSZ Lusaka 138.47 213** *e*PKPdf **PKPdf 20 27 57.2 -0.1**
**OBN Obninsk 138.53 334** *e*PKIKP **PKPdf 20 27 55.4 -0.6**
OBN pmax pmax
comp=Z,20nm,1.3s
**OBN Obninsk 138.53 334** PFAKE 20 28 10.0 +14
OBN LR LR
comp=Z,2µm,20.0s
**VRH Novokhopyorsk 138.62 326** *e*PKIKP **PKPdf 20 27 53.1 -3.2**
VRH *e* 20 30 45.1
VRH pmax pmax
comp=Z,9.0nm,1.1s
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.8s
VRH pmax pmax
comp=Z,10.0nm,1.7s
VRH pmax pmax
comp=N,10.0nm,1.1s
VRH pmax pmax
comp=E,20nm,2.3s
VRH MLR MLR
comp=E,2µm,20.0s
VRH MLR MLR
comp=Z,3µm,20.0s
VRH MLR MLR
comp=N,2µm,22.0s
**MAK Makhachkala 138.87 313** *e*P Pdif 20 24 57.1 -12
MAK *i* 20 27 54.3
MAK *e*PPP PPP 20 33 48.5
MAK *e* 20 34 59.4
MAK *e*SS SS 20 49 06.6 +2.3
MAK *e*SSS SSS 20 54 10.4
MAK pmax pmax
comp=Z,112nm,1.6s
**TSUM Tsumeb 139.06 196** *e*PP PP 20 30 51.6 +2.4
TSUM LR LR
comp=Z,5µm,18.0s
**LPSR Galich'ya Gora 139.16 330** *e*PKIKP **PKPdf 20 27 56.5 -0.8**
LPSR *e* 20 30 48.0
LPSR pmax pmax
comp=Z,10.0nm,0.6s
LPSR pmax pmax
comp=N,10.0nm,0.7s
LPSR pmax pmax
comp=E,50nm,2.8s
LPSR pmax pmax
comp=Z,9.0nm,0.7s
LPSR pmax pmax
comp=N,10.0nm,1.8s
LPSR pmax pmax
comp=E,20nm,2.1s
LPSR MLR MLR
comp=Z,3µm,22.0s
LPSR MLR MLR
comp=N,1µm,19.0s
LPSR MLR MLR
comp=E,2µm,21.0s
**NB2 NORSAR Subarra 139.29 356** PKPdf PKPpre 20 27 49.4
comp=Z,24nm,1.7s,baz=6.6,slow=1.8
**NB2 NORSAR Subarra 139.29 356** PKPdf PKPpre 20 27 49.4
baz=6.6,slow=1.8
**NOA NORSAR Array B 139.29 356** PKhKP PKPpre 20 27 50.8
comp=Z,1.1nm,0.9s,baz=324,slow=1.5,SNR=3.8
**NOA NORSAR Array B 139.29 356** *i* PKHKP PKPpre 20 27 50.8
NOA pmax pmax
comp=Z,1.0nm,0.9s
**SUE Sulen 139.41 1** *e* PKPpre 20 27 50.4
SUE *e*PP **PP 20 30 51.0 0.0**
SUE *e*SS SS 20 49 15.8 +7.3
**NC602 NORSAR Array S 139.57 356** *e* 20 30 57.8
**VSR Storozhevoye 139.91 328** *e*PKIKP **PKPdf 20 27 59.5 +0.8**
VSR *e* 20 30 51.4
VSR pmax pmax
comp=Z,10.0nm,1.1s
VSR pmax pmax
comp=N,4.0nm,0.5s
VSR pmax pmax
comp=E,5.0nm,0.8s
VSR pmax pmax
comp=Z,60nm,3.0s
VSR pmax pmax
comp=N,40nm,2.6s
VSR pmax pmax
comp=E,40nm,3.9s
VSR MLR MLR
comp=Z,3µm,19.0s
VSR MLR MLR
comp=N,1µm,18.0s
VSR MLR MLR
comp=E,3µm,24.0s
**HFS Hagfors 140.00 354** PKhKP PKPpre 20 27 50.2
comp=E,2.9nm,0.7s,baz=61,slow=3.7,SNR=9.2
**HFS Hagfors 140.00 354** *i* PKHKP PKPpre 20 27 50.2
HFS pmax pmax
comp=Z,3.0nm,0.7s
**VORD Divnogorie 140.00 328** *e*PKIKP **PKPdf 20 27 57.9 -0.9**
VORD *e* 20 30 51.7
VORD pmax pmax
comp=Z,8.0nm,0.9s
VORD pmax pmax
comp=N,20nm,0.8s
VORD pmax pmax
comp=E,10.0nm,0.8s
VORD pmax pmax
comp=Z,50nm,2.5s
VORD pmax pmax
comp=N,40nm,3.0s
VORD pmax pmax
comp=E,20nm,0.9s
VORD MLR MLR
comp=E,3µm,23.0s
VORD MLR MLR
comp=Z,3µm,23.0s
VORD MLR MLR
comp=N,1µm,19.0s
**BER Bergen 140.09 1** *e*PP PP 20 30 50.4 -4.9
BER *e*SS SS 20 49 16.7 +0.2
**OSL Oslo 140.42 356** *e* **PKPdf 20 27 56.4 -2.9**
**KONO Kongsberg 140.76 357** *e*P **PKPdf 20 27 59.5 -0.4**
KONO *e* 20 28 14.4
KONO *e*PP **PP 20 30 59.4 0.0**
KONO *e*SS SS 20 49 27.3 +2.9
**KONO Kongsberg 140.76 357** PFAKE 20 28 10.0 +10
KONO LR LR
comp=Z,2µm,21.0s
**BLS5 Blasjo 141.06 360** *e*P **PKPdf 20 27 56.0 -4.6**
BLS5 *e*PP **PP 20 31 00.1 -1.2**
BLS5 *e*SS SS 20 49 25.0 -3.0
**TBLG Delisi 141.23 312** P PKPpre 20 27 55.0
**TBLG Delisi 141.23 312** *e*PKHKP PKPpre 20 27 55.0
**NCK Nalchik 141.32 315** *i* PKIKP **PKPdf 20 28 00.4 -1.1**
**KBZ Khabaz 141.68 316** PKhKP PKPpre 20 27 59.8
comp=Z,0.7nm,0.7s,baz=12,slow=1.7,SNR=4.7
**KIV Kislovodsk 141.72 316***d i*PKHKP PKPpre 20 27 56.5
KIV *i* 20 31 10.6
KIV pmax pmax
comp=Z,6.0nm,1.2s
KIV MLR MLR
comp=Z,1µm,19.0s
**KIV Kislovodsk 141.72 316**⇑ *i*PKPdf PKPpre 20 27 53.6
SNR=6.7
**KIV Kislovodsk 141.72 316** *e*PKPdf **PKPdf 20 28 01.2 -1.1**
KIV *e*PP **PP 20 31 10.9 +4.5**
KIV LR LR
comp=Z,2µm,20.0s
**GNI Garni 141.77 310** *e*PKIKP **PKPdf 20 28 01.0 -1.7**
GNI *e* 20 31 04.3
**GNI Garni 141.77 310** *i* PKPdf PKPpre 20 27 58.6
SNR=8.7
**GNI Garni 141.77 310** *e*PKPdf **PKPdf 20 28 00.9 -1.7**
GNI *e*PP **PP 20 31 04.3 -2.8**
**ONI Oni 141.78 314** P PKPpre 20 27 57.0
**ONI Oni 141.78 314** *e*PKHKP PKPpre 20 27 56.9
**ISAL Salakas 141.88 342** *e*P PKPpre 20 27 54.9
**IDID Didziasalis 141.91 341** *e*P PKPpre 20 27 56.1
**NEY Neytrino 142.00 315**⇑ *e*PKIKP **PKPdf 20 28 03.4 +0.4**
**IIGN Ignalina 142.03 342** *e*P PKPpre 20 27 54.6
**AKH Akhalkalaki 142.21 312** P PKPpre 20 27 58.2
**AKH Akhalkalaki 142.21 312** *e*PKHKP PKPpre 20 27 58.2
**MICGM Minsk 142.23 339** *e*PKP **PKPdf 20 28 01.0 -1.7**
**NACGM Naroch 142.25 341** *e*PKP PKPpre 20 27 56.0
**MNK Minsk 142.25 339** *e*PKIKP **PKPdf 20 28 01.0 -1.8**
MNK *e*PPP PPP 20 34 16.0
MNK *e*SS SS 20 49 40.0 -2.1
**CLDR Caldiran 142.70 308** *e*P **PKPdf 20 27 59.9 -4.5**
**KARS Kars 142.79 311** *e*P **PKPdf 20 28 01.1 -3.3**
**KMBO Kilima Mbogo 142.83 238** PKhKP PKPpre 20 28 02.5
comp=Z,3.1nm,0.8s,baz=112,slow=2.7,SNR=12
**KMBO Kilima Mbogo 142.83 238** *e*PKHKP PKPpre 20 28 01.8
KMBO MLR MLR
comp=Z,2µm,19.0s
**KMBO Kilima Mbogo 142.83 238** PKPdf **PKPdf 20 28 03.2 -2.2**
SNR=14
**KMBO Kilima Mbogo 142.83 238** *e*PKPpre PKPpre 20 28 01.8
KMBO LR LR
comp=Z,2µm,19.0s
**DAMY Dhamar 143.21 267** *e*PKPdf **PKPdf 20 28 06.0 0.0**
DAMY LR LR
comp=Z,3µm,20.0s
**AGRB Hanur-Agry 143.23 309** *e*P PKPbc 20 28 02.7 +0.4
**EDU Dundee 143.29 9** *e*P PKPbc 20 28 01.8 +0.2
**HKR Hakkari 143.32 306** *e*P PKPbc 20 28 02.3 -0.3
**EAB Aberfoyle 143.44 10** *e*P PKPab 20 28 00.3 -0.7
**BCA Borcka 143.49 313** *e*P PKPab 20 28 01.5 -0.3
**CUKT Cukurca 143.52 305** *e*P PKPbc 20 28 03.1 0.0
**RAYN Ar Rayn 143.54 282** *e*PKPdf PKPbc 20 28 03.5 +0.1
**PGBU Glenifferbraes 143.78 10** *e*P PKPab 20 28 02.1 -0.3
PGBU AMB AMB 20 28 05.5
comp=Z,150nm,1.8s
PGBU AMS AMS 21 37 09.3
comp=Z,2µm,15.4s
**SOC Sochi 143.80 317***c i*PKIKP PKPab 20 28 02.7 -0.1
SOC *e* 20 31 15.5
SOC *e*SSS SSS 20 55 29.1
SOC pmax pmax
comp=Z,38nm,1.2s
**ESY Stoneypath 143.96 8** *e*P PKPbc 20 28 04.0 +0.5
**MUD Monsted U'grnd 143.97 357** *i* P PKPab 20 28 00.9 -2.1
**SUW Suwalki 144.07 343** *e*PKP **PKPab 20 28 03.2 -0.2**
**SUW Suwalki 144.07 343** *e*PKIKP **PKPab 20 28 03.3 -0.2**
**KLNR Kaliningrad 144.28 346** *i* PKIKP PKPbc 20 28 04.9 +0.3
**EZM Erzurum 144.28 311** *e*P **PKPdf 20 28 08.0 +0.8**
**SIRT Sirnak 144.33 306** *e*P PKPbc 20 28 05.4 0.0
**EKA Eskdalemuir Ar 144.45 9** PKP **PKPab 20 28 04.3 -0.6**
comp=Z,16nm,0.9s,baz=337,slow=2.9,SNR=27
**EKA Eskdalemuir Ar 144.45 9** PKIKP **PKPab 20 28 04.3 -0.6**
EKA pmax pmax
comp=Z,17nm,0.9s
**ESK Eskdalemuir 144.46 9** *e*P **PKPab 20 28 04.6 -0.3**
ESK AMB AMB 20 28 07.8
comp=Z,98nm,1.9s
ESK AMS AMS 21 30 03.9
comp=Z,2µm,18.7s
**ESK Eskdalemuir 144.46 9** *e*PKIKP PKPbc 20 28 05.2 +0.1
ESK MLR MLR
comp=Z,3µm,21.0s
**ESK Eskdalemuir 144.46 9** *e*PKPdf PKPbc 20 28 05.2 +0.1
ESK LR LR
comp=Z,3µm,21.0s
**VRTB Varto-Mus 144.49 309** *e*P **PKPdf 20 28 08.2 +0.7**
**COP Copenhagen 144.50 354** *i* PKIKP PKPbc 20 28 05.6 +0.4
COP MLR MLR
comp=Z,960nm,24.0s
**COP Copenhagen 144.50 354** *i* P PKPbc 20 28 05.6 +0.4
comp=Z,960nm,24.0s
**BWH Wardlaw 144.52 10** *e*P **PKPab 20 28 03.8 -1.4**
**ANN Anapa 144.58 320** *i* PKIKP **PKPdf 20 28 06.7 -0.5**
ANN *e* 20 28 14.4
ANN *e* 20 31 22.4
ANN *e*SS SS 20 50 09.5 -0.6
ANN *e*SSS SSS 20 55 31.5
ANN pmax pmax
comp=Z,165nm,1.6s
**GAL1 Galloway 144.64 11**⇑ *e*P **PKPab 20 28 04.5 -1.1**
GAL1 AMB AMB 20 28 08.5
comp=Z,128nm,1.4s
**BHH Howats Hill 144.67 9** *e*P **PKPab 20 28 05.5 -0.2**

BSD Bornholm Skovb 144.77 351 *i* PKIKP PKPab 20 28 05.6 -0.4
BSD MLR MLR
comp=Z,2µm,18.0s
BSD Bornholm Skovb 144.77 351 *i* P PKPab 20 28 05.6 -0.4
comp=Z,2µm,18.0s
AKASG Malin Array Be 144.78 334 PKP PKPab 20 28 05.3 -0.9
comp=Z,17nm,0.7s,baz=36,slow=3.9,SNR=69
AKASG Malin Array Be 144.78 334 PKIKP PKPab 20 28 05.3 -0.9
AKASG pmax pmax
comp=Z,17nm,0.7s
KIEV Kiev 144.80 335*c* *i*PKIKP PKPab 20 28 05.4 -0.8
KIEV Kiev 144.80 335 *e*PKPdf PKPab 20 28 05.5 -0.8
KIEV LR LR
comp=Z,2µm,20.0s
AK11 Malin Array Si 144.82 335 *e*PKPdf PKPab 20 28 05.9 -0.5
PCED Cedros 144.88 51 *e*P PKPab 20 28 01.8 -5.2
comp=Z,186nm,1.7s
BAYT Ayd¯–ntepe-Bay 144.95 312 *e*P PKPdf 20 28 08.5 +0.3
KTUT Trabzon 144.96 313 *e*P PKPab 20 28 07.0 -0.2
SVAN Silvan-Diyarba 145.04 308 *e*P PKPdf 20 28 08.6 +0.3
PCAN Candelaria 145.10 51 *e*P PKPdf 20 28 09.4 +1.1
comp=Z,376nm,1.5s
BNGB Bing˜¶ 145.12 310 *e*P PKPdf 20 28 08.9 +0.4
KESW Keswick, Cumbr 145.18 10 *e*P PKPbc 20 28 06.0 -1.5
KESW AMB AMB 20 28 10.7
comp=Z,289nm,2.5s
KESW AMS AMS 21 37 60.0
comp=Z,2µm,19.4s
ROSA Rosais 145.18 51 *e*P PKPdf 20 28 10.1 +1.6
comp=Z,276nm,1.9s
ROSA Rosais 145.18 51 PFAKE 20 28 20.0 +12
ROSA LR LR
comp=Z,5µm,20.0s
PPNO Prainha do Nor 145.26 51 *e*P PKPbc 20 28 07.8 -0.6
comp=Z,471nm,1.0s
PMAN Manadas 145.33 51 *e*P PKPdf 20 28 09.4 +0.7
comp=Z,371nm,1.7s
RGN Rugen 145.53 353 PFAKE 20 28 20.0 +11
RGN LR LR
comp=Z,2µm,20.0s
ERZN Erzincan 145.57 311 *e*P PKPab 20 28 09.8 0.0
ESPY Espiye-Giresun 145.69 314 *e*P PKPdf 20 28 07.8 -1.5
MAZI Mazidag 145.84 307 *e*P PKPab 20 28 10.8 0.0
DSB Dublin 145.84 14 *e*PKPdf PKPdf 20 28 08.9 -0.2
DSB LR LR
comp=Z,3µm,19.0s
DYBB Diyarbakir 145.89 308 *e*P PKPab 20 28 10.9 +0.1
ADH Angra Heroismo 145.94 50 *e*P PKPab 20 28 10.7 -0.2
comp=Z,388nm,1.6s
HPK Haverah Park 146.00 8⇑ *e*P PKPdf 20 28 08.6 -0.7
HPK AMB AMB 20 28 13.6
comp=Z,404nm,1.7s
HPK AMS AMS 21 36 54.1
comp=Z,2µm,19.6s
VAL Valentia 146.03 18 *e*P PKPdf 20 28 07.2 -2.2
PTK Pertek 146.08 310 *e*P PKPab 20 28 13.1 +1.3
WME Myndd Eilian 146.12 11 *e*P PKPbc 20 28 10.6 +0.2
GKP Gorka Klasztor 146.15 348 *e*PKP PKPdf 20 28 09.9 +0.3
GKP Gorka Klasztor 146.15 348 *e*PKP2 PKPdf 20 28 10.0 +0.3
WLF1 Llynfaes 146.20 11⇑ *e*P PKPdf 20 28 09.8 +0.1
WLF1 AMB AMB 20 28 13.8
comp=Z,230nm,2.1s
WLF1 AMS AMS 21 35 30.9
comp=Z,3µm,18.4s
WPM1 Penmaenmawr 146.32 11 *e*P PKPbc 20 28 10.9 -0.2
SVRC Sivrice-ELAZID 146.34 309 *e*P PKPab 20 28 13.7 +1.0
LHO Holmfirth 146.38 9 *e*P PKPdf 20 28 10.6 +0.6
BSEG Bad Segeberg 146.42 356 *e*PKP PKPdf 20 28 06.3 -3.7
baz=9.5,slow=2.5
SIM Simferopol' 146.42 323*c* *i*PKP2 PKPab 20 28 12.2 -0.4
YRE Yr Eifl 146.49 12 *e*P PKPdf 20 28 10.8 +0.6
FURI Furi 146.66 255 *e*PKPdf PKPab 20 28 15.9 +1.1
FURI LR LR
comp=Z,3µm,21.0s
BEL Belsk 146.67 344 *e*PKP PKPbc 20 28 12.4 +0.2
BEL Belsk 146.67 344 *e*PKP2 PKPbc 20 28 12.4 +0.2
STNC Stoke 146.76 9⇑ *e*P PKPbc 20 28 12.6 +0.2
STNC AMB AMB 20 28 16.1
comp=Z,379nm,2.8s
STNC AMS AMS 21 37 43.0
comp=Z,3µm,16.3s
FOEL Foel Wylfa 146.80 10⇑ *e*P PKPbc 20 28 12.5 0.0
FOEL AMB AMB 20 28 15.0
comp=Z,217nm,1.9s
RSDY Resadiye-TOKAT 146.88 314 *e*P PKPab 20 28 14.9 +0.3
MALT Malatya 147.00 310 ⇑PKP2 PKPdf 20 28 12.6 +0.9
MALT Malatya 147.00 310 *i*P PKPdf 20 28 12.6 +0.9
URFA Urfa 147.05 308 *e*P PKPbc 20 28 14.5 +0.6
SORM Soroca 147.12 332 ⇓PKP2 PKPab 20 28 14.6 -0.5
SORM Soroca 147.12 332 ⇓*i*P PKPab 20 28 14.6 -0.5
HLM1 Long Mynd 147.21 10⇑ *e*P PKPbc 20 28 13.1 -0.7
HLM1 AMB AMB 20 28 23.9
comp=Z,165nm,3.0s
CWF Charnwood Fore 147.24 8⇑ *e*P PKPbc 20 28 12.9 -0.8
CWF AMB AMB 20 28 16.9
comp=Z,163nm,2.6s
CWF AMS AMS 21 38 12.0
comp=Z,2µm,18.6s
CWF Charnwood Fore 147.24 8 *e*PKPdf PKPbc 20 28 13.8 +0.1
CWF LR LR
comp=Z,3µm,18.0s
SVSK Karacayir 147.32 313 *e*P PKPbc 20 28 14.5 +0.1
LPW Lampeter 147.38 12⇑ *e*P PKPbc 20 28 13.1 -1.0
LPW AMS AMS 21 33 30.7
comp=Z,3µm,17.9s
KVT Kavak 147.40 316 *e*P PKPbc 20 28 14.5 -0.2
LVV L'vov 147.45 338 *i* PKIKP PKPdf 20 28 12.8 +0.9
LVV *e* 20 35 00.0
SNOP Sinop 147.45 318 *e*P PKPbc 20 28 13.7 -1.0
RUE Ruedersdorf 147.49 351 *e*PKP PKPdf 20 28 09.2 -2.7
baz=9.5,slow=2.5
DARE Darende-Malaty 147.58 311 *e*P PKPdf 20 28 13.3 +0.6
DIKM Dikmen 147.62 317 *e*P PKPbc 20 28 14.9 -0.3
MCH1 Michaelchurch 147.69 11 *e*P PKPdf 20 28 10.8 -1.5
MCH1 AMB AMB 20 28 19.0
comp=Z,143nm,2.2s
MCH1 AMS AMS 21 35 42.6
comp=Z,3µm,17.2s
KIS Kishinev 147.76 330⇑ *i*PKIKP PKPbc 20 28 14.0 -1.4
KIS M M 20 28 16.0
comp=Z,1µm,3.0s
KIS Kishinev 147.76 330 *i* PsP 20 28 38.0
KIS Kishinev 147.76 330 *e*PP PP 20 31 35.0 -6.8
KIS *e*SKKS 20 38 40.0
KIS Kishinev 147.76 330 *e*PS 20 41 17.0
KIS Kishinev 147.76 330 *e*PPS PPS 20 43 45.0
KIS LRM MLR 21 33 07.0
comp=Z,3µm,20.0s
KIS Kishinev 147.76 330*c* *i*PKIKP PKPbc 20 28 14.0 -1.4
KIS *e* 20 35 05.0
KIS pmax pmax
comp=Z,1µm,3.0s
KIS pmax pmax
comp=Z,3µm,6.0s
BART Pico Bartolome 147.78 51 *e*P PKPdf 20 28 06.7 -6.3
comp=Z,163nm,1.0s
NRDL Niedersach Rie 147.87 356 *e*PKP PKPdf 20 28 10.3 -2.1
baz=9.5,slow=2.5
MONM Monmouth 147.88 11 *e*P PKPbc 20 28 14.2 -1.4
MONM AMB AMB 20 28 19.8
comp=Z,239nm,1.8s
MONM AMS AMS 21 35 56.9
comp=Z,3µm,20.2s
BYBT Boyabat 148.03 317 *e*P PKPbc 20 28 16.1 -0.2
STRD Stroud 148.04 10 *e*P PKPdf 20 28 05.4 -7.4
STRD AMS AMS 21 34 04.5
comp=Z,2µm,20.9s
KWP Kalwaria Pacla 148.06 340 *e*PKP PKPbc 20 28 16.7 +0.6
KWP Kalwaria Pacla 148.06 340 *e*PKP2 PKPbc 20 28 16.8 +0.6
PSMN Pico do Norte, 148.16 52 *e*P PKPdf 20 28 13.4 -0.1
comp=Z,220nm,2.6s
IBBN Ibbenburen 148.18 358 *e*PKP PKPdf 20 28 11.1 -1.9
baz=9.5,slow=2.5
MBAR Mbarara 148.18 232 PKPbc PKPbc 20 28 18.5 +0.8
comp=Z,15nm,0.8s,baz=103,slow=4.3,SNR=24
MBAR Mbarara 148.18 232 PKP2 PKPbc 20 28 18.5 +0.8
MBAR pmax pmax
comp=Z,15nm,0.8s
MBAR Mbarara 148.18 232 *e*PKPbc PKPbc 20 28 18.7 +1.0
MBAR LR LR
comp=Z,3µm,19.0s
IAS Iasi 148.18 332 ⇑PKP2 PKPbc 20 28 15.5 -1.0
IAS Iasi 148.18 332 ⇑*i*P PKPbc 20 28 15.5 -1.0
ASSE Asse, Remlinge 148.19 355 *e*PKP PKPdf 20 28 11.3 -1.7
baz=9.5,slow=2.5
BZK Bozkurt 148.24 319 *e*P PKPdf 20 28 14.1 +0.6
SWN1 Swindon 148.36 10⇑ *e*P PKPdf 20 28 12.6 -0.7
SWN1 AMB AMB 20 28 21.2
comp=Z,346nm,2.4s
SWN1 AMS AMS 21 36 17.5
comp=Z,3µm,17.7s
HTL Hartland 148.36 13 *e*P PKPdf 20 28 12.1 -1.2
HTL AMB AMB 20 28 21.3
comp=Z,132nm,2.6s
HTL AMS AMS 21 34 25.6
comp=Z,3µm,18.6s
OJC Ojcow 148.40 343 *e*PKP PKPdf 20 28 13.2 -0.3
OJC Ojcow 148.40 343 *e*PKIKP PKPdf 20 28 13.3 -0.3
OJC Ojcow 148.40 343 *e*PKPdf PKPbc 20 28 16.3 -0.7
KMRS Kahramanmaras 148.44 309 *e*P PKPdf 20 28 14.1 +0.1
CLZ Clausthal 148.50 355 *e*PKP PKPdf 20 28 12.3 -1.4
baz=9.5,slow=2.5
WTSB Winterswijk 148.53 359 *e*PKP PKPdf 20 28 14.2 +0.6
comp=Z,2µm,3.1s
PRAR RASCA 148.63 333 ⇓*i*P PKPab 20 28 19.5 -1.7
WOL Wolverton 148.64 9⇑ *e*P PKPdf 20 28 13.3 -0.5
WOL AMB AMB 20 28 21.8
comp=Z,302nm,2.1s
WOL AMS AMS 21 34 36.6
comp=Z,3µm,18.2s
KSP Ksiaz 148.64 348 *e*PKP PKPdf 20 28 14.2 +0.4
KSP Ksiaz 148.64 348 *e*PKIKP PKPdf 20 28 14.3 +0.4
STHS Stebnicka Huta 148.71 341 *e*PKHKP PKPpre 20 28 12.6
STHS *e* 20 28 21.6
STHS Stebnicka Huta 148.71 341 *e*PKP PKPdf 20 28 12.6 -1.5
STHS *e* 20 28 17.5
STHS *e* 20 28 21.6
TOS Tosya 148.73 317 *e*P PKPdf 20 28 15.6 +1.1
CLL Collm 148.74 352⇓ *e*PKIKP PKPdf 20 28 14.0 0.0
CLL *i* 20 28 18.7
CLL *i* 20 28 23.7
CLL pmax pmax
comp=Z,135nm,2.5s
CLL MLR MLR
comp=Z,2µm,19.0s
CLL Collm 148.74 352 *e*PKP PKPdf 20 28 12.6 -1.4
baz=9.5,slow=2.5
CLL *e*L L 21 45 11.8
comp=Z,2µm,19.0s
CLL Collm 148.74 352 *e*PKPdf PKPdf 20 28 14.0 0.0
comp=Z,135nm,2.5s
CLL ⇓*i*PKPbc PKiKP 20 28 18.7 -0.5
comp=Z,353nm,1.8s
CLL *i* 20 28 23.7
CLL *e*PKPlp 20 28 24.0
comp=Z,1µm,16.4s
CLL *e*SKPbc SKiKP 20 31 56.0 +1.0
CLL *e*PPP PPP 20 35 07.0
CLL *e*SKKSac SKKSac 20 38 42.0 +3.4
CLL *e* 20 40 26.0
CLL *e*PSKS 20 42 04.0
CLL *e*PPS PPS 20 44 36.0
CLL *e*SS SS 20 50 55.0 -0.8
CLL *e*PSS PSS 20 51 49.0
CLL *e* 20 53 24.0
CLL *e*SSS SSS 20 56 30.0
CLL *e*SSSS 21 00 36.0
CLL LmH 21 44 00.0
comp=N,2µm,18.4s
CLL LmH 21 44 00.0
comp=E,1µm,18.6s
CLL LmV 21 45 00.0
comp=Z,2µm,19.0s
CLL Collm 148.74 352 *e*PKPdf PKPdf 20 28 15.3 +1.3
CLL LR LR
comp=Z,3µm,19.0s
CORM Corum 148.79 315 *e*P PKPdf 20 28 14.5 -0.1
KOLS Kolonicke sedl 148.80 339 *e*PKIKP PKPdf 20 28 14.7 +0.5
KOLS *e* 20 28 17.5
KOLS *e* 20 28 21.8
KOLS Kolonicke sedl 148.80 339 *e*PKP PKPdf 20 28 14.7 +0.5
KOLS *e* 20 28 17.4
KOLS *e* 20 28 21.8
GTTG Gvttingen 148.82 356 *e*PKP PKPdf 20 28 13.0 -1.2
baz=9.5,slow=2.5
BUR04 Bucovina Ar. S 148.84 335 *e*PKPdf PKPdf 20 28 16.1 +1.7
RAC Raciborz 148.94 345 *e*PKIKP PKPdf 20 28 15.2 +0.8
RAC MLR MLR
comp=Z,3µm,17.2s
NIE Niedzica 148.99 342 *e*PKP PKPbc 20 28 17.1 -1.5
NIE Niedzica 148.99 342 *e*PKIKP PKPbc 20 28 17.1 -1.5
NEUB Neuenburg 148.99 353 *e*PKP PKPdf 20 28 13.4 -1.0
baz=9.5,slow=2.5
DYA Yadsworthy 149.01 13 *e*PKPbc PKPab 20 28 20.9 -1.7
UPC Upice 149.02 348 *e*PKP2 PKPbc 20 28 17.4 -1.2
UPC *e*SS SS 20 50 57.7 -1.3
UPC MLR MLR
comp=Z,3µm,18.2s
UPC Upice 149.02 348⇑ *e*PKP PKPbc 20 28 17.4 -1.2
UPC *e*PKPAB PKPab 20 28 21.7 -1.0
UPC *e*SS SS 20 50 57.7 -1.3
UPC AMS AMS 21 46 10.0
comp=Z,3µm,18.2s
BRG Berggiesshubel 149.03 351 *i* PKP PKPdf 20 28 15.2 +0.7
comp=Z,179nm,2.6s
BRG SS SS 20 50 58.0 -1.0
comp=N,2µm,18.6s
comp=E,1µm,17.7s
comp=Z,3µm,18.4s
BRG Berggiesshubel 149.03 351 *i* PKIKP PKPdf 20 28 15.2 +0.7
BRG SS SS 20 50 58.0 -1.0
BRG pmax pmax
comp=Z,179nm,2.6s
BRG MLR MLR
comp=N,2µm,18.6s
BRG MLR MLR
comp=E,1µm,17.7s
BRG MLR MLR
comp=Z,3µm,18.4s
BRG Berggiesshubel 149.03 351 *e*PKP PKPdf 20 28 13.7 -0.8
baz=9.5,slow=2.5
BUG Bochum--Univer 149.05 359 *e*PKP PKPdf 20 28 13.3 -1.2
baz=9.5,slow=2.5
UZH Uzhgorod 149.06 339⇑ *i*PKP2 PKPbc 20 28 17.8 -0.9
UZH *e* 20 31 47.9
UZH *e* 20 35 21.4
UZH *e* 20 51 01.6
UZH MLR MLR
comp=N,1µm,20.0s
UZH MLR MLR
comp=E,1µm,20.0s
UZH MLR MLR
comp=Z,700nm,20.0s
FBE Freiberg 149.07 351 *e*PKP PKPdf 20 28 14.0 -0.5
baz=9.5,slow=2.5
TLCR 149.08 328 ⇓PKP2 PKPbc 20 28 19.7 +0.9
TLCR 149.08 328 ⇓*i*P PKPbc 20 28 19.7 +0.9
ELSH Elham, Standar 149.09 6 *e*P PKPbc 20 28 17.3 -1.4
DPC Dobruska-Polom 149.11 347 *e*PKIKP PKPdf 20 28 15.9 +1.2
DPC *e* 20 28 22.1
DPC *e*SS SS 20 50 59.9 -0.2
DPC MLR MLR
comp=Z,2µm,18.9s
DPC Dobruska-Polom 149.11 347 *e*PKPDF PKPdf 20 28 15.9 +1.2
DPC *e*PKPAB PKPab 20 28 22.1 -1.0
DPC *e*SS SS 20 50 59.9 -0.2
DPC AMS AMS 21 43 30.0
comp=Z,2µm,18.9s
OKC Ostrava-Krasne 149.18 345 *e*PKIKP PKPbc 20 28 17.0 -2.0
OKC *e* 20 28 22.0
OKC *e*SS SS 20 50 59.1 -1.7
OKC MLR MLR
comp=Z,2µm,18.5s
OKC Ostrava-Krasne 149.18 345⇑ *e*PKP PKPbc 20 28 17.0 -2.0
OKC *e*PKPAB PKPab 20 28 22.0 -1.3
OKC *e*SS SS 20 50 59.1 -1.7
OKC AMS AMS 21 43 50.0
comp=Z,2µm,18.5s
CANT Cankiri 149.22 317 *e*P PKPdf 20 28 15.7 +0.4
PVCC Panska Ves 149.26 350 *e*PKP2 PKPbc 20 28 18.0 -1.2
PVCC MLR MLR
comp=Z,2µm,18.1s
PVCC Panska Ves 149.26 350⇑ *e*PKP PKPbc 20 28 18.0 -1.2
PVCC *e*PKPAB PKPab 20 28 22.6 -1.0
PVCC AMS AMS 21 44 30.0
comp=Z,2µm,18.1s
KRLC Kraliky 149.27 347 *e*PKP2 PKPbc 20 28 18.9 -0.4
KRLC Kraliky 149.27 347⇑ *e*PKP PKPbc 20 28 18.9 -0.4
KRLC *e*PKPAB PKPab 20 28 22.4 -1.4
MORC Moravsky Berou 149.38 346 ⇑PKIKP PKPdf 20 28 15.4 +0.2
MORC Moravsky Berou 149.38 346 ⇑*i*P PKPdf 20 28 15.4 +0.2
MORC Moravsky Berou 149.38 346 *e*PKPdf PKPdf 20 28 16.5 +1.4
MORC LR LR
comp=Z,14µm,18.0s
TRPA Tarpa 149.41 338 ⇓*i*P PKPbc 20 28 20.7 +1.1
TRPA Tarpa 149.41 338 *e*PKPdf PKPbc 20 28 19.6 0.0
TAHT Tahtakopru-Hat 149.41 308 *e*P PKPdf 20 28 15.7 +0.1
SAFT Safranbolu 149.46 319 *e*P PKPdf 20 28 16.1 +0.5
LANS Liptovska Anna 149.46 343 *e*PKP PKPdf 20 28 16.2 +0.9
LANS *e* 20 28 19.0
LANS *e* 20 28 24.5
CEYT Ceyhan 149.48 309 *e*P PKPdf 20 28 16.1 +0.4
MOX Moxa 149.56 353 *e*PKP PKPdf 20 28 14.9 -0.5
baz=9.5,slow=2.5
VRI Vrincioaia 149.57 331 ⇑PKP2 PKPbc 20 28 20.3 +0.2
VRI Vrincioaia 149.57 331 ⇑*i*P PKPbc 20 28 20.3 +0.2
PLOR Plostina 149.61 331 ⇓PKP2 PKPbc 20 28 20.9 +0.7
PLOR Plostina 149.61 331 ⇓*i*P PKPbc 20 28 20.9 +0.7
PLN Plauen 149.66 353 *e*PKP PKPdf 20 28 15.4 -0.2
baz=9.5,slow=2.5
BRTR Keskin Array B 149.67 315 PKP PKPdf 20 28 16.6 +0.6
comp=Z,6.3nm,0.8s,baz=329,slow=6.3,SNR=13
BRTR PKPbc PKPbc 20 28 21.2 +0.5
comp=Z,7.6nm,0.8s,baz=132,slow=4.1,SNR=26
WERD Werda 149.68 352 *e*PKP PKPdf 20 28 15.2 -0.4
baz=9.5,slow=2.5
TANN Tannenbergstha 149.69 352 *e*PKP PKPdf 20 28 15.3 -0.3
baz=9.5,slow=2.5
BEBN Eben Emael 149.71 1 PKPbc PKPbc 20 28 20.3 +0.1
PRA Prague 149.73 350⇑ *e*PKP PKPbc 20 28 18.1 -2.2
PRA *e*PKPAB PKiKP 20 28 23.3 +2.0
PRA *e*SS SS 20 51 11.0 +4.2
PRA AMS AMS 21 42 50.0
comp=Z,4µm,18.9s
HGN Heimansgroeve 149.74 0 *e*PKP PKPbc 20 28 20.2 -0.1
comp=Z,791nm,2.6s
GUNZ Gunzen 149.76 352 *e*PKP PKPdf 20 28 15.5 -0.2
baz=9.5,slow=2.5
PRU Pruhonice 149.79 349⇑ *e*PKP PKPdf 20 28 18.1 +2.4
PRU *e*pPKP PKiKP 20 28 23.6 +2.1
PRU *e*SKS SKSdf 20 35 33.0 +10
PRU *e*SS SS 20 51 01.2 -6.3
PRU AMS AMS 21 42 30.0
comp=Z,1µm,19.6s
TIRR Tirgusor 149.80 328 ⇑*i*P PKPbc 20 28 21.6 +0.9
TIRR Tirgusor 149.80 328 *e*PKPdf PKPdf 20 28 16.8 +0.9
TIRR *e*PKPbc PKPbc 20 28 20.8 +0.1
TIRR LR LR
comp=Z,4µm,20.0s
KAMT Kaman 149.81 315 *e*P PKPdf 20 28 17.6 +1.3
NIG Nigde 149.81 312 *e*P PKPbc 20 28 19.2 -2.1
GOPC GÖ Pecny, Ondr 149.82 349⇑ *e*PKP PKPbc 20 28 18.6 -2.0
GOPC *e*pPKP PKiKP 20 28 23.5 +1.9
GOPC *e*x x 20 28 41.0
GOPC *e*x x 20 35 34.3
GOPC *e*SS SS 20 51 06.4 -1.5
GOPC AMS AMS 21 44 00.0
comp=Z,3µm,18.6s
WERN Wernitzgruen 149.82 352 *e*PKP PKPdf 20 28 15.8 0.0
baz=9.5,slow=2.5
HARR Harsova 149.87 328 ⇓PKP2 PKPbc 20 28 23.2 +2.4
HARR Harsova 149.87 328 ⇓*i*P PKPbc 20 28 23.2 +2.4
KARA Karaisali 149.87 310 *e*P PKPdf 20 28 16.4 +0.1
MEM Membach 149.90 0 PKPbc PKPbc 20 28 21.4 +0.7
KRTS Karatas 149.93 309 *e*P PKPdf 20 28 16.1 -0.3
SNF Seneffe 149.96 2 PKPbc PKPbc 20 28 21.8 +0.9
VRAC Vranov 150.03 346 PKP PKPdf 20 28 16.2 0.0
comp=Z,0.4nm,0.3s,baz=113,slow=2.4,SNR=7.9
VRAC Vranov 150.03 346⇑ *i*P PKPbc 20 28 22.2 +1.1
BCLA Clavier 150.08 1 PKPbc PKPbc 20 28 21.3 +0.1
DOPR Dopca 150.08 333⇑ *i*P PKPbc 20 28 20.1 -1.3
ANTO Ankara 150.15 316 *e*PKIKP PKPdf 20 28 17.5 +0.7
ANTO *e* 20 28 22.9
ANTO MLR MLR
comp=Z,2µm,20.0s
ANTO Ankara 150.15 316 PKPdf PKPdf 20 28 17.9 +1.1
SNR=38
ANTO Ankara 150.15 316 *e*PKPdf PKPdf 20 28 17.5 +0.7
ANTO *e*PKPbc PKiKP 20 28 22.9 +0.2
ANTO LR LR
comp=Z,2µm,20.0s
MANZ Manzenberg 150.15 352 *e*PKP PKPdf 20 28 16.4 0.0
baz=9.5,slow=2.5
BR231 Keskin MP Arra 150.18 316 *e*PKPdf PKPdf 20 28 16.0 -0.8
KDZE Karadeniz Ereo 150.18 320 *e*P PKPbc 20 28 20.8 -1.0
AFSR Afˆar-Bala (A 150.19 315 *e*P PKPdf 20 28 16.4 -0.4
MLR Muntele Rosu 150.21 331 ⇓PKIKP PKPbc 20 28 19.4 -2.4
MLR Muntele Rosu 150.21 331 ⇓*i*P PKPbc 20 28 19.4 -2.4
TNS Taunus Mts 150.23 357 *e*PKP PKPdf 20 28 17.6 +1.1
baz=9.5,slow=2.5
TNS *e*L L 21 39 28.1
comp=Z,3µm,19.7s
VYHS Vyhne 150.23 343 *e*PKIKP PKPdf 20 28 17.0 +0.5
VYHS *e* 20 28 22.6
VYHS *e* 20 29.0
VYHS Vyhne 150.23 343 *e*PKP PKPdf 20 28 17.0 +0.5
VYHS *e* 20 28 22.6
VYHS *e* 20 29.0
ASF Jabal al Asfar 150.24 299 PKP PKPdf 20 28 17.7 +0.5
comp=Z,1.8nm,0.8s,baz=317,slow=1.1,SNR=13
ASF PKPbc PKiKP 20 28 22.9 -0.2
comp=Z,14nm,1.1s,baz=191,slow=0.1,SNR=23
ASF Jabal al Asfar 150.24 299 PKIKP PKPdf 20 28 17.5 +0.5
ASF 20 28 22.9
ASF pmax pmax
comp=Z,2.0nm,0.9s
MSAB Monastry St. A 150.36 328 ⇓*i*P PKPbc 20 28 23.5 +1.5
ROTZ Rotzenmuhle 150.36 352 *e*PKP PKPdf 20 28 17.1 +0.4
baz=9.5,slow=2.5
DOU Dourbes 150.38 2 PKPbc PKPbc 20 28 22.4 +0.6
PSZ Piszkesteto 150.45 341 *e*PKIKP PKPdf 20 28 18.1 +1.2
PSZ *e* 20 28 23.0
PSZ MLR MLR
comp=Z,2µm,19.0s
PSZ Piszkesteto 150.45 341 ⇓*i*P PKPbc 20 28 23.6 +1.4
PSZ Piszkesteto 150.45 341 *e*PKPdf PKPdf 20 28 17.4 +0.4
PSZ Piszkesteto 150.45 341 *e*PKPdf PKPdf 20 28 18.1 +1.2
PSZ *e*PKPbc PKiKP 20 28 23.0 0.0
PSZ LR LR
comp=Z,2µm,19.0s
PSN Preselentsi 150.46 327 *i* P PKPbc 20 28 24.2 +1.9
DRGR 150.48 337 ⇓PKIKP PKPbc 20 28 22.6 +0.2
DRGR 150.48 337 ⇓*i*P PKPbc 20 28 22.6 +0.2
SECR 150.50 331 ⇑*i*P PKPbc 20 28 23.0 +0.6
SULT Sultanhani-AKS 150.52 313 *e*P PKPdf 20 28 15.7 -1.7
JSA Saint Aubin 150.54 11 *e*P PKPdf 20 28 12.4 -4.4
JSA AMS AMS 21 34 25.4
comp=Z,2µm,18.0s
GRF Grafenberg Arr 150.55 353 *e*PKP PKPdf 20 28 16.9 0.0
baz=9.5,slow=2.5
GRF *e*L L 21 39 44.6
comp=Z,3µm,20.2s
GRFO Grafenberg 150.55 353 *e*PKIKP PKPdf 20 28 15.1 -1.8
GRFO *e* 20 28 20.6
GRFO MLR MLR
comp=Z,3µm,21.0s
GRFO Grafenberg 150.55 353 *e*PKPdf PKPdf 20 28 15.1 -1.8
GRFO *e*PKPbc PKPbc 20 28 20.6 -1.8
GRFO LR LR
comp=Z,3µm,21.0s
SMOL Smolenice 150.58 345 *e*PKIKP PKPbc 20 28 23.8 +1.3
SMOL *e* 20 28 30.4
SMOL Smolenice 150.58 345 *e*PKP PKPbc 20 28 23.8 +1.3
SMOL *e* 20 28 30.4
VOIR 150.64 332 ⇑PKIKP PKPbc 20 28 24.0 +1.2
VOIR 150.64 332 ⇑*i*P PKPbc 20 28 24.0 +1.2
SULR 150.69 330 ⇓*i*P PKPbc 20 28 24.3 +1.5
KHC Kasperske Hory 150.78 350 *e*PKIKP PKPdf 20 28 17.8 +0.4
KHC *e* 20 28 23.7
KHC MLR MLR
comp=Z,1µm,19.0s
KHC Kasperske Hory 150.78 350 *e*PKPDF PKPdf 20 28 18.1 +0.7
KHC ⇑*e*PKP PKiKP 20 28 24.0 +0.4
KHC *e*SS SS 20 51 13.5 -5.1
KHC AMS AMS 21 45 30.0
comp=Z,3µm,18.2s
KHC Kasperske Hory 150.78 350 *e*PKPdf PKPdf 20 28 17.8 +0.4
KHC *e*PKPbc PKiKP 20 28 23.7 +0.1
KHC LR LR
comp=Z,1µm,19.0s
MDUB Mudurnu 150.82 319 *e*P PKPdf 20 28 16.1 -1.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WLF** | **Walferdange** | **150.84** | **0** | PKPbc | **PKPbc** | **20 28 21.9** | **-1.1** |
| **WLF** | **Walferdange** | **150.84** | **0** | *e*PKIKP | **PKPbc** | **20 28 24.8** | **+1.8** |
| WLF | | | | MLR | MLR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **WLF** | **Walferdange** | **150.84** | **0** | *e*PKP | **PKPdf** | **20 28 18.2** | **+0.8** |
| | baz=9.5,slow=2.5 | | | | | | |
| **WLF** | **Walferdange** | **150.84** | **0** | *e*PKPbc | **PKPbc** | **20 28 24.8** | **+1.8** |
| WLF | | | | LR | LR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **WET** | **Wettzell** | **150.88** | **351** | *e*PKP | **PKPdf** | **20 28 18.1** | **+0.5** |
| | baz=9.5,slow=2.5 | | | | | | |
| **GEC2** | **GERESS Array S** | **151.04** | **350** | *e*PKIKP | **PKPdf** | **20 28 18.2** | **+0.3** |
| GEC2 | | | | *e* | | 20 28 19.0 | |
| **GEC2** | **GERESS Array S** | **151.04** | **350** | *e*PKP | **PKPdf** | **20 28 18.4** | **+0.5** |
| | baz=9.5,slow=2.5 | | | | | | |
| GEC2 | | | | *e*L | L | 21 42 45.0 | |
| | comp=Z,3μm,19.3s | | | | | | |
| **GEC2** | **GERESS Array S** | **151.04** | **350** | *e*PKPdf | **PKPdf** | **20 28 18.2** | **+0.3** |
| GEC2 | | | | *e*PKPdf | **PKPbc** | **20 28 19.0** | **-4.7** |
| **GERES** | **GERESS Array B** | **151.04** | **350** | PKP | **PKPdf** | **20 28 18.8** | **+0.9** |
| | comp=Z,1.4nm,0.9s,baz=45,slow=2.1,SNR=11 | | | | | | |
| GERES | | | | PKPbc | **PKiKP** | **20 28 24.0** | **-0.2** |
| | comp=Z,8.0nm,0.9s,baz=45,slow=2.1,SNR=35 | | | | | | |
| **GERES** | **GERESS Array B** | **151.04** | **350** | PKIKP | **PKPdf** | **20 28 18.8** | **+0.9** |
| GERES | | | | | | 20 28 24.0 | |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **BUD** | **Budapest** | **151.10** | **342** | *e*PKPdf | **PKPdf** | **20 28 17.8** | **0.0** |
| **LOT** | **Lotru** | **151.18** | **334** | ⇑*i*P | **PKPbc** | **20 28 24.5** | **+0.4** |
| **SVRH** | **Sivrihisar-ESK** | **151.20** | **317** | *e*P | **PKPdf** | **20 28 18.0** | **-0.4** |
| **MMAI** | **Mount Meron Ar** | **151.21** | **302** | PKPbc | **PKPbc** | **20 28 24.9** | **+0.4** |
| | comp=Z,15nm,0.9s,baz=83,slow=8.7,SNR=14 | | | | | | |
| **SPNC** | **Sapanca-Adapaz** | **151.24** | **320** | *e*P | **PKPdf** | **20 28 18.0** | **-0.3** |
| **EREN** | **Erenkoy** | **151.25** | **307** | *e*P | **PKPdf** | **20 28 18.4** | **0.0** |
| **GULT** | **Gulveren** | **151.27** | **319** | *e*P | **PKPdf** | **20 28 17.6** | **-0.8** |
| **KIZT** | **Kizilcal** | **151.28** | **315** | *e*P | **PKPdf** | **20 28 18.8** | **+0.2** |
| **SIRR** | **Siria** | **151.31** | **337** | ⇑*i*P | **PKPbc** | **20 28 24.9** | **+0.6** |
| **SILT** | **Sile** | **151.35** | **321** | *e*P | **PKPdf** | **20 28 16.8** | **-1.6** |
| **PKSG** | | **151.36** | **343** | *e*PKPdf | **PKPdf** | **20 28 20.4** | **+2.1** |
| **PKSN** | **Nyarlorinc** | **151.37** | **340** | *e*PKPdf | **PKPbc** | **20 28 26.3** | **+2.0** |
| **HUMR** | **Humele** | **151.39** | **331** | ⇑*i*P | **PKPdf** | **20 28 20.9** | **+2.5** |
| **KONT** | **Konya--Tatoy** | **151.44** | **313** | *e*P | **PKPdf** | **20 28 18.4** | **-0.3** |
| **PKS7** | **Kunszentmiklos** | **151.45** | **341** | *e*PKPdf | **PKPdf** | **20 28 19.6** | **+1.2** |
| **CONA** | **Conrad Observa** | **151.50** | **346** | ⇑*i*PKPdf | **PKPdf** | **20 28 17.3** | **-1.2** |
| | comp=Z,82nm,1.5s | | | | | | |
| **HRT** | **Hereke** | **151.54** | **321** | *e*P | **PKPdf** | **20 28 18.0** | **-0.8** |
| **SOP** | **Sopron** | **151.57** | **345** | *e*PKPdf | **PKPdf** | **20 28 17.9** | **-0.7** |
| **PKST** | **T`s** | **151.58** | **343** | *e*PKPdf | **PKPdf** | **20 28 19.8** | **+1.2** |
| **GZR** | **Gura Zlata** | **151.62** | **335** | ⇑PKIKP | **PKPbc** | **20 28 25.9** | **+0.8** |
| **GZR** | **Gura Zlata** | **151.62** | **335** | ⇑*i*P | **PKPbc** | **20 28 25.9** | **+0.8** |
| **KLYT** | **Kilyos** | **151.63** | **322** | *e*P | **PKPdf** | **20 28 16.1** | **-2.8** |
| **STU** | **Stuttgart** | **151.64** | **356** | *e*PKIKP | **PKPdf** | **20 28 19.7** | **+1.1** |
| STU | | | | MLR | MLR | | |
| | comp=Z,2μm,20.0s | | | | | | |
| **STU** | **Stuttgart** | **151.64** | **356** | *e*PKP | **PKPdf** | **20 28 19.6** | **+0.9** |
| | baz=9.5,slow=2.5 | | | | | | |
| **STU** | **Stuttgart** | **151.64** | **356** | *e*PKPdf | **PKPdf** | **20 28 19.7** | **+1.1** |
| STU | | | | LR | LR | | |
| | comp=Z,2μm,20.0s | | | | | | |
| **PKS6** | **Bocsa** | **151.73** | **340** | *e*PKPdf | **PKPdf** | **20 28 20.9** | **+2.1** |
| **ADVT** | **Abdulvahap** | **151.74** | **320** | *e*P | **PKPdf** | **20 28 18.4** | **-0.6** |
| **CAVI** | **Cavuskoy** | **151.81** | **320** | *e*P | **PKPdf** | **20 28 19.2** | **0.0** |
| **LFK** | **Lefkose** | **151.82** | **307** | *e*P | **PKPdf** | **20 28 19.6** | **+0.2** |
| **BGKT** | **Bogazkoy** | **151.83** | **322** | *e*P | **PKPdf** | **20 28 18.0** | **-1.1** |
| **HDMB** | **Hadim** | **151.83** | **311** | *e*P | **PKPdf** | **20 28 14.5** | **-5.1** |
| **CTYL** | **Yal??k??y-??at** | **151.92** | **323** | *e*P | **PKPdf** | **20 28 18.8** | **-0.5** |
| **CTKS** | **Kestanelik-??a** | **151.95** | **323** | *e*P | **PKPdf** | **20 28 19.2** | **-0.1** |
| **FUR** | **Furstenfeldbru** | **152.05** | **353** | *e*PKP | **PKPdf** | **20 28 19.9** | **+0.6** |
| | baz=9.5,slow=2.5 | | | | | | |
| FUR | | | | *e*L | L | 21 41 25.9 | |
| | comp=Z,2μm,19.9s | | | | | | |
| **CSS** | **Prodhromos** | **152.11** | **307** | P | **PKPdf** | **20 28 18.3** | **-1.5** |
| **CSS** | **Prodhromos** | **152.11** | **307** | P | **PKPdf** | **20 28 18.3** | **-1.5** |
| CSS | | | | *e*PKPdf | PKPbc | 20 28 19.8 | -6.7 |
| CSS | | | | *e*PKPbc | **PKiKP** | **20 28 27.4** | **+0.7** |
| CSS | | | | LR | LR | | |
| | comp=Z,700nm,20.0s | | | | | | |
| **BFO** | **Black Forest** | **152.13** | **357** | *e*PKIKP | **PKPdf** | **20 28 20.9** | **+1.4** |
| BFO | | | | *e* | | 20 28 26.2 | |
| BFO | | | | MLR | MLR | | |
| | comp=Z,2μm,19.0s | | | | | | |
| **BFO** | **Black Forest** | **152.13** | **357** | *e*L | L | 21 42 48.3 | |
| | comp=Z,2μm,19.2s | | | | | | |
| **BFO** | **Black Forest** | **152.13** | **357** | *e*PKPdf | **PKPdf** | **20 28 20.9** | **+1.4** |
| BFO | | | | *e*PKPbc | **PKPbc** | **20 28 26.2** | **+0.1** |
| BFO | | | | *e*PKPab | **PKPab** | **20 28 36.2** | **+0.7** |
| BFO | | | | LR | LR | | |
| | comp=Z,2μm,19.0s | | | | | | |
| **ARMT** | **Armutlu** | **152.18** | **321** | *e*P | **PKPdf** | **20 28 15.3** | **-4.5** |
| **PVL** | **Pavlikeni** | **152.22** | **329** | *i* P | **PKPdf** | **20 28 20.6** | **+0.9** |
| **PHSR** | **Pinarhisar** | **152.24** | **324** | *e*P | **PKPdf** | **20 28 20.0** | **+0.2** |
| **RJOB** | **Jochberg** | **152.26** | **350** | *e*PKP | **PKPdf** | **20 28 20.0** | **+0.3** |
| | baz=9.5,slow=2.5 | | | | | | |
| **MDNY** | **Mudanya-Bursa** | **152.29** | **321** | *e*P | **PKPdf** | **20 28 17.6** | **-2.3** |
| **SHUT** | **Suhut-Afyon** | **152.33** | **316** | *e*P | **PKPdf** | **20 28 19.2** | **-1.0** |
| **LEF** | **Lefka** | **152.37** | **308** | *e*P | **PKPdf** | **20 28 19.2** | **-1.0** |
| **CRLT** | **Corlu** | **152.46** | **323** | *e*P | **PKPdf** | **20 28 19.2** | **-0.9** |
| **EIL** | **Elat** | **152.48** | **295** | P | **PKPdf** | **20 28 20.6** | **0.0** |
| **EIL** | **Elat** | **152.48** | **295** | PKP | **PKPdf** | **20 28 20.4** | **0.0** |
| | comp=Z,1.3nm,0.3s,baz=289,slow=2.5,SNR=9.8 | | | | | | |
| EIL | | | | PKPbc | **PKiKP** | **20 28 28.4** | **+0.8** |
| | comp=Z,7.9nm,0.9s,baz=83,slow=0.6,SNR=4.6 | | | | | | |
| **EDRB** | **Edirne** | **152.51** | **325** | *e*P | **PKPdf** | **20 28 17.2** | **-2.9** |
| **SUTC** | **Sutluce-Ispart** | **152.61** | **314** | *e*P | **PKPdf** | **20 28 18.4** | **-2.2** |
| **BEHE** | **Becsehely** | **152.65** | **344** | *e*PKPdf | **PKPdf** | **20 28 20.8** | **+0.6** |
| **KCTX** | **Karacabey (Bur** | **152.66** | **321** | *e*P | **PKPdf** | **20 28 19.6** | **-0.9** |
| **ISP** | **Isparta** | **152.75** | **315** | PKIKP | **PKPdf** | **20 28 20.6** | **-0.2** |
| **ISP** | **Isparta** | **152.75** | **315** | P | **PKPdf** | **20 28 20.6** | **-0.2** |
| **ISP** | **Isparta** | **152.75** | **315** | P | **PKPdf** | **20 28 20.6** | **-0.2** |
| **KBA** | **Koelnbreinsper** | **152.81** | **349** | ⇑*i*PKPdf | **PKPdf** | **20 28 22.0** | **+1.3** |
| | comp=Z,24nm,1.1s | | | | | | |
| **MPEP** | **Malo Peshtene** | **152.86** | **331** | *i* P | **PKPdf** | **20 28 21.7** | **+1.1** |
| **SOKA** | **Soboth** | **152.86** | **347** | ⇑*i*PKPdf | **PKPdf** | **20 28 21.2** | **+0.6** |
| | comp=Z,55nm,1.9s | | | | | | |
| **PERS** | **Pernice** | **152.88** | **347** | *i* PKPdf | **PKPdf** | **20 28 19.4** | **-1.2** |
| PERS | | | | *e*PP | **PP** | **20 32 08.0** | **-3.1** |
| **MRMT** | **Marmara Adasi** | **152.89** | **323** | *e*P | **PKPdf** | **20 28 17.6** | **-3.2** |
| **RKY** | **Sarkoy-Tekirda** | **153.07** | **323** | *e*P | **PKPdf** | **20 28 20.4** | **-0.7** |
| **KRBG** | **Karabiga-Canak** | **153.20** | **323** | *e*P | **PKPdf** | **20 28 20.0** | **-1.2** |
| **FETA** | **Feichten** | **153.24** | **353** | ⇑*i*PKPdf | **PKPdf** | **20 28 19.7** | **-1.6** |
| | comp=Z,36nm,1.7s | | | | | | |
| **ABTA** | **Abfaltersbach** | **153.27** | **350** | ⇑*i*PKPdf | **PKPdf** | **20 28 21.8** | **+0.5** |
| | comp=Z,37nm,1.3s | | | | | | |
| **PGB** | **Panagyurishte** | **153.29** | **330** | *i* P | **PKPdf** | **20 28 22.6** | **+1.2** |
| **KDZ** | **Kurdzhali** | **153.34** | **327** | *i* P | **PKPdf** | **20 28 21.4** | **0.0** |
| **BALB** | **Balikesir** | **153.35** | **321** | *e*P | **PKPdf** | **20 28 20.0** | **-1.5** |
| **PLD** | **Plovdiv** | **153.37** | **328** | *i* P | **PKPdf** | **20 28 22.9** | **+1.5** |
| **ERIK** | **Erikli-Kesan** | **153.45** | **324** | *e*P | **PKPdf** | **20 28 19.2** | **-2.3** |
| **LPK** | **Lapseki** | **153.51** | **323** | *e*P | **PKPdf** | **20 28 20.4** | **-1.3** |
| **ALN** | **Alexandroupoli** | **153.55** | **325** | PKIKP | **PKPdf** | **20 28 19.8** | **-1.9** |
| **ALN** | **Alexandroupoli** | **153.55** | **325** | P | **PKPdf** | **20 28 19.8** | **-1.9** |
| **ALN** | **Alexandroupoli** | **153.55** | **325** | P | **PKPdf** | **20 28 19.8** | **-1.9** |
| **KULA** | **Kula-Manisa** | **153.56** | **318** | *e*P | **PKPdf** | **20 28 22.3** | **+0.4** |
| **LJU** | **Ljubljana** | **153.57** | **347** | *e*PKPdf | **PKPdf** | **20 28 20.9** | **-0.7** |
| LJU | | | | *e*PP | **PP** | **20 32 11.8** | **-3.0** |
| **ENEZ** | **Enez** | **153.60** | **324** | *e*P | **PKPdf** | **20 28 18.0** | **-3.7** |
| **RDO** | **Rodhopi** | **153.64** | **326** | PFAKE | | 20 28 30.0 | +0.4 |
| RDO | | | | LR | LR | | |
| | comp=Z,18μm,21.0s | | | | | | |
| **GELI** | **Tayfur-Gelibol** | **153.66** | **323** | *e*P | **PKPdf** | **20 28 20.0** | **-1.9** |
| **RZN** | **Rozhen** | **153.67** | **328** | *i* P | **PKPdf** | **20 28 22.8** | **+0.7** |
| **FUORN** | **Ofenpass-Fuorn** | **153.68** | **354** | *e*PKPdf | **PKPdf** | **20 28 24.7** | **+2.7** |
| FUORN | | | | LR | LR | | |
| | comp=Z,2μm,19.0s | | | | | | |
| **VTS** | **Vitosha** | **153.70** | **331** | *i* P | **PKPdf** | **20 28 22.6** | **+0.5** |
| **ELL** | **Elmali** | **153.73** | **313** | *e*P | **PKPdf** | **20 28 20.8** | **-1.5** |
| **DIVS** | **Divibare** | **153.78** | **337** | P | PKPdf | 20 28 14.8 | -7.3 |
| **JAVS** | **Javornik** | **153.81** | **348** | *i* PKPdf | **PKPdf** | **20 28 21.1** | **-0.9** |
| JAVS | | | | *i* PP | **PP** | **20 32 12.0** | **-4.3** |
| **TUE** | **Stuetta** | **153.91** | **355** | *e*PKPdf | **PKPdf** | **20 28 22.3** | **-0.1** |
| TUE | | | | *e*PKPbc | **PKiKP** | **20 28 31.5** | **+1.1** |
| TUE | | | | LR | LR | | |
| | comp=Z,3μm,19.0s | | | | | | |
| **BOJS** | **Bojanci** | **153.93** | **345** | *e*PKPdf | **PKPdf** | **20 28 21.8** | **-0.3** |
| BOJS | | | | *e*PP | **PP** | **20 32 13.3** | **-3.5** |
| BOJS | | | | *e*SKKSac | SKKSac | 20 39 10.1 | +2.9 |
| **TRI** | **Trieste** | **154.05** | **348** | PFAKE | | 20 28 30.0 | -0.3 |
| TRI | | | | LR | LR | | |
| | comp=Z,3μm,20.0s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **154.13** | **358** | *e*PKPbc | **PKPbc** | **20 28 30.4** | **-0.4** |
| SENIN | | | | LR | LR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **MMB** | **Musomiste** | **154.23** | **329** | *i* P | **PKPdf** | **20 28 22.7** | **0.0** |
| **KAVA** | **Kavala** | **154.28** | **327** | P | **PKPdf** | **20 28 21.7** | **-1.0** |
| **KAVA** | **Kavala** | **154.28** | **327** | P | **PKPdf** | **20 28 21.7** | **-1.0** |
| **KKB** | **Krupnik** | **154.33** | **330** | *i* P | **PKPdf** | **20 28 23.6** | **+0.8** |
| **NVR** | **Nevrokopi** | **154.35** | **328** | P | **PKPdf** | **20 28 20.6** | **-2.3** |
| **NVR** | **Nevrokopi** | **154.35** | **328** | P | **PKPdf** | **20 28 20.6** | **-2.3** |
| **FETY** | **Fethiye** | **154.35** | **314** | *e*P | **PKPdf** | **20 28 22.7** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **154.39** | **318** | *e*P | **PKPdf** | **20 28 18.8** | **-4.4** |
| **DALY** | **Dalyan (Mu˙la** | **154.54** | **315** | *e*P | **PKPdf** | **20 28 22.2** | **-1.0** |
| **PRK** | **Paraskevi** | **154.55** | **322** | PKIKP | **PKPdf** | **20 28 21.8** | **-1.4** |
| **PRK** | **Paraskevi** | **154.55** | **322** | P | **PKPdf** | **20 28 21.8** | **-1.4** |
| **PRK** | **Paraskevi** | **154.55** | **322** | P | **PKPdf** | **20 28 21.8** | **-1.4** |
| **YER** | **Yerkesik** | **154.61** | **316** | *e*P | **PKPdf** | **20 28 21.2** | **-2.3** |
| **BLCB** | **Balcova** | **154.65** | **319** | *e*P | **PKPdf** | **20 28 19.6** | **-3.7** |
| **PLE** | **Pljevlja** | **154.66** | **337** | *e*PKP | **PKPdf** | **20 28 22.8** | **-0.6** |
| **LIA** | **Limnos Island** | **154.72** | **324** | P | **PKPdf** | **20 28 21.1** | **-2.3** |
| **LIA** | **Limnos Island** | **154.72** | **324** | P | **PKPdf** | **20 28 21.1** | **-2.3** |
| **SIGR** | **SIGRI** | **154.81** | **322** | P | **PKPdf** | **20 28 21.6** | **-1.9** |
| **SIGR** | **SIGRI** | **154.81** | **322** | P | **PKPdf** | **20 28 21.6** | **-1.9** |
| **IVA** | **Berane** | **154.87** | **336** | *e*PKP | **PKPdf** | **20 28 23.2** | **-0.4** |
| **UPM** | **Unac-Piva** | **154.94** | **338** | *e*PKP | **PKPdf** | **20 28 23.5** | **-0.4** |
| **KNT** | **Kendrikon** | **154.96** | **329** | PKIKP | **PKPdf** | **20 28 20.6** | **-3.1** |
| **KNT** | **Kendrikon** | **154.96** | **329** | P | **PKPdf** | **20 28 20.6** | **-3.1** |
| **KNT** | **Kendrikon** | **154.96** | **329** | P | **PKPdf** | **20 28 20.6** | **-3.1** |
| **OUR** | **Ouranopolis** | **155.04** | **326** | PKIKP | **PKPdf** | **20 28 22.4** | **-1.4** |
| **OUR** | **Ouranopolis** | **155.04** | **326** | P | **PKPdf** | **20 28 22.4** | **-1.4** |
| **OUR** | **Ouranopolis** | **155.04** | **326** | P | **PKPdf** | **20 28 22.4** | **-1.4** |
| **PVY** | **Plav** | **155.08** | **335** | *e*PKP | **PKPdf** | **20 28 23.7** | **-0.3** |
| **SSB** | **Saint Sauveur** | **155.19** | **3** | *e*PKP2 | **PKPab** | **20 28 51.6** | **+3.0** |
| SSB | | | | MLR | MLR | | |
| | comp=Z,2μm,20.0s | | | | | | |
| **SSB** | **Saint Sauveur** | **155.19** | **3** | *e*PKPab | **PKPab** | **20 28 51.6** | **+3.0** |
| SSB | | | | LR | LR | | |
| | comp=Z,2μm,20.0s | | | | | | |
| **SMG** | **Samos** | **155.19** | **318** | P | **PKPdf** | **20 28 21.6** | **-2.5** |
| **SMG** | **Samos** | **155.19** | **318** | P | **PKPdf** | **20 28 21.6** | **-2.5** |
| **ARG** | **Arkhangelos** | **155.23** | **314** | PKIKP | **PKPdf** | **20 28 23.2** | **-1.0** |
| **ARG** | **Arkhangelos** | **155.23** | **314** | P | **PKPdf** | **20 28 23.2** | **-1.0** |
| **ARG** | **Arkhangelos** | **155.23** | **314** | P | **PKPdf** | **20 28 23.2** | **-1.0** |
| **CHOS** | **Chios island** | **155.24** | **321** | P | **PKPdf** | **20 28 22.8** | **-1.5** |
| **CHOS** | **Chios island** | **155.24** | **321** | P | **PKPdf** | **20 28 22.8** | **-1.5** |
| **NKY** | **Niksic** | **155.25** | **337** | *e*PKP | **PKPdf** | **20 28 23.7** | **-0.5** |
| **PGAV** | **Gavieira, Arco** | **155.28** | **27** | *e*PKPdf | **PKPdf** | **20 28 23.2** | **-1.0** |
| **PGAV** | **Gavieira, Arco** | **155.28** | **27** | *e*SS | SS | 20 52 13.9 | +5.1 |
| **PGAV** | **Gavieira, Arco** | **155.28** | **27** | *e*LR | LR | 21 27 12.7 | |
| | comp=Z,4μm,20.0s | | | | | | |
| **NKME** | **Niksic** | **155.31** | **337** | ⇑*i*PKP | **PKPdf** | **20 28 23.7** | **-0.5** |
| **BRY** | **Bratogost** | **155.34** | **338** | *e*PKP | **PKPdf** | **20 28 23.7** | **-0.6** |
| **PDG** | **Podgorica** | **155.49** | **336** | P | **PKPdf** | **20 28 22.8** | **-1.5** |
| **TTG** | **Podgorica** | **155.49** | **336** | ⇑*i*PKP | **PKPdf** | **20 28 24.2** | **-0.1** |
| **TTG** | **Podgorica** | **155.49** | **336** | PKIKP | **PKPdf** | **20 28 22.8** | **-1.5** |
| **TTG** | **Podgorica** | **155.49** | **336** | P | **PKPdf** | **20 28 22.8** | **-1.5** |
| **PCAB** | **Cabril** | **155.60** | **27** | *e*PKPdf | **PKPdf** | **20 28 27.1** | **+2.5** |
| **PCAB** | **Cabril** | **155.60** | **27** | *e*PKPab | **PKPab** | **20 28 50.1** | **-0.4** |
| **DRME** | **Dracevica, Mon** | **155.72** | **336** | ⇑*i*PKP | **PKPdf** | **20 28 24.3** | **-0.4** |
| **BUM** | **Brajici-Budva** | **155.73** | **337** | *e*PKP | **PKPdf** | **20 28 24.3** | **-0.5** |
| **PMOZ** | **Porto Moniz, M** | **155.75** | **55** | *e*LR | LR | 21 28 00.8 | |
| | comp=Z,2μm,20.0s | | | | | | |
| **HCY** | **Herceg Novi** | **155.75** | **338** | *e*PKP | **PKPdf** | **20 28 24.3** | **-0.4** |
| **ULC** | **Ulcinj** | **155.89** | **336** | *e*PKP | **PKPdf** | **20 28 24.5** | **-0.5** |
| **FNA** | **Florina** | **155.97** | **331** | PKIKP | **PKPdf** | **20 28 24.4** | **-0.7** |
| **FNA** | **Florina** | **155.97** | **331** | P | **PKPdf** | **20 28 24.4** | **-0.7** |
| **FNA** | **Florina** | **155.97** | **331** | P | **PKPdf** | **20 28 24.4** | **-0.7** |
| **POLO** | **Lamas de Olo** | **155.97** | **27** | *e*PKPdf | **PKPdf** | **20 28 25.3** | **+0.1** |
| **POLO** | **Lamas de Olo** | **155.97** | **27** | *e*PKPab | **PKPab** | **20 28 51.7** | **-0.5** |
| **PBRG** | **Braganca** | **156.03** | **24** | *e*PKPdf | **PKPdf** | **20 28 24.9** | **-0.3** |
| **PBRG** | **Braganca** | **156.03** | **24** | *e*PKPab | **PKPab** | **20 28 53.1** | **+0.7** |
| **PVRL** | **Vila Real** | **156.09** | **27** | *e*PKPdf | **PKPdf** | **20 28 26.7** | **+1.4** |
| **KZN** | **Kozani** | **156.16** | **330** | PKIKP | **PKPdf** | **20 28 24.4** | **-1.0** |
| **KZN** | **Kozani** | **156.16** | **330** | P | **PKPdf** | **20 28 24.4** | **-1.0** |
| **KZN** | **Kozani** | **156.16** | **330** | P | **PKPdf** | **20 28 24.4** | **-1.0** |
| **TIR** | **Tirane** | **156.17** | **334** | PFAKE | | 20 28 40.0 | -13 |
| TIR | | | | LR | LR | | |
| | comp=Z,5μm,20.0s | | | | | | |
| **KARP** | **Karpathos** | **156.25** | **314** | P | **PKPdf** | **20 28 23.2** | **-2.4** |
| **KARP** | **Karpathos** | **156.25** | **314** | P | **PKPdf** | **20 28 23.2** | **-2.4** |
| **FYTO** | **Fytoko, Volos** | **156.27** | **326** | P | **PKPdf** | **20 28 25.4** | **-0.1** |
| **FYTO** | **Fytoko, Volos** | **156.27** | **326** | P | **PKPdf** | **20 28 25.4** | **-0.1** |
| **APE** | **Apeiranthos** | **156.40** | **319** | PKIKP | **PKPdf** | **20 28 24.0** | **-1.8** |
| **APE** | **Apeiranthos** | **156.40** | **319** | P | **PKPdf** | **20 28 23.4** | **-2.4** |
| **APE** | **Apeiranthos** | **156.40** | **319** | P | **PKPdf** | **20 28 23.4** | **-2.4** |
| **NEST** | **Nestorio** | **156.41** | **331** | P | **PKPdf** | **20 28 25.8** | **0.0** |
| **MVO** | **Moncorvo** | **156.46** | **26** | *e*PKPdf | **PKPdf** | **20 28 27.3** | **+1.5** |
| **MVO** | **Moncorvo** | **156.46** | **26** | *e*SS | SS | 20 52 27.2 | +5.8 |
| **MVO** | **Moncorvo** | **156.46** | **26** | *e*LR | LR | 21 28 20.4 | |
| | comp=Z,4μm,20.0s | | | | | | |
| **PVIS** | **Viseu** | **156.47** | **28** | *e*PKPdf | **PKPdf** | **20 28 27.4** | **+1.6** |
| **THL** | **Klokotos Trika** | **156.62** | **328** | P | **PKPdf** | **20 28 23.8** | **-2.1** |
| **PCAS** | **Casmilo, Conde** | **156.74** | **30** | *e*PKPdf | **PKPdf** | **20 28 27.5** | **+1.4** |
| **PCAS** | **Casmilo, Conde** | **156.74** | **30** | *e*PKPab | **PKPab** | **20 28 56.1** | **+0.7** |
| **ATAL** | **Atalanti** | **156.75** | **325** | P | **PKPdf** | **20 28 24.2** | **-2.0** |
| **ATAL** | **Atalanti** | **156.75** | **325** | P | **PKPdf** | **20 28 24.2** | **-2.0** |
| **AGG** | **Agios Georgios** | **156.87** | **327** | PKIKP | **PKPdf** | **20 28 24.4** | **-1.9** |
| **AGG** | **Agios Georgios** | **156.87** | **327** | P | **PKPdf** | **20 28 24.4** | **-1.9** |
| **AGG** | **Agios Georgios** | **156.87** | **327** | P | **PKPdf** | **20 28 24.4** | **-1.9** |
| **MTE** | **Manteigas** | **156.88** | **28** | *e*PKPdf | **PKPdf** | **20 28 26.6** | **+0.2** |
| **MTE** | **Manteigas** | **156.88** | **28** | *e*PKPab | **PKPab** | **20 28 56.1** | **0.0** |
| **MTE** | **Manteigas** | **156.88** | **28** | *e*SS | SS | 20 52 31.9 | +5.9 |
| **MTE** | **Manteigas** | **156.88** | **28** | *e*LR | LR | 21 30 01.1 | |
| | comp=Z,4μm,20.0s | | | | | | |
| **MTE** | **Manteigas** | **156.88** | **28** | PFAKE | | 20 28 40.0 | +14 |
| MTE | | | | LR | LR | | |
| | comp=Z,4μm,20.0s | | | | | | |
| **SANT** | **Santorini** | **156.88** | **317** | PFAKE | | 20 28 40.0 | +14 |
| SANT | | | | LR | LR | | |
| | comp=Z,1μm,21.0s | | | | | | |
| **AXAR** | **Agios Charalam** | **156.89** | **326** | P | **PKPdf** | **20 28 25.0** | **-1.4** |
| **AXAR** | **Agios Charalam** | **156.89** | **326** | P | **PKPdf** | **20 28 25.0** | **-1.4** |
| **VLY** | **Voula,Athens** | **156.92** | **322** | P | **PKPdf** | **20 28 25.0** | **-1.4** |
| **VLY** | **Voula,Athens** | **156.92** | **322** | P | **PKPdf** | **20 28 25.0** | **-1.4** |
| **MAKR** | **Makrakomi, Fth** | **156.98** | **327** | P | **PKPdf** | **20 28 25.7** | **-0.8** |
| **MAKR** | **Makrakomi, Fth** | **156.98** | **327** | P | **PKPdf** | **20 28 25.7** | **-0.8** |
| **PTOM** | **Tomar** | **157.12** | **30** | *e*PKPdf | **PKPdf** | **20 28 28.2** | **+1.6** |
| **PTOM** | **Tomar** | **157.12** | **30** | *e*PKPab | **PKPab** | **20 28 58.4** | **+1.3** |
| **PMAFR** | **Mafra** | **157.21** | **33** | *e*PKPdf | **PKPdf** | **20 28 28.0** | **+1.3** |
| **PMAFR** | **Mafra** | **157.21** | **33** | *e*PKPab | **PKPab** | **20 28 58.0** | **+0.5** |
| **DSF** | **Desfina** | **157.22** | **325** | P | **PKPdf** | **20 28 25.0** | **-1.8** |
| **DSF** | **Desfina** | **157.22** | **325** | P | **PKPdf** | **20 28 25.0** | **-1.8** |
| **LTK** | **Loutraki** | **157.26** | **324** | P | **PKPdf** | **20 28 24.8** | **-2.0** |
| **LTK** | **Loutraki** | **157.26** | **324** | P | **PKPdf** | **20 28 24.8** | **-2.0** |
| **PCBR** | **Castelo Branco** | **157.37** | **28** | *e*PKPdf | **PKPdf** | **20 28 28.0** | **+1.1** |
| **PMST** | **Lisbon--Monsan** | **157.43** | **33** | *e*PKPdf | **PKPdf** | **20 28 28.0** | **+1.9** |
| **PMST** | **Lisbon--Monsan** | **157.43** | **33** | *e*PKPab | **PKPab** | **20 29 00.0** | **+0.9** |
| **LIS** | **Lisbon** | **157.46** | **33** | *e*P | **PKPdf** | **20 28 26.7** | **-0.3** |
| LIS | | | | AMS | AMS | 21 37 26.8 | |
| | comp=Z,4μm,21.0s | | | | | | |
| **LIS** | **Lisbon** | **157.46** | **33** | *e*PKIKP | **PKPdf** | **20 28 26.7** | **-0.3** |
| **PACT** | **Alcochete** | **157.58** | **32** | *e*PKPdf | PKPdf | 20 28 32.9 | +5.7 |
| **LAST** | **Lasithi** | **157.60** | **315** | *e*PKPab | **PKPab** | **20 28 59.6** | **+0.2** |
| **KRND** | **KRANIDI** | **157.61** | **323** | P | **PKPdf** | **20 28 25.8** | **-1.5** |
| **LAKA** | **Lakka** | **157.64** | **326** | P | **PKPdf** | **20 28 26.2** | **-1.1** |
| **LAKA** | **Lakka** | **157.64** | **326** | P | **PKPdf** | **20 28 26.2** | **-1.1** |
| **PMTG** | **Montargil** | **157.64** | **31** | *e*PKPdf | **PKPdf** | **20 28 28.4** | **+1.1** |
| **PMTG** | **Montargil** | **157.64** | **31** | *e*PKPab | **PKPab** | **20 29 00.7** | **+1.4** |
| **GUR** | **Goura** | **157.67** | **325** | P | **PKPdf** | **20 28 27.5** | **0.0** |
| **GUR** | **Goura** | **157.67** | **325** | P | **PKPdf** | **20 28 27.5** | **0.0** |
| **KLV** | **Kalavryta, Ach** | **157.69** | **325** | P | **PKPdf** | **20 28 25.8** | **-1.6** |
| **KLV** | **Kalavryta, Ach** | **157.69** | **325** | P | **PKPdf** | **20 28 25.8** | **-1.6** |
| **PMRV** | **Marv??o** | **157.74** | **29** | *e*PKPdf | **PKPdf** | **20 28 28.4** | **+1.0** |
| **PMRV** | **Marv??o** | **157.74** | **29** | *e*PKPab | **PKPab** | **20 29 01.1** | **+1.3** |
| **PMRV** | **Marv??o** | **157.74** | **29** | *e*SS | SS | 20 52 40.8 | +5.6 |
| **PMRV** | **Marv??o** | **157.74** | **29** | *e*LR | LR | 21 29 18.3 | |
| | comp=Z,4μm,18.0s | | | | | | |
| **IDI** | **Anoyia** | **157.91** | **316** | P | **PKPdf** | **20 28 26.0** | **-1.8** |
| **IDI** | **Anoyia** | **157.91** | **316** | P | **PKPdf** | **20 28 26.0** | **-1.8** |
| IDI | | | | *e*PKPdf | **PKPdf** | **20 28 28.1** | **+0.2** |
| **VLX** | **Vlachokerasia** | **158.06** | **324** | P | **PKPdf** | **20 28 27.4** | **-0.6** |
| **VLX** | **Vlachokerasia** | **158.06** | **324** | P | **PKPdf** | **20 28 27.4** | **-0.6** |
| **EVO** | **Evora** | **158.17** | **31** | *e*PKPdf | **PKPdf** | **20 28 28.7** | **+0.8** |
| **EVO** | **Evora** | **158.17** | **31** | *e*PKPab | **PKPab** | **20 29 01.7** | **+0.1** |
| **PNCL** | **Nicolau / Gran** | **158.23** | **33** | *e*PKPdf | **PKPdf** | **20 28 28.6** | **+0.6** |
| **PTEO** | **Sao Teotonio** | **158.56** | **34** | *e*PKPdf | **PKPdf** | **20 28 30.1** | **+1.7** |
| **PTEO** | **Sao Teotonio** | **158.56** | **34** | *e*PKPab | **PKPab** | **20 29 03.0** | **-0.3** |
| **MESJ** | **Messejana** | **158.60** | **33** | *e*P | **PKPdf** | **20 28 27.9** | **-0.5** |
| MESJ | | | | AMS | AMS | 21 36 23.3 | |
| | comp=Z,3μm,18.7s | | | | | | |
| **MESJ** | **Messejana** | **158.60** | **33** | *e*PKPdf | **PKPdf** | **20 28 28.8** | **+0.3** |
| **MESJ** | **Messejana** | **158.60** | **33** | *e*PKIKP | **PKPdf** | **20 28 27.9** | **-0.5** |
| **PBEJ** | **Beja** | **158.63** | **32** | *e*PKPdf | **PKPdf** | **20 28 30.0** | **+1.5** |
| **PBEJ** | **Beja** | **158.63** | **32** | *e*PKPab | **PKP

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 3.7nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.17** | **229** | P | **P** | **20 52 38.4** | **+1.5** |
| | 2.3nm,0.5s,baz=52,slow=10,SNR=28 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.86** | **223** | P | **P** | **20 53 04.3** | **+1.3** |
| | 2.8nm,0.7s,baz=57,slow=8.9,SNR=48 | | | | | | | |
| **MBWA** | **Marble Bar** | **34.77** | **241** | *e*P | **P** | **20 54 31.4** | **+0.4** |
| | 32nm,1.5s | | | | | | | |
| **MAJO** | **Matsushiro** | **44.08** | **344** | P | **P** | **20 55 49.5** | **+1.4** |
| **SONM** | **Songino Array** | **66.77** | **328** | P | **P** | **20 58 30.9** | **-0.5** |
| | 0.4nm,0.5s,baz=128,slow=2.3,SNR=3.9 | | | | | | | |
| **VNDA** | **Vanda** | **71.84** | **178** | P | P | 20 59 06.3 | +4.2 |
| | 0.9nm,1.1s,baz=339,slow=7.1,SNR=5.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.56** | **327** | P | **P** | **20 59 54.9** | **-2.4** |
| | 0.4nm,0.3s,baz=113,slow=9.6,SNR=2.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.40** | **22** | P | **P** | **21 00 07.2** | **+0.5** |
| | 0.6nm,0.6s,baz=249,slow=5.3,SNR=7.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.84** | **286** | PKPbc | **PKPbc** | **21 07 31.1** | **+0.4** |
| | 2.1nm,0.7s,baz=84,slow=2.2,SNR=21 | | | | | | | |

*BUL* ***16*** *20:51:07.8±17.0, 28°.51S×29°.69E, h0km±999km, MD3.9*
*ISCJB* ***16*** *20:51:19.9±0.4, 26°.44S±0°.03×27°.43E±0°.03, h8km±3km,*
*Error ellipse: s-maj=5.1km s-min=3.9km az=145.4*
*PRE* ***16*** *20:51:20.0±1.7, 26°.41S×27°.40E, h2km, ML2.8*

**ISC 16 20:51:20.3±0.8, 26°.40S±0°.03×27°.41E±0°.03, h8km±5km, n19,σ1°62/34, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WDLM** | **Western Deep L** | **0.02** | **151** | *e*P | **Pg** | **20 51 22.3** | **+0.2** |
| WDLM | | | | *e*S | **Sg** | **20 51 23.1** | **-0.4** |
| WDLM | | | | AML | AML | 20 51 23.4 | |
| | comp=Z,34μm,0.1s | | | | | | |
| **KLOF** | **Kloof** | **0.19** | **74** | *e*P | **Pg** | **20 51 23.7** | **-0.6** |
| KLOF | | | | *e*S | **Sg** | **20 51 25.6** | **-1.4** |
| KLOF | | | | AML | AML | 20 51 25.7 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **PRYS** | **Parys** | **0.52** | **185** | *e*P | **Pg** | **20 51 29.3** | **-1.2** |
| PRYS | | | | *e*S | **Sg** | **20 51 37.1** | **-0.3** |
| PRYS | | | | AML | AML | 20 51 42.4 | |
| | comp=Z,166nm,0.3s | | | | | | |
| **OBSV** | **Observatory** | **0.64** | **70** | *e*P | **Pg** | **20 51 32.0** | **-0.7** |
| OBSV | | | | *e*S | **Sg** | **20 51 40.0** | **-1.0** |
| OBSV | | | | AML | AML | 20 51 47.0 | |
| | comp=Z,100nm,0.2s | | | | | | |
| **KSR** | **Koster** | **0.72** | **320** | *e*P | **Pg** | **20 51 34.5** | **+0.3** |
| KSR | | | | *e*S | **Sg** | **20 51 44.2** | **+0.7** |
| KSR | | | | AML | AML | 20 51 46.6 | |
| | comp=Z,83nm,0.1s | | | | | | |
| **BFSD** | **Buffelsfontein** | **0.72** | **230** | *e*P | **Pg** | **20 51 33.6** | **-0.8** |
| BFSD | | | | *e*S | **Sg** | **20 51 43.1** | **-0.7** |
| BFSD | | | | AML | AML | 20 51 53.0 | |
| | comp=Z,148nm,0.3s | | | | | | |
| **MOAB** | **Moab Khotsong** | **0.80** | **223** | *e*P | **Pg** | **20 51 35.2** | **-0.6** |
| MOAB | | | | *e*S | **Sg** | **20 51 45.4** | **-0.8** |
| MOAB | | | | AML | AML | 20 51 54.2 | |
| | comp=Z,195nm,0.2s | | | | | | |
| **TLEK** | **Tau Lekoa** | **0.86** | **230** | *e*P | **Pg** | **20 51 36.1** | **-0.9** |
| TLEK | | | | *e*S | **Sg** | **20 51 47.8** | **-0.5** |
| TLEK | | | | AML | AML | 20 51 55.0 | |
| | comp=Z,155nm,0.1s | | | | | | |
| **SWZ** | **Schweizer** | **2.01** | **247** | *e*P | **Pb** | **20 51 56.7** | **-0.5** |
| SWZ | | | | *e*S | **Sn** | **20 52 21.5** | **+1.4** |
| SWZ | | | | AML | AML | 20 52 25.0 | |
| | comp=Z,199nm,0.4s | | | | | | |
| **LBTB** | **Lobatse** | **2.14** | **310** | *i* P | Pg | 20 52 08.5 | +7.1 |
| LBTB | | | | *i* S | **Sb** | **20 52 26.6** | **+0.4** |
| **BOSA** | **Boshof** | **2.92** | **220** | *i* P | **Pn** | **20 52 08.3** | **+1.2** |
| BOSA | | | | *i* S | **Sb** | **20 52 50.6** | **+2.1** |
| **POGA** | **Pongola** | **3.88** | **105** | *e*P | **Pn** | **20 52 21.8** | **+1.6** |
| POGA | | | | *e*S | **Sn** | **20 53 08.8** | **+2.9** |
| POGA | | | | AML | AML | 20 53 23.7 | |
| | comp=Z,33nm,0.6s | | | | | | |
| **POGA** | **Pongola** | **3.88** | **105** | *i* S | **Pn** | **20 52 22.5** | **+2.3** |
| **KSD** | **Kokstad** | **4.49** | **157** | *e*P | **Pn** | **20 52 30.1** | **+1.4** |
| KSD | | | | *e*S | **Sn** | **20 53 20.8** | **-0.4** |
| KSD | | | | AML | AML | 20 53 41.5 | |
| | comp=Z,9.0nm,0.6s | | | | | | |
| **UPI** | **Upington** | **5.81** | **249** | *e*P | **Pn** | **20 52 47.6** | **+0.7** |
| UPI | | | | *e*S | **Sn** | **20 53 52.2** | **-1.6** |
| UPI | | | | AML | AML | 20 54 27.8 | |
| | comp=Z,13nm,0.5s | | | | | | |
| **MATP** | **Matopo** | **6.03** | **10** | *i* P | **Pn** | **20 52 51.0** | **+1.1** |
| MATP | | | | *i* S | **Sg** | **20 54 30.4** | **-3.7** |
| **BLWY** | **Bulawayo** | **6.33** | **10** | *i* P | Pg | 20 53 18.1 | -3.6 |
| BLWY | | | | *i* S | Sb | 20 54 34.5 | +7.7 |
| **SOE** | **Somerset East** | **6.49** | **194** | *e*P | **Pn** | **20 52 57.6** | **+1.4** |
| SOE | | | | *e*S | **Sn** | **20 54 08.2** | **-2.2** |
| SOE | | | | AML | AML | 20 54 57.6 | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **KOMG** | **Komaggas** | **9.39** | **247** | *e*P | **Pn** | **20 53 37.0** | **+1.0** |
| KOMG | | | | *e*S | **Sn** | **20 55 17.6** | **-4.2** |
| KOMG | | | | AML | AML | 20 56 20.0 | |
| | comp=Z,4.4nm,0.6s | | | | | | |

*MOS* ***16*** *20:54:17.7±2.1, 49°.52N×156°.95E, h15km, mb4.2/1, Error*
*ellipse: s-maj=45.9km s-min=8.3km az=81.8*

**KRSC 16 20:54:17.7±2.6, 49°.52N×156°.95E, h15km±7km, ML4.0, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.28** | **335** | *e*P | Pn | 20 54 38.9 | -2.0 |
| SKR | | | | *e*S | Sb | 20 54 55.0 | -2.6 |
| **SKR** | **Severo-Kuril's** | **1.28** | **335** | *e*PN | Pn | 20 54 32.4 | -8.5 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,50nm,0.3s | | | | | | |
| **PAU** | **Pauzhetka** | **1.95** | **357** | *e*P | Pn | 20 54 51.0 | +0.9 |
| PAU | | | | *e*S | Sb | 20 55 15.9 | -1.0 |
| **PAU** | **Pauzhetka** | **1.95** | **357** | PN | Pn | 20 54 51.0 | +0.9 |
| PAU | | | | S | Sb | 20 55 15.9 | -1.0 |
| **ASAK** | **Asacha** | **2.92** | **11** | *e*P | Pb | 20 55 07.4 | -2.2 |
| **MTVR** | **Mutnovka** | **3.06** | **14** | *e*S | Sb | 20 55 46.6 | -2.7 |
| **RUS** | **Russkaya** | **3.08** | **18** | *e*P | Pn | 20 55 08.7 | +3.1 |
| **RUS** | **Russkaya** | **3.08** | **18** | PN | Pn | 20 55 08.7 | +3.1 |
| **UGLR** | **Uglovaya** | **3.87** | **17** | *e*P | Pn | 20 55 21.0 | +4.3 |
| **AVH** | **Avacha** | **3.91** | **16** | *e*P | Pb | 20 55 22.2 | -4.2 |
| **AVH** | **Avacha** | **3.91** | **16** | PN | Pb | 20 55 22.2 | -4.2 |
| **KOK** | **Koryaka** | **3.92** | **15** | *e*P | Pb | 20 55 22.1 | -4.4 |
| **KOK** | **Koryaka** | **3.92** | **15** | PN | Pb | 20 55 22.1 | -4.4 |
| **SMAR** | **Somma** | **3.92** | **16** | *e*P | Pb | 20 55 22.2 | -4.5 |
| **SMAR** | **Somma** | **3.92** | **16** | PN | Pb | 20 55 22.2 | -4.5 |
| **NLC** | **Nalytchevo** | **3.95** | **21** | *e*S | Sn | 20 56 06.7 | +3.1 |
| **SDLR** | **Sedlovina** | **3.95** | **17** | *e*P | Pn | 20 55 21.4 | +3.6 |
| **SDLR** | **Sedlovina** | **3.95** | **17** | PN | Pn | 20 55 21.4 | +3.6 |
| **KRX** | **Arik** | **3.98** | **15** | *e*P | Pb | 20 55 23.3 | -4.4 |
| **SPN** | **Mys Shipunski** | **4.06** | **27** | *e*P | Pn | 20 55 22.8 | +3.6 |
| SPN | | | | *e*S | Sb | 20 56 12.6 | -5.1 |
| **SPN** | **Mys Shipunski** | **4.06** | **27** | PN | Pn | 20 55 22.8 | +3.6 |
| SPN | | | | S | Sb | 20 56 12.6 | -5.1 |
| **GNL** | **Ganaly** | **4.22** | **8** | *e*P | Pn | 20 55 25.6 | +4.0 |
| **GNL** | **Ganaly** | **4.22** | **8** | PN | Pn | 20 55 25.6 | +4.0 |
| **MKZ** | **Mys Kozlova** | **5.84** | **28** | *e*P | Pn | 20 55 46.8 | +3.3 |
| **MKZ** | **Mys Kozlova** | **5.84** | **28** | PN | Pn | 20 55 46.8 | +3.3 |
| **KBTR** | **Krutoberegovo** | **7.58** | **26** | *e*P | Pn | 20 56 10.5 | +3.1 |
| **KBTR** | **Krutoberegovo** | **7.58** | **26** | PN | Pn | 20 56 10.5 | +3.1 |

*DDA* ***16*** *21:02:11.2, 40°.83N×31°.32E, h7km, Md3.2*
*ISK* ***16*** *21:02:11.1, 40°.82N×31°.32E, h5km, ML3.1*
*CSEM* ***16*** *21:02:12.6±0.1, 40°.82N×31°.33E, h2km, ML3.1*

**ISC 16 21:02:12.2±1.1, 40°.82N±0°.02×31°.35E±0°.02, h4km±9km, n147,σ0°92/175, 6C-5D, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BTAS** | **Taskesti** | **0.36** | **226** | *i* P | **Pg** | **21 02 18.8** | **-0.5** |
| BTAS | | | | *i* S | **Sg** | **21 02 24.0** | **-0.1** |
| **BTAS** | **Taskesti** | **0.36** | **226** | P | **Pg** | **21 02 18.8** | **-0.5** |
| BTAS | | | | S | **Sg** | **21 02 24.0** | **-0.1** |
| **MDUB** | **Mudurnu** | **0.37** | **198** | *e*PG | **Pg** | **21 02 19.4** | **0.0** |
| MDUB | | | | *e*SG | **Sg** | **21 02 24.8** | **+0.6** |
| **MDUB** | **Mudurnu** | **0.37** | **198** | *e*Pg | **Pg** | **21 02 19.4** | **0.0** |
| MDUB | | | | *e*Sg | **Sg** | **21 02 24.8** | **+0.6** |
| **KDZE** | **Karadeniz Ereo** | **0.49** | **8** | *e*PG | **Pg** | **21 02 21.4** | **-0.4** |
| KDZE | | | | *e*SG | **Sg** | **21 02 29.0** | **+0.8** |
| **KDZE** | **Karadeniz Ereo** | **0.49** | **8** | *e*Pg | **Pg** | **21 02 21.4** | **-0.4** |
| KDZE | | | | *e*Sg | **Sg** | **21 02 29.0** | **+0.8** |
| **BCAM** | **Yenicaga** | **0.55** | **91** | *i* P | **Pg** | **21 02 22.3** | **-0.4** |
| BCAM | | | | *i* S | **Sg** | **21 02 29.6** | **-0.2** |
| **BCAM** | **Yenicaga** | **0.55** | **91** | P | **Pg** | **21 02 22.3** | **-0.4** |
| BCAM | | | | S | **Sg** | **21 02 29.6** | **-0.2** |
| **GULT** | **Gulveren** | **0.74** | **239** | *e*PG | **Pg** | **21 02 26.1** | **-0.4** |
| **GULT** | **Gulveren** | **0.74** | **239** | *e*Pg | **Pg** | **21 02 26.1** | **-0.4** |
| **SPNC** | **Sapanca-Adapaz** | **0.80** | **260** | *e*PG | **Pg** | **21 02 27.8** | **+0.2** |
| **SPNC** | **Sapanca-Adapaz** | **0.80** | **260** | *e*Pg | **Pg** | **21 02 27.8** | **+0.2** |
| **GPA** | **Golpazari** | **0.95** | **236** | *e*PG | **Pg** | **21 02 30.0** | **-0.5** |
| **GPA** | **Golpazari** | **0.95** | **236** | *e*Pg | **Pg** | **21 02 30.0** | **-0.5** |
| **AUMIH** | **MIHALICIK** | **0.96** | **174** | P | **Pg** | **21 02 30.4** | **-0.3** |
| AUMIH | | | | S | **Sg** | **21 02 43.8** | **+0.7** |
| **SAFT** | **Safranbolu** | **1.10** | **67** | *e*PN | **Pg** | **21 02 33.3** | **+0.1** |
| **SAFT** | **Safranbolu** | **1.10** | **67** | *e*Pn | **Pg** | **21 02 33.3** | **+0.1** |
| **BORA** | **Eskisehir** | **1.16** | **216** | *i* P | **Pg** | **21 02 33.6** | **-0.9** |
| BORA | | | | *i* S | **Sn** | **21 02 51.7** | **-0.1** |
| **BORA** | **Eskisehir** | **1.16** | **216** | P | **Pg** | **21 02 33.6** | **-0.9** |
| BORA | | | | S | **Sn** | **21 02 51.7** | **-0.1** |
| **HRT** | **Hereke** | **1.27** | **270** | *e*PN | **Pg** | **21 02 35.9** | **-0.8** |
| **HRT** | **Hereke** | **1.27** | **270** | *e*Pn | **Pg** | **21 02 35.9** | **-0.8** |
| **ADVT** | **Abdulvahap** | **1.28** | **253** | *e*PN | **Pg** | **21 02 36.1** | **-0.8** |
| **ADVT** | **Abdulvahap** | **1.28** | **253** | *e*Pn | **Pg** | **21 02 36.1** | **-0.8** |
| **CAVI** | **Cavuskoy** | **1.30** | **242** | *e*PN | **Pg** | **21 02 36.4** | **-0.8** |
| **CAVI** | **Cavuskoy** | **1.30** | **242** | *e*Pn | **Pg** | **21 02 36.4** | **-0.8** |
| **SILT** | **Sile** | **1.33** | **285** | *e*PN | **Pn** | **21 02 37.0** | **-0.6** |
| **SILT** | **Sile** | **1.33** | **285** | *e*Pn | **Pn** | **21 02 37.0** | **-0.6** |
| **ESKT** | **Eskisehir** | **1.36** | **196** | *e*PN | **Pg** | **21 02 38.4** | **+0.2** |
| **ESKT** | **Eskisehir** | **1.36** | **196** | *e*Pn | **Pg** | **21 02 38.4** | **+0.2** |
| **ESKT** | **Eskisehir** | **1.36** | **196** | P | **Pn** | **21 02 37.7** | **-0.4** |
| ESKT | | | | S | **Sg** | **21 02 55.1** | **-0.7** |
| **SEYT** | **Eskypehyr** | **1.36** | **196** | *i* P | **Pn** | **21 02 37.7** | **-0.4** |
| SEYT | | | | *i* S | **Sg** | **21 02 55.1** | **-0.7** |
| **SVRH** | **Sivrihisar-ESK** | **1.38** | **174** | *e*PN | **Pb** | **21 02 38.5** | **-0.2** |
| **SVRH** | **Sivrihisar-ESK** | **1.38** | **174** | *e*Pn | **Pb** | **21 02 38.5** | **-0.2** |
| **LOD** | **Lodumlu** | **1.43** | **130** | *e*PN | **Pn** | **21 02 38.9** | **-0.1** |
| **LOD** | **Lodumlu** | **1.43** | **130** | *e*Pn | **Pn** | **21 02 38.9** | **-0.1** |
| **IZI** | **Iznik** | **1.51** | **252** | *e*PN | **Pn** | **21 02 40.1** | **+0.1** |
| **IZI** | **Iznik** | **1.51** | **252** | *e*Pn | **Pn** | **21 02 40.2** | **+0.1** |
| **ELDT** | **Eldivan** | **1.62** | **101** | *i* S | **Sg** | **21 03 05.8** | **+1.6** |
| **ELDT** | **Eldivan** | **1.62** | **101** | P | **Pb** | **21 02 42.9** | **+0.1** |
| ELDT | | | | S | **Sg** | **21 03 05.8** | **+1.6** |
| **BUY** | **Buyukada** | **1.69** | **272** | *i* S | **Sn** | **21 03 04.6** | **-0.1** |
| **BUY** | **Buyukada** | **1.69** | **272** | P | **Pn** | **21 02 42.6** | **+0.1** |
| BUY | | | | S | **Sn** | **21 03 04.6** | **-0.1** |
| **IGD** | **Bursa** | **1.73** | **252** | P | **Pn** | **21 02 42.1** | **-0.9** |
| IGD | | | | S | **Sb** | **21 03 06.7** | **+0.2** |
| **CANT** | **Cankiri** | **1.74** | **96** | *e*PN | **Pn** | **21 02 43.7** | **+0.4** |
| **KLYT** | **Kilyos** | **1.79** | **285** | *e*PN | **Pn** | **21 02 44.5** | **+0.5** |
| **KLYT** | **Kilyos** | **1.79** | **285** | *e*Pn | **Pn** | **21 02 44.5** | **+0.5** |
| **ULDT** | **Uludag** | **1.82** | **249** | *i* P | **Pn** | **21 02 43.7** | **-0.8** |
| ULDT | | | | *i* S | **Sg** | **21 03 10.7** | **+0.1** |
| **ULDT** | **Uludag** | **1.82** | **249** | P | **Pn** | **21 02 43.7** | **-0.8** |
| ULDT | | | | S | **Sg** | **21 03 10.7** | **+0.1** |
| **BBAL** | **Bala** | **1.87** | **133** | *i* P | **Pb** | **21 02 46.9** | **-0.1** |
| BBAL | | | | *i* S | **Sg** | **21 03 12.5** | **+0.3** |
| **BBAL** | **Bala** | **1.87** | **133** | P | **Pb** | **21 02 46.9** | **-0.1** |
| BBAL | | | | S | **Sg** | **21 03 12.5** | **+0.3** |
| **AFSR** | **Af˘ar-Bala (A** | **1.91** | **136** | *e*PN | **Pn** | **21 02 46.5** | **+0.8** |
| **AFSR** | **Af˘ar-Bala (A** | **1.91** | **136** | *e*Pn | **Pn** | **21 02 46.5** | **+0.8** |
| **ARMT** | **Armutlu** | **1.91** | **263** | *e*PN | **Pn** | **21 02 46.1** | **+0.6** |
| **ARMT** | **Armutlu** | **1.91** | **263** | *e*Pn | **Pn** | **21 02 46.1** | **+0.6** |
| **MDNY** | **Mudanya-Bursa** | **1.93** | **257** | *e*PN | **Pn** | **21 02 46.5** | **+0.6** |
| **MDNY** | **Mudanya-Bursa** | **1.93** | **257** | *e*Pn | **Pn** | **21 02 46.5** | **+0.6** |
| **BGKT** | **Bogazkoy** | **1.98** | **281** | *e*PN | **Pn** | **21 02 47.0** | **+0.5** |
| **BGKT** | **Bogazkoy** | **1.98** | **281** | *e*Pn | **Pn** | **21 02 47.0** | **+0.5** |
| **KIZT** | **Kizilcal** | **1.98** | **168** | *e*PN | **Pn** | **21 02 47.1** | **+0.4** |
| **KIZT** | **Kizilcal** | **1.98** | **168** | *e*Pn | **Pn** | **21 02 47.1** | **+0.4** |
| **ORLT** | **Orhaneli** | **2.03** | **248** | *e*PN | **Pn** | **21 02 47.2** | **0.0** |
| **ORLT** | **Orhaneli** | **2.03** | **248** | *e*Pn | **Pn** | **21 02 47.2** | **0.0** |
| **TOS** | **Tosya** | **2.04** | **83** | *e*PN | **Pb** | **21 02 48.8** | **-1.1** |
| **TOS** | **Tosya** | **2.04** | **83** | *e*Pn | **Pb** | **21 02 48.8** | **-1.1** |
| **BOLV** | **Bolvadin** | **2.12** | **188** | *i* P | **Pn** | **21 02 49.3** | **+0.6** |
| BOLV | | | | *i* S | **Sn** | **21 03 16.0** | **+0.5** |
| **BOLV** | **Bolvadin** | **2.12** | **188** | P | **Pn** | **21 02 49.3** | **+0.6** |
| BOLV | | | | S | **Sn** | **21 03 16.0** | **+0.5** |
| **CTKS** | **Kestanelik-??a** | **2.19** | **282** | *e*PN | **Pn** | **21 02 49.6** | **+0.2** |
| **CTKS** | **Kestanelik-??a** | **2.19** | **282** | *e*Pn | **Pn** | **21 02 49.6** | **+0.2** |
| **BZK** | **Bozkurt** | **2.30** | **60** | *e*PN | **Pn** | **21 02 52.4** | **+1.5** |
| **BZK** | **Bozkurt** | **2.30** | **60** | *e*Pn | **Pn** | **21 02 52.4** | **+1.5** |
| **KAMT** | **Kaman** | **2.33** | **128** | *e*PN | **Pn** | **21 02 52.4** | **+1.0** |
| **KAMT** | **Kaman** | **2.33** | **128** | *e*Pn | **Pn** | **21 02 52.4** | **+1.0** |
| **KCTX** | **Karacabey (Bur** | **2.35** | **257** | *e*PN | **Pn** | **21 02 52.7** | **+1.1** |
| **KCTX** | **Karacabey (Bur** | **2.35** | **257** | *e*Pn | **Pn** | **21 02 52.7** | **+1.1** |
| **SHUT** | **Suhut-Afyon** | **2.35** | **195** | *e*PN | **Pn** | **21 02 52.5** | **+0.8** |
| **SHUT** | **Suhut-Afyon** | **2.35** | **195** | *e*Pn | **Pn** | **21 02 52.5** | **+0.8** |
| **CTYL** | **Yal??k??y-??at** | **2.40** | **287** | *e*PN | **Pn** | **21 02 53.1** | **+0.8** |
| **CTYL** | **Yal??k??y-??at** | **2.40** | **287** | *e*Pn | **Pn** | **21 02 53.1** | **+0.8** |
| **DST** | **Dursunbey** | **2.42** | **241** | *e*PN | **Pn** | **21 02 53.5** | **+0.9** |
| **DST** | **Dursunbey** | **2.42** | **241** | *e*Pn | **Pn** | **21 02 53.5** | **+0.9** |
| **CORM** | **Corum** | **2.58** | **103** | *e*PN | **Pn** | **21 02 56.0** | **+1.0** |
| **CORM** | **Corum** | **2.58** | **103** | *e*Pn | **Pn** | **21 02 56.0** | **+1.0** |
| **CDAG** | **Cicekdag** | **2.61** | **116** | *i* P | **Pn** | **21 02 56.6** | **+1.3** |
| CDAG | | | | *i* S | **Sb** | **21 03 30.1** | **-2.0** |
| **CDAG** | **Cicekdag** | **2.61** | **116** | P | **Pn** | **21 02 56.6** | **+1.3** |
| CDAG | | | | S | **Sb** | **21 03 30.1** | **-2.0** |
| **BNT** | **Bandirma** | **2.65** | **261** | *e*PN | **Pn** | **21 02 56.9** | **+1.1** |
| **BNT** | **Bandirma** | **2.65** | **261** | *e*Pn | **Pn** | **21 02 56.9** | **+1.1** |
| **BYBT** | **Boyabat** | **2.66** | **75** | *e*PN | **Pn** | **21 02 57.1** | **+1.2** |
| **BYBT** | **Boyabat** | **2.66** | **75** | *e*Pn | **Pn** | **21 02 57.1** | **+1.2** |
| **EDC** | **Edincik** | **2.69** | **261** | *e*PN | **Pn** | **21 02 57.1** | **+0.7** |
| **EDC** | **Edincik** | **2.69** | **261** | *e*Pn | **Pn** | **21 02 57.1** | **+0.7** |
| **CRLT** | **Corlu** | **2.75** | **278** | *e*PN | **Pn** | **21 02 57.9** | **+0.7** |
| **CRLT** | **Corlu** | **2.75** | **278** | *e*Pn | **Pn** | **21 02 57.9** | **+0.7** |
| **KHAL** | **Karahalli** | **2.84** | **211** | P | **Pb** | **21 03 03.6** | **0.0** |
| KHAL | | | | S | **Sg** | **21 03 41.2** | **-2.2** |
| **MRMT** | **Marmara Adasi** | **2.86** | **267** | *e*PN | **Pn** | **21 02 59.0** | **+0.3** |
| **MRMT** | **Marmara Adasi** | **2.86** | **267** | *e*Pn | **Pn** | **21 02 59.0** | **+0.3** |
| **TKR** | **Tekirdag** | **2.89** | **275** | *e*PN | **Pn** | **21 02 60.0** | **+0.9** |
| **TKR** | **Tekirdag** | **2.89** | **275** | *e*Pn | **Pn** | **21 03 00.0** | **+0.9** |
| **GONE** | **Gonen-Balikesi** | **2.90** | **256** | *e*PN | **Pn** | **21 03 00.2** | **+1.0** |
| **GONE** | **Gonen-Balikesi** | **2.90** | **256** | *e*Pn | **Pn** | **21 03 00.2** | **+1.0** |
| **BALB** | **Balikesir** | **2.91** | **247** | *e*PN | **Pn** | **21 03 00.3** | **+1.1** |
| **BALB** | **Balikesir** | **2.91** | **247** | *e*Pn | **Pn** | **21 03 00.3** | **+1.1** |
| **KONT** | **Konya--Tatoy** | **2.98** | **164** | *e*PN | **Pn** | **21 03 01.8** | **+1.5** |
| **KONT** | **Konya--Tatoy** | **2.98** | **164** | *e*Pn | **Pn** | **21 03 01.8** | **+1.5** |
| **PHSR** | **Pinarhisar** | **2.99** | **287** | *e*PN | **Pn** | **21 03 01.4** | **+0.9** |
| **PHSR** | **Pinarhisar** | **2.99** | **287** | *e*Pn | **Pn** | **21 03 01.4** | **+0.9** |
| **KULA** | **Kula-Manisa** | **3.10** | **223** | *e*PN | **Pn** | **21 03 03.0** | **+1.0** |
| **KULA** | **Kula-Manisa** | **3.10** | **223** | *e*Pn | **Pn** | **21 03 03.0** | **+1.0** |
| **KRBG** | **Karabiga-Canak** | **3.11** | **263** | *e*PN | **Pn** | **21 03 03.4** | **+1.3** |
| **KRBG** | **Karabiga-Canak** | **3.11** | **263** | *e*Pn | **Pn** | **21 03 03.4** | **+1.3** |
| **SART** | **Tekirdag** | **3.17** | **269** | *i* P | **Pn** | **21 03 03.3** | **+0.3** |
| **SART** | **Tekirdag** | **3.17** | **269** | P | **Pn** | **21 03 03.3** | **+0.3** |
| SART | | | | S | **Sb** | **21 03 50.0** | **+1.9** |
| **RKY** | **Sarkoy-Tekirda** | **3.17** | **269** | *e*PN | **Pn** | **21 03 03.8** | **+0.8** |
| **RKY** | **Sarkoy-Tekirda** | **3.17** | **269** | *e*Pn | **Pn** | **21 03 03.8** | **+0.8** |
| **MANT** | **Manisa** | **3.17** | **224** | P | **Pb** | **21 03 10.5** | **+1.2** |
| **AKHS** | **Akhisar** | **3.34** | **236** | P | **Pb** | **21 03 12.8** | **+0.7** |
| AKHS | | | | S | **Sg** | **21 03 59.5** | **0.0** |
| **AKS** | **Akhisar** | **3.34** | **236** | *e*PN | **Pn** | **21 03 06.2** | **+0.9** |
| **AKS** | **Akhisar** | **3.34** | **236** | *e*Pn | **Pn** | **21 03 06.2** | **+0.9** |
| **SUTC** | **Sutluce-Ispart** | **3.35** | **185** | *e*PN | **Pn** | **21 03 06.9** | **+1.4** |
| **SUTC** | **Sutluce-Ispart** | **3.35** | **185** | *e*Pn | **Pn** | **21 03 06.9** | **+1.4** |
| **LPK** | **Lapseki** | **3.52** | **264** | *e*PN | **Pn** | **21 03 09.3** | **+1.6** |
| **LPK** | **Lapseki** | **3.52** | **264** | *e*Pn | **Pn** | **21 03 09.3** | **+1.6** |
| **EDRB** | **Edirne** | **3.61** | **288** | *e*PN | **Pn** | **21 03 10.8** | **+1.8** |
| **EDRB** | **Edirne** | **3.61** | **288** | *e*Pn | **Pn** | **21 03 10.8** | **+1.8** |
| **ERIK** | **Erikli-Kesan** | **3.67** | **269** | *e*PN | **Pn** | **21 03 11.2** | **+1.4** |
| **ERIK** | **Erikli-Kesan** | **3.67** | **269** | *e*Pn | **Pn** | **21 03 11.2** | **+1.4** |
| **DKL** | **Dikili** | **3.84** | **244** | *e*PN | **Pn** | **21 03 12.8** | **+0.8** |
| **DKL** | **Dikili** | **3.84** | **244** | *e*Pn | **Pn** | **21 03 12.8** | **+0.8** |
| **ENEZ** | **Enez** | **3.94** | **270** | *e*PN | **Pn** | **21 03 14.5** | **+1.0** |
| **ENEZ** | **Enez** | **3.94** | **270** | *e*Pn | **Pn** | **21 03 14.5** | **+1.0** |
| **BOZC** | **Bozcaada** | **4.16** | **258** | P | **Pn** | **21 03 16.2** | **-0.3** |
| BOZC | | | | S | **Sn** | **21 04 05.6** | **-0.1** |
| **MSAB** | **Monastery St. A** | **4.18** | **323** | *i* P | **Pn** | **21 03 16.0** | **-0.7** |
| **TIRR** | **Tirgusor** | **4.23** | **330** | *i* P | **Pn** | **21 03 17.4** | **0.0** |
| **TIRR** | **Tirgusor** | **4.23** | **330** | S | **Sn** | **21 04 04.2** | **-3.0** |
| **CVD** | **Cernavoda** | **4.26** | **326** | *i* P | **Pn** | **21 03 18.6** | **+0.7** |
| **CVD** | **Cernavoda** | **4.26** | **326** | S | **Sn** | **21 04 09.1** | **+1.1** |
| **CFR** | **Carcaliu** | **4.95** | **333** | *i* P | **Pn** | **21 03 26.0** | **-1.3** |
| **CFR** | **Carcaliu** | **4.95** | **333** | S | **Sn** | **21 04 22.3** | **-2.6** |
| **VRI** | **Vrincioaia** | **6.06** | **328** | *i* P | **Pn** | **21 03 42.8** | **+0.2** |
| **VRI** | **Vrincioaia** | **6.06** | **328** | S | **Sn** | **21 04 52.3** | **-0.1** |
| **PLOR** | **Plostina** | **6.08** | **327** | *i* P | **Pn** | **21 03 43.5** | **+0.6** |
| **MLR** | **Muntele Rosu** | **6.11** | **322** | *i* P | **Pn** | **21 03 42.0** | **-1.4** |
| **MLR** | **Muntele Rosu** | **6.11** | **322** | S | **Sn** | **21 04 54.3** | **+0.4** |
| **VOIR** | | **6.52** | **317** | *i* P | **Pn** | **21 03 49.1** | **+0.2** |
| **VOIR** | | **6.52** | **317** | S | **Sn** | **21 05 05.8** | **+2.0** |
| **DOPR** | **Dopca** | **6.73** | **322** | *i* P | **Pn** | **21 03 52.4** | **+0.6** |
| **DOPR** | **Dopca** | **6.73** | **322** | S | **Sn** | **21 05 09.3** | **+0.5** |
| **LOT** | **Lotru** | **7.21** | **312** | *i* P | **Pn** | **21 03 58.2** | **-0.4** |
| **GZR** | **Gura Zlata** | **7.75** | **309** | *i* P | **Pn** | **21 04 04.9** | **-1.0** |

**IDC 16 21:23:44.5±5.2, 50°.69S×113°.58E, h0km, mb3.8/2, mb1 4.1/2, mb1mx3.6/12, mbtmp3.8/2, Error ellipse: s-maj=343.3km s-min=62.5km az=115.0, Southeast Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H01W2** | **Cape Leeuwin H** | **15.79** | **2** | T | T | 21 42 55.1 | |
| | baz=180,slow=74,SNR=53 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **15.79** | **2** | T | T | 21 42 53.8 | |
| | baz=180,slow=74,SNR=65 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **15.80** | **2** | T | T | 21 42 54.6 | |
| | baz=180,slow=74,SNR=70 | | | | | | |
| **ASAR** | **Alice Springs** | **31.25** | **38** | P | P | 21 30 06.0 | 0.0 |
| | 0.8nm,0.8s,baz=201,slow=8.1,SNR=8.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.80** | **36** | P | P | 21 30 36.7 | -0.1 |
| | 1.5nm,0.7s,baz=204,slow=9.0,SNR=4.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **54.75** | **307** | T | T | 22 32 15.4 | |
| | baz=148,slow=76,SNR=4.8 | | | | | | |
| **H08S1** | **Diego Carcia H** | **54.76** | **307** | T | T | 22 32 15.1 | |
| | baz=148,slow=76,SNR=4.5 | | | | | | |
| **H08S3** | **Diego Garcia H** | **54.77** | **307** | T | T | 22 32 18.4 | |
| | baz=148,slow=76,SNR=4.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **144.90** | **113** | PKP | PKPbc | 21 43 22.8 | +0.2 |
| | 0.1nm,0.6s,baz=190,slow=3.7,SNR=2.2 | | | | | | |

*ISCJB* ***16*** *21:41:47.4±0.4, 6°.48S±0°.04×130°.00E±0°.05, h146km,*
*mb3.8/4, Error ellipse: s-maj=7.7km s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BODT | | | | *e*SG | **Sg** | **21 51 00.3** | **+0.3** |
| **BODT** | **Bodrum** | **0.27** | **284** | *e*Pg | **Pg** | **21 50 56.4** | **+0.1** |
| BODT | | | | *e*Sg | **Sg** | **21 51 00.3** | **+0.3** |
| **YER** | **Yerkesik** | **0.53** | **75** | *e*PG | **Pg** | **21 51 01.5** | **+0.3** |
| YER | | | | *e*SG | **Sb** | **21 51 09.4** | **-0.7** |
| **YER** | **Yerkesik** | **0.53** | **75** | *e*Pg | **Pg** | **21 51 01.5** | **+0.3** |
| YER | | | | *e*Sg | **Sb** | **21 51 09.4** | **-0.7** |
| **AYDN** | **Tasoluk** | **0.69** | **16** | *i* P | **Pb** | **21 51 05.5** | **+0.4** |
| AYDN | | | | *i* S | **Sb** | **21 51 14.4** | **-0.3** |
| **AYDN** | **Tasoluk** | **0.69** | **16** | P | **Pb** | **21 51 05.5** | **+0.4** |
| AYDN | | | | S | **Sb** | **21 51 14.4** | **-0.3** |
| **GCAM** | **G?zelcaml?** | **0.77** | **335** | *i* P | **Pb** | **21 51 06.9** | **+0.5** |
| GCAM | | | | *i* S | **Sb** | **21 51 16.5** | **-0.5** |
| **GCAM** | **G?zelcaml?** | **0.77** | **335** | P | **Pb** | **21 51 06.9** | **+0.5** |
| GCAM | | | | S | **Sb** | **21 51 16.5** | **-0.5** |
| **TURN** | **Turunc** | **0.78** | **99** | P | Pg | 21 51 01.3 | -4.6 |
| TURN | | | | S | Sg | 21 51 09.2 | -6.9 |
| **DALY** | **Dalyan (Mu¨la** | **0.83** | **102** | *e*PG | **Pg** | **21 51 06.8** | **0.0** |
| **DALY** | **Dalyan (Mu¨la** | **0.83** | **102** | *e*Pg | **Pg** | **21 51 06.8** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **12** | *e*PG | **Pg** | **21 51 09.4** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **12** | *e*Pg | **Pg** | **21 51 09.4** | **-0.1** |
| **FETY** | **Fethiye** | **1.21** | **107** | *e*PN | **Pg** | **21 51 14.1** | **-0.1** |
| **FETY** | **Fethiye** | **1.21** | **107** | *e*Pn | **Pg** | **21 51 14.1** | **-0.1** |

*ISCJB **16** 21:51:27.9±0.7, 32˚.17N±0˚.03×115˚.21W±0˚.03, h13km±5km, Error ellipse: s-maj=5.4km s-min=4.7km az=147.3*
*NEIC **16** 21:51:29.7, 32˚.19N×115˚.26W, h8km, ML3.6(PAS), ML3.8(ECX), After ECX.*
*ECX **16** 21:51:29.8±0.6, 32˚.19N×115˚.26W, h8km, MD3.5, ML3.7*

**ISC 16 21:51:28.1±1.1, 32˚.17N±0˚.03×115˚.22W±0˚.03, h15km±8km, n37, σ1§01/52, 11C-10D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.23** | **5** | ⇓*e*P | **Pb** | **21 51 34.0** | **-0.1** |
| **CPBX** | **Cerro Prieto** | **0.25** | **344** | ⇓*e*P | **Pg** | **21 51 33.8** | **+0.2** |
| CPBX | | | | ⇓*e*P | **Pg** | **21 51 33.8** | **+0.2** |
| CPBX | | | | *e*S | **Sg** | **21 51 37.5** | **+0.2** |
| **EMSC** | **East Mesa** | **0.60** | **19** | ⇓*i*P | **Pb** | **21 51 40.4** | **+0.1** |
| **SGL** | **Mount Signal** | **0.64** | **318** | ⇑*i*P | **Pg** | **21 51 40.4** | **-0.2** |
| **DREC** | **Desert Rsrch C** | **0.66** | **343** | ⇓*i*P | **Pb** | **21 51 41.5** | **+0.2** |
| **RDX** | **Rancho Dawling** | **0.66** | **248** | ⇑*e*P | **Pg** | **21 51 41.0** | **0.0** |
| RDX | | | | *e*S | **Sg** | **21 51 49.8** | **0.0** |
| RDX | | | | *e* | | 21 51 51.5 | |
| RDX | | | | IAML | | 21 51 51.5 | |
| | comp=N,4μm,0.3s | | | | | | |
| **YMD** | **Yuma Desert** | **0.69** | **56** | ⇑*i*P | **Pb** | **21 51 41.9** | **+0.1** |
| **WESC** | **Westside Schoo** | **0.72** | **324** | ⇑*i*P | **Pg** | **21 51 42.4** | **+0.2** |
| **YUH** | **Yuha Desert** | **0.76** | **309** | ⇑*i*P | **Pg** | **21 51 42.3** | **-0.7** |
| **COK** | **Cook Ranch** | **0.80** | **328** | ⇑*i*P | **Pb** | **21 51 43.4** | **-0.2** |
| **RMX** | **La Rumorosa** | **0.84** | **301** | ⇑*e*P | **Pb** | **21 51 43.4** | **-1.1** |
| RMX | | | | *e*S | **Sb** | **21 51 53.5** | **-2.2** |
| RMX | | | | IAML | | 21 51 55.0 | |
| | comp=N,2μm,0.2s | | | | | | |
| **IBP** | **Imperial Bould** | **0.88** | **304** | P | **Pb** | **21 51 44.7** | **-0.5** |
| | baz=0.8 | | | | | | |
| IBP | | | | S | **Sb** | **21 51 55.9** | **-0.9** |
| | baz=0.8 | | | | | | |
| **IBP** | **Imperial Bould** | **0.88** | **304** | ⇑*i*P | **Pb** | **21 51 44.7** | **-0.5** |
| IBP | | | | *e*S | **Sb** | **21 51 56.4** | **-0.5** |
| **SWSC** | **Sam W. Stewart** | **0.91** | **328** | P | **Pb** | **21 51 44.4** | **-1.1** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.94** | **21** | P | **Pb** | **21 51 45.0** | **-1.1** |
| | baz=0.9 | | | | | | |
| GLA | | | | S | **Sb** | **21 51 56.8** | **-1.5** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.94** | **21** | *e*P | **Pb** | **21 51 45.1** | **-1.0** |
| GLA | | | | *e*S | **Sb** | **21 51 57.4** | **-1.0** |
| **ZAX** | **El Zacaton** | **1.11** | **234** | ⇓*e*P | **Pb** | **21 51 49.0** | **-0.1** |
| **SPX** | **San Pedro Mart** | **1.14** | **190** | ⇓*e*P | **Pb** | **21 51 50.2** | **+0.4** |
| **CBX** | **Cerro Bola** | **1.23** | **277** | ⇑*e*P | **Pn** | **21 51 50.6** | **-0.3** |
| CBX | | | | *e*S | **Sb** | **21 52 06.7** | **-0.2** |
| CBX | | | | ⇓*e* | | 21 52 12.3 | |
| CBX | | | | IAML | | 21 52 12.3 | |
| | comp=E,2μm,0.5s | | | | | | |
| **MONP** | **Monument Peak** | **1.24** | **306** | P | **Pn** | **21 51 50.0** | **-1.1** |
| | baz=1.2 | | | | | | |
| MONP | | | | S | **Sb** | **21 52 06.0** | **-1.2** |
| | baz=1.2 | | | | | | |
| **ECNX** | **Esteban Cantu** | **1.28** | **247** | ⇓*e*P | **Pn** | **21 51 51.6** | **+0.1** |
| **BAR** | **Barrett** | **1.33** | **293** | ⇑*e*P | **Pn** | **21 51 51.7** | **-0.5** |
| **BAR** | **Barrett** | **1.33** | **293** | *e*Pn | **Pn** | **21 51 51.4** | **-0.7** |
| BAR | | | | *e*S | **Sn** | **21 52 08.3** | **-1.3** |
| **PBX** | **Punta Banda** | **1.35** | **252** | ⇑*e*P | **Pn** | **21 51 52.4** | **-0.1** |
| **BC3** | **Big Chuckawall** | **1.49** | **353** | P | **Pn** | **21 51 53.2** | **-1.3** |
| | baz=1.5 | | | | | | |
| **SDRC** | **San Diego Road** | **1.56** | **292** | ⇓*e*P | **Pn** | **21 51 55.3** | **0.0** |
| **109C** | **Camp Elliot, M** | **1.74** | **295** | P | **Pn** | **21 51 57.6** | **-0.2** |
| | baz=1.7 | | | | | | |
| 109C | | | | Sb | **Sb** | **21 52 20.7** | **-0.8** |
| | baz=1.7 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.77** | **324** | *e*Pn | **Pn** | **21 51 57.0** | **-1.3** |
| PFO | | | | *e*Sn | **Sb** | **21 52 22.9** | **+0.5** |
| **IRM** | **Iron Mountain** | **1.98** | **2** | Pb | **Pn** | **21 52 01.9** | **+0.7** |
| | baz=2.0 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.06** | **95** | P | **Pn** | **21 52 01.6** | **-0.6** |
| | baz=2.1 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.06** | **95** | *e*Pn | **Pn** | **21 52 01.8** | **-0.4** |
| **MURC** | **Murrieta** | **2.19** | **311** | Sb | **Sb** | **21 52 35.1** | **+0.7** |
| | baz=2.2 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **2.90** | **316** | Sb | **Sb** | **21 52 55.8** | **+0.9** |
| | baz=2.9 | | | | | | |
| **MWC** | **Mount Wilson** | **3.14** | **311** | *e*Pn | **Pn** | **21 52 19.4** | **+2.2** |
| MWC | | | | *e*Sn | **Sn** | **21 52 57.3** | **+2.9** |
| **PASC** | **Pasadena Art C** | **3.19** | **310** | *e*Pn | **Pn** | **21 52 18.4** | **+0.7** |
| **GSC** | **Goldstone** | **3.39** | **337** | *e*Pn | **Pn** | **21 52 23.3** | **+2.8** |
| **SHPR** | **Sheep Range** | **4.32** | **1** | *e*Pn | **Pn** | **21 52 34.6** | **+1.1** |
| SHPR | | | | *e*Pg | **Pg** | **21 52 50.9** | **0.0** |

*IDC **16** 21:52:39.5±1.4, 31˚.25N×141˚.85E, h0km, mb3.6/7, mb1 3.7/8, mb1mx3.5/47, mbtmp3.6/8, ML2.6/1, Error ellipse: s-maj=51.3km s-min=20.6km az=63.0*
*ISCJB **16** 21:52:42.2±0.8, 31˚.21N±0˚.06×141˚.8E±0˚.1, h29km, mb3.6/7, Error ellipse: s-maj=17.3km s-min=6.5km az=159.2*
*JMA **16** 21:52:42.9±0.4, 31˚.45N×141˚.80E, h0km, M3.8*

**ISC 16 21:52:44.3±1.1, 31˚.24N±0˚.09×141˚.7E±0˚.1, h29km, n14, σ1§69/21, mb3.7/7, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ2** | **Mitsune** | **2.46** | **320** | P | **Pn** | **21 53 23.8** | **+1.4** |
| JHJ2 | | | | S | **Sb** | **21 53 53.7** | **-3.9** |
| **JHJ** | **Hachijo jima 2** | **2.48** | **320** | Pn | **Pn** | **21 53 22.4** | **-0.3** |
| | 3.1nm,0.3s,baz=120,slow=11,SNR=1.8 | | | | | | |
| JHJ | | | | Sn | **Sn** | **21 53 52.7** | **+0.7** |
| | 6.8nm,0.3s,baz=71,slow=23,SNR=1.2 | | | | | | |
| **BSO1** | **Boso 1** | **3.46** | **350** | P | **Pn** | **21 53 36.5** | **+0.8** |
| BSO1 | | | | S | **Sn** | **21 54 17.3** | **+1.9** |
| **JHU** | **Hanno** | **5.02** | **337** | P | **Pn** | **21 53 59.7** | **+2.0** |
| JHU | | | | S | **Sn** | **21 54 56.6** | **+1.8** |
| **JRY** | **Ryogami san** | **5.31** | **335** | P | **Pn** | **21 54 03.6** | **+2.0** |
| JRY | | | | S | **Sn** | **21 55 04.1** | **+2.3** |
| **JHO** | **Hitachi** | **5.44** | **350** | P | **Pn** | **21 54 03.3** | **-0.1** |
| JHO | | | | S | **Sn** | **21 55 02.4** | **-2.7** |
| **JAG** | **Ashikaga** | **5.50** | **341** | P | **Pn** | **21 54 05.9** | **+1.6** |
| JAG | | | | S | **Sn** | **21 55 07.3** | **+0.8** |
| **SONM** | **Songino Array** | **31.54** | **312** | P | **P** | **21 59 04.4** | **+0.4** |
| | 0.4nm,0.7s,baz=112,slow=9.1,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.14** | **317** | P | **P** | **22 01 05.6** | **-0.3** |
| | 0.4nm,0.4s,baz=98,slow=10,SNR=1.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.59** | **307** | P | **P** | **22 01 18.0** | **+0.5** |
| | 0.2nm,0.2s,baz=81,slow=9.1,SNR=1.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.90** | **312** | P | **P** | **22 01 35.2** | **+0.2** |
| | 0.2nm,0.2s,baz=90,slow=6.9,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Ar** | **51.38** | **189** | P | **P** | **22 01 45.2** | **-1.3** |
| | 0.3nm,0.3s,baz=6.2,slow=7.6,SNR=1.7 | | | | | | |
| **ASAR** | **Alice Springs** | **55.10** | **189** | P | **P** | **22 02 14.4** | **+0.6** |
| | 0.2nm,0.5s,baz=6.9,slow=6.2,SNR=5.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **93.45** | **53** | P | **P** | **22 05 56.8** | **-0.8** |
| | 0.4nm,0.9s,baz=338,slow=3.0,SNR=3.9 | | | | | | |

*SKO **16** 22:12:22.4, 41˚.43N×20˚.06E, h49km, M1.6, ML1.8*
*CSEM **16** 22:12:24.4±0.2, 41˚.57N×20˚.17E, h2km, ML2.3, Error ellipse: s-maj=5.2km s-min=3.0km az=47.0*
*ISCJB **16** 22:12:24.0±0.5, 41˚.59N±0˚.03×20˚.19E±0˚.04, h0km±4km, Error ellipse: s-maj=5.7km s-min=2.9km az=139.1*

*ATH **16** 22:12:24.2, 41˚.62N×20˚.22E, h15km±3km, MD3.2/5*
*BEO **16** 22:12:24.7±0.5, 41˚.55N×20˚.25E, h8km±4km, ML2.3/8*
*PDG **16** 22:12:25.3±0.3, 41˚.60N×20˚.12E, h6km, ML2.4/9, Error ellipse: s-maj=0.4km s-min=0.8km az=0.0*

**ISC 16 22:12:24.5±1.1, 41˚.58N±0˚.02×20˚.18E±0˚.03, h5km±10km, n53, σ0§90/92, 6C-14D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.33** | **225** | *e*Pg | **Pg** | **22 12 30.7** | **-0.2** |
| **TIR** | **Tirane** | **0.33** | **225** | *e*Pg | **Pg** | **22 12 30.7** | **-0.2** |
| **OHR** | **Ohrid** | **0.66** | **135** | *i* Pg | **Pg** | **22 12 37.0** | **-0.3** |
| OHR | | | | *i* Sg | **Sb** | **22 12 48.0** | **-0.1** |
| OHR | | | | *e*Lg | Lg | 22 12 48.0 | |
| | comp=N,67nm,0.3s | | | | | | |
| OHR | | | | *e*Lg | Lg | 22 12 48.6 | |
| | comp=E,76nm,0.4s | | | | | | |
| **OHR** | **Ohrid** | **0.66** | **135** | *i* Pg | **Pg** | **22 12 36.9** | **-0.3** |
| OHR | | | | *i* Sg | **Sb** | **22 12 47.9** | **-0.1** |
| OHR | | | | *e*Lg | Lg | 22 12 48.0 | |
| | comp=E,67nm,0.3s | | | | | | |
| **ULC** | **Ulcinj** | **0.80** | **299** | ⇓*i*Pg | **Pg** | **22 12 39.0** | **-0.8** |
| ULC | | | | *e*Sg | **Sb** | **22 12 51.0** | **-0.9** |
| **ULC** | **Ulcinj** | **0.80** | **299** | ⇓*i*Pg | **Pg** | **22 12 39.0** | **-0.8** |
| ULC | | | | *e*Sg | **Sb** | **22 12 51.0** | **-0.9** |
| **DRME** | **Dracevica, Mon** | **0.96** | **309** | ⇓*i*Pg | **Pg** | **22 12 41.9** | **-1.0** |
| DRME | | | | *e*Sg | **Sb** | **22 12 56.2** | **-0.4** |
| **DRME** | **Dracevica, Mon** | **0.96** | **309** | ⇓*i*Pg | **Pg** | **22 12 41.9** | **-1.0** |
| DRME | | | | *e*Sg | **Sb** | **22 12 56.2** | **-0.4** |
| **SKO** | **Skopje** | **1.02** | **67** | *i* Pg | **Pn** | **22 12 46.1** | **+0.6** |
| SKO | | | | *e*Lg | Lg | 22 12 58.9 | |
| | comp=N,20nm,0.4s | | | | | | |
| SKO | | | | *e*Lg | Lg | 22 12 59.9 | |
| | comp=E,7.9nm,0.4s | | | | | | |
| **SKO** | **Skopje** | **1.02** | **67** | *i* Pg | **Pn** | **22 12 46.0** | **+0.6** |
| SKO | | | | *e*Lg | Lg | 22 12 58.8 | |
| | comp=E,20nm,0.4s | | | | | | |
| **PVY** | **Plav** | **1.02** | **351** | ⇓*i*Pg | **Pg** | **22 12 43.5** | **-0.7** |
| PVY | | | | *e*Sg | **Sb** | **22 12 59.5** | **+0.9** |
| **PVY** | **Plav** | **1.02** | **351** | ⇓*i*Pg | **Pg** | **22 12 43.5** | **-0.7** |
| PVY | | | | *e*Sg | **Sb** | **22 12 59.5** | **+0.9** |
| **PDG** | **Podgorica** | **1.09** | **321** | *e*Pg | **Pg** | **22 12 44.4** | **-1.1** |
| PDG | | | | *e*Sg | **Sn** | **22 13 01.7** | **-0.2** |
| **PDG** | **Podgorica** | **1.09** | **321** | ⇓*i*Pg | **Pg** | **22 12 44.7** | **-0.8** |
| PDG | | | | *e*Sg | **Sn** | **22 13 01.6** | **-0.3** |
| **TTG** | **Podgorica** | **1.09** | **321** | ⇓*i*Pg | **Pg** | **22 12 44.7** | **-0.8** |
| TTG | | | | *e*Sg | **Sn** | **22 13 01.6** | **-0.3** |
| **BUM** | **Brajici-Budva** | **1.20** | **307** | ⇓*i*Pg | **Pg** | **22 12 46.4** | **-1.1** |
| BUM | | | | *e*Sg | **Sn** | **22 13 04.8** | **+0.1** |
| **BUM** | **Brajici-Budva** | **1.20** | **307** | ⇓*i*Pg | **Pg** | **22 12 46.4** | **-1.1** |
| BUM | | | | *e*Sg | **Sn** | **22 13 04.8** | **+0.1** |
| **FNA** | **Florina** | **1.21** | **131** | *e*PN | **Pg** | **22 12 46.7** | **-0.9** |
| FNA | | | | *e*SN | **Sb** | **22 13 04.1** | **+0.4** |
| **FNA** | **Florina** | **1.21** | **131** | *e*Pg | **Pg** | **22 12 46.7** | **-0.9** |
| FNA | | | | *e*Sb | **Sb** | **22 13 04.1** | **+0.4** |
| **BEY** | **Berane** | **1.31** | **351** | ⇑*i*Pg | **Pb** | **22 12 49.6** | **0.0** |
| BEY | | | | *e*Sg | **Sn** | **22 13 09.3** | **+1.9** |
| **IVA** | **Berane** | **1.31** | **351** | ⇑*i*Pg | **Pb** | **22 12 49.6** | **0.0** |
| IVA | | | | *e*Sg | **Sn** | **22 13 09.3** | **+1.9** |
| **NEST** | **Nestorio** | **1.34** | **150** | *e*PN | **Pb** | **22 12 49.9** | **-0.2** |
| **NEST** | **Nestorio** | **1.34** | **150** | *e*Pb | **Pb** | **22 12 49.9** | **-0.2** |
| **NKME** | **Niksic** | **1.50** | **323** | ⇓*i*Pg | **Pn** | **22 12 52.0** | **0.0** |
| NKME | | | | *e*Sg | **Sg** | **22 13 14.4** | **+1.9** |
| **NKME** | **Niksic** | **1.50** | **323** | ⇓*i*Pg | **Pn** | **22 12 52.0** | **0.0** |
| NKME | | | | *e*Sg | **Sg** | **22 13 14.4** | **+1.9** |
| **NKY** | **Niksic** | **1.51** | **325** | ⇑*i*Pg | **Pn** | **22 12 52.2** | **-0.2** |
| NKY | | | | *e*Sg | **Sg** | **22 13 15.3** | **+2.1** |
| **NKY** | **Niksic** | **1.51** | **325** | ⇑*i*Pg | **Pn** | **22 12 52.2** | **-0.2** |
| NKY | | | | *e*Sg | **Sg** | **22 13 15.3** | **+2.1** |
| **HCY** | **Herceg Novi** | **1.52** | **305** | ⇑*i*Pg | **Pn** | **22 12 52.1** | **-0.3** |
| HCY | | | | *e*Sg | **Sg** | **22 13 15.6** | **+2.1** |
| **HCY** | **Herceg Novi** | **1.52** | **305** | ⇑*i*Pg | **Pn** | **22 12 52.1** | **-0.3** |
| HCY | | | | *e*Sg | **Sg** | **22 13 15.6** | **+2.1** |
| **SJES** | **Sjenica** | **1.69** | **355** | *e*Pn | **Pb** | **22 12 55.7** | **-0.4** |
| SJES | | | | *e*Sn | **Sg** | **22 13 18.3** | **-0.4** |
| **BARS** | **Barje** | **1.73** | **44** | *e*Pn | **Pn** | **22 12 54.8** | **-0.5** |
| BARS | | | | *e*Sn | **Sn** | **22 13 17.8** | **0.0** |
| **BARS** | **Barje** | **1.73** | **44** | *e*Pn | **Pn** | **22 12 54.8** | **-0.5** |
| BARS | | | | *e*Sn | **Sn** | **22 13 17.8** | **0.0** |
| **SELS** | **Selova** | **1.78** | **23** | *e*Pn | **Pn** | **22 12 54.8** | **-1.1** |
| SELS | | | | *e*Sn | **Sn** | **22 13 18.2** | **-0.7** |
| **GRG** | **Griva** | **1.79** | **110** | *e*PN | **Pn** | **22 12 56.3** | **+0.3** |
| **GRG** | **Griva** | **1.79** | **110** | *e*Pn | **Pn** | **22 12 56.3** | **+0.3** |
| **BRY** | **Bratogost** | **1.79** | **318** | ⇓*i*Pn | **Pb** | **22 12 57.1** | **-0.9** |
| BRY | | | | *e*Sn | **Sg** | **22 13 22.5** | **+0.3** |
| **BRY** | **Bratogost** | **1.79** | **318** | ⇓*i*Pn | **Pb** | **22 12 57.1** | **-0.9** |
| BRY | | | | *e*Sn | **Sg** | **22 13 22.5** | **+0.3** |
| **UPM** | **Unac-Piva** | **1.88** | **330** | *e*Pn | **Pb** | **22 12 58.7** | **-0.6** |
| UPM | | | | *e*Sn | **Sg** | **22 13 24.3** | **-0.5** |
| **UPM** | **Unac-Piva** | **1.88** | **330** | *e*Pn | **Pb** | **22 12 58.7** | **-0.6** |
| UPM | | | | *e*Sn | **Sg** | **22 13 24.3** | **-0.5** |
| **IVAS** | **Ivanjica** | **1.99** | **359** | *e*Pn | **Pn** | **22 12 59.6** | **+0.7** |
| IVAS | | | | *e*Sn | **Sn** | **22 13 23.1** | **-1.2** |
| **IVAS** | **Ivanjica** | **1.99** | **359** | *e*Pn | **Pn** | **22 12 59.6** | **+0.7** |
| IVAS | | | | *e*Sn | **Sn** | **22 13 23.1** | **-1.2** |
| **IGT** | **Igoumenitsa** | **2.05** | **177** | *e*PN | **Pb** | **22 13 00.8** | **-1.4** |
| **IGT** | **Igoumenitsa** | **2.05** | **177** | *e*Pn | **Pb** | **22 13 00.8** | **-1.4** |
| **KNT** | **Kendrikon** | **2.09** | **101** | *e*PN | **Pn** | **22 13 00.9** | **+0.7** |
| **KNT** | **Kendrikon** | **2.09** | **101** | *e*Pn | **Pn** | **22 13 00.9** | **+0.7** |
| **STON** | **Ston** | **2.25** | **306** | *e*Pn | **Pn** | **22 13 03.4** | **+1.1** |
| STON | | | | *e*Sn | **Sn** | **22 13 31.5** | **+1.1** |
| **STON** | **Ston** | **2.25** | **306** | *e*Pn | **Pn** | **22 13 03.4** | **+1.1** |
| STON | | | | *e*Sn | **Sn** | **22 13 31.5** | **+1.1** |
| **GRUS** | **Gruza** | **2.34** | **10** | *e*Pn | **Pn** | **22 13 03.8** | **+0.2** |
| **GRUS** | **Gruza** | **2.34** | **10** | *e*Pn | **Pn** | **22 13 03.8** | **+0.2** |
| **BBLS** | **Lazići** | **2.35** | **346** | *e*Pn | **Pn** | **22 13 04.8** | **+0.9** |
| BBLS | | | | *e*Sn | **Sn** | **22 13 33.3** | **+0.1** |
| **BBLS** | **Lazići** | **2.35** | **346** | *e*Pn | **Pn** | **22 13 04.8** | **+0.9** |
| BBLS | | | | *e*Sn | **Sn** | **22 13 33.3** | **+0.1** |
| **DIVS** | **Divibare** | **2.52** | **357** | *e*Pn | **Pn** | **22 13 07.0** | **+0.8** |
| DIVS | | | | *e*Sn | **Sn** | **22 13 37.7** | **+0.4** |
| **DIVS** | **Divibare** | **2.52** | **357** | *e*Pn | **Pn** | **22 13 07.0** | **+0.8** |
| DIVS | | | | *e*Sn | **Sn** | **22 13 37.7** | **+0.4** |

**OTT 16 22:34:06.5±0.5, 77˚.57N×92˚.92W, h18km, MN3.5/4, 265km northeast from Polaris, Nu Sverdrup Seismic Zone., Queen Elizabeth Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EUNU** | **Eureka** | **2.80** | **24** | PN | Pn | **22 34 49.5** | **-0.9** |
| EUNU | | | | SN | Sn | 22 35 23.1 | -0.6 |
| EUNU | | | | Trac | | 22 35 41.2 | |
| | comp=Z,74nm,1.2s | | | | | | |
| **RES** | **Resolute Bay** | **2.94** | **190** | PN | Pn | 22 34 52.6 | +0.4 |
| RES | | | | SN | Sn | 22 35 28.4 | +1.4 |
| RES | | | | LG | Lg | 22 35 37.4 | |
| RES | | | | Trac | | 22 35 46.4 | |
| | comp=Z,92nm,0.2s | | | | | | |
| **TULEG** | **Thule** | **5.49** | **89** | PN | Pn | 22 35 25.9 | -1.3 |
| TULEG | | | | SN | Sn | 22 36 26.9 | -2.9 |
| **GIFN** | **Gifford Fjord,** | **8.22** | **152** | PN | Pn | 22 36 02.1 | -2.5 |
| GIFN | | | | SN | Sn | 22 37 30.2 | -6.6 |
| GIFN | | | | LG | Lg | 22 38 21.4 | |
| GIFN | | | | Trac | | 22 38 28.1 | |
| | comp=Z,112nm,1.6s | | | | | | |
| **ILON** | **Igloolik, Nuna** | **8.80** | **154** | PN | Pn | 22 36 10.2 | -2.4 |
| ILON | | | | SN | Sn | 22 37 45.0 | -6.0 |
| ILON | | | | LG | Lg | 22 38 33.4 | |
| ILON | | | | Trac | | 22 38 46.7 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **LAIN** | **Lailor River,** | **8.90** | **158** | PN | Pn | 22 36 11.4 | -2.7 |
| LAIN | | | | SN | Sn | 22 37 46.6 | -7.1 |
| LAIN | | | | LG | Lg | 22 38 42.1 | |
| LAIN | | | | Trac | | 22 38 55.4 | |
| | comp=Z,41nm,0.8s | | | | | | |
| **SMLN** | **Simpson Lake,** | **9.03** | **178** | PN | Pn | 22 36 13.7 | -2.1 |
| SMLN | | | | SN | Sn | 22 37 50.7 | -6.1 |
| SMLN | | | | LG | Lg | 22 38 39.4 | |
| SMLN | | | | Trac | | 22 38 50.4 | |
| | comp=Z,44nm,0.8s | | | | | | |
| **KUGN** | **Kugaaruk Camp,** | **9.57** | **174** | PN | Pn | 22 36 21.2 | -1.9 |
| KUGN | | | | SN | Sn | 22 38 00.7 | -9.2 |
| KUGN | | | | LG | Lg | 22 38 57.8 | |
| KUGN | | | | Trac | | 22 39 10.0 | |
| | comp=Z,102nm,1.6s | | | | | | |
| **BULN** | **Bullion Camp,** | **11.23** | **180** | PN | Pn | 22 36 42.3 | -3.6 |
| BULN | | | | SN | Sn | 22 38 41.8 | -9.0 |
| BULN | | | | LG | Lg | 22 39 49.6 | |
| BULN | | | | Trac | | 22 40 05.8 | |
| | comp=Z,97nm,1.8s | | | | | | |
| **HPLN** | **Hepburn Lake,** | **13.07** | **223** | PN | Pn | 22 37 07.9 | -3.1 |
| HPLN | | | | SN | Sn | 22 39 14.0 | -22 |
| **MCMN** | **McManaman Lake** | **14.34** | **179** | SN | Sn | 22 39 53.2 | -13 |
| MCMN | | | | LG | Lg | 22 41 28.0 | |
| **SEDN** | **First Sedna Si** | **14.40** | **177** | PN | Pn | 22 37 23.9 | -5.2 |
| SEDN | | | | SN | Sn | 22 39 58.5 | -10 |
| SEDN | | | | LG | Lg | 22 41 27.9 | |

*IDC **16** 22:43:36.1±3.8, 13˚.99N×92˚.05W, h0km, mb3.6/2, mb1 3.8/4, mb1mx3.5/40, mbtmp3.4/4, ML3.6/2, Error ellipse: s-maj=133.0km s-min=55.4km az=41.0*
*MEX **16** 22:43:43.5±0.3, 14˚.15N×92˚.50W, h27km±46km, MD4.0*

**ISC 16 22:43:45.0±2.0, 14˚.2N±0˚.2×92˚.5W±0˚.1, h46km, n7, σ2§16/10, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.66** | **337** | *e*P | **Pn** | **22 44 09.3** | **-2.3** |
| PCIG | | | | *i* S | **Sn** | **22 44 28.9** | **-2.8** |
| **CCIG** | **Comitan** | **2.13** | **10** | *e*P | **Pn** | **22 44 18.9** | **+0.6** |
| CCIG | | | | *e*S | **Sn** | **22 44 43.8** | **+0.1** |
| **CMIG** | **Matias Romero** | **3.68** | **322** | Pn | **Pn** | **22 44 38.9** | **-0.5** |
| | 4.3nm,0.3s,baz=138,slow=11,SNR=22 | | | | | | |
| CMIG | | | | Sn | **Sn** | **22 45 24.4** | **+2.9** |
| | 10.0nm,0.3s,baz=265,slow=19,SNR=7.0 | | | | | | |
| CMIG | | | | Lg | Lg | 22 45 34.0 | |
| | 18nm,0.3s,baz=50,slow=15,SNR=6.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **18.27** | **327** | P | **Pn** | **22 47 57.5** | **+2.3** |
| | 0.0nm,0.3s,baz=148,slow=12,SNR=4.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **33.21** | **321** | P | **P** | **22 50 19.1** | **+1.2** |
| | 0.4nm,0.6s,baz=130,slow=8.4,SNR=5.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **50.74** | **347** | P | **P** | **22 52 39.2** | **-0.8** |
| | 0.6nm,0.6s,baz=152,slow=7.0,SNR=3.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **145.66** | **340** | PKPbc | **PKPbc** | **23 03 18.0** | **-1.6** |
| | 0.4nm,0.3s,baz=349,slow=3.8,SNR=5.3 | | | | | | |

**IDC 16 22:44:08.3±2.0, 5˚.03S×143˚.83E, h0km, mb3.5/3, mb1 3.9/4, mb1mx3.6/28, mbtmp3.6/4, ML3.9/1, Error ellipse: s-maj=84.7km s-min=30.4km az=108.0, New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.47** | **211** | P | P | 22 48 14.6 | -0.4 |
| | 0.4nm,0.3s,baz=33,slow=12,SNR=6.9 | | | | | | |
| **ASAR** | **Alice Springs** | **20.86** | **206** | P | P | 22 48 51.6 | -0.5 |
| | 5.8nm,0.8s,baz=38,slow=9.5,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **74.75** | **321** | P | P | 22 55 50.1 | -0.2 |
| | 0.5nm,0.6s,baz=94,slow=9.7,SNR=5.4 | | | | | | |
| **ILAR** | **Eielson Array** | **85.85** | **24** | P | P | 22 56 49.9 | +0.3 |
| | 0.6nm,1.0s,baz=245,slow=6.5,SNR=3.6 | | | | | | |

*IDC **16** 22:46:51.4±1.2, 0˚.60N×123˚.97E, h0km, mb4.0/5, mb1 4.2/5, mb1mx3.7/30, mbtmp4.0/5, Error ellipse: s-maj=94.0km s-min=19.0km az=62.0*
*ISCJB **16** 22:47:12.4±0.6, 0˚.17N±0˚.07×123˚.87E±0˚.04, h208km±5km, mb3.7/5, Error ellipse: s-maj=11.3km s-min=6.4km az=17.9*
*DJA **16** 22:47:14.8±0.5, 0˚.N±4˚×12˚4E±˚, h182km±5km, M4.0/11, mb4.1/2, mB4.7/1, MLv3.9/11, Mw(mB)4.0/1*

**ISC 16 22:47:12.7±0.8, 0˚.20N±0˚.07×123˚.87E±0˚.05, h208km±7km, n16, σ1§32/24, mb3.9/5, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **0.39** | **17** | P | **Pn** | **22 47 41.1** | **+0.7** |
| KMSI | | | | S | **S** | **22 48 02.4** | **+0.3** |
| **GTOI** | **Gorontalo** | **0.96** | **297** | P | **Pn** | **22 47 44.0** | **+1.0** |
| GTOI | | | | S | **S** | **22 48 08.6** | **+2.2** |
| **LUWI** | **Luwuk** | **1.65** | **222** | P | **Pn** | **22 47 48.4** | **0.0** |
| LUWI | | | | S | **S** | **22 48 14.5** | **-1.5** |
| **MRSI** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=0.7 | | | | | | | |
| TIN | | | | S | Sg | 23 36 09.0 | +0.2 | |
| | baz=0.7 | | | | | | | |
| FURC | Furnace Creek, baz=0.8 | 0.80 | 149 | P | Pg | 23 36 01.6 | +0.2 | |
| FURC | | | | S | Sb | 23 36 12.7 | +0.5 | |
| | baz=0.8 | | | | | | | |
| DAC | Darwin (Calif) | 0.90 | 192 | *e*Pg | Pg | 23 36 03.2 | -0.2 | |
| DAC | | | | *e*Sg | Sg | 23 36 14.9 | -0.3 | |
| CWC | Cottonwood Cre baz=0.9 | 0.92 | 219 | S | Sg | 23 36 15.6 | -0.2 | |
| TPNV | Topopah Spring baz=0.9 | 0.92 | 103 | P | Pg | 23 36 03.9 | +0.1 | |
| MPMC | Manual Prospec baz=1.1 | 1.10 | 185 | P | Pb | 23 36 06.8 | -0.1 | |
| MPMC | | | | S | Sb | 23 36 21.3 | +0.2 | |
| | baz=1.1 | | | | | | | |
| MLAC | Mammoth Lakes baz=1.3 | 1.26 | 292 | Pb | Pb | 23 36 09.9 | +0.2 | |
| ISA | Isabella | 1.74 | 211 | *e*Pn | Pn | 23 36 15.2 | -0.6 | |
| R11A | Troy Canyon, C baz=1.9 | 1.85 | 49 | Pb | Pb | 23 36 20.1 | +0.5 | |
| R11A | | | | Sb | Sg | 23 36 45.0 | -0.4 | |
| | baz=1.9 | | | | | | | |
| R11A | Troy Canyon, C | 1.85 | 49 | *e*Pn | Pb | 23 36 20.1 | +0.5 | |
| R11A | | | | *e*Pg | Pg | 23 36 24.5 | +3.0 | |
| R11A | | | | *e*Sg | Sg | 23 36 45.1 | -0.4 | |
| SHPR | Sheep Range | 1.89 | 109 | *e*Pn | Pb | 23 36 20.1 | -0.2 | |
| SHPR | | | | *e*S | Sg | 23 36 46.6 | -0.1 | |
| GSC | Goldstone | 1.91 | 166 | *e*Pn | Pn | 23 36 18.7 | +0.5 | |
| CMB | Columbia Colle | 2.55 | 291 | *e*Pg | Pb | 23 36 32.2 | +0.6 | |
| CCUT | Cedar City | 3.21 | 82 | Pn | Pn | 23 36 36.9 | +0.6 | |
| ELK | Elko | 3.95 | 24 | *e*Pg | Pg | 23 37 00.7 | -0.9 | |
| ELK | | | | *e*Sg | Sg | 23 37 50.0 | -2.9 | |
| MSU | Marysvale | 4.33 | 70 | *e*Pg | Pg | 23 37 07.4 | -1.4 | |
| MSU | | | | *e*Sg | Sg | 23 38 03.9 | -1.0 | |
| WUAZ | Wupatki | 5.11 | 107 | *e*Pg | Pb | 23 37 20.0 | +4.8 | |

*NEIC* ***16*** *23:39:09.9, 17.48N×62.10W, h10km, MD4.0(TRN), After TRN.*
*NEIC Felt at Cedar Grove, Antigua.*
**TRN 16 23:39:09.8, 17.48N×62.10W, h10km, MD3.7, 2C, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANWB | Willy Bob | 0.35 | 58 | *e*P | Pb | 23 39 18.9 | +0.8 |
| ANWB | | | | *e*S | Sb | 23 39 24.9 | +1.1 |
| ANWB | Willy Bob | 0.35 | 58 | *e*Pg | Pb | 23 39 19.0 | +0.8 |
| ANWB | | | | *e*Sg | Sb | 23 39 23.7 | -0.1 |
| BPA | Boggy Peak | 0.49 | 152 | *e*P | Pn | 23 39 22.6 | -0.3 |
| BPA | | | | *e*S | Sb | 23 39 29.8 | +2.0 |
| BPA | Boggy Peak | 0.49 | 152 | *e*P | Pn | 23 39 22.6 | -0.3 |
| BPA | | | | *e*S | Sb | 23 39 29.8 | +2.0 |
| NVRH | Round Hill, Ne | 0.56 | 238 | *e*P | Pn | 23 39 24.3 | +0.4 |
| NVRH | | | | *e*S | Sn | 23 39 32.7 | -0.5 |
| SKI | Saint Kitts | 0.63 | 257 | *e*P | Pn | 23 39 25.3 | +0.5 |
| SKI | | | | *e*S | Sn | 23 39 35.2 | +0.4 |
| SKI | Saint Kitts | 0.63 | 257 | *e*P | Pn | 23 39 25.3 | +0.5 |
| SKI | | | | *e*S | Sn | 23 39 35.2 | +0.4 |
| SKDB | Saint Kitts 2 | 0.68 | 263 | *e*P | Pn | 23 39 26.5 | +1.0 |
| SKDB | | | | *e*S | Sn | 23 39 37.0 | +0.9 |
| SKDB | Saint Kitts 2 | 0.68 | 263 | *e*P | Pn | 23 39 26.5 | +1.0 |
| SKDB | | | | *e*S | Sn | 23 39 37.0 | +0.9 |
| MBWH | | 0.74 | 187 | *i*P | Pn | 23 39 26.7 | +0.4 |
| MBWH | | | | *e*S | Sn | 23 39 37.2 | -0.5 |
| MLYT | Lee's Yard | 0.76 | 187 | *e*P | Pn | 23 39 27.2 | +0.5 |
| MLYT | | | | *e*S | Sn | 23 39 40.2 | +2.0 |
| SEUS | St. Eustatius | 0.84 | 271 | *e*P | Pn | 23 39 29.5 | +1.9 |
| SEUS | | | | *e*S | Sn | 23 39 42.9 | +2.8 |
| SEUS | St. Eustatius | 0.84 | 271 | *e*P | Pn | 23 39 29.5 | +1.9 |
| SEUS | | | | *e*S | Sn | 23 39 42.9 | +2.8 |
| SABA | Saba | 1.10 | 277 | *e*P | Pn | 23 39 32.6 | +1.4 |
| SABA | Saba | 1.10 | 277 | *e*P | Pn | 23 39 32.9 | +1.6 |
| SABA | | | | *e*S | Sn | 23 39 49.1 | +2.6 |
| SABA | Saba | 1.10 | 277 | *e*P | Pn | 23 39 32.9 | +1.6 |
| SABA | | | | *e*S | Sn | 23 39 49.1 | +2.6 |
| SEG | Port Louis | 1.21 | 152 | *i*P | Pg | 23 39 33.9 | +0.7 |
| LZG | Guadaloupe-1 | 1.37 | 167 | *e*P | Pg | 23 39 36.3 | +0.2 |
| SSG | Sans Toucher | 1.44 | 164 | *e*P | Pg | 23 39 37.6 | -0.2 |
| MLG | Mont-d'or | 1.46 | 165 | *e*P | Pg | 23 39 37.9 | -0.1 |
| ECG | Echelle | 1.49 | 163 | *e*P | Pg | 23 39 38.4 | -0.4 |
| DOG | Dongo Capester | 1.51 | 162 | *e*P | Pg | 23 39 38.7 | -0.3 |
| PHG | Guadaloupe-2 | 1.52 | 163 | *e*P | Pg | 23 39 39.1 | -0.1 |
| DEG | La Desirade | 1.53 | 139 | *e*P | Pb | 23 39 38.3 | -0.1 |
| DEG | La Desirade | 1.53 | 139 | *e*P | Pb | 23 39 38.3 | -0.1 |
| TBG | Guadaloupe-3 | 1.68 | 165 | *e*P | Pg | 23 39 41.8 | -0.2 |
| MGG | Marie-Galante | 1.73 | 154 | *e*P | Pb | 23 39 41.7 | +0.1 |
| MGG | Marie-Galante | 1.73 | 154 | *e*P | Pb | 23 39 41.7 | +0.1 |
| BBL | Barber's Block | 2.04 | 163 | *e*P | Pb | 23 39 46.5 | -0.5 |
| BBL | Barber's Block | 2.04 | 163 | *e*P | Pb | 23 39 46.5 | -0.5 |
| STVI | Saint Thomas | 2.85 | 288 | *e*Pn | Pn | 23 39 56.4 | +1.1 |
| STVI | | | | *e*S | Sn | 23 40 30.6 | +0.8 |
| FDF | Fort de France | 2.88 | 161 | *e*Pn | Pn | 23 39 58.2 | +2.4 |
| SJG | San Juan | 3.91 | 280 | *e*Pn | Pn | 23 40 12.4 | +2.5 |
| CELP | Cerrillos | 4.31 | 279 | Pn | Pn | 23 40 18.2 | +2.8 |
| CELP | | | | *e*Sn | Sn | 23 41 09.5 | +3.8 |
| OBIP | Obispado Ponce | 4.33 | 278 | *e*Pn | Pn | 23 40 18.2 | +2.5 |
| LRS | Lares | 4.59 | 281 | Pn | Pn | 23 40 21.0 | +1.7 |
| LSP | Las Mesas | 4.80 | 279 | P | Pn | 23 40 24.2 | +2.0 |
| CRPR | Cabo Rojo, PR | 4.80 | 277 | *e*Pn | Pn | 23 40 23.6 | +1.4 |
| AGPR | Aguadilla, PR | 4.87 | 282 | *e*Pn | Pn | 23 40 24.5 | +1.4 |

*BJI* ***16*** *23:59:43.9, 56.20S×28.59W, h10km, mB5.3/8, Ms5.4/5, Ms7 5.0/4*
*ISCJB* ***16*** *23:59:46.8±0.4, 55.49S±0.06×28.0W±0.1, h26km, mb4.8/20, MS4.0/11, Error ellipse: s-maj=10.2km s-min=6.9km az=143.0*
*AWI* ***16*** *23:59:46.0, 55.49S×28.06W*
*NEIC* ***16*** *23:59:48.0±2.7, 55.51S×28.00W, h21km±18km, mb5.2/18, Error ellipse: s-maj=9.2km s-min=6.6km az=46.0*
*IDC* ***16*** *23:59:48.6±3.2, 55.52S×27.99W, h24km±20km, mb4.6/11, mb1 4.6/13, mb1mx4.5/22, mbtmp4.7/13, ML4.9/2, MS4.0/11, Ms1 4.0/11, ms1mx3.9/17, Error ellipse: s-maj=18.4km s-min=14.0km az=70.0*
*MOS* ***16*** *23:59:48.9±1.2, 55.61S×28.06W, h34km, mb5.4/8, Error ellipse: s-maj=33.7km s-min=14.0km az=98.3*
*GCMT* ***16*** *23:59:48.0±0.3, 55.48S×27.96W, h20km±1km, MW5.0/70, Moment Tensor Solution. s28,c32; s70,c97; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=1.57±.21; Mθθ=-1.15±.18; Mϕϕ2.72±.17; Mrθ2.17±.38; Mθϕ-1.65±.11; Mϕr0.78±.27; Best double couple: Mo3.68900×10^16 NP1:ϕs235.00000°, δ73.00000°, λ-48.00000°. NP2: ϕs344.00000°, δ45.00000°, λ-155.00000°. Principal axes: T 3.7870, Plg17.0000°, Azm296.0000°; N -0.1970, Plg40.0000°, Azm41.0000°; P -3.5900, Plg45.0000°, Azm188.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
**ISC 16 23:59:48.8±0.3, 55.54S±0.08×28.16W±0.07, h26km, n131, σ1.8 30/130, mb5.0/21, MS4.1/11, 1C-4D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| HOPE | Hope Point 4um,0.6s | 4.97 | 281 | Pn | Pn | 00 01 01.7 | +0.1 |
| HOPE | Hope Point | 4.97 | 281 | *e*Pn | Pn | 00 01 01.3 | -0.3 |
| HOPE | | | | *e*Sn | Sn | 00 01 52.0 | -6.1 |
| VNA1 | Neumayer--Stat | 17.48 | 158 | P | P | 00 03 51.9 | +0.7 |
| VNA3 | Neumayer Olymp | 17.66 | 160 | P | P | 00 03 52.9 | -0.4 |
| VNA2 | Neumayer--Watz baz=314,slow=13 | 17.87 | 158 | P | P | 00 03 55.7 | 0.0 |
| SNAA | Sanae | 19.43 | 156 | P | P | 00 04 12.2 | -0.7 |
| SNAA | Sanae 1.0nm,0.3s,baz=301,slow=10,SNR=165 | 19.43 | 156 | P | P | 00 04 12.2 | -0.7 |
| SNAA | Sanae | 19.43 | 156 | *d*P | P | 00 04 11.7 | -1.1 |
| SNAA | comp=Z,6.0nm,0.6s | | | pmax | pmax | | |
| SNAA | Sanae comp=Z,7.0nm,0.6s | 19.43 | 156 | *e*P | P | 00 04 11.9 | -0.9 |
| PMSA | Palmer Station comp=Z,1.4nm,0.3s,baz=36,slow=14,SNR=5.8 | 19.83 | 228 | P | Pn | 00 04 19.8 | +1.0 |
| PMSA | Palmer Station comp=Z,6.9nm,0.8s | 19.83 | 228 | *e*P | Pn | 00 04 19.8 | +1.0 |
| USHA | Ushuaia comp=Z,6.3nm,0.8s,baz=114,slow=16,SNR=4.2 | 22.79 | 255 | P | P | 00 04 49.4 | +0.4 |
| TRQA | Tornquist | 28.62 | 293 | *e*P | P | 00 05 43.7 | +0.9 |
| | comp=Z,62nm,2.1s | | | | | | |
| SYO | Syowa Base | 32.32 | 141 | *e*P | P | 00 06 13.0 | -2.1 |
| QSPA | South Pole Qui comp=Z,32nm,0.6s,baz=205,slow=2.7,SNR=249 | 34.71 | 180 | P | P | 00 06 36.7 | +0.5 |
| QSPA | | | | PcP | PcP | 00 09 08.4 | -0.9 |
| QSPA | South Pole Qui comp=Z,2.6nm,0.7s,baz=90,slow=2.0,SNR=3.3 | 34.71 | 180 | *e*P | P | 00 06 36.6 | +0.5 |
| QSPA | comp=Z,133nm,1.5s | | | *e*PcP | PcP | 00 09 08.4 | -0.9 |
| CPUP | Villa Florida comp=Z,5.9nm,0.8s,baz=165,slow=6.6,SNR=13 | 36.06 | 312 | P | P | 00 06 48.2 | +0.2 |
| CPUP | | | | ScP | ScP | 00 12 58.9 | +1.0 |
| CPUP | comp=Z,1.0nm,0.6s,baz=141,slow=3.9,SNR=5.4 | | | LR | LR | 00 20 12.2 | |
| CPUP | comp=Z,108nm,19.0s,baz=163,slow=34 | 36.06 | 312 | *e*P | P | 00 06 48.0 | 0.0 |
| CPUP | Villa Florida | | | | | | |
| LCO | Las Campanas comp=Z,278nm,2.7s | 40.20 | 293 | *e*P | P | 00 07 20.4 | -2.8 |
| MAW | Mawson comp=Z,6.7nm,0.7s,baz=233,slow=9.2,SNR=22 | 40.88 | 144 | P | P | 00 07 27.6 | -0.4 |
| MAW | | | | PcP | PcP | 00 09 28.3 | +0.2 |
| MAW | comp=Z,1.5nm,0.7s,baz=214,slow=4.9,SNR=2.9 | | | ScP | ScP | 00 13 15.7 | +0.1 |
| MAW | comp=Z,2.3nm,0.9s,baz=198,slow=3.0,SNR=5.8 | | | LR | LR | 00 22 39.1 | |
| BDFB | Brasilia comp=Z,2.8nm,0.7s,baz=129,slow=3.5,SNR=5.2 | 42.65 | 331 | P | P | 00 07 43.5 | +0.4 |
| BDFB | | | | LR | LR | 00 24 05.6 | |
| LVC | comp=Z,345nm,19.1s,baz=158,slow=34 Limon Verde comp=Z,12nm,0.8s | 44.57 | 301 | *e*P | P | 00 07 59.0 | +0.2 |
| BOSA | Boshof comp=Z,3.2nm,0.6s,baz=202,slow=6.0,SNR=7.0 | 46.38 | 77 | P | P | 00 08 13.1 | +0.3 |
| BOSA | | | | LR | LR | 00 23 51.2 | |
| BOSA | comp=Z,424nm,19.4s,baz=220,slow=31 Boshof | 46.38 | 77 | *e*P | P | 00 08 12.9 | 0.0 |
| BOSA | comp=Z,223nm,3.0s | | | pmax | pmax | | |
| BOSA | Boshof comp=Z,223nm,3.0s | 46.38 | 77 | *e*P | P | 00 08 12.9 | 0.0 |
| SBA | Scott Base | 46.55 | 184 | *e*P | P | 00 08 14.8 | +1.4 |
| SBA | comp=Z,22nm,1.0s | | | pmax | pmax | | |
| SBA | Scott Base comp=Z,22nm,1.0s | 46.55 | 184 | *e*P | P | 00 08 14.8 | +1.4 |
| VNDA | Vanda comp=Z,28nm,0.7s,baz=186,slow=6.6,SNR=368 | 47.06 | 183 | P | P | 00 08 18.1 | +0.7 |
| VNDA | | | | pmax | pmax | | |
| VNDA | Vanda comp=Z,30nm,0.6s | 47.06 | 183 | *e*P | P | 00 08 18.2 | +0.7 |
| VNDA | Vanda comp=Z,30nm,0.6s | 47.06 | 183 | *e*P | P | 00 08 18.1 | +0.7 |
| H10S2 | ASCENSION HYDR baz=190,slow=75,SNR=86 | 47.68 | 18 | T | T | 01 00 19.2 | |
| H10S3 | ASCENSION HYDR baz=190,slow=75,SNR=82 | 47.68 | 18 | T | T | 01 00 19.8 | |
| H10S1 | ASCENSION HYDR baz=190,slow=75,SNR=71 | 47.69 | 18 | T | T | 01 00 20.9 | |
| H10N1 | ASCENSION HYDR | 48.79 | 18 | T | T | 01 01 13.3 | |
| H10N3 | ASCENSION HYDR | 48.79 | 18 | T | T | 01 01 13.3 | |
| H10N2 | ASCENSION HYDR | 48.81 | 18 | T | T | 01 01 13.3 | |
| LBTB | Lobatse comp=Z,114nm,2.6s | 49.39 | 75 | *e*P | P | 00 08 35.3 | -0.8 |
| LBTB | | | | pmax | pmax | | |
| LBTB | Lobatse comp=Z,114nm,2.6s | 49.39 | 75 | *e*P | P | 00 08 35.3 | -0.8 |
| LPAZ | La Paz comp=Z,6.5nm,0.5s,baz=124,slow=5.3,SNR=43 | 49.63 | 306 | P | P | 00 08 39.7 | +1.0 |
| LPAZ | | | | PcP | PcP | 00 10 00.9 | +1.1 |
| LPAZ | comp=Z,2.7nm,0.8s,baz=189,slow=4.9,SNR=1.5 | | | LR | LR | 00 31 36.4 | |
| LPAZ | La Paz comp=Z,71nm,19.8s,baz=150,slow=38 | 49.63 | 306 | *e*P | P | 00 08 39.5 | +0.8 |
| LPAZ | comp=Z,13nm,1.0s | | | pmax | pmax | | |
| LPAZ | La Paz comp=Z,13nm,1.0s | 49.63 | 306 | *e*P | P | 00 08 39.5 | +0.8 |
| TSUM | Tsumeb comp=Z,96nm,3.0s | 49.92 | 62 | *e*P | P | 00 08 39.3 | -0.9 |
| SAML | Samuel comp=Z,12nm,1.1s | 54.05 | 316 | *e*P | P | 00 09 10.7 | -0.2 |
| CASY | Casey comp=Z,27nm,0.9s | 54.57 | 161 | *e*P | P | 00 09 14.2 | +0.1 |
| PTGA | Pitinga comp=Z,73nm,3.0s | 60.43 | 323 | *e*P | P | 00 09 55.6 | -0.3 |
| DBIC | Dimbokro comp=Z,4.2nm,0.7s,baz=174,slow=7.5,SNR=8.0 | 64.94 | 26 | P | P | 00 10 25.6 | -0.2 |
| DBIC | | | | LR | LR | 00 31 58.3 | |
| DBIC | comp=Z,72nm,19.4s,baz=150,slow=30 Dimbokro | 64.94 | 26 | *e*P | P | 00 10 25.7 | -0.2 |
| DBIC | comp=Z,78nm,2.1s | | | pmax | pmax | | |
| DBIC | Dimbokro comp=Z,78nm,2.1s | 64.94 | 26 | *e*P | P | 00 10 25.6 | -0.2 |
| OTAV | Otavalo comp=Z,13nm,1.5s | 68.92 | 304 | *e*P | P | 00 10 52.1 | +0.3 |
| ROSC | El Rosal comp=Z,74nm,19.2s,baz=191,slow=37 | 71.15 | 311 | LR | LR | 00 44 15.0 | |
| TOA0 | Torodi Ar. Sit | 72.89 | 30 | *e*P | P | 00 11 15.5 | +0.2 |
| TORD | Torodi Ar. Bea comp=Z,5.7nm,0.7s,baz=202,slow=5.9,SNR=37 | 72.89 | 30 | P | P | 00 11 15.6 | +0.3 |
| TORD | | | | LR | LR | 00 36 49.9 | |
| JTS | comp=Z,148nm,20.9s,baz=210,slow=30 JuntasAbangare baz=215 | 80.78 | 303 | P | P | 00 12 04.4 | +4.5 |
| JTS | | | | pmax | pmax | | |
| TAM | comp=Z,28nm,1.2s Tamanrasset | 83.13 | 31 | *e*P | P | 00 12 15.3 | +3.1 |
| TAM | comp=Z,14nm,1.8s | | | pmax | pmax | | |
| TAM | Tamanrasset comp=Z,14nm,1.8s | 83.13 | 31 | *e*P | P | 00 12 15.3 | +3.1 |
| ATD | Arta Tunnel comp=Z,96nm,20.8s,baz=192,slow=33 | 88.97 | 68 | LR | LR | 00 49 04.1 | |
| H08N3 | Diego Garcia H baz=215 | 89.97 | 101 | T | T | 01 52 57.1 | |
| H08N1 | Diego Carcia H baz=215 | 89.99 | 101 | T | T | 01 52 49.5 | |
| H08N2 | Diego Garcia H baz=215 | 89.99 | 101 | T | T | 01 52 51.3 | |
| MDT | Midelt comp=Z,65nm,18.9s,baz=190,slow=32 | 90.28 | 20 | LR | LR | 00 47 45.6 | |
| ASAR | Alice Springs comp=Z,1.8nm,0.8s,baz=194,slow=4.0,SNR=15 | 99.64 | 163 | P | Pdif | 00 13 28.3 | -1.7 |
| ASAR | | | | LR | LR | 00 54 52.5 | |
| AS01 | comp=Z,112nm,21.5s,baz=186,slow=33 Alice Springs | 99.65 | 163 | *e*Pdif | Pdif | 00 13 27.4 | -2.6 |
| VYHS | Vyhne | 110.88 | 31 | *i* PKIKP | PKiKP | 00 18 17.6 | -0.8 |
| KOLS | Kolonicke sedl | 112.32 | 33 | *i* PKIKP | PKiKP | 00 18 20.8 | -0.3 |
| STHS | Stebnicka Huta | 112.42 | 32 | *i* PKIKP | PKiKP | 00 18 19.9 | -1.4 |
| PMG | Port Moresby | 115.18 | 175 | *i* PKIKP | PKPdf | 00 18 26.7 | -1.0 |
| GMRC | Granite Mounta baz=117 | 116.54 | 293 | P | PKPdf | 00 18 30.2 | +0.4 |
| MPMC | Manual Prospec baz=119 | 118.48 | 293 | P | PKPdf | 00 18 33.7 | +0.1 |
| TPNV | Topopah Spring baz=119 | 118.51 | 294 | P | PKPdf | 00 18 33.7 | +0.2 |
| NOA | NORSAR Array B comp=Z,1.0nm,0.8s,baz=73,slow=13,SNR=3.8 | 120.32 | 21 | PKP | PKPdf | 00 18 35.9 | -0.2 |
| NV01 | Mina Array Sit | 120.69 | 294 | *e*PKPdf | PKPdf | 00 18 38.4 | +0.6 |
| NVAR | Mina Array Bea comp=Z,0.6nm,0.7s,baz=132,slow=2.2,SNR=5.7 | 120.69 | 294 | PKP | PKPdf | 00 18 38.3 | +0.5 |
| FXWY | Fox Creek | 120.97 | 303 | *e*PKPdf | PKPdf | 00 18 37.8 | -0.4 |
| WVOR | Wild Horse Val | 123.82 | 297 | *e*PKIKP | PKPdf | 00 18 44.5 | +0.9 |
| WVOR | Wild Horse Val | 123.82 | 297 | *e*PKPdf | PKPdf | 00 18 44.5 | +0.9 |
| O03D | Paynes Creek baz=124 | 123.89 | 293 | P | PKPdf | 00 18 43.6 | -0.2 |
| FINES | FINESS Array B comp=Z,5.1nm,0.5s,baz=165,slow=3.2,SNR=51 | 124.19 | 28 | PKP | PKPdf | 00 18 42.7 | -0.7 |
| MSO | Missoula baz=125 | 124.71 | 304 | P | PKPdf | 00 18 45.1 | +0.1 |
| MSO | Missoula | 124.71 | 304 | *e*PKPdf | PKPdf | 00 18 45.2 | +0.1 |
| N02D | Trinity Center baz=125 | 124.86 | 293 | P | PKPdf | 00 18 45.9 | +0.4 |
| M02C | Callahan baz=126 | 125.24 | 293 | P | PKPdf | 00 18 47.0 | +0.8 |
| CMAR | Chiang Mai Arr comp=Z,0.9nm,0.4s,baz=249,slow=3.0,SNR=5.4 | 125.76 | 111 | PKP | PKPdf | 00 18 47.5 | -0.3 |
| J05D | Fort Rock, OR baz=126 | 125.76 | 296 | P | PKPdf | 00 18 47.9 | +0.6 |
| G08A | Pilot Rock | 126.04 | 299 | *e*PKPdf | PKPdf | 00 18 48.2 | +0.5 |
| J04D | Umpqua Nationa baz=126 | 126.18 | 295 | P | PKPdf | 00 18 49.0 | +0.8 |
| KSH | Kashi | 128.96 | 75 | PKP | PKPdf | 00 18 53.6 | +0.1 |
| KSH | | | | PKS | PKSdf | 00 22 30.4 | +0.4 |
| KSH | | | | SKS | SKSdf | 00 26 00.3 | -2.8 |
| KSH | | | | SKKS | SKKSac | 00 27 55.8 | -0.4 |
| KSH | | | | PPMZ | | | |
| | comp=Z,82nm,6.3s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,87nm,7.3s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,120nm,4.5s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,120nm,5.7s | | | | | | |
| AAK | Ala-Archa | 130.32 | 71 | PKIKP | PKPdf | 00 18 56.4 | +0.4 |
| ARCES | ARCESS Array B comp=Z,2.8nm,0.6s,baz=163,slow=1.3,SNR=18 | 130.67 | 22 | PKP | PKPdf | 00 18 55.3 | -0.3 |
| ARU | Arti | 131.76 | 48 | *i* PKIKP | PKPdf | 00 18 57.9 | -0.1 |
| ARU | | | | SS | SS | 00 38 46.5 | -6.5 |
| ARU | Arti | 131.76 | 48 | *e*PKPdf | PKPdf | 00 18 58.4 | +0.4 |
| SVE | Sverdlovsk | 132.90 | 49 | *i* PKIKP | PKPdf | 00 19 00.6 | +0.4 |
| BRVK | Borovoye | 134.94 | 58 | *d i* PKIKP | PKPdf | 00 19 05.2 | +1.1 |
| BRVK | Borovoye | 134.94 | 58 | *e*PKPdf | PKPdf | 00 19 05.0 | +0.8 |
| YKA | Yellowknife Ar comp=Z,3.1nm,0.7s,baz=127,slow=2.5,SNR=11 | 135.43 | 319 | PKP | PKPdf | 00 19 04.4 | -0.3 |
| GYA | Guiyang | 136.37 | 113 | *e*Pdif | Pdif | 00 16 12.8 | -0.3 |
| GYA | | | | PKP | PKPdf | 00 19 07.3 | -0.5 |
| GYA | | | | PP | PP | 00 21 53.0 | +4.0 |
| GYA | | | | PPMZ | | | |
| | comp=Z,140nm,7.9s | | | | | | |
| MKAR | Makanchi Array comp=Z,0.2nm,0.3s,baz=18,slow=0.5,SNR=3.9 | 137.24 | 71 | PKhKP | PKPpre | 00 19 03.8 | |
| CD2 | Chengdu | 138.32 | 106 | PKP | PKPdf | 00 19 11.4 | +0.2 |
| CD2 | | | | sPKP | | 00 19 16.3 | |
| CD2 | | | | PP | PP | 00 22 01.4 | +0.2 |
| CD2 | | | | SKS | SKSdf | 00 26 22.0 | +2.1 |
| CD2 | | | | SKKS | SKKSac | 00 28 54.8 | +1.5 |
| CD2 | | | | SS | SS | 00 40 15.8 | +3.7 |
| CD2 | | | | PPMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| WMQ | Urumqi | 138.34 | 78 | *e*PKP | PKPdf | 00 19 13.0 | +2.1 |
| NVS | Novosibirsk | 142.28 | 62 | *e*PKHKP | PKPpre | 00 19 11.8 | |
| ZAA0 | Zalesovo Array | 142.63 | 64 | *e*PKPpre | PKPpre | 00 19 13.3 | |
| ZALV | Zalesovo Beam comp=Z,1.4nm,0.6s,baz=214,slow=4.7,SNR=7.4 | 142.63 | 64 | PKhKP | PKPpre | 00 19 13.9 | |
| ZALV | Zalesovo Beam | 142.63 | 64 | *i* PKHKP | PKPpre | 00 19 13.8 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| INK | Inuvik | 145.06 | 321 | *e*PKIKP | PKPbc | 00 19 21.4 | -0.1 |
| INK | Inuvik | 145.06 | 321 | *e*PKPbc | PKPbc | 00 19 21.4 | -0.1 |
| DAWY | Dawson | 146.04 | 313 | *e*PKPdf | PKPbc | 00 19 24.5 | -0.4 |
| EGAK | Eagle | 146.99 | 314 | *e*PKPdf | PKPbc | 00 19 27.2 | -0.2 |
| DIV | Divide | 147.91 | 306 | *e*PKPbc | PKPbc | 00 19 30.8 | +0.6 |
| KLU | Klutina | 148.09 | 307 | *e*PKPbc | PKPbc | 00 19 31.5 | +0.8 |
| PAX | Paxson | 148.32 | 309 | *e*PKP2 | PKPbc | 00 19 31.5 | +0.2 |
| PAX | Paxson | 148.32 | 309 | *e*PKPbc | PKPbc | 00 19 31.5 | +0.2 |
| FYU | Fort Yukon | 149.04 | 316 | *e*PKPbc | PKPbc | 00 19 33.8 | +0.9 |
| ILAR | Eielson Array comp=Z,1.4nm,1.2s,baz=159,slow=1.4,SNR=5.8 | 149.37 | 312 | PKP | PKPdf | 00 19 26.5 | -2.8 |
| ILAR | | | | PKPbc | PKPbc | 00 19 33.0 | -0.7 |
| | comp=Z,16nm,0.8s,baz=129,slow=1.7,SNR=123 | | | | | | |
| CCB | Clear Creek Bu | 149.73 | 312 | *e*PKPbc | PKPbc | 00 19 34.4 | -0.2 |
| COLA | College | 149.79 | 313 | *c i* PKP2 | PKPbc | 00 19 34.8 | +0.1 |
| COLA | College | 149.79 | 313 | *e*PKPbc | PKPbc | 00 19 34.7 | +0.1 |
| WRH | Wood River Hil | 149.81 | 312 | *e*PKPbc | PKPbc | 00 19 35.0 | +0.1 |
| HHC | Hu-ho-hao-te | 149.88 | 102 | *e*PKPbc | PKPdf | 00 19 26.4 | -4.6 |
| HHC | | | | PP | PP | 00 23 08.3 | -2.2 |
| HHC | | | | SS | SS | 00 42 20.3 | -4.8 |
| HHC | | | | PPMZ | | | |
| | comp=Z,27nm,5.3s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,120nm,13.6s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,120nm,12.3s | | | | | | |
| RND | Reindeer | 149.92 | 309 | *e*PKIKP | PKPdf | 00 19 25.9 | -4.4 |
| RND | Reindeer | 149.92 | 309 | *e*PKPdf | PKPdf | 00 19 25.9 | -4.4 |
| MDM | Murphy Dome | 149.97 | 313 | *e*PKPbc | PKPbc | 00 19 34.9 | -0.3 |
| MCK | McKinley | 150.02 | 310 | *e*PKPbc | PKPbc | 00 19 35.8 | +0.4 |
| MCK | McKinley | 150.02 | 310 | *e*PKPbc | PKPbc | 00 19 35.8 | +0.4 |
| KDAK | Kodiak Island | 150.10 | 298 | *i* PKIKP | PKPbc | 00 19 35.6 | -0.1 |
| TRF | Thorofare Moun | 150.56 | 309 | *e*PKPbc | PKPbc | 00 19 37.1 | +0.3 |
| ZAK | Zakamensk | 150.79 | 80 | *e*PKIKP | PKPbc | 00 19 36.0 | -1.7 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.2s | | | | | | |
| BPAW | Bear Paw Mtn. | 150.99 | 310 | *e*PKPbc | PKPbc | 00 19 37.5 | -0.2 |
| COLD | Coldfoot | 151.07 | 317 | *e*PKPbc | PKPbc | 00 19 38.7 | +1.0 |
| SONM | Songino Array comp=Z,6.0nm,0.9s,baz=224,slow=3.5,SNR=30 | 151.24 | 86 | PKPbc | PKPbc | 00 19 38.1 | -0.8 |
| SONA1 | Songino Array | 151.25 | 86 | *e*PKPbc | PKPbc | 00 19 38.1 | -0.8 |
| ULN | Ulaanbaatar | 151.63 | 87 | *e*PKIKP | PKPdf | 00 19 36.3 | +2.7 |
| ULN | Ulaanbaatar | 151.63 | 87 | *e*PKPbc | PKPbc | 00 19 39.3 | -0.6 |

*IDC* ***17*** *00:08:39.9±1.1, 7.02S×150.36E, h0km, mb4.0/7, mb1 4.3/8, mb1mx4.0/28, mbtmp4.0/8, ML2.1/1, MS3.2/3, Ms1 3.2/3, ms1mx2.7/27, Error ellipse: s-maj=48.3km s-min=19.8km az=133.0*
*ISCJB* ***17*** *00:08:42.4±1.1, 7.1S±0.2×150.4E±0.2, h26km, mb3.9/6, MS3.4/2, Error ellipse: s-maj=47.6km s-min=10.4km az=135.2*
**ISC 17 00:08:44.0±1.1, 7.0S±0.3×150.4E±0.3, h26km, n12, σ0.98/9, mb4.0/6, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby 9.1nm,0.3s,baz=46,slow=12,SNR=35 | 3.95 | 233 | Pn | Pn | 00 09 44.2 | +1.2 |
| PMG | | | | Sn | Sn | 00 10 29.4 | +1.0 |
| | 24nm,0.3s,baz=148,slow=20,SNR=23 | | | | | | |
| PMG | | | | LR | LR | 00 11 01.5 | |
| | comp=Z,85nm,18.1s,baz=100,slow=36 | | | | | | |
| WRA | Warramunga Arr 3.9nm,0.5s,baz=54,slow=11,SNR=19 | 20.15 | 229 | P | Pn | 00 13 15.9 | -2.7 |
| GUMO | Guam comp=Z,27nm,18.1s,baz=172,slow=39 | 21.19 | 345 | LR | LR | 00 22 26.5 | |
| ASAR | Alice Springs 2.2nm,0.4s,baz=57,slow=9.1,SNR=42 | 22.88 | 222 | P | P | 00 13 44.6 | -1.2 |
| FITZ | Fitzroy Crossi 3.1nm,0.6s,baz=72,slow=9.3,SNR=6.0 | 26.47 | 243 | P | P | 00 14 19.2 | -0.1 |
| MKAR | Makanchi Array 0.2nm,0.4s,baz=111,slow=6.3,SNR=3.5 | 80.41 | 320 | P | P | 00 20 53.2 | -0.3 |
| ZALV | Zalesovo Beam 0.5nm,0.4s,baz=116,slow=6.6,SNR=2.9 | 81.66 | 327 | P | P | 00 21 00.2 | +0.3 |
| ILAR | Eielson Array 1.8nm,0.8s,baz=259,slow=5.0,SNR=5.3 | 85.13 | 22 | P | P | 00 21 16.7 | -

*BJI **17** 01:06:51.0, 8.˝23S×126.˝10E, h27km, mb4.7/26, mB4.9/15, Ms4.8/8, Ms7 4.3/7*
*IDC **17** 01:06:55.3±0.5, 7.˝39S×125.˝64E, h0km, mb4.6/20, mb1 4.6/24, mb1mx4.5/33, mbtmp4.6/24, ML4.3/4, MS3.4/11, Ms1 3.4/11, ms1mx3.1/38, Error ellipse: s-maj=18.7km s-min=13.6km az=67.0*
*ISCJB **17** 01:06:56.9±1.0, 7.˝45S±0.˝03×125.˝72E±0.˝03, h21km±8km, mb4.7/53, MS3.5/7, Error ellipse: s-maj=5.9km s-min=4.1km az=144.1*
*NEIC **17** 01:06:57.3±0.3, 7.˝39S×125.˝76E, h10km, mb4.7/22, Error ellipse: s-maj=8.3km s-min=6.1km az=66.0*
*MOS **17** 01:06:58.1±1.5, 7.˝60S×125.˝66E, h33km, mb5.2/19, Error ellipse: s-maj=15.3km s-min=6.9km az=116.4*
*DJA **17** 01:06:59.7±0.8, 7.˝S±2.˝×12.˝6E±.˝, h16km±8km, M4.6/31, mb4.8/31, mB5.1/13, MLv4.7/23, Mw(mB)4.5/13*
*AUST **17** 01:07:02.1±0.3, 7.˝55S×125.˝78E, h56km, Error ellipse: s-maj=0.9km s-min=0.8km az=253.0*

**ISC 17 01:07:00.0±0.5, 7˚51S±0.˝04×125˚64E±0.˝05, h30km±3km, h30km:pP-P, n175, σ1s37/185, mb4.8/52, MS3.7/7, 7C-6D, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SOEI** | **Soe** | **2.61** | **211** | P | | | **Pb** | **01 07 44.7** | **-1.5** |
| | baz=2.7,SNR=31 | | | | | | | | |
| **SOEI** | **Soe** | **2.61** | **211** | P | | | **Pb** | **01 07 45.0** | **-1.3** |
| **SOEI** | **Soe** | **2.61** | **211** | *e*Pn | | | **Pb** | **01 07 44.8** | **-1.5** |
| **BATI** | **Baumata** | **3.32** | **216** | Pn | | | Pn | 01 07 54.0 | +4.1 |
| | 42nm,0.3s,baz=113,slow=0.9,SNR=55 | | | | | | | | |
| BATI | | | | | Sn | | **Sb** | **01 08 36.2** | **-2.0** |
| | 20nm,0.3s,baz=22,slow=18,SNR=6.4 | | | | | | | | |
| BATI | | | | | LR | | LR | 01 09 17.7 | |
| | comp=Z,712nm,19.8s,baz=75,slow=42 | | | | | | | | |
| **BATI** | **Baumata** | **3.32** | **216** | P | | | Pb | 01 07 54.3 | -3.9 |
| **MMRI** | **Maumere** | **3.55** | **251** | P | | | **Pn** | **01 07 54.5** | **+1.4** |
| **MMRI** | **Maumere** | **3.55** | **251** | *e*Pn | | | **Pn** | **01 07 54.5** | **+1.4** |
| **BBSI** | **Bau Bau** | **3.65** | **303** | P | | | **Pn** | **01 07 53.8** | **-0.7** |
| **NLAI** | **Namlea** | **4.48** | **19** | P | | | **Pn** | **01 08 07.4** | **+1.4** |
| **AAI** | **Ambon** | **4.57** | **34** | P | | | **Pn** | **01 08 05.2** | **-2.0** |
| **MSAI** | **Masohi** | **5.27** | **39** | P | | | **Pn** | **01 08 15.8** | **-1.1** |
| | 19nm,0.7s,0.1nm | | | | | | | | |
| **SANI** | **Sanana** | **5.43** | **4** | P | | | **Pn** | **01 08 17.4** | **-1.6** |
| | 30nm,0.5s,0.1nm | | | | | | | | |
| **BASI** | **Baing, Sumba** | **5.68** | **241** | P | | | **Pn** | **01 08 25.1** | **+2.7** |
| | 510nm,1.1s,4µm1.6nm | | | | | | | | |
| **BKSI** | **Bulukumba** | **5.89** | **291** | P | | | **Pn** | **01 08 25.0** | **-0.4** |
| | 168nm,0.8s,2µm0.6nm | | | | | | | | |
| **KAPI** | **Kappang** | **6.35** | **293** | Pn | | | **Pn** | **01 08 31.3** | **-0.3** |
| | 5.0nm,0.3s,baz=158,slow=10,SNR=15 | | | | | | | | |
| KAPI | | | | | Sn | | **Sn** | **01 09 42.6** | **-0.7** |
| | 3.0nm,0.3s,baz=17,slow=19,SNR=6.0 | | | | | | | | |
| KAPI | | | | | LR | | LR | 01 11 05.7 | |
| | comp=Z,309nm,18.9s,baz=127,slow=40 | | | | | | | | |
| **KAPI** | **Kappang** | **6.35** | **293** | *e*Pn | | | **Pn** | **01 08 31.9** | **+0.2** |
| KAPI | | | | *e*Sn | | | **Sn** | **01 09 45.0** | **+1.7** |
| **SPSI** | **Sidrap Palu** | **6.82** | **301** | P | | | **Pn** | **01 08 38.3** | **+0.2** |
| | 72nm,0.7s,0.3nm | | | | | | | | |
| **LUWI** | **Luwuk** | **7.03** | **336** | P | | | Pn | 01 08 44.8 | +3.8 |
| | baz=7.2,SNR=3.5 | | | | | | | | |
| **LUWI** | **Luwuk** | **7.03** | **336** | P | | | **Pn** | **01 08 40.0** | **-1.0** |
| | 82nm,0.6s,2µm0.2nm | | | | | | | | |
| **LUWI** | **Luwuk** | **7.03** | **336** | *e*Pn | | | **Pn** | **01 08 39.5** | **-1.4** |
| **TTSI** | **Tana Toraja** | **7.29** | **307** | P | | | **Pn** | **01 08 45.7** | **+1.1** |
| | 90nm,0.7s,633nm0.3nm | | | | | | | | |
| **MTN** | **Manton Dam** | **7.57** | **135** | P | | | **Pn** | **01 08 49.7** | **+1.3** |
| | baz=7.5,SNR=50 | | | | | | | | |
| **MTN** | **Manton Dam** | **7.57** | **135** | *e*Pn | | | **Pn** | **01 08 50.4** | **+1.9** |
| MTN | | | | *e*Sn | | | **Sn** | **01 10 12.2** | **-1.1** |
| **APSI** | **Ampana** | **7.67** | **329** | P | | | **Pn** | **01 08 48.7** | **-1.0** |
| | 118nm,1.0s,984nm0.4nm | | | | | | | | |
| **FAKI** | **Fak Fak** | **8.01** | **56** | P | | | **Pn** | **01 08 54.3** | **-0.1** |
| | baz=7.9,SNR=6.6 | | | | | | | | |
| **FAKI** | **Fak Fak** | **8.01** | **56** | *e*Pn | | | **Pn** | **01 08 53.8** | **-0.6** |
| **KDU** | **Kakadu** | **8.47** | **128** | P | | | **Pn** | **01 09 00.6** | **-0.2** |
| | baz=8.4,SNR=8.8 | | | | | | | | |
| **SIJI** | **Sorong** | **8.66** | **41** | Pn | | | **Pn** | **01 09 02.0** | **-1.4** |
| | 3.4nm,0.3s,baz=20,slow=19,SNR=5.5 | | | | | | | | |
| SIJI | | | | | LR | | LR | 01 12 43.7 | |
| | comp=Z,310nm,19.4s,baz=56,slow=41 | | | | | | | | |
| **SWI** | **Sorong** | **8.66** | **41** | P | | | **Pn** | **01 09 03.5** | **+0.2** |
| | 38nm,1.1s,1µm | | | | | | | | |
| **KNRA** | **Kununurra** | **8.68** | **160** | P | | | **Pn** | **01 09 03.9** | **+0.3** |
| | baz=8.6,SNR=34 | | | | | | | | |
| **PCI** | **Palu** | **8.74** | **318** | P | | | **Pn** | **01 09 06.9** | **+2.4** |
| | 62nm,0.7s,947nm0.3nm | | | | | | | | |
| **MPSI** | **Mapaga** | **9.67** | **323** | P | | | **Pn** | **01 09 16.1** | **-1.1** |
| | 40nm,1.0s,4µm | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.53** | **180** | Pn | | | **Pn** | **01 09 28.3** | **-0.7** |
| | 2.8nm,0.3s,baz=7.4,slow=13,SNR=31 | | | | | | | | |
| FITZ | | | | | Sn | | Sn | 01 11 19.7 | -6.4 |
| | 1.7nm,0.3s,baz=262,slow=10,SNR=3.4 | | | | | | | | |
| FITZ | | | | | LR | | LR | 01 14 20.2 | |
| | comp=Z,104nm,20.6s,baz=7.5,slow=42 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.53** | **180** | P | | | **Pn** | **01 09 28.3** | **-0.7** |
| | baz=11,SNR=26 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.53** | **180** | *e*Pn | | | **Pn** | **01 09 28.4** | **-0.7** |
| FITZ | | | | *e*Sn | | | Sn | 01 11 15.2 | -11 |
| **MBWA** | **Marble Bar** | **14.72** | **202** | *e*Pn | | | **Pn** | **01 10 26.5** | **+0.2** |
| **WRAB** | **Tennant Creek** | **14.96** | **147** | *ce*P | | | Pn | 01 10 25.1 | -4.5 |
| WRAB | | | | | pmax | | pmax | | |
| | comp=Z,52nm,1.2s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **14.96** | **147** | *e*Pn | | | Pn | 01 10 25.0 | -4.5 |
| | comp=Z,22nm,0.9s | | | | | | | | |
| WRAB | | | | *e*Sn | | | Sn | 01 13 00.6 | -14 |
| **WRA** | **Warramunga Arr** | **14.97** | **147** | Pn | | | Pn | 01 10 24.9 | -4.7 |
| | comp=Z,1.4nm,0.3s,baz=318,slow=14,SNR=22 | | | | | | | | |
| WRA | | | | | Sn | | Sn | 01 13 00.6 | -14 |
| | comp=Z,1.0nm,0.3s,baz=325,slow=23,SNR=5.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.97** | **147** | *i* P | | | Pn | 01 10 25.2 | -4.4 |
| WRA | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **16.42** | **325** | *e*Pn | | | **Pn** | **01 10 49.0** | **+0.5** |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **SBUM** | **Sibu** | **16.65** | **306** | *e*Pn | | | **P** | **01 10 53.6** | **+0.1** |
| **WRKA** | **Warakurna** | **17.62** | **172** | P | | | **Pn** | **01 11 02.2** | **-1.2** |
| | baz=18,SNR=54 | | | | | | | | |
| **KSM** | **Kuching** | **17.70** | **300** | P | | | **P** | **01 11 07.2** | **+1.9** |
| | baz=18,SNR=7.3 | | | | | | | | |
| **KSM** | **Kuching** | **17.70** | **300** | *e*Pn | | | **P** | **01 11 07.1** | **+1.9** |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **17.92** | **155** | P | | | **Pn** | **01 11 06.0** | **-1.2** |
| | comp=Z,1.1nm,0.3s,baz=330,slow=11,SNR=46 | | | | | | | | |
| ASAR | | | | | S | | Sn | 01 14 11.0 | -15 |
| | comp=Z,0.8nm,0.3s,baz=261,slow=18,SNR=11 | | | | | | | | |
| ASAR | | | | | LR | | LR | 01 17 53.4 | |
| | comp=Z,127nm,19.4s,baz=323,slow=36 | | | | | | | | |
| **ASAR** | **Alice Springs** | **17.92** | **155** | P | | | **Pn** | **01 11 06.0** | **-1.2** |
| ASAR | | | | | S | | Sn | 01 14 11.0 | -15 |
| **COEN** | **Coen** | **18.38** | **112** | P | | | **P** | **01 11 10.9** | **-1.7** |
| | baz=18,SNR=9.2 | | | | | | | | |
| **COEN** | **Coen** | **18.38** | **112** | *e*P | | | **P** | **01 11 11.1** | **-1.6** |
| **QIS** | **Mount Isa** | **18.74** | **135** | P | | | **Pn** | **01 11 17.4** | **+0.3** |
| | baz=19,SNR=16 | | | | | | | | |
| **MEEK** | **Meekatharra** | **20.16** | **199** | P | | | Pn | 01 11 33.7 | -0.4 |
| | baz=20,SNR=18 | | | | | | | | |
| **MTSU** | **Mount Surprise** | **21.03** | **122** | P | | | **P** | **01 11 41.7** | **+0.1** |
| | baz=21,SNR=14 | | | | | | | | |
| **PMG** | **Port Moresby** | **21.37** | **97** | P | | | **P** | **01 11 45.8** | **+0.6** |
| | comp=Z,8.9nm,0.6s,baz=303,slow=6.2,SNR=8.0 | | | | | | | | |
| **PMG** | **Port Moresby** | **21.37** | **97** | P | | | **P** | **01 11 47.4** | **+2.2** |
| PMG | | | | | pmax | | pmax | | |
| | comp=Z,54nm,1.0s | | | | | | | | |
| **PMG** | **Port Moresby** | **21.37** | **97** | *e*P | | | **P** | **01 11 45.9** | **+0.6** |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **FORT** | **Forrest** | **23.26** | **175** | P | | | **P** | **01 12 06.0** | **+0.9** |
| | baz=23,SNR=9.6 | | | | | | | | |
| **FORT** | **Forrest** | **23.26** | **175** | *e*P | | | **P** | **01 12 06.0** | **+0.9** |
| | comp=Z,30nm,0.9s | | | | | | | | |
| **MORW** | **Morawa** | **23.28** | **202** | P | | | **P** | **01 12 06.4** | **+1.1** |
| | baz=23,SNR=4.5 | | | | | | | | |
| **BLDU** | **Balliduu** | **24.46** | **199** | P | | | **P** | **01 12 16.9** | **+0.5** |
| | baz=25,SNR=13 | | | | | | | | |
| **QLP** | **Quilpie** | **25.93** | **139** | P | | | **P** | **01 12 30.9** | **+1.1** |
| | baz=26,SNR=6.9 | | | | | | | | |
| **PPI** | **Padang Panjang** | **26.12** | **284** | P | | | **P** | **01 12 33.5** | **+1.8** |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **26.47** | **196** | P | | | **P** | **01 12 31.6** | **-3.0** |
| | comp=Z,167nm,0.7s,baz=293,slow=0.0,SNR=33 | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **26.47** | **196** | P | | | **P** | **01 12 31.1** | **-3.5** |
| | baz=27,SNR=7.5 | | | | | | | | |
| **KULM** | **Kulim** | **27.99** | **296** | *e*P | | | **P** | **01 12 49.9** | **+1.4** |
| | comp=Z,7.9nm,0.7s | | | | | | | | |
| **RKGY** | **Rocky Gully** | **28.13** | **195** | P | | | P | 01 12 44.8 | -4.6 |
| | baz=28,SNR=16 | | | | | | | | |
| **PSI** | **Prapat** | **28.55** | **290** | P | | | **P** | **01 12 53.6** | **0.0** |
| | comp=Z,6.4nm,0.8s,baz=108,slow=6.4,SNR=4.6 | | | | | | | | |
| **HTT** | **Hallett** | **28.58** | **156** | P | | | **P** | **01 12 51.1** | **-2.5** |
| | baz=29,SNR=4.6 | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **30.36** | **145** | P | | | **P** | **01 13 10.5** | **+1.2** |
| | baz=30,SNR=12 | | | | | | | | |
| **ARPS** | **Mount Arapiles** | **32.66** | **155** | P | | | **P** | **01 13 31.9** | **+2.4** |
| | baz=33,SNR=5.0 | | | | | | | | |
| **SLVN** | **Son La** | **35.73** | **324** | *e*P | | | **P** | **01 13 57.2** | **+0.8** |
| | comp=Z,19nm,1.2s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.87** | **315** | P | | | **P** | **01 14 06.8** | **+0.7** |
| | comp=Z,7.5nm,0.7s,baz=144,slow=6.8,SNR=37 | | | | | | | | |
| CMAR | | | | | LR | | LR | 01 30 32.3 | |
| | comp=Z,41nm,18.7s,baz=160,slow=38 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **37.11** | **315** | *e*P | | | **P** | **01 14 07.8** | **-0.3** |
| CHTO | | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **37.11** | **315** | *e*P | | | **P** | **01 14 07.8** | **-0.3** |
| | comp=Z,10nm,0.9s | | | | | | | | |
| **GYA** | **Guiyang** | **38.46** | **332** | *e*P | | | **P** | **01 14 22.0** | **+2.4** |
| GYA | | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **KMI** | **Kunming** | **39.36** | **326** | P | | | **P** | **01 14 29.1** | **+1.8** |
| KMI | | | | | pP | | **pP** | **01 14 37.9** | **+1.8** |
| KMI | | | | | S | | **S** | **01 20 29.4** | **+2.4** |
| KMI | | | | | sS | | **sS** | **01 20 45.0** | **+3.4** |
| KMI | | | | | PMZ | | | | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| KMI | | | | | PMZ | | | | |
| | comp=Z,140nm,4.3s | | | | | | | | |
| KMI | | | | | LN | | | | |
| | comp=Z,260nm,4.3s | | | | | | | | |
| KMI | | | | | LE | | | | |
| | comp=Z,160nm,4.6s | | | | | | | | |
| KMI | | | | | LZ | | | | |
| | comp=Z,92nm,4.6s | | | | | | | | |
| **NJ2** | **Nanjing** | **39.87** | **351** | *e*P | | | **P** | **01 14 32.3** | **+1.2** |
| NJ2 | | | | | PMZ | | | | |
| | comp=Z,30nm,0.6s | | | | | | | | |
| **CD2** | **Chengdu** | **43.57** | **332** | *e*P | | | **P** | **01 15 02.0** | **+0.5** |
| CD2 | | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| **XAN** | **Xi'an** | **44.25** | **340** | P | | | **P** | **01 15 05.5** | **-1.5** |
| XAN | | | | | pP | | **pP** | **01 15 14.8** | **-1.1** |
| XAN | | | | | PMZ | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **44.76** | **3** | P | | | **P** | **01 15 09.8** | **-1.1** |
| **KSAR** | **Wonju Array Be** | **44.76** | **3** | P | | | **P** | **01 15 09.8** | **-1.1** |
| **KSRS** | **Korea Array** | **44.78** | **3** | P | | | **P** | **01 15 09.8** | **-1.2** |
| | comp=Z,1.8nm,0.8s,baz=179,slow=11,SNR=5.4 | | | | | | | | |
| KSRS | | | | | LR | | LR | 01 33 00.4 | |
| | comp=Z,34nm,21.8s,baz=177,slow=35 | | | | | | | | |
| **MAJO** | **Matsushiro** | **45.38** | **14** | *e*P | | | **P** | **01 15 18.3** | **+2.5** |
| MAJO | | | | | pmax | | pmax | | |
| | comp=Z,103nm,1.5s | | | | | | | | |
| **MAT** | **Matsushiro** | **45.38** | **14** | P | | | **P** | **01 15 13.0** | **-2.8** |
| **LZH** | **Lanzhou** | **47.96** | **336** | *e*P | | | **P** | **01 15 37.3** | **+1.0** |
| LZH | | | | | pP | | **pP** | **01 15 45.6** | **+0.3** |
| LZH | | | | | sP | | **sP** | **01 15 49.0** | **+0.1** |
| LZH | | | | | PMZ | | | | |
| | comp=Z,32nm,1.2s | | | | | | | | |
| LZH | | | | | PMZ | | | | |
| | comp=Z,110nm,4.9s | | | | | | | | |
| **LSA** | **Lhasa** | **49.68** | **320** | P | | | **P** | **01 15 49.0** | **-0.9** |
| **LSA** | **Lhasa** | **49.68** | **320** | *e*P | | | **P** | **01 15 50.7** | **+0.8** |
| LSA | | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **LSA** | **Lhasa** | **49.68** | **320** | *e*P | | | **P** | **01 15 50.6** | **+0.8** |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.83** | **346** | *e*P | | | **P** | **01 15 52.9** | **+2.4** |
| HHC | | | | | pP | | **pP** | **01 16 00.6** | **+1.1** |
| HHC | | | | | S | | **S** | **01 23 03.4** | **+5.0** |
| HHC | | | | | SS | | **SS** | **01 26 31.1** | **-0.5** |
| HHC | | | | | PMZ | | | | |
| | comp=Z,23nm,1.4s | | | | | | | | |
| HHC | | | | | PMZ | | | | |
| | comp=Z,130nm,5.0s | | | | | | | | |
| HHC | | | | | LN | | | | |
| | comp=Z,120nm,14.9s | | | | | | | | |
| HHC | | | | | LE | | | | |
| | comp=Z,130nm,17.4s | | | | | | | | |
| HHC | | | | | LZ | | | | |
| | comp=Z,72nm,16.2s | | | | | | | | |
| **ODAN** | **Odare** | **50.41** | **314** | *e*P | | | **P** | **01 15 54.8** | **-0.5** |
| | comp=Z,26nm,0.7s | | | | | | | | |
| **TAPN** | **Taplejung** | **50.48** | **315** | *e*P | | | **P** | **01 15 55.5** | **-0.4** |
| **RAMN** | **Ramite** | **51.03** | **314** | *e*P | | | **P** | **01 15 59.9** | **0.0** |
| | comp=Z,78nm,0.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.78** | **6** | P | | | **P** | **01 16 03.7** | **-1.2** |
| | comp=Z,5.2nm,0.6s,baz=194,slow=7.1,SNR=12 | | | | | | | | |
| **ERM** | **Erimo** | **51.83** | **17** | P | | | **P** | **01 16 07.9** | **+2.6** |
| ERM | | | | | pmax | | pmax | | |
| | comp=Z,32nm,1.2s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **52.00** | **4** | P | | | **P** | **01 16 05.8** | **-0.8** |
| MDJ | | | | | PMZ | | | | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| **GUN** | **Gumba** | **52.11** | **314** | *e*P | | | **P** | **01 16 07.7** | **-0.5** |
| | comp=Z,53nm,0.7s | | | | | | | | |
| **PKI** | **Pulchoki** | **52.25** | **314** | *e*P | | | **P** | **01 16 08.5** | **-0.6** |
| | comp=Z,37nm,0.8s | | | | | | | | |
| **PKIN** | **Phulchoki** | **52.26** | **314** | *e*P | | | **P** | **01 16 08.4** | **-0.8** |
| | comp=Z,25nm,0.7s | | | | | | | | |
| **GTA** | **Gaotai** | **52.46** | **335** | *e*P | | | **P** | **01 16 09.8** | **-0.4** |
| GTA | | | | | pP | | **pP** | **01 16 17.4** | **-1.9** |
| GTA | | | | | sP | | **sP** | **01 16 20.5** | **-2.4** |
| GTA | | | | | PMZ | | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| **KKN** | **Kakani** | **52.47** | **314** | *e*P | | | **P** | **01 16 10.0** | **-0.7** |
| | comp=Z,35nm,0.9s | | | | | | | | |
| **DMN** | **Daman** | **52.49** | **313** | *e*P | | | **P** | **01 16 10.4** | **-0.4** |
| | comp=Z,56nm,1.0s | | | | | | | | |
| **GKN** | **Gorkha** | **53.05** | **313** | *e*P | | | **P** | **01 16 14.5** | **-0.4** |
| **KOLN** | **Koldanda** | **53.67** | **313** | *e*P | | | **P** | **01 16 19.2** | **-0.3** |
| | comp=Z,58nm,0.7s | | | | | | | | |
| **DANN** | **Dangsing** | **53.89** | **313** | *e*P | | | **P** | **01 16 20.8** | **-0.4** |
| **ULN** | **Ulaanbaatar** | **57.53** | **345** | *i* P | | | **P** | **01 16 45.4** | **-1.4** |
| ULN | | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.53** | **345** | *e*P | | | **P** | **01 16 46.3** | **-0.5** |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **SONM** | **Songino Array** | **57.67** | **345** | P | | | **P** | **01 16 46.8** | **-0.9** |
| | comp=Z,5.1nm,0.8s,baz=163,slow=8.0,SNR=25 | | | | | | | | |
| SONM | | | | | PcP | | **PcP** | **01 17 39.5** | **-1.1** |
| | comp=Z,2.0nm,0.9s,baz=161,slow=4.4,SNR=4.5 | | | | | | | | |
| **WMQ** | **Urumqi** | **61.55** | **330** | P | | | **P** | **01 17 16.0** | **+1.5** |
| **HVS** | **Khovu-Aksy** | **64.57** | **338** | *e*P | | | **P** | **01 17 33.7** | **-0.8** |
| HVS | | | | | pmax | | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| **KSH** | **Kashi** | **65.53** | **320** | P | | | **P** | **01 17 41.3** | **+0.3** |
| KSH | | | | *ep*P | | | **pP** | **01 17 48.8** | **-1.5** |
| KSH | | | | | S | | **S** | **01 26 20.6** | **-3.8** |
| KSH | | | | | PMZ | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| KSH | | | | | PMZ | | | | |
| | comp=Z,82nm,4.4s | | | | | | | | |
| KSH | | | | | LN | | | | |
| | comp=Z,83nm,8.5s | | | | | | | | |
| KSH | | | | | LE | | | | |
| | comp=Z,80nm,5.6s | | | | | | | | |
| KSH | | | | | LZ | | | | |
| | comp=Z,100nm,5.2s | | | | | | | | |
| **BOD** | **Bodaibo** | **65.79** | **353** | *e*P | | | **P** | **01 17 41.4** | **-0.7** |
| BOD | | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **66.23** | **20** | P | | | **P** | **01 17 45.6** | **+0.5** |
| | comp=Z,11nm,0.7s,baz=188,slow=6.5,SNR=13 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **66.35** | **329** | P | | | **P** | **01 17 45.2** | **-0.8** |
| | comp=Z,4.7nm,0.7s,baz=128,slow=8.0,SNR=40 | | | | | | | | |
| **PET** | **Petropavlovsk** | **66.50** | **21** | *e*P | | | **P** | **01 17 47.4** | **+0.7** |
| PET | | | | | pmax | | pmax | | |
| | comp=Z,28nm,2.5s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **67.68** | **323** | *e*P | | | **P** | **01 17 54.4** | **-0.4** |
| TKM2 | | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **67.68** | **323** | *e*P | | | **P** | **01 17 54.4** | **-0.4** |
| | comp=Z,3.6nm,0.9s | | | | | | | | |
| **KBL** | **Kabul** | **67.83** | **312** | *e*P | | | **P** | **01 17 55.7** | **-0.1** |
| KBL | | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **KBL** | **Kabul** | **67.83** | **312** | *e*P | | | **P** | **01 17 55.7** | **-0.1** |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | **68.19** | **322** | P | | | **P** | **01 17 57.6** | **-0.3** |
| | comp=Z,3.0nm,0.7s,baz=128,slow=5.2,SNR=16 | | | | | | | | |
| **AAK** | **Ala-Archa** | **68.19** | **322** | *c i* P | | | **P** | **01 17 57.8** | **-0.1** |
| AAK | | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **AAK** | **Ala-Archa** | **68.19** | **322** | *e*P | | | **P** | **01 17 57.4** | **-0.5** |
| | comp=Z,4.7nm,0.9s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **68.65** | **321** | *e*P | | | **P** | **01 18 01.0** | **+0.3** |
| EKS2 | | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **68.65** | **321** | *e*P | | | **P** | **01 18 01.0** | **+0.3** |
| | comp=Z,4.4nm,0.9s | | | | | | | | |
| **KRAR** | **Krasnoyarsk** | **68.85** | **341** | P | | | **P** | **01 18 01.9** | **+0.4** |
| KRAR | | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.3s | | | | | | | | |
| **YAK** | **Yakutsk** | **69.40** | **2** | *e*P | | | **P** | **01 18 04.7** | **-0.1** |
| YAK | | | | | pmax | | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | | | |
| **YAK** | **Yakutsk** | **69.40** | **2** | *e*P | | | **P** | **01 18 04.9** | **+0.1** |
| | comp=Z,22nm,0.7s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.19** | **336** | P | | | **P** | **01 18 08.1** | **-1.7** |
| | comp=Z,4.6nm,0.7s,baz=131,slow=4.3,SNR=23 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.74** | **330** | P | | | **P** | **01 18 11.9** | **-1.3** |
| | comp=Z,3.7nm,0.8s,baz=137,slow=5.1,SNR=40 | | | | | | | | |
| **KURK** | **Kurchatov** | **70.76** | **330** | *e*P | | | **P** | **01 18 11.9** | **-1.5** |
| KURK | | | | | pmax | | pmax | | |
| | comp=Z,43nm,1.4s | | | | | | | | |
| **KURK** | **Kurchatov** | **70.76** | **330** | *e*P | | | **P** | **01 18 11.9** | **-1.5** |
| | comp=Z,43nm,1.4s | | | | | | | | |
| **VNDA** | **Vanda** | **72.50** | **172** | P | | | **P** | **01 18 24.7** | **+1.2** |
| | comp=Z,1.8nm,0.6s,baz=307,slow=8.7,SNR=23 | | | | | | | | |
| VNDA | | | | | LR | | LR | 01 48 02.0 | |
| | comp=Z,54nm,21.3s,baz=346,slow=34 | | | | | | | | |
| **VNDA** | **Vanda** | **72.50** | **172** | *e*P | | | **P** | **01 18 25.0** | **+1.5** |
| VNDA | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **VNDA** | **Vanda** | **72.50** | **172** | *e*P | | | **P** | **01 18 25.0** | **+1.5** |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **MAW** | **Mawson** | **72.92** | **201** | P | | | **P** | **01 18 27.0** | **+1.0** |
| | comp=Z,1.7nm,0.7s,baz=42,slow=9.0,SNR=6.2 | | | | | | | | |
| MAW | | | | | LR | | LR | 01 48 01.0 | |
| | comp=Z,41nm,19.5s,baz=61,slow=34 | | | | | | | | |
| **MAW** | **Mawson** | **72.92** | **201** | *e*P | | | **P** | **01 18 27.6** | **+1.5** |
| MAW | | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **MAW** | **Mawson** | **72.92** | **201** | *e*P | | | **P** | **01 18 27.6** | **+1.5** |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **SEY** | **Seymchan** | **73.16** | **12** | P | | | **P** | **01 18 27.2** | **-0.3** |
| | comp=Z,7.8nm,0.7s,baz=188,slow=3.3,SNR=13 | | | | | | | | |
| **SEY** | **Seymchan** | **73.16** | **12** | *i* P | | | **P** | **01 18 28.2** | **+0.7** |
| **IMYA** | **Miami** | **75.23** | **311** | *e*P | | | **P** | **01 18 39.8** | **-0.7** |
| **IMOG** | **Moghan** | **75.72** | **310** | *e*P | | | **P** | **01 18 43.3** | **-0.1** |
| **BRVK** | **Borovoye** | **76.31** | **329** | *e*P | | | **P** | **01 18 48.0** | **+2.0** |
| BRVK | | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **BRVK** | **Borovoye** | **76.31** | **329** | *e*P | | | **P** | **01 18 45.5** | **-0.4** |
| | comp=Z,6.4nm,0.9s | | | | | | | | |
| **IKRD** | **Kardeh** | **76.58** | **310** | *e*P | | | P | 01 18 44.7 | -3.5 |
| **IEMG** | **Emamgholi** | **76.69** | **311** | *e*P | | | **P** | **01 18 48.6** | **-0.3** |
| **ISFR** | **Sfrayin** | **77.06** | **311** | *e*P | | | **P** | **01 18 51.2** | **+0.3** |
| **GEYT** | **Alibeck** | **77.27** | **311** | P | | | **P** | **01 18 51.7** | **-0.1** |
| | comp=Z,4.0nm,0.7s,baz=122,slow=5.4,SNR=16 | | | | | | | | |
| **ISHV** | **Shirvan** | **77.45** | **311** | *e*P | | | **P** | **01 18 53.7** | **+0.7** |
| **ISAD** | **Sadrabad** | **78.88** | **305** | *e*P | | | **P** | **01 19 00.7** | **-0.4** |
| **IPIR** | **Pirpir** | **81.36** | **305** | *e*P | | | **P** | **01 19 14.0** | **-0.5** |
| **AKTO** | **Aktyubinsk** | **81.86** | **323** | P | | | **P** | **01 19 15.4** | **-1.0** |
| | comp=Z,3.2nm,0.7s,baz=108,slow=6.5,SNR=11 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **82.47** | **180** | *e*P | | | **P** | **01 19 20.6** | **+1.0** |
| | comp=Z,7.1nm,0.8s | | | | | | | | |
| **PPT** | **Papeete** | **82.83** | **107** | LR | | | LR | 01 54 55.2 | |
| | comp=Z,35nm,18.8s,baz=162,slow=35 | | | | | | | | |
| **SVE** | **Sverdlovsk** | **83.00** | **330** | *e*P | | | **P** | **01 19 23.2** | **+1.0** |
| SVE | | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | | | |
| **ARU** | **Arti** | **83.88** | **329** | P | | | **P** | **01 19 26.3** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=108,slow=19,SNR=1.9 | | | | | | | | |
| **ARU** | **Arti** | **83.88** | **329** | *d i* P | | | **P** | **01 19 25.9** | **-0.8** |
| ARU | | | | | S | | **S** | **01 29 45.8** | **-2.4** |
| ARU | | | | | SS | | **SS** | **01 35 12.4** | **-4.1** |
| ARU | | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **ARU** | **Arti** | **83.88** | **329** | *e*P | | | **P** | **01 19 26.8** | **+0.1** |
| | comp=Z,11nm,1.1s | | | | | | | | |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KULA** | **Kula-Manisa** | **0.57** | **176** | *e*PG | **Pg** | **01** | **17** | **31.9** | **+0.5** |
| KULA | | | | *e*SG | **Sg** | **01** | **17** | **38.8** | **0.0** |
| **KULA** | **Kula-Manisa** | **0.57** | **176** | *e*Pg | **Pg** | **01** | **17** | **31.9** | **+0.5** |
| KULA | | | | *e*Sg | **Sg** | **01** | **17** | **38.8** | **0.0** |
| **MANT** | **Manisa** | **0.59** | **184** | *i* P | **Pg** | **01** | **17** | **32.4** | **+0.6** |
| MANT | | | | *i* S | **Sg** | **01** | **17** | **40.2** | **+0.6** |
| **MANT** | **Manisa** | **0.59** | **184** | P | **Pg** | **01** | **17** | **32.4** | **+0.6** |
| MANT | | | | S | **Sg** | **01** | **17** | **40.2** | **+0.6** |
| **AKHS** | **Akhisar** | **0.65** | **252** | *i* P | **Pg** | **01** | **17** | **32.2** | **-0.8** |
| AKHS | | | | *i* S | **Sg** | **01** | **17** | **41.9** | **+0.4** |
| **AKHS** | **Akhisar** | **0.65** | **252** | P | **Pg** | **01** | **17** | **32.2** | **-0.8** |
| AKHS | | | | S | **Sg** | **01** | **17** | **41.9** | **+0.4** |
| **AKS** | **Akhisar** | **0.65** | **252** | *e*PG | **Pg** | **01** | **17** | **33.2** | **+0.2** |
| **AKS** | **Akhisar** | **0.65** | **252** | *e*Pg | **Pg** | **01** | **17** | **33.2** | **+0.2** |
| **BALB** | **Balikesir** | **0.79** | **315** | *e*PG | **Pb** | **01** | **17** | **36.5** | **+0.2** |
| BALB | | | | *e*SG | **Sb** | **01** | **17** | **47.2** | **0.0** |
| **BALB** | **Balikesir** | **0.79** | **315** | *e*Pg | **Pb** | **01** | **17** | **36.5** | **+0.2** |
| BALB | | | | *e*Sg | **Sb** | **01** | **17** | **47.2** | **0.0** |
| **KHAL** | **Karahalli** | **0.99** | **135** | *i* P | **Pn** | **01** | **17** | **40.4** | **-0.1** |
| KHAL | | | | *i* S | **Sg** | **01** | **17** | **51.9** | **-0.4** |
| **KHAL** | **Karahalli** | **0.99** | **135** | P | **Pn** | **01** | **17** | **40.4** | **-0.1** |
| KHAL | | | | S | **Sg** | **01** | **17** | **51.9** | **-0.4** |
| **BALY** | **Balya** | **1.01** | **311** | *i* P | **Pg** | **01** | **17** | **40.1** | **+0.3** |
| BALY | | | | *i* S | **Sg** | **01** | **17** | **52.2** | **-0.8** |
| **BALY** | **Balya** | **1.01** | **311** | P | **Pg** | **01** | **17** | **40.1** | **+0.3** |
| BALY | | | | S | **Sg** | **01** | **17** | **52.2** | **-0.8** |
| **ULDT** | **Uludag** | **1.14** | **21** | *i* P | **Pb** | **01** | **17** | **40.8** | **-1.5** |
| **ULDT** | **Uludag** | **1.14** | **21** | P | **Pb** | **01** | **17** | **40.8** | **-1.5** |
| **GONE** | **Gonen-Balikesi** | **1.20** | **324** | *e*PN | **Pg** | **01** | **17** | **43.8** | **+0.4** |
| **GONE** | **Gonen-Balikesi** | **1.20** | **324** | *e*Pn | **Pg** | **01** | **17** | **43.8** | **+0.4** |
| **KCTX** | **Karacabey (Bur** | **1.20** | **351** | *e*PN | **Pg** | **01** | **17** | **43.9** | **+0.5** |
| **KCTX** | **Karacabey (Bur** | **1.20** | **351** | *e*Pn | **Pg** | **01** | **17** | **43.9** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.26** | **207** | *e*PN | **Pn** | **01** | **17** | **44.0** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.26** | **207** | *e*Pn | **Pn** | **01** | **17** | **44.0** | **-0.3** |
| **IGD** | **Bursa** | **1.27** | **21** | P | **Pn** | **01** | **17** | **43.3** | **-0.9** |
| IGD | | | | S | **Sb** | **01** | **18** | **00.1** | **-0.8** |
| **MDNY** | **Mudanya-Bursa** | **1.30** | **9** | *e*PN | **Pg** | **01** | **17** | **45.7** | **+0.2** |
| **MDNY** | **Mudanya-Bursa** | **1.30** | **9** | *e*Pn | **Pg** | **01** | **17** | **45.7** | **+0.2** |
| **EDC** | **Edincik** | **1.39** | **336** | *e*PN | **Pb** | **01** | **17** | **46.6** | **+0.2** |
| **EDC** | **Edincik** | **1.39** | **336** | *e*Pn | **Pb** | **01** | **17** | **46.7** | **+0.2** |
| **BLCB** | **Balcova** | **1.41** | **241** | *e*PN | **Pn** | **01** | **17** | **46.0** | **-0.2** |
| **BLCB** | **Balcova** | **1.41** | **241** | *e*Pn | **Pn** | **01** | **17** | **46.0** | **-0.2** |
| **ARMT** | **Armutlu** | **1.50** | **7** | *e*PN | **Pb** | **01** | **17** | **48.3** | **0.0** |
| **ARMT** | **Armutlu** | **1.50** | **7** | *e*Pn | **Pb** | **01** | **17** | **48.3** | **0.0** |
| **SHUT** | **Suhut-Afyon** | **1.61** | **109** | *e*PN | **Pn** | **01** | **17** | **49.7** | **+0.7** |
| **SHUT** | **Suhut-Afyon** | **1.61** | **109** | *e*Pn | **Pn** | **01** | **17** | **49.7** | **+0.7** |
| **BORA** | **Eskisehir** | **1.64** | **60** | *i* P | **Pn** | **01** | **17** | **49.5** | **+0.1** |
| **BORA** | **Eskisehir** | **1.64** | **60** | P | **Pn** | **01** | **17** | **49.5** | **+0.1** |
| BORA | | | | S | **Sg** | **01** | **18** | **14.6** | **+1.5** |
| **KRBG** | **Karabiga-Canak** | **1.66** | **323** | *e*PN | **Pn** | **01** | **17** | **50.1** | **+0.6** |
| **KRBG** | **Karabiga-Canak** | **1.66** | **323** | *e*Pn | **Pn** | **01** | **17** | **50.1** | **+0.6** |
| **MRMT** | **Marmara Adasi** | **1.71** | **333** | *e*PN | **Pb** | **01** | **17** | **51.4** | **-0.6** |
| **MRMT** | **Marmara Adasi** | **1.71** | **333** | *e*Pn | **Pb** | **01** | **17** | **51.4** | **-0.6** |
| **RKY** | **Sarkoy-Tekirda** | **1.95** | **326** | *e*PN | **Pn** | **01** | **17** | **54.4** | **+0.8** |
| **RKY** | **Sarkoy-Tekirda** | **1.95** | **326** | *e*Pn | **Pn** | **01** | **17** | **54.4** | **+0.8** |
| **GULT** | **Gulveren** | **2.00** | **47** | *e*PN | **Pn** | **01** | **17** | **54.7** | **+0.3** |
| **GULT** | **Gulveren** | **2.00** | **47** | *e*Pn | **Pn** | **01** | **17** | **54.7** | **+0.3** |

*AUST **17** 01:22:51.7, 20.52S × 178.27W, h200km*
*ISCJB **17** 01:22:56.6±0.5, 19.82S±0.08 × 177.65W±0.09, h350km, mb3.6/8, Error ellipse: s-maj=14.0km s-min=8.0km az=40.6*
*IDC **17** 01:22:57.0±2.5, 19.82S × 177.71W, h339km±26km, mb3.3/8, mb1 3.6/9, mb1mx3.5/24, mbtmp4.1/9, Error ellipse: s-maj=20.9km s-min=14.2km az=119.0*

**ISC 17 01:22:57.7±0.6, 19.9S±0.1 × 177.6W±0.1, h350km, n27, σ1§06/25, mb3.6/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **7.29** | **85** | P | Pn | 01 24 47.9 | +4.4 |
| | baz=8.0,SNR=3.4 | | | | | | |
| **AFI** | **Afiamalu** | **8.18** | **44** | P | **Pn** | **01 24 53.5** | **-0.7** |
| | 11nm,0.3s,baz=45,slow=19,SNR=3.6 | | | | | | |
| AFI | | | | S | S | 01 26 22.1 | -7.0 |
| | 16nm,0.3s,baz=66,slow=20,SNR=4.4 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.05** | **259** | P | Pn | 01 26 16.9 | +1.6 |
| | 0.4nm,0.3s,baz=7.3,slow=8.2,SNR=7.3 | | | | | | |
| **URZ** | **Urewera** | **18.83** | **193** | P | **P** | **01 26 52.7** | **-0.7** |
| | 6.7nm,0.3s,baz=40,slow=1.6,SNR=21 | | | | | | |
| URZ | | | | S | **S** | **01 30 06.3** | **-2.5** |
| | 0.7nm,0.3s,baz=324,slow=18,SNR=6.7 | | | | | | |
| **ARMA** | **Armidale** | **29.65** | **243** | P | **P** | **01 28 34.3** | **+1.9** |
| | baz=29,SNR=5.6 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **34.87** | **243** | P | **P** | **01 29 18.0** | **+0.7** |
| | baz=34,SNR=7.4 | | | | | | |
| **MTSU** | **Mount Surprise** | **36.00** | **266** | P | **P** | **01 29 27.0** | **0.0** |
| | baz=35,SNR=7.6 | | | | | | |
| **TOO** | **Toolangi** | **36.53** | **233** | P | **P** | **01 29 32.2** | **+1.0** |
| | baz=36,SNR=7.4 | | | | | | |
| **HTT** | **Hallett** | **40.82** | **242** | P | P | 01 30 02.7 | -3.9 |
| | baz=40,SNR=7.4 | | | | | | |
| **BBOO** | **Buckleboo** | **43.14** | **243** | P | **P** | **01 30 25.2** | **+0.1** |
| | baz=42,SNR=33 | | | | | | |
| **ASAR** | **Alice Springs** | **45.02** | **256** | P | **P** | **01 30 40.3** | **+0.2** |
| | 3.0nm,0.5s,baz=92,slow=8.8,SNR=61 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.05** | **261** | P | **P** | **01 30 39.3** | **-1.0** |
| | 1.3nm,0.3s,baz=96,slow=7.3,SNR=39 | | | | | | |
| **MTN** | **Manton Dam** | **49.53** | **270** | P | **P** | **01 31 13.7** | **-0.9** |
| | baz=49,SNR=5.3 | | | | | | |
| **FORT** | **Forrest** | **49.86** | **246** | P | **P** | **01 31 16.4** | **-0.4** |
| | baz=49,SNR=9.0 | | | | | | |
| **WRKA** | **Warakurna** | **49.98** | **254** | P | **P** | **01 31 17.7** | **-0.1** |
| | baz=49,SNR=38 | | | | | | |
| **KNRA** | **Kununurra** | **51.07** | **266** | P | **P** | **01 31 25.8** | **-0.1** |
| | baz=50,SNR=4.7 | | | | | | |
| **VNDA** | **Vanda** | **58.51** | **185** | P | **P** | **01 32 19.9** | **+2.1** |
| | 1.1nm,0.6s,baz=1.5,slow=9.9,SNR=15 | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.82** | **345** | P | **P** | **01 34 06.2** | **+0.3** |
| | 2.5nm,0.7s,baz=128,slow=7.6,SNR=7.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.36** | **43** | P | **P** | **01 34 31.2** | **0.0** |
| | 0.6nm,0.9s,baz=237,slow=7.8,SNR=4.0 | | | | | | |
| **MAW** | **Mawson** | **82.22** | **200** | P | **P** | **01 34 39.9** | **-0.2** |
| | 0.6nm,0.4s,baz=160,slow=5.4,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.44** | **57** | P | **P** | **01 35 03.4** | **+1.5** |
| | 0.3nm,0.9s,baz=239,slow=7.0,SNR=2.3 | | | | | | |
| **ILAR** | **Eielson Array** | **87.68** | **13** | P | **P** | **01 35 06.1** | **-0.7** |
| | 0.5nm,0.6s,baz=234,slow=4.7,SNR=13 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **88.68** | **176** | P | **P** | **01 35 11.4** | **-0.3** |
| **VNA2** | **Neumayer--Watz** | **89.13** | **177** | P | **P** | **01 35 14.0** | **+0.2** |
| | baz=194,slow=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.73** | **313** | PKPbc | **PKPbc** | **01 41 57.9** | **-1.5** |
| | 0.5nm,0.6s,baz=48,slow=2.1,SNR=4.0 | | | | | | |
| **GERES** | **GERESS Array B** | **149.75** | **345** | PKPbc | **PKPbc** | **01 42 06.0** | **-0.7** |
| | 0.6nm,0.6s,baz=21,slow=3.4,SNR=7.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **173.22** | **174** | PKPab | **PKPab** | **01 43 55.6** | **-0.4** |
| | 0.3nm,0.6s,baz=192,slow=4.3,SNR=4.8 | | | | | | |

**IDC 17 01:37:33.6±1.5, 15.01S × 172.42W, h0km, mb4.2/3, mb1 4.3/3, mb1mx3.7/36, mbtmp4.2/3, MS3.5/11, Ms1 3.5/11, ms1mx3.2/32, Error ellipse: s-maj=62.0km s-min=17.4km az=126.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **1.25** | **30** | Pn | Pg | 01 37 58.0 | +0.2 |
| | 61nm,0.3s,baz=144,slow=2.1,SNR=23 | | | | | | |
| AFI | | | | Sn | Sn | 01 38 18.0 | +1.7 |
| | 527nm,0.3s,baz=180,slow=20,SNR=27 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.22** | **248** | LR | LR | 01 49 19.3 | |
| | comp=Z,222nm,21.3s,baz=103,slow=33 | | | | | | |
| **URZ** | **Urewera** | **24.94** | **200** | P | P | 01 42 58.7 | 0.0 |
| | 17nm,0.9s,baz=282,slow=4.6,SNR=5.0 | | | | | | |
| URZ | | | | LR | LR | 01 51 20.3 | |
| | comp=Z,54nm,18.0s,baz=10.0,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.86** | **256** | P | P | 01 46 36.5 | -0.2 |
| | 0.9nm,0.8s,baz=92,slow=7.3,SNR=4.9 | | | | | | |
| **GUMO** | **Guam** | **50.93** | **302** | LR | LR | 02 04 58.1 | |
| | comp=Z,13nm,18.0s,baz=27,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **51.13** | **252** | P | P | 01 46 38.6 | -0.1 |
| | 2.0nm,0.7s,baz=89,slow=7.5,SNR=22 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **59.22** | **258** | LR | LR | 02 10 30.8 | |
| | comp=Z,18nm,20.8s,baz=104,slow=33 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **71.96** | **47** | LR | LR | 02 13 16.8 | |
| | comp=Z,49nm,20.9s,baz=242,slow=30 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **72.72** | **37** | LR | LR | 02 11 35.7 | |
| | comp=Z,49nm,21.3s,baz=228,slow=28 | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.41** | **42** | LR | LR | 02 15 43.6 | |
| | comp=Z,58nm,18.2s,baz=242,slow=31 | | | | | | |
| **KSRS** | **Korea Array** | **76.55** | **315** | LR | LR | 02 18 21.2 | |
| | comp=Z,13nm,19.0s,baz=116,slow=32 | | | | | | |
| **TXAR** | **Lajitas Array** | **79.61** | **56** | LR | LR | 02 17 30.7 | |
| | comp=Z,32nm,20.0s,baz=0.0,slow=30 | | | | | | |
| **NEW** | **Newport** | **79.85** | **34** | LR | LR | 02 17 25.7 | |
| | comp=Z,37nm,20.1s,baz=228,slow=30 | | | | | | |
| **ULM** | **Lac du Bonnet** | **93.03** | **39** | LR | LR | 02 24 40.1 | |
| | comp=Z,51nm,19.3s,baz=346,slow=30 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.44** | **322** | PKPbc | PKPbc | 01 57 16.8 | -0.5 |
| | 1.0nm,0.8s,baz=61,slow=0.8,SNR=5.3 | | | | | | |

*NEIC **17** 01:38:37.2, 59.51N × 136.05W, h10km, ML2.8(AEIC), ML3.2(OTT), After AEIC.*
*NEIC Felt at Haines.*
*PGC **17** 01:38:37.4±0.4, 59.43N × 136.01W, h10km, ML3.2/4, 56km Wnw of Haines, Ak Southeastern Alaska*

**ISC 17 01:38:37.2±0.9, 59.50N±0.03 × 136.01W±0.02, h8km±8km, n25, σ1§13/51, Southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLBC** | **Pleasant Camp** | **0.19** | **257** | P | **Pg** | **01 38 41.0** | **0.0** |
| PLBC | | | | S | **Sg** | **01 38 43.5** | **-0.1** |
| **PLBC** | **Pleasant Camp** | **0.19** | **257** | P | **Pg** | **01 38 41.0** | **0.0** |
| PLBC | | | | S | **Sg** | **01 38 43.5** | **-0.1** |
| **SKAG** | **Skagway** | **0.35** | **96** | P | **Pg** | **01 38 44.5** | **+0.4** |
| SKAG | | | | S | **Sg** | **01 38 49.6** | **+0.9** |
| **BESE** | **Bessie Mountai** | **1.10** | **147** | P | **Pg** | **01 38 57.7** | **-0.6** |
| BESE | | | | S | **Sb** | **01 39 12.6** | **-0.3** |
| **DHAK** | **Deception Hill** | **1.20** | **251** | P | **Pb** | **01 38 59.0** | **-1.1** |
| DHAK | | | | S | **Sn** | **01 39 16.1** | **-0.7** |
| **WHY** | **Whitehorse** | **1.30** | **25** | P | **Pn** | **01 39 00.7** | **-0.9** |
| WHY | | | | S | **Sb** | **01 39 19.0** | **+0.4** |
| **WHY** | **Whitehorse** | **1.30** | **25** | P | **Pn** | **01 39 00.6** | **-1.1** |
| WHY | | | | S | **Sb** | **01 39 18.7** | **+0.1** |
| **YUK7** | **Dusty Glacier** | **1.49** | **315** | Pg | **Pn** | **01 39 04.6** | **+0.2** |
| YUK7 | | | | Sg | **Sb** | **01 39 25.0** | **+0.7** |
| **HYT** | **Haines Junctio** | **1.53** | **331** | Pn | **Pn** | **01 39 03.9** | **-0.9** |
| HYT | | | | Pg | **Pb** | **01 39 05.0** | **-0.8** |
| HYT | | | | Sn | **Sn** | **01 39 24.5** | **-0.4** |
| HYT | | | | Sg | **Sg** | **01 39 26.9** | **+0.7** |
| **HYT** | **Haines Junctio** | **1.53** | **331** | *e*Pn | **Pn** | **01 39 03.9** | **-0.9** |
| HYT | | | | *e*Pg | **Pb** | **01 39 05.0** | **-0.8** |
| HYT | | | | *e*Sn | **Sn** | **01 39 24.5** | **-0.4** |
| HYT | | | | *e*Sg | **Sg** | **01 39 26.9** | **+0.7** |
| **PNL** | **Peninsula** | **1.73** | **277** | P | **Pn** | **01 39 08.1** | **+0.5** |
| PNL | | | | S | **Sn** | **01 39 29.9** | **+0.1** |
| **YUK6** | **Outpost Mounta** | **1.86** | **322** | Pg | **Pb** | **01 39 11.0** | **-0.6** |
| YUK6 | | | | Sg | **Sb** | **01 39 36.0** | **+0.8** |
| **YUK5** | **Granite Creek** | **1.88** | **331** | Pn | **Pn** | **01 39 09.9** | **+0.2** |
| YUK5 | | | | Pg | **Pb** | **01 39 11.6** | **-0.3** |
| YUK5 | | | | Sg | **Sn** | **01 39 35.0** | **+1.3** |
| **PCA** | **Pinnacle** | **2.23** | **287** | P | **Pn** | **01 39 14.6** | **+0.1** |
| **YUK4** | **Talbot Arm** | **2.27** | **326** | Pn | **Pn** | **01 39 16.1** | **+1.0** |
| YUK4 | | | | Pg | **Pb** | **01 39 18.6** | **+0.1** |
| YUK4 | | | | Sg | **Sb** | **01 39 49.0** | **+2.3** |
| **SAMH** | **Samovar Hills** | **2.49** | **287** | P | **Pn** | **01 39 18.6** | **+0.5** |
| **CTGM** | **Chitina Glacie** | **3.04** | **301** | P | **Pn** | **01 39 25.6** | **+0.1** |
| **YUK3** | **Moose Creek** | **3.17** | **318** | Pg | **Pb** | **01 39 34.3** | **+0.6** |
| YUK3 | | | | Sg | **Sg** | **01 40 16.6** | **-2.1** |
| **DLBC** | **Dease Lake** | **3.28** | **106** | Pn | **Pn** | **01 39 29.2** | **+0.4** |
| DLBC | | | | Pg | **Pb** | **01 39 36.4** | **+0.8** |
| DLBC | | | | Sg | **Sg** | **01 40 19.5** | **-2.8** |
| **DLBC** | **Dease Lake** | **3.28** | **106** | P | **Pn** | **01 39 30.2** | **+1.4** |
| **YUK2** | **White River** | **3.31** | **316** | Pn | **Pn** | **01 39 30.0** | **+0.7** |
| YUK2 | | | | Pg | **Pb** | **01 39 37.4** | **+1.3** |
| YUK2 | | | | Sg | **Sg** | **01 40 21.2** | **-2.1** |
| **YUK1** | **Sand Pete Hill** | **3.46** | **322** | Sg | **Sg** | **01 40 26.6** | **-1.7** |
| **BVCY** | **Beaver Creek** | **3.76** | **323** | Pg | **Pb** | **01 39 46.0** | **+2.3** |
| **DAWY** | **Dawson** | **4.86** | **342** | Pn | **Pn** | **01 39 51.1** | **+0.6** |
| DAWY | | | | Pg | Pb | 01 40 05.9 | +3.5 |
| DAWY | | | | Sg | **Sg** | **01 41 09.8** | **-3.2** |
| **EGAK** | **Eagle** | **5.82** | **338** | *e*Pn | **Pn** | **01 40 03.8** | **+0.1** |
| | 3.7nm,0.7s | | | | | | |
| EGAK | | | | *e*Pg | Pb | 01 40 22.4 | +3.6 |
| EGAK | | | | *e*Sg | Sg | 01 41 38.1 | -5.8 |

**MEX 17 01:42:38.3±0.6, 14.21N × 93.27W, h10km±316km, MD4.0, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.49** | **2** | *i* P | Pn | 01 43 01.6 | -3.5 |
| PCIG | | | | *i* S | Sn | 01 43 19.6 | -5.2 |
| **CCIG** | **Comitan** | **2.33** | **28** | *e*Pn | Pn | 01 43 15.6 | -1.4 |
| CCIG | | | | *i* S | Sn | 01 43 43.2 | -2.7 |

**IDC 17 01:59:16.0±2.0, 7.89S × 126.02E, h0km, mb3.5/1, mb1 3.7/5, mb1mx3.4/30, mbtmp3.5/5, ML3.4/4, Error ellipse: s-maj=41.0km s-min=27.4km az=85.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **3.27** | **225** | Pn | Pn | 02 00 07.8 | -0.8 |
| | 5.8nm,0.3s,baz=103,slow=6.2,SNR=6.0 | | | | | | |
| BATI | | | | Sn | Sn | 02 00 50.3 | +2.0 |
| | 3.5nm,0.3s,baz=113,slow=18,SNR=3.6 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **10.15** | **182** | Pn | Pn | 02 01 42.2 | -0.9 |
| | 0.2nm,0.3s,baz=4.8,slow=12,SNR=9.2 | | | | | | |
| FITZ | | | | Sn | Sn | 02 03 35.6 | -2.2 |
| | 0.4nm,0.3s,baz=151,slow=19,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.44** | **147** | Pn | Pn | 02 02 40.8 | -1.1 |
| | 0.1nm,0.3s,baz=325,slow=13,SNR=6.3 | | | | | | |
| WRA | | | | Sn | Sn | 02 05 19.8 | -3.1 |
| | 0.2nm,0.3s,baz=326,slow=24,SNR=6.7 | | | | | | |
| **ASAR** | **Alice Springs** | **17.41** | **155** | P | P | 02 03 22.4 | +0.5 |
| | 0.2nm,0.3s,baz=336,slow=14,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.87** | **329** | P | P | 02 10 10.1 | +0.1 |
| | 0.2nm,0.5s,baz=124,slow=6.7,SNR=3.4 | | | | | | |

**MEX 17 02:05:06.1±0.4, 14.27N × 93.52W, h26km±999km, MD4.0, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.45** | **11** | *e*P | Pn | 02 05 28.3 | -2.3 |
| PCIG | | | | *e*S | Sn | 02 05 45.1 | -3.7 |
| **CCIG** | **Comitan** | **2.40** | **34** | *e*P | Pn | 02 05 45.9 | +1.9 |
| CCIG | | | | *i* S | Sn | 02 06 13.4 | +0.6 |

*BEO **17** 02:10:40.2±0.5, 43.76N × 17.24E, h6km±3km, ML3.1/1*
*PRU **17** 02:10:41.5, 43.73N × 17.42E, h0km*
*ISCJB **17** 02:10:41.5±0.6, 43.80N±0.02 × 17.26E±0.02, h16km±6km, Error ellipse: s-maj=3.7km s-min=2.2km az=43.4*
*LDG **17** 02:10:42.8±0.2, 43.88N × 17.46E, h10km, Ml3.3/15, Error ellipse: s-maj=7.5km s-min=4.5km az=15.0*
*PDG **17** 02:10:42.6±0.5, 43.86N × 17.52E, h16km±1km, ML3.1/10, Error ellipse: s-maj=0.6km s-min=0.8km az=0.0*
*CSEM **17** 02:10:43.4±0.1, 43.78N × 17.38E, h20km, ML3.1, Error ellipse: s-maj=4.5km s-min=2.7km az=30.0*

**ISC 17 02:10:41.4±1.2, 43.78N±0.02 × 17.36E±0.03, h4km±10km, n134, σ1§05/174, 12C-29D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STON** | **Ston** | **0.95** | **165** | *e*Pg | **Pg** | **02 10 57.2** | **-2.3** |
| STON | | | | *e*Sg | **Sg** | **02 11 10.5** | **-1.3** |
| **BLY** | **Banja Luka** | **0.97** | **353** | *e*Pg | **Pg** | **02 11 00.7** | **+0.7** |
| BLY | | | | *e*Sg | **Sg** | **02 11 13.0** | **+0.3** |
| **BLY** | **Banja Luka** | **0.97** | **353** | *e*Pg | **Pg** | **02 11 00.7** | **+0.7** |
| **BRY** | **Bratogost** | **1.23** | **135** | *i*Pg | **Pg** | **02 11 03.6** | **-1.4** |
| BRY | | | | *e*Sg | **Sn** | **02 11 23.9** | **+1.2** |
| **BRY** | **Bratogost** | **1.23** | **135** | *i*Pg | **Pg** | **02 11 03.6** | **-1.4** |
| BRY | | | | *e*Sg | **Sn** | **02 11 23.9** | **+1.2** |
| **UPM** | **Unac-Piva** | **1.27** | **117** | *i*Pg | **Pg** | **02 11 04.6** | **-1.1** |
| UPM | | | | *e*Sg | **Sn** | **02 11 23.9** | **+0.3** |
| **UPM** | **Unac-Piva** | **1.27** | **117** | *i*Pg | **Pg** | **02 11 04.6** | **-1.1** |
| UPM | | | | *e*Sg | **Sn** | **02 11 23.9** | **+0.3** |
| **BBLS** | **Lazići** | **1.48** | **86** | *e*Pg | **Pn** | **02 11 08.5** | **-0.4** |
| BBLS | | | | *e*Sg | **Sg** | **02 11 29.8** | **+0.7** |
| **BBLS** | **Lazići** | **1.48** | **86** | *e*Pg | **Pn** | **02 11 08.5** | **-0.4** |
| BBLS | | | | *e*Sg | **Sg** | **02 11 29.8** | **+0.7** |
| **NKY** | **Niksic** | **1.54** | **129** | *i*Pg | **Pn** | **02 11 09.1** | **-0.6** |
| NKY | | | | *e*Sg | **Sg** | **02 11 31.2** | **+0.4** |
| **NKY** | **Niksic** | **1.54** | **129** | *i*Pg | **Pn** | **02 11 09.1** | **-0.6** |
| **PLE** | **Pljevlja** | **1.54** | **106** | *i*Pg | **Pn** | **02 11 10.2** | **+0.4** |
| PLE | | | | *e*Sg | **Sb** | **02 11 30.3** | **-0.3** |
| **PLE** | **Pljevlja** | **1.54** | **106** | *i*Pg | **Pn** | **02 11 10.2** | **+0.4** |
| PLE | | | | *e*Sg | **Sb** | **02 11 30.3** | **-0.3** |
| **NKME** | **Niksic** | **1.55** | **131** | *i*Pg | **Pn** | **02 11 09.2** | **-0.6** |
| NKME | | | | *e*Sg | **Sg** | **02 11 31.8** | **+0.7** |
| **NKME** | **Niksic** | **1.55** | **131** | *i*Pg | **Pn** | **02 11 09.2** | **-0.6** |
| **HCY** | **Herceg Novi** | **1.57** | **148** | *i*Pn | **Pn** | **02 11 09.3** | **-0.8** |
| HCY | | | | *e*Sn | **Sg** | **02 11 33.3** | **+1.4** |
| **HCY** | **Herceg Novi** | **1.57** | **148** | *i*Pn | **Pn** | **02 11 09.3** | **-0.8** |
| HCY | | | | *e*Sn | **Sg** | **02 11 33.3** | **+1.4** |
| **TEKS** | **Tekeris** | **1.74** | **63** | *e*Pn | **Pn** | **02 11 11.5** | **-0.9** |
| **TEKS** | **Tekeris** | **1.74** | **63** | *e*Pn | **Pn** | **02 11 11.5** | **-0.9** |
| **BUM** | **Brajici-Budva** | **1.86** | **142** | *i*Pn | **Pn** | **02 11 14.9** | **+0.8** |
| BUM | | | | *e*Sn | **Sb** | **02 11 39.8** | **+0.1** |
| **BUM** | **Brajici-Budva** | **1.86** | **142** | *i*Pn | **Pn** | **02 11 14.9** | **+0.8** |
| BUM | | | | *e*Sn | **Sb** | **02 11 39.8** | **+0.1** |
| **DIVS** | **Divibare** | **1.93** | **80** | *e*Pn | **Pn** | **02 11 14.2** | **-0.9** |
| DIVS | | | | *e*Sn | **Sb** | **02 11 40.9** | **-0.7** |
| **DIVS** | **Divibare** | **1.93** | **80** | *i*P | **Pn** | **02 11 14.9** | **-0.2** |
| **DIVS** | **Divibare** | **1.93** | **80** | *e*Pn | **Pn** | **02 11 14.2** | **-0.9** |
| DIVS | | | | *e*Sn | **Sb** | **02 11 40.9** | **-0.7** |
| **PDG** | **Podgorica** | **1.94** | **134** | *e*Sn | **Sn** | **02 11 40.2** | **+0.3** |
| **PDG** | **Podgorica** | **1.94** | **134** | *e*Pn | **Pn** | **02 11 15.9** | **+0.8** |
| PDG | | | | *e*Sn | **Sn** | **02 11 40.2** | **+0.3** |
| **TTG** | **Podgorica** | **1.94** | **134** | *e*Pn | **Pn** | **02 11 15.9** | **+0.8** |
| TTG | | | | *e*Sn | **Sb** | **02 11 41.5** | **-0.3** |
| **SJES** | **Sjenica** | **1.97** | **104** | *e*Pn | **Pn** | **02 11 15.6** | **-0.1** |
| SJES | | | | *e*Sn | **Sn** | **02 11 41.0** | **+0.1** |
| **IVAS** | **Ivanjica** | **2.04** | **95** | *e*Pn | **Pn** | **02 11 16.6** | **0.0** |
| IVAS | | | | *e*Sn | **Sn** | **02 11 43.0** | **+0.5** |
| **IVAS** | **Ivanjica** | **2.04** | **95** | *e*Pn | **Pn** | **02 11 16.6** | **0.0** |
| IVAS | | | | *e*Sn | **Sn** | **02 11 43.0** | **+0.5** |
| **BEY** | **Berane** | **2.06** | **115** | *i*Pn | **Pn** | **02 11 16.9** | **0.0** |
| BEY | | | | *e*Sn | **Sn** | **02 11 43.3** | **+0.2** |
| **IVA** | **Berane** | **2.06** | **115** | *i*Pn | **Pn** | **02 11 16.9** | **0.0** |
| IVA | | | | *e*Sn | **Sn** | **02 11 43.3** | **+0.2** |
| **DRME** | **Dracevica, Mon** | **2.08** | **139** | *i*Pn | **Pn** | **02 11 18.0** | **+0.9** |
| DRME | | | | *e*Sn | **Sb** | **02 11 45.5** | **-0.5** |
| **DRME** | **Dracevica, Mon** | **2.08** | **139** | *i*Pn | **Pn** | **02 11 18.0** | **+0.9** |
| DRME | | | | *e*Sn | **Sb** | **02 11 45.5** | **-0.5** |
| **FGSL** | **Fruska Gora** | **2.23** | **51** | *e*Pn | **Pn** | **02 11 17.9** | **-1.2** |
| **FRGS** | **Fruska Gora** | **2.23** | **51** | *e*Pn | **Pn** | **02 11 17.9** | **-1.2** |
| **PVY** | **Plav** | **2.24** | **121** | *e*Pn | **Pn** | **02 11 20.1** | **+0.7** |
| PVY | | | | *e*Sn | **Sn** | **02 11 48.1** | **+0.5** |
| **TRUS** | **Trudelj** | **2.24** | **78** | *e*Pn | **Pn** | **02 11 17.8** | **-1.5** |
| TRUS | | | | *e*Sn | **Sn** | **02 11 48.7** | **+1.2** |
| **TRUS** | **Trudelj** | **2.24** | **78** | *e*Pn | **Pn** | **02 11 17.8** | **-1.5** |
| TRUS | | | | *e*Sn | **Sn** | **02 11 48.7** | **+1.2** |
| **ULC** | **Ulcinj** | **2.29** | **142** | *i*Pn | **Pn** | **02 11 20.8** | **+0.8** |
| ULC | | | | *e*Sn | **Sn** | **02 11 49.8** | **+1.2** |
| **ULC** | **Ulcinj** | **2.29** | **142** | *i*Pn | **Pn** | **02 11 20.8** | **+0.8** |
| ULC | | | | *e*Sn | **Sn** | **02 11 49.8** | **+1.2** |
| **MS1** | **Monte Sant'Ang** | **2.33** | **207** | *e*Pn | **Pb** | **02 11 24.0** | **+0.1** |
| **GRUS** | **Gruza** | **2.43** | **86** | *e*Pn | **Pn** | **02 11 21.7** | **-0.2** |
| **GRUS** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CDF | | | | *e*Sn | Sn | 02 14 06.5 | -13 |
| | comp=Z,4.1nm,0.7s | | | | | | |
| **CABF** | **La Chapelle** | **8.45** | **293** | *e*Pn | **Pn** | **02 12 44.9** | **+0.3** |
| CABF | | | | *e*Sn | Sn | 02 14 05.8 | -15 |
| | comp=Z,8.2nm,0.9s | | | | | | |
| **CABF** | **La Chapelle** | **8.45** | **293** | *e*Pn | **Pn** | **02 12 44.9** | **+0.3** |
| **SMRF** | **Simiane la Rot** | **8.52** | **275** | *e*Pn | **Pn** | **02 12 45.6** | **+0.1** |
| **SMRF** | **Simiane la Rot** | **8.52** | **275** | *e*Pn | **Pn** | **02 12 45.6** | **+0.1** |
| **HAU** | **Haudompre** | **8.76** | **303** | *e*Pn | **Pn** | **02 12 49.6** | **+0.8** |
| HAU | | | | *e*Sn | Sn | 02 14 14.3 | -14 |
| | comp=Z,2.2nm,0.4s | | | | | | |
| **HAU** | **Haudompre** | **8.76** | **303** | *e*Pn | **Pn** | **02 12 49.6** | **+0.8** |
| **VIVF** | **Saint-Julien-l** | **9.16** | **281** | *e*Pn | **Pn** | **02 12 54.3** | **0.0** |
| **VIVF** | **Saint-Julien-l** | **9.16** | **281** | *e*Pn | **Pn** | **02 12 54.3** | **0.0** |
| **SMF** | **Signal de Mont** | **9.96** | **291** | *e*Pn | **Pn** | **02 13 05.3** | **+0.1** |
| SMF | | | | *e*Sn | Sn | 02 14 42.0 | -15 |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **SMF** | **Signal de Mont** | **9.96** | **291** | *e*Pn | **Pn** | **02 13 05.3** | **+0.1** |
| **LOR** | **Lormes** | **10.09** | **295** | *e*Pn | **Pn** | **02 13 06.5** | **-0.6** |
| | baz=111 | | | | | | |
| LOR | | | | *e*Sn | Sn | 02 14 45.2 | -16 |
| | comp=Z,2.6nm,0.5s | | | | | | |
| **LOR** | **Lormes** | **10.09** | **295** | *e*Pn | **Pn** | **02 13 06.5** | **-0.6** |
| **AVF** | **Avril sur Loir** | **10.32** | **292** | *e*Pn | **Pn** | **02 13 10.1** | **0.0** |
| **AVF** | **Avril sur Loir** | **10.32** | **292** | *e*Pn | **Pn** | **02 13 10.1** | **0.0** |
| **BGF** | **Bois d'Agland** | **10.62** | **290** | *e*Pn | **Pn** | **02 13 14.3** | **+0.1** |
| BGF | | | | *e*Sn | Sn | 02 14 57.4 | -16 |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **BGF** | **Bois d'Agland** | **10.62** | **290** | *e*Pn | **Pn** | **02 13 14.3** | **+0.1** |

*NSSC* ***17*** *02:14:41.6±5.2, 36°.79N×35°.69E, h142km±65km, MD1.0, ML2.3*
*DDA* ***17*** *02:14:42.2, 37°.03N×35°.55E, h7km, Md3.3*
*ISCJB* ***17*** *02:14:45.0±0.6, 37°.00N±0°.02×35°.69E±0°.04, h9km±5km, Error ellipse: s-maj=4.9km s-min=3.8km az=156.0*
*CSEM* ***17*** *02:14:44.7±0.2, 36°.99N×35°.69E, h2km, MD3.0, Error ellipse: s-maj=7.0km s-min=5.0km az=54.0*
*ISK* ***17*** *02:14:44.6, 37°.06N×35°.62E, h4km, MD3.0*
**ISC 17 02:14:44.2**±0.9, **37°.01N**±0°.02×**35°.71E**±0°.02, **h16**km±6km, **n50**, σ1§**43**/63, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CEYT** | **Ceyhan** | **0.03** | **85** | PG | **Pg** | **02 14 47.9** | **+0.8** |
| **CEYT** | **Ceyhan** | **0.03** | **85** | *i* Pg | **Pg** | **02 14 47.9** | **+0.8** |
| **KRTS** | **Karatas** | **0.51** | **212** | *e*PG | **Pb** | **02 14 55.2** | **+0.4** |
| KRTS | | | | *e*SG | **Sb** | **02 15 03.7** | **+1.8** |
| **KRTS** | **Karatas** | **0.51** | **212** | *e*Pg | **Pb** | **02 14 55.2** | **+0.4** |
| KRTS | | | | *e*Sg | **Sb** | **02 15 03.7** | **+1.8** |
| **KARA** | **Karaisali** | **0.58** | **296** | *e*PG | **Pg** | **02 14 54.5** | **-1.2** |
| KARA | | | | *e*SG | **Sg** | **02 15 02.2** | **-1.2** |
| **KARA** | **Karaisali** | **0.58** | **296** | *e*Pg | **Pg** | **02 14 54.5** | **-1.2** |
| KARA | | | | *e*Sg | **Sg** | **02 15 02.3** | **-1.2** |
| **TAHT** | **Tahtakopru-Hat** | **0.74** | **148** | *e*PG | **Pn** | **02 15 00.0** | **0.0** |
| **TAHT** | **Tahtakopru-Hat** | **0.74** | **148** | *e*Pg | **Pn** | **02 15 00.0** | **0.0** |
| **AYKD** | **Aykdinkavak** | **0.97** | **65** | P | **Pn** | **02 15 03.2** | **0.0** |
| AYKD | | | | S | **Sn** | **02 15 17.3** | **+0.7** |
| **YAYL** | **Yayladag** | **1.02** | **162** | *i* P | **Pb** | **02 15 04.0** | **+0.4** |
| YAYL | | | | *i* S | **Sn** | **02 15 18.3** | **+0.2** |
| **YAYL** | **Yayladag** | **1.02** | **162** | P | **Pb** | **02 15 04.0** | **+0.4** |
| YAYL | | | | S | **Sn** | **02 15 18.3** | **+0.2** |
| **KMRS** | **Kahramanmaras** | **1.07** | **62** | *e*PN | **Pn** | **02 15 05.5** | **+0.8** |
| **KMRS** | **Kahramanmaras** | **1.07** | **62** | *e*Pn | **Pn** | **02 15 05.5** | **+0.8** |
| **KUZU** | **Kuzuini** | **1.12** | **102** | *i* P | **Pn** | **02 15 06.2** | **+0.9** |
| KUZU | | | | *i* S | **Sg** | **02 15 18.5** | **-2.1** |
| **KUZU** | **Kuzuini** | **1.12** | **102** | P | **Pn** | **02 15 06.2** | **+0.9** |
| KUZU | | | | S | **Sg** | **02 15 18.5** | **-2.1** |
| **BTCH** | **Batrach** | **1.14** | **148** | *e*P | **Pb** | **02 15 05.3** | **-0.4** |
| BTCH | | | | *e*S | **Sn** | **02 15 21.3** | **+0.3** |
| | comp=N,101nm,0.3s | | | | | | |
| **ARNB** | **Al Arnab** | **1.16** | **169** | *e*P | **Pb** | **02 15 06.3** | **+0.3** |
| ARNB | | | | *e*S | **Sn** | **02 15 22.5** | **+1.0** |
| ARNB | | | | AML | AML | 02 15 27.9 | |
| | comp=E,30nm,0.4s | | | | | | |
| ARNB | | | | AML | AML | 02 15 28.0 | |
| | comp=N,55nm,0.2s | | | | | | |
| **ARNB** | **Al Arnab** | **1.16** | **169** | *e*P | **Pb** | **02 15 06.3** | **+0.3** |
| ARNB | | | | *e*S | **Sn** | **02 15 22.5** | **+1.0** |
| | comp=N,55nm,0.2s | | | | | | |
| **KIZK** | **Mersin** | **1.36** | **248** | *i* P | **Pn** | **02 15 07.4** | **-1.2** |
| **KIZK** | **Mersin** | **1.36** | **248** | P | **Pn** | **02 15 07.4** | **-1.2** |
| KIZK | | | | S | **Sb** | **02 15 22.7** | **-3.8** |
| **NIG** | **Nigde** | **1.40** | **322** | *e*PN | **Pb** | **02 15 10.8** | **+0.5** |
| **NIG** | **Nigde** | **1.40** | **322** | *e*Pn | **Pb** | **02 15 10.8** | **+0.5** |
| **SARI** | **SarD1z-Kayseri** | **1.51** | **22** | *e*PN | **Pg** | **02 15 12.9** | **-0.3** |
| **WRDH** | **Warideh** | **1.60** | **159** | *e*P | **Pn** | **02 15 12.6** | **+0.7** |
| WRDH | | | | *e*S | **Sn** | **02 15 33.4** | **+1.1** |
| WRDH | | | | AML | AML | 02 15 37.6 | |
| | comp=N,31nm,0.5s | | | | | | |
| **WRDH** | **Warideh** | **1.60** | **159** | *e*P | **Pn** | **02 15 12.6** | **+0.7** |
| WRDH | | | | *e*S | **Sn** | **02 15 33.4** | **+1.1** |
| | comp=N,31nm,0.5s | | | | | | |
| **GULA** | **Gulagac** | **1.77** | **319** | *e*PN | **Pb** | **02 15 16.2** | **-0.2** |
| **GULA** | **Gulagac** | **1.77** | **319** | *e*Pn | **Pb** | **02 15 16.3** | **-0.2** |
| **BNN** | **Bunyan** | **1.84** | **3** | *e*PN | **Pb** | **02 15 17.1** | **-0.6** |
| **BNN** | **Bunyan** | **1.84** | **3** | *e*Pn | **Pb** | **02 15 17.1** | **-0.6** |
| **BIDA** | **Albida** | **2.05** | **166** | *e*P | Pn | 02 15 11.6 | -6.5 |
| BIDA | | | | *e*S | Sn | 02 15 37.0 | -6.4 |
| BIDA | | | | AML | AML | 02 15 42.2 | |
| | comp=E,42nm,0.5s | | | | | | |
| BIDA | | | | AML | AML | 02 15 45.8 | |
| | comp=N,37nm,0.4s | | | | | | |
| **BIDA** | **Albida** | **2.05** | **166** | *e*P | Pn | 02 15 11.6 | -6.5 |
| BIDA | | | | *e*S | Sn | 02 15 37.0 | -6.4 |
| | comp=N,37nm,0.4s | | | | | | |
| **DARE** | **Darende-Malaty** | **2.10** | **41** | *e*PN | **Pb** | **02 15 22.0** | **0.0** |
| **DARE** | **Darende-Malaty** | **2.10** | **41** | *e*Pn | **Pb** | **02 15 22.0** | **0.0** |
| **SULT** | **Sultanhani-AKS** | **2.11** | **305** | *e*PN | **Pn** | **02 15 20.9** | **+2.0** |
| **SULT** | **Sultanhani-AKS** | **2.11** | **305** | *e*Pn | **Pn** | **02 15 20.9** | **+2.0** |
| **YAYX** | **Yaylak** | **2.44** | **323** | *e*PN | **Pn** | **02 15 25.6** | **+2.0** |
| **YAYX** | **Yaylak** | **2.44** | **323** | *e*Pn | **Pn** | **02 15 25.6** | **+2.0** |
| **LFK** | **Lefkose** | **2.46** | **226** | *e*PN | **Pn** | **02 15 26.7** | **+2.9** |
| **LFK** | **Lefkose** | **2.46** | **226** | *e*Pn | **Pn** | **02 15 26.7** | **+2.9** |
| **MALT** | **Malatya** | **2.52** | **58** | *e*PN | **Pb** | **02 15 28.3** | **-0.9** |
| **MALT** | **Malatya** | **2.52** | **58** | *e*Pn | **Pb** | **02 15 28.3** | **-0.9** |
| **HDMB** | **Hadim** | **2.58** | **270** | *e*PN | **Pn** | **02 15 27.6** | **+2.1** |
| **HDMB** | **Hadim** | **2.58** | **270** | *e*Pn | **Pn** | **02 15 27.6** | **+2.1** |
| **CSS** | **Prodhromos** | **2.81** | **224** | *e*PN | **Pb** | **02 15 32.2** | **-1.8** |
| **CSS** | **Prodhromos** | **2.81** | **224** | *e*Pn | **Pb** | **02 15 32.2** | **-1.8** |
| **CDAG** | **Cicekdag** | **2.81** | **339** | *i* P | **Pn** | **02 15 31.5** | **+2.8** |
| **CDAG** | **Cicekdag** | **2.81** | **339** | P | **Pn** | **02 15 31.5** | **+2.8** |
| **BBAL** | **Bala** | **3.25** | **322** | *i* P | Pb | 02 15 38.8 | -2.8 |
| **BBAL** | **Bala** | **3.25** | **322** | P | Pb | 02 15 38.8 | -2.8 |
| BBAL | | | | S | **Sg** | **02 16 26.3** | **-2.3** |

*CSEM* ***17*** *02:35:42.9±0.1, 38°.21N×37°.20E, h5km, MD2.8, Error ellipse: s-maj=3.1km s-min=2.8km az=138.0*
*DDA* ***17*** *02:35:42.7, 38°.16N×37°.20E, h7km, Md2.8*
*ISK* ***17*** *02:35:42.4, 38°.22N×37°.17E, h8km, MD2.8*
**ISC 17 02:35:42.8**±1.2, **38°.20N**±0°.02×**37°.19E**±0°.03, **h2**km±12km, **n28**, σ0§**62**/39, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DARE** | **Darende-Malaty** | **0.44** | **32** | *e*PG | **Pg** | **02 35 51.7** | **+0.5** |
| **DARE** | **Darende-Malaty** | **0.44** | **32** | *e*Pg | **Pg** | **02 35 51.7** | **+0.5** |
| CUGUR | **Gurin_S¨VAS** | **0.53** | **7** | P | **Pg** | **02 35 53.5** | **+0.6** |
| CUGUR | | | | S | **Sb** | **02 36 01.9** | **-1.0** |
| **AKCD** | **Akcadag** | **0.58** | **80** | *i* P | **Pg** | **02 35 53.4** | **-0.6** |
| **AKCD** | **Akcadag** | **0.58** | **80** | P | **Pg** | **02 35 53.4** | **-0.6** |
| **SARI** | **SarD1z-Kayseri** | **0.64** | **289** | *e*PG | **Pg** | **02 35 55.0** | **-0.1** |
| SARI | | | | *e*SG | **Sg** | **02 36 03.9** | **+0.4** |
| **KMRS** | **Kahramanmaras** | **0.73** | **199** | *e*PG | **Pg** | **02 35 57.2** | **+0.4** |
| **KMRS** | **Kahramanmaras** | **0.73** | **199** | *e*Pg | **Pg** | **02 35 57.2** | **+0.4** |
| **PINB** | **Pinarbasi** | **0.78** | **308** | *i* P | **Pg** | **02 35 57.6** | **-0.2** |
| PINB | | | | *i* S | **Sb** | **02 36 09.2** | **-1.2** |
| **PINB** | **Pinarbasi** | **0.78** | **308** | P | **Pg** | **02 35 57.6** | **-0.2** |
| PINB | | | | S | **Sb** | **02 36 09.2** | **-1.2** |
| **AYKD** | **Aykdinkavak** | **0.84** | **201** | P | **Pg** | **02 35 58.9** | **0.0** |
| **ANDN** | **Andirin** | **0.91** | **228** | *i* P | **Pg** | **02 36 00.7** | **+0.4** |
| ANDN | | | | *i* S | **Sg** | **02 36 12.6** | **+0.5** |
| **ANDN** | **Andirin** | **0.91** | **228** | P | **Pg** | **02 36 00.7** | **+0.4** |
| ANDN | | | | S | **Sg** | **02 36 12.6** | **+0.5** |
| **MALT** | **Malatya** | **0.98** | **83** | *e*PG | **Pg** | **02 36 01.8** | **+0.3** |
| MALT | | | | *e*SG | **Sb** | **02 36 16.0** | **+0.1** |
| **MALT** | **Malatya** | **0.98** | **83** | *e*Pg | **Pg** | **02 36 01.8** | **+0.3** |
| MALT | | | | *e*Sg | **Sb** | **02 36 16.0** | **+0.1** |
| **KAMA** | **Osmaniye** | **1.09** | **202** | P | **Pg** | **02 36 02.6** | **-1.1** |
| KAMA | | | | S | **Sg** | **02 36 17.3** | **-0.6** |
| **CUALT** | **Altinyayla-SIV** | **1.12** | **343** | P | **Pb** | **02 36 05.0** | **0.0** |
| CUALT | | | | S | **Sn** | **02 36 22.4** | **+0.5** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.43** | **329** | P | **Pg** | **02 36 10.3** | **+0.3** |
| CUSAR | | | | S | **Sn** | **02 36 30.9** | **+1.7** |
| **KUZU** | **Kuzuini** | **1.43** | **184** | *i* P | **Pb** | **02 36 10.1** | **0.0** |
| **KUZU** | **Kuzuini** | **1.43** | **184** | P | **Pb** | **02 36 10.1** | **0.0** |
| **ILIC** | **ilic-Erzincan** | **1.65** | **40** | *e*PN | **Pn** | **02 36 12.4** | **-0.5** |
| **ILIC** | **ilic-Erzincan** | **1.65** | **40** | *e*Pn | **Pn** | **02 36 12.4** | **-0.5** |
| **SVSK** | **Karacayir** | **1.72** | **355** | *e*PN | **Pn** | **02 36 13.3** | **-0.4** |
| **SVSK** | **Karacayir** | **1.72** | **355** | *e*Pn | **Pn** | **02 36 13.3** | **-0.4** |
| **TAHT** | **Tahtakopru-Hat** | **1.99** | **204** | *e*PN | **Pn** | **02 36 17.6** | **+0.2** |
| **TAHT** | **Tahtakopru-Hat** | **1.99** | **204** | *e*Pn | **Pn** | **02 36 17.6** | **+0.2** |
| **CORM** | **Corum** | **2.81** | **316** | *e*PN | **Pn** | **02 36 28.4** | **-0.3** |
| **CORM** | **Corum** | **2.81** | **316** | *e*Pn | **Pn** | **02 36 28.4** | **-0.3** |

**DJA 17 03:01:24.1**±0.5, **3°.5**±7°×**12°.7E**±°, **h10**km, **M3.9**/13, **mb4.6**/3, **MLv3.5**/13, **Seram**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NLAI** | **Namlea** | **0.28** | **316** | P | Pg | 03 01 29.6 | -0.1 |
| **AAI** | **Ambon** | **0.94** | **105** | P | Pg | 03 01 41.1 | -1.1 |
| **MSAI** | **Masohi** | **1.64** | **87** | P | Pn | 03 01 52.0 | -1.0 |
| **SANI** | **Sanana** | **1.90** | **317** | P | Pn | 03 01 56.3 | -0.3 |
| **LBMI** | **Labuha** | **2.79** | **4** | P | Pn | 03 02 09.2 | +0.3 |
| **BNDI** | **Bandanaira** | **2.82** | **112** | P | Pn | 03 02 09.0 | -0.3 |
| **TNTI** | **Ternate** | **4.18** | **1** | P | Pn | 03 02 28.1 | +0.1 |
| **SWI** | **Sorong** | **4.72** | **57** | P | Pn | 03 02 35.1 | -0.3 |
| **LUWI** | **Luwuk** | **5.11** | **298** | P | Pn | 03 02 40.5 | -0.2 |
| | 40nm,0.8s,0.2nm | | | | | | |
| **KMSI** | **Cibinong** | **5.18** | **320** | P | Pn | 03 02 41.7 | -0.1 |
| | 103nm,0.6s,0.5nm | | | | | | |
| **APSI** | **Ampana** | **6.17** | **294** | P | Pn | 03 02 55.3 | -0.1 |

*NSSC* ***17*** *03:01:54.5±1.5, 33°.69N×35°.52E, h11km±9km, ML1.6*
*ISCJB* ***17*** *03:01:55.9±1.0, 33°.70N±0°.04×35°.59E±0°.08, h21km±9km, Error ellipse: s-maj=11.4km s-min=5.8km az=171.7*
*CSEM* ***17*** *03:01:56.1±0.3, 33°.71N×35°.67E, h10km, ML1.6, Error ellipse: s-maj=8.0km s-min=5.4km az=83.0*
*GRAL* ***17*** *03:01:57.6±0.3, 33°.74N×35°.71E, h0km±27km, MD3.0*
**ISC 17 03:01:56.0**±0.9, **33°.73N**±0°.03×**35°.68E**±0°.04, **h17**km±6km, **n18**, σ0§**41**/30, **Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DQRL** | **Deir Qamar** | **0.09** | **258** | *e*P | **Pg** | **03 01 59.8** | **+0.3** |
| DQRL | | | | *e*S | **Sg** | **03 02 01.5** | **-0.4** |
| **DQRL** | **Deir Qamar** | **0.09** | **258** | *e*Pg | **Pg** | **03 01 59.8** | **+0.3** |
| DQRL | | | | *e*Sg | **Sg** | **03 02 01.5** | **-0.4** |
| **BHL** | **Bhannes** | **0.18** | **355** | *e*P | **Pg** | **03 02 00.7** | **+0.1** |
| **BHL** | **Bhannes** | **0.18** | **355** | *e*Pg | **Pg** | **03 02 00.7** | **+0.1** |
| **BEYL** | **Beirut** | **0.21** | **314** | *e*P | **Pb** | **03 02 01.8** | **+0.4** |
| **BEYL** | **Beirut** | **0.21** | **314** | *e*Pg | **Pb** | **03 02 01.8** | **+0.4** |
| **BRBR** | **Barbar** | **0.39** | **144** | *i* P | **Pg** | **03 02 04.1** | **0.0** |
| BRBR | | | | *i* S | **Sg** | **03 02 09.6** | **+0.1** |
| BRBR | | | | AML | AML | 03 02 10.6 | |
| | comp=N,87nm,0.2s | | | | | | |
| BRBR | | | | AML | AML | 03 02 11.3 | |
| | comp=E,62nm,0.2s | | | | | | |
| **BRBR** | **Barbar** | **0.39** | **144** | *i* P | **Pg** | **03 02 04.1** | **0.0** |
| BRBR | | | | *i* S | **Sg** | **03 02 09.6** | **+0.1** |
| **HWQ** | **Hawqa** | **0.60** | **22** | *e*P | **Pg** | **03 02 07.9** | **+0.1** |
| HWQ | | | | *e*S | **Sg** | **03 02 15.6** | **-0.3** |
| **HWQ** | **Hawqa** | **0.60** | **22** | *e*P | **Pg** | **03 02 07.9** | **+0.1** |
| HWQ | | | | *e*S | **Sg** | **03 02 15.6** | **-0.3** |
| **FKH** | **Fakeheh** | **0.80** | **49** | *e*P | **Pb** | **03 02 11.5** | **-0.1** |
| **FKH** | **Fakeheh** | **0.80** | **49** | *e*P | **Pb** | **03 02 11.5** | **-0.1** |
| **HAWK** | **Haweek** | **1.00** | **37** | *e*P | **Pb** | **03 02 15.1** | **+0.2** |
| HAWK | | | | *e*S | **Sn** | **03 02 29.0** | **-0.1** |
| HAWK | | | | AML | AML | 03 02 34.1 | |
| | comp=E,24nm,0.4s | | | | | | |
| HAWK | | | | AML | AML | 03 02 37.0 | |
| | comp=N,22nm,0.5s | | | | | | |
| **HAWK** | **Haweek** | **1.00** | **37** | *e*P | **Pb** | **03 02 15.1** | **+0.2** |
| HAWK | | | | *e*S | **Sn** | **03 02 29.0** | **-0.1** |
| **SALA** | **Sala** | **1.34** | **138** | *e*P | **Pn** | **03 02 19.4** | **-0.8** |
| SALA | | | | *e*S | **Sb** | **03 02 38.5** | **+0.6** |
| **ROOS** | **tl_alroos** | **1.41** | **71** | *e*P | **Pg** | **03 02 23.2** | **0.0** |
| ROOS | | | | *e*S | **Sg** | **03 02 42.5** | **+0.8** |
| SALA | | | | AML | AML | 03 02 44.1 | |
| | comp=E,1.8nm,0.5s | | | | | | |
| SALA | | | | AML | AML | 03 02 50.7 | |
| | comp=N,16nm,0.4s | | | | | | |
| **SALA** | **Sala** | **1.34** | **138** | *e*P | **Pn** | **03 02 19.4** | **-0.8** |
| SALA | | | | *e*S | **Sb** | **03 02 38.5** | **+0.6** |
| **ROOS** | **tl_alroos** | **1.41** | **71** | *e*P | **Pg** | **03 02 23.2** | **0.0** |
| ROOS | | | | *e*S | **Sg** | **03 02 42.5** | **+0.8** |
| ROOS | | | | AML | AML | 03 02 47.5 | |
| | comp=E,24nm,0.3s | | | | | | |
| ROOS | | | | AML | AML | 03 02 48.4 | |
| | comp=N,16nm,0.4s | | | | | | |
| **ROOS** | **tl_alroos** | **1.41** | **71** | *e*P | **Pg** | **03 02 23.2** | **0.0** |
| ROOS | | | | *e*S | **Sg** | **03 02 42.5** | **+0.8** |

**SJA 17 03:11:33.0**±0.5, **28°.71S**×**68°.56W**, **h107**km±2km, **ML4.6**, **La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VCA** | **Vinchina** | **0.31** | **96** | *i* P | Pn | 03 11 49.4 | +0.7 |
| VCA | | | | *i* P | Pn | 03 11 49.7 | +1.0 |
| VCA | | | | *i* S | Sn | 03 12 01.2 | +0.8 |
| VCA | | | | *i* S | Sn | 03 12 01.4 | +1.0 |
| VCA | | | | AML | AML | 03 12 02.8 | |
| | comp=N,17µm,0.2s | | | | | | |
| **AGUA** | **GUANDACOL** | **0.78** | **176** | *i* P | Pn | 03 11 52.6 | +0.6 |
| AGUA | | | | *i* S | Sn | 03 12 07.4 | +1.2 |
| **AVFE** | **Valle Fertil** | **2.17** | **154** | *i* P | Pn | 03 12 09.5 | +1.4 |
| AVFE | | | | *i* S | Sn | 03 12 36.2 | +1.1 |
| **AMOG** | **MOGNA** | **2.23** | **179** | *i* P | Pn | 03 12 09.9 | +1.0 |
| **CYA** | **Choya** | **2.44** | **84** | *i* P | Pn | 03 12 12.8 | +1.3 |
| CYA | | | | *i* P | Pn | 03 12 12.9 | +1.3 |
| CYA | | | | AML | AML | 03 12 44.3 | |
| | comp=Z,182nm,0.2s | | | | | | |
| **APLL** | **PUNTA DE LOS L** | **2.44** | **134** | *i* P | Pn | 03 12 12.6 | +0.9 |
| **CFAA** | **Coronel Fontan** | **2.90** | **175** | *i* P | Pn | 03 12 18.9 | +1.2 |
| CFAA | | | | AML | AML | 03 12 54.9 | |
| | comp=Z,17µm,0.5s | | | | | | |
| CFAA | | | | AMSN | | 03 14 05.6 | |
| **RTCV** | **Cerro Valdivia** | **3.14** | **180** | *i* P | Pn | 03 12 22.3 | +1.4 |
| **AHML** | **Horco Molle** | **3.44** | **57** | *i* P | Pn | 03 12 26.3 | +1.5 |
| **FSA** | **Cafayete** | **3.45** | **42** | *i* P | Pn | 03 12 26.6 | +1.4 |

*IDC* ***17*** *03:11:31.2±3.2, 4°.65S×134°.81E, h0km, mb3.7/1, mb1 4.1/3, mb1mx3.6/25, mbtmp3.9/3, ML3.9/2, Error ellipse: s-maj=144.8km s-min=32.4km az=79.0*
*ISCJB* ***17*** *03:11:32.6±0.8, 4°.85S±0°.08×134°.4E±0°.1, h22km, mb3.7/1, Error ellipse: s-maj=16.8km s-min=10.9km az=9.6*
*AUST* ***17*** *03:11:34.4±0.0, 4°.63S×134°.23E, h106km, Error ellipse: s-maj=1.3km s-min=1.2km az=253.0*
**ISC 17 03:11:35.2**±1.0, **4°.79S**±0°.10×**134°.4E**±0°.1, **h22**km, **n9**, σ1§**45**/8, **Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SWI** | **Sorong** | **5.01** | **321** | P | **Pn** | **03 12 49.2** | **0.0** |
| | baz=4.8,SNR=3.4 | | | | | | |
| **JAY** | **Jayapura** | **6.68** | **70** | P | **Pn** | **03 13 11.9** | **-0.3** |
| | baz=6.8,SNR=6.7 | | | | | | |
| **KDU** | **Kakadu** | **8.07** | **194** | P | **Pn** | **03 13 32.4** | **+1.2** |
| | baz=8.2,SNR=23 | | | | | | |
| **MTN** | **Manton Dam** | **8.63** | **202** | P | **Pn** | **03 13 38.6** | **-0.3** |
| | baz=8.8,SNR=37 | | | | | | |
| **KNRA** | **Kununurra** | **12.15** | **207** | P | **Pn** | **03 14 24.7** | **-2.4** |
| | baz=12,SNR=46 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.06** | **180** | Pn | **Pn** | **03 15 05.4** | **-1.4** |
| | 0.4nm,0.3s,baz=0.7,slow=13,SNR=11 | | | | | | |
| WRA | | | | Sn | Sn | 03 17 44.1 | -8.9 |
| | 0.5nm,0.3s,baz=359,slow=23,SNR=6.2 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **15.76** | **212** | P | Pn | 03 15 10.0 | -6.0 |
| | baz=16,SNR=22 | | | | | | |
| **ASAR** | **Alice Springs** | **18.77** | **181** | P | **Pn** | **03 15 54.6** | **+1.0** |
| | 0.4nm,0.3s,baz=5.7,slow=10,SNR=30 | | | | | | |
| ASAR | | | | S | Sn | 03 19 11.3 | -12 |
| | 0.2nm,0.3s,baz=360,slow=28,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.89** | **324** | P | **P** | **03 22 38.8** | **+0.3** |
| | 0.6nm,0.6s,baz=129,slow=7.2,SNR=3.8 | | | | | | |

**MEX 17 03:15:15.4**±0.9, **17°.16N**×**99°.76W**, **h31**km±41km, **MD3.7, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ACX** | **Acapulco** | **0.31** | **197** | *i* P | Pb | 03 15 20.9 | -2.2 |
| ACX | | | | *i* S | Sb | 03 15 27.2 | -1.1 |
| **CAIG** | **El Cayaco** | **0.49** | **257** | *e*P | Pb | 03 15 23.8 | -2.0 |
| CAIG | | | | *e*S | Sb | 03 15 31.4 | -1.5 |
| **MEIG** | **Mezcala** | **0.77** | **10** | *e*P | Pn | 03 15 27.8 | -2.5 |
| MEIG | | | | *i* S | Sb | 03 15 37.3 | -3.5 |
| **TLIG** | **Tlapa** | **1.21** | **71** | *i* P | Pn | 03 15 34.6 | -1.7 |
| TLIG | | | | *i* S | Sn | 03 15 49.8 | -2.0 |
| **PLIG** | **Platanillo** | **1.25** | **11** | *e*P | Pn | 03 15 34.9 | -2.0 |
| PLIG | | | | *e*S | Sn | 03 15 52.1 | -0.6 |

*IDC* ***17*** *03:20:20.0±1.3, 16°.74S×168°.39E, h0km, mb4.0/5, mb1 4.3/6, mb1mx3.9/23, mbtmp4.0/6, ML3.9/1, MS3.5/5, Ms1 3.5/5, ms1mx3.1/21, Error ellipse: s-maj=45.5km s-min=23.4km az=131.0*
*ISCJB* ***17*** *03:20:23.5±1.0, 16°.79S±0°.09×168°.3E±0°.2, h33km, mb4.0/5, MS3.5/4, Error ellipse: s-maj=29.9km s-min=10.8km az=16.7*
**ISC 17 03:20:25.2**±1.1, **16°.8S**±0°.1×**168°.4E**±0°.2, **h35**km, **n12**, σ1§**33**/8, **mb3.9**/5, **MS3.5**/4, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **5.56** | **199** | *e*Pn | **Pn** | **03 21 45.4** | **-0.3** |
| | 7.1nm,0.3s | | | | | | |
| DZM | | | | *e*LR | LR | 03 22 46.3 | |
| | 366nm,25.8s | | | | | | |
| **DZM** | **Mont Dzumac** | **5.56** | **199** | Pn | **Pn** | **03 21 44.7** | **-0.9** |
| | 3.6nm,0.3s,baz=356,slow=19,SNR=35 | | | | | | |
| DZM | | | | Sn | **Sn** | **03 22 49.6** | **+1.1** |
| | 1.3nm,0.3s,baz=0.2,slow=20,SNR=4.1 | | | | | | |
| **AFI** | **Afiamalu** | **19.31** | **84** | LR | LR | 03 30 22.0 | |
| | comp=Z,120nm,20.1s,baz=320,slow=31 | | | | | | |
| **URZ** | **Urewera** | **22.70** | **162** | LR | LR | 03 32 29.0 | |
| | comp=Z,102nm,19.0s,baz=4.0,slow=32 | | | | | | |
| **RPZ** | **Rata Peaks** | **26.93** | **176** | LR | LR | 03 35 50.6 | |
| | comp=Z,143nm,18.3s,baz=245,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.46** | **259** | P | **P** | **03 26 51.6** | **-1.0** |
| | 0.9nm,0.9s,baz=84,slow=8.3,SNR=5.9 | | | | | | |
| **ASAR** | **Alice Springs** | **33.04** | **252** | P | **P** | **03 26 57.2** | **-0.4** |
| | 4.9nm,0.8s,baz=77,slow=8.8,SNR=45 | | | | | | |
| ASAR | | | | LR | LR | 03 39 57.5 | |
| | comp=Z,114nm,18.7s,baz=116,slow=36 | | | | | | |
| **PPT2** | **Papeete2** | **40.08** | **98** | *e*LR | LR | 03 39 19.4 | |
| | 92nm,24.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **69.22** | **333** | LR | LR | 03 57 46.6 | |
| | comp=Z,27nm,22.0s,baz=203,slow=32 | | | | | | |
| **SONM** | **Songino Array** | **84.81** | **323** | P | **P** | **03 32 58.1** | **+1.9** |
| | 0.6nm,0.6s,baz=110,slow=6.3,SNR=4.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.79** | **49** | P | **P** | **03 33 11.5** | **+0.4** |
| | 1.1nm,1.0s,baz=232,slow=7.4,SNR=7.8 | | | | | | |
| **ILAR** | **Eielson Array** | **88.15** | **18** | P | **P** | **03 33 10.8** | **-1.2** |
| | 0.5nm,0.8s,baz=229,slow=4.5,SNR=6.3 | | | | | | |

**IDC 17 03:23:43.9**±2.3, **16°.72S**×**168°.47E**, **h0**km, **mb3.6**/3, **mb1 3.9**/4, **mb1mx3.7**/23, **mbtmp3.7**/4, **ML3.7**/1, **MS3.6**/1, **Ms1 3.6**/1, **ms1mx2.8**/18, **Error ellipse: s-maj=60.6km s-min=31.3km az=118.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **5.66** | **199** | Pn | Pn | 03 25 09.7 | +0.3 |
| | 2.0nm,0.3s,baz=179,slow=18,SNR=13 | | | | | | |
| DZM | | | | Sn | Sn | 03 26 14.5 | -0.8 |
| | 0.4nm,0.3s,baz=180,slow=20,SNR=2.5 | | | | | | |
| **RAO** | **Raoul Island** | **17.67** | **137** | LR | LR | 03 32 26.3 | |
| | comp=Z,209nm,19.5s,baz=46,slow=30 | | | | | | |
| **WRA** | **Warramunga Arr

*ML3.9(THE),After ATH.*
*NEIC Felt at Karpathos.*
*MOS* ***17*** *04:02:21.0±1.3,35°.46N×27°.26E,h33km,mb4.0/11,Error ellipse: s-maj=10.0km s-min=6.5km az=88.5*
*NIC* ***17*** *04:02:21.5,35°.38N×27°.16E,h51km,mb4.5,ML4.0*
*HLW* ***17*** *04:02:24.9,34°.94N×27°.61E,h9km×6km,Md3.6,Ml3.1*
**ISC 17 04:02:19.1±0.8,35°.48N±0'.02×27°.25E±0'.02,h8km±5km, n364,σ1‡32/451,mb3.9/17,MS2.9/8,6C-5D,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KARP** | **Karpathos** | **0.10** | **312** | | *e*PB | | **Pg** | **04 02 21.4** | **-0.2** |
| KARP | | | | | *e*SB | | **Sg** | **04 02 23.2** | **-0.1** |
| **KARP** | **Karpathos** | **0.10** | **312** | | P | | **Pg** | **04 02 21.4** | **-0.2** |
| KARP | | | | | S | | **Sg** | **04 02 23.2** | **-0.1** |
| **KARP** | **Karpathos** | **0.10** | **312** | | P | | **Pg** | **04 02 21.4** | **-0.2** |
| KARP | | | | | S | | **Sg** | **04 02 23.2** | **-0.1** |
| **ZKR** | **Zakros** | **0.92** | **247** | | *e*PN | | **Pg** | **04 02 35.8** | **-1.1** |
| ZKR | | | | | *e*SN | | **Sg** | **04 02 48.7** | **-0.1** |
| **ZKR** | **Zakros** | **0.92** | **247** | | P | | **Pg** | **04 02 35.7** | **-1.1** |
| ZKR | | | | | S | | **Sb** | **04 02 49.4** | **-0.3** |
| **ZKR** | **Zakros** | **0.92** | **247** | | P | | **Pg** | **04 02 35.7** | **-1.1** |
| ZKR | | | | | S | | **Sb** | **04 02 49.4** | **-0.3** |
| **ARG** | **Arkhangelos** | **1.02** | **44** | | *e*PN | | **Pb** | **04 02 39.1** | **0.0** |
| ARG | | | | | *e*SN | | **Sn** | **04 02 53.5** | **-0.7** |
| **ARG** | **Arkhangelos** | **1.02** | **44** | | P | | **Pg** | **04 02 38.7** | **-0.1** |
| ARG | | | | | S | | **Sn** | **04 02 53.6** | **-0.7** |
| **ARG** | **Arkhangelos** | **1.02** | **44** | | P | | **Pg** | **04 02 38.7** | **-0.1** |
| **ARG** | **Arkhangelos** | **1.02** | **44** | | *e*Pn | | **Pb** | **04 02 39.1** | **0.0** |
| ARG | | | | | S | | **Sn** | **04 02 53.6** | **-0.7** |
| **NIS1** | **Nisyros Isl.** | **1.12** | **357** | | *e*PN | | **Pg** | **04 02 40.4** | **-0.2** |
| **NIS1** | **Nisyros Isl.** | **1.12** | **357** | | P | | **Pg** | **04 02 40.5** | **-0.2** |
| NIS1 | | | | | S | | **Sn** | **04 02 56.6** | **-0.1** |
| **NIS1** | **Nisyros Isl.** | **1.12** | **357** | | P | | **Pg** | **04 02 40.5** | **-0.2** |
| NIS1 | | | | | S | | **Sn** | **04 02 56.6** | **-0.1** |
| **NISR** | **Nisiros** | **1.13** | **355** | | *e*PN | | **Pg** | **04 02 40.2** | **-0.7** |
| NISR | | | | | *e*SN | | **Sb** | **04 02 56.2** | **+0.4** |
| **NISR** | **Nisiros** | **1.13** | **355** | | P | | **Pg** | **04 02 40.4** | **-0.5** |
| NISR | | | | | S | | **Sb** | **04 02 56.4** | **+0.6** |
| **NISR** | **Nisiros** | **1.13** | **355** | | P | | **Pg** | **04 02 40.4** | **-0.5** |
| NISR | | | | | S | | **Sb** | **04 02 56.4** | **+0.6** |
| **NPS** | **Neapolis** | **1.36** | **261** | | *e*PN | | **Pn** | **04 02 44.5** | **+0.1** |
| NPS | | | | | *e*SN | | **Sb** | **04 03 01.4** | **-0.9** |
| **NPS** | **Neapolis** | **1.36** | **261** | | *e*Pn | | **Pn** | **04 02 44.5** | **+0.1** |
| NPS | | | | | *e*Sn | | **Sb** | **04 03 01.4** | **-0.9** |
| **LAST** | **Lasithi** | **1.48** | **258** | | *e*PN | | **Pn** | **04 02 46.6** | **+0.4** |
| LAST | | | | | *e*SN | | **Sg** | **04 03 06.6** | **-0.3** |
| **LAST** | **Lasithi** | **1.48** | **258** | | *e*Pn | | **Pn** | **04 02 46.6** | **+0.4** |
| LAST | | | | | *e*Sn | | **Sg** | **04 03 06.6** | **-0.3** |
| **BODT** | **Bodrum** | **1.58** | **2** | | *e*PN | | **Pn** | **04 02 47.3** | **-0.1** |
| **BODT** | **Bodrum** | **1.58** | **2** | | *e*Pn | | **Pn** | **04 02 47.3** | **-0.1** |
| **BDRM** | **Kayabasi** | **1.59** | **6** | | *i* P | | **Pn** | **04 02 46.5** | **-1.0** |
| BDRM | | | | | *i* S | | **Sn** | **04 03 05.9** | **-2.3** |
| **BDRM** | **Kayabasi** | **1.59** | **6** | | P | | **Pn** | **04 02 46.5** | **-1.0** |
| BDRM | | | | | S | | **Sn** | **04 03 05.9** | **-2.3** |
| **SANT** | **Santorini** | **1.70** | **302** | | *e*PN | | **Pn** | **04 02 48.8** | **-0.3** |
| SANT | | | | | *e*SN | | **Sn** | **04 03 11.1** | **0.0** |
| **SANT** | **Santorini** | **1.70** | **302** | | P | | **Pn** | **04 02 48.8** | **-0.3** |
| SANT | | | | | S | | **Sn** | **04 03 11.6** | **+0.5** |
| **SANT** | **Santorini** | **1.70** | **302** | | *e*Pn | | **Pn** | **04 02 48.8** | **-0.3** |
| SANT | | | | | *e*Sn | | **Sn** | **04 03 11.1** | **0.0** |
| **SANT** | **Santorini** | **1.70** | **302** | | P | | **Pn** | **04 02 48.8** | **-0.3** |
| SANT | | | | | *e*Sn | | **Sn** | **04 03 11.1** | **0.0** |
| SANT | | | | | S | | **Sn** | **04 03 11.6** | **+0.5** |
| **THR1** | **Thera Island** | **1.70** | **302** | | P | | **Pn** | **04 02 49.0** | **-0.1** |
| **THR1** | **Thera Island** | **1.70** | **302** | | P | | **Pn** | **04 02 49.0** | **-0.1** |
| **THR6** | **Thira Island,** | **1.74** | **301** | | P | | **Pn** | **04 02 49.4** | **-0.2** |
| **THR6** | **Thira Island,** | **1.74** | **301** | | P | | **Pn** | **04 02 49.4** | **-0.2** |
| **THR7** | **Fira-Santorini** | **1.75** | **303** | | P | | **Pn** | **04 02 49.8** | **0.0** |
| **THR7** | **Fira-Santorini** | **1.75** | **303** | | P | | **Pn** | **04 02 49.8** | **0.0** |
| **DALY** | **Dalyan (Mu¨la** | **1.75** | **40** | | *e*PN | | **Pn** | **04 02 50.0** | **+0.2** |
| DALY | | | | | *e*SN | | **Sn** | **04 03 12.4** | **+0.2** |
| **DALY** | **Dalyan (Mu¨la** | **1.75** | **40** | | *e*Pn | | **Pn** | **04 02 50.0** | **+0.2** |
| DALY | | | | | *e*Sn | | **Sn** | **04 03 12.4** | **+0.2** |
| **THR3** | **Thira Island,** | **1.76** | **302** | | P | | **Pn** | **04 02 49.8** | **-0.1** |
| **THR3** | **Thira Island,** | **1.76** | **302** | | P | | **Pn** | **04 02 49.8** | **-0.1** |
| **TURN** | **Turunc** | **1.77** | **38** | | *i* P | | **Pn** | **04 02 47.3** | **-2.7** |
| **TURN** | **Turunc** | **1.77** | **38** | | P | | **Pn** | **04 02 47.3** | **-2.7** |
| TURN | | | | | S | | **Sn** | **04 03 08.7** | **-4.0** |
| **THR5** | **Thira Island,** | **1.80** | **302** | | P | | **Pn** | **04 02 50.2** | **-0.3** |
| **THR5** | **Thira Island,** | **1.80** | **302** | | P | | **Pn** | **04 02 50.2** | **-0.3** |
| **YER** | **Yerkesik** | **1.85** | **27** | | *e*PN | | **Pn** | **04 02 51.9** | **+0.7** |
| YER | | | | | *e*SN | | **Sn** | **04 03 14.0** | **-0.7** |
| **YER** | **Yerkesik** | **1.85** | **27** | | *e*Pn | | **Pn** | **04 02 51.9** | **+0.7** |
| YER | | | | | *e*Sn | | **Sn** | **04 03 14.0** | **-0.7** |
| **FETY** | **Fethiye** | **1.88** | **52** | | *e*PN | | **Pn** | **04 02 52.5** | **+0.9** |
| **FETY** | **Fethiye** | **1.88** | **52** | | *e*Pn | | **Pn** | **04 02 52.5** | **+0.9** |
| **IDI** | **Anoyia** | **1.94** | **265** | | Pn | | **Pn** | **04 02 52.2** | **-0.2** |
| | 14nm,0.3s,baz=46,slow=4.1,SNR=108 | | | | | | | | |
| IDI | | | | | | Sn | **Sb** | **04 03 19.8** | **+0.7** |
| | 136nm,0.3s,baz=297,slow=19,SNR=19 | | | | | | | | |
| IDI | | | | | | LR | LR | 04 03 47.0 | |
| | comp=Z,666nm,18.1s,baz=82,slow=46 | | | | | | | | |
| **IDI** | **Anoyia** | **1.94** | **265** | | *e*PN | | **Pn** | **04 02 52.2** | **-0.2** |
| **IDI** | **Anoyia** | **1.94** | **265** | | P | | **Pn** | **04 02 51.6** | **-0.8** |
| IDI | | | | | S | | **Sb** | **04 03 18.2** | **-0.9** |
| **IDI** | **Anoyia** | **1.94** | **265** | | *e*Pn | | **Pn** | **04 02 52.7** | **+0.3** |
| IDI | | | | | *e*Pg | | **Pg** | **04 02 56.1** | **-0.2** |
| IDI | | | | | *e*Sn | | **Sb** | **04 03 18.7** | **-0.4** |
| IDI | | | | | *e*Sg | | **Sg** | **04 03 21.6** | **+0.1** |
| **IDI** | **Anoyia** | **1.94** | **265** | | P | | **Pn** | **04 02 51.6** | **-0.8** |
| **IDI** | **Anoyia** | **1.94** | **265** | | *e*Pn | | **Pn** | **04 02 52.7** | **+0.3** |
| **IDI** | **Anoyia** | **1.94** | **265** | | *e*Pg | | **Pg** | **04 02 56.1** | **-0.2** |
| IDI | | | | | S | | **Sb** | **04 03 18.2** | **-0.9** |
| **SIVA** | **Sivas** | **2.05** | **258** | | *e*PN | | **Pn** | **04 02 54.6** | **+0.7** |
| **SIVA** | **Sivas** | **2.05** | **258** | | P | | **Pb** | **04 02 55.4** | **-1.2** |
| SIVA | | | | | S | | **Sn** | **04 03 20.6** | **+1.0** |
| **SIVA** | **Sivas** | **2.05** | **258** | | *e*Pn | | **Pn** | **04 02 54.6** | **+0.7** |
| **SIVA** | **Sivas** | **2.05** | **258** | | P | | **Pb** | **04 02 55.4** | **-1.2** |
| SIVA | | | | | S | | **Sn** | **04 03 20.6** | **+1.0** |
| **AKAS** | **Kas** | **2.06** | **68** | | *i* P | | **Pn** | **04 02 55.5** | **+1.4** |
| AKAS | | | | | *i* S | | **Sn** | **04 03 21.0** | **+1.1** |
| **AKAS** | **Kas** | **2.06** | **68** | | P | | **Pn** | **04 02 55.5** | **+1.4** |
| AKAS | | | | | S | | **Sn** | **04 03 21.0** | **+1.1** |
| **APE** | **Apeiranthos** | **2.11** | **319** | | *e*PN | | **Pn** | **04 02 53.5** | **-1.2** |
| **APE** | **Apeiranthos** | **2.11** | **319** | | *ce*P | | **Pn** | **04 02 54.2** | **-0.5** |
| APE | | | | | *i* S | | **Sn** | **04 03 19.1** | **-2.0** |
| **APE** | **Apeiranthos** | **2.11** | **319** | ⇑ | *i*P | | **Pn** | **04 02 54.3** | **-0.5** |
| APE | | | | | S | | **Sn** | **04 03 21.2** | **+0.1** |
| **APE** | **Apeiranthos** | **2.11** | **319** | | *e*PB | | **Pn** | **04 02 54.2** | **-0.5** |
| APE | | | | | *e*SN | | **Sn** | **04 03 21.0** | **-0.1** |
| **APE** | **Apeiranthos** | **2.11** | **319** | | P | | **Pn** | **04 02 53.7** | **-1.0** |
| **APE** | **Apeiranthos** | **2.11** | **319** | | P | | **Pn** | **04 02 53.7** | **-1.0** |
| APE | | | | | *i* S | | **Sn** | **04 03 19.1** | **-2.0** |
| APE | | | | | *e*Sn | | **Sn** | **04 03 21.0** | **-0.1** |
| **AYDN** | **Tasoluk** | **2.23** | **13** | | *i* P | | **Pb** | **04 02 59.9** | **+0.1** |
| AYDN | | | | | *i* S | | **Sn** | **04 03 24.9** | **+0.7** |
| **AYDN** | **Tasoluk** | **2.23** | **13** | | P | | **Pb** | **04 02 59.9** | **+0.1** |
| AYDN | | | | | S | | **Sn** | **04 03 24.9** | **+0.7** |
| **SMG** | **Samos** | **2.25** | **352** | | P | | **Pn** | **04 02 55.6** | **-1.0** |
| **SMG** | **Samos** | **2.25** | **352** | | P | | **Pn** | **04 02 55.6** | **-1.0** |
| **VAM** | **Vamos** | **2.49** | **269** | | *e*PN | | **Pn** | **04 03 01.6** | **+1.6** |
| **VAM** | **Vamos** | **2.49** | **269** | | P | | **Pn** | **04 03 00.3** | **+0.3** |
| **VAM** | **Vamos** | **2.49** | **269** | | P | | **Pn** | **04 03 00.3** | **+0.3** |
| **VAM** | **Vamos** | **2.49** | **269** | | *e*Pn | | **Pn** | **04 03 01.6** | **+1.6** |
| **ELL** | **Elmali** | **2.50** | **59** | | *e*PN | | **Pn** | **04 03 01.2** | **+1.1** |
| **ELL** | **Elmali** | **2.50** | **59** | | *e*Pn | | **Pn** | **04 03 01.2** | **+1.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.51** | **12** | | *e*PN | | **Pn** | **04 03 00.5** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.51** | **12** | | *e*Pn | | **Pn** | **04 03 00.5** | **+0.1** |
| **GOLH** | **Golhisar** | **2.56** | **46** | | *i* P | | **Pb** | **04 03 03.8** | **-1.6** |
| **GOLH** | **Golhisar** | **2.56** | **46** | | P | | **Pb** | **04 03 03.8** | **-1.6** |
| GOLH | | | | | S | | **Sb** | **04 03 39.4** | **+2.5** |
| **MHLO** | **Agia Marina, M** | **2.60** | **298** | | *e*PB | | **Pn** | **04 03 03.0** | **+1.5** |
| **DNZL** | **Cakiroluk** | **2.63** | **33** | | *i* P | | **Pn** | **04 03 04.3** | **+2.2** |
| DNZL | | | | | *i* S | | **Sb** | **04 03 39.2** | **-0.1** |
| **DNZL** | **Cakiroluk** | **2.63** | **33** | | P | | **Pn** | **04 03 04.3** | **+2.2** |
| DNZL | | | | | S | | **Sb** | **04 03 39.2** | **-0.1** |
| **IMMV** | **Iera Moni Meta** | **2.67** | **270** | | *e*PB | | **Pn** | **04 03 03.2** | **+0.8** |
| **DENT** | **Denizli** | **2.68** | **32** | | *e*PN | | **Pn** | **04 03 02.8** | **+0.2** |
| **DENT** | **Denizli** | **2.68** | **32** | | *e*Pn | | **Pn** | **04 03 02.8** | **+0.2** |
| **SERI** | **Serifos** | **2.79** | **308** | | *e*PN | | **Pn** | **04 03 03.9** | **-0.2** |
| **SERI** | **Serifos** | **2.79** | **308** | | *e*Pn | | **Pn** | **04 03 03.9** | **-0.2** |
| **ZEY** | **¨zmir** | **2.82** | **348** | | P | | **Pn** | **04 03 03.3** | **-1.1** |
| ZEY | | | | | S | | **Sg** | **04 03 52.2** | **+2.6** |
| **BLCB** | **Balcova** | **2.90** | **357** | | *e*PN | | **Pn** | **04 03 05.5** | **-0.1** |
| **BLCB** | **Balcova** | **2.90** | **357** | | *e*Pn | | **Pn** | **04 03 05.5** | **-0.1** |
| **URLA** | **Izmir** | **2.92** | **350** | | *i* P | | **Pn** | **04 03 05.2** | **-0.7** |
| **URLA** | **Izmir** | **2.92** | **350** | | P | | **Pn** | **04 03 05.2** | **-0.7** |
| URLA | | | | | S | | **Sg** | **04 03 55.3** | **+2.3** |
| **KORT** | **Korkueli** | **2.93** | **58** | | *i* P | | **Pn** | **04 03 08.5** | **+2.4** |
| KORT | | | | | *i* S | | **Sb** | **04 03 46.3** | **-1.4** |
| **KORT** | **Korkueli** | **2.93** | **58** | | P | | **Pn** | **04 03 08.5** | **+2.4** |
| KORT | | | | | S | | **Sb** | **04 03 46.3** | **-1.4** |
| **CHOS** | **Chios island** | **3.05** | **342** | | *e*PN | | **Pn** | **04 03 07.8** | **+0.1** |
| **CHOS** | **Chios island** | **3.05** | **342** | | *e*Pn | | **Pn** | **04 03 07.8** | **+0.1** |
| **MANT** | **Manisa** | **3.18** | **19** | | *i* P | | **Pn** | **04 03 10.4** | **+0.7** |
| MANT | | | | | *i* S | | **Sn** | **04 03 47.3** | **-0.6** |
| **MANT** | **Manisa** | **3.18** | **19** | | P | | **Pn** | **04 03 10.4** | **+0.7** |
| MANT | | | | | S | | **Sn** | **04 03 47.3** | **-0.6** |
| **KULA** | **Kula-Manisa** | **3.23** | **20** | | *e*PN | | **Pn** | **04 03 10.8** | **+0.6** |
| **KULA** | **Kula-Manisa** | **3.23** | **20** | | *e*Pn | | **Pn** | **04 03 10.8** | **+0.6** |
| **ANKY** | **Antikythira Is** | **3.24** | **278** | | *e*PN | | **Pn** | **04 03 09.8** | **-0.4** |
| **ANKY** | **Antikythira Is** | **3.24** | **278** | | P | | **Pn** | **04 03 09.9** | **-0.3** |
| ANKY | | | | | S | | **Sn** | **04 03 50.7** | **+1.8** |
| **ANKY** | **Antikythira Is** | **3.24** | **278** | | P | | **Pn** | **04 03 09.9** | **-0.3** |
| ANKY | | | | | S | | **Sn** | **04 03 50.7** | **+1.8** |
| **BCK** | **Bucak** | **3.34** | **53** | | *e*PN | | **Pn** | **04 03 13.0** | **+1.3** |
| **BCK** | **Bucak** | **3.34** | **53** | | *e*Pn | | **Pn** | **04 03 13.0** | **+1.3** |
| **KHL** | **Karahalli** | **3.37** | **32** | | *e*PN | | **Pn** | **04 03 13.3** | **+1.2** |
| **KHL** | **Karahalli** | **3.37** | **32** | | *e*Pn | | **Pn** | **04 03 13.3** | **+1.2** |
| **KHAL** | **Karahalli** | **3.40** | **31** | | *i* P | | **Pn** | **04 03 13.9** | **+1.4** |
| KHAL | | | | | *i* S | | **Sb** | **04 03 57.5** | **-3.6** |
| **KHAL** | **Karahalli** | **3.40** | **31** | | P | | **Pn** | **04 03 13.9** | **+1.4** |
| KHAL | | | | | S | | **Sb** | **04 03 57.5** | **-3.6** |
| **AKHS** | **Akhisar** | **3.42** | **7** | | *i* P | | **Pn** | **04 03 13.5** | **+0.7** |
| AKHS | | | | | *i* S | | **Sn** | **04 03 54.0** | **+0.5** |
| **AKHS** | **Akhisar** | **3.42** | **7** | | P | | **Pn** | **04 03 13.5** | **+0.7** |
| AKHS | | | | | S | | **Sn** | **04 03 54.0** | **+0.5** |
| **AKS** | **Akhisar** | **3.42** | **7** | | *e*PN | | **Pn** | **04 03 13.4** | **+0.6** |
| **AKS** | **Akhisar** | **3.42** | **7** | | *e*Pn | | **Pn** | **04 03 13.4** | **+0.6** |
| **KYTH** | **Kithira** | **3.51** | **284** | | *e*PN | | **Pn** | **04 03 14.5** | **+0.5** |
| **KYTH** | **Kithira** | **3.51** | **284** | | P | | **Pn** | **04 03 14.5** | **+0.5** |
| **KYTH** | **Kithira** | **3.51** | **284** | | P | | **Pn** | **04 03 14.5** | **+0.5** |
| **ISP** | **Isparta** | **3.52** | **47** | | *e*PN | | **Pn** | **04 03 15.7** | **+1.5** |
| **ISP** | **Isparta** | **3.52** | **47** | ⇓ | *e*P | | **Pn** | **04 03 16.3** | **+2.1** |
| **ISP** | **Isparta** | **3.52** | **47** | | *e*Pn | | **Pn** | **04 03 15.7** | **+1.5** |
| **ISP** | **Isparta** | **3.52** | **47** | | *e*P | | **Pn** | **04 03 16.3** | **+2.1** |
| **DKL** | **Dikili** | **3.59** | **356** | | *e*PN | | **Pn** | **04 03 14.8** | **-0.3** |
| **DKL** | **Dikili** | **3.59** | **356** | | *e*Pn | | **Pn** | **04 03 14.8** | **-0.3** |
| **SUTC** | **Sutluce-Ispart** | **3.62** | **56** | | *e*PN | | **Pn** | **04 03 17.2** | **+1.6** |
| **SUTC** | **Sutluce-Ispart** | **3.62** | **56** | | *e*Pn | | **Pn** | **04 03 17.2** | **+1.6** |
| **VLY** | **Voula,Athens** | **3.65** | **311** | | *e*PN | | **Pn** | **04 03 16.7** | **+0.8** |
| **VLY** | **Voula,Athens** | **3.65** | **311** | | *e*Pn | | **Pn** | **04 03 16.7** | **+0.8** |
| **VLI** | **Veliai** | **3.70** | **291** | | *e*PN | | **Pn** | **04 03 16.9** | **+0.3** |
| **VLI** | **Veliai** | **3.70** | **291** | | P | | **Pn** | **04 03 16.2** | **-0.4** |
| VLI | | | | | S | | **Sn** | **04 04 01.6** | **+1.2** |
| **VLI** | **Veliai** | **3.70** | **291** | | P | | **Pn** | **04 03 16.2** | **-0.4** |
| **VLI** | **Veliai** | **3.70** | **291** | | *e*Pn | | **Pn** | **04 03 16.9** | **+0.3** |
| VLI | | | | | S | | **Sn** | **04 04 01.6** | **+1.2** |
| **ATHU** | **Athens Univers** | **3.73** | **313** | | P | | **Pn** | **04 03 16.6** | **-0.4** |
| **ATHU** | **Athens Univers** | **3.73** | **313** | | P | | **Pn** | **04 03 16.6** | **-0.4** |
| **DEMI** | **Demirci** | **3.74** | **18** | | *i* P | | **Pn** | **04 03 18.3** | **+1.1** |
| DEMI | | | | | *i* S | | **Sn** | **04 04 00.9** | **-0.6** |
| **DEMI** | **Demirci** | **3.74** | **18** | | P | | **Pn** | **04 03 18.3** | **+1.1** |
| DEMI | | | | | S | | **Sn** | **04 04 00.9** | **-0.6** |
| **ATH** | **Athens Observa** | **3.77** | **312** | | *e*PN | | **Pn** | **04 03 18.0** | **+0.5** |
| **ATH** | **Athens Observa** | **3.77** | **312** | | *e*Pn | | **Pn** | **04 03 18.0** | **+0.5** |
| **BAGO** | **Egridir - ISPA** | **3.79** | **48** | | P | | **Pn** | **04 03 18.2** | **+0.3** |
| BAGO | | | | | S | | **Sn** | **04 04 07.2** | **+4.6** |
| **KRND** | **KRANIDI** | **3.81** | **301** | | *e*PN | | **Pn** | **04 03 19.5** | **+1.4** |
| **KRND** | **KRANIDI** | **3.81** | **301** | | P | | **Pn** | **04 03 18.8** | **+0.7** |
| KRND | | | | | S | | **Sn** | **04 04 04.4** | **+1.3** |
| **KRND** | **KRANIDI** | **3.81** | **301** | | P | | **Pn** | **04 03 18.8** | **+0.7** |
| **KRND** | **KRANIDI** | **3.81** | **301** | | *e*Pn | | **Pn** | **04 03 19.5** | **+1.4** |
| KRND | | | | | S | | **Sn** | **04 04 04.4** | **+1.3** |
| **DID** | **Didima** | **3.81** | **303** | | *e*PN | | **Pn** | **04 03 18.9** | **+0.8** |
| **DID** | **Didima** | **3.81** | **303** | | P | | **Pn** | **04 03 18.6** | **+0.5** |
| **DID** | **Didima** | **3.81** | **303** | | P | | **Pn** | **04 03 18.6** | **+0.5** |
| **DID** | **Didima** | **3.81** | **303** | | *e*Pn | | **Pn** | **04 03 18.9** | **+0.8** |
| **SHUT** | **Suhut-Afyon** | **4.05** | **40** | | *e*PN | | **Pn** | **04 03 23.0** | **+1.5** |
| **SHUT** | **Suhut-Afyon** | **4.05** | **40** | | *e*Pn | | **Pn** | **04 03 23.0** | **+1.5** |
| **VILL** | **Villia** | **4.14** | **311** | | *e*Pn | | **Pn** | **04 03 23.9** | **+1.2** |
| **BALB** | **Balikesir** | **4.18** | **7** | | *e*PN | | **Pn** | **04 03 23.9** | **+0.8** |
| **BALB** | **Balikesir** | **4.18** | **7** | | *e*Pn | | **Pn** | **04 03 23.9** | **+0.8** |
| **AKMC** | **Akamas** | **4.18** | **95** | | P | | **Pn** | **04 03 24.4** | **+1.2** |
| | baz=276 | | | | | | | | |
| **AKMC** | **Akamas** | **4.18** | **95** | | P | | **Pn** | **04 03 24.4** | **+1.2** |
| **GAZI** | **Gazipasa** | **4.18** | **78** | | *i* P | | **Pn** | **04 03 22.9** | **-0.3** |
| GAZI | | | | | *i* S | | **Sn** | **04 04 09.8** | **-2.5** |
| **GAZI** | **Gazipasa** | **4.18** | **78** | | P | | **Pn** | **04 03 22.9** | **-0.3** |
| GAZI | | | | | S | | **Sn** | **04 04 09.8** | **-2.5** |
| **VIL2** | **Platees** | **4.20** | **312** | | *e*PN | | **Pn** | **04 03 23.9** | **+0.5** |
| **PPCY** | **Paphos** | **4.22** | **97** | | P | | **Pn** | **04 03 25.4** | **+1.8** |
| | baz=278 | | | | | | | | |
| **PPCY** | **Paphos** | **4.22** | **97** | | P | | **Pn** | **04 03 25.4** | **+1.8** |
| **DST** | **Dursunbey** | **4.26** | **14** | | *e*PN | | **Pn** | **04 03 25.7** | **+1.5** |
| **DST** | **Dursunbey** | **4.26** | **14** | | *e*Pn | | **Pn** | **04 03 25.7** | **+1.5** |
| **BALY** | **Balya** | **4.26** | **4** | | *i* P | | **Pn** | **04 03 24.7** | **+0.4** |
| BALY | | | | | *i* S | | **Sn** | **04 04 11.2** | **-3.1** |
| **BALY** | **Balya** | **4.26** | **4** | | P | | **Pn** | **04 03 24.8** | **+0.4** |
| BALY | | | | | S | | **Sn** | **04 04 11.2** | **-3.1** |
| **LTK** | **Loutraki** | **4.27** | **308** | | *e*PN | | **Pn** | **04 03 26.3** | **+1.8** |
| **LTK** | **Loutraki** | **4.27** | **308** | | P | | **Pn** | **04 03 25.1** | **+0.6** |
| **LTK** | **Loutraki** | **4.27** | **308** | | P | | **Pn** | **04 03 25.1** | **+0.6** |
| **LTK** | **Loutraki** | **4.27** | **308** | | *e*Pn | | **Pn** | **04 03 26.3** | **+1.8** |
| **SLUM** | | **4.33** | **204** | | P | | **Pn** | **04 03 26.3** | **+1.1** |
| | baz=211 | | | | | | | | |
| **SLUM** | | **4.33** | **204** | | P | | **Pn** | **04 03 26.3** | **+1.1** |
| **VLX** | **Vlachokerasia** | **4.36** | **297** | | *e*PN | | **Pn** | **04 03 27.5** | **+1.8** |
| **VLX** | **Vlachokerasia** | **4.36** | **297** | | P | | **Pn** | **04 03 26.5** | **+0.8** |
| VLX | | | | | S | | **Sn** | **04 04 17.1** | **+0.4** |
| **VLX** | **Vlachokerasia** | **4.36** | **297** | | P | | **Pn** | **04 03 26.5** | **+0.8** |
| **VLX** | **Vlachokerasia** | **4.36** | **297** | | *e*Pn | | **Pn** | **04 03 27.5** | **+1.8** |
| VLX | | | | | S | | **Sn** | **04 04 17.1** | **+0.4** |
| **BOLV** | **Bolvadin** | **4.38** | **41** | | *i* P | | **Pn** | **04 03 28.1** | **+2.1** |
| BOLV | | | | | *i* S | | **Sn** | **04 04 19.5** | **+2.2** |
| **BOLV** | **Bolvadin** | **4.38** | **41** | | P | | **Pn** | **04 03 28.1** | **+2.1** |
| BOLV | | | | | S | | **Sn** | **04 04 19.5** | **+2.2** |
| **ALFC** | **Alevga** | **4.39** | **93** | | P | | **Pn** | **04 03 27.1** | **+1.1** |
| | baz=274 | | | | | | | | |
| ALFC | | | | | S | | **Sn** | **04 04 19.3** | **+2.0** |
| **ALFC** | **Alevga** | **4.39** | **93** | | P | | **Pn** | **04 03 27.1** | **+1.1** |
| ALFC | | | | | S | | **Sn** | **04 04 19.3** | **+2.0** |
| **EZN** | **Ezine** | **4.40** | **351** | | *e*PN | | **Pn** | **04 03 26.9** | **+0.8** |
| **EZN** | **Ezine** | **4.40** | **351** | | *e*Pn | | **Pn** | **04 03 26.9** | **+0.8** |
| **LTBQ** | **Tobruq** | **4.40** | **220** | | *i* P | | **Pn** | **04 03 28.5** | **+2.3** |
| | SNR=128 | | | | | | | | |
| LTBQ | | | | | *e*S | | **Sn** | **04 04 18.2** | **+0.6** |
| | SNR=128 | | | | | | | | |
| **HDMB** | **Hadim** | **4.48** | **69** | | *e*PN | | **Pn** | **04 03 29.6** | **+2.0** |
| **HDMB** | **Hadim** | **4.48** | **69** | | *e*Pn | | **Pn** | **04 03 29.6** | **+2.0** |
| **ITM** | **Ithomi** | **4.62** | **293** | | *e*PN | | **Pn** | **04 03 32.2** | **+3.0** |
| **ITM** | **Ithomi** | **4.62** | **293** | | *e*Pn | | **Pn** | **04 03 32.2** | **+3.0** |
| **LEF** | **Lefka** | **4.63** | **93** | | *e*PN | | **Pn** | **04 03 31.2** | **+1.9** |
| **LEF** | **Lefka** | **4.63** | **93** | | *e*Pn | | **Pn** | **04 03 31.2** | **+1.9** |
| **GUR** | **Goura** | **4.64** | **303** | | *e*PN | | **Pn** | **04 03 32.0** | **+2.4** |
| **GUR** | **Goura** | **4.64** | **303** | | P | | **Pn** | **04 03 30.2** | **+0.6** |
| **GUR** | **Goura** | **4.64** | **303** | | P | | **Pn** | **04 03 30.2** | **+0.6** |
| **GUR** | **Goura** | **4.64** | **303** | | *e*Pn | | **Pn** | **04 03 32.0** | **+2.4** |
| **PYL** | **PYLOS** | **4.67** | **289** | | *e*PN | | **Pn** | **04 03 31.6** | **+1.7** |
| **PYL** | **PYLOS** | **4.67** | **289** | | *e*Pn | | **Pn** | **04 03 31.6** | **+1.7** |
| **SZAC** | **Souni-Zanaja** | **4.67** | **97** | | P | | **Pn** | **04 03 31.1** | **+1.1** |
| | baz=279 | | | | | | | | |
| SZAC | | | | | S | | **Sn** | **04 04 23.9** | **-0.5** |
| **SZAC** | **Souni-Zanaja** | **4.67** | **97** | | P | | **Pn** | **04 03 31.1** | **+1.1** |
| SZAC | | | | | S | | **Sn** | **04 04 23.9** | **-0.5** |
| **SMIA** | **Simia** | **4.68** | **318** | | *e*PN | | **Pn** | **04 03 31.8** | **+1.7** |
| **SMIA** | **Simia** | **4.68** | **318** | | *e*Pn | | **Pn** | **04 03 31.8** | **+1.7** |
| **LIA** | **Limnos Island** | **4.70** | **340** | | *e*PN | | **Pn** | **04 03 30.3** | **0.0** |
| **LIA** | **Limnos Island** | **4.70** | **340** | | *e*Pn | | **Pn** | **04 03 30.3** | **0.0** |
| **ERMK** | **Ermenek** | **4.73** | **74** | | *i* P | | **Pn** | **04 03 32.8** | **+1.9** |
| **ERMK** | **Ermenek** | **4.73** | **74** | | P | | **Pn** | **04 03 32.8** | **+1.9** |
| ERMK | | | | | S | | Sn | 04 04 17.6 | -8.5 |
| **DESF** | **Desfina** | **4.78** | **309** | | *e*PN | | **Pn** | **04 03 33.2** | **+1.8** |
| **DESF** | **Desfina** | **4.78** | **309** | | *e*Pn | | **Pn** | **04 03 33.2** | **+1.8** |
| **KONT** | **Konya--Tatoy** | **4.79** | **58** | | *e*PN | | **Pn** | **04 03 33.4** | **+1.9** |
| **KONT** | **Konya--Tatoy** | **4.79** | **58** | | *e*Pn | | **Pn** | **04 03 33.4** | **+1.9** |
| **GADA** | **Gvkgeada** | **4.82** | **348** | | *e*PN | | **Pn** | **04 03 31.9** | **0.0** |
| **GADA** | **Gvkgeada** | **4.82** | **348** | | *e*Pn | | **Pn** | **04 03 31.9** | **0.0** |
| **KCTX** | **Karacabey (Bur** | **4.86** | **10** | | *e*PN | | **Pn** | **04 03 33.4** | **+0.9** |
| **KCTX** | **Karacabey (Bur** | **4.86** | **10** | | *e*Pn | | **Pn** | **04 03 33.4** | **+0.9** |
| **EDC** | **Edincik** | **4.88** | **6** | | *e*PN | | **Pn** | **04 03 33.5** | **+0.7** |
| **EDC** | **Edincik** | **4.88** | **6** | | *e*Pn | | **Pn** | **04 03 33.5** | **+0.7** |
| **MAMC** | **Mammari** | **4.89** | **92** | ⇓ | P | | **Pn** | **04 03 34.7** | **+1.8** |
| | baz=274 | | | | | | | | |
| **MAMC** | **Mammari** | **4.89** | **92** | ⇓ | P | | **Pn** | **04 03 34.7** | **+1.8** |
| **BNT** | **Bandirma** | **4.89** | **6** | | *e*PN | | **Pn** | **04 03 33.8** | **+0.8** |
| **BNT** | **Bandirma** | **4.89** | **6** | | *e*Pn | | **Pn** | **04 03 33.8** | **+0.8** |
| **LPK** | **Lapseki** | **4.90** | **356** | | *e*PN | | **Pn** | **04 03 33.4** | **+0.4** |
| **LPK** | **Lapseki** | **4.90** | **356** | | *e*Pn | | **Pn** | **04 03 33.4** | **+0.4** |
| **KRBG** | **Karabiga-Canak** | **4.90** | **0** | | *e*PN | | **Pn** | **04 03 33.8** | **+0.7** |
| **KRBG** | **Karabiga-Canak** | **4.90** | **0** | | *e

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MORC** | **Moravsky Berou** | **15.95** | **337** | *e*P | | **Pn** | **04 06 03.3** | **-0.5** |
| **MORC** | **Moravsky Berou** | **15.95** | **337** | *e*Pn | | **Pn** | **04 06 03.3** | **-0.5** |
| **MORC** | **Moravsky Berou** | **15.95** | **337** | *e*Pn | | **Pn** | **04 06 03.3** | **-0.5** |
| **GERES** | **GERESS Array B** | **16.67** | **327** | Pn | | **P** | **04 06 14.4** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=139,slow=12,SNR=9.1 | | | | | | | |
| GERES | | | | LR | | LR | 04 13 15.5 | |
| | comp=Z,47nm,21.7s,baz=110,slow=40 | | | | | | | |
| **KHC** | **Kasperske Hory** | **16.94** | **328** | *e*P | | **P** | **04 06 18.1** | **-0.3** |
| KHC | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **16.94** | **328** | *e*P | | **Pn** | **04 06 16.0** | **-0.4** |
| **KHC** | **Kasperske Hory** | **16.94** | **328** | *e*Pn | | **P** | **04 06 18.1** | **-0.3** |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **16.94** | **328** | *e*P | | **P** | **04 06 18.1** | **-0.3** |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **17.24** | **316** | LR | | LR | 04 14 23.3 | |
| | comp=Z,63nm,18.2s,baz=91,slow=42 | | | | | | | |
| **STU** | **Stuttgart** | **18.80** | **320** | *e*P | | **Pn** | **04 06 39.8** | **+0.5** |
| STU | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **STU** | **Stuttgart** | **18.80** | **320** | *e*P | | **Pn** | **04 06 39.8** | **+0.5** |
| | comp=Z,16nm,1.1s | | | | | | | |
| **STU** | **Stuttgart** | **18.80** | **320** | *e*P | | **Pn** | **04 06 39.8** | **+0.5** |
| | comp=Z,16nm,1.1s | | | | | | | |
| **CLL** | **Collm** | **18.85** | **331** | *e*P | | **Pn** | **04 06 42.0** | **+2.1** |
| **CLL** | **Collm** | **18.85** | **331** | *e*P | | **Pn** | **04 06 42.0** | **+2.1** |
| **CLL** | **Collm** | **18.85** | **331** | *e*P | | **Pn** | **04 06 42.0** | **+2.1** |
| **OBN** | **Obninsk** | **20.66** | **15** | P | | **P** | **04 07 00.0** | **+0.9** |
| OBN | | | | *SP | | sP | 04 07 10.0 | +7.5 |
| OBN | | | | *e*S | | **S** | **04 10 50.3** | **+0.4** |
| OBN | | | | | | | 04 11 12.0 | |
| OBN | | | | SSS | | SSS | 04 11 28.0 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.8s | | | | | | | |
| OBN | | | | MLR | | MLR | | |
| | comp=Z,23nm,13.0s | | | | | | | |
| **OBN** | **Obninsk** | **20.66** | **15** | P | | **P** | **04 07 00.0** | **+0.9** |
| | comp=Z,20nm,1.8s | | | | | | | |
| **TAM** | **Tamanrasset** | **22.74** | **242** | *e*P | | **P** | **04 07 22.6** | **+0.7** |
| TAM | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | |
| **TAM** | **Tamanrasset** | **22.74** | **242** | *e*P | | **P** | **04 07 22.6** | **+0.7** |
| | comp=Z,5.2nm,1.2s | | | | | | | |
| **TAM** | **Tamanrasset** | **22.74** | **242** | *e*P | | **P** | **04 07 22.6** | **+0.7** |
| | comp=Z,5.2nm,1.2s | | | | | | | |
| **ESDC** | **Sonseca Array** | **25.02** | **289** | P | | **P** | **04 07 43.4** | **-0.1** |
| | comp=Z,1.5nm,0.5s,baz=82,slow=9.5,SNR=22 | | | | | | | |
| **FINES** | **FINESS Array B** | **25.99** | **359** | P | | **P** | **04 07 50.9** | **-1.2** |
| | comp=Z,0.9nm,0.5s,baz=167,slow=12,SNR=13 | | | | | | | |
| FINES | | | | PcP | | **PcP** | **04 11 19.5** | **-0.5** |
| | comp=Z,2.8nm,1.0s,baz=216,slow=4.5,SNR=3.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **25.99** | **359** | P | | **P** | **04 07 50.9** | **-1.2** |
| FINES | | | | | | | 04 11 19.5 | |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **HFS** | **Hagfors** | **26.18** | **345** | P | | **P** | **04 07 52.9** | **-1.0** |
| | comp=Z,0.9nm,0.5s,baz=146,slow=11,SNR=12 | | | | | | | |
| HFS | | | | LR | | LR | 04 19 51.4 | |
| | comp=Z,33nm,19.2s,baz=14,slow=40 | | | | | | | |
| **HFS** | **Hagfors** | **26.18** | **345** | P | | **P** | **04 07 52.9** | **-1.0** |
| HFS | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| HFS | | | | MLR | | MLR | | |
| | comp=Z,33nm,19.2s | | | | | | | |
| **MDT** | **Midelt** | **26.45** | **273** | P | | **P** | **04 07 57.5** | **+0.8** |
| | comp=Z,2.6nm,1.0s,baz=58,slow=5.4,SNR=4.3 | | | | | | | |
| MDT | | | | LR | | LR | 04 19 26.4 | |
| | comp=Z,36nm,18.4s,baz=74,slow=39 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **26.78** | **47** | P | | **P** | **04 07 59.7** | **+0.3** |
| | comp=Z,1.9nm,0.5s,baz=253,slow=9.9,SNR=6.2 | | | | | | | |
| AKTO | | | | LR | | LR | 04 23 43.7 | |
| | comp=Z,14nm,18.7s,baz=176,slow=48 | | | | | | | |
| **NOA** | **NORSAR Array B** | **27.56** | **343** | LR | | LR | 04 20 16.9 | |
| | comp=Z,28nm,21.2s,baz=180,slow=39 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **28.79** | **323** | P | | **P** | **04 08 16.1** | **-1.0** |
| | comp=Z,0.7nm,0.7s,baz=128,slow=11,SNR=3.8 | | | | | | | |
| EKA | | | | PcP | | **PcP** | **04 11 27.1** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=120,slow=5.0,SNR=3.6 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **28.79** | **323** | P | | **P** | **04 08 16.2** | **-1.0** |
| EKA | | | | | | | 04 11 27.1 | |
| EKA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **32.02** | **232** | P | | **P** | **04 08 46.7** | **+0.5** |
| | comp=Z,2.2nm,0.5s,baz=32,slow=8.9,SNR=53 | | | | | | | |
| TORD | | | | LR | | LR | 04 22 45.6 | |
| | comp=Z,56nm,21.8s,baz=70,slow=38 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.12** | **359** | P | | **P** | **04 09 03.3** | **-0.7** |
| | comp=Z,0.5nm,0.4s,baz=181,slow=8.5,SNR=6.8 | | | | | | | |
| ARCES | | | | PcP | | **PcP** | **04 11 40.1** | **-0.9** |
| | comp=Z,1.3nm,0.8s,baz=180,slow=2.7,SNR=3.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.12** | **359** | P | | **P** | **04 09 03.3** | **-0.7** |
| ARCES | | | | | | | 04 11 40.1 | |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **36.98** | **64** | LR | | LR | 04 25 30.4 | |
| | comp=Z,25nm,19.7s,baz=300,slow=38 | | | | | | | |
| **DBIC** | **Dimbokro** | **41.12** | **233** | P | | **P** | **04 10 04.6** | **+0.9** |
| | comp=Z,2.8nm,1.0s,baz=14,slow=8.3,SNR=3.3 | | | | | | | |
| DBIC | | | | LR | | LR | 04 28 33.5 | |
| | comp=Z,51nm,18.1s,baz=33,slow=38 | | | | | | | |
| **DBIC** | **Dimbokro** | **41.12** | **233** | P | | **P** | **04 10 04.6** | **+0.9** |
| DBIC | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| DBIC | | | | MLR | | MLR | | |
| | comp=Z,51nm,18.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.17** | **57** | P | | **P** | **04 10 12.4** | **+0.3** |
| | comp=Z,0.8nm,0.5s,baz=289,slow=6.2,SNR=10.0 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **04 12 06.6** | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=290,slow=3.5,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.17** | **57** | *i* P | | **P** | **04 10 12.3** | **+0.2** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.55** | **46** | P | | **P** | **04 10 22.7** | **-0.4** |
| | comp=Z,2.4nm,0.3s,baz=266,slow=11,SNR=5.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.55** | **46** | P | | **P** | **04 10 22.7** | **-0.4** |
| ZALV | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **57.96** | **51** | P | | **P** | **04 12 12.7** | **+0.6** |
| | comp=Z,0.5nm,0.5s,baz=291,slow=8.6,SNR=4.3 | | | | | | | |
| **SONM** | **Songino Array** | **57.96** | **51** | P | | **P** | **04 12 12.7** | **+0.6** |
| SONM | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **SCHQ** | **Schefferville** | **64.04** | **320** | P | | **P** | **04 12 51.2** | **-2.0** |
| | comp=Z,3.1nm,0.7s,baz=92,slow=4.5,SNR=6.4 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **75.40** | **46** | P | | **P** | **04 14 03.0** | **-0.2** |
| | comp=Z,1.4nm,0.4s,baz=279,slow=5.7,SNR=4.2 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **76.71** | **53** | P | | **P** | **04 14 11.1** | **+0.3** |
| **KSAR** | **Wonju Array Be** | **76.71** | **53** | P | | **P** | **04 14 11.1** | **+0.3** |
| **KSAR** | **Wonju Array Be** | **76.71** | **53** | P | | **P** | **04 14 11.1** | **+0.3** |
| **KSRS** | **Korea Array** | **76.72** | **53** | P | | **P** | **04 14 11.1** | **+0.2** |
| | comp=Z,1.3nm,0.5s,baz=303,slow=4.9,SNR=5.0 | | | | | | | |
| **KSRS** | **Korea Array** | **76.72** | **53** | P | | **P** | **04 14 11.1** | **+0.2** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **79.97** | **357** | P | | **P** | **04 14 27.7** | **-0.7** |
| | comp=Z,0.4nm,1.1s,baz=342,slow=3.9,SNR=3.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **116.43** | **101** | PKP | | **PKPdf** | **04 21 02.7** | **-1.1** |
| | comp=Z,0.1nm,0.5s,baz=262,slow=1.6,SNR=4.3 | | | | | | | |

*ISCJB **17** 04:02:24.4±1.1,22.36S±0.06×68.3W±0.2,h135km±19km, mb3.7/2, Error ellipse: s-maj=29.9km s-min=7.3km az=12.5*
*GUC **17** 04:02:25.1±0.7,22.32S×68.46W,h147km±9km,ML4.0*
*IDC **17** 04:02:28.0±5.1,22.21S×67.96W,h145km±48km,mb3.7/2, mb1 3.5/4,mb1mx3.2/24,mbtmp4.0/4, Error ellipse: s-maj=44.1km s-min=34.6km az=163.0*

**ISC 17 04:02:25.2±1.4,22.35S±0.07×68.2W±0.2,h127km±17km, n14,σ0ᵗ79/21,4C-4D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB06** | **IPOC Station P** | **1.28** | **253** | ⇑*i*P | **Pn** | **04 02 51.3** | **+0.5** |
| PB06 | | | | *i* S | **Sn** | **04 03 11.2** | **+1.0** |
| PB06 | | | | AML | AML | 04 03 13.3 | |
| | comp=E,1μm,0.6s | | | | | | |
| **PB07** | **IPOC Station P** | **1.64** | **292** | ⇓*i*P | **Pn** | **04 02 55.1** | **+0.1** |
| PB07 | | | | *i* S | **Sn** | **04 03 17.3** | **-0.2** |
| PB07 | | | | AML | AML | 04 03 18.4 | |
| | comp=N,2μm,0.7s | | | | | | |
| **PB01** | **IPOC Station P** | **1.74** | **318** | ⇓*i*P | **Pn** | **04 02 55.8** | **-0.1** |
| PB01 | | | | *i* S | **Sn** | **04 03 19.9** | **+0.5** |
| PB01 | | | | AML | AML | 04 03 21.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| **PB04** | **IPOC Station P** | **1.76** | **270** | ⇑*i*P | **Pn** | **04 02 56.4** | **0.0** |
| PB04 | | | | *i* S | **Sn** | **04 03 19.5** | **-0.5** |
| PB04 | | | | AML | AML | 04 03 25.1 | |
| | comp=N,1μm,0.2s | | | | | | |
| **ANCH** | **Antofagasta** | **2.40** | **236** | ⇓*i*P | Pn | 04 02 55.2 | -8.8 |
| ANCH | | | | *i* S | Sn | 04 03 24.1 | -10 |
| **PB10** | **IPOC Station P** | **2.43** | **241** | ⇑*i*P | **Pn** | **04 03 04.0** | **-0.3** |
| PB10 | | | | *i* S | **Sn** | **04 03 33.7** | **-0.7** |
| PB10 | | | | AML | AML | 04 03 34.2 | |
| | comp=N,1μm,0.4s | | | | | | |
| **MNMC** | **Minimini** | **3.44** | **338** | ⇓*i*P | **Pn** | **04 03 17.2** | **-0.5** |
| MNMC | | | | *i* S | **Sn** | **04 03 57.4** | **-1.0** |
| **PB13** | **IPOC Station P** | **4.16** | **343** | ⇑*i*P | **Pn** | **04 03 27.6** | **0.0** |
| PB13 | | | | *i* S | **Sn** | **04 04 16.2** | **+0.3** |
| **LPAZ** | **La Paz** | **6.03** | **1** | P | **Pn** | **04 03 53.3** | **+0.6** |
| | comp=N,1.5nm,0.3s,baz=174,slow=4.0,SNR=72 | | | | | | |
| LPAZ | | | | S | **Sn** | **04 05 01.9** | **+1.0** |
| | comp=N,0.1nm,0.3s,baz=266,slow=15,SNR=2.5 | | | | | | |
| **BDFB** | **Brasilia** | **20.25** | **74** | P | **P** | **04 06 49.3** | **-1.5** |
| | comp=N,0.5nm,0.3s,baz=230,slow=13,SNR=8.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.06** | **70** | P | **P** | **04 14 04.0** | **-1.0** |
| | comp=N,0.6nm,0.3s,baz=254,slow=5.5,SNR=24 | | | | | | |
| **MAW** | **Mawson** | **83.35** | **163** | P | **P** | **04 14 38.8** | **+1.1** |
| | comp=N,0.7nm,0.5s,baz=191,slow=5.2,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **129.44** | **207** | PKP | **PKPdf** | **04 21 20.4** | **+0.7** |
| | comp=N,0.3nm,0.7s,baz=116,slow=2.2,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **132.53** | **209** | PKP | **PKPdf** | **04 21 26.4** | **+0.8** |
| | comp=N,0.6nm,0.7s,baz=161,slow=1.9,SNR=4.6 | | | | | | |

*IDC **17** 04:19:22.1±4.9,37.55N×72.56E,h173km±41km,mb3.1/4, mb1 3.3/8,mb1mx3.0/43,mbtmp3.8/8,MS2.8/1,Ms1 2.8/1, ms1mx2.1/17, Error ellipse: s-maj=58.7km s-min=37.7km az=121.0*

**ISC 17 04:19:22.6±2.0,37.7N±0.1×72.2E±0.1,h150km,n19, σ1ᵗ93/20,mb3.5/4,2D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **4.59** | **14** | P | **Pn** | **04 20 32.9** | **+2.0** |
| | SNR=75 | | | | | | |
| **UCH** | **Uchtor** | **4.87** | **21** | P | **Pn** | **04 20 36.0** | **+1.3** |
| | SNR=44 | | | | | | |
| **KZA** | **Kyzart** | **4.97** | **27** | P | **Pn** | **04 20 36.6** | **+0.6** |
| | SNR=5.4 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.12** | **13** | P | **Pn** | **04 20 40.5** | **+2.8** |
| | SNR=6.0 | | | | | | |
| **AAK** | **Ala-Archa** | **5.25** | **19** | P | **Pn** | **04 20 40.8** | **+1.4** |
| | 4.5nm,0.3s,baz=159,slow=4.8,SNR=34 | | | | | | |
| AAK | | | | S | **Sn** | **04 21 40.1** | **+0.8** |
| | 1.7nm,0.3s,baz=313,slow=23,SNR=15 | | | | | | |
| **AAK** | **Ala-Archa** | **5.25** | **19** | P | **Pn** | **04 20 41.2** | **+1.8** |
| | SNR=20 | | | | | | |
| **ULHL** | **Ulahol** | **5.51** | **33** | P | **Pn** | **04 20 43.0** | **+0.1** |
| | SNR=6.5 | | | | | | |
| **KK31** | **Karatay Array** | **5.57** | **347** | P | **Pn** | **04 20 46.4** | **+2.9** |
| | 2.6nm,0.3s,baz=154,slow=12,SNR=77 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **04 21 47.0** | **+0.1** |
| | 29nm,0.5s,baz=159,slow=16 | | | | | | |
| **CHMS** | **Chumysh** | **5.65** | **19** | P | **Pn** | **04 20 46.3** | **+1.6** |
| | SNR=5.1 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.84** | **25** | P | **Pn** | **04 20 48.1** | **+0.8** |
| | SNR=7.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.70** | **17** | P | **Pn** | **04 22 31.4** | **+0.9** |
| | 0.1nm,0.3s,baz=205,slow=10,SNR=13 | | | | | | |
| **AB31** | **Akbulak array** | **14.58** | **326** | P | **Pn** | **04 22 43.2** | **+1.6** |
| | 0.4nm,0.5s,baz=137,slow=11,SNR=9.0 | | | | | | |
| AB31 | | | | ⇓S | **Sn** | **04 25 18.9** | **-4.3** |
| | 1.5nm,0.6s,baz=137,slow=24 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.30** | **326** | P | **P** | **04 23 04.3** | **+1.4** |
| | 0.3nm,0.3s,baz=130,slow=11,SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.44** | **24** | P | **P** | **04 23 23.9** | **-2.5** |
| | 0.4nm,0.3s,baz=227,slow=10,SNR=8.6 | | | | | | |
| **TLY** | **Talaya** | **26.12** | **47** | LR | LR | 04 36 35.6 | |
| | comp=Z,24nm,20.8s,baz=296,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **37.06** | **325** | P | **P** | **04 26 17.4** | **-0.3** |
| | 0.6nm,0.6s,baz=122,slow=12,SNR=6.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.44** | **337** | P | **P** | **04 26 45.0** | **-0.8** |
| | 1.0nm,0.6s,baz=91,slow=7.4,SNR=5.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.03** | **322** | P | **P** | **04 27 14.2** | **-0.9** |
| | 0.3nm,0.4s,baz=94,slow=7.6,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.72** | **269** | P | P | 04 29 56.1 | -1.7 |
| | 0.2nm,0.3s,baz=49,slow=5.4,SNR=7.6 | | | | | | |

**IDC 17 04:36:56.4±11.0,18.29S×177.03W,h0km,mb3.6/3, mb1 3.9/3,mb1mx3.6/18,mbtmp3.6/3,Error ellipse: s-maj=487.9km s-min=39.5km az=143.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.86** | **260** | P | P | 04 45 20.1 | -0.7 |
| | 0.2nm,0.3s,baz=97,slow=6.8,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **45.95** | **255** | P | P | 04 45 22.0 | +0.5 |
| | 0.3nm,0.5s,baz=84,slow=8.5,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **85.96** | **12** | P | P | 04 49 38.0 | 0.0 |
| | 0.6nm,1.1s,baz=217,slow=5.2,SNR=4.9 | | | | | | |

*ISCJB **17** 04:44:14.6±0.7,32.12N±0.03×115.14W±0.04,h11km±5km, Error ellipse: s-maj=6.0km s-min=5.7km az=9.8*
*NEIC **17** 04:44:16.8,32.10N×115.18W,h8km,ML2.5(PAS), ML2.8(ECX),After ECX.*
*ECX **17** 04:44:16.8±0.5,32.10N×115.19W,h8km,MD2.7,ML2.9*
*MEX **17** 04:44:18.4±0.6,32.20N×115.16W,h14km±780km,MD3.4*

**ISC 17 04:44:14.9±1.0,32.11N±0.03×115.16W±0.03,h17km±8km, n25,σ0ᵗ76/41,4C-3D,California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MBIG** | **Mexicali** | **0.30** | **354** | *e*P | **Pb** | **04 44 22.7** | **+0.8** |
| MBIG | | | | *i* S | **Sg** | **04 44 25.1** | **-0.7** |
| **MBIG** | **Mexicali** | **0.30** | **354** | ⇓*e*P | **Pb** | **04 44 22.9** | **+1.0** |
| **CPBX** | **Cerro Prieto** | **0.33** | **338** | ⇑*e*P | **Pb** | **04 44 23.0** | **+0.6** |
| CPBX | | | | ⇑*e*P | **Pb** | **04 44 23.1** | **+0.6** |
| CPBX | | | | *e*S | **Sb** | **04 44 27.8** | **+0.3** |
| CPBX | | | | *e* | | 04 44 29.3 | |
| CPBX | | | | IAML | | 04 44 29.3 | |
| | comp=E,4μm,0.2s | | | | | | |
| **CPBX** | **Cerro Prieto** | **0.33** | **338** | *e*P | **Pb** | **04 44 23.1** | **+0.6** |
| CPBX | | | | *i* S | **Sg** | **04 44 25.4** | **-1.4** |
| **EMSC** | **East Mesa** | **0.65** | **13** | *e*P | **Pb** | **04 44 28.2** | **+0.4** |
| **YMD** | **Yuma Desert** | **0.69** | **49** | *e*P | **Pb** | **04 44 28.6** | **+0.2** |
| **RDX** | **Rancho Dawling** | **0.69** | **255** | ⇑*e*P | **Pb** | **04 44 28.7** | **+0.1** |
| RDX | | | | *e*S | **Sg** | **04 44 37.7** | **0.0** |
| RDX | | | | IAML | | 04 44 41.6 | |
| | comp=N,382nm,0.2s | | | | | | |
| RDX | | | | ⇑*e* | | 04 44 41.6 | |
| **RDX** | **Rancho Dawling** | **0.69** | **255** | *e*P | **Pb** | **04 44 28.7** | **+0.1** |
| RDX | | | | *e*S | **Sg** | **04 44 37.7** | **0.0** |
| **SGL** | **Mount Signal** | **0.72** | **319** | *e*P | **Pb** | **04 44 29.2** | **+0.1** |
| **DREC** | **Desert Rsrch C** | **0.74** | **341** | *e*P | **Pg** | **04 44 29.6** | **+0.3** |
| **COA** | **Coachella** | **0.76** | **2** | ⇓*i*P | **Pb** | **04 44 29.5** | **-0.1** |
| **WESC** | **Westside Schoo** | **0.81** | **324** | *e*P | **Pg** | **04 44 30.9** | **+0.1** |
| **YUH** | **Yuha Desert** | **0.84** | **310** | *e*P | **Pb** | **04 44 30.6** | **-0.5** |
| **IBP** | **Imperial Bould** | **0.96** | **305** | *e*P | **Pb** | **04 44 33.5** | **+0.3** |
| **GLA** | **Glamis** | **0.98** | **16** | *e*Pg | **Pb** | **04 44 32.5** | **-1.0** |
| GLA | | | | *e*Sg | **Sb** | **04 44 45.6** | **-0.7** |
| **SPX** | **San Pedro Mart** | **1.09** | **194** | *e*P | **Pg** | **04 44 35.7** | **-0.3** |
| **SPX** | **San Pedro Mart** | **1.09** | **194** | *e*P | **Pg** | **04 44 36.6** | **+0.6** |
| SPX | | | | *e*S | **Sg** | **04 44 51.0** | **+0.7** |
| **CBX** | **Cerro Bola** | **1.29** | **280** | *e*P | **Pn** | **04 44 38.1** | **-0.2** |
| CBX | | | | *e*S | **Sn** | **04 44 54.1** | **-1.1** |
| **CBX** | **Cerro Bola** | **1.29** | **280** | *e*P | **Pn** | **04 44 38.6** | **+0.3** |
| CBX | | | | *e*S | **Sb** | **04 44 55.8** | **+0.6** |
| CBX | | | | ⇓*e* | | 04 44 58.1 | |
| CBX | | | | IAML | | 04 44 58.1 | |
| | comp=E,228nm,0.4s | | | | | | |
| **CBX** | **Cerro Bola** | **1.29** | **280** | *e*P | **Pn** | **04 44 38.6** | **+0.3** |
| CBX | | | | *e*S | **Sn** | **04 44 54.1** | **-1.1** |
| **BAR** | **Barrett** | **1.40** | **294** | *e*Pn | **Pn** | **04 44 39.4** | **-0.3** |
| BAR | | | | *e*Pg | **Pg** | **04 44 41.2** | **+0.6** |
| BAR | | | | *e*Sn | **Sn** | **04 44 58.0** | **+0.1** |
| **SDRC** | **San Diego Road** | **1.63** | **293** | *e*P | **Pn** | **04 44 44.4** | **-0.2** |
| **PFO** | **Pinyon Flat Ob** | **1.85** | **324** | *e*Pn | **Pn** | **04 44 44.9** | **-1.2** |
| PFO | | | | *e*Pg | **Pb** | **04 44 49.1** | **+0.6** |
| PFO | | | | *e*Sn | **Sb** | **04 45 11.7** | **+0.3** |
| **214A** | **Organ Pipe Nat** | **2.00** | **94** | *e*Pn | **Pn** | **04 44 47.0** | **-0.9** |
| 214A | | | | *e*Pg | **Pb** | **04 44 51.6** | **+0.8** |
| **LDFC** | **Landfair** | **2.96** | **1** | *e*Pg | **Pg** | **04 45 14.2** | **+2.4** |

*ISCJB **17** 04:56:56.3±0.6,32.17N±0.03×115.18W±0.03,h15km±4km, Error ellipse: s-maj=4.6km s-min=4.1km az=11.4*
*NEIC **17** 04:56:58.8,32.16N×115.27W,h8km,ML3.3(ECX), ML3.4(PAS),After ECX.*
*ECX **17** 04:56:58.7±0.5,32.16N×115.27W,h8km,MD3.2,ML3.4*
*MEX **17** 04:56:59.5±0.6,32.23N×115.17W,h16km±681km,MD4.0*

**ISC 17 04:56:56.9±1.0,32.16N±0.02×115.25W±0.02,h15km±7km, n45,σ1ᵗ50/77,4C-8D,California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MBIG** | **Mexicali** | **0.25** | **10** | *e*P | **Pb** | **04 57 03.5** | **+0.4** |
| MBIG | | | | *i* S | **Sg** | **04 57 06.0** | **-0.1** |
| **MBIG** | **Mexicali** | **0.25** | **10** | ⇓*e*P | **Pb** | **04 57 03.8** | **+0.6** |
| **CPBX** | **Cerro Prieto** | **0.26** | **350** | *e*P | **Pb** | **04 57 03.7** | **+0.3** |
| CPBX | | | | ⇓*e*P | **Pb** | **04 57 03.7** | **+0.3** |
| CPBX | | | | *e*S | **Sb** | **04 57 07.7** | **0.0** |
| CPBX | | | | IAML | | 04 57 09.1 | |
| | comp=E,15μm,0.1s | | | | | | |
| CPBX | | | | *e* | | 04 57 09.1 | |
| **CPBX** | **Cerro Prieto** | **0.26** | **350** | *e*P | **Pb** | **04 57 03.6** | **+0.3** |
| CPBX | | | | *i* S | **Sg** | **04 57 06.3** | **-0.1** |
| **EMSC** | **East Mesa** | **0.62** | **21** | ⇓*i*P | **Pg** | **04 57 09.5** | **+0.5** |
| **RDX** | **Rancho Dawling** | **0.63** | **249** | ⇑*e*P | **Pg** | **04 57 09.8** | **+0.5** |
| RDX | | | | *e*S | **Sg** | **04 57 18.3** | **+0.5** |
| RDX | | | | IAML | | 04 57 18.8 | |
| | comp=N,2μm,0.3s | | | | | | |
| RDX | | | | *e* | | 04 57 18.8 | |
| **RDX** | **Rancho Dawling** | **0.63** | **249** | *e*P | **Pg** | **04 57 09.8** | **+0.5** |
| RDX | | | | *e*S | **Sg** | **04 57 18.3** | **+0.5** |
| **SGL** | **Mount Signal** | **0.63** | **321** | ⇓*i*P | **Pg** | **04 57 09.6** | **+0.3** |
| **DREC** | **Desert Rsrch C** | **0.67** | **346** | ⇓*i*P | **Pg** | **04 57 10.6** | **+0.7** |
| **COA** | **Coachella** | **0.71** | **9** | ⇓*i*P | **Pg** | **04 57 10.8** | **0.0** |
| **WESC** | **Westside Schoo** | **0.72** | **326** | *e*P | **Pg** | **04 57 11.2** | **+0.2** |
| **YUH** | **Yuha Desert** | **0.75** | **311** | ⇓*i*P | **Pg** | **04 57 11.4** | **-0.1** |
| **RMX** | **La Rumorosa** | **0.83** | **302** | ⇑*e*P | **Pg** | **04 57 12.6** | **-0.4** |
| RMX | | | | *e*S | **Sg** | **04 57 23.2** | **-0.8** |
| **RMX** | **La Rumorosa** | **0.83** | **302** | *e*P | **Pg** | **04 57 12.6** | **-0.4** |
| **IBP** | **Imperial Bould** | **0.87** | **305** | P | **Pg** | **04 57 13.7** | **-0.1** |
| | baz=0.9 | | | | | | |
| IBP | | | | S | **Sg** | **04 57 25.5** | **+0.2** |
| | baz=0.9 | | | | | | |
| **IBP** | **Imperial Bould** | **0.87** | **305** | ⇑*i*P | **Pg** | **04 57 14.1** | **+0.2** |
| **SWSC** | **Sam W. Stewart** | **0.91** | **330** | P | **Pg** | **04 57 13.3** | **-1.1** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.96** | **22** | P | **Pg** | **04 57 14.1** | **-1.3** |
| | baz=1.0 | | | | | | |
| GLA | | | | S | **Sg** | **04 57 25.7** | **-2.4** |
| | baz=1.0 | | | | | | |
| **GLA** | **Glamis** | **0.96** | **22** | *e*Pg | **Pg** | **04 57 13.9** | **-1.6** |
| GLA | | | | *e*Sg | **Sg** | **04 57 25.9** | **-2.1** |
| **SPX** | **San Pedro Mart** | **1.13** | **189** | ⇓*e*P | **Pb** | **04 57 17.9** | **-0.4** |
| SPX | | | | *e*S | **Sn** | **04 57 34.1** | **+0.2** |
| **SPX** | **San Pedro Mart** | **1.13** | **189** | *e*P | **Pb** | **04 57 17.9** | **-0.4** |
| SPX | | | | *e*S | **Sb** | **04 57 32.0** | **-0.9** |
| **CBX** | **Cerro Bola** | **1.21** | **278** | *e*P | **Pn** | **04 57 19.0** | **-0.5** |
| CBX | | | | *e*S | **Sb** | **04 57 34.1** | **-0.9** |
| **CBX** | **Cerro Bola** | **1.21** | **278** | ⇑*e*P | **Pn** | **04 57 19.1** | **-0.3** |
| CBX | | | | IAML | | 04 57 36.7 | |
| | comp=E,1μm,0.2s | | | | | | |
| **CBX** | **Cerro Bola** | **1.21** | **278** | *e*P | **Pn** | **04 57 19.1** | **-0.3** |
| CBX | | | | *e*S | **Sb** | **04 57 34.1** | **-0.9** |
| **MONP** | **Monument Peak** | **1.23** | **307** | P | **Pn** | **04 57 18.9** | **-0.9** |
| | baz=1.2 | | | | | | |
| MONP | | | | S | **Sb** | **04 57 35.1** | **-0.7** |
| | baz=1.2 | | | | | | |
| **BAR** | **Barrett** | **1.31** | **294** | *e*Pn | **Pn** | **04 57 20.4** | **-0.3** |
| BAR | | | | *e*Sn | **Sb** | **04 57 38.3** | **+0.4** |
| **BC3** | **Big Chuckawall** | **1.50** | **354** | P | **Pn** | **04 57 22.2** | **-1.2** |
| | baz=1.5 | | | | | | |
| **Y12C** | **Blythe** | **1.70** | **21** | P | **Pn** | **04 57 25.0** | **-1.0** |
| | baz=1.7 | | | | | | |
| **109C** | **Camp Elliot, M** | **1.73** | **295** | Pb | **Pn** | **04 57 26.6** | **+0.2** |
| | baz=1.7 | | | | | | |
| 109C | | | | S | **Sn** | **04 57 48.0** | **-0.2** |
| | baz=1.7 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.77** | **325** | *e*Pn | **Pn** | **04 57 25.8** | **-1.4** |
| PFO | | | | *e*Sn | **Sn** | **04 57 49.3** | **-0.1** |
| **IRM** | **Iron Mountain** | **2.00** | **2** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | 0.89 | 243 | *e*PB | **Pg** | 05 05 11.2 | -0.9 |
| **ZKR** | **Zakros** | 0.89 | 243 | P | **Pg** | 05 05 11.2 | -0.9 |
| **ZKR** | **Zakros** | 0.89 | 243 | P | **Pg** | 05 05 11.2 | -0.9 |
| **ARG** | **Arkhangelos** | 1.03 | 48 | *e*PN | **Pg** | 05 05 14.4 | -0.2 |
| ARG | | | | *e*SB | **Sb** | 05 05 28.8 | +0.4 |
| **ARG** | **Arkhangelos** | 1.03 | 48 | P | **Pg** | 05 05 14.3 | -0.3 |
| ARG | | | | S | **Sb** | 05 05 28.5 | +0.1 |
| **ARG** | **Arkhangelos** | 1.03 | 48 | P | **Pg** | 05 05 14.3 | -0.3 |
| ARG | | | | S | **Sb** | 05 05 28.5 | +0.1 |
| ARG | | | | *e*Sb | **Sb** | 05 05 28.8 | +0.4 |
| **NISR** | **Nisiros** | 1.09 | 357 | *e*PN | **Pb** | 05 05 15.6 | -0.2 |
| **NISR** | **Nisiros** | 1.09 | 357 | P | **Pb** | 05 05 15.2 | -0.6 |
| NISR | | | | S | **Sn** | 05 05 31.0 | -0.3 |
| **NISR** | **Nisiros** | 1.09 | 357 | P | **Pb** | 05 05 15.2 | -0.6 |
| **NISR** | **Nisiros** | 1.09 | 357 | *e*Pn | **Pb** | 05 05 15.6 | -0.2 |
| NISR | | | | S | **Sn** | 05 05 31.0 | -0.3 |
| **NPS** | **Neapolis** | 1.31 | 259 | *e*PG | **Pg** | 05 05 19.8 | -0.3 |
| NPS | | | | *e*SB | **Sb** | 05 05 36.4 | -0.2 |
| **NPS** | **Neapolis** | 1.31 | 259 | *e*Pg | **Pg** | 05 05 19.8 | -0.3 |
| NPS | | | | *e*Sb | **Sb** | 05 05 36.4 | -0.2 |
| **LAST** | **Lasithi** | 1.44 | 256 | *e*PB | **Pb** | 05 05 22.0 | +0.1 |
| LAST | | | | *e*SB | **Sg** | 05 05 41.6 | +0.3 |
| **LAST** | **Lasithi** | 1.44 | 256 | P | **Pb** | 05 05 21.7 | -0.2 |
| LAST | | | | S | **Sg** | 05 05 41.9 | +0.6 |
| **LAST** | **Lasithi** | 1.44 | 256 | P | **Pb** | 05 05 21.7 | -0.2 |
| **LAST** | **Lasithi** | 1.44 | 256 | *e*Pb | **Pb** | 05 05 22.0 | +0.1 |
| LAST | | | | *e*Sb | **Sg** | 05 05 41.6 | +0.3 |
| LAST | | | | S | **Sg** | 05 05 41.9 | +0.6 |
| **BODT** | **Bodrum** | 1.54 | 4 | *e*PN | **Pn** | 05 05 22.0 | -0.5 |
| **BODT** | **Bodrum** | 1.54 | 4 | *e*Pn | **Pn** | 05 05 22.0 | -0.5 |
| **BDRM** | **Kayabasi** | 1.55 | 8 | *i* P | **Pn** | 05 05 21.9 | -0.8 |
| BDRM | | | | *i* S | **Sg** | 05 05 44.6 | -0.2 |
| **BDRM** | **Kayabasi** | 1.55 | 8 | P | **Pn** | 05 05 21.9 | -0.8 |
| BDRM | | | | S | **Sg** | 05 05 44.6 | -0.2 |
| **THR1** | **Thera Island** | 1.64 | 302 | P | **Pn** | 05 05 23.9 | +0.1 |
| THR1 | | | | S | **Sg** | 05 05 46.1 | -1.4 |
| **THR1** | **Thera Island** | 1.64 | 302 | P | **Pn** | 05 05 23.9 | +0.1 |
| THR1 | | | | S | **Sg** | 05 05 46.1 | -1.4 |
| **SANT** | **Santorini** | 1.64 | 302 | *e*PG | **Pn** | 05 05 24.1 | +0.3 |
| **SANT** | **Santorini** | 1.64 | 302 | P | **Pn** | 05 05 23.8 | 0.0 |
| SANT | | | | S | **Sg** | 05 05 46.3 | -1.3 |
| **SANT** | **Santorini** | 1.64 | 302 | P | **Pn** | 05 05 23.8 | 0.0 |
| **SANT** | **Santorini** | 1.64 | 302 | *e*Pg | **Pn** | 05 05 24.1 | +0.3 |
| SANT | | | | S | **Sg** | 05 05 46.3 | -1.3 |
| **THR6** | **Thira Island,** | 1.67 | 300 | P | **Pn** | 05 05 24.5 | +0.2 |
| **THR6** | **Thira Island,** | 1.67 | 300 | P | **Pn** | 05 05 24.5 | +0.2 |
| **THR7** | **Fira-Santorini** | 1.69 | 303 | P | **Pn** | 05 05 24.7 | +0.2 |
| **THR7** | **Fira-Santorini** | 1.69 | 303 | P | **Pn** | 05 05 24.7 | +0.2 |
| **THR3** | **Thira Island,** | 1.70 | 302 | P | **Pn** | 05 05 24.9 | +0.3 |
| **THR3** | **Thira Island,** | 1.70 | 302 | P | **Pn** | 05 05 24.9 | +0.3 |
| **THR5** | **Thira Island,** | 1.74 | 301 | P | **Pn** | 05 05 25.4 | +0.2 |
| **THR5** | **Thira Island,** | 1.74 | 301 | P | **Pn** | 05 05 25.4 | +0.2 |
| **DALY** | **Dalyan (Mu˘la** | 1.75 | 42 | *e*PN | **Pb** | 05 05 26.3 | -0.8 |
| DALY | | | | *e*SN | **Sb** | 05 05 49.8 | +0.6 |
| **DALY** | **Dalyan (Mu˘la** | 1.75 | 42 | *e*Pn | **Pb** | 05 05 26.3 | -0.8 |
| DALY | | | | *e*Sn | **Sb** | 05 05 49.8 | +0.6 |
| **TURN** | **Turunc** | 1.77 | 40 | P | Pn | 05 05 21.5 | -4.1 |
| TURN | | | | S | **Sn** | 05 05 43.1 | -5.0 |
| **YER** | **Yerkesik** | 1.83 | 28 | *e*PN | **Pn** | 05 05 26.9 | +0.3 |
| YER | | | | *e*SN | **Sb** | 05 05 51.2 | -0.5 |
| **YER** | **Yerkesik** | 1.83 | 28 | *e*Pn | **Pn** | 05 05 26.9 | +0.3 |
| YER | | | | *e*Sn | **Sb** | 05 05 51.2 | -0.5 |
| **IDI** | **Anoyia** | 1.89 | 264 | Pn | **Pn** | 05 05 27.6 | +0.2 |
| | 7.5nm,0.3s,baz=12,slow=1.9,SNR=55 | | | | | | |
| IDI | | | | Sn | **Sn** | 05 05 51.8 | +0.5 |
| | 13nm,0.3s,baz=104,slow=13,SNR=7.0 | | | | | | |
| IDI | | | | LR | LR | 05 06 32.4 | |
| | comp=Z,54nm,21.5s,baz=90,slow=51 | | | | | | |
| **IDI** | **Anoyia** | 1.89 | 264 | *e*PN | **Pn** | 05 05 27.6 | +0.2 |
| **IDI** | **Anoyia** | 1.89 | 264 | P | **Pn** | 05 05 27.3 | -0.1 |
| IDI | | | | S | **Sb** | 05 05 53.6 | +0.3 |
| **IDI** | **Anoyia** | 1.89 | 264 | P | **Pn** | 05 05 27.3 | -0.1 |
| **IDI** | **Anoyia** | 1.89 | 264 | *e*Pn | **Pn** | 05 05 27.6 | +0.2 |
| IDI | | | | S | **Sb** | 05 05 53.6 | +0.3 |
| **FETY** | **Fethiye** | 1.89 | 54 | *e*PN | **Pb** | 05 05 28.7 | -0.9 |
| **FETY** | **Fethiye** | 1.89 | 54 | *e*Pn | **Pb** | 05 05 28.7 | -0.9 |
| **SIVA** | **Sivas** | 2.01 | 256 | *e*PG | **Pb** | 05 05 30.9 | -0.6 |
| **SIVA** | **Sivas** | 2.01 | 256 | *e*Pg | **Pb** | 05 05 30.9 | -0.6 |
| **APE** | **Apeiranthos** | 2.04 | 320 | *e*PN | **Pn** | 05 05 29.4 | -0.1 |
| **APE** | **Apeiranthos** | 2.04 | 320 | *e*PB | **Pn** | 05 05 29.3 | -0.1 |
| **APE** | **Apeiranthos** | 2.04 | 320 | P | **Pn** | 05 05 29.1 | -0.3 |
| APE | | | | S | **Sn** | 05 05 55.3 | +0.3 |
| **APE** | **Apeiranthos** | 2.04 | 320 | P | **Pn** | 05 05 29.1 | -0.3 |
| **APE** | **Apeiranthos** | 2.04 | 320 | *e*Pn | **Pn** | 05 05 29.4 | -0.1 |
| APE | | | | S | **Sn** | 05 05 55.3 | +0.3 |
| **GCAM** | **G?zelcaml?** | 2.17 | 1 | *i* P | **Pn** | 05 05 30.9 | -0.2 |
| **GCAM** | **G?zelcaml?** | 2.17 | 1 | P | **Pn** | 05 05 30.9 | -0.2 |
| **AYDN** | **Tasoluk** | 2.20 | 14 | *i* P | **Pb** | 05 05 33.8 | -1.1 |
| AYDN | | | | *i* S | **Sb** | 05 06 02.4 | +0.1 |
| **AYDN** | **Tasoluk** | 2.20 | 14 | P | **Pb** | 05 05 33.8 | -1.1 |
| AYDN | | | | S | **Sb** | 05 06 02.4 | +0.1 |
| **VAM** | **Vamos** | 2.44 | 268 | *e*PN | **Pn** | 05 05 35.9 | +1.0 |
| **VAM** | **Vamos** | 2.44 | 268 | P | **Pn** | 05 05 34.7 | -0.2 |
| **VAM** | **Vamos** | 2.44 | 268 | P | **Pn** | 05 05 34.7 | -0.2 |
| **VAM** | **Vamos** | 2.44 | 268 | *e*Pn | **Pn** | 05 05 35.9 | +1.0 |
| **AYDB** | **Zeytinkoy-Aydi** | 2.48 | 13 | *e*PN | **Pn** | 05 05 35.7 | +0.2 |
| **AYDB** | **Zeytinkoy-Aydi** | 2.48 | 13 | *e*Pn | **Pn** | 05 05 35.7 | +0.2 |
| **ELL** | **Elmali** | 2.52 | 60 | *e*PN | **Pn** | 05 05 37.7 | +1.7 |
| **ELL** | **Elmali** | 2.52 | 60 | *e*Pn | **Pn** | 05 05 37.7 | +1.7 |
| **GOLH** | **Golhisar** | 2.57 | 48 | *i* P | **Pn** | 05 05 38.8 | +2.1 |
| **GOLH** | **Golhisar** | 2.57 | 48 | P | **Pn** | 05 05 38.8 | +2.1 |
| GOLH | | | | S | **Sg** | 05 06 17.1 | -0.2 |
| **IMMV** | **Iera Moni Meta** | 2.62 | 270 | *e*PB | **Pn** | 05 05 38.0 | +0.7 |
| **DNZL** | **Cakiroluk** | 2.63 | 34 | *i* P | **Pn** | 05 05 39.7 | +2.1 |
| **DNZL** | **Cakiroluk** | 2.63 | 34 | P | **Pn** | 05 05 39.7 | +2.1 |
| DNZL | | | | S | **Sg** | 05 06 21.5 | +2.1 |
| **DENT** | **Denizli** | 2.67 | 33 | *e*PN | **Pn** | 05 05 38.7 | +0.6 |
| **DENT** | **Denizli** | 2.67 | 33 | *e*Pn | **Pn** | 05 05 38.7 | +0.6 |
| **ZEY** | **˙zmir** | 2.77 | 349 | P | **Pn** | 05 05 38.6 | -0.7 |
| **BLCB** | **Balcova** | 2.86 | 358 | *e*PN | **Pn** | 05 05 41.1 | +0.5 |
| **BLCB** | **Balcova** | 2.86 | 358 | *e*Pn | **Pn** | 05 05 41.1 | +0.5 |
| **URLA** | **Izmir** | 2.87 | 351 | *i* P | **Pn** | 05 05 40.5 | -0.3 |
| **URLA** | **Izmir** | 2.87 | 351 | P | **Pn** | 05 05 40.5 | -0.3 |
| **CHOS** | **Chios island** | 3.00 | 343 | *e*PN | **Pn** | 05 05 42.6 | 0.0 |
| **CHOS** | **Chios island** | 3.00 | 343 | P | **Pn** | 05 05 42.6 | 0.0 |
| **CHOS** | **Chios island** | 3.00 | 343 | P | **Pn** | 05 05 42.6 | 0.0 |
| **MANT** | **Manisa** | 3.16 | 20 | *i* P | **Pn** | 05 05 44.5 | -0.4 |
| MANT | | | | *i* S | **Sn** | 05 06 22.0 | -0.8 |
| **MANT** | **Manisa** | 3.16 | 20 | P | **Pn** | 05 05 44.5 | -0.4 |
| MANT | | | | S | **Sn** | 05 06 22.0 | -0.8 |
| **ANKY** | **Antikythira Is** | 3.18 | 277 | P | **Pn** | 05 05 45.3 | +0.3 |
| **ANKY** | **Antikythira Is** | 3.18 | 277 | P | **Pn** | 05 05 45.3 | +0.3 |
| **KULA** | **Kula-Manisa** | 3.21 | 21 | *e*PN | **Pn** | 05 05 46.1 | +0.6 |
| **KULA** | **Kula-Manisa** | 3.21 | 21 | *e*Pn | **Pn** | 05 05 46.1 | +0.6 |
| **BCK** | **Bucak** | 3.35 | 54 | *e*PN | **Pn** | 05 05 49.5 | +2.0 |
| **BCK** | **Bucak** | 3.35 | 54 | *e*Pn | **Pn** | 05 05 49.5 | +2.0 |
| **KHL** | **Karahalli** | 3.36 | 33 | *e*PN | **Pn** | 05 05 49.0 | +1.4 |
| **KHL** | **Karahalli** | 3.36 | 33 | *e*Pn | **Pn** | 05 05 49.0 | +1.4 |
| **AKS** | **Akhisar** | 3.39 | 8 | *e*PN | **Pn** | 05 05 48.8 | +1.0 |
| **AKS** | **Akhisar** | 3.39 | 8 | *e*Pn | **Pn** | 05 05 48.8 | +1.0 |
| **KHAL** | **Karahalli** | 3.39 | 32 | *i* P | **Pn** | 05 05 48.7 | +0.7 |
| **KHAL** | **Karahalli** | 3.39 | 32 | P | **Pn** | 05 05 48.7 | +0.7 |
| **KYTH** | **Kithira** | 3.45 | 284 | *e*PN | **Pn** | 05 05 49.6 | +0.8 |
| **KYTH** | **Kithira** | 3.45 | 284 | P | **Pn** | 05 05 49.4 | +0.6 |
| **KYTH** | **Kithira** | 3.45 | 284 | P | **Pn** | 05 05 49.4 | +0.6 |
| **SUTC** | **Sutluce-Ispart** | 3.64 | 56 | *e*PN | **Pn** | 05 05 53.9 | +2.5 |
| **SUTC** | **Sutluce-Ispart** | 3.64 | 56 | *e*Pn | **Pn** | 05 05 53.9 | +2.5 |
| **VLI** | **Veliai** | 3.64 | 290 | *e*PN | **Pn** | 05 05 52.0 | +0.6 |
| **VLI** | **Veliai** | 3.64 | 290 | P | **Pn** | 05 05 51.6 | +0.2 |
| VLI | | | | S | **Sn** | 05 06 34.2 | -0.2 |
| **VLI** | **Veliai** | 3.64 | 290 | P | **Pn** | 05 05 51.6 | +0.2 |
| **VLI** | **Veliai** | 3.64 | 290 | *e*Pn | **Pn** | 05 05 52.0 | +0.6 |
| VLI | | | | S | **Sn** | 06 06 34.2 | -0.2 |
| **DEMI** | **Demirci** | 3.72 | 19 | *i* P | **Pn** | 05 05 53.3 | +0.8 |
| **DEMI** | **Demirci** | 3.72 | 19 | P | **Pn** | 05 05 53.3 | +0.8 |
| **DID** | **Didima** | 3.75 | 303 | *e*PN | **Pn** | 05 05 54.0 | +1.2 |
| **DID** | **Didima** | 3.75 | 303 | P | **Pn** | 05 05 53.5 | +0.7 |
| DID | | | | S | **Sn** | 06 06 37.8 | +0.7 |
| **DID** | **Didima** | 3.75 | 303 | P | **Pn** | 05 05 53.5 | +0.7 |
| **DID** | **Didima** | 3.75 | 303 | *e*Pn | **Pn** | 05 05 54.0 | +1.2 |
| DID | | | | S | **Sn** | 05 06 37.8 | +0.7 |
| **VILL** | **Villia** | 4.08 | 311 | *e*Pn | **Pn** | 05 05 58.3 | +0.9 |
| **VIL2** | **Platees** | 4.13 | 312 | *e*PN | **Pn** | 05 05 58.3 | +0.2 |
| **BALY** | **Balya** | 4.22 | 5 | *i* P | **Pn** | 05 06 00.1 | +0.7 |
| **BALY** | **Balya** | 4.22 | 5 | P | **Pn** | 05 06 00.1 | +0.7 |
| **GAZI** | **Gazipasa** | 4.22 | 79 | *i* P | **Pn** | 05 05 58.5 | -0.9 |
| **GAZI** | **Gazipasa** | 4.22 | 79 | P | **Pn** | 05 05 58.5 | -0.9 |
| GAZI | | | | S | **Sn** | 05 06 44.2 | -4.6 |
| **VLX** | **Vlachokerasia** | 4.29 | 297 | *e*PN | **Pn** | 05 06 02.3 | +1.9 |
| **VLX** | **Vlachokerasia** | 4.29 | 297 | *e*Pn | **Pn** | 05 06 02.3 | +1.9 |
| **HDMB** | **Hadim** | 4.52 | 70 | *e*PN | **Pn** | 05 06 06.3 | +2.7 |
| **HDMB** | **Hadim** | 4.52 | 70 | *e*Pn | **Pn** | 05 06 06.3 | +2.7 |
| **GUR** | **Goura** | 4.58 | 303 | *e*PN | **Pn** | 05 06 06.2 | +1.9 |
| **GUR** | **Goura** | 4.58 | 303 | *e*Pn | **Pn** | 05 06 06.2 | +1.9 |
| **GADA** | **Gvkgeada** | 4.77 | 348 | *e*PN | **Pn** | 05 06 07.3 | +0.5 |
| **GADA** | **Gvkgeada** | 4.77 | 348 | *e*Pn | **Pn** | 05 06 07.3 | +0.5 |
| **KONT** | **Konya--Tatoy** | 4.80 | 58 | *e*PN | **Pn** | 05 06 09.7 | +2.3 |
| **KONT** | **Konya--Tatoy** | 4.80 | 58 | *e*Pn | **Pn** | 05 06 09.7 | +2.3 |
| **KRBG** | **Karabiga-Canak** | 4.86 | 1 | *e*PN | **Pn** | 05 06 08.7 | +0.6 |
| **KRBG** | **Karabiga-Canak** | 4.86 | 1 | *e*Pn | **Pn** | 05 06 08.7 | +0.6 |
| **GELI** | **Tayfur-Gelibol** | 4.90 | 354 | *e*PN | **Pn** | 05 06 09.5 | +0.9 |
| **GELI** | **Tayfur-Gelibol** | 4.90 | 354 | *e*Pn | **Pn** | 05 06 09.5 | +0.9 |
| **KIZT** | **Kizilcal** | 5.02 | 47 | *e*PN | **Pn** | 05 06 12.3 | +1.8 |
| **KIZT** | **Kizilcal** | 5.02 | 47 | *e*Pn | **Pn** | 05 06 12.3 | +1.8 |
| **BRTR** | **Keskin Array B** | 6.62 | 49 | Pn | **Pn** | 05 06 34.5 | +2.1 |
| | 0.2nm,0.3s,baz=213,slow=14,SNR=6.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | 7.25 | 108 | Pn | **Pn** | 05 06 43.1 | +2.1 |
| | 3.9nm,0.3s,baz=277,slow=17,SNR=3.5 | | | | | | |
| MMAI | | | | Sn | Sn | 05 07 56.1 | -7.3 |
| | 4.9nm,0.3s,baz=316,slow=36,SNR=3.8 | | | | | | |
| **EIL** | **Elat** | 8.77 | 130 | Pn | **Pn** | 05 06 59.6 | -2.2 |
| | 0.5nm,0.3s,baz=296,slow=2.9,SNR=11 | | | | | | |
| EIL | | | | Sn | **Sn** | 05 08 36.9 | -3.9 |
| | 0.8nm,0.3s,baz=101,slow=17,SNR=4.0 | | | | | | |
| **KEST** | **Kesra** | 14.52 | 276 | Pn | **P** | 05 08 28.7 | +1.5 |
| | 0.2nm,0.3s,baz=44,slow=9.1,SNR=4.1 | | | | | | |
| **KBZ** | **Khabaz** | 14.60 | 51 | Pn | **P** | 05 08 30.6 | +2.6 |
| | 0.1nm,0.3s,baz=252,slow=6.0,SNR=8.9 | | | | | | |
| **AKASG** | **Malin Array Be** | 15.24 | 5 | Pn | **P** | 05 08 32.6 | -2.4 |
| | 0.8nm,0.3s,baz=294,slow=10,SNR=2.4 | | | | | | |
| **GERES** | **GERESS Array B** | 16.61 | 327 | Pn | **P** | 05 08 50.9 | +0.6 |
| | 0.1nm,0.3s,baz=135,slow=11,SNR=3.5 | | | | | | |
| **ESDC** | **Sonseca Array** | 24.96 | 289 | P | **P** | 05 10 18.5 | -0.1 |
| | 0.4nm,0.5s,baz=78,slow=9.6,SNR=5.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | 26.79 | 47 | P | **P** | 05 10 34.5 | -0.5 |
| | 1.5nm,0.6s,baz=247,slow=2.4,SNR=6.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | 32.01 | 232 | P | **P** | 05 11 21.8 | +0.2 |
| | 0.5nm,0.4s,baz=35,slow=8.6,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | 42.19 | 57 | P | **P** | 05 12 48.2 | +0.4 |
| | 0.4nm,0.6s,baz=298,slow=6.2,SNR=3.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | 43.55 | 46 | P | **P** | 05 12 58.7 | -0.1 |
| | 0.9nm,0.4s,baz=282,slow=7.2,SNR=3.5 | | | | | | |
| **SONM** | **Songino Array** | 57.97 | 51 | P | **P** | 05 14 48.6 | +0.9 |
| | 0.4nm,0.6s,baz=287,slow=14,SNR=2.6 | | | | | | |

*NEIC* ***17*** *05:25:27.6, 16˚.13N×96˚.59W, h16km, MD4.3(MEX), After MEX.*

**MEX 17 05:25:27.6±1.0, 16˚.13N×96˚.59W, h16km±18km, MD4.3, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HUIG** | **Huatulco** | **0.59** | **127** | *e*P | | Pg | 05 25 37.0 | -2.2 |
| HUIG | | | | *i* S | | Sg | 05 25 44.7 | -2.4 |
| **HUIG** | **Huatulco** | **0.59** | **127** | *e*P | | Pg | 05 25 37.0 | -2.2 |
| HUIG | | | | *i* S | | Sg | 05 25 44.7 | -2.4 |
| **OXX** | **Oaxaca** | **0.96** | **353** | *i* P | | Pb | 05 25 38.5 | -7.7 |
| OXX | | | | *i* S | | Sb | 05 25 50.4 | -8.4 |
| **OXX** | **Oaxaca** | **0.96** | **353** | *i* P | | Pb | 05 25 38.5 | -7.7 |
| OXX | | | | *i* S | | Sb | 05 25 50.4 | -8.4 |
| **PNIG** | **Pinotepa** | **1.50** | **280** | *e*P | | Pn | 05 25 51.9 | -2.0 |
| PNIG | | | | *i* S | | Sn | 05 26 07.4 | -5.7 |
| **PNIG** | **Pinotepa** | **1.50** | **280** | *e*P | | Pn | 05 25 51.9 | -2.0 |
| PNIG | | | | *i* S | | Sn | 05 26 07.4 | -5.7 |
| **TLIG** | **Tlapa** | **2.37** | **307** | *e*P | | Pn | 05 26 03.4 | -2.6 |
| TLIG | | | | *i* S | | Sn | 05 26 29.9 | -5.0 |
| **CAIG** | **El Cayaco** | **3.64** | **285** | *e*P | | Pn | 05 26 17.6 | -5.7 |
| **CAIG** | **El Cayaco** | **3.64** | **285** | *e*P | | Pn | 05 26 17.6 | -5.7 |
| **ARIG** | **Puente Sto Nin** | **4.18** | **301** | *e*P | | Pn | 05 26 29.2 | -1.6 |
| ARIG | | | | *i* S | | Sn | 05 27 13.7 | -5.7 |

**IDC 17 05:31:57.0±9.4, 22˚.97S×178˚.11W, h273km±91km, mb3.3/6, mb1 3.6/7, mb1mx3.4/25, mbtmp4.0/7, Error ellipse: s-maj=36.9km s-min=25.5km az=9.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **14.30** | **271** | P | | Pn | 05 35 11.6 | +3.3 |
| | 0.2nm,0.3s,baz=0.0,slow=20,SNR=3.1 | | | | | | | |
| **URZ** | **Urewera** | **15.78** | **194** | P | | P | 05 35 22.2 | -1.8 |
| | 1.2nm,0.3s,baz=228,slow=0.8,SNR=5.7 | | | | | | | |
| URZ | | | | S | | S | 05 38 05.3 | -11 |
| | 1.9nm,0.3s,baz=167,slow=20,SNR=10 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.90** | **259** | P | | P | 05 39 37.7 | +0.3 |
| | 3.7nm,0.8s,baz=95,slow=8.2,SNR=34 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.21** | **265** | P | | P | 05 39 39.7 | -0.1 |
| | 3.1nm,0.7s,baz=102,slow=8.1,SNR=29 | | | | | | | |
| **QSPA** | **South Pole Qui** | **67.11** | **180** | P | | P | 05 42 21.7 | +0.4 |
| | 0.4nm,0.6s,baz=37,slow=5.3,SNR=3.9 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.89** | **43** | P | | P | 05 43 51.9 | +0.4 |
| | 0.4nm,0.6s,baz=218,slow=9.4,SNR=4.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **88.47** | **57** | P | | P | 05 44 19.7 | +0.8 |
| | 0.0nm,0.3s,baz=202,slow=6.3,SNR=5.1 | | | | | | | |
| **ILAR** | **Eielson Array** | **90.73** | **13** | P | | P | 05 44 27.8 | -0.7 |
| | 0.2nm,0.5s,baz=216,slow=5.5,SNR=4.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **145.10** | **329** | PKPbc | | PKPdf | 05 51 00.4 | -1.3 |
| | 0.4nm,0.4s,baz=46,slow=4.8,SNR=4.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **148.37** | **309** | PKPbc | | PKPbc | 05 51 09.9 | -1.6 |
| | 0.3nm,0.6s,baz=123,slow=5.3,SNR=3.3 | | | | | | | |
| **BRG** | **Berggiesshubel** | **150.61** | **344** | *e*P | | PKPbc | 05 51 16.0 | -0.4 |
| | 3.2nm,0.6s | | | | | | | |

*IDC* ***17*** *05:32:29.3±0.7, 10˚.74N×91˚.13E, h0km, mb3.9/9, mb1 4.1/11, mb1mx3.8/36, mbtmp4.0/11, ML4.6/2, MS3.3/11, Ms1 3.4/11, ms1mx3.2/26, Error ellipse: s-maj=25.8km s-min=17.3km az=65.0*

*ISCJB* ***17*** *05:32:31.4±0.3, 10˚.78N±0˚.04×91˚.09E±0˚.03, h33km, mb4.1/16, MS3.3/9, Error ellipse: s-maj=5.3km s-min=3.4km az=19.0*

*NEIC* ***17*** *05:32:31.0±0.3, 10˚.74N×91˚.12E, h10km, mb4.9/4, Error ellipse: s-maj=6.2km s-min=4.6km az=223.0*

**ISC 17 05:32:34.0±0.5, 10˚.78N±0˚.06×91˚.14E±0˚.05, h35km, n67, σ18±50/71, mb4.0/16, MS3.3/9, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PBA** | **Port Blair** | **1.80** | **61** | *e*P | | Pn | 05 33 04.4 | +1.9 |
| PBA | | | | *e*S | | Sn | 05 33 26.4 | +2.2 |
| PBA | | | | AML | | AML | 05 33 27.1 | |
| | comp=N,11μm,0.2s | | | | | | | |
| PBA | | | | AML | | AML | 05 33 28.2 | |
| | comp=E,8μm,0.4s | | | | | | | |
| **DGPR** | **DIGLIPUR** | **2.96** | **36** | *e*P | | **Pn** | **05 33 19.6** | **+1.1** |
| DGPR | | | | *e*S | | **Sn** | **05 33 52.5** | **-0.3** |
| DGPR | | | | AML | | AML | 05 33 54.1 | |
| | comp=N,2μm,1.2s | | | | | | | |
| DGPR | | | | AML | | AML | 05 33 56.6 | |
| | comp=E,3μm,0.6s | | | | | | | |
| **CMBY** | **CAMPBELL BAY** | **4.65** | **143** | *e*P | | **Pn** | **05 33 42.2** | **+0.5** |
| CMBY | | | | *e*S | | **Sn** | **05 34 32.0** | **-2.4** |
| CMBY | | | | AML | | AML | 05 34 40.7 | |
| | comp=N,1μm,0.1s | | | | | | | |
| CMBY | | | | AML | | AML | 05 34 41.4 | |
| | comp=E,1μm,0.5s | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **7.96** | **133** | *e*Pn | | **Pn** | **05 34 26.6** | **-0.7** |
| **VIS** | **Vishakhapatnam** | **10.24** | **313** | *i* P | | **Pn** | **05 34 57.5** | **-1.1** |
| VIS | | | | *i* x | | x | 05 36 39.8 | |
| VIS | | | | *ex* | | x | 05 36 43.3 | |
| | comp=E,7μm,0.2s | | | | | | | |
| VIS | | | | *ex* | | x | 05 36 44.3 | |
| | comp=N,736nm,0.6s | | | | | | | |
| **CHLP** | **Challavanipeta** | **10.29** | **319** | *e*P | | **Pn** | **05 34 57.3** | **-1.9** |
| CHLP | | | | IAmb | | IAmb | 05 34 58.9 | |
| | comp=Z,148nm,0.3s | | | | | | | |
| CHLP | | | | *e* | | | 05 36 41.3 | |
| CHLP | | | | *e*Sn | | **Sn** | **05 36 54.9** | **+1.4** |
| **CMAR** | **Chiang Mai Arr** | **10.74** | **44** | Pn | | **Pn** | **05 35 05.8** | **+0.5** |
| | comp=Z,0.9nm,0.3s,baz=236,slow=15,SNR=12 | | | | | | | |
| CMAR | | | | Sn | | **Sn** | **05 36 59.2** | **-5.1** |
| | comp=Z,1.0nm,0.3s,baz=236,slow=27,SNR=4.2 | | | | | | | |
| **KULM** | **Kulim** | **10.88** | **119** | *e*Pn | | **Pn** | **05 35 07.0** | **-0.3** |
| **PALK** | **Pallekele** | **10.88** | **252** | Pn | | **Pn** | **05 35 06.5** | **-0.9** |
| | comp=Z,7.5nm,0.3s,baz=116,slow=9.3,SNR=30 | | | | | | | |
| PALK | | | | Sn | | Sn | 05 36 54.6 | -13 |
| | comp=Z,14nm,0.3s,baz=296,slow=20,SNR=12 | | | | | | | |
| PALK | | | | LR | | LR | 05 38 58.9 | |
| | comp=Z,236nm,19.1s,baz=116,slow=36 | | | | | | | |
| **PALK** | **Pallekele** | **10.88** | **252** | Pn | | **Pn** | **05 35 06.5** | **-0.9** |
| | comp=Z,13nm,0.4s | | | | | | | |
| PALK | | | | *e*Sn | | Sn | 05 36 53.8 | -14 |
| PALK | | | | Sn | | Sn | 05 36 54.6 | -13 |
| **MDRS** | **Chennai** | **10.90** | **283** | *e*P | | **Pn** | **05 35 07.4** | **-0.2** |
| MDRS | | | | AMB | | AMB | 05 35 08.9 | |
| | comp=Z,271nm,0.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **10.99** | **42** | *e*Pn | | **Pn** | **05 35 08.8** | **0.0** |
| | comp=Z,9.7nm,0.9s | | | | | | | |
| CHTO | | | | *e*Sn | | **Sn** | **05 37 12.3** | **+1.8** |
| **PSI** | **Prapat** | **11.07** | **135** | LR | | LR | 05 40 12.8 | |
| | comp=Z,315nm,21.4s,baz=295,slow=42 | | | | | | | |
| **PVM** | **Polavaram** | **11.25** | **306** | *e*Pn | | **Pn** | **05 35 11.2** | **-1.1** |
| PVM | | | | IAmb | | IAmb | 05 35 15.2 | |
| | comp=Z,41nm,0.3s | | | | | | | |
| PVM | | | | *e* | | | 05 37 02.4 | |
| PVM | | | | *e*Sn | | **Sn** | **05 37 18.3** | **+1.3** |
| **SKHT** | **Srikalahasti** | **11.55** | **286** | *e*Pn | | **Pn** | **05 35 16.6** | **+0.1** |
| SKHT | | | | IAmb | | IAmb | 05 35 18.0 | |
| | comp=Z,348nm,0.5s | | | | | | | |
| SKHT | | | | *e* | | | 05 37 11.2 | |
| SKHT | | | | *e*Sn | | **Sn** | **05 37 24.7** | **+0.3** |
| **IPM** | **Ipoh** | **11.62** | **122** | *e*Pn | | **Pn** | **05 35 16.5** | **-1.0** |
| **ADKI** | **Addanki** | **11.98** | **296** | *e*P | | **Pn** | **05 35 20.5** | **-1.8** |
| ADKI | | | | IAmb | | IAmb | 05 35 23.5 | |
| | comp=Z,99nm,0.5s | | | | | | | |
| ADKI | | | | *e* | | | 05 37 20.5 | |
| ADKI | | | | *e*Sn | | **Sn** | **05 37 35.2** | **+0.4** |
| **NJS** | **Nagarjunasagar** | **12.85** | **298** | *e*Pn | | **Pn** | **05 35 33.8** | **-0.5** |
| NJS | | | | IAmb | | IAmb | 05 35 35.6 | |
| | comp=Z,26nm,0.4s | | | | | | | |
| NJS | | | | *e* | | | 05 37 41.4 | |
| **HYB** | **Hyderabad** | **13.87** | **300** | *i* P | | **Pn** | **05 35 46.0** | **-2.3** |
| HYB | | | | *e*S | | **Sn** | **05 38 19.0** | **-2.2** |
| **HYB** | **Hyderabad** | **13.87** | **300** | *e*P | | **Pn** | **05 35 46.7** | **-1.6** |
| HYB | | | | AMB | | AMB | 05 35 54.2 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **HYBB** | **Hyderabad (bro** | **13.88** | **300** | *e*P | | **Pn** | **05 35 47.2** | **-1.1** |
| HYBB | | | | IAmb | | IAmb | 05 35 47.3 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| HYBB | | | | *e* | | | 05 38 07.8 | |
| HYBB | | | | *e*Sn | | **Sn** | **05 38 20.8** | **-0.4** |
| **BOK** | **Bokaro** | **13.88** | **340** | *e*P | | **Pn** | **05 35 46.3** | **-2.0** |
| BOK | | | | AMB | | AMB | 05 35 49.4 | |
| | comp=Z,68nm,2.2s | | | | | | | |
| **RPR** | **Rampur** | **13.98** | **306** | *e*Pn | | **Pn** | **05 35 48.7** | **-1.0** |
| RPR | | | | IAmb | | IAmb | 05 35 50.0 | |
| | comp=Z,49nm,

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VLS** | **Valsamata** | **0.44** | **28** | *e*PB | **Pg** | **05 41 06.8** | **0.0** |
| VLS | | | | *e*SB | **Sg** | **05 41 13.6** | **+1.2** |
| **VLS** | **Valsamata** | **0.44** | **28** | P | **Pg** | **05 41 06.7** | **0.0** |
| VLS | | | | S | **Sg** | **05 41 11.8** | **-0.6** |
| **VLS** | **Valsamata** | **0.44** | **28** | P | **Pg** | **05 41 06.7** | **0.0** |
| VLS | | | | S | **Sg** | **05 41 11.8** | **-0.6** |
| VLS | | | | *e*Sb | **Sg** | **05 41 13.6** | **+1.2** |
| **KFL** | **Anninata** | **0.48** | **49** | *e*PG | **Pg** | **05 41 07.5** | **-0.1** |
| KFL | | | | *e*SB | **Sg** | **05 41 14.7** | **+0.8** |
| **KFL** | **Anninata** | **0.48** | **49** | P | **Pg** | **05 41 07.2** | **-0.4** |
| KFL | | | | S | **Sg** | **05 41 12.8** | **-1.1** |
| **KFL** | **Anninata** | **0.48** | **49** | P | **Pg** | **05 41 07.2** | **-0.4** |
| **KFL** | **Anninata** | **0.48** | **49** | *e*Pg | **Pg** | **05 41 07.5** | **-0.1** |
| KFL | | | | S | **Sg** | **05 41 12.8** | **-1.1** |
| KFL | | | | *e*Sb | **Sg** | **05 41 14.7** | **+0.8** |
| **AXS** | **Araxos** | **0.92** | **64** | P | **Pg** | **05 41 15.8** | **-0.2** |
| **AXS** | **Araxos** | **0.92** | **64** | P | **Pg** | **05 41 15.8** | **-0.2** |
| **RLS** | **Riolos of Patr** | **0.94** | **73** | *e*PG | **Pg** | **05 41 15.5** | **-0.8** |
| RLS | | | | *e*SB | **Sb** | **05 41 30.2** | **+0.1** |
| **RLS** | **Riolos of Patr** | **0.94** | **73** | P | **Pg** | **05 41 15.5** | **-0.8** |
| **RLS** | **Riolos of Patr** | **0.94** | **73** | P | **Pg** | **05 41 15.5** | **-0.8** |
| RLS | | | | *e*Sb | **Sb** | **05 41 30.2** | **+0.1** |
| **LKD2** | **Lefkada island** | **1.03** | **15** | *e*PN | **Pg** | **05 41 18.0** | **-0.1** |
| **LKD2** | **Lefkada island** | **1.03** | **15** | P | **Pb** | **05 41 18.7** | **-0.1** |
| **LKD2** | **Lefkada island** | **1.03** | **15** | *e*Pn | **Pg** | **05 41 18.0** | **-0.1** |
| **LKD2** | **Lefkada island** | **1.03** | **15** | P | **Pb** | **05 41 18.0** | **-0.1** |
| **PDO** | **Prodromos** | **1.05** | **40** | *e*PG | **Pg** | **05 41 17.6** | **-0.9** |
| PDO | | | | *e*SB | **Sb** | **05 41 33.8** | **+0.5** |
| **PDO** | **Prodromos** | **1.05** | **40** | P | **Pg** | **05 41 17.6** | **-0.9** |
| **PDO** | **Prodromos** | **1.05** | **40** | P | **Pg** | **05 41 17.6** | **-0.9** |
| PDO | | | | *e*Sb | **Sb** | **05 41 33.8** | **+0.5** |
| **DRO** | **Drossia** | **1.11** | **81** | *e*PN | **Pg** | **05 41 18.8** | **-0.7** |
| DRO | | | | *e*SB | **Sn** | **05 41 36.0** | **-0.5** |
| **DRO** | **Drossia** | **1.11** | **81** | P | **Pg** | **05 41 19.1** | **-0.4** |
| **DRO** | **Drossia** | **1.11** | **81** | *e*Pn | **Pg** | **05 41 18.8** | **-0.7** |
| **DRO** | **Drossia** | **1.11** | **81** | P | **Pg** | **05 41 19.1** | **-0.4** |
| DRO | | | | *e*Sb | **Sn** | **05 41 36.0** | **-0.5** |
| **AMT** | **Artemida-Makis** | **1.13** | **103** | *e*PB | **Pg** | **05 41 19.8** | **-0.1** |
| AMT | | | | *e*SB | **Sn** | **05 41 36.8** | **-0.2** |
| **AMT** | **Artemida-Makis** | **1.13** | **103** | P | **Pg** | **05 41 19.8** | **-0.1** |
| AMT | | | | S | **Sb** | **05 41 35.8** | **+0.3** |
| **AMT** | **Artemida-Makis** | **1.13** | **103** | P | **Pg** | **05 41 19.8** | **-0.1** |
| AMT | | | | S | **Sb** | **05 41 35.8** | **+0.3** |
| AMT | | | | *e*Sb | **Sn** | **05 41 36.8** | **-0.2** |
| **PVO** | **Paravola** | **1.25** | **49** | *e*PB | **Pn** | **05 41 22.7** | **0.0** |
| **PVO** | **Paravola** | **1.25** | **49** | *e*Pb | **Pn** | **05 41 22.7** | **0.0** |
| **LAKA** | **Lakka** | **1.38** | **71** | *e*PG | **Pn** | **05 41 24.0** | **-0.5** |
| LAKA | | | | *e*SB | **Sn** | **05 41 44.0** | **+0.8** |
| **LAKA** | **Lakka** | **1.38** | **71** | P | **Pg** | **05 41 23.6** | **-0.9** |
| LAKA | | | | S | **Sg** | **05 41 42.9** | **+0.3** |
| **LAKA** | **Lakka** | **1.38** | **71** | P | **Pn** | **05 41 23.6** | **-0.9** |
| **LAKA** | **Lakka** | **1.38** | **71** | *e*Pg | **Pn** | **05 41 24.0** | **-0.5** |
| LAKA | | | | S | **Sg** | **05 41 42.9** | **+0.3** |
| LAKA | | | | *e*Sb | **Sn** | **05 41 44.0** | **+0.8** |
| **EFP** | **Efpalio** | **1.40** | **63** | *e*PG | **Pn** | **05 41 24.2** | **-0.5** |
| **EFP** | **Efpalio** | **1.40** | **63** | *e*Pg | **Pn** | **05 41 24.2** | **-0.5** |
| **ITM** | **Ithomi** | **1.41** | **115** | *e*PB | **Pg** | **05 41 25.4** | **0.0** |
| ITM | | | | *e*SB | **Sg** | **05 41 43.8** | **+0.1** |
| **ITM** | **Ithomi** | **1.41** | **115** | *e*Pb | **Sg** | **05 41 25.4** | **0.0** |
| ITM | | | | *e*Sb | **Sg** | **05 41 43.8** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **1.46** | **80** | *e*PB | **Pg** | **05 41 26.3** | **-0.1** |
| KLV | | | | *e*SB | **Sg** | **05 41 47.5** | **+2.1** |
| **KLV** | **Kalavryta, Ach** | **1.46** | **80** | P | **Pb** | **05 41 25.9** | **-0.3** |
| KLV | | | | S | **Sb** | **05 41 45.4** | **+0.2** |
| **KLV** | **Kalavryta, Ach** | **1.46** | **80** | P | **Pb** | **05 41 25.9** | **-0.3** |
| **KLV** | **Kalavryta, Ach** | **1.46** | **80** | *e*Pb | **Pg** | **05 41 26.3** | **-0.1** |
| KLV | | | | S | **Sb** | **05 41 45.4** | **+0.2** |
| KLV | | | | *e*Sb | **Sg** | **05 41 47.5** | **+2.1** |
| **DSL** | **Palaion Diasel** | **1.47** | **24** | *e*PG | **Pn** | **05 41 25.2** | **-0.5** |
| **DSL** | **Palaion Diasel** | **1.47** | **24** | *e*Pg | **Pn** | **05 41 25.2** | **-0.5** |
| **SERG** | **Sergoula** | **1.50** | **65** | P | **Pn** | **05 41 26.0** | **-0.1** |
| SERG | | | | S | **Sn** | **05 41 45.8** | **-0.4** |
| **SERG** | **Sergoula** | **1.50** | **65** | P | **Pn** | **05 41 26.0** | **-0.1** |
| SERG | | | | S | **Sn** | **05 41 45.8** | **-0.4** |
| **KALE** | **Kalithea** | **1.55** | **67** | *e*PB | **Pb** | **05 41 27.6** | **-0.1** |
| **KALE** | **Kalithea** | **1.55** | **67** | P | **Pn** | **05 41 27.0** | **+0.1** |
| KALE | | | | S | **Sn** | **05 41 47.1** | **-0.4** |
| **KALE** | **Kalithea** | **1.55** | **67** | P | **Pn** | **05 41 27.0** | **+0.1** |
| **KALE** | **Kalithea** | **1.55** | **67** | *e*Pb | **Pb** | **05 41 27.6** | **-0.1** |
| KALE | | | | S | **Sn** | **05 41 47.1** | **-0.4** |
| **GUR** | **Goura** | **1.60** | **84** | P | **Pb** | **05 41 28.2** | **-0.4** |
| **GUR** | **Goura** | **1.60** | **84** | P | **Pb** | **05 41 28.2** | **-0.4** |
| **EVR** | **Evrytania** | **1.62** | **46** | *e*PB | **Pg** | **05 41 29.0** | **-0.3** |
| **EVR** | **Evrytania** | **1.62** | **46** | *e*Pb | **Pg** | **05 41 29.0** | **-0.3** |
| **DSF** | **Desfina** | **1.84** | **70** | *e*PN | **Pn** | **05 41 31.2** | **+0.3** |
| **DSF** | **Desfina** | **1.84** | **70** | P | **Pn** | **05 41 30.8** | **-0.1** |
| DSF | | | | S | **Sn** | **05 41 55.0** | **+0.3** |
| **DSF** | **Desfina** | **1.84** | **70** | P | **Pn** | **05 41 30.8** | **-0.1** |
| **DSF** | **Desfina** | **1.84** | **70** | *e*Pn | **Pn** | **05 41 31.2** | **+0.3** |
| DSF | | | | S | **Sn** | **05 41 55.0** | **+0.3** |
| **DESF** | **Desfina** | **1.85** | **70** | *e*PN | **Pn** | **05 41 31.3** | **+0.4** |
| DESF | | | | *e*SB | **Sb** | **05 41 56.5** | **+0.2** |
| **DESF** | **Desfina** | **1.85** | **70** | *e*Pn | **Pn** | **05 41 31.3** | **+0.4** |
| DESF | | | | *e*Sb | **Sb** | **05 41 56.5** | **+0.2** |
| **MAKR** | **Makrakomi, Fth** | **1.87** | **49** | *e*PG | **Pb** | **05 41 32.7** | **-0.4** |
| **MAKR** | **Makrakomi, Fth** | **1.87** | **49** | *e*Pg | **Pb** | **05 41 32.7** | **-0.4** |
| **AGG** | **Agios Georgios** | **2.00** | **51** | *e*PN | **Pn** | **05 41 33.7** | **+0.7** |
| **AGG** | **Agios Georgios** | **2.00** | **51** | P | **Pn** | **05 41 33.4** | **+0.4** |
| **AGG** | **Agios Georgios** | **2.00** | **51** | P | **Pn** | **05 41 33.4** | **+0.4** |
| **AGG** | **Agios Georgios** | **2.00** | **51** | *e*Pn | **Pn** | **05 41 33.7** | **+0.7** |
| **LTK** | **Loutraki** | **2.10** | **83** | *e*PB | **Pn** | **05 41 34.3** | **-0.1** |
| **LTK** | **Loutraki** | **2.10** | **83** | P | **Pn** | **05 41 34.3** | **-0.1** |
| **LTK** | **Loutraki** | **2.10** | **83** | P | **Pn** | **05 41 34.3** | **-0.1** |
| **THL** | **Klokotos Trika** | **2.21** | **36** | P | **Pn** | **05 41 36.5** | **+0.7** |
| **THL** | **Klokotos Trika** | **2.21** | **36** | P | **Pn** | **05 41 36.5** | **+0.7** |

*IDC* ***17*** *05:41:10.0±2.1,8.˚86S×153.˚15E, h0km, mb4.0/4, mb1 4.1/5, mb1mx3.8/24, mbtmp4.0/5, ML1.4/1, MS3.7/3, Ms1 3.7/3, ms1mx3.1/21, Error ellipse: s-maj=59.7km s-min=29.7km az=132.0*

**ISC 17 05:41:14.2±1.7, 9.0S±0.˚3×153.˚3E±0.˚2, h35km, n8, σ1§34/7, mb4.1/4, D'Entrecasteaux Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** 0.6nm,0.3s,baz=37,slow=20,SNR=2.1 | **6.07** | **266** | Pn | **Pn** | **05 42 40.0** | **-1.5** |
| PMG | 1.4nm,0.3s,baz=78,slow=18,SNR=6.6 | | | Sn | **Sn** | **05 43 51.1** | **+1.3** |
| PMG | comp=Z,271nm,20.7s,baz=72,slow=37 | | | LR | LR | 05 44 49.5 | |
| **HNR** | **Honiara** comp=Z,236nm,20.4s,baz=264,slow=38 | **6.58** | **94** | LR | LR | 05 45 25.3 | |
| **WRA** | **Warramunga Arr** 8.7nm,0.9s,baz=60,slow=10,SNR=22 | **21.29** | **237** | P | **P** | **05 45 57.6** | **-0.3** |
| **ASAR** | **Alice Springs** 2.0nm,0.8s,baz=51,slow=9.3,SNR=17 | **23.57** | **230** | P | **P** | **05 46 22.8** | **+0.9** |
| **AFI** | **Afiamalu** comp=Z,589nm,18.1s,baz=199,slow=35 | **34.55** | **101** | LR | LR | 06 01 28.9 | |
| **MKAR** | **Makanchi Array** 0.9nm,0.7s,baz=101,slow=7.5,SNR=5.9 | **83.83** | **319** | P | **P** | **05 53 41.7** | **+1.4** |
| **ZALV** | **Zalesovo Beam** 1.2nm,0.7s,baz=120,slow=8.5,SNR=3.0 | **84.93** | **326** | P | **P** | **05 53 45.1** | **-0.5** |
| **TORD** | **Torodi Ar. Bea** 0.8nm,1.1s,baz=68,slow=2.3,SNR=3.7 | **151.84** | **281** | PKPbc | **PKPbc** | **06 01 06.3** | **-0.2** |

*AUST* ***17*** *05:53:59.9±0.7,22.˚34S×174.˚56W, h0km, Error ellipse: s-maj=25.8km s-min=8.0km az=140.0*

*IDC* ***17*** *05:54:02.4±0.6,22.˚61S×174.˚92W, h0km, mb4.6/14, mb1 4.8/15, mb1mx4.7/23, mbtmp4.6/15, ML5.0/2, MS4.1/13, Ms1 4.1/13, ms1mx3.9/25, Error ellipse: s-maj=21.8km s-min=16.1km az=106.0*

*MOS* ***17*** *05:54:06.8±1.4,22.˚76S×175.˚07W, h35km, mb5.0/22, Error ellipse: s-maj=13.5km s-min=10.4km az=73.0*

*ISCJB* ***17*** *05:54:06.6±3.4,22.˚70S±0.˚06×175.˚10W±0.˚05, h32km±23km, mb4.9/72, MS4.1/14, Error ellipse: s-maj=9.7km s-min=7.8km az=157.0*

*NEIC* ***17*** *05:54:08.7±0.2,22.˚58S×175.˚16W, mb4.8/33, Error ellipse: s-maj=9.2km s-min=5.6km az=143.0*

*BJI* ***17*** *05:54:08.8,22.˚51S×175.˚38W, h34km, mb5.2/25, mB5.4/20, Ms5.1/13, Ms7 4.7/13*

**ISC 17 05:54:08.1±0.5, 22.˚78S±0.˚08×174.˚95W±0.˚07, h41km±3km, h40km:pP-P, n217, σ1§59/232, mb4.9/73, MS4.1/14, 10C-3D, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** baz=5.4,SNR=14 | **5.97** | **53** | P | Pn | 05 55 21.4 | -13 |
| **RAO** | **Raoul Island** 157nm,0.3s,baz=101,slow=22,SNR=3.8 | **6.97** | **202** | Pn | **Pn** | **05 55 48.8** | **+1.0** |
| RAO | 106nm,0.3s,baz=94,slow=22,SNR=5.7 | | | Sn | **Sn** | **05 57 05.4** | **-0.4** |
| **MSVF** | **Nonsavu** | **8.27** | **306** | P | Pn | 05 56 00.8 | -4.8 |
| **MSVF** | **Nonsavu** | **8.27** | **306** | Pn | Pn | 05 56 00.8 | -4.8 |
| **AFI** | **Afiamalu** 12nm,0.3s,baz=264,slow=5.2,SNR=17 | **9.32** | **19** | Pn | Pn | 05 56 10.1 | -10 |
| AFI | 6.3nm,0.3s,baz=357,slow=17,SNR=3.1 | | | Sn | Sn | 05 57 43.7 | -20 |
| **RAR** | **Rarotonga** 30nm,0.3s,baz=238,slow=8.8,SNR=12 | **14.17** | **87** | Pn | Pn | 05 57 13.6 | -13 |
| RAR | 3.0nm,0.3s,baz=328,slow=17,SNR=4.4 | | | Sn | Sn | 05 59 35.9 | -26 |
| RAR | comp=Z,819nm,19.1s,baz=288,slow=35 | | | LR | LR | 06 02 13.1 | |
| **URZ** | **Urewera** 1.0nm,0.3s,baz=307,slow=5.4,SNR=5.0 | **16.86** | **202** | Pn | **P** | **05 58 04.1** | **+1.3** |
| URZ | 1.0nm,0.3s,baz=26,slow=23,SNR=6.6 | | | Sn | Sn | 06 00 56.5 | -11 |
| **DZM** | **Mont Dzumac** 82nm,1.2s | **17.22** | **269** | *e*P | P | 05 58 12.7 | +5.8 |
| DZM | 520nm,21.5s | | | *e*LR | LR | 06 02 13.4 | |
| **DZM** | **Mont Dzumac** 0.7nm,0.3s,baz=0.8,slow=6.6,SNR=8.7 | **17.22** | **269** | P | **P** | **05 58 08.4** | **+1.5** |
| **TBI** | **Tubuai** 902nm,27.2s | **23.45** | **96** | *e*S | **S** | **06 03 24.8** | **+0.1** |
| TBI | 388nm,29.8s,baz=269 | | | *e*LR | LR | 06 04 36.6 | |
| **RPZ** | **Rata Peaks** 16nm,0.9s,baz=27,slow=14,SNR=2.4 | **23.87** | **206** | P | **P** | **05 59 18.5** | **+0.7** |
| **PAE** | **Paea** 4.8nm,0.4s | **24.33** | **83** | *e*T | T | 06 24 10.4 | |
| **PPT2** | **Papeete2** 726nm,26.0s | **24.36** | **82** | *e*S | **S** | **06 03 37.9** | **-1.5** |
| PPT2 | 406nm,21.5s,baz=254 | | | *e*LR | LR | 06 05 10.7 | |
| **PPT2** | **Papeete2** 5.0nm,0.4s | **24.36** | **82** | *e*T | T | 06 24 13.0 | |
| **PPT** | **Papeete** comp=Z,419nm,18.9s,baz=280,slow=32 | **24.36** | **82** | LR | LR | 06 07 04.4 | |
| **HNR** | **Honiara** comp=Z,150nm,18.9s,baz=144,slow=36 | **27.46** | **295** | LR | LR | 06 10 14.7 | |
| **ARMA** | **Armidale** baz=31,SNR=5.6 | **30.75** | **249** | P | **P** | **06 00 20.9** | **+1.1** |
| **ARMA** | **Armidale** 50nm,1.7s | **30.75** | **249** | *e*P | **P** | **06 00 22.0** | **+2.1** |
| **EIDS** | **Eidsvold** baz=32 | **31.07** | **258** | P | **P** | **06 00 22.6** | **+0.1** |
| **EIDS** | **Eidsvold** 19nm,1.4s | **31.07** | **258** | *e*P | **P** | **06 00 22.8** | **+0.2** |
| **RMQ** | **Roma** baz=34,SNR=5.4 | **33.12** | **256** | P | **P** | **06 00 42.6** | **+2.0** |
| **CMSA** | **Cobar Meteorol** baz=36,SNR=11 | **35.93** | **247** | P | **P** | **06 01 06.0** | **+1.2** |
| **CTA** | **Charters Tower** baz=36 | **36.14** | **267** | P | **P** | **06 01 06.9** | **+0.2** |
| **QLP** | **Quilpie** baz=38,SNR=3.2 | **37.17** | **256** | P | **P** | **06 01 16.9** | **+1.4** |
| **MTSU** | **Mount Surprise** baz=39,SNR=4.0 | **38.36** | **269** | P | **P** | **06 01 25.9** | **+0.4** |
| **PMG** | **Port Moresby** 45nm,1.0s,baz=244,slow=3.0,SNR=9.0 | **38.63** | **284** | P | **P** | **06 01 27.7** | **-0.1** |
| **PMG** | **Port Moresby** comp=Z,45nm,1.0s | **38.63** | **284** | P pmax | **P** pmax | **06 01 27.7** | **-0.1** |
| **PMG** | **Port Moresby** | **38.63** | **284** | *e*P | **P** | **06 01 27.1** | **-0.7** |
| **COEN** | **Coen** comp=Z,20nm,1.1s | **40.58** | **275** | *e*P | **P** | **06 01 44.7** | **+0.6** |
| **AS01** | **Alice Springs** | **46.76** | **258** | *e*P | **P** | **06 02 33.0** | **-0.8** |
| **ASAR** | **Alice Springs** comp=Z,15nm,0.9s,baz=91,slow=7.9,SNR=85 | **46.80** | **258** | P | **P** | **06 02 33.4** | **-0.7** |
| ASAR | comp=Z,305nm,18.6s,baz=103,slow=37 | | | LR | LR | 06 22 50.0 | |
| **WRAB** | **Tennant Creek** | **47.12** | **263** | *d*P | **P** | **06 02 35.5** | **-1.1** |
| WRAB | comp=Z,26nm,1.0s | | | pmax | pmax | | |
| **WRAB** | **Tennant Creek** comp=Z,14nm,1.1s | **47.12** | **263** | *e*P | **P** | **06 02 34.9** | **-1.7** |
| **WRA** | **Warramunga Arr** comp=Z,5.9nm,0.8s,baz=101,slow=8.3,SNR=24 | **47.13** | **263** | P | **P** | **06 02 35.6** | **-1.0** |
| WRA | comp=Z,1.4nm,0.8s,baz=97,slow=2.9,SNR=3.2 | | | PcP | **PcP** | **06 04 06.7** | **-1.3** |
| WRA | comp=Z,207nm,21.0s,baz=130,slow=36 | | | LR | LR | 06 22 07.7 | |
| **JAY** | **Jayapura** baz=48,SNR=3.8 | **47.45** | **289** | P | P | 06 02 36.3 | -2.9 |
| **FORT** | **Forrest** baz=52,SNR=7.7 | **51.04** | **248** | P | **P** | **06 03 05.9** | **-0.6** |
| **FORT** | **Forrest** comp=Z,66nm,1.6s | **51.04** | **248** | *e*P | **P** | **06 03 07.0** | **+0.5** |
| **WRKA** | **Warakurna** baz=52,SNR=39 | **51.61** | **255** | P | **P** | **06 03 09.0** | **-1.9** |
| **KNRA** | **Kununurra** baz=54,SNR=7.3 | **53.35** | **267** | P | **P** | **06 03 23.6** | **-0.2** |
| **FITZ** | **Fitzroy Crossi** comp=Z,179nm,19.0s,baz=94,slow=37 | **55.55** | **263** | LR | LR | 06 28 08.7 | |
| **FITZ** | **Fitzroy Crossi** baz=56,SNR=4.6 | **55.55** | **263** | P | **P** | **06 03 40.0** | **+0.2** |
| **FITZ** | **Fitzroy Crossi** comp=Z,13nm,1.1s | **55.55** | **263** | *e*P | **P** | **06 03 40.1** | **+0.3** |
| **VNDA** | **Vanda** comp=Z,1.3nm,1.1s,baz=6.3,slow=7.2,SNR=3.7 | **55.92** | **186** | P | **P** | **06 03 44.1** | **+2.6** |
| **SOEI** | **Soe** comp=Z,71nm,1.0s | **59.41** | **272** | *e*P | **P** | **06 04 08.0** | **+0.9** |
| **KLBR** | **Kellerberrin** baz=60 | **59.69** | **246** | P | **P** | **06 04 09.1** | **+0.4** |
| **BATI** | **Baunata** comp=Z,328nm,18.3s,baz=133,slow=37 | **59.81** | **271** | LR | LR | 06 31 06.9 | |
| **MEEK** | **Meekatharra** baz=60,SNR=3.5 | **59.87** | **252** | P | **P** | **06 04 10.5** | **+0.4** |
| **BLDU** | **Ballidu** baz=61,SNR=6.8 | **60.74** | **247** | P | **P** | **06 04 16.6** | **+0.6** |
| **CASY** | **Casey** comp=Z,11nm,0.9s | **63.14** | **206** | P | P | 06 04 35.2 | +3.8 |
| **QSPA** | **South Pole Qui** comp=Z,2.0nm,0.9s,baz=316,slow=0.9,SNR=9.0 | **67.30** | **180** | P | **P** | **06 04 59.3** | **+0.7** |
| **QSPA** | **South Pole Qui** comp=Z,25nm,1.4s | **67.30** | **180** | *e*P | **P** | **06 05 01.5** | **+2.9** |
| **JAGI** | **Jajag, Banyuwa** comp=Z,40nm,1.3s | **69.20** | **269** | *e*P | **P** | **06 05 10.1** | **-1.1** |
| **MAJO** | **Matsushiro** comp=Z,30nm,1.0s | **73.73** | **322** | *e*P | **P** | **06 05 37.6** | **-0.4** |
| MAJO | | | | pmax | pmax | | |
| **MAT** | **Matsushiro** | **73.73** | **322** | P | **P** | **06 05 37.1** | **-0.9** |
| **KSM** | **Kuching** comp=Z,20nm,1.1s | **76.53** | **277** | *e*P | **P** | **06 05 54.9** | **+0.3** |
| **PET** | **Petropavlovsk** | **78.90** | **344** | *e*P | **P** | **06 06 06.3** | **-0.5** |
| PET | comp=Z,14nm,1.2s | | | pmax | pmax | | |
| **ISA** | **Isabella** | **78.95** | **44** | *e*P | **P** | **06 06 10.2** | **+2.5** |
| ISA | comp=Z,14nm,1.4s | | | pmax | pmax | | |
| **ISA** | **Isabella** comp=Z,14nm,1.4s | **78.95** | **44** | *e*P | **P** | **06 06 10.2** | **+2.5** |
| **PFO** | **Pinyon Flat Ob** | **79.03** | **46** | *e*P | **P** | **06 06 10.8** | **+2.6** |
| PFO | comp=Z,6.0nm,1.1s | | | pmax | pmax | | |
| **PFO** | **Pinyon Flat Ob** comp=Z,6.3nm,1.1s | **79.03** | **46** | *e*P | **P** | **06 06 10.8** | **+2.6** |
| **YSS** | **Yuzh-Sakhalins** | **79.21** | **332** | *e*P | **P** | **06 06 11.5** | **+2.8** |
| YSS | comp=Z,41nm,1.3s | | | pmax | pmax | | |
| **YSS** | **Yuzh-Sakhalins** comp=Z,124nm,1.6s | **79.21** | **332** | *e*P | **P** | **06 06 09.9** | **+1.3** |
| **PEA0** | **Petropavlovsk-** | **79.22** | **344** | *e*P | **P** | **06 06 08.7** | **0.0** |
| **PETK** | **Petropavlovsk-** comp=Z,14nm,0.9s,baz=126,slow=7.5,SNR=7.3 | **79.22** | **344** | P | **P** | **06 06 08.5** | **-0.1** |
| PETK | comp=Z,55nm,19.9s,baz=144,slow=32 | | | LR | LR | 06 36 18.2 | |
| **CMB** | **Columbia Colle** | **79.26** | **41** | *e*P | **P** | **06 06 10.7** | **+1.4** |
| CMB | comp=Z,5.0nm,1.0s | | | pmax | pmax | | |
| **CMB** | **Columbia Colle** comp=Z,4.7nm,1.0s | **79.26** | **41** | *e*P | **P** | **06 06 10.7** | **+1.4** |
| **WDC** | **Whiskeytown Da** | **79.67** | **38** | *e*P | **P** | **06 06 12.2** | **+0.8** |
| **WDC** | **Whiskeytown Da** | **79.67** | **38** | *e*P | **P** | **06 06 12.2** | **+0.8** |
| **GSC** | **Goldstone** | **79.81** | **45** | *e*P | **P** | **06 06 15.0** | **+2.6** |
| GSC | comp=Z,11nm,1.4s | | | pmax | pmax | | |
| **GSC** | **Goldstone** comp=Z,10nm,1.4s | **79.81** | **45** | *e*P | **P** | **06 06 15.0** | **+2.6** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MAW** | **Mawson** comp=Z,2.6nm,0.5s,baz=151,slow=4.1,SNR=32 | **80.37** | **199** | P | **P** | **06 06 17.0** | **+2.2** |
| **MAW** | **Mawson** | **80.37** | **199** | *e*P | **P** | **06 06 17.0** | **+2.2** |
| MAW | comp=Z,4.0nm,1.2s | | | pmax | pmax | | |
| **MAW** | **Mawson** comp=Z,4.4nm,1.2s | **80.37** | **199** | *e*P | **P** | **06 06 17.0** | **+2.2** |
| **KSRS** | **Korea Array** comp=Z,6.1nm,1.1s,baz=143,slow=6.1,SNR=12 | **80.47** | **317** | P | **P** | **06 06 16.7** | **+0.9** |
| KSRS | comp=Z,42nm,22.0s,baz=240,slow=32 | | | LR | LR | 06 36 51.2 | |
| **KSAR** | **Wonju Array Be** | **80.49** | **317** | P | **P** | **06 06 16.7** | **+0.8** |
| **KSAR** | **Wonju Array Be** | **80.49** | **317** | P | **P** | **06 06 16.7** | **+0.8** |
| **KS01** | **Wonju Array Si** | **80.50** | **317** | *e*P | **P** | **06 06 16.6** | **+0.7** |
| KS01 | | | | *e*PcP | **pP** | **06 06 29.4** | **+1.1** |
| **NV01** | **Mina Array Sit** | **80.78** | **42** | *e*P | **P** | **06 06 17.2** | **-0.6** |
| **NVAR** | **Mina Array Bea** comp=Z,2.5nm,0.9s,baz=224,slow=8.1,SNR=12 | **80.78** | **42** | P | **P** | **06 06 17.0** | **-0.7** |
| NVAR | comp=Z,166nm,19.3s,baz=236,slow=31 | | | LR | LR | 06 35 35.1 | |
| **TPNV** | **Topopah Spring** | **81.16** | **44** | *e*P | **P** | **06 06 19.8** | **0.0** |
| TPNV | comp=Z,5.0nm,1.1s | | | pmax | pmax | | |
| **TPNV** | **Topopah Spring** comp=Z,5.4nm,1.1s | **81.16** | **44** | *e*P | **P** | **06 06 19.8** | **0.0** |
| **SHPR** | **Sheep Range** comp=Z,20nm,1.7s | **81.60** | **45** | *e*P | **P** | **06 06 23.7** | **+1.7** |
| **MOD** | **Modoc** comp=Z,30nm,2.0s | **81.81** | **38** | P | **P** | **06 06 23.3** | **+0.2** |
| **MSHR** | **Mys Shultsa** | **81.83** | **323** | *d*P | **P** | **06 06 24.4** | **+1.6** |
| **TUC** | **Tucson** | **82.20** | **50** | *e*P | **P** | **06 06 27.5** | **+2.3** |
| TUC | comp=Z,6.0nm,1.2s | | | pmax | pmax | | |
| **TUC** | **Tucson** comp=Z,5.8nm,1.2s | **82.20** | **50** | *e*P | **P** | **06 06 27.5** | **+2.3** |
| **USRK** | **Ussuriysk Ar.** comp=Z,18nm,1.0s,baz=150,slow=4.0,SNR=20 | **82.44** | **325** | P | **P** | **06 06 27.6** | **+1.5** |
| **MYKOM** | **Kota Tinggi** comp=Z,32nm,1.1s | **82.58** | **275** | *e*P | **P** | **06 06 27.0** | **-0.5** |
| **WVOR** | **Wild Horse Val** | **83.10** | **38** | *e*P | **P** | **06 06 30.1** | **+0.4** |
| WVOR | comp=Z,13nm,1.3s | | | pmax | pmax | | |
| **WVOR** | **Wild Horse Val** comp=Z,13nm,1.3s | **83.10** | **38** | *e*P | **P** | **06 06 30.1** | **+0.4** |
| **CCUT** | **Cedar City** comp=Z,11nm,1.4s | **83.38** | **45** | *e*P | **P** | **06 06 33.6** | **+2.2** |
| **NJ2** | **Nanjing** | **83.51** | **309** | *e*P | **P** | **06 06 32.3** | **+0.4** |
| NJ2 | comp=Z,50nm,1.2s | | | PMZ | | | |
| **I07A** | **Izee** comp=Z,8.8nm,1.2s | **83.67** | **37** | *e*P | **P** | **06 06 32.7** | **+0.1** |
| **J08A** | **Circle Bar Ran** comp=Z,16nm,1.4s | **83.78** | **38** | *e*P | **P** | **06 06 35.5** | **+2.4** |
| **HABR** | **Khabarovsk** | **83.83** | **329** | *e*P | **P** | **06 06 32.1** | **-1.0** |
| HABR | | | | *e**PP | **pP** | **06 06 42.7** | **-2.8** |
| HABR | | | | *e**SP | **sP** | **06 06 46.7** | **-3.4** |
| HABR | | | | *e* | | 06 09 45.9 | |
| HABR | | | | *e*PPP | PPP | 06 11 38.2 | |
| HABR | | | | *e*S | **SKSac** | **06 16 51.6** | **-1.0** |
| HABR | | | | *e*SS | **SS** | **06 22 23.8** | **+1.8** |
| HABR | | | | *e*SSS | SSS | 06 25 54.1 | |
| HABR | comp=Z,66nm,1.8s | | | pmax | pmax | | |
| HABR | comp=Z,176nm,19.0s | | | MLR | MLR | | |
| **MDJ** | **Mudanjiang** | **84.01** | **324** | P | **P** | **06 06 35.3** | **+1.1** |
| MDJ | | | | sP | **sP** | **06 06 47.9** | **-3.3** |
| MDJ | | | | S | **S** | **06 16 57.8** | **+2.5** |
| MDJ | comp=Z,16nm,1.2s | | | PMZ | | | |
| MDJ | comp=Z,37nm,21.1s | | | LN | | | |
| MDJ | comp=Z,32nm,19.5s | | | LE | | | |
| MDJ | comp=Z,56nm,21.1s | | | LZ | | | |
| **ELK** | **Elko** | **84.07** | **41** | *e*P | **P** | **06 06 36.8** | **+2.0** |
| ELK | | | | *e* | | 06 06 46.0 | |
| **ELK** | **Elko** | **84.07** | **41** | *e*P | **P** | **06 06 36.8** | **+2.0** |
| ELK | | | | *e*PcP | **pP** | **06 06 46.0** | **-1.3** |
| **LON** | **Longmire** | **84.19** | **34** | *e*P | **P** | **06 06 34.8** | **-0.3** |
| LON | comp=Z,8.0nm,1.2s | | | pmax | pmax | | |
| **LON** | **Longmire** comp=Z,7.7nm,1.2s | **84.19** | **34** | *e*P | **P** | **06 06 34.8** | **-0.3** |
| **QIZ** | **Qiongzhong** | **84.36** | **293** | P | **P** | **06 06 36.4** | **-0.1** |
| QIZ | | | | S | **S** | **06 17 01.3** | **+1.4** |
| QIZ | comp=Z,50nm,26.2s | | | LZ | | | |
| **D05A** | **Enumclaw** comp=Z,28nm,1.1s | **84.40** | **33** | *e*P | **P** | **06 06 37.9** | **+1.9** |
| **MSU** | **Marysvale** | **84.69** | **44** | *e*P | **P** | **06 06 38.8** | **+0.7** |
| **MSU** | **Marysvale** | **84.69** | **44** | *e*P | **P** | **06 06 38.8** | **+0.7** |
| **G08A** | **Pilot Rock** comp=Z,14nm,1.1s | **84.74** | **36** | *e*P | **P** | **06 06 37.7** | **-0.3** |
| **E07A** | **Sunnyside** comp=Z,9.6nm,1.0s | **85.08** | **35** | *e*P | **P** | **06 06 41.6** | **+2.0** |
| **SYO** | **Syowa Base** | **85.11** | **192** | *e*P | **P** | **06 06 39.2** | **-0.2** |
| **LTY** | **Liberty** comp=Z,54nm,2.5s | **85.11** | **34** | *e*P | **P** | **06 06 41.7** | **+1.9** |
| **HAWA** | **Hanford** comp=Z,12nm,1.3s | **85.14** | **35** | *e*P | **P** | **06 06 41.3** | **+1.5** |
| **MFID** | **Camas Ranch** comp=Z,8.1nm,1.1s | **85.33** | **39** | *e*P | **P** | **06 06 40.4** | **-0.6** |
| **SNAA** | **Sanae** | **85.64** | **178** | P | P | 06 06 46.1 | +3.9 |
| **SNAA** | **Sanae** | **85

baz=88,SNR=7.7
**PSI Prapat 87.50 274** *e*P **P** **06 06 52.2 -0.2**
comp=Z,26nm,1.0s
**EFI East Falkland 87.63 146** *e*P **P** **06 06 51.1 -1.0**
EFI pmax pmax
comp=Z,31nm,1.1s
**S22A 4UR Ranch, Cre 87.83 47** *e*P **P** **06 06 55.1 +1.6**
comp=Z,12nm,1.7s
**GSI Gunungsitoli 88.17 272** *e*P **P** **06 06 55.2 -0.2**
comp=Z,62nm,0.9s
**REDW Red Top Meadow 88.25 41** *e*P **P** **06 06 57.1 +1.8**
comp=Z,9.1nm,1.4s
**BW06 Boulder Array 88.71 42** *e*P **P** **06 06 56.5 -1.1**
**BWN Browne 88.92 11** *e*P **P** **06 06 59.0 +1.3**
comp=Z,323nm,1.8s
**SEY Seymchan 89.25 346** *e*P **P** **06 06 59.4 +0.1**
**CCB Clear Creek Bu 89.65 11** *e*P **P** **06 07 03.8 +2.7**
comp=Z,23nm,1.6s
**ENH Enshi 89.66 303** *e*P **P** **06 07 03.5 +1.5**
comp=Z,18nm,1.2s
**COLA College 89.85 11** *e*P P 06 07 06.1 +4.1
**IL1 Eielson Array 89.93 12** *e*P **P** **06 07 01.4 -1.1**
**ILAR Eielson Array 89.93 12** P **P** **06 07 01.2 -1.2**
comp=Z,1.6nm,0.8s,baz=222,slow=5.7,SNR=8.7
**GYA Guiyang 90.23 299** *e*P **P** **06 07 05.8 +0.9**
GYA PMZ
comp=Z,10.0nm,1.0s
**DAWY Dawson 90.89 15** *e*P P 06 07 04.3 -2.7
comp=Z,68nm,2.5s
**BILL Bilibino 91.61 353** P **P** **06 07 10.0 -0.2**
BILL S **SKSac** **06 17 35.0 -4.0**
BILL PS **PnS** 06 19 28.0 +5.5
BILL *i* SSS SSS 06 27 50.2
BILL pmax pmax
comp=Z,6.0nm,1.1s
**XAN Xi'an 91.76 306** P **P** **06 07 13.3 +1.5**
XAN pP **pP** **06 07 23.5 -0.8**
XAN PMZ
comp=Z,19nm,1.2s
XAN PMZ
comp=Z,110nm,7.4s
**LAO LASA Array 92.79 40** *e*P P 06 07 19.7 +3.5
comp=Z,17nm,1.3s
**KMI Kunming 92.90 296** P **P** **06 07 19.4 +1.9**
KMI pP **pP** **06 07 31.9 +1.9**
KMI PMZ
comp=Z,20nm,1.2s
KMI PMZ
comp=Z,72nm,4.3s
KMI LN
comp=Z,390nm,13.0s
KMI LE
comp=Z,180nm,11.2s
KMI LZ
comp=Z,380nm,15.6s
**HHC Hu-ho-hao-te 92.97 313** *e*P **P** **06 07 16.8 -0.5**
HHC S S 06 18 08.3 -12
HHC PMZ
comp=Z,27nm,1.3s
HHC PMZ
comp=Z,100nm,7.5s
HHC LN
comp=Z,180nm,17.4s
HHC LE
comp=Z,230nm,18.7s
HHC LZ
comp=Z,150nm,14.9s
**CM01 Chiang Mai Arr 93.50 288** *e*P **P** **06 07 22.2 +2.1**
**CMAR Chiang Mai Arr 93.53 288** P **P** **06 07 22.5 +2.2**
comp=Z,14nm,1.2s,baz=120,slow=3.0,SNR=28
**CMAR Chiang Mai Arr 93.53 288** *e*P **P** **06 07 23.0 +2.8**
CMAR pmax pmax
comp=Z,9.0nm,1.0s
**CHTO Chiang Mai 93.67 289** *e*P **P** **06 07 20.3 -0.6**
CHTO pmax pmax
comp=Z,22nm,1.4s
**CHTO Chiang Mai 93.67 289** *e*P **P** **06 07 20.3 -0.6**
comp=Z,22nm,1.4s
**CD2 Chengdu 94.40 302** *e*P **P** **06 07 23.3 -0.7**
**CD2 Chengdu 94.40 302** *e*P **P** **06 07 24.8 +0.8**
CD2 pP **pP** **06 07 35.8 -0.7**
CD2 sP **sP** **06 07 40.0 -1.1**
CD2 SKS **SKSac** **06 17 56.8 +0.6**
CD2 S **S** **06 18 34.3 +1.1**
CD2 sS **sS** **06 18 53.3 -1.0**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.0s
**YAK Yakutsk 95.29 337** *e*P **P** **06 07 29.0 +1.8**
YAK pmax pmax
comp=Z,7.0nm,1.1s
**LZH Lanzhou 96.40 306** *e*P P 06 07 37.1 +3.9
LZH pP pP 06 07 49.4 +3.7
LZH PMZ
comp=Z,16nm,1.0s
**LPAZ La Paz 98.58 112** LR LR 06 45 57.7
comp=Z,52nm,18.0s,baz=216,slow=32
**ULN Ulaanbaatar 98.94 318** *e*P Pdif 06 07 55.6 +11
ULN pmax pmax
comp=Z,1.0nm,1.1s
**SONM Songino Array 99.33 318** LR LR 06 51 39.2
comp=Z,55nm,18.0s,baz=162,slow=35
**TLY Talaya 102.44 321** *e*P **Pdif** **06 07 58.0 -1.6**
TLY pmax pmax
comp=Z,9.0nm,1.0s
**WMQ Urumqi 110.56 310** *e*Pdif **Pdif** **06 08 38.0 +2.0**
WMQ PP **PP** **06 13 18.0 +4.9**
WMQ SS SS 06 28 40.0 +0.7
WMQ PPMZ
comp=Z,13nm,8.0s
WMQ LN
comp=Z,69nm,25.0s
WMQ LE
comp=Z,97nm,28.0s
WMQ LZ
comp=Z,60nm,23.0s
**MKAR Makanchi Array 114.82 312** PKP PKPdf 06 12 43.8 -0.5
comp=Z,0.4nm,0.6s,baz=77,slow=2.4,SNR=3.6
**NVS Novosibirsk 115.04 321** *e*PKIKP PKPdf 06 12 57.0 +13
**KSH Kashi 118.51 304** *e*PKP **PKPdf** **06 12 52.4 +0.6**
KSH *es*PKP 06 13 05.6
KSH *e*PP **PP** **06 14 11.3 +1.8**
KSH PKS **PKSdf** **06 16 26.8 -1.7**
KSH SKS **SKSdf** **06 20 00.1 -0.7**
KSH SKKS **SKKSac** **06 21 02.8 -3.6**
KSH PPMZ
comp=Z,120nm,6.0s
KSH LN
comp=Z,120nm,6.9s
KSH LE
comp=Z,69nm,4.9s
KSH LZ
comp=Z,110nm,5.4s
**ARCES ARCESS Array B 131.64 351** PKP **PKPdf** **06 13 16.3 +0.5**
comp=Z,2.5nm,1.0s,baz=48,slow=1.8,SNR=5.4
**FINES FINESS Array B 138.72 345** PKP **PKPdf** **06 13 30.0 +0.8**
comp=Z,1.2nm,0.7s,baz=276,slow=1.7,SNR=3.8
**OBN Obninsk 140.09 332** PKHKP PKPpre 06 13 23.0
OBN *e*SS SS 06 34 54.3 +6.0
OBN pmax pmax
comp=Z,3.0nm,0.8s
OBN MLR MLR
comp=Z,51nm,20.0s
**KIV Kislovodsk 142.57 313** *i* PKIKP **PKPdf** **06 13 39.0 +2.1**
KIV pmax pmax
comp=Z,6.0nm,1.1s
**AKASG Malin Array Be 146.36 332** PKPbc **PKPdf** **06 13 43.4 +0.3**
comp=Z,2.9nm,0.6s,baz=40,slow=4.1,SNR=20
**KIEV Kiev 146.37 332** *e*PKP2 **PKPdf** **06 13 43.7 +0.6**
**KIEV Kiev 146.37 332** *e*PKPdf **PKPdf** **06 13 43.7 +0.6**
**AK11 Malin Array Si 146.40 332** *e*PKPdf **PKPdf** **06 13 44.1 +1.0**
**SIM Simferopol' 147.55 320** *e*PKP2 **PKPbc** **06 13 47.2 -0.7**
SIM pmax pmax
comp=Z,14nm,1.2s
**BUR04 Bucovina Ar. S 150.41 332** *e*PKPbc **PKPbc** **06 13 55.8 +0.5**
**BRTR Keskin Array B 150.46 312** PKPbc **PKPbc** **06 13 55.6 -0.1**
comp=Z,4.4nm,1.0s,baz=90,slow=2.5,SNR=9.3
**STHS Stebnicka Huta 150.50 338** *e*PKP **PKPbc** **06 13 57.2 +1.9**
**KOLS Kolonicke sedl 150.54 337** *e*PKIKP **PKPbc** **06 13 56.1 +0.7**
**KOLS Kolonicke sedl 150.54 337** *e*PKP **PKPbc** **06 13 56.1 +0.7**
**UZH Uzhgorod 150.79 336** *e*PKIKP **PKPbc** **06 13 54.5 -1.4**
UZH *e* 06 13 59.3
UZH *e* 06 14 11.9
**CLL Collm 150.86 350** *e*PKIKP **PKPbc** **06 13 56.0 0.0**
CLL *i* 06 14 04.2
CLL pmax pmax
comp=Z,21nm,1.6s
**CLL Collm 150.86 350** *e*PKPbc **PKPbc** **06 13 56.0 0.0**
comp=Z,21nm,1.6s
CLL *i* PKPab **PKPab** **06 14 04.2 +0.9**
CLL LmV 07 32 00.0
comp=Z,100nm,19.5s
**BR231 Keskin MP Arra 151.00 312** *e*PKPbc **PKPbc** **06 13 56.4 -0.5**
BR231 *e*PKPab **PKPab** **06 14 04.1 -0.4**
**UPC Upice 151.02 345** *e*PKIKP **PKPbc** **06 13 57.0 +0.5**
UPC *e* 06 14 08.6
**UPC Upice 151.02 345**↑ *e*PKP **PKPbc** **06 13 57.0 +0.5**
UPC *ep*PKP **PKPab** **06 14 08.6 +4.6**
**OKC Ostrava-Krasne 151.09 342** *e*PKPAB **PKPab** **06 14 03.7 -0.6**
**DPC Dobruska-Polom 151.10 345** *e*PKIKP **PKPbc** **06 13 57.1 +0.4**
DPC *e* 06 14 08.8
**DPC Dobruska-Polom 151.10 345**↑ *e*PKP **PKPbc** **06 13 57.1 +0.4**
DPC *ep*PKP **PKPab** **06 14 08.8 +4.4**
**BRG Berggiesshubel 151.11 348** *e*PKP **PKPbc** **06 13 56.7 +0.1**
comp=Z,4.2nm,0.7s
BRG *e* 06 14 09.6
comp=Z,10nm,1.0s
**BRG Berggiesshubel 151.11 348** *e*PKIKP **PKPbc** **06 13 56.7 +0.1**
BRG *e* 06 14 09.6
BRG pmax pmax
comp=Z,4.0nm,0.7s
**KRLC Kraliky 151.24 344** *e*PKIKP **PKPbc** **06 13 57.5 +0.5**
KRLC *e* 06 14 08.1
**KRLC Kraliky 151.24 344**↑ *e*PKP **PKPbc** **06 13 57.5 +0.5**
KRLC *ep*PKP **PKPab** **06 14 08.1 +3.1**
**LANS Liptovska Anna 151.31 340** *e*PKIKP **PKPbc** **06 13 57.8 +0.6**
**LANS Liptovska Anna 151.31 340** *e*PKP **PKPbc** **06 13 57.8 +0.6**
**MORC Moravsky Berou 151.31 343** *e*PKIKP **PKPbc** **06 13 57.9 +0.7**
**MORC Moravsky Berou 151.31 343** *e*PKPbc **PKPbc** **06 13 57.9 +0.7**
**PVCC Panska Ves 151.32 347** *e*PKIKP **PKPbc** **06 13 57.9 +0.8**
PVCC *e* 06 14 09.4
**PVCC Panska Ves 151.32 347**↑ *e*PKP **PKPbc** **06 13 57.9 +0.8**
PVCC *ep*PKP **PKPab** **06 14 09.4 +4.2**
**PRU Pruhonice 151.84 347** *e*PKPAB **PKPab** **06 14 05.2 -2.2**
PRU *ep*PKP pPKPdf 06 14 19.5 +15
**VYHS Vyhne 152.09 340** *e*PKIKP **PKPbc** **06 14 00.8 +1.8**
**VYHS Vyhne 152.09 340** *e*PKP **PKPbc** **06 14 00.8 +1.8**
**PSZ Piszkesteto 152.25 338** *e*PKPab **PKPab** **06 14 09.4 +0.1**
**CSS Prodhromos 152.52 303** *e*PKPab **PKPab** **06 14 09.6 -1.2**
**KHC Kasperske Hory 152.85 348**↑ *e*PKP **PKPbc** **06 14 04.0 +3.3**
KHC *e*PKPAB **PKPab** **06 14 14.1 +2.4**
**KHC Kasperske Hory 152.85 348** *e*PKPbc **PKPbc** **06 14 04.3 +3.6**
KHC *e*PKPab **PKPab** **06 14 13.8 +2.0**
**GERES GERESS Array B 153.09 347** PKPbc **PKPbc** **06 14 01.4 +0.1**
comp=Z,0.4nm,0.6s,baz=58,slow=3.3,SNR=3.9
**TOA0 Torodi Ar. Sit 169.91 161** *e*PKPab PKPab 06 15 32.9 +6.2
**TORD Torodi Ar. Bea 169.91 161** PKPab **PKPab** **06 15 28.4 +1.7**
comp=Z,1.0nm,1.0s,baz=204,slow=3.7,SNR=2.8

*NEIC* ***17*** *05:56:37.6, 32.°15N×115.°25W, h15km, ML2.8(PAS), ML3.3(ECX), After ECX.*
**ECX 17 05:56:37.6±0.5, 32.°15N×115.°24W, h8km, MD2.9, ML3.1, 5C-7D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.26** | **8**↑ | *e*P | Pg | 05 56 42.9 | +0.1 |
| **CPBX** | **Cerro Prieto** | **0.28** | **348**↓ | *e*P | Pg | 05 56 42.9 | -0.2 |
| CPBX | | | | ↓*e*P | Pg | 05 56 42.9 | -0.2 |
| CPBX | | | | *e*S | Sg | 05 56 46.8 | 0.0 |
| CPBX | | | | *e* | | 05 56 48.6 | |
| CPBX | | | | IAML | | 05 56 48.6 | |
| | comp=E,9μm,0.2s | | | | | | |
| **EMSC** | **East Mesa** | **0.63** | **20** | *e*P | Pg | 05 56 48.6 | -1.1 |
| **RDX** | **Rancho Dawling** | **0.64** | **250**↑ | *e*P | Pg | 05 56 49.2 | -1.0 |
| RDX | | | | *e*S | Sg | 05 56 58.0 | -0.7 |
| RDX | | | | IAML | | 05 56 58.9 | |
| | comp=N,602nm,0.4s | | | | | | |
| RDX | | | | ↓*e* | | 05 56 58.9 | |
| **SGL** | **Mount Signal** | **0.65** | **321** | *e*P | Pg | 05 56 48.7 | -1.4 |
| **DREC** | **Desert Rsrch C** | **0.68** | **345** | *e*P | Pg | 05 56 49.5 | -1.2 |
| **YMD** | **Yuma Desert** | **0.71** | **55**↑ | *i*P | Pg | 05 56 49.7 | -1.7 |
| **COA** | **Coachella** | **0.72** | **8**↓ | *i*P | Pg | 05 56 50.0 | -1.5 |
| **WESC** | **Westside Schoo** | **0.74** | **326** | *e*P | Pg | 05 56 50.9 | -0.9 |
| **YUH** | **Yuha Desert** | **0.76** | **311**↓ | *i*P | Pg | 05 56 50.7 | -1.7 |
| **RMX** | **La Rumorosa** | **0.84** | **303**↓ | *e*P | Pg | 05 56 51.9 | -2.2 |
| RMX | | | | *e*S | Sg | 05 57 02.9 | -2.3 |
| **IBP** | **Imperial Bould** | **0.89** | **306** | *e*P | Pg | 05 56 52.9 | -1.9 |
| **GLA** | **Glamis** | **0.97** | **21** | *e*Pg | Pg | 05 56 53.2 | -3.1 |
| GLA | | | | *e*Sg | Sg | 05 57 05.6 | -3.3 |
| **SPX** | **San Pedro Mart** | **1.12** | **190**↑ | *e*P | Pg | 05 56 57.2 | -2.3 |
| **CBX** | **Cerro Bola** | **1.22** | **278** | *e*P | Pb | 05 56 58.5 | -2.6 |
| CBX | | | | *e*S | Sb | 05 57 14.8 | -2.3 |
| CBX | | | | IAML | | 05 57 16.3 | |
| | comp=N,614nm,0.4s | | | | | | |
| CBX | | | | ↓*e* | | 05 57 16.3 | |
| **BAR** | **Barrett** | **1.32** | **294**↑ | *e*P | Pn | 05 56 59.8 | -2.6 |
| **BAR** | **Barrett** | **1.32** | **294** | *e*Pn | Pn | 05 56 59.9 | -2.6 |
| BAR | | | | *e*Sn | Sb | 05 57 17.2 | -2.8 |
| **PFO** | **Pinyon Flat Ob** | **1.78** | **325** | *e*Pn | Pn | 05 57 05.1 | -3.8 |
| PFO | | | | *e*Sn | Sn | 05 57 30.7 | -1.2 |
| **214A** | **Organ Pipe Nat** | **2.07** | **95** | *e*Pn | Pn | 05 57 09.0 | -3.7 |

*BJI* ***17*** *06:20:06.2, 0.°35N×97.°27E, h16km, mb4.8/14, mB4.8/9, Ms4.2/4, Ms7 3.8/3*
*IDC* ***17*** *06:20:12.4±0.8, 1.°08N×97.°16E, h0km, mb4.2/13, mb1 4.3/15, mb1mx4.1/33, mbtmp4.1/15, ML4.0/2, MS3.6/2, Ms1 3.7/2, ms1mx2.9/35, Error ellipse: s-maj=25.5km s-min=15.8km az=44.0*
*KLM* ***17*** *06:20:13.6, 1.°18N×96.°77E, h56km, mb4.4, ML3.8, MS5.7*
*ISCJB* ***17*** *06:20:15.1±0.5, 1.°19N±0.°06×97.°18E±0.°05, h25km, mb4.2/18, Error ellipse: s-maj=9.3km s-min=4.7km az=34.9*
*DJA* ***17*** *06:20:17.7±0.6, 1.°N±3.°×97.°7E±.°, h19km±5km, M4.6/16, mb4.9/4, mB5.5/4, MLv4.4/16, Mw(mB)5.0/4*
*NEIC* ***17*** *06:20:17.4±1.3, 1.°19N×97.°24E, h32km±8km, mb4.3/5, Error ellipse: s-maj=12.0km s-min=8.4km az=59.0*
**ISC 17 06:20:15.5±0.6, 1.°01N±0.°06×97.°18E±0.°05, h25km, n76, σ1s41/66, mb4.4/19, 7C-4D, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **0.49** | **54** | P | **Pb** | **06 20 25.7** | **0.0** |
| **GSI** | **Gunungsitoli** | **0.49** | **54** | *e*Pg | **Pn** | **06 20 26.1** | **-0.9** |
| **SNSI** | **Sinabang, Aceh** | **1.63** | **329** | P | **Pn** | **06 20 42.1** | **-0.6** |
| **MNSI** | **Mandailing Nat** | **2.41** | **95** | P | **Pb** | **06 20 55.4** | **-2.9** |
| **PSI** | **Prapat** | **2.49** | **44** | Pn | **Pn** | **06 20 53.7** | **-1.0** |
| | 7.5nm,0.3s,baz=211,slow=6.8,SNR=24 | | | | | | |
| PSI | | | | Sn | **Sb** | **06 21 31.9** | **+1.9** |
| | 6.0nm,0.3s,baz=39,slow=19,SNR=9.5 | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **2.57** | **13** | P | **Pn** | **06 20 53.9** | **-1.7** |
| **SISI** | **Saibi** | **3.01** | **140** | P | **Pb** | **06 21 07.8** | **-0.6** |
| **MLSI** | **Meulaboh, Aceh** | **3.33** | **347** | P | **Pn** | **06 21 04.2** | **-1.8** |
| **PPI** | **Padang Panjang** | **3.54** | **114** | P | Pb | 06 21 12.2 | -5.2 |
| **BKNI** | **Bangkinang** | **3.92** | **100** | P | Pn | 06 21 16.9 | +2.7 |
| **LHMI** | **Lhok Sumawe** | **4.20** | **357** | P | **Pn** | **06 21 16.0** | **-2.0** |
| **LHMI** | **Lhok Sumawe** | **4.20** | **357** | *e*Pn | **Pn** | **06 21 15.9** | **-2.1** |
| **SDSI** | **Sungai Dareh** | **4.67** | **114** | P | Pn | 06 21 28.2 | +3.7 |
| **PPSI** | **Pulau Pagai** | **4.70** | **143** | P | Pb | 06 21 30.9 | -6.4 |
| **IPM** | **Ipoh** | **5.16** | **48** | ↑P | **Pn** | **06 21 31.9** | **+0.6** |
| **IPM** | **Ipoh** | **5.16** | **48** | *e*Pn | **Pn** | **06 21 31.9** | **+0.6** |
| | 49nm,0.8s | | | | | | |
| **KULM** | **Kulim** | **5.49** | **39** | ↑P | **Pn** | **06 21 34.6** | **-1.2** |
| **KULM** | **Kulim** | **5.49** | **39** | *e*Pn | **Pn** | **06 21 34.5** | **-1.2** |
| | 92nm,0.8s | | | | | | |
| **KGM** | **Kluang** | **6.22** | **81** | ↓P | Pn | 06 21 48.1 | +2.2 |
| **MYKOM** | **Kota Tinggi** | **6.72** | **83** | ↑P | Pn | 06 21 54.7 | +2.0 |
| **KTGM** | **Kuala Trenggan** | **7.33** | **54** | ↓P | **Pn** | **06 22 01.5** | **+0.4** |
| **MDSI** | **Maura Dua** | **8.87** | **128** | P | Pn | 06 22 24.9 | +2.6 |
| | 20nm,0.8s,1μm | | | | | | |
| **KSM** | **Kuching** | **13.14** | **88** | ↑P | Pn | 06 23 22.2 | +1.5 |
| **SBUM** | **Sibu** | **15.10** | **84** | ↑P | **Pn** | **06 23 48.3** | **+0.9** |
| **DLV** | **T Lat** | **15.62** | **45** | *e*P | **P** | **06 23 57.4** | **-1.0** |
| | 17nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **17.43** | **6** | P | **Pn** | **06 24 14.7** | **-2.5** |
| | 0.7nm,0.3s,baz=195,slow=13,SNR=10.0 | | | | | | |
| CMAR | | | | LR | LR | 06 32 18.5 | |
| | comp=Z,206nm,18.4s,baz=204,slow=42 | | | | | | |
| **PALK** | **Pallekele** | **17.56** | **291** | LR | LR | 06 30 53.5 | |
| | comp=Z,159nm,18.6s,baz=116,slow=37 | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.64** | **75** | ↓P | **P** | **06 24 41.9** | **-0.9** |
| **KDM** | **Kudat** | **20.46** | **73** | ↑P | **P** | **06 24 48.8** | **-2.7** |
| **SDKM** | **Sandakan** | **20.50** | **77** | ↑P | Pn | 06 24 53.4 | -1.0 |
| **SLVN** | **Son La** | **21.24** | **18** | *e*P | **P** | **06 24 58.4** | **-1.6** |
| | 20nm,0.8s | | | | | | |
| **MYLDM** | **Lahad Datu** | **21.69** | **79** | ↓P | **P** | **06 25 04.6** | **-0.2** |
| **KMI** | **Kunming** | **24.57** | **12** | P | **P** | **06 25 34.3** | **+0.4** |
| KMI | | | | pP | **pP** | **06 25 40.5** | **-0.8** |
| KMI | | | | sP | **sP** | **06 25 43.6** | **-0.8** |
| KMI | | | | S | **S** | **06 29 59.4** | **+5.8** |
| KMI | | | | sS | sS | 06 30 11.4 | +5.6 |
| KMI | | | | PMZ | | | |
| | 28nm,1.3s | | | | | | |
| KMI | | | | PMZ | | | |
| | 38nm,3.1s | | | | | | |
| KMI | | | | LN | | | |
| | 410nm,15.7s | | | | | | |
| KMI | | | | LE | | | |
| | 180nm,12.0s | | | | | | |
| KMI | | | | LZ | | | |
| | 380nm,16.6s | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.08** | **250** | T | T | 06 52 46.4 | |
| | baz=71,slow=75,SNR=2045 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.08** | **250** | T | T | 06 52 46.6 | |
| | baz=71,slow=75,SNR=1861 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.09** | **250** | T | T | 06 52 47.7 | |
| | baz=71,slow=75,SNR=2096 | | | | | | |
| **H08N1** | **Diego Garcia H** | **27.12** | **254** | T | T | 06 55 00.2 | |
| | baz=146,slow=76,SNR=26 | | | | | | |
| **H08N2** | **Diego Garcia H** | **27.13** | **254** | T | T | 06 55 00.4 | |
| | baz=146,slow=76,SNR=30 | | | | | | |
| **H08N3** | **Diego Garcia H** | **27.14** | **254** | T | T | 06 55 00.0 | |
| | baz=146,slow=76,SNR=26 | | | | | | |
| **ODAN** | **Odare** | **27.37** | **341** | *e*P | **P** | **06 26 00.0** | **+0.8** |
| | 31nm,0.9s | | | | | | |
| **TAPN** | **Taplejung** | **27.72** | **342** | *e*P | **P** | **06 26 02.5** | **0.0** |
| | 36nm,0.8s | | | | | | |
| **RAMN** | **Ramite** | **27.72** | **339** | *e*P | **P** | **06 26 03.5** | **+1.1** |
| | 14nm,0.7s | | | | | | |
| **BATI** | **Baumata** | **28.62** | **114** | P | **P** | **06 26 10.5** | **+0.2** |
| | 22nm,0.6s,baz=281,slow=16,SNR=2.7 | | | | | | |
| **PKI** | **Pulchoki** | **28.72** | **338** | *e*P | **P** | **06 26 11.7** | **+0.3** |
| | 16nm,0.9s | | | | | | |
| **PKIN** | **Phulchoki** | **28.73** | **338** | *e*P | **P** | **06 26 11.9** | **+0.5** |
| | 11nm,0.8s | | | | | | |
| **GUN** | **Gumba** | **28.86** | **339** | *e*P | **P** | **06 26 12.4** | **-0.2** |
| | 24nm,0.7s | | | | | | |
| **DMN** | **Daman** | **28.87** | **337** | *e*P | **P** | **06 26 12.6** | **-0.1** |
| | 18nm,1.0s | | | | | | |
| **KKN** | **Kakani** | **28.97** | **338** | *e*P | **P** | **06 26 13.8** | **+0.3** |
| | 30nm,1.1s | | | | | | |
| **GKN** | **Gorkha** | **29.41** | **337** | *e*P | **P** | **06 26 17.9** | **+0.6** |
| | 12nm,0.6s | | | | | | |
| **KOLN** | **Koldanda** | **29.62** | **335** | *e*P | **P** | **06 26 20.1** | **+0.9** |
| | 14nm,0.7s | | | | | | |
| **XAN** | **Xi'an** | **34.65** | **17** | P | **P** | **06 27 02.3** | **-0.8** |
| XAN | | | | pP | **pP** | **06 27 08.4** | **-2.2** |
| XAN | | | | PMZ | | | |
| | 16nm,0.9s | | | | | | |
| XAN | | | | PMZ | | | |
| | 59nm,4.7s | | | | | | |
| **GTA** | **Gaotai** | **38.30** | **3** | *e*P | **P** | **06 27 34.3** | **0.0** |
| GTA | | | | pP | **pP** | **06 27 40.4** | **-1.4** |
| GTA | | | | sP | **sP** | **06 27 44.3** | **-0.6** |
| GTA | | | | PMZ | | | |
| | 10.0nm,0.9s | | | | | | |
| GTA | | | | PMZ | | | |
| | 71nm,4.3s | | | | | | |
| GTA | | | | LN | | | |
| | 130nm,11.4s | | | | | | |
| GTA | | | | LE | | | |
| | 130nm,15.7s | | | | | | |
| GTA | | | | LZ | | | |
| | 76nm,9.5s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **39.08** | **158** | T | T | 07 09 16.4 | |
| | baz=333,slow=76,SNR=16 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **39.09** | **158** | T | T | 07 09 15.6 | |
| | baz=333,slow=76,SNR=19 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **39.09** | **158** | T | T | 07 09 11.8 | |
| | baz=333,slow=76,SNR=20 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.75** | **16** | *e*P | P | 06 28 07.6 | +4.7 |
| HHC | | | | PP | **PnPn** | **06 29 47.8** | **+3.1** |
| HHC | | | | S | **S** | **06 34 21.5** | **+2.8** |
| **WRA** | **Warramunga Arr** | **41.95** | **122** | P | **P** | **06 28 05.6** | **+0.8** |
| | 1.6nm,0.7s,baz=300,slow=9.0,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **43.30** | **127** | P | **P** | **06 28 16.8** | **+1.1** |
| | 1.3nm,0.9s,baz=307,slow=6.9,SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **45.98** | **338** | *e*P | **P** | **06 28 36.5** | **-0.6** |
| | 2.3nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **45.99** | **34** | P | **P** | **06 28 36.8** | **-0.1** |
| **KSRS** | **Korea Array** | **46.02** | **34** | P | **P** | **06 28 36.8** | **-0.3** |
| | 10.0nm,0.8s,baz=223,slow=8.8,SNR=30 | | | | | | |
| **EKS2** | **Erkin-Say** | **46.47** | **336** | *e*P | **P** | **06 28 41.8** | **+1.0** |
| | 3.1nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **47.32** | **8** | P | **P** | **06 28 47.3** | **0.0** |
| | 5.2nm,0.8s,baz=190,slow=9.6,SNR=21 | | | | | | |
| SONM | | | | PcP | **PcP** | **06 30 18.9** | **+0.8** |
| | 1.2nm,0.7s,baz=183,slow=4.4,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.42** | **346** | P | **P** | **06 28 48.3** | **+0.3** |
| | 3.5nm,0.7s,baz=163,slow=8.2,SNR=20 | | | | | | |
| **GEYT** | **Alibeck** | **51.34** | **320** | P | **P** | **06 29 18.7** | **+0.5** |
| | 1.7nm,0.5s,baz=160,slow=8.9,SNR=3.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.95** | **31** | P | **P** | **06 29 30.2** | **+0.4** |
| | 9.0nm,0.8s,baz=234,slow=5.7,SNR=16 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.74** | **351** | P | **P** | **06 29 35.5** | **0.0** |
| | 7.9nm,0.7s,baz=182,slow=6.1,SNR=45 | | | | | | |
| **BRVK** | **Borovoye** | **56.48** | **341** | *e*P | **P** | **06 29 55.0** | **-0.4** |
| | 3.3nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **64.20** | **319** | P | **P** | **06 30 48.5** | **+0.2** |
| | 2.4nm,0.7s,baz=124,slow=4.3,SNR=7.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.22** | **312** | P | **P** | **06 31 20.5** | **-0.2** |
| | 0.8nm,0.7s,baz=134,slow=7.1,SNR=5.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **75.39** | **322** | P | **P** | **06 31 57.3** | **+0.2** |
| | 0.1nm,0.3s,baz=107,slow=3.1,SNR=4.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.71** | **340** | P | **P** | **06 32 37.2** | **+0.4** |
| | 1.1nm,0.9s,baz=114,slow=4.0,SNR=3.0 | | | | | | |
| **GERES** | **GERESS Array B** | **84.94** | **319** | P | **P** | **06 32 50.2** | **+1.5** |
| | 0.6nm,0.8s,baz=108,slow=3.0,SNR=5.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **128.95** | **36** | PKP | **PKPdf** | **06 39 23.4** | **+1.5** |
| | 0.3nm,0.8s,baz=217,slow=2.8,SNR=3.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.84** | **32** | PKP | **PKPdf** | **06 39 48.6** | **-0.9** |
| | 0.4nm,0.9s,baz=191,slow=1.4,SNR=4.0 | | | | | | |
| **CPUP** | **Villa Florida** | **144.85** | **222** | PKP | **PKPdf** | **06 39 52.3** | **+1.1** |
| | 1.8nm,0.8s,baz=107,slow=4.6,SNR=3.5 | | | | | | |

**WEL 17 06:20:51.1±0.1, 43.°59S×172.°62E, h2km, ML3.5/8, 3D, Error ellipse: s-maj=1.2km s-min=0.5km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.01** | **2** | PG | Pg | 06 20 51.0 | -0.6 |
| CRLZ | | | | SG | Sg | 06 20 51.6 | -0.3 |
| CRLZ | | | | AML | AML | 06 20 51.6 | |
| CRLZ | | | | AML | AML | 06 20 51.7 | |
| **MQZ** | **McQueen's Vall** | **0.12** | **169** | ↓PG | Pg | 06 20 53.5 | +0.1 |
| MQZ | | | | SG | Sg | 06 20 55.4 | +0.4 |
| MQZ | | | | AML | AML | 06 20 56.0 | |
| **OXZ** | **Oxford** | **0.50** | **302** | ↓PG | Pg | 06 21 01.0 | +0.2 |
| OXZ | | | | SG | Sg | 06 21 08.3 | +1.0 |
| **LTZ** | **Lake Taylor** | **0.85** | **342** | ↓P* | Pg | 06 21 07.9 | +0.5 |
| LTZ | | | | S* | Sb | 06 21 20.1 | -0.5 |
| LTZ | | | | AML | AML | 06 21 21.4 | |
| **RPZ** | **Rata Peaks** | **1.14** | **263** | P* | Pg | 06 21 12.7 | -0.4 |
| RPZ | | | | S* | Sb | 06 21 29.4 | +0.4 |
| RPZ | | | | AML | AML | 06 21 33.5 | |
| **KHZ** | **Kahutara** | **1.35** | **30** | P* | Pn | 06 21 15.0 | -2.0 |
| **WVZ** | **Waitaha Valley** | **1.47** | **290** | PN | Pn | 06 21 18.4 | -0.2 |
| WVZ | | | | AML | AML | 06 22 04.9 | |
| **THZ** | **Tophouse** | **1.84** | **7** | PN | Pn | 06 21 22.0 | -1.8 |
| THZ | | | | AML | AML | 06 21 50.1 | |
| THZ | | | | AML | AML | 06 21 54.8 | |
| **LBZ** | **Lake Benmore** | **1.93** | **245** | PN | Pn | 06 21 24.6 | -0.4 |
| LBZ | | | | AML | AML | 06 22 05.1 | |
| LBZ | | | | AML | AML | 06 22 11.3 | |
| **FOZ** | **Fox Glacier** | **2.13** | **270** | PN | Pn | 06 21 26.7 | -1.0 |
| FOZ | | | | AML | AML | 06 22 08.0 | |
| FOZ | | | | AML | AML | 06 22 11.0 | |

*ISCJB* ***17*** *06:36:34.6±0.7, 32.°21S±0.°07×69.°56W±0.°09, h120km±8km, Error ellipse: s-maj=16.6km s-min=4.6km az=43.8*
*SJA* ***17*** *06:36:34.2±0.7, 32.°30S×69.°49W, h113km±3km, ML3.2, MW3.2*
*GUC* ***17*** *06:36:34.6±0.6, 32.°08S×69.°82W, h125km±24km, ML3.4*
**ISC

**h116**km±11km, **n25**, σ**0**s**70**/33, **2C-1D, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUSP** | **Uspallata** | **0.13** | **94** | *i* P | **Pn** | **06 36 51.5** | **-0.2** |
| AUSP | | | | *i* S | **Sn** | **06 37 03.6** | **-0.4** |
| **RTLS** | **Leoncito** | **0.46** | **27** | *i* P | **Pn** | **06 36 52.8** | **-0.1** |
| **ASAL** | **Salagasta** | **0.71** | **122** | *e*P | **Pn** | **06 36 54.6** | **+0.2** |
| **ARCO** | **CERRO ARCO** | **0.81** | **141** | *e*P | **Pn** | **06 36 55.8** | **+0.4** |
| ARCO | | | | IAML | | 06 37 13.3 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **0.92** | **68** | *e*P | **Pn** | **06 36 56.2** | **-0.1** |
| RTCV | | | | *e*S | **Sn** | **06 37 11.7** | **-0.5** |
| **AAGR** | **Agrelo** | **1.06** | **145** | *e*P | **Pn** | **06 36 58.2** | **+0.5** |
| **SJA** | **San Juan** | **1.08** | **51** | *e*P | **Pn** | **06 36 58.1** | **+0.2** |
| **CFAA** | **Coronel Fontan** | **1.27** | **62** | *e*P | **Pn** | **06 36 59.7** | **-0.2** |
| **RTLL** | **Cerro Villicun** | **1.27** | **46** | *e*P | **Pn** | **06 36 59.9** | **0.0** |
| RTLL | | | | *e*S | **Sn** | **06 37 18.6** | **+0.1** |
| **PEL** | **Peldehue** | **1.34** | **226**↑ | *i*P | **Pn** | **06 37 00.4** | **-0.2** |
| PEL | | | | *i* S | **Sn** | **06 37 19.8** | **-0.1** |
| PEL | | | | AML | AML | 06 37 20.7 | |
| | comp=N,817nm,0.4s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.45** | **215** | *e*P | **Pn** | **06 37 02.3** | **+0.4** |
| CLCH | | | | *i* S | **Sn** | **06 37 22.9** | **+0.8** |
| CLCH | | | | AML | AML | 06 37 26.1 | |
| | comp=E,466nm,0.6s | | | | | | |
| **ROC1** | **El Roble** | **1.46** | **238** | *e*P | **Pn** | **06 37 01.7** | **-0.5** |
| **LACH** | **Col Las Americ** | **1.49** | **214** | *e*P | **Pn** | **06 37 02.5** | **+0.1** |
| LACH | | | | *i* S | **Sn** | **06 37 23.7** | **+0.7** |
| **SAN** | **Santiago** | **1.55** | **217** | *e*P | **Pn** | **06 37 03.4** | **+0.3** |
| **AMOG** | **MOGNA** | **1.56** | **36** | *e*P | **Pn** | **06 37 03.6** | **+0.4** |
| **PCH** | **Pirque** | **1.62** | **210** | *e*P | **Pn** | **06 37 04.8** | **+0.7** |
| **ANTU** | **Antumapu** | **1.63** | **214**↑ | *i*P | **Pn** | **06 37 04.4** | **+0.3** |
| ANTU | | | | *i* S | **Sn** | **06 37 26.9** | **+0.8** |
| **RCDM** | **Rinconada Maip** | **1.66** | **219** | *e*P | **Pn** | **06 37 02.5** | **-1.9** |
| RCDM | | | | *e*S | **Sn** | **06 37 25.6** | **-1.0** |
| RCDM | | | | AML | AML | 06 37 27.2 | |
| | comp=E,628nm,0.1s | | | | | | |
| **TACH** | **Talagante** | **1.85** | **219**↓ | *i*P | **Pn** | **06 37 06.3** | **-0.4** |
| **AVFE** | **Valle Fertil** | **2.36** | **50** | *e*P | **Pn** | **06 37 13.3** | **+0.1** |
| AVFE | | | | IAML | | 06 37 43.7 | |
| | comp=Z,29nm,0.5s | | | | | | |
| **ACHE** | **Chepes** | **2.67** | **68** | *e*P | **Pn** | **06 37 17.1** | **-0.2** |
| **AGUA** | **GUANDACOL** | **2.87** | **19** | *e*P | **Pn** | **06 37 20.8** | **+1.0** |
| **APLL** | **PUNTA DE LOS L** | **3.15** | **56** | *e*P | **Pn** | **06 37 23.8** | **+0.2** |
| **VCA** | **Vinchina** | **3.65** | **19** | *e*P | **Pn** | **06 37 31.5** | **+1.2** |
| VCA | | | | IAML | | 06 38 19.8 | |
| | comp=Z,47nm,0.4s | | | | | | |
| **CYA** | **Choya** | **4.96** | **42** | *e*P | **Pn** | **06 37 46.0** | **-1.8** |

*PRE* ***17*** *06:48:33.8±1.1,24°.97S×27°.21E, h2km, ML2.1*
*ISCJB* ***17*** *06:48:35.9±0.7,25°.03S±0°.04×27°.12E±0°.08, h5km, Error ellipse: s-maj=10.4km s-min=4.8km az=11.8*
*BUL* ***17*** *06:48:58.0±9.4,24°.66S×26°.89E, h84km±999km, MD3.2*
**ISC 17 06:48:34.9**±1.0, **25°.00S**±0°.04×**27°.22E**±0°.08, **h5**km, **n7,** σ**0**s**96**/**11, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSR** | **Koster** | **0.90** | **199** | *e*P | **Pb** | **06 48 52.1** | **-1.0** |
| KSR | | | | *e*S | **Sb** | **06 49 04.9** | **-0.5** |
| KSR | | | | AML | AML | 06 49 12.6 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **OBSV** | **Observatory** | **1.41** | **147** | *e*P | **Pg** | **06 49 01.7** | **-0.3** |
| OBSV | | | | *e*S | **Sg** | **06 49 21.3** | **+1.0** |
| OBSV | | | | AML | AML | 06 49 30.4 | |
| | comp=Z,16nm,0.8s | | | | | | |
| **PRYS** | **Parys** | **1.92** | **176** | *e*P | **Pn** | **06 49 08.6** | **+0.1** |
| PRYS | | | | *e*S | **Sb** | **06 49 35.0** | **0.0** |
| PRYS | | | | AML | AML | 06 52 43.2 | |
| | comp=Z,15nm,0.6s | | | | | | |
| **SWZ** | **Schweizer** | **2.76** | **218** | *e*P | **Pn** | **06 49 20.7** | **+0.7** |
| SWZ | | | | *e*S | **Sn** | **06 49 53.2** | **-0.6** |
| SWZ | | | | AML | AML | 06 50 08.6 | |
| | comp=Z,7.2nm,0.4s | | | | | | |
| **BOSA** | **Boshof** | **4.00** | **206** | *i* P | Pg | 06 50 03.9 | +12 |
| BOSA | | | | *i* S | **Sb** | **06 50 36.9** | **+2.0** |
| **MATP** | **Matopo** | **4.70** | **15** | *i* P | **Pg** | **06 50 04.8** | **-0.3** |
| MATP | | | | *i* S | Sb | 06 50 46.6 | -8.5 |
| **BLWY** | **Bulawayo** | **5.00** | **15** | *i* P | **Pb** | **06 50 02.9** | **-0.3** |
| BLWY | | | | *i* S | Sn | 06 50 54.3 | +5.1 |

**IDC 17 06:50:49.9**±2.0, **17°.20S×178°.07W, h0**km, **mb3.7**/5, **mb1 4.0**/5, **mb1mx3.8**/24, **mbtmp3.7**/5, **Error ellipse: s-maj=137.7km s-min=25.4km az=153.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **45.08** | **259** | P | P | 06 59 08.0 | -0.2 |
| | 0.4nm,0.8s,baz=95,slow=8.0,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **45.30** | **254** | P | P | 06 59 09.9 | 0.0 |
| | 0.8nm,0.7s,baz=91,slow=8.4,SNR=3.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.69** | **44** | P | P | 07 02 55.5 | +1.0 |
| | 0.7nm,0.7s,baz=221,slow=9.0,SNR=9.0 | | | | | | |
| **ILAR** | **Eielson Array** | **85.13** | **13** | P | P | 07 03 26.2 | -1.3 |
| | 0.7nm,1.1s,baz=221,slow=5.6,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.35** | **58** | P | P | 07 03 29.0 | -0.6 |
| | 0.4nm,0.6s,baz=212,slow=5.4,SNR=7.4 | | | | | | |

*ISK* ***17*** *07:17:15.5,38°.21N×26°.52E, h10km, MD2.8*
*ISCJB* ***17*** *07:17:16.0±0.6,38°.22N±0°.02×26°.48E±0°.04, h10km±4km, Error ellipse: s-maj=5.4km s-min=3.4km az=148.3*
*THE* ***17*** *07:17:16.8,38°.08N×26°.26E, h29km±3km, ML2.4/2, Error ellipse: s-maj=6.9km s-min=0.8km az=241.0*
*ATH* ***17*** *07:17:16.1,38°.21N×26°.48E, h34km±2km, MD3.0/5*
*DDA* ***17*** *07:17:16.6,38°.25N×26°.57E, h14km, Md2.8*
*CSEM* ***17*** *07:17:16.5±0.2,38°.23N×26°.50E, h12km, MD2.8, Error ellipse: s-maj=4.3km s-min=2.8km az=58.0*
**ISC 17 07:17:16.4**±0.9, **38°.23N**±0°.02×**26°.50E**±0°.02, **h11**km±6km, **n55,** σ**0**s**50**/80, **Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URLA** | **Izmir** | **0.15** | **30** | *i* P | **Pg** | **07 17 20.0** | **+0.1** |
| URLA | | | | *i* S | **Sg** | **07 17 22.5** | **+0.1** |
| **URLA** | **Izmir** | **0.15** | **30** | P | **Pg** | **07 17 20.0** | **+0.1** |
| URLA | | | | S | **Sg** | **07 17 22.5** | **+0.1** |
| **CHOS** | **Chios island** | **0.38** | **295** | *e*PB | **Pb** | **07 17 25.3** | **+0.1** |
| **CHOS** | **Chios island** | **0.38** | **295** | P | **Pg** | **07 17 24.6** | **+0.6** |
| **CHOS** | **Chios island** | **0.38** | **295** | P | **Pg** | **07 17 24.6** | **+0.6** |
| **CHOS** | **Chios island** | **0.38** | **295** | *e*Pb | **Pb** | **07 17 25.3** | **+0.1** |
| **BLCB** | **Balcova** | **0.45** | **70** | *e*PG | **Pg** | **07 17 25.0** | **-0.3** |
| BLCB | | | | *e*SG | **Sg** | **07 17 30.9** | **-0.4** |
| **BLCB** | **Balcova** | **0.45** | **70** | *e*Pg | **Pg** | **07 17 25.0** | **-0.3** |
| BLCB | | | | *e*Sg | **Sg** | **07 17 30.9** | **-0.4** |
| **SMG** | **Samos** | **0.58** | **153** | *e*PN | **Pb** | **07 17 28.6** | **0.0** |
| SMG | | | | *e*SN | **Sb** | **07 17 37.2** | **+0.4** |
| **SMG** | **Samos** | **0.58** | **153** | P | **Pg** | **07 17 27.9** | **+0.2** |
| SMG | | | | S | **Sb** | **07 17 37.4** | **+0.6** |
| **SMG** | **Samos** | **0.58** | **153** | P | **Pg** | **07 17 27.9** | **+0.2** |
| **SMG** | **Samos** | **0.58** | **153** | *e*Pn | **Pb** | **07 17 28.6** | **0.0** |
| SMG | | | | *e*Sn | **Sb** | **07 17 37.2** | **+0.4** |
| SMG | | | | S | **Sb** | **07 17 37.4** | **+0.6** |
| **GCAM** | **G?zelcaml?** | **0.78** | **132** | *i* P | **Pg** | **07 17 31.4** | **-0.1** |
| GCAM | | | | *i* S | **Sg** | **07 17 41.7** | **0.0** |
| **GCAM** | **G?zelcaml?** | **0.78** | **132** | P | **Pg** | **07 17 31.4** | **-0.1** |
| GCAM | | | | S | **Sg** | **07 17 41.7** | **0.0** |
| **DKL** | **Dikili** | **0.90** | **21** | *e*PG | **Pb** | **07 17 34.0** | **0.0** |
| DKL | | | | *e*SG | **Sb** | **07 17 46.5** | **+0.5** |
| **DKL** | **Dikili** | **0.90** | **21** | *e*Pg | **Pb** | **07 17 34.0** | **0.0** |
| DKL | | | | *e*Sg | **Sb** | **07 17 46.5** | **+0.5** |
| **PRK** | **Paraskevi** | **1.03** | **350** | *e*PN | **Pb** | **07 17 36.1** | **-0.1** |
| PRK | | | | *e*SN | **Sb** | **07 17 49.8** | **0.0** |
| **PRK** | **Paraskevi** | **1.03** | **350** | P | **Pb** | **07 17 35.8** | **-0.4** |
| PRK | | | | S | **Sn** | **07 17 51.5** | **+0.3** |
| **PRK** | **Paraskevi** | **1.03** | **350** | P | **Pb** | **07 17 35.8** | **-0.4** |
| **PRK** | **Paraskevi** | **1.03** | **350** | *e*Pn | **Pb** | **07 17 36.1** | **-0.1** |
| PRK | | | | *e*Sn | **Sb** | **07 17 49.8** | **0.0** |
| PRK | | | | S | **Sn** | **07 17 51.5** | **+0.3** |
| **SIGR** | **SIGRI** | **1.10** | **333** | P | **Pb** | **07 17 36.8** | **-0.6** |
| SIGR | | | | S | **Sb** | **07 17 51.3** | **-0.5** |
| **SIGR** | **SIGRI** | **1.10** | **333** | P | **Pb** | **07 17 36.8** | **-0.6** |
| SIGR | | | | S | **Sb** | **07 17 51.3** | **-0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.13** | **104** | *e*PN | **Pb** | **07 17 37.4** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.13** | **104** | *e*Pn | **Pb** | **07 17 37.4** | **-0.6** |
| **AKHS** | **Akhisar** | **1.22** | **57** | *i* P | **Pn** | **07 17 38.1** | **-1.2** |
| AKHS | | | | *i* S | **Sb** | **07 17 55.1** | **0.0** |
| **AKHS** | **Akhisar** | **1.22** | **57** | P | **Pn** | **07 17 38.1** | **-1.2** |
| AKHS | | | | S | **Sb** | **07 17 55.1** | **0.0** |
| **AKS** | **Akhisar** | **1.22** | **57** | *e*PN | **Pn** | **07 17 38.7** | **-0.6** |
| **AKS** | **Akhisar** | **1.22** | **57** | *e*Pn | **Pn** | **07 17 38.7** | **-0.6** |
| **AYDN** | **Tasoluk** | **1.23** | **117** | *i* P | **Pg** | **07 17 40.2** | **+0.2** |
| AYDN | | | | *i* S | **Sb** | **07 17 55.6** | **+0.2** |
| **AYDN** | **Tasoluk** | **1.23** | **117** | P | **Pg** | **07 17 40.2** | **+0.2** |
| AYDN | | | | S | **Sb** | **07 17 55.6** | **+0.2** |
| **BODT** | **Bodrum** | **1.33** | **151** | *e*PN | **Pn** | **07 17 40.8** | **-0.1** |
| **BODT** | **Bodrum** | **1.33** | **151** | *e*Pn | **Pn** | **07 17 40.8** | **-0.1** |
| **APE** | **Apeiranthos** | **1.39** | **214** | *e*PN | **Pn** | **07 17 41.0** | **-0.7** |
| **APE** | **Apeiranthos** | **1.39** | **214** | *e*PN | **Pn** | **07 17 40.8** | **-0.9** |
| **APE** | **Apeiranthos** | **1.39** | **214** | *e*Pn | **Pn** | **07 17 41.0** | **-0.7** |
| **EZN** | **Ezine** | **1.60** | **355** | *e*PN | **Pn** | **07 17 44.6** | **0.0** |
| **EZN** | **Ezine** | **1.60** | **355** | *e*Pn | **Pn** | **07 17 44.6** | **0.0** |
| **MANT** | **Manisa** | **1.64** | **80** | *i* S | **Sn** | **07 18 06.6** | **+0.1** |
| **MANT** | **Manisa** | **1.64** | **80** | S | **Sn** | **07 18 06.6** | **+0.1** |
| **BOZC** | **Bozcaada** | **1.65** | **348** | P | **Pn** | **07 17 43.9** | **-1.3** |
| BOZC | | | | S | **Sn** | **07 18 06.2** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.72** | **80** | *e*PN | **Pn** | **07 17 47.0** | **+0.7** |
| **KULA** | **Kula-Manisa** | **1.72** | **80** | *e*Pn | **Pn** | **07 17 47.0** | **+0.7** |
| **BALY** | **Balya** | **1.74** | **30** | *i* P | **Pb** | **07 17 48.4** | **0.0** |
| **BALY** | **Balya** | **1.74** | **30** | P | **Pb** | **07 17 48.5** | **0.0** |
| BALY | | | | S | **Sg** | **07 18 12.5** | **0.0** |
| **LIA** | **Limnos Island** | **1.96** | **329** | *e*PN | **Pn** | **07 17 49.3** | **-0.2** |
| **LIA** | **Limnos Island** | **1.96** | **329** | *e*Pn | **Pn** | **07 17 49.3** | **-0.2** |
| **GONE** | **Gonen-Balikesi** | **2.04** | **27** | *e*PN | **Pn** | **07 17 51.7** | **+1.2** |
| **GONE** | **Gonen-Balikesi** | **2.04** | **27** | *e*Pn | **Pn** | **07 17 51.7** | **+1.2** |
| **LPK** | **Lapseki** | **2.15** | **5** | *e*PN | **Pn** | **07 17 52.5** | **+0.4** |
| **LPK** | **Lapseki** | **2.15** | **5** | *e*Pn | **Pn** | **07 17 52.5** | **+0.4** |
| **GELI** | **Tayfur-Gelibol** | **2.17** | **359** | *e*PN | **Pn** | **07 17 52.9** | **+0.6** |
| **GELI** | **Tayfur-Gelibol** | **2.17** | **359** | *e*Pn | **Pn** | **07 17 52.9** | **+0.6** |
| **SMTH** | **Samothraki Isl** | **2.36** | **342** | P | **Pn** | **07 17 54.4** | **-0.7** |
| **SMTH** | **Samothraki Isl** | **2.36** | **342** | P | **Pn** | **07 17 54.4** | **-0.7** |
| **SART** | **Tekirdag** | **2.51** | **12** | P | **Pb** | **07 18 01.8** | **+0.2** |
| SART | | | | S | **Sb** | **07 18 32.6** | **+0.1** |

*NSSC* ***17*** *08:01:24.7±2.7,31°.11N×35°.15E, h0km±272km, MD2.0, ML2.5*
*ISCJB* ***17*** *08:01:30.6±0.7,31°.08N±0°.02×35°.62E±0°.05, h6km±4km, Error ellipse: s-maj=7.3km s-min=2.6km az=13.3*
*HLW* ***17*** *08:01:30.5,31°.28N×35°.69E, h20km±16km, MD2.6, Ml2.8*
*CSEM* ***17*** *08:01:31.3±0.2,31°.08N×35°.62E, h10km, MD2.9, Mw2.4, Error ellipse: s-maj=7.4km s-min=3.3km az=106.0*
*GII* ***17*** *08:01:32.9±0.1,31°.09N×35°.47E, h10km, MD2.9/8, Mm2.4/11*
**ISC 17 08:01:31.2**±1.0, **31°.11N**±0°.02×**35°.60E**±0°.04, **h14**km±8km, **n63,** σ**1**s**04**/**97, Dead Sea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MZDA** | **Masada** | **0.29** | **316** | Pg | **Pb** | **08 01 38.0** | **-0.1** |
| MZDA | | | | Sg | **Sg** | **08 01 41.7** | **+0.4** |
| **MZDA** | **Masada** | **0.29** | **316** | Pg | **Pb** | **08 01 38.0** | **-0.1** |
| MZDA | | | | Sg | **Sg** | **08 01 41.7** | **+0.4** |
| **YTIR** | **Yattir** | **0.48** | **302** | Pg | **Pb** | **08 01 41.4** | **-0.2** |
| YTIR | | | | Sg | **Sg** | **08 01 47.7** | **+0.3** |
| **YTIR** | **Yattir** | **0.48** | **302** | Pg | **Pb** | **08 01 41.4** | **-0.2** |
| YTIR | | | | Sg | **Sg** | **08 01 47.7** | **+0.3** |
| **DSI** | **Dead Sea** | **0.50** | **338** | Pg | **Pb** | **08 01 42.7** | **+0.9** |
| DSI | | | | Sg | **Sb** | **08 01 50.1** | **+1.1** |
| **DSI** | **Dead Sea** | **0.50** | **338** | Pg | **Pb** | **08 01 42.7** | **+0.9** |
| DSI | | | | Sg | **Sb** | **08 01 50.1** | **+1.1** |
| **ZFRI** | **Zfri** | **0.66** | **213** | Pg | **Pb** | **08 01 44.5** | **+0.1** |
| ZFRI | | | | Sg | **Sg** | **08 01 53.1** | **+0.4** |
| **ZFRI** | **Zfri** | **0.66** | **213** | Pg | **Pb** | **08 01 44.5** | **+0.1** |
| ZFRI | | | | Sg | **Sg** | **08 01 53.1** | **+0.4** |
| **RMNI** | **Mount Ramon** | **0.88** | **235** | Pg | **Pb** | **08 01 48.4** | **+0.1** |
| **RMNI** | **Mount Ramon** | **0.88** | **235** | Pg | **Pb** | **08 01 48.4** | **+0.1** |
| **PRNI** | **Paran** | **0.91** | **214** | Pg | **Pb** | **08 01 49.0** | **+0.2** |
| PRNI | | | | Sg | **Sb** | **08 02 00.9** | **+0.2** |
| **PRNI** | **Paran** | **0.91** | **214** | Pg | **Pb** | **08 01 49.0** | **+0.2** |
| PRNI | | | | Sg | **Sb** | **08 02 00.9** | **+0.2** |
| **KZIT** | **Kziot** | **1.05** | **259** | Pg | **Pg** | **08 01 50.5** | **-1.0** |
| KZIT | | | | Sg | **Sg** | **08 02 03.5** | **-1.7** |
| **KZIT** | **Kziot** | **1.05** | **259** | Pg | **Pg** | **08 01 50.5** | **-1.0** |
| KZIT | | | | Sg | **Sg** | **08 02 03.5** | **-1.7** |
| **HMDT** | **Nahal Hemdat** | **1.15** | **357** | Pg | **Pn** | **08 01 54.1** | **+1.2** |
| HMDT | | | | Sg | **Sn** | **08 02 10.2** | **+1.8** |
| **HMDT** | **Nahal Hemdat** | **1.15** | **357** | Pg | **Pn** | **08 01 54.1** | **+1.2** |
| HMDT | | | | Sg | **Sn** | **08 02 10.2** | **+1.8** |
| **HRFI** | **Mount Harif** | **1.17** | **205** | Pg | **Pg** | **08 01 53.7** | **-0.1** |
| HRFI | | | | Sg | **Sb** | **08 02 08.6** | **+0.4** |
| **HRFI** | **Mount Harif** | **1.17** | **205** | Pg | **Pg** | **08 01 53.7** | **-0.1** |
| HRFI | | | | Sg | **Sb** | **08 02 08.6** | **+0.4** |
| **SLTI** | **Sal'it** | **1.23** | **337** | Pg | **Pg** | **08 01 54.8** | **-0.1** |
| SLTI | | | | Sg | **Sn** | **08 02 11.8** | **+1.4** |
| **SLTI** | **Sal'it** | **1.23** | **337** | Pg | **Pg** | **08 01 54.8** | **-0.1** |
| SLTI | | | | Sg | **Sn** | **08 02 11.8** | **+1.4** |
| **KRMI** | **Paran Flat** | **1.24** | **218** | Pg | **Pn** | **08 01 54.2** | **+0.1** |
| KRMI | | | | Sg | **Sb** | **08 02 10.2** | **0.0** |
| **KRMI** | **Paran Flat** | **1.24** | **218** | Pg | **Pn** | **08 01 54.2** | **+0.1** |
| KRMI | | | | Sg | **Sb** | **08 02 10.2** | **0.0** |
| **MMLI** | **Mount Malkishu** | **1.34** | **354** | Pn | **Pg** | **08 01 57.2** | **+0.2** |
| MMLI | | | | Sn | **Sg** | **08 02 15.7** | **+1.3** |
| **MMLI** | **Mount Malkishu** | **1.34** | **354** | Pn | **Pg** | **08 01 57.2** | **+0.2** |
| MMLI | | | | Sn | **Sg** | **08 02 15.7** | **+1.3** |
| **MBRI** | **Mt Berech** | **1.43** | **204** | Pn | **Pb** | **08 01 57.8** | **0.0** |
| MBRI | | | | Sn | **Sg** | **08 02 16.8** | **-0.7** |
| **MBRI** | **Mt Berech** | **1.43** | **204** | Pn | **Pb** | **08 01 57.8** | **0.0** |
| MBRI | | | | Sn | **Sg** | **08 02 16.8** | **-0.7** |
| **EIL** | **Elat** | **1.54** | **201** | Pn | **Pb** | **08 01 59.4** | **-0.1** |
| EIL | | | | Sn | **Sb** | **08 02 19.5** | **+0.7** |
| **EIL** | **Elat** | **1.54** | **201** | Pn | **Pb** | **08 01 59.4** | **-0.1** |
| EIL | | | | Sn | **Sb** | **08 02 19.5** | **+0.7** |
| **TCHB** | **Talchebab** | **1.59** | **11** | *e*P | Pn | 08 01 55.5 | -3.5 |
| TCHB | | | | *e*S | **Sn** | **08 02 15.5** | **-3.9** |
| TCHB | | | | AML | AML | 08 02 17.6 | |
| | comp=N,334nm,0.5s | | | | | | |
| TCHB | | | | AML | AML | 08 02 19.3 | |
| | comp=E,271nm,0.5s | | | | | | |
| **TCHB** | **Talchebab** | **1.59** | **11** | *e*P | Pn | 08 01 55.5 | -3.5 |
| TCHB | | | | *e*S | **Sn** | **08 02 15.5** | **-3.9** |
| **OFRI** | **'Ofer** | **1.60** | **341** | Pn | **Pb** | **08 02 00.8** | **+0.2** |
| **OFRI** | **'Ofer** | **1.60** | **341** | Pn | **Pb** | **08 02 00.8** | **+0.2** |
| **RSH** | | **1.62** | **265** | P | **Pn** | **08 01 59.0** | **-0.3** |
| | baz=260 | | | | | | |
| **RSH** | | **1.62** | **265** | P | **Pn** | **08 01 59.0** | **-0.3** |
| **BLGI** | **Bet Lehem HaGe** | **1.66** | **348** | Pn | **Pb** | **08 02 02.1** | **+0.5** |
| **BLGI** | **Bet Lehem HaGe** | **1.66** | **348** | Pn | **Pb** | **08 02 02.1** | **+0.5** |
| **HNKL** | **Nakhl** | **1.82** | **230** | P | **Pn** | **08 02 02.6** | **+0.4** |
| | baz=229 | | | | | | |
| HNKL | | | | S | **Sb** | **08 02 27.0** | **0.0** |
| | baz=229 | | | | | | |
| **HNKL** | **Nakhl** | **1.82** | **230** | P | **Pn** | **08 02 02.6** | **+0.4** |
| HNKL | | | | S | **Sb** | **08 02 27.0** | **0.0** |
| **SALA** | **Sala** | **1.87** | **31** | *e*P | **Pn** | **08 02 01.7** | **-1.3** |
| SALA | | | | *e*S | **Sb** | **08 02 27.9** | **-0.7** |
| SALA | | | | AML | AML | 08 02 31.8 | |
| | comp=E,11nm,0.4s | | | | | | |
| SALA | | | | AML | AML | 08 02 33.6 | |
| | comp=N,74nm,0.4s | | | | | | |
| **SALA** | **Sala** | **1.87** | **31** | *e*P | **Pn** | **08 02 01.7** | **-1.3** |
| SALA | | | | *e*S | **Sb** | **08 02 27.9** | **-0.7** |
| **KSHT** | **Keshet** | **1.88** | **6** | Pn | **Pb** | **08 02 05.9** | **+0.5** |
| **KSHT** | **Keshet** | **1.88** | **6** | Pn | **Pb** | **08 02 05.9** | **+0.5** |
| **MMA0B** | **Mount Meron ar** | **1.91** | **355** | Pn | **Pb** | **08 02 06.0** | **+0.1** |
| **MMA0B** | **Mount Meron ar** | **1.91** | **355** | Pn | **Pb** | **08 02 06.0** | **+0.1** |
| **HBST** | **Basata** | **2.02** | **202** | P | **Pn** | **08 02 05.7** | **+0.7** |
| | baz=203 | | | | | | |
| **HBST** | **Basata** | **2.02** | **202** | P | **Pn** | **08 02 05.7** | **+0.7** |
| **KSDI** | **Kefar Szold** | **2.08** | **1** | Pn | **Pb** | **08 02 08.0** | **-0.8** |
| **KSDI** | **Kefar Szold** | **2.08** | **1** | Pn | **Pb** | **08 02 08.0** | **-0.8** |
| **AMAG** | **Maghara** | **2.10** | **258** | P | **Pn** | **08 02 05.5** | **-0.5** |
| | baz=255 | | | | | | |
| **AMAG** | **Maghara** | **2.10** | **258** | P | Pn | **08 02 05.6** | **-0.5** |
| **NUB** | | **2.23** | **202** | P | **Pn** | **08 02 09.5** | **+1.7** |
| | baz=202 | | | | | | |
| **BRBR** | **Barbar** | **2.32** | **7** | *e*P | Pn | 08 02 05.1 | -4.1 |
| BRBR | | | | *e*S | **Sn** | **08 02 36.1** | **-1.5** |
| BRBR | | | | AML | AML | 08 02 49.0 | |
| | comp=E,40nm,0.4s | | | | | | |
| BRBR | | | | AML | AML | 08 02 55.3 | |
| | comp=N,46nm,0.3s | | | | | | |
| **BRBR** | **Barbar** | **2.32** | **7** | *e*P | Pn | 08 02 05.1 | -4.1 |
| BRBR | | | | *e*S | **Sn** | **08 02 36.1** | **-1.5** |
| **ZALF** | **Zalf** | **2.34** | **39** | *e*P | **Pn** | **08 02 08.3** | **-1.0** |
| ZALF | | | | *e*S | **Sn** | **08 02 39.6** | **+1.8** |
| ZALF | | | | AML | AML | 08 02 47.4 | |
| | comp=N,53nm,0.4s | | | | | | |
| ZALF | | | | AML | AML | 08 02 52.1 | |
| | comp=E,74nm,0.4s | | | | | | |
| **ZALF** | **Zalf** | **2.34** | **39** | *e*P | **Pn** | **08 02 08.3** | **-1.0** |
| ZALF | | | | *e*S | **Sn** | **08 02 39.6** | **+1.8** |
| **TOTH** | **TOTAH** | **2.36** | **17** | *e*P | **Pn** | **08 02 07.5** | **-2.1** |
| TOTH | | | | *e*S | **Sn** | **08 02 38.5** | **+0.2** |
| TOTH | | | | AML | AML | 08 02 47.5 | |
| | comp=E,41nm,0.2s | | | | | | |
| TOTH | | | | AML | AML | 08 02 55.5 | |
| | comp=N,39nm,0.7s | | | | | | |
| **TOTH** | **TOTAH** | **2.36** | **17** | *e*P | **Pn** | **08 02 07.5** | **-2.1** |
| TOTH | | | | *e*S | **Sn** | **08 02 38.5** | **+0.2** |
| **HDHB** | **Dhahab** | **2.52** | **200** | P | **Pn** | **08 02 12.5** | **+0.8** |
| | baz=201 | | | | | | |
| **HDHB** | **Dhahab** | **2.52** | **200** | P | **Pn** | **08 02 12.5** | **+0.8** |
| **TR1** | | **3.40** | **205** | P | **Pn** | **08 02 24.5** | **+0.6** |
| | baz=206 | | | | | | |
| **TR1** | | **3.40** | **205** | P | **Pn** | **08 02 24.5** | **+0.6** |
| **SH2** | **Sharm el Sheik** | **3.47** | **203** | P | **Pn** | **08 02 25.7** | **+0.8** |
| | baz=203 | | | | | | |
| **SH2** | **Sharm el Sheik** | **3.47** | **203** | P | **Pn** | **08 02 25.7** | **+0.8** |

*ISCJB* ***17*** *08:09:08.2±0.7, 13°.42S±0°.06×167°.0E±0°.1, h200km, mb4.0/18, Error ellipse: s-maj=16.7km s-min=8.1km az=1.3*
*NEIC* ***17*** *08:09:11.2±1.3, 13°.40S×166°.93E, h215km±11km, mb4.1/5, Error ellipse: s-maj=13.5km s-min=8.9km az=94.0*
*IDC* ***17*** *08:09:11.1±2.8, 13°.49S×166°.95E, h212km±24km, mb3.8/15, mb1 3.8/17, mb1mx3.7/40, mbtmp4.3/17, Error ellipse: s-maj=22.3km s-min=13.6km az=99.0*
**ISC 17 08:09:09.6**±0.7, **13°.45S**±0°.07×**167°.0E**±0°.1, **h200**km, **n29,** σ**1**s**00**/32, **mb4.2**/18, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **8.00** | **299** | P | **Pn** | **08 11 02.9** | **0.0** |
| | 8.2nm,0.3s,baz=181,slow=3.3,SNR=4.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **8.59** | **184** | P | **Pn** | **08 11 12.8** | **+2.1** |
| | 0.9nm,0.3s,baz=0.0,slow=20,SNR=5.6 | | | | | | |
| DZM | | | | S | **Sn** | **08 12 45.4** | **-1.9** |
| | 0.3nm,0.3s,baz=359,slow=19,SNR=2.7 | | | | | | |
| **EIDS** | **Eidsvold** | **19.12** | **229** | *e*P | **P** | **08 13 18.8** | **+1.2** |
| | 2.4nm,0.4s | | | | | | |
| **CTA** | **Charters Tower** | **20.94** | **249** | P | **P** | **08 13 37.8** | **+0.6** |
| | 3.0nm,0.5s,baz=75,slow=12,SNR=4.3 | | | | | | |
| **ARMA** | **Armidale** | **22.07** | **218** | *e*P | **P** | **08 13 49.1** | **+0.4** |
| | 1.7nm,0.5s | | | | | | |
| **WRAB** | **Tennant Creek** | **31.91** | **254** | *e*P | **P** | **08 15 16.1** | **-0.5** |
| | 1.6nm,0.6s | | | | | | |
| **WRA** | **Warrannunga Arr** | **31.92** | **254** | P | **P** | **08 15 15.8** | **-0.9** |
| | 2.1nm,0.6s,baz=85,slow=8.8,SNR=19 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 18 02.9** | **+0.7** |
| | 0.5nm,0.4s,baz=86,slow=3.3,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **32.92** | **247** | P | **P** | **08 15 24.1** | **-1.4** |
| | 3.9nm,0.3s,baz=76,slow=10,SNR=118 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 18 04.9** | **-0.1** |
| | 1.3nm,0.5s,baz=70,slow=2.2,SNR=17 | | | | | | |
| **BBOO** | **Buckleboo** | **34.19** | **230** | *e*P | **P** | **08 15 36.0** | **-0.1** |
| | 4.8nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **45.66** | **254** | *e*P | **P** | **08 17 11.0** | **+0.3** |
| | 5.9nm,0.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **49.21** | **238** | P | **P** | **08 17 37.0** | **-0.8** |
| | 3.4nm,0.4s,baz=340,slow=0.1,SNR=5.8 | | | | | | |
| **JNU** | **Nakatsue** | **57.75** | **324** | P | **P** | **08 18 39.0** | **-0.9** |
| | 12nm,1.1s,baz=156,slow=3.3,SNR=4.2 | | | | | | |
| **ASAJ** | **Asahikawa** | **61.46**

*JMA Felt II J1.*
*NEIC **17** 08:19:43.8±0.4,36°.39N×141°.18E,mb4.8/7,MW4.2(NIED) Error ellipse: s-maj=8.4km s-min=6.6km az=109.0*
*NEIC Recorded [2 JMA] in Ibaraki and Tochigi; [1 JMA] in Chiba, Fukushima, Gumma and Saitama.*
*MOS **17** 08:19:43.6±1.0,36°.67N×141°.10E,h45km,mb4.5/24,Error ellipse: s-maj=10.8km s-min=6.9km az=113.2*
*IDC **17** 08:19:44.2±0.8,36°.47N×141°.08E,h41km±6km,mb3.9/21, mb1 4.0/25,mb1mx3.9/60,mbtmp4.1/25,ML4.0/3,MS3.4/9, Ms1 3.4/9,ms1mx3.1/34,Error ellipse: s-maj=17.3km s-min=14.3km az=95.0*

**ISC 17 08:19:43.5±0.5,36°.42N±0°.03×141°.16E±0°.05,h37km±1km, h37km:pP-P,n132,σ1$42/166,mb4.2/32,MS3.4/8,4C-8D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JHO** | **Hitachi** | **0.52** | **292** | ⇓P | | | **Pn** | **08 19 53.8** | **-0.6** |
| JHO | | | | S | | | **Sn** | **08 20 02.0** | **0.0** |
| **ONAJ** | **Iwakimizuishiy** | **0.74** | **337** | ⇓P | | | **Pn** | **08 19 56.9** | **-0.6** |
| ONAJ | | | | S | | | **Sn** | **08 20 06.9** | **-0.7** |
| **CHOJ** | **Chosi** | **0.76** | **199** | ⇑P | | | **Pn** | **08 19 56.7** | **-0.9** |
| CHOJ | | | | S | | | **Sn** | **08 20 06.5** | **-1.3** |
| **JYT** | **Yasato** | **0.81** | **257** | ⇓P | | | **Pn** | **08 19 57.5** | **-0.8** |
| JYT | | | | S | | | **Sn** | **08 20 08.0** | **-1.1** |
| **JFK** | **Kawauchi** | **0.97** | **346** | ⇓P | | | **Pn** | **08 20 00.0** | **-0.7** |
| **JFT** | **Otama** | **1.28** | **329** | ⇓P | | | **Pn** | **08 20 05.6** | **+0.7** |
| JFT | | | | S | | | **Sn** | **08 20 22.1** | **+1.3** |
| **I30JP** | **ISUMI INFRASON** | **1.31** | **212** | P | | | Pn | 08 20 08.9 | +3.7 |
| | baz=37,slow=13 | | | | | | | | |
| I30JP | | | | S | | | **Sn** | **08 20 23.7** | **+2.3** |
| | baz=9.1,slow=287 | | | | | | | | |
| **JAG** | **Ashikaga** | **1.38** | **271** | ⇓P | | | **Pn** | **08 20 05.9** | **-0.3** |
| JAG | | | | S | | | **Sn** | **08 20 22.6** | **-0.6** |
| **JFY** | **Yanaizu** | **1.53** | **311** | ⇓P | | | **Pn** | **08 20 08.8** | **+0.5** |
| **MJAR** | **Matsushiro Arr** | **2.38** | **274** | P | | | **Pn** | **08 20 20.2** | **+0.1** |
| | 89nm,0.3s,baz=107,slow=8.9,SNR=1216 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **2.38** | **274** | P | | | **Pn** | **08 20 20.2** | **+0.1** |
| MJAR | | | | pmax | | pmax | | | |
| | comp=Z,89nm,0.3s | | | | | | | | |
| **MAJO** | **Matsushiro** | **2.38** | **274** | *d* | *i*P | | **Pn** | **08 20 21.4** | **+1.3** |
| **MAJO** | **Matsushiro** | **2.38** | **274** | *e* | Pn | | **Pn** | **08 20 21.1** | **+1.1** |
| **MAT** | **Matsushiro** | **2.38** | **274** | P | | | **Pn** | **08 20 20.5** | **+0.4** |
| MAT | | | | S | | | **Sn** | **08 20 49.1** | **+1.0** |
| **JHJ2** | **Mitsune** | **3.48** | **199** | *e* | Pn | | **Pn** | **08 20 35.3** | **+0.2** |
| **JHJ** | **Hachijo jima 2** | **3.48** | **199** | P | | | **Pn** | **08 20 35.2** | **+0.1** |
| | comp=Z,21nm,0.3s,baz=342,slow=23,SNR=34 | | | | | | | | |
| JHJ | | | | S | | | **Sn** | **08 21 13.2** | **-1.9** |
| | comp=Z,56nm,0.3s,baz=144,slow=22,SNR=9.9 | | | | | | | | |
| **ERM** | **Erimo** | **5.80** | **15** | *e*P | | | **Pn** | **08 21 07.9** | **+1.0** |
| ERM | | | | *e* | | | | 08 22 18.9 | |
| **ERM** | **Erimo** | **5.80** | **15** | *e*Pn | | | **Pn** | **08 21 07.9** | **+1.0** |
| ERM | | | | *e*Sn | | | Sn | 08 22 18.9 | +6.8 |
| **ASAJ** | **Asahikawa** | **7.77** | **8** | P | | | **Pn** | **08 21 32.8** | **-1.2** |
| | comp=Z,1.9nm,0.3s,baz=227,slow=9.8,SNR=17 | | | | | | | | |
| ASAJ | | | | S | | | **Sn** | **08 22 56.9** | **-3.6** |
| | comp=Z,1.4nm,0.3s,baz=198,slow=20,SNR=2.7 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **7.77** | **8** | P | | | **Pn** | **08 21 32.8** | **-1.2** |
| ASAJ | | | | S | | | **Sn** | **08 22 56.9** | **-3.6** |
| ASAJ | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | | |
| ASAJ | | | | smax | | smax | | | |
| | comp=N,1.0nm,0.3s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **7.77** | **8** | *e*Pn | | | **Pn** | **08 21 34.2** | **+0.2** |
| ASAJ | | | | S | | | **Sn** | **08 22 56.9** | **-3.6** |
| **JNU** | **Nakatsue** | **9.08** | **252** | P | | | **Pn** | **08 21 54.9** | **+2.9** |
| | comp=N,0.3nm,0.3s,baz=22,slow=5.4,SNR=3.7 | | | | | | | | |
| JNU | | | | LR | | LR | | 08 25 47.5 | |
| | comp=N,306nm,18.4s,baz=120,slow=40 | | | | | | | | |
| **CBIJ** | **Chichi jima** | **9.34** | **174** | *e*Pn | | | **Pn** | **08 21 53.1** | **-2.5** |
| **KUR** | **Kuril'sk** | **10.16** | **28** | *e*P | | | **Pn** | **08 22 09.9** | **+3.2** |
| KUR | | | | S | | | Sn | 08 23 52.0 | -7.3 |
| **USRK** | **Ussuriysk Ar.** | **10.46** | **321** | P | | | **Pn** | **08 22 11.9** | **+1.2** |
| | comp=N,0.7nm,0.3s,baz=129,slow=13,SNR=8.6 | | | | | | | | |
| USRK | | | | LR | | LR | | 08 25 58.2 | |
| | comp=N,154nm,19.8s,baz=117,slow=36 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **10.59** | **6** | *e*P | | | **Pn** | **08 22 11.2** | **-1.4** |
| **KSRS** | **Korea Array** | **10.65** | **280** | P | | | **Pn** | **08 22 16.2** | **+2.8** |
| | comp=N,0.7nm,0.3s,baz=93,slow=14,SNR=16 | | | | | | | | |
| KSRS | | | | LR | | LR | | 08 26 09.6 | |
| | comp=N,182nm,20.5s,baz=62,slow=36 | | | | | | | | |
| **KSRS** | **Korea Array** | **10.65** | **280** | P | | | **Pn** | **08 22 16.3** | **+2.8** |
| KSRS | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| KSRS | | | | MLR | | MLR | | | |
| | comp=Z,183nm,20.5s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **10.68** | **279** | P | | | **Pn** | **08 22 16.3** | **+2.4** |
| **KSAR** | **Wonju Array Be** | **10.68** | **279** | P | | | **Pn** | **08 22 16.2** | **+2.4** |
| **MDJ** | **Mudanjiang** | **12.01** | **317** | P | | | **Pn** | **08 22 31.5** | **-0.6** |
| MDJ | | | | S | | | **Sn** | **08 24 44.8** | **+0.1** |
| MDJ | | | | PcS | | | **PcS** | **08 31 50.1** | **+0.2** |
| MDJ | | | | PMZ | | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| MDJ | | | | PMZ | | | | | |
| | comp=Z,59nm,4.7s | | | | | | | | |
| MDJ | | | | LZ | | | | | |
| | comp=Z,180nm,16.5s | | | | | | | | |
| **HABR** | **Khabarovsk** | **12.86** | **341** | *e*P | | | **Pn** | **08 22 40.9** | **-2.7** |
| HABR | | | | *e*S | | | **Sn** | **08 25 02.6** | **-2.6** |
| HABR | | | | pmax | | pmax | | | |
| | comp=Z,41nm,1.4s | | | | | | | | |
| **KLR** | **Kul'dur** | **14.53** | **335** | *e*P | | | **Pn** | **08 23 04.3** | **-2.1** |
| **BJI** | **Beijing** | **19.94** | **288** | P | | | **P** | **08 24 11.3** | **-0.9** |
| BJI | | | | sP | | | **sP** | **08 24 23.1** | **-3.3** |
| BJI | | | | S | | | **S** | **08 27 52.8** | **-1.7** |
| BJI | | | | PMZ | | | | | |
| | comp=Z,9.0nm,1.2s | | | | | | | | |
| BJI | | | | LZ | | | | | |
| | comp=Z,67nm,19.3s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **23.48** | **290** | *e*P | | | **P** | **08 24 50.1** | **+0.1** |
| HHC | | | | S | | | **S** | **08 29 01.5** | **+0.4** |
| HHC | | | | SS | | | **SnSn** | **08 29 45.0** | **+6.3** |
| HHC | | | | ScP | | | **ScP** | **08 32 11.8** | **+1.6** |
| HHC | | | | PMZ | | | | | |
| | comp=Z,24nm,1.5s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,220nm,5.0s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | comp=Z,160nm,17.4s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | comp=Z,140nm,18.7s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | comp=Z,100nm,14.9s | | | | | | | | |
| **YAK** | **Yakutsk** | **26.63** | **348** | P | | | **P** | **08 25 17.2** | **-1.0** |
| | comp=Z,2.1nm,0.3s,baz=222,slow=16,SNR=3.3 | | | | | | | | |
| YAK | | | | LR | | LR | | 08 36 09.7 | |
| | comp=Z,76nm,18.9s,baz=168,slow=37 | | | | | | | | |
| **YAK** | **Yakutsk** | **26.63** | **348** | *e*P | | | **P** | **08 25 18.0** | **-0.3** |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=N,20nm,1.4s | | | | | | | | |
| YAK | | | | pmax | | pmax | | | |
| | comp=E,8.0nm,1.4s | | | | | | | | |
| **SEY** | **Seymchan** | **27.43** | **11** | P | | | **P** | **08 25 24.3** | **-1.2** |
| | comp=E,3.4nm,0.8s,baz=53,slow=20,SNR=4.0 | | | | | | | | |
| **SEY** | **Seymchan** | **27.43** | **11** | P | | | **P** | **08 25 24.3** | **-1.2** |
| SEY | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.54** | **305** | *e*P | | | **P** | **08 25 25.3** | **-1.6** |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | |
| **SONA1** | **Songino Array** | **27.96** | **305** | *e*P | | | **P** | **08 25 30.2** | **-0.5** |
| **SONM** | **Songino Array** | **27.97** | **305** | P | | | **P** | **08 25 30.3** | **-0.3** |
| | comp=Z,2.8nm,0.6s,baz=103,slow=8.9,SNR=16 | | | | | | | | |
| SONM | | | | LR | | LR | | 08 36 45.8 | |
| | comp=Z,82nm,20.3s,baz=82,slow=37 | | | | | | | | |
| **SONM** | **Songino Array** | **27.97** | **305** | P | | | **P** | **08 25 30.3** | **-0.3** |
| SONM | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| SONM | | | | MLR | | MLR | | | |
| | comp=Z,82nm,20.3s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.02** | **119** | T | | T | | 08 54 54.5 | |
| | baz=312,slow=75,SNR=43 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.02** | **119** | T | | T | | 08 55 02.2 | |
| | baz=312,slow=75,SNR=30 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.03** | **119** | T | | T | | 08 54 55.8 | |
| | baz=312,slow=75,SNR=46 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.70** | **122** | T | | T | | 08 55 54.5 | |
| | baz=314,slow=76,SNR=198 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.70** | **122** | T | | T | | 08 55 39.9 | |
| | baz=314,slow=76,SNR=94 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.72** | **122** | T | | T | | 08 55 41.1 | |
| | baz=314,slow=76,SNR=69 | | | | | | | | |
| **LZH** | **Lanzhou** | **29.98** | **281** | *e*P | | | **P** | **08 25 48.4** | **-0.3** |
| LZH | | | | pP | | | **pP** | **08 25 57.4** | **-1.7** |
| LZH | | | | sP | | | **sP** | **08 26 00.4** | **-3.1** |
| LZH | | | | PMZ | | | | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,190nm,4.2s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | comp=Z,180nm,14.5s | | | | | | | | |
| **GYA** | **Guiyang** | **30.92** | **261** | *e*P | | | **P** | **08 25 56.5** | **-0.5** |
| GYA | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **CD2** | **Chengdu** | **31.48** | **271** | *e*P | | | **P** | **08 26 01.5** | **-0.3** |
| CD2 | | | | pP | | | **pP** | **08 26 11.4** | **-0.8** |
| CD2 | | | | S | | | **S** | **08 31 07.4** | **-0.1** |
| CD2 | | | | sS | | | **sS** | **08 31 23.8** | **-0.9** |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,120nm,5.0s | | | | | | | | |
| **GTA** | **Gaotai** | **32.56** | **288** | *e*P | | | **P** | **08 26 12.1** | **+0.8** |
| GTA | | | | pP | | | **pP** | **08 26 21.6** | **-0.1** |
| GTA | | | | sP | | | **sP** | **08 26 25.5** | **-0.7** |
| GTA | | | | S | | | **S** | **08 31 26.3** | **+2.0** |
| GTA | | | | sS | | | **sS** | **08 31 42.4** | **+0.8** |
| GTA | | | | PMZ | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,55nm,4.4s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | comp=Z,210nm,19.5s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | comp=Z,320nm,19.0s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | comp=Z,130nm,18.5s | | | | | | | | |
| **BILL** | **Bilibino** | **34.67** | **16** | P | | | **P** | **08 26 29.0** | **-0.2** |
| BILL | | | | *e**PP | | | **pP** | **08 26 40.4** | **+0.7** |
| BILL | | | | *e**SP | | | **sP** | **08 26 44.8** | **+0.7** |
| BILL | | | | | | | | 08 29 04.0 | |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,23nm,1.6s | | | | | | | | |
| BILL | | | | MLR | | MLR | | | |
| | comp=Z,70nm,24.0s | | | | | | | | |
| **KMI** | **Kunming** | **34.67** | **262** | P | | | **P** | **08 26 29.9** | **-0.1** |
| KMI | | | | PMZ | | | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | | |
| **WMQ** | **Urumqi** | **40.94** | **297** | *e*P | | | **P** | **08 27 23.0** | **+0.5** |
| WMQ | | | | PP | | | **PnPn** | **08 29 01.0** | **-0.6** |
| WMQ | | | | S | | | **S** | **08 33 28.0** | **-3.8** |
| WMQ | | | | SS | | | SS | 08 36 26.0 | -8.1 |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,18nm,5.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,47nm,15.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,91nm,16.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,55nm,16.0s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.15** | **256** | LR | | LR | | 08 46 40.0 | |
| | comp=Z,51nm,18.3s,baz=82,slow=39 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **42.18** | **313** | *e*P | | | **P** | **08 27 32.3** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **42.18** | **313** | P | | | **P** | **08 27 32.5** | **+0.1** |
| | comp=Z,6.9nm,0.5s,baz=94,slow=7.0,SNR=31 | | | | | | | | |
| ZALV | | | | LR | | LR | | 08 45 45.7 | |
| | comp=Z,39nm,18.5s,baz=64,slow=37 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.18** | **313** | P | | | **P** | **08 27 32.5** | **+0.1** |
| ZALV | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | | |
| ZALV | | | | MLR | | MLR | | | |
| | comp=Z,39nm,18.5s | | | | | | | | |
| **NVS** | **Novosibirsk** | **43.12** | **314** | *e*P | | | P | 08 27 36.5 | -3.5 |
| **MK01** | **Makanchi Array** | **44.27** | **303** | *e*P | | | **P** | **08 27 49.3** | **-0.2** |
| **MKAR** | **Makanchi Array** | **44.28** | **303** | P | | | **P** | **08 27 49.4** | **-0.1** |
| | comp=Z,2.8nm,0.8s,baz=88,slow=11,SNR=11 | | | | | | | | |
| MKAR | | | | LR | | LR | | 08 47 03.0 | |
| | comp=Z,44nm,20.1s,baz=75,slow=37 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.28** | **303** | P | | | **P** | **08 27 49.4** | **-0.1** |
| MKAR | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| MKAR | | | | MLR | | MLR | | | |
| | comp=Z,44nm,20.1s | | | | | | | | |
| **TAPN** | **Taplejung** | **45.78** | **274** | *e*P | | | **P** | **08 28 02.5** | **+0.5** |
| | comp=Z,9.5nm,0.5s | | | | | | | | |
| **KAPI** | **Kappang** | **45.83** | **210** | P | | | **P** | **08 28 02.0** | **-0.1** |
| | comp=Z,3.0nm,0.4s,baz=64,slow=5.2,SNR=4.7 | | | | | | | | |
| **KAPI** | **Kappang** | **45.83** | **210** | *e*P | | | **P** | **08 27 59.6** | **-2.4** |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **KURK** | **Kurchatov** | **46.15** | **309** | *e*P | | | **P** | **08 28 03.9** | **-0.4** |
| KURK | | | | *e**PP | | | **pP** | **08 28 15.7** | **+0.7** |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,31nm,0.7s | | | | | | | | |
| **KURK** | **Kurchatov** | **46.15** | **309** | *e*P | | | **P** | **08 28 03.9** | **-0.4** |
| | comp=Z,31nm,0.7s | | | | | | | | |
| KURK | | | | *e*pP | | | **pP** | **08 28 15.7** | **+0.7** |
| **ODAN** | **Odare** | **46.25** | **274** | *e*P | | | **P** | **08 28 06.4** | **+0.7** |
| **RAMN** | **Ramite** | **46.85** | **275** | *e*P | | | **P** | **08 28 10.3** | **0.0** |
| | comp=Z,52nm,1.0s | | | | | | | | |
| **GUN** | **Gumba** | **47.02** | **276** | *e*P | | | **P** | **08 28 12.1** | **+0.3** |
| | comp=Z,34nm,0.9s | | | | | | | | |
| **PKI** | **Pulchoki** | **47.54** | **276** | *e*P | | | **P** | **08 28 15.5** | **-0.3** |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **PKIN** | **Phulchoki** | **47.55** | **276** | *e*P | | | **P** | **08 28 15.5** | **-0.3** |
| **KKN** | **Kakani** | **47.55** | **276** | *e*P | | | **P** | **08 28 15.8** | **0.0** |
| | comp=Z,24nm,0.9s | | | | | | | | |
| **DMN** | **Daman** | **47.77** | **276** | *e*P | | | **P** | **08 28 17.4** | **-0.1** |
| **GKN** | **Gorkha** | **47.97** | **277** | *e*P | | | **P** | **08 28 19.2** | **+0.2** |
| **KOLN** | **Koldanda** | **48.90** | **277** | *e*P | | | **P** | **08 28 26.1** | **-0.1** |
| **MDM** | **Murphy Dome** | **49.54** | **32** | *e*P | | | **P** | **08 28 32.0** | **+1.7** |
| | comp=Z,128nm,3.0s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **49.75** | **299** | *e*P | | | **P** | **08 28 31.1** | **-1.4** |
| TKM2 | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **49.75** | **299** | *e*P | | | **P** | **08 28 31.1** | **-1.4** |
| | comp=Z,6.1nm,0.6s | | | | | | | | |
| **IL1** | **Eielson Array** | **50.12** | **32** | *e*P | | | **P** | **08 28 34.9** | **+0.2** |
| **ILAR** | **Eielson Array** | **50.12** | **32** | P | | | **P** | **08 28 35.3** | **+0.6** |
| | comp=Z,2.2nm,0.8s,baz=270,slow=6.4,SNR=24 | | | | | | | | |
| **ILAR** | **Eielson Array** | **50.12** | **32** | P | | | **P** | **08 28 35.3** | **+0.6** |
| ILAR | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **COEN** | **Coen** | **50.14** | **177** | *e*P | | | **P** | **08 28 36.0** | **+0.6** |
| **KSH** | **Kashi** | **50.47** | **294** | P | | | P | 08 28 42.3 | +4.4 |
| KSH | | | | *e*pP | | | pP | 08 28 52.3 | +3.5 |
| KSH | | | | *e*ScP | | | **ScP** | **08 33 51.1** | **+2.3** |
| KSH | | | | S | | | **S** | **08 35 53.8** | **+4.5** |
| KSH | | | | ScS | | | **ScS** | **08 38 27.3** | **+1.2** |
| KSH | | | | PMZ | | | | | |
| | comp=Z,66nm,5.4s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,110nm,6.2s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,74nm,5.4s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,130nm,5.7s | | | | | | | | |
| **AAK** | **Ala-Archa** | **50.61** | **299** | *e*P | | | **P** | **08 28 38.7** | **-0.2** |
| AAK | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **AAK** | **Ala-Archa** | **50.61** | **299** | *e*P | | | **P** | **08 28 38.9** | **-0.1** |
| | comp=Z,2.9nm,0.6s | | | | | | | | |
| **BRVK** | **Borovoye** | **50.89** | **313** | *e*P | | | **P** | **08 28 40.9** | **+0.2** |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.43** | **188** | P | | | **P** | **08 29 22.7** | **+1.2** |
| | comp=Z,1.0nm,0.5s,baz=6.0,slow=7.7,SNR=3.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.43** | **188** | P | | | **P** | **08 29 22.7** | **+1.2** |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **ARU** | **Arti** | **56.69** | **319** | P | | | **P** | **08 29 22.6** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=270,slow=20,SNR=2.4 | | | | | | | | |
| **ARU** | **Arti** | **56.69** | **319** | *c* | *i*P | | **P** | **08 29 22.5** | **-0.5** |
| ARU | | | | | S | | **S** | **08 37 13.8** | **+1.1** |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **ARU** | **Arti** | **56.69** | **319** | *e*P | | | **P** | **08 29 22.4** | **-0.5** |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **KBL** | **Kabul** | **57.45** | **291** | ⇑*e*P | | | **P** | **08 29 29.9** | **+0.9** |
| **AKTO** | **Aktyubinsk** | **58.94** | **312** | P | | | **P** | **08 29 37.8** | **-1.1** |
| | comp=Z,1.1nm,0.5s,baz=82,slow=16,SNR=4.5 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **58.94** | **312** | P | | | **P** | **08 29 37.8** | **-1.1** |
| AKTO | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **60.15** | **188** | P | | | **P** | **08 29 47.0** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=357,slow=6.5,SNR=4.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **60.15** | **188** | P | | | **P** | **08 29 47.0** | **-0.5** |
| ASAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **GEYT** | **Alibeck** | **63.96** | **299** | P | | | **P** | **08 30 13.1** | **0.0** |
| | comp=Z,1.3nm,0.4s,baz=82,slow=3.1,SNR=2.9 | | | | | | | | |
| GEYT | | | | LR | | LR | | 08 59 31.7 | |
| | comp=Z,28nm,18.9s,baz=105,slow=37 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **64.50** | **339** | P | | | **P** | **08 30 15.9** | **-0.1** |
| | comp=Z,1.4nm,0.7s,baz=39,slow=7.8,SNR=4.6 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **64.50** | **339** | P | | | **P** | **08 30 16.0** | **-0.1** |
| ARCES | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **FINES** | **FINESS Array B** | **69.26** | **332** | P | | | **P** | **08 30 45.5** | **-0.8** |
| | comp=Z,3.1nm,0.8s,baz=108,slow=6.2,SNR=7.5 | | | | | | | | |
| **FINES** | **FINESS Array B** | **69.26** | **332** | P | | | **P** | **08 30 45.6** | **-0.8** |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **KBZ** | **Khabaz** | **71.15** | **311** | P | | | **P** | **08 30 58.6** | **+0.3** |
| | comp=Z,2.0nm,0.9s,baz=213,slow=3.3,SNR=5.2 | | | | | | | | |
| **KBZ** | **Khabaz** | **71.15** | **311** | P | | | **P** | **08 30 58.6** | **+0.3** |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **KIV** | **Kislovodsk** | **71.16** | **311** | *e*P | | | **P** | **08 30 59.4** | **+0.9** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| KIV | | | | MLR | | MLR | | | |
| | comp=Z,18nm,17.0s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.66** | **322** | P | | | **P** | **08 31 18.2** | **-0.7** |
| | comp=Z,1.5nm,0.6s,baz=45,slow=5.9,SNR=8.3 | | | | | | | | |
| AKASG | | | | pP | | | **pP** | **08 31 30.3** | **0.0** |
| | comp=Z,0.7nm,0.4s,baz=46,slow=5.6,SNR=4.3 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.66** | **322** | P | | | **P** | **08 31 18.2** | **-0.7** |
| AKASG | | | | *PP | | | **pP** | **08 31 30.3** | **0.0** |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **KIEV** | **Kiev** | **74.67** | **322** | *e*P | | | **P** | **08 31 16.8** | **-2.2** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **74.67** | **337** | P | | | **P** | **08 31 18.7** | **-0.2** |
| | comp=Z,1.7nm,0.7s,baz=40,slow=5.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.67** | **337** | P | | | **P** | **08 31 18.6** | **-0.4** |
| | comp=Z,2.7nm,0.8s,baz=39,slow=5.7,SNR=8.7 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.67** | **337** | P | | | **P** | **08 31 18.6** | **-0.4** |
| NOA | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.52** | **53** | P | | | **P** | **08 31 25.7** | **+1.2** |
| | comp=Z,0.7nm,0.8s,baz=292,slow=4.7,SNR=6.2 | | | | | | | | |
| **MALT** | **Malatya** | **76.99** | **308** | *c**e*P | | | **P** | **08 31 35.5** | **+2.8** |
| **BUR04** | **Bucovina Ar. S** | **78.67** | **322** | *e*P | | | **P** | **08 31 41.8** | **0.0** |
| **BRTR** | **Keskin Array B** | **79.11** | **312** | P | | | **P** | **08 31 45.0** | **+0.6** |
| | comp=Z,1.4nm,0.9s,baz=66,slow=3.0,SNR=6.2 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.11** | **312** | P | | | **P** | **08 31 45.0** | **+0.6** |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **BR231** | **Keskin MP Arra** | **79.55** | **312** | *e*P | | | **P** | **08 31 45.6** | **-1.2** |
| **RAYN** | **Ar Rayn** | **80.70** | **292** | *e*P | | | **P** | **08 31 52.8** | **-0.4** |
| | comp=Z,12nm,1.5s | | | | | | | | |
| **VYHS** | **Vyhne** | **81.11** | **325** | *e*P | | | **P** | **08 31 53.4** | **-1.5** |
| **VYHS** | **Vyhne** | **81.11** | **325** | *e*P | | | **P** | **08 31 53.4** | **-1.5** |
| **BRG** | **Berggiesshubel** | **81.48** | **329** | *e*(P) | | | **P** | **08 31 57.0** | **+0.2** |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **81.48** | **329** | *e*P | | | **P** | **08 31 57.0** | **+0.2** |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **81.53** | **330** | *e*P | | | **P** | **08 31 57.0** | **0.0** |
| **CLL** | **Collm** | **81.53** | **330** | *e*P | | | **P** | **08 31 57.0** | **0.0** |
| CLL | | | | LmV | | | | 09 25 00.0 | |
| | comp=Z,100nm,18.5s | | | | | | | | |
| **GERES** | **GERESS Array B** | **83.13** | **328** | P | | | **P** | **08 32 05.1** | **-0.5** |
| | comp=Z,0.6nm,0.5s,baz=54,slow=8.6,SNR=4.7 | | | | | | | | |
| GERES | | | | pP | | | **pP** | **08 32 17.6** | **+0.6** |
| | comp=Z,0.5nm,0.4s,baz=33,slow=6.1,SNR=4.8 | | | | | | | | |
| **GERES** | **GERESS Array B** | **83.13** | **328** | P | | | **P** | **08 32 05.1** | **-0.5** |
| GERES | | | | *PP | | | **pP** | **08 32 17.6** | **+0.6** |
| GERES | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| GERES | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **GRFO** | **Grafenberg** | **83.50** | **330** | *e*P | | | **P** | **08 32 07.9** | **+0.5** |
| GRFO | | | | *e* | | | | 08 35 13.8 | |
| **GRFO** | **Grafenberg** | **83.50** | **330** | *e*P | | | **P** | **08 32 07.9** | **+0.5** |
| GRFO | | | | *e*PP | | | PP | 08 35 13.8 | -5.4 |
| **TXAR** | **Lajitas Array** | **90.66** | **52** | P | | | **P** | **08 32 43.2** | **+0.6** |
| | comp=Z,0.4nm,0.8s,baz=290,slow=5.2,SNR=5.2 | | | | | | | | |
| TXAR | | | | pP | | | **pP** | **08 32 56.7** | **+2.5** |
| | comp=Z,0.3nm,0.8s,baz=318,slow=1.7,SNR=3.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **117.62** | **314** | PKP | | | **PKPdf** | **08 38 25.3** | **-0.9** |
| | comp=Z,0.3nm,0.9s,baz=29,slow=3.3,SNR=2.2 | | | | | | | | |

*ISCJB **17** 08:20:10.7±0.4,50°.04N±0°.03×18°.37E±0°.03,h0km, Error ellipse: s-maj=4.5km s-min=2.4km az=14.8*
*CSEM **17** 08:20:11.9±0.2,50°.01N×18°.40E,h2km,ML3.1/9, Error ellipse: s-maj=5.4km s-min=3.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PVCC** | **Panska Ves** | **2.53** | **283** | *e*SG | **Sg** | **08** | **21** | **32.6** | **-0.6** |
| | comp=Z,24nm,0.3s | | | | | | | | |
| **PVCC** | **Panska Ves** | **2.53** | **283** | Sg | **Sg** | **08** | **21** | **32.6** | **-0.6** |
| | 24nm,0.3s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **3.00** | **289** | PG | **Pb** | **08** | **21** | **07.5** | **+1.4** |
| BRG | | | | SG | **Sg** | **08** | **21** | **45.6** | **-2.5** |
| | 7.3nm,0.3s | | | | | | | | |
| **MOA** | **Molln** | **3.49** | **233** | ⇑*i*Sg | **Sg** | **08** | **22** | **02.3** | **-1.7** |
| | 9.6nm,0.6s | | | | | | | | |
| **MOA** | **Molln** | **3.49** | **233** | Sg | **Sg** | **08** | **22** | **02.3** | **-1.7** |
| | 9.6nm,0.6s | | | | | | | | |
| **CLL** | **Collm** | **3.69** | **293** | *e*Sg | **Sg** | **08** | **22** | **09.0** | **-1.4** |
| | comp=Z,6.0nm,0.6s | | | | | | | | |

**IDC 17 08:22:00.9±3.6, 5°15S×133°64E, h0km, mb3.9/2, mb1 4.3/5, mb1mx3.8/35, mbtmp4.1/5, ML4.1/3, Error ellipse: s-maj=147.4km s-min=26.2km az=73.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **4.87** | **331** | Pn | Pn | 08 23 13.4 | -2.0 |
| | 4.8nm,0.3s,baz=256,slow=22,SNR=19 | | | | | | |
| SIJI | | | | Sn | Sn | 08 24 00.9 | -12 |
| | 7.6nm,0.3s,baz=37,slow=23,SNR=6.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.72** | **177** | Pn | Pn | 08 25 28.8 | -1.8 |
| | 0.8nm,0.3s,baz=7.1,slow=13,SNR=42 | | | | | | |
| WRA | | | | Sn | Sn | 08 28 06.4 | -8.1 |
| | 0.3nm,0.3s,baz=355,slow=23,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **18.41** | **179** | P | Pn | 08 26 17.8 | 0.0 |
| | 0.9nm,0.3s,baz=0.0,slow=12,SNR=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.47** | **305** | P | P | 08 29 50.0 | +0.1 |
| | 1.0nm,0.5s,baz=111,slow=10.0,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.74** | **325** | P | P | 08 33 07.1 | +0.5 |
| | 0.3nm,0.5s,baz=139,slow=9.2,SNR=3.2 | | | | | | |

*IDC 17 08:27:47.9±0.5, 11°.69S×72°.21W, h0km, mb4.6/16, mb1 4.8/21, mb1mx4.7/29, mbtmp4.7/21, ML4.3/4, MS4.0/19, Ms1 4.0/19, ms1mx3.9/23, Error ellipse: s-maj=18.4km s-min=12.4km az=59.0*

*NEIC 17 08:27:49.1±1.8, 11°.70S×72°.22W, h6km±11km, mb5.2/64, ML4.9(ARE), Error ellipse: s-maj=6.7km s-min=3.7km az=63.0*

*GCMT 17 08:27:49.8±0.3, 11°.52S×72°.37W, h14km±1km, MW4.8/68, Moment Tensor Solution. s31,c35; s68,c95; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr1.48±.10; Mθθ-1.59±.08; Mφφ0.11±.09; Mrθ-1.25±.19; Mθφ0.32±.06; Mφr0.50±.23; Best double couple: M◎2.06500×10¹⁶ NP1:φs288.00000°, δ65.00000°, λ97.00000°. NP2: φs91.00000°, δ25.00000°, λ75.00000°. Principal axes: T 1.9960, Plg69.0000°, Azm212.0000°; N 0.1420, Plg7.0000°, Azm105.0000°; P -2.1330, Plg20.0000°, Azm13.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*BJI 17 08:27:49.9, 11°.70S×72°.20W, h10km, mB5.1/13, Ms5.3/9, Ms7 4.9/10*

*MOS 17 08:27:51.8±1.1, 11°.68S×72°.40W, h33km, mb5.3/22, Error ellipse: s-maj=14.9km s-min=6.0km az=117.5*

*ISCJB 17 08:27:51.6±0.2, 11°.71S±0°.03×72°.23W±0°.03, h33km, mb5.0/81, MS4.0/15, Error ellipse: s-maj=5.4km s-min=3.9km az=135.8*

**ISC 17 08:27:53.2±0.3, 11°.77S±0°.05×72°.26W±0°.05, h35km, n655, σ1§13/667, mb5.1/81, MS4.0/15, 1C, Central Peru**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NNA** | **Nana** | **4.49** | **267** | Pn | **Pn** | **08 28 57.0** | **-1.8** |
| | 37nm,0.3s,baz=89,slow=13,SNR=40 | | | | | | |
| NNA | | | | Sn | **Sn** | **08 29 49.7** | **-0.1** |
| | 63nm,0.3s,baz=274,slow=14,SNR=5.0 | | | | | | |
| NNA | | | | LR | LR | 08 31 04.6 | |
| | comp=Z,923nm,19.6s,baz=304,slow=43 | | | | | | |
| **NNA** | **Nana** | **4.49** | **267** | *e*P | **Pn** | **08 28 57.0** | **-1.8** |
| NNA | | | | *e* | | 08 29 50.8 | |
| **NNA** | **Nana** | **4.49** | **267** | Pn | **Pn** | **08 28 57.5** | **-1.3** |
| | 1μm,0.5s,SNR=24 | | | | | | |
| **NNA** | **Nana** | **4.49** | **267** | *e*Pn | **Pn** | **08 28 57.0** | **-1.8** |
| NNA | | | | *e*Sn | **Sn** | **08 29 50.8** | **+1.0** |
| **ARE** | **Arequipa** | **4.73** | **171** | *e*P | **Pn** | **08 29 04.0** | **+1.7** |
| **ARE** | **Arequipa** | **4.73** | **171** | *e*P | **Pn** | **08 29 04.0** | **+1.7** |
| **LPAZ** | **La Paz** | **6.02** | **139** | Pn | **Pn** | **08 29 22.0** | **+1.6** |
| | 6.9nm,0.3s,baz=323,slow=10,SNR=171 | | | | | | |
| LPAZ | | | | Lg | Lg | 08 31 02.1 | |
| | 19nm,0.3s,baz=49,slow=20,SNR=3.9 | | | | | | |
| **ATAH** | **Atahualpa** | **7.60** | **307** | Pn | **Pn** | **08 29 40.5** | **-1.3** |
| | 14nm,0.3s,baz=114,slow=5.7,SNR=38 | | | | | | |
| ATAH | | | | Sn | **Sn** | **08 31 07.1** | **0.0** |
| | 10nm,0.3s,baz=253,slow=19,SNR=2.5 | | | | | | |
| ATAH | | | | LR | LR | 08 33 16.1 | |
| | comp=Z,854nm,21.3s,baz=131,slow=43 | | | | | | |
| **SAML** | **Samuel** | **9.36** | **73** | *e*Pn | **Pn** | **08 30 06.7** | **+1.0** |
| SAML | | | | *e*Sn | **Sn** | **08 31 49.6** | **-0.2** |
| **LVC** | **Limon Verde** | **11.25** | **164** | Pn | **Pn** | **08 30 29.1** | **-2.7** |
| | 68nm,0.3s,baz=328,slow=7.9,SNR=14 | | | | | | |
| LVC | | | | Sn | **Sn** | **08 32 35.6** | **-0.9** |
| | 34nm,0.3s,baz=142,slow=19,SNR=3.4 | | | | | | |
| LVC | | | | LR | LR | 08 35 19.0 | |
| | comp=Z,5μm,20.5s,baz=319,slow=40 | | | | | | |
| **SIV** | **San Ignacio** | **11.65** | **112** | LR | LR | 08 34 53.1 | |
| | comp=Z,255nm,19.4s,baz=300,slow=37 | | | | | | |
| **OTAV** | **Otavalo** | **13.42** | **332** | *e*Pn | **Pn** | **08 30 59.6** | **-2.0** |
| **PTGA** | **Pitinga** | **16.41** | **49** | Pn | **Pn** | **08 31 37.7** | **-3.2** |
| | 6.6nm,0.3s,baz=228,slow=13,SNR=94 | | | | | | |
| PTGA | | | | Sn | Sn | 08 34 30.4 | -12 |
| | 7.7nm,0.3s,baz=342,slow=20,SNR=4.5 | | | | | | |
| PTGA | | | | Lg | Lg | 08 36 19.2 | |
| | 2.9nm,0.3s,baz=108,slow=20,SNR=2.0 | | | | | | |
| **PTGA** | **Pitinga** | **16.41** | **49** | *e*Pn | **Pn** | **08 31 37.7** | **-3.2** |
| | 76nm,0.8s | | | | | | |
| PTGA | | | | Sn | Sn | 08 34 30.4 | -12 |
| PTGA | | | | Lg | Lg | 08 36 19.2 | |
| **ROSC** | **El Rosal** | **16.64** | **353** | Pn | **Pn** | **08 31 43.8** | **-0.5** |
| | 3.0nm,0.3s,baz=250,slow=22,SNR=16 | | | | | | |
| ROSC | | | | LR | LR | 08 38 33.3 | |
| | comp=Z,1μm,18.2s,baz=192,slow=39 | | | | | | |
| **LCO** | **Las Campanas** | **17.22** | **175** | *e*P | **Pn** | **08 31 52.2** | **+0.9** |
| | 31nm,1.2s | | | | | | |
| **CFAA** | **Coronel Fontan** | **20.09** | **170** | P | **P** | **08 32 23.7** | **-0.2** |
| | 1.5nm,0.7s,baz=342,slow=11,SNR=35 | | | | | | |
| **CPUP** | **Villa Florida** | **20.20** | **138** | P | **P** | **08 32 23.7** | **-1.3** |
| | 8.1nm,0.5s,baz=318,slow=9.7,SNR=37 | | | | | | |
| **CPUP** | **Villa Florida** | **20.20** | **138** | *e*P | **P** | **08 32 24.2** | **-0.8** |
| **CPUP** | **Villa Florida** | **20.20** | **138** | *e*P | **P** | **08 32 24.2** | **-0.8** |
| **SDV** | **Santo Domingo** | **20.58** | **5** | *e*P | **P** | **08 32 29.4** | **0.0** |
| | 9.5nm,0.6s | | | | | | |
| SDV | | | | S | **S** | **08 36 15.3** | **-2.7** |
| **BCIP** | **Isla Barro Col** | **22.12** | **340** | *e*P | **P** | **08 32 44.6** | **-1.2** |
| | 62nm,1.1s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **23.08** | **19** | P | **P** | **08 32 53.3** | **-2.6** |
| | 10nm,0.6s,baz=187,slow=9.7,SNR=16 | | | | | | |
| **BDFB** | **Brasilia** | **23.86** | **102** | P | **P** | **08 33 04.9** | **+1.2** |
| | 30nm,0.7s,baz=265,slow=11,SNR=57 | | | | | | |
| BDFB | | | | LR | LR | 08 43 15.8 | |
| | comp=Z,367nm,22.0s,baz=244,slow=39 | | | | | | |
| **BDFB** | **Brasilia** | **23.86** | **102** | *e*P | **P** | **08 33 05.1** | **+1.4** |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,271nm,1.6s | | | | | | |
| **BDFB** | **Brasilia** | **23.86** | **102** | *e*P | **P** | **08 33 05.1** | **+1.4** |
| | comp=Z,271nm,1.6s | | | | | | |
| **JTS** | **JuntasAbangare** | **25.28** | **330** | P | **P** | **08 33 17.5** | **+1.0** |
| | comp=Z,18nm,1.2s,baz=146,slow=9.1,SNR=4.6 | | | | | | |
| **PLCA** | **Paso Flores** | **28.89** | **177** | *e*P | **P** | **08 33 48.3** | **-0.5** |
| PLCA | | | | pmax | pmax | | |
| | comp=Z,15nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **28.89** | **177** | *e*P | **P** | **08 33 48.3** | **-0.5** |
| | comp=Z,15nm,0.8s | | | | | | |
| **USHA** | **Ushuaia** | **43.07** | **177** | P | **P** | **08 35 50.0** | **+0.5** |
| | comp=Z,13nm,0.6s,baz=350,slow=8.7,SNR=18 | | | | | | |
| **BRAL** | **Brewton** | **44.84** | **342** | *e*P | **P** | **08 36 03.9** | **-0.2** |
| | comp=Z,50nm,1.0s | | | | | | |
| **NHSC** | **New Hope** | **45.26** | **351** | *e*P | **P** | **08 36 06.8** | **-0.5** |
| | comp=Z,111nm,1.2s | | | | | | |
| **GOGA** | **Godfrey** | **46.18** | **347** | *e*P | **P** | **08 36 14.4** | **-0.2** |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,55nm,1.5s | | | | | | |
| **GOGA** | **Godfrey** | **46.18** | **347** | *e*P | **P** | **08 36 14.4** | **-0.2** |
| | comp=Z,55nm,1.5s | | | | | | |
| **034A** | **Hebbronville** | **46.34** | **327** | P | **P** | **08 36 16.4** | **+0.4** |
| | baz=46 | | | | | | |
| **JSC** | **Jenkinsville** | **46.59** | **350** | *e*P | **P** | **08 36 17.9** | **+0.1** |
| JSC | | | | pmax | pmax | | |
| | comp=Z,74nm,2.0s | | | | | | |
| **JSC** | **Jenkinsville** | **46.59** | **350** | *e*P | **P** | **08 36 17.9** | **+0.1** |
| | comp=Z,74nm,2.0s | | | | | | |
| **LRAL** | **Lakeview Retre** | **46.72** | **343** | *e*P | **P** | **08 36 17.6** | **-1.2** |
| | comp=Z,13nm,1.1s | | | | | | |
| LRAL | | | | *e*PcP | **PcP** | **08 37 51.6** | **-0.4** |
| **835A** | **Beeville** | **46.88** | **329** | P | **P** | **08 36 21.3** | **+1.1** |
| | baz=47 | | | | | | |
| **637A** | **Eagle Lake** | **47.09** | **331** | P | **P** | **08 36 23.1** | **+1.3** |
| | baz=47 | | | | | | |
| **VBMS** | **Vicksburg** | **47.10** | **339** | P | **P** | **08 36 21.8** | **0.0** |
| | baz=47 | | | | | | |
| **933A** | **Laredo** | **47.10** | **327** | P | **P** | **08 36 21.8** | **-0.1** |
| | baz=47 | | | | | | |
| **HKT** | **Hockley** | **47.28** | **332** | *e*P | **P** | **08 36 22.5** | **-0.8** |
| HKT | | | | pmax | pmax | | |
| | comp=Z,49nm,1.9s | | | | | | |
| **HKT** | **Hockley** | **47.28** | **332** | *e*P | **P** | **08 36 22.5** | **-0.8** |
| | comp=Z,50nm,1.9s | | | | | | |
| **KMSC** | **Kings Mountain** | **47.44** | **350** | P | **P** | **08 36 24.6** | **+0.2** |
| | baz=48 | | | | | | |
| **KMSC** | **Kings Mountain** | **47.44** | **350** | *e*P | **P** | **08 36 23.9** | **-0.5** |
| | comp=Z,91nm,1.7s | | | | | | |
| **340A** | **Bronson** | **47.69** | **335** | P | **P** | **08 36 26.3** | **-0.1** |
| | baz=48 | | | | | | |
| **733A** | **Divot King Ran** | **47.99** | **328** | P | **P** | **08 36 28.8** | **0.0** |
| | baz=48 | | | | | | |
| **832A** | **Faith Ranch, C** | **48.01** | **327** | P | **P** | **08 36 28.2** | **-0.7** |
| | baz=48 | | | | | | |
| **338A** | **Crockett** | **48.24** | **333** | P | **P** | **08 36 31.1** | **+0.3** |
| | baz=48 | | | | | | |
| **732A** | **Laxson Ranch,** | **48.35** | **327** | P | **P** | **08 36 31.3** | **-0.3** |
| | baz=48 | | | | | | |
| **CPCT** | **Cooper Cave** | **48.37** | **347** | *e*P | **P** | **08 36 31.0** | **-0.7** |
| **TKL** | **Tuckaleechee C** | **48.41** | **347** | *e*P | **P** | **08 36 31.5** | **-0.5** |
| **TKL** | **Tuckaleechee C** | **48.41** | **347** | *e*P | **P** | **08 36 31.4** | **-0.5** |
| **337A** | **Centerville** | **48.47** | **333** | P | **P** | **08 36 33.9** | **+1.4** |
| | baz=49 | | | | | | |
| **SWET** | **Sewanee** | **48.49** | **345** | *e*P | **P** | **08 36 31.8** | **-0.8** |
| | comp=Z,36nm,0.9s | | | | | | |
| **633A** | **Saathoff Ranch** | **48.52** | **328** | P | **P** | **08 36 33.1** | **+0.2** |
| | baz=49,SNR=7.6 | | | | | | |
| **238A** | **Jacksonville** | **48.72** | **334** | P | **P** | **08 36 35.3** | **+0.9** |
| | baz=49 | | | | | | |
| **435B** | **Jarrell** | **48.81** | **331** | P | **P** | **08 36 36.2** | **+1.1** |
| | baz=49 | | | | | | |
| **OXF** | **Oxford** | **48.82** | **341** | *e*P | **P** | **08 36 34.1** | **-1.0** |
| OXF | | | | *e* | | 08 36 46.4 | |
| OXF | | | | pmax | pmax | | |
| | comp=Z,41nm,1.1s | | | | | | |
| **OXF** | **Oxford** | **48.82** | **341** | *e*P | **P** | **08 36 34.1** | **-1.0** |
| | comp=Z,42nm,1.1s | | | | | | |
| OXF | | | | *e* | | 08 36 46.4 | |
| **533A** | **Kerrville** | **48.94** | **329** | P | **P** | **08 36 36.9** | **+0.7** |
| | baz=49 | | | | | | |
| **237A** | **Washetta, Mont** | **49.01** | **333** | P | **P** | **08 36 38.0** | **+1.4** |
| | baz=49 | | | | | | |
| **335A** | **Moody** | **49.15** | **331** | P | **P** | **08 36 38.6** | **+0.9** |
| | baz=49 | | | | | | |
| **TZTN** | **Tazewell** | **49.21** | **348** | *e*P | **P** | **08 36 37.6** | **-0.6** |
| | comp=Z,59nm,1.5s | | | | | | |
| **631A** | **Perdido Creek** | **49.22** | **327** | P | **P** | **08 36 39.1** | **+0.8** |
| | baz=49,SNR=10 | | | | | | |
| **138A** | **Matatall Enter** | **49.27** | **334** | P | **P** | **08 36 39.9** | **+1.3** |
| | baz=50,SNR=8.1 | | | | | | |
| **Z39A** | **Irene McRaven,** | **49.40** | **336** | P | **P** | **08 36 41.1** | **+1.5** |
| | baz=50 | | | | | | |
| **532A** | **Rocksprings** | **49.43** | **328** | P | **P** | **08 36 40.8** | **+0.8** |
| | baz=50 | | | | | | |
| **137A** | **Heron Place, G** | **49.50** | **334** | P | **P** | **08 36 41.4** | **+1.0** |
| | baz=50,SNR=5.3 | | | | | | |
| **433A** | **Art** | **49.52** | **329** | P | **P** | **08 36 41.3** | **+0.7** |
| | baz=50 | | | | | | |
| **334A** | **Lometa** | **49.57** | **331** | P | **P** | **08 36 42.0** | **+1.0** |
| | baz=50 | | | | | | |
| **JCT** | **Junction City** | **49.66** | **328** | *e*P | **P** | **08 36 43.5** | **+1.8** |
| JCT | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **JCT** | **Junction City** | **49.66** | **328** | P | **P** | **08 36 42.5** | **+0.8** |
| | baz=50 | | | | | | |
| **JCT** | **Junction City** | **49.66** | **328** | *e*P | **P** | **08 36 43.5** | **+1.8** |
| | comp=Z,9.5nm,1.3s | | | | | | |
| **Z38A** | **Mt. Pleasant** | **49.73** | **335** | P | **P** | **08 36 43.4** | **+1.3** |
| | baz=50 | | | | | | |
| **136A** | **Ennis** | **49.74** | **333** | P | **P** | **08 36 43.6** | **+1.4** |
| | baz=50 | | | | | | |
| **WHTX** | **Lake Whitney** | **49.75** | **332** | P | **P** | **08 36 43.1** | **+0.9** |
| | baz=50 | | | | | | |
| **531A** | **Rocksprings** | **49.80** | **327** | P | **P** | **08 36 43.7** | **+0.9** |
| | baz=50 | | | | | | |
| **WVT** | **Waverly** | **49.85** | **343** | *e*P | **P** | **08 36 41.6** | **-1.4** |
| **WVT** | **Waverly** | **49.85** | **343** | *e*P | **P** | **08 36 41.6** | **-1.4** |
| **Y39A** | **Lockesburg** | **49.97** | **336** | P | **P** | **08 36 45.1** | **+1.2** |
| | baz=50,SNR=19 | | | | | | |
| **UALR** | **University of** | **50.05** | **338** | *e*P | **P** | **08 36 43.8** | **-0.7** |
| | comp=Z,31nm,1.0s | | | | | | |
| **234A** | **Clairette** | **50.08** | **331** | P | **P** | **08 36 45.9** | **+1.1** |
| | baz=50 | | | | | | |
| **530A** | **J-C Ranch, Com** | **50.20** | **327** | P | **P** | **08 36 46.7** | **+0.9** |
| | baz=50 | | | | | | |
| **Y38A** | **Idabel** | **50.22** | **336** | P | **P** | **08 36 46.9** | **+1.1** |
| | baz=50,SNR=7.4 | | | | | | |
| **431A** | **Sonora** | **50.24** | **328** | P | **P** | **08 36 46.9** | **+0.8** |
| | baz=50 | | | | | | |
| **MIAR** | **Mount Ida** | **50.31** | **337** | *e*P | **P** | **08 36 45.5** | **-1.0** |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **MIAR** | **Mount Ida** | **50.31** | **337** | P | **P** | **08 36 47.5** | **+1.0** |
| | baz=50 | | | | | | |
| **MIAR** | **Mount Ida** | **50.31** | **337** | *e*P | **P** | **08 36 45.5** | **-1.0** |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **332A** | **Millersview** | **50.35** | **329** | P | **P** | **08 36 47.8** | **+0.9** |
| | baz=50 | | | | | | |
| **Z36A** | **Blue Ridge** | **50.37** | **334** | P | **P** | **08 36 48.0** | **+1.0** |
| | baz=51,SNR=7.9 | | | | | | |
| **233A** | **Rising Star** | **50.46** | **330** | P | **P** | **08 36 49.0** | **+1.2** |
| | baz=51 | | | | | | |
| **134A** | **White-Moore Ra** | **50.52** | **332** | P | **P** | **08 36 49.5** | **+1.4** |
| | baz=51 | | | | | | |
| **Y37A** | **Hugo** | **50.63** | **335** | P | **P** | **08 36 50.0** | **+1.1** |
| | baz=51,SNR=12 | | | | | | |
| **331A** | **San Angelo** | **50.64** | **328** | P | **P** | **08 36 49.8** | **+0.6** |
| | baz=51 | | | | | | |
| **430A** | **Baggett Ranch,** | **50.65** | **327** | P | **P** | **08 36 50.0** | **+0.8** |
| | baz=51,SNR=7.1 | | | | | | |
| **529A** | **Stev Forest Ra** | **50.66** | **326** | P | **P** | **08 36 50.5** | **+1.2** |
| | baz=51 | | | | | | |
| **232A** | **Coleman** | **50.72** | **330** | P | **P** | **08 36 50.7** | **+1.0** |
| | baz=51,SNR=9.4 | | | | | | |
| **Z35A** | **Perchaven, San** | **50.78** | **333** | P | **P** | **08 36 51.1** | **+1.0** |
| | baz=51 | | | | | | |
| **Y36A** | **Durant** | **50.84** | **334** | P | **P** | **08 36 52.1** | **+1.5** |
| | baz=51 | | | | | | |
| **TXAR** | **Lajitas Array** | **50.87** | **324** | P | **P** | **08 36 49.9** | **-1.1** |
| | comp=Z,1.3nm,0.6s,baz=149,slow=8.7,SNR=23 | | | | | | |
| TXAR | | | | LR | LR | 08 57 53.7 | |
| | comp=Z,64nm,19.9s,baz=0.0,slow=36 | | | | | | |
| **429A** | **Davenport Ranc** | **50.87** | **327** | P | **P** | **08 36 51.8** | **+0.9** |
| | baz=51 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **50.87** | **324** | *e*P | **P** | **08 36 50.5** | **-0.5** |
| **X38A** | **Whitesboro** | **50.91** | **336** | P | **P** | **08 36 52.6** | **+1.6** |
| | baz=51,SNR=14 | | | | | | |
| **PARMO** | **Parma** | **50.91** | **342** | *e*P | **P** | **08 36 50.1** | **-0.9** |
| **133A** | **Hamilton Ranch** | **50.95** | **331** | P | **P** | **08 36 52.9** | **+1.5** |
| | baz=51 | | | | | | |
| **X37A** | **Clayton** | **51.05** | **335** | P | **P** | **08 36 53.6** | **+1.5** |
| | baz=51,SNR=8.9 | | | | | | |
| **231A** | **Bronte** | **51.09** | **329** | P | **P** | **08 36 53.3** | **+0.8** |
| | baz=51 | | | | | | |
| **330A** | **Mertzon** | **51.11** | **328** | P | **P** | **08 36 53.1** | **+0.5** |
| | baz=51 | | | | | | |
| **Z34A** | **Collier Ranch,** | **51.12** | **332** | P | **P** | **08 36 54.1** | **+1.5** |
| | baz=51 | | | | | | |
| **W38A** | **Poteau** | **51.13** | **336** | P | **P** | **08 36 54.0** | **+1.3** |
| | baz=51,SNR=17 | | | | | | |
| **Y35A** | **Marietta** | **51.17** | **333** | P | **P** | **08 36 54.4** | **+1.4** |
| | baz=51 | | | | | | |
| **PBMO** | **Poplar Bluff** | **51.23** | **341** | *e*P | **P** | **08 36 52.2** | **-1.1** |
| | comp=Z,28nm,0.6s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **51.31** | **330** | P | **P** | **08 36 55.0** | **+0.9** |
| | baz=52 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **51.31** | **330** | *e*P | **P** | **08 36 53.9** | **-0.2** |
| | comp=Z,14nm,0.8s | | | | | | |
| **Z33A** | **Whitaker Ranch** | **51.44** | **331** | P | **P** | **08 36 55.9** | **+0.9** |
| | baz=52,SNR=9.8 | | | | | | |
| **WCI** | **Wyandotte Cave** | **51.44** | **346** | *e*P | **P** | **08 36 53.0** | **-2.0** |
| WCI | | | | pmax | pmax | | |
| | comp=Z,153nm,1.0s | | | | | | |
| **WCI** | **Wyandotte Cave** | **51.44** | **346** | *e*P | **P** | **08 36 53.0** | **-2.0** |
| | comp=Z,153nm,1.0s | | | | | | |
| **X36A** | **Centrahoma** | **51.45** | **334** | P | **P** | **08 36 56.1** | **+1.1** |
| | baz=52,SNR=5.3 | | | | | | |
| **230A** | **Sterling City** | **51.46** | **328** | P | **P** | **08 36 56.3** | **+1.0** |
| | baz=52 | | | | | | |
| **USIN** | **University of** | **51.53** | **344** | *e*P | **P** | **08 36 54.7** | **-1.0** |
| **Y34A** | **Reagan Ranch,** | **51.53** | **333** | P | **P** | **08 36 56.8** | **+1.0** |
| | baz=52 | | | | | | |
| **W37A** | **Quinton** | **51.55** | **336** | P | **P** | **08 36 57.2** | **+1.3** |
| | baz=52,SNR=10 | | | | | | |
| **X35A** | **Drake** | **51.56** | **334** | P | **P** | **08 36 57.2** | **+1.3** |
| | baz=52,SNR=6.5 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **51.59** | **327** | P | **P** | **08 36 57.1** | **+0.8** |
| | baz=52 | | | | | | |
| **131A** | **Roby** | **51.72** | **330** | P | **P** | **08 36 58.2** | **+1.0** |
| | baz=52 | | | | | | |
| **SIUC** | **Southern Illin** | **51.73** | **343** | *e*P | **P** | **08 36 56.2** | **-0.9** |
| | comp=Z,71nm,1.4s | | | | | | |
| **V38A** | **Canehill** | **51.79** | **337** | P | **P** | **08 36 58.7** | **+1.1** |
| | baz=52,SNR=19 | | | | | | |
| **W36A** | **Wetumka** | **51.88** | **335** | P | **P** | **08 36 59.5** | **+1.2** |
| | baz=52,SNR=11 | | | | | | |
| **130A** | **Snyder** | **51.95** | **329** | P | **P** | **08 36 59.9** | **+1.0** |
| | baz=52 | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **51.97** | **332** | P | **P** | **08 37 00.1** | **+1.1** |
| | baz=52 | | | | | | |
| **V37A** | **Hulbert** | **52.09** | **336** | P | **P** | **08 37 01.1** | **+1.3** |
| | baz=52,SNR=10 | | | | | | |
| **X34A** | **Smith Ranch, M** | **52.11** | **333** | P | **P** | **08 37 01.4** | **+1.4** |
| | baz=52,SNR=6.7 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **52.12** | **330** | P | **P** | **08 37 01.2** | **+1.0** |
| | baz=52,SNR=9.3 | | | | | | |
| **W35A** | **Tecumseh** | **52.16** | **334** | P | **P** | **08 37 01.9** | **+1.5** |
| | baz=52,SNR=12 | | | | | | |
| **U38A** | **Gravette** | **52.29** | **337** | P | **P** | **08 37 02.9** | **+1.6** |
| | baz=52,SNR=9.2 | | | | | | |
| **V36A** | **Jenks** | **52.32** | **336** | P | **P** | **08 37 02.8** | **+1.2** |
| | baz=52,SNR=11 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **52.35** | **331** | P | **P** | **08 37 02.9** | **+1.1** |
| | baz=52,SNR=13 | | | | | | |
| **X33A** | **Lawton** | **52.36** | **333** | P | **P** | **08 37 02.9** | **+1.0** |
| | baz=53 | | | | | | |
| **OLIL** | **Olney** | **52.37** | **344** | *e*P | **P** | **08 37 00.4** | **-1.5** |
| | comp=Z,191nm,1.8s | | | | | | |
| **TUL1** | **Tulsa** | **52.37** | **336** | P | **P** | **08 37 03.5** | **+1.6** |
| | baz=53,SNR=11 | | | | | | |
| **TUL1** | **Tulsa** | **52.37** | **336** | *e*P | **P** | **08 37 01.8** | **-0.1** |
| **BLO** | **Bloomington** | **52.39** | **346** | *e*P | **P** | **08 37 00.7** | **-1.3** |
| BLO | | | | pmax | pmax | | |
| | comp=Z,42nm,0.8s | | | | | | |
| **BLO** | **Bloomington** | **52.39** | **346** | *e*P | **P** | **08 37 00.7** | **-1.3** |
| | comp=Z,42nm,0.8s | | | | | | |
| **228A** | **UT Block 9, Go** | **52.41** | **327** | P | **P** | **08 37 03.2** | **+0.8** |
| | baz=53 | | | | | | |
| **129A** | **Stewart Farms,** | **52.43** | **328** | P | **P** | **08 37 03.7** | **+1.1** |
| | baz=53 | | | | | | |
| **U37A** | **Salina** | **52.54** | **337** | P | **P** | **08 37 04.2** | **+1.1** |
| | baz=53,SNR=13 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **52.58** | **329** | P | **P** | **08 37 04.5** | **+0.9** |
| | baz=53,SNR=9.4 | | | | | | |
| **X32A** | **Elmer** | **52.62** | **332** | P | **P** | **08 37 04.7** | **+0.9** |
| | baz=53 | | | | | | |
| **WMOK** | **Wichita Mounta** | **52.65** | **332** | *e*P | **P** | **08 37 04.1** | **0.0** |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,25nm,1.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **52.65** | **332** | *e*P | **P** | **08 37 04.0** | **0.0** |
| | comp=Z,25nm,1.8s | | | | | | |
| **V35A** | **Meyer Ranch, C** | **52.67** | **335** | P | **P** | **08 37 05.5** | **+1.4** |
| | baz=53,SNR=12 | | | | | | |
| **ACSO** | **Alum Creek Sta** | **52.68** | **350** | *e*P | **P** | **08 37 03.1** | **-1.0** |
| | comp=Z,34nm,1.4s | | | | | | |
| **Y31A** | **Rekieta Farm,** | **52.70** | **331** | P | **P** | **08 37 05.5** | **+1.0** |
| | baz=53,SNR=9.9 | | | | | | |
| **128A** | **Castleberry Fa** | **52.75** | **328** | P | **P** | **08 37 05.8** | **+0.9** |
| | baz=53 | | | | | | |
| **U36A** | **Oologah** | **52.77** | **336** | P | **P** | **08 37 06.2** | **+1.4** |
| | baz=53,SNR=9.8 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **52.85** | **329** | P | **P** | **08 37 06.3** | **+0.7** |
| | baz=53 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **52.85** | **333** | P | **P** | **08 37 06.5** | **+1.0** |
| | baz=53 | | | | | | |
| **SLM** | **Saint Louis** | **52.88** | **342** | *e*P | **P** | **08 37 04.4** | **-1.2** |
| SLM | | | | pmax | pmax | | |
| | comp=Z,115nm,1.7s | | | | | | |
| **SLM** | **Saint Louis** | **52.88** | **342** | *e*P | **P** | **08 37 04.4** | **-1.2** |
| | comp=Z,115nm,1.7s | | | | | | |
| **Y30A** | **Stafford Cattl** | **52.94** | **330** | P | **P** | **08 37 07.4** | **+1.2** |
| | baz=53 | | | | | | |
| **V34A** | **Guthrie** | **53.02** | **334** | P | **P** | **08 37 08.2** | **+1.5** |
| | baz=53,SNR=6.7 | | | | | | |
| **T37A** | **Cheneyville 18** | **53.09** | **337** | P | **P** | **08 37 08.1** | **+0.9** |
| | baz=53,SNR=28 | | | | | | |
| **X31A** | **McDonald Ranch** | **53.11** | **331** | P | **P** | **08 37 08.1** | **+0.7** |
| | baz=53,SNR=9.0 | | | | | | |
| **U35A** | **Pawnee** | **53.15** | **335** | P | **P** | **08 37 09.0** | **+1.3** |
| | baz=53 | | | | | | |
| **W32A** | **Sentinel** | **53.18** | **332** | P | **P** | **08 37 08.9** | **+0.9** |
| | baz=53 | | | | | | |
| **Z28A** | **Tucker Farm, M** | **53.22** | **328** | P | **P** | **08 37 09.2** | **+0.8** |
| | baz=53 | | | | | | |
| **Y29A** | **Porterfield Fa** | **53.31** | **329** | P | **P** | **08 37 09.5** | **+0.5** |
| | baz=54,SNR=7.3 | | | | | | |
| **V33A** | **Lossen Ranch,** | **53.34** | **334** | P | **P** | **08 37 09.7** | **+0.6** |
| | baz=54 | | | | | | |
| **X30A** | **Coker Ranch, T** | **53.39** | **330** | P | **P** | **08 37 10.5** | **+1.0** |
| | baz=54 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **53.41** | **336** | P | **P** | **08 37 10.7** | **+1.2** |
| | baz=54,SNR=27 | | | | | | |
| **T35A** | **Sooner Cattle** | **53.53** | **336** | P | **P** | **08 37 11.9** | **+1.4** |
| | baz=54,SNR=11 | | | | | | |
| **U34A** | **Anderson Ranch** | **53.54** | **335** | P | **P** | **08 37 11.9** | **+1.3** |
| | baz=54 | | | | | | |
| **U34A** | **Anderson Ranch** | **53.

| | | | | | | |
|---|---|---|---|---|---|---|
| V28A | Channing<br>baz=55,SNR=5.9 | 55.09 330 | P | P | 08 37 22.7 | +0.6 |
| S32A | Newby Ranch, P<br>baz=55,SNR=6.9 | 55.20 334 | P | P | 08 37 24.1 | +1.5 |
| R33A | Olander Ranch,<br>baz=56,SNR=8.7 | 55.32 335 | P | P | 08 37 24.7 | +1.2 |
| S31A | Mullinville<br>baz=56,SNR=5.2 | 55.37 334 | P | P | 08 37 25.1 | +1.2 |
| V27A | Dan Oppiter Fa<br>baz=56 | 55.40 330 | P | P | 08 37 25.3 | +1.1 |
| P36A | Good Intent, A<br>baz=56,SNR=17 | 55.40 339 | P | P | 08 37 24.7 | +0.7 |
| Q34A | Chapman<br>baz=56,SNR=11 | 55.44 337 | P | P | 08 37 25.2 | +0.9 |
| KSU1 | Kansas State U<br>baz=56,SNR=16 | 55.46 337 | P | P | 08 37 25.6 | +1.1 |
| KSU1 | Kansas State U<br>comp=Z,52nm,0.8s | 55.46 337 | eP | P | 08 37 24.0 | -0.5 |
| U28A | Mallet<br>baz=56 | 55.60 331 | P | P | 08 37 26.7 | +1.0 |
| 121A | Cookes Peak, D<br>baz=56 | 55.61 324 | P | P | 08 37 26.6 | +0.7 |
| 121A | Cookes Peak, D<br>comp=Z,11nm,0.9s | 55.61 324 | eP | P | 08 37 26.1 | +0.2 |
| P35A | Duane Minner,<br>baz=56 | 55.62 338 | P | P | 08 37 26.1 | +0.5 |
| R32A | Long Quarter,<br>baz=56,SNR=9.4 | 55.72 335 | P | P | 08 37 27.4 | +1.0 |
| O36A | Bolckow<br>baz=56 | 55.77 339 | P | P | 08 37 26.7 | 0.0 |
| T29A | Hugoton<br>baz=56,SNR=11 | 55.79 332 | P | P | 08 37 27.6 | +0.6 |
| Q33A | Connelly Farm,<br>baz=56 | 55.85 336 | P | P | 08 37 28.3 | +1.1 |
| U27A | Thompson Grove<br>baz=56 | 55.92 330 | P | P | 08 37 28.8 | +0.8 |
| P34A | Walnut Farm, R<br>baz=56,SNR=23 | 55.94 337 | P | P | 08 37 27.7 | -0.1 |
| R31A | Burdett<br>baz=56 | 55.95 334 | P | P | 08 37 28.8 | +0.8 |
| S29A | Ulysses<br>baz=56 | 56.09 332 | P | P | 08 37 29.7 | +0.6 |
| Q32A | Meitler Ranch,<br>baz=56,SNR=11 | 56.14 335 | P | P | 08 37 29.5 | +0.2 |
| BNM | Barren Site | 56.14 326 | eP | P | 08 37 31.1 | +1.3 |
| T28A | Walsh<br>baz=56 | 56.14 331 | P | P | 08 37 29.3 | -0.3 |
| P33A | Williams Farm,<br>baz=56 | 56.17 336 | P | P | 08 37 30.6 | +1.0 |
| O35A | Humboldt<br>baz=56,SNR=6.7 | 56.22 338 | P | P | 08 37 30.4 | +0.5 |
| LPM | Los Pinos Moun | 56.26 326 | P | P | 08 37 31.1 | +0.5 |
| R30A | Dighton<br>baz=56,SNR=9.2 | 56.27 334 | P | P | 08 37 30.6 | +0.2 |
| T27A | Campo<br>baz=57 | 56.38 331 | P | P | 08 37 31.3 | 0.0 |
| S28A | Manter<br>baz=57,SNR=11 | 56.42 332 | P | P | 08 37 31.6 | +0.1 |
| O34A | Beatrice<br>baz=57,SNR=9.0 | 56.44 338 | P | P | 08 37 31.9 | +0.4 |
| CBKS | Cedar Bluff | 56.48 334 | eP | P | 08 37 32.3 | +0.5 |
| CBKS | comp=Z,108nm,1.5s | | pmax | pmax | | |
| CBKS | Cedar Bluff<br>baz=57 | 56.48 334 | P | P | 08 37 32.4 | +0.6 |
| CBKS | Cedar Bluff<br>comp=Z,108nm,1.5s | 56.48 334 | eP | P | 08 37 32.2 | +0.5 |
| Q31A | Ellis<br>baz=57 | 56.49 335 | P | P | 08 37 32.4 | +0.5 |
| LAZ | Ladron | 56.61 326 | eP | P | 08 37 33.5 | +0.5 |
| ANMO | Albuquerque | 56.64 326 | eP | P | 08 37 32.8 | -0.4 |
| ANMO | comp=Z,13nm,1.4s | | pmax | pmax | | |
| ANMO | Albuquerque<br>comp=Z,13nm,1.4s | 56.64 326 | eP | P | 08 37 32.8 | -0.4 |
| O33A | Hebron<br>baz=57,SNR=24 | 56.68 337 | P | P | 08 37 33.3 | +0.1 |
| P32A | Huiting Farm,<br>baz=57,SNR=12 | 56.69 336 | P | P | 08 37 33.2 | -0.1 |
| R29A | Marienthal<br>baz=57 | 56.76 333 | P | P | 08 37 34.3 | +0.5 |
| JFWS | Jewell Farm | 56.85 344 | eP | P | 08 37 33.4 | -0.9 |
| JFWS | comp=Z,19nm,0.9s | | pmax | pmax | | |
| JFWS | Jewell Farm<br>comp=Z,19nm,0.9s | 56.85 344 | eP | P | 08 37 33.4 | -0.9 |
| T26A | Comanche Natio<br>baz=57 | 56.89 330 | P | P | 08 37 35.3 | +0.3 |
| P31A | Stockton<br>baz=57 | 56.92 335 | P | P | 08 37 35.5 | +0.6 |
| N34A | Lincoln<br>baz=57,SNR=13 | 56.94 338 | P | P | 08 37 35.4 | +0.4 |
| R28A | Tribune<br>baz=57 | 56.99 332 | P | P | 08 37 36.4 | +0.8 |
| Q29A | Oakley<br>baz=57 | 57.08 333 | P | P | 08 37 36.8 | +0.7 |
| O32A | Brockman Farm,<br>baz=57,SNR=6.0 | 57.11 336 | P | P | 08 37 37.4 | +1.2 |
| S26A | Kim<br>baz=57,SNR=10 | 57.19 331 | P | P | 08 37 37.6 | +0.6 |
| N33A | J Bar K, Exete<br>baz=57 | 57.20 337 | P | P | 08 37 37.6 | +0.7 |
| M35A | Neola<br>baz=57,SNR=13 | 57.21 339 | P | P | 08 37 37.3 | +0.5 |
| TUC | Tucson | 57.25 321 | eP | P | 08 37 37.4 | 0.0 |
| TUC | Tucson | 57.25 321 | eP | P | 08 37 37.4 | 0.0 |
| T25A | Trinidad<br>baz=58,SNR=5.8 | 57.27 330 | P | P | 08 37 38.1 | +0.5 |
| T25A | Trinidad | 57.27 330 | eP | P | 08 37 38.1 | +0.5 |
| P30A | Selden<br>baz=58 | 57.30 334 | P | P | 08 37 39.0 | +1.4 |
| R27A | Eads<br>baz=58 | 57.40 332 | P | P | 08 37 39.2 | +0.7 |
| O31A | Woolen Ranch,<br>baz=58 | 57.44 336 | P | P | 08 37 39.7 | +1.1 |
| N32A | Stulken Farm,<br>baz=58 | 57.55 337 | P | P | 08 37 40.7 | +1.4 |
| M34A | Aspy Farms, Fr<br>baz=58 | 57.55 338 | P | P | 08 37 40.0 | +0.7 |
| Q28A | Sharon Springs<br>baz=58 | 57.59 333 | P | P | 08 37 40.3 | +0.5 |
| P29A | Atwood<br>baz=58 | 57.65 334 | P | P | 08 37 40.7 | +0.6 |
| R26A | Arlington<br>baz=58 | 57.72 331 | P | P | 08 37 40.8 | +0.2 |
| L35A | Bielow Farm, R<br>baz=58,SNR=13 | 57.73 340 | P | P | 08 37 40.7 | +0.2 |
| O30A | MW Ranch, Wils<br>baz=58 | 57.76 335 | P | P | 08 37 40.9 | 0.0 |
| M33A | Taylor Creek F<br>baz=58,SNR=10.0 | 57.84 338 | P | P | 08 37 41.7 | +0.4 |
| N31A | Bailey Ranch,<br>baz=58 | 57.86 336 | P | P | 08 37 41.4 | -0.1 |
| L34A | Svendsen Farm,<br>baz=58,SNR=24 | 57.89 339 | P | P | 08 37 41.6 | -0.1 |
| KSCO | Kaye Shedlock'<br>baz=58 | 57.91 332 | P | P | 08 37 41.7 | -0.4 |
| KSCO | Kaye Shedlock' | 57.91 332 | eP | P | 08 37 42.4 | +0.3 |
| P28A | Saint Francis<br>baz=58 | 57.98 333 | P | P | 08 37 42.4 | -0.1 |
| O29A | 4D Ranch, Culb<br>baz=58 | 58.02 334 | P | P | 08 37 43.0 | +0.3 |
| BGNE | Belgrade<br>baz=58,SNR=9.1 | 58.05 337 | P | P | 08 37 43.1 | +0.3 |
| J37A | Redenius Farm,<br>baz=58 | 58.16 342 | P | P | 08 37 44.2 | +0.6 |
| K35A | Storm Lake<br>baz=58 | 58.17 340 | P | P | 08 37 44.3 | +0.7 |
| Q26A | Hugo<br>baz=58 | 58.25 332 | P | P | 08 37 45.2 | +0.8 |
| 214A | Organ Pipe Nat<br>baz=58,SNR=5.4 | 58.28 319 | P | P | 08 37 44.8 | +0.2 |
| 214A | Organ Pipe Nat<br>comp=Z,77nm,1.4s | 58.28 319 | eP | P | 08 37 44.8 | +0.2 |
| SDCO | Great Sand Dun<br>baz=58,SNR=12 | 58.28 329 | P | P | 08 37 45.3 | +0.4 |
| SDCO | Great Sand Dun<br>comp=Z,21nm,1.4s | 58.28 329 | eP | P | 08 37 44.8 | -0.1 |
| N30A | Hueftle Ranch,<br>baz=58 | 58.30 335 | P | P | 08 37 45.9 | +1.3 |
| M31A | Lambtecht Ranc<br>baz=58 | 58.31 337 | P | P | 08 37 45.7 | +1.0 |
| L33A | Hoskins<br>baz=59,SNR=13 | 58.38 338 | P | P | 08 37 46.0 | +0.9 |
| J36A | Seneca 1, Swea<br>baz=59 | 58.42 341 | P | P | 08 37 46.5 | +1.1 |
| K34A | Le Mars<br>baz=59,SNR=7.3 | 58.43 340 | P | P | 08 37 46.1 | +0.7 |
| O28A | Krutsinger Ran<br>baz=59 | 58.44 334 | P | P | 08 37 46.0 | +0.4 |
| I38A | Scanlan Farm,<br>baz=59,SNR=17 | 58.47 343 | P | P | 08 37 46.0 | +0.3 |
| L32A | Elgin<br>baz=59 | 58.51 338 | P | P | 08 37 46.8 | +0.8 |
| N29A | Votaw Ranch, W<br>baz=59 | 58.53 335 | P | P | 08 37 47.0 | +0.7 |
| W18A | Petrified Fore<br>baz=59 | 58.59 324 | P | P | 08 37 47.5 | +0.5 |
| K33A | Hardington<br>baz=59 | 58.67 339 | P | P | 08 37 48.2 | +1.1 |
| J35A | Milford<br>baz=59 | 58.73 341 | P | P | 08 37 48.6 | +1.0 |
| I37A | Lemond, Waseca<br>baz=59 | 58.76 342 | P | P | 08 37 49.1 | +1.4 |
| N28A | Pribbeno Ranch<br>baz=59 | 58.80 334 | P | P | 08 37 49.6 | +1.4 |
| J34A | George<br>baz=59 | 58.91 340 | P | P | 08 37 50.3 | +1.5 |
| I36A | Fitzsimmons Fa<br>baz=59 | 58.95 342 | P | P | 08 37 50.6 | +1.6 |
| S22A | 4UR Ranch, Cre<br>baz=59,SNR=9.1 | 58.95 328 | P | P | 08 37 50.7 | +1.1 |
| S22A | 4UR Ranch, Cre | 58.95 328 | eP | P | 08 37 49.6 | 0.0 |
| L31A | Butterfield Fa<br>baz=59,SNR=21 | 58.97 337 | P | P | 08 37 50.6 | +1.3 |
| Q24A | Divide<br>baz=59 | 59.06 330 | P | P | 08 37 51.2 | +1.0 |
| K32A | Verdigre<br>baz=59 | 59.07 338 | P | P | 08 37 51.4 | +1.5 |
| M29A | Burnside Ranch<br>baz=59,SNR=6.2 | 59.08 335 | P | P | 08 37 51.6 | +1.6 |
| I35A | Creekview Farm<br>baz=59 | 59.10 341 | P | P | 08 37 51.5 | +1.5 |
| L30A | Spencer Herefo<br>baz=59,SNR=6.2 | 59.12 336 | P | P | 08 37 51.8 | +1.6 |
| H37A | Dierke Farm, C<br>baz=59,SNR=6.9 | 59.13 343 | P | P | 08 37 51.6 | +1.4 |
| OGNE | Ogallala<br>baz=59 | 59.23 334 | P | P | 08 37 52.7 | +1.6 |
| J33A | Davis<br>baz=60,SNR=16 | 59.28 339 | P | P | 08 37 52.7 | +1.4 |
| M28A | Bar X Bar Ranc<br>baz=60 | 59.32 335 | P | P | 08 37 52.9 | +1.2 |
| K31A | O'Neill<br>baz=60,SNR=7.2 | 59.32 337 | P | P | 08 37 52.9 | +1.2 |
| H36A | Jessenland, He<br>baz=60,SNR=13 | 59.42 342 | P | P | 08 37 53.2 | +1.0 |
| MVCO | Mesa Verde<br>baz=60,SNR=7.8 | 59.43 327 | P | P | 08 37 53.6 | +0.8 |
| MVCO | Mesa Verde<br>comp=Z,30nm,1.5s | 59.43 327 | eP | P | 08 37 53.1 | +0.3 |
| L29A | Maesberg Ranch<br>baz=60,SNR=5.5 | 59.52 336 | P | P | 08 37 54.2 | +1.2 |
| ECSD | EROS Data Cent<br>baz=60,SNR=10 | 59.53 340 | P | P | 08 37 54.7 | +1.7 |
| ECSD | EROS Data Cent<br>comp=Z,16nm,0.9s | 59.53 340 | eP | P | 08 37 52.0 | -1.0 |
| I34A | Hadley<br>baz=60 | 59.55 340 | P | P | 08 37 53.3 | +0.2 |
| J32A | Parkston<br>baz=60,SNR=9.0 | 59.64 339 | P | P | 08 37 54.2 | +0.4 |
| SPMN | St. Paul<br>baz=60,SNR=8.5 | 59.69 343 | P | P | 08 37 54.4 | +0.3 |
| SPMN | St. Paul | 59.69 343 | eP | P | 08 37 53.5 | -0.6 |
| K30A | Basset<br>baz=60,SNR=11 | 59.69 337 | P | P | 08 37 54.5 | +0.3 |
| H35A | Sunnyside Ranc<br>baz=60,SNR=11 | 59.81 342 | P | P | 08 37 55.5 | +0.5 |
| WUAZ | Wupatki<br>baz=60,SNR=15 | 59.82 323 | P | P | 08 37 55.5 | +0.1 |
| WUAZ | Wupatki<br>comp=Z,17nm,1.0s | 59.82 323 | eP | P | 08 37 55.8 | +0.4 |
| I33A | Coleman<br>baz=60,SNR=10 | 59.87 340 | P | P | 08 37 55.8 | +0.5 |
| J31A | Geddes<br>baz=60 | 59.90 338 | P | P | 08 37 56.1 | +0.6 |
| ISCO | Idaho Springs<br>baz=60,SNR=6.9 | 59.93 331 | P | P | 08 37 56.4 | +0.1 |
| G36A | St. Michael<br>baz=60 | 59.97 343 | P | P | 08 37 56.7 | +0.6 |
| K29A | Lazy Trails An<br>baz=60,SNR=16 | 60.04 336 | P | P | 08 37 57.7 | +1.1 |
| I32A | Karley and Nic<br>baz=60,SNR=14 | 60.08 339 | P | P | 08 37 57.3 | +0.5 |
| H34A | Spellman Lake,<br>baz=60,SNR=20 | 60.08 341 | P | P | 08 37 57.2 | +0.4 |
| SMCO | Snowmass | 60.12 329 | eP | P | 08 37 58.4 | +0.7 |
| G35A | Watkins<br>baz=60 | 60.17 342 | P | P | 08 37 57.8 | +0.4 |
| J30A | Dallas<br>baz=60,SNR=21 | 60.20 337 | P | P | 08 37 58.2 | +0.5 |
| GLA | Glamis<br>baz=60 | 60.28 319 | P | P | 08 37 58.9 | +0.4 |
| H33A | Prehn Over Nor<br>baz=61,SNR=8.6 | 60.41 340 | P | P | 08 37 59.7 | +0.6 |
| K28A | Ten Mile Ranch<br>baz=61,SNR=24 | 60.42 336 | P | P | 08 38 00.1 | +0.9 |
| I31A | Royce, Wessing<br>baz=61 | 60.46 338 | P | P | 08 38 00.2 | +0.7 |
| H32A | Carlson Farm,<br>baz=61 | 60.49 340 | P | P | 08 38 00.7 | +1.1 |
| G34A | Benson<br>baz=61 | 60.55 341 | P | P | 08 38 00.2 | +0.3 |
| J29A | Okreek<br>baz=61,SNR=38 | 60.59 337 | P | P | 08 38 01.6 | +1.2 |
| I30A | Oacoma<br>baz=61,SNR=5.8 | 60.69 338 | P | P | 08 38 01.9 | +0.9 |
| G33A | Ortonville<br>baz=61 | 60.76 341 | P | P | 08 38 02.4 | +1.0 |
| F35A | Swanville<br>baz=61,SNR=9.4 | 60.78 342 | P | P | 08 38 02.2 | +0.7 |
| H31A | Wolsey<br>baz=61 | 60.83 339 | P | P | 08 38 02.6 | +0.7 |
| F34A | Alexandria<br>baz=61,SNR=7.9 | 60.93 342 | P | P | 08 38 03.7 | +1.1 |
| N23A | Red Feather La<br>baz=61 | 60.95 331 | P | P | 08 38 03.9 | +0.7 |
| N23A | Red Feather La | 60.95 331 | eP | P | 08 38 04.8 | +1.7 |
| J28A | Allard Ranch,<br>baz=61,SNR=30 | 60.96 336 | P | P | 08 38 03.9 | +1.0 |
| SUSD | South Dakota S<br>baz=61 | 60.97 338 | P | P | 08 38 03.9 | +1.0 |
| PHWY | Pilot Hill | 61.04 332 | eP | P | 08 38 04.9 | +1.1 |
| I29A | Vivian Onida<br>baz=61,SNR=9.9 | 61.10 337 | P | P | 08 38 05.3 | +1.5 |
| J27A | Elkhorn Farm,<br>baz=61,SNR=16 | 61.13 336 | P | P | 08 38 05.4 | +1.3 |
| G32A | Wazer<br>baz=61,SNR=12 | 61.17 340 | P | P | 08 38 05.5 | +1.3 |
| IRM | Iron Mountain<br>baz=61,SNR=12 | 61.20 320 | P | P | 08 38 05.8 | +1.1 |
| F33A | 5 Mile Ranch,<br>baz=62 | 61.29 341 | P | P | 08 38 06.2 | +1.2 |
| E35A | Pequot Lakes<br>baz=62,SNR=14 | 61.36 343 | P | P | 08 38 06.2 | +0.7 |
| D37A | Cotton<br>baz=62,SNR=6.5 | 61.37 344 | P | P | 08 38 06.1 | +0.6 |
| G31A | Conde<br>baz=62 | 61.38 339 | P | P | 08 38 06.3 | +0.7 |
| C39A | Grand Marais<br>baz=62,SNR=5.7 | 61.41 346 | P | P | 08 38 06.8 | +1.0 |
| I28A | Midland<br>baz=62,SNR=12 | 61.42 337 | P | P | 08 38 07.3 | +1.4 |
| O20A | White River Ci<br>baz=62 | 61.48 329 | P | P | 08 38 06.8 | +0.1 |
| O20A | White River Ci | 61.48 329 | eP | P | 08 38 07.3 | +0.6 |
| E34A | Wadena<br>baz=62 | 61.55 342 | P | P | 08 38 07.8 | +1.0 |
| D36A | Goodland<br>baz=62,SNR=6.6 | 61.58 344 | P | P | 08 38 07.5 | +0.6 |
| H29A | Onida<br>baz=62,SNR=7.0 | 61.59 338 | P | P | 08 38 07.9 | +0.8 |
| J26A | Sides Ranch, S<br>baz=62,SNR=11 | 61.62 335 | P | P | 08 38 08.3 | +0.9 |
| PFO | Pinyon Flat Ob | 61.69 319 | eP | P | 08 38 08.9 | +0.8 |
| PFO | comp=Z,14nm,1.4s | | pmax | pmax | | |
| PFO | Pinyon Flat Ob<br>comp=Z,14nm,1.4s | 61.69 319 | eP | P | 08 38 08.9 | +0.8 |
| PLM | Palomar | 61.79 318 | eP | P | 08 38 07.1 | -1.8 |
| PLM | Palomar | 61.79 318 | eP | P | 08 38 07.1 | -1.8 |
| E33A | Westby DABS, E<br>baz=62 | 61.79 342 | P | P | 08 38 09.1 | +0.7 |
| I27A | Quinn<br>baz=62,SNR=18 | 61.83 336 | P | P | 08 38 09.1 | +0.3 |
| C37A | Embarrass<br>baz=62 | 61.83 345 | P | P | 08 38 09.2 | +0.6 |
| EYMN | Ely<br>baz=62,SNR=8.6 | 61.86 345 | P | P | 08 38 09.1 | +0.3 |
| EYMN | Ely<br>comp=Z,46nm,1.1s | 61.86 345 | eP | P | 08 38 08.2 | -0.7 |
| SRU | San Rafael | 61.91 327 | eP | P | 08 38 09.6 | 0.0 |
| SRU | San Rafael | 61.91 327 | eP | P | 08 38 09.6 | 0.0 |
| GMRC | Granite Mounta<br>baz=62 | 61.92 320 | P | P | 08 38 09.2 | -0.5 |
| H28A | Mission Ridge<br>baz=62,SNR=11 | 61.93 337 | P | P | 08 38 09.8 | +0.3 |
| F31A | Hecla<br>baz=62,SNR=10 | 61.95 340 | P | P | 08 38 09.5 | 0.0 |
| G29A | Hoven<br>baz=62,SNR=15 | 61.96 338 | P | P | 08 38 10.3 | +0.7 |
| C36A | Pine Crest Far<br>baz=62,SNR=9.3 | 62.03 344 | P | P | 08 38 10.0 | +0.1 |
| DGR | Domenigoni Val | 62.07 318 | eP | P | 08 38 11.8 | +1.2 |
| D34A | Park Rapids<br>baz=62 | 62.07 342 | P | P | 08 38 10.7 | +0.4 |
| I26A | New Underwood<br>baz=62,SNR=9.1 | 62.12 335 | P | P | 08 38 11.7 | +0.9 |
| P18A | Preston Nutter<br>comp=Z,29nm,1.7s | 62.14 327 | eP | P | 08 38 11.9 | +0.7 |
| F30A | Leola<br>baz=62 | 62.20 339 | P | P | 08 38 12.3 | +1.1 |
| G28A | Parade<br>baz=62,SNR=14 | 62.23 337 | P | P | 08 38 12.2 | +0.8 |
| C35A | Jirik Farms, M<br>baz=62 | 62.28 344 | P | P | 08 38 12.0 | +0.4 |
| P17A | Butcher Ranch,<br>comp=Z,52nm,1.7s | 62.28 327 | eP | P | 08 38 12.2 | +0.1 |
| H27A | Howes<br>baz=62,SNR=8.1 | 62.30 336 | P | P | 08 38 12.3 | +0.4 |
| D33A | AnnSam, Waubun<br>baz=62 | 62.31 342 | P | P | 08 38 12.7 | +0.8 |
| MSU | Marysvale | 62.38 325 | eP | P | 08 38 13.4 | +0.6 |
| MSU | Marysvale | 62.38 325 | eP | P | 08 38 13.4 | +0.6 |
| CCUT | Cedar City | 62.38 324 | eP | P | 08 38 13.9 | +1.0 |
| TMUT | Trail Mountain | 62.41 327 | eP | P | 08 38 13.5 | +0.5 |
| E31A | Nome<br>baz=63 | 62.44 340 | P | P | 08 38 13.4 | +0.7 |
| I25A | Rochford<br>baz=63,SNR=35 | 62.47 335 | P | P | 08 38 13.7 | +0.5 |
| F29A | Eureka<br>baz=63,SNR=6.7 | 62.48 339 | P | P | 08 38 13.4 | +0.4 |
| H26A | Fairpoint<br>baz=63 | 62.57 336 | P | P | 08 38 13.8 | +0.1 |
| K22A | Casper<br>baz=63,SNR=6.4 | 62.59 332 | P | P | 08 38 14.6 | +0.6 |
| K22A | Casper | 62.59 332 | eP | P | 08 38 14.7 | +0.6 |
| D32A | Dogwood Acres,<br>baz=63 | 62.67 341 | P | P | 08 38 15.6 | +1.3 |
| SCI | San Clemente I<br>baz=63 | 62.67 317 | P | P | 08 38 14.8 | +0.3 |
| RSSD | Black Hills | 62.68 335 | eP | P | 08 38 15.0 | +0.4 |
| RSSD | Black Hills | 62.68 335 | eP | P | 08 38 15.0 | +0.4 |
| E30A | Jud<br>baz=63,SNR=12 | 62.74 340 | P | P | 08 38 15.6 | +0.9 |
| SHPR | Sheep Range | 62.74 322 | eP | P | 08 38 15.5 | +0.4 |
| D31A | Mcclaflin, Tow<br>baz=63 | 62.82 341 | P | P | 08 38 16.6 | +1.3 |
| F28A | McLaughlin<br>baz=63,SNR=21 | 62.84 338 | P | P | 08 38 16.2 | +0.7 |
| C33A | Trail<br>baz=63 | 62.85 342 | P | P | 08 38 16.4 | +1.0 |
| G27A | Dupree<br>baz=63,SNR=14 | 62.87 337 | P | P | 08 38 16.5 | +0.8 |
| H25A | Fruitdale<br>baz=63,SNR=15 | 62.91 335 | P | P | 08 38 17.4 | +1.4 |
| GSC | Goldstone | 62.98 320 | eP | P | 08 38 17.1 | +0.4 |
| GSC | Goldstone | 62.98 320 | eP | P | 08 38 17.1 | +0.4 |
| E29A | Napoleon<br>baz=63,SNR=15 | 63.05 339 | P | P | 08 38 17.6 | +0.8 |
| G26A | Maurine<br>baz=63,SNR=18 | 63.06 336 | P | P | 08 38 17.2 | +0.2 |
| B34A | Aery, Baudette<br>baz=63,SNR=7.3 | 63.18 344 | P | P | 08 38 18.1 | +0.4 |
| D30A | Buchanan<br>baz=63,SNR=13 | 63.21 340 | P | P | 08 38 18.4 | +0.5 |
| O16A | Springville<br>comp=Z,20nm,1.3s | 63.22 327 | eP | P | 08 38 11.2 | -7.1 |
| G25A | Newell<br>baz=64,SNR=7.6 | 63.30 336 | P | P | 08 38 19.1 | +0.5 |
| F27A | Lemmon<br>baz=64,SNR=8.5 | 63.32 337 | P | P | 08 38 19.7 | +1.0 |
| NLU | North Lily Min | 63.35 327 | eP | P | 08 38 19.6 | +0.4 |
| AGMN | Agassiz Nation<br>baz=64,SNR=9.8 | 63.36 343 | P | P | 08 38 19.7 | +0.9 |
| D29A | Pettibone, Tap<br>baz=64,SNR=6.5 | 63.46 339 | P | P | 08 38 20.1 | +0.6 |
| EDW2 | Edwards Air Fo<br>baz=64,SNR=6.1 | 63.47 319 | P | P | 08 38 20.4 | +0.5 |
| C31A | Landman Farms,<br>baz=64,SNR=9.4 | 63.48 341 | P | P | 08 38 20.3 | +0.6 |
| F26A | Lodgepole<br>baz=64,SNR=18 | 63.55 337 | P | P | 08 38 20.7 | +0.4 |
| E27A | Carson<br>baz=64,SNR=17 | 63.62 338 | P | P | 08 38 21.7 | +1.0 |
| C30A | Mose, Pekin<br>baz=64,SNR=7.5 | 63.64 341 | P | P | 08 38 21.7 | +1.0 |
| B32A | Ashes, Strandq<br>baz=64,SNR=8.1 | 63.65 342 | P | P | 08 38 21.8 | +1.1 |
| TPNV | Topopah Spring | 63.69 322 | eP | P | 08 38 22.8 | +1.3 |
| TPNV | comp=Z,12nm,1.0s | | pmax | pmax | | |
| TPNV | Topopah Spring<br>baz=64,SNR=9.9 | 63.69 322 | P | P | 08 38 21.8 | +0.4 |
| TPNV | Topopah Spring<br>comp=Z,12nm,1.0s | 63.69 322 | eP | P | 08 38 22.8 | +1.3 |
| CTU | Camp Tracy | 63.70 327 | eP | P | 08 38 23.9 | +2.4 |
| FURC | Furnace Creek,<br>baz=64,SNR=11 | 63.76 321 | P | P | 08 38 22.7 | +1.1 |
| A33A | Warroad<br>baz=64 | 63.80 343 | P | P | 08 38 22.6 | +0.9 |
| TCUT | Toone Canyon | 63.83 328 | eP | P | 08 38 23.1 | +0.8 |
| MPMC | Manual Prospec<br>baz=64,SNR=6.0 | 63.89 320 | P | P | 08 38 23.0 | +0.1 |
| D28A | Regan<br>baz=64 | 63.91 339 | P | P | 08 38 23.3 | +0.7 |
| DUG | Dugway | 63.92 326 | eP | P | 08 38 23.3 | +0.5 |
| DUG | comp=Z,48nm,1.7s | | pmax | pmax | | |
| DUG | Dugway<br>baz=64,SNR=18 | 63.92 326 | P | P | 08 38 23.6 | +0.8 |
| DUG | Dugway<br>comp=Z,48nm,1.7s | 63.92 326 | eP | P | 08 38 23.3 | +0.5 |
| F25A | Bowman<br>baz=64,SNR=6.6 | 63.92 336 | P | P | 08 38 23.6 | +0.9 |
| E26A | Carlson Angus<br>baz=64,SNR=16 | 63.99 337 | P | P | 08 38 23.8 | +0.7 |
| B31A | Greenbush Farm<br>baz=64 | 64.01 341 | P | P | 08 38 23.9 | +0.8 |
| DAC | Darwin (Calif) | 64.09 320 | eP | P | 08 38 24.4 | +0.2 |
| DAC | comp=Z,24nm,1.8s | | pmax | pmax | | |
| DAC | Darwin (Calif)<br>comp=Z,24nm,1.8s | 64.09 320 | eP | P | 08 38 24.4 | +0.2 |
| BW06 | Boulder Array<br>comp=Z,24nm,1.4s | 64.11 330 | eP | P | 08 38 22.9 | -1.4 |
| MDND | Maddock<br>baz=64,SNR=18 | 64.14 340 | P | P | 08 38 24.9 | +0.9 |
| MDND | Maddock | 64.14 340 | eP | P | 08 38 25.0 | +0.9 |
| ARVC | Arvin<br>baz=64 | 64.17 319 | P | P | 08 38 25.1 | +0.7 |
| D27A | Center<br>baz=64,SNR=5.7 | 64.18 338 | P | P | 08 38 25.3 | +1.1 |
| R11A | Troy Canyon, C<br>baz=64,SNR=17 | 64.22 323 | P | P | 08 38 25.3 | +0.3 |
| R11A | Troy Canyon, C | 64.22 323 | eP | P | 08 38 25.6 | +0.7 |
| B30A | Myrvik Farm, E<br>baz=64,SNR=6.4 | 64.25 341 | P | P | 08 38 25.6 | +0.9 |
| HWUT | Hardware Ranch<br>comp=Z,4.2nm,0.6s | 64.26 328 | eP | P | 08 38 24.3 | -0.9 |
| ISA | Isabella | 64.27 319 | eP | P | 08 38 25.6 | +0.4 |
| ISA | Isabella<br>baz=64,SNR=11 | 64.27 319 | P | P | 08 38 25.6 | +0.4 |
| ISA | Isabella | 64.27 319 | eP | P | 08 38 25.6 | +0.4 |
| E25A | Miller Ranch,<br>baz=65,SNR=19 | 64.38 337 | P | P | 08 38 26.5 | +0.9 |
| GRAC | Grapevine Rang<br>baz=65 | 64.41 321 | P | P | 08 38 26.9 | +0.9 |
| D26A | Manning<br>baz=65 | 64.45 338 | P | P | 08 38 27.0 | +1.0 |
| CWC | Cottonwood Cre<br>baz=65 | 64.50 320 | P | P | 08 38 27.6 | +0.9 |
| SPUT | South Promonto | 64.51 327 | eP | P | 08 38 27.3 | +0.5 |

comp=Z,12nm,1.0s
**BGU Big Grassy Mou 64.55 327** *e*P **P** **08 38 27.2 +0.2**
**B29A Wagenman Farm, 64.59 340** P **P** **08 38 28.4 +1.5**
baz=65,SNR=5.2
**PKM Peak Mountain 64.67 318** P **P** **08 38 28.4 +0.5**
baz=65,SNR=9.8
**A30A Hoffart Farm, 64.67 341** P **P** **08 38 28.3 +0.8**
baz=65,SNR=7.7
**C27A Sayler Ranch, 64.69 339** P **P** **08 38 28.7 +1.1**
baz=65,SNR=11
**VES Vestal, Richgr 64.77 319** P **P** **08 38 28.9 +0.6**
baz=65,SNR=13
**D25A Fairfield 64.88 337** P **P** **08 38 30.0 +1.1**
baz=65,SNR=35
**B28A Dugan Ranch, T 64.92 340** P **P** **08 38 30.1 +1.1**
baz=65
**A29A Manning Farm, 64.95 341** P **P** **08 38 30.1 +0.8**
baz=65,SNR=13
**C26A Wahner Farm, P 64.99 338** P **P** **08 38 30.6 +1.0**
baz=65,SNR=15
**HVU Hansel Valley 65.02 328** *e*P **P** **08 38 30.3 +0.2**
HVU pmax pmax
comp=Z,27nm,1.7s
**HVU Hansel Valley 65.02 328** *e*P **P** **08 38 30.3 +0.2**
comp=Z,28nm,1.7s
**SMMC Simmler 65.04 318** P **P** **08 38 30.2 +0.1**
baz=65,SNR=9.2
**ULM Lac du Bonnet 65.12 344** P **P** **08 38 29.6 -0.7**
comp=Z,25nm,0.7s,baz=155,slow=6.0,SNR=20
**RCTC Rector, Farmer 65.15 319** P **P** **08 38 31.3 +0.5**
baz=65
**B27A Peters Farms, 65.19 339** P **P** **08 38 32.2 +1.4**
baz=65,SNR=5.9
**REDW Red Top Meadow 65.19 330** *e*P **P** **08 38 31.4 +0.1**
**SNOW Snow King Moun 65.22 330** *e*P **P** **08 38 31.6 +0.2**
**LOHW Long Hollow 65.25 330** *e*P **P** **08 38 31.7 +0.1**
**A28A Rude Farm, Bot 65.28 340** P **P** **08 38 32.7 +1.2**
baz=66
**C25A Freed Ranch, W 65.33 337** P **P** **08 38 33.2 +1.4**
baz=66,SNR=11
**TPAW Teton Pass 65.33 330** *e*P **P** **08 38 32.6 +0.5**
**MTUM Tungsten Hills 65.37 321** *e*P **P** **08 38 33.1 +0.7**
**MOOW Moose Ponds 65.42 330** *e*P **P** **08 38 32.6 -0.1**
**FXWY Fox Creek 65.48 330** *e*P **P** **08 38 33.2 +0.1**
**B26A Jensen Ranch, 65.51 339** P **P** **08 38 34.0 +1.1**
baz=66,SNR=7.1
**IMW Indian Meadow 65.63 330** *e*P **P** **08 38 34.2 +0.1**
**ELK Elko 65.63 325** *e*P **P** **08 38 34.6 +0.5**
**ELK Elko 65.63 325** *e*P **P** **08 38 34.6 +0.5**
**A27A Ledoux Ranch, 65.65 339** P **P** **08 38 35.0 +1.2**
baz=66
**FLWY Flagg Ranch 65.65 331** *e*P **P** **08 38 34.1 -0.1**
**LAO LASA Array 65.66 335** P **P** **08 38 35.5 +1.5**
baz=66,SNR=5.2
**LAO LASA Array 65.66 335** *e*P **P** **08 38 34.8 +0.8**
**MLAC Mammoth Lakes 65.72 321** P **P** **08 38 35.1 +0.4**
baz=66
**B25A Knox Farm, Ray 65.76 338** P **P** **08 38 35.7 +1.2**
baz=66
**RLMT Red Lodge 65.76 332** P **P** **08 38 35.6 +0.8**
baz=66,SNR=9.5
**RLMT Red Lodge 65.76 332** *e*P **P** **08 38 35.0 +0.1**
**H17A Grant Village 65.82 331** P **P** **08 38 36.4 +1.1**
baz=66
**H17A Grant Village 65.82 331** *e*P **P** **08 38 36.4 +1.1**
comp=Z,66nm,2.0s
**A26A Wade Farm, Ken 65.88 339** P **P** **08 38 36.5 +1.2**
baz=66,SNR=5.2
**NV01 Mina Array Sit 65.89 322** *e*P **P** **08 38 35.8 -0.1**
**NVAR Mina Array Bea 65.89 322** P **P** **08 38 35.8 0.0**
comp=Z,4.1nm,1.0s,baz=160,slow=7.4,SNR=24
NVAR LR LR 09 07 09.4
comp=Z,72nm,19.6s,baz=124,slow=36
**YFT Old Faithful 65.99 331** *e*P **P** **08 38 38.3 +1.9**
comp=Z,48nm,1.3s
**YMR Madison River 66.21 331** *e*P **P** **08 38 38.3 +0.5**
comp=Z,31nm,1.0s
**A25A Svangstu Ranch 66.30 338** P **P** **08 38 39.2 +1.2**
baz=66,SNR=7.8
**DGMT Dagmar 66.31 337** P **P** **08 38 38.8 +0.7**
baz=66,SNR=13
**LRV Little Rabbit 66.36 319** *e*P **P** **08 38 41.0 +2.3**
**GCMT Greycliff 66.45 332** *e*P **P** **08 38 39.6 +0.4**
**SCHQ Schefferville 66.50 3** LR LR 09 06 53.1
comp=Z,91nm,21.1s,baz=230,slow=35
**QLMT Earthquake Lak 66.56 331** *e*P **P** **08 38 41.6 +1.6**
**CMB Columbia Colle 66.93 320** *e*P **P** **08 38 42.9 +0.6**
**CMB Columbia Colle 66.93 320** *e*P **P** **08 38 42.9 +0.6**
**HLID Hailey 67.13 328** P **P** **08 38 44.1 +0.5**
baz=67,SNR=16
**HLID Hailey 67.13 328** *e*P **P** **08 38 44.2 +0.5**
**MCMT McKenzie Canyo 67.24 330** *e*P **P** **08 38 45.1 +0.8**
**BOZ Bozeman (W) 67.25 331** *e*P **P** **08 38 44.4 +0.1**
**BOZ Bozeman (W) 67.25 331** P **P** **08 38 44.8 +0.5**
baz=67,SNR=16
**BOZ Bozeman (W) 67.25 331** *e*P **P** **08 38 44.4 +0.1**
**DLMT Dillon 67.51 330** *e*P **P** **08 38 46.4 +0.5**
**LRM Limekiln Ridge 67.77 331** *e*P **P** **08 38 48.0 +0.3**
**MFID Camas Ranch 67.77 327** *e*P **P** **08 38 47.4 -0.2**
**HRY Holter Researc 68.14 332** *e*P **P** **08 38 50.4 +0.6**
**EGMT Eagleton 68.20 334** P **P** **08 38 51.0 +0.8**
baz=68,SNR=6.1
**EGMT Eagleton 68.20 334** *e*P **P** **08 38 50.4 +0.3**
**OHCM Honcut 68.40 321** *e*P **P** **08 38 52.2 +0.8**
**CHMT Chamberlain Mo 68.95 331** *e*P **P** **08 38 55.9 +0.9**
**J08A Circle Bar Ran 69.17 326** *e*P **P** **08 38 56.5 +0.2**
**O03D Paynes Creek 69.17 321** P **P** **08 38 56.6 +0.2**
baz=69
**LIC Lamto 69.21 79** *e*P P 08 38 50.2 -6.9
comp=Z,90nm,1.9s
**MSO Missoula 69.21 331** P **P** **08 38 57.5 +1.0**
baz=69,SNR=21
**MSO Missoula 69.21 331** *e*P **P** **08 38 57.3 +0.8**
**MOD Modoc 69.27 324** *e*P **P** **08 38 57.5 +0.5**
**SLMT Seeley Lake 69.30 331** *e*P **P** **08 38 58.1 +1.0**
**TIC Toumodi 69.33 78** *e*P **P** **08 38 56.7 -1.1**
**DBIC Dimbokro 69.49 78** P **P** **08 38 58.3 -0.5**
comp=Z,17nm,1.1s,baz=243,slow=4.4,SNR=7.0
DBIC LR LR 09 08 13.5
comp=Z,81nm,18.1s,baz=248,slow=35
**DBIC Dimbokro 69.49 78** *e*P **P** **08 38 59.1 +0.3**
**DBIC Dimbokro 69.49 78** *e*P **P** **08 38 59.0 +0.3**
**KIC Kosan Boka 69.52 79** *e*P **P** **08 38 59.1 +0.1**
comp=Z,61nm,1.2s
**SWMT Swartz Lake 69.73 331** *e*P **P** **08 39 01.0 +1.3**
**YBMT Yellow Bay 69.99 331** *e*P **P** **08 39 02.8 +1.4**
**JTMT Jette 70.03 331** *e*P **P** **08 39 02.9 +1.3**
**M04C Macdoel 70.10 323** P **P** **08 39 02.6 +0.5**
baz=70,SNR=8.2
**K05A Summer Lake 70.13 324** *e*P **P** **08 39 03.4 +1.0**
**N02D Trinity Center 70.13 322** P **P** **08 39 03.1 +0.9**
baz=70
**I07A Izee 70.20 326** *e*P **P** **08 39 03.6 +0.9**
**F10A Beach Ranch, E 70.25 328** *e*P **P** **08 39 04.0 +1.1**
**BLMT Blacktail Moun 70.26 331** *e*P **P** **08 39 05.0 +1.9**
**BSMT Bassoo Peak 70.35 331** *e*P **P** **08 39 04.9 +1.3**
**M02C Callahan 70.47 322** P **P** **08 39 05.2 +0.9**
baz=71
**VNA1 Neumayer--Stat 70.48 161** P **P** **08 39 04.8 +1.0**
**K04D Chiloquin, OR 70.56 323** P **P** **08 39 06.1 +1.1**
baz=71
**YBH Yreka Blue Hor 70.59 322** *e*P **P** **08 39 04.1 -0.9**
**YBH Yreka Blue Hor 70.59 322** *e*P **P** **08 39 04.1 -0.9**
**J05D Fort Rock, OR 70.67 324** P **P** **08 39 06.4 +0.8**
baz=71,SNR=8.5
**G08A Pilot Rock 70.70 327** *e*P **P** **08 39 06.3 +0.6**
**WALA Waterton Lakes 70.81 332** *e*P **P** **08 39 06.7 +0.4**
comp=Z,13nm,0.9s
**VNA2 Neumayer--Watz 70.85 162** P **P** **08 39 07.1 +1.0**
baz=281,slow=7.0
**L02D Cave Junction, 71.38 322** P **P** **08 39 10.9 +1.2**
baz=72
**I05D Terrebonne, OR 71.39 325** P **P** **08 39 11.1 +1.3**
baz=72,SNR=8.7
**G06A Carlson Farm, 71.56 326** *e*P **P** **08 39 12.2 +1.3**
**I04A Tendick Farm, 71.66 324** P **P** **08 39 12.4 +1.0**
baz=72
**HAWA Hanford 71.72 328** *e*P **P** **08 39 13.1 +1.4**
comp=Z,10nm,1.0s
**NEW Newport 71.76 330** *e*P **P** **08 39 11.6 -0.3**
NEW pmax pmax
comp=Z,8.0nm,0.9s
**NEW Newport 71.76 330** P **P** **08 39 13.2 +1.2**
baz=72,SNR=8.5
**NEW Newport 71.76 330** *e*P **P** **08 39 11.6 -0.3**

comp=Z,7.9nm,0.9s
**D08A Wollman Farm, 71.84 328** *e*P **P** **08 39 13.9 +1.5**
**G05D Wamic, OR 71.94 326** P **P** **08 39 14.3 +1.2**
baz=72
**E07A Sunnyside 72.00 328** *e*P **P** **08 39 14.7 +1.3**
**C09A Chrisman Ranch 72.01 329** *e*P **P** **08 39 15.0 +1.6**
**H04A Detroit Lake 72.08 325** *e*P **P** **08 39 14.5 +0.6**
**I03D Drain, OR 72.14 324** P **P** **08 39 15.4 +1.1**
baz=72
**SNAA Sanae 72.48 162** P **P** **08 39 16.4 +0.5**
**SNAA Sanae 72.48 162** *e*P **P** **08 39 16.3 +0.3**
**SNAA Sanae 72.48 162** *e*P **P** **08 39 16.3 +0.3**
**LTY Liberty 72.88 328** *e*P **P** **08 39 19.3 +0.6**
**F04A Amboy 72.98 326** *e*P **P** **08 39 19.8 +0.6**
**LON Longmire 73.16 327** *e*P **P** **08 39 20.6 +0.3**
**LON Longmire 73.16 327** *e*P **P** **08 39 20.6 +0.3**
**D05A Enumclaw 73.53 327** *e*P **P** **08 39 23.1 +0.8**
**EDM Edmonton 73.63 336** *e*P **P** **08 39 22.1 -0.8**
EDM pmax pmax
comp=Z,45nm,0.9s
**EDM Edmonton 73.63 336** *e*P **P** **08 39 22.1 -0.8**
comp=Z,45nm,0.9s
**E03A Lebam 73.98 326** *e*P **P** **08 39 26.9 +1.9**
**B05A Bryant 74.26 328** P **P** **08 39 27.9 +1.3**
baz=74
**PPT Papeete 74.58 255** LR LR 09 05 58.9
comp=Z,33nm,19.7s,baz=336,slow=31
**A04D Lummi Island 74.86 328** P **P** **08 39 31.5 +1.4**
baz=75
**MORF Marmelete 77.01 47** *e*P **P** **08 39 44.6 +1.8**
comp=Z,30nm,1.5s
**TOA0 Torodi Ar. Sit 77.42 74** *e*P **P** **08 39 44.4 -1.0**
**TOA0 Torodi Ar. Sit 77.42 74** *e*P **P** **08 39 44.0 -1.5**
**TORD Torodi Ar. Bea 77.42 74** P **P** **08 39 44.3 -1.1**
comp=Z,6.7nm,0.6s,baz=264,slow=5.9,SNR=93
TORD LR LR 09 12 49.7
comp=Z,88nm,18.8s,baz=335,slow=35
**PCVE Castro Verde 77.59 47** *e*P **P** **08 39 46.6 +0.7**
comp=Z,17nm,1.7s
**PVAQ Vaqueiros 77.72 47** *e*LR LR 09 07 35.4
comp=Z,101nm,20.0s
**PBEJ Beja 77.88 47** *e*P **P** **08 39 48.0 +0.4**
comp=Z,9.4nm,1.7s
**QSPA South Pole Qui 78.37 180** *e*P **P** **08 39 50.4 +0.5**
comp=Z,6.3nm,0.8s
**PMRV Marv??o 78.82 46** *e*LR LR 09 08 37.4
comp=Z,148nm,18.0s
**MTE Manteigas 79.13 45** *e*LR LR 09 07 33.4
comp=Z,136nm,22.0s
**PGAV Gavieira, Arco 79.32 43** *e*LR LR 09 07 54.5
comp=Z,151nm,22.0s
**MVO Moncorvo 79.81 44** *e*LR LR 09 08 19.9
comp=Z,127nm,22.0s
**YKA Yellowknife Ar 80.99 342** P **P** **08 40 03.6 -0.3**
comp=Z,5.9nm,0.7s,baz=135,slow=5.8,SNR=12
**ESDC Sonseca Array 81.34 46** P **P** **08 40 06.5 +0.2**
comp=Z,1.7nm,0.8s,baz=273,slow=5.3,SNR=7.9
ESDC LR LR 09 13 38.3
comp=Z,115nm,19.2s,baz=265,slow=34
**VNDA Vanda 85.82 190** P **P** **08 40 29.6 +0.9**
comp=Z,1.2nm,0.8s,baz=138,slow=4.9,SNR=9.0
VNDA LR LR 09 11 38.5
comp=Z,104nm,21.8s,baz=130,slow=31
**SYO Syowa Base 86.69 160** *e*P **P** **08 40 32.4 -0.7**
**SUMG Summit 87.02 10** *i* P **P** **08 40 35.8 +0.8**
SUMG pmax pmax
comp=Z,18nm,1.0s
**SUMG Summit 87.02 10** *i* P **P** **08 40 35.8 +0.8**
comp=Z,18nm,1.0s
**SUMG Summit 87.02 10** *e*P **P** **08 40 36.8 +1.9**
**INK Inuvik 90.75 341** *e*P **P** **08 40 52.4 +0.3**
INK pmax pmax
comp=Z,19nm,1.2s
**INK Inuvik 90.75 341** *e*P **P** **08 40 52.4 +0.3**
comp=Z,19nm,1.2s
**BOSA Boshof 90.92 119** LR LR 09 18 16.6
comp=Z,118nm,20.8s,baz=248,slow=33
**ILAR Eielson Array 94.12 336** P **P** **08 41 08.6 +0.8**
comp=Z,0.4nm,0.8s,baz=130,slow=3.8,SNR=4.3
ILAR PP **PP** **08 44 54.3 -0.3**
comp=Z,1.1nm,0.9s,baz=102,slow=6.9,SNR=6.8
**MAW Mawson 94.52 164** P **P** **08 41 10.6 +0.9**
comp=Z,2.8nm,0.7s,baz=226,slow=6.1,SNR=26
MAW LR LR 09 22 25.7
comp=Z,112nm,21.7s,baz=240,slow=35
**GERES GERESS Array B 96.12 42** P **P** **08 41 16.6 -0.9**
comp=Z,0.2nm,0.4s,baz=242,slow=8.6,SNR=3.5
GERES LR LR 09 19 26.7
comp=Z,48nm,20.9s,baz=282,slow=32
**NOA NORSAR Array B 97.06 29** LR LR 09 20 45.4
comp=Z,83nm,21.6s,baz=270,slow=33
**URZ Urewera 98.43 228** LR LR 09 16 33.1
comp=Z,41nm,19.0s,baz=107,slow=30
**RAYN Ar Rayn 119.94 70** *e*PKPdf **PKPdf** **08 46 41.2 +0.3**
**NVS Novosibirsk 132.90 19** *e*PKIKP **PKPdf** **08 47 02.8 -1.8**
**ZALV Zalesovo Beam 134.15 19** PKP **PKPdf** **08 47 07.3 +0.4**
comp=Z,6.0nm,0.6s,baz=286,slow=2.7,SNR=22
ZALV SKP 08 50 43.1
comp=Z,0.7nm,0.6s,baz=316,slow=4.0,SNR=2.8
**KURK Kurchatov 134.45 26** *e*PKIKP **PKPdf** **08 47 08.2 +0.6**
**KURK Kurchatov 134.45 26** *e*PKPdf **PKPdf** **08 47 08.2 +0.6**
**ASAR Alice Springs 136.47 216** PKP **PKPdf** **08 47 12.0 -0.3**
comp=Z,1.8nm,0.6s,baz=123,slow=2.1,SNR=23
**EKS2 Erkin-Say 137.39 37** *e*PKIKP **PKPdf** **08 47 14.6 +1.0**
**EKS2 Erkin-Say 137.39 37** *e*PKPdf **PKPdf** **08 47 14.6 +1.0**
**AAK Ala-Archa 137.83 37** *e*PKIKP **PKPdf** **08 47 15.8 +1.4**
**AAK Ala-Archa 137.83 37** *e*PKPdf **PKPdf** **08 47 15.8 +1.4**
**MKAR Makanchi Array 139.00 27** PKP **PKPdf** **08 47 16.4 +0.1**
comp=Z,2.8nm,0.8s,baz=0.5,slow=1.6,SNR=14
**WRA Warramunga Arr 139.03 220** PKP **PKPdf** **08 47 16.6 -0.6**
comp=Z,3.0nm,0.6s,baz=136,slow=1.8,SNR=25
**KSH Kashi 140.57 40** *e*PKP **PKPdf** **08 47 20.9 +1.4**
KSH PKS **PKSdf** **08 50 52.3 -3.2**
KSH SKS **SKSdf** **08 54 27.5 +0.1**
KSH PPMZ
comp=Z,73nm,4.0s
KSH LN
comp=Z,190nm,13.0s
KSH LE
comp=Z,110nm,6.9s
KSH LZ
comp=Z,140nm,12.4s
**WMQ Urumqi 143.68 25** *e*PKP PKPbc 08 47 23.0 +0.7
WMQ PP **PP** **08 50 38.0 +1.4**
WMQ SKS **SKSdf** **08 54 28.0 -3.9**
WMQ PPMZ
comp=Z,18nm,10.0s
WMQ LN
comp=Z,140nm,22.0s
WMQ LE
comp=Z,210nm,22.0s
WMQ LZ
comp=Z,130nm,20.0s
**ULN Ulaanbaatar 144.01 1** *e*PKIKP PKPbc 08 47 24.3 +1.0
**ULN Ulaanbaatar 144.01 1** *e*PKPdf PKPbc 08 47 24.3 +1.0
**SONM Songino Array 144.03 2** PKP PKPbc 08 47 23.8 +0.5
comp=Z,1.8nm,0.5s,baz=340,slow=3.1,SNR=11
**MBWA Marble Bar 145.22 200** *e*PKPbc **PKPbc** **08 47 27.5 -0.2**
**KSRS Korea Array 148.66 328** PKP **PKPdf** **08 47 32.5 -0.8**
comp=Z,7.3nm,1.0s,baz=29,slow=2.5,SNR=7.3
KSRS PKPbc **PKPbc** **08 47 37.8 +0.7**
comp=Z,7.2nm,1.0s,baz=15,slow=1.9,SNR=16
**KSAR Wonju Array Be 148.69 328** PKIKP **PKPdf** **08 47 32.6 -0.8**
KSAR 08 47 37.8
**KSAR Wonju Array Be 148.69 328** PKP **PKPdf** **08 47 32.5 -0.8**
KSAR PKPbc **PKPbc** **08 47 37.8 +0.6**
**URV Uravakonda 150.19 80** *e*PKPdf **PKPdf** **08 47 35.7 -0.7**
**HHC Hu-ho-hao-te 150.84 354** *e*PKPbc **PKPdf** **08 47 35.3 -1.5**
HHC pPKP **PKiKP** **08 47 44.0 +0.9**
HHC PP **PP** **08 51 22.9 +4.6**
HHC SKS **SKSdf** **08 54 36.9 -5.3**
HHC SS **SS** **09 10 42.8 +6.5**
HHC PPMZ
comp=Z,68nm,7.5s
HHC LN
comp=Z,250nm,14.9s
HHC LE
comp=Z,170nm,17.4s
HHC LZ
comp=Z,110nm,14.9s
**BJI Beijing 150.87 347** PKIKP **PKPbc** **08 47 44.1 +1.7**
BJI LR LR
comp=Z,99nm,22.8s
**HYBB Hyderabad (bro 151.22 75** *e*PKPdf **PKPdf** **08 47 37.7 -0.2**
**HYB Hyderabad 151.22 75** *i* PKP **PKPdf** **08 47 38.0 0.0**
**GTA Gaotai 151.58 13** *e*PKPbc **PKPdf** **08 47 41.1 +3.0**
GTA PKPab PKPab 08 47 58.3 +5.5
GTA PP PP 08 51 31.3 +8.6
GTA SKS **SKSdf** **08 54 43.0 -0.2**
GTA SKKS **SKKSac** **08 58 15.3 +3.3**
GTA SS SS 09 10 52.4 +7.6
GTA PPMZ
comp=Z,57nm,4.3s
GTA LN
comp=Z,95nm,19.0s
GTA LE
comp=Z,130nm,18.0s
GTA LZ
comp=Z,120nm,19.9s
**RPR Rampur 151.70 72** *e*PKPdf **PKPdf** **08 47 36.7 -1.9**
**NJS Nagarjunasagar 152.04 77** *e*PKPdf **PKPdf** **08 47 38.0 -1.1**
**ADKI Addanki 152.74 78** *e*PKPdf **PKPdf** **08 47 39.5 -0.7**
**LZH Lanzhou 155.53 8** *e*PKP **PKPdf** **08 47 42.1 -1.8**
LZH pPKP **pPKPdf** **08 47 50.4 -5.0**
LZH PP **PP** **08 51 48.3 +3.4**
LZH PPMZ
comp=Z,190nm,4.4s
**CD2 Chengdu 160.60 10** PKP **PKPdf** **08 47 48.6 -1.4**
CD2 pPKP **pPKPdf** **08 47 55.9 -5.7**
CD2 sPKP 08 47 58.5
CD2 PP **PP** **08 52 12.9 +0.3**
CD2 SKS **SKSdf** **08 54 52.8 -0.1**
CD2 SKKS **SKKSac** **08 58 59.6 -0.4**
CD2 SS **SS** **09 12 24.3 +2.7**
CD2 PPMZ
comp=Z,120nm,5.2s
**GYA Guiyang 165.35 4** *e*PKP **PKPdf** **08 47 54.0 -0.9**
GYA PKS **PKSdf** **08 51 25.4 -2.5**
GYA PP **PP** **08 52 41.0 +3.3**
GYA PPMZ
comp=Z,130nm,8.0s
**KMI Kunming 165.90 19** PKP **PKPdf** **08 47 56.3 +0.8**
**CMAR Chiang Mai Arr 169.22 51** PKP **PKPdf** **08 47 58.2 +0.5**
comp=Z,1.2nm,0.3s,baz=318,slow=1.7,SNR=6.2

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*ISCJB* ***17*** *08:29:20.2±0.7,6˚.8S±0˚.1×155˚.86E±0˚.08,h35km, mb4.1/12,MS3.0/2,Error ellipse: s-maj=14.9km s-min=11.2km az=158.2*

*NEIC* ***17*** *08:29:22.7±0.5,6˚.74S×155˚.82E,mb4.2/2,Error ellipse: s-maj=14.0km s-min=9.9km az=146.0*

*IDC* ***17*** *08:29:22.6±0.9,6˚.81S×155˚.81E,h40km±5km,mb4.0/10, mb1 4.1/10,mb1mx3.8/30,mbtmp4.2/10,ML4.3/1,MS3.1/3, Ms1 3.1/3,ms1mx2.8/23,Error ellipse: s-maj=23.0km s-min=20.4km az=113.0*

**ISC 17 08:29:21.8±0.7,6˚.7S±0˚.1×155˚.9E±0˚.1,h35km, h36km:pP-P,n28,σ1°21/27,mb4.2/12,Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **4.79** | **124** | P | | Pn | | 08 30 39.7 | +8.2 |
| | 22nm,0.3s,baz=214,slow=3.8,SNR=6.8 | | | | | | | | |
| HNR | | | | S | | Sn | | 08 31 38.2 | +12 |
| | 35nm,0.3s,baz=48,slow=20,SNR=6.4 | | | | | | | | |
| HNR | | | | LR | | LR | | 08 32 38.6 | |
| | comp=Z,198nm,19.1s,baz=349,slow=40 | | | | | | | | |
| **HNR** | **Honiara** | **4.79** | **124** | P | | Pn | | 08 30 39.7 | +8.2 |
| HNR | | | | S | | Sn | | 08 31 38.2 | +12 |
| HNR | | | | *e*Sn | | Sn | | 08 31 39.6 | +14 |
| **PMG** | **Port Moresby** | **9.10** | **252** | Pn | | **Pn** | | **08 31 30.8** | **+0.2** |
| | 24nm,0.6s | | | | | | | | |
| PMG | | | | *e*Sn | | **Sn** | | **08 33 14.5** | **+2.7** |
| **COEN** | **Coen** | **14.46** | **239** | Pn | | **Pn** | | **08 32 44.2** | **+0.1** |
| **DZM** | **Mont Dzumac** | **18.32** | **147** | P | | **P** | | **08 33 34.8** | **+1.5** |
| | 0.9nm,0.3s,baz=0.0,slow=19,SNR=14 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.73** | **236** | *e*P | | **P** | | **08 34 38.9** | **-1.2** |
| | 3.7nm,0.6s | | | | | | | | |
| WRAB | | | | *e*pP | | **pP** | | **08 34 50.7** | **+0.6** |
| **WRA** | **Warramunga Arr** | **24.75** | **236** | P | | **P** | | **08 34 39.2** | **-1.1** |
| | 2.4nm,0.6s,baz=63,slow=10,SNR=21 | | | | | | | | |
| WRA | | | | pP | | **pP** | | **08 34 50.4** | **+0.2** |
| | 3.1nm,0.5s,baz=62,slow=9.6,SNR=9.7 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **08 38 17.2** | **+0.6** |
| | 0.5nm,0.3s,baz=65,slow=2.6,SNR=7.8 | | | | | | | | |
| WRA | | | | pPcP | | | | 08 38 29.6 | |
| | 0.6nm,0.7s,baz=59,slow=2.2,SNR=3.1 | | | | | | | | |
| WRA | | | | LR | | LR | | 08 43 49.2 | |
| | comp=Z,27nm,20.5s,baz=190,slow=35 | | | | | | | | |
| **SIJI** | **Sorong** | **25.29** | **282** | P | | **P** | | **08 34 43.7** | **-1.5** |
| | 6.2nm,0.5s,baz=131,slow=20,SNR=2.9 | | | | | | | | |
| **ASAR** | **Alice Springs** | **27.06** | **229** | P | | **P** | | **08 34 59.0** | **-2.2** |
| | 0.6nm,0.5s,baz=61,slow=9.3,SNR=7.3 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **08 38 21.9** | **-0.1** |
| | 0.5nm,0.6s,baz=78,slow=2.7,SNR=3.9 | | | | | | | | |
| ASAR | | | | pPcP | | | | 08 38 34.4 | |
| | 0.7nm,0.8s,baz=68,slow=1.8,SNR=6.3 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.21** | **23** | T | | T | | 09 03 36.1 | |
| | baz=203,slow=75,SNR=133 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.21** | **23** | T | | T | | 09 03 36.3 | |
| | baz=203,slow=75,SNR=119 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.22** | **23** | T | | T | | 09 03 30.7 | |
| | baz=203,slow=75,SNR=107 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.39** | **22** | T | | T | | 09 04 55.2 | |
| | baz=204,slow=76,SNR=17 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.41** | **22** | T | | T | | 09 04 58.0 | |
| | baz=204,slow=76,SNR=16 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.41** | **22** | T | | T | | 09 05 00.2 | |
| | baz=204,slow=76,SNR=12 | | | | | | | | |
| **BATI** | **Baumata** | **32.10** | **262** | LR | | LR | | 08 50 17.3 | |
| | comp=Z,58nm,18.0s,baz=118,slow=39 | | | | | | | | |
| **KAPI** | **Kappang** | **36.03** | **271** | P | | **P** | | **08 36 19.1** | **-1.0** |
| | 4.4nm,0.8s,baz=117,slow=8.3,SNR=4.9 | | | | | | | | |
| KAPI | | | | pP | | **pP** | | **08 36 30.9** | **+0.6** |
| | 8.0nm,0.8s,baz=144,slow=7.9,SNR=5.5 | | | | | | | | |
| **MBWA** | **Marble Bar** | **37.84** | **244** | *e*P | | **P** | | **08 36 33.4** | **-2.0** |
| | 2.6nm,0.6s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.52** | **295** | P | | **P** | | **08 39 36.7** | **+1.0** |
| | 1.3nm,0.3s,baz=126,slow=5.5,SNR=7.6 | | | | | | | | |
| **SONM** | **Songino Array** | **69.62** | **327** | P | | **P** | | **08 40 29.1** | **+1.5** |
| | 1.0nm,0.5s,baz=132,slow=7.1,SNR=9.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **82.78** | **21** | P | | **P** | | **08 41 42.2** | **+0.3** |
| | 0.6nm,0.6s,baz=248,slow=5.3,SNR=6.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **83.82** | **318** | P | | **P** | | **08 41 48.1** | **+0.4** |
| | 1.4nm,0.6s,baz=103,slow=5.0,SNR=8.5 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.48** | **326** | P | | **P** | | **08 41 50.2** | **-0.6** |
| | 0.6nm,0.3s,baz=122,slow=5.4,SNR=3.5 | | | | | | | | |
| **MAW** | **Mawson** | **85.01** | **203** | P | | **P** | | **08 41 52.6** | **-0.7** |
| | 1.9nm,0.6s,baz=93,slow=6.9,SNR=4.6 | | | | | | | | |
| MAW | | | | pP | | **pP** | | **08 42 06.2** | **+1.8** |
| | 2.4nm,0.9s,baz=67,slow=2.5,SNR=2.8 | | | | | | | | |
| **FINES** | **FINESS Array B** | **114.07** | **336** | PKP | | **PKiKP** | | **08 47 56.3** | **-0.7** |
| | 0.8nm,0.6s,baz=123,slow=4.0,SNR=8.5 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **119.75** | **341** | PKP | | **PKPdf** | | **08 48 07.7** | **-0.3** |
| | 0.7nm,0.8s,baz=47,slow=2.1,SNR=2.3 | | | | | | | | |
| **GERES** | **GERESS Array B** | **127.30** | **329** | PKP | | **PKPdf** | | **08 48 23.0** | **+0.1** |
| | 0.7nm,0.8s,baz=321,slow=2.5,SNR=2.6 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.85** | **286** | PKPbc | | **PKPbc** | | **08 49 17.5** | **-0.9** |
| | 0.4nm,0.4s,baz=45,slow=2.1,SNR=9.4 | | | | | | | | |
| TORD | | | | pPKPbc | | **pPKPbc** | | **08 49 30.6** | **+0.7** |
| | 1.4nm,0.6s,baz=78,slow=3.7,SNR=10 | | | | | | | | |

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**DJA 17 08:39:02.0±0.4,0˚S±3˚×12˚2E±˚,h10km,M4.0/14,mb4.6/2, MLv3.9/3,MLv4.0/14,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **APSI** | **Ampana** | **0.56** | **169** | P | | P | Pg | 08 39 12.0 | -0.9 |
| APSI | | | | S | | S | Sb | 08 39 21.5 | -0.4 |
| **MRSI** | **Marisa** | **0.92** | **26** | P | | P | Pg | 08 39 18.7 | -1.1 |
| **LUWI** | **Luwuk** | **1.41** | **119** | P | | Pn | | 08 39 27.3 | -0.4 |
| LUWI | | | | S | | Sn | | 08 39 45.8 | -0.5 |
| **TTSI** | **Tana Toraja** | **3.17** | **213** | P | | Pn | | 08 39 52.2 | +0.2 |
| **KDI** | **Kendari** | **3.73** | **163** | P | | Pn | | 08 39 58.9 | -0.8 |
| **SPSI** | **Sidrap Palu** | **3.99** | **206** | P | | Pn | | 08 40 03.5 | +0.2 |
| **BKB** | **Balikpapan** | **4.73** | **259** | P | | Pn | | 08 40 13.0 | -0.4 |
| **SANI** | **Sanana** | **4.75** | **111** | P | | Pn | | 08 40 12.8 | -1.0 |
| **BKSI** | **Bulukumba** | **5.13** | **196** | P | | Pn | | 08 40 18.4 | -0.5 |
| | 29nm,0.7s,0.1nm0.1nm | | | | | | | | |
| **BBSI** | **Bau Bau** | **5.20** | **169** | P | | Pn | | 08 40 19.5 | -0.4 |

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*ISK* ***17*** *08:50:26.8,37˚.16N×28˚.12E,h12km,MD2.6*

*ISCJB* ***17*** *08:50:27.8±0.5,37˚.21N±0˚.04×28˚.17E±0˚.04,h0km,Error ellipse: s-maj=6.7km s-min=3.6km az=37.9*

*CSEM* ***17*** *08:50:27.7±0.2,37˚.19N×28˚.18E,h1km,MD2.6,Error ellipse: s-maj=7.1km s-min=4.4km az=34.0,Mining explosion.*

*DDA **17** 08:50:27.4, 37.21N×28.20E, h7km, Md2.6*

**ISC 17 08:50:27.8±1.1, 37.17N±0.04×28.16E±0.03, h0km, n18, σ0§96/28, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.10** | **108** | *e*PG | **Pg** | **08 50 30.1** | **+0.3** |
| YER | | | | *e*SG | **Sg** | **08 50 33.3** | **+2.2** |
| **YER** | **Yerkesik** | **0.10** | **108** | *e*Pg | **Pg** | **08 50 30.1** | **+0.3** |
| YER | | | | *e*Sg | **Sg** | **08 50 33.3** | **+2.2** |
| **TURN** | **Turunc** | **0.46** | **129** | *i* P | **Pg** | **08 50 36.2** | **-0.4** |
| TURN | | | | *i* S | **Sb** | **08 50 45.8** | **-0.3** |
| **TURN** | **Turunc** | **0.46** | **129** | P | **Pg** | **08 50 36.2** | **-0.4** |
| TURN | | | | S | **Sb** | **08 50 45.8** | **-0.3** |
| **DALY** | **Dalyan (Mu¨la** | **0.53** | **131** | *e*PG | **Pg** | **08 50 37.8** | **-0.1** |
| DALY | | | | *e*SG | **Sb** | **08 50 46.6** | **-1.5** |
| **DALY** | **Dalyan (Mu¨la** | **0.53** | **131** | *e*Pg | **Pg** | **08 50 37.8** | **-0.1** |
| DALY | | | | *e*Sg | **Sb** | **08 50 46.6** | **-1.5** |
| **AYDN** | **Tasoluk** | **0.54** | **336** | *i* P | **Pg** | **08 50 38.8** | **+0.6** |
| AYDN | | | | *i* S | **Sg** | **08 50 45.9** | **+0.7** |
| **AYDN** | **Tasoluk** | **0.54** | **336** | P | **Pg** | **08 50 38.8** | **+0.6** |
| AYDN | | | | S | **Sg** | **08 50 45.9** | **+0.7** |
| **BDRM** | **Kayabasi** | **0.58** | **260** | *i* P | **Pg** | **08 50 39.4** | **+0.5** |
| BDRM | | | | *i* S | **Sb** | **08 50 48.7** | **-1.0** |
| **BDRM** | **Kayabasi** | **0.58** | **260** | P | **Pg** | **08 50 39.4** | **+0.5** |
| BDRM | | | | S | **Sb** | **08 50 48.7** | **-1.0** |
| **BODT** | **Bodrum** | **0.69** | **262** | *e*PG | **Pg** | **08 50 40.3** | **-0.7** |
| **BODT** | **Bodrum** | **0.69** | **262** | *e*Pg | **Pg** | **08 50 40.3** | **-0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.81** | **345** | *e*PG | **Pg** | **08 50 43.0** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.81** | **345** | *e*Pg | **Pg** | **08 50 43.0** | **-0.3** |
| **DNZL** | **Cakiroluk** | **0.88** | **53** | *i* P | **Pg** | **08 50 43.6** | **-1.0** |
| **DNZL** | **Cakiroluk** | **0.88** | **53** | P | **Pg** | **08 50 43.6** | **-1.0** |
| **FETY** | **Fethiye** | **0.91** | **125** | *e*PG | **Pg** | **08 50 44.5** | **-0.7** |
| **FETY** | **Fethiye** | **0.91** | **125** | *e*Pg | **Pg** | **08 50 44.5** | **-0.7** |

**KRSC 17 09:01:24.7±1.3, 51.68N×158.86E, h55km±18km, ML3.8, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RUS** | **Russkaya** | **0.79** | **344** | *e*P | Pn | 09 01 40.9 | +1.1 |
| RUS | | | | *e*S | Sn | 09 01 51.2 | +0.4 |
| **MTVR** | **Mutnovka** | **0.91** | **333** | *e*P | Pn | 09 01 43.0 | +1.4 |
| MTVR | | | | *e*S | Sn | 09 01 54.5 | +0.5 |
| **ASAK** | **Asacha** | **0.92** | **320** | *e*P | Pn | 09 01 43.4 | +1.7 |
| ASAK | | | | *e*S | Sn | 09 01 55.0 | +0.8 |
| **GRL** | **Gorelyy** | **1.00** | **331** | *e*P | Pn | 09 01 45.0 | +2.2 |
| GRL | | | | *e*S | Sn | 09 01 58.2 | +2.1 |
| **PAU** | **Pauzhetka** | **1.30** | **261** | *e*P | Pn | 09 01 48.1 | +1.6 |
| PAU | | | | *e*S | Sn | 09 02 04.0 | +1.1 |
| **PET** | **Petropavlovsk** | **1.35** | **355** | *e*P | Pn | 09 01 49.1 | +1.8 |
| PET | | | | *e*S | Sn | 09 02 05.7 | +1.5 |
| **MIPR** | **Malaya Ipel'ka** | **1.43** | **295** | *e*P | Pn | 09 01 50.9 | +2.5 |
| MIPR | | | | *e*S | Sn | 09 02 08.8 | +2.6 |
| **UGLR** | **Uglovaya** | **1.53** | **359** | *e*P | Pn | 09 01 51.8 | +1.9 |
| UGLR | | | | *e*S | Sn | 09 02 01.0 | -7.8 |
| **SMAR** | **Somma** | **1.59** | **359** | *e*P | Pn | 09 01 53.4 | +2.6 |
| SMAR | | | | *e*S | Sn | 09 02 12.7 | +2.3 |
| **SPN** | **Mys Shipunski** | **1.59** | **26** | *e*P | Pn | 09 01 53.4 | +2.9 |
| SPN | | | | *e*S | Sn | 09 02 12.7 | +2.8 |
| **AVH** | **Avacha** | **1.59** | **357** | *e*P | Pn | 09 01 53.0 | +2.4 |
| AVH | | | | *e*S | Sn | 09 02 12.1 | +1.9 |
| **SDLR** | **Sedlovina** | **1.60** | **0** | *e*P | Pn | 09 01 52.3 | +1.5 |
| SDLR | | | | *e*S | Sn | 09 02 10.7 | +0.2 |
| **KOK** | **Koryaka** | **1.62** | **355** | *e*P | Pn | 09 01 53.7 | +2.6 |
| KOK | | | | *e*S | Sn | 09 02 13.2 | +2.2 |
| **APC** | **Apacha** | **1.63** | **321** | *e*P | Pn | 09 01 53.8 | +2.8 |
| APC | | | | *e*S | Sn | 09 02 14.0 | +3.1 |
| **KRX** | **Arik** | **1.69** | **356** | *e*P | Pn | 09 01 54.2 | +2.2 |
| KRX | | | | *e*S | Sn | 09 02 13.9 | +1.2 |
| **SKR** | **Severo-Kuril's** | **2.00** | **241** | *e*P | Pn | 09 01 57.6 | +1.6 |
| SKR | | | | *e*S | Sn | 09 02 20.9 | +1.1 |
| **GNL** | **Ganaly** | **2.10** | **345** | *e*P | Pn | 09 02 00.6 | +3.1 |
| GNL | | | | *e*S | Sn | 09 02 25.0 | +2.4 |
| **MKZ** | **Mys Kozlova** | **3.36** | **30** | *e*P | Pn | 09 02 17.4 | +2.8 |
| MKZ | | | | *e*S | Sn | 09 02 53.7 | +0.5 |
| **KZV** | **Kizimen** | **3.54** | **13** | *e*P | Pn | 09 02 21.2 | +3.8 |
| KZV | | | | *e*S | Sn | 09 03 02.9 | +4.7 |
| **TUMR** | **Tumrok** | **3.69** | **11** | *e*P | Pn | 09 02 23.0 | +3.6 |
| **KBTR** | **Krutoberegovo** | **5.10** | **26** | *e*P | Pn | 09 02 42.0 | +3.5 |

*IDC **17** 09:10:20.4±3.2, 81.00N×6.60W, h0km, mb3.7/3, mb1 3.8/4, mb1mx3.3/48, mbtmp3.8/4, ML3.2/1, Error ellipse: s-maj=66.6km s-min=39.8km az=129.0*

*ISCJB **17** 09:10:21.1±1.5, 80.8N±0.2×5.9W±0.6, h10km, mb3.6/3, Error ellipse: s-maj=37.2km s-min=10.0km az=162.0*

**ISC 17 09:10:23.6±1.6, 80.8N±0.2×5.6W±0.1, h10km, n6, σ0§80/7, mb3.6/3, North of Svalbard**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAG** | **Danmarks Havn** | **4.76** | **219** | *i* P | Pb | 09 11 40.6 | -6.3 |
| DAG | | | | *i* S | **Sb** | **09 12 43.2** | **-0.9** |
| **SUMG** | **Summit** | **10.93** | **240** | *i* P | **Pn** | **09 13 00.7** | **+0.6** |
| SUMG | | | | *i* S | **Sn** | **09 15 02.7** | **+0.2** |
| **ARCES** | **ARCESS Array B** | **13.49** | **129** | Pn | **Pn** | **09 13 35.2** | **+0.6** |
| | 0.2nm,0.3s,baz=350,slow=10,SNR=6.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **39.52** | **85** | P | **P** | **09 17 53.0** | **-0.9** |
| | 1.2nm,0.8s,baz=355,slow=7.5,SNR=9.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.84** | **82** | P | **P** | **09 18 29.0** | **-0.3** |
| | 0.6nm,0.6s,baz=348,slow=7.0,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.74** | **172** | P | **P** | **09 21 20.9** | **0.0** |
| | 0.7nm,0.8s,baz=357,slow=6.3,SNR=4.3 | | | | | | |

*MAN **17** 09:15:13, 8.53N×127.38E, h69km, mb5.3, ML4.3, MS4.5*

*BJI **17** 09:15:14.8, 8.26N×127.14E, h47km, mb4.7/31, mB5.0/27, Ms4.5/21, Ms7 4.1/21*

*NEIC **17** 09:15:17.8±0.3, 8.73N×127.10E, h35km, mb4.7/29, Error ellipse: s-maj=9.7km s-min=5.4km az=81.0*

*ISCJB **17** 09:15:17.8±0.6, 8.60N±0.03×127.05E±0.05, h54km±5km, mb4.6/50, MS3.7/12, Error ellipse: s-maj=7.9km s-min=3.7km az=160.9*

*IDC **17** 09:15:17.4±0.7, 8.51N×126.88E, h35km±4km, mb4.2/20, mb1 4.3/22, mb1mx4.2/38, mbtmp4.4/22, ML3.9/2, MS3.6/11, Ms1 3.7/11, ms1mx3.4/37, Error ellipse: s-maj=25.0km s-min=13.1km az=78.0*

*MOS **17** 09:15:18.9±1.3, 8.57N×126.70E, h58km, mb5.0/22, Error ellipse: s-maj=17.8km s-min=7.7km az=112.2*

*AUST **17** 09:15:19.4±0.4, 8.61N×127.41E, h64km, Error ellipse: s-maj=1.3km s-min=1.1km az=36.0*

*DJA **17** 09:15:24.3±1.4, 8˚N±13˚×12˚7˚E±˚, h10km, M4.9/12, mb4.9/12, mB5.3/9, MLv5.2/4, Mw(mB)4.7/9*

**ISC 17 09:15:18.5±0.4, 8.68N±0.04×127.13E±0.06, h44km±2km, h44km:pP-P, n184, σ1§59/207, mb4.7/50, MS3.7/12, 4C-4D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BUTP** | **Butuan** | **1.52** | **281** | *e*P | **Pn** | **09 15 44.6** | **+1.4** |
| BUTP | | | | *e*S | **Sn** | **09 16 05.7** | **+3.9** |
| **MATI** | **Mati** | **1.93** | **207** | *e*P | Pn | 09 15 45.5 | -3.3 |
| MATI | | | | *e*S | **Sn** | **09 16 07.5** | **-4.3** |
| **SCPH** | **Surigao** | **1.96** | **304** | *e*P | **Pn** | **09 15 47.9** | **-1.3** |
| SCPH | | | | *e*S | Sn | 09 15 59.4 | -1.3 |
| **BUKP** | **Musuan** | **2.19** | **249** | *e*P | **Pn** | **09 15 52.3** | **-0.2** |
| **DAV** | **Davao City (W)** | **2.21** | **224** | Pn | **Pn** | **09 15 52.7** | **-0.1** |
| | 139nm,0.3s,baz=55,slow=3.8,SNR=14 | | | | | | |
| DAV | | | | Sn | **Sn** | **09 16 21.9** | **+3.0** |
| | 179nm,0.3s,baz=223,slow=19,SNR=8.4 | | | | | | |
| DAV | | | | LR | LR | 09 16 39.1 | |
| | comp=Z,1μm,19.5s,baz=48,slow=42 | | | | | | |
| **DAV** | **Davao City (W)** | **2.21** | **224** | *e*Pn | **Pn** | **09 15 53.1** | **+0.3** |
| DAV | | | | Sn | **Sn** | **09 16 21.9** | **+3.0** |
| DAV | | | | *e*Sn | Sn | 09 16 28.4 | +9.5 |
| **KCP** | **Kidapawan** | **2.61** | **231** | *e*P | **Pn** | **09 16 36.3** | **-2.0** |
| KCP | | | | *e*S | Sn | 09 16 35.6 | +6.8 |
| **MSLP** | **Maasin** | **2.67** | **303** | *e*P | **Pn** | **09 15 58.9** | **-0.1** |
| **PLP** | **Palo** | **3.25** | **320** | *e*P | **Pn** | **09 16 06.1** | **-0.9** |
| **OCLP** | **Ormoc** | **3.42** | **314** | *e*P | **Pn** | **09 16 09.6** | **+0.2** |
| **LLP** | **Lapu-Lapu** | **3.52** | **298** | *e*P | **Pn** | **09 16 11.0** | **+0.3** |
| LLP | | | | *e*S | **Sn** | **09 16 52.6** | **+1.5** |
| **DCPH** | **Dipolog City** | **3.74** | **269** | *e*P | **Pn** | **09 16 15.0** | **+1.4** |
| **PAGZ** | **Pagadian** | **3.80** | **258** | *e*P | **Pn** | **09 16 14.7** | **+0.2** |
| **RCP** | **Roxas** | **5.18** | **304** | *e*P | **Pn** | **09 16 33.9** | **+0.4** |
| **SGSI** | **Sangihe** | **5.21** | **198** | P | **Pn** | **09 16 34.1** | **+0.2** |
| **PALU** | **Palau** | **7.39** | **100** | P | Pn | 09 16 57.9 | -6.0 |
| | baz=7.1,SNR=3.9 | | | | | | |
| **TNTI** | **Ternate** | **7.86** | **178** | P | **Pn** | **09 17 11.4** | **+1.1** |
| | 220nm,1.1s,3μm0.7nm | | | | | | |
| **TNTI** | **Ternate** | **7.86** | **178** | *e*Pn | **Pn** | **09 17 11.0** | **+0.7** |
| **GTOI** | **Gorontalo** | **8.98** | **207** | P | **Pn** | **09 17 23.9** | **-1.8** |
| | 208nm,0.9s,135μm | | | | | | |
| **MYLDM** | **Lahad Datu** | **9.24** | **248** | *e*Pn | **Pn** | **09 17 32.1** | **+2.8** |
| **MRSI** | **Marisa** | **9.65** | **213** | P | **Pn** | **09 17 34.2** | **-0.6** |
| | 75nm,0.7s,912nm | | | | | | |
| **SWI** | **Sorong** | **10.33** | **156** | P | Pn | 09 17 48.2 | +4.0 |
| **SIJI** | **Sorong** | **10.34** | **156** | Pn | **Pn** | **09 17 42.5** | **-1.8** |
| | 1.0nm,0.3s,baz=330,slow=20,SNR=2.7 | | | | | | |
| SIJI | | | | LR | LR | 09 22 16.7 | |
| | comp=Z,334nm,19.0s,baz=330,slow=41 | | | | | | |
| **LUWI** | **Luwuk** | **10.59** | **204** | P | Pn | 09 17 53.0 | +5.3 |
| | baz=11,SNR=5.4 | | | | | | |
| **LUWI** | **Luwuk** | **10.59** | **204** | P | **Pn** | **09 17 48.4** | **+0.7** |
| | 135nm,1.2s,4μm | | | | | | |
| **LUWI** | **Luwuk** | **10.59** | **204** | *e*Pn | **Pn** | **09 17 50.1** | **+2.5** |
| **SANI** | **Sanana** | **10.72** | **186** | P | **Pn** | **09 17 47.1** | **-2.4** |
| | 47nm,1.0s,650nm | | | | | | |
| **APSI** | **Ampana** | **10.98** | **210** | P | **Pn** | **09 17 52.9** | **-0.2** |
| | 91nm,1.0s,910nm | | | | | | |
| **KKM** | **Kota Kinabalu** | **11.14** | **257** | *e*Pn | Pn | 09 17 59.1 | +3.8 |
| **NLAI** | **Namlea** | **11.84** | **180** | P | **Pn** | **09 18 05.4** | **+0.6** |
| | 44nm,0.7s,914nm | | | | | | |
| **PCI** | **Palu** | **11.98** | **218** | P | **Pn** | **09 18 04.2** | **-2.5** |
| **FAKI** | **Fak Fak** | **12.60** | **156** | P | **Pn** | **09 18 15.4** | **+0.1** |
| | baz=12,SNR=4.3 | | | | | | |
| **FAKI** | **Fak Fak** | **12.60** | **156** | *e*Pn | **Pn** | **09 18 15.3** | **+0.1** |
| **KAPI** | **Kappang** | **15.46** | **209** | Pn | **Pn** | **09 18 50.4** | **-3.3** |
| | 0.6nm,0.3s,baz=21,slow=16,SNR=6.9 | | | | | | |
| **KAPI** | **Kappang** | **15.46** | **209** | *e*P | **Pn** | **09 18 51.7** | **-2.0** |
| | 13nm,0.8s | | | | | | |
| **TPUB** | **Ta-pu** | **15.82** | **338** | *e*P | **Pn** | **09 18 59.5** | **+1.3** |
| | 62nm,1.2s | | | | | | |
| **SBUM** | **Sibu** | **16.07** | **248** | *e*Pn | **P** | **09 19 03.1** | **-1.2** |
| | 41nm,1.0s | | | | | | |
| **SSLB** | **Suanglung** | **16.15** | **339** | *e*P | **P** | **09 19 04.9** | **-0.2** |
| | 29nm,1.2s | | | | | | |
| **YHNB** | **Yeheng** | **16.83** | **342** | *e*P | **Pn** | **09 19 11.2** | **+0.2** |
| | 58nm,1.2s | | | | | | |
| **GUMO** | **Guam** | **18.07** | **73** | LR | LR | 09 25 58.4 | |
| | comp=Z,128nm,19.6s,baz=246,slow=35 | | | | | | |
| **KSM** | **Kuching** | **18.21** | **248** | *e*P | **P** | **09 19 27.8** | **-0.2** |
| | 9.5nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **18.53** | **189** | *e*P | **Pn** | **09 19 33.5** | **+1.3** |
| | 54nm,0.8s | | | | | | |
| **DLV** | **T Lat** | **18.62** | **282** | *e*P | **Pn** | **09 19 34.8** | **+1.4** |
| | 15nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **19.07** | **190** | P | **P** | **09 19 37.5** | **0.0** |
| | 7.2nm,0.3s,baz=349,slow=2.0,SNR=5.4 | | | | | | |
| **QIZ** | **Qiongzhong** | **19.67** | **303** | P | **P** | **09 19 44.0** | **+0.1** |
| QIZ | | | | pP | **pP** | **09 19 53.9** | **-0.6** |
| QIZ | | | | S | **S** | **09 23 24.0** | **+0.4** |
| QIZ | | | | PMZ | | | |
| | 300nm,3.5s | | | | | | |
| QIZ | | | | LZ | | | |
| | 620nm,17.4s | | | | | | |
| **MTN** | **Manton Dam** | **21.75** | **169** | P | P | 09 20 00.1 | -6.3 |
| | baz=22,SNR=5.9 | | | | | | |
| **MTN** | **Manton Dam** | **21.75** | **169** | *e*P | **P** | **09 20 08.7** | **+2.3** |
| | 66nm,1.4s | | | | | | |
| **KDU** | **Kakadu** | **21.88** | **166** | P | **P** | **09 20 07.9** | **+0.1** |
| | baz=22,SNR=5.8 | | | | | | |
| **MYKOM** | **Kota Tinggi** | **24.16** | **255** | *e*P | **P** | **09 20 30.3** | **-0.5** |
| | 17nm,0.9s | | | | | | |
| **KNRA** | **Kununurra** | **24.25** | **176** | P | **P** | **09 20 31.1** | **-0.4** |
| | baz=24,SNR=25 | | | | | | |
| **NJ2** | **Nanjing** | **24.50** | **343** | *e*P | **P** | **09 20 33.5** | **-0.2** |
| NJ2 | | | | PMZ | | | |
| | 40nm,1.0s | | | | | | |
| **JNU** | **Nakatsue** | **24.57** | **8** | P | **P** | **09 20 35.7** | **+1.3** |
| | 5.6nm,0.7s,baz=164,slow=2.4,SNR=4.9 | | | | | | |
| **IPM** | **Ipoh** | **26.26** | **263** | *e*P | **P** | **09 20 49.5** | **-0.5** |
| | 31nm,1.2s | | | | | | |
| **GYA** | **Guiyang** | **26.26** | **315** | *e*P | **P** | **09 20 51.0** | **+1.1** |
| GYA | | | | PMZ | | | |
| | 10.0nm,0.7s | | | | | | |
| **KULM** | **Kulim** | **26.49** | **264** | *e*P | **P** | **09 20 51.8** | **-0.2** |
| | 55nm,1.5s | | | | | | |
| **COEN** | **Coen** | **27.55** | **145** | *e*P | **P** | **09 21 00.9** | **-0.6** |
| | 32nm,1.3s | | | | | | |
| **KMI** | **Kunming** | **28.41** | **308** | P | **P** | **09 21 11.4** | **+2.0** |
| KMI | | | | sP | **sP** | **09 21 28.4** | **+2.1** |
| KMI | | | | S | **S** | **09 25 57.8** | **+4.0** |
| KMI | | | | PMZ | | | |
| | 7.0nm,0.6s | | | | | | |
| KMI | | | | PMZ | | | |
| | 140nm,5.5s | | | | | | |
| KMI | | | | LN | | | |
| | 160nm,4.7s | | | | | | |
| KMI | | | | LE | | | |
| | 170nm,5.5s | | | | | | |
| KMI | | | | LZ | | | |
| | 140nm,4.9s | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.64** | **1** | P | **P** | **09 21 13.9** | **+2.9** |
| **KSAR** | **Wonju Array Be** | **28.64** | **1** | P | **P** | **09 21 13.8** | **+2.9** |
| **PSI** | **Prapat** | **28.65** | **260** | LR | LR | 09 36 14.4 | |
| | comp=Z,166nm,18.2s,baz=161,slow=44 | | | | | | |
| **KSRS** | **Kore Array** | **28.66** | **1** | P | **P** | **09 21 13.8** | **+2.8** |
| | 1.2nm,0.6s,baz=184,slow=9.4,SNR=6.4 | | | | | | |
| KSRS | | | | LR | LR | 09 33 38.4 | |
| | comp=Z,157nm,19.1s,baz=176,slow=38 | | | | | | |
| **CM01** | **Chiang Mai Arr** | **29.01** | **292** | *e*P | **P** | **09 21 12.9** | **-1.5** |
| **CMAR** | **Chiang Mai Arr** | **29.03** | **293** | P | **P** | **09 21 13.8** | **-0.9** |
| | 1.5nm,0.5s,baz=99,slow=7.0,SNR=9.6 | | | | | | |
| CMAR | | | | LR | LR | 09 33 28.3 | |
| | comp=Z,138nm,18.6s,baz=108,slow=38 | | | | | | |
| **WRAB** | **Tennant Creek** | **29.31** | **166** | *e*P | **P** | **09 21 17.2** | **+0.1** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **29.31** | **166** | *e*P | **P** | **09 21 17.2** | **+0.1** |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **29.31** | **166** | P | **P** | **09 21 15.5** | **-1.6** |
| | comp=Z,1.5nm,0.9s,baz=345,slow=9.8,SNR=15 | | | | | | |
| **MBWA** | **Marble Bar** | **30.53** | **194** | *e*P | **P** | **09 21 28.9** | **+1.1** |
| | comp=Z,8.4nm,0.8s | | | | | | |
| **CD2** | **Chengdu** | **31.05** | **319** | *e*P | **P** | **09 21 34.0** | **+1.5** |
| CD2 | | | | pP | **pP** | **09 21 45.5** | **+1.2** |
| CD2 | | | | sP | **sP** | **09 21 50.9** | **+1.4** |
| CD2 | | | | S | **S** | **09 26 37.9** | **+3.0** |
| CD2 | | | | sS | **sS** | **09 26 57.3** | **+2.7** |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| **QIS** | **Mount Isa** | **31.54** | **157** | P | **P** | **09 21 36.5** | **-0.3** |
| | baz=32,SNR=24 | | | | | | |
| **MTSU** | **Mount Surprise** | **31.59** | **148** | P | **P** | **09 21 38.3** | **+1.0** |
| | baz=32,SNR=4.2 | | | | | | |
| **BJI** | **Beijing** | **32.73** | **344** | P | **P** | **09 21 47.4** | **+0.4** |
| BJI | | | | sP | **sP** | **09 22 02.3** | **-1.7** |
| BJI | | | | S | **S** | **09 27 01.6** | **+1.0** |
| BJI | | | | PMZ | | | |
| | comp=Z,19nm,0.9s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,140nm,9.1s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,140nm,12.2s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,74nm,18.6s | | | | | | |
| **ASAR** | **Alice Springs** | **32.82** | **168** | P | **P** | **09 21 46.9** | **-1.2** |
| | comp=Z,1.4nm,0.5s,baz=352,slow=6.5,SNR=36 | | | | | | |
| **AS01** | **Alice Springs** | **32.83** | **168** | *e*P | **P** | **09 21 49.5** | **+1.4** |
| **SNY** | **Shenyang** | **33.17** | **355** | ||P | **P** | **09 21 52.9** | **+2.1** |
| SNY | | | | S | S | 09 27 17.5 | +10 |
| SNY | | | | PMZ | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| SNY | | | | PMZ | | | |
| | comp=Z,180nm,3.5s | | | | | | |
| SNY | | | | LN | | | |
| | comp=Z,160nm,18.6s | | | | | | |
| SNY | | | | LZ | | | |
| | comp=Z,190nm,20.2s | | | | | | |
| **WRKA** | **Warakurna** | **33.53** | **178** | P | **P** | **09 21 54.0** | **-0.2** |
| | baz=34,SNR=34 | | | | | | |
| **LZH** | **Lanzhou** | **34.56** | **326** | *e*P | P | 09 22 07.5 | +4.3 |
| LZH | | | | pP | pP | 09 22 19.4 | +4.3 |
| LZH | | | | sP | sP | 09 22 23.3 | +3.0 |
| LZH | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.64** | **6** | P | **P** | **09 22 14.4** | **+2.2** |
| | comp=Z,6.2nm,0.8s,baz=191,slow=6.6,SNR=15 | | | | | | |
| **MDJ** | **Mudanjiang** | **35.87** | **3** | P | **P** | **09 22 13.1** | **-1.0** |
| MDJ | | | | pP | **pP** | **09 22 24.0** | **-2.0** |
| MDJ | | | | sP | **sP** | **09 22 29.3** | **-1.9** |
| MDJ | | | | S | **S** | **09 27 48.1** | **-0.9** |
| MDJ | | | | ScP | **ScP** | **09 28 22.3** | **-1.2** |
| MDJ | | | | PcS | **PcS** | **09 28 27.4** | **-0.6** |
| MDJ | | | | PMZ | | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,110nm,4.8s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,54nm,19.8s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,34nm,18.3s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,55nm,19.8s | | | | | | |
| **MEEK** | **Meekatharra** | **36.06** | **193** | P | **P** | **09 22 15.6** | **-0.4** |
| | baz=36,SNR=4.6 | | | | | | |
| **HNR** | **Honiara** | **37.30** | **118** | LR | LR | 09 36 54.2 | |
| | comp=Z,63nm,19.0s,baz=90,slow=35 | | | | | | |
| **QLP** | **Quilpie** | **38.78** | **155** | P | **P** | **09 22 38.9** | **-0.1** |
| | baz=39,SNR=15 | | | | | | |
| **MORW** | **Morawa** | **39.02** | **196** | P | **P** | **09 22 40.6** | **-0.4** |
| | baz=39,SNR=4.5 | | | | | | |
| **GTA** | **Gaotai** | **39.17** | **326** | *e*P | **P** | **09 22 42.0** | **-0.3** |
| GTA | | | | pP | **pP** | **09 22 53.3** | **-1.0** |
| GTA | | | | sP | **sP** | **09 22 58.8** | **-0.7** |
| GTA | | | | PcP | **PcP** | **09 24 50.3** | **-0.9** |
| GTA | | | | S | **S** | **09 28 38.8** | **-0.7** |
| GTA | | | | sS | **sS** | **09 28 59.0** | **-0.5** |
| GTA | | | | SS | **SS** | **09 31 25.5** | **-8.2** |
| GTA | | | | PMZ | | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,72nm,4.2s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,170nm,17.1s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,230nm,15.7s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,250nm,16.6s | | | | | | |
| **FORT** | **Forrest** | **39.24** | **179** | P | **P** | **09 22 42.2** | **-0.6** |
| | baz=39,SNR=8.3 | | | | | | |
| **FORT** | **Forrest** | **39.24** | **179** | *e*P | **P** | **09 22 43.8** | **+1.1** |
| | comp=Z,167nm,2.3s | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.59** | **72** | T | T | 10 05 53.1 | |
| | baz=262,slow=73,SNR=17 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.59** | **71** | T | T | 10 06 03.8 | |
| | baz=262,slow=73,SNR=16 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.60** | **72** | T | T | 10 06 06.9 | |
| | baz=262,slow=73,SNR=7.7 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.98** | **70** | T | T | 10 06 48.3 | |
| | baz=265,slow=74,SNR=9.1 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.99** | **70** | T | T | 10 06 44.0 | |
| | baz=265,slow=74,SNR=11 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.00** | **70** | T | T | 10 06 49.6 | |
| | baz=265,slow=74,SNR=11 | | | | | | |
| **BLDU** | **Ballidu** | **40.33** | **194** | P | **P** | **09 22 51.6** | **-0.3** |
| | baz=40,SNR=6.3 | | | | | | |
| **KLR** | **Kul'dur** | **40.60** | **5** | *e*P | **P** | **09 22 54.8** | **+0.9** |
| **KLBR** | **Kellerberrin** | **41.03** | **192** | P | **P** | **09 22 59.3** | **+1.7** |
| | baz=41,SNR=7.1 | | | | | | |
| **TAPN** | **Taplejung** | **41.59** | **302** | *e*P | **P** | **09 23 01.8** | **-1.0** |
| | comp=Z,8.0nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **41.71** | **301** | *e*P | **P** | **09 23 02.6** | **-1.0** |
| | comp=Z,39nm,0.6s | | | | | | |
| **BBOO** | **Buckleboo** | **42.12** | **169** | P | **P** | **09 23 06.2** | **-0.4** |
| | baz=42,SNR=14 | | | | | | |
| **RAMN** | **Ramite** | **42.41** | **301** | *e*P | **P** | **09 23 08.5** | **-0.9** |
| | comp=Z,33nm,0.8s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.43** | **192** | *e*P | **P** | **09 23 10.8** | **+1.7** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **42.43** | **192** | *e*P | **P** | **09 23 10.8** | **+1.7** |
| | comp=Z,18nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **42.60** | **340** | *e*P | **P** | **09 23 09.7** | **-0.8** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **42.60** | **340** | *e*P | **P** | **09 23 11.0** | **+0.5** |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **42.80** | **339** | P | **P** | **09 23 12.4** | **+0.3** |
| | comp=Z,2.7nm,0.9s,baz=158,slow=7.6,SNR=12 | | | | | | |
| SONM | | | | PcP | **PcP** | **09 25 03.3** | **+0.5** |
| | comp=Z,1.0nm,0.7s,baz=138,slow=1.6,SNR=3.1 | | | | | | |
| **SONA1** | **Songino Array** | **42.81** | **339** | *e*P | **P** | **09 23 12.3** | **+0.2** |
| **GUN** | **Gumba** | **43.31** | **302** | *e*P | **P** | **09 23 15.8** | **-1.0** |
| | comp=Z,60nm,0.9s | | | | | | |
| **HTT** | **Hallett** | **43.35** | **166** | P | **P** | **09 23 14.4** | **-2.2** |
| | baz=43,SNR=3.7 | | | | | | |
| **PKI** | **Pulchoki** | **43.60** | **301** | *e*P | **P** | **09 23 17.3** | **-1.8** |
| | comp=Z,13nm,0.6s | | | | | | |
| **PKIN** | **Phulchoki** | **43.62** | **301** | *e*P | **P** | **09 23 17.4** | **-1.8** |
| | comp=Z,10nm,0.6s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **43.76** | **157** | P | **P** | **09 23 22.4** | **+2.6** |
| | baz=44,SNR=8.0 | | | | | | |
| **KKN** | **Kakani** | **43.78** | **301** | *e*P | **P** | **09 23 19.0** | **-1.4** |
| **DMN** | **Daman** | **43.87** | **301** | *e*P | **P** | **09 23 19.8** | **-1.4** |
| | comp=Z,36nm,1.1s | | | | | | |
| **GKN** | **Gorkha** | **44.39** | **301** | *e*P | **P** | **09 23 23.4** | **-1.8** |
| **KOLN** | **Koldanda** | **45.20** | **301** | *e*P | **P** | **09 23 30.5** | **-1.2** |
| | comp=Z,28nm,0.8s | | | | | | |
| **TLY** | **Talaya** | **47.01** | **340** | *e*P | **P** | **09 23 46.5** | **+1.1** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **TLY** | **Talaya** | **47.01** | **340** | *e*P | **P** | **09 23 45.8** | **+0.4** |
| | comp=Z,36nm,1.5s | | | | | | |
| **WMQ** | **Urumqi** | **48.99** | **322** | P | **P** | **09 24 02.0** | **+1.1** |
| WMQ | | | | sP | **sP**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EKS2** | **Erkin-Say** | **57.55** | **315** | *e*P | | **P** | **09 25 03.3** | **-0.6** |
| EKS2 | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **EKS2** | **Erkin-Say** | **57.55** | **315** | P | | **P** | **09 25 03.6** | **-0.3** |
| | SNR=7.8 | | | | | | | |
| **EKS2** | **Erkin-Say** | **57.55** | **315** | *e*P | | **P** | **09 25 03.3** | **-0.6** |
| | comp=Z,5.8nm,0.7s | | | | | | | |
| **NVS** | **Novosibirsk** | **57.70** | **332** | *e*P | | **P** | **09 25 03.1** | **-1.4** |
| NVS | | | | *e* | | | 09 27 13.1 | |
| **KBL** | **Kabul** | **58.93** | **305** | *e*P | | **P** | **09 25 13.2** | **-0.6** |
| **KBL** | **Kabul** | **58.93** | **305** | *e*P | | **P** | **09 25 13.2** | **-0.6** |
| **BRVK** | **Borovoye** | **63.52** | **326** | *ce*P | | **P** | **09 25 44.3** | **0.0** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **63.52** | **326** | *e*P | | **P** | **09 25 43.7** | **-0.5** |
| | comp=Z,17nm,1.0s | | | | | | | |
| **BILL** | **Bilibino** | **64.70** | **15** | *e*P | | P | 09 26 00.0 | +8.3 |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,47nm,2.4s | | | | | | | |
| BILL | | | | MLR | | MLR | | |
| | comp=Z,46nm,18.0s | | | | | | | |
| **IMYA** | **Miami** | **66.42** | **306** | *e*P | | **P** | **09 26 03.6** | **-0.1** |
| **IAKL** | **Akhelmad** | **67.53** | **306** | *e*P | | **P** | **09 26 10.3** | **-0.5** |
| **GEYT** | **Alibeck** | **68.17** | **307** | P | | **P** | **09 26 14.4** | **-0.2** |
| | comp=Z,5.9nm,0.7s,baz=146,slow=2.9,SNR=7.8 | | | | | | | |
| GEYT | | | | pP | | **pP** | **09 26 26.0** | **-1.4** |
| | comp=Z,12nm,0.8s,baz=172,slow=3.0,SNR=5.6 | | | | | | | |
| GEYT | | | | LR | | LR | 10 00 20.8 | |
| | comp=Z,57nm,18.8s,baz=75,slow=40 | | | | | | | |
| **SVE** | **Sverdlovsk** | **70.00** | **328** | *e*P | | **P** | **09 26 25.4** | **-0.1** |
| SVE | | | | pmax | | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **ARU** | **Arti** | **71.01** | **327** | LR | | LR | 09 57 37.3 | |
| | comp=Z,38nm,18.7s,baz=236,slow=36 | | | | | | | |
| **ARU** | **Arti** | **71.01** | **327** | *d* iP | | **P** | **09 26 31.2** | **-0.4** |
| ARU | | | | S | | **S** | **09 35 45.9** | **+1.4** |
| ARU | | | | SS | | **SS** | **09 40 17.4** | **-0.6** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **ARU** | **Arti** | **71.01** | **327** | *e*P | | **P** | **09 26 30.6** | **-1.0** |
| | comp=Z,19nm,0.9s | | | | | | | |
| **ISRV** | **Sarvestan** | **71.89** | **298** | *e*P | | P | 09 26 33.1 | -4.8 |
| **KDAK** | **Kodiak Island** | **77.53** | **33** | *i* P | | P | 09 27 14.8 | +5.3 |
| **RAYN** | **Ar Rayn** | **78.95** | **292** | *e*P | | **P** | **09 27 16.7** | **-1.5** |
| | comp=Z,14nm,0.9s | | | | | | | |
| **MCK** | **McKinley** | **79.59** | **27** | *e*P | | **P** | **09 27 22.7** | **+1.8** |
| MCK | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **MCK** | **McKinley** | **79.59** | **27** | *e*P | | **P** | **09 27 22.6** | **+1.8** |
| | comp=Z,12nm,1.1s | | | | | | | |
| **KBZ** | **Khabaz** | **79.91** | **313** | P | | **P** | **09 27 21.7** | **-1.2** |
| | comp=Z,1.9nm,0.8s,baz=91,slow=8.8,SNR=4.3 | | | | | | | |
| **KIV** | **Kislovodsk** | **80.05** | **313** | *e*P | | **P** | **09 27 24.3** | **+0.5** |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| KIV | | | | MLR | | MLR | | |
| | comp=Z,35nm,18.0s | | | | | | | |
| **COLA** | **College** | **80.09** | **26** | *e*P | | P | 09 27 26.6 | +3.2 |
| **ILAR** | **Eielson Array** | **80.50** | **26** | P | | **P** | **09 27 26.4** | **+0.7** |
| | comp=Z,1.0nm,0.9s,baz=256,slow=4.3,SNR=7.2 | | | | | | | |
| ILAR | | | | LR | | LR | 10 05 46.1 | |
| | comp=Z,28nm,19.7s,baz=240,slow=38 | | | | | | | |
| **KLMR** | **Klimovskoe** | **81.32** | **330** | *e*P | | **P** | **09 27 28.7** | **-1.4** |
| KLMR | | | | pmax | | pmax | | |
| | comp=Z,38nm,1.7s | | | | | | | |
| **OBN** | **Obninsk** | **83.27** | **325** | P | | **P** | **09 27 40.0** | **-0.4** |
| OBN | | | | *e* | | | 09 27 53.1 | |
| OBN | | | | *e* | | | 09 31 00.0 | |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| OBN | | | | MLR | | MLR | | |
| | comp=Z,25nm,13.0s | | | | | | | |
| **MALT** | **Malatya** | **83.68** | **308** | *ce*P | | **P** | **09 27 44.0** | **+0.9** |
| **DAWY** | **Dawson** | **83.79** | **26** | *e*P | | **P** | **09 27 43.8** | **+0.8** |
| | comp=Z,8.3nm,1.1s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **85.97** | **340** | P | | **P** | **09 27 53.2** | **-0.6** |
| | comp=Z,4.2nm,0.7s,baz=74,slow=5.4,SNR=10 | | | | | | | |
| ARCES | | | | pP | | **pP** | **09 28 06.1** | **-0.9** |
| | comp=Z,4.9nm,0.7s,baz=87,slow=5.8,SNR=5.2 | | | | | | | |
| **SIM** | **Simferopol'** | **86.06** | **315** | *e*P | | **P** | **09 27 53.3** | **-1.5** |
| SIM | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **87.19** | **310** | P | | **P** | **09 27 59.4** | **-1.2** |
| | comp=Z,1.2nm,0.6s,baz=102,slow=4.2,SNR=8.1 | | | | | | | |
| BRTR | | | | pP | | **pP** | **09 28 10.9** | **-2.9** |
| | comp=Z,1.7nm,0.6s,baz=91,slow=5.2,SNR=6.8 | | | | | | | |
| **FINES** | **FINESS Array B** | **87.69** | **332** | P | | **P** | **09 28 02.1** | **-0.2** |
| | comp=Z,4.4nm,0.6s,baz=89,slow=4.8,SNR=30 | | | | | | | |
| FINES | | | | pP | | **pP** | **09 28 13.1** | **-2.4** |
| | comp=Z,4.2nm,0.6s,baz=103,slow=6.0,SNR=5.5 | | | | | | | |
| **CSS** | **Prodhromos** | **88.18** | **305** | *e*P | | **P** | **09 28 03.9** | **-1.4** |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **VNDA** | **Vanda** | **88.25** | **173** | LR | | LR | 10 08 32.9 | |
| | comp=Z,20nm,19.8s,baz=108,slow=36 | | | | | | | |
| **AKASG** | **Malin Array Be** | **88.33** | **321** | P | | **P** | **09 28 04.4** | **-1.2** |
| | comp=Z,2.3nm,0.8s,baz=70,slow=4.4,SNR=6.5 | | | | | | | |
| AKASG | | | | pP | | **pP** | **09 28 15.9** | **-2.8** |
| | comp=Z,1.6nm,0.6s,baz=66,slow=3.1,SNR=2.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **88.33** | **321** | *i* P | | P | **09 28 04.6** | **-1.0** |
| AKASG | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **KIEV** | **Kiev** | **88.34** | **321** | *e*P | | P | 09 28 12.0 | +6.4 |
| KIEV | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **MAW** | **Mawson** | **88.50** | **200** | P | | **P** | **09 28 05.4** | **-0.5** |
| | comp=Z,1.1nm,0.8s,baz=342,slow=3.2,SNR=4.2 | | | | | | | |
| **SBA** | **Scott Base** | **89.15** | **172** | *e*P | | **P** | **09 28 10.4** | **+1.6** |
| SBA | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | | |
| **SBA** | **Scott Base** | **89.15** | **172** | *e*P | | **P** | **09 28 10.3** | **+1.6** |
| | comp=Z,4.2nm,1.2s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **90.05** | **269** | P | | **P** | **09 28 13.9** | **-0.8** |
| | comp=Z,1.0nm,0.2s,baz=63,slow=4.8,SNR=5.0 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **90.05** | **269** | *i* P | | **P** | **09 28 12.8** | **-1.9** |
| KMBO | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.2s | | | | | | | |
| **STHS** | **Stebnicka Huta** | **93.62** | **321** | *e*P | | **P** | **09 28 30.6** | **+0.3** |
| **STHS** | **Stebnicka Huta** | **93.62** | **321** | *e*P | | **P** | **09 28 30.6** | **+0.3** |
| **NB2** | **NORSAR Subarra** | **94.55** | **334** | P | | **P** | **09 28 32.7** | **-1.6** |
| | comp=Z,3.0nm,0.8s,baz=64,slow=4.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **94.55** | **334** | P | | **P** | **09 28 33.4** | **-0.9** |
| | comp=Z,1.7nm,0.7s,baz=64,slow=4.6,SNR=6.5 | | | | | | | |
| NOA | | | | pP | | **pP** | **09 28 44.7** | **-2.9** |
| | comp=Z,2.2nm,0.8s,baz=67,slow=4.7,SNR=3.7 | | | | | | | |
| NOA | | | | LR | | LR | 10 14 46.0 | |
| | comp=Z,40nm,18.3s,baz=35,slow=38 | | | | | | | |
| **GERES** | **GERESS Array B** | **98.46** | **322** | P | | **P** | **09 28 51.3** | **-1.1** |
| | comp=Z,0.8nm,0.7s,baz=74,slow=5.7,SNR=5.5 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **103.30** | **47** | PKKP | | PKKPdf | 09 45 26.8 | +9.0 |
| | comp=Z,0.3nm,0.8s,baz=103,slow=4.0,SNR=3.1 | | | | | | | |
| **ANMO** | **Albuquerque** | **113.37** | **46** | *i* PKIKP | | **PKiKP** | **09 33 56.6** | **+4.2** |
| ANMO | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,2.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **118.21** | **50** | PKP | | **PKPdf** | **09 34 03.7** | **+2.0** |
| | comp=Z,0.2nm,0.6s,baz=129,slow=1.7,SNR=4.0 | | | | | | | |
| TXAR | | | | PKKPbc | | **PKKPbc** | **09 44 21.1** | **+0.2** |
| | comp=Z,0.4nm,0.7s,baz=125,slow=5.6,SNR=5.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.64** | **291** | PKP | | **PKPdf** | **09 34 08.0** | **-0.5** |
| | comp=Z,0.9nm,0.9s,baz=44,slow=3.0,SNR=6.5 | | | | | | | |
| **LRS** | **Lares** | **149.86** | **27** | *e*PKPbc | | **PKPbc** | **09 35 05.6** | **+0.7** |
| **STVI** | **Saint Thomas** | **150.61** | **24** | *e*PKPbc | | **PKPbc** | **09 35 07.9** | **+1.3** |

*ISCJB **17** 09:15:32.1±0.6, 10°.29S±0°.07×78°.56W±0°.10, h52km, mb3.9/11, MS3.6/1, Error ellipse: s-maj=16.7km s-min=4.8km az=144.1*
*IDC **17** 09:15:32.5±1.0, 10°.37S×78°.57W, h34km±6km, mb3.7/7, mb1 3.9/9, mb1mx3.8/33, mbtmp3.9/9, ML3.6/2, MS3.4/5, Ms1 3.4/5, ms1mx3.1/19, Error ellipse: s-maj=33.8km s-min=14.6km az=44.0*
*NEIC **17** 09:15:34.9±1.0, 10°.32S×78°.32W, h74km±13km, mb4.3/4, Error ellipse: s-maj=25.1km s-min=9.0km az=70.0*
*BJI **17** 09:15:40.9, 10°.50S×78°.40W, h30km, mB5.2/4, Ms5.4/4, Ms7 5.1/4*

**ISC 17 09:15:34.1±0.7, 10°.35S±0°.07×78°.5W±0°.1, h52km, n37, σ2s29/40, mb4.1/11, Near coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MAYR** | **Mayorazgo** | **2.31** | **137** | *e*P | | | **Pn** | **09 16 09.1** | **-0.6** |
| MAYR | | | | *e*S | | | **Sn** | **09 16 35.5** | **-1.5** |
| **NNA** | **Nana** | **2.33** | **135** | Pn | | | **Pn** | **09 16 09.5** | **-0.5** |
| | 18nm,0.3s,baz=306,slow=6.0,SNR=56 | | | | | | | | |
| NNA | | | | Sn | | | **Sn** | **09 16 37.4** | **0.0** |
| | 97nm,0.3s,baz=278,slow=7.1,SNR=8.0 | | | | | | | | |
| NNA | | | | LR | | | LR | 09 17 19.7 | |
| | comp=Z,379nm,20.2s,baz=347,slow=46 | | | | | | | | |
| **NNA** | **Nana** | **2.33** | **135** | *e*Pn | | | **Pn** | **09 16 09.2** | **-0.8** |
| NNA | | | | *e*Sn | | | **Sn** | **09 16 40.5** | **+3.0** |
| **ATAH** | **Atahualpa** | **3.19** | **3** | Pn | | | Pn | 09 16 25.1 | +2.9 |
| | 11nm,0.3s,baz=177,slow=5.3,SNR=41 | | | | | | | | |
| ATAH | | | | Sn | | | Sn | 09 17 08.1 | +8.8 |
| | 19nm,0.3s,baz=296,slow=22,SNR=9.5 | | | | | | | | |
| ATAH | | | | LR | | | LR | 09 17 39.3 | |
| | comp=Z,364nm,18.6s,baz=196,slow=39 | | | | | | | | |
| **ATAH** | **Atahualpa** | **3.19** | **3** | *e*P | | | **Pn** | **09 16 24.7** | **+2.5** |
| ATAH | | | | *e*S | | | **Sn** | **09 17 02.7** | **+3.4** |
| **PT02** | **Quilmana** | **3.30** | **142** | *e*P | | | **Pn** | **09 16 21.6** | **-1.8** |
| PT02 | | | | *e*S | | | **Sn** | **09 17 04.0** | **+2.6** |
| **PT06** | **Pisco** | **4.08** | **148** | *e*P | | | **Pn** | **09 16 34.0** | **0.0** |
| **PT03** | **Guadalupe** | **4.50** | **144** | *e*P | | | **Pn** | **09 16 38.1** | **-1.8** |
| PT03 | | | | *e*S | | | **Sn** | **09 17 34.7** | **+3.7** |
| **AYAC** | **Ayacucho** | **5.08** | **124** | *e*P | | | **Pn** | **09 16 47.9** | **-0.1** |
| AYAC | | | | *e*S | | | **Sn** | **09 17 46.5** | **+1.0** |
| **PT04** | **Zamaca** | **5.16** | **147** | *e*P | | | **Pn** | **09 16 49.6** | **+0.8** |
| **ARE** | **Arequipa** | **9.16** | **132** | *e*P | | | Pn | 09 17 55.0 | +11 |
| **OTAV** | **Otavalo** | **10.52** | **0** | *e*Pn | | | **Pn** | **09 18 00.9** | **-1.7** |
| OTAV | | | | *e*Sn | | | Sn | 09 20 08.0 | +8.7 |
| **LPAZ** | **La Paz** | **11.72** | **121** | Pn | | | Pn | 09 18 22.0 | +2.7 |
| | 0.2nm,0.3s,baz=322,slow=11,SNR=13 | | | | | | | | |
| LPAZ | | | | LR | | | LR | 09 23 16.6 | |
| | comp=Z,199nm,18.8s,baz=286,slow=40 | | | | | | | | |
| **SAML** | **Samuel** | **15.20** | **86** | *e*Pn | | | **Pn** | **09 19 02.5** | **-3.1** |
| **LVC** | **Limon Verde** | **15.29** | **144** | Pn | | | **P** | **09 19 13.2** | **+2.4** |
| | 29nm,0.3s,baz=301,slow=8.3,SNR=17 | | | | | | | | |
| **ROSC** | **El Rosal** | **15.68** | **16** | LR | | | LR | 09 26 29.4 | |
| | comp=Z,218nm,19.9s,baz=194,slow=42 | | | | | | | | |
| **SIV** | **San Ignacio** | **17.90** | **110** | P | | | **P** | **09 19 39.3** | **-0.3** |
| | 0.2nm,0.3s,baz=297,slow=14.5,SNR=6.8 | | | | | | | | |
| **PTGA** | **Pitinga** | **20.79** | **64** | P | | | **P** | **09 20 11.5** | **+0.4** |
| | 1.7nm,0.6s,baz=245,slow=13,SNR=5.7 | | | | | | | | |
| **CFAA** | **Coronel Fontan** | **23.21** | **157** | P | | | **P** | **09 20 36.2** | **-0.4** |
| | 0.2nm,0.9s,baz=78,slow=9.3,SNR=2.5 | | | | | | | | |
| **CPUP** | **Villa Florida** | **25.59** | **131** | P | | | **P** | **09 20 58.5** | **+0.1** |
| | 1.7nm,0.8s,baz=313,slow=12,SNR=7.4 | | | | | | | | |
| **BDFB** | **Brasilia** | **30.18** | **103** | P | | | **P** | **09 21 40.0** | **+0.2** |
| | 3.6nm,0.7s,baz=239,slow=8.3,SNR=5.9 | | | | | | | | |
| BDFB | | | | LR | | | LR | 09 34 51.2 | |
| | comp=Z,128nm,19.5s,baz=234,slow=38 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.30** | **329** | P | | | **P** | **09 23 55.1** | **+0.2** |
| | 0.3nm,0.8s,baz=145,slow=11,SNR=3.8 | | | | | | | | |
| TXAR | | | | pP | | | **pP** | **09 24 04.9** | **-3.9** |
| | 0.6nm,0.8s,baz=146,slow=9.1,SNR=6.0 | | | | | | | | |
| **ANMO** | **Albuquerque** | **52.23** | **331** | *e*P | | | **P** | **09 24 39.5** | **-0.8** |
| | 3.4nm,1.3s | | | | | | | | |
| ANMO | | | | *e* | | | | 09 24 50.5 | |
| **SDCO** | **Great Sand Dun** | **54.10** | **334** | *e*P | | | **P** | **09 24 53.6** | **-0.4** |
| | 2.2nm,1.0s | | | | | | | | |
| SDCO | | | | *e* | | | | 09 25 04.0 | |
| **HWUT** | **Hardware Ranch** | **59.96** | **332** | *e*P | | | **P** | **09 25 34.5** | **-0.9** |
| | 2.7nm,0.9s | | | | | | | | |
| HWUT | | | | *e* | | | | 09 25 44.4 | |
| **NVAR** | **Mina Array Bea** | **61.08** | **325** | P | | | **P** | **09 25 43.9** | **+0.8** |
| | 0.6nm,0.7s,baz=128,slow=5.7,SNR=5.2 | | | | | | | | |
| NVAR | | | | pP | | | **pP** | **09 25 54.3** | **-3.2** |
| | 1.2nm,0.8s,baz=144,slow=6.8,SNR=7.1 | | | | | | | | |
| **DBIC** | **Dimbokro** | **75.28** | **80** | P | | | **P** | **09 27 13.6** | **+1.3** |
| | 3.7nm,0.8s,baz=188,slow=7.5,SNR=3.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.98** | **75** | P | | | **P** | **09 27 54.4** | **0.0** |
| | 1.8nm,0.9s,baz=268,slow=4.3,SNR=8.7 | | | | | | | | |
| TORD | | | | pP | | | **pP** | **09 28 05.6** | **-3.7** |
| | 0.9nm,0.8s,baz=271,slow=4.2,SNR=4.1 | | | | | | | | |
| **SUMG** | **Summit** | **86.75** | **11** | *e*P | | | **P** | **09 28 10.5** | **-2.1** |
| | 5.1nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **135.80** | **227** | PKP | | | **PKPdf** | **09 34 49.3** | **-0.6** |
| | 0.3nm,0.6s,baz=127,slow=1.7,SNR=3.2 | | | | | | | | |
| **SONM** | **Songino Array** | **142.41** | **355** | PKhKP | | PKPpre | | 09 34 57.9 | |
| | 0.5nm,0.5s,baz=5.2,slow=5.1,SNR=3.1 | | | | | | | | |
| **KSH** | **Kashi** | **143.14** | **34** | *e*PKP | | PKPdf | | 09 35 11.4 | +8.5 |
| KSH | | | | *ep*PKP | | pPKPdf | | 09 35 22.5 | +4.0 |
| KSH | | | | *es*PKP | | | | 09 35 25.6 | |
| KSH | | | | *e*PP | | PP | | 09 38 21.3 | +8.5 |
| KSH | | | | PPMZ | | | | | |
| | 81nm,5.0s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | 180nm,10.5s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | 110nm,5.4s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | 200nm,12.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **144.57** | **17** | *e*PKP | | PKPdf | | 09 35 14.0 | +8.8 |
| **HHC** | **Hu-ho-hao-te** | **148.33** | **345** | *e*PKPbc | | **PKPab** | | **09 35 21.9** | **+3.7** |
| HHC | | | | PP | | PP | | 09 38 58.0 | +15 |
| HHC | | | | SKKS | | | | 09 45 40.6 | |
| HHC | | | | PPMZ | | | | | |
| | 93nm,6.2s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | 180nm,13.7s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | 300nm,16.2s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | 220nm,16.2s | | | | | | | | |
| **GTA** | **Gaotai** | **151.02** | **3** | *e*PKPbc | | **PKPbc** | | **09 35 21.8** | **0.0** |
| GTA | | | | pPKP | | **pPKPdf** | | **09 35 35.6** | **+3.9** |
| GTA | | | | sPKP | | | | 09 35 39.8 | |
| **CD2** | **Chengdu** | **159.43** | **354** | PKP | | PKPdf | | 09 35 34.3 | +6.8 |
| CD2 | | | | pPKP | | pPKPdf | | 09 35 48.5 | +5.3 |
| CD2 | | | | sPKP | | | | 09 35 53.8 | |
| CD2 | | | | SKS | | SKSdf | | 09 42 36.0 | +7.0 |
| CD2 | | | | SKKS | | **SKKSac** | | **09 46 37.5** | **+6.4** |
| CD2 | | | | PPMZ | | | | | |
| | 120nm,5.0s | | | | | | | | |
| **KMI** | **Kunming** | **165.25** | **355** | PKP | | PKPdf | | 09 35 43.1 | +9.4 |

**ISK 17 09:20:07.3, 39°.38N×40°.46E, h23km, MD2.2, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BNGB** | **Bing˜¶l** | **0.43** | **156** | *e*PG | | | Pb | 09 20 16.6 | +0.3 |
| BNGB | | | | *e*SG | | | Sb | 09 20 23.5 | +0.9 |
| **ERZN** | **Erzincan** | **0.61** | **290** | *e*PG | | | Pb | 09 20 19.9 | +0.4 |
| ERZN | | | | *e*SG | | | Sn | 09 20 29.1 | -0.9 |
| **PTK** | **Pertek** | **0.96** | **240** | *e*PG | | | Pb | 09 20 25.6 | 0.0 |

*ISCJB **17** 09:24:28.7±0.6, 19°.1S±0°.1×178°.2W±0°.1, h600km, mb3.6/8, Error ellipse: s-maj=22.8km s-min=9.4km az=143.9*
*IDC **17** 09:24:30.8±1.6, 19°.03S×178°.24W, h618km±20km, mb3.1/8, mb1 3.4/11, mb1mx3.2/27, mbtmp4.2/11, Error ellipse: s-maj=19.3km s-min=12.9km az=152.0*

**ISC 17 09:24:29.5±0.7, 19°.05S±0°.2×178°.2W±0°.1, h600km, n12, σ1s54/15, mb3.3/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.96** | **52** | P | | P | **P** | **09 26 29.4** | **+0.8** |
| | 2.5nm,0.3s,baz=300,slow=8.1,SNR=3.9 | | | | | | | | |
| AFI | | | | S | | S | **S** | **09 28 04.2** | **-1.9** |
| | 2.3nm,0.3s,baz=83,slow=8.1,SNR=3.8 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **14.71** | **255** | P | | P | **P** | **09 27 36.5** | **+1.4** |
| | 0.3nm,0.3s,baz=2.4,slow=5.2,SNR=5.2 | | | | | | | | |
| **URZ** | **Urewera** | **19.65** | **191** | P | | P | **P** | **09 28 18.2** | **-1.6** |
| | 1.3nm,0.3s,baz=281,slow=4.3,SNR=11 | | | | | | | | |
| **CTA** | **Charters Tower** | **33.48** | **262** | P | | P | **P** | **09 30 21.9** | **+1.1** |
| | 9.7nm,0.6s,baz=98,slow=11,SNR=12 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.64** | **261** | P | | P | **P** | **09 31 50.2** | **-0.1** |
| | 5.7nm,0.6s,baz=97,slow=7.9,SNR=108 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **09 33 16.8** | **-3.0** |
| | 0.2nm,0.4s,baz=87,slow=3.1,SNR=3.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **44.70** | **255** | P | | P | **P** | **09 31 51.1** | **+0.3** |
| | 11nm,0.8s,baz=88,slow=8.1,SNR=113 | | | | | | | | |
| ASAR | | | | S | | | **S** | **09 37 42.8** | **-2.3** |
| | 2.0nm,0.8s,baz=93,slow=16,SNR=16 | | | | | | | | |
| **VNDA** | **Vanda** | **59.41** | **185** | P | | P | **P** | **09 33 35.6** | **+0.7** |
| | 0.5nm,0.8s,baz=6.3,slow=9.2,SNR=4.0 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.06** | **44** | P | | P | **P** | **09 35 38.8** | **+0.6** |
| | 0.5nm,0.7s,baz=227,slow=9.2,SNR=4.5 | | | | | | | | |
| **MAW** | **Mawson** | **82.93** | **200** | P | | P | **P** | **09 35 52.1** | **+0.1** |
| | 0.4nm,0.4s,baz=138,slow=4.6,SNR=6.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.40** | **57** | P | | P | **P** | **09 36 11.2** | **+1.5** |
| | 0.5nm,0.8s,baz=216,slow=6.2,SNR=5.1 | | | | | | | | |
| **ILAR** | **Eielson Array** | **86.88** | **13** | P | | P | **P** | **09 36 09.9** | **-1.1** |
| | 0.3nm,0.7s,baz=238,slow=4.9,SNR=3.7 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.66** | **314** | PKPbc | | | **PKPdf** | **09 43 01.0** | **+0.1** |
| | 0.4nm,0.6s,baz=0.0,slow=1.7,SNR=2.7 | | | | | | | | |

**GUC 17 09:28:56.8±0.3, 22°.25S×68°.88W, h107km±4km, ML3.5, 3C-3D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **0.79** | **234** | *i* P | | | Pn | 09 29 16.3 | +0.4 |
| PB06 | | | | *i* S | | | Sn | 09 29 31.0 | +0.8 |
| PB06 | | | | AML | | AML | | 09 29 31.9 | |
| | comp=E,1μm,0.2s | | | | | | | | |
| **PB07** | **IPOC Station P** | **1.07** | **299** | *i* P | | | Pn | 09 29 19.3 | +0.6 |
| PB07 | | | | *i* S | | | Sn | 09 29 36.3 | +1.0 |
| PB07 | | | | AML | | AML | | 09 29 37.0 | |
| | comp=E,1μm,0.5s | | | | | | | | |
| **PB04** | **IPOC Station P** | **1.18** | **266** | *i* P | | | Pn | 09 29 20.5 | +0.6 |
| PB04 | | | | *i* S | | | Sn | 09 29 38.3 | +0.9 |
| PB04 | | | | AML | | AML | | 09 29 42.3 | |
| | comp=E,664nm,0.4s | | | | | | | | |
| **PB01** | **IPOC Station P** | **1.32** | **335** | *i* P | | | Pn | 09 29 21.8 | +0.3 |
| PB01 | | | | *i* S | | | Sn | 09 29 41.1 | +0.9 |
| PB01 | | | | AML | | AML | | 09 29 42.3 | |
| | comp=E,575nm,0.2s | | | | | | | | |
| **PB10** | **IPOC Station P** | **1.99** | **230** | *i* P | | | Pn | 09 29 31.5 | +1.9 |
| **MNMC** | **Minimini** | **3.17** | **348** | *i* P | | | Pn | 09 29 45.0 | -0.4 |
| MNMC | | | | AML | | AML | | 09 30 40.2 | |
| | comp=E,255nm,0.3s | | | | | | | | |

**IDC 17 09:34:32.4±1.6, 19°.69S×174°.26W, h0km, mb3.6/4, mb1 3.9/5, mb1mx3.7/20, mbtmp3.6/5, ML3.6/1, Error ellipse: s-maj=70.1km s-min=22.5km az=144.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.22** | **23** | Pn | | | Pn | 09 36 05.6 | -0.1 |
| | 1.3nm,0.3s,baz=208,slow=15,SNR=4.1 | | | | | | | | |
| AFI | | | | Sn | | | Sn | 09 37 17.9 | +0.2 |
| | 1.5nm,0.3s,baz=198,slow=20,SNR=3.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.12** | **256** | P | | | P | 09 43 14.8 | +0.2 |
| | 0.4nm,0.5s,baz=104,slow=7.8,SNR=7.9 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.20** | **261** | P | | | P | 09 43 14.6 | -0.5 |
| | 0.6nm,0.8s,baz=95,slow=8.1,SNR=8.0 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.06** | **42** | P | | | P | 09 46 34.2 | +0.8 |
| | 0.5nm,0.7s,baz=232,slow=8.5,SNR=5.2 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **83.68** | **56** | P | | | P | 09 47 02.8 | -0.8 |
| | 0.3nm,0.8s,baz=251,slow=8.5,SNR=4.3 | | | | | | | | |

*CSEM **17** 09:36:16.2±0.1, 40°.75N×27°.63E, h20km, MD2.5, Error ellipse: s-maj=3.0km s-min=2.1km az=163.0*

**ISK 17 09:36:15.6, 40.75N×27.62E, h22km, MD2.5, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MRMT** | **Marmara Adasi** | **0.15** | **186** | *e*PG | | | Pb | 09 36 21.2 | +0.2 |
| MRMT | | | | *e*SG | | | Sb | 09 36 23.4 | -1.3 |
| **MRMT** | **Marmara Adasi** | **0.15** | **186** | *e*Pg | | | Pb | 09 36 21.2 | +0.2 |
| MRMT | | | | *e*Sg | | | Sb | 09 36 23.4 | -1.4 |
| **SART** | **Tekirdag** | **0.34** | **260** | *i* P | | | Pn | 09 36 24.3 | -1.0 |
| SART | | | | *i* S | | | Sb | 09 36 28.8 | +0.7 |
| **SART** | **Tekirdag** | **0.34** | **260** | P | | | Pn | 09 36 24.3 | -1.0 |
| SART | | | | S | | | Sb | 09 36 28.8 | +0.6 |
| **RKY** | **Sarkoy-Tekirda** | **0.34** | **260** | *e*PG | | | Pn | 09 36 24.2 | -1.1 |
| RKY | | | | *e*SG | | | Sb | 09 36 28.6 | +0.5 |
| **RKY** | **Sarkoy-Tekirda** | **0.34** | **260** | *e*Pg | | | Pn | 09 36 24.2 | -1.1 |
| RKY | | | | *e*Sg | | | Sb | 09 36 28.7 | +0.6 |
| **KRBG** | **Karabiga-Canak** | **0.43** | **214** | *e*PG | | | Pn | 09 36 25.8 | -0.6 |
| KRBG | | | | *e*SG | | | Sb | 09 36 31.5 | +1.0 |
| **KRBG** | **Karabiga-Canak** | **0.43** | **214** | *e*Pg | | | Pn | 09 36 25.8 | -0.6 |
| KRBG | | | | *e*Sg | | | Sb | 09 36 31.5 | +1.0 |
| **EDC** | **Edincik** | **0.44** | **155** | *e*PG | | | Pn | 09 36 25.9 | -0.7 |
| **EDC** | **Edincik** | **0.44** | **155** | *e*Pg | | | Pn | 09 36 25.9 | -0.8 |
| **GONE** | **Gonen-Balikesi** | **0.70** | **176** | *e*PG | | | Pb | 09 36 29.0 | -0.1 |
| **GONE** | **Gonen-Balikesi** | **0.70** | **176** | *e*Pg | | | Pb | 09 36 29.0 | -0.2 |
| **KCTX** | **Karacabey (Bur** | **0.74** | **130** | *e*PG | | | Pb | 09 36 30.2 | +0.3 |
| **KCTX** | **Karacabey (Bur** | **0.74** | **130** | *e*Pg | | | Pb | 09 36 30.2 | +0.3 |
| **LPK** | **Lapseki** | **0.75** | **240** | *e*PG | | | Pn | 09 36 30.6 | -0.3 |
| **LPK** | **Lapseki** | **0.75** | **240** | *e*Pg | | | Pn | 09 36 30.6 | -0.3 |
| **CTKS** | **Kestanelik-??a** | **0

HAWK eS Sn 09 46 50.1 0.0
comp=N,8.0nm,0.5s

*ISCJB **17** 09:59:29.1±0.7, 11°.33N±0°.04×70°.39W±0°.03, h27km±5km, Error ellipse: s-maj=6.5km s-min=4.4km az=155.7*
*NEIC **17** 09:59:29.7, 11°.30N×70°.39W, h12km, MW4.0(CAR), After CAR.*
*FUNV **17** 09:59:29.7, 11°.30N×70°.38W, h11km, MW4.1*
**ISC 17 09:59:28.8**±1.1, **11°.32N**±0°.03×**70°.38W**±0°.03, **h17**km±8km, **n39**,σ1§**01**/73,**5C-2D**,**Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DABV** | **Dabajuro** | **0.47** | **213** | *i*P | | | **Pg** | **09 59 37.6** | **-0.6** |
| DABV | | | | eS | | | **Sb** | **09 59 45.4** | **+0.2** |
| **DABV** | **Dabajuro** | **0.47** | **213** | eP | | | **Pg** | **09 59 37.6** | **-0.6** |
| DABV | | | | eS | | | **Sb** | **09 59 45.4** | **+0.2** |
| **MONV** | **Montecano** | **0.75** | **32**↑ | eP | | | **Pg** | **09 59 43.8** | **+0.3** |
| MONV | | | | eS | | | **Sn** | **09 59 54.6** | **-0.9** |
| **MONV** | **Montecano** | **0.75** | **32** | eP | | | **Pg** | **09 59 43.7** | **+0.3** |
| MONV | | | | eS | | | Sb | 09 59 45.6 | -7.7 |
| **SIQV** | **Siquisique** | **0.87** | **140**↓ | eP | | | **Pg** | **09 59 45.8** | **0.0** |
| SIQV | | | | eS | | | **Sg** | **09 59 57.6** | **+0.3** |
| **SIQV** | **Siquisique** | **0.87** | **140** | eP | | | **Pg** | **09 59 45.7** | **-0.1** |
| SIQV | | | | eS | | | **Sg** | **09 59 57.6** | **+0.3** |
| **QARV** | **Quebrada Arrib** | **1.11** | **187**↑ | eP | | | **Pb** | **09 59 49.8** | **+0.2** |
| QARV | | | | eS | | | **Sn** | **10 00 04.5** | **-0.1** |
| **QARV** | **Quebrada Arrib** | **1.11** | **187** | eP | | | **Pb** | **09 59 49.8** | **+0.2** |
| QARV | | | | eS | | | **Sn** | **10 00 04.5** | **-0.1** |
| **CURV** | **Curarigua** | **1.36** | **162** | eP | | | **Pb** | **09 59 54.0** | **+0.2** |
| CURV | | | | eS | | | **Sg** | **10 00 12.1** | **-0.8** |
| **CURV** | **Curarigua** | **1.36** | **162** | eP | | | **Pb** | **09 59 54.0** | **+0.2** |
| CURV | | | | eS | | | **Sg** | **10 00 12.1** | **-0.8** |
| **JACV** | **Jacura** | **1.54** | **98**↓ | eP | | | **Pb** | **09 59 56.5** | **-0.4** |
| JACV | | | | eS | | | **Sb** | **10 00 16.9** | **+0.8** |
| **JACV** | **Jacura** | **1.54** | **98** | eP | | | **Pb** | **09 59 56.5** | **-0.4** |
| JACV | | | | eS | | | **Sb** | **10 00 16.9** | **+0.8** |
| **TEPV** | **Terepaima** | **1.78** | **139** | eP | | | **Pb** | **10 00 00.5** | **-0.5** |
| TEPV | | | | eS | | | **Sn** | **10 00 21.4** | **+0.3** |
| **TEPV** | **Terepaima** | **1.78** | **139** | eP | | | **Pb** | **10 00 00.5** | **-0.5** |
| TEPV | | | | eS | | | **Sn** | **10 00 21.4** | **+0.3** |
| **SANV** | **Sanarito** | **1.99** | **155** | eP | | | **Pn** | **10 00 02.3** | **+0.6** |
| SANV | | | | eS | | | **Sn** | **10 00 26.9** | **+0.6** |
| **SANV** | **Sanarito** | **1.99** | **155** | eP | | | **Pn** | **10 00 02.3** | **+0.6** |
| SANV | | | | eS | | | **Sn** | **10 00 26.9** | **+0.6** |
| **VIRV** | **Villa del Rosa** | **2.15** | **248**↓ | eP | | | **Pn** | **10 00 04.5** | **+0.7** |
| VIRV | | | | eS | | | **Sn** | **10 00 30.9** | **+0.8** |
| **VIRV** | **Villa del Rosa** | **2.15** | **248** | eP | | | **Pn** | **10 00 04.1** | **+0.2** |
| VIRV | | | | eS | | | **Sn** | **10 00 30.9** | **+0.8** |
| **MAPV** | **Macapo** | **2.40** | **128** | eP | | | **Pn** | **10 00 08.0** | **+0.6** |
| MAPV | | | | eS | | | **Sn** | **10 00 36.9** | **+0.5** |
| **MAPV** | **Macapo** | **2.40** | **128** | eP | | | **Pn** | **10 00 08.0** | **+0.6** |
| MAPV | | | | eS | | | **Sn** | **10 00 36.9** | **+0.5** |
| **SDV** | **Santo Domingo** | **2.43** | **186** | ePn | | | **Pn** | **10 00 06.4** | **-1.5** |
| SDV | | | | ePg | | | **Pb** | **10 00 13.1** | **+0.9** |
| **TURV** | **Turiamo** | **2.64** | **109** | eP | | | **Pn** | **10 00 10.7** | **+0.1** |
| TURV | | | | eS | | | **Sn** | **10 00 41.9** | **-0.4** |
| **TURV** | **Turiamo** | **2.64** | **109** | eP | | | **Pn** | **10 00 11.5** | **+0.9** |
| TURV | | | | eS | | | **Sn** | **10 00 41.9** | **-0.4** |
| **VIGV** | **El Vigia** | **2.65** | **202**↑ | eP | | | **Pn** | **10 00 11.8** | **+1.0** |
| VIGV | | | | eS | | | **Sn** | **10 00 42.9** | **+0.4** |
| **SOCV** | **Socops** | **3.05** | **189** | eP | | | **Pn** | **10 00 17.5** | **+1.2** |
| SOCV | | | | eS | | | **Sn** | **10 00 51.3** | **-1.1** |
| **SOCV** | **Socops** | **3.05** | **189** | eP | | | **Pn** | **10 00 17.5** | **+1.2** |
| SOCV | | | | eS | | | **Sn** | **10 00 51.3** | **-1.1** |
| **BAUV** | **El Baul** | **3.30** | **135** | eP | | | **Pn** | **10 00 20.9** | **+1.3** |
| BAUV | | | | eS | | | **Sn** | **10 00 57.3** | **-1.2** |
| **BAUV** | **El Baul** | **3.30** | **135** | eP | | | **Pn** | **10 00 20.9** | **+1.3** |
| BAUV | | | | eS | | | **Sn** | **10 00 57.3** | **-1.2** |
| **CAPV** | **Capacho** | **3.93** | **209** | eP | | | **Pn** | **10 00 28.7** | **+0.2** |
| CAPV | | | | eS | | | **Sn** | **10 01 12.3** | **-2.0** |
| **CAPV** | **Capacho** | **3.93** | **209** | eP | | | **Pn** | **10 00 28.7** | **+0.2** |
| CAPV | | | | eS | | | **Sn** | **10 01 11.3** | **-3.0** |
| **BIRV** | **Birongo** | **4.12** | **101** | eP | | | **Pn** | **10 00 30.8** | **-0.2** |
| BIRV | | | | eS | | | **Sn** | **10 01 16.7** | **-2.2** |
| **BIRV** | **Birongo** | **4.12** | **101** | eP | | | **Pn** | **10 00 30.8** | **-0.2** |
| BIRV | | | | eS | | | **Sn** | **10 01 16.7** | **-2.2** |
| **ORCV** | **Isla La Orchil** | **4.13** | **83** | eP | | | **Pn** | **10 00 30.6** | **-0.6** |
| **ORCV** | **Isla La Orchil** | **4.13** | **83** | eP | | | **Pn** | **10 00 30.9** | **-0.2** |
| **CUPV** | **Cœpira** | **4.68** | **105** | eP | | | **Pn** | **10 00 39.4** | **+0.6** |
| CUPV | | | | eS | | | **Sn** | **10 01 30.2** | **-2.6** |
| **CUPV** | **Cœpira** | **4.68** | **105** | eP | | | **Pn** | **10 00 39.4** | **+0.6** |
| CUPV | | | | eS | | | **Sn** | **10 01 30.2** | **-2.6** |
| **PCRV** | **Puerto La Cruz** | **5.76** | **101** | eP | | | **Pn** | **10 00 53.8** | **+0.3** |
| **PCRV** | **Puerto La Cruz** | **5.76** | **101** | eP | | | **Pn** | **10 00 53.8** | **+0.3** |
| **BCIP** | **Isla Barro Col** | **9.55** | **258** | ePn | | | **Pn** | **10 01 47.1** | **+1.6** |
| BCIP | | | | | Sn | | **Sn** | **10 03 30.8** | **-1.7** |

*BJI **17** 10:15:07.6, 12°.71N×92°.30E, h35km, mb4.8/52, mB4.8/38, Ms4.3/41, Ms7 4.0/36*
*ISCJB **17** 10:15:08.4±0.7, 12°.95N±0°.02×92°.29E±0°.02, h25km±5km, mb4.9/124, MS4.0/29, Error ellipse: s-maj=4.3km s-min=2.6km az=19.1*
*MOS **17** 10:15:09.4±1.0, 12°.96N×92°.37E, h33km, mb5.1/41, MS4.2/7, Error ellipse: s-maj=7.8km s-min=4.9km az=114.3*
*IDC **17** 10:15:10.5±0.5, 12°.90N×92°.41E, h30km±2km, mb4.5/26, mb1 4.6/28, mb1mx4.5/38, mbtmp4.6/28, ML4.2/2, MS4.0/26, Ms1 4.0/26, ms1mx3.9/49, Error ellipse: s-maj=13.8km s-min=8.3km az=49.0*
*NEIC **17** 10:15:11.7±0.2, 12°.96N×92°.36E, h35km, mb5.0/34, Error ellipse: s-maj=6.9km s-min=4.7km az=48.0*
*KLM **17** 10:15:11.7, 12°.84N×92°.26E, h45km, mb4.8, MS5.3*
*SZGRF **17** 10:15:12.4, 13°.03N×92°.27E, h33km, mb5.0/23(BGR), Ms4.0/6(BGR)*
*DJA **17** 10:15:17.1±0.6, 13°N±4°×9°2E±°, h72km±6km, M5.1/35, mb4.8/35, mB5.5/9, MLv5.3/1, Mw(mB)5.0/9*
**ISC 17 10:15:11.2**±0.3, **12°.91N**±0°.03×**92°.36E**±0°.03, **h32**km±1km, **h32**km:**pP-P**,**n334**,σ1§**60**/407,**mb4.9**/124,**MS4.1**/30, **28C-32D**,**Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DGPR** | **DIGLIPUR** | **0.62** | **64** | eP | | | **Pb** | **10 15 23.9** | **+0.2** |
| DGPR | | | | eS | | | **Sn** | **10 15 33.1** | **+0.6** |
| DGPR | | | | | AML | | AML | 10 15 34.1 | |
| | comp=N,133μm,0.7s | | | | | | | | |
| DGPR | | | | | AML | | AML | 10 15 34.6 | |
| | comp=E,189μm,0.4s | | | | | | | | |
| **PBA** | **Port Blair** | **1.30** | **163** | eP | | | Pb | 10 15 35.9 | +0.8 |
| PBA | | | | eS | | | Sb | 10 15 55.5 | +4.0 |
| PBA | | | | | AML | | AML | 10 15 56.9 | |
| | comp=N,16μm,0.3s | | | | | | | | |
| PBA | | | | | AML | | AML | 10 15 57.8 | |
| | comp=E,23μm,0.6s | | | | | | | | |
| **CMBY** | **CAMPBELL BAY** | **6.06** | **165** | eP | | | **Pn** | **10 16 40.4** | **+1.8** |
| CMBY | | | | ex | | | **Sn** | **10 17 46.1** | **-0.8** |
| CMBY | | | | | AML | | AML | 10 17 51.2 | |
| | comp=N,513nm,0.2s | | | | | | | | |
| CMBY | | | | | AML | | AML | 10 17 55.3 | |
| | comp=E,417nm,0.2s | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **8.39** | **48** | ePn | | | **Pn** | **10 17 13.5** | **+2.8** |
| CM01 | | | | eSn | | | **Sn** | **10 18 40.1** | **-4.2** |
| **CMAR** | **Chiang Mai Arr** | **8.40** | **48** | Pn | | | **Pn** | **10 17 10.6** | **-0.2** |
| | comp=E,0.9nm,0.3s,baz=242,slow=15,SNR=14 | | | | | | | | |
| CMAR | | | | | Sn | | **Sn** | **10 18 39.9** | **-4.7** |
| | comp=E,1.3nm,0.3s,baz=237,slow=28,SNR=8.3 | | | | | | | | |
| CMAR | | | | | LR | | LR | 10 21 25.0 | |
| | comp=E,690nm,18.2s,baz=220,slow=45 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **8.64** | **46** | eP | | | **Pn** | **10 17 15.9** | **+1.9** |
| CHTO | | | | e | | | | 10 18 44.2 | |
| **CHTO** | **Chiang Mai** | **8.64** | **46** | ePn | | | **Pn** | **10 17 15.9** | **+1.9** |
| CHTO | | | | eSn | | | Sn | 10 18 44.2 | -6.2 |
| **LHMI** | **Lhok Sumawe** | **8.88** | **149** | ePn | | | Pn | 10 17 20.3 | +3.1 |
| **CHLP** | **Challavanipeta** | **9.74** | **306** | ePn | | | **Pn** | **10 17 26.7** | **-2.3** |
| CHLP | | | | | IAmb | | IAmb | 10 17 28.8 | |
| | comp=Z,175nm,0.8s | | | | | | | | |
| CHLP | | | | e | | | | 10 19 04.8 | |
| CHLP | | | | eSn | | | **Sn** | **10 19 17.1** | **-0.2** |
| **VIS** | **Vishakhapatnam** | **9.94** | **300** | *i* P | | | **Pn** | **10 17 30.0** | **-1.7** |
| VIS | | | | *i* x | | | x | 10 19 10.9 | |
| VIS | | | | ex | | | Sn | 10 19 14.5 | -7.7 |
| | comp=E,646nm,0.6s | | | | | | | | |
| VIS | | | | ex | | | x | 10 19 14.5 | |
| | comp=N,1μm,0.7s | | | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **10.75** | **150** | P | | | Pn | 10 17 47.6 | +4.6 |
| | comp=N,50nm,1.1s,comp=N,3μm | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KULM** | **Kulim** | **11.15** | **132** | ↑P | | | **Pn** | **10 17 49.4** | **+1.0** |
| **KULM** | **Kulim** | **11.15** | **132** | ePn | | | **Pn** | **10 17 51.1** | **+2.7** |
| **PVM** | **Polavaram** | **11.23** | **294** | ePn | | | **Pn** | **10 17 48.7** | **-0.8** |
| PVM | | | | | IAmb | | IAmb | 10 17 52.5 | |
| | comp=Z,54nm,0.9s | | | | | | | | |
| PVM | | | | e | | | | 10 19 41.0 | |
| PVM | | | | eSn | | | **Sn** | **10 19 54.4** | **+0.5** |
| **MDRS** | **Chennai** | **11.80** | **272** | eP | | | **Pn** | **10 17 56.5** | **-0.9** |
| MDRS | | | | | AMB | | AMB | 10 18 15.8 | |
| | comp=Z,38nm,0.6s | | | | | | | | |
| **PSI** | **Prapat** | **11.96** | **147** | eP | | | Pn | 10 18 04.2 | +4.5 |
| **PSI** | **Prapat** | **11.96** | **147** | ePn | | | Pn | 10 18 04.2 | +4.5 |
| **IPM** | **Ipoh** | **11.98** | **134** | ↓P | | | **Pn** | **10 17 59.7** | **-0.1** |
| **IPM** | **Ipoh** | **11.98** | **134** | ePn | | | **Pn** | **10 18 01.0** | **+1.2** |
| **SKHT** | **Srikalahasti** | **12.34** | **275** | ePn | | | **Pn** | **10 18 04.4** | **-0.3** |
| SKHT | | | | | IAmb | | IAmb | 10 18 05.6 | |
| | comp=Z,29nm,0.3s | | | | | | | | |
| SKHT | | | | e | | | | 10 20 06.5 | |
| SKHT | | | | eSn | | | **Sn** | **10 20 21.6** | **+0.4** |
| **ADKI** | **Addanki** | **12.35** | **285** | ePn | | | **Pn** | **10 18 03.1** | **-1.8** |
| ADKI | | | | | IAmb | | IAmb | 10 18 07.6 | |
| | comp=Z,14nm,0.7s | | | | | | | | |
| ADKI | | | | e | | | | 10 20 08.2 | |
| ADKI | | | | eSn | | | **Sn** | **10 20 21.5** | **0.0** |
| **BOK** | **Bokaro** | **12.44** | **331** | eP | | | **Pn** | **10 18 04.6** | **-1.5** |
| BOK | | | | | AMB | | AMB | 10 18 09.7 | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| **SHL** | **Shillong** | **12.60** | **358** | eP | | | **Pn** | **10 18 07.8** | **-0.6** |
| SHL | | | | | AMB | | AMB | 10 18 16.9 | |
| | comp=Z,19nm,0.0s | | | | | | | | |
| **PALK** | **Pallekele** | **12.77** | **245** | Pn | | | **Pn** | **10 18 11.2** | **+0.6** |
| | comp=Z,1.3nm,0.3s,baz=117,slow=10,SNR=8.7 | | | | | | | | |
| PALK | | | | | Sn | | Sn | 10 20 19.0 | -13 |
| | comp=Z,8.5nm,0.3s,baz=116,slow=21,SNR=9.1 | | | | | | | | |
| PALK | | | | | LR | | LR | 10 22 41.2 | |
| | comp=Z,988nm,18.9s,baz=295,slow=35 | | | | | | | | |
| **PALK** | **Pallekele** | **12.77** | **245** | eP | | | **Pn** | **10 18 11.9** | **+1.3** |
| **PALK** | **Pallekele** | **12.77** | **245** | ePn | | | **Pn** | **10 18 11.9** | **+1.3** |
| PALK | | | | eSn | | | Sn | 10 20 22.5 | -9.2 |
| **KTGM** | **Kuala Trenggan** | **13.03** | **124** | ↓P | | | **Pn** | **10 18 15.0** | **+0.8** |
| **NJS** | **Nagarjunasagar** | **13.13** | **288** | ePn | | | **Pn** | **10 18 13.6** | **-1.9** |
| NJS | | | | | IAmb | | IAmb | 10 18 16.5 | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| NJS | | | | e | | | | 10 20 26.4 | |
| NJS | | | | eSn | | | **Sn** | **10 20 40.8** | **+0.2** |
| **FRIM** | **Kepong** | **13.28** | **136** | ↑P | | | **Pn** | **10 18 18.4** | **+0.9** |
| **RPR** | **Rampur** | **13.88** | **297** | ePn | | | **Pn** | **10 18 23.8** | **-2.0** |
| RPR | | | | | IAmb | | IAmb | 10 18 27.0 | |
| | comp=Z,15nm,0.6s | | | | | | | | |
| RPR | | | | e | | | | 10 20 45.4 | |
| RPR | | | | eSn | | | **Sn** | **10 20 57.8** | **-1.1** |
| **HYB** | **Hyderabad** | **14.06** | **290** | *i* P | | | Pn | 10 18 31.5 | +3.3 |
| HYB | | | | e | | | | 10 20 51.5 | |
| HYB | | | | eS | | | **Sn** | **10 21 02.0** | **-1.2** |
| **HYB** | **Hyderabad** | **14.06** | **290** | eP | | | **Pn** | **10 18 28.0** | **-0.2** |
| **HYBB** | **Hyderabad (bro** | **14.06** | **290** | ePn | | | **Pn** | **10 18 28.3** | **+0.1** |
| HYBB | | | | | IAmb | | IAmb | 10 18 29.6 | |
| | comp=Z,5.7nm,0.6s | | | | | | | | |
| HYBB | | | | e | | | | 10 20 47.1 | |
| HYBB | | | | eSn | | | **Sn** | **10 21 02.1** | **-1.1** |
| **ODAN** | **Odare** | **14.64** | **342** | eP | | | Pn | 10 18 32.6 | -3.7 |
| | comp=Z,49nm,0.4s | | | | | | | | |
| **URV** | **Uravakonda** | **14.79** | **280** | ePn | | | **Pn** | **10 18 39.9** | **+1.6** |
| URV | | | | | IAmb | | IAmb | 10 18 46.1 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| URV | | | | e | | | | 10 21 06.7 | |
| URV | | | | eSn | | | **Sn** | **10 21 21.3** | **+0.1** |
| **RAMN** | **Ramite** | **14.98** | **340** | eP | | | Pn | 10 18 36.0 | -4.8 |
| | comp=Z,93nm,0.5s | | | | | | | | |
| **TAPN** | **Taplejung** | **15.01** | **344** | eP | | | **Pn** | **10 18 38.9** | **-2.4** |
| | comp=Z,102nm,0.7s | | | | | | | | |
| **NGP** | **Nagpur** | **15.13** | **305** | eP | | | **Pn** | **10 18 42.6** | **-0.1** |
| NGP | | | | ex | | | x | 10 18 44.2 | |
| | comp=Z,86nm,0.9s | | | | | | | | |
| NGP | | | | ex | | | x | 10 21 17.8 | |
| **KGM** | **Kluang** | **15.33** | **134** | ↓P | | | **P** | **10 18 48.7** | **-1.0** |
| **KMI** | **Kunming** | **15.61** | **37** | P | | | **Pn** | **10 18 50.6** | **+1.5** |
| KMI | | | | pP | | | **P** | **10 18 54.6** | **+1.6** |
| KMI | | | | sP | | | sP | 10 19 00.1 | -5.6 |
| KMI | | | | S | | | **Sn** | **10 21 43.6** | **+2.4** |
| KMI | | | | | PMZ | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| KMI | | | | | PMZ | | | | |
| | comp=Z,120nm,3.3s | | | | | | | | |
| KMI | | | | | LN | | | | |
| | comp=Z,580nm,16.8s | | | | | | | | |
| KMI | | | | | LE | | | | |
| | comp=Z,260nm,11.0s | | | | | | | | |
| KMI | | | | | LZ | | | | |
| | comp=Z,440nm,16.2s | | | | | | | | |
| MYKOM | **Kota Tinggi** | **15.86** | **133** | ↑P | | | **P** | **10 18 55.2** | **-0.4** |
| **PKI** | **Pulchoki** | **15.97** | **337** | eP | | | Pn | 10 18 48.4 | -5.4 |
| | comp=Z,211nm,1.0s | | | | | | | | |
| **PKIN** | **Phulchoki** | **15.98** | **337** | eP | | | Pn | 10 18 48.1 | -5.8 |
| | comp=Z,64nm,0.5s | | | | | | | | |
| **GUN** | **Gumba** | **16.11** | **339** | eP | | | **Pn** | **10 18 52.0** | **-3.6** |
| **DMN** | **Daman** | **16.12** | **336** | eP | | | Pn | 10 18 51.0 | -4.7 |
| **KKN** | **Kakani** | **16.22** | **337** | eP | | | Pn | 10 18 52.1 | -4.8 |
| **SDSI** | **Sungai Dareh** | **16.43** | **146** | P | | | **Pn** | **10 19 00.6** | **+1.1** |
| | comp=Z,13nm,1.0s,comp=Z,29μm | | | | | | | | |
| **GKN** | **Gorkha** | **16.66** | **336** | eP | | | **Pn** | **10 18 58.3** | **-4.1** |
| | comp=Z,102nm,0.5s | | | | | | | | |
| **LSA** | **Lhasa** | **16.75** | **356** | P | | | **Pn** | **10 19 03.8** | **0.0** |
| LSA | | | | S | | | **Sn** | **10 22 09.8** | **+0.7** |
| LSA | | | | LZ | | | | | |
| | comp=Z,450nm,17.9s | | | | | | | | |
| **LSA** | **Lhasa** | **16.75** | **356** | eP | | | **Pn** | **10 19 04.9** | **+1.1** |
| LSA | | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **LSA** | **Lhasa** | **16.75** | **356** | eP | | | **Pn** | **10 19 04.9** | **+1.1** |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **KOLN** | **Koldanda** | **16.90** | **332** | eP | | | Pn | 10 19 00.7 | -4.8 |
| | comp=Z,107nm,0.5s | | | | | | | | |
| **BHPL** | **Bhopal** | **17.51** | **308** | eP | | | **Pn** | **10 19 13.4** | **+0.4** |
| BHPL | | | | | AMB | | AMB | 10 19 25.6 | |
| | comp=Z,123nm,1.4s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **17.87** | **68** | P | | | **Pn** | **10 19 17.4** | **-0.1** |
| QIZ | | | | sP | | | **sP** | **10 19 30.4** | **-0.2** |
| QIZ | | | | S | | | **Sn** | **10 22 35.9** | **0.0** |
| QIZ | | | | LZ | | | | | |
| | comp=Z,560nm,19.2s | | | | | | | | |
| **POO** | **Poona** | **18.67** | **290** | eP | | | **Pn** | **10 19 27.1** | **-0.1** |
| POO | | | | *i* PP | | | **PnPn** | **10 19 39.0** | **-0.5** |
| **GYA** | **Guiyang** | **19.03** | **43** | P | | | **Pn** | **10 19 32.3** | **+0.7** |
| GYA | | | | pP | | | **pP** | **10 19 42.8** | **+3.5** |
| GYA | | | | PP | | | **PnPn** | **10 19 51.0** | **+6.4** |
| GYA | | | | S | | | **Sn** | **10 23 00.3** | **-3.7** |
| GYA | | | | sS | | | **sS** | **10 23 14.5** | **-4.4** |
| GYA | | | | SS | | | **SnSn** | **10 23 26.8** | **+8.5** |
| GYA | | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| GYA | | | | | PMZ | | | | |
| | comp=Z,90nm,4.6s | | | | | | | | |
| GYA | | | | | LN | | | | |
| | comp=Z,1μm,12.0s | | | | | | | | |
| GYA | | | | | LE | | | | |
| | comp=Z,1μm,13.2s | | | | | | | | |
| GYA | | | | | LZ | | | | |
| | comp=Z,1μm,12.6s | | | | | | | | |
| **PPBI** | **Pangkal Pinang** | **20.28** | **137** | P | | | **P** | **10 19 44.7** | **+0.4** |
| | comp=Z,38nm,1.0s,comp=Z,4μm | | | | | | | | |
| **CD2** | **Chengdu** | **20.78** | **29** | eP | | | **P** | **10 19 49.8** | **+0.2** |
| CD2 | | | | pP | | | **pP** | **10 19 59.6** | **+1.3** |
| CD2 | | | | sP | | | **sP** | **10 20 04.8** | **+2.4** |
| CD2 | | | | S | | | **S** | **10 23 40.6** | **+0.7** |
| CD2 | | | | sS | | | **sS** | **10 23 57.1** | **+3.4** |
| CD2 | | | | | PMZ | | | | |
| | comp=Z,60nm,0.6s | | | | | | | | |
| CD2 | | | | | PMZ | | | | |
| | comp=Z,260nm,5.0s | | | | | | | | |
| CD2 | | | | | LN | | | | |
| | comp=Z,2μm,14.7s | | | | | | | | |
| CD2 | | | | | LE | | | | |
| | comp=Z,940nm,14.7s | | | | | | | | |
| CD2 | | | | | LZ | | | | |
| | comp=Z,390nm,16.6s | | | | | | | | |
| **NDI** | **New Delhi** | **21.10** | **320** | eP | | | **P** | **10 19 54.0** | **+1.0** |
| NDI | | | | eS | | | **S** | **10 23 48.0** | **+1.8** |
| **KSM** | **Kuching** | **21.10** | **121** | ↑P | | | **P** | **10 19 54.4** | **+1.2** |
| **KSM** | **Kuching** | **21.10** | **121** | eP | | | **P** | **10 19 55.6** | **+2.4** |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **TPI** | **Tanjungpandan** | **21.75** | **135** | P | | | **P** | **10 20 03.0** | **+2.9** |
| | comp=Z,32nm,1.2s | | | | | | | | |
| **DDI** | **Dehra Dun** | **21.80** | **325** | eP | | | **P** | **10 19 59.4** | **-1.2** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DDI | | | | | AMB | | AMB | 10 20 14.4 | |
| | comp=Z,111nm,0.2s | | | | | | | | |
| **SBUM** | **Sibu** | **22.23** | **116** | ↑P | | | **P** | **10 20 04.7** | **-0.7** |
| **SBUM** | **Sibu** | **22.23** | **116** | eP | | | **P** | **10 20 04.9** | **-0.5** |
| **BTM** | **Bintulu** | **22.65** | **113** | ↓P | | | **P** | **10 20 09.1** | **-0.8** |
| **SMLA** | **Simla** | **22.91** | **325** | *i* P | | | **P** | **10 20 13.0** | **+0.7** |
| SMLA | | | | | AMB | | AMB | 10 20 14.4 | |
| | comp=Z,56nm,1.6s | | | | | | | | |
| SMLA | | | | *i* x | | | x | 10 24 06.2 | |
| **ENH** | **Enshi** | **23.44** | **40** | eP | | | **P** | **10 20 16.7** | **-1.1** |
| | comp=Z,26nm,1.0s | | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **24.24** | **325** | eP | | | **P** | **10 20 25.3** | **-0.2** |
| DHRM | | | | | AMB | | AMB | 10 20 27.1 | |
| | comp=Z,39nm,0.7s | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **24.49** | **104** | ↓P | | | **P** | **10 20 26.7** | **-1.1** |
| **KKM** | **Kota Kinabalu** | **24.49** | **104** | eP | | | **P** | **10 20 26.6** | **-1.1** |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **LZH** | **Lanzhou** | **25.29** | **22** | ↑P | | | **P** | **10 20 35.6** | **+0.7** |
| LZH | | | | pP | | | **pP** | **10 20 45.1** | **+0.8** |
| LZH | | | | sP | | | **sP** | **10 20 49.8** | **+1.6** |
| LZH | | | | PP | | | **PnPn** | **10 21 15.8** | **+5.6** |
| LZH | | | | eS | | | **S** | **10 24 59.0** | **0.0** |
| LZH | | | | sS | | | **sS** | **10 25 16.0** | **+1.6** |
| LZH | | | | eSS | | | **SnSn** | **10 26 01.1** | **+9.4** |
| LZH | | | | | PMZ | | | | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| LZH | | | | | PMZ | | | | |
| | comp=Z,140nm,4.0s | | | | | | | | |
| LZH | | | | | LN | | | | |
| | comp=Z,390nm,12.8s | | | | | | | | |
| LZH | | | | | LE | | | | |
| | comp=Z,360nm,13.7s | | | | | | | | |
| LZH | | | | | LZ | | | | |
| | comp=Z,690nm,19.2s | | | | | | | | |
| **SDKM** | **Sandakan** | **25.54** | **104** | ↓P | | | **P** | **10 20 36.5** | **-0.8** |
| **XAN** | **Xi'an** | **25.87** | **33** | P | | | **P** | **10 20 38.6** | **-1.5** |
| XAN | | | | pP | | | **pP** | **10 20 48.3** | **-1.2** |
| XAN | | | | | PMZ | | | | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| XAN | | | | | PMZ | | | | |
| | comp=Z,100nm,5.1s | | | | | | | | |
| **TSM** | **Tawau** | **26.62** | **107** | ↑P | | | **P** | **10 20 45.6** | **-1.3** |
| **GTA** | **Gaotai** | **27.21** | **13** | P | | | **P** | **10 20 52.8** | **+0.6** |
| GTA | | | | pP | | | **pP** | **10 21 02.3** | **+0.7** |
| GTA | | | | sP | | | **sP** | **10 21 06.8** | **+1.3** |
| GTA | | | | PcP | | | **PcP** | **10 24 13.4** | **+1.5** |
| GTA | | | | S | | | **S** | **10 25 29.8** | **+0.7** |
| GTA | | | | sS | | | **sS** | **10 25 44.9** | **+0.3** |
| GTA | | | | SS | | | **SnSn** | **10 26 47.3** | **+8.9** |
| GTA | | | | | PMZ | | | | |
| | comp=Z,29nm,1.2s | | | | | | | | |
| GTA | | | | | PMZ | | | | |
| | comp=Z,170nm,4.4s | | | | | | | | |
| GTA | | | | | LN | | | | |
| | comp=Z,180nm,18.5s | | | | | | | | |
| GTA | | | | | LE | | | | |
| | comp=Z,230nm,15.7s | | | | | | | | |
| GTA | | | | | LZ | | | | |
| | comp=Z,210nm,18.5s | | | | | | | | |
| **BBKI** | **Banjar Baru** | **27.63** | **125** | P | | | **P** | **10 20 58.0** | **+2.0** |
| | comp=Z,51nm,0.7s | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.39** | **225** | T | | | T | 10 50 36.0 | |
| | baz=44,slow=76,SNR=164 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.40** | **225** | T | | | T | 10 50 48.9 | |
| | baz=44,slow=76,SNR=313 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.41** | **225** | T | | | T | 10 50 47.0 | |
| | baz=44,slow=76,SNR=243 | | | | | | | | |
| **H08N2** | **Diego Garcia H** | **28.56** | **229** | T | | | T | 10 51 55.4 | |
| | baz=23,slow=75,SNR=4.9 | | | | | | | | |
| **H08N1** | **Diego Carcia H** | **28.56** | **229** | T | | | T | 10 51 43.6 | |
| | baz=23,slow=75,SNR=4.1 | | | | | | | | |
| **H08N3** | **Diego Garcia H** | **28.58** | **229** | T | | | T | 10 51 53.2 | |
| | baz=23,slow=75,SNR=4.0 | | | | | | | | |
| **KBL** | **Kabul** | **30.18** | **319** | eP | | | **P** | **10 21 18.9** | **+0.1** |
| KBL | | | | | pmax | | pmax | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **KBL** | **Kabul** | **30.18** | **319** | eP | | | **P** | **10 21 18.9** | **+0.1** |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **KSH** | **Kashi** | **30.20** | **334** | P | | | **P** | **10 21 17.4** | **-1.4** |
| KSH | | | | eSP | | | **sP** | **10 21 34.9** | **+2.7** |
| KSH | | | | ePP | | | **PnPn** | **10 22 15.6** | **-1.4** |
| KSH | | | | S | | | S | 10 26 09.1 | -7.1 |
| KSH | | | | sS | | | **sS** | **10 26 29.9** | **-1.8** |
| KSH | | | | SS | | | **SnSn** | **10 27 48.4** | **-2.9** |
| KSH | | | | | PMZ | | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| KSH | | | | | PMZ | | | | |
| | comp=Z,93nm,4.7s | | | | | | | | |
| KSH | | | | | LN | | | | |
| | comp=Z,290nm,13.6s | | | | | | | | |
| KSH | | | | | LE | | | | |
| | comp=Z,120nm,8.0s | | | | | | | | |
| KSH | | | | | LZ | | | | |
| | comp=Z,210nm,13.5s | | | | | | | | |
| **SRBI** | **Singaraja** | **30.83** | **131** | P | | | **P** | **10 21 25.5** | **+1.0** |
| | comp=Z,63nm,0.9s,comp=Z,719nm | | | | | | | | |
| **NJ2** | **Nanjing** | **30.88** | **48** | eP | | | **P** | **10 21 25.5** | **+0.8** |
| NJ2 | | | | S | | | **S** | **10 26 27.0** | **+0.3** |
| NJ2 | | | | | PMZ | | | | |
| | comp=Z,30nm,0.6s | | | | | | | | |
| NJ2 | | | | | LN | | | | |
| | comp=Z,580nm,16.4s | | | | | | | | |
| NJ2 | | | | | LE | | | | |
| | comp=Z,1μm,11.8s | | | | | | | | |
| **WMQ** | **Urumqi** | **31.06** | **353** | P | | | **P** | **10 21 27.0** | **+0.7** |
| WMQ |

comp=Z,15nm,1.0s
**FRU Bishkek 33.54 336** *e*P **P 10 21 47.0 -1.0**
FRU pmax pmax
comp=Z,57nm,2.2s
FRU MLR MLR
comp=Z,500nm,20.0s
FRU MLR MLR
comp=E,400nm,17.0s
**EKS2 Erkin-Say 33.73 335** *e*P **P 10 21 51.3 +1.5**
EKS2 pmax pmax
comp=Z,11nm,0.8s
**EKS2 Erkin-Say 33.73 335** *e*P **P 10 21 51.2 +1.5**
comp=Z,12nm,0.8s
**BJI Beijing 34.20 33** P **P 10 21 54.1 +0.4**
BJI S **S 10 27 20.5 +2.2**
BJI sS **sS 10 27 36.0 +2.1**
BJI PMZ
comp=Z,20nm,1.0s
BJI PMZ
comp=Z,160nm,4.0s
BJI LN
comp=Z,330nm,19.8s
BJI LE
comp=Z,220nm,17.8s
BJI LZ
comp=Z,240nm,24.9s
**MK01 Makanchi Array 34.80 348** *e*P **P 10 21 58.8 -0.1**
**MKAR Makanchi Array 34.83 348** P **P 10 21 59.1 0.0**
comp=Z,14nm,0.8s,baz=162,slow=8.6,SNR=47
MKAR pP **pP 10 22 08.3 -0.3**
comp=Z,12nm,0.8s,baz=182,slow=8.3,SNR=14
MKAR PcP **PcP 10 24 31.7 -0.1**
comp=Z,2.0nm,0.8s,baz=163,slow=5.6,SNR=4.7
MKAR LR LR 10 38 59.8
comp=Z,190nm,20.8s,baz=152,slow=41
**UOSS Wadi Hilu 36.12 295** *e*P **P 10 22 12.6 +2.2**
UOSS *e*pP **pP 10 22 23.1 +3.2**
**SONM Songino Array 36.74 16** P **P 10 22 15.9 +0.2**
comp=Z,16nm,1.0s,baz=199,slow=8.4,SNR=67
SONM pP **pP 10 22 24.9 -0.3**
comp=Z,11nm,0.9s,baz=201,slow=8.7,SNR=13
SONM PcP **PcP 10 24 37.7 +0.1**
comp=Z,1.7nm,0.8s,baz=221,slow=2.9,SNR=4.1
SONM LR LR 10 40 27.1
comp=Z,138nm,18.4s,baz=195,slow=41
**SONA1 Songino Array 36.75 16** *e*P **P 10 22 15.8 +0.1**
**ULN Ulaanbaatar 36.95 17** *d* i P **P 10 22 17.3 -0.1**
ULN pmax pmax
comp=Z,15nm,1.2s
**ULN Ulaanbaatar 36.95 17** *e*P **P 10 22 16.9 -0.5**
comp=Z,17nm,1.2s
**HVS Khovu-Aksy 38.14 1** *e*P **P 10 22 27.5 +0.2**
HVS pmax pmax
comp=Z,35nm,0.9s
**ZAK Zakamensk 38.42 11** *e*P **P 10 22 29.3 -0.5**
ZAK pmax pmax
comp=Z,8.0nm,1.1s
**IBAF Bafgh 38.55 305** *e*P **P 10 22 32.4 +1.2**
**TJN Taejon 39.14 47** *d* i P **P 10 22 35.1 -0.8**
**AAI Ambon 39.23 112** P **P 10 22 38.5 +1.6**
comp=Z,46nm,0.7s
**KURK Kurchatov 39.33 346** *e*P **P 10 22 37.0 -0.2**
KURK pmax pmax
comp=Z,84nm,1.3s
**KURK Kurchatov 39.33 346** *e*P **P 10 22 37.0 -0.2**
comp=Z,84nm,1.3s
**GEYT Alibeck 39.35 315** P **P 10 22 38.8 +1.2**
comp=Z,11nm,0.5s,baz=141,slow=7.6,SNR=19
GEYT pP **pP 10 22 48.0 +0.7**
comp=Z,8.5nm,0.4s,baz=153,slow=8.1,SNR=4.2
GEYT LR LR 10 39 49.7
comp=Z,282nm,21.9s,baz=120,slow=38
**SNY Shenyang 39.59 37** ⇓P **P 10 22 39.1 -0.4**
SNY PMZ
comp=Z,13nm,0.7s
SNY PMZ
comp=Z,140nm,5.3s
SNY LE
comp=Z,300nm,17.5s
SNY LZ
comp=Z,230nm,15.7s
**TLY Talaya 39.73 11** *e*P **P 10 22 42.0 +1.4**
TLY *e* 10 24 17.5
TLY *e*S **S 10 28 45.5 +3.2**
TLY pmax pmax
comp=Z,13nm,1.0s
**TLY Talaya 39.73 11** *e*P **P 10 22 41.3 +0.7**
comp=Z,10nm,0.9s
**MSAI Masohi 39.75 112** P **P 10 22 41.6 +0.4**
comp=Z,15nm,0.9s
**KSAR Wonju Array Be 40.01 46** P **P 10 22 42.6 -0.5**
KSAR *PP **pP 10 22 51.4 -1.2**
**KSAR Wonju Array Be 40.01 46** P **P 10 22 42.5 -0.5**
KSAR pP **pP 10 22 51.4 -1.2**
**KS01 Wonju Array Si 40.03 46** *e*P **P 10 22 42.4 -0.8**
**KSRS Korea Array 40.04 46** P **P 10 22 42.5 -0.8**
comp=Z,9.3nm,0.8s,baz=242,slow=9.0,SNR=34
KSRS pP **pP 10 22 51.4 -1.5**
comp=Z,3.7nm,0.8s,baz=243,slow=8.4,SNR=5.5
KSRS LR LR 10 42 11.3
comp=Z,464nm,18.0s,baz=238,slow=40
**IPAR Pars 40.06 301** *e*P **P 10 22 43.9 -0.1**
**ISAD Sadrabad 40.16 305** *e*P **P 10 22 45.4 +0.6**
**SIJI Sorong 40.95 107** P **P 10 22 49.6 -1.6**
comp=Z,6.9nm,0.6s,baz=12,slow=5.4,SNR=3.8
**IKAZ Kazeroun 41.05 301** *e*P **P 10 22 52.8 +0.6**
**ZALV Zalesovo Beam 41.37 353** P **P 10 22 53.6 -0.5**
comp=Z,20nm,0.8s,baz=176,slow=9.1,SNR=76
ZALV pP **pP 10 23 02.8 -0.9**
comp=Z,11nm,0.8s,baz=152,slow=4.5,SNR=12
ZALV LR LR 10 44 50.3
comp=Z,146nm,18.3s,baz=250,slow=43
**CN2 Changchun 41.88 36** *e*P **P 10 22 58.0 -0.4**
CN2 *e*pP **pP 10 23 07.8 -0.2**
CN2 *e*sP **sP 10 23 11.8 -0.1**
CN2 *e*S **S 10 29 14.3 0.0**
CN2 PMZ
comp=Z,20nm,1.1s
CN2 LN
comp=Z,300nm,18.0s
CN2 LE
comp=Z,200nm,18.0s
CN2 LZ
comp=Z,200nm,18.0s
**NVS Novosibirsk 42.44 352** *e*P P 10 22 59.0 -3.8
**FAKI Fak Fak 42.62 109** P **P 10 23 03.7 -1.1**
comp=Z,24nm,1.1s
**FAKI Fak Fak 42.62 109** *e*P **P 10 23 02.9 -1.9**
comp=Z,50nm,1.3s
**IPIR Pirpir 42.65 304** *e*P **P 10 23 05.2 0.0**
**BRVK Borovoye 43.75 341** *d* i P **P 10 23 12.6 -0.8**
BRVK pmax pmax
comp=Z,12nm,1.2s
**BRVK Borovoye 43.75 341** *e*P **P 10 23 12.9 -0.5**
comp=Z,12nm,1.1s
**MSHR Mys Shultsa 44.69 41** *e*P **P 10 23 20.7 -0.4**
**MDJ Mudanjiang 44.78 38** P **P 10 23 22.3 +0.5**
MDJ pP **pP 10 23 30.4 -1.1**
MDJ sP **sP 10 23 34.9 -0.5**
MDJ ScP **ScP 10 28 53.9 +0.2**
MDJ PcS **PcS 10 28 57.8 +0.8**
MDJ S **S 10 29 51.3 -5.6**
MDJ sS **sS 10 30 12.3 -0.5**
MDJ PMZ
comp=Z,9.0nm,1.6s
MDJ PMZ
comp=Z,56nm,4.1s
MDJ LN
comp=Z,83nm,22.6s
MDJ LE
comp=Z,95nm,22.6s
MDJ LZ
comp=Z,76nm,32.0s
**RAYN Ar Rayn 45.56 290** *e*P **P 10 23 28.6 +0.2**
comp=Z,9.7nm,1.3s
**USRK Ussuriysk Ar. 46.03 40** P **P 10 23 31.2 -0.5**
comp=Z,2.9nm,0.8s,baz=257,slow=9.0,SNR=5.3
**AKTO Aktyubinsk 46.72 330** P **P 10 23 36.9 -0.2**
comp=Z,3.6nm,0.5s,baz=124,slow=8.7,SNR=17
AKTO PcP **PcP 10 25 10.0 -0.2**
comp=Z,4.1nm,1.1s,baz=124,slow=8.6,SNR=3.7
AKTO LR LR 10 45 52.0
comp=Z,183nm,18.4s,slow=39
**MAJO Matsushiro 47.27 52** *c* i P **P 10 23 41.5 -0.1**
MAJO pmax pmax
comp=Z,65nm,1.0s
**MAT Matsushiro 47.27 52** P **P 10 23 41.0 -0.6**
MAT S **S 10 30 31.4 -1.5**
**GNI Garni 49.73 312** *e*P **P 10 24 02.3 +1.6**
GNI pmax pmax
comp=Z,149nm,0.9s
**GNI Garni 49.73 312** *e*P **P 10 24 02.3 +1.6**
comp=Z,149nm,0.9s
**HABR Khabarovsk 50.01 36** *e*P P 10 23 58.9 -3.5
HABR *e**PP pP 10 24 09.0 -3.2
HABR *e**SP sP 10 24 12.9 -3.2
HABR *e* 10 25 54.1
HABR *e*S **S 10 31 07.1 -4.0**
HABR *e**SS sS 10 31 24.4 -2.9
HABR *e* 10 33 47.8
HABR *e*SS **SS 10 34 42.2 -2.2**
HABR *e*SSS SSS 10 36 05.9
HABR pmax pmax
comp=Z,37nm,1.4s
HABR MLR MLR
comp=Z,625nm,19.0s
**SVE Sverdlovsk 50.10 338**⇑ *e*P **P 10 24 03.1 +0.1**
SVE pmax pmax
comp=Z,36nm,1.2s
**CLNS Chul'man 50.41 23** *e*P **P 10 24 04.0 -1.4**
CLNS pmax pmax
comp=Z,22nm,0.8s
CLNS pmax pmax
comp=E,14nm,1.0s
CLNS pmax pmax
comp=N,14nm,0.9s
**ARU Arti 50.60 336** LR LR 10 47 44.7
comp=N,289nm,19.7s,baz=145,slow=39
**ARU Arti 50.60 336** *d* i P **P 10 24 06.3 -0.5**
ARU 10 26 04.9
ARU S **S 10 31 20.5 +1.4**
ARU SS **SS 10 34 48.8 -4.6**
ARU pmax pmax
comp=Z,30nm,1.7s
ARU MLR MLR
comp=Z,328nm,22.0s
**ARU Arti 50.60 336** *e*P **P 10 24 06.3 -0.5**
comp=Z,39nm,1.5s
**NWAO Narrogin (SRO) 51.40 153** P **P 10 24 12.8 -0.3**
comp=Z,34nm,1.0s,baz=354,slow=0.1,SNR=13
**NWAO Narrogin (SRO) 51.40 153** *e*P **P 10 24 12.8 -0.3**
NWAO pmax pmax
comp=Z,42nm,1.1s
**NWAO Narrogin (SRO) 51.40 153** *e*P **P 10 24 12.8 -0.3**
comp=Z,42nm,1.1s
**NEY Neytrino 52.20 315** *e*P **P 10 24 20.7 +1.5**
**KBZ Khabaz 52.24 316** P **P 10 24 18.5 -0.7**
comp=Z,5.5nm,1.1s,baz=35,slow=8.2,SNR=8.1
KBZ pP **pP 10 24 28.2 -0.9**
comp=Z,3.4nm,0.8s,baz=106,slow=5.6,SNR=5.1
**KIV Kislovodsk 52.46 316** *e*P **P 10 24 21.4 +0.4**
KIV *e*S **S 10 31 45.6 +0.2**
KIV pmax pmax
comp=Z,34nm,1.0s
KIV MLR MLR
comp=Z,79nm,17.0s
**KIV Kislovodsk 52.46 316** *e*P **P 10 24 21.8 +0.8**
comp=Z,38nm,1.1s
**WRA Warramunga Arr 52.66 128** P **P 10 24 21.9 -0.8**
comp=Z,6.0nm,0.9s,baz=300,slow=9.9,SNR=42
WRA pP **pP 10 24 30.8 -1.7**
comp=Z,7.9nm,0.7s,baz=306,slow=8.2,SNR=22
WRA PcP **PcP 10 25 32.2 -0.2**
comp=Z,2.4nm,0.5s,baz=322,slow=3.1,SNR=13
WRA S **S 10 31 44.9 -3.5**
comp=Z,2.9nm,0.9s,baz=310,slow=14,SNR=12
**WRAB Tennant Creek 52.66 128** *e*P **P 10 24 21.7 -1.0**
WRAB pmax pmax
comp=Z,14nm,1.2s
**WRAB Tennant Creek 52.66 128** *e*P **P 10 24 21.6 -1.1**
comp=Z,10.0nm,0.8s
**MALT Malatya 53.94 308** *c*e P **P 10 24 32.7 +0.7**
**YSS Yuzh-Sakhalins 54.02 41** *e*P **P 10 24 31.6 -0.7**
**ASAR Alice Springs 54.52 132** P **P 10 24 35.4 -0.9**
comp=Z,3.1nm,0.6s,baz=308,slow=7.0,SNR=57
ASAR pP **pP 10 24 44.2 -2.0**
comp=Z,5.5nm,0.7s,baz=311,slow=7.0,SNR=18
ASAR PcP **PcP 10 25 39.6 +0.1**
comp=Z,4.8nm,1.0s,baz=308,slow=3.4,SNR=7.3
ASAR S **S 10 32 11.9 -1.7**
comp=Z,1.5nm,0.9s,baz=334,slow=21,SNR=10.0
**AS01 Alice Springs 54.55 132** *e*P **P 10 24 35.2 -1.3**
**ABPO Ambohimpanom 54.62 235** *e*P **P 10 24 38.8 +1.5**
ABPO pmax pmax
comp=Z,53nm,1.4s
**ABPO Ambohimpanom 54.62 235** *e*P **P 10 24 38.8 +1.5**
comp=Z,53nm,1.4s
**FORT Forrest 55.36 142** *e*P **P 10 24 42.3 +0.1**
comp=Z,50nm,1.1s
**MMAI Mount Meron Ar 55.45 301** LR LR 10 51 17.9
comp=Z,180nm,20.4s,baz=90,slow=39
**VRH Novokhopyorsk 55.83 324** *e*P **P 10 24 44.3 -1.0**
VRH pmax pmax
comp=Z,20nm,0.9s
VRH pmax pmax
comp=N,20nm,0.7s
VRH pmax pmax
comp=E,30nm,1.0s
**YAK Yakutsk 55.85 20** *d* i P **P 10 24 44.2 -1.1**
YAK pmax pmax
comp=Z,34nm,0.9s
YAK pmax pmax
comp=N,4.0nm,0.9s
YAK pmax pmax
comp=E,12nm,1.1s
YAK MLR MLR
comp=N,36nm,18.0s
YAK MLR MLR
comp=E,78nm,18.0s
YAK MLR MLR
comp=Z,138nm,18.0s
**YAK Yakutsk 55.85 20** *e*P **P 10 24 44.5 -0.8**
comp=Z,39nm,0.8s
**KMBO Kilima Mbogo 56.40 260** LR LR 10 47 09.0
comp=Z,183nm,19.9s,baz=79,slow=34
**VORD Divnogorie 57.15 323** *e*P **P 10 24 53.8 -0.9**
VORD pmax pmax
comp=Z,20nm,0.9s
VORD pmax pmax
comp=N,9.0nm,0.6s
VORD pmax pmax
comp=E,30nm,0.6s
**VSR Storozhevoye 57.32 323** *e*P **P 10 24 55.0 -0.9**
VSR pmax pmax
comp=Z,20nm,1.1s
VSR pmax pmax
comp=N,10.0nm,1.2s
VSR pmax pmax
comp=E,30nm,1.7s
**BRTR Keskin Array B 57.88 309** P **P 10 24 59.1 -1.1**
comp=E,6.4nm,0.8s,baz=115,slow=7.3,SNR=44
BRTR pP **pP 10 25 08.2 -2.0**
comp=E,7.1nm,0.9s,baz=116,slow=5.6,SNR=14
BRTR LR LR 10 53 43.1
comp=E,70nm,18.2s,baz=112,slow=40
**LPSR Galich'ya Gora 57.98 325** *e*P **P 10 24 59.9 -0.6**
LPSR pmax pmax
comp=Z,30nm,1.4s
LPSR pmax pmax
comp=N,9.0nm,1.2s
LPSR pmax pmax
comp=E,10.0nm,1.2s
**SIM Simferopol' 58.62 315** P **P 10 25 05.6 +0.4**
SIM pmax pmax
comp=Z,21nm,1.0s
SIM MLR MLR
comp=N,130nm,23.7s
**PMG Port Moresby 58.77 109** ⇓ *i* P **P 10 25 06.9 +0.3**
**PMG Port Moresby 58.77 109** *e*P **P 10 25 06.9 +0.3**
comp=N,18nm,0.9s
**MOS Moscow 59.90 328** *e*P **P 10 25 12.4 -1.4**
MOS pmax pmax
comp=Z,39nm,1.2s
**ISP Isparta 60.00 306** *e*P **P 10 25 13.7 -1.3**
ISP pmax pmax
comp=Z,13nm,1.0s
**ISP Isparta 60.00 306** *e*P **P 10 25 13.7 -1.3**
comp=Z,13nm,1.0s
**OBN Obninsk 60.22 327** LR LR 10 56 07.6
comp=Z,184nm,18.3s,baz=89,slow=41
**OBN Obninsk 60.22 327**⇑ *i* P **P 10 25 15.7 -0.3**
OBN *e**PP **pP 10 25 26.7 +0.7**
OBN *e**SP **sP 10 25 30.4 +0.6**
OBN *e* 10 26 01.0
OBN S S 10 33 36.1 +8.5
OBN pmax pmax
comp=Z,28nm,1.7s
OBN MLR MLR
comp=Z,225nm,18.0s
**KLMR Klimovskoe 61.19 334** *e*P **P 10 25 19.4 -3.1**
KLMR pmax pmax
comp=Z,33nm,1.4s
**CTA Charters Tower 62.34 121** P **P 10 25 29.7 -1.2**
comp=Z,5.9nm,0.9s,baz=246,slow=10.0,SNR=3.7
**TLCR 62.34 314**⇑P **P 10 25 30.0 -0.6**
**TLCR 62.34 314**⇑ *i* P **P 10 25 30.0 -0.6**
**CFR Carcaliu 62.82 314**⇓P **P 10 25 33.2 -0.5**
**CFR Carcaliu 62.82 314**⇓ *i* P **P 10 25 33.2 -0.5**
**AKASG Malin Array Be 63.16 321** P **P 10 25 34.8 -1.1**
comp=Z,6.6nm,0.8s,baz=88,slow=4.8,SNR=27
AKASG LR LR 10 58 26.6
comp=Z,82nm,18.7s,baz=105,slow=41
**KIEV Kiev 63.17 321** *e*P **P 10 25 35.1 -0.8**
KIEV pmax pmax
comp=Z,13nm,1.2s
**KIEV Kiev 63.17 321** *e*P **P 10 25 34.5 -1.4**
comp=Z,6.5nm,0.7s
**MA2 Magadan 63.19 29** *e*P **P 10 25 36.1 +0.1**
**VRI Vrincioaia 63.90 315** ⇓P **P 10 25 41.4 +0.5**
**VRI Vrincioaia 63.90 315** ⇓ *i* P **P 10 25 41.4 +0.5**
**ISR Istrita 63.92 314** ⇓P **P 10 25 40.5 -0.6**
**ISR Istrita 63.92 314** ⇓ *i* P **P 10 25 40.5 -0.6**
**PLOR Plostina 63.95 315** ⇓P **P 10 25 42.2 +0.9**
**PLOR Plostina 63.95 315** ⇓ *i* P **P 10 25 42.2 +0.9**
**TESR Tescani 64.05 316** ⇓ *i* P **P 10 25 41.8 -0.1**
**IDI Anoyia 64.32 303** LR LR 10 58 25.2
comp=Z,40nm,20.6s,baz=88,slow=40
**MLR Muntele Rosu 64.39 314** ⇓P **P 10 25 44.4 +0.1**
**MLR Muntele Rosu 64.39 314** ⇓ *i* P **P 10 25 44.4 +0.1**
**PRAR RASCA 64.47 316** ⇓ *i* P **P 10 25 43.2 -1.4**
**DOPR Dopca 64.84 315**⇑ *i* P **P 10 25 46.0 -1.1**
**VOIR 65.01 314**⇑P **P 10 25 47.1 -1.2**
**VOIR 65.01 314**⇑ *i* P **P 10 25 47.1 -1.2**
**PETK Petropavlovsk- 65.02 37** LR LR 10 55 35.6
comp=Z,58nm,19.1s,baz=240,slow=37
**SEY Seymchan 65.15 26** *e*P **P 10 25 47.9 -0.8**
**BURAR Bucovina Array 65.18 317** ⇓P **P 10 25 49.4 0.0**
**BURAR Bucovina Array 65.18 317** ⇓ *i* P **P 10 25 49.3 -0.1**
**ARR Arges 65.29 314** ⇑ *i* P **P 10 25 49.6 -0.5**
**LOT Lotru 65.91 314** ⇓ *i* P **P 10 25 53.4 -0.7**
**LVV L'vov 66.27 319** *e*P **P 10 25 55.6 -0.7**
**GZR Gura Zlata 66.59 314**⇑ *i* P **P 10 25 57.2 -1.3**
**DRGR 66.78 315**⇑P **P 10 25 59.5 -0.1**
**DRGR 66.78 315**⇑ *i* P **P 10 25 59.5 -0.1**
**TRPA Tarpa 67.03 317** ⇓ *i* P **P 10 26 01.4 +0.3**
**UZH Uzhgorod 67.25 317**⇑ *i* P **P 10 26 01.9 -0.6**
UZH *i* 10 26 10.3
UZH *e* 10 26 29.5
**KOLS Kolonicke sedl 67.30 318** *e*P **P 10 26 02.8 0.0**
KOLS pmax pmax
comp=Z,11nm,1.6s
**KOLS Kolonicke sedl 67.30 318** *e*P **P 10 26 02.8 0.0**
**BZS Buzias 67.43 314**⇑P **P 10 26 02.9 -0.8**
**BZS Buzias 67.43 314**⇑ *i* P **P 10 26 02.9 -0.8**
**SIRR Siria 67.45 315**⇑ *i* P **P 10 26 04.0 +0.1**
**FINES FINESS Array B 67.47 332** P **P 10 26 03.0 -0.6**
comp=Z,9.0nm,0.7s,baz=116,slow=6.8,SNR=38
FINES LR LR 10 58 55.1
comp=Z,106nm,21.1s,baz=142,slow=39
**STHS Stebnicka Huta 68.02 318** *e*P **P 10 26 07.6 +0.1**
STHS pmax pmax
comp=Z,4.0nm,0.8s
**STHS Stebnicka Huta 68.02 318** *e*P **P 10 26 07.5 +0.1**
**DIVS Divibare 68.48 312** ⇓ *i* P **P 10 26 09.0 -1.5**
**PSZ Piszkesteto 68.78 317** *e*P **P 10 26 11.8 -0.5**
PSZ pmax pmax
comp=Z,9.0nm,1.0s
**PSZ Piszkesteto 68.78 317** ⇓ *i* P **P 10 26 10.5 -1.8**
**PSZ Piszkesteto 68.78 317** *e*P **P 10 26 11.8 -0.5**
comp=Z,9.2nm,1.0s
**OJC Ojcow 69.03 319** *e*P **P 10 26 13.4 -0.2**
**OJC Ojcow 69.03 319** *e*P **P 10 26 13.4 -0.2**
**LANS Liptovska Anna 69.16 318** *e*P **P 10 26 14.4 -0.1**
**VYHS Vyhne 69.53 317** *e*P **P 10 26 16.3 -0.5**
VYHS pmax pmax
comp=Z,3.0nm,1.0s
**VYHS Vyhne 69.53 317** *e*P **P 10 26 16.3 -0.5**
**ARCES ARCESS Array B 69.96 340** P **P 10 26 18.8 -0.2**
comp=Z,7.8nm,0.7s,baz=93,slow=7.0,SNR=15
ARCES pP **pP 10 26 28.1 -1.1**
comp=Z,4.7nm,0.9s,baz=90,slow=6.1,SNR=3.5
ARCES LR LR 11 00 02.6
comp=Z,275nm,19.2s,baz=115,slow=38
**OKC Ostrava-Krasne 70.06 318** *e*P **P 10 26 20.2 +0.2**
**OKC Ostrava-Krasne 70.06 318** *e*P **P 10 26 20.2 +0.2**
**MORC Moravsky Berou 70.45 318** *e*P **P 10 26 22.3 -0.2**
MORC pmax pmax
comp=Z,27nm,1.0s
**MORC Moravsky Berou 70.45 318**⇑ *i* P **P 10 26 21.3 -1.2**
**MORC Moravsky Berou 70.45 318** *e*P **P 10 26 22.3 -0.2**
comp=Z,27nm,1.0s
**VRAC Vranov 71.05 318** LR LR 11 02 48.3
comp=Z,72nm,18.6s,baz=72,slow=40
**DPC Dobruska-Polom 71.27 319** *e*P **P 10 26 27.9 +0.5**
DPC *e* 10 26 35.8
**DPC Dobruska-Polom 71.27 319** *e*P **P 10 26 27.9 +0.5**
DPC *e*pP **pP 10 26 35.8 -1.8**
**ARMA Armidale 71.43 128** *e*P **P 10 26 30.4 +1.7**
comp=Z,42nm,1.3s
**BILL Bilibino 72.10 22**⇑ *e*P **P 10 26 31.6 -0.4**
BILL *PP **pP 10 26 41.0 -1.2**
BILL *SP **sP 10 26 44.0 -2.0**
BILL 10 26 51.0
BILL pmax pmax
comp=Z,18nm,1.7s
BILL MLR MLR
comp=Z,105nm,19.0s
**GOPC GO Pecny, Ondr 72.24 318** *e*P **P 10 26 33.4 +0.2**
**GOPC GO Pecny, Ondr 72.24 318** *e*P **P 10 26 33.4 +0.2**
**PRU Pruhonice 72.40 319** *e*P **P 10 26 34.4 +0.2**
**PRU Pruhonice 72.40 319** *e*P **P 10 26 34.4 +0.2**
**BRG Berggiesshubel 72.79 319** *e*P **P 10 26 36.5 0.0**
comp=Z,24nm,1.5s
BRG *e* 10 26 47.4
comp=Z,6.9nm,1.2s
**BRG Berggiesshubel 72.79 319** *e*P **P 10 26 36.5 0.0**
BRG *e* 10 26 47.4
BRG pmax pmax
comp=Z,24nm,1.5s
**BRG Berggiesshubel 72.79 319** *e*P **P 10 26 36.5 0.0**
comp=Z,24nm,1.5s,baz=88,slow=5.8
**RUE Ruedersdorf 72.92 321** *e*P **P 10 26 37.2 +0.1**
comp=Z,29nm,0.9s,baz=88,slow=5.8
**GEC2 GERESS Array S 72.94 317** *e*P **P 10 26 37.4 -0.2**
comp=Z,14nm,0.9s,baz=88,slow=5.8
GEC2 *e*L L 11 03 17.6
comp=Z,72nm,20.1s
**GERES GERESS Array B 72.94 317** P **P 10 26 37.4 -0.2**
comp=Z,6.3nm,0.8s,baz=87,slow=5.9,SNR=30
GERES LR LR 11 03 56.3
comp=Z,56nm,18.2s,baz=85,slow=40
**KHC Kasperske Hory 73.02 318** *e*P **P 10 26 37.6 -0.3**
**KHC Kasperske Hory 73.02 318** *e*P **P 10 26 37.6 -0.3**
**KHC Kasperske Hory 73.02 318** *e*P **P 10 26 37.6 -0.3**
comp=Z,4.2nm,1.1s
**FBE Freiberg 73.17 320** *e*P **P 10 26 39.0 +0.3**
comp=Z,41nm,1.5s,baz=88,slow=5.8
**CLL Collm 73.39 320** *i* P **P 10 26 39.6 -0.4**
CLL *e* 10 26 50.0
CLL pmax pmax
comp=Z,24nm,1.6s
**CLL Collm 73.39 320** *e*P **P 10 26 39.6 -0.4**
comp=Z,25nm,1.6s,baz=88,slow=5.8
CLL *e*L L 11 02 28.6
comp=Z,74nm,21.1s
**CLL Collm 73.39 320** *i* P **P 10 26 39.6 -0.4**
comp=Z,24nm,1.6s
CLL *e*pP **pP 10 26 50.0 -0.2**
**CLL Collm 73.39 320** *e*P **P 10 26 39.5 -0.4**
**WET Wettzell 73.48 318** *e*P **P 10 26 40.4 -0.3**
comp=Z,12nm,1.2s,baz=88,slow=5.8
**TANN Tannenbergstha 73.74 319** *e*P **P 10 26 41.9 -0.3**
comp=Z,4.6nm,0.9s,baz=88,slow=5.8
**WERN Wernitzgruen 73.79 319** *e*P **P 10 26 42.5 +0.1**
comp=Z,12nm,1.2s,baz=88,slow=5.8
**GUNZ Gunzen 73.82 319** *e*P **P 10 26 42.5 -0.1**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,8.3nm,0.9s,baz=88,slow=5.8 | | | | | | | | |
| **WERD** | **Werda** | **73.83** | **319** | *e*P | | **P** | **10 26 42.5** | **-0.2** |
| | comp=Z,15nm,1.3s,baz=88,slow=5.8 | | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **73.91** | **318** | *e*P | | **P** | **10 26 43.6** | **+0.5** |
| | comp=Z,20nm,1.3s,baz=88,slow=5.8 | | | | | | | | |
| **PLN** | **Plauen** | **73.93** | **319** | *e*P | | **P** | **10 26 43.1** | **-0.2** |
| | comp=Z,8.2nm,1.0s,baz=88,slow=5.8 | | | | | | | | |
| **MANZ** | **Manzenberg** | **73.97** | **319** | *e*P | | **P** | **10 26 43.9** | **+0.4** |
| | comp=Z,23nm,1.4s,baz=88,slow=5.8 | | | | | | | | |
| **NEUB** | **Neuenburg** | **74.16** | **320** | *e*P | | **P** | **10 26 44.3** | **-0.2** |
| | comp=Z,18nm,0.9s,baz=88,slow=5.8 | | | | | | | | |
| **MOX** | **Moxa** | **74.27** | **319** | *e*P | | **P** | **10 26 45.1** | **-0.1** |
| | comp=Z,22nm,1.6s,baz=88,slow=5.8 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **74.52** | **330** | P | | **P** | **10 26 45.4** | **-1.0** |
| | comp=Z,2.7nm,0.6s,baz=91,slow=5.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.52** | **330** | P | | **P** | **10 26 45.5** | **-1.0** |
| | comp=Z,6.7nm,0.9s,baz=91,slow=5.8,SNR=12 | | | | | | | | |
| NOA | | | | pP | | **pP** | **10 26 55.4** | **-1.2** |
| | comp=Z,31nm,1.4s,baz=93,slow=5.5,SNR=5.7 | | | | | | | | |
| NOA | | | | LR | | LR | 11 02 25.4 | | |
| | comp=Z,111nm,20.3s,baz=100,slow=38 | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **74.55** | **318** | *e*P | | **P** | **10 26 47.1** | **+0.3** |
| | comp=Z,18nm,1.1s,baz=88,slow=5.8 | | | | | | | | |
| GRF | | | | *e*L | | L | 11 04 27.5 | | |
| | comp=Z,86nm,18.8s | | | | | | | | |
| **ASSE** | **Asse, Remlinge** | **74.83** | **321** | *e*P | | **P** | **10 26 47.8** | **-0.5** |
| | comp=Z,20nm,1.3s,baz=88,slow=5.8 | | | | | | | | |
| **BSEG** | **Bad Segeberg** | **75.00** | **323** | *e*P | | **P** | **10 26 49.5** | **+0.3** |
| | comp=Z,19nm,1.0s,baz=88,slow=5.8 | | | | | | | | |
| **CLZ** | **Clausthal** | **75.02** | **321** | *e*P | | **P** | **10 26 49.5** | **0.0** |
| | comp=Z,111nm,0.9s,baz=88,slow=5.8 | | | | | | | | |
| CLZ | | | | *e*L | | L | 11 04 35.6 | | |
| | comp=Z,90nm,20.1s | | | | | | | | |
| **NRDL** | **Niedersach Rie** | **75.16** | **321** | *e*P | | **P** | **10 26 50.5** | **+0.3** |
| | comp=Z,32nm,1.5s,baz=88,slow=5.8 | | | | | | | | |
| **GTTG** | **Gvttingen** | **75.29** | **320** | *e*P | | **P** | **10 26 50.9** | **-0.1** |
| | comp=Z,25nm,1.3s,baz=88,slow=5.8 | | | | | | | | |
| **KONO** | **Kongsberg** | **75.31** | **329** | *e*P | | **P** | **10 26 51.6** | **+0.6** |
| KONO | | | | pmax | | pmax | | | |
| | comp=Z,32nm,1.3s | | | | | | | | |
| **KONO** | **Kongsberg** | **75.31** | **329** | *e*P | | **P** | **10 26 51.6** | **+0.6** |
| | comp=Z,32nm,1.3s | | | | | | | | |
| **TNS** | **Taunus Mts** | **76.31** | **319** | *e*P | | **P** | **10 26 56.9** | **-0.1** |
| | comp=Z,10nm,1.2s,baz=88,slow=5.8 | | | | | | | | |
| TNS | | | | *e*L | | L | 11 04 53.4 | | |
| | comp=Z,63nm,19.3s | | | | | | | | |
| **BFO** | **Black Forest** | **76.53** | **317** | *ce*P | | **P** | **10 26 58.3** | **+0.1** |
| BFO | | | | pmax | | pmax | | | |
| | comp=Z,12nm,2.5s | | | | | | | | |
| **BFO** | **Black Forest** | **76.53** | **317** | *e*L | | L | 11 05 46.2 | | |
| | comp=Z,69nm,18.1s | | | | | | | | |
| **IBBN** | **Ibbenburen** | **76.61** | **321** | *e*P | | **P** | **10 26 58.6** | **0.0** |
| | comp=Z,32nm,1.4s,baz=88,slow=5.8 | | | | | | | | |
| **BOSA** | **Boshof** | **76.83** | **236** | P | | **P** | **10 27 01.1** | **+0.7** |
| | comp=Z,6.7nm,0.9s,baz=110,slow=3.7,SNR=7.5 | | | | | | | | |
| BOSA | | | | LR | | LR | 10 57 25.5 | | |
| | comp=Z,103nm,18.8s,baz=34,slow=33 | | | | | | | | |
| **KEST** | **Kesra** | **76.96** | **304** | P | | **P** | **10 27 00.5** | **-0.5** |
| | comp=Z,8.3nm,0.9s,baz=22,slow=0.8,SNR=7.0 | | | | | | | | |
| **SUR** | **Sutherland** | **81.79** | **234** | *e*P | | **P** | **10 27 29.1** | **+1.7** |
| | comp=Z,38nm,1.1s | | | | | | | | |
| **MAW** | **Mawson** | **83.10** | **191** | P | | **P** | **10 27 34.5** | **+1.3** |
| | comp=Z,3.8nm,1.1s,baz=14,slow=6.8,SNR=6.9 | | | | | | | | |
| MAW | | | | LR | | LR | 10 57 37.1 | | |
| | comp=Z,82nm,20.4s,baz=61,slow=31 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **86.66** | **310** | P | | **P** | **10 27 51.9** | **-0.1** |
| | comp=Z,2.6nm,0.7s,baz=56,slow=4.7,SNR=12 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **87.75** | **283** | P | | **P** | **10 27 57.5** | **-0.2** |
| | comp=Z,6.9nm,1.0s,baz=87,slow=4.7,SNR=37 | | | | | | | | |
| TORD | | | | PP | | **PP** | **10 31 21.8** | **-1.7** |
| | comp=Z,0.3nm,0.8s,baz=94,slow=8.9,SNR=4.6 | | | | | | | | |
| **PBAR** | **Barrancos** | **89.36** | **309** | *e*P | | **P** | **10 28 05.2** | **+0.4** |
| | comp=Z,29nm,1.3s | | | | | | | | |
| **PTOM** | **Tomar** | **89.98** | **311** | *e*P | | **P** | **10 28 08.3** | **+0.6** |
| | comp=Z,60nm,1.4s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **90.09** | **308** | *e*P | | **P** | **10 28 08.3** | **+0.1** |
| | comp=Z,22nm,2.0s | | | | | | | | |
| **PCVE** | **Castro Verde** | **90.27** | **309** | *e*P | | **P** | **10 28 10.0** | **+0.9** |
| | comp=Z,15nm,2.0s | | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **90.30** | **308** | *e*P | | **P** | **10 28 10.3** | **+1.0** |
| | comp=Z,28nm,1.7s | | | | | | | | |
| **MESJ** | **Messejana** | **90.35** | **309** | *e*P | | **P** | **10 28 10.1** | **+0.7** |
| | comp=Z,17nm,2.0s | | | | | | | | |
| **COLA** | **College** | **90.35** | **22** | *e*P | | **P** | **10 28 09.1** | **+0.3** |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **90.50** | **309** | *e*P | | **P** | **10 28 10.8** | **+0.7** |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **ILAR** | **Eielson Array** | **90.75** | **22** | P | | **P** | **10 28 09.4** | **-1.4** |
| | comp=Z,2.3nm,0.9s,baz=301,slow=4.5,SNR=17 | | | | | | | | |
| ILAR | | | | LR | | LR | 11 15 59.4 | | |
| | comp=Z,57nm,18.1s,baz=302,slow=40 | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **90.82** | **309** | *e*P | | **P** | **10 28 13.2** | **+1.6** |
| | comp=Z,34nm,1.4s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **91.02** | **308** | *e*P | | **P** | **10 28 13.4** | **+0.9** |
| | comp=Z,40nm,1.8s | | | | | | | | |
| **PMR** | **Palmer** | **91.58** | **25** | *e*P | | P | **10 28 14.4** | **-0.2** |
| PMR | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **PMR** | **Palmer** | **91.58** | **25** | *e*P | | **P** | **10 28 14.4** | **-0.2** |
| | comp=Z,7.2nm,0.7s | | | | | | | | |
| **INK** | **Inuvik** | **92.65** | **15** | P | | **P** | **10 28 17.7** | **-1.7** |
| | comp=Z,4.7nm,1.0s,baz=290,slow=2.8,SNR=3.2 | | | | | | | | |
| **DAWY** | **Dawson** | **93.79** | **20** | *e*P | | **P** | **10 28 24.7** | **-0.2** |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **DBIC** | **Dimbokro** | **95.51** | **278** | LR | | LR | 11 14 16.7 | | |
| | comp=Z,55nm,18.1s,baz=78,slow=37 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **121.42** | **28** | PKP | | **PKPdf** | **10 34 02.4** | **+0.4** |
| | comp=Z,1.8nm,0.9s,baz=248,slow=1.5,SNR=11 | | | | | | | | |
| **MSU** | **Marysvale** | **123.93** | **23** | *e*PKIKP | | **PKPdf** | **10 34 07.8** | **+1.0** |
| **MSU** | **Marysvale** | **123.93** | **23** | *e*PKPdf | | **PKPdf** | **10 34 07.8** | **+1.0** |
| **BAR** | **Barrett** | **126.85** | **31** | *e*PKPdf | | **PKPdf** | **10 34 12.9** | **+0.6** |
| **ANMO** | **Albuquerque** | **129.17** | **20** | *i* PKIKP | | **PKPdf** | **10 34 17.5** | **+0.6** |
| ANMO | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,2.5s | | | | | | | | |
| **ANMO** | **Albuquerque** | **129.17** | **20** | *e*PKPdf | | **PKPdf** | **10 34 17.4** | **+0.5** |
| **TXAR** | **Lajitas Array** | **135.25** | **20** | PKP | | **PKPdf** | **10 34 27.5** | **-0.8** |
| | comp=Z,0.9nm,0.9s,baz=200,slow=0.9,SNR=7.1 | | | | | | | | |
| TXAR | | | | PP | | **PP** | **10 36 58.1** | **-4.6** |
| | comp=Z,0.6nm,1.0s,baz=358,slow=3.8,SNR=5.0 | | | | | | | | |
| **JCT** | **Junction City** | **135.30** | **15** | *e*PKIKP | | **PKPdf** | **10 34 28.9** | **+0.6** |
| **JCT** | **Junction City** | **135.30** | **15** | *e*PKPdf | | **PKPdf** | **10 34 28.9** | **+0.6** |
| **BDFB** | **Brasilia** | **141.53** | **261** | PKP | | **PKPdf** | **10 34 40.6** | **+0.4** |
| | comp=Z,1.7nm,0.6s,baz=172,slow=5.7,SNR=3.9 | | | | | | | | |
| **SDDR** | **Presa de Saban** | **144.45** | **333** | *e*PKPdf | | PKPbc | 10 34 43.7 | 0.0 | |
| **CPUP** | **Villa Florida** | **148.57** | **240** | PKPbc | | **PKPbc** | **10 34 54.7** | **-0.8** |
| | comp=Z,8.3nm,0.9s,baz=84,slow=4.8,SNR=9.6 | | | | | | | | |
| **ROSC** | **El Rosal** | **157.94** | **322** | PKPab | | **PKPab** | **10 35 39.2** | **0.0** |
| | comp=Z,2.4nm,0.4s,baz=84,slow=9.2,SNR=4.7 | | | | | | | | |
| **LPAZ** | **La Paz** | **160.82** | **258** | PKP | | **PKPdf** | **10 35 08.7** | **-1.1** |
| | comp=Z,1.7nm,1.0s,baz=86,slow=3.2,SNR=5.0 | | | | | | | | |
| LPAZ | | | | PKPab | | **PKPab** | **10 35 51.6** | **-0.5** |
| | comp=Z,4.7nm,1.0s,baz=105,slow=4.6,SNR=9.9 | | | | | | | | |

**ISC 17 10:15:36.4±2.6, 50°17N±0°10×19°0E±0°1, h0km, n5, σ0s80/9, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **OJC** | **Ojcow** | **0.53** | **84** | *e*Pg | | **Pg** | **10 15 46.4** | **0.0** |
| OJC | | | | *e*Sg | | **Sg** | **10 15 52.7** | **-0.5** |
| **LANS** | **Liptovska Anna** | **1.07** | **163** | *e*PG | | **Pg** | **10 15 57.3** | **+0.5** |
| LANS | | | | *e*SG | | **Sg** | **10 16 09.4** | **-1.2** |
| **NIE** | **Niedzica** | **1.14** | **131** | *e*Pg | | **Pg** | **10 15 58.8** | **+0.7** |
| NIE | | | | *e*Sg | | **Sb** | **10 16 14.9** | **+0.7** |
| **STHS** | **Stebnicka Huta** | **1.65** | **116** | *e*PN | | **Pb** | **10 16 07.6** | **0.0** |
| **VYHS** | **Vyhne** | **1.68** | **183** | *e*PN | | **Pn** | **10 16 07.3** | **+0.3** |
| VYHS | | | | *e*SN | | **Sn** | **10 16 28.3** | **-0.9** |

**IDC 17 10:22:58.0±2.0, 5°51S×154°50E, h0km, mb3.7/4, mb1 3.9/4, mb1mx3.6/23, mbtmp3.8/4, Error ellipse: s-maj=42.2km s-min=35.0km az=60.0, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **20.11** | **146** | P | | P | 10 27 33.0 | -0.7 |
| | 5.7nm,0.4s,baz=9.5,slow=6.1,SNR=22 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.30** | **232** | P | | P | 10 28 18.4 | +1.0 |
| | 0.6nm,0.3s,baz=57,slow=10.0,SNR=15 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.82** | **226** | P | | P | 10 28 40.0 | -0.3 |
| | 0.1nm,0.3s,baz=56,slow=9.2,SNR=4.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **81.97** | **319** | P | | P | 10 35 19.7 | -0.2 |
| | 0.8nm,0.7s,baz=94,slow=6.9,SNR=4.8 | | | | | | | |

*DJA* **17 10:34:42.5±0.4, 4°S±4°×12°8E±°, h98km±4km, M3.8/12, mb4.6/2, MLv3.4/12, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AAI** | **Ambon** | **0.15** | **239** | P | | Pn | 10 34 56.5 | +0.2 |
| AAI | | | | S | | Sn | 10 35 08.8 | +2.2 |
| **MSAI** | **Masohi** | **0.66** | **67** | P | | Pn | 10 35 00.4 | +1.0 |
| MSAI | | | | S | | Sn | 10 35 13.9 | +1.9 |
| **NLAI** | **Namlea** | **1.27** | **287** | P | | Pn | 10 35 05.6 | -0.3 |
| NLAI | | | | S | | Sn | 10 35 23.7 | +0.1 |
| **BNDI** | **Bandanaira** | **1.82** | **120** | P | | Pn | 10 35 12.3 | -0.4 |
| **SANI** | **Sanana** | **2.80** | **304** | P | | Pn | 10 35 24.9 | -0.6 |
| **LBMI** | **Labuha** | **3.06** | **344** | P | | Pn | 10 35 29.2 | +0.1 |
| **FAKI** | **Fak Fak** | **3.98** | **80** | P | | Pn | 10 35 41.5 | 0.0 |
| **SWI** | **Sorong** | **4.01** | **47** | P | | Pn | 10 35 41.5 | -0.3 |
| **SAUI** | **Saumlaki** | **5.26** | **146** | P | | Pn | 10 35 58.1 | -0.7 |
| | 110nm,1.4s,0.5nm | | | | | | | |
| **BBSI** | **Bau Bau** | **6.03** | **252** | P | | Pn | 10 36 09.0 | -0.2 |

*IDC* **17** *10:45:31.9±2.5, 36°37N×71°06E, h160km±21km, mb3.5/13, mb1 3.6/18, mb1mx3.3/59, mbtmp3.9/18, Error ellipse: s-maj=18.7km s-min=12.8km az=3.0*
*ISCJB* **17** *10:45:34.3±0.4, 36°57N±0°04×70°98E±0°05, h188km, mb3.7/12, Error ellipse: s-maj=6.8km s-min=4.2km az=142.7*
*NNC* **17** *10:45:43.2±5.1, 37°16N×70°66E, h193km±42km, mb2.9, mpv4.3, Error ellipse: s-maj=43.4km s-min=30.7km az=10.0*

**ISC 17 10:45:33.5±0.7, 36°54N±0°06×70°98E±0°07, h188km, n45, σ2s17/38, mb3.6/12, 2C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CEP** | **Cherat** | **2.81** | **164** | ⇓P | | Pn | 10 46 25.2 | +4.6 |
| CEP | | | | S | | Sn | 10 47 02.0 | +4.8 |
| **CHCP** | **Chirah Chowk** | **3.43** | **146** | P | | Pn | 10 46 32.3 | +4.4 |
| **AML** | **Almayashu** | **5.96** | **20** | P | | **Pn** | **10 47 02.5** | **+2.0** |
| | SNR=49 | | | | | | | |
| **UCH** | **Uchtor** | **6.30** | **25** | P | | **Pn** | **10 47 06.8** | **+1.9** |
| | SNR=16 | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.48** | **19** | P | | **Pn** | **10 47 09.0** | **+2.0** |
| | SNR=9.1 | | | | | | | |
| **KK31** | **Karatay Array** | **6.56** | **357** | P | | **Pn** | **10 47 09.7** | **+1.8** |
| | 9.7nm,0.3s,baz=175,slow=12,SNR=471 | | | | | | | |
| KK31 | | | | ⇓S | | **Sn** | **10 48 18.3** | **-4.4** |
| | 39nm,0.5s,baz=180,slow=22 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.66** | **23** | P | | **Pn** | **10 47 10.8** | **+1.5** |
| | 4.2nm,0.3s,baz=211,slow=4.9,SNR=22 | | | | | | | |
| AAK | | | | S | | **Sn** | **10 48 23.4** | **-1.7** |
| | 1.3nm,0.3s,baz=215,slow=23,SNR=12 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.66** | **23** | P | | **Pn** | **10 47 11.6** | **+2.2** |
| | SNR=10 | | | | | | | |
| **USP** | **Ospenovka** | **7.24** | **21** | P | | **Pn** | **10 47 18.6** | **+1.8** |
| | SNR=14 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.29** | **28** | P | | **Pn** | **10 47 19.6** | **+1.9** |
| | SNR=22 | | | | | | | |
| **NDI** | **New Delhi** | **9.43** | **144** | *ex* | | Pn | 10 47 41.0 | -4.6 |
| NDI | | | | *e*S | | **Sn** | **10 49 25.0** | **-6.0** |
| **GEYT** | **Alibeck** | **10.35** | **282** | P | | **Pn** | **10 47 58.3** | **+0.8** |
| | 1.3nm,0.3s,baz=90,slow=12,SNR=3.7 | | | | | | | |
| GEYT | | | | S | | **S** | **10 49 52.6** | **-0.9** |
| | 1.5nm,0.3s,baz=127,slow=24,SNR=4.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.27** | **36** | P | | **P** | **10 48 35.6** | **-2.3** |
| | 0.1nm,0.3s,baz=225,slow=14,SNR=3.4 | | | | | | | |
| **DANN** | **Dangsing** | **13.52** | **124** | *e*P | | **P** | **10 48 39.5** | **-1.6** |
| **KOLN** | **Koldanda** | **13.80** | **126** | *e*P | | **P** | **10 48 42.6** | **-1.5** |
| | 16nm,0.4s | | | | | | | |
| **GKN** | **Gorkha** | **14.34** | **123** | *e*P | | **P** | **10 48 49.6** | **-0.4** |
| | 35nm,0.5s | | | | | | | |
| **DMN** | **Daman** | **14.91** | **123** | *e*P | | **P** | **10 48 57.0** | **+0.5** |
| | 20nm,0.4s | | | | | | | |
| **KKN** | **Kakani** | **14.91** | **122** | *e*P | | **P** | **10 48 56.7** | **+0.2** |
| | 20nm,0.4s | | | | | | | |
| **AB31** | **Akbulak array** | **15.04** | **331** | P | | **P** | **10 48 57.6** | **+0.2** |
| | 1.1nm,0.3s,baz=140,slow=12,SNR=68 | | | | | | | |
| AB31 | | | | ⇓S | | **S** | **10 51 38.6** | **-6.0** |
| | 0.9nm,0.4s,baz=144,slow=24 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.09** | **19** | P | | **P** | **10 48 59.8** | **+1.8** |
| | 0.1nm,0.3s,baz=210,slow=10,SNR=3.2 | | | | | | | |
| **PKIN** | **Phulchoki** | **15.12** | **122** | *e*P | | **P** | **10 48 59.6** | **+0.7** |
| | 25nm,0.4s | | | | | | | |
| **PKI** | **Pulchoki** | **15.14** | **122** | *e*P | | **P** | **10 48 59.9** | **+0.8** |
| | 27nm,0.6s | | | | | | | |
| **GUN** | **Gumba** | **15.25** | **120** | *e*P | | **P** | **10 49 01.7** | **+1.4** |
| | 15nm,0.3s | | | | | | | |
| **VOSK** | **Vostochnaya** | **16.18** | **360** | ⇑P | | **Pn** | **10 49 11.6** | **+1.2** |
| | 2.9nm,0.7s | | | | | | | |
| **RAMN** | **Ramite** | **16.35** | **121** | *e*P | | **Pn** | **10 49 14.4** | **+1.5** |
| | 14nm,0.3s | | | | | | | |
| **ZRNK** | **Zerenda** | **16.47** | **356** | ⇓P | | **Pn** | **10 49 16.0** | **+2.2** |
| | 1.9nm,0.8s | | | | | | | |
| **BVA0** | **Borovoye Array** | **16.49** | **359** | P | | **Pn** | **10 49 15.1** | **+1.0** |
| | 0.2nm,1.1s,baz=56,slow=4.0,SNR=8.7 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.74** | **330** | ⇑P | | **Pn** | **10 49 19.1** | **+2.0** |
| | 5.7nm,0.9s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.74** | **330** | P | | **Pn** | **10 49 17.6** | **+0.5** |
| | 0.5nm,0.3s,baz=142,slow=11,SNR=12 | | | | | | | |
| **TAPN** | **Taplejung** | **16.88** | **118** | *e*P | | Pn | 10 49 21.5 | +2.2 |
| | 18nm,0.5s | | | | | | | |
| **ODAN** | **Odare** | **16.95** | **120** | *e*P | | **Pn** | **10 49 21.9** | **+1.8** |
| **ZALV** | **Zalesovo Beam** | **19.88** | **25** | P | | **Pn** | **10 49 52.4** | **-1.9** |
| | 1.4nm,0.4s,baz=217,slow=10,SNR=7.6 | | | | | | | |
| **SONM** | **Songino Array** | **28.32** | **55** | P | | **P** | **10 51 11.0** | **+1.3** |
| | 0.8nm,0.8s,baz=242,slow=3.2,SNR=5.3 | | | | | | | |
| **AKASG** | **Malin Array Be** | **32.91** | **309** | P | | P | 10 51 52.5 | +2.7 |
| | 0.8nm,0.5s,baz=86,slow=6.7,SNR=4.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **37.44** | **326** | P | | P | 10 52 31.4 | +3.1 |
| | 2.4nm,0.7s,baz=122,slow=10,SNR=11 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.10** | **338** | P | | P | 10 53 01.3 | +2.8 |
| | 0.8nm,0.4s,baz=113,slow=7.9,SNR=11 | | | | | | | |
| **HFS** | **Hagfors** | **43.03** | **322** | P | | P | 10 53 16.7 | +2.6 |
| | 2.7nm,0.5s,baz=98,slow=11,SNR=17 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.34** | **323** | P | | P | 10 53 27.0 | +2.3 |
| | comp=Z,1.4nm,0.5s,baz=95,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.34** | **323** | P | | P | 10 53 27.1 | +2.3 |
| | comp=Z,2.3nm,0.6s,baz=96,slow=7.8,SNR=9.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.70** | **269** | P | | **P** | **10 55 58.8** | **+0.6** |
| | comp=Z,0.4nm,0.5s,baz=51,slow=5.8,SNR=12 | | | | | | | |
| **INK** | **Inuvik** | **73.87** | **9** | P | | P | 10 56 49.8 | +2.6 |
| | comp=Z,1.1nm,0.6s,baz=316,slow=6.7,SNR=6.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **74.74** | **16** | P | | **P** | **10 56 52.9** | **+0.6** |
| | comp=Z,0.6nm,0.9s,baz=345,slow=5.8,SNR=5.4 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.20** | **3** | P | | P | 10 57 30.5 | +2.6 |
| | comp=Z,0.7nm,0.5s,baz=349,slow=5.4,SNR=3.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **82.02** | **122** | P | | **P** | **10 57 33.8** | **+0.9** |
| | comp=Z,0.5nm,0.4s,baz=324,slow=4.9,SNR=16 | | | | | | | |
| **ASAR** | **Alice Springs** | **84.29** | **125** | P | | **P** | **10 57 45.4** | **+1.0** |
| | comp=Z,0.9nm,0.6s,baz=313,slow=5.1,SNR=17 | | | | | | | |

*DDA* **17** *10:48:52.3, 40°80N×43°58E, h7km, Md2.9*
*TIF* **17** *10:48:52.9, 40°68N×43°53E, h14km±1km*
*CSEM* **17** *10:48:54.0±0.3, 40°71N×43°50E, h2km, MD2.9, Error ellipse: s-maj=8.5km s-min=5.3km az=126.0*

**ISC 17 10:48:53.7±1.2, 40°70N±0°03×43°51E±0°04, h8km±12km, n16, σ0s93/31, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DIGO** | **Kars** | **0.30** | **200** | *i* P | | **Pb** | **10 49 00.6** | **-1.0** |
| DIGO | | | | *i* S | | **Sb** | **10 49 05.8** | **-0.9** |
| **DIGO** | **Kars** | **0.30** | **200** | P | | **Pb** | **10 49 00.6** | **-1.0** |
| DIGO | | | | S | | **Sb** | **10 49 05.8** | **-0.9** |
| **AKH** | **Akhalkalaki** | **0.71** | **359** | P | | **Pg** | **10 49 07.0** | **-0.4** |
| AKH | | | | S | | **Sb** | **10 49 18.0** | **-0.5** |
| **AKH** | **Akhalkalaki** | **0.71** | **359** | P | | **Pg** | **10 49 07.0** | **-0.4** |
| AKH | | | | S | | **Sb** | **10 49 18.0** | **-0.5** |
| **EATA** | **Eleskirt** | **1.14** | **223** | *i* P | | **Pg** | **10 49 16.3** | **+0.7** |
| **EATA** | **Eleskirt** | **1.14** | **223** | P | | **Pg** | **10 49 16.3** | **+0.7** |
| EATA | | | | S | | **Sn** | **10 49 35.3** | **+3.0** |
| **ARTV** | **Artvin** | **1.29** | **293** | *i* P | | **Pg** | **10 49 18.6** | **+0.1** |
| ARTV | | | | *i* S | | **Sb** | **10 49 34.3** | **-0.9** |
| **ARTV** | **Artvin** | **1.29** | **293** | P | | **Pg** | **10 49 18.6** | **+0.1** |
| ARTV | | | | S | | **Sb** | **10 49 34.3** | **-0.9** |
| **TBLG** | **Delisi** | **1.39** | **42** | P | | **Pn** | **10 49 18.5** | **-0.9** |
| TBLG | | | | S | | **Sb** | **10 49 37.8** | **0.0** |
| **TBLG** | **Delisi** | **1.39** | **42** | P | | **Pn** | **10 49 18.5** | **-0.9** |
| TBLG | | | | S | | **Sb** | **10 49 37.8** | **0.0** |
| **DGRG** | **David-gareji** | **1.60** | **61** | P | | **Pb** | **10 49 22.8** | **-0.7** |
| DGRG | | | | S | | **Sg** | **10 49 45.8** | **+0.8** |
| **DGRG** | **David-gareji** | **1.60** | **61** | *i* P | | **Pb** | **10 49 22.8** | **-0.7** |
| DGRG | | | | *i* S | | **Sg** | **10 49 45.8** | **+0.1** |
| **DUS** | **Dusheti** | **1.65** | **33** | P | | **Pb** | **10 49 24.6** | **+0.1** |
| DUS | | | | S | | **Sg** | **10 49 48.2** | **+1.3** |
| **DUS** | **Dusheti** | **1.65** | **33** | P | | **Pb** | **10 49 24.6** | **+0.1** |
| DUS | | | | S | | **Sg** | **10 49 48.2** | **+1.3** |
| **ONI** | **Oni** | **1.89** | **359** | P | | **Pb** | **10 49 28.2** | **-0.3** |
| ONI | | | | S | | **Sg** | **10 49 54.9** | **+0.5** |
| **ONI** | **Oni** | **1.89** | **359** | P | | **Pb** | **10 49 28.2** | **-0.3** |
| ONI | | | | S | | **Sg** | **10 49 54.9** | **+0.5** |

*ISCJB* **17** *11:01:53.8±0.8, 34°71N±0°04×139°34E±0°07, h11km±5km, mb3.4/3, MS2.9/1, Error ellipse: s-maj=9.8km s-min=6.3km az=156.6*
*IDC* **17** *11:01:53.3±2.4, 34°75N×139°41E, h0km, mb3.4/3, mb1 3.6/4, mb1mx3.4/41, mbtmp3.4/4, ML3.2/1, MS2.8/3, Ms1 2.8/3, ms1mx2.5/34, Error ellipse: s-maj=65.2km s-min=15.4km az=66.0*
*JMA* **17** *11:01:54.2, 34°73N×139°30E, h0km, M3.1*
*JMA Felt III J1.*

**ISC 17 11:01:54.5±1.1, 34°73N±0°04×139°34E±0°05, h6km±8km, n13, σ0s57/15, mb3.2/3, 1C-3D, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JIM2** | **Oshima 3** | **0.07** | **98** | ⇓P | | **Pg** | **11 01 56.5** | **+0.1** |
| **KTJJ** | **Kamata 2** | **0.30** | **311** | ⇓P | | **Pg** | **11 02 00.0** | **-0.4** |
| KTJJ | | | | S | | **Sg** | **11 02 04.4** | **0.0** |
| **JIZS** | **Izushimoda** | **0.38** | **269** | ⇓P | | **Pg** | **11 02 01.5** | **-0.4** |
| JIZS | | | | S | | **Sg** | **11 02 07.0** | **+0.1** |
| **JKO** | **Kozu shima** | **0.56** | **197** | P | | **Pg** | **11 02 05.6** | **+0.2** |
| **JOD2** | **Odawara 2** | **0.57** | **339** | ⇑P | | **Pg** | **11 02 05.2** | **-0.4** |
| JOD2 | | | | S | | **Sg** | **11 02 13.2** | **+0.1** |
| **JHJ** | **Hachijo jima 2** | **1.65** | **167** | Pn | | **Pn** | **11 02 23.3** | **-0.7** |
| | 35nm,0.3s,baz=132,slow=22,SNR=19 | | | | | | | |
| JHJ | | | | Lg | | Lg | 11 02 46.5 | |
| | 82nm,0.3s,baz=241,slow=22,SNR=15 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **2.03** | **333** | LR | | LR | 11 03 31.0 | |
| | comp=Z,151nm,19.9s,baz=60,slow=49 | | | | | | | |
| **MAT** | **Matsushiro** | **2.03** | **333** | P | | **Pn** | **11 02 29.4** | **0.0** |
| MAT | | | | S | | **Sn** | **11 02 56.0** | **+0.9** |
| **JNU** | **Nakatsue** | **7.21** | **260** | Pn | | **Pn** | **11 03 41.5** | **+0.9** |
| | 0.3nm,0.3s,baz=36,slow=19,SNR=4.9 | | | | | | | |
| JNU | | | | LR | | LR | 11 06 40.5 | |
| | comp=Z,58nm,21.5s,baz=118,slow=40 | | | | | | | |
| **SONM** | **Songino Array** | **27.78** | **308** | LR | | LR | 11 19 50.0 | |
| | comp=Z,34nm,19.4s,baz=78,slow=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.96** | **304** | P | | **P** | **11 10 02.4** | **0.0** |
| | 0.2nm,0.4s,baz=85,slow=8.1,SNR=2.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.58** | **186** | P | | **P** | **11 11 22.8** | **-0.9** |
| | 1.1nm,1.0s,baz=2.2,slow=7.5,SNR=7.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **58.30** | **186** | P | | **P** | **11 11 50.5** | **+0.3** |
| | 0.2nm,0.8s,baz=7.9,slow=14,SNR=5.8 | | | | | | | |

**IDC 17 11:08:45.3±2.5, 54°22N×86°07E, h0km, mb1 3.4/2, mb1mx3.1/42, mbtmp3.4/2, ML3.2/2, Error ellipse: s-maj=20.0km s-min=12.6km az=48.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.79** | **251** | *i* | | | 11 14 30.0 | |
| | baz=70,slow=324,SNR=3.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.79** | **250** | Pg | | Pg | 11 08 58.9 | -1.5 |
| | 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RTCV | | | | *i* S | | **Sn** | **11 20 46.3** | **-0.9** |
| **CDCH** | **Caldera** | **2.63** | **332** | *e*P | | **Pn** | **11 20 17.7** | **+1.4** |
| CDCH | | | | *i* S | | **Sn** | **11 20 48.5** | **-0.2** |
| **APLL** | **PUNTA DE LOS L** | **2.72** | **112** | *i* P | | **Pn** | **11 20 17.9** | **+0.5** |
| APLL | | | | *i* S | | **Sn** | **11 20 48.6** | **-2.1** |
| **ACHE** | **Chepes** | **2.98** | **127** | *i* P | | **Pn** | **11 20 21.3** | **+0.5** |
| ACHE | | | | *i* S | | **Sn** | **11 20 55.4** | **-1.4** |
| **CYA** | **Choya** | **3.34** | **74** | *i* P | | **Pn** | **11 20 26.1** | **+0.7** |
| CYA | | | | *i* P | | **Pn** | **11 20 26.1** | **+0.7** |
| CYA | | | | *i* S | | **Sn** | **11 21 03.4** | **-1.7** |
| CYA | | | | *i* S | | **Sn** | **11 21 03.5** | **-1.7** |
| CYA | | | | AML | | AML | 11 21 06.1 | |
| | comp=N,105nm,0.2s | | | | | | | |
| **FSA** | **Cafayete** | **4.50** | **43** | *i* P | | **Pn** | **11 20 42.9** | **+2.1** |

*ISCJB* ***17*** *11:21:08.6±0.7,32°.21N±0°.05×115°.25W±0°.05,h20km±9km, Error ellipse: s-maj=8.5km s-min=6.3km az=140.1*
*ECX* ***17*** *11:21:09.6±0.5,32°.19N×115°.25W,h8km, MD2.6,ML2.8*
*MEX* ***17*** *11:21:10.6±0.3,32°.29N×115°.15W,h19km±12km,MD3.8*

**ISC 17 11:21:08.1±1.1,32°.19N±0°.04×115°.27W±0°.04,h18km±9km, n19,σ0°.945/25,10C-3D,California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **MBIG** | **Mexicali** | **0.23** | **15** | *e*P | **Pb** | **11 21 13.8** | | **0.0** |
| MBIG | | | | *e*S | **Sg** | **11 21 16.2** | | **-0.8** |
| **MBIG** | **Mexicali** | **0.23** | **15**⇓ | *e*P | **Pb** | **11 21 14.1** | | **+0.3** |
| **CPBX** | **Cerro Prieto** | **0.23** | **352**⇓ | *e*P | **Pg** | **11 21 13.8** | | **+0.3** |
| CPBX | | | ⇓ | *e*P | **Pg** | **11 21 13.9** | | **+0.3** |
| CPBX | | | | *e*S | **Sg** | **11 21 17.3** | | **+0.1** |
| CPBX | | | | *e* | | 11 21 19.3 | | |
| CPBX | | | | IAML | | 11 21 19.3 | | |
| | comp=E,5μm,0.3s | | | | | | | |
| **EMSC** | **East Mesa** | **0.60** | **23**⇑ | *i*P | **Pg** | **11 21 20.1** | | **0.0** |
| **SGL** | **Mount Signal** | **0.60** | **320**⇑ | *i*P | **Pg** | **11 21 20.2** | | **+0.1** |
| **RDX** | **Rancho Dawling** | **0.63** | **246**⇑ | *e*P | **Pb** | **11 21 21.3** | | **+0.5** |
| RDX | | | | *e*S | **Sb** | **11 21 29.9** | | **+0.6** |
| RDX | | | ⇑ | *e* | | 11 21 31.0 | | |
| RDX | | | | IAML | | 11 21 31.0 | | |
| | comp=N,309nm,0.4s | | | | | | | |
| **DREC** | **Desert Rsrch C** | **0.63** | **346** | *e*P | **Pb** | **11 21 21.2** | | **+0.5** |
| **ERC** | **Ernies Place** | **0.65** | **329** | *e*P | **Pb** | **11 21 23.3** | | **+0.4** |
| **COA** | **Coachella** | **0.68** | **10** | *e*P | **Pg** | **11 21 21.3** | | **-0.3** |
| **WESC** | **Westside Schoo** | **0.69** | **326** | *e*P | **Pb** | **11 21 22.0** | | **+0.3** |
| **YMD** | **Yuma Desert** | **0.71** | **59**⇑ | *i*P | **Pg** | **11 21 21.6** | | **-0.5** |
| **YUH** | **Yuha Desert** | **0.72** | **310**⇑ | *i*P | **Pg** | **11 21 21.9** | | **-0.4** |
| **RMX** | **La Rumorosa** | **0.80** | **301**⇑ | *e*P | **Pg** | **11 21 23.2** | | **-0.6** |
| RMX | | | | *e*S | **Sg** | **11 21 33.6** | | **-0.9** |
| RMX | | | | *e* | | 11 21 35.3 | | |
| RMX | | | | IAML | | 11 21 35.3 | | |
| | comp=N,402nm,0.1s | | | | | | | |
| **IBP** | **Imperial Bould** | **0.84** | **304** | *e*P | **Pg** | **11 21 24.6** | | **0.0** |
| **ZAX** | **El Zacaton** | **1.09** | **232** | *e*P | **Pg** | **11 21 28.7** | | **-0.6** |
| **SPX** | **San Pedro Mart** | **1.15** | **188**⇑ | *e*P | **Pn** | **11 21 30.0** | | **+0.3** |
| **CBX** | **Cerro Bola** | **1.19** | **276** | *e*P | **Pn** | **11 21 30.1** | | **0.0** |
| CBX | | | | *e*S | **Sb** | **11 21 45.6** | | **+0.2** |
| **CBX** | **Cerro Bola** | **1.19** | **276** | *e*P | **Pn** | **11 21 30.1** | | **0.0** |
| CBX | | | | IAML | | 11 21 51.3 | | |
| | comp=N,185nm,0.5s | | | | | | | |
| CBX | | | ⇑ | *e* | | 11 21 51.3 | | |
| **BAR** | **Barrett** | **1.28** | **293**⇑ | *e*P | **Pn** | **11 21 31.0** | | **-0.3** |

**DHMR 17 11:25:30.8±0.7,12°.54N×46°.91E,h11km±19km,ML3.7, Western Gulf of Aden**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **BDHA** | **Al Bayda'** | **1.93** | **318** | *i* P | Pn | 11 26 04.6 | | +0.6 |
| BDHA | | | | *i* S | Sb | 11 26 31.8 | | +1.1 |
| BDHA | | | | AML | AML | 11 26 34.0 | | |
| | comp=N,785nm,0.5s | | | | | | | |
| **LBOS** | | **2.08** | **309** | *i* P | Pn | 11 26 07.6 | | +1.5 |
| LBOS | | | | *i* S | Sb | 11 26 36.0 | | +0.8 |
| **UDYN** | **Al 'Udayn** | **3.19** | **297** | *i* P | Pn | 11 26 23.7 | | +2.5 |
| UDYN | | | | *i* S | Sb | 11 27 04.4 | | -2.5 |

*IDC* ***17*** *11:28:50.0±1.0,50°.36N×177°.43W,h0km, mb3.8/12, mb1 4.0/13,mb1mx3.8/67,mbtmp3.9/13,ML3.9/1,MS3.0/1, Ms1 3.2/1,ms1mx2.3/41,Error ellipse: s-maj=31.3km s-min=18.7km az=0.0*
*NEIC* ***17*** *11:28:54.3,50°.45N×177°.53W,h10km,mb4.4/10,After AEIC.*

**ISC 17 11:28:52.1±3.5,50°.35N±0°.08×177°.54W±0°.05, h12km±21km,n36,σ1°.01/44,mb4.2/17,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **TAFL** | **Tanaga Flats** | **1.43** | **351** | P | **Pb** | **11 29 18.9** | | **+0.1** |
| **TASE** | **Tanaga Southea** | **1.52** | **348** | P | **Pn** | **11 29 19.8** | | **+0.6** |
| TASE | | | | S | **Sb** | **11 29 39.9** | | **+0.2** |
| **TAFP** | **Tanaga Falls P** | **1.58** | **350** | P | **Pn** | **11 29 20.6** | | **+0.6** |
| TAFP | | | | S | **Sn** | **11 29 40.5** | | **+0.1** |
| **KIRH** | **Kanaga Island** | **1.58** | **10** | P | **Pn** | **11 29 20.7** | | **+0.7** |
| **GALAA** | **Gareloi Lava P** | **1.62** | **332** | P | **Pn** | **11 29 20.7** | | **+0.3** |
| **GAEA** | **Gareloi East** | **1.63** | **333** | P | **Pn** | **11 29 21.0** | | **+0.3** |
| GAEA | | | | S | **Sn** | **11 29 42.2** | | **+0.7** |
| **GANE** | **Gareloi Northe** | **1.67** | **333** | P | **Pn** | **11 29 21.3** | | **+0.2** |
| GANE | | | | S | **Sn** | **11 29 42.6** | | **+0.1** |
| **GSTD** | **Great Sitkin T** | **1.93** | **27** | P | **Pn** | **11 29 25.3** | | **+0.5** |
| GSTD | | | | S | **Sn** | **11 29 48.3** | | **-0.7** |
| **GSMY** | **Great Sitkin M** | **1.94** | **28** | P | **Pn** | **11 29 25.3** | | **+0.4** |
| GSMY | | | | S | **Sn** | **11 29 48.7** | | **-0.6** |
| **KOKL** | **Mount Kliuchef** | **2.88** | **45** | P | **Pn** | **11 29 39.7** | | **+1.8** |
| **KOWE** | **Korovin West** | **2.89** | **44** | P | **Pn** | **11 29 39.4** | | **+1.4** |
| **KOFP** | **Korovin Flat P** | **2.90** | **47** | P | **Pn** | **11 29 39.9** | | **+1.8** |
| **KDAK** | **Kodiak Island** | **16.36** | **53** | Pn | **Pn** | **11 32 38.9** | | **-2.6** |
| | 0.5nm,0.3s,baz=187,slow=1.8,SNR=17 | | | | | | | |
| KDAK | | | | Sn | **Sn** | **11 35 42.6** | | **-0.1** |
| | 0.1nm,0.3s,baz=324,slow=18,SNR=2.3 | | | | | | | |
| **KDAK** | **Kodiak Island** | **16.36** | **53** | *e*P | **Pn** | **11 32 39.5** | | **-1.9** |
| | 176nm,2.0s | | | | | | | |
| KDAK | | | | Sn | **Sn** | **11 35 42.6** | | **-0.1** |
| **TRF** | **Thorofare Moun** | **19.64** | **38** | *e*P | **Pn** | **11 33 22.0** | | **+0.1** |
| | 17nm,1.3s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **19.70** | **36** | *e*P | **P** | **11 33 20.0** | | **-1.0** |
| | 1.9nm,0.9s | | | | | | | |
| **MCK** | **McKinley** | **20.30** | **38** | *e*P | Pn | 11 33 28.6 | | -1.0 |
| | 24nm,1.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **21.58** | **36** | P | **P** | **11 33 40.6** | | **-0.7** |
| | 0.6nm,0.7s,baz=236,slow=10,SNR=8.2 | | | | | | | |
| ILAR | | | | LR | LR | 11 42 51.6 | | |
| | comp=Z,41nm,18.1s,baz=88,slow=39 | | | | | | | |
| **SKAG** | **Skagway** | **25.52** | **53** | *e*P | **P** | **11 34 18.6** | | **-1.5** |
| | 26nm,1.6s | | | | | | | |
| **INK** | **Inuvik** | **27.87** | **34** | *e*P | **P** | **11 34 39.4** | | **-1.8** |
| | 30nm,1.8s | | | | | | | |
| **EDM** | **Edmonton** | **38.63** | **60** | *e*P | **P** | **11 36 16.5** | | **+1.5** |
| | 3.9nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **42.89** | **83** | P | **P** | **11 36 48.8** | | **-1.8** |
| | 0.4nm,0.8s,baz=290,slow=10,SNR=2.1 | | | | | | | |
| **BW06** | **Boulder Array** | **45.87** | **72** | *e*P | **P** | **11 37 15.2** | | **+0.9** |
| | 2.5nm,1.2s | | | | | | | |
| **SONM** | **Songino Array** | **47.83** | **298** | P | **P** | **11 37 29.7** | | **+0.2** |
| | 0.6nm,0.8s,baz=77,slow=9.0,SNR=3.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **58.02** | **81** | P | **P** | **11 38 45.1** | | **+0.2** |
| | 0.3nm,0.6s,baz=312,slow=3.6,SNR=4.9 | | | | | | | |
| TXAR | | | | PcP | **PcP** | **11 39 36.6** | | **-0.2** |
| | 0.4nm,0.8s,baz=274,slow=3.8,SNR=4.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.24** | **351** | P | **P** | **11 38 52.0** | | **-0.7** |
| | 1.9nm,0.8s,baz=26,slow=7.1,SNR=5.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **61.30** | **310** | P | **P** | **11 39 07.0** | | **-0.2** |
| | 0.5nm,0.7s,baz=45,slow=7.2,SNR=4.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **66.97** | **348** | P | **P** | **11 39 44.1** | | **+0.1** |
| | 1.7nm,0.9s,baz=108,slow=6.2,SNR=3.3 | | | | | | | |
| **AAK** | **Ala-Archa** | **68.14** | **311** | P | **P** | **11 39 52.4** | | **+0.3** |
| | 1.0nm,0.5s,baz=35,slow=5.2,SNR=3.8 | | | | | | | |
| **AAK** | **Ala-Archa** | **68.14** | **311** | *e*P | **P** | **11 39 52.4** | | **+0.3** |
| | 1.5nm,0.7s | | | | | | | |
| **EKS2** | **Erkin-Say** | **68.47** | **311** | *e*P | **P** | **11 39 55.9** | | **+1.9** |
| | 3.0nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **69.50** | **354** | P | **P** | **11 39 59.2** | | **-0.8** |
| | 1.5nm,0.9s,baz=15,slow=6.0,SNR=4.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **71.92** | **277** | P | **P** | **11 40 14.8** | | **-0.6** |
| | 0.4nm,0.4s,baz=21,slow=6.8,SNR=4.1 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **74.59** | **3** | P | **P** | **11 40 31.3** | | **+0.8** |
| | 1.5nm,0.8s,baz=357,slow=9.3,SNR=3.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.77** | **343** | P | **P** | **11 40 43.4** | | **+0.2** |
| | 1.8nm,0.7s,baz=19,slow=5.8,SNR=5.7 | | | | | | | |
| **MAW** | **Mawson** | **146.14** | **217** | PKPbc | **PKPdf** | **11 48 30.0** | | **+0.4** |
| | 1.2nm,0.8s,baz=27,slow=2.3,SNR=3.9 | | | | | | | |

*IDC* ***17*** *11:49:41.3±1.0,45°.73S×76°.68W,h0km,mb3.8/8, mb1 3.9/9,mb1mx3.8/26,mbtmp3.7/9,ML2.8/1,MS4.1/12, Ms1 4.1/12,ms1mx3.9/20,Error ellipse: s-maj=43.4km s-min=17.5km az=108.0*
*ISCJB* ***17*** *11:49:50.1±0.6,45°.81S±0°.09×75°.3W±0°.2,h33km, mb4.4/22,MS4.2/9,Error ellipse: s-maj=16.5km s-min=12.1km az=11.4*
*NEIC* ***17*** *11:49:50.6±0.6,46°.08S×75°.49W,h35km,mb4.8/16,Error ellipse: s-maj=21.6km s-min=13.4km az=103.0*
*BJI* ***17*** *11:49:54.9,45°.18S×76°.45W,h39km,mB5.1/2,Ms5.5/1, Ms7 5.3/1*

**ISC 17 11:49:49.3±0.6,46°.02S±0°.09×75°.6W±0°.2,h35km,n70, σ2°.18/46,mb4.6/22,MS4.2/9,Southern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **PLCA** | **Paso Flores** | **6.43** | **36** | *e*Pn | **Pn** | **11 51 22.9** | | **+1.4** |
| **USHA** | **Ushuaia** | **9.92** | **155** | LR | LR | 11 56 03.6 | | |
| | comp=Z,1μm,19.1s,baz=301,slow=36 | | | | | | | |
| **TRQA** | **Tornquist** | **12.85** | **57** | *e*Pn | P | 11 52 56.6 | | -3.2 |
| **CFAA** | **Coronel Fontan** | **15.48** | **24** | Pn | **Pn** | **11 53 22.1** | | **-2.8** |
| | 0.0nm,0.3s,baz=216,slow=12,SNR=4.0 | | | | | | | |
| CFAA | | | | LR | LR | 11 59 22.6 | | |
| | comp=Z,127nm,21.5s,baz=198,slow=37 | | | | | | | |
| **CFAA** | **Coronel Fontan** | **15.48** | **24** | Pn | **Pn** | **11 53 22.1** | | **-2.8** |
| **LCO** | **Las Campanas** | **17.41** | **14** | *e*P | **Pn** | **11 53 49.5** | | **-0.2** |
| | 80nm,1.7s | | | | | | | |
| **PMSA** | **Palmer Station** | **19.84** | **165** | LR | LR | 12 00 14.6 | | |
| | comp=Z,381nm,20.6s,baz=340,slow=31 | | | | | | | |
| **LVC** | **Limon Verde** | **23.98** | **15** | P | **P** | **11 54 57.3** | | **-3.4** |
| | 5.0nm,0.4s,baz=214,slow=12,SNR=3.1 | | | | | | | |
| LVC | | | | LR | LR | 12 04 54.2 | | |
| | comp=Z,1μm,18.8s,baz=192,slow=38 | | | | | | | |
| **LVC** | **Limon Verde** | **23.98** | **15** | *e*P | **P** | **11 55 02.5** | | **+1.8** |
| | 52nm,1.6s | | | | | | | |
| **CPUP** | **Villa Florida** | **24.45** | **43** | P | **P** | **11 55 03.8** | | **-1.0** |
| | 3.6nm,1.0s,baz=233,slow=9.7,SNR=3.0 | | | | | | | |
| **CPUP** | **Villa Florida** | **24.45** | **43** | *e*P | **P** | **11 55 08.0** | | **+3.2** |
| **LPAZ** | **La Paz** | **30.29** | **14** | *e*P | **P** | **11 55 57.9** | | **0.0** |
| LPAZ | | | | *e*pP | **pP** | **11 56 04.6** | | **-3.3** |
| **BDFB** | **Brasilia** | **38.07** | **46** | P | **P** | **11 57 04.2** | | **-0.5** |
| | 1.8nm,0.8s,baz=232,slow=12,SNR=2.0 | | | | | | | |
| BDFB | | | | LR | LR | 12 14 22.2 | | |
| | comp=Z,1μm,18.2s,baz=208,slow=38 | | | | | | | |
| **BDFB** | **Brasilia** | **38.07** | **46** | P | **P** | **11 57 04.2** | | **-0.5** |
| **SAML** | **Samuel** | **38.44** | **20** | *e*P | **P** | **11 57 05.7** | | **-1.9** |
| | 11nm,1.2s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **40.31** | **152** | P | P | 11 57 26.9 | | +4.2 |
| | baz=276,slow=9.1 | | | | | | | |
| **SNAA** | **Sanae** | **41.77** | **153** | P | **P** | **11 57 37.8** | | **+3.1** |
| **SNAA** | **Sanae** | **41.77** | **153** | P | **P** | **11 57 37.7** | | **+3.0** |
| | 0.7nm,0.8s,baz=259,slow=6.6,SNR=7.0 | | | | | | | |
| **SNAA** | **Sanae** | **41.77** | **153** | P | **P** | **11 57 37.7** | | **+3.0** |
| **QSPA** | **South Pole Qui** | **44.22** | **180** | P | **P** | **11 57 53.9** | | **-0.9** |
| | 1.1nm,0.9s,baz=131,slow=5.8,SNR=4.0 | | | | | | | |
| **QSPA** | **South Pole Qui** | **44.22** | **180** | P | **P** | **11 57 53.9** | | **-0.9** |
| **ROSC** | **El Rosal** | **50.67** | **2** | LR | LR | 12 18 08.6 | | |
| | comp=Z,222nm,19.1s,baz=206,slow=34 | | | | | | | |
| **VNDA** | **Vanda** | **51.79** | **193** | P | **P** | **11 58 51.2** | | **-1.7** |
| | 0.6nm,0.8s,baz=56,slow=3.6,SNR=3.2 | | | | | | | |
| VNDA | | | | LR | LR | 12 16 37.8 | | |
| | comp=Z,98nm,20.8s,baz=131,slow=31 | | | | | | | |
| **VNDA** | **Vanda** | **51.79** | **193** | P | **P** | **11 58 51.2** | | **-1.7** |
| **MAW** | **Mawson** | **62.44** | **163** | LR | LR | 12 26 26.3 | | |
| | comp=Z,313nm,21.0s,baz=236,slow=35 | | | | | | | |
| **PPT2** | **Papeete2** | **66.51** | **269** | *e*LR | LR | 12 20 06.4 | | |
| | 108nm,23.0s | | | | | | | |
| **PPT** | **Papeete** | **66.52** | **269** | LR | LR | 12 20 47.2 | | |
| | comp=Z,92nm,18.7s,baz=110,slow=28 | | | | | | | |
| **BOSA** | **Boshof** | **76.90** | **118** | LR | LR | 12 33 26.3 | | |
| | comp=Z,94nm,18.2s,baz=209,slow=34 | | | | | | | |
| **TXAR** | **Lajitas Array** | **79.21** | **335** | LR | LR | 12 30 42.8 | | |
| | comp=Z,73nm,20.0s,baz=0.0,slow=31 | | | | | | | |
| **JCT** | **Junction City** | **79.25** | **339** | *e*P | **P** | **12 01 52.9** | | **+2.3** |
| | 11nm,1.0s | | | | | | | |
| **SWET** | **Sewanee** | **81.41** | **351** | *e*P | **P** | **12 02 03.6** | | **+1.5** |
| | 4.0nm,1.2s | | | | | | | |
| **WVT** | **Waverly** | **82.52** | **350** | *e*P | **P** | **12 02 10.2** | | **+2.3** |
| | 3.2nm,1.0s | | | | | | | |
| **WMOK** | **Wichita Mounta** | **83.08** | **341** | *e*P | **P** | **12 02 11.8** | | **+0.9** |
| | 12nm,1.3s | | | | | | | |
| **TUL1** | **Tulsa** | **83.57** | **344** | *e*P | **P** | **12 02 14.3** | | **+1.0** |
| | 60nm,1.8s | | | | | | | |
| **V34A** | **Guthrie** | **83.85** | **342** | *e*P | **P** | **12 02 16.2** | | **+1.4** |
| | 20nm,1.3s | | | | | | | |
| **AMTX** | **Amarillo** | **83.91** | **339** | *e*P | **P** | **12 02 17.8** | | **+2.5** |
| | 9.5nm,1.1s | | | | | | | |
| **ANMO** | **Albuquerque** | **85.28** | **335** | *e*P | **P** | **12 02 22.0** | | **-0.3** |
| | 4.8nm,1.2s | | | | | | | |
| **T25A** | **Trinidad** | **86.76** | **337** | *e*P | **P** | **12 02 32.8** | | **+3.2** |
| **WUAZ** | **Wupatki** | **87.35** | **331** | *e*P | **P** | **12 02 33.1** | | **+0.6** |
| | 14nm,1.5s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **88.00** | **336** | *e*P | **P** | **12 02 37.8** | | **+2.1** |
| **GSC** | **Goldstone** | **89.08** | **327** | *e*P | **P** | **12 02 43.2** | | **+2.6** |
| | 4.4nm,1.2s | | | | | | | |
| **SMCO** | **Snowmass** | **89.37** | **336** | *e*P | **P** | **12 02 45.3** | | **+3.1** |
| | 7.5nm,1.4s | | | | | | | |
| **SHPR** | **Sheep Range** | **89.55** | **329** | *e*P | **P** | **12 02 40.6** | | **-2.2** |
| **CCUT** | **Cedar City** | **89.87** | **331** | *e*P | P | 12 02 39.6 | | -4.8 |
| | 11nm,1.3s | | | | | | | |
| **ISA** | **Isabella** | **90.04** | **326** | *e*P | P | 12 02 41.3 | | -3.7 |
| | 6.7nm,1.5s | | | | | | | |
| **DAC** | **Darwin (Calif)** | **90.24** | **327** | *e*P | **P** | **12 02 48.7** | | **+2.6** |
| **MSU** | **Marysvale** | **90.34** | **332** | *e*P | **P** | **12 02 49.2** | | **+2.6** |
| **N23A** | **Red Feather La** | **90.69** | **337** | *e*P | **P** | **12 02 49.9** | | **+1.8** |
| **TORD** | **Torodi Ar. Bea** | **90.72** | **72** | P | **P** | **12 02 49.7** | | **+1.1** |
| | 0.2nm,0.6s,baz=244,slow=4.8,SNR=2.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **90.72** | **72** | P | **P** | **12 02 49.7** | | **+1.1** |
| **DZM** | **Mont Dzumac** | **92.02** | **235** | *e*LR | LR | 12 32 11.8 | | |
| | 204nm,29.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.41** | **328** | P | P | 12 02 51.3 | | -4.8 |
| | 0.3nm,0.7s,baz=139,slow=7.0,SNR=2.9 | | | | | | | |
| NVAR | | | | LR | LR | 12 35 12.5 | | |
| | comp=Z,84nm,20.9s,baz=198,slow=30 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.41** | **328** | P | P | 12 02 51.3 | | -4.8 |
| **H11S2** | **WAKE ISLAND Hyd** | **22.25** | **263** | T | T | 14 21 17.0 | | |
| | baz=139,slow=75,SNR=92 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **22.27** | **263** | T | T | 14 21 27.1 | | |
| | baz=139,slow=75,SNR=49 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **22.27** | **263** | T | T | 14 21 27.0 | | |
| | baz=139,slow=75,SNR=55 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **22.94** | **265** | T | T | 14 22 25.7 | | |
| | baz=132,slow=75,SNR=5.5 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **22.95** | **265** | T | T | 14 22 01.2 | | |
| | baz=132,slow=75,SNR=5.4 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **22.96** | **265** | T | T | 14 22 28.3 | | |
| | baz=132,slow=75,SNR=4.4 | | | | | | | |
| **HYB** | **Hyderabad** | **144.29** | **134** | *i* PKP | **PKPdf** | **12 09 24.0** | | **+2.3** |
| **GEYT** | **Ailbeck** | **145.05** | **87** | PKPbc | **PKPdf** | **12 09 23.3** | | **+0.8** |
| | 1.5nm,0.3s,baz=75,slow=2.2,SNR=2.8 | | | | | | | |
| **ARU** | **Arti** | **150.00** | **53** | *e*PKPdf | **PKPbc** | **12 09 33.5** | | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **152.14** | **169** | PKPbc | **PKPbc** | **12 09 38.5** | | **-2.6** |
| | 1.6nm,0.8s,baz=213,slow=3.9,SNR=7.4 | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **12 09 48.2** | | **-2.5** |
| | 2.2nm,0.8s,baz=215,slow=3.7,SNR=7.9 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **152.14** | **169** | PKPbc | **PKPbc** | **12 09 38.5** | | **-2.6** |
| CMAR | | | | PKPab | **PKPab** | **12 09 48.2** | | **-2.5** |
| **KSH** | **Kashi** | **158.20** | **97** | *e*PKP | PKPdf | 12 09 49.5 | | +7.2 |
| KSH | | | | *ep*PKP | pPKPdf | 12 10 00.4 | | +6.7 |
| KSH | | | | *es*PKP | | 12 10 04.1 | | |
| KSH | | | | PKS | PKSdf | 12 13 21.6 | | +5.6 |
| KSH | | | | *e*PP | PP | 12 14 11.0 | | +14 |
| KSH | | | | PPMZ | | | | |
| | 79nm,4.8s | | | | | | | |
| **CD2** | **Chengdu** | **164.90** | **178** | PKP | PKPdf | 12 09 56.5 | | +7.1 |
| **WMQ** | **Urumqi** | **167.94** | **95** | *e*PKP | PKPdf | 12 09 58.0 | | +6.6 |
| **LZH** | **Lanzhou** | **170.06** | **177** | *e*PKP | PKPdf | 12 10 07.9 | | +15 |
| LZH | | | | pPKP | pPKPdf | 12 10 16.1 | | +12 |
| LZH | | | | sPKP | | 12 10 18.3 | | |
| LZH | | | | LR | LR | | | |
| | comp=N,100nm,18.0s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=E,120nm,18.2s | | | | | | | |
| LZH | | | | LR | LR | | | |
| | comp=Z,150nm,20.1s | | | | | | | |
| **GTA** | **Gaotai** | **172.57** | **151** | *e*PKP | PKPdf | 12 10 03.9 | | +10 |
| GTA | | | | pPKP | pPKPdf | 12 10 14.6 | | +8.9 |
| GTA | | | | sPKP | | 12 10 18.3 | | |
| **HHC** | **Hu-ho-hao-te** | **172.67** | **228** | *e*PKP | PKPdf | 12 10 00.4 | | +6.2 |

*ISCJB* ***17*** *11:51:44.6±0.6,51°.10N±0°.06×175°.10W±0°.05,h10km, mb4.0/21,MS3.2/4,Error ellipse: s-maj=9.4km s-min=4.2km az=4.0*
*NEIC* ***17*** *11:51:47.7,51°.27N×175°.20W,h7km,mb4.2/14,After AEIC.*
*IDC* ***17*** *11:51:47.5±1.1,52°.13N×175°.71W,h0km,mb3.8/10, mb1 4.0/12,mb1mx3.8/42,mbtmp3.8/12,ML3.9/2,MS3.2/4, Ms1 3.2/4,ms1mx2.8/36,Error ellipse: s-maj=38.0km s-min=16.7km az=173.0*

**ISC 17 11:51:45.3±0.8,51°.13N±0°.09×175°.11W±0°.04,h10km,n61, σ1°.19/46,mb4.0/21,MS3.2/4,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **GSMY** | **Great Sitkin M** | **1.09** | **328** | P | **Pg** | **11 52 05.7** | | **-0.5** |
| **ETKA** | **Kagalaska Isla** | **1.09** | **313** | P | **Pg** | **11 52 06.0** | | **-0.3** |
| **GSCK** | **Great Sitkin C** | **1.10** | **324** | P | **Pg** | **11 52 06.0** | | **-0.5** |
| **GSTD** | **Great Sitkin T** | **1.13** | **326** | P | **Pg** | **11 52 06.5** | | **-0.6** |
| **GSTR** | **Great Sitkin T** | **1.14** | **329** | *e*Pg | **Pg** | **11 52 06.4** | | **-0.7** |
| **ADAG** | **Mount Adagdak** | **1.27** | **313** | P | **Pg** | **11 52 09.3** | | **-0.2** |
| **KOFP** | **Korovin Flat P** | **1.31** | **28** | P | **Pn** | **11 52 10.1** | | **+0.4** |
| **KOKL** | **Mount Kliuchef** | **1.33** | **25** | P | **Pn** | **11 52 10.0** | | **+0.1** |
| **KOWE** | **Korovin West** | **1.35** | **23** | P | **Pn** | **11 52 10.7** | | **+0.4** |
| **KIRH** | **Kanaga Island** | **1.46** | **303** | P | **Pn** | **11 52 11.8** | | **+0.1** |
| KIRH | | | | S | **Sb** | **11 52 30.0** | | **-1.2** |
| **KIKV** | **Kanaga Island** | **1.49** | **301** | P | **Pn** | **11 52 12.1** | | **0.0** |
| KIKV | | | | S | **Sb** | **11 52 30.7** | | **-1.3** |
| **KINC** | **Kanaga Island** | **1.50** | **303** | P | **Pn** | **11 52 12.2** | | **0.0** |
| **TAPA** | **Tanaga Point A** | **1.83** | **293** | P | **Pn** | **11 52 17.2** | | **+0.4** |
| **TAFL** | **Tanaga Flats** | **1.85** | **291** | P | **Pn** | **11 52 17.5** | | **+0.4** |
| **TAFP** | **Tanaga Falls P** | **1.96** | **295** | P | **Pn** | **11 52 19.2** | | **+0.7** |
| TAFP | | | | S | **Sn** | **11 52 43.6** | | **+0.5** |
| **GAEA** | **Gareloi East** | **2.37** | **288** | P | **Pn** | **11 52 26.2** | | **+2.0** |
| GAEA | | | | S | **Sn** | **11 52 54.3** | | **+1.1** |
| **GALAA** | **Gareloi Lava P** | **2.38** | **287** | P | **Pn** | **11 52 26.6** | | **+2.3** |
| **GANE** | **Gareloi Northe** | **2.40** | **288** | P | **Pn** | **11 52 26.4** | | **+1.9** |
| **UNV** | **Unalaska Valle** | **5.92** | **59** | *e*Pn | Pn | 11 53 18.4 | | +5.4 |
| **SDPT** | **Sand Point** | **9.74** | **59** | *e*Pn | Pn | 11 54 09.2 | | +4.0 |
| **OHAK** | **Old Harbor** | **14.13** | **56** | *e*Pn | **Pn** | **11 55 08.0** | | **+2.8** |
| **KDAK** | **Kodiak Island** | **14.65** | **54** | Pn | **Pn** | **11 55 11.4** | | **-1.0** |
| | 0.3nm,0.3s,baz=163,slow=2.0,SNR=6.5 | | | | | | | |
| **KDAK** | **Kodiak Island** | **14.65** | **54** | *e*P | **P** | **11 55 18.4** | | **-0.4** |
| **PETK** | **Petropavlovsk-** | **16.78** | **287** | Pn | **Pn** | **11 55 40.6** | | **+0.5** |
| | 0.4nm,0.3s,baz=96,slow=15,SNR=8.1 | | | | | | | |
| **PPLA** | **Purkeypile** | **17.05** | **37** | *e*P | **P** | **11 55 49.0** | | **+3.6** |
| | 19nm,1.2s | | | | | | | |
| **TRF** | **Thorofare Moun** | **18.07** | **37** | *e*P | **Pn** | **11 55 56.1** | | **-0.2** |
| | 38nm,1.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **20.03** | **36** | P | **P** | **11 56 16.8** | | **-1.3** |
| | 0.3nm,0.3s,baz=227,slow=9.4,SNR=17 | | | | | | | |
| **COLD** | **Coldfoot** | **20.33** | **28** | *e*P | **P** | **11 56 20.8** | | **-0.5** |
| | 3.4nm,0.9s | | | | | | | |
| **EGAK** | **Eagle** | **22.25** | **39** | *e*P | **P** | **11 56 39.8** | | **-2.1** |
| | 4.1nm,0.6s | | | | | | | |
| **DAWY** | **Dawson** | **22.73** | **42** | *e*P | **P** | **11 56 46.1** | | **-1.0** |
| | 5.0nm,1.2s | | | | | | | |
| **INK** | **Inuvik** | **26.36** | **34** | P | **P** | **11 57 19.5** | | **-1.6** |
| | 2.0nm,0.9s,baz=272,slow=6.2,SNR=4.4 | | | | | | | |
| **BBB** | **Bella Bella** | **28.78** | **69** | LR | LR | 12 06 46.8 | | |
| | comp=Z,41nm,20.2s,baz=218,slow=31 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.39** | **211** | T | T | 12 35 25.3 | | |
| | baz=18,slow=76,SNR=15 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.40** | **211** | T | T | 12 35 25.0 | | |
| | baz=18,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RDWB** | **Redoubt West** | **0.83** | **345** | P | Pn | 11 57 13.6 | -1.2 |
| RDWB | | | | S | Sn | 11 57 26.0 | -1.0 |
| **RDN** | **Redoubt North** | **0.85** | **348** | P | Pn | 11 57 14.0 | -0.9 |
| RDN | | | | S | Sn | 11 57 26.5 | -0.8 |
| **NCT** | **North Crescent** | **0.92** | **343** | P | Pn | 11 57 14.8 | -0.9 |
| NCT | | | | S | Sn | 11 57 28.7 | 0.0 |
| **RDJH** | **Redoubt Jeurge** | **0.93** | **348** | P | Pn | 11 57 15.1 | -0.9 |
| RDJH | | | | S | Sn | 11 57 28.7 | -0.3 |
| **CDD** | **Cape Douglas** | **0.99** | **221** | P | Pn | 11 57 15.9 | -0.7 |
| **BGRM** | **Barrier Glacie** | **1.07** | **360** | P | Pn | 11 57 16.7 | -1.0 |
| **FOPK** | **Fourpeaked Vol** | **1.08** | **211** | P | Pn | 11 57 17.0 | -0.8 |
| FOPK | | | | S | Sn | 11 57 32.3 | +0.1 |
| **MCNL** | **McNeil River** | **1.11** | **244** | P | Pn | 11 57 17.0 | -1.1 |
| **FOSS** | **Fourpeaked Sta** | **1.11** | **217** | P | Pn | 11 57 17.5 | -0.6 |
| **SLKM** | **Skilak Lake** | **1.37** | **52** | P | Pn | 11 57 20.6 | -0.9 |
| **KAPH** | **Katmai Pasha** | **1.48** | **223** | P | Pn | 11 57 22.4 | -0.6 |
| **CKL** | **Chakachamna La** | **1.51** | **1** | P | Pn | 11 57 23.1 | -0.4 |
| **SPCR** | **Spurr Chakacha** | **1.52** | **4** | P | Pn | 11 57 23.1 | -0.5 |
| **CKN** | **Chakachatna No** | **1.54** | **4** | P | Pn | 11 57 23.8 | -0.1 |
| **SEW** | **Seward** | **1.54** | **73** | P | Pn | 11 57 24.0 | +0.3 |
| **SPBG** | **Spurr Blockage** | **1.58** | **1** | P | Pn | 11 57 24.1 | -0.2 |
| **BGL** | **Barrier Glacie** | **1.58** | **0** | P | Pn | 11 57 23.9 | -0.4 |
| **KAHC** | **Katmai Hardscr** | **1.70** | **233** | P | Pn | 11 57 24.9 | -1.1 |
| **STLK** | **Strandline Lak** | **1.84** | **9** | P | Pn | 11 57 28.0 | +0.2 |
| **KDAK** | **Kodiak Island** | **1.91** | **183** | *e*Pn | Pn | 11 57 28.1 | -0.6 |
| **RC01** | **Rabbit Creek A** | **1.93** | **42** | P | Pn | 11 57 28.4 | -0.5 |
| **KAKN** | **Katmai Knife C** | **1.96** | **226** | P | Pn | 11 57 29.1 | -0.4 |
| **SUA** | **Susitna One** | **1.96** | **24** | P | Pn | 11 57 29.2 | -0.2 |
| **KABR** | **Katmai Barrier** | **2.05** | **222** | P | Pn | 11 57 30.3 | -0.4 |
| **SKT** | **Skwentna** | **2.34** | **10** | P | Pn | 11 57 34.6 | +0.1 |
| **PWL** | **Port Wells** | **2.34** | **58** | P | Pn | 11 57 33.1 | -1.4 |
| **PMR** | **Palmer** | **2.50** | **39** | P | Pn | 11 57 35.4 | -1.2 |
| **OHAK** | **Old Harbor** | **2.52** | **191** | *e*Pn | Pn | 11 57 36.2 | -0.6 |
| **CUT** | **Chulitna** | **2.92** | **20** | P | Pn | 11 57 41.8 | -0.4 |
| **SML** | **Sawmill** | **2.92** | **41** | *e*Pn | Pn | 11 57 42.3 | -0.1 |
| **FID** | **Port Fidalgo** | **3.14** | **68** | P | Pn | 11 57 42.4 | -3.0 |
| **PPLA** | **Purkeypile** | **3.22** | **2** | P | Pn | 11 57 46.9 | +0.3 |
| **SCM** | **Sheep Creek Mo** | **3.29** | **47** | P | Pn | 11 57 46.4 | -1.1 |
| **TT01** | **Tatalina** | **3.67** | **333** | P | Pn | 11 57 52.0 | -0.5 |
| **KLU** | **Klutina** | **3.67** | **58** | P | Pn | 11 57 51.0 | -1.7 |
| **TRF** | **Thorofare Moun** | **3.91** | **14** | P | Pn | 11 57 56.6 | +0.6 |
| **KTH** | **Kantishna Hill** | **3.94** | **10** | P | Pn | 11 57 47.4 | +1.0 |
| **RND** | **Reindeer** | **4.10** | **23** | P | Pn | 11 57 58.2 | -0.3 |
| **MCK** | **McKinley** | **4.38** | **21** | P | Pn | 11 58 02.4 | +0.1 |
| **BPAW** | **Bear Paw Mtn.** | **4.48** | **8** | P | Pn | 11 58 04.0 | +0.4 |
| **PAX** | **Paxson** | **4.69** | **42** | *e*Pn | Pn | 11 58 06.1 | -0.5 |
| **KIAG** | **Kiagna River** | **5.14** | **72** | P | Pn | 11 58 12.3 | -0.6 |
| **BALM** | **Baldy** | **5.17** | **71** | P | Pn | 11 58 12.9 | -0.3 |
| **WRH** | **Wood River Hil** | **5.21** | **21** | P | Pn | 11 58 12.9 | -0.6 |
| **CCB** | **Clear Creek Bu** | **5.42** | **21** | P | Pn | 11 58 15.5 | -0.9 |
| **COLA** | **College** | **5.62** | **20** | P | Pn | 11 58 18.5 | -0.6 |
| **MDM** | **Murphy Dome** | **5.63** | **18** | P | Pn | 11 58 18.9 | -0.5 |
| **IL1** | **Eielson Array** | **5.71** | **24** | P | Pn | 11 58 19.4 | -1.1 |
| **ILB** | **Eielson Array** | **5.71** | **24** | P | Pn | 11 58 19.6 | -0.9 |
| **IM3** | **Indian Mountai** | **6.35** | **355** | P | Pn | 11 58 28.5 | -0.6 |

*ISK* ***17*** *12:05:27.5, 37°.29N×28°.25E, h7km, MD2.8*
*ISCJB* ***17*** *12:05:28.5±0.5, 37°.22N±0°.03×28°.20E±0°.05, h10km±5km, Error ellipse: s-maj=6.9km s-min=4.7km az=141.3*
*CSEM* ***17*** *12:05:28.5±0.3, 37°.23N×28°.23E, h10km, MD2.8, Error ellipse: s-maj=7.5km s-min=5.3km az=53.0*
*DDA* ***17*** *12:05:28.4, 37°.23N×28°.21E, h7km, Md2.9*

**ISC 17 12:05:28.5**±1.2, **37°.28N**±0°.03×**28°.24E**±0°.03, **h3**km±13km, **n24**, σ1§**05**/36, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.15** | **168** | *e*PG | **Pg** | **12 05 30.9** | **-0.5** |
| YER | | | | *e*SG | **Sg** | **12 05 34.0** | **+0.6** |
| **YER** | **Yerkesik** | **0.15** | **168** | *e*Pg | **Pg** | **12 05 30.9** | **-0.5** |
| YER | | | | *e*Sg | **Sg** | **12 05 34.0** | **+0.6** |
| **AYDN** | **Tasoluk** | **0.47** | **323** | *i* P | **Pb** | **12 05 40.0** | **+0.5** |
| AYDN | | | | *i* S | **Sb** | **12 05 46.8** | **-0.2** |
| **AYDN** | **Tasoluk** | **0.47** | **323** | P | **Pb** | **12 05 40.0** | **+0.5** |
| AYDN | | | | S | **Sb** | **12 05 46.8** | **-0.2** |
| **TURN** | **Turunc** | **0.50** | **145** | *i* P | **Pg** | **12 05 37.2** | **-0.9** |
| TURN | | | | *i* S | **Sg** | **12 05 44.2** | **-0.3** |
| **TURN** | **Turunc** | **0.50** | **145** | P | **Pg** | **12 05 37.2** | **-0.9** |
| TURN | | | | S | **Sg** | **12 05 44.2** | **-0.3** |
| **DALY** | **Dalyan (Mu¨la** | **0.57** | **145** | *e*PG | **Pg** | **12 05 38.7** | **-0.7** |
| DALY | | | | *e*SG | **Sb** | **12 05 48.4** | **-1.2** |
| **DALY** | **Dalyan (Mu¨la** | **0.57** | **145** | *e*Pg | **Pg** | **12 05 38.7** | **-0.7** |
| **BDRM** | **Kayabasi** | **0.67** | **251** | *i* P | **Pg** | **12 05 40.5** | **-0.9** |
| BDRM | | | | *i* S | **Sg** | **12 05 49.8** | **-0.3** |
| **BDRM** | **Kayabasi** | **0.67** | **251** | P | **Pg** | **12 05 40.5** | **-0.9** |
| BDRM | | | | S | **Sg** | **12 05 48.8** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.72** | **337** | *e*PG | **Pg** | **12 05 42.2** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.72** | **337** | *e*Pg | **Pg** | **12 05 42.2** | **-0.1** |
| **DNZL** | **Cakiroluk** | **0.76** | **57** | *i* P | **Pb** | **12 05 44.1** | **-0.3** |
| **DNZL** | **Cakiroluk** | **0.76** | **57** | P | **Pb** | **12 05 44.1** | **-0.3** |
| **BODT** | **Bodrum** | **0.78** | **254** | *e*PG | **Pg** | **12 05 43.0** | **-0.3** |
| **BODT** | **Bodrum** | **0.78** | **254** | *e*Pg | **Pg** | **12 05 43.0** | **-0.3** |
| **FETY** | **Fethiye** | **0.93** | **134** | *e*PG | **Pg** | **12 05 45.0** | **-1.4** |
| **FETY** | **Fethiye** | **0.93** | **134** | *e*Pg | **Pg** | **12 05 45.0** | **-1.4** |
| **MANT** | **Manisa** | **1.23** | **12** | *i* P | **Pn** | **12 05 53.6** | **+0.8** |
| MANT | | | | *i* S | **Sn** | **12 06 09.7** | **-0.4** |
| **MANT** | **Manisa** | **1.23** | **12** | P | **Pn** | **12 05 53.6** | **+0.8** |
| MANT | | | | S | **Sn** | **12 06 09.7** | **-0.4** |
| **KULA** | **Kula-Manisa** | **1.27** | **15** | *e*PN | **Pg** | **12 05 51.6** | **-1.3** |
| **KULA** | **Kula-Manisa** | **1.27** | **15** | *e*Pn | **Pg** | **12 05 51.6** | **-1.3** |
| **AKAS** | **Kas** | **1.52** | **133** | *i* P | **Pg** | **12 05 57.7** | **+0.2** |
| **AKAS** | **Kas** | **1.52** | **133** | P | **Pg** | **12 05 57.7** | **+0.2** |
| AKAS | | | | S | **Sg** | **12 06 21.5** | **+4.3** |

**SJA 17 12:15:22.5**±0.6, **31°.62S×69°.64W, h104**km±3km, **MD2.9, ML5.8, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLS** | **Leoncito** | **0.34** | **121** | *i* P | Pn | 12 15 39.5 | +1.4 |
| RTLS | | | | *i* S | Sn | 12 15 51.5 | +1.7 |
| **AUSP** | **Uspallata** | **0.64** | **160** | *i* P | Pn | 12 15 41.5 | +1.3 |
| AUSP | | | | *i* S | Sn | 12 15 54.8 | +1.5 |
| **RTLL** | **Cerro Villicun** | **1.04** | **74** | *i* P | Pn | 12 15 44.6 | +0.9 |
| RTLL | | | | *i* S | Sn | 12 16 00.7 | +1.0 |
| **ASAL** | **Salagasta** | **1.18** | **145** | *i* P | Pn | 12 15 46.6 | +1.3 |
| **AMOG** | **MOGNA** | **1.20** | **55** | *i* P | Pn | 12 15 46.8 | +1.3 |
| AMOG | | | | *i* S | Sn | 12 16 03.8 | +0.9 |
| **CFAA** | **Coronel Fontan** | **1.20** | **89** | *i* P | Pn | 12 15 46.4 | +0.9 |
| CFAA | | | | *i* P | Pn | 12 15 46.6 | +1.1 |
| CFAA | | | | *i* S | Sn | 12 16 04.2 | +1.4 |
| CFAA | | | | *i* S | Sn | 12 16 04.4 | +1.6 |
| CFAA | | | | AML | AML | 12 16 06.4 | |
| | comp=Z,112μm,0.1s | | | | | | |
| **ROC1** | **El Roble** | **1.78** | **220** | *i* P | Pn | 12 15 53.7 | +0.9 |
| ROC1 | | | | *i* S | Sn | 12 16 16.9 | +1.0 |
| **AVFE** | **Valle Fertil** | **2.10** | **63** | *i* P | Pn | 12 15 57.9 | +1.2 |
| AVFE | | | | *i* S | Sn | 12 16 24.0 | +1.2 |
| **ACHE** | **Chepes** | **2.58** | **81** | *i* P | Pn | 12 16 04.5 | +1.4 |
| ACHE | | | | *i* S | Sn | 12 16 35.2 | +1.0 |

*IDC* ***17*** *12:26:25.9±1.6, 51°.54N×175°.05W, h0km, mb3.7/6, mb1 3.9/9, mb1mx3.7/40, mbtmp3.8/9, ML3.6/3, MS3.2/2, Ms1 3.4/2, ms1mx2.7/38, Error ellipse: s-maj=48.6km s-min=19.1km az=171.0*
*ISCJB* ***17*** *12:26:29.5±0.7, 51°.43N±0°.09×174°.97W±0°.08, h40km, mb3.7/6, MS3.7/1, Error ellipse: s-maj=12.7km s-min=6.6km az=14.1*
*NEIC* ***17*** *12:26:32.0, 51°.44N×175°.25W, h26km, ML3.5(AEIC), After AEIC.*

**ISC 17 12:26:31.3**±1.0, **51°.4N**±0°.1×**175°.15W**±0°.06, **h40**km, **n30**, σ0§**87**/26, **mb3.8/6, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSMY** | **Great Sitkin M** | **0.84** | **318** | P | **Pn** | **12 26 46.8** | **+0.2** |
| GSMY | | | | S | **Sn** | **12 26 57.3** | **-0.4** |
| **GSCK** | **Great Sitkin C** | **0.86** | **313** | P | **Pn** | **12 26 47.4** | **+0.5** |
| **GSTR** | **Great Sitkin T** | **0.88** | **320** | P | **Pn** | **12 26 47.3** | **+0.2** |
| GSTR | | | | S | **Sn** | **12 26 58.4** | **-0.3** |
| **GSTD** | **Great Sitkin T** | **0.88** | **316** | P | **Pn** | **12 26 48.0** | **+0.8** |
| GSTD | | | | S | **Sn** | **12 26 59.6** | **+0.6** |
| **ETKA** | **Kagalaska Isla** | **0.90** | **299** | P | **Pn** | **12 26 47.3** | **-0.1** |
| **ADAG** | **Mount Adagdak** | **1.06** | **302** | P | **Pn** | **12 26 50.6** | **+1.0** |
| **KOWE** | **Korovin West** | **1.09** | **30** | P | **Pn** | **12 26 51.6** | **+1.5** |
| **KIRH** | **Kanaga Island** | **1.30** | **292** | P | **Pn** | **12 26 53.0** | **0.0** |
| **KIKV** | **Kanaga Island** | **1.34** | **290** | P | **Pn** | **12 26 53.4** | **-0.1** |
| **TAFP** | **Tanaga Falls P** | **1.83** | **286** | P | **Pn** | **12 27 00.5** | **+0.3** |
| **TASE** | **Tanaga Southea** | **1.85** | **284** | P | **Pn** | **12 27 00.8** | **+0.3** |
| **GAEA** | **Gareloi East** | **2.27** | **280** | P | **Pn** | **12 27 06.8** | **+0.6** |
| **GANE** | **Gareloi Northe** | **2.30** | **281** | P | **Pn** | **12 27 07.0** | **+0.4** |
| **KDAK** | **Kodiak Island** | **14.50** | **55** | Pn | **Pn** | **12 29 52.0** | **-1.5** |
| | 0.4nm,0.3s,baz=155,slow=4.8,SNR=6.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.67** | **286** | Pn | **Pn** | **12 30 20.7** | **-1.0** |
| | 0.2nm,0.3s,baz=105,slow=14,SNR=5.3 | | | | | | |
| PETK | | | | LR | LR | 12 35 48.8 | |
| | comp=Z,32nm,20.7s,baz=117,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **19.80** | **37** | P | **P** | **12 30 57.9** | **-0.1** |
| | 0.2nm,0.3s,baz=224,slow=9.1,SNR=16 | | | | | | |
| **INK** | **Inuvik** | **26.12** | **34** | P | **P** | **12 32 00.8** | **-0.2** |
| | 1.6nm,0.8s,baz=240,slow=8.1,SNR=4.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.64** | **211** | T | T | 13 10 10.8 | |
| | baz=18,slow=76,SNR=5.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.65** | **211** | T | T | 13 10 11.5 | |
| | baz=18,slow=76,SNR=3.8 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.66** | **211** | T | T | 13 10 36.9 | |
| | baz=18,slow=76,SNR=3.5 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.85** | **210** | T | T | 13 12 44.4 | |
| | baz=11 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.87** | **210** | T | T | 13 12 50.0 | |
| | baz=11 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.87** | **210** | T | T | 13 12 47.0 | |
| | baz=11 | | | | | | |
| **KSRS** | **Korea Array** | **41.92** | **273** | P | **P** | **12 34 20.4** | **+2.7** |
| | 1.9nm,0.9s,baz=51,slow=8.0,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **48.65** | **298** | P | **P** | **12 35 11.3** | **+0.2** |
| | 1.0nm,0.8s,baz=60,slow=8.5,SNR=4.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.38** | **84** | P | **P** | **12 36 08.0** | **-0.5** |
| | 0.1nm,0.5s,baz=305,slow=6.4,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.77** | **310** | P | **P** | **12 36 45.1** | **-0.4** |
| | 0.7nm,0.5s,baz=55,slow=6.5,SNR=9.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.28** | **279** | LR | LR | 13 14 56.5 | |
| | comp=Z,37nm,18.1s,baz=174,slow=40 | | | | | | |
| **AKASG** | **Malin Array Be** | **76.16** | **344** | P | **P** | **12 38 14.0** | **-0.7** |
| | 0.4nm,0.3s,baz=18,slow=5.8,SNR=2.5 | | | | | | |
| **BOSA** | **Boshof** | **152.55** | **318** | PKPbc | **PKPbc** | **12 46 23.5** | **+0.4** |
| | 3.8nm,0.8s,baz=359,slow=3.5,SNR=4.1 | | | | | | |

*ISCJB* ***17*** *12:38:52.9±0.6, 26°.00S±0°.04×29°.64E±0°.04, h0km, Error ellipse: s-maj=6.0km s-min=5.0km az=154.5*
*PRE* ***17*** *12:38:53.6±1.8, 26°.10S×29°.65E, h0km, ML2.6, Suspected explosion*
*BUL* ***17*** *12:39:00.8±2.1, 25°.92S×30°.04E, h274km, MD4.1*

**ISC 17 12:38:52.5**±0.9, **26°.09S**±0°.05×**29°.75E**±0°.04, **h0**km, **n14**, σ1§**33**/23, **South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **POGA** | **Pongola** | **2.10** | **128** | *e*P | **Pg** | **12 39 33.2** | **+0.4** |
| POGA | | | | *e*S | **Sg** | **12 39 59.7** | **-0.3** |
| POGA | | | | AML | AML | 12 40 05.4 | |
| | comp=Z,51nm,0.3s | | | | | | |
| **POGA** | **Pongola** | **2.10** | **128** | *i* P | **Sg** | **12 39 57.1** | **-2.9** |
| **WDLM** | **Western Deep L** | **2.11** | **260** | *e*P | **Pn** | **12 39 30.8** | **+1.6** |
| WDLM | | | | *e*S | **Sn** | **12 39 56.6** | **+0.2** |
| WDLM | | | | AML | AML | 12 39 58.7 | |
| | comp=Z,50nm,0.4s | | | | | | |
| **PRYS** | **Parys** | **2.29** | **248** | *e*P | **Pn** | **12 39 31.6** | **-0.1** |
| PRYS | | | | *e*S | **Sn** | **12 40 00.3** | **-0.5** |
| PRYS | | | | AML | AML | 12 40 05.0 | |
| | comp=Z,37nm,0.1s | | | | | | |
| **KSR** | **Koster** | **2.57** | **275** | *e*P | **Pn** | **12 39 36.4** | **+0.8** |
| KSR | | | | *e*S | **Sn** | **12 40 06.8** | **-1.0** |
| KSR | | | | AML | AML | 12 40 17.0 | |
| | comp=Z,16nm,0.1s | | | | | | |
| **BFSD** | **Buffelsfontein** | **2.76** | **253** | *e*P | **Pn** | **12 39 38.8** | **+0.6** |
| BFSD | | | | *e*S | **Sn** | **12 40 11.6** | **-0.8** |
| BFSD | | | | AML | AML | 12 40 17.4 | |
| | comp=Z,20nm,0.5s | | | | | | |
| **MSNA** | **Messina** | **3.74** | **4** | *e*P | **Pn** | **12 39 50.9** | **-0.6** |
| MSNA | | | | *e*S | **Sn** | **12 40 36.0** | **-0.2** |
| MSNA | | | | AML | AML | 12 40 51.5 | |
| | comp=Z,18nm,0.2s | | | | | | |
| **LBTB** | **Lobatse** | **3.90** | **285** | *i* P | Pn | 12 39 59.0 | +5.3 |
| LBTB | | | | *i* S | **Sg** | **12 40 55.7** | **-2.1** |
| **SWZ** | **Schweizer** | **4.10** | **254** | *e*P | **Pn** | **12 39 57.3** | **+0.8** |
| SWZ | | | | *e*S | **Sn** | **12 40 45.1** | **-0.2** |
| SWZ | | | | AML | AML | 12 40 58.1 | |
| | comp=Z,22nm,0.6s | | | | | | |
| **KSD** | **Kokstad** | **4.45** | **184** | *e*P | **Pn** | **12 40 03.6** | **+2.3** |
| KSD | | | | *e*S | **Sn** | **12 40 54.0** | **+0.2** |
| KSD | | | | AML | AML | 12 41 16.6 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **4.72** | **237** | *i* P | **Pb** | **12 40 17.2** | **+1.1** |
| BOSA | | | | *i* S | **Sb** | **12 41 12.3** | **-1.2** |
| **MATP** | **Matopo** | **5.75** | **348** | *i* P | Pn | 12 40 25.3 | +6.0 |
| **BLWY** | **Bulawayo** | **6.01** | **350** | *i* P | **Pn** | **12 40 25.3** | **+2.4** |
| BLWY | | | | *i* S | **Sn** | **12 41 31.3** | **-1.3** |
| **UPI** | **Upington** | **7.89** | **251** | *e*P | **Pn** | **12 40 48.9** | **+0.3** |
| UPI | | | | *e*S | Sn | 12 42 12.8 | -5.9 |
| UPI | | | | AML | AML | 12 43 01.1 | |
| | comp=Z,3.3nm,0.5s | | | | | | |

*NSSC* ***17*** *13:04:26.9±1.8, 35°.86N×36°.29E, h53km±14km, MD0.8, ML1.9*
*CSEM* ***17*** *13:04:28.9±0.6, 35°.75N×36°.21E, h32km±6km, ML1.9, Error ellipse: s-maj=22.4km s-min=12.2km az=91.0*
*ISCJB* ***17*** *13:04:29.4±0.7, 35°.69N±0°.03×36°.29E±0°.08, h24km±8km, Error ellipse: s-maj=10.5km s-min=5.8km az=0.6*
*DDA* ***17*** *13:04:29.8, 36°.22N×35°.75E, h7km, Md2.8*

**ISC 17 13:04:29.3**±0.9, **35°.76N**±0°.03×**36°.25E**±0°.05, **h29**km±7km, **n13**, σ1§**54**/26, **Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARNB** | **Al Arnab** | **0.25** | **294** | *e*P | **Pn** | **13 04 36.9** | **-0.2** |
| ARNB | | | | *e*S | **Sb** | **13 04 42.0** | **+1.4** |
| ARNB | | | | AML | AML | 13 04 43.4 | |
| | comp=E,52nm,0.3s | | | | | | |
| ARNB | | | | AML | AML | 13 04 45.0 | |
| | comp=N,64nm,0.3s | | | | | | |
| **ARNB** | **Al Arnab** | **0.25** | **294** | *e*P | **Pn** | **13 04 36.9** | **-0.2** |
| ARNB | | | | *e*S | **Sb** | **13 04 42.0** | **+1.4** |
| **WRDH** | **Warideh** | **0.29** | **152** | *e*P | **Pb** | **13 04 37.5** | **+1.0** |
| WRDH | | | | *e*S | **Sn** | **13 04 44.8** | **+1.8** |
| WRDH | | | | AML | AML | 13 04 49.9 | |
| | comp=N,62nm,0.4s | | | | | | |
| **WRDH** | **Warideh** | **0.29** | **152** | *e*P | **Pb** | **13 04 37.5** | **+1.0** |
| WRDH | | | | *e*S | **Sn** | **13 04 44.8** | **+1.8** |
| **YAYL** | **Yayladag** | **0.29** | **337** | *i* P | **Pn** | **13 04 37.1** | **-0.7** |
| YAYL | | | | *i* S | **Sb** | **13 04 41.9** | **+0.1** |
| **YAYL** | **Yayladag** | **0.29** | **337** | P | **Pn** | **13 04 37.1** | **-0.7** |
| YAYL | | | | S | **Sb** | **13 04 41.9** | **+0.1** |
| **BTCH** | **Batrach** | **0.32** | **32** | *e*P | **Pb** | **13 04 36.4** | **-0.8** |
| BTCH | | | | *e*S | **Sb** | **13 04 41.3** | **-1.1** |
| BTCH | | | | AML | AML | 13 04 43.5 | |
| | comp=N,222nm,0.7s | | | | | | |
| BTCH | | | | AML | AML | 13 04 45.0 | |
| | comp=E,380nm,0.4s | | | | | | |
| **BTCH** | **Batrach** | **0.32** | **32** | *e*P | **Pb** | **13 04 36.3** | **-0.8** |
| BTCH | | | | *e*S | **Sb** | **13 04 41.3** | **-1.1** |
| **KUZU** | **Kuzuini** | **1.21** | **33** | *i* P | **Pb** | **13 04 51.8** | **+0.2** |
| KUZU | | | | *i* S | **Sb** | **13 05 10.4** | **+3.5** |
| **KUZU** | **Kuzuini** | **1.21** | **33** | P | **Pb** | **13 04 51.8** | **+0.2** |
| KUZU | | | | S | **Sb** | **13 05 10.3** | **+3.5** |
| **HAWK** | **Haweek** | **1.24** | **174** | *e*P | **Pn** | **13 04 48.9** | **-1.9** |
| HAWK | | | | *e*S | **Sn** | **13 05 05.3** | **-1.4** |
| HAWK | | | | AML | AML | 13 05 10.1 | |
| | comp=E,6.9nm,0.3s | | | | | | |
| HAWK | | | | AML | AML | 13 05 13.4 | |
| | comp=N,13nm,0.4s | | | | | | |
| **HAWK** | **Haweek** | **1.24** | **174** | *e*P | **Pn** | **13 04 48.9** | **-1.9** |
| HAWK | | | | *e*S | **Sn** | **13 05 05.3** | **-1.4** |
| **AYKD** | **Aykdinkavak** | **1.71** | **15** | P | **Pb** | **13 04 59.8** | **-0.3** |
| AYKD | | | | S | **Sb** | **13 05 21.3** | **+0.1** |

*ISCJB* ***17*** *13:16:31.2±0.7, 29°.58S±0°.05×68°.56W±0°.07, h112km, mb3.5/2, Error ellipse: s-maj=9.0km s-min=5.9km az=145.7*
*IDC* ***17*** *13:16:34.3±1.6, 29°.86S×68°.56W, h136km±16km, mb3.3/2, mb1 3.5/4, mb1mx3.2/26, mbtmp3.7/4, Error ellipse: s-maj=30.4km s-min=21.8km az=101.0*

**ISC 17 13:16:32.0**±0.8, **29°.62S**±0°.06×**68°.60W**±0°.07, **h112**km, **n13**, σ0§**92**/18, **San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TLL** | **Tololo Astrono** | **2.00** | **254** | *e*P | **Pn** | **13 17 05.8** | **+0.5** |
| TLL | | | | *e*S | **Sn** | **13 17 30.9** | **+0.2** |
| TLL | | | | AML | AML | 13 17 33.2 | |
| | comp=E,3μm,0.4s | | | | | | |
| **CFAA** | **Coronel Fontan** | **2.00** | **171** | P | **Pn** | **13 17 05.5** | **+0.4** |
| | comp=E,3.8nm,0.3s,baz=349,slow=13,SNR=10 | | | | | | |
| CFAA | | | | S | **Sn** | **13 17 30.1** | **-0.4** |
| | comp=E,9.4nm,0.3s,baz=250,slow=21,SNR=33 | | | | | | |
| **VACH** | **Vallenar** | **2.16** | **298** | *e*P | **Pn** | **13 17 07.8** | **+0.7** |
| VACH | | | | *e*S | **Sn** | **13 17 34.0** | **0.0** |
| **CPCH** | **Copiapo** | **2.73** | **325** | *e*P | **Pn** | **13 17 15.4** | **+0.9** |
| CPCH | | | | *e*S | **Sn** | **13 17 46.6** | **-0.7** |
| **CDCH** | **Caldera** | **3.21** | **322** | *e*P | **Pn** | **13 17 20.9** | **+0.1** |
| CDCH | | | | *e*S | **Sn** | **13 17 57.4** | **-1.1** |
| **CPUP** | **Villa Florida** | **10.48** | **74** | P | **Pn** | **13 18 59.8** | **+0.7** |
| | comp=E,0.4nm,0.3s,baz=248,slow=17,SNR=9.0 | | | | | | |
| **LPAZ** | **La Paz** | **13.28** | **2** | P | **P** | **13 19 42.4** | **0.0** |
| | comp=E,0.5nm,0.3s,baz=160,slow=8.7,SNR=10 | | | | | | |
| **TXAR** | **Lajitas Array** | **67.50** | **327** | P | **P** | **13 27 16.7** | **+0.6** |
| | comp=E,0.2nm,0.7s,baz=140,slow=5.8,SNR=2.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.92** | **69** | P | **P** | **13 28 28.8** | **-0.1** |
| | comp=E,1.0nm,0.4s,baz=279,slow=6.7,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **122.78** | **205** | PKP | **PKPdf** | **13 35 12.9** | **-2.4** |
| | comp=E,0.2nm,0.9s,baz=133,slow=1.4,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **125.99** | **207** | PKP | **PKPdf** | **13 35 20.1** | **-1.4** |
| | comp=E,0.1nm,0.4s,baz=156,slow=1.7,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **148.97** | **31** | PKPbc | **PKPbc** | **13 36 06.9** | **+0.6** |
| | comp=E,1.7nm,0.4s,baz=293,slow=3.4,SNR=9.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **151.64** | **45** | PKPbc | **PKPbc** | **13 36 13.1** | **+0.2** |
| | comp=E,0.8nm,0.7s,baz=289,slow=1.3,SNR=7.0 | | | | | | |

*ISCJB* ***17*** *13:31:10.2±0.6, 55°.8S±0°.1×27°.1W±0°.1, h10km, mb4.1/9, MS3.0/1, Error ellipse: s-maj=16.7km s-min=9.3km az=33.3*
*IDC* ***17*** *13:31:10.5±0.8, 55°.75S×26°.90W, h0km, mb4.1/7, mb1 4.2/8, mb1mx4.0/20, mbtmp4.0/8, ML3.1/1, MS2.8/2, Ms1 2.8/2, ms1mx2.6/17, Error ellipse: s-maj=35.2km s-min=17.9km az=68.0*
*NEIC* ***17*** *13:31:14.4±4.3, 55°.78S×26°.98W, h26km±31km, mb4.1/3, Error ellipse: s-maj=16.4km s-min=8.1km az=51.0*

**ISC 17 13:31:12.3**±0.7, **55°.8S**±0°.1×**27°.07W**±0°.10, **h10**km, **n22**, σ1§**43**/17, **mb4.1/8, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOPE** | **Hope Point** | **5.62** | **282** | *e*Pn | **Pn** | **13 32 36.6** | **+0.8** |
| HOPE | | | | *e*Sn | **Sn** | **13 33 38.4** | **-2.0** |
| **SNAA** | **Sanae** | **18.96** | **156** | P | **P** | **13 35 33.3** | **-0.1** |
| | 0.1nm,0.3s,baz=318,slow=11,SNR=12 | | | | | | |
| SNAA | | | | LR | LR | 13 41 09.1 | |
| | comp=Z,17nm,21.2s,baz=28,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **18.96** | **156** | *e*P | **P** | **13 35 32.9** | **-0.5** |
| **TRQA** | **Tornquist** | **29.28** | **293** | *e*P | **P** | **13 37 15.0** | **+0.5** |
| | 2.2nm,0.6s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.47** | **180** | P | **P** | **13 37 59.7** | **-0.3** |
| | 2.7nm,0.7s,baz=25,slow=1.4,SNR=33 | | | | | | |
| **QSPA** | **South Pole Qui** | **34.47** | **180** | *e*P | **P** | **13 38 00.1** | **+0.1** |
| | 2.6nm,0.7s | | | | | | |
| **CPUP** | **Villa Florida** | **36.68** | **311** | P | **P** | **13 38 18.6** | **-0.5** |
| | 2.6nm,0.9s,baz=146,slow=10,SNR=5.0 | | | | | | |
| CPUP | | | | LR | LR | 13 54 21.0 | |
| | comp=Z,25nm,18.5s,baz=174,slow=38 | | | | | | |
| **MAW** | **Mawson** | **40.33** | **144** | P | **P** | **13 38 48.9** | **-0.4** |
| | 1.1nm,0.8s,baz=242,slow=12,SNR=4.3 | | | | | | |
| **VNDA** | **Vanda** | **46.85** | **183** | P | **P** | **13 39 42.0** | **+0.2** |
| | 3.7nm,0.7s,baz=185,slow=7.1,SNR=39 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **47.72** | **17** | T | T | 14 31 09.5 | |
| | baz=190,slow=75,SNR=38 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **47.72** | **17** | T | T | 14 31 15.0 | |
| | baz=190,slow=75,SNR=32 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **47.74** | **17** | T | T | 14 31 15.4 | |
| | baz=190,slow=75,SNR=30 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **48.84** | **17** | T | T | 14 32 39.3 | |
| | baz=189,slow=

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DEG | | | | *e*S | Sb | 13 56 16.3 | +2.1 |
| **SEG** | **Port Louis** | **0.48** | **254** | ⇓*e*P | Pn | 13 56 15.0 | +0.9 |
| **MGG** | **Marie-Galante** | **0.68** | **205** | *e*P | Pn | 13 56 18.0 | +1.1 |
| MGG | | | | *e*S | Sn | 13 56 28.7 | +2.3 |
| **DOG** | **Dongo Capester** | **0.76** | **229** | ⇑*i*P | Pn | 13 56 19.4 | +1.3 |
| **SSG** | **Sans Toucher** | **0.77** | **235** | ⇑*e*P | Pb | 13 56 19.4 | +1.0 |
| **CRG** | **Carmichael** | **0.78** | **232** | *e*P | Pb | 13 56 19.7 | +1.2 |
| **ECG** | **Echelle** | **0.78** | **231** | ⇑*i*P | Pb | 13 56 19.6 | +1.1 |
| **PHG** | **Guadaloupe-2** | **0.79** | **229** | ⇑*i*P | Pb | 13 56 19.9 | +1.2 |
| **FNG** | **Fond-Bernard** | **0.80** | **234** | ⇓*i*P | Pb | 13 56 19.7 | +1.0 |
| **MLG** | **Mont-d'or** | **0.81** | **235** | ⇓*i*P | Pb | 13 56 20.1 | +1.1 |
| **LZG** | **Guadaloupe-1** | **0.82** | **242** | ⇑*i*P | Pb | 13 56 20.3 | +1.2 |
| **TBG** | **Guadaloupe-3** | **0.91** | **222** | *e*P | Pb | 13 56 21.8 | +1.3 |
| TBG | | | | *e*S | Sb | 13 56 35.0 | +2.9 |
| **BBL** | **Barber's Block** | **1.09** | **203** | *e*P | Pb | 13 56 24.3 | +0.6 |
| BBL | | | | *e*S | Sb | 13 56 39.2 | +1.6 |
| **MLYT** | **Lee's Yard** | **1.14** | **279** | *e*P | Pb | 13 56 25.2 | +0.8 |
| MLYT | | | | *e*S | Sb | 13 56 41.5 | +2.6 |
| **MBWH** | | **1.14** | **281** | *e*P | Pb | 13 56 24.6 | +0.1 |
| **ANWB** | **Willy Bob** | **1.34** | **327** | ⇑*i*P | Pn | 13 56 25.6 | -0.4 |
| ANWB | | | | *e*S | Sb | 13 56 45.1 | +0.5 |
| **FDF** | **Fort de France** | **1.80** | **184** | *e*P | Pb | 13 56 34.0 | -1.6 |
| **SKI** | **Saint Kitts** | **1.83** | **296** | *e*P | Pn | 13 56 33.4 | +0.7 |
| SKI | | | | *e*S | Sb | 13 56 57.1 | -1.4 |

**IDC 17 14:34:45.0±1.4, 15°35N×93°02W, h0km, mb3.5/3, mb1 3.8/5, mb1mx3.5/41, mbtmp3.4/5, ML3.4/2, MS2.5/2, Ms1 2.5/2, ms1mx2.3/24, Error ellipse: s-maj=140.3km s-min=20.5km az=50.0, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMIG** | **Matias Romero** | **2.49** | **314** | Pn | Pn | 14 35 27.1 | +0.3 |
| | 4.3nm,0.3s,baz=164,slow=14,SNR=45 | | | | | | |
| CMIG | | | | Sn | Sn | 14 35 57.3 | -0.7 |
| | 5.8nm,0.3s,baz=145,slow=7.3,SNR=5.7 | | | | | | |
| CMIG | | | | LR | LR | 14 36 18.0 | |
| | comp=Z,71nm,20.5s,baz=192,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **17.03** | **327** | P | | 14 38 46.4 | -0.3 |
| | 0.1nm,0.3s,baz=145,slow=16,SNR=2.9 | | | | | | |
| **TKL** | **Tuckaleechee C** | **21.86** | **21** | LR | LR | 14 49 48.1 | |
| | comp=Z,17nm,21.3s,baz=84,slow=41 | | | | | | |
| **NVAR** | **Mina Array Bea** | **32.01** | **321** | P | P | 14 41 13.4 | 0.0 |
| | 0.6nm,0.8s,baz=142,slow=8.3,SNR=5.9 | | | | | | |
| **LPAZ** | **La Paz** | **39.90** | **141** | P | P | 14 42 21.6 | -0.1 |
| | 0.6nm,0.7s,baz=300,slow=8.1,SNR=3.2 | | | | | | |
| **ILAR** | **Eielson Array** | **61.22** | **337** | P | P | 14 45 01.1 | -0.4 |
| | 0.4nm,0.9s,baz=117,slow=5.2,SNR=3.1 | | | | | | |

*ISK 17 14:36:17.4, 40°.85N×38°.06E, h28km, MD2.7*
*ISCJB 17 14:36:18.1±0.8, 40°.57N±0°.03×38°.16E±0°.06, h6km±7km, Error ellipse: s-maj=7.9km s-min=5.4km az=19.8*
*CSEM 17 14:36:18.2±0.3, 40°.57N×38°.16E, h8km, MD3.0, Error ellipse: s-maj=7.6km s-min=4.9km az=111.0*
*DDA 17 14:36:18.0, 40°.55N×38°.18E, h7km, Md3.0*
**ISC 17 14:36:18.4±1.0, 40°.56N±0°.03×38°.17E±0°.04, h10km±10km, n18, σ0.951/30, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SUSE** | **Susehri** | **0.35** | **176** | *i* P | **Pg** | **14 36 25.4** | **-0.1** |
| SUSE | | | | *i* S | **Sg** | **14 36 29.6** | **-0.5** |
| **SUSE** | **Susehri** | **0.35** | **176** | P | **Pg** | **14 36 25.4** | **-0.1** |
| SUSE | | | | S | **Sg** | **14 36 29.6** | **-0.5** |
| **GRSN** | **GIRESUNGRSN** | **0.37** | **11** | *i* P | **Pg** | **14 36 25.8** | **+0.1** |
| GRSN | | | | *i* S | **Sg** | **14 36 31.1** | **+0.4** |
| **GRSN** | **GIRESUNGRSN** | **0.37** | **11** | P | **Pg** | **14 36 25.8** | **+0.1** |
| GRSN | | | | S | **Sg** | **14 36 31.1** | **+0.4** |
| **ESPY** | **Espiye-Giresun** | **0.55** | **50** | *e*PG | **Pg** | **14 36 28.7** | **-0.4** |
| ESPY | | | | *e*SG | **Sg** | **14 36 36.8** | **+0.4** |
| **ESPY** | **Espiye-Giresun** | **0.55** | **50** | *e*Pg | **Pg** | **14 36 28.7** | **-0.4** |
| ESPY | | | | *e*Sg | **Sg** | **14 36 36.8** | **+0.4** |
| **KELT** | **Kelkit** | **0.92** | **116** | *i* P | **Pg** | **14 36 36.1** | **-0.1** |
| KELT | | | | *i* S | **Sg** | **14 36 48.5** | **+0.2** |
| **KELT** | **Kelkit** | **0.92** | **116** | P | **Pg** | **14 36 36.1** | **-0.1** |
| KELT | | | | S | **Sg** | **14 36 48.5** | **+0.2** |
| **GUMT** | **Gumushane** | **1.00** | **95** | *e*PN | **Pb** | **14 36 37.9** | **0.0** |
| **GUMT** | **Gumushane** | **1.00** | **95** | *e*Pn | **Pb** | **14 36 37.9** | **0.0** |
| **SVSK** | **Karacayir** | **1.11** | **235** | *e*PN | **Pg** | **14 36 39.3** | **-0.4** |
| SVSK | | | | *e*SN | **Sn** | **14 36 55.4** | **+0.2** |
| **SVSK** | **Karacayir** | **1.11** | **235** | *e*Pn | **Pg** | **14 36 39.3** | **-0.4** |
| SVSK | | | | *e*Sn | **Sn** | **14 36 55.4** | **+0.2** |
| **KEMA** | **Kemaliye** | **1.31** | **169** | *i* P | **Pn** | **14 36 42.9** | **0.0** |
| KEMA | | | | *i* S | **Sg** | **14 37 02.2** | **+1.5** |
| **KEMA** | **Kemaliye** | **1.31** | **169** | P | **Pn** | **14 36 43.0** | **0.0** |
| KEMA | | | | S | **Sg** | **14 37 02.2** | **+1.5** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **1.51** | **96** | *e*PN | **Pn** | **14 36 45.4** | **-0.3** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **1.51** | **96** | *e*Pn | **Pn** | **14 36 45.4** | **-0.3** |
| **PTK** | **Pertek** | **1.91** | **150** | *e*PN | **Pb** | **14 36 53.3** | **-0.2** |
| **PTK** | **Pertek** | **1.91** | **150** | *e*Pn | **Pb** | **14 36 53.3** | **-0.2** |

*ISCJB 17 14:38:27.8±1.1, 36°.89N±0°.07×27°.89E±0°.04, h7km±8km, Error ellipse: s-maj=11.1km s-min=5.0km az=0.5*
*DDA 17 14:38:27.5, 36°.90N×27°.91E, h7km, Md2.8*
*CSEM 17 14:38:27.8±0.4, 36°.89N×27°.89E, h10km, MD2.5, Error ellipse: s-maj=8.6km s-min=4.2km az=4.0*
*ISK 17 14:38:27.2, 36°.92N×27°.91E, h19km, MD2.5*
**ISC 17 14:38:24.9±1.7, 36°.76N±0°.07×27°.88E±0°.04, h8km±11km, n19, σ1.944/31, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BDRM** | **Kayabasi** | **0.46** | **311** | *i* P | **Pb** | **14 38 35.7** | **+0.4** |
| BDRM | | | | *i* S | **Sb** | **14 38 41.6** | **-0.7** |
| **BDRM** | **Kayabasi** | **0.46** | **311** | P | **Pb** | **14 38 35.7** | **+0.4** |
| BDRM | | | | S | **Sb** | **14 38 41.6** | **-0.7** |
| **YER** | **Yerkesik** | **0.49** | **41** | *e*PG | **Pb** | **14 38 35.7** | **-0.1** |
| YER | | | | *e*SG | **Sg** | **14 38 41.2** | **+0.2** |
| **YER** | **Yerkesik** | **0.49** | **41** | *e*Pg | **Pb** | **14 38 35.7** | **-0.1** |
| YER | | | | *e*Sg | **Sg** | **14 38 41.2** | **+0.2** |
| **BODT** | **Bodrum** | **0.55** | **304** | *e*PG | **Pb** | **14 38 37.4** | **+0.7** |
| BODT | | | | *e*SG | **Sb** | **14 38 45.5** | **+0.8** |
| **BODT** | **Bodrum** | **0.55** | **304** | *e*Pg | **Pb** | **14 38 37.4** | **+0.7** |
| BODT | | | | *e*Sg | **Sb** | **14 38 45.5** | **+0.8** |
| **TURN** | **Turunc** | **0.59** | **79** | *i* P | **Pg** | **14 38 34.1** | **-2.2** |
| **TURN** | **Turunc** | **0.59** | **79** | P | **Pg** | **14 38 34.1** | **-2.2** |
| TURN | | | | S | Sg | 14 38 37.9 | -6.2 |
| **DALY** | **Dalyan (Mu¯la** | **0.62** | **85** | *e*PG | **Pn** | **14 38 39.7** | **-0.3** |
| **DALY** | **Dalyan (Mu¯la** | **0.62** | **85** | *e*Pg | **Pn** | **14 38 39.7** | **-0.3** |
| **AYDN** | **Tasoluk** | **0.90** | **0** | *i* P | **Pn** | **14 38 44.0** | **+0.1** |
| AYDN | | | | *i* S | **Sg** | **14 38 53.5** | **-0.3** |
| **AYDN** | **Tasoluk** | **0.90** | **0** | P | **Pn** | **14 38 44.0** | **+0.1** |
| AYDN | | | | S | **Sg** | **14 38 53.5** | **-0.3** |
| **GCAM** | **G?zelcaml?** | **1.07** | **331** | *i* P | **Pb** | **14 38 45.7** | **+0.1** |
| GCAM | | | | *i* S | **Sb** | **14 38 58.3** | **-1.4** |
| **GCAM** | **G?zelcaml?** | **1.07** | **331** | P | **Pb** | **14 38 45.7** | **+0.1** |
| GCAM | | | | S | **Sb** | **14 38 58.3** | **-1.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.18** | **0** | *e*PG | **Pn** | **14 38 47.0** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.18** | **0** | *e*Pg | **Pn** | **14 38 47.0** | **-0.8** |
| **DNZL** | **Cakiroluk** | **1.31** | **45** | *i* P | **Pg** | **14 38 51.6** | **+1.5** |
| DNZL | | | | *i* S | **Sn** | **14 39 07.3** | **-0.2** |
| **DNZL** | **Cakiroluk** | **1.31** | **45** | P | **Pg** | **14 38 51.6** | **+1.5** |
| DNZL | | | | S | **Sn** | **14 39 07.3** | **-0.2** |
| **GOLH** | **Golhisar** | **1.43** | **70** | P | Pn | 14 38 47.7 | -3.5 |
| GOLH | | | | S | **Sg** | **14 39 16.5** | **+5.7** |

**SJA 17 14:40:14.4±0.6, 32°.08S×69°.49W, h111km±3km, ML5.4, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUSP** | **Uspallata** | **0.17** | **148** | *i* P | Pn | 14 40 31.4 | +1.2 |
| AUSP | | | | *i* S | Sn | 14 40 43.4 | +1.3 |
| **RTLS** | **Leoncito** | **0.33** | **30** | *i* P | Pn | 14 40 32.2 | +1.4 |
| RTLS | | | | *i* S | Sn | 14 40 44.5 | +1.5 |
| **ASAL** | **Salagasta** | **0.75** | **133** | *i* P | Pn | 14 40 34.2 | +0.8 |
| ASAL | | | | *i* S | Sn | 14 40 48.8 | +1.0 |
| **RTCV** | **Cerro Valdivia** | **0.84** | **75** | *i* P | Pn | 14 40 34.9 | +0.7 |
| RTCV | | | | *i* S | Sn | 14 40 49.9 | +0.9 |
| **ARCO** | **CERRO ARCO** | **0.89** | **148** | *i* P | Pn | 14 40 35.8 | +1.0 |
| ARCO | | | | *i* S | Sn | 14 40 51.0 | +0.8 |
| **CFAA** | **Coronel Fontan** | **1.17** | **66** | *i* P | Pn | 14 40 38.5 | +1.0 |
| CFAA | | | | *i* S | Sn | 14 40 56.2 | +1.2 |
| CFAA | | | | AML | AML | 14 40 56.7 | |
| | comp=Z,50μm,0.1s | | | | | | |
| **AMOG** | **MOGNA** | **1.42** | **37** | *i* P | Pn | 14 40 41.5 | +1.1 |
| AMOG | | | | *i* S | Sn | 14 41 01.0 | +0.7 |
| **ROC1** | **El Roble** | **1.57** | **235** | *i* P | Pn | 14 40 43.2 | +0.9 |
| ROC1 | | | | *i* S | Sn | 14 41 04.5 | +0.9 |
| **ACHE** | **Chepes** | **2.58** | **70** | *i* P | Pn | 14 40 55.9 | +0.8 |

*ISK 17 14:52:34.8, 37°.19N×28°.15E, h5km, MD2.5*
*ISCJB 17 14:52:35.3±0.9, 37°.17N±0°.06×28°.17E±0°.08, h12km±7km, Error ellipse: s-maj=13.2km s-min=8.3km az=138.9*
*CSEM 17 14:52:35.7±0.3, 37°.20N×28°.20E, h10km, MD2.5, Error ellipse: s-maj=9.5km s-min=5.9km az=50.0*
*DDA 17 14:52:37.6, 37°.37N×28°.30E, h7km, Md2.8*
**ISC 17 14:52:35.8±1.1, 37°.18N±0°.04×28°.20E±0°.04, h10km±8km, n12, σ0.945/18, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.08** | **127** | *e*PG | **Pg** | **14 52 37.7** | **-0.4** |
| YER | | | | *e*SG | **Sg** | **14 52 40.0** | **+0.3** |
| **YER** | **Yerkesik** | **0.08** | **127** | *e*Pg | **Pg** | **14 52 37.7** | **-0.4** |
| YER | | | | *e*Sg | **Sg** | **14 52 40.1** | **+0.3** |
| **DALY** | **Dalyan (Mu¯la** | **0.51** | **135** | *e*PG | **Pb** | **14 52 47.0** | **+0.1** |
| **DALY** | **Dalyan (Mu¯la** | **0.51** | **135** | *e*Pg | **Pb** | **14 52 47.0** | **+0.1** |
| **AYDN** | **Tasoluk** | **0.54** | **332** | *i* P | **Pg** | **14 52 46.5** | **+0.2** |
| AYDN | | | | *i* S | **Sg** | **14 52 53.4** | **-0.1** |
| **AYDN** | **Tasoluk** | **0.54** | **332** | P | **Pg** | **14 52 46.5** | **+0.2** |
| AYDN | | | | S | **Sg** | **14 52 53.4** | **-0.1** |
| **BODT** | **Bodrum** | **0.72** | **261** | *e*PG | **Pg** | **14 52 49.2** | **-0.5** |
| **BODT** | **Bodrum** | **0.72** | **261** | *e*Pg | **Pg** | **14 52 49.3** | **-0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.80** | **342** | *e*PG | **Pg** | **14 52 50.5** | **-0.7** |
| AYDB | | | | *e*SG | **Sb** | **14 53 03.4** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.80** | **342** | *e*Pg | **Pg** | **14 52 50.6** | **-0.7** |
| AYDB | | | | *e*Sg | **Sb** | **14 53 03.4** | **+0.5** |
| **DNZL** | **Cakiroluk** | **0.84** | **53** | *i* P | **Pg** | **14 52 51.5** | **-0.5** |
| **DNZL** | **Cakiroluk** | **0.84** | **53** | P | **Pg** | **14 52 51.5** | **-0.5** |

*CSEM 17 15:05:29.6±0.2, 41°.69N×22°.31E, h8km, ML1.8, Error ellipse: s-maj=5.0km s-min=1.9km az=69.0*
*THE 17 15:05:30.9, 41°.67N×22°.39E, h6km±2km, ML1.8/3, Error ellipse: s-maj=2.7km s-min=1.1km az=146.0*
*BEO 17 15:05:30.9±0.5, 41°.68N×22°.40E, h0km, ML1.4/3*
*ATH 17 15:05:31.5, 41°.61N×22°.36E, h4km, MD2.9/5*
**ISC 17 15:05:29.8±1.2, 41°.69N±0°.03×22°.31E±0°.05, h6km±12km, n23, σ0.945/41, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VAY** | **Valandovo** | **0.41** | **152** | *i* Pg | **Pb** | **15 05 38.8** | **-0.8** |
| VAY | | | | *i* Sg | **Sg** | **15 05 44.4** | **+1.1** |
| **VAY** | **Valandovo** | **0.41** | **152** | *e*Pg | **Pg** | **15 05 38.1** | **+0.3** |
| VAY | | | | *e*Sg | **Sg** | **15 05 42.6** | **-0.6** |
| **VAY** | **Valandovo** | **0.41** | **152** | P | **Pg** | **15 05 38.1** | **+0.3** |
| VAY | | | | S | **Sg** | **15 05 43.8** | **+0.6** |
| **VAY** | **Valandovo** | **0.41** | **152** | P | **Pg** | **15 05 38.1** | **+0.3** |
| VAY | | | | *e*Sg | **Sg** | **15 05 42.6** | **-0.6** |
| VAY | | | | S | **Sg** | **15 05 43.8** | **+0.6** |
| **KNT** | **Kendrikon** | **0.68** | **140** | *e*PG | **Pg** | **15 05 43.1** | **+0.1** |
| KNT | | | | *e*SG | **Sg** | **15 05 51.3** | **-0.6** |
| **KNT** | **Kendrikon** | **0.68** | **140** | P | **Pg** | **15 05 42.8** | **-0.2** |
| KNT | | | | S | **Sg** | **15 05 52.1** | **+0.2** |
| **KNT** | **Kendrikon** | **0.68** | **140** | P | **Pg** | **15 05 42.8** | **-0.2** |
| **KNT** | **Kendrikon** | **0.68** | **140** | *e*Pg | **Pg** | **15 05 43.1** | **+0.1** |
| KNT | | | | *e*Sg | **Sg** | **15 05 51.3** | **-0.6** |
| KNT | | | | S | **Sg** | **15 05 52.1** | **+0.2** |
| **GRG** | **Griva** | **0.73** | **175** | *e*PG | **Pg** | **15 05 43.9** | **0.0** |
| **GRG** | **Griva** | **0.73** | **175** | P | **Pg** | **15 05 43.8** | **-0.1** |
| **GRG** | **Griva** | **0.73** | **175** | *e*Pg | **Pg** | **15 05 43.9** | **0.0** |
| **SOH** | **Sokhos** | **1.17** | **137** | *e*PG | **Pg** | **15 05 52.0** | **-0.2** |
| **SOH** | **Sokhos** | **1.17** | **137** | P | **Pg** | **15 05 51.8** | **-0.4** |
| SOH | | | | S | **Sb** | **15 06 07.9** | **+0.1** |
| **SOH** | **Sokhos** | **1.17** | **137** | *e*Pg | **Pg** | **15 05 52.0** | **-0.2** |
| SOH | | | | S | **Sb** | **15 06 07.9** | **+0.1** |
| **BARS** | **Barje** | **1.19** | **342** | *e*Pg | **Pg** | **15 05 52.0** | **-0.7** |
| BARS | | | | *e*Sg | **Sn** | **15 06 09.6** | **+0.1** |
| **BARS** | **Barje** | **1.19** | **342** | *e*Pg | **Pg** | **15 05 52.0** | **-0.7** |
| BARS | | | | *e*Sg | **Sn** | **15 06 09.6** | **+0.1** |
| **NVR** | **Nevrokopi** | **1.21** | **106** | *e*PB | **Pg** | **15 05 52.8** | **-0.3** |
| NVR | | | | *e*SB | **Sb** | **15 06 09.4** | **+0.3** |
| **NVR** | **Nevrokopi** | **1.21** | **106** | P | **Pg** | **15 05 52.6** | **-0.5** |
| NVR | | | | S | **Sg** | **15 06 09.0** | **+0.2** |
| **NVR** | **Nevrokopi** | **1.21** | **106** | P | **Pg** | **15 05 52.6** | **-0.5** |
| NVR | | | | S | **Sg** | **15 06 09.0** | **+0.2** |
| NVR | | | | *e*Sb | **Sb** | **15 06 09.4** | **+0.3** |
| **HORT** | **Hortiatis** | **1.24** | **151** | *e*PB | **Pg** | **15 05 53.3** | **-0.3** |
| **HORT** | **Hortiatis** | **1.24** | **151** | P | **Pg** | **15 05 53.5** | **-0.1** |
| **HORT** | **Hortiatis** | **1.24** | **151** | *e*Pb | **Pg** | **15 05 53.3** | **-0.3** |
| **ZAPS** | **Zavoj** | **1.60** | **8** | *e*Pg | **Pb** | **15 06 00.5** | **+0.6** |
| ZAPS | | | | *e*Sg | **Sb** | **15 06 21.2** | **+0.7** |

**SJA 17 15:12:31.6±0.7, 32°.05S×68°.44W, h113km±3km, MD3.7, ML5.6, 1C, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTCV** | **Cerro Valdivia** | **0.20** | **336** | *i* P | Pn | 15 12 48.1 | +0.6 |
| RTCV | | | | *i* S | Sn | 15 13 00.1 | +0.8 |
| **CFAA** | **Coronel Fontan** | **0.48** | **22** | *i* P | Pn | 15 12 49.4 | +0.7 |
| CFAA | | | | *i* P | Pn | 15 12 49.4 | +0.7 |
| CFAA | | | | *i* S | Sn | 15 13 02.4 | +0.8 |
| CFAA | | | | *i* S | Sn | 15 13 02.4 | +0.8 |
| CFAA | | | | AML | AML | 15 13 03.3 | |
| | comp=Z,138μm,0.1s | | | | | | |
| **ASAL** | **Salagasta** | **0.64** | **211** | *i* P | Pn | 15 12 50.7 | +0.8 |
| ASAL | | | | *i* S | Sn | 15 13 04.6 | +0.9 |
| **RTLL** | **Cerro Villicun** | **0.72** | **358** | *i* P | Pn | 15 12 51.2 | +0.7 |
| RTLL | | | | ⇑*i* S | Sn | 15 13 05.7 | +0.9 |
| **RTLS** | **Leoncito** | **0.77** | **289** | *i* P | Pn | 15 12 52.4 | +1.2 |
| RTLS | | | | *i* S | Sn | 15 13 07.5 | +1.5 |
| **AUSP** | **Uspallata** | **0.82** | **257** | *i* P | Pn | 15 12 52.8 | +1.2 |
| AUSP | | | | *i* S | Sn | 15 13 07.8 | +1.0 |
| **AMOG** | **MOGNA** | **1.11** | **358** | *i* P | Pn | 15 12 55.4 | +1.0 |
| AMOG | | | | *i* S | Sn | 15 13 12.2 | +0.8 |
| **AVFE** | **Valle Fertil** | **1.62** | **32** | *i* P | Pn | 15 13 00.9 | +0.7 |
| AVFE | | | | *i* S | Sn | 15 13 22.9 | +1.0 |
| **ACHE** | **Chepes** | **1.75** | **60** | *i* P | Pn | 15 13 02.6 | +0.8 |
| ACHE | | | | *i* S | Sn | 15 13 25.8 | +0.8 |

*NIED 17 15:31:00, 40°.20N×142°.40E, h47km, Mw3.7 Best double couple: M0 3.40000×10^14 NP1:φ1=166.00000°, δ25.00000°, λ40.00000°. NP2:φ2=39.00000°, δ74.00000°, λ109.00000°.*
*IDC 17 15:31:53.2±1.1, 40°.10N×142°.21E, h0km, mb3.4/6, mb1 3.5/8, mb1mx3.4/44, mbtmp3.4/8, ML2.6/2, MS2.2/1, Ms1 2.2/1, ms1mx2.0/28, Error ellipse: s-maj=29.2km s-min=19.2km az=81.0*
*ISCJB 17 15:31:58.1±0.9, 40°.11N±0°.04×142°.4E±0°.1, h52km±7km, mb3.4/6, Error ellipse: s-maj=12.9km s-min=7.3km az=178.9*
*JMA 17 15:31:58.2±0.1, 40°.15N×142°.41E, h35km±1km, M3.5*
**ISC 17 15:31:59.1±1.3, 40°.11N±0°.05×142°.33E±0°.09, h42km±12km, n17, σ1.923/23, mb3.4/6, 1C-6D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTH** | **Tanohata** | **0.40** | **244** | ⇓P | **Pn** | **15 32 08.3** | **-0.3** |
| JTH | | | | S | **Sn** | **15 32 15.5** | **+0.2** |
| **MIYJ** | **Miyakonagasawa** | **0.66** | **216** | ⇑P | **Pn** | **15 32 11.8** | **-0.3** |
| MIYJ | | | | S | **Sn** | **15 32 21.4** | **+0.1** |
| **JANG** | **Nango** | **0.67** | **293** | ⇓P | **Pn** | **15 32 11.7** | **-0.5** |
| JANG | | | | S | **Sn** | **15 32 21.0** | **-0.6** |
| **JKZ** | **Kuzumaki** | **0.78** | **261** | ⇓P | **Pn** | **15 32 13.9** | **+0.2** |
| **JOM** | **Ohasama** | **1.02** | **232** | ⇓P | **Pn** | **15 32 17.7** | **+0.7** |
| JOM | | | | S | **Sn** | **15 32 32.1** | **+2.0** |
| **OFUJ** | **Ofunato** | **1.15** | **206** | P | **Pn** | **15 32 19.2** | **+0.5** |
| **JTM** | **Tenmabayashi** | **1.17** | **305** | ⇓P | **Pn** | **15 32 19.2** | **+0.2** |
| JTM | | | | *e*S | **Sn** | **15 32 35.0** | **+1.2** |
| **JAH** | **Hinai** | **1.30** | **274** | ⇓P | **Pn** | **15 32 21.6** | **+0.9** |
| JAH | | | | *e*S | **Sn** | **15 32 39.1** | **+2.2** |
| **JMK** | **Ichinoseki** | **1.44** | **217** | P | **Pn** | **15 32 23.7** | **+1.0** |
| **ASAJ** | **Asahikawa** | **4.01** | **3** | Pn | **Pn** | **15 32 57.9** | **0.0** |
| | 1.0nm,0.3s,baz=205,slow=16,SNR=17 | | | | | | |
| ASAJ | | | | Sn | **Sn** | **15 33 46.9** | **+3.3** |
| | 0.6nm,0.3s,baz=198,slow=20,SNR=2.6 | | | | | | |
| ASAJ | | | | LR | LR | 15 34 33.5 | |
| | comp=Z,34nm,21.1s,baz=181,slow=40 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.70** | **301** | Pn | Pn | 15 33 58.7 | -3.6 |
| | 0.2nm,0.3s,baz=99,slow=17,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **26.80** | **299** | P | **P** | **15 37 34.0** | **-1.3** |
| | 0.4nm,0.6s,baz=104,slow=6.1,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.16** | **300** | P | **P** | **15 39 55.0** | **-0.5** |
| | 0.5nm,0.6s,baz=83,slow=10,SNR=4.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.73** | **306** | P | **P** | **15 40 07.1** | **-0.9** |
| | 1.0nm,0.5s,baz=82,slow=8.6,SNR=8.3 | | | | | | |
| **ILAR** | **Eielson Array** | **46.53** | **34** | P | **P** | **15 40 21.5** | **-0.5** |
| | 0.3nm,0.7s,baz=270,slow=6.3,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **60.21** | **189** | P | **P** | **15 42 02.2** | **-0.6** |
| | 0.4nm,0.8s,baz=7.1,slow=7.2,SNR=3.6 | | | | | | |
| **ASAR** | **Alice Springs** | **63.93** | **189** | P | **P** | **15 42 28.7** | **+0.9** |
| | 0.1nm,0.7s,baz=1.2,slow=8.7,SNR=3.2 | | | | | | |

*ISCJB 17 15:45:49.3±0.6, 9°.07S±0°.05×122°.37E±0°.06, h100km, mb3.3/1, Error ellipse: s-maj=9.0km s-min=6.2km az=160.7*
*IDC 17 15:45:50.4±4.4, 8°.23S×123°.32E, h103km±52km, mb3.1/1, mb1 3.7/4, mb1mx3.2/32, mbtmp3.8/4, Error ellipse: s-maj=169.9km s-min=20.4km az=55.0*
*DJA 17 15:45:53.6±0.3, 9°S±3°×12°2E±°, h47km±9km, M4.0/16, mb4.1/5, mB4.8/2, MLv3.9/16, Mw(mB)4.1/2*
**ISC 17 15:45:50.6±1.0, 9°.02S±0°.05×122°.22E±0°.06, h100km, n16, σ2.915/18, Savu Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MMRI** | **Maumere** | **0.39** | **2** | P | **Pn** | **15 46 04.7** | **-1.0** |
| **EDFI** | **Ende, Flores** | **0.59** | **297** | P | **Pn** | **15 46 05.3** | **-1.9** |
| **BATI** | **Baumata** | **1.84** | **130** | P | **Pn** | **15 46 23.1** | **+1.9** |
| | 17nm,0.3s,baz=57,slow=0.6,SNR=42 | | | | | | |
| **BATI** | **Baumata** | **1.84** | **130** | P | **Pn** | **15 46 23.2** | **+1.9** |
| **BASI** | **Baing, Sumba** | **2.01** | **234** | P | **Pn** | **15 46 25.0** | **+1.7** |
| BASI | | | | S | **Sn** | **15 46 49.7** | **+1.4** |
| **SOEI** | **Soe** | **2.15** | **110** | P | **Pn** | **15 46 27.1** | **+1.9** |
| **BBSI** | **Bau Bau** | **3.53** | **6** | P | **Pn** | **15 46 45.0** | **+1.5** |
| **BKSI** | **Bulukumba** | **4.23** | **330** | P | **Pn** | **15 46 53.7** | **+0.8** |
| BKSI | | | | S | **Sn** | **15 47 43.3** | **+2.1** |
| **KAPI** | **Kappang** | **4.68** | **328** | P | **Pn** | **15 47 00.1** | **+1.1** |
| | 1.8nm,0.3s,baz=176,slow=11,SNR=13 | | | | | | |
| **KDI** | **Kendari** | **5.08** | **5** | P | **Pn** | **15 47 06.4** | **+2.3** |
| | 41nm,0.9s,0.2nm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **5.29** | **273** | P | **Pn** | **15 47 09.5** | **+2.3** |
| | 23nm,0.7s,920nm0.3nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.59** | **334** | P | **Pn** | **15 47 13.2** | **+1.9** |
| | 12nm,0.8s,0.0nm | | | | | | |
| **TTSI** | **Tana Toraja** | **6.40** | **338** | P | **Pn** | **15 47 24.6** | **+2.2** |
| **WRA** | **Warramunga Arr** | **15.97** | **134** | P | **Pn** | **15 49 25.3** | **-4.4** |
| | 0.6nm,0.3s,baz=309,slow=14,SNR=51 | | | | | | |
| WRA | | | | S | Sn | 15 52 12.1 | -14 |
| | 0.5nm,0.3s,baz=306,slow=24,SNR=5.9 | | | | | | |
| **ASAR** | **Alice Springs** | **18.36** | **144** | P | **Pn** | **15 49 58.3** | **-0.4** |
| | 0.8nm,0.3s,baz=325,slow=13,SNR=42 | | | | | | |
| ASAR | | | | S | S | 15 53 13.1 | -9.2 |
| | 0.2nm,0.3s,baz=310,slow=22,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.97** | **331** | P | **P** | **15 56 24.6** | **-1.6** |
| | 0.2nm,0.4s,baz=147,slow=7.3,SNR=5.0 | | | | | | |

**SJA 17 15:50:17.5±0.4, 33°.48S×68°.58W, h26km±1km, ML5.1, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAGR** | **Agrelo** | **0.44** | **332** | *i* P | Pb | 15 50 27.6 | +0.6 |
| AAGR | | | | *i* S | Sn | 15 50 34.7 | -0.9 |
| **ASAL** | **Salagasta** | **0.91** | **346** | *i* P | Pn | 15 50 35.1 | +0.4 |
| ASAL | | | | *i* S | Sn | 15 50 48.5 | +1.4 |
| **AUSP** | **Uspallata** | **1.42** | **331** | *i* P | Pb | 15 50 44.5 | +0.8 |
| **RTLS** | **Leoncito** | **1.78** | **340** | *i* P | Pb | 15 50 49.4 | -0.3 |
| RTLS | | | | *i* S | Sb | 15 51 13.0 | +1.1 |
| **CFAA** | **Coronel Fontan** | **1.89** | **9** | *i* P | Pb | 15 50 50.3 | -1.1 |
| CFAA | | | | *i* S | Sb | 15 51 14.8 | +0.2 |
| CFAA | | | | AML | AML | 15 51 17.1 | |
| | comp=Z,17μm,0.1s | | | | | | |
| **AMO

*NIED* **17** *16:13:00,45.70N×151.40E,h50km,Mw4.0 Best double couple: Mo1.21000×10^15 NP1:φ=135.00000°,δ47.00000°, λ=-1.00000°. NP2:φ=226.00000°,δ89.00000°, λ=-137.00000°.*
*MOS* **17** *16:13:38.0±2.1,45.45N×151.67E,h81km,mb4.0/1,Error ellipse: s-maj=19.2km s-min=12.4km az=50.3*
*ISCJB* **17** *16:13:41.0±0.7,45.21N±0.09×151.49E±0.08,h32km, mb3.5/6,MS3.0/4,Error ellipse: s-maj=13.5km s-min=5.1km az=152.6*
*JMA* **17** *16:13:41.7±0.5,45.73N×151.40E,h30km,M4.4*
*SKHL* **17** *16:13:41.9±0.6,45.41N×151.60E,h78km±2km,mb4.7/4*
*IDC* **17** *16:13:48.2±3.0,45.63N×151.15E,h91km±27km,mb3.2/6, mb1 3.3/9,mb1mx3.1/36,mbtmp3.6/9,MS3.1/6,Ms1 3.1/6, ms1mx2.8/19,Error ellipse: s-maj=27.7km s-min=17.8km az=122.0*

**ISC 17 16:13:41.0±1.1,45.34N±0.10×151.61E±0.09,h32km,n55, σ1s92/51,mb3.5/5,MS3.0/4,2D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.65** | **269** | *i* | PN | **Pn** | **16 14 21.7** | **+0.3** |
| KUR | | | | *i* | S | **Sn** | **16 14 51.6** | **-0.7** |
| KUR | | | | | pmax | pmax | | |
| | comp=Z,91nm,0.5s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=N,28nm,0.2s | | | | | | | |
| KUR | | | | | pmax | pmax | | |
| | comp=E,15nm,0.2s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=N,341nm,0.5s | | | | | | | |
| KUR | | | | | smax | smax | | |
| | comp=E,160nm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **2.65** | **269** | *i* | P | **Pn** | **16 14 21.7** | **+0.3** |
| KUR | | | | | AMB | AMB | 16 14 22.9 | |
| | comp=E,28nm,0.4s | | | | | | | |
| KUR | | | | | AMB | AMB | 16 14 22.9 | |
| | comp=E,15nm,0.4s | | | | | | | |
| KUR | | | | | AMB | AMB | 16 14 22.9 | |
| | comp=E,91nm,0.4s | | | | | | | |
| KUR | | | | *i* | S | **Sn** | **16 14 51.6** | **-0.7** |
| KUR | | | | | A | A | 16 14 55.6 | |
| | comp=E,341nm,0.5s | | | | | | | |
| KUR | | | | | A | A | 16 14 55.6 | |
| | comp=E,160nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **3.72** | **248** | *d i* | PN | **Pn** | **16 14 36.5** | **+0.4** |
| **SHO** | **Shikotan** | **3.72** | **248** | *i* | P | **Pn** | **16 14 36.5** | **+0.4** |
| SHO | | | | *e* | S | **Sn** | **16 15 17.9** | **-0.9** |
| SHO | | | | | A | A | 16 15 25.9 | |
| | comp=E,227nm,0.7s | | | | | | | |
| SHO | | | | | A | A | 16 15 25.9 | |
| | comp=E,159nm,0.7s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **4.30** | **254** | *d i* | PN | **Pn** | **16 14 46.5** | **+2.3** |
| YUK | | | | | pmax | pmax | | |
| | comp=N,14nm,0.2s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=E,13nm,0.2s | | | | | | | |
| YUK | | | | | pmax | pmax | | |
| | comp=Z,64nm,0.2s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **4.30** | **254** | *i* | P | **Pn** | **16 14 46.5** | **+2.3** |
| YUK | | | | | AMB | AMB | 16 14 47.5 | |
| | comp=Z,14nm,0.2s | | | | | | | |
| YUK | | | | | AMB | AMB | 16 14 47.5 | |
| | comp=Z,13nm,0.2s | | | | | | | |
| YUK | | | | | AMB | AMB | 16 14 47.5 | |
| | comp=Z,64nm,0.2s | | | | | | | |
| YUK | | | | *i* | S | **Sn** | **16 15 34.5** | **+1.3** |
| YUK | | | | | A | A | 16 15 39.4 | |
| | comp=Z,133nm,0.9s | | | | | | | |
| YUK | | | | | A | A | 16 15 39.4 | |
| | comp=Z,226nm,0.9s | | | | | | | |
| **NEM2** | **Nemuro 2** | **4.65** | **247** | | P | **Pn** | **16 14 49.2** | **+0.3** |
| NEM2 | | | | *e* | S | **Sn** | **16 15 39.1** | **-2.6** |
| **JRA** | **Rausu** | **4.84** | **255** | | P | **Pn** | **16 14 54.2** | **+2.7** |
| JRA | | | | *e* | S | **Sn** | **16 15 48.6** | **+2.2** |
| **JNK** | **Nakash** | **5.23** | **253** | | P | **Pn** | **16 14 58.9** | **+1.9** |
| JNK | | | | *e* | S | **Sn** | **16 15 55.8** | **-0.4** |
| **JAK** | **Akkeshi** | **5.50** | **247** | | P | **Pn** | **16 15 01.1** | **+0.5** |
| JAK | | | | *e* | S | **Sn** | **16 16 00.9** | **-1.7** |
| **JTKR** | **Abashiri--Toko** | **5.66** | **259** | | P | **Pn** | **16 15 04.8** | **+1.9** |
| **JAR** | **Ashorobuto** | **5.98** | **253** | | P | **Pn** | **16 15 09.2** | **+1.9** |
| JAR | | | | *e* | S | **Sn** | **16 16 14.8** | **+0.1** |
| **JMP** | **Maruseppu** | **6.03** | **260** | | P | **Pn** | **16 15 10.7** | **+2.7** |
| **JOB** | **Onbets** | **6.10** | **249** | | P | **Pn** | **16 15 10.2** | **+1.3** |
| JOB | | | | *e* | S | **Sn** | **16 16 16.1** | **-1.5** |
| **SKR** | **Severo-Kuril's** | **6.14** | **28** | *e* | PN | Pn | 16 15 02.5 | -6.9 |
| SKR | | | | | pmax | pmax | | |
| | comp=N,30nm,0.5s | | | | | | | |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,40nm,0.5s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **6.14** | **28** | *e* | P | **Pn** | **16 15 09.6** | **+0.2** |
| SKR | | | | | AMB | AMB | 16 15 15.0 | |
| | comp=Z,80nm,0.5s | | | | | | | |
| SKR | | | | *e* | S | **Sn** | **16 16 15.0** | **-3.5** |
| SKR | | | | | A | A | 16 16 21.2 | |
| | comp=Z,750nm,1.0s | | | | | | | |
| SKR | | | | | A | A | 16 16 30.6 | |
| | comp=Z,40nm,0.4s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **6.36** | **288** | *e* | P | **Pn** | **16 15 13.4** | **+0.9** |
| YSS | | | | | AMB | AMB | 16 15 14.5 | |
| | comp=Z,12nm,0.5s | | | | | | | |
| **JKK2** | **Kamakawa 2** | **6.49** | **260** | | P | **Pn** | **16 15 17.4** | **+3.1** |
| **JKA** | **Kamikawa-asahi** | **6.53** | **262** | *e* | P | **Pn** | **16 15 17.0** | **+2.2** |
| **ASAJ** | **Asahikawa** | **6.54** | **262** | | P | **Pn** | **16 15 17.0** | **+2.1** |
| | comp=Z,0.8nm,0.3s,baz=86,slow=14,SNR=13 | | | | | | | |
| ASAJ | | | | | LR | LR | 16 17 49.1 | |
| | comp=Z,113nm,18.8s,baz=354,slow=38 | | | | | | | |
| **ASAJ** | **Asahikawa** | **6.54** | **262** | | PN | **Pn** | **16 15 17.0** | **+2.1** |
| ASAJ | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **JCH** | **Churui** | **6.54** | **248** | | P | **Pn** | **16 15 15.8** | **+0.8** |
| JCH | | | | *e* | S | **Sn** | **16 16 25.4** | **-3.0** |
| **JFR** | **Furan** | **6.83** | **255** | | P | **Pn** | **16 15 20.9** | **+2.0** |
| **JEM** | **Erimo** | **6.97** | **245** | *e* | S | **Sn** | **16 16 36.9** | **-2.0** |
| **PAU** | **Pauzhetka** | **7.04** | **28** | *e* | S | **Sn** | **16 16 38.5** | **-2.1** |
| **JNBK** | **Urakawa-nobuka** | **7.10** | **248** | | P | **Pn** | **16 15 23.0** | **+0.4** |
| JNBK | | | | *e* | S | **Sn** | **16 16 39.1** | **-3.0** |
| **JBT2** | **Biratori 2** | **7.13** | **252** | | P | **Pn** | **16 15 24.7** | **+1.6** |
| JBT2 | | | | *e* | S | **Sn** | **16 16 43.5** | **+0.5** |
| **JNB** | **Noboribetsu** | **8.15** | **253** | | P | **Pn** | **16 15 38.0** | **+0.9** |
| JNB | | | | *e* | S | **Sn** | **16 17 06.2** | **-1.9** |
| **JKB** | **Kayabe** | **8.41** | **250** | | P | **Pn** | **16 15 41.3** | **+0.7** |
| JKB | | | | *e* | S | **Sn** | **16 17 09.2** | **-5.2** |
| **PETK** | **Petropavlovsk-** | **8.74** | **25** | | P | Pn | 16 15 49.1 | +4.1 |
| | comp=Z,0.5nm,0.3s,baz=204,slow=16,SNR=8.9 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **8.74** | **25** | | PN | Pn | 16 15 49.1 | +4.1 |
| PETK | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **JANG** | **Nango** | **8.92** | **240** | | P | **Pn** | **16 15 46.8** | **-0.8** |
| JANG | | | | *e* | S | Sn | 16 17 19.4 | -7.5 |
| **JTH** | **Tanohata** | **8.98** | **236** | *e* | S | Sn | 16 17 20.9 | -7.5 |
| **OFUJ** | **Ofunato** | **9.66** | **233** | *e* | S | Sn | 16 17 38.3 | -6.9 |
| **JRG** | **Rokugo** | **10.06** | **238** | *e* | S | Sn | 16 17 48.6 | -6.2 |
| **JIO** | **Ouri** | **10.28** | **232** | *e* | S | Sn | 16 17 52.4 | -7.9 |
| **USRK** | **Ussuriysk Ar.** | **13.99** | **272** | | LR | LR | 16 22 34.5 | |
| | comp=Z,70nm,18.3s,baz=75,slow=38 | | | | | | | |
| **BMKR** | **Bomnak** | **17.31** | **311** | *e* | rx | rx | 16 17 41.0 | |
| **KSRS** | **Korea Array** | **19.39** | **254** | | P | **Pn** | **16 18 06.0** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=63,slow=10,SNR=3.5 | | | | | | | |
| **YAK** | **Yakutsk** | **20.99** | **331** | | P | **P** | **16 18 20.8** | **-0.5** |
| | comp=Z,3.3nm,0.4s,baz=90,slow=2.0,SNR=2.4 | | | | | | | |
| YAK | | | | | LR | LR | 16 25 51.9 | |
| | comp=Z,40nm,19.4s,baz=116,slow=35 | | | | | | | |
| **YAK** | **Yakutsk** | **20.99** | **331** | *e* | P | Pn | 16 18 24.4 | +0.4 |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| YAK | | | | | pmax | pmax | | |
| | comp=N,2.0nm,1.0s | | | | | | | |
| **YAK** | **Yakutsk** | **20.99** | **331** | *e* | P | Pn | 16 18 24.4 | +0.4 |
| **H11N2** | **WAKE ISLAND Hy** | **28.50** | **149** | | T | T | 16 51 14.4 | |
| | baz=337,slow=76,SNR=4.1 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.51** | **149** | | T | T | 16 51 14.9 | |
| | baz=337,slow=76,SNR=5.5 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.52** | **149** | | T | T | 16 51 15.1 | |
| | baz=337,slow=76,SNR=5.3 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.55** | **150** | | T | T | 16 52 32.6 | |
| | baz=338,slow=76,SNR=5.6 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.56** | **150** | | T | T | 16 52 34.9 | |
| | baz=338,slow=76,SNR=31 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.57** | **150** | | T | T | 16 52 34.5 | |
| | baz=338,slow=76,SNR=4.6 | | | | | | | |
| **SONM** | **Songino Array** | **30.84** | **291** | | LR | LR | 16 32 57.0 | |
| | comp=N,24nm,19.1s,baz=130,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **38.31** | **37** | | P | **P** | **16 20 59.7** | **+1.5** |
| | comp=N,0.3nm,0.8s,baz=257,slow=6.5,SNR=3.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.60** | **307** | | LR | LR | 16 40 17.8 | |
| | comp=N,42nm,18.2s,baz=62,slow=38 | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.67** | **298** | | P | **P** | **16 22 04.1** | **-2.2** |
| | comp=N,0.3nm,0.5s,baz=75,slow=9.4,SNR=3.7 | | | | | | | |
| MKAR | | | | | LR | LR | 16 42 03.1 | |
| | comp=N,24nm,21.0s,baz=12,slow=37 | | | | | | | |
| **WRA** | **Warramunga Arr** | **66.84** | **198** | | P | **P** | **16 24 31.2** | **+1.6** |
| | comp=N,0.4nm,0.7s,baz=12,slow=6.7,SNR=3.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **70.54** | **197** | | P | **P** | **16 24 54.5** | **+1.9** |
| | comp=N,0.4nm,0.8s,baz=10,slow=6.2,SNR=4.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **72.13** | **326** | | P | P | 16 24 58.7 | -3.3 |
| | comp=N,0.3nm,0.3s,baz=38,slow=6.0,SNR=3.3 | | | | | | | |

*IDC* **17** *16:24:44.6±0.7,0.15S×149.75E,h0km,mb4.1/13, mb1 4.3/15,mb1mx4.2/30,mbtmp4.2/15,ML3.8/2,MS3.5/11, Ms1 3.5/11,ms1mx3.3/26,Error ellipse: s-maj=24.5km s-min=13.8km az=81.0*
*NEIC* **17** *16:24:46.6±0.6,0.10S×149.72E,h10km,mb5.0/12,Error ellipse: s-maj=13.6km s-min=10.3km az=73.0*
*AUST* **17** *16:24:49.9±0.0,0.07N×149.45E,h36km,Error ellipse: s-maj=1.3km s-min=0.8km az=354.0*
*ISCJB* **17** *16:24:49.3±0.4,0.08S±0.04×149.52E±0.06,h33km, mb4.5/31,MS3.6/9,Error ellipse: s-maj=9.0km s-min=5.9km az=168.3*
*BJI* **17** *16:24:53.6,0.86S×149.95E,h88km,mb4.8/27,mB5.1/18, Ms5.0/11,Ms7 4.6/9*
*DJA* **17** *16:25:09.1±0.6,1.1S±4.1×14.9E±.7,h67km±7km,M5.0/24, mb4.7/24,mB5.9/4,Mw(mB)5.5/4*

**ISC 17 16:24:50.9±0.5,0.07S±0.06×149.65E±0.07,h35km,n103, σ1s89/80,mb4.7/31,MS3.5/9,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **3.00** | **229** | | P | Pn | 16 25 32.9 | -3.2 |
| | baz=3.0,SNR=54 | | | | | | | |
| **RABL** | **Rabaul** | **4.80** | **148** | | P | **Pn** | **16 26 02.8** | **+1.9** |
| | baz=5.1,SNR=13 | | | | | | | |
| **JAY** | **Jayapura** | **9.26** | **255** | | P | **Pn** | **16 26 59.9** | **-2.3** |
| | baz=9.1,SNR=7.2 | | | | | | | |
| **PMG** | **Port Moresby** | **9.60** | **195** | *e* | Pn | **Pn** | **16 27 08.9** | **+2.3** |
| **GENI** | **Genyem** | **9.80** | **255** | | P | **Pn** | **16 27 07.8** | **-1.7** |
| | 58nm,0.8s | | | | | | | |
| GENI | | | | | S | Sn | 16 28 46.4 | -12 |
| | 58nm,0.8s | | | | | | | |
| **PATS** | **Pohnpei** | **11.04** | **51** | | P | **Pn** | **16 27 24.9** | **-1.6** |
| | baz=11,SNR=3.2 | | | | | | | |
| **SMPI** | **Sarmi** | **11.10** | **260** | | P | **Pn** | **16 27 27.8** | **+0.5** |
| | 32nm,1.2s | | | | | | | |
| SMPI | | | | | S | Sn | 16 29 20.4 | -10 |
| | 32nm,1.2s | | | | | | | |
| **HNR** | **Honiara** | **13.84** | **132** | | Pn | Pn | 16 28 00.8 | -4.0 |
| | 0.7nm,0.3s,baz=338,slow=19,SNR=1.7 | | | | | | | |
| HNR | | | | | LR | LR | 16 32 54.9 | |
| | comp=Z,101nm,18.0s,baz=222,slow=36 | | | | | | | |
| **GUMO** | **Guam** | **14.38** | **341** | | LR | LR | 16 32 15.6 | |
| | comp=Z,153nm,22.0s,baz=158,slow=31 | | | | | | | |
| **COEN** | **Coen** | **15.21** | **205** | *e* | P | **Pn** | **16 28 24.2** | **+1.0** |
| | 38nm,1.0s | | | | | | | |
| **FAKI** | **Fak Fak** | **17.62** | **261** | | P | **Pn** | **16 28 52.1** | **-1.8** |
| | baz=17,SNR=4.0 | | | | | | | |
| **FAKI** | **Fak Fak** | **17.62** | **261** | | P | **Pn** | **16 28 52.3** | **-1.6** |
| | 45nm,1.3s | | | | | | | |
| **FAKI** | **Fak Fak** | **17.62** | **261** | *e* | Pn | **Pn** | **16 28 51.6** | **-2.3** |
| | 35nm,1.0s | | | | | | | |
| **SIJI** | **Sorong** | **18.40** | **267** | | P | **P** | **16 29 02.0** | **-1.2** |
| | 0.2nm,0.3s,baz=80,slow=14,SNR=4.7 | | | | | | | |
| **MTSU** | **Mount Surprise** | **18.70** | **196** | | P | **Pn** | **16 29 10.6** | **+3.5** |
| | baz=19,SNR=8.6 | | | | | | | |
| **CTA** | **Charters Tower** | **20.17** | **189** | | P | **P** | **16 29 19.2** | **-3.3** |
| | 12nm,1.0s,baz=26,slow=17,SNR=2.4 | | | | | | | |
| **KDU** | **Kakadu** | **21.15** | **233** | | P | **P** | **16 29 32.1** | **-1.0** |
| | baz=21,SNR=6.2 | | | | | | | |
| **AAI** | **Ambon** | **21.73** | **260** | | P | **P** | **16 29 41.2** | **+1.7** |
| | 29nm,0.7s | | | | | | | |
| **LBMI** | **Labuha** | **22.15** | **268** | | P | **P** | **16 29 48.3** | **+4.3** |
| | 40nm,1.4s | | | | | | | |
| **TNTI** | **Ternate** | **22.29** | **272** | | P | **P** | **16 29 50.3** | **+4.8** |
| | 37nm,1.3s | | | | | | | |
| **MTN** | **Manton Dam** | **22.32** | **235** | | P | **P** | **16 29 44.3** | **-1.4** |
| | baz=22,SNR=3.8 | | | | | | | |
| **MTN** | **Manton Dam** | **22.32** | **235** | *e* | P | **P** | **16 29 44.1** | **-1.6** |
| | 165nm,2.2s | | | | | | | |
| **QIS** | **Mount Isa** | **22.60** | **205** | | P | **P** | **16 29 48.1** | **-0.7** |
| | baz=23,SNR=10 | | | | | | | |
| **SANI** | **Sanana** | **23.73** | **265** | | P | **P** | **16 30 04.1** | **+3.9** |
| | 16nm,1.1s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.78** | **216** | *e* | P | **P** | **16 30 09.1** | **-0.6** |
| | 109nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.79** | **216** | | P | **P** | **16 30 09.2** | **-0.7** |
| | 81nm,8s,baz=37,slow=10,SNR=379 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **24.92** | **41** | | T | T | 16 56 21.5 | |
| | baz=224,slow=75,SNR=96 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **24.93** | **41** | | T | T | 16 56 23.0 | |
| | baz=224,slow=75,SNR=109 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **24.93** | **41** | | T | T | 16 56 19.2 | |
| | baz=224,slow=75,SNR=140 | | | | | | | |
| **EIDS** | **Eidsvold** | **25.19** | **177** | | P | **P** | **16 30 14.3** | **+1.0** |
| | baz=26,SNR=11 | | | | | | | |
| **EIDS** | **Eidsvold** | **25.19** | **177** | *e* | P | **P** | **16 30 14.1** | **+0.8** |
| | 22nm,0.8s | | | | | | | |
| **KNRA** | **Kununurra** | **25.80** | **232** | | P | **P** | **16 30 17.7** | **-1.3** |
| | baz=26,SNR=5.4 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **25.93** | **40** | | T | T | 16 57 32.5 | |
| | baz=222,slow=76,SNR=17 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **25.95** | **40** | | T | T | 16 57 26.8 | |
| | baz=222,slow=76,SNR=30 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **25.95** | **40** | | T | T | 16 57 28.0 | |
| | baz=222,slow=76,SNR=22 | | | | | | | |
| **RMQ** | **Roma** | **26.27** | **182** | | P | **P** | **16 30 24.1** | **+0.9** |
| | baz=27,SNR=9.9 | | | | | | | |
| **QLP** | **Quilpie** | **26.87** | **191** | | P | **P** | **16 30 28.7** | **+0.2** |
| | baz=27,SNR=5.2 | | | | | | | |
| **LUWI** | **Luwuk** | **26.89** | **268** | | P | P | 16 30 35.3 | +6.4 |
| | 55nm,1.1s | | | | | | | |
| **LUWI** | **Luwuk** | **26.89** | **268** | | P | **P** | **16 30 30.5** | **+1.6** |
| | 57nm,1.1s | | | | | | | |
| **SOEI** | **Soe** | **27.02** | **248** | *e* | P | **P** | **16 30 32.1** | **+1.9** |
| | 61nm,1.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **27.32** | **144** | | P | **P** | **16 30 31.4** | **-1.4** |
| | 5.4nm,0.9s,baz=355,slow=9.3,SNR=1.7 | | | | | | | |
| **AS01** | **Alice Springs** | **27.97** | **212** | *e* | P | **P** | **16 30 37.9** | **-0.6** |
| **ASAR** | **Alice Springs** | **27.99** | **212** | | P | **P** | **16 30 38.2** | **-0.5** |
| | 6.3nm,0.6s,baz=40,slow=7.6,SNR=174 | | | | | | | |
| ASAR | | | | | PcP | **PcP** | **16 33 52.9** | **-0.5** |
| | 1.2nm,0.9s,baz=66,slow=2.8,SNR=4.5 | | | | | | | |
| ASAR | | | | | LR | LR | 16 42 43.7 | |
| | comp=Z,234nm,18.7s,baz=22,slow=39 | | | | | | | |
| **APSI** | **Ampana** | **28.01** | **268** | | P | P | 16 30 44.3 | +5.4 |
| | 29nm,1.5s | | | | | | | |
| **BKSI** | **Bulukumba** | **29.94** | **259** | | P | P | 16 31 00.2 | +4.1 |
| | 9.7nm,1.0s | | | | | | | |
| **ARMA** | **Armidale** | **30.24** | **177** | | P | **P** | **16 31 00.5** | **+1.9** |
| | baz=31,SNR=5.2 | | | | | | | |
| **ARMA** | **Armidale** | **30.24** | **177** | *e* | P | **P** | **16 31 00.3** | **+1.7** |
| | 19nm,0.9s | | | | | | | |
| **WRKA** | **Warakurna** | **32.28** | **218** | | P | **P** | **16 31 15.4** | **-1.3** |
| | baz=32,SNR=15 | | | | | | | |
| **YNG** | **Young** | **34.07** | **182** | | P | **P** | **16 31 33.5** | **+1.5** |
| | baz=34,SNR=6.1 | | | | | | | |
| **HTT** | **Hallett** | **34.68** | **196** | | P | P | 16 31 32.4 | -5.0 |
| | baz=35,SNR=5.2 | | | | | | | |
| **FORT** | **Forrest** | **36.78** | **212** | | P | **P** | **16 31 54.6** | **-0.8** |
| | baz=37,SNR=29 | | | | | | | |
| **JNU** | **Nakatsue** | **37.45** | **334** | | P | **P** | **16 31 59.9** | **-1.3** |
| | 3.4nm,0.7s,baz=215,slow=16,SNR=3.7 | | | | | | | |
| **MEEK** | **Mekatharra** | **39.87** | **226** | | P | **P** | **16 32 20.8** | **-0.8** |
| | baz=40,SNR=12 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **42.36** | **259** | | P | **P** | **16 32 39.6** | **-2.7** |
| | baz=42,SNR=3.8 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **42.36** | **259** | *e* | P | **P** | **16 32 39.7** | **-2.7** |
| | 44nm,0.9s | | | | | | | |
| **KSRS** | **Korea Array** | **42.39** | **334** | | P | **P** | **16 32 42.6** | **+0.6** |
| | 1.2nm,0.9s,baz=144,slow=9.7,SNR=3.8 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **42.40** | **334** | | P | **P** | **16 32 42.6** | **+0.5** |
| **MORW** | **Morawa** | **43.14** | **225** | | P | **P** | **16 32 48.6** | **+0.3** |
| | baz=43,SNR=3.8 | | | | | | | |
| **NJ2** | **Nanjing** | **43.22** | **321** | *e* | P | P | 16 32 53.1 | +4.3 |
| NJ2 | | | | | PMZ | | | |
| | 20nm,0.5s | | | | | | | |
| **URZ** | **Urewera** | **45.63** | **149** | | LR | LR | 16 51 08.9 | |
| | comp=Z,44nm,18.4s,baz=298,slow=35 | | | | | | | |
| **RPZ** | **Rata Peaks** | **47.47** | **159** | | LR | LR | 16 51 54.9 | |
| | comp=Z,67nm,20.2s,baz=9.0,slow=34 | | | | | | | |
| **MDJ** | **Mudanjiang** | **47.93** | **341** | | P | P | 16 33 33.1 | +7.1 |
| MDJ | | | | | PMZ | | | |
| | 6.0nm,2.2s | | | | | | | |
| MDJ | | | | | PMZ | | | |
| | 40nm,3.8s | | | | | | | |
| **GYA** | **Guiyang** | **49.06** | **306** | *e* | P | P | 16 33 40.0 | +4.8 |
| GYA | | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | | |
| **PBKT** | **Sadao Pong** | **50.74** | **292** | | P | P | 16 33 54.9 | +7.1 |
| | 11nm,1.2s | | | | | | | |
| **UTTA** | **Uttaradit** | **51.41** | **293** | | P | P | 16 34 01.7 | +8.8 |
| | 3.2nm,1.0s | | | | | | | |
| **KMI** | **Kunming** | **51.77** | **303** | | P | P | 16 34 00.8 | +5.0 |
| KMI | | | | | sP | sP | 16 34 33.1 | +23 |
| KMI | | | | | S | **S** | **16 41 13.4** | **-2.5** |
| KMI | | | | | SS | **SS** | **16 44 49.6** | **-3.4** |
| KMI | | | | | PMZ | | | |
| | 12nm,1.3s | | | | | | | |
| KMI | | | | | PMZ | | | |
| | 76nm,4.6s | | | | | | | |
| KMI | | | | | LN | | | |
| | 88nm,4.8s | | | | | | | |
| KMI | | | | | LE | | | |
| | 63nm,4.5s | | | | | | | |
| KMI | | | | | LZ | | | |
| | 160nm,6.8s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **53.05** | **293** | *e* | P | **P** | **16 34 05.5** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **53.08** | **293** | | P | **P** | **16 34 06.0** | **+0.7** |
| | 2.6nm,0.7s,baz=112,slow=5.6,SNR=21 | | | | | | | |
| **CHTO** | **Chiang Mai** | **53.16** | **294** | | P | P | 16 34 13.0 | +7.0 |
| | 32nm,1.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **53.16** | **294** | *e* | P | P | 16 34 11.1 | +5.2 |
| | 14nm,1.4s | | | | | | | |
| **CD2** | **Chengdu** | **53.30** | **310** | *e* | P | P | 16 34 11.0 | +4.2 |
| CD2 | | | | | pP | pP | 16 34 32.8 | +15 |
| CD2 | | | | | sP | sP | 16 34 42.8 | +21 |
| CD2 | | | | | PcS | **PcS** | **16 39 16.6** | **+3.3** |
| CD2 | | | | | S | **S** | **16 41 36.3** | **0.0** |
| CD2 | | | | | sS | sS | 16 42 13.9 | +20 |
| CD2 | | | | | SS | **SS** | **16 45 18.5** | **+1.9** |
| CD2 | | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | | |
| CD2 | | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **53.40** | **324** | *e* | P | P | 16 34 14.9 | +7.5 |
| HHC | | | | | pP | pP | 16 34 38.8 | +21 |
| HHC | | | | | S | **S** | **16 41 40.3** | **+2.9** |
| HHC | | | | | SS | **SKiKP** | **16 45 20.0** | **-1.5** |
| HHC | | | | | PMZ | | | |
| | 33nm,1.1s | | | | | | | |
| HHC | | | | | PMZ | | | |
| | 140nm,6.2s | | | | | | | |
| HHC | | | | | LN | | | |
| | 180nm,13.7s | | | | | | | |
| HHC | | | | | LE | | | |
| | 230nm,14.9s | | | | | | | |
| HHC | | | | | LZ | | | |
| | 160nm,14.9s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **53.42** | **6** | | P | **P** | **16 34 07.1** | **-0.1** |
| | 3.4nm,0.9s,baz=205,slow=5.5,SNR=3.1 | | | | | | | |
| PETK | | | | | LR | LR | 16 52 52.7 | |
| | comp=Z,51nm,21.6s,baz=191,slow=32 | | | | | | | |
| **LZH** | **Lanzhou** | **55.67** | **315** | *e* | P | P | 16 34 31.1 | +7.0 |
| LZH | | | | | pP | pP | 16 34 52.9 | +18 |
| LZH | | | | | sP | sP | 16 35 01.9 | +23 |
| LZH | | | | | PP | PP | 16 36 40.0 | +11 |
| LZH | | | | *e* | S | **S** | **16 42 09.0** | **+0.7** |
| LZH | | | | | sS | sS | 16 42 47.6 | +22 |
| LZH | | | | *e* | SS | **SS** | **16 45 57.3** | **+3.2** |
| LZH | | | | | PMZ | | | |
| | 18nm,1.2s | | | | | | | |
| LZH | | | | | PMZ | | | |
| | 160nm,5.1s | | | | | | | |
| **GTA** | **Gaotai** | **60.07** | **317** | | P | P | 16 35 00.3 | +5.4 |
| GTA | | | | | pP | PcP | 16 35 24.1 | -16 |
| GTA | | | | | sP | sP | 16 35 34.6 | +25 |
| GTA | | | | | PcP | pP | 16 35 43.3 | +38 |
| GTA | | | | | PMZ | | | |
| | 5.0nm,1.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **60.35** | **328** | *e* | P | P | 16 35 02.5 | +5.9 |
| | 5.7nm,1.0s | | | | | | | |
| **SONM** | **Songino Array** | **60.67** | **328** | | P | **P** | **16 34 59.3** | **+0.5** |
| | 0.4nm,0.6s,baz=141,slow=7.4,SNR=3.0 | | | | | | | |
| SONM | | | | | LR | LR | 17 00 44.4 | |
| | comp=Z,22nm,21.7s,baz=56,slow=36 | | | | | | | |
| **SONA1** | **Songino Array** | **60.68** | **328** | *e* | P | P | 16 35 04.5 | +5.7 |
| **YAK** | **Yakutsk** | **63.77** | **350** | *e* | P | P | 16 35 25.1 | +6.0 |
| | 45nm,1.6s | | | | | | | |
| **TLY** | **Talaya** | **64.44** | **330** | *e* | P | P | 16 35 29.7 | +5.9 |
| **TAPN** | **Taplejung** | **65.30** | **300** | *e* | P | **P** | **16 35 30.1** | **-0.1** |
| | 39nm,1.2s | | | | | | | |
| **ODAN** | **Odare** | **65.46** | **300** | *e* | P | **P** | **16 35 30.9** | **-0.3** |
| | 42nm,0.9s | | | | | | | |
| **RAMN** | **Ramite** | **66.17** | **300** | *e* | P | **P** | **16 35 36.3** | **+0.5** |
| | 16nm,0.8s | | | | | | | |
| **GUN** | **Gumba** | **67.01** | **300** | *e* | P | **P** | **16 35 41.0** | **-0.2** |
| | 58nm,0.9s | | | | | | | |
| **PKI** | **Pulchoki** | **67.34** | **300** | *e* | P | **P** | **16 35 42.7** | **-0.6** |
| | 34nm,1.1s | | | | | | | |
| **PKIN** | **Phulchoki** | **67.35** | **300** | *e* | P | **P** | **16 35 42.4** | **-0.9** |
| | 23nm,1.1s | | | | | | | |
| **KKN** | **Kakani** | **67.50** | **300** | *e* | P | **P** | **16 35 44.3** | **+0.1** |
| | 31nm,1.0s | | | | | | | |
| **DMN** | **Daman** | **67.61** | **300** | *e* | P | **P** | **16 35 44.5** | **-0.4** |
| | 49nm,1.0s | | | | | | | |
| **GKN** | **Gorkha** | **68.10** | **300** | *e* | P | **P** | **16 35 46.4** | **-1.5** |
| | 41nm,1.0s | | | | | | | |
| **WMQ** | **Urumqi** | **70.16** | **317** | *e* | P | P | 16 36 05.0 | +4.8 |
| **MKAR** | **Makanchi Array** | **74.72** | **319** | | P | **P** | **16 36 26.8** | **-0.5** |
| | 0.9nm,0.7s,baz=97,slow=9.9,SNR=6.6 | | | | | | | |
| MKAR | | | | | LR | LR | 17 08 25.2 | |
| | comp=Z,22nm,21.3s,baz=65,slow=35 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **75.50** | **326** | | P | **P** | **16 36 30.2** | **-1.4** |
| | 3.9nm,0.6s,baz=103,slow=4.7,SNR=4.1 | | | | | | | |
| **KSH** | **Kashi** | **77.49** | **311** | *e* | P | **P** | **16 36 45.8** | **+2.4** |
| KSH | | | | *e* | sP | sP | 16 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AVFE** | **Valle Fertil** | **2.67** | **34** | *i* P | Pb | 16 33 19.1 | -2.2 |
| AVFE | | | | *i* S | Sb | 16 33 53.1 | -1.1 |
| **ACHE** | **Chepes** | **2.74** | **52** | *i* P | Pb | 16 33 20.4 | -2.3 |
| ACHE | | | | *i* S | Sb | 16 33 55.3 | -1.2 |

*IDC* ***17*** *16:43:08.7±1.5,30.°52S×177.°97W,h0km,mb3.8/3, mb1 4.0/3,mb1mx3.6/26,mbtmp3.8/3,Error ellipse: s-maj=38.6km s-min=25.2km az=97.0*
*ISCJB* ***17*** *16:43:13.1±1.6,30.°46S±0.°09×178.°0W±0.°3,h46km, mb3.8/4,Error ellipse: s-maj=35.9km s-min=10.6km az=12.4*
*NEIC* ***17*** *16:43:14.8±2.6,30.°39S×177.°91W,h48km±27km,mb4.0/1, Error ellipse: s-maj=30.8km s-min=26.9km az=209.0*

**ISC 17 16:43:14.6±1.5,30.°4S±0.°1×177.°9W±0.°3,h46km,n6, σ0s13/7,mb3.9/4,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.15** | **0** | Pn | **Pn** | **16 43 34.3** | **0.0** |
| | 79nm,0.3s,baz=55,slow=20,SNR=5.1 | | | | | | |
| RAO | | | | Sn | **Sn** | **16 43 49.0** | **+0.1** |
| | 164nm,0.3s,baz=88,slow=23,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **43.18** | **267** | P | **P** | **16 51 11.2** | **0.0** |
| | 0.4nm,0.4s,baz=106,slow=7.2,SNR=27 | | | | | | |
| **WRAB** | **Tennant Creek** | **44.16** | **272** | *e*P | **P** | **16 51 19.2** | **+0.2** |
| | 1.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.17** | **272** | P | **P** | **16 51 19.1** | **-0.1** |
| | 0.9nm,0.3s,baz=110,slow=8.1,SNR=37 | | | | | | |
| **QSPA** | **South Pole Qui** | **59.70** | **180** | P | **P** | **16 53 14.3** | **+0.1** |
| | 0.5nm,0.7s,baz=179,slow=5.6,SNR=2.0 | | | | | | |
| **FINES** | **FINESS Array B** | **145.18** | **340** | PKPbc | **PKPbc** | **17 02 45.9** | **-0.1** |
| | 1.4nm,0.4s,baz=53,slow=1.9,SNR=14 | | | | | | |

**IDC 17 17:01:59.2±10.0,5.°33S×146.°40E,h0km,mb3.0/2, mb1 3.3/3,mb1mx3.2/26,mbtmp3.0/3,ML3.1/1,Error ellipse: s-maj=236.1km s-min=39.3km az=89.0,Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **18.67** | **218** | P | P | 17 06 17.6 | -1.4 |
| | 0.1nm,0.3s,baz=36,slow=11,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **21.84** | **212** | P | P | 17 06 54.1 | +0.5 |
| | 0.2nm,0.7s,baz=40,slow=7.9,SNR=4.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.41** | **298** | P | P | 17 11 14.0 | +0.1 |
| | 0.5nm,0.7s,baz=114,slow=6.2,SNR=5.6 | | | | | | |

*ATH* ***17*** *17:04:48.7,41.°66N×20.°22E,h4km±3km,MD3.2/6*
*SKO* ***17*** *17:04:48.8,41.°51N×20.°15E,h37km*
*CSEM* ***17*** *17:04:49.2±0.2,41.°56N×20.°22E,h2km,ML2.3,Error ellipse: s-maj=5.0km s-min=3.4km az=49.0*
*BEO* ***17*** *17:04:50.5±0.4,41.°57N×20.°19E,h0km,ML2.3/5*
*PDG* ***17*** *17:04:50.2±0.2,41.°59N×20.°19E,h12km,ML2.6/10,Error ellipse: s-maj=0.3km s-min=0.4km az=0.0*

**ISC 17 17:04:49.4±1.1,41.°56N±0.°02×20.°20E±0.°02,h4km±10km, n47,σ0s78/83,9C-12D,Albania**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TIR** | **Tirane** | **0.33** | **231** | *e*Pg | **Pg** | **17 04 56.1** | **+0.4** |
| TIR | | | | *e*Sg | **Sg** | **17 05 00.5** | **+0.5** |
| **TIR** | **Tirane** | **0.33** | **231** | *e*PG | **Pb** | **17 04 56.7** | **-1.1** |
| TIR | | | | *e*SG | **Sb** | **17 05 02.2** | **-1.2** |
| **TIR** | **Tirane** | **0.33** | **231** | *e*Pg | **Pg** | **17 04 56.1** | **+0.4** |
| TIR | | | | *e*Sg | **Sg** | **17 05 00.5** | **+0.5** |
| **OHR** | **Ohrid** | **0.63** | **134** | *i* Pg | **Pb** | **17 05 02.3** | **-0.8** |
| OHR | | | | *i* Sg | **Sb** | **17 05 13.1** | **+0.8** |
| **OHR** | **Ohrid** | **0.63** | **134** | *i* Pg | **Pb** | **17 05 02.2** | **-0.8** |
| OHR | | | | *i* Sg | **Sb** | **17 05 13.0** | **+0.8** |
| **ULC** | **Ulcinj** | **0.82** | **300** | ⇓*i*Pg | **Pg** | **17 05 04.5** | **-0.7** |
| ULC | | | | *e*Sg | **Sb** | **17 05 17.2** | **-0.6** |
| **ULC** | **Ulcinj** | **0.82** | **300** | ⇓*i*Pg | **Pg** | **17 05 04.5** | **-0.7** |
| ULC | | | | *e*Sg | **Sb** | **17 05 17.2** | **-0.6** |
| **DRME** | **Dracevica, Mon** | **0.99** | **310** | ⇑*i*Pg | **Pg** | **17 05 07.4** | **-0.9** |
| DRME | | | | *e*Sg | **Sb** | **17 05 22.6** | **+0.2** |
| **DRME** | **Dracevica, Mon** | **0.99** | **310** | ⇑*i*Pg | **Pg** | **17 05 07.4** | **-0.9** |
| DRME | | | | *e*Sg | **Sb** | **17 05 22.6** | **+0.2** |
| **SKO** | **Skopje** | **1.02** | **65** | *e*Pg | **Pn** | **17 05 09.9** | **-0.5** |
| SKO | | | | *e*Sg | **Sb** | **17 05 23.3** | **0.0** |
| **SKO** | **Skopje** | **1.02** | **65** | *e*Pg | **Pn** | **17 05 09.9** | **-0.5** |
| SKO | | | | *e*Sg | **Sb** | **17 05 23.3** | **0.0** |
| **PVY** | **Plav** | **1.05** | **350** | ⇑*i*Pg | **Pg** | **17 05 08.8** | **-0.8** |
| PVY | | | | *e*Sg | **Sb** | **17 05 24.8** | **+0.3** |
| **PDG** | **Podgorica** | **1.12** | **321** | *e*Pg | **Pg** | **17 05 09.8** | **-1.1** |
| PDG | | | | *e*Sg | **Sb** | **17 05 26.4** | **+0.1** |
| **PDG** | **Podgorica** | **1.12** | **321** | ⇓*i*Pg | **Pg** | **17 05 10.3** | **-0.6** |
| PDG | | | | *e*Sg | **Sb** | **17 05 26.4** | **+0.1** |
| **TTG** | **Podgorica** | **1.12** | **321** | ⇓*i*Pg | **Pg** | **17 05 10.3** | **-0.6** |
| TTG | | | | *e*Sg | **Sn** | **17 05 27.3** | **-0.5** |
| **FNA** | **Florina** | **1.18** | **131** | *e*PB | **Pb** | **17 05 12.1** | **-0.2** |
| FNA | | | | *e*SB | **Sn** | **17 05 29.0** | **-0.1** |
| **FNA** | **Florina** | **1.18** | **131** | *e*Pb | **Pb** | **17 05 12.1** | **-0.2** |
| FNA | | | | *e*Sb | **Sn** | **17 05 29.0** | **-0.1** |
| **BUM** | **Brajici-Budva** | **1.23** | **308** | ⇑*i*Pg | **Pg** | **17 05 12.0** | **-0.9** |
| BUM | | | | *e*Sg | **Sn** | **17 05 31.1** | **+0.6** |
| **BUM** | **Brajici-Budva** | **1.23** | **308** | ⇑*i*Pg | **Pg** | **17 05 12.0** | **-0.9** |
| BUM | | | | *e*Sg | **Sn** | **17 05 31.1** | **+0.6** |
| **NEST** | **Nestorio** | **1.31** | **150** | *e*PN | **Pb** | **17 05 15.1** | **+0.5** |
| **NEST** | **Nestorio** | **1.31** | **150** | *e*Pn | **Pb** | **17 05 15.1** | **+0.5** |
| **BEY** | **Berane** | **1.33** | **350** | ⇓*i*Pg | **Pn** | **17 05 14.2** | **-0.7** |
| BEY | | | | *e*Sg | **Sn** | **17 05 34.6** | **+1.4** |
| **IVA** | **Berane** | **1.33** | **350** | ⇓*i*Pg | **Pn** | **17 05 14.2** | **-0.7** |
| IVA | | | | *e*Sg | **Sn** | **17 05 34.6** | **+1.4** |
| **NKME** | **Niksic** | **1.53** | **323** | ⇓*i*Pg | **Pn** | **17 05 17.7** | **+0.2** |
| NKME | | | | *e*Sg | **Sg** | **17 05 39.6** | **+1.2** |
| **NKME** | **Niksic** | **1.53** | **323** | ⇓*i*Pg | **Pn** | **17 05 17.7** | **+0.2** |
| NKME | | | | *e*Sg | **Sg** | **17 05 39.6** | **+1.2** |
| **NKY** | **Niksic** | **1.54** | **325** | ⇑*i*Pg | **Pb** | **17 05 18.2** | **-0.4** |
| NKY | | | | *e*Sg | **Sg** | **17 05 40.3** | **+1.3** |
| **NKY** | **Niksic** | **1.54** | **325** | ⇑*i*Pg | **Pb** | **17 05 18.2** | **-0.4** |
| NKY | | | | *e*Sg | **Sg** | **17 05 40.3** | **+1.3** |
| **HCY** | **Herceg Novi** | **1.55** | **306** | ⇑*i*Pg | **Pn** | **17 05 17.7** | **-0.1** |
| HCY | | | | *e*Sg | **Sg** | **17 05 40.7** | **+1.4** |
| **HCY** | **Herceg Novi** | **1.55** | **306** | ⇑*i*Pg | **Pn** | **17 05 17.7** | **-0.1** |
| HCY | | | | *e*Sg | **Sg** | **17 05 40.7** | **+1.4** |
| **SJES** | **Sjenica** | **1.71** | **354** | *e*Pg | **Pb** | **17 05 20.8** | **-0.7** |
| SJES | | | | *e*Sg | **Sb** | **17 05 43.6** | **+0.2** |
| **BARS** | **Barje** | **1.74** | **43** | *e*Pg | **Pb** | **17 05 22.0** | **+0.1** |
| BARS | | | | *e*Sg | **Sg** | **17 05 45.4** | **+0.1** |
| **BARS** | **Barje** | **1.74** | **43** | *e*Pg | **Pb** | **17 05 22.0** | **+0.1** |
| BARS | | | | *e*Sg | **Sg** | **17 05 45.4** | **+0.1** |
| **GRG** | **Griva** | **1.76** | **109** | *e*PG | **Pb** | **17 05 21.7** | **-0.6** |
| **SELS** | **Selova** | **1.80** | **22** | *e*Pg | **Pn** | **17 05 21.3** | **+0.1** |
| **BRY** | **Bratogost** | **1.83** | **318** | ⇓*i*Pn | **Pn** | **17 05 22.4** | **+0.7** |
| BRY | | | | *e*Sn | **Sb** | **17 05 47.2** | **+0.5** |
| **BRY** | **Bratogost** | **1.83** | **318** | ⇓*i*Pn | **Pn** | **17 05 22.4** | **+0.7** |
| BRY | | | | *e*Sn | **Sb** | **17 05 47.2** | **+0.5** |
| **UPM** | **Unac-Piva** | **1.91** | **330** | ⇓*i*Pn | **Pn** | **17 05 23.5** | **+0.7** |
| UPM | | | | *e*Sn | **Sb** | **17 05 48.8** | **-0.3** |
| **UPM** | **Unac-Piva** | **1.91** | **330** | ⇓*i*Pn | **Pn** | **17 05 23.5** | **+0.7** |
| UPM | | | | *e*Sn | **Sb** | **17 05 48.8** | **-0.3** |
| **IVAS** | **Ivanjica** | **2.02** | **359** | *e*Pn | **Pn** | **17 05 25.0** | **+0.7** |
| **IVAS** | **Ivanjica** | **2.02** | **359** | *e*Pn | **Pn** | **17 05 25.0** | **+0.7** |
| **IGT** | **Igoumenitsa** | **2.02** | **177** | *e*PG | **Pg** | **17 05 28.0** | **-0.2** |
| **IGT** | **Igoumenitsa** | **2.02** | **177** | *e*Pg | **Pg** | **17 05 28.0** | **-0.2** |
| **KNT** | **Kendrikon** | **2.07** | **100** | *e*PN | **Pb** | **17 05 26.3** | **-1.2** |
| **STON** | **Ston** | **2.28** | **306** | *e*Pn | **Pb** | **17 05 29.7** | **-1.3** |
| STON | | | | *e*Sg | **Sg** | **17 06 03.3** | **+0.8** |
| **STON** | **Ston** | **2.28** | **306** | *e*Pn | **Pb** | **17 05 29.7** | **-1.3** |
| STON | | | | *e*Sg | **Sg** | **17 06 03.3** | **+0.8** |
| **THL** | **Klokotos Trika** | **2.42** | **145** | *e*PB | **Pb** | **17 05 31.8** | **-1.7** |
| **THL** | **Klokotos Trika** | **2.42** | **145** | *e*Pb | **Pb** | **17 05 31.8** | **-1.7** |

*AUST* ***17*** *17:13:20.1±8.4,5.°22S×153.°97E,h1km±2km,Error ellipse: s-maj=4.1km s-min=1.4km az=239.0*
*IDC* ***17*** *17:13:26.8±0.8,5.°52S×153.°02E,h0km,mb3.9/9, mb1 4.1/10,mb1mx3.9/32,mbtmp4.0/10,ML3.5/1,MS3.1/1, Ms1 3.1/1,ms1mx2.5/24,Error ellipse: s-maj=28.4km s-min=19.5km az=101.0*
*ISCJB* ***17*** *17:13:30.2±0.7,5.°56S±0.°06×153.°1E±0.°1,h37km,mb3.9/9, MS2.9/1,Error ellipse: s-maj=14.8km s-min=9.2km az=2.0*
*NEIC* ***17*** *17:13:34.2±0.7,5.°63S×152.°89E,h55km,mb4.2/2,Error ellipse: s-maj=18.9km s-min=12.4km az=106.0*

**ISC 17 17:13:32.4±0.7,5.°57S±0.°08×153.°1E±0.°1,h37km,n28, σ1s32/27,mb3.9/9,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **1.63** | **327** | P | **Pn** | **17 13 58.4** | **-0.2** |
| | baz=2.1,SNR=148 | | | | | | |
| **PMG** | **Port Moresby** | **6.98** | **237** | *e*Pn | Pn | 17 15 08.5 | -3.6 |
| | 17nm,0.4s | | | | | | |
| PMG | | | | *e*Sn | **Sn** | **17 16 27.9** | **-2.4** |
| **MMPI** | **Merauke** | **12.91** | **256** | P | **Pn** | **17 16 33.0** | **-0.3** |
| | baz=14,SNR=7.1 | | | | | | |
| **MTSU** | **Mount Surprise** | **15.13** | **214** | P | **P** | **17 17 10.4** | **+2.2** |
| | baz=16,SNR=13 | | | | | | |
| **CTA** | **Charters Tower** | **15.88** | **204** | Pn | **Pn** | **17 17 13.7** | **+0.5** |
| | 0.1nm,0.3s,baz=51,slow=7.1,SNR=4.7 | | | | | | |
| **EIDS** | **Eidsvold** | **19.78** | **185** | P | **Pn** | **17 18 00.4** | **-0.8** |
| | baz=20,SNR=3.2 | | | | | | |
| **EIDS** | **Eidsvold** | **19.78** | **185** | *e*P | **Pn** | **17 18 00.4** | **-0.8** |
| | 12nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **19.82** | **220** | P | **Pn** | **17 18 00.8** | **-1.0** |
| | baz=21,SNR=5.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.90** | **143** | P | **P** | **17 18 11.2** | **-0.6** |
| | 4.3nm,0.6s,baz=174,slow=10,SNR=6.1 | | | | | | |
| **RMQ** | **Roma** | **21.20** | **191** | P | **P** | **17 18 15.7** | **+0.8** |
| | baz=22,SNR=7.1 | | | | | | |
| **KDU** | **Kakadu** | **21.51** | **249** | P | **P** | **17 18 20.0** | **+1.7** |
| | baz=22,SNR=9.1 | | | | | | |
| **QLP** | **Quilpie** | **22.53** | **201** | P | **P** | **17 18 29.6** | **+0.4** |
| | baz=23,SNR=5.7 | | | | | | |
| **MTN** | **Manton Dam** | **22.81** | **250** | P | **P** | **17 18 36.1** | **+3.9** |
| | baz=24,SNR=4.3 | | | | | | |
| **WRAB** | **Tennant Creek** | **23.13** | **230** | *e*P | **P** | **17 18 34.6** | **-0.9** |
| | 12nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.14** | **230** | P | **P** | **17 18 34.1** | **-1.5** |
| | 9.0nm,1.0s,baz=54,slow=10,SNR=28 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 22 24.1** | **+0.5** |
| | 1.1nm,0.8s,baz=42,slow=2.0,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **25.77** | **224** | P | **P** | **17 18 59.4** | **-0.5** |
| | 3.1nm,0.9s,baz=58,slow=9.1,SNR=44 | | | | | | |
| ASAR | | | | LR | LR | 17 28 53.0 | |
| | comp=Z,39nm,19.6s,baz=32,slow=36 | | | | | | |
| **KNRA** | **Kununurra** | **25.88** | **245** | P | P | 17 19 06.6 | +5.7 |
| | baz=27,SNR=9.8 | | | | | | |
| **WRKA** | **Warakurna** | **30.64** | **228** | P | **P** | **17 19 42.3** | **-1.1** |
| | baz=32,SNR=3.9 | | | | | | |
| **HTT** | **Hallett** | **30.68** | **204** | P | P | 17 19 38.7 | -5.1 |
| | baz=32,SNR=4.4 | | | | | | |
| **MEEK** | **Meekatharra** | **38.95** | **234** | P | **P** | **17 20 55.6** | **+0.5** |
| | baz=40,SNR=3.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.44** | **296** | P | **P** | **17 23 24.6** | **-0.3** |
| | 0.3nm,0.7s,baz=106,slow=5.7,SNR=3.7 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.59** | **3** | P | **P** | **17 23 25.2** | **-0.1** |
| | 3.4nm,0.6s,baz=168,slow=7.4,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **67.11** | **328** | P | **P** | **17 24 22.1** | **-0.2** |
| | 0.4nm,0.5s,baz=139,slow=5.0,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **81.07** | **319** | P | **P** | **17 25 44.4** | **+0.7** |
| | 0.3nm,0.5s,baz=98,slow=8.2,SNR=3.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.93** | **326** | P | **P** | **17 25 47.2** | **-0.9** |
| | 0.9nm,0.7s,baz=98,slow=5.3,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **82.77** | **22** | P | **P** | **17 25 51.1** | **-1.1** |
| | 0.4nm,0.7s,baz=232,slow=5.9,SNR=5.0 | | | | | | |
| **BDFB** | **Brasilia** | **150.34** | **136** | PKPbc | **PKPbc** | **17 33 22.2** | **+1.3** |
| | 2.2nm,0.6s,baz=265,slow=2.7,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.78** | **287** | PKPbc | **PKPbc** | **17 33 21.9** | **0.0** |
| | 1.5nm,0.6s,baz=83,slow=2.1,SNR=10 | | | | | | |

**IDC 17 17:16:19.0±3.8,4.°39S×151.°44E,h0km,mb3.5/2, mb1 3.8/2,mb1mx3.4/26,mbtmp3.6/2,Error ellipse: s-maj=150.5km s-min=50.2km az=118.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.72** | **226** | P | P | 17 21 23.9 | +1.0 |
| | 1.7nm,0.8s,baz=50,slow=10,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **25.56** | **220** | P | P | 17 21 48.7 | -1.2 |
| | 0.7nm,0.5s,baz=56,slow=9.1,SNR=5.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.89** | **288** | PKPbc | PKPbc | 17 36 09.7 | -0.2 |
| | 0.8nm,0.7s,baz=76,slow=1.4,SNR=3.6 | | | | | | |

**KRSC 17 17:23:43.5±1.0,54.°41N×161.°89E,h37km±7km,ML3.6, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKZ** | **Mys Kozlova** | **0.18** | **328** | *e*P | Pn | 17 23 51.0 | -2.5 |
| MKZ | | | | *e*S | Sn | 17 23 55.7 | -7.6 |
| **KZV** | **Kizimen** | **1.17** | **308** | *e*P | Pn | 17 24 04.5 | +1.0 |
| KZV | | | | *e*S | Sn | 17 24 19.5 | +1.2 |
| **TUMR** | **Tumrok** | **1.34** | **312** | *e*P | Pn | 17 24 07.3 | +1.5 |
| **KII** | **Karymskiy** | **1.48** | **257** | *e*P | Pn | 17 24 09.8 | +2.1 |
| **KMNR** | **Kamenistaya** | **1.66** | **326** | *e*P | Pn | 17 24 12.4 | +2.3 |
| **SPN** | **Mys Shipunski** | **1.72** | **221** | *e*P | Pn | 17 24 11.6 | +0.8 |
| SPN | | | | *e*S | Sn | 17 24 32.6 | +1.1 |
| **KBTR** | **Krutoberegovo** | **1.88** | **16** | *e*P | Pn | 17 24 15.3 | +2.2 |
| KBTR | | | | *e*S | Sn | 17 24 39.1 | +3.5 |
| **SDLR** | **Sedlovina** | **2.11** | **239** | *e*P | Pn | 17 24 19.0 | +2.6 |
| SDLR | | | | *e*S | Sn | 17 24 44.5 | +3.0 |
| **SMAR** | **Somma** | **2.16** | **239** | *e*P | Pn | 17 24 19.7 | +2.5 |
| SMAR | | | | *e*S | Sn | 17 24 46.2 | +3.3 |
| **UGLR** | **Uglovaya** | **2.18** | **238** | *e*P | Pn | 17 24 19.9 | +2.6 |
| UGLR | | | | *e*S | Sn | 17 24 45.5 | +2.3 |
| **KRX** | **Arik** | **2.19** | **243** | *e*P | Pn | 17 24 20.2 | +2.7 |
| KRX | | | | *e*S | Sn | 17 24 47.6 | +4.2 |
| **AVH** | **Avacha** | **2.19** | **240** | *e*P | Pn | 17 24 20.6 | +3.1 |
| AVH | | | | *e*S | Sn | 17 24 47.3 | +3.9 |
| **KOK** | **Koryaka** | **2.23** | **241** | *e*P | Pn | 17 24 20.9 | +2.9 |
| KOK | | | | *e*S | Sn | 17 24 47.9 | +3.6 |
| **PET** | **Petropavlovsk** | **2.37** | **236** | *e*P | Pn | 17 24 22.3 | +2.5 |
| PET | | | | *e*S | Sn | 17 24 50.9 | +3.3 |
| **ESO** | **Esso** | **2.38** | **311** | *e*P | Pn | 17 24 21.9 | +1.9 |
| ESO | | | | *e*S | Sn | 17 24 49.9 | +1.9 |
| **GNL** | **Ganaly** | **2.44** | **255** | *e*P | Pn | 17 24 23.9 | +3.0 |
| **RUS** | **Russkaya** | **2.83** | **227** | *e*P | Pn | 17 24 28.2 | +2.1 |
| RUS | | | | *e*S | Sn | 17 25 02.4 | +3.6 |
| **MTVR** | **Mutnovka** | **2.94** | **231** | *e*P | Pn | 17 24 31.2 | +3.4 |
| **ASAK** | **Asacha** | **3.13** | **231** | *e*P | Pn | 17 24 34.2 | +3.8 |
| **APC** | **Apacha** | **3.18** | **244** | *e*P | Pn | 17 24 35.1 | +4.1 |
| APC | | | | *e*S | Sn | 17 25 13.6 | +6.0 |

*NEIC* ***17*** *17:39:47.2,17.°57N×61.°72W,h20km,MD4.1(TRN),After TRN.*

**TRN 17 17:39:46.7,17.°58N×61.°69W,h21km,MD4.1,2C-9D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANWB** | **Willy Bob** | **0.12** | **313** | *e*P | Pb | 17 39 52.8 | -0.1 |
| **ANWB** | **Willy Bob** | **0.12** | **313** | *i* Pg | Pb | 17 39 53.1 | +0.2 |
| ANWB | | | | *e*Sg | Sb | 17 39 57.3 | 0.0 |
| **BPA** | **Boggy Peak** | **0.56** | **197** | *e*P | Pn | 17 39 59.8 | +0.2 |
| BPA | | | | *e*S | Sn | 17 40 09.2 | +1.0 |
| **BPA** | **Boggy Peak** | **0.56** | **197** | *e*P | Pn | 17 39 59.8 | +0.2 |
| BPA | | | | *e*S | Sn | 17 40 09.2 | +1.0 |
| **NEV** | **Hard Times** | **0.95** | **242** | ⇓*i*P | Pn | 17 40 06.4 | +1.5 |
| NEV | | | | *e*S | Sn | 17 40 20.5 | +2.6 |
| **NEV** | **Hard Times** | **0.95** | **242** | ⇓*i*P | Pn | 17 40 06.4 | +1.5 |
| NEV | | | | *e*S | Sn | 17 40 20.5 | +2.6 |
| **NVRH** | **Round Hill, Ne** | **0.96** | **246** | ⇓*i*P | Pn | 17 40 07.4 | +2.4 |
| **MBWH** | | **0.96** | **210** | *e*P | Pn | 17 40 06.4 | +1.3 |
| MBWH | | | | *e*S | Sn | 17 40 21.9 | +3.7 |
| **MLYT** | **Lee's Yard** | **0.98** | **209** | ⇓*i*P | Pn | 17 40 07.1 | +1.7 |
| MLYT | | | | *e*S | Sn | 17 40 22.0 | +3.3 |
| **NVBH** | **Bath Hotel, Ne** | **1.00** | **242** | *e*P | Pn | 17 40 08.1 | +2.6 |
| **SKI** | **Saint Kitts** | **1.03** | **256** | ⇓*i*P | Pn | 17 40 07.2 | +1.2 |
| SKI | | | | *e*S | Sn | 17 40 22.3 | +2.4 |
| **SKI** | **Saint Kitts** | **1.03** | **256** | ⇓*i*P | Pn | 17 40 07.2 | +1.2 |
| **SKDB** | **Saint Kitts 2** | **1.08** | **260** | *e*P | Pb | 17 40 08.9 | +2.2 |
| SKDB | | | | *e*S | Sn | 17 40 24.6 | +3.5 |
| **SKDB** | **Saint Kitts 2** | **1.08** | **260** | *e*P | Pb | 17 40 08.9 | +2.2 |
| **BSK** | **Brimstone Hill** | **1.12** | **258** | ⇓*i*P | Pb | 17 40 08.1 | +0.7 |
| BSK | | | | *e*S | Sn | 17 40 24.9 | +2.8 |
| **BSK** | **Brimstone Hill** | **1.12** | **258** | ⇓*i*P | Pb | 17 40 08.1 | +0.7 |
| **SEG** | **Port Louis** | **1.19** | **171** | *e*P | Pb | 17 40 09.2 | +0.7 |
| **SEUS** | **St. Eustatius** | **1.23** | **266** | *e*P | Pb | 17 40 10.0 | +0.7 |
| SEUS | | | | *e*S | Sn | 17 40 27.2 | +2.4 |
| **SEUS** | **St. Eustatius** | **1.23** | **266** | *e*P | Pb | 17 40 10.0 | +0.7 |
| **DEG** | **La Desirade** | **1.40** | **154** | *e*P | Pb | 17 40 12.7 | +0.4 |
| DEG | | | | *e*S | Sb | 17 40 32.4 | +2.7 |
| **DEG** | **La Desirade** | **1.40** | **154** | *e*P | Pb | 17 40 12.7 | +0.4 |
| **LZG** | **Guadaloupe-1** | **1.44** | **183** | ⇓*e*P | Pb | 17 40 13.0 | +0.2 |
| **SABA** | **Saba** | **1.48** | **272** | *e*P | Pb | 17 40 14.2 | +0.6 |
| SABA | | | | *e*S | Sb | 17 40 34.2 | +2.2 |
| **SABA** | **Saba** | **1.48** | **272** | *e*P | Pb | 17 40 14.2 | +0.6 |
| SABA | | | | *e*S | Sb | 17 40 34.2 | +2.2 |
| **SSG** | **Sans Toucher** | **1.49** | **180** | ⇑*i*P | Pb | 17 40 13.9 | +0.1 |
| **MLG** | **Mont-d'or** | **1.51** | **181** | *e*P | Pb | 17 40 14.5 | +0.2 |
| **FNG** | **Fond-Bernard** | **1.52** | **180** | *e*P | Pb | 17 40 14.1 | -0.1 |
| **CRG** | **Carmichael** | **1.52** | **179** | *e*P | Pb | 17 40 14.1 | -0.4 |
| **ECG** | **Echelle** | **1.53** | **179** | *e*P | Pb | 17 40 14.5 | -0.2 |
| **DOG** | **Dongo Capester** | **1.54** | **177** | *e*P | Pb | 17 40 14.8 | +0.1 |
| **PHG** | **Guadaloupe-2** | **1.56** | **178** | ⇓*e*P | Pb | 17 40 15.0 | -0.1 |
| **HMG** | **Houelmont** | **1.59** | **180** | *e*P | Pb | 17 40 15.7 | +0.2 |
| **MGG** | **Marie-Galante** | **1.69** | **168** | *e*P | Pb | 17 40 17.3 | +0.1 |
| **MGG** | **Marie-Galante** | **1.69** | **168** | *e*P | Pb | 17 40 17.3 | +0.1 |
| **TBG** | **Guadaloupe-3** | **1.72** | **179** | *e*P | Pb | 17 40 17.3 | -0.4 |
| TBG | | | | *e*S | Sb | 17 40 39.6 | +0.7 |
| **BBL** | **Barber's Block** | **2.06** | **174** | *e*P | Pb | 17 40 22.3 | -1.1 |
| **DLPL** | **La Plaine** | **2.28** | **169** | *e*P | Pn | 17 40 24.9 | +1.7 |
| DLPL | | | | *e*S | Sb | 17 40 53.2 | -1.8 |
| **PCM** | **Pelee Case Pet** | **2.79** | **170** | *e*P | Pn | 17 40 32.0 | +1.8 |
| **PCM** | **Pelee Case Pet** | **2.79** | **170** | *e*P | Pn | 17 40 32.2 | +1.9 |
| **BAMF** | **Morne Balai** | **2.80** | **169** | *e*P | Pn | 17 40 32.5 | +2.0 |
| **CXM** | **Morne La Croix** | **2.80** | **170** | *e*P | Pn | 17 40 32.5 | +1.9 |
| **GBMF** | **Grand Be** | **2.82** | **170** | *e*P | Pn | 17 40 32.3 | +1.6 |
| **PML** | **Morne Lenard** | **2.83** | **170** | *e*P | Pn | 17 40 32.5 | +1.7 |
| **FDF** | **Fort de France** | **2.88** | **170** | *e*P | Pn | 17 40 33.3 | +1.8 |
| FDF | | | | *e*S | Sn | 17 41 07.8 | +2.1 |
| **FDF** | **Fort de France** | **2.88** | **170** | *e*Pn | Pn | 17 40 32.1 | +0.5 |
| **ZAM** | **Aeronautique** | **3.06** | **168** | *e*P | Pn | 17 40 35.4 | +1.4 |
| **LPMF** | **Morne Lapointe** | **3.07** | **167** | *e*P | Pn | 17 40 35.2 | +1.1 |
| **STVI** | **Saint Thomas** | **3.20** | **284** | *e*Pn | Pn | 17 40 35.5 | -0.3 |
| STVI | | | | *e*Sn | Sn | 17 41 15.1 | +1.7 |
| **MCLT** | **Moule a Chique** | **3.92** | **169** | *e*P | Pn | 17 40 48.8 | +3.0 |
| MCLT | | | | *e*S | Sn | 17 41 32.8 | +1.6 |
| **SJG** | **San Juan** | **4.28** | **278** | *e*Pn | Pn | 17 40 52.3 | +1.6 |
| SJG | | | | *e*Sn | Sn | 17 41 41.7 | +1.7 |
| **CELP** | **Cerrillos** | **4.68** | **277** | *e*Pn | Pn | 17 40 56.4 | +0.1 |
| CELP | | | | *e*Sn | Sn | 17 41 53.0 | +3.0 |
| **OBIP** | **Obispado Ponce** | **4.71** | **276** | *e*Pn | Pn | 17 40 57.2 | +0.7 |
| OBIP | | | | *e*Sn | Sn | 17 41 52.5 | +1.9 |
| **SDDR** | **Presa de Saban** | **9.22** | **280** | *e*Pn | Pn | 17 42 00.1 | +1.4 |
| | 9.3nm,0.4s | | | | | | |

*BJI* ***17*** *17:55:01.8,39.°83N×20.°57E,h4km,mb4.7/32,mB5.0/21, Ms4.9/14,Ms7 4.5/13*
*IDC* ***17*** *17:55:02.3±0.4,39.°42N×20.°60E,h0km,mb4.6/29, mb1 4.6/43,mb1mx4.6/52,mbtmp4.5/43,ML4.3/14, MS3.7/24,Ms1 3.7/24,ms1mx3.5/44,Error ellipse: s-maj=9.6km s-min=9.3km az=60.0*
*MOS* ***17*** *17:55:04.9±1.2,39.°46N×20.°54E,h24km,mb4.9/37,Error ellipse: s-maj=5.6km s-min=3.3km az=91.2*
*SKO* ***17*** *17:55:04.2,38.°97N×20.°45E,h55km,M3.9,ML4.8*
*PDG* ***17*** *17:55:04.6±0.6,39.°37N×20.°51E,h8km±1km,MD4.5/3, ML4.5/10,Error ellipse: s-maj=0.5km s-min=0.4km az=90.0*
*ISCJB* ***17*** *17:55:04.6±0.2,39.°382N±0.°010×20.°45E±0.°01, h19km±2km,mb4.7/71,MS3.7/19,Error ellipse: s-maj=1.8km s-min=1.2km az=35.9*
*HLW* ***17*** *17:55:05.1,39.°38N×21.°14E,h25km±13km,Md4.5,Ml4.1*
*CSEM* ***17*** *17:55:05.5±0.1,39.°36N×20.°48E,h15km,mb4.8/25,Error ellipse: s-maj=2.2km s-min=1.5km az=43.0*
*SFS* ***17*** *17:55:05.0,39.°32N×20.°63E,h16km,ML4.8*
*THE* ***17*** *17:55:05.1,39.°

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **MAKR** | **Makrakomi, Fth** | **1.26** | **107** | *e*PN | **Pb** | 17 55 28.8 | +0.1 |
| MAKR | | | | *e*SN | **Sg** | 17 55 46.9 | +0.9 |
| **MAKR** | **Makrakomi, Fth** | **1.26** | **107** | P | **Pn** | 17 55 27.4 | -0.9 |
| MAKR | | | | S | **Sg** | 17 55 47.0 | +0.9 |
| **MAKR** | **Makrakomi, Fth** | **1.26** | **107** | P | **Pn** | 17 55 27.9 | -0.4 |
| **MAKR** | **Makrakomi, Fth** | **1.26** | **107** | *e*Pn | **Pb** | 17 55 28.8 | +0.1 |
| MAKR | | | | *e*Sn | **Sg** | 17 55 46.9 | +0.9 |
| MAKR | | | | S | **Sn** | 17 55 48.3 | +3.4 |
| **KFL** | **Anninata** | **1.29** | **173** | *e*PN | **Pb** | 17 55 28.8 | -0.4 |
| **KFL** | **Anninata** | **1.29** | **173** | P | **Pn** | 17 55 27.9 | -0.8 |
| KFL | | | | S | **Sg** | 17 55 48.3 | +1.4 |
| **KFL** | **Anninata** | **1.29** | **173** | P | **Pn** | 17 55 28.4 | -0.3 |
| **KFL** | **Anninata** | **1.29** | **173** | *e*Pn | **Pb** | 17 55 28.8 | -0.4 |
| KFL | | | | S | **Sg** | 17 55 48.9 | +2.0 |
| **KZN** | **Kozani** | **1.29** | **45** | *e*PN | **Pb** | 17 55 29.9 | +0.6 |
| KZN | | | | *e*SN | **Sg** | 17 55 48.6 | +1.4 |
| **KZN** | **Kozani** | **1.29** | **45** | P | **Pn** | 17 55 29.2 | +0.4 |
| KZN | | | | S | **Sg** | 17 55 48.3 | +1.1 |
| **KZN** | **Kozani** | **1.29** | **45** | P | **Pn** | 17 55 29.2 | +0.4 |
| **KZN** | **Kozani** | **1.29** | **45** | *e*Pn | **Pb** | 17 55 29.9 | +0.6 |
| KZN | | | | S | **Sg** | 17 55 48.3 | +1.1 |
| KZN | | | | *e*Sn | **Sg** | 17 55 48.6 | +1.4 |
| **AXS** | **Araxos** | **1.34** | **152** | P | **Pn** | 17 55 29.0 | -0.4 |
| **AXS** | **Araxos** | **1.34** | **152** | P | **Pn** | 17 55 29.0 | -0.4 |
| **AGG** | **Agios Georgios** | **1.41** | **105** | *e*PN | **Pg** | 17 55 31.9 | -0.5 |
| AGG | | | | *e*SN | **Sg** | 17 55 50.0 | -0.7 |
| **AGG** | **Agios Georgios** | **1.41** | **105** | P | **Pn** | 17 55 29.9 | -0.4 |
| AGG | | | | S | **Sg** | 17 55 50.9 | +0.2 |
| **AGG** | **Agios Georgios** | **1.41** | **105** | P | **Pn** | 17 55 29.9 | -0.4 |
| **AGG** | **Agios Georgios** | **1.41** | **105** | *e*Pn | **Pg** | 17 55 31.9 | -0.5 |
| AGG | | | | *e*Sn | **Sg** | 17 55 50.0 | -0.7 |
| AGG | | | | S | **Sg** | 17 55 50.9 | +0.2 |
| **EFP** | **Efpalio** | **1.41** | **133** | *e*PN | **Pg** | 17 55 31.7 | -0.8 |
| EFP | | | | *e*SN | **Sg** | 17 55 50.5 | -0.3 |
| **EFP** | **Efpalio** | **1.41** | **133** | P | **Pb** | 17 55 30.9 | -0.3 |
| **EFP** | **Efpalio** | **1.41** | **133** | P | **Pb** | 17 55 30.9 | -0.3 |
| **EFP** | **Efpalio** | **1.41** | **133** | *e*Pn | **Pg** | 17 55 31.7 | -0.8 |
| EFP | | | | *e*Sn | **Sg** | 17 55 50.5 | -0.3 |
| **UPR** | **University Cam** | **1.45** | **139** | *e*PN | **Pg** | 17 55 33.0 | -0.3 |
| UPR | | | | *e*SN | **Sg** | 17 55 52.8 | +0.7 |
| **UPR** | **University Cam** | **1.45** | **139** | P | **Pg** | 17 55 32.9 | -0.3 |
| **UPR** | **University Cam** | **1.45** | **139** | P | **Pg** | 17 55 32.9 | -0.3 |
| UPR | | | | *e*Sn | **Sg** | 17 55 52.8 | +0.7 |
| **RLS** | **Riolos of Patr** | **1.50** | **152** | *e*PN | **Pb** | 17 55 32.9 | +0.2 |
| RLS | | | | *e*SN | **Sg** | 17 55 53.7 | +0.1 |
| **RLS** | **Riolos of Patr** | **1.50** | **152** | P | **Pn** | 17 55 31.5 | 0.0 |
| RLS | | | | S | **Sg** | 17 55 53.8 | +0.1 |
| **RLS** | **Riolos of Patr** | **1.50** | **152** | P | **Pn** | 17 55 31.5 | 0.0 |
| **RLS** | **Riolos of Patr** | **1.50** | **152** | *e*Pn | **Pb** | 17 55 32.9 | +0.2 |
| RLS | | | | *e*Sn | **Sg** | 17 55 53.7 | +0.1 |
| **SERG** | **Sergoula** | **1.51** | **130** | P | **Pb** | 17 55 32.8 | -0.1 |
| **SERG** | **Sergoula** | **1.51** | **130** | P | **Pb** | 17 55 32.8 | -0.1 |
| **FNA** | **Florina** | **1.52** | **23** | *e*PN | **Pb** | 17 55 33.7 | +0.5 |
| FNA | | | | *e*SN | **Sg** | 17 55 54.2 | -0.1 |
| **FNA** | **Florina** | **1.52** | **23** | P | **Pn** | 17 55 32.3 | +0.4 |
| FNA | | | | S | **Sg** | 17 55 53.7 | -0.6 |
| **FNA** | **Florina** | **1.52** | **23** | P | **Pn** | 17 55 32.3 | +0.4 |
| **FNA** | **Florina** | **1.52** | **23** | *e*Pn | **Pb** | 17 55 33.7 | +0.5 |
| FNA | | | | S | **Sg** | 17 55 53.7 | -0.6 |
| FNA | | | | *e*Sn | **Sg** | 17 55 54.2 | -0.1 |
| **VTN** | **Vitineika** | **1.54** | **162** | *e*PN | **Pg** | 17 55 34.0 | -1.0 |
| **VTN** | **Vitineika** | **1.54** | **162** | *e*Pn | **Pg** | 17 55 34.0 | -1.0 |
| **KALE** | **Kalithea** | **1.57** | **129** | *e*PN | **Pg** | 17 55 35.1 | -0.4 |
| KALE | | | | *e*SN | **Sg** | 17 55 56.7 | +0.7 |
| **KALE** | **Kalithea** | **1.57** | **129** | P | **Pb** | 17 55 33.4 | -0.6 |
| **KALE** | **Kalithea** | **1.57** | **129** | P | **Pb** | 17 55 33.4 | -0.6 |
| **KALE** | **Kalithea** | **1.57** | **129** | *e*Pn | **Pg** | 17 55 35.1 | -0.4 |
| **LAKA** | **Lakka** | **1.58** | **136** | *e*PN | **Pg** | 17 55 35.0 | -0.8 |
| **LAKA** | **Lakka** | **1.58** | **136** | P | **Pn** | 17 55 32.5 | -0.2 |
| **LAKA** | **Lakka** | **1.58** | **136** | P | **Pn** | 17 55 32.5 | -0.2 |
| **LAKA** | **Lakka** | **1.58** | **136** | *e*Pn | **Pg** | 17 55 35.0 | -0.8 |
| **LIT** | **Litokhoron** | **1.63** | **64** | *e*PN | **Pb** | 17 55 35.3 | +0.2 |
| LIT | | | | *e*SN | **Sg** | 17 55 57.6 | -0.3 |
| **LIT** | **Litokhoron** | **1.63** | **64** | P | **Pn** | 17 55 33.8 | +0.4 |
| **LIT** | **Litokhoron** | **1.63** | **64** | P | **Pn** | 17 55 33.8 | +0.4 |
| **LIT** | **Litokhoron** | **1.63** | **64** | *e*Pn | **Pb** | 17 55 35.3 | +0.2 |
| **DRO** | **Drossia** | **1.69** | **148** | *e*PN | **Pb** | 17 55 35.9 | 0.0 |
| **DRO** | **Drossia** | **1.69** | **148** | P | **Pn** | 17 55 34.6 | +0.5 |
| **DRO** | **Drossia** | **1.69** | **148** | P | **Pn** | 17 55 34.6 | +0.5 |
| **DRO** | **Drossia** | **1.69** | **148** | *e*Pn | **Pb** | 17 55 35.9 | 0.0 |
| **OHR** | **Ohrid** | **1.73** | **5** | *i* Pn | **Pg** | 17 55 37.7 | -0.9 |
| OHR | | | | *i* Sn | **Sg** | 17 56 01.5 | +0.5 |
| OHR | | | | *e*Lg | Lg | 17 56 07.0 | |
| | comp=E,7µm,0.7s | | | | | | |
| OHR | | | | *e*Lg | Lg | 17 56 10.6 | |
| | comp=N,6µm,1.1s | | | | | | |
| **OHR** | **Ohrid** | **1.73** | **5** | *i* Pn | **Pg** | 17 55 37.6 | -0.9 |
| OHR | | | | *i* Sn | **Sg** | 17 56 01.5 | +0.5 |
| OHR | | | | *e*Lg | Lg | 17 56 06.9 | |
| | comp=N,7µm,0.7s | | | | | | |
| **AXAR** | **Agios Charalam** | **1.73** | **110** | *e*PN | **Pg** | 17 55 37.7 | -0.9 |
| AXAR | | | | *e*SN | **Sg** | 17 56 01.1 | 0.0 |
| **AXAR** | **Agios Charalam** | **1.73** | **110** | P | **Pb** | 17 55 36.2 | -0.5 |
| **AXAR** | **Agios Charalam** | **1.73** | **110** | P | **Pb** | 17 55 36.2 | -0.5 |
| **AXAR** | **Agios Charalam** | **1.73** | **110** | *e*Pn | **Pg** | 17 55 37.7 | -0.9 |
| **DESF** | **Desfina** | **1.81** | **122** | *e*PN | **Pb** | 17 55 38.2 | +0.2 |
| DESF | | | | *e*SN | **Sg** | 17 56 02.5 | -1.0 |
| **DESF** | **Desfina** | **1.81** | **122** | *e*Pn | **Pb** | 17 55 38.2 | +0.2 |
| **KLV** | **Kalavryta, Ach** | **1.82** | **137** | *e*PN | **Pb** | 17 55 38.6 | +0.3 |
| KLV | | | | *e*SN | **Sb** | 17 56 02.2 | +1.4 |
| **KLV** | **Kalavryta, Ach** | **1.82** | **137** | P | **Pb** | 17 55 37.6 | -0.7 |
| KLV | | | | S | **Sg** | 17 56 03.0 | -0.9 |
| **KLV** | **Kalavryta, Ach** | **1.82** | **137** | P | **Pb** | 17 55 37.6 | -0.7 |
| **KLV** | **Kalavryta, Ach** | **1.82** | **137** | *e*Pn | **Pb** | 17 55 38.6 | +0.3 |
| KLV | | | | *e*Sn | **Sb** | 17 56 02.2 | +1.4 |
| **FYTO** | **Fytoko, Volos** | **1.83** | **89** | P | **Pn** | 17 55 37.1 | +1.1 |
| FYTO | | | | S | **Sb** | 17 56 01.6 | +0.7 |
| **FYTO** | **Fytoko, Volos** | **1.83** | **89** | P | **Pn** | 17 55 37.1 | +1.1 |
| FYTO | | | | S | **Sb** | 17 56 01.6 | +0.7 |
| **GUR** | **Goura** | **2.00** | **136** | *e*PN | **Pb** | 17 55 41.0 | -0.4 |
| **GUR** | **Goura** | **2.00** | **136** | P | **Pb** | 17 55 40.8 | -0.6 |
| **GUR** | **Goura** | **2.00** | **136** | P | **Pb** | 17 55 40.8 | -0.6 |
| **ATAL** | **Atalanti** | **2.02** | **109** | P | **Pb** | 17 55 40.7 | -1.0 |
| **ATAL** | **Atalanti** | **2.02** | **109** | P | **Pb** | 17 55 40.7 | -1.0 |
| **LKR** | **Lokris** | **2.02** | **111** | *e*PN | **Pb** | 17 55 41.4 | -0.3 |
| LKR | | | | *e*SN | **Sb** | 17 56 07.6 | +1.0 |
| **LKR** | **Lokris** | **2.02** | **111** | P | **Pb** | 17 55 40.6 | -1.1 |
| **LKR** | **Lokris** | **2.02** | **111** | P | **Pb** | 17 55 40.6 | -1.1 |
| **LKR** | **Lokris** | **2.02** | **111** | *e*Pn | **Pb** | 17 55 41.4 | -0.3 |
| **TIR** | **Tirane** | **2.03** | **345** | *e*PN | **Pb** | 17 55 41.0 | -0.8 |
| **TIR** | **Tirane** | **2.03** | **345** | *e*P | **Pb** | 17 55 41.4 | -0.4 |
| TIR | | | | *e* | | 17 56 04.7 | |
| **TIR** | **Tirane** | **2.03** | **345** | *e*PN | **Pb** | 17 55 41.5 | -0.4 |
| TIR | | | | *e*SN | **Sb** | 17 56 07.0 | +0.1 |
| **TIR** | **Tirane** | **2.03** | **345** | *e*Pn | **Pb** | 17 55 41.4 | -0.4 |
| TIR | | | | *e*Sn | **Sn** | 17 56 04.7 | +0.8 |
| **TIR** | **Tirane** | **2.03** | **345** | *e*Pn | **Pb** | 17 55 41.0 | -0.8 |
| **TIR** | **Tirane** | **2.03** | **345** | *e*P | **Pb** | 17 55 41.4 | -0.4 |
| TIR | | | | *e*S | **Sn** | 17 56 04.7 | +0.8 |
| **NEO** | **Neokhori** | **2.05** | **91** | *e*PB | **Pn** | 17 55 40.5 | +1.4 |
| NEO | | | | *e*SN | **Sb** | 17 56 08.8 | +1.4 |
| **NEO** | **Neokhori** | **2.05** | **91** | P | **Pn** | 17 55 40.2 | +1.1 |
| NEO | | | | S | **Sb** | 17 56 07.2 | -0.2 |
| **NEO** | **Neokhori** | **2.05** | **91** | P | **Pn** | 17 55 40.2 | +1.1 |
| **NEO** | **Neokhori** | **2.05** | **91** | *e*Pb | **Pn** | 17 55 40.5 | +1.4 |
| NEO | | | | S | **Sb** | 17 56 07.2 | -0.2 |
| **AMT** | **Artemida-Makis** | **2.05** | **154** | *e*PN | **Pb** | 17 55 41.1 | -1.2 |
| **AMT** | **Artemida-Makis** | **2.05** | **154** | P | **Pb** | 17 55 41.1 | -1.2 |
| **AMT** | **Artemida-Makis** | **2.05** | **154** | P | **Pb** | 17 55 41.1 | -1.2 |
| **GRG** | **Griva** | **2.10** | **41** | *e*PN | **Pb** | 17 55 42.2 | -0.8 |
| GRG | | | | *e*SN | **Sb** | 17 56 09.4 | +0.7 |
| **GRG** | **Griva** | **2.10** | **41** | P | **Pn** | 17 55 40.8 | +1.0 |
| GRG | | | | S | **Sb** | 17 56 09.1 | +0.4 |
| **GRG** | **Griva** | **2.10** | **41** | P | **Pn** | 17 55 40.8 | +1.0 |
| **GRG** | **Griva** | **2.10** | **41** | *e*Pn | **Pb** | 17 55 42.2 | -0.8 |
| GRG | | | | S | **Sb** | 17 56 09.1 | +0.4 |
| GRG | | | | *e*Sn | **Sb** | 17 56 09.4 | +0.7 |
| **SMIA** | **Simia** | **2.10** | **103** | *e*PN | **Pb** | 17 55 43.1 | 0.0 |
| **SMIA** | **Simia** | **2.10** | **103** | P | **Pb** | 17 55 41.6 | -1.5 |
| **SMIA** | **Simia** | **2.10** | **103** | P | **Pb** | 17 55 41.6 | -1.5 |
| **SMIA** | **Simia** | **2.10** | **103** | *e*Pn | **Pb** | 17 55 43.1 | 0.0 |
| **THAL** | **Thalero** | **2.12** | **129** | *e*PN | **Pb** | 17 55 41.8 | -1.4 |
| **THAL** | **Thalero** | **2.12** | **129** | P | **Pb** | 17 55 41.6 | -1.6 |
| **THAL** | **Thalero** | **2.12** | **129** | P | **Pb** | 17 55 41.6 | -1.6 |
| **SFD** | **Strofades** | **2.16** | **171** | *e*PN | **Pb** | 17 55 43.5 | -0.6 |
| SFD | | | | *e*SN | **Sb** | 17 56 10.4 | -0.2 |
| **SFD** | **Strofades** | **2.16** | **171** | *e*Pn | **Pb** | 17 55 43.5 | -0.6 |
| SFD | | | | *e*Sn | **Sb** | 17 56 10.4 | -0.2 |
| **THE** | **Thessaloniki** | **2.21** | **55** | *e*PN | **Pb** | 17 55 43.7 | -1.2 |
| THE | | | | *e*SN | **Sb** | 17 56 12.2 | +0.2 |
| **THE** | **Thessaloniki** | **2.21** | **55** | P | **Pn** | 17 55 42.5 | +1.2 |
| THE | | | | S | **Sb** | 17 56 11.5 | -0.5 |
| **THE** | **Thessaloniki** | **2.21** | **55** | P | **Pn** | 17 55 42.5 | +1.2 |
| **THE** | **Thessaloniki** | **2.21** | **55** | *e*Pn | **Pb** | 17 55 43.7 | -1.2 |
| THE | | | | S | **Sb** | 17 56 11.5 | -0.5 |
| THE | | | | *e*Sn | **Sb** | 17 56 12.2 | +0.2 |
| **SKIA** | **Skiathos** | **2.25** | **95** | *e*PB | **Pn** | 17 55 43.7 | +1.8 |
| **SKIA** | **Skiathos** | **2.25** | **95** | P | **Pn** | 17 55 42.6 | +0.7 |
| **SKIA** | **Skiathos** | **2.25** | **95** | P | **Pn** | 17 55 42.6 | +0.7 |
| **SKIA** | **Skiathos** | **2.25** | **95** | *e*Pb | **Pn** | 17 55 43.7 | +1.8 |
| **HORT** | **Hortiatis** | **2.28** | **57** | *e*PB | **Pn** | 17 55 44.1 | +1.8 |
| HORT | | | | *e*SN | **Sb** | 17 56 14.1 | 0.0 |
| **HORT** | **Hortiatis** | **2.28** | **57** | P | **Pn** | 17 55 43.0 | +0.7 |
| HORT | | | | S | **Sb** | 17 56 13.1 | -1.0 |
| **HORT** | **Hortiatis** | **2.28** | **57** | P | **Pn** | 17 55 43.0 | +0.7 |
| **HORT** | **Hortiatis** | **2.28** | **57** | *e*Pb | **Pn** | 17 55 44.1 | +1.8 |
| HORT | | | | S | **Sb** | 17 56 13.1 | -1.0 |
| HORT | | | | *e*Sn | **Sb** | 17 56 14.1 | 0.0 |
| **LTK** | **Loutraki** | **2.31** | **125** | *e*PB | **Pn** | 17 55 44.5 | +1.8 |
| **LTK** | **Loutraki** | **2.31** | **125** | P | **Pn** | 17 55 44.2 | +1.5 |
| **LTK** | **Loutraki** | **2.31** | **125** | P | **Pn** | 17 55 44.2 | +1.5 |
| **LTK** | **Loutraki** | **2.31** | **125** | *e*Pb | **Pn** | 17 55 44.5 | +1.8 |
| **VIL2** | **Platees** | **2.41** | **118** | *e*PB | **Pb** | 17 55 46.5 | -1.7 |
| **PLG** | **Polygyros** | **2.41** | **65** | *e*PN | **Pn** | 17 55 45.6 | +1.5 |
| PLG | | | | *e*SN | **Sn** | 17 56 15.5 | +2.1 |
| **PLG** | **Polygyros** | **2.41** | **65** | P | **Pn** | 17 55 44.9 | +0.8 |
| PLG | | | | S | **Sn** | 17 56 16.0 | +2.6 |
| **PLG** | **Polygyros** | **2.41** | **65** | P | **Pn** | 17 55 44.9 | +0.8 |
| **PLG** | **Polygyros** | **2.41** | **65** | *e*Pn | **Pn** | 17 55 45.6 | +1.5 |
| PLG | | | | *e*Sn | **Sn** | 17 56 15.5 | +2.1 |
| PLG | | | | S | **Sn** | 17 56 16.0 | +2.6 |
| **MRKA** | **Markates** | **2.44** | **105** | *e*PN | **Pb** | 17 55 46.8 | -2.0 |
| MRKA | | | | *e*SN | **Sb** | 17 56 18.0 | -0.6 |
| **MRKA** | **Markates** | **2.44** | **105** | P | **Pn** | 17 55 46.5 | +2.0 |
| MRKA | | | | S | **Sb** | 17 56 17.1 | -1.5 |
| **MRKA** | **Markates** | **2.44** | **105** | P | **Pn** | 17 55 46.5 | +2.0 |
| **MRKA** | **Markates** | **2.44** | **105** | *e*Pn | **Pb** | 17 55 46.8 | -2.0 |
| MRKA | | | | S | **Sb** | 17 56 17.1 | -1.5 |
| MRKA | | | | *e*Sn | **Sb** | 17 56 18.0 | -0.6 |
| **ITM** | **Ithomi** | **2.45** | **154** | *e*PB | **Pn** | 17 55 46.5 | +1.8 |
| **ITM** | **Ithomi** | **2.45** | **154** | P | **Pn** | 17 55 46.4 | +1.8 |
| **ITM** | **Ithomi** | **2.45** | **154** | P | **Pn** | 17 55 46.4 | +1.8 |
| **PAIG** | **Paliouri** | **2.45** | **76** | *e*PN | **Pn** | 17 55 45.8 | +1.2 |
| PAIG | | | | *e*SN | **Sb** | 17 56 17.0 | -1.9 |
| **PAIG** | **Paliouri** | **2.45** | **76** | P | **Pn** | 17 55 44.9 | +0.3 |
| PAIG | | | | S | **Sb** | 17 56 17.2 | -1.7 |
| **PAIG** | **Paliouri** | **2.45** | **76** | P | **Pn** | 17 55 44.9 | +0.3 |
| **PAIG** | **Paliouri** | **2.45** | **76** | *e*Pn | **Pn** | 17 55 45.8 | +1.2 |
| PAIG | | | | *e*Sn | **Sb** | 17 56 17.0 | -1.9 |
| **VAY** | **Valandovo** | **2.46** | **38** | *i* Pn | **Pb** | 17 55 47.4 | -1.6 |
| VAY | | | | *i* Sn | **Sb** | 17 56 17.7 | -1.4 |
| VAY | | | | *e*Lg | Lg | 17 56 30.6 | |
| | comp=N,2µm,0.8s | | | | | | |
| VAY | | | | *e*Lg | Lg | 17 56 32.1 | |
| | comp=E,2µm,0.8s | | | | | | |
| **VAY** | **Valandovo** | **2.46** | **38** | *e*Sn | **Sb** | 17 56 18.0 | -1.1 |
| **VAY** | **Valandovo** | **2.46** | **38** | P | **Pb** | 17 55 47.0 | -2.0 |
| VAY | | | | S | **Sb** | 17 56 17.9 | -1.1 |
| **VAY** | **Valandovo** | **2.46** | **38** | P | **Pb** | 17 55 47.0 | -2.0 |
| **VAY** | **Valandovo** | **2.46** | **38** | *i* Pn | **Pb** | 17 55 47.4 | -1.6 |
| VAY | | | | *i* Sn | **Sb** | 17 56 17.6 | -1.4 |
| VAY | | | | S | **Sb** | 17 56 17.9 | -1.1 |
| VAY | | | | *e*Lg | Lg | 17 56 30.5 | |
| | comp=E,2µm,0.8s | | | | | | |
| **VILL** | **Villia** | **2.46** | **119** | P | **Pn** | 17 55 46.4 | +1.6 |
| **VILL** | **Villia** | **2.46** | **119** | P | **Pn** | 17 55 46.4 | +1.6 |
| **VLX** | **Vlachokerasia** | **2.46** | **144** | *e*PN | **Pb** | 17 55 47.5 | -1.7 |
| **VLX** | **Vlachokerasia** | **2.46** | **144** | P | **Pb** | 17 55 47.2 | -2.0 |
| **VLX** | **Vlachokerasia** | **2.46** | **144** | P | **Pb** | 17 55 47.2 | -2.0 |
| **VLX** | **Vlachokerasia** | **2.46** | **144** | *e*Pn | **Pb** | 17 55 47.5 | -1.7 |
| **KNT** | **Kendrikon** | **2.50** | **44** | *e*PN | **Pb** | 17 55 47.9 | -2.0 |
| KNT | | | | *e*SN | **Sb** | 17 56 18.9 | -1.6 |
| **KNT** | **Kendrikon** | **2.50** | **44** | P | **Pn** | 17 55 46.4 | +1.0 |
| **KNT** | **Kendrikon** | **2.50** | **44** | P | **Pn** | 17 55 46.4 | +1.0 |
| **KNT** | **Kendrikon** | **2.50** | **44** | *e*Pn | **Pb** | 17 55 47.9 | -2.0 |
| KNT | | | | *e*Sn | **Sb** | 17 56 18.9 | -1.6 |
| **SOH** | **Sokhos** | **2.56** | **55** | *e*PN | **Pb** | 17 55 48.7 | -2.2 |
| SOH | | | | *e*SN | **Sb** | 17 56 20.8 | -1.4 |
| **SOH** | **Sokhos** | **2.56** | **55** | P | **Pn** | 17 55 47.7 | +1.5 |
| SOH | | | | S | **Sb** | 17 56 20.6 | -1.6 |
| **SOH** | **Sokhos** | **2.56** | **55** | P | **Pn** | 17 55 47.7 | +1.5 |
| **SOH** | **Sokhos** | **2.56** | **55** | *e*Pn | **Pb** | 17 55 48.7 | -2.2 |
| SOH | | | | S | **Sb** | 17 56 20.6 | -1.6 |
| **PYL** | **PYLOS** | **2.65** | **159** | *e*PN | **Pn** | 17 55 48.3 | +0.9 |
| **PYL** | **PYLOS** | **2.65** | **159** | P | **Pn** | 17 55 48.1 | +0.7 |
| **PYL** | **PYLOS** | **2.65** | **159** | P | **Pn** | 17 55 48.1 | +0.7 |
| **SKO** | **Skopje** | **2.66** | **14** | *i* Pn | **Pb** | 17 55 50.7 | -1.9 |
| SKO | | | | *i* Sn | **Sb** | 17 56 23.6 | -1.4 |
| SKO | | | | *e*Lg | Lg | 17 56 32.4 | |
| | comp=N,179nm,0.6s | | | | | | |
| SKO | | | | *e*Lg | Lg | 17 56 33.1 | |
| | comp=E,225nm,0.8s | | | | | | |
| **SKO** | **Skopje** | **2.66** | **14** | ⇑*i* Pn | **Pn** | 17 55 50.1 | +2.6 |
| **SKO** | **Skopje** | **2.66** | **14** | P | **Pn** | 17 55 49.8 | +2.3 |
| **SKO** | **Skopje** | **2.66** | **14** | P | **Pn** | 17 55 49.8 | +2.3 |
| **SKO** | **Skopje** | **2.66** | **14** | ⇑*i* Pn | **Pn** | 17 55 50.1 | +2.6 |
| SKO | | | | *i* Sn | **Sb** | 17 56 23.5 | -1.4 |
| SKO | | | | *e*Lg | Lg | 17 56 32.3 | |
| | comp=E,179nm,0.6s | | | | | | |
| **ULC** | **Ulcinj** | **2.77** | **339** | ⇑*i* Pn | **Pn** | 17 55 50.1 | +1.1 |
| ULC | | | | *e*Sn | **Sb** | 17 56 25.5 | -2.5 |
| **ULC** | **Ulcinj** | **2.77** | **339** | ⇑*i* Pn | **Pn** | 17 55 50.1 | +1.1 |
| ULC | | | | *e*Sn | **Sb** | 17 56 25.5 | -2.5 |
| **TAR1** | **Taranto** | **2.78** | **295** | *e*Pn | **Pn** | 17 55 49.4 | +0.3 |
| **OUR** | **Ouranopolis** | **2.78** | **69** | *e*PN | **Pn** | 17 55 51.1 | +2.0 |
| **OUR** | **Ouranopolis** | **2.78** | **69** | P | **Pn** | 17 55 50.7 | +1.6 |
| **OUR** | **Ouranopolis** | **2.78** | **69** | P | **Pn** | 17 55 50.7 | +1.6 |
| **OUR** | **Ouranopolis** | **2.78** | **69** | *e*PN | **Pn** | 17 55 51.1 | +2.0 |
| **EREA** | **Eretria** | **2.79** | **109** | *e*PN | **Pn** | 17 55 51.7 | +2.4 |
| EREA | | | | *e*SN | **Sn** | 17 56 24.9 | +2.3 |
| **EREA** | **Eretria** | **2.79** | **109** | P | **Pn** | 17 55 51.2 | +1.9 |
| **EREA** | **Eretria** | **2.79** | **109** | P | **Pn** | 17 55 51.2 | +1.9 |
| **EREA** | **Eretria** | **2.79** | **109** | *e*Pn | **Pn** | 17 55 51.7 | +2.4 |
| EREA | | | | *e*Sn | **Sn** | 17 56 24.9 | +2.3 |
| **NAIG** | **Nisos Aigina** | **2.80** | **125** | *e*PN | **Pn** | 17 55 51.3 | +1.9 |
| **NAIG** | **Nisos Aigina** | **2.80** | **125** | *e*Pn | **Pn** | 17 55 51.3 | +1.9 |
| **PE1** | **Pezze di Greco** | **2.81** | **301** | *e*Pn | **Pn** | 17 55 50.0 | +0.5 |
| **ATH** | **Athens Observa** | **2.83** | **119** | *e*PN | **Pn** | 17 55 51.7 | +1.8 |
| **ATH** | **Athens Observa** | **2.83** | **119** | P | **Pn** | 17 55 51.6 | +1.7 |
| **ATH** | **Athens Observa** | **2.83** | **119** | P | **Pn** | 17 55 51.6 | +1.7 |
| **KRND** | **KRANIDI** | **2.84** | **134** | *e*PN | **Pn** | 17 55 51.8 | +1.8 |
| **KRND** | **KRANIDI** | **2.84** | **134** | P | **Pn** | 17 55 51.6 | +1.6 |
| **KRND** | **KRANIDI** | **2.84** | **134** | P | **Pn** | 17 55 51.6 | +1.6 |
| **SRS** | **Serrai** | **2.88** | **52** | *e*PN | **Pn** | 17 55 53.0 | +2.5 |
| SRS | | | | *e*SN | **Sb** | 17 56 28.0 | -2.6 |
| **SRS** | **Serrai** | **2.88** | **52** | P | **Pn** | 17 55 52.0 | +1.5 |
| **SRS** | **Serrai** | **2.88** | **52** | P | **Pn** | 17 55 52.0 | +1.5 |
| **SRS** | **Serrai** | **2.88** | **52** | *e*Pn | **Pn** | 17 55 53.0 | +2.5 |
| SRS | | | | *e*Sn | **Sb** | 17 56 28.6 | -2.6 |
| **ATHU** | **Athens Univers** | **2.88** | **119** | P | **Pn** | 17 55 52.1 | +1.5 |
| **ATHU** | **Athens Univers** | **2.88** | **119** | P | **Pn** | 17 55 52.1 | +1.5 |
| **PTL** | **Penteli** | **2.90** | **117** | *e*PN | **Pn** | 17 55 52.7 | +1.9 |
| **PTL** | **Penteli** | **2.90** | **117** | P | **Pn** | 17 55 52.5 | +1.7 |
| **PTL** | **Penteli** | **2.90** | **117** | P | **Pn** | 17 55 52.5 | +1.7 |
| **VLY** | **Voula,Athens** | **2.95** | **120** | *e*PN | **Pn** | 17 55 53.3 | +1.8 |
| VLY | | | | *e*SN | **Sn** | 17 56 28.8 | +2.3 |
| **VLY** | **Voula,Athens** | **2.95** | **120** | P | **Pn** | 17 55 52.9 | +1.4 |
| **VLY** | **Voula,Athens** | **2.95** | **120** | P | **Pn** | 17 55 52.9 | +1.4 |
| **VLY** | **Voula,Athens** | **2.95** | **120** | *e*Pn | **Pn** | 17 55 53.3 | +1.8 |
| VLY | | | | *e*Sn | **Sn** | 17 56 28.8 | +2.3 |
| **TIP** | **Timpagrande** | **2.98** | **267** | P | **Pn** | 17 55 52.1 | +0.2 |
| **TIP** | **Timpagrande** | **2.98** | **267** | *e*Pn | **Pn** | 17 55 52.1 | +0.2 |
| **TIP** | **Timpagrande** | **2.98** | **267** | P | **Pn** | 17 55 52.1 | +0.2 |
| **DRME** | **Dracevica, Mon** | **2.99** | **340** | ⇑*i* Pn | **Pn** | 17 55 53.4 | +1.4 |
| DRME | | | | *e*Sn | **Sn** | 17 56 31.0 | +3.5 |
| **DRME** | **Dracevica, Mon** | **2.99** | **340** | ⇑*i* Pn | **Pn** | 17 55 53.4 | +1.4 |
| DRME | | | | *e*Sn | **Sn** | 17 56 31.0 | +3.5 |
| **BUM** | **Brajici-Budva** | **3.18** | **337** | ⇑*i* Pn | **Pn** | 17 55 55.6 | +0.9 |
| BUM | | | | *e*Sn | **Sn** | 17 56 35.1 | +2.8 |
| **BUM** | **Brajici-Budva** | **3.18** | **337** | ⇑*i* Pn | **Pn** | 17 55 55.6 | +0.9 |
| BUM | | | | *e*Sn | **Sn** | 17 56 35.1 | +2.8 |
| **NVR** | **Nevrokopi** | **3.18** | **51** | *e*PN | **Pn** | 17 55 57.3 | +2.6 |
| NVR | | | | *e*SN | **Sn** | 17 56 35.8 | +3.5 |
| **NVR** | **Nevrokopi** | **3.18** | **51** | P | **Pn** | 17 55 56.5 | +1.8 |
| **NVR** | **Nevrokopi** | **3.18** | **51** | P | **Pn** | 17 55 56.5 | +1.8 |
| **NVR** | **Nevrokopi** | **3.18** | **51** | *e*Pn | **Pn** | 17 55 57.3 | +2.6 |
| NVR | | | | *e*Sn | **Sn** | 17 56 35.8 | +3.5 |
| **PDG** | **Podgorica** | **3.20** | **342** | ⇑*i* Pn | **Pn** | 17 55 56.4 | +1.5 |
| PDG | | | | *e*Sn | **Sn** | 17 56 33.1 | +0.4 |
| **PDG** | **Podgorica** | **3.20** | **342** | P | **Pn** | 17 55 56.1 | +1.2 |
| **PDG** | **Podgorica** | **3.20** | **342** | P | **Pn** | 17 55 56.1 | +1.2 |
| PDG | | | | *e*Sn | **Sn** | 17 56 33.1 | +0.4 |
| **TTG** | **Podgorica** | **3.20** | **342** | ⇑*i* Pn | **Pn** | 17 55 56.2 | +1.3 |
| TTG | | | | *e*Sn | **Sn** | 17 56 36.4 | +3.7 |
| **PVY** | **Plav** | **3.24** | **352** | ⇑*i* Pn | **Pn** | 17 55 57.9 | +2.3 |
| PVY | | | | *e*Sn | **Sn** | 17 56 37.7 | +3.9 |
| **PVY** | **Plav** | **3.24** | **352** | ⇑*i* Pn | **Pn** | 17 55 57.9 | +2.3 |
| PVY | | | | *e*Sn | **Sn** | 17 56 37.7 | +3.9 |
| **VLI** | **Veliai** | **3.25** | **144** | *e*PN | **Pn** | 17 55 57.8 | +2.2 |
| **VLI** | **Veliai** | **3.25** | **144** | P | **Pn** | 17 55 57.4 | +1.8 |
| **VLI** | **Veliai** | **3.25** | **144** | P | **Pn** | 17 55 57.4 | +1.8 |
| **VLI** | **Veliai** | **3.25** | **144** | *e*Pn | **Pn** | 17 55 57.8 | +2.2 |
| **KARY** | **Karystos** | **3.31** | **113** | P | **Pn** | 17 55 58.1 | +1.7 |
| **BAI** | **Bari** | **3.31** | **302** | *i* Pn | **Pn** | 17 55 56.9 | +0.4 |
| **SG1** | **Sgolgore (BA)** | **3.33** | **297** | *i* Pn | **Pn** | 17 55 57.2 | +0.5 |
| **KAVA** | **Kavala** | **3.41** | **61** | P | **Pn** | 17 55 58.7 | +0.9 |
| **KAVA** | **Kavala** | **3.41** | **61** | P | **Pn** | 17 55 58.7 | +0.9 |
| **HCY** | **Herceg Novi** | **3.44** | **333** | ⇑*i* Pn | **Pn** | 17 55 58.5 | +0.3 |
| HCY | | | | *e*Sn | **Sn** | 17 56 41.7 | +3.0 |
| **HCY** | **Herceg Novi** | **3.44** | **333** | ⇑*i* Pn | **Pn** | 17 55 58.5 | +0.3 |
| HCY | | | | *e*Sn | **Sn** | 17 56

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| SMG | Samos | 5.18 | 107 | P | | Pn | 17 56 24.7 | +2.5 |
| VAE | Valguarnera | 5.21 | 250 | Pn | | Pn | 17 56 23.7 | +1.1 |
| | comp=E,1.1nm,0.3s,baz=106,slow=1.2,SNR=9.4 | | | | | | | |
| VAE | | | | Sn | | Sn | 17 57 24.0 | +1.7 |
| | comp=E,2.5nm,0.3s,baz=89,slow=8.9,SNR=5.5 | | | | | | | |
| TEKS | Tekeris | 5.21 | 352 | ⇑iPn | | Pn | 17 56 23.5 | +0.9 |
| TEKS | Tekeris | 5.21 | 352 | ⇑iPn | | Pn | 17 56 23.5 | +0.9 |
| RKY | Sarkoy-Tekirda | 5.22 | 74 | eP | | Pn | 17 56 25.1 | +2.3 |
| RKY | Sarkoy-Tekirda | 5.22 | 74 | eP | | Pn | 17 56 25.1 | +2.3 |
| SART | Tekirdag | 5.23 | 74 | iP | | Pn | 17 56 24.7 | +1.9 |
| SART | Tekirdag | 5.23 | 74 | P | | Pn | 17 56 24.7 | +1.9 |
| KRBG | Karabiga-Canak | 5.26 | 77 | eP | | Pn | 17 56 25.5 | +2.2 |
| KRBG | Karabiga-Canak | 5.26 | 77 | eP | | Pn | 17 56 25.5 | +2.2 |
| EDRB | Edirne | 5.29 | 60 | eP | | Pn | 17 56 26.3 | +2.6 |
| EDRB | Edirne | 5.29 | 60 | eP | | Pn | 17 56 26.3 | +2.6 |
| IZM | Izmir | 5.30 | 99 | eP | | Pn | 17 56 26.8 | +2.9 |
| IDI | Anoyia | 5.34 | 139 | Pn | | Pn | 17 56 23.9 | -0.6 |
| | comp=E,4.0nm,0.3s,baz=173,slow=3.2,SNR=33 | | | | | | | |
| IDI | | | | Sn | | Sn | 17 57 21.4 | -4.2 |
| | comp=E,6.5nm,0.3s,baz=219,slow=11,SNR=3.6 | | | | | | | |
| IDI | Anoyia | 5.34 | 139 | ePN | | Pn | 17 56 23.8 | -0.6 |
| IDI | Anoyia | 5.34 | 139 | P | | Pn | 17 56 23.4 | -1.0 |
| IDI | Anoyia | 5.34 | 139 | ePn | | Pn | 17 56 24.3 | -0.1 |
| IDI | Anoyia | 5.34 | 139 | P | | Pn | 17 56 23.4 | -1.0 |
| IDI | Anoyia | 5.34 | 139 | ePn | | Pn | 17 56 24.3 | -0.1 |
| IACM | Heraklion | 5.42 | 137 | ePN | | Pn | 17 56 24.6 | -0.9 |
| IACM | Heraklion | 5.42 | 137 | ePn | | Pn | 17 56 24.6 | -0.9 |
| BALY | Balya | 5.45 | 84 | P | | Pn | 17 56 28.5 | +2.6 |
| GCAM | G?zelcaml? | 5.48 | 106 | P | | Pn | 17 56 29.1 | +2.8 |
| GONE | Gonen-Balikesi | 5.52 | 81 | eP | | Pn | 17 56 29.7 | +3.0 |
| SIVA | Sivas | 5.52 | 141 | ePN | | Pn | 17 56 28.5 | +1.7 |
| SIVA | Sivas | 5.52 | 141 | P | | Pn | 17 56 27.6 | +0.8 |
| SIVA | Sivas | 5.52 | 141 | P | | Pn | 17 56 27.6 | +0.8 |
| SIVA | Sivas | 5.52 | 141 | ePn | | Pn | 17 56 28.5 | +1.7 |
| MRMT | Marmara Adasi | 5.52 | 75 | eP | | Pn | 17 56 29.5 | +2.6 |
| TKR | Tekirdag | 5.56 | 71 | eP | | Pn | 17 56 29.7 | +2.4 |
| ZIMR | | 5.57 | 39 | ⇑iPn | | Pn | 17 56 30.5 | +3.0 |
| SRE | Strehaia | 5.62 | 19 | ⇑iP | | Pn | 17 56 30.8 | +2.6 |
| AKS | Akhisar | 5.64 | 93 | eP | | Pn | 17 56 31.7 | +3.1 |
| AKHS | Akhisar | 5.64 | 93 | P | | Pn | 17 56 31.9 | +3.3 |
| BALB | Balikesir | 5.65 | 85 | eP | | Pn | 17 56 31.4 | +2.9 |
| EDC | Edincik | 5.68 | 78 | eP | | Pn | 17 56 31.7 | +2.6 |
| BNT | Bandirma | 5.73 | 78 | eP | | Pn | 17 56 32.0 | +2.3 |
| CRLT | Corlu | 5.74 | 70 | eP | | Pn | 17 56 32.8 | +2.9 |
| PHSR | Pinarhisar | 5.74 | 65 | eP | | Pn | 17 56 32.3 | +2.4 |
| NPS | Neapolis | 5.75 | 134 | ePN | | Pn | 17 56 31.0 | +1.0 |
| NPS | Neapolis | 5.75 | 134 | ePn | | Pn | 17 56 31.0 | +1.0 |
| LAST | Lasithi | 5.75 | 136 | ePN | | Pn | 17 56 30.2 | +0.2 |
| LAST | Lasithi | 5.75 | 136 | P | | Pn | 17 56 30.2 | +0.2 |
| LAST | Lasithi | 5.75 | 136 | ePn | | Pn | 17 56 30.6 | +0.5 |
| LAST | Lasithi | 5.75 | 136 | P | | Pn | 17 56 30.2 | +0.2 |
| LAST | Lasithi | 5.75 | 136 | ePn | | Pn | 17 56 30.6 | +0.5 |
| BODT | Bodrum | 5.78 | 112 | eP | | Pn | 17 56 33.3 | +2.9 |
| FGSL | Fruska Gora | 5.79 | 355 | ⇑iPn | | Pn | 17 56 30.7 | +0.1 |
| FRGS | Fruska Gora | 5.79 | 355 | ⇑iPn | | Pn | 17 56 30.7 | +0.1 |
| NISR | Nisiros | 5.87 | 116 | ePN | | Pn | 17 56 34.8 | +3.3 |
| NISR | Nisiros | 5.87 | 116 | ePn | | Pn | 17 56 34.8 | +3.3 |
| BDRM | Kayabasi | 5.88 | 111 | P | | Pn | 17 56 34.1 | +2.4 |
| AYDB | Zeytinkoy-Aydi | 5.90 | 102 | eP | | Pn | 17 56 35.4 | +3.3 |
| NIS1 | Nisyros Isl. | 5.91 | 116 | ePN | | Pn | 17 56 35.0 | +2.9 |
| NIS1 | Nisyros Isl. | 5.91 | 116 | ePn | | Pn | 17 56 35.0 | +2.9 |
| WDD | Wield Dalam | 5.96 | 236 | ePn | | Pn | 17 56 31.5 | -1.3 |
| WDD | Wield Dalam | 5.96 | 236 | ePn | | Pn | 17 56 31.5 | -1.3 |
| AYDN | Tasoluk | 5.97 | 105 | P | | Pn | 17 56 38.1 | +5.0 |
| BANR | Banloc | 6.00 | 4 | ⇑iP | | Pn | 17 56 35.3 | +1.9 |
| KCTX | Karacabey (Bur | 6.05 | 79 | eP | | Pn | 17 56 36.7 | +2.6 |
| CLTB | Caltabellotta | 6.06 | 255 | ePn | | Pn | 17 56 33.4 | -0.9 |
| CLTB | Caltabellotta | 6.06 | 255 | ePn | | Pn | 17 56 33.4 | -0.9 |
| HUMR | Humele | 6.09 | 31 | ⇑iP | | Pn | 17 56 37.7 | +3.1 |
| DURS | Dursunbey | 6.11 | 86 | P | | Pn | 17 56 37.7 | +2.7 |
| GZR | Gura Zlata | 6.21 | 14 | ⇓iP | | Pn | 17 56 39.2 | +2.8 |
| GZR | Gura Zlata | 6.21 | 14 | S | | Sn | 17 57 47.6 | +0.5 |
| DST | Dursunbey | 6.22 | 85 | eP | | Pn | 17 56 39.7 | +3.3 |
| CTYL | Yal??k??y-??at | 6.24 | 68 | eP | | Pn | 17 56 39.5 | +2.9 |
| BZS | Buzias | 6.27 | 7 | ePn | | Pn | 17 56 37.4 | +0.3 |
| BZS | Buzias | 6.27 | 7 | ⇑iP | | Pn | 17 56 37.4 | +0.3 |
| BZS | Buzias | 6.27 | 7 | S | | Sn | 17 57 47.1 | -1.3 |
| BZS | Buzias | 6.27 | 7 | ePn | | Pn | 17 56 37.4 | +0.3 |
| MANT | Manisa | 6.28 | 96 | P | | Pn | 17 56 41.0 | +2.5 |
| DEMI | Demirci | 6.33 | 91 | P | | Pn | 17 56 41.7 | +3.8 |
| CTKS | Kestanelik-??a | 6.33 | 71 | eP | | Pn | 17 56 40.8 | +2.9 |
| GOLR | | 6.34 | 29 | ⇓iP | | Pn | 17 56 42.5 | +4.4 |
| KULA | Kula-Manisa | 6.36 | 95 | eP | | Pn | 17 56 41.4 | +3.0 |
| MDNY | Mudanya-Bursa | 6.46 | 79 | eP | | Pn | 17 56 42.8 | +3.1 |
| YER | Yerkesik | 6.46 | 108 | eP | | Pn | 17 56 43.5 | +3.6 |
| ARMT | Armutlu | 6.47 | 77 | eP | | Pn | 17 56 42.8 | +3.0 |
| KARP | Karpathos | 6.49 | 124 | ePN | | Pn | 17 56 42.2 | +2.1 |
| KARP | Karpathos | 6.49 | 124 | P | | Pn | 17 56 40.6 | +0.5 |
| KARP | Karpathos | 6.49 | 124 | P | | Pn | 17 56 40.6 | +0.5 |
| KARP | Karpathos | 6.49 | 124 | ePn | | Pn | 17 56 42.2 | +2.1 |
| LOT | Lotru | 6.50 | 20 | ⇓iP | | Pn | 17 56 42.2 | +1.9 |
| BGKT | Bogazkoy | 6.51 | 71 | eP | | Pn | 17 56 43.5 | +3.0 |
| ARR | Arges | 6.68 | 25 | ⇓iP | | Pn | 17 56 45.3 | +2.5 |
| IGD | Bursa | 6.69 | 80 | P | | Pn | 17 56 45.5 | +2.6 |
| BUY | Buyukada | 6.71 | 75 | P | | Pn | 17 56 45.8 | +2.7 |
| MTUR | Matau | 6.71 | 28 | ⇑iP | | Pn | 17 56 48.1 | +4.9 |
| DEV | Deva | 6.71 | 14 | ⇓iP | | Pn | 17 56 44.0 | +0.9 |
| DEV | Deva | 6.71 | 14 | S | | Sn | 17 58 03.5 | +4.3 |
| KLYT | Kilyos | 6.73 | 71 | eP | | Pn | 17 56 46.7 | +3.4 |
| ARG | Arkhangelos | 6.76 | 116 | ePN | | Pn | 17 56 47.1 | +3.2 |
| ARG | Arkhangelos | 6.76 | 116 | P | | Pn | 17 56 47.0 | +3.2 |
| ARG | Arkhangelos | 6.76 | 116 | P | | Pn | 17 56 47.0 | +3.2 |
| SULR | | 6.76 | 37 | ⇑iP | | Pn | 17 56 48.2 | +4.4 |
| TURN | Turunc | 6.80 | 109 | P | | Pn | 17 56 44.3 | -0.1 |
| DENT | Denizli | 6.82 | 101 | eP | | Pn | 17 56 48.4 | +3.7 |
| DNZL | Cakiroluk | 6.85 | 102 | P | | Pn | 17 56 49.2 | +4.0 |
| DALY | Dalyan (Mu¨la | 6.86 | 109 | eP | | Pn | 17 56 49.4 | +4.1 |
| VOIR | | 6.89 | 27 | ⇓iP | | Pn | 17 56 48.8 | +3.2 |
| IZI | Iznik | 6.90 | 79 | eP | | Pn | 17 56 48.7 | +2.8 |
| SIRR | Siria | 6.92 | 6 | ⇑iP | | Pn | 17 56 45.5 | -0.5 |
| SECR | | 6.96 | 34 | ⇓iP | | Pn | 17 56 50.8 | +4.3 |
| KHAL | Karahalli | 7.02 | 96 | P | | Pn | 17 56 51.5 | +3.9 |
| KHAL | Karahalli | 7.06 | 96 | eP | | Pn | 17 56 51.7 | +3.6 |
| ADVT | Abdulvahap | 7.12 | 79 | eP | | Pn | 17 56 51.7 | +3.0 |
| SILT | Sile | 7.15 | 73 | eP | | Pn | 17 56 52.6 | +3.5 |
| MSAB | Monastry St. A | 7.17 | 47 | ⇑iP | | Pn | 17 56 52.4 | +3.0 |
| CAVI | Cavuskoy | 7.18 | 81 | eP | | Pn | 17 56 53.0 | +3.4 |
| ISR | Istrita | 7.23 | 36 | ⇓iP | | Pn | 17 56 54.7 | +4.4 |
| PKS6 | Bocsa | 7.25 | 354 | ⇑ePn | | Pn | 17 56 51.5 | +1.0 |
| PKS6 | Bocsa | 7.25 | 354 | ⇑eP | | Pn | 17 56 51.5 | +1.0 |
| FETY | Fethiye | 7.25 | 110 | eP | | Pn | 17 56 54.6 | +4.0 |
| BOJS | Bojanci | 7.27 | 329 | iPn | | Pn | 17 56 51.1 | +0.3 |
| BOJS | | | | eSn | | Sn | 17 58 07.9 | -5.1 |
| | comp=Z,534nm,1.9s | | | | | | | |
| MLR | Muntele Rosu | 7.27 | 31 | ⇓iP | | Pn | 17 56 55.4 | +4.4 |
| PGOR | Pogoanele | 7.28 | 39 | ⇑iP | | Pn | 17 56 55.1 | +4.2 |
| GOLH | Golhisar | 7.38 | 104 | P | | Pn | 17 56 57.6 | +5.1 |
| MANR | Mangalia | 7.45 | 51 | ⇑iP | | Pn | 17 56 56.9 | +3.6 |
| DOPR | Dopca | 7.46 | 27 | ⇓iP | | Pn | 17 56 57.4 | +3.9 |
| PKSN | Nyarlorinc | 7.52 | 356 | ⇑ePn | | Pn | 17 56 53.7 | -0.6 |
| PKSN | Nyarlorinc | 7.52 | 356 | ⇑eP | | Pn | 17 56 53.7 | -0.6 |
| DRGR | | 7.56 | 11 | ⇑iP | | Pn | 17 56 56.6 | +1.7 |
| BEHE | Becsehely | 7.61 | 340 | ⇑ePn | | Pn | 17 56 55.6 | +0.2 |
| BEHE | Becsehely | 7.61 | 340 | ⇑eP | | Pn | 17 56 55.6 | +0.2 |
| BORA | Eskisehir | 7.63 | 83 | P | | Pn | 17 56 59.3 | +3.4 |
| CJR | Cluj-Napoca | 7.64 | 16 | ⇑iP | | Pn | 17 56 57.3 | +1.3 |
| GULT | Gulveren | 7.71 | 79 | eP | | Pn | 17 56 59.5 | +2.6 |
| PKS7 | Kunszentmiklos | 7.72 | 353 | ⇑ePn | | Pn | 17 56 56.4 | -0.6 |
| PKS7 | Kunszentmiklos | 7.72 | 353 | ⇑eP | | Pn | 17 56 56.4 | -0.6 |
| TIRR | Tirgusor | 7.73 | 47 | eP | | Pn | 17 56 59.5 | +2.5 |
| TIRR | Tirgusor | 7.73 | 47 | ⇓iP | | Pn | 17 56 59.8 | +2.7 |
| TIRR | Tirgusor | 7.73 | 47 | ePn | | Pn | 17 56 59.5 | +2.5 |
| TIRR | Tirgusor | 7.73 | 47 | eP | | Pn | 17 56 59.5 | +2.5 |
| AKAS | Kas | 7.80 | 111 | P | | Pn | 17 57 03.9 | +5.6 |
| SHUT | Suhut-Afyon | 7.81 | 93 | eP | | Pn | 17 57 01.8 | +3.4 |
| KSL | Kastellorizon | 7.83 | 112 | ePN | | Pn | 17 57 02.6 | +4.1 |
| PDKS | Podkum | 7.83 | 330 | iPn | | Pn | 17 56 58.6 | 0.0 |
| SKDS | Skadanscina | 7.83 | 324 | iPn | | Pn | 17 56 58.1 | -0.5 |
| SKDS | | | | eSn | | Sn | 17 58 20.8 | -6.2 |
| | comp=Z,116nm,0.4s | | | | | | | |
| PLOR | Plostina | 7.85 | 33 | ⇑iP | | Pn | 17 57 03.3 | +4.4 |
| VRI | Vrincioaia | 7.90 | 33 | ⇓iP | | Pn | 17 57 03.4 | +3.9 |
| ISP | Isparta | 7.94 | 98 | eP | | Pn | 17 57 03.8 | +3.7 |
| ISP | Isparta | 7.94 | 98 | eP | | Pn | 17 57 02.6 | +2.5 |
| ISP | Isparta | 7.94 | 98 | ⇓iP | | Pn | 17 57 03.8 | +3.7 |
| ISP | Isparta | 7.94 | 98 | ePN | | Pn | 17 57 04.7 | +4.6 |
| ISP | Isparta | 7.94 | 98 | ePn | | Pn | 17 57 02.6 | +2.5 |
| ISP | Isparta | 7.94 | 98 | eP | | Pn | 17 57 02.6 | +2.5 |
| ESKT | Eskisehir | 7.95 | 86 | eP | | Pn | 17 57 02.9 | +2.7 |
| ESKT | Eskisehir | 7.95 | 86 | P | | Pn | 17 57 03.6 | +3.3 |
| LJU | Ljubljana | 8.00 | 328 | ePn | | Pn | 17 57 00.5 | -0.4 |
| LJU | | | | eSn | | Sn | 17 58 29.0 | -2.1 |
| PETR | Petresti | 8.01 | 36 | ⇑iP | | Pn | 17 57 04.5 | +3.6 |
| CFR | Carcaliu | 8.05 | 42 | ⇑iP | | Pn | 17 57 05.3 | +3.8 |
| KORT | Korkueli | 8.05 | 104 | P | | Pn | 17 57 07.5 | +5.8 |
| TRI | Trieste | 8.07 | 324 | eP | | Pn | 17 57 01.4 | -0.4 |
| TRI | Trieste | 8.07 | 324 | ePn | | Pn | 17 57 01.4 | -0.4 |
| TRI | Trieste | 8.07 | 324 | eP | | Pn | 17 57 01.4 | -0.4 |
| PKST | T¨s | 8.08 | 348 | ⇑ePn | | Pn | 17 57 02.5 | +0.5 |
| PKST | T¨s | 8.08 | 348 | ⇑eP | | Pn | 17 57 02.5 | +0.5 |
| BOLV | Bolvadin | 8.10 | 91 | P | | Pn | 17 57 07.8 | +5.5 |
| BAGO | Egridir - ISPA | 8.10 | 97 | P | | Pn | 17 57 07.8 | +5.5 |
| PKSG | | 8.16 | 349 | ⇑ePn | | Pn | 17 57 03.7 | +0.7 |
| PKSG | | 8.16 | 349 | ⇑eP | | Pn | 17 57 03.7 | +0.7 |
| ARCR | ARCALIA | 8.17 | 18 | ⇑iP | | Pn | 17 57 07.4 | +4.2 |
| BUD | Budapest | 8.17 | 353 | P | | Pn | 17 57 04.4 | +1.3 |
| BUD | | | | pmax | pmax | | | |
| | comp=Z,38nm,0.8s | | | | | | | |
| BUD | Budapest | 8.17 | 353 | ⇑ePn | | Pn | 17 57 04.2 | +1.1 |
| BUD | Budapest | 8.17 | 353 | ⇑eP | | Pn | 17 57 04.2 | +1.1 |
| MDUB | Mudurnu | 8.23 | 79 | eP | | Pn | 17 57 06.9 | +2.8 |
| SOKA | Soboth | 8.34 | 333 | ⇓iPn | | Pn | 17 57 05.1 | -0.5 |
| | SNR=23 | | | | | | | |
| SOKA | Soboth | 8.34 | 333 | Pn | | Pn | 17 57 05.1 | -0.5 |
| | SNR=23 | | | | | | | |
| OBKA | Obir | 8.38 | 330 | ⇑iPn | | Pn | 17 57 05.7 | -0.4 |
| | SNR=18 | | | | | | | |
| OBKA | Obir | 8.38 | 330 | Pn | | Pn | 17 57 05.7 | -0.4 |
| | SNR=18 | | | | | | | |
| LMSR | Misrath | 8.39 | 214 | iP | | Pn | 17 57 03.4 | -2.8 |
| | SNR=22 | | | | | | | |
| TESR | Tescani | 8.39 | 30 | ⇑iP | | Pn | 17 57 10.3 | +4.1 |
| TLCR | | 8.41 | 44 | ⇑iP | | Pn | 17 57 09.4 | +3.0 |
| AUMIH | MIHALICIK | 8.43 | 83 | P | | Pn | 17 57 09.8 | +2.9 |
| LJBD | Adjabya | 8.46 | 182 | iP | | Pn | 17 57 03.3 | -3.9 |
| | SNR=22 | | | | | | | |
| SVRH | Sivrihisar-ESK | 8.47 | 86 | eP | | Pn | 17 57 10.0 | +2.6 |
| PSZ | Piszkesteto | 8.54 | 357 | eP | | Pn | 17 57 08.5 | +0.2 |
| PSZ | Piszkesteto | 8.54 | 357 | ⇑iP | | Pn | 17 57 08.8 | +0.5 |
| PSZ | Piszkesteto | 8.54 | 357 | ⇑ePn | | Pn | 17 57 09.4 | +1.1 |
| PSZ | Piszkesteto | 8.54 | 357 | ePn | | Pn | 17 57 08.5 | +0.2 |
| PSZ | Piszkesteto | 8.54 | 357 | eP | | Pn | 17 57 08.5 | +0.2 |
| VSL | Villasalto | 8.67 | 274 | ePn | | Pn | 17 57 09.4 | -0.7 |
| VSL | Villasalto | 8.67 | 274 | ePn | | Pn | 17 57 09.4 | -0.7 |
| ARSA | Arzberg | 8.68 | 337 | ⇓iPn | | Pn | 17 57 09.4 | -0.8 |
| | SNR=11 | | | | | | | |
| ARSA | Arzberg | 8.68 | 337 | Pn | | Pn | 17 57 09.4 | -0.8 |
| | SNR=11 | | | | | | | |
| SLUM | | 8.74 | 153 | P | | Pn | 17 57 08.6 | -2.4 |
| | baz=155 | | | | | | | |
| SLUM | | | | S | | Sn | 17 58 42.1 | -7.0 |
| | baz=155 | | | | | | | |
| SLUM | | 8.74 | 153 | P | | Pn | 17 57 08.6 | -2.4 |
| SLUM | | | | S | | Sn | 17 58 42.1 | -7.0 |
| SOP | Sopron | 8.79 | 342 | ⇑ePKiKP | | Pn | 17 57 12.4 | +0.8 |
| SOP | Sopron | 8.79 | 342 | ⇑eP | | Pn | 17 57 12.4 | +0.8 |
| TRPA | Tarpa | 8.85 | 9 | ⇑iP | | Pn | 17 57 14.2 | +1.7 |
| BURAR | Bucovina Array | 8.88 | 21 | ⇑iP | | Pn | 17 57 15.8 | +2.8 |
| BUR04 | Bucovina Ar. S | 8.88 | 21 | ePn | | Pn | 17 57 14.6 | +1.5 |
| BUR04 | Bucovina Ar. S | 8.88 | 21 | ePn | | Pn | 17 57 14.6 | +1.5 |
| LSRT | Sirt | 8.89 | 202 | iP | | Pn | 17 57 11.0 | -2.1 |
| | SNR=22 | | | | | | | |
| BCAM | Yenicaga | 8.91 | 77 | P | | Pn | 17 57 16.9 | +3.4 |
| PRAR | RASCA | 8.96 | 25 | ⇑iP | | Pn | 17 57 18.8 | +4.8 |
| VLC | Villacollemand | 8.98 | 305 | ePn | | Pn | 17 57 13.7 | -0.7 |
| VLC | Villacollemand | 8.98 | 305 | ePn | | Pn | 17 57 13.7 | -0.7 |
| KDHN | Kadinhani | 9.03 | 92 | P | | Pn | 17 57 21.2 | +6.2 |
| VYHS | Vyhne | 9.19 | 353 | eP | | Pn | 17 57 17.3 | +0.2 |
| VYHS | Vyhne | 9.19 | 353 | ePN | | Pn | 17 57 17.3 | +0.2 |
| VYHS | Vyhne | 9.19 | 353 | eP | | Pn | 17 57 17.3 | +0.2 |
| CONA | Conrad Observa | 9.19 | 340 | ⇑iPn | | Pn | 17 57 17.0 | -0.3 |
| | SNR=7.7 | | | | | | | |
| CONA | Conrad Observa | 9.19 | 340 | Pn | | Pn | 17 57 17.0 | -0.3 |
| | SNR=7.7 | | | | | | | |
| UZH | Uzhgorod | 9.32 | 7 | ⇑iP | | Pn | 17 57 20.7 | +1.8 |
| UZH | | | | eS | | Sn | 17 59 04.1 | +0.8 |
| UZH | Uzhgorod | 9.32 | 7 | iP | | Pn | 17 57 20.7 | +1.8 |
| UZH | | | | eS | | Sn | 17 59 04.1 | +0.8 |
| KBA | Koelnbreinsper | 9.32 | 328 | ⇑iPn | | Pn | 17 57 19.5 | +0.4 |
| | SNR=8.1 | | | | | | | |
| KBA | Koelnbreinsper | 9.32 | 328 | Pn | | Pn | 17 57 19.5 | +0.4 |
| | SNR=8.1 | | | | | | | |
| ABTA | Abfaltersbach | 9.43 | 324 | ⇓iPn | | Pn | 17 57 19.9 | -0.6 |
| | SNR=10 | | | | | | | |
| ABTA | Abfaltersbach | 9.43 | 324 | Pn | | Pn | 17 57 19.9 | -0.6 |
| | SNR=10 | | | | | | | |
| ANTO | Ankara | 9.44 | 83 | eP | | Pn | 17 57 21.9 | +1.3 |
| ANTO | Ankara | 9.44 | 83 | ⇓iP | | Pn | 17 57 25.4 | +4.8 |
| ANTO | Ankara | 9.44 | 83 | ePn | | Pn | 17 57 21.9 | +1.3 |
| ANTO | Ankara | 9.44 | 83 | eP | | Pn | 17 57 21.9 | +1.3 |
| GHAR | Gharyan | 9.47 | 222 | iP | | Pn | 17 57 19.1 | -2.0 |
| | SNR=22 | | | | | | | |
| GHAR | | | | eS | | Sn | 17 59 00.2 | -7.0 |
| | SNR=22 | | | | | | | |
| MOA | Molln | 9.61 | 334 | ⇑iPn | | Pn | 17 57 22.9 | -0.1 |
| | SNR=20 | | | | | | | |
| MOA | Molln | 9.61 | 334 | Pn | | Pn | 17 57 22.9 | -0.1 |
| | SNR=20 | | | | | | | |
| KOLS | Kolonicke sedl | 9.62 | 7 | eP | | Pn | 17 57 25.7 | +2.7 |
| KOLS | Kolonicke sedl | 9.62 | 7 | ePN | | Pn | 17 57 25.7 | +2.7 |
| KOLS | Kolonicke sedl | 9.62 | 7 | eP | | Pn | 17 57 25.7 | +2.7 |
| KEST | Kesra | 9.64 | 251 | Pn | | Pn | 17 57 22.4 | -1.0 |
| | comp=Z,0.7nm,0.3s,baz=28,slow=7.6,SNR=7.9 | | | | | | | |
| KEST | | | | LR | | LR | 18 02 18.2 | |
| | comp=Z,515nm,19.9s,baz=8.0,slow=45 | | | | | | | |
| KEST | Kesra | 9.64 | 251 | ePn | | Pn | 17 57 26.7 | +3.3 |
| KEST | Kesra | 9.64 | 251 | ePn | | Pn | 17 57 26.7 | +3.3 |
| KIS | Kishinev | 9.69 | 36 | eP | | Pn | 17 57 28.0 | +4.0 |
| KIS | Kishinev | 9.69 | 36 | ePP | | Pn | 17 57 44.0 | +20 |
| KIS | | | | eS | | Sn | 17 59 19.0 | +6.6 |
| KIS | | | | eLQ | | LQ | 18 00 31.0 | |
| KIS | | | | eLR | | LR | 18 01 01.0 | |
| | comp=Z,1µm,10.0s | | | | | | | |
| KIS | Kishinev | 9.69 | 36 | eP | | Pn | 17 57 28.0 | +4.0 |
| KIS | | | | eS | | Sn | 17 59 19.0 | +6.6 |
| KIS | | | | MLR | MLR | | | |
| | comp=Z,900nm,10.0s | | | | | | | |
| KIS | | | | MLR | MLR | | | |
| | comp=Z,1µm,10.0s | | | | | | | |
| KIS | Kishinev | 9.69 | 36 | eP | | Pn | 17 57 28.0 | +4.0 |
| BBAL | Bala | 9.70 | 85 | P | | Pn | 17 57 29.3 | +5.0 |
| GAZI | Gazipasa | 9.80 | 105 | P | | Pn | 17 57 29.8 | +4.2 |
| ELDT | Eldivan | 9.93 | 80 | P | | Pn | 17 57 31.4 | +4.0 |
| NIE | Niedzica | 10.03 | 359 | eP | | Pn | 17 57 31.3 | +2.6 |
| NIE | Niedzica | 10.03 | 359 | eP | | Pn | 17 57 31.4 | +2.7 |
| NIE | Niedzica | 10.03 | 359 | eP | | Pn | 17 57 31.4 | +2.7 |
| STHS | Stebnicka Huta | 10.04 | 2 | eP | | Pn | 17 57 31.2 | +2.4 |
| STHS | Stebnicka Huta | 10.04 | 2 | ePN | | Pn | 17 57 31.2 | +2.4 |
| STHS | Stebnicka Huta | 10.04 | 2 | eP | | Pn | 17 57 31.2 | +2.4 |
| RJOB | Jochberg | 10.07 | 328 | ePn | | Pn | 17 57 29.5 | +0.2 |
| | comp=Z,62nm,0.5s | | | | | | | |
| BRTR | Keskin Array B | 10.09 | 84 | Pn | | Pn | 17 57 31.1 | +1.4 |
| | comp=Z,1.2nm,0.3s,baz=265,slow=12,SNR=40 | | | | | | | |
| BRTR | | | | LR | | LR | 18 01 56.9 | |
| | comp=Z,369nm,21.1s,baz=262,slow=41 | | | | | | | |
| BRTR | Keskin Array B | 10.09 | 84 | P | | Pn | 17 57 31.1 | +1.4 |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| BRTR | | | | MLR | MLR | | | |
| | comp=Z,369nm,21.1s | | | | | | | |
| ILGA | Ilgaz | 10.18 | 76 | P | | Pn | 17 57 38.6 | +7.6 |
| WATA | Walderalm | 10.29 | 323 | ⇓iPn | | Pn | 17 57 32.3 | -0.1 |
| | SNR=46 | | | | | | | |
| WATA | Walderalm | 10.29 | 323 | Pn | | Pn | 17 57 32.3 | -0.1 |
| | SNR=46 | | | | | | | |
| VRAC | Vranov | 10.32 | 345 | Pn | | Pn | 17 57 31.9 | -0.7 |
| | comp=Z,0.6nm,0.3s,baz=181,slow=12,SNR=11 | | | | | | | |
| VRAC | | | | LR | | LR | 18 02 03.1 | |
| | comp=Z,350nm,19.7s,baz=178,slow=41 | | | | | | | |
| VRAC | Vranov | 10.32 | 345 | P | | Pn | 17 57 31.9 | -0.7 |
| VRAC | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| VRAC | | | | MLR | MLR | | | |
| | comp=Z,350nm,19.7s | | | | | | | |
| VRAC | Vranov | 10.32 | 345 | ⇑iP | | Pn | 17 57 32.9 | +0.3 |
| AKMC | Akamas | 10.33 | 111 | P | | Pn | 17 57 34.1 | +1.3 |
| KWP | Kalwaria Pacla | 10.35 | 8 | eP | | Pn | 17 57 35.7 | +2.7 |
| KWP | Kalwaria Pacla | 10.35 | 8 | eP | | Pn | 17 57 35.8 | +2.7 |
| KWP | Kalwaria Pacla | 10.35 | 8 | eP | | Pn | 17 57 35.8 | +2.7 |
| PPCY | Paphos | 10.41 | 112 | P | | Pn | 17 57 34.8 | +0.9 |
| FUORN | Ofenpass-Fuorn | 10.45 | 317 | ePn | | Pn | 17 57 34.6 | 0.0 |
| FUORN | Ofenpass-Fuorn | 10.45 | 317 | ePn | | Pn | 17 57 34.6 | 0.0 |
| ALFC | Alevga | 10.46 | 110 | P | | Pn | 17 57 35.9 | +1.2 |
| FETA | Feichten | 10.48 | 320 | iPn | | Pn | 17 57 34.9 | 0.0 |
| | SNR=14 | | | | | | | |
| FETA | Feichten | 10.48 | 320 | Pn | | Pn | 17 57 34.9 | 0.0 |
| | SNR=14 | | | | | | | |
| MOTA | Moosalm | 10.52 | 322 | ⇓iPn | | Pn | 17 57 36.1 | +0.6 |
| | SNR=81 | | | | | | | |
| MOTA | Moosalm | 10.52 | 322 | Pn | | Pn | 17 57 36.1 | +0.6 |
| | SNR=81 | | | | | | | |
| TREC | Trest | 10.55 | 341 | AMS | | AMS | 18 02 10.0 | |
| | comp=Z,1µm,19.5s | | | | | | | |
| OKC | Ostrava-Krasne | 10.59 | 351 | eP | | Pn | 17 57 37.7 | +1.4 |
| OKC | Ostrava-Krasne | 10.59 | 351 | eP | | Pn | 17 57 37.7 | +1.4 |
| OKC | Ostrava-Krasne | 10.59 | 351 | eP | | Pn | 17 57 37.7 | +1.4 |
| MORC | Moravsky Berou | 10.61 | 349 | eP | | Pn | 17 57 37.2 | +0.6 |
| MORC | Moravsky Berou | 10.61 | 349 | ⇓iP | | Pn | 17 57 35.7 | -0.9 |
| MORC | Moravsky Berou | 10.61 | 349 | ePn | | Pn | 17 57 37.2 | +0.6 |
| MORC | Moravsky Berou | 10.61 | 349 | eP | | Pn | 17 57 37.2 | +0.6 |
| CDAG | Cicekdag | 10.66 | 84 | P | | Pn | 17 57 42.0 | +4.6 |
| GEC2 | GERESS Array S | 10.66 | 335 | eP | | Pn | 17 57 36.7 | -0.7 |
| GEC2 | GERESS Array S | 10.66 | 335 | ePn | | Pn | 17 57 37.1 | -0.4 |
| GEC2 | GERESS Array S | 10.66 | 335 | ePn | | Pn | 17 57 36.7 | -0.7 |
| GEC2 | GERESS Array S | 10.66 | 335 | eP | | Pn | 17 57 36.7 | -0.7 |
| GERES | GERESS Array B | 10.66 | 335 | Pn | | Pn | 17 57 36.6 | -0.7 |
| GERES | | | | | | | 17 59 32.5 | |
| GERES | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.3s | | | | | | | |
| GERES | | | | smax | smax | | | |
| | comp=N,2.0nm,0.3s | | | | | | | |
| GERES | | | | MLR | MLR | | | |
| | comp=Z,639nm,19.1s | | | | | | | |
| LVV | L'vov | 10.71 | 12 | eP | | Pn | 17 57 46.6 | +8.6 |
| DAVOX | Davos/Dischmat | 10.76 | 317 | Pn | | Pn | 17 57 39.1 | +0.3 |
| | comp=Z,4.7nm,0.3s,baz=123,slow=19,SNR=47 | | | | | | | |
| DAVOX | | | | LR | | LR | 18 02 26.5 | |
| | comp=Z,288nm,19.1s,baz=147,slow=41 | | | | | | | |
| DAVOX | Davos/Dischmat | 10.76 | 317 | P | | Pn | 17 57 39.1 | +0.3 |
| DAVOX | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.3s | | | | | | | |
| DAVOX | | | | MLR | MLR | | | |
| | comp=Z,288nm,19.1s | | | | | | | |
| RETA | Reutte | 10.79 | 322 | ⇓iPn | | Pn | 17 57 39.0 | -0.1 |
| RETA | Reutte | 10.79 | 322 | Pn | | Pn | 17 57 39.0 | -0.1 |
| OJC | Ojcow | 10.84 | 357 | eP | | Pn | 17 57 41.3 | +1.5 |
| OJC | Ojcow | 10.84 | 357 | eP | | Pn | 17 57 41.4 | +1.6 |
| OJC | Ojcow | 10.84 | 357 | ePn | | Pn | 17 57 38.9 | -0.9 |
| OJC | Ojcow | 10.84 | 357 | ePn | | Pn | 17 57 38.9 | -0.9 |
| OJC | Ojcow | 10.84 | 357 | eP | | Pn | 17 57 

comp=Z,28nm,2.5s
**KIEV Kiev 12.83 25** *e*Pn **Pn 17 58 09.2 +2.3**
**AKASG Malin Array Be 12.84 25** Pn **Pn 17 58 06.5 -0.6**
comp=Z,0.7nm,0.3s,baz=212,slow=13,SNR=5.2
**AKASG Malin Array Be 12.84 25** P **Pn 17 58 06.5 -0.6**
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**AYKD Aykdinkavak 12.88 94** P **P 17 58 16.9 -1.6**
**MOF Molkenrain 12.89 315** *e*P **Pn 17 58 07.0 -0.8**
**MOX Moxa 12.91 334** *e*Pn **Pn 17 58 07.5 -0.5**
**CLL Collm 13.04 338** *e*P **Pn 17 58 10.0 +0.1**
**CLL Collm 13.04 338** *e*P **Pn 17 58 10.0 +0.1**
CLL *i* sPP 17 58 21.6
comp=Z,37nm,1.0s
CLL LmV 18 03 00.0
comp=Z,500nm,18.0s
**CLL Collm 13.04 338** *e*P **Pn 17 58 10.0 +0.1**
**CUKAN kangal_SIVAS 13.07 85** P P 17 58 16.2 -4.5
**LGHD Ghdames 13.08 228** *i* P **Pn 17 58 08.6 -1.9**
SNR=22
**ECH Echery 13.09 317** *e*P **Pn 17 58 11.3 +0.7**
**TOD Tromm 13.21 324** *e*P **Pn 17 58 11.1 -1.1**
**LANF Langenberg 13.25 321** *e*P **Pn 17 58 12.0 -0.7**
**KUZU Kuzuini 13.25 96** P **P 17 58 23.3 +0.7**
**MMAI Mount Meron Ar 13.55 113** Pn **Pn 17 58 14.6 -2.3**
comp=Z,2.8nm,0.3s,baz=299,slow=12,SNR=17
MMAI LR LR 18 04 44.4
comp=Z,429nm,18.6s,baz=270,slow=43
**AKCD Akcadag 13.56 89** P **P 17 58 27.2 +1.1**
**GRSN GIRESUNGRSN 13.62 78** P **P 17 58 26.4 -0.2**
**ANN Anapa 13.62 61** *e*P **Pn 17 58 17.2 -0.5**
ANN *e*S **Sn 18 00 52.3 +3.6**
ANN pmax pmax
comp=Z,11nm,1.0s
ANN MLR MLR
comp=Z,300nm,14.0s
**THEF They Montfort 13.73 315** *e*P **Pn 17 58 18.5 -0.8**
**TNS Taunus Mts 13.82 326** *e*Pn **Pn 17 58 20.2 -0.3**
**MALT Malatya 13.95 89**⇑ *i*P **P 17 58 27.5 -2.9**
**GKP Gorka Klasztor 14.07 352** *e*P **P 17 58 32.8 +1.3**
**GKP Gorka Klasztor 14.07 352** *e*P **P 17 58 32.9 +1.4**
**GKP Gorka Klasztor 14.07 352** *e*P **P 17 58 32.9 +1.4**
**CLZ Clausthal 14.34 334** *e*Pn **Pn 17 58 29.5 +1.9**
**KELT Kelkit 14.38 81** P **P 17 58 33.3 -2.1**
**ASSE Asse, Remlinge 14.48 335** *e*Pn **Pn 17 58 31.2 +1.9**
**WLF Walferdange 14.52 320** P Pn 17 58 33.1 +3.2
comp=Z,14nm,0.8s
**WLF Walferdange 14.52 320** *e*P **Pn 17 58 30.5 +0.6**
**WLF Walferdange 14.52 320** *e*Pn **Pn 17 58 30.5 +0.6**
**WLF Walferdange 14.52 320** *e*Pn **Pn 17 58 30.5 +0.6**
**SUW Suwalki 14.73 6** *e*P **Pn 17 58 33.6 +0.7**
**SUW Suwalki 14.73 6** *e*P **Pn 17 58 33.7 +0.8**
**NRDL Niedersach Rie 14.97 335** *e*Pn **P 17 58 38.8 -2.7**
**ASF Jabal al Asfar 15.06 114** Pn **Pn 17 58 37.4 -0.1**
comp=Z,0.5nm,0.3s,baz=260,slow=11,SNR=3.7
ASF LR LR 18 05 42.9
comp=Z,378nm,21.1s,baz=262,slow=42
**ASF Jabal al Asfar 15.06 114** P **Pn 17 58 37.4 -0.1**
ASF pmax pmax
comp=Z,1.0nm,0.3s
ASF MLR MLR
comp=Z,378nm,21.1s
**MEM Membach 15.20 322** P **Pn 17 58 40.3 +1.1**
comp=Z,37nm,1.0s
**KLNR Kaliningrad 15.22 359** *e*P **Pn 17 58 38.7 -0.7**
**EIL Elat 15.29 125** Pn **Pn 17 58 39.2 -1.2**
comp=Z,0.8nm,0.3s,baz=292,slow=1.6,SNR=7.7
EIL Sn **Sn 18 01 25.1 -4.3**
comp=Z,1.2nm,0.3s,baz=90,slow=20,SNR=3.8
**HGN Heimansgroeve 15.34 323** *e*P **Pn 17 58 41.5 +0.4**
comp=Z,28nm,0.8s
HGN *e*L L 18 05 38.8
comp=Z,206nm,18.8s
**KOPT Kop Dagi 15.34 81** *i* P **P 17 58 49.2 +3.1**
**KOPT Kop Dagi 15.34 81** P **P 17 58 49.2 +3.1**
**BCLA Clavier 15.42 321** P **Pn 17 58 43.6 +1.6**
comp=Z,11nm,1.5s
**DOU Dourbes 15.57 319** P **Pn 17 58 45.3 +1.3**
comp=Z,11nm,1.0s
**IBBN Ibbenburen 15.67 330** *e*Pn **P 17 58 47.3 -2.0**
**WTSB Winterswijk 15.80 327** *e*P **P 17 58 52.3 +1.5**
comp=Z,116nm,1.7s
**WTSB Winterswijk 15.80 327** *e*P **P 17 58 52.3 +1.5**
comp=Z,116nm,1.7s
**MNK Minsk 15.89 16** *e*P **Pn 17 58 46.0 -2.1**
MNK *e*S **Sn 18 01 42.0 -1.8**
**MICGM Minsk 15.90 16** *e*P **Pn 17 58 46.0 -2.3**
**NACGM Naroch 16.07 13** *e* **Pn 17 58 50.0 -0.4**
**BSEG Bad Segeberg 16.14 338** *e*Pn **P 17 58 54.5 0.0**
**DBOC Borcka 16.19 76** P **P 17 58 54.1 -1.0**
**DDEM Demirkent 16.26 78** *i* P **P 17 58 58.5 +2.5**
**DDEM Demirkent 16.26 78** P **P 17 58 58.5 +2.5**
**ARTV Artvin 16.39 77** P **Pn 17 58 54.0 -0.8**
**EKAR Karacoban 16.62 84** P P 17 59 09.1 +8.9
**EATA Eleskirt 16.89 81** P P 17 59 08.0 +4.8
**NEY Neytrino 17.06 70** *e*P **P 17 59 08.8 +3.8**
**NEY Neytrino 17.06 70** *e*P **P 17 59 08.8 +3.8**
**KIV Kislovodsk 17.12 67** *e*P **P 17 59 07.3 +1.8**
KIV *e*S **S 18 02 21.6 -1.7**
KIV pmax pmax
comp=Z,21nm,1.1s
KIV MLR MLR
comp=Z,65nm,14.0s
**KIV Kislovodsk 17.12 67** *e*Pn **P 17 59 05.6 +0.1**
comp=Z,19nm,0.9s
**KIV Kislovodsk 17.12 67** *e*Pn **P 17 59 05.6 +0.1**
comp=Z,19nm,0.9s
**KIV Kislovodsk 17.12 67** *e*P **P 17 59 07.3 +1.8**
comp=Z,21nm,1.1s
**KBZ Khabaz 17.24 68** Pn **P 17 59 07.8 +1.1**
comp=Z,0.5nm,0.3s,baz=230,slow=7.6,SNR=13
**KBZ Khabaz 17.24 68** P **P 17 59 07.8 +1.1**
KBZ pmax pmax
comp=Z,1.0nm,0.3s
**VORD Divnogorie 17.49 42** *e*P **P 17 59 09.7 +0.2**
VORD pmax pmax
comp=Z,10.0nm,1.1s
VORD pmax pmax
comp=N,10.0nm,1.3s
VORD pmax pmax
comp=E,50nm,1.2s
**VORD Divnogorie 17.49 42** *e*P **P 17 59 09.7 +0.2**
comp=E,10.0nm,1.3s
**ONI Oni 17.55 72** P P 17 59 15.0 +4.7
**ONI Oni 17.55 72** *e*P P 17 59 15.0 +4.7
**AKH Akhalkalaki 17.56 76** P P 17 59 15.7 +5.2
**AKH Akhalkalaki 17.56 76** *e*P P 17 59 15.7 +5.2
**VSR Storozhevoye 17.57 42** *e*P **P 17 59 10.1 -0.2**
VSR pmax pmax
comp=Z,20nm,1.5s
VSR pmax pmax
comp=N,7.0nm,1.1s
VSR pmax pmax
comp=E,10.0nm,1.0s
**VSR Storozhevoye 17.57 42** *e*P **P 17 59 10.1 -0.2**
comp=E,7.0nm,1.1s
**NCK Nalchik 17.72 69** *e*P **P 17 59 15.4 +3.3**
**NCK Nalchik 17.72 69** *e*P **P 17 59 15.4 +3.3**
**LPSR Galich'ya Gora 18.29 38** *e*P **Pn 17 59 17.7 -0.4**
LPSR pmax pmax
comp=Z,10.0nm,0.7s
LPSR pmax pmax
comp=N,3.0nm,0.4s
LPSR pmax pmax
comp=E,4.0nm,0.4s
**LPSR Galich'ya Gora 18.29 38** *e*P **Pn 17 59 17.7 -0.4**
comp=E,10.0nm,0.7s
**TBLG Delisi 18.49 75** P Pn 17 59 25.6 +4.9
**TBLG Delisi 18.49 75** *e*P Pn 17 59 25.6 +4.9
**GNI Garni 18.58 80** *e*P **Pn 17 59 24.0 +2.0**
GNI pmax pmax
comp=Z,102nm,1.0s
**GNI Garni 18.58 80** *e*P **Pn 17 59 24.0 +2.0**
comp=Z,102nm,1.0s
**MUD Monsted U'grnd 18.66 340** *i* P **Pn 17 59 22.9 +0.2**
MUD pmax pmax
comp=Z,25nm,0.9s
**MUD Monsted U'grnd 18.66 340** *i* P **Pn 17 59 22.9 +0.2**
comp=Z,25nm,0.9s
**MUD Monsted U'grnd 18.66 340** *i* P **Pn 17 59 22.9 +0.2**
comp=Z,25nm,0.9s
**VRH Novokhopyorsk 18.91 44** *e*P **Pn 17 59 29.7 +3.9**
VRH pmax pmax
comp=Z,8.0nm,0.4s
VRH pmax pmax
comp=N,10.0nm,0.9s
VRH pmax pmax
comp=E,50nm,1.3s
**ESDC Sonseca Array 18.93 279** P **P 17 59 25.0 -0.4**
comp=E,1.1nm,0.3s,baz=74,slow=11,SNR=43
ESDC LR LR 18 06 45.4
comp=E,289nm,18.5s,baz=95,slow=37
**DGRG David-gareji 18.97 76** P **Pn 17 59 27.7 +1.0**
**DGRG David-gareji 18.97 76** *e*P **Pn 17 59 27.6 +1.0**
**DGRG David-gareji 18.97 76** *e*P **Pn 17 59 27.6 +1.0**
**OBN Obninsk 19.03 29** P **P 17 59 25.9 -0.5**
comp=E,3.7nm,0.3s,baz=33,slow=23,SNR=5.6
**OBN Obninsk 19.03 29**‖ *e*P **P 17 59 25.7 -0.7**
OBN *e*S **S 18 03 04.2 +2.5**
OBN pmax pmax
comp=Z,35nm,1.2s
OBN MLR MLR
comp=Z,251nm,16.0s
**OBN Obninsk 19.03 29** *e*P **P 17 59 26.5 +0.1**
comp=Z,25nm,0.7s
**OBN Obninsk 19.03 29** *e*P **P 17 59 26.5 +0.1**
comp=Z,25nm,0.7s
**PAB San Pablo 19.24 278** *e*P **Pn 17 59 29.9 0.0**
PAB pmax pmax
comp=Z,19nm,0.8s
**PAB San Pablo 19.24 278** *e*P **Pn 17 59 29.9 0.0**
comp=Z,19nm,0.8s
**PAB San Pablo 19.24 278** *e*P **Pn 17 59 29.9 0.0**
comp=Z,19nm,0.8s
**IMRD Marand 19.51 84** *e*P **P 17 59 32.4 +0.4**
**IMRD Marand 19.51 84** *e*P **P 17 59 32.4 +0.4**
**ISHB Shabestar 19.52 85** *e*P **P 17 59 31.4 -0.8**
**MOS Moscow 19.90 29** *e*P **P 17 59 33.4 -2.5**
MOS pmax pmax
comp=Z,37nm,0.8s
**STRD Stroud 20.07 316** *e*P **P 17 59 38.2 +0.4**
STRD AMB AMB 17 59 38.9
comp=Z,75nm,1.2s
**STRD Stroud 20.07 316** *e*P **P 17 59 38.2 +0.4**
**MONM Monmouth 20.45 315** *e*P **P 17 59 42.1 +0.2**
MONM AMB AMB 17 59 43.9
comp=Z,51nm,1.6s
**MONM Monmouth 20.45 315** *e*P **P 17 59 42.1 +0.2**
**DYA Yadsworthy 20.48 311** *e*P **P 17 59 43.0 +0.8**
**DYA Yadsworthy 20.48 311** *e*P **P 17 59 43.0 +0.8**
**MAK Makhachkala 20.54 71** *e*P Pn 17 59 49.8 +4.6
MAK MLR MLR
comp=Z,126nm,6.0s
**LIJA Lijar 20.57 271** *i* P **P 17 59 43.0 -0.4**
**IHRS Heris 20.61 85** *e*P **P 17 59 43.4 -0.6**
**IHRS Heris 20.61 85** *e*P **P 17 59 43.4 -0.6**
**IBST Bostanabad 20.63 86** *e*P **P 17 59 44.0 -0.2**
**IBST Bostanabad 20.63 86** *e*P **P 17 59 44.0 -0.2**
**MCH1 Michaelchurch 20.63 315** *e*P **P 17 59 43.8 -0.1**
MCH1 AMB AMB 17 59 45.3
comp=Z,58nm,2.0s
**MCH1 Michaelchurch 20.63 315** *e*P **P 17 59 43.8 -0.1**
**HEX Exmoor 20.66 312** *e*P **P 17 59 44.5 +0.3**
**HEX Exmoor 20.66 312** *e*P **P 17 59 44.5 +0.3**
**STNC Stoke 20.77 319** *e*P Pn 17 59 49.3 +1.6
STNC AMB AMB 17 59 50.0
comp=Z,89nm,0.7s
**HLM1 Long Mynd 20.82 317** *e*P **P 17 59 46.3 +0.3**
HLM1 AMB AMB 17 59 50.2
comp=Z,52nm,1.0s
**HLM1 Long Mynd 20.82 317** *e*P **P 17 59 46.3 +0.3**
**LHO Holmfirth 20.84 320** *e*P **P 17 59 46.2 +0.1**
**LHO Holmfirth 20.84 320** *e*P **P 17 59 46.2 +0.1**
**PBRG Braganca 20.86 285** *e*P **P 17 59 47.0 +0.5**
comp=Z,45nm,1.5s
**TAM Tamanrasset 20.93 222** *e*P Pn 17 59 48.9 -1.2
TAM pmax pmax
comp=Z,22nm,1.2s
**TAM Tamanrasset 20.93 222** *e*P Pn 17 59 48.9 -1.2
comp=Z,22nm,1.2s
**TAM Tamanrasset 20.93 222** *e*P Pn 17 59 48.9 -1.2
comp=Z,22nm,1.2s
**HPK Haverah Park 20.96 321** *e*P **P 17 59 47.3 -0.1**
HPK AMB AMB 17 59 50.7
comp=Z,64nm,1.7s
**HPK Haverah Park 20.96 321** *e*P **P 17 59 47.3 -0.1**
**IDHR Dehrash 21.09 95** *e*P **P 17 59 48.2 -1.0**
**MVO Moncorvo 21.11 284** *e*P **P 17 59 49.6 +0.4**
comp=Z,32nm,1.2s
**FOEL Foel Wylfa 21.18 317** *e*P **P 17 59 50.9 +1.1**
FOEL AMB AMB 17 59 51.6
comp=Z,84nm,1.2s
**FOEL Foel Wylfa 21.18 317** *e*P **P 17 59 50.9 +1.1**
**ISRB Sarab 21.20 86** *e*P **P 17 59 52.1 +1.8**
**ISRB Sarab 21.20 86** *e*P **P 17 59 52.1 +1.8**
**HFS Hagfors 21.21 350** P **P 17 59 49.4 -0.7**
comp=Z,32nm,0.7s,baz=163,slow=11,SNR=83
HFS LR LR 18 08 44.3
comp=Z,216nm,18.4s,baz=178,slow=39
**HFS Hagfors 21.21 350** P **P 17 59 49.4 -0.7**
HFS pmax pmax
comp=Z,32nm,0.7s
HFS MLR MLR
comp=Z,216nm,18.4s
**LCP Cassop 21.34 323** *e*P **P 17 59 50.8 -0.7**
**LCP Cassop 21.34 323** *e*P **P 17 59 50.8 -0.7**
**MDT Midelt 21.35 260** P **P 17 59 51.4 -0.5**
comp=Z,10nm,0.8s,baz=80,slow=13,SNR=10
MDT LR LR 18 08 00.5
comp=Z,154nm,21.6s,baz=74,slow=36
**KONO Kongsberg 21.44 345** *e*P **P 17 59 51.5 -1.0**
KONO pmax pmax
comp=Z,61nm,0.9s
**KONO Kongsberg 21.44 345** *e*P **P 17 59 51.5 -1.0**
comp=Z,61nm,0.9s
**KONO Kongsberg 21.44 345** *e*P **P 17 59 51.5 -1.0**
comp=Z,61nm,0.9s
**ILIN Lien 21.46 94** *e*P **P 17 59 51.6 -1.7**
**IVIS Veis 21.51 95** *e*P **P 17 59 51.9 -1.7**
**PBAR Barrancos 21.54 276** *e*P **P 17 59 53.0 -0.8**
comp=Z,107nm,1.4s
**MTE Manteigas 21.57 282** *e*P **P 17 59 55.5 +1.3**
comp=Z,42nm,1.6s
**PMRV Marv??o 21.59 279** *e*P **P 17 59 54.5 +0.2**
comp=Z,37nm,1.6s
**PCBR Castelo Branco 21.59 280** *e*P **P 17 59 55.1 +0.8**
comp=Z,30nm,1.4s
**POLO Lamas de Olo 21.67 284** *e*P **P 17 59 57.3 +2.0**
comp=Z,18nm,1.8s
**WPM1 Penmaenmawr 21.73 318** *e*P **P 17 59 55.8 +0.1**
**WPM1 Penmaenmawr 21.73 318** *e*P **P 17 59 55.8 +0.1**
**PVIS Viseu 21.80 283** *e*P **P 17 59 57.7 +1.0**
comp=Z,37nm,1.6s
**YRE Yr Eifl 21.87 317** *e*P **P 17 59 57.0 -0.1**
**YRE Yr Eifl 21.87 317** *e*P **P 17 59 57.0 -0.1**
**KESW Keswick, Cumbr 22.03 321** *e*P **P 17 59 58.5 -0.4**
KESW AMB AMB 17 59 60.0
comp=Z,45nm,0.9s
**KESW Keswick, Cumbr 22.03 321** *e*P **P 17 59 58.5 -0.4**
**YRC Rhoscolyn 22.07 317** *e*P **P 18 00 00.4 +1.1**
**YRC Rhoscolyn 22.07 317** *e*P **P 18 00 00.4 +1.1**
**IKOM Komasi 22.15 95** *e*P **P 17 59 58.9 -1.6**
**PBEJ Beja 22.21 276** *e*P **P 18 00 00.1 -0.9**
comp=Z,35nm,1.1s
**PVAQ Vaqueiros 22.23 274** *e*P **P 18 00 00.1 -1.2**
comp=Z,34nm,1.4s
**IBZA Bozab 22.31 94** *e*P **P 18 00 00.9 -1.5**
**PTOM Tomar 22.34 280** *e*P **P 18 00 02.2 -0.1**
comp=Z,53nm,1.3s
**FINES FINESS Array B 22.34 7** P **P 18 00 00.9 -1.2**
comp=Z,26nm,0.7s,baz=176,slow=12,SNR=50
FINES PcP **PcP 18 03 56.0 -1.0**
comp=Z,2.4nm,0.8s,baz=132,slow=2.8,SNR=3.3
FINES LR LR 18 09 19.0
comp=Z,75nm,18.5s,baz=208,slow=38
**FINES FINESS Array B 22.34 7** P **P 18 00 01.0 -1.2**
FINES 18 03 56.0
FINES pmax pmax
comp=Z,26nm,0.7s
FINES MLR MLR
comp=Z,75nm,18.5s
**PCAS Casmilo, Conde 22.34 281** *e*P **P 18 00 02.1 -0.3**
comp=Z,36nm,1.5s
**BHH Howats Hill 22.37 322** *e*P **P 18 00 02.0 -0.5**
**BHH Howats Hill 22.37 322** *e*P **P 18 00 02.0 -0.5**
**ECK Cauldkaine Hil 22.38 323** *e*P **P 18 00 01.9 -0.7**
**ECK Cauldkaine Hil 22.38 323** *e*P **P 18 00 01.9 -0.7**
**PCVE Castro Verde 22.43 275** *e*P **P 18 00 02.4 -1.0**
comp=Z,27nm,2.0s
**PBDV Barranco-do-Ve 22.44 274** *e*P **P 18 00 04.6 +1.1**
comp=Z,41nm,1.3s
**NB2 NORSAR Subarra 22.44 348** P **P 18 00 02.9 -0.4**
comp=Z,65nm,1.1s,baz=161,slow=11
**NB2 NORSAR Subarra 22.44 348** P **P 18 00 02.9 -0.4**
comp=Z,65nm,1.1s,SNR=9.8
**NOA NORSAR Array B 22.44 348** P **P 18 00 02.2 -1.0**
comp=Z,38nm,0.8s,baz=166,slow=10,SNR=65
NOA LR LR 18 10 30.5
comp=Z,116nm,19.1s,baz=165,slow=41
**NOA NORSAR Array B 22.44 348** P **P 18 00 02.3 -1.0**
NOA pmax pmax
comp=Z,38nm,0.8s
NOA MLR MLR
comp=Z,116nm,19.1s
**EKA Eskdalemuir Ar 22.48 323** P **P 18 00 03.5 -0.2**
comp=Z,71nm,0.8s,baz=122,slow=10,SNR=139
**EKA Eskdalemuir Ar 22.48 323** P **P 18 00 03.5 -0.2**
EKA pmax pmax
comp=Z,71nm,0.8s
**ESK Eskdalemuir 22.49 323** *e*P **P 18 00 03.0 -0.8**
ESK AMB AMB 18 00 04.2
comp=Z,388nm,0.9s
**ESK Eskdalemuir 22.49 323** *e*P **P 18 00 03.4 -0.4**
ESK pmax pmax
comp=Z,117nm,0.8s
**ESK Eskdalemuir 22.49 323** *e*P **P 18 00 03.4 -0.4**
comp=Z,117nm,0.8s
**ESK Eskdalemuir 22.49 323** *e*P **P 18 00 03.4 -0.4**
comp=Z,117nm,0.8s
**NBO02 NORSAR Array S 22.51 348** *e*P **P 18 00 03.4 -0.6**
**NBO02 NORSAR Array S 22.51 348** *e*P **P 18 00 03.4 -0.6**
**MESJ Messejana 22.52 275** *e*P **P 18 00 03.8 -0.6**
MESJ AMb AMB 18 00 06.0
comp=Z,32nm,1.7s
MESJ *e*S **S 18 04 12.0 +1.3**
**MESJ Messejana 22.52 275** *e*P **P 18 00 03.3 -1.0**
comp=Z,34nm,2.1s
**MESJ Messejana 22.52 275** *e*P **P 18 00 03.7 -0.6**
MESJ *e*S **S 18 04 12.0 +1.3**
MESJ pmax pmax
comp=Z,33nm,1.7s
**MESJ Messejana 22.52 275** *e*P **P 18 00 03.7 -0.6**
comp=Z,33nm,1.7s
**PNCL Nicolau / Gran 22.70 276** *e*P **P 18 00 05.8 -0.4**
comp=Z,58nm,1.5s
**GAL1 Galloway 22.96 321** *e*P **P 18 00 07.6 -1.2**
**GAL1 Galloway 22.96 321** *e*P **P 18 00 07.6 -1.2**
**PTEO Sao Teotonio 22.98 275** *e*P **P 18 00 08.5 -0.6**
comp=Z,59nm,1.0s
**DSB Dublin 23.03 316** *e*P **P 18 00 08.8 -0.7**
comp=Z,35nm,1.1s
**DSB Dublin 23.03 316** *e*P **P 18 00 08.8 -0.7**
comp=Z,35nm,1.1s
**DRUM Mains of Drumt 23.14 327** *e*P **P 18 00 09.6 -1.0**
DRUM AMB AMB 18 00 11.2
comp=Z,56nm,1.3s
**DRUM Mains of Drumt 23.14 327** *e*P **P 18 00 09.6 -1.0**
**EAB Aberfoyle 23.52 324** *e*P **P 18 00 13.7 -0.7**
**EAB Aberfoyle 23.52 324** *e*P **P 18 00 13.7 -0.7**
**IGZV Ghazvin 23.53 88** *e*P **P 18 00 13.2 -1.8**
**IRAZ Razeghan 23.60 90** *e*P **P 18 00 14.9 -0.8**
**IRAZ Razeghan 23.60 90** *e*P **P 18 00 14.9 -0.8**
**IR5 Iran Long-Peri 24.17 90** *e*P **P 18 00 20.1 -0.9**
**IR5 Iran Long-Peri 24.17 90** *e*P **P 18 00 20.1 -0.9**
**KLMR Klimovskoe 24.50 23** *e*P P 18 00 30.6 +7.1
KLMR pmax pmax
comp=Z,15nm,0.7s
KLMR MLR MLR
comp=Z,547nm,15.0s
**KSB Sheil Bridge 24.60 325** *e*P **P 18 00 23.6 -0.8**
**KSB Sheil Bridge 24.60 325** *e*P **P 18 00 23.6 -0.8**
**KAC Achnashellach 24.71 326** *e*P **P 18 00 24.8 -0.7**
**KAC Achnashellach 24.71 326** *e*P **P 18 00 24.8 -0.7**
**KPL Plockton 24.77 325** *e*P **P 18 00 25.1 -0.9**
**KPL Plockton 24.77 325** *e*P **P 18 00 25.1 -0.9**
**IAFJ Afjeh 24.84 88** *e*P **P 18 00 28.0 +0.7**
**IAFJ Afjeh 24.84 88** *e*P **P 18 00 28.0 +0.7**
**RSC Scourie 25.17 327** *e*P **P 18 00 28.9 -0.7**
**RSC Scourie 25.17 327** *e*P **P 18 00 28.9 -0.7**
**IDMV Damavand 25.18 89** *e*P **P 18 00 30.4 +0.1**
**IDMV Damavand 25.18 89** *e*P **P 18 00 30.4 +0.1**
**IPIR Pirpir 25.33 96** *e*P **P 18 00 30.6 -1.1**
**IKLH Kolahrood 25.61 94** *e*P **P 18 00 34.8 +0.6**
**IKLH Kolahrood 25.61 94** *e*P **P 18 00 34.8 +0.6**
**IALA Alasht 25.63 87** *e*P **P 18 00 35.5 +1.1**
**IALA Alasht 25.63 87** *e*P **P 18 00 35.5 +1.1**
**IFIR Firoozkooh 25.71 88** *e*P **P 18 00 35.4 +0.3**
**IFIR Firoozkooh 25.71 88** *e*P **P 18 00 35.4 +0.3**
**IGLO Ghaloghah 26.29 86** *e*P **P 18 00 41.2 +0.9**
**IGAR Gharneh 26.33 96** *e*P **P 18 00 40.3 -0.4**
**IZEF Zefreh 26.35 94** *e*P **P 18 00 40.3 -0.7**
**IZEF Zefreh 26.35 94** *e*P **P 18 00 40.3 -0.7**
**RAYN Ar Rayn 26.38 119** *e*P **P 18 00 40.9 -0.1**
comp=Z,9.8nm,0.9s
**RAYN Ar Rayn 26.38 119** *e*P **P 18 00 40.9 -0.1**
comp=Z,9.8nm,0.9s
**IRAM Ramesheh 26.84 96** *e*P **P 18 00 44.4 -0.9**
**IRAM Ramesheh 26.84 96** *e*P **P 18 00 44.4 -0.9**
**IKAZ Kazeroun 27.35 101** *e*P **P 18 00 49.4 -0.6**
**IKAZ Kazeroun 27.35 101** *e*P **P 18 00 49.4 -0.6**
**ISAD Sadrabad 27.80 95** *e*P **P 18 00 54.4 +0.4**
**ISAD Sadrabad 27.80 95** *e*P **P 18 00 54.4 +0.4**
**IPAR Pars 28.24 100** *e*P **P 18 00 57.4 -0.6**
**IPAR Pars 28.24 100** *e*P **P 18 00 57.4 -0.6**
**AKTK Aktyubinsk 28.43 55** P **P 18 00 58.5 -0.6**
comp=Z,78nm,20.1s
**AKTO Aktyubinsk 28.43 55** P **P 18 00 58.5 -0.6**
comp=Z,8.1nm,0.6s,baz=264,slow=9.6,SNR=18
AKTO LR LR 18 14 21.8
comp=Z,78nm,20.1s,baz=344,slow=41
**AKTO Aktyubinsk 28.43 55** P **P 18 00 58.5 -0.6**
AKTO pmax pmax
comp=Z,8.0nm,0.6s
AKTO MLR MLR
comp=Z,78nm,20.1s
**ISRV Sarvestan 28.51 100** *e*P **P 18 00 59.8 -0.5**
**ISRV Sarvestan 28.51 100** *e*P **P 18 00 59.8 -0.5**
**APA Apatity 29.12 10**⇑ *i*P **P 18 01 04.8 -0.2**
APA *i* 18 01 53.0
APA *i* S **S 18 05 52.0 -3.9**
APA pmax pmax
comp=Z,16nm,0.8s
APA MLR MLR
comp=Z,1μm,13.0s
**APA Apatity 29.12 10** *i* P **P 18 01 04.8 -0.2**
comp=Z,16nm,0.8s
**GEYT Alibeck 29.21 81** P **P 18 01 05.7 -0.5**
comp=Z,14nm,0.7s,baz=283,slow=8.5,SNR=17
GEYT LR LR 18 15 29.0
comp=Z,104nm,18.6s,baz=275,slow=42
**ABKAR Akbulak array 29.54 57** *e*P **P 18 01 08.0 -0.9**
comp=Z,5.8nm,0.8s
**ABKAR Akbulak array 29.54 57** *e*P **P 18 01 08.0 -0.9**
comp=Z,5.8nm,0.8s
**IKRD Kardeh 29.83 83** *e*P P 18 01 15.1 +3.2
**IKRD Kardeh 29.83 83** *e*P P 18 01 15.1 +3.2
**ARU Arti 30.13 43** P **P 18 01 13.2 -0.9**
comp=Z,0.7nm,0.3s,baz=85,slow=22,SNR=6.6
**ARU Arti 30.13 43***c* *i*P **P 18 01 13.4 -0.7**
ARU S **S 18 06 14.5 +2.4**
ARU SS **SnSn 18 07 49.4 +4.4**
ARU pmax pmax
comp=Z,16nm,1.0s
ARU MLR MLR
comp=Z,282nm,16.0s
**ARU Arti 30.13 43** *e*P **P 18 01 13.4 -0.7**
comp=Z,18nm,1.1s
**ARU Arti 30.13 43** *e*P **P 18 01 13.4 -0.7**
comp=Z,18nm,1.1s
**IPAY Payeh 30.29 83** *e*P **P 18 01 17.6 +1.5**
**IPAY Payeh 30.29 83** *e*P **P 18 01 17.6 +1.5**
**ARCES ARCESS Array B 30.32 3** P **P 18 01 14.4 -1.3**
comp=Z,7.2nm,0.6s,baz=186,slow=9.5,SNR=60
ARCES LR LR 18 15 44.5
comp=Z,162nm,18.4s,baz=184,slow=41
**ARCES ARCESS Array B 30.32 3** P **P 18 01 14.4 -1.3**
ARCES pmax pmax
comp=Z,7.0nm,0.6s
ARCES MLR MLR
comp=Z,162nm,18.4s
**IMOG Moghan 30.66 84** *e*P **P 18 01 19.9 +0.5**
**IMOG Moghan 30.66 84** *e*P **P 18 01 19.9 +0.5**
**ISRO Mashad 30.70 83** *e*P **P 18 01 20.5 +1.0**
**ISRO Mashad 30.70 83** *e*P **P 18 01 20.5 +1.0**

TOA1 **Torodi Ar. Sit** 31.01 218 *e*P P 18 01 22.0 -0.2
TOA0 **Torodi Ar. Sit** 31.01 218 *e*P P 18 01 22.0 -0.2
TOA0 **Torodi Ar. Sit** 31.01 218 *e*P P 18 01 21.8 -0.4
TOA0 **Torodi Ar. Sit** 31.01 218 *e*P P 18 01 21.8 -0.4
TORD **Torodi Ar. Bea** 31.01 218 P P 18 01 22.1 -0.2
comp=Z,14nm,0.7s,baz=32,slow=9.1,SNR=122
TORD PcP **PcP** 18 04 17.8 -0.2
comp=Z,1.5nm,0.7s,baz=353,slow=1.9,SNR=4.3
TORD LR LR 18 15 43.9
comp=Z,109nm,19.1s,baz=40,slow=40
IMYA **Miami** 31.18 83 *e*P P 18 01 25.1 +1.2
IMYA **Miami** 31.18 83 *e*P P 18 01 25.0 +1.2
SVE **Sverdlovsk** 31.34 43⇑ *e*P P 18 01 24.9 +0.1
SVE pmax pmax
comp=Z,32nm,0.9s
SVE **Sverdlovsk** 31.34 43 *e*P P 18 01 24.9 +0.1
comp=Z,32nm,0.9s
BRVK **Borovoye** 36.25 51 *d*/*i*P P 18 02 07.5 0.0
BRVK pmax pmax
comp=Z,21nm,1.0s
BRVK **Borovoye** 36.25 51 *e*P P 18 02 07.5 0.0
comp=Z,16nm,0.8s
BRVK **Borovoye** 36.25 51 *e*P P 18 02 07.5 0.0
comp=Z,16nm,0.8s
KKAR **Karatay Array** 37.28 68 *e*P P 18 02 15.6 -0.8
KKAR pmax pmax
comp=Z,8.0nm,0.7s
KKAR **Karatay Array** 37.28 68 *e*P P 18 02 15.6 -0.8
comp=Z,8.4nm,0.7s
KKAR **Karatay Array** 37.28 68 *e*P P 18 02 15.6 -0.8
comp=Z,8.4nm,0.7s
KBL **Kabul** 38.65 82⇑ *e*P P 18 02 28.7 +0.4
KBL **Kabul** 38.65 82 *e*P P 18 02 28.7 +0.4
DBIC **Dimbokro** 39.82 222 P P 18 02 36.6 -1.3
comp=Z,6.3nm,0.7s,baz=0.2,slow=8.9,SNR=7.3
DBIC LR LR 18 20 09.9
comp=Z,95nm,18.3s,baz=22,slow=38
DBIC **Dimbokro** 39.82 222 P P 18 02 36.6 -1.3
DBIC pmax pmax
comp=Z,6.0nm,0.7s
DBIC MLR MLR
comp=Z,95nm,18.3s
TIC **Toumodi** 39.93 222 *e*P P 18 02 42.5 +3.7
KIC **Kosan Boka** 40.02 221 *e*P P 18 02 39.2 -0.4
comp=Z,22nm,0.9s
AAK **Ala-Archa** 40.24 67 P P 18 02 39.9 -1.4
comp=Z,2.4nm,0.7s,baz=254,slow=7.0,SNR=8.8
AAK **Ala-Archa** 40.24 67 *e*P P 18 02 41.9 +0.5
AAK pmax pmax
comp=Z,26nm,1.7s
AAK **Ala-Archa** 40.24 67 *e*P P 18 02 41.9 +0.5
comp=Z,4.1nm,0.7s
AAK **Ala-Archa** 40.24 67 *e*P P 18 02 41.9 +0.5
comp=Z,4.1nm,0.7s
LIC **Lamto** 40.29 222 *e*P P 18 02 41.4 -0.4
comp=Z,48nm,1.1s
MBAR **Mbarara** 40.87 164 P P 18 02 46.0 -0.8
comp=Z,2.4nm,0.2s,baz=311,slow=8.2,SNR=3.8
MBAR **Mbarara** 40.87 164 P P 18 02 46.0 -0.8
MBAR pmax pmax
comp=Z,2.0nm,0.2s
MBAR **Mbarara** 40.87 164 P P 18 02 46.0 -0.8
comp=Z,2.0nm,0.2s
DAG **Danmarks Havn** 41.12 347 *i* P P 18 02 47.9 -0.1
DAG *i* 18 03 01.2
DAG pmax pmax
comp=Z,7.0nm,0.6s
DAG **Danmarks Havn** 41.12 347 *i* P P 18 02 47.9 -0.1
comp=Z,11nm,0.6s
DAG *i* 18 03 01.2
KURBB **Kurchatov Arra** 41.48 55 P P 18 02 50.5 -0.7
comp=Z,9.9nm,0.7s,baz=284,slow=9.0,SNR=50
KURK **Kurchatov** 41.52 54 P P 18 02 50.6 -1.0
KURK pmax pmax
comp=Z,10.0nm,0.7s
KURK **Kurchatov** 41.52 54 *e*P P 18 02 50.9 -0.8
comp=Z,32nm,0.9s
KURK **Kurchatov** 41.52 54 *e*P P 18 02 50.8 -0.8
comp=Z,32nm,0.9s
KSH **Kashi** 42.18 71 *e*P P 18 02 56.4 -0.9
KSH *e*pP **pP** 18 03 01.0 -1.3
KSH *e*PP **PP** 18 04 35.9 +1.0
KSH *e*PcP **PcP** 18 04 53.3 +1.9
KSH S **S** 18 09 13.5 -3.3
KSH sS **sS** 18 09 20.8 -4.2
KSH ScS **ScS** 18 12 56.6 -2.5
KSH PMZ
comp=Z,10.0nm,1.1s
KSH PMZ
comp=Z,91nm,4.0s
KSH LN
comp=Z,120nm,5.8s
KSH LE
comp=Z,120nm,5.7s
KSH LZ
comp=Z,260nm,5.5s
KMBO **Kilima Mbogo** 43.12 155 P P 18 03 05.3 0.0
comp=Z,1.7nm,1.0s,baz=20,slow=9.3,SNR=3.6
KMBO **Kilima Mbogo** 43.12 155 P P 18 03 05.3 0.0
KMBO pmax pmax
comp=Z,2.0nm,1.0s
SUMG **Summit** 43.71 338 *i* P P 18 03 09.0 -0.6
SUMG pmax pmax
comp=Z,9.0nm,0.9s
SUMG **Summit** 43.71 338 *i* P P 18 03 09.0 -0.6
comp=Z,9.3nm,0.9s
NVS **Novosibirsk** 43.82 48 *e*P P 18 03 09.6 -0.6
NVS *e* 18 04 49.4
NVS *e*S **S** 18 09 36.2 -4.0
NVS pmax pmax
comp=E,11nm,1.5s
NVS pmax pmax
comp=Z,18nm,1.5s
NVS smax smax
comp=E,31nm,2.6s
MKAR **Makanchi Array** 44.63 59 P P 18 03 16.2 -0.8
comp=E,6.8nm,0.6s,baz=281,slow=6.9,SNR=47
MKAR ScP **ScP** 18 08 50.0 -0.9
comp=E,1.1nm,0.8s,baz=282,slow=6.1,SNR=4.9
MKAR LR LR 18 25 52.7
comp=E,46nm,18.4s,baz=276,slow=42
MK01 **Makanchi Array** 44.65 59 *e*P P 18 03 16.0 -1.0
MK01 **Makanchi Array** 44.65 59 *e*P P 18 03 16.0 -1.0
ZAA0 **Zalesovo Array** 44.85 49 *e*P P 18 03 17.6 -0.9
ZAA0 **Zalesovo Array** 44.85 49 *e*P P 18 03 17.6 -0.9
ZALV **Zalesovo Beam** 44.85 49 P P 18 03 17.7 -0.8
comp=E,14nm,0.5s,baz=276,slow=8.8,SNR=72
ZALV S **S** 18 09 52.8 -2.4
comp=E,0.3nm,0.3s,baz=282,slow=8.7,SNR=3.1
ZALV LR LR 18 22 50.5
comp=E,32nm,19.1s,baz=248,slow=37
ZALV **Zalesovo Beam** 44.85 49 P P 18 03 17.7 -0.8
ZALV S **S** 18 09 52.8 -2.4
ZALV pmax pmax
comp=Z,14nm,0.5s
ZALV MLR MLR
comp=Z,32nm,19.1s
WMQ **Urumqi** 49.14 62 *e*P P 18 03 52.0 -0.2
WMQ S **S** 18 10 52.0 -4.8
WMQ SS **SS** 18 14 22.0 -5.7
WMQ LN
comp=Z,82nm,14.0s
WMQ LE
comp=Z,52nm,15.0s
WMQ LZ
comp=Z,54nm,15.0s
HVS **Khovu-Aksy** 50.76 51 *e*P P 18 04 04.2 -0.2
DANN **Dangsing** 52.64 82 *e*P P 18 04 17.5 -1.6
KOLN **Koldanda** 52.81 82 *e*P P 18 04 18.3 -1.9
comp=Z,13nm,0.5s
GKN **Gorkha** 53.49 82 *e*P P 18 04 23.1 -2.1
comp=Z,30nm,0.9s
DMN **Daman** 54.04 82 *e*P P 18 04 27.6 -1.8
comp=Z,53nm,1.1s
KKN **Kakani** 54.09 81 *e*P P 18 04 27.5 -2.1
comp=Z,15nm,0.8s
PKIN **Phulchoki** 54.28 82 *e*P P 18 04 29.2 -1.9
comp=Z,15nm,0.8s
PKI **Pulchoki** 54.29 82 *e*P P 18 04 29.4 -1.9
comp=Z,29nm,1.1s
GUN **Gumba** 54.48 81 *e*P P 18 04 30.9 -1.8
comp=Z,59nm,1.0s
MOY **Mondy** 54.91 49 *e*P P 18 04 35.7 +0.6
FRB **Frobisher Bay** 55.16 327 LR LR 18 29 30.6
comp=Z,42nm,18.6s,baz=22,slow=38
RAMN **Ramite** 55.52 82 *e*P P 18 04 37.8 -2.3
comp=Z,26nm,0.7s
TAPN **Taplejung** 56.17 81 *e*P P 18 04 42.7 -2.1
comp=Z,53nm,1.0s
ODAN **Odare** 56.17 81 *e*P P 18 04 43.1 -1.6
comp=Z,49nm,1.2s
ZAK **Zakamensk** 56.73 49 *e*P P 18 04 45.5 -2.7
ZAK pmax pmax
comp=Z,5.0nm,1.0s
LSA **Lhasa** 57.60 76 *e*P P 18 04 53.7 -1.4
LSA pmax pmax
comp=Z,7.0nm,0.6s
LSA **Lhasa** 57.60 76 *e*P P 18 04 53.7 -1.4
comp=Z,6.7nm,0.6s
LSA **Lhasa** 57.60 76 *e*P P 18 04 53.7 -1.4
comp=Z,6.7nm,0.6s
SCHQ **Schefferville** 57.61 317 P P 18 04 53.0 -1.2
comp=Z,5.7nm,0.4s,baz=76,slow=9.6,SNR=9.1
SCHQ **Schefferville** 57.61 317 P P 18 04 53.0 -1.2
GTA **Gaotai** 59.21 62 *e*P P 18 05 05.4 -0.4
GTA pP **pP** 18 05 10.1 -0.9
GTA sP **sP** 18 05 12.4 -0.5
GTA PcP **PcP** 18 05 57.0 +2.9
GTA ScP **ScP** 18 09 54.4 +0.3
SONA1 **Songino Array** 59.66 51 *e*P P 18 05 07.9 -0.8
SONA1 **Songino Array** 59.66 51 *e*P P 18 05 07.9 -0.8
SONM **Songino Array** 59.66 51 P P 18 05 08.2 -0.6
comp=Z,4.9nm,0.8s,baz=285,slow=9.5,SNR=20
SONM **Songino Array** 59.66 51 P P 18 05 08.2 -0.6
SONM pmax pmax
comp=Z,5.0nm,0.8s
ULN **Ulaanbaatar** 60.04 51⇓ *e*P P 18 05 11.1 -0.3
ULN pmax pmax
comp=Z,7.0nm,1.0s
ULN **Ulaanbaatar** 60.04 51 *e*P P 18 05 10.7 -0.7
ULN **Ulaanbaatar** 60.04 51 *e*P P 18 05 10.7 -0.7
LZH **Lanzhou** 63.62 64 *e*P P 18 05 35.6 -0.1
LZH pP **pP** 18 05 38.6 -2.3
LZH sP **sP** 18 05 40.9 -1.9
LZH PMZ
comp=Z,16nm,1.0s
YAK **Yakutsk** 64.03 30 *e*P P 18 05 37.2 -0.5
YAK pmax pmax
comp=Z,10.0nm,1.0s
YAK **Yakutsk** 64.03 30 *e*P P 18 05 36.8 -1.0
comp=Z,8.9nm,0.6s
YAK **Yakutsk** 64.03 30 *e*P P 18 05 36.8 -1.0
comp=Z,8.9nm,0.6s
CD2 **Chengdu** 66.28 69 *e*P P 18 05 51.8 -1.2
CD2 pP **pP** 18 05 57.1 -1.1
CD2 PP **PP** 18 08 17.3 -1.4
CD2 S **S** 18 14 40.3 -1.6
CD2 sS **sS** 18 14 49.3 -1.1
CD2 SKS **SKSac** 18 15 47.1 -1.8
CD2 SS **SS** 18 18 57.1 -0.6
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.4s
HHC **Hu-ho-hao-te** 66.31 56 *e*P P 18 05 54.0 +0.9
HHC PP **PP** 18 08 20.3 +1.6
HHC S **S** 18 14 42.8 +0.7
HHC PMZ
comp=Z,25nm,1.2s
HHC PMZ
comp=Z,100nm,6.2s
HHC LN
comp=Z,290nm,17.4s
HHC LE
comp=Z,240nm,17.4s
HHC LZ
comp=Z,160nm,18.7s
BOSA **Boshof** 67.79 176 P P 18 06 03.4 +1.0
comp=Z,2.1nm,0.6s,baz=3.1,slow=7.2,SNR=6.6
BOSA LR LR 18 38 33.6
comp=Z,118nm,18.2s,baz=340,slow=38
BOSA **Boshof** 67.79 176 P P 18 06 03.4 +1.0
BOSA pmax pmax
comp=Z,2.0nm,0.6s
BOSA MLR MLR
comp=Z,118nm,18.2s
KMI **Kunming** 68.73 75 P P 18 06 10.6 +1.8
KMI pP **pP** 18 06 15.5 +1.5
KMI sP **sP** 18 06 18.3 +2.4
KMI PMZ
comp=Z,7.0nm,0.5s
KMI PMZ
comp=Z,190nm,5.4s
KMI LN
comp=Z,280nm,5.5s
KMI LE
comp=Z,130nm,6.4s
KMI LZ
comp=Z,160nm,7.8s
CHTO **Chiang Mai** 69.47 82 *e*P P 18 06 12.7 -0.5
CHTO **Chiang Mai** 69.47 82 *e*P P 18 06 12.7 -0.5
CHTO **Chiang Mai** 69.47 82 *e*P P 18 06 12.7 -0.5
CMAR **Chiang Mai Arr** 69.68 82 P P 18 06 12.6 -1.9
comp=Z,2.0nm,0.8s,baz=303,slow=7.6,SNR=7.4
CMAR LR LR 18 40 25.6
comp=Z,40nm,18.9s,baz=179,slow=39
CMAR **Chiang Mai Arr** 69.68 82 P P 18 06 12.6 -1.9
CMAR pmax pmax
comp=Z,2.0nm,0.8s
CMAR MLR MLR
comp=Z,40nm,18.9s
BJI **Beijing** 69.69 55 P P 18 06 13.8 -0.4
BJI S **S** 18 15 17.5 -4.7
BJI PMZ
comp=Z,11nm,0.5s
BJI LZ
comp=Z,32nm,19.3s
GYA **Guiyang** 70.88 71 *e*P P 18 06 22.4 +0.6
GYA PMZ
comp=Z,10.0nm,1.0s
YKA **Yellowknife Ar** 72.27 340 P P 18 06 28.0 -1.4
comp=Z,4.7nm,0.7s,baz=36,slow=5.5,SNR=7.5
YKA **Yellowknife Ar** 72.27 340 P P 18 06 28.0 -1.4
YKA pmax pmax
comp=Z,5.0nm,0.7s
YKA **Yellowknife Ar** 72.27 340 P P 18 06 28.0 -1.4
CN2 **Changchun** 73.02 47 *e*P P 18 06 31.6 -2.7
COLD **Coldfoot** 73.48 356 *e*P P 18 06 37.7 +1.2
COLD **Coldfoot** 73.48 356 *e*P P 18 06 37.7 +1.2
ULM **Lac du Bonnet** 74.75 323 P P 18 06 42.8 -1.5
comp=Z,8.0nm,0.7s,baz=63,slow=6.4,SNR=5.6
ULM **Lac du Bonnet** 74.75 323 P P 18 06 42.8 -1.5
ULM pmax pmax
comp=Z,8.0nm,0.7s
MDM **Murphy Dome** 75.62 355 *e*P P 18 06 50.1 +1.0
MDM **Murphy Dome** 75.62 355 *e*P P 18 06 50.1 +1.0
DAWY **Dawson** 75.67 351 *e*P P 18 06 50.3 +0.9
DAWY **Dawson** 75.67 351 *e*P P 18 06 50.3 +0.9
ILAR **Eielson Array** 75.71 354 P P 18 06 49.8 +0.3
comp=Z,2.5nm,0.7s,baz=355,slow=3.3,SNR=31
ILAR **Eielson Array** 75.71 354 P P 18 06 49.8 +0.3
ILAR pmax pmax
comp=Z,3.0nm,0.7s
HDA **Harding Lake** 76.08 354 *e*P P 18 06 51.5 -0.1
HDA **Harding Lake** 76.08 354 *e*P P 18 06 51.5 -0.1
CPD **Cerro la Pandu** 76.14 282 *e*P P 18 06 53.4 +0.6
CPD **Cerro la Pandu** 76.14 282 *e*P P 18 06 53.4 +0.6
CPD **Cerro la Pandu** 76.14 282 *e*P P 18 06 53.4 +0.6
NJ2 **Nanjing** 76.16 60 *e*P P 18 06 54.1 +1.4
NJ2 PMZ
comp=Z,40nm,0.8s
USRK **Ussuriysk Ar.** 76.37 44 P P 18 06 53.0 -0.6
comp=Z,2.1nm,0.7s,baz=318,slow=5.4,SNR=5.6
BLO **Bloomington** 77.27 310 *e*P P 18 06 59.7 +0.9
BLO **Bloomington** 77.27 310 *e*P P 18 06 59.7 +0.9
BLO **Bloomington** 77.27 310 *e*P P 18 06 59.7 +0.9
SMN1 **Samana, DR** 77.98 285 *e*P P 18 07 04.5 +1.4
SMN1 **Samana, DR** 77.98 285 *e*P P 18 07 04.5 +1.4
KSAR **Wonju Array Be** 78.51 51 P P 18 07 05.1 -0.6
KSAR **Wonju Array Be** 78.51 51 P P 18 07 05.1 -0.6
KSAR **Wonju Array Be** 78.51 51 P P 18 07 05.1 -0.6
KSRS **Korea Array** 78.53 51 P P 18 07 05.1 -0.7
comp=Z,2.9nm,0.8s,baz=313,slow=4.8,SNR=14
KSRS **Korea Array** 78.53 51 P P 18 07 05.1 -0.7
KSRS pmax pmax
comp=Z,3.0nm,0.8s
EDM **Edmonton** 79.53 334 *e*P P 18 07 11.6 +0.5
EDM **Edmonton** 79.53 334 *e*P P 18 07 11.6 +0.5
EDM **Edmonton** 79.53 334 *e*P P 18 07 11.6 +0.5
SDDR **Presa de Saban** 79.61 286 *e*P P 18 07 42.7 -2.1
SDDR **Presa de Saban** 79.61 286 *e*P P 18 07 14.5 +2.4
ECSD **EROS Data Cent** 79.71 319 *e*P P 18 07 12.9 +0.7
ECSD **EROS Data Cent** 79.71 319 *e*P P 18 07 12.9 +0.7
YSS **Yuzh-Sakhalins** 79.76 36 *e*P P 18 07 12.0 -0.4
YSS pmax pmax
comp=Z,50nm,1.0s
PETK **Petropavlovsk-** 80.68 25 LR LR 18 47 14.6
comp=Z,30nm,18.5s,baz=339,slow=39
LRAL **Lakeview Retre** 81.59 306 *e*P P 18 07 23.0 +0.6
comp=Z,18nm,1.0s
LRAL **Lakeview Retre** 81.59 306 *e*P P 18 07 23.0 +0.6
comp=Z,18nm,1.0s
LAO **LASA Array** 82.02 326 *e*P P 18 07 26.3 +1.7
LAO **LASA Array** 82.02 326 *e*P P 18 07 26.3 +1.7
EGMT **Eagleton** 82.43 329 *e*P P 18 07 28.2 +1.5
EGMT **Eagleton** 82.43 329 *e*P P 18 07 28.2 +1.5
KSU1 **Kansas State U** 83.02 316 *e*P P 18 07 30.9 +1.0
KSU1 **Kansas State U** 83.02 316 *e*P P 18 07 30.9 +1.0
RSSD **Black Hills** 83.03 323 *e*P P 18 07 31.3 +1.2
RSSD **Black Hills** 83.03 323 *e*P P 18 07 31.3 +1.2
RSSD **Black Hills** 83.03 323 *e*P P 18 07 31.3 +1.2
BDFB **Brasilia** 84.08 244 P P 18 07 36.4 +0.8
comp=Z,2.6nm,0.6s,baz=20,slow=2.2,SNR=4.5
BDFB **Brasilia** 84.08 244 P P 18 07 36.4 +0.8
BDFB pmax pmax
comp=Z,3.0nm,0.6s
GCMT **Greycliff** 84.19 328 *e*P P 18 07 37.4 +1.4
GCMT **Greycliff** 84.19 328 *e*P P 18 07 37.4 +1.4
YBMT **Yellow Bay** 84.21 331 *e*P P 18 07 36.9 +0.9
YBMT **Yellow Bay** 84.21 331 *e*P P 18 07 36.9 +0.9
HRY **Holter Researc** 84.32 329 *e*P P 18 07 37.5 +1.0
HRY **Holter Researc** 84.32 329 *e*P P 18 07 37.5 +1.0
JTMT **Jette** 84.41 331 *e*P P 18 07 38.0 +1.0
JTMT **Jette** 84.41 331 *e*P P 18 07 38.0 +1.0
SWMT **Swartz Lake** 84.50 331 *e*P P 18 07 38.2 +0.7
SWMT **Swartz Lake** 84.50 331 *e*P P 18 07 38.2 +0.7
RLMT **Red Lodge** 84.56 327 *e*P P 18 07 39.2 +1.3
RLMT **Red Lodge** 84.56 327 *e*P P 18 07 39.2 +1.3
TUL1 **Tulsa** 84.86 313 *e*P P 18 07 40.5 +1.2
TUL1 **Tulsa** 84.86 313 *e*P P 18 07 40.5 +1.2
NEW **Newport** 85.00 333 *e*P P 18 07 40.8 +1.0
NEW **Newport** 85.00 333 *e*P P 18 07 40.8 +1.0
NEW **Newport** 85.00 333 *e*P P 18 07 40.8 +1.0
BOZ **Bozeman (W)** 85.11 329 *e*P P 18 07 41.8 +1.2
BOZ **Bozeman (W)** 85.11 329 *e*P P 18 07 41.8 +1.2
BOZ **Bozeman (W)** 85.11 329 *e*P P 18 07 41.8 +1.2
LRM **Limekiln Ridge** 85.30 329 *e*P P 18 07 42.4 +0.7
LRM **Limekiln Ridge** 85.30 329 *e*P P 18 07 42.4 +0.7
K22A **Casper** 85.31 324 *e*P P 18 07 42.0 +0.3
K22A **Casper** 85.31 324 *e*P P 18 07 42.0 +0.3
SDV **Santo Domingo** 85.37 278 *e*P P 18 07 42.5 +0.1
comp=Z,9.8nm,0.8s
SDV **Santo Domingo** 85.37 278 *e*P P 18 07 42.5 +0.1
comp=Z,9.8nm,0.8s
H17A **Grant Village** 85.70 327 *e*P P 18 07 47.5 +3.9
QLMT **Earthquake Lak** 85.70 328 *e*P P 18 07 45.4 +1.8
QLMT **Earthquake Lak** 85.70 328 *e*P P 18 07 45.4 +1.8
DPW **Davenport** 85.71 334 *e*P P 18 07 40.7 -2.7
DPW **Davenport** 85.71 334 *e*P P 18 07 40.7 -2.7
DLMT **Dillon** 85.73 329 *e*P P 18 07 45.0 +1.3
DLMT **Dillon** 85.73 329 *e*P P 18 07 45.0 +1.3
C09A **Chrisman Ranch** 85.79 334 *e*P P 18 07 44.6 +0.9
C09A **Chrisman Ranch** 85.79 334 *e*P P 18 07 44.7 +0.9
IMW **Indian Meadow** 86.25 327 *e*P P 18 07 48.3 +1.8
IMW **Indian Meadow** 86.25 327 *e*P P 18 07 48.3 +1.8
MOOW **Moose Ponds** 86.29 327 *e*P P 18 07 48.0 +1.4
MOOW **Moose Ponds** 86.29 327 *e*P P 18 07 48.0 +1.4
N23A **Red Feather La** 86.42 322 *e*P P 18 07 48.4 +1.0
N23A **Red Feather La** 86.42 322 *e*P P 18 07 48.3 +1.0
FXWY **Fox Creek** 86.50 327 *e*P P 18 07 49.1 +1.4
FXWY **Fox Creek** 86.50 327 *e*P P 18 07 49.1 +1.4
BW06 **Boulder Array** 86.58 326 *e*P P 18 07 48.0 0.0
BW06 **Boulder Array** 86.58 326 *e*P P 18 07 48.0 0.0
TPAW **Teton Pass** 86.59 327 *e*P P 18 07 49.5 +1.4
TPAW **Teton Pass** 86.59 327 *e*P P 18 07 49.5 +1.4
F10A **Beach Ranch, E** 86.99 332 *e*P P 18 07 50.0 +0.2
F10A **Beach Ranch, E** 86.99 332 *e*P P 18 07 50.0 +0.2
ISCO **Idaho Springs** 87.11 322 *e*P P 18 07 51.5 +0.7
ISCO **Idaho Springs** 87.11 322 *e*P P 18 07 51.5 +0.7
ISCO **Idaho Springs** 87.11 322 *e*P P 18 07 51.5 +0.7
AHID **Auburn Hatcher** 87.24 327 *e*P P 18 07 51.9 +0.6
AHID **Auburn Hatcher** 87.24 327 *e*P P 18 07 51.9 +0.6
WMOK **Wichita Mounta** 87.39 314 *e*P P 18 07 53.0 +1.1
WMOK **Wichita Mounta** 87.39 314 *e*P P 18 07 53.0 +1.1
WMOK **Wichita Mounta** 87.39 314 *e*P P 18 07 53.0 +1.1
HAWA **Hanford** 87.44 334 *e*P P 18 07 52.8 +0.9
HAWA **Hanford** 87.44 334 *e*P P 18 07 52.8 +0.9
SMCO **Snowmass** 88.25 322 *e*P P 18 07 56.7 +0.3
SMCO **Snowmass** 88.25 322 *e*P P 18 07 56.7 +0.3
T25A **Trinidad** 88.58 319 *e*P P 18 07 58.5 +0.8
T25A **Trinidad** 88.58 319 *e*P P 18 07 58.5 +0.8
SDCO **Great Sand Dun** 88.66 320 *e*P P 18 07 58.5 +0.3
SDCO **Great Sand Dun** 88.66 320 *e*P P 18 07 58.5 +0.3
TCUT **Toone Canyon** 88.72 326 *e*P P 18 07 59.2 +0.8
TCUT **Toone Canyon** 88.72 326 *e*P P 18 07 59.2 +0.8
HVU **Hansel Valley** 88.76 327 *e*P P 18 07 59.2 +0.8
HVU **Hansel Valley** 88.76 327 *e*P P 18 07 59.2 +0.8
HVU **Hansel Valley** 88.76 327 *e*P P 18 07 59.2 +0.8
S22A **4UR Ranch, Cre** 89.31 321 *e*P P 18 08 02.0 +0.7
S22A **4UR Ranch, Cre** 89.31 321 *e*P P 18 08 02.0 +0.7
P18A **Preston Nutter** 89.41 324 *e*P P 18 08 01.9 +0.2
P18A **Preston Nutter** 89.41 324 *e*P P 18 08 01.9 +0.2
ABTX **Abilene, Hawle** 89.43 313 *e*P P 18 08 03.1 +1.5
ABTX **Abilene, Hawle** 89.43 313 *e*P P 18 08 03.1 +1.5
O16A **Springville** 89.50 325 *e*P P 18 08 06.5 +4.5
BGU **Big Grassy Mou** 89.58 327 *e*P P 18 08 03.1 +0.8
BGU **Big Grassy Mou** 89.58 327 *e*P P 18 08 03.1 +0.8
SRU **San Rafael** 89.96 324 *e*P P 18 08 04.2 +0.1
SRU **San Rafael** 89.96 324 *e*P P 18 08 04.2 +0.1
SRU **San Rafael** 89.96 324 *e*P P 18 08 04.2 +0.1
NLU **North Lily Min** 89.96 326 *e*P P 18 08 04.8 +0.6
NLU **North Lily Min** 89.96 326 *e*P P 18 08 04.8 +0.6
DUG **Dugway** 90.09 326 *e*P P 18 08 05.2 +0.5
DUG **Dugway** 90.09 326 *e*P P 18 08 05.2 +0.5
DUG **Dugway** 90.09 326 *e*P P 18 08 05.2 +0.5
TMUT **Trail Mountain** 90.12 325 *e*P P 18 08 05.3 +0.3
TMUT **Trail Mountain** 90.12 325 *e*P P 18 08 05.3 +0.3
MVCO **Mesa Verde** 90.54 322 *e*P P 18 08 07.8 +0.8
MVCO **Mesa Verde** 90.54 322 *e*P P 18 08 07.8 +0.8
MSU **Marysvale** 91.19 325 *e*P P 18 08 11.0 +1.1
MSU **Marysvale** 91.19 325 *e*P P 18 08 11.0 +1.1
MSU **Marysvale** 91.19 325 *e*P P 18 08 11.0 +1.1
WUAZ **Wupatki** 93.27 323 *e*P P 18 08 20.6 +1.1
WUAZ **Wupatki** 93.27 323 *e*P P 18 08 20.6 +1.1
MNTX **Cornudas Mount** 93.29 316 *e*P P 18 08 20.0 +0.5
MNTX **Cornudas Mount** 93.29 316 *e*P P 18 08 20.0 +0.5
NV01 **Mina Array Sit** 93.86 329 *e*P P 18 08 22.7 +0.5
NV01 **Mina Array Sit** 93.86 329 *e*P P 18 08 22.7 +0.5
NVAR **Mina Array Bea** 93.86 329 P P 18 08 21.2 -1.0
comp=Z,1.0nm,0.7s,baz=42,slow=3.7,SNR=10
NVAR PKKPbc **PKKPbc** 18 25 25.6 +1.0
comp=Z,0.4nm,0.6s,baz=201,slow=4.5,SNR=4.1
TXAR **Lajitas Array** 94.17 314 P P 18 08 24.6 +1.0
comp=Z,4.1nm,0.7s,baz=68,slow=4.0,SNR=37
TXAR **Lajitas Array** 94.17 314 P P 18 08 24.7 +1.0
TXAR pmax pmax
comp=Z,4.0nm,0.7s
ISA **Isabella** 96.30 328 *e*P P 18 08 34.3 +1.0
ISA **Isabella** 96.30 328 *e*P P 18 08 34.3 +1.0
ISA **Isabella** 96.30 328 *e*P P 18 08 34.3 +1.0
CPUP **Villa Florida** 97.66 242 LR LR 18 53 21.2
comp=Z,61nm,20.3s,baz=38,slow=36
WRA **Warramunga Arr** 120.53 92 PKP **PKPdf** 18 13 55.2 -1.2
comp=Z,1.4nm,0.7s,baz=315,slow=1.5,SNR=21
WRA **Warramunga Arr** 120.53 92 PKIKP **PKPdf** 18 13 55.2 -1.2
WRA pmax pmax
comp=Z,1.0nm,0.7s
ASAR **Alice Springs** 122.25 95 PKP **PKPdf** 18 13 58.7 -1.0
comp=Z,2.3nm,0.6s,baz=317,slow=1.5,SNR=48
ASAR **Alice Springs** 122.25 95 PKIKP **PKPdf** 18 13 58.7 -1.0
ASAR pmax pmax
comp=Z,2.0nm,0.6s
CTA **Charters Tower** 129.83 84 PKP **PKPdf** 18 14 13.5 -0.7
comp=Z,3.2nm,0.8s,baz=248,slow=12,SNR=4.5
CTA **Charters Tower** 129.83 84 PKIKP **PKPdf** 18 14 13.5 -0.7
CTA pmax pmax
comp=Z,3.0nm,0.8s

**SJA 17 18:00:10.1±0.5, 32.01S×69.24W, h96km±3km, MD2.8, ML4.8, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLS** | **Leoncito** | **0.21** | **347** | *i* P | Pn | 18 00 25.6 | +1.4 |
| RTLS | | | | *i* S | Sn | 18 00 36.5 | +1.9 |
| **AUSP** | **Uspallata** | **0.25** | **209** | *i* P | Pn | 18 00 25.1 | +0.7 |
| AUSP | | | | *i* S | Sn | 18 00 36.5 | +1.6 |
| **ASAL** | **Salagasta** | **0.68** | **149** | *i* P | Pn | 18 00 28.0 | +0.9 |
| ASAL | | | | *i* S | Sn | 18 00 41.1 | +1.4 |
| **CFAA** | **Coronel Fontan** | **0.94** | **65** | *i* P | Pn | 18 00 30.3 | +0.7 |
| CFAA | | | | *i* S | Sn | 18 00 45.7 | +1.3 |
| CFAA | comp=Z,19μm,0.2s | | | AML | AML | 18 00 49.3 | |
| **AMOG** | **MOGNA** | **1.24** | **31** | *i* P | Pn | 18 00 34.2 | +1.1 |
| AMOG | | | | *i* S | Sn | 18 00 51.8 | +1.3 |

*ISCJB* **17** *18:11:46.5±0.5, 43˚.90N±0˚.05×105˚.42W±0˚.06, h0km, mb4.1/2, MS3.7/2, Error ellipse: s-maj=6.7km s-min=6.1km az=146.9*

*NEIC* **17** *18:11:48.6±1.2, 43˚.94N×105˚.41W, h0km, ML3.3, Error ellipse: s-maj=17.0km s-min=14.2km az=58.0, Suspected Mining explosion.*

*NEIC 40 km [25 miles] S of Gillette.*

*IDC* **17** *18:11:49.7±1.1, 44˚.12N×105˚.82W, h0km, mb4.0/2, mb1 3.8/5, mb1mx3.5/45, mbtmp3.6/5, ML2.9/3, MS3.4/3, Ms1 3.4/3, ms1mx2.6/54, Error ellipse: s-maj=29.3km s-min=13.3km az=130.0*

**ISC 17 18:11:46.7±0.8, 43.98N±0.05×105.54W±0.05, h0km, n51, σ1§43/36, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **1.09** | **82** | *e*Pg | **Pn** | **18 12 07.5** | **-2.0** |
| **K22A** | **Casper** | **1.51** | **209** | *e*Pn | **Pg** | **18 12 15.8** | **+0.1** |
| **PHWY** | **Pilot Hill** | **2.68** | **179** | *e*Pn | **Pn** | **18 12 31.3** | **-0.1** |
| **LAO** | **LASA Array** | **2.75** | **350** | *e*Pn | **Pn** | **18 12 31.5** | **-0.7** |
| **RLMT** | **Red Lodge** | **2.90** | **294** | *e*Pn | **Pb** | **18 12 41.0** | **+1.6** |
| **BW06** | **Boulder Array** | **3.17** | **249** | *e*Pn | **Pb** | **18 12 42.6** | **-1.5** |
| **GCMT** | **Greycliff** | **3.45** | **303** | *e*Pn | **Pb** | **18 12 48.2** | **-0.5** |
| **H17A** | **Grant Village** | **3.65** | **278** | *e*Pn | **Pb** | **18 12 50.0** | **-2.2** |
| **LOHW** | **Long Hollow** | **3.69** | **266** | *e*Pn | **Pb** | **18 12 51.6** | **-1.2** |
| **FLWY** | **Flagg Ranch** | **3.72** | **273** | *e*Pn | **Pb** | **18 12 51.4** | **-2.1** |
| **MOOW** | **Moose Ponds** | **3.77** | **268** | *e*Pn | **Pb** | **18 12 53.4** | **-1.0** |
| **YFT** | **Old Faithful** | **3.84** | **279** | *e*Pn | **Pn** | **18 12 46.1** | **-1.1** |
| **IMW** | **Indian Meadow** | **3.90** | **271** | *e*Pn | Pb | 18 12 53.5 | -3.1 |
| **REDW** | **Red Top Meadow** | **3.91** | **263** | *e*Pn | **Pb** | **18 12 55.9** | **-0.7** |
| **TPAW** | **Teton Pass** | **3.95** | **265** | *e*Pn | **Pb** | **18 12 56.2** | **-1.3** |
| **YMR** | **Madison River** | **3.96** | **282** | Pn | Pn | 18 12 42.8 | -6.1 |
| **OGNE** | **Ogallala** | **3.99** | **138** | *e*Pn | **Pn** | **18 12 48.9** | **-0.4** |
| **ISCO** | **Idaho Springs** | **4.18** | **181** | *e*Pn | **Pn** | **18 12 52.8** | **+0.8** |
| **AHID** | **Auburn Hatcher** | **4.23** | **255** | *e*Pn | **Pn** | **18 12 53.5** | **+0.9** |
| AHID | | | | *e*Sn | **Sn** | **18 13 40.2** | **-2.6** |
| **QLMT** | **Earthquake Lak** | **4.31** | **283** | Pn | **Pn** | **18 12 52.0** | **-1.7** |
| **O20A** | **White River Ci** | **4.34** | **209** | Pn | **Pn** | **18 12 53.5** | **-0.6** |
| **DGMT** | **Dagmar** | **4.58** | **11** | *e*Pn | Pb | 18 13 03.6 | -4.4 |
| DGMT | | | | *e*Sn | **Sn** | **18 13 50.4** | **-0.9** |
| **BOZ** | **Bozeman (W)** | **4.64** | **293** | *e*Pn | Pb | 18 13 04.3 | -4.8 |
| **EGMT** | **Eagleton** 31nm,0.7s | **5.00** | **325** | Pn | Pn | 18 12 57.5 | -5.5 |
| **TCUT** | **Toone Canyon** 39nm,0.5s | **5.20** | **239** | *e*Pn | **Pn** | **18 13 07.1** | **+1.2** |
| **HRY** | **Holter Researc** 16nm,0.5s | **5.21** | **304** | *e*Pn | Pn | 18 13 12.3 | +6.3 |
| **LRM** | **Limekiln Ridge** 42nm,0.6s | **5.24** | **293** | *e*Pn | **Pn** | **18 13 07.3** | **+0.7** |
| **MCMT** | **McKenzie Canyo** 2.5nm,0.5s | **5.31** | **282** | *e*Pn | **Pn** | **18 13 06.6** | **-0.8** |
| **KSCO** | **Kaye Shedlock'** 21nm,0.4s | **5.42** | **155** | *e*Pn | **Pn** | **18 13 08.2** | **-0.8** |
| **CTU** | **Camp Tracy** 6.6nm,0.4s | **5.66** | **237** | *e*Pn | **Pn** | **18 13 13.5** | **+1.4** |
| **SPUT** | **South Promonto** 6.0nm,0.5s | **5.75** | **245** | *e*Pn | **Pn** | **18 13 16.3** | **+2.8** |
| **HVU** | **Hansel Valley** 8.2nm,0.7s | **5.75** | **250** | *e*Pn | **Pn** | **18 13 14.7** | **+1.2** |
| **SRU** | **San Rafael** 10nm,0.5s | **6.14** | **219** | *e*Pn | **Pn** | **18 13 20.8** | **+2.0** |
| **CHMT** | **Chamberlain Mo** 1.7nm,0.5s | **6.17** | **301** | *e*Pn | Pn | 18 13 25.6 | +6.3 |
| **NLU** | **North Lily Min** 2.8nm,0.5s | **6.32** | **233** | *e*Pn | **Pn** | **18 13 22.9** | **+1.6** |
| **TMUT** | **Trail Mountain** 23nm,0.5s | **6.32** | **224** | *e*Pn | Pn | 18 13 24.7 | +3.3 |
| **HLID** | **Hailey** 1.0nm,0.6s | **6.44** | **269** | *e*Pn | **Pn** | **18 13 22.9** | **0.0** |
| **SLMT** | **Seeley Lake** 4.7nm,0.7s | **6.46** | **303** | *e*Pn | Pn | 18 13 29.5 | +6.3 |
| **DUG** | **Dugway** 4.4nm,0.8s | **6.60** | **238** | *e*Pn | **Pn** | **18 13 26.1** | **+1.0** |
| **SWMT** | **Swartz Lake** 2.5nm,0.5s | **6.89** | **304** | *e*Pn | Pn | 18 13 35.4 | +6.4 |
| **YBMT** | **Yellow Bay** 4.1nm,0.5s | **7.07** | **306** | *e*Pn | **Pn** | **18 13 30.1** | **-1.4** |
| **I10CA** | **LAC DU BONNET** baz=222,slow=329,SNR=3.1 | **8.98** | **43** | *i* | | 19 03 10.0 | |
| **ULM** | **Lac du Bonnet** 1.1nm,0.3s,baz=230,slow=11,SNR=6.5 | **9.09** | **43** | Pn | **Pn** | **18 14 00.3** | **+1.3** |
| ULM | 0.4nm,0.3s,baz=128,slow=19,SNR=2.4 | | | Lg | Lg | 18 16 30.1 | |
| **NEW** | **Newport** 0.1nm,0.3s,baz=70,slow=15,SNR=2.9 | **9.11** | **302** | Lg | Lg | 18 16 25.4 | |
| **WUAZ** | **Wupatki** 5.0nm,0.6s | **9.57** | **210** | *e*Pn | Pn | 18 14 08.6 | +2.7 |
| **NVAR** | **Mina Array Bea** 0.1nm,0.3s,baz=57,slow=16,SNR=4.1 | **11.10** | **244** | Pn | Pn | 18 14 30.1 | +3.3 |
| NVAR | comp=Z,68nm,18.3s,baz=336,slow=38 | | | LR | LR | 18 18 38.8 | |
| **TXAR** | **Lajitas Array** 0.0nm,0.3s,baz=356,slow=11,SNR=2.4 | **14.70** | **174** | Pn | **P** | **18 15 22.8** | **+0.4** |
| TXAR | 0.0nm,0.3s,baz=342,slow=28,SNR=3.9 | | | Lg | Lg | 18 19 30.9 | |
| **ARCES** | **ARCESS Array B** 3.0nm,1.0s,baz=334,slow=8.0,SNR=5.2 | **61.24** | **18** | P | P | 18 22 06.0 | +3.0 |
| **LPAZ** | **La Paz** comp=Z,30nm,18.6s,baz=10,slow=40 | **69.03** | **141** | LR | LR | 18 58 21.9 | |
| **MKAR** | **Makanchi Array** 0.6nm,0.8s,baz=21,slow=6.2,SNR=3.7 | **89.34** | **355** | P | **P** | **18 24 47.1** | **+2.2** |
| **ASF** | **Jabal al Asfar** comp=Z,39nm,20.5s,baz=220,slow=36 | **96.81** | **31** | LR | LR | 19 10 39.9 | |

**IDC 17 18:11:50.8±5.2, 4.65S×150.32E, h183km±39km, mb2.9/2, mb1 3.1/3, mb1mx2.8/30, mbtmp3.4/3, Error ellipse: s-maj=120.1km s-min=40.9km az=126.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** 1.0nm,0.3s,baz=346,slow=4.2,SNR=5.3 | **5.67** | **213** | P | Pn | 18 13 13.5 | 0.0 |
| PMG | 1.6nm,0.3s,baz=154,slow=16,SNR=6.4 | | | S | Sn | 18 14 20.3 | +1.6 |
| **WRA** | **Warramunga Arr** 0.6nm,0.5s,baz=51,slow=10,SNR=12 | **21.75** | **224** | P | P | 18 16 28.4 | +0.3 |
| **ASAR** | **Alice Springs** 0.5nm,0.5s,baz=55,slow=9.1,SNR=19 | **24.66** | **218** | P | P | 18 16 54.6 | -0.3 |
| **TORD** | **Torodi Ar. Bea** 0.2nm,0.6s,baz=95,slow=3.6,SNR=1.7 | **147.91** | **287** | PKPbc | PKPbc | 18 31 14.5 | -1.0 |

*ISCJB* **17** *18:12:07.5±1.1, 14˚.40S±0˚.08×167˚.1E±0˚.2, h67km, mb3.7/4, Error ellipse: s-maj=25.8km s-min=11.7km az=1.8*

*IDC* **17** *18:12:14.9±3.1, 14˚.64S×167˚.17E, h131km±29km, mb3.4/5, mb1 3.7/7, mb1mx3.4/35, mbtmp4.1/7, Error ellipse: s-maj=26.4km s-min=23.9km az=97.0*

**ISC 17 18:12:08.9±1.3, 14.3S±0.1×167.1E±0.2, h67km, n8, σ1§96/8, mb3.6/4, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** 4.0nm,0.3s,baz=5.6,slow=19,SNR=40 | **7.75** | **185** | P | **Pn** | **18 14 00.6** | **+1.6** |
| DZM | baz=180,slow=14,SNR=0.8 | | | S | **Sn** | **18 15 23.7** | **-1.7** |
| **HNR** | **Honiara** 5.6nm,0.3s,baz=194,slow=4.7,SNR=5.2 | **8.54** | **304** | P | Pn | 18 14 18.9 | +8.9 |
| **CTA** | **Charters Tower** 3.5nm,0.9s,baz=51,slow=6.5,SNR=3.3 | **20.75** | **251** | P | **P** | **18 16 46.6** | **+2.3** |
| **WRA** | **Warramunga Arr** 0.3nm,0.6s,baz=85,slow=9.4,SNR=6.6 | **31.80** | **255** | P | **P** | **18 18 25.9** | **-1.5** |
| **ASAR** | **Alice Springs** 0.3nm,0.4s,baz=74,slow=9.5,SNR=11 | **32.70** | **248** | P | **P** | **18 18 34.0** | **-1.2** |
| **ILAR** | **Eielson Array** 0.4nm,0.7s,baz=248,slow=4.8,SNR=3.1 | **86.17** | **18** | P | **P** | **18 24 41.2** | **-1.2** |
| **INK** | **Inuvik** 3.9nm,1.0s,baz=283,slow=5.0,SNR=4.3 | **92.54** | **19** | P | **P** | **18 25 13.8** | **+1.6** |
| **ARCES** | **ARCESS Array B** 0.6nm,0.4s,baz=27,slow=0.4,SNR=12 | **119.82** | **345** | PKP | **PKPdf** | **18 30 49.9** | **-1.0** |

*CSEM* **17** *18:17:34.5, 42˚.51N×13˚.16E, h6km, MD1.6/5, After ROM*

**ROM 17 18:17:34.5±0.2, 42.51N×13.16E, h6km, Md1.6/5, Ml1.2/3, Error ellipse: s-maj=1.9km s-min=1.0km az=11.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RM33** | **Pellescritta (** | **0.04** | **87** | Pg | Pg | 18 17 36.1 | +0.2 |
| RM33 | | | | Sg | Sg | 18 17 37.0 | 0.0 |
| | 344nm,0.2s | | | | | | |
| **RM33** | **Pellescritta (** | **0.04** | **87** | Pg | Pg | 18 17 36.1 | +0.2 |
| RM33 | | | | Sg | Sg | 18 17 37.0 | 0.0 |
| | 344nm,0.2s | | | | | | |
| **RM29** | **Verrico (Monte** | **0.06** | **28** | Pg | Pg | 18 17 36.3 | 0.0 |
| RM29 | | | | Sg | Sg | 18 17 37.3 | -0.2 |
| | 287nm,0.4s | | | | | | |
| **RM29** | **Verrico (Monte** | **0.06** | **28** | Pg | Pg | 18 17 36.3 | 0.0 |
| RM29 | | | | Sg | Sg | 18 17 37.3 | -0.2 |
| | 287nm,0.4s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.11** | **56** | Pg | Pg | 18 17 37.4 | +0.2 |
| RM32 | | | | Sg | Sg | 18 17 39.6 | +0.6 |
| | 353nm,2.0s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.11** | **56** | Pg | Pg | 18 17 37.4 | +0.2 |
| RM32 | | | | Sg | Sg | 18 17 39.6 | +0.6 |
| | 353nm,2.0s | | | | | | |
| **LNSS** | **Leonessa** | **0.13** | **316** | Pg | Pg | 18 17 37.8 | +0.4 |
| LNSS | | | | Sg | Sg | 18 17 40.2 | +0.8 |
| | 75nm,0.1s | | | | | | |
| **LNSS** | **Leonessa** | **0.13** | **316** | Pg | Pg | 18 17 37.8 | +0.4 |
| LNSS | | | | Sg | Sg | 18 17 40.2 | +0.8 |
| | 75nm,0.1s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.18** | **46** | Pg | Pg | 18 17 38.7 | +0.5 |
| SMA1 | | | | Sg | Sg | 18 17 41.9 | +1.1 |
| | 47nm,0.2s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.18** | **46** | Pg | Pg | 18 17 38.7 | +0.5 |
| SMA1 | | | | Sg | Sg | 18 17 41.9 | +1.1 |
| | 47nm,0.2s | | | | | | |

*NEIC* **17** *18:18:57.3, 17˚.64N×61˚.64W, h25km, MD4.4(TRN), After TRN.*

**TRN 17 18:18:57.2, 17.63N×61.64W, h26km, MD4.5, 1D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANWB** | **Willy Bob** | **0.15** | **286** | *e*P | Pn | 18 19 03.5 | -0.4 |
| ANWB | | | | *e*S | Sb | 18 19 08.1 | +2.2 |
| **ANWB** | **Willy Bob** | **0.15** | **286** | *e*Pg | Pn | 18 19 03.5 | -0.4 |
| ANWB | | | | *e*Sg | Sb | 18 19 07.5 | +1.6 |
| **NVRH** | **Round Hill, Ne** | **1.02** | **244** | *e*P | Pb | 18 19 18.5 | +2.2 |
| NVRH | | | | *e*S | Sn | 18 19 32.7 | +3.3 |
| **MBWH** | | **1.03** | **211** | ‖ *i*P | Pb | 18 19 17.1 | +0.6 |
| MBWH | | | | *e*S | Sn | 18 19 31.9 | +2.2 |
| **MLYT** | **Lee's Yard** | **1.05** | **210** | *e*P | Pb | 18 19 17.6 | +0.8 |
| MLYT | | | | *e*S | Sn | 18 19 33.6 | +3.4 |
| **NVBH** | **Bath Hotel, Ne** | **1.06** | **242** | *e*P | Pb | 18 19 19.2 | +2.2 |
| **SKI** | **Saint Kitts** | **1.09** | **255** | *e*P | Pb | 18 19 17.7 | +0.2 |
| SKI | | | | *e*S | Sb | 18 19 32.9 | +1.5 |
| **SKI** | **Saint Kitts** | **1.09** | **255** | *e*P | Pb | 18 19 17.7 | +0.2 |
| SKI | | | | *e*S | Sb | 18 19 32.9 | +1.5 |
| **SKDB** | **Saint Kitts 2** | **1.14** | **258** | *e*P | Pb | 18 19 20.4 | +2.1 |
| SKDB | | | | *e*S | Sb | 18 19 35.9 | +3.2 |
| **SKDB** | **Saint Kitts 2** | **1.14** | **258** | *e*P | Pb | 18 19 20.4 | +2.1 |
| SKDB | | | | *e*S | Sb | 18 19 35.9 | +3.2 |
| **BSK** | **Brimstone Hill** | **1.18** | **256** | *e*P | Pb | 18 19 19.7 | +0.7 |
| BSK | | | | *e*S | Sb | 18 19 35.5 | +1.6 |
| **BSK** | **Brimstone Hill** | **1.18** | **256** | *e*P | Pb | 18 19 19.7 | +0.7 |
| BSK | | | | *e*S | Sb | 18 19 35.5 | +1.6 |
| **SEG** | **Port Louis** | **1.23** | **174** | *e*P | Pb | 18 19 19.6 | -0.2 |
| **SEUS** | **St. Eustatius** | **1.29** | **264** | *e*P | Pb | 18 19 20.8 | 0.0 |
| SEUS | | | | *e*S | Sb | 18 19 38.2 | +1.3 |
| **SEUS** | **St. Eustatius** | **1.29** | **264** | *e*P | Pb | 18 19 20.4 | -0.4 |
| **DEG** | **La Desirade** | **1.42** | **157** | *e*P | Pb | 18 19 23.1 | -0.1 |
| **DEG** | **La Desirade** | **1.42** | **157** | *e*P | Pb | 18 19 23.1 | -0.1 |
| **LZG** | **Guadaloupe-1** | **1.49** | **185** | *e*P | Pb | 18 19 23.8 | -0.5 |
| **SABA** | **Saba** | **1.53** | **270** | *e*P | Pb | 18 19 24.6 | -0.4 |
| SABA | | | | *e*S | Sb | 18 19 44.5 | +0.5 |
| **SABA** | **Saba** | **1.53** | **270** | *e*P | Pb | 18 19 24.6 | -0.4 |
| SABA | | | | *e*S | Sb | 18 19 44.5 | +0.5 |
| **SSG** | **Sans Toucher** | **1.53** | **181** | *e*P | Pb | 18 19 24.3 | -0.9 |
| **MLG** | **Mont-d'or** | **1.56** | **183** | *e*P | Pb | 18 19 25.0 | -0.6 |
| **FNG** | **Fond-Bernard** | **1.56** | **182** | *e*P | Pb | 18 19 24.9 | -0.7 |
| **PHG** | **Guadaloupe-2** | **1.60** | **180** | *e*P | Pb | 18 19 25.6 | -0.8 |
| **MGG** | **Marie-Galante** | **1.73** | **170** | *e*P | Pb | 18 19 27.5 | -0.9 |
| **MGG** | **Marie-Galante** | **1.73** | **170** | *e*P | Pb | 18 19 28.0 | -0.3 |
| **MGG** | **Marie-Galante** | **1.73** | **170** | *e*P | Pb | 18 19 28.0 | -0.3 |
| **TBG** | **Guadaloupe-3** | **1.77** | **180** | *e*P | Pb | 18 19 27.8 | -1.2 |
| **BBL** | **Barber's Block** | **2.10** | **176** | *e*P | Pn | 18 19 32.5 | +1.7 |
| **BBL** | **Barber's Block** | **2.10** | **176** | *e*P | Pn | 18 19 32.5 | +1.7 |
| **FDF** | **Fort de France** | **2.92** | **171** | *e*Pn | Pn | 18 19 42.7 | +0.6 |
| **STVI** | **Saint Thomas** | **3.24** | **283** | *e*Pn | Pn | 18 19 46.0 | -0.5 |
| **SJG** | **San Juan** | **4.32** | **277** | *e*Pn | Pn | 18 20 01.9 | +0.5 |
| **CELP** | **Cerrillos** | **4.73** | **276** | *e*Pn | Pn | 18 20 08.2 | +1.2 |
| **OBIP** | **Obispado Ponce** | **4.75** | **276** | *e*Pn | Pn | 18 20 06.8 | -0.4 |
| **LRS** | **Lares** | **5.00** | **278** | *e*Pn | Pn | 18 20 11.9 | +1.1 |
| **CRPR** | **Cabo Rojo, PR** | **5.23** | **275** | *e*P | Pn | 18 20 14.0 | +0.3 |
| **SDDR** | **Presa de Saban** | **9.26** | **280** | *e*Pn | Pn | 18 21 08.8 | -0.5 |
| SDDR | | | | *e*Sn | Sn | 18 22 52.0 | -0.9 |

*DDA* **17** *18:20:59.8, 39˚.84N×28˚.20E, h7km, Md3.0*

*ISK* **17** *18:20:59.8, 39˚.88N×28˚.23E, h5km, MD2.7*

*CSEM* **17** *18:21:00.5±0.1, 39˚.89N×28˚.21E, h2km, MD3.0, Error ellipse: s-maj=3.0km s-min=2.6km az=45.0*

**ISC 17 18:21:00.2±1.0, 39.87N±0.02×28.22E±0.02, h7km±11km, n55, σ0§39/76, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DURS** | **Dursunbey** | **0.34** | **144** | *i* P | **Pg** | **18 21 06.9** | **+0.1** |
| DURS | | | | *i* S | **Sg** | **18 21 11.7** | **+0.4** |
| **DURS** | **Dursunbey** | **0.34** | **144** | P | **Pg** | **18 21 06.9** | **+0.1** |
| DURS | | | | S | **Sg** | **18 21 11.7** | **+0.4** |
| **BALB** | **Balikesir** | **0.35** | **228** | *e*PG | **Pg** | **18 21 07.0** | **0.0** |
| BALB | | | | *e*SG | **Sg** | **18 21 11.9** | **+0.3** |
| **BALB** | **Balikesir** | **0.35** | **228** | *e*Pg | **Pg** | **18 21 07.0** | **0.0** |
| BALB | | | | *e*Sg | **Sg** | **18 21 11.9** | **+0.3** |
| **KCTX** | **Karacabey (Bur** | **0.41** | **15** | *e*PG | **Pg** | **18 21 07.7** | **-0.4** |
| KCTX | | | | *e*SG | **Sg** | **18 21 13.4** | **-0.1** |
| **KCTX** | **Karacabey (Bur** | **0.41** | **15** | *e*Pg | **Pg** | **18 21 07.7** | **-0.4** |
| KCTX | | | | *e*Sg | **Sg** | **18 21 13.4** | **-0.1** |
| **DST** | **Dursunbey** | **0.41** | **131** | *e*PG | **Pg** | **18 21 07.9** | **-0.3** |
| **DST** | **Dursunbey** | **0.41** | **131** | *e*Pg | **Pg** | **18 21 07.9** | **-0.3** |
| **GONE** | **Gonen-Balikesi** | **0.44** | **293** | *e*PG | **Pg** | **18 21 08.7** | **-0.1** |
| **GONE** | **Gonen-Balikesi** | **0.44** | **293** | *e*Pg | **Pg** | **18 21 08.7** | **-0.1** |
| **BALY** | **Balya** | **0.48** | **254** | *i* P | **Pg** | **18 21 09.4** | **-0.1** |
| BALY | | | | *i* S | **Sg** | **18 21 15.9** | **+0.1** |
| **BALY** | **Balya** | **0.48** | **254** | P | **Pg** | **18 21 09.4** | **-0.1** |
| BALY | | | | S | **Sg** | **18 21 15.9** | **+0.1** |
| **EDC** | **Edincik** | **0.54** | **330** | *e*PG | **Pg** | **18 21 11.1** | **+0.3** |
| **EDC** | **Edincik** | **0.54** | **330** | *e*Pg | **Pg** | **18 21 11.1** | **+0.3** |
| **MDNY** | **Mudanya-Bursa** | **0.71** | **46** | *e*PG | **Pg** | **18 21 13.6** | **-0.3** |
| **MDNY** | **Mudanya-Bursa** | **0.71** | **46** | *e*Pg | **Pg** | **18 21 13.6** | **-0.3** |
| **ULDT** | **Uludag** | **0.76** | **69** | *i* P | **Pg** | **18 21 15.1** | **+0.4** |
| ULDT | | | | *i* S | **Sg** | **18 21 25.0** | **+0.4** |
| **ULDT** | **Uludag** | **0.76** | **69** | P | **Pg** | **18 21 15.1** | **+0.4** |
| ULDT | | | | S | **Sg** | **18 21 25.0** | **+0.4** |
| **ARMT** | **Armutlu** | **0.85** | **35** | *e*PG | **Pg** | **18 21 16.2** | **-0.3** |
| **ARMT** | **Armutlu** | **0.85** | **35** | *e*Pg | **Pg** | **18 21 16.2** | **-0.3** |
| **IGD** | **Bursa** | **0.85** | **62** | P | Pb | 18 21 17.3 | 0.0 |
| IGD | | | | S | **Sb** | **18 21 28.9** | **-0.1** |
| **MRMT** | **Marmara Adasi** | **0.87** | **327** | *e*PG | **Pb** | **18 21 17.4** | **-0.3** |
| **MRMT** | **Marmara Adasi** | **0.87** | **327** | *e*Pg | **Pb** | **18 21 17.4** | **-0.3** |
| **KRBG** | **Karabiga-Canak** | **0.88** | **307** | *e*PG | **Pb** | **18 21 17.7** | **-0.1** |
| **KRBG** | **Karabiga-Canak** | **0.88** | **307** | *e*Pg | **Pb** | **18 21 17.7** | **-0.1** |
| **DEMI** | **Demirci** | **0.92** | **155** | *i* P | **Pb** | **18 21 18.5** | **0.0** |
| DEMI | | | | *i* S | **Sg** | **18 21 29.9** | **+0.2** |
| **DEMI** | **Demirci** | **0.92** | **155** | P | **Pb** | **18 21 18.5** | **0.0** |
| DEMI | | | | S | **Sg** | **18 21 29.9** | **+0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.14** | **316** | *e*PN | **Pb** | **18 21 22.1** | **-0.1** |
| **RKY** | **Sarkoy-Tekirda** | **1.14** | **316** | *e*Pn | **Pb** | **18 21 22.1** | **-0.1** |
| **SART** | **Tekirdag** | **1.14** | **316** | *i* P | **Pg** | **18 21 21.9** | **-0.1** |
| SART | | | | *i* S | **Sb** | **18 21 37.5** | **+0.3** |
| **SART** | **Tekirdag** | **1.14** | **316** | P | **Pg** | **18 21 21.9** | **-0.1** |
| SART | | | | S | **Sb** | **18 21 37.5** | **+0.3** |
| **LPK** | **Lapseki** | **1.22** | **294** | *e*PN | **Pg** | **18 21 24.2** | **+0.5** |
| **LPK** | **Lapseki** | **1.22** | **294** | *e*Pn | **Pg** | **18 21 24.2** | **+0.5** |
| **CAVI** | **Cavuskoy** | **1.29** | **75** | *e*PN | **Pn** | **18 21 24.6** | **-0.1** |
| **CAVI** | **Cavuskoy** | **1.29** | **75** | *e*Pn | **Pn** | **18 21 24.6** | **-0.1** |
| **DKL** | **Dikili** | **1.29** | **232** | *e*PN | **Pg** | **18 21 25.4** | **+0.4** |
| **DKL** | **Dikili** | **1.29** | **232** | *e*Pn | **Pg** | **18 21 25.4** | **+0.4** |
| **CTKS** | **Kestanelik-??a** | **1.38** | **9** | *e*PN | **Pg** | **18 21 26.4** | **-0.2** |
| **CTKS** | **Kestanelik-??a** | **1.38** | **9** | *e*Pn | **Pg** | **18 21 26.4** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.40** | **166** | *e*PN | **Pg** | **18 21 27.4** | **+0.3** |
| **KULA** | **Kula-Manisa** | **1.40** | **166** | *e*Pn | **Pg** | **18 21 27.4** | **+0.3** |
| **MANT** | **Manisa** | **1.41** | **169** | *i* P | **Pg** | **18 21 27.4** | **+0.2** |
| MANT | | | | *i* S | **Sb** | **18 21 44.1** | **-1.1** |
| **MANT** | **Manisa** | **1.41** | **169** | P | **Pg** | **18 21 27.4** | **+0.2** |
| MANT | | | | S | **Sb** | **18 21 44.1** | **-1.1** |
| **GELI** | **Tayfur-Gelibol** | **1.44** | **292** | *e*PN | **Pg** | **18 21 27.8** | **+0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.44** | **292** | *e*Pn | **Pg** | **18 21 27.8** | **+0.1** |
| **BORA** | **Eskisehir** | **1.72** | **89** | *i* P | **Pg** | **18 21 33.1** | **-0.1** |
| BORA | | | | *i* S | **Sg** | **18 21 56.3** | **+0.8** |
| **BORA** | **Eskisehir** | **1.72** | **89** | P | **Pg** | **18 21 33.1** | **-0.1** |
| BORA | | | | S | **Sg** | **18 21 56.3** | **+0.8** |
| **KHAL** | **Karahalli** | **1.80** | **146** | *i* P | **Pg** | **18 21 35.1** | **+0.4** |
| KHAL | | | | *i* S | **Sg** | **18 21 58.2** | **+0.1** |
| **KHAL** | **Karahalli** | **1.80** | **146** | P | **Pg** | **18 21 35.1** | **+0.4** |
| KHAL | | | | S | **Sg** | **18 21 58.2** | **+0.1** |
| **GADA** | **Gvkgeada** | **1.81** | **281** | *e*PN | **Pb** | **18 21 33.1** | **-0.6** |
| **GADA** | **Gvkgeada** | **1.81** | **281** | *e*Pn | **Pb** | **18 21 33.1** | **-0.6** |
| **GULT** | **Gulveren** | **1.85** | **72** | *e*PN | **Pn** | **18 21 33.1** | **+0.7** |
| **GULT** | **Gulveren** | **1.85** | **72** | *e*Pn | **Pn** | **18 21 33.1** | **+0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.94** | **188** | *e*PN | **Pb** | **18 21 35.2** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.94** | **188** | *e*Pn | **Pb** | **18 21 35.2** | **-0.8** |

**MEX 17 18:30:22.1±0.6, 13.53N×90.99W, h30km, MD3.9, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCIG** | **Comitan** | **2.96** | **338** | *e*P | Pn | 18 31 04.9 | -2.4 |
| **PCIG** | | **3.06** | **315** | *e*P | Pn | 18 31 07.5 | -1.0 |
| PCIG | | | | *e*S | Sn | 18 31 42.6 | -1.5 |

*IDC* **17** *18:33:01.9±0.9, 39˚.41N×20˚.57E, h0km, mb3.7/12, mb1 3.8/17, mb1mx3.7/35, mbtmp3.7/17, ML3.6/5, MS2.7/4, Ms1 2.7/4, ms1mx2.4/41, Error ellipse: s-maj=16.5km s-min=14.2km az=13.0*

*CSEM* **17** *18:33:04.2±0.1, 39˚.38N×20˚.53E, h2km, ML3.6, Error ellipse: s-maj=2.3km s-min=1.3km az=59.0*

*THE* **17** *18:33:04.6, 39˚.37N×20˚.58E, h0km±1km, ML3.6/20, Error ellipse: s-maj=1.2km s-min=0.5km az=263.0*

*ISCJB* **17** *18:33:04.8±0.3, 39˚.40N±0˚.01×20˚.48E±0˚.02, h18km±2km, mb3.7/12, MS2.9/2, Error ellipse: s-maj=2.8km s-min=1.6km az=142.7*

*ATH* **17** *18:33:04.8, 39˚.37N×20˚.60E, h14km, MD3.3/33, ML3.6*

*PDG* **17** *18:33:05.7±0.2, 39˚.50N×20˚.38E, h8km±1km, ML3.5/11, Error ellipse: s-maj=1.9km s-min=1.4km az=90.0*

*BEO* **17** *18:33:07.3±0.9, 39˚.48N×20˚.53E, h16km±6km, ML3.5/7*

**ISC 17 18:33:04.7±0.8, 39.39N±0.01×20.54E±0.02, h16km±5km, n377, σ1§35/509, mb3.7/12, 20C-14D, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IGT** | **Igoumenitsa** | **0.22** | **312** | *e*PG | **Pb** | **18 33 10.1** | **-0.2** |
| IGT | | | | *e*SG | **Sg** | **18 33 14.5** | **+1.2** |
| **IGT** | **Igoumenitsa** | **0.22** | **312** | P | **Pg** | **18 33 09.9** | **+0.1** |
| IGT | | | | S | **Sg** | **18 33 13.6** | **+0.3** |
| **IGT** | **Igoumenitsa** | **0.22** | **312** | P | **Pg** | **18 33 09.9** | **+0.1** |
| IGT | | | | S | **Sg** | **18 33 14.3** | **+1.0** |
| **SGD** | **Sagiada** | **0.33** | **314** | P | **Pg** | **18 33 11.1** | **-0.5** |
| SGD | | | | S | **Sb** | **18 33 17.5** | **+0.2** |
| **SGD** | **Sagiada** | **0.33** | **314** | P | **Pg** | **18 33 11.1** | **-0.5** |
| **JAN** | **Janina** | **0.36** | **41** | *e*PB | **Pg** | **18 33 11.6** | **-0.6** |
| JAN | | | | *e*SB | **Sg** | **18 33 17.0** | **-0.3** |
| **JAN** | **Janina** | **0.36** | **41** | P | **Pg** | **18 33 11.4** | **-0.8** |
| JAN | | | | S | **Sg** | **18 33 17.2** | **-0.1** |
| **JAN** | **Janina** | **0.36** | **41** | P | **Pg** | **18 33 11.4** | **-0.8** |
| JAN | | | | S | **Sg** | **18

| Code | Station Name | Δ° | AZ° | Phase (Op) | Phase (ISC) | Time h m s | Res |
|---|---|---|---|---|---|---|---|
| MAKR | | | | eSb | Sb | 18 33 45.4 | +0.5 |
| MAKR | | | | S | Sg | 18 33 46.9 | +0.5 |
| KZN | Kozani | 1.32 | 45 | ePB | Pb | 18 33 29.5 | +0.4 |
| KZN | | | | eSB | Sg | 18 33 48.0 | +0.6 |
| KZN | Kozani | 1.32 | 45 | P | Pn | 18 33 28.6 | +0.1 |
| KZN | | | | S | Sg | 18 33 48.7 | +1.3 |
| KZN | Kozani | 1.32 | 45 | P | Pn | 18 33 28.6 | +0.1 |
| KZN | Kozani | 1.32 | 45 | ePb | Pb | 18 33 29.5 | +0.4 |
| KZN | | | | S | Sg | 18 33 47.7 | +0.3 |
| KZN | | | | eSb | Sg | 18 33 48.0 | +0.6 |
| AXS | Araxos | 1.35 | 151 | P | Pn | 18 33 28.6 | -0.3 |
| AXS | | | | S | Sg | 18 33 48.8 | +0.4 |
| AXS | Araxos | 1.35 | 151 | P | Pn | 18 33 28.6 | -0.3 |
| AXS | | | | S | Sg | 18 33 48.8 | +0.4 |
| EFP | Efpalio | 1.43 | 132 | ePB | Pb | 18 33 31.3 | +0.3 |
| EFP | | | | eSB | Sb | 18 33 49.8 | +0.9 |
| EFP | Efpalio | 1.43 | 132 | P | Pn | 18 33 30.7 | +0.7 |
| EFP | | | | S | Sg | 18 33 50.8 | -0.1 |
| EFP | Efpalio | 1.43 | 132 | P | Pn | 18 33 30.7 | +0.7 |
| EFP | Efpalio | 1.43 | 132 | ePb | Pb | 18 33 31.3 | +0.3 |
| EFP | | | | eSb | Sb | 18 33 49.8 | +0.9 |
| EFP | | | | S | Sg | 18 33 50.8 | -0.1 |
| AGG | Agios Georgios | 1.44 | 104 | ePG | Pn | 18 33 30.7 | +0.6 |
| AGG | | | | eSB | Sb | 18 33 50.1 | +1.0 |
| AGG | Agios Georgios | 1.44 | 104 | P | Pn | 18 33 30.0 | -0.1 |
| AGG | | | | S | Sg | 18 33 51.2 | +0.2 |
| AGG | Agios Georgios | 1.44 | 104 | P | Pn | 18 33 30.3 | +0.2 |
| AGG | Agios Georgios | 1.44 | 104 | ePg | Pn | 18 33 30.7 | +0.6 |
| AGG | | | | eSb | Sb | 18 33 50.1 | +1.0 |
| AGG | | | | S | Sg | 18 33 51.2 | +0.2 |
| UPR | University Cam | 1.47 | 138 | ePB | Pb | 18 33 32.2 | +0.6 |
| UPR | | | | eSB | Sg | 18 33 51.7 | -0.3 |
| UPR | University Cam | 1.47 | 138 | ePb | Pb | 18 33 32.2 | +0.6 |
| UPR | | | | eSb | Sg | 18 33 51.7 | -0.3 |
| RLS | Riolos of Patr | 1.51 | 151 | ePG | Pb | 18 33 32.4 | +0.1 |
| RLS | | | | eSB | Sg | 18 33 53.1 | -0.3 |
| RLS | Riolos of Patr | 1.51 | 151 | P | Pn | 18 33 31.2 | +0.2 |
| RLS | Riolos of Patr | 1.51 | 151 | P | Pb | 18 33 32.0 | -0.3 |
| RLS | Riolos of Patr | 1.51 | 151 | ePg | Pb | 18 33 32.4 | +0.1 |
| RLS | | | | eSb | Sg | 18 33 53.1 | -0.3 |
| RLS | | | | S | Sb | 18 33 54.3 | +3.1 |
| SERG | Sergoula | 1.53 | 129 | P | Pn | 18 33 32.7 | 0.0 |
| SERG | | | | S | Sg | 18 33 53.3 | -0.7 |
| SERG | Sergoula | 1.53 | 129 | P | Pb | 18 33 32.7 | 0.0 |
| SERG | | | | S | Sg | 18 33 53.3 | -0.7 |
| FNA | Florina | 1.54 | 24 | ePG | Pb | 18 33 33.1 | +0.3 |
| FNA | | | | eSB | Sg | 18 33 55.2 | +0.9 |
| FNA | Florina | 1.54 | 24 | P | Pn | 18 33 32.3 | +0.8 |
| FNA | | | | S | Sg | 18 33 54.5 | +0.2 |
| FNA | Florina | 1.54 | 24 | P | Pn | 18 33 32.3 | +0.8 |
| FNA | Florina | 1.54 | 24 | ePg | Pb | 18 33 33.1 | +0.3 |
| FNA | | | | S | Sg | 18 33 54.5 | +0.2 |
| FNA | | | | eSb | Sg | 18 33 55.2 | +0.9 |
| KALE | Kalithea | 1.59 | 128 | ePB | Pb | 18 33 34.0 | +0.2 |
| KALE | | | | eSB | Sg | 18 33 55.5 | -0.6 |
| KALE | Kalithea | 1.59 | 128 | P | Pb | 18 33 33.8 | 0.0 |
| KALE | Kalithea | 1.59 | 128 | P | Pb | 18 33 33.8 | 0.0 |
| KALE | | | | eSb | Sg | 18 33 55.5 | -0.6 |
| LAKA | Lakka | 1.60 | 135 | ePG | Pb | 18 33 33.9 | 0.0 |
| LAKA | | | | eSB | Sg | 18 33 55.5 | -0.8 |
| LAKA | Lakka | 1.60 | 135 | P | Pn | 18 33 33.3 | +0.9 |
| LAKA | | | | S | Sb | 18 33 54.9 | +1.0 |
| LAKA | Lakka | 1.60 | 135 | P | Pn | 18 33 33.3 | +0.9 |
| LAKA | Lakka | 1.60 | 135 | ePg | Pb | 18 33 33.9 | 0.0 |
| LAKA | | | | S | Sb | 18 33 54.9 | +1.0 |
| LAKA | | | | eSb | Sg | 18 33 55.5 | -0.8 |
| LIT | Litokhoron | 1.66 | 64 | ePG | Pb | 18 33 34.6 | -0.3 |
| LIT | Litokhoron | 1.66 | 64 | P | Pn | 18 33 33.6 | +0.4 |
| LIT | | | | S | Sb | 18 33 56.8 | +1.2 |
| LIT | Litokhoron | 1.66 | 64 | P | Pn | 18 33 33.6 | +0.4 |
| LIT | Litokhoron | 1.66 | 64 | ePg | Pb | 18 33 34.6 | -0.3 |
| LIT | | | | S | Sb | 18 33 56.8 | +1.2 |
| DRO | Drossia | 1.70 | 147 | ePB | Pb | 18 33 35.1 | -0.4 |
| DRO | Drossia | 1.70 | 147 | P | Pn | 18 33 34.0 | +0.3 |
| DRO | | | | S | Sb | 18 33 57.9 | +1.3 |
| DRO | Drossia | 1.70 | 147 | P | Pn | 18 33 34.0 | +0.3 |
| DRO | Drossia | 1.70 | 147 | ePb | Pb | 18 33 35.1 | -0.4 |
| DRO | | | | S | Sb | 18 33 57.9 | +1.3 |
| OHR | Ohrid | 1.73 | 6 | iPn | Pg | 18 33 37.9 | -0.2 |
| OHR | | | | iSn | Sg | 18 34 02.2 | +1.6 |
| OHR | Ohrid | 1.73 | 6 | iPn | Pg | 18 33 37.8 | -0.2 |
| OHR | | | | iSn | Sg | 18 34 02.2 | +1.6 |
| AXAR | Agios Charalam | 1.76 | 110 | ePN | Pb | 18 33 36.4 | -0.2 |
| AXAR | Agios Charalam | 1.76 | 110 | P | Pb | 18 33 36.1 | -0.5 |
| AXAR | | | | S | Sb | 18 33 59.2 | +0.8 |
| AXAR | Agios Charalam | 1.76 | 110 | P | Pb | 18 33 36.1 | -0.5 |
| AXAR | Agios Charalam | 1.76 | 110 | ePn | Pb | 18 33 36.4 | -0.2 |
| AXAR | | | | S | Sb | 18 33 59.2 | +0.8 |
| DESF | Desfina | 1.83 | 121 | ePG | Pb | 18 33 38.2 | +0.4 |
| DESF | Desfina | 1.83 | 121 | ePg | Pb | 18 33 38.2 | +0.4 |
| KLV | Kalavryta, Ach | 1.84 | 136 | ePG | Pb | 18 33 38.4 | +0.5 |
| KLV | Kalavryta, Ach | 1.84 | 136 | P | Pn | 18 33 35.8 | +0.2 |
| KLV | Kalavryta, Ach | 1.84 | 136 | P | Pn | 18 33 35.8 | +0.2 |
| KLV | Kalavryta, Ach | 1.84 | 136 | ePg | Pb | 18 33 38.4 | +0.5 |
| FYTO | Fytoko, Volos | 1.86 | 89 | P | Pn | 18 33 36.7 | +0.9 |
| FYTO | | | | S | Sb | 18 34 01.6 | +0.4 |
| FYTO | Fytoko, Volos | 1.86 | 89 | P | Pn | 18 33 36.7 | +0.9 |
| FYTO | | | | S | Sb | 18 34 01.6 | +0.4 |
| GUR | Goura | 2.02 | 135 | ePG | Pb | 18 33 40.9 | -0.2 |
| GUR | Goura | 2.02 | 135 | P | Pb | 18 33 40.4 | -0.7 |
| GUR | Goura | 2.02 | 135 | P | Pb | 18 33 40.4 | -0.7 |
| GUR | Goura | 2.02 | 135 | ePg | Pb | 18 33 40.9 | -0.2 |
| TIR | Tirane | 2.03 | 345 | ePn | Pn | 18 33 40.0 | +1.8 |
| TIR | | | | eSg | Sg | 18 34 08.4 | -1.6 |
| TIR | Tirane | 2.03 | 345 | ePn | Pn | 18 33 40.0 | +1.8 |
| TIR | | | | eSg | Sg | 18 34 08.4 | -1.6 |
| LKR | Lokris | 2.05 | 110 | ePN | Pb | 18 33 41.0 | -0.5 |
| LKR | Lokris | 2.05 | 110 | P | Pn | 18 33 39.6 | +1.1 |
| LKR | Lokris | 2.05 | 110 | P | Pn | 18 33 39.6 | +1.1 |
| LKR | Lokris | 2.05 | 110 | ePn | Pb | 18 33 41.0 | -0.5 |
| ATAL | Atalanti | 2.05 | 109 | P | Pn | 18 33 40.2 | +1.7 |
| ATAL | | | | S | Sb | 18 34 06.7 | -0.1 |
| ATAL | Atalanti | 2.05 | 109 | P | Pn | 18 33 40.2 | +1.7 |
| ATAL | | | | S | Sb | 18 34 06.7 | -0.1 |
| AMT | Artemida-Makis | 2.06 | 153 | ePN | Pb | 18 33 41.1 | -0.7 |
| AMT | Artemida-Makis | 2.06 | 153 | P | Pb | 18 33 40.6 | -1.2 |
| AMT | Artemida-Makis | 2.06 | 153 | P | Pb | 18 33 40.6 | -1.2 |
| AMT | Artemida-Makis | 2.06 | 153 | ePn | Pb | 18 33 41.1 | -0.7 |
| NEO | Neokhori | 2.08 | 91 | ePN | Pn | 18 33 40.2 | +1.3 |
| NEO | Neokhori | 2.08 | 91 | P | Pn | 18 33 39.9 | +1.0 |
| NEO | Neokhori | 2.08 | 91 | P | Pn | 18 33 39.9 | +1.0 |
| NEO | Neokhori | 2.08 | 91 | ePn | Pn | 18 33 40.2 | +1.3 |
| GRG | Griva | 2.12 | 42 | ePN | Pb | 18 33 41.6 | -1.1 |
| GRG | Griva | 2.12 | 42 | P | Pn | 18 33 41.1 | +1.6 |
| GRG | | | | S | Sb | 18 34 09.0 | +0.2 |
| GRG | Griva | 2.12 | 42 | P | Pn | 18 33 41.1 | +1.6 |
| GRG | Griva | 2.12 | 42 | ePn | Pb | 18 33 41.6 | -1.1 |
| GRG | | | | S | Sb | 18 34 09.0 | +0.2 |
| SMIA | Simia | 2.13 | 103 | ePG | Pb | 18 33 42.6 | -0.4 |
| SMIA | Simia | 2.13 | 103 | P | Pn | 18 33 41.5 | +1.8 |
| SMIA | Simia | 2.13 | 103 | P | Pn | 18 33 41.5 | +1.8 |
| SMIA | Simia | 2.13 | 103 | ePg | Pb | 18 33 42.6 | -0.4 |
| THE | Thessaloniki | 2.24 | 55 | ePN | Pb | 18 33 43.3 | -1.4 |
| THE | Thessaloniki | 2.24 | 55 | ePn | Pb | 18 33 43.3 | -1.4 |
| SKIA | Skiathos | 2.28 | 95 | ePN | Pn | 18 33 43.5 | +1.9 |
| SKIA | Skiathos | 2.28 | 95 | P | Pn | 18 33 43.1 | +1.5 |
| SKIA | Skiathos | 2.28 | 95 | P | Pn | 18 33 43.1 | +1.5 |
| SKIA | Skiathos | 2.28 | 95 | ePn | Pn | 18 33 43.5 | +1.9 |
| HORT | Hortiatis | 2.31 | 58 | ePN | Pb | 18 33 44.5 | -1.5 |
| HORT | Hortiatis | 2.31 | 58 | P | Pn | 18 33 43.2 | +1.1 |
| HORT | Hortiatis | 2.31 | 58 | P | Pn | 18 33 43.2 | +1.1 |
| HORT | Hortiatis | 2.31 | 58 | ePn | Pb | 18 33 44.5 | -1.5 |
| LTK | Loutraki | 2.33 | 125 | ePN | Pn | 18 33 44.4 | +2.0 |
| LTK | Loutraki | 2.33 | 125 | P | Pn | 18 33 44.0 | +1.6 |
| LTK | Loutraki | 2.33 | 125 | P | Pn | 18 33 44.0 | +1.6 |
| LTK | Loutraki | 2.33 | 125 | ePn | Pn | 18 33 44.4 | +2.0 |
| VIL2 | Platees | 2.43 | 118 | ePB | Pn | 18 33 46.2 | +2.5 |
| PLG | Polygyros | 2.44 | 65 | ePB | Pn | 18 33 45.6 | +1.7 |
| PLG | Polygyros | 2.44 | 65 | P | Pn | 18 33 44.8 | +0.9 |
| PLG | | | | S | Sn | 18 34 16.1 | +2.7 |
| PLG | Polygyros | 2.44 | 65 | P | Pn | 18 33 44.8 | +0.9 |
| PLG | Polygyros | 2.44 | 65 | ePb | Pn | 18 33 45.6 | +1.7 |
| PLG | | | | S | Sn | 18 34 16.1 | +2.7 |
| ITM | Ithomi | 2.46 | 153 | ePN | Pb | 18 33 47.0 | -1.5 |
| ITM | Ithomi | 2.46 | 153 | P | Pn | 18 33 45.5 | +1.4 |
| ITM | Ithomi | 2.46 | 153 | P | Pn | 18 33 45.5 | +1.4 |
| ITM | Ithomi | 2.46 | 153 | ePn | Pb | 18 33 47.0 | -1.5 |
| MRKA | Markates | 2.46 | 105 | ePN | Pn | 18 33 46.3 | +2.1 |
| MRKA | Markates | 2.46 | 105 | P | Pn | 18 33 46.0 | +1.8 |

| Code | Station Name | Δ° | AZ° | Phase (Op) | Phase (ISC) | Time h m s | Res |
|---|---|---|---|---|---|---|---|
| MRKA | Markates | 2.46 | 105 | P | Pn | 18 33 46.0 | +1.8 |
| MRKA | Markates | 2.46 | 105 | ePn | Pn | 18 33 46.3 | +2.1 |
| VLX | Vlachokerasia | 2.48 | 144 | ePN | Pb | 18 33 47.3 | -1.6 |
| VLX | Vlachokerasia | 2.48 | 144 | ePn | Pb | 18 33 47.3 | -1.6 |
| VAY | Valandovo | 2.48 | 38 | iPn | Pb | 18 33 47.3 | -1.5 |
| VAY | | | | iSn | Sb | 18 34 18.1 | -0.9 |
| VAY | Valandovo | 2.48 | 38 | ePn | Pn | 18 33 45.8 | +1.4 |
| VAY | Valandovo | 2.48 | 38 | ePn | Pn | 18 33 45.8 | +1.4 |
| VAY | | | | iSn | Sb | 18 34 18.1 | -0.9 |
| PAIG | Paliouri | 2.48 | 76 | ePN | Pn | 18 33 46.4 | +2.0 |
| PAIG | | | | eSN | Sn | 18 34 16.5 | +2.2 |
| PAIG | Paliouri | 2.48 | 76 | P | Pn | 18 33 44.6 | +0.2 |
| PAIG | | | | S | Sb | 18 34 17.5 | -1.7 |
| PAIG | Paliouri | 2.48 | 76 | P | Pn | 18 33 44.6 | +0.2 |
| PAIG | Paliouri | 2.48 | 76 | ePn | Pn | 18 33 46.4 | +2.0 |
| PAIG | | | | eSn | Sn | 18 34 16.5 | +2.2 |
| PAIG | | | | S | Sb | 18 34 17.5 | -1.7 |
| VILL | Villia | 2.48 | 119 | P | Pn | 18 33 45.4 | +0.9 |
| VILL | Villia | 2.48 | 119 | P | Pn | 18 33 45.4 | +0.9 |
| VILL | Villia | 2.48 | 119 | ePb | Pn | 18 33 46.2 | +1.7 |
| KNT | Kendrikon | 2.53 | 45 | ePB | Pn | 18 33 47.1 | +2.0 |
| KNT | Kendrikon | 2.53 | 45 | P | Pn | 18 33 46.9 | +1.8 |
| KNT | Kendrikon | 2.53 | 45 | P | Pn | 18 33 46.9 | +1.8 |
| SOH | Sokhos | 2.59 | 55 | ePN | Pn | 18 33 48.4 | +2.4 |
| SOH | Sokhos | 2.59 | 55 | P | Pn | 18 33 47.0 | +1.0 |
| SOH | Sokhos | 2.59 | 55 | P | Pn | 18 33 47.0 | +1.0 |
| SOH | Sokhos | 2.59 | 55 | ePn | Pn | 18 33 48.4 | +2.4 |
| SKO | Skopje | 2.67 | 14 | iPn | Pb | 18 33 50.4 | -1.8 |
| SKO | | | | iSn | Sb | 18 34 23.1 | -1.7 |
| SKO | Skopje | 2.67 | 14 | ePn | Pn | 18 33 49.8 | +2.7 |
| SKO | Skopje | 2.67 | 14 | ePn | Pn | 18 33 49.8 | +2.7 |
| SKO | | | | iSn | Sb | 18 34 23.1 | -1.7 |
| TAR1 | Taranto | 2.75 | 295 | ePn | Pn | 18 33 46.1 | -2.0 |
| ULC | Ulcinj | 2.76 | 339⇓ | iPn | Pn | 18 33 49.5 | +1.2 |
| ULC | | | | eSn | Sn | 18 34 23.6 | +2.4 |
| ULC | Ulcinj | 2.76 | 339⇓ | iPn | Pn | 18 33 49.5 | +1.2 |
| ULC | | | | eSn | Sn | 18 34 23.6 | +2.4 |
| PE1 | Pezze di Greco | 2.78 | 302 | ePn | Pn | 18 33 49.6 | +1.1 |
| OUR | Ouranopolis | 2.81 | 69 | ePN | Pn | 18 33 50.5 | +1.6 |
| OUR | | | | eSN | Sn | 18 34 24.8 | +2.3 |
| OUR | Ouranopolis | 2.81 | 69 | P | Pn | 18 33 50.3 | +1.4 |
| OUR | Ouranopolis | 2.81 | 69 | P | Pn | 18 33 50.3 | +1.4 |
| OUR | | | | eSn | Sn | 18 34 24.8 | +2.3 |
| EREA | Eretria | 2.81 | 109 | ePN | Pn | 18 33 51.3 | +2.3 |
| EREA | Eretria | 2.81 | 109 | P | Pn | 18 33 50.8 | +1.8 |
| EREA | | | | S | Sn | 18 34 24.8 | +2.2 |
| EREA | Eretria | 2.81 | 109 | P | Pn | 18 33 50.8 | +1.8 |
| EREA | Eretria | 2.81 | 109 | ePn | Pn | 18 33 51.3 | +2.3 |
| EREA | | | | S | Sn | 18 34 24.8 | +2.2 |
| NAIG | Nisos Aigina | 2.82 | 124 | ePN | Pn | 18 33 51.2 | +2.1 |
| NAIG | Nisos Aigina | 2.82 | 124 | ePn | Pn | 18 33 51.2 | +2.1 |
| DID | Didima | 2.83 | 131 | ePN | Pn | 18 33 51.1 | +1.9 |
| DID | Didima | 2.83 | 131 | P | Pn | 18 33 49.9 | +0.7 |
| DID | | | | S | Sn | 18 34 25.7 | +2.8 |
| DID | Didima | 2.83 | 131 | P | Pn | 18 33 49.9 | +0.7 |
| DID | Didima | 2.83 | 131 | ePn | Pn | 18 33 51.1 | +1.9 |
| DID | | | | S | Sn | 18 34 25.7 | +2.8 |
| ATH | Athens Observa | 2.86 | 119 | ePN | Pn | 18 33 51.7 | +2.1 |
| ATH | | | | eSN | Sn | 18 34 25.4 | +1.8 |
| ATH | Athens Observa | 2.86 | 119 | ePn | Pn | 18 33 51.7 | +2.1 |
| ATH | | | | eSn | Sn | 18 34 25.4 | +1.8 |
| KRND | KRANIDI | 2.86 | 133 | ePN | Pn | 18 33 52.1 | +2.4 |
| KRND | KRANIDI | 2.86 | 133 | ePn | Pn | 18 33 52.1 | +2.4 |
| SRS | Serrai | 2.90 | 52 | ePN | Pn | 18 33 52.5 | +2.2 |
| SRS | Serrai | 2.90 | 52 | P | Pn | 18 33 51.1 | +0.8 |
| SRS | Serrai | 2.90 | 52 | P | Pn | 18 33 51.1 | +0.8 |
| SRS | Serrai | 2.90 | 52 | ePn | Pn | 18 33 52.5 | +2.2 |
| PTL | Penteli | 2.92 | 116 | ePN | Pn | 18 33 52.4 | +1.9 |
| PTL | Penteli | 2.92 | 116 | ePn | Pn | 18 33 52.4 | +1.9 |
| VLY | Voula,Athens | 2.97 | 120 | ePN | Pn | 18 33 53.2 | +2.0 |
| VLY | Voula,Athens | 2.97 | 120 | P | Pn | 18 33 52.4 | +1.2 |
| VLY | Voula,Athens | 2.97 | 120 | P | Pn | 18 33 52.4 | +1.2 |
| VLY | Voula,Athens | 2.97 | 120 | ePn | Pn | 18 33 53.2 | +2.0 |
| DRME | Dracevica, Mon | 2.98 | 340⇓ | iPn | Pn | 18 33 52.8 | +1.5 |
| DRME | | | | eSn | Sn | 18 34 28.4 | +1.7 |
| DRME | Dracevica, Mon | 2.98 | 340⇓ | iPn | Pn | 18 33 52.8 | +1.5 |
| DRME | | | | eSn | Sn | 18 34 28.4 | +1.7 |
| BUM | Brajici-Budva | 3.17 | 337⇑ | iPn | Pn | 18 33 55.2 | +1.2 |
| BUM | | | | eSn | Sn | 18 34 33.0 | +1.6 |
| BUM | Brajici-Budva | 3.17 | 337⇑ | iPn | Pn | 18 33 55.2 | +1.2 |
| BUM | | | | eSn | Sn | 18 34 33.0 | +1.6 |
| PDG | Podgorica | 3.19 | 343 | ePn | Pn | 18 33 55.7 | +1.5 |
| PDG | | | | eSg | Sg | 18 34 46.1 | -1.2 |
| PDG | Podgorica | 3.19 | 343⇑ | iPn | Pn | 18 33 55.6 | +1.4 |
| PDG | | | | eSn | Sn | 18 34 33.1 | +1.2 |
| PDG | | | | eSg | Sg | 18 34 46.1 | -1.2 |
| TTG | Podgorica | 3.19 | 343⇑ | iPn | Pn | 18 33 55.6 | +1.4 |
| TTG | | | | eSn | Sn | 18 34 33.1 | +1.2 |
| NVR | Nevrokopi | 3.21 | 51 | ePN | Pn | 18 33 56.7 | +2.3 |
| NVR | Nevrokopi | 3.21 | 51 | P | Pn | 18 33 55.8 | +1.4 |
| NVR | Nevrokopi | 3.21 | 51 | P | Pn | 18 33 55.8 | +1.4 |
| NVR | Nevrokopi | 3.21 | 51 | ePn | Pn | 18 33 56.7 | +2.3 |
| PVY | Plav | 3.24 | 352 | ePn | Pn | 18 33 56.7 | +1.8 |
| PVY | | | | eSn | Sn | 18 34 35.2 | +2.0 |
| PVY | Plav | 3.24 | 352 | ePn | Pn | 18 33 56.7 | +1.8 |
| PVY | | | | eSn | Sn | 18 34 35.2 | +2.0 |
| BAI | Bari | 3.29 | 303 | ePn | Pn | 18 33 57.7 | +2.2 |
| SG1 | Sgolgore (BA) | 3.30 | 297 | ePn | Pn | 18 33 56.9 | +1.3 |
| HCY | Herceg Novi | 3.43 | 334⇓ | iPn | Pn | 18 33 58.1 | +0.6 |
| HCY | | | | eSn | Sn | 18 34 38.9 | +1.1 |
| HCY | Herceg Novi | 3.43 | 334⇓ | iPn | Pn | 18 33 58.1 | +0.6 |
| HCY | | | | eSn | Sn | 18 34 38.9 | +1.1 |
| KAVA | Kavala | 3.44 | 61 | P | Pn | 18 33 58.5 | +0.9 |
| KAVA | Kavala | 3.44 | 61 | P | Pn | 18 33 58.5 | +0.9 |
| BEY | Berane | 3.52 | 352⇑ | iPn | Pn | 18 34 00.2 | +1.4 |
| BEY | | | | eSn | Sn | 18 34 41.7 | +1.6 |
| IVA | Berane | 3.52 | 352⇑ | iPn | Pn | 18 34 00.2 | +1.4 |
| IVA | | | | eSn | Sn | 18 34 41.7 | +1.6 |
| BARS | Barje | 3.56 | 15 | ePn | Pn | 18 34 01.3 | +2.0 |
| BARS | | | | eSn | Sn | 18 34 41.0 | 0.0 |
| BARS | Barje | 3.56 | 15 | ePn | Pn | 18 34 01.3 | +2.0 |
| BARS | | | | eSn | Sn | 18 34 41.0 | 0.0 |
| NKME | Niksic | 3.59 | 341⇓ | iPn | Pn | 18 34 00.6 | +0.9 |
| NKME | | | | eSn | Sn | 18 34 43.3 | +1.6 |
| NKME | Niksic | 3.59 | 341⇓ | iPn | Pn | 18 34 00.6 | +0.9 |
| NKME | | | | eSn | Sn | 18 34 43.3 | +1.6 |
| LIA | Limnos Island | 3.62 | 80 | ePN | Pn | 18 34 02.2 | +2.2 |
| LIA | Limnos Island | 3.62 | 80 | ePn | Pn | 18 34 02.2 | +2.2 |
| NKY | Niksic | 3.62 | 342⇓ | iPn | Pn | 18 34 01.1 | +0.9 |
| NKY | | | | eSn | Sn | 18 34 43.4 | +0.8 |
| NKY | Niksic | 3.62 | 342⇓ | iPn | Pn | 18 34 01.1 | +0.9 |
| NKY | | | | eSn | Sn | 18 34 43.4 | +0.8 |
| KYTH | Kithira | 3.67 | 147 | P | Pn | 18 34 02.2 | +1.3 |
| KYTH | Kithira | 3.67 | 147 | P | Pn | 18 34 02.2 | +1.3 |
| CDT | Castel del Mon | 3.68 | 299 | ePn | Pn | 18 34 02.0 | +1.1 |
| BRY | Bratogost | 3.83 | 337⇓ | iPn | Pn | 18 34 03.9 | +0.9 |
| BRY | | | | eSn | Sn | 18 34 48.8 | +1.1 |
| BRY | Bratogost | 3.83 | 337⇓ | iPn | Pn | 18 34 03.9 | +0.9 |
| BRY | | | | eSn | Sn | 18 34 48.8 | +1.1 |
| SELS | Selova | 3.85 | 6 | ePn | Pn | 18 34 04.7 | +1.4 |
| SJES | Sjenica | 3.90 | 354 | ePn | Pn | 18 34 05.3 | +1.3 |
| SJES | Sjenica | 3.90 | 354 | ePn | Pn | 18 34 05.3 | +1.3 |
| SMTH | Samothraki Isl | 3.98 | 73 | P | Pn | 18 34 06.8 | +1.7 |
| SMTH | Samothraki Isl | 3.98 | 73 | P | Pn | 18 34 06.8 | +1.7 |
| UPM | Unac-Piva | 4.01 | 343 | ePn | Pn | 18 34 06.7 | +1.1 |
| UPM | | | | eSn | Sn | 18 34 53.6 | +1.3 |
| UPM | Unac-Piva | 4.01 | 343 | ePn | Pn | 18 34 06.7 | +1.1 |
| UPM | | | | eSn | Sn | 18 34 53.6 | +1.3 |
| PLE | Pljevlja | 4.04 | 348⇑ | iPn | Pn | 18 34 06.9 | +1.0 |
| PLE | | | | eSn | Sn | 18 34 54.2 | +1.3 |
| PLE | Pljevlja | 4.04 | 348⇑ | iPn | Pn | 18 34 06.9 | +1.0 |
| PLE | | | | eSn | Sn | 18 34 54.2 | +1.3 |
| STON | Ston | 4.09 | 329 | ePn | Pn | 18 34 06.7 | +0.2 |
| STON | | | | eSn | Sn | 18 34 53.4 | -0.6 |
| STON | Ston | 4.09 | 329 | ePn | Pn | 18 34 06.7 | +0.2 |
| STON | | | | eSn | Sn | 18 34 53.4 | -0.6 |
| ZAPS | Zavoj | 4.19 | 21 | ePn | Pn | 18 34 10.3 | +2.3 |
| IVAS | Ivanjica | 4.20 | 356 | ePn | Pn | 18 34 09.8 | +1.7 |
| IVAS | Ivanjica | 4.20 | 356 | ePn | Pn | 18 34 09.8 | +1.7 |
| GADA | Gvkgeada | 4.20 | 77 | eP | Pn | 18 34 08.9 | +0.9 |
| GADA | Gvkgeada | 4.20 | 77 | eP | Pn | 18 34 08.9 | +0.8 |
| BOZC | Bozcaada | 4.28 | 82 | P | Pn | 18 34 12.0 | +2.9 |
| BOVS | Bovan | 4.33 | 11 | ePn | Pn | 18 34 10.9 | +1.0 |
| BOVS | Bovan | 4.33 | 11 | ePn | Pn | 18 34 10.9 | +1.0 |
| ALN | Alexandroupoli | 4.48 | 69 | ⇓P | Pn | 18 34 12.9 | +1.0 |
| ALN | Alexandroupoli | 4.48 | 69 | P | Pn | 18 34 12.9 | +1.0 |
| GRUS | Gruza | 4.50 | 2 | ePn | Pn | 18 34 13.6 | +1.4 |
| GRUS | Gruza | 4.50 | 2 | ePn | Pn | 18 34 13.6 | +1.4 |
| ENEZ | Enez | 4.51 | 71 | eP | Pn | 18 34 12.9 | +0.6 |

| Code | Station Name | Δ° | AZ° | Phase (Op) | Phase (ISC) | Time h m s | Res |
|---|---|---|---|---|---|---|---|
| ENEZ | Enez | 4.51 | 71 | eP | Pn | 18 34 12.9 | +0.6 |
| APE | Apeiranthos | 4.56 | 119⇑ | iP | Pn | 18 34 14.9 | +1.9 |
| BBLS | Lazići | 4.56 | 350 | ePn | Pn | 18 34 14.5 | +1.5 |
| BBLS | Lazići | 4.56 | 350 | ePn | Pn | 18 34 14.5 | +1.5 |
| GELI | Tayfur-Gelibol | 4.67 | 76 | eP | Pn | 18 34 15.3 | +0.8 |
| GELI | Tayfur-Gelibol | 4.67 | 76 | eP | Pn | 18 34 15.3 | +0.8 |
| DIVS | Divibare | 4.73 | 355 | ePn | Pn | 18 34 16.1 | +0.7 |
| DIVS | | | | eSn | Sn | 18 35 09.4 | -0.5 |
| DIVS | Divibare | 4.73 | 355⇑ | iP | Pn | 18 34 17.0 | +1.6 |
| DIVS | Divibare | 4.73 | 355 | ePn | Pn | 18 34 16.1 | +0.7 |
| DIVS | | | | eSn | Sn | 18 35 09.4 | -0.5 |
| ERIK | Erikli-Kesan | 4.76 | 72 | eP | Pn | 18 34 17.2 | +1.5 |
| ERIK | Erikli-Kesan | 4.76 | 72 | eP | Pn | 18 34 17.2 | +1.5 |
| ZEY | ˜zmir | 4.79 | 102 | P | Pn | 18 34 18.5 | +2.3 |
| URLA | Izmir | 4.83 | 100 | iP | Pn | 18 34 18.9 | +2.1 |
| URLA | Izmir | 4.83 | 100 | P | Pn | 18 34 18.9 | +2.1 |
| TRUS | Trudelj | 4.83 | 359 | ePn | Pn | 18 34 17.3 | +0.5 |
| TRUS | Trudelj | 4.83 | 359 | ePn | Pn | 18 34 17.3 | +0.5 |
| LPK | Lapseki | 4.88 | 76 | eP | Pn | 18 34 18.7 | +1.3 |
| LPK | Lapseki | 4.88 | 76 | eP | Pn | 18 34 18.7 | +1.3 |
| SVIS | Svilajnac | 4.90 | 6 | ePn | Pn | 18 34 19.4 | +1.7 |
| DKL | Dikili | 4.95 | 92 | eP | Pn | 18 34 20.6 | +2.3 |
| DKL | Dikili | 4.95 | 92 | eP | Pn | 18 34 20.6 | +2.3 |
| KUBS | Kucevo | 5.09 | 9 | ePn | Pn | 18 34 20.5 | +0.2 |
| KUBS | Kucevo | 5.09 | 9 | ePn | Pn | 18 34 20.5 | +0.2 |
| VAE | Valguarnera | 5.18 | 250 | Pn | Pn | 18 34 19.8 | -1.8 |
| | 0.6nm,0.3s,baz=160,slow=12,SNR=2.6 | | | | | | |
| VAE | | | | Sn | Sn | 18 35 23.3 | +2.4 |
| | 0.3nm,0.3s,baz=37,slow=17,SNR=3.1 | | | | | | |
| TEKS | Tekeris | 5.21 | 352 | ePn | Pn | 18 34 22.8 | +0.8 |
| TEKS | Tekeris | 5.21 | 352 | ePn | Pn | 18 34 22.8 | +0.8 |
| RKY | Sarkoy-Tekirda | 5.25 | 74 | eP | Pn | 18 34 23.8 | +1.2 |
| RKY | Sarkoy-Tekirda | 5.25 | 74 | eP | Pn | 18 34 23.8 | +1.2 |
| SART | Tekirdag | 5.26 | 74 | iP | Pn | 18 34 24.0 | +1.3 |
| SART | Tekirdag | 5.26 | 74 | P | Pn | 18 34 23.9 | +1.3 |
| KRBG | Karabiga-Canak | 5.29 | 77 | eP | Pn | 18 34 24.6 | +1.6 |
| KRBG | Karabiga-Canak | 5.29 | 77 | eP | Pn | 18 34 24.6 | +1.6 |
| EDRB | Edirne | 5.32 | 60 | eP | Pn | 18 34 24.2 | +0.8 |
| EDRB | Edirne | 5.32 | 60 | eP | Pn | 18 34 24.2 | +0.8 |
| IDI | Anoyia | 5.36 | 138 | Pn | Pn | 18 34 23.3 | -0.8 |
| | 1.4nm,0.3s,baz=337,slow=12,SNR=12 | | | | | | |
| IDI | | | | Sn | Sn | 18 35 20.3 | -5.2 |
| | 1.5nm,0.3s,baz=301,slow=18,SNR=2.6 | | | | | | |
| IDI | | | | LR | LR | 18 36 26.1 | |
| | comp=Z,25nm,18.4s,baz=256,slow=38 | | | | | | |
| BALY | Balya | 5.48 | 84 | iP | Pn | 18 34 29.4 | +3.7 |
| BALY | Balya | 5.48 | 84 | P | Pn | 18 34 29.4 | +3.7 |
| GONE | Gonen-Balikesi | 5.55 | 81 | eP | Pn | 18 34 28.4 | +1.9 |
| GONE | Gonen-Balikesi | 5.55 | 81 | eP | Pn | 18 34 28.4 | +1.9 |
| MRMT | Marmara Adasi | 5.55 | 75 | eP | Pn | 18 34 28.0 | +1.3 |
| MRMT | Marmara Adasi | 5.55 | 75 | eP | Pn | 18 34 28.0 | +1.3 |
| BALB | Balikesir | 5.68 | 85 | eP | Pn | 18 34 30.6 | +2.2 |
| BALB | Balikesir | 5.68 | 85 | eP | Pn | 18 34 30.6 | +2.2 |
| EDC | Edincik | 5.71 | 78 | eP | Pn | 18 34 30.5 | +1.7 |
| EDC | Edincik | 5.71 | 78 | eP | Pn | 18 34 30.5 | +1.7 |
| CRLT | Corlu | 5.77 | 70 | eP | Pn | 18 34 30.8 | +1.2 |
| CRLT | Corlu | 5.77 | 70 | eP | Pn | 18 34 30.8 | +1.2 |
| FGSL | Fruska Gora | 5.79 | 355 | ePn | Pn | 18 34 30.8 | +0.8 |
| FRGS | Fruska Gora | 5.79 | 355 | ePn | Pn | 18 34 30.8 | +0.8 |
| BODT | Bodrum | 5.81 | 111 | eP | Pn | 18 34 33.2 | +3.0 |
| BODT | Bodrum | 5.81 | 111 | eP | Pn | 18 34 33.2 | +3.0 |
| AYDB | Zeytinkoy-Aydi | 5.93 | 102 | eP | Pn | 18 34 35.0 | +3.1 |
| AYDB | Zeytinkoy-Aydi | 5.93 | 102 | eP | Pn | 18 34 35.0 | +3.1 |
| AYDN | Tasoluk | 6.00 | 104 | P | Pn | 18 34 38.2 | +5.4 |
| KCTX | Karacabey (Bur | 6.08 | 79 | eP | Pn | 18 34 35.5 | +1.7 |
| KCTX | Karacabey (Bur | 6.08 | 79 | eP | Pn | 18 34 35.6 | +1.7 |
| DURS | Dursunbey | 6.14 | 85 | iP | Pn | 18 34 38.1 | +3.3 |
| DURS | Dursunbey | 6.14 | 85 | P | Pn | 18 34 38.1 | +3.3 |
| GZR | Gura Zlata | 6.23 | 15⇑ | iP | Pn | 18 34 43.2 | +7.3 |
| BZS | Buzias | 6.28 | 7 | ePn | Pn | 18 34 36.9 | +0.3 |
| BZS | | | | eSn | Sn | 18 35 44.7 | -3.2 |
| BZS | Buzias | 6.28 | 7⇑ | iP | Pn | 18 34 37.8 | +1.2 |
| BZS | Buzias | 6.28 | 7 | ePn | Pn | 18 34 36.9 | +0.3 |
| CTKS | Kestanelik-??a | 6.36 | 71 | eP | Pn | 18 34 39.3 | +1.6 |
| CTKS | Kestanelik-??a | 6.36 | 71 | eP | Pn | 18 34 39.3 | +1.6 |
| KULA | Kula-Manisa | 6.39 | 95 | eP | Pn | 18 34 41.1 | +2.9 |
| KULA | Kula-Manisa | 6.39 | 95 | eP | Pn | 18 34 41.1 | +2.9 |
| ARMT | Armutlu | 6.50 | 77 | eP | Pn | 18 34 41.6 | +2.0 |
| ARMT | Armutlu | 6.50 | 77 | eP | Pn | 18 34 41.6 | +2.0 |
| TURN | Turunc | 6.83 | 109 | iP | Pn | 18 34 45.6 | +1.4 |
| TURN | Turunc | 6.83 | 109 | P | Pn | 18 34 45.6 | +1.4 |
| DNZL | Cakiroluk | 6.88 | 102 | iP | Pn | 18 34 48.8 | +3.8 |
| DNZL | Cakiroluk | 6.88 | 102 | P | Pn | 18 34 48.8 | +3.8 |
| VOIR | | 6.90 | 27⇑ | iP | Pn | 18 34 48.2 | +2.9 |
| KHAL | Karahalli | 7.05 | 95 | P | Pn | 18 34 51.6 | +4.2 |
| ISR | Istrita | 7.25 | 36⇑ | iP | Pn | 18 34 52.5 | +2.5 |
| MLR | Muntele Rosu | 7.29 | 31⇑ | iP | Pn | 18 34 55.4 | +4.8 |
| GOLH | Golhisar | 7.41 | 104 | P | Pn | 18 34 58.2 | +6.0 |
| DRGR | | 7.57 | 11⇑ | iP | Pn | 18 34 55.9 | +1.5 |
| PLOR | Plostina | 7.87 | 33⇑ | iP | Pn | 18 35 03.0 | +4.5 |
| VRI | Vrincioaia | 7.92 | 33⇑ | iP | Pn | 18 35 02.5 | +3.4 |
| SOKA | Soboth | 8.33 | 333⇑ | iPn | Pn | 18 35 05.1 | +0.3 |
| SOKA | Soboth | 8.33 | 333 | Pn | Pn | 18 35 05.1 | +0.3 |
| OBKA | Obir | 8.37 | 330⇑ | iPn | Pn | 18 35 06.0 | +0.7 |
| OBKA | Obir | 8.37 | 330 | Pn | Pn | 18 35 06.0 | +0.7 |
| MOA | Molln | 9.60 | 334⇓ | iPn | Pn | 18 35 23.0 | +0.8 |
| MOA | Molln | 9.60 | 334 | Pn | Pn | 18 35 23.0 | +0.8 |
| BRTR | Keskin Array B | 10.12 | 84 | Pn | Pn | 18 35 32.5 | +3.0 |
| | 0.2nm,0.3s,baz=267,slow=13,SNR=6.6 | | | | | | |
| MOTA | Moosalm | 10.51 | 322⇓ | iPn | Pn | 18 35 36.3 | +1.6 |
| MOTA | Moosalm | 10.51 | 322 | Pn | Pn | 18 35 36.3 | +1.6 |
| GERES | GERESS Array B | 10.65 | 335 | Pn | Pn | 18 35 36.2 | -0.4 |
| | 0.3nm,0.3s,baz=154,slow=14,SNR=12 | | | | | | |
| GERES | | | | LR | LR | 18 40 15.0 | |
| | comp=Z,19nm,18.2s,baz=12,slow=41 | | | | | | |
| DAVOX | Davos/Dischmat | 10.74 | 317 | Pn | Pn | 18 35 39.4 | +1.5 |
| | 0.4nm,0.3s,baz=131,slow=19,SNR=8.9 | | | | | | |
| DAVOX | | | | Sn | Sn | 18 37 39.0 | +1.2 |
| | 0.5nm,0.3s,baz=139,slow=20,SNR=4.0 | | | | | | |
| ESDC | Sonseca Array | 18.90 | 279 | P | P | 18 37 23.0 | -1.5 |
| | 0.1nm,0.3s,baz=78,slow=12,SNR=3.5 | | | | | | |
| HFS | Hagfors | 21.21 | 351 | P | P | 18 37 49.1 | -0.3 |
| | 2.0nm,0.5s,baz=163,slow=10,SNR=12 | | | | | | |
| FINES | FINESS Array B | 22.35 | 7 | P | P | 18 38 01.1 | -0.5 |
| | 1.3nm,0.4s,baz=174,slow=11,SNR=15 | | | | | | |
| NB2 | NORSAR Subarra | 22.44 | 348 | P | P | 18 38 02.5 | -0.2 |
| | comp=Z,0.7nm,0.4s,baz=161,slow=11 | | | | | | |
| NB2 | NORSAR Subarra | 22.44 | 348 | P | P | 18 38 02.5 | -0.2 |
| | comp=Z,0.7nm,0.4s,SNR=4.7 | | | | | | |
| NOA | NORSAR Array B | 22.44 | 348 | P | P | 18 38 01.8 | -0.8 |
| | comp=Z,0.9nm,0.4s,baz=153,slow=10.0,SNR=7.8 | | | | | | |
| NOA | | | | LR | LR | 18 46 46.4 | |
| | comp=Z,25nm,18.2s,baz=5.0,slow=37 | | | | | | |
| EKA | Eskdalemuir Ar | 22.46 | 323 | P | P | 18 38 03.3 | +0.4 |
| | comp=Z,3.0nm,0.7s,baz=125,slow=9.2,SNR=10 | | | | | | |
| AKTO | Aktyubinsk | 28.45 | 55 | P | P | 18 38 58.1 | -0.5 |
| | comp=Z,0.8nm,0.6s,baz=228,slow=14,SNR=3.7 | | | | | | |
| GEYT | Alibeck | 29.24 | 81 | P | P | 18 39 04.8 | -1.1 |
| | comp=Z,0.9nm,0.5s,baz=261,slow=9.6,SNR=3.5 | | | | | | |
| ARCES | ARCESS Array B | 30.33 | 3 | P | P | 18 39 13.8 | -1.3 |
| | comp=Z,0.8nm,0.6s,baz=187,slow=8.6,SNR=6.2 | | | | | | |
| TORD | Torodi Ar. Bea | 30.99 | 218 | P | P | 18 39 21.5 | +0.1 |
| | comp=Z,1.0nm,0.6s,baz=32,slow=9.4,SNR=13 | | | | | | |
| AAK | Ala-Archa | 40.27 | 67 | LR | LR | 19 00 00.9 | |
| | comp=Z,31nm,18.6s,baz=343,slow=40 | | | | | | |
| MKAR | Makanchi Array | 44.66 | 59 | P | P | 18 41 14.8 | -1.7 |
| | comp=Z,0.6nm,0.6s,baz=289,slow=6.8,SNR=9.1 | | | | | | |
| ZALV | Zalesovo Beam | 44.88 | 49 | P | P | 18 41 16.8 | -1.3 |
| | comp=Z,1.2nm,0.4s,baz=280,slow=7.9,SNR=6.0 | | | | | | |
| SONM | Songino Array | 59.68 | 51 | P | P | 18 43 08.4 | +0.1 |
| | comp=Z,0.2nm,0.7s,baz=287,slow=5.9,SNR=2.2 | | | | | | |
| TXAR | Lajitas Array | 94.15 | 314 | P | P | 18 46 24.7 | +1.7 |
| | comp=Z,0.1nm,0.6s,baz=60,slow=5.3,SNR=2.4 | | | | | | |

**TRN 17 18:37:07.8, 17.67N×61.66W, h28km, MD3.7, 1D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ANWB | Willy Bob | 0.12 | 270 | eP | Pn | 18 37 14.1 | +0.3 |
| ANWB | | | | eS | Sb | 18 37 18.4 | +2.0 |
| NVRH | Round Hill, Ne | 1.02 | 242 | eP | Pb | 18 37 28.7 | +1.9 |
| NVRH | | | | eS | Sb | 18 37 42.5 | +2.7 |
| MBWH | | 1.05 | 209 | eP | Pb | 18 37 27.5 | +0.1 |
| MBWH | | | | eS | Sb | 18 37 42.6 | +1.9 |
| MLYT | Lee's Yard | 1.07 | 208 | eP | Pb | 18 37 28.4 | +0.7 |
| MLYT | | | | eS | Sb | 18 37 44.1 | +2.8 |
| SKI | Saint Kitts | 1.08 | 252⇓ | iP | Pb | 18 37 28.4 | +0.5 |
| SKI | | | | eS | Sb | 18 37 43.4 | +1.8 |
| SKDB | Saint Kitts 2 | 1.12 | 256 | eP | Pb | 18 37 30.1 | +1.6 |
| SKDB | | | | eS | Sb | 18 37 44.8 | +2.0 |
| BSK | Brimstone Hill | 1.17 | 254 | eP | Pb | 18 37 29.3 | 0.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BSK | | | | *e*S | Sb | 18 37 45.6 | +1.5 | |
| **SEG** | **Port Louis** | **1.27** | **173** | *e*P | Pb | 18 37 31.5 | +0.5 | |
| **SEUS** | **St. Eustatius** | **1.27** | **262** | *e*P | Pb | 18 37 31.7 | +0.7 | |
| SEUS | | | | *e*S | Sb | 18 37 48.2 | +1.2 | |
| **DEG** | **La Desirade** | **1.47** | **157** | *e*P | Pn | 18 37 33.1 | +0.6 | |
| **SABA** | **Saba** | **1.51** | **268** | *e*P | Pb | 18 37 34.3 | -0.8 | |
| **LZG** | **Guadaloupe-1** | **1.52** | **184** | *e*P | Pb | 18 37 34.6 | -0.8 | |
| **SSG** | **Sans Toucher** | **1.57** | **181** | *e*P | Pn | 18 37 35.1 | +1.1 | |
| **MLG** | **Mont-d'or** | **1.60** | **182** | *e*P | Pb | 18 37 36.0 | -0.8 | |
| **FNG** | **Fond-Bernard** | **1.60** | **181** | *e*P | Pb | 18 37 35.9 | -0.9 | |
| **MGG** | **Marie-Galante** | **1.77** | **169** | *e*P | Pb | 18 37 38.2 | -1.4 | |
| **TBG** | **Guadaloupe-3** | **1.81** | **179** | *e*P | Pb | 18 37 38.9 | -1.3 | |
| **BBL** | **Barber's Block** | **2.14** | **175** | *e*P | Pn | 18 37 43.3 | +1.6 | |

**IDC 17 18:43:37.8±3.2, 30°26S×177°74W, h0km, mb3.4/2, mb1 3.7/2, mb1mx3.5/28, mbtmp3.4/2, Error ellipse: s-maj=68.8km s-min=23.2km az=106.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.02** | **351** | Pn | Pn | 18 44 00.2 | +0.8 |
| | 181nm,0.3s,baz=345,slow=21,SNR=9.1 | | | | | | |
| RAO | | | | Sn | Sn | 18 44 13.9 | -0.5 |
| | 578nm,0.3s,baz=196,slow=22,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **9.04** | **207** | Sn | Sn | 18 47 28.8 | -3.4 |
| | 0.4nm,0.3s,baz=144,slow=19,SNR=1.2 | | | | | | |
| **ASAR** | **Alice Springs** | **43.34** | **267** | P | P | 18 51 42.2 | +0.3 |
| | 0.1nm,0.3s,baz=104,slow=7.7,SNR=5.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.32** | **272** | P | P | 18 51 49.4 | -0.4 |
| | 0.3nm,0.3s,baz=110,slow=8.1,SNR=18 | | | | | | |
| **FINES** | **FINESS Array B** | **145.09** | **340** | PKPbc | PKPbc | 19 03 14.6 | -1.3 |
| | 3.2nm,1.0s,baz=48,slow=2.8,SNR=5.7 | | | | | | |

*IDC 17 18:50:13.1±1.6, 14°.59N×54°.17E, h0km, mb3.6/8, mb1 3.7/8, mb1mx3.4/60, mbtmp3.6/8, MS3.0/7, Ms1 3.0/7, ms1mx2.8/39, Error ellipse: s-maj=37.1km s-min=34.0km az=140.0*

*ISCJB 17 18:50:14.5±1.2, 14°.7N±0°.2×54°.1E±0°.2, h19km, mb3.6/8, MS2.9/6, Error ellipse: s-maj=29.3km s-min=24.4km az=146.7*

**ISC 17 18:50:16.2±1.4, 14°.6N±0°.2×54°.2E±0°.2, h19km, n21, σ0s91/8, mb3.6/8, MS2.9/6, Owen Fracture Zone region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATD** | **Arta Tunnel** | **11.43** | **256** | LR | LR | 18 56 23.9 | |
| | comp=Z,74nm,18.9s,baz=284,slow=32 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **22.91** | **228** | LR | LR | 19 04 10.9 | |
| | comp=Z,58nm,20.7s,baz=94,slow=37 | | | | | | |
| **GEYT** | **Alibeck** | **23.48** | **8** | LR | LR | 19 05 40.3 | |
| | comp=Z,60nm,20.8s,baz=10.0,slow=39 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **25.01** | **320** | LR | LR | 19 05 25.4 | |
| | comp=Z,35nm,18.9s,baz=85,slow=36 | | | | | | |
| **H08N2** | **Diego Garcia H** | **26.69** | **140** | T | T | 19 23 32.6 | |
| | baz=321,slow=76,SNR=15 | | | | | | |
| **H08N3** | **Diego Garcia H** | **26.70** | **140** | T | T | 19 23 29.7 | |
| | baz=321,slow=76,SNR=17 | | | | | | |
| **H08N1** | **Diego Carcia H** | **26.71** | **140** | T | T | 19 23 34.2 | |
| | baz=321,slow=76,SNR=12 | | | | | | |
| **KBZ** | **Khabaz** | **30.56** | **344** | LR | LR | 19 11 49.3 | |
| | comp=Z,31nm,19.3s,baz=162,slow=42 | | | | | | |
| **BRTR** | **Keskin Array B** | **30.80** | **328** | LR | LR | 19 09 58.7 | |
| | comp=Z,22nm,19.2s,baz=129,slow=38 | | | | | | |
| **AKTO** | **Aktyubinsk** | **35.85** | **4** | P | P | **18 57 14.9** | **+0.2** |
| | 1.3nm,0.7s,baz=200,slow=8.6,SNR=7.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **39.76** | **30** | P | P | **18 57 49.1** | **+1.3** |
| | 0.5nm,0.6s,baz=224,slow=8.4,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **40.97** | **24** | P | P | **18 57 56.4** | **-1.3** |
| | 0.2nm,0.7s,baz=224,slow=9.2,SNR=3.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.03** | **79** | LR | LR | 19 14 45.5 | |
| | comp=Z,12nm,21.8s,baz=270,slow=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.01** | **25** | P | P | **18 58 37.7** | **-0.5** |
| | 0.3nm,0.3s,baz=239,slow=11,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **50.85** | **275** | P | P | **18 59 16.4** | **+0.2** |
| | 0.3nm,0.6s,baz=86,slow=7.4,SNR=2.7 | | | | | | |
| **FINES** | **FINESS Array B** | **50.92** | **343** | P | P | **18 59 15.6** | **-0.4** |
| | 2.3nm,1.0s,baz=161,slow=13,SNR=3.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.75** | **349** | P | P | **19 00 06.0** | **+0.5** |
| | 1.9nm,1.0s,baz=134,slow=7.0,SNR=6.0 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **75.21** | **133** | T | T | 20 24 03.4 | |
| | baz=301,slow=75,SNR=36 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **75.22** | **133** | T | T | 20 24 12.0 | |
| | baz=301,slow=75,SNR=38 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **75.23** | **133** | T | T | 20 24 07.1 | |
| | baz=301,slow=75,SNR=46 | | | | | | |
| **ASAR** | **Alice Springs** | **86.69** | **115** | P | P | **19 02 59.1** | **-0.2** |
| | 0.2nm,0.7s,baz=297,slow=5.4,SNR=4.8 | | | | | | |

*ISCJB 17 18:50:44.9±0.7, 21°.0S±0°.2×173°.3E±0°.1, h50km, mb4.2/13, MS3.9/11, Error ellipse: s-maj=22.0km s-min=14.7km az=165.9*

*NEIC 17 18:50:47.9±3.5, 21°.03S×173°.33E, h60km±28km, mb4.4/4, Error ellipse: s-maj=24.6km s-min=23.2km az=96.0*

*IDC 17 18:50:51.8±5.1, 20°.74S×173°.01E, h82km±43km, mb3.8/10, mb1 4.0/11, mb1mx3.8/35, mbtmp4.1/11, ML3.5/1, MS3.8/12, Ms1 3.9/12, ms1mx3.6/30, Error ellipse: s-maj=37.0km s-min=26.4km az=152.0*

**ISC 17 18:50:46.9±0.8, 21°.1S±0°.2×173°.4E±0°.1, h50km, n29, σ1s36/17, mb4.3/13, MS3.9/11, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.51** | **54** | *e*Pn | Pn | 18 51 53.0 | -14 |
| **DZM** | **Mont Dzumac** | **6.53** | **260** | *e*Pn | **Pn** | **18 52 21.8** | **+1.3** |
| | 30nm,0.6s | | | | | | |
| DZM | | | | *e*LR | LR | 18 54 03.9 | |
| | 4μm,25.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **6.53** | **260** | P | **Pn** | **18 52 21.8** | **+1.3** |
| | 1.2nm,0.3s,baz=0.5,slow=15,SNR=17 | | | | | | |
| **DZM** | **Mont Dzumac** | **6.53** | **260** | *e*Pn | **Pn** | **18 52 20.8** | **+0.3** |
| | 156nm,1.5s | | | | | | |
| **URZ** | **Urewera** | **17.46** | **170** | LR | LR | 19 00 43.6 | |
| | comp=Z,640nm,21.6s,baz=4.0,slow=33 | | | | | | |
| **EIDS** | **Eidsvold** | **20.93** | **254** | *e*P | **P** | **18 55 26.3** | **+0.8** |
| | 23nm,1.4s | | | | | | |
| **RAR** | **Rarotonga** | **25.04** | **95** | LR | LR | 19 03 26.2 | |
| | comp=Z,178nm,21.0s,baz=273,slow=30 | | | | | | |
| **CTA** | **Charters Tower** | **25.40** | **267** | P | **P** | **18 56 10.7** | **+0.8** |
| | 3.1nm,0.6s,baz=90,slow=12,SNR=3.7 | | | | | | |
| **TBI** | **Tubuai** | **34.43** | **101** | *e*LQ | LQ | 19 04 50.3 | |
| | 438nm,29.5s | | | | | | |
| TBI | | | | *e*LR | LR | 19 06 28.2 | |
| | 289nm,28.2s,baz=277 | | | | | | |
| **PPT2** | **Papeete2** | **35.09** | **91** | *e*LR | LR | 19 06 45.6 | |
| | 597nm,28.8s,baz=258 | | | | | | |
| **PPT** | **Papeete** | **35.09** | **91** | LR | LR | 19 10 57.5 | |
| | comp=Z,43nm,18.5s,baz=284,slow=34 | | | | | | |
| **WRAB** | **Tennant Creek** | **36.51** | **265** | *e*P | **P** | **18 57 46.6** | **-1.1** |
| | 2.6nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **36.52** | **258** | P | **P** | **18 57 47.3** | **-0.6** |
| | 6.8nm,0.7s,baz=82,slow=9.4,SNR=108 | | | | | | |
| ASAR | | | | LR | LR | 19 12 25.5 | |
| | comp=Z,196nm,21.6s,baz=104,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.52** | **265** | P | **P** | **18 57 46.4** | **-1.4** |
| | 3.9nm,0.8s,baz=102,slow=7.9,SNR=32 | | | | | | |
| WRA | | | | LR | LR | 19 12 40.9 | |
| | comp=Z,679nm,19.7s,baz=115,slow=36 | | | | | | |
| **SIJI** | **Sorong** | **45.71** | **291** | P | P | 18 59 00.3 | -3.1 |
| | 2.4nm,0.6s,baz=125,slow=6.9,SNR=5.0 | | | | | | |
| **BATI** | **Baumata** | **48.89** | **275** | LR | LR | 19 19 50.6 | |
| | comp=Z,149nm,20.2s,baz=118,slow=36 | | | | | | |
| **VNDA** | **Vanda** | **56.80** | **183** | LR | LR | 19 20 38.4 | |
| | comp=Z,120nm,21.5s,baz=7.5,slow=31 | | | | | | |
| **SBA** | **Scott Base** | **56.94** | **182** | *e*P | **P** | **19 00 25.3** | **-1.3** |
| | 14nm,1.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **66.21** | **330** | P | **P** | **19 01 28.9** | **-0.8** |
| | 0.7nm,0.6s,baz=166,slow=9.1,SNR=3.5 | | | | | | |
| **PETK** | **Petropavlovsk-** | **75.08** | **350** | LR | LR | 19 31 37.8 | |
| | comp=Z,88nm,18.7s,baz=140,slow=33 | | | | | | |
| **MAW** | **Mawson** | **78.20** | **202** | P | **P** | **19 02 42.9** | **+2.2** |
| | 3.6nm,1.0s,baz=140,slow=9.0,SNR=4.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **82.78** | **293** | P | **P** | **19 03 04.7** | **-1.5** |
| | 1.0nm,0.6s,baz=124,slow=3.8,SNR=7.0 | | | | | | |
| **KDAK** | **Kodiak Island** | **83.50** | **18** | LR | LR | 19 34 05.5 | |
| | comp=Z,50nm,19.6s,baz=209,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.14** | **47** | P | **P** | **19 03 29.8** | **+1.9** |
| | 0.7nm,0.8s,baz=226,slow=8.1,SNR=5.0 | | | | | | |
| **SNAA** | **Sanae** | **87.49** | **181** | *e*P | **P** | **19 03 27.4** | **-1.6** |
| | 4.2nm,1.2s | | | | | | |
| **ILAR** | **Eielson Array** | **90.84** | **16** | P | **P** | **19 03 43.7** | **-0.8** |
| | 0.4nm,0.9s,baz=224,slow=5.0,SNR=3.4 | | | | | | |
| ILAR | | | | LR | LR | 19 41 52.7 | |
| | comp=Z,23nm,19.5s,baz=225,slow=34 | | | | | | |
| **SONM** | **Songino Array** | **91.01** | **322** | LR | LR | 19 40 45.8 | |
| | comp=Z,26nm,22.0s,baz=116,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **94.25** | **60** | P | **P** | **19 04 01.7** | **+0.6** |
| | 0.2nm,0.8s,baz=292,slow=4.8,SNR=2.8 | | | | | | |
| TXAR | | | | LR | LR | 19 38 19.2 | |
| | comp=Z,74nm,20.1s,baz=0.0,slow=30 | | | | | | |
| **GERES** | **GERESS Array B** | **147.85** | **334** | PKPbc | **PKPbc** | **19 10 27.4** | **+1.0** |
| | 0.3nm,0.6s,baz=0.0,slow=3.0,SNR=3.2 | | | | | | |

**DJA 17 18:53:20.8±0.6, 2°N±3°×12°8E±°, h20km±6km, M4.0/16, mb4.1/9, MLv3.9/16, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.74** | **204** | P | Pn | 18 53 49.7 | -0.2 |
| TNTI | | | | S | Sb | 18 54 13.3 | -0.1 |
| **SGSI** | **Sangihe** | **2.85** | **297** | P | Pn | 18 54 05.5 | +0.2 |
| **LBMI** | **Labuha** | **3.04** | **191** | P | Pn | 18 54 07.3 | -0.5 |
| LBMI | | | | S | Sn | 18 54 45.8 | +2.1 |
| **KMSI** | **Cibinong** | **4.46** | **246** | P | Pn | 18 54 27.5 | +0.2 |
| **SWI** | **Sorong** | **4.53** | **135** | P | Pn | 18 54 24.9 | -3.3 |
| SWI | | | | S | Sn | 18 55 22.8 | +2.5 |
| **SANI** | **Sanana** | **4.86** | **205** | P | Pn | 18 54 28.8 | -4.0 |
| SANI | | | | S | Sn | 18 55 29.4 | +0.9 |
| **GTOI** | **Gorontalo** | **5.34** | **251** | S | Sn | 18 55 44.3 | +3.8 |
| **NLAI** | **Namlea** | **5.66** | **190** | P | Pn | 18 54 45.1 | +1.3 |
| | 17nm,0.8s,0.1nm | | | | | | |
| **MSAI** | **Masohi** | **5.74** | **171** | P | Pn | 18 54 46.1 | +1.1 |
| | 3.6nm,0.7s,0.0nm | | | | | | |
| **AAI** | **Ambon** | **6.02** | **179** | P | Pn | 18 54 49.4 | +0.6 |
| | 18nm,1.5s,0.1nm | | | | | | |
| **LUWI** | **Luwuk** | **6.29** | **237** | P | Pn | 18 54 52.7 | +0.2 |
| | 26nm,0.7s,0.3nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.71** | **141** | P | Pn | 18 54 59.3 | +1.0 |
| | 9.2nm,0.9s,0.1nm | | | | | | |
| **APSI** | **Ampana** | **7.20** | **243** | P | Pn | 18 54 56.4 | -8.6 |
| **SPSI** | **Sidrap Palu** | **10.41** | **233** | P | Pn | 18 55 48.4 | -0.7 |
| | 11nm,0.6s | | | | | | |
| **GENI** | **Genyem** | **13.06** | **112** | P | Pn | 18 56 24.4 | -1.0 |

*ISCJB 17 18:53:39.3±0.8, 51°.49N±0°.04×16°.07E±0°.04, h0km, Error ellipse: s-maj=5.9km s-min=3.1km az=15.4*

*IPEC 17 18:53:39.0±0.2, 51°.61N×16°.17E, h0km, ML1.5/3, Error ellipse: s-maj=1.6km s-min=0.9km az=28.0*

*CSEM 17 18:53:40.7±0.3, 51°.50N×16°.07E, h2km, ML3.0/7, Error ellipse: s-maj=4.5km s-min=2.4km az=8.0*

*PRU 17 18:53:41.4, 51°.50N×16°.07E, h0km*

**ISC 17 18:53:40.7±1.2, 51°.51N±0°.06×16°.07E±0°.03, h0km, n28, σ0s52/52, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.68** | **168** | *e*Pg | **Pg** | **18 53 54.2** | **+0.6** |
| KSP | | | | *e*Sg | **Sg** | **18 54 03.8** | **+1.4** |
| **KSP** | **Ksiaz** | **0.68** | **168** | *e*Pg | **Pg** | **18 53 54.2** | **+0.6** |
| KSP | | | | *e*Sg | **Sg** | **18 54 03.8** | **+1.4** |
| **UPC** | **Upice** | **1.00** | **182** | *e*PG | **Pb** | **18 54 00.4** | **-0.4** |
| **UPC** | **Upice** | **1.00** | **182** | Pg | **Pb** | **18 54 00.4** | **-0.4** |
| **DPC** | **Dobruska-Polom** | **1.17** | **172** | *e*PG | **Pg** | **18 54 03.1** | **+0.1** |
| DPC | | | | *e*SG | **Sg** | **18 54 18.2** | **+0.1** |
| | comp=Z,7.8nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.17** | **172** | Pg | **Pg** | **18 54 03.1** | **+0.1** |
| DPC | | | | Sg | **Sg** | **18 54 18.2** | **+0.1** |
| | 7.8nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.36** | **225** | *e*PG | **Pg** | **18 54 06.8** | **0.0** |
| PVCC | | | | *e*SG | **Sn** | **18 54 25.5** | **-0.2** |
| | comp=Z,66nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.36** | **225** | Pg | **Pg** | **18 54 06.8** | **0.0** |
| PVCC | | | | Sg | **Sn** | **18 54 25.5** | **-0.2** |
| | 66nm,0.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.48** | **246** | PG | **Pn** | **18 54 08.6** | **+0.1** |
| BRG | | | | SG | **Sn** | **18 54 28.7** | **+0.1** |
| | 17nm,0.3s | | | | | | |
| **KRLC** | **Kraliky** | **1.50** | **162** | *e*PG | **Pb** | **18 54 09.2** | **-0.2** |
| KRLC | | | | *e*SG | **Sg** | **18 54 29.0** | **+0.1** |
| **KRLC** | **Kraliky** | **1.50** | **162** | Pg | **Pb** | **18 54 09.2** | **-0.2** |
| KRLC | | | | Sg | **Sg** | **18 54 29.0** | **+0.1** |
| **GOPC** | **GO Pecny, Ondr** | **1.79** | **208** | *e*PG | **Pb** | **18 54 14.1** | **-0.2** |
| **GOPC** | **GO Pecny, Ondr** | **1.79** | **208** | Pg | **Pb** | **18 54 14.1** | **-0.2** |
| **PRU** | **Pruhonice** | **1.80** | **213** | *e*PN | **Pn** | **18 54 13.1** | **+0.1** |
| PRU | | | | *e*PG | **Pb** | **18 54 14.5** | **0.0** |
| PRU | | | | *e*SG | **Sg** | **18 54 38.4** | **-0.1** |
| | comp=Z,8.4nm,0.2s | | | | | | |
| **PRU** | **Pruhonice** | **1.80** | **213** | Pn | **Pn** | **18 54 13.1** | **+0.1** |
| **CLL** | **Collm** | **1.93** | **265** | *e*Pg | **Pb** | **18 54 16.0** | **-0.7** |
| CLL | | | | *e*Sg | **Sb** | **18 54 42.0** | **+0.7** |
| | comp=Z,6.0nm,0.6s | | | | | | |
| **CLL** | **Collm** | **1.93** | **265** | *e*PKPbc | | 19 10 23.0 | |
| **MORC** | **Moravsky Berou** | **1.97** | **151** | *e*Pn | **Pn** | **18 54 14.4** | **-0.9** |
| | baz=335 | | | | | | |
| MORC | | | | *e*Sg | **Sb** | **18 54 42.8** | **+0.3** |
| | comp=Z,3.5nm,0.3s,baz=335 | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.13** | **141** | *e*PG | **Pg** | **18 54 21.0** | **-0.4** |
| OKC | | | | *e*SG | **Sg** | **18 54 48.4** | **-0.6** |
| **OKC** | **Ostrava-Krasne** | **2.13** | **141** | Pg | **Pg** | **18 54 21.0** | **-0.4** |
| OKC | | | | Sg | **Sg** | **18 54 48.4** | **-0.6** |
| **VRAC** | **Vranov** | **2.23** | **171** | *e*Pn | **Pn** | **18 54 18.7** | **-0.1** |
| | baz=354 | | | | | | |
| VRAC | | | | *e*Sg | **Sg** | **18 54 51.3** | **-0.8** |
| | comp=Z,4.1nm,0.2s,baz=354 | | | | | | |
| **KRUC** | **Moravsky** | **2.46** | **175** | *e*Pn | **Pn** | **18 54 21.9** | **0.0** |
| | baz=357 | | | | | | |
| KRUC | | | | *e*Sg | **Sg** | **18 54 59.4** | **-0.1** |
| | comp=Z,1.5nm,0.2s,baz=357 | | | | | | |
| **NKC** | **Novy Kostel** | **2.62** | **242** | *e*PN | **Pn** | **18 54 24.5** | **+0.2** |
| NKC | | | | *e*PG | **Pg** | **18 54 30.3** | **-0.6** |
| NKC | | | | *e*SG | **Sg** | **18 55 05.7** | **+0.8** |
| | comp=Z,12nm,0.2s | | | | | | |
| **NKC** | **Novy Kostel** | **2.62** | **242** | Pn | **Pn** | **18 54 24.5** | **+0.2** |
| **OJC** | **Ojcow** | **2.69** | **117** | *e*Pg | **Pg** | **18 54 32.6** | **+0.4** |
| OJC | | | | *e*Sg | **Sg** | **18 55 07.9** | **+0.9** |
| **OJC** | **Ojcow** | **2.69** | **117** | *e*Pg | **Pg** | **18 54 32.6** | **+0.4** |
| OJC | | | | *e*Sg | **Sg** | **18 55 07.9** | **+0.9** |
| **KHC** | **Kasperske Hory** | **2.87** | **215** | *e*PN | **Pn** | **18 54 27.8** | **+0.2** |
| KHC | | | | *e*SN | **Sn** | **18 55 02.2** | **-0.6** |
| KHC | | | | *e*SG | **Sg** | **18 55 13.2** | **+0.6** |
| **KHC** | **Kasperske Hory** | **2.87** | **215** | Pn | **Pn** | **18 54 27.8** | **+0.2** |
| KHC | | | | Sn | **Sn** | **18 55 02.2** | **-0.6** |
| KHC | | | | Sg | **Sg** | **18 55 13.2** | **+0.6** |

*IDC 17 18:58:05.4±3.1, 38°.26N×73°.39E, h81km±27km, mb3.6/16, mb1 3.8/21, mb1mx3.6/53, mbtmp4.0/21, MS3.5/2, Ms1 3.5/2, ms1mx2.6/39, Error ellipse: s-maj=22.0km s-min=14.1km az=178.0*

*ISCJB 17 18:58:06.2±0.3, 38°.26N±0°.03×73°.48E±0°.06, h107km, mb3.9/15, Error ellipse: s-maj=6.4km s-min=3.3km az=164.7*

*BJI 17 18:58:06.0, 38°.44N×73°.16E, h88km, mb3.9/4, Ms3.9/2*

*NNC 17 18:58:16.2±4.0, 39°.01N×73°.42E, h156km±37km, mb3.9, mpv4.6, Error ellipse: s-maj=37.2km s-min=22.0km az=177.0*

**ISC 17 18:58:07.6±0.5, 38°.35N±0°.05×73°.63E±0°.06, h107km, n66, σ1s96/64, mb3.8/15, 5C-5D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **2.17** | **57** | P | **Pn** | **18 58 42.3** | **-0.5** |
| KSH | | | | S | **Sn** | **18 59 04.4** | **-5.3** |
| KSH | | | | SMN | | | |
| | 12μm,0.4s | | | | | | |
| KSH | | | | SME | | | |
| | 8μm,0.6s | | | | | | |
| **AML** | **Almayashu** | **3.78** | **1** | P | **Pn** | **18 59 05.8** | **+1.5** |
| | SNR=192 | | | | | | |
| **KZA** | **Kyzart** | **3.93** | **18** | P | **Pn** | **18 59 08.7** | **+2.3** |
| | SNR=11 | | | | | | |
| **UCH** | **Uchtor** | **3.94** | **10** | P | **Pn** | **18 59 08.7** | **+2.2** |
| | SNR=110 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.31** | **1** | P | **Pn** | **18 59 13.2** | **+2.0** |
| | SNR=102 | | | | | | |
| **AAK** | **Ala-Archa** | **4.33** | **9** | P | **Pn** | **18 59 13.8** | **+2.3** |
| | 8.4nm,0.3s,baz=177,slow=7.8,SNR=81 | | | | | | |
| AAK | | | | S | **Sn** | **19 00 01.5** | **+0.4** |
| | 23nm,0.3s,baz=9.1,slow=18,SNR=19 | | | | | | |
| **AAK** | **Ala-Archa** | **4.33** | **9** | P | **Pn** | **18 59 14.0** | **+2.4** |
| | SNR=42 | | | | | | |
| **ULHL** | **Ulahol** | **4.38** | **26** | P | **Pn** | **18 59 14.8** | **+2.6** |
| | SNR=33 | | | | | | |
| **CHCP** | **Chirah Chowk** | **4.69** | **184** | P | Pn | 18 59 20.9 | +4.7 |
| **CEP** | **Cherat** | **4.72** | **198** | P | Pn | 18 59 19.9 | +3.1 |
| CEP | | | | S | **Sn** | **19 00 10.0** | **-0.5** |
| **CHMS** | **Chumysh** | **4.73** | **10** | P | **Pn** | **18 59 19.3** | **+2.6** |
| | SNR=8.9 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.81** | **18** | P | **Pn** | **18 59 20.9** | **+2.9** |
| | SNR=16 | | | | | | |
| **KK31** | **Karatay Array** | **5.31** | **335** | ⇓P | **Pn** | **18 59 24.2** | **-0.3** |
| | 60nm,0.6s,baz=150,slow=12,SNR=786 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **19 00 19.4** | **-5.1** |
| | 41nm,0.3s,baz=149,slow=22 | | | | | | |
| **DHRM** | **DHARAMSHALA** | **6.46** | **159** | *e*P | **Pn** | **18 59 42.9** | **+2.5** |
| DHRM | | | | *e*S | **Sn** | **19 00 51.0** | **-1.8** |
| DHRM | | | | AML | AML | 19 00 58.0 | |
| | comp=N,426nm,0.5s | | | | | | |
| DHRM | | | | AML | AML | 19 00 58.6 | |
| | comp=E,591nm,0.3s | | | | | | |
| **SMLA** | **Simla** | **7.77** | **157** | *i* P | **Pn** | **19 00 00.4** | **+2.5** |
| SMLA | | | | *i* S | **Sn** | **19 01 20.7** | **-3.5** |
| SMLA | | | | *i* S | **Sn** | **19 01 21.0** | **-3.2** |
| SMLA | | | | AML | AML | 19 01 27.2 | |
| | comp=N,482nm,0.2s | | | | | | |
| SMLA | | | | AML | AML | 19 01 28.0 | |
| | comp=E,364nm,0.5s | | | | | | |
| **DDI** | **Dehra Dun** | **8.80** | **154** | *e*P | **Pn** | **19 00 13.1** | **+1.1** |
| DDI | | | | *e*S | **Sn** | **19 01 45.1** | **-4.4** |
| DDI | | | | AML | AML | 19 01 54.5 | |
| | comp=N,302nm,0.8s | | | | | | |
| DDI | | | | AML | AML | 19 01 54.8 | |
| | comp=E,264nm,0.2s | | | | | | |
| **RTK** | **Rohtak** | **9.57** | **165** | *e*S | Sn | 19 02 00.6 | -7.5 |
| **NDI** | **New Delhi** | **10.09** | **162** | *e*S | Sn | 19 02 12.5 | -8.2 |
| **KHET** | **Khetri** | **10.40** | **169** | *e*P | **Pn** | **19 00 33.6** | **-0.2** |
| KHET | | | | *e*S | Sn | 19 02 20.2 | -8.2 |
| KHET | | | | AML | AML | 19 02 26.0 | |
| | comp=E,48nm,0.2s | | | | | | |
| KHET | | | | AML | AML | 19 02 29.6 | |
| | comp=N,57nm,0.4s | | | | | | |
| **KUDL** | **Kundal** | **10.45** | **166** | *e*P | **Pn** | **19 00 35.4** | **+1.0** |
| KUDL | | | | *e*S | Sn | 19 02 20.6 | -8.9 |
| **MK31** | **Makanchi Array** | **10.58** | **34** | ⇑P | Pn | 19 00 39.3 | +3.3 |
| | comp=N,1.6nm,0.7s,baz=0.0,slow=0.1,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.58** | **34** | P | **Pn** | **19 00 37.7** | **+1.7** |
| | comp=N,0.2nm,0.3s,baz=228,slow=15,SNR=4.9 | | | | | | |
| **GEYT** | **Alibeck** | **12.22** | **273** | P | Pn | 19 00 52.6 | -5.4 |
| | comp=N,1.6nm,0.3s,baz=105,slow=11,SNR=23 | | | | | | |
| GEYT | | | | S | Sn | 19 02 58.4 | -14 |
| | comp=N,1.7nm,0.3s,baz=94,slow=15,SNR=6.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.76** | **14** | ⇓P | **Pn** | **19 01 03.3** | **-1.7** |
| | comp=N,1nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.76** | **14** | P | **Pn** | **19 01 03.4** | **-1.6** |
| | comp=N,0.1nm,0.3s,baz=206,slow=12,SNR=13 | | | | | | |
| **DANN** | **Dangsing** | **13.07** | **137** | *e*P | **Pn** | **19 01 07.6** | **-1.9** |
| **KOLN** | **Koldanda** | **13.45** | **139** | *e*P | **Pn** | **19 01 13.3** | **-1.0** |
| **GKN** | **Gorkha** | **13.82** | **135** | *e*P | **Pn** | **19 01 18.0** | **-1.1** |
| | comp=N,43nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **14.35** | **134** | *e*P | **Pn** | **19 01 24.1** | **-1.8** |
| | comp=N,18nm,0.5s | | | | | | |
| **DMN** | **Daman** | **14.39** | **135** | *e*P | **Pn** | **19 01 25.4** | **-1.1** |
| | comp=N,9.0nm,0.3s | | | | | | |
| **VOSK** | **Vostochnaya** | **14.50** | **354** | ⇑P | **Pn** | **19 01 26.6** | **-0.8** |
| | comp=N,9.0nm,0.7s | | | | | | |
| **PKIN** | **Phulchoki** | **14.58** | **134** | *e*P | **Pn** | **19 01 27.8** | **-1.1** |
| | comp=N,17nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **14.59** | **134** | *e*P | **Pn** | **19 01 27.8** | **-1.3** |
| | comp=N,7.8nm,0.3s | | | | | | |
| **GUN** | **Gumba** | **14.60** | **132** | *e*P | **Pn** | **19 01 27.8** | **-1.5** |
| **AB31** | **Akbulak array** | **14.69** | **322** | ⇑P | Pn | 19 01 26.5 | -3.4 |
| | comp=N,3.2nm,0.3s | | | | | | |
| **BVA0** | **Borovoye Array** | **14.85** | **352** | ⇓P | **Pn** | **19 01 30.5** | **-1.5** |
| | comp=N,38nm,0.5s | | | | | | |
| **ZRNK** | **Zerenda** | **14.96** | **349** | ⇓P | **Pn** | **19 01 31.7** | **-1.6** |
| | comp=N,23nm,0.6s | | | | | | |
| **CHKZ** | **Chkalovo** | **15.47** | **353** | ⇑P | **Pn** | **19 01 37.4** | **-2.3** |
| | comp=N,5.5nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **15.74** | **132** | *e*P | **Pn** | **19 01 42.3** | **-1.3** |
| | comp=N,15nm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **16.11** | **129** | *e*P | **Pn** | **19 01 47.7** | **-0.5** |
| | comp=N,6.3nm,0.3s | | | | | | |
| **ODAN** | **Odare** | **16.28** | **131** | *e*P | **Pn** | **19 01 49.9** | **-0.3** |
| | comp=N,12nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.41** | **322** | ⇑P | **Pn** | **19 01 49.4** | **-2.0** |
| | comp=N,16nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.41** | **322** | P | **Pn** | **19 01 49.0** | **-2.4** |
| | comp=N,1.3nm,0.3s,baz=128,slow=12,SNR=30 | | | | | | |
| AKTO | | | | S | Sn | 19 04 37.2 | -16 |
| | comp=N,0.1nm,0.3s,baz=180,slow=20,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.39** | **23** | P | **Pn** | **19 02 03.8** | **+0.4** |
| | comp=N,4.1nm,0.3s,baz=218,slow=12,SNR=86 | | | | | | |
| ZALV | | | | S | **Sn** | **19 05 15.8** | **-1.1** |
| | comp=N,0.1nm,0.3s,baz=218,slow=23,SNR=2.7 | | | | | | |
| **GTA** | **Gaotai** | **20.40** | **79** | *

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SCER** | **sogukcermik** | **0.71** | **168** | *i* P | **Pg** | **19 01 37.1** | **-0.4** |
| SCER | | | | *i* S | **Sb** | **19 01 48.4** | **-0.2** |
| **SCER** | **sogukcermik** | **0.71** | **168** | P | **Pg** | **19 01 37.1** | **-0.4** |
| SCER | | | | S | **Sb** | **19 01 48.4** | **-0.2** |
| **CUZAR** | **Zara_SIVAS** | **0.92** | **136** | P | **Pg** | **19 01 41.4** | **-0.1** |
| CUZAR | | | | S | **Sb** | **19 01 54.5** | **-0.3** |
| **SUSE** | **Susehri** | **1.02** | **109** | *i* P | **Pg** | **19 01 43.2** | **-0.3** |
| SUSE | | | | *i* S | **Sg** | **19 01 56.5** | **-0.3** |
| **SUSE** | **Susehri** | **1.02** | **109** | P | **Pg** | **19 01 43.2** | **-0.3** |
| SUSE | | | | S | **Sg** | **19 01 56.5** | **-0.3** |
| **HAVZ** | **Havza** | **1.06** | **299** | *i* P | **Pg** | **19 01 43.3** | **-0.9** |
| HAVZ | | | | *i* S | **Sg** | **19 01 58.1** | **+0.1** |
| **HAVZ** | **Havza** | **1.06** | **299** | P | **Pg** | **19 01 43.3** | **-0.9** |
| HAVZ | | | | S | **Sg** | **19 01 58.1** | **+0.1** |
| **GRSN** | **GIRESUNGRSN** | **1.07** | **70** | *i* P | **Pg** | **19 01 44.2** | **-0.2** |
| GRSN | | | | *i* S | **Sg** | **19 01 58.1** | **-0.3** |
| **GRSN** | **GIRESUNGRSN** | **1.07** | **70** | P | **Pg** | **19 01 44.2** | **-0.2** |
| GRSN | | | | S | **Sg** | **19 01 58.1** | **-0.3** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.26** | **205** | P | **Pg** | **19 01 47.3** | **-0.6** |
| CUSAR | | | | S | **Sn** | **19 02 05.7** | **+0.5** |
| **CUKAN** | **kangal_SIVAS** | **1.30** | **162** | P | **Pn** | **19 01 48.3** | **-0.3** |
| CUKAN | | | | S | **Sg** | **19 02 04.2** | **-1.5** |
| **ESPY** | **Espiye-Giresun** | **1.40** | **75** | *e*PN | **Pg** | **19 01 50.7** | **0.0** |
| **ESPY** | **Espiye-Giresun** | **1.40** | **75** | *e*Pn | **Pg** | **19 01 50.7** | **0.0** |
| **YOZ** | **Yozgat** | **1.54** | **234** | *e*PN | **Pn** | **19 01 52.4** | **+0.5** |
| **YOZ** | **Yozgat** | **1.54** | **234** | *e*Pn | **Pn** | **19 01 52.4** | **+0.5** |
| **DIKM** | **Dikmen** | **1.68** | **311** | *e*PN | **Pb** | **19 01 55.0** | **0.0** |
| **DIKM** | **Dikmen** | **1.68** | **311** | *e*Pn | **Pb** | **19 01 55.0** | **0.0** |
| **BOYT** | **Boyabat** | **1.77** | **300** | *i* P | **Pb** | **19 01 56.6** | **0.0** |
| BOYT | | | | *i* S | **Sn** | **19 02 18.1** | **+0.4** |
| **BOYT** | **Boyabat** | **1.77** | **300** | P | **Pb** | **19 01 56.6** | **0.0** |
| BOYT | | | | S | **Sn** | **19 02 18.1** | **+0.4** |
| **KELT** | **Kelkit** | **1.81** | **102** | *i* P | **Pb** | **19 01 57.5** | **0.0** |
| KELT | | | | *i* S | **Sb** | **19 02 20.6** | **+0.1** |
| **KELT** | **Kelkit** | **1.81** | **102** | P | **Pb** | **19 01 57.5** | **0.0** |
| KELT | | | | S | **Sb** | **19 02 20.6** | **+0.1** |
| **ONI** | **Oni** | **5.29** | **65** | P | Pn | 19 02 47.6 | +4.3 |

*IDC* ***17*** *19:02:30.9±1.4,30.°02N×130.°98E, h0km, mb3.8/4, mb1 3.7/6, mb1mx3.4/43, mbtmp3.6/6, ML2.8/2, MS3.7/2, Ms1 3.7/2, ms1mx2.7/36, Error ellipse: s-maj=39.8km s-min=27.1km az=95.0*

*ISCJB* ***17*** *19:02:34.3±1.0,30.°08N±0.°04×131.°38E±0.°06, h28km±6.6km, mb3.6/4, MS4.7/1, Error ellipse: s-maj=8.4km s-min=5.8km az=22.4*

*JMA* ***17*** *19:02:34.5±0.2,30.°08N×131.°35E, h24km±2km, M3.4*

*NEIC* ***17*** *19:02:36.3±2.5,30.°02N×130.°92E, h37km±23km, mb4.0/1, Error ellipse: s-maj=22.9km s-min=17.4km az=135.0*

**ISC 17 19:02:34.1±1.7, 30.°05N±0.°05×131.°28E±0.°07, h23km±12km, n26, σ1°01/32, mb3.8/4, Kyushu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTN** | **Tanegashima 3** | **0.66** | **337** | P | **Pb** | **19 02 47.1** | **+0.1** |
| JTN | | | | S | **Sb** | **19 02 55.5** | **-0.2** |
| **JYAK** | **Yakushimahirau** | **0.69** | **286** | P | **Pn** | **19 02 48.4** | **-0.1** |
| JYAK | | | | S | **Sn** | **19 02 59.3** | **+0.7** |
| **JKC** | **Kuchinoerabu** | **1.02** | **294** | P | **Pn** | **19 02 54.0** | **+0.9** |
| JKC | | | | S | **Sn** | **19 03 08.4** | **+1.7** |
| **JTSR** | **Tashiro 2** | **1.16** | **345** | P | **Pn** | **19 02 55.0** | **0.0** |
| JTSR | | | | S | **Sn** | **19 03 09.8** | **-0.3** |
| **JNN** | **Nakanoshima** | **1.23** | **261** | P | **Pb** | **19 02 58.0** | **+1.2** |
| JNN | | | | S | **Sn** | **19 03 14.0** | **+2.0** |
| **JNAR** | **Kushima--Naru** | **1.47** | **360** | P | **Pn** | **19 02 59.6** | **+0.3** |
| JNAR | | | | *e*S | **Sb** | **19 03 18.9** | **-0.3** |
| **JSU** | **Suzuyama** | **1.62** | **334** | P | **Pn** | **19 03 01.4** | **+0.1** |
| JSU | | | | *e*S | **Sn** | **19 03 21.7** | **+0.2** |
| **JTZ** | **Takazaki** | **1.85** | **355** | P | **Pn** | **19 03 05.4** | **+0.8** |
| JTZ | | | | *e*S | **Sn** | **19 03 28.0** | **+0.7** |
| **JTAJ** | **Takarajima** | **2.01** | **244** | P | **Pb** | **19 03 09.9** | **-0.1** |
| **JSJ** | **Shimokoshiki** | **2.11** | **321** | P | **Pn** | **19 03 07.5** | **-0.6** |
| JSJ | | | | *e*S | **Sn** | **19 03 32.6** | **-1.0** |
| **JZO** | **Okuchi** | **2.17** | **345** | P | **Pn** | **19 03 09.4** | **+0.5** |
| JZO | | | | S | **Sn** | **19 03 34.4** | **-0.6** |
| **JAM** | **Amami Oshima** | **2.19** | **222** | P | **Pb** | **19 03 12.3** | **-0.7** |
| **JTSN** | **Tsuno** | **2.20** | **5** | P | **Pn** | **19 03 09.7** | **+0.4** |
| **JNU** | **Nakatsue** | **3.08** | **354** | Pn | **Pn** | **19 03 22.2** | **+0.7** |
| | 1.2nm,0.3s,baz=340,slow=2.5,SNR=13 | | | | | | |
| **JNU** | **Nakatsue** | **3.08** | **354** | *e*Pn | **Pn** | **19 03 22.8** | **+1.2** |
| JNU | | | | *e*Sn | **Sn** | **19 03 58.3** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **8.69** | **40** | Pn | **Pn** | **19 04 38.8** | **+0.2** |
| | 0.2nm,0.3s,baz=248,slow=13,SNR=4.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **14.14** | **2** | LR | LR | 19 11 26.9 | |
| | comp=Z,35nm,19.3s,baz=164,slow=38 | | | | | | |
| **ENH** | **Enshi** | **18.84** | **276** | *e*Pn | **P** | **19 06 50.1** | **-2.5** |
| | 5.4nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **26.09** | **320** | P | **P** | **19 08 04.5** | **-1.8** |
| | 0.2nm,0.5s,baz=131,slow=6.6,SNR=3.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **30.05** | **32** | P | **P** | **19 08 43.0** | **+1.6** |
| | 1.9nm,0.5s,baz=237,slow=5.0,SNR=6.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.78** | **99** | T | T | 19 45 18.0 | |
| | baz=296,slow=75,SNR=7.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.79** | **99** | T | T | 19 45 16.7 | |
| | baz=296,slow=75,SNR=4.9 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.80** | **99** | T | T | 19 45 19.0 | |
| | baz=296,slow=75,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **53.47** | **177** | P | **P** | **19 11 52.8** | **+0.1** |
| | 0.4nm,0.8s,baz=334,slow=6.2,SNR=3.1 | | | | | | |
| **INK** | **Inuvik** | **64.33** | **24** | LR | LR | 19 43 44.8 | |
| | comp=Z,398nm,18.0s,baz=319,slow=38 | | | | | | |
| **FINES** | **FINESS Array B** | **70.87** | **331** | P | **P** | **19 13 49.0** | **0.0** |
| | 1.8nm,0.7s,baz=91,slow=6.0,SNR=7.2 | | | | | | |

**IDC 17 19:06:08.8±2.6, 20.°08S×174.°02W, h0km, mb3.6/5, mb1 4.0/5, mb1mx3.8/24, mbtmp3.6/5, Error ellipse: s-maj=168.3km s-min=26.2km az=153.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **48.25** | **256** | P | P | 19 14 52.0 | +0.1 |
| | 0.9nm,0.8s,baz=90,slow=8.0,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.36** | **261** | P | P | 19 14 52.5 | -0.3 |
| | 0.2nm,0.4s,baz=96,slow=8.0,SNR=5.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.19** | **42** | P | P | 19 18 10.7 | +0.1 |
| | 0.6nm,0.7s,baz=234,slow=7.7,SNR=5.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **83.71** | **56** | P | P | 19 18 40.1 | +0.1 |
| | 0.3nm,0.9s,baz=219,slow=9.3,SNR=2.4 | | | | | | |
| **ILAR** | **Eielson Array** | **87.13** | **11** | P | P | 19 18 56.3 | +0.1 |
| | 0.4nm,0.8s,baz=218,slow=5.7,SNR=2.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.35** | **334** | PKP | PKPbc | 19 25 45.6 | +0.5 |
| | 0.2nm,0.3s,baz=36,slow=4.0,SNR=4.5 | | | | | | |

*DDA* ***17*** *19:18:15.9,40.°75N×30.°68E, h7km, Md2.7*

*ISCJB* ***17*** *19:18:16.0±0.7,40.°76N±0.°03×30.°68E±0.°03, h2km±5km, Error ellipse: s-maj=5.8km s-min=3.6km az=11.4*

*CSEM* ***17*** *19:18:16.5±0.1,40.°74N×30.°69E, h8km, MD2.8, Error ellipse: s-maj=1.9km s-min=1.3km az=15.0*

*ISK* ***17*** *19:18:16.2,40.°72N×30.°67E, h10km, MD2.8*

**ISC 17 19:18:16.6±1.0, 40.°74N±0.°03×30.°68E±0.°02, h10km±8km, n38, σ0°30/56, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SPNC** | **Sapanca-Adapaz** | **0.28** | **260** | *e*PG | **Pg** | **19 18 22.3** | **+0.1** |
| **SPNC** | **Sapanca-Adapaz** | **0.28** | **260** | *e*Pg | **Pg** | **19 18 22.3** | **+0.1** |
| **BTAS** | **Taskesti** | **0.30** | **124** | *i* P | **Pg** | **19 18 22.6** | **0.0** |
| BTAS | | | | *i* S | **Sg** | **19 18 26.6** | **0.0** |
| **BTAS** | **Taskesti** | **0.30** | **124** | P | **Pg** | **19 18 22.6** | **0.0** |
| BTAS | | | | S | **Sg** | **19 18 26.6** | **0.0** |
| **GULT** | **Gulveren** | **0.33** | **202** | *e*PG | **Pg** | **19 18 23.0** | **-0.1** |
| GULT | | | | *e*SG | **Sg** | **19 18 27.4** | **-0.1** |
| **GULT** | **Gulveren** | **0.33** | **202** | *e*Pg | **Pg** | **19 18 23.0** | **-0.1** |
| GULT | | | | *e*Sg | **Sg** | **19 18 27.4** | **-0.1** |
| **MDUB** | **Mudurnu** | **0.48** | **124** | *e*PG | **Pg** | **19 18 26.3** | **+0.4** |
| MDUB | | | | *e*SG | **Sg** | **19 18 32.6** | **+0.3** |
| **MDUB** | **Mudurnu** | **0.48** | **124** | *e*Pg | **Pg** | **19 18 26.3** | **+0.4** |
| MDUB | | | | *e*Sg | **Sg** | **19 18 32.6** | **+0.3** |
| **GPA** | **Golpazari** | **0.53** | **212** | *e*PG | **Pg** | **19 18 26.9** | **+0.1** |
| **GPA** | **Golpazari** | **0.53** | **212** | *e*Pg | **Pg** | **19 18 26.9** | **+0.1** |
| **BORA** | **Eskisehir** | **0.87** | **191** | *i* P | **Pg** | **19 18 33.0** | **-0.4** |
| BORA | | | | *i* S | **Sg** | **19 18 44.6** | **-0.1** |
| **BORA** | **Eskisehir** | **0.87** | **191** | P | **Pg** | **19 18 33.0** | **-0.4** |
| BORA | | | | S | **Sg** | **19 18 44.6** | **-0.1** |
| **SILT** | **Sile** | **0.89** | **298** | *e*PG | **Pg** | **19 18 33.3** | **-0.3** |
| **SILT** | **Sile** | **0.89** | **298** | *e*Pg | **Pg** | **19 18 33.3** | **-0.3** |
| **BCAM** | **Yenicaga** | **1.06** | **85** | *i* P | **Pg** | **19 18 36.5** | **-0.5** |
| BCAM | | | | *i* S | **Sg** | **19 18 50.6** | **-0.1** |
| **BCAM** | **Yenicaga** | **1.06** | **85** | P | **Pg** | **19 18 36.5** | **-0.5** |
| BCAM | | | | S | **Sg** | **19 18 50.6** | **-0.1** |
| **AUMIH** | **MIHALICIK** | **1.07** | **144** | P | **Pg** | **19 18 36.9** | **-0.2** |
| AUMIH | | | | S | **Sb** | **19 18 51.1** | **-0.2** |
| **BUY** | **Buyukada** | **1.19** | **276** | *i* P | **Pb** | **19 18 39.2** | **0.0** |
| BUY | | | | *i* S | **Sn** | **19 18 55.2** | **-0.3** |
| **BUY** | **Buyukada** | **1.19** | **276** | P | **Pb** | **19 18 39.2** | **0.0** |
| BUY | | | | S | **Sn** | **19 18 55.2** | **-0.3** |
| **IGD** | **Bursa** | **1.22** | **248** | P | **Pn** | **19 18 39.2** | **-0.5** |
| IGD | | | | S | **Sn** | **19 18 56.6** | **+0.4** |
| **ESKT** | **Eskisehir** | **1.22** | **174** | P | **Pn** | **19 18 39.6** | **-0.3** |
| ESKT | | | | S | **Sn** | **19 18 57.2** | **+0.6** |
| **SEYT** | **Eskypehyr** | **1.22** | **174** | *i* P | **Pn** | **19 18 39.6** | **-0.3** |
| SEYT | | | | *i* S | **Sn** | **19 18 57.2** | **+0.6** |
| **ULDT** | **Uludag** | **1.32** | **244** | *i* P | **Pb** | **19 18 41.6** | **+0.1** |
| ULDT | | | | *i* S | **Sg** | **19 18 59.3** | **+0.4** |
| **ULDT** | **Uludag** | **1.32** | **244** | P | **Pb** | **19 18 41.6** | **+0.1** |
| ULDT | | | | S | **Sg** | **19 18 59.3** | **+0.4** |
| **KLYT** | **Kilyos** | **1.34** | **293** | *e*PN | **Pn** | **19 18 41.5** | **+0.1** |
| **KLYT** | **Kilyos** | **1.34** | **293** | *e*Pn | **Pn** | **19 18 41.5** | **+0.1** |
| **ARMT** | **Armutlu** | **1.39** | **264** | *e*PN | **Pb** | **19 18 42.4** | **-0.3** |
| **ARMT** | **Armutlu** | **1.39** | **264** | *e*Pn | **Pb** | **19 18 42.4** | **-0.3** |
| **SVRH** | **Sivrihisar-ESK** | **1.44** | **153** | *e*PN | **Pn** | **19 18 42.8** | **-0.1** |
| **SVRH** | **Sivrihisar-ESK** | **1.44** | **153** | *e*Pn | **Pn** | **19 18 42.8** | **-0.1** |
| **BGKT** | **Bogazkoy** | **1.51** | **288** | *e*PN | **Pn** | **19 18 44.0** | **+0.3** |
| **BGKT** | **Bogazkoy** | **1.51** | **288** | *e*Pn | **Pn** | **19 18 44.0** | **+0.3** |
| **SAFT** | **Safranbolu** | **1.60** | **71** | *e*PN | **Pn** | **19 18 45.1** | **+0.1** |
| **SAFT** | **Safranbolu** | **1.60** | **71** | *e*Pn | **Pn** | **19 18 45.2** | **+0.1** |
| **CTKS** | **Kestanelik-??a** | **1.71** | **288** | *e*PN | **Pn** | **19 18 47.1** | **+0.6** |
| **CTKS** | **Kestanelik-??a** | **1.71** | **288** | *e*Pn | **Pn** | **19 18 47.1** | **+0.6** |
| **KCTX** | **Karacabey (Bur** | **1.83** | **256** | *e*PN | **Pn** | **19 18 48.3** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **1.83** | **256** | *e*Pn | **Pn** | **19 18 48.3** | **+0.2** |

*ISCJB* ***17*** *19:19:57.9±0.6, 18.°92N±0.°06×145.°5E±0.°2, h214km, mb3.8/14, Error ellipse: s-maj=21.4km s-min=8.0km az=177.1*

*IDC* ***17*** *19:19:58.8±2.3, 18.°93N×145.°51E, h206km±21km, mb3.6/12, mb1 3.7/13, mb1mx3.5/38, mbtmp4.1/13, MS3.8/1, Ms1 3.8/1, ms1mx2.6/27, Error ellipse: s-maj=21.0km s-min=12.8km az=85.0*

*NEIC* ***17*** *19:19:60.0±1.5, 18.°90N×145.°50E, h219km±14km, mb4.2/3, Error ellipse: s-maj=17.0km s-min=10.0km az=83.0*

**ISC 17 19:19:59.5±0.7, 18.°90N±0.°07×145.°5E±0.°2, h214km, n20, σ0°72/21, mb4.0/14, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **5.32** | **187** | P | **Pn** | **19 21 19.0** | **+0.7** |
| | 2.2nm,0.3s,baz=233,slow=20,SNR=3.5 | | | | | | |
| GUMO | | | | S | **S** | **19 22 19.8** | **-0.7** |
| | 4.8nm,0.3s,baz=15,slow=20,SNR=4.6 | | | | | | |
| **GUMO** | **Guam** | **5.32** | **187** | P | **Pn** | **19 21 19.0** | **+0.7** |
| | 116nm,1.1s | | | | | | |
| GUMO | | | | S | **S** | **19 22 19.8** | **-0.7** |
| **JAY** | **Jayapura** | **21.80** | **193** | LR | LR | 19 31 21.1 | |
| | comp=Z,266nm,20.5s,baz=67,slow=31 | | | | | | |
| **KSRS** | **Korea Array** | **24.05** | **324** | P | **P** | **19 24 55.3** | **+0.3** |
| | 0.5nm,0.6s,baz=124,slow=8.7,SNR=2.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **24.06** | **324** | P | **P** | **19 24 55.3** | **+0.1** |
| **KAPI** | **Kappang** | **34.77** | **229** | P | **P** | **19 26 30.0** | **+0.1** |
| | 4.6nm,0.6s,baz=215,slow=4.0,SNR=7.0 | | | | | | |
| **BATI** | **Baumata** | **36.07** | **218** | P | **P** | **19 26 41.2** | **+0.3** |
| | 18nm,0.7s,baz=38,slow=18,SNR=4.7 | | | | | | |
| **CTA** | **Charters Tower** | **38.75** | **179** | P | **P** | **19 27 03.1** | **-0.3** |
| | 4.1nm,0.9s,baz=23,slow=13,SNR=2.7 | | | | | | |
| **WRAB** | **Tennant Creek** | **40.12** | **196** | *e*P | **P** | **19 27 14.0** | **-0.6** |
| | 3.0nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **40.13** | **196** | P | **P** | **19 27 14.9** | **+0.2** |
| | 4.3nm,0.5s,baz=22,slow=9.1,SNR=66 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 29 15.1** | **+0.3** |
| | 0.3nm,0.4s,baz=13,slow=3.2,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **42.88** | **321** | P | **P** | **19 27 37.5** | **+0.6** |
| | 0.3nm,0.4s,baz=130,slow=8.4,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **43.80** | **195** | P | **P** | **19 27 44.2** | **-0.2** |
| | 1.0nm,0.4s,baz=11,slow=6.4,SNR=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **45.58** | **152** | P | **P** | **19 27 58.5** | **+0.1** |
| | 6.8nm,0.8s,baz=3.5,slow=19,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.19** | **314** | P | **P** | **19 29 31.5** | **+0.3** |
| | 0.7nm,0.6s,baz=84,slow=9.4,SNR=5.4 | | | | | | |
| **ILAR** | **Eielson Array** | **63.54** | **26** | P | **P** | **19 30 05.7** | **-1.2** |
| | 0.5nm,0.9s,baz=260,slow=5.5,SNR=4.8 | | | | | | |
| **ABKAR** | **Akbulak array** | **73.07** | **317** | *e*P | P | 19 31 01.9 | -4.2 |
| | 1.3nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.16** | **52** | P | **P** | **19 32 03.2** | **+1.2** |
| | 1.0nm,0.7s,baz=270,slow=5.6,SNR=9.0 | | | | | | |
| **FINES** | **FINESS Array B** | **86.63** | **335** | P | **P** | **19 32 16.8** | **-1.7** |
| | 1.1nm,0.4s,baz=75,slow=4.3,SNR=17 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.19** | **309** | PKP | **PKPdf** | **19 38 48.9** | **+0.1** |
| | 0.2nm,0.7s,baz=5.5,slow=2.8,SNR=4.1 | | | | | | |
| **LPAZ** | **La Paz** | **147.85** | **91** | PKPbc | **PKPbc** | **19 39 21.5** | **+0.6** |
| | 0.6nm,0.4s,baz=330,slow=2.0,SNR=6.6 | | | | | | |

**MEX 17 19:24:17.3±0.3, 16.°34N×95.°64W, h16km±156km, MD3.7, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HUIG** | **Huatulco** | **0.72** | **218** | *e*P | Pg | 19 24 28.9 | -2.6 |
| HUIG | | | | *e*S | Sg | 19 24 37.9 | -3.1 |
| **TLIG** | **Tlapa** | **3.05** | **294** | *e*P | Pn | 19 25 02.8 | -2.4 |
| TLIG | | | | *e*S | Sn | 19 25 37.4 | -4.1 |

*IDC* ***17*** *19:40:54.8±1.2,14.°11N×146.°79E, h0km, mb3.7/9, mb1 3.9/9, mb1mx3.7/38, mbtmp3.7/9, Error ellipse: s-maj=28.9km s-min=19.3km az=110.0*

*ISCJB* ***17*** *19:40:57.4±0.9,14.°1N±0.°1×146.°88E±0.°10, h33km, mb3.8/10, Error ellipse: s-maj=18.0km s-min=10.9km az=143.1*

**ISC 17 19:40:59.7±1.1, 14.°0N±0.°1×146.°8E±0.°1, h35km, n12, σ1°00/13, mb3.9/10, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.95** | **257** | Pn | **Pn** | **19 41 29.2** | **-1.1** |
| | 65nm,0.3s,baz=96,slow=5.0,SNR=66 | | | | | | |
| GUMO | | | | Sn | **Sn** | **19 41 54.5** | **+0.9** |
| | 36nm,0.3s,baz=347,slow=23,SNR=8.7 | | | | | | |
| **KSRS** | **Korea Array** | **28.75** | **328** | P | **P** | **19 46 56.4** | **+2.3** |
| | 0.9nm,0.6s,baz=138,slow=10.0,SNR=3.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **32.62** | **340** | P | **P** | **19 47 27.6** | **-0.5** |
| | 1.7nm,0.7s,baz=182,slow=12,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.94** | **200** | P | **P** | **19 47 57.7** | **+0.6** |
| | 1.5nm,0.8s,baz=20,slow=9.3,SNR=6.7 | | | | | | |
| **ASAR** | **Alice Springs** | **39.55** | **199** | P | **P** | **19 48 27.9** | **+0.3** |
| | 0.5nm,0.8s,baz=17,slow=6.8,SNR=3.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **46.07** | **282** | P | **P** | **19 49 19.5** | **-1.1** |
| | 0.2nm,0.6s,baz=87,slow=6.4,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **47.47** | **324** | P | **P** | **19 49 31.3** | **-0.1** |
| | 1.4nm,0.9s,baz=134,slow=9.0,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.37** | **324** | P | **P** | **19 51 18.3** | **-0.5** |
| | 0.6nm,0.6s,baz=115,slow=6.5,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.49** | **316** | P | **P** | **19 51 20.2** | **+0.4** |
| | 0.3nm,0.3s,baz=92,slow=7.4,SNR=3.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.51** | **319** | P | **P** | **19 51 39.2** | **-0.2** |
| | 1.5nm,0.7s,baz=98,slow=6.8,SNR=15 | | | | | | |
| **ILAR** | **Eielson Array** | **67.35** | **25** | P | **P** | **19 51 50.9** | **-0.1** |
| | 0.4nm,0.9s,baz=248,slow=5.4,SNR=6.4 | | | | | | |
| **DBIC** | **Dimbokro** | **145.16** | **304** | PKPbc | **PKPdf** | **20 00 35.0** | **+0.4** |
| | 3.5nm,0.8s,baz=39,slow=6.5,SNR=3.8 | | | | | | |

**MAN 17 19:43:05, 13.°64N×122.°72E, h23km, mb4.6, ML3.4, MS3.3, 6C-1D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUQP** | **San Andres** | **0.32** | **187** | *e*P | Pb | 19 43 12.1 | 0.0 |
| **GQP** | **Guinayangan** | **0.37** | **315** | ↑*i*P | Pn | 19 43 15.2 | +0.2 |
| GQP | | | | *i* S | Sn | 19 43 23.1 | +1.5 |
| **LQP** | **Lukban** | **1.24** | **293** | ↑*e*P | Pn | 19 43 25.2 | -2.0 |
| **PVCP** | **Virac** | **1.40** | **92** | ↑*i*P | Pn | 19 43 28.6 | -0.5 |
| PVCP | | | | *i* S | Sn | 19 43 46.1 | -0.7 |
| **OTRP** | **Odiongan** | **1.44** | **208** | *e*P | Pn | 19 43 30.1 | +0.4 |
| OTRP | | | | *e*S | Sb | 19 43 48.4 | -0.6 |
| **TGY** | **Tagaytay City** | **1.79** | **285** | ↑*i*P | Pb | 19 43 41.7 | +4.5 |
| **SJMP** | **San Jose** | **1.95** | **233** | *e*P | Pb | 19 43 39.0 | -0.8 |
| **RCP** | **Roxas** | **2.06** | **179** | ↑*e*P | Pn | 19 43 39.2 | +0.9 |
| **LUBP** | **Lubang** | **2.40** | **273** | *e*P | Pb | 19 43 46.2 | -1.4 |
| **PCPH** | **Palayan** | **2.47** | **321** | ||*e*P | Pb | 19 43 48.5 | -0.3 |
| **BCPH** | **Baguio City Da** | **3.42** | **323** | ↑*i*P | Pb | 19 44 01.6 | -3.5 |
| BCPH | | | | *i* S | Sn | 19 44 40.4 | +3.2 |

*NIED* ***17*** *19:44:00.0±0.2,30.°10N×131.°40E, h23km, Mw4.1 Best double couple: M0:1.48000×10^15 NP1:φ=222.00000°, δ=32.00000°, λ=97.00000°. NP2:φ=33.00000°, δ=59.00000°, λ=86.00000°.*

*JMA* ***17*** *19:44:00.0±0.2,30.°07N×131.°36E, h25km±2km, M3.6*

*ISCJB* ***17*** *19:44:01.5±0.8,30.°11N±0.°03×131.°29E±0.°07, h47km±7km, mb3.7/8, MS3.0/1, Error ellipse: s-maj=10.9km s-min=4.3km az=21.6*

*IDC* ***17*** *19:44:05.2±2.0,30.°23N×130.°78E, h51km±15km, mb3.5/8, mb1 3.7/10, mb1mx3.4/39, mbtmp3.7/10, ML2.5/3, MS3.1/3, Ms1 3.2/3, ms1mx2.8/31, Error ellipse: s-maj=35.9km s-min=9.2km az=105.0*

**ISC 17 19:44:01.6±1.6, 30.°13N±0.°05×131.°26E±0.°08, h31km±10km, n31, σ1°05/37, mb3.7/8, Kyushu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTN** | **Tanegashima 3** | **0.58** | **335** | P | **Pb** | **19 44 12.9** | **-0.4** |
| JTN | | | | S | **Sb** | **19 44 21.5** | **+0.2** |
| **JYAK** | **Yakushimahirau** | **0.66** | **280** | P | **Pb** | **19 44 14.2** | **-0.4** |
| JYAK | | | | *e*S | **Sb** | **19 44 24.3** | **+0.8** |
| **JKC** | **Kuchinoerabu** | **0.98** | **290** | P | **Pn** | **19 44 19.5** | **+0.3** |
| JKC | | | | S | **Sn** | **19 44 33.9** | **+1.9** |
| **JTSR** | **Tashiro 2** | **1.07** | **344** | P | **Pn** | **19 44 20.6** | **0.0** |
| JTSR | | | | S | **Sn** | **19 44 35.5** | **+1.0** |
| **JNN** | **Nakanoshima** | **1.24** | **257** | P | **Pn** | **19 44 23.2** | **+0.4** |
| JNN | | | | S | **Sb** | **19 44 40.2** | **+0.3** |
| **JNAR** | **Kushima--Naru** | **1.39** | **0** | P | **Pn** | **19 44 25.4** | **+0.5** |
| JNAR | | | | S | **Sb** | **19 44 43.9** | **-0.5** |
| **JSU** | **Suzuyama** | **1.54** | **333** | P | **Pn** | **19 44 27.0** | **+0.1** |
| JSU | | | | *e*S | **Sn** | **19 44 47.2** | **+1.3** |
| **JTZ** | **Takazaki** | **1.77** | **355** | P | **Pn** | **19 44 31.2** | **+1.1** |
| JTZ | | | | *e*S | **Sn** | **19 44 53.8** | **+2.2** |
| **JSJ** | **Shimokoshiki** | **2.04** | **320** | P | **Pn** | **19 44 33.1** | **-0.7** |
| JSJ | | | | S | **Sn** | **19 44 58.1** | **-0.1** |
| **JTAJ** | **Takarajima** | **2.04** | **242** | P | **Pn** | **19 44 35.2** | **+1.4** |
| JTAJ | | | | *e*S | **Sn** | **19 45 00.1** | **+1.9** |
| **JZO** | **Okuchi** | **2.08** | **344** | P | **Pn** | **19 44 35.2** | **+0.8** |
| **JTSN** | **Tsuno** | **2.12** | **6** | P | **Pn** | **19 44 35.1** | **+0.2** |
| **JZK** | **Kikaishima** | **2.13** | **212** | P | **Pn** | **19 44 35.7** | **+0.6** |
| **JAM** | **Amami Oshima** | **2.24** | **221** | P | **Pn** | **19 44 36.9** | **+0.3** |
| JAM | | | | S | **Sn** | **19 45 03.6** | **+0.4** |
| **JNU** | **Nakatsue** | **3.00** | **354** | P | **Pn** | **19 44 48.0** | **+0.9** |
| | 2.2nm,0.3s,baz=203,slow=9.8,SNR=23 | | | | | | |
| JNU | | | | S | **Sn** | **19 45 23.1** | **+1.1** |
| | 4.6nm,0.3s,baz=115,slow=22,SNR=4.6 | | | | | | |
| **JOW** | **Kunigami** | **4.21** | **219** | P | **Pn** | **19 45 03.7** | **+0.1** |
| | 0.2nm,0.3s,baz=103,slow=23,SNR=10 | | | | | | |
| JOW | | | | S | **Sn** | **19 45 51.2** | **-0.6** |
| | 0.9nm,0.3s,baz=107,slow=25,SNR=12 | | | | | | |
| **KSRS** | **Korea Array** | **7.81** | **340** | P | **Pn** | **19 45 53.9** | **+0.8** |
| | 0.2nm,0.3s,baz=158,slow=15,SNR=3.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **14.06** | **2** | LR | LR | 19 52 32.2 | |
| | comp=Z,67nm,18.6s,baz=182,slow=36 | | | | | | |
| **ASAJ** | **Asahikawa** | **16.61** | **30** | LR | LR | 19 54 25.0 | |
| | comp=Z,90nm,20.7s,baz=318,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.56** | **256** | LR | LR | 20 03 59.6 | |
| | comp=Z,32nm,18.6s,baz=86,slow=38 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.81** | **99** | T | T | 20 26 44.9 | |
| | baz=296,slow=75,SNR=11 | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **72.92** | **334** | P | | **P** | **20 11 41.2** | **+0.2** |
| | 1.3nm,0.9s,baz=75,slow=4.3,SNR=9.6 | | | | | | | |
| ILAR | | | | LR | | LR | 20 43 38.7 | |
| | comp=Z,29nm,18.9s,baz=254,slow=36 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **80.42** | **39** | P | | **P** | **20 12 22.9** | **-0.8** |
| | 0.5nm,0.5s,baz=253,slow=6.6,SNR=3.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **91.19** | **32** | P | | **P** | **20 13 16.0** | **-1.1** |
| | 0.3nm,0.6s,baz=290,slow=5.5,SNR=3.9 | | | | | | | |

*SZGRF* ***17*** *20:11:13.0,27˚.51N×85˚.78E,h33km, mb5.2/25(BGR), Ms3.7/6(BGR)*
*BJI* ***17*** *20:11:16.8,28˚.31N×85˚.82E,h50km, mb5.0/56, mB5.0/41, Ms4.2/43,Ms7 3.7/37*
*MOS* ***17*** *20:11:16.6±0.9,28˚.49N×85˚.66E,h36km,mb5.1/59,Error ellipse: s-maj=7.6km s-min=4.0km az=121.1*
*ISCJB* ***17*** *20:11:17.5±0.5,28˚.51N±0˚.02×85˚.70E±0˚.02,h44km±4km, mb4.9/140,MS3.5/17,Error ellipse: s-maj=3.3km s-min=2.7km az=14.1*
*BKK* ***17*** *20:11:17.2±0.3,28˚N±7˚×8˚6E±˚,h10km,M4.3/12,mB4.7/6, mb5.0/12,Mw(mB)3.9/6*
*NEIC* ***17*** *20:11:18.5±0.8,28˚.49N×85˚.68E,h41km±8km, mb4.9/36, Error ellipse: s-maj=5.9km s-min=4.1km az=210.0*
*NEIC Felt [II] at Kathmandu, Nepal.*
*NDI* ***17*** *20:11:21.6±2.3,28˚.55N×85˚.68E,h33km,ML4.9, mb4.9(NEIC)*
*DMN* ***17*** *20:11:22.9±0.1,28˚.64N×85˚.72E,h50km,Ml5.8/8,Error ellipse: s-maj=2.4km s-min=1.1km az=17.0*
*IDC* ***17*** *20:11:23.5±0.6,28˚.54N×85˚.71E,h83km±5km, mb4.5/41, mb1 4.5/42,mb1mx4.5/45,mbtmp4.8/42,MS3.4/14, Ms1 3.4/14,ms1mx3.2/31,Error ellipse: s-maj=10.7km s-min=8.6km az=13.0*
**ISC 17 20:11:20.1±0.3,28˚.60N±0˚.03×85˚.68E±0˚.03,h53km±3km, h53km:pP-P,n487,σ1º72/540,mb4.9/143,MS3.4/17, 39C-44D,Nepal**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GUN** | **Gumba** | **0.71** | **166** | *e*Pg | | Pn | 20 11 38.5 | +4.0 |
| GUN | | | | *e*Sg | | **Sn** | **20 11 49.2** | **+4.3** |
| | 53μm,0.3s | | | | | | | |
| **KKN** | **Kakani** | **0.88** | **204** | *e*Pg | | Pn | 20 11 40.8 | +4.2 |
| KKN | | | | *e*Sg | | **Sn** | **20 11 53.7** | **+5.1** |
| | 13μm,0.3s | | | | | | | |
| **PKIN** | **Phulchoki** | **1.05** | **194** | *e*Pg | | Pn | 20 11 43.0 | +4.2 |
| PKIN | | | | *e*Sg | | **Sn** | **20 11 57.4** | **+4.7** |
| | 49μm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **1.05** | **193** | *e*Pg | | Pn | 20 11 43.3 | +4.3 |
| PKI | | | | *e*Sg | | **Sn** | **20 11 57.5** | **+4.7** |
| | 43μm,0.5s | | | | | | | |
| **GKN** | **Gorkha** | **1.10** | **237** | *e*Pg | | Pn | 20 11 43.4 | +4.1 |
| **GKN** | **Gorkha** | **1.10** | **237** | *e*Pg | | Pn | 20 11 43.5 | +4.1 |
| GKN | | | | *e*Sg | | **Sn** | **20 11 58.4** | **+4.8** |
| | 26μm,0.3s | | | | | | | |
| **DMN** | **Daman** | **1.11** | **207** | *e*Pg | | Pn | 20 11 43.9 | +4.3 |
| **DMN** | **Daman** | **1.11** | **207** | *e*Pg | | Pn | 20 11 43.9 | +4.3 |
| DMN | | | | *e*Sg | | **Sn** | **20 11 58.8** | **+4.7** |
| **DANN** | **Dangsing** | **1.71** | **262** | *e*Pn | | Pn | 20 11 51.2 | +3.4 |
| **DANN** | **Dangsing** | **1.71** | **262** | *e*Pn | | Pn | 20 11 51.2 | +3.4 |
| DANN | | | | *e*Sn | | **Sn** | **20 12 12.2** | **+3.6** |
| DANN | | | | *e*Sn | | Sn | 20 12 12.5 | +3.6 |
| **RAMN** | **Ramite** | **1.84** | **153** | *e*Pg | | **Pn** | **20 11 52.5** | **+3.0** |
| RAMN | | | | *e*Sg | | **Sn** | **20 12 13.9** | **+2.2** |
| | 40μm,0.4s | | | | | | | |
| **KOLN** | **Koldanda** | **2.01** | **246** | *e*Pg | | Pn | 20 11 55.2 | +3.4 |
| KOLN | | | | *e*Sg | | **Sn** | **20 12 19.5** | **+3.5** |
| | 5μm,0.3s | | | | | | | |
| **TAPN** | **Taplejung** | **2.19** | **124** | *e*Pn | | **Pn** | **20 11 57.2** | **+2.9** |
| TAPN | | | | *e*Sn | | **Sn** | **20 12 22.6** | **+2.3** |
| | 8μm,0.4s | | | | | | | |
| **ODAN** | **Odare** | **2.30** | **138** | *e*Pn | | **Pn** | **20 11 59.0** | **+3.1** |
| ODAN | | | | *e*Sn | | **Sn** | **20 12 25.4** | **+2.2** |
| | 21μm,0.4s | | | | | | | |
| **BOK** | **Bokaro** | **4.79** | **178** | *e*P | | **Pn** | **20 12 32.0** | **+2.2** |
| BOK | | | | *e*S | | **Sn** | **20 13 20.4** | **-3.6** |
| BOK | | | | | AML | AML | 20 13 24.3 | |
| | comp=N,4μm,0.2s | | | | | | | |
| BOK | | | | | AML | AML | 20 13 25.2 | |
| | comp=E,4μm,1.1s | | | | | | | |
| **LSA** | **Lhasa** | **4.91** | **76** | Pg | | **Pn** | **20 12 33.9** | **+2.2** |
| LSA | | | | Sg | | **Sn** | **20 13 23.3** | **-4.2** |
| LSA | | | | | smax | smax | | |
| | comp=E,2μm,0.7s | | | | | | | |
| **LSA** | **Lhasa** | **4.91** | **76** | *e*P | | **Pn** | **20 12 33.3** | **+1.6** |
| LSA | | | | *e* | | | 20 13 28.3 | |
| **LSA** | **Lhasa** | **4.91** | **76** | *e*Pn | | **Pn** | **20 12 33.3** | **+1.6** |
| LSA | | | | *e*Sn | | **Sn** | **20 13 28.3** | **+0.8** |
| **SHL** | **Shillong** | **6.30** | **117** | *e*P | | **Pn** | **20 12 50.5** | **-0.2** |
| SHL | | | | *e*S | | **Sn** | **20 13 58.0** | **-3.4** |
| SHL | | | | | AML | AML | 20 14 01.7 | |
| | comp=N,2μm,0.1s | | | | | | | |
| SHL | | | | | AML | AML | 20 14 02.7 | |
| | comp=E,2μm,1.0s | | | | | | | |
| **DDI** | **Dehra Dun** | **6.87** | **286** | *e*P | | **Pn** | **20 12 59.6** | **+1.4** |
| DDI | | | | *e*P | | Pn | 20 13 01.6 | +3.4 |
| DDI | | | | *e*S | | **Sn** | **20 14 12.0** | **-3.0** |
| DDI | | | | *e*S | | **Sn** | **20 14 13.2** | **-1.8** |
| **NDI** | **New Delhi** | **7.44** | **273** | *e*P | | **Pn** | **20 13 06.0** | **0.0** |
| NDI | | | | *e*S | | **Sn** | **20 14 25.0** | **-4.0** |
| **SMLA** | **Simla** | **7.81** | **291** | *i* P | | **Pn** | **20 13 13.4** | **+2.4** |
| SMLA | | | | *i* S | | **Sn** | **20 14 36.0** | **-2.1** |
| SMLA | | | | | AML | AML | 20 14 43.8 | |
| | comp=N,981nm,0.7s | | | | | | | |
| SMLA | | | | | AML | AML | 20 14 45.4 | |
| | comp=E,1μm,0.6s | | | | | | | |
| **KUDL** | **Kundal** | **8.11** | **269** | *e*P | | **Pn** | **20 13 16.2** | **+1.0** |
| **RTK** | **Rohtak** | **8.14** | **275** | *e*P | | **Pn** | **20 13 16.2** | **+0.6** |
| **BHK** | **Bhakra** | **8.51** | **292** | *ex* | | **Pn** | **20 13 18.9** | **-1.8** |
| BHK | | | | *ex* | | x | 20 14 21.8 | |
| **KHET** | **Khetri** | **8.72** | **269** | *e*P | | **Pn** | **20 13 24.3** | **+0.7** |
| **DHRM** | **DHARAMSHALA** | **8.88** | **296** | *e*P | | **Pn** | **20 13 27.2** | **+1.3** |
| DHRM | | | | *ex* | | x | 20 15 02.7 | |
| DHRM | | | | | AML | AML | 20 15 07.2 | |
| | comp=N,402nm,0.9s | | | | | | | |
| DHRM | | | | | AML | AML | 20 15 07.4 | |
| | comp=E,754nm,0.5s | | | | | | | |
| **BHPL** | **Bhopal** | **9.15** | **236** | *e*P | | **Pn** | **20 13 29.0** | **-0.5** |
| BHPL | | | | *e*S | | Sn | 20 15 03.4 | -7.7 |
| BHPL | | | | | AML | AML | 20 15 06.9 | |
| | comp=N,1μm,0.9s | | | | | | | |
| BHPL | | | | | AML | AML | 20 15 07.9 | |
| | comp=E,917nm,0.0s | | | | | | | |
| **NGP** | **Nagpur** | **9.55** | **221** | *e*P | | **Pn** | **20 13 35.0** | **0.0** |
| NGP | | | | *ex* | | x | 20 13 37.7 | |
| | comp=Z,272nm,0.5s | | | | | | | |
| NGP | | | | *e*S | | Sn | 20 15 14.6 | -6.3 |
| **CHLP** | **Challavanipeta** | **10.16** | **189** | *e*Pn | | **Pn** | **20 13 43.2** | **-0.1** |
| CHLP | | | | *e* | | | 20 15 28.1 | |
| CHLP | | | | *e*Sn | | **Sn** | **20 15 32.4** | **-3.4** |
| **VIS** | **Vishakhapatnam** | **11.04** | **192** | *e*P | | **Pn** | **20 13 54.6** | **-0.8** |
| VIS | | | | *i* P | | **Pn** | **20 13 55.4** | **0.0** |
| VIS | | | | *e*S | | Sn | 20 15 49.4 | -8.1 |
| VIS | | | | *ex* | | x | 20 16 33.4 | |
| | comp=E,332nm,1.1s | | | | | | | |
| VIS | | | | *ex* | | x | 20 16 37.1 | |
| | comp=N,211nm,0.7s | | | | | | | |
| **RPR** | **Rampur** | **11.32** | **212** | *e*Pn | | **Pn** | **20 13 57.6** | **-1.6** |
| RPR | | | | *e* | | | 20 15 54.3 | |
| RPR | | | | *e*Sn | | **Sn** | **20 16 00.8** | **-3.5** |
| **SARP** | **Sargodha** | **11.72** | **290** | P | | **Pn** | **20 14 02.9** | **-1.7** |
| **CHCP** | **Chirah Chowk** | **11.77** | **298** | P | | **Pn** | **20 14 04.9** | **-0.4** |
| **PVM** | **Polavaram** | **11.90** | **199** | *e*P | | Pn | 20 14 03.8 | -3.2 |
| **THW** | **Thamme Wali** | **12.70** | **293** | P | | **Pn** | **20 14 16.2** | **-1.8** |
| **CEP** | **Cherat** | **12.88** | **297** | ⇓P | | **Pn** | **20 14 18.6** | **-1.9** |
| CEP | | | | S | | Sn | 20 16 35.0 | -7.4 |
| **HYBB** | **Hyderabad (bro** | **12.92** | **212** | *e*Pn | | **Pn** | **20 14 18.2** | **-2.8** |
| HYBB | | | | *e* | | | 20 16 32.7 | |
| HYBB | | | | *e*Sn | | **Sn** | **20 16 39.9** | **-3.3** |
| **HYB** | **Hyderabad** | **12.92** | **212** | *i* P | | **Pn** | **20 14 18.0** | **-3.0** |
| | comp=N,140nm,1.0s | | | | | | | |
| HYB | | | | *e* | | | 20 14 22.0 | |
| HYB | | | | *e*S | | Sn | 20 16 31.0 | -12 |
| **NJS** | **Nagarjunasagar** | **13.35** | **207** | *e*Pn | | **Pn** | **20 14 24.1** | **-2.9** |
| NJS | | | | *e* | | | 20 16 41.8 | |
| NJS | | | | *e*Sn | | **Sn** | **20 16 51.9** | **-2.0** |
| **KSH** | **Kashi** | **13.53** | **326** | ⇓*i*P | | **Pn** | **20 14 26.6** | **-2.7** |
| KSH | | | | *ep*P | | **P** | **20 14 36.1** | **-0.8** |
| KSH | | | | | LN | | | |
| | comp=N,160nm,6.2s | | | | | | | |
| KSH | | | | | LE | | | |
| | comp=N,330nm,6.6s | | | | | | | |
| KSH | | | | | LZ | | | |
| | comp=N,230nm,6.8s | | | | | | | |
| **ADKI** | **Addanki** | **13.75** | **204** | *e*Pn | | **Pn** | **20 14 29.7** | **-2.6** |
| ADKI | | | | *e* | | | 20 16 50.6 | |
| **CMAI** | **Chiengmai2** | **14.92** | **122** | P | | **P** | **20 14 53.6** | **+1.0** |
| **WMQ** | **Urumqi** | **15.27** | **6** | *e*P | | **P** | **20 14 55.0** | **-1.2** |
| WMQ | | | | pP | | **pP** | **20 15 06.0** | **-2.0** |
| WMQ | | | | sP | | **sP** | **20 15 15.0** | **+0.2** |
| WMQ | | | | S | | **Sn** | **20 17 42.0** | **+1.6** |
| WMQ | | | | SS | | S | 20 18 03.0 | +8.4 |
| WMQ | | | | PMZ | | | | |
| | comp=N,54nm,0.8s | | | | | | | |
| WMQ | | | | PMZ | | | | |
| | comp=N,120nm,3.5s | | | | | | | |
| WMQ | | | | LN | | | | |
| | comp=N,280nm,10.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | comp=N,660nm,8.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | comp=N,91nm,8.0s | | | | | | | |
| **MHMT** | **Maesarieng** | **15.29** | **130** | P | | **Pn** | **20 14 50.5** | **-2.1** |
| | comp=N,30nm,0.8s,comp=N,317nm | | | | | | | |
| **KBL** | **Kabul** | **15.36** | **297** | *e*P | | **Pn** | **20 14 51.4** | **-2.2** |
| KBL | | | | pmax | | pmax | | |
| | comp=Z,199nm,0.8s | | | | | | | |
| **KBL** | **Kabul** | **15.36** | **297** | *e*Pn | | **Pn** | **20 14 51.4** | **-2.2** |
| | comp=Z,199nm,0.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **15.56** | **126** | P | | **Pn** | **20 14 54.4** | **-1.7** |
| | comp=Z,196nm,1.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **15.56** | **126** | *e*P | | **Pn** | **20 14 53.4** | **-2.7** |
| CHTO | | | | *e* | | | 20 17 47.3 | |
| CHTO | | | | pmax | | pmax | | |
| | comp=Z,39nm,0.9s | | | | | | | |
| **CHTO** | **Chiang Mai** | **15.56** | **126** | *e*Pn | | **Pn** | **20 14 53.4** | **-2.7** |
| | comp=Z,39nm,0.9s | | | | | | | |
| CHTO | | | | *e*Sn | | **Sn** | **20 17 47.3** | **-0.2** |
| **KMI** | **Kunming** | **15.61** | **99** | P | | **Pn** | **20 14 55.3** | **-1.7** |
| KMI | | | | pP | | P | 20 15 05.1 | +4.8 |
| KMI | | | | S | | **Sn** | **20 17 49.3** | **+0.2** |
| KMI | | | | PMZ | | | | |
| | comp=Z,31nm,0.7s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,260nm,5.7s | | | | | | | |
| KMI | | | | LN | | | | |
| | comp=Z,330nm,6.4s | | | | | | | |
| KMI | | | | LE | | | | |
| | comp=Z,270nm,6.4s | | | | | | | |
| KMI | | | | LZ | | | | |
| | comp=Z,160nm,9.0s | | | | | | | |
| **ULHL** | **Ulahol** | **15.62** | **333** | P | | **Pn** | **20 14 57.0** | **0.0** |
| | SNR=50 | | | | | | | |
| **URV** | **Uravakonda** | **15.67** | **212** | *e*Pn | | **Pn** | **20 14 54.6** | **-3.0** |
| URV | | | | *e* | | | 20 17 37.9 | |
| URV | | | | *e*Sn | | **Sn** | **20 17 47.5** | **-2.7** |
| **CMAR** | **Chiang Mai Arr** | **15.79** | **127** | P | | **Pn** | **20 14 56.1** | **-3.0** |
| | comp=Z,0.5nm,0.3s,baz=307,slow=13,SNR=47 | | | | | | | |
| CMAR | | | | ScP | | **ScP** | **20 23 21.9** | **-3.9** |
| | comp=Z,0.1nm,0.3s,baz=304,slow=4.2,SNR=5.0 | | | | | | | |
| **SKHT** | **Srikalahasti** | **15.79** | **202** | *e*Pn | | **Pn** | **20 14 57.7** | **-1.4** |
| SKHT | | | | *e* | | | 20 17 42.9 | |
| **CM01** | **Chiang Mai Arr** | **15.83** | **127** | *e*Pn | | **Pn** | **20 14 55.9** | **-3.6** |
| **CD2** | **Chengdu** | **15.87** | **77** | *e*P | | **Pn** | **20 15 00.8** | **+0.8** |
| CD2 | | | | S | | **Sn** | **20 17 57.8** | **+2.8** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,100nm,0.8s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,220nm,4.9s | | | | | | | |
| CD2 | | | | LN | | | | |
| | comp=Z,840nm,7.2s | | | | | | | |
| CD2 | | | | LZ | | | | |
| | comp=Z,370nm,7.2s | | | | | | | |
| **KZA** | **Kyzart** | **15.89** | **331** | P | | **Pn** | **20 15 00.1** | **-0.6** |
| | SNR=5.8 | | | | | | | |
| **GTA** | **Gaotai** | **15.90** | **44** | ⇑P | | **Pn** | **20 14 58.4** | **-2.1** |
| GTA | | | | S | | **Sn** | **20 17 50.3** | **-5.5** |
| GTA | | | | SS | | **SnSn** | **20 18 09.6** | **+0.2** |
| GTA | | | | PMZ | | | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,53nm,4.0s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,220nm,15.2s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,160nm,16.6s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,170nm,11.9s | | | | | | | |
| **LAMP** | **Lampang** | **16.24** | **125** | P | | **Pn** | **20 15 04.5** | **-0.3** |
| | comp=Z,8.7nm,0.9s,comp=Z,81nm | | | | | | | |
| **UCH** | **Uchtor** | **16.34** | **329** | P | | **Pn** | **20 15 05.1** | **-1.2** |
| | SNR=204 | | | | | | | |
| **TKM2** | **Tokmak 2** | **16.45** | **333** | *e*P | | **Pn** | **20 15 07.6** | **+0.2** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| **TKM2** | **Tokmak 2** | **16.45** | **333** | P | | **Pn** | **20 15 07.7** | **+0.2** |
| | SNR=32 | | | | | | | |
| **TKM2** | **Tokmak 2** | **16.45** | **333** | *e*Pn | | **Pn** | **20 15 07.6** | **+0.2** |
| | comp=Z,24nm,0.9s | | | | | | | |
| **AML** | **Almayashu** | **16.64** | **327** | P | | **Pn** | **20 15 09.2** | **-0.9** |
| | SNR=92 | | | | | | | |
| **AAK** | **Ala-Archa** | **16.67** | **330** | P | | **Pn** | **20 15 10.0** | **-0.2** |
| | comp=Z,2.4nm,0.3s,baz=147,slow=12,SNR=41 | | | | | | | |
| AAK | | | | | LR | LR | 20 22 28.0 | |
| | comp=Z,79nm,21.4s,baz=127,slow=40 | | | | | | | |
| **AAK** | **Ala-Archa** | **16.67** | **330** | P | | **Pn** | **20 15 10.5** | **+0.3** |
| | SNR=42 | | | | | | | |
| **AAK** | **Ala-Archa** | **16.67** | **330** | *e*Pn | | **Pn** | **20 15 09.4** | **-0.8** |
| | comp=Z,40nm,0.9s | | | | | | | |
| AAK | | | | *e*Sn | | **Sn** | **20 18 12.8** | **-1.7** |
| **FRU** | **Bishkek** | **16.78** | **331** | ⇓*i*P | | **Pn** | **20 15 11.5** | **+0.1** |
| FRU | | | | *e*S | | **S** | **20 18 26.0** | **+0.7** |
| FRU | | | | pmax | | pmax | | |
| | comp=Z,175nm,1.8s | | | | | | | |
| **CHMS** | **Chumysh** | **16.86** | **331** | P | | **Pn** | **20 15 12.6** | **+0.3** |
| | SNR=14 | | | | | | | |
| **EKS2** | **Erkin-Say** | **17.02** | **329** | *e*P | | **P** | **20 15 15.2** | **-0.4** |
| EKS2 | | | | pmax | | pmax | | |
| | comp=Z,67nm,1.3s | | | | | | | |
| **EKS2** | **Erkin-Say** | **17.02** | **329** | P | | **P** | **20 15 15.2** | **-0.4** |
| | SNR=52 | | | | | | | |
| **EKS2** | **Erkin-Say** | **17.02** | **329** | *e*Pn | | **P** | **20 15 15.2** | **-0.4** |
| | comp=Z,67nm,1.3s | | | | | | | |
| **LZH** | **Lanzhou** | **17.05** | **59** | ⇓P | | **Pn** | **20 15 14.0** | **-1.0** |
| LZH | | | | pP | | **pP** | **20 15 25.3** | **-2.6** |
| LZH | | | | PP | | **pwP** | **20 15 30.0** | **+2.1** |
| LZH | | | | sP | | **sP** | **20 15 32.6** | **-2.1** |
| LZH | | | | *e*S | | **Sn** | **20 18 20.1** | **-3.7** |
| LZH | | | | sS | | S | 20 18 39.1 | +7.9 |
| LZH | | | | SS | | **SnSn** | **20 18 44.4** | **+6.8** |
| LZH | | | | PMZ | | | | |
| | comp=Z,93nm,1.2s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,330nm,4.0s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,420nm,12.4s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,460nm,14.4s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,520nm,15.0s | | | | | | | |
| **UMPA** | **Umpang Tak** | **17.32** | **133** | P | | **P** | **20 15 19.6** | **+0.6** |
| | comp=Z,16nm,0.7s,comp=Z,146nm | | | | | | | |
| **UTTA** | **Uttaradit** | **17.41** | **125** | P | | **Pn** | **20 15 19.4** | **+0.1** |
| | comp=Z,10nm,1.1s,comp=Z,91nm | | | | | | | |
| **MNAS** | **Manas** | **17.49** | **326** | P | | **Pn** | **20 15 19.2** | **-1.1** |
| MNAS | | | | pmax | | pmax | | |
| | comp=Z,47nm,0.9s | | | | | | | |
| **LOEI** | **Loei** | **18.08** | **124** | P | | **Pn** | **20 15 30.5** | **+3.0** |
| | comp=Z,20nm,1.3s | | | | | | | |
| **MK01** | **Makanchi Array** | **18.33** | **353** | *e*P | | **Pn** | **20 15 30.9** | **+0.5** |
| **MKAR** | **Makanchi Array** | **18.36** | **353** | P | | **Pn** | **20 15 31.5** | **+0.8** |
| | comp=Z,2.6nm,0.3s,baz=176,slow=12,SNR=102 | | | | | | | |
| MKAR | | | | S | | **Sn** | **20 18 52.5** | **-2.3** |
| | baz=160,slow=13,SNR=4.1 | | | | | | | |
| MKAR | | | | ScP | | **ScP** | **20 23 27.2** | **-3.4** |
| | comp=Z,0.1nm,0.3s,baz=120,slow=7.2,SNR=3.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **18.36** | **353** | *i* P | | **Pn** | **20 15 31.7** | **+1.0** |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,18nm,0.6s | | | | | | | |
| **PBKT** | **Sadao Pong** | **18.49** | **127** | P | | **Pn** | **20 15 33.3** | **+0.8** |
| | comp=Z,92nm,0.9s | | | | | | | |
| **GYA** | **Guiyang** | **18.73** | **92** | ⇑*i*P | | **P** | **20 15 34.4** | **-0.2** |
| GYA | | | | pP | | **pP** | **20 15 47.5** | **+1.0** |
| GYA | | | | S | | **Sn** | **20 18 58.3** | **-6.1** |
| GYA | | | | sS | | sS | 20 19 16.0 | -8.4 |
| GYA | | | | PMZ | | | | |
| | comp=Z,40nm,0.7s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=Z,150nm,4.6s | | | | | | | |
| GYA | | | | LN | | | | |
| | comp=Z,2μm,15.8s | | | | | | | |
| GYA | | | | LE | | | | |
| | comp=Z,2μm,15.6s | | | | | | | |
| GYA | | | | LZ | | | | |
| | comp=Z,1μm,16.6s | | | | | | | |
| **KKAR** | **Karatay Array** | **18.94** | **324** | *e*P | | **P** | **20 15 36.9** | **+0.2** |
| KKAR | | | | pmax | | pmax | | |
| | comp=Z,46nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **18.94** | **324** | *e*P | | **P** | **20 15 36.9** | **+0.2** |
| | comp=Z,46nm,0.7s | | | | | | | |
| **KHON** | **Khomkaen** | **19.97** | **124** | P | | Pn | 20 15 56.0 | +5.9 |
| **XAN** | **Xi'an** | **20.57** | **69** | P | | **P** | **20 15 54.0** | **-0.5** |
| XAN | | | | PMZ | | | | |
| | comp=Z,100nm,0.7s | | | | | | | |
| XAN | | | | PMZ | | | | |
| | comp=Z,100nm,6.8s | | | | | | | |
| **ENH** | **Enshi** | **20.80** | **80** | *e*P | | **P** | **20 15 56.2** | **-0.8** |
| | comp=Z,43nm,0.6s | | | | | | | |
| **PALK** | **Pallekele** | **21.73** | **193** | P | | **P** | **20 16 05.6** | **-1.5** |
| | comp=Z,17nm,0.7s,baz=296,slow=14,SNR=7.6 | | | | | | | |
| PALK | | | | S | | S | 20 19 55.6 | -9.2 |
| | comp=Z,9.3nm,0.9s,baz=119,slow=19,SNR=3.1 | | | | | | | |
| **PALK** | **Pallekele** | **21.73** | **193** | P | | **P** | **20 16 05.6** | **-1.5** |
| PALK | | | | S | | S | 20 19 55.6 | -9.2 |
| PALK | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.7s | | | | | | | |
| PALK | | | | smax | | smax | | |
| | comp=N,9.0nm,0.9s | | | | | | | |
| **PALK** | **Pallekele** | **21.73** | **193** | *i* P | | pP | 20 16 20.1 | +0.9 |
| | SNR=9.9 | | | | | | | |
| **OTUK** | **Ortayu** | **22.16** | **336** | P | | **P** | **20 16 12.6** | **+1.1** |
| OTUK | | | | pmax | | pmax | | |
| | comp=Z,84nm,0.9s | | | | | | | |
| **IDAH** | **Dahanechah** | **22.56** | **287** | *e*P | | **P** | **20 16 17.6** | **+1.5** |
| **KURBB** | **Kurchatov Arra** | **22.65** | **348** | P | | **P** | **20 16 17.6** | **+1.0** |
| | comp=Z,10.0nm,0.5s,baz=170,slow=10,SNR=104 | | | | | | | |
| KURBB | | | | S | | **S** | **20 20 16.6** | **-4.1** |
| | comp=Z,1.4nm,0.9s,baz=164,slow=14,SNR=4.1 | | | | | | | |
| KURBB | | | | ScP | | **ScP** | **20 23 37.4** | **-3.3** |
| | comp=Z,2.5nm,0.9s,baz=182,slow=1.8,SNR=9.3 | | | | | | | |
| **KURK** | **Kurchatov** | **22.72** | **348** | P | | **P** | **20 16 17.6** | **+0.2** |
| KURK | | | | S | | **S** | **20 20 16.6** | **-5.3** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| KURK | | | | smax | | smax | | |
| | comp=N,1.0nm,0.9s | | | | | | | |
| **KURK** | **Kurchatov** | **22.72** | **348** | P | | **P** | **20 16 17.6** | **+0.2** |
| KURK | | | | S | | **S** | **20 20 16.6** | **-5.3** |
| KURK | | | | ScP | | **ScP** | **20 23 37.4** | **-3.5** |
| **IMYA** | **Miami** | **22.87** | **296** | *e*P | | **P** | **20 16 20.5** | **+1.2** |
| **BTO** | **Baotou** | **23.26** | **53** | *e*P | | **P** | **20 16 22.8** | **-0.2** |
| **IKOO** | **Kooshah** | **23.27** | **286** | *e*P | | **P** | **20 16 25.4** | **+2.1** |
| **HVS** | **Khovu-Aksy** | **23.31** | **13** | *e*P | | **P** | **20 16 23.9** | **+0.6** |
| **ISRO** | **Mashad** | **23.36** | **296** | *e*P | | **P** | **20 16 25.5** | **+1.4** |
| **IMOG** | **Moghan** | **23.43** | **295** | *e*P | | **P** | **20 16 26.8** | **+1.9** |
| **ITEG** | **Tejag** | **23.51** | **287** | *e*P | | **P** | **20 16 27.6** | **+2.0** |
| **IPAY** | **Payeh** | **23.77** | **296** | *e*P | | **P** | **20 16 29.4** | **+1.5** |
| **IAKL** | **Akhelmad** | **23.99** | **296** | *e*P | | **P** | **20 16 31.8** | **+1.7** |
| **QIZ** | **Qiongzhong** | **24.03** | **108** | P | | **P** | **20 16 30.1** | **-0.2** |
| QIZ | | | | S | | **S** | **20 20 44.6** | **+0.7** |
| **IKRD** | **Kardeh** | **24.21** | **297** | *e*P | | **P** | **20 16 27.3** | **-4.8** |
| **IEMG** | **Emamgholi** | **24.25** | **298** | *e*P | | **P** | **20 16 34.8** | **+2.4** |
| **HHC** | **Hu-ho-hao-te** | **24.44** | **53** | *e*P | | **P** | **20 16 37.0** | **+3.1** |
| HHC | | | | sP | | **sP** | **20 16 55.0** | **+1.3** |
| HHC | | | | sS | | **sS** | **20 21 09.9** | **-3.0** |
| HHC | | | | SS | | **SnSn** | **20 21 44.8** | **+6.5** |
| HHC | | | | PMZ | | | | |
| | comp=N,35nm,1.4s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=N,69nm,3.7s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=N,310nm,17.4s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=N,280nm,17.4s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=N,190nm,16.2s | | | | | | | |
| **ISFR** | **Sfrayin** | **24.67** | **297** | *e*P | | **P** | **20 16 38.7** | **+2.4** |
| **GEYT** | **Alibeck** | **24.78** | **299** | P | | **P** | **20 16 39.8** | **+2.8** |
| | comp=N,57nm,0.9s,baz=125,slow=9.3,SNR=95 | | | | | | | |
| **WHN** | **Wuhan** | **24.98** | **79** | ⇓P | | **P** | **20 16 38.9** | **+0.1** |
| **SONM** | **Songino Array** | **25.03** | **34** | P | | **P** | **20 16 41.2** | **+1.9** |
| | comp=N,66nm,0.6s,baz=220,slow=9.9,SNR=388 | | | | | | | |
| SONM | | | | ScP | | **ScP** | **20 23 44.5** | **-3.0** |
| | comp=N,0.4nm,0.6s,baz=230,slow=4.2,SNR=3.8 | | | | | | | |
| SONM | | | | LR | | LR | 20 28 19.2 | |
| | comp=N,74nm,18.1s,baz=220,slow=40 | | | | | | | |
| **SONA1** | **Songino Array** | **25.05** | **34** | *e*P | | **P** | **20 16 41.2** | **+1.8** |
| **ZAA0** | **Zalesovo Array** | **25.33** | **359** | *e*P | | **P** | **20 16 42.8** | **+1.1** |
| **ZALV** | **Zalesovo Beam** | **25.33** | **359** | P | | **P** | **20 16 42.9** | **+1.2** |
| | comp=N,7.5nm,0.4s,baz=191,slow=8.9,SNR=44 | | | | | | | |
| ZALV | | | | S | | **S** | **20 21 00.3** | **-3.7** |
| | comp=N,5.6nm,1.0s,baz=193,slow=13,SNR=4.9 | | | | | | | |
| ZALV | | | | LR | | LR | 20 28 48.8 | |
| | comp=N,42nm,18.1s,baz=254,slow=41 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.33** | **359** | P | | **P** | **20 16 42.9** | **+1.2** |
| ZALV | | | | S | | **S** | **20 21 00.3** | **-3.7** |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.4s | | | | | | | |
| ZALV | | | | smax | | smax | | |
| | comp=N,6.0nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.38** | **35** | *c i*P | | **P** | **20 16 44.0** | **+1.5** |
| **ULN** | **Ulaanbaatar** | **25.38** | **35** | *e*P | | **P** | **20 16 44.0** | **+1.5** |
| | comp=N,77nm,0.7s | | | | | | | |
| **ZAK** | **Zakamensk** | **25.52** | **27** | *e*P | | **P** | **20 16 44.6** | **+1.0** |
| ZAK | | | | pmax | | pmax | | |
| | comp=Z,35nm,1.0s | | | | | | | |
| **MOY** | **Mondy** | **25.74** | **22** | *e*P | | **P** | **20 16 48.0** | **+2.4** |
| MOY | | | | pmax | | pmax | | |
| | comp=Z,34nm,2.4s | | | | | | | |
| **IBAF** | **Bafgh** | **26.18** | **284** | *e*P | | **P** | **20 16 52.1** | **+2.2** |
| **MLSI** | **Meulaboh, Aceh** | **26.26** | **155** | P | | **P** | **20 16 53.5** | **+3.0** |
| | comp=Z,50nm,1.4s | | | | | | | |
| **NVS** | **Novosibirsk** | **26.28** | **357** | *e*P | | **P** | **20 16 50.1** | **-0.2** |
| NVS | | | | *e*S | | **S** | **20 21 14.7** | **-4.2** |
| NVS | | | | pm

**ISRV Sarvestan 28.45 280** *e*P **P** **20 17 12.6 +2.1**
**IPAR Pars 28.46 281** *e*P **P** **20 17 12.2 +1.8**
**ABKAR Akbulak array 28.51 323** *e*P **P** **20 17 11.3 +1.0**
comp=Z,16nm,0.5s
**PSI Prapat 28.59 151** LR LR 20 28 26.3
comp=Z,44nm,20.8s,baz=314,slow=36
**NJ2 Nanjing 28.78 75** *e*P **P** **20 17 13.5 +0.6**
NJ2 S **S** **20 22 01.5 +2.7**
NJ2 PMZ
comp=Z,60nm,0.9s
NJ2 LN
comp=Z,950nm,15.5s
NJ2 LE
comp=Z,800nm,16.6s
NJ2 LZ
comp=Z,830nm,16.6s
**IRAM Rameshev 28.89 285** *e*P **P** **20 17 15.3 +1.1**
**IZEF Zefreh 28.91 287** *e*P **P** **20 17 16.3 +1.9**
**IGAR Gharneh 29.16 286** *e*P **P** **20 17 18.8 +2.3**
**GSI Gunungsitoli 29.43 155** P **P** **20 17 21.5 +2.7**
comp=Z,24nm,1.0s
**IKLH Kolahrood 29.54 288** *e*P **P** **20 17 22.6 +2.6**
**IPIR Pirpir 30.12 287** *e*P **P** **20 17 27.6 +2.4**
**AKTO Aktyubinsk 30.21 324** P **P** **20 17 26.0 +0.6**
comp=Z,16nm,0.7s,baz=121,slow=9.3,SNR=45
AKTO ScP **ScP** **20 23 58.2 -4.9**
comp=Z,1.0nm,0.7s,baz=121,slow=5.9,SNR=3.6
**AKTO Aktyubinsk 30.21 324** P **P** **20 17 26.0 +0.6**
AKTO 20 23 58.2
AKTO pmax pmax
comp=Z,16nm,0.7s
**IRAZ Razeghan 30.95 292** *e*P **P** **20 17 34.2 +1.9**
**ISRB Sarab 32.92 296** *e*P **P** **20 17 52.1 +2.5**
**IKOM Komasi 32.92 289** *e*P **P** **20 17 51.3 +1.7**
**HIA Hailar 33.17 42** *e*P **P** **20 17 51.4 -0.1**
HIA pmax pmax
comp=Z,15nm,0.6s
**HIA Hailar 33.17 42** *e*P **P** **20 17 51.4 -0.1**
comp=Z,15nm,0.6s
**SVE Sverdlovsk 33.30 335**⇑ *i*P **P** **20 17 54.5 +2.0**
SVE pmax pmax
comp=Z,36nm,0.6s
**SNY Shenyang 33.38 57** ⇑P **P** **20 17 53.5 +0.2**
SNY PMZ
comp=Z,31nm,0.7s
SNY PMZ
comp=Z,120nm,5.3s
SNY LN
comp=Z,250nm,15.5s
SNY LZ
comp=Z,130nm,10.3s
**IHRS Heris 33.45 297** *e*P **P** **20 17 56.0 +1.7**
**IBST Bostanabad 33.52 296** *e*P **P** **20 17 56.6 +1.6**
**IGHG Ghaleghazi 33.70 290** *e*P **P** **20 17 57.8 +1.3**
**ARU Arti 33.82 333** P **P** **20 17 58.3 +1.3**
comp=Z,1.8nm,0.4s,baz=305,slow=21,SNR=17
**ARU Arti 33.82 333***d i*P **P** **20 17 58.4 +1.4**
ARU 20 19 05.8
ARU S S 20 23 23.6 +6.6
ARU SS **SnSn** **20 25 26.1 0.0**
ARU pmax pmax
comp=Z,43nm,0.8s
**ARU Arti 33.82 333** *e*P **P** **20 17 56.5 -0.4**
comp=Z,39nm,0.6s
**IDHR Dehrash 33.84 290** *e*P **P** **20 17 59.4 +1.7**
**ISHB Shabestar 34.57 297** *e*P **P** **20 18 06.4 +2.4**
**DGRG David-gareji 35.10 302** P **P** **20 18 11.4 +3.1**
**DGRG David-gareji 35.10 302** *e*P **P** **20 18 11.4 +3.1**
**DGRG David-gareji 35.10 302** P **P** **20 18 11.4 +3.1**
**INCN Inchon 35.23 65** *e*P **P** **20 18 09.6 +0.2**
comp=Z,40nm,1.0s
**BOD Bodaibo 35.26 26** *e*P **P** **20 18 10.3 +0.9**
BOD pmax pmax
comp=Z,20nm,0.8s
**GNI Garni 35.41 300** *e*P **P** **20 18 13.6 +2.5**
GNI pmax pmax
comp=Z,162nm,1.2s
**GNI Garni 35.41 300**⇑ *i*P **P** **20 18 13.9 +2.8**
SNR=8.2
**GNI Garni 35.41 300** *e*P **P** **20 18 11.7 +0.5**
comp=Z,278nm,1.4s
**TBLG Delisi 35.61 303** P **P** **20 18 15.0 +2.3**
**TBLG Delisi 35.61 303** *e*P **P** **20 18 14.9 +2.3**
**TBLG Delisi 35.61 303** P **P** **20 18 15.0 +2.3**
**KSAR Wonju Array Be 36.22 65** P **P** **20 18 17.4 -0.5**
**KSAR Wonju Array Be 36.22 65** P **P** **20 18 17.4 -0.5**
KSAR pP pP 20 18 38.3 +6.7
KSAR ScP **ScP** **20 24 20.0 -4.3**
**KS01 Wonju Array Si 36.23 65** *e*P **P** **20 18 16.7 -1.2**
**KSRS Korea Array 36.25 65** P **P** **20 18 17.4 -0.8**
comp=Z,11nm,0.7s,baz=266,slow=8.3,SNR=42
KSRS pP pP 20 18 38.3 +6.5
comp=Z,3.2nm,0.6s,baz=262,slow=8.2,SNR=3.8
KSRS ScP **ScP** **20 24 20.0 -4.4**
comp=Z,1.0nm,0.8s,baz=270,slow=2.4,SNR=3.5
KSRS LR LR 20 34 29.5
comp=Z,80nm,20.1s,baz=262,slow=38
**RAYN Ar Rayn 36.32 271** *e*P **P** **20 18 17.9 -1.0**
comp=Z,7.4nm,0.9s
**AKH Akhalkalaki 36.50 302** P P 20 18 23.8 +3.4
**AKH Akhalkalaki 36.50 302** *e*P P 20 18 23.8 +3.4
**AKH Akhalkalaki 36.50 302** P P 20 18 23.8 +3.4
**ONI Oni 36.68 304** P **P** **20 18 24.6 +2.8**
**ONI Oni 36.68 304** *e*P **P** **20 18 24.6 +2.8**
**ONI Oni 36.68 304** P **P** **20 18 24.6 +2.8**
**NCK Nalchik 36.72 305** *e*P **P** **20 18 23.5 +1.4**
**KBZ Khabaz 37.26 306** P **P** **20 18 27.2 +0.6**
comp=Z,4.2nm,0.8s,baz=150,slow=9.0,SNR=12
KBZ LR LR 20 35 19.9
comp=Z,34nm,21.1s,baz=93,slow=38
**KBZ Khabaz 37.26 306** P **P** **20 18 27.2 +0.6**
KBZ pmax pmax
comp=Z,4.0nm,0.8s
KBZ MLR MLR
comp=Z,34nm,21.1s
**NEY Neytrino 37.31 305** *e*P P 20 18 31.5 +4.2
**KIV Kislovodsk 37.45 306** *e*P **P** **20 18 30.3 +1.9**
KIV pmax pmax
comp=Z,13nm,1.0s
KIV MLR MLR
comp=Z,26nm,15.0s
**KIV Kislovodsk 37.45 306** *e*P **P** **20 18 28.7 +0.4**
comp=Z,15nm,1.0s
**MDJ Mudanjiang 38.21 53** P **P** **20 18 34.3 -0.4**
MDJ pP **pP** **20 18 47.5 -0.9**
MDJ sP **sP** **20 18 53.8 -0.9**
MDJ S **S** **20 24 24.8 +0.3**
MDJ PcS **PcS** **20 24 36.9 -0.2**
MDJ PMZ
comp=Z,11nm,0.7s
MDJ PMZ
comp=Z,72nm,3.0s
MDJ LN
comp=Z,100nm,23.6s
MDJ LE
comp=Z,25nm,20.3s
MDJ LZ
comp=Z,79nm,21.1s
**VRH Novokhopyorsk 39.79 317** *e*P **P** **20 18 48.3 +0.6**
VRH pmax pmax
comp=Z,30nm,0.8s
VRH pmax pmax
comp=N,10.0nm,1.7s
VRH pmax pmax
comp=E,10.0nm,0.6s
**USRK Ussuriysk Ar. 39.85 54** P **P** **20 18 48.4 0.0**
comp=E,15nm,0.7s,baz=259,slow=7.7,SNR=26
USRK LR LR 20 36 41.1
comp=E,78nm,21.2s,baz=229,slow=38
**MALT Malatya 40.22 297***ce*P **P** **20 18 54.3 +2.6**
**SLMH Al Salmeh 40.69 293** *e*P P 20 18 52.1 -3.4
**VORD Divnogorie 41.19 316** *e*P **P** **20 18 59.7 +0.4**
VORD pmax pmax
comp=Z,30nm,1.1s
VORD pmax pmax
comp=N,40nm,0.9s
VORD pmax pmax
comp=E,70nm,1.0s
**ANN Anapa 41.30 306** *e*P **P** **20 19 00.5 +0.3**
ANN *e*PPP PPP 20 21 02.7
ANN pmax pmax
comp=Z,29nm,0.9s
**VSR Storozhevoye 41.34 316** *e*P **P** **20 19 00.8 +0.3**
VSR pmax pmax
comp=Z,10.0nm,0.6s
VSR pmax pmax
comp=N,10.0nm,0.8s
VSR pmax pmax
comp=E,10.0nm,0.8s
**ROOS tl_alroos 41.38 290** *e*P **P** **20 19 02.3 +1.1**
**RABH Abou Rabah 41.42 291** *e*P **P** **20 19 03.6 +2.1**
**ZALF Zalf 41.48 288** *e*P **P** **20 19 04.0 +2.0**
**LPSR Galich'ya Gora 41.85 318** *e*P **P** **20 19 05.5 +0.8**
LPSR pmax pmax
comp=Z,30nm,0.7s
LPSR pmax pmax
comp=N,4.0nm,0.6s
LPSR pmax pmax
comp=E,10.0nm,0.6s
**BTCH Batrach 41.89 293** *e*P P 20 19 02.0 -3.3
**ASF Jabal al Asfar 41.95 287** P **P** **20 19 07.3 +1.4**
comp=E,7.5nm,0.8s,baz=252,slow=3.3,SNR=10
**ASF Jabal al Asfar 41.95 287** P **P** **20 19 07.3 +1.4**
ASF pmax pmax
comp=Z,8.0nm,0.8s
**WRDH Warideh 41.97 292** *e*P **P** **20 19 04.2 -1.9**
**SALA Sala 42.01 288** *e*P **P** **20 19 07.2 +0.6**
**HAWK Haweek 42.07 291** *e*P **P** **20 19 07.5 +0.6**
**BIDA Albida 42.09 292** *e*P **P** **20 19 07.4 +0.4**
**TOTH TOTAH 42.18 289** *e*P **P** **20 19 08.0 +0.3**
**BRBR Barbar 42.57 289** *e*P **P** **20 19 12.1 +1.0**
**TCHB Talchebab 42.66 288** *e*P **P** **20 19 13.7 +2.1**
**MMAI Mount Meron Ar 43.08 289** P **P** **20 19 16.9 +1.8**
comp=Z,4.8nm,0.5s,baz=72,slow=11,SNR=12
**SIM Simferopol' 43.66 306***d i*P **P** **20 19 20.7 +1.2**
SIM pmax pmax
comp=Z,43nm,0.9s
**OBN Obninsk 43.91 321** P **P** **20 19 22.2 +1.0**
comp=Z,16nm,0.4s,baz=298,slow=21,SNR=9.0
**OBN Obninsk 43.91 321**⇓ *e*P **P** **20 19 21.9 +0.7**
OBN *e* 20 19 27.9
OBN pmax pmax
comp=Z,97nm,2.5s
OBN MLR MLR
comp=Z,68nm,17.0s
**OBN Obninsk 43.91 321** *e*P **P** **20 19 20.9 -0.4**
comp=Z,31nm,0.8s
**BRTR Keskin Array B 43.92 299** P **P** **20 19 22.8 +0.9**
comp=Z,7.5nm,0.7s,baz=103,slow=7.4,SNR=49
BRTR PP **PP** **20 21 03.0 -1.8**
comp=Z,0.7nm,0.7s,baz=107,slow=13,SNR=1.7
**EIL Elat 44.03 284** P **P** **20 19 24.3 +1.6**
comp=Z,9.1nm,0.8s,baz=50,slow=6.5,SNR=7.8
**YAK Yakutsk 44.09 28** P **P** **20 19 23.4 +0.7**
comp=Z,5.0nm,0.4s,baz=62,slow=22,SNR=8.0
**YAK Yakutsk 44.09 28***c i*P **P** **20 19 23.3 +0.7**
YAK pmax pmax
comp=Z,34nm,0.8s
YAK pmax pmax
comp=E,10.0nm,1.2s
YAK pmax pmax
comp=N,4.0nm,1.0s
**YAK Yakutsk 44.09 28** *e*P **P** **20 19 22.5 -0.2**
comp=N,42nm,0.7s
**MAT Matsushiro 44.51 66** P **P** **20 19 25.4 -1.0**
**MAJO Matsushiro 44.51 66** *e*P **P** **20 19 26.6 +0.2**
MAJO pmax pmax
comp=Z,13nm,1.2s
**MAJO Matsushiro 44.51 66** P **P** **20 19 24.5 -1.9**
comp=Z,12nm,0.8s
**MJAR Matsushiro Arr 44.51 66** P **P** **20 19 26.8 +0.4**
comp=Z,13nm,1.0s,baz=277,slow=9.6,SNR=29
**MJAR Matsushiro Arr 44.51 66** P **P** **20 19 26.8 +0.4**
MJAR pmax pmax
comp=Z,13nm,1.0s
**CSS Prodhromos 44.53 292** *e*P **P** **20 19 27.7 +1.1**
comp=Z,2.6nm,0.7s
**ANTO Ankara 44.57 299** P **P** **20 19 24.9 -2.0**
ANTO pmax pmax
comp=Z,14nm,0.7s
**ANTO Ankara 44.57 299** P **P** **20 19 24.9 -2.0**
comp=Z,14nm,0.7s
**BR231 Keskin MP Arra 44.58 299** *e*P P 20 19 23.6 -3.5
**ISP Isparta 46.48 296** *e*P **P** **20 19 41.7 -0.4**
ISP pmax pmax
comp=Z,10.0nm,0.8s
**ISP Isparta 46.48 296** *e*P **P** **20 19 41.7 -0.4**
comp=Z,10.0nm,0.8s
**TLCR 47.42 306**⇑ *i*P **P** **20 19 49.9 +0.7**
**AKASG Malin Array Be 47.43 314** P **P** **20 19 49.2 0.0**
comp=Z,19nm,0.6s,baz=80,slow=7.1,SNR=191
AKASG PP **PP** **20 21 41.4 +0.7**
comp=Z,0.6nm,0.4s,baz=90,slow=7.5,SNR=4.0
AKASG LR LR 20 42 20.8
comp=Z,36nm,19.1s,baz=40,slow=39
**AKASG Malin Array Be 47.43 314** P **P** **20 19 49.2 0.0**
AKASG 20 21 41.4
AKASG pmax pmax
comp=Z,19nm,0.6s
AKASG pmax pmax
comp=Z,1.0nm,0.4s
AKASG MLR MLR
comp=Z,36nm,19.1s
**KIEV Kiev 47.44 314** *e*P **P** **20 19 49.3 +0.1**
KIEV pmax pmax
comp=Z,41nm,0.7s
**KIEV Kiev 47.44 314** *e*P **P** **20 19 49.3 +0.1**
**AK11 Malin Array Si 47.46 314** *e*P **P** **20 19 49.4 0.0**
**TIRR Tirgusor 47.71 305**⇑ *i*P **P** **20 19 52.5 +1.1**
**SORM Soroca 47.81 310**⇓ *i*P **P** **20 19 51.9 -0.3**
**CFR Carcaliu 47.90 306**⇓ *i*P **P** **20 19 53.3 +0.4**
**MSAB Monastry St. A 48.14 305**⇑ *i*P **P** **20 19 55.6 +0.9**
**IAS Iasi 48.31 309**⇑ *i*P **P** **20 19 56.9 +0.8**
**PETR Petresti 48.53 307**⇑ *i*P **P** **20 19 59.4 +1.6**
**GRER 48.72 307**⇑ *i*P pP 20 20 13.6 +0.2
**PGOR Pogoanele 48.72 306**⇓ *i*P **P** **20 20 00.9 +1.7**
**VRI Vrincioaia 48.88 307**⇓ *i*P **P** **20 20 02.2 +1.7**
**TESR Tescani 48.94 308**⇓ *i*P **P** **20 20 01.2 +0.3**
**PLOR Plostina 48.94 307**⇑ *i*P **P** **20 20 01.4 +0.4**
**ISR Istrita 49.03 306**⇑ *i*P **P** **20 20 04.2 +2.5**
**PRAR RASCA 49.23 309**⇓ *i*P **P** **20 20 03.7 +0.6**
**SULR 49.24 306**⇑ *i*P **P** **20 20 05.7 +2.5**
**NACGM Naroch 49.37 319** *e* **P** **20 20 04.0 -0.1**
**MLR Muntele Rosu 49.44 307**⇓ *i*P **P** **20 20 06.8 +1.9**
**APA Apatity 49.74 337**⇓ *i*P **P** **20 20 09.0 +2.3**
APA MLR MLR
comp=Z,1μm,15.0s
**IIGN Ignalina 49.75 320** *e*P **P** **20 20 07.9 +1.0**
IIGN IAmb IAmb 20 20 09.0
comp=Z,30nm,0.6s
**IZAR Zarasai 49.79 320** *e*P **P** **20 20 08.2 +1.0**
IZAR IAmb IAmb 20 20 09.2
comp=Z,29nm,0.6s
**DOPR Dopca 49.82 308**⇓ *i*P **P** **20 20 09.1 +1.5**
**ISAL Salakas 49.83 320** *e*P **P** **20 20 08.5 +1.0**
ISAL IAmb IAmb 20 20 09.6
comp=Z,22nm,0.7s
**BURAR Bucovina Array 49.91 310**⇓ *i*P **P** **20 20 08.3 -0.1**
**BUR04 Bucovina Ar. S 49.91 310** *e*P **P** **20 20 09.1 +0.7**
**ZIMR 49.93 305**⇑ *i*P **P** **20 20 10.2 +1.7**
**VOIR 50.07 307**⇑ *i*P **P** **20 20 09.9 +0.3**
**HUMR Humele 50.16 306**⇑ *i*P **P** **20 20 11.4 +1.2**
**ARR Arges 50.37 307**⇓ *i*P **P** **20 20 13.5 +1.6**
**ARCR ARCALIA 50.50 309**⇓ *i*P **P** **20 20 15.0 +2.2**
**LVV L'vov 50.70 313** *e*P **P** **20 20 14.6 +0.3**
**FINES FINESS Array B 50.84 328** P **P** **20 20 15.8 +0.7**
comp=Z,16nm,0.6s,baz=108,slow=8.9,SNR=80
FINES LR LR 20 44 01.6
comp=Z,88nm,19.0s,baz=102,slow=38
**FINES FINESS Array B 50.84 328** P **P** **20 20 15.8 +0.7**
FINES pmax pmax
comp=Z,16nm,0.6s
FINES MLR MLR
comp=Z,88nm,19.0s
**LOT Lotru 50.97 307**⇑ *i*P **P** **20 20 17.1 +0.6**
**CJR Cluj-Napoca 51.03 309**⇓ *i*P **P** **20 20 18.5 +1.7**
**BMR Baia Mare 51.07 310**⇓ *i*P **P** **20 20 18.8 +1.7**
**IDI Anoyia 51.32 294** P **P** **20 20 19.4 +0.2**
comp=Z,6.8nm,0.6s,baz=42,slow=12,SNR=6.2
**SUW Suwalki 51.38 318** *e*P **P** **20 20 19.3 0.0**
**SUW Suwalki 51.38 318** *e*P **P** **20 20 19.4 +0.1**
**DEV Deva 51.55 308**⇑ *i*P **P** **20 20 22.4 +1.7**
**KWP Kalwaria Pacla 51.56 312** *e*P **P** **20 20 21.7 +1.0**
**KWP Kalwaria Pacla 51.56 312** *e*P **P** **20 20 21.7 +1.0**
**DRGR 51.64 309**⇓ *i*P **P** **20 20 22.8 +1.4**
**GZR Gura Zlata 51.67 307**⇑ *i*P **P** **20 20 22.6 +0.9**
**TRPA Tarpa 51.70 310**⇑ *i*P **P** **20 20 23.0 +1.3**
**UZH Uzhgorod 51.85 311**⇓ *i*P **P** **20 20 23.5 +0.7**
UZH *e* 20 20 32.3
**KOLS Kolonicke sedl 51.86 311** *e*P **P** **20 20 23.8 +0.9**
KOLS pmax pmax
comp=Z,7.0nm,0.7s
**KOLS Kolonicke sedl 51.86 311** *e*P **P** **20 20 23.8 +0.9**
**SIRR Siria 52.39 308**⇓ *i*P **P** **20 20 28.6 +1.6**
**BZS Buzias 52.47 307**⇓ *i*P **P** **20 20 28.8 +1.3**
**STHS Stebnicka Huta 52.52 312** *e*P **P** **20 20 28.5 +0.6**
STHS pmax pmax
comp=Z,15nm,0.7s
**STHS Stebnicka Huta 52.52 312** *e*P **P** **20 20 28.5 +0.6**
**BEL Belsk 52.77 315** *e*P **P** **20 20 30.2 +0.7**
**BEL Belsk 52.77 315** *e*P **P** **20 20 30.3 +0.7**
**BANR Banloc 52.83 307**⇓ *i*P **P** **20 20 31.8 +1.7**
**NIE Niedzica 53.14 312** *e*P **P** **20 20 34.0 +1.6**
**NIE Niedzica 53.14 312** *e*P **P** **20 20 34.0 +1.6**
**ARA0 ARCESS Array S 53.16 338** *e*P **P** **20 20 33.2 +1.0**
**ARCES ARCESS Array B 53.16 338** P **P** **20 20 33.2 +1.0**
comp=Z,11nm,0.6s,baz=100,slow=7.3,SNR=83
ARCES LR LR 20 43 36.2
comp=Z,29nm,18.0s,baz=156,slow=36
**ARCES ARCESS Array B 53.16 338** P **P** **20 20 33.2 +1.0**
ARCES pmax pmax
comp=Z,11nm,0.6s
ARCES MLR MLR
comp=Z,29nm,18.0s
**OJC Ojcow 53.43 313** *e*P **P** **20 20 34.9 +0.4**
**OJC Ojcow 53.43 313** *e*P **P** **20 20 35.0 +0.4**
**OJC Ojcow 53.43 313** *e*P **P** **20 20 35.0 +0.4**
comp=Z,30nm,0.6s
**PSZ Piszkesteto 53.49 310** *e*P **P** **20 20 35.4 +0.3**
**PSZ Piszkesteto 53.49 310**⇑ *i*P **P** **20 20 36.1 +1.0**
**PSZ Piszkesteto 53.49 310**⇑ *e*P **P** **20 20 36.1 +1.0**
**PSZ Piszkesteto 53.49 310** *e*P **P** **20 20 35.4 +0.3**
**LANS Liptovska Anna 53.70 312** *e*P **P** **20 20 37.8 +1.3**
**LANS Liptovska Anna 53.70 312** *e*P **P** **20 20 37.8 +1.3**
**DIVS Divibare 53.77 306**⇑ *i*P **P** **20 20 38.1 +0.9**
**VYHS Vyhne 54.15 311** *e*P **P** **20 20 39.6 -0.2**
**VYHS Vyhne 54.15 311** *e*P **P** **20 20 39.6 -0.2**
**SEY Seymchan 54.37 31**⇑ *e*P **P** **20 20 41.7 +0.6**
**OKC Ostrava-Krasne 54.51 313** *e*P **P** **20 20 43.4 +1.0**
**OKC Ostrava-Krasne 54.51 313**⇓ *e*P **P** **20 20 43.4 +1.0**
**PKSG 54.54 310**⇑ *e*P **P** **20 20 43.3 +0.7**
**PKST T"'s 54.80 310**⇑ *e*P **P** **20 20 44.8 +0.3**
**MORC Moravsky Berou 54.91 313** *e*P **P** **20 20 45.2 -0.1**
MORC pmax pmax
comp=Z,83nm,0.7s
**MORC Moravsky Berou 54.91 313**⇑ *i*P **P** **20 20 45.0 -0.3**
**MORC Moravsky Berou 54.91 313** *e*P **P** **20 20 45.2 -0.1**
comp=Z,83nm,0.7s
**GKP Gorka Klasztor 54.91 317** *e*P **P** **20 20 46.0 +0.8**
**GKP Gorka Klasztor 54.91 317** *e*P **P** **20 20 46.0 +0.8**
**KMBO Kilima Mbogo 54.97 246** P **P** **20 20 46.4 0.0**
comp=Z,1.7nm,0.6s,baz=43,slow=9.2,SNR=6.1
**KMBO Kilima Mbogo 54.97 246** *i* P **P** **20 20 46.7 +0.3**
KMBO pmax pmax
comp=Z,2.0nm,0.6s
**KMBO Kilima Mbogo 54.97 246** *e*P **P** **20 20 47.1 +0.7**
comp=Z,8.9nm,1.3s
**KRLC Kraliky 55.38 313** *e*P **P** **20 20 49.6 +0.9**
**KRLC Kraliky 55.38 313**⇓ *e*P **P** **20 20 49.6 +0.9**
**VRAC Vranov 55.56 312** P **P** **20 20 51.2 +1.2**
comp=Z,21nm,0.7s,baz=92,slow=7.9,SNR=33
**VRAC Vranov 55.56 312** P **P** **20 20 51.2 +1.2**
VRAC pmax pmax
comp=Z,21nm,0.7s
**VRAC Vranov 55.56 312**⇑ *i*P **P** **20 20 51.0 +1.0**
**KSP Ksiaz 55.63 314** *e*P **P** **20 20 51.4 +1.0**
**KSP Ksiaz 55.63 314** *e*P **P** **20 20 51.4 +1.0**
**DPC Dobruska-Polom 55.65 313** *e*P **P** **20 20 51.8 +1.2**
**DPC Dobruska-Polom 55.65 313** *e*P **P** **20 20 51.8 +1.2**
**UPC Upice 55.83 314** *e*P **P** **20 20 52.9 +1.0**
**UPC Upice 55.83 314**⇓ *e*P **P** **20 20 52.9 +1.0**
**CONA Conrad Observa 56.19 311**⇑ *i*P **P** **20 20 55.6 +1.0**
comp=Z,22nm,0.9s,SNR=7.3
**BSD Bornholm Skovb 56.20 319** *i* P **P** **20 20 53.6 -0.8**
BSD pmax pmax
comp=Z,17nm,0.7s
**BSD Bornholm Skovb 56.20 319** *i* P **P** **20 20 53.6 -0.8**
comp=Z,17nm,0.7s
**ARSA Arzberg 56.50 310**⇑ *i*P **P** **20 20 57.5 +0.8**
comp=Z,8.0nm,0.6s
**GOPC GO Pecny, Ondr 56.67 313** *e*P **P** **20 20 59.0 +1.1**
**GOPC GO Pecny, Ondr 56.67 313** *e*P **P** **20 20 59.0 +1.1**
**HFS Hagfors 56.74 325** P **P** **20 20 58.6 +0.4**
comp=Z,12nm,0.5s,baz=96,slow=9.1,SNR=89
**HFS Hagfors 56.74 325** P **P** **20 20 58.6 +0.4**
HFS pmax pmax
comp=Z,12nm,0.5s
**PVCC Panska Ves 56.75 314** *e*P **P** **20 20 59.5 +1.1**
**PVCC Panska Ves 56.75 314**⇓ *e*P **P** **20 20 59.5 +1.1**
**PRU Pruhonice 56.82 313**⇓ *e*P **P** **20 21 00.0 +1.0**
**PRU Pruhonice 56.82 313**⇓ *e*P **P** **20 21 00.0 +1.0**
**PERS Pernice 56.85 309** *i* P **P** **20 21 00.0 +0.7**
**SOKA Soboth 56.91 309**⇑ *i*P **P** **20 21 00.4 +0.6**
comp=Z,13nm,0.6s
**TIP Timpagrande 56.95 300** *e*P **P** **20 20 58.9 -1.2**
**RUE Ruedersdorf 57.05 316** *e*P **P** **20 21 01.1 +0.6**
comp=Z,55nm,0.7s,baz=82,slow=6.9
**PETK Petropavlovsk- 57.07 43** P **P** **20 21 00.3 -0.3**
comp=Z,4.4nm,0.6s,baz=287,slow=12,SNR=4.5
PETK LR LR 20 48 49.7
comp=Z,31nm,18.7s,baz=273,slow=39
**PETK Petropavlovsk- 57.07 43** P **P** **20 21 00.3 -0.3**
PETK pmax pmax
comp=Z,4.0nm,0.6s
PETK MLR MLR
comp=Z,31nm,18.7s
**BRG Berggiesshubel 57.11 314** *i* P **P** **20 21 01.7 +0.7**
comp=Z,29nm,0.8s
**BRG Berggiesshubel 57.11 314** *i* P **P** **20 21 01.7 +0.7**
BRG pmax pmax
comp=Z,29nm,0.8s
**BRG Berggiesshubel 57.11 314** *e*P **P** **20 21 01.7 +0.7**
comp=Z,29nm,0.8s,baz=82,slow=6.9
**RGN Rugen 57.16 319** *e*P **P** **20 21 01.4 +0.2**
comp=Z,41nm,0.7s
**MOA Molln 57.26 311**⇓ *i*P **P** **20 21 02.6 +0.5**
comp=Z,12nm,0.6s,SNR=5.8
**CEY Cerknica 57.46 308** *i* P **P** **20 21 04.3 +0.7**
**FBE Freiberg 57.47 314** *e*P **P** **20 21 04.6 +1.0**
comp=Z,37nm,0.8s,baz=82,slow=6.9
**CUC Castrocucco 57.49 301** *e*P **P** **20 21 02.9 -1.0**
comp=Z,22nm,0.8s
**GEC2 GERESS Array S 57.50 312** *e*P **P** **20 21 03.8 -0.1**
**GEC2 GERESS Array S 57.50 312** *e*P **P** **20 21 04.5 +0.5**
comp=Z,18nm,1.3s,baz=82,slow=6.9
GEC2 *e*L L 20 45 27.5
comp=Z,66nm,19.2s
**GEC2 GERESS Array S 57.50 312** *e*P **P** **20 21 03.8 -0.1**
**GERES GERESS Array B 57.50 312** P **P** **20 21 04.4 +0.5**
comp=Z,6.2nm,0.7s,baz=84,slow=6.5,SNR=42
GERES LR LR 20 48 59.8
comp=Z,31nm,18.9s,baz=102,slow=39
**GERES GERESS Array B 57.50 312** P **P** **20 21 04.4 +0.5**
GERES pmax pmax
comp=Z,6.0nm,0.7s
GERES MLR MLR
comp=Z,31nm,18.9s
**KHC Kasperske Hory 57.55 312**⇓ *i*P **P** **20 21 04.8 +0.7**
**KHC Kasperske Hory 57.55 312**⇓ *i*P **P** **20 21 04.8 +0.7**
KHC *e*pP **pP** **20 21 16.0 -2.6**
**KHC Kasperske Hory 57.55 312** P **P** **20 21 04.0 -0.2**
**CLL Collm 57.65 315**⇓ *i*P **P** **20 21 05.1 +0.3**
CLL pmax pmax
comp=Z,11nm,0.9s
**CLL Collm 57.65 315** *e*P **P** **20 21 05.1 +0.3**
comp=Z,11nm,0.9s,baz=82,slow=6.9
CLL *e*L L 20 46 19.3
comp=Z,68nm,21.7s
**CLL Collm 57.65 315**⇓ *i*P **P** **20 21 05.1 +0.3**
comp=Z,11nm,0.9s
CLL *e*PP **PP** **20 23 15.0 +2.2**
**CLL Collm 57.65 315** *e*P **P** **20 21 05.0 +0.3**
**CADS Cadrg 57.86 309** *i* P **P** **20 21 06.6 +0.2**
**NB2 NORSAR Subarra 57.95 326** P **P** **20 21 06.3 -0.5**
comp=Z,11nm,0.7s,baz=86,slow=7.4
**NOA NORSAR Array B 57.95 326** P **P** **20 21 06.7 -0.1**
comp=Z,11nm,0.7s,baz=88,slow=7.2,SNR=26
NOA LR LR 20 47 40.9
comp=Z,62nm,19.0s,baz=110,slow=38
**NOA NORSAR Array B 57.95 326** P **P** **20 21 06.7 -0.1**
NOA pmax pmax
comp=Z,11nm,0.7s
NOA MLR MLR

comp=Z,62nm,19.0s
**SPITS Spitsbergen Ar 57.99 347** P **P** **20 21 07.6 +0.8**
comp=Z,4.3nm,0.6s,baz=116,slow=9.4,SNR=6.6
**SPITS Spitsbergen Ar 57.99 347** P **P** **20 21 07.6 +0.8**
SPITS pmax pmax
comp=Z,4.0nm,0.6s
**KBA Koelnbreinsper 57.99 310**⇓*iP* **P** **20 21 07.7 +0.2**
comp=Z,5.0nm,0.5s
**WET Wettzell 58.00 312** *e*P **P** **20 21 08.2 +0.9**
comp=Z,14nm,0.8s,baz=82,slow=6.9
**TANN Tannenbergstha 58.10 314** *e*P **P** **20 21 08.6 +0.6**
comp=Z,13nm,0.9s,baz=82,slow=6.9
**GUNZ Gunzen 58.19 314** *e*P **P** **20 21 09.3 +0.7**
comp=Z,19nm,0.9s,baz=82,slow=6.9
**WERD Werda 58.19 314** *e*P **P** **20 21 09.3 +0.7**
comp=Z,18nm,0.8s,baz=82,slow=6.9
**PLN Plauen 58.28 314** *e*P **P** **20 21 09.8 +0.6**
comp=Z,13nm,0.8s,baz=82,slow=6.9
**ROTZ Rotzenmuhle 58.35 313** *e*P **P** **20 21 11.0 +1.3**
comp=Z,27nm,0.9s,baz=82,slow=6.9
**MANZ Manzenberg 58.38 313** *e*P **P** **20 21 10.9 +0.9**
comp=Z,18nm,1.3s,baz=82,slow=6.9
**NEUB Neuenburg 58.43 315** *e*P **P** **20 21 10.7 +0.5**
comp=Z,33nm,0.8s,baz=82,slow=6.9
**MOX Moxa 58.60 314** *e*P **P** **20 21 12.1 +0.6**
comp=Z,17nm,0.9s,baz=82,slow=6.9
MOX *e*L L 20 47 43.1
comp=Z,57nm,21.0s
**ABTA Abfaltersbach 58.61 310**⇑*iP* **P** **20 21 10.6 -1.1**
comp=Z,5.8nm,0.6s
**BSEG Bad Segeberg 58.97 318** *e*P **P** **20 21 14.9 +1.0**
comp=Z,32nm,0.9s,baz=82,slow=6.9
**ASSE Asse, Remlinge 58.99 316** *e*P **P** **20 21 14.3 +0.3**
comp=Z,7.6nm,1.0s,baz=82,slow=6.9
**GRF Grafenberg Arr 58.99 313** *e*L L 20 46 43.8
comp=Z,78nm,20.4s
**VAE Valguarnera 59.12 299** P **P** **20 21 15.9 +0.6**
comp=Z,6.3nm,0.5s,baz=54,slow=8.7,SNR=7.5
**FUR Furstenfeldbru 59.20 311** *e*L L 20 47 17.4
comp=Z,46nm,19.8s
**CLZ Clausthal 59.21 316** *e*P **P** **20 21 16.6 +0.9**
comp=Z,44nm,0.8s,baz=82,slow=6.9
**NRDL Niedersach Rie 59.28 316** *e*P **P** **20 21 17.2 +1.2**
comp=Z,47nm,1.0s,baz=82,slow=6.9
**MOTA Moosalm 59.46 310**⇑*iP* **P** **20 21 16.7 -0.9**
comp=Z,16nm,0.7s,SNR=13
**RETA Reutte 59.66 311**⇓*iP* **P** **20 21 18.8 -0.1**
comp=Z,8.4nm,0.6s
**FETA Feichten 59.77 310**⇓*iP* **P** **20 21 19.5 -0.2**
comp=Z,12nm,0.8s
**CLTB Caltabellotta 60.02 299** P **P** **20 21 20.7 -0.9**
**FUORN Ofenpass-Fuorn 60.16 310** *e*P **P** **20 21 22.1 -0.5**
comp=Z,6.6nm,0.7s
**DAVA Damuels 60.28 311** *i*P **P** **20 21 23.3 0.0**
comp=Z,27nm,0.8s,SNR=7.9
**BILL Bilibino 60.31 25**⇓*iP* **P** **20 21 24.6 +1.7**
BILL S S 20 30 10.0 +37
BILL pmax pmax
comp=Z,32nm,2.5s
BILL MLR MLR
comp=Z,170nm,19.0s
**DAVOX Davos/Dischmat 60.38 310** P **P** **20 21 23.6 -0.4**
comp=Z,5.9nm,0.6s,baz=109,slow=4.5,SNR=18
**DAVOX Davos/Dischmat 60.38 310** P **P** **20 21 23.6 -0.4**
DAVOX pmax pmax
comp=Z,6.0nm,0.6s
**STU Stuttgart 60.46 312** *e*P **P** **20 21 24.8 +0.5**
**STU Stuttgart 60.46 312** *e*P **P** **20 21 24.8 +0.5**
**TNS Taunus Mts 60.67 314** *e*P **P** **20 21 26.4 +0.7**
comp=Z,24nm,0.8s,baz=82,slow=6.9
TNS *e*L L 20 47 12.5
comp=Z,62nm,21.9s
**IBBN Ibbenburen 60.73 317** *e*P **P** **20 21 26.8 +0.8**
comp=Z,30nm,1.1s,baz=82,slow=6.9
**TUE Stuetta 60.80 310** *e*P **P** **20 21 25.8 -1.1**
comp=Z,8.3nm,0.9s
**BFO Black Forest 61.11 312** *ce*P **P** **20 21 29.2 +0.5**
BFO pmax pmax
comp=Z,16nm,2.5s
**BFO Black Forest 61.11 312** *e*P **P** **20 21 28.4 -0.3**
comp=Z,3.2nm,0.7s,baz=82,slow=6.9
**BFO Black Forest 61.11 312** *e*P **P** **20 21 26.2 -2.5**
**BUG Bochum--Univer 61.18 316** *e*P **P** **20 21 29.8 +0.7**
comp=Z,24nm,0.9s,baz=82,slow=6.9
**MEM Membach 62.13 315** P **P** **20 21 36.3 +0.8**
comp=Z,8.7nm,1.1s
**SENIN Lac Senin/Sane 62.21 310** *e*P **P** **20 21 36.5 +0.1**
comp=Z,19nm,0.9s
**WLF Walferdange 62.23 314** P **P** **20 21 37.6 +1.4**
comp=Z,19nm,1.3s
**WLF Walferdange 62.23 314** *e*P **P** **20 21 35.4 -0.9**
**WLF Walferdange 62.23 314** *e*P **P** **20 21 37.1 +0.9**
comp=Z,29nm,1.0s,baz=82,slow=6.9
**WLF Walferdange 62.23 314** *e*P **P** **20 21 35.4 -0.9**
**BCLA Clavier 62.61 315** P **P** **20 21 39.3 +0.6**
**DOU Dourbes 63.12 314** P **P** **20 21 42.8 +0.6**
**KEST Kesra 63.52 298** P **P** **20 21 46.0 +0.9**
comp=Z,74nm,0.9s,baz=307,slow=1.2,SNR=45
**KEST Kesra 63.52 298** *e*P **P** **20 21 46.5 +1.4**
**DAG Danmarks Havn 65.59 346** *i*P **P** **20 21 58.9 +1.1**
DAG pmax pmax
comp=Z,8.0nm,1.0s
**DAG Danmarks Havn 65.59 346** *i*P **P** **20 21 58.9 +1.1**
comp=Z,7.6nm,1.0s
**EKA Eskdalemuir Ar 66.36 321** P **P** **20 22 03.2 +0.2**
comp=Z,4.1nm,0.6s,baz=78,slow=6.3,SNR=26
**EKA Eskdalemuir Ar 66.36 321** P **P** **20 22 03.3 +0.2**
EKA pmax pmax
comp=Z,4.0nm,0.6s
**WRA Warramunga Arr 67.36 130** P **P** **20 22 10.5 +0.6**
comp=Z,4.9nm,0.6s,baz=324,slow=6.4,SNR=66
WRA pP pP 20 22 30.8 +6.0
comp=Z,3.0nm,0.6s,baz=322,slow=6.7,SNR=8.3
**WRA Warramunga Arr 67.36 130** P **P** **20 22 10.5 +0.6**
WRA *PP pP 20 22 30.8 +6.0
WRA pmax pmax
comp=Z,5.0nm,0.6s
**WRAB Tennant Creek 67.36 130** *e*P **P** **20 22 11.2 +1.3**
WRAB pmax pmax
comp=Z,9.0nm,0.8s
**WRAB Tennant Creek 67.36 130** *e*P **P** **20 22 09.5 -0.4**
comp=Z,11nm,0.7s
**ASAR Alice Springs 69.69 133** P **P** **20 22 24.9 +0.5**
comp=Z,2.6nm,0.6s,baz=315,slow=5.9,SNR=40
ASAR pP **PcP** **20 22 46.3 -0.7**
comp=Z,4.7nm,0.7s,baz=320,slow=6.3,SNR=9.9
**ASAR Alice Springs 69.69 133** P **P** **20 22 25.0 +0.5**
ASAR *PP **PcP** **20 22 46.3 -0.7**
ASAR pmax pmax
comp=Z,3.0nm,0.6s
**AS01 Alice Springs 69.72 133** *e*P **P** **20 22 24.6 0.0**
AS01 *ep*P **pP** **20 22 41.8 +2.3**
**LSZ Lusaka 70.65 240** P **P** **20 22 29.6 -0.9**
LSZ pmax pmax
comp=Z,4.0nm,0.5s
**LSZ Lusaka 70.65 240** P **P** **20 22 29.6 -0.9**
comp=Z,4.4nm,0.5s
**TAM Tamanrasset 71.21 286** *e*P **P** **20 22 34.2 +0.2**
TAM pmax pmax
comp=Z,7.0nm,0.7s
**TAM Tamanrasset 71.21 286** *e*P **P** **20 22 34.2 +0.2**
comp=Z,6.5nm,0.7s
**ES19 SONSECA Array 72.06 306** *e*P **P** **20 22 39.3 +0.5**
**ESDC Sonseca Array 72.12 306** P **P** **20 22 39.4 +0.3**
comp=Z,6.1nm,0.7s,baz=60,slow=5.8,SNR=48
**SUMG Summit 72.21 345** *i*P **P** **20 22 40.5 +1.0**
SUMG pmax pmax
comp=Z,7.0nm,0.8s
**SUMG Summit 72.21 345** *i*P **P** **20 22 40.5 +1.0**
comp=Z,7.1nm,0.8s
**PAB San Pablo 72.44 306** *e*P **P** **20 22 40.5 -0.6**
PAB pmax pmax
comp=Z,6.0nm,0.8s
**PAB San Pablo 72.44 306** *e*P **P** **20 22 40.5 -0.6**
comp=Z,6.2nm,0.8s
**MVO Moncorvo 73.69 308** *e*P **P** **20 22 49.0 +0.6**
comp=Z,20nm,1.6s
**POLO Lamas de Olo 74.13 309** *e*P **P** **20 22 51.4 +0.4**
comp=Z,9.3nm,1.5s
**MTE Manteigas 74.35 308** *e*P **P** **20 22 53.3 +1.0**
comp=Z,25nm,2.5s
**PVIS Viseu 74.47 308** *e*P **P** **20 22 53.8 +0.9**
comp=Z,14nm,1.3s
**PCBR Castelo Branco 74.54 307** *e*P **P** **20 22 54.0 +0.7**
comp=Z,7.2nm,0.6s
**PMRV Marv??o 74.65 307** *e*P **P** **20 22 54.4 +0.4**
comp=Z,9.4nm,1.4s

**PTO Porto 74.78 309** *e*P **P** **20 22 55.3 +0.7**
comp=Z,32nm,1.6s
**PBAR Barrancos 74.92 305** *e*P **P** **20 22 56.0 +0.5**
comp=Z,23nm,1.5s
**PTOM Tomar 75.28 307** *e*P **P** **20 22 58.5 +0.9**
comp=Z,23nm,1.1s
**EVO Evora 75.46 306** *e*P **P** **20 22 59.4 +0.8**
comp=Z,9.7nm,2.2s
**PBEJ Beja 75.57 306** *e*P **P** **20 22 59.9 +0.6**
comp=Z,14nm,1.5s
**PVAQ Vaqueiros 75.72 305** *e*P **P** **20 23 00.7 +0.5**
comp=Z,17nm,0.7s
**PCVE Castro Verde 75.86 305** *e*P **P** **20 23 00.8 -0.1**
comp=Z,15nm,1.7s
**MESJ Messejana 75.90 305** *e*P **P** **20 23 02.0 +0.8**
comp=Z,17nm,1.8s
**PBDV Barranco-do-Ve 75.95 305** *e*P **P** **20 23 02.4 +0.9**
comp=Z,24nm,1.2s
**PNCL Nicolau / Gran 76.01 306** *e*P **P** **20 23 02.7 +1.0**
comp=Z,15nm,2.1s
**PMAFR Mafra 76.18 307** *e*P **P** **20 23 03.3 +0.6**
comp=Z,72nm,1.9s
**MDM Murphy Dome 77.85 21** *e*P **P** **20 23 12.8 +1.2**
**ILAR Eielson Array 78.39 20** P **P** **20 23 14.5 -0.1**
comp=Z,2.3nm,0.5s,baz=312,slow=4.6,SNR=26
ILAR PP **PP** **20 26 11.6 -0.1**
comp=Z,1.3nm,0.8s,baz=308,slow=7.1,SNR=5.7
**ILAR Eielson Array 78.39 20** P **P** **20 23 14.5 -0.1**
ILAR 20 26 11.6
ILAR pmax pmax
comp=Z,2.0nm,0.5s
ILAR pmax pmax
comp=Z,1.0nm,0.8s
**LBTB Lobatse 78.60 233** *e*P **P** **20 23 16.9 +0.4**
**LBTB Lobatse 78.60 233** *e*P **P** **20 23 16.9 +0.4**
**TOA0 Torodi Ar. Sit 78.61 279** *e*P **P** **20 23 16.5 -0.2**
**TOA0 Torodi Ar. Sit 78.61 279** *e*P **P** **20 23 16.9 +0.2**
**TORD Torodi Ar. Bea 78.61 279** P **P** **20 23 17.0 +0.3**
comp=Z,5.4nm,0.5s,baz=58,slow=4.4,SNR=172
TORD pP pP 20 23 38.4 +6.5
comp=Z,2.2nm,0.7s,baz=39,slow=4.5,SNR=3.8
**HDA Harding Lake 78.63 21** *e*P **P** **20 23 15.7 -0.2**
**BOSA Boshof 81.10 231** P **P** **20 23 29.3 -0.6**
comp=Z,5.3nm,0.6s,baz=36,slow=3.4,SNR=17
**BOSA Boshof 81.10 231** P **P** **20 23 29.3 -0.6**
BOSA pmax pmax
comp=Z,5.0nm,0.6s
**KDAK Kodiak Island 81.12 27** *i*P **P** **20 23 30.1 +0.6**
**DBIC Dimbokro 87.32 276** P **P** **20 24 02.4 +0.6**
comp=Z,4.6nm,0.4s,baz=44,slow=5.8,SNR=23
**DBIC Dimbokro 87.32 276** P **P** **20 24 02.4 +0.6**
DBIC pmax pmax
comp=Z,5.0nm,0.4s
**KIC Kosan Boka 87.36 276** *e*P **P** **20 24 02.8 +0.8**
comp=Z,48nm,1.2s
**TIC Toumodi 87.47 276** *e*P **P** **20 24 03.3 +0.8**
**YKA Yellowknife Ar 87.77 9** P **P** **20 24 03.3 +0.3**
comp=Z,0.8nm,0.6s,baz=339,slow=5.0,SNR=2.7
**YKA Yellowknife Ar 87.77 9** P **P** **20 24 03.3 +0.3**
YKA pmax pmax
comp=Z,1.0nm,0.6s
**TXAR Lajitas Array 121.70 10** PKP **PKPdf** **20 30 09.1 +0.5**
comp=Z,0.2nm,0.4s,baz=228,slow=0.6,SNR=5.6
**CPUP Villa Florida 147.18 265** PKPbc **PKPdf** **20 30 56.2 +0.8**
comp=Z,3.1nm,0.7s,baz=32,slow=3.4,SNR=8.1
**CPUP Villa Florida 147.18 265** PKP2 **PKPdf** **20 30 56.3 +0.8**
CPUP pmax pmax
comp=Z,3.0nm,0.7s
**LPAZ La Paz 152.94 291** PKPbc **PKPbc** **20 31 11.5 -1.3**
comp=Z,1.3nm,0.4s,baz=127,slow=1.6,SNR=8.0
**LPAZ La Paz 152.94 291** PKIKP **PKPbc** **20 31 11.5 -1.3**
LPAZ pmax pmax
comp=Z,1.0nm,0.4s

*ISCJB **17** 20:28:20.6±0.5, 43.˚53S±0.˚04×172.˚52E±0.˚05, h26km±3km, mb3.5/2, MS3.0/1, Error ellipse: s-maj=8.1km s-min=4.3km az=141.8*
*WEL **17** 20:28:22.0±0.1, 43.˚60S×172.˚40E, h8km±1km, ML4.5/33, Error ellipse: s-maj=1.1km s-min=1.0km az=0.0*
*WEL Felt in the Canterbury region, maximum reported intensity MM 6.*
*IDC **17** 20:28:22.4±1.4, 43.˚11S×172.˚12E, h0km, mb3.6/2, mb1 3.8/3, mb1mx3.6/14, mbtmp3.6/3, ML3.7/1, MS3.0/3, Ms1 3.0/3, ms1mx2.8/12, Error ellipse: s-maj=40.0km s-min=12.1km az=136.0*
*NEIC **17** 20:28:22.0, 43.˚62S×172.˚41E, h8km, ML4.4(WEL), After WEL.*
*NEIC Felt in the Christchurch area.*

**ISC 17 20:28:21.4±0.8, 43.˚50S±0.˚03×172.˚48E±0.˚03, h17km±5km, n56, σ1°24/40, 1C-2D, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.13** | **126** | | PG | **Pb** | **20 28 25.5** | **+0.1** |
| CRLZ | | | | | SG | **Sg** | **20 28 28.0** | **+0.1** |
| CRLZ | | | | | AML | AML | 20 28 28.3 | |
| CRLZ | | | | | AML | AML | 20 28 28.3 | |
| CRLZ | | | | | AML | AML | 20 28 28.4 | |
| **CRLZ** | **Canterbury Las** | **0.13** | **126** | | Sg | **Sg** | **20 28 28.0** | **+0.1** |
| **MQZ** | **McQueen's Vall** | **0.24** | **148** | ⇓*P*G | | **Pg** | **20 28 26.8** | **-0.1** |
| MQZ | | | | | AML | AML | 20 28 30.5 | |
| MQZ | | | | | AML | AML | 20 28 30.8 | |
| **MQZ** | **McQueen's Vall** | **0.24** | **148** | *e*Pg | | **Pg** | **20 28 26.9** | **-0.1** |
| **OXZ** | **Oxford** | **0.36** | **298** | ⇑PG | | **Pg** | **20 28 29.0** | **+0.1** |
| OXZ | | | | | SG | **Sg** | **20 28 34.2** | **+0.1** |
| **OXZ** | **Oxford** | **0.36** | **298** | *e*Pg | | **Pg** | **20 28 29.0** | **+0.1** |
| OXZ | | | | | Sg | **Sg** | **20 28 34.2** | **+0.1** |
| **LTZ** | **Lake Taylor** | **0.73** | **348** | P* | | **Pn** | **20 28 37.4** | **+0.4** |
| LTZ | | | | | AML | AML | 20 28 48.9 | |
| LTZ | | | | | AML | AML | 20 28 49.3 | |
| **RPZ** | **Rata Peaks** | **1.05** | **258** | P* | | **Pb** | **20 28 40.8** | **-0.4** |
| RPZ | | | | | AML | AML | 20 28 58.4 | |
| RPZ | | | | | AML | AML | 20 29 00.0 | |
| **RPZ** | **Rata Peaks** | **1.05** | **258** | Pg | | **Pb** | **20 28 40.8** | **-0.4** |
| | 846nm,0.3s,baz=133,slow=2.8,SNR=1099 | | | | | | | |
| RPZ | | | | Lg | | Lg | 20 28 55.2 | |
| | 1µm,0.3s,baz=12,slow=20,SNR=16 | | | | | | | |
| **RPZ** | **Rata Peaks** | **1.05** | **258** | *e*Pg | | **Pb** | **20 28 40.9** | **-0.3** |
| RPZ | | | | *e*Sg | | **Sb** | **20 28 53.8** | **-1.0** |
| **KHZ** | **Kahutara** | **1.33** | **36** | ⇓PN | | **Pb** | **20 28 45.9** | **+0.1** |
| KHZ | | | | | AML | AML | 20 29 13.2 | |
| KHZ | | | | | AML | AML | 20 29 18.9 | |
| **KHZ** | **Kahutara** | **1.33** | **36** | *e*Pn | | **Pb** | **20 28 46.0** | **+0.1** |
| KHZ | | | | *e*Sn | | **Sn** | **20 29 00.5** | **-2.0** |
| **WVZ** | **Waitaha Valley** | **1.34** | **288** | PN | | **Pn** | **20 28 45.2** | **0.0** |
| WVZ | | | | | AML | AML | 20 29 10.2 | |
| WVZ | | | | | AML | AML | 20 29 11.3 | |
| **DSZ** | **Denniston Nort** | **1.82** | **344** | | AML | AML | 20 29 24.6 | |
| DSZ | | | | | AML | AML | 20 29 24.6 | |
| DSZ | | | | | AML | AML | 20 29 24.7 | |
| DSZ | | | | | AML | AML | 20 29 25.5 | |
| **LBZ** | **Lake Benmore** | **1.88** | **241** | PN | | **Pn** | **20 28 52.0** | **-0.7** |
| LBZ | | | | | AML | AML | 20 29 26.8 | |
| LBZ | | | | | AML | AML | 20 29 26.8 | |
| LBZ | | | | | AML | AML | 20 29 27.9 | |
| LBZ | | | | | AML | AML | 20 29 27.9 | |
| **FOZ** | **Fox Glacier** | **2.03** | **267** | | AML | AML | 20 29 32.2 | |
| FOZ | | | | | AML | AML | 20 29 32.2 | |
| FOZ | | | | | AML | AML | 20 29 33.9 | |
| FOZ | | | | | AML | AML | 20 29 33.9 | |
| **ODZ** | **Otahua Downs** | **2.03** | **220** | | AML | AML | 20 29 32.4 | |
| ODZ | | | | | AML | AML | 20 29 32.4 | |
| ODZ | | | | | AML | AML | 20 29 32.6 | |
| ODZ | | | | | AML | AML | 20 29 32.6 | |
| **ODZ** | **Otahua Downs** | **2.03** | **220** | *e*Pn | | **Pn** | **20 28 53.8** | **-1.0** |
| ODZ | | | | *e*Sn | | **Sn** | **20 29 20.0** | **+0.2** |
| **BSWZ** | **Blackbirch Sta** | **2.06** | **31** | | AML | AML | 20 29 40.5 | |
| BSWZ | | | | | AML | AML | 20 29 42.2 | |
| **TUWZ** | **Tuamarina** | **2.33** | **28** | | AML | AML | 20 29 39.3 | |
| **NNZ** | **Nelson** | **2.38** | **17** | | AML | AML | 20 29 38.5 | |
| NNZ | | | | | AML | AML | 20 29 38.5 | |
| NNZ | | | | | AML | AML | 20 29 51.3 | |
| NNZ | | | | | AML | AML | 20 29 51.4 | |
| **TCW** | **Tory Channel** | **2.65** | **31** | | AML | AML | 20 29 49.8 | |
| TCW | | | | | AML | AML | 20 29 55.7 | |
| **QRZ** | **Quartz Range** | **2.67** | **1** | | AML | AML | 20 29 50.2 | |
| QRZ | | | | | AML | AML | 20 29 50.2 | |
| QRZ | | | | | AML | AML | 20 29 52.7 | |
| QRZ | | | | | AML | AML | 20 29 52.7 | |
| **BHW** | **Baring Head** | **2.74** | **41** | | AML | AML | 20 29 43.1 | |
| BHW | | | | | AML | AML | 20 30 17.2 | |
| **SNZO** | **South Karori** | **2.74** | **38** | *e*Pn | | **Pn** | **20 29 04.7** | **+0.2** |
| SNZO | | | | *e*Sn | | **Sn** | **20 29 35.4** | **-1.9** |
| **JCZ** | **Jackson Bay** | **2.75** | **257** | AML | | AML | 20 29 50.8 | |
| JCZ | | | | AML | | AML | 20 29 57.6 | |
| **WKZ** | **Wanaka** | **2.82** | **241** | AML | | AML | 20 29 56.6 | |
| WKZ | | | | AML | | AML | 20 29 56.6 | |
| WKZ | | | | AML | | AML | 20 30 03.4 | |
| WKZ | | | | AML | | AML | 20 30 03.4 | |
| **WKZ** | **Wanaka** | **2.82** | **241** | *e*Pn | | **Pn** | **20 29 05.2** | **-0.5** |
| **EAZ** | **Earnscleugh** | **2.86** | **232** | AML | | AML | 20 29 50.8 | |
| EAZ | | | | AML | | AML | 20 29 50.9 | |
| EAZ | | | | AML | | AML | 20 29 57.0 | |
| EAZ | | | | AML | | AML | 20 29 57.0 | |
| **DUWZ** | **D'Urville Isla** | **2.90** | **22** | AML | | AML | 20 30 11.3 | |
| DUWZ | | | | AML | | AML | 20 30 11.9 | |
| **MSWZ** | **Moikau Station** | **2.92** | **46** | AML | | AML | 20 29 45.9 | |
| MSWZ | | | | AML | | AML | 20 29 46.6 | |
| **CAW** | **Cannon Point** | **3.07** | **40** | AML | | AML | 20 29 50.9 | |
| **TRWZ** | **Traveller** | **3.17** | **50** | AML | | AML | 20 29 52.1 | |
| **TUZ** | **Tuapeka** | **3.18** | **219** | AML | | AML | 20 30 06.0 | |
| TUZ | | | | AML | | AML | 20 30 10.4 | |
| TUZ | | | | AML | | AML | 20 30 10.4 | |
| TUZ | | | | AML | | AML | 20 30 11.4 | |
| **KIW** | **Kapiti Island** | **3.20** | **35** | AML | | AML | 20 29 51.6 | |
| KIW | | | | AML | | AML | 20 29 56.9 | |
| **MSZ** | **Milford Sound** | **3.48** | **249** | AML | | AML | 20 30 13.4 | |
| MSZ | | | | AML | | AML | 20 30 21.7 | |
| **MLZ** | **Mavora Lakes** | **3.59** | **238** | AML | | AML | 20 30 21.0 | |
| MLZ | | | | AML | | AML | 20 30 22.8 | |
| **SYZ** | **Scrubby Hill** | **3.85** | **217** | AML | | AML | 20 29 38.4 | |
| SYZ | | | | AML | | AML | 20 30 23.1 | |
| SYZ | | | | AML | | AML | 20 30 30.9 | |
| SYZ | | | | AML | | AML | 20 30 44.0 | |
| **BFZ** | **Birch Farm** | **3.98** | **46** | *e*Pn | | **Pn** | **20 29 20.2** | **-1.4** |
| BFZ | | | | *e*Sg | | **Sb** | **20 30 19.5** | **+0.7** |
| **WHZ** | **Wether Hill Ro** | **4.02** | **232** | AML | | AML | 20 30 37.6 | |
| WHZ | | | | AML | | AML | 20 30 41.3 | |
| **WHZ** | **Wether Hill Ro** | **4.02** | **232** | *e*Pn | | **Pn** | **20 29 20.3** | **-1.9** |
| WHZ | | | | *e*Sn | | **Sn** | **20 30 08.1** | **-0.7** |
| **DCZ** | **Deep Cove** | **4.29** | **241** | AML | | AML | 20 30 39.6 | |
| DCZ | | | | AML | | AML | 20 30 51.9 | |
| **DCZ** | **Deep Cove** | **4.29** | **241** | *e*Pn | | **Pn** | **20 29 24.5** | **-1.4** |
| **APZ** | **The Paps** | **4.60** | **222** | AML | | AML | 20 30 56.1 | |
| APZ | | | | AML | | AML | 20 31 06.2 | |
| **VRZ** | **Vera Road** | **4.70** | **22** | AML | | AML | 20 30 44.8 | |
| VRZ | | | | AML | | AML | 20 30 56.0 | |
| **BKZ** | **Black Stump Fm** | **5.28** | **36** | *e*Pn | | **Pn** | **20 29 40.1** | **+0.6** |
| **HIZ** | **Hauiti** | **5.29** | **21** | AML | | AML | 20 30 51.1 | |
| HIZ | | | | AML | | AML | 20 34 55.6 | |
| **HIZ** | **Hauiti** | **5.29** | **21** | *e*Pn | | **Pn** | **20 29 40.4** | **+0.7** |
| **URZ** | **Urewera** | **6.30** | **35** | Pn | | **Pn** | **20 29 53.3** | **-0.2** |
| | 1.7nm,0.3s,baz=228,slow=5.0,SNR=1.9 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **20 31 00.5** | **-4.5** |
| | 4.6nm,0.3s,baz=73,slow=15,SNR=6.9 | | | | | | | |
| URZ | | | | LR | | LR | 20 32 44.1 | |
| | comp=Z,170nm,20.1s,baz=208,slow=43 | | | | | | | |
| **URZ** | **Urewera** | **6.30** | **35** | *e*Pn | | Pn | 20 29 50.0 | -3.5 |
| URZ | | | | *e*Sn | | **Sn** | **20 31 02.7** | **-2.4** |
| **RAO** | **Raoul Island** | **16.17** | **32** | LR | | LR | 20 37 34.4 | |
| | comp=Z,40nm,21.2s,baz=53,slow=35 | | | | | | | |
| **ASAR** | **Alice Springs** | **37.30** | **289** | P | | **P** | **20 35 33.1** | **+0.4** |
| | 0.6nm,0.8s,baz=143,slow=9.3,SNR=4.5 | | | | | | | |
| ASAR | | | | LR | | LR | 20 48 05.1 | |
| | comp=Z,29nm,21.8s,baz=343,slow=32 | | | | | | | |
| **WRA** | **Warramunga Arr** | **39.55** | **294** | P | | **P** | **20 35 52.2** | **+0.6** |
| | 0.7nm,0.7s,baz=133,slow=7.8,SNR=12 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.73** | **197** | PKP | | **PKPbc** | **20 48 09.0** | **+1.0** |
| | 0.5nm,0.6s,baz=172,slow=1.1,SNR=3.0 | | | | | | | |
| TORD | | | | PKPbc | | **PKPab** | **20 48 12.6** | **+0.9** |
| | 0.6nm,0.6s,baz=158,slow=1.8,SNR=10.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **148.94** | **338** | PKPbc | | **PKPbc** | **20 48 08.5** | **+1.5** |
| | 1.9nm,0.9s,baz=66,slow=2.9,SNR=4.0 | | | | | | | |
| **BRTR** | **Keskin Array B** | **149.22** | **277** | PKPbc | | **PKPbc** | **20 48 10.9** | **+2.1** |
| | 0.3nm,0.5s,baz=151,slow=3.8,SNR=2.7 | | | | | | | |

**KLM 17 20:37:06.1, 4.˚35N×118.˚13E, h6km, mb3.8, ML3.4, 5C, Borneo**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TSM** | **Tawau** | **0.26** | **257** | ⇑P | | Pg | 20 37 11.2 | 0.0 |
| **TSM** | **Tawau** | **0.26** | **257** | ⇑S | | Sg | 20 37 15.0 | +0.2 |
| **MYLDM** | **Lahad Datu** | **0.90** | **24** | ⇑P | | Pg | 20 37 23.7 | +0.3 |
| **SDKM** | **Sandakan** | **1.58** | **324** | ⇑P | | Pn | 20 37 34.1 | -0.7 |
| **KKM** | **Kota Kinabalu** | **2.54** | **311** | ⇑P | | Pn | 20 37 48.3 | +0.2 |

*IDC **17** 20:59:37.0±1.3, 5.˚34S×152.˚95E, h0km, mb3.6/5, mb1 3.8/6, mb1mx3.6/30, mbtmp3.7/6, ML1.8/1, Error ellipse: s-maj=52.5km s-min=22.4km az=124.0*
*ISCJB **17** 20:59:41.1±1.5, 5.˚4S±0.˚3×152.˚9E±0.˚3, h37km, mb3.5/5, Error ellipse: s-maj=53.3km s-min=11.6km az=41.9*

**ISC 17 20:59:42.6±1.3, 5.˚4S±0.˚2×153.˚0E±0.˚3, h37km, n8, σ0°46/9, mb3.6/5, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **7.00** | **235** | Pn | | **Pn** | **21 01 22.8** | **+0.2** |
| | 0.9nm,0.3s,baz=80,slow=11,SNR=2.6 | | | | | | | |
| PMG | | | | Sn | | **Sn** | **21 02 41.0** | **0.0** |
| | 4.3nm,0.3s,baz=101,slow=23,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.18** | **230** | P | | **P** | **21 04 45.7** | **-0.5** |
| | 1.3nm,0.8s,baz=55,slow=10,SNR=7.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.83** | **223** | P | | **P** | **21 05 10.4** | **-0.3** |
| | 0.8nm,0.8s,baz=55,slow=8.5,SNR=9.5 | | | | | | | |
| **SONM** | **Songino Array** | **66.88** | **328** | P | | **P** | **21 10 31.6** | **+0.5** |
| | 0.3nm,0.5s,baz=155,slow=5.0,SNR=4.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.71** | **326** | P | | **P** | **21 11 56.7** | **-0.4** |
| | 0.4nm,0.4s,baz=104,slow=6.1,SNR=2.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.63** | **22** | P | | **P** | **21 12 01.4** | **-0.4** |
| | 0.5nm,0.8s,baz=228,slow=5.3,SNR=3.0 | | | | | | | |
| **BDFB** | **Brasilia** | **150.56** | **135** | PKPbc | | **PKPbc** | **21 19 32.3** | **+0.6** |
| | 1.9nm,0.7s,baz=198,slow=3.2,SNR=3.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.62** | **287** | PKPbc | | **PKPbc** | **21 19 31.7** | **0.0** |
| | 0.9nm,0.7s,baz=76,slow=1.8,SNR=9.3 | | | | | | | |

*NEIC **17** 21:01:02.6±0.7, 20.˚57S×173.˚90W, h10km, mb4.5/1, Error ellipse: s-maj=29.5km s-min=11.7km az=166.0*
*IDC **17** 21:01:02.2±0.7, 20.˚24S×173.˚99W, h0km, mb4.1/10, mb1 4.3/11, mb1mx4.2/29, mbtmp4.1/11, ML4.3/1, MS3.3/2, Ms1 3.3/2, ms1mx2.8/30, Error ellipse: s-maj=28.0km s-min=19.4km az=141.0*
*ISCJB **17** 21:01:04.6±0.7, 19.˚94S±0.˚09×174.˚0W±0.˚1, h31km, mb4.2/11, MS3.2/1, Error ellipse: s-maj=17.9km s-min=8.8km az=35.1*

**ISC 17 21:01:06.5±0.7, 20.˚04S±0.˚09×173.˚9W±0.˚1, h31km, n24, σ1°55/24, mb4.2/11, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.42** | **19** | Pn | | **Pn** | **21 02 37.2** | **-1.9** |
| | 5.4nm,0.3s,baz=210,slow=18,SNR=6.4 | | | | | | | |
| AFI | | | | Sn | | **Sn** | **21 03 50.0** | **-1.5** |
| | 6.4nm,0.3s,baz=352,slow=23,SNR=3.9 | | | | | | | |
| **AFI** | **Afiamalu** | **6.42** | **19** | *e*Pn | | **Pn** | **21 02 36.7** | **-2.5** |
| AFI | | | | Sn | | **Sn** | **21 03 50.0** | **-1.5** |
| **MSVF** | **Nonsavu** | **7.95** | **285** | Pn | | **Pn** | **21 03 00.7** | **+0.6** |
| | 40nm,1.3s | | | | | | | |
| **RAR** | **Rarotonga** | **13.28** | **98** | LR | | LR | 21 09 37.4 | |
| | comp=Z,116nm,18.2s,baz=296,slow=39 | | | | | | | |
| **URZ** | **Urewera** | **19.76** | **201** | P | | **P** | **21 05 31.0** | **-3.0** |
| | 0.9nm,0.3s,baz=4.8,slow=12,SNR=4.2 | | | | | | | |
| **TBI** | **Tubuai** | **22.94** | **103** | eLR | | LR | 21 11 18.3 | |
| | 135nm,33.5s | | | | | | | |
| **PPT2** | **Papeete2** | **23.15** | **88** | eLR | | LR | 21 11 32.5 | |
| | 77nm,21.8s | | | | | | | |
| **PPT** | **Papeete** | **23.16** | **88** | LR | | LR | 21 13 20.7 | |
| | comp=Z,89nm,19.5s,baz=182,

16nm,0.9s,baz=90,slow=10,SNR=12
**VNDA Vanda 58.74 186** P **P** 21 11 00.5 -0.5
1.2nm,1.0s,baz=22,slow=7.4,SNR=4.2
**MJAR Matsushiro Arr 72.19 321** P **P** 21 12 30.2 +1.6
1.5nm,0.7s,baz=156,slow=5.8
**NVAR Mina Array Bea 78.09 41** P **P** 21 13 04.3 +1.5
1.3nm,0.8s,baz=224,slow=8.1,SNR=7.2
**MAW Mawson 83.27 199** P **P** 21 13 29.5 -0.3
1.6nm,0.8s,baz=114,slow=7.9,SNR=4.4
**TXAR Lajitas Array 83.59 56** P **P** 21 13 33.4 +1.2
0.6nm,0.9s,baz=238,slow=5.2,SNR=5.3
**ILAR Eielson Array 87.06 11** P **P** 21 13 50.2 +1.6
0.3nm,0.5s,baz=231,slow=5.5,SNR=6.1
**ARCES ARCESS Array B 129.10 351** PKP **PKPdf** 21 20 12.1 +1.3
0.9nm,0.8s,baz=15,slow=3.7,SNR=4.6
**AKASG Malin Array Be 144.36 335** PKP **PKPdf** 21 20 38.8 -0.6
2.0nm,0.6s,baz=39,slow=4.3,SNR=9.0
**CLL Collm 148.32 352** *i* PKPbc **PKPab** 21 20 53.9 +1.2
comp=Z,4.0nm,0.8s
**BRTR Keskin Array B 149.29 316** PKPbc **PKPbc** 21 20 53.1 +0.5
comp=Z,0.4nm,0.5s,baz=30,slow=3.5,SNR=3.4
**GERES GERESS Array B 150.62 350** PKPbc **PKPbc** 21 20 55.7 +0.2
comp=Z,0.5nm,0.8s,baz=358,slow=2.9,SNR=2.5

*DDA* ***17*** *21:10:21.7, 40.55N×36.92E, h13km, Md3.0*
*CSEM* ***17*** *21:10:22.4±0.2, 40.54N×36.93E, h2km, MD2.9, Error ellipse: s-maj=5.2km s-min=3.1km az=7.0*
*ISK* ***17*** *21:10:22.5, 40.47N×36.93E, h6km, MD2.9*
**ISC 17 21:10:22.1**±1.1**, 40.55N**±0.03×**36.93E**±0.02**, h4**km±10**km, n32,** σ**0 62/50, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RSDY** | **Resadiye-TOKAT** | **0.34** | **116** | *e*PG | | **Pg** | **21 10 29.1** | **+0.3** |
| RSDY | | | | *e*SG | | **Sg** | **21 10 33.9** | **+0.7** |
| **RSDY** | **Resadiye-TOKAT** | **0.34** | **116** | *e*Pg | | **Pg** | **21 10 29.1** | **+0.3** |
| RSDY | | | | *e*Sg | | **Sg** | **21 10 33.9** | **+0.7** |
| **TOKT** | **Tokat** | **0.37** | **232** | *e*PG | | **Pg** | **21 10 29.6** | **+0.3** |
| TOKT | | | | *e*SG | | **Sg** | **21 10 34.1** | **0.0** |
| **TOKT** | **Tokat** | **0.37** | **232** | *e*Pg | | **Pg** | **21 10 29.6** | **+0.3** |
| TOKT | | | | *e*Sg | | **Sg** | **21 10 34.1** | **0.0** |
| **TOKA** | **Tokat** | **0.41** | **237** | *i* P | | **Pg** | **21 10 30.1** | **+0.1** |
| TOKA | | | | *i* S | | **Sg** | **21 10 36.3** | **+0.9** |
| **TOKA** | **Tokat** | **0.41** | **237** | P | | **Pg** | **21 10 30.1** | **+0.1** |
| TOKA | | | | S | | **Sg** | **21 10 36.3** | **+0.9** |
| **SVSK** | **Karacayir** | **0.63** | **175** | *e*PG | | **Pg** | **21 10 33.9** | **-0.4** |
| **SVSK** | **Karacayir** | **0.63** | **175** | *e*Pg | | **Pg** | **21 10 33.9** | **-0.4** |
| **SCER** | **sogukcermik** | **0.70** | **167** | *i* P | | **Pg** | **21 10 35.6** | **-0.1** |
| SCER | | | | *i* S | | **Sb** | **21 10 46.7** | **-0.5** |
| **SCER** | **sogukcermik** | **0.70** | **167** | P | | **Pg** | **21 10 35.6** | **-0.1** |
| SCER | | | | S | | **Sb** | **21 10 46.7** | **-0.5** |
| **CUZAR** | **Zara_SIVAS** | **0.92** | **135** | P | | **Pg** | **21 10 39.6** | **-0.3** |
| CUZAR | | | | S | | **Sb** | **21 10 53.1** | **-0.4** |
| **SUSE** | **Susehri** | **1.03** | **109** | *i* P | | **Pg** | **21 10 41.5** | **-0.5** |
| SUSE | | | | *i* S | | **Sg** | **21 10 54.5** | **-0.8** |
| **SUSE** | **Susehri** | **1.03** | **109** | P | | **Pg** | **21 10 41.5** | **-0.5** |
| SUSE | | | | S | | **Sg** | **21 10 54.5** | **-0.8** |
| **HAVZ** | **Havza** | **1.06** | **300** | *i* P | | **Pg** | **21 10 41.5** | **-0.9** |
| HAVZ | | | | *i* S | | **Sg** | **21 10 55.8** | **-0.3** |
| **HAVZ** | **Havza** | **1.06** | **300** | P | | **Pg** | **21 10 41.5** | **-0.9** |
| HAVZ | | | | S | | **Sg** | **21 10 55.9** | **-0.3** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.25** | **205** | P | | **Pg** | **21 10 44.3** | **-1.7** |
| CUSAR | | | | S | | **Sn** | **21 11 04.0** | **+0.3** |
| **CUALT** | **Altinyayla-SIV** | **1.28** | **186** | P | | **Pg** | **21 10 46.6** | **-0.1** |
| CUALT | | | | S | | **Sn** | **21 11 05.3** | **+0.6** |
| **CUKAN** | **kangal_SIVAS** | **1.30** | **161** | P | | **Pg** | **21 10 46.2** | **-0.8** |
| CUKAN | | | | S | | **Sg** | **21 11 03.2** | **-0.7** |
| **ESPY** | **Espiye-Giresun** | **1.42** | **74** | *e*PN | | **Pn** | **21 10 48.9** | **+0.2** |
| **ESPY** | **Espiye-Giresun** | **1.42** | **74** | *e*Pn | | **Pn** | **21 10 48.9** | **+0.2** |
| **YOZ** | **Yozgat** | **1.53** | **234** | *e*PN | | **Pn** | **21 10 50.6** | **+0.2** |
| **YOZ** | **Yozgat** | **1.53** | **234** | *e*Pn | | **Pn** | **21 10 50.6** | **+0.2** |
| **DIKM** | **Dikmen** | **1.67** | **312** | *e*PN | | **Pg** | **21 10 54.2** | **0.0** |
| **DIKM** | **Dikmen** | **1.67** | **312** | *e*Pn | | **Pg** | **21 10 54.2** | **0.0** |
| **CORM** | **Corum** | **1.79** | **259** | *e*PN | | **Pn** | **21 10 54.8** | **+0.8** |
| **CORM** | **Corum** | **1.79** | **259** | *e*Pn | | **Pn** | **21 10 54.8** | **+0.8** |
| **KELT** | **Kelkit** | **1.82** | **102** | *i* P | | **Pb** | **21 10 55.8** | **-0.4** |
| KELT | | | | *i* S | | **Sn** | **21 11 18.7** | **+0.6** |
| **KELT** | **Kelkit** | **1.82** | **102** | P | | **Pb** | **21 10 55.8** | **-0.4** |
| KELT | | | | S | | **Sn** | **21 11 18.7** | **+0.6** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **2.46** | **93** | *e*PN | | **Pn** | **21 11 04.3** | **+1.2** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **2.46** | **93** | *e*Pn | | **Pn** | **21 11 04.3** | **+1.2** |
| **PTK** | **Pertek** | **2.52** | **130** | *e*PN | | **Pn** | **21 11 04.6** | **+0.5** |
| **PTK** | **Pertek** | **2.52** | **130** | *e*Pn | | **Pn** | **21 11 04.6** | **+0.5** |

*ISCJB* ***17*** *21:19:24.8±0.7, 24.76N×0.04×122.58E±0.02, h11km±5km, Error ellipse: s-maj=6.4km s-min=3.1km az=9.8*
*TAP* ***17*** *21:19:25.6, 24.71N×122.53E, h2km, ML2.9, D*
*JMA* ***17*** *21:19:25.3±0.1, 24.67N×122.55E, h28km±3km, M2.2*
**ISC 17 21:19:24.9**±1.0**, 24.70N**±0.04×**122.55E**±0.02**, h17**km±8**km, n28,** σ**0 57/50, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.44** | **124** | P | | **Pb** | **21 19 34.3** | **+0.1** |
| JYNG | | | | S | | **Sg** | **21 19 40.2** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **0.48** | **119** | P | | **Pg** | **21 19 35.0** | **+0.3** |
| YOJ | | | | S | | **Sg** | **21 19 41.6** | **+0.3** |
| **TWB1** | **Santiao Chiao** | **0.59** | **301** | P | | **Pg** | **21 19 36.6** | **-0.1** |
| | baz=301 | | | | | | | |
| TWB1 | | | | *i* S | | **Sg** | **21 19 44.5** | **-0.1** |
| | baz=301 | | | | | | | |
| **TWC** | **Suao** | **0.64** | **262** | P | | **Pg** | **21 19 37.0** | **-0.6** |
| | baz=260 | | | | | | | |
| TWC | | | | *i* S | | **Sb** | **21 19 46.4** | **0.0** |
| | baz=260 | | | | | | | |
| **ENA** | **Nanau** | **0.78** | **250** | *i* P | | **Pb** | **21 19 40.2** | **+0.2** |
| | baz=248 | | | | | | | |
| ENA | | | | *i* S | | **Sb** | **21 19 50.6** | **+0.3** |
| | baz=248 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.79** | **298** | *i* P | | **Pb** | **21 19 40.4** | **+0.2** |
| | baz=298 | | | | | | | |
| NWF | | | | S | | **Sg** | **21 19 50.6** | **-0.2** |
| | baz=298 | | | | | | | |
| **TWE** | **Neicheng** | **0.80** | **272** | *i* P | | **Pg** | **21 19 39.9** | **-0.7** |
| | baz=270 | | | | | | | |
| TWE | | | | *i* S | | **Sb** | **21 19 51.1** | **+0.2** |
| | baz=270 | | | | | | | |
| **ENTT** | **Nioudou** | **0.89** | **266** | *i* P | | **Pb** | **21 19 42.1** | **+0.1** |
| | baz=265 | | | | | | | |
| ENTT | | | | *i* S | | **Sg** | **21 19 54.4** | **+0.3** |
| | baz=265 | | | | | | | |
| **NSK** | **Sanguang** | **1.08** | **269** | *i* P | | **Pb** | **21 19 45.4** | **+0.1** |
| | baz=268 | | | | | | | |
| NSK | | | | S | | **Sg** | **21 19 59.8** | **-0.2** |
| | baz=268 | | | | | | | |
| **NNS** | **Nan Shan** | **1.10** | **257** | *i* P | | **Pn** | **21 19 45.9** | **+0.2** |
| | baz=255 | | | | | | | |
| NNS | | | | *i* S | | **Sn** | **21 20 01.3** | **+0.8** |
| | baz=255 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.14** | **108** | S | | **Sb** | **21 20 01.3** | **+0.7** |
| **WHF** | **Hehuan Shan** | **1.29** | **245** | P | | **Pb** | **21 19 49.5** | **+0.5** |
| | baz=243 | | | | | | | |
| WHF | | | | *e*S | | **Sg** | **21 20 07.0** | **+0.2** |
| | baz=243 | | | | | | | |
| **TWT** | **Tachien** | **1.32** | **251** | P | | **Pg** | **21 19 50.7** | **+0.2** |
| | baz=249 | | | | | | | |
| TWT | | | | *e*S | | **Sg** | **21 20 08.0** | **+0.2** |
| | baz=249 | | | | | | | |
| **ESL** | **Shilin** | **1.34** | **229** | *e*S | | **Sb** | **21 20 07.6** | **+1.0** |
| | baz=228 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.41** | **268** | P | | **Pb** | **21 19 51.2** | **+0.4** |
| | baz=266 | | | | | | | |
| NSTT | | | | S | | **Sb** | **21 20 09.1** | **+0.7** |
| | baz=266 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.41** | **109** | P | | **Pn** | **21 19 49.4** | **-0.4** |
| JKRS | | | | S | | **Sn** | **21 20 07.0** | **-1.0** |
| **JIJ** | **Ishigaki jima** | **1.49** | **103** | P | | **Pn** | **21 19 50.1** | **-0.8** |
| JIJ | | | | S | | **Sn** | **21 20 10.5** | **+0.5** |
| **JISG** | **Ishigakijimahi** | **1.61** | **94** | S | | **Sb** | **21 20 14.5** | **+0.3** |
| **EHY** | **Hungye** | **1.63** | **224** | *e*S | | **Sb** | **21 20 16.4** | **+1.5** |
| | baz=222 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.65** | **258** | *e*P | | **Pb** | **21 19 54.9** | **0.0** |
| | baz=257 | | | | | | | |
| TWQ1 | | | | S | | **Sb** | **21 20 16.2** | **+0.7** |
| | baz=257 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.71** | **242** | P | | **Pb** | **21 19 56.1** | **+0.1** |
| | baz=240 | | | | | | | |
| SMLT | | | | *e*S | | **Sb** | **21 20 17.7** | **+0.5** |
| | baz=240 | | | | | | | |
| **TYC** | **Yuchr** | **1.73** | **243** | *e*P | | **Pb** | **21 19 56.4** | **+0.2** |
| | baz=242 | | | | | | | |
| TYC | | | | *e*S | | **Sb** | **21 20 17.9** | **+0.2** |
| | baz=242 | | | | | | | |
| **TWF1** | **Yuli** | **1.76** | **221** | P | | **Pb** | **21 19 56.5** | **-0.3** |
| | baz=219 | | | | | | | |
| TWF1 | | | | *e*S | | **Sb** | **21 20 20.1** | **+1.5** |
| | baz=219 | | | | | | | |
| **ALS** | **Alishan** | **1.98** | **234** | *e*P | | **Pb** | **21 19 59.9** | **-0.9** |
| | baz=232 | | | | | | | |
| ALS | | | | S | | **Sb** | **21 20 25.2** | **-0.1** |
| | baz=232 | | | | | | | |
| **CHN5** | **Tsauling** | **2.03** | **238** | P | | **Pb** | **21 20 00.9** | **-0.5** |
| | baz=236 | | | | | | | |
| CHN5 | | | | S | | **Sb** | **21 20 25.8** | **-0.6** |
| | baz=236 | | | | | | | |
| **ELDTW** | **Lidau** | **2.05** | **223** | *e*P | | **Pb** | **21 20 01.1** | **-0.8** |
| | baz=222 | | | | | | | |
| ELDTW | | | | *e*S | | **Sb** | **21 20 26.9** | **-0.2** |
| | baz=222 | | | | | | | |
| **WTP** | **Ta-pu** | **2.28** | **231** | *e*S | | **Sb** | **21 20 33.1** | **-0.6** |
| | baz=230 | | | | | | | |
| **CHN1** | **Nanshi** | **2.38** | **231** | *e*S | | **Sb** | **21 20 35.9** | **-0.7** |
| | baz=230 | | | | | | | |

*IDC* ***17*** *21:21:01.9±2.6, 6.28N×94.49E, h69km±24km, mb4.0/18, mb1 4.1/20, mb1mx3.9/38, mbtmp4.3/20, MS2.8/2, Ms1 3.0/2, ms1mx2.5/33, Error ellipse: s-maj=22.1km s-min=11.4km az=46.0*
*BJI* ***17*** *21:21:01.6, 5.91N×94.25E, h99km, mb4.3/14, mB4.9/10*
*ISCJB* ***17*** *21:21:02.1±0.6, 6.10N±0.04×94.45E±0.04, h93km±6km, mb4.3/32, Error ellipse: s-maj=8.2km s-min=4.8km az=42.3*
*NEIC* ***17*** *21:21:03.5±0.6, 6.13N×94.44E, h89km±6km, mb4.6/11, Error ellipse: s-maj=8.3km s-min=5.3km az=57.0*
*AUST* ***17*** *21:21:05.3±0.6, 6.19N×94.52E, h100km, Error ellipse: s-maj=1.5km s-min=1.0km az=42.0*
*DJA* ***17*** *21:21:07.8±0.6, 6°N±3′×9°5E±′, h132km±8km, M4.3/11, mb4.3/10, mB5.1/4, MLv4.2/11, Mw(mB)4.4/4*
**ISC 17 21:21:03.9**±0.5**, 6.08N**±0.05×**94.43E**±0.05**, h91**km±4**km, n119,** σ**1 9/30/140, mb4.4/32, 10C-3D, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LHMI** | **Lhok Sumawe** | **2.65** | **109** | P | | **Pn** | **21 21 44.7** | **0.0** |
| | baz=2.6,SNR=6.3 | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **2.65** | **109** | P | | **Pn** | **21 21 45.3** | **+0.6** |
| LHMI | | | | S | | **Sn** | **21 22 16.6** | **+0.5** |
| **LHMI** | **Lhok Sumawe** | **2.65** | **109** | *e*Pn | | **Pn** | **21 21 44.7** | **0.0** |
| LHMI | | | | *e*Sn | | **Sn** | **21 22 13.8** | **-2.2** |
| **MLSI** | **Meulaboh, Aceh** | **2.67** | **132** | P | | **Pn** | **21 21 45.0** | **0.0** |
| MLSI | | | | S | | **Sn** | **21 22 16.5** | **-0.1** |
| **KCSI** | **Kotacane, Aceh** | **4.19** | **127** | P | | **Pn** | **21 22 05.7** | **+0.1** |
| KCSI | | | | S | | **Sn** | **21 22 50.7** | **-2.8** |
| **PSI** | **Prapat** | **5.54** | **126** | P | | **Pn** | **21 22 24.8** | **+0.7** |
| | 5.6nm,0.3s,baz=329,slow=15,SNR=32 | | | | | | | |
| PSI | | | | S | | **Sn** | **21 23 27.5** | **+1.0** |
| | 2.7nm,0.3s,baz=311,slow=20,SNR=4.5 | | | | | | | |
| **PSI** | **Prapat** | **5.54** | **126** | P | | **Pn** | **21 22 25.4** | **+1.3** |
| | baz=5.6,SNR=10 | | | | | | | |
| **GSI** | **Gunungsitoli** | **5.69** | **146** | P | | **Pn** | **21 22 24.2** | **-1.8** |
| | 34nm,0.6s,0.2nm | | | | | | | |
| GSI | | | | S | | **Sn** | **21 23 28.4** | **-1.6** |
| | 34nm,0.6s,0.2nm | | | | | | | |
| **GSI** | **Gunungsitoli** | **5.69** | **146** | *e*Pn | | **Pn** | **21 22 23.8** | **-2.3** |
| GSI | | | | *e*Sn | | **Sn** | **21 23 27.2** | **-2.8** |
| **KULM** | **Kulim** | **6.24** | **97** | *e*Pn | | **Pn** | **21 22 33.0** | **-0.5** |
| KULM | | | | *e*Sn | | **Sn** | **21 23 41.2** | **-2.2** |
| **IPM** | **Ipoh** | **6.76** | **103** | *e*Pn | | **Pn** | **21 22 40.5** | **-0.1** |
| IPM | | | | *e*Sn | | **Sn** | **21 23 54.1** | **-2.0** |
| **MNSI** | **Mandailing Nat** | **7.35** | **135** | P | | **Pn** | **21 22 47.8** | **-0.8** |
| | 28nm,0.6s,867nm0.2nm | | | | | | | |
| MNSI | | | | S | | **Sn** | **21 24 08.3** | **-2.2** |
| | 28nm,0.6s,867nm0.2nm | | | | | | | |
| **MYKOM** | **Kota Tinggi** | **10.32** | **114** | *e*Pn | | **Pn** | **21 23 29.0** | **-0.1** |
| **CM01** | **Chiang Mai Arr** | **13.03** | **19** | *e*Pn | | **Pn** | **21 24 06.3** | **+0.7** |
| **CM31** | **Chiang Mai Arr** | **13.06** | **19** | P | | **Pn** | **21 24 08.2** | **+2.2** |
| | baz=13,SNR=5.4 | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **13.06** | **19** | *e*Pn | | **Pn** | **21 24 05.2** | **-0.8** |
| **CMAR** | **Chiang Mai Arr** | **13.06** | **19** | P | | **Pn** | **21 24 05.2** | **-0.8** |
| | 1.0nm,0.3s,baz=206,slow=14,SNR=35 | | | | | | | |
| CMAR | | | | LR | | LR | 21 28 31.2 | |
| | comp=Z,44nm,18.1s,baz=190,slow=35 | | | | | | | |
| **CHTO** | **Chiang Mai** | **13.40** | **19** | *e*Pn | | **Pn** | **21 24 12.2** | **+1.8** |
| **MNAI** | **Manna** | **13.42** | **140** | *e*Pn | | Pn | 21 24 05.2 | -5.6 |
| **PALK** | **Pallekele** | **13.69** | **276** | P | | **Pn** | **21 24 14.2** | **-0.1** |
| | 0.5nm,0.3s,baz=116,slow=13,SNR=6.6 | | | | | | | |
| PALK | | | | S | | Sn | 21 26 28.9 | -16 |
| | 1.2nm,0.3s,baz=116,slow=19,SNR=8.6 | | | | | | | |
| PALK | | | | LR | | LR | 21 29 04.5 | |
| | comp=Z,41nm,19.5s,baz=117,slow=35 | | | | | | | |
| **PALK** | **Pallekele** | **13.69** | **276** | *e*Pn | | **Pn** | **21 24 14.8** | **+0.6** |
| PALK | | | | *e*Sn | | Sn | 21 26 28.9 | -16 |
| **CHLP** | **Challavanipeta** | **15.96** | **322** | *e*Pn | | **Pn** | **21 24 41.7** | **-1.5** |
| **PVM** | **Polavaram** | **16.73** | **313** | *e*Pn | | **P** | **21 24 53.4** | **-0.1** |
| **ADKI** | **Addanki** | **17.18** | **306** | *e*Pn | | **P** | **21 24 59.5** | **+0.9** |
| **NJS** | **Nagarjunasagar** | **18.10** | **306** | *e*Pn | | **P** | **21 25 08.8** | **+0.1** |
| **URV** | **Uravakonda** | **19.02** | **299** | *e*Pn | | **P** | **21 25 19.7** | **+0.8** |
| **HYBB** | **Hyderabad (bro** | **19.18** | **307** | *e*Pn | | **P** | **21 25 20.8** | **+0.3** |
| **RPR** | **Rampur** | **19.46** | **312** | *e*P | | **P** | **21 25 22.8** | **-0.7** |
| **KMI** | **Kunming** | **20.54** | **22** | P | | **P** | **21 25 36.3** | **+0.9** |
| KMI | | | | PMZ | | | | |
| | 6.0nm,0.5s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | 180nm,6.7s | | | | | | | |
| **ODAN** | **Odare** | **21.72** | **343** | *e*P | | **P** | **21 25 46.7** | **-1.4** |
| | 6.0nm,0.4s | | | | | | | |
| **RAMN** | **Ramite** | **22.05** | **341** | *e*P | | **P** | **21 25 49.1** | **-2.5** |
| | 8.3nm,0.3s | | | | | | | |
| **TAPN** | **Taplejung** | **22.09** | **344** | *e*P | | **P** | **21 25 50.3** | **-1.8** |
| | 7.8nm,0.4s | | | | | | | |
| **PKI** | **Pulchoki** | **23.03** | **339** | *e*P | | **P** | **21 25 58.4** | **-3.4** |
| **PKIN** | **Phulchoki** | **23.04** | **339** | *e*P | | **P** | **21 25 58.6** | **-3.2** |
| **DMN** | **Daman** | **23.17** | **339** | *e*P | | **P** | **21 26 00.1** | **-3.0** |
| **GUN** | **Gumba** | **23.18** | **340** | *e*P | | **P** | **21 25 59.9** | **-3.3** |
| **KKN** | **Kakani** | **23.27** | **339** | *e*P | | **P** | **21 26 00.2** | **-3.8** |
| **GYA** | **Guiyang** | **23.38** | **29** | *e*P | | **P** | **21 26 04.8** | **-0.1** |
| GYA | | | | PMZ | | | | |
| | 10.0nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **23.69** | **353** | *e*P | | **P** | **21 26 07.2** | **-0.9** |
| | 3.0nm,0.8s | | | | | | | |
| **GKN** | **Gorkha** | **23.70** | **338** | *e*P | | **P** | **21 26 04.5** | **-3.3** |
| | 3.9nm,0.2s | | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.78** | **238** | T | | T | 21 53 26.5 | |
| | baz=57,slow=76,SNR=66 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.78** | **238** | T | | T | 21 53 42.1 | |
| | baz=57,slow=76,SNR=82 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.80** | **238** | T | | T | 21 53 38.5 | |
| | baz=57,slow=76,SNR=70 | | | | | | | |
| **CD2** | **Chengdu** | **26.20** | **18** | *e*P | | **P** | **21 26 31.4** | **+1.1** |
| CD2 | | | | pP | | **pP** | **21 26 51.3** | **+0.6** |
| CD2 | | | | sP | | **sP** | **21 27 02.3** | **+0.9** |
| CD2 | | | | S | | **S** | **21 30 57.4** | **+1.5** |
| CD2 | | | | sS | | **sS** | **21 31 33.6** | **+2.0** |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | 120nm,5.0s | | | | | | | |
| **LZH** | **Lanzhou** | **31.09** | **15** | *e*P | | P | 21 27 19.8 | +6.0 |
| LZH | | | | pP | | pP | 21 27 40.6 | +6.1 |
| LZH | | | | sP | | sP | 21 27 54.1 | +9.0 |
| LZH | | | | PMZ | | | | |
| | 14nm,1.0s | | | | | | | |
| **NJ2** | **Nanjing** | **34.47** | **38** | *e*P | | **P** | **21 27 41.8** | **-1.3** |
| **KSH** | **Kashi** | **37.21** | **336** | P | | **P** | **21 28 04.5** | **-2.2** |
| KSH | | | | *e*pP | | **pP** | **21 28 27.1** | **-0.7** |
| KSH | | | | *e*PP | | **PP** | **21 29 32.8** | **-0.4** |
| KSH | | | | S | | S | 21 33 40.0 | -7.1 |
| KSH | | | | PMZ | | | | |
| | 130nm,5.3s | | | | | | | |
| KSH | | | | LN | | | | |
| | 100nm,5.9s | | | | | | | |
| KSH | | | | LE | | | | |
| | 170nm,5.3s | | | | | | | |
| KSH | | | | LZ | | | | |
| | 220nm,5.8s | | | | | | | |
| **SIJI** | **Sorong** | **37.42** | **99** | P | | **P** | **21 28 08.6** | **0.0** |
| | 2.6nm,0.3s,baz=62,slow=6.8,SNR=4.6 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **37.86** | **21** | *e*P | | **P** | **21 28 14.6** | **+2.5** |
| HHC | | | | PMZ | | | | |
| | 12nm,0.7s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | 180nm,4.8s | | | | | | | |
| **WMQ** | **Urumqi** | **38.05** | **352** | P | | **P** | **21 28 14.0** | **+0.4** |

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TKM2** | **Tokmak 2** | **40.29** | **338** | *e*P | | **P** | **21 28 32.1** | **-0.3** |
| | 1.6nm,0.5s | | | | | | | |
| **AAK** | **Ala-Archa** | **40.45** | **337** | P | | **P** | **21 28 33.7** | **0.0** |
| | 2.0nm,0.7s,baz=151,slow=6.7,SNR=11 | | | | | | | |
| **AAK** | **Ala-Archa** | **40.45** | **337** | *e*P | | **P** | **21 28 33.4** | **-0.3** |
| | 23nm,2.0s | | | | | | | |
| **EKS2** | **Erkin-Say** | **40.76** | **337** | *e*P | | **P** | **21 28 36.4** | **+0.2** |
| | 2.9nm,0.6s | | | | | | | |
| **MK01** | **Makanchi Array** | **41.86** | **348** | *e*P | | **P** | **21 28 44.0** | **-1.1** |
| **MK32** | **Makanchi Array** | **41.89** | **348** | *e*P | | **P** | **21 28 43.8** | **-1.5** |
| MK32 | | | | *e*PcP | | **PcP** | **21 30 39.3** | **-0.1** |
| **MKAR** | **Makanchi Array** | **41.89** | **348** | P | | **P** | **21 28 43.8** | **-1.5** |
| | 1.1nm,0.4s,baz=160,slow=9.0,SNR=18 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **21 30 39.3** | **-0.1** |
| | 0.3nm,0.4s,baz=187,slow=2.3,SNR=2.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **41.89** | **348** | *e*P | | **P** | **21 28 44.5** | **-0.7** |
| **KKAR** | **Karatay Array** | **42.48** | **334** | *e*P | | **P** | **21 28 49.6** | **-0.6** |
| **SONA0** | **Songino Array** | **42.84** | **12** | *e*P | | **P** | **21 28 52.0** | **-1.1** |
| SONA0 | | | | *e*PcP | | **PcP** | **21 30 42.7** | **0.0** |
| **SONM** | **Songino Array** | **42.84** | **12** | P | | **P** | **21 28 52.0** | **-1.1** |
| | 0.9nm,0.3s,baz=198,slow=9.1,SNR=9.5 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **21 30 42.7** | **0.0** |
| | 0.8nm,0.6s,baz=196,slow=3.6,SNR=4.9 | | | | | | | |
| **SONA1** | **Songino Array** | **42.85** | **12** | *e*P | | **P** | **21 28 52.4** | **-0.8** |
| **WRKA** | **Warakurna** | **45.19** | **135** | P | | **P** | **21 29 13.4** | **+1.2** |
| | baz=45,SNR=7.1 | | | | | | | |
| **GEYT** | **Alibeck** | **45.73** | **319** | P | | **P** | **21 29 16.2** | **0.0** |
| | 3.1nm,0.5s,baz=142,slow=8.5,SNR=9.1 | | | | | | | |
| **KURK** | **Kurchatov** | **46.41** | **346** | *e*P | | **P** | **21 29 20.9** | **-0.3** |
| | 129nm,2.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **47.01** | **124** | P | | **P** | **21 29 26.6** | **+0.1** |
| | 4.3nm,0.7s,baz=305,slow=9.2,SNR=21 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **21 30 58.2** | **+0.8** |
| | 0.5nm,0.6s,baz=315,slow=3.1,SNR=4.3 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **48.36** | **352** | P | | **P** | **21 29 35.8** | **-0.5** |
| | baz=48,SNR=4.5 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **48.36** | **352** | *e*P | | **P** | **21 29 35.7** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **48.36** | **352** | P | | **P** | **21 29 35.5** | **-0.8** |
| | 2.2nm,0.3s,baz=172,slow=7.9,SNR=17 | | | | | | | |
| **ZAA1** | **Zalesovo Array** | **48.36** | **352** | *e*P | | **P** | **21 29 35.5** | **-0.8** |
| **AS12** | **Alice Springs** | **48.56** | **129** | *e*P | | **P** | **21 29 39.0** | **+0.6** |
| AS12 | | | | *e*pP | | pP | 21 29 55.0 | -5.4 |
| AS12 | | | | *e*PcP | | **PcP** | **21 31 04.0** | **+1.1** |
| **ASAR** | **Alice Springs** | **48.56** | **129** | P | | **P** | **21 29 39.0** | **+0.6** |
| | 3.1nm,0.6s,baz=300,slow=7.2,SNR=45 | | | | | | | |
| ASAR | | | | pP | | pP | 21 29 55.0 | -5.4 |
| | 1.8nm,0.5s,baz=301,slow=8.0,SNR=7.8 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **21 31 04.1** | **+1.1** |
| | 0.6nm,0.5s,baz=304,slow=3.1,SNR=3.4 | | | | | | | |
| **AS01** | **Alice Springs** | **48.60** | **129** | *e*P | | **P** | **21 29 38.6** | **-0.1** |
| **MDJ** | **Mudanjiang** | **49.13** | **33** | P | | **P** | **21 29 42.0** | **-0.4** |
| MDJ | | | | pP | | **pP** | **21 30 03.8** | **-0.6** |
| MDJ | | | | sP | | **sP** | **21 30 14.0** | **-0.7** |
| MDJ | | | | ScP | | **ScP** | **21 34 50.8** | **-1.0** |
| MDJ | | | | PcS | | **PcS** | **21 35 00.8** | **-0.2** |
| MDJ | | | | S | | **S** | **21 36 40.6** | **-0.3** |
| MDJ | | | | sS | | **sS** | **21 37 18.6** | **0.0** |
| MDJ | | | | PMZ | | | | |
| | 5.0nm,0.9s | | | | | | | |
| MDJ | | | | PMZ | | | | |
| | 140nm,4.5s | | | | | | | |
| MDJ | | | | LN | | | | |
| | 17nm,12.9s | | | | | | | |
| MDJ | | | | LE | | | | |
| | 10.0nm,15.9s | | | | | | | |
| MDJ | | | | LZ | | | | |
| | 21nm,14.0s | | | | | | | |
| **RAYN** | **Ar Rayn** | **50.09** | **296** | *e*P | | **P** | **21 29 51.4** | **+1.2** |
| | 2.9nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **50.83** | **341** | *e*P | | **P** | **21 29 54.6** | **-0.5** |
| | 3.4nm,0.9s | | | | | | | |
| **ABKAR** | **Akbulak array** | **51.93** | **332** | *e*P | | **P** | **21 30 03.2** | **-0.2** |
| **ARU** | **Arti** | **57.64** | **337** | *e*P | | **P** | **21 30 44.0** | **-0.5** |
| | 8.7nm,1.0s | | | | | | | |
| **KBZ** | **Khabaz** | **58.60** | **318** | P | | **P** | **21 30 50.6** | **-0.8** |
| | 0.6nm,0.5s,baz=191,slow=5.2,SNR=4.7 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **61.54** | **131** | P | | **P** | **21 31 13.2** | **+1.5** |
| | baz=62,SNR=8.5 | | | | | | | |
| **BR101** | **Keskin Array S** | **63.81** | **311** | *e*P | | **P** | **21 31 25.4** | **-1.6** |
| **BRTR** | **Keskin Array B** | **63.81** | **311** | P | | **P** | **21 31 25.4** | **-1.6** |
| | 2.1nm,0.8s,baz=122,slow=7.3,SNR=15 | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.73** | **322** | P | | **P** | **21 32 02.6** | **-1.4** |
| | 0.5nm,0.4s,baz=87,slow=4.4,SNR=7.0 | | | | | | | |
| **AKBB** | **Malin Array Si** | **69.73** | **322** | *e*P | | **P** | **21 32 02.6** | **-1.4** |
| **ISR** | **Istrita** | **70.16** | **316** ⇓ | *i* P | | P | 21 32 18.8 | +12 |
| **VRI** | **Vrincioaia** | **70.19** | **317** ⇑ | *i* P | | **P** | **21 32 06.5** | **-0.5** |
| **MLR** | **Muntele Rosu** | **70.65** | **316** ⇑ | *i* P | | **P** | **21 32 09.8** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ITM** | **Ithomi** | **0.20** | **114** | *e*PB | Pg | 21 41 09.8 | -0.1 |
| ITM | | | | *e*SB | Sg | 21 41 13.4 | +0.1 |
| **ITM** | **Ithomi** | **0.20** | **114** | *e*Pb | Pg | 21 41 09.8 | -0.1 |
| ITM | | | | *e*Sb | Sg | 21 41 13.4 | +0.1 |
| **AMT** | **Artemida-Makis** | **0.27** | **1** | *e*PB | Pg | 21 41 10.6 | -0.5 |
| AMT | | | | *e*SB | Sb | 21 41 15.1 | -0.1 |
| **AMT** | **Artemida-Makis** | **0.27** | **1** | *e*Pb | Pg | 21 41 10.6 | -0.5 |
| AMT | | | | *e*Sb | Sb | 21 41 15.1 | -0.1 |
| **PYL** | **PYLOS** | **0.36** | **175** | *e*PB | Pg | 21 41 12.1 | -0.5 |
| PYL | | | | *e*SB | Sb | 21 41 18.2 | 0.0 |
| **PYL** | **PYLOS** | **0.36** | **175** | *e*Pb | Pg | 21 41 12.1 | -0.5 |
| PYL | | | | *e*Sb | Sb | 21 41 18.2 | 0.0 |
| **VLX** | **Vlachokerasia** | **0.55** | **78** | *e*PN | Pb | 21 41 15.4 | -0.6 |
| VLX | | | | *e*SN | Sb | 21 41 22.8 | -0.8 |
| **VLX** | **Vlachokerasia** | **0.55** | **78** | *e*Pn | Pb | 21 41 15.4 | -0.6 |
| VLX | | | | *e*Sn | Sb | 21 41 22.8 | -0.8 |
| **DRO** | **Drossia** | **0.69** | **1** | *e*PN | Pb | 21 41 18.1 | -0.2 |
| DRO | | | | *e*SN | Sg | 21 41 28.3 | +0.5 |
| **DRO** | **Drossia** | **0.69** | **1** | *e*Pn | Pb | 21 41 18.1 | -0.2 |
| DRO | | | | *e*Sn | Sg | 21 41 28.3 | +0.5 |
| **RLS** | **Riolos of Patr** | **0.82** | **347** | *e*PN | Pb | 21 41 20.5 | +0.1 |
| RLS | | | | *e*SN | Sg | 21 41 32.1 | +0.4 |
| **RLS** | **Riolos of Patr** | **0.82** | **347** | *e*Pn | Pb | 21 41 20.5 | +0.1 |
| RLS | | | | *e*Sn | Sg | 21 41 32.1 | +0.4 |
| **GUR** | **Goura** | **0.85** | **37** | *e*PN | Pb | 21 41 20.1 | -1.0 |
| GUR | | | | *e*SN | Sg | 21 41 32.7 | -0.2 |
| **GUR** | **Goura** | **0.85** | **37** | *e*Pn | Pb | 21 41 20.1 | -1.0 |
| GUR | | | | *e*Sn | Sg | 21 41 32.7 | -0.2 |
| **KLV** | **Kalavryta, Ach** | **0.86** | **24** | *e*PN | Pb | 21 41 21.1 | -0.1 |
| KLV | | | | *e*SN | Sb | 21 41 32.7 | +0.2 |
| **KLV** | **Kalavryta, Ach** | **0.86** | **24** | *e*Pn | Pb | 21 41 21.1 | -0.1 |
| KLV | | | | *e*Sn | Sb | 21 41 32.7 | +0.2 |
| **LAKA** | **Lakka** | **1.00** | **13** | *e*PN | Pn | 21 41 23.9 | 0.0 |
| LAKA | | | | *e*SN | Sg | 21 41 38.1 | +0.4 |
| **LAKA** | **Lakka** | **1.00** | **13** | *e*Pn | Pn | 21 41 23.9 | 0.0 |
| LAKA | | | | *e*Sn | Sg | 21 41 38.1 | +0.4 |
| **VLI** | **Veliai** | **1.13** | **118** | *e*PN | Pg | 21 41 26.9 | +0.2 |
| **VLI** | **Veliai** | **1.13** | **118** | *e*Pn | Pg | 21 41 26.9 | +0.2 |
| **KRND** | **KRANIDI** | **1.16** | **84** | *e*PN | Pg | 21 41 26.9 | -0.4 |
| **KRND** | **KRANIDI** | **1.16** | **84** | *e*Pn | Pg | 21 41 26.9 | -0.4 |
| **DID** | **Didima** | **1.25** | **78** | *e*PN | Pb | 21 41 28.1 | +0.3 |
| **DID** | **Didima** | **1.25** | **78** | *e*Pn | Pb | 21 41 28.1 | +0.3 |

*ISK* ***17*** *21:42:28.8, 37˚.03N×28˚.30E, h10km, MD2.8*
*ISCJB* ***17*** *21:42:29.4±0.5, 37˚.03N±0˚.03×28˚.32E±0˚.03, h6km±4km, Error ellipse: s-maj=6.0km s-min=3.5km az=36.2*
*CSEM* ***17*** *21:42:29.6±0.2, 37˚.03N×28˚.31E, h10km, MD2.8, Error ellipse: s-maj=4.6km s-min=2.9km az=32.0*
*DDA* ***17*** *21:42:29.4, 37˚.04N×28˚.32E, h7km, Md2.9*

**ISC 17 21:42:29.6±0.9, 37˚.05N±0˚.03×28˚.30E±0˚.02, h7km±6km, n44, σ0§88/65, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.09** | **352** | *e*PG | **Pg** | **21 42 31.9** | **0.0** |
| YER | | | | *e*SG | **Sg** | **21 42 33.9** | **+0.5** |
| **YER** | **Yerkesik** | **0.09** | **352** | *e*Pg | **Pg** | **21 42 31.9** | **0.0** |
| YER | | | | *e*Sg | **Sg** | **21 42 33.9** | **+0.5** |
| **TURN** | **Turunc** | **0.30** | **125** | *i* P | **Pg** | **21 42 34.6** | **-0.9** |
| TURN | | | | *i* S | **Sg** | **21 42 39.1** | **-0.3** |
| **TURN** | **Turunc** | **0.30** | **125** | P | **Pg** | **21 42 34.6** | **-0.9** |
| TURN | | | | S | **Sg** | **21 42 39.1** | **-0.3** |
| **DALY** | **Dalyan (Mu˘la** | **0.36** | **129** | *e*PG | **Pg** | **21 42 36.2** | **-0.4** |
| DALY | | | | *e*SG | **Sg** | **21 42 41.4** | **-0.1** |
| **DALY** | **Dalyan (Mu˘la** | **0.36** | **129** | *e*Pg | **Pg** | **21 42 36.3** | **-0.4** |
| DALY | | | | *e*Sg | **Sg** | **21 42 41.4** | **-0.1** |
| **BDRM** | **Kayabasi** | **0.68** | **272** | *i* P | **Pg** | **21 42 42.9** | **+0.1** |
| BDRM | | | | *i* S | **Sb** | **21 42 53.0** | **-0.5** |
| **BDRM** | **Kayabasi** | **0.68** | **272** | P | **Pg** | **21 42 42.9** | **+0.1** |
| BDRM | | | | S | **Sb** | **21 42 53.0** | **-0.5** |
| **AYDN** | **Tasoluk** | **0.70** | **332** | *i* P | **Pn** | **21 42 45.2** | **-0.8** |
| AYDN | | | | *i* S | **Sb** | **21 42 54.6** | **+0.6** |
| **AYDN** | **Tasoluk** | **0.70** | **332** | P | **Pn** | **21 42 45.2** | **-0.8** |
| AYDN | | | | S | **Sb** | **21 42 54.6** | **+0.6** |
| **FETY** | **Fethiye** | **0.75** | **123** | *e*PG | **Pb** | **21 42 44.2** | **-0.8** |
| **FETY** | **Fethiye** | **0.75** | **123** | *e*Pg | **Pb** | **21 42 44.2** | **-0.8** |
| **BODT** | **Bodrum** | **0.79** | **271** | *e*PG | **Pg** | **21 42 44.7** | **-0.1** |
| **BODT** | **Bodrum** | **0.79** | **271** | *e*Pg | **Pg** | **21 42 44.7** | **-0.1** |
| **DNZL** | **Cakiroluk** | **0.88** | **43** | *i* P | **Pg** | **21 42 46.0** | **-0.5** |
| DNZL | | | | *i* S | **Sb** | **21 43 00.2** | **+1.0** |
| **DNZL** | **Cakiroluk** | **0.88** | **43** | P | **Pg** | **21 42 46.0** | **-0.5** |
| DNZL | | | | S | **Sb** | **21 43 00.2** | **+1.0** |
| **DENT** | **Denizli** | **0.92** | **39** | *e*PG | **Pg** | **21 42 47.0** | **-0.3** |
| **DENT** | **Denizli** | **0.92** | **39** | *e*Pg | **Pg** | **21 42 47.0** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.96** | **340** | *e*PG | **Pg** | **21 42 47.4** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.96** | **340** | *e*Pg | **Pg** | **21 42 47.4** | **-0.6** |
| **GOLH** | **Golhisar** | **1.03** | **79** | *i* P | **Pn** | **21 42 49.8** | **-0.7** |
| GOLH | | | | *i* S | **Sn** | **21 43 06.8** | **+1.6** |
| **GOLH** | **Golhisar** | **1.03** | **79** | P | **Pn** | **21 42 49.8** | **-0.7** |
| GOLH | | | | S | **Sn** | **21 43 06.8** | **+1.6** |
| **GCAM** | **G?zelcaml?** | **1.07** | **308** | *i* P | **Pn** | **21 42 51.4** | **+0.4** |
| GCAM | | | | *i* S | **Sn** | **21 43 06.5** | **+0.4** |
| **GCAM** | **G?zelcaml?** | **1.07** | **308** | P | **Pn** | **21 42 51.4** | **+0.4** |
| GCAM | | | | S | **Sn** | **21 43 06.5** | **+0.4** |
| **ELL** | **Elmali** | **1.32** | **102** | *e*PN | **Pb** | **21 42 54.2** | **-0.6** |
| **ELL** | **Elmali** | **1.32** | **102** | *e*Pn | **Pb** | **21 42 54.2** | **-0.6** |
| **AKAS** | **Kas** | **1.33** | **127** | *i* P | **Pg** | **21 42 55.0** | **-0.1** |
| **AKAS** | **Kas** | **1.33** | **127** | P | **Pg** | **21 42 55.0** | **-0.1** |
| AKAS | | | | S | **Sg** | **21 43 17.4** | **+5.1** |
| **MANT** | **Manisa** | **1.46** | **8** | *i* P | **Pb** | **21 42 57.0** | **-0.2** |
| MANT | | | | *i* S | **Sn** | **21 43 15.7** | **-0.3** |
| **MANT** | **Manisa** | **1.46** | **8** | P | **Pb** | **21 42 57.0** | **-0.2** |
| MANT | | | | S | **Sn** | **21 43 15.7** | **-0.3** |
| **KULA** | **Kula-Manisa** | **1.49** | **11** | *e*PN | **Pn** | **21 42 56.4** | **-0.5** |
| **KULA** | **Kula-Manisa** | **1.49** | **11** | *e*Pn | **Pn** | **21 42 56.4** | **-0.5** |
| **IZM** | **Izmir** | **1.58** | **329** | *e*PN | **Pn** | **21 42 57.6** | **-0.5** |
| **IZM** | **Izmir** | **1.58** | **329** | *e*Pn | **Pn** | **21 42 57.6** | **-0.5** |
| **KHL** | **Karahalli** | **1.60** | **37** | *e*PN | **Pn** | **21 42 58.0** | **-0.4** |
| **KHL** | **Karahalli** | **1.60** | **37** | *e*Pn | **Pn** | **21 42 58.0** | **-0.4** |
| **KHAL** | **Karahalli** | **1.63** | **35** | *i* P | **Pb** | **21 42 59.3** | **-0.7** |
| KHAL | | | | *i* S | **Sn** | **21 43 19.4** | **-0.6** |
| **KHAL** | **Karahalli** | **1.63** | **35** | P | **Pb** | **21 42 59.3** | **-0.7** |
| KHAL | | | | S | **Sn** | **21 43 19.4** | **-0.6** |
| **BLCB** | **Balcova** | **1.67** | **324** | *e*PN | **Pn** | **21 42 58.7** | **-0.5** |
| **BLCB** | **Balcova** | **1.67** | **324** | *e*Pn | **Pn** | **21 42 58.7** | **-0.5** |
| **AKS** | **Akhisar** | **1.87** | **348** | *e*PN | **Pn** | **21 43 01.7** | **-0.3** |
| **AKS** | **Akhisar** | **1.87** | **348** | *e*Pn | **Pn** | **21 43 01.7** | **-0.3** |
| **BCK** | **Bucak** | **1.87** | **77** | *e*PN | **Pn** | **21 43 02.1** | **0.0** |
| **BCK** | **Bucak** | **1.87** | **77** | *e*Pn | **Pn** | **21 43 02.1** | **0.0** |

*BJI* ***17*** *21:49:38.1, 28˚.06N×104˚.11E, h11km, mb4.7/47, mB4.8/30, ML4.8/24, Ms4.7/63, Ms7 4.3/60*
*MOS* ***17*** *21:49:39.0±0.9, 27˚.93N×104˚.23E, h29km, mb5.0/61, Error ellipse: s-maj=7.4km s-min=5.1km az=110.3*
*ISCJB* ***17*** *21:49:40.5±0.5, 28˚.03N±0˚.02×104˚.19E±0˚.02, h36km±5km, mb4.8/105, MS3.9/26, Error ellipse: s-maj=3.6km s-min=3.0km az=142.4*
*IDC* ***17*** *21:49:41.2±3.4, 28˚.00N×104˚.23E, h32km±25km, mb4.5/30, mb1 4.5/31, mb1mx4.5/37, mbtmp4.6/31, ML4.7/1, MS3.8/23, Ms1 3.8/23, ms1mx3.7/34, Error ellipse: s-maj=12.0km s-min=11.2km az=61.0*
*NEIC* ***17*** *21:49:42.1±0.2, 28˚.03N×104˚.21E, h35km, mb5.0/58, Error ellipse: s-maj=4.5km s-min=3.9km az=85.0*
*NEIC Felt at Leshan and Zhaotong.*
*BKK* ***17*** *21:49:46.6±0.4, 28˚N±4˚×10˚5E±˚, h55km, M4.5/19, mB4.9/4, mb4.6/19, Mw(mB)4.2/4*

**ISC 17 21:49:39.7±0.4, 28˚.02N±0˚.03×104˚.17E±0˚.03, h17km±2km, h17km:pP-P, n373, σ1§50/395, mb4.9/107, MS3.8/27, 28C-15D, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GYA** | **Guiyang** | **2.71** | **124** | ⇓*i*Pn | **Pn** | **21 50 24.5** | **+1.9** |
| GYA | | | | Pg | **Pb** | **21 50 29.5** | **+1.6** |
| GYA | | | | Sn | **Sn** | **21 50 57.3** | **+2.2** |
| GYA | | | | Sg | **Sb** | **21 51 02.4** | **+1.5** |
| GYA | | | | SMN | | | |
| | 4µm,1.1s | | | | | | |
| GYA | | | | SME | | | |
| | 4µm,0.6s | | | | | | |
| **CD2** | **Chengdu** | **2.90** | **353** | ⇓*i*Pn | **Pn** | **21 50 26.5** | **+1.4** |
| CD2 | | | | Pg | **Pb** | **21 50 31.0** | **0.0** |
| CD2 | | | | Sn | **Sn** | **21 50 55.5** | **-4.1** |
| CD2 | | | | Sg | **Sb** | **21 51 07.3** | **+1.1** |
| CD2 | | | | SMN | | | |
| | 12µm,0.8s | | | | | | |
| CD2 | | | | SME | | | |
| | 15µm,0.7s | | | | | | |
| **KMI** | **Kunming** | **3.16** | **204** | Pn | **Pn** | **21 50 30.6** | **+1.8** |
| KMI | | | | Pg | **Pb** | **21 50 37.6** | **+2.1** |
| KMI | | | | Sg | **Sg** | **21 51 20.8** | **-0.4** |
| KMI | | | | SMN | | | |
| | 450nm,0.9s | | | | | | |
| KMI | | | | SME | | | |
| | 630nm,1.0s | | | | | | |
| KMI | | | | LN | | | |
| | 8µm,6.5s | | | | | | |
| KMI | | | | LE | | | |
| | 8µm,5.1s | | | | | | |
| KMI | | | | LZ | | | |
| | 6µm,8.7s | | | | | | |
| **ENH** | **Enshi** | **5.17** | **63** | *e*Pn | **Pn** | **21 50 58.0** | **+1.8** |
| ENH | | | | *e*Sn | **Sn** | **21 51 54.4** | **-1.1** |
| **SLVN** | **Son La** | **6.66** | **182** | *e*Pn | **Pn** | **21 51 18.0** | **+1.1** |
| **XAN** | **Xi'an** | **7.25** | **33** | Pn | **Pn** | **21 51 24.8** | **-0.1** |
| XAN | | | | Sg | Sg | 21 53 24.3 | -8.2 |
| XAN | | | | SMN | | | |
| | 1µm,0.8s | | | | | | |
| XAN | | | | SME | | | |
| | 1µm,0.9s | | | | | | |
| XAN | | | | LN | | | |
| | 3µm,6.5s | | | | | | |
| XAN | | | | LE | | | |
| | 2µm,5.8s | | | | | | |
| XAN | | | | LZ | | | |
| | 3µm,7.7s | | | | | | |
| **LZH** | **Lanzhou** | **8.05** | **358** | ⇑P | **Pn** | **21 51 36.9** | **+1.0** |
| LZH | | | | S | **Sn** | **21 53 07.8** | **+1.2** |
| LZH | | | | SMN | | | |
| | 500nm,1.1s | | | | | | |
| LZH | | | | SME | | | |
| | 410nm,0.8s | | | | | | |
| LZH | | | | LN | | | |
| | 5µm,7.4s | | | | | | |
| LZH | | | | LE | | | |
| | 7µm,9.6s | | | | | | |
| LZH | | | | LZ | | | |
| | 4µm,7.8s | | | | | | |
| **WHN** | **Wuhan** | **9.24** | **72** | ⇑P | **Pn** | **21 51 52.4** | **+0.2** |
| WHN | | | | LN | | | |
| | 12µm,11.6s | | | | | | |
| WHN | | | | LE | | | |
| | 7µm,13.8s | | | | | | |
| WHN | | | | LZ | | | |
| | 6µm,8.3s | | | | | | |
| **CMAI** | **Chiengmai2** | **9.31** | **211** | P | Pn | 21 51 58.3 | +4.9 |
| | 71nm,0.8s | | | | | | |
| **GZH** | **Guangzhou** | **9.63** | **119** | P | **Pn** | **21 51 55.9** | **-1.7** |
| GZH | | | | LN | | | |
| | 4µm,4.1s | | | | | | |
| GZH | | | | LE | | | |
| | 3µm,4.7s | | | | | | |
| **LAMP** | **Lampang** | **10.33** | **205** | P | Pn | 21 52 12.3 | +5.1 |
| | 7.7nm,1.0s,71nm | | | | | | |
| **CHTO** | **Chiang Mai** | **10.34** | **209** | P | Pn | 21 52 11.3 | +4.0 |
| | 92nm,1.4s | | | | | | |
| **CHTO** | **Chiang Mai** | **10.34** | **209** | *e*P | **Pn** | **21 52 07.3** | **-0.1** |
| **CHTO** | **Chiang Mai** | **10.34** | **209** | Pn | Pn | 21 52 11.8 | +4.4 |
| | SNR=6.7 | | | | | | |
| **CHTO** | **Chiang Mai** | **10.34** | **209** | *e*Pn | **Pn** | **21 52 07.2** | **-0.1** |
| **QIZ** | **Qiongzhong** | **10.35** | **149** | P | **Pn** | **21 52 07.5** | **0.0** |
| QIZ | | | | S | **Sn** | **21 54 04.8** | **+1.7** |
| QIZ | | | | LN | | | |
| | 3µm,10.3s | | | | | | |
| QIZ | | | | LE | | | |
| | 2µm,10.6s | | | | | | |
| QIZ | | | | LZ | | | |
| | 2µm,9.4s | | | | | | |
| **QIZ** | **Qiongzhong** | **10.35** | **149** | *e*Pn | **Pn** | **21 52 07.7** | **+0.2** |
| **CM31** | **Chiang Mai Arr** | **10.66** | **208** | *e*Pn | Pn | 21 52 15.1 | +3.4 |
| CM31 | | | | *e*Lg | Lg | 21 55 27.9 | |
| **CMAR** | **Chiang Mai Arr** | **10.66** | **208** | Pn | Pn | 21 52 15.1 | +3.4 |
| | 0.5nm,0.3s,baz=16,slow=12,SNR=67 | | | | | | |
| CMAR | | | | Lg | Lg | 21 55 27.9 | |
| | baz=18,slow=30,SNR=3.4 | | | | | | |
| CMAR | | | | LR | LR | 21 56 47.8 | |
| | comp=Z,757nm,19.4s,baz=26,slow=40 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **10.66** | **208** | *e*P | Pn | 21 52 15.6 | +3.9 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **10.69** | **208** | *e*Pn | **Pn** | **21 52 15.2** | **+3.1** |
| **LOEI** | **Loei** | **10.80** | **195** | P | Pn | 21 52 18.2 | +4.6 |
| | comp=Z,32nm,0.7s,comp=Z,6µm | | | | | | |
| **SKNT** | **Sakolnakorn** | **11.00** | **181** | P | Pn | 21 52 20.2 | +3.9 |
| | comp=Z,78nm,2.0s | | | | | | |
| **MHMT** | **Maesarieng** | **11.35** | **212** | P | Pn | 21 52 26.2 | +5.1 |
| | comp=Z,11nm,1.8s | | | | | | |
| **LSA** | **Lhasa** | **11.53** | **281** | P | **Pn** | **21 52 26.3** | **+2.3** |
| LSA | | | | LN | | | |
| | comp=Z,1µm,11.7s | | | | | | |
| LSA | | | | LZ | | | |
| | comp=Z,1µm,7.9s | | | | | | |
| **LSA** | **Lhasa** | **11.53** | **281** | *e*P | **Pn** | **21 52 25.9** | **+1.9** |
| **LSA** | **Lhasa** | **11.53** | **281** | *e*Pn | **Pn** | **21 52 25.9** | **+1.9** |
| **KHON** | **Khomkaen** | **11.70** | **186** | P | **Pn** | **21 52 28.3** | **+2.5** |
| | comp=Z,17nm,0.5s,comp=Z,625nm | | | | | | |
| **PBKT** | **Sadao Pong** | **11.77** | **195** | P | Pn | 21 52 30.2 | +3.3 |
| | comp=Z,14nm,0.7s | | | | | | |
| **GTA** | **Gaotai** | **11.92** | **343** | *e*P | **Pn** | **21 52 30.8** | **+1.8** |
| GTA | | | | pP | | 21 52 34.3 | |
| GTA | | | | sP | | 21 52 37.0 | |
| GTA | | | | S | **Sn** | **21 54 46.5** | **+4.9** |
| GTA | | | | sS | | 21 54 51.8 | |
| GTA | | | | SS | **SnSn** | **21 55 00.8** | **+6.9** |
| GTA | | | | PMZ | | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,51nm,4.1s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,2µm,12.4s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,4µm,13.3s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,690nm,12.4s | | | | | | |
| **UMPA** | **Umpang Tak** | **12.74** | **204** | P | **P** | **21 52 48.8** | **-2.5** |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **NJ2** | **Nanjing** | **13.34** | **69** | *e*P | **Pn** | **21 52 48.6** | **+0.3** |
| NJ2 | | | | S | **Sn** | **21 55 15.5** | **-0.7** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,30nm,0.9s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=Z,4µm,17.8s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=Z,4µm,17.0s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=Z,4µm,15.6s | | | | | | |
| **BTO** | **Baotou** | **13.45** | **20** | *e*P | **Pn** | **21 52 48.1** | **-1.7** |
| **TIA** | **Tai'an** | **13.67** | **50** | *e*P | **Pn** | **21 52 54.5** | **+1.7** |
| TIA | | | | PMZ | | | |
| | comp=Z,20nm,1.3s | | | | | | |
| TIA | | | | LN | | | |
| | comp=Z,1µm,10.0s | | | | | | |
| TIA | | | | LE | | | |
| | comp=Z,1µm,11.0s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=Z,1µm,13.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **14.17** | **24** | *e*P | **Pn** | **21 53 01.3** | **+1.6** |
| HHC | | | | PP | **PnPn** | **21 53 13.3** | **+5.6** |
| HHC | | | | S | **Sn** | **21 55 39.8** | **+3.3** |
| HHC | | | | SS | **S** | **21 55 58.3** | **+1.0** |
| HHC | | | | PMZ | | | |
| | comp=Z,21nm,1.2s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,720nm,10.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,880nm,9.1s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,530nm,8.3s | | | | | | |
| **TAPN** | **Taplejung** | **14.60** | **271** | *e*P | **Pn** | **21 53 04.7** | **-1.1** |
| | comp=Z,123nm,1.0s | | | | | | |
| **ODAN** | **Odare** | **14.94** | **269** | *e*P | **Pn** | **21 53 08.2** | **-2.2** |
| | comp=Z,75nm,0.7s | | | | | | |
| **PATY** | **Pattaya** | **15.34** | **192** | P | **P** | **21 53 22.7** | **+2.6** |
| | comp=Z,23nm,0.9s,comp=Z,455nm | | | | | | |
| **BJT** | **Baijiatuan** | **15.54** | **37** | *e*P | **Pn** | **21 53 19.1** | **+1.1** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,44nm,1.2s | | | | | | |
| **BJT** | **Baijiatuan** | **15.54** | **37** | *e*Pn | **Pn** | **21 53 19.1** | **+1.1** |
| | comp=Z,44nm,1.2s | | | | | | |
| **BJI** | **Beijing** | **15.56** | **37** | P | **Pn** | **21 53 19.0** | **+0.8** |
| BJI | | | | S | **Sn** | **21 56 14.3** | **+4.1** |
| BJI | | | | PMZ | | | |
| | comp=Z,25nm,1.6s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,200nm,3.3s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,920nm,10.4s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,870nm,12.8s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,500nm,16.4s | | | | | | |
| **TPUB** | **Ta-pu** | **15.57** | **104** | *e*Pn | **Pn** | **21 53 19.9** | **+1.4** |
| | comp=Z,46nm,0.9s | | | | | | |
| **RAMN** | **Ramite** | **15.63** | **270** | *e*P | **Pn** | **21 53 17.2** | **-2.3** |
| | comp=Z,73nm,0.6s | | | | | | |
| **SSLB** | **Suanglung** | **15.68** | **102** | *e*Pn | **P** | **21 53 22.4** | **-1.5** |
| | comp=Z,42nm,0.8s | | | | | | |
| **GUN** | **Gumba** | **16.16** | **274** | *e*P | **Pn** | **21 53 24.8** | **-1.6** |
| | comp=Z,101nm,0.7s | | | | | | |
| **DLV** | **T Lat** | **16.50** | **165** | *e*Pn | **P** | **21 53 34.4** | **+1.2** |
| | comp=Z,22nm,0.9s | | | | | | |
| **PKI** | **Pulchoki** | **16.61** | **273** | *e*P | **Pn** | **21 53 30.6** | **-1.5** |
| | comp=Z,90nm,0.7s | | | | | | |
| **PKIN** | **Phulchoki** | **16.62** | **273** | *e*P | **Pn** | **21 53 30.5** | **-1.6** |
| | comp=Z,67nm,0.7s | | | | | | |
| **KKN** | **Kakani** | **16.70** | **274** | *e*P | **Pn** | **21 53 32.5** | **-0.6** |
| | comp=Z,106nm,0.7s | | | | | | |
| **DMN** | **Daman** | **16.87** | **273** | *e*P | **Pn** | **21 53 33.7** | **-1.6** |
| | comp=Z,79nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | **17.25** | **275** | *e*P | **Pn** | **21 53 38.2** | **-1.8** |
| | comp=Z,40nm,0.5s | | | | | | |
| **DANN** | **Dangsing** | **18.00** | **276** | *e*P | **Pn** | **21 53 46.8** | **-2.6** |
| **DL2** | **Dalian** | **18.14** | **49** | P | **P** | **21 53 52.1** | **+1.1** |
| DL2 | | | | S | **S** | **21 57 16.8** | **-1.3** |
| DL2 | | | | PMZ | | | |
| | comp=Z,64nm,1.4s | | | | | | |
| DL2 | | | | PMZ | | | |
| | comp=Z,190nm,4.5s | | | | | | |
| DL2 | | | | LN | | | |
| | comp=Z,580nm,4.9s | | | | | | |
| DL2 | | | | LZ | | | |
| | comp=Z,430nm,9.6s | | | | | | |
| **KOLN** | **Koldanda** | **18.18** | **274** | *e*P | **Pn** | **21 53 48.7** | **-2.9** |
| | comp=Z,38nm,0.7s | | | | | | |
| **SONA0** | **Songino Array** | **19.86** | **4** | *e*P | **P** | **21 54 10.6** | **+0.7** |
| **SONM** | **Songino Array** | **19.86** | **4** | P | **P** | **21 54 10.6** | **+0.7** |
| | comp=Z,2.2nm,0.3s,baz=186,slow=11,SNR=4.3 | | | | | | |
| SONM | | | | LR | LR | 22 02 54.0 | |
| | comp=Z,280nm,21.6s,baz=184,slow=40 | | | | | | |
| **SONM** | **Songino Array** | **19.86** | **4** | P | **P** | **21 54 10.6** | **+0.7** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,280nm,21.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **19.94** | **6** | *c*eP | **P** | **21 54 11.4** | **+0.6** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **19.94** | **6** | P | **Pn** | **21 54 12.5** | **-0.1** |
| | SNR=15 | | | | | | |
| **ULN** | **Ulaanbaatar** | **19.94** | **6** | *e*P | **P** | **21 54 11.3** | **+0.4** |
| | comp=Z,40nm,1.2s | | | | | | |
| **TRTT** | **Trang** | **20.52** | **193** | P | Pn | 21 54 18.8 | -0.6 |
| | comp=Z,52nm,1.1s | | | | | | |
| **WMQ** | **Urumqi** | **20.59** | **324** | P | **P** | **21 54 17.6** | **-0.3** |
| WMQ | | | | sP | **sP** | **21 54 24.0** | **-1.1** |
| WMQ | | | | PP | **PnPn** | **21 54 37.0** | **+1.4** |
| WMQ | | | | S | **S** | **21 58 05.0** | **-2.4** |
| WMQ | | | | SS | **SnSn** | **21 58 33.0** | **+6.2** |
| WMQ | | | | PMZ | | | |
| | comp=Z,29nm,0.8s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,36nm,5.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,690nm,11.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,470nm,9.5s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,390nm,8.8s | | | | | | |
| **CHLP** | **Challavanipeta** | **20.73** | **247** | *e*P | **P** | **21 54 19.5** | **0.0** |
| **SNY** | **Shenyang** | **20.98** | **44** | ⇑P | **P** | **21 54 21.6** | **-0.4** |
| SNY | | | | S | **S** | **21 58 09.1** | **-6.0** |
| SNY | | | | PMZ | | | |
| | comp=Z,17nm,1.4s | | | | | | |
| SNY | | | | PMZ | | | |
| | comp=Z,170nm,3.5s | | | | | | |
| SNY | | | | LE | | | |
| | comp=Z,600nm,14.5s | | | | | | |
| SNY | | | | LZ | | | |
| | comp=Z,550nm,14.9s | | | | | | |
| **INCN** | **Inchon** | **21.08** | **58** | *e*P | **P** | **21 54 24.2** | **+1.0** |
| | comp=Z,33nm,0.9s | | | | | | |
| **KSSWO** | **Suwon** | **21.26** | **59** | P | **P** | **21 54 26.4** | **+1.4** |
| | SNR=7.8 | | | | | | |
| **TJN** | **Taejon** | **21.29** | **61** | *i* P | **P** | **21 54 26.0** | **+0.6** |
| **KSMUS** | **Musan** | **21.31** | **57** | P | **P** | **21 54 26.8** | **+1.2** |
| | SNR=11 | | | | | | |
| **KSBON** | **Boeun** | **21.66** | **61** | P | **P** | **21 54 29.5** | **+0.1** |
| | SNR=9.9 | | | | | | |
| **KSCPR** | **CHUPUNGNYEONG** | **21.72** | **62** | P | **P** | **21 54 30.2** | **+0.2** |
| | SNR=10 | | | | | | |
| **KSCWO** | **Cheorwon** | **21.94** | **57** | P | **P** | **21 54 33.2** | **+0.8** |
| | SNR=11 | | | | | | |
| **KS15** | **Wonju Array Si** | **22.00** | **59** | *e*P | **P** | **21 54 32.5** | **-0.6** |
| **KSAR** | **Wonju Array Be** | **22.00** | **59** | P | **P** | **21 54 32.5** | **-0.6** |
| **KSAR** | **Wonju Array Be** | **22.00** | **59** | P | **P** | **21 54 32.5** | **-0.6** |
| **KS01** | **Wonju Array Si** | **22.02** | **59** | *e*P | **P** | **21 54 31.8** | **-1.5** |
| **KSRS** | **Korea Array** | **22.04** | **59** | P | **P** | **21 54 32.5** | **-0.9** |
| | comp=Z,10nm,0.7s,baz=250,slow=9.9,SNR=36 | | | | | | |
| KSRS | | | | LR | LR | 22 04 16.2 | |
| | comp=Z,295nm,18.7s,baz=252,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **22.04** | **59** | P | **P** | **21 54 32.5** | **-0.9** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,295nm,18.7s | | | | | | |
| **KSCHC** | **Chuncheon** | **22.06** | **58** | P | **P** | **21 54 33.7** | **0.0** |
| | SNR=11 | | | | | | |
| **ZAK** | **Zakamensk** | **22.34** | **359** | *e*P | **P** | **21 54 36.4** | **-0.3** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,43nm,1.0s | | | | | | |
| **KSIJA** | **INJE** | **22.35** | **57** | P | **P** | **21 54 37.5** | **+0.7** |
| | SNR=9.5 | | | | | | |
| **SEHB** | **SEOHWA** | **22.55** | **57** | P | **P** | **21 54 40.0** | **+1.1** |
| | SNR=6.5 | | | | | | |
| **CN2** | **Changchun** | **23.25** | **42** | ⇑*e*P | **P** | **21 54 45.5** | **-0.6** |
| CN2 | | | | *e*pP | **pP** | **21 54 49.8** | **-1.4** |
| CN2 | | | | *e*S | **S** | **21 58 52.8** | **-4.6** |
| CN2 | | | | PMZ | | | |
| | comp=Z,20nm,1.1s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,500nm,10.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,400nm,10.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,400nm,11.0s | | | | | | |
| **PVM**

**HVS Khovu-Aksy 24.40 344** *i* P **P** **21 54 57.6 +0.4**
HVS pmax pmax
comp=Z,74nm,0.7s
**RPR Rampur 24.54 254** *e*P **P** **21 54 58.5 0.0**
**KKM Kota Kinabalu 24.67 150** *e*P **P** **21 54 59.5 -0.4**
comp=Z,20nm,0.8s
**MLSI Meulaboh, Aceh 24.75 199** P **P** **21 55 00.7 +0.2**
comp=Z,92nm,1.3s
**TSI Tuntungan 24.96 193** P **P** **21 55 03.3 +0.9**
comp=Z,127nm,0.9s
**PDGK Podgornoye 25.08 314** P **P** **21 55 03.8 +0.6**
PDGK pmax pmax
comp=Z,15nm,0.7s
**MK01 Makanchi Array 25.39 323** *e*P **P** **21 55 06.8 +0.7**
MK01 *e*ScP **ScP** **22 02 15.1 -1.6**
**MK32 Makanchi Array 25.41 323** *e*P **P** **21 55 06.9 +0.7**
MK32 *e*ScP **ScP** **22 02 14.9 -1.8**
**MKAR Makanchi Array 25.41 323** P **P** **21 55 06.9 +0.7**
comp=Z,13nm,0.7s,baz=125,slow=11,SNR=27
MKAR ScP **ScP** **22 02 14.9 -1.8**
comp=Z,3.3nm,0.8s,baz=116,slow=3.9,SNR=14
MKAR LR LR 22 06 15.8
comp=Z,258nm,20.5s,baz=124,slow=39
**MKAR Makanchi Array 25.41 323***ce*P **P** **21 55 08.6 +2.3**
MKAR pmax pmax
comp=Z,13nm,0.7s
**MKAR Makanchi Array 25.41 323** *e*P **P** **21 55 07.8 +1.6**
**ADKI Addanki 25.45 247** *e*P **P** **21 55 06.8 0.0**
**PSI Prapat 25.57 192** P **P** **21 55 07.6 -0.5**
comp=Z,13nm,0.6s,baz=358,slow=9.5,SNR=7.6
PSI LR LR 22 04 28.9
comp=Z,202nm,20.1s,baz=340,slow=35
**PSI Prapat 25.57 192** P **P** **21 55 07.6 -0.5**
PSI pmax pmax
comp=Z,13nm,0.6s
PSI MLR MLR
comp=Z,202nm,20.1s
**PSI Prapat 25.57 192** *e*P **P** **21 55 08.0 -0.1**
**MAKZ Makanchi 25.59 323** *e*P **P** **21 55 09.3 +1.5**
**NJS Nagarjunasagar 25.62 249** *e*P **P** **21 55 07.8 -0.6**
**HYB Hyderabad 25.82 251** *i* P **P** **21 55 09.0 -1.3**
**HYBB Hyderabad (bro 25.82 251** *e*P **P** **21 55 10.2 -0.1**
**KSH Kashi 25.98 303** P **P** **21 55 16.3 +4.6**
KSH *e*PP PnPn 21 56 00.3 +11
KSH *e*PcP **PcP** **21 58 42.3 +2.5**
KSH S **S** **21 59 46.4 +4.8**
KSH PMZ
comp=Z,16nm,1.2s
KSH PMZ
comp=Z,84nm,3.5s
KSH LN
comp=Z,500nm,15.6s
KSH LE
comp=Z,190nm,6.3s
KSH LZ
comp=Z,320nm,13.7s
**MDJ Mudanjiang 26.19 44** P **P** **21 55 14.9 +1.6**
MDJ pP **pP** **21 55 17.3 -1.3**
MDJ sP **sP** **21 55 19.1 -1.7**
MDJ S **S** **21 59 48.8 +4.4**
MDJ sS **sS** **21 59 53.9 +0.6**
MDJ PMZ
comp=Z,8.0nm,0.9s
MDJ PMZ
comp=Z,100nm,4.8s
MDJ LN
comp=Z,180nm,20.1s
MDJ LE
comp=Z,150nm,21.5s
MDJ LZ
comp=Z,170nm,17.1s
**MYLDM Lahad Datu 26.49 146** *e*P **P** **21 55 17.0 +0.8**
comp=Z,50nm,1.2s
**SKHT Srikalahasti 26.83 243** *e*P **P** **21 55 19.8 +0.5**
**VLA Vladivostok 26.96 49**⇓*e*P **P** **21 55 18.6 -1.6**
VLA 21 56 01.0
VLA S **S** **21 59 53.3 -3.3**
VLA pmax pmax
comp=Z,42nm,1.4s
**GSI Gunungsitoli 27.31 194** P **P** **21 55 22.8 -0.8**
comp=Z,24nm,0.7s
**GSI Gunungsitoli 27.31 194** *e*P **P** **21 55 21.9 -1.7**
comp=Z,12nm,0.5s
**TKM2 Tokmak 2 27.45 310** *e*P **P** **21 55 26.1 +1.2**
TKM2 pmax pmax
comp=Z,7.0nm,1.1s
**TKM2 Tokmak 2 27.45 310** *e*P **P** **21 55 26.1 +1.2**
comp=Z,6.7nm,1.1s
**USRK Ussuriysk Ar. 27.50 47** P **P** **21 55 24.2 -0.8**
comp=Z,27nm,0.7s,baz=249,slow=8.9,SNR=38
USRK LR LR 22 08 02.0
comp=Z,162nm,18.6s,baz=211,slow=40
**BKNI Bangkinang 27.70 187** *e*P **P** **21 55 25.7 -1.4**
comp=Z,63nm,0.4s
**AAK Ala-Archa 28.08 309** P P 21 55 36.0 +5.4
comp=Z,2.2nm,0.6s,baz=129,slow=14,SNR=8.3
AAK LR LR 22 07 43.7
comp=Z,197nm,20.1s,baz=72,slow=38
**AAK Ala-Archa 28.08 309** P P 21 55 36.0 +5.4
AAK pmax pmax
comp=Z,2.0nm,0.6s
AAK MLR MLR
comp=Z,197nm,20.1s
**AAK Ala-Archa 28.08 309** *e*P **P** **21 55 32.8 +2.2**
comp=Z,55nm,0.9s
**URV Uravakonda 28.14 248** *e*P **P** **21 55 30.8 -0.3**
**EKS2 Erkin-Say 28.59 309** *e*P **P** **21 55 37.0 +2.0**
EKS2 pmax pmax
comp=Z,7.0nm,0.9s
**EKS2 Erkin-Say 28.59 309** *e*P **P** **21 55 37.0 +2.0**
comp=Z,7.1nm,0.9s
**DAV Davao City (W) 29.07 132** LR LR 22 08 47.5
comp=Z,200nm,19.9s,baz=348,slow=40
**ZAA0 Zalesovo Array 29.54 337** *e*P **P** **21 55 42.6 -0.5**
**ZALV Zalesovo Beam 29.54 337** P **P** **21 55 42.4 -0.7**
comp=Z,17nm,0.8s,baz=144,slow=9.7,SNR=34
ZALV LR LR 22 09 18.2
comp=Z,41nm,20.4s,baz=76,slow=40
**ZAA1 Zalesovo Array 29.54 337** *e*P **P** **21 55 42.4 -0.7**
**KURK Kurchatov 29.79 327** *e*P **P** **21 55 45.5 +0.1**
KURK pmax pmax
comp=Z,23nm,0.8s
**KURK Kurchatov 29.79 327** P **P** **21 55 45.6 +0.1**
comp=Z,87nm,0.7s,SNR=5.2
**KURK Kurchatov 29.79 327** *e*P **P** **21 55 45.5 +0.1**
comp=Z,23nm,0.8s
**KLR Kul'dur 29.93 37** *i* P **P** **21 55 46.4 -0.3**
**PALK Pallekele 30.31 232** P **P** **21 55 51.0 +0.6**
comp=Z,5.5nm,0.6s,baz=119,slow=3.1,SNR=5.8
**PALK Pallekele 30.31 232** P **P** **21 55 51.0 +0.6**
PALK pmax pmax
comp=Z,6.0nm,0.6s
**PALK Pallekele 30.31 232** *e*P **P** **21 55 51.0 +0.6**
comp=Z,11nm,0.7s
**KBL Kabul 30.61 291** *e*P **P** **21 55 53.7 +0.6**
KBL pmax pmax
comp=Z,8.0nm,0.7s
**KBL Kabul 30.61 291** *e*P **P** **21 55 53.7 +0.6**
comp=Z,8.2nm,0.7s
**NVS Novosibirsk 30.81 336** *e*P **P** **21 55 54.9 +0.5**
NVS *e*S **S** **22 00 52.1 -4.8**
NVS pmax pmax
comp=Z,16nm,1.6s
NVS pmax pmax
comp=N,12nm,1.7s
NVS pmax pmax
comp=E,12nm,1.8s
NVS smax smax
comp=E,13nm,1.6s
**KKAR Karatay Array 31.00 308** *e*P **P** **21 55 57.2 +1.0**
**KKAR Karatay Array 31.00 308** *e*P **P** **21 55 57.2 +1.0**
**DZET Dzherino 31.22 299** P **P** **21 55 59.3 +0.9**
DZET pmax pmax
comp=Z,7.0nm,0.6s
**OTUK Ortayu 31.82 318** P P 21 56 07.4 +4.0
OTUK pmax pmax
comp=Z,7.0nm,1.0s
**LUWI Luwuk 33.97 145** *e*P **P** **21 56 22.2 -0.2**
comp=Z,38nm,1.0s
**ASAJ Asahikawa 34.61 52** P **P** **21 56 27.8 0.0**
comp=Z,21nm,1.0s,baz=202,slow=11,SNR=4.0
**ASAJ Asahikawa 34.61 52** P **P** **21 56 27.8 0.0**
ASAJ pmax pmax
comp=Z,21nm,1.0s
**ASAJ Asahikawa 34.61 52** *e*P **P** **21 56 27.8 0.0**
comp=Z,421nm,2.7s

**BRVK Borovoye 35.35 324***ce*P P 21 56 37.5 +3.5
BRVK pmax pmax
comp=Z,12nm,1.7s
**BRVK Borovoye 35.35 324** P P 21 56 37.6 +3.5
comp=Z,49nm,1.0s,SNR=5.7
**BRVK Borovoye 35.35 324** *e*P P 21 56 37.3 +3.3
comp=Z,6.9nm,0.9s
**YSS Yuzh-Sakhalins 35.53 47** *e*P P 21 56 32.0 -3.6
YSS MLR MLR
comp=N,400nm,15.0s
YSS MLR MLR
comp=Z,300nm,15.0s
**KAPI Kappang 36.12 153** P **P** **21 56 40.6 -0.4**
comp=Z,5.7nm,0.4s,baz=324,slow=9.5,SNR=6.3
**YAK Yakutsk 37.97 19** P **P** **21 56 56.4 +0.1**
comp=Z,7.7nm,0.5s,baz=32,slow=20,SNR=7.1
**YAK Yakutsk 37.97 19** *e*P **P** **21 56 56.3 +0.1**
YAK *e*S **S** **22 02 42.9 -4.3**
YAK pmax pmax
comp=Z,48nm,0.8s
YAK pmax pmax
comp=E,10.0nm,0.9s
YAK pmax pmax
comp=N,4.0nm,0.7s
YAK smax smax
comp=N,178nm,3.5s
YAK smax smax
comp=E,360nm,3.9s
**IMOG Moghan 38.56 294** *e*P **P** **21 57 03.5 +1.6**
**IKOO Kooshah 39.05 288** *e*P **P** **21 57 06.8 +0.8**
**IKRD Kardeh 39.22 295** *e*P P 21 57 02.3 -5.0
**ABKT Ailbek 39.53 297** P **P** **21 57 10.6 +0.9**
comp=E,100nm,0.8s,SNR=8.7
**GEYT Alibeck 39.53 297** P **P** **21 57 11.0 +1.3**
comp=E,9.7nm,0.8s,baz=101,slow=6.0,SNR=28
GEYT LR LR 22 16 29.0
comp=E,169nm,19.9s,baz=135,slow=41
**ABKAR Akbulak array 39.81 314** *e*P **P** **21 57 12.9 +1.0**
**MMRI Maumere 40.42 152** *e*P **P** **21 57 16.0 -1.2**
comp=E,42nm,0.9s
**AKTO Aktyubinsk 41.33 316** P **P** **21 57 25.6 +1.2**
comp=E,1.9nm,0.6s,baz=114,slow=10.0,SNR=3.3
**AKTO Aktyubinsk 41.33 316** P **P** **21 57 25.6 +1.2**
AKTO pmax pmax
comp=Z,2.0nm,0.6s
**SMDO Samad 41.72 274** P **P** **21 57 28.9 +0.9**
SNR=9.3
**SVE Sverdlovsk 42.03 326** *e*P P 21 57 33.6 +3.6
SVE pmax pmax
comp=Z,16nm,1.1s
**BATI Baumata 42.43 151** LR LR 22 16 37.0
comp=Z,73nm,18.1s,baz=163,slow=38
**ARU Arti 42.93 324** P **P** **21 57 36.7 -0.7**
comp=Z,0.3nm,0.3s,baz=287,slow=19,SNR=2.8
**ARU Arti 42.93 324***c i*P **P** **21 57 36.8 -0.5**
ARU S **S** **22 04 00.6 -0.7**
ARU SS **SS** **22 07 10.7 -2.2**
ARU pmax pmax
comp=Z,25nm,2.5s
**ARU Arti 42.93 324** *e*P **P** **21 57 37.0 -0.4**
comp=Z,12nm,1.0s
**IGLO Ghaloghah 42.99 295** *e*P **P** **21 57 39.5 +1.1**
**ISAD Sadrabad 43.59 288** *e*P **P** **21 57 43.4 0.0**
**IDMV Damavand 44.52 293** *e*P **P** **21 57 51.7 +0.9**
**IZEF Zefreh 44.59 290** *e*P **P** **21 57 51.5 +0.2**
**IRAM Ramesheh 44.70 288** *e*P **P** **21 57 51.7 -0.5**
**IKLH Kolahrood 45.15 290** *e*P **P** **21 57 56.8 +1.0**
**IPIR Pirpir 45.81 290** *e*P **P** **21 58 01.5 +0.4**
**IRAZ Razeghan 46.24 293** *e*P **P** **21 58 04.8 +0.4**
**PETK Petropavlovsk- 46.40 42** P **P** **21 58 03.3 -1.8**
comp=Z,6.2nm,0.9s,baz=46,slow=4.3,SNR=5.0
PETK LR LR 22 18 53.3
comp=Z,66nm,18.1s,baz=245,slow=38
**PETK Petropavlovsk- 46.40 42** P **P** **21 58 03.3 -1.8**
PETK pmax pmax
comp=Z,6.0nm,0.9s
PETK MLR MLR
comp=Z,66nm,18.1s
**PEA2 Petropavlovsk- 46.40 42** *e*P **P** **21 58 03.3 -1.8**
**SEY Seymchan 46.76 28** P **P** **21 58 07.5 -0.3**
comp=Z,4.2nm,0.6s,baz=176,slow=23,SNR=5.8
**SEY Seymchan 46.76 28** P **P** **21 58 07.5 -0.3**
SEY pmax pmax
comp=Z,4.0nm,0.6s
**ISRB Sarab 47.79 297** *e*P **P** **21 58 17.3 +0.8**
**IHRS Heris 48.24 298** *e*P **P** **21 58 20.2 +0.3**
**IKOM Komasi 48.38 292** *e*P **P** **21 58 20.9 -0.1**
**IBST Bostanabad 48.42 297** *e*P **P** **21 58 20.9 -0.4**
**IVIS Veis 48.87 293** *e*P **P** **21 58 25.2 +0.5**
**IMRD Marand 49.24 298** *e*P **P** **21 58 28.4 +0.8**
**DGRG David-gareji 49.27 302** P **P** **21 58 28.8 +1.3**
**DGRG David-gareji 49.27 302** *e*P **P** **21 58 28.8 +1.3**
**ISHB Shabestar 49.35 298** *e*P **P** **21 58 29.7 +1.2**
**GNI Garni 49.84 300***ce*P **P** **21 58 33.8 +1.7**
GNI pmax pmax
comp=Z,109nm,1.2s
**GNI Garni 49.84 300** P **P** **21 58 33.9 +1.7**
SNR=7.0
**ONI Oni 50.62 304** P **P** **21 58 39.6 +1.7**
**ONI Oni 50.62 304** *e*P **P** **21 58 39.5 +1.7**
**KBZ Khabaz 50.95 305** P **P** **21 58 39.9 -0.3**
comp=Z,5.9nm,0.9s,baz=69,slow=6.9,SNR=7.6
KBZ LR LR 22 23 42.2
comp=Z,92nm,18.3s,baz=98,slow=40
**KBZ Khabaz 50.95 305** P **P** **21 58 39.9 -0.3**
KBZ pmax pmax
comp=Z,6.0nm,0.9s
KBZ MLR MLR
comp=Z,92nm,18.3s
**KIV Kislovodsk 51.09 305** *e*P **P** **21 58 41.9 +0.5**
KIV pmax pmax
comp=Z,58nm,1.1s
KIV MLR MLR
comp=Z,93nm,16.0s
**KIV Kislovodsk 51.09 305** P **P** **21 58 42.9 +1.5**
comp=Z,282nm,0.9s,SNR=10
**KIV Kislovodsk 51.09 305** P **P** **21 58 42.5 +1.1**
SNR=16
**KIV Kislovodsk 51.09 305** *e*P **P** **21 58 42.1 +0.7**
comp=Z,51nm,1.0s
**MBWA Marble Bar 51.16 161** *e*P **P** **21 58 41.5 -0.4**
comp=Z,22nm,0.8s
**VRH Novokhopyorsk 51.64 315** *e*P **P** **21 58 45.8 +0.6**
VRH pmax pmax
comp=Z,10.0nm,1.0s
VRH pmax pmax
comp=N,20nm,0.7s
VRH pmax pmax
comp=E,20nm,0.7s
**RAYN Ar Rayn 52.59 279** P **P** **21 58 52.9 +0.1**
comp=E,48nm,0.7s,SNR=11
**RAYN Ar Rayn 52.59 279** *e*P **P** **21 58 52.2 -0.6**
comp=E,16nm,1.3s
**VORD Divnogorie 53.17 314** *e*P **P** **21 58 57.2 +0.6**
VORD pmax pmax
comp=E,30nm,0.8s
VORD pmax pmax
comp=Z,5.0nm,0.8s
VORD pmax pmax
comp=N,10.0nm,1.0s
**VSR Storozhevoye 53.25 315** *e*P **P** **21 58 58.0 +0.8**
VSR pmax pmax
comp=Z,10.0nm,1.7s
VSR pmax pmax
comp=N,10.0nm,1.3s
VSR pmax pmax
comp=E,9.0nm,0.9s
**SOC Sochi 53.26 305** *e*P **P** **21 58 56.5 -0.9**
SOC *e*PPP PPP 22 02 10.8
SOC *e*S **S** **22 06 27.6 -0.4**
SOC pmax pmax
comp=Z,10.0nm,0.6s
**LPSR Galich'ya Gora 53.40 316** *e*P **P** **21 58 58.3 0.0**
LPSR pmax pmax
comp=E,10.0nm,1.3s
LPSR pmax pmax
comp=Z,10.0nm,1.3s
LPSR pmax pmax
comp=N,3.0nm,0.7s
**KLMR Klimovskoe 53.64 327** *e*P **P** **21 58 58.8 -1.1**
KLMR pmax pmax
comp=Z,29nm,1.0s
**BILL Bilibino 53.94 24***de*P **P** **21 59 02.8 +0.8**
BILL *e**SP **sP** **21 59 10.5 +0.8**
BILL *e* 21 59 19.1
BILL *e*SS **SKiKP** **22 10 13.7 -0.4**

BILL pmax pmax
comp=Z,10.0nm,0.7s
BILL MLR MLR
comp=Z,291nm,18.0s
**ANN Anapa 54.77 307** *e*P **P** **21 59 07.6 -0.8**
ANN pmax pmax
comp=Z,28nm,1.4s
**OBN Obninsk 54.82 319** P **P** **21 59 10.0 +1.4**
OBN *SP **sP** **21 59 18.0 +1.7**
OBN pmax pmax
comp=Z,5.0nm,0.9s
OBN MLR MLR
comp=Z,194nm,18.0s
**WRAB Tennant Creek 55.90 145** *e*P **P** **21 59 16.1 -0.7**
WRAB pmax pmax
comp=Z,87nm,1.0s
**WRAB Tennant Creek 55.90 145** P **P** **21 59 15.0 -1.8**
comp=Z,228nm,0.5s,SNR=33
**WRA Warramunga Arr 55.91 145** P **P** **21 59 15.6 -1.3**
comp=Z,21nm,0.7s,baz=333,slow=7.9,SNR=57
**WRA Warramunga Arr 55.91 145***ce*P **P** **21 59 15.8 -1.0**
WRA pmax pmax
comp=Z,21nm,0.7s
**APA Apatity 57.09 334**⇑*i*P **P** **21 59 25.6 +1.0**
APA MLR MLR
comp=Z,1μm,24.0s
**BR101 Keskin Array S 58.34 301** *e*P **P** **21 59 33.3 -0.8**
**BRTR Keskin Array B 58.35 301** P **P** **21 59 33.3 -0.8**
comp=Z,4.2nm,0.8s,baz=107,slow=6.0,SNR=21
BRTR LR LR 22 29 14.6
comp=Z,27nm,18.4s,baz=96,slow=41
**BRTR Keskin Array B 58.35 301***ce*P **P** **21 59 33.7 -0.4**
BRTR pmax pmax
comp=Z,4.0nm,0.8s
**AS12 Alice Springs 58.85 148** *e*P **P** **21 59 37.0 -0.5**
**ASAR Alice Springs 58.85 148** P **P** **21 59 37.0 -0.5**
comp=Z,9.5nm,0.7s,baz=329,slow=6.5,SNR=94
**ASAR Alice Springs 58.85 148** P **P** **21 59 37.1 -0.5**
ASAR pmax pmax
comp=Z,10.0nm,0.7s
**AS01 Alice Springs 58.87 148** *e*P **P** **21 59 36.9 -0.8**
**ANTO Ankara 58.95 302** *e*P **P** **21 59 38.5 +0.2**
ANTO pmax pmax
comp=Z,9.0nm,0.7s
**ANTO Ankara 58.95 302**⇑*i*P **P** **21 59 38.8 +0.5**
**ANTO Ankara 58.95 302** P **P** **21 59 38.9 +0.5**
SNR=5.5
**ANTO Ankara 58.95 302** *e*P **P** **21 59 38.5 +0.2**
comp=Z,9.3nm,0.7s
**BR231 Keskin MP Arra 58.97 302** *e*P P 21 59 35.0 -3.5
**AKASG Malin Array Be 59.55 315** P **P** **21 59 41.2 -0.9**
comp=Z,1.1nm,0.4s,baz=73,slow=6.3,SNR=12
**AKASG Malin Array Be 59.55 315** P **P** **21 59 41.2 -0.9**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**AKBB Malin Array Si 59.55 315** *e*P **P** **21 59 41.2 -0.9**
**AKBB Malin Array Si 59.55 315** *e*P **P** **21 59 41.2 -0.9**
**KIEV Kiev 59.56 315** *e*P **P** **21 59 41.8 -0.4**
KIEV pmax pmax
comp=Z,17nm,1.5s
**KIEV Kiev 59.56 315** *e*P **P** **21 59 41.8 -0.4**
comp=Z,17nm,1.5s
**AK11 Malin Array Si 59.59 315** *e*P **P** **21 59 41.4 -1.0**
**CSS Prodhromos 59.67 296** *e*P **P** **21 59 41.8 -1.5**
comp=Z,2.4nm,0.8s
**ARA0 ARCESS Array S 60.09 337** *e*P **P** **21 59 45.1 -0.5**
**ARCES ARCESS Array B 60.09 337** P **P** **21 59 45.1 -0.5**
comp=Z,4.9nm,0.7s,baz=86,slow=7.2,SNR=19
ARCES LR LR 22 27 55.5
comp=Z,157nm,18.1s,baz=88,slow=38
**ARCES ARCESS Array B 60.09 337** P **P** **21 59 45.1 -0.5**
ARCES pmax pmax
comp=Z,5.0nm,0.7s
ARCES MLR MLR
comp=Z,157nm,18.1s
**FIA0 FINESS Array S 60.16 327** *e*P **P** **21 59 45.9 -0.2**
**FIA0 FINESS Array S 60.16 327** *e*P **P** **21 59 45.9 -0.2**
**FINES FINESS Array B 60.16 327** P **P** **21 59 45.9 -0.2**
comp=Z,3.3nm,0.8s,baz=93,slow=7.6,SNR=14
FINES LR LR 22 27 44.1
comp=Z,194nm,18.6s,baz=79,slow=38
**FINES FINESS Array B 60.16 327***ce*P **P** **21 59 48.2 +2.1**
FINES pmax pmax
comp=Z,3.0nm,0.5s
**TLCR 60.76 308**⇑*i*P **P** **21 59 47.6 -2.9**
**ISP Isparta 61.15 300** *e*P **P** **21 59 52.5 -0.9**
ISP pmax pmax
comp=Z,19nm,0.9s
**ISP Isparta 61.15 300**⇑*i*P **P** **21 59 52.9 -0.5**
**ISP Isparta 61.15 300** *e*P **P** **21 59 52.5 -0.9**
comp=Z,18nm,0.9s
**TIRR Tirgusor 61.18 308**⇑*i*P **P** **21 59 52.8 -0.6**
**CFR Carcaliu 61.23 308**⇓*i*P **P** **21 59 53.5 -0.2**
**VRI Vrincioaia 62.05 309**⇓*i*P **P** **21 59 59.9 +0.6**
**PLOR Plostina 62.11 309**⇓*i*P **P** **22 00 00.7 +1.0**
**MLR Muntele Rosu 62.67 309**⇑*i*P **P** **22 00 04.3 +0.7**
**BURAR Bucovina Array 62.69 312**⇑*i*P **P** **22 00 01.0 -2.6**
**BUR04 Bucovina Ar. S 62.69 312** *e*P **P** **22 00 03.6 -0.1**
**DOPR Dopca 62.94 310**⇑*i*P **P** **22 00 06.0 +0.8**
**VOIR 63.29 309**⇓*i*P **P** **22 00 07.5 -0.2**
**ARCR ARCALIA 63.38 311**⇓*i*P **P** **22 00 09.4 +1.3**
**HUMR Humele 63.56 308**⇑*i*P **P** **22 00 09.4 +0.1**
**KWP Kalwaria Pacla 63.87 314** *e*P **P** **22 00 11.7 +0.5**
**KWP Kalwaria Pacla 63.87 314** *e*P **P** **22 00 11.8 +0.5**
**LOT Lotru 64.17 310**⇑*i*P **P** **22 00 13.8 +0.4**
**KOLS Kolonicke sedl 64.31 314** *e*P **P** **22 00 14.7 +0.5**
**KOLS Kolonicke sedl 64.31 314** *e*P **P** **22 00 14.7 +0.5**
**TRPA Tarpa 64.33 313**⇑*i*P **P** **22 00 14.9 +0.6**
**UZH Uzhgorod 64.37 313**⇓*e*P **P** **22 00 13.9 -0.6**
UZH *e* 22 00 27.9
**DRGR 64.54 311**⇓*i*P **P** **22 00 16.2 +0.4**
**STHS Stebnicka Huta 64.84 314** *e*P **P** **22 00 17.3 -0.4**
**STHS Stebnicka Huta 64.84 314** *e*P **P** **22 00 17.3 -0.4**
**GZR Gura Zlata 64.86 310**⇓*i*P **P** **22 00 17.0 -0.9**
**NIE Niedzica 65.44 314** *e*P **P** **22 00 22.4 +0.8**
**NIE Niedzica 65.44 314** *e*P **P** **22 00 22.4 +0.8**
**HNR Honiara 65.52 116** LR LR 22 26 31.4
comp=Z,53nm,18.6s,baz=124,slow=34
**OJC Ojcow 65.55 315** *e*P **P** **22 00 22.5 +0.3**
**OJC Ojcow 65.55 315** *e*P **P** **22 00 22.5 +0.3**
**BZS Buzias 65.58 310**⇑*i*P **P** **22 00 21.2 -1.3**
**LAST Lasithi 65.79 298** *e*pP pP 22 00 29.0 -0.9
**PSZ Piszkesteto 66.10 313** *e*P **P** **22 00 28.6 +2.7**
PSZ pmax pmax
comp=Z,8.0nm,1.1s
**PSZ Piszkesteto 66.10 313**⇓*i*P **P** **22 00 24.3 -1.6**
**PSZ Piszkesteto 66.10 313** *e*P **P** **22 00 28.6 +2.7**
comp=Z,8.2nm,1.1s
**VYHS Vyhne 66.62 314** *e*P **P** **22 00 28.4 -0.7**
VYHS pmax pmax
comp=Z,6.0nm,1.4s
**VYHS Vyhne 66.62 314** *e*P **P** **22 00 28.4 -0.7**
**OKC Ostrava-Krasne 66.68 315** *e*P **P** **22 00 30.5 +1.0**
**OKC Ostrava-Krasne 66.68 315** *e*P **P** **22 00 30.5 +1.0**
**MORC Moravsky Berou 67.07 315** *e*P **P** **22 00 32.3 +0.3**
MORC pmax pmax
comp=Z,21nm,1.0s
**MORC Moravsky Berou 67.07 315**⇓*i*P **P** **22 00 32.6 +0.6**
**MORC Moravsky Berou 67.07 315** *e*P **P** **22 00 32.3 +0.3**
comp=Z,21nm,1.0s
**DIVS Divibare 67.12 309**⇑*i*P **P** **22 00 31.4 -1.1**
**NB2 NORSAR Subarra 67.29 328** P **P** **22 00 32.2 -1.0**
comp=Z,26nm,1.4s,baz=74,slow=6.9
**NB200 NORSAR Array S 67.29 328** *e*P **P** **22 00 32.0 -1.1**
**NOA NORSAR Array B 67.29 328** P **P** **22 00 32.0 -1.1**
comp=Z,5.2nm,1.0s,baz=74,slow=6.5,SNR=5.5
NOA LR LR 22 32 49.4
comp=Z,69nm,18.3s,baz=35,slow=38
**NOA NORSAR Array B 67.29 328** P **P** **22 00 32.1 -1.1**
NOA pmax pmax
comp=Z,5.0nm,1.0s
NOA MLR MLR
comp=Z,69nm,18.3s
**VRAC Vranov 67.80 315**⇑*i*P **P** **22 00 37.4 +0.8**
**CONA Conrad Observa 68.69 314**⇑*i*P **P** **22 00 39.6 -2.7**
comp=Z,9.3nm,1.5s
**BRG Berggiesshubel 68.94 317** *e*P P 22 00 47.4 +3.7
comp=Z,5.6nm,0.8s
**BRG Berggiesshubel 68.94 317** *e*P P 22 00 47.4 +3.7
BRG pmax pmax
comp=Z,6.0nm,0.8s
**CLL Collm 69.36 318** *e*P **P** **22 00 46.0 -0.3**
CLL pmax pmax
comp=Z,9.0nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CLL** | **Collm** | **69.36** | **318** | *e*P | | **P** | **22 00 46.0** | **-0.3** |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| CLL | | | | *i* | | | 22 00 48.0 | |
| CLL | | | | *i* (PcP) | | **PcP** | **22 01 12.4** | **+2.7** |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| CLL | | | | Lm | | MLR | 22 32 00.0 | |
| | comp=Z,100nm,21.0s | | | | | | | |
| **CLL** | **Collm** | **69.36** | **318** | *e*P | | **P** | **22 00 44.3** | **-2.0** |
| | comp=Z,4.9nm,0.8s | | | | | | | |
| CLL | | | | *e*PcP | | **pP** | **22 00 50.2** | **-1.8** |
| **GEC2** | **GERESS Array S** | **69.75** | **315** | *e*P | | **P** | **22 00 48.7** | **-0.2** |
| **GEC2** | **GERESS Array S** | **69.75** | **315** | *e*P | | **P** | **22 00 48.7** | **-0.2** |
| **GERES** | **GERESS Array B** | **69.75** | **315** | P | | **P** | **22 00 48.7** | **-0.2** |
| | comp=Z,1.7nm,0.6s,baz=67,slow=5.5,SNR=10 | | | | | | | |
| GERES | | | | LR | | LR | 22 33 37.5 | |
| | comp=Z,109nm,20.5s,baz=84,slow=38 | | | | | | | |
| **GERES** | **GERESS Array B** | **69.75** | **315** | P | | **P** | **22 00 48.7** | **-0.2** |
| GERES | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| GERES | | | | MLR | | MLR | | |
| | comp=Z,109nm,20.5s | | | | | | | |
| **COLD** | **Coldfoot** | **70.26** | **23** | *e*P | | **P** | **22 00 52.1** | **+0.5** |
| | comp=Z,14nm,1.1s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **70.28** | **258** | P | | **P** | **22 00 52.5** | **-0.3** |
| | comp=Z,2.4nm,0.7s,baz=51,slow=12,SNR=9.3 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **70.28** | **258** | *ce*P | | **P** | **22 00 53.0** | **+0.2** |
| KMBO | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **70.28** | **258** | *e*P | | **P** | **22 00 53.1** | **+0.3** |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **71.31** | **27** | *e*P | | **P** | **22 00 57.6** | **-0.5** |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **PPLA** | **Purkeypile** | **71.34** | **28** | *e*P | | **P** | **22 00 58.6** | **+0.2** |
| | comp=Z,35nm,1.0s | | | | | | | |
| **MOTA** | **Moosalm** | **71.91** | **314** | ⇓*i*P | | **P** | **22 01 01.4** | **-0.7** |
| | comp=Z,6.1nm,0.8s | | | | | | | |
| **MDM** | **Murphy Dome** | **71.99** | **25** | *e*P | | **P** | **22 01 02.1** | **-0.1** |
| | comp=Z,28nm,0.9s | | | | | | | |
| **COLA** | **College** | **72.18** | **25** | *e*P | | **P** | **22 01 02.0** | **-1.2** |
| COLA | | | | pmax | | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **COLA** | **College** | **72.18** | **25** | *e*P | | **P** | **22 01 02.0** | **-1.2** |
| | comp=Z,19nm,0.8s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **72.30** | **25** | *e*P | | **P** | **22 01 03.7** | **-0.2** |
| | comp=Z,135nm,2.8s | | | | | | | |
| **RND** | **Reindeer** | **72.47** | **27** | *e*P | | **P** | **22 01 05.0** | **-0.1** |
| RND | | | | pmax | | pmax | | |
| | comp=Z,148nm,2.2s | | | | | | | |
| **RND** | **Reindeer** | **72.47** | **27** | *e*P | | **P** | **22 01 05.0** | **-0.1** |
| | comp=Z,148nm,2.2s | | | | | | | |
| **IL1** | **Eielson Array** | **72.59** | **25** | *e*P | | **P** | **22 01 03.8** | **-1.9** |
| **ILAR** | **Eielson Array** | **72.59** | **25** | P | | **P** | **22 01 03.8** | **-1.9** |
| | comp=Z,2.3nm,0.8s,baz=284,slow=4.6,SNR=16 | | | | | | | |
| ILAR | | | | PP | | **PP** | **22 03 48.1** | **+1.5** |
| | comp=Z,1.6nm,0.9s,baz=290,slow=7.4,SNR=5.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **72.59** | **25** | P | | **P** | **22 01 03.8** | **-1.9** |
| ILAR | | | | | | | 22 03 48.2 | |
| ILAR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| ILAR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **ILB** | **Eielson Array** | **72.59** | **25** | *e*P | | **P** | **22 01 03.8** | **-1.9** |
| ILB | | | | *e*PP | | **PP** | **22 03 48.1** | **+1.5** |
| **FUORN** | **Ofenpass-Fuorn** | **72.72** | **314** | *e*P | | **P** | **22 01 06.4** | **-0.6** |
| | comp=Z,9.1nm,1.0s | | | | | | | |
| **HDA** | **Harding Lake** | **72.74** | **25** | *e*P | | **P** | **22 01 04.9** | **-1.7** |
| | comp=Z,79nm,1.0s | | | | | | | |
| **BFO** | **Black Forest** | **73.26** | **316** | *e*P | | **P** | **22 01 10.2** | **+0.2** |
| BFO | | | | pmax | | pmax | | |
| | comp=Z,15nm,1.4s | | | | | | | |
| **BFO** | **Black Forest** | **73.26** | **316** | *e*P | | **P** | **22 01 10.2** | **+0.2** |
| | comp=Z,15nm,1.4s | | | | | | | |
| **KDAK** | **Kodiak Island** | **73.38** | **33** | *i* P | | **P** | **22 01 09.8** | **-0.6** |
| **SML** | **Sawmill** | **73.44** | **28** | *e*P | | **P** | **22 01 10.6** | **-0.2** |
| SML | | | | pmax | | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | | |
| **SML** | **Sawmill** | **73.44** | **28** | *e*P | | **P** | **22 01 10.6** | **-0.2** |
| | comp=Z,23nm,0.8s | | | | | | | |
| **WLF** | **Walferdange** | **74.03** | **318** | P | | **P** | **22 01 15.9** | **+1.4** |
| | comp=Z,12nm,1.6s | | | | | | | |
| **WLF** | **Walferdange** | **74.03** | **318** | *e*P | | **P** | **22 01 15.1** | **+0.7** |
| WLF | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **WLF** | **Walferdange** | **74.03** | **318** | *e*P | | **P** | **22 01 15.1** | **+0.7** |
| | comp=Z,14nm,0.9s | | | | | | | |
| **BCLA** | **Clavier** | **74.21** | **319** | P | | **P** | **22 01 18.3** | **+2.9** |
| **KLU** | **Klutina** | **74.60** | **28** | *e*P | | **P** | **22 01 17.9** | **-0.2** |
| | comp=Z,91nm,1.6s | | | | | | | |
| **INK** | **Inuvik** | **75.04** | **19** | P | | **P** | **22 01 19.1** | **-0.8** |
| | comp=Z,14nm,0.8s,baz=302,slow=6.0,SNR=16 | | | | | | | |
| **INK** | **Inuvik** | **75.04** | **19** | *e*P | | **P** | **22 01 19.8** | **-0.1** |
| INK | | | | pmax | | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | | |
| **INK** | **Inuvik** | **75.04** | **19** | *e*P | | **P** | **22 01 19.8** | **-0.1** |
| | comp=Z,17nm,0.8s | | | | | | | |
| **BMRM** | **Bremner River** | **75.42** | **28** | *e*P | | **P** | **22 01 22.8** | **+0.4** |
| | comp=Z,23nm,0.8s | | | | | | | |
| **MBAR** | **Mbarara** | **75.68** | **262** | *e*P | | **P** | **22 01 24.2** | **-0.6** |
| MBAR | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **MBAR** | **Mbarara** | **75.68** | **262** | *e*P | | **P** | **22 01 24.2** | **-0.6** |
| | comp=Z,6.5nm,1.1s | | | | | | | |
| **DAWY** | **Dawson** | **75.72** | **24** | *e*P | | **P** | **22 01 23.5** | **-0.5** |
| | comp=Z,60nm,1.8s | | | | | | | |
| **SUMG** | **Summit** | **76.47** | **349** | *i* P | | **P** | **22 01 28.7** | **+0.1** |
| SUMG | | | | pmax | | pmax | | |
| | comp=Z,27nm,1.2s | | | | | | | |
| **SUMG** | **Summit** | **76.47** | **349** | *i* P | | **P** | **22 01 28.7** | **+0.1** |
| | comp=Z,27nm,1.2s | | | | | | | |
| **SUMG** | **Summit** | **76.47** | **349** | *e*P | | **P** | **22 01 28.2** | **-0.3** |
| | comp=Z,28nm,1.2s | | | | | | | |
| **RES** | **Resolute Bay** | **76.79** | **5** | *e*P | | **P** | **22 01 28.7** | **-1.1** |
| RES | | | | pmax | | pmax | | |
| | comp=Z,186nm,3.0s | | | | | | | |
| **RES** | **Resolute Bay** | **76.79** | **5** | *e*P | | **P** | **22 01 28.7** | **-1.1** |
| | comp=Z,186nm,3.0s | | | | | | | |
| **SKAG** | **Skagway** | **80.06** | **27** | *e*P | | **P** | **22 01 50.8** | **+2.7** |
| | comp=Z,20nm,1.0s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **83.37** | **350** | *i* P | | **P** | **22 02 05.1** | **-0.4** |
| SFJD | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **83.37** | **350** | *i* P | | **P** | **22 02 05.1** | **-0.4** |
| | comp=Z,11nm,0.7s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.61** | **17** | P | | **P** | **22 02 10.9** | **-1.0** |
| | comp=Z,2.9nm,0.5s,baz=326,slow=5.5,SNR=9.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **84.61** | **17** | P | | **P** | **22 02 10.9** | **-1.0** |
| YKA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **YKB5** | **Yellowknife Ar** | **84.61** | **17** | *e*P | | **P** | **22 02 10.9** | **-1.0** |
| **ESDC** | **Sonseca Array** | **85.13** | **313** | P | | **P** | **22 02 13.1** | **-2.0** |
| | comp=Z,0.1nm,0.3s,baz=39,slow=5.9,SNR=4.0 | | | | | | | |
| **LSZ** | **Lusaka** | **85.16** | **250** | *e*P | | **P** | **22 02 15.3** | **-0.3** |
| LSZ | | | | pmax | | pmax | | |
| | comp=Z,37nm,1.4s | | | | | | | |
| **LSZ** | **Lusaka** | **85.16** | **250** | *e*P | | **P** | **22 02 15.3** | **-0.3** |
| | comp=Z,37nm,1.4s | | | | | | | |
| **LBTB** | **Lobatse** | **92.15** | **243** | *e*P | | **P** | **22 02 50.4** | **+1.7** |
| LBTB | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **LBTB** | **Lobatse** | **92.15** | **243** | *e*P | | **P** | **22 02 50.4** | **+1.7** |
| | comp=Z,8.3nm,0.8s | | | | | | | |
| **EDM** | **Edmonton** | **92.76** | **22** | *e*P | | **P** | **22 02 51.8** | **+0.8** |
| EDM | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **EDM** | **Edmonton** | **92.76** | **22** | *e*P | | **P** | **22 02 51.8** | **+0.8** |
| | comp=Z,7.3nm,0.7s | | | | | | | |
| **BOSA** | **Boshof** | **94.19** | **240** | P | | **P** | **22 02 56.1** | **-2.0** |
| | comp=Z,3.1nm,0.6s,baz=93,slow=4.0,SNR=8.0 | | | | | | | |
| BOSA | | | | LR | | LR | 22 43 34.3 | |
| | comp=Z,18nm,21.3s,baz=353,slow=34 | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **94.61** | **287** | *e*P | | **P** | **22 02 59.4** | **-0.7** |
| TOA0 | | | | *e*PP | | **PP** | **22 06 47.2** | **-0.9** |
| **TORD** | **Torodi Ar. Bea** | **94.61** | **287** | P | | **P** | **22 02 59.4** | **-0.7** |
| | comp=Z,0.9nm,0.9s,baz=64,slow=5.3,SNR=8.7 | | | | | | | |
| TORD | | | | PP | | **PP** | **22 06 47.2** | **-0.9** |
| | comp=Z,1.1nm,1.1s,baz=44,slow=7.0,SNR=4.8 | | | | | | | |
| TORD | | | | LR | | LR | 22 52 11.3 | |
| | comp=Z,40nm,18.0s,baz=285,slow=40 | | | | | | | |
| **TXAR** | **Lajitas Array** | **117.06** | **27** | PKP | | **PKPdf** | **22 08 23.3** | **-1.0** |
| | comp=Z,0.3nm,0.4s,baz=311,slow=0.2,SNR=6.9 | | | | | | | |
| **SDV** | **Santo Domingo** | **142.97** | **351** | *e*PKPpre | | PKPpre | 22 09 08.6 | |
| **ROSC** | **El Rosal** | **147.28** | **357** | PKPbc | | **PKPbc** | **22 09 23.5** | **0.0** |
| | comp=Z,15nm,0.6s,baz=98,slow=6.1,SNR=11 | | | | | | | |
| **ROSC** | **El Rosal** | **147.28** | **357** | *e*PKPbc | | **PKPbc** | **22 09 24.0** | **+0.5** |
| **PTGA** | **Pitinga** | **148.90** | **328** | *e*PKPbc | | **PKPbc** | **22 09 26.3** | **-1.0** |
| **BDFB** | **Brasilia** | **151.46** | **290** | PKPbc | | **PKPbc** | **22 09 34.1** | **+0.6** |
| | comp=Z,1.7nm,0.5s,baz=24,slow=1.2,SNR=4.2 | | | | | | | |
| **BDFB** | **Brasilia** | **151.46** | **290** | PKIKP | | **PKPbc** | **22 09 34.1** | **+0.6** |
| BDFB | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **OTAV** | **Otavalo** | **151.79** | **6** | *e*PKPdf | | **PKPdf** | **22 09 29.7** | **+1.2** |

*IDC* ***17*** *22:08:48.3±1.7,2.2°21S×100.59E, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.5/36, mbtmp3.6/6, Error ellipse: s-maj=82.2km s-min=22.0km az=53.0*
*ISCJB* ***17*** *22:08:55.9±0.5,2.09S±0.04×100.48E±0.05, h72km±6km, mb3.6/5, Error ellipse: s-maj=8.5km s-min=5.6km az=158.2*
*DJA* ***17*** *22:08:55.7±0.2,2°S±2°×10°1E±°, h13km, M4.1/15, mb4.2/1, MLv4.1/15*

**ISC 17 22:08:56.8±1.0, 2.08S±0.04×100.49E±0.05, h57km±11km, n20, σ1ᵖ59/26, mb3.8/5, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.83** | **215** | P | | **Pn** | **Pn** | **22 09 10.5** | **-2.0** |
| PPSI | | | | S | | **Sn** | **Sn** | **22 09 24.5** | **+0.4** |
| **PDSI** | **Padang** | **1.16** | **359** | P | | **Pn** | **Pn** | **22 09 16.9** | **0.0** |
| **SDSI** | **Sungai Dareh** | **1.48** | **39** | P | | **Pn** | **Pn** | **22 09 18.9** | **-2.2** |
| SDSI | | | | S | | **Sn** | **Sn** | **22 09 38.1** | **-1.3** |
| **SISI** | **Saibi** | **1.59** | **298** | P | | **Pn** | **Pn** | **22 09 22.5** | **-0.1** |
| SISI | | | | S | | **Sn** | **Sn** | **22 09 45.4** | **+3.3** |
| **PPI** | **Padang Panjang** | **1.62** | **357** | P | | **Pn** | **Pn** | **22 09 22.2** | **-0.8** |
| PPI | | | | S | | **Sn** | **Sn** | **22 09 44.4** | **+1.6** |
| **BKNI** | **Bangkinang** | **2.45** | **13** | P | | **Pn** | **Pn** | **22 09 35.5** | **+1.1** |
| BKNI | | | | S | | **Sn** | **Sn** | **22 10 05.2** | **+2.0** |
| **KSI** | **Kapahiang** | **2.62** | **127** | P | | **Pn** | **Pn** | **22 09 38.4** | **+1.7** |
| KSI | | | | S | | **Sn** | **Sn** | **22 10 09.2** | **+1.9** |
| **MNSI** | **Mandailing Nat** | **3.00** | **342** | P | | **Pn** | **Pn** | **22 09 42.0** | **+0.1** |
| **MNAI** | **Manna** | **3.34** | **133** | P | | **Pn** | **Pn** | **22 09 48.4** | **+1.8** |
| **MDSI** | **Maura Dua** | **4.39** | **123** | P | | **Pn** | **Pn** | **22 10 01.1** | **+0.2** |
| **GSI** | **Gunungsitoli** | **4.45** | **319** | P | | **Pn** | **Pn** | **22 10 02.3** | **+0.5** |
| **LWLI** | **Liwa** | **4.60** | **129** | P | | **Pn** | **Pn** | **22 10 04.9** | **+0.9** |
| **KLSI** | | **4.96** | **122** | P | | **Pn** | **Pn** | **22 10 09.9** | **+1.1** |
| **CMAR** | **Chiang Mai Arr** | **20.47** | **356** | P | | **P** | **P** | **22 13 30.1** | **+0.2** |
| | 0.7nm,0.6s,baz=190,slow=10.0,SNR=4.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.53** | **121** | P | | **P** | **P** | **22 16 03.1** | **-2.6** |
| | 1.5nm,1.2s,baz=299,slow=8.3,SNR=2.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **38.81** | **126** | P | | **P** | **P** | **22 16 14.2** | **-2.2** |
| | 0.4nm,0.6s,baz=305,slow=8.3,SNR=6.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.24** | **344** | P | | **P** | **P** | **22 17 55.2** | **+0.5** |
| | 0.4nm,0.4s,baz=143,slow=7.1,SNR=5.9 | | | | | | | | |
| **ZALV** | **Zelesovo Beam** | **57.34** | **349** | P | | **P** | **P** | **22 18 38.0** | **-0.9** |
| | 0.4nm,0.3s,baz=153,slow=8.8,SNR=3.3 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **73.74** | **312** | P | | **P** | **P** | **22 20 26.0** | **+0.9** |
| | 0.3nm,0.6s,baz=109,slow=7.9,SNR=2.9 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **144.47** | **38** | PKP | | **PKPab** | **P** | **22 28 26.1** | **+0.2** |
| | 0.1nm,0.4s,baz=177,slow=1.8,SNR=3.4 | | | | | | | | |

**IDC 17 22:14:30.4±1.5, 14.06S×175.22W, h0km, mb4.3/2, mb1 4.6/3, mb1mx3.9/27, mbtmp4.4/3, ML4.2/1, Error ellipse: s-maj=146.3km s-min=28.3km az=170.0, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **3.34** | **88** | Pn | | Pn | Pn | 22 15 24.2 | +0.2 |
| | 24nm,0.3s,baz=191,slow=10,SNR=41 | | | | | | | | |
| AFI | | | | Sn | | Sn | Sn | 22 15 55.6 | -8.9 |
| | 114nm,0.3s,baz=54,slow=23,SNR=14 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.45** | **256** | P | | P | P | 22 23 15.2 | +0.2 |
| | 1.6nm,0.6s,baz=91,slow=7.3,SNR=12 | | | | | | | | |
| **ASAR** | **Alice Springs** | **48.87** | **251** | P | | P | P | 22 23 18.0 | -0.3 |
| | 2.9nm,0.4s,baz=88,slow=8.0,SNR=48 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **144.01** | **321** | PKP | | PKPdf | PKPdf | 22 34 07.8 | -0.7 |
| | 0.9nm,0.8s,baz=107,slow=3.2,SNR=7.9 | | | | | | | | |
| **GERES** | **GERESS Array B** | **144.54** | **350** | PKP | | PKPbc | PKPbc | 22 34 07.9 | +0.3 |
| | 0.2nm,0.4s,baz=347,slow=1.3,SNR=2.9 | | | | | | | | |

**WEL 17 22:39:58.1±0.1, 43.61S×172.40E, h5km, ML3.7/14, 1C-2D, Error ellipse: s-maj=0.6km s-min=0.6km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.17** | **80** | ⇓PG | | Pg | Pg | 22 40 01.5 | +0.2 |
| CRLZ | | | | SG | | Sg | Sg | 22 40 03.7 | +0.2 |
| CRLZ | | | | AML | | AML | AML | 22 40 04.2 | |
| CRLZ | | | | AML | | AML | AML | 22 40 05.2 | |
| CRLZ | | | | AML | | AML | AML | 22 40 05.3 | |
| **MQZ** | **McQueen's Vall** | **0.21** | **119** | ⇓PG | | Pg | Pg | 22 40 02.4 | +0.2 |
| MQZ | | | | SG | | Sg | Sg | 22 40 05.5 | +0.5 |
| **OXZ** | **Oxford** | **0.38** | **317** | PG | | Pg | Pg | 22 40 05.6 | +0.1 |
| OXZ | | | | SG | | Sg | Sg | 22 40 11.1 | +0.6 |
| **LTZ** | **Lake Taylor** | **0.83** | **353** | ⇑P* | | Pg | Pg | 22 40 14.2 | +0.2 |
| LTZ | | | | S* | | Sg | Sg | 22 40 25.2 | +0.4 |
| LTZ | | | | AML | | AML | AML | 22 40 26.1 | |
| **RPZ** | **Rata Peaks** | **0.98** | **263** | P* | | Pg | Pg | 22 40 17.1 | +0.2 |
| RPZ | | | | AML | | AML | AML | 22 40 34.0 | |
| RPZ | | | | AML | | AML | AML | 22 40 34.4 | |
| **WVZ** | **Waitaha Valley** | **1.32** | **293** | P* | | Pn | Pn | 22 40 22.4 | -0.8 |
| WVZ | | | | AML | | AML | AML | 22 40 44.3 | |
| WVZ | | | | AML | | AML | AML | 22 40 52.4 | |
| **KHZ** | **Kahutara** | **1.45** | **36** | PN | | Pn | Pn | 22 40 22.7 | -2.2 |
| **LBZ** | **Lake Benmore** | **1.78** | **243** | AML | | AML | AML | 22 40 57.2 | |
| LBZ | | | | AML | | AML | AML | 22 40 57.3 | |
| LBZ | | | | AML | | AML | AML | 22 40 57.5 | |
| LBZ | | | | AML | | AML | AML | 22 40 57.5 | |
| **THZ** | **Tophouse** | **1.88** | **12** | PN | | Pn | Pn | 22 40 29.2 | -1.8 |
| THZ | | | | AML | | AML | AML | 22 41 08.1 | |
| THZ | | | | AML | | AML | AML | 22 41 08.6 | |
| **DSZ** | **Denniston Nort** | **1.91** | **347** | PN | | Pn | Pn | 22 40 31.2 | -0.1 |
| DSZ | | | | AML | | AML | AML | 22 41 04.5 | |
| DSZ | | | | AML | | AML | AML | 22 41 09.0 | |
| **ODZ** | **Otahua Downs** | **1.91** | **221** | PN | | Pn | Pn | 22 40 29.8 | -1.5 |
| ODZ | | | | AML | | AML | AML | 22 41 06.8 | |
| ODZ | | | | AML | | AML | AML | 22 41 11.0 | |
| ODZ | | | | AML | | AML | AML | 22 41 11.0 | |
| ODZ | | | | AML | | AML | AML | 22 41 15.2 | |
| **FOZ** | **Fox Glacier** | **1.97** | **270** | PN | | Pn | Pn | 22 40 31.2 | -0.9 |
| FOZ | | | | AML | | AML | AML | 22 41 03.5 | |
| FOZ | | | | AML | | AML | AML | 22 41 04.5 | |
| FOZ | | | | AML | | AML | AML | 22 41 04.5 | |
| **BSWZ** | **Blackbirch Sta** | **2.18** | **31** | PN | | Pn | Pn | 22 40 34.6 | -0.4 |
| **NNZ** | **Nelson** | **2.49** | **17** | PN | | Pn | Pn | 22 40 38.8 | -0.4 |
| **JCZ** | **Jackson Bay** | **2.67** | **259** | PN | | Pn | Pn | 22 40 41.6 | -0.3 |
| JCZ | | | | AML | | AML | AML | 22 41 35.3 | |
| JCZ | | | | AML | | AML | AML | 22 41 36.5 | |
| **EAZ** | **Earnscleugh** | **2.75** | **233** | PN | | Pn | Pn | 22 40 41.3 | -1.5 |
| EAZ | | | | AML | | AML | AML | 22 41 30.1 | |
| EAZ | | | | AML | | AML | AML | 22 41 31.1 | |
| EAZ | | | | AML | | AML | AML | 22 41 31.1 | |
| EAZ | | | | AML | | AML | AML | 22 41 31.3 | |
| **QRZ** | **Quartz Range** | **2.78** | **2** | AML | | AML | AML | 22 41 16.8 | |
| QRZ | | | | AML | | AML | AML | 22 41 36.9 | |
| **TUZ** | **Tuapeka** | **3.07** | **219** | AML | | AML | AML | 22 41 47.8 | |
| **MLZ** | **Mavora Lakes** | **3.49** | **239** | PN | | Pn | Pn | 22 40 52.0 | -1.1 |
| **SYZ** | **Scrubby Hill** | **3.73** | **217** | PN | | Pn | Pn | 22 40 54.9 | -1.4 |
| SYZ | | | | AML | | AML | AML | 22 42 05.6 | |

**WEL 17 22:45:15.0±0.1, 43.63S×172.53E, h5km, ML3.5/11, 2C-1D, Error ellipse: s-maj=0.7km s-min=0.6km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.09** | **50** | ⇑PG | | Pg | Pg | 22 45 16.9 | 0.0 |
| CRLZ | | | | SG | | Sg | Sg | 22 45 18.3 | +0.2 |
| CRLZ | | | | AML | | AML | AML | 22 45 18.5 | |
| CRLZ | | | | AML | | AML | AML | 22 45 18.5 | |
| CRLZ | | | | AML | | AML | AML | 22 45 18.6 | |
| **MQZ** | **McQueen's Vall** | **0.12** | **130** | ⇓PG | | Pg | Pg | 22 45 17.6 | +0.1 |
| MQZ | | | | SG | | Sg | Sg | 22 45 19.4 | +0.4 |
| MQZ | | | | AML | | AML | AML | 22 45 19.6 | |
| **OXZ** | **Oxford** | **0.47** | **311** | PG | | Pg | Pg | 22 45 24.2 | +0.1 |
| **LTZ** | **Lake Taylor** | **0.87** | **347** | P* | | Pg | Pg | 22 45 32.0 | +0.2 |
| LTZ | | | | S* | | Sb | Sb | 22 45 44.1 | -0.6 |
| LTZ | | | | AML | | AML | AML | 22 45 44.8 | |
| **RPZ** | **Rata Peaks** | **1.07** | **265** | P* | | Pg | Pg | 22 45 35.3 | -0.4 |
| RPZ | | | | S* | | Sb | Sb | 22 45 50.7 | +0.2 |
| RPZ | | | | AML | | AML | AML | 22 45 54.9 | |
| **WVZ** | **Waitaha Valley** | **1.42** | **292** | PN | | Pn | Pn | 22 45 40.7 | -0.8 |
| WVZ | | | | AML | | AML | AML | 22 46 04.3 | |
| WVZ | | | | AML | | AML | AML | 22 46 05.5 | |
| **KHZ** | **Kahutara** | **1.42** | **32** | ⇑PN | | Pn | Pn | 22 45 39.5 | -2.0 |
| **LBZ** | **Lake Benmore** | **1.85** | **245** | PN | | Pn | Pn | 22 45 46.6 | -0.8 |
| LBZ | | | | AML | | AML | AML | 22 46 16.8 | |
| LBZ | | | | AML | | AML | AML | 22 46 18.7 | |
| **THZ** | **Tophouse** | **1.89** | **9** | PN | | Pn | Pn | 22 45 46.3 | -1.7 |
| **ODZ** | **Otahua Downs** | **1.96** | **223** | PN | | Pg | Pg | 22 45 52.4 | -0.2 |
| ODZ | | | | AML | | AML | AML | 22 46 20.1 | |
| ODZ | | | | AML | | AML | AML | 22 46 20.5 | |
| ODZ | | | | AML | | AML | AML | 22 46 24.3 | |
| ODZ | | | | AML | | AML | AML | 22 46 29.0 | |
| **DSZ** | **Denniston Nort** | **1.96** | **344** | AML | | AML | AML | 22 45 40.1 | |
| DSZ | | | | PN | | Pn | Pn | 22 45 48.0 | -1.0 |
| DSZ | | | | AML | | AML | AML | 22 46 17.0 | |
| **FOZ** | **Fox Glacier** | **2.06** | **271** | PN | | Pn | Pn | 22 45 49.6 | -0.8 |
| FOZ | | | | AML | | AML | AML | 22 46 17.4 | |
| FOZ | | | | AML | | AML | AML | 22 46 30.1 | |
| **BSWZ** | **Blackbirch Sta** | **2.16** | **28** | PN | | Pn | Pn | 22 45 50.1 | -1.6 |
| **EAZ** | **Earnscleugh** | **2.81** | **234** | AML | | AML | AML | 22 46 48.5 | |
| EAZ | | | | AML | | AML | AML | 22 46 51.6 | |
| **TUZ** | **Tuapeka** | **3.11** | **221** | AML | | AML | AML | 22 47 00.1 | |
| TUZ | | | | AML | | AML | AML | 22 47 00.2 | |

*ISK* ***17*** *22:51:41.6, 39°15N×36°20E, h8km, MD2.6*
*CSEM* ***17*** *22:51:42.6±0.3, 39°17N×36°16E, h2km, MD2.6, Error ellipse: s-maj=8.9km s-min=7.6km az=79.0*
*ISCJB* ***17*** *22:51:43.1±0.8, 39°12N±0°03×36°11E±0°07, h19km±14km, Error ellipse: s-maj=8.8km s-min=5.5km az=16.0*
*DDA* ***17*** *22:51:43.7, 39°11N×36°24E, h7km, Md2.9*

**ISC 17 22:51:42.6±1.2, 39.15N±0.04×36.16E±0.04, h8km±16km, n11, σ0ᵖ68/18, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CUSAR** | **Sarkisla-SIVAS** | **0.27** | **14** | P | | **Pb** | **Pb** | **22 51 49.6** | **-0.3** |
| CUSAR | | | | S | | **Sb** | **Sb** | **22 51 54.6** | **-0.2** |
| **BNN** | **Bunyan** | **0.39** | **219** | *e*PG | | **Pg** | **Pg** | **22 51 49.9** | **-0.3** |
| BNN | | | | *e*SG | | **Sg** | **Sg** | **22 51 56.2** | **+0.9** |
| **BNN** | **Bunyan** | **0.39** | **219** | *e*Pg | | **Pg** | **Pg** | **22 51 49.9** | **-0.3** |
| BNN | | | | *e*Sg | | **Sg** | **Sg** | **22 51 56.2** | **+0.9** |
| **CUALT** | **Altinyayla-SIV** | **0.48** | **75** | P | | **Pb** | **Pb** | **22 51 53.3** | **-0.2** |
| CUALT | | | | S | | **Sb** | **Sb** | **22 52 02.1** | **+1.4** |
| **PINB** | **Pinarbasi** | **0.51** | **158** | *i* P | | **Pg** | **Pg** | **22 51 52.4** | **-0.1** |
| PINB | | | | *i* S | | **Sg** | **Sg** | **22 51 59.5** | **+0.2** |
| **PINB** | **Pinarbasi** | **0.51** | **158** | P | | **Pg** | **Pg** | **22 51 52.5** | **-0.1** |
| PINB | | | | S | | **Sg** | **Sg** | **22 51 59.5** | **+0.2** |
| **SARI** | **SarD1z-Kayseri** | **0.77** | **165** | *e*PG | | **Pg** | **Pg** | **22 51 56.0** | **-1.4** |
| SARI | | | | *e*SG | | **Sg** | **Sg** | **22 52 07.9** | **+0.4** |
| **SVSK** | **Karacayir** | **1.00** | **40** | *e*PG | | **Pg** | **Pg** | **22 52 01.6** | **-0.3** |
| **SVSK** | **Karacayir** | **1.00** | **40** | *e*Pg | | **Pg** | **Pg** | **22 52 01.6** | **-0.3** |
| **CORM** | **Corum** | **1.56** | **311** | *e*PN | | **Pn** | **Pn** | **22 52 10.7** | **-0.1** |
| **CORM** | **Corum** | **1.56** | **311** | *e*Pn | | **Pn** | **Pn** | **22 52 10.7** | **-0.1** |

*ISK* ***17*** *22:53:11.5, 39°30N×27°58E, h15km, MD2.7*
*ISCJB* ***17*** *22:53:12.7±0.6, 39°29N±0°03×27°64E±0°06, h22km±7km, Error ellipse: s-maj=8.0km s-min=4.4km az=168.6*
*CSEM* ***17*** *22:53:12.5±0.1, 39°28N×27°64E, h20km, MD2.7, Error ellipse: s-maj=3.6km s-min=2.2km az=82.0*
*DDA* ***17*** *22:53:13.3, 39°30N×27°75E, h7km, Md2.8*

**ISC 17 22:53:12.0±1.2, 39°29N±0°02×27°64E±0°04, h13km±11km, n35, σ0ᵖ37/46, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BALB** | **Balikesir** | **0.40** | **28** | *e*PG | | **Pg** | **Pg** | **22 53 20.3** | **+0.3** |
| BALB | | | | *e*SG | | **Sb** | **Sb** | **22 53 26.6** | **-0.4** |
| **BALB** | **Balikesir** | **0.40** | **28** | *e*Pg | | **Pg** | **Pg** | **22 53 20.3** | **+0.3** |
| BALB | | | | *e*Sg | | **Sb** | **Sb** | **22 53 26.6** | **-0.4** |
| **AKS** | **Akhisar** | **0.43** | **161** | *e*PG | | **Pg** | **Pg** | **22 53 20.7** | **+0.2** |
| AKS | | | | *e*SG | | **Sb** | **Sb** | **22 53 28.4** | **+0.7** |
| **AKS** | **Akhisar** | **0.43** | **161** | *e*Pg | | **Pg** | **Pg** | **22 53 20.7** | **+0.2** |
| AKS | | | | *e*Sg | | **Sb** | **Sb

*ISCJB* ***17*** *23:05:35.0±0.3, 7.42S×0.03×128.53E±0.04, h151km, mb4.0/5, Error ellipse: s-maj=5.2km s-min=4.2km az=27.8*
*AUST* ***17*** *23:05:37.0±0.0, 7.54S×128.56E, h156km, Error ellipse: s-maj=1.4km s-min=1.0km az=327.0*
*IDC* ***17*** *23:05:37.8±1.9, 7.42S×128.39E, h166km±17km, mb3.7/5, mb1 3.8/8, mb1mx3.5/28, mbtmp4.2/8, MS3.4/1, Ms1 3.4/1, ms1mx2.4/23, Error ellipse: s-maj=21.1km s-min=14.1km az=95.0*
*DJA* ***17*** *23:05:37.7±0.3, 8°S±3°×12°9E±°, h90km±42km, M4.6/16, mb4.7/10, mB5.2/6, MLv4.5/16, Mw(mB)4.6/6*
**ISC 17 23:05:36.1±0.5, 7.47S±0.05×128.60E±0.06, h151km, n50, σ1°58/56, mb4.1/5, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.73** | **101** | P | **Pn** | **23 06 18.9** | **-1.2** |
| **BNDI** | **Bandanaira** | **3.21** | **24** | P | **Pn** | **23 06 26.4** | **+0.2** |
| **AAI** | **Ambon** | **3.78** | **354** | P | **Pn** | **23 06 34.9** | **+1.3** |
| **MSAI** | **Masohi** | **4.11** | **5** | P | **Pn** | **23 06 39.5** | **+1.6** |
| **NLAI** | **Namlea** | **4.46** | **340** | P | **Pn** | **23 06 44.3** | **+1.8** |
| **SOEI** | **Soe** | **4.84** | **242** | P | **Pn** | **23 06 47.7** | **+0.1** |
| | baz=4.8,SNR=65 | | | | | | |
| **SOEI** | **Soe** | **4.84** | **242** | P | **Pn** | **23 06 47.6** | **0.0** |
| SOEI | | | | S | **Sn** | **23 07 43.1** | **-0.3** |
| **BATI** | **Baumata** | **5.58** | **241** | P | **Pn** | **23 06 57.4** | **+0.1** |
| | 190nm,0.3s,baz=98,slow=2.2,SNR=88 | | | | | | |
| BATI | | | | S | **Sn** | **23 07 60.0** | **-0.8** |
| | 43nm,0.3s,baz=62,slow=22,SNR=7.5 | | | | | | |
| **BATI** | **Baumata** | **5.58** | **241** | P | **Pn** | **23 06 57.5** | **+0.1** |
| | 409nm,0.5s,6μm1.8nm | | | | | | |
| BATI | | | | S | **Sn** | **23 07 59.1** | **-1.7** |
| | 409nm,0.5s,6μm1.8nm | | | | | | |
| **FAKI** | **Fak Fak** | **5.80** | **39** | P | **Pn** | **23 07 00.0** | **-0.3** |
| | baz=5.9,SNR=43 | | | | | | |
| **FAKI** | **Fak Fak** | **5.80** | **39** | P | **Pn** | **23 07 01.3** | **+1.0** |
| | 36nm,0.5s,1μm0.2nm | | | | | | |
| **MTN** | **Manton Dam** | **5.89** | **155** | P | **Pn** | **23 07 03.0** | **+1.5** |
| | baz=5.9,SNR=9.5 | | | | | | |
| **BBSI** | **Bau Bau** | **6.30** | **288** | P | **Pn** | **23 07 08.4** | **+1.5** |
| | 58nm,1.0s,0.2nm | | | | | | |
| **KMPI** | **Kaimana, Papua** | **6.34** | **54** | P | **Pn** | **23 07 09.1** | **+1.7** |
| | 161nm,1.2s,3.9nm | | | | | | |
| KMPI | | | | S | **Sn** | **23 08 15.8** | **-3.1** |
| | 161nm,1.2s,3.9nm | | | | | | |
| **MMRI** | **Maumere** | **6.40** | **259** | P | **Pn** | **23 07 08.2** | **0.0** |
| | 88nm,0.9s,4μm0.4nm | | | | | | |
| MMRI | | | | S | **Sn** | **23 08 22.4** | **+2.0** |
| | 88nm,0.9s,4μm0.4nm | | | | | | |
| **KDU** | **Kakadu** | **6.44** | **144** | P | **Pn** | **23 07 08.9** | **+0.2** |
| | baz=6.4,SNR=16 | | | | | | |
| **KDI** | **Kendari** | **6.90** | **300** | P | **Pn** | **23 07 16.8** | **+1.9** |
| | 66nm,0.8s,0.2nm | | | | | | |
| **SIJI** | **Sorong** | **7.08** | **22** | P | **Pn** | **23 07 18.6** | **+1.3** |
| | 3.5nm,0.3s,baz=226,slow=23,SNR=25 | | | | | | |
| SIJI | | | | S | **Sn** | **23 08 34.9** | **-1.8** |
| | 1.5nm,0.3s,baz=229,slow=19,SNR=2.4 | | | | | | |
| **SWI** | **Sorong** | **7.08** | **22** | P | **Pn** | **23 07 19.3** | **+1.9** |
| | 18nm,0.7s,0.1nm | | | | | | |
| **RKPI** | **Ransiki, Papua** | **8.12** | **43** | P | **Pn** | **23 07 33.4** | **+2.1** |
| **KNRA** | **Kununurra** | **8.16** | **179** | P | **Pn** | **23 07 30.5** | **-1.1** |
| | baz=8.1,SNR=7.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.59** | **156** | P | **P** | **23 08 47.1** | **+0.4** |
| | 1.2nm,0.3s,baz=334,slow=11,SNR=8.5 | | | | | | |
| WRA | | | | S | Sn | 23 11 03.7 | -10 |
| | 1.3nm,0.3s,baz=334,slow=22,SNR=5.4 | | | | | | |
| **COEN** | **Coen** | **15.70** | **115** | P | **P** | **23 09 11.1** | **+0.9** |
| | baz=16,SNR=6.6 | | | | | | |
| **ASAR** | **Alice Springs** | **16.89** | **163** | P | **Pn** | **23 09 24.6** | **+0.9** |
| | 1.4nm,0.3s,baz=339,slow=10,SNR=43 | | | | | | |
| ASAR | | | | S | **S** | **23 12 27.9** | **-3.6** |
| | 0.5nm,0.3s,baz=329,slow=22,SNR=9.1 | | | | | | |
| **WRKA** | **Warakurna** | **17.47** | **181** | P | **Pn** | **23 09 31.1** | **+0.4** |
| | baz=18,SNR=7.1 | | | | | | |
| **MEEK** | **Meekatharra** | **21.29** | **205** | P | **P** | **23 10 10.5** | **-0.5** |
| | baz=21,SNR=4.9 | | | | | | |
| **QLP** | **Quilpie** | **24.13** | **144** | P | **P** | **23 10 41.2** | **+3.0** |
| | baz=24,SNR=3.9 | | | | | | |
| **MORW** | **Morawa** | **24.53** | **207** | P | **P** | **23 10 43.2** | **+1.5** |
| | baz=24,SNR=3.3 | | | | | | |
| **BBOO** | **Buckleboo** | **26.15** | **166** | P | **P** | **23 10 57.1** | **+0.7** |
| | baz=26,SNR=12 | | | | | | |
| **HTT** | **Hallett** | **27.54** | **161** | P | **P** | **23 11 05.8** | **-3.1** |
| | baz=28,SNR=6.4 | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.56** | **159** | P | **P** | **23 11 46.1** | **+1.8** |
| | baz=32,SNR=9.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.70** | **11** | LR | LR | 23 32 09.8 | |
| | comp=Z,52nm,20.9s,baz=255,slow=36 | | | | | | |
| **ODAN** | **Odare** | **52.53** | **312** | *e*P | **P** | **23 14 33.1** | **-1.3** |
| | 6.3nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **52.57** | **313** | *e*P | **P** | **23 14 33.0** | **-1.8** |
| **RAMN** | **Ramite** | **53.16** | **312** | *e*P | **P** | **23 14 38.1** | **-1.0** |
| | 14nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **54.23** | **312** | *e*P | **P** | **23 14 44.4** | **-2.5** |
| | 7.3nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **54.38** | **312** | *e*P | **P** | **23 14 46.3** | **-1.8** |
| | 4.8nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **54.40** | **312** | *e*P | **P** | **23 14 46.0** | **-2.1** |
| | 7.7nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **54.60** | **312** | *e*P | **P** | **23 14 47.1** | **-2.4** |
| | 5.1nm,0.6s | | | | | | |
| **DMN** | **Daman** | **54.63** | **311** | *e*P | **P** | **23 14 47.7** | **-2.1** |
| **GKN** | **Gorkha** | **55.19** | **312** | *e*P | **P** | **23 14 52.1** | **-1.6** |
| | 11nm,0.5s | | | | | | |
| **KOLN** | **Koldanda** | **55.84** | **311** | *e*P | **P** | **23 14 57.1** | **-1.3** |
| | 9.8nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **58.46** | **343** | P | **P** | **23 15 16.2** | **-0.1** |
| | 1.5nm,0.7s,baz=165,slow=7.9,SNR=8.4 | | | | | | |
| **PETK** | **Petropavlovsk-** | **65.21** | **19** | P | **P** | **23 16 01.6** | **+0.4** |
| | 2.5nm,0.6s,baz=196,slow=9.0,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.86** | **328** | P | **P** | **23 16 17.6** | **-0.6** |
| | 2.0nm,0.5s,baz=118,slow=8.0,SNR=30 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.40** | **334** | P | **P** | **23 16 38.0** | **-1.6** |
| | 1.7nm,0.5s,baz=135,slow=5.8,SNR=9.2 | | | | | | |
| **VNDA** | **Vanda** | **72.15** | **173** | P | **P** | **23 16 44.1** | **+0.3** |
| | 0.6nm,0.5s,baz=328,slow=8.0,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.53** | **281** | PKP | **PKPdf** | **23 24 23.2** | **-1.1** |
| | 0.7nm,0.8s,baz=68,slow=1.8,SNR=6.5 | | | | | | |
| **CPUP** | **Villa Florida** | **145.91** | **170** | PKPbc | **PKPdf** | **23 24 57.2** | **-0.6** |
| | 0.8nm,0.5s,baz=127,slow=5.1,SNR=3.5 | | | | | | |
| **LPAZ** | **La Paz** | **151.17** | **145** | PKPbc | **PKPbc** | **23 25 13.8** | **+0.5** |
| | 0.8nm,0.4s,baz=154,slow=1.3,SNR=6.7 | | | | | | |

*ATH* ***17*** *23:23:41.7, 34.19N×26.35E, h8km±3km, MD3.5/10*
*CSEM* ***17*** *23:23:45.4±0.8, 34.52N×26.34E, h2km, MD3.5, Error ellipse: s-maj=20.3km s-min=6.2km az=179.0*
**ISC 17 23:23:43.1±2.2, 34.3N±0.1×26.33E±0.04, h10km±14km, n36, σ1°13/43, Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LAST** | **Lasithi** | **1.14** | **322** | *e*PB | **Pb** | **23 24 04.4** | **-0.6** |
| LAST | | | | *e*SB | **Sb** | **23 24 20.4** | **+0.5** |
| **LAST** | **Lasithi** | **1.14** | **322** | *e*Pb | **Pb** | **23 24 04.4** | **-0.6** |
| LAST | | | | *e*Sb | **Sb** | **23 24 20.4** | **+0.5** |
| **NPS** | **Neapolis** | **1.16** | **330** | *e*PN | **Pn** | **23 24 03.8** | **-1.7** |
| NPS | | | | *e*SB | **Sb** | **23 24 20.7** | **+0.2** |
| **KARP** | **Karpathos** | **1.45** | **28** | *e*PG | **Pb** | **23 24 09.6** | **-0.7** |
| KARP | | | | *e*SB | **Sg** | **23 24 31.1** | **+1.2** |
| **KARP** | **Karpathos** | **1.45** | **28** | *e*Pg | **Pb** | **23 24 09.6** | **-0.7** |
| **SIVA** | **Sivas** | **1.47** | **301** | *e*PB | **Pg** | **23 24 10.7** | **-0.5** |
| SIVA | | | | *e*SB | **Sg** | **23 24 31.2** | **+1.0** |
| **SIVA** | **Sivas** | **1.47** | **301** | *e*Pb | **Pg** | **23 24 10.7** | **-0.5** |
| SIVA | | | | *e*Sb | **Sg** | **23 24 31.2** | **+1.0** |
| **IDI** | **Anoyia** | **1.57** | **311** | *e*PB | **Pg** | **23 24 12.8** | **-0.4** |
| IDI | | | | *e*SB | **Sg** | **23 24 35.0** | **+1.4** |
| **IDI** | **Anoyia** | **1.57** | **311** | *e*Pb | **Pg** | **23 24 12.8** | **-0.4** |
| **VAM** | **Vamos** | **2.09** | **304** | *e*PN | **Pb** | **23 24 19.7** | **-1.5** |
| **VAM** | **Vamos** | **2.09** | **304** | *e*Pn | **Pb** | **23 24 19.7** | **-1.5** |
| **IMMV** | **Iera Moni Meta** | **2.27** | **302** | *e*PN | **Pb** | **23 24 23.0** | **-1.3** |
| **IMMV** | **Iera Moni Meta** | **2.27** | **302** | *e*Pn | **Pb** | **23 24 23.0** | **-1.3** |
| **ARG** | **Arkhangelos** | **2.44** | **36** | *e*PN | **Pb** | **23 24 25.4** | **-1.7** |
| **ARG** | **Arkhangelos** | **2.44** | **36** | *e*Pn | **Pb** | **23 24 25.4** | **-1.7** |
| **APE** | **Apeiranthos** | **2.88** | **347** | *e*P | **Pn** | **23 24 29.8** | **+0.7** |
| **APE** | **Apeiranthos** | **2.88** | **347** | *e*PB | **Pn** | **23 24 31.0** | **+1.9** |
| **APE** | **Apeiranthos** | **2.88** | **347** | *e*P | **Pn** | **23 24 29.8** | **+0.7** |
| **APE** | **Apeiranthos** | **2.88** | **347** | *e*Pb | **Pn** | **23 24 31.0** | **+1.9** |
| **DALY** | **Dalyan (Mu¨la** | **3.18** | **36** | *e*P | **Pn** | **23 24 32.6** | **-0.6** |
| **DALY** | **Dalyan (Mu¨la** | **3.18** | **36** | *e*P | **Pn** | **23 24 32.6** | **-0.6** |
| **KSL** | **Kastellorizon** | **3.26** | **54** | *e*PN | **Pn** | **23 24 35.9** | **+1.6** |
| **FETY** | **Fethiye** | **3.27** | **43** | *e*P | **Pn** | **23 24 34.5** | **+0.1** |
| **FETY** | **Fethiye** | **3.27** | **43** | *e*P | **Pn** | **23 24 34.5** | **+0.1** |
| **YER** | **Yerkesik** | **3.28** | **28** | *e*P | **Pn** | **23 24 34.1** | **-0.5** |
| **YER** | **Yerkesik** | **3.28** | **28** | *e*P | **Pn** | **23 24 34.1** | **-0.5** |
| **VLI** | **Veliai** | **3.70** | **312** | *e*PN | **Pn** | **23 24 41.7** | **+1.3** |
| **VLI** | **Veliai** | **3.70** | **312** | *e*Pn | **Pn** | **23 24 41.7** | **+1.3** |
| **ELL** | **Elmali** | **3.83** | **49** | *e*P | **Pn** | **23 24 43.2** | **+0.9** |
| **ELL** | **Elmali** | **3.83** | **49** | *e*P | **Pn** | **23 24 43.2** | **+0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **3.89** | **18** | *e*P | **Pn** | **23 24 42.4** | **-0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **3.89** | **18** | *e*P | **Pn** | **23 24 42.4** | **-0.7** |
| **BCK** | **Bucak** | **4.71** | **46** | *e*P | **Pn** | **23 24 55.4** | **+1.1** |
| **BCK** | **Bucak** | **4.71** | **46** | *e*P | **Pn** | **23 24 55.4** | **+1.1** |
| **SUTC** | **Sutluce-Ispart** | **4.97** | **48** | *e*P | **Pn** | **23 24 59.3** | **+1.4** |
| **SUTC** | **Sutluce-Ispart** | **4.97** | **48** | *e*P | **Pn** | **23 24 59.3** | **+1.4** |

**DDA 17 23:24:09.1, 37.95N×29.12E, h7km, Md1.9, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KHAL** | **Karahalli** | **0.51** | **35** | P | Pg | 23 24 19.1 | -0.1 |
| KHAL | | | | S | Sg | 23 24 27.1 | +1.1 |

*IDC* ***17*** *23:27:23.1±0.9, 10.64N×141.94E, h0km, mb3.8/9, mb1 4.1/10, mb1mx3.8/38, mbtmp3.9/10, ML4.3/1, MS2.9/3, Ms1 2.9/3, ms1mx2.6/27, Error ellipse: s-maj=28.0km s-min=21.2km az=98.0*
*ISCJB* ***17*** *23:27:26.3±0.7, 10.6N±0.1×141.9E±0.1, h33km, mb3.9/9, MS2.7/3, Error ellipse: s-maj=21.3km s-min=14.4km az=28.2*
**ISC 17 23:27:28.3±0.9, 10.6N±0.1×141.9E±0.2, h35km, n14, σ0°93/11, mb3.7/9, MS2.7/3, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **4.11** | **44** | Pn | **Pn** | **23 28 28.8** | **+0.1** |
| | 17nm,0.3s,baz=18,slow=19,SNR=3.8 | | | | | | |
| **PMG** | **Port Moresby** | **20.58** | **165** | LR | LR | 23 39 30.9 | |
| | comp=Z,30nm,19.4s,baz=316,slow=35 | | | | | | |
| **JNU** | **Nakatsue** | **24.58** | **327** | LR | LR | 23 42 11.9 | |
| | comp=Z,24nm,18.2s,baz=128,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **27.00** | **236** | LR | LR | 23 43 41.8 | |
| | comp=Z,29nm,21.8s,baz=360,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.29** | **194** | P | **P** | **23 33 45.0** | **-0.2** |
| | 1.0nm,0.7s,baz=15,slow=9.4,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **34.98** | **193** | P | **P** | **23 34 17.4** | **0.0** |
| | 0.4nm,0.6s,baz=21,slow=12,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.24** | **286** | P | **P** | **23 35 19.5** | **+0.9** |
| | 1.2nm,0.8s,baz=91,slow=6.3,SNR=4.9 | | | | | | |
| **SONM** | **Songino Array** | **47.59** | **328** | P | **P** | **23 36 00.6** | **-0.2** |
| | 0.2nm,0.4s,baz=133,slow=8.5,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.67** | **318** | P | **P** | **23 37 43.3** | **+0.4** |
| | 0.8nm,0.6s,baz=96,slow=8.1,SNR=6.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.39** | **326** | P | **P** | **23 37 47.1** | **-0.5** |
| | 1.1nm,0.6s,baz=108,slow=5.6,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **72.45** | **25** | P | **P** | **23 38 50.5** | **-0.5** |
| | 0.6nm,0.7s,baz=244,slow=6.2,SNR=6.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.00** | **51** | P | **P** | **23 40 31.3** | **+1.7** |
| | 0.6nm,0.6s,baz=271,slow=5.4,SNR=6.2 | | | | | | |
| **FINES** | **FINESS Array B** | **92.59** | **334** | P | **P** | **23 40 35.0** | **-1.1** |
| | 3.6nm,1.0s,baz=60,slow=8.2,SNR=4.1 | | | | | | |
| **LPAZ** | **La Paz** | **150.25** | **104** | PKPbc | **PKPbc** | **23 47 16.6** | **-1.0** |
| | 1.6nm,0.8s,baz=271,slow=3.0,SNR=5.0 | | | | | | |

*ISCJB* ***17*** *23:35:14.1±1.2, 33.46S±0.07×70.26W±0.07, h114km±8km, Error ellipse: s-maj=13.8km s-min=7.3km az=144.9*
*SJA* ***17*** *23:35:14.1±0.5, 33.44S×70.27W, h109km±3km, MD3.4, ML5.6*
*GUC* ***17*** *23:35:15.0±0.6, 33.57S×70.43W, h109km±4km, ML3.3*
**ISC 17 23:35:13.0±3.2, 33.5S±0.1×70.31W±0.07, h121km±18km, n16, σ0°69/31, 2C, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FSR** | **Penalolen** | **0.19** | **286** | *e*P | **Pn** | **23 35 30.5** | **+0.7** |
| FSR | | | | *e*S | **Sn** | **23 35 42.5** | **+0.1** |
| **CLCH** | **Cerro Calan** | **0.24** | **305** | *e*P | **Pn** | **23 35 30.2** | **+0.2** |
| CLCH | | | | *e*S | **Sn** | **23 35 42.2** | **-0.4** |
| CLCH | | | | AML | AML | 23 35 43.7 | |
| | comp=E,1μm,0.4s | | | | | | |
| **ANTU** | **Antumapu** | **0.28** | **262** | *e*P | **Pn** | **23 35 30.4** | **+0.4** |
| ANTU | | | | *e*S | **Sn** | **23 35 42.0** | **-0.8** |
| **SAN** | **Santiago** | **0.31** | **285** | *e*S | **Sn** | **23 35 42.1** | **-0.9** |
| **PEL** | **Peldehue** | **0.50** | **320** | *e*P | **Pn** | **23 35 32.0** | **+0.8** |
| PEL | | | | *e*S | **Sn** | **23 35 44.7** | **0.0** |
| PEL | | | | AML | AML | 23 35 45.5 | |
| | comp=N,2μm,0.3s | | | | | | |
| **TACH** | **Talagante** | **0.54** | **257** | *e*P | **Pn** | **23 35 31.6** | **+0.2** |
| **ROC1** | **El Roble** | **0.81** | **313** | *i* P | **Pn** | **23 35 33.9** | **+0.2** |
| ROC1 | | | | *i* P | **Pn** | **23 35 34.0** | **+0.2** |
| ROC1 | | | | *i* S | **Sn** | **23 35 48.7** | **-0.5** |
| ROC1 | | | | *i* S | **Sn** | **23 35 48.8** | **-0.5** |
| **AAGR** | **Agrelo** | **1.31** | **71** | *i* P | **Pn** | **23 35 38.9** | **+0.4** |
| AAGR | | | | *i* S | **Sn** | **23 35 57.7** | **-0.2** |
| **ARCO** | **CERRO ARCO** | **1.34** | **60** | *i* P | **Pn** | **23 35 39.2** | **+0.4** |
| **AUSP** | **Uspallata** | **1.52** | **31** | *i* P | **Pn** | **23 35 41.9** | **+0.8** |
| AUSP | | | | *i* S | **Sn** | **23 36 01.9** | **-0.3** |
| **ASAL** | **Salagasta** | **1.55** | **53** | *i* P | **Pn** | **23 35 41.9** | **+0.7** |
| ASAL | | | | *i* S | **Sn** | **23 36 02.0** | **-0.6** |
| **RTLS** | **Leoncito** | **1.93** | **26** | *i* P | **Pn** | **23 35 46.8** | **+0.9** |
| RTLS | | | | *i* S | **Sn** | **23 36 10.8** | **-0.1** |
| **CFAA** | **Coronel Fontan** | **2.59** | **43** | *i* P | **Pn** | **23 35 54.7** | **+0.6** |
| CFAA | | | | ⇑*i* S | **Sn** | **23 36 24.7** | **-1.0** |
| CFAA | | | | AML | AML | 23 36 27.5 | |
| | comp=Z,24μm,0.1s | | | | | | |
| **RTLL** | **Cerro Villicun** | **2.69** | **36** | *i* P | **Pn** | **23 35 56.1** | **+0.8** |
| RTLL | | | | *i* S | **Sn** | **23 36 26.9** | **-0.9** |
| **AMOG** | **MOGNA** | **3.01** | **31** | *i* P | **Pn** | **23 36 00.1** | **+0.6** |
| AMOG | | | | *i* S | **Sn** | **23 36 34.2** | **-1.2** |
| **AVFE** | **Valle Fertil** | **3.75** | **41** | *i* P | **Pn** | **23 36 10.0** | **+0.7** |
| AVFE | | | | ⇑*i* S | **Sn** | **23 36 51.5** | **-1.3** |

*ISCJB* ***17*** *23:39:08.2±0.4, 37.78N±0.04×73.23E±0.06, h10km, mb3.7/6, MS2.9/1, Error ellipse: s-maj=7.3km s-min=5.1km az=147.8*
*IDC* ***17*** *23:39:08.2±1.5, 37.89N×73.38E, h0km, mb3.8/6, mb1 3.9/11, mb1mx3.6/33, mbtmp3.8/11, ML3.5/5, MS3.1/1, Ms1 3.1/1, ms1mx2.3/29, Error ellipse: s-maj=26.2km s-min=17.3km az=148.0*
*NNC* ***17*** *23:39:10.2±14.0, 38.23N×74.03E, h0km, mb4.0, mpv3.7, Error ellipse: s-maj=134.4km s-min=120.0km az=79.0*
**ISC 17 23:39:10.2±0.8, 37.87N±0.07×73.25E±0.07, h10km, n27, σ2°04/28, mb3.8/6, 3D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AML** | **Almayashu** | **4.27** | **4** | P | **Pn** | **23 40 17.8** | **+2.3** |
| | SNR=18 | | | | | | |
| **UCH** | **Uchtor** | **4.46** | **12** | P | **Pn** | **23 40 20.2** | **+2.0** |
| | SNR=17 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.80** | **5** | P | Pn | 23 40 25.6 | +3.0 |
| | SNR=6.8 | | | | | | |
| **AAK** | **Ala-Archa** | **4.85** | **11** | Pn | **Pn** | **23 40 25.5** | **+2.1** |
| | 1.8nm,0.3s,baz=156,slow=6.2,SNR=30 | | | | | | |
| AAK | | | | Sn | **Sn** | **23 41 22.3** | **+2.7** |
| | 1.8nm,0.3s,baz=180,slow=20,SNR=2.5 | | | | | | |
| **AAK** | **Ala-Archa** | **4.85** | **11** | P | **Pn** | **23 40 25.5** | **+2.1** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.35** | **19** | P | **Pn** | **23 40 32.4** | **+2.2** |
| | SNR=5.3 | | | | | | |
| **KK31** | **Karatay Array** | **5.62** | **339** | P | **Pn** | **23 40 34.6** | **+0.8** |
| | 3.3nm,0.3s,baz=155,slow=12,SNR=130 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **23 41 39.9** | **+1.4** |
| | 8.0nm,0.5s,baz=148,slow=23 | | | | | | |
| **MKAR** | **Makanchi Array** | **11.14** | **34** | Pn | **Pn** | **23 41 49.6** | **+0.2** |
| | 0.1nm,0.3s,baz=202,slow=11,SNR=3.1 | | | | | | |
| **GEYT** | **Alibeck** | **11.96** | **275** | Pn | **Pn** | **23 42 01.4** | **+0.7** |
| | 0.4nm,0.3s,baz=93,slow=12,SNR=5.5 | | | | | | |
| GEYT | | | | Sn | **Sn** | **23 44 16.5** | **+2.3** |
| | 0.2nm,0.3s,baz=158,slow=16,SNR=3.0 | | | | | | |
| **KOLN** | **Koldanda** | **13.30** | **136** | *e*P | **Pn** | **23 42 21.6** | **+2.3** |
| | 6.3nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **13.71** | **133** | *e*P | **Pn** | **23 42 24.2** | **-0.6** |
| **KKN** | **Kakani** | **14.25** | **131** | *e*P | **Pn** | **23 42 30.8** | **-1.4** |
| | 8.0nm,0.6s | | | | | | |
| **DMN** | **Daman** | **14.28** | **132** | *e*P | **Pn** | **23 42 31.9** | **-0.8** |
| | 6.5nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **14.47** | **132** | *e*P | **Pn** | **23 42 34.4** | **-0.9** |
| | 5.1nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **14.49** | **132** | *e*P | **Pn** | **23 42 34.4** | **-1.2** |
| **AB31** | **Akbulak array** | **14.89** | **324** | P | Pn | 23 42 35.5 | -5.1 |
| | 0.5nm,0.4s,baz=133,slow=12,SNR=17 | | | | | | |
| AB31 | | | | ⇓S | Sn | 23 45 15.7 | -10 |
| | 1.4nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **15.66** | **130** | *e*P | **Pn** | **23 42 49.0** | **-2.1** |
| | 11nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.61** | **324** | ⇓P | **P** | **23 43 04.2** | **-1.2** |
| | 5.4nm,0.9s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.61** | **324** | Pn | **Pn** | **23 43 01.8** | **-1.1** |
| | 0.3nm,0.3s,baz=117,slow=10,SNR=12 | | | | | | |
| AKTO | | | | Sn | **Sn** | **23 46 01.0** | **-6.2** |
| | 0.1nm,0.3s,baz=124,slow=11,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.94** | **23** | P | **Pn** | **23 43 17.5** | **-2.0** |
| | 0.6nm,0.3s,baz=214,slow=13,SNR=11 | | | | | | |
| **ARU** | **Arti** | **21.00** | **337** | LR | LR | 23 52 29.0 | |
| | comp=Z,48nm,18.3s,baz=274,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **26.08** | **57** | P | **P** | **23 44 44.6** | **+0.7** |
| | 0.7nm,0.6s,baz=259,slow=10,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **30.76** | **286** | P | **P** | **23 45 27.0** | **+1.3** |
| | 0.4nm,0.7s,baz=94,slow=7.4,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **37.38** | **325** | P | **P** | **23 46 22.3** | **-0.4** |
| | 2.8nm,0.8s,baz=116,slow=9.6,SNR=9.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.58** | **336** | P | **P** | **23 46 49.7** | **+0.2** |
| | 0.8nm,0.6s,baz=106,slow=8.9,SNR=9.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.54** | **269** | P | **P** | **23 50 06.3** | **-0.7** |
| | 0.4nm,0.4s,baz=47,slow=5.6,SNR=13 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.78** | **4** | P | **P** | **23 51 16.9** | **-1.2** |
| | 0.7nm,0.5s,baz=352,slow=5.7,SNR=4.2 | | | | | | |

**DJA 17 23:52:03.0±0.8, 8°S±8°×107°E±°, h27km±4km, M3.8/11, MLv3.8/11, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CISI** | **Cisompet, Garu** | **0.49** | **52** | P | Pb | 23 52 13.6 | +0.4 |
| CISI | | | | S | Sn | 23 52 22.2 | +0.2 |
| **CNJI** | **Cibinong** | **0.62** | **331** | P | Pb | 23 52 15.1 | -0.3 |
| CNJI | | | | S | Sn | 23 52 24.9 | -0.3 |
| **CMJI** | **Cimerak** | **1.01** | **86** | P | Pn | 23 52 20.8 | -0.6 |
| CMJI | | | | S | Sb | 23 52 35.0 | +0.2 |
| **SKJI** | **Sukabumi** | **1.21** | **314** | P | Pb | 23 52 25.5 | +0.2 |
| SKJI | | | | S | Sn | 23 52 39.3 | -0.5 |
| **CGJI** | **Cibinong** | **2.12** | **306** | P | Pn | 23 52 34.5 | -2.2 |
| CGJI | | | | S | Sn | 23 53 04.2 | +2.0 |
| **SBJI** | **Serang** | **2.16** | **323** | P | Pn | 23 52 38.5 | +1.3 |
| **UGM** | **Wanagama** | **3.06** | **91** | P | Pn | 23 52 49.0 | -0.7 |
| **SMRI** | **Semarang** | **3.09** | **75** | P | Pn | 23 52 51.7 | +1.6 |
| SMRI | | | | S | Sn | 23 53 27.5 | +1.3 |
| **KSI** | **Kapahiang** | **6.37** | **311** | P | Pn | 23 53 34.0 | -1.3 |

*ISCJB* ***17*** *23:54:38.5±0.5, 21.44S±0.04×68.87W±0.06, h132km±5km, mb3.9/3, Error ellipse: s-maj=8.5km s-min=6.4km az=170.9*
*NEIC* ***17*** *23:54:39.0, 21.34S×68.91W, h116km, MG4.1(GUC), After GUC.*
*NEIC Felt [III] at Iquique and [II] at La Tirana and Pozo Almonte.*
*GUC* ***17*** *23:54:39.8±0.6, 21.35S×68.91W, h116km±4km, ML4.1*
*IDC* ***17*** *23:54:40.7±1.1, 21.36S×68.44W, h103km±15km, mb3.9/4, mb1 3.8/7, mb1mx3.5/26, mbtmp4.1/7, Error ellipse: s-maj=32.6km s-min=16.4km az=110.0*
*SJA* ***17*** *23:54:42.2±0.4, 21.95S×68.72W, h146km±4km, MD3.6, ML2.4*
**ISC 17 23:54:39.4±0.8, 21.44S±0.05×68.90W±0.06, h126km±7km, n21, σ1°71/34, mb4.1/3, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB09** | **IPOC Station P** | **0.48** | **222** | *e*P | **Pn** | **23 54 58.4** | **+0.3** |
| PB09 | | | | *e*S | **Sn** | **23 55 12.2** | **0.0** |
| PB09 | | | | AML | AML | 23 55 14.1 | |
| | comp=N,6μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **0.68** | **305** | *e*P | **Pn** | **23 54 58.6** | **-0.7** |
| PB01 | | | | *e*S | **Sn** | **23 55 12.6** | **-1.7** |
| PB01 | | | | AML | AML | 23 55 13.5 | |
| | comp=E,10μm,0.7s | | | | | | |
| **PB07** | **IPOC Station P** | **0.97** | **252** | *e*P | **Pn** | **23 55 02.4** | **+0.6** |
| PB07 | | | | *e*S | **Sn** | **23 55 19.3** | **+0.6** |
| PB07 | | | | AML | AML | 23 55 20.5 | |
| | comp=E,6μm,0.4s | | | | | | |
| **LVC** | **Limon Verde** | **1.17** | **181** | P | **Pn** | **23 55

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **COVZ** | **Chateau Observ** | **0.77** | **195** | PN | Pn | 00 22 06.3 | +0.1 | |
| COVZ | | | | SN | Sn | 00 22 21.7 | -1.0 | |
| **WPVZ** | **Whakapapa** | **0.78** | **195** | ⇑PN | Pn | 00 22 06.5 | +0.3 | |
| WPVZ | | | | SN | Sn | 00 22 21.8 | -1.1 | |
| **FWVZ** | **Far West T-bar** | **0.82** | **194** | PN | Pn | 00 22 06.7 | 0.0 | |
| FWVZ | | | | SN | Sn | 00 22 23.0 | -0.7 | |
| **WHVZ** | **Whangaehu Hut** | **0.84** | **191** | PN | Pn | 00 22 07.0 | +0.1 | |
| **TRVZ** | **Turoa** | **0.87** | **193** | PN | Pn | 00 22 07.3 | +0.2 | |
| TRVZ | | | | SN | Sn | 00 22 25.3 | +1.0 | |
| **WNVZ** | **Wahianoa** | **0.89** | **190** | PN | Pn | 00 22 07.3 | +0.1 | |
| WNVZ | | | | SN | Sn | 00 22 24.8 | +0.3 | |
| **BKZ** | **Black Stump Fm** | **0.89** | **143** | ⇑PN | Pn | 00 22 07.1 | 0.0 | |
| BKZ | | | | SN | Sn | 00 22 24.4 | +0.1 | |
| BKZ | | | | AML | AML | 00 22 26.7 | | |
| **MOVZ** | **Moawhango** | **0.95** | **182** | ⇑PN | Pn | 00 22 07.4 | -0.3 | |
| MOVZ | | | | SN | Sn | 00 22 24.5 | -0.8 | |
| **NMHZ** | **Naumai** | **1.02** | **130** | PN | Pn | 00 22 09.3 | +1.1 | |
| NMHZ | | | | SN | Sn | 00 22 28.4 | +2.1 | |
| **URZ** | **Urewera** | **1.05** | **80** | PN | Pn | 00 22 07.7 | -0.6 | |
| URZ | | | | SN | Sn | 00 22 26.3 | -0.2 | |
| URZ | | | | AML | AML | 00 22 27.3 | | |
| **BHHZ** | **Black Hill Sta** | **1.05** | **169** | PN | Pn | 00 22 08.2 | -0.3 | |
| BHHZ | | | | SN | Sn | 00 22 26.1 | -0.8 | |
| **VRZ** | **Vera Road** | **1.06** | **230** | ⇑PN | Pn | 00 22 08.6 | +0.2 | |
| **ARHZ** | **Aropaoanui** | **1.23** | **131** | PN | Pn | 00 22 10.8 | +0.6 | |
| **RAGZ** | **Rawiri** | **1.27** | **92** | PN | Pn | 00 22 11.0 | +0.4 | |
| **KRHZ** | **Kereru** | **1.27** | **160** | PN | Pn | 00 22 10.5 | -0.1 | |
| **WHHZ** | **Waihua** | **1.28** | **119** | PN | Pn | 00 22 11.0 | +0.3 | |
| **MWZ** | **Matawai** | **1.36** | **86** | PN | Pn | 00 22 10.9 | -0.6 | |
| MWZ | | | | AML | AML | 00 22 31.9 | | |
| MWZ | | | | AML | AML | 00 22 41.2 | | |
| **WAZ** | **Wanganui** | **1.45** | **206** | PN | Pn | 00 22 12.2 | -0.3 | |
| **PNHZ** | **Pukenui** | **1.49** | **168** | PN | Pn | 00 22 12.4 | -0.6 | |
| **CKHZ** | **Cape Kidnapper** | **1.56** | **141** | PN | Pn | 00 22 13.8 | +0.1 | |
| **KNZ** | **Kokohu** | **1.57** | **112** | ⇑PN | Pn | 00 22 13.6 | -0.1 | |
| **KAHZ** | **Kahuranaki** | **1.58** | **148** | PN | Pn | 00 22 14.2 | +0.2 | |
| **TKGZ** | **Te Karaka** | **1.61** | **90** | PN | Pn | 00 22 14.4 | +0.2 | |
| **TSZ** | **Takapari Road** | **1.61** | **176** | ⇑PN | Pn | 00 22 13.5 | -0.7 | |
| TSZ | | | | AML | AML | 00 22 38.5 | | |
| TSZ | | | | AML | AML | 00 22 38.9 | | |
| **WPHZ** | **Waipukurau** | **1.68** | **163** | PN | Pn | 00 22 14.4 | -0.7 | |
| **PRGZ** | **Paritu Road** | **1.69** | **107** | PN | Pn | 00 22 14.9 | -0.3 | |
| **HAZ** | **Te Kaha** | **1.71** | **67** | PN | Pn | 00 22 14.0 | -1.3 | |
| **TWGZ** | **Tauwhareparae** | **1.74** | **81** | PN | Pn | 00 22 15.5 | -0.2 | |
| **PXZ** | **Pawanui** | **1.78** | **153** | PN | Pn | 00 22 15.5 | -0.6 | |
| PXZ | | | | AML | AML | 00 22 43.6 | | |
| PXZ | | | | AML | AML | 00 22 45.0 | | |
| **MHGZ** | **Mahia Peninsul** | **1.79** | **114** | PN | Pn | 00 22 16.1 | -0.2 | |
| **CNGZ** | **Carnagh Statio** | **1.89** | **92** | PN | Pn | 00 22 17.4 | -0.1 | |
| **PUZ** | **Puketiti** | **1.97** | **80** | ⇓PN | Pn | 00 22 17.4 | -1.0 | |
| PUZ | | | | AML | AML | 00 22 44.3 | | |
| **WMGZ** | **Waiomatatini S** | **2.16** | **74** | ⇑PN | Pn | 00 22 19.7 | -1.0 | |
| **MXZ** | **Matakaoa Point** | **2.17** | **67** | ⇓PN | Pn | 00 22 20.2 | -0.6 | |
| **MRZ** | **Mangatainoka R** | **2.21** | **184** | PN | Pn | 00 22 19.4 | -2.0 | |
| MRZ | | | | AML | AML | 00 22 48.7 | | |
| MRZ | | | | AML | AML | 00 22 48.7 | | |
| **BFZ** | **Birch Farm** | **2.25** | **171** | PN | Pn | 00 22 19.8 | -2.0 | |
| BFZ | | | | AML | AML | 00 22 50.7 | | |
| **OGWZ** | **Otaki Gorge** | **2.41** | **191** | PN | Pn | 00 22 21.9 | -1.9 | |
| **KIW** | **Kapiti Island** | **2.50** | **196** | PN | Pn | 00 22 22.4 | -2.6 | |
| KIW | | | | AML | AML | 00 22 54.5 | | |
| KIW | | | | AML | AML | 00 22 54.9 | | |
| **TMWZ** | **Te Maipa** | **2.65** | **179** | PN | Pn | 00 22 24.2 | -2.6 | |
| **DUWZ** | **D'Urville Isla** | **2.76** | **211** | PN | Pn | 00 22 25.4 | -2.8 | |
| **PAWZ** | **Paruwai Farm** | **2.94** | **186** | PN | Pn | 00 22 27.3 | -3.2 | |
| PAWZ | | | | AML | AML | 00 23 05.4 | | |
| PAWZ | | | | AML | AML | 00 23 06.8 | | |
| **TRWZ** | **Traveller** | **2.94** | **182** | PN | Pn | 00 22 27.6 | -2.9 | |
| TRWZ | | | | AML | AML | 00 23 04.0 | | |
| TRWZ | | | | AML | AML | 00 23 04.2 | | |
| **MSWZ** | **Moikau Station** | **2.99** | **188** | ⇑PN | Pn | 00 22 27.8 | -3.3 | |
| MSWZ | | | | AML | AML | 00 23 04.2 | | |
| MSWZ | | | | AML | AML | 00 23 04.4 | | |
| **TCW** | **Tory Channel** | **3.00** | **203** | PN | Pn | 00 22 28.1 | -3.1 | |
| TCW | | | | AML | AML | 00 23 03.7 | | |
| TCW | | | | AML | AML | 00 23 03.8 | | |
| **BHW** | **Baring Head** | **3.04** | **193** | PN | Pn | 00 22 28.3 | -3.4 | |
| BHW | | | | AML | AML | 00 23 05.5 | | |
| **PLWZ** | **Palliser** | **3.14** | **188** | PN | Pn | 00 22 29.6 | -3.6 | |
| **TUWZ** | **Tuamarina** | **3.30** | **205** | PN | Pn | 00 22 31.6 | -3.5 | |
| TUWZ | | | | AML | AML | 00 23 10.6 | | |
| TUWZ | | | | AML | AML | 00 23 12.2 | | |
| **NNZ** | **Nelson** | **3.33** | **213** | ⇓PN | Pn | 00 22 32.3 | -3.3 | |
| **KHZ** | **Kahutara** | **4.32** | **203** | PN | Pn | 00 22 44.4 | -4.1 | |
| KHZ | | | | AML | AML | 00 23 33.9 | | |
| KHZ | | | | AML | AML | 00 23 33.9 | | |

*SJA **18** 00:30:37.7±1.0, 33°.66S×70°.34W, h120km±7km, ML3.2*
*ISCJB **18** 00:30:38.7±0.7, 33°.66S±0°.05×70°.35W±0°.06, h117km±6km, Error ellipse: s-maj=11.2km s-min=4.7km az=42.2*
*GUC **18** 00:30:39.8±0.6, 33°.63S×70°.43W, h116km±3km, ML4.0*

**ISC 18 00:30:39.4±1.5, 33°.65S±0°.06×70°.35W±0°.06, h113km±10km, n21, σ0$ẋ38, 5C-3D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCH** | **Pirque** | **0.14** | **281** | *e*P | **Pn** | **00 30 55.5** | **+0.3** |
| PCH | | | | *i* S | **Sn** | **00 31 06.8** | **-0.2** |
| **ANTU** | **Antumapu** | **0.25** | **288** | ⇑*i*P | **Pn** | **00 30 55.2** | **-0.2** |
| ANTU | | | | *i* S | **Sn** | **00 31 07.3** | **-0.1** |
| ANTU | | | | AML | AML | 00 31 08.3 | |
| | comp=N,7μm,0.4s | | | | | | |
| **CLCH** | **Cerro Calan** | **0.30** | **327** | ⇓*i*P | **Pn** | **00 30 55.6** | **0.0** |
| CLCH | | | | *i* S | **Sn** | **00 31 08.0** | **+0.1** |
| CLCH | | | | AML | AML | 00 31 09.3 | |
| | comp=E,9μm,0.4s | | | | | | |
| **SAN** | **Santiago** | **0.33** | **306** | ⇓*i*P | **Pn** | **00 30 55.6** | **0.0** |
| SAN | | | | *i* S | **Sn** | **00 31 07.6** | **-0.3** |
| **RCDM** | **Rinconada Maip** | **0.42** | **292** | ⇑*i*P | **Pn** | **00 30 56.0** | **-0.1** |
| RCDM | | | | *i* S | **Sn** | **00 31 08.4** | **-0.3** |
| RCDM | | | | AML | AML | 00 31 09.7 | |
| | comp=E,15μm,0.1s | | | | | | |
| **TACH** | **Talagante** | **0.49** | **269** | ⇓*i*P | **Pn** | **00 30 56.7** | **+0.1** |
| TACH | | | | *i* S | **Sn** | **00 31 09.3** | **-0.2** |
| **PEL** | **Peldehue** | **0.58** | **330** | ⇑*i*P | **Pn** | **00 30 57.3** | **+0.1** |
| PEL | | | | *i* S | **Sn** | **00 31 10.4** | **-0.2** |
| PEL | | | | AML | AML | 00 31 12.5 | |
| | comp=N,5μm,0.3s | | | | | | |
| **ROC1** | **El Roble** | **0.88** | **320** | *i* P | **Pn** | **00 31 00.0** | **+0.1** |
| ROC1 | | | | *i* S | **Sn** | **00 31 15.5** | **+0.2** |
| **AAGR** | **Agrelo** | **1.39** | **67** | *i* P | **Pn** | **00 31 04.9** | **-0.2** |
| AAGR | | | | *i* S | **Sn** | **00 31 25.0** | **+0.2** |
| **ARCO** | **CERRO ARCO** | **1.43** | **56** | *i* P | **Pn** | **00 31 05.1** | **-0.6** |
| ARCO | | | | *i* S | **Sn** | **00 31 26.0** | **+0.3** |
| ARCO | | | | AML | AML | 00 31 28.5 | |
| | comp=Z,130nm,0.8s | | | | | | |
| **NICH** | **Los Niches** | **1.54** | **208** | ⇑*i*P | **Pn** | **00 31 07.5** | **+0.7** |
| NICH | | | | *i* S | **Sn** | **00 31 28.2** | **+0.6** |
| **CHPI** | **Pichilemu** | **1.56** | **241** | *e*P | **Pn** | **00 31 06.9** | **-0.2** |
| CHPI | | | | *i* S | **Sn** | **00 31 27.6** | **-0.6** |
| **AUSP** | **Uspallata** | **1.63** | **30** | *i* P | **Pn** | **00 31 08.1** | **-0.2** |
| AUSP | | | | *i* S | **Sn** | **00 31 31.2** | **+1.0** |
| **ASAL** | **Salagasta** | **1.65** | **51** | *i* P | **Pn** | **00 31 08.5** | **+0.2** |
| ASAL | | | | *i* S | **Sn** | **00 31 30.4** | **+0.2** |
| **RTLS** | **Leoncito** | **2.04** | **26** | *i* P | **Pn** | **00 31 14.2** | **+0.8** |
| RTLS | | | | *i* S | **Sn** | **00 31 40.1** | **+0.9** |
| **TALC** | **Talca** | **2.04** | **211** | ⇑*i*P | **Pn** | **00 31 13.2** | **+0.1** |
| TALC | | | | *i* S | **Sn** | **00 31 38.6** | **-0.2** |
| **RTCV** | **Cerro Valdivia** | **2.34** | **41** | *i* P | **Pn** | **00 31 16.9** | **-0.1** |
| **CFAA** | **Coronel Fontan** | **2.70** | **42** | *i* P | **Pn** | **00 31 20.9** | **-0.8** |
| **RTLL** | **Cerro Villicun** | **2.80** | **35** | *i* P | **Pn** | **00 31 22.6** | **-0.3** |
| RTLL | | | | *i* P | **Pn** | **00 31 22.6** | **-0.3** |
| **AMOG** | **MOGNA** | **3.12** | **31** | *i* P | **Pn** | **00 31 27.2** | **0.0** |
| **AVFE** | **Valle Fertil** | **3.86** | **40** | *i* P | **Pn** | **00 31 35.7** | **-1.2** |
| AVFE | | | | AML | AML | 00 32 21.7 | |
| | comp=Z,67nm,0.4s | | | | | | |

**GUC 18 00:54:52.7±0.4, 21°.76S×68°.55W, h136km±3km, ML3.9, 4C-1D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB09** | **IPOC Station P** | **0.65** | **267** | ⇑*i*P | Pn | 00 55 14.1 | +0.6 |
| PB09 | | | | *e*S | Sn | 00 55 30.2 | +0.9 |
| PB09 | | | | AML | AML | 00 55 33.5 | |
| | comp=E,8μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **1.13** | **309** | ⇓*i*P | Pn | 00 55 18.1 | +0.6 |
| PB01 | | | | *i* P | Pn | 00 55 18.1 | +0.6 |
| PB01 | | | | *i* S | Sn | 00 55 37.0 | +0.7 |
| PB01 | | | | AML | AML | 00 55 39.4 | |
| | comp=N,1μm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.25** | **271** | ⇑*i*P | Pn | 00 55 19.4 | +0.7 |
| PB07 | | | | *i* S | Sn | 00 55 39.8 | +1.2 |
| PB07 | | | | AML | AML | 00 55 41.4 | |
| | comp=N,3μm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **1.33** | **225** | ⇑*i*P | Pn | 00 55 20.3 | +0.7 |
| PB06 | | | | *i* S | Sn | 00 55 41.0 | +0.8 |
| PB06 | | | | AML | AML | 00 55 43.2 | |
| | comp=E,1μm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **1.59** | **249** | ⇑*i*P | Pn | 00 55 23.2 | +0.7 |
| PB04 | | | | *i* S | Sn | 00 55 46.4 | +1.3 |
| PB04 | | | | AML | AML | 00 55 51.9 | |
| | comp=N,942nm,0.2s | | | | | | |
| **PB10** | **IPOC Station P** | **2.54** | **226** | *e*P | Pn | 00 55 34.8 | +1.1 |
| PB10 | | | | AML | AML | 00 56 18.5 | |
| | comp=E,963nm,0.3s | | | | | | |
| **MNMC** | **Minimini** | **2.80** | **339** | *e*P | Pn | 00 55 38.3 | +0.9 |
| MNMC | | | | *i* S | Sn | 00 56 13.3 | +1.6 |
| MNMC | | | | AML | AML | 00 56 16.2 | |
| | comp=N,390nm,0.3s | | | | | | |

*ISCJB **18** 01:03:29.7±0.5, 13°.04S±0°.07×165°.89E±0°.08, h50km, mb4.1/15, MS3.9/7, Error ellipse: s-maj=11.7km s-min=9.1km az=157.4*
*IDC **18** 01:03:33.5±4.9, 13°.17S×166°.04E, h72km±42km, mb3.8/12, mb1 4.0/13, mb1mx3.9/35, mbtmp4.1/13, ML3.7/1, MS3.8/9, Ms1 3.8/9, ms1mx3.4/25, Error ellipse: s-maj=26.0km s-min=22.3km az=42.0*
*NEIC **18** 01:03:33.2±1.1, 13°.02S×165°.90E, h70km±10km, mb4.3/3, Error ellipse: s-maj=11.4km s-min=9.5km az=207.0*

**ISC 18 01:03:31.6±0.5, 12°.93S±0°.07×165°.91E±0°.10, h50km, n32, σ1$39/29, mb4.1/15, MS4.0/7, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **6.80** | **300** | LR | LR | 01 08 01.8 | |
| | comp=Z,406nm,20.2s,baz=140,slow=38 | | | | | | |
| **HNR** | **Honiara** | **6.80** | **300** | *e*Pn | **Pn** | **01 05 10.0** | **+1.2** |
| **DZM** | **Mont Dzumac** | **9.11** | **177** | *e*Pn | Pn | 01 05 50.6 | +10 |
| DZM | 12nm,0.3s | | | | | | |
| | | | | *e*LR | LR | 01 07 54.0 | |
| | 404nm,24.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **9.11** | **177** | P | **Pn** | **01 05 39.2** | **-1.3** |
| | 0.8nm,0.3s,baz=359,slow=18,SNR=7.7 | | | | | | |
| DZM | | | | S | **Sn** | **01 07 21.3** | **-0.4** |
| | baz=0.0,slow=20,SNR=1.6 | | | | | | |
| **DZM** | **Mont Dzumac** | **9.11** | **177** | *e*Pn | **Pn** | **01 05 40.7** | **+0.2** |
| DZM | 18nm,0.6s | | | | | | |
| | | | | *e*S | **Sn** | **01 07 26.4** | **+4.8** |
| **MSVF** | **Nonsavu** | **12.65** | **114** | *e*Pn | **Pn** | **01 06 31.4** | **+2.4** |
| | 23nm,1.3s | | | | | | |
| **EIDS** | **Eidsvold** | **18.66** | **226** | *e*Pn | **P** | **01 07 44.8** | **-0.8** |
| **PMG** | **Port Moresby** | **18.72** | **279** | LR | LR | 01 14 15.1 | |
| | comp=Z,76nm,21.5s,baz=90,slow=34 | | | | | | |
| **CTA** | **Charters Tower** | **20.13** | **247** | P | **P** | **01 08 03.2** | **+1.6** |
| | 5.5nm,0.8s,baz=64,slow=12,SNR=3.6 | | | | | | |
| CTA | | | | LR | LR | 01 15 48.6 | |
| | comp=Z,606nm,19.5s,baz=84,slow=36 | | | | | | |
| **AFI** | **Afiamalu** | **21.73** | **95** | LR | | 01 16 00.4 | |
| | comp=Z,150nm,18.0s,baz=314,slow=35 | | | | | | |
| **RPZ** | **Rata Peaks** | **31.00** | **173** | P | **P** | **01 09 42.2** | **-2.1** |
| | 8.4nm,0.7s,baz=300,slow=8.1,SNR=4.3 | | | | | | |
| **WRAB** | **Tennant Creek** | **31.02** | **253** | P | **P** | **01 09 44.6** | **-0.2** |
| | 4.4nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **31.03** | **253** | P | **P** | **01 09 44.4** | **-0.5** |
| | 0.8nm,0.7s,baz=83,slow=9.5,SNR=5.0 | | | | | | |
| WRA | | | | LR | LR | 01 22 26.5 | |
| | comp=Z,273nm,18.3s,baz=80,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **32.13** | **246** | P | **P** | **01 09 54.3** | **-0.3** |
| | 3.4nm,0.7s,baz=74,slow=9.7,SNR=41 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 12 42.2** | **-0.7** |
| | 0.9nm,0.9s,baz=90,slow=3.7,SNR=3.2 | | | | | | |
| ASAR | | | | LR | LR | 01 23 16.3 | |
| | comp=Z,298nm,18.3s,baz=85,slow=37 | | | | | | |
| **PPT** | **Papeete** | **43.13** | **102** | LR | LR | 01 26 42.2 | |
| | comp=Z,68nm,19.6s,baz=156,slow=32 | | | | | | |
| **PPT2** | **Papeete2** | **43.13** | **102** | *e*S | S | 01 17 58.7 | +8.0 |
| PPT2 | 67nm,26.0s | | | | | | |
| | | | | *e*LR | LR | 01 23 31.9 | |
| | 234nm,26.8s | | | | | | |
| **VNDA** | **Vanda** | **64.62** | **181** | P | P | 01 14 00.9 | -2.5 |
| | 1.4nm,0.7s,baz=360,slow=4.8,SNR=7.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **64.69** | **334** | P | **P** | **01 14 05.9** | **+1.5** |
| | 0.9nm,0.4s,baz=139,slow=9.1,SNR=4.7 | | | | | | |
| **SBA** | **Scott Base** | **64.93** | **180** | *e*P | **P** | **01 14 04.8** | **-0.6** |
| | 2.7nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **73.01** | **294** | P | **P** | **01 14 57.4** | **+0.8** |
| | 0.7nm,0.3s,baz=114,slow=3.6,SNR=4.6 | | | | | | |
| **QSPA** | **South Pole Qui** | **77.09** | **180** | *e*P | **P** | **01 15 18.5** | **-1.0** |
| | 12nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **80.27** | **324** | P | **P** | **01 15 37.2** | **0.0** |
| | 0.3nm,0.4s,baz=134,slow=6.2,SNR=2.7 | | | | | | |
| **ILAR** | **Eielson Array** | **85.24** | **18** | P | P | 01 16 00.2 | -2.3 |
| | 0.8nm,0.9s,baz=232,slow=5.5,SNR=4.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.11** | **50** | P | **P** | **01 16 12.0** | **-0.6** |
| | 0.6nm,0.8s,baz=237,slow=7.4,SNR=3.9 | | | | | | |
| NVAR | | | | LR | LR | 01 47 48.6 | |
| | comp=Z,94nm,19.5s,baz=247,slow=30 | | | | | | |
| **MKAR** | **Makanchi Array** | **94.99** | **317** | P | **P** | **01 16 48.9** | **+0.1** |
| | 1.2nm,0.8s,baz=90,slow=5.8,SNR=4.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **95.17** | **324** | P | **P** | **01 16 49.4** | **0.0** |
| | 0.9nm,0.6s,baz=98,slow=2.9,SNR=4.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **96.59** | **62** | P | **P** | **01 16 55.7** | **-0.9** |
| | 0.3nm,0.7s,baz=238,slow=5.2,SNR=4.3 | | | | | | |
| TXAR | | | | LR | LR | 01 52 18.5 | |
| | comp=Z,47nm,20.7s,baz=0.0,slow=30 | | | | | | |
| **ARCES** | **ARCESS Array B** | **118.19** | **345** | PKP | **PKPdf** | **01 22 11.4** | **-1.2** |
| | 2.4nm,0.9s,baz=46,slow=2.6,SNR=7.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **130.33** | **312** | PKP | **PKPdf** | **01 22 37.0** | **+0.1** |
| | 0.3nm,0.7s,baz=112,slow=3.4,SNR=3.0 | | | | | | |
| **KEST** | **Kesra** | **148.99** | **321** | PKPbc | **PKPbc** | **01 23 15.1** | **+0.5** |
| | 12nm,0.7s,baz=82,slow=1.6,SNR=11 | | | | | | |
| **ESDC** | **Sonseca Array** | **151.90** | **343** | PKPbc | **PKPbc** | **01 23 21.2** | **-0.2** |
| | 0.5nm,0.8s,baz=2.9,slow=3.3,SNR=3.3 | | | | | | |
| ESDC | | | | PKPab | **PKPab** | **01 23 30.7** | **+0.2** |
| | 1.2nm,0.7s,baz=11,slow=3.8,SNR=7.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **164.61** | **273** | PKP | **PKPdf** | **01 23 29.3** | **-1.5** |
| | 0.4nm,0.8s,baz=80,slow=1.7,SNR=2.7 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **01 24 26.5** | **+0.2** |
| | 0.6nm,0.8s,baz=96,slow=5.4,SNR=3.8 | | | | | | |

*GUC **18** 01:08:23.9±0.5, 34°.74S×71°.77W, h44km±2km, ML4.0*
*ISCJB **18** 01:08:24.2±1.3, 34°.80S±0°.04×71°.9W±0°.1, h45km±16km, Error ellipse: s-maj=14.6km s-min=6.9km az=169.0*

**ISC 18 01:08:25.1±1.3, 34°.80S±0°.04×71°.9W±0°.1, h33km±14km, n14, σ1$41/25, 5C-2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.42** | **345** | ⇑*i*P | **Pb** | **01 08 34.2** | **-0.3** |
| CHPI | | | | *i* S | **Sb** | **01 08 41.4** | **+0.5** |
| **NICH** | **Los Niches** | **0.57** | **111** | ⇓*i*P | **Pn** | **01 08 35.9** | **-1.0** |
| NICH | | | | *i* S | **Sn** | **01 08 44.3** | **-0.8** |
| **TALC** | **Talca** | **0.63** | **162** | ⇑*i*P | **Pb** | **01 08 37.6** | **-0.2** |
| TALC | | | | *i* S | **Sb** | **01 08 47.2** | **+0.8** |
| **RCDM** | **Rinconada Maip** | **1.58** | **34** | ⇓*i*P | **Pn** | **01 08 49.6** | **-1.1** |
| RCDM | | | | *i* S | **Sn** | **01 09 09.9** | **-0.2** |
| RCDM | | | | AML | AML | 01 09 15.6 | |
| | comp=N,2μm,0.1s | | | | | | |
| **SAN** | **Santiago** | **1.68** | **37** | ⇑*i*P | **Pn** | **01 08 51.4** | **-0.7** |
| SAN | | | | *e*S | **Sn** | **01 09 12.4** | **-0.1** |
| **CLCH** | **Cerro Calan** | **1.78** | **39** | ⇑*i*P | **Pn** | **01 08 53.0** | **-0.7** |
| CLCH | | | | *i* S | **Sn** | **01 09 15.5** | **+0.2** |
| **PEL** | **Peldehue** | **1.92** | **31** | ⇑*i*P | **Pn** | **01 08 55.3** | **-0.3** |
| PEL | | | | *i* S | **Sn** | **01 09 20.4** | **+1.8** |
| PEL | | | | AML | AML | 01 09 23.4 | |
| | comp=N,3μm,0.4s | | | | | | |
| **ROC1** | **El Roble** | **1.95** | **22** | *i* P | **Pn** | **01 08 54.1** | **-2.0** |
| ROC1 | | | | *i* S | **Sn** | **01 09 22.8** | **+3.2** |
| **AAGR** | **Agrelo** | **3.05** | **57** | *i* P | **Pn** | **01 09 13.5** | **+2.3** |
| AAGR | | | | *i* P | **Pn** | **01 09 13.5** | **+2.3** |
| **AUSP** | **Uspallata** | **3.30** | **40** | *i* P | **Pn** | **01 09 15.2** | **+0.5** |
| AUSP | | | | *i* S | **Sb** | **01 10 01.4** | **-1.5** |
| **ASAL** | **Salagasta** | **3.35** | **50** | *i* P | **Pn** | **01 09 17.1** | **+1.8** |
| ASAL | | | | *i* S | **Sb** | **01 10 03.7** | **-0.6** |
| **RTLS** | **Leoncito** | **3.69** | **37** | *i* P | **Pn** | **01 09 20.4** | **+0.4** |
| RTLS | | | | *i* S | Sn | 01 10 08.8 | +6.3 |
| **RTLL** | **Cerro Villicun** | **4.48** | **40** | *i* P | **Pn** | **01 09 30.5** | **-0.2** |
| **AVFE** | **Valle Fertil** | **5.56** | **43** | *i* P | **Pn** | **01 09 44.0** | **-1.6** |
| AVFE | | | | AML | AML | 01 10 59.7 | |
| | comp=Z,50nm,0.5s | | | | | | |

*NEIC **18** 01:11:24.5, 43°.59S×172°.43E, h10km, ML4.1(WEL), After WEL.*
*NEIC Felt in Canterbury.*

**WEL 18 01:11:24.4±0.1, 43°.61S×172°.39E, h5km, ML4.1/23, 5C-4D, Error ellipse: s-maj=0.9km s-min=0.6km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CRLZ** | **Canterbury Las** | **0.17** | **78** | ⇓PG | Pg | 01 11 27.9 | +0.1 |
| CRLZ | | | | SG | Sg | 01 11 30.1 | -0.1 |
| CRLZ | | | | AML | AML | 01 11 30.6 | |
| CRLZ | | | | AML | AML | 01 11 30.6 | |
| CRLZ | | | | AML | AML | 01 11 30.6 | |
| **CRLZ** | **Canterbury Las** | **0.17** | **78** | ⇓Pg | Pg | 01 11 27.9 | +0.1 |
| CRLZ | | | | Sg | Sg | 01 11 30.1 | -0.1 |
| **MQZ** | **McQueen's Vall** | **0.21** | **116** | ⇓PG | Pg | 01 11 28.8 | +0.2 |
| MQZ | | | | SG | Sg | 01 11 32.1 | +0.6 |
| MQZ | | | | AML | AML | 01 11 32.2 | |
| **MQZ** | **McQueen's Vall** | **0.21** | **116** | ⇓Pg | Pg | 01 11 28.8 | +0.2 |
| **OXZ** | **Oxford** | **0.38** | **318** | PG | Pg | 01 11 32.1 | +0.3 |
| **OXZ** | **Oxford** | **0.38** | **318** | P* | Pg | 01 11 32.1 | +0.3 |
| **LTZ** | **Lake Taylor** | **0.83** | **354** | P* | Pg | 01 11 40.3 | -0.2 |
| LTZ | | | | AML | AML | 01 11 52.6 | |
| LTZ | | | | AML | AML | 01 11 54.9 | |
| **LTZ** | **Lake Taylor** | **0.83** | **354** | P* | Pg | 01 11 40.3 | -0.2 |
| **RPZ** | **Rata Peaks** | **0.97** | **263** | ⇑P* | Pb | 01 11 43.5 | -0.3 |
| RPZ | | | | AML | AML | 01 12 00.9 | |
| RPZ | | | | AML | AML | 01 12 03.5 | |
| **RPZ** | **Rata Peaks** | **0.97** | **263** | *e*Pg | Pb | 01 11 43.7 | -0.1 |
| RPZ | | | | *e*S | Sn | 01 11 58.0 | -1.0 |
| **WVZ** | **Waitaha Valley** | **1.32** | **293** | P* | Pn | 01 11 48.8 | -0.7 |
| WVZ | | | | AML | AML | 01 12 12.0 | |
| WVZ | | | | AML | AML | 01 12 15.2 | |
| **WVZ** | **Waitaha Valley** | **1.32** | **293** | Pn | Pn | 01 11 48.8 | -0.7 |
| **KHZ** | **Kahutara** | **1.46** | **36** | ⇑PN | Pn | 01 11 49.0 | -2.5 |
| KHZ | | | | AML | AML | 01 12 10.2 | |
| KHZ | | | | AML | AML | 01 12 19.4 | |
| **KHZ** | **Kahutara** | **1.46** | **36** | *e*Pn | Pn | 01 11 49.1 | -2.4 |
| **LBZ** | **Lake Benmore** | **1.77** | **243** | PN | Pn | 01 11 54.8 | -0.9 |
| LBZ | | | | AML | AML | 01 12 23.5 | |
| LBZ | | | | AML | AML | 01 12 23.7 | |
| LBZ | | | | AML | AML | 01 12 23.7 | |
| LBZ | | | | AML | AML | 01 12 23.9 | |
| **LBZ** | **Lake Benmore** | **1.77** | **243** | Pn | Pn | 01 11 54.8 | -0.9 |
| **THZ** | **Tophouse** | **1.89** | **12** | ⇑PN | Pn | 01 11 55.2 | -2.2 |
| THZ | | | | AML | AML | 01 12 34.7 | |
| THZ | | | | AML | AML | 01 12 36.6 | |
| **THZ** | **Tophouse** | **1.89** | **12** | Pn | Pn | 01 11 55.2 | -2.2 |
| **ODZ** | **Otahua Downs** | **1.90** | **221** | ⇑PN | Pn | 01 11 56.1 | -1.4 |
| ODZ | | | | AML | AML | 01 12 33.5 | |
| ODZ | | | | AML | AML | 01 12 33.5 | |
| ODZ | | | | AML | AML | 01 12 34.3 | |
| ODZ | | | | AML | AML | 01 12 35.9 | |
| **ODZ** | **Otahua Downs** | **1.90** | **221** | *e*Pn | Pn | 01 11 56.2 | -1.3 |
| ODZ | | | | *e*Pg | Pg | 01 12 00.8 | -0.1 |
| ODZ | | | | *e*S | Sg | 01 12 25.9 | +0.4 |
| **DSZ** | **Denniston Nort** | **1.91** | **347** | AML | AML | 01 12 28.7 | |
| DSZ | | | | AML | AML | 01 12 28.7 | |
| DSZ | | | | AML | AML | 01 12 33.3 | |
| DSZ | | | | AML | AML | 01 12 33.4 | |
| **FOZ** | **Fox Glacier** | **1.96** | **270** | AML | AML | 01 12 31.1 | |
| FOZ | | | | AML | AML | 01 12 31.1 | |
| FOZ | | | | AML | AML | 01 12 34.9 | |
| FOZ | | | | AML | AML | 01 12 34.9 | |
| **BSWZ** | **Blackbirch Sta** | **2.19** | **31** | AML | AML | 01 12 26.9 | |
| BSWZ | | | | AML | AML | 01 12 36.0 | |
| **TUWZ** | **Tuamarina** | **2.47** | **28** | AML | AML | 01 13 53.3 | |
| **NNZ** | **Nelson** | **2.50** | **17** | AML | AML | 01 12 41.6 | |
| NNZ | | | | AML | AML | 01 12 42.0 | |
| **HHSZ** | **Highcliff Hill** | **2.60** | **209** | PN | Pn | 01 12 05.8 | -1.4 |
| **HHSZ** | **Highcliff Hill** | **2.60** | **209** | Pn | Pn | 01 12 05.8 | -1.4 |
| **JCZ** | **Jackson Bay** | **2.67** | **259** | AML | AML | 01 12 53.1 | |
| JCZ | | | | AML | AML | 01 12 55.8 | |
| **WKZ** | **Wanaka** | **2.71** | **242** | AML | AML | 01 12 56.4 | |
| WKZ | | | | AML | AML | 01 12 56.5 | |
| WKZ | | | | AML | AML | 01 13 01.0 | |
| WKZ | | | | AML | AML | 01 13 01.1 | |
| **EAZ** | **Earnscleugh** | **2.74** | **233** | ⇑PN | Pn | 01 12 07.7 | -1.3 |
| EAZ | | | | AML | AML | 01 12 55.5 | |
| EAZ

comp=Z,40nm,19.2s,baz=140,slow=36
**SONM Songino Array 47.29 326** LR LR 02 01 42.8
comp=Z,41nm,20.4s,baz=118,slow=35
**ZALV Zalesovo Beam 62.16 325** P **P** **01 44 34.0 +0.7**
0.6nm,0.5s,baz=101,slow=7.5,SNR=2.5
**AAK Ala-Archa 66.68 311** LR LR 02 16 03.0
comp=Z,24nm,19.0s,baz=100,slow=38
**ILAR Eielson Array 70.13 25** P **P** **01 45 23.0 -1.3**
0.4nm,0.5s,baz=254,slow=5.8,SNR=6.5
**PPT Papeete 72.02 113** LR LR 02 10 56.1
comp=Z,48nm,20.6s,baz=2.5,slow=31
**YKA Yellowknife Ar 84.43 27** P **P** **01 46 45.2 +0.8**
1.3nm,0.8s,baz=288,slow=5.2,SNR=3.9
**NVAR Mina Array Bea 88.44 51** P **P** **01 47 06.8 +1.9**
0.8nm,0.7s,baz=261,slow=5.4,SNR=6.4
**FINES FINESS Array B 91.96 335** P **P** **01 47 20.4 0.0**
2.4nm,0.9s,baz=58,slow=3.6,SNR=4.3
**BRTR Keskin Array B 97.30 313** LR LR 02 38 12.2
comp=Z,8.2nm,18.4s,baz=344,slow=40
**LPAZ La Paz 148.69 101** PKPbc **PKPbc** **01 54 01.8 +0.8**
1.1nm,0.7s,baz=180,slow=1.0,SNR=2.9

*CSEM **18** 01:38:28.5, 39.°72N×29.°37W, h10km, ML2.7, After PDA*
**PDA 18 01:38:28.5±0.9, 39.°72N×29.°37W, h10km, MD3.8, ML2.7, Error ellipse: s-maj=21.9km s-min=7.8km az=66.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PCED** | **Cedros** | **1.21** | **154** | *e*P | | Pn | 01 38 46.6 | -4.8 |
| PCED | | | | *e*S | | Sb | 01 39 00.1 | -7.0 |
| PCED | | | | A | | A | 01 39 00.8 | |
| | 36nm,0.3s | | | | | | | |
| **PCED** | **Cedros** | **1.21** | **154** | *e*P | | Pn | 01 38 46.6 | -4.8 |
| PCED | | | | *e*S | | Sb | 01 39 00.1 | -7.0 |
| **CALA** | **Caldeira** | **1.25** | **155** | *e*S | | Sb | 01 39 01.8 | -6.7 |
| **CALA** | **Caldeira** | **1.25** | **155** | *e*S | | Sb | 01 39 01.8 | -6.7 |
| **ROSA** | **Rosais** | **1.33** | **138** | *e*S | | Sb | 01 39 03.2 | -7.4 |
| ROSA | | | | A | | A | 01 39 05.3 | |
| | 21nm,0.6s | | | | | | | |
| **ROSA** | **Rosais** | **1.33** | **138** | *e*S | | Sb | 01 39 03.2 | -7.4 |
| **PICO** | **Pico** | **1.42** | **149** | *e*P | | Pn | 01 38 50.3 | -4.2 |
| PICO | | | | *e*S | | Sn | 01 39 05.9 | -7.4 |
| **PICO** | **Pico** | **1.42** | **149** | *e*P | | Pn | 01 38 50.3 | -4.2 |
| PICO | | | | *e*S | | Sn | 01 39 05.9 | -7.4 |
| **PCAN** | **Candelaria** | **1.43** | **151** | *e*P | | Pn | 01 38 49.7 | -4.8 |
| PCAN | | | | *e*S | | Sn | 01 39 06.2 | -7.2 |
| PCAN | | | | A | | A | 01 39 07.7 | |
| | 107nm,0.4s | | | | | | | |
| **PCAN** | **Candelaria** | **1.43** | **151** | *e*P | | Pn | 01 38 49.7 | -4.8 |
| PCAN | | | | *e*S | | Sn | 01 39 06.2 | -7.2 |

*TAP **18** 01:43:53.3, 24.°81N×122.°42E, h17km±1km, ML3.1, D*
*JMA **18** 01:43:53.2±0.1, 24.°71N×122.°51E, h39km±3km, M2.1*
**ISC 18 01:43:52.5±1.2, 24.°80N±0.°06×122.°50E±0.°03, h23km±14km, n17, σ0s59/31, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.51** | **294** | P | | **Pb** | **01 44 02.6** | **-0.2** |
| | baz=296 | | | | | | | |
| TWB1 | | | | *e*S | | **Sb** | **01 44 09.2** | **-0.6** |
| | baz=296 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.53** | **130** | P | | **Pb** | **01 44 03.5** | **+0.3** |
| JYNG | | | | S | | **Sb** | **01 44 10.3** | **-0.2** |
| **YOJ** | **Yonaguni jima** | **0.57** | **126** | P | | **Pb** | **01 44 03.9** | **0.0** |
| YOJ | | | | S | | **Sb** | **01 44 11.7** | **+0.1** |
| **TWC** | **Suao** | **0.62** | **252** | P | | **Pb** | **01 44 05.1** | **+0.4** |
| | baz=248 | | | | | | | |
| TWC | | | | *e*S | | **Sb** | **01 44 13.2** | **+0.2** |
| | baz=248 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.71** | **293** | *e*P | | **Pn** | **01 44 07.0** | **-0.1** |
| | baz=294 | | | | | | | |
| NWF | | | | *e*S | | **Sb** | **01 44 16.3** | **+0.7** |
| | baz=294 | | | | | | | |
| **TWE** | **Neicheng** | **0.76** | **264** | P | | **Pb** | **01 44 06.8** | **-0.3** |
| | baz=262 | | | | | | | |
| TWE | | | | S | | **Sb** | **01 44 17.2** | **+0.2** |
| | baz=262 | | | | | | | |
| **ENA** | **Nanau** | **0.78** | **242** | *i* P | | **Pb** | **01 44 07.4** | **-0.1** |
| | baz=238 | | | | | | | |
| ENA | | | | *e*S | | **Sb** | **01 44 17.1** | **-0.5** |
| | baz=238 | | | | | | | |
| **TWA** | **Mucha** | **0.85** | **282** | *e*S | | **Sn** | **01 44 20.4** | **-0.5** |
| | baz=282 | | | | | | | |
| **ENTT** | **Nioudou** | **0.86** | **260** | P | | **Pn** | **01 44 09.4** | **+0.1** |
| | baz=257 | | | | | | | |
| ENTT | | | | *e*S | | **Sb** | **01 44 20.2** | **+0.2** |
| | baz=257 | | | | | | | |
| **NNS** | **Nan Shan** | **1.09** | **251** | P | | **Pb** | **01 44 13.0** | **+0.3** |
| | baz=248 | | | | | | | |
| NNS | | | | S | | **Sn** | **01 44 26.8** | **0.0** |
| | baz=248 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.30** | **240** | *e*P | | **Pb** | **01 44 16.7** | **+0.2** |
| | baz=237 | | | | | | | |
| WHF | | | | *e*S | | **Sb** | **01 44 32.7** | **-0.3** |
| | baz=237 | | | | | | | |
| **TWT** | **Tachien** | **1.32** | **246** | *e*P | | **Pb** | **01 44 18.4** | **+1.6** |
| | baz=244 | | | | | | | |
| TWT | | | | *e*S | | **Sb** | **01 44 33.8** | **+0.4** |
| | baz=244 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.56** | **106** | P | | **Pn** | **01 44 18.6** | **-0.2** |
| **JISG** | **Ishigakijimahi** | **1.66** | **97** | S | | **Sn** | **01 44 41.2** | **+0.4** |
| **SMLT** | **Sun Moon Lake** | **1.72** | **238** | *e*P | | **Pb** | **01 44 23.9** | **+0.4** |
| | baz=236 | | | | | | | |
| SMLT | | | | *e*S | | **Sb** | **01 44 44.0** | **-0.8** |
| | baz=236 | | | | | | | |
| **TYC** | **Yuchr** | **1.74** | **240** | *e*P | | **Pb** | **01 44 23.9** | **+0.1** |
| | baz=237 | | | | | | | |
| TYC | | | | *e*S | | **Sb** | **01 44 46.5** | **+1.3** |
| | baz=237 | | | | | | | |
| **ALS** | **Alishan** | **2.01** | **231** | *e*P | | **Pb** | **01 44 27.8** | **-0.8** |
| | baz=228 | | | | | | | |
| ALS | | | | *e*S | | **Sb** | **01 44 52.3** | **-1.0** |
| | baz=228 | | | | | | | |

*AUST **18** 01:45:52.1±99.0, 18.°22S×175.°55W, h480km±4km, Error ellipse: s-maj=18.5km s-min=2.9km az=256.0*
*ISCJB **18** 01:46:10.9±0.3, 18.°70S±0.°07×177.°50W±0.°07, h570km, mb4.5/26, Error ellipse: s-maj=10.3km s-min=6.8km az=138.6*
*IDC **18** 01:46:14.8±1.2, 18.°79S×177.°68W, h602km±15km, mb3.6/10, mb1 3.9/13, mb1mx3.7/24, mbtmp4.6/13, Error ellipse: s-maj=17.2km s-min=11.0km az=145.0*
*NEIC **18** 01:46:15.1±1.1, 18.°77S×177.°40W, h620km±13km, mb4.9/18, Error ellipse: s-maj=16.0km s-min=11.0km az=128.0*
*BJI **18** 01:46:16.5, 18.°87S×178.°06W, h619km, mb4.7/11, mB5.3/7*
**ISC 18 01:46:12.6±0.5, 18.°71S±0.°09×177.°67W±0.°08, h570km, n96, σ1s78/91, mb4.8/27, 1C-3D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.18** | **283** | P | | P | 01 47 46.0 | +8.7 |
| | 2µm,0.7s,SNR=62 | | | | | | | |
| **MSVF** | **Nonsavu** | **4.18** | **283** | *e*P | | P | 01 47 46.3 | +9.0 |
| MSVF | | | | *e*S | | S | 01 49 01.0 | +15 |
| **AFI** | **Afiamalu** | **7.40** | **51** | P | | P | 01 48 08.6 | +3.3 |
| | 11nm,0.3s,baz=176,slow=4.7,SNR=14 | | | | | | | |
| AFI | | | | S | | **S** | **01 49 43.0** | **+5.4** |
| | 12nm,0.3s,baz=48,slow=23,SNR=8.9 | | | | | | | |
| **AFI** | **Afiamalu** | **7.40** | **51** | *e*P | | P | 01 48 10.6 | +5.3 |
| AFI | | | | *e*S | | S | 01 49 44.8 | +7.2 |
| **DZM** | **Mont Dzumac** | **15.26** | **255** | P | | **P** | **01 49 25.9** | **+1.6** |
| | 2.9nm,0.3s,baz=180,slow=18,SNR=25 | | | | | | | |
| **OUZ** | **Omahuta** | **18.18** | **203** | *e*P | | **P** | **01 49 55.4** | **+4.3** |
| | 38nm,0.7s | | | | | | | |
| **URZ** | **Urewera** | **20.01** | **192** | P | | **P** | **01 50 06.2** | **-1.4** |
| | 4.9nm,0.3s,baz=5.7,slow=10,SNR=9.4 | | | | | | | |
| **URZ** | **Urewera** | **20.01** | **192** | *e*P | | **P** | **01 50 06.7** | **-0.9** |
| | 28nm,0.9s | | | | | | | |
| **SNZO** | **South Karori** | **23.45** | **195** | *e*P | | **P** | **01 50 38.5** | **+0.1** |
| | 68nm,1.3s | | | | | | | |
| **THZ** | **Tophouse** | **24.35** | **197** | *e*P | | **P** | **01 50 47.3** | **+0.9** |
| | 176nm,1.6s | | | | | | | |
| **KHZ** | **Kahutara** | **24.79** | **196** | *e*P | | **P** | **01 50 50.1** | **-0.1** |
| | 784nm,2.2s | | | | | | | |
| **EIDS** | **Eidsvold** | **29.66** | **251** | P | | **P** | **01 51 34.3** | **+1.2** |
| | baz=32,SNR=4.3 | | | | | | | |
| **EIDS** | **Eidsvold** | **29.66** | **251** | *e*P | | **P** | **01 51 34.1** | **+1.0** |
| | 13nm,0.9s | | | | | | | |
| **ARMA** | **Armidale** | **30.16** | **241** | P | | **P** | **01 51 39.7** | **+2.2** |
| | baz=32,SNR=9.8 | | | | | | | |
| **ARMA** | **Armidale** | **30.16** | **241** | *e*P | | **P** | **01 51 39.4** | **+2.0** |
| | 14nm,0.6s | | | | | | | |
| **MGCD** | **Mangrove Creek** | **31.42** | **236** | P | | P | 01 51 51.6 | +3.5 |
| | baz=33,SNR=7.2 | | | | | | | |
| **RMQ** | **Roma** | **31.88** | **250** | P | | **P** | **01 51 54.3** | **+2.2** |
| | baz=34,SNR=11 | | | | | | | |
| **CNB** | **Canberra Magne** | **33.51** | **234** | P | | **P** | **01 52 07.8** | **+2.1** |
| | baz=35,SNR=27 | | | | | | | |
| **CAN** | **Canberra** | **33.79** | **234** | *e*P | | **P** | **01 52 08.3** | **+0.2** |
| | 21nm,0.6s | | | | | | | |
| **PMG** | **Port Moresby** | **35.29** | **280** | P | | **P** | **01 52 21.4** | **+0.6** |
| | 57nm,0.9s,baz=110,slow=5.2,SNR=20 | | | | | | | |
| **PMG** | **Port Moresby** | **35.29** | **280** | *e*P | | **P** | **01 52 22.8** | **+2.0** |
| | 40nm,0.6s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.38** | **242** | P | | **P** | **01 52 22.8** | **+1.5** |
| | baz=37,SNR=38 | | | | | | | |
| **QLP** | **Quilpie** | **35.92** | **250** | P | | **P** | **01 52 27.1** | **+1.2** |
| | baz=38,SNR=50 | | | | | | | |
| **MTSU** | **Mount Surprise** | **36.02** | **265** | P | | **P** | **01 52 28.0** | **+1.1** |
| | baz=38,SNR=57 | | | | | | | |
| **TOO** | **Toolangi** | **37.22** | **232** | P | | **P** | **01 52 38.0** | **+1.5** |
| | baz=39,SNR=6.3 | | | | | | | |
| **COEN** | **Coen** | **37.82** | **271** | P | | **P** | **01 52 43.3** | **+1.7** |
| | baz=40,SNR=89 | | | | | | | |
| **COEN** | **Coen** | **37.82** | **271** | *e*P | | **P** | **01 52 43.3** | **+1.7** |
| | 82nm,0.7s | | | | | | | |
| **QIS** | **Mount Isa** | **40.20** | **260** | P | | **P** | **01 53 01.3** | **+0.5** |
| | baz=42,SNR=6.1 | | | | | | | |
| **HTT** | **Hallett** | **41.35** | **240** | P | | P | 01 53 06.3 | -3.4 |
| | baz=43,SNR=6.2 | | | | | | | |
| **BBOO** | **Buckleboo** | **43.64** | **242** | P | | **P** | **01 53 28.3** | **+0.8** |
| | baz=46,SNR=21 | | | | | | | |
| **BBOO** | **Buckleboo** | **43.64** | **242** | *e*P | | **P** | **01 53 28.4** | **+0.8** |
| | 18nm,0.6s | | | | | | | |
| **JAY** | **Jayapura** | **43.80** | **287** | P | | **P** | **01 53 30.4** | **+1.3** |
| | baz=46,SNR=23 | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.17** | **260** | P | | **P** | **01 53 39.0** | **-0.5** |
| | 280nm,0.4s,SNR=58 | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.17** | **260** | *e*P | | **P** | **01 53 39.6** | **0.0** |
| | 36nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.18** | **260** | P | | **P** | **01 53 39.7** | **0.0** |
| | 26nm,0.5s,baz=97,slow=7.5,SNR=390 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **01 55 06.8** | **-0.9** |
| | 2.7nm,1.0s,baz=90,slow=4.1,SNR=4.1 | | | | | | | |
| **AS01** | **Alice Springs** | **45.21** | **255** | *e*P | | **P** | **01 53 40.2** | **+0.3** |
| **ASAR** | **Alice Springs** | **45.25** | **255** | P | | **P** | **01 53 40.5** | **+0.3** |
| | 23nm,0.5s,baz=88,slow=8.0,SNR=281 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **01 55 07.0** | **-0.9** |
| | 2.1nm,0.5s,baz=104,slow=3.8,SNR=5.7 | | | | | | | |
| ASAR | | | | S | | **S** | **01 59 35.9** | **-3.7** |
| | 1.1nm,0.6s,baz=91,slow=16,SNR=7.0 | | | | | | | |
| **KDU** | **Kakadu** | **48.25** | **270** | P | | **P** | **01 54 03.0** | **+0.3** |
| | baz=50,SNR=11 | | | | | | | |
| **WRKA** | **Warakurna** | **50.27** | **253** | P | | **P** | **01 54 15.7** | **-1.9** |
| | baz=52,SNR=29 | | | | | | | |
| **KNRA** | **Kununurra** | **51.11** | **265** | P | | **P** | **01 54 23.8** | **+0.1** |
| | baz=53,SNR=6.2 | | | | | | | |
| **FAKI** | **Fak Fak** | **51.42** | **282** | P | | **P** | **01 54 26.2** | **+0.2** |
| | baz=53,SNR=4.4 | | | | | | | |
| **SOEI** | **Soe** | **56.77** | **270** | P | | **P** | **01 55 05.5** | **+1.7** |
| | baz=59,SNR=3.7 | | | | | | | |
| **SOEI** | **Soe** | **56.77** | **270** | *e*P | | **P** | **01 55 04.6** | **+0.8** |
| | 56nm,0.7s | | | | | | | |
| **MBWA** | **Marble Bar** | **58.56** | **256** | *e*P | | **P** | **01 55 15.1** | **-0.6** |
| **MEEK** | **Meekatharra** | **58.81** | **250** | P | | **P** | **01 55 16.6** | **-0.7** |
| | baz=61,SNR=10 | | | | | | | |
| **KLBR** | **Kellerberrin** | **59.10** | **244** | P | | **P** | **01 55 18.7** | **-0.4** |
| | baz=61,SNR=13 | | | | | | | |
| **VNDA** | **Vanda** | **59.71** | **185** | P | | **P** | **01 55 22.9** | **+0.6** |
| | 1.0nm,0.9s,baz=32,slow=7.3,SNR=4.6 | | | | | | | |
| **BLDU** | **Balliduu** | **60.08** | **245** | P | | **P** | **01 55 25.1** | **-0.5** |
| | baz=62,SNR=24 | | | | | | | |
| **LUWI** | **Luwuk** | **60.93** | **280** | P | | P | 01 55 26.6 | -4.8 |
| | baz=63,SNR=3.7 | | | | | | | |
| **GIRL** | **Giralia** | **63.34** | **254** | P | | **P** | **01 55 47.9** | **+1.0** |
| | baz=65,SNR=4.3 | | | | | | | |
| **KKM** | **Kota Kinabalu** | **69.61** | **284** | *e*P | | **P** | **01 56 26.1** | **+0.1** |
| | 8.7nm,0.5s | | | | | | | |
| **UGM** | **Wanagama** | **70.32** | **268** | P | | **P** | **01 56 29.6** | **-0.5** |
| | baz=72,SNR=3.6 | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.35** | **180** | *e*P | | **P** | **01 56 35.8** | **+0.6** |
| | 2.4nm,0.9s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.63** | **345** | P | | **P** | **01 56 53.8** | **-0.2** |
| | 6.2nm,0.8s,baz=139,slow=7.2,SNR=3.9 | | | | | | | |
| **WHFM** | **Hanning Flat** | **77.97** | **46** | *e*P | | **P** | **01 57 10.6** | **-2.2** |
| **BORC** | **Borrego Spring** | **78.01** | **49** | *e*P | | P | 01 57 08.8 | -4.2 |
| **WORM** | **Onyx Ranch** | **78.04** | **46** | *e*P | | **P** | **01 57 10.6** | **-2.5** |
| **WWPM** | **Walker Pass** | **78.17** | **46** | *e*P | | P | 01 57 10.6 | -3.3 |
| **WLHM** | **Little Horse** | **78.25** | **45** | *e*P | | P | 01 57 10.6 | -3.9 |
| **SRTC** | **Snort** | **78.38** | **46** | *e*P | | P | 01 57 10.6 | -4.3 |
| **RCWM** | **Renegade Canyo** | **78.59** | **46** | *e*P | | P | 01 57 10.6 | -5.4 |
| **NJ2** | **Nanjing** | **78.98** | **309** | *e*P | | P | 01 57 13.6 | -4.5 |
| NJ2 | | | | | PMZ | | | |
| | 70nm,1.0s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.52** | **43** | P | | **P** | **01 57 21.1** | **0.0** |
| | 1.0nm,0.7s,baz=222,slow=8.4,SNR=11 | | | | | | | |
| **WHN** | **Wuhan** | **81.64** | **306** | P | | **P** | **01 57 33.1** | **+1.1** |
| **I07A** | **Izee** | **82.00** | **38** | *e*P | | **P** | **01 57 34.6** | **+1.0** |
| | 3.9nm,0.9s | | | | | | | |
| **MAW** | **Mawson** | **83.35** | **200** | P | | **P** | **01 57 39.2** | **-0.7** |
| | 2.2nm,0.9s,baz=128,slow=6.8,SNR=7.4 | | | | | | | |
| **MAW** | **Mawson** | **83.35** | **200** | *e*P | | **P** | **01 57 39.6** | **-0.3** |
| | 1.6nm,1.4s | | | | | | | |
| **F10A** | **Beech Ranch, E** | **84.40** | **38** | *e*P | | **P** | **01 57 46.5** | **+0.9** |
| | 70nm,2.6s | | | | | | | |
| **TRF** | **Thorofare Moun** | **84.64** | **12** | *e*P | | **P** | **01 57 45.4** | **-1.0** |
| | 311nm,3.0s | | | | | | | |
| **RND** | **Reindeer** | **84.89** | **13** | *e*P | | **P** | **01 57 47.7** | **+0.2** |
| | 149nm,2.5s | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.83** | **57** | P | | **P** | **01 57 52.7** | **-0.1** |
| | 0.6nm,0.7s,baz=222,slow=7.3,SNR=9.0 | | | | | | | |
| **GYA** | **Guiyang** | **86.04** | **299** | *e*P | | **P** | **01 57 54.0** | **+0.1** |
| GYA | | | | | pP | pP | 02 00 05.8 | +8.8 |
| GYA | | | | | sP | sP | 02 01 07.3 | +13 |
| GYA | | | | | PP | PP | 02 01 30.6 | +5.5 |
| GYA | | | | | SKS | **SKSac** | **02 07 20.0** | **-6.2** |
| GYA | | | | | S | **SKKSac** | **02 07 38.4** | **+2.5** |
| GYA | | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **86.21** | **12** | *e*P | | **P** | **01 57 52.9** | **-0.8** |
| | 100nm,2.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **86.51** | **13** | P | | **P** | **01 57 54.0** | **-1.1** |
| | 0.9nm,0.4s,baz=225,slow=4.8,SNR=22 | | | | | | | |
| **IL1** | **Eielson Array** | **86.51** | **13** | *e*P | | **P** | **01 57 52.8** | **-2.3** |
| **KMI** | **Kunming** | **88.82** | **297** | P | | **P** | **01 58 06.8** | **-0.3** |
| KMI | | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | | |
| **SNAA** | **Sanae** | **89.78** | **178** | P | | **P** | **01 58 09.5** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **89.81** | **289** | P | | **P** | **01 58 11.9** | **+0.4** |
| | 1.2nm,0.3s,baz=127,slow=3.4,SNR=7.0 | | | | | | | |
| **CD2** | **Chengdu** | **90.09** | **303** | *e*P | | **P** | **01 58 12.0** | **-0.6** |
| CD2 | | | | | pP | pP | 02 00 25.1 | +8.1 |
| CD2 | | | | | sP | sP | 02 01 26.9 | +13 |
| CD2 | | | | | SKS | **SKSac** | **02 07 44.0** | **-5.7** |
| CD2 | | | | | S | **S** | **02 08 15.0** | **-3.3** |
| CD2 | | | | | SS | **SS** | **02 14 36.6** | **+1.4** |
| CD2 | | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | | |
| CD2 | | | | | PMZ | | | |
| | 120nm,5.0s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.35** | **177** | P | | **P** | **01 58 13.0** | **-0.1** |
| | baz=180,slow=4.2 | | | | | | | |
| **LZH** | **Lanzhou** | **91.93** | **307** | *e*P | | **P** | **01 58 23.4** | **+2.2** |
| LZH | | | | | PMZ | | | |
| | 15nm,1.0s | | | | | | | |
| **KSH** | **Kashi** | **114.11** | **306** | *e*PKP | | PKPdf | 02 03 48.9 | +0.9 |
| KSH | | | | *es*PKP | | | 02 07 04.9 | |
| KSH | | | | | PPMZ | | | |
| | 69nm,4.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.22** | **350** | PKP | | **PKPdf** | **02 04 10.6** | **-1.5** |
| | 2.8nm,1.0s,baz=356,slow=1.7,SNR=7.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **134.14** | **344** | SKPbc | | **SKPbc** | **02 06 57.7** | **-4.2** |
| | 1.3nm,0.8s,baz=41,slow=3.8,SNR=4.5 | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.84** | **314** | PKPbc | | **PKPdf** | **02 04 47.3** | **0.0** |
| | 1.4nm,0.7s,baz=138,slow=3.1,SNR=10 | | | | | | | |
| **BR231** | **Keskin MP Arra** | **146.36** | **315** | *e*PKPdf | | **PKPdf** | **02 04 47.9** | **-0.2** |
| **GERES** | **GERESS Array B** | **148.56** | **346** | PKPbc | | **PKPbc** | **02 04 54.9** | **-0.9** |
| | 0.7nm,0.7s,baz=228,slow=2.4,SNR=6.7 | | | | | | | |
| **CONA** | **Conrad Observa** | **148.84** | **342** | *i* PKiKP | | **PKPbc** | **02 04 56.0** | **-0.6** |
| | 4.9nm,1.2s | | | | | | | |
| **SOKA** | **Soboth** | **150.21** | **342** | *i* PKiKP | | **PKPbc** | **02 04 58.2** | **-1.6** |
| | 5.9nm,1.2s | | | | | | | |
| **PERS** | **Pernice** | **150.22** | **342** | *i* PKPbc | | **PKPbc** | **02 04 58.4** | **-1.5** |
| **ABTA** | **Abfaltersbach** | **150.81** | **346** | *i* PKiKP | | **PKPbc** | **02 04 59.7** | **-1.6** |
| | 3.5nm,0.5s | | | | | | | |
| **LJU** | **Ljubljana** | **150.93** | **342** | *i* PKPbc | | **PKPbc** | **02 05 00.2** | **-1.2** |
| **FETA** | **Feichten** | **150.93** | **348** | *i* PKiKP | | **PKPbc** | **02 05 00.6** | **-1.0** |
| | 1.7nm,0.6s | | | | | | | |
| **VISS** | **Visnje** | **151.06** | **342** | *i* PKPbc | | **PKPbc** | **02 04 59.6** | **-2.1** |
| **BOJS** | **Bojanci** | **151.20** | **341** | *i* PKPbc | | **PKPbc** | **02 05 01.4** | **-0.6** |
| **TORD** | **Torodi Ar. Bea** | **174.44** | **174** | PKPab | | **PKPab** | **02 06 53.4** | **-1.5** |
| | 0.3nm,0.7s,baz=190,slow=3.3,SNR=2.7 | | | | | | | |

*ISCJB **18** 01:51:36.9±0.5, 24.°74N±0.°05×122.°49E±0.°02, h3km±4km, Error ellipse: s-maj=7.8km s-min=2.9km az=12.0*
*JMA **18** 01:51:36.5±0.2, 24.°71N×122.°46E, h0km, M2.4*
*TAP **18** 01:51:38.1, 24.°75N×122.°45E, h3km±1km, ML3.3, D*
**ISC 18 01:51:37.2±1.1, 24.°74N±0.°05×122.°48E±0.°02, h9km±9km, n23, σ0s67/42, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JYNG** | **Yonagunijimaku** | **0.51** | **124** | P | | **Pg** | **01 51 46.6** | **-0.6** |
| JYNG | | | | S | | **Sg** | **01 51 54.6** | **+0.7** |
| **TWB1** | **Santiao Chiao** | **0.52** | **301** | *i* P | | **Pg** | **01 51 47.2** | **0.0** |
| | baz=302 | | | | | | | |
| TWB1 | | | | S | | **Sg** | **01 51 54.2** | **+0.1** |
| | baz=302 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **0.56** | **120** | P | | **Pg** | **01 51 48.2** | **+0.2** |
| YOJ | | | | S | | **Sg** | **01 51 55.4** | **0.0** |
| **TWC** | **Suao** | **0.59** | **257** | P | | **Pg** | **01 51 48.5** | **-0.1** |
| | baz=255 | | | | | | | |
| TWC | | | | *e*S | | **Sg** | **01 51 55.9** | **-0.4** |
| | baz=255 | | | | | | | |
| **ILA** | **Ilan** | **0.67** | **272** | *e*S | | **Sb** | **01 51 60.0** | **-0.3** |
| | baz=271 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.71** | **297** | *e*P | | **Pb** | **01 51 51.7** | **-0.1** |
| | baz=298 | | | | | | | |
| NWF | | | | *e*S | | **Sb** | **01 52 01.1** | **-0.6** |
| | baz=298 | | | | | | | |
| **TWE** | **Neicheng** | **0.74** | **268** | P | | **Pg** | **01 51 51.2** | **-0.2** |
| | baz=267 | | | | | | | |
| TWE | | | | *e*S | | **Sb** | **01 52 02.0** | **-0.4** |
| | baz=267 | | | | | | | |
| **ENA** | **Nanau** | **0.74** | **245** | P | | **Pg** | **01 51 51.8** | **+0.3** |
| | baz=243 | | | | | | | |
| ENA | | | | *e*S | | **Sb** | **01 52 01.8** | **-0.7** |
| | baz=243 | | | | | | | |
| **ENTT** | **Nioudou** | **0.84** | **263** | P | | **Pb** | **01 51 53.8** | **0.0** |
| | baz=262 | | | | | | | |
| ENTT | | | | *e*S | | **Sb** | **01 52 04.8** | **-0.5** |
| | baz=262 | | | | | | | |
| **TWA** | **Mucha** | **0.85** | **286** | *e*P | | **Pb** | **01 51 54.0** | **-0.1** |
| | baz=286 | | | | | | | |
| TWA | | | | *e*S | | **Sb** | **01 52 05.0** | **-0.6** |
| | baz=286 | | | | | | | |
| **NSK** | **Sanguang** | **1.02** | **266** | *e*P | | **Pb** | **01 51 57.0** | **-0.1** |
| | baz=265 | | | | | | | |
| NSK | | | | *e*S | | **Sg** | **01 52 10.0** | **-0.1** |
| | baz=265 | | | | | | | |
| **TWD** | **Chiawan** | **1.04** | **231** | *e*S | | **Sb** | **01 52 11.1** | **0.0** |
| | baz=229 | | | | | | | |
| **NNS** | **Nan Shan** | **1.05** | **254** | *e*P | | **Pb** | **01 51 57.5** | **-0.1** |
| | baz=252 | | | | | | | |
| NNS | | | | *e*S | | **Sg** | **01 52 10.3** | **-0.7** |
| | baz=252 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.21** | **109** | S | | **Sb** | **01 52 16.1** | **+0.1** |
| **WHF** | **Hehuan Shan** | **1.26** | **242** | *e*P | | **Pg** | **01 52 01.3** | **0.0** |
| | baz=240 | | | | | | | |
| WHF | | | | *e*S | | **Sb** | **01 52 15.3** | **-2.5** |
| | baz=240 | | | | | | | |
| **TWT** | **Tachien** | **1.28** | **248** | *e*P | | **Pg** | **01 52 03.4** | **+1.6** |
| | baz=247 | | | | | | | |
| TWT | | | | *e*S | | **Sn** | **01 52 19.3** | **+0.5** |
| | baz=247 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.35** | **266** | *e*P | | **Pg** | **01 52 04.1** | **+1.0** |
| | baz=264 | | | | | | | |
| NSTT | | | | *e*S | | **Sb** | **01 52 19.8** | **-0.2** |
| | baz=264 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.56** | **104** | S | | **Sn** | **01 52 25.0** | **-0.5** |
| **TWQ1** | **Liyutan** | **1.60** | **256** | *e*P | | **Pn** | **01 52 06.1** | **+0.4** |
| | baz=255 | | | | | | | |
| TWQ1 | | | | *e*S | | **Sg** | **01 52 29.3** | **+0.6** |
| | baz=255 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.68** | **240** | *e*P | | **Pb** | **01 52 08.3** | **+0.1** |
| | baz=238 | | | | | | | |
| SMLT | | | | *e*S | | **Sg** | **01 52 30.4** | **-0.7** |
| | baz=238 | | | | | | | |
| **TYC** | **Yuchr** | **1.70** | **241** | *e*P | | **Pn** | **01 52 06.5** | **-0.5** |
| | baz=239 | | | | | | | |
| TYC | | | | *e*S | | **Sg** | **01 52 31.8** | **0.0** |
| | baz=239 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.87** | **228** | *e*P | | **Pn** | **01 52 09.9** | **+0.1** |
| | baz=227 | | | | | | | |
| YUS | | | | *e*S | | **Sn** | **01 52 34.3** | **+0.5** |
| | baz=227 | | | | | | | |
| **ALS** | **Alishan** | **1.96** | **232** | *e*P | | **Pn** | **01 52 11.9** | **+1.1** |
| | baz=230 | | | | | | | |
| ALS | | | | *e*S | | **Sb** | **01 52 37.0** | **-0.9** |
| | baz=230 | | | | | | | |

*ISCJB **18** 02:20:21.4±0.3, 36.°09N±0.°03×29.°61E±0.°02, h49km±5km, Error ellipse: s-maj=4.4km s-min=3.1km az=22.1*
*CSEM **18** 02:20:22.4±0.2, 36.°14N×29.°59E, h30km, MD3.4, Error ellipse: s-maj=5.2km s-min=3.4km az=20.0*
*ISK **18** 02:20:22.3, 36.°23N×29.°50E, h27km, MD3.2*
*DDA **18** 02:20:22.6, 36.°26N×29.°47E, h36km, Md3.4*
*ATH **18** 02:20:22.7, 36.°27N×29.°36E, h30km±3km, MD3.6/14*
*NIC **18** 02:20:25.4, 36.°10N×29.°82E, h33km, mb4.0, ML3.6*
*NSSC **18** 02:20:26.6±2.0, 35.°70N×30.°09E, h84km±411km, MD1.7, ML2.7*
**ISC 18 02:20:23.1±1.6, 36.°14N±0.°03×29.°56E±0.°02, h37km±1km, n127, σ1s22/149, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KSL** | **Kastellorizon** | **0.02** | **69** | *e*PB | | **Pn** | **02 20 29.1** | **0.0** |
| KSL | | | | *e*SB |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BODT** | **Bodrum** | **2.03 298** | *e*PN | **Pn** | **02 20 54.4** | **-0.3** |
| **BODT** | **Bodrum** | **2.03 298** | *e*Pn | **Pn** | **02 20 54.4** | **-0.3** |
| **KARP** | **Karpathos** | **2.04 254** | *e*PB | **Pn** | **02 20 56.0** | **+1.2** |
| **KARP** | **Karpathos** | **2.04 254** | *e*Pb | **Pn** | **02 20 56.0** | **+1.2** |
| **BAGO** | **Egridir - ISPA** | **2.09 28** | P | **Pn** | **02 20 55.3** | **-0.3** |
| BAGO | | | S | Sn | 02 21 27.2 | +6.8 |
| **KHL** | **Karahalli** | **2.18 359** | *e*PN | **Pn** | **02 20 56.2** | **-0.6** |
| **KHL** | **Karahalli** | **2.18 359** | *e*Pn | **Pn** | **02 20 56.2** | **-0.6** |
| **KHAL** | **Karahalli** | **2.22 359** | *i* P | **Pn** | **02 20 58.9** | **+1.4** |
| KHAL | | | *i* S | **Sn** | **02 21 24.8** | **+1.1** |
| **KHAL** | **Karahalli** | **2.22 359** | P | **Pn** | **02 20 58.9** | **+1.4** |
| KHAL | | | S | **Sn** | **02 21 24.8** | **+1.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.24 324** | *e*PN | **Pn** | **02 20 57.0** | **-0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.24 324** | *e*Pn | **Pn** | **02 20 57.0** | **-0.7** |
| **GCAM** | **G?zelcaml?** | **2.43 311** | *i* P | **Pn** | **02 20 59.8** | **-0.3** |
| **GCAM** | **G?zelcaml?** | **2.43 311** | P | **Pn** | **02 20 59.8** | **-0.3** |
| GCAM | | | S | **Sn** | **02 21 25.4** | **-3.1** |
| **KULA** | **Kula-Manisa** | **2.47 343** | *e*PN | **Pn** | **02 21 00.4** | **-0.5** |
| **KULA** | **Kula-Manisa** | **2.47 343** | *e*Pn | **Pn** | **02 21 00.4** | **-0.5** |
| **MANT** | **Manisa** | **2.48 341** | *i* P | **Pn** | **02 21 00.4** | **-0.6** |
| **MANT** | **Manisa** | **2.48 341** | P | **Pn** | **02 21 00.4** | **-0.6** |
| MANT | | | S | **Sn** | **02 21 32.0** | **+1.9** |
| **HDMB** | **Hadim** | **2.49 70** | *e*PN | **Pn** | **02 21 03.2** | **+1.9** |
| **HDMB** | **Hadim** | **2.49 70** | *e*Pn | **Pn** | **02 21 03.2** | **+1.9** |
| **AKMC** | **Akamas** baz=298 | **2.52 115** | P | **Pn** | **02 21 01.5** | **+0.1** |
| **AKMC** | **Akamas** | **2.52 115** | P | **Pn** | **02 21 01.5** | **+0.1** |
| **SHUT** | **Suhut-Afyon** | **2.53 18** | *e*PN | **Pn** | **02 21 01.8** | **+0.1** |
| **SHUT** | **Suhut-Afyon** | **2.53 18** | *e*Pn | **Pn** | **02 21 01.8** | **+0.1** |
| **PPCY** | **Paphos** baz=301 | **2.59 118** | P | **Pn** | **02 21 02.5** | **0.0** |
| **PPCY** | **Paphos** | **2.59 118** | P | **Pn** | **02 21 02.5** | **0.0** |
| **ALFC** | **Alevga** baz=293 | **2.66 111** | P | **Pn** | **02 21 03.2** | **-0.2** |
| ALFC | | | S | **Sn** | **02 21 33.3** | **-1.2** |
| **ALFC** | **Alevga** | **2.66 111** | P | **Pn** | **02 21 03.2** | **-0.2** |
| ALFC | | | S | **Sn** | **02 21 33.3** | **-1.2** |
| **SMG** | **Samos** | **2.68 306** | *e*PN | **Pn** | **02 21 03.2** | **-0.5** |
| **SMG** | **Samos** | **2.68 306** | *e*Pn | **Pn** | **02 21 03.2** | **-0.5** |
| **KONT** | **Konya--Tatoy** | **2.87 50** | *e*PN | **Pn** | **02 21 07.5** | **+1.2** |
| **KONT** | **Konya--Tatoy** | **2.87 50** | *e*Pn | **Pn** | **02 21 07.5** | **+1.2** |
| **IZM** | **Izmir** | **2.90 322** | *e*PN | **Pn** | **02 21 06.1** | **-0.6** |
| **IZM** | **Izmir** | **2.90 322** | *e*Pn | **Pn** | **02 21 06.1** | **-0.6** |
| **DEMI** | **Demirci** | **2.97 347** | *i* P | **Pn** | **02 21 06.0** | **-1.7** |
| DEMI | | | *i* S | **Sn** | **02 21 40.5** | **-1.7** |
| **DEMI** | **Demirci** | **2.97 347** | P | **Pn** | **02 21 06.0** | **-1.7** |
| DEMI | | | S | **Sn** | **02 21 40.5** | **-1.7** |
| **BLCB** | **Balcova** | **3.01 319** | *e*PN | **Pn** | **02 21 08.4** | **+0.3** |
| **BLCB** | **Balcova** | **3.01 319** | *e*Pn | **Pn** | **02 21 08.4** | **+0.3** |
| **SZAC** | **Souni-Zanaja** baz=298 | **3.04 116** | P | **Pn** | **02 21 08.8** | **+0.1** |
| SZAC | | | S | **Sn** | **02 21 42.0** | **-1.9** |
| **SZAC** | **Souni-Zanaja** | **3.04 116** | P | **Pn** | **02 21 08.8** | **+0.1** |
| SZAC | | | S | **Sn** | **02 21 42.0** | **-1.9** |
| **AKS** | **Akhisar** | **3.06 334** | *e*PN | **Pn** | **02 21 08.5** | **-0.4** |
| **AKS** | **Akhisar** | **3.06 334** | *e*Pn | **Pn** | **02 21 08.5** | **-0.4** |
| **KDHN** | **Kadinhani** | **3.13 40** | *i* P | **Pn** | **02 21 10.6** | **+0.7** |
| KDHN | | | *i* S | **Sn** | **02 21 44.8** | **-1.2** |
| **KDHN** | **Kadinhani** | **3.13 40** | P | **Pn** | **02 21 10.6** | **+0.7** |
| KDHN | | | S | **Sn** | **02 21 44.8** | **-1.2** |
| **MAMC** | **Mammari** baz=289 | **3.13 107** | P | **Pn** | **02 21 11.7** | **+1.8** |
| **MAMC** | **Mammari** | **3.13 107** | P | **Pn** | **02 21 11.7** | **+1.8** |
| **ZEY** | **˜zmir** | **3.21 312** | P | **Pn** | **02 21 10.0** | **-1.0** |
| ZEY | | | S | **Sn** | **02 21 44.9** | **-3.1** |
| **CSS** | **Prodhromos** baz=292 | **3.29 110** | P | **Pn** | **02 21 13.7** | **+1.6** |
| CSS | | | S | **Sn** | **02 21 49.6** | **-0.4** |
| **CSS** | **Prodhromos** | **3.29 110** | P | **Pn** | **02 21 13.7** | **+1.6** |
| CSS | | | S | **Sn** | **02 21 49.6** | **-0.4** |
| **NPS** | **Neapolis** | **3.33 256** | *e*PN | **Pn** | **02 21 13.3** | **+0.7** |
| **NPS** | **Neapolis** | **3.33 256** | *e*Pn | **Pn** | **02 21 13.3** | **+0.7** |
| **APE** | **Apeiranthos** | **3.37 287** | *e*PN | **Pn** | **02 21 14.4** | **+1.2** |
| **APE** | **Apeiranthos** | **3.37 287** | *e*Pn | **Pn** | **02 21 14.4** | **+1.2** |
| **LAST** | **Lasithi** | **3.46 255** | *e*PN | **Pn** | **02 21 15.2** | **+0.7** |
| **LAST** | **Lasithi** | **3.46 255** | *e*Pn | **Pn** | **02 21 15.2** | **+0.7** |
| **CHOS** | **Chios island** | **3.58 310** | *e*PN | **Pn** | **02 21 16.0** | **-0.1** |
| **CHOS** | **Chios island** | **3.58 310** | *e*Pn | **Pn** | **02 21 16.0** | **-0.1** |
| **DKL** | **Dikili** | **3.60 325** | *e*PN | **Pn** | **02 21 16.4** | **+0.1** |
| **DKL** | **Dikili** | **3.60 325** | *e*Pn | **Pn** | **02 21 16.4** | **+0.1** |
| **SVRH** | **Sivrihisar-ESK** | **3.65 25** | *e*PN | **Pn** | **02 21 17.6** | **+0.6** |
| **SVRH** | **Sivrihisar-ESK** | **3.65 25** | *e*Pn | **Pn** | **02 21 17.6** | **+0.6** |
| **IDI** | **Anoyia** | **3.90 259** | *e*PN | **Pn** | **02 21 20.7** | **+0.3** |
| **IDI** | **Anoyia** | **3.90 259** | *e*Pn | **Pn** | **02 21 20.7** | **+0.3** |
| **SIVA** | **Sivas** | **4.03 255** | *e*PN | **Pn** | **02 21 23.6** | **+1.4** |
| **SIVA** | **Sivas** | **4.03 255** | *e*Pn | **Pn** | **02 21 23.6** | **+1.4** |
| **GONE** | **Gonen-Balikesi** | **4.17 340** | *e*PN | **Pn** | **02 21 24.6** | **+0.5** |
| **GONE** | **Gonen-Balikesi** | **4.17 340** | *e*Pn | **Pn** | **02 21 24.6** | **+0.5** |
| **KCTX** | **Karacabey (Bur** | **4.22 347** | *e*PN | **Pn** | **02 21 25.8** | **+0.9** |
| **KCTX** | **Karacabey (Bur** | **4.22 347** | *e*Pn | **Pn** | **02 21 25.8** | **+0.9** |
| **VAM** | **Vamos** | **4.42 262** | *e*PN | **Pn** | **02 21 28.2** | **+0.6** |
| **VAM** | **Vamos** | **4.42 262** | *e*Pn | **Pn** | **02 21 28.2** | **+0.6** |
| **IMMV** | **Iera Moni Meta** | **4.59 263** | *e*PN | **Pn** | **02 21 31.3** | **+1.5** |
| **IMMV** | **Iera Moni Meta** | **4.59 263** | *e*Pn | **Pn** | **02 21 31.3** | **+1.5** |
| **ARNB** | **Al Arnab** | **5.21 91** | *e*P | **Pn** | **02 21 37.3** | **-1.1** |
| ARNB | | | *e*S | Sn | 02 22 28.1 | -9.2 |
| ARNB | comp=N,24nm,0.3s | | AML | AML | 02 22 40.7 | |
| ARNB | comp=E,19nm,0.6s | | AML | AML | 02 22 45.0 | |
| **ARNB** | **Al Arnab** | **5.21 91** | *e*P | **Pn** | **02 21 37.3** | **-1.1** |
| ARNB | | | *e*S | Sn | 02 22 28.1 | -9.2 |
| **KYTH** | **Kithira** | **5.28 273** | *e*PN | **Pn** | **02 21 40.2** | **+0.8** |
| **KYTH** | **Kithira** | **5.28 273** | *e*Pn | **Pn** | **02 21 40.2** | **+0.8** |
| **VLI** | **Veliai** | **5.37 278** | *e*PN | **Pn** | **02 21 41.3** | **+0.7** |
| **VLI** | **Veliai** | **5.37 278** | *e*Pn | **Pn** | **02 21 41.3** | **+0.7** |
| **WRDH** | **Warideh** | **5.60 94** | *e*P | **Pn** | **02 21 42.0** | **-1.9** |
| WRDH | | | *e*S | Sn | 02 22 37.2 | -10 |
| WRDH | comp=N,8.4nm,0.2s | | AML | AML | 02 22 48.7 | |
| **WRDH** | **Warideh** | **5.60 94** | *e*P | **Pn** | **02 21 42.0** | **-1.9** |
| WRDH | | | *e*S | Sn | 02 22 37.2 | -10 |
| **BIDA** | **Albida** | **5.62 100** | *e*P | Pn | 02 21 41.9 | -2.3 |
| BIDA | | | *e*S | Sn | 02 22 36.5 | -11 |
| BIDA | comp=N,95nm,0.4s | | AML | AML | 02 22 48.0 | |
| BIDA | comp=E,69nm,0.3s | | AML | AML | 02 22 48.7 | |
| **BIDA** | **Albida** | **5.62 100** | *e*P | Pn | 02 21 41.9 | -2.3 |
| BIDA | | | *e*S | Sn | 02 22 36.5 | -11 |
| **HAWK** | **Haweek** | **5.83 104** | *e*P | Pn | 02 21 44.7 | -2.3 |
| HAWK | | | *e*S | Sn | 02 22 41.0 | -12 |
| HAWK | comp=N,22nm,0.3s | | AML | AML | 02 22 49.7 | |
| HAWK | comp=E,12nm,0.3s | | AML | AML | 02 22 55.1 | |
| **HAWK** | **Haweek** | **5.83 104** | *e*P | Pn | 02 21 44.7 | -2.3 |
| HAWK | | | *e*S | Sn | 02 22 41.0 | -12 |
| **BRBR** | **Barbar** | **5.92 116** | *e*P | Pn | 02 21 45.6 | -2.8 |
| BRBR | | | *e*S | Sn | 02 22 42.1 | -13 |
| BRBR | comp=E,14nm,0.6s | | AML | AML | 02 22 53.9 | |
| BRBR | comp=N,32nm,0.7s | | AML | AML | 02 22 54.6 | |
| **BRBR** | **Barbar** | **5.92 116** | *e*P | Pn | 02 21 45.6 | -2.8 |
| BRBR | | | *e*S | Sn | 02 22 42.1 | -13 |
| **TCHB** | **Talchebab** | **6.33 121** | *e*P | Pn | 02 21 48.4 | -5.4 |
| TCHB | | | *e*S | Sn | 02 22 50.4 | -14 |
| TCHB | comp=N,71nm,0.6s | | AML | AML | 02 22 59.9 | |
| TCHB | comp=E,49nm,0.6s | | AML | AML | 02 23 03.3 | |
| **TCHB** | **Talchebab** | **6.33 121** | *e*P | Pn | 02 21 48.4 | -5.4 |
| TCHB | | | *e*S | Sn | 02 22 50.4 | -14 |
| **RABH** | **Abou Rabah** | **6.48 103** | *e*P | **Pn** | **02 21 54.2** | **-1.7** |
| RABH | | | *e*S | Sn | 02 22 57.0 | -12 |
| RABH | comp=E,4.9nm,0.2s | | AML | AML | 02 23 08.9 | |
| RABH | comp=N,9.1nm,0.2s | | AML | AML | 02 23 09.1 | |
| **RABH** | **Abou Rabah** | **6.48 103** | *e*P | **Pn** | **02 21 54.2** | **-1.7** |
| RABH | | | *e*S | Sn | 02 22 57.0 | -12 |
| **ROOS** | **tl_alroos** | **6.63 105** | *e*P | **Pn** | **02 21 56.0** | **-2.0** |
| ROOS | | | *e*S | Sn | 02 22 58.4 | -14 |
| ROOS | comp=N,16nm,0.3s | | AML | AML | 02 23 12.7 | |
| **ROOS** | **tl_alroos** | **6.63 105** | *e*P | **Pn** | **02 21 56.0** | **-2.0** |
| ROOS | comp=E,22nm,0.3s | | *e*S | Sn | 02 22 58.4 | -14 |
| **SALA** | **Sala** | **6.84 118** | *e*P | **Pn** | **02 21 59.4** | **-1.6** |
| SALA | | | *e*S | Sn | 02 23 04.6 | -13 |
| SALA | comp=E,1.7nm,0.3s | | AML | AML | 02 23 18.8 | |
| SALA | comp=N,12nm,0.4s | | AML | AML | 02 23 21.0 | |
| **SALA** | **Sala** | **6.84 118** | *e*P | **Pn** | **02 21 59.4** | **-1.6** |
| SALA | | | *e*S | Sn | 02 23 04.6 | -13 |
| SALA | comp=N,12nm,0.4s | | | | | |

**IDC 18 02:36:50.1±4.8, 4°99S×133°80E, h0km, mb4.0/1, mb1 4.0/4, mb1mx3.7/26, mbtmp3.8/4, ML3.6/3, Error ellipse: s-maj=247.6km s-min=27.3km az=75.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.81** | **328** | Pn | Pn | 02 38 04.2 | +0.3 |
| | 0.7nm,0.3s,baz=210,slow=20,SNR=6.0 | | | | | | |
| SIJI | | | | Sn | Sn | 02 38 54.6 | -5.8 |
| | 1.5nm,0.3s,baz=217,slow=20,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.87** | **178** | Pn | Pn | 02 40 21.0 | -0.9 |
| | 0.3nm,0.3s,baz=357,slow=13,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **18.57** | **180** | P | Pn | 02 41 09.3 | +0.3 |
| | 0.5nm,0.3s,baz=1.3,slow=13,SNR=26 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.70** | **325** | P | P | 02 47 55.5 | -0.1 |
| | 0.8nm,0.5s,baz=115,slow=6.5,SNR=5.7 | | | | | | |

**MEX 18 02:46:09.3±0.8, 15°92N×91°88W, h166km±10km, MD4.0, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CCIG** | **Comitan** | **0.43** | **326** | *i* P | Pn | 02 46 36.2 | +3.7 |
| CCIG | | | | *e*S | Sn | 02 46 53.1 | +2.7 |
| **PCIG** | | **1.30** | **261** | *i* P | Pn | 02 46 37.0 | -1.2 |
| PCIG | | | | *i* S | Sn | 02 46 58.5 | -2.0 |

*INMG **18** 02:57:23.1±0.8, 37°19N×13°89W, h0km, ML2.1, Error ellipse: s-maj=14.6km s-min=10.0km az=155.0*
*CSEM **18** 02:57:24.3±0.5, 37°31N×13°30W, h10km, mb3.9, Error ellipse: s-maj=20.1km s-min=7.6km az=164.0*
**MDD 18 02:57:21.4±3.1, 37°17N×13°56W, h0km, mb3.9/4, Error ellipse: s-maj=57.7km s-min=22.8km az=164.0, PRXIMO, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **3.78** | **89** | *e*Pn | Pn | 02 58 19.7 | -1.3 |
| PFVI | | | | *e*Sn | Sn | 02 59 02.4 | -3.8 |
| PFVI | | | | A | A | 02 59 05.1 | |
| | 4.5nm,0.6s | | | | | | |
| **PFVI** | **Vila Bisbo** | **3.78** | **89** | P | Pn | 02 58 19.2 | -1.8 |
| | 33nm,1.2s,SNR=7.9 | | | | | | |
| PFVI | | | | S | Sn | 02 59 02.6 | -3.6 |
| | 124nm,5.1s,SNR=7.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **3.78** | **89** | P | Pn | 02 58 19.2 | -1.8 |
| | 33nm,1.2s,SNR=7.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **3.78** | **89** | *e*Pn | Pn | 02 58 19.7 | -1.3 |
| PFVI | | | | *e*Sn | Sn | 02 59 02.4 | -3.8 |
| | 4.5nm,0.6s | | | | | | |
| **PTEO** | **Sao Teotonio** | **3.87** | **83** | *e*Pn | Pn | 02 58 21.1 | -1.1 |
| PTEO | | | | *e*Sn | Sn | 02 59 04.5 | -3.9 |
| PTEO | | | | A | A | 02 59 10.7 | |
| | 4.4nm,0.6s | | | | | | |
| **PTEO** | **Sao Teotonio** | **3.87** | **83** | P | Pn | 02 58 21.1 | -1.1 |
| PTEO | | | | S | Sn | 02 59 04.5 | -3.9 |
| | 2.2nm,0.6s | | | | | | |
| **PTEO** | **Sao Teotonio** | **3.87** | **83** | P | Pn | 02 58 21.1 | -1.1 |
| PTEO | | | | S | Sn | 02 59 04.5 | -3.9 |
| | 2.2nm,0.6s | | | | | | |
| **MORF** | **Marmelete** | **3.92** | **86** | *e*Pn | Pn | 02 58 21.7 | -1.2 |
| MORF | | | | *e*Sn | Sn | 02 59 05.3 | -4.4 |
| MORF | | | | A | A | 02 59 11.2 | |
| | 2.7nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **3.92** | **86** | P | Pn | 02 58 21.7 | -1.2 |
| MORF | | | | S | Sn | 02 59 05.3 | -4.4 |
| | 2.7nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **3.92** | **86** | P | Pn | 02 58 21.7 | -1.2 |
| MORF | | | | S | Sn | 02 59 05.3 | -4.4 |
| | 2.7nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **4.10** | **75** | *e*Sn | Sn | 02 59 09.6 | -4.5 |
| PNCL | | | | A | A | 02 59 14.6 | |
| | 1.7nm,1.2s | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **79** | *e*Sn | Sn | 02 59 15.6 | -3.3 |
| MESJ | | | | A | A | 02 59 21.1 | |
| | 1.2nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **79** | S | Sn | 02 59 15.6 | -3.3 |
| | 1.2nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **4.30** | **79** | S | Sn | 02 59 15.6 | -3.3 |
| | 1.2nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **4.42** | **82** | *e*Sn | Sn | 02 59 17.3 | -4.7 |
| PCVE | | | | A | A | 02 59 24.8 | |
| | 2.0nm,0.9s | | | | | | |
| **PCVE** | **Castro Verde** | **4.42** | **82** | S | Sn | 02 59 17.3 | -4.7 |
| | 2.0nm,0.9s | | | | | | |
| **PCVE** | **Castro Verde** | **4.42** | **82** | S | Sn | 02 59 17.3 | -4.7 |
| | 2.0nm,0.9s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **4.50** | **87** | *e*Pn | Pn | 02 58 30.6 | -0.2 |
| PBDV | | | | *e*Sn | Sn | 02 59 19.8 | -4.0 |
| PBDV | | | | A | A | 02 59 24.1 | |
| | 2.2nm,0.6s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **4.50** | **87** | P | Pn | 02 58 30.6 | -0.2 |
| PBDV | | | | S | Sn | 02 59 19.8 | -4.0 |
| | 2.2nm,0.6s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **4.50** | **87** | P | Pn | 02 58 30.6 | -0.2 |
| PBDV | | | | S | Sn | 02 59 19.8 | -4.0 |
| | 2.2nm,0.6s | | | | | | |
| **EVO** | **Evora** | **4.60** | **71** | *e*Sn | Sn | 02 59 22.7 | -3.6 |
| EVO | | | | A | A | 02 59 26.7 | |
| | 1.8nm,0.5s | | | | | | |
| **EVO** | **Evora** | **4.60** | **71** | S | Sn | 02 59 22.7 | -3.6 |
| | 1.8nm,0.5s | | | | | | |
| **EVO** | **Evora** | **4.60** | **71** | S | Sn | 02 59 22.7 | -3.6 |
| | 1.8nm,0.5s | | | | | | |
| **PVAQ** | **Vaqueiros** | **4.67** | **85** | *e*Sn | Sn | 02 59 24.2 | -3.8 |
| PVAQ | | | | A | A | 02 59 28.6 | |
| | 1.5nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **4.67** | **85** | S | Sn | 02 59 24.2 | -3.8 |
| | 1.5nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **4.67** | **85** | S | Sn | 02 59 24.2 | -3.8 |
| | 1.5nm,0.6s | | | | | | |
| **EGRO** | **El Granado** | **4.86** | **84** | P | Pn | 02 58 34.2 | -1.5 |
| | 11nm,1.5s,SNR=7.9 | | | | | | |
| EGRO | | | | S | Sn | 02 59 28.6 | -4.1 |
| | 30nm,1.7s,SNR=7.9 | | | | | | |
| **EGRO** | **El Granado** | **4.86** | **84** | P | Pn | 02 58 34.2 | -1.5 |
| | 11nm,1.5s,SNR=7.9 | | | | | | |
| EGRO | | | | S | Sn | 02 59 28.5 | -4.2 |
| | 30nm,1.7s,SNR=7.9 | | | | | | |
| **PBAR** | **Barrancos** | **5.27** | **77** | *e*Sn | Sn | 02 59 39.4 | -3.5 |
| PBAR | | | | A | A | 02 59 46.8 | |
| | 2.7nm,0.8s | | | | | | |
| **PBAR** | **Barrancos** | **5.27** | **77** | S | Sn | 02 59 39.4 | -3.5 |
| | 2.7nm,0.8s | | | | | | |
| **PBAR** | **Barrancos** | **5.27** | **77** | S | Sn | 02 59 39.4 | -3.5 |
| | 2.7nm,0.8s | | | | | | |
| **PMRV** | **Marv??o** | **5.35** | **63** | *e*Sn | Sn | 02 59 39.1 | -5.8 |
| PMRV | | | | A | A | 02 59 40.5 | |
| | 1.4nm,0.8s | | | | | | |
| **PMRV** | **Marv??o** | **5.35** | **63** | S | Sn | 02 59 39.1 | -5.8 |
| | 1.4nm,0.8s | | | | | | |
| **PMRV** | **Marv??o** | **5.35** | **63** | S | Sn | 02 59 39.1 | -5.8 |
| | 1.4nm,0.8s | | | | | | |
| **EBAD** | **Badajoz** | **5.41** | **71** | S | Sn | 02 59 41.2 | -5.1 |
| | 14nm,2.0s,SNR=7.9 | | | | | | |
| **EBAD** | **Badajoz** | **5.41** | **71** | S | Sn | 02 59 41.2 | -5.2 |
| | 14nm,2.0s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **5.51** | **82** | S | Sn | 02 59 43.3 | -5.5 |
| | 4.8nm,3.2s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **5.51** | **82** | S | Sn | 02 59 43.3 | -5.6 |
| | 4.8nm,3.2s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **6.53** | **80** | P | Pn | 02 58 57.1 | -1.6 |
| | 0.7nm,0.5s,SNR=7.9 | | | | | | |
| ECAB | | | | S | Sn | 03 00 08.6 | -5.4 |
| | 7.4nm,1.3s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **6.53** | **80** | P | Pn | 02 58 57.1 | -1.6 |
| | 0.7nm,0.5s,SNR=7.9 | | | | | | |
| ECAB | | | | S | Sn | 03 00 08.6 | -5.3 |
| | 7.4nm,1.3s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **7.20 79** | | P | Pn | 02 59 06.9 | -1.0 |
| | 3.1nm,0.7s,SNR=7.9 | | | | | | |
| EADA | | | | S | Sn | 03 00 24.3 | -6.1 |
| | 11nm,1.3s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **7.20 79** | | P | Pn | 02 59 06.9 | -1.0 |
| | 3.1nm,0.7s,SNR=7.9 | | | | | | |
| EADA | | | | S | Sn | 03 00 24.3 | -6.1 |
| | 11nm,1.3s,SNR=7.9 | | | | | | |

*ISCJB **18** 03:15:38.9±0.5, 2°35N±0°05×98°95E±0°05, h150km, mb3.7/9, Error ellipse: s-maj=8.4km s-min=5.8km az=138.5*
*IDC **18** 03:15:38.7±1.3, 2°23N×98°85E, h141km±5km, mb3.6/9, mb1 3.7/10, mb1mx3.4/45, mbtmp4.0/10, Error ellipse: s-maj=49.7km s-min=15.9km az=54.0*
*DJA **18** 03:15:41.2±0.5, 2°N±3°×9°9E±°, h128km±6km, M3.6/13, MLv3.6/13*
**ISC 18 03:15:39.8±0.7, 2°33N±0°06×98°96E±0°07, h150km, n20, σ0°95/25, mb3.9/9, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSI** | **Prapat** | **0.47** | **355** | LR | LR | 03 15 51.7 | |
| | comp=Z,37nm,19.2s,baz=39,slow=28 | | | | | | |
| PSI | | | | P | **Pn** | **03 16 00.3** | **-0.9** |
| | 70nm,0.3s,baz=186,slow=9.2,SNR=202 | | | | | | |
| PSI | | | | S | **Sn** | **03 16 15.9** | **-1.6** |
| | 19nm,0.3s,baz=329,slow=22,SNR=35 | | | | | | |
| **MNSI** | **Mandailing Nat** | **1.64** | **158** | P | **Pn** | **03 16 11.2** | **+0.3** |
| **KCSI** | **Kotacane, Aceh** | **1.68** | **315** | P | **Pn** | **03 16 11.7** | **+0.4** |
| KCSI | | | | S | **Sn** | **03 16 34.4** | **-1.1** |
| **GSI** | **Gunungsitoli** | **1.72** | **234** | P | **Pn** | **03 16 12.4** | **+0.7** |
| GSI | | | | S | **Sn** | **03 16 35.8** | **-0.4** |
| **SNSI** | **Sinabang, Aceh** | **2.63** | **272** | P | **Pn** | **03 16 24.0** | **+1.4** |
| SNSI | | | | S | **Sn** | **03 16 54.4** | **-1.2** |
| **BKNI** | **Bangkinang** | **2.87** | **134** | P | **Pn** | **03 16 26.6** | **+1.0** |
| **PPI** | **Padang Panjang** | **3.11** | **153** | P | **Pn** | **03 16 29.9** | **+1.3** |
| **MLSI** | **Meulaboh, Aceh** | **3.20** | **307** | P | **Pn** | **03 16 30.5** | **+0.8** |
| MLSI | | | | S | **Sn** | **03 17 07.2** | **-1.2** |
| **LHMI** | **Lhok Sumawe** | **3.52** | **325** | P | **Pn** | **03 16 34.4** | **+0.6** |
| **SISI** | **Saibi** | **3.63** | **178** | P | **Pn** | **03 16 33.8** | **-1.5** |
| **CMAR** | **Chiang Mai Arr** | **16.03** | **360** | P | **P** | **03 19 18.5** | **+1.0** |
| | 0.5nm,0.3s,baz=191,slow=11,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.17** | **124** | P | **P** | **03 23 09.3** | **-0.6** |
| | 1.2nm,0.4s,baz=300,slow=9.1,SNR=6.5 | | | | | | |
| **ASAR** | **Alice Springs** | **42.70** | **129** | P | **P** | **03 23 22.7** | **+0.5** |
| | 0.7nm,0.5s,baz=299,slow=7.9,SNR=4.7 | | | | | | |
| **AAK** | **Ala-Archa** | **45.70** | **335** | P | **P** | **03 23 46.0** | **+0.1** |
| | 1.1nm,0.4s,baz=148,slow=9.5,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **45.79** | **7** | P | **P** | **03 23 46.9** | **+0.4** |
| | 0.4nm,0.3s,baz=183,slow=7.0,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.61** | **344** | P | **P** | **03 23 53.7** | **+0.9** |
| | 1.3nm,0.4s,baz=153,slow=8.1,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.75** | **350** | P | **P** | **03 24 39.4** | **+0.3** |
| | 2.0nm,0.5s,baz=172,slow=7.3,SNR=7.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **59.09** | **331** | P | **P** | **03 25 23.3** | **-1.0** |
| | 0.8nm,0.5s,baz=110,slow=6.0,SNR=4.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.67** | **312** | P | **P** | **03 26 33.4** | **-0.1** |
| | 0.3nm,0.7s,baz=88,slow=4.6,SNR=3.7 | | | | | | |
| **FINES** | **FINESS Array B** | **79.83** | **332** | P | **P** | **03 27 31.1** | **-0.2** |
| | 2.5nm,0.9s,baz=106,slow=5.1,SNR=4.9 | | | | | | |

*DJA **18** 03:18:32.5±0.6, 5°S±3°×13°3E±°, h69km±21km, M4.5/12, mb4.8/5, mB5.2/5, MLv4.4/12, Mw(mB)4.5/5*
*AUST **18** 03:18:39.8±0.6, 5°84S×132°47E, h197km, Error ellipse: s-maj=1.2km s-min=1.0km az=260.0*
**ISC 18 03:18:32.4±1.7, 4°60S±0°07×133°37E±0°08, h35km, n16, σ1°21/15, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMPI** | **Kaimana, Papua** | **0.99** | **19** | P | Pn | 03 18 45.4 | -4.4 |
| KMPI | | | | S | **Sn** | **03 19 01.1** | **-1.4** |
| **FAKI** | **Fak Fak** | **2.01** | **326** | P | **Pn** | **03 19 02.5** | **-1.4** |
| FAKI | | | | S | **Sn** | **03 19 29.8** | **+2.0** |
| **RKPI** | **Ransiki, Papua** | **3.17** | **15** | P | **Pn** | **03 19 20.6** | **+0.8** |
| RKPI | | | | S | **Sn** | **03 19 56.5** | **0.0** |
| **BNDI** | **Bandanaira** | **3.46** | **271** | P | **Pn** | **03 19 23.0** | **-0.8** |
| BNDI | | | | S | **Sn** | **03 20 04.0** | **+0.4** |
| **SAUI** | **Saumlaki** | **3.94** | **211** | P | **Pn** | **03 19 30.6** | **+0.2** |
| **SWI** | **Sorong** | **4.27** | **330** | P | **Pn** | **03 19 35.2** | **+0.2** |
| SWI | | | | S | **Sn** | **03 20 25.1** | **+1.5** |
| **MSAI** | **Masohi** | **4.61** | **286** | P | **Pn** | **03 19 39.0** | **-0.6** |
| **AAI** | **Ambon** | **5.25** | **280** | P | **Pn** | **03 19 49.2** | **+0.8** |
| | baz=4.8,SNR=3.3 | | | | | | |
| **AAI** | **Ambon** | **5.25** | **280** | P | **Pn** | **03 19 48.0** | **-0.4** |
| | 89nm,0.5s,2µm0.4nm | | | | | | |
| **NLAI** | **Namlea** | **6.40** | **282** | P | **Pn** | **03 20 04.3** | **0.0** |
| | 46nm,0.4s,1µm0.2nm | | | | | | |
| **SANI** | **Sanana** | **7.80** | **289** | P | **Pn** | **03 20 21.2** | **-2.2** |
| **KDU** | **Kakadu** | **8.08** | **186** | P | Pn | 03 20 17.4 | -10 |
| | baz=6.8,SNR=7.7 | | | | | | |
| **MTN** | **Manton Dam** | **8.48** | **195** | P | Pn | 03 20 23.8 | -9.0 |
| | baz=7.1,SNR=6.6 | | | | | | |
| **KNRA** | **Kununurra** | **11.90** | **202** | P | Pn | 03 21 10.2 | -9.5 |
| | baz=10,SNR=7.6 | | | | | | |
| **MANU** | **Manus Island** | **14.20** | **80** | P | P | 03 22 06.6 | +8.5 |
| | baz=15,SNR=3.1 | | | | | | |
| **MTSU** | **Mount Surprise** | **17.19** | **142** | P | Pn | 03 22 22.4 | -7.6 |
| | baz=17,SNR=6.2 | | | | | | |

*ISCJB

2.0nm,0.8s,baz=15,slow=3.7,SNR=5.8
**AKASG Malin Array Be 143.65 333** PKP PKPab 04 13 52.8 +0.3
1.3nm,0.6s,baz=40,slow=5.0,SNR=5.7
**BRTR Keskin Array B 147.94 314** PKPbc PKPbc 04 14 06.4 -0.2
0.9nm,0.7s,baz=116,slow=4.3,SNR=7.0
**GERES GERESS Array B 150.44 347** PKPbc PKPbc 04 14 12.2 -0.2
0.7nm,0.6s,baz=44,slow=3.0,SNR=5.6

**IDC 18 03:55:10.5±7.1, 20°14'S×179°09'W, h0km, mb4.4/2, mb1 4.7/2, mb1mx3.8/17, mbtmp4.4/2, Error ellipse: s-maj=304.8km s-min=62.3km az=146.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **43.61** | **256** | P | P | 04 03 16.2 | -0.7 |
| | 4.6nm,0.6s,baz=94,slow=8.0,SNR=25 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.64** | **262** | P | P | 04 03 17.6 | +0.4 |
| | 1.6nm,0.2s,baz=96,slow=8.3,SNR=44 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.84** | **312** | PKPbc | PKPdf | 04 14 51.3 | -0.3 |
| | 0.2nm,0.4s,baz=52,slow=2.4,SNR=2.9 | | | | | | |

*ISCJB **18** 04:09:08.2±0.5,9.53N±0.04×62.93W±0.03, h69km±8km, Error ellipse: s-maj=7.3km s-min=3.9km az=150.2*
*FUNV **18** 04:09:10.2,9.49N×62.83W, h35km, MW3.2*
*TRN **18** 04:09:11.0,9.68N×62.62W, h3km, MD3.8*

**ISC 18 04:09:08.6±1.2, 9°47'N±0'04×62°89'W±0'04, h64km±13km, n25, σ1s36/38, 2C, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ORIV** | **Oritupano** | **0.65** | **232** | *eP* | **Pn** | **04 09 23.4** | **+1.0** |
| ORIV | | | | *eS* | **Sn** | **04 09 33.3** | **+0.7** |
| **GUNV** | **Guanoco** | **0.69** | **356** | ↑*iP* | **Pn** | **04 09 22.8** | **-0.1** |
| GUNV | | | | *eS* | **Sn** | **04 09 32.2** | **-1.3** |
| **CRUV** | **Carupano** | **1.25** | **344** | *eP* | **Pn** | **04 09 29.7** | **-0.3** |
| CRUV | | | | *eS* | **Sn** | **04 09 43.9** | **-2.1** |
| **GUIV** | **Guiria** | **1.34** | **29** | ↑*eP* | **Pn** | **04 09 31.9** | **+0.6** |
| GUIV | | | | *eS* | **Sn** | **04 09 46.9** | **-1.5** |
| **RIOV** | **Rio Grande** | **1.75** | **142** | *eP* | **Pn** | **04 09 37.6** | **+0.8** |
| **PCRV** | **Puerto La Cruz** | **1.85** | **292** | *eP* | **Pn** | **04 09 38.4** | **+0.2** |
| **PRGV** | **PARIAGUAN** | **1.87** | **248** | *eP* | **Pn** | **04 09 39.8** | **+1.4** |
| **TRN** | **Trinidad (W)** | **1.88** | **51** | *eP* | **Pn** | **04 09 40.3** | **+1.9** |
| TRN | | | | *eS* | **Sn** | **04 10 00.8** | **-0.4** |
| **BOT** | **Bacolet** | **2.73** | **52** | *eP* | **Pn** | **04 09 51.9** | **+1.9** |
| BOT | | | | *eS* | **Sn** | **04 10 21.9** | **+0.1** |
| **CUPV** | **Cœpira** | **2.91** | **282** | *eP* | **Pn** | **04 09 54.5** | **+1.8** |
| CUPV | | | | *eS* | **Sn** | **04 10 26.9** | **+0.4** |
| **GRW** | **Mount Saint Ca** | **2.94** | **24** | *eP* | **Pn** | **04 09 54.8** | **+1.9** |
| GRW | | | | *eS* | **Sn** | **04 10 27.1** | **0.0** |
| **TOSP** | **Speyside** | **2.95** | **52** | *eP* | **Pn** | **04 09 54.2** | **+1.1** |
| TOSP | | | | *eS* | **Sn** | **04 10 26.1** | **-1.2** |
| **MERV** | **Las Mercedes** | **3.37** | **267** | *eP* | **Pn** | **04 10 00.0** | **+1.3** |
| MERV | | | | *eS* | **Sn** | **04 10 36.6** | **-0.9** |
| **BIRV** | **Birongo** | **3.47** | **287** | *eP* | **Pn** | **04 10 00.8** | **+0.6** |
| BIRV | | | | *eS* | **Sn** | **04 10 38.8** | **-1.3** |
| **LUEV** | **Luepa** | **3.87** | **158** | *eP* | **Pn** | **04 10 05.6** | **-0.2** |
| LUEV | | | | *eS* | **Sn** | **04 10 47.0** | **-3.2** |
| **SVB** | **Belmont** | **4.11** | **23** | *eS* | **Sn** | **04 10 56.2** | **+0.4** |
| **TURV** | **Turiamo** | **4.97** | **282** | *eP* | **Pn** | **04 10 21.8** | **+1.1** |
| **BAUV** | **El Baul** | **5.11** | **265** | *eP* | **Pn** | **04 10 23.6** | **+1.0** |
| BAUV | | | | *eS* | **Sn** | **04 11 17.1** | **-3.2** |
| **TEPV** | **Terepaima** | **6.23** | **275** | *eP* | **Pn** | **04 10 38.4** | **+0.4** |
| **SANV** | **Sanarito** | **6.55** | **271** | *eP* | **Pn** | **04 10 43.4** | **+0.9** |
| **SIQV** | **Siquisique** | **6.91** | **280** | *eP* | **Pn** | **04 10 47.8** | **+0.5** |
| **ELOV** | **Elorza** | **6.97** | **250** | *eP* | **Pn** | **04 10 49.4** | **+1.3** |
| **CURV** | **Curarigua** | **6.99** | **275** | *eP* | **Pn** | **04 10 49.6** | **+1.2** |
| **MONV** | **Montecano** | **7.38** | **290** | *eP* | **Pn** | **04 10 54.5** | **+0.7** |
| **SOCV** | **Socops** | **7.96** | **262** | *eP* | **Pn** | **04 11 02.2** | **+0.6** |

**WEL 18 04:17:59.0±0.6, 36°54'S×178°42'E, h33km, ML3.4/7, 1D, Error ellipse: s-maj=7.3km s-min=3.9km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **1.03** | **185** | P* | Pn | 04 18 15.6 | -1.5 |
| MXZ | | | | S* | Sn | 04 18 29.0 | -1.4 |
| MXZ | | | | AML | AML | 04 18 30.2 | |
| **WMGZ** | **Waiomatatini S** | **1.28** | **180** | PN | Pn | 04 18 20.3 | -0.2 |
| WMGZ | | | | SN | Sn | 04 18 35.8 | -0.8 |
| **HAZ** | **Te Kaha** | **1.32** | **202** | P* | Pn | 04 18 19.8 | -1.2 |
| HAZ | | | | S* | Sn | 04 18 37.1 | -0.4 |
| **PUZ** | **Puketiti** | **1.54** | **185** | PN | Pn | 04 18 22.7 | -1.4 |
| PUZ | | | | SN | Sn | 04 18 41.6 | -1.5 |
| **MWZ** | **Matawai** | **1.93** | **201** | P* | Pn | 04 18 27.7 | -1.9 |
| MWZ | | | | AML | AML | 04 19 01.6 | |
| MWZ | | | | AML | AML | 04 19 03.7 | |
| **CNGZ** | **Carnagh Statio** | **1.95** | **185** | PN | Pn | 04 18 29.2 | -0.6 |
| **URZ** | **Urewera** | **2.01** | **211** | P* | Pn | 04 18 28.8 | -1.8 |
| URZ | | | | AML | AML | 04 18 53.4 | |
| URZ | | | | AML | AML | 04 18 53.7 | |
| **KUZ** | **Kuaotunu** | **2.18** | **264** | ↓PN | Pn | 04 18 31.6 | -1.3 |
| KUZ | | | | SN | Sn | 04 18 55.4 | -3.4 |
| **GRZ** | **Great Barrier** | **2.41** | **276** | PN | Pn | 04 18 34.9 | -1.1 |
| **KNZ** | **Kokohu** | **2.55** | **193** | PN | Pn | 04 18 35.1 | -2.9 |
| **MKAZ** | **Moumakai** | **2.67** | **257** | PN | Pn | 04 18 37.6 | -2.0 |
| **ARHZ** | **Aropaoanui** | **2.95** | **202** | PN | Pn | 04 18 41.4 | -2.1 |
| **BKZ** | **Black Stump Fm** | **3.04** | **210** | P* | Pn | 04 18 43.0 | -1.8 |

*ISCJB **18** 04:23:36.7±1.3, 40.13N±0.05×31.86E±0.09, h7km±8km, Error ellipse: s-maj=11.6km s-min=7.3km az=13.8*
*CSEM **18** 04:23:37.3±0.7, 40.14N×31.78E, h10km, MD2.8, Error ellipse: s-maj=17.6km s-min=10.8km az=112.0*
*DDA **18** 04:23:37.7, 40.19N×31.65E, h7km, Md2.8*

**ISC 18 04:23:37.7±1.3, 40°15'N±0'04×31°73'E±0'05, h8km±11km, n13, σ0s75/21, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUMIH** | **MIHALICIK** | **0.34** | **214** | P | **Pg** | **04 23 44.9** | **+0.4** |
| AUMIH | | | | S | **Sg** | **04 23 49.9** | **+0.8** |
| **MDUB** | **Mudurnu** | **0.52** | **308** | *e*PG | **Pb** | **04 23 48.7** | **-0.4** |
| MDUB | | | | *e*SG | **Sb** | **04 23 57.6** | **+0.8** |
| **MDUB** | **Mudurnu** | **0.52** | **308** | *e*Pg | **Pb** | **04 23 48.7** | **-0.4** |
| **BCAM** | **Yenicaga** | **0.71** | **21** | *i* P | **Pg** | **04 23 51.3** | **-0.1** |
| BCAM | | | | *i* S | **Sn** | **04 24 04.7** | **-0.6** |
| **BCAM** | **Yenicaga** | **0.71** | **21** | P | **Pg** | **04 23 51.3** | **-0.1** |
| BCAM | | | | S | **Sn** | **04 24 04.7** | **-0.6** |
| **SVRH** | **Sivrihisar-ESK** | **0.72** | **193** | *e*PG | **Pb** | **04 23 52.4** | **-0.2** |
| **SVRH** | **Sivrihisar-ESK** | **0.72** | **193** | *e*Pg | **Pb** | **04 23 52.4** | **-0.2** |
| **ESKT** | **Eskisehir** | **0.93** | **227** | P | **Pg** | **04 23 54.1** | **-1.5** |
| ESKT | | | | S | **Sb** | **04 24 09.3** | **+0.7** |
| **SEYT** | **Eskypehyr** | **0.93** | **227** | *i* P | **Pg** | **04 23 54.1** | **-1.5** |
| SEYT | | | | *i* S | **Sb** | **04 24 09.3** | **+0.7** |
| **GULT** | **Gulveren** | **0.97** | **287** | *e*PG | **Pb** | **04 23 57.1** | **+0.3** |
| **GULT** | **Gulveren** | **0.97** | **287** | *e*Pg | **Pb** | **04 23 57.1** | **+0.3** |
| **BORA** | **Eskisehir** | **1.02** | **255** | *i* P | **Pg** | **04 23 56.5** | **-0.8** |
| BORA | | | | *i* S | **Sn** | **04 24 13.3** | **+0.4** |
| **BORA** | **Eskisehir** | **1.02** | **255** | P | **Pg** | **04 23 56.5** | **-0.8** |
| BORA | | | | S | **Sn** | **04 24 13.3** | **+0.4** |

*IDC **18** 04:26:45.2±0.6, 28.50N×85.67E, h0km, mb4.2/25, mb1 4.3/28, mb1mx4.2/56, mbtmp4.2/28, ML4.2/3, MS3.0/3, Ms1 3.2/3, ms1mx2.6/39, Error ellipse: s-maj=19.0km s-min=13.0km az=30.0*
*BJI **18** 04:26:47.3, 28.43N×85.76E, h30km, mb4.4/7, mB4.5/4, Ms7 3.4/1*
*NEIC **18** 04:26:51.3±1.1, 28.49N×85.65E, h43km±11km, mb4.0/5, Error ellipse: s-maj=11.9km s-min=5.6km az=45.0*
*ISCJB **18** 04:26:53.7±0.4, 28.46N±0.03×85.56E±0.03, h85km±4km, mb4.1/28, Error ellipse: s-maj=6.0km s-min=4.7km az=26.3*
*NDI **18** 04:26:54.3±2.4, 28.48N×85.69E, h33km, ML4.1, mb4.0(NEIC)*
*DMN **18** 04:26:55.0±0.2, 28.65N×85.74E, h50km, Ml5.3/7, Error ellipse: s-maj=5.2km s-min=2.0km az=17.0*

**ISC 18 04:26:52.9±0.8, 28°57'N±0'05×85°63'E±0'04, h59km±9km, n97, σ1s84/92, mb4.2/28, 11C-5D, Nepal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUN** | **Gumba** | **0.69** | **161** | *e*Pg | Pn | 04 27 10.7 | +3.4 |
| **GUN** | **Gumba** | **0.69** | **161** | *e*Pg | Pn | 04 27 10.9 | +3.6 |
| GUN | | | | *e*Sg | **Sn** | **04 27 21.4** | **+3.6** |
| | 27µm,0.5s | | | | | | |
| **KKN** | **Kakani** | **0.83** | **202** | *e*Pg | Pn | 04 27 13.1 | +4.2 |
| **KKN** | **Kakani** | **0.83** | **202** | *e*Pg | Pn | 04 27 13.1 | +4.2 |
| KKN | | | | *e*Sg | Sn | 04 27 26.1 | +5.4 |
| | 2µm,0.2s | | | | | | |
| **PKIN** | **Phulchoki** | **1.00** | **192** | *e*Pg | Pn | 04 27 15.4 | +4.2 |
| **PKI** | **Pulchoki** | **1.01** | **191** | *e*Pg | Pn | 04 27 15.4 | +4.1 |
| **GKN** | **Gorkha** | **1.04** | **238** | *e*Pg | Pn | 04 27 15.8 | +4.2 |
| **GKN** | **Gorkha** | **1.04** | **238** | *e*Pg | Pn | 04 27 15.9 | +4.3 |
| GKN | | | | *e*Sg | Sn | 04 27 30.9 | +5.5 |
| | 6µm,0.5s | | | | | | |
| **DMN** | **Daman** | **1.06** | **206** | *e*Pg | Pn | 04 27 16.3 | +4.4 |
| **DMN** | **Daman** | **1.06** | **206** | *e*Pg | Pn | 04 27 16.4 | +4.5 |
| **DANN** | **Dangsing** | **1.66** | **263** | *e*Pg | Pn | 04 27 23.6 | +3.6 |
| **DANN** | **Dangsing** | **1.66** | **263** | *e*Pg | Pn | 04 27 23.6 | +3.6 |
| DANN | | | | *e*Sg | **Sn** | **04 27 45.2** | **+4.8** |
| | 75µm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **1.82** | **152** | *e*Pn | Pn | 04 27 24.4 | +2.2 |
| RAMN | | | | *e*Sg | **Sn** | **04 27 45.9** | **+1.5** |
| | 6µm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **1.96** | **247** | *e*Pn | Pn | 04 27 27.1 | +3.1 |
| KOLN | | | | *e*Sg | **Sn** | **04 27 52.0** | **+4.4** |
| | 1µm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **2.20** | **123** | *e*Pn | Pn | 04 27 29.3 | +1.9 |
| TAPN | | | | *e*Sn | **Sn** | **04 27 53.5** | **-0.2** |
| | 2µm,0.3s | | | | | | |
| **ODAN** | **Odare** | **2.31** | **137** | *e*Pn | Pn | 04 27 31.2 | +2.5 |
| ODAN | | | | *e*Sn | **Sn** | **04 27 57.4** | **+1.3** |
| | 3µm,0.2s | | | | | | |
| **BOK** | **Bokaro** | **4.76** | **177** | *e*P | **Pn** | **04 28 04.0** | **+1.9** |
| BOK | | | | *e*S | **Sn** | **04 28 53.2** | **-2.8** |
| BOK | | | | AML | AML | 04 28 55.8 | |
| | comp=E,810nm,0.1s | | | | | | |
| BOK | | | | AML | AML | 04 28 56.5 | |
| | comp=N,709nm,0.2s | | | | | | |
| **LSA** | **Lhasa** | **4.96** | **75** | Pg | **Pn** | **04 28 06.6** | **+1.3** |
| LSA | | | | Sg | Sn | 04 28 40.3 | -22 |
| LSA | | | | *s*max | *s*max | | |
| | comp=E,330nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **4.96** | **75** | *e*Pn | **Pn** | **04 28 05.7** | **+0.5** |
| LSA | | | | *e*S | **Sn** | **04 29 00.1** | **-1.4** |
| **DDI** | **Dehra Dun** | **6.83** | **287** | *e*P | **Pn** | **04 28 32.0** | **+1.5** |
| DDI | | | | *e*P | Pn | 04 28 34.0 | +3.4 |
| DDI | | | | *e*S | **Sn** | **04 29 45.4** | **-1.5** |
| DDI | | | | *e*S | **Sn** | **04 29 49.0** | **+2.0** |
| **NDI** | **New Delhi** | **7.39** | **273** | *e*P | **Pn** | **04 28 39.5** | **+1.3** |
| NDI | | | | *ex* | x | 04 29 56.0 | |
| **SMLA** | **Simla** | **7.78** | **291** | *i* P | Pn | 04 28 45.8 | +2.3 |
| SMLA | | | | *e*S | **Sn** | **04 30 08.4** | **-1.6** |
| SMLA | | | | AML | AML | 04 30 16.2 | |
| | comp=N,177nm,0.9s | | | | | | |
| SMLA | | | | AML | AML | 04 30 19.0 | |
| | comp=Z,95nm,0.5s | | | | | | |
| **KHET** | **Khetri** | **8.67** | **269** | *e*S | **Sn** | **04 30 26.5** | **-5.5** |
| KHET | | | | AML | AML | 04 30 32.9 | |
| | comp=E,94nm,0.5s | | | | | | |
| KHET | | | | AML | AML | 04 30 34.0 | |
| | comp=N,123nm,0.4s | | | | | | |
| **KHET** | **Khetri** | **8.67** | **269** | *e*S | **Sn** | **04 30 26.8** | **-5.3** |
| **DHRM** | **DHARAMSHALA** | **8.85** | **297** | *e*P | **Pn** | **04 29 00.0** | **+1.7** |
| DHRM | | | | *e*S | **Sn** | **04 30 34.8** | **-2.0** |
| **BHPL** | **Bhopal** | **9.09** | **236** | *e*P | **Pn** | **04 29 01.0** | **-0.4** |
| BHPL | | | | *e*S | Sn | 04 30 35.7 | -6.7 |
| **NGP** | **Nagpur** | **9.49** | **220** | *e*P | **Pn** | **04 29 06.9** | **0.0** |
| NGP | | | | *e*S | **Sn** | **04 30 46.4** | **-5.8** |
| **CHLP** | **Challavanipeta** | **10.12** | **189** | *e*Pn | **Pn** | **04 29 15.3** | **-0.2** |
| **RPR** | **Rampur** | **11.27** | **212** | *e*Pn | **Pn** | **04 29 30.7** | **-0.5** |
| **SARP** | **Sargodha** | **11.69** | **290** | P | **Pn** | **04 29 35.8** | **-1.1** |
| **CHCP** | **Chirah Chowk** | **11.75** | **299** | ↓P | **Pn** | **04 29 37.3** | **-0.4** |
| **PVM** | **Polavaram** | **11.85** | **199** | *e*Pn | **Pn** | **04 29 37.5** | **-1.6** |
| **THW** | **Thamme Wali** | **12.67** | **293** | P | **Pn** | **04 29 49.1** | **-1.2** |
| **CEP** | **Cherat** | **12.86** | **297** | P | **Pn** | **04 29 51.5** | **-1.5** |
| **HYBB** | **Hyderabad (bro** | **12.86** | **212** | *e*Pn | **Pn** | **04 29 51.5** | **-1.5** |
| **HYB** | **Hyderabad** | **12.86** | **212** | *i* P | **Pn** | **04 29 52.0** | **-1.0** |
| HYB | | | | *e* | | 04 32 05.0 | |
| HYB | | | | *e*S | **Sn** | **04 32 14.0** | **-0.6** |
| **HYB** | **Hyderabad** | **12.86** | **212** | *e*P | **Pn** | **04 29 51.8** | **-1.2** |
| HYB | | | | *e*S | Sn | 04 32 03.8 | -11 |
| HYB | | | | AML | AML | 04 32 33.1 | |
| | comp=N,15nm,0.8s | | | | | | |
| HYB | | | | AML | AML | 04 32 35.0 | |
| | comp=E,18nm,0.5s | | | | | | |
| **NJS** | **Nagarjunasagar** | **13.30** | **207** | *e*Pn | **Pn** | **04 29 56.2** | **-2.8** |
| **ADKI** | **Addanki** | **13.70** | **204** | *e*Pn | **Pn** | **04 30 01.8** | **-2.5** |
| **CHTO** | **Chiang Mai** | **15.57** | **126** | *e*Pn | **Pn** | **04 30 26.8** | **-2.0** |
| | comp=E,2.9nm,0.6s | | | | | | |
| **URV** | **Uravakonda** | **15.61** | **212** | *e*Pn | **Pn** | **04 30 27.5** | **-1.8** |
| **SKHT** | **Srikalahasti** | **15.74** | **202** | *e*Pn | **Pn** | **04 30 28.9** | **-2.1** |
| **CMAR** | **Chiang Mai Arr** | **15.81** | **127** | Pn | **Pn** | **04 30 28.7** | **-3.1** |
| | comp=E,1.0nm,0.3s,baz=311,slow=14,SNR=5.5 | | | | | | |
| CMAR | | | | LR | LR | 04 37 58.2 | |
| | comp=E,21nm,19.6s,baz=135,slow=43 | | | | | | |
| **CD2** | **Chengdu** | **15.92** | **77** | *e*P | **P** | **04 30 37.6** | **+1.8** |
| **GTA** | **Gaotai** | **15.96** | **44** | ↑P | **P** | **04 30 36.0** | **-0.3** |
| GTA | | | | pP | Pn | 04 30 39.4 | +5.7 |
| GTA | | | | sP | sP | 04 30 43.0 | -14 |
| GTA | | | | PMZ | | | |
| | comp=E,26nm,1.1s | | | | | | |
| **TKM2** | **Tokmak 2** | **16.46** | **333** | *e*Pn | **Pn** | **04 30 40.0** | **0.0** |
| | comp=E,4.4nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **16.68** | **330** | Pn | **Pn** | **04 30 41.0** | **-1.8** |
| | comp=E,0.2nm,0.3s,baz=162,slow=11,SNR=2.2 | | | | | | |
| **AAK** | **Ala-Archa** | **16.68** | **330** | *e*Pn | **Pn** | **04 30 42.5** | **-0.3** |
| **EKS2** | **Erkin-Say** | **17.02** | **329** | *e*Pn | **Pn** | **04 30 46.4** | **-0.6** |
| **MKAR** | **Makanchi Array** | **18.39** | **353** | P | **P** | **04 31 02.2** | **-0.7** |
| | comp=E,0.6nm,0.3s,baz=177,slow=11,SNR=16 | | | | | | |
| **KKAR** | **Karatay Array** | **18.95** | **324** | *e*P | **Pn** | **04 31 09.7** | **-0.6** |
| | comp=E,7.9nm,0.7s | | | | | | |
| KKAR | | | | *e*S | Sn | 04 34 30.3 | -12 |
| **XAN** | **Xi'an** | **20.62** | **69** | P | **P** | **04 31 26.3** | **-1.1** |
| XAN | | | | pP | Pn | 04 31 31.1 | +0.9 |
| XAN | | | | PMZ | | | |
| | comp=E,16nm,0.7s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=E,100nm,5.1s | | | | | | |
| **KURK** | **Kurchatov** | **22.75** | **348** | *e*P | **P** | **04 31 50.5** | **+0.5** |
| | comp=E,5.1nm,0.6s | | | | | | |
| **GEYT** | **Alibeck** | **24.76** | **299** | P | **P** | **04 32 10.6** | **+1.5** |
| | comp=E,11nm,0.9s,baz=128,slow=9.6,SNR=8.0 | | | | | | |
| **SONM** | **Songimo Array** | **25.09** | **34** | P | **P** | **04 32 13.1** | **+1.0** |
| | comp=E,13nm,0.6s,baz=219,slow=10,SNR=39 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.37** | **359** | P | **P** | **04 32 15.4** | **+1.1** |
| | comp=E,1.4nm,0.3s,baz=196,slow=11,SNR=6.5 | | | | | | |
| **ABKAR** | **Akbulak array** | **28.51** | **323** | *e*P | **P** | **04 32 44.0** | **+1.5** |
| | comp=E,3.1nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **30.21** | **324** | P | **P** | **04 32 57.9** | **+0.2** |
| | comp=E,2.8nm,0.6s,baz=122,slow=9.0,SNR=9.7 | | | | | | |
| AKTO | | | | LR | LR | 04 46 16.7 | |
| | comp=E,13nm,18.1s,baz=153,slow=39 | | | | | | |
| **ARU** | **Arti** | **33.83** | **333** | P | **P** | **04 33 30.4** | **+1.1** |
| | comp=E,4.7nm,0.2s,baz=112,slow=19,SNR=2.1 | | | | | | |
| **CN2** | **Changchun** | **35.19** | **54** | *e*P | P | 04 33 45.0 | +3.8 |
| **KSAR** | **Wonju Array Be** | **36.28** | **65** | P | **P** | **04 33 49.2** | **-1.3** |
| **KSRS** | **Korea Array** | **36.31** | **65** | P | **P** | **04 33 49.2** | **-1.6** |
| | comp=E,2.0nm,0.7s,baz=268,slow=8.1,SNR=5.2 | | | | | | |
| **KBZ** | **Khabaz** | **37.25** | **306** | P | **P** | **04 33 58.9** | **+0.2** |
| | comp=E,1.9nm,0.9s,baz=113,slow=3.8,SNR=3.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **39.91** | **54** | P | **P** | **04 34 20.5** | **-0.5** |
| | comp=E,3.2nm,0.8s,baz=235,slow=6.7,SNR=5.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **43.90** | **299** | P | **P** | **04 34 54.5** | **+0.6** |
| | comp=E,1.7nm,0.8s,baz=96,slow=8.2,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **47.42** | **314** | P | **P** | **04 35 21.6** | **+0.4** |
| | comp=E,2.4nm,0.5s,baz=83,slow=6.7,SNR=34 | | | | | | |
| **TIRR** | **Tirgusor** | **47.69** | **306** | ↓*i*P | P | 04 35 33.1 | +10 |
| **CFR** | **Carcaliu** | **47.89** | **306** | ↓*i*P | **P** | **04 35 26.1** | **+1.1** |
| **VRI** | **Vrincioaia** | **48.87** | **307** | ↑*i*P | **P** | **04 35 35.0** | **+2.4** |
| **PLOR** | **Plostina** | **48.93** | **307** | ↑*i*P | **P** | **04 35 34.0** | **+0.9** |
| **MLR** | **Muntele Rosu** | **49.43** | **307** | ↑*i*P | **P** | **04 35 39.7** | **+2.7** |
| **DOPR** | **Dopca** | **49.80** | **308** | ↑*i*P | **P** | **04 35 40.6** | **+0.9** |
| **BURAR** | **Bucovina Array** | **49.90** | **310** | ↓*i*P | **P** | **04 35 41.9** | **+1.4** |
| **VOIR** | | **50.06** | **307** | ↑*i*P | **P** | **04 35 41.9** | **+0.2** |
| **FINES** | **FINESS Array B** | **50.85** | **328** | P | **P** | **04 35 48.1** | **+0.8** |
| | comp=E,2.6nm,0.6s,baz=120,slow=8.9,SNR=12 | | | | | | |
| **DRGR** | | **51.63** | **309** | ↓*i*P | **P** | **04 35 55.2** | **+1.7** |
| **GZR** | **Gura Zlata** | **51.66** | **307** | ↑*i*P | **P** | **04 35 54.9** | **+1.2** |
| **TRPA** | **Tarpa** | **51.69** | **310** | ↑*i*P | **P** | **04 35 55.7** | **+1.9** |
| **SIRR** | **Siria** | **52.38** | **308** | ↑*i*P | **P** | **04 36 01.3** | **+2.3** |
| **ARCES** | **ARCESS Array B** | **53.17** | **338** | P | **P** | **04 36 05.5** | **+1.0** |
| | comp=E,2.7nm,0.7s,baz=108,slow=7.8,SNR=14 | | | | | | |
| **PSZ** | **Piszkesteto** | **53.48** | **310** | ↑*i*P | **P** | **04 36 07.1** | **-0.1** |
| **MORC** | **Moravsky Berou** | **54.90** | **313** | ↑*i*P | **P** | **04 36 18.9** | **+1.5** |
| **VRAC** | **Vranov** | **55.55** | **312** | P | **P** | **04 36 23.1** | **+1.0** |
| | comp=E,4.1nm,0.7s,baz=66,slow=1.6,SNR=5.2 | | | | | | |
| **HFS** | **Hagfors** | **56.75** | **325** | P | **P** | **04 36 30.7** | **+0.3** |
| | comp=E,2.8nm,0.6s,baz=98,slow=7.8,SNR=12 | | | | | | |
| **BRG** | **Berggiesshubel** | **57.10** | **314** | *e*(P) | **P** | **04 36 34.2** | **+1.2** |
| | comp=E,4.3nm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | **57.49** | **312** | P | **P** | **04 36 36.5** | **+0.5** |
| | comp=E,1.0nm,0.7s,baz=76,slow=5.6,SNR=7.3 | | | | | | |
| **NB2** | **NORSAR Subarra** | **57.96** | **326** | P | **P** | **04 36 38.8** | **-0.2** |
| | comp=Z,1.1nm,0.6s,baz=89,slow=7.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **57.96** | **326** | P | **P** | **04 36 38.5** | **-0.5** |
| | comp=Z,1.8nm,0.7s,baz=88,slow=7.2,SNR=4.1 | | | | | | |
| **KEST** | **Kesra** | **63.50** | **298** | P | **P** | **04 37 17.8** | **+0.6** |
| | comp=Z,9.7nm,0.8s,baz=59,slow=19,SNR=9.0 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **66.36** | **321** | P | **P** | **04 37 35.5** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=60,slow=6.8,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **67.37** | **130** | P | **P** | **04 37 42.5** | **+0.4** |
| | comp=Z,0.9nm,0.6s,baz=324,slow=6.4,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **69.70** | **133** | P | **P** | **04 37 57.0** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=317,slow=6.1,SNR=8.2 | | | | | | |
| **ESDC** | **Sonseca Array** | **72.10** | **306** | P | **P** | **04 38 11.6** | **+0.4** |
| | comp=Z,1.0nm,0.7s,baz=57,slow=6.0,SNR=5.6 | | | | | | |
| **ILAR** | **Eielson Array** | **78.44** | **20** | P | **P** | **04 38 46.7** | **-0.3** |
| | comp=Z,0.3nm,0.5s,baz=314,slow=4.4,SNR=4.9 | | | | | | |
| ILAR | | | | LR | LR | 05 17 28.6 | |
| | comp=Z,54nm,18.2s,baz=169,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.58** | **279** | P | **P** | **04 38 49.4** | **+0.8** |
| | comp=Z,1.0nm,0.5s,baz=58,slow=4.4,SNR=33 | | | | | | |
| **BOSA** | **Boshof** | **81.04** | **231** | P | **P** | **04 39 02.0** | **+0.3** |
| | comp=Z,1.6nm,0.8s,baz=90,slow=20,SNR=3.4 | | | | | | |
| **DBIC** | **Dimbokro** | **87.28** | **276** | P | **P** | **04 39 34.9** | **+1.2** |
| | comp=Z,3.6nm,1.0s,baz=85,slow=2.9,SNR=4.1 | | | | | | |

*JMA **18** 04:32:30.1±0.2, 24.77N×122.02E, h104km±3km, M2.9*
*ISCJB **18** 04:32:31.2±0.6, 24.81N±0.04×122.08E±0.02, h95km±5km, Error ellipse: s-maj=6.2km s-min=3.1km az=161.9*
*TAP **18** 04:32:31.1, 24.84N×122.07E, h97km, ML3.6, D*

**ISC 18 04:32:31.8±1.5, 24°79'N±0'05×122°08'E±0'03, h92km±9km, n46, σ0s70/86, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWB1** | **Santiao Chiao** | **0.24** | **339** | P | **Pn** | **04 32 45.0** | **-0.3** |
| | baz=338 | | | | | | |
| TWB1 | | | | S | **Sn** | **04 32 55.0** | **-0.2** |
| | baz=338 | | | | | | |
| **TWC** | **Suao** | **0.28** | **230** | *i* P | **Pn** | **04 32 45.4** | **+0.1** |
| | baz=218 | | | | | | |
| TWC | | | | *i* S | **Sn** | **04 32 55.5** | **0.0** |
| | baz=218 | | | | | | |
| **ILA** | **Ilan** | **0.30** | **266** | *e*P | **Pn** | **04 32 45.6** | **+0.1** |
| | baz=254 | | | | | | |
| ILA | | | | *e*S | **Sn** | **04 32 56.1** | **+0.4** |
| | baz=254 | | | | | | |
| **TWE** | **Neicheng** | **0.38** | **260** | P | **Pn** | **04 32 45.9** | **0.0** |
| | baz=250 | | | | | | |
| TWE | | | | *e*S | **Sn** | **04 32 56.8** | **+0.2** |
| | baz=250 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.40** | **316** | *i* P | **Pn** | **04 32 45.8** | **-0.4** |
| | baz=311 | | | | | | |
| NWF | | | | S | **Sn** | **04 32 56.4** | **-0.5** |
| | baz=311 | | | | | | |
| **ENA** | **Nanau** | **0.47** | **221** | *i* P | **Pn** | **04 32 47.0** | **+0.4** |
| | baz=214 | | | | | | |
| ENA | | | | *i* S | **Sn** | **04 32 58.6** | **+1.1** |
| | baz=214 | | | | | | |
| **ENTT** | **Nioudou** | **0.49** | **253** | *i* P | **Pn** | **04 32 47.0** | **+0.2** |
| | baz=245 | | | | | | |
| ENTT | | | | S | **Sn** | **04 32 59.1** | **+1.2** |
| | baz=245 | | | | | | |
| **TAP1** | **Taipei** | **0.57** | **296** | *e*S | **Sn** | **04 32 58.0** | **-0.9** |
| | baz=290 | | | | | | |
| **NSK** | **Sanguang** | **0.67** | **261** | P | **Pn** | **04 32 47.9** | **-0.4** |
| | baz=255 | | | | | | |
| NSK | | | | S | **Sn** | **04 33 00.2** | **-0.4** |
| | baz=255 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.68** | **298** | P | **Pn** | **04 32 48.1** | **-0.2** |
| | baz=293 | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **04 33 01.9** | **+1.2** |
| | baz=293 | | | | | | |
| **NNS** | **Nan Shan** | **0.73** | **242** | *e*P | **Pn** | **04 32 49.1** | **+0.1** |
| | baz=237 | | | | | | |
| NNS | | | | *e*S | **Sn

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=210 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.92** | **102** | P | **Pn** | **04 33 02.8** | **-0.3** |
| JIJ | | | | S | **Sn** | **04 33 26.2** | **-0.7** |
| **STYT** | **Tauyuan** | **2.02** | **217** | *eP* | **Pn** | **04 33 05.0** | **+0.6** |
| | baz=215 | | | | | | | |
| STYT | | | | *eS* | **Sn** | **04 33 31.0** | **+1.7** |
| | baz=215 | | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.04** | **95** | P | **Pn** | **04 33 04.7** | **+0.1** |
| JISG | | | | *eS* | **Sn** | **04 33 29.6** | **0.0** |
| **WTP** | **Ta-pu** | **2.04** | **222** | *eP* | **Pn** | **04 33 04.8** | **+0.1** |
| | baz=219 | | | | | | | |
| WTP | | | | *eS* | **Sn** | **04 33 30.0** | **+0.2** |
| | baz=219 | | | | | | | |
| **WSF** | **Szhu** | **2.05** | **236** | *eS* | **Sn** | **04 33 30.1** | **+0.2** |
| | baz=234 | | | | | | | |
| **CHN1** | **Nanshi** | **2.14** | **222** | *eP* | **Pn** | **04 33 05.9** | **-0.1** |
| | baz=220 | | | | | | | |
| CHN1 | | | | *eS* | **Sn** | **04 33 32.1** | **+0.1** |
| | baz=220 | | | | | | | |
| **TWG** | **Pinlang** | **2.17** | **206** | *eP* | **Pn** | **04 33 06.0** | **-0.3** |
| | baz=204 | | | | | | | |
| TWG | | | | *eS* | **Sn** | **04 33 31.4** | **-1.3** |
| | baz=204 | | | | | | | |
| **SGST** | **Jiashian** | **2.18** | **219** | *eP* | **Pn** | **04 33 07.3** | **+0.7** |
| | baz=217 | | | | | | | |
| SGST | | | | *eS* | **Sn** | **04 33 34.1** | **+1.1** |
| | baz=217 | | | | | | | |
| **JTJ** | **Tarama** | **2.39** | **93** | *eS* | **Sn** | **04 33 38.3** | **+0.5** |
| **SSD** | **Sandimen** | **2.43** | **214** | *eP* | **Pn** | **04 33 10.8** | **+1.0** |
| | baz=212 | | | | | | | |
| SSD | | | | *eS* | **Sn** | **04 33 39.3** | **+0.5** |
| | baz=212 | | | | | | | |

*ISCJB **18** 04:52:39.4±0.9, 16°.5S±0°.2×174°.2W±0°.2, h111km, mb3.7/5, Error ellipse: s-maj=41.1km s-min=10.6km az=45.0*
*IDC **18** 04:52:40.7±2.9, 16°.67S×174°.18W, h109km±27km, mb3.5/5, mb1 3.8/6, mb1mx3.5/28, mbtmp3.9/6, Error ellipse: s-maj=47.1km s-min=18.9km az=134.0*

**ISC 18 04:52:40.7±1.1, 16°.6S±0°.3×174°.1W±0°.3, h111km, n8, σ1§30/9, mb3.5/5, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **3.50** | **41** | P | **Pn** | **04 53 34.8** | **+1.4** |
| | 42nm,0.3s,baz=180,slow=2.2,SNR=48 | | | | | | |
| AFI | | | | S | **Sn** | **04 54 11.7** | **-2.5** |
| | 74nm,0.3s,baz=153,slow=17,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **22.93** | **198** | P | **P** | **04 57 34.5** | **-0.7** |
| | 5.2nm,0.4s,baz=80,slow=13,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.90** | **258** | P | **P** | **05 01 15.2** | **-0.5** |
| | 0.2nm,0.3s,baz=97,slow=7.6,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **49.08** | **253** | P | **P** | **05 01 16.6** | **-0.5** |
| | 1.6nm,0.7s,baz=88,slow=8.2,SNR=16 | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.67** | **42** | P | **P** | **05 04 14.8** | **+0.6** |
| | 0.5nm,0.8s,baz=280,slow=5.2,SNR=3.9 | | | | | | |
| **ILAR** | **Eielson Array** | **83.74** | **11** | P | **P** | **05 04 57.3** | **+0.5** |
| | 0.5nm,1.0s,baz=211,slow=5.9,SNR=6.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.61** | **319** | PKPbc | **PKPbc** | **05 12 10.3** | **+0.5** |
| | 1.1nm,0.8s,baz=79,slow=2.6,SNR=5.3 | | | | | | |
| **GERES** | **GERESS Array B** | **147.19** | **350** | PKPbc | **PKPbc** | **05 12 10.5** | **-0.5** |
| | 0.4nm,0.2s,baz=28,slow=4.4,SNR=4.2 | | | | | | |

**MEX 18 05:11:25.3±0.5, 15°.41N×96°.07W, h7km±22km, MD4.0, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HUIG** | **Huatulco** | **0.36** | **355** | *i* P | | Pg | 05 11 31.8 | -0.5 |
| HUIG | | | | *i* S | | Sg | 05 11 37.3 | +0.2 |
| **PNIG** | **Pinotepa** | **2.20** | **297** | *i* P | | Pn | 05 12 00.0 | -2.4 |
| PNIG | | | | *i* S | | Sn | 05 12 25.2 | -4.8 |
| **TLIG** | **Tlapa** | **3.21** | **312** | *eP* | | Pn | 05 12 13.6 | -2.8 |
| TLIG | | | | *i* S | | Sn | 05 12 51.4 | -3.7 |

*ISCJB **18** 06:00:56.7±0.9, 34°.48S±0°.05×179°.0E±0°.2, h100km, mb4.1/7, Error ellipse: s-maj=18.4km s-min=7.5km az=2.9*
*NEIC **18** 06:00:58.1±2.7, 34°.52S×179°.46E, h104km±19km, mb4.2/2, Error ellipse: s-maj=27.5km s-min=13.6km az=48.0*
*IDC **18** 06:01:02.1±2.9, 34°.70S×179°.19E, h130km±20km, mb3.9/5, mb1 4.0/6, mb1mx3.7/27, mbtmp4.3/6, Error ellipse: s-maj=27.7km s-min=19.1km az=64.0*

**ISC 18 06:00:58.5±0.8, 34°.54S±0°.08×179°.1E±0°.1, h100km, n68, σ1§66/68, mb4.3/7, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **3.09** | **192** | PN | **Pn** | **06 01 46.9** | **+1.5** |
| MXZ | | | | SN | **Sn** | **06 02 23.0** | **+1.4** |
| **WMGZ** | **Waiomatatini S** | **3.32** | **190** | PN | **Pn** | **06 01 49.4** | **+0.8** |
| WMGZ | | | | SN | **Sn** | **06 02 29.1** | **+1.9** |
| **HAZ** | **Te Kaha** | **3.39** | **198** | PN | **Pn** | **06 01 51.3** | **+1.9** |
| HAZ | | | | SN | **Sn** | **06 02 31.7** | **+2.9** |
| **PUZ** | **Puketiti** | **3.59** | **191** | PN | **Pn** | **06 01 53.3** | **+1.1** |
| PUZ | | | | SN | **Sn** | **06 02 34.0** | **+0.2** |
| **TWGZ** | **Tauwhareparae** | **3.75** | **194** | PN | **Pn** | **06 01 55.6** | **+1.3** |
| TWGZ | | | | SN | **Sn** | **06 02 37.7** | **+0.2** |
| **OPRZ** | **Ohinepanea** | **3.90** | **211** | PN | Pn | 06 02 00.4 | +4.1 |
| **MWZ** | **Matawai** | **4.00** | **198** | PN | **Pn** | **06 01 59.3** | **+1.5** |
| **CNGZ** | **Carnagh Statio** | **4.01** | **190** | PN | **Pn** | **06 01 58.5** | **+0.8** |
| **TKGZ** | **Te Karaka** | **4.03** | **194** | PN | **Pn** | **06 01 58.7** | **+0.7** |
| **URZ** | **Urewera** | **4.05** | **203** | P | **Pn** | **06 01 59.4** | **+1.0** |
| | 41nm,0.3s,baz=58,slow=1.4,SNR=99 | | | | | | |
| URZ | | | | S | **Sn** | **06 02 45.6** | **+0.8** |
| | 22nm,0.3s,baz=261,slow=4.2,SNR=15 | | | | | | |
| **URZ** | **Urewera** | **4.05** | **203** | PN | **Pn** | **06 01 59.8** | **+1.4** |
| **URZ** | **Urewera** | **4.05** | **203** | *e*Pn | **Pn** | **06 01 59.7** | **+1.4** |
| URZ | | | | *e*Sn | **Sn** | **06 02 46.1** | **+1.3** |
| **RAGZ** | **Rawiri** | **4.18** | **199** | PN | **Pn** | **06 02 01.5** | **+1.3** |
| **RIGZ** | **Rimuhau** | **4.30** | **194** | PN | **Pn** | **06 02 02.8** | **+1.0** |
| **PRGZ** | **Paritu Road** | **4.49** | **192** | PN | **Pn** | **06 02 04.3** | **0.0** |
| **PRRZ** | **Plateau Road** | **4.52** | **208** | PN | **Pn** | **06 02 07.7** | **+3.0** |
| **ALRZ** | **Allen Road** | **4.60** | **208** | PN | **Pn** | **06 02 08.4** | **+2.7** |
| **KNZ** | **Kokohu** | **4.62** | **194** | PN | **Pn** | **06 02 05.5** | **-0.5** |
| **MHGZ** | **Mahia Peninsul** | **4.71** | **192** | PN | **Pn** | **06 02 07.0** | **-0.3** |
| **WHHZ** | **Waihua** | **4.78** | **198** | PN | **Pn** | **06 02 08.7** | **+0.5** |
| **MRHZ** | **Matea Rd** | **4.80** | **206** | PN | **Pn** | **06 02 10.1** | **+1.5** |
| **NMHZ** | **Naumai** | **4.92** | **202** | PN | **Pn** | **06 02 10.9** | **+0.7** |
| **ARHZ** | **Aropaoanui** | **5.01** | **199** | PN | **Pn** | **06 02 11.7** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **5.08** | **204** | PN | **Pn** | **06 02 12.7** | **+0.4** |
| **MCHZ** | **McNeill Hill** | **5.27** | **201** | PN | **Pn** | **06 02 15.1** | **+0.3** |
| **CKHZ** | **Cape Kidnapper** | **5.37** | **197** | PN | **Pn** | **06 02 15.2** | **-1.0** |
| **TUVZ** | **Tukino** | **5.48** | **209** | PN | **Pn** | **06 02 20.0** | **+2.2** |
| **BHHZ** | **Black Hill Sta** | **5.51** | **205** | PN | **Pn** | **06 02 18.5** | **+0.3** |
| **KAHZ** | **Kaharunaki** | **5.54** | **198** | PN | **Pn** | **06 02 17.9** | **-0.8** |
| **WNVZ** | **Wahianoa** | **5.55** | **210** | PN | **Pn** | **06 02 20.3** | **+1.5** |
| **MOVZ** | **Moawhango** | **5.56** | **208** | PN | **Pn** | **06 02 19.3** | **+0.4** |
| **PNHZ** | **Pukenui** | **5.85** | **203** | PN | **Pn** | **06 02 21.1** | **-1.7** |
| **PRHZ** | **Porangahau** | **6.05** | **198** | PN | **Pn** | **06 02 23.5** | **-2.0** |
| **BFZ** | **Birch Farm** | **6.54** | **200** | PN | **Pn** | **06 02 29.9** | **-2.2** |
| **MRZ** | **Mangatainoka R** | **6.73** | **204** | PN | **Pn** | **06 02 32.2** | **-2.4** |
| MRZ | | | | SN | Sn | 06 03 39.8 | -10 |
| **KIW** | **Kapiti Island** | **7.14** | **207** | PN | **Pn** | **06 02 38.0** | **-2.2** |
| **MTW** | **Mount Morrison** | **7.20** | **202** | PN | Pn | 06 02 37.2 | -3.9 |
| **CAW** | **Cannon Point** | **7.30** | **205** | PN | **Pn** | **06 02 39.9** | **-2.5** |
| **TRWZ** | **Traveller** | **7.37** | **201** | PN | Pn | 06 02 39.6 | -3.7 |
| **PAWZ** | **Paruwai Farm** | **7.43** | **202** | PN | Pn | 06 02 41.3 | -2.9 |
| **PLWZ** | **Palliser** | **7.65** | **202** | PN | Pn | 06 02 43.0 | -4.3 |
| **TCW** | **Tory Channel** | **7.69** | **208** | PN | Pn | 06 02 44.7 | -2.9 |
| **TUWZ** | **Tuamarina** | **8.00** | **209** | PN | **Pn** | **06 02 49.5** | **-2.4** |
| **NNZ** | **Nelson** | **8.06** | **213** | PN | **Pn** | **06 02 51.1** | **-1.7** |
| **BSWZ** | **Blackbirch Sta** | **8.27** | **208** | PN | Pn | 06 02 52.6 | -3.0 |
| **THZ** | **Tophouse** | **8.72** | **212** | PN | **Pn** | **06 03 00.2** | **-1.5** |
| THZ | | | | *e*SN | **Sn** | **06 04 32.8** | **-5.4** |
| **KHZ** | **Kahutara** | **9.00** | **207** | PN | Pn | 06 03 02.4 | -3.1 |
| **MQZ** | **McQueen's Vall** | **10.44** | **207** | SN | Sn | 06 05 07.1 | -13 |
| **RPZ** | **Rata Peaks** | **11.10** | **212** | P | Pn | 06 03 29.9 | -4.2 |
| | 1.1nm,0.3s,baz=71,slow=1.8,SNR=4.0 | | | | | | |
| RPZ | | | | S | Sn | 06 05 25.0 | -11 |
| | 3.9nm,0.3s,baz=112,slow=20,SNR=9.6 | | | | | | |
| **ASAR** | **Alice Springs** | **40.67** | **273** | P | **P** | **06 08 31.3** | **+2.0** |
| | 3.5nm,0.4s,baz=115,slow=7.8,SNR=51 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 10 29.2** | **0.0** |
| | 0.3nm,0.5s,baz=116,slow=4.2,SNR=3.0 | | | | | | |
| ASAR | | | | ScP | ScP | 06 14 03.5 | -6.0 |
| | 0.2nm,0.7s,baz=113,slow=4.0,SNR=4.3 | | | | | | |
| **WRAB** | **Tennant Creek** | **42.05** | **278** | *eP* | **P** | **06 08 42.1** | **+1.6** |
| | 1.8nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **42.05** | **278** | P | **P** | **06 08 42.1** | **+1.6** |
| | 1.7nm,0.4s,baz=120,slow=7.5,SNR=34 | | | | | | |
| WRA | | | | PcP | **PcP** | **06 10 33.4** | **-0.3** |
| | 0.7nm,0.6s,baz=110,slow=3.0,SNR=5.2 | | | | | | |
| WRA | | | | ScP | **ScP** | **06 14 10.3** | **-4.7** |
| | 0.5nm,0.9s,baz=120,slow=4.1,SNR=3.4 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **50.77** | **253** | P | **P** | **06 09 49.1** | **+0.6** |
| | 3.8nm,0.5s,baz=274,slow=0.3,SNR=5.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **55.58** | **180** | P | **P** | **06 10 23.8** | **+0.4** |
| | 1.7nm,0.5s,baz=351,slow=1.6,SNR=19 | | | | | | |
| **QSPA** | **South Pole Qui** | **55.58** | **180** | *eP* | **P** | **06 10 23.5** | **0.0** |
| | 1.6nm,0.5s | | | | | | |
| **MAW** | **Mawson** | **67.58** | **202** | P | **P** | **06 11 44.0** | **+0.2** |
| | 1.1nm,0.8s,baz=113,slow=10,SNR=6.2 | | | | | | |
| **SNAA** | **Sanae** | **74.08** | **179** | *eP* | **P** | **06 12 21.6** | **-1.6** |
| | 0.5nm,0.9s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **74.33** | **177** | P | **P** | **06 12 24.4** | **-0.2** |
| **VNA2** | **Neumayer--Watz** | **74.73** | **178** | P | **P** | **06 12 27.3** | **+0.4** |
| | baz=171,slow=4.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **142.04** | **345** | PKhKP | PKPpre | 06 20 12.9 | |
| | 3.2nm,1.0s,baz=3.4,slow=6.1,SNR=3.8 | | | | | | |
| **KBZ** | **Khabaz** | **145.17** | **299** | PKPbc | **PKPbc** | **06 20 22.9** | **-1.0** |
| | 1.1nm,0.6s,baz=64,slow=1.8,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **148.05** | **336** | PKPbc | **PKPdf** | **06 20 30.9** | **+2.6** |
| | 3.8nm,0.7s,baz=11,slow=1.9,SNR=8.4 | | | | | | |
| **DBIC** | **Dimbokro** | **152.02** | **172** | PKPbc | **PKPbc** | **06 20 42.4** | **-0.3** |
| | 3.8nm,1.0s,baz=206,slow=5.0,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **152.11** | **291** | PKPbc | **PKPbc** | **06 20 41.8** | **-0.6** |
| | 2.7nm,0.5s,baz=145,slow=3.6,SNR=15 | | | | | | |
| **NB2** | **NORSAR Subarra** | **152.36** | **347** | PKP | **PKPbc** | **06 20 41.6** | **-0.4** |
| | comp=Z,0.9nm,0.5s,baz=12,slow=2.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **152.36** | **347** | PKPbc | **PKPbc** | **06 20 41.7** | **-0.3** |
| | comp=Z,0.9nm,0.6s,baz=15,slow=3.9,SNR=3.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **152.84** | **316** | PKPbc | **PKPbc** | **06 20 42.6** | **-0.8** |
| | comp=Z,0.8nm,0.4s,baz=47,slow=2.7,SNR=5.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **158.57** | **187** | PKPab | **PKPab** | **06 21 19.3** | **-0.8** |
| | comp=Z,0.4nm,0.5s,baz=172,slow=4.3,SNR=6.9 | | | | | | |

*ISCJB **18** 06:05:41.3±0.6, 75°.82N±0°.05×7°.9E±0°.2, h10km, mb3.6/6, MS3.3/16, Error ellipse: s-maj=8.5km s-min=7.4km az=10.5*
*CSEM **18** 06:05:42.1±0.5, 75°.82N×7°.65E, h10km, ML2.9, Error ellipse: s-maj=14.3km s-min=11.9km az=101.0*
*IDC **18** 06:05:43.0±0.8, 75°.83N×7°.94E, h0km, mb3.6/6, mb1 3.9/11, mb1mx3.7/40, mbtmp3.7/11, ML3.4/5, MS3.3/22, Ms1 3.3/22, ms1mx3.2/39, Error ellipse: s-maj=16.7km s-min=11.3km az=80.0*
*BER **18** 06:05:44.4±2.1, 75°.80N×7°.86E, h10km, MD2.0, ML2.9, ML4.4(NAO)*
*NAO **18** 06:05:45.7±6.7, 75°.82N×8°.77E, h7km±65km, ML4.4*

**ISC 18 06:05:43.6±0.6, 75°.88N±0°.06×8°.04E±0°.07, h10km, n54, σ1§40/46, mb3.6/6, MS3.4/16, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HSPB** | **Hornsund (broa** | **2.10** | **54** | *eP* | **Pn** | **06 06 17.8** | **-0.8** |
| **HSPB** | **Hornsund (broa** | **2.10** | **54** | *eP* | **Pn** | **06 06 17.8** | **-0.8** |
| | SNR=50 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **2.97** | **35** | Pn | **Pn** | **06 06 31.4** | **+0.6** |
| | baz=217,slow=12 | | | | | | |
| SPA0 | | | | Sn | **Sn** | **06 07 05.5** | **-0.9** |
| **SPA0** | **Spitsbergen Ar** | **2.97** | **35** | Pn | **Pn** | **06 06 31.4** | **+0.6** |
| | baz=217,slow=12 | | | | | | |
| SPA0 | | | | Sn | **Sn** | **06 07 05.5** | **-0.9** |
| **SPA0** | **Spitsbergen Ar** | **2.97** | **35** | Pn | **Pn** | **06 06 31.4** | **+0.6** |
| | SNR=50 | | | | | | |
| SPA0 | | | | Sn | **Sn** | **06 07 05.5** | **-0.9** |
| | SNR=50 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **2.97** | **35** | Pn | **Pn** | **06 06 31.3** | **+0.6** |
| | baz=211,slow=14,SNR=154 | | | | | | |
| SPITS | | | | Sn | **Sn** | **06 07 04.8** | **-1.6** |
| | baz=217,slow=22,SNR=2.9 | | | | | | |
| SPITS | | | | LR | LR | 06 07 27.7 | |
| | comp=Z,125nm,20.8s,baz=270,slow=35 | | | | | | |
| **BJO** | **Bjornoya** | **3.18** | **110** | *eP* | **Pn** | **06 06 34.7** | **+1.2** |
| **BJO** | **Bjornoya** | **3.18** | **110** | *eP* | **Pn** | **06 06 34.7** | **+1.2** |
| | SNR=50 | | | | | | |
| **KBS** | **Kingsbay** | **3.18** | **14** | Pn | **Pn** | **06 06 33.9** | **+0.4** |
| **KBS** | **Kingsbay** | **3.18** | **14** | *eP* | **Pn** | **06 06 33.7** | **+0.2** |
| **KBS** | **Kingsbay** | **3.18** | **14** | *eP* | **Pn** | **06 06 33.7** | **+0.2** |
| | SNR=50 | | | | | | |
| **HOPEN** | **Hopen** | **4.11** | **73** | Pn | **Pn** | **06 06 47.1** | **+0.8** |
| HOPEN | | | | Sn | **Sn** | **06 07 32.0** | **-2.3** |
| **HOPEN** | **Hopen** | **4.11** | **73** | *eP* | **Pn** | **06 06 47.1** | **+0.8** |
| HOPEN | | | | *eS* | **Sn** | **06 07 31.4** | **-2.8** |
| HOPEN | | | | IAML | | 06 07 34.0 | |
| | comp=Z,58nm,0.4s | | | | | | |
| **HOPEN** | **Hopen** | **4.11** | **73** | *eP* | **Pn** | **06 06 47.1** | **+0.8** |
| | SNR=49 | | | | | | |
| HOPEN | | | | Sn | **Sn** | **06 07 32.0** | **-2.3** |
| **DAG** | **Danmarks Havn** | **6.36** | **291** | *i* P | Pn | 06 07 13.1 | -4.0 |
| DAG | | | | *i* S | Sn | 06 08 17.1 | -12 |
| **ARA0** | **ARCESS Array S** | **8.18** | **132** | Pn | **Pn** | **06 07 40.5** | **-1.6** |
| | baz=330,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **8.18** | **132** | Pn | **Pn** | **06 07 40.5** | **-1.6** |
| | baz=330,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **8.18** | **132** | Pn | **Pn** | **06 07 40.5** | **-1.6** |
| | SNR=50 | | | | | | |
| **ARCES** | **ARCESS Array B** | **8.18** | **132** | Pn | **Pn** | **06 07 40.6** | **-1.5** |
| | comp=Z,1.2nm,0.3s,baz=330,slow=12,SNR=48 | | | | | | |
| ARCES | | | | Sn | Sn | 06 09 05.9 | -8.6 |
| | comp=Z,1.3nm,0.3s,baz=328,slow=20,SNR=5.6 | | | | | | |
| ARCES | | | | LR | LR | 06 10 59.6 | |
| | comp=Z,135nm,21.0s,baz=329,slow=39 | | | | | | |
| **SCO** | **Scoresbysund** | **10.11** | **253** | *i* P | **Pn** | **06 08 05.7** | **-2.8** |
| SCO | | | | *i* S | Sn | 06 09 43.5 | -18 |
| **SCO** | **Scoresbysund** | **10.11** | **253** | *i* P | **Pn** | **06 08 05.7** | **-2.8** |
| **APA0** | **Apatity Array** | **11.28** | **124** | Pn | **Pn** | **06 08 22.9** | **-1.5** |
| | baz=326,slow=8.6 | | | | | | |
| **APA0** | **Apatity Array** | **11.28** | **124** | Pn | **Pn** | **06 08 22.9** | **-1.5** |
| | baz=326,slow=8.6 | | | | | | |
| **APA0** | **Apatity Array** | **11.28** | **124** | Pn | **Pn** | **06 08 23.0** | **-1.5** |
| | SNR=50 | | | | | | |
| **NOA** | **NORSAR Array B** | **14.95** | **174** | Pn | **Pn** | **06 09 15.6** | **+0.9** |
| | comp=Z,0.1nm,0.3s,baz=355,slow=13,SNR=3.0 | | | | | | |
| NOA | | | | LR | LR | 06 14 21.3 | |
| | comp=Z,52nm,18.6s,baz=355,slow=35 | | | | | | |
| **FIA0** | **FINESS Array S** | **15.78** | **147** | Pn | **Pn** | **06 09 24.9** | **-0.5** |
| | baz=336,slow=12 | | | | | | |
| **FIA0** | **FINESS Array S** | **15.78** | **147** | Pn | **Pn** | **06 09 24.9** | **-0.5** |
| | baz=336,slow=12 | | | | | | |
| **FIA0** | **FINESS Array S** | **15.78** | **147** | Pn | **Pn** | **06 09 25.0** | **-0.5** |
| | SNR=50 | | | | | | |
| **FINES** | **FINESS Array B** | **15.78** | **147** | Pn | **Pn** | **06 09 23.6** | **-1.8** |
| | comp=Z,0.4nm,0.3s,baz=354,slow=12,SNR=13 | | | | | | |
| FINES | | | | LR | LR | 06 15 14.1 | |
| | comp=Z,131nm,19.7s,baz=3.5,slow=36 | | | | | | |
| **HFS** | **Hagfors** | **15.95** | **170** | Pn | **P** | **06 09 29.2** | **-2.1** |
| | comp=Z,0.1nm,0.3s,baz=357,slow=8.7,SNR=1.9 | | | | | | |
| HFS | | | | LR | LR | 06 14 43.3 | |
| | comp=Z,100nm,21.1s,baz=354,slow=34 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **19.68** | **275** | LR | LR | 06 16 55.7 | |
| | comp=Z,112nm,19.7s,baz=31,slow=34 | | | | | | |
| **RES** | **Resolute Bay** | **22.08** | **319** | LR | LR | 06 19 34.1 | |
| | comp=Z,64nm,19.7s,baz=233,slow=36 | | | | | | |
| **OBN** | **Obninsk** | **23.46** | **136** | LR | LR | 06 20 21.9 | |
| | comp=Z,52nm,18.4s,baz=276,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **26.66** | **149** | P | **P** | **06 11 23.6** | **+1.6** |
| | comp=Z,0.4nm,0.4s,baz=351,slow=11,SNR=3.4 | | | | | | |
| **FRB** | **Frobisher Bay** | **26.67** | **285** | LR | LR | 06 21 24.7 | |
| | comp=Z,136nm,21.5s,baz=1.5,slow=35 | | | | | | |
| **ARU** | **Arti** | **26.78** | **108** | LR | LR | 06 22 53.4 | |
| | comp=Z,51nm,18.8s,baz=268,slow=38 | | | | | | |
| **VRAC** | **Vranov** | **26.90** | **168** | LR | LR | 06 20 59.5 | |
| | comp=Z,63nm,18.9s,baz=355,slow=34 | | | | | | |
| **GERES** | **GERESS Array B** | **27.23** | **172** | LR | LR | 06 21 48.9 | |
| | comp=Z,42nm,20.5s,baz=3.5,slow=36 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **29.21** | **177** | LR | LR | 06 24 47.7 | |
| | comp=Z,18nm,20.4s,baz=5.0,slow=39 | | | | | | |
| **SCHQ** | **Schefferville** | **34.13** | **276** | LR | LR | 06 25 10.2 | |
| | comp=Z,77nm,18.9s,baz=44,slow=34 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **35.40** | **83** | LR | LR | 06 31 43.1 | |
| | comp=Z,65nm,18.5s,baz=44,slow=44 | | | | | | |
| **KBZ** | **Khabaz** | **35.53** | **135** | LR | LR | 06 27 33.2 | |
| | comp=Z,60nm,21.3s,baz=11,slow=37 | | | | | | |
| **BRTR** | **Keskin Array B** | **38.02** | **147** | LR | LR | 06 30 34.3 | |
| | comp=Z,22nm,18.4s,baz=348,slow=39 | | | | | | |
| **ILAR** | **Eielson Array** | **38.69** | **343** | P | **P** | **06 13 08.0** | **+1.2** |
| | comp=Z,0.9nm,0.9s,baz=1.5,slow=8.1,SNR=8.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **41.40** | **90** | P | **P** | **06 13 31.5** | **+2.0** |
| | comp=Z,0.5nm,0.6s,baz=336,slow=9.1,SNR=3.2 | | | | | | |
| MKAR | | | | LR | LR | 06 34 35.4 | |
| | comp=Z,86nm,18.9s,baz=340,slow=42 | | | | | | |
| **GEYT** | **Alibeck** | **44.11** | **119** | LR | LR | 06 34 33.5 | |
| | comp=Z,64nm,19.4s,baz=95,slow=39 | | | | | | |
| **ULM** | **Lac du Bonnet** | **45.14** | **298** | LR | LR | 06 32 45.6 | |
| | comp=Z,60nm,19.5s,baz=306,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **60.94** | **314** | P | **P** | **06 15 57.1** | **+0.6** |
| | comp=Z,0.6nm,0.9s,baz=27,slow=3.6,SNR=3.8 | | | | | | |
| NVAR | | | | LR | LR | 06 41 47.3 | |
| | comp=Z,43nm,19.9s,baz=51,slow=36 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **62.82** | **187** | P | **P** | **06 16 09.9** | **+0.9** |
| | comp=Z,0.8nm,0.8s,baz=2.4,slow=5.7,SNR=5.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **66.85** | **298** | P | **P** | **06 16 36.0** | **+0.8** |
| | comp=Z,1.1nm,0.8s,baz=49,slow=5.4,SNR=13 | | | | | | |
| TXAR | | | | LR | LR | 06 47 01.2 | |
| | comp=Z,50nm,18.6s,baz=0.0,slow=37 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **146.66** | **190** | P | **PKPab** | **06 25 25.3** | **+0.9** |
| **VNA2** | **Neumayer--Watz** | **146.90** | **189** | P | **PKPab** | **06 25 26.1** | **+0.7** |
| | baz=351,slow=5.5 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **147.31** | **190** | P | **PKPab** | **06 25 26.7** | **-0.4** |
| **SNAA** | **Sanae** | **147.49** | **186** | P | **PKPab** | **06 25 27.3** | **-0.6** |

**NNC 18 06:32:40.3±2.7, 37°.01N×70°.98E, h0km, mb3.7, mpv3.3, 7C-4D, Error ellipse: s-maj=21.9km s-min=9.2km az=173.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.47** | **317** | ⇑Pn | Pn | 06 33 21.9 | -0.2 |
| | 7.1nm,0.3s | | | | | | |
| DZET | | | | ⇓Sn | Sn | 06 33 54.6 | +1.5 |
| | 14nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.60** | **33** | ⇓Pn | Pn | 06 33 38.2 | +0.5 |
| | 1.6nm,0.3s | | | | | | |
| SFK | | | | ⇑Sn | Sn | 06 34 23.4 | +2.4 |
| | 3.6nm,0.2s | | | | | | |
| **MNAS** | **Manas** | **5.60** | **12** | ⇓Pn | Pn | 06 34 04.4 | -0.7 |
| | 1.3nm,0.3s | | | | | | |
| MNAS | | | | ⇑Sn | Sn | 06 35 10.0 | -0.3 |
| | 4.4nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **6.10** | **357** | Pn | Pn | 06 34 11.5 | -0.3 |
| | 1.7nm,0.4s,baz=180,slow=12,SNR=38 | | | | | | |
| KK31 | | | | ⇓Sn | Sn | 06 35 22.0 | -0.3 |
| | 0.5nm,0.3s,baz=190,slow=26,SNR=4.9 | | | | | | |
| **AAK** | **Ala-Archa** | **6.24** | **25** | ⇑Pn | Pn | 06 34 13.1 | -0.7 |
| | 0.8nm,0.3s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 06 35 26.0 | 0.0 |
| | 1.7nm,0.5s | | | | | | |
| **AB31** | **Akbulak array** | **14.63** | **330** | ⇑Pn | Pn | 06 36 03.9 | -4.6 |
| | 0.4nm,0.4s,baz=152,slow=12,SNR=8.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.33** | **329** | ⇑Pn | Pn | 06 36 29.7 | -1.3 |
| | 2.0nm,0.7s | | | | | | |

*IDC **18** 07:09:07.9±1.7, 0°.44S×129°.73E, h0km, mb3.6/2, mb1 3.8/3, mb1mx3.5/47, mbtmp3.6/3, ML3.6/1, MS2.8/3, Ms1 2.8/3, ms1mx2.5/28, Error ellipse: s-maj=35.6km s-min=23.9km az=34.0*
*ISCJB **18** 07:09:11.8±0.8, 0°.27S±0°.07×129°.79E±0°.04, h33km, mb3.6/2, MS2.9/2, Error ellipse: s-maj=10.4km s-min=5.3km az=8.0*
*DJA **18** 07:09:11.4±1.8, 0°S±4°×13°0E±°, h20km±24km, M3.8/11, MLv3.8/7, MLv3.8/11*

**ISC 18 07:09:12.9±1.1, 0°.27S±0°.08×129°.82E±0°.04, h35km, n14, σ1§13/15, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SWI** | **Sorong** | **1.56** | **112** | P | **Pn** | **07 09 37.4** | **-0.7** |
| SWI | | | | S | **Sn** | **07 09 59.0** | **+1.9** |
| **SIJI** | **Sorong** | **1.56** | **112** | Pn | **Pn** | **07 09 37.7** | **-0.5** |
| | 116nm,0.3s,baz=298,slow=13,SNR=174 | | | | | | |
| SIJI | | | | Sn | **Sn** | **07 09 58.6** | **+1.3** |
| | 31nm,0.3s,baz=217,slow=20,SNR=16 | | | | | | |
| **LBMI** | **Labuha** | **2.35** | **261** | P | **Pn** | **07 09 50.0** | **+1.0** |
| LBMI | | | | S | **Sn** | **07 10 16.6** | **0.0** |
| **TNTI** | **Ternate** | **2.66** | **293** | P | **Pn** | **07 09 52.7** | **-0.6** |
| **MSAI** | **Masohi** | **3.18** | **196** | P | **Pn** | **07 10 00.9** | **+0.4** |
| MSAI | | | | S | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KASI | | | | S | **Sb** | 07 40 21.8 | +0.6 | | |
| **CGJI** | **Cibinong** | **1.87** | **81** | P | **Pn** | 07 40 04.9 | -0.9 | | |
| CGJI | | | | S | **Sb** | 07 40 33.0 | +1.6 | | |
| **LWLI** | **Liwa** | **1.88** | **7** | P | Pn | 07 40 03.0 | -3.0 | | |
| LWLI | | | | S | **Sn** | 07 40 29.2 | -0.1 | | |
| **MDSI** | **Maura Dua** | **2.42** | **8** | P | **Pn** | 07 40 10.7 | -2.7 | | |
| MDSI | | | | S | **Sn** | 07 40 42.4 | 0.0 | | |
| **CNJI** | **Cibinong** | **3.30** | **97** | P | **Pn** | 07 40 24.0 | -1.5 | | |
| **H01W3** | **Cape Leeuwin H** | **29.43** | **163** | T | T | 08 16 17.6 | | | |
| | baz=339,slow=76,SNR=32 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **29.44** | **163** | T | T | 08 16 19.3 | | | |
| | baz=339,slow=76,SNR=25 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **29.44** | **163** | T | T | 08 16 17.6 | | | |
| | baz=339,slow=76,SNR=30 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **31.09** | **267** | T | T | 08 17 46.2 | | | |
| | baz=90,slow=74,SNR=139 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **31.10** | **267** | T | T | 08 17 46.7 | | | |
| | baz=90,slow=74,SNR=107 | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **31.11** | **267** | T | T | 08 17 43.9 | | | |
| | baz=90,slow=74,SNR=94 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.31** | **117** | P | **P** | 07 46 00.4 | -2.5 | | |
| | 0.4nm,0.6s,baz=287,slow=12,SNR=2.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **33.34** | **123** | P | P | 07 46 07.4 | -4.5 | | |
| | 0.3nm,0.8s,baz=305,slow=8.9,SNR=4.0 | | | | | | | | |
| **JAY** | **Jayapura** | **37.00** | **85** | LR | LR | 08 04 20.6 | | | |
| | comp=Z,690nm,20.5s,slow=40 | | | | | | | | |
| **SONM** | **Songino Array** | **54.54** | **2** | P | **P** | 07 49 03.0 | +1.4 | | |
| | 0.7nm,0.7s,baz=177,slow=7.0,SNR=3.1 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.78** | **342** | P | **P** | 07 49 19.9 | +2.3 | | |
| | 0.2nm,0.5s,baz=148,slow=6.3,SNR=2.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.70** | **347** | P | **P** | 07 49 59.5 | +1.3 | | |
| | 1.0nm,0.4s,baz=167,slow=5.0,SNR=3.6 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **66.09** | **339** | LR | LR | 08 23 12.5 | | | |
| | comp=Z,46nm,21.5s,baz=256,slow=40 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.81** | **46** | PKPbc | **PKPab** | 07 59 14.6 | +0.7 | | |
| | 0.8nm,1.2s,baz=302,slow=1.7,SNR=3.3 | | | | | | | | |

*CSEM **18** 07:42:54.8±0.3, 43.48N×46.46E, h10km, mb3.9, Error ellipse: s-maj=7.1km s-min=3.6km az=31.0*
*TIF **18** 07:42:56.5, 43.30N×46.30E, h13km±2km*
*MOS **18** 07:42:56.5±1.4, 43.33N×46.35E, h12km, mb3.9/1, Error ellipse: s-maj=7.8km s-min=6.2km az=115.2*

**ISC 18 07:42:56.3±0.9, 43.35N±0.03×46.39E±0.02, h27km±8km, n53, σ1$84/98, 2C-9D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DLMR** | **Dylym** | **0.33** | **148** | *e*Pg | **Pb** | **07 43 04.0** | **0.0** |
| DLMR | | | | *e*S | **Sb** | **07 43 09.7** | **+0.5** |
| DLMR | | | | pmax | pmax | | |
| | comp=Z,470nm,0.2s | | | | | | |
| **DLMR** | **Dylym** | **0.33** | **148** | *e*Pg | **Pb** | **07 43 04.0** | **0.0** |
| | comp=Z,470nm,0.2s | | | | | | |
| DLMR | | | | *e*Sg | **Sb** | **07 43 09.7** | **+0.5** |
| **GROC** | **Groznyy** | **0.46** | **251** | ⇓*i*Pg | **Pb** | **07 43 04.3** | **-1.6** |
| GROC | | | | *i* S | **Sb** | **07 43 12.4** | **0.0** |
| **DBC** | **Dubki** | **0.46** | **136** | ⇑*i*Pg | **Pb** | **07 43 06.5** | **+0.4** |
| DBC | | | | *i* S | **Sb** | **07 43 13.8** | **+1.1** |
| DBC | | | | pmax | pmax | | |
| | comp=Z,60nm,0.2s | | | | | | |
| **DBC** | **Dubki** | **0.46** | **136** | *i* Pg | **Pb** | **07 43 06.5** | **+0.4** |
| | comp=Z,60nm,0.2s | | | | | | |
| DBC | | | | *i* Sg | **Sb** | **07 43 13.8** | **+1.1** |
| **BTLR** | **Botlikh** | **0.70** | **190** | *e*PG | Pb | 07 43 07.0 | -3.0 |
| BTLR | | | | *e*S | **Sb** | **07 43 16.4** | **-2.9** |
| BTLR | | | | pmax | pmax | | |
| | comp=Z,21nm,0.5s | | | | | | |
| **UNCR** | **Uncukul** | **0.70** | **155** | ⇓*i*PG | **Pb** | **07 43 09.8** | **-0.2** |
| UNCR | | | | *i* S | **Sb** | **07 43 20.0** | **+0.6** |
| UNCR | | | | pmax | pmax | | |
| | comp=Z,65nm,0.2s | | | | | | |
| **UNCR** | **Uncukul** | **0.70** | **155** | *i* Pg | **Pb** | **07 43 09.8** | **-0.2** |
| | comp=Z,65nm,0.2s | | | | | | |
| UNCR | | | | *i* Sg | **Sb** | **07 43 20.0** | **+0.6** |
| **BUJR** | **Buynaksk** | **0.74** | **135** | PG | **Pn** | **07 43 12.0** | **+0.9** |
| BUJR | | | | *e*S | **Sn** | **07 43 24.5** | **+2.9** |
| **BUJR** | **Buynaksk** | **0.74** | **135** | Pg | **Pn** | **07 43 12.0** | **+0.9** |
| **XNZR** | **Khunzakh** | **0.84** | **164** | *i* PG | **Pb** | **07 43 12.0** | **-0.5** |
| XNZR | | | | *i* S | **Sb** | **07 43 24.0** | **+0.5** |
| XNZR | | | | pmax | pmax | | |
| | comp=Z,62nm,0.1s | | | | | | |
| **XNZR** | **Khunzakh** | **0.84** | **164** | *i* Pg | **Pb** | **07 43 12.0** | **-0.5** |
| | comp=Z,62nm,0.1s | | | | | | |
| XNZR | | | | *i* Sg | **Sb** | **07 43 24.0** | **+0.5** |
| **ARKR** | **Arakani** | **0.87** | **149** | *e*PG | **Pn** | **07 43 13.0** | **+0.1** |
| ARKR | | | | *e*S | **Sn** | **07 43 25.5** | **+0.8** |
| **ARKR** | **Arakani** | **0.87** | **149** | *e*Pg | **Pn** | **07 43 13.0** | **+0.1** |
| ARKR | | | | *e*Sg | **Sn** | **07 43 25.5** | **+0.8** |
| **GNBR** | **Gunib** | **1.05** | **156** | ⇓*i*PG | **Pb** | **07 43 16.9** | **+1.0** |
| GNBR | | | | *i* S | **Sn** | **07 43 31.3** | **+2.1** |
| GNBR | | | | pmax | pmax | | |
| | comp=Z,36nm,0.1s | | | | | | |
| **GNBR** | **Gunib** | **1.05** | **156** | *i* Pg | **Pb** | **07 43 16.9** | **+1.0** |
| | comp=Z,36nm,0.1s | | | | | | |
| GNBR | | | | *i* Sg | **Sn** | **07 43 31.3** | **+2.1** |
| **KMGR** | **Komgaron** | **1.15** | **256** | ⇓*i*PG | **Pb** | **07 43 17.2** | **-0.4** |
| KMGR | | | | *i* S | **Sb** | **07 43 34.0** | **+1.8** |
| **KMGR** | **Komgaron** | **1.15** | **256** | *i* Pg | **Pb** | **07 43 17.2** | **-0.4** |
| **TRKR** | **Terskaya** | **1.26** | **288** | *e*PG | **Pb** | **07 43 20.1** | **+0.7** |
| TRKR | | | | *e*S | **Sb** | **07 43 39.2** | **+4.0** |
| **TRKR** | **Terskaya** | **1.26** | **288** | *e*Pg | **Pb** | **07 43 20.1** | **+0.7** |
| TRKR | | | | *e*Sg | **Sb** | **07 43 39.2** | **+4.0** |
| **VLKR** | **Vladikavkaz** | **1.29** | **257** | *e*PG | **Pb** | **07 43 20.2** | **+0.3** |
| VLKR | | | | *e*S | **Sb** | **07 43 38.7** | **+2.6** |
| **VLKR** | **Vladikavkaz** | **1.29** | **257** | *e*Pg | **Pb** | **07 43 20.2** | **+0.3** |
| VLKR | | | | *e*Sg | **Sb** | **07 43 38.7** | **+2.6** |
| **KMKR** | **Kumukh** | **1.33** | **157** | *e*PG | **Pb** | **07 43 21.8** | **+1.1** |
| KMKR | | | | *e*S | **Sb** | **07 43 40.0** | **+2.6** |
| KMKR | | | | pmax | pmax | | |
| | comp=Z,56nm,0.2s | | | | | | |
| **KMKR** | **Kumukh** | **1.33** | **157** | *e*Pg | **Pb** | **07 43 21.8** | **+1.1** |
| | comp=Z,56nm,0.2s | | | | | | |
| KMKR | | | | *e*Sg | **Sb** | **07 43 40.0** | **+2.6** |
| **BTKR** | **Batakoyurt** | **1.35** | **271** | ⇓*i*PG | **Pb** | **07 43 20.3** | **-0.6** |
| BTKR | | | | *e*S | **Sb** | **07 43 40.2** | **+2.4** |
| **BTKR** | **Batakoyurt** | **1.35** | **271** | *i* Pg | **Pb** | **07 43 20.3** | **-0.6** |
| BTKR | | | | *e*Sg | **Sb** | **07 43 40.2** | **+2.4** |
| **URKR** | **Urkarakh** | **1.50** | **142** | *i* PG | **Pb** | **07 43 25.0** | **+1.4** |
| URKR | | | | *i* S | **Sb** | **07 43 47.0** | **+4.8** |
| URKR | | | | pmax | pmax | | |
| | comp=Z,67nm,0.2s | | | | | | |
| **PRTR** | **Priterechnaya** | **1.58** | **285** | *e*PG | **Pb** | **07 43 24.5** | **-0.4** |
| PRTR | | | | *e*S | **Sb** | **07 43 47.7** | **+3.2** |
| **PRTR** | **Priterechnaya** | **1.58** | **285** | *e*Pg | **Pb** | **07 43 24.5** | **-0.4** |
| PRTR | | | | *e*Sg | **Sb** | **07 43 47.7** | **+3.2** |
| **LACR** | **Lac** | **1.62** | **252** | ⇓*i*PG | **Pn** | **07 43 23.7** | **+0.5** |
| **STDR** | **Stavd-Durt** | **1.70** | **271** | *e*PN | **Pb** | **07 43 26.6** | **-0.2** |
| STDR | | | | *e*S | **Sb** | **07 43 50.6** | **+2.8** |
| **STDR** | **Stavd-Durt** | **1.70** | **271** | *e*Pn | **Pb** | **07 43 26.6** | **-0.2** |
| STDR | | | | *e*Sg | **Sb** | **07 43 50.6** | **+2.8** |
| **KORR** | **Kora** | **1.72** | **262** | *e*PN | **Pb** | **07 43 26.6** | **-0.6** |
| KORR | | | | *e*S | **Sb** | **07 43 50.8** | **+2.4** |
| **KORR** | **Kora** | **1.72** | **262** | *e*Pn | **Pb** | **07 43 26.6** | **-0.6** |
| KORR | | | | *e*Sg | **Sb** | **07 43 50.8** | **+2.4** |
| **DUS** | **Dusheti** | **1.77** | **225** | P | **Pb** | **07 43 28.2** | **0.0** |
| DUS | | | | S | **Sb** | **07 43 51.0** | **+1.0** |
| **DUS** | **Dusheti** | **1.77** | **225** | *e*PN | **Pb** | **07 43 28.1** | **0.0** |
| DUS | | | | *e*S | **Sb** | **07 43 51.0** | **+1.0** |
| **DUS** | **Dusheti** | **1.77** | **225** | *e*Pn | **Pb** | **07 43 28.1** | **0.0** |
| DUS | | | | S | **Sb** | **07 43 51.0** | **+1.0** |
| **LSNR** | **Lesken** | **1.87** | **269** | *e*PN | **Pb** | **07 43 29.2** | **-0.7** |
| LSNR | | | | *i* S | **Sb** | **07 43 55.5** | **+2.7** |
| **SEAG** | **Tbilisi Sea** | **1.97** | **217** | P | **Sb** | **07 43 57.5** | **+1.8** |
| **TBLG** | **Delisi** | **2.03** | **218** | P | **Pb** | **07 43 31.8** | **-0.7** |
| TBLG | | | | S | **Sb** | **07 43 57.9** | **+0.6** |
| **TBLG** | **Delisi** | **2.03** | **218** | *e*PN | **Pb** | **07 43 31.8** | **-0.7** |
| **TBLG** | **Delisi** | **2.03** | **218** | P | **Pb** | **07 43 31.8** | **-0.7** |
| TBLG | | | | S | **Sb** | **07 43 57.9** | **+0.6** |
| **DGRG** | **David-gareji** | **2.04** | **202** | P | **Pb** | **07 43 33.3** | **+0.4** |
| DGRG | | | | S | **Sb** | **07 43 59.9** | **+2.1** |
| **DGRG** | **David-gareji** | **2.04** | **202** | *e*PN | **Pb** | **07 43 33.2** | **+0.4** |
| DGRG | | | | *e*S | **Sb** | **07 43 59.9** | **+2.1** |
| **DGRG** | **David-gareji** | **2.04** | **202** | *e*Pn | **Pb** | **07 43 33.2** | **+0.4** |
| DGRG | | | | S | **Sb** | **07 43 59.9** | **+2.1** |
| **ONI** | **Oni** | **2.29** | **252** | P | **Sb** | **07 44 05.5** | **+0.7** |
| **AKH** | **Akhalkalaki** | **2.89** | **229** | P | **Pb** | **07 43 46.3** | **-1.1** |
| AKH | | | | S | **Sb** | **07 44 22.0** | **-0.3** |
| **AKH** | **Akhalkalaki** | **2.89** | **229** | *e*PN | **Pb** | **07 43 46.2** | **-1.1** |
| AKH | | | | *e*S | **Sb** | **07 44 22.0** | **-0.3** |
| **AKH** | **Akhalkalaki** | **2.89** | **229** | *e*Pn | **Pb** | **07 43 46.2** | **-1.1** |
| AKH | | | | S | **Sb** | **07 44 22.0** | **-0.3** |
| **AKTO** | **Aktyubinsk** | **10.64** | **44** | ⇓Pn | **Pn** | **07 45 24.9** | **-2.1** |
| | comp=Z,2.0nm,1.1s | | | | | | |
| AKTO | | | | ⇓Sn | **Sn** | **07 47 19.5** | **-5.7** |
| | comp=Z,1.3nm,1.1s | | | | | | |
| **AKTO** | **Aktyubinsk** | **10.64** | **44** | Pn | **Pn** | **07 45 24.9** | **-2.1** |
| | comp=Z,2.0nm,1.1s | | | | | | |
| AKTO | | | | Sn | **Sn** | **07 47 19.5** | **-5.7** |
| | comp=Z,1.3nm,1.1s | | | | | | |
| **AB31** | **Akbulak array** | **11.07** | **53** | ⇓Pn | **Pn** | **07 45 34.7** | **+1.9** |
| | comp=Z,0.6nm,0.6s,baz=243,slow=11,SNR=7.7 | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **07 47 32.9** | **-2.8** |
| | comp=Z,0.2nm,0.3s,baz=251,slow=23,SNR=4.2 | | | | | | |
| **AB31** | **Akbulak array** | **11.07** | **53** | Sn | **Sn** | **07 47 32.9** | **-2.8** |
| | comp=Z,0.2nm,0.3s,baz=251,SNR=4.2 | | | | | | |

*ISCJB **18** 07:51:55.1±1.0, 49.2N±0.2×153.5E±0.3, h200km, mb3.1/3, Error ellipse: s-maj=43.3km s-min=9.4km az=137.2*
*MOS **18** 07:51:55.2±2.2, 48.54N×155.60E, h203km, mb4.2/1, Error ellipse: s-maj=48.8km s-min=9.5km az=72.9*
*KRSC **18** 07:51:55.2±2.8, 48.55N×155.62E, h203km±31km, ML4.0*
*IDC **18** 07:51:56.1±3.5, 49.32N×153.40E, h198km±41km, mb2.9/3, mb1 3.3/5, mb1mx2.9/43, mbtmp3.6/5, Error ellipse: s-maj=143.9km s-min=24.4km az=138.0*

**ISC 18 07:51:56.1±1.1, 49.3N±0.2×153.6E±0.2, h200km, n26, σ1$51/29, mb3.2/3, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.14** | **49** | *e*P | **Pn** | **07 52 36.3** | **+0.3** |
| SKR | | | | *e*S | **Sn** | **07 53 09.1** | **+1.9** |
| **PAU** | **Pauzhetka** | **3.00** | **42** | *e*P | **Pn** | **07 52 45.8** | **+0.2** |
| PAU | | | | *e*S | **Sn** | **07 53 23.8** | **-0.6** |
| **PAU** | **Pauzhetka** | **3.00** | **42** | PN | **Pn** | **07 52 45.8** | **+0.2** |
| PAU | | | | S | **Sn** | **07 53 23.8** | **-0.6** |
| **MIPR** | **Malaya Ipel'ka** | **3.60** | **33** | *e*P | **Pn** | **07 52 53.9** | **+1.1** |
| **RUS** | **Russkaya** | **4.42** | **43** | *e*P | **Pn** | **07 53 02.4** | **-0.7** |
| RUS | | | | *e*S | **Sn** | **07 53 52.7** | **-3.2** |
| **RUS** | **Russkaya** | **4.42** | **43** | PN | **Pn** | **07 53 02.4** | **-0.7** |
| RUS | | | | S | **Sn** | **07 53 52.7** | **-3.2** |
| **PETK** | **Petropavlovsk-** | **4.61** | **33** | P | **Pn** | **07 53 06.0** | **+0.5** |
| | 0.4nm,0.3s,baz=182,slow=13,SNR=3.3 | | | | | | |
| **PETK** | **Petropavlovsk-** | **4.61** | **33** | PN | **Pn** | **07 53 06.0** | **+0.5** |
| **KOK** | **Koryaka** | **5.10** | **36** | *e*P | **Pn** | **07 53 14.1** | **+2.3** |
| **KOK** | **Koryaka** | **5.10** | **36** | PN | **Pn** | **07 53 14.1** | **+2.3** |
| **AVH** | **Avacha** | **5.12** | **37** | *e*P | **Pn** | **07 53 14.1** | **+2.1** |
| **AVH** | **Avacha** | **5.12** | **37** | PN | **Pn** | **07 53 14.1** | **+2.1** |
| **KRX** | **Arik** | **5.16** | **36** | *e*P | **Pn** | **07 53 14.3** | **+1.7** |
| **GNL** | **Ganaly** | **5.17** | **30** | *e*P | Pn | 07 53 17.8 | +5.1 |
| **GNL** | **Ganaly** | **5.17** | **30** | PN | Pn | 07 53 17.8 | +5.1 |
| **SDLR** | **Sedlovina** | **5.19** | **38** | *e*P | **Pn** | **07 53 13.6** | **+0.7** |
| **SDLR** | **Sedlovina** | **5.19** | **38** | PN | **Pn** | **07 53 13.6** | **+0.7** |
| **SPN** | **Mys Shipunski** | **5.55** | **44** | *e*P | **Pn** | **07 53 16.8** | **-0.7** |
| SPN | | | | *e*S | Sn | 07 54 15.7 | -6.1 |
| **SPN** | **Mys Shipunski** | **5.55** | **44** | PN | **Pn** | **07 53 16.8** | **-0.7** |
| SPN | | | | S | Sn | 07 54 15.7 | -6.1 |
| **KBTR** | **Krutoberegovo** | **8.90** | **35** | *e*P | **Pn** | **07 53 59.9** | **-0.9** |
| **KBTR** | **Krutoberegovo** | **8.90** | **35** | PN | **Pn** | **07 53 59.9** | **-0.9** |
| **ASAJ** | **Asahikawa** | **9.15** | **240** | P | **Pn** | **07 54 03.1** | **-1.2** |
| | 0.9nm,0.3s,baz=61,slow=13,SNR=4.0 | | | | | | |
| **ASAJ** | **Asahikawa** | **9.15** | **240** | PN | **Pn** | **07 54 03.1** | **-1.2** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **ILAR** | **Eielson Array** | **34.38** | **41** | P | **P** | **07 58 24.2** | **+0.5** |
| | comp=Z,0.2nm,0.5s,baz=273,slow=7.0,SNR=5.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **60.99** | **64** | P | **P** | **08 01 50.0** | **+1.6** |
| | comp=Z,0.5nm,0.7s,baz=302,slow=6.8,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **75.98** | **61** | P | **P** | **08 03 21.6** | **+0.4** |
| | comp=Z,0.3nm,0.6s,baz=284,slow=3.6,SNR=4.5 | | | | | | |

**IDC 18 07:59:59.6±2.3, 2.57S×129.13E, h0km, mb3.4/2, mb1 3.7/4, mb1mx3.4/51, mbtmp3.4/4, ML3.0/2, Error ellipse: s-maj=65.7km s-min=27.1km az=101.0, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **2.73** | **52** | Pn | Pn | 08 00 44.6 | -0.1 |
| | 4.2nm,0.3s,baz=232,slow=19,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.00** | **164** | P | Pn | 08 04 09.5 | -1.9 |
| | 0.0nm,0.3s,baz=345,slow=12,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **21.47** | **168** | P | P | 08 04 49.7 | -0.2 |
| | 0.3nm,0.4s,baz=342,slow=9.6,SNR=8.9 | | | | | | |
| **ILAR** | **Eielson Array** | **89.74** | **25** | P | P | 08 13 00.2 | +0.6 |
| | 0.3nm,0.6s,baz=270,slow=5.4,SNR=6.8 | | | | | | |

*CSEM **18** 08:00:27.9±0.2, 33.78N×5.95W, h15km, ML2.9/4, Error ellipse: s-maj=4.8km s-min=3.4km az=66.0*
*CNRM **18** 08:00:29.1, 33.82N×5.96W, h19km, MD3.0*
*MDD **18** 08:00:29.0±0.6, 33.78N×5.96W, h16km±5km, mb3.6/11, Error ellipse: s-maj=4.4km s-min=3.6km az=47.0, PRXIMO*
*INMG **18** 08:00:33.0±2.0, 33.98N×6.45W, h0km, ML2.1, Error ellipse: s-maj=17.1km s-min=5.5km az=109.0*

**ISC 18 08:00:28.4±1.1, 33.81N±0.02×5.95W±0.02, h27km±11km, n70, σ1$38/120, Morocco**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MIF** | **Mishlifen** | **0.72** | **123** | P | **Pb** | **08 00 43.0** | **+0.5** |
| MIF | | | | S | **Sb** | **08 00 52.0** | **-0.1** |
| **MIF** | **Mishlifen** | **0.72** | **123** | P | **Pb** | **08 00 43.0** | **+0.5** |
| MIF | | | | S | **Sb** | **08 00 52.0** | **-0.1** |
| **RTC** | **Rabat Centre** | **0.78** | **284** | P | **Pb** | **08 00 43.0** | **-0.3** |
| RTC | | | | S | **Sb** | **08 00 52.0** | **-1.5** |
| **RTC** | **Rabat Centre** | **0.78** | **284** | P | **Pb** | **08 00 43.0** | **-0.3** |
| RTC | | | | *i* S | **Sb** | **08 00 52.0** | **-1.5** |
| **TGT** | **Taghat** | **0.79** | **70** | P | **Pb** | **08 00 44.0** | **+0.4** |
| TGT | | | | S | **Sb** | **08 00 54.0** | **+0.1** |
| **TGT** | **Taghat** | **0.79** | **70** | P | **Pb** | **08 00 44.0** | **+0.4** |
| TGT | | | | S | **Sb** | **08 00 54.0** | **+0.1** |
| **CZD** | **Col de Zad** | **1.08** | **135** | P | **Pn** | **08 00 48.0** | **-0.1** |
| CZD | | | | S | **Sn** | **08 01 02.0** | **-0.3** |
| **CZD** | **Col de Zad** | **1.08** | **135** | P | **Pn** | **08 00 48.0** | **-0.1** |
| CZD | | | | S | **Sn** | **08 01 02.0** | **-0.3** |
| **KIB** | **El Ksiba** | **1.23** | **184** | P | **Pn** | **08 00 50.0** | **+0.1** |
| KIB | | | | S | **Sn** | **08 01 05.5** | **-0.2** |
| **KIB** | **El Ksiba** | **1.23** | **184** | P | **Pn** | **08 00 50.0** | **+0.1** |
| KIB | | | | S | **Sn** | **08 01 05.5** | **-0.2** |
| **TZK** | **Tazeka** | **1.49** | **79** | P | **Pn** | **08 00 54.0** | **+0.3** |
| TZK | | | | S | **Sn** | **08 01 12.0** | **-0.4** |
| **TZK** | **Tazeka** | **1.49** | **79** | P | **Pn** | **08 00 54.0** | **+0.3** |
| TZK | | | | S | **Sn** | **08 01 12.0** | **-0.4** |
| **TZC** | **Tazercounte** | **1.71** | **196** | P | **Pn** | **08 00 58.0** | **+1.3** |
| TZC | | | | S | **Sn** | **08 01 19.0** | **+1.2** |
| **TZC** | **Tazercounte** | **1.71** | **196** | P | **Pn** | **08 00 58.0** | **+1.3** |
| TZC | | | | S | **Sn** | **08 01 19.0** | **+1.2** |
| **ZFT** | **Errachidia** | **2.22** | **142** | P | **Pn** | **08 01 03.0** | **-0.7** |
| ZFT | | | | S | **Sn** | **08 01 30.0** | **-0.3** |
| **ZFT** | **Errachidia** | **2.22** | **142** | P | **Pn** | **08 01 03.0** | **-0.7** |
| ZFT | | | | S | **Sn** | **08 01 30.0** | **-0.3** |
| **EMIJ** | **Mijas** | **2.92** | **19** | P | **Pn** | **08 01 14.5** | **+1.4** |
| | 4.8nm,0.9s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | **Sn** | **08 01 46.6** | **-0.6** |
| | 23nm,1.3s,SNR=7.9 | | | | | | |
| **EMIJ** | **Mijas** | **2.92** | **19** | P | **Pn** | **08 01 14.5** | **+1.4** |
| | 4.8nm,0.9s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | **Sn** | **08 01 46.6** | **-0.6** |
| | 23nm,1.3s,SNR=7.9 | | | | | | |
| **OUK** | **Oukaimeden** | **3.06** | **213** | P | **Pn** | **08 01 15.0** | **-0.3** |
| OUK | | | | S | **Sn** | **08 01 50.0** | **-1.1** |
| **OUK** | **Oukaimeden** | **3.06** | **213** | P | **Pn** | **08 01 15.0** | **-0.3** |
| OUK | | | | S | **Sn** | **08 01 50.0** | **-1.1** |
| **EGUA** | **Guajares** | **3.59** | **32** | P | **Pn** | **08 01 23.3** | **+0.9** |
| | 6.4nm,1.2s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sn** | **08 02 02.6** | **-1.4** |
| | 12nm,1.1s,SNR=7.9 | | | | | | |
| **EGUA** | **Guajares** | **3.59** | **32** | P | **Pn** | **08 01 23.3** | **+0.9** |
| | 6.4nm,1.2s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sn** | **08 02 02.6** | **-1.4** |
| | 12nm,1.1s,SNR=7.9 | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **335** | *e*Pn | **Pn** | **08 01 27.7** | **+2.6** |
| PBDV | | | | *e*Sn | **Sn** | **08 02 07.3** | **-1.5** |
| PBDV | | | | A | A | 08 02 15.3 | |
| | 4.4nm,0.6s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **335** | P | **Pn** | **08 01 27.7** | **+2.6** |
| PBDV | | | | S | **Sn** | **08 02 07.3** | **-1.5** |
| | 4.4nm,0.6s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.79** | **335** | P | **Pn** | **08 01 27.7** | **+2.6** |
| PBDV | | | | S | **Sn** | **08 02 07.3** | **-1.5** |
| | 4.4nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.87** | **339** | *e*Pn | **Pn** | **08 01 28.8** | **+2.7** |
| PVAQ | | | | *e*Sn | **Sn** | **08 02 09.5** | **-1.2** |
| PVAQ | | | | A | A | 08 02 14.9 | |
| | 3.3nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.87** | **339** | P | **Pn** | **08 01 28.8** | **+2.7** |
| PVAQ | | | | S | **Sn** | **08 02 09.5** | **-1.2** |
| | 3.3nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.87** | **339** | P | **Pn** | **08 01 28.8** | **+2.7** |
| PVAQ | | | | S | **Sn** | **08 02 09.5** | **-1.2** |
| | 3.3nm,0.4s | | | | | | |
| **EGRO** | **El Granado** | **3.92** | **342** | P | **Pn** | **08 01 27.5** | **+0.6** |
| | 1.0nm,0.3s,SNR=11 | | | | | | |
| EGRO | | | | S | **Sn** | **08 02 10.4** | **-1.6** |
| | 9.8nm,0.7s,SNR=7.9 | | | | | | |
| **EGRO** | **El Granado** | **3.92** | **342** | P | **Pn** | **08 01 27.5** | **+0.6** |
| | 1.0nm,0.3s,SNR=11 | | | | | | |
| EGRO | | | | S | **Sn** | **08 02 10.4** | **-1.6** |
| | 9.8nm,0.7s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **4.00** | **352** | P | **Pn** | **08 01 28.3** | **+0.4** |
| | 1.9nm,0.8s,SNR=6.8 | | | | | | |
| EMIN | | | | S | **Sn** | **08 02 13.0** | **-0.8** |
| | 6.6nm,0.8s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **4.00** | **352** | P | **Pn** | **08 01 28.3** | **+0.4** |
| | 1.9nm,0.8s,SNR=6.8 | | | | | | |
| EMIN | | | | S | **Sn** | **08 02 13.0** | **-0.8** |
| | 6.6nm,0.8s,SNR=7.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.07** | **326** | *e*Sn | **Sn** | **08 02 16.6** | **+1.0** |
| PFVI | | | | A | A | 08 02 21.0 | |
| | 3.4nm,1.0s | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.07** | **326** | *e*Sn | **Sn** | **08 02 16.6** | **+1.0** |
| | 3.4nm,1.0s | | | | | | |
| **MORF** | **Marmelete** | **4.13** | **329** | *e*Pn | **Pn** | **08 01 31.3** | **+1.5** |
| MORF | | | | *e*Sn | **Sn** | **08 02 18.2** | **+1.0** |
| MORF | | | | A | A | 08 02 19.1 | |
| | 4.2nm,0.4s | | | | | | |
| **MORF** | **Marmelete** | **4.13** | **329** | P | **Pn** | **08 01 31.3** | **+1.5** |
| **MORF** | **Marmelete** | **4.13** | **329** | P | **Pn** | **08 01 31.3** | **+1.5** |
| MORF | | | | *e*Sn | **Sn** | **08 02 18.2** | **+1.0** |
| | 4.2nm,0.4s | | | | | | |
| **PCVE** | **Castro Verde** | **4.18** | **337** | *e*Pn | **Pn** | **08 01 33.2** | **+2.8** |
| PCVE | | | | *e*Sn | **Sn** | **08 02 17.1** | **-1.3** |
| PCVE | | | | A | A | 08 02 23.2 | |
| | 2.5nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **4.18** | **337** | S | **Sn** | **08 02 17.1** | **-1.3** |
| | 2.5nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **4.18** | **337** | *e*Pn | **Pn** | **08 01 33.2** | **+2.8** |
| PCVE | | | | S | **Sn** | **08 02 17.1** | **-1.3** |
| | 2.5nm,0.2s | | | | | | |
| **ECAB** | **El Cabril** | **4.28** | **6** | P | **Pn** | **08 01 33.6** | **+1.7** |
| | 2.8nm,1.0s,SNR=8.0 | | | | | | |
| ECAB | | | | S | **Sn** | **08 02 20.2** | **-0.7** |
| | 1.0nm,0.3s,SNR=8.2 | | | | | | |
| **ECAB** | **El Cabril** | **4.28** | **6** | P | **Pn** | **08 01 33.6** | **+1.7** |
| | 2.8nm,1.0s,SNR=8.0 | | | | | | |
| ECAB | | | | S | **Sn** | **08 02 20.2** | **-0.7** |
| | 1.0nm,0.3s,SNR=8.2 | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.36** | **330** | *e*Sn | **Sn** | **08 02 22.3** | **-0.6** |
| PTEO | | | | A | A | 08 02 33.9 | |
| | 4.5nm,0.7s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.36** | **330** | S | **Sn** | **08 02 22.3** | **-0.6** |
| | 2.2nm,0.7s | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.36** | **330** | S | **Sn** | **08 02 22.3** | **-0.6** |
| | 2.2nm,0.7s | | | | | | |
| **MESJ** | **Messejana** | **4.43** | **336** | *e*Pn | **Pn** | **08 01 36.1** | **+2.3** |
| **MESJ** | **Messejana** | **4.43** | **336** | P | **Pn** | **08 01 36.1** | **+2.3** |
| **MESJ** | **Messejana** | **4.43** | **336** | P | **Pn** | **08 01 36.1** | **+2.3** |
| **PBAR** | **Barrancos** | **4.45** | **349** | *e*Pn | **Pn** | **08 01 35.0** | **+0.9** |
| PBAR | | | | *e*Sn | **Sn** | **08 02 26.3** | **+1.3** |
| PBAR | | | | A | A | 08 02 28.4 | |
| | 4.8nm,0.2s | | | | | | |
| **PBAR** | **Barrancos** | **4.45** | **349** | P | **Pn** | **08 01 35.0** | **+0.9** |
| **PBAR** | **Barrancos** | **4.45** | **349** | P | **Pn** | **08 01 35.0** | **+0.9** |
| PBAR | | | | *e*

| Code | Station Name | Δ° | AZ° | Phase Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.85** | **327** | P | **Pn** | **08 02 58.9** | **-2.0** |
| | baz=3.0,SNR=11 | | | | | | |
| **HNR** | **Honiara** | **6.78** | **115** | LR | LR | 08 06 33.2 | |
| | comp=Z,532nm,20.2s,baz=300,slow=39 | | | | | | |
| **PMG** | **Port Moresby** | **7.07** | **246** | Pn | **Pn** | **08 03 58.1** | **-0.7** |
| | 59nm,0.3s,baz=64,slow=9.2,SNR=69 | | | | | | |
| PMG | | | | Sn | **Sn** | **08 05 18.5** | **+0.6** |
| | 12nm,0.3s,baz=187,slow=23,SNR=5.6 | | | | | | |
| PMG | | | | LR | LR | 08 06 47.1 | |
| | comp=Z,1μm,21.1s,baz=37,slow=39 | | | | | | |
| **PMG** | **Port Moresby** | **7.07** | **246** | *c i* P | **Pn** | **08 03 57.6** | **-1.3** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,4μm,1.2s | | | | | | |
| **PMG** | **Port Moresby** | **7.07** | **246** | P | **Pn** | **08 03 57.8** | **-1.0** |
| | baz=7.2 | | | | | | |
| **PMG** | **Port Moresby** | **7.07** | **246** | *e* Pn | **Pn** | **08 03 58.0** | **-0.9** |
| PMG | | | | *e* Sn | **Sn** | **08 05 22.4** | **+4.5** |
| **COEN** | **Coen** | **12.69** | **234** | P | **Pn** | **08 05 13.7** | **-2.1** |
| | baz=13,SNR=8.8 | | | | | | |
| **COEN** | **Coen** | **12.69** | **234** | *e* Pn | **Pn** | **08 05 13.6** | **-2.2** |
| COEN | | | | *e* Sn | **Sn** | **08 07 34.1** | **-1.6** |
| **MTSU** | **Mount Surprise** | **14.68** | **218** | P | **Pn** | **08 05 41.3** | **-1.5** |
| | baz=15,SNR=6.9 | | | | | | |
| **CTA** | **Charters Tower** | **15.24** | **208** | Pn | **Pn** | **08 05 48.9** | **-1.2** |
| | comp=Z,0.4nm,0.3s,baz=35,slow=15,SNR=6.2 | | | | | | |
| **CTA** | **Charters Tower** | **15.24** | **208** | P | **Pn** | **08 05 49.3** | **-0.8** |
| | baz=15 | | | | | | |
| **EIDS** | **Eidsvold** | **18.83** | **187** | P | **P** | **08 06 33.6** | **-0.5** |
| | baz=19 | | | | | | |
| **QIS** | **Mount Isa** | **19.48** | **223** | P | **P** | **08 06 41.3** | **0.0** |
| | baz=20,SNR=39 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.69** | **143** | *e* P | **P** | **08 06 44.2** | **+0.7** |
| | comp=Z,240nm,1.1s | | | | | | |
| DZM | | | | *e* LR | LR | 08 11 29.5 | |
| | comp=Z,247nm,21.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **19.69** | **143** | P | **P** | **08 06 43.0** | **-0.5** |
| | comp=Z,1.7nm,0.3s,baz=180,slow=19,SNR=16 | | | | | | |
| **RMQ** | **Roma** | **20.33** | **193** | P | **P** | **08 06 50.9** | **+0.5** |
| | baz=20,SNR=50 | | | | | | |
| **TARA** | **Tarawa** | **20.73** | **68** | *e* P | Pn | 08 06 56.8 | -0.9 |
| | comp=Z,176nm,1.1s | | | | | | |
| **FAKI** | **Fak Fak** | **21.70** | **279** | P | P | 08 07 11.4 | +6.2 |
| **FAKI** | **Fak Fak** | **21.70** | **279** | *e* P | **P** | **08 07 03.3** | **-1.9** |
| | comp=Z,60nm,1.6s | | | | | | |
| **KDU** | **Kakadu** | **21.79** | **252** | P | **P** | **08 07 05.5** | **-0.7** |
| | baz=22,SNR=9.6 | | | | | | |
| **QLP** | **Quilpie** | **21.83** | **203** | P | **P** | **08 07 06.1** | **-0.3** |
| | baz=22,SNR=19 | | | | | | |
| **GUMO** | **Guam** | **21.90** | **336** | P | **P** | **08 07 07.0** | **-0.3** |
| | comp=Z,92nm,0.9s,baz=171,slow=10,SNR=6.1 | | | | | | |
| **GUMO** | **Guam** | **21.90** | **336** | *e* P | **P** | **08 07 07.2** | **-0.1** |
| GUMO | | | | pmax | pmax | | |
| | comp=Z,111nm,0.9s | | | | | | |
| **GUMO** | **Guam** | **21.90** | **336** | *e* P | **P** | **08 07 07.2** | **-0.1** |
| | comp=Z,111nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.00** | **233** | *d e* P | **P** | **08 07 17.5** | **-1.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,82nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **23.00** | **233** | P | **P** | **08 07 17.6** | **-1.5** |
| | comp=Z,228nm,0.9s,SNR=29 | | | | | | |
| **WRAB** | **Tennant Creek** | **23.00** | **233** | *e* P | **P** | **08 07 18.0** | **-1.1** |
| | comp=Z,38nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.02** | **233** | P | **P** | **08 07 17.6** | **-1.6** |
| | comp=Z,8.6nm,0.4s,baz=60,slow=9.3,SNR=54 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 11 07.1** | **-0.7** |
| | comp=Z,3.3nm,0.7s,baz=54,slow=2.0,SNR=6.1 | | | | | | |
| WRA | | | | S | **S** | **08 11 27.6** | **+0.9** |
| | comp=Z,3.0nm,1.1s,baz=58,slow=16,SNR=4.0 | | | | | | |
| WRA | | | | LR | LR | 08 16 26.0 | |
| | comp=Z,193nm,20.3s,baz=50,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.02** | **233** | *i* P | **P** | **08 07 18.1** | **-1.1** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.4s | | | | | | |
| **MTN** | **Manton Dam** | **23.10** | **253** | P | **P** | **08 07 20.0** | **0.0** |
| | baz=23,SNR=6.1 | | | | | | |
| **MTN** | **Manton Dam** | **23.10** | **253** | *e* P | **P** | **08 07 21.6** | **+1.6** |
| | comp=Z,39nm,1.0s | | | | | | |
| **SIJI** | **Sorong** | **23.11** | **283** | P | **P** | **08 07 18.9** | **-1.2** |
| | comp=Z,30nm,1.0s,baz=72,slow=6.3,SNR=13 | | | | | | |
| **SWI** | **Sorong** | **23.11** | **283** | P | **P** | **08 07 22.5** | **+2.3** |
| | comp=Z,42nm,1.2s,comp=Z,1μm | | | | | | |
| **ARMA** | **Armidale** | **23.77** | **184** | P | **P** | **08 07 25.1** | **-1.3** |
| | baz=24,SNR=7.4 | | | | | | |
| **ARMA** | **Armidale** | **23.77** | **184** | *e* P | **P** | **08 07 27.2** | **+0.7** |
| | comp=Z,37nm,1.2s | | | | | | |
| **AS17** | **Alice Springs** | **25.44** | **226** | P | **P** | **08 07 41.2** | **-0.5** |
| | baz=26 | | | | | | |
| **AS01** | **Alice Springs** | **25.47** | **226** | *e* P | **P** | **08 07 41.0** | **-0.9** |
| **ASAR** | **Alice Springs** | **25.51** | **226** | P | **P** | **08 07 41.5** | **-0.7** |
| | comp=Z,21nm,0.8s,baz=59,slow=8.9,SNR=152 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 11 13.7** | **+0.5** |
| | comp=Z,1.7nm,0.8s,baz=66,slow=3.3,SNR=4.2 | | | | | | |
| ASAR | | | | S | **S** | **08 12 05.0** | **-1.7** |
| | comp=Z,0.5nm,0.7s,baz=41,slow=18,SNR=2.3 | | | | | | |
| ASAR | | | | LR | LR | 08 17 03.5 | |
| | comp=Z,247nm,21.6s,baz=112,slow=35 | | | | | | |
| **AAI** | **Ambon** | **25.58** | **275** | P | **P** | **08 07 46.3** | **+3.3** |
| | comp=Z,67nm,1.0s,comp=Z,1μm | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.92** | **196** | P | **P** | **08 07 47.3** | **+1.4** |
| | baz=26,SNR=22 | | | | | | |
| **KNRA** | **Kununurra** | **26.07** | **248** | P | **P** | **08 07 47.9** | **+0.6** |
| | baz=26,SNR=5.6 | | | | | | |
| **MSVF** | **Nonsavu** | **26.19** | **117** | *e* P | **P** | **08 07 49.7** | **+1.2** |
| MSVF | | | | pmax | pmax | | |
| | comp=Z,50nm,1.1s | | | | | | |
| **MSVF** | **Nonsavu** | **26.19** | **117** | P | **P** | **08 07 49.8** | **+1.2** |
| | comp=Z,242nm,1.0s,SNR=7.8 | | | | | | |
| **MSVF** | **Nonsavu** | **26.19** | **117** | *e* P | **P** | **08 07 49.7** | **+1.2** |
| | comp=Z,50nm,1.1s | | | | | | |
| **LBMI** | **Labuha** | **26.82** | **282** | P | P | 08 08 01.7 | +7.5 |
| **SANI** | **Sanana** | **28.01** | **278** | P | P | 08 08 12.4 | +7.5 |
| **H11S3** | **WAKE ISLAND Hy** | **28.03** | **27** | T | T | 08 36 33.4 | |
| | baz=208,slow=73,SNR=6.6 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.03** | **27** | T | T | 08 36 28.2 | |
| | baz=208,slow=73,SNR=5.4 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.05** | **27** | T | T | 08 36 36.0 | |
| | baz=208,slow=73,SNR=4.5 | | | | | | |
| **BATI** | **Baumata** | **29.94** | **261** | LR | LR | 08 22 09.6 | |
| | comp=Z,240nm,21.2s,baz=130,slow=40 | | | | | | |
| **WRKA** | **Warakurna** | **30.46** | **230** | P | **P** | **08 08 25.2** | **-1.3** |
| | baz=31,SNR=66 | | | | | | |
| **BBOO** | **Buckleboo** | **30.82** | **210** | P | **P** | **08 08 31.1** | **+1.5** |
| | baz=31,SNR=6.6 | | | | | | |
| **BBOO** | **Buckleboo** | **30.82** | **210** | *e* P | **P** | **08 08 30.9** | **+1.4** |
| | comp=Z,17nm,1.2s | | | | | | |
| **LUWI** | **Luwuk** | **31.35** | **279** | P | P | 08 08 39.5 | +5.0 |
| **LUWI** | **Luwuk** | **31.35** | **279** | *e* P | **P** | **08 08 34.8** | **+0.3** |
| **APSI** | **Ampana** | **32.48** | **279** | P | P | 08 08 49.0 | +4.6 |
| **KAPI** | **Kappang** | **33.82** | **271** | *e* P | **P** | **08 08 56.0** | **-0.2** |
| | comp=Z,37nm,1.0s | | | | | | |
| **AFI** | **Afiamalu** | **34.69** | **105** | P | **P** | **08 09 04.5** | **+0.8** |
| | comp=Z,41nm,0.9s,baz=299,slow=8.7,SNR=4.2 | | | | | | |
| **URZ** | **Urewera** | **37.98** | **149** | P | **P** | **08 09 31.4** | **0.0** |
| | comp=Z,22nm,1.1s,baz=353,slow=1.1,SNR=6.2 | | | | | | |
| URZ | | | | LR | LR | 08 23 19.3 | |
| | comp=Z,203nm,18.1s,baz=182,slow=33 | | | | | | |
| **MEEK** | **Meekatharra** | **38.89** | **235** | P | **P** | **08 09 38.3** | **-0.9** |
| | baz=39,SNR=12 | | | | | | |
| **KLBR** | **Kellerberrin** | **41.78** | **229** | P | **P** | **08 10 02.0** | **-1.1** |
| | baz=42,SNR=4.5 | | | | | | |
| **MORW** | **Morawa** | **41.97** | **233** | P | **P** | **08 10 04.1** | **-0.5** |
| | baz=42,SNR=11 | | | | | | |
| **RKGY** | **Rocky Gully** | **43.84** | **225** | P | **P** | **08 10 20.4** | **+0.6** |
| | baz=44 | | | | | | |
| **JNU** | **Nakatsue** | **45.07** | **333** | P | **P** | **08 10 28.9** | **-0.7** |
| | comp=Z,37nm,1.0s,baz=168,slow=2.4,SNR=8.4 | | | | | | |
| **JNU** | **Nakatsue** | **45.07** | **333** | *e* P | **P** | **08 10 29.1** | **-0.5** |
| **MJAR** | **Matsushiro Arr** | **45.31** | **342** | P | **P** | **08 10 29.1** | **-2.3** |
| | comp=Z,8.0nm,0.9s,baz=166,slow=8.8,SNR=13 | | | | | | |
| MJAR | | | | PcP | **PcP** | **08 12 10.2** | **-0.3** |
| | comp=Z,4.7nm,0.9s,baz=162,slow=3.8,SNR=6.8 | | | | | | |
| MJAR | | | | LR | LR | 08 28 42.4 | |
| | comp=Z,26nm,19.8s,baz=200,slow=35 | | | | | | |
| **MAJO** | **Matsushiro** | **45.31** | **342** | *c e* P | **P** | **08 10 29.3** | **-2.2** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,74nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **45.31** | **342** | *e* P | **P** | **08 10 29.2** | **-2.2** |
| | comp=Z,12nm,0.9s | | | | | | |
| **MAT** | **Matsushiro** | **45.31** | **342** | P | **P** | **08 10 29.2** | **-2.2** |
| **MDSI** | **Maura Dua** | **49.34** | **270** | P | **P** | **08 11 01.1** | **-2.0** |
| | comp=Z,14nm,1.8s | | | | | | |
| **TJN** | **Taejon** | **49.38** | **332** | *d e* P | **P** | **08 11 02.5** | **-0.5** |
| **KSRS** | **Korea Array** | **50.01** | **333** | P | **P** | **08 11 07.0** | **-0.7** |
| | comp=Z,11nm,1.0s,baz=151,slow=8.8,SNR=25 | | | | | | |
| **KSAR** | **Wonju Array Be** | **50.02** | **333** | P | **P** | **08 11 07.1** | **-0.8** |
| **KSAR** | **Wonju Array Be** | **50.02** | **333** | P | **P** | **08 11 07.0** | **-0.8** |
| **QIZ** | **Qiongzhong** | **50.17** | **301** | P | **P** | **08 11 09.3** | **-0.1** |
| QIZ | | | | S | **S** | **08 18 19.3** | **+1.0** |
| QIZ | | | | PMZ | | | |
| | comp=Z,43nm,2.3s | | | | | | |
| **NJ2** | **Nanjing** | **50.81** | **321** | *e* P | **P** | **08 11 14.6** | **+0.7** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,40nm,0.6s | | | | | | |
| **ASAJ** | **Asahikawa** | **51.47** | **350** | P | **P** | **08 11 19.1** | **+0.5** |
| | comp=Z,28nm,1.0s,baz=236,slow=14,SNR=4.5 | | | | | | |
| **WHN** | **Wuhan** | **52.78** | **317** | P | **P** | **08 11 29.3** | **+0.6** |
| **MSHR** | **Mys Shultsa** | **53.09** | **339** | ⇑ *e* P | **P** | **08 11 30.5** | **-0.2** |
| **VLA** | **Vladivostok** | **53.31** | **340** | *d e* P | **P** | **08 11 32.4** | **+0.1** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,48nm,1.1s | | | | | | |
| **PPI** | **Padang Panjang** | **53.54** | **274** | P | P | 08 11 37.9 | +3.4 |
| **USRK** | **Ussuriysk Ar.** | **54.24** | **341** | P | **P** | **08 11 38.5** | **-0.6** |
| | comp=Z,17nm,0.8s,baz=162,slow=8.1,SNR=28 | | | | | | |
| **TIA** | **Tai'an** | **54.70** | **324** | ⇑ P | **P** | **08 11 42.8** | **+0.2** |
| TIA | | | | PMZ | | | |
| | comp=Z,30nm,1.2s | | | | | | |
| **MDJ** | **Mudanjiang** | **55.42** | **339** | P | **P** | **08 11 47.5** | **-0.1** |
| MDJ | | | | S | **S** | **08 19 24.8** | **-4.2** |
| MDJ | | | | PMZ | | | |
| | comp=Z,26nm,1.2s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,97nm,3.6s | | | | | | |
| **NONG** | **Nongkai** | **55.59** | **297** | P | **P** | **08 11 50.8** | **+1.4** |
| | comp=Z,25nm,1.4s | | | | | | |
| **GYA** | **Guiyang** | **56.21** | **308** | P | **P** | **08 11 56.0** | **+2.2** |
| GYA | | | | pP | **pP** | **08 12 07.8** | **+1.0** |
| GYA | | | | PP | **PP** | **08 14 03.0** | **+3.5** |
| GYA | | | | S | **S** | **08 19 41.3** | **+0.8** |
| GYA | | | | sS | **sS** | **08 20 01.4** | **-0.7** |
| GYA | | | | SS | **SS** | **08 23 28.9** | **+1.1** |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,120nm,5.4s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,440nm,18.8s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,460nm,19.0s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,380nm,18.2s | | | | | | |
| **CN2** | **Changchun** | **56.30** | **336** | ⇑ P | **P** | **08 11 54.1** | **+0.1** |
| CN2 | | | | *e* sP | **sP** | **08 12 11.8** | **-0.5** |
| CN2 | | | | PMZ | | | |
| | comp=Z,20nm,0.9s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,200nm,5.0s | | | | | | |
| **PPT** | **Papeete** | **56.33** | **107** | LR | LR | 08 31 16.9 | |
| | comp=Z,39nm,21.0s,baz=288,slow=31 | | | | | | |
| **PPT2** | **Papeete2** | **56.33** | **107** | *e* LR | LR | 08 28 28.8 | |
| | comp=Z,83nm,27.6s | | | | | | |
| **LOEI** | **Loei** | **57.07** | **296** | P | **P** | **08 11 58.0** | **-2.0** |
| | comp=Z,16nm,1.1s,comp=Z,2μm | | | | | | |
| **HABR** | **Khabarovsk** | **57.24** | **345** | *e* P | **P** | **08 11 57.9** | **-2.6** |
| HABR | | | | *e* | | 08 12 52.4 | |
| HABR | | | | *e* | | 08 14 04.8 | |
| HABR | | | | *e* S | **S** | **08 19 53.4** | **+0.4** |
| HABR | | | | *e** SS | sS | 08 19 59.4 | -15 |
| HABR | | | | *e* | | 08 21 47.3 | |
| HABR | | | | *e* SS | **SS** | **08 23 44.0** | **+1.0** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,126nm,2.5s | | | | | | |
| **UTTA** | **Uttaradit** | **57.79** | **296** | P | **P** | **08 12 05.9** | **+0.9** |
| | comp=Z,9.7nm,0.9s,comp=Z,86nm | | | | | | |
| **BJI** | **Beijing** | **57.89** | **326** | P | **P** | **08 12 05.4** | **+0.2** |
| BJI | | | | PMZ | | | |
| | comp=Z,10.0nm,1.4s | | | | | | |
| **SRDT** | **SRDT** | **58.02** | **291** | P | **P** | **08 12 08.1** | **+1.5** |
| | comp=Z,104nm,1.0s | | | | | | |
| **NANT** | **Nan** | **58.02** | **297** | P | **P** | **08 12 07.3** | **+0.7** |
| | comp=Z,10nm,1.1s | | | | | | |
| **UTHA** | **Uthaitani** | **58.08** | **293** | P | **P** | **08 12 07.8** | **+0.7** |
| | comp=Z,12nm,0.9s,comp=Z,121nm | | | | | | |
| **KMI** | **Kunming** | **58.75** | **305** | P | **P** | **08 12 12.0** | **+0.1** |
| KMI | | | | pP | **pP** | **08 12 25.8** | **+0.9** |
| KMI | | | | sP | **sP** | **08 12 30.6** | **+0.4** |
| KMI | | | | PP | **PP** | **08 14 25.3** | **+3.0** |
| KMI | | | | S | **S** | **08 20 09.6** | **-4.5** |
| KMI | | | | sS | **sS** | **08 20 34.8** | **-1.0** |
| KMI | | | | ScS | **ScS** | **08 21 57.9** | **-0.7** |
| KMI | | | | SS | **SS** | **08 24 09.4** | **+1.4** |
| KMI | | | | PMZ | | | |
| | comp=Z,20nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,120nm,4.8s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,340nm,5.1s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,270nm,5.1s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,170nm,5.9s | | | | | | |
| **UMPA** | **Umpang Tak** | **58.82** | **293** | P | **P** | **08 12 13.5** | **+1.3** |
| | comp=Z,9.4nm,1.0s,comp=Z,1μm | | | | | | |
| **KLR** | **Kul'dur** | **58.82** | **343** | *e* P | P | 08 12 08.2 | -3.4 |
| KLR | | | | pmax | pmax | | |
| | comp=E,48nm,1.4s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,120nm,1.4s | | | | | | |
| **CRAI** | **Chiangrai** | **58.82** | **298** | P | P | 08 12 05.1 | -7.1 |
| **LAMP** | **Lampang** | **58.88** | **296** | P | **P** | **08 12 13.8** | **+1.2** |
| | comp=Z,13nm,0.9s,comp=Z,91nm | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **59.47** | **296** | P | **P** | **08 12 17.8** | **+1.0** |
| | comp=Z,14nm,0.9s,baz=115,slow=5.1,SNR=49 | | | | | | |
| CMAR | | | | LR | LR | 08 40 10.2 | |
| | comp=Z,27nm,18.1s,baz=145,slow=38 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.58** | **3** | LR | LR | 08 40 35.4 | |
| | comp=Z,25nm,18.0s,baz=158,slow=39 | | | | | | |
| **CHTO** | **Chiang Mai** | **59.59** | **296** | P | **P** | **08 12 18.2** | **+0.7** |
| | comp=Z,113nm,1.2s | | | | | | |
| **CHTO** | **Chiang Mai** | **59.59** | **296** | *e* P | **P** | **08 12 18.2** | **+0.7** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,40nm,1.3s | | | | | | |
| **CHTO** | **Chiang Mai** | **59.59** | **296** | *e* P | **P** | **08 12 18.2** | **+0.7** |
| | comp=Z,40nm,1.3s | | | | | | |
| **CMAI** | **Chiengmai2** | **59.88** | **297** | P | **P** | **08 12 20.7** | **+1.0** |
| | comp=Z,52nm,1.4s,comp=Z,5μm | | | | | | |
| **CD2** | **Chengdu** | **60.60** | **311** | *e* P | **P** | **08 12 24.5** | **+0.2** |
| CD2 | | | | pP | **pP** | **08 12 36.5** | **-0.9** |
| CD2 | | | | PP | **PP** | **08 14 38.4** | **+0.1** |
| CD2 | | | | PcS | **PcS** | **08 17 11.0** | **-0.1** |
| CD2 | | | | S | **S** | **08 20 38.5** | **+1.1** |
| CD2 | | | | sS | **sS** | **08 20 59.0** | **-0.2** |
| CD2 | | | | SS | **SS** | **08 24 38.8** | **+2.2** |
| CD2 | | | | PMZ | | | |
| | comp=Z,60nm,0.7s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,350nm,5.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **61.03** | **324** | *e* P | **P** | **08 12 29.6** | **+2.5** |
| HHC | | | | S | **S** | **08 20 45.5** | **+2.8** |
| HHC | | | | sS | **sS** | **08 21 04.3** | **-0.3** |
| HHC | | | | ScS | **SKKSac** | **08 22 12.6** | **-2.0** |
| HHC | | | | PMZ | | | |
| | comp=Z,45nm,1.4s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,320nm,3.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,270nm,14.9s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,270nm,17.4s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,200nm,17.4s | | | | | | |
| **HIA** | **Hailar** | **63.04** | **336** | *e* P | **P** | **08 12 40.9** | **+0.6** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| **HIA** | **Hailar** | **63.04** | **336** | *e* P | **P** | **08 12 40.9** | **+0.6** |
| | comp=Z,21nm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **63.15** | **316** | ⇑ P | **P** | **08 12 42.8** | **+1.3** |
| LZH | | | | pP | **pP** | **08 12 53.3** | **-1.3** |
| LZH | | | | sP | **sP** | **08 12 58.8** | **-1.1** |
| LZH | | | | *e* S | **S** | **08 21 09.1** | **-0.6** |
| LZH | | | | sS | **sS** | **08 21 28.0** | **-3.7** |
| LZH | | | | SS | **SS** | **08 25 17.0** | **+0.4** |
| LZH | | | | PMZ | | | |
| | comp=Z,42nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,320nm,5.5s | | | | | | |
| **CASY** | **Casey** | **66.58** | **198** | *e* P | **P** | **08 13 02.5** | **-0.5** |
| | comp=Z,16nm,1.3s | | | | | | |
| **CLNS** | **Chul'man** | **67.48** | **343** | *e* P | **P** | **08 13 09.1** | **+0.2** |
| CLNS | | | | pmax | pmax | | |
| | comp=Z,56nm,0.9s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=N,23nm,0.9s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.9s | | | | | | |
| **GTA** | **Gaotai** | **67.59** | **317** | *e* P | **P** | **08 13 10.9** | **+0.8** |
| GTA | | | | pP | **pP** | **08 13 24.5** | **+1.1** |
| GTA | | | | sP | **sP** | **08 13 29.4** | **+0.8** |
| GTA | | | | PcP | **PcP** | **08 13 40.5** | **+3.5** |
| GTA | | | | PcS | | 08 17 43.3 | |
| GTA | | | | PMZ | | | |
| | comp=E,11nm,1.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **68.00** | **328** | *d i* P | **P** | **08 13 13.1** | **+0.6** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.2s | | | | | | |
| **ULN** | **Ulaanbaatar** | **68.00** | **328** | *e* P | **P** | **08 13 13.5** | **+1.0** |
| | comp=Z,28nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **68.33** | **328** | P | **P** | **08 13 15.4** | **+0.8** |
| | comp=Z,20nm,1.0s,baz=132,slow=5.9,SNR=64 | | | | | | |
| SONM | | | | LR | LR | 08 44 09.1 | |
| | comp=Z,27nm,18.9s,baz=97,slow=37 | | | | | | |
| **SEY** | **Seymchan** | **69.34** | **359** | P | **P** | **08 13 19.6** | **-0.7** |
| | comp=Z,6.8nm,1.0s,baz=210,slow=7.0,SNR=3.8 | | | | | | |
| **SEY** | **Seymchan** | **69.34** | **359** | ‖ *e* P | **P** | **08 13 20.1** | **-0.2** |
| **LSA** | **Lhasa** | **70.01** | **305** | P | **P** | **08 13 24.9** | **-0.9** |
| **YAK** | **Yakutsk** | **70.91** | **348** | *e* P | **P** | **08 13 30.6** | **+0.6** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,52nm,1.4s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,12nm,1.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,13nm,1.3s | | | | | | |
| **VNDA** | **Vanda** | **71.01** | **178** | P | **P** | **08 13 30.9** | **+0.5** |
| | comp=N,6.3nm,0.8s,baz=330,slow=6.0,SNR=24 | | | | | | |
| VNDA | | | | LR | LR | 08 40 14.2 | |
| | comp=N,26nm,18.2s,baz=311,slow=32 | | | | | | |
| **VNDA** | **Vanda** | **71.01** | **178** | P | **P** | **08 13 31.0** | **+0.5** |
| **ZAK** | **Zakamensk** | **71.50** | **329** | *e* P | **P** | **08 13 33.3** | **-0.6** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,24nm,1.3s | | | | | | |
| **BOD** | **Bodaibo** | **71.79** | **339** | *e* P | **P** | **08 13 34.9** | **-0.5** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,27nm,1.2s | | | | | | |
| **TLY** | **Talaya** | **72.08** | **330** | P | **P** | **08 13 38.6** | **+1.2** |
| | comp=Z,10nm,1.0s,baz=185,slow=7.5,SNR=6.1 | | | | | | |
| **TLY** | **Talaya** | **72.08** | **330** | *e* P | **P** | **08 13 38.0** | **+0.7** |
| TLY | | | | *e* | | 08 16 26.2 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **TLY** | **Talaya** | **72.08** | **330** | *e* P | **P** | **08 13 38.3** | **+1.0** |
| | comp=Z,22nm,1.4s | | | | | | |
| **TAPN** | **Taplejung** | **72.11** | **301** | *e* P | **P** | **08 13 38.6** | **+0.2** |
| | comp=Z,92nm,1.6s | | | | | | |
| **ODAN** | **Odare** | **72.24** | **301** | *e* P | **P** | **08 13 38.9** | **-0.2** |
| | comp=Z,56nm,1.1s | | | | | | |
| **MIR** | **Mirnyy** | **72.59** | **201** | ⇑ *e* P | P | 08 13 50.0 | +10 |
| MIR | | | | pmax | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **72.94** | **301** | *e* P | **P** | **08 13 42.5** | **-0.8** |
| **CHLP** | **Challavanipeta** | **73.04** | **292** | *e* P | **P** | **08 13 43.8** | **+0.1** |
| **MOY** | **Mondy** | **73.42** | **329** | *e* P | **P** | **08 13 46.0** | **+0.6** |
| **GUN** | **Gumba** | **73.83** | **301** | *e* P | **P** | **08 13 48.7** | **+0.1** |
| | comp=Z,30nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | **74.13** | **301** | *e* P | **P** | **08 13 50.0** | **-0.4** |
| | comp=Z,68nm,1.4s | | | | | | |
| **PKIN** | **Phulchoki** | **74.15** | **301** | *e* P | **P** | **08 13 50.0** | **-0.4** |
| | comp=Z,66nm,1.5s | | | | | | |
| **KKN** | **Kakani** | **74.31** | **301** | *e* P | **P** | **08 13 51.1** | **-0.1** |
| **DMN** | **Daman** | **74.40** | **301** | *e* P | **P** | **08 13 51.9** | **+0.1** |
| | comp=Z,71nm,1.1s | | | | | | |
| **GKN** | **Gorkha** | **74.91** | **301** | *e* P | **P** | **08 13 54.5** | **-0.2** |
| | comp=Z,95nm,1.3s | | | | | | |
| **BILL** | **Bilibino** | **74.99** | **5** | *i* P | **P** | **08 13 53.9** | **-0.2** |
| BILL | | | | *i* | | 08 14 01.9 | |
| BILL | | | | *i* | | 08 14 11.5 | |
| BILL | | | | *i* | | 08 16 43.7 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| **PVM** | **Polavaram** | **75.03** | **290** | *e* P | **P** | **08 13 54.7** | **-0.6** |
| **KOLN** | **Koldanda** | **75.73** | **301** | *e* P | **P** | **08 13 59.1** | **-0.3** |
| | comp=Z,29nm,0.9s | | | | | | |
| **SKHT** | **Srikalahasti** | **76.17** | **286** | *e* P | **P** | **08 14 01.4** | **-0.5** |
| **ADKI** | **Addanki** | **76.31** | **288** | *e* P | **P** | **08 14 01.9** | **-0.7** |
| **HVS** | **Khovu-Aksy** | **77.05** | **326** | ‖ *e* P | **P** | **08 14 07.0** | **+0.8** |
| HVS | | | | pmax | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | |
| **RPR** | **Rampur** | **77.53** | **291** | *e* P | **P** | **08 14 09.1** | **-0.4** |
| **WMQ** | **Urumqi** | **77.68** | **317** | P | **P** | **08 14 10.0** | **+0.1** |
| WMQ | | | | pP | **pP** | **08 14 23.5** | **+0.1** |
| WMQ | | | | sP | **sP** | **08 14 29.6** | **+1.0** |
| WMQ | | | | PP | **PP** | **08 17 08.0** | **+2.3** |
| WMQ | | | | S | **S** | **08 23 57.0** | **-1.6** |
| WMQ | | | | PMZ | | | |
| | comp=Z,15nm,1.0s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,56nm,8.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,59nm,16.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,78nm,16.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,38nm,16.0s | | | | | | |
| **HYB** | **Hyderabad** | **77.94** | **289** | *i* P | **P** | **08 14 10.0** | **-1.9** |
| **HYBB** | **Hyderabad (bro** | **77.94** | **289** | *e* P | **P** | **08 14 11.3** | **-0.6** |
| **URV** | **Uravakonda** | **78.72** | **287** | *e* P | **P** | **08 14 17.5** | **+1.3** |
| **MCK** | **McKinley** | **82.17** | **22** | *e* P | **P** | **08 14 31.5** | **-2.2** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,21nm,1.1s | | | | | | |
| **MCK** | **McKinley** | **82.17** | **22** | *e* P | **P** | **08 14 31.5** | **-2.2** |
| | comp=Z,21nm,1.1s | | | | | | |
| **MKAR** | **Makanchi Array** | **82.27** | **319** | P | **P** | **08 14 34.6** | **0.0** |
| | comp=Z,4.9nm,0.7s,baz=101,slow=6.3,SNR=19 | | | | | | |
| **MKAR** | **Makanchi Array** | **82.27** | **319** | *i* P | **P** | **08 14 35.0** | **+0.4** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **83.15** | **326** | P | **P** | **08 14 38.0** | **-0.9** |
| | comp=Z,5.2nm,0.4s,baz=116,slow=5.1,SNR=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TKM2 | | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.4s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **85.83** | **314** | | P | **P** | **08 14 53.4** | **+0.3** | |
| | SNR=6.9 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **85.83** | **314** | *eP* | P | **P** | **08 14 53.3** | **+0.3** | |
| | comp=Z,26nm,1.4s | | | | | | | | |
| **KZA** | **Kyzart** | **85.89** | **313** | | P | **P** | **08 14 55.3** | **+1.6** | |
| | SNR=9.0 | | | | | | | | |
| **CHMS** | **Chumysh** | **86.45** | **314** | | P | **P** | **08 14 56.6** | **+0.7** | |
| | SNR=5.2 | | | | | | | | |
| **UCH** | **Uchtor** | **86.46** | **313** | | P | **P** | **08 14 57.4** | **+0.9** | |
| | SNR=15 | | | | | | | | |
| **FRU** | **Bishkek** | **86.51** | **314** | *eP* | P | **P** | **08 14 56.0** | **-0.2** | |
| FRU | | | | | pmax | pmax | | | |
| | comp=Z,70nm,1.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | **86.56** | **313** | | P | **P** | **08 14 56.5** | **-0.1** | |
| | comp=Z,4.8nm,0.8s,baz=111,slow=5.9,SNR=9.4 | | | | | | | | |
| **AAK** | **Ala-Archa** | **86.56** | **313** | *diP* | | **P** | **08 14 56.7** | **+0.1** | |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.1s | | | | | | | | |
| **AAK** | **Ala-Archa** | **86.56** | **313** | | P | **P** | **08 14 57.2** | **+0.6** | |
| | comp=Z,55nm,1.0s,SNR=5.7 | | | | | | | | |
| **AAK** | **Ala-Archa** | **86.56** | **313** | | P | **P** | **08 14 57.5** | **+0.9** | |
| | SNR=6.7 | | | | | | | | |
| **AAK** | **Ala-Archa** | **86.56** | **313** | *eP* | | **P** | **08 14 56.8** | **+0.1** | |
| | comp=Z,32nm,1.6s | | | | | | | | |
| **USP** | **Ospenovka** | **86.69** | **314** | | P | **P** | **08 14 57.7** | **+0.6** | |
| | SNR=6.4 | | | | | | | | |
| **AML** | **Almayashu** | **87.04** | **313** | | P | **P** | **08 15 00.5** | **+1.2** | |
| | SNR=8.3 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **87.08** | **313** | *eP* | | **P** | **08 14 59.0** | **-0.1** | |
| EKS2 | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **87.08** | **313** | | P | **P** | **08 14 60.0** | **+0.9** | |
| | SNR=6.4 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **87.08** | **313** | *eP* | | **P** | **08 14 59.0** | **-0.1** | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **O03D** | **Paynes Creek** | **90.03** | **50** | | P | **P** | **08 15 13.2** | **+0.2** | |
| | baz=90 | | | | | | | | |
| **SMMC** | **Simmler** | **90.75** | **55** | | P | **P** | **08 15 16.3** | **-0.1** | |
| | baz=91 | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **90.88** | **47** | | P | **P** | **08 15 16.7** | **-0.4** | |
| | baz=91 | | | | | | | | |
| **G05D** | **Wamic, OR** | **91.10** | **45** | | P | **P** | **08 15 16.9** | **-0.9** | |
| | baz=91 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **91.22** | **323** | | P | **P** | **08 15 16.9** | **-1.2** | |
| | comp=Z,4.9nm,0.8s,baz=106,slow=4.8,SNR=13 | | | | | | | | |
| **BRVK** | **Borovoye** | **91.29** | **323** | *deP* | | **P** | **08 15 17.0** | **-1.5** | |
| BRVK | | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **BRVK** | **Borovoye** | **91.29** | **323** | *eP* | | **P** | **08 15 17.1** | **-1.5** | |
| | comp=Z,9.2nm,1.1s | | | | | | | | |
| **DECC** | **Green Verdugo** | **91.98** | **56** | | P | **P** | **08 15 22.8** | **+0.6** | |
| | baz=92 | | | | | | | | |
| **MWC** | **Mount Wilson** | **92.20** | **56** | *eP* | | **P** | **08 15 23.7** | **+0.3** | |
| MWC | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **MWC** | **Mount Wilson** | **92.20** | **56** | *eP* | | **P** | **08 15 23.7** | **+0.3** | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **92.33** | **55** | | P | **P** | **08 15 23.5** | **-0.3** | |
| | baz=92 | | | | | | | | |
| **CWC** | **Cottonwood Cre** | **92.43** | **54** | | P | **P** | **08 15 23.8** | **-0.6** | |
| | baz=92 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.47** | **52** | | P | **P** | **08 15 24.3** | **-0.3** | |
| | comp=Z,3.9nm,0.9s,baz=257,slow=6.4,SNR=24 | | | | | | | | |
| NVAR | | | | | LR | LR | 08 56 08.0 | | |
| | comp=Z,48nm,18.1s,baz=262,slow=35 | | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **92.53** | **56** | | P | **P** | **08 15 24.8** | **-0.1** | |
| | baz=93 | | | | | | | | |
| **109C** | **Camp Elliot, M** | **92.85** | **57** | | P | **P** | **08 15 27.0** | **+0.8** | |
| | baz=93 | | | | | | | | |
| **MPMC** | **Manual Prospec** | **92.86** | **54** | | P | **P** | **08 15 25.6** | **-0.8** | |
| | baz=93 | | | | | | | | |
| **BAR** | **Barrett** | **93.19** | **58** | *eP* | | **P** | **08 15 28.6** | **+0.7** | |
| | comp=Z,6.7nm,1.2s | | | | | | | | |
| **FURC** | **Furnace Creek,** | **93.41** | **54** | | P | **P** | **08 15 27.9** | **-0.7** | |
| | baz=94 | | | | | | | | |
| **MONP** | **Monument Peak** | **93.42** | **57** | | P | **P** | **08 15 29.6** | **+0.5** | |
| | baz=94 | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **93.46** | **57** | *eP* | | **P** | **08 15 29.0** | **-0.2** | |
| PFO | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.3s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **93.46** | **57** | *eP* | | **P** | **08 15 29.0** | **-0.2** | |
| | comp=Z,5.6nm,1.3s | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **93.88** | **56** | | P | **P** | **08 15 31.4** | **+0.3** | |
| | baz=94 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **93.95** | **53** | | P | **P** | **08 15 31.4** | **+0.1** | |
| | baz=94 | | | | | | | | |
| **GMRC** | **Granite Mounta** | **94.23** | **56** | | P | **P** | **08 15 33.2** | **+0.6** | |
| | baz=94 | | | | | | | | |
| **BC3** | **Big Chuckawall** | **94.30** | **57** | | P | **P** | **08 15 33.6** | **+0.6** | |
| | baz=94 | | | | | | | | |
| **NEW** | **Newport** | **94.31** | **42** | | P | **P** | **08 15 31.1** | **-1.6** | |
| | baz=94 | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **94.59** | **52** | | P | **P** | **08 15 34.3** | **0.0** | |
| | baz=95 | | | | | | | | |
| **IRM** | **Iron Mountain** | **94.59** | **56** | | P | **P** | **08 15 35.3** | **+1.1** | |
| | baz=95 | | | | | | | | |
| **GLA** | **Glamis** | **94.77** | **57** | | P | **P** | **08 15 36.6** | **+1.5** | |
| | baz=95 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **97.42** | **319** | *eP* | | **P** | **08 15 46.0** | **-0.7** | |
| | comp=Z,0.2nm,0.3s | | | | | | | | |
| **WUAZ** | **Wupatki** | **97.78** | **55** | | P | P | 08 15 45.4 | -3.4 | |
| | comp=Z,2.2nm,1.0s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **97.93** | **45** | | P | **P** | **08 15 48.7** | **-0.6** | |
| | baz=98 | | | | | | | | |
| **GEYT** | **Alibeck** | **98.43** | **307** | | LR | LR | 09 01 28.6 | | |
| | comp=Z,21nm,21.0s,baz=175,slow=36 | | | | | | | | |
| **SNAA** | **Sanae** | **100.37** | **187** | | P | **Pdif** | **08 15 58.9** | **-0.7** | |
| **SNAA** | **Sanae** | **100.37** | **187** | *eP* | | **Pdif** | **08 15 59.2** | **-0.4** | |
| SNAA | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.3s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **101.61** | **186** | | P | **Pdif** | **08 16 06.2** | **+1.3** | |
| **LAO** | **LASA Array** | **101.67** | **44** | | P | **Pdif** | **08 16 03.7** | **-2.1** | |
| | baz=102 | | | | | | | | |
| **N23A** | **Red Feather La** | **102.10** | **50** | | P | **Pdif** | **08 16 08.0** | **-0.2** | |
| | baz=102 | | | | | | | | |
| **T25A** | **Trinidad** | **103.41** | **54** | | P | **Pdif** | **08 16 13.2** | **-0.8** | |
| | baz=103 | | | | | | | | |
| **APA** | **Apatity** | **107.33** | **340** | *iP* | | **Pdif** | **08 16 28.8** | **-1.6** | |
| APA | | | | *i* | | | 08 20 59.0 | | |
| **AKASG** | **Malin Array Be** | **116.48** | **324** | | PKP | **PKPdf** | **08 20 56.2** | **-0.5** | |
| | comp=Z,1.4nm,0.5s,baz=62,slow=2.2,SNR=7.9 | | | | | | | | |
| **KIEV** | **Kiev** | **116.49** | **324** | *iP* | PKIKP | **PKPdf** | **08 20 56.2** | **-0.6** | |
| **BRTR** | **Keskin Array B** | **117.17** | **311** | | PKP | **PKPdf** | **08 20 57.5** | **-1.2** | |
| | comp=Z,0.5nm,0.6s,baz=7.6,slow=1.9,SNR=4.2 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **118.91** | **340** | | PKP | **PKPdf** | **08 21 01.1** | **-0.1** | |
| | comp=Z,1.4nm,0.8s,baz=13,slow=4.5,SNR=3.7 | | | | | | | | |
| **BOSA** | **Boshof** | **119.27** | **232** | | PKP | **PKPdf** | **08 21 02.8** | **-0.2** | |
| | comp=Z,2.9nm,0.8s,baz=11,slow=2.4,SNR=3.9 | | | | | | | | |
| **BRG** | **Berggiesshubel** | **124.68** | **330** | | P | **PKPdf** | **08 21 12.8** | **+0.3** | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **124.68** | **330** | | PKIKP | **PKPdf** | **08 21 12.8** | **+0.3** | |
| BRG | | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **125.94** | **329** | *e* | PKIKP | **PKPdf** | **08 21 15.4** | **+0.3** | |
| **KHC** | **Kasperske Hory** | **125.94** | **329** | *e* | PKPdf | **PKPdf** | **08 21 15.4** | **+0.3** | |
| **GERES** | **GERESS Array B** | **126.06** | **328** | | PKP | **PKPdf** | **08 21 15.0** | **-0.4** | |
| | comp=Z,2.2nm,0.7s,baz=46,slow=3.9,SNR=10 | | | | | | | | |
| **GERES** | **GERESS Array B** | **126.06** | **328** | | PKIKP | **PKPdf** | **08 21 15.0** | **-0.4** | |
| **DAVOX** | **Davos/Dischmat** | **129.36** | **328** | | PKP | **PKPdf** | **08 21 21.7** | **-0.1** | |
| | comp=Z,2.1nm,0.5s,baz=184,slow=7.1,SNR=4.1 | | | | | | | | |
| **ROSC** | **El Rosal** | **132.17** | **89** | | PKP | **PKPdf** | **08 21 29.0** | **+0.6** | |
| | comp=Z,6.4nm,0.5s,baz=101,slow=10,SNR=6.6 | | | | | | | | |
| **LPAZ** | **La Paz** | **132.76** | **119** | | PKP | **PKPdf** | **08 21 30.2** | **+0.5** | |
| | comp=Z,8.5nm,1.1s,baz=285,slow=2.2,SNR=17 | | | | | | | | |
| **CPUP** | **Villa Florida** | **135.52** | **139** | | PKP | **PKPdf** | **08 21 34.8** | **+1.0** | |
| | comp=Z,3.2nm,0.9s,baz=305,slow=5.3,SNR=5.5 | | | | | | | | |
| **SDV** | **Santo Domingo** | **136.01** | **84** | *e* | PKPdf | **PKPdf** | **08 21 35.5** | **+0.2** | |
| **LRS** | **Lares** | **138.82** | **70** | *e* | PKPdf | **PKPdf** | **08 21 40.3** | **+0.1** | |
| **CELP** | **Cerrillos** | **139.11** | **70** | *e* | PKPdf | **PKPdf** | **08 21 40.8** | **+0.2** | |
| **SJG** | **San Juan** | **139.51** | **70** | *e* | PKIKP | **PKPdf** | **08 21 41.4** | **+0.1** | |
| **SJG** | **San Juan** | **139.51** | **70** | *e* | PKPdf | **PKPdf** | **08 21 41.4** | **+0.1** | |
| **SAML** | **Samuel** | **140.11** | **112** | *e* | PKPdf | **PKPdf** | **08 21 42.9** | **+0.3** | |
| **ESDC** | **Sonseca Array** | **141.44** | **332** | | PKP | **PKPdf** | **08 21 45.1** | **+0.8** | |
| | comp=Z,0.2nm,0.3s,baz=29,slow=1.5,SNR=4.1 | | | | | | | | |
| ESDC | | | | | PP | **PP** | **08 24 46.4** | **-0.2** | |
| | comp=Z,0.3nm,0.3s,baz=37,slow=5.3,SNR=4.9 | | | | | | | | |
| **PMRV** | **Marv??o** | **143.15** | **335** | *e* | PKP | **PKPdf** | **08 21 49.5** | **+2.1** | |
| **PMAFR** | **Mafra** | **144.32** | **337** | *e* | PKP | **PKPdf** | **08 21 50.2** | **+0.8** | |
| **PBEJ** | **Beja** | **144.53** | **335** | *e* | PKP | **PKPdf** | **08 21 49.2** | **-0.6** | |
| **PNCL** | **Nicolau / Gran** | **144.74** | **335** | *e* | PKP | **PKPdf** | **08 21 49.8** | **-0.3** | |
| **MESJ** | **Messejana** | **144.84** | **335** | *eP* | | PKPbc | 08 21 49.8 | +0.4 | |
| **MESJ** | **Messejana** | **144.84** | **335** | *e* | PKP | **PKPdf** | **08 21 50.0** | **-0.3** | |
| **PCVE** | **Castro Verde** | **144.94** | **334** | *e* | PKP | **PKPdf** | **08 21 50.9** | **+0.4** | |
| **PVAQ** | **Vaqueiros** | **144.99** | **334** | *e* | PKP | **PKPdf** | **08 21 51.0** | **+0.4** | |
| **PBDV** | **Barranco-do-Ve** | **145.22** | **334** | *e* | PKP | **PKPdf** | **08 21 52.2** | **+1.2** | |
| **PTEO** | **Sao Teotonio** | **145.30** | **335** | *e* | PKP | **PKPdf** | **08 21 52.0** | **+0.9** | |
| **TAM** | **Tamanrasset** | **145.40** | **301** | *e* | PKIKP | **PKPab** | **08 21 52.6** | **+0.5** | |
| **TAM** | **Tamanrasset** | **145.40** | **301** | *e* | PKPbc | **PKPab** | **08 21 52.6** | **+0.5** | |
| **MORF** | **Marmelete** | **145.47** | **335** | *e* | P | **PKPab** | **08 21 52.1** | **+0.3** | |
| **MORF** | **Marmelete** | **145.47** | **335** | *e* | PKP | **PKPab** | **08 21 52.3** | **+0.5** | |
| **PFVI** | **Vila Bisbo** | **145.69** | **335** | *e* | PKP | **PKPab** | **08 21 53.0** | **+0.5** | |
| **BDFB** | **Brasilia** | **149.15** | **136** | | PKP | **PKPdf** | **08 21 59.0** | **+0.7** | |
| | comp=Z,14nm,0.8s,baz=213,slow=2.5,SNR=7.1 | | | | | | | | |
| BDFB | | | | | PKPbc | **PKPbc** | **08 22 02.4** | **-0.1** | |
| | comp=Z,10nm,0.8s,baz=196,slow=7.6,SNR=7.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.70** | **285** | | PKPbc | **PKPbc** | **08 22 07.9** | **-0.5** | |
| | comp=Z,26nm,0.7s,baz=68,slow=2.2,SNR=91 | | | | | | | | |

*IDC* ***18*** *08:04:03.2± 1.0, 13.˚50N× 124.˚61E, h0km, mb3.9/8, mb1 4.0/8, mb1mx3.8/54, mbtmp3.9/8, MS3.2/2, Ms1 3.3/2, ms1mx2.7/43, Error ellipse: s-maj=44.3km s-min=17.5km az=70.0*

*ISCJB* ***18*** *08:04:05.3± 1.4, 13.˚71N± 0.˚05× 124.˚71E± 0.˚06, h23km± 9km, mb3.9/8, MS3.0/1, Error ellipse: s-maj=10.7km s-min=6.7km az=150.6*

*MAN* ***18*** *08:04:06, 13.˚60N× 124.˚60E, h12km, mb4.8, ML3.8, MS3.8*

**ISC 18 08:04:05.6±2.0, 13.˚71N± 0.˚06× 124.˚67E± 0.˚07, h14km± 11km, n25, σ1°55/24, mb4.0/8, 1C-5D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PVCP** | **Virac** | **0.52** | **257** | *i* | *iP* | | **Pg** | **08 04 15.9** | **+0.1** |
| PVCP | | | | *i* | S | | **Sg** | **08 04 21.9** | **-0.8** |
| **CNP** | **Catarman** | **1.19** | **180** | *e* | P | | **Pn** | **08 04 27.2** | **-0.6** |
| CNP | | | | *e* | S | | **Sb** | **08 04 43.6** | **+0.4** |
| **AUQP** | **San Andres** | **1.98** | **259** | *e* | P | | **Pb** | **08 04 41.0** | **-0.4** |
| **GQP** | **Guinayangan** | **2.17** | **275** | *e* | P | | **Pn** | **08 04 41.7** | **+0.4** |
| GQP | | | | *e* | S | | **Sn** | **08 05 08.7** | **+0.7** |
| **PLP** | **Palo** | **2.55** | **173** | *e* | P | | **Pn** | **08 04 46.7** | **+0.2** |
| PLP | | | | *i* | S | | **Sn** | **08 05 16.2** | **-1.1** |
| **RCP** | **Roxas** | **2.85** | **222** | *e* | P | | **Pn** | **08 04 51.4** | **+0.8** |
| RCP | | | | *e* | S | | **Sn** | **08 05 24.9** | **+0.2** |
| **OTRP** | **Odiongan** | **2.91** | **243** | *e* | P | | **Pn** | **08 04 51.6** | **+0.2** |
| **LQP** | **Lukban** | **3.07** | **278** | *e* | P | | **Pb** | **08 05 00.6** | **+0.5** |
| **SJMP** | **San Jose** | **3.68** | **251** | *e* | P | | **Pn** | **08 05 04.2** | **+2.2** |
| **PCPH** | **Palayan** | **3.92** | **298** | *e* | P | | **Pn** | **08 05 04.3** | **-1.0** |
| PCPH | | | | *e* | S | | **Sn** | **08 05 46.4** | **-4.8** |
| **DAV** | **Davao City (W)** | **6.66** | **172** | | LR | | LR | 08 09 02.6 | |
| | comp=Z,233nm,18.7s,baz=316,slow=46 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.16** | **284** | | P | | **P** | **08 09 29.9** | **-0.7** |
| | 1.1nm,0.3s,baz=91,slow=8.4,SNR=4.7 | | | | | | | | |
| CMAR | | | | | LR | | LR | 08 19 42.0 | |
| | comp=Z,46nm,18.8s,baz=132,slow=37 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **31.02** | **10** | | P | | **P** | **08 10 24.2** | **+1.4** |
| | 1.5nm,0.6s,baz=202,slow=8.6,SNR=5.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.77** | **164** | | P | | **P** | **08 10 54.3** | **-1.5** |
| | 0.6nm,0.6s,baz=342,slow=7.9,SNR=2.9 | | | | | | | | |
| **SONM** | **Songino Array** | **37.27** | **340** | | P | | **P** | **08 11 18.4** | **+1.3** |
| | 0.8nm,0.6s,baz=156,slow=12,SNR=4.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **38.23** | **166** | | P | | **P** | **08 11 23.1** | **-2.2** |
| | 0.9nm,0.3s,baz=343,slow=7.8,SNR=9.9 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.58** | **78** | | T | | T | 08 55 20.5 | |
| | baz=269,slow=75,SNR=137 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.59** | **78** | | T | | T | 08 55 09.4 | |
| | baz=269,slow=75,SNR=74 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.60** | **78** | | T | | T | 08 55 09.8 | |
| | baz=269,slow=75,SNR=114 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.80** | **76** | | T | | T | 08 55 31.5 | |
| | baz=268,slow=74,SNR=132 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.80** | **76** | | T | | T | 08 55 27.0 | |
| | baz=268,slow=74,SNR=80 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.81** | **76** | | T | | T | 08 55 32.9 | |
| | baz=268,slow=74,SNR=94 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.37** | **322** | | P | | **P** | **08 12 48.1** | **+1.1** |
| | 1.3nm,0.7s,baz=118,slow=9.8,SNR=10 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.88** | **331** | | P | | **P** | **08 13 05.9** | **0.0** |
| | 0.8nm,0.5s,baz=136,slow=8.9,SNR=2.5 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **57.97** | **325** | | P | | **P** | **08 13 59.2** | **+1.6** |
| | 1.0nm,0.5s,baz=98,slow=6.5,SNR=4.8 | | | | | | | | |

*ISCJB* ***18*** *08:05:10.7± 0.5, 38.˚41N± 0.˚04× 56.˚03E± 0.˚06, h10km, Error ellipse: s-maj=6.8km s-min=6.2km az=149.6*

*IDC* ***18*** *08:05:10.8± 1.8, 38.˚07N× 55.˚99E, h0km, mb3.1/1, mb1 3.8/3, mb1mx3.3/52, mbtmp3.6/3, ML3.5/2, Error ellipse: s-maj=20.5km s-min=12.1km az=26.0*

*CSEM* ***18*** *08:05:12.8± 0.3, 38.˚24N× 56.˚03E, h10km, ML3.8, Error ellipse: s-maj=9.0km s-min=8.3km az=162.0*

*TEH* ***18*** *08:05:16.5, 37.˚92N× 56.˚06E, h12km, ML3.8*

*NNC* ***18*** *08:05:21.5± 3.1, 38.˚92N× 56.˚60E, h0km, mb3.7, Error ellipse: s-maj=27.5km s-min=15.6km az=40.0*

**ISC 18 08:05:12.8±0.8, 38.˚34N± 0.˚06× 56.˚04E± 0.˚05, h10km, n33, σ1°54/34, 3C-3D, Iran-Turkmenistan border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ISHV** | **Shirvan** | **1.54** | **121** | *e* | Pn | | Pn | 08 05 37.1 | -3.5 |
| **GEYT** | **Alibeck** | **1.69** | **103** | | Pg | | **Pn** | **08 05 39.9** | **-2.6** |
| | 130nm,0.3s,baz=279,slow=19,SNR=214 | | | | | | | | |
| GEYT | | | | | Lg | | Lg | 08 06 03.5 | |
| | 59nm,0.3s,baz=268,slow=39,SNR=13 | | | | | | | | |
| **ISFR** | **Sfrayin** | **2.02** | **129** | *e* | Sg | | **Sn** | **08 06 11.7** | **-0.9** |
| ISFR | | | | *e* | | | | 08 06 20.9 | |
| | comp=Z,14μm,0.2s | | | | | | | | |
| **ISFR** | **Sfrayin** | **2.02** | **129** | *e* | Sg | | **Sn** | **08 06 11.7** | **-0.9** |
| **IEMG** | **Emamgholi** | **2.27** | **113** | *e* | Pn | | **Pn** | **08 05 49.0** | **-1.7** |
| IEMG | | | | *e* | | | | 08 06 28.5 | |
| | comp=Z,5μm,0.2s | | | | | | | | |
| **IEMG** | **Emamgholi** | **2.27** | **113** | *e* | Pn | | **Pn** | **08 05 49.0** | **-1.7** |
| **SHRO** | **Shahrood** | **2.34** | **181** | *e* | Pn | | **Pn** | **08 05 48.9** | **-2.7** |
| **IKRD** | **Kardeh** | **2.51** | **128** | *e* | Pn | | Pg | 08 06 03.7 | +2.7 |
| IKRD | | | | *e* | | | | 08 06 56.6 | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **IKRD** | **Kardeh** | **2.51** | **128** | *e* | Pn | | Pg | 08 06 03.7 | +2.7 |
| **IGLO** | **Ghaloghah** | **2.54** | **224** | *e* | Pn | | **Pn** | **08 05 54.4** | **+0.1** |
| IGLO | | | | *e* | | | | 08 06 39.6 | |
| | comp=Z,11μm,0.2s | | | | | | | | |
| **IAKL** | **Akhelmad** | **2.77** | **128** | *e* | Pn | | **Pn** | **08 05 57.4** | **-0.2** |
| IAKL | | | | *e* | | | | 08 06 44.2 | |
| | comp=Z,2μm,0.2s | | | | | | | | |
| **IKIA** | **Kiasar** | **2.84** | **222** | *e* | Pn | | **Pn** | **08 05 58.0** | **-0.4** |
| IKIA | | | | *e* | | | | 08 06 45.1 | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **IKIA** | **Kiasar** | **2.84** | **222** | *e* | Pn | | **Pn** | **08 05 58.0** | **-0.4** |
| **IPAY** | **Payeh** | **3.02** | **128** | *e* | Pn | | **Pn** | **08 06 01.2** | **+0.3** |
| IPAY | | | | *e* | | | | 08 06 46.4 | |
| | comp=Z,3μm,0.3s | | | | | | | | |
| **IPAY** | **Payeh** | **3.02** | **128** | *e* | Pn | | **Pn** | **08 06 01.2** | **+0.3** |
| **ISRO** | **Mashad** | **3.41** | **125** | *e* | Pn | | **Pn** | **08 06 06.4** | **+0.3** |
| **ISRO** | **Mashad** | **3.41** | **125** | *e* | Pn | | **Pn** | **08 06 06.4** | **+0.3** |
| **IMOG** | **Moghan** | **3.45** | **129** | *e* | Pn | | **Pn** | **08 06 05.9** | **-1.0** |
| IMOG | | | | *e* | | | | 08 07 06.6 | |
| | comp=Z,1μm,0.3s | | | | | | | | |
| **IMOG** | **Moghan** | **3.45** | **129** | *e* | Pn | | **Pn** | **08 06 05.9** | **-1.0** |
| **IPRN** | **Peran** | **3.62** | **236** | *e* | | | | 08 06 54.0 | |
| | comp=Z,4μm,0.2s | | | | | | | | |
| IPRN | | | | | Pn | | **Pn** | **08 06 08.6** | **-0.5** |
| **IMYA** | **Miami** | **3.80** | **120** | *e* | Pn | | **Pn** | **08 06 11.4** | **-0.3** |
| IMYA | | | | *e* | | | | 08 07 28.9 | |
| | comp=Z,960nm,0.3s | | | | | | | | |
| **IMYA** | **Miami** | **3.80** | **120** | *e* | Pn | | **Pn** | **08 06 11.4** | **-0.3** |
| **TABS** | **Tabas** | **4.76** | **169** | *e* | Pn | | **Pn** | **08 06 22.8** | **-2.0** |
| **ZNJK** | **Zanjan** | **6.08** | **256** | *e* | Pn | | **Pn** | **08 06 43.9** | **+0.9** |
| **AB31** | **Akbulak array** | **11.27** | **13** | | Pn | | **Pn** | **08 07 54.3** | **+0.4** |
| | comp=Z,1.1nm,0.8s,baz=199,slow=13,SNR=6.0 | | | | | | | | |
| AB31 | | | | | Sn | | Sn | 08 09 55.5 | -4.3 |
| | comp=Z,0.9nm,0.6s,baz=196,slow=25,SNR=4.4 | | | | | | | | |
| **AB31** | **Akbulak array** | **11.27** | **13** | | Pn | | **Pn** | **08 07 54.3** | **+0.4** |
| | comp=Z,1.1nm,0.8s,baz=199,SNR=6.0 | | | | | | | | |
| **KBZ** | **Khabaz** | **11.29** | **303** | | Pn | | **Pn** | **08 07 54.2** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=59,slow=18,SNR=4.7 | | | | | | | | |
| KBZ | | | | | Sn | | Sn | 08 09 57.6 | -2.6 |
| | comp=Z,0.1nm,0.3s,baz=305,slow=16,SNR=2.9 | | | | | | | | |
| **KK31** | **Karatay Array** | **11.97** | **62** | | Pn | | **Pn** | **08 08 05.3** | **+1.8** |
| | comp=Z,0.3nm,0.4s,baz=266,slow=6.1,SNR=3.6 | | | | | | | | |
| KK31 | | | | | Sn | | Sn | 08 10 11.8 | -5.2 |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **KK31** | **Karatay Array** | **11.97** | **62** | | Pn | | **Pn** | **08 08 05.3** | **+1.8** |
| | comp=Z,0.3nm,0.4s,SNR=3.6 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **12.18** | **6** | | Pn | | **Pn** | **08 08 07.2** | **+0.9** |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| AKTO | | | | | Sn | | **Sn** | **08 10 19.6** | **-2.4** |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **12.18** | **6** | | Pn | | **Pn** | **08 08 07.9** | **+1.6** |
| | comp=Z,0.4nm,0.3s,baz=188,slow=14,SNR=2.9 | | | | | | | | |
| AKTO | | | | | Sn | | **Sn** | **08 10 19.6** | **-2.4** |
| | comp=Z,0.2nm,0.3s,baz=54,slow=18,SNR=3.2 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **12.18** | **6** | | Pn | | **Pn** | **08 08 07.2** | **+0.9** |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| AKTO | | | | | Sn | | **Sn** | **08 10 19.6** | **-2.4** |
| | comp=Z,1.5nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **21.03** | **58** | | P | | **P** | **08 09 59.6** | **+3.0** |
| | comp=Z,0.4nm,0.5s,baz=246,slow=9.1,SNR=4.6 | | | | | | | | |

*NIED* ***18*** *08:10:00, 46.˚50N× 153.˚10E, h50km, Mw4.2 Best double couple: M0 2.25000× 10^15 NP1: ϕ 72.00000°, δ 13.00000°, λ -92.00000°. NP2: ϕ 256.00000°, δ 77.00000°, λ -90.00000°.*

*IDC* ***18*** *08:10:13.3± 0.8, 46.˚41N× 153.˚12E, h0km, mb4.0/18, mb1 4.1/20, mb1mx4.0/59, mbtmp4.0/20, ML3.0/2, MS3.2/3, Ms1 3.2/3, ms1mx2.7/45, Error ellipse: s-maj=20.0km s-min=18.8km az=175.0*

*NEIC* ***18*** *08:10:14.9± 0.6, 46.˚37N× 152.˚99E, h10km, mb4.3/1, Error ellipse: s-maj=14.2km s-min=8.4km az=133.0*

*ISCJB* ***18*** *08:10:17.3± 0.6, 46.˚34N± 0.˚07× 152.˚91E± 0.˚09, h40km, mb4.0/18, MS3.2/2, Error ellipse: s-maj=12.9km s-min=5.2km az=139.6*

*MOS* ***18*** *08:10:18.0± 0.8, 46.˚38N× 152.˚92E, h45km, mb4.5/12, Error ellipse: s-maj=16.7km s-min=14.2km az=90.9*

*SKHL* ***18*** *08:10:20.3± 0.4, 46.˚57N× 152.˚70E, h61km± 4km, mb4.6/2*

**ISC 18 08:10:18.9±0.8, 46.˚34N± 0.˚09× 153.˚01E± 0.˚09, h40km, n68, σ1°31/58, mb4.1/18, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **4.81** | **24** | *e* | PN | | Pn | 08 11 22.5 | -6.3 |
| SKR | | | | | pmax | pmax | | | |
| | comp=N,80nm,0.5s | | | | | | | | |
| SKR | | | | | pmax | pmax | | | |
| | comp=E,80nm,0.5s | | | | | | | | |
| SKR | | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.5s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.81** | **24** | *e* | P | | **Pn** | **08 11 29.2** | **+0.4** |
| SKR | | | | | AMB | AMB | | 08 11 31.1 | |
| | comp=Z,100nm,1.2s | | | | | | | | |
| SKR | | | | | eS | | **Sn** | **08 12 20.6** | **-2.6** |
| SKR | | | | | A | A | | 08 12 31.7 | |
| | comp=Z,100nm,0.5s | | | | | | | | |
| **SHO** | **Shikotan** | **5.02** | **243** | *e* | P | | **Pn** | **08 11 32.1** | **+0.4** |
| SHO | | | | | AMB | AMB | | 08 11 38.7 | |
| | comp=Z,64nm,0.6s | | | | | | | | |
| SHO | | | | | AMB | AMB | | 08 11 38.7 | |
| | comp=Z,60nm,0.6s | | | | | | | | |
| SHO | | | | | AMB | AMB | | 08 11 38.7 | |
| | comp=Z,86nm,0.6s | | | | | | | | |
| SHO | | | | | eS | | **Sn** | **08 12 26.3** | **-2.1** |
| SHO | | | | | A | A | | 08 12 31.9 | |
| | comp=Z,43nm,0.3s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.55** | **248** | *e* | P | | **Pn** | **08 11 39.7** | **+0.8** |

comp=Z,3.0nm,0.9s
**ASAR Alice Springs 71.79 198** P **P 08 21 37.8 +0.6**
comp=Z,0.3nm,0.6s,baz=16,slow=4.9,SNR=4.1
**AKASG Malin Array Be 71.85 326** P **P 08 21 37.3 +0.1**
comp=Z,4.9nm,0.6s,baz=33,slow=6.3,SNR=12
**AKASG Malin Array Be 71.85 326** P **P 08 21 37.3 +0.1**
AKASG pmax pmax
comp=Z,5.0nm,0.6s
**TXAR Lajitas Array 77.76 60** P **P 08 22 11.8 -0.1**
comp=Z,1.0nm,0.5s,baz=301,slow=4.6,SNR=22
TXAR LR LR 08 54 29.2
comp=Z,46nm,22.0s,baz=0.0,slow=34
**BRTR Keskin Array B 78.64 317** P **P 08 22 17.2 +0.5**
comp=Z,0.4nm,0.5s,baz=30,slow=8.7,SNR=3.3
**TORD Torodi Ar. Bea 115.41 329** PKP **PKPdf 08 28 56.0 -0.6**
comp=Z,0.1nm,0.5s,baz=53,slow=1.7,SNR=2.1

*ISCJB **18** 08:45:37.8±0.6, 11°.39N±0°.10×142°.1E±0°.1, h49km, mb4.1/13, MS2.9/4, Error ellipse: s-maj=17.6km s-min=9.7km az=44.1*
*NEIC **18** 08:45:39.5±2.0, 11°.39N×142°.11E, h50km±20km, mb4.3/1, Error ellipse: s-maj=21.7km s-min=13.0km az=119.0*
*IDC **18** 08:45:39.8±2.5, 11°.43N×142°.15E, h50km±25km, mb3.8/12, mb1 4.1/13, mb1mx3.8/39, mbtmp4.1/13, ML4.2/1, MS3.0/5, Ms1 3.0/5, ms1mx2.7/39, Error ellipse: s-maj=22.9km s-min=15.0km az=109.0*

**ISC 18 08:45:39.6±0.8, 11°.4N±0°.1×142°.2E±0°.1, h49km, n18, σ1$36/18, mb4.0/13, MS2.8/4, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **3.42** | **51** | P | **Pn** | **08 46 30.9** | **+0.5** |
| | 24nm,0.3s,baz=35,slow=5.8,SNR=16 | | | | | | |
| GUMO | | | | S | **Sn** | **08 47 10.6** | **+0.9** |
| | 25nm,0.3s,baz=46,slow=22,SNR=2.3 | | | | | | |
| GUMO | | | | LR | LR | 08 47 53.8 | |
| | comp=Z,177nm,21.3s,baz=223,slow=39 | | | | | | |
| **GUMO** | **Guam** | **3.42** | **51** | *e*Pn | **Pn** | **08 46 31.3** | **+0.9** |
| GUMO | | | | *e*Sn | **Sn** | **08 47 06.7** | **-3.0** |
| **LUWI** | **Luwuk** | **22.90** | **239** | *e*P | **P** | **08 50 37.9** | **-1.6** |
| | 4.6nm,0.4s | | | | | | |
| **JNU** | **Nakatsue** | **23.95** | **336** | LR | LR | 08 59 34.7 | |
| | comp=Z,24nm,18.8s,baz=114,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **25.27** | **353** | P | **P** | **08 51 00.1** | **-1.2** |
| | 1.2nm,0.6s,baz=186,slow=11,SNR=3.6 | | | | | | |
| MJAR | | | | LR | LR | 09 00 53.3 | |
| | comp=Z,37nm,18.3s,baz=175,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **28.91** | **336** | LR | LR | 09 03 22.6 | |
| | comp=Z,12nm,18.4s,baz=181,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.10** | **194** | P | **P** | **08 52 01.5** | **-0.8** |
| | 1.8nm,0.8s,baz=18,slow=9.6,SNR=10 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.82** | **347** | P | **P** | **08 52 16.8** | **-0.3** |
| | 4.8nm,0.6s,baz=173,slow=8.4,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **35.79** | **193** | P | **P** | **08 52 34.2** | **-0.1** |
| | 0.5nm,0.7s,baz=20,slow=12,SNR=11 | | | | | | |
| ASAR | | | | PcP | **PcP** | **08 55 02.9** | **+1.5** |
| | 0.3nm,0.7s,baz=26,slow=2.2,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.25** | **285** | P | **P** | **08 53 28.9** | **+0.3** |
| | 1.1nm,0.4s,baz=90,slow=7.2,SNR=3.9 | | | | | | |
| **SONM** | **Songino Array** | **47.05** | **327** | P | **P** | **08 54 07.2** | **+0.8** |
| | 0.4nm,0.4s,baz=145,slow=9.3,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.24** | **317** | P | **P** | **08 55 51.2** | **+1.5** |
| | 0.6nm,0.6s,baz=110,slow=11,SNR=4.8 | | | | | | |
| **ILAR** | **Eielson Array** | **71.65** | **25** | P | **P** | **08 56 55.1** | **-0.7** |
| | 1.3nm,0.6s,baz=248,slow=6.1,SNR=30 | | | | | | |
| **GEYT** | **Ailbeck** | **78.41** | **307** | LR | LR | 09 34 40.6 | |
| | comp=Z,20nm,20.1s,baz=160,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **85.99** | **27** | P | **P** | **08 58 14.2** | **-0.3** |
| | 1.0nm,0.7s,baz=282,slow=5.0,SNR=2.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.31** | **342** | P | **P** | **08 58 25.3** | **-0.4** |
| | 5.5nm,1.1s,baz=61,slow=7.5,SNR=4.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.34** | **51** | P | **P** | **08 58 37.9** | **+1.8** |
| | 0.6nm,0.7s,baz=273,slow=4.9,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **91.98** | **334** | P | **P** | **08 58 41.1** | **-1.7** |
| | 3.0nm,0.8s,baz=70,slow=6.3,SNR=4.9 | | | | | | |

**GUC 18 08:55:35.3±0.5, 18°.21S×69°.50W, h110km±4km, ML3.6, 2C-2D, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB13** | **IPOC Station P** | **0.12** | **181** | ⇓*i*P | Pn | 08 55 52.0 | +0.7 |
| PB13 | | | | *i* S | Sn | 08 56 05.0 | +1.7 |
| **ARCH** | **Arica** | **0.81** | **250** | *e*P | Pn | 08 55 54.8 | +0.2 |
| ARCH | | | | *i* S | Sn | 08 56 09.6 | +0.5 |
| **MNMC** | **Minimini** | **0.92** | **186** | ⇑*i*P | Pn | 08 55 56.5 | +0.5 |
| MNMC | | | | *e*S | Sn | 08 56 12.5 | +0.9 |
| MNMC | | | | AML | AML | 08 56 16.6 | |
| | comp=E,2μm,0.8s | | | | | | |
| **PB01** | **IPOC Station P** | **2.82** | **180** | ⇓*i*P | Pn | 08 56 18.6 | -0.5 |
| PB01 | | | | *e*S | Sn | 08 56 52.1 | -0.6 |
| PB01 | | | | AML | AML | 08 56 56.6 | |
| | comp=E,175nm,0.7s | | | | | | |
| **PB07** | **IPOC Station P** | **3.52** | **186** | ⇑*i*P | Pn | 08 56 28.4 | 0.0 |
| PB07 | | | | *i* S | Sn | 08 57 10.3 | +0.8 |

*AUST **18** 09:09:30.7, 23°.13S×174°.21W, h0km*
*IDC **18** 09:09:37.7±0.6, 21°.67S×175°.73W, h0km, mb4.4/8, mb1 4.7/10, mb1mx4.4/22, mbtmp4.5/10, ML5.0/3, MS3.3/6, Ms1 3.3/6, ms1mx3.0/18, Error ellipse: s-maj=30.2km s-min=16.3km az=121.0*
*ISCJB **18** 09:09:38.2±0.2, 21°.88S±0°.05×175°.48W±0°.06, h10km, mb4.8/30, MS3.6/6, Error ellipse: s-maj=9.9km s-min=5.0km az=39.2*
*NEIC **18** 09:09:39.6±0.2, 21°.70S×175°.63W, h10km, mb4.9/24, Error ellipse: s-maj=11.3km s-min=4.8km az=125.0*
*BJI **18** 09:09:44.2, 22°.00S×175°.30W, h45km, mb5.2/7, mB5.5/5, Ms5.2/4, Ms7 5.0/4*

**ISC 18 09:09:39.4±0.4, 21°.83S±0°.06×175°.46W±0°.08, h10km, n105, σ1$30/91, mb4.8/30, MS3.5/6, 1D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIUE** | **Niue** | **5.86** | **63** | P | **Pn** | **09 11 04.9** | **-1.5** |
| | baz=5.7,SNR=34 | | | | | | |
| **MSVF** | **Nonsavu** | **7.35** | **303** | *e*Pn | Pb | 09 11 38.4 | -8.7 |
| **RAO** | **Raoul Island** | **7.72** | **196** | Pn | **Pn** | **09 11 33.3** | **+1.4** |
| | 45nm,0.3s,baz=41,slow=20,SNR=3.0 | | | | | | |
| RAO | | | | Sn | **Sn** | **09 12 57.9** | **-1.4** |
| | 142nm,0.3s,baz=22,slow=23,SNR=7.1 | | | | | | |
| **RAO** | **Raoul Island** | **7.72** | **196** | *e*Pn | **Pn** | **09 11 34.6** | **+2.7** |
| RAO | | | | Sn | **Sn** | **09 12 57.9** | **-1.4** |
| **AFI** | **Afiamalu** | **8.62** | **25** | Pn | **Pn** | **09 11 43.5** | **-0.8** |
| | 34nm,0.3s,baz=216,slow=2.6,SNR=62 | | | | | | |
| AFI | | | | Sn | Sn | 09 13 10.5 | -11 |
| | 15nm,0.3s,baz=70,slow=21,SNR=3.6 | | | | | | |
| AFI | | | | LR | LR | 09 13 49.6 | |
| | comp=Z,38nm,19.6s,baz=183,slow=29 | | | | | | |
| **AFI** | **Afiamalu** | **8.62** | **25** | *e*Pn | **Pn** | **09 11 44.3** | **0.0** |
| AFI | | | | Sn | Sn | 09 13 10.5 | -11 |
| **RAR** | **Rarotonga** | **14.61** | **90** | Pn | Pn | 09 13 04.8 | -1.4 |
| | 6.0nm,0.3s,baz=264,slow=2.3,SNR=5.1 | | | | | | |
| RAR | | | | Sn | Sn | 09 15 31.4 | -17 |
| | 3.2nm,0.3s,baz=79,slow=16,SNR=5.8 | | | | | | |
| **RAR** | **Rarotonga** | **14.61** | **90** | *e*Pn | **Pn** | **09 13 06.3** | **+0.1** |
| RAR | | | | Sn | Sn | 09 15 31.4 | -17 |
| **DZM** | **Mont Dzumac** | **16.80** | **266** | *e*P | P | 09 13 41.8 | +4.7 |
| | 22nm,0.8s | | | | | | |
| DZM | | | | *e*LR | LR | 09 18 03.5 | |
| | 272nm,25.1s | | | | | | |
| **URZ** | **Urewera** | **17.58** | **200** | P | **Pn** | **09 13 44.1** | **-0.5** |
| | 1.5nm,0.3s,baz=284,slow=1.3,SNR=6.0 | | | | | | |
| URZ | | | | S | Sn | 09 16 47.7 | -13 |
| | 1.5nm,0.3s,baz=108,slow=23,SNR=6.1 | | | | | | |
| **URZ** | **Urewera** | **17.58** | **200** | *e*Pn | **Pn** | **09 13 44.8** | **+0.3** |
| | 297nm,2.5s | | | | | | |
| URZ | | | | S | Sn | 09 16 47.7 | -13 |
| **BKZ** | **Black Stump Fm** | **18.61** | **200** | *e*P | **P** | **09 13 56.8** | **-0.2** |
| | 70nm,1.5s | | | | | | |
| **THZ** | **Tophouse** | **22.16** | **204** | *e*P | **P** | **09 14 38.0** | **+2.5** |
| | 684nm,2.6s | | | | | | |
| **KHZ** | **Kahutara** | **22.51** | **202** | *e*P | **P** | **09 14 38.6** | **-0.5** |
| | 505nm,2.3s | | | | | | |
| **MQZ** | **McQueen's Vall** | **23.95** | **202** | *e*P | P | 09 14 58.7 | +5.0 |
| | 424nm,2.1s | | | | | | |
| **TBI** | **Tubuai** | **24.04** | **99** | *e*LR | LR | 09 20 30.1 | |
| | 247nm,35.0s | | | | | | |
| **TBI** | **Tubuai** | **24.04** | **99** | *e*T | T | 09 39 34.0 | |
| | 7.5nm,0.3s | | | | | | |
| **RPZ** | **Rata Peaks** | **24.54** | **204** | P | **P** | **09 14 60.0** | **+0.8** |
| | 14nm,0.9s,baz=349,slow=5.2,SNR=3.2 | | | | | | |
| RPZ | | | | LR | LR | 09 23 19.0 | |
| | comp=Z,126nm,19.9s,baz=30,slow=33 | | | | | | |
| **LHI** | **Lord Howe Isla** | **24.68** | **242** | *e*P | **P** | **09 15 02.2** | **+1.6** |
| | 43nm,0.8s | | | | | | |
| **PAE** | **Paea** | **24.69** | **85** | *e*T | T | 09 40 11.3 | |
| | 24nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **24.71** | **85** | *e*LQ | LQ | 09 19 47.8 | |
| | 300nm,25.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 09 20 48.5 | |
| | 301nm,28.0s | | | | | | |
| **PPT2** | **Papeete2** | **24.71** | **85** | *e*T | T | 09 40 14.0 | |
| | 13nm,0.3s | | | | | | |
| **TIAR** | **Tiarei** | **24.93** | **85** | *e*T | T | 09 40 29.4 | |
| | 2.6nm,0.3s | | | | | | |
| **TVO** | **Taravao** | **24.97** | **85** | *e*T | T | 09 40 23.9 | |
| | 1.9nm,0.3s | | | | | | |
| **MEH** | **Mehetia** | **26.05** | **86** | *e*T | T | 09 41 53.8 | |
| | 18nm,0.2s | | | | | | |
| **HNR** | **Honiara** | **26.65** | **294** | LR | LR | 09 24 50.6 | |
| | comp=Z,19nm,20.2s,baz=164,slow=35 | | | | | | |
| **WHZ** | **Wether Hill Ro** | **27.57** | **206** | *e*P | **P** | **09 15 28.6** | **+2.1** |
| | 341nm,2.4s | | | | | | |
| **ARMA** | **Armidale** | **30.68** | **247** | P | **P** | **09 15 55.1** | **+0.6** |
| | baz=31,SNR=4.8 | | | | | | |
| **RMQ** | **Roma** | **32.91** | **255** | P | **P** | **09 16 15.4** | **+1.3** |
| | baz=34,SNR=7.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.88** | **246** | P | **P** | **09 16 39.0** | **-0.6** |
| | baz=36,SNR=9.0 | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **36.31** | **75** | *e*T | T | 09 54 33.8 | |
| | 94nm,0.3s | | | | | | |
| **QLP** | **Quilpie** | **36.96** | **254** | P | **P** | **09 16 49.6** | **+0.6** |
| | baz=38,SNR=4.1 | | | | | | |
| **RKT** | **Rikitea** | **37.35** | **100** | *e*LR | LR | 09 26 36.7 | |
| | 202nm,35.2s | | | | | | |
| **RKT** | **Rikitea** | **37.35** | **100** | *e*T | T | 09 56 08.3 | |
| | 3.8nm,0.2s | | | | | | |
| **MTSU** | **Mount Surprise** | **37.91** | **268** | P | **P** | **09 16 57.4** | **+0.2** |
| | baz=39,SNR=6.3 | | | | | | |
| **MANU** | **Manus Island** | **41.15** | **293** | P | P | 09 17 32.5 | +8.3 |
| | baz=43,SNR=3.8 | | | | | | |
| **HTT** | **Hallett** | **41.74** | **244** | P | P | 09 17 23.0 | -5.9 |
| | baz=42,SNR=4.2 | | | | | | |
| **BBOO** | **Buckleboo** | **44.11** | **245** | P | **P** | **09 17 46.1** | **-2.0** |
| | baz=45,SNR=7.8 | | | | | | |
| **AS01** | **Alice Springs** | **46.50** | **258** | *e*P | **P** | **09 18 05.1** | **-2.0** |
| **ASAR** | **Alice Springs** | **46.54** | **258** | P | **P** | **09 18 05.7** | **-1.8** |
| | 7.7nm,0.8s,baz=92,slow=8.1,SNR=75 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 19 40.4** | **-1.4** |
| | 1.4nm,0.7s,baz=110,slow=4.3,SNR=5.5 | | | | | | |
| ASAR | | | | LR | LR | 09 36 11.8 | |
| | comp=Z,71nm,18.5s,baz=109,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.78** | **263** | P | **P** | **09 18 06.9** | **-2.5** |
| | 3.7nm,0.8s,baz=101,slow=7.9,SNR=29 | | | | | | |
| **WRKA** | **Warakurna** | **51.40** | **255** | P | **P** | **09 18 42.6** | **-2.2** |
| | baz=52,SNR=9.1 | | | | | | |
| **MTN** | **Manton Dam** | **51.55** | **271** | P | **P** | **09 18 45.6** | **-0.4** |
| | baz=53,SNR=3.6 | | | | | | |
| **KNRA** | **Kununurra** | **52.94** | **266** | P | **P** | **09 18 54.9** | **-1.4** |
| | baz=54,SNR=4.4 | | | | | | |
| **VNDA** | **Vanda** | **56.82** | **186** | P | **P** | **09 19 24.7** | **+1.3** |
| | 0.7nm,0.8s,baz=19,slow=7.6,SNR=5.1 | | | | | | |
| **KLBR** | **Kellerberrin** | **59.66** | **245** | P | **P** | **09 19 42.2** | **-1.8** |
| | baz=60,SNR=5.5 | | | | | | |
| **ISA** | **Isabella** | **78.60** | **44** | *e*P | **P** | **09 21 42.5** | **+1.0** |
| | 7.2nm,0.9s | | | | | | |
| **CMB** | **Columbia Colle** | **78.86** | **41** | *e*P | **P** | **09 21 43.4** | **+0.6** |
| | 7.9nm,1.1s | | | | | | |
| **GSC** | **Goldstone** | **79.47** | **45** | *e*P | **P** | **09 21 46.9** | **+0.6** |
| **MTUM** | **Tungsten Hills** | **79.57** | **43** | *e*P | **P** | **09 21 48.0** | **+1.0** |
| **NV01** | **Mina Array Sit** | **80.39** | **42** | *e*P | **P** | **09 21 51.5** | **+0.1** |
| **NVAR** | **Mina Array Bea** | **80.39** | **42** | P | **P** | **09 21 52.0** | **+0.6** |
| | 2.7nm,0.6s,baz=223,slow=8.4,SNR=20 | | | | | | |
| **TPNV** | **Topopah Spring** | **80.80** | **44** | *e*P | **P** | **09 21 53.4** | **-0.2** |
| | 4.7nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **81.11** | **199** | P | **P** | **09 21 54.4** | **-0.1** |
| | 6.8nm,0.7s,baz=147,slow=5.9,SNR=36 | | | | | | |
| MAW | | | | LR | LR | 09 55 48.9 | |
| | comp=Z,41nm,19.1s,baz=248,slow=34 | | | | | | |
| **MAW** | **Mawson** | **81.11** | **199** | *e*P | **P** | **09 21 54.5** | **-0.1** |
| | 1.6nm,0.7s | | | | | | |
| **SHPR** | **Sheep Range** | **81.26** | **45** | *e*P | **P** | **09 21 56.9** | **+0.9** |
| **R11A** | **Troy Canyon, C** | **82.05** | **43** | *e*P | **P** | **09 22 00.5** | **+0.3** |
| **NJ2** | **Nanjing** | **82.55** | **309** | *e*P | **P** | **09 22 05.0** | **+2.3** |
| **WVOR** | **Wild Horse Val** | **82.65** | **39** | *e*P | **P** | **09 22 03.4** | **+0.3** |
| | 10.0nm,1.2s | | | | | | |
| **LVP** | **Lakeview Peak** | **82.91** | **34** | P | **P** | **09 22 05.0** | **+0.7** |
| **CCUT** | **Cedar City** | **83.03** | **45** | *e*P | **P** | **09 22 06.6** | **+1.2** |
| | 6.7nm,1.1s | | | | | | |
| **WUAZ** | **Wupatki** | **83.25** | **48** | *e*P | **P** | **09 22 07.5** | **+1.0** |
| | 6.1nm,1.0s | | | | | | |
| **J08A** | **Circle Bar Ran** | **83.32** | **38** | *e*P | **P** | **09 22 07.1** | **+0.6** |
| | 6.7nm,1.1s | | | | | | |
| **ELK** | **Elko** | **83.67** | **42** | *e*P | **P** | **09 22 08.5** | **0.0** |
| **LON** | **Longmire** | **83.67** | **34** | *e*P | **P** | **09 22 08.5** | **+0.3** |
| | 52nm,2.8s | | | | | | |
| **D05A** | **Enumclaw** | **83.86** | **33** | *e*P | **P** | **09 22 10.8** | **+1.7** |
| | 26nm,1.3s | | | | | | |
| **G08A** | **Pilot Rock** | **84.25** | **36** | *e*P | **P** | **09 22 11.9** | **+0.6** |
| | 7.6nm,0.9s | | | | | | |
| **MSU** | **Marysvale** | **84.35** | **45** | *e*P | **P** | **09 22 13.3** | **+1.3** |
| **E07A** | **Sunnyside** | **84.57** | **35** | *e*P | **P** | **09 22 13.6** | **+0.8** |
| | 6.6nm,0.9s | | | | | | |
| **MFID** | **Camas Ranch** | **84.88** | **39** | *e*P | **P** | **09 22 14.4** | **-0.2** |
| | 4.8nm,1.0s | | | | | | |
| **WHN** | **Wan** | **85.14** | **305** | P | **P** | **09 22 16.3** | **+0.3** |
| **D08A** | **Wollman Farm,** | **85.38** | **35** | *e*P | **P** | **09 22 17.4** | **+0.6** |
| | 98nm,2.9s | | | | | | |
| **TMUT** | **Trail Mountain** | **85.41** | **45** | *e*P | **P** | **09 22 18.6** | **+1.0** |
| **MNTX** | **Cornudas Mount** | **85.61** | **53** | *e*P | **P** | **09 22 18.9** | **+0.5** |
| | 7.7nm,1.0s | | | | | | |
| **F10A** | **Beach Ranch, E** | **85.63** | **36** | *e*P | **P** | **09 22 17.9** | **-0.3** |
| | 9.2nm,1.4s | | | | | | |
| **LAZ** | **Ladron** | **85.64** | **50** | *e*P | **P** | **09 22 19.7** | **+1.0** |
| **SRU** | **San Rafael** | **85.75** | **45** | *e*P | **P** | **09 22 19.6** | **+0.5** |
| | 8.3nm,1.2s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **85.79** | **56** | *e*P | **P** | **09 22 19.4** | **-0.1** |
| **TXAR** | **Lajitas Array** | **85.79** | **56** | P | **P** | **09 22 19.5** | **+0.1** |
| | 2.7nm,0.9s,baz=216,slow=7.7,SNR=24 | | | | | | |
| TXAR | | | | LR | LR | 09 52 53.6 | |
| | comp=Z,16nm,20.6s,baz=0.0,slow=30 | | | | | | |
| **C09A** | **Chrisman Ranch** | **86.19** | **35** | *e*P | **P** | **09 22 20.4** | **-0.4** |
| **ANMO** | **Albuquerque** | **86.40** | **50** | *e*P | **P** | **09 22 22.7** | **+0.3** |
| **SNAA** | **Sanae** | **86.61** | **178** | P | **P** | **09 22 22.2** | **-0.5** |
| **VNA3** | **Neumayer Olymp** | **86.65** | **175** | P | **P** | **09 22 22.0** | **-0.8** |
| **VNA2** | **Neumayer--Watz** | **87.12** | **176** | P | **P** | **09 22 24.4** | **-0.7** |
| | baz=198,slow=3.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **87.33** | **176** | P | **P** | **09 22 25.8** | **-0.3** |
| **S22A** | **4UR Ranch, Cre** | **87.53** | **48** | *e*P | **P** | **09 22 28.4** | **+0.4** |
| **MSTX** | **Muleshoe** | **88.61** | **53** | *e*P | **P** | **09 22 32.7** | **-0.3** |
| **ILAR** | **Eielson Array** | **89.10** | **12** | P | **P** | **09 22 33.2** | **-1.1** |
| | 0.7nm,0.9s,baz=222,slow=5.0,SNR=5.8 | | | | | | |
| **GYA** | **Guiyang** | **89.37** | **299** | *e*P | **P** | **09 22 38.0** | **+1.3** |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **91.98** | **313** | *e*P | P | 09 22 56.4 | +7.9 |
| HHC | | | | sP | sP | 09 23 13.4 | +20 |
| **HHC** | **Hu-ho-hao-te** | **91.98** | **313** | SKS | **SKSac** | **09 33 25.3** | **+3.5** |
| **HHC** | **Hu-ho-hao-te** | **91.98** | **313** | S | S | 09 33 57.5 | +7.0 |
| **HHC** | **Hu-ho-hao-te** | **91.98** | **313** | SS | SS | 09 40 09.4 | +10 |
| HHC | | | | pmax | pmax | | |
| | comp=Z,31nm,1.5s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,100nm,3.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,260nm,16.2s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,360nm,17.4s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,220nm,17.4s | | | | | | |
| **KMI** | **Kunming** | **92.06** | **296** | P | P | 09 22 52.0 | +2.6 |
| KMI | | | | PMZ | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **RSSD** | **Black Hills** | **92.48** | **43** | *e*P | **P** | **09 22 50.5** | **-0.4** |
| **CD2** | **Chengdu** | **93.50** | **302** | *e*P | **P** | **09 22 57.0** | **+1.3** |
| CD2 | | | | pP | pP | 09 23 11.0 | +12 |
| CD2 | | | | PP | **PP** | **09 26 42.5** | **+2.0** |
| CD2 | | | | SKS | **SKSac** | **09 33 27.3** | **-3.2** |
| CD2 | | | | S | **S** | **09 34 02.6** | **-1.8** |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| **KSH** | **Kashi** | **117.59** | **304** | *e*PKP | **PKPdf** | **09 28 29.1** | **+3.1** |
| KSH | | | | *es*PKP | | 09 28 43.0 | |
| KSH | | | | *e*PP | PP | 09 29 47.3 | +8.6 |
| KSH | | | | SKS | **SKSdf** | **09 35 35.6** | **-2.8** |
| KSH | | | | PPMZ | | | |
| | comp=Z,160nm,5.5s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,180nm,5.4s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,110nm,5.2s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,170nm,5.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.63** | **350** | PKP | **PKPdf** | **09 28 48.9** | **-1.0** |
| | comp=Z,2.4nm,0.9s,baz=347,slow=5.0,SNR=3.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **145.30** | **332** | PKPbc | **PKPbc** | **09 29 16.0** | **-1.0** |
| | comp=Z,1.3nm,0.3s,baz=42,slow=4.2,SNR=13 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.48** | **312** | PKPbc | **PKPbc** | **09 29 28.3** | **-1.0** |
| | comp=Z,1.9nm,0.8s,baz=141,slow=5.3,SNR=9.1 | | | | | | |
| **ASF** | **Jabal al Asfar** | **149.49** | **297** | PKPbc | **PKPbc** | **09 29 28.7** | **-0.7** |
| | comp=Z,1.8nm,0.5s,baz=102,slow=6.0,SNR=3.8 | | | | | | |
| **CLL** | **Collm** | **149.84** | **349** | ⇓*i*PKPbc | **PKPbc** | **09 29 29.3** | **-0.2** |
| | comp=Z,7.0nm,0.7s | | | | | | |
| CLL | | | | *e*PKPab | **PKPab** | **09 29 36.0** | **+1.0** |
| **BRG** | **Berggiesshubel** | **150.09** | **348** | *e*(P) | **PKPab** | **09 29 37.5** | **+1.5** |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **150.53** | **299** | PKPbc | **PKPbc** | **09 29 31.3** | **-0.6** |
| | comp=Z,1.7nm,0.4s,baz=58,slow=3.8,SNR=2.9 | | | | | | |
| **GERES** | **GERESS Array B** | **152.07** | **347** | PKPbc | **PKPbc** | **09 29 35.1** | **+0.1** |
| | comp=Z,0.3nm,0.4s,baz=90,slow=5.3,SNR=4.4 | | | | | | |

**WEL 18 09:22:14.3±0.1, 43°.50S×172°.19E, h7km±1km, ML3.2/10, 1C, Error ellipse: s-maj=1.2km s-min=1.2km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OXZ** | **Oxford** | **0.21** | **329** | ⇑PG | Pg | 09 22 18.1 | -0.4 |
| OXZ | | | | SG | Sg | 09 22 21.2 | -0.2 |
| **CRLZ** | **Canterbury Las** | **0.33** | **103** | PG | Pg | 09 22 21.1 | +0.5 |
| CRLZ | | | | SG | Sg | 09 22 25.6 | +0.6 |
| CRLZ | | | | AML | AML | 09 22 28.0 | |
| **MQZ** | **McQueen's Vall** | **0.40** | **121** | PG | Pg | 09 22 22.2 | +0.2 |
| MQZ | | | | SG | Sg | 09 22 28.5 | +1.3 |
| MQZ | | | | AML | AML | 09 22 28.7 | |
| **LTZ** | **Lake Taylor** | **0.72** | **5** | P* | Pg | 09 22 28.4 | +0.1 |
| LTZ | | | | S* | Sb | 09 22 38.6 | -0.8 |
| LTZ | | | | AML | AML | 09 22 39.8 | |
| **RPZ** | **Rata Peaks** | **0.85** | **255** | P* | Pg | 09 22 30.1 | -0.6 |
| RPZ | | | | AML | AML | 09 22 47.0 | |
| RPZ | | | | AML | AML | 09 22 48.4 | |
| **WVZ** | **Waitaha Valley** | **1.14** | **291** | P* | Pb | 09 22 36.4 | 0.0 |
| WVZ | | | | AML | AML | 09 22 54.4 | |
| WVZ | | | | AML | AML | 09 22 54.8 | |
| **KHZ** | **Kahutara** | **1.47** | **43** | PN | Pn | 09 22 39.7 | -1.6 |
| **LBZ** | **Lake Benmore** | **1.69** | **238** | PN | Pn | 09 22 43.9 | -0.5 |
| LBZ | | | | AML | AML | 09 23 09.2 | |
| LBZ | | | | AML | AML | 09 23 11.5 | |
| **DSZ** | **Denniston Nort** | **1.78** | **351** | PN | Pn | 09 22 45.3 | -0.2 |
| DSZ | | | | AML | AML | 09 23 40.8 | |
| **FOZ** | **Fox Glacier** | **1.82** | **267** | PN | Pn | 09 22 44.4 | -1.6 |
| **THZ** | **Tophouse** | **1.82** | **17** | PN | Pn | 09 22 44.3 | -1.8 |
| THZ | | | | AML | AML | 09 22 56.8 | |
| THZ | | | | AML | AML | 09 23 36.7 | |
| **TUZ** | **Tuapeka** | **3.05** | **216** | AML | AML | 09 23 53.7 | |
| TUZ | | | | AML | AML | 09 24 44.7 | |

*HEL **18** 09:26:37.9±0.3, 59°.34N×27°.24E, h0km, ML1.8, Explosion*
*ISCJB **18** 09:26:38.3±0.7, 59°.30N±0°.03×27°.00E±0°.08, h0km, Error ellipse: s-maj=5.9km s-min=3.5km az=19.6*
*CSEM **18** 09:26:38.8±0.3, 59°.30N×27°.06E, h2km, ML2.2, Error ellipse: s-maj=8.2km s-min=4.5km az=102.0, Mining explosion.*
*NAO **18** 09:26:38.8±1.1, 59°.28N×26°.97E, ML2.2*
*BER **18** 09:26:39.4±1.9, 59°.30N×27°.11E, h0km, ML2.2(NAO), Suspected explosion*

**ISC 18 09:26:38.5±0.9, 59°.31N±0°.02×27°.03E±0°.04, h0km, n37, σ1$32/54, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VSU** | **Vasula** | **0.87** | **190** | Pg | **Pg** | **09 26 55.1** | **+0.1** |
| VSU | | | | Lg | Lg | 09 27 05.7 | |
| **VSU** | **Vasula** | **0.87** | **190** | Pg | **Pg** | **09 26 55.1** | **+0.1** |
| VSU | | | | Lg | Lg | 09 27 05.7 | |
| **VSU** | **Vasula** | **0.87** | **190** | *e*P | **Pg** | **09 26 54.9** | **-0.2** |
| VSU | | | | *e*S | **Sg** | **09 27 05.4** | **-0.8** |
| **VSU** | **Vasula** | **0.87** | **190** | P | **Pg** | **09 26 54.8** | **-0.2** |
| **VSU** | **Vasula** | **0.87** | **190** | Pg | **Pg** | **09 26 55.1** | **+0.1** |
| VSU | | | | S | **Sg** | **09 27 05.4** | **-0.8** |
| VSU | | | | Lg | Lg | 09 27 05.7 | |
| **VJF** | **Virojoki** | **1.26** | **12** | *e*P | **Pg** | **09 27 02.2** | **-0.4** |
| VJF | | | | *e*S | **Sg** | **09 27 18.9** | **0.0** |
| **VJF** | **Virojoki** | **1.26** | **12** | P | **Pg** | **09 27 02.2** | **-0.4** |
| VJF | | | | S | **Sg** | **09 27 18.9** | **0.0** |
| **SRPE** | **Suurupi** | **1.36** | **278** | *e*P | **Pg** | **09 27 04.6** | **0.0** |
| SRPE | | | | *e*S | **Sg** | **09 27 22.4** | **+0.1** |
| **SRPE** | **Suurupi** | **1.36** | **278** | P | **Pg** | **09 27 04.6** | **0.0** |
| SRPE | | | | S | **Sg** | **09 27 22.4** | **+0.1** |
| **PVF** | **Pernaja** | **1.37** | **335** | *e*P | **Pg** | **09 27 04.4** | **-0.4** |
| PVF | | | | MSG | | 09 27 19.9 | |
| | comp=Z,14nm,0.2s | | | | | | |
| PVF | | | | *e*S | **Sb** | **09 27 22.7** | **-0.3** |
| **PVF** | **Pernaja** | **1.37** | **335** | P | **Pg** | **09 27 04.3** | **-0.4** |
| PV

baz=175,slow=28
**ARA0 ARCESS Array S** 10.29 357 Pn **Pn** 09 29 05.5 -1.6
baz=173,slow=16
ARA0 Sn Sn 09 30 56.3 -6.7
baz=175,slow=28
**ARA0 ARCESS Array S** 10.29 357 Pn **Pn** 09 29 05.5 -1.6
SNR=9.5

**IDC 18 10:43:05.9±977.0, 52°.76N×53°.08E, h0km, Error ellipse: s-maj=409.7km s-min=87.8km az=122.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **3.89** | **125** | *i* | | 11 10 50.0 | |
| | baz=308,slow=321,SNR=7.1 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **18.91** | **74** | *i* | | 12 35 40.0 | |
| | baz=277,slow=325,SNR=2.4 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **33.78** | **77** | *i* | | 14 07 00.0 | |
| | baz=298,slow=334,SNR=0.4 | | | | | | |

*IDC **18** 11:02:20.6±1.4, 2°.24S×139°.25E, h0km, mb3.6/3, mb1 3.9/4, mb1mx3.6/25, mbtmp3.7/4, ML4.1/1, MS3.3/1, Ms1 3.3/1, ms1mx2.4/31, Error ellipse: s-maj=63.5km s-min=25.6km az=96.0*
*AUST **18** 11:02:21.8, 2°.44S×139°.51E, h0km*
*ISCJB **18** 11:02:23.1±0.8, 2°.3S±0°.1×139°.21E±0°.09, h27km, mb3.7/3, Error ellipse: s-maj=16.2km s-min=11.7km az=148.2*
**ISC 18 11:02:24.1±0.9, 2°.3S±0°.1×139°.38E±0°.09, h27km, n16, σ1§64/12, mb3.7/3, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **1.33** | **97** | P | **Pb** | **11 02 48.7** | **+0.2** |
| | baz=1.2,SNR=35 | | | | | | |
| **FAKI** | **Fak Fak** | **7.15** | **265** | P | **Pn** | **11 04 06.2** | **-0.8** |
| | baz=7.3,SNR=4.3 | | | | | | |
| **KDU** | **Kakadu** | **12.35** | **213** | P | **Pn** | **11 05 20.1** | **+1.9** |
| | baz=12,SNR=4.3 | | | | | | |
| **MTN** | **Manton Dam** | **13.25** | **218** | P | **Pn** | **11 05 32.9** | **+2.3** |
| | baz=13,SNR=3.0 | | | | | | |
| **KNRA** | **Kununurra** | **16.89** | **218** | P | **Pn** | **11 06 18.8** | **+0.1** |
| | baz=17,SNR=6.5 | | | | | | |
| **BATI** | **Baumata** | **17.46** | **243** | LR | LR | 11 14 07.7 | |
| | comp=Z,94nm,19.9s,baz=124,slow=41 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.18** | **195** | P | **P** | **11 06 35.7** | **+0.9** |
| | 0.6nm,0.3s,baz=19,slow=12,SNR=25 | | | | | | |
| **ASAR** | **Alice Springs** | **21.85** | **194** | P | **P** | **11 07 15.1** | **+0.3** |
| | 2.8nm,0.4s,baz=25,slow=11,SNR=34 | | | | | | |
| **WRKA** | **Warakurna** | **24.97** | **204** | P | **P** | **11 07 45.3** | **-0.3** |
| | baz=25,SNR=18 | | | | | | |
| **HTT** | **Hallett** | **30.93** | **181** | P | **P** | **11 08 35.7** | **-3.2** |
| | baz=31,SNR=3.5 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **33.93** | **51** | T | T | 11 44 44.5 | |
| | baz=236,slow=75,SNR=15 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **33.94** | **51** | T | T | 11 44 45.2 | |
| | baz=236,slow=75,SNR=13 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **33.94** | **51** | T | T | 11 44 45.9 | |
| | baz=236,slow=75,SNR=11 | | | | | | |
| **MORW** | **Morawa** | **34.64** | **218** | P | **P** | **11 09 11.4** | **+0.1** |
| | baz=35,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.91** | **322** | P | **P** | **11 13 32.2** | **-0.7** |
| | 0.4nm,0.6s,baz=112,slow=7.0,SNR=2.8 | | | | | | |
| **ILAR** | **Eielson Array** | **85.22** | **24** | P | **P** | **11 14 59.6** | **+1.7** |
| | 0.2nm,0.6s,baz=274,slow=4.8,SNR=3.2 | | | | | | |

*AUST **18** 11:07:57.7, 4°.97S×132°.03E, h35km*
*ISCJB **18** 11:07:58.5±0.6, 5°.04S±0°.05×132°.25E±0°.06, h33km, Error ellipse: s-maj=8.8km s-min=5.7km az=145.2*
*DJA **18** 11:08:08.3±1.0, 4°.S±5°.×13°.2E±°., h62km±16km, M3.9/9, MLv3.9/9*
**ISC 18 11:07:59.8±0.9, 4°.94S±0°.06×132°.28E±0°.06, h35km, n15, σ1§81/20, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.01** | **359** | P | **Pn** | **11 08 32.7** | **+1.5** |
| | baz=2.1,SNR=86 | | | | | | |
| **FAKI** | **Fak Fak** | **2.01** | **359** | P | **Pn** | **11 08 33.0** | **+1.8** |
| FAKI | | | | S | **Sn** | **11 08 55.7** | **+0.6** |
| **BNDI** | **Bandanaira** | **2.40** | **280** | P | **Pn** | **11 08 38.6** | **+2.0** |
| BNDI | | | | S | **Sn** | **11 09 04.7** | **-0.1** |
| **MSAI** | **Masohi** | **3.69** | **295** | P | **Pn** | **11 08 56.0** | **+1.6** |
| MSAI | | | | S | **Sn** | **11 09 34.4** | **-2.4** |
| **SWI** | **Sorong** | **4.17** | **346** | P | **Pn** | **11 09 02.0** | **+1.0** |
| | baz=4.2,SNR=18 | | | | | | |
| **SWI** | **Sorong** | **4.17** | **346** | P | **Pn** | **11 09 01.8** | **+0.8** |
| SWI | | | | S | **Sn** | **11 09 45.4** | **-3.2** |
| **AAI** | **Ambon** | **4.26** | **287** | P | **Pn** | **11 09 04.3** | **+2.1** |
| AAI | | | | S | **Sn** | **11 09 48.4** | **-2.3** |
| **NLAI** | **Namlea** | **5.43** | **288** | P | **Pn** | **11 09 20.9** | **+2.6** |
| **LBMI** | **Labuha** | **6.40** | **312** | P | **Pn** | **11 09 34.2** | **+2.5** |
| **KDU** | **Kakadu** | **7.70** | **179** | P | **Pn** | **11 09 49.1** | **-0.4** |
| | baz=7.7,SNR=33 | | | | | | |
| **KNRA** | **Kununurra** | **11.22** | **198** | P | **Pn** | **11 10 36.5** | **-1.2** |
| | baz=11,SNR=31 | | | | | | |
| **COEN** | **Coen** | **13.99** | **131** | P | **Pn** | **11 11 16.2** | **+0.6** |
| | baz=14,SNR=8.2 | | | | | | |
| **QIS** | **Mount Isa** | **17.08** | **156** | P | **Pn** | **11 11 55.0** | **-1.0** |
| | baz=17,SNR=3.6 | | | | | | |
| **MTSU** | **Mount Surprise** | **17.62** | **139** | P | **P** | **11 12 03.6** | **+0.1** |
| | baz=18,SNR=6.4 | | | | | | |
| **WRKA** | **Warakurna** | **20.35** | **190** | P | **P** | **11 12 33.2** | **-0.2** |
| | baz=20,SNR=10 | | | | | | |

*ISCJB **18** 11:15:48.7±0.6, 26°.05S±0°.04×29°.45E±0°.04, h0km, Error ellipse: s-maj=6.0km s-min=4.6km az=145.1*
*PRE **18** 11:15:49.4±1.1, 26°.26S×29°.44E, h0km, ML3.1, Explosion*
**ISC 18 11:15:48.5±0.9, 26°.17S±0°.05×29°.54E±0°.04, h0km, n13, σ1§45/22, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OBSV** | **Observatory** | **1.32** | **269** | *e*P | **Pg** | **11 16 13.9** | **0.0** |
| OBSV | | | | *e*S | **Sg** | **11 16 30.0** | **-1.0** |
| OBSV | | | | AML | AML | 11 16 33.3 | |
| | comp=Z,95nm,0.7s | | | | | | |
| **WDLM** | **Western Deep L** | **1.92** | **262** | *e*P | **Pn** | **11 16 23.2** | **+0.5** |
| WDLM | | | | *e*S | **Sn** | **11 16 46.1** | **-1.5** |
| WDLM | | | | AML | AML | 11 16 49.5 | |
| | comp=Z,202nm,0.5s | | | | | | |
| **PRYS** | **Parys** | **2.09** | **249** | *e*P | **Pn** | **11 16 25.3** | **+0.2** |
| PRYS | | | | *e*S | **Sn** | **11 16 50.8** | **-1.1** |
| PRYS | | | | AML | AML | 11 16 54.2 | |
| | comp=Z,150nm,0.4s | | | | | | |
| **POGA** | **Pongola** | **2.20** | **123** | *e*P | **Pb** | **11 16 29.2** | **-0.1** |
| POGA | | | | *e*S | **Sb** | **11 16 58.3** | **+1.2** |
| POGA | | | | AML | AML | 11 17 10.4 | |
| | comp=Z,137nm,0.6s | | | | | | |
| **POGA** | **Pongola** | **2.20** | **123** | *i* P | **Sb** | **11 16 57.0** | **-0.1** |
| **KSR** | **Koster** | **2.40** | **277** | *e*P | **Pn** | **11 16 29.9** | **+0.6** |
| KSR | | | | *e*S | **Sn** | **11 16 59.0** | **-0.5** |
| KSR | | | | AML | AML | 11 17 09.3 | |
| | comp=Z,36nm,0.2s | | | | | | |
| **LBTB** | **Lobatse** | **3.74** | **287** | *i* P | **Pb** | **11 16 55.8** | **+0.1** |
| LBTB | | | | *i* S | **Sn** | **11 17 35.8** | **+3.2** |
| **MSNA** | **Messina** | **3.83** | **7** | *e*P | **Pn** | **11 16 50.2** | **+1.3** |
| MSNA | | | | *e*S | **Sn** | **11 17 35.3** | **+0.6** |
| MSNA | | | | AML | AML | 11 17 52.1 | |
| | comp=Z,46nm,0.5s | | | | | | |
| **SWZ** | **Schweizer** | **3.90** | **254** | *e*P | **Pn** | **11 16 49.2** | **-0.7** |
| SWZ | | | | *e*S | **Sn** | **11 17 34.8** | **-1.7** |
| SWZ | | | | AML | AML | 11 17 50.9 | |
| | comp=Z,100nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **4.52** | **236** | *i* P | Pb | 11 17 04.2 | -4.6 |
| BOSA | | | | *i* S | **Sb** | **11 18 05.8** | **+1.9** |
| **MATP** | **Matopo** | **5.80** | **350** | *i* P | **Pn** | **11 17 17.2** | **+1.2** |
| MATP | | | | *i* S | **Sn** | **11 18 20.9** | **-2.4** |
| **BLWY** | **Bulawayo** | **6.07** | **352** | *i* P | **Pn** | **11 17 18.8** | **-0.9** |
| BLWY | | | | *i* S | **Sn** | **11 18 27.4** | **-2.5** |
| **POGA** | **Pongola** | **8.83** | **117** | *i* S | | 11 17 35.7 | |

*ISCJB **18** 11:22:03.2±0.7, 16°.4S±0°.1×174°.2W±0°.1, h50km, mb4.2/8, MS3.4/3, Error ellipse: s-maj=27.6km s-min=8.9km az=44.8*
*IDC **18** 11:22:05.9±3.2, 16°.50S×174°.14W, h58km±30km, mb3.9/8, mb1 4.2/9, mb1mx3.8/41, mbtmp4.2/9, ML4.2/1, MS3.2/4, Ms1 3.2/4, ms1mx2.8/31, Error ellipse: s-maj=30.2km s-min=16.7km az=133.0*
**ISC 18 11:22:05.2±0.8, 16°.5S±0°.2×174°.0W±0°.2, h50km, n15, σ1§64/13, mb4.2/8, MS3.4/3, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **3.39** | **40** | P | **Pn** | **11 22 57.9** | **+2.1** |
| | 24nm,0.3s,baz=191,slow=1.9,SNR=218 | | | | | | |
| AFI | | | | S | **Sn** | **11 23 34.0** | **-0.9** |
| | 114nm,0.3s,baz=50,slow=22,SNR=14 | | | | | | |
| **RAR** | **Rarotonga** | **14.27** | **111** | LR | LR | 11 30 15.5 | |
| | comp=Z,46nm,20.0s,baz=306,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **19.23** | **250** | P | **Pn** | **11 26 30.3** | **+3.4** |
| | 0.7nm,0.3s,baz=360,slow=8.0,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **23.00** | **198** | P | **P** | **11 27 05.7** | **-0.1** |
| | 11nm,0.8s,baz=297,slow=6.8,SNR=4.2 | | | | | | |
| **HNR** | **Honiara** | **26.30** | **282** | LR | LR | 11 35 15.1 | |
| | comp=Z,65nm,21.9s,baz=223,slow=30 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.01** | **258** | P | **P** | **11 30 44.7** | **-2.7** |
| | 1.0nm,0.5s,baz=97,slow=8.4,SNR=8.2 | | | | | | |
| **ASAR** | **Alice Springs** | **49.19** | **253** | P | **P** | **11 30 47.5** | **-1.4** |
| | 11nm,0.5s,baz=86,slow=8.5,SNR=58 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 32 11.5** | **0.0** |
| | 1.0nm,0.6s,baz=103,slow=4.1,SNR=4.4 | | | | | | |
| **SIJI** | **Sorong** | **56.06** | **280** | P | **P** | **11 31 39.7** | **+0.1** |
| | 5.0nm,0.6s,baz=142,slow=3.7,SNR=5.0 | | | | | | |
| **VNDA** | **Vanda** | **62.19** | **186** | P | **P** | **11 32 21.4** | **+0.3** |
| | 1.3nm,0.9s,baz=3.5,slow=6.4,SNR=8.1 | | | | | | |
| **ASAJ** | **Asahikawa** | **72.18** | **329** | LR | LR | 11 59 02.7 | |
| | comp=Z,29nm,20.1s,baz=39,slow=31 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.52** | **343** | LR | LR | 12 00 38.5 | |
| | comp=Z,21nm,22.0s,baz=152,slow=32 | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.57** | **42** | P | **P** | **11 33 44.7** | **-0.4** |
| | 1.0nm,0.8s,baz=225,slow=8.6,SNR=8.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **81.74** | **56** | P | **P** | **11 34 18.6** | **-0.4** |
| | 0.4nm,0.7s,baz=219,slow=6.8,SNR=4.3 | | | | | | |
| **ILAR** | **Eielson Array** | **83.67** | **11** | P | **P** | **11 34 27.1** | **-1.0** |
| | 1.3nm,0.5s,baz=230,slow=5.8,SNR=33 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.63** | **319** | PKPbc | **PKPbc** | **11 41 42.2** | **+0.3** |
| | 1.2nm,0.7s,baz=47,slow=1.3,SNR=5.6 | | | | | | |

*IDC **18** 11:29:48.6±1.5, 5°.92S×151°.27E, h0km, mb3.8/6, mb1 4.0/7, mb1mx3.8/32, mbtmp3.9/7, ML2.3/1, MS3.3/2, Ms1 3.3/2, ms1mx2.7/30, Error ellipse: s-maj=56.3km s-min=21.7km az=114.0*
*ISCJB **18** 11:29:56.7±0.7, 5°.86S±0°.10×150°.6E±0°.1, h48km, mb3.8/6, MS3.9/1, Error ellipse: s-maj=22.6km s-min=8.2km az=33.7*
*AUST **18** 11:29:58.4±3.8, 6°.42S×151°.22E, h25km, Error ellipse: s-maj=1.9km s-min=1.1km az=289.0*
**ISC 18 11:29:58.0±0.8, 5°.8S±0°.1×150°.7E±0°.2, h48km, n17, σ0§87/16, mb3.8/6, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.22** | **43** | P | **Pn** | **11 30 33.5** | **+1.1** |
| | baz=2.4,SNR=44 | | | | | | |
| **PMG** | **Port Moresby** | **4.96** | **224** | Pn | **Pn** | **11 31 10.9** | **+1.0** |
| | 6.1nm,0.3s,baz=47,slow=6.3,SNR=25 | | | | | | |
| PMG | | | | Sn | **Sn** | **11 32 06.3** | **+0.4** |
| | 9.7nm,0.3s,baz=228,slow=20,SNR=6.7 | | | | | | |
| PMG | | | | LR | LR | 11 32 31.9 | |
| | comp=Z,62nm,19.7s,baz=358,slow=30 | | | | | | |
| **PMG** | **Port Moresby** | **4.96** | **224** | P | **Pn** | **11 31 10.8** | **+0.9** |
| | baz=5.0,SNR=12 | | | | | | |
| **COEN** | **Coen** | **10.92** | **222** | P | **Pn** | **11 32 31.5** | **-0.2** |
| | baz=11,SNR=3.9 | | | | | | |
| **RMQ** | **Roma** | **20.61** | **185** | P | **P** | **11 34 33.8** | **+0.5** |
| | baz=20,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.17** | **227** | P | **P** | **11 34 38.5** | **-0.9** |
| | 4.3nm,1.0s,baz=49,slow=10.0,SNR=19 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 38 43.7** | **-0.2** |
| | 0.8nm,1.1s,baz=27,slow=2.0,SNR=5.5 | | | | | | |
| **QLP** | **Quilpie** | **21.52** | **196** | P | **P** | **11 34 42.9** | **-0.1** |
| | baz=21,SNR=5.8 | | | | | | |
| **KNRA** | **Kununurra** | **23.60** | **244** | P | **P** | **11 35 05.3** | **+0.6** |
| | baz=24,SNR=6.3 | | | | | | |
| **ASAR** | **Alice Springs** | **23.96** | **221** | P | **P** | **11 35 08.1** | **0.0** |
| | 1.5nm,0.8s,baz=54,slow=8.9,SNR=12 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 38 48.5** | **-1.0** |
| | 0.8nm,0.8s,baz=23,slow=2.4,SNR=5.0 | | | | | | |
| **WRKA** | **Warakurna** | **28.70** | **226** | P | P | 11 35 58.6 | +7.8 |
| | baz=29,SNR=3.8 | | | | | | |
| **AFI** | **Afiamalu** | **37.83** | **105** | LR | LR | 11 48 44.4 | |
| | comp=Z,188nm,20.0s,baz=195,slow=30 | | | | | | |
| **XMI** | **Christmas Isla** | **44.71** | **261** | P | P | 11 38 14.4 | +7.5 |
| | baz=45,SNR=4.4 | | | | | | |
| **KSRS** | **Korea Array** | **48.00** | **336** | P | **P** | **11 38 33.4** | **+1.1** |
| | 1.9nm,0.9s,baz=147,slow=9.6,SNR=5.3 | | | | | | |
| **SONM** | **Songino Array** | **66.08** | **329** | P | **P** | **11 40 40.2** | **0.0** |
| | 0.7nm,0.6s,baz=151,slow=5.6,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **79.71** | **320** | P | **P** | **11 41 59.6** | **-1.2** |
| | 0.2nm,0.3s,baz=92,slow=4.3,SNR=2.8 | | | | | | |
| **ILAR** | **Eielson Array** | **83.92** | **22** | P | P | 11 42 18.6 | -3.9 |
| | 0.7nm,0.7s,baz=248,slow=5.7,SNR=6.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.56** | **286** | PKPbc | **PKPbc** | **11 49 39.4** | **-1.3** |
| | 4.3nm,0.6s,baz=64,slow=2.8,SNR=29 | | | | | | |

*ISCJB **18** 11:42:56.4±0.5, 32°.32N±0°.03×115°.40W±0°.03, h6km±4km, Error ellipse: s-maj=4.8km s-min=3.9km az=171.7*
*ECX **18** 11:42:57.4±0.5, 32°.29N×115°.37W, h6km, MD3.3, ML3.5*
*MEX **18** 11:42:57.2±0.5, 32°.50N×115°.19W, h21km±7km, MD4.0*
*NEIC **18** 11:42:57.5, 32°.30N×115°.38W, h6km, ML3.2(PAS), ML3.5(ECX), After ECX.*
**ISC 18 11:42:56.6±0.9, 32°.30N±0°.03×115°.39W±0°.03, h11km±7km, n26, σ0§58/42, 6C-5D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPBX** | **Cerro Prieto** | **0.14** | **33** | ⇓*e*P | **Pg** | **11 42 59.9** | **+0.1** |
| CPBX | | | | ⇓*e*P | **Pg** | **11 42 60.0** | **+0.1** |
| CPBX | | | | IAML | | 11 43 13.0 | |
| | comp=E,60μm,0.5s | | | | | | |
| CPBX | | | | ⇑*e* | | 11 43 13.0 | |
| **CPBX** | **Cerro Prieto** | **0.14** | **33** | *e*P | **Pg** | **11 42 59.8** | **0.0** |
| CPBX | | | | *e*S | **Sg** | **11 43 02.6** | **+0.4** |
| **MBIG** | **Mexicali** | **0.20** | **57** | *e*P | **Pg** | **11 43 00.9** | **+0.1** |
| MBIG | | | | *i* S | **Sg** | **11 43 02.9** | **-0.7** |
| **MBIG** | **Mexicali** | **0.20** | **57** | ⇑*e*P | **Pg** | **11 43 01.0** | **+0.3** |
| **DREC** | **Desert Rsrch C** | **0.51** | **355** | ⇓*e*P | **Pg** | **11 43 07.0** | **+0.6** |
| **WESC** | **Westside Schoo** | **0.54** | **328** | *e*P | **Pg** | **11 43 07.5** | **+0.4** |
| **RDX** | **Rancho Dawling** | **0.60** | **232** | ⇑*e*P | **Pg** | **11 43 08.3** | **+0.1** |
| RDX | | | | *e*S | **Sg** | **11 43 16.6** | **+0.5** |
| RDX | | | | IAML | | 11 43 18.4 | |
| | comp=N,2μm,0.3s | | | | | | |
| RDX | | | | ⇓*e* | | 11 43 18.4 | |
| **RMX** | **La Rumorosa** | **0.65** | **298** | ⇑*e*P | **Pg** | **11 43 08.8** | **-0.5** |
| RMX | | | | *e*S | **Sg** | **11 43 17.8** | **-0.1** |
| RMX | | | | ⇑*e* | | 11 43 19.8 | |
| RMX | | | | IAML | | 11 43 19.8 | |
| | comp=N,1μm,0.2s | | | | | | |
| **IBP** | **Imperial Bould** | **0.69** | **301** | P | **Pg** | **11 43 10.0** | **0.0** |
| | baz=0.7 | | | | | | |
| IBP | | | | S | **Sg** | **11 43 19.5** | **+0.4** |
| | baz=0.7 | | | | | | |
| **IBP** | **Imperial Bould** | **0.69** | **301** | *e*P | **Pg** | **11 43 10.0** | **0.0** |
| IBP | | | | *e*S | **Sg** | **11 43 19.6** | **+0.5** |
| **GLA** | **Glamis** | **0.89** | **32** | *e*Pg | **Pg** | **11 43 13.9** | **+0.2** |
| GLA | | | | *e*Sg | **Sg** | **11 43 23.7** | **-1.6** |
| **MONP** | **Monument Peak** | **1.05** | **304** | P | **Pg** | **11 43 16.3** | **-0.5** |
| | baz=1.1 | | | | | | |
| MONP | | | | S | **Sg** | **11 43 29.8** | **-0.6** |
| | baz=1.1 | | | | | | |
| **CBX** | **Cerro Bola** | **1.08** | **271** | *e*P | **Pg** | **11 43 16.6** | **-0.7** |
| CBX | | | | *i* S | **Sg** | **11 43 31.5** | **+0.2** |
| **CBX** | **Cerro Bola** | **1.08** | **271** | ⇓*e*P | **Pg** | **11 43 16.9** | **-0.4** |
| CBX | | | | *e*S | **Sg** | **11 43 31.7** | **+0.4** |
| CBX | | | | IAML | | 11 43 37.0 | |
| | comp=N,1μm,0.6s | | | | | | |
| **CBX** | **Cerro Bola** | **1.08** | **271** | *e*P | **Pg** | **11 43 16.6** | **-0.7** |
| CBX | | | | *i* S | **Sg** | **11 43 31.5** | **+0.2** |
| **ZAX** | **El Zacaton** | **1.08** | **224** | IAML | | 11 43 33.9 | |
| | comp=N,2μm,0.6s | | | | | | |
| ZAX | | | | ⇑*e* | | 11 43 33.9 | |
| **BAR** | **Barrett** | **1.15** | **290** | *e*P | **Pb** | **11 43 17.6** | **-0.8** |
| BAR | | | | *e*S | **Sb** | **11 43 32.8** | **-0.5** |
| **BAR** | **Barrett** | **1.15** | **290** | *e*Pg | **Pb** | **11 43 17.9** | **-0.5** |
| BAR | | | | *e*Sg | **Sb** | **11 43 33.0** | **-0.3** |
| **SPX** | **San Pedro Mart** | **1.25** | **183** | *e*P | **Pg** | **11 43 21.2** | **+0.5** |
| SPX | | | | *i* S | **Sb** | **11 43 37.3** | **+0.6** |
| **SDRC** | **San Diego Road** | **1.38** | **289** | *e*P | **Pn** | **11 43 21.1** | **-0.7** |
| **109C** | **Camp Elliot, M** | **1.56** | **293** | P | **Pn** | **11 43 24.6** | **+0.3** |
| | baz=1.6 | | | | | | |
| 109C | | | | S | **Sn** | **11 43 44.9** | **+0.4** |
| | baz=1.6 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.58** | **326** | *e*Pn | **Pb** | **11 43 25.8** | **-0.1** |
| PFO | | | | *e*Sn | **Sb** | **11 43 46.8** | **+0.8** |
| **MURC** | **Murrieta** | **2.00** | **311** | Sb | **Sb** | **11 43 59.1** | **+1.2** |
| | baz=2.0 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.22** | **98** | *e*Pn | **Pn** | **11 43 32.8** | **-0.6** |
| **ISA** | **Isabella** | **4.22** | **323** | *e*Pn | **Pn** | **11 44 01.4** | **+0.5** |
| **DAC** | **Darwin (Calif)** | **4.37** | **336** | Pn | **Pn** | **11 44 03.7** | **+0.6** |

*IDC **18** 11:44:12.9±1.0, 20°.32S×174°.09W, h0km, mb4.1/6, mb1 4.4/8, mb1mx4.1/36, mbtmp4.1/8, ML3.9/2, MS3.4/4, Ms1 3.4/4, ms1mx3.0/28, Error ellipse: s-maj=42.2km s-min=20.4km az=139.0*
**ISC 18 11:44:17.9±0.9, 20°.05S±0°.2×174°.3W±0°.3, h35km, n17, σ1§80/11, mb4.2/6, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.50** | **22** | P | **Pn** | **11 45 51.2** | **0.0** |
| | 2.0nm,0.3s,baz=106,slow=20,SNR=7.1 | | | | | | |
| AFI | | | | S | **Sn** | **11 47 01.7** | **-2.4** |
| | 5.4nm,0.3s,baz=208,slow=21,SNR=4.5 | | | | | | |
| **RAO** | **Raoul Island** | **9.80** | **199** | LR | LR | 11 49 34.2 | |
| | comp=Z,89nm,18.4s,baz=94,slow=34 | | | | | | |
| **RAR** | **Rarotonga** | **13.67** | **98** | LR | LR | 11 51 57.4 | |
| | comp=Z,226nm,18.5s,baz=276,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.09** | **260** | eLR | LR | 11 52 53.7 | |
| | 154nm,20.9s | | | | | | |
| **URZ** | **Urewera** | **19.69** | **200** | P | **P** | **11 48 41.2** | **-2.9** |
| | 0.5nm,0.3s,baz=72,slow=14,SNR=3.9 | | | | | | |
| **TBI** | **Tubuai** | **23.33** | **103** | eLR | LR | 11 54 46.4 | |
| | 147nm,23.0s | | | | | | |
| **PPT2** | **Papeete2** | **23.53** | **88** | eLQ | LQ | 11 53 47.3 | |
| | 163nm,24.5s | | | | | | |
| PPT2 | | | | eLR | LR | 11 54 51.7 | |
| | 134nm,21.2s | | | | | | |
| **PPT** | **Papeete** | **23.53** | **88** | LR | LR | 11 56 52.0 | |
| | comp=Z,122nm,18.1s,baz=298,slow=32 | | | | | | |
| **ASAR** | **Alice Springs** | **48.01** | **256** | P | **P** | **11 52 54.2** | **+0.3** |
| | 4.9nm,0.9s,baz=86,slow=8.5,SNR=43 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 54 23.4** | **+1.7** |
| | 1.0nm,0.8s,baz=100,slow=4.1,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.11** | **261** | P | **P** | **11 52 55.0** | **+0.3** |
| | 3.1nm,0.9s,baz=95,slow=7.2,SNR=24 | | | | | | |
| **VNDA** | **Vanda** | **58.76** | **186** | LR | LR | 12 18 03.5 | |
| | comp=Z,26nm,18.0s,baz=84,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **71.90** | **321** | P | P | 11 55 41.5 | +3.9 |
| | 2.5nm,0.8s,baz=154,slow=5.5,SNR=6.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.29** | **42** | P | **P** | **11 56 15.9** | **+1.2** |
| | 1.6nm,0.9s,baz=224,slow=7.6,SNR=9.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **83.87** | **56** | P | **P** | **11 56 44.7** | **+0.3** |
| | 0.5nm,0.8s,baz=215,slow=8.5,SNR=5.1 | | | | | | |
| **ILAR** | **Eielson Array** | **87.07** | **11** | P | **P** | **11 57 01.1** | **+1.7** |
| | 0.6nm,0.8s,baz=210,slow=6.5,SNR=4.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.14** | **334** | PKP | **PKPdf** | **12 03 49.7** | **-0.1** |
| | 3.9nm,0.8s,baz=41,slow=4.5,SNR=13 | | | | | | |
| **BRTR** | **Keskin Array B** | **148.98** | **315** | PKPbc | **PKPab** | **12 04 04.7** | **-2.1** |
| | 0.7nm,0.7s,baz=56,slow=7.6,SNR=5.3 | | | | | | |

*MOS **18** 12:05:23.5±0.9, 53°.86N×110°.52E, h10km, mb4.3/1, Error ellipse: s-maj=29.4km s-min=15.3km az=78.3*
**BYKL 18 12:05:25.8±0.3, 54°.03N×110°.42E, h14km±6km, 4C-4D, Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SYVR** | **Suvo** | **0.45** | **214** | *e*Pg | Pg | 12 05 34.6 | -0.2 |
| SYVR | | | | *e*Pb | Pn | 12 05 38.8 | +0.9 |
| SYVR | | | | *i* Sg | Sg | 12 05 41.3 | +0.5 |
| SYVR | | | | max | | | |
| | 57nm,0.2s | | | | | | |
| SYVR | | | | Smax | | | |
| | 668nm,0.6s | | | | | | |
| **YLYR** | **Ulyunkhan** | **0.95** | **27** | ⇑*i*PG | Pb | 12 05 43.2 | -0.9 |
| YLYR | | | | *e* | | 12 05 56.8 | |
| YLYR | | | | pmax | pmax | | |
| | comp=Z,44nm,0.2s | | | | | | |
| YLYR | | | | smax | smax | | |
| | comp=N,485nm,0.2s | | | | | | |
| **YLYR** | **Ulyunkhan** | **0.95** | **27** | *e*Pg | Pb | 12 05 43.2 | -0.9 |
| YLYR | | | | *e*Sg | Sb | 12 05 56.4 | -0.3 |
| YLYR | | | | *e*Sb | Sn | 12 05 59.5 | +1.3 |
| YLYR | | | | Pmax | | | |
| | comp=N,45nm,0.2s | | | | | | |
| YLYR | | | | max | | | |
| | comp=N,623nm,0.3s | | | | | | |
| **OGRR** | **Ongureny** | **1.72** | **258** | *e*PN | Pn | 12 05 55.5 | +0.2 |
| OGRR | | | | *e* | | 12 05 56.3 | |
| OGRR | | | | *e* | | 12 06 19.0 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,37nm,0.6s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=N,393nm,1.1s | | | | | | |
| **OGRR** | **Ongureny** | **1.72** | **258** | *e*Pn | Pn | 12 05 55.7 | +0.4 |
| OGRR | | | | ⇓*i*Pg | Pb | 12 05 56.7 | -0.5 |
| OGRR | | | | *e*Sg | Sb | 12 06 19.3 | +0.6 |
| OGRR | | | | Pmax | | | |
| | comp=N,38nm,0.5s | | | | | | |
| OGRR | | | | Smax | | | |
| | comp=N,392nm,1.0s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **1.82** | **344** | *e*PN | Pb | 12 05 58.5 | -0.4 |
| NIZ | | | | *e* | | 12 06 23.8 | |
| NIZ | | | | pmax | pmax | | |
| | comp=Z,89nm,0.3s | | | | | | |
| NIZ | | | | smax | smax | | |
| | comp=N,205nm,0.3s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **1.82** | **344** | *e*Pn | Pn | 12 05 57.4 | +0.7 |
| NIZ | | | | ⇑*i*Pg | Pb | 12 05 58.6 | -0.3 |
| NIZ | | | | *e*Sg | Sg | 12 06 23.4 | -1.1 |
| NIZ | | | | Pmax | | | |
| | comp=N,88nm,0.3s | | | | | | |
| NIZ | | | | Smax | | | |
| | comp=N,246nm,0.6s | | | | | | |
| **KMO** | **Kumora** | **1.92** | **13** | *e*PN | Pb | 12 05 59.6 | -0.9 |
| KMO | | | | *e* | | 12 06 23.9 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,127nm,0.4s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=E,331nm,0.6s | | | | | | |
| **KMO** | **Kumora** | **1.92** | **13**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| UUDB | | | | Smax | | | | |
| | comp=E,98nm,0.8s | | | | | | | |
| **TRG** | **Tyrgan** | **2.75** | **244** | *e*Pn | Pn | 12 06 10.0 | +0.5 | |
| TRG | | | | *e*Pg | Pb | 12 06 13.6 | -1.2 | |
| TRG | | | | *e*Sn | Sn | 12 06 42.9 | +0.3 | |
| TRG | | | | *e*Sg | Sb | 12 06 50.8 | +2.4 | |
| TRG | | | | Pmax | | | | |
| | comp=E,8.0nm,0.2s | | | | | | | |
| TRG | | | | Smax | | | | |
| | comp=E,66nm,0.2s | | | | | | | |
| **CIT** | **Chita** | **2.76** | **136** | *e*Sg | Sb | 12 06 49.8 | +1.0 | |
| CIT | | | | Smax | | | | |
| | comp=E,343nm,0.2s | | | | | | | |
| **SVKR** | **Severomuysk** | **2.76** | **40** | *e*Sg | Sg | 12 06 51.8 | -2.9 | |
| SVKR | | | | Smax | | | | |
| | comp=E,247nm,0.5s | | | | | | | |
| **KAB** | **Kabansk** | **3.02** | **230** | *e*Sg | Sg | 12 06 59.7 | -3.1 | |
| KAB | | | | Smax | | | | |
| | comp=E,315nm,0.8s | | | | | | | |
| **HRMR** | **Khuramsha** | **3.19** | **223** | *e* | Pb | 12 06 22.1 | -0.3 | |
| HRMR | | | | *e*Pg | Pg | 12 06 23.9 | -3.2 | |
| HRMR | | | | *e* | | 12 06 28.6 | | |
| HRMR | | | | *e*Sg | Sg | 12 07 06.8 | -1.7 | |
| HRMR | | | | max | | | | |
| | comp=E,25nm,0.3s | | | | | | | |
| HRMR | | | | Smax | | | | |
| | comp=E,213nm,0.3s | | | | | | | |
| **NLYR** | **Nelyaty** | **3.90** | **49** | *e* | Pb | 12 06 31.0 | -3.4 | |
| NLYR | | | | *e*Pg | Pg | 12 06 34.4 | -6.2 | |
| NLYR | | | | *e*Sn | Sn | 12 07 07.9 | -3.0 | |
| NLYR | | | | *e*Sg | Sg | 12 07 27.0 | -4.1 | |
| NLYR | | | | Pmax | | | | |
| | comp=E,8.0nm,0.7s | | | | | | | |
| NLYR | | | | Smax | | | | |
| | comp=E,72nm,1.1s | | | | | | | |
| **LSTR** | **Listvyanka** | **4.01** | **240** | *e* | Pg | 12 06 43.1 | +0.4 | |
| LSTR | | | | *e* | | 12 07 11.2 | | |
| LSTR | | | | *e*Sg | Sb | 12 07 29.6 | +4.9 | |
| LSTR | | | | max | | | | |
| | comp=E,4.0nm,0.6s | | | | | | | |
| LSTR | | | | Smax | | | | |
| | comp=E,21nm,0.9s | | | | | | | |
| **IRK** | **Irkutsk** | **4.11** | **247** | *e*Sg | Sb | 12 07 32.6 | +5.1 | |
| IRK | | | | Smax | | | | |
| | comp=E,176nm,0.1s | | | | | | | |
| **BOD** | **Bodaibo** | **4.30** | **27** | *e*Pg | Pb | 12 06 41.7 | +0.6 | |
| BOD | | | | *e*Sg | Sg | 12 07 38.5 | -5.3 | |
| BOD | | | | Pmax | | | | |
| | comp=E,3.0nm,0.4s | | | | | | | |
| BOD | | | | Smax | | | | |
| | comp=E,23nm,0.7s | | | | | | | |
| **KPC** | **Khapcheranga** | **4.50** | **164** | *e*Pg | Pb | 12 06 46.3 | +1.7 | |
| KPC | | | | *e* | | 12 06 50.6 | | |
| KPC | | | | *e*Sg | Sg | 12 07 46.0 | -4.4 | |
| KPC | | | | Smax | | | | |
| | comp=E,56nm,1.2s | | | | | | | |
| **TLY** | **Talaya** | **4.73** | **243** | *e*Pg | Pb | 12 06 49.9 | +1.4 | |
| TLY | | | | *e* | | 12 06 58.2 | | |
| TLY | | | | *i* Sg | Sb | 12 07 51.4 | +6.0 | |
| TLY | | | | Pmax | | | | |
| | comp=E,2.0nm,0.1s | | | | | | | |
| TLY | | | | Smax | | | | |
| | comp=E,15nm,0.6s | | | | | | | |
| **ARS** | **Arshan** | **5.27** | **250** | *e* | Pb | 12 06 56.9 | -0.9 | |
| ARS | | | | *e* | | 12 07 06.2 | | |
| ARS | | | | *e*Sg | Sg | 12 08 08.4 | -6.8 | |
| ARS | | | | Smax | | | | |
| | comp=E,78nm,0.7s | | | | | | | |
| **CRS** | **Chara** | **5.31** | **54** | *e*Sg | Sg | 12 08 11.6 | -4.7 | |
| CRS | | | | Smax | | | | |
| | comp=E,33nm,1.6s | | | | | | | |
| **TUP** | **Tupik** | **5.61** | **82** | *e*PN | Pn | 12 06 48.6 | -0.2 | |
| TUP | | | | *e* | | 12 07 05.9 | | |
| TUP | | | | *e* | | 12 08 18.7 | | |
| TUP | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| TUP | | | | smax | smax | | | |
| | comp=N,84nm,0.9s | | | | | | | |
| **TUP** | **Tupik** | **5.61** | **82** | *e*Pn | Pn | 12 06 48.4 | -0.4 | |
| TUP | | | | *e* | | 12 06 56.5 | | |
| TUP | | | | *e*Pg | Pb | 12 07 04.9 | +1.5 | |
| TUP | | | | *e*Sg | Sg | 12 08 18.9 | -6.9 | |
| TUP | | | | Pmax | | | | |
| | comp=N,4.0nm,0.6s | | | | | | | |
| TUP | | | | Smax | | | | |
| | comp=N,98nm,1.4s | | | | | | | |
| **ZAK** | **Zakamensk** | **5.71** | **233** | *e*Sg | Sg | 12 08 22.7 | -6.6 | |
| ZAK | | | | Smax | | | | |
| | comp=N,14nm,0.9s | | | | | | | |
| **MOY** | **Mondy** | **6.18** | **251** | *e*Pg | Pb | 12 07 15.0 | +1.6 | |
| MOY | | | | *e* | | 12 07 19.1 | | |
| MOY | | | | *e*Sg | Sb | 12 08 35.8 | +8.5 | |
| MOY | | | | Smax | | | | |
| | comp=N,31nm,1.6s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **6.53** | **200** | *e* | Sn | 12 08 20.1 | +4.1 | |
| ULN | | | | *e*Sg | Sg | 12 08 49.2 | -6.4 | |
| **ORL** | **Orlik** | **6.54** | **261** | *e*PN | Pn | 12 07 01.8 | +0.2 | |
| ORL | | | | *e* | | 12 07 22.2 | | |
| ORL | | | | *e*S | Sn | 12 08 14.2 | -1.9 | |
| ORL | | | | *e* | | 12 08 45.6 | | |
| ORL | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| ORL | | | | smax | smax | | | |
| | comp=N,27nm,1.8s | | | | | | | |
| **ORL** | **Orlik** | **6.54** | **261** | ǁ *i*Pn | Pn | 12 07 02.5 | +0.9 | |
| ORL | | | | *e* | | 12 07 14.7 | | |
| ORL | | | | *e*Sn | Sn | 12 08 14.3 | -1.8 | |
| ORL | | | | *e*Sg | Sg | 12 08 47.1 | -8.7 | |
| ORL | | | | *e* | | 12 08 58.7 | | |
| ORL | | | | max | | | | |
| | comp=N,2.0nm,0.6s | | | | | | | |
| ORL | | | | Smax | | | | |
| | comp=N,26nm,1.2s | | | | | | | |

*CSEM **18** 12:06:32.7±0.3, 43.54N×7.78E, h15km, ML2.7/12, Error ellipse: s-maj=4.6km s-min=4.3km az=59.0*
*LDG **18** 12:06:33.4±0.1, 43.54N×7.78E, h10km, Md2.4/3, Ml2.5/10, Error ellipse: s-maj=2.8km s-min=2.3km az=46.0*
*GEN **18** 12:06:34.4, 43.57N×7.74E, h7km, ML2.2*
*ROM **18** 12:06:35.0±0.3, 43.63N×7.75E, h10km, Ml2.4/3, Error ellipse: s-maj=2.5km s-min=1.4km az=2.0*
*STR **18** 12:06:35.2±0.2, 43.58N×7.70E, h5km, Ml2.3, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*

**ISC 18 12:06:32.6**±1.0, **43.52N**±0.03×**7.79E**±0.03, **h17**km±8km, **n44**, σ0**975**/81, **Near south coast of France**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **REVF** | **Revere** | **0.38** | **306** | Pg | **Pb** | **12 06 41.0** | **+0.1** |
| REVF | | | | Sg | **Sg** | **12 06 45.8** | **-0.1** |
| **REVF** | **Revere** | **0.38** | **306** | Pg | **Pb** | **12 06 41.0** | **+0.1** |
| REVF | | | | Sg | **Sg** | **12 06 45.8** | **-0.1** |
| **IMI** | **Imperia** | **0.40** | **11** | Pg | **Pb** | **12 06 41.5** | **+0.2** |
| IMI | | | | Sg | **Sg** | **12 06 46.4** | **-0.1** |
| **IMI** | **Imperia** | **0.40** | **11** | S | **Sg** | **12 06 46.5** | **-0.1** |
| **SBF** | **Sospel** | **0.43** | **324** | *e*Pg | **Pg** | **12 06 41.6** | **+0.1** |
| SBF | | | | *e*Sg | **Sg** | **12 06 46.6** | **-0.8** |
| | 316nm,0.4s | | | | | | |
| **SBF** | **Sospel** | **0.43** | **324** | *e*Pg | **Pg** | **12 06 41.6** | **+0.1** |
| SBF | | | | *e*Sg | **Sg** | **12 06 46.6** | **-0.8** |
| | 158nm,0.4s | | | | | | |
| **LUCF** | **Luceram** | **0.49** | **320** | Pg | **Pb** | **12 06 43.2** | **+0.3** |
| LUCF | | | | Sg | **Sg** | **12 06 49.1** | **-0.2** |
| **LUCF** | **Luceram** | **0.49** | **320** | Pg | **Pb** | **12 06 43.2** | **+0.3** |
| LUCF | | | | Sg | **Sg** | **12 06 49.1** | **-0.2** |
| **AUTN** | **L'Aution** | **0.55** | **332** | Pg | **Pb** | **12 06 44.0** | **+0.1** |
| AUTN | | | | Sg | **Sg** | **12 06 50.5** | **-0.5** |
| **AUTN** | **L'Aution** | **0.55** | **332** | Pg | **Pb** | **12 06 44.0** | **+0.1** |
| AUTN | | | | Sg | **Sg** | **12 06 50.5** | **-0.5** |
| **MVIF** | **Mont Vial** | **0.60** | **310** | Pg | **Pb** | **12 06 45.2** | **+0.5** |
| MVIF | | | | Sg | **Sg** | **12 06 52.1** | **-0.5** |
| **MVIF** | **Mont Vial** | **0.60** | **310** | Pg | **Pb** | **12 06 45.2** | **+0.5** |
| MVIF | | | | Sg | **Sg** | **12 06 52.1** | **-0.5** |
| **RORO** | **Rocca Rossa** | **0.63** | **19** | Pg | **Pb** | **12 06 45.9** | **+0.8** |
| RORO | | | | Sg | **Sg** | **12 06 53.7** | **+0.2** |
| | 136nm,0.1s | | | | | | |
| **RORO** | **Rocca Rossa** | **0.63** | **19** | Pg | **Pb** | **12 06 45.9** | **+0.8** |
| RORO | | | | Sg | **Sg** | **12 06 53.7** | **+0.2** |
| | 136nm,0.1s | | | | | | |
| **CALN** | **Calern** | **0.69** | **290** | Pg | **Pb** | **12 06 46.9** | **+0.6** |
| CALN | | | | Sg | **Sg** | **12 06 55.3** | **-0.3** |
| CALN | | | | Sg | **Sg** | **12 06 55.3** | **-0.3** |
| **ENR** | **Entracque** | **0.76** | **340** | S | **Sg** | **12 06 56.7** | **-0.9** |
| **STV** | **Sant Anna di V** | **0.80** | **336** | Pg | **Pg** | **12 06 48.2** | **-0.1** |
| STV | | | | Sg | **Sg** | **12 06 57.7** | **-1.3** |
| **STV** | **Sant Anna di V** | **0.80** | **336** | S | **Sg** | **12 06 57.6** | **-1.4** |
| **FRF** | **La Foret Royal** | **0.83** | **273** | *e*Pg | **Pg** | **12 06 48.8** | **0.0** |
| FRF | | | | *e*Sg | **Sg** | **12 06 58.8** | **-1.0** |
| | 50nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **0.83** | **273** | *e*Pg | **Pg** | **12 06 48.8** | **0.0** |
| FRF | | | | *e*Sg | **Sg** | **12 06 58.8** | **-1.0** |
| | 25nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **0.95** | **259** | *e*Pg | **Pg** | **12 06 50.5** | **-0.6** |
| LMR | | | | *e*Sg | **Sg** | **12 07 02.1** | **-1.4** |
| | 16nm,0.2s | | | | | | |
| **DOI** | **San Damiano** | **1.06** | **339** | Pg | **Pb** | **12 06 52.8** | **+0.2** |
| DOI | | | | Sg | **Sg** | **12 07 05.8** | **-1.4** |
| | 122nm,0.2s | | | | | | |
| **DOI** | **San Damiano** | **1.06** | **339** | Pg | **Pb** | **12 06 52.8** | **+0.2** |
| DOI | | | | Sg | **Sg** | **12 07 05.8** | **-1.4** |
| | 122nm,0.2s | | | | | | |
| **PZZ** | **Stroppo** | **1.10** | **334** | Pg | **Pb** | **12 06 53.6** | **+0.3** |
| PZZ | | | | Sg | **Sb** | **12 07 07.1** | **-0.3** |
| | 74nm,0.3s | | | | | | |
| **PZZ** | **Stroppo** | **1.10** | **334** | Pg | **Pb** | **12 06 53.6** | **+0.3** |
| PZZ | | | | Sg | **Sb** | **12 07 07.1** | **-0.3** |
| | 74nm,0.3s | | | | | | |
| **PGF** | **Pioggiola** | **1.31** | **137** | *e*Pn | **Pn** | **12 06 56.6** | **+0.4** |
| PGF | | | | *e*Sn | **Sb** | **12 07 13.3** | **-0.1** |
| | 2.7nm,0.2s | | | | | | |
| **PGF** | **Pioggiola** | **1.31** | **137** | *e*Pn | **Pn** | **12 06 56.6** | **+0.4** |
| PGF | | | | *e*Sn | **Sb** | **12 07 13.3** | **-0.1** |
| | 1.4nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** | **1.41** | **329** | *e*Pg | **Pb** | **12 06 59.2** | **+0.6** |
| MBDF | | | | *e*Sg | **Sb** | **12 07 17.6** | **+1.2** |
| | 29nm,0.3s | | | | | | |
| **MBDF** | **Montbardon** | **1.41** | **329** | *e*Pg | **Pb** | **12 06 59.2** | **+0.6** |
| MBDF | | | | *e*Sg | **Sb** | **12 07 17.6** | **+1.2** |
| | 14nm,0.3s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.67** | **287** | *e*Pn | **Pn** | **12 07 01.7** | **+0.6** |
| **SMRF** | **Simiane la Rot** | **1.67** | **287** | *e*Pg | **Pg** | **12 07 05.2** | **+0.5** |
| SMRF | | | | *e*Sg | **Sb** | **12 07 25.4** | **+1.8** |
| | 11nm,0.2s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.67** | **287** | *e*Pg | **Pg** | **12 07 05.2** | **+0.5** |
| SMRF | | | | *e*Sg | **Sb** | **12 07 25.4** | **+1.8** |
| | 5.4nm,0.2s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.96** | **316** | *e*Pn | **Pn** | **12 07 04.7** | **-0.4** |
| **ORIF** | **Oris-en-Rattie** | **1.96** | **316** | *e*Pg | **Pb** | **12 07 08.7** | **+0.8** |
| ORIF | | | | *e*Sg | **Sg** | **12 07 34.7** | **-1.1** |
| | 12nm,0.4s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.96** | **316** | *e*Pn | **Pn** | **12 07 04.7** | **-0.4** |
| **ORIF** | **Oris-en-Rattie** | **1.96** | **316** | *e*Pg | **Pb** | **12 07 08.7** | **+0.8** |
| ORIF | | | | *e*Sg | **Sg** | **12 07 34.7** | **-1.1** |
| | 6.2nm,0.4s | | | | | | |
| **LPG** | **La Plagne** | **2.12** | **340** | *e*Pg | **Pg** | **12 07 12.4** | **-0.9** |
| LPG | | | | *e*Sg | **Sg** | **12 07 40.0** | **-0.8** |
| | 2.6nm,0.3s | | | | | | |
| **LPG** | **La Plagne** | **2.12** | **340** | *e*Pg | **Pg** | **12 07 12.4** | **-0.9** |
| LPG | | | | *e*Sg | **Sg** | **12 07 40.0** | **-0.8** |
| | 1.3nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **2.14** | **340** | *e*Pg | **Pb** | **12 07 11.2** | **+0.2** |
| LPL | | | | *e*Sg | **Sb** | **12 07 38.9** | **+1.6** |
| | 3.2nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **2.14** | **340** | *e*Pg | **Pb** | **12 07 11.2** | **+0.2** |
| LPL | | | | *e*Sg | **Sb** | **12 07 38.9** | **+1.6** |
| | 1.6nm,0.3s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **2.61** | **302** | *e*Pn | **Pn** | **12 07 14.1** | **+0.1** |
| VIVF | | | | *e*Sn | **Sn** | **12 07 44.5** | **-0.8** |
| | 2.7nm,0.3s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **2.61** | **302** | *e*Pn | **Pn** | **12 07 14.1** | **+0.1** |
| VIVF | | | | *e*Sn | **Sn** | **12 07 44.5** | **-0.8** |
| | 1.4nm,0.3s | | | | | | |
| **LASF** | **Ste Croix** | **2.90** | **282** | *e*Pn | **Pn** | **12 07 17.3** | **-0.7** |

*NIED **18** 12:09:00, 37.80N×141.10E, h68km, Mw3.8 Best double couple: M0:6.14000×10^14 NP1:φs87.00000°, δ45.00000°, λ-104.00000°. NP2:φs286.00000°, δ46.00000°, λ-76.00000°.*
*ISCJB **18** 12:09:31.8±0.5, 37.73N±0.03×141.12E±0.06, h71km±3km, mb3.5/7, Error ellipse: s-maj=8.7km s-min=5.2km az=16.7*
*JMA **18** 12:09:32.6, 37.75N×141.09E, h66km±1km, M3.9 Broadband fault plane solution: P waves. NP1: φs262.00000°, δ64.00000°, λ-102.00000°. NP2: φs107.00000°, δ28.00000°, λ-68.00000°. Principal axes: T Plg18.0000°, Azm1.0000°; N Plg10.0000°, Azm268.0000°; P Plg69.0000°, Azm149.0000°;*
*JMA Felt II J1.*
*IDC **18** 12:09:33.4±2.2, 37.84N×141.00E, h68km±23km, mb3.4/7, mb1 3.6/10, mb1mx3.5/45, mbtmp3.7/10 Error ellipse: s-maj=28.2km s-min=22.1km az=161.0*

**ISC 18 12:09:32.5**±0.9, **37.73N**±0.04×**141.14E**±0.06, **h64**km±6km, **n30**, σ0**85**/35, **mb3.6/7, 4C-7D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JMM** | **Marumori** | **0.31** | **296** | ǁP | **Pn** | **12 09 43.1** | **0.0** |
| JMM | | | | S | **Sn** | **12 09 50.8** | **+0.1** |
| **JFK** | **Kawauchi** | **0.42** | **210** | ǁP | **Pn** | **12 09 44.4** | **+0.3** |
| JFK | | | | S | **Sn** | **12 09 52.8** | **+0.3** |
| **JFT** | **Otama** | **0.68** | **252** | ǁP | **Pn** | **12 09 46.8** | **+0.1** |
| JFT | | | | S | **Sn** | **12 09 57.0** | **-0.1** |
| **ONAJ** | **Iwakimizuishiy** | **0.69** | **204** | ⇑P | **Pn** | **12 09 47.1** | **+0.2** |
| ONAJ | | | | S | **Sn** | **12 09 58.0** | **+0.5** |
| **JOU** | **Okura** | **0.74** | **329** | ǁP | **Pn** | **12 09 47.3** | **-0.1** |
| JOU | | | | S | **Sn** | **12 09 58.2** | **-0.2** |
| **JIO** | **Ouri** | **0.74** | **13** | ǁP | **Pn** | **12 09 47.7** | **+0.3** |
| JIO | | | | S | **Sn** | **12 09 58.2** | **-0.2** |
| **JYS** | **Shirataka** | **0.98** | **300** | ǁP | **Pn** | **12 09 50.5** | **0.0** |
| JYS | | | | S | **Sn** | **12 10 04.1** | **+0.3** |
| **JFY** | **Yanaizu** | **1.19** | **255** | ⇑P | **Pn** | **12 09 53.4** | **+0.2** |
| JFY | | | | S | **Sn** | **12 10 08.5** | **-0.1** |
| **JMK** | **Ichinoseki** | **1.22** | **3** | ⇑P | **Pn** | **12 09 53.6** | **+0.1** |
| **JYK** | **Kaneyama** | **1.33** | **333** | ⇑P | **Pn** | **12 09 55.4** | **+0.3** |
| JYK | | | | S | **Sn** | **12 10 12.0** | **0.0** |
| **JYA** | **Atsumi** | **1.42** | **308** | P | **Pn** | **12 09 56.3** | **+0.1** |
| **JNS** | **Sasagawa** | **1.45** | **274** | ǁP | **Pn** | **12 09 56.7** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **2.63** | **244** | P | **Pn** | **12 10 13.6** | **+1.0** |
| | 4.6nm,0.3s,baz=49,slow=12,SNR=34 | | | | | | |
| MJAR | | | | S | Sn | 12 10 31.6 | -12 |
| | 18nm,0.3s,baz=64,slow=13,SNR=83 | | | | | | |
| **MAT** | **Matsushiro** | **2.63** | **244** | P | **Pn** | **12 10 13.7** | **+1.1** |
| MAT | | | | S | **Sn** | **12 10 41.9** | **-1.5** |
| **JHJ** | **Hachijo jima 2** | **4.74** | **194** | P | **Pn** | **12 10 42.5** | **+1.1** |
| | 20nm,0.3s,baz=38,slow=22,SNR=3.4 | | | | | | |
| JHJ | | | | S | **Sn** | **12 11 33.7** | **-1.3** |
| | 55nm,0.3s,baz=114,slow=19,SNR=6.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **6.47** | **9** | P | **Pn** | **12 11 04.3** | **-0.7** |
| | 1.3nm,0.3s,baz=191,slow=11,SNR=17 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.46** | **316** | P | **Pn** | **12 11 49.0** | **+3.0** |
| | 0.3nm,0.3s,baz=124,slow=13,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **27.22** | **303** | P | **P** | **12 15 09.1** | **-1.3** |
| | 0.2nm,0.3s,baz=101,slow=8.1,SNR=3.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.69** | **122** | T | T | 12 45 44.6 | |
| | baz=315,slow=75,SNR=115 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.70** | **122** | T | T | 12 45 37.9 | |
| | baz=315,slow=75,SNR=177 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.71** | **122** | T | T | 12 45 40.1 | |
| | baz=315,slow=75,SNR=122 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.42** | **124** | T | T | 12 46 33.9 | |
| | baz=316,slow=76,SNR=78 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.42** | **124** | T | T | 12 46 34.0 | |
| | baz=316,slow=76,SNR=45 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.44** | **124** | T | T | 12 46 39.3 | |
| | baz=316,slow=76,SNR=42 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.29** | **312** | P | **P** | **12 17 10.9** | **-0.5** |
| | 0.7nm,0.4s,baz=91,slow=7.8,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.57** | **301** | P | **P** | **12 17 29.2** | **-0.8** |
| | 0.5nm,0.5s,baz=90,slow=9.7,SNR=5.4 | | | | | | |
| **ILAR** | **Eielson Array** | **49.02** | **33** | P | **P** | **12 18 13.0** | **+0.5** |
| | 0.5nm,0.6s,baz=265,slow=6.2,SNR=8.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.61** | **322** | P | **P** | **12 20 58.1** | **-0.7** |
| | 0.2nm,0.3s,baz=48,slow=5.4,SNR=3.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **74.74** | **53** | P | **P** | **12 21 07.0** | **+1.1** |
| | 0.4nm,0.7s,baz=298,slow=6.1,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **89.86** | **52** | P | **P** | **12 22 24.8** | **+0.1** |
| | 0.5nm,0.7s,baz=301,slow=3.2,SNR=7.0 | | | | | | |

*IDC **18** 12:11:19.9±0.7, 6.52S×147.74E, h0km, mb4.4/15, mb1 4.6/17, mb1mx4.5/30, mbtmp4.5/17, ML4.7/2, MS3.5/21, Ms1 3.5/21, ms1mx3.4/30, Error ellipse: s-maj=24.3km s-min=14.6km az=99.0*
*BJI **18** 12:11:25.8, 6.86S×148.00E, h76km, mb4.7/19, mB5.0/9, Ms4.9/8, Ms7 4.6/6*
*ISCJB **18** 12:11:27.6±0.3, 6.55S±0.03×147.47E±0.04, h63km, mb4.5/25, Error ellipse: s-maj=6.2km s-min=4.3km az=176.7*
*AUST **18** 12:11:29.5±0.0, 6.65S×147.53E, h64km, Error ellipse: s-maj=1.1km s-min=0.9km az=43.0*
*NEIC **18** 12:11:29.7±0.9, 6.57S×147.53E, h71km±9km, mb4.5/14, Error ellipse: s-maj=7.7km s-min=7.2km az=63.0*
*NEIC Felt at Kainantu.*
*DJA **18** 12:11:31.1±1.5, 7.3S±6.1×14.7E±*, h10km±14km, M4.7/5, mb4.3/5, MLv5.0/1*

**ISC 18 12:11:29.9**±0.4, **6.63S**±0.05×**147.45E**±0.06, **h63**km, **n105**, σ1**86**/107, **mb4.4**/24, **1D, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **2.77** | **186** | Pn | **Pn** | **12 12 12.5** | **+0.6** |
| | 112nm,0.3s,baz=3.8,slow=5.9,SNR=371 | | | | | | |
| PMG | | | | Sn | **Sn** | **12 12 46.9** | **+2.7** |
| | 103nm,0.3s,baz=18,slow=22,SNR=21 | | | | | | |
| PMG | | | | LR | LR | 12 13 42.1 | |
| | comp=Z,1μm,18.9s,baz=46,slow=49 | | | | | | |
| **PMG** | **Port Moresby** | **2.77** | **186** | P | **Pn** | **12 12 12.4** | **+0.5** |
| | baz=2.8,SNR=145 | | | | | | |
| **RABL** | **Rabaul** | **5.29** | **63** | P | **Pn** | **12 12 46.9** | **+0.5** |
| | baz=5.2,SNR=12 | | | | | | |
| **GENI** | **Genyem** | **8.29** | **299** | P | **Pn** | **12 13 28.3** | **+0.8** |
| GENI | | | | S | **Sn** | **12 15 00.0** | **+0.3** |
| **COEN** | **Coen** | **8.40** | **210** | P | **Pn** | **12 13 29.8** | **+0.8** |
| | baz=8.5,SNR=30 | | | | | | |
| **COEN** | **Coen** | **8.40** | **210** | *e*Pn | **Pn** | **12 13 29.8** | **+0.8** |
| **MTSU** | **Mount Surprise** | **11.83** | **195** | P | **Pn** | **12 14 16.7** | **+0.8** |
| | baz=12,SNR=88 | | | | | | |
| **HNR** | **Honiara** | **12.69** | **103** | LR | LR | 12 17 23.1 | |
| | comp=Z,69nm,20.9s,baz=278,slow=29 | | | | | | |
| **HNR** | **Honiara** | **12.69** | **103** | Pn | **Pn** | **12 14 27.0** | **-0.6** |
| **CTA** | **Charters Tower** | **13.43** | **185** | Pn | **Pn** | **12 14 37.6** | **0.0** |
| | 2.0nm,0.3s,baz=6.4,slow=15,SNR=18 | | | | | | |
| **FAKI** | **Fak Fak** | **15.58** | **283** | P | **P** | **12 15 08.8** | **-0.2** |
| | baz=16,SNR=5.6 | | | | | | |
| **FAKI** | **Fak Fak** | **15.58** | **283** | *e*P | **P** | **12 15 08.3** | **-0.6** |
| | 29nm,0.9s | | | | | | |
| **QIS** | **Mount Isa** | **15.79** | **208** | P | **Pn** | **12 15 09.5** | **+1.0** |
| | baz=16,SNR=26 | | | | | | |
| **KDU** | **Kakadu** | **15.93** | **247** | P | **Pn** | **12 15 10.3** | **0.0** |
| | baz=16,SNR=15 | | | | | | |
| **SIJI** | **Sorong** | **17.12** | **289** | P | **Pn** | **12 15 25.0** | **-0.2** |
| | 2.2nm,0.3s,baz=90,slow=9.7,SNR=14 | | | | | | |
| SIJI | | | | LR | LR | 12 23 35.8 | |
| | comp=Z,215nm,21.6s,baz=334,slow=42 | | | | | | |
| **SWI** | **Sorong** | **17.13** | **289** | P | **P** | **12 15 28.2** | **+2.2** |
| | baz=17,SNR=5.0 | | | | | | |
| **SWI** | **Sorong** | **17.13** | **289** | P | **P** | **12 15 25.6** | **-0.5** |
| **MTN** | **Manton Dam** | **17.21** | **248** | P | **P** | **12 15 27.3** | **+0.3** |
| | baz=17,SNR=8.9 | | | | | | |
| **MTN** | **Manton Dam** | **17.21** | **248** | *e*Pn | **P** | **12 15 27.0** | **0.0** |
| | 130nm,2.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **18.34** | **223** | *e*P | **P** | **12 15 39.1** | **-0.3** |
| | 30nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.36** | **223** | P | **P** | **12 15 38.8** | **-0.7** |
| | 2.4nm,0.3s,baz=52,slow=11,SNR=66 | | | | | | |
| WRA | | | | S | **Sn** | **12 18 59.2** | **-5.5** |
| | 0.2nm,0.3s,baz=43,slow=21,SNR=5.5 | | | | | | |
| WRA | | | | LR | LR | 12 23 27.9 | |
| | comp=Z,168nm,21.4s,baz=70,slow=39 | | | | | | |
| WRA | | | | ScP | **ScP** | **12 23 43.0** | **+3.9** |
| | 0.2nm,0.3s,baz=63,slow=3.6,SNR=12 | | | | | | |
| **EIDS** | **Eidsvold** | **18.95** | **170** | P | **Pn** | **12 15 50.8** | **+3.6** |
| | baz=19,SNR=6.0 | | | | | | |
| **EIDS** | **Eidsvold** | **18.95** | **170** | *e*P | **Pn** | **12 15 49.3** | **+2.0** |
| | 12nm,0.8s | | | | | | |
| **AAI** | **Ambon** | **19.39** | **278** | P | **Pn** | **12 15 53.1** | **+0.5** |
| **RMQ** | **Roma** | **19.78** | **177** | P | **Pn** | **12 15 58.0** | **+0.9** |
| | baz=20,SNR=10 | | | | | | |
| **QLP** | **Quilpie** | **20.07** | **188** | P | Pn | 12 15 59.6 | -0.9 |
| | baz=20,SNR=29 | | | | | | |
| **GUMO** | **Guam** | **20.25** | **353** | LR | LR | 12 23 52.7 | |
| | comp=Z,121nm,18.7s,baz=192,slow=37 | | | | | | |
| **KNRA** | **Kununurra** | **20.40** | **242** | P | **P** | **12 16 00.8** | **-1.0** |
| | baz=20,SNR=44 | | | | | | |
| **LBMI** | **Labuha** | **20.77** | **286** | P | Pn | 12 16 09.7 | +0.8 |
| **AS01** | **Alice Springs** | **21.33** | **216** | *e*P | **P** | **12 16 12.1** | **+0.2** |
| **TNTI** | **Ternate** | **21.35** | **289** | P | **P** | **12 16 11.4** | **-0.6** |
| **ASAR** | **Alice Springs** | **21.36** | **216** | P | **P** | **12 16 12.2** | **+0.1** |
| | 16nm,0.6s,baz=51,slow=9.3,SNR=447 | | | | | | |
| ASAR | | | | S | **S** | **12 20 04.3** | **-1.8** |
| | 8.3nm,0.9s,baz=32,slow=22,SNR=11 | | | | | | |
| ASAR | | | | ScP | **ScP** | **12 23 51.0** | **+5.0** |
| | 1.6nm,0.9s,baz=57,slow=3.4,SNR=4.5 | | | | | | |
| ASAR | | | | LR | LR | 12 24 58.1 | |
| | comp=Z,143nm,18.1s,baz=38,slow=38 | | | | | | |
| **SANI** | **Sanana** | **21.87** | **281** | P | **P** | **12 16 21.6** | **+3.9** |
| **BATI** | **Baumata** | **23.79** | **260** | P | **P** | **12 16 38.8** | **+1.7** |
| | 27nm,0.7s,baz=90,slow=5.1,SNR=3.6 | | | | | | |
| BATI | | | | LR | LR | 12 28 38.6 | |
| | comp=Z,267nm,18.8s,baz=125,slow=43 | | | | | | |
| **DZM** | **Mont Dzumac** | **23.92** | **132** | *e*S | **S** | **12 20 57.0** | **+6.6** |
| | 92nm,27.3s | | | | | | |
| DZM | | | | *e*LQ | LQ | 12 21 41.7 | |
| | 380nm,30.4s | | | | | | |
| DZM | | | | *e*LR | LR | 12 22 43.0 | |
| | 398nm,24.9s | | | | | | |
| **ARMA** | **Armidale** | **23.98** | **171** | P | **P** | **12 16 38.6** | **-0.2** |
| | baz=24,SNR=11 | | | | | | |
| **ARMA** | **Armidale** | **23.98** | **171** | *e*P | **P** | **12 16 39.2** | **+0.4** |
| | 17nm,0.8s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **24.83** | **184** | P | **P** | **12 16 45.7** | **-0.6** |
| | baz=25,SNR=5.0 | | | | | | |
| **MMRI** | **Maumere** | **25.06** | **264** | *e*P | **P** | **12 16 47.4** | **-1.3** |
| | 41nm,0.5s | | | | | | |
| **LUWI** | **Luwuk** | **25.23** | **282** | P | **P** | **12 16 50.8** | **+0.7** |
| | baz=25,SNR=4.3 | | | | | | |
| **LUWI** | **Luwuk** | **25.23** | **282** | *e*P | **P** | **12 16 49.5** | **-0.7** |
| | 61nm,0.9s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CMAR | | | | LR | LR | 12 46 10.8 | | | |
| | comp=Z,23nm,18.1s,baz=164,slow=39 | | | | | | | | |
| **CD2** | **Chengdu** | **56.03** | **314** | *e*P | **P** | **12 21 02.0** | **-0.5** | | |
| CD2 | | | | pP | **pP** | **12 21 21.3** | **+2.2** | | |
| CD2 | | | | sP | **sP** | **12 21 30.1** | **+3.9** | | |
| CD2 | | | | S | **S** | **12 28 45.8** | **-0.8** | | |
| CD2 | | | | sS | **sS** | **12 29 19.1** | **+4.5** | | |
| CD2 | | | | SS | **SS** | **12 32 34.4** | **+0.6** | | |
| CD2 | | | | PMZ | | | | | |
| | 10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | 120nm,5.3s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **57.60** | **328** | *e*P | P | 12 21 16.9 | +3.4 | | |
| HHC | | | | S | **S** | **12 29 12.3** | **+5.2** | | |
| HHC | | | | sS | sS | 12 29 40.9 | +5.7 | | |
| HHC | | | | PMZ | | | | | |
| | 25nm,1.5s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | 170nm,5.0s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | 360nm,17.4s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | 310nm,16.2s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | 240nm,16.2s | | | | | | | | |
| **LZH** | **Lanzhou** | **58.98** | **319** | *e*P | P | 12 21 27.8 | +4.5 | | |
| LZH | | | | pP | pP | 12 21 48.5 | +8.5 | | |
| LZH | | | | sP | sP | 12 21 55.0 | +7.9 | | |
| LZH | | | | PMZ | | | | | |
| | 15nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | 52nm,4.3s | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **60.15** | **7** | P | **P** | **12 21 29.8** | **-1.0** | | |
| | 5.9nm,0.8s,baz=168,slow=8.1,SNR=8.3 | | | | | | | | |
| PETK | | | | LR | LR | 12 42 55.7 | | | |
| | comp=Z,38nm,21.7s,baz=200,slow=32 | | | | | | | | |
| **PPT2** | **Papeete2** | **62.29** | **106** | *e*S | S | 12 30 14.9 | +6.8 | | |
| | 51nm,24.5s | | | | | | | | |
| **PPT2** | **Papeete2** | **62.29** | **106** | *e*LR | LR | 12 40 34.7 | | | |
| | 47nm,23.5s | | | | | | | | |
| **GTA** | **Gaotai** | **63.51** | **320** | *e*P | P | 12 21 57.0 | +3.1 | | |
| GTA | | | | pP | pP | 12 22 16.3 | +5.6 | | |
| GTA | | | | sP | sP | 12 22 25.3 | +7.5 | | |
| GTA | | | | PMZ | | | | | |
| | 6.0nm,1.0s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **64.87** | **331** | *e*P | **P** | **12 22 01.9** | **-0.8** | | |
| | 3.3nm,0.7s | | | | | | | | |
| **SONM** | **Songino Array** | **65.17** | **331** | P | **P** | **12 22 03.2** | **-1.4** | | |
| | 1.3nm,0.8s,baz=143,slow=8.7,SNR=7.4 | | | | | | | | |
| SONM | | | | LR | LR | 12 49 38.3 | | | |
| | comp=Z,39nm,21.5s,baz=134,slow=35 | | | | | | | | |
| **TAPN** | **Taplejung** | **66.87** | **303** | *e*P | **P** | **12 22 14.8** | **-1.3** | | |
| **ODAN** | **Odare** | **66.96** | **303** | *e*P | **P** | **12 22 13.7** | **-2.9** | | |
| | 27nm,1.2s | | | | | | | | |
| **GUN** | **Gumba** | **68.58** | **303** | *e*P | **P** | **12 22 26.5** | **-0.4** | | |
| **DMN** | **Daman** | **69.12** | **303** | *e*P | **P** | **12 22 29.5** | **-0.7** | | |
| | 30nm,1.0s | | | | | | | | |
| **GKN** | **Gorkha** | **69.65** | **303** | *e*P | **P** | **12 22 32.2** | **-1.1** | | |
| | 28nm,1.0s | | | | | | | | |
| **KOLN** | **Koldanda** | **70.44** | **302** | *e*P | **P** | **12 22 36.9** | **-1.3** | | |
| **VNDA** | **Vanda** | **71.26** | **177** | P | **P** | **12 22 42.0** | **0.0** | | |
| | 3.0nm,0.5s,baz=332,slow=7.0,SNR=60 | | | | | | | | |
| VNDA | | | | LR | LR | 12 53 07.2 | | | |
| | comp=Z,32nm,18.0s,baz=350,slow=35 | | | | | | | | |
| **WMQ** | **Urumqi** | **73.56** | **319** | P | **P** | **12 22 56.0** | **-0.4** | | |
| WMQ | | | | pP | **pP** | **12 23 16.0** | **+2.4** | | |
| WMQ | | | | PP | **PP** | **12 25 43.0** | **+1.8** | | |
| WMQ | | | | S | **SKiKP** | **12 32 18.0** | **-3.2** | | |
| WMQ | | | | SS | **SS** | **12 37 04.0** | **-2.0** | | |
| WMQ | | | | PMZ | | | | | |
| | 12nm,1.0s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | 31nm,6.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | 37nm,20.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | 26nm,18.0s | | | | | | | | |
| **MK01** | **Makanchi Array** | **78.25** | **320** | *e*P | **P** | **12 23 21.4** | **-1.5** | | |
| **MKAR** | **Makanchi Array** | **78.26** | **320** | P | **P** | **12 23 21.5** | **-1.5** | | |
| | 2.7nm,0.9s,baz=104,slow=6.1,SNR=12 | | | | | | | | |
| MKAR | | | | LR | LR | 12 59 42.5 | | | |
| | comp=Z,8.5nm,18.1s,baz=84,slow=37 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **78.26** | **320** | *e*P | **P** | **12 23 22.3** | **-0.8** | | |
| **ZAA0** | **Zalesovo Array** | **79.78** | **328** | *e*P | **P** | **12 23 28.4** | **-2.7** | | |
| **ZALV** | **Zalesovo Beam** | **79.78** | **328** | P | **P** | **12 23 28.5** | **-2.6** | | |
| | 4.1nm,0.6s,baz=112,slow=5.5,SNR=15 | | | | | | | | |
| ZALV | | | | LR | LR | 12 58 21.2 | | | |
| | comp=Z,51nm,21.1s,baz=70,slow=35 | | | | | | | | |
| **KSH** | **Kashi** | **80.13** | **312** | *e*P | P | 12 23 37.1 | +3.6 | | |
| KSH | | | | *e*pP | pP | 12 23 57.5 | +6.5 | | |
| KSH | | | | PP | PP | 12 26 43.8 | +7.2 | | |
| KSH | | | | S | **S** | **12 33 36.3** | **+2.7** | | |
| KSH | | | | LN | | | | | |
| | 110nm,4.6s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | 94nm,6.4s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | 130nm,7.5s | | | | | | | | |
| **MAW** | **Mawson** | **81.84** | **203** | P | **P** | **12 23 41.1** | **-0.8** | | |
| | 2.3nm,0.9s,baz=74,slow=6.0,SNR=6.7 | | | | | | | | |
| MAW | | | | LR | LR | 12 59 24.3 | | | |
| | comp=Z,30nm,18.8s,baz=62,slow=35 | | | | | | | | |
| **AAK** | **Ala-Archa** | **82.10** | **315** | LR | LR | 13 01 02.5 | | | |
| | comp=Z,27nm,20.0s,baz=50,slow=36 | | | | | | | | |
| **AAK** | **Ala-Archa** | **82.10** | **315** | *e*P | **P** | **12 23 43.0** | **-1.0** | | |
| | 3.3nm,0.9s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **82.61** | **314** | *e*P | **P** | **12 23 46.2** | **-0.4** | | |
| | 4.1nm,0.9s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **83.34** | **180** | *e*P | **P** | **12 23 49.2** | **-0.7** | | |
| | 5.5nm,0.7s | | | | | | | | |
| **KKAR** | **Karatay Array** | **85.05** | **314** | *e*P | **P** | **12 23 58.3** | **-0.6** | | |
| **ILAR** | **Eielson Array** | **85.89** | **23** | P | P | 12 23 59.1 | -3.4 | | |
| | 2.5nm,1.0s,baz=256,slow=4.8,SNR=12 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **93.34** | **319** | *e*P | **P** | **12 24 35.9** | **-2.2** | | |
| **GEYT** | **Alibeck** | **93.50** | **309** | LR | LR | 13 10 31.9 | | | |
| | comp=Z,18nm,18.9s,baz=115,slow=38 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **97.41** | **52** | P | P | 12 24 51.9 | -5.3 | | |
| | 0.1nm,0.4s,baz=270,slow=3.6,SNR=2.8 | | | | | | | | |
| NVAR | | | | LR | LR | 13 03 00.3 | | | |
| | comp=Z,16nm,19.6s,baz=238,slow=32 | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **97.88** | **54** | *e*P | Pdif | 12 24 60.0 | +0.6 | | |
| | 3.7nm,0.9s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **121.47** | **327** | *i* P | **PKPdf** | **12 30 15.4** | **-0.8** | | |
| | 8.6nm,1.1s | | | | | | | | |
| **CLL** | **Colln** | **121.73** | **328** | ⇓*i* PKPdf | **PKPdf** | **12 30 15.7** | **-1.0** | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **GERES** | **GERESS Array B** | **122.68** | **325** | PKP | **PKPdf** | **12 30 17.9** | **-0.8** | | |
| | comp=Z,1.1nm,0.5s,baz=56,slow=2.4,SNR=8.9 | | | | | | | | |
| **CELP** | **Cerrillos** | **144.94** | **68** | *e*PKPdf | **PKPab** | **12 30 58.4** | **-1.8** | | |
| **TORD** | **Torodi Ar. Bea** | **145.67** | **284** | PKPbc | **PKPbc** | **12 31 02.2** | **-0.4** | | |
| | comp=Z,12nm,0.8s,baz=82,slow=3.1,SNR=84 | | | | | | | | |
| **SAML** | **Samuel** | **145.77** | **117** | *e*PKPdf | **PKPdf** | **12 31 01.2** | **-1.3** | | |
| **STVI** | **Saint Thomas** | **146.36** | **67** | *e*PKPdf | **PKPdf** | **12 31 01.7** | **-1.6** | | |
| **DBIC** | **Dimbokro** | **152.49** | **272** | PKPbc | **PKPbc** | **12 31 19.9** | **-0.3** | | |
| | comp=Z,3.3nm,0.5s,baz=85,slow=2.9,SNR=5.3 | | | | | | | | |
| **BDFB** | **Brasilia** | **153.09** | **145** | PKPbc | **PKPbc** | **12 31 20.6** | **-1.0** | | |
| | comp=Z,5.4nm,0.5s,baz=225,slow=4.3,SNR=7.5 | | | | | | | | |

**DJA 18 12:18:06.3±1.4, 6°S±16°×10°3E±°, h11km±22km, M3.7/5, MLv3.7/5, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KASI** | **Kota Agung** | **1.39** | **56** | P | Pn | 12 18 30.1 | -1.5 |
| KASI | | | | S | Sn | 12 18 49.2 | -0.7 |
| **LWLI** | **Liwa** | **1.46** | **29** | P | Pn | 12 18 31.2 | -1.6 |
| LWLI | | | | S | Sn | 12 18 51.3 | -0.8 |
| **MNAI** | **Manna** | **1.96** | **349** | P | Pn | 12 18 40.2 | +0.6 |
| MNAI | | | | S | Sn | 12 19 04.4 | +0.1 |
| **MDSI** | **Maura Dua** | **1.99** | **25** | P | Pn | 12 18 39.3 | -0.6 |
| **KLI** | **Kotabumi** | **2.08** | **47** | P | Pn | 12 18 41.4 | +0.3 |

*IDC **18** 12:28:08.9±1.9, 5°69S×130°94E, h0km, mb4.0/1, mb1 4.2/4, mb1mx3.7/23, mbtmp4.1/4, ML4.1/3, Error ellipse: s-maj=105.0km s-min=26.7km az=79.0*
*ISCJB **18** 12:28:09.9±0.7, 5°67S±0°05×131°3E±0°2, h10km, mb4.0/1, Error ellipse: s-maj=33.1km s-min=7.3km az=179.4*
*AUST **18** 12:28:12.7, 5°48S×131°03E, h60km*

**ISC 18 12:28:10.2±1.0, 5°77S±0°08×131°4E±0°3, h10km, n11, σ2s32/10, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.97** | **18** | P | **Pn** | **12 28 57.8** | **+0.4** |
| | baz=2.8,SNR=66 | | | | | | |
| **SIJI** | **Sorong** | **4.87** | **359** | Pn | **Pn** | **12 29 23.4** | **-0.2** |
| | 17nm,0.3s,baz=237,slow=23,SNR=92 | | | | | | |
| SIJI | | | | Sn | Sn | 12 30 11.1 | -8.9 |
| | 6.9nm,0.3s,baz=238,slow=22,SNR=9.6 | | | | | | |
| **SWI** | **Sorong** | **4.87** | **359** | P | **Pn** | **12 29 23.2** | **-0.4** |
| | baz=4.6,SNR=19 | | | | | | |
| **KDU** | **Kakadu** | **6.96** | **171** | P | Pn | 12 29 58.3 | +6.0 |
| | baz=7.4,SNR=37 | | | | | | |
| **MTN** | **Manton Dam** | **7.04** | **182** | P | Pn | 12 29 59.8 | +6.5 |
| | baz=7.4,SNR=50 | | | | | | |
| **KNRA** | **Kununurra** | **10.17** | **194** | P | Pn | 12 30 41.6 | +5.3 |
| | baz=10,SNR=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.39** | **169** | Pn | **Pn** | **12 31 34.5** | **+0.4** |
| | 0.7nm,0.3s,baz=353,slow=13,SNR=27 | | | | | | |
| WRA | | | | Sn | **Sn** | **12 34 11.1** | **-2.7** |
| | 0.4nm,0.3s,baz=357,slow=23,SNR=5.7 | | | | | | |
| **QIS** | **Mount Isa** | **16.74** | **152** | P | **P** | **12 32 08.9** | **+1.6** |
| | baz=17,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **17.96** | **172** | P | **P** | **12 32 22.9** | **+2.1** |
| | 0.7nm,0.3s,baz=351,slow=11,SNR=60 | | | | | | |
| ASAR | | | | S | **Sn** | **12 35 38.0** | **-2.8** |
| | 0.1nm,0.3s,baz=0.2,slow=29,SNR=4.3 | | | | | | |
| **WRKA** | **Warakurna** | **19.38** | **188** | P | **Pn** | **12 32 40.9** | **+3.4** |
| | baz=20,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.95** | **326** | P | **P** | **12 39 07.7** | **-1.7** |
| | 0.7nm,0.5s,baz=112,slow=8.2,SNR=9.8 | | | | | | |

*SJA **18** 12:35:21.7±1.2, 24°02S×66°56W, h229km±15km, ML2.6*
*IDC **18** 12:35:22.2±1.5, 23°99S×66°78W, h192km±17km, mb3.3/1, mb1 3.6/3, mb1mx3.1/28, mbtmp4.0/3, Error ellipse: s-maj=25.4km s-min=19.1km az=101.0*
*ISCJB **18** 12:35:23.3±0.6, 24°11S±0°05×66°94W±0°07, h181km, mb3.4/1, Error ellipse: s-maj=9.0km s-min=6.4km az=166.3*

**ISC 18 12:35:22.1±0.8, 24°06S±0°05×66°92W±0°07, h181km, n16, σ2s32/23, Salta Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLA** | **San Lorenzo** | **1.45** | **117** | *i* P | Pn | 12 35 57.3 | +3.5 |
| **HJA** | **Humahuaca** | **1.63** | **59** | *i* P | **Pn** | **12 35 57.8** | **+2.0** |
| HJA | | | | *i* S | **Sn** | **12 36 24.2** | **+2.4** |
| **AZAP** | **Zapla** | **1.70** | **96** | *i* P | **Pn** | **12 35 58.6** | **+2.3** |
| AZAP | | | | *i* P | **Pn** | **12 35 58.6** | **+2.3** |
| **FSA** | **Cafayete** | **2.18** | **158** | *i* P | **Pn** | **12 36 04.5** | **+3.1** |
| FSA | | | | *i* S | **Sn** | **12 36 36.5** | **+4.5** |
| FSA | | | | AML | AML | 12 36 38.7 | |
| | comp=Z,19nm,0.7s | | | | | | |
| **ASTB** | **Santa Barbara** | **2.23** | **88** | *i* P | **Pn** | **12 36 02.3** | **+0.4** |
| **YJA** | **Yavi** | **2.28** | **35** | *i* P | **Pn** | **12 36 04.1** | **+1.3** |
| YJA | | | | *i* S | **Sn** | **12 36 36.4** | **+2.0** |
| **LVC** | **Limon Verde** | **2.33** | **308** | P | **Pn** | **12 36 05.7** | **+2.5** |
| | comp=Z,2µm,0.3s,baz=132,slow=5.8,SNR=269 | | | | | | |
| LVC | | | | S | **Sn** | **12 36 38.0** | **+2.9** |
| | comp=Z,465nm,0.3s,baz=252,slow=19,SNR=10 | | | | | | |
| **AHML** | **Horco Molle** | **3.06** | **152** | *i* P | **Pn** | **12 36 12.9** | **+1.3** |
| AHML | | | | *i* S | **Sn** | **12 36 50.8** | **+0.4** |
| AHML | | | | AML | AML | 12 36 57.4 | |
| | comp=Z,10nm,0.6s | | | | | | |
| **CFAA** | **Coronel Fontan** | **7.60** | **189** | P | **Pn** | **12 37 10.5** | **+0.4** |
| | comp=Z,0.0nm,0.3s,baz=5.0,slow=12,SNR=5.8 | | | | | | |
| CFAA | | | | S | **Sn** | **12 38 32.1** | **-3.6** |
| | comp=Z,0.2nm,0.3s,baz=173,slow=20,SNR=10 | | | | | | |
| **LPAZ** | **La Paz** | **7.82** | **351** | P | **Pn** | **12 37 13.1** | **-0.6** |
| | comp=Z,0.6nm,0.3s,baz=181,slow=8.4,SNR=9.7 | | | | | | |
| LPAZ | | | | S | **Sn** | **12 38 39.2** | **-2.6** |
| | comp=Z,0.2nm,0.3s,baz=282,slow=22,SNR=4.6 | | | | | | |
| **BDFB** | **Brasilia** | **19.64** | **68** | P | **P** | **12 39 35.9** | **-1.3** |
| | comp=Z,1.3nm,0.3s,baz=244,slow=11,SNR=14 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **57.63** | **160** | P | **P** | **12 44 54.5** | **+1.7** |
| | baz=283,slow=9.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.52** | **69** | P | **P** | **12 46 50.0** | **-2.7** |
| | comp=Z,0.5nm,0.5s,baz=254,slow=5.5,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **128.43** | **205** | PKP | **PKPdf** | **12 54 06.5** | **-1.5** |
| | comp=Z,0.5nm,1.1s,baz=138,slow=4.5,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.60** | **207** | PKP | **PKPdf** | **12 54 13.2** | **-0.9** |
| | comp=Z,0.5nm,0.3s,baz=151,slow=1.9,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.53** | **40** | PKPbc | **PKPdf** | **12 54 40.7** | **+0.5** |
| | comp=Z,0.5nm,0.6s,baz=276,slow=2.9,SNR=3.6 | | | | | | |

**DJA 18 12:55:55.1±1.1, 8°S±4°×10°6E±°, h39km±14km, M3.9/6, MLv3.9/6, Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKJI** | **Sukabumi** | **0.91** | **24** | P | Pn | 12 56 11.3 | -0.1 |
| SKJI | | | | S | Sn | 12 56 24.0 | +0.8 |
| **CNJI** | **Cibinong** | **1.07** | **61** | P | Pn | 12 56 13.7 | +0.1 |
| CNJI | | | | S | Sn | 12 56 27.7 | +0.5 |
| **CGJI** | **Cibinong** | **1.31** | **338** | P | Pn | 12 56 17.5 | +0.5 |
| CGJI | | | | S | Sn | 12 56 34.2 | +0.9 |
| **CBJI** | **Citeko** | **1.56** | **25** | P | Pn | 12 56 17.7 | -2.6 |
| CBJI | | | | S | Sn | 12 56 34.8 | -4.4 |
| **CISI** | **Cisompet, Garu** | **1.64** | **80** | P | Pn | 12 56 21.4 | -0.1 |
| **CMJI** | **Cimerak** | **2.24** | **89** | P | Pn | 12 56 29.7 | 0.0 |
| **KASI** | **Kota Agung** | **2.85** | **324** | P | Pn | 12 56 37.9 | -0.2 |
| **MDSI** | **Maura Dua** | **3.89** | **329** | P | Pn | 12 56 52.4 | +0.1 |
| **MNAI** | **Manna** | **4.72** | **317** | P | Pn | 12 57 03.7 | -0.1 |

**MEX 18 13:05:50.7±0.7, 17°99N×103°19W, h20km, MD3.9, Near coast of Michoacan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MMIG** | **Aquila** | **0.33** | **333** | *i* P | Pb | 13 05 55.9 | -2.0 |
| MMIG | | | | *i* S | Sb | 13 06 01.5 | -1.3 |
| **R15V** | | **1.39** | **327** | *i* P | Pn | 13 06 12.1 | -3.0 |
| R15V | | | | *i* S | Sn | 13 06 29.4 | -3.5 |
| **EZ5V** | | **1.53** | **345** | *e*P | Pn | 13 06 14.1 | -3.1 |
| EZ5V | | | | *i* S | Sn | 13 06 31.4 | -5.4 |
| **ZIIG** | **Zihuatanejo** | **1.69** | **103** | *i* P | Pn | 13 06 16.4 | -2.7 |
| ZIIG | | | | *e*S | Sn | 13 06 36.4 | -3.7 |

**MEX 18 13:07:03.1±0.5, 14°98N×93°16W, h5km±50km, MD3.7, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.72** | **356** | *e*P | Pg | 13 07 15.8 | -1.2 |
| PCIG | | | | *e*S | Sg | 13 07 25.8 | -0.5 |
| **CCIG** | **Comitan** | **1.63** | **37** | *i* P | Pn | 13 07 29.0 | -3.7 |
| CCIG | | | | *i* S | Sn | 13 07 48.9 | -5.3 |

**IDC 18 13:17:42.3±999.0, 51°59N×54°45E, h0km, Error ellipse: s-maj=474.1km s-min=58.7km az=115.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **2.56** | **116** | *i* | | 13 37 36.7 | |
| | baz=298,slow=320,SNR=67 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **18.46** | **71** | *i* | | 15 06 30.0 | |
| | baz=269,slow=322,SNR=2.4 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **33.24** | **76** | *i* | | 16 36 10.0 | |
| | baz=298,slow=332,SNR=0.9 | | | | | | |

*MOS **18** 13:27:43.1±1.0, 55°99N×113°63E, h11km, mb4.4/1, Error ellipse: s-maj=12.6km s-min=7.8km az=78.9*
*MOS Felt (II) at Severomuisk.*
*BYKL **18** 13:27:44.7±0.2, 56°08N×113°55E, h22km±3km, FELT I=III MSK at Severomuisk*

**ISC 18 13:27:45.2±0.8, 56°05N±0°03×113°55E±0°02, h14km±5km, n50, σ1s59/69, 13C-5D, East of Lake Baykal**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVKR** | **Severomuysk** | **0.07** | **7** | *e*PG | **Pg** | **13 27 48.1** | **-0.1** |
| SVKR | | | | *e* | | 13 27 50.8 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,6µm,0.2s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=N,7µm,0.8s | | | | | | |
| **SVKR** | **Severomuysk** | **0.07** | **7** | ⇑*i* Pg | **Pg** | **13 27 48.2** | **0.0** |
| SVKR | | | | *e*Sg | **Sg** | **13 27 51.2** | **+1.0** |
| **UKT** | **Uakit** | **0.56** | **175** | *e*PG | **Pg** | **13 27 55.6** | **-0.7** |
| UKT | | | | *e* | | 13 28 02.6 | |
| UKT | | | | pmax | pmax | | |
| | comp=Z,255nm,0.2s | | | | | | |
| UKT | | | | smax | smax | | |
| | comp=N,1µm,0.1s | | | | | | |
| **UKT** | **Uakit** | **0.56** | **175** | ⇑*i* Pg | **Pg** | **13 27 55.6** | **-0.7** |
| UKT | | | | *e*Sg | **Sg** | **13 28 04.1** | **+0.3** |
| UKT | | | | Pmax | | | |
| | comp=N,341nm,0.7s | | | | | | |
| UKT | | | | Smax | | | |
| | comp=N,1µm,0.2s | | | | | | |
| **YOA** | **Uoyan** | **1.02** | **275** | *e*PG | **Pb** | **13 28 03.7** | **-1.0** |
| YOA | | | | *e* | | 13 28 18.0 | |
| YOA | | | | pmax | pmax | | |
| | comp=Z,302nm,0.3s | | | | | | |
| YOA | | | | smax | smax | | |
| | comp=E,4µm,0.6s | | | | | | |
| **YOA** | **Uoyan** | **1.02** | **275** | *e*Pg | **Pb** | **13 28 03.6** | **-1.1** |
| YOA | | | | *i* Sg | **Sb** | **13 28 18.1** | **+0.1** |
| YOA | | | | *e* | | 13 28 23.8 | |
| YOA | | | | Pmax | | | |
| | comp=E,317nm,0.4s | | | | | | |
| YOA | | | | max | | | |
| | comp=E,4µm,0.6s | | | | | | |
| **NLYR** | **Nelyaty** | **1.28** | **69** | *e*PG | **Pn** | **13 28 07.6** | **-1.1** |
| NLYR | | | | *e* | | 13 28 24.1 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,179nm,0.6s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,625nm,1.1s | | | | | | |
| **KMO** | **Kumora** | **1.33** | **264** | *e*PG | **Pn** | **13 28 08.6** | **-0.7** |
| KMO | | | | *e* | | 13 28 26.6 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,281nm,0.4s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,1µm,0.8s | | | | | | |
| **KMO** | **Kumora** | **1.33** | **264** | ⇑*i* Pg | **Pn** | **13 28 08.7** | **-0.6** |
| KMO | | | | *e*Pb | **Pb** | **13 28 09.6** | **-0.3** |
| KMO | | | | *e*Sg | **Sn** | **13 28 26.5** | **-0.2** |
| KMO | | | | *e*Sb | **Sb** | **13 28 28.0** | **+1.3** |
| KMO | | | | max | | | |
| | comp=N,289nm,0.4s | | | | | | |
| KMO | | | | max | | | |
| | comp=N,1µm,1.1s | | | | | | |
| **BOD** | **Bodaibo** | **1.79** | **8** | *e*PN | **Pn** | **13 28 15.3** | **-0.4** |
| BOD | | | | *e* | | 13 28 38.5 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,158nm,0.3s | | | | | | |
| BOD | | | | smax | smax | | |
| | comp=N,986nm,0.4s | | | | | | |
| **BOD** | **Bodaibo** | **1.79** | **8** | *e*Pn | **Pn** | **13 28 14.7** | **-1.0** |
| BOD | | | | ⇑*i* Pg | **Pb** | **13 28 15.7** | **-2.1** |
| BOD | | | | *e*Sg | **Sb** | **13 28 38.8** | **-1.3** |
| BOD | | | | Pmax | | | |
| | comp=N,157nm,0.3s | | | | | | |
| BOD | | | | Smax | | | |
| | comp=N,983nm,0.4s | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.80** | **230** | *e*PN | **Pn** | **13 28 15.9** | **+0.2** |
| YLYR | | | | *e* | | 13 28 16.9 | |
| YLYR | | | | *e*S | **Sn** | **13 28 39.8** | **+1.5** |
| YLYR | | | | *e* | | 13 28 41.0 | |
| YLYR | | | | pmax | pmax | | |
| | comp=Z,175nm,0.3s | | | | | | |
| YLYR | | | | smax | smax | | |
| | comp=E,1µm,0.4s | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.80** | **230** | ⇑*i* Pn | **Pn** | **13 28 15.9** | **+0.2** |
| YLYR | | | | ⇓*i* Pg | **Pb** | **13 28 16.8** | **-1.0** |
| YLYR | | | | ⇓*i* Pg | **Pb** | **13 28 16.8** | **-1.0** |
| | comp=E,96nm,0.6s | | | | | | |
| YLYR | | | | ⇑*i* Pg | **Pb** | **13 28 16.8** | **-1.0** |
| | comp=E,129nm,0.6s | | | | | | |
| YLYR | | | | *e* | | 13 28 19.4 | |
| YLYR | | | | *i* Sg | **Sb** | **13 28 41.9** | **+1.7** |
| YLYR | | | | max | | | |
| | comp=E,173nm,0.3s | | | | | | |
| YLYR | | | | Smax | | | |
| | comp=E,1µm,0.4s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.27** | **265** | *e*PN | **Pn** | **13 28 22.3** | **+0.1** |
| NIZ | | | | *e* | | 13 28 25.1 | |
| NIZ | | | | *e*S | **Sn** | **13 28 50.1** | **+0.1** |
| NIZ | | | | *e* | | 13 28 53.5 | |
| NIZ | | | | pmax | pmax | | |
| | comp=Z,35nm,0.3s | | | | | | |
| NIZ | | | | smax | smax | | |
| | comp=N,133nm,0.4s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.27** | **265** | ⇑*i* Pn | **Pn** | **13 28 22.3** | **+0.1** |
| NIZ | | | | *e*Pg | **Pb** | **13 28 25.4** | **-0.5** |
| NIZ | | | | *e* | | 13 28 27.5 | |
| NIZ | | | | *e*Sg | **Sb** | **13 28 55.7** | **+1.9** |
| NIZ | | | | max | | | |
| | comp=N,20nm,0.3s | | | | | | |
| NIZ | | | | Smax | | | |
| | comp=N,138nm,0.4s | | | | | | |
| **CRS** | **Chara** | **2.76** | **70** | *e*PN | **Pb** | **13 28 35.1** | **+0.9** |
| CRS | | | | *e* | | 13 29 10.2 | |
| CRS | | | | pmax | pmax | | |
| | comp=Z,80nm,0.6s | | | | | | |
| CRS | | | | smax | smax | | |
| | comp=E,217nm,0.7s | | | | | | |
| **CRS** | **Chara** | **2.76** | **70** | *e*Pn | **Pn** | **13 28 28.4** | **-0.5** |
| CRS | | | | *e*Pg | **Pb** | **13 28 34.5** | **+0.3** |
| CRS | | | | *e*PgPg | **Pg** | **13 28 39.4** | **+1.4** |
| CRS | | | | *e*Sg | **Sb** | **13 29 10.3** | **+2.5** |
| CRS | | | | max | | | |
| | comp=E,87nm,0.5s | | | | | | |
| CRS | | | | Smax | | | |
| | comp=E,318nm,0.8s | | | | | | |
| **SYVR** | **Suvo** | **3.15** | **222** | *e*PN | **Pn** | **13 28 34.0** | **-0.3** |
| SYVR | | | | *e* | | 13 28 40.7 | |
| SYVR | | | | *e* | | 13 29 21.9 | |
| SYVR | | | | pmax | pmax | | |
| | comp=Z,35nm,0.7s | | | | | | |
| SYVR | | | | smax | smax | | |
| | comp=E,234nm,0.8s | | | | | | |
| **SYVR** | **Suvo** | **3.15** | **222** | ⇑*i* Pn | **Pn** | **13 28 34.1** | **-0.3** |
| SYVR | | | | *e* | | 13 28 37.2 | |
| SYVR | | | | *e*Pg | **Pb** | **13 28 41.0** | **0.0** |
| SYVR | | | | *e*Sg | **Sb** | **13 29 22.3** | **+3.1** |
| SYVR | | | | Pmax | | | |
| | comp=E,30nm,0.7s | | | | | | |
| SYVR | | | | Smax | | | |
| | comp=E,230nm,1.2s | | | | | | |
| **KHNR** | **Khani** | **3.67** | **74** | *e*Pg | **Pb** | **13 28 49.7** | **-0.1** |
| KHNR | | | | *e*Sg | **Sb** | **13 29 37.4** | **+3.2** |
| **TUP** | **Tupik** | **4.01** | **111** | *e*PN | **Pn** | **13 28 45.5** | **-0.7** |
| TUP | | | | *e* | | 13 28 57.4 | |
| TUP | | | | *e* | | 13 29 50.3 | |
| TUP | | | | pmax | pmax | | |
| | comp=Z,26nm,0.6s | | | | | | |
| TUP | | | | smax | smax | | |
| | comp=N,230nm,0.9s | | | | | | |
| **TUP** | **Tupik** | **4.01** | **111** | ⇑*i* Pn | **Pn** | **13 28 45.5** | **-0.7** |
| TUP | | | | *e* | | 13 28 50.4 | |
| TUP | | | | *e* | | 13 29 30.3 | |
| TUP | | | | *i* Sg | **Sg** | **13 29 50.3** | **-3.7** |
| TUP | | | | max | | | |
| | comp=N,12nm,0.3s | | | | | | |
| TUP | | | | Smax | | | |
| | comp=N,276nm,0.9s | | | | | | |
| **CIT** | **Chita** | **4.04** | **180** | *e*Sg | **Sg** | **13 29 51.0** | **-3.7** |
| CIT | | | | Smax | | | |
| | comp=N,340nm,0.3s | | | | | | |
| **OGRR** | **Ongureny** | **4.20** | **237** | *e*PN | **Pn** | **13 28 48.8** | **+0.1** |
| OGRR | | | | *e* | | 13 28 59.4 | |
| OGRR | | | | *e* | | 13 29

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=E,247nm,1.0s | | | | | | | |
| **TRG** | **Tyrgan** | **5.34** | **235** | *e*Pn | **Pn** | **13 29 04.9** | **+0.5** |
| TRG | | | | *e*Pg | **Pb** | **13 29 19.5** | **+1.3** |
| TRG | | | | *e* | | 13 30 15.9 | |
| TRG | | | | *e*Sg | Sb | 13 30 30.0 | +7.9 |
| TRG | | | | Pmax | | | |
| | comp=E,5.0nm,0.5s | | | | | | |
| TRG | | | | Smax | | | |
| | comp=E,25nm,0.5s | | | | | | |
| **UUDB** | **Ulan-Yde** | **5.44** | **222** | *e*Pg | **Pb** | **13 29 22.1** | **+2.2** |
| UUDB | | | | *e* | | 13 30 20.8 | |
| UUDB | | | | *e*Sg | Sb | 13 30 33.3 | +8.3 |
| UUDB | | | | Pmax | | | |
| | comp=E,16nm,0.8s | | | | | | |
| UUDB | | | | Smax | | | |
| | comp=E,149nm,1.7s | | | | | | |
| **HRMR** | **Khuramsha** | **5.90** | **224** | *e*Pn | **Pn** | **13 29 10.9** | **-1.2** |
| HRMR | | | | *e*Pg | Pb | 13 29 31.6 | +3.8 |
| HRMR | | | | *e* | | 13 30 35.2 | |
| HRMR | | | | *e*Sg | Sg | 13 30 49.3 | -5.1 |
| HRMR | | | | *e* | | 13 30 55.1 | |
| HRMR | | | | Pmax | | | |
| | comp=E,7.0nm,0.2s | | | | | | |
| HRMR | | | | max | | | |
| | comp=E,190nm,0.8s | | | | | | |
| **IENR** | **Iengra** | **6.33** | **84** | *e*Pn | **Pn** | **13 29 17.3** | **-0.7** |
| IENR | | | | *e* | | 13 29 21.8 | |
| IENR | | | | *e*Sg | Sg | 13 31 01.6 | -6.5 |
| **KPC** | **Khapcheranga** | **6.40** | **187** | *e*PN | **Pn** | **13 29 17.5** | **-1.5** |
| KPC | | | | *e* | | 13 29 40.1 | |
| KPC | | | | *e* | | 13 31 03.3 | |
| KPC | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| KPC | | | | smax | smax | | |
| | comp=E,114nm,1.1s | | | | | | |
| **KPC** | **Khapcheranga** | **6.40** | **187** | *i*Pn | **Pn** | **13 29 17.3** | **-1.7** |
| KPC | | | | *e* | | 13 29 26.4 | |
| KPC | | | | *e*Pg | Pb | 13 29 41.0 | +4.8 |
| KPC | | | | *e*Sg | Sg | 13 31 04.4 | -5.9 |
| KPC | | | | Pmax | | | |
| | comp=E,5.0nm,0.3s | | | | | | |
| KPC | | | | Smax | | | |
| | comp=E,116nm,1.1s | | | | | | |
| **IRK** | **Irkutsk** | **6.65** | **239** | *e*Sg | Sg | 13 31 11.8 | -6.6 |
| IRK | | | | Smax | | | |
| | comp=E,268nm,0.2s | | | | | | |
| **TLY** | **Talaya** | **7.31** | **237** | *e*PG | **Pb** | **13 29 53.6** | **+1.9** |
| **TLY** | **Talaya** | **7.31** | **237** | *e*Sg | Sb | 13 31 30.1 | +11 |
| TLY | | | | Smax | | | |
| | comp=E,19nm,0.8s | | | | | | |
| **ARS** | **Arshan** | **7.75** | **242** | *e*PG | Pb | 13 30 03.9 | +4.7 |
| ARS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.1s | | | | | | |
| **ARS** | **Arshan** | **7.75** | **242** | *e*Pg | Pb | 13 30 04.0 | +4.7 |
| ARS | | | | *e*Sg | Sb | 13 31 45.0 | +13 |
| ARS | | | | Pmax | | | |
| | comp=Z,5.0nm,0.4s | | | | | | |
| ARS | | | | Smax | | | |
| | comp=Z,96nm,0.9s | | | | | | |
| **ZAK** | **Zakamensk** | **8.37** | **232** | *e*PG | Pb | 13 30 12.6 | +2.8 |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **ZAK** | **Zakamensk** | **8.37** | **232** | *e*Sg | Sb | 13 32 04.6 | +15 |
| ZAK | | | | Smax | | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **MOY** | **Mondy** | **8.62** | **245** | *e*PG | Pn | 13 30 22.3 | +33 |
| **MOY** | **Mondy** | **8.62** | **245** | *e*Sg | Sn | 13 32 13.1 | +47 |
| MOY | | | | Smax | | | |
| | comp=Z,44nm,1.3s | | | | | | |
| **ORL** | **Orlik** | **8.77** | **252** | *e*Pn | **Pn** | **13 29 51.3** | **-0.2** |
| ORL | | | | *e*Sg | Sn | 13 32 17.3 | +47 |
| ORL | | | | Smax | | | |
| | comp=Z,18nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **9.12** | **209**⇑ | *e*P | **Pn** | **13 29 55.2** | **-1.2** |
| **YAK** | **Yakutsk** | **10.23** | **48**⇓ | *e*P | **Pn** | **13 30 11.8** | **+0.4** |
| **HVS** | **Khovu-Aksy** | **12.76** | **256**⇓ | *e*P | **Pn** | **13 30 47.1** | **+1.1** |
| **KLR** | **Kul'dur** | **12.97** | **114**⇑ | *e*P | **Pn** | **13 30 47.5** | **-1.4** |
| **VLA** | **Vladivostok** | **17.50** | **130** | *de*P | **Pn** | **13 31 48.8** | **+0.3** |
| **MKAR** | **Makanchi Array** | **21.41** | **258** | *i*P | **P** | **13 32 35.5** | **+3.1** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **25.66** | **129**⇑ | *e*P | **P** | **13 33 14.0** | **-0.3** |

*ISK **18** 13:34:21.8, 39.°60N×30.°04E, h7km, MD2.6*
*ISCJB **18** 13:34:24.0±1.0, 39.°69N±0.°06×30.°19E±0.°07, h10km±12km, Error ellipse: s-maj=11.7km s-min=6.9km az=43.6*
*DDA **18** 13:34:24.9, 39.°74N×30.°26E, h7km, Md2.6*
*CSEM **18** 13:34:24.3±0.4, 39.°73N×30.°20E, h10km, MD2.6, Error ellipse: s-maj=15.3km s-min=7.3km az=22.0*

**ISC 18 13:34:24.1±1.0, 39.73N±0.04×30.19E±0.03, h11km±9km, n19, σ0972/30, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BORA** | **Eskisehir** | **0.25** | **53** | *i* P | **Pg** | **13 34 29.1** | **-0.3** |
| BORA | | | | *i* S | **Sg** | **13 34 33.1** | **+0.2** |
| **BORA** | **Eskisehir** | **0.25** | **53** | P | **Pg** | **13 34 29.1** | **-0.3** |
| BORA | | | | S | **Sg** | **13 34 33.1** | **+0.2** |
| **CAVI** | **Cavuskoy** | **0.54** | **331** | *e*PG | **Pg** | **13 34 34.5** | **-0.2** |
| **CAVI** | **Cavuskoy** | **0.54** | **331** | *e*Pg | **Pg** | **13 34 34.5** | **-0.2** |
| **ESKT** | **Eskisehir** | **0.55** | **112** | *e*PG | **Pg** | **13 34 34.1** | **-0.8** |
| ESKT | | | | *e*SG | **Sb** | **13 34 44.0** | **+0.2** |
| **ESKT** | **Eskisehir** | **0.55** | **112** | *e*Pg | **Pg** | **13 34 34.1** | **-0.8** |
| ESKT | | | | *e*Sg | **Sb** | **13 34 44.0** | **+0.2** |
| **ESKT** | **Eskisehir** | **0.55** | **112** | P | **Pg** | **13 34 34.8** | **-0.1** |
| ESKT | | | | S | **Sg** | **13 34 42.7** | **+0.6** |
| **SEYT** | **Eskypehyr** | **0.55** | **112** | *i* P | **Pg** | **13 34 34.8** | **-0.1** |
| SEYT | | | | *i* S | **Sg** | **13 34 42.7** | **+0.6** |
| **GULT** | **Gulveren** | **0.75** | **19** | *e*PG | **Pb** | **13 34 39.8** | **+0.6** |
| GULT | | | | *e*SG | **Sn** | **13 34 52.7** | **+0.6** |
| **GULT** | **Gulveren** | **0.75** | **19** | *e*Pg | **Pb** | **13 34 39.8** | **+0.6** |
| GULT | | | | *e*Sg | **Sn** | **13 34 52.7** | **+0.6** |
| **ULDT** | **Uludag** | **0.91** | **297** | *i* P | **Pb** | **13 34 43.1** | **+1.0** |
| **ULDT** | **Uludag** | **0.91** | **297** | P | **Pb** | **13 34 43.0** | **+1.0** |
| **IGD** | **Bursa** | **0.93** | **305** | P | **Pn** | **13 34 43.4** | **+0.2** |
| IGD | | | | S | **Sg** | **13 34 54.0** | **-0.2** |
| **SVRH** | **Sivrihisar-ESK** | **1.07** | **105** | *e*PN | **Pg** | **13 34 44.0** | **-0.7** |
| **SVRH** | **Sivrihisar-ESK** | **1.07** | **105** | *e*Pn | **Pg** | **13 34 44.0** | **-0.7** |
| **ARMT** | **Armutlu** | **1.32** | **310** | *e*PN | **Pn** | **13 34 47.5** | **-1.0** |
| **ARMT** | **Armutlu** | **1.32** | **310** | *e*Pn | **Pn** | **13 34 47.5** | **-1.0** |
| **DURS** | **Dursunbey** | **1.33** | **265** | *i* P | **Pg** | **13 34 50.1** | **+0.4** |
| DURS | | | | *i* S | **Sb** | **13 35 04.8** | **-1.5** |
| **DURS** | **Dursunbey** | **1.33** | **265** | P | **Pg** | **13 34 50.1** | **+0.4** |
| DURS | | | | S | **Sb** | **13 35 04.8** | **-1.5** |

**IDC 18 13:37:49.2±472.0, 49.°07N×45.°61E, h0km, Error ellipse: s-maj=168.3km s-min=149.8km az=44.0, Ukraine - Moldova - Southwestern Russia region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **8.16** | **76** | *i* | | 14 34 00.0 | |
| | baz=267,slow=318,SNR=25 | | | | | | |
| **I43RU** | **DUBNA INFRASON** | **9.19** | **330** | *i* | | 14 37 50.0 | |
| | baz=144,slow=329,SNR=0.7 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **24.65** | **64** | *i* | | 16 05 50.0 | |
| | baz=271,slow=324,SNR=2.9 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **39.40** | **68** | *i* | | 17 38 00.0 | |
| | baz=298,slow=333,SNR=0.5 | | | | | | |

*DDA **18** 13:49:11.9, 38.°25N×31.°05E, h7km, Md2.7*
*ISCJB **18** 13:49:12.0±0.6, 38.°25N±0.°04×31.°09E±0.°05, h4km±13km, Error ellipse: s-maj=7.4km s-min=5.8km az=43.8*
*CSEM **18** 13:49:12.0±0.2, 38.°23N×31.°07E, h8km, MD2.7, Error ellipse: s-maj=6.0km s-min=4.6km az=19.0*

**ISC 18 13:49:12.2±1.1, 38.°25N±0.°03×31.°10E±0.°04, h7km±12km, n13, σ0953/21, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BAGO** | **Egridir - ISPA** | **0.36** | **223** | P | **Pg** | **13 49 19.5** | **+0.2** |
| BAGO | | | | S | **Sg** | **13 49 24.4** | **+0.4** |
| **BOLV** | **Bolvadin** | **0.48** | **346** | *i* P | **Pg** | **13 49 21.9** | **+0.4** |
| BOLV | | | | *i* S | **Sg** | **13 49 27.9** | **+0.1** |
| **BOLV** | **Bolvadin** | **0.48** | **346** | P | **Pg** | **13 49 21.9** | **+0.4** |
| BOLV | | | | S | **Sg** | **13 49 27.9** | **+0.1** |
| **SHUT** | **Suhut-Afyon** | **0.53** | **305** | *e*PG | **Pg** | **13 49 22.0** | **-0.4** |
| **SHUT** | **Suhut-Afyon** | **0.53** | **305** | *e*Pg | **Pg** | **13 49 22.0** | **-0.4** |
| **SUTC** | **Sutluce-Ispart** | **0.78** | **186** | *e*PG | **Pg** | **13 49 27.2** | **+0.1** |
| SUTC | | | | *e*SG | **Sn** | **13 49 42.4** | **+0.8** |
| **SUTC** | **Sutluce-Ispart** | **0.78** | **186** | *e*Pg | **Pg** | **13 49 27.2** | **+0.1** |
| **KDHN** | **Kadinhani** | **0.84** | **71** | *i* P | **Pb** | **13 49 29.5** | **+0.3** |
| KDHN | | | | *i* S | **Sb** | **13 49 41.3** | **+0.6** |
| **KDHN** | **Kadinhani** | **0.84** | **71** | P | **Pb** | **13 49 29.5** | **+0.3** |
| KDHN | | | | S | **Sb** | **13 49 41.3** | **+0.6** |
| **KONT** | **Konya--Tatoy** | **1.04** | **107** | *e*PG | **Pg** | **13 49 31.4** | **-0.7** |
| **KONT** | **Konya--Tatoy** | **1.04** | **107** | *e*Pg | **Pg** | **13 49 31.4** | **-0.7** |
| **KHAL** | **Karahalli** | **1.27** | **276** | *i* P | **Pn** | **13 49 35.6** | **-0.8** |
| KHAL | | | | *i* S | **Sg** | **13 49 52.8** | **-0.3** |
| **KHAL** | **Karahalli** | **1.27** | **276** | P | **Pn** | **13 49 35.6** | **-0.8** |
| KHAL | | | | S | **Sg** | **13 49 52.8** | **-0.3** |

*IDC **18** 14:00:52.7±2.3, 7.°44N×93.°90E, h0km, mb3.6/4, mb1 3.7/5, mb1mx3.5/40, mbtmp3.7/5, ML4.2/1, MS2.9/4, Ms1 3.0/4, ms1mx2.5/51, Error ellipse: s-maj=79.2km s-min=26.5km az=66.0*
*ISCJB **18** 14:00:55.0±1.3, 7.°5N±0.°2×94.°2E±0.°2, h20km, mb3.6/4, MS3.1/1, Error ellipse: s-maj=31.2km s-min=17.3km az=144.4*

**ISC 18 14:00:56.3±1.7, 7.°5N±0.°2×94.°0E±0.°3, h20km, n17, σ1914/12, mb3.5/4, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSI** | **Prapat** | **6.73** | **133** | LR | LR | 14 05 56.6 | |
| | comp=Z,115nm,18.0s,baz=268,slow=44 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **11.95** | **23** | Pn | **Pn** | **14 03 45.6** | **0.0** |
| | 0.4nm,0.3s,baz=212,slow=14,SNR=6.5 | | | | | | |
| CMAR | | | | LR | LR | 14 08 18.2 | |
| | comp=Z,39nm,18.6s,baz=200,slow=37 | | | | | | |
| **PALK** | **Pallekele** | **13.20** | **270** | LR | LR | 14 07 40.5 | |
| | comp=Z,30nm,19.4s,baz=116,slow=31 | | | | | | |
| **RAMN** | **Ramite** | **20.63** | **341** | *e*P | **P** | **14 05 35.5** | **+0.6** |
| | 19nm,0.7s | | | | | | |
| **TAPN** | **Taplejung** | **20.67** | **344** | *e*P | **P** | **14 05 36.7** | **+1.3** |
| | 28nm,1.1s | | | | | | |
| **PKI** | **Pulchoki** | **21.61** | **339** | *e*P | **P** | **14 05 47.2** | **+1.7** |
| **PKIN** | **Phulchoki** | **21.62** | **339** | *e*P | **P** | **14 05 46.9** | **+1.4** |
| | 5.0nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **21.85** | **339** | *e*P | **P** | **14 05 49.5** | **+1.5** |
| **GKN** | **Gorkha** | **22.28** | **338** | *e*P | **P** | **14 05 51.4** | **-1.2** |
| **KOLN** | **Koldanda** | **22.49** | **335** | *e*P | **P** | **14 05 54.6** | **-0.2** |
| | 7.6nm,0.7s | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.18** | **236** | T | T | 14 33 24.2 | |
| | baz=54,slow=75,SNR=13 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.18** | **235** | T | T | 14 33 22.7 | |
| | baz=54,slow=75,SNR=12 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.19** | **236** | T | T | 14 33 23.3 | |
| | baz=54,slow=75,SNR=9.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.47** | **348** | P | **P** | **14 08 32.9** | **-0.8** |
| | 0.8nm,0.5s,baz=162,slow=9.5,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **41.60** | **13** | P | **P** | **14 08 42.8** | **-0.2** |
| | 0.4nm,0.6s,baz=204,slow=6.3,SNR=3.2 | | | | | | |
| SONM | | | | LR | LR | 14 28 21.0 | |
| | comp=Z,25nm,18.8s,baz=236,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.95** | **353** | P | **P** | **14 09 24.9** | **-0.7** |
| | 1.5nm,0.4s,baz=174,slow=8.5,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **49.75** | **130** | P | **P** | **14 09 47.9** | **+0.2** |
| | 0.2nm,0.7s,baz=304,slow=8.3,SNR=3.5 | | | | | | |

**IDC 18 14:27:33.7±6.2, 2.°52S×141.°03E, h0km, mb3.4/2, mb1 3.7/3, mb1mx3.4/24, mbtmp3.5/3, ML3.7/1, Error ellipse: s-maj=229.9km s-min=32.4km az=89.0, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **18.51** | **200** | P | P | 14 31 50.7 | -1.0 |
| | 0.3nm,0.3s,baz=22,slow=12,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **22.13** | **198** | P | P | 14 32 31.6 | +0.5 |
| | 0.8nm,0.6s,baz=26,slow=11,SNR=25 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **32.77** | **49** | T | T | 15 09 07.6 | |
| | baz=232,slow=75,SNR=6.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **32.78** | **49** | T | T | 15 09 07.9 | |
| | baz=232,slow=75,SNR=6.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **32.79** | **49** | T | T | 15 09 10.5 | |
| | baz=232,slow=75,SNR=6.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **71.06** | **322** | P | P | 14 38 53.7 | -0.1 |
| | 0.3nm,0.6s,baz=123,slow=5.3,SNR=2.7 | | | | | | |

*ISCJB **18** 14:32:45.7±0.4, 11.°55S±0.°04×117.°46E±0.°04, h34km, mb3.9/3, Error ellipse: s-maj=6.7km s-min=4.6km az=139.0*
*AUST **18** 14:32:46.2, 11.°48S×117.°42E, h20km*
*IDC **18** 14:32:47.6±1.6, 11.°54S×117.°89E, h0km, mb3.9/3, mb1 4.0/7, mb1mx3.7/35, mbtmp4.0/7, ML3.9/4, MS2.6/1, Ms1 2.6/1, ms1mx2.3/28, Error ellipse: s-maj=42.1km s-min=21.9km az=38.0*
*DJA **18** 14:32:48.2±2.3, 11.°5S±5.°×117.°7E±.°, h22km±31km, M4.5/13, mb4.3/9, mB4.9/2, MLv4.6/13, Mw(mB)4.2/2*

**ISC 18 14:32:47.9±0.8, 11.48S±0.06×117.50E±0.06, h34km, n32, σ1953/33, mb3.9/3, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **2.79** | **347** | P | **Pn** | **14 33 30.1** | **-0.2** |
| TWSI | | | | S | **Sn** | **14 34 04.4** | **+1.6** |
| **BASI** | **Baing, Sumba** | **3.27** | **68** | P | **Pn** | **14 33 38.6** | **+1.7** |
| BASI | | | | S | **Sn** | **14 34 18.4** | **+3.8** |
| **IGBI** | **Denpasar** | **3.52** | **319** | P | **Pn** | **14 33 40.0** | **-0.2** |
| IGBI | | | | S | **Sn** | **14 34 21.1** | **+0.4** |
| **SRBI** | **Singaraja** | **4.06** | **326** | P | **Pn** | **14 33 47.8** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **4.45** | **312** | P | **Pn** | **14 33 51.9** | **-1.2** |
| | baz=4.4,SNR=84 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **4.45** | **312** | P | **Pn** | **14 33 52.2** | **-0.9** |
| **MMRI** | **Maumere** | **5.46** | **59** | P | **Pn** | **14 34 07.9** | **+1.0** |
| | 32nm,0.6s,2μm0.3nm | | | | | | |
| **KMMI** | **Kalianget** | **5.62** | **321** | P | **Pn** | **14 34 10.8** | **+1.7** |
| | 20nm,1.5s,0.2nm | | | | | | |
| **BATI** | **Baumata** | **6.18** | **79** | Pn | **Pn** | **14 34 16.3** | **-0.6** |
| | 6.5nm,0.3s,baz=265,slow=3.6,SNR=7.8 | | | | | | |
| BATI | | | | Sn | **Sn** | **14 35 24.8** | **-1.8** |
| | 12nm,0.3s,baz=217,slow=20,SNR=8.0 | | | | | | |
| **BATI** | **Baumata** | **6.18** | **79** | P | **Pn** | **14 34 18.0** | **+1.1** |
| | 27nm,1.5s,0.2nm | | | | | | |
| **PWJI** | **Pagerwojo** | **6.58** | **301** | P | **Pn** | **14 34 21.9** | **-0.5** |
| | 37nm,2.2s | | | | | | |
| **BKSI** | **Bulukumba** | **6.65** | **23** | P | **Pn** | **14 34 24.5** | **+1.2** |
| | 28nm,0.5s,584nm | | | | | | |
| **KAPI** | **Kappang** | **6.80** | **19** | Pn | **Pn** | **14 34 26.6** | **+1.2** |
| | 3.2nm,0.3s,baz=201,slow=5.4,SNR=13 | | | | | | |
| KAPI | | | | Sn | **Sn** | **14 35 38.3** | **-3.4** |
| | 18nm,0.3s,baz=155,slow=19,SNR=25 | | | | | | |
| KAPI | | | | LR | LR | 14 37 10.9 | |
| | comp=Z,46nm,20.8s,baz=271,slow=39 | | | | | | |
| **SOEI** | **Soe** | **6.87** | **76** | P | **Pn** | **14 34 27.2** | **+0.7** |
| | baz=6.9,SNR=6.7 | | | | | | |
| **SOEI** | **Soe** | **6.87** | **76** | P | **Pn** | **14 34 27.4** | **+1.0** |
| | 37nm,0.9s | | | | | | |
| **PCJI** | **Pacitan** | **7.04** | **297** | P | **Pn** | **14 34 28.4** | **-0.2** |
| | 45nm,2.4s | | | | | | |
| **UGM** | **Wanagama** | **7.74** | **297** | P | **Pn** | **14 34 39.0** | **+0.7** |
| | baz=7.7,SNR=7.2 | | | | | | |
| **UGM** | **Wanagama** | **7.74** | **297** | P | **Pn** | **14 34 39.0** | **+0.7** |
| | 98nm,2.5s | | | | | | |
| **KBKI** | **Kotabaru** | **8.24** | **351** | P | **Pn** | **14 34 44.7** | **-0.4** |
| **GIRL** | **Giralia** | **11.53** | **195** | P | **Pn** | **14 35 29.6** | **-0.6** |
| | baz=12,SNR=13 | | | | | | |
| **KNRA** | **Kununurra** | **11.71** | **112** | P | **Pn** | **14 35 31.1** | **-1.7** |
| | baz=12,SNR=7.6 | | | | | | |
| **MEEK** | **Meekatharra** | **15.11** | **176** | P | **Pn** | **14 36 17.3** | **-1.7** |
| | baz=15,SNR=18 | | | | | | |
| **WRKA** | **Warakurna** | **16.92** | **144** | P | **Pn** | **14 36 42.3** | **0.0** |
| | baz=17,SNR=4.3 | | | | | | |
| **MORW** | **Morawa** | **17.55** | **184** | P | **Pn** | **14 36 49.4** | **-0.6** |
| | baz=18,SNR=24 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.25** | **120** | P | **P** | **14 36 57.4** | **-1.2** |
| | 0.3nm,0.3s,baz=295,slow=13,SNR=9.8 | | | | | | |
| WRA | | | | S | Sn | 14 40 06.3 | -15 |
| | 0.5nm,0.3s,baz=286,slow=24,SNR=7.5 | | | | | | |
| **BLDU** | **Ballidu** | **19.05** | **182** | P | **Pn** | **14 37 10.1** | **+1.8** |
| | baz=19,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **19.76** | **130** | P | **Pn** | **14 37 15.9** | **-0.9** |
| | 0.2nm,0.3s,baz=314,slow=12,SNR=24 | | | | | | |
| ASAR | | | | S | S | 14 40 43.3 | -13 |
| | 0.4nm,0.3s,baz=291,slow=22,SNR=12 | | | | | | |
| **KLBR** | **Kellerberrin** | **20.01** | **179** | P | **Pn** | **14 37 22.8** | **+3.0** |
| | baz=20,SNR=14 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **21.34** | **181** | P | P | 14 37 39.3 | +7.0 |
| | baz=21,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **59.87** | **351** | P | P | 14 42 56.6 | +6.2 |
| | 0.5nm,0.5s,baz=180,slow=8.2,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.01** | **334** | P | P | 14 43 37.5 | +6.4 |
| | 0.5nm,0.5s,baz=148,slow=7.2,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.84** | **340** | P | P | 14 44 06.8 | +5.7 |
| | 1.8nm,0.6s,baz=145,slow=4.2,SNR=7.7 | | | | | | |

*ISCJB **18** 14:48:57.0±0.7, 32.°30N±0.°05×115.°36W±0.°07, h13km±8km, Error ellipse: s-maj=11.5km s-min=7.2km az=30.7*
*ECX **18** 14:48:58.2±0.5, 32.°28N×115.°34W, h5km, MD2.3, ML2.5*
*MEX **18** 14:48:59.2±0.7, 32.°39N×115.°26W, h13km±895km, MD3.6*

**ISC 18 14:48:56.6±1.1, 32.30N±0.05×115.36W±0.04, h12km±11km, n17, σ0922/22, 6C-3D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPBX** | **Cerro Prieto** | **0.13** | **22**⇑ | *e*P | **Pb** | **14 49 00.8** | **-0.1** |
| CPBX | | | | *e*P | **Pb** | **14 49 00.8** | **-0.1** |
| CPBX | | | | IAML | | 14 49 09.7 | |
| | comp=E,8μm,0.2s | | | | | | |
| CPBX | | | | ⇑*e* | | 14 49 09.7 | |
| **MBIG** | **Mexicali** | **0.17** | **52** | *e*P | **Pb** | **14 49 01.6** | **-0.1** |
| MBIG | | | | *i* S | **Sg** | **14 49 03.1** | **-0.2** |
| **MBIG** | **Mexicali** | **0.17** | **52**⇑ | *e*P | **Pb** | **14 49 02.0** | **+0.3** |
| **SGL** | **Mount Signal** | **0.47** | **319** | *e*P | **Pb** | **14 49 06.6** | **-0.1** |
| **EMSC** | **East Mesa** | **0.54** | **36** | *e*P | **Pb** | **14 49 08.1** | **+0.1** |
| **WESC** | **Westside Schoo** | **0.56** | **326** | *e*P | **Pb** | **14 49 08.3** | **+0.1** |
| **YUH** | **Yuha Desert** | **0.59** | **306**⇑ | *i*P | **Pb** | **14 49 08.6** | **-0.2** |
| **COA** | **Coachella** | **0.60** | **20** | *e*P | **Pb** | **14 49 08.8** | **-0.1** |
| **RDX** | **Rancho Dawling** | **0.62** | **233**⇑ | *e*P | **Pb** | **14 49 09.2** | **-0.2** |
| RDX | | | | *e*S | **Sg** | **14 49 17.5** | **+0.7** |
| RDX | | | | IAML | | 14 49 18.2 | |
| | comp=E,158nm,0.1s | | | | | | |
| RDX | | | | ⇑*e* | | 14 49 18.2 | |
| RDX | | | | IAML | | 14 49 19.1 | |
| | comp=N,105nm,0.2s | | | | | | |
| **RMX** | **La Rumorosa** | **0.68** | **297** | *e*P | **Pg** | **14 49 09.9** | **+0.1** |
| RMX | | | | *e*S | **Sg** | **14 49 18.8** | **0.0** |
| RMX | | | | IAML | | 14 49 19.4 | |
| | comp=N,376nm,0.1s | | | | | | |
| **IBP** | **Imperial Bould** | **0.72** | **300** | *e*P | **Pb** | **14 49 11.0** | **0.0** |
| **CBX** | **Cerro Bola** | **1.10** | **271** | *e*P | **Pg** | **14 49 17.8** | **-0.1** |
| CBX | | | | *e*S | **Sb** | **14 49 32.1** | **+0.1** |
| **CBX** | **Cerro Bola** | **1.10** | **271** | *e*P | **Pg** | **14 49 17.8** | **-0.1** |
| **ZAX** | **El Zacaton** | **1.10** | **225** | *e*P | **Pb** | **14 49 17.4** | **-0.2** |
| ZAX | | | | ⇓*e* | | 14 49 33.4 | |
| ZAX | | | | IAML | | 14 49 33.4 | |
| | comp=N,81nm,0.5s | | | | | | |
| **BAR** | **Barrett** | **1.17** | **289**⇓ | *e*P | **Pb** | **14 49 18.8** | **0.0** |
| **ECNX** | **Esteban Cantu** | **1.23** | **239**⇓ | *e*P | **Pn** | **14 49 19.6** | **-0.1** |
| **PBX** | **Punta Banda** | **1.28** | **245** | *e*P | **Pn** | **14 49 20.3** | **-0.1** |

*CSEM **18** 14:51:15.2±0.2, 39.°37N×20.°59E, h2km, MD3.5, Error ellipse: s-maj=4.3km s-min=2.8km az=69.0*
*THE **18** 14:51:15.3, 39.°35N×20.°60E, h2km, ML3.0/9, Error ellipse: s-maj=0.9km s-min=0.3km az=233.0*
*ATH **18** 14:51:15.0, 39.°37N×20.°60E, h11km±1km, MD3.5/33*

**ISC 18 14:51:15.2±1.1, 39.37N±0.02×20.60E±0.02, h1km±10km, n114, σ0884/149, 1D, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IGT** | **Igoumenitsa** | **0.26** | **308** | *e*PG | **Pg** | **14 51 20.6** | **+0.3** |
| IGT | | | | *e*SG | **Sg** | **14 51 24.8** | **+1.1** |
| **IGT** | **Igoumenitsa** | **0.26** | **308** | P | **Pg** | **14 51 20.4** | **+0.1** |
| IGT | | | | S | **Sg** | **14 51 25.0** | **+1.3** |
| **IGT** | **Igoumenitsa** | **0.26** | **308** | *e*Pg | **Pg** | **14 51 20.4** | **+0.3** |
| IGT | | | | S | **Sg** | **14 51 24.8** | **+1.1** |
| **JAN** | **Janina** | **0.35** | **34** | *e*PB | **Pg** | **14 51 22.0** | **+0.1** |
| JAN | | | | *e*SB | **Sg** | **14 51 26.9** | **+0.5** |
| **JAN** | **Janina** | **0.35** | **34** | P | **Pg** | **14 51 22.0** | **+0.1** |
| JAN | | | | S | **Sg** | **14 51 27.8** | **+1.4** |
| **JAN** | **Janina** | **0.35** | **34** | P | **Pg** | **14 51 22.0** | **+0.1** |
| JAN | | | | *e*Sb | **Sg** | **14 51 26.9** | **+0.5** |
| JAN | | | | S | **Sb** | **14 51 27.5** | **-2.8** |
| **SGD** | **Sagiada** | **0.37** | **311** | *e*PB | **Pg** | **14 51 22.8** | **+0.4** |
| **SGD** | **Sagiada** | **0.37** | **311** | P | **Pg** | **14 51 22.7** | **+0.4** |
| SGD | | | | S | **Sg** | **14 51 28.2** | **+1.0** |
| **SGD** | **Sagiada** | **0.37** | **311** | P | **Pg** | **14 51 22.7** | **+0.4** |
| SGD | | | | S | **Sg** | **14 51 28.2** | **+1.0** |
| **DSL** | **Palaion Diasel** | **0.45** | **121** | *e*PB | **Pg** | **14 51 23.6** | **-0.3** |
| DSL | | | | *e*SB | **Sg** | **14 51 30.3** | **+0.5** |
| **DSL** | **Palaion Diasel** | **0.45** | **121** | P | **Pg** | **14 51 23.4** | **-0.5** |
| DSL | | | | S | **Sg** | **14 51 30.3** | **+0.5** |
| **DSL** | **Palaion Diasel** | **0.45** | **121** | P | **Pg** | **14 51 23.4** | **-0.5** |
| DSL | | | | S | **Sg** | **14 51 30.3** | **+0.5** |
| **LKD2** | **Lefkada island** | **0.58** | **175** | *e*PG | **Pg** | **14 51 25.8** | **-0.6** |
| **LKD2** | **Lefkada island** | **0.58** | **175** | P | **Pg** | **14 51 25.9** | **-0.5** |
| LKD2 | | | | S | **Sg** | **14 51 34.4** | **+0.5** |
| **LKD2** | **Lefkada island** | **0.58** | **175** | *e*Pg | **Pg** | **14 51 25.8** | **-0.6** |
| LKD2 | | | | S | **Sg** | **14 51 34.4** | **+0.5** |
| **KEK** | **Kerkira** | **0.71** | **299** | *e*PG | **Pg** | **14 51 28.4** | **-0.4** |
| KEK | | | | *e*SB | **Sg** | **14 51 38.0** | **0.0** |
| **KEK** | **Kerkira** | **0.71** | **299** | P | **Pg** | **14 51 28.4** | **-0.4** |
| KEK | | | | S | **Sb** | **14 51 39.4** | **-1.2** |
| **KEK** | **Kerkira** | **0.71** | **299** | P | **Pg** | **14 51 28.4** | **-0.4** |
| KEK | | | | *e*Sb | **Sg** | **14 51 38.0** | **0.0** |
| KEK | | | | S | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LIT | | | | S | Sn | 14 52 06.8 | 0.0 | | |
| **DRO** | **Drossia** | **1.66** | **148** | *e*PB | **Pb** | **14 51 46.5** | **-0.1** | | |
| **DRO** | **Drossia** | **1.66** | **148** | *e*Pb | **Pb** | **14 51 46.5** | **-0.1** | | |
| **AXAR** | **Agios Charalam** | **1.71** | **110** | *e*PN | **Pb** | **14 51 47.4** | **-0.1** | | |
| **AXAR** | **Agios Charalam** | **1.71** | **110** | *e*Pn | **Pb** | **14 51 47.4** | **-0.1** | | |
| **OHR** | **Ohrid** | **1.75** | **5** | *e*Pn | **Pb** | **14 51 48.0** | **-0.1** | | |
| OHR | | | | *e*Sg | **Sg** | **14 52 12.7** | **+1.3** | | |
| **OHR** | **Ohrid** | **1.75** | **5** | *e*Pn | **Pb** | **14 51 48.0** | **-0.1** | | |
| OHR | | | | *e*Sg | **Sg** | **14 52 12.7** | **+1.3** | | |
| **DESF** | **Desfina** | **1.79** | **122** | *e*PG | **Pb** | **14 51 48.1** | **-0.7** | | |
| **DESF** | **Desfina** | **1.79** | **122** | *e*Pg | **Pb** | **14 51 48.1** | **-0.7** | | |
| **KLV** | **Kalavryta, Ach** | **1.80** | **137** | *e*PN | **Pn** | **14 51 47.9** | **+0.5** | | |
| **KLV** | **Kalavryta, Ach** | **1.80** | **137** | *e*Pn | **Pn** | **14 51 47.9** | **+0.5** | | |
| **GUR** | **Goura** | **1.98** | **136** | *e*PN | **Pb** | **14 51 51.1** | **-1.0** | | |
| **GUR** | **Goura** | **1.98** | **136** | *e*Pn | **Pb** | **14 51 51.1** | **-1.0** | | |
| **LKR** | **Lokris** | **2.00** | **110** | *e*PN | **Pb** | **14 51 51.5** | **-0.9** | | |
| **LKR** | **Lokris** | **2.00** | **110** | *e*Pn | **Pb** | **14 51 51.5** | **-0.9** | | |
| **NEO** | **Neokhori** | **2.04** | **91** | *e*PG | **Pb** | **14 51 52.2** | **-0.8** | | |
| **NEO** | **Neokhori** | **2.04** | **91** | *e*Pn | **Pb** | **14 51 52.2** | **-0.8** | | |
| **GRG** | **Griva** | **2.10** | **40** | *e*PN | **Pn** | **14 51 52.1** | **+0.5** | | |
| **GRG** | **Griva** | **2.10** | **40** | P | **Pn** | **14 51 50.7** | **-0.9** | | |
| **GRG** | **Griva** | **2.10** | **40** | P | **Pn** | **14 51 50.7** | **-0.9** | | |
| **GRG** | **Griva** | **2.10** | **40** | *e*Pn | **Pn** | **14 51 52.1** | **+0.5** | | |
| **HORT** | **Hortiatis** | **2.28** | **57** | *e*PN | **Pn** | **14 51 54.8** | **+0.7** | | |
| **HORT** | **Hortiatis** | **2.28** | **57** | *e*Pn | **Pn** | **14 51 54.8** | **+0.7** | | |
| **LTK** | **Loutraki** | **2.29** | **125** | *e*PN | **Pn** | **14 51 54.8** | **+0.7** | | |
| **LTK** | **Loutraki** | **2.29** | **125** | *e*Pn | **Pn** | **14 51 54.8** | **+0.7** | | |
| **VIL2** | **Platees** | **2.38** | **118** | *e*PN | **Pb** | **14 51 57.2** | **-1.8** | | |
| **ITM** | **Ithomi** | **2.42** | **154** | *e*PN | **Pn** | **14 51 57.3** | **+1.3** | | |
| **ITM** | **Ithomi** | **2.42** | **154** | *e*Pn | **Pn** | **14 51 57.3** | **+1.3** | | |
| **VLX** | **Vlachokerasia** | **2.44** | **144** | *e*PN | **Pn** | **14 51 57.8** | **+1.5** | | |
| **VLX** | **Vlachokerasia** | **2.44** | **144** | *e*Pn | **Pn** | **14 51 57.8** | **+1.5** | | |
| **VILL** | **Villia** | **2.44** | **119** | *e*Pn | **Pn** | **14 51 57.2** | **+1.0** | | |
| **PAIG** | **Paliouri** | **2.44** | **76** | *e*PB | **Pn** | **14 51 56.6** | **+0.4** | | |
| **SOH** | **Sokhos** | **2.56** | **55** | *e*PN | **Pn** | **14 51 59.1** | **+1.1** | | |
| SOH | | | | *e*SN | **Sn** | **14 52 31.3** | **+1.5** | | |
| **SOH** | **Sokhos** | **2.56** | **55** | *e*Pn | **Pn** | **14 51 59.1** | **+1.1** | | |
| SOH | | | | *e*Sn | **Sn** | **14 52 31.3** | **+1.5** | | |
| **EREA** | **Eretria** | **2.77** | **109** | *e*PB | **Pn** | **14 52 00.9** | **+0.2** | | |
| **OUR** | **Ouranopolis** | **2.78** | **69** | *e*PB | **Pn** | **14 52 01.2** | **+0.4** | | |
| **DID** | **Didima** | **2.78** | **131** | *e*PB | **Pn** | **14 52 01.9** | **+0.9** | | |
| **SRS** | **Serrai** | **2.88** | **52** | *e*PN | **Pn** | **14 52 02.5** | **+0.2** | | |
| **SRS** | **Serrai** | **2.88** | **52** | *e*Pn | **Pn** | **14 52 02.5** | **+0.2** | | |
| **NVR** | **Nevrokopi** | **3.18** | **51** | *e*PN | **Pn** | **14 52 07.0** | **+0.5** | | |
| **NVR** | **Nevrokopi** | **3.18** | **51** | *e*Pn | **Pn** | **14 52 07.0** | **+0.5** | | |
| **VLI** | **Veliai** | **3.23** | **144** | *e*PN | **Pn** | **14 52 07.9** | **+0.9** | | |
| **VLI** | **Veliai** | **3.23** | **144** | *e*Pn | **Pn** | **14 52 07.9** | **+0.9** | | |
| **BARS** | **Barje** | **3.56** | **15** | ⇓*i*Pn | **Pn** | **14 52 11.9** | **+0.2** | | |
| **KYTH** | **Kithira** | **3.64** | **147** | *e*PN | **Pn** | **14 52 14.4** | **+1.7** | | |
| **KYTH** | **Kithira** | **3.64** | **147** | *e*Pn | **Pn** | **14 52 14.4** | **+1.7** | | |
| **IVAS** | **Ivanjica** | **4.22** | **356** | *e*Pn | **Pn** | **14 52 19.2** | **-1.5** | | |
| **GRUS** | **Gruza** | **4.52** | **1** | *e*Pn | **Pn** | **14 52 24.7** | **0.0** | | |
| **DIVS** | **Divibare** | **4.75** | **355** | *e*Pn | **Pn** | **14 52 27.4** | **-0.6** | | |
| **TRUS** | **Trudelj** | **4.85** | **358** | *e*Pn | **Pn** | **14 52 26.7** | **-2.7** | | |

*BUL **18** 14:55:14.9±17.0, 24.°42S×26.°99E, h80km±762km, MD3.0*
**PRE 18 14:54:24.6±1.2, 26.°37S×29.°16E, h0km, ML2.6, Explosion, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OBSV** | **Observatory** | **1.00** | **280** | *e*P | Pb | 14 54 44.5 | -0.5 |
| OBSV | | | | *e*S | Sg | 14 54 58.0 | +0.9 |
| OBSV | | | | AML | AML | 14 55 01.7 | |
| | comp=Z,42nm,0.5s | | | | | | |
| **PRYS** | **Parys** | **1.71** | **251** | *e*P | Pn | 14 54 55.7 | -0.1 |
| PRYS | | | | *e*S | Sg | 14 55 19.7 | -0.2 |
| PRYS | | | | AML | AML | 14 55 24.7 | |
| | comp=Z,41nm,0.4s | | | | | | |
| **KSR** | **Koster** | **2.10** | **284** | *e*P | Pn | 14 55 01.2 | -0.1 |
| KSR | | | | *e*S | Sn | 14 55 28.7 | +0.3 |
| KSR | | | | AML | AML | 14 55 29.4 | |
| | comp=Z,25nm,0.5s | | | | | | |
| **POGA** | **Pongola** | **2.40** | **115** | *e*P | Pn | 14 55 06.2 | +1.0 |
| POGA | | | | *e*S | Sb | 14 55 38.4 | -0.6 |
| POGA | | | | AML | AML | 14 55 50.9 | |
| | comp=Z,36nm,0.5s | | | | | | |
| **SWZ** | **Schweizer** | **3.52** | **256** | *e*P | Pn | 14 55 22.0 | +1.2 |
| SWZ | | | | *e*S | Sn | 14 56 02.6 | -0.7 |
| SWZ | | | | AML | AML | 14 56 18.3 | |
| | comp=Z,31nm,0.5s | | | | | | |
| **BOSA** | **Boshof** | **4.13** | **236** | *i* P | Sn | 14 56 25.1 | +6.8 |
| BOSA | | | | *i* S | Sg | 14 56 56.7 | +19 |
| **MATP** | **Matopo** | **5.95** | **354** | *i* P | Pg | 14 56 22.8 | +4.0 |
| MATP | | | | *i* S | Sn | 14 56 59.0 | -4.2 |
| **BLWY** | **Bulawayo** | **6.22** | **355** | *i* P | Pg | 14 56 22.2 | -1.8 |
| BLWY | | | | *i* S | Sn | 14 56 55.5 | -14 |

*DDA **18** 15:02:22.8, 38.°44N×36.°61E, h10km, Md2.9*
*ISK **18** 15:02:22.1, 38.°51N×36.°61E, h5km, MD2.7*
*ISCJB **18** 15:02:23.1±0.6, 38.°46N±0.°02×36.°58E±0.°04, h4km±5km, Error ellipse: s-maj=4.8km s-min=3.7km az=5.6*
*CSEM **18** 15:02:23.1±0.3, 38.°49N×36.°62E, h5km, MD2.7, Error ellipse: s-maj=7.1km s-min=5.9km az=91.0*
**ISC 18 15:02:23.2±1.0, 38.°46N±0.°02×36.°60E±0.°03, h7km±10km, n25, σ0°89/43, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SARI** | **SarD1z-Kayseri** | **0.15** | **250** | *e*PG | **Pg** | **15 02 25.8** | **-0.6** |
| **PINB** | **Pinarbasi** | **0.27** | **325** | *i* P | **Pg** | **15 02 28.2** | **-0.4** |
| PINB | | | | *i* S | **Sg** | **15 02 33.5** | **+1.3** |
| **PINB** | **Pinarbasi** | **0.27** | **325** | P | **Pg** | **15 02 28.2** | **-0.4** |
| PINB | | | | S | **Sg** | **15 02 33.5** | **+1.3** |
| **CUGUR** | **Gurin_S¯VAS** | **0.59** | **63** | P | **Pg** | **15 02 34.0** | **-0.6** |
| CUGUR | | | | S | **Sb** | **15 02 43.5** | **-1.0** |
| **DARE** | **Darende-Malaty** | **0.70** | **81** | *e*PG | **Pg** | **15 02 36.5** | **-0.2** |
| DARE | | | | *e*SG | **Sb** | **15 02 46.8** | **-0.9** |
| **DARE** | **Darende-Malaty** | **0.70** | **81** | *e*Pg | **Pg** | **15 02 36.5** | **-0.2** |
| DARE | | | | *e*Sg | **Sb** | **15 02 46.8** | **-0.9** |
| **ANDN** | **Andirin** | **0.90** | **193** | *i* P | **Pg** | **15 02 41.3** | **+0.8** |
| ANDN | | | | *i* S | **Sb** | **15 02 53.6** | **+0.2** |
| **ANDN** | **Andirin** | **0.90** | **193** | P | **Pg** | **15 02 41.3** | **+0.8** |
| ANDN | | | | S | **Sb** | **15 02 53.6** | **+0.2** |
| **KMRS** | **Kahramanmaras** | **0.98** | **166** | *e*PG | **Pb** | **15 02 42.9** | **+0.4** |
| KMRS | | | | *e*SG | **Sn** | **15 02 58.0** | **+0.4** |
| **KMRS** | **Kahramanmaras** | **0.98** | **166** | *e*Pg | **Pb** | **15 02 42.9** | **+0.4** |
| KMRS | | | | *e*Sg | **Sn** | **15 02 58.0** | **+0.4** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.00** | **344** | P | **Pg** | **15 02 41.4** | **-1.0** |
| CUSAR | | | | S | **Sg** | **15 02 53.5** | **-1.8** |
| **AKCD** | **Akcadag** | **1.05** | **99** | *i* P | **Pg** | **15 02 42.4** | **-1.0** |
| AKCD | | | | *i* S | **Sb** | **15 02 57.9** | **+0.1** |
| **AKCD** | **Akcadag** | **1.05** | **99** | P | **Pg** | **15 02 42.4** | **-1.0** |
| AKCD | | | | S | **Sb** | **15 02 57.9** | **+0.1** |
| **AYKD** | **Aykdinkavak** | **1.06** | **171** | P | **Pg** | **15 02 41.6** | **-1.9** |
| AYKD | | | | S | **Sg** | **15 02 56.3** | **-0.9** |
| **CUKAN** | **kangal_SIVAS** | **1.09** | **38** | P | **Pn** | **15 02 45.1** | **+0.1** |
| CUKAN | | | | S | **Sn** | **15 03 00.0** | **-0.4** |
| **KAMA** | **Osmaniye** | **1.27** | **178** | P | **Pn** | **15 02 46.8** | **-0.7** |
| KAMA | | | | S | **Sg** | **15 03 04.1** | **0.0** |
| **GZT** | **Gaziantep** | **1.34** | **145** | P | **Pn** | **15 02 47.5** | **-1.0** |
| GZT | | | | S | **Sn** | **15 03 08.1** | **+1.6** |
| **MALT** | **Malatya** | **1.44** | **95** | *e*PN | **Pg** | **15 02 50.4** | **-0.5** |
| **MALT** | **Malatya** | **1.44** | **95** | *e*Pn | **Pg** | **15 02 50.4** | **-0.5** |
| **YOZ** | **Yozgat** | **1.54** | **320** | *e*PN | **Pb** | **15 02 52.2** | **0.0** |
| **YOZ** | **Yozgat** | **1.54** | **320** | *e*Pn | **Pb** | **15 02 52.2** | **0.0** |
| **KEMA** | **Kemaliye** | **1.69** | **61** | *i* P | **Pn** | **15 02 53.5** | **+0.4** |
| KEMA | | | | *i* S | **Sg** | **15 03 19.0** | **+1.6** |
| **KEMA** | **Kemaliye** | **1.69** | **61** | P | **Pn** | **15 02 53.5** | **+0.4** |
| KEMA | | | | S | **Sg** | **15 03 19.0** | **+1.6** |
| **PTK** | **Pertek** | **2.23** | **78** | *e*PN | **Pn** | **15 03 01.2** | **+0.5** |
| **PTK** | **Pertek** | **2.23** | **78** | *e*Pn | **Pn** | **15 03 01.2** | **+0.5** |

**WEL 18 15:20:35.3±0.1, 43.°98S×169.°42E, h5km, ML3.6/18, 5C-1D, Error ellipse: s-maj=1.3km s-min=0.8km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FOZ** | **Fox Glacier** | **0.46** | **25** | ⇑PG | Pb | 15 20 45.7 | -0.2 |
| FOZ | | | | SG | Sb | 15 20 52.3 | -0.7 |
| FOZ | | | | AML | AML | 15 20 54.7 | |
| FOZ | | | | AML | AML | 15 20 54.7 | |
| FOZ | | | | AML | AML | 15 20 56.4 | |
| **JCZ** | **Jackson Bay** | **0.49** | **259** | ⇑PG | Pg | 15 20 45.1 | +0.2 |
| JCZ | | | | SG | Sg | 15 20 51.4 | 0.0 |
| JCZ | | | | AML | AML | 15 20 51.5 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **LBZ** | **Lake Benmore** | **0.68** | **127** | ⇑P* | Pg | 15 20 49.0 | +0.6 | | |
| LBZ | | | | SG | Sg | 15 20 58.3 | +1.0 | | |
| LBZ | | | | AML | AML | 15 21 05.5 | | | |
| LBZ | | | | AML | AML | 15 21 05.5 | | | |
| **WKZ** | **Wanaka** | **0.89** | **199** | P* | Pg | 15 20 52.0 | -0.5 | | |
| WKZ | | | | AML | AML | 15 21 11.1 | | | |
| WKZ | | | | AML | AML | 15 21 11.7 | | | |
| WKZ | | | | AML | AML | 15 21 11.7 | | | |
| WKZ | | | | AML | AML | 15 21 14.0 | | | |
| **RPZ** | **Rata Peaks** | **1.21** | **78** | ⇑P* | Pg | 15 20 58.5 | -0.1 | | |
| RPZ | | | | AML | AML | 15 21 18.4 | | | |
| RPZ | | | | AML | AML | 15 21 19.3 | | | |
| **EAZ** | **Earnscleugh** | **1.25** | **184** | ⇓P* | Pg | 15 20 58.4 | -1.0 | | |
| EAZ | | | | S* | Sn | 15 21 16.5 | -0.3 | | |
| EAZ | | | | AML | AML | 15 21 17.8 | | | |
| EAZ | | | | AML | AML | 15 21 20.5 | | | |
| EAZ | | | | AML | AML | 15 21 20.6 | | | |
| **MSZ** | **Milford Sound** | **1.28** | **237** | P* | Pg | 15 20 58.7 | -1.1 | | |
| MSZ | | | | S* | Sg | 15 21 15.3 | -1.0 | | |
| MSZ | | | | AML | AML | 15 21 16.9 | | | |
| MSZ | | | | AML | AML | 15 21 17.8 | | | |
| MSZ | | | | AML | AML | 15 21 17.8 | | | |
| **ODZ** | **Otahua Downs** | **1.38** | **141** | PN | Pn | 15 21 01.1 | 0.0 | | |
| ODZ | | | | AML | AML | 15 21 21.2 | | | |
| ODZ | | | | AML | AML | 15 21 21.2 | | | |
| ODZ | | | | AML | AML | 15 21 21.2 | | | |
| ODZ | | | | AML | AML | 15 21 21.2 | | | |
| **MLZ** | **Mavora Lakes** | **1.63** | **213** | PN | Pb | 15 21 05.4 | -0.5 | | |
| MLZ | | | | AML | AML | 15 21 31.7 | | | |
| MLZ | | | | AML | AML | 15 21 33.5 | | | |
| **TUZ** | **Tuapeka** | **1.98** | **176** | PN | Pn | 15 21 09.4 | -0.1 | | |
| TUZ | | | | AML | AML | 15 21 42.2 | | | |
| TUZ | | | | AML | AML | 15 21 46.8 | | | |
| TUZ | | | | AML | AML | 15 21 46.8 | | | |
| **HHSZ** | **Highcliff Hill** | **2.08** | **157** | PN | Pn | 15 21 11.6 | +0.7 | | |
| **WHZ** | **Wether Hill Ro** | **2.18** | **208** | PN | Pn | 15 21 12.9 | +0.6 | | |
| WHZ | | | | AML | AML | 15 21 48.3 | | | |
| WHZ | | | | AML | AML | 15 21 52.7 | | | |
| **DCZ** | **Deep Cove** | **2.20** | **226** | PN | Pn | 15 21 12.4 | -0.1 | | |
| DCZ | | | | AML | AML | 15 21 45.8 | | | |
| DCZ | | | | AML | AML | 15 21 49.3 | | | |
| **CRLZ** | **Canterbury Las** | **2.35** | **81** | PN | Pn | 15 21 14.2 | -0.3 | | |
| CRLZ | | | | AML | AML | 15 21 53.6 | | | |
| **MQZ** | **McQueen's Vall** | **2.35** | **84** | PN | Pn | 15 21 14.9 | +0.3 | | |
| MQZ | | | | AML | AML | 15 25 50.1 | | | |
| MQZ | | | | AML | AML | 15 25 50.1 | | | |
| **LTZ** | **Lake Taylor** | **2.40** | **61** | ⇑PN | Pn | 15 21 15.5 | +0.2 | | |
| LTZ | | | | AML | AML | 15 22 00.3 | | | |
| LTZ | | | | AML | AML | 15 22 02.0 | | | |
| **SYZ** | **Scrubby Hill** | **2.56** | **184** | PN | Pn | 15 21 17.0 | -0.5 | | |
| **DSZ** | **Denniston Nort** | **2.84** | **39** | PN | Pn | 15 21 20.8 | -0.5 | | |
| DSZ | | | | AML | AML | 15 22 12.1 | | | |
| DSZ | | | | AML | AML | 15 22 17.1 | | | |
| **THZ** | **Tophouse** | **3.39** | **50** | PN | Pn | 15 21 28.5 | -0.4 | | |
| THZ | | | | AML | AML | 15 23 59.7 | | | |
| **KHZ** | **Kahutara** | **3.39** | **64** | PN | Pn | 15 21 28.9 | 0.0 | | |
| **QRZ** | **Quartz Range** | **3.90** | **37** | PN | Pn | 15 21 35.9 | -0.1 | | |
| QRZ | | | | AML | AML | 15 22 56.6 | | | |
| QRZ | | | | AML | AML | 15 22 59.0 | | | |

*ISCJB **18** 15:25:08.4±0.6, 44.°41N±0.°07×138.°53E±0.°07, h287km, mb3.1/3, Error ellipse: s-maj=9.4km s-min=6.8km az=21.8*
*IDC **18** 15:25:08.9±1.0, 44.°54N×138.°60E, h297km±15km, mb2.8/3, mb1 3.1/6, mb1mx2.8/30, mbtmp3.6/6, Error ellipse: s-maj=31.0km s-min=18.1km az=28.0*
*JMA **18** 15:25:09.1±0.3, 44.°56N×138.°69E, h300km, M3.1*
**ISC 18 15:25:08.5±1.0, 44.°44N±0.°08×138.°65E±0.°07, h287km, n19, σ1°89/26, mb3.1/3, Eastern Sea of Japan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHR** | **Hokuryu** | **2.33** | **106** | P | **Pn** | **15 25 59.0** | **+2.2** |
| **JWK2** | **Keihoku** | **2.47** | **68** | P | **Pn** | **15 25 59.6** | **+1.5** |
| **JSE** | **Soyaes** | **2.85** | **78** | P | **Pn** | **15 26 03.0** | **+1.2** |
| **ASAJ** | **Asahikawa** | **2.85** | **95** | P | **Pn** | **15 26 03.8** | **+2.0** |
| | 7.6nm,0.3s,baz=266,slow=8.9,SNR=85 | | | | | | |
| ASAJ | | | | S | **S** | **15 26 47.1** | **+2.7** |
| | baz=246,slow=20,SNR=1.8 | | | | | | |
| **JKK2** | **Kamakawa 2** | **3.00** | **99** | P | **Pn** | **15 26 05.1** | **+1.7** |
| **JFR** | **Furan** | **3.13** | **113** | P | **Pn** | **15 26 06.7** | **+2.1** |
| **JNBK** | **Urakawa-nobuka** | **3.69** | **124** | P | **Pn** | **15 26 13.2** | **+2.6** |
| JNBK | | | | *e*S | **S** | **15 27 02.6** | **+2.4** |
| **JTKR** | **Abashiri--Toko** | **3.81** | **95** | P | **Pn** | **15 26 13.2** | **+1.4** |
| **JAR** | **Ashorobuto** | **3.88** | **105** | P | **Pn** | **15 26 14.1** | **+1.5** |
| **JCH** | **Churui** | **3.88** | **116** | P | **Pn** | **15 26 13.3** | **+0.6** |
| JCH | | | | *e*S | **S** | **15 27 02.9** | **-1.2** |
| **JANG** | **Nango** | **4.59** | **151** | P | **Pn** | **15 26 22.1** | **+1.4** |
| JANG | | | | *e*S | **S** | **15 27 17.0** | **-1.6** |
| **JAK** | **Akkeshi** | **4.62** | **106** | P | **Pn** | **15 26 21.2** | **+0.2** |
| JAK | | | | *e*S | **S** | **15 27 17.6** | **-1.5** |
| **USRK** | **Ussuriysk Ar.** | **4.78** | **269** | P | **Pn** | **15 26 22.9** | **0.0** |
| | 0.8nm,0.3s,baz=80,slow=12,SNR=15 | | | | | | |
| **NEM2** | **Nemuro 2** | **5.24** | **99** | P | **Pn** | **15 26 27.8** | **-0.4** |
| NEM2 | | | | *e*S | **S** | **15 27 28.4** | **-3.9** |
| **JMK** | **Ichinoseki** | **5.81** | **160** | P | **Pn** | **15 26 36.8** | **+1.6** |
| JMK | | | | *e*S | **S** | **15 27 42.8** | **-2.2** |
| **MJAR** | **Matsushiro Arr** | **7.90** | **183** | P | **Pn** | **15 27 03.2** | **+2.5** |
| | 1.2nm,0.3s,baz=359,slow=11,SNR=19 | | | | | | |
| **SONM** | **Songino Array** | **22.52** | **290** | P | **P** | **15 29 43.2** | **-0.9** |
| | 0.3nm,0.3s,baz=96,slow=10,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **38.77** | **294** | P | **P** | **15 32 04.6** | **-1.0** |
| | 0.3nm,0.4s,baz=88,slow=8.5,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **64.19** | **185** | P | **P** | **15 35 12.8** | **-0.1** |
| | 0.2nm,0.3s,baz=359,slow=6.7,SNR=3.1 | | | | | | |

*NIED **18** 15:37:00, 44.°60N×148.°80E, h35km, Mw3.6 Best double couple: M0 2.75000×10^14 NP1: ϕs 184.00000°, δ 24.00000°, λ 74.00000°. NP2: ϕs 22.00000°, δ 67.00000°, λ 97.00000°.*
*ISCJB **18** 15:37:50.1±0.9, 44.°13N±0.°06×148.°94E±0.°07, h42km, Error ellipse: s-maj=9.6km s-min=6.1km az=140.6*
*JMA **18** 15:37:51.2±0.6, 44.°61N×148.°78E, h30km, M3.9*
*SKHL **18** 15:37:52.0±0.3, 44.°27N×148.°93E, h52km±1km, mb4.4/3*
**ISC 18 15:37:49.5±1.7, 44.°06N±0.°07×149.°1E±0.°1, h42km, n25, σ2°16/41, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.47** | **323** | *i* P | **Pn** | **15 38 12.8** | **-0.8** |
| KUR | | | | AMB | AMB | 15 38 18.2 | |
| | 99nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 15 38 18.2 | |
| | 40nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 15 38 18.2 | |
| | 314nm,0.5s | | | | | | |
| KUR | | | | *i* S | **Sn** | **15 38 28.2** | **-3.4** |
| KUR | | | | A | A | 15 38 30.3 | |
| | 320nm,0.3s | | | | | | |
| KUR | | | | A | A | 15 38 30.3 | |
| | 182nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **1.66** | **264** | *e*P | **Pn** | **15 38 16.4** | **+0.3** |
| SHO | | | | AMB | AMB | 15 38 19.4 | |
| | 53nm,0.4s | | | | | | |
| SHO | | | | *i* S | **Sn** | **15 38 34.7** | **-1.4** |
| SHO | | | | A | A | 15 38 42.3 | |
| | 330nm,0.4s | | | | | | |
| SHO | | | | A | A | 15 38 42.3 | |
| | 130nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.34** | **271** | *i* P | **Pn** | **15 38 25.5** | **0.0** |
| YUK | | | | AMB | AMB | 15 38 29.8 | |
| | 24nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 15 38 29.8 | |
| | 27nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 15 38 29.8 | |
| | 79nm,0.2s | | | | | | |
| YUK | | | | *i* S | **Sn** | **15 38 50.9** | **-2.1** |
| YUK | | | | A | A | 15 38 57.1 | |
| | 159nm,0.5s | | | | | | |
| YUK | | | | A | A | 15 38 57.1 | |
| | 244nm,0.5s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.54** | **255** | P | **Pn** | **15 38 28.6** | **+0.4** |
| NEM2 | | | | *e*S | **Sn** | **15 38 56.5** | **-1.3** |
| **JRA** | **Rausu** | **2.88** | **269** | P | **Pn** | **15 38 33.9** | **+1.0** |
| **JNK** | **Nakash** | **3.21** | **263** | P | **Pn** | **15 38 38.3** | **+0.8** |
| JNK | | | | *e*S | **Sn** | **15 39 14.4** | **-0.1** |
| **JAK** | **Akkeshi** | **3.38** | **253** | P | **Pn** | **15 38 40.9** | **+1.1** |
| JAK | | | | *e*S | **Sn** | **15 39 17.9** | **-0.7** |
| **JTKR** | **Abashiri--Toko** | **3.75** | **270** | P | **Pn** | **15 38 46.6** | **+1.7** |
| **JAR** | **Ashorobuto** | **3.95** | **261** | P | **Pn** | **15 38 49.4** | **+1.8** |
| JAR | | | | *e*S | **Sn** | **15 39 32.6** | **0.0** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **JOB** | **Onbets** | **4.01** | **255** | P | **Pn** | **15 38 49.9** | **+1.5** | | |
| **HRK** | **Horoka** | **4.37** | **264** | *e*P | **Pn** | **15 38 56.2** | **+2.7** | | |
| HRK | | | | *e*S | **Sn** | **15 39 45.4** | **+2.2** | | |
| **JCH** | **Churui** | **4.43** | **253** | P | **Pn** | **15 38 56.1** | **+1.9** | | |
| JCH | | | | *e*S | **Sn** | **15 39 44.4** | **-0.2** | | |
| **MYR** | **Moyori** | **4.61** | **250** | *e*P | **Pn** | **15 38 59.2** | **+2.5** | | |
| MYR | | | | *e*S | **Sn** | **15 39 49.7** | **+0.8** | | |
| **JFR** | **Furan** | **4.82** | **262** | P | **Pn** | **15 39 02.2** | **+2.7** | | |
| **JNBK** | **Urakawa-nobuka** | **4.98** | **251** | P | **Pn** | **15 39 03.9** | **+2.2** | | |
| JNBK | | | | *e*S | **Sn** | **15 39 56.8** | **-1.1** | | |
| **JBT2** | **Biratori 2** | **5.08** | **258** | *e*S | **Sn** | **15 40 00.1** | **-0.3** | | |
| **YSS** | **Yuzh-Sakhalins** | **5.32** | **305** | *e*P | **Pn** | **15 39 06.0** | **-0.4** | | |
| **JNB** | **Noboribetsu** | **6.10** | **258** | P | **Pn** | **15 39 19.9** | **+2.8** | | |
| **JKB** | **Kayabe** | **6.31** | **253** | P | **Pn** | **15 39 21.7** | **+1.7** | | |
| JKB | | | | *e*S | **Sn** | **15 40 28.5** | **-2.2** | | |
| **JANG** | **Nango** | **6.73** | **239** | P | **Pn** | **15 39 26.7** | **+0.9** | | |
| JANG | | | | *e*S | **Sn** | **15 40 36.9** | **-4.3** | | |
| **JTH** | **Tanohata** | **6.79** | **235** | P | **Pn** | **15 39 27.9** | **+1.4** | | |
| JTH | | | | *e*S | **Sn** | **15 40 37.8** | **-4.7** | | |
| **OFUJ** | **Ofunato** | **7.47** | **231** | P | **Pn** | **15 39 37.5** | **+1.6** | | |
| **JRG** | **Rokugo** | **7.86** | **237** | P | **Pn** | **15 39 43.3** | **+2.0** | | |
| JRG | | | | *e*S | **Sn** | **15 41 05.5** | **-3.5** | | |
| **JIO** | **Ouri** | **8.09** | **229** | P | **Pn** | **15 39 45.7** | **+1.3** | | |
| JIO | | | | *e*S | **Sn** | **15 41 09.4** | **-5.1** | | |
| **SKR** | **Severo-Kuril's** | **8.16** | **33** | *e*P | **Pn** | **15 39 47.0** | **+1.8** | | |

*ISCJB **18** 15:41:49.4±0.9, 37.°61N±0.°07×72.°3E±0.°1, h250km, Error ellipse: s-maj=17.8km s-min=5.8km az=155.3*
*NNC **18** 15:41:53.1±3.6, 37.°68N×71.°72E, h152km±34km, mb2.6, mpv3.5, Error ellipse: s-maj=33.6km s-min=12.2km az=158.0*
**ISC 18 15:41:49.8±1.4, 37.°67N±0.°10×72.°2E±0.°1, h250km, n13, σ2°63/15, 7C-7D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **2.55** | **23** | ⇑P | **Pn** | **15 42 37.1** | **-0.6** |
| | 16nm,0.3s | | | | | | |
| SFK | | | | ⇑S | **S** | **15 43 11.8** | **-3.9** |
| | 108nm,0.5s | | | | | | |
| **DZET** | **Dzherino** | **2.90** | **294** | ⇓P | Pn | 15 42 34.6 | -6.7 |
| | 34nm,0.6s | | | | | | |
| DZET | | | | ⇓S | S | 15 43 08.0 | -14 |
| | 182nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **4.82** | **3** | ⇑P | **Pn** | **15 43 05.1** | **+1.7** |
| | 3.5nm,0.4s | | | | | | |
| MNAS | | | | ⇓S | **S** | **15 44 00.9** | **-1.2** |
| | 76nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **5.26** | **19** | ⇓P | **Pn** | **15 43 11.2** | **+2.4** |
| | 0.5nm,0.2s | | | | | | |
| AAK | | | | ⇑S | **S** | **15 44 13.1** | **+1.3** |
| | 18nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **5.58** | **347** | ⇓P | **Pn** | **15 43 14.0** | **+1.4** |
| | 1.7nm,0.5s,baz=180,slow=14,SNR=21 | | | | | | |
| KK31 | | | | ⇑S | **S** | **15 44 16.3** | **-2.6** |
| | 23nm,0.3s,baz=178,slow=23 | | | | | | |
| **KOLN** | **Koldanda** | **13.74** | **133** | *e*P | Pn | 15 44 53.3 | -1.7 |
| | 3.4nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **14.19** | **129** | *e*P | **Pn** | **15 44 59.2** | **-1.3** |
| | 7.2nm,0.4s | | | | | | |
| **AB31** | **Akbulak array** | **14.59** | **326** | ⇓P | P | 15 45 09.6 | +4.7 |
| | 0.8nm,0.5s,baz=153,slow=11,SNR=13 | | | | | | |
| AB31 | | | | ⇓S | **S** | **15 47 42.8** | **-3.3** |
| | 2.1nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **14.74** | **128** | *e*P | **P** | **15 45 06.5** | **-0.6** |
| **PKIN** | **Phulchoki** | **14.97** | **128** | *e*P | **P** | **15 45 09.4** | **-0.2** |
| **RAMN** | **Ramite** | **16.17** | **127** | *e*P | **P** | **15 45 24.2** | **+1.5** |
| | 12nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.30** | **326** | ⇑P | Pn | 15 45 31.1 | +5.8 |
| | 1.7nm,1.2s | | | | | | |
| AKTO | | | | ⇑S | **S** | **15 48 26.9** | **+5.4** |
| | 3.6nm,1.2s | | | | | | |
| **TAPN** | **Taplejung** | **16.61** | **124** | *e*P | **Pn** | **15 45 31.0** | **+1.6** |

**GUC 18 16:18:52.5±0.7, 35.°54S×71.°42W, h97km±4km, ML3.5, Central Chile**

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

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** | **6.09** | **245** | ⇓Pn | Pn | 17 54 07.1 | +1.1 |
| | 2.2nm,0.3s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 17 55 18.9 | +2.5 |
| | 8.1nm,0.7s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 17 55 51.0 | |
| | 14nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **7.42** | **207** | ⇑Pn | Pn | 17 54 24.5 | +0.2 |
| | 0.1nm,0.3s,baz=30,slow=13,SNR=13 | | | | | | |
| MK31 | | | | ⇓Sn | Sn | 17 55 49.8 | +0.7 |
| | 0.6nm,0.5s,baz=36,slow=24,SNR=2.6 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 17 56 28.6 | |
| | 5.9nm,0.9s,baz=30,slow=34,SNR=3.7 | | | | | | |
| **VOSK** | **Vostochnaya** | **9.81** | **272** | ⇓Pn | Pn | 17 54 58.7 | +1.7 |
| | 1.5nm,0.8s | | | | | | |
| VOSK | | | | ⇓Sn | Sn | 17 56 44.8 | -3.0 |
| | 1.9nm,0.7s | | | | | | |
| **CHKZ** | **Chkalovo** | **9.89** | **278** | ⇑Pn | Pn | 17 54 59.6 | +1.5 |
| | 0.6nm,0.7s | | | | | | |
| CHKZ | | | | ⇓Sn | Sn | 17 56 46.9 | -2.9 |
| | 1.2nm,0.7s | | | | | | |
| **BVA0** | **Borovoye Array** | **10.11** | **274** | ⇑Pn | Pn | 17 55 01.6 | +0.5 |
| | 2.0nm,1.1s,baz=94,slow=16,SNR=6.3 | | | | | | |
| BVA0 | | | | ⇓Sn | Sn | 17 56 56.5 | +1.2 |
| | 1.0nm,0.6s,baz=164,slow=43,SNR=8.6 | | | | | | |
| **BRVK** | **Borovoye** | **10.17** | **274** | ⇑Pn | Pn | 17 55 03.1 | +1.2 |
| | 2.5nm,0.9s | | | | | | |
| BRVK | | | | ⇓Sn | Sn | 17 56 57.7 | +1.2 |
| | 2.6nm,1.0s | | | | | | |
| **ZRNK** | **Zerenda** | **10.95** | **275** | ⇑Pn | Pn | 17 55 12.5 | -0.1 |
| | 1.7nm,1.0s | | | | | | |
| ZRNK | | | | ⇓Sn | Sn | 17 57 12.2 | -3.5 |
| | 1.0nm,0.6s | | | | | | |

**IDC 18 17:58:26.8±2.6, 7°.33S×14°.32W, h0km, mb3.7/3, mb1 3.7/3, mb1mx3.5/23, mbtmp3.7/3, Error ellipse: s-maj=260.7km s-min=16.6km az=114.0, Ascension Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N2** | **ASCENSION HYDR** | **0.53** | **198** | Pn | Pn | 17 58 41.3 | +0.1 |
| **TORD** | **Torodi Ar. Bea** | **25.82** | **38** | P | P | 18 03 59.3 | -0.7 |
| | 0.6nm,0.8s,baz=223,slow=11,SNR=3.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **64.43** | **39** | P | P | 18 09 06.0 | +0.8 |
| | 0.6nm,0.7s,baz=225,slow=8.4,SNR=3.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.93** | **28** | P | P | 18 09 33.5 | -0.1 |
| | 0.1nm,0.3s,baz=228,slow=7.6,SNR=5.8 | | | | | | |

*ISCJB **18** 18:35:48.0±0.7, 42°.54N±0°.03×48°.28E±0°.04, h11km±4km, Error ellipse: s-maj=5.4km s-min=4.7km az=166.4*
*CSEM **18** 18:35:49.3±0.2, 42°.52N×48°.23E, h2km, mb3.9, Error ellipse: s-maj=4.1km s-min=3.7km az=169.0*
*TIF **18** 18:35:49.9, 42°.48N×48°.14E, h9km±2km*
*MOS **18** 18:35:51.5±0.6, 42°.42N×48°.03E, h12km, mb3.9/1, Error ellipse: s-maj=12.3km s-min=8.0km az=26.8*
**ISC 18 18:35:50.4±1.2, 42°.48N±0°.03×48°.13E±0°.04, h14km±8km, n34, σ0°.94/65, 4C-5D, Caspian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGKR** | **Sergokala** | **0.35** | **268** | *e*PG | **Pg** | **18 35 57.5** | **-0.1** |
| SGKR | | | | *e*S | **Sg** | **18 36 03.0** | **+0.5** |
| SGKR | | | | pmax | pmax | | |
| | comp=Z,192nm,0.2s | | | | | | |
| **SGKR** | **Sergokala** | **0.35** | **268** | *e*Pg | **Pg** | **18 35 57.5** | **-0.1** |
| | comp=Z,192nm,0.2s | | | | | | |
| SGKR | | | | *e*Sg | **Sg** | **18 36 03.0** | **+0.5** |
| **URKR** | **Urkarakh** | **0.48** | **230** | ⇓*i*PG | **Pg** | **18 36 00.0** | **0.0** |
| URKR | | | | *i* S | **Sb** | **18 36 08.0** | **+0.1** |
| URKR | | | | pmax | pmax | | |
| | comp=Z,673nm,0.2s | | | | | | |
| **URKR** | **Urkarakh** | **0.48** | **230** | *i* Pg | **Pg** | **18 36 00.0** | **0.0** |
| | comp=Z,673nm,0.2s | | | | | | |
| URKR | | | | *i* Sg | **Sb** | **18 36 08.0** | **+0.1** |
| **MAK** | **Makhachkala** | **0.67** | **317** | *e*PG | **Pn** | **18 36 05.3** | **-0.3** |
| MAK | | | | *e* | | 18 36 16.3 | |
| MAK | | | | pmax | pmax | | |
| | comp=Z,295nm,0.3s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,82nm,0.4s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=E,148nm,0.4s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=E,146nm,0.6s | | | | | | |
| MAK | | | | smax | smax | | |
| | comp=N,118nm,0.4s | | | | | | |
| **BUJR** | **Buynaksk** | **0.83** | **295** | *e*PG | **Pn** | **18 36 07.2** | **-0.7** |
| BUJR | | | | *e*S | **Sn** | **18 36 23.0** | **+3.0** |
| BUJR | | | | pmax | pmax | | |
| | comp=Z,68nm,0.3s | | | | | | |
| **BUJR** | **Buynaksk** | **0.83** | **295** | *e*Pg | **Pn** | **18 36 07.2** | **-0.7** |
| | comp=Z,68nm,0.3s | | | | | | |
| **KMKR** | **Kumukh** | **0.84** | **246** | ⇑*i*PG | **Pg** | **18 36 06.5** | **-0.3** |
| KMKR | | | | *e*S | **Sg** | **18 36 18.0** | **+0.1** |
| KMKR | | | | pmax | pmax | | |
| | comp=Z,155nm,0.2s | | | | | | |
| **KMKR** | **Kumukh** | **0.84** | **246** | *i* Pg | **Pg** | **18 36 06.5** | **-0.3** |
| | comp=Z,155nm,0.2s | | | | | | |
| KMKR | | | | *e*Sg | **Sg** | **18 36 18.0** | **+0.1** |
| **ARKR** | **Arakani** | **0.85** | **279** | *e*PG | **Pb** | **18 36 07.0** | **-0.1** |
| ARKR | | | | *e*S | **Sb** | **18 36 19.5** | **+1.1** |
| **ARKR** | **Arakani** | **0.85** | **279** | *e*Pg | **Pb** | **18 36 07.0** | **-0.1** |
| ARKR | | | | *e*Sg | **Sb** | **18 36 19.5** | **+1.1** |
| **GNBR** | **Gunib** | **0.87** | **265** | ⇑*i*PG | **Pg** | **18 36 07.0** | **-0.3** |
| GNBR | | | | *i* S | **Sg** | **18 36 18.5** | **-0.2** |
| GNBR | | | | pmax | pmax | | |
| | comp=Z,64nm,0.1s | | | | | | |
| **GNBR** | **Gunib** | **0.87** | **265** | *i* Pg | **Pg** | **18 36 07.0** | **-0.3** |
| | comp=Z,64nm,0.1s | | | | | | |
| GNBR | | | | *i* Sg | **Sg** | **18 36 18.5** | **-0.2** |
| **KSMR** | **Kasumkent** | **0.87** | **180** | ⇓*i*PG | **Pb** | **18 36 07.5** | **+0.1** |
| KSMR | | | | *e*S | **Sb** | **18 36 20.0** | **+1.0** |
| KSMR | | | | pmax | pmax | | |
| | comp=Z,328nm,0.2s | | | | | | |
| **KSMR** | **Kasumkent** | **0.87** | **180** | *i* Pg | **Pb** | **18 36 07.5** | **+0.1** |
| | comp=Z,328nm,0.2s | | | | | | |
| KSMR | | | | *e*Sg | **Sb** | **18 36 20.0** | **+1.0** |
| **KRNR** | **Karanay** | **0.97** | **292** | ⇓*i*PG | **Pb** | **18 36 09.0** | **-0.2** |
| KRNR | | | | *i* S | **Sb** | **18 36 22.0** | **+0.1** |
| KRNR | | | | pmax | pmax | | |
| | comp=Z,78nm,0.2s | | | | | | |
| **KRNR** | **Karanay** | **0.97** | **292** | *i* Pg | **Pb** | **18 36 09.0** | **-0.2** |
| | comp=Z,78nm,0.2s | | | | | | |
| KRNR | | | | *i* Sg | **Sb** | **18 36 22.0** | **+0.1** |
| **UNCR** | **Uncukul** | **1.02** | **284** | *e*PG | **Pn** | **18 36 10.5** | **+0.1** |
| UNCR | | | | *e*S | **Sn** | **18 36 25.5** | **+1.0** |
| **UNCR** | **Uncukul** | **1.02** | **284** | *e*Pg | **Pn** | **18 36 10.5** | **+0.1** |
| UNCR | | | | *e*Sg | **Sn** | **18 36 25.5** | **+1.0** |
| **XNZR** | **Khunzakh** | **1.06** | **274** | *e*PG | **Pn** | **18 36 11.0** | **-0.1** |
| XNZR | | | | *i* S | **Sn** | **18 36 26.5** | **+0.8** |
| XNZR | | | | pmax | pmax | | |
| | comp=Z,34nm,0.2s | | | | | | |
| **XNZR** | **Khunzakh** | **1.06** | **274** | *e*Pg | **Pn** | **18 36 11.0** | **-0.1** |
| | comp=Z,34nm,0.2s | | | | | | |
| XNZR | | | | *i* Sg | **Sn** | **18 36 26.5** | **+0.8** |
| **DBC** | **Dubki** | **1.10** | **300** | ⇓*i*PG | **Pn** | **18 36 11.6** | **0.0** |
| DBC | | | | *i* S | **Sn** | **18 36 28.4** | **+1.7** |
| DBC | | | | pmax | pmax | | |
| | comp=Z,33nm,0.3s | | | | | | |
| **DBC** | **Dubki** | **1.10** | **300** | *i* Pg | **Pn** | **18 36 11.6** | **0.0** |
| | comp=Z,33nm,0.3s | | | | | | |
| DBC | | | | *i* Sg | **Sn** | **18 36 28.4** | **+1.7** |
| **DLMR** | **Dylym** | **1.26** | **299** | *e*PG | **Pg** | **18 36 14.5** | **-0.1** |
| DLMR | | | | *e*S | **Sn** | **18 36 31.5** | **+1.1** |
| DLMR | | | | pmax | pmax | | |
| | comp=Z,117nm,0.2s | | | | | | |
| **DLMR** | **Dylym** | **1.26** | **299** | *e*Pg | **Pg** | **18 36 14.5** | **-0.1** |
| | comp=Z,117nm,0.2s | | | | | | |
| DLMR | | | | *e*Sg | **Sn** | **18 36 31.5** | **+1.1** |
| **BTLR** | **Botlikh** | **1.43** | **278** | *e*PG | **Pb** | **18 36 16.7** | **-0.2** |
| BTLR | | | | *e*S | **Sb** | **18 36 35.4** | **+0.5** |
| BTLR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **BTLR** | **Botlikh** | **1.43** | **278** | *e*Pg | **Pb** | **18 36 16.7** | **-0.2** |
| | comp=Z,2.0nm,0.6s | | | | | | |
| BTLR | | | | *e*Sg | **Sb** | **18 36 35.4** | **+0.5** |
| **DGRG** | **David-gareji** | **2.30** | **244** | P | **Pb** | **18 36 30.5** | **-1.3** |
| DGRG | | | | S | **Sb** | **18 36 59.0** | **-1.1** |
| **DGRG** | **David-gareji** | **2.30** | **244** | *e*PN | **Pb** | **18 36 30.4** | **-1.3** |
| DGRG | | | | *e*S | **Sb** | **18 36 58.9** | **-1.1** |
| **DGRG** | **David-gareji** | **2.30** | **244** | P | **Pb** | **18 36 30.5** | **-1.3** |
| DGRG | | | | S | **Sb** | **18 36 59.0** | **-1.1** |
| **AKTO** | **Aktyubinsk** | **10.47** | **37** | ⇓Pn | **Pn** | **18 38 19.3** | **-0.8** |
| | comp=Z,1.9nm,1.1s | | | | | | |
| AKTO | | | | ⇑Sn | **Sn** | **18 40 15.5** | **-1.7** |
| | comp=Z,2.1nm,1.2s | | | | | | |
| **AKTO** | **Aktyubinsk** | **10.47** | **37** | Pn | **Pn** | **18 38 19.3** | **-0.8** |
| | comp=Z,1.9nm,1.1s | | | | | | |
| AKTO | | | | Sn | **Sn** | **18 40 15.5** | **-1.7** |
| | comp=Z,2.1nm,1.2s | | | | | | |
| **AB31** | **Akbulak array** | **10.66** | **46** | Pn | **Pn** | **18 38 25.2** | **+2.6** |
| | comp=Z,0.1nm,0.3s,baz=240,slow=12,SNR=6.1 | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **18 40 20.4** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=240,slow=25,SNR=4.2 | | | | | | |
| **AB31** | **Akbulak array** | **10.66** | **46** | Sn | **Sn** | **18 40 20.4** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=240,SNR=4.2 | | | | | | |

**IDC 18 18:40:34.6±11.0, 22°.67S×179°.84W, h414km±91km, mb3.4/3, mb1 3.6/4, mb1mx3.1/27, mbtmp4.3/4, Error ellipse: s-maj=113.6km s-min=29.3km az=44.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **15.76** | **189** | P | P | 18 43 54.4 | -0.3 |
| | 1.2nm,0.3s,baz=7.2,slow=4.2,SNR=8.9 | | | | | | |
| URZ | | | | S | S | 18 46 36.0 | -4.2 |
| | 0.6nm,0.3s,baz=319,slow=20,SNR=5.1 | | | | | | |
| **CTA** | **Charters Tower** | **31.64** | **268** | P | P | 18 46 23.1 | +1.3 |
| | 5.0nm,0.4s,baz=94,slow=11,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **42.39** | **259** | P | P | 18 47 50.5 | -0.5 |
| | 1.3nm,0.5s,baz=90,slow=6.4,SNR=31 | | | | | | |
| ASAR | | | | PcP | PcP | 18 49 34.4 | -1.0 |
| | 0.3nm,0.7s,baz=107,slow=4.0,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.65** | **265** | P | P | 18 47 52.2 | -0.8 |
| | 0.9nm,0.5s,baz=92,slow=8.3,SNR=30 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **170.42** | **189** | PKPab | PKPab | 19 01 14.5 | +0.7 |
| | 0.7nm,1.0s,baz=193,slow=4.7,SNR=4.1 | | | | | | |

**IDC 18 18:44:14.7±3.0, 20°.24S×174°.15W, h0km, mb3.8/4, mb1 4.1/4, mb1mx3.8/26, mbtmp3.8/4, MS2.7/1, Ms1 2.7/1, ms1mx2.4/24, Error ellipse: s-maj=208.6km s-min=30.4km az=155.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.69** | **20** | LR | | 18 47 52.3 | |
| | comp=Z,62nm,18.3s,baz=162,slow=32 | | | | | | |
| **CTA** | **Charters Tower** | **37.11** | **263** | P | P | 18 51 27.2 | 0.0 |
| | 2.6nm,0.5s,baz=82,slow=10,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **48.09** | **256** | P | P | 18 52 56.0 | -0.5 |
| | 0.8nm,0.7s,baz=100,slow=7.4,SNR=13 | | | | | | |
| ASAR | | | | PcP | PcP | 18 54 24.7 | +0.3 |
| | 0.4nm,0.6s,baz=109,slow=4.1,SNR=5.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.21** | **261** | P | P | 18 52 57.4 | -0.1 |
| | 0.3nm,0.4s,baz=97,slow=8.2,SNR=8.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.39** | **42** | P | P | 18 56 17.4 | -0.1 |
| | 0.4nm,0.6s,baz=230,slow=7.0,SNR=4.2 | | | | | | |

*ISCJB **18** 19:03:59.0±0.6, 26°.50S±0°.03×27°.63E±0°.03, h2km±5km, Error ellipse: s-maj=4.8km s-min=3.9km az=142.5*
*PRE **18** 19:03:59.3±1.6, 26°.48S×27°.61E, h2km, ML2.8*
**ISC 18 19:03:59.7±1.1, 26°.47S±0°.03×27°.61E±0°.03, h6km±8km, n13, σ1s19/26, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KLOF** | **Kloof** | **0.12** | **1** | *e*P | **Pg** | **19 04 02.7** | **+0.4** |
| KLOF | | | | *e*S | **Sg** | **19 04 04.0** | **-0.1** |
| KLOF | | | | AML | AML | 19 04 04.3 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **WDLM** | **Western Deep L** | **0.17** | **284** | *e*P | **Pg** | **19 04 02.6** | **-0.7** |
| WDLM | | | | *e*S | **Sg** | **19 04 05.9** | **+0.3** |
| WDLM | | | | AML | AML | 19 04 06.4 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **OBSV** | **Observatory** | **0.50** | **56** | *e*P | **Pg** | **19 04 07.9** | **-1.5** |
| OBSV | | | | *e*S | **Sg** | **19 04 15.3** | **-0.8** |
| OBSV | | | | AML | AML | 19 04 16.6 | |
| | comp=Z,277nm,0.2s | | | | | | |
| **PRYS** | **Parys** | **0.51** | **206** | *e*P | **Pg** | **19 04 08.6** | **-1.0** |
| PRYS | | | | *e*S | **Sg** | **19 04 16.7** | **+0.4** |
| PRYS | | | | AML | AML | 19 04 20.9 | |
| | comp=Z,219nm,0.4s | | | | | | |
| **BFSD** | **Buffelsfontein** | **0.84** | **241** | *e*P | **Pg** | **19 04 16.1** | **+0.3** |
| BFSD | | | | *e*S | **Sg** | **19 04 26.0** | **-0.7** |
| BFSD | | | | AML | AML | 19 04 33.1 | |
| | comp=Z,123nm,0.3s | | | | | | |
| **KSR** | **Koster** | **0.88** | **314** | *e*P | **Pg** | **19 04 16.2** | **-0.5** |
| KSR | | | | *e*S | **Sb** | **19 04 29.8** | **+0.1** |
| KSR | | | | AML | AML | 19 04 35.2 | |
| | comp=Z,34nm,0.1s | | | | | | |
| **MOAB** | **Moab Khotsong** | **0.89** | **234** | *e*P | **Pg** | **19 04 16.0** | **-0.9** |
| MOAB | | | | *e*S | **Sg** | **19 04 28.6** | **+0.2** |
| MOAB | | | | AML | AML | 19 04 33.9 | |
| | comp=Z,134nm,0.4s | | | | | | |
| **TLEK** | **Tau Lekoa** | **0.97** | **239** | *e*P | **Pg** | **19 04 18.7** | **+0.2** |
| TLEK | | | | *e*S | **Sg** | **19 04 30.7** | **-0.3** |
| TLEK | | | | AML | AML | 19 04 35.9 | |
| | comp=Z,124nm,0.4s | | | | | | |
| **SWZ** | **Schweizer** | **2.15** | **250** | *e*P | **Pn** | **19 04 37.5** | **+1.1** |
| SWZ | | | | *e*S | **Sn** | **19 05 04.0** | **+0.6** |
| SWZ | | | | AML | AML | 19 05 07.6 | |
| | comp=Z,136nm,0.2s | | | | | | |
| **LBTB** | **Lobatse** | **2.32** | **308** | *i* P | **Pn** | **19 04 40.1** | **+1.5** |
| LBTB | | | | | | 19 04 41.5 | |
| LBTB | | | | *i* S | **Sb** | **19 05 09.4** | **-1.6** |
| **POGA** | **Pongola** | **3.69** | **105** | *e*P | **Pn** | **19 04 58.9** | **+1.7** |
| POGA | | | | *e*S | **Sn** | **19 05 42.6** | **+1.5** |
| POGA | | | | AML | AML | 19 05 59.3 | |
| | comp=Z,35nm,0.4s | | | | | | |
| **KSD** | **Kokstad** | **4.36** | **159** | *e*P | **Pn** | **19 05 07.7** | **+1.1** |
| KSD | | | | *e*S | **Sn** | **19 05 57.8** | **-0.1** |
| KSD | | | | AML | AML | 19 06 19.7 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **UPI** | **Upington** | **5.96** | **250** | *e*P | **Pn** | **19 05 29.4** | **+0.9** |
| UPI | | | | *e*S | **Sn** | **19 06 33.8** | **-3.3** |
| UPI | | | | AML | AML | 19 07 08.1 | |
| | comp=Z,10.0nm,0.5s | | | | | | |

*LDG **18** 19:23:14.3±0.1, 43°.09N×0°.30W, h2km, Md1.4/3, Ml1.4/1, Error ellipse: s-maj=3.9km s-min=2.2km az=162.0*
*MDD **18** 19:23:14.5±0.4, 43°.09N×0°.31W, h11km±1km, mbLg1.3/13, Error ellipse: s-maj=4.7km s-min=2.3km az=3.0, PRIMO*
**CSEM 18 19:23:13.6±0.1, 43°.07N×0°.31W, h15km, ML1.2/5, Error ellipse: s-maj=3.5km s-min=1.9km az=2.0, Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **REYF** | **Montagne du Re** | **0.06** | **275** | Pg | Pg | 19 23 16.8 | +0.1 |
| REYF | | | | Lg | Lg | 19 23 19.2 | |
| **REYF** | **Montagne du Re** | **0.06** | **275** | Pg | Pg | 19 23 16.8 | +0.1 |
| REYF | | | | Lg | Lg | 19 23 19.2 | |
| **ETSF** | **Etsaut** | **0.25** | **228** | *e*Pg | Pg | 19 23 19.4 | +0.3 |
| ETSF | | | | *e*Sg | Sg | 19 23 23.2 | +0.3 |
| | 13nm,0.3s | | | | | | |
| **ETSF** | **Etsaut** | **0.25** | **228** | Pg | Pg | 19 23 19.4 | +0.3 |
| ETSF | | | | Lg | Lg | 19 23 23.2 | |
| | 6.5nm,0.3s | | | | | | |
| **ETSF** | **Etsaut** | **0.25** | **228** | Pg | Pg | 19 23 19.4 | +0.3 |
| ETSF | | | | *e*Sg | Sg | 19 23 23.2 | +0.3 |
| | 6.5nm,0.3s | | | | | | |
| **ATE** | **Arette** | **0.29** | **274** | Pg | Pg | 19 23 19.7 | -0.1 |
| | 6.7nm,0.5s,SNR=7.9 | | | | | | |
| ATE | | | | Lg | Lg | 19 23 23.9 | |
| | 15nm,0.8s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **0.29** | **274** | Pg | Pg | 19 23 19.7 | -0.1 |
| | 6.7nm,0.5s,SNR=7.9 | | | | | | |
| ATE | | | | Lg | Lg | 19 23 23.9 | |
| | 15nm,0.8s,SNR=7.9 | | | | | | |
| **VIEF** | **Viey** | **0.30** | **126** | Pg | Pg | 19 23 20.4 | +0.3 |
| VIEF | | | | Lg | Lg | 19 23 25.1 | |
| **VIEF** | **Viey** | **0.30** | **126** | Pg | Pg | 19 23 20.4 | +0.3 |
| VIEF | | | | Lg | Lg | 19 23 25.1 | |
| **EPF** | **Esparros** | **0.48** | **94** | *e*Pg | Pg | 19 23 23.5 | -0.3 |
| EPF | | | | *e*Sg | Sg | 19 23 29.9 | +0.2 |
| | 1.5nm,0.2s | | | | | | |
| **EPF** | **Esparros** | **0.48** | **94** | Pg | Pg | 19 23 23.5 | -0.3 |
| EPF | | | | Lg | Lg | 19 23 29.9 | |
| | 0.8nm,0.2s | | | | | | |
| **EPF** | **Esparros** | **0.48** | **94** | Pg | Pg | 19 23 23.5 | -0.3 |
| EPF | | | | *e*Sg | Sg | 19 23 29.9 | +0.2 |
| | 0.8nm,0.2s | | | | | | |
| **YBER** | **Berdun** | **0.66** | **223** | Lg | Lg | 19 23 37.0 | |
| | 1.9nm,0.1s,SNR=7.9 | | | | | | |
| **YBER** | **Berdun** | **0.66** | **223** | Lg | Lg | 19 23 37.0 | |
| | 1.9nm,0.1s,SNR=7.9 | | | | | | |
| **YSIG** | **Sigues** | **0.66** | **230** | Pg | Pb | 19 23 27.1 | +0.2 |
| | 3.7nm,1.0s,SNR=7.9 | | | | | | |
| YSIG | | | | Lg | Lg | 19 23 36.0 | |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | |
| **YSIG** | **Sigues** | **0.66** | **230** | Pg | Pb | 19 23 27.1 | +0.2 |
| | 3.7nm,1.0s,SNR=7.9 | | | | | | |
| YSIG | | | | Lg | Lg | 19 23 36.0 | |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | |
| **SJPF** | **Ste Jean** | **0.67** | **274** | *e*Pg | Pb | 19 23 27.3 | +0.2 |
| SJPF | | | | *e*Sg | Sb | 19 23 36.2 | -0.1 |
| | 1.2nm,0.2s | | | | | | |
| **SJPF** | **Ste Jean** | **0.67** | **274** | Pg | Pb | 19 23 27.3 | +0.2 |
| SJPF | | | | Lg | Lg | 19 23 36.2 | |
| | 0.6nm,0.2s | | | | | | |
| **SJPF** | **Ste Jean** | **0.67** | **274** | Pg | Pb | 19 23 27.3 | +0.2 |
| SJPF | | | | *e*Sg | Sb | 19 23 36.2 | -0.1 |
| | 0.6nm,0.2s | | | | | | |
| **YMUS** | **Pe˜–a Musera** | **0.71** | **228** | Pg | Pg | 19 23 27.4 | -0.2 |
| | 0.2nm,0.4s,SNR=7.9 | | | | | | |
| YMUS | | | | Lg | Lg | 19 23 37.9 | |
| | 1.9nm,0.1s,SNR=7.9 | | | | | | |
| **YMUS** | **Pe˜–a Musera** | **0.71** | **228** | Pg | Pg | 19 23 27.4 | -0.2 |
| | 0.2nm,0.4s,SNR=7.9 | | | | | | |
| YMUS | | | | Lg | Lg | 19 23 37.9 | |
| | 1.9nm,0.1s,SNR=7.9 | | | | | | |
| **YASP** | **Aspurt** | **0.71** | **242** | Pg | Pb | 19 23 27.8 | 0.0 |
| | 0.1nm,0.6s,SNR=7.9 | | | | | | |
| YASP | | | | Lg | Lg | 19 23 38.7 | |
| | 2.8nm,0.2s,SNR=7.9 | | | | | | |
| **YASP** | **Aspurt** | **0.71** | **242** | Pg | Pb | 19 23 27.8 | 0.0 |
| | 0.1nm,0.6s,SNR=7.9 | | | | | | |
| YASP | | | | Lg | Lg | 19 23 38.7 | |
| | 2.8nm,0.2s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **0.72** | **252** | Pg | Pg | 19 23 27.4 | -0.3 |
| | 0.2nm,0.4s,SNR=7.9 | | | | | | |
| IELO | | | | Lg | Lg | 19 23 38.5 | |
| | 3.2nm,0.2s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **0.72** | **252** | Pg | Pg | 19 23 27.5 | -0.2 |
| | 0.2nm,0.4s,SNR=7.9 | | | | | | |
| IELO | | | | Lg | Lg | 19 23 38.5 | |
| | 3.2nm,0.2s,SNR=7.9 | | | | | | |
| **IEPA** | **Eparoz** | **0.76** | **248** | Pg | Pg | 19 23 28.2 | -0.3 |
| | 2.7nm,1.0s,SNR=7.9 | | | | | | |
| IEPA | | | | Lg | Lg | 19 23 39.4 | |
| | 2.4nm,0.2s,SNR=7.9 | | | | | | |
| **IEPA** | **Eparoz** | **0.76** | **248** | Pg | Pg | 19 23 28.2 | -0.3 |
| | 2.7nm,1.0s,SNR=7.9 | | | | | | |
| IEPA | | | | Lg | Lg | 19 23 39.4 | |
| | 2.4nm,0.2s,SNR=7.9 | | | | | | |
| **EALK** | **Alkurruntz** | **0.89** | **280** | Pg | Pb | 19 23 30.6 | -0.1 |
| | 0.2nm,1.2s,SNR=7.9 | | | | | | |
| EALK | | | | Lg | Lg | 19 23 42.4 | |
| | 2.7nm,0.4s,SNR=7.9 | | | | | | |
| **EALK** | **Alkurruntz** | **0.89** | **280** | Pg | Pb | 19 23 30.6 | -0.1 |
| | 0.2nm,1.2s,SNR=7.9 | | | | | | |
| EALK | | | | Lg | Lg | 19 23 42.4 | |
| | 2.7nm,0.4s,SNR=7.9 | | | | | | |
| **IUSE** | **Utxeti** | **0.92** | **263** | Pg | Pg | 19 23 31.4 | -0.1 |
| | 1.6nm,1.3s,SNR=7.9 | | | | | | |
| IUSE | | | | Lg | Lg | 19 23 43.6 | |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| **IUSE** | **Utxeti** | **0.92** | **263** | Pg | Pb | 19 23 31.4 | +0.1 |
| | 1.6nm,1.3s,SNR=7.9 | | | | | | |
| IUSE | | | | Lg | Lg | 19 23 43.6 | |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| **CSOR** | **Sort** | **1.27** | **122** | Pg | Pn | 19 23 37.0 | +0.1 |
| | 0.2nm,0.5s,SNR=7.9 | | | | | | |
| CSOR | | | | Lg | Lg | 19 23 56.0 | |
| | 39nm,1.4s,SNR=5.8 | | | | | | |
| **CSOR** | **Sort** | **1.27** | **122** | Pg | Pn | 19 23 37.0 | +0.1 |
| | 0.2nm,0.5s,SNR=7.9 | | | | | | |
| CSOR | | | | Lg | Lg | 19 23 56.0 | |
| | 39nm,1.4s,SNR=5.8 | | | | | | |
| **EMIR** | **Miracle** | **1.78** | **130** | Lg | Lg | 19 24 11.7 | |
| | 6.4nm,1.2s,SNR=7.9 | | | | | | |
| **EMIR** | **Miracle** | **1.78** | **130** | Lg | Lg | 19 24 11.7 | |
| | 6.4nm,1.2s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **1.78** | **108** | Lg | Lg | 19 24 11.8 | |
| | 42nm,4.2s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **1.78** | **108** | Lg | Lg | 19 24 11.8 | |
| | 42nm,4.2s,SNR=7.9 | | | | | | |
| **EPOB** | **Poblet** | **2.00** | **148** | Pn | Pn | 19 23 48.0 | +1.0 |
| | 0.6nm,0.6s,SNR=7.9 | | | | | | |
| EPOB | | | | Pg | Pb | 19 23 50.8 | +1.1 |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| EPOB | | | | Sn | Sn | 19 24 12.3 | +0.6 |
| | 1.4nm,0.5s,SNR=7.9 | | | | | | |
| EPOB | | | | Lg | Lg | 19 24 18.8 | |
| | 17nm,0.8s,SNR=7.9 | | | | | | |
| **EPOB** | **Poblet** | **2.00** | **148** | Pn | Pn | 19 23 48.0 | +1.1 |
| | 0.6nm,0.6s,SNR=7.9 | | | | | | |
| **LFF** | **La Frestale** | **2.02** | **22** | *e*Pn | Pn | 19 23 46.9 | -0.2 |
| LFF | | | | *e*Sn | Sn | 19 24 11.6 | -0.5 |
| | 0.7nm,0.3s | | | | | | |
| **LFF** | **La Frestale** | **2.02** | **22** | Pn | Pn | 19 23 46.9 | -0.2 |
| LFF | | | | Sn | Sn | 19 24 11.6 | -0.5 |
| | 0.3nm,0.3s | | | | | | |
| **LFF** | **La Frestale** | **2.02** | **22** | Pn | Pn | 19 23 46.9 | -0.2 |
| LFF | | | | *e*Sn | Sn | 19 24 11.6 | -0.5 |
| | 0.3nm,0.3s | | | | | | |
| **ERTA** | **Horta de San J** | **2.16** | **167** | Lg | Lg | 19 24 24.3 | |
| | 7.7nm,1.2s,SNR=7.9 | | | | | | |
| **ERTA** | **Horta de San J** | **2.16** | **167** | Lg | Lg | 19 24 24.3 | |
| | 7.7nm,1.2s,SNR=7.9 | | | | | | |

*SKHL **18** 19:50:39.1±0.1, 45°.23N×151°.34E, h39km±7km, mb4.3/3*
*JMA **18** 19:50:40.9±0.5, 45°.54N×151°.05E, h30km, M4.1*
**ISC 18 19:50:42.3±4.3, 45°.0N±0°.1×151°.2E±0°.2, h42km, n18, σ1s51/28, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **2.34** | **276** | *i* P | **Pn** | **19 51 17.4** | **-0.8** |
| KUR | | | | AMB | AMB | 19 51 20.4 | |
| | 28nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 19 51 20.4 | |
| | 14nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 19 51 20.4 | |
| | 55nm,0.5s | | | | | | |
| KUR | | | | *i* S | **Sn** | **19 51 46.0** | **+0.3** |
| KUR | | | | A | A | 19 51 49.9 | |
| | 103nm,0.3s | | | | | | |
| KUR | | | | A | A | 19 51 49.9 | |
| | 36nm,0.3s | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MYR | | | | *e*S | | **Sn** | **19 53 22.2** | **-1.9** |
| **JEM** | **Erimo** | **6.55** | **245** | *e*S | | **Sn** | **19 53 28.0** | **-1.4** |
| **SKR** | **Severo-Kuril's** | **6.56** | **29** | *e*P | | Pn | 19 52 09.7 | -6.5 |
| **JNBK** | **Urakawa-nobuka** | **6.69** | **249** | P | | **Pn** | **19 52 18.2** | **+0.2** |
| JNBK | | | | *e*S | | **Sn** | **19 53 29.8** | **-3.0** |
| **JBT2** | **Biratori 2** | **6.74** | **254** | P | | **Pn** | **19 52 19.4** | **+0.7** |

*ISCJB* ***18*** *20:08:19.7±0.8, 32˚26N±0˚05×115˚35W±0˚07, h13km±7km, Error ellipse: s-maj=9.6km s-min=8.0km az=24.6*
*ECX* ***18*** *20:08:20.8±0.5, 32˚25N×115˚34W, h7km, MD2.1, ML2.3*
*MEX* ***18*** *20:08:20.7±0.4, 32˚26N×115˚20W, h16km±547km, MD3.6*
**ISC 18 20:08:19.4**±1.0, **32˚27N**±0˚05×**115˚36W**±0˚04, **h13**km±9km, **n16**, σ0**956**/21, **3C-4D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPBX** | **Cerro Prieto** | **0.16** | **18** | *e*P | **Pg** | **20 08 23.7** | **+0.4** |
| CPBX | | | | *e*P | **Pb** | **20 08 23.8** | **-0.4** |
| CPBX | | | | *e*S | **Sb** | **20 08 27.0** | **-0.4** |
| CPBX | | | | *e* | | 20 08 29.4 | |
| CPBX | | | | IAML | | 20 08 29.4 | |
| | comp=E,4μm,0.2s | | | | | | |
| **MBIG** | **Mexicali** | **0.20** | **45** | *e*P | **Pg** | **20 08 24.3** | **+0.4** |
| MBIG | | | | *e*S | **Sg** | **20 08 26.5** | **-0.4** |
| **MBIG** | **Mexicali** | **0.20** | **45** | *e*P | **Pb** | **20 08 24.7** | **-0.2** |
| **SGL** | **Mount Signal** | **0.49** | **321** | *i* P | **Pb** | **20 08 29.7** | **-0.1** |
| **EMSC** | **East Mesa** | **0.57** | **34** | *i* P | **Pb** | **20 08 31.4** | **+0.2** |
| **WESC** | **Westside Schoo** | **0.58** | **328** | *e*P | **Pb** | **20 08 31.5** | **+0.1** |
| **RDX** | **Rancho Dawling** | **0.59** | **236** | *e*P | **Pb** | **20 08 31.5** | **-0.2** |
| RDX | | | | *e*S | **Sb** | **20 08 39.9** | **-0.2** |
| **YUH** | **Yuha Desert** | **0.61** | **309** | *i* P | **Pb** | **20 08 31.6** | **-0.2** |
| **COA** | **Coachella** | **0.63** | **19** | *e*P | **Pb** | **20 08 32.2** | **0.0** |
| **RMX** | **La Rumorosa** | **0.69** | **299** | *e*P | **Pb** | **20 08 32.9** | **-0.5** |
| RMX | | | | *e*S | **Sg** | **20 08 42.0** | **-0.1** |
| **IBP** | **Imperial Bould** | **0.73** | **303** | *e*P | **Pg** | **20 08 34.0** | **+0.4** |
| **ZAX** | **El Zacaton** | **1.08** | **226** | *e* | **Sn** | **20 08 56.8** | **+1.8** |
| ZAX | | | | IAML | | 20 08 56.8 | |
| | comp=N,42nm,0.3s | | | | | | |
| **CBX** | **Cerro Bola** | **1.10** | **273** | *i* S | **Sb** | **20 08 54.3** | **-0.3** |
| **CBX** | **Cerro Bola** | **1.10** | **273** | *e*P | **Pg** | **20 08 40.7** | **0.0** |
| **BAR** | **Barrett** | **1.18** | **291** | *e*P | **Pb** | **20 08 41.8** | **+0.1** |
| **SPX** | **San Pedro Mart** | **1.22** | **184** | *e*P | **Pn** | **20 08 41.6** | **-0.7** |

*IDC* ***18*** *20:10:20.3±1.1, 11˚19S×162˚31E, h0km, mb3.9/8, mb1 4.0/11, mb1mx4.0/27, mbtmp3.9/11, ML3.6/3, MS3.1/5, Ms1 3.1/5, ms1mx2.8/31, Error ellipse: s-maj=29.2km s-min=21.7km az=85.0*
*ISCJB* ***18*** *20:10:24.6±0.8, 11˚42S±0˚09×162˚4E±0˚1, h46km, mb3.8/8, MS3.1/4, Error ellipse: s-maj=18.4km s-min=10.8km az=146.4*
**ISC 18 20:10:26.5**±1.0, **11˚3S**±0˚1×**162˚3E**±0˚2, **h46**km, **n20,** σ1**902/11, mb3.9/8, MS3.1**/4, **Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **2.91** | **309** | | **Pn** | **20 11 08.9** | **-1.5** |
| | 7.8nm,0.3s,baz=195,slow=16,SNR=2.1 | | | | | | |
| HNR | | | | | Sn | 20 11 50.5 | +6.3 |
| | 44nm,0.3s,baz=132,slow=20,SNR=7.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **11.46** | **160** | Pn | **Pn** | **20 13 06.3** | **-1.4** |
| | 0.5nm,0.3s,baz=3.3,slow=8.2,SNR=17 | | | | | | |
| DZM | | | | LR | LR | 20 16 38.2 | |
| | comp=Z,140nm,20.9s,baz=346,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **17.70** | **238** | P | **Pn** | **20 14 29.5** | **-0.3** |
| | 0.1nm,0.3s,baz=53,slow=10,SNR=1.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.19** | **249** | P | **P** | **20 16 15.2** | **+0.2** |
| | 0.5nm,0.7s,baz=76,slow=9.8,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **29.64** | **242** | P | **P** | **20 16 28.2** | **+0.3** |
| | 1.4nm,0.8s,baz=74,slow=9.2,SNR=17 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.90** | **9** | T | T | 20 47 30.1 | |
| | baz=190 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.91** | **8** | T | T | 20 47 31.0 | |
| | baz=190,slow=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.92** | **8** | T | T | 20 47 31.3 | |
| | baz=190,slow=74 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **31.13** | **8** | T | T | 20 49 01.5 | |
| | baz=188,slow=76,SNR=11 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **31.14** | **9** | T | T | 20 49 03.6 | |
| | baz=188,slow=76,SNR=22 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **31.15** | **8** | T | T | 20 49 04.7 | |
| | baz=188,slow=76,SNR=12 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.68** | **336** | LR | LR | 20 39 46.9 | |
| | comp=Z,14nm,21.3s,baz=130,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **58.19** | **328** | LR | LR | 20 43 26.3 | |
| | comp=Z,16nm,19.3s,baz=148,slow=34 | | | | | | |
| **PETK** | **Petropavlovsk-** | **64.25** | **357** | LR | LR | 20 48 51.5 | |
| | comp=Z,11nm,18.1s,baz=25,slow=36 | | | | | | |
| **VNDA** | **Vanda** | **66.23** | **180** | P | **P** | **20 21 10.8** | **+1.5** |
| | 1.3nm,0.8s,baz=342,slow=5.5,SNR=8.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.07** | **295** | P | **P** | **20 21 29.2** | **+1.0** |
| | 0.4nm,0.7s,baz=139,slow=5.9,SNR=3.3 | | | | | | |
| **SONM** | **Songino Array** | **76.86** | **325** | P | **P** | **20 22 14.3** | **+0.4** |
| | 1.5nm,0.7s,baz=145,slow=5.4,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **84.85** | **19** | P | **P** | **20 22 55.5** | **-0.5** |
| | 0.4nm,0.5s,baz=256,slow=5.7,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **91.35** | **317** | P | **P** | **20 23 27.9** | **+0.3** |
| | 0.9nm,0.7s,baz=92,slow=8.6,SNR=5.7 | | | | | | |
| MKAR | | | | LR | LR | 21 07 22.1 | |
| | comp=Z,9.4nm,18.6s,baz=356,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **91.75** | **325** | P | **P** | **20 23 29.3** | **+0.2** |
| | 0.4nm,0.4s,baz=116,slow=6.6,SNR=2.5 | | | | | | |

*ISK* ***18*** *20:13:41.7, 40˚09N×38˚05E, h8km, MD2.7*
*ISCJB* ***18*** *20:13:42.9±0.5, 40˚11N±0˚04×38˚04E±0˚03, h8km±5km, Error ellipse: s-maj=7.3km s-min=3.5km az=155.5*
*DDA* ***18*** *20:13:42.2, 40˚19N×37˚98E, h8km, Md2.6*
*CSEM* ***18*** *20:13:42.4±0.2, 40˚06N×38˚05E, h8km, MD2.6, Error ellipse: s-maj=5.4km s-min=3.1km az=173.0*
**ISC 18 20:13:42.8**±0.9, **40˚08N**±0˚04×**38˚05E**±0˚02, **h16**km±7km, **n25,** σ0**965/40, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SUSE** | **Susehri** | **0.18** | **42** | *i* P | **Pg** | **20 13 47.3** | **-0.1** |
| SUSE | | | | *i* S | **Sg** | **20 13 50.6** | **+0.2** |
| **SUSE** | **Susehri** | **0.18** | **42** | P | **Pg** | **20 13 47.3** | **-0.1** |
| SUSE | | | | S | **Sg** | **20 13 50.6** | **+0.2** |
| **CUZAR** | **Zara_SIVAS** | **0.29** | **228** | P | **Pb** | **20 13 49.4** | **-0.2** |
| CUZAR | | | | S | **Sb** | **20 13 54.4** | **+0.1** |
| **RSDY** | **Resadiye-TOKAT** | **0.64** | **300** | *e*PG | **Pg** | **20 13 54.5** | **-0.9** |
| RSDY | | | | *e*SG | **Sg** | **20 14 03.0** | **-0.8** |
| **RSDY** | **Resadiye-TOKAT** | **0.64** | **300** | *e*Pg | **Pg** | **20 13 54.5** | **-0.9** |
| RSDY | | | | *e*Sg | **Sg** | **20 14 03.0** | **-0.8** |
| **SCER** | **sogukcermik** | **0.74** | **253** | *i* P | **Pg** | **20 13 56.6** | **-0.7** |
| SCER | | | | *i* S | **Sb** | **20 14 07.7** | **+0.4** |
| **SCER** | **sogukcermik** | **0.74** | **253** | P | **Pg** | **20 13 56.6** | **-0.7** |
| SCER | | | | S | **Sb** | **20 14 07.7** | **+0.4** |
| **ILIC** | **ilic-Erzincan** | **0.74** | **147** | *e*PG | **Pg** | **20 13 56.2** | **-1.1** |
| **ILIC** | **ilic-Erzincan** | **0.74** | **147** | *e*Pg | **Pg** | **20 13 56.3** | **-1.1** |
| **SVSK** | **Karacayir** | **0.82** | **259** | *e*PG | **Pg** | **20 13 58.0** | **-0.8** |
| SVSK | | | | *e*SG | **Sb** | **20 14 10.7** | **+1.1** |
| **SVSK** | **Karacayir** | **0.82** | **259** | *e*Pg | **Pg** | **20 13 58.0** | **-0.8** |
| SVSK | | | | *e*Sg | **Sb** | **20 14 10.7** | **+1.1** |
| **CUKAN** | **kangal_SIVAS** | **0.88** | **211** | P | **Pb** | **20 14 00.1** | **+0.2** |
| CUKAN | | | | S | **Sn** | **20 14 14.1** | **+0.7** |
| **KELT** | **Kelkit** | **0.93** | **85** | *i* P | **Pb** | **20 14 00.9** | **+0.2** |
| KELT | | | | *i* S | **Sb** | **20 14 12.9** | **0.0** |
| **KELT** | **Kelkit** | **0.93** | **85** | P | **Pb** | **20 14 00.9** | **+0.2** |
| KELT | | | | S | **Sb** | **20 14 12.9** | **0.0** |
| **ESPY** | **Espiye-Giresun** | **0.98** | **32** | *e*PG | **Pg** | **20 14 00.9** | **-1.0** |
| **ESPY** | **Espiye-Giresun** | **0.98** | **32** | *e*Pg | **Pg** | **20 14 00.9** | **-1.0** |
| **GUMT** | **Gumushane** | **1.16** | **70** | *e*PN | **Pb** | **20 14 04.4** | **-0.2** |
| **GUMT** | **Gumushane** | **1.16** | **70** | *e*Pn | **Pb** | **20 14 04.4** | **-0.2** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.54** | **245** | P | **Pb** | **20 14 11.0** | **0.0** |
| CUSAR | | | | S | **Sg** | **20 14 33.1** | **+0.7** |
| **MACK** | **Trabzon** | **1.57** | **56** | *i* P | **Pb** | **20 14 11.4** | **-0.1** |
| MACK | | | | *i* S | **Sg** | **20 14 33.2** | **-0.3** |
| **MACK** | **Trabzon** | **1.57** | **56** | P | **Pb** | **20 14 11.4** | **-0.1** |
| MACK | | | | S | **Sg** | **20 14 33.2** | **-0.3** |
| **PTK** | **Pertek** | **1.58** | **138** | *e*PN | **Pn** | **20 14 10.4** | **0.0** |
| **PTK** | **Pertek** | **1.58** | **138** | *e*Pn | **Pn** | **20 14 10.4** | **0.0** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.63** | **78** | *e*PN | **Pn** | **20 14 11.9** | **+0.8** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.63** | **78** | *e*Pn | **Pn** | **20 14 11.9** | **+0.8** |

*IDC* ***18*** *20:30:38.5±2.7, 26˚63N×140˚63E, h0km, mb3.4/2, mb1 3.8/4, mb1mx3.5/32, mbtmp3.7/4, ML3.6/2, MS3.0/1, Ms1 3.2/1, ms1mx2.3/22, Error ellipse: s-maj=103.1km s-min=27.5km az=75.0*
*ISCJB* ***18*** *20:31:07.6±0.7, 28˚59N±0˚05×139˚6E±0˚1, h448km, mb2.9/2, Error ellipse: s-maj=15.0km s-min=5.7km az=171.0*
*JMA* ***18*** *20:31:08.9±0.2, 28˚68N×139˚98E, h459km, M3.6*
**ISC 18 20:31:08.7**±1.0, **28˚65N**±0˚08×**139˚6E**±0˚1, **h448**km, **n15,** σ1**958/18, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **2.75** | **124** | P | **P** | **20 32 13.7** | **-0.1** |
| CBIJ | | | | S | **S** | **20 33 04.6** | **-2.0** |
| **JHHJ** | **Haha-jima-NKT** | **3.04** | **131** | S | **S** | **20 33 09.0** | **-1.4** |
| **BSO1** | **Boso 1** | **6.10** | **11** | S | **S** | **20 34 01.3** | **+0.7** |
| **BSO3** | **Boso 3** | **6.18** | **7** | S | **S** | **20 34 02.7** | **+0.1** |
| **BSO4** | **Boso 4** | **6.35** | **5** | S | **S** | **20 34 06.8** | **+0.6** |
| **JHU** | **Hanno** | **7.18** | **358** | S | **S** | **20 34 20.1** | **-2.4** |
| **JRY** | **Ryogami san** | **7.37** | **356** | P | **P** | **20 32 59.0** | **+1.8** |
| JRY | | | | S | **S** | **20 34 26.4** | **+0.3** |
| **JAG** | **Ashikaga** | **7.75** | **359** | P | **P** | **20 33 02.1** | **+0.8** |
| JAG | | | | S | **S** | **20 34 30.3** | **-3.3** |
| **MJAR** | **Matsushiro Arr** | **7.96** | **352** | Pn | **P** | **20 33 04.5** | **+1.0** |
| | 1.1nm,0.3s,baz=172,slow=11,SNR=11 | | | | | | |
| **JHO** | **Hitachi** | **7.98** | **6** | P | **P** | **20 33 05.4** | **+1.7** |
| JHO | | | | S | **S** | **20 34 36.4** | **-1.7** |
| **JNU** | **Nakatsue** | **8.73** | **303** | Pn | **P** | **20 33 12.6** | **+0.7** |
| | 0.3nm,0.3s,baz=122,slow=9.5,SNR=3.4 | | | | | | |
| **JFK** | **Kawauchi** | **8.76** | **7** | S | **S** | **20 34 52.3** | **-1.3** |
| **CMAR** | **Chiang Mai Arr** | **38.48** | **264** | LR | LR | 20 52 45.9 | |
| | comp=Z,21nm,20.5s,baz=166,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.58** | **187** | P | **P** | **20 39 09.4** | **-0.6** |
| | 0.5nm,0.5s,baz=5.6,slow=7.6,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **52.30** | **187** | P | **P** | **20 39 37.5** | **+0.1** |
| | 0.2nm,0.6s,baz=17,slow=14,SNR=6.8 | | | | | | |

*ISCJB* ***18*** *20:32:23.0±0.6, 50˚35N±0˚04×18˚80E±0˚03, h0km, Error ellipse: s-maj=5.5km s-min=2.4km az=15.1*
*IPEC* ***18*** *20:32:23.9±0.2, 50˚36N×18˚90E, h1km±2km, ML1.7/3, Error ellipse: s-maj=2.7km s-min=1.1km az=170.0*
*CSEM* ***18*** *20:32:24.2±0.2, 50˚35N×18˚83E, h2km, ML2.7/6, Error ellipse: s-maj=5.4km s-min=2.4km az=12.0*
*PRU* ***18*** *20:32:24.9, 50˚33N×18˚82E, h0km*
**ISC 18 20:32:24.2**±0.9, **50˚33N**±0˚04×**18˚84E**±0˚02, **h0**km, **n30,** σ0**972/53, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.62** | **100** | *e*Pg | **Pg** | **20 32 35.6** | **-0.6** |
| OJC | | | | *e*Sg | **Sg** | **20 32 43.8** | **-0.5** |
| **OJC** | **Ojcow** | **0.62** | **100** | *e*Pg | **Pg** | **20 32 35.6** | **-0.6** |
| OJC | | | | *e*Sg | **Sg** | **20 32 43.8** | **-0.5** |
| **OKC** | **Ostrava-Krasne** | **0.67** | **222** | *e*PG | **Pb** | **20 32 38.3** | **-0.4** |
| OKC | | | | *e*SG | **Sg** | **20 32 46.8** | **+1.3** |
| | comp=Z,7.8nm,0.3s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.67** | **222** | Pg | **Pb** | **20 32 38.3** | **-0.4** |
| OKC | | | | Sg | **Sg** | **20 32 46.8** | **+1.3** |
| | 7.8nm,0.3s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.00** | **237** | *e*Pg | **Pb** | **20 32 44.2** | **-0.3** |
| MORC | | | | *e*Sg | **Sg** | **20 32 56.9** | **+0.5** |
| | 14nm,0.2s,baz=56 | | | | | | |
| **LANS** | **Liptovska Anna** | **1.25** | **161** | *e*PG | **Pg** | **20 32 48.3** | **+0.2** |
| LANS | | | | *e*SG | **Sg** | **20 33 04.3** | **0.0** |
| **LANS** | **Liptovska Anna** | **1.25** | **161** | *e*Pg | **Pg** | **20 32 48.3** | **+0.2** |
| LANS | | | | *e*Sg | **Sg** | **20 33 04.3** | **0.0** |
| **NIE** | **Niedzica** | **1.31** | **133** | *e*Pg | **Pg** | **20 32 49.9** | **+0.5** |
| NIE | | | | *e*Sg | **Sg** | **20 33 07.2** | **+0.8** |
| **NIE** | **Niedzica** | **1.31** | **133** | *e*Pg | **Pg** | **20 32 49.9** | **+0.5** |
| NIE | | | | *e*Sg | **Sg** | **20 33 07.2** | **+0.8** |
| **KRLC** | **Kraliky** | **1.35** | **260** | *e*PG | **Pg** | **20 32 49.3** | **-0.7** |
| KRLC | | | | *e*SG | **Sb** | **20 33 08.3** | **+0.1** |
| **KRLC** | **Kraliky** | **1.35** | **260** | Pg | **Pg** | **20 32 49.3** | **-0.7** |
| KRLC | | | | Sg | **Sb** | **20 33 08.3** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **1.61** | **272** | *e*PG | **Pn** | **20 32 53.7** | **-0.3** |
| DPC | | | | *e*SG | **Sg** | **20 33 16.4** | **+0.4** |
| | comp=Z,7.4nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.61** | **272** | Pg | **Pn** | **20 32 53.7** | **-0.3** |
| DPC | | | | Sg | **Sg** | **20 33 16.4** | **+0.4** |
| | 7.4nm,0.2s | | | | | | |
| **KSP** | **Ksiaz** | **1.70** | **289** | *e*Pg | **Pg** | **20 32 57.2** | **+0.4** |
| KSP | | | | *e*Sg | **Sg** | **20 33 19.5** | **+0.6** |
| **KSP** | **Ksiaz** | **1.70** | **289** | *e*Pg | **Pg** | **20 32 57.2** | **+0.4** |
| KSP | | | | *e*Sg | **Sg** | **20 33 19.5** | **+0.6** |
| **VRAC** | **Vranov** | **1.78** | **236** | *e*Pn | **Pn** | **20 32 56.4** | **+0.2** |
| | baz=54 | | | | | | |
| VRAC | | | | *e*Sg | **Sg** | **20 33 21.1** | **-0.2** |
| | 4.4nm,0.3s,baz=54 | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.80** | **120** | *e*PN | **Pb** | **20 32 57.9** | **-0.2** |
| STHS | | | | *e*SN | **Sn** | **20 33 20.8** | **+0.6** |
| **STHS** | **Stebnicka Huta** | **1.80** | **120** | *e*Pn | **Pb** | **20 32 57.9** | **-0.2** |
| STHS | | | | *e*Sn | **Sn** | **20 33 20.8** | **+0.6** |
| **UPC** | **Upice** | **1.82** | **277** | *e*SG | **Sg** | **20 33 22.5** | **-0.1** |
| **UPC** | **Upice** | **1.82** | **277** | Sg | **Sg** | **20 33 22.5** | **-0.1** |
| **VYHS** | **Vyhne** | **1.84** | **180** | *e*PN | **Pn** | **20 32 56.9** | **-0.1** |
| VYHS | | | | *e*SN | **Sn** | **20 33 19.8** | **-1.2** |
| **VYHS** | **Vyhne** | **1.84** | **180** | *e*Pn | **Pn** | **20 32 56.9** | **-0.1** |
| VYHS | | | | *e*Sn | **Sn** | **20 33 19.8** | **-1.2** |
| **KRUC** | **Moravsky** | **2.03** | **232** | *e*Pn | **Pn** | **20 33 00.2** | **+0.5** |
| | baz=50 | | | | | | |
| KRUC | | | | *e*Sg | **Sg** | **20 33 29.0** | **-0.5** |
| | 3.3nm,0.3s,baz=50 | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.64** | **262** | *e*PG | **Pb** | **20 33 12.6** | **+0.2** |
| GOPC | | | | *e*SG | **Sg** | **20 33 48.4** | **-0.6** |
| **PVCC** | **Panska Ves** | **2.74** | **276** | *e*SG | **Sg** | **20 33 51.9** | **-0.2** |
| | comp=Z,5.3nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **2.74** | **276** | Sg | **Sg** | **20 33 51.9** | **-0.2** |
| | 5.3nm,0.2s | | | | | | |
| **PRU** | **Pruhonice** | **2.79** | **265** | *e*SG | **Sg** | **20 33 52.5** | **-1.1** |
| **PRU** | **Pruhonice** | **2.79** | **265** | Sg | **Sg** | **20 33 52.5** | **-1.1** |
| **BRG** | **Berggiesshubel** | **3.17** | **282** | SG | **Sg** | **20 34 06.6** | **+0.7** |
| | 2.8nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.62** | **253** | *e*PG | **Pb** | **20 33 31.1** | **+2.0** |
| KHC | | | | *e*SG | **Sg** | **20 34 18.4** | **-2.0** |

*ISCJB* ***18*** *20:57:15.4±0.6, 22˚94N±0˚04×122˚62E±0˚03, h23km, Error ellipse: s-maj=6.7km s-min=3.1km az=154.4*
*JMA* ***18*** *20:57:15.9±0.3, 22˚91N×122˚57E, h44km, M2.8*
*TAP* ***18*** *20:57:17.5, 22˚91N×122˚41E, h83km±1km, ML3.2, D*
**ISC 18 20:57:14.7**±1.3, **22˚87N**±0˚05×**122˚57E**±0˚05, **h23**km, **n33,** σ1**908/47, 2C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHKT** | **Chengkung** | **1.13** | **282** | *e*P | **Pb** | **20 57 34.6** | **-0.9** |
| | baz=284 | | | | | | |
| **LAY** | **Lan-yu** | **1.25** | **229** | *e*P | **Pn** | **20 57 37.4** | **+0.6** |
| | baz=222 | | | | | | |
| **TWF1** | **Yuli** | **1.26** | **293** | *i* P | **Pn** | **20 57 37.6** | **+0.7** |
| | baz=290 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **20 57 51.1** | **-2.5** |
| | baz=290 | | | | | | |
| **EHY** | **Hungye** | **1.31** | **299** | *e*P | **Pn** | **20 57 38.5** | **+0.9** |
| | baz=301 | | | | | | |
| EHY | | | | *e*S | **Sb** | **20 57 54.6** | **-0.3** |
| | baz=301 | | | | | | |
| **TWG** | **Pinlang** | **1.38** | **268** | P | **Pb** | **20 57 40.1** | **+0.3** |
| | baz=265 | | | | | | |
| TWG | | | | S | **Sb** | **20 57 56.4** | **-0.6** |
| | baz=265 | | | | | | |
| **ESL** | **Shilin** | **1.40** | **312** | *e*P | **Pn** | **20 57 40.2** | **+1.4** |
| | baz=318 | | | | | | |
| **ELDTW** | **Lidau** | **1.46** | **283** | *i* P | **Pn** | **20 57 40.6** | **+0.8** |
| | baz=288 | | | | | | |
| **TWD** | **Chiawan** | **1.50** | **324** | *e*P | **Pn** | **20 57 40.4** | **+0.3** |
| | baz=332 | | | | | | |
| **ECL** | **Taimali** | **1.51** | **260** | *e*P | **Pn** | **20 57 41.6** | **+1.2** |
| | baz=257 | | | | | | |
| ECL | | | | *e*S | **Sn** | **20 57 59.1** | **-0.2** |
| | baz=257 | | | | | | |
| **WDT** | **Danda** | **1.58** | **304** | P | **Pn** | **20 57 42.7** | **+1.1** |
| | baz=306 | | | | | | |
| **YUS** | **Yu-Shan** | **1.61** | **293** | P | **Pb** | **20 57 43.7** | **-0.3** |
| | baz=293 | | | | | | |
| YUS | | | | *e*S | **Sb** | **20 58 03.1** | **-0.9** |
| | baz=293 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.63** | **14** | P | **Pn** | **20 57 42.9** | **+0.9** |
| YOJ | | | | S | **Sn** | **20 58 02.2** | **-0.1** |
| **EAST** | **Anshuo** | **1.66** | **253** | *e*P | **Pb** | **20 57 44.4** | **-0.2** |
| | baz=253 | | | | | | |
| **STYT** | **Tauyuan** | **1.69** | **280** | P | **Pb** | **20 57 44.7** | **-0.5** |
| | baz=284 | | | | | | |
| STYT | | | | *e*S | **Sb** | **20 58 04.0** | **-2.1** |
| | baz=284 | | | | | | |
| **ALS** | **Alishan** | **1.74** | **292** | P | **Pb** | **20 57 46.1** | **0.0** |
| | baz=292 | | | | | | |
| ALS | | | | *e*S | **Sb** | **20 58 05.9** | **-1.8** |
| | baz=292 | | | | | | |
| **SSD** | **Sandimen** | **1.79** | **266** | *e*P | **Pb** | **20 57 46.3** | **-0.5** |
| | baz=264 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.81** | **36** | P | **Pn** | **20 57 45.0** | **+0.6** |
| IRIF | | | | S | **Sn** | **20 58 06.0** | **-0.6** |
| **SMLT** | **Sun Moon Lake** | **1.83** | **304** | *e*P | **Pb** | **20 57 47.1** | **-0.4** |
| | baz=309 | | | | | | |
| **WTP** | **Ta-pu** | **1.84** | **282** | *e*P | **Pb** | **20 57 47.7** | **+0.1** |
| | baz=281 | | | | | | |
| WTP | | | | *e*S | **Sb** | **20 58 09.9** | **-0.3** |
| | baz=281 | | | | | | |
| **SGST** | **Jiashian** | **1.84** | **277** | *e*P | **Pb** | **20 57 47.5** | **-0.1** |
| | baz=282 | | | | | | |
| SGST | | | | *e*S | **Sb** | **20 58 10.4** | **+0.1** |
| | baz=282 | | | | | | |
| **SCZT** | **Fangliau** | **1.87** | **255** | *e*P | **Pb** | **20 57 48.5** | **+0.4** |
| | baz=252 | | | | | | |
| **TWT** | **Tachien** | **1.88** | **317** | *e*P | **Pn** | **20 57 46.0** | **+0.5** |
| | baz=323 | | | | | | |
| **TYC** | **Yuchr** | **1.88** | **304** | *e*P | **Pb** | **20 57 47.9** | **-0.3** |
| | baz=308 | | | | | | |
| **CHN5** | **Tsauling** | **1.88** | **293** | *e*P | **Pb** | **20 57 48.5** | **+0.1** |
| | baz=301 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **20 58 11.7** | **+0.2** |
| | baz=301 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.90** | **44** | S | **Sn** | **20 58 08.0** | **-0.8** |
| **CHN1** | **Nanshi** | **1.90** | **280** | *e*P | **Pb** | **20 57 48.9** | **+0.2** |
| | baz=284 | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **20 58 12.1** | **0.0** |
| | baz=284 | | | | | | |
| **NNS** | **Nan Shan** | **1.91** | **325** | *e*P | **Pn** | **20 57 47.7** | **+1.8** |
| | baz=322 | | | | | | |
| NNS | | | | *e*S | **Sn** | **20 58 09.3** | **0.0** |
| | baz=322 | | | | | | |
| **TWE** | **Neicheng** | **2.02** | **336** | *e*P | **Pn** | **20 57 49.1** | **+1.8** |
| | baz=340 | | | | | | |
| TWE | | | | *e*S | **Sn** | **20 58 11.7** | **-0.1** |
| | baz=340 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.07** | **44** | P | Pn | 20 57 48.1 | +0.1 |
| JIJ | | | | S | Sn | 20 58 11.2 | -2.0 |
| **NSK** | **Sanguang** | **2.11** | **329** | *e*P | **Pn** | **20 57 50.6** | **+1.9** |
| | baz=332 | | | | | | |
| NSK | | | | *e*S | **Sn** | **20 58 12.7** | **-1.5** |
| | baz=332 | | | | | | |
| **TWQ1** | **Liyutan** | **2.21** | **312** | *e*P | **Pn** | **20 57 52.4** | **+2.5** |
| | baz=314 | | | | | | |
| **NSTT** | **Nanjuang** | **2.26** | **321** | *e*P | **Pn** | **20 57 53.1** | **+2.5** |
| | baz=311 | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.34** | **43** | P | Pn | 20 57 51.1 | -0.6 |
| JISG | | | | S | Sn | 20 58 17.7 | -2.0 |

*NIED* ***18*** *21:23:00, 24˚20N×125˚30E, h32km, Mw4.5 Best double couple: M₀5.33000×10¹⁵ NP1:φ₀s109.00000°, δ76.00000°, λ13.00000°. NP2:φ₀s16.00000°, δ77.00000°, λ165.00000°.*
*BJI* ***18*** *21:23:48.7, 24˚06N×125˚49E, h15km, mb4.6/29, mB4.6/15, Ms4.4/9, Ms7 4.3/2*
*IDC* ***18*** *21:23:50.2±0.7, 24˚31N×125˚21E, h0km, mb4.4/25, mb1 4.4/29, mb1mx4.4/44, mbtmp4.4/29, ML3.9/4, MS3.4/16, Ms1 3.4/16, ms1mx3.2/47, Error ellipse: s-maj=16.8km s-min=15.2km az=108.0*
*MOS* ***18*** *21:23:53.5±1.0, 24˚27N×125˚35E, h33km, mb4.9/29, Error ellipse: s-maj=9.6km s-min=5.8km az=116.5*
*ISCJB* ***18*** *21:23:54.3±0.4, 24˚23N±0˚03×125˚39E±0˚03, h43km±3km, mb4.7/64, MS3.5/15, Error ellipse: s-maj=6.1km s-min=3.2km az=152.0*
*NEIC* ***18*** *21:23:55.8±0.6, 24˚30N×125˚32E, h40km±5km, mb4.9/23, MW4.4(NIED), Error ellipse: s-maj=6.9km s-min=4.7km az=139.0*
*NEIC Recorded [1 JMA] on Miyako-jima and Tarama-shima.*
*JMA* ***18*** *21:23:55.3±0.1, 24˚23N×125˚34E, h49km±4km, M4.7*
*JMA Felt I J1.*
**ISC 18 21:23:55.0**±0.6, **24˚26N**±0˚05×**125˚27E**±0˚04, **h29**km±3km, **h29**km:**pP-P, n226,** σ1**936**/242, **mb4.7**/64, **MS3.5**/15, **18C-4D, Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JOGS** | **Gusukube** | **0.51** | **14** | P | **Pn** | **21 24 06.8** | **+0.4** |
| JOGS | | | | S | **Sn** | **21 24 15.5** | **+1.4** |
| **JMJ** | **Miyako jima 2** | **0.55** | **3** | P | **Pn** | **21 24 07.4** | **+0.5** |
| JMJ | | | | S | **Sn** | **21 24 16.5** | **+1.3** |
| **JIRB** | **Irabujima** | **0.57** | **352** | P | **Pn** | **21 24 07.6** | **+0.4** |
| JIRB | | | | S | **Sn** | **21 24 16.9** | **+1.3** |
| **JTJ** | **Tarama** | **0.64** | **306** | P | **Pn** | **21 24 09.1** | **+1.0** |
| JTJ | | | | S | **Sn** | **21 24 19.0** | **+1.7** |
| **

comp=Z,115nm,0.8s
**MAJO Matsushiro 16.55 39** *e*Pn **Pn 21 27 44.2 -0.7**
comp=Z,21nm,0.8s
**MAT Matsushiro 16.55 39** P **P 21 27 48.3 +1.0**
**MJAR Matsushiro Arr 16.55 39** Pn **Pn 21 27 44.9 0.0**
comp=Z,2.4nm,0.3s,baz=224,slow=11,SNR=42
**MJA0 Matsu Arr-Jizo 16.57 39** *e*P **P 21 27 48.6 +1.0**
MJA0 pmax pmax
comp=Z,2.0nm,0.3s
**DAV Davao City (W) 17.10 179** LR LR 21 35 09.0
comp=Z,56nm,19.5s,baz=165,slow=40
**XAN Xi'an 17.26 308** P **P 21 27 56.6 +1.3**
XAN PMZ
comp=Z,15nm,0.8s
XAN PMZ
comp=Z,82nm,5.6s
**BJT Baijiatuau 17.48 336** *e*P **P 21 27 58.9 +1.3**
**BJT Baijiatuau 17.48 336** *e*Pn **P 21 27 58.9 +1.3**
**CN2 Changchun 19.49 0** *e*P **P 21 28 19.3 -0.4**
**VLA Vladivostok 19.59 15**⇓ *e*P **Pn 21 28 22.9 +0.7**
VLA pmax pmax
comp=Z,45nm,0.7s
**MYLDM Lahad Datu 20.06 200** *e*P **P 21 28 26.0 0.0**
comp=Z,41nm,1.3s
**HHC Hu-ho-hao-te 20.13 329** *e*P **P 21 28 27.4 +0.6**
HHC S **S 21 32 05.8 -5.7**
HHC PMZ
comp=Z,43nm,0.8s
HHC PMZ
comp=Z,160nm,5.6s
HHC LN
comp=Z,210nm,12.3s
HHC LE
comp=Z,230nm,11.1s
**USRK Ussuriysk Ar. 20.64 14** P **P 21 28 29.4 -2.7**
comp=Z,0.8nm,0.5s,baz=225,slow=8.0,SNR=4.0
**GUMO Guam 21.34 116** LR LR 21 35 46.8
comp=Z,51nm,20.5s,baz=338,slow=34
**LZH Lanzhou 21.90 308** *e*P **P 21 28 46.5 +0.5**
LZH pP **pP 21 28 53.5 -0.4**
LZH sP **sP 21 28 57.3 -0.3**
LZH PMZ
comp=Z,40nm,1.0s
LZH PMZ
comp=Z,260nm,6.0s
**ERM Erimo 23.11 36** *e*P **P 21 28 56.8 -1.7**
ERM pmax pmax
comp=Z,57nm,1.4s
**ERM Erimo 23.11 36** *e*P **P 21 28 56.8 -1.7**
comp=Z,57nm,1.4s
**TNTI Ternate 23.44 175** *e*P **P 21 29 02.8 +0.8**
comp=Z,50nm,1.0s
**MRSI Marisa 23.86 188** P P 21 29 17.7 +12
**ASAJ Asahikawa 24.36 31** P **P 21 29 10.2 -0.2**
comp=Z,3.2nm,0.4s,baz=227,slow=12,SNR=4.7
**ASAJ Asahikawa 24.36 31** *e*P **P 21 29 10.2 -0.2**
comp=Z,222nm,2.3s
**SBUM Sibu 25.08 212** *e*P **P 21 29 18.4 +1.2**
comp=Z,27nm,1.5s
**CM01 Chiang Mai Arr 25.16 262** *e*P **P 21 29 19.2 +1.2**
**CM31 Chiang Mai Arr 25.16 262** *e*P **P 21 29 16.5 -1.5**
**CMAR Chiang Mai Arr 25.16 262** P **P 21 29 16.5 -1.5**
comp=Z,1.2nm,0.7s,baz=57,slow=7.4,SNR=7.7
CMAR LR LR 21 40 26.8
comp=Z,100nm,18.8s,baz=86,slow=40
**CMAR Chiang Mai Arr 25.16 262** *e*P **P 21 29 19.4 +1.4**
**HABR Khabarovsk 25.37 15** *e*P **P 21 29 19.0 -0.5**
HABR *e**PP **pP 21 29 28.5 +0.5**
HABR *e**SP **sP 21 29 32.9 +1.3**
HABR *e* 21 29 54.6
HABR *e* 21 32 50.6
HABR *e*S **S 21 33 44.0 -0.1**
HABR *e**SS **sS 21 34 00.2 +2.1**
HABR *e*SS **SnSn 21 34 38.7 +1.4**
HABR *e*SSS SSS 21 34 53.1
HABR *e* 21 40 15.8
HABR pmax pmax
comp=Z,30nm,1.4s
HABR MLR MLR
comp=Z,192nm,19.0s
**KLR Kul'dur 25.44 10**⇑ *e*P **P 21 29 20.6 +0.4**
**SANI Sanana 26.16 178** P **P 21 29 31.1 +4.1**
comp=Z,26nm,1.2s,comp=Z,426nm
**GTA Gaotai 26.25 311** *e*P **P 21 29 27.3 -0.6**
GTA pP **pP 21 29 32.3 -4.0**
GTA sP **sP 21 29 36.0 -3.9**
GTA PMZ
comp=Z,14nm,1.1s
**ULN Ulaanbaatar 27.64 333**⇑ *e*P **P 21 29 40.2 -0.1**
ULN pmax pmax
comp=Z,12nm,1.7s
**SONA0 Songino Array 27.89 332** *e*P **P 21 29 41.2 -1.3**
**SONM Songino Array 27.89 332** P **P 21 29 41.2 -1.3**
comp=Z,4.4nm,0.5s,baz=152,slow=9.9,SNR=31
SONM LR LR 21 42 22.0
comp=Z,93nm,19.6s,baz=136,slow=40
**SONA1 Songino Array 27.90 332** *e*P **P 21 29 40.9 -1.7**
**KAPI Kappang 29.59 191** LR LR 21 42 47.3
comp=Z,40nm,18.2s,baz=24,slow=38
**LSA Lhasa 30.81 288** P **P 21 30 09.0 0.0**
**LSA Lhasa 30.81 288** *e*P **P 21 30 10.8 +1.8**
LSA pmax pmax
comp=Z,4.0nm,0.7s
**LSA Lhasa 30.81 288** *e*P **P 21 30 10.8 +1.8**
comp=Z,3.7nm,0.7s
**TAPN Taplejung 33.87 283** *e*P **P 21 30 37.1 +1.5**
comp=Z,21nm,0.6s
**MNSI Mandailing Nat 34.10 231** P **P 21 30 38.1 +0.8**
comp=Z,26nm,1.1s
**ODAN Odare 34.19 283** *e*P **P 21 30 39.5 +1.2**
comp=Z,48nm,0.8s
**PPI Padang Panjang 34.43 228** P **P 21 30 41.9 +1.7**
comp=Z,18nm,0.9s
**RAMN Ramite 34.88 283** *e*P **P 21 30 45.3 +1.0**
comp=Z,11nm,0.5s
**GSI Gunungsitoli 35.19 234** *e*P **P 21 30 45.2 -1.6**
comp=Z,168nm,2.8s
**GUN Gumba 35.46 285** *e*P **P 21 30 50.6 +1.2**
comp=Z,47nm,0.8s
**PKI Pulchoki 35.90 284** *e*P **P 21 30 53.8 +0.7**
comp=Z,24nm,0.8s
**PKIN Phulchoki 35.91 284** *e*P **P 21 30 53.8 +0.6**
comp=Z,18nm,0.7s
**KKN Kakani 35.99 284** *e*P **P 21 30 54.7 +0.8**
comp=Z,38nm,0.7s
**DMN Daman 36.16 284** *e*P **P 21 30 56.1 +0.8**
comp=Z,44nm,1.0s
**GKN Gorkha 36.55 285** *e*P **P 21 30 59.1 +0.6**
comp=Z,29nm,0.8s
**DANN Dangsing 37.30 285** *e*P **P 21 31 06.4 +1.3**
**KOLN Koldanda 37.48 285** *e*P **P 21 31 07.4 +0.9**
comp=Z,22nm,0.8s
**PETK Petropavlovsk- 37.77 32** P **P 21 31 08.0 -0.4**
comp=Z,2.9nm,0.6s,baz=264,slow=1.4,SNR=2.2
PETK LR LR 21 46 40.0
comp=Z,36nm,20.3s,baz=359,slow=36
**PETK Petropavlovsk- 37.77 32** P **P 21 31 08.0 -0.4**
**PEA2 Petropavlovsk- 37.78 32** *e*P **P 21 31 08.0 -0.5**
**YAK Yakutsk 37.87 3**⇑ *e*P **P 21 31 09.7 +0.6**
YAK pmax pmax
comp=Z,6.0nm,1.0s
**KRAR Krasnoyarsk 39.56 332**⇑ *e*P **P 21 31 22.7 -0.7**
KRAR pmax pmax
comp=Z,6.0nm,0.9s
**MK01 Makanchi Array 40.90 314** *e*P **P 21 31 33.9 -0.8**
**MK32 Makanchi Array 40.91 314** *e*P **P 21 31 33.6 -1.2**
**MKAR Makanchi Array 40.91 314** P **P 21 31 33.6 -1.2**
comp=Z,9.3nm,0.4s,baz=99,slow=9.6,SNR=89
MKAR LR LR 21 47 53.3
comp=Z,39nm,21.5s,baz=98,slow=35
**MKAR Makanchi Array 40.91 314** *e*P **P 21 31 34.8 +0.1**
MKAR pmax pmax
comp=Z,10.0nm,0.4s
**MKAR Makanchi Array 40.91 314** *e*P **P 21 31 34.3 -0.4**
**MAKZ Makanchi 41.12 314** *e*P **P 21 31 36.8 +0.3**
**PDGK Podgornoye 41.94 309** P **P 21 31 43.4 +0.3**
PDGK pmax pmax
comp=Z,30nm,0.8s
**ZAA0 Zalesovo Array 42.26 325** *e*P **P 21 31 43.9 -1.7**
**ZALV Zalesovo Beam 42.26 325** P **P 21 31 44.1 -1.4**
comp=Z,4.6nm,0.4s,baz=113,slow=8.4,SNR=21
ZALV LR LR 21 50 56.3
comp=Z,64nm,18.9s,baz=68,slow=38
**ZAA1 Zalesovo Array 42.26 325** *e*P **P 21 31 44.1 -1.5**
**KSH Kashi 43.99 302** P P 21 32 04.0 +4.0
KSH PMZ
comp=Z,13nm,1.1s
**ULHL Ulahol 44.10 306** P **P 21 32 02.4 +1.5**
SNR=17
**KURK Kurchatov 44.46 319** *e*P **P 21 32 02.4 -1.0**
KURK pmax pmax
comp=Z,20nm,0.8s
**KURK Kurchatov 44.46 319** *e*P **P 21 32 02.4 -1.0**
comp=Z,20nm,0.8s
**TKM2 Tokmak 2 44.67 307** *e*P **P 21 32 06.3 +0.8**
TKM2 pmax pmax
comp=Z,33nm,0.6s
**TKM2 Tokmak 2 44.67 307** P **P 21 32 06.4 +0.9**
SNR=43
**TKM2 Tokmak 2 44.67 307** *e*P **P 21 32 06.3 +0.8**
comp=Z,33nm,0.6s
**WRAB Tennant Creek 44.81 168**⇓ *e*P P 21 32 10.5 +4.0
WRAB pmax pmax
comp=Z,29nm,1.2s
**KZA Kyzart 44.81 306** P **P 21 32 09.1 +2.2**
SNR=5.9
**WRA Warramunga Arr 44.82 168** P **P 21 32 06.2 -0.3**
comp=Z,3.0nm,0.6s,baz=348,slow=8.8,SNR=17
**KBK Karagaybulak 45.11 307** P **P 21 32 10.2 +1.3**
SNR=14
**CHMS Chumysh 45.30 307** P **P 21 32 10.9 +0.6**
SNR=14
**UCH Uchtor 45.37 306** P **P 21 32 12.9 +1.5**
SNR=36
**AAK Ala-Archa 45.44 307** *c**e*P **P 21 32 12.1 +0.6**
AAK pmax pmax
comp=Z,11nm,0.9s
**AAK Ala-Archa 45.44 307** P **P 21 32 12.3 +0.8**
SNR=8.5
**AAK Ala-Archa 45.44 307** *e*P **P 21 32 12.2 +0.6**
comp=Z,6.0nm,0.6s
**PALK Pallekele 45.85 256** *e*P **P 21 32 16.8 +1.8**
PALK pmax pmax
comp=Z,78nm,1.8s
**PALK Pallekele 45.85 256** *e*P **P 21 32 16.8 +1.8**
comp=Z,78nm,1.8s
**SFK Sufi-Kurgan 45.93 303** P **P 21 32 16.8 +1.2**
SFK pmax pmax
comp=Z,6.0nm,0.9s
**EKS2 Erkin-Say 45.96 307** *e*P **P 21 32 14.6 -1.1**
EKS2 pmax pmax
comp=Z,6.0nm,0.7s
**EKS2 Erkin-Say 45.96 307** P **P 21 32 17.1 +1.4**
SNR=8.4
**EKS2 Erkin-Say 45.96 307** *e*P **P 21 32 14.6 -1.1**
comp=Z,5.8nm,0.7s
**AML Almayashu 45.97 306** P **P 21 32 17.5 +1.5**
SNR=5.6
**MNAS Manas 46.88 306** P **P 21 32 24.3 +1.4**
MNAS pmax pmax
comp=Z,83nm,1.1s
**OTUK Ortayu 47.80 314** P **P 21 32 30.6 +0.8**
OTUK pmax pmax
comp=Z,16nm,0.7s
**AS12 Alice Springs 48.37 169** *e*P **P 21 32 34.2 -0.2**
**ASAR Alice Springs 48.37 169** P **P 21 32 34.2 -0.2**
comp=Z,1.2nm,0.5s,baz=356,slow=13,SNR=23
**AS01 Alice Springs 48.38 169** *e*P **P 21 32 34.5 0.0**
**KKAR Karatay Array 48.40 307** *e*P **P 21 32 35.0 +0.5**
**KKAR Karatay Array 48.40 307** *e*P **P 21 32 35.0 +0.5**
**KBL Kabul 49.49 296** *e*P **P 21 32 44.4 +1.1**
KBL pmax pmax
comp=Z,38nm,1.6s
**KBL Kabul 49.49 296** *e*P **P 21 32 44.4 +1.1**
comp=Z,38nm,1.6s
**DZET Dzherino 49.51 301** P **P 21 32 44.1 +0.9**
DZET pmax pmax
comp=Z,38nm,0.7s
**BRVK Borovoye 50.07 320** *c**e*P **P 21 32 46.7 -0.3**
BRVK pmax pmax
comp=Z,9.0nm,1.2s
**BRVK Borovoye 50.07 320** *e*P **P 21 32 46.5 -0.5**
comp=Z,7.2nm,1.0s
**BILL Bilibino 50.38 19** *e*P P 21 32 53.3 +4.1
BILL pmax pmax
comp=Z,6.0nm,1.2s
**ABKAR Akbulak array 56.06 314** *e*P **P 21 33 31.5 +0.3**
**SVE Sverdlovsk 56.20 323**⇑ *e*P **P 21 33 32.4 +0.3**
SVE pmax pmax
comp=Z,20nm,1.3s
**IMYA Miami 56.59 299** *e*P **P 21 33 36.1 +0.6**
**IMOG Moghan 57.23 298** *e*P **P 21 33 40.8 +0.6**
**ARU Arti 57.30 323** P **P 21 33 39.2 -0.7**
comp=Z,0.3nm,0.2s,baz=270,slow=20,SNR=3.3
**ARU Arti 57.30 323** *c i*P **P 21 33 39.3 -0.6**
ARU S **S 21 41 32.7 -1.4**
ARU pmax pmax
comp=Z,17nm,1.0s
**ARU Arti 57.30 323** *e*P **P 21 33 39.5 -0.4**
comp=Z,12nm,0.8s
**AKTO Aktyubinsk 57.33 316** P **P 21 33 39.3 -1.0**
comp=Z,4.2nm,0.6s,baz=83,slow=8.1,SNR=3.1
**IKRD Kardeh 57.80 299** *e*P P 21 33 38.8 -5.3
**GEYT Alibeck 57.97 301** P **P 21 33 45.5 +0.5**
comp=Z,7.4nm,0.6s,baz=62,slow=2.0,SNR=21
GEYT LR LR 22 01 51.1
comp=Z,89nm,18.2s,baz=155,slow=39
**IFIR Firoozkooh 62.58 299** *e*P **P 21 34 17.9 +0.9**
**RND Reindeer 66.77 29** *e*P **P 21 34 43.5 0.0**
RND pmax pmax
comp=Z,87nm,2.2s
**RND Reindeer 66.77 29** *e*P **P 21 34 43.5 0.0**
comp=Z,87nm,2.2s
**MDM Murphy Dome 66.83 28** *e*P **P 21 34 45.1 +1.3**
comp=Z,70nm,2.2s
**ILAR Eielson Array 67.43 28** P **P 21 34 47.2 -0.3**
comp=Z,0.6nm,0.5s,baz=261,slow=6.2,SNR=9.6
**ILB Eielson Array 67.43 28** *e*P **P 21 34 47.2 -0.3**
**VRH Novokhopyorsk 67.53 317** *e*P **P 21 34 48.3 -0.1**
VRH pmax pmax
comp=N,7.0nm,0.6s
VRH pmax pmax
comp=E,9.0nm,0.6s
VRH pmax pmax
comp=Z,10.0nm,0.6s
**ISHB Shabestar 67.59 303** *e*P **P 21 34 49.6 +0.1**
**KBZ Khabaz 68.33 309** P **P 21 34 52.9 -0.7**
comp=Z,4.8nm,0.8s,baz=138,slow=3.6,SNR=15
KBZ LR LR 22 07 55.3
comp=Z,41nm,20.6s,baz=20,slow=39
**KIV Kislovodsk 68.42 310** *e*P **P 21 34 54.7 +0.4**
KIV pmax pmax
comp=Z,13nm,0.9s
**KIV Kislovodsk 68.42 310** *e*P **P 21 34 55.2 +0.9**
comp=Z,12nm,0.6s
**NEY Neytrino 68.56 309**⇑ *e*P **P 21 34 56.5 +1.2**
NEY pmax pmax
comp=Z,2.0nm,0.8s
**LPSR Galich'ya Gora 68.94 319** *e*P **P 21 34 57.1 -0.1**
LPSR pmax pmax
comp=N,8.0nm,0.9s
LPSR pmax pmax
comp=E,8.0nm,0.9s
LPSR pmax pmax
comp=Z,10.0nm,0.9s
**VORD Divnogorie 69.08 318** *e*P **P 21 34 58.5 +0.4**
VORD pmax pmax
comp=N,50nm,0.5s
VORD pmax pmax
comp=E,50nm,0.5s
VORD pmax pmax
comp=Z,10.0nm,0.5s
**VSR Storozhevoye 69.10 318** *e*P **P 21 34 58.0 -0.3**
VSR pmax pmax
comp=N,3.0nm,0.6s
VSR pmax pmax
comp=E,3.0nm,0.6s
VSR pmax pmax
comp=Z,8.0nm,0.6s
**OBN Obninsk 69.73 322** *i*P **P 21 35 00.1 -2.0**
OBN *i* 21 35 24.6
OBN *i* 21 37 37.3
OBN pmax pmax
comp=Z,9.0nm,1.0s
**SPA0 Spitsbergen Ar 70.19 348** *e*P **P 21 35 04.0 -0.6**
**SPITS Spitsbergen Ar 70.19 348** P **P 21 35 04.0 -0.6**
comp=Z,8.3nm,0.8s,baz=79,slow=10,SNR=4.5
**SPITS Spitsbergen Ar 70.19 348** P **P 21 35 04.0 -0.6**
**ARA0 ARCESS Array S 70.85 338** *e*P **P 21 35 07.1 -1.6**
**ARCES ARCESS Array B 70.85 338** P **P 21 35 07.1 -1.6**
comp=Z,2.4nm,0.7s,baz=78,slow=7.9,SNR=6.9
ARCES LR LR 22 10 59.5
comp=Z,22nm,18.3s,baz=249,slow=40
**ARCES ARCESS Array B 70.85 338** *e*P **P 21 35 08.9 +0.2**
ARCES pmax pmax
comp=Z,2.0nm,0.7s
**RAYN Ar Rayn 71.88 288** *e*P **P 21 35 16.1 +0.3**
comp=Z,10nm,1.6s
**MALT Malatya 73.03 305**⇑ P **P 21 35 23.6 +1.1**
**MALT Malatya 73.03 305**⇑ *i*P **P 21 35 23.6 +1.1**
**FIA0 FINESS Array S 73.24 330** *e*P **P 21 35 21.4 -1.8**
**FIA0 FINESS Array S 73.24 330** *e*P **P 21 35 21.4 -1.8**
**FINES FINESS Array B 73.24 330** P **P 21 35 21.4 -1.8**
comp=Z,6.4nm,0.7s,baz=67,slow=5.2,SNR=22
**FINES FINESS Array B 73.24 330** *e*P **P 21 35 22.7 -0.5**
FINES pmax pmax
comp=Z,6.0nm,0.7s
**AKASG Malin Array Be 75.27 319** P **P 21 35 34.5 -0.8**
comp=Z,2.1nm,0.5s,baz=58,slow=6.6,SNR=8.0
**AKASG Malin Array Be 75.27 319** *e*P **P 21 35 34.4 -0.8**
AKASG pmax pmax
comp=Z,3.0nm,0.6s
**AKBB Malin Array Si 75.27 319** *e*P **P 21 35 34.5 -0.7**
**AKBB Malin Array Si 75.27 319** *e*P **P 21 35 34.5 -0.7**
**KIEV Kiev 75.28 319**⇓ *e*P **P 21 35 34.3 -0.9**
KIEV pmax pmax
comp=Z,4.0nm,0.9s
**BR101 Keskin Array S 76.11 307** *e*P **P 21 35 40.6 +0.2**
**BRTR Keskin Array B 76.11 307** P **P 21 35 40.6 +0.2**
comp=Z,4.3nm,1.0s,baz=93,slow=4.9,SNR=14
**BR231 Keskin MP Arra 76.69 308** *e*P **P 21 35 40.8 -2.8**
**MMAI Mount Meron Ar 77.09 300** P **P 21 35 46.2 +0.2**
comp=Z,1.0nm,0.4s,baz=64,slow=10,SNR=3.1
**TESR Tescani 78.40 316**⇑ *i*P **P 21 35 52.6 -0.4**
**ATD Arta Tunnel 78.51 278** LR LR 22 09 31.2
comp=Z,28nm,18.9s,slow=35
**BURAR Bucovina Array 78.86 317**⇑ P **P 21 35 56.2 +0.6**
**BURAR Bucovina Array 78.86 317**⇑ *i*P **P 21 35 56.2 +0.6**
**BUR04 Bucovina Ar. S 78.86 317** *e*P **P 21 35 55.9 +0.3**
**MLR Muntele Rosu 79.25 315** P **P 21 35 57.0 -0.8**
comp=Z,0.4nm,0.5s,baz=321,slow=5.6,SNR=4.6
**HFS Hagfors 79.29 332** P **P 21 35 57.8 +0.2**
comp=Z,4.1nm,0.6s,baz=78,slow=7.7,SNR=10.0
**NB2 NORSAR Subarra 79.87 333** P **P 21 36 00.3 -0.4**
comp=Z,3.4nm,0.9s,baz=56,slow=6.2
**NB200 NORSAR Array S 79.87 333** *e*P **P 21 36 00.1 -0.7**
**NOA NORSAR Array B 79.87 333** P **P 21 36 00.1 -0.7**
comp=Z,1.4nm,0.9s,baz=56,slow=7.0,SNR=6.5
NOA LR LR 22 15 45.5
comp=Z,44nm,18.3s,baz=0.0,slow=39
**TRPA Tarpa 80.29 318**⇓ *i*P **P 21 36 01.5 -1.7**
**VYHS Vyhne 82.33 320** *e*P **P 21 36 11.3 -2.8**
**VYHS Vyhne 82.33 320** *e*P **P 21 36 11.3 -2.8**
**VRAC Vranov 83.24 321** P **P 21 36 18.1 -0.7**
comp=Z,3.0nm,0.8s,baz=64,slow=12,SNR=3.8
VRAC LR LR 22 18 47.4
comp=Z,71nm,18.4s,baz=48,slow=40
**VRAC Vranov 83.24 321**⇑ P **P 21 36 21.2 +2.4**
**VRAC Vranov 83.24 321**⇑ *i*P **P 21 36 21.2 +2.4**
**CLL Collm 84.20 324** *e*P **P 21 36 24.0 +0.4**
**GEC2 GERESS Array S 85.11 322** *e*P **P 21 36 27.2 -1.2**
**GEC2 GERESS Array S 85.11 322** *e*P **P 21 36 27.2 -1.2**
**GERES GERESS Array B 85.11 322** P **P 21 36 27.2 -1.2**
comp=Z,0.7nm,0.6s,baz=65,slow=5.1,SNR=7.1
GERES LR LR 22 19 01.8
comp=Z,14nm,20.4s,baz=330,slow=39
**GERES GERESS Array B 85.11 322** *e*P **P 21 36 28.5 +0.1**
GERES pmax pmax
comp=Z,1.0nm,0.6s
**MOD Modoc 90.57 43** *e*P **P 21 36 55.6 +0.8**
comp=Z,12nm,0.3s
**NV01 Mina Array Sit 93.79 45** *e*P **P 21 37 08.0 -1.9**
**NVAR Mina Array Bea 93.79 45** P **P 21 37 09.7 -0.2**
comp=Z,0.3nm,0.5s,baz=303,slow=5.6,SNR=4.3
**WASM Alta Sierra Ca 95.16 47** *e*P **P 21 37 13.6 -2.6**
**LEOC Leona Valley 95.96 48** *e*P P 21 37 16.5 -3.3
**TORD Torodi Ar. Bea 113.53 298** PP PP 21 43 13.1 -10
comp=Z,0.5nm,0.8s,baz=44,slow=6.0,SNR=3.9

*ISCJB **18** 21:33:57.6±1.2,43°.96N±0°.08×147°.5E±0°.1, h63km, Error ellipse: s-maj=15.7km s-min=5.9km az=44.6*
*JMA **18** 21:33:58.5±0.3,43°.81N×147°.29E, h14km, M3.6*
*SKHL **18** 21:33:58.7±0.1,43°.91N×147°.52E, h45km±9km, mb4.1/3*
**ISC 18 21:33:56.9±2.2, 43°.89N±0°.10×147°.6E±0°.1, h63km, n16, σ1§60/24, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.56** | **268** | *i* P | | **Pn** | **21 34 08.8** | **-0.9** |
| SHO | | | | | AMB | AMB | 21 34 09.0 | |
| | 39nm,0.2s | | | | | | | |
| SHO | | | | *i* S | | **Sn** | **21 34 16.3** | **-2.8** |
| SHO | | | | | A | A | 21 34 17.2 | |
| | 147nm,0.1s | | | | | | | |
| SHO | | | | | A | A | 21 34 17.2 | |
| | 524nm,0.1s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.27** | **277** | *i* P | | **Pn** | **21 34 18.1** | **-0.4** |
| YUK | | | | | AMB | AMB | 21 34 20.4 | |
| | 32nm,0.2s | | | | | | | |
| YUK | | | | | AMB | AMB | 21 34 20.4 | |
| | 55nm,0.2s | | | | | | | |
| YUK | | | | | AMB | AMB | 21 34 20.4 | |
| | 129nm,0.2s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **21 34 32.7** | **-2.0** |
| YUK | | | | | A | A | 21 34 35.1 | |
| | 340nm,0.2s | | | | | | | |
| YUK | | | | | A | A | 21 34 35.1 | |
| | 107nm,0.2s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.35** | **8** | *i* P | | **Pn** | **21 34 19.9** | **+0.2** |
| KUR | | | | | AMB | AMB | 21 34 21.3 | |
| | 29nm,0.2s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **21 34 35.7** | **-1.0** |
| KUR | | | | | A | A | 21 34 36.5 | |
| | 164nm,0.2s | | | | | | | |
| KUR | | | | | A | A | 21 34 36.5 | |
| | 122nm,0.2s | | | | | | | |
| **NEM2** | **Nemuro 2** | **1.45** | **249** | | P | **Pn** | **21 34 20.7** | **-0.3** |
| NEM2 | | | | | *e*S | **Sn** | **21 34 36.9** | **-2.2** |
| **JRA** | **Rausu** | **1.80** | **272** | | P | **Pn** | **21 34 26.2** | **+0.6** |
| **JNK** | **Nakash** | **2.12** | **263** | | P | **Pn** | **21 34 30.6** | **+0.7** |
| JNK | | | | | *e*S | **Sn** | **21 34 54.7** | **-0.5** |
| **JAK** | **Akkeshi** | **2.30** | **248** | | P | **Pn** | **21 34 32.9** | **+0.5** |
| JAK | | | | | *e*S | **Sn** | **21 34 57.8** | **-1.8** |
| **JTKR** | **Abashiri--Toko** | **2.67** | **273** | | P | **Pn** | **21 34 38.8** | **+1.3** |
| **JAR** | **Ashorobuto** | **2.85** | **259** | | P | **Pn** | **21 34 41.5** | **+1.5** |
| JAR | | | | | *e*S | **Sn** | **21 35 13.4** | **+0.3** |
| **JOB** | **Onbets** | **2.92** | **252** | | P | **Pn** | **21 34 42.1** | **+1.2** |
| **JMP** | **Maruseppu** | **3.07** | **274** | | P | **Pn** | **21 34 44.6** | **+1.6** |
| **HRK** | **Horoka** | **3.28** | **264** | *e*P | | **Pn** | **21 34 48.2** | **+2.4** |
| **JCH** | **Churui** | **3.35** | **249** | | P | **Pn** | **21 34 47.5** | **+0.7** |
| JCH | | | | | *e*S | **Sn** | **21 35 24.9** | **-0.5** |
| **JEM** | **Erimo** | **3.77** | **242** | | P | **Pn** | **21 34 54.5** | **+2.0** |
| **JNBK** | **Urakawa-nobuka** | **3.90** | **247** | | P | **Pn** | **21 34 57.0** | **+2.7** |
| **YSS** | **Yuzh-Sakhalins** | **4.59** | **314** | *e*P | | **Pn** | **21 35 05.7** | **+2.1** |

*NIED **18** 21:48:00,29°.00N×142°.20E, h5km, Mw3.7 Best double couple: M0 3.76000×10^14 NP1:φ1 92.00000°, δ41.00000°, λ48.00000°. NP2:φ2 62.00000°, δ61.00000°, λ120.00000°.*
*ISCJB **18** 21:48:25.8±1.4,28°.9N±0°.1×141°.8E±0°.5, h10km, mb3.7/4, MS3.0/1, Error ellipse: s-maj=72.1km s-min=7.8km az=163.6*
*JMA **18** 21:48:27.8±0.1,28°.95N×142°.16E, h46km, M4.0*
*IDC **18** 21:48:29.1±1.5,28°.60N×140°.93E, h0km, mb3.6/4, mb1 3.8/5, mb1mx3.5/54, mbtmp3.5/5, ML3.3/1, MS2.8/2, Ms1 2.8/2, ms1mx2.4/32, Error ellipse: s-maj=45.0km s-min=27.7km az=82.0*
**ISC 18 21:48:27.5±1.8, 28°.8N±0°.2×141°.8E±0°.6, h10km, n10, σ0§61/7, mb3.7/4, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **1.74** | **168** | | P | **Pn** | **21 48 57.9** | **0.0** |
| CBIJ | | | | | S | **Sn** | **21 49 19.9** | **-0.2** |
| **JRY** | **Ryogami san** | **7.59** | **342** | | P | **Pn** | **21 50 17.9** | **-0.3** |
| **JHO** | **Hitachi** | **7.85** | **353** | | S | Sn | 21 51 40.2 | -10 |
| **MJAR** | **Matsushiro Arr** | **8.28** | **340** | | Pn | **Pn** | **21 50 28.1** | **+0.4** |
| | 0.4nm,0.3s,baz=156,slow=10,SNR=6.0 | | | | | | | |
| **JFK** | **Kawauchi** | **8.57** | **355** | | S | Sn | 21 51 54.6 | -14 |
| **KSRS** | **Korea Array** | **14.45** | **310** | | LR | LR | 21 57 32.6 | |
| | comp=Z,24nm,18.0s,baz=135,slow=39 | | | | | | | |
| **SONM** | **Songino Array** | **33.25** | **315** | | P | **P** | **21 55 05.6** | **+0.6** |
| | 1.0nm,1.0s,baz=104,slow=6.1,SNR=4.9 | | | | | | | |
| SONM | | | | | LR | LR | 22 06 58.3 | |

comp=Z,26nm,18.4s,baz=77,slow=34
**WRA Warramunga Arr 49.00 189** P **P 21 57 14.8 +0.3**
0.7nm,0.7s,baz=8.1,slow=8.2,SNR=5.3
**MKAR Makanchi Array 49.12 308** P **P 21 57 14.5 -0.9**
0.2nm,0.3s,baz=80,slow=12,SNR=2.4
**ILAR Eielson Array 56.39 29** P P 21 58 16.0 +7.2
0.6nm,0.9s,baz=246,slow=6.6,SNR=4.5

*NEIC* ***18*** *21:54:14.2, 43.64S×172.39E, h15km, ML4.1(WEL), After WEL.*
*NEIC Felt in Canterbury.*
**WEL 18 21:54:12.9±0.4, 43.73S×172.40E, h26km±5km, ML4.1/22, 1C-4D, Error ellipse: s-maj=6.3km s-min=4.0km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MQZ** | **McQueen's Vall** | **0.18** | **84** | ⇓P* | Pb | 21 54 18.9 | +0.4 |
| MQZ | | | | S* | Sb | 21 54 22.2 | 0.0 |
| MQZ | | | | S* | | 21 54 22.3 | |
| MQZ | | | | AML | AML | 21 54 22.6 | |
| **MQZ** | **McQueen's Vall** | **0.18** | **84** | ⇓P* | Pb | 21 54 18.9 | +0.4 |
| MQZ | | | | S* | Sb | 21 54 22.2 | 0.0 |
| **CRLZ** | **Canterbury Las** | **0.22** | **47** | ⇓P* | Pb | 21 54 18.7 | -0.2 |
| CRLZ | | | | S* | Sb | 21 54 22.0 | -1.0 |
| CRLZ | | | | AML | AML | 21 54 22.3 | |
| **CRLZ** | **Canterbury Las** | **0.22** | **47** | ⇓P* | Pb | 21 54 18.7 | -0.2 |
| CRLZ | | | | S* | Sb | 21 54 22.0 | -1.0 |
| **OXZ** | **Oxford** | **0.48** | **327** | P* | Pb | 21 54 21.8 | -1.0 |
| **OXZ** | **Oxford** | **0.48** | **327** | P* | Pb | 21 54 21.9 | -1.0 |
| **LTZ** | **Lake Taylor** | **0.95** | **354** | PN | Pn | 21 54 30.5 | -0.1 |
| LTZ | | | | AML | AML | 21 54 43.2 | |
| LTZ | | | | AML | AML | 21 54 45.6 | |
| **LTZ** | **Lake Taylor** | **0.95** | **354** | P* | Pn | 21 54 30.5 | -0.1 |
| **RPZ** | **Rata Peaks** | **0.97** | **270** | PN | Pb | 21 54 31.9 | +0.7 |
| RPZ | | | | AML | AML | 21 54 50.5 | |
| RPZ | | | | AML | AML | 21 54 51.5 | |
| **RPZ** | **Rata Peaks** | **0.97** | **270** | P* | Pb | 21 54 31.9 | +0.7 |
| **WVZ** | **Waitaha Valley** | **1.38** | **298** | PN | Pb | 21 54 37.6 | -0.3 |
| WVZ | | | | AML | AML | 21 54 59.8 | |
| WVZ | | | | AML | AML | 21 55 02.5 | |
| **WVZ** | **Waitaha Valley** | **1.38** | **298** | Pn | Pb | 21 54 37.6 | -0.3 |
| **KHZ** | **Kahutara** | **1.55** | **33** | PN | Pn | 21 54 39.3 | +0.5 |
| KHZ | | | | AML | AML | 21 55 06.8 | |
| KHZ | | | | AML | AML | 21 55 08.4 | |
| **KHZ** | **Kahutara** | **1.55** | **33** | Pn | Pn | 21 54 39.3 | +0.5 |
| **LBZ** | **Lake Benmore** | **1.73** | **247** | PN | Pb | 21 54 43.4 | -0.6 |
| LBZ | | | | AML | AML | 21 55 14.0 | |
| LBZ | | | | AML | AML | 21 55 14.1 | |
| LBZ | | | | AML | AML | 21 55 16.0 | |
| LBZ | | | | AML | AML | 21 55 16.0 | |
| **LBZ** | **Lake Benmore** | **1.73** | **247** | Pn | Pb | 21 54 43.4 | -0.6 |
| **ODZ** | **Otahua Downs** | **1.82** | **223** | PN | Pb | 21 54 44.3 | -1.2 |
| ODZ | | | | AML | AML | 21 55 14.3 | |
| ODZ | | | | AML | AML | 21 55 19.9 | |
| ODZ | | | | AML | AML | 21 55 19.9 | |
| ODZ | | | | AML | AML | 21 55 20.3 | |
| **ODZ** | **Otahua Downs** | **1.82** | **223** | Pn | Pb | 21 54 44.3 | -1.2 |
| **FOZ** | **Fox Glacier** | **1.97** | **274** | PN | Pn | 21 54 45.9 | +1.3 |
| FOZ | | | | AML | AML | 21 55 21.7 | |
| FOZ | | | | AML | AML | 21 55 22.8 | |
| **FOZ** | **Fox Glacier** | **1.97** | **274** | Pn | Pn | 21 54 45.9 | +1.3 |
| **THZ** | **Tophouse** | **2.00** | **11** | PN | Pn | 21 54 45.3 | +0.3 |
| THZ | | | | AML | AML | 21 55 26.3 | |
| THZ | | | | AML | AML | 21 55 30.0 | |
| **THZ** | **Tophouse** | **2.00** | **11** | Pn | Pn | 21 54 45.3 | +0.3 |
| **DSZ** | **Denniston Nort** | **2.03** | **347** | PN | Pn | 21 54 46.3 | +0.8 |
| DSZ | | | | AML | AML | 21 55 21.7 | |
| DSZ | | | | AML | AML | 21 55 22.4 | |
| **DSZ** | **Denniston Nort** | **2.03** | **347** | Pn | Pn | 21 54 46.3 | +0.8 |
| **BSWZ** | **Blackbirch Sta** | **2.29** | **29** | PN | Pn | 21 54 49.8 | +0.9 |
| BSWZ | | | | AML | AML | 21 55 03.9 | |
| BSWZ | | | | AML | AML | 21 55 37.1 | |
| **BSWZ** | **Blackbirch Sta** | **2.29** | **29** | Pn | Pn | 21 54 49.8 | +0.9 |
| **NNZ** | **Nelson** | **2.61** | **16** | PN | Pn | 21 54 54.4 | +1.0 |
| **NNZ** | **Nelson** | **2.61** | **16** | Pn | Pn | 21 54 54.4 | +1.0 |
| **JCZ** | **Jackson Bay** | **2.65** | **261** | PN | Pn | 21 54 56.3 | +2.2 |
| JCZ | | | | AML | AML | 21 55 44.0 | |
| JCZ | | | | AML | AML | 21 55 44.1 | |
| **JCZ** | **Jackson Bay** | **2.65** | **261** | Pn | Pn | 21 54 56.3 | +2.2 |
| **WKZ** | **Wanaka** | **2.67** | **244** | PN | Pn | 21 54 55.7 | +1.6 |
| WKZ | | | | AML | AML | 21 55 46.1 | |
| WKZ | | | | AML | AML | 21 55 54.2 | |
| **WKZ** | **Wanaka** | **2.67** | **244** | Pn | Pn | 21 54 55.7 | +1.6 |
| **EAZ** | **Earnscleugh** | **2.67** | **235** | ⇑PN | Pn | 21 54 56.3 | +2.1 |
| EAZ | | | | AML | AML | 21 55 41.2 | |
| EAZ | | | | AML | AML | 21 55 41.3 | |
| EAZ | | | | AML | AML | 21 55 42.9 | |
| EAZ | | | | AML | AML | 21 55 42.9 | |
| **EAZ** | **Earnscleugh** | **2.67** | **235** | Pn | Pn | 21 54 56.3 | +2.1 |
| **TCW** | **Tory Channel** | **2.87** | **30** | PN | Pn | 21 54 57.7 | +0.7 |
| **TCW** | **Tory Channel** | **2.87** | **30** | Pn | Pn | 21 54 57.7 | +0.7 |
| **QRZ** | **Quartz Range** | **2.90** | **2** | PN | Pn | 21 54 57.9 | +0.5 |
| QRZ | | | | AML | AML | 21 55 09.4 | |
| QRZ | | | | AML | AML | 21 55 46.2 | |
| **QRZ** | **Quartz Range** | **2.90** | **2** | Pn | Pn | 21 54 57.9 | +0.5 |
| **TUZ** | **Tuapeka** | **2.97** | **220** | PN | Pn | 21 55 00.6 | +2.4 |
| TUZ | | | | AML | AML | 21 55 53.1 | |
| TUZ | | | | AML | AML | 21 55 57.6 | |
| TUZ | | | | AML | AML | 21 55 57.7 | |
| TUZ | | | | AML | AML | 21 56 01.0 | |
| **TUZ** | **Tuapeka** | **2.97** | **220** | Pn | Pn | 21 55 00.7 | +2.4 |
| **PLWZ** | **Palliser** | **3.02** | **45** | PN | Pn | 21 54 59.0 | 0.0 |
| **PLWZ** | **Palliser** | **3.02** | **45** | Pn | Pn | 21 54 59.0 | 0.0 |
| **CAW** | **Cannon Point** | **3.28** | **38** | PN | Pn | 21 55 02.7 | +0.1 |
| CAW | | | | AML | AML | 21 55 40.5 | |
| **CAW** | **Cannon Point** | **3.28** | **38** | Pn | Pn | 21 55 02.7 | +0.1 |
| **KIW** | **Kapiti Island** | **3.42** | **34** | PN | Pn | 21 55 05.3 | +0.8 |
| **KIW** | **Kapiti Island** | **3.42** | **34** | Pn | Pn | 21 55 05.3 | +0.8 |
| **MLZ** | **Mavora Lakes** | **3.43** | **240** | PN | Pn | 21 55 07.3 | +2.4 |
| MLZ | | | | AML | AML | 21 56 12.3 | |
| MLZ | | | | AML | AML | 21 56 13.9 | |
| **MLZ** | **Mavora Lakes** | **3.43** | **240** | Pn | Pn | 21 55 07.0 | +2.4 |
| **SYZ** | **Scrubby Hill** | **3.63** | **218** | PN | Pn | 21 55 10.5 | +3.1 |
| SYZ | | | | AML | AML | 21 56 21.7 | |
| SYZ | | | | AML | AML | 21 56 23.9 | |
| **SYZ** | **Scrubby Hill** | **3.63** | **218** | Pn | Pn | 21 55 10.5 | +3.1 |
| **WHZ** | **Wether Hill Ro** | **3.84** | **234** | PN | Pn | 21 55 11.1 | +0.9 |
| WHZ | | | | AML | AML | 21 56 26.8 | |
| WHZ | | | | AML | AML | 21 56 30.3 | |
| **WHZ** | **Wether Hill Ro** | **3.84** | **234** | Pn | Pn | 21 55 11.2 | +0.9 |
| **MRZ** | **Mangatainoka R** | **3.87** | **39** | PN | Pn | 21 55 10.6 | -0.1 |
| MRZ | | | | AML | AML | 21 55 56.7 | |
| MRZ | | | | AML | AML | 21 55 58.1 | |
| **MRZ** | **Mangatainoka R** | **3.87** | **39** | Pn | Pn | 21 55 10.6 | -0.1 |
| **APZ** | **The Paps** | **4.39** | **224** | PN | Pn | 21 55 20.2 | +2.3 |
| **APZ** | **The Paps** | **4.39** | **224** | Pn | Pn | 21 55 20.2 | +2.3 |
| **KHEZ** | **Kahui Hut** | **4.59** | **16** | Pn | Pn | 21 55 23.2 | +2.5 |
| **HIZ** | **Hauiti** | **5.53** | **20** | PN | Pn | 21 55 34.8 | +1.3 |
| **HIZ** | **Hauiti** | **5.53** | **20** | Pn | Pn | 21 55 34.8 | +1.3 |

*ISN* ***18*** *21:55:10.6±2.3, 30.87N×48.70E, h2km±13km, ML3.6*
*IDC* ***18*** *21:55:15.1±1.4, 31.67N×49.12E, h0km, mb3.7/7, mb1 3.8/10, mb1mx3.5/52, mbtmp3.7/10, ML3.4/3, Error ellipse: s-maj=33.9km s-min=18.4km az=170.0*
*ISCJB* ***18*** *21:55:16.3±0.3, 31.66N±0.03×49.06E±0.04, h10km, mb3.6/7, Error ellipse: s-maj=4.8km s-min=4.0km az=169.6*
*CSEM* ***18*** *21:55:17.4±0.1, 31.74N×49.10E, h2km, ML3.2, Ms3.9, Error ellipse: s-maj=4.4km s-min=3.0km az=64.0*
*SGS* ***18*** *21:55:17.9, 32.01N×49.12E, h17km*
*TEH* ***18*** *21:55:18.7, 31.72N×49.08E, h0km, ML3.6*
*DSN* ***18*** *21:55:31.6±1.2, 31.34N×50.32E, h15km, mb3.6/6, Ms3.9/6, Error ellipse: s-maj=37.9km s-min=8.1km az=36.0*
**ISC 18 21:55:17.2±0.7, 31.74N±0.05×49.06E±0.04, h10km, n83, σ1°33/82, mb3.7/7, 3C-2D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SHGR** | **Shooshtar-Gavs** | **0.43** | **329** | *e*Pg | **Pg** | **21 55 26.2** | **+0.5** |
| **IPIR** | **Pirpir** | **1.82** | **58** | *e*Pn | **Pn** | **21 55 50.1** | **+1.3** |
| IPIR | | | | *e*Sg | **Sb** | **21 56 15.3** | **+1.6** |
| IPIR | | | | *e* | | 21 56 15.9 | |
| | comp=Z,6μm,0.3s | | | | | | |
| **IPIR** | **Pirpir** | **1.82** | **58** | *e*Pn | **Pn** | **21 55 50.2** | **+1.3** |
| IPIR | | | | *e*Sg | **Sb** | **21 56 15.3** | **+1.6** |
| **KHMZ** | **Khomeyn** | **2.13** | **21** | *e*Pn | **Pn** | **21 55 54.9** | **+1.8** |
| KHMZ | | | | *e*Sg | **Sb** | **21 56 24.1** | **+1.4** |
| **NSR** | **Nassriya** | **2.60** | **255** | *e*PG | x | 21 55 58.4 | |
| NSR | | | | *i* Sg | x | 21 56 30.1 | |
| **NSR** | **Nassriya** | **2.60** | **255** | *e*Pg | **Pn** | **21 55 58.4** | **-0.9** |
| | SNR=90 | | | | | | |
| NSR | | | | *i* Sg | **Sn** | **21 56 30.1** | **-0.9** |
| | SNR=90 | | | | | | |
| **IGAR** | **Gharneh** | **2.62** | **75** | *e*Pn | **Pn** | **21 56 01.2** | **+1.4** |
| IGAR | | | | *e* | | 21 56 43.9 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **IKLH** | **Kolahrood** | **2.65** | **53** | *e*Pn | **Pn** | **21 56 01.9** | **+1.7** |
| IKLH | | | | *e* | | 21 56 47.1 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IKLH** | **Kolahrood** | **2.65** | **53** | *e*Pn | **Pn** | **21 56 01.9** | **+1.7** |
| **IKOM** | **Komasi** | **2.75** | **332** | *e*Pn | **Pn** | **21 56 03.8** | **+2.1** |
| IKOM | | | | *e* | | 21 56 54.6 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IKOM** | **Komasi** | **2.75** | **332** | *e*Pn | **Pn** | **21 56 03.8** | **+2.1** |
| **IRAM** | **Ramesheh** | **2.83** | **88** | *e*Pn | **Pn** | **21 56 03.4** | **+0.7** |
| IRAM | | | | *e* | | 21 56 53.3 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **IRAM** | **Ramesheh** | **2.83** | **88** | *e*Pn | **Pn** | **21 56 03.4** | **+0.7** |
| **IBZA** | **Bozab** | **2.90** | **340** | *e*Pn | **Pn** | **21 56 05.5** | **+1.7** |
| IBZA | | | | *e* | | 21 56 53.2 | |
| | comp=Z,765nm,0.2s | | | | | | |
| **IBZA** | **Bozab** | **2.90** | **340** | *e*Pn | **Pn** | **21 56 05.5** | **+1.7** |
| **IBDR** | **Badra** | **2.98** | **298** | *e*Pn | x | 21 56 03.9 | |
| IBDR | | | | *e*SN | x | 21 56 41.0 | |
| **IKAZ** | **Kazeroun** | **3.09** | **129** | *e*Pn | **Pn** | **21 56 08.1** | **+1.7** |
| IKAZ | | | | *e* | | 21 57 10.4 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **IKAZ** | **Kazeroun** | **3.09** | **129** | *e*Pn | **Pn** | **21 56 08.1** | **+1.7** |
| **GHVR** | **GHOM** | **3.31** | **34** | *e*Pn | **Pn** | **21 56 10.6** | **+1.3** |
| **IGHG** | **Ghaleghazi** | **3.32** | **322** | *e*Pn | **Pn** | **21 56 11.0** | **+1.5** |
| IGHG | | | | *e* | | 21 57 11.5 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **IGHG** | **Ghaleghazi** | **3.32** | **322** | *e*Pn | **Pn** | **21 56 11.0** | **+1.5** |
| **NASN** | **Na'in** | **3.35** | **71** | *e*Pn | **Pn** | **21 56 11.4** | **+1.5** |
| **AHBU** | **AHRAM** | **3.46** | **145** | *e*Pn | **Pn** | **21 56 13.4** | **+2.3** |
| **ILIN** | **Lien** | **3.62** | **332** | *e*Pn | **Pn** | **21 56 14.8** | **+1.2** |
| ILIN | | | | *e* | | 21 57 00.8 | |
| | comp=Z,642nm,0.2s | | | | | | |
| **ILIN** | **Lien** | **3.62** | **332** | *e*Pn | **Pn** | **21 56 14.8** | **+1.2** |
| **SNGE** | **Sanandaj** | **3.64** | **337** | *e*Pn | **Pn** | **21 56 16.0** | **+2.2** |
| **KFJS** | | **3.67** | **196** | S | **Sn** | **21 56 60.0** | **+2.5** |
| **KFJS** | | **3.67** | **196** | P | **Pn** | **21 56 16.5** | **+2.5** |
| **KFJS** | | **3.67** | **196** | P | **Pn** | **21 56 17.0** | **+2.9** |
| KFJS | | | | S | **Sn** | **21 57 00.0** | **+2.5** |
| **IR5** | **Iran Long-Peri** | **3.69** | **20** | *e*Pn | **Pn** | **21 56 15.8** | **+1.3** |
| IR5 | | | | *e* | | 21 57 29.0 | |
| | comp=Z,99nm,0.3s | | | | | | |
| **IR5** | **Iran Long-Peri** | **3.69** | **20** | *e*Pn | **Pn** | **21 56 15.8** | **+1.3** |
| **IDHR** | **Dehrash** | **3.71** | **324** | *e*Pn | **Pn** | **21 56 15.6** | **+0.8** |
| IDHR | | | | *e* | | 21 57 16.1 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **IDHR** | **Dehrash** | **3.71** | **324** | *e*Pn | **Pn** | **21 56 15.6** | **+0.8** |
| **IRAZ** | **Razeghan** | **3.73** | **11** | *e*Pn | **Pn** | **21 56 16.5** | **+1.5** |
| IRAZ | | | | *e* | | 21 57 25.5 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **IRAZ** | **Razeghan** | **3.73** | **11** | *e*Pn | **Pn** | **21 56 16.5** | **+1.5** |
| **IPAR** | **Pars** | **3.92** | **118** | *e*Pn | **Pn** | **21 56 18.2** | **+0.4** |
| IPAR | | | | *e* | | 21 57 51.3 | |
| | comp=Z,463nm,0.4s | | | | | | |
| **IPAR** | **Pars** | **3.92** | **118** | *e*Pn | **Pn** | **21 56 18.2** | **+0.4** |
| **ISAD** | **Sadrabad** | **3.94** | **86** | *e*Pn | **Pn** | **21 56 18.9** | **+0.8** |
| ISAD | | | | *e* | | 21 57 33.2 | |
| | comp=Z,770nm,0.3s | | | | | | |
| **ISAD** | **Sadrabad** | **3.94** | **86** | *e*Pn | **Pn** | **21 56 18.9** | **+0.8** |
| **ISRV** | **Sarvestan** | **4.21** | **123** | *e*Pn | **Pn** | **21 56 21.7** | **-0.1** |
| ISRV | | | | *e* | | 21 57 31.2 | |
| | comp=Z,662nm,0.2s | | | | | | |
| **ISRV** | **Sarvestan** | **4.21** | **123** | *e*Pn | **Pn** | **21 56 21.7** | **-0.1** |
| **BHD** | **Baghdad** | **4.24** | **292** | *e*PN | x | 21 56 18.4 | |
| **BHD** | **Baghdad** | **4.24** | **292** | *e*Pn | Pn | 21 56 18.4 | -3.5 |
| | SNR=39 | | | | | | |
| **IDMV** | **Damavand** | **4.56** | **32** | *e*Pn | **Pn** | **21 56 27.2** | **+0.7** |
| IDMV | | | | *e* | | 21 57 59.8 | |
| | comp=Z,390nm,0.4s | | | | | | |
| **IDMV** | **Damavand** | **4.56** | **32** | *e*Pn | **Pn** | **21 56 27.2** | **+0.7** |
| **IAFJ** | **Afjeh** | **4.66** | **28** | *e*Pn | **Pn** | **21 56 28.0** | **0.0** |
| IAFJ | | | | *e* | | 21 58 19.7 | |
| | comp=Z,274nm,0.0s | | | | | | |
| **IAFJ** | **Afjeh** | **4.66** | **28** | *e*Pn | **Pn** | **21 56 28.0** | **0.0** |
| **IMEH** | **Mehriz** | **4.75** | **93** | *e*Pn | **Pn** | **21 56 30.1** | **+0.9** |
| IMEH | | | | *e* | | 21 57 35.4 | |
| | comp=Z,229nm,0.2s | | | | | | |
| **IMEH** | **Mehriz** | **4.75** | **93** | *e*Pn | **Pn** | **21 56 30.1** | **+0.9** |
| **IFIR** | **Firoozkooh** | **4.96** | **37** | *e*Pn | **Pn** | **21 56 33.3** | **+1.2** |
| **IFIR** | **Firoozkooh** | **4.96** | **37** | *e*Pn | **Pn** | **21 56 33.3** | **+1.2** |
| **IKRK** | **Kirkuk** | **5.37** | **314** | *e*PN | x | 21 56 39.4 | |
| IKRK | | | | *i* Sn | x | 21 57 41.0 | |
| **BOQSS** | | **5.86** | **177** | P | **Pn** | **21 56 45.9** | **+1.7** |
| **BOQSS** | | **5.86** | **177** | P | **Pn** | **21 56 46.0** | **+1.9** |
| **ASYS** | | **5.89** | **225** | S | **Sn** | **21 57 51.1** | **-1.1** |
| **ASYS** | | **5.89** | **225** | P | **Pn** | **21 56 45.2** | **+0.6** |
| **ASYS** | | **5.89** | **225** | P | **Pn** | **21 56 45.0** | **+0.4** |
| ASYS | | | | S | **Sn** | **21 57 51.0** | **-1.2** |
| **MSL** | **Mosul** | **6.78** | **315** | *e*Pn | x | 21 56 57.1 | |
| MSL | | | | *i* Sn | x | 21 58 14.7 | |
| **SLWS** | | **7.06** | **168** | P | **Pn** | **21 57 01.3** | **+0.7** |
| **SLWS** | | **7.06** | **168** | P | **Pn** | **21 57 01.0** | **+0.4** |
| **RTB** | **Rutbah** | **7.51** | **282** | *e*PN | x | 21 57 02.8 | |
| RTB | | | | *i* Sn | x | 21 58 19.9 | |
| **BTHS** | | **7.83** | **168** | P | **Pn** | **21 57 11.3** | **+0.1** |
| **BTHS** | | **7.83** | **168** | P | **Pn** | **21 57 11.0** | **-0.2** |
| **BANOM** | **Banah** | **8.59** | **131** | *i* P | **Pn** | **21 57 20.6** | **-1.2** |
| | SNR=19 | | | | | | |
| BANOM | | | | ⇓S | Sn | 21 58 47.4 | -11 |
| **BANOM** | **Banah** | **8.59** | **131** | P | **Pn** | **21 57 20.6** | **-1.2** |
| | SNR=19 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **8.89** | **138** | ⇑P | **Pn** | **21 57 26.4** | **+0.6** |
| **NAZ** | **Nazwa, Dubai** | **8.89** | **138** | P | **Pn** | **21 57 26.4** | **+0.6** |
| **ASUD** | **Al Ashush, Dub** | **8.99** | **140** | ⇓*i*P | **Pn** | **21 57 28.0** | **+0.9** |
| | SNR=17 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **8.99** | **140** | P | **Pn** | **21 57 28.0** | **+0.9** |
| | SNR=17 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **9.04** | **139** | ⇑P | **Pn** | **21 57 28.6** | **+0.8** |
| **FAQ** | **Al Faqa, Dubai** | **9.04** | **139** | P | **Pn** | **21 57 28.6** | **+0.8** |
| **HATD** | **Hatta, Dubai** | **9.29** | **136** | ⇑P | **Pn** | **21 57 31.2** | **-0.1** |
| **HATD** | **Hatta, Dubai** | **9.29** | **136** | P | **Pn** | **21 57 31.2** | **-0.1** |
| **GEYT** | **Alibeck** | **9.67** | **48** | Pn | **Pn** | **21 57 37.5** | **+1.1** |
| | comp=Z,0.6nm,0.3s,baz=239,slow=10,SNR=9.7 | | | | | | |
| **ASF** | **Jabal al Asfar** | **10.34** | **276** | Pn | **Pn** | **21 57 44.7** | **-1.1** |
| | comp=Z,0.3nm,0.3s,baz=59,slow=14,SNR=4.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **14.83** | **307** | Pn | **P** | **21 58 52.0** | **-1.1** |
| | comp=Z,0.1nm,0.3s,baz=138,slow=20,SNR=3.5 | | | | | | |
| **MLR** | **Muntele Rosu** | **22.59** | **314** | P | **P** | **22 00 19.9** | **+1.9** |
| | comp=Z,0.6nm,0.7s,baz=234,slow=12,SNR=3.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **26.28** | **30** | P | **P** | **22 00 52.2** | **-0.5** |
| | comp=Z,0.6nm,0.6s,baz=216,slow=7.3,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **29.54** | **50** | P | **P** | **22 01 22.4** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=246,slow=14,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **33.28** | **340** | P | **P** | **22 01 53.2** | **-1.4** |
| | comp=Z,2.6nm,0.8s,baz=141,slow=9.0,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.80** | **38** | P | **P** | **22 01 57.4** | **-1.8** |
| | comp=Z,0.7nm,0.4s,baz=250,slow=11,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **46.70** | **94** | P | **P** | **22 03 45.2** | **-1.3** |
| | comp=Z,0.8nm,0.3s,baz=288,slow=7.6,SNR=4.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **47.12** | **258** | P | **P** | **22 03 49.5** | **-0.3** |
| | comp=Z,0.3nm,0.4s,baz=54,slow=7.5,SNR=22 | | | | | | |

*IDC* ***18*** *22:03:42.0±0.9, 72.37N×3.92E, h0km, mb3.6/9, mb1 3.8/14, mb1mx3.6/44, mbtmp3.7/14, ML3.3/5, MS2.9/3, Ms1 2.9/3, ms1mx2.5/39, Error ellipse: s-maj=19.0km s-min=16.9km az=81.0*
*ISCJB* ***18*** *22:03:42.3±0.8, 72.40N±0.07×4.03E±0.2, h10km, mb3.6/9, MS2.8/3, Error ellipse: s-maj=10.7km s-min=8.3km az=5.9*
*CSEM* ***18*** *22:03:42.0±0.7, 72.62N×3.82E, h10km, ML2.2, Error ellipse: s-maj=17.5km s-min=9.4km az=98.0*
*NAO* ***18*** *22:03:42.2±10.0, 72.46N×3.25E, h22km±109km, ML3.1*
*BER* ***18*** *22:03:44.9±3.2, 72.71N×3.87E, h10km±38km, ML2.2, ML3.1(NAO)*
**ISC 18 22:03:42.4±0.8, 72.55N±0.07×4.05E±0.08, h10km, n52, σ1°58/54, mb3.6/9, MS2.8/3, Norwegian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LOF** | **Lofoten** | **5.47** | **140** | *e*P | **Pn** | **22 05 05.2** | **+1.5** |
| LOF | | | | *e*S | **Sn** | **22 06 03.4** | **-3.2** |
| **LOF** | **Lofoten** | **5.47** | **140** | *e*P | **Pn** | **22 05 05.2** | **+1.5** |
| | SNR=49 | | | | | | |
| **TRO** | **Tromso** | **5.65** | **114** | *e*P | **Pn** | **22 05 07.5** | **+1.4** |
| TRO | | | | *e*S | **Sn** | **22 06 09.6** | **-1.4** |
| **TRO** | **Tromso** | **5.65** | **114** | *e*P | **Pn** | **22 05 07.6** | **+1.4** |
| | SNR=49 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **6.44** | **23** | Pn | **Pn** | **22 05 16.1** | **-1.1** |
| | baz=219,slow=14 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **6.44** | **23** | Pn | **Pn** | **22 05 16.1** | **-1.1** |
| | baz=219,slow=14 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **6.44** | **23** | Pn | **Pn** | **22 05 16.0** | **-1.1** |
| | baz=219,slow=14,SNR=50 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **6.44** | **23** | Pn | **Pn** | **22 05 16.5** | **-0.6** |
| | baz=267,slow=15,SNR=7.4 | | | | | | |
| **HAMF** | **Hammerfest** | **6.49** | **98** | *e*P | **Pn** | **22 05 18.5** | **+0.7** |
| **HAMF** | **Hammerfest** | **6.49** | **98** | *e*P | **Pn** | **22 05 18.5** | **+0.7** |
| | SNR=47 | | | | | | |
| **KONS** | **Konsvik** | **6.85** | **148** | *e*P | **Pn** | **22 05 24.5** | **+1.8** |
| KONS | | | | IAML | | 22 06 46.6 | |
| | comp=Z,5.8nm,0.7s | | | | | | |
| **KONS** | **Konsvik** | **6.85** | **148** | *e*P | **Pn** | **22 05 24.5** | **+1.8** |
| | SNR=47 | | | | | | |
| **STOK** | **Stokkvaagen** | **6.99** | **149** | *e*P | **Pn** | **22 05 27.1** | **+2.5** |
| STOK | | | | IAML | | 22 06 45.0 | |
| | comp=N,2.4nm,0.4s | | | | | | |
| **STOK** | **Stokkvaagen** | **6.99** | **149** | *e*P | **Pn** | **22 05 27.1** | **+2.5** |
| | SNR=47 | | | | | | |
| **KTK1** | **Kautokeino** | **7.24** | **110** | *e*P | **Pn** | **22 05 30.5** | **+2.5** |
| **KTK1** | **Kautokeino** | **7.24** | **110** | *e*P | **Pn** | **22 05 30.5** | **+2.5** |
| | SNR=47 | | | | | | |
| **DAG** | **Danmarks Havn** | **7.31** | **316** | *i* P | Pn | 22 05 20.8 | -8.2 |
| DAG | | | | *i* S | Sn | 22 06 31.8 | -20 |
| **MOR8** | **Moi Rana** | **7.37** | **145** | *e*P | **Pn** | **22 05 30.7** | **+0.9** |
| MOR8 | | | | IAML | | 22 06 56.5 | |
| | comp=Z,3.9nm,0.5s | | | | | | |
| **MOR8** | **Moi Rana** | **7.37** | **145** | *e*P | **Pn** | **22 05 30.7** | **+0.9** |
| | SNR=47 | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.59** | **103** | Pn | **Pn** | **22 05 34.0** | **+1.2** |
| | baz=308,slow=12 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **22 06 58.6** | **-0.2** |
| | baz=304,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.59** | **103** | Pn | **Pn** | **22 05 34.0** | **+1.2** |
| | baz=308,slow=12 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **22 06 58.6** | **-0.2** |
| | baz=304,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.59** | **103** | Pn | **Pn** | **22 05 34.0** | **+1.2** |
| | baz=308,slow=11,SNR=50 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **22 06 58.6** | **-0.2** |
| | baz=304,slow=20,SNR=50 | | | | | | |
| **ARCES** | **ARCESS Array B** | **7.59** | **103** | Pn | **Pn** | **22 05 31.2** | **-1.6** |
| | comp=Z,1.0nm,0.3s,baz=314,slow=12,SNR=29 | | | | | | |
| **NSS** | **Namsos** | **8.55** | **156** | *e*P | **Pn** | **22 05 47.6** | **+1.6** |
| NSS | | | | *e*S | **Sn** | **22 07 17.9** | **-4.5** |
| **NSS** | **Namsos** | **8.55** | **156** | *e*P | **Pn** | **22 05 47.6** | **+1.6** |
| | SNR=47 | | | | | | |
| **APA0** | **Apatity Array** | **10.95** | **102** | Pn | **Pn** | **22 06 20.2** | **+1.4** |
| | baz=326,slow=8.6 | | | | | | |
| **APA0** | **Apatity Array** | **10.95** | **102** | Pn | **Pn** | **22 06 20.2** | **+1.4** |
| | baz=326,slow=8.6 | | | | | | |
| **APA0** | **Apatity Array** | **10.95** | **102** | Pn | **Pn** | **22 06 20.2** | **+1.4** |
| | baz=326,slow=8.0,SNR=50 | | | | | | |
| **NB2** | **NORSAR Subarra** | **11.88** | **163** | Pn | **Pn** | **22 06 30.3** | **-1.4** |
| **NB2** | **NORSAR Subarra** | **11.88** | **163** | P | **Pn** | **22 06 30.3** | **-1.4** |
| **NOA** | **NORSAR Array B** | **11.88** | **163** | Pn | **Pn** | **22 06 30.7** | **-1.0** |
| | comp=Z,0.2nm,0.3s,baz=358,slow=15,SNR=3.0 | | | | | | |
| **HFS** | **Hagfors** | **13.02** | **158** | Pn | **Pn** | **22 06 47.0** | **-0.2** |
| | baz=346,slow=12 | | | | | | |
| **HFS** | **Hagfors** | **13.02** | **158** | P | **Pn** | **22 06 47.0** | **-0.2** |
| | baz=346,slow=12 | | | | | | |
| **HFS** | **Hagfors** | **13.02** | **158** | Pn | **Pn** | **22 06 46.1** | **-1.1** |
| | comp=Z,0.3nm,0.3s,baz=11,slow=11,SNR=8.6 | | | | | | |
| **HFS** | **Hagfors** | **13.02** | **158** | P | **Pn** | **22 06 47.0** | **-0.2** |
| | baz=346,slow=12,SNR=47 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.95** | **132** | Pn | **Pn** | **22 06 58.6** | **-1.1** |
| | baz=345,slow=16 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.95** | **132** | P | **Pn** | **22 06 58.6** | **-1.1** |
| | baz=345,slow=16 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.95** | **132** | Pn | **Pn** | **22 06 58.6** | **-1.1** |
| | baz=345,slow=14,SNR=5.0 | | | | | | |
| **FINES** | **FINESS Array B** | **13.95** | **132** | Pn | **Pn** | **22 06 59.6** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=324,slow=9.4,SNR=4.9 | | | | | | |
| **OBN** | **Obninsk** | **22.10**

*mb4.6/10,MS3.8/4,Error ellipse: s-maj=5.7km s-min=3.9km az=163.9*

*IDC* ***18*** *22:17:50.4±1.2,31°.66S×72°.18W,h0km,mb4.2/7, mb1 4.2/12,mb1mx4.0/33,mbtmp4.1/12,ML3.7/4,MS3.8/5, Ms1 3.8/5,ms1mx3.3/28,Error ellipse: s-maj=28.5km s-min=24.2km az=95.0*

*SJA* ***18*** *22:17:52.5±1.4,31°.79S×72°.40W,h57km±32km,ML4.3*

*NEIC* ***18*** *22:17:56.0,31°.70S×71°.53W,h22km,ML4.2(GUC),After GUC.*

*GUC* ***18*** *22:17:56.3±0.7,31°.70S×71°.53W,h22km±8km,ML4.2*

**ISC 18 22:17:52.9±1.6, 31°.65S±0°.03×71°.99W±0°.06, h11km±10km, n53,σ1$29/56, mb4.5/10, MS3.8/4, 2C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **ROC1** | **El Roble** | **1.56** | **148** | *i* P | | **Pb** | **22 18 21.2** | **-0.8** |
| ROC1 | | | | *i* S | | **Sg** | **22 18 42.1** | **-1.0** |
| **TLL** | **Tololo Astrono** | **1.79** | **35** | *e*P | | **Pb** | **22 18 26.3** | **+0.4** |
| TLL | | | | *e*S | | **Sb** | **22 18 49.5** | **+1.0** |
| **LSCH** | **La Serena** | **1.85** | **20** | ⇑*i*P | | **Pg** | **22 18 28.0** | **-0.3** |
| LSCH | | | | *i* S | | **Sg** | **22 18 51.9** | **-0.4** |
| **PEL** | **Peldehue** | **1.85** | **144** | ⇓*i*P | | **Pb** | **22 18 25.7** | **-1.2** |
| PEL | | | | *i* S | | **Sn** | **22 18 46.9** | **-1.2** |
| PEL | comp=E,6μm,0.4s | | | AML | | AML | 22 18 49.9 | |
| **SAN** | **Santiago** | **2.12** | **149** | *e*P | | **Pn** | **22 18 29.3** | **+0.9** |
| SAN | | | | *i* S | | **Sn** | **22 18 54.7** | **0.0** |
| **CLCH** | **Cerro Calan** | **2.13** | **145** | ⇑*i*P | | **Pn** | **22 18 29.6** | **+1.1** |
| CLCH | | | | *i* S | | **Sn** | **22 18 54.6** | **-0.4** |
| CLCH | comp=N,4μm,0.7s | | | AML | | AML | 22 18 59.9 | |
| **ANTU** | **Antumapu** | **2.23** | **150** | *i* S | | **Sn** | **22 18 56.3** | **-1.1** |
| ANTU | comp=N,2μm,0.7s | | | AML | | AML | 22 19 04.7 | |
| **AUSP** | **Uspallata** | **2.28** | **105** | *i* P | | **Pb** | **22 18 34.5** | **+0.2** |
| AUSP | | | | *i* S | | **Sg** | **22 19 05.9** | **-0.4** |
| **RTLS** | **Leoncito** | **2.30** | **95** | *i* P | | **Pb** | **22 18 34.6** | **+0.1** |
| RTLS | | | | *i* S | | **Sg** | **22 19 07.8** | **+1.0** |
| **LCO** | **Las Campanas** | **2.85** | **23** | *e*Pn | | **Pn** | **22 18 41.0** | **+2.4** |
| LCO | | | | *e*Sn | | **Sn** | **22 19 09.1** | **-4.0** |
| **SJA** | **San Juan** | **2.93** | **89** | *i* P | | **Pb** | **22 18 43.9** | **-1.3** |
| SJA | comp=Z,716nm,0.4s | | | AML | | AML | 22 19 33.5 | |
| **RTCV** | **Cerro Valdivia** | **2.94** | **95** | *i* P | | **Pb** | **22 18 43.8** | **-1.6** |
| RTCV | | | | *i* S | | **Sb** | **22 19 21.9** | **+0.5** |
| **RTLL** | **Cerro Villicun** | **3.02** | **85** | *i* P | | **Pb** | **22 18 45.5** | **-1.2** |
| RTLL | | | | *i* P | | **Pb** | **22 18 45.5** | **-1.2** |
| **AAGR** | **Agrelo** | **3.03** | **119** | *i* P | | **Pb** | **22 18 45.1** | **-1.9** |
| AAGR | | | | *i* S | | **Sb** | **22 19 22.5** | **-1.6** |
| **CFAA** | **Coronel Fontan** | **3.20** | **90** | Pn | | **Pn** | **22 18 45.7** | **+2.5** |
| CFAA | comp=Z,3.8nm,0.3s,baz=258,slow=11,SNR=66 | | | Sn | | **Sb** | **22 19 27.3** | **-1.5** |
| CFAA | comp=Z,12nm,0.3s,baz=54,slow=10,SNR=9.7 | | | LR | | LR | 22 20 12.4 | |
| **CFAA** | comp=Z,52nm,21.7s,baz=219,slow=42 **Coronel Fontan** | **3.20** | **90** | *i* P | | **Pb** | **22 18 49.3** | **-0.5** |
| CFAA | | | | *i* S | | **Sb** | **22 19 28.7** | **0.0** |
| **VACH** | **Vallenar** | **3.24** | **19** | *i* S | | **Sb** | **22 19 27.4** | **-2.6** |
| **AVFE** | **Valle Fertil** | **4.01** | **77** | *i* P | | Pn | 22 18 58.2 | +3.9 |
| AVFE | comp=Z,356nm,0.6s | | | AML | | AML | 22 19 52.1 | |
| **PLCA** | **Paso Flores** | **9.14** | **173** | *e*Pn | | **Pn** | **22 20 06.2** | **+1.4** |
| **LVC** | **Limon Verde** | **9.40** | **18** | Pn | | **Pn** | **22 20 07.4** | **-1.2** |
| LVC | comp=Z,13nm,0.3s,baz=168,slow=16,SNR=5.2 comp=Z,456nm,21.0s,baz=216,slow=40 | | | LR | | LR | 22 24 07.1 | |
| **TRQA** | **Tornquist** | **10.41** | **131** | *e*Pn | | **Pn** | **22 20 22.9** | **+0.8** |
| **CPUP** | **Villa Florida** | **13.87** | **71** | Pn | | **Pn** | **22 21 11.8** | **+2.3** |
| **LPAZ** | comp=Z,0.1nm,0.3s,baz=264,slow=19,SNR=2.3 **La Paz** | **15.69** | **14** | Pn | | **Pn** | **22 21 36.1** | **+1.5** |
| **SIV** | comp=Z,0.2nm,0.3s,baz=219,slow=6.5,SNR=4.0 **San Ignacio** | **18.49** | **35** | P | | **Pn** | **22 22 09.8** | **+0.7** |
| **BDFB** | comp=Z,0.4nm,0.3s,baz=218,slow=5.7,SNR=4.1 **Brasilia** | **27.04** | **59** | P | | **P** | **22 23 34.8** | **-0.7** |
| **PTGA** | comp=Z,6.0nm,0.8s,baz=258,slow=6.6,SNR=4.8 **Pitinga** | **32.78** | **23** | LR | | LR | 22 38 03.5 | |
| **PTGA** | comp=Z,125nm,20.9s,baz=116,slow=37 **Pitinga** | **32.78** | **23** | *e*P | | **P** | **22 24 26.4** | **+0.2** |
| **PMSA** | comp=Z,23nm,2.2s **Palmer Station** | **33.52** | **174** | *e*P | | **P** | **22 24 31.8** | **-0.3** |
| **VNA3** | comp=Z,1μm,2.5s **Neumayer Olymp** | **51.52** | **159** | P | | **P** | **22 26 59.2** | **+0.9** |
| **VNA2** | **Neumayer--Watz** baz=286,slow=8.2 | **52.16** | **158** | P | | **P** | **22 27 04.0** | **+1.0** |
| **SNAA** | **Sanae** | **53.75** | **158** | P | | **P** | **22 27 15.5** | **+0.7** |
| **SNAA** | **Sanae** comp=Z,0.8nm,0.8s,baz=271,slow=5.8,SNR=8.9 | **53.75** | **158** | *e*P | | **P** | **22 27 14.7** | **-0.1** |
| **SNAA** | **Sanae** comp=Z,22nm,2.9s | **53.75** | **158** | *e*P | | **P** | **22 27 14.7** | **-0.1** |
| **DBIC** | **Dimbokro** comp=Z,3.2nm,0.5s,baz=234,slow=6.2,SNR=7.2 | **74.39** | **72** | P | | **P** | **22 29 31.2** | **0.0** |
| **DBIC** | **Dimbokro** comp=Z,25nm,1.4s | **74.39** | **72** | *e*P | | **P** | **22 29 31.2** | **0.0** |
| **RAR** | **Rarotonga** comp=Z,68nm,19.8s,baz=60,slow=30 | **77.38** | **253** | LR | | LR | 22 56 44.3 | |
| **LDFC** | **Landfair** | **77.77** | **325** | *e*P | | **P** | **22 29 51.0** | **+0.8** |
| **R11A** | **Troy Canyon, C** comp=Z,7.7nm,0.9s | **80.62** | **327** | *e*P | | **P** | **22 30 07.7** | **+1.9** |
| **BOSA** | **Boshof** comp=Z,3.8nm,1.1s,baz=54,slow=22,SNR=3.2 | **81.13** | **118** | P | | **P** | **22 30 08.9** | **0.0** |
| **NV01** | **Mina Array Sit** | **81.98** | **325** | *e*P | | **P** | **22 30 11.3** | **-1.8** |
| **NVAR** | **Mina Array Bea** comp=Z,0.5nm,0.7s,baz=144,slow=6.3,SNR=4.3 | **81.98** | **325** | P | | **P** | **22 30 12.5** | **-0.6** |
| **LBTB** | **Lobatse** comp=Z,1.3nm,0.4s,baz=241,slow=7.1,SNR=4.8 | **83.25** | **115** | P | | **P** | **22 30 19.1** | **-0.9** |
| **LBTB** | **Lobatse** comp=Z,103nm,2.1s | **83.25** | **115** | *e*P | | **P** | **22 30 19.1** | **-0.9** |
| **TOA0** | **Torodi Ar. Sit** | **83.37** | **70** | *e*P | | **P** | **22 30 19.8** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** comp=Z,1.8nm,0.8s,baz=282,slow=7.1,SNR=13 | **83.37** | **70** | P | | **P** | **22 30 20.6** | **+0.1** |
| **RPZ** | **Rata Peaks** comp=Z,102nm,18.4s,baz=218,slow=29 | **85.46** | **220** | LR | | LR | 22 59 32.9 | |
| **YBH** | **Yreka Blue Hor** comp=Z,20nm,20.8s,baz=329,slow=31 | **86.68** | **325** | LR | | LR | 23 03 11.1 | |
| **H11S2** | **WAKE ISLAND Hyl** baz=117,slow=74,SNR=92 | **25.82** | **271** | T | | T | 00 55 49.3 | |
| **H11S1** | **WAKE ISLAND Hyl** baz=117,slow=74,SNR=94 | **25.83** | **271** | T | | T | 00 55 51.7 | |
| **H11S3** | **WAKE ISLAND Hyl** baz=117,slow=74,SNR=70 | **25.83** | **271** | T | | T | 00 55 52.4 | |
| **H11N3** | **WAKE ISLAND Hyl** baz=116,slow=75,SNR=18 | **26.17** | **272** | T | | T | 00 56 14.6 | |
| **H11N1** | **WAKE ISLAND Hyl** baz=116,slow=75,SNR=7.4 | **26.18** | **272** | T | | T | 00 56 15.7 | |
| **H11N2** | **WAKE ISLAND Hyl** baz=116,slow=75,SNR=35 | **26.19** | **272** | T | | T | 00 56 14.9 | |

*NIED* ***18*** *22:30:00,42°.00N×142°.70E,h53km,Mw4.2 Best double couple: M0 2.19000×10^15 NP1:φs193.00000°,δ27.00000°, λ89.00000°. NP2:φs14.00000°,δ63.00000°,λ91.00000°.*

*MOS* ***18*** *22:30:16.7±1.4,42°.11N×142°.54E,h49km,mb4.5/16,Error ellipse: s-maj=10.6km s-min=8.5km az=76.6*

*ISCJB* ***18*** *22:30:17.8±0.3,41°.98N±0°.04×142°.73E±0°.04,h67km±2km, mb4.2/24,Error ellipse: s-maj=6.6km s-min=3.9km az=149.3*

*JMA* ***18*** *22:30:18.7±0.1,41°.98N×142°.73E,h56km±1km,M4.0 Broadband fault plane solution: P waves. NP1: φs357.00000°,δ77.00000°,λ80.00000°. NP2: φs214.00000°,δ16.00000°,λ126.00000°. Principal axes: T Plg57.0000°, Azm254.0000°; N Plg10.0000°, Azm359.0000°; P Plg31.0000°, Azm95.0000°;*

*JMA Felt II J1.*

*NEIC* ***18*** *22:30:19.2±0.7,42°.02N×142°.82E,h68km±6km,mb4.7/10, MW4.2(NIED) Error ellipse: s-maj=13.4km s-min=8.9km az=133.0*

*NEIC Recorded [2 JMA] in southern Hokkaido. Recorded [1 JMA] in Aomori, Honshu.*

*IDC* ***18*** *22:30:20.0±1.9,42°.00N×142°.76E,h76km±14km,mb3.8/14, mb1 4.0/18,mb1mx3.8/42,mbtmp4.1/18,MS3.0/6, Ms1 3.1/6,ms1mx2.9/31,Error ellipse: s-maj=21.7km s-min=11.8km az=115.0*

**ISC 18 22:30:18.8±0.7, 41°.96N±0°.05×142°.75E±0°.04, h61km±6km, n104,σ1$25/120, mb4.3/24, 4C-8D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **ERM** | **Erimo** | **0.31** | **79** | *e*PN | | **Pn** | **22 30 28.3** | **-0.8** |
| **ERM** | **Erimo** | **0.31** | **79** | *e*Pn | | **Pn** | **22 30 28.3** | **-0.8** |
| **JEM** | **Erimo** | **0.31** | **79** | ⇑P | | **Pn** | **22 30 28.7** | **-0.3** |
| JEM | | | | *e*S | | **Sn** | **22 30 35.9** | **-0.6** |
| **JNBK** | **Urakawa-nobuka** | **0.32** | **1** | ⇑P | | **Pn** | **22 30 28.4** | **-0.8** |
| JNBK | | | | *e*S | | **Sn** | **22 30 35.3** | **-1.3** |
| **JCH** | **Churui** | **0.80** | **35** | ⇑P | | **Pn** | **22 30 34.0** | **-0.3** |
| JCH | | | | *e*S | | **Sn** | **22 30 44.8** | **-0.9** |
| **JBT2** | **Biratori 2** | **0.87** | **341** | ⇓P | | **Pn** | **22 30 34.7** | **-0.5** |
| JBT2 | | | | *e*S | | **Sn** | **22 30 46.9** | **-0.3** |
| **JFR** | **Furan** | **1.21** | **355** | P | | **Pn** | **22 30 39.5** | **-0.1** |
| JFR | | | | *e*S | | **Sn** | **22 30 54.4** | **-0.8** |
| **JOB** | **Onbets** | **1.24** | **40** | ⇑P | | **Pn** | **22 30 40.9** | **+0.9** |
| JOB | | | | *e*S | | **Sn** | **22 30 57.5** | **+1.6** |
| **JKB** | **Kayabe** | **1.28** | **267** | ⇓P | | **Pn** | **22 30 39.8** | **-0.7** |
| JKB | | | | *e*S | | **Sn** | **22 30 55.4** | **-1.4** |
| **JEW** | **Eniwo** | **1.30** | **313** | ⇓P | | **Pn** | **22 30 40.6** | **-0.2** |
| JEW | | | | *e*S | | **Sn** | **22 30 56.9** | **-0.4** |
| **JNB** | **Noboribetsu** | **1.37** | **292** | ⇓P | | **Pn** | **22 30 40.6** | **-1.1** |
| JNB | | | | *e*S | | **Sn** | **22 30 57.6** | **-1.2** |
| **JOT** | **Ohata** | **1.40** | **246** | ⇓P | | **Pn** | **22 30 41.6** | **-0.5** |
| JOT | | | | *e*S | | **Sn** | **22 30 59.4** | **-0.1** |
| **ASAJ** | **Asahikawa** | **2.16** | **357** | P | | **Pn** | **22 30 52.5** | **+0.1** |
| ASAJ | 21nm,0.3s,baz=214,slow=9.8,SNR=60 | | | S | | **Sn** | **22 31 20.2** | **+2.1** |
| **ASAJ** | 27nm,0.3s,baz=224,slow=19,SNR=6.0 **Asahikawa** | **2.16** | **357** | *e*Pn | | **Pn** | **22 30 53.7** | **+1.3** |
| ASAJ | | | | *e*Sn | | **Sn** | **22 31 20.2** | **+2.1** |
| **YUK** | **Yuzh-Kuril'sk** | **3.09** | **47** | *d i*PN | | **Pn** | **22 31 06.6** | **+1.5** |
| YUK | | | | *i* S | | **Sn** | **22 31 41.4** | **+0.7** |
| YUK | comp=Z,192nm,0.3s | | | pmax | pmax | | | |
| YUK | comp=N,43nm,0.1s | | | pmax | pmax | | | |
| YUK | comp=E,108nm,0.1s | | | pmax | pmax | | | |
| YUK | comp=N,365nm,0.6s | | | smax | smax | | | |
| YUK | comp=E,462nm,0.6s | | | smax | smax | | | |
| **SHO** | **Shikotan** | **3.56** | **56** | *d i*PN | | **Pn** | **22 31 11.5** | **0.0** |
| SHO | | | | *i* S | | **Sn** | **22 31 50.2** | **-2.0** |
| SHO | comp=N,40nm,0.4s | | | pmax | pmax | | | |
| SHO | comp=E,54nm,0.4s | | | pmax | pmax | | | |
| SHO | comp=Z,50nm,0.4s | | | smax | smax | | | |
| SHO | comp=N,274nm,0.7s | | | smax | smax | | | |
| SHO | comp=E,412nm,0.7s | | | smax | smax | | | |
| **KUR** | **Kuril'sk** | **4.95** | **47** | ⇓*i*PN | | **Pn** | **22 31 33.1** | **+2.5** |
| KUR | | | | *i* S | | **Sn** | **22 32 28.6** | **+2.1** |
| KUR | comp=Z,62nm,0.6s | | | pmax | pmax | | | |
| KUR | comp=N,36nm,0.3s | | | pmax | pmax | | | |
| KUR | comp=E,34nm,0.3s | | | smax | smax | | | |
| KUR | comp=E,51nm,0.7s | | | smax | smax | | | |
| KUR | comp=N,46nm,0.4s | | | smax | smax | | | |
| **MAJO** | **Matsushiro** | **6.45** | **215** | *e*PN | | **Pn** | **22 31 54.2** | **+3.0** |
| **MAJO** | **Matsushiro** | **6.45** | **215** | *e*Pn | | **Pn** | **22 31 54.2** | **+3.0** |
| **MAT** | **Matsushiro** | **6.45** | **215** | P | | **Pn** | **22 31 52.7** | **+1.5** |
| **MJAR** | **Matsushiro Arr** | **6.45** | **215** | P | | **Pn** | **22 31 52.0** | **+0.8** |
| MJAR | comp=N,1.7nm,0.3s,baz=31,slow=12,SNR=15 comp=N,57nm,19.2s,baz=55,slow=42 | | | LR | | LR | 22 34 55.7 | |
| **USRK** | **Ussuriysk Ar.** comp=N,1.0nm,0.3s,baz=89,slow=15,SNR=20 | **8.19** | **289** | P | | **Pn** | **22 32 15.2** | **+0.3** |
| USRK | comp=N,130nm,19.9s,baz=129,slow=36 | | | LR | | LR | 22 35 15.9 | |
| **KSRS** | **Korea Array** comp=N,0.5nm,0.3s,baz=65,slow=13,SNR=9.3 | **12.27** | **253** | P | | **Pn** | **22 33 12.6** | **+2.0** |
| KSRS | comp=N,0.4nm,0.3s,baz=66,slow=24,SNR=4.5 | | | S | | **Sn** | **22 35 31.1** | **+5.5** |
| KSRS | comp=N,75nm,21.7s,baz=82,slow=33 | | | LR | | LR | 22 37 03.5 | |
| **KS15** | **Wonju Array Si** | **12.30** | **253** | *e*Pn | | **Pn** | **22 33 12.6** | **+1.5** |
| KS15 | | | | *e*Sn | | **Sn** | **22 35 31.1** | **+4.7** |
| **ULN** | **Ulaanbaatar** | **25.80** | **295** | *e*P | | **P** | **22 35 44.2** | **0.0** |
| ULN | comp=Z,36nm,2.6s | | | pmax | pmax | | | |
| **ULN** | **Ulaanbaatar** comp=Z,36nm,2.6s | **25.80** | **295** | *e*P | | **P** | **22 35 44.2** | **0.0** |
| **SONA1** | **Songino Array** | **26.23** | **295** | *e*P | | **P** | **22 35 48.2** | **+0.1** |
| **SONA0** | **Songino Array** | **26.24** | **295** | *e*P | | **P** | **22 35 47.3** | **-0.8** |
| **SONM** | **Songino Array** comp=Z,1.9nm,0.6s,baz=72,slow=8.3,SNR=24 | **26.24** | **295** | P | | **P** | **22 35 47.3** | **-0.8** |
| SONM | comp=Z,50nm,18.3s,baz=86,slow=37 | | | LR | | LR | 22 46 33.0 | |
| **BILL** | **Bilibino** | **29.02** | **18** | *e*P | | P | 22 36 07.8 | -4.9 |
| BILL | comp=Z,176nm,2.8s | | | pmax | pmax | | | |
| **BILL** | **Bilibino** comp=Z,176nm,2.8s | **29.02** | **18** | *e*P | | P | 22 36 07.8 | -4.9 |
| **ZAA1** | **Zalesovo Array** | **39.52** | **308** | *e*P | | **P** | **22 37 42.3** | **-1.1** |
| **ZAA0** | **Zalesovo Array** | **39.52** | **308** | *e*P | | **P** | **22 37 42.6** | **-0.7** |
| **ZALV** | **Zalesovo Beam** comp=Z,6.9nm,0.7s,baz=87,slow=8.1,SNR=30 | **39.52** | **308** | P | | **P** | **22 37 42.3** | **-1.1** |
| ZALV | comp=Z,1.2nm,0.7s,baz=105,slow=3.5,SNR=4.0 | | | PcP | | **PcP** | **22 39 50.5** | **+0.7** |
| **ZALV** | **Zalesovo Beam** | **39.52** | **308** | P | | **P** | **22 37 42.3** | **-1.1** |
| ZALV | | | | | | | 22 39 50.5 | |
| ZALV | comp=Z,7.0nm,0.7s | | | pmax | pmax | | | |
| **NVS** | **Novosibirsk** | **40.34** | **310** | *e*P | | P | 22 37 46.6 | -3.5 |
| NVS | comp=E,3.0nm,0.8s | | | pmax | pmax | | | |
| NVS | comp=Z,5.0nm,0.8s | | | pmax | pmax | | | |
| **MK01** | **Makanchi Array** | **42.55** | **298** | *e*P | | **P** | **22 38 08.1** | **-0.3** |
| **MK32** | **Makanchi Array** | **42.55** | **298** | *e*P | | **P** | **22 38 06.7** | **-1.7** |
| **MKAR** | **Makanchi Array** | **42.55** | **298** | P | | **P** | **22 38 06.7** | **-1.7** |
| MKAR | comp=Z,2.4nm,0.7s,baz=84,slow=9.5,SNR=16 | | | PcP | | **PcP** | **22 39 59.2** | **-0.6** |
| **MKAR** | comp=Z,0.7nm,0.4s,baz=73,slow=2.7,SNR=4.9 **Makanchi Array** | **42.55** | **298** | P | | **P** | **22 38 06.7** | **-1.7** |
| MKAR | | | | | | | 22 39 59.2 | |
| MKAR | comp=Z,2.0nm,0.7s | | | pmax | pmax | | | |
| **MKAR** | **Makanchi Array** | **42.55** | **298** | *e*P | | **P** | **22 38 08.3** | **0.0** |
| **LSA** | **Lhasa** | **42.99** | **271** | *e*P | | **P** | **22 38 10.5** | **-2.2** |
| LSA | comp=Z,3.0nm,0.6s | | | pmax | pmax | | | |
| **LSA** | **Lhasa** comp=Z,3.3nm,0.6s | **42.99** | **271** | *e*P | | **P** | **22 38 10.5** | **-2.2** |
| **KURK** | **Kurchatov** | **43.85** | **304** | *e*P | | **P** | **22 38 18.6** | **-0.2** |
| KURK | comp=Z,12nm,0.7s | | | pmax | pmax | | | |
| **KURK** | **Kurchatov** comp=Z,12nm,0.7s | **43.85** | **304** | *e*P | | **P** | **22 38 18.6** | **-0.2** |
| **CM31** | **Chiang Mai Arr** | **43.90** | **251** | *e*P | | **P** | **22 38 20.8** | **+1.2** |
| **CMAR** | **Chiang Mai Arr** | **43.90** | **251** | P | | **P** | **22 38 20.8** | **+1.2** |
| CMAR | comp=Z,0.9nm,0.5s,baz=37,slow=7.4,SNR=5.7 comp=Z,13nm,21.3s,baz=210,slow=38 | | | LR | | LR | 22 57 54.6 | |
| **RND** | **Reindeer** | **44.08** | **37** | *e*P | | **P** | **22 38 20.1** | **-0.4** |
| **RND** | **Reindeer** comp=Z,138nm,2.7s | **44.08** | **37** | *e*P | | **P** | **22 38 20.1** | **-0.4** |
| **ILAR** | **Eielson Array** comp=Z,0.9nm,0.7s,baz=260,slow=6.6,SNR=7.3 | **44.83** | **35** | P | | **P** | **22 38 25.4** | **-1.0** |
| **ILAR** | **Eielson Array** comp=Z,1.0nm,0.7s | **44.83** | **35** | P | | **P** | **22 38 25.4** | **-1.0** |
| ILAR | | | | | pmax | pmax | | |
| **ILB** | **Eielson Array** | **44.83** | **35** | *e*P | | **P** | **22 38 25.4** | **-1.0** |
| **TAPN** | **Taplejung** | **46.80** | **270** | *e*P | | **P** | **22 38 43.6** | **+0.8** |
| **ODAN** | **Odare** comp=Z,15nm,0.8s | **47.30** | **270** | *e*P | | **P** | **22 38 47.0** | **+0.4** |
| **RAMN** | **Ramite** comp=Z,25nm,0.6s | **47.84** | **270** | *e*P | | **P** | **22 38 51.1** | **+0.3** |
| **GUN** | **Gumba** comp=Z,74nm,0.4s | **47.86** | **272** | *e*P | | **P** | **22 38 51.6** | **+0.5** |
| **BRVK** | **Borovoye** | **48.18** | **309** | *e*P | | **P** | **22 38 50.9** | **-1.9** |
| BRVK | comp=Z,3.0nm,0.6s | | | pmax | pmax | | | |
| **BRVK** | **Borovoye** comp=Z,3.0nm,0.6s | **48.18** | **309** | *e*P | | **P** | **22 38 50.9** | **-1.9** |
| **KKN** | **Kakani** | **48.37** | **272** | *e*P | | **P** | **22 38 55.3** | **+0.4** |
| **PKI** | **Pulchoki** comp=Z,7.9nm,0.4s | **48.39** | **272** | *e*P | | **P** | **22 38 55.2** | **0.0** |
| **PKIN** | **Phulchoki** comp=Z,8.3nm,0.5s | **48.40** | **272** | *e*P | | **P** | **22 38 55.2** | **+0.1** |
| **DMN** | **Daman** comp=Z,14nm,0.6s | **48.60** | **272** | *e*P | | **P** | **22 38 57.1** | **+0.4** |
| **GKN** | **Gorkha** | **48.73** | **273** | *e*P | | **P** | **22 38 57.7** | **+0.1** |
| **DANN** | **Dangsing** | **49.20** | **274** | *e*P | | **P** | **22 39 02.2** | **+0.9** |
| **KOLN** | **Koldanda** comp=Z,156nm,0.3s | **49.63** | **273** | *e*P | | **P** | **22 39 05.1** | **+0.6** |
| **EKS2** | **Erkin-Say** | **49.67** | **295** | *e*P | | **P** | **22 39 04.8** | **+0.3** |
| EKS2 | comp=Z,3.0nm,0.6s | | | pmax | pmax | | | |
| **EKS2** | **Erkin-Say** comp=Z,3.3nm,0.6s | **49.67** | **295** | *e*P | | **P** | **22 39 04.8** | **+0.3** |
| **KKAR** | **Karatay Array** | **51.67** | **297** | *e*P | | **P** | **22 39 19.1** | **-0.3** |
| **KKAR** | **Karatay Array** | **51.67** | **297** | *e*P | | **P** | **22 39 19.1** | **-0.3** |
| **ABKAR** | **Akbulak array** | **55.64** | **308** | *e*P | | **P** | **22 39 48.4** | **+0.1** |
| **KBL** | **Kabul** | **56.72** | **289** | *e*P | | **P** | **22 39 55.8** | **-0.7** |
| KBL | comp=Z,3.0nm,0.8s | | | pmax | pmax | | | |
| **KBL** | **Kabul** comp=Z,2.7nm,0.8s | **56.72** | **289** | *e*P | | **P** | **22 39 55.8** | **-0.7** |
| **RES** | **Resolute Bay** comp=Z,2.6nm,0.9s,baz=316,slow=5.3,SNR=9.5 | **57.58** | **15** | P | | **P** | **22 40 00.9** | **-0.8** |
| **RES** | **Resolute Bay** | **57.58** | **15** | P | | **P** | **22 40 00.9** | **-0.8** |
| RES | comp=Z,3.0nm,0.9s | | | pmax | pmax | | | |
| **RES** | **Resolute Bay** comp=Z,49nm,1.7s | **57.58** | **15** | *e*P | | **P** | **22 40 00.9** | **-0.8** |
| **GEYT** | **Alibeck** comp=Z,1.1nm,0.5s,baz=19,slow=4.9,SNR=4.6 | **62.42** | **297** | P | | **P** | **22 40 35.0** | **-0.5** |
| **FIA0** | **FINESS Array S** | **64.96** | **332** | *e*P | | **P** | **22 40 51.3** | **-0.4** |
| **FIA0** | **FINESS Array S** | **64.96** | **332** | *e*P | | **P** | **22 40 51.3** | **-0.4** |
| **FINES** | **FINESS Array B** comp=Z,6.6nm,0.7s,baz=51,slow=6.9,SNR=17 | **64.96** | **332** | P | | **P** | **22 40 51.3** | **-0.4** |
| **FINES** | **FINESS Array B** | **64.96** | **332** | P | | **P** | **22 40 51.3** | **-0.4** |
| FINES | comp=Z,7.0nm,0.7s | | | pmax | pmax | | | |
| **AS12** | **Alice Springs** | **65.80** | **189** | *e*P | | **P** | **22 40 57.4** | **-0.2** |
| **ASAR** | **Alice Springs** comp=Z,0.6nm,0.7s,baz=1.0,slow=5.6,SNR=3.3 | **65.80** | **189** | P | | **P** | **22 40 57.4** | **-0.2** |
| **ASAR** | **Alice Springs** | **65.80** | **189** | P | | **P** | **22 40 57.4** | **-0.2** |
| ASAR | comp=Z,1.0nm,0.7s | | | pmax | pmax | | | |
| **KIV** | **Kislovodsk** | **68.49** | **310** | *e*P | | **P** | **22 41 15.5** | **+0.9** |
| KIV | comp=Z,13nm,0.9s | | | pmax | pmax | | | |
| **KIV** | **Kislovodsk** comp=Z,14nm,1.0s | **68.49** | **310** | *e*P | | **P** | **22 41 16.1** | **+1.5** |
| **KBZ** | **Khabaz** comp=Z,2.2nm,0.7s,baz=43,slow=6.9,SNR=6.8 | **68.51** | **310** | P | | **P** | **22 41 14.9** | **+0.3** |
| **KBZ** | **Khabaz** | **68.51** | **310** | P | | **P** | **22 41 14.9** | **+0.3** |
| KBZ | comp=Z,2.0nm,0.7s | | | pmax | pmax | | | |
| **NB2** | **NORSAR Subarra** comp=Z,1.3nm,0.6s,baz=36,slow=6.5 | **70.05** | **337** | P | | **P** | **22 41 23.4** | **-0.5** |
| **NB200** | **NORSAR Array S** | **70.05** | **337** | *e*P | | **P** | **22 41 22.2** | **-1.6** |
| **NOA** | **NORSAR Array B** comp=Z,2.1nm,0.7s,baz=37,slow=6.2,SNR=6.2 | **70.05** | **337** | P | | **P** | **22 41 22.2** | **-1.6** |
| NOA | comp=Z,13nm,18.1s,baz=275,slow=38 | | | LR | | LR | 23 15 18.3 | |
| **AKASG** | **Malin Array Be** comp=Z,1.3nm,0.3s,baz=42,slow=6.5,SNR=9.1 | **71.05** | **322** | P | | **P** | **22 41 29.6** | **-0.5** |
| **AKASG** | **Malin Array Be** | **71.05** | **322** | P | | **P** | **22 41 29.6** | **-0.5** |
| AKASG | comp=Z,1.0nm,0.3s | | | pmax | pmax | | | |
| **AKBB** | **Malin Array Si** | **71.05** | **322** | *e*P | | **P** | **22 41 29.6** | **-0.5** |
| **AKBB** | **Malin Array Si** | **71.05** | **322** | *e*P | | **P** | **22 41 29.6** | **-0.5** |
| **BUR04** | **Bucovina Ar. S** | **75.09** | **322** | *e*P | | **P** | **22 41 54.4** | **+0.2** |
| **BR101** | **Keskin Array S** | **76.36** | **311** | *e*P | | **P** | **22 42 00.7** | **-0.9** |
| **BRTR** | **Keskin Array B** comp=Z,1.0nm,0.6s,baz=64,slow=5.6,SNR=5.9 | **76.36** | **311** | P | | **P** | **22 42 00.7** | **-0.9** |
| **BRTR** | **Keskin Array B** | **76.36** | **311** | P | | **P** | **22 42 00.7** | **-0.9** |
| BRTR | comp=Z,1.0nm,0.6s | | | pmax | pmax | | | |
| **GEC2** | **GERESS Array S** | **79.06** | **328** | *e*P | | **P** | **22 42 15.9** | **-0.6** |
| **GEC2** | **GERESS Array S** | **79.06** | **328** | *e*P | | **P** | **22 42 15.8** | **-0.6** |
| **GERES** | **GERESS Array B** comp=Z,0.4nm,0.6s,baz=27,slow=5.1,SNR=4.9 | **79.06** | **328** | P | | **P** | **22 42 15.8** | **-0.6** |
| **SNAA** | **Sanae** | **145.75** | **199** | P | | **PKPab** | **22 49 50.6** | **+0.4** |
| **VNA2** | **Neumayer--Watz** baz=91,slow=1.5 | **147.32** | **198** | P | | **PKPab** | **22 49 55.7** | **-0.6** |
| **VNA3** | **Neumayer Olymp** | **147.58** | **196** | P | | **PKPbc** | **22 49 54.9** | **-0.1** |

*BJI* ***18*** *22:32:13.9,43°.85S×172°.27E,h18km,mb5.5/8,mB5.8/5, Ms5.3/2,Ms7 4.9/2*

*ISCJB* ***18*** *22:32:14.1±0.4,43°.58S±0°.03×172°.66E±0°.04,h11km±2km, mb4.6/11,MS4.1/10,Error ellipse: s-maj=5.7km s-min=3.0km az=42.5*

*NEIC* ***18*** *22:32:14.3,43°.61S×172°.57E,h18km,mb4.7/3,MW4.8, ML5.0(WEL),Moment Tensor Solution. s25 Moment tensor: Scale 10^16Nm; Mrr0.62; Mθθ0.79; Mϕϕ-1.41; Mrθ0.53; Mθϕ-1.41; Mϕr0.62; Best double couple: M0 2.00000×10^16 NP1:φs70.00000°,δ90.00000°, λ158.00000°. NP2:φs160.00000°,δ68.00000°,λ0.00000°. Principal axes: T 1.5400, Plg15.0000°, Azm23.0000°; N 0.7700, Plg68.0000°, Azm249.0000°; P -2.3100, Plg15.0000°, Azm117.0000°; After WEL.*

*NEIC Felt [VI] at Christchurh, Hallswell and Riccarton. Felt widely in Canterbury.*

*IDC* ***18*** *22:32:15.0±0.7,43°.40S×172°.54E,h0km,mb4.5/8, mb1 4.6/9,mb1mx4.5/23,mbtmp4.5/9,ML4.1/1,MS4.1/11, Ms1 4.1/11,ms1mx4.0/16 Error ellipse: s-maj=19.3km s-min=12.7km az=160.0*

*WEL* ***18*** *22:32:15.6±0.1,43°.62S×172°.57E,h5km,ML5.1/54,Error ellipse: s-maj=0.9km s-min=0.8km az=0.0*

*WEL Felt from West Coast to Otago, maximum reported intensity MM 8.*

**ISC 18 22:32:16.0±0.7, 43°.57S±0°.03×172°.64E±0°.04, h10km±3km, n199,σ1$59/171, mb4.6/11, MS4.1/10, 9C-1D, South Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **CRLZ** | **Canterbury Las** | **0.02** | **231** | *e*PG | | **Pg** | **22 32 17.0** | **-0.6** |
| CRLZ | | | | SG | | **Sg

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BSWZ | Blackbirch Sta | 2.06 | 27 | ⇑PN | Pn | 22 32 49.8 | -0.9 | | |
| BSWZ | | | | AML | AML | 22 33 42.3 | | | |
| BSWZ | | | | AML | AML | 22 33 55.4 | | | |
| BSWZ | Blackbirch Sta | 2.06 | 27 | ePn | Pn | 22 32 49.9 | -0.9 | | |
| FOZ | Fox Glacier | 2.15 | 269 | ⇑PN | Pn | 22 32 50.1 | -1.8 | | |
| FOZ | | | | AML | AML | 22 32 57.2 | | | |
| FOZ | | | | AML | AML | 22 32 57.3 | | | |
| FOZ | | | | AML | AML | 22 33 26.9 | | | |
| FOZ | | | | AML | AML | 22 33 29.4 | | | |
| FOZ | Fox Glacier | 2.15 | 269 | ePn | Pn | 22 32 50.1 | -1.8 | | |
| TUWZ | Tuamarina | 2.34 | 25 | PN | Pn | 22 32 53.5 | -1.0 | | |
| TUWZ | | | | AML | AML | 22 33 39.1 | | | |
| TUWZ | | | | AML | AML | 22 33 49.6 | | | |
| TUWZ | Tuamarina | 2.34 | 25 | ePn | Pn | 22 32 53.5 | -1.0 | | |
| NNZ | Nelson | 2.41 | 13 | PN | Pn | 22 32 54.7 | -0.7 | | |
| NNZ | | | | AML | AML | 22 33 47.5 | | | |
| NNZ | | | | AML | AML | 22 33 49.9 | | | |
| NNZ | | | | AML | AML | 22 33 50.8 | | | |
| NNZ | | | | AML | AML | 22 33 50.8 | | | |
| NNZ | Nelson | 2.41 | 13 | ePn | Pn | 22 32 54.8 | -0.7 | | |
| TCW | Tory Channel | 2.65 | 28 | PN | Pn | 22 32 57.7 | -1.0 | | |
| TCW | | | | AML | AML | 22 33 57.2 | | | |
| TCW | | | | AML | AML | 22 33 59.8 | | | |
| TCW | Tory Channel | 2.65 | 28 | ePn | Pn | 22 32 57.7 | -1.0 | | |
| SNZO | South Karori | 2.72 | 35 | ePn | Pn | 22 32 58.7 | -1.1 | | |
| HHSZ | Highcliff Hill | 2.74 | 211 | PN | Pn | 22 32 57.7 | -2.4 | | |
| HHSZ | Highcliff Hill | 2.74 | 211 | ePn | Pn | 22 32 57.7 | -2.4 | | |
| QRZ | Quartz Range | 2.74 | 358 | PN | Pn | 22 32 58.9 | -1.1 | | |
| QRZ | | | | AML | AML | 22 33 09.7 | | | |
| QRZ | | | | AML | AML | 22 33 09.7 | | | |
| QRZ | | | | AML | AML | 22 33 55.1 | | | |
| QRZ | | | | AML | AML | 22 33 55.1 | | | |
| QRZ | Quartz Range | 2.74 | 358 | ePn | Pn | 22 32 58.9 | -1.1 | | |
| WEL | Wellington | 2.77 | 35 | ePn | Pn | 22 32 59.7 | -0.7 | | |
| PLWZ | Palliser | 2.78 | 45 | ⇓PN | Pn | 22 32 59.0 | -1.5 | | |
| PLWZ | Palliser | 2.78 | 45 | ePn | Pn | 22 32 59.0 | -1.5 | | |
| JCZ | Jackson Bay | 2.85 | 258 | PN | Pn | 22 33 00.5 | -1.2 | | |
| JCZ | | | | AML | AML | 22 33 51.1 | | | |
| JCZ | | | | AML | AML | 22 33 55.5 | | | |
| JCZ | Jackson Bay | 2.85 | 258 | ePn | Pn | 22 33 00.5 | -1.2 | | |
| MSWZ | Moikau Station | 2.89 | 43 | PN | Pn | 22 33 00.3 | -1.8 | | |
| MSWZ | | | | AML | AML | 22 33 36.0 | | | |
| MSWZ | | | | AML | AML | 22 34 34.3 | | | |
| MSWZ | Moikau Station | 2.89 | 43 | ePn | Pn | 22 33 00.3 | -1.8 | | |
| WKZ | Wanaka | 2.89 | 243 | PN | Pn | 22 33 00.7 | -1.5 | | |
| WKZ | | | | AML | AML | 22 33 59.8 | | | |
| WKZ | | | | AML | AML | 22 33 59.8 | | | |
| WKZ | | | | AML | AML | 22 34 07.9 | | | |
| WKZ | | | | AML | AML | 22 34 07.9 | | | |
| WKZ | Wanaka | 2.89 | 243 | ePn | Pn | 22 33 00.2 | -0.2 | | |
| EAZ | Earnscleugh | 2.91 | 234 | PN | Pn | 22 33 00.3 | -2.1 | | |
| EAZ | | | | AML | AML | 22 34 00.5 | | | |
| EAZ | | | | AML | AML | 22 34 00.5 | | | |
| EAZ | | | | AML | AML | 22 34 01.6 | | | |
| EAZ | | | | AML | AML | 22 34 01.6 | | | |
| EAZ | Earnscleugh | 2.91 | 234 | ePn | Pn | 22 33 00.3 | -2.1 | | |
| DUWZ | D'Urville Isla | 2.92 | 19 | AML | AML | 22 33 49.0 | | | |
| DUWZ | | | | AML | AML | 22 34 05.9 | | | |
| CAW | Cannon Point | 3.04 | 37 | PN | Pn | 22 33 02.6 | -1.6 | | |
| CAW | | | | AML | AML | 22 34 08.4 | | | |
| CAW | | | | AML | AML | 22 34 19.8 | | | |
| CAW | Cannon Point | 3.04 | 37 | ePn | Pn | 22 33 02.6 | -1.6 | | |
| TRWZ | Traveller | 3.13 | 47 | PN | Pn | 22 33 03.4 | -1.9 | | |
| TRWZ | | | | AML | AML | 22 35 01.3 | | | |
| TRWZ | | | | AML | AML | 22 35 06.8 | | | |
| TRWZ | Traveller | 3.13 | 47 | ePn | Pn | 22 33 03.4 | -1.9 | | |
| KIWZ | Kapiti Island | 3.19 | 33 | PN | Pn | 22 33 04.9 | -1.3 | | |
| KIW | | | | AML | AML | 22 34 15.9 | | | |
| KIW | | | | AML | AML | 22 34 27.1 | | | |
| KIW | Kapiti Island | 3.19 | 33 | ePn | Pn | 22 33 04.9 | -1.3 | | |
| MTW | Mount Morrison | 3.21 | 42 | PN | Pn | 22 33 04.7 | -1.8 | | |
| MTW | | | | AML | AML | 22 33 47.2 | | | |
| MTW | | | | AML | AML | 22 34 19.1 | | | |
| MTW | Mount Morrison | 3.21 | 42 | ePn | Pn | 22 33 04.7 | -1.8 | | |
| TUZ | Tuapeka | 3.21 | 221 | ⇑PN | Pn | 22 33 04.3 | -2.2 | | |
| TUZ | | | | AML | AML | 22 33 59.5 | | | |
| TUZ | | | | AML | AML | 22 34 03.4 | | | |
| TUZ | | | | AML | AML | 22 34 03.4 | | | |
| TUZ | | | | AML | AML | 22 34 08.4 | | | |
| TUZ | Tuapeka | 3.21 | 221 | ePn | Pn | 22 33 04.3 | -2.2 | | |
| OGWZ | Otaki Gorge | 3.33 | 35 | PN | Pn | 22 33 06.4 | -1.7 | | |
| OGWZ | Otaki Gorge | 3.33 | 35 | ePn | Pn | 22 33 06.5 | -1.7 | | |
| HOWZ | Holdsworth Sta | 3.42 | 40 | PN | Pn | 22 33 07.5 | -1.8 | | |
| HOWZ | Holdsworth Sta | 3.42 | 40 | ePn | Pn | 22 33 07.5 | -1.8 | | |
| TMWZ | Te Maipa | 3.44 | 46 | ePn | Pn | 22 33 06.1 | -1.3 | | |
| MSZ | Milford Sound | 3.57 | 250 | AML | AML | 22 32 16.4 | | | |
| MSZ | | | | AML | AML | 22 34 16.5 | | | |
| MSZ | | | | AML | AML | 22 34 16.6 | | | |
| MSZ | | | | AML | AML | 22 34 16.6 | | | |
| MSZ | Milford Sound | 3.57 | 250 | ePn | Pn | 22 33 10.4 | -1.0 | | |
| MRZ | Mangatainoka R | 3.63 | 38 | PN | Pn | 22 33 10.3 | -2.0 | | |
| MRZ | | | | AML | AML | 22 34 04.6 | | | |
| MRZ | | | | AML | AML | 22 34 36.8 | | | |
| MRZ | Mangatainoka R | 3.63 | 38 | ePn | Pn | 22 33 10.3 | -2.0 | | |
| MLZ | Mavora Lakes | 3.66 | 239 | PN | Pn | 22 33 11.3 | -1.4 | | |
| MLZ | | | | AML | AML | 22 34 26.2 | | | |
| MLZ | | | | AML | AML | 22 34 27.9 | | | |
| SYZ | Scrubby Hill | 3.87 | 219 | PN | Pn | 22 33 13.7 | -1.9 | | |
| SYZ | | | | AML | AML | 22 34 32.0 | | | |
| SYZ | | | | AML | AML | 22 34 32.0 | | | |
| SYZ | | | | AML | AML | 22 34 32.1 | | | |
| SYZ | | | | AML | AML | 22 34 32.1 | | | |
| SYZ | Scrubby Hill | 3.87 | 219 | ePn | Pn | 22 33 13.7 | -1.9 | | |
| POWZ | Post Office Ro | 3.94 | 37 | PN | Pn | 22 33 15.2 | -1.3 | | |
| POWZ | Post Office Ro | 3.94 | 37 | ePn | Pn | 22 33 15.2 | -1.3 | | |
| BFZ | Birch Farm | 3.94 | 44 | AML | AML | 22 34 48.9 | | | |
| BFZ | | | | AML | AML | 22 35 03.4 | | | |
| BFZ | | | | AML | AML | 22 35 03.5 | | | |
| BFZ | | | | AML | AML | 22 35 15.1 | | | |
| BFZ | Birch Farm | 3.94 | 44 | ePn | Pn | 22 33 16.2 | -0.3 | | |
| WHZ | Wether Hill Ro | 4.07 | 234 | PN | Pn | 22 33 15.5 | -2.9 | | |
| WHZ | | | | AML | AML | 22 34 35.0 | | | |
| WHZ | | | | AML | AML | 22 34 40.9 | | | |
| WHZ | Wether Hill Ro | 4.07 | 234 | ePn | Pn | 22 33 16.3 | -2.1 | | |
| WAZ | Wanganui | 4.19 | 26 | AML | AML | 22 34 56.2 | | | |
| WAZ | | | | AML | AML | 22 35 06.7 | | | |
| WAZ | Wanganui | 4.19 | 26 | ePn | Pn | 22 33 21.7 | +1.6 | | |
| ANWZ | Angora Road | 4.22 | 44 | PN | Pn | 22 33 19.1 | -1.2 | | |
| NMEZ | Namu Road | 4.25 | 13 | PN | Pn | 22 33 22.6 | +1.8 | | |
| DCZ | Deep Cove | 4.36 | 242 | PN | Pn | 22 33 20.5 | -2.0 | | |
| DCZ | | | | AML | AML | 22 34 43.8 | | | |
| DCZ | | | | AML | AML | 22 34 43.9 | | | |
| DCZ | | | | AML | AML | 22 34 48.6 | | | |
| DCZ | | | | AML | AML | 22 34 48.6 | | | |
| DCZ | Deep Cove | 4.36 | 242 | ePn | Pn | 22 33 20.3 | -2.0 | | |
| PREZ | Palmer Road | 4.37 | 16 | PN | Pn | 22 33 24.3 | +1.8 | | |
| KHEZ | Kahui Hut | 4.39 | 14 | PN | Pn | 22 33 24.4 | +1.6 | | |
| NEZ | North Egmont | 4.43 | 15 | ePn | Pn | 22 33 24.8 | +1.5 | | |
| PKE | Pukeiti | 4.48 | 14 | PN | Pn | 22 33 25.0 | +1.0 | | |
| PKE | | | | AML | AML | 22 34 39.3 | | | |
| PKE | | | | AML | AML | 22 35 12.4 | | | |
| PKE | Pukeiti | 4.48 | 14 | ePn | Pn | 22 33 25.1 | +1.0 | | |
| PNHZ | Pukenui | 4.52 | 37 | ePn | Pn | 22 33 22.7 | -1.8 | | |
| APZ | The Paps | 4.63 | 224 | PN | Pn | 22 33 24.0 | -2.1 | | |
| APZ | | | | AML | AML | 22 34 51.8 | | | |
| APZ | | | | AML | AML | 22 34 52.8 | | | |
| APZ | The Paps | 4.63 | 224 | ePn | Pn | 22 33 24.0 | -2.1 | | |
| VRZ | Vera Road | 4.71 | 20 | AML | AML | 22 35 13.3 | | | |
| VRZ | | | | AML | AML | 22 35 20.8 | | | |
| PKVZ | Pokaka | 4.73 | 26 | AML | AML | 22 35 07.0 | | | |
| PKVZ | | | | AML | AML | 22 35 29.4 | | | |
| PKVZ | Pokaka | 4.73 | 26 | ePn | Pn | 22 33 27.2 | -0.3 | | |
| PXZ | Pawanui | 4.74 | 43 | AML | AML | 22 35 20.1 | | | |
| PXZ | | | | AML | AML | 22 35 57.6 | | | |
| MOVZ | Moawhango | 4.77 | 30 | AML | AML | 22 35 13.0 | | | |
| MOVZ | | | | AML | AML | 22 35 18.4 | | | |
| MOVZ | Moawhango | 4.77 | 30 | ePn | Pn | 22 33 27.2 | -0.8 | | |
| WNVZ | Wahianoa | 4.78 | 29 | PN | Pn | 22 33 28.3 | +0.1 | | |
| WNVZ | Wahianoa | 4.78 | 29 | ePn | Pn | 22 33 28.4 | +0.1 | | |
| TRVZ | Turoa | 4.79 | 28 | ⇑PN | Pn | 22 33 28.4 | -0.1 | | |
| TRVZ | | | | AML | AML | 22 35 11.5 | | | |
| TRVZ | | | | AML | AML | 22 35 18.7 | | | |
| TRVZ | Turoa | 4.79 | 28 | ePn | Pn | 22 33 28.4 | -0.1 | | |
| KRHZ | Kereru | 4.81 | 37 | PN | Pn | 22 33 27.5 | -1.0 | | |
| BHHZ | Black Hill Sta | 4.82 | 33 | PN | Pn | 22 33 27.6 | -1.0 | | |
| BHHZ | Black Hill Sta | 4.82 | 33 | ePn | Pn | 22 33 27.6 | -1.0 | | |
| WHVZ | Whangaehu Hut | 4.82 | 28 | ⇑PN | Pn | 22 33 28.6 | -0.2 | | |
| TUVZ | Tukino | 4.85 | 29 | PN | Pn | 22 33 29.3 | +0.1 | | |
| TUVZ | | | | AML | AML | 22 35 25.0 | | | |
| TUVZ | Tukino | 4.85 | 29 | ePn | Pn | 22 33 29.3 | +0.1 | | |
| WPVZ | Whakapapa | 4.87 | 28 | AML | AML | 22 35 17.7 | | | |
| WPVZ | | | | AML | AML | 22 35 30.2 | | | |
| WPVZ | Whakapapa | 4.87 | 28 | ePn | Pn | 22 33 29.5 | 0.0 | | |
| NGZ | Ngauruhoe | 4.92 | 28 | AML | AML | 22 35 30.1 | | | |
| NGZ | | | | AML | AML | 22 35 46.7 | | | |
| NGZ | Ngauruhoe | 4.92 | 28 | ePn | Pn | 22 33 30.2 | +0.1 | | |
| KAHZ | Kahuranaki | 4.92 | 42 | ePn | Pn | 22 33 28.1 | -2.0 | | |
| OTVZ | Oturere | 4.95 | 28 | AML | AML | 22 35 23.8 | | | |
| OTVZ | | | | AML | AML | 22 35 25.4 | | | |
| TWVZ | Taurewa | 4.96 | 26 | AML | AML | 22 35 19.6 | | | |
| TWVZ | | | | AML | AML | 22 35 26.1 | | | |
| TWVZ | Taurewa | 4.96 | 26 | ePn | Pn | 22 33 30.6 | 0.0 | | |
| WTVZ | West Tongariro | 4.97 | 28 | AML | AML | 22 35 21.2 | | | |
| WTVZ | | | | AML | AML | 22 35 28.8 | | | |
| WTVZ | West Tongariro | 4.97 | 28 | ePn | Pn | 22 33 30.2 | -0.5 | | |
| KRVZ | Karewarewa | 5.00 | 28 | AML | AML | 22 35 32.9 | | | |
| KRVZ | | | | AML | AML | 22 35 42.9 | | | |
| KRVZ | Karewarewa | 5.00 | 28 | ePn | Pn | 22 33 31.9 | +0.6 | | |
| CKHZ | Cape Kidnapper | 5.13 | 42 | ePn | Pn | 22 33 31.4 | -1.4 | | |
| BKZ | Black Stump Fm | 5.26 | 35 | AML | AML | 22 35 40.1 | | | |
| BKZ | | | | AML | AML | 22 35 49.1 | | | |
| BKZ | Black Stump Fm | 5.26 | 35 | ePn | Pn | 22 33 34.4 | -0.4 | | |
| HIZ | Hauiti | 5.32 | 19 | AML | AML | 22 35 30.1 | | | |
| HIZ | | | | AML | AML | 22 35 44.5 | | | |
| HIZ | Hauiti | 5.32 | 19 | ePn | Pn | 22 33 37.4 | +1.9 | | |
| KNZ | Kokohu | 5.91 | 42 | AML | AML | 22 36 25.1 | | | |
| KNZ | | | | AML | AML | 22 36 25.4 | | | |
| KNZ | Kokohu | 5.91 | 42 | ePn | Pn | 22 33 41.5 | -2.2 | | |
| MHGZ | Mahia Peninsul | 5.93 | 44 | ePn | Pn | 22 33 42.7 | -1.1 | | |
| PRGZ | Paritu Road | 6.09 | 42 | ePn | Pn | 22 33 43.4 | -2.7 | | |
| TOZ | Tahuroa Road | 6.22 | 21 | AML | AML | 22 35 55.7 | | | |
| TOZ | | | | AML | AML | 22 36 04.6 | | | |
| TOZ | Tahuroa Road | 6.22 | 21 | ePn | Pn | 22 33 46.8 | -1.0 | | |
| URZ | Urewera | 6.29 | 34 | Pn | Pn | 22 33 46.1 | -2.7 | | |
| | 4.2nm,0.3s,baz=232,slow=4.5,SNR=16 | | | | | | | | |
| URZ | | | | Sn | Sn | 22 34 55.4 | -5.3 | | |
| | 15nm,0.3s,baz=102,slow=18,SNR=6.6 | | | | | | | | |
| URZ | Urewera | 6.29 | 34 | ePn | Pn | 22 33 46.8 | -2.0 | | |
| URZ | | | | eSn | Sn | 22 34 55.4 | -5.3 | | |
| MWZ | Matawai | 6.40 | 37 | AML | AML | 22 35 08.5 | | | |
| MWZ | | | | AML | AML | 22 36 15.2 | | | |
| MWZ | Matawai | 6.40 | 37 | ePn | Pn | 22 33 47.5 | -2.9 | | |
| MKAZ | Moumakai | 6.73 | 18 | AML | AML | 22 34 31.3 | | | |
| MKAZ | | | | AML | AML | 22 34 40.5 | | | |
| MKAZ | Moumakai | 6.73 | 18 | ePn | Pn | 22 33 54.2 | -0.6 | | |
| KUZ | Kuaotunu | 7.21 | 20 | AML | AML | 22 34 41.3 | | | |
| KUZ | | | | AML | AML | 22 35 49.9 | | | |
| KUZ | Kuaotunu | 7.21 | 20 | ePn | Pn | 22 34 02.0 | +0.6 | | |
| OUZ | Omahuta | 8.37 | 5 | ePn | Pn | 22 34 17.9 | +0.6 | | |
| RAO | Raoul Island | 16.16 | 31 | LR | LR | 22 42 06.1 | | | |
| | comp=Z,662nm,18.9s,baz=172,slow=37 | | | | | | | | |
| DZM | Mont Dzumac | 22.05 | 345 | eLR | LR | 22 42 35.4 | | | |
| | 379nm,24.1s | | | | | | | | |
| DZM | Mont Dzumac | 22.05 | 345 | LR | LR | 22 44 53.3 | | | |
| | comp=Z,628nm,18.3s,baz=236,slow=35 | | | | | | | | |
| VNDA | Vanda | 34.35 | 184 | P | P | 22 39 04.4 | +2.0 | | |
| | 0.9nm,0.9s,baz=0.5,slow=11,SNR=4.0 | | | | | | | | |
| VNDA | | | | LR | LR | 22 52 02.1 | | | |
| | comp=Z,255nm,18.6s,baz=23,slow=34 | | | | | | | | |
| TBI | Tubuai | 37.08 | 69 | eLQ | LQ | 22 47 42.0 | | | |
| | 233nm,25.5s | | | | | | | | |
| TBI | | | | eLR | LR | 22 49 12.2 | | | |
| | 166nm,29.8s | | | | | | | | |
| TBI | Tubuai | 37.08 | 69 | eT | T | 23 17 58.9 | | | |
| | 26nm,0.3s | | | | | | | | |
| AS01 | Alice Springs | 37.41 | 289 | eP | P | 22 39 28.5 | -0.8 | | |
| AS12 | Alice Springs | 37.44 | 289 | eP | P | 22 39 27.9 | -1.7 | | |
| ASAR | Alice Springs | 37.44 | 289 | P | P | 22 39 27.9 | -1.7 | | |
| | 15nm,0.9s,baz=131,slow=8.6,SNR=80 | | | | | | | | |
| ASAR | | | | LR | LR | 22 53 50.3 | | | |
| | comp=Z,388nm,21.0s,baz=132,slow=35 | | | | | | | | |
| WRAB | Tennant Creek | 39.69 | 294 | eP | P | 22 39 46.8 | -1.7 | | |
| | 13nm,0.7s | | | | | | | | |
| WRA | Warramunga Arr | 39.69 | 294 | P | P | 22 39 48.4 | -0.1 | | |
| | 13nm,0.9s,baz=134,slow=7.8,SNR=48 | | | | | | | | |
| WRA | | | | LR | LR | 22 55 29.9 | | | |
| | comp=Z,575nm,19.7s,baz=130,slow=35 | | | | | | | | |
| PAE | Paea | 40.99 | 63 | eT | T | 23 22 53.6 | | | |
| | 12nm,0.3s | | | | | | | | |
| PPT2 | Papeete2 | 41.04 | 63 | eLR | LR | 22 51 03.5 | | | |
| | 164nm,25.5s | | | | | | | | |
| PPT | Papeete | 41.06 | 63 | LR | LR | 22 56 27.6 | | | |
| | comp=Z,99nm,18.4s,baz=190,slow=35 | | | | | | | | |
| TVO | Taravao | 41.11 | 63 | eT | T | 23 23 03.0 | | | |
| | 3.3nm,0.3s | | | | | | | | |
| VAH | Vaihoa | 44.03 | 63 | eT | T | 23 26 41.4 | | | |
| | 7.2nm,0.2s | | | | | | | | |
| PMOR | Pomariorio Ree | 44.03 | 62 | eT | T | 23 26 42.2 | | | |
| | 4.7nm,0.3s | | | | | | | | |
| QSPA | South Pole Qui | 46.56 | 180 | P | P | 22 40 46.3 | +2.6 | | |
| | 21nm,0.9s,baz=29,slow=2.4,SNR=47 | | | | | | | | |
| RKT | Rikitea | 47.42 | 82 | eLR | LR | 22 54 01.3 | | | |
| | 309nm,24.2s | | | | | | | | |
| SIJI | Sorong | 56.24 | 307 | P | P | 22 41 56.6 | 0.0 | | |
| | 8.7nm,0.7s,baz=338,slow=2.3,SNR=5.7 | | | | | | | | |
| MAW | Mawson | 57.31 | 205 | P | P | 22 42 04.7 | +1.3 | | |
| | 3.1nm,0.9s,baz=108,slow=4.2,SNR=7.1 | | | | | | | | |
| MAW | | | | LR | LR | 23 06 11.1 | | | |
| | comp=Z,256nm,18.0s,baz=68,slow=36 | | | | | | | | |
| MAW | Mawson | 57.31 | 205 | eP | P | 22 42 05.8 | +2.3 | | |
| SNAA | Sanae | 65.03 | 182 | P | P | 22 42 57.6 | +1.7 | | |
| SNAA | Sanae | 65.03 | 182 | eP | P | 22 42 57.7 | +1.8 | | |
| | 5.3nm,1.4s | | | | | | | | |
| VNA3 | Neumayer Olymp | 65.49 | 179 | P | P | 22 43 00.5 | +1.7 | | |
| VNA2 | Neumayer--Watz | 65.82 | 180 | P | P | 22 43 03.0 | +2.1 | | |
| | baz=170,slow=5.8 | | | | | | | | |
| VNA1 | Neumayer--Stat | 66.09 | 180 | P | P | 22 43 05.1 | +2.5 | | |
| VNA1 | Neumayer--Stat | 66.09 | 180 | P | P | 22 43 05.3 | +2.6 | | |
| GSI | Gunungsitoli | 80.11 | 281 | eP | P | 22 44 28.5 | +2.0 | | |
| | 14nm,0.8s | | | | | | | | |
| NJ2 | Nanjing | 89.89 | 317 | eP | P | 22 45 14.3 | -0.7 | | |
| NJ2 | | | | PMZ | | | | | |
| | 40nm,1.0s | | | | | | | | |
| KSRS | Korea Array | 90.28 | 326 | P | P | 22 45 18.0 | +1.4 | | |
| | 0.9nm,0.6s,baz=154,slow=5.6,SNR=4.5 | | | | | | | | |
| KS15 | Wonju Array Si | 90.28 | 326 | eP | P | 22 45 18.0 | +1.4 | | |
| KSAR | Wonju Array Be | 90.28 | 326 | P | P | 22 45 18.0 | +1.4 | | |
| CM31 | Chiang Mai Arr | 91.28 | 294 | eP | P | 22 45 22.6 | +0.8 | | |
| CMAR | Chiang Mai Arr | 91.28 | 294 | P | P | 22 45 22.6 | +0.8 | | |
| | 1.6nm,0.9s,baz=150,slow=3.4,SNR=10 | | | | | | | | |
| CMAR | | | | LR | LR | 23 27 41.5 | | | |
| | comp=Z,63nm,21.6s,baz=160,slow=36 | | | | | | | | |
| KMI | Kunming | 93.64 | 301 | P | P | 22 45 32.0 | -0.9 | | |
| KMI | | | | PMZ | | | | | |
| | 3.0nm,1.1s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | 170nm,4.3s | | | | | | | | |
| USRK | Ussuriysk Ar. | 94.62 | 332 | LR | LR | 23 27 30.1 | | | |
| | comp=Z,32nm,18.4s,baz=138,slow=35 | | | | | | | | |
| CPUP | Villa Florida | 96.70 | 136 | LR | LR | 23 23 26.7 | | | |
| | comp=Z,107nm,19.4s,baz=208,slow=32 | | | | | | | | |
| CD2 | Chengdu | 97.23 | 306 | eP | P | 22 45 47.5 | -1.4 | | |
| CD2 | | | | PMZ | | | | | |
| | 10.0nm,0.5s | | | | | | | | |
| LPAZ | La Paz | 98.60 | 122 | LR | LR | 23 20 39.5 | | | |
| | comp=Z,85nm,20.7s,baz=176,slow=29 | | | | | | | | |
| HHC | Hu-ho-hao-te | 100.41 | 318 | eP | Pdif | 22 46 02.5 | -0.5 | | |
| HHC | | | | PP | PP | 22 50 13.0 | +3.0 | | |
| HHC | | | | SKS | SKSac | 22 56 39.0 | -2.7 | | |
| HHC | | | | S | Sdif | 22 57 37.5 | -1.6 | | |
| HHC | | | | sS | sS | 22 57 46.3 | +1.9 | | |
| HHC | | | | PMZ | | | | | |
| | 17nm,1.2s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | 190nm,3.0s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | 300nm,19.9s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | 260nm,19.9s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | 220nm,18.7s | | | | | | | | |
| ILAR | Eielson Array | 112.55 | 18 | PKKPbc | PKKPbc | 23 01 49.1 | +7.6 | | |
| | 0.6nm,0.9s,baz=5.7,slow=3.9,SNR=5.4 | | | | | | | | |
| WMQ | Urumqi | 115.31 | 307 | ePKP | PKPdf | 22 50 56.0 | -1.4 | | |
| KSH | Kashi | 120.03 | 297 | ePKP | PKPdf | 22 51 07.8 | +1.1 | | |
| KSH | | | | PPMZ | | | | | |
| | 57nm,4.0s | | | | | | | | |
| MK32 | Makanchi Array | 120.14 | 307 | ePKPdf | PKPdf | 22 51 05.4 | -1.1 | | |
| MKAR | Makanchi Array | 120.14 | 307 | PKP | PKPdf | 22 51 05.4 | -1.1 | | |
| | 0.3nm,0.4s,baz=68,slow=2.6,SNR=3.5 | | | | | | | | |
| KKAR | Karatay Array | 125.41 | 299 | ePKPdf | PKPdf | 22 51 18.1 | +1.3 | | |
| DBIC | Dimbokro | 143.19 | 184 | PKP | PKPdf | 22 51 49.4 | -1.4 | | |
| | 1.9nm,0.7s,baz=155,slow=8.0,SNR=4.1 | | | | | | | | |
| TOA0 | Torodi Ar. Sit | 148.70 | 197 | ePKPbc | PKPbc | 22 52 03.6 | -0.2 | | |
| TORD | Torodi Ar. Bea | 148.70 | 197 | PKPbc | PKPbc | 22 52 03.6 | -0.2 | | |
| | 3.4nm,0.9s,baz=160,slow=0.7,SNR=18 | | | | | | | | |
| ARA0 | ARCESS Array S | 149.05 | 338 | ePKPbc | PKPbc | 22 52 03.5 | +0.4 | | |
| ARCES | ARCESS Array B | 149.05 | 338 | PKPbc | PKPbc | 22 52 03.5 | +0.4 | | |
| | 5.1nm,0.7s,baz=66,slow=2.9,SNR=14 | | | | | | | | |
| BR101 | Keskin Array S | 149.34 | 277 | ePKPbc | PKPbc | 22 52 04.7 | -0.3 | | |
| BRTR | Keskin Array B | 149.34 | 277 | PKPbc | PKPbc | 22 52 04.7 | -0.3 | | |
| | 5.3nm,0.6s,baz=137,slow=5.1,SNR=34 | | | | | | | | |
| BR231 | Keskin MP Arra | 150.01 | 277 | ePKPbc | PKPbc | 22 52 05.7 | -0.8 | | |
| FIA0 | FINESS Array S | 153.35 | 324 | ePKPbc | PKPbc | 22 52 12.4 | -0.9 | | |
| FINES | FINESS Array B | 153.35 | 324 | PKPbc | PKPbc | 22 52 12.4 | -0.9 | | |
| | 2.6nm,0.7s,baz=80,slow=2.1,SNR=7.1 | | | | | | | | |
| AKASG | Malin Array Be | 154.31 | 299 | PKPbc | PKPbc | 22 52 15.4 | -0.3 | | |
| | 0.3nm,0.3s,baz=79,slow=2.1,SNR=4.4 | | | | | | | | |
| AKBB | Malin Array Si | 154.31 | 299 | ePKPbc | PKPbc | 22 52 15.4 | -0.3 | | |
| GEC2 | GERESS Array S | 164.51 | 297 | ePKPab | PKPab | 22 53 15.4 | +0.9 | | |
| GERES | GERESS Array B | 164.51 | 297 | PKPab | PKPab | 22 53 15.4 | +0.9 | | |
| | 0.5nm,0.8s,baz=113,slow=3.5,SNR=3.7 | | | | | | | | |

**WEL 18 22:41:17.4±0.4, 43°.68S×172°.53E, h5km, ML3.7/16, Error ellipse: s-maj=2.6km s-min=2.4km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CRLZ | Canterbury Las | 0.12 | 33 | PG | Pg | 22 41 20.2 | +0.5 |
| CRLZ | | | | SG | Sg | 22 41 21.5 | +0.1 |
| CRLZ | | | | AML | AML | 22 41 21.7 | |
| OXZ | Oxford | 0.50 | 314 | PG | Pg | 22 41 25.3 | -1.7 |
| OXZ | | | | SG | Sg | 22 41 34.7 | +1.1 |
| LTZ | Lake Taylor | 0.91 | 348 | P* | Pg | 22 41 35.3 | +0.4 |
| LTZ | | | | S* | Sg | 22 41 47.2 | +0.3 |
| LTZ | | | | AML | AML | 22 41 47.8 | |
| RPZ | Rata Peaks | 1.07 | 267 | P* | Pg | 22 41 35.9 | -2.1 |
| RPZ | | | | AML | AML | 22 42 00.6 | |
| RPZ | | | | AML | AML | 22 42 05.2 | |
| WVZ | Waitaha Valley | 1.44 | 294 | PN | Pn | 22 41 43.4 | -0.7 |
| WVZ | | | | AML | AML | 22 42 08.3 | |
| WVZ | | | | AML | AML | 22 42 08.7 | |
| KHZ | Kahutara | 1.46 | 31 | PN | Pn | 22 41 42.9 | -1.4 |
| KHZ | | | | AML | AML | 22 41 48.6 | |
| KHZ | | | | AML | AML | 22 42 03.7 | |
| ODZ | Otahua Downs | 1.93 | 224 | PN | Pn | 22 41 51.7 | +0.9 |
| ODZ | | | | AML | AML | 22 42 25.4 | |
| ODZ | | | | AML | AML | 22 42 25.4 | |
| ODZ | | | | AML | AML | 22 42 25.7 | |
| ODZ | | | | AML | AML | 22 42 25.7 | |
| THZ | Tophouse | 1.93 | 8 | PN | Pn | 22 41 48.9 | -2.0 |
| THZ | | | | AML | AML | 22 42 26.4 | |
| THZ | | | | AML | AML | 22 42 29.1 | |
| DSZ | Denniston Nort | 2.00 | 344 | PN | Pn | 22 41 51.0 | -0.9 |
| DSZ | | | | AML | AML | 22 42 24.6 | |
| DSZ | | | | AML | AML | 22 42 25.1 | |
| DSZ | | | | AML | AML | 22 42 25.7 | |
| DSZ | | | | AML | AML | 22 42 25.7 | |
| FOZ | Fox Glacier | 2.07 | 272 | PN | Pn | 22 41 50.4 | -2.3 |
| FOZ | | | | AML | AML | 22 42 28.1 | |
| FOZ | | | | AML | AML | 22 42 29.1 | |
| BSWZ | Blackbirch Sta | 2.20 | 27 | PN | Pn | 22 41 53.2 | -1.3 |
| BSWZ | | | | AML | AML | 22 42 23.6 | |
| BSWZ | | | | AML | AML | 22 42 38.5 | |
| NNZ | Nelson | 2.54 | 15 | PN | Pn | 22 41 58.2 | -0.9 |
| WKZ | Wanaka | 2.78 | 244 | AML | AML | 22 42 57.3 | |
| WKZ | | | | AML | AML | 22 42 58.3 | |
| EAZ | Earnscleugh | 2.79 | 235 | PN | Pn | 22 42 03.4 | +0.9 |
| EAZ | | | | AML | AML | 22 42 52.8 | |
| EAZ | | | | AML | AML | 22 42 53.1 | |
| QRZ | Quartz Range | 2.85 | 360 | PN | Pn | 22 42 02.5 | -0.9 |
| QRZ | | | | AML | AML | 22 42 12.4 | |
| QRZ | | | | AML | AML | 22 42 53.7 | |
| TUZ | Tuapeka | 3.08 | 221 | PN | Pn | 22 42 05.4 | -1.1 |
| TUZ | | | | AML | AML | 22 43 06.7 | |
| TUZ | | | | AML | AML | 22 43 16.1 | |
| CAW | Cannon Point | 3.18 | 37 | PN | Pn | 22 42 06.4 | -1.7 |
| SYZ | Scrubby Hill | 3.74 | 219 | PN | Pn | 22 42 14.7 | -0.9 |
| SYZ | | | | AML | AML | 22 43 28.9 | |
| SYZ | | | | AML | AML | 22 43 32.0 | |
| MRZ | Mangatainoka R | 3.77 | 38 | PN | Pn | 22 42 14.0 | -2.1 |
| MRZ | | | | AML | AML | 22 42 57.9 | |
| MRZ | | | | AML | AML | 22 43 00.0 | |

*IDC* ***18*** *22:53:22.9±0.9, 22°.21S×169°.95E, h0km, mb4.1/9, mb1 4.3/11, mb1mx4.2/22, mbtmp4.2/11, ML4.3/2, MS3.7/6, Ms1 3.7/6, ms1mx3.4/22, Error ellipse: s-maj=24.3km s-min=23.0km az=76.0*

*ISCJB* ***18*** *22:53:24.6±0.5, 22°.23S±0°.09×170°.03E±0°.06, h25km, mb4.2/12, MS3.8/4, Error ellipse: s-maj=12.9km s-min=8.6km az=2.5*

*NEIC* ***18*** *22:53:27.5±3.0, 22°.23S×169°.94E, h31km, 21km, mb4.6/

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **UPC** | **Upice** | **145.23** | **331** | *e*PKP | **PKPdf** | **23 13 01.3** | **-0.4** |
| UPC | | | | *ex* | x | 23 13 06.4 | |
| **PVCC** | **Panska Ves** | **145.86** | **332** | *e*PKP | **PKPab** | **23 13 03.4** | **-0.4** |
| PVCC | | | | *ep*PKP | **pPKPdf** | **23 13 10.2** | **-1.0** |
| **BRG** | **Berggiesshubel** 19nm,1.2s | **145.88** | **333** | *e*(P) | **PKPbc** | **23 13 02.7** | **-0.8** |
| **CLL** | **Collm** comp=Z,13nm,1.1s | **145.94** | **334** | *i* PKPbc | **PKPbc** | **23 13 03.1** | **-0.5** |
| CLL | | | | *i* PKiKP | **PKiKP** | **23 13 05.9** | **-1.1** |
| CLL | | | | *i* (pPKPbc) | | 23 13 10.3 | |
| **PRU** | **Pruhonice** | **146.26** | **331** | *e*PKP | **PKPab** | **23 13 04.7** | **-0.7** |
| **NKC** | **Novy Kostel** | **146.99** | **333** | *e*PKP | **PKPab** | **23 13 07.2** | **-1.0** |
| NKC | | | | *ep*PKP | **pPKPdf** | **23 13 13.4** | **+0.2** |
| **KHC** | **Kasperske Hory** | **147.32** | **331** | *e*PKP | **PKPab** | **23 13 08.2** | **-1.4** |
| KHC | | | | *ep*PKP | **pPKPdf** | **23 13 13.4** | **-0.4** |
| **GERES** | **GERESS Array B** comp=Z,1.4nm,0.8s,baz=42,slow=4.2,SNR=9.6 | **147.47** | **330** | PKPbc | **PKPbc** | **23 13 08.7** | **+0.4** |

*DDA* ***18*** *23:06:11.6, 36°.88N×32°.17E, h7km, Md2.6*
*ISCJB* ***18*** *23:06:14.0±0.8, 36°.81N±0°.04×32°.21E±0°.05, h8km±7km, Error ellipse: s-maj=7.3km s-min=6.5km az=154.8*
*CSEM* ***18*** *23:06:14.2±0.3, 36°.81N×32°.21E, h10km, MD2.6, Error ellipse: s-maj=6.9km s-min=5.6km az=60.0*
*ISK* ***18*** *23:06:14.9, 36°.90N×32°.21E, h8km, MD2.6*
**ISC 18 23:06:14.7±1.0, 36°.80N±0°.03×32°.25E±0°.04, h14km±8km, n15, σ0s77/26, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HDMB** | **Hadim** | **0.25** | **49** | *e*PG | **Pg** | **23 06 20.4** | **+0.2** |
| HDMB | | | | *e*SG | **Sg** | **23 06 23.6** | **-0.4** |
| **HDMB** | **Hadim** | **0.25** | **49** | *e*Pg | **Pg** | **23 06 20.4** | **+0.2** |
| HDMB | | | | *e*Sg | **Sg** | **23 06 23.6** | **-0.4** |
| **ERMK** | **Ermenek** | **0.56** | **106** | *i* P | **Pg** | **23 06 24.4** | **-1.2** |
| ERMK | | | | *i* S | **Sg** | **23 06 33.2** | **+0.1** |
| **ERMK** | **Ermenek** | **0.56** | **106** | P | **Pg** | **23 06 24.4** | **-1.2** |
| ERMK | | | | S | **Sg** | **23 06 33.2** | **+0.1** |
| **GAZI** | **Gazipasa** | **0.56** | **175** | *i* P | **Pg** | **23 06 26.0** | **+0.2** |
| GAZI | | | | *i* S | **Sg** | **23 06 34.1** | **+0.8** |
| **GAZI** | **Gazipasa** | **0.56** | **175** | P | **Pg** | **23 06 26.0** | **+0.2** |
| GAZI | | | | S | **Sg** | **23 06 34.1** | **+0.8** |
| **KONT** | **Konya--Tatoy** | **1.15** | **4** | *e*PG | **Pb** | **23 06 36.0** | **-0.3** |
| **KONT** | **Konya--Tatoy** | **1.15** | **4** | *e*Pg | **Pb** | **23 06 36.0** | **-0.3** |
| **SUTC** | **Sutluce-Ispart** | **1.21** | **304** | *e*PN | **Pn** | **23 06 36.4** | **-0.8** |
| SUTC | | | | *e*SN | **Sn** | **23 06 52.8** | **-0.7** |
| **SUTC** | **Sutluce-Ispart** | **1.21** | **304** | *e*Pn | **Pn** | **23 06 36.4** | **-0.8** |
| SUTC | | | | *e*Sn | **Sn** | **23 06 52.8** | **-0.7** |
| **YESY** | **Yesilyurt** | **1.54** | **50** | *e*PN | **Pb** | **23 06 43.0** | **-0.1** |
| **YESY** | **Yesilyurt** | **1.54** | **50** | *e*Pn | **Pb** | **23 06 43.0** | **-0.1** |
| **KIZK** | **Mersin** | **1.56** | **101** | *i* P | **Pn** | **23 06 43.0** | **+1.0** |
| KIZK | | | | *i* S | **Sb** | **23 07 03.0** | **+0.2** |
| **KIZK** | **Mersin** | **1.56** | **101** | P | **Pn** | **23 06 43.0** | **+1.0** |
| KIZK | | | | S | **Sb** | **23 07 03.0** | **+0.2** |
| **KDHN** | **Kadinhani** | **1.72** | **357** | P | **Pg** | **23 06 49.5** | **+1.7** |
| KDHN | | | | S | **Sg** | **23 07 10.7** | **+0.5** |

**WEL 18 23:11:41.3±0.1, 43°.57S×171°.95E, h2km, ML3.7/16, 5C-5D, Error ellipse: s-maj=0.5km s-min=0.4km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OXZ** | **Oxford** | **0.25** | **15** | ⇓PG | Pg | 23 11 46.2 | +0.1 |
| OXZ | | | | SG | Sg | 23 11 49.6 | +0.3 |
| **CRLZ** | **Canterbury Las** | **0.48** | **92** | ⇑PG | Pg | 23 11 51.3 | +0.7 |
| CRLZ | | | | *e*SG | Sg | 23 11 57.8 | +0.9 |
| CRLZ | | | | AML | AML | 23 11 59.8 | |
| **MQZ** | **McQueen's Vall** | **0.53** | **106** | PG | Pg | 23 11 51.9 | +0.4 |
| MQZ | | | | SG | Sg | 23 11 59.2 | +1.0 |
| MQZ | | | | AML | AML | 23 12 02.5 | |
| **RPZ** | **Rata Peaks** | **0.67** | **257** | ⇑PG | Pg | 23 11 54.8 | +0.5 |
| RPZ | | | | *e*SG | Sg | 23 12 04.0 | +1.0 |
| RPZ | | | | AML | AML | 23 12 07.7 | |
| **LTZ** | **Lake Taylor** | **0.81** | **17** | ⇓P* | Pg | 23 11 57.3 | +0.3 |
| LTZ | | | | SG | Sg | 23 12 08.7 | +1.0 |
| LTZ | | | | AML | AML | 23 12 09.9 | |
| **WVZ** | **Waitaha Valley** | **1.01** | **298** | ⇓P* | Pg | 23 12 00.9 | +0.2 |
| WVZ | | | | AML | AML | 23 12 16.7 | |
| WVZ | | | | AML | AML | 23 12 17.0 | |
| **LBZ** | **Lake Benmore** | **1.52** | **237** | ⇑PN | Pn | 23 12 08.2 | -1.4 |
| LBZ | | | | AML | AML | 23 12 34.5 | |
| LBZ | | | | AML | AML | 23 12 36.5 | |
| LBZ | | | | AML | AML | 23 12 37.5 | |
| LBZ | | | | AML | AML | 23 12 37.8 | |
| **KHZ** | **Kahutara** | **1.63** | **46** | ⇑PN | Pn | 23 12 09.0 | -2.0 |
| **FOZ** | **Fox Glacier** | **1.65** | **269** | PN | Pn | 23 12 10.0 | -1.2 |
| FOZ | | | | AML | AML | 23 12 32.0 | |
| FOZ | | | | AML | AML | 23 12 32.1 | |
| FOZ | | | | AML | AML | 23 12 37.9 | |
| FOZ | | | | AML | AML | 23 12 37.9 | |
| **ODZ** | **Otahua Downs** | **1.75** | **212** | ⇑PN | Pn | 23 12 10.9 | -1.8 |
| ODZ | | | | AML | AML | 23 12 39.4 | |
| ODZ | | | | AML | AML | 23 12 39.4 | |
| ODZ | | | | AML | AML | 23 12 42.3 | |
| ODZ | | | | AML | AML | 23 12 44.2 | |
| **DSZ** | **Denniston Nort** | **1.82** | **356** | AML | AML | 23 12 43.5 | |
| DSZ | | | | AML | AML | 23 12 43.7 | |
| DSZ | | | | AML | AML | 23 12 44.1 | |
| DSZ | | | | AML | AML | 23 12 45.0 | |
| **THZ** | **Tophouse** | **1.93** | **22** | ⇓PN | Pn | 23 12 13.5 | -1.8 |
| THZ | | | | AML | AML | 23 12 43.2 | |
| THZ | | | | AML | AML | 23 12 52.2 | |
| **BSWZ** | **Blackbirch Sta** | **2.33** | **38** | PN | Pn | 23 12 19.5 | -1.2 |
| **JCZ** | **Jackson Bay** | **2.37** | **256** | AML | AML | 23 13 02.8 | |
| JCZ | | | | AML | AML | 23 13 09.3 | |
| **WKZ** | **Wanaka** | **2.46** | **238** | PN | Pn | 23 12 20.9 | -1.6 |
| WKZ | | | | AML | AML | 23 13 09.1 | |
| WKZ | | | | AML | AML | 23 13 09.1 | |
| WKZ | | | | AML | AML | 23 13 10.5 | |
| **EAZ** | **Earnscleugh** | **2.52** | **228** | PN | Pn | 23 12 21.6 | -1.8 |
| EAZ | | | | AML | AML | 23 13 07.0 | |
| EAZ | | | | AML | AML | 23 13 09.1 | |
| EAZ | | | | AML | AML | 23 13 09.2 | |
| EAZ | | | | AML | AML | 23 13 17.2 | |
| **NNZ** | **Nelson** | **2.57** | **25** | PN | Pn | 23 12 23.4 | -0.6 |
| **QRZ** | **Quartz Range** | **2.77** | **9** | PN | Pn | 23 12 25.0 | -1.7 |
| QRZ | | | | AML | AML | 23 12 35.9 | |
| QRZ | | | | AML | AML | 23 12 35.9 | |
| QRZ | | | | AML | AML | 23 12 58.6 | |
| QRZ | | | | AML | AML | 23 13 18.6 | |
| **TUZ** | **Tuapeka** | **2.91** | **214** | PN | Pn | 23 12 27.0 | -1.6 |
| TUZ | | | | AML | AML | 23 13 19.0 | |
| TUZ | | | | AML | AML | 23 13 19.0 | |
| TUZ | | | | AML | AML | 23 13 20.2 | |
| TUZ | | | | AML | AML | 23 13 20.3 | |
| **MLZ** | **Mavora Lakes** | **3.24** | **235** | PN | Pn | 23 12 31.5 | -1.7 |
| **SYZ** | **Scrubby Hill** | **3.58** | **213** | ⇓PN | Pn | 23 12 36.3 | -1.5 |
| SYZ | | | | AML | AML | 23 13 41.2 | |
| SYZ | | | | AML | AML | 23 13 45.4 | |
| **WHZ** | **Wether Hill Ro** | **3.69** | **229** | PN | Pn | 23 12 36.2 | -3.1 |
| **APZ** | **The Paps** | **4.30** | **219** | PN | Pn | 23 12 45.7 | -2.2 |

*MOS* ***18*** *23:13:11.6±0.8, 3°.26S×101°.70E, h40km, mb5.1/18, Error ellipse: s-maj=16.2km s-min=7.4km az=113.5*
*BJI* ***18*** *23:13:14.1, 3°.60S×101°.40E, h62km, mb4.9/24, mB5.2/20, Ms4.8/15, Ms7 4.5/14*
*AUST* ***18*** *23:13:14.8±0.8, 3°.59S×101°.41E, h63km, Error ellipse: s-maj=1.8km s-min=0.6km az=232.0*
*ISCJB* ***18*** *23:13:15.4±0.4, 3°.36S±0°.04×101°.61E±0°.03, h78km±3km, mb4.6/39, Error ellipse: s-maj=7.7km s-min=3.2km az=43.3*
*KLM* ***18*** *23:13:15.1, 3°.53S×101°.55E, h70km, mb4.6, MS5.2*
*DJA* ***18*** *23:13:16.6±0.2, 3°.5±3°×10°.2E±°, h46km±10km, M4.6/14, mb4.8/9, mB5.1/5, MLv4.6/14, Mw(mB)4.5/5*
*IDC* ***18*** *23:13:16.8±0.9, 3°.30S×101°.75E, h73km±6km, mb4.1/17, mb1 4.2/19, mb1mx4.1/31, mbtmp4.4/19, MS3.7/2, Ms1 3.7/2, ms1mx2.9/35, Error ellipse: s-maj=22.1km s-min=10.8km az=48.0*
*NEIC* ***18*** *23:13:16.3±0.3, 3°.35S×101°.64E, mb4.9/11, Error ellipse: s-maj=7.8km s-min=3.8km az=48.0*
*NEIC Felt [III] at Ketaun.*
**ISC 18 23:13:15.9±0.5, 3°.53S±0°.04×101°.51E±0°.04, h67km±3km, h67km:pP-P, n165, σ1s68/192, mb4.7/39, 12C-3D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSI** | **Kapahiang** | **1.09** | **97** | P | **Pn** | **23 13 35.2** | **-0.3** |
| KSI | | | | S | **Sn** | **23 13 48.5** | **-1.6** |
| **MNAI** | **Manna** baz=1.7,SNR=95 | **1.67** | **120** | P | **Pn** | **23 13 42.9** | **-0.1** |
| **MNAI** | **Manna** | **1.67** | **120** | P | **Pn** | **23 13 43.4** | **+0.4** |
| MNAI | | | | S | **Sn** | **23 14 05.1** | **+1.6** |
| **MNAI** | **Manna** | **1.67** | **120** | *e*Pn | **Pn** | **23 13 43.1** | **+0.1** |
| MNAI | | | | *e*Sn | **Sn** | **23 14 04.1** | **+0.6** |
| **PPSI** | **Pulau Pagai** | **1.68** | **297** | P | **Pn** | **23 13 43.8** | **+0.7** |
| PPSI | | | | S | **Sn** | **23 14 04.7** | **+0.9** |
| **SDSI** | **Sungai Dareh** | **2.58** | **358** | P | **Pn** | **23 13 53.6** | **-1.8** |
| SDSI | | | | S | **Sn** | **23 14 23.3** | **-2.3** |
| **MDSI** | **Maura Dua** | **2.83** | **110** | P | **Pn** | **23 13 59.8** | **+1.0** |
| MDSI | | | | S | **Sn** | **23 14 32.3** | **+0.5** |
| **LWLI** | **Liwa** | **2.94** | **120** | P | **Pn** | **23 14 02.3** | **+1.9** |
| LWLI | | | | S | **Sn** | **23 14 36.1** | **+1.4** |
| **PPI** | **Padang Panjang** baz=3.3,SNR=14 | **3.25** | **340** | P | **Pn** | **23 14 04.7** | **+0.3** |
| **PPI** | **Padang Panjang** | **3.25** | **340** | P | **Pn** | **23 14 04.3** | **-0.1** |
| PPI | | | | S | **Sn** | **23 14 40.8** | **-1.1** |
| **SISI** | **Saibi** | **3.26** | **312** | P | **Pn** | **23 14 04.7** | **+0.1** |
| SISI | | | | S | **Sn** | **23 14 42.7** | **+0.5** |
| **KASI** | **Kota Agung** | **3.58** | **124** | P | **Pn** | **23 14 10.1** | **+1.1** |
| **BKNI** | **Bangkinang** baz=3.9,SNR=9.1 | **3.86** | **353** | P | **Pn** | **23 14 12.4** | **-0.4** |
| **BKNI** | **Bangkinang** | **3.86** | **353** | P | **Pn** | **23 14 12.2** | **-0.6** |
| **BKNI** | **Bangkinang** | **3.86** | **353** | *e*Pn | **Pn** | **23 14 12.4** | **-0.4** |
| **MNSI** | **Mandailing Nat** | **4.71** | **336** | P | **Pn** | **23 14 23.3** | **-1.1** |
| **PPBI** | **Pangkal Pinang** | **4.82** | **74** | P | **Pn** | **23 14 24.4** | **-1.6** |
| **CGJI** | **Cibinong** 57nm,0.8s,2μm | **5.18** | **126** | P | **Pn** | **23 14 30.6** | **-0.2** |
| **TPRI** | **Tanjung Pinang** 389nm,0.6s | **5.35** | **34** | P | **Pn** | **23 14 31.3** | **-1.9** |
| **BTDF** | **Bukit Timah Da** baz=5.5,SNR=6.8 | **5.36** | **25** | P | **Pn** | **23 14 32.6** | **-0.7** |
| MYKOM | **Kota Tinggi** | **5.78** | **24** | ⇑P | **Pn** | **23 14 38.0** | **-1.1** |
| MYKOM | **Kota Tinggi** | **5.78** | **24** | *e*Pn | **Pn** | **23 14 37.6** | **-1.5** |
| **KGM** | **Kluang** | **5.80** | **18** | ⇑P | **Pn** | **23 14 38.1** | **-1.2** |
| **TPI** | **Tanjungpandan** 26nm,0.9s,0.2nm | **6.18** | **83** | P | **Pn** | **23 14 42.9** | **-1.8** |
| **GSI** | **Gunungsitoli** 113nm,0.4s,3μm | **6.20** | **321** | P | **Pn** | **23 14 44.2** | **-0.7** |
| **GSI** | **Gunungsitoli** | **6.20** | **321** | *e*Pn | **Pn** | **23 14 43.4** | **-1.5** |
| GSI | | | | *e*Sn | Sn | 23 15 45.1 | -9.4 |
| **PSI** | **Prapat** 2.7nm,0.3s,baz=166,slow=14,SNR=4.8 | **6.79** | **338** | P | **Pn** | **23 14 52.4** | **-0.8** |
| **PSI** | **Prapat** | **6.79** | **338** | *e*P | **Pn** | **23 14 50.3** | **-2.8** |
| **PSI** | **Prapat** | **6.79** | **338** | *e*Pn | **Pn** | **23 14 50.3** | **-2.8** |
| **CISI** | **Cisompet, Garu** | **7.45** | **123** | *e*Pn | Pn | 23 14 58.5 | -3.5 |
| **IPM** | **Ipoh** | **7.97** | **357** | ⇑P | **Pn** | **23 15 08.5** | **-0.6** |
| **IPM** | **Ipoh** | **7.97** | **357** | *e*Pn | **Pn** | **23 15 08.2** | **-0.9** |
| **XMIS** | **Christmas Isla** baz=8.1,SNR=3.4 | **8.04** | **149** | P | Pn | 23 15 05.7 | -4.3 |
| **XMIS** | **Christmas Isla** | **8.04** | **149** | *e*Pn | **Pn** | **23 15 07.5** | **-2.5** |
| XMIS | | | | *e*Sn | Sn | 23 16 28.5 | -11 |
| **CMJI** | **Cimerak** 28nm,1.1s | **8.10** | **122** | P | **Pn** | **23 15 12.2** | **+1.4** |
| **KULM** | **Kulim** | **8.80** | **354** | *e*Pn | **Pn** | **23 15 19.6** | **-0.9** |
| **KTGM** | **Kuala Trenggan** | **8.95** | **10** | ⇑P | **Pn** | **23 15 21.5** | **-0.9** |
| **MLSI** | **Meulaboh, Aceh** | **9.27** | **327** | P | **Pn** | **23 15 25.1** | **-1.8** |
| **LHMI** | **Lhok Sumawe** baz=9.9,SNR=3.3 | **9.82** | **332** | P | **Pn** | **23 15 34.7** | **+0.4** |
| **LHMI** | **Lhok Sumawe** | **9.82** | **332** | *e*Pn | **Pn** | **23 15 32.2** | **-2.2** |
| **UGM** | **Wanagama** baz=10.0,SNR=8.0 | **9.97** | **116** | P | **Pn** | **23 15 36.5** | **0.0** |
| **UGM** | **Wanagama** | **9.97** | **116** | *e*Pn | **Pn** | **23 15 36.3** | **-0.2** |
| **SBUM** | **Sibu** | **12.24** | **61** | ⇑P | **Pn** | **23 16 06.8** | **-0.7** |
| **JAGI** | **Jajag, Banyuwa** baz=14,SNR=4.3 | **13.50** | **112** | P | **Pn** | **23 16 23.6** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **13.50** | **112** | *e*Pn | **Pn** | **23 16 23.3** | **-1.2** |
| **KAPI** | **Kappang** 1.4nm,0.3s,baz=272,slow=9.4,SNR=11 | **18.25** | **95** | P | **P** | **23 17 22.6** | **-1.6** |
| **KAPI** | **Kappang** | **18.25** | **95** | *e*P | **P** | **23 17 24.1** | **-0.1** |
| **LUWI** | **Luwuk** 48nm,1.0s | **21.39** | **84** | *e*P | **P** | **23 17 57.9** | **-0.3** |
| **CM01** | **Chiang Mai Arr** | **21.95** | **354** | *e*P | **P** | **23 18 03.3** | **-0.9** |
| **CM31** | **Chiang Mai Arr** | **21.99** | **353** | *e*P | **P** | **23 18 02.5** | **-2.1** |
| CM31 | | | | *e*S | **S** | **23 22 02.0** | **-1.6** |
| **CMAR** | **Chiang Mai Arr** 2.4nm,0.4s,baz=179,slow=9.5,SNR=14 | **21.99** | **353** | P | **P** | **23 18 02.5** | **-2.1** |
| CMAR | | | | PcP | **PcP** | **23 22 02.0** | **+1.0** |
| **KMI** | **Kunming** 0.5nm,0.3s,baz=189,slow=4.1,SNR=4.8 | **28.50** | **2** | P | **P** | **23 19 08.3** | **+3.0** |
| KMI | | | | pP | **pP** | **23 19 23.6** | **+2.1** |
| KMI | | | | sP | **sP** | **23 19 31.0** | **+1.7** |
| KMI | | | | PP | **PnPn** | **23 20 03.0** | **+4.7** |
| KMI | | | | S | **S** | **23 23 52.0** | **+3.5** |
| KMI | | | | sS | **sS** | **23 24 18.8** | **+2.5** |
| KMI | 6.0nm,1.2s | | | PMZ | | | |
| KMI | 210nm,4.4s | | | PMZ | | | |
| KMI | 280nm,5.0s | | | LN | | | |
| KMI | 250nm,4.8s | | | LE | | | |
| KMI | 240nm,5.6s | | | LZ | | | |
| **H08S2** | **Diego Garcia H** baz=84,slow=75,SNR=116 | **29.16** | **261** | T | T | 23 49 19.4 | |
| **H08S3** | **Diego Garcia H** baz=84,slow=75,SNR=156 | **29.16** | **261** | T | T | 23 49 12.2 | |
| **H08S1** | **Diego Carcia H** baz=84,slow=75,SNR=63 | **29.18** | **261** | T | T | 23 49 13.1 | |
| **GYA** | **Guiyang** | **30.22** | **9** | *e*P | **P** | **23 19 22.8** | **+2.4** |
| GYA | | | | pP | **pP** | **23 19 38.3** | **+1.6** |
| GYA | | | | sP | **sP** | **23 19 46.0** | **+1.4** |
| GYA | | | | PP | **PP** | **23 20 25.4** | **-4.4** |
| GYA | | | | S | **S** | **23 24 19.6** | **+4.3** |
| GYA | | | | sS | **sS** | **23 24 46.8** | **+3.7** |
| GYA | | | | SS | **ScP** | **23 26 03.0** | **+6.3** |
| GYA | 10.0nm,0.8s | | | PMZ | | | |
| GYA | 90nm,4.9s | | | PMZ | | | |
| GYA | 490nm,17.8s | | | LN | | | |
| GYA | 440nm,16.4s | | | LE | | | |
| GYA | 410nm,17.2s | | | LZ | | | |
| **ODAN** | **Odare** 9.4nm,0.4s | **33.15** | **337** | *e*P | **P** | **23 19 45.6** | **-0.6** |
| **H01W3** | **Cape Leeuwin H** baz=338,slow=76,SNR=3.4 | **33.33** | **161** | T | T | 23 54 17.4 | |
| **H01W2** | **Cape Leeuwin H** baz=338,slow=76,SNR=4.8 | **33.34** | **161** | T | T | 23 54 17.8 | |
| **H01W1** | **Cape Leeuwin H** baz=338,slow=76,SNR=2.9 | **33.34** | **161** | T | T | 23 54 18.8 | |
| **TAPN** | **Taplejung** | **33.46** | **337** | *e*P | **P** | **23 19 48.6** | **-0.4** |
| **WRKA** | **Warakurna** baz=34,SNR=5.9 | **33.49** | **132** | P | **P** | **23 19 50.9** | **+1.9** |
| **RAMN** | **Ramite** 13nm,0.5s | **33.55** | **335** | *e*P | **P** | **23 19 49.6** | **-0.1** |
| **CD2** | **Chengdu** | **34.31** | **3** | *e*P | **P** | **23 19 57.8** | **+1.7** |
| CD2 | | | | pP | **pP** | **23 20 13.3** | **+0.8** |
| CD2 | | | | PP | **PP** | **23 21 17.3** | **+2.3** |
| CD2 | | | | S | **S** | **23 25 23.3** | **+4.6** |
| CD2 | | | | sS | **sS** | **23 25 50.3** | **+3.6** |
| CD2 | 10.0nm,0.6s | | | PMZ | | | |
| CD2 | 120nm,5.0s | | | PMZ | | | |
| **PKI** | **Pulchoki** | **34.60** | **334** | *e*P | **P** | **23 19 58.3** | **-0.6** |
| **PKIN** | **Phulchoki** 4.5nm,0.4s | **34.61** | **334** | *e*P | **P** | **23 19 58.2** | **-0.7** |
| **GUN** | **Gumba** 36nm,0.5s | **34.69** | **335** | *e*P | **P** | **23 19 59.6** | **-0.2** |
| **DMN** | **Daman** | **34.76** | **334** | *e*P | **P** | **23 19 59.5** | **-0.8** |
| **KKN** | **Kakani** | **34.84** | **334** | *e*P | **P** | **23 20 00.5** | **-0.4** |
| **GKN** | **Gorkha** | **35.31** | **334** | *e*P | **P** | **23 20 04.6** | **-0.3** |
| **KOLN** | **Koldanda** 39nm,0.8s | **35.58** | **332** | *e*P | **P** | **23 20 07.4** | **+0.1** |
| **WRA** | **Warramunga Arr** 6.2nm,0.8s,baz=295,slow=9.6,SNR=16 | **35.93** | **120** | P | **P** | **23 20 09.2** | **-0.9** |
| **WRAB** | **Tennant Creek** comp=Z,4.5nm,0.6s | **35.94** | **120** | ⇑*e*P | **P** | **23 20 09.6** | **-0.6** |
| WRAB | comp=Z,20nm,1.1s | | | pmax | pmax | | |
| **WRAB** | **Tennant Creek** comp=Z,4.5nm,0.6s | **35.94** | **120** | *e*P | **P** | **23 20 09.7** | **-0.6** |
| **DANN** | **Dangsing** | **36.00** | **333** | *e*P | **P** | **23 20 10.9** | **0.0** |
| **AS12** | **Alice Springs** | **37.14** | **126** | *e*P | **P** | **23 20 21.0** | **+0.5** |
| AS12 | | | | *e*S | **S** | **23 25 60.0** | **-2.5** |
| **ASAR** | **Alice Springs** comp=Z,2.1nm,0.4s,baz=299,slow=7.9,SNR=24 | **37.14** | **126** | P | **P** | **23 20 21.0** | **+0.5** |
| ASAR | comp=Z,0.4nm,0.3s,baz=297,slow=17,SNR=7.6 | | | S | **S** | **23 25 60.0** | **-2.5** |
| **LZH** | **Lanzhou** | **39.47** | **3** | *e*P | P | 23 20 44.9 | +5.0 |
| LZH | | | | pP | pP | 23 20 58.9 | +2.3 |
| LZH | | | | sP | sP | 23 21 07.8 | +3.4 |
| LZH | comp=Z,9.0nm,1.0s | | | PMZ | | | |
| LZH | comp=Z,130nm,5.9s | | | PMZ | | | |
| **QIS** | **Mount Isa** baz=41,SNR=3.8 | **40.77** | **118** | P | **P** | **23 20 50.8** | **+0.1** |
| **HHC** | **Hu-ho-hao-te** | **45.11** | **11** | *e*P | P | 23 21 29.3 | +3.6 |
| HHC | | | | PP | **PP** | **23 23 17.3** | **+4.9** |
| HHC | | | | S | **S** | **23 28 04.8** | **+4.6** |
| HHC | comp=Z,15nm,0.8s | | | PMZ | | | |
| HHC | comp=Z,160nm,4.7s | | | PMZ | | | |
| HHC | comp=Z,180nm,13.6s | | | LN | | | |
| HHC | comp=Z,180nm,13.6s | | | LE | | | |
| HHC | comp=Z,80nm,13.6s | | | LZ | | | |
| **PMG** | **Port Moresby** comp=Z,44nm,19.1s,baz=64,slow=41 | **45.70** | **100** | LR | LR | 23 44 16.7 | |
| **PMG** | **Port Moresby** | **45.70** | **100** | ⇑*e*P | **P** | **23 21 30.4** | **-0.3** |
| PMG | comp=Z,55nm,1.2s | | | pmax | pmax | | |
| **HTT** | **Hallett** baz=46,SNR=3.3 | **45.86** | **135** | P | **P** | **23 21 29.0** | **-2.7** |
| **KBL** | **Kabul** | **48.65** | **324** | *e*P | **P** | **23 21 53.0** | **-0.5** |
| KBL | comp=Z,4.0nm,0.6s | | | pmax | pmax | | |
| **KBL** | **Kabul** comp=Z,3.7nm,0.6s | **48.65** | **324** | *e*P | **P** | **23 21 53.0** | **-0.5** |
| **WMQ** | **Urumqi** | **48.74** | **347** | P | **P** | **23 21 54.0** | **+0.1** |
| WMQ | | | | pP | **pP** | **23 22 10.0** | **-1.1** |
| WMQ | | | | S | **S** | **23 28 54.0** | **+2.2** |
| WMQ | | | | SS | SS | 23 32 14.0 | -9.2 |
| WMQ | comp=Z,95nm,1.0s | | | PMZ | | | |
| WMQ | comp=Z,120nm,5.0s | | | PMZ | | | |
| WMQ | comp=Z,97nm,18.0s | | | LN | | | |
| WMQ | comp=Z,65nm,17.0s | | | LE | | | |
| **KSH** | **Kashi** | **48.86** | **334** | P | **P** | **23 21 53.4** | **-1.5** |
| KSH | | | | *e*pP | **pP** | **23 22 09.4** | **-2.7** |
| KSH | | | | *e*PP | PP | 23 23 42.6 | -6.3 |
| KSH | | | | PcS | **PcS** | **23 27 17.3** | **+2.3** |
| KSH | | | | S | **S** | **23 28 49.3** | **-4.3** |
| KSH | | | | sS | sS | 23 29 16.5 | -6.2 |
| KSH | | | | SS | SS | 23 32 16.9 | -8.4 |
| KSH | comp=Z,130nm,5.9s | | | PMZ | | | |
| KSH | comp=Z,180nm,6.7s | | | LN | | | |
| KSH | comp=Z,200nm,5.5s | | | LE | | | |
| KSH | comp=Z,170nm,6.9s | | | LZ | | | |
| **CMSA** | **Cobar Meteorol** baz=50,SNR=10.0 | **49.99** | **129** | P | **P** | **23 22 05.6** | **+2.0** |
| **SFK** | **Sufi-Kurgan** | **50.38** | **332** | P | **P** | **23 22 07.0** | **+0.4** |
| SFK | comp=Z,94nm,0.7s | | | pmax | pmax | | |
| **PDGK** | **Podgornoye** | **50.70** | **339** | P | **P** | **23 22 08.4** | **-0.2** |
| PDGK | comp=Z,19nm,1.0s | | | pmax | pmax | | |
| **SONA0** | **Songino Array** | **51.33** | **4** | *e*P | **P** | **23 22 12.8** | **-0.6** |
| SONA0 | | | | *e*PcP | **PcP** | **23 23 26.9** | **-0.7** |
| **SONM** | **Songino Array** comp=Z,4.2nm,0.8s,baz=181,slow=4.4,SNR=5.4 | **51.33** | **4** | P | **P** | **23 22 12.8** | **-0.6** |
| SONM | comp=Z,2.5nm,0.6s,baz=185,slow=9.9,SNR=4.2 | | | pP | **pP** | **23 22 30.1** | **-0.6** |
| SONM | comp=Z,1.3nm,0.6s,baz=187,slow=4.0,SNR=2.9 | | | PcP | **PcP** | **23 23 26.9** | **-0.7** |
| **SONA1** | **Songino Array** | **51.34** | **4** | *e*P | **P** | **23 22 12.9** | **-0.7** |
| **ULN** | **Ulaanbaatar** | **51.41** | **5** | *ce*P | **P** | **23 22 13.3** | **-0.8** |
| ULN | comp=Z,6.0nm,0.9s | | | pmax | pmax | | |
| **ULN** | **Ulaanbaatar** comp=Z,5.0nm,0.8s | **51.41** | **5** | *e*P | **P** | **23 22 13.5** | **-0.6** |
| **CN2** | **Changchun** | **51.80** | **22** | *e*P | **P** | **23 22 14.8** | **-2.1** |
| **DZET** | **Dzherino** | **51.81** | **328** | P | **P** | **23 22 15.9** | **-1.3** |
| DZET | comp=Z,59nm,0.6s | | | pmax | pmax | | |
| **TKM2** | **Tokmak 2** | **51.83** | **336** | *e*P | **P** | **23 22 17.0** | **-0.4** |
| TKM2 | comp=Z,11nm,0.6s | | | pmax | pmax | | |
| **TKM2** | **Tokmak 2** comp=Z,11nm,0.6s | **51.83** | **336** | *e*P | **P** | **23 22 17.0** | **-0.4** |
| **AAK** | **Ala-Archa** | **52.05** | **335** | *ce*P | **P** | **23 22 18.7** | **-0.3** |
| AAK | comp=Z,4.0nm,0.8s | | | pmax | pmax | | |
| **AAK** | **Ala-Archa** comp=Z,3.3nm,0.8s | **52.05** | **335** | *e*P | **P** | **23 22 19.2** | **+0.2** |
| **EKS2** | **Erkin-Say** | **52.38** | **334** | *e*P | **P** | **23 22 21.5** | **+0.1** |
| EKS2 | comp=Z,17nm,0.8s | | | pmax | pmax | | |
| **EKS2** | **Erkin-Say** comp=Z,17nm,0.8s | **52.38** | **334** | *e*P | **P** | **23 22 21.5** | **+0.1** |
| **MAJO** | **Matsushiro** | **52.54** | **37** | *e*P | **P** | **23 22 21.3** | **-1.3** |
| MAJO | comp=Z,38nm,1.7s | | | pmax | pmax | | |
| **MAJO** | **Matsushiro** comp=Z,38nm,1.7s | **52.54** | **37** | *e*P | **P** | **23 22 21.2** | **-1.3** |
| **MJAR** | **Matsushiro Arr** comp=Z,0.7nm,0.3s,baz=199,slow=7.9,SNR=4.5 | **52.54** | **37** | P | **P** | **23 22 21.2** | **-1.3** |
| MJAR | comp=Z,2.2nm,0.7s,baz=216,slow=8.6,SNR=2.6 | | | pP | **pP** | **23 22 38.0** | **-1.8** |
| **MK01** | **Makanchi Array** | **52.88** | **344** | *e*P | **P** | **23 22 23.9** | **-1.0** |
| **MK32** | **Makanchi Array** | **52.90** | **344** | *e*P | **P** | **23 22 24.2** | **-0.9** |
| **MKAR** | **Makanchi Array** comp=Z,26nm,0.7s,baz=150,slow=8.1,SNR=189 | **52.90** | **344** | P | **P** | **23 22 24.2** | **-0.9** |
| MKAR | comp=Z,4.0nm,0.7s,baz=146,slow=8.8,SNR=3.1 | | | pP | **pP** | **23 22 42.6** | **+0.2** |
| **MAKZ** | **Makanchi** | **53.01** | **343** | *e*P | **P** | **23 22 25.1** | **-0.8** |
| **KKAR** | **Karatay Array** | **54.19** | **332** | *e*P | **P** | **23 22 34.0** | **-0.6** |
| **KKAR** | **Karatay Array** | **54.19** | **332** | *e*P | **P** | **23 22 34.0** | **-0.6** |
| **USRK** | **Ussuriysk Ar.** comp=Z,4.7nm,0.5s,baz=216,slow=5.6,SNR=14 | **54.81** | **27** | P | **P** | **23 22 37.3** | **-1.7** |
| USRK | comp=Z,7.2nm,0.8s,baz=221,slow=7.1,SNR=5.6 | | | pP | **pP** | **23 22 56.0** | **-0.4** |
| **IMYA** | **Miami** | **55.36** | **320** | *e*P | **P** | **23 22 45.3** | **+1.9** |
| **IPAY** | **Payeh** | **56.15** | **319** | *e*P | **P** | **23 22 48.6** | **-0.5** |
| **IPAR** | **Pars

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BRVK** | **Borovoye** | **62.20** | **339** | *e*P | | **P** | **23 23 28.3** | **-1.9** |
| | comp=Z,49nm,2.3s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **63.70** | **331** | *e*P | | **P** | **23 23 39.3** | **-1.0** |
| **IGHG** | **Ghaleghazi** | **63.88** | **311** | *e*P | | **P** | **23 23 41.6** | **-0.5** |
| **KMBO** | **Kilima Mbogo** | **64.23** | **270** | P | | **P** | **23 23 42.5** | **-2.3** |
| | baz=64,SNR=3.3 | | | | | | | | |
| **SVE** | **Sverdlovsk** | **68.66** | **337** | *e*P | | **P** | **23 24 11.7** | **-0.2** |
| **YAK** | **Yakutsk** | **68.84** | **14**⇑ | *e*P | | **P** | **23 24 11.3** | **-1.6** |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **MAW** | **Mawson** | **69.19** | **195** | P | | **P** | **23 24 18.0** | **+3.0** |
| | comp=Z,0.8nm,0.8s,baz=90,slow=23,SNR=3.6 | | | | | | | | |
| **MAW** | **Mawson** | **69.19** | **195** | *e*P | | **P** | **23 24 18.0** | **+3.0** |
| **NCK** | **Nalchik** | **69.88** | **319**‖ | *e*P | | **P** | **23 24 20.0** | **+0.2** |
| **NEY** | **Neytrino** | **70.35** | **318**‖ | *e*P | | **P** | **23 24 24.8** | **+1.9** |
| NEY | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **KBZ** | **Khabaz** | **70.44** | **319** | P | | **P** | **23 24 23.5** | **+0.4** |
| | comp=Z,8.2nm,0.8s,baz=124,slow=6.9,SNR=23 | | | | | | | | |
| **MBAR** | **Mbarara** | **70.77** | **271** | *e*P | | P | 23 24 31.2 | +5.2 |
| MBAR | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **MBAR** | **Mbarara** | **70.77** | **271** | *e*P | | P | 23 24 31.2 | +5.2 |
| | comp=Z,7.1nm,0.6s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **74.42** | **326** | *e*P | | **P** | **23 24 45.6** | **-1.1** |
| VRH | | | | pmax | pmax | | | | |
| | comp=N,2.0nm,0.8s | | | | | | | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=E,5.0nm,0.8s | | | | | | | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **BR101** | **Keskin Array S** | **75.46** | **312** | *e*P | | **P** | **23 24 52.9** | **-0.2** |
| **BR131** | **Keskin Array S** | **75.46** | **312** | P | | **P** | **23 24 53.0** | **-0.2** |
| | baz=76,SNR=4.4 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.46** | **312** | P | | **P** | **23 24 52.9** | **-0.2** |
| | comp=Z,2.6nm,0.6s,baz=134,slow=6.9,SNR=15 | | | | | | | | |
| **VSR** | **Storozhevoye** | **75.88** | **325** | *e*P | | **P** | **23 24 53.9** | **-1.2** |
| VSR | | | | pmax | pmax | | | | |
| | comp=E,10.0nm,0.8s | | | | | | | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=N,4.0nm,0.7s | | | | | | | | |
| **BR231** | **Keskin MP Arra** | **76.13** | **312** | *e*P | | P | 23 24 53.4 | -3.5 |
| **VNDA** | **Vanda** | **80.38** | **169** | P | | **P** | **23 25 21.2** | **+1.6** |
| | comp=N,0.4nm,0.8s,baz=280,slow=12,SNR=3.5 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **81.61** | **322** | P | | **P** | **23 25 25.4** | **-1.0** |
| | comp=N,1.0nm,0.5s,baz=84,slow=5.5,SNR=5.3 | | | | | | | | |
| **AKBB** | **Malin Array Si** | **81.61** | **322** | *e*P | | **P** | **23 25 25.5** | **-1.0** |
| **AKBB** | **Malin Array Si** | **81.61** | **322** | *e*P | | **P** | **23 25 25.4** | **-1.0** |
| **BUR04** | **Bucovina Ar. S** | **83.40** | **319** | *e*P | | **P** | **23 25 37.1** | **+1.1** |
| **KOLS** | **Kolonicke sedl** | **85.58** | **319** | *e*P | | **P** | **23 25 48.4** | **+1.4** |
| KOLS | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **85.58** | **319** | *e*P | | **P** | **23 25 48.4** | **+1.4** |
| **FIA0** | **FINESS Array S** | **86.16** | **332** | *e*P | | **P** | **23 25 49.8** | **+0.3** |
| **FIA0** | **FINESS Array S** | **86.16** | **332** | *e*P | | **P** | **23 25 49.8** | **+0.3** |
| **FINES** | **FINESS Array B** | **86.16** | **332** | P | | **P** | **23 25 49.8** | **+0.3** |
| | comp=Z,1.6nm,0.7s,baz=116,slow=4.4,SNR=3.8 | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **88.41** | **340** | *e*P | | **P** | **23 25 59.2** | **-1.0** |
| **ARCES** | **ARCESS Array B** | **88.41** | **340** | P | | **P** | **23 25 59.2** | **-1.0** |
| | comp=Z,4.4nm,0.9s,baz=106,slow=4.8,SNR=5.5 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **91.18** | **319** | *e*P | | **P** | **23 26 13.8** | **+0.1** |
| **GEC2** | **GERESS Array S** | **91.18** | **319** | *e*P | | **P** | **23 26 13.8** | **+0.1** |
| **GERES** | **GERESS Array B** | **91.18** | **319** | P | | **P** | **23 26 13.8** | **+0.1** |
| | comp=Z,0.6nm,0.8s,baz=141,slow=4.5,SNR=4.6 | | | | | | | | |
| GERES | | | | LR | | LR | 00 12 27.9 | | |
| | comp=Z,70nm,19.1s,baz=320,slow=39 | | | | | | | | |
| **BDFB** | **Brasilia** | **144.33** | **237** | PKP | | **PKPdf** | **23 32 45.4** | **-0.1** |
| | comp=Z,2.0nm,0.5s,baz=107,slow=4.8,SNR=4.6 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **144.94** | **40** | PKP | PKPbc | | 23 32 45.7 | +0.1 | |
| | comp=Z,5.5nm,0.7s,baz=282,slow=1.1,SNR=55 | | | | | | | | |

*GUC* ***18*** *23:20:31.6±0.8, 40˚.20S×73˚.85W, h23km±9km, ML4.4*
**ISC 18 23:20:30.9±2.2, 40.12S±0.08×73.9W±0.2, h35km, n9, σ1°47/12, 1C, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **VLCH** | **Valdivia** | **0.62** | **60**⇑ | *i* | P | **Pn** | **23 20 43.2** | **0.0** |
| VLCH | | | | *i* | S | **Sn** | **23 20 51.2** | **-0.6** |
| VLCH | | | | AML | | AML | 23 20 52.7 | |
| | comp=N,52μm,0.1s | | | | | | | |
| **OSCH** | **Osorno** | **0.77** | **127** | *e* | P | **Pn** | **23 20 44.4** | **-0.9** |
| OSCH | | | | *i* | S | **Sn** | **23 20 53.7** | **-2.0** |
| OSCH | | | | AML | | AML | 23 20 55.5 | |
| | comp=E,31μm,0.6s | | | | | | | |
| **PMCH** | **Puerto Montt** | **1.58** | **150** | *e* | P | **Pn** | **23 20 56.5** | **0.0** |
| PMCH | | | | *i* | S | **Sn** | **23 21 16.0** | **+0.3** |
| **PUEL** | **Puelo Alto** | **1.98** | **142** | *i* | S | **Sn** | **23 21 26.7** | **+1.1** |
| **PLCA** | **Paso Flores** | **2.66** | **104** | *e* | P | **Pn** | **23 21 13.3** | **+1.9** |
| **VNA3** | **Neumayer Olymp** | **44.36** | **155** | P | | **P** | **23 28 35.4** | **-1.9** |
| **VNA1** | **Neumayer--Stat** | **44.73** | **154** | P | | **P** | **23 28 41.9** | **+1.7** |
| **VNA2** | **Neumayer--Watz** | **45.05** | **155** | P | | **P** | **23 28 41.5** | **-1.3** |
| | baz=286,slow=10 | | | | | | | |
| **SNAA** | **Sanae** | **46.57** | **156** | P | | **P** | **23 28 56.0** | **+1.1** |

*CSEM* ***18*** *23:31:06.1, 39˚.65N×29˚.63W, h10km, ML2.2, After PDA*
**PDA 18 23:31:06.1±0.6, 39.65N×29.63W, h10km, MD3.6, ML2.2, Error ellipse: s-maj=16.1km s-min=5.6km az=62.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CALA** | **Caldeira** | **1.29** | **146** | *e* | S | Sb | 23 31 40.2 | -7.0 |
| **CALA** | **Caldeira** | **1.29** | **146** | *e* | S | Sb | 23 31 40.2 | -7.0 |
| **ROSA** | **Rosais** | **1.42** | **130** | *e* | P | Pn | 23 31 27.2 | -4.8 |
| ROSA | | | | *e* | S | Sn | 23 31 43.3 | -7.5 |
| ROSA | | | | A | | A | 23 31 45.4 | |
| | 16nm,0.4s | | | | | | | |
| **ROSA** | **Rosais** | **1.42** | **130** | *e* | P | Pn | 23 31 27.2 | -4.8 |
| ROSA | | | | *e* | S | Sn | 23 31 43.3 | -7.5 |
| **PICO** | **Pico** | **1.48** | **140** | *e* | P | Pn | 23 31 28.6 | -4.3 |
| PICO | | | | *e* | S | Sn | 23 31 44.7 | -7.7 |
| **PICO** | **Pico** | **1.48** | **140** | *e* | P | Pn | 23 31 28.6 | -4.3 |
| PICO | | | | *e* | S | Sn | 23 31 44.7 | -7.7 |
| **PCAN** | **Candelaria** | **1.48** | **143** | *e* | P | Pn | 23 31 28.0 | -4.8 |
| PCAN | | | | *e* | S | Sn | 23 31 44.8 | -7.5 |
| PCAN | | | | A | | A | 23 31 48.0 | |
| | 18nm,0.3s | | | | | | | |
| **PCAN** | **Candelaria** | **1.48** | **143** | *e* | P | Pn | 23 31 28.0 | -4.8 |
| PCAN | | | | *e* | S | Sn | 23 31 44.8 | -7.5 |

*MDD* ***19*** *00:06:05.7±0.2, 35˚.61N×10˚.02W, h56km±5km, mb3.9/35, Error ellipse: s-maj=2.1km s-min=1.2km az=84.0, PRXIMO*
*IGIL* ***19*** *00:06:05.8, 35˚.74N×9˚.89W, h9km, ML2.5*
*CNRM* ***19*** *00:06:05.5, 35˚.61N×9˚.80W, h31km, MD3.1*
*CSEM* ***19*** *00:06:05.9±0.2, 35˚.66N×9˚.80W, h60km, ML2.6, Error ellipse: s-maj=5.8km s-min=3.7km az=83.0*
*INMG* ***19*** *00:06:06.5±1.1, 35˚.77N×9˚.85W, h10km, MD2.7, ML2.6, Error ellipse: s-maj=4.0km s-min=2.7km az=73.0*
**ISC 19 00:06:00.6±1.9, 35˚.67N±0˚.07×9˚.93W±0˚.08, h10km, n152, σ2°31/251, 10C-1D, West of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **1.71** | **31**⇑ | *e* | P | **Pb** | **00 06 32.9** | **+0.7** |
| PFVI | | | | *e* | S | **Sn** | **00 06 52.4** | **-0.1** |
| PFVI | | | | A | | A | 00 06 54.3 | |
| | 38nm,0.1s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.71** | **31** | ⇑P | | **Pb** | **00 06 32.9** | **+0.7** |
| | 31nm,0.2s,SNR=18 | | | | | | | |
| PFVI | | | | S | | **Sn** | **00 06 53.0** | **+0.5** |
| | 23nm,0.1s,SNR=13 | | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.71** | **31** | P | | **Pb** | **00 06 32.9** | **+0.7** |
| | 31nm,0.2s,SNR=18 | | | | | | | |
| PFVI | | | | S | | **Sn** | **00 06 53.0** | **+0.5** |
| | 23nm,0.1s,SNR=13 | | | | | | | |
| **MORF** | **Marmelete** | **1.93** | **32** | *e* | P | **Pn** | **00 06 36.0** | **+2.4** |
| MORF | | | | *e* | S | **Sn** | **00 06 57.7** | **-0.3** |
| MORF | | | | AML | | AML | 00 06 58.0 | |
| | comp=E,57nm,0.2s | | | | | | | |
| **MORF** | **Marmelete** | **1.93** | **32**⇑ | *i* | Pn | **Pn** | **00 06 36.0** | **+2.4** |
| MORF | | | | *e* | Sn | **Sn** | **00 06 57.7** | **-0.3** |
| MORF | | | | A | | A | 00 06 59.6 | |
| | comp=E,87nm,0.1s | | | | | | | |
| **MORF** | **Marmelete** | **1.93** | **32** | P | | **Pn** | **00 06 36.0** | **+2.4** |
| MORF | | | | S | | **Sn** | **00 06 57.7** | **-0.3** |
| | comp=E,87nm,0.1s | | | | | | | |
| **MORF** | **Marmelete** | **1.93** | **32** | P | | **Pn** | **00 06 36.0** | **+2.4** |
| MORF | | | | S | | **Sn** | **00 06 57.7** | **-0.3** |
| | comp=E,87nm,0.1s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.11** | **27** | *e* | Pn | **Pn** | **00 06 38.4** | **+2.4** |
| PTEO | | | | *e* | Sn | **Sn** | **00 07 02.1** | **-0.2** |
| PTEO | | | | A | | A | 00 07 04.2 | |
| | comp=E,81nm,0.2s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.11** | **27** | P | | **Pn** | **00 06 38.4** | **+2.4** |
| PTEO | | | | S | | **Sn** | **00 07 02.1** | **-0.2** |
| | comp=E,40nm,0.2s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.11** | **27** | P | | **Pn** | **00 06 38.4** | **+2.4** |
| PTEO | | | | S | | **Sn** | **00 07 02.1** | **-0.2** |
| | comp=E,40nm,0.2s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.25** | **45**⇑ | *i* | Pn | **Pn** | **00 06 40.7** | **+2.7** |
| PBDV | | | | *e* | Sn | **Sn** | **00 07 05.6** | **-0.3** |
| PBDV | | | | A | | A | 00 07 09.8 | |
| | comp=E,11nm,0.1s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.25** | **45** | P | | **Pn** | **00 06 40.7** | **+2.7** |
| PBDV | | | | S | | **Sn** | **00 07 05.6** | **-0.3** |
| | comp=E,11nm,0.1s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.25** | **45** | P | | **Pn** | **00 06 40.7** | **+2.7** |
| PBDV | | | | S | | **Sn** | **00 07 05.6** | **-0.3** |
| | comp=E,11nm,0.1s | | | | | | | |
| **PCVE** | **Castro Verde** | **2.48** | **37**⇑ | *i* | Pn | **Pn** | **00 06 43.8** | **+2.7** |
| PCVE | | | | *e* | Sn | **Sn** | **00 07 11.2** | **-0.3** |
| PCVE | | | | A | | A | 00 07 14.6 | |
| | comp=E,16nm,0.4s | | | | | | | |
| **PCVE** | **Castro Verde** | **2.48** | **37** | P | | **Pn** | **00 06 43.8** | **+2.7** |
| PCVE | | | | S | | **Sn** | **00 07 11.2** | **-0.3** |
| | comp=E,16nm,0.4s | | | | | | | |
| **PCVE** | **Castro Verde** | **2.48** | **37** | P | | **Pn** | **00 06 43.8** | **+2.7** |
| PCVE | | | | S | | **Sn** | **00 07 11.2** | **-0.3** |
| | comp=E,16nm,0.4s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.49** | **45** | *e* | Pn | **Pn** | **00 06 43.8** | **+2.6** |
| PVAQ | | | | *e* | Sn | **Sn** | **00 07 11.3** | **-0.3** |
| PVAQ | | | | A | | A | 00 07 13.2 | |
| | comp=E,18nm,0.1s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.49** | **45** | P | | **Pn** | **00 06 43.8** | **+2.6** |
| PVAQ | | | | S | | **Sn** | **00 07 11.3** | **-0.3** |
| | comp=E,18nm,0.1s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.49** | **45** | P | | **Pn** | **00 06 43.8** | **+2.6** |
| PVAQ | | | | S | | **Sn** | **00 07 11.3** | **-0.3** |
| | comp=E,18nm,0.1s | | | | | | | |
| **MESJ** | **Messejana** | **2.57** | **32** | *e* | P | **Pn** | **00 06 44.7** | **+2.4** |
| MESJ | | | | *e* | S | **Sn** | **00 07 13.3** | **-0.2** |
| MESJ | | | | AML | | AML | 00 07 14.8 | |
| | comp=E,15nm,0.1s | | | | | | | |
| **MESJ** | **Messejana** | **2.57** | **32**⇑ | *e* | Pn | **Pn** | **00 06 44.7** | **+2.4** |
| MESJ | | | | *e* | Sn | **Sn** | **00 07 13.7** | **+0.2** |
| MESJ | | | | A | | A | 00 07 16.4 | |
| | comp=E,20nm,0.2s | | | | | | | |
| **MESJ** | **Messejana** | **2.57** | **32** | P | | **Pn** | **00 06 44.7** | **+2.4** |
| MESJ | | | | S | | **Sn** | **00 07 13.7** | **+0.2** |
| | comp=E,20nm,0.2s | | | | | | | |
| **MESJ** | **Messejana** | **2.57** | **32** | P | | **Pn** | **00 06 44.7** | **+2.4** |
| MESJ | | | | S | | **Sn** | **00 07 13.7** | **+0.2** |
| | comp=E,20nm,0.2s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.69** | **24** | *e* | Pn | **Pn** | **00 06 46.0** | **+2.1** |
| PNCL | | | | *e* | Sn | **Sn** | **00 07 16.2** | **-0.3** |
| PNCL | | | | A | | A | 00 07 19.1 | |
| | comp=E,24nm,0.1s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.69** | **24** | *e* | Pn | **Pn** | **00 06 46.0** | **+2.1** |
| PNCL | | | | *e* | Sn | **Sn** | **00 07 16.2** | **-0.3** |
| | comp=E,24nm,0.1s | | | | | | | |
| **EGRO** | **El Granado** | **2.71** | **46** | ⇑P | | **Pn** | **00 06 46.9** | **+2.6** |
| | comp=E,17nm,0.1s,SNR=18 | | | | | | | |
| EGRO | | | | S | | **Sn** | **00 07 16.8** | **-0.3** |
| | comp=E,9.1nm,0.1s,SNR=6.8 | | | | | | | |
| **EGRO** | **El Granado** | **2.71** | **46** | P | | **Pn** | **00 06 46.9** | **+2.6** |
| | comp=E,17nm,0.1s,SNR=18 | | | | | | | |
| EGRO | | | | S | | **Sn** | **00 07 16.8** | **-0.3** |
| | comp=E,9.1nm,0.1s,SNR=6.8 | | | | | | | |
| **PBEJ** | **Beja** | **2.88** | **35** | *e* | Pn | **Pn** | **00 06 48.8** | **+2.2** |
| PBEJ | | | | *e* | Sn | **Sn** | **00 07 20.8** | **-0.5** |
| PBEJ | | | | A | | A | 00 07 23.4 | |
| | comp=E,15nm,0.2s | | | | | | | |
| **PBEJ** | **Beja** | **2.88** | **35** | P | | **Pn** | **00 06 48.8** | **+2.2** |
| PBEJ | | | | S | | **Sn** | **00 07 20.8** | **-0.5** |
| | comp=E,7.3nm,0.2s | | | | | | | |
| **PBEJ** | **Beja** | **2.88** | **35** | P | | **Pn** | **00 06 48.8** | **+2.2** |
| PBEJ | | | | S | | **Sn** | **00 07 20.8** | **-0.5** |
| | comp=E,7.3nm,0.2s | | | | | | | |
| **PMST** | **Lisbon--Monsan** | **3.12** | **11** | *e* | Sn | **Sn** | **00 07 26.6** | **-0.6** |
| PMST | | | | A | | A | 00 07 32.5 | |
| | comp=E,18nm,0.4s | | | | | | | |
| **PMST** | **Lisbon--Monsan** | **3.12** | **11** | *e* | Sn | **Sn** | **00 07 26.6** | **-0.6** |
| | comp=E,18nm,0.4s | | | | | | | |
| **PACT** | **Alcochete** | **3.21** | **16** | *e* | Pn | **Pn** | **00 06 49.9** | **-1.3** |
| PACT | | | | *e* | Sn | **Sn** | **00 07 24.6** | **-4.9** |
| PACT | | | | A | | A | 00 07 31.1 | |
| | comp=E,19nm,0.5s | | | | | | | |
| **EVO** | **Evora** | **3.24** | **28** | *e* | Pn | **Pn** | **00 06 53.6** | **+2.0** |
| EVO | | | | *e* | Sn | **Sn** | **00 07 29.4** | **-0.9** |
| EVO | | | | A | | A | 00 07 31.1 | |
| | comp=E,41nm,0.1s | | | | | | | |
| **EVO** | **Evora** | **3.24** | **28** | P | | **Pn** | **00 06 53.6** | **+2.0** |
| EVO | | | | S | | **Sn** | **00 07 29.4** | **-0.9** |
| | comp=E,41nm,0.1s | | | | | | | |
| **EVO** | **Evora** | **3.24** | **28** | P | | **Pn** | **00 06 53.6** | **+2.0** |
| EVO | | | | S | | **Sn** | **00 07 29.4** | **-0.9** |
| | comp=E,41nm,0.1s | | | | | | | |
| **PMAFR** | **Mafra** | **3.32** | **9** | *e* | Pn | **Pn** | **00 06 55.0** | **+2.3** |
| PMAFR | | | | *e* | Sn | **Sn** | **00 07 30.5** | **-1.7** |
| PMAFR | | | | A | | A | 00 07 34.7 | |
| | comp=E,39nm,0.1s | | | | | | | |
| **PMAFR** | **Mafra** | **3.32** | **9** | P | | **Pn** | **00 06 54.9** | **+2.3** |
| | comp=E,2.5nm,0.1s,SNR=7.9 | | | | | | | |
| PMAFR | | | | S | | **Sn** | **00 07 30.0** | **-2.2** |
| | comp=E,7.2nm,0.1s,SNR=13 | | | | | | | |
| **PMAFR** | **Mafra** | **3.32** | **9** | P | | **Pn** | **00 06 54.9** | **+2.3** |
| | comp=E,2.5nm,0.1s,SNR=7.9 | | | | | | | |
| PMAFR | | | | S | | **Sn** | **00 07 30.0** | **-2.2** |
| | comp=E,7.2nm,0.1s,SNR=13 | | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.35** | **50** | ⇑P | | **Pn** | **00 06 55.2** | **+2.1** |
| | comp=E,2.2nm,0.1s,SNR=18 | | | | | | | |
| EMIN | | | | S | | **Sn** | **00 07 31.6** | **-1.4** |
| | comp=E,1.4nm,0.1s,SNR=6.3 | | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.35** | **50** | P | | **Pn** | **00 06 55.2** | **+2.1** |
| | comp=E,2.2nm,0.1s,SNR=18 | | | | | | | |
| EMIN | | | | S | | **Sn** | **00 07 31.6** | **-1.4** |
| | comp=E,1.4nm,0.1s,SNR=6.3 | | | | | | | |
| **PBAR** | **Barrancos** | **3.41** | **42** | *e* | Pn | **Pn** | **00 06 56.0** | **+2.1** |
| PBAR | | | | *e* | Sn | **Sn** | **00 07 33.6** | **-0.8** |
| PBAR | | | | A | | A | 00 07 38.3 | |
| | comp=E,10nm,0.3s | | | | | | | |
| **PBAR** | **Barrancos** | **3.41** | **42** | P | | **Pn** | **00 06 56.0** | **+2.1** |
| PBAR | | | | S | | **Sn** | **00 07 33.6** | **-0.8** |
| | comp=E,10nm,0.3s | | | | | | | |
| **PBAR** | **Barrancos** | **3.41** | **42** | P | | **Pn** | **00 06 56.0** | **+2.1** |
| PBAR | | | | S | | **Sn** | **00 07 33.6** | **-0.8** |
| | comp=E,10nm,0.3s | | | | | | | |
| **ESPR** | **Espera** | **3.51** | **69** | P | | **Pn** | **00 06 57.5** | **+2.3** |
| | comp=E,6.4nm,0.1s,SNR=35 | | | | | | | |
| ESPR | | | | S | | **Sn** | **00 07 35.3** | **-1.4** |
| | comp=E,9.9nm,0.2s,SNR=7.9 | | | | | | | |
| **ESPR** | **Espera** | **3.51** | **69** | P | | **Pn** | **00 06 57.5** | **+2.3** |
| | comp=E,6.4nm,0.1s,SNR=35 | | | | | | | |
| ESPR | | | | S | | **Sn** | **00 07 35.3** | **-1.4** |
| | comp=E,9.9nm,0.2s,SNR=7.9 | | | | | | | |
| **ECEU** | **Ceuta** | **3.71** | **85** | P | | **Pn** | **00 07 00.3** | **+2.3** |
| | comp=E,0.9nm,0.1s,SNR=4.7 | | | | | | | |
| ECEU | | | | S | | **Sn** | **00 07 39.8** | **-2.0** |
| | comp=E,0.7nm,0.1s | | | | | | | |
| **ECEU** | **Ceuta** | **3.71** | **85** | P | | **Pn** | **00 07 00.3** | **+2.3** |
| | comp=E,0.9nm,0.1s,SNR=4.7 | | | | | | | |
| ECEU | | | | S | | **Sn** | **00 07 39.8** | **-2.0** |
| | comp=E,0.7nm,0.1s | | | | | | | |
| **EBAD** | **Badajoz** | **3.86** | **36** | ⇑P | | **Pn** | **00 07 02.0** | **+1.9** |
| | comp=E,1.6nm,0.1s,SNR=18 | | | | | | | |
| EBAD | | | | S | | **Sn** | **00 07 44.2** | **-1.3** |
| | comp=E,4.5nm,0.1s,SNR=7.4 | | | | | | | |
| **EBAD** | **Badajoz** | **3.86** | **36** | P | | **Pn** | **00 07 02.0** | **+1.9** |
| | comp=E,1.6nm,0.1s,SNR=18 | | | | | | | |
| EBAD | | | | S | | **Sn** | **00 07 44.2** | **-1.3** |
| | comp=E,4.5nm,0.1s,SNR=7.4 | | | | | | | |
| **PTOM** | **Tomar** | **4.12** | **17** | *e* | Pn | **Pn** | **00 07 05.7** | **+2.0** |
| PTOM | | | | *e* | Sn | **Sn** | **00 07 50.1** | **-1.8** |
| PTOM | | | | A | | A | 00 07 54.4 | |
| | comp=E,8.3nm,0.3s | | | | | | | |
| **PTOM** | **Tomar** | **4.12** | **17** | P | | **Pn** | **00 07 05.7** | **+2.0** |
| PTOM | | | | S | | **Sn** | **00 07 50.1** | **-1.8** |
| | comp=E,4.2nm,0.3s | | | | | | | |
| **PTOM** | **Tomar** | **4.12** | **17** | P | | **Pn** | **00 07 05.7** | **+2.0** |
| PTOM | | | | S | | **Sn** | **00 07 50.1** | **-1.8** |
| | comp=E,4.2nm,0.3s | | | | | | | |
| **CIA** | **Chichaoua** | **4.21** | **166** | P | | **Pn** | **00 07 06.0** | **+1.1** |
| CIA | | | | S | | Sn | 00 07 51.0 | -3.1 |
| **CIA** | **Chichaoua** | **4.21** | **166** | P | | **Pn** | **00 07 06.0** | **+1.1** |
| CIA | | | | S | | Sn | 00 07 51.0 | -3.1 |
| **PMRV** | **Marv??o** | **4.26** | **28** | *e* | Pn | **Pn** | **00 07 07.4** | **+1.8** |
| PMRV | | | | *e* | Sn | **Sn** | **00 07 53.7** | **-1.7** |
| PMRV | | | | A | | A | 00 07 56.9 | |
| | comp=E,13nm,0.3s | | | | | | | |
| **PMRV** | **Marv??o** | **4.26** | **28** | P | | **Pn** | **00 07 07.4** | **+1.8** |
| PMRV | | | | S | | **Sn** | **00 07 53.7** | **-1.7** |
| | comp=E,13nm,0.3s | | | | | | | |
| **PMRV** | **Marv??o** | **4.26** | **28** | P | | **Pn** | **00 07 07.4** | **+1.8** |
| PMRV | | | | S | | **Sn** | **00 07 53.7** | **-1.7** |
| | comp=E,13nm,0.3s | | | | | | | |
| **EMIJ** | **Mijas** | **4.27** | **76** | P | | **Pn** | **00 07 07.0** | **+1.2** |
| | comp=E,0.7nm,0.1s,SNR=14 | | | | | | | |
| EMIJ | | | | S | | **Sn** | **00 07 53.9** | **-1.9** |
| | comp=E,1.8nm,0.2s | | | | | | | |
| **EMIJ** | **Mijas** | **4.27** | **76** | P | | **Pn** | **00 07 07.0** | **+1.2** |
| | comp=E,0.7nm,0.1s,SNR=14 | | | | | | | |
| EMIJ | | | | S | | **Sn** | **00 07 53.8** | **-1.9** |
| | comp=E,1.8nm,0.2s | | | | | | | |
| **ECAB** | **El Cabril** | **4.34** | **55** | ⇑P | | **Pn** | **00 07 08.8** | **+2.1** |
| | comp=E,2.3nm,0.1s,SNR=18 | | | | | | | |
| ECAB | | | | S | | **Sn** | **00 07 56.2** | **-1.2** |
| | comp=E,1.0nm,0.1s | | | | | | | |
| **ECAB** | **El Cabril** | **4.34** | **55** | P | | **Pn** | **00 07 08.8** | **+2.1** |
| | comp=E,2.3nm,0.1s,SNR=18 | | | | | | | |
| ECAB | | | | S | | **Sn** | **00 07 56.2** | **-1.2** |
| | comp=E,1.0nm,0.1s | | | | | | | |
| **KIB** | **El Ksiba** | **4.47** | **133** | P | | **Pn** | **00 07 09.0** | **+0.5** |
| KIB | | | | S | | Sn | 00 07 56.0 | -4.6 |
| **KIB** | **El Ksiba** | **4.47** | **133** | P | | **Pn** | **00 07 09.0** | **+0.5** |
| KIB | | | | S | | Sn | 00 07 56.0 | -4.6 |
| **PCAS** | **Casmilo, Conde** | **4.52** | **14** | *e* | Sn | **Sn** | **00 07 59.6** | **-2.2** |
| PCAS | | | | A | | A | 00 08 04.5 | |
| | comp=E,8.4nm,0.8s | | | | | | | |
| **TZC** | **Tazercounte** | **4.53** | **140** | P | | **Pn** | **00 07 10.0** | **+0.5** |
| TZC | | | | S | | Sn | 00 07 58.0 | -4.3 |
| **TZC** | **Tazercounte** | **4.53** | **140** | P | | **Pn** | **00 07 10.0** | **+0.5** |
| TZC | | | | S | | Sn | 00 07 58.0 | -4.3 |
| **PCBR** | **Castelo Branco** | **4.60** | **24** | *e* | Pn | **Pn** | **00 07 12.1** | **+1.9** |
| PCBR | | | | *e* | Sn | **Sn** | **00 08 01.8** | **-1.8** |
| PCBR | | | | A | | A | 00 08 05.5 | |
| | comp=E,7.4nm,0.3s | | | | | | | |
| **PCBR** | **Castelo Branco** | **4.60** | **24** | P | | **Pn** | **00 07 12.1** | **+1.9** |
| PCBR | | | | S | | **Sn** | **00 08 01.8** | **-1.8** |
| | comp=E,3.7nm,0.3s | | | | | | | |
| **PCBR** | **Castelo Branco** | **4.60** | **24** | P | | **Pn** | **00 07 12.1** | **+1.9** |
| PCBR | | | | S | | **Sn** | **00 08 01.8** | **-1.8** |
| | comp=E,3.7nm,0.3s | | | | | | | |
| **OUK** | **Oukaimeden** | **4.77** | **158** | P | | **Pn** | **00 07 13.0** | **+0.1** |
| OUK | | | | S | | Sn | 00 08 03.0 | -5.4 |
| **OUK** | **Oukaimeden** | **4.77** | **158** | P | | **Pn** | **00 07 13.0** | **+0.1** |
| OUK | | | | S | | Sn | 00 08 03.0 | -5.4 |
| **CZD** | **Col de Zad** | **4.83** | **122** | P | | **Pn** | **00 07 14.0** | **+0.4** |
| **CZD** | **Col de Zad** | **4.83** | **122** | P | | **Pn** | **00 07 14.0** | **+0.4** |
| CZD | | | | *i* | S | Sn | 00 08 04.0 | -5.7 |
| **EADA** | **Adamuz** | **4.96** | **58** | ⇓P | | **Pn** | **00 07 17.4** | **+2.1** |
| | comp=E,1.8nm,0.1s,SNR=18 | | | | | | | |
| EADA | | | | S | | **Sn** | **00 08 10.6** | **-2.2** |
| | comp=E,1.5nm,0.1s | | | | | | | |
| **EADA** | **Adamuz** | **4.96** | **58** | P | | **Pn** | **00 07 17.4** | **+2.1** |
| | comp=E,1.8nm,0.1s,SNR=18 | | | | | | | |
| EADA | | | | S | | **Sn** | **00 08 10.6** | **-2.2** |
| | comp=E,1.5nm,0.1s | | | | | | | |
| **MTE** | **Manteigas** | **5.08** | **21** | *e* | Pn | **Pn** | **00 07 18.9** | **+1.9** |
| MTE | | | | *e* | Sn | **Sn** | **00 08 13.6** | **-2.2** |
| MTE | | | | A | | A | 00 08 19.7 | |
| | comp=E,6.1nm,0.5s | | | | | | | |
| **MTE** | **Manteigas** | **5.08** | **21** | P | | **Pn** | **00 07 18.9** | **+1.9** |
| MTE | | | | S | | **Sn** | **00 08 13.6** | **-2.2** |
| | comp=E,3.1nm,0.5s | | | | | | | |
| **MTE** | **Manteigas** | **5.08** | **21** | P | | **Pn** | **00 07 18.9** | **+1.9** |
| MTE | | | | S | | **Sn** | **00 08 13.6** | **-2.2** |
| | comp=E,3.1nm,0.5s | | | | | | | |
| **EGUA** | **Guajares** | **5.28** | **75** | P | | **Pn** | **00 07 22.4** | **+2.9** |
| | comp=E,1.2nm,0.2s,SNR=7.9 | | | | | | | |
| EGUA | | | | S | | **Sn** | **00 08 18.4** | **-2.0** |
| | comp=E,0.5nm,0.2s,SNR=7.9 | | | | | | | |
| **EGUA** | **Guajares** | **5.28** | **75** | P | | **Pn** | **00 07 22.4** | **+2.9** |
| | comp=E,1.2nm,0.2s,SNR=7.9 | | | | | | | |
| EGUA | | | | S | | **Sn** | **00 08 18.4** | **-2.0** |
| | comp=E,0.5nm,

comp=E,5.5nm,0.1s
**PCAB Cabril 6.21 13** S **Sn** 00 08 40.5 -3.0
comp=E,2.8nm,0.1s
**PCAB Cabril 6.21 13** S **Sn** 00 08 40.5 -3.0
comp=E,2.8nm,0.1s
**EHUE Huescar 6.27 68** P **Pn** 00 07 34.9 +1.6
comp=E,1.4nm,0.1s,SNR=7.9
EHUE S **Sn** 00 08 42.2 -2.8
comp=E,3.0nm,1.0s,SNR=7.9
**EHUE Huescar 6.27 68** P **Pn** 00 07 34.9 +1.6
comp=E,1.4nm,0.1s,SNR=7.9
EHUE S **Sn** 00 08 42.2 -2.8
comp=E,3.0nm,1.0s,SNR=7.9
**ELOB Lobios 6.36 13** P **Pn** 00 07 36.5 +2.0
comp=E,0.2nm,0.1s,SNR=7.9
ELOB S **Sn** 00 08 42.4 -4.8
comp=E,3.3nm,0.2s,SNR=7.9
**ELOB Lobios 6.36 13** P **Pn** 00 07 36.5 +2.0
comp=E,0.2nm,0.1s,SNR=7.9
ELOB S **Sn** 00 08 42.4 -4.8
comp=E,3.3nm,0.2s,SNR=7.9
**SESP Santiago Espad 6.41 65** P **Pn** 00 07 36.8 +1.6
comp=E,1.1nm,0.2s,SNR=7.9
SESP S **Sn** 00 08 45.6 -2.9
comp=E,0.7nm,0.1s,SNR=7.9
**SESP Santiago Espad 6.41 65** P **Pn** 00 07 36.8 +1.6
comp=E,1.1nm,0.2s,SNR=7.9
SESP S **Sn** 00 08 45.6 -2.9
comp=E,0.7nm,0.1s,SNR=7.9
**PGAV Gavieira, Arco 6.42 11** *e*Pn **Pn** 00 07 37.4 +2.1
PGAV *e*Sn **Sn** 00 08 45.2 -3.5
PGAV A A 00 08 48.6
comp=E,4.5nm,0.3s
**PGAV Gavieira, Arco 6.42 11** *e*Pn **Pn** 00 07 37.4 +2.1
**PBRG Braganca 6.61 21** *e*Sn **Sn** 00 08 49.6 -3.8
PBRG A A 00 08 53.7
comp=E,2.7nm,0.1s
**PBRG Braganca 6.61 21** S **Sn** 00 08 49.6 -3.8
comp=E,1.4nm,0.1s
**PBRG Braganca 6.61 21** S **Sn** 00 08 49.6 -3.8
comp=E,1.4nm,0.1s
**GUD Guadarrama 6.74 41** P **Pn** 00 07 41.3 +1.6
comp=E,2.1nm,0.2s,SNR=14
GUD S **Sn** 00 08 52.5 -4.1
comp=E,0.5nm,0.1s
**GUD Guadarrama 6.74 41** P **Pn** 00 07 41.3 +1.6
comp=E,2.1nm,0.2s,SNR=14
GUD S **Sn** 00 08 52.5 -4.1
comp=E,0.5nm,0.1s
**ECAL Calabor 6.74 21** P **Pn** 00 07 42.1 +2.4
comp=E,0.5nm,0.1s,SNR=7.9
ECAL S **Sn** 00 08 52.4 -4.2
comp=E,1.0nm,0.2s,SNR=7.9
**ECAL Calabor 6.74 21** P **Pn** 00 07 42.1 +2.4
comp=E,0.5nm,0.1s,SNR=7.9
ECAL S **Sn** 00 08 52.4 -4.2
comp=E,1.0nm,0.2s,SNR=7.9
**EAGO Agolada(Pontev 7.27 11** P **Pn** 00 07 48.4 +1.6
comp=E,2.4nm,3.8s,SNR=7.9
EAGO S **Sn** 00 09 04.7 -4.7
comp=E,0.9nm,0.1s,SNR=7.9
**EAGO Agolada(Pontev 7.27 11** P **Pn** 00 07 48.4 +1.6
comp=E,2.4nm,3.8s,SNR=7.9
EAGO S **Sn** 00 09 04.7 -4.7
comp=E,0.9nm,0.1s,SNR=7.9
**EMAZ Mazaricos 7.31 6** S Sn 00 09 04.9 -5.5
comp=E,1.7nm,0.1s,SNR=7.9
**EMAZ Mazaricos 7.31 6** S Sn 00 09 04.9 -5.5
comp=E,1.7nm,0.1s,SNR=7.9
**ETOB Tobarra 7.33 64** P **Pn** 00 07 48.8 +1.1
comp=E,0.4nm,0.1s,SNR=10
ETOB S **Sn** 00 09 06.0 -5.0
comp=E,0.3nm,0.2s,SNR=7.9
**ETOB Tobarra 7.33 64** P **Pn** 00 07 48.8 +1.1
comp=E,0.4nm,0.1s,SNR=10
ETOB S **Sn** 00 09 05.9 -5.0
comp=E,0.3nm,0.2s,SNR=7.9
**EPON Pontenova 7.94 15** S Sn 00 09 20.0 -6.1
comp=E,0.3nm,0.2s,SNR=7.9
**EPON Pontenova 7.94 15** S Sn 00 09 20.0 -6.1
comp=E,0.3nm,0.2s,SNR=7.9
**ETOR Torete 8.05 48** P **Pn** 00 08 00.3 +2.6
comp=E,10nm,0.2s,SNR=11
ETOR S **Sn** 00 09 23.5 -5.3
comp=E,1.3nm,0.2s,SNR=7.9
**ETOR Torete 8.05 48** P **Pn** 00 08 00.3 +2.6
comp=E,10nm,0.2s,SNR=11
ETOR S **Sn** 00 09 23.5 -5.3
comp=E,1.3nm,0.2s,SNR=7.9
**EMOS Mosqueruela 8.81 55** P **Pn** 00 08 10.9 +2.7
comp=E,0.3nm,0.2s,SNR=7.9
EMOS S **Sn** 00 09 42.9 -4.8
comp=E,0.1nm,0.2s,SNR=7.9
**EMOS Mosqueruela 8.81 55** P **Pn** 00 08 10.9 +2.7
comp=E,0.3nm,0.2s,SNR=7.9
EMOS S **Sn** 00 09 42.9 -4.8
comp=E,0.1nm,0.2s,SNR=7.9
**YMUS Pe¯a Musera 9.77 42** P **Pn** 00 08 24.1 +2.8
comp=E,0.4nm,3.1s,SNR=7.9
**YMUS Pe¯a Musera 9.77 42** P **Pn** 00 08 24.1 +2.8
comp=E,0.4nm,3.1s,SNR=7.9
**YASP Aspurt 9.79 41** P **Pn** 00 08 24.4 +2.8
comp=E,4.0nm,1.9s,SNR=7.9
**YASP Aspurt 9.79 41** P **Pn** 00 08 24.4 +2.8
comp=E,4.0nm,1.9s,SNR=7.9
**YSIG Sigues 9.83 42** P **Pn** 00 08 24.8 +2.8
comp=E,13nm,1.9s,SNR=7.9
**YSIG Sigues 9.83 42** P **Pn** 00 08 24.8 +2.8
comp=E,13nm,1.9s,SNR=7.9
**YBER Berdun 9.83 43** P **Pn** 00 08 24.8 +2.8
comp=E,1.9nm,2.5s,SNR=7.9
**YBER Berdun 9.83 43** P **Pn** 00 08 24.8 +2.8
comp=E,1.9nm,2.5s,SNR=7.9
**IELO Elcoad 9.83 41** P **Pn** 00 08 24.5 +2.4
comp=E,0.2nm,0.2s,SNR=7.9
**IELO Elcoad 9.83 41** P **Pn** 00 08 24.5 +2.4
comp=E,0.2nm,0.2s,SNR=7.9
**ELIZ Elizondo 9.91 38** P **Pn** 00 08 25.4 +2.3
comp=E,0.8nm,0.2s,SNR=7.9
**ELIZ Elizondo 9.91 38** P **Pn** 00 08 25.4 +2.3
comp=E,0.8nm,0.2s,SNR=7.9
**EALK Alkurruntz 9.96 38** P **Pn** 00 08 25.9 +2.1
comp=E,0.3nm,0.3s,SNR=7.9
EALK S Sn 00 10 08.9 -6.7
comp=E,0.3nm,0.3s,SNR=4.0
**EALK Alkurruntz 9.96 38** P **Pn** 00 08 25.9 +2.1
comp=E,0.3nm,0.3s,SNR=7.9
EALK S Sn 00 10 08.9 -6.7
comp=E,0.3nm,0.3s,SNR=4.0
**ATE Arette 10.29 41** P **Pn** 00 08 30.1 +1.8
comp=E,0.5nm,0.3s,SNR=7.9
ATE S Sn 00 10 16.8 -6.8
comp=E,0.1nm,0.2s,SNR=4.0
**ATE Arette 10.29 41** P **Pn** 00 08 30.1 +1.8
comp=E,0.5nm,0.3s,SNR=7.9
ATE S Sn 00 10 16.8 -6.8
comp=E,0.1nm,0.2s,SNR=4.0

*ISCJB **19** 00:12:22.4±2.4, 41˚08N±0˚10×43˚5E±0˚2, h7km, Error ellipse: s-maj=22.8km s-min=6.2km az=34.3*
*CSEM **19** 00:12:22.2±1.0, 41˚10N×43˚58E, h2km, MD2.6, Error ellipse: s-maj=29.8km s-min=6.5km az=126.0*
*DDA **19** 00:12:24.2, 40˚89N×43˚88E, h7km, Md2.6*
**ISC 19 00:12:21.4±2.3, 41˚10N±0˚09×43˚5E±0˚1, h7km, n7, σ0§38/13, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EAK** | **Akyaka** | **0.43** | **167** | *i* P | **Pg** | **00 12 30.1** | **+0.4** |
| EAK | | | | *i* S | **Sg** | **00 12 34.9** | **-0.4** |
| **EAK** | **Akyaka** | **0.43** | **167** | P | **Pg** | **00 12 30.1** | **+0.4** |
| EAK | | | | S | **Sg** | **00 12 34.9** | **-0.4** |
| **DIGO** | **Kars** | **0.69** | **187** | *i* P | **Pb** | **00 12 36.2** | **+0.3** |
| DIGO | | | | *i* S | **Sb** | **00 12 45.5** | **-0.2** |
| **DIGO** | **Kars** | **0.69** | **187** | P | **Pb** | **00 12 36.1** | **+0.3** |
| DIGO | | | | S | **Sb** | **00 12 45.5** | **-0.2** |
| **TBLG** | **Delisi** | **1.14** | **56** | P | **Sg** | **00 12 57.4** | **-0.5** |
| **DGRG** | **David-gareji** | **1.47** | **76** | P | **Pn** | **00 12 48.0** | **-0.3** |
| DGRG | | | | S | **Sb** | **00 13 08.2** | **+0.3** |
| **DGRG** | **David-gareji** | **1.47** | **76** | P | **Pn** | **00 12 48.0** | **-0.3** |
| DGRG | | | | S | **Sb** | **00 13 08.2** | **+0.3** |

*ISCJB **19** 00:24:03.7±0.3, 41˚28S±0˚05×90˚30W±0˚08, h10km, mb4.7/40, MS3.8/10, Error ellipse: s-maj=8.8km s-min=6.2km az=148.6*
*BJI **19** 00:24:03.0, 41˚30S×90˚30W, h11km, mB5.2/12, Ms5.7/5, Ms7 5.4/5*
*IDC **19** 00:24:03.5±0.5, 41˚25S×90˚49W, h0km, mb4.3/10, mb1 4.5/11, mb1mx4.4/19, mbtmp4.3/11, ML3.5/1, MS3.9/11, Ms1 3.9/11, ms1mx3.8/19, Error ellipse: s-maj=20.6km s-min=15.9km az=106.0*
*NEIC **19** 00:24:04.8±0.3, 41˚30S×90˚43W, h10km, mb4.9/35, Error ellipse: s-maj=9.7km s-min=8.6km az=76.0*
**ISC 19 00:24:04.8±0.3, 41˚30S±0˚08×90˚39W±0˚07, h10km, n270, σ1§13/277, mb4.9/41, MS3.9/10, 1D, Southeast of Easter Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLCA** | **Paso Flores** | **14.99** | **94** | *e*Pn | **Pn** | **00 27 36.1** | **-0.6** |
| PLCA | | | | *e*Sn | Sn | 00 30 09.2 | -14 |
| **USHA** | **Ushuaia** | **19.85** | **140** | P | **Pn** | **00 28 37.7** | **+0.5** |
| | 0.1nm,0.3s,baz=339,slow=8.6,SNR=1.9 | | | | | | |
| USHA | | | | LR | LR | 00 34 23.2 | |
| | comp=Z,679nm,19.1s,baz=288,slow=31 | | | | | | |
| **LCO** | **Las Campanas** | **20.18** | **59** | *e*P | Pn | 00 28 41.2 | -0.5 |
| | 56nm,1.3s | | | | | | |
| **CFAA** | **Coronel Fontan** | **20.23** | **69** | P | **P** | **00 28 40.1** | **+0.1** |
| | 1.4nm,1.1s,baz=225,slow=10,SNR=9.9 | | | | | | |
| CFAA | | | | LR | LR | 00 35 15.8 | |
| | comp=Z,34nm,18.4s,baz=230,slow=33 | | | | | | |
| **RPN** | **Rapa Nui** | **21.04** | **306** | LR | LR | 00 34 43.8 | |
| | comp=Z,195nm,20.8s,baz=145,slow=31 | | | | | | |
| **TRQA** | **Tornquist** | **22.06** | **91** | *e*P | **P** | **00 29 00.2** | **+0.4** |
| | 30nm,1.3s | | | | | | |
| **LVC** | **Limon Verde** | **25.94** | **51** | P | **P** | **00 29 38.6** | **+1.0** |
| | 30nm,0.9s,baz=201,slow=7.5,SNR=4.3 | | | | | | |
| **LVC** | **Limon Verde** | **25.94** | **51** | *e*P | **P** | **00 29 38.6** | **+1.0** |
| | 7.2nm,1.8s | | | | | | |
| **CPUP** | **Villa Florida** | **31.04** | **72** | P | **P** | **00 30 23.1** | **+0.3** |
| | 4.7nm,1.1s,baz=244,slow=9.3,SNR=4.0 | | | | | | |
| CPUP | | | | LR | LR | 00 41 40.5 | |
| | comp=Z,463nm,18.9s,baz=241,slow=34 | | | | | | |
| **CPUP** | **Villa Florida** | **31.04** | **72** | *e*P | **P** | **00 30 21.9** | **-0.9** |
| **LPAZ** | **La Paz** | **31.47** | **44** | P | **P** | **00 30 28.9** | **+1.6** |
| | 7.3nm,1.2s,baz=187,slow=5.6,SNR=14 | | | | | | |
| LPAZ | | | | PcP | **PcP** | **00 33 20.8** | **+0.3** |
| | 2.5nm,1.1s,baz=304,slow=2.1,SNR=4.5 | | | | | | |
| LPAZ | | | | LR | LR | 00 40 23.0 | |
| | comp=Z,250nm,20.8s,baz=208,slow=31 | | | | | | |
| **LPAZ** | **La Paz** | **31.47** | **44** | *e*P | **P** | **00 30 28.9** | **+1.7** |
| | 11nm,1.2s | | | | | | |
| LPAZ | | | | *e*PcP | **PcP** | **00 33 20.8** | **+0.3** |
| **SAML** | **Samuel** | **40.21** | **44** | *e*P | **P** | **00 31 41.7** | **+0.2** |
| | 6.1nm,0.9s | | | | | | |
| **RKT** | **Rikitea** | **41.35** | **282** | *e*LR | LR | 00 43 21.2 | |
| | 411nm,27.8s,baz=121 | | | | | | |
| **OTAV** | **Otavalo** | **42.74** | **18** | *e*P | **P** | **00 32 04.5** | **+1.7** |
| | 12nm,0.9s | | | | | | |
| **BDFB** | **Brasilia** | **44.57** | **68** | P | **P** | **00 32 17.1** | **-0.1** |
| | 1.6nm,0.6s,baz=281,slow=6.7,SNR=4.0 | | | | | | |
| BDFB | | | | LR | LR | 00 50 24.0 | |
| | comp=Z,369nm,18.1s,baz=224,slow=35 | | | | | | |
| **ROSC** | **El Rosal** | **48.23** | **22** | P | **P** | **00 32 49.1** | **+2.9** |
| | 15nm,0.9s,baz=149,slow=2.8,SNR=13 | | | | | | |
| ROSC | | | | LR | LR | 00 50 18.2 | |
| | comp=Z,95nm,22.0s,baz=189,slow=33 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **48.59** | **155** | P | **P** | **00 32 48.8** | **+0.9** |
| **PTGA** | **Pitinga** | **48.85** | **42** | *e*P | **P** | **00 32 49.9** | **-0.7** |
| | 9.9nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **48.93** | **180** | P | **P** | **00 32 52.1** | **+1.3** |
| | 1.6nm,0.9s,baz=119,slow=3.8,SNR=3.8 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **49.13** | **154** | P | **P** | **00 32 53.4** | **+1.3** |
| **VNA2** | **Neumayer--Watz** | **49.37** | **155** | P | **P** | **00 32 54.9** | **+0.9** |
| | baz=273,slow=7.2 | | | | | | |
| **SNAA** | **Sanae** | **50.66** | **156** | P | **P** | **00 33 03.8** | **0.0** |
| **SNAA** | **Sanae** | **50.66** | **156** | P | **P** | **00 33 04.3** | **+0.5** |
| | 2.4nm,0.9s,baz=288,slow=3.7,SNR=14 | | | | | | |
| **SNAA** | **Sanae** | **50.66** | **156** | *e*P | **P** | **00 33 03.8** | **0.0** |
| | 5.3nm,1.1s | | | | | | |
| **TBI** | **Tubuai** | **52.05** | **271** | *e*S | **S** | **00 40 39.5** | **+1.0** |
| | 86nm,26.8s | | | | | | |
| TBI | | | | *e*LR | LR | 00 48 13.9 | |
| | 540nm,29.2s,baz=130 | | | | | | |
| **SDV** | **Santo Domingo** | **53.15** | **25** | *e*P | **P** | **00 33 22.6** | **-0.4** |
| | 15nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **53.72** | **195** | P | **P** | **00 33 28.4** | **+2.0** |
| | 1.0nm,0.7s,baz=117,slow=6.2,SNR=9.5 | | | | | | |
| VNDA | | | | LR | LR | 00 52 41.5 | |
| | comp=Z,118nm,18.0s,baz=130,slow=32 | | | | | | |
| **VNDA** | **Vanda** | **53.72** | **195** | *e*P | **P** | **00 33 28.9** | **+2.5** |
| | 45nm,2.8s | | | | | | |
| **PPT2** | **Papeete2** | **55.56** | **277** | *e*S | **S** | **00 41 24.7** | **-1.6** |
| | 130nm,26.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 00 49 47.0 | |
| | 424nm,27.2s | | | | | | |
| **PPT** | **Papeete** | **55.57** | **277** | LR | LR | 00 52 18.4 | |
| | comp=Z,68nm,18.9s,baz=190,slow=31 | | | | | | |
| **SJG** | **San Juan** | **63.24** | **26** | *e*P | **P** | **00 34 32.5** | **-0.9** |
| | 16nm,1.0s | | | | | | |
| **SYO** | **Syowa Base** | **63.97** | **162** | *e*P | **P** | **00 34 36.7** | **-0.9** |
| **035A** | **Encino** | **68.27** | **353** | P | **P** | **00 35 06.9** | **+1.2** |
| | baz=69 | | | | | | |
| **034A** | **Hebbronville** | **68.45** | **352** | P | **P** | **00 35 08.1** | **+1.3** |
| | baz=69 | | | | | | |
| **936A** | **North Padre Is** | **68.67** | **353** | P | **P** | **00 35 09.4** | **+1.2** |
| | baz=69 | | | | | | |
| **933A** | **Laredo** | **69.06** | **352** | P | **P** | **00 35 11.8** | **+1.2** |
| | baz=69 | | | | | | |
| **834A** | **Tilden** | **69.49** | **352** | P | **P** | **00 35 14.3** | **+1.1** |
| | baz=70 | | | | | | |
| **MAW** | **Mawson** | **69.54** | **169** | P | **P** | **00 35 13.4** | **+0.2** |
| | 1.4nm,0.7s,baz=200,slow=14,SNR=3.8 | | | | | | |
| MAW | | | | LR | LR | 01 02 48.3 | |
| | comp=Z,69nm,19.5s,baz=240,slow=33 | | | | | | |
| **833A** | **Chaparral WMA,** | **69.78** | **352** | P | **P** | **00 35 15.7** | **+0.7** |
| | baz=70 | | | | | | |
| **832A** | **Faith Ranch, C** | **69.80** | **351** | P | **P** | **00 35 15.8** | **+0.6** |
| | baz=70 | | | | | | |
| **737A** | **Port Lavaca** | **69.94** | **354** | P | **P** | **00 35 17.0** | **+1.0** |
| | baz=70 | | | | | | |
| **738A** | **Farr-Stevens R** | **69.96** | **355** | P | **P** | **00 35 17.0** | **+0.9** |
| | baz=70 | | | | | | |
| **734A** | **La Parita Cree** | **70.20** | **352** | P | **P** | **00 35 18.2** | **+0.6** |
| | baz=70 | | | | | | |
| **732A** | **Laxson Ranch,** | **70.24** | **351** | P | **P** | **00 35 18.6** | **+0.7** |
| | baz=71 | | | | | | |
| **637A** | **Eagle Lake** | **70.60** | **355** | P | **P** | **00 35 20.8** | **+0.8** |
| | baz=71 | | | | | | |
| **633A** | **Saathoff Ranch** | **70.87** | **352** | P | **P** | **00 35 22.8** | **+1.1** |
| | baz=71 | | | | | | |
| **632A** | **Uvalde** | **70.99** | **351** | P | **P** | **00 35 23.3** | **+0.8** |
| | baz=71 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **71.35** | **348** | *e*P | **P** | **00 35 25.4** | **+0.7** |
| **TXAR** | **Lajitas Array** | **71.35** | **348** | P | **P** | **00 35 25.7** | **+1.0** |
| | 3.6nm,0.9s,baz=168,slow=9.4,SNR=26 | | | | | | |
| **534A** | **Blanco** | **71.37** | **353** | P | **P** | **00 35 25.5** | **+0.8** |
| | baz=72 | | | | | | |
| **533A** | **Kerrville** | **71.47** | **352** | P | **P** | **00 35 25.9** | **+0.6** |
| | baz=72 | | | | | | |
| **CASY** | **Casey** | **71.54** | **189** | *e*P | **P** | **00 35 25.1** | **-0.3** |
| | 28nm,1.8s | | | | | | |
| **532A** | **Rocksprings** | **71.61** | **351** | P | **P** | **00 35 26.5** | **+0.2** |
| | baz=72,SNR=9.2 | | | | | | |
| **531A** | **Rocksprings** | **71.73** | **351** | P | **P** | **00 35 27.5** | **+0.6** |
| | baz=72,SNR=11 | | | | | | |
| **530A** | **J-C Ranch, Com** | **71.81** | **350** | P | **P** | **00 35 28.4** | **+0.9** |
| | baz=72,SNR=11 | | | | | | |
| **438A** | **Sam Houston St** | **71.85** | **355** | P | **P** | **00 35 29.0** | **+1.4** |
| | baz=72 | | | | | | |
| **529A** | **Stev Forest Ra** | **71.91** | **349** | P | **P** | **00 35 28.6** | **+0.5** |
| | baz=72 | | | | | | |
| **JCT** | **Junction City** | **71.95** | **351** | P | **P** | **00 35 28.9** | **+0.7** |
| | baz=72 | | | | | | |
| **JCT** | **Junction City** | **71.95** | **351** | *e*P | **P** | **00 35 27.9** | **-0.4** |
| | 12nm,1.2s | | | | | | |
| **434A** | **Burnet** | **72.12** | **353** | P | **P** | **00 35 29.8** | **+0.5** |
| | baz=72 | | | | | | |
| **433A** | **Art** | **72.15** | **352** | P | **P** | **00 35 29.3** | **-0.1** |
| | baz=72,SNR=9.1 | | | | | | |
| **431A** | **Sonora** | **72.25** | **351** | P | **P** | **00 35 30.6** | **+0.5** |
| | baz=73,SNR=8.3 | | | | | | |
| **429A** | **Davenport Ranc** | **72.35** | **350** | P | **P** | **00 35 31.0** | **+0.3** |
| | baz=73,SNR=5.6 | | | | | | |
| **430A** | **Baggett Ranch,** | **72.43** | **350** | P | **P** | **00 35 31.5** | **+0.4** |
| | baz=73 | | | | | | |
| **337A** | **Centerville** | **72.44** | **355** | P | **P** | **00 35 32.2** | **+1.2** |
| | baz=73 | | | | | | |
| **338A** | **Crockett** | **72.44** | **356** | P | **P** | **00 35 32.1** | **+1.0** |
| | baz=73 | | | | | | |
| **335A** | **Moody** | **72.52** | **354** | P | **P** | **00 35 32.1** | **+0.6** |
| | baz=73 | | | | | | |
| **336A** | **Riesel** | **72.57** | **354** | P | **P** | **00 35 32.2** | **+0.4** |
| | baz=73 | | | | | | |
| **334A** | **Lometa** | **72.64** | **353** | P | **P** | **00 35 32.1** | **-0.2** |
| | baz=73,SNR=6.1 | | | | | | |
| **333A** | **Richland Sprin** | **72.70** | **352** | P | **P** | **00 35 32.9** | **+0.2** |
| | baz=73 | | | | | | |
| **332A** | **Millersview** | **72.84** | **352** | P | **P** | **00 35 33.3** | **-0.3** |
| | baz=73 | | | | | | |
| **331A** | **San Angelo** | **72.84** | **351** | P | **P** | **00 35 33.7** | **+0.1** |
| | baz=73 | | | | | | |
| **330A** | **Mertzon** | **73.03** | **350** | P | **P** | **00 35 34.9** | **+0.2** |
| | baz=73 | | | | | | |
| **239A** | **Gary** | **73.05** | **356** | P | **P** | **00 35 35.0** | **+0.3** |
| | baz=73 | | | | | | |
| **237A** | **Washetta, Mont** | **73.11** | **355** | P | **P** | **00 35 35.7** | **+0.7** |
| | baz=74 | | | | | | |
| **236A** | **Katherine and** | **73.16** | **355** | P | **P** | **00 35 35.7** | **+0.4** |
| | baz=74 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **73.21** | **350** | P | **P** | **00 35 36.1** | **+0.3** |
| | baz=74 | | | | | | |
| **WHTX** | **Lake Whitney** | **73.22** | **354** | P | **P** | **00 35 36.2** | **+0.5** |
| | baz=74 | | | | | | |
| **234A** | **Clairette** | **73.29** | **353** | P | **P** | **00 35 36.6** | **+0.4** |
| | baz=74 | | | | | | |
| **232A** | **Coleman** | **73.33** | **352** | P | **P** | **00 35 36.4** | **-0.1** |
| | baz=74,SNR=5.3 | | | | | | |
| **233A** | **Rising Star** | **73.38** | **352** | P | **P** | **00 35 36.9** | **+0.2** |
| | baz=74 | | | | | | |
| **231A** | **Bronte** | **73.45** | **351** | P | **P** | **00 35 37.4** | **+0.3** |
| | baz=74 | | | | | | |
| **230A** | **Sterling City** | **73.50** | **350** | P | **P** | **00 35 38.0** | **+0.6** |
| | baz=74 | | | | | | |
| **229A** | **Bryant Ranch,** | **73.66** | **350** | P | **P** | **00 35 39.0** | **+0.5** |
| | baz=74 | | | | | | |
| **138A** | **Matatall Enter** | **73.72** | **356** | P | **P** | **00 35 39.1** | **+0.4** |
| | baz=74 | | | | | | |
| **134A** | **White-Moore Ra** | **73.85** | **353** | P | **P** | **00 35 39.6** | **+0.1** |
| | baz=74,SNR=6.1 | | | | | | |
| **228A** | **UT Block 9, Go** | **73.92** | **349** | P | **P** | **00 35 40.0** | **0.0** |
| | baz=74 | | | | | | |
| **MNTX** | **Cornudas Mount** | **73.95** | **347** | P | **P** | **00 35 40.1** | **0.0** |
| | baz=74 | | | | | | |
| **133A** | **Hamilton Ranch** | **73.96** | **353** | P | **P** | **00 35 40.5** | **+0.4** |
| | baz=74 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **74.05** | **352** | P | **P** | **00 35 40.8** | **+0.2** |
| | baz=74 | | | | | | |
| **130A** | **Snyder** | **74.18** | **351** | P | **P** | **00 35 41.6** | **+0.1** |
| | baz=74 | | | | | | |
| **131A** | **Roby** | **74.19** | **351** | P | **P** | **00 35 41.7** | **+0.2** |
| | baz=74 | | | | | | |
| **129A** | **Stewart Farms,** | **74.33** | **350** | P | **P** | **00 35 43.0** | **+0.7** |
| | baz=75 | | | | | | |
| **128A** | **Castleberry Fa** | **74.40** | **349** | P | **P** | **00 35 43.4** | **+0.6** |
| | baz=75 | | | | | | |
| **Z36A** | **Blue Ridge** | **74.41** | **355** | P | **P** | **00 35 43.2** | **+0.6** |
| | baz=75 | | | | | | |
| **Z35A** | **Perchaven, San** | **74.53** | **354** | P | **P** | **00 35 43.9** | **+0.5** |
| | baz=75 | | | | | | |
| **GOGA** | **Godfrey** | **74.62** | **6** | *e*P | **P** | **00 35 42.0** | **-1.9** |
| | 9.9nm,0.9s | | | | | | |
| **Z33A** | **Whitaker Ranch** | **74.62** | **353** | P | **P** | **00 35 44.4** | **+0.5** |
| | baz=75 | | | | | | |
| **Z34A** | **Collier Ranch,** | **74.63** | **353** | P | **P** | **00 35 44.5** | **+0.5** |
| | baz=75 | | | | | | |
| **Z32A** | **Haskell** | **74.71** | **352** | P | **P** | **00 35 44.9** | **+0.4** |
| | baz=75 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **74.80** | **352** | P | **P** | **00 35 45.1** | **+0.2** |
| | baz=75 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **74.88** | **351** | P | **P** | **00 35 45.4** | **0.0** |
| | baz=75 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **74.92** | **350** | P | **P** | **00 35 45.8** | **+0.1** |
| | baz=75 | | | | | | |
| **Y39A** | **Lockesburg** | **74.95** | **357** | P | **P** | **00 35 46.1** | **+0.3** |
| | baz=75 | | | | | | |
| **Y38A** | **Idabel** | **74.97** | **356** | P | **P** | **00 35 46.2** | **+0.3** |
| | baz=75 | | | | | | |
| **Y36A** | **Durant** | **75.03** | **355** | P | **P** | **00 35 46.7** | **+0.5** |
| | baz=75 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **75.20** | **354** | P | **P** | **00 35 47.7** | **+0.5** |
| | baz=76 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **75.40** | **352** | P | **P** | **00 35 48.9** | **+0.5** |
| | baz=76 | | | | | | |
| **Y30A** | **Stafford Cattl** | **75.43** | **351** | P | **P** | **00 35 48.9** | **+0.3** |
| | baz=76 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **75.44** | **352** | P | **P** | **00 35 49.1** | **+0.4** |
| | baz=76 | | | | | | |
| **Y29A** | **Porterfield Fa** | **75.51** | **350** | P | **P** | **00 35 49.4** | **+0.3** |
| | baz=76 | | | | | | |
| **MIAR** | **Mount Ida** | **75.53** | **357** | P | **P** | **00 35 49.5** | **+0.3** |
| | baz=76 | | | | | | |
| **MIAR** | **Mount Ida** | **75.53** | **357** | *e*P | **P** | **00 35 49.5** | **+0.3** |
| | 33nm,1.9s | | | | | | |
| **X35A** | **Drake** | **75.58** | **354** | P | **P** | **00 35 49.8** | **+0.4** |
| | baz=76 | | | | | | |
| **TUC** | **Tucson** | **75.63** | **342** | *e*P | **P** | **00 35 49.5** | **-0.4** |
| | 36nm,2.5s | | | | | | |
| **JSC** | **Jenkinsville** | **75.68** | **8** | *e*P | **P** | **00 35 50.6** | **+0.6** |
| | 22nm,1.3s | | | | | | |
| **X36A** | **Centrahoma** | **75.70** | **355** | P | **P** | **00 35 50.3** | **+0.2** |
| | baz=76 | | | | | | |
| **MSTX** | **Muleshoe** | **75.77** | **349** | P | **P** | **00 35 51.4** | **+0.8** |
| | baz=76 | | | | | | |
| **MSTX** | **Muleshoe** | **75.77** | **349** | *e*P | **P** | **00 35 51.8** | **+1.2** |
| | 14nm,0.9s | | | | | | |
| **214A** | **Organ Pipe Nat** | **75.78** | **340** | P | **P** | **00 35 50.7** | **+0.1** |
| | baz=76 | | | | | | |
| **X32A** | **Elmer** | **75.80** | **352** | P | **P** | **00 35 51.3** | **+0.6** |
| | baz=76 | | | | | | |
| **X34A** | **Smith Ranch, M** | **75.84** | **354** | P | **P** | **00 35 51.7** | **+0.8** |
| | baz=76 | | | | | | |
| **X30A** | **Coker Ranch, T** | **75.99** | **351** | P | **P** | **00 35 52.6** | **+0.7** |
| | baz=76 | | | | | | |
| **SWET** | **Sewanee** | **76.26** | **4** | *e*P | **P** | **00 35 53.5** | **+0.2** |
| | 20nm,1.2s | | | | | | |
| **W36A** | **Wetumka** | **76.26** | **355** | P | **P** | **00 35 53.4** | **+0.2** |
| | baz=77 | | | | | | |
| **W35A** | **Tecumseh** | **76.32** | **355** | P | **P** | **00 35 54.3** | **+0.7** |
| | baz=77 | | | | | | |
| **W33A** | **Caddo, Fort Co** | **76.44** | **353** | P | **P** | **00 35 55.7** | **+1.3** |
| | baz=77 | | | | | | |
| **W34A** | **Bridge Creek,** | **76.47** | **354** | P | **P** | **00 35 55.2** | **+0.7** |
| | baz=77 | | | | | | |
| **AMTX** | **Amarillo** | **76.52** | **350** | P | **P** | **00 35 55.8** | **+1.0** |
| | baz=77 | | | | | | |
| **AMTX** | **Amarillo** | **76.52** | **350** | *e*P | **P** | **00 35 55.9** | **+1.0** |
| | 14nm,1.0s | | | | | | |
| **KMSC** | **Kings Mountain** | **76.53** | **8** | P | **P** | **00 35 55.1** | **+0.3** |
| | baz=77 | | | | | | |
| **CPCT** | **Cooper Cave** | **76.57** | **5** | *e*P | **P** | **00 35 54.7** | **-0.3** |
| **V38A** | **Canehill** | **76.88** | **357** | P | **P** | **00 35 57.0** | **+0.2** |
| | baz=77 | | | | | | |
| **V36A** | **Jenks** | **76.88** | **355** | P | **P** | **00 35 57.2** | **+0.5** |
| | baz=77 | | | | | | |
| **V35A** | **Meyer Ranch, C** | **76.92** | **355** | P | **P** | **00 35 57.3** | **+0.3** |
| | baz=77 | | | | | | |
| **V37A** | **Hulbert** | **76.94** | **356** | P | **P** | **00 35 57.3** | **+0.2** |
| | baz=77 | | | | | | |
| **TUL1** | **Tulsa** | **77.00** | **355** | P | **P** | **00 35 57.6** | **+0.2** |
| | baz=77 | | | | | | |
| **TUL1** | **Tulsa** | **77.00** | **355** | *e*P | **P** | **00 35 57.7** | **+0.2** |
| | 12nm,1.0s | | | | | | |
| **V32A** | **Arapaho** | **77.06** | **353** | P | **P** | **00 35 59.2** | **+1.4** |
| | baz=77 | | | | | | |
| **V33A** | **Lossen Ranch,** | **77.09** | **353** | P | **P** | **00 35 59.1** | **+1.2** |
| | baz=78 | | | | | | |
| **V31A** | **Spring Creek L** | **77.19** | **352** | P | **P** | **00 35 59.5** | **+0.9** |
| | baz=78 | | | | | | |
| **V30A** | **Spur Ranch, Mi** | **77.27** | **351** | P | **P** | **00 36 00.3** | **+1.3** |
| | baz=78 | | | | | | |
| **ANMO** | **Albuquerque** | **77.30** | **347** | *e*P | **P** | **00 35 58.9** | **-0.5** |
| | 5.0nm,1.0s | | | | | | |
| **U38A** | **Gravette** | **77.45** | **357** | P | **P** | **00 36 00.3** | **+0.3** |
| | baz=78 | | | | | | |
| **U37A** | **Salina** | **77.45** | **356** | P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| U27A | Thompson Grove | 78.19 | 350 | P | | P | 00 36 04.8 +0.5 |
| | baz=78 | | | | | | |
| T34A | McClaskey Farm | 78.20 | 354 | P | | P | 00 36 04.9 +0.8 |
| | baz=79 | | | | | | |
| IRM | Iron Mountain | 78.47 | 339 | P | | P | 00 36 07.3 +1.5 |
| | baz=79 | | | | | | |
| T31A | Randall Ranch, | 78.49 | 352 | P | | P | 00 36 06.8 +1.0 |
| | baz=79 | | | | | | |
| BELC | Belle Mtn. Jos | 78.55 | 339 | P | | P | 00 36 07.2 +0.9 |
| | baz=79 | | | | | | |
| T28A | Walsh | 78.78 | 350 | P | | P | 00 36 08.2 +0.8 |
| | baz=79 | | | | | | |
| S37A | Fort Scott | 78.79 | 356 | P | | P | 00 36 07.8 +0.5 |
| | baz=79 | | | | | | |
| S36A | Lake Cedric, C | 78.79 | 356 | P | | P | 00 36 07.8 +0.5 |
| | baz=79 | | | | | | |
| S35A | Otter Creek Ra | 78.79 | 355 | P | | P | 00 36 08.0 +0.6 |
| | baz=79 | | | | | | |
| S34A | Willow Spring | 78.87 | 355 | P | | P | 00 36 08.8 +1.0 |
| | baz=79 | | | | | | |
| FMP | Fort Macarthur | 78.94 | 337 | P | | P | 00 36 09.1 +0.8 |
| | baz=79 | | | | | | |
| S32A | Newby Ranch, P | 79.01 | 353 | P | | P | 00 36 10.3 +1.7 |
| | baz=79 | | | | | | |
| T26A | Comanche Natio | 79.03 | 349 | P | | P | 00 36 10.3 +1.4 |
| | baz=79 | | | | | | |
| S30A | Montezuma | 79.10 | 352 | P | | P | 00 36 10.5 +1.4 |
| | baz=80 | | | | | | |
| GMRC | Granite Mounta | 79.20 | 339 | P | | P | 00 36 11.3 +1.4 |
| | baz=80 | | | | | | |
| BFSC | Mount Baldy Ra | 79.25 | 337 | P | | P | 00 36 11.3 +1.2 |
| | baz=80 | | | | | | |
| S26A | Kim | 79.45 | 349 | P | | P | 00 36 12.6 +1.4 |
| | baz=80 | | | | | | |
| R34A | Isabella, Hill | 79.47 | 355 | P | | P | 00 36 12.2 +1.1 |
| | baz=80 | | | | | | |
| BLG | Laguna Peak | 79.55 | 336 | P | | P | 00 36 12.9 +1.3 |
| | baz=80 | | | | | | |
| R31A | Burdett | 79.65 | 353 | P | | P | 00 36 13.6 +1.5 |
| | baz=80 | | | | | | |
| R30A | Dighton | 79.72 | 352 | P | | P | 00 36 14.1 +1.6 |
| | baz=80 | | | | | | |
| SDCO | Great Sand Dun | 79.88 | 348 | P | | P | 00 36 14.9 +1.2 |
| | baz=80 | | | | | | |
| MVCO | Mesa Verde | 79.88 | 345 | P | | P | 00 36 15.1 +1.5 |
| | baz=80 | | | | | | |
| EDW2 | Edwards Air Fo | 79.94 | 337 | P | | P | 00 36 15.0 +1.2 |
| | baz=80 | | | | | | |
| R28A | Tribune | 79.95 | 351 | P | | P | 00 36 15.1 +1.3 |
| | baz=80 | | | | | | |
| GSC | Goldstone | 80.00 | 338 | P | | P | 00 36 15.4 +1.2 |
| | baz=80 | | | | | | |
| R27A | Eads | 80.02 | 350 | P | | P | 00 36 15.3 +1.1 |
| | baz=80 | | | | | | |
| S22A | 4UR Ranch, Cre | 80.09 | 347 | P | | P | 00 36 16.2 +1.3 |
| | baz=80 | | | | | | |
| S22A | 4UR Ranch, Cre | 80.09 | 347 | *eP* | | P | 00 36 14.0 -0.9 |
| | 12nm,1.4s | | | | | | |
| CBKS | Cedar Bluff | 80.19 | 353 | P | | P | 00 36 16.2 +1.1 |
| | baz=81 | | | | | | |
| Q33A | Connelly Farm, | 80.21 | 354 | P | | P | 00 36 16.2 +1.2 |
| | baz=81 | | | | | | |
| KSU1 | Kansas State U | 80.22 | 355 | P | | P | 00 36 16.2 +1.1 |
| | baz=81 | | | | | | |
| Q32A | Meitler Ranch, | 80.26 | 354 | P | | P | 00 36 16.7 +1.3 |
| | baz=81 | | | | | | |
| Q31A | Ellis | 80.35 | 353 | P | | P | 00 36 17.3 +1.4 |
| | baz=81 | | | | | | |
| Q29A | Oakley | 80.40 | 352 | P | | P | 00 36 17.3 +1.2 |
| | baz=81 | | | | | | |
| PKM | Peak Mountain | 80.51 | 336 | P | | P | 00 36 18.0 +1.0 |
| | baz=81 | | | | | | |
| P34A | Walnut Farm, R | 80.68 | 355 | P | | P | 00 36 18.6 +1.0 |
| | baz=81 | | | | | | |
| Q24A | Divide | 81.01 | 348 | P | | P | 00 36 21.1 +1.3 |
| | baz=81 | | | | | | |
| O34A | Beatrice | 81.31 | 355 | P | | P | 00 36 21.9 +1.0 |
| | baz=82 | | | | | | |
| SMCO | Snowmass | 81.51 | 347 | *eP* | | P | 00 36 24.4 +1.9 |
| | 5.2nm,0.9s | | | | | | |
| TMUT | Trail Mountain | 82.43 | 344 | *eP* | | P | 00 36 27.4 +0.1 |
| | 30nm,0.6s | | | | | | |
| O20A | White River Ci | 82.67 | 346 | P | | P | 00 36 30.0 +1.7 |
| | baz=83 | | | | | | |
| MPU | Maple Canyon | 83.21 | 344 | *eP* | | P | 00 36 33.3 +2.1 |
| | 11nm,1.4s | | | | | | |
| NLU | North Lily Min | 83.25 | 343 | *eP* | | P | 00 36 33.8 +2.4 |
| | 10nm,1.3s | | | | | | |
| NV01 | Mina Array Sit | 83.34 | 338 | *eP* | | P | 00 36 30.9 -1.0 |
| NVAR | Mina Array Bea | 83.34 | 338 | P | | P | 00 36 31.6 -0.3 |
| | 1.9nm,0.8s,baz=175,slow=6.1,SNR=13 | | | | | | |
| L28A | Connealy Angus | 83.54 | 352 | P | | P | 00 36 34.7 +2.0 |
| | baz=84 | | | | | | |
| DUG | Dugway | 83.64 | 343 | P | | P | 00 36 34.5 +1.2 |
| | baz=84 | | | | | | |
| DUG | Dugway | 83.64 | 343 | *eP* | | P | 00 36 32.7 -0.6 |
| | 7.3nm,1.1s | | | | | | |
| K22A | Casper | 84.83 | 348 | P | | P | 00 36 40.4 +1.1 |
| | baz=85 | | | | | | |
| K22A | Casper | 84.83 | 348 | *eP* | | P | 00 36 38.1 -1.2 |
| | 18nm,1.3s | | | | | | |
| ECSD | EROS Data Cent | 84.84 | 355 | P | | P | 00 36 39.8 +0.7 |
| | baz=85 | | | | | | |
| ECSD | EROS Data Cent | 84.84 | 355 | *eP* | | P | 00 36 38.1 -1.0 |
| | 120nm,2.8s | | | | | | |
| DZM | Mont Dzumac | 85.04 | 245 | *e*LR | | LR | 01 03 27.1 |
| | 260nm,26.4s | | | | | | |
| BW06 | Boulder Array | 85.46 | 346 | *eP* | | P | 00 36 42.9 +0.4 |
| | 26nm,2.3s | | | | | | |
| AHID | Auburn Hatcher | 85.75 | 345 | *eP* | | P | 00 36 40.5 -3.4 |
| | 8.1nm,0.5s | | | | | | |
| FXWY | Fox Creek | 86.58 | 345 | *eP* | | P | 00 36 46.8 -1.2 |
| | 60nm,2.8s | | | | | | |
| G27A | Dupree | 86.91 | 352 | P | | P | 00 36 50.1 +0.7 |
| | baz=87 | | | | | | |
| DBIC | Dimbokro | 91.01 | 82 | LR | | LR | 01 14 05.6 |
| | comp=Z,60nm,18.5s,baz=186,slow=33 | | | | | | |
| H11S2 | WAKE ISLAND Hyl | 111.53 | 276 | T | | T | 02 44 42.7 |
| | baz=123 | | | | | | |
| H11S1 | WAKE ISLAND Hyl | 111.55 | 276 | T | | T | 02 44 44.1 |
| | baz=123 | | | | | | |
| H11S3 | WAKE ISLAND Hyl | 111.55 | 276 | T | | T | 02 44 44.7 |
| | baz=123 | | | | | | |
| ILAR | Eielson Array | 114.57 | 337 | PKP | | PKPdf | 00 42 43.5 -0.5 |
| | 0.5nm,0.7s,baz=178,slow=2.8,SNR=5.7 | | | | | | |
| ILB | Eielson Array | 114.57 | 337 | *e*PKiKP | | PKPdf | 00 42 43.5 -0.5 |
| BR231 | Keskin MP Arra | 137.47 | 72 | *e*PKPdf | | PKPdf | 00 43 28.4 -0.2 |
| BR101 | Keskin Array S | 138.05 | 73 | *e*PKPdf | | PKPdf | 00 43 28.9 -0.8 |
| BRTR | Keskin Array B | 138.05 | 73 | PKP | | PKPdf | 00 43 28.9 -0.8 |
| | 0.8nm,0.7s,baz=260,slow=0.8,SNR=4.9 | | | | | | |
| AKASG | Malin Array Be | 138.09 | 56 | PKP | | PKPdf | 00 43 29.6 +0.4 |
| | 0.4nm,0.3s,baz=275,slow=2.0,SNR=4.1 | | | | | | |
| AKBB | Malin Array Si | 138.09 | 56 | *e*PKPdf | | PKPdf | 00 43 29.6 +0.4 |
| RAYN | Ar Rayn | 139.24 | 102 | *e*PKPdf | | PKPdf | 00 43 32.6 +0.3 |
| IGHG | Ghaleghazi | 145.57 | 87 | *eP* | | PKPab | 00 43 43.8 -0.1 |
| IDHR | Dehrash | 145.58 | 87 | *eP* | | PKPdf | 00 43 43.5 +0.1 |
| KBZ | Khabaz | 145.83 | 70 | PKPbc | | PKPab | 00 43 45.0 +0.8 |
| | 4.3nm,0.9s,baz=279,slow=2.4,SNR=8.6 | | | | | | |
| ILIN | Lien | 146.10 | 87 | *eP* | | PKPdf | 00 43 44.5 +0.2 |
| IKOM | Komasi | 146.21 | 88 | *eP* | | PKPbc | 00 43 45.1 -0.4 |
| ISHB | Shabestar | 146.33 | 80 | *eP* | | PKPdf | 00 43 44.7 +0.1 |
| IMRD | Marand | 146.53 | 80 | *eP* | | PKPdf | 00 43 45.2 +0.4 |
| IBZA | Bozab | 146.60 | 88 | *eP* | | PKPbc | 00 43 46.2 -0.5 |
| ITBZ | Tabriz | 146.71 | 81 | *eP* | | PKPdf | 00 43 45.1 0.0 |
| IBST | Bostanabad | 147.08 | 82 | *eP* | | PKPbc | 00 43 47.1 -0.9 |
| IKAZ | Kazeroun | 147.42 | 98 | *eP* | | PKPbc | 00 43 49.5 +0.2 |
| IPIR | Pirpir | 148.11 | 93 | *eP* | | PKPbc | 00 43 50.5 -0.5 |
| ISRV | Sarvestan | 148.16 | 100 | *eP* | | PKPdf | 00 43 49.4 +1.4 |
| IPAR | Pars | 148.35 | 99 | *eP* | | PKPbc | 00 43 50.9 -0.9 |
| IRAM | Ramesheh | 148.83 | 96 | *eP* | | PKPbc | 00 43 51.9 -0.9 |
| IKLH | Kolahrood | 148.91 | 92 | *eP* | | PKPbc | 00 43 52.1 -1.0 |
| USRK | Ussuriysk Ar. | 149.00 | 290 | PKPbc | | PKPbc | 00 43 51.0 -1.5 |
| | 6.8nm,1.0s,baz=150,slow=4.2,SNR=7.8 | | | | | | |
| IZEF | Zefreh | 149.29 | 94 | *eP* | | PKPbc | 00 43 52.4 -1.7 |
| IDMV | Damavand | 150.18 | 89 | *eP* | | PKPbc | 00 43 56.1 0.0 |
| KSRS | Korea Array | 150.30 | 275 | PKPbc | | PKPbc | 00 43 55.8 -0.2 |
| | 3.3nm,1.0s,baz=180,slow=1.3,SNR=6.5 | | | | | | |
| KS15 | Wonju Array Si | 150.33 | 275 | *e*PKPbc | | PKPbc | 00 43 55.8 -0.2 |
| KSAR | Wonju Array Be | 150.33 | 275 | PKPbc | | PKPbc | 00 43 55.8 -0.2 |
| KS01 | Wonju Array Si | 150.33 | 275 | *e*PKPdf | | PKPdf | 00 43 52.9 +2.0 |
| ARU | Arti | 154.87 | 42 | *e*PKPdf | | PKPdf | 00 43 57.0 +0.2 |
| NJ2 | Nanjing | 154.89 | 258 | *e*PKPbc | | PKPdf | 00 43 57.1 -0.6 |
| GEYT | Alibeck | 155.57 | 88 | PKP | | PKPdf | 00 43 58.0 -0.5 |
| | 0.8nm,0.5s,baz=286,slow=5.5,SNR=4.9 | | | | | | |
| GEYT | | | | PKPab | | PKPab | 00 44 24.3 -0.3 |
| | 3.6nm,0.7s,baz=280,slow=8.4,SNR=10 | | | | | | |
| CM31 | Chiang Mai Arr | 155.87 | 202 | *e*PKPdf | | PKPdf | 00 43 59.1 -0.4 |
| CM31 | | | | *e*PKPab | | PKPab | 00 44 26.0 -0.1 |
| CMAR | Chiang Mai Arr | 155.87 | 202 | PKP | | PKPdf | 00 43 59.1 -0.4 |
| | 1.0nm,0.3s,baz=273,slow=1.5,SNR=4.9 | | | | | | |
| CMAR | | | | PKPab | | PKPab | 00 44 26.0 -0.1 |
| | 0.7nm,0.3s,baz=171,slow=6.2,SNR=2.6 | | | | | | |
| ABKAR | Akbulak array | 157.77 | 59 | *e*PKPdf | | PKPdf | 00 44 01.0 +0.1 |
| GYA | Guiyang | 159.57 | 229 | *e*PKP | | PKPdf | 00 44 03.0 -1.0 |
| GYA | | | | PKPab | | PKPab | 00 44 44.0 +1.9 |
| GYA | | | | PKS | | PKSdf | 00 47 34.6 -3.1 |
| GYA | | | | PP | | PP | 00 48 26.3 +3.0 |
| GYA | | | | PPMZ | | | |
| | 120nm,7.8s | | | | | | |
| KMI | Kunming | 160.52 | 218 | PKP | | PKPdf | 00 44 04.0 -1.2 |
| KMI | | | | PPMZ | | | |
| | 120nm,4.4s | | | | | | |
| BRVK | Borovoye | 162.43 | 41 | *e*PKPdf | | PKPdf | 00 44 05.8 -0.1 |
| HHC | Hu-ho-hao-te | 163.44 | 276 | *e*PKP | | PKPdf | 00 44 00.4 -7.1 |
| HHC | | | | PPMZ | | | |
| | 69nm,6.3s | | | | | | |
| HHC | | | | LN | | | |
| | 190nm,14.8s | | | | | | |
| HHC | | | | LE | | | |
| | 250nm,11.1s | | | | | | |
| HHC | | | | LZ | | | |
| | 140nm,15.9s | | | | | | |
| CD2 | Chengdu | 164.59 | 232 | PKP | | PKPdf | 00 44 08.5 -0.3 |
| CD2 | | | | pPKP | | pPKPdf | 00 44 12.1 -0.2 |
| CD2 | | | | sPKP | | | 00 44 13.5 |
| CD2 | | | | PP | | PP | 00 48 50.4 +0.3 |
| CD2 | | | | SKS | | SKSdf | 00 51 13.0 -0.3 |
| CD2 | | | | SKKS | | SKKSac | 00 55 37.8 -0.3 |
| CD2 | | | | SS | | SS | 01 09 24.3 +1.7 |
| CD2 | | | | PPMZ | | | |
| | 120nm,5.2s | | | | | | |
| SONA0 | Songino Array | 166.38 | 304 | *e*PKPab | | PKPab | 00 45 11.3 -0.3 |
| SONM | Songino Array | 166.38 | 304 | PKPab | | PKPab | 00 45 11.3 -0.3 |
| | 1.6nm,1.1s,baz=107,slow=2.6,SNR=6.3 | | | | | | |
| ZAA1 | Zalesovo Array | 166.94 | 13 | *e*PKPdf | | PKPdf | 00 44 07.8 -2.1 |
| ZAA1 | | | | *e*PKPab | | PKPab | 00 45 13.6 +0.1 |
| ZALV | Zalesovo Beam | 166.94 | 13 | PKP | | PKPdf | 00 44 07.8 -2.1 |
| | 4.0nm,0.8s,baz=259,slow=1.5,SNR=14 | | | | | | |
| ZALV | | | | PKPab | | PKPab | 00 45 13.5 0.0 |
| | 0.9nm,0.5s,baz=331,slow=5.6,SNR=2.8 | | | | | | |
| LZH | Lanzhou | 167.73 | 250 | *e*PKP | | PKPdf | 00 44 07.4 -3.9 |
| LZH | | | | pPKP | | pPKPdf | 00 44 10.5 -4.2 |
| LZH | | | | sPKP | | | 00 44 12.3 |
| LZH | | | | PP | | PP | 00 49 07.0 +0.1 |
| LZH | | | | SKKS | | | 00 55 47.1 |
| LZH | | | | *e*SS | | SS | 01 09 49.0 -6.5 |
| LZH | | | | PPMZ | | | |
| | 160nm,5.2s | | | | | | |
| EKS2 | Erkin-Say | 168.13 | 78 | *e*PKPdf | | PKPdf | 00 44 12.3 +1.0 |
| AAK | Ala-Archa | 168.66 | 78 | *e*PKPdf | | PKPdf | 00 44 09.4 -2.3 |
| KSH | Kashi | 169.44 | 95 | PKP | | PKPdf | 00 44 12.8 +0.5 |
| KSH | | | | PKS | | PKSdf | 00 47 43.1 -1.7 |
| KSH | | | | *e*PP | | PP | 00 49 11.6 -4.1 |
| KSH | | | | SKKS | | | 00 55 56.0 |
| KSH | | | | PPMZ | | | |
| | 86nm,6.3s | | | | | | |
| KSH | | | | LN | | | |
| | 190nm,5.9s | | | | | | |
| KSH | | | | LE | | | |
| | 180nm,5.4s | | | | | | |
| KSH | | | | LZ | | | |
| | 190nm,6.7s | | | | | | |
| TKM2 | Tokmak 2 | 169.46 | 77 | *e*PKPdf | | PKPdf | 00 44 11.1 -1.1 |
| GTA | Gaotai | 171.98 | 260 | *e*PKP | | PKPdf | 00 44 15.6 +2.0 |
| MK32 | Makanchi Array | 172.39 | 41 | *e*PKPdf | | PKPdf | 00 44 12.4 -1.0 |
| MKAR | Makanchi Array | 172.39 | 41 | PKP | | PKPdf | 00 44 12.4 -1.0 |
| | 1.1nm,1.0s,baz=259,slow=2.5,SNR=4.6 | | | | | | |
| MK01 | Makanchi Array | 172.41 | 41 | *e*PKPdf | | PKPdf | 00 44 12.2 -1.2 |
| WMQ | Urumqi | 177.11 | 29 | *e*PKP | | PKPdf | 00 44 17.0 +2.0 |

*NEIC **19** 00:24:24.9, 43.63S×172.38E, h5km, ML3.8(WEL), After WEL.*
*NEIC Felt in Canberry.*
**WEL 19 00:24:25.0±0.1, 43.65S×172.38E, h5km, ML3.8/19, 2C-3D, Error ellipse: s-maj=1.0km s-min=0.7km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CRLZ | Canterbury Las | 0.18 | 69 | ⇓PG | Pg | 00 24 28.8 | +0.2 |
| CRLZ | | | | SG | Sg | 00 24 31.2 | +0.1 |
| CRLZ | | | | AML | AML | 00 24 32.0 | |
| CRLZ | | | | AML | AML | 00 24 32.0 | |
| CRLZ | | | | AML | AML | 00 24 32.0 | |
| CRLZ | Canterbury Las | 0.18 | 69 | Pg | Pg | 00 24 28.8 | +0.2 |
| MQZ | McQueen's Vall | 0.20 | 108 | ⇓PG | Pg | 00 24 29.1 | +0.1 |
| MQZ | | | | SG | Sg | 00 24 32.1 | +0.3 |
| MQZ | | | | AML | AML | 00 24 33.2 | |
| MQZ | McQueen's Vall | 0.20 | 108 | Pg | Pg | 00 24 29.1 | +0.1 |
| MQZ | | | | Sg | Sg | 00 24 32.2 | +0.4 |
| OXZ | Oxford | 0.41 | 322 | ⇑PG | Pg | 00 24 32.8 | -0.1 |
| OXZ | Oxford | 0.41 | 322 | Pg | Pg | 00 24 32.7 | -0.2 |
| LTZ | Lake Taylor | 0.86 | 354 | P* | Pg | 00 24 41.5 | -0.2 |
| LTZ | | | | AML | AML | 00 24 41.9 | |
| LTZ | | | | AML | AML | 00 24 59.0 | |
| LTZ | Lake Taylor | 0.86 | 354 | P* | Pg | 00 24 41.5 | -0.2 |
| RPZ | Rata Peaks | 0.97 | 265 | ⇓P* | Pg | 00 24 43.6 | 0.0 |
| RPZ | | | | AML | AML | 00 25 01.1 | |
| RPZ | | | | AML | AML | 00 25 05.9 | |
| RPZ | Rata Peaks | 0.97 | 265 | P* | Pg | 00 24 43.6 | 0.0 |
| WVZ | Waitaha Valley | 1.33 | 295 | AML | AML | 00 25 10.7 | |
| WVZ | | | | AML | AML | 00 25 14.5 | |
| WVZ | Waitaha Valley | 1.33 | 295 | P* | Pn | 00 24 49.8 | -0.5 |
| KHZ | Kahutara | 1.49 | 35 | PN | Pn | 00 24 50.0 | -2.4 |
| KHZ | | | | AML | AML | 00 25 13.2 | |
| KHZ | | | | AML | AML | 00 25 14.0 | |
| KHZ | Kahutara | 1.49 | 35 | Pn | Pn | 00 24 50.0 | -2.5 |
| LBZ | Lake Benmore | 1.75 | 244 | AML | AML | 00 25 23.0 | |
| LBZ | | | | AML | AML | 00 25 23.1 | |
| LBZ | | | | AML | AML | 00 25 23.8 | |
| LBZ | | | | AML | AML | 00 25 25.2 | |
| LBZ | Lake Benmore | 1.75 | 244 | Pn | Pn | 00 24 54.8 | -1.3 |
| ODZ | Otahua Downs | 1.88 | 221 | AML | AML | 00 25 29.9 | |
| ODZ | | | | AML | AML | 00 25 31.9 | |
| ODZ | | | | AML | AML | 00 25 32.8 | |
| ODZ | | | | AML | AML | 00 25 32.8 | |
| ODZ | Otahua Downs | 1.88 | 221 | Pn | Pn | 00 24 56.3 | -1.4 |
| THZ | Tophouse | 1.92 | 12 | ⇑PN | Pn | 00 24 56.1 | -2.3 |
| THZ | | | | AML | AML | 00 25 24.3 | |
| THZ | | | | AML | AML | 00 25 33.7 | |
| THZ | Tophouse | 1.92 | 12 | Pn | Pn | 00 24 56.1 | -2.3 |
| DSZ | Denniston Nort | 1.94 | 347 | AML | AML | 00 25 22.6 | |
| DSZ | | | | AML | AML | 00 25 22.9 | |
| DSZ | | | | AML | AML | 00 25 24.9 | |
| DSZ | | | | AML | AML | 00 25 25.7 | |
| FOZ | Fox Glacier | 1.96 | 271 | AML | AML | 00 25 06.5 | |
| FOZ | | | | AML | AML | 00 25 06.5 | |
| FOZ | | | | AML | AML | 00 25 31.2 | |
| FOZ | | | | AML | AML | 00 25 34.5 | |
| FOZ | Fox Glacier | 1.96 | 271 | Pn | Pn | 00 24 57.4 | -1.5 |
| BSWZ | Blackbirch Sta | 2.22 | 30 | AML | AML | 00 25 31.1 | |
| BSWZ | Blackbirch Sta | 2.22 | 30 | Pn | Pn | 00 25 00.4 | -2.1 |
| NNZ | Nelson | 2.53 | 17 | Pn | Pn | 00 25 05.1 | -1.7 |
| JCZ | Jackson Bay | 2.66 | 259 | AML | AML | 00 25 46.1 | |
| JCZ | | | | AML | AML | 00 25 57.3 | |
| JCZ | Jackson Bay | 2.66 | 259 | Pn | Pn | 00 25 07.2 | -1.4 |
| WKZ | Wanaka | 2.69 | 243 | AML | AML | 00 25 57.8 | |
| WKZ | | | | AML | AML | 00 25 58.1 | |
| WKZ | Wanaka | 2.69 | 243 | Pn | Pn | 00 25 07.5 | -1.5 |
| EAZ | Earnscleugh | 2.71 | 233 | AML | AML | 00 25 53.1 | |
| EAZ | | | | AML | AML | 00 25 53.1 | |
| EAZ | | | | AML | AML | 00 25 54.7 | |
| EAZ | | | | AML | AML | 00 25 54.9 | |
| EAZ | Earnscleugh | 2.71 | 233 | Pn | Pn | 00 25 07.7 | -1.6 |
| TCW | Tory Channel | 2.81 | 31 | Pn | Pn | 00 25 08.3 | -2.2 |
| QRZ | Quartz Range | 2.82 | 2 | AML | AML | 00 25 18.1 | |
| QRZ | | | | AML | AML | 00 25 18.1 | |
| QRZ | | | | AML | AML | 00 25 51.5 | |
| QRZ | | | | AML | AML | 00 26 02.9 | |
| QRZ | Quartz Range | 2.82 | 2 | Pn | Pn | 00 25 08.6 | -2.1 |
| TUZ | Tuapeka | 3.03 | 219 | AML | AML | 00 26 07.4 | |
| TUZ | | | | AML | AML | 00 26 08.3 | |
| TUZ | | | | AML | AML | 00 26 08.3 | |
| TUZ | | | | AML | AML | 00 26 12.7 | |
| TUZ | Tuapeka | 3.03 | 219 | Pn | Pn | 00 25 12.2 | -1.4 |
| CAW | Cannon Point | 3.22 | 39 | AML | AML | 00 25 52.7 | |
| CAW | | | | AML | AML | 00 25 53.4 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MTW | Mount Morrison | 3.39 | 44 | Pn | Pn | 00 25 15.1 | -3.5 |
| MLZ | Mavora Lakes | 3.46 | 239 | Pn | Pn | 00 25 18.3 | -1.3 |
| SYZ | Scrubby Hill | 3.69 | 217 | AML | AML | 00 26 33.5 | |
| SYZ | | | | AML | AML | 00 26 37.1 | |
| SYZ | Scrubby Hill | 3.69 | 217 | Pn | Pn | 00 25 21.9 | -0.8 |
| MRZ | Mangatainoka R | 3.81 | 40 | Pn | Pn | 00 25 21.4 | -3.0 |
| WHZ | Wether Hill Ro | 3.88 | 233 | Pn | Pn | 00 25 22.6 | -2.7 |

*IDC **19** 00:38:27.2±0.8, 47.22N×11.82E, h0km, mb3.4/3, mb1 3.6/7, mb1mx3.4/40, mbtmp3.4/7, ML3.8/4, Error ellipse: s-maj=21.9km s-min=7.4km az=140.0*
*VIE **19** 00:38:28.4±0.1, 47.33N×11.68E, h15km±1km, mb3.2/14, ml4.0/18, Error ellipse: s-maj=1.2km s-min=0.9km az=177.0, felt 5 ems98 at Schwaz / Tyrol*
*NEIC **19** 00:38:28.6±0.7, 47.38N×11.64E, h7km±6km, ML4.0(ZUR), ML4.0(CSEM), Error ellipse: s-maj=6.4km s-min=4.3km az=166.0*
*NEIC Felt at Absam, Hall and Innsbruck.*
*LDG **19** 00:38:28.7±0.1, 47.40N×11.68E, h3km, Md3.7/3, Ml3.9/43, Error ellipse: s-maj=2.7km s-min=1.8km az=23.0*
*CSEM **19** 00:38:28.7±0.1, 47.36N×11.69E, h10km, ML4.3/22, Error ellipse: s-maj=1.4km s-min=1.3km az=21.0*
*ZUR **19** 00:38:29.8, 47.30N×11.62E, h6km±1km, ML4.0/18*
*ROM **19** 00:38:30.2±0.2, 47.28N×11.66E, h10km±1km, Ml3.8/25, Error ellipse: s-maj=3.5km s-min=1.8km az=3.0*
*PRU **19** 00:38:30.6, 47.40N×11.75E, h14km, Schwaz*
*BNS **19** 00:38:30.1±0.5, 47.33N×11.76E, h10km, ML3.5*
*BGR **19** 00:38:30.5±0.3, 47.42N×11.66E, h10km, ML3.9/6, Error ellipse: s-maj=5.6km s-min=2.2km az=157.0*
*BGR Strongly felt, e.g. in Innsbruck, slight fissures in the plastering.*
*STR **19** 00:38:32.9±0.2, 47.39N×11.39E, h5km, Ml4.1, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
**ISC 19 00:38:29.2±0.6, 47.34N±0.01×11.66E±0.01, h17km±3km, n521,σ1s59/783, mb3.6/4, 55C-65D, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WATA | Walderalm | 0.06 | 262 | ⇑*i*Pg | Pg | 00 38 31.6 | -0.9 |
| WATA | | | | ⇑*i*Sg | Sg | 00 38 33.7 | -1.0 |
| | 2μm,0.2s | | | | | | |
| WATA | Walderalm | 0.06 | 262 | Pg | Pg | 00 38 31.6 | -0.9 |
| WATA | | | | Sg | Sg | 00 38 33.7 | -1.0 |
| | 2μm,0.2s | | | | | | |
| WTTA | Wattenberg | 0.08 | 191 | ⇑*i*Pg | Pg | 00 38 32.0 | -0.7 |
| | 143μm,0.3s | | | | | | |
| WTTA | Wattenberg | 0.08 | 191 | ⇑*i*Pg | Pg | 00 38 32.0 | -0.7 |
| | 7μm,0.1s | | | | | | |
| WTTA | | | | ⇑*e*Sg | Sg | 00 38 34.2 | -0.9 |
| | 38μm,0.3s | | | | | | |
| WTTA | Wattenberg | 0.08 | 191 | ⇑*i*Pg | Pg | 00 38 32.0 | -0.7 |
| WTTA | | | | Sg | Sg | 00 38 34.2 | -0.9 |
| | 2μm,0.2s | | | | | | |
| WTTA | Wattenberg | 0.08 | 191 | ⇑*i*Pg | Pg | 00 38 32.0 | -0.7 |
| WTTA | Wattenberg | 0.08 | 191 | ⇑*i*Pg | Pg | 00 38 32.0 | -0.7 |
| WTTA | | | | Sg | Sg | 00 38 34.2 | -0.9 |
| | 2μm,0.2s | | | | | | |
| SQTA | Sankt Quirin | 0.33 | 248 | ⇑*i*Pg | Pg | 00 38 35.4 | -0.8 |
| SQTA | | | | ⇑*i*Sg | Sg | 00 38 40.8 | -0.2 |
| SQTA | Sankt Quirin | 0.33 | 248 | Pg | Pg | 00 38 35.4 | -0.8 |
| SQTA | | | | Sg | Sg | 00 38 40.8 | -0.2 |
| MOTA | Moosalm | 0.38 | 270 | ⇑*i*Pg | Pg | 00 38 36.0 | -1.1 |
| | 112nm,0.1s,SNR=639 | | | | | | |
| MOTA | | | | ⇑*i*Sg | Sg | 00 38 42.7 | +0.3 |
| | 845nm,0.2s | | | | | | |
| MOTA | Moosalm | 0.38 | 270 | P | Pg | 00 38 36.0 | -1.1 |
| MOTA | Moosalm | 0.38 | 270 | P | Pg | 00 38 36.0 | -1.1 |
| MOTA | | | | Sg | Sg | 00 38 42.7 | +0.3 |
| | 845nm,0.2s | | | | | | |
| ROSI | Rosskopf | 0.45 | 202 | ⇓*i*Pg | Pg | 00 38 37.5 | -0.8 |
| | 23μm,0.5s | | | | | | |
| ROSI | Rosskopf | 0.45 | 202 | Pg | Pg | 00 38 37.6 | -0.8 |
| ROSI | | | | Sg | Sg | 00 38 44.2 | -0.3 |
| | 8μm,0.5s | | | | | | |
| ROSI | Rosskopf | 0.45 | 202 | ⇓*i*Pg | Pg | 00 38 37.5 | -0.8 |
| ROSI | Rosskopf | 0.45 | 202 | ⇓*i*Pg | Pg | 00 38 37.5 | -0.8 |
| ROSI | | | | Sg | Sg | 00 38 44.2 | -0.3 |
| | 8μm,0.5s | | | | | | |
| RISI | Rein | 0.49 | 144 | ⇓*i*Pg | Pg | 00 38 38.5 | -0.6 |
| | 54μm,0.5s | | | | | | |
| RISI | Rein | 0.49 | 144 | Pg | Pg | 00 38 38.5 | -0.6 |
| RISI | | | | Sg | Sg | 00 38 45.5 | -0.2 |
| | 13μm,0.4s | | | | | | |
| RISI | Rein | 0.49 | 144 | ⇓*i*Pg | Pg | 00 38 38.5 | -0.6 |
| RISI | Rein | 0.49 | 144 | ⇓*i*Pg | Pg | 00 38 38.5 | -0.6 |
| RISI | | | | Sg | Sg | 00 38 45.5 | -0.2 |
| | 13μm,0.4s | | | | | | |
| RETA | Reutte | 0.63 | 284 | ⇓*e*Pg | Pg | 00 38 40.3 | -1.3 |
| | 14nm,0.1s,SNR=223 | | | | | | |
| RETA | | | | ⇓*i*Sg | Sg | 00 38 50.0 | 0.0 |
| | 400nm,0.2s | | | | | | |
| RETA | Reutte | 0.63 | 284 | Pg | Pg | 00 38 40.3 | -1.3 |
| | 14nm,0.1s,SNR=223 | | | | | | |
| RETA | | | | Sg | Sg | 00 38 50.0 | 0.0 |
| | 400nm,0.2s | | | | | | |
| ABSI | Aberstueckl | 0.66 | 201 | ⇓*e*Pg | Pg | 00 38 41.4 | -0.8 |
| | 32μm,0.4s | | | | | | |
| ABSI | Aberstueckl | 0.66 | 201 | *e*Pg | Pg | 00 38 41.4 | -0.8 |
| ABSI | Aberstueckl | 0.66 | 201 | *e*Pg | Pg | 00 38 41.4 | -0.8 |
| ABSI | | | | *e*Sg | Sg | 00 38 50.5 | -0.5 |
| FETA | Feichten | 0.71 | 243 | ⇑*e*Pg | Pg | 00 38 42.2 | -1.0 |
| | 70nm,0.3s,SNR=249 | | | | | | |
| FETA | | | | ⇑*i*Sg | Sg | 00 38 52.3 | -0.4 |
| | 413nm,0.3s | | | | | | |
| FETA | Feichten | 0.71 | 243 | Pg | Pg | 00 38 42.2 | -1.0 |
| | 70nm,0.3s,SNR=249 | | | | | | |
| FETA | | | | Sg | Sg | 00 38 52.3 | -0.4 |
| | 413nm,0.3s | | | | | | |
| ABTA | Abfaltersbach | 0.83 | 135 | ⇓*i*Pg | Pb | 00 38 44.6 | -0.7 |
| | 149nm,0.3s,SNR=347 | | | | | | |
| ABTA | | | | ⇑*i*Sg | Sb | 00 38 55.7 | -0.6 |
| | 225nm,0.2s | | | | | | |
| ABTA | Abfaltersbach | 0.83 | 135 | Pg | Pb | 00 38 44.6 | -0.7 |
| | 149nm,0.3s,SNR=347 | | | | | | |
| ABTA | | | | Sg | Sb | 00 38 55.7 | -0.6 |
| | 225nm,0.2s | | | | | | |
| FUR | Furstenfeldbru | 0.86 | 343 | *e*Pg | Pg | 00 38 46.1 | +0.1 |
| | SNR=1666 | | | | | | |
| FUR | Furstenfeldbru | 0.86 | 343 | Pg | Pg | 00 38 46.1 | +0.1 |
| | SNR=1000 | | | | | | |
| BOSI | Bolzano | 0.88 | 196 | ⇓*

FVI Sg Sb 00 39 03.1 0.0
1µm,0.6s
**CSMI Casera Mimoias** 1.07 140⇓*e*Pg Pb 00 38 49.2 -0.3
CSMI *e*Sg Sb 00 39 03.7 +0.3
**CSMI Casera Mimoias** 1.07 140 *e*Pg Pb 00 38 49.2 -0.3
CSMI *e*Sg Sb 00 39 03.6 +0.3
**AGOR Agordo** 1.09 166⇓*e*Pg Pb 00 38 49.7 -0.1
AGOR *e*Sg Sb 00 39 04.0 +0.3
**AGOR Agordo** 1.09 166 Pg Pb 00 38 49.7 -0.1
2µm,0.4s
**UBR Ueberruh** 1.10 288 ⇓P* Pn 00 38 50.5 +0.4
UBR PmP 00 38 51.7
UBR S* Sg 00 39 05.9 +0.8
UBR SmS 00 39 08.1
**UBR Ueberruh** 1.10 288 Pb Pn 00 38 50.5 +0.4
UBR Sb Sg 00 39 05.9 +0.8
**FAU Forcella Aurin** 1.14 169⇓*e*Pg Pn 00 38 50.3 -0.2
**FAU Forcella Aurin** 1.14 169 *e*Pg Pn 00 38 50.3 -0.2
**CIMO Cimolais** 1.16 152⇓*e*Pg Pn 00 38 50.7 -0.1
CIMO *e*Sg Sb 00 39 06.2 +0.4
**CIMO Cimolais** 1.16 152 *e*Pg Pn 00 38 50.7 -0.1
CIMO *e*Sg Sb 00 39 06.1 +0.4
**CSO Casso** 1.16 157⇓*e*Pg Pn 00 38 50.8 -0.1
**CSO Casso** 1.16 157 *e*Pg Pn 00 38 50.8 -0.1
CSO *e*Sg Sn 00 39 06.7 +0.3
**KBA Koelnbreinsper** 1.18 102 *e*Pn Pn 00 38 51.0 -0.2
SNR=32
**KBA Koelnbreinsper** 1.18 102⇓*e*Pn Pn 00 38 50.6 -0.6
92nm,0.3s,SNR=65
KBA ⇑*i*Sn Sb 00 39 06.8 +0.4
**KBA Koelnbreinsper** 1.18 102 P Pn 00 38 50.8 -0.4
**KBA Koelnbreinsper** 1.18 102 P Pn 00 38 50.8 -0.4
KBA Sn Sb 00 39 06.8 +0.4
**ZOU Zoufplan** 1.20 131⇓*e*Pg Pn 00 38 51.1 -0.3
ZOU *e*Sg Sb 00 39 06.7 -0.1
**ZOU Zoufplan** 1.20 131⇓*e*Pg Pn 00 38 51.1 -0.3
ZOU *e*Sg Sb 00 39 06.7 -0.1
**ZOU Zoufplan** 1.20 131 *e*Pg Pn 00 38 51.1 -0.3
ZOU *e*Sg Sb 00 39 06.7 -0.1
**FUORN Ofenpass-Fuorn** 1.20 233⇑*e*Pg Pn 00 38 49.7 -1.8
3µm,0.6s
**FUORN Ofenpass-Fuorn** 1.20 233 Pg Pn 00 38 51.3 -0.2
**FUORN Ofenpass-Fuorn** 1.20 233 *e*Pn Pn 00 38 51.6 +0.1
FUORN *e*Sn Sb 00 39 07.2 +0.2
**FUORN Ofenpass-Fuorn** 1.20 233 Pg Pn 00 38 51.3 -0.2
**FUORN Ofenpass-Fuorn** 1.20 233 *e*Pn Pn 00 38 51.6 +0.1
FUORN *e*Sn Sb 00 39 07.2 +0.2
**DAVA Damuels** 1.21 268 *e*Pn Pb 00 38 52.2 +0.4
SNR=400
**DAVA Damuels** 1.21 268⇓*e*Pg Pn 00 38 51.2 -0.4
10µm,0.3s
**DAVA Damuels** 1.21 268⇓*e*Pg Pb 00 38 52.2 +0.4
130nm,0.2s,SNR=294
DAVA ⇑*e*Sg Sg 00 39 09.3 +0.8
3µm,0.4s
**DAVA Damuels** 1.21 268⇓*e*Pg Pn 00 38 51.2 -0.4
10µm,0.3s
**DAVA Damuels** 1.21 268 Pn Pb 00 38 52.2 +0.4
SNR=400
DAVA Sg Sg 00 39 09.3 +0.8
3µm,0.4s
**BRMO Bormio** 1.24 226 Pg Pn 00 38 51.7 -0.2
442nm,0.5s
**BRMO Bormio** 1.24 226 Pg Pn 00 38 51.7 -0.2
442nm,0.5s
**PLRO Paularo** 1.29 127⇑*e*Pg Pn 00 38 53.0 +0.3
PLRO *e*Sg Sn 00 39 10.2 +0.5
**PLRO Paularo** 1.29 127 *e*Pg Pn 00 38 53.0 +0.3
PLRO *e*Sg Sn 00 39 10.1 +0.5
**FUSE Fusea** 1.31 135⇓*e*Pg Pn 00 38 52.9 +0.1
**FUSE Fusea** 1.31 135 *e*Pg Pn 00 38 52.9 +0.1
**PANI Panarotta** 1.32 191⇓*e*Pg Pn 00 38 53.5 +0.4
**PANI Panarotta** 1.32 191 *e*Pg Pn 00 38 53.5 +0.4
**DAVOX Davos/Dischmat** 1.34 246 *e*P Pn 00 38 52.2 -1.2
5µm,0.5s
**DAVOX Davos/Dischmat** 1.34 246 Pg Pn 00 38 53.8 +0.4
90nm,0.3s,baz=56,slow=6.4,SNR=392
DAVOX Lg Lg 00 39 13.6
248nm,0.3s,baz=181,slow=21,SNR=62
DAVOX LR LR 00 39 37.9
comp=Z,105nm,18.3s,baz=242,slow=51
**DAVOX Davos/Dischmat** 1.34 246 Pg Pn 00 38 53.8 +0.4
**DAVOX Davos/Dischmat** 1.34 246 *e*P Pn 00 38 52.2 -1.2
5µm,0.5s
**MLNI Malnisio** 1.36 151⇓*e*Pg Pb 00 38 54.5 +0.2
**MLNI Malnisio** 1.36 151 *e*Pg Pb 00 38 54.5 +0.2
**VARN Col Varnada, M** 1.39 167⇓*e*Pg Pb 00 38 54.8 +0.1
**VARN Col Varnada, M** 1.39 167 *e*Pg Pb 00 38 54.8 +0.1
**MPRI Monte Prat** 1.43 140 *e*Pg Pb 00 38 56.1 +0.7
**MPRI Monte Prat** 1.43 140 *e*Pg Pb 00 38 56.2 +0.7
**POLC Polcenigo** 1.44 156 Pg Pg 00 38 57.0 +0.1
4µm,0.6s
**POLC Polcenigo** 1.44 156 Pg Pg 00 38 57.0 +0.1
4µm,0.6s
**CAE Caneva** 1.44 158⇑*e*Pg Pb 00 38 56.0 +0.4
**CAE Caneva** 1.44 158 *e*Pg Pb 00 38 56.0 +0.4
**BERNI Berninapass** 1.46 231⇓*e*P Pn 00 38 53.7 -1.4
2µm,0.3s
**BERNI Berninapass** 1.46 231 Pg Pb 00 38 56.1 0.0
**BERNI Berninapass** 1.46 231⇓*e*P Pn 00 38 53.7 -1.4
2µm,0.3s
**BERNI Berninapass** 1.46 231 Pg Pb 00 38 56.1 0.0
**CGRP Cima Grappa** 1.47 176⇓*e*Pg Pb 00 38 56.1 -0.1
**CGRP Cima Grappa** 1.47 176⇓*i*Pg Pb 00 38 56.1 -0.1
8µm,0.8s
**CGRP Cima Grappa** 1.47 176 Pg Pb 00 38 56.1 -0.1
3µm,0.6s
**CGRP Cima Grappa** 1.47 176 Pg Pb 00 38 56.1 -0.1
3µm,0.6s
**LIENZ Kamor/St.Gall** 1.48 269 ⇓P Pb 00 38 57.0 +0.6
LIENZ S Sg 00 39 17.2 +0.4
**LIENZ Kamor/St.Gall** 1.48 269⇓*e*P Pb 00 38 56.1 -0.2
3µm,0.5s
**LIENZ Kamor/St.Gall** 1.48 269⇓*e*P Pb 00 38 56.1 -0.2
3µm,0.5s
LIENZ S Sg 00 39 17.2 +0.4
**PTCC Patocco-Chiusa** 1.49 128 Pg Pb 00 38 56.5 -0.1
700nm,0.6s
**PTCC Patocco-Chiusa** 1.49 128 Pg Pb 00 38 56.5 -0.1
700nm,0.6s
**ACOM Acomizza, Ital** 1.50 121⇑*e*Pg Pb 00 38 56.9 +0.1
**ACOM Acomizza, Ital** 1.50 121 Pg Pb 00 38 56.7 0.0
1µm,0.5s
**ACOM Acomizza, Ital** 1.50 121 Pg Pb 00 38 56.7 0.0
1µm,0.5s
**DDS Dosso del Somm** 1.50 193⇓*e*Pg Pb 00 38 56.6 -0.1
**DDS Dosso del Somm** 1.50 193 *e*Pg Pb 00 38 56.6 -0.1
**BUA Buia** 1.51 138⇓*e*Pg Pb 00 38 57.5 +0.7
BUA *e*Sg Sg 00 39 18.7 +0.8
**BUA Buia** 1.51 138 *e*Pg Pb 00 38 57.5 +0.7
BUA *e*Sg Sg 00 39 18.7 +0.8
**MABI Malga Bissina** 1.51 212 *e*P Pb 00 38 56.8 -0.2
2µm,0.5s
**MABI Malga Bissina** 1.51 212 Pg Pb 00 38 56.7 -0.2
564nm,0.6s
**MABI Malga Bissina** 1.51 212 *e*P Pb 00 38 56.8 -0.2
2µm,0.5s
**MYKA Terra Mystica** 1.53 117⇓*e*Pn Pb 00 38 56.8 -0.4
7.6nm,0.3s
MYKA ⇑*e*Pg Pg 00 38 58.5 -0.2
82nm,0.2s,SNR=134
MYKA ⇑*i*Sn Sn 00 39 15.6 +0.1
MYKA ⇑*i*Sg Sg 00 39 18.5 -0.2
335nm,0.4s
**MYKA Terra Mystica** 1.53 117 Pn Pb 00 38 56.8 -0.4
7.6nm,0.3s
**LSR Lussari** 1.55 123⇓*e*Pg Pb 00 38 57.5 -0.1
**LSR Lussari** 1.55 123 *e*Pg Pb 00 38 57.5 -0.1
**BAD Bernadia** 1.55 135⇑*e*Pg Pb 00 38 57.6 0.0
**BAD Bernadia** 1.55 135 *e*Pg Pb 00 38 57.6 0.0
**VINO Villanova** 1.56 134⇓*e*Pg Pb 00 38 57.5 -0.2
**VINO Villanova** 1.56 134 Pg Pb 00 38 57.6 0.0
1µm,0.4s
**VINO Villanova** 1.56 134 Pg Pb 00 38 57.6 0.0
1µm,0.4s
**MTLO Montello** 1.56 169⇑*e*Pg Pg 00 38 58.6 -0.6
MTLO *e*Sg Sg 00 39 20.7 +1.2
**MTLO Montello** 1.56 169 *e*Pg Pg 00 38 58.6 -0.6
MTLO *e*Sg Sg 00 39 20.7 +1.2
**HDH Heidenheim-Cha** 1.58 322 P Pn 00 38 56.5 -0.1
HDH *i*Pg Pb 00 38 58.8 +0.8
HDH S Sn 00 39 16.8 +0.2
HDH Sg Sg 00 39 21.0 +0.8
**HDH Heidenheim-Cha** 1.58 322 Pg Pb 00 38 58.8 +0.8
HDH S Sn 00 39 16.8 +0.2
HDH Sg Sg 00 39 21.0 +0.8
**PLONS Plons/SG** 1.58 260 *e*Pn Pb 00 38 58.2 +0.1
SNR=157
PLONS *e*Sg Sg 00 39 20.9 +0.7
SNR=10
**PLONS Plons/SG** 1.58 260⇑*e*Pn Pn 00 38 57.0 +0.4
3µm,0.5s
**PLONS Plons/SG** 1.58 260 Pg Pb 00 38 58.1 0.0
797nm,0.4s
**PLONS Plons/SG** 1.58 260⇑*e*Pn Pn 00 38 57.0 +0.4
3µm,0.5s
**PLONS Plons/SG** 1.58 260 Pg Pb 00 38 58.1 0.0
797nm,0.4s
PLONS Sg Sg 00 39 20.9 +0.7
SNR=10
**GRC1 Grafenberg Arr** 1.66 357 ⇓P Pn 00 38 57.2 -0.4
GRC1 PmP 00 38 60.0
GRC1 S Sn 00 39 18.5 0.0
GRC1 SmS 00 39 21.8
**GRC1 Grafenberg Arr** 1.66 357 P Pn 00 38 57.2 -0.4
GRC1 S Sn 00 39 18.5 0.0
**ROBS Robic** 1.68 130 *i*Pn Pb 00 38 59.7 0.0
**ROBS Robic** 1.68 130 *i*Pn Pb 00 38 59.7 0.0
**COLI Coloredo** 1.69 135⇑*e*Pg Pb 00 39 00.2 +0.3
**COLI Coloredo** 1.69 135 *e*Pg Pb 00 39 00.2 +0.3
**MAGA Magasa** 1.72 205 Pg Pb 00 39 00.3 -0.2
3µm,0.4s
**MAGA Magasa** 1.72 205 Pg Pb 00 39 00.3 -0.2
3µm,0.4s
**MARN Marana (Italy)** 1.73 190⇓*e*Pg Pb 00 39 00.6 -0.1
**MARN Marana (Italy)** 1.73 190 *e*Pg Pb 00 39 00.6 -0.1
**TLI Talmassons** 1.73 145⇑*e*Pg Pg 00 39 01.6 -1.0
**TLI Talmassons** 1.73 145 *e*Pg Pg 00 39 01.6 -1.0
**ROVR Rover˜¤ Verone** 1.75 194 Pg Pb 00 39 00.9 0.0
**ROVR Rover˜¤ Verone** 1.75 194 Pg Pb 00 39 00.9 0.0
**BALD Monte Baldo** 1.76 200 *e*Pg Pb 00 39 01.1 -0.1
**BALD Monte Baldo** 1.76 200 *e*Pg Pb 00 39 01.1 -0.1
**DRE Drenchia** 1.80 130 *e*Pg Pb 00 39 02.0 +0.2
**DRE Drenchia** 1.80 130 *e*Pg Pb 00 39 02.0 +0.2
**TUE Stuetta** 1.81 242⇑*i*P Pn 00 38 58.1 -1.7
**TUE Stuetta** 1.81 242 Pg Pb 00 39 02.4 +0.4
406nm,0.6s
**TUE Stuetta** 1.81 242 *e*Pn Pb 00 39 02.4 +0.4
TUE *e*Sn Sb 00 39 24.4 -0.1
**TUE Stuetta** 1.81 242⇑*i*P Pn 00 38 58.1 -1.7
**TUE Stuetta** 1.81 242 *e*Pn Pb 00 39 02.4 +0.4
TUE *e*Sn Sb 00 39 24.4 -0.1
**MOA Molln** 1.83 73 *e*Pn Pn 00 39 01.0 +0.9
SNR=114
MOA *e*Sg Sg 00 39 27.7 -0.6
SNR=5.6
**MOA Molln** 1.83 73⇑*e*Pn Pn 00 39 01.0 +0.9
1.2nm,0.2s
MOA ⇓*e*Pg Pb 00 39 03.3 +1.0
27nm,0.1s,SNR=104
MOA ⇑*i*Sg Sg 00 39 27.9 -0.4
160nm,0.2s
**MOA Molln** 1.83 73 Pn Pn 00 39 01.0 +0.9
SNR=114
**SISB Singen-Schiene** 1.86 282 P Pb 00 39 02.1 -0.7
**SISB Singen-Schiene** 1.86 282 P Pb 00 39 02.1 -0.7
**GUT Gutenstein** 1.87 294 P Pb 00 39 02.2 -0.7
GUT Sg Sg 00 39 28.2 -1.1
**GUT Gutenstein** 1.87 294 P Pb 00 39 02.2 -0.7
GUT Sg Sg 00 39 28.2 -1.1
**WILA Wila** 1.87 273 *e*Pn Pb 00 39 02.7 -0.3
SNR=108
WILA Pg Pg 00 39 04.2 -0.9
WILA *e*Sg Sg 00 39 29.2 -0.3
SNR=12
**WILA Wila** 1.87 273⇑*e*Pn Pb 00 39 02.7 -0.3
6µm,0.2s
**WILA Wila** 1.87 273 Pn Pb 00 39 02.7 -0.3
SNR=108
**LLS Linth-Limmern** 1.88 256⇑*i*Pn Pb 00 39 02.4 -0.8
2µm,0.3s
**LLS Linth-Limmern** 1.88 256⇑*i*Pn Pb 00 39 02.4 -0.8
2µm,0.3s
**SALO Salr** 1.90 205 Pg Pb 00 39 03.3 -0.1
741nm,0.4s
**SALO Salr** 1.90 205 Pg Pb 00 39 03.3 -0.1
741nm,0.4s
**GORS Gorjuse** 1.90 122 *i*Pn Pb 00 39 03.7 +0.1
GORS *i*Sn Sg 00 39 29.8 -0.7
comp=Z,314nm,0.6s
**GORS Gorjuse** 1.90 122 *i*Pn Pb 00 39 03.7 +0.1
GORS *i*Sn Sg 00 39 29.8 -0.7
comp=Z,314nm,0.6s
**BUCH Bad Urach** 1.91 306 P Pn 00 39 01.4 +0.3
BUCH Sg Sg 00 39 30.1 -0.5
**BUCH Bad Urach** 1.91 306 P Pn 00 39 01.4 +0.3
BUCH Sg Sg 00 39 30.1 -0.5
**SABO M.te Sabotino** 1.91 135 *e*Pn Pb 00 39 03.7 0.0
**SABO M.te Sabotino** 1.91 135 Pg Pb 00 39 03.6 0.0
comp=Z,856nm,0.5s
**SABO M.te Sabotino** 1.91 135 Pg Pb 00 39 03.6 0.0
comp=Z,856nm,0.5s
**GRB2 Grafenberg Arr** 1.93 0 ⇓P Pn 00 39 00.9 -0.5
GRB2 Sg Sg 00 39 30.0 -1.3
**GRB2 Grafenberg Arr** 1.93 0 P Pn 00 39 00.9 -0.5
GRB2 Sg Sg 00 39 30.0 -1.3
**WET Wettzell** 1.98 24 *e*Pn Pn 00 39 02.2 +0.2
SNR=157
WET *e*Pg Pb 00 39 06.1 +1.3
SNR=1.7
WET *e*Sn Sn 00 39 26.9 +0.5
SNR=3.8
WET *e*Sg Sb 00 39 31.0 +1.8
SNR=2.6
**WET Wettzell** 1.98 24 Pn Pn 00 39 02.2 +0.2
SNR=157
**TEOL Teolo** 1.98 180⇓*e*Pn Pb 00 39 04.3 -0.6
TEOL *e*Sn Sg 00 39 32.0 -1.0
**TEOL Teolo** 1.98 180 Pg Pb 00 39 04.5 -0.4
comp=Z,5µm,0.6s
**TEOL Teolo** 1.98 180 *e*Pn Pb 00 39 04.3 -0.6
TEOL *e*Sn Sg 00 39 32.0 -1.0
**VOJS Vojsko** 2.02 130 *i*Pn Pb 00 39 04.8 -0.7
**VOJS Vojsko** 2.02 130 *i*Pn Pb 00 39 04.8 -0.7
**GEC2 GERESS Array S** 2.03 42 *e*Pn Pn 00 39 03.1 +0.3
SNR=49
GEC2 *e*Pg Pb 00 39 06.8 +1.0
SNR=3.1
GEC2 *e*Sn Sn 00 39 28.9 +1.0
SNR=4.0
GEC2 *e*Sg Sg 00 39 33.2 -1.5
SNR=5.2
**GEC2 GERESS Array S** 2.03 42 *e*Pn Pn 00 39 03.1 +0.3
GEC2 *e*Sn Sn 00 39 24.8 -3.1
**GEC2 GERESS Array S** 2.03 42 *e*Pn Pn 00 39 03.1 +0.3
**GERES GERESS Array B** 2.03 42 Pn Pn 00 39 03.0 +0.2
comp=Z,11nm,0.3s,baz=222,slow=14,SNR=149
GERES Pg Pb 00 39 06.7 +1.0
comp=Z,15nm,0.3s,baz=220,slow=16,SNR=88
GERES Sn Sn 00 39 28.9 +1.0
comp=Z,93nm,0.3s,baz=228,slow=25,SNR=17
GERES Lg Lg 00 39 32.7
comp=Z,148nm,0.3s,baz=225,slow=30,SNR=38
**GERES GERESS Array B** 2.03 42 Pn Pn 00 39 03.0 +0.2
**DOETR Doetra (Olivon** 2.07 248 *i*Pn Pn 00 39 02.8 -0.6
**DOETR Doetra (Olivon** 2.07 248 *i*Pn Pn 00 39 02.8 -0.6
**SPAK Spaichingen-Ko** 2.08 292 P Pb 00 39 05.3 -1.3
**SPAK Spaichingen-Ko** 2.08 292 Pn Pn 00 39 05.1 +1.6
SPAK Sg Sg 00 39 35.2 -1.1
**TONGO Tortengo (Faid** 2.15 248 *i*Pn Pn 00 39 05.0 +0.7
**TONGO Tortengo (Faid** 2.15 248 *i*Pn Pn 00 39 05.0 +0.7
**OBKA Obir** 2.15 112 *e*Pn Pb 00 39 07.0 -0.8
SNR=7.3
**OBKA Obir** 2.15 112⇑*e*Pn Pb 00 39 06.9 -0.8
comp=Z,10nm,0.5s
OBKA ⇑*e*Pg Pg 00 39 09.4 -1.1
comp=Z,121nm,0.5s,SNR=106
OBKA ⇑*i*Sg Sg 00 39 37.1 -1.3
comp=Z,273nm,0.6s
**OBKA Obir** 2.15 112 Pn Pb 00 39 06.9 -0.9
comp=Z,10nm,0.5s
**STU Stuttgart** 2.19 312 Pg Pg 00 39 10.5 -0.7
STU Sg Sg 00 39 42.6 +3.1
**STU Stuttgart** 2.19 312 *e*Pn Pn 00 39 04.5 -0.3
STU *e*Sn Sn 00 39 28.1 -3.4
**STU Stuttgart** 2.19 312 *e*Pn Pn 00 39 04.5 -0.3
**STU Stuttgart** 2.19 312 Pg Pg 00 39 10.5 -0.7
STU *e*Sn Sn 00 39 28.1 -3.4
**SLE Schleitheim** 2.19 282 *e*Pn Pn 00 39 06.4 +1.5
SNR=18
SLE Pg Pg 00 39 10.9 -0.3
SLE *e*Sg Sg 00 39 38.1 -1.4
SNR=3.7
**SLE Schleitheim** 2.19 282 Pn Pn 00 39 06.4 +1.5
SNR=18
**TRI Trieste** 2.19 138⇑*e*Pn Pb 00 39 06.8 -1.6
**TRI Trieste** 2.19 138 Pg Pb 00 39 06.8 -1.6
comp=Z,246nm,0.6s
**TRI Trieste** 2.19 138 *e*Pn Pb 00 39 07.0 -1.4
**TRI Trieste** 2.19 138 *e*Pn Pb 00 39 06.8 -1.6
**CRNS Crni Vrh** 2.19 124 *i*Pn Pb 00 39 07.2 -1.2
CRNS *i*Sn Sb 00 39 36.4 +1.1
comp=Z,113nm,0.4s
**KHC Kasperske Hory** 2.20 35 *e*PN Pn 00 39 05.3 +0.2
KHC *e*PG Pb 00 39 09.5 +0.9
KHC *e*SN Sn 00 39 32.7 +0.7
KHC *e*SG Sg 00 39 38.4 -1.6
comp=Z,266nm,0.2s
**KHC Kasperske Hory** 2.20 35 *e*Pn Pn 00 39 05.6 +0.5
**KHC Kasperske Hory** 2.20 35 Pn Pn 00 39 05.3 +0.2
**FUSIO Fusio** 2.24 248 *i*Pn Pn 00 39 05.9 +0.2
**FUSIO Fusio** 2.24 248 Pg Pb 00 39 08.0 -1.3
**FUSIO Fusio** 2.24 248 *i*Pn Pn 00 39 05.9 +0.2
**BNALP Bannalp** 2.26 259⇓*i*Pn Pn 00 39 06.4 +0.4
comp=Z,1µm,0.4s
**BNALP Bannalp** 2.26 259 Pg Pn 00 39 07.8 +1.8
comp=Z,356nm,0.4s
**BNALP Bannalp** 2.26 259⇓*i*Pn Pn 00 39 06.4 +0.4
comp=Z,1µm,0.4s
**MUGIO Muggio** 2.30 233 *e*Pn Pn 00 39 06.5 +0.1
**MUGIO Muggio** 2.30 233 Pg Pb 00 39 09.1 -1.2
**MUGIO Muggio** 2.30 233 *e*Pn Pn 00 39 06.5 +0.1
**LBG Lerchenberg** 2.33 306 ⇑P Pn 00 39 07.5 +0.6
LBG S Sn 00 39 33.5 -1.7
**LBG Lerchenberg** 2.33 306 P Pn 00 39 07.5 +0.6
LBG S Sn 00 39 33.5 -1.7
**GRFO Grafenberg** 2.37 353 *e*Pn Pn 00 39 06.3 -1.0
GRFO *e*Pg Pg 00 39 13.5 -1.1
**GRFO Grafenberg** 2.37 353 *e*Pn Pn 00 39 06.3 -1.0
**GRA1 Grafenberg Arr** 2.37 353 P Pn 00 39 06.5 -0.9
**GRA1 Grafenberg Arr** 2.37 353 Pg Pg 00 39 14.1 -0.5
**GRF Grafenberg Arr** 2.37 353 ⇓P Pn 00 39 06.5 -0.9
GRF Pg Pg 00 39 14.1 -0.5
**SOKA Soboth** 2.40 105⇑*e*Pn Pn 00 39 09.7 +1.8
comp=Z,5.1nm,0.2s
SOKA ⇓*i*Sg Sg 00 39 47.4 +1.0
comp=Z,58nm,0.4s
**SOKA Soboth** 2.40 105 Pn Pn 00 39 09.7 +1.8
comp=Z,5.1nm,0.2s
SOKA Sg Sg 00 39 47.4 +1.0
comp=Z,58nm,0.4s
**SULZ Cheisacher** 2.42 276 P Pn 00 39 09.6 +1.6
SULZ Sg Sg 00 39 45.4 -1.5
**SULZ Cheisacher** 2.42 276 P Pn 00 39 09.6 +1.6
SULZ Sg Sg 00 39 45.4 -1.5
**SKDS Skadanscina** 2.42 137 *i*Pn Pn 00 39 10.0 +1.8
**SKDS Skadanscina** 2.42 137 *i*Pn Pn 00 39 10.0 +1.8
**SIND Sindeldorf** 2.43 326 ⇓P Pn 00 39 08.0 -0.2
SIND Pg Pn 00 39 15.2 -0.6
**SIND Sindeldorf** 2.43 326 P Pn 00 39 08.0 -0.2
**VNDS Vrh nad Dolski** 2.43 120 *i*Pn Pn 00 39 10.3 +2.0
**BFO Black Forest** 2.45 295 P Pn 00 39 09.1 +0.6
BFO S Sn 00 39 38.4 +0.3
**BFO Black Forest** 2.45 295 *e*Pn Pn 00 39 09.4 +0.9
BFO *e*Pg Pg 00 39 15.0 -1.2
BFO *e*Sn Sn 00 39 39.6 +1.5
**BFO Black Forest** 2.45 295 P Pn 00 39 09.1 +0.6
**BFO Black Forest** 2.45 295 *e*Pn Pn 00 39 09.4 +0.9
**BFO Black Forest** 2.45 295 *e*Pg Pg 00 39 15.0 -1.2
BFO S Sn 00 39 38.4 +0.3
**ROTZ Rotzenmuhle** 2.45 8 Pn Pn 00 39 07.8 -0.7
SNR=50
**ROTZ Rotzenmuhle** 2.45 8 Pn Pn 00 39 07.8 -0.7
SNR=50
**HASLI Hasliberg/Brie** 2.47 258⇑*e*P Pn 00 39 06.8 -2.0
**HASLI Hasliberg/Brie** 2.47 258⇑*e*P Pn 00 39 06.8 -2.0
**PERS Pernice** 2.47 105 *i*Pn Pn 00 39 10.5 +1.7
**PERS Pernice** 2.47 105 *i*Pn Pn 00 39 10.5 +1.7
**VARE Varese** 2.48 235 Pg Pb 00 39 11.5 -1.9
comp=Z,266nm,0.7s
**FELD Feldberg im Sc** 2.53 284 Pg Pb 00 39 15.6 +1.3
FELD Sg Sg 00 39 48.9 -1.6
**FELD Feldberg im Sc** 2.53 284 Pn Pn 00 39 10.9 +1.2
**FELD Feldberg im Sc** 2.53 284 Pg Pb 00 39 15.6 +1.3
FELD Sg Sg 00 39 48.9 -1.6
**KIZ Kirchzarten** 2.60 285 P Pn 00 39 11.7 +1.1
KIZ Pg Pg 00 39 19.8 +0.6
KIZ Sg Sg 00 39 51.1 -1.7
**KIZ Kirchzarten** 2.60 285 P Pn 00 39 11.7 +1.1
**OPP Oppenau** 2.60 298 S Sn 00 39 39.8 -2.1
**OPP Oppenau** 2.60 298 S Sn 00 39 39.8 -2.1
**ARSA Arzberg** 2.63 91⇓*e*Pn Pn 00 39 13.0 +2.0
comp=Z,0.7nm,0.1s
**ARSA Arzberg** 2.63 91 Pn Pn 00 39 13.0 +2.0
comp=Z,0.7nm,0.1s
**FBB Freiburg im Br** 2.66 286 Sg Sg 00 39 52.7 -1.8
**FBB Freiburg im Br** 2.66 286 Sg Sg 00 39 52.7 -1.8
**MANZ Manzenberg** 2.66 6 *e*Pn Pn 00 39 10.3 -1.1
SNR=27
**MANZ Manzenberg** 2.66 6 Pn Pn 00 39 10.3 -1.1
SNR=27
**BALST Balsthal** 2.70 271 *e*Pn Pn 00 39 13.3 +1.4
SNR=28
BALST S Sn 00 39 45.3 +1.1
BALST Sg Sg 00 39 54.2 -1.7
**BALST Balsthal** 2.70 271 Pn Pn 00 39 13.3 +1.4
SNR=28
BALST S Sn 00 39 45.3 +1.1
BALST Sg Sg 00 39 54.2 -1.7
**BBS Basel-Blauen** 2.82 274 P Pn 00 39 15.3 +1.7
**BBS Basel-Blauen** 2.82 274 Pn Pn 00 39 15.1 +1.5
BBS Sg Sg 00 39 58.8 -1.1
**WIMIS Wimmis** 2.84 258⇑*i*Pn Pn 00 39 08.0 -5.9
**LIBD Limburg** 2.85 288 P Pn 00 39 16.1 +2.1
**LIBD Limburg** 2.85 288 Pn Pn 00 39 15.7 +1.7
**LIBD Limburg** 2.85 288 P Pn 00 39 16.1 +2.1
LIBD Sg Sg 00 40 00.1 -0.8
**CONA Conrad Observa** 2.90 77⇑*i*Pn Pn 00 39 15.9 +1.1
comp=Z,2.9nm,0.2s
**CONA Conrad Observa** 2.90 77 Pn Pn 00 39 15.9 +1.1
comp=Z,2.9nm,0.2s
**SWS Schriesheim-Wi** 2.91 318 P Pn 00 39 15.1 +0.3
SWS S Sn 00 39 46.9 -2.5
**SWS Schriesheim-Wi** 2.91 318 P Pn 00 39 15.1 +0.3
SWS S Sn 00 39 46.9 -2.5
**LKBD Leukerbad** 2.93 252⇑*i*Pn Pn 00 39 08.2 -7.0
**NKC Novy Kostel** 2.94 10⇓*i*PN Pn 00 39 14.5 -0.7
NKC *e*PG Pg 00 39 24.5 -1.0
NKC *e*SN Sn 00 39 49.8 -0.3
NKC *e*SG Sg 00 40 01.6 -2.0
comp=Z,205nm,0.5s
**NKC Novy Kostel** 2.94 10 Pn Pn 00 39 14.5 -0.7
**TOD Tromm** 2.96 321 P Pn 00 39 15.7 +0.3
**TOD Tromm** 2.96 321 P Pn 00 39 15.7 +0.3
**TOD Tromm** 2.96 321 Pn Pn 00 39 16.2 +0.8
**WERN Wernitzgruen** 2.98 9 *e*Pn Pn 00 39 14.8 -1.0
SNR=19
WERN *e*Pg Pg 00 39 25.6 -0.8
SNR=5.7
**WERN Wernitzgruen** 2.98 9 Pn Pn 00 39 14.8 -1.0
SNR=19
**SATI Passo dei Sala** 3.00 242 P Pn 00 39 16.7 +0.4
SATI S Sn 00 39 50.2 -1.8
**BOURR Bourrignon** 3.01 273 P Pn 00 39 17.7 +1.5
**BOURR Bourrignon** 3.01 273 *e*Pn Pn 00 39 09.3 -6.9
**BOURR Bourrignon** 3.01 273 P Pn 00 39 17.7 +1.5
**GUNZ Gunzen** 3.06 8 *e*Pn Pn 00 39 15.7 -1.1
SNR=30
GUNZ *e*Pg Pg 00 39 26.6 -1.1
SNR=4.7
**GUNZ Gunzen** 3.06 8 Pn Pn 00 39 15.7 -1.1
SNR=30
**LANF Langenberg** 3.06 304 P Pn 00 39 16.9 +0.1
**LANF Langenberg** 3.06 304 Pn Pn 00 39 17.2 +0.4
LANF Sg Sg 00 40 06.6 -0.8
**LANF Langenberg** 3.06 304 P Pn 00 39 16.9 +0.1
**LANF Langenberg** 3.06 304 Pn Pn 00 39 17.2 +0.4
LANF Sg Sg 00 40 06.6 -0.8
**GRAM Graiana** 3.06 202 P Pn 00 39 19.1 +2.2
GRAM S Sn 00 39 53.6 +0.4

**WLS Welschbruch 3.09 292** P **Pn** **00 39 18.5 +1.2**
**WLS Welschbruch 3.09 292** P **Pn** **00 39 18.5 +1.2**
**KTD Kalmit 3.10 311** Pn **Pn** **00 39 18.5 +1.1**
KTD Sg **Sg** **00 40 08.5 -0.2**
**MOF Molkenrain 3.10 281** P **Pn** **00 39 19.2 +1.6**
**MOF Molkenrain 3.10 281** Pn **Pn** **00 39 19.2 +1.6**
MOF Sg **Sg** **00 40 07.6 -1.3**
**MOF Molkenrain 3.10 281** P **Pn** **00 39 19.2 +1.6**
MOF Sg **Sg** **00 40 07.6 -1.3**
**TANN Tannenbergstha 3.12 9** *e*Pn **Pn** **00 39 16.7 -1.0**
SNR=28
TANN *e*Pg **Pg** **00 39 27.5 -1.5**
SNR=5.6
**TANN Tannenbergstha 3.12 9** Pn **Pn** **00 39 16.7 -1.0**
SNR=28
**WERD Werda 3.14 8** *e*Pn **Pn** **00 39 16.6 -1.3**
SNR=16
WERD *e*Pg **Pg** **00 39 28.3 -1.0**
SNR=4.0
**WERD Werda 3.14 8** Pn **Pn** **00 39 16.6 -1.3**
SNR=16
**CDF Champ du Feu 3.14 292** *e*Pn **Pn** **00 39 18.7 +0.7**
CDF *e*Sg **Sb** **00 40 05.8 +3.2**
comp=Z,173nm,0.4s
**CDF Champ du Feu 3.14 292** *e*Pn **Pn** **00 39 18.7 +0.7**
CDF *e*Sg **Sb** **00 40 05.8 +3.2**
comp=Z,86nm,0.4s
**SENIN Lac Senin/Sane 3.15 253**⇑ *i*Pn Pn 00 39 10.6 -7.7
**SENIN Lac Senin/Sane 3.15 253** *e*Pn **Pn** **00 39 20.0 +1.7**
SENIN *e*Sn **Sn** **00 39 57.2 +1.6**
**SENIN Lac Senin/Sane 3.15 253** *e*Pn **Pn** **00 39 20.0 +1.7**
SENIN *e*Sn **Sn** **00 39 57.2 +1.6**
**VALM Valbona 3.15 199** P **Pn** **00 39 20.4 +2.2**
**ECH Echery 3.16 288** P **Pn** **00 39 19.4 +1.1**
**ECH Echery 3.16 288** Pn **Pn** **00 39 19.2 +1.0**
ECH Sg **Sg** **00 40 09.7 -0.9**
**ECH Echery 3.16 288** Pn **Pn** **00 39 19.2 +1.0**
ECH Sg **Sg** **00 40 09.7 -0.9**
**PLN Plauen 3.16 6** *e*Pn **Pn** **00 39 16.7 -1.6**
SNR=9.2
PLN *e*Pg **Pg** **00 39 28.7 -1.1**
SNR=8.0
**PLN Plauen 3.16 6** Pn **Pn** **00 39 16.7 -1.6**
SNR=9.2
**DIX Grande Dixence 3.19 248** *e*Pn Pn 00 39 13.0 -5.8
**PRU Pruhonice 3.26 35**⇓ *e*PN **Pn** **00 39 20.3 +0.6**
PRU *e*PG **Pg** **00 39 29.3 -2.4**
PRU *e*SG **Sg** **00 40 10.6 -3.4**
comp=Z,89nm,0.3s
**PRU Pruhonice 3.26 35** Pn **Pn** **00 39 20.3 +0.6**
**TRAV Traversella 3.27 237** P **Pn** **00 39 19.9 +0.1**
**SARO Sassorosso 3.28 196** P **Pn** **00 39 22.4 +2.4**
**LOMF Lomont 3.29 272** Pn **Pn** **00 39 21.1 +1.1**
LOMF Sg **Sg** **00 40 15.1 +0.4**
**LOMF Lomont 3.29 272** Pn **Pn** **00 39 21.1 +1.1**
LOMF Sg **Sg** **00 40 15.1 +0.4**
**HINF Hinteralfeld 3.29 280** *e*Pn **Pn** **00 39 20.7 +0.7**
HINF *e*Sn **Sn** **00 39 55.7 -3.1**
HINF *e*Sg **Sb** **00 40 10.5 +3.6**
comp=Z,133nm,0.3s
**HINF Hinteralfeld 3.29 280** *e*Pn **Pn** **00 39 20.7 +0.7**
HINF *e*Sn **Sn** **00 39 55.7 -3.1**
HINF *e*Sg **Sb** **00 40 10.5 +3.6**
comp=Z,67nm,0.3s
**PRA Prague 3.29 33**⇓ *e*PN **Pn** **00 39 21.1 +1.1**
PRA *e*PG **Pb** **00 39 29.5 +2.4**
PRA *e*SG **Sg** **00 40 11.6 -3.2**
comp=Z,112nm,0.4s
**PRA Prague 3.29 33** Pn **Pn** **00 39 21.1 +1.1**
**SC2M Scurtabo 3.29 208** P **Pn** **00 39 22.6 +2.5**
**GOPC GO Pecny, Ondr 3.31 38** *e*PN **Pn** **00 39 21.4 +1.2**
GOPC *ex* x 00 39 26.2
GOPC *e*PG **Pg** **00 39 30.8 -1.7**
GOPC *e*SN **Sn** **00 39 58.5 -0.6**
GOPC *e*SG **Sg** **00 40 12.2 -3.1**
**GOPC GO Pecny, Ondr 3.31 38** Pn **Pn** **00 39 21.4 +1.2**
**MOX Moxa 3.31 360** *e*Pn **Pn** **00 39 19.1 -1.1**
SNR=38
**MOX Moxa 3.31 360** Pn **Pn** **00 39 19.1 -1.1**
SNR=38
**GRYON Gryon 3.31 252**⇑ *i*Pn Pn 00 39 14.7 -5.7
**CIRO Champorcher 3.32 240** P **Pn** **00 39 20.9 +0.2**
**SOP Sopron 3.34 82** *e*Pn **Pn** **00 39 22.4 +1.7**
**SOP Sopron 3.34 82** *e*Pn **Pn** **00 39 22.4 +1.7**
SOP *e*Sn **Sn** **00 40 00.3 +0.4**
**AIGLE Aigle 3.38 254**⇑ *i*Pn Pn 00 39 14.8 -6.5
**OG01 Vacheresse 3.56 255** Pn **Pn** **00 39 25.2 +1.4**
OG01 Sg **Sg** **00 40 23.8 +0.2**
**OG01 Vacheresse 3.56 255** Pn **Pn** **00 39 25.2 +1.4**
OG01 Sg **Sg** **00 40 23.8 +0.2**
**TNS Taunus Mts 3.58 325** *e*Pn **Pn** **00 39 24.6 +0.6**
SNR=42
TNS S **Sn** **00 40 05.2 -0.8**
**TNS Taunus Mts 3.58 325** Pn **Pn** **00 39 24.6 +0.6**
SNR=42
TNS S **Sn** **00 40 05.2 -0.8**
**HAU Haudompre 3.65 282** *e*Pn **Pn** **00 39 26.3 +1.3**
HAU *e*Sg **Sb** **00 40 21.7 +4.4**
comp=Z,253nm,0.4s
**HAU Haudompre 3.65 282** *e*Pn **Pn** **00 39 26.3 +1.3**
HAU *e*Sg **Sb** **00 40 21.7 +4.4**
comp=Z,127nm,0.4s
**PVCC Panska Ves 3.72 30**⇓ *e*PN **Pn** **00 39 26.0 +0.1**
PVCC *ex* x 00 39 35.5
PVCC *e*PG **Pg** **00 39 38.1 -2.4**
PVCC *e*SG **Sg** **00 40 25.0 -3.6**
comp=Z,206nm,0.3s
**PVCC Panska Ves 3.72 30** Pn **Pn** **00 39 26.0 +0.1**
**ABH Alteburg 3.73 314** P **Pn** **00 39 27.4 +1.4**
**ABH Alteburg 3.73 314** Pn **Pn** **00 39 27.2 +1.1**
**FBE Freiberg 3.75 17** *e*Pn **Pn** **00 39 26.1 -0.2**
SNR=3.9
**FBE Freiberg 3.75 17** Pn **Pn** **00 39 26.1 -0.2**
SNR=3.9
**GIMEL St. Georges / 3.78 260** *e*Pn Pn 00 39 15.6 -11
**VRAC Vranov 3.83 57** Pn **Pn** **00 39 27.3 -0.2**
comp=Z,1.6nm,0.3s,baz=239,slow=5.9,SNR=3.3
VRAC Pg **Pb** **00 39 38.0 +1.6**
comp=Z,2.2nm,0.3s,baz=251,slow=13,SNR=14
VRAC Sn **Sn** **00 40 10.2 -2.0**
comp=Z,7.5nm,0.3s,baz=235,slow=13,SNR=3.9
VRAC Lg Lg 00 40 23.8
comp=Z,12nm,0.3s,baz=168,slow=22,SNR=6.9
**VRAC Vranov 3.83 57**⇑ *i*P **Pb** **00 39 34.1 -2.3**
**VRAC Vranov 3.83 57** S **Sn** **00 40 11.0 -1.2**
**VRAC Vranov 3.83 57** *e*Pn **Pn** **00 39 27.4 -0.1**
**VRAC Vranov 3.83 57** Pg **Pb** **00 39 38.0 +1.6**
VRAC S **Sn** **00 40 11.0 -1.2**
VRAC *e*Sn Sb 00 40 11.8 -11
VRAC *e*Sg **Sg** **00 40 29.7 -2.6**
**BRG Berggiesshubel 3.84 22** PN **Pn** **00 39 27.1 -0.4**
BRG *i* 00 39 35.4
**BRG Berggiesshubel 3.84 22** PG **Pg** **00 39 40.7 -2.0**
BRG SN **Sn** **00 40 10.7 -1.5**
BRG SG **Sg** **00 40 30.0 -2.4**
comp=Z,105nm,0.8s
comp=N,135nm,8.1s
comp=E,251nm,5.5s
comp=Z,832nm,6.3s
**BRG Berggiesshubel 3.84 22** *e*Pn **Pn** **00 39 27.2 -0.3**
SNR=6.5
**BRG Berggiesshubel 3.84 22** Pn **Pn** **00 39 27.2 -0.3**
SNR=6.5
**RSL Roselend 3.85 246** Pn **Pn** **00 39 29.8 +1.9**
**RSL Roselend 3.85 246** Pn **Pn** **00 39 29.8 +1.9**
**RUP Ruppelstein 3.86 309** Pn **Pn** **00 39 29.4 +1.5**
RUP Sg **Sg** **00 40 32.5 -0.7**
**LPG La Plagne 3.86 243** *e*Pn **Pn** **00 39 30.7 +2.5**
LPG *e*Sn **Sn** **00 40 10.5 -2.8**
comp=Z,102nm,0.7s
**LPG La Plagne 3.86 243** *e*Pn **Pn** **00 39 30.7 +2.5**
LPG *e*Sn **Sn** **00 40 10.5 -2.8**
comp=Z,51nm,0.7s
**LPL La Plagne 3.87 244** *e*Pn **Pn** **00 39 30.4 +2.3**
LPL *e*Sn **Sn** **00 40 10.5 -2.8**
comp=Z,33nm,0.3s
**LPL La Plagne 3.87 244** *e*Pn **Pn** **00 39 30.4 +2.3**
LPL *e*Sn **Sn** **00 40 10.5 -2.8**
comp=Z,17nm,0.3s
**CABF La Chapelle 3.88 261** *e*Pn **Pn** **00 39 29.0 +0.7**
CABF *e*Sg **Sg** **00 40 29.7 -4.2**
comp=Z,142nm,0.6s
**CABF La Chapelle 3.88 261** *e*Pn **Pn** **00 39 29.0 +0.7**
CABF *e*Sg **Sg** **00 40 29.7 -4.2**
comp=Z,71nm,0.6s
**THEF They Montfort 3.93 285** Pn **Pn** **00 39 30.2 +1.4**
THEF Sg **Sg** **00 40 35.4 +0.2**
**THEF They Montfort 3.93 285** Pn **Pn** **00 39 30.2 +1.4**
THEF Sg **Sg** **00 40 35.4 +0.2**
**KOE Koeppel 4.03 321** *e*Pn **Pn** **00 39 31.2 +1.0**
KOE *e*Sn **Sn** **00 40 18.0 +1.0**
comp=Z,106nm,0.3s
**KOE Koeppel 4.03 321** Pn **Pn** **00 39 31.2 +1.0**
KOE Sn **Sn** **00 40 18.0 +1.0**
comp=Z,106nm,0.3s
**BGG Burgeitz 4.05 317** *e*Pn **Pn** **00 39 31.6 +1.2**
BGG *e*Sn **Sn** **00 40 18.1 +0.7**
comp=Z,60nm,0.9s
**BGG Burgeitz 4.05 317** Pn **Pn** **00 39 31.6 +1.2**
BGG Sn **Sn** **00 40 18.1 +0.7**
comp=Z,60nm,0.9s
**CLL Collm 4.06 12** *e*Pn **Pn** **00 39 30.1 -0.5**
SNR=27
**CLL Collm 4.06 12** *i* Pn **Pn** **00 39 30.1 -0.5**
CLL *e* 00 39 44.0
CLL *i* Pg **Pg** **00 39 46.4 -0.6**
CLL *e*Sn **Sn** **00 40 15.0 -2.8**
CLL *i* Sg **Sg** **00 40 38.0 -1.6**
comp=Z,147nm,0.8s
**CLL Collm 4.06 12** *e*Pn **Pn** **00 39 29.4 -1.2**
**CLL Collm 4.06 12** Pn **Pn** **00 39 30.1 -0.5**
SNR=27
**BNI Bardonecchia 4.15 238** *e*Pn **Pn** **00 39 33.8 +1.8**
**BNI Bardonecchia 4.15 238** *e*Pn **Pn** **00 39 33.8 +1.8**
**PAGF Fort de Pagny 4.17 289** *e*Pn **Pn** **00 39 33.3 +1.2**
baz=110
PAGF *e*Sg **Sg** **00 40 37.9 -5.1**
comp=Z,33nm,0.6s
**PAGF Fort de Pagny 4.17 289** *e*Pn **Pn** **00 39 33.3 +1.2**
PAGF *e*Sg **Sg** **00 40 37.9 -5.1**
comp=Z,17nm,0.6s
**UPC Upice 4.27 41**⇓ *e*PN **Pn** **00 39 33.4 -0.1**
UPC *e*PG **Pg** **00 39 48.0 -3.0**
UPC *e*SN **Sn** **00 40 20.5 -2.5**
UPC *e*SG **Sb** **00 40 40.4 +5.2**
**UPC Upice 4.27 41** Pn **Pn** **00 39 33.4 -0.1**
UPC Sn **Sn** **00 40 20.5 -2.5**
**MBDF Montbardon 4.29 234** *e*Pn **Pn** **00 39 34.7 +0.8**
**MBDF Montbardon 4.29 234** *e*P Pn 00 39 38.0 +4.1
MBDF *e*Sn **Sn** **00 40 20.7 -3.0**
comp=Z,53nm,0.5s
**MBDF Montbardon 4.29 234** *e*Pn **Pn** **00 39 34.7 +0.8**
**MBDF Montbardon 4.29 234** *e*P Pn 00 39 38.0 +4.1
MBDF *e*Sn **Sn** **00 40 20.7 -3.0**
comp=Z,26nm,0.5s
**DPC Dobruska-Polom 4.30 44** *e*PN **Pn** **00 39 33.9 -0.1**
DPC *e*PG **Pg** **00 39 50.9 -0.7**
DPC *e*SN **Sn** **00 40 22.5 -1.3**
DPC *e*SG **Sg** **00 40 44.3 -3.1**
comp=Z,70nm,0.5s
**DPC Dobruska-Polom 4.30 44** Pn **Pn** **00 39 33.9 -0.1**
DPC Sn **Sn** **00 40 22.5 -1.3**
DPC Sg **Sg** **00 40 44.3 -3.1**
comp=Z,70nm,0.5s
**WLF Walferdange 4.33 304** P **Pn** **00 39 36.4 +2.0**
WLF S **Sn** **00 40 22.7 -1.9**
comp=N,34nm,0.0s
**WLF Walferdange 4.33 304** *e*Pn **Pn** **00 39 36.3 +2.0**
SNR=7.8
**WLF Walferdange 4.33 304** *e*Pn **Pn** **00 39 35.1 +0.7**
**WLF Walferdange 4.33 304** *e*Pn **Pn** **00 39 35.1 +0.7**
**WLF Walferdange 4.33 304** P **Pn** **00 39 36.3 +2.0**
WLF S **Sn** **00 40 22.6 -1.9**
**PKST T"s 4.34 89**⇓ *e*Pn **Pn** **00 39 35.2 +0.8**
PKST *e* 00 40 23.3
**PKST T"s 4.34 89**⇓ *e*Pn **Pn** **00 39 35.2 +0.8**
PKST *e*Sn **Sn** **00 40 23.3 -1.3**
**GTTG Gvttingen 4.35 346** *e*Pn **Pn** **00 39 35.0 +0.5**
SNR=6.9
**GTTG Gvttingen 4.35 346** Pn **Pn** **00 39 35.0 +0.5**
SNR=6.9
**KRLC Kraliky 4.36 49** *e*PN **Pn** **00 39 35.2 +0.5**
KRLC *e*SN **Sn** **00 40 24.3 -0.8**
KRLC *e*SG **Sg** **00 40 46.2 -2.8**
**KRLC Kraliky 4.36 49** Pn **Pn** **00 39 35.2 +0.5**
KRLC Sn **Sn** **00 40 24.3 -0.8**
KRLC Sg **Sg** **00 40 46.2 -2.8**
**HILG Hillesheim 4.42 314** *e*Pn **Pn** **00 39 36.7 +1.2**
HILG *e*Sn **Sn** **00 40 27.4 +0.8**
**HILG Hillesheim 4.42 314** Pn **Pn** **00 39 36.7 +1.2**
HILG Sn **Sn** **00 40 27.4 +0.8**
**STB Steinbach 4.54 317** *e*Pn **Pn** **00 39 38.3 +1.1**
STB *e*Sn **Sn** **00 40 29.9 +0.2**
comp=N,42nm,0.3s
**STB Steinbach 4.54 317** Pn **Pn** **00 39 38.3 +1.1**
STB Sn **Sn** **00 40 29.9 +0.2**
comp=N,42nm,0.3s
**SFTF Sexfontaines 4.55 283** *e*Pn **Pn** **00 39 38.0 +0.7**
baz=108
SFTF *e*Sg **Sg** **00 40 49.7 -5.4**
comp=N,93nm,0.5s,baz=101
**SFTF Sexfontaines 4.55 283** *e*Pn **Pn** **00 39 38.0 +0.7**
SFTF *e*Sg **Sg** **00 40 49.7 -5.4**
comp=N,47nm,0.5s
**SBF Sospel 4.57 222** *e*Pn **Pn** **00 39 39.6 +1.9**
SBF *e*Sn **Sn** **00 40 27.4 -3.0**
comp=N,86nm,0.5s
**SBF Sospel 4.57 222** *e*Pn **Pn** **00 39 39.6 +1.9**
SBF *e*Sn **Sn** **00 40 27.4 -3.0**
comp=N,43nm,0.5s
**PKSG 4.57 87** *e*Pn **Pn** **00 39 38.5 +0.9**
PKSG *e* 00 40 33.5
**PKSG 4.57 87** *e*Pn **Pn** **00 39 38.5 +0.9**
PKSG *e*Sn **Sn** **00 40 33.5 +3.1**
**LUCF Luceram 4.59 223** Pn **Pn** **00 39 39.5 +1.5**
**LUCF Luceram 4.59 223** Pn **Pn** **00 39 39.5 +1.5**
**MEZF Maizieres J'vi 4.59 287** *e*Pn **Pn** **00 39 38.5 +0.6**
baz=104
MEZF *e*Sg **Sg** **00 40 51.0 -5.5**
comp=N,119nm,0.6s
**MEZF Maizieres J'vi 4.59 287** *e*Pn **Pn** **00 39 38.5 +0.6**
MEZF *e*Sg **Sg** **00 40 51.0 -5.5**
comp=N,60nm,0.6s
**MORC Moravsky Berou 4.60 56**⇓ *i*P **Pn** **00 39 40.8 +2.7**
**MORC Moravsky Berou 4.60 56** S **Sb** **00 40 44.3 -0.4**
**MORC Moravsky Berou 4.60 56** *e*Pn **Pn** **00 39 38.0 -0.1**
**MORC Moravsky Berou 4.60 56** *e*Pn **Pn** **00 39 38.0 -0.1**
**MORC Moravsky Berou 4.60 56**⇓ *i*P **Pn** **00 39 40.8 +2.7**
MORC *e*Sn **Sn** **00 40 28.6 -2.6**
MORC *e*Sg **Sg** **00 40 52.2 -4.7**
**HOBG Hohbusch 4.62 324** *e*Pn **Pn** **00 39 39.2 +1.0**
HOBG *e*Sn **Sn** **00 40 32.3 +0.8**
**HOBG Hohbusch 4.62 324** Pn **Pn** **00 39 39.2 +1.0**
HOBG Sn **Sn** **00 40 32.3 +0.8**
**KSP Ksiaz 4.64 39** *e*Pn **Pn** **00 39 39.2 +0.6**
KSP *e*Pg Pg 00 39 54.8 -3.2
KSP *e*Sn **Sn** **00 40 31.3 -0.7**
KSP *e*Sg **Sg** **00 40 54.8 -3.3**
**KSP Ksiaz 4.64 39** *e*Pn **Pn** **00 39 39.2 +0.6**
**BNS Bensberg 4.67 323** *e*Pn **Pn** **00 39 40.1 +1.2**
BNS *e*Sn **Sn** **00 40 33.3 +0.6**
**BNS Bensberg 4.67 323** Pn **Pn** **00 39 40.1 +1.2**
BNS Sn **Sn** **00 40 33.3 +0.6**
**MVIF Mont Vial 4.68 224** Pn **Pn** **00 39 40.7 +1.5**
**MVIF Mont Vial 4.68 224** Pn **Pn** **00 39 40.7 +1.5**
**ORIF Oris-en-Rattie 4.69 241** *e*Pn **Pn** **00 39 41.1 +1.7**
ORIF *e*Sn **Sn** **00 40 30.0 -3.5**
comp=N,54nm,0.4s
**ORIF Oris-en-Rattie 4.69 241** *e*Pn **Pn** **00 39 41.1 +1.7**
ORIF *e*Sn **Sn** **00 40 30.0 -3.5**
comp=N,27nm,0.4s
**REVF Revere 4.70 221** Pn **Pn** **00 39 41.1 +1.7**
**REVF Revere 4.70 221** Pn **Pn** **00 39 41.1 +1.7**
**KLL Kalltalsperre 4.83 315** *e*Pn **Pn** **00 39 42.1 +0.9**
KLL *e*Sn **Sn** **00 40 37.2 +0.5**
**KLL Kalltalsperre 4.83 315** Pn **Pn** **00 39 42.1 +0.9**
KLL Sn **Sn** **00 40 37.2 +0.5**
**DREG Dreilaegerbach 4.88 315** *e*Pn **Pn** **00 39 43.3 +1.5**
DREG *e*Sn **Sn** **00 40 38.0 +0.1**
comp=N,33nm,0.3s
**DREG Dreilaegerbach 4.88 315** Pn **Pn** **00 39 43.3 +1.5**
DREG Sn **Sn** **00 40 38.0 +0.1**
comp=N,33nm,0.3s
**CALN Calern 4.91 225** Pn **Pn** **00 39 44.6 +2.2**
**CALN Calern 4.91 225** Pn **Pn** **00 39 44.6 +2.2**
**MEM Membach 4.95 313** P **Pn** **00 39 44.2 +1.4**
MEM S **Sn** **00 40 37.3 -2.4**
comp=N,28nm,0.0s
**MEM Membach 4.95 313** P **Pn** **00 39 44.2 +1.4**
MEM S **Sn** **00 40 37.3 -2.4**
**VYHS Vyhne 4.96 74** *e*PN **Pn** **00 39 43.3 +0.3**
VYHS *e*SN **Sn** **00 40 36.6 -3.4**
**VYHS Vyhne 4.96 74** *e*Pn **Pn** **00 39 43.3 +0.3**
VYHS *e*Sn **Sn** **00 40 36.6 -3.4**
**OKC Ostrava-Krasne 4.98 58**⇓ *e*PN **Pn** **00 39 43.2 0.0**
OKC *e*SN **Sn** **00 40 38.4 -1.9**
OKC *e*SG **Sg** **00 41 04.9 -4.0**
comp=N,96nm,0.7s
**OKC Ostrava-Krasne 4.98 58** Pn **Pn** **00 39 43.2 0.0**
OKC Sn **Sn** **00 40 38.4 -1.9**
OKC Sg **Sg** **00 41 04.9 -4.0**
comp=N,96nm,0.7s
**PGF Pioggiola 5.15 202** *e*Pn **Pn** **00 39 46.7 +1.0**
PGF *e*Sn **Sn** **00 40 41.8 -3.0**
comp=N,14nm,0.5s
**PGF Pioggiola 5.15 202** *e*Pn **Pn** **00 39 46.7 +1.0**
**FRF La Foret Royal 5.17 225** *e*Pn **Pn** **00 39 47.8 +1.9**
FRF *e*Sn **Sn** **00 40 41.7 -3.4**
comp=N,25nm,0.5s
**FRF La Foret Royal 5.17 225** *e*Pn **Pn** **00 39 47.8 +1.9**
**BCLA Clavier 5.20 309** P **Pn** **00 39 48.0 +1.7**
BCLA S **Sn** **00 40 43.0 -2.8**
comp=N,25nm,0.0s
**BCLA Clavier 5.20 309** P **Pn** **00 39 47.9 +1.7**
BCLA S **Sn** **00 40 43.0 -2.8**
**GIVF Givet 5.30 304** *e*Pn **Pn** **00 39 49.5 +1.9**
GIVF *e*Sn **Sn** **00 40 43.7 -4.6**
GIVF *e*Sg Sg 00 41 12.8 -6.4
comp=N,68nm,0.6s
**GIVF Givet 5.30 304** *e*Pn **Pn** **00 39 49.5 +1.9**
GIVF *e*Sn **Sn** **00 40 43.7 -4.6**
GIVF *e*Sg Sg 00 41 12.8 -6.4
comp=N,34nm,0.6s
**LOR Lormes 5.31 272** *e*Pn **Pn** **00 39 48.0 +0.3**
baz=87
LOR *e*Sn **Sn** **00 40 43.0 -5.5**
LOR *e*Sg **Sg** **00 41 13.7 -5.8**
comp=N,36nm,0.4s,baz=98
**LOR Lormes 5.31 272** *e*Pn **Pn** **00 39 48.0 +0.3**
LOR *e*Sg **Sg** **00 41 13.7 -5.8**
comp=N,18nm,0.4s
**SSB Saint Sauveur 5.35 250** Pn **Pn** **00 39 48.2 -0.1**
**SSB Saint Sauveur 5.35 250** *e*Pn **Pn** **00 39 48.7 +0.4**
SSB *e*Sn Sn 00 40 41.8 -7.7
**SSB Saint Sauveur 5.35 250** *e*Pn **Pn** **00 39 48.7 +0.4**
SSB *e*Sn Sn 00 40 41.8 -7.7
**SMF Signal de Mont 5.39 265** *e*Pn **Pn** **00 39 49.3 +0.4**
SMF *e*Sn **Sn** **00 40 45.5 -5.2**
SMF *e*Sg **Sg** **00 41 16.9 -5.4**
comp=N,25nm,0.2s
**LMR La Mourre 5.41 224** *e*Pn **Pn** **00 39 50.4 +1.3**
LMR *e*Sn **Sn** **00 40 47.4 -3.5**
comp=N,25nm,0.7s
**DOU Dourbes 5.43 303** P **Pn** **00 39 51.4 +2.0**
DOU S **Sn** **00 40 48.7 -2.6**
comp=E,20nm,0.0s
**SMRF Simiane la Rot 5.43 234** *e*Pn **Pn** **00 39 51.0 +1.5**
SMRF *e*Sn **Sn** **00 40 47.8 -3.8**
comp=E,13nm,0.4s
**VIVF Saint-Julien-l 5.46 245** *e*Pn **Pn** **00 39 50.4 +0.6**
VIVF *e*Sn **Sn** **00 40 48.0 -4.3**
comp=E,39nm,0.3s
**LANS Liptovska Anna 5.52 68** *e*SN **Sn** **00 40 52.9 -0.9**
**SSF Saint Saulge 5.56 270** *e*Pn **Pn** **00 39 52.1 +0.8**
SSF *e*Sn **Sn** **00 40 50.2 -4.6**
SSF *e*Sg Sg 00 41 21.7 -6.0
comp=E,22nm,0.3s
**PSZ Piszkesteto 5.60 81** *e*Pn **Pn** **00 39 52.7 +0.9**
PSZ *e*Sn Sn 00 40 49.6 -6.1
**PSZ Piszkesteto 5.60 81** *e*Pn **Pn** **00 39 53.5 +1.7**
**PSZ Piszkesteto 5.60 81** *e*Pn **Pn** **00 39 53.5 +1.7**
**BAIF Baives 5.63 302** *e*Pn **Pn** **00 39 53.9 +1.7**
BAIF *e*Sn **Sn** **00 40 51.3 -5.1**
BAIF *e*Sg Sg 00 41 23.3 -6.6
comp=E,34nm,0.5s
**PLDF La Plantade 5.70 259** Pn **Pn** **00 39 53.1 -0.1**
**AVF Avril sur Loir 5.70 267** *e*Pn **Pn** **00 39 53.5 +0.4**
AVF *e*Sg Sg 00 41 26.3 -5.8
comp=E,25nm,0.6s
**COLF Collangettes 5.80 255** Pn **Pn** **00 39 54.5 -0.1**
**AGO Saint Agoulin 6.01 261** Pn **Pn** **00 39 57.7 +0.3**
**BGF Bois d'Agland 6.08 266** *e*Pn **Pn** **00 39 58.8 +0.4**
BGF *e*Sn **Sn** **00 41 02.8 -4.8**
BGF *e*Sg Sg 00 41 38.0 -6.4
comp=E,26nm,0.3s
**OJC Ojcow 6.10 59** *e*Pn **Pn** **00 39 60.0 +1.4**
**OJC Ojcow 6.10 59** *e*Pn **Pn** **00 40 00.0 +1.4**
**HYF Humbligny 6.13 273** *e*Pn **Pn** **00 39 59.4 +0.3**
HYF *e*Sg Sg 00 41 39.4 -6.6
**PYM Petit Puy Mans 6.18 258** Pn **Pn** **00 39 59.6 -0.1**
**LBL Lubilhac 6.20 253** Pn **Pn** **00 40 00.7 +0.6**
**LASF Ste Croix 6.37 242** *e*Pn **Pn** **00 40 02.3 0.0**
LASF *e*Sn **Sn** **00 41 09.8 -4.8**
comp=E,77nm,0.7s
**TCF Toulx Ste Croi 6.57 264** *e*Pn **Pn** **00 40 05.3 +0.2**
TCF *e*Sn **Sn** **00 41 14.2 -5.4**
TCF *e*Sg Sg 00 41 53.4 -6.6
comp=E,26nm,0.6s
**STHS Stebnicka Huta 6.71 68** *e*PN **Pn** **00 40 08.5 +1.5**
**CAF Calviac 7.09 254** *e*Pn **Pn** **00 40 12.5 +0.2**
CAF *e*Sn **Sn** **00 41 27.0 -5.5**
comp=E,10.0nm,0.2s
**RJF Les Rejaudoux 7.31 258** *e*Pn **Pn** **00 40 15.9 +0.6**
RJF *e*Sn **Sn** **00 41 32.1 -5.8**
comp=E,13nm,0.4s
**MTLF Montolieu 7.76 242** *e*Pn **Pn** **00 40 21.9 +0.5**
MTLF *e*Sn Sn 00 41 43.0 -5.9
comp=E,3.9nm,0.3s
**LFF La Frestale 7.96 256** *e*Pn **Pn** **00 40 24.8 +0.7**
LFF *e*Sn Sn 00 41 47.5 -6.1
comp=E,13nm,0.4s
**LDF La Druitiere 8.01 283** *e*Pn **Pn** **00 40 23.0 -1.8**
LDF *e*Sg Sb 00 42 37.5 +15
comp=E,29nm,0.6s
**MFF Saint Martin d 8.11 269** *e*Pn **Pn** **00 40 26.7 +0.5**
MFF *e*Sn Sn 00 41 51.0 -6.4
MFF *e*Sg Sb 00 42 41.3 +16
comp=E,32nm,1.1s
**FLN La Foliniere 8.26 284** *e*Pn **Pn** **00 40 27.2 -1.0**
FLN *e*Sg Sb 00 42 45.8 +16
comp=E,37nm,0.8s
**GRR Gorron 8.48 282** *e*Pn **Pn** **00 40 29.2 -2.1**
GRR *e*Sn Sn 00 41 59.3 -7.3
GRR *e*Sg Sb 00 42 52.2 +16
comp=E,48nm,1.0s
**EPF Esparros 9.08 246** *e*Pn **Pn** **00 40 39.9 +0.4**
EPF *e*Sn Sn 00 42 14.6 -6.8
comp=E,1.8nm,0.3s
**BUR04 Bucovina Ar. S 9.19 83** *e*Pn **Pn** **00 40 43.2 +2.2**
**BUR04 Bucovina Ar. S 9.19 83** *e*Pn **Pn** **00 40 43.2 +2.2**
**SGMF Saint Gilles 9.61 281** *e*Pn **Pn** **00 40 46.9 +0.1**
**ETSF Etsaut 9.71 247** *e*Pn **Pn** **00 40 48.6 +0.4**
**CWF Charnwood Fore 9.93 308** *e*Pn **Pn** **00 40 48.1 -2.9**
CWF *e*Sn **Sn** **00 42 36.7 -5.4**
**SJPF Ste Jean 10.02 250** *e*Pn **Pn** **00 40 50.9 -1.5**
**QUIF Quistinic 10.03 279** *e*Pn **Pn** **00 40 51.4 -1.0**
**ROSF Rostrenen 10.09 281** *e*Pn **Pn** **00 40 54.1 +0.8**
**EKA Eskdalemuir Ar 12.22 316** Pn **Pn** **00 41 24.0 +1.6**
baz=125,slow=14,SNR=9.6
**EKA Eskdalemuir Ar 12.22 316** Pn **Pn** **00 41 24.0 +1.6**
**ESK Eskdalemuir 12.23 316** *e*Pn **Pn** **00 41 24.6 +2.1**
**ESK Eskdalemuir 12.23 316** *e*Pn **Pn** **00 41 24.6 +2.1**
**ESDC Sonseca Array 13.67 242** Pn **Pn** **00 41 42.8 +0.5**
comp=E,0.3nm,0.3s,baz=52,slow=14,SNR=4.8
**PAB San Pablo 13.98 242** *e*Pn **Pn** **00 41 46.8 +0.2**
**PAB San Pablo 13.98 242** *e*Pn **Pn** **00 41 46.8 +0.2**
**FINES FINESS Array B 16.37 25** Pn **P** **00 42 24.0 +3.2**
comp=E,0.2nm,0.3s,baz=215,slow=9.3,SNR=4.5
**KBZ Khabaz 22.10 88** P **P** **00 43 24.7 +1.2**
comp=E,0.9nm,0.7s,baz=285,slow=14,SNR=3.5
**TORD Torodi Ar. Bea 35.10 197** P **P** **00 45 20.4 -1.2**
comp=E,0.2nm,0.3s,baz=9.8,slow=8.9,SNR=11
TORD PcP **PcP** **00 47 52.6 -0.5**
comp=E,0.2nm,0.6s,baz=7.3,slow=1.9,SNR=5.1
**MKAR Makanchi Array 46.55 63** P **P** **00 46 56.4 +0.6**
comp=E,0.3nm,0.3s,baz=296,slow=6.5,SNR=7.0
**HHC Hu-ho-hao-te 67.11 54** *e*P **P** **00 49 22.0 +0.1**
HHC pmax pmax
comp=Z,18nm,1.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| HHC | | | | pmax | pmax | | | |
| | comp=Z,78nm,4.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **128.71** | **84** | PKP | **PKPdf** | **00 57 34.9** | **-0.7** | |
| | comp=Z,0.3nm,0.3s,baz=308,slow=3.4,SNR=3.9 | | | | | | | |

*CSEM* ***19*** *00:39:16.5, 47.37N×11.61E, h9km, After ZAMG*
**VIE 19 00:39:16.5±0.2, 47.37N×11.61E, h9km±1km, 5C-2D, Error ellipse: s-maj=1.7km s-min=0.9km az=165.0, 8 km WNW of Schwaz, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATA** | **Walderalm** | **0.04** | **211** | ⇑*i* | Pg | 00 39 19.0 | +0.5 |
| | 76nm,0.1s | | | | | | |
| WATA | | | | ⇓*i* | Sg | 00 39 20.3 | +0.4 |
| | 297nm,0.1s | | | | | | |
| **WATA** | **Walderalm** | **0.04** | **211** | Pg | Pg | 00 39 19.0 | +0.6 |
| | 76nm,0.1s | | | | | | |
| WATA | | | | Sg | Sg | 00 39 20.3 | +0.4 |
| | 297nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **170** | ⇑*i* | Pg | 00 39 19.4 | +0.1 |
| | 204nm,0.1s | | | | | | |
| WTTA | | | | ⇑*i* | Sg | 00 39 21.6 | +0.2 |
| | 286nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **170** | Pg | Pg | 00 39 19.4 | +0.1 |
| | 204nm,0.1s | | | | | | |
| WTTA | | | | Sg | Sg | 00 39 21.6 | +0.2 |
| | 286nm,0.1s | | | | | | |
| **RETA** | **Reutte** | **0.59** | **282** | ⇑ | Pg | 00 39 28.4 | +0.4 |
| RETA | | | | ⇓*i* | Sg | 00 39 36.2 | +0.5 |
| | 51nm,0.3s | | | | | | |
| **RETA** | **Reutte** | **0.59** | **282** | Pg | Pg | 00 39 28.4 | +0.4 |
| RETA | | | | Sg | Sg | 00 39 36.2 | +0.5 |
| | 51nm,0.3s | | | | | | |
| **FETA** | **Feichten** | **0.69** | **240** | ⇑*i* | Sg | 00 39 39.6 | +0.3 |
| | 24nm,0.3s | | | | | | |
| **FETA** | **Feichten** | **0.69** | **240** | Sg | Sg | 00 39 39.6 | +0.2 |
| | 24nm,0.3s | | | | | | |

*IDC* ***19*** *00:50:41.2±1.3, 26.43S×64.79W, h0km, mb3.7/1, mb1 3.7/5, mb1mx3.5/24, mbtmp3.6/5, ML3.5/3, MS3.1/2, Ms1 3.1/2, ms1mx2.7/19, Error ellipse: s-maj=29.4km s-min=26.5km az=126.0*
*SJA* ***19*** *00:50:42.0±0.7, 26.33S×65.11W, h12km, ML4.0, MW4.2*
*ISCJB* ***19*** *00:50:43.5±0.5, 26.37S±0.03×65.14W±0.08, h10km, mb3.6/1, Error ellipse: s-maj=10.0km s-min=3.1km az=12.5*
**ISC 19 00:50:42.0±0.7, 26.33S±0.02×65.02W±0.06, h10km, n23, σ1.93/36, Tucuman Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AHML** | **Horco Molle** | **0.53** | **212** | *e*P | **Pg** | **00 50 52.1** | **-0.3** |
| AHML | | | | *e*S | **Sg** | **00 50 59.8** | **+0.3** |
| AHML | | | | IAML | | 00 51 00.8 | |
| | comp=Z,11μm,0.6s | | | | | | |
| **AHML** | **Horco Molle** | **0.53** | **212** | *i* P | **Pg** | **00 50 52.1** | **-0.3** |
| AHML | | | | *i* S | **Sg** | **00 50 58.4** | **-1.1** |
| **FSA** | **Cafayete** | **0.93** | **285** | *e*P | **Pg** | **00 50 57.7** | **-2.2** |
| FSA | | | | IAML | | 00 51 09.0 | |
| | comp=Z,2μm,0.5s | | | | | | |
| FSA | | | | *e*S | **Sg** | **00 51 10.2** | **-1.7** |
| **FSA** | **Cafayete** | **0.93** | **285** | *i* P | **Pg** | **00 50 57.3** | **-2.6** |
| FSA | | | | *i* S | Sg | 00 51 05.7 | -6.2 |
| **SLA** | **San Lorenzo** | **1.66** | **345** | *e*P | **Pb** | **00 51 12.8** | **-0.1** |
| SLA | | | | *e*S | **Sg** | **00 51 35.5** | **-0.1** |
| SLA | | | | IAML | | 00 51 38.9 | |
| | comp=Z,3μm,0.7s | | | | | | |
| **SLA** | **San Lorenzo** | **1.66** | **345** | *i* P | **Pn** | **00 51 12.0** | **+0.6** |
| SLA | | | | *i* P | **Pn** | **00 51 12.0** | **+0.6** |
| SLA | | | | AML | AML | 00 51 39.0 | |
| | comp=Z,3μm,0.7s | | | | | | |
| **AZAP** | **Zapla** | **2.10** | **359** | *e*P | **Pb** | **00 51 19.7** | **-0.7** |
| **AZAP** | **Zapla** | **2.10** | **359** | *i* P | **Pb** | **00 51 20.3** | **-0.1** |
| **CYA** | **Choya** | **2.21** | **198** | *e*P | **Pb** | **00 51 20.6** | **-1.6** |
| CYA | | | | *e*S | **Sb** | **00 51 49.1** | **-0.6** |
| CYA | | | | IAML | | 00 51 53.4 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **CYA** | **Choya** | **2.21** | **198** | *i* P | **Pb** | **00 51 20.1** | **-2.1** |
| CYA | | | | *i* S | **Sb** | **00 51 48.4** | **-1.3** |
| CYA | | | | AML | AML | 00 51 54.1 | |
| | comp=E,2μm,0.5s | | | | | | |
| **ASTB** | **Santa Barbara** | **2.42** | **12** | *e*P | **Pb** | **00 51 24.4** | **-1.4** |
| ASTB | | | | *e*S | **Sb** | **00 51 56.2** | **+0.4** |
| **ASTB** | **Santa Barbara** | **2.42** | **12** | *i* P | **Pb** | **00 51 23.8** | **-2.0** |
| **ALOL** | **LOMAS DE OLMED** | **2.68** | **21** | *e*P | **Pn** | **00 51 27.3** | **+2.0** |
| ALOL | | | | *e*S | **Sb** | **00 52 01.8** | **-1.3** |
| **HJA** | **Humahuaca** | **3.13** | **353** | *e*P | **Pn** | **00 51 34.2** | **+2.4** |
| HJA | | | | *e*S | **Sb** | **00 52 14.3** | **-2.1** |
| **YJA** | **Yavi** | **4.16** | **354** | *e*P | **Pg** | **00 51 59.7** | **-2.2** |
| YJA | | | | IAML | | 00 52 03.7 | |
| | comp=Z,148nm,0.5s | | | | | | |
| YJA | | | | *e*S | **Sn** | **00 52 40.2** | **+5.2** |
| **APLL** | **PUNTA DE LOS L** | **4.26** | **198** | *e*P | **Pn** | **00 51 47.5** | **+0.4** |
| APLL | | | | *e*S | **Sn** | **00 52 39.9** | **+3.0** |
| **LVC** | **Limon Verde** | **5.13** | **315** | Pn | **Pn** | **00 52 02.2** | **+3.0** |
| | comp=Z,86nm,0.3s,baz=119,slow=8.5,SNR=15 | | | | | | |
| LVC | | | | Lg | LR | 00 54 09.1 | |
| | comp=Z,681nm,18.5s,baz=146,slow=39 | | | | | | |
| **AMOG** | **MOGNA** | **5.51** | **213** | *e*P | **Pn** | **00 52 06.9** | **+2.6** |
| **CFAA** | **Coronel Fontan** | **5.96** | **207** | Pn | **Pn** | **00 52 10.8** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=24,slow=16,SNR=21 | | | | | | |
| CFAA | | | | Pg | Pb | 00 52 30.2 | +4.1 |
| | comp=Z,0.6nm,0.3s,baz=36,slow=17,SNR=13 | | | | | | |
| CFAA | | | | Sn | **Sn** | **00 53 21.2** | **+2.4** |
| | comp=Z,0.8nm,0.3s,baz=354,slow=13,SNR=3.8 | | | | | | |
| CFAA | | | | Lg | Lg | 00 53 43.1 | |
| | comp=Z,0.9nm,0.3s,baz=80,slow=18,SNR=5.4 | | | | | | |
| **CPUP** | **Villa Florida** | **6.90** | **92** | Pn | **Pn** | **00 52 21.7** | **-1.6** |
| | comp=Z,0.7nm,0.3s,baz=274,slow=19,SNR=9.3 | | | | | | |
| CPUP | | | | Lg | Lg | 00 54 19.1 | |
| | comp=Z,6.4nm,0.3s,baz=192,slow=15,SNR=2.7 | | | | | | |
| **LPAZ** | **La Paz** | **10.41** | **343** | Pn | **Pn** | **00 53 14.7** | **+2.7** |
| | comp=Z,0.2nm,0.3s,baz=171,slow=7.2,SNR=8.0 | | | | | | |
| LPAZ | | | | LR | LR | 00 57 29.1 | |
| | comp=Z,30nm,20.4s,baz=218,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.77** | **67** | P | **P** | **01 02 27.6** | **-0.9** |
| | comp=Z,0.6nm,0.8s,baz=253,slow=5.1,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **147.08** | **43** | PKPbc | **PKPab** | **01 10 25.9** | **-0.8** |
| | comp=Z,0.4nm,0.7s,baz=318,slow=2.7,SNR=2.8 | | | | | | |

*ISK* ***19*** *01:34:55.2, 40.16N×31.71E, h5km, MD2.7*
*DDA* ***19*** *01:34:55.7, 40.13N×31.65E, h7km, Md2.6*
*CSEM* ***19*** *01:34:55.9±0.3, 40.15N×31.68E, h2km, MD2.7, Error ellipse: s-maj=7.0km s-min=5.4km az=18.0*
**ISC 19 01:34:55.7±1.2, 40.12N±0.03×31.67E±0.03, h7km±10km, n25, σ0.85/36, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUMIH** | **MIHALICIK** | **0.29** | **210** | P | **Pg** | **01 35 01.4** | **-0.1** |
| AUMIH | | | | S | **Sg** | **01 35 06.2** | **+0.8** |
| **MDUB** | **Mudurnu** | **0.50** | **314** | *e*PG | **Pg** | **01 35 05.9** | **+0.4** |
| MDUB | | | | *e*SG | **Sb** | **01 35 14.5** | **0.0** |
| **MDUB** | **Mudurnu** | **0.50** | **314** | *e*Pg | **Pg** | **01 35 05.9** | **+0.4** |
| MDUB | | | | *e*Sg | **Sb** | **01 35 14.5** | **0.0** |
| **BTAS** | **Taskesti** | **0.68** | **311** | *i* P | **Pg** | **01 35 09.0** | **+0.2** |
| **BTAS** | **Taskesti** | **0.68** | **311** | P | **Pg** | **01 35 09.0** | **+0.2** |
| **SVRH** | **Sivrihisar-ESK** | **0.68** | **190** | *e*PG | **Pb** | **01 35 10.4** | **+0.3** |
| SVRH | | | | *e*SG | **Sn** | **01 35 21.8** | **-1.1** |
| **SVRH** | **Sivrihisar-ESK** | **0.68** | **190** | *e*Pg | **Pb** | **01 35 10.4** | **+0.3** |
| SVRH | | | | *e*Sg | **Sn** | **01 35 21.8** | **-1.1** |
| **BCAM** | **Yenicaga** | **0.76** | **23** | *i* P | **Pg** | **01 35 10.1** | **-0.2** |
| **BCAM** | **Yenicaga** | **0.76** | **23** | P | **Pg** | **01 35 10.1** | **-0.2** |
| **LOD** | **Lodumlu** | **0.87** | **105** | *e*PG | **Pg** | **01 35 12.5** | **0.0** |
| **LOD** | **Lodumlu** | **0.87** | **105** | *e*Pg | **Pg** | **01 35 12.5** | **0.0** |
| **ESKT** | **Eskisehir** | **0.87** | **227** | P | **Pg** | **01 35 12.5** | **0.0** |
| ESKT | | | | S | **Sn** | **01 35 29.1** | **+1.5** |
| **SEYT** | **Eskypehyr** | **0.87** | **227** | *i* P | **Pg** | **01 35 12.5** | **0.0** |
| SEYT | | | | *i* S | **Sn** | **01 35 29.1** | **+1.5** |
| **GULT** | **Gulveren** | **0.94** | **290** | *e*PG | **Pg** | **01 35 13.9** | **+0.2** |
| **GULT** | **Gulveren** | **0.94** | **290** | *e*Pg | **Pg** | **01 35 13.9** | **+0.2** |
| **BORA** | **Eskisehir** | **0.97** | **256** | *i* P | **Pg** | **01 35 12.8** | **-1.5** |
| BORA | | | | *i* S | **Sn** | **01 35 29.8** | **0.0** |
| **BORA** | **Eskisehir** | **0.97** | **256** | P | **Pg** | **01 35 12.8** | **-1.5** |
| BORA | | | | S | **Sn** | **01 35 29.8** | **0.0** |
| **BBAL** | **Bala** | **1.26** | **117** | *i* P | **Pn** | **01 35 19.7** | **-0.1** |
| BBAL | | | | *i* S | **Sn** | **01 35 38.5** | **+1.4** |
| **BBAL** | **Bala** | **1.26** | **117** | P | **Pn** | **01 35 19.7** | **-0.1** |
| BBAL | | | | S | **Sn** | **01 35 38.5** | **+1.4** |
| **AFSR** | **Afˆar-Bala (A** | **1.27** | **122** | *e*PN | **Pg** | **01 35 20.5** | **+0.4** |
| **AFSR** | **Afˆar-Bala (A** | **1.27** | **122** | *e*Pn | **Pg** | **01 35 20.5** | **+0.4** |
| **SAFT** | **Safranbolu** | **1.36** | **34** | *e*PN | **Pb** | **01 35 21.4** | **-0.1** |
| **SAFT** | **Safranbolu** | **1.36** | **34** | *e*Pn | **Pb** | **01 35 21.4** | **-0.1** |
| **CORM** | **Corum** | **2.27** | **88** | *e*PN | **Pb** | **01 35 35.4** | **-1.7** |
| **CORM** | **Corum** | **2.27** | **88** | *e*Pn | **Pb** | **01 35 35.4** | **-1.7** |

*ISK* ***19*** *02:07:31.6, 37.24N×36.53E, h9km, MD2.8*
*ISCJB* ***19*** *02:07:32.1±0.6, 37.27N±0.02×36.45E±0.04, h1km±6km, Error ellipse: s-maj=4.9km s-min=4.0km az=23.7*
*DDA* ***19*** *02:07:32.4, 37.29N×36.49E, h3km, Md2.7*
*CSEM* ***19*** *02:07:32.5±0.1, 37.29N×36.45E, h5km, MD2.7, Error ellipse: s-maj=3.8km s-min=3.0km az=114.0*
**ISC 19 02:07:32.6±1.0, 37.28N±0.02×36.47E±0.03, h7km±9km, n26, σ0.39/43, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KAMA** | **Osmaniye** | **0.18** | **120** | P | **Pg** | **02 07 36.3** | **0.0** |
| KAMA | | | | S | **Sg** | **02 07 38.3** | **-0.4** |
| **AYKD** | **Aykdinkavak** | **0.30** | **63** | P | **Pg** | **02 07 38.4** | **-0.1** |
| AYKD | | | | S | **Sg** | **02 07 42.8** | **+0.3** |
| **ANDN** | **Andirin** | **0.32** | **342** | *i* P | **Pg** | **02 07 38.8** | **0.0** |
| ANDN | | | | *i* S | **Sg** | **02 07 43.6** | **+0.5** |
| **ANDN** | **Andirin** | **0.32** | **342** | P | **Pg** | **02 07 38.8** | **0.0** |
| ANDN | | | | S | **Sg** | **02 07 43.6** | **+0.5** |
| **KMRS** | **Kahramanmaras** | **0.41** | **56** | *e*PG | **Pg** | **02 07 40.5** | **-0.1** |
| KMRS | | | | *e*SG | **Sg** | **02 07 45.7** | **-0.3** |
| **KMRS** | **Kahramanmaras** | **0.41** | **56** | *e*Pg | **Pg** | **02 07 40.5** | **-0.1** |
| KMRS | | | | *e*Sg | **Sg** | **02 07 45.7** | **-0.3** |
| **KUZU** | **Kuzuini** | **0.70** | **136** | *i* P | **Pg** | **02 07 46.2** | **+0.2** |
| KUZU | | | | *i* S | **Sg** | **02 07 55.9** | **+0.8** |
| **KUZU** | **Kuzuini** | **0.70** | **136** | P | **Pg** | **02 07 46.2** | **+0.2** |
| KUZU | | | | S | **Sg** | **02 07 55.9** | **+0.8** |
| **GZT** | **Gaziantep** | **0.88** | **85** | P | **Pb** | **02 07 50.4** | **+0.1** |
| GZT | | | | S | **Sb** | **02 08 02.8** | **+0.6** |
| **TAHT** | **Tahtakopru-Hat** | **0.93** | **194** | *e*PG | **Pg** | **02 07 49.9** | **-0.5** |
| TAHT | | | | *e*SG | **Sg** | **02 08 01.9** | **-0.5** |
| **TAHT** | **Tahtakopru-Hat** | **0.93** | **194** | *e*Pg | **Pg** | **02 07 49.9** | **-0.5** |
| TAHT | | | | *e*Sg | **Sg** | **02 08 01.9** | **-0.5** |
| **SARI** | **SarD1z-Kayseri** | **1.13** | **358** | *e*PN | **Pb** | **02 07 54.5** | **-0.1** |
| **YAYL** | **Yayladag** | **1.27** | **193** | *i* P | **Pg** | **02 07 57.7** | **+0.7** |
| YAYL | | | | *i* S | **Sb** | **02 08 13.2** | **-0.4** |
| **YAYL** | **Yayladag** | **1.27** | **193** | P | **Pg** | **02 07 57.7** | **+0.7** |
| YAYL | | | | S | **Sb** | **02 08 13.2** | **-0.4** |
| **ATAB** | **Bozova** | **1.47** | **82** | *i* P | **Pg** | **02 08 00.8** | **+0.1** |
| ATAB | | | | *i* S | **Sg** | **02 08 20.0** | **+0.3** |
| **ATAB** | **Bozova** | **1.47** | **82** | P | **Pg** | **02 08 00.8** | **+0.1** |
| ATAB | | | | S | **Sg** | **02 08 20.0** | **+0.3** |
| **DARE** | **Darende-Malaty** | **1.52** | **32** | *e*PN | **Pn** | **02 08 00.1** | **-0.2** |
| **DARE** | **Darende-Malaty** | **1.52** | **32** | *e*Pn | **Pn** | **02 08 00.1** | **-0.2** |
| **AKCD** | **Akcadag** | **1.54** | **48** | *i* P | **Pb** | **02 08 01.3** | **-0.1** |
| AKCD | | | | *i* S | **Sn** | **02 08 20.9** | **0.0** |
| **AKCD** | **Akcadag** | **1.54** | **48** | P | **Pb** | **02 08 01.3** | **-0.1** |
| AKCD | | | | S | **Sn** | **02 08 20.9** | **0.0** |
| **NIG** | **Nigde** | **1.69** | **300** | *e*PN | **Pn** | **02 08 02.6** | **-0.1** |
| **NIG** | **Nigde** | **1.69** | **300** | *e*Pn | **Pn** | **02 08 02.7** | **-0.1** |
| **MALT** | **Malatya** | **1.86** | **56** | *e*PN | **Pn** | **02 08 04.6** | **-0.5** |
| **MALT** | **Malatya** | **1.86** | **56** | *e*Pn | **Pn** | **02 08 04.6** | **-0.5** |
| **YESY** | **Yesilyurt** | **2.23** | **284** | *e*PN | **Pn** | **02 08 10.4** | **+0.4** |
| **YESY** | **Yesilyurt** | **2.23** | **284** | *e*Pn | **Pn** | **02 08 10.4** | **+0.4** |

*ISCJB* ***19*** *02:17:54.8±0.2, 47.41N±0.01×11.69E±0.02, h6km±2km, Error ellipse: s-maj=2.5km s-min=2.0km az=138.3*
*CSEM* ***19*** *02:17:56.1±0.1, 47.37N×11.68E, h8km, ML2.8/20, Error ellipse: s-maj=1.6km s-min=1.4km az=137.0*
*VIE* ***19*** *02:17:56.7±0.1, 47.32N×11.63E, h11km, mb1.7/5, ml2.6/12, Error ellipse: s-maj=0.9km s-min=0.6km az=170.0, felt 4 ems-98 at Schwaz / Tyrol*
*ROM* ***19*** *02:17:57.2±0.2, 47.32N×11.67E, h11km±1km, Md2.5/8, Ml2.3/7, Error ellipse: s-maj=4.5km s-min=2.1km az=102.0*
*LDG* ***19*** *02:17:57.7±0.2, 47.39N×11.68E, h2km, Ml2.4/7, Error ellipse: s-maj=4.2km s-min=2.2km az=41.0*
*BGR* ***19*** *02:17:58.2±0.6, 47.40N×11.65E, h10km, ML2.4/8, Error ellipse: s-maj=8.9km s-min=3.3km az=157.0*
*PRU* ***19*** *02:17:58.8, 47.42N×11.75E, h12km, Schwaz*
**ISC 19 02:17:56.5±0.8, 47.37N±0.02×11.66E±0.01, h15km±4km, n119, σ0.97/181, 10C-6D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATA** | **Walderalm** | **0.07** | **237** | *e*Pg | **Pg** | **02 17 59.3** | **-0.3** |
| | 214nm,0.2s,SNR=1669 | | | | | | |
| WATA | | | | ⇑*i* | Sg | 02 18 01.2 | -0.4 |
| | 1μm,0.2s | | | | | | |
| **WATA** | **Walderalm** | **0.07** | **237** | Pg | **Pg** | 02 17 59.3 | -0.3 |
| | 214nm,0.1s,SNR=1000 | | | | | | |
| WATA | | | | Sg | **Sg** | 02 18 01.2 | -0.4 |
| | 1μm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **189** | *e*Pg | **Pg** | 02 17 59.8 | -0.3 |
| | 175nm,0.1s,SNR=698 | | | | | | |
| WTTA | | | | ⇑*i* | Sg | 02 18 01.9 | -0.5 |
| | 991nm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **189** | Pg | **Pg** | 02 17 59.8 | -0.3 |
| WTTA | | | | Sg | **Sg** | 02 18 01.8 | -0.6 |
| | 1μm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **189** | Pg | **Pg** | 02 17 59.8 | -0.3 |
| | 175nm,0.1s,SNR=698 | | | | | | |
| WTTA | | | | Sg | **Sg** | 02 18 01.8 | -0.6 |
| | 1μm,0.3s | | | | | | |
| **MOTA** | **Moosalm** | **0.38** | **266** | ⇓*i* | Pg | 02 18 03.9 | -0.4 |
| MOTA | | | | ⇑*i* | Sg | 02 18 09.5 | 0.0 |
| | 37nm,0.2s | | | | | | |
| **MOTA** | **Moosalm** | **0.38** | **266** | Pg | **Pg** | 02 18 03.9 | -0.4 |
| MOTA | | | | Sg | **Sg** | 02 18 09.5 | 0.0 |
| | 37nm,0.2s | | | | | | |
| **ROSI** | **Rosskopf** | **0.48** | **201** | Pg | **Pg** | 02 18 05.4 | -0.6 |
| ROSI | | | | Sg | **Sg** | 02 18 12.2 | -0.3 |
| | 196nm,0.5s | | | | | | |
| **ROSI** | **Rosskopf** | **0.48** | **201** | Pg | **Pg** | 02 18 05.4 | -0.6 |
| ROSI | | | | Sg | **Sg** | 02 18 12.2 | -0.3 |
| | 196nm,0.5s | | | | | | |
| **RISI** | **Rein** | **0.51** | **146** | Pg | **Pg** | 02 18 06.2 | -0.5 |
| RISI | | | | Sg | **Sg** | 02 18 13.3 | -0.2 |
| | 411nm,0.4s | | | | | | |
| **RISI** | **Rein** | **0.51** | **146** | Pg | **Pg** | 02 18 06.2 | -0.5 |
| RISI | | | | Sg | **Sg** | 02 18 13.3 | -0.2 |
| | 411nm,0.4s | | | | | | |
| **RETA** | **Reutte** | **0.62** | **281** | ⇑*e*Pg | **Pg** | 02 18 08.5 | -0.2 |
| | 0.8nm,0.1s,SNR=8.2 | | | | | | |
| RETA | | | | ⇑*e*Sg | **Sg** | 02 18 16.8 | -0.1 |
| | 20nm,0.2s,SNR=20 | | | | | | |
| **RETA** | **Reutte** | **0.62** | **281** | Pg | **Pg** | 02 18 08.5 | -0.2 |
| | 0.8nm,0.1s,SNR=8.2 | | | | | | |
| RETA | | | | Sg | **Sg** | 02 18 16.8 | -0.1 |
| | 20nm,0.2s,SNR=20 | | | | | | |
| **FETA** | **Feichten** | **0.73** | **241** | ⇑*i* | Pg | 02 18 10.1 | -0.6 |
| | 1.1nm,0.2s | | | | | | |
| FETA | | | | ⇓*i* | Sg | 02 18 19.8 | -0.5 |
| | 4.3nm,0.2s | | | | | | |
| **FETA** | **Feichten** | **0.73** | **241** | Pg | **Pg** | 02 18 10.1 | -0.6 |
| | 1.1nm,0.2s | | | | | | |
| FETA | | | | Sg | **Sg** | 02 18 19.8 | -0.5 |
| | 4.3nm,0.2s | | | | | | |
| **FUR** | **Furstenfeldbru** | **0.83** | **342** | *e*Pn | **Pn** | 02 18 14.0 | +0.2 |
| | SNR=8.5 | | | | | | |
| **FUR** | **Furstenfeldbru** | **0.83** | **342** | Pn | **Pn** | 02 18 14.0 | +0.2 |
| | SNR=8.5 | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.85** | **137** | ⇓*e*Pg | **Pg** | 02 18 12.4 | -0.7 |
| | 2.8nm,0.2s,SNR=8.2 | | | | | | |
| ABTA | | | | ⇓*e*Sg | **Sg** | 02 18 23.9 | -0.4 |
| | 11nm,0.1s,SNR=12 | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.85** | **137** | Pg | **Pg** | 02 18 12.4 | -0.7 |
| | 2.8nm,0.2s,SNR=8.2 | | | | | | |
| ABTA | | | | Sg | **Sg** | 02 18 23.9 | -0.4 |
| | 11nm,0.1s,SNR=12 | | | | | | |
| **KOSI** | **Kohlern** | **0.93** | **192** | Pg | **Pg** | 02 18 13.8 | -0.7 |
| KOSI | | | | Sg | **Sg** | 02 18 26.0 | -0.8 |
| | 85nm,0.3s | | | | | | |
| **KOSI** | **Kohlern** | **0.93** | **192** | Pg | **Pg** | 02 18 13.8 | -0.7 |
| KOSI | | | | Sg | **Sg** | 02 18 26.0 | -0.8 |
| | 85nm,0.3s | | | | | | |
| **APPI** | **Appiano** | **0.94** | **199** | Pg | **Pg** | 02 18 13.9 | -0.8 |
| APPI | | | | Sg | **Sg** | 02 18 26.2 | -0.9 |
| | 95nm,0.3s | | | | | | |
| **APPI** | **Appiano** | **0.94** | **199** | Pg | **Pg** | 02 18 13.9 | -0.8 |
| APPI | | | | Sg | **Sg** | 02 18 26.2 | -0.9 |
| | 95nm,0.3s | | | | | | |
| **FVI** | **Forni Avoltri** | **1.09** | **135** | Pg | **Pg** | 02 18 16.8 | -0.8 |
| | 34nm,0.3s | | | | | | |
| **FVI** | **Forni Avoltri** | **1.09** | **135** | Pg | **Pg** | 02 18 16.8 | -0.8 |
| | 34nm,0.3s | | | | | | |
| **CSMI** | **Casera Mimoias** | **1.10** | **141** | ⇑*e*Pg | **Pg** | 02 18 17.1 | -0.6 |
| CSMI | | | | *e*Sg | **Sg** | 02 18 31.4 | -0.6 |
| **CSMI** | **Casera Mimoias** | **1.10** | **141** | ⇑*e*Pg | **Pg** | 02 18 17.1 | -0.6 |
| CSMI | | | | *e*Sg | **Sg** | 02 18 31.4 | -0.6 |
| **AGOR** | **Agordo** | **1.12** | **166** | Pg | **Pg** | 02 18 17.5 | -0.6 |
| | 45nm,0.3s | | | | | | |
| **ZOU** | **Zoufplan** | **1.21** | **132** | *e*Pg | **Pb** | 02 18 18.2 | -1.1 |
| ZOU | | | | *e*Sg | **Sb** | 02 18 34.8 | -0.2 |
| **ZOU** | **Zoufplan** | **1.21** | **132** | *e*Pg | **Pb** | 02 18 18.2 | -1.1 |
| ZOU | | | | *e*Sg | **Sb** | 02 18 34.7 | -0.2 |
| **DAVA** | **Damuels** | **1.22** | **267** | *e*Sg | **Sn** | **02 18 38.2** | **+2.8** |
| | SNR=5.0 | | | | | | |
| **DAVA** | **Damuels** | **1.22** | **267** | ⇑*e*Pg | **Pn** | **02 18 19.8** | **+0.7** |
| | 3.8nm,0.2s,SNR=12 | | | | | | |
| DAVA | | | | ⇓*e*Sg | **Sn** | **02 18 36.6** | **+1.2** |
| | 51nm,0.2s,SNR=12 | | | | | | |
| **DAVA** | **Damuels** | **1.22** | **267** | Pg | **Pn** | **02 18 19.8** | **+0.7** |
| | 3.8nm,0.2s,SNR=12 | | | | | | |
| DAVA | | | | Sg | **Sn** | **02 18 36.6** | **+1.2** |
| | 51nm,0.2s,SNR=12 | | | | | | |
| **PLRO** | **Paularo** | **1.31** | **128** | *e*Pg | **Pn** | **02 18 21.2** | **+0.8** |
| PLRO | | | | *e*Sg | **Sb** | **02 18 38.2** | **+0.5** |
| **PLRO** | **Paularo** | **1.31** | **128** | *e*Pg | **Pn** | **02 18 21.2** | **+0.8** |
| PLRO | | | | *e*Sg | **Sb** | **02 18 38.1** | **+0.5** |
| **ACOM** | **Acomizza, Ital** | **1.51** | **122** | Pg | **Pb** | **02 18 24.5** | **+0.1** |
| | 45nm,0.5s | | | | | | |
| **ACOM** | **Acomizza, Ital** | **1.51** | **122** | Pg | **Pb** | **02 18 24.5** | **+0.1** |
| | 45nm,0.5s | | | | | | |
| **PLONS** | **Plons/SG** | **1.59** | **259** | *e*Sg | **Sg** | **02 18 48.4** | **+0.8** |
| | SNR=7.5 | | | | | | |
| **PLONS** | **Plons/SG** | **1.59** | **259** | Sg | **Sg** | **02 18 48.4** | **+0.8** |
| | SNR=7.5 | | | | | | |
| **MOA** | **Molln** | **1.82** | **74** | *e*Sg | **Sg** | **02 18 55.6** | **+0.4** |
| | SNR=4.1 | | | | | | |
| **MOA** | **Molln** | **1.82** | **74** | ⇑*i* | Pn | 02 18 28.8 | +1.4 |
| MOA | | | | ⇓*i* | Sn | 02 18 53.0 | +0.7 |
| **MOA** | **Molln** | **1.82** | **74** | Pn | **Pn** | 02 18 28.8 | +1.4 |
| MOA | | | | Sn | **Sb** | 02 18 53.0 | +0.7 |
| MOA | | | | Sg | **Sg** | 02 18 55.6 | +0.4 |
| | SNR=4.1 | | | | | | |
| **WILA** | **Wila** | **1.87** | **272** | *e*Sg | **Sg** | **02 18 56.8** | **+0.1** |
| | SNR=8.6 | | | | | | |
| **WILA** | **Wila** | **1.87** | **272** | Sg | **Sg** | **02 18 56.8** | **+0.1** |
| | SNR=8.6 | | | | | | |
| **WET** | **Wettzell** | **1.95** | **24** | *e*Pn | **Pn** | **02 18 30.1** | **+1.0** |
| | SNR=5.3 | | | | | | |
| WET | | | | *e*Pg | **Pg** | 02 18 33.8 | -0.1 |
| | SNR=1.4 | | | | | | |
| WET | | | | *e*Sn | **Sn** | **02 18 54.1** | **+0.8** |
| | SNR=1.8 | | | | | | |
| WET | | | | *e*Sg | **Sg** | **02 18 58.9** | **-0.3** |
| | SNR=2.2 | | | | | | |
| **WET** | **Wettzell** | **1.95** | **24** | Pn | **Pn** | **02 18 30.1** | **+1.0** |
| | SNR=5.3 | | | | | | |
| **GEC2** | **GERESS Array S** | **2.01** | **42** | *e*Pn | **Pn** | **02 18 30.9** | **+0.9** |
| | SNR=2.2 | | | | | | |
| GEC2 | | | | *e*Sn | **Sn** | **02 18 56.6** | **+1.6** |
| | SNR=3.8 | | | | | | |
| GEC2 | | | | *e*Sg | **Sg** | **02 19 01.0** | **-0.1** |
| | SNR=2.0 | | | | | | |
| **GEC2** | **GERESS Array S** | **2.01** | **42** | Pn | **Pn** | **02 18 30.9** | **+0.9** |
| | SNR=2.2 | | | | | | |
| GEC2 | | | | Sn | **Sn** | **02 18 56.6** | **+1.6** |
| | SNR=3.8 | | | | | | |
| GEC2 | | | | Sg | **Sg** | **02 19 01.0** | **-0.1** |
| | SNR=2.0 | | | | | | |
| **TEOL** | **Teolo** | **2.01** | **180** | *e*Pg | **Pb** | **02 18 33.5** | **+0.7** |
| **TEOL** | **Teolo** | **2.01** | **180** | *e*Pg | **Pb** | **02 18 33.5** | **+0.7** |
| **KHC** | **Kasperske Hory** | **2.18** | **35** | *e*PG | **Pg** | **02 18 37.6** | **-0.6** |
| KHC | | | | *e*SN | **Sn** | **02 19 00.4** | **+1.4** |
| KHC | | | | *e*SG | **Sg** | **02 19 06.1** | **-0.3** |
| | comp=Z,9.8nm,0.2s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.18** | **35** | Pg | **Pg** | **02 18 37.6** | **-0.6** |
| KHC | | | | Sn | **Sn** | **02 19 00.4** | **+1.4** |
| KHC | | | | Sg | **Sg** | **02 19 06.1** | **-0.3** |
| | 9.8nm,0.2s | | | | | | |
| **SLE** | **Schleitheim** | **2.18** | **282** | *e*Sg | **Sg** | **02 19 05.9** | **-0.7** |
| | SNR=5.1 | | | | | | |
| **SLE** | **Schleitheim** | **2.18** | **282** | Sg | **Sg** | **02 19 05.9** | **-0.7** |
| | SNR=5.1 | | | | | | |
| **GRA1** | **Grafenberg Arr** | **2.34** | **353** | Pg | **Pg** | **02 18 41.9** | **+0.6** |
| | SNR=4.1 | | | | | | |
| **GRF** | **Grafenberg Arr** | **2.34** | **353** | *e*Pg | **Pg** | **02 18 41.9** | **+0.6** |
| | SNR=4.1 | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **2.42** | **8** | *e*Pn | **Pn** | **02 18 36.1** | **+0.5** |
| | SNR=2.8 | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **2.42** | **8** | Pn | **Pn** | **02 18 36.1** | **+0.5** |
| | SNR=2.8 | | | | | | |
| **MANZ** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CABF | La Chapelle | 3.89 | 261 | *e*Pn | | Pn | 02 18 57.0 | +1.1 |
| CABF | La Chapelle | 3.89 | 261 | *e*Pn | | Pn | 02 18 57.0 | +1.1 |
| CLL | Collm | 4.04 | 12 | *e*Sg | | Sg | 02 20 05.0 | -1.0 |
| PAGF | Fort de Pagny baz=100 | 4.16 | 289 | *e*Pg | | Pg | 02 19 14.7 | -1.4 |
| PAGF | 0.5nm,0.3s | | | *e*Sg | | Sg | 02 20 08.1 | -1.9 |
| PAGF | Fort de Pagny | 4.16 | 289 | *e*Pg | | Pg | 02 19 14.7 | -1.4 |
| PAGF | 0.2nm,0.3s | | | *e*Sg | | Sg | 02 20 08.1 | -1.9 |
| UPC | Upice | 4.25 | 41 | *e*SG | | Sg | 02 20 08.5 | -4.3 |
| DPC | Dobruska-Polom | 4.28 | 44 | *e*SG | | Sg | 02 20 12.1 | -1.8 |
| DPC | Dobruska-Polom | 4.28 | 44 | Sg | | Sg | 02 20 12.1 | -1.8 |
| MBDF | Montbardon | 4.31 | 234 | *e*Pn | | Pn | 02 19 02.4 | +0.7 |
| MBDF | Montbardon | 4.31 | 234 | *e*P | | Pn | 02 19 06.0 | +4.3 |
| MBDF | Montbardon | 4.31 | 234 | *e*Pn | | Pn | 02 19 02.4 | +0.7 |
| MBDF | Montbardon | 4.31 | 234 | *e*P | | Pn | 02 19 06.0 | +4.3 |
| SFTF | Sexfontaines | 4.54 | 283 | *e*Pn | | Pn | 02 19 05.3 | +0.6 |
| SFTF | Sexfontaines | 4.54 | 283 | *e*Pn | | Pn | 02 19 05.3 | +0.6 |
| MEZF | Maizieres J'vi | 4.58 | 287 | *e*Pn | | Pn | 02 19 06.5 | +1.2 |
| MEZF | Maizieres J'vi | 4.58 | 287 | *e*Pn | | Pn | 02 19 06.5 | +1.2 |
| MORC | Moravsky Berou | 4.58 | 56 | *e*Sn | | Sn | 02 19 57.6 | -0.8 |
| ORIF | Oris-en-Rattie | 4.71 | 241 | *e*Pn | | Pn | 02 19 08.8 | +1.7 |
| ORIF | Oris-en-Rattie | 4.71 | 241 | *e*Pn | | Pn | 02 19 08.8 | +1.7 |
| LOR | Lormes baz=89 | 5.31 | 272 | *e*Pn | | Pn | 02 19 15.8 | +0.6 |
| LOR | Lormes | 5.31 | 272 | *e*Pn | | Pn | 02 19 15.8 | +0.6 |
| VIVF | Saint-Julien-l | 5.47 | 245 | *e*Pn | | Pn | 02 19 18.3 | +0.8 |
| VIVF | Saint-Julien-l | 5.47 | 245 | *e*Pn | | Pn | 02 19 18.3 | +0.8 |
| BGF | Bois d'Agland | 6.09 | 266 | *e*Pn | | Pn | 02 19 27.0 | +1.0 |
| BGF | Bois d'Agland | 6.09 | 266 | *e*Pn | | Pn | 02 19 27.0 | +1.0 |
| TCF | Toulx Ste Croi | 6.58 | 264 | *e*Pn | | Pn | 02 19 33.4 | +0.7 |
| TCF | Toulx Ste Croi | 6.58 | 264 | *e*Pn | | Pn | 02 19 33.4 | +0.7 |
| CAF | Calviac | 7.10 | 253 | *e*Pn | | Pn | 02 19 40.6 | +0.7 |
| CAF | Calviac | 7.10 | 253 | *e*Pn | | Pn | 02 19 40.6 | +0.7 |

*ISCJB **19** 02:36:11.3±1.1, 13°.49N±0°.05×90°.84W±0°.04, h27$^{km}$±9$^{km}$, Error ellipse: s-maj=8.7km s-min=5.0km az=30.8*
*CASC **19** 02:36:13.1±2.3, 13°.59N×90°.74W, h26$^{km}$±7$^{km}$, MD2.9, ML3.3,mb4.1(NEIC)*
*MEX **19** 02:36:15.4±0.7, 13°.39N×91°.21W, h17$^{km}$±36$^{km}$, MD4.1*
*NEIC **19** 02:36:15.7±1.6, 13°.58N×91°.05W, h35$^{km}$, MD4.1(MEX), Error ellipse: s-maj=62.8km s-min=11.2km az=220.0*

**ISC 19 02:36:11.6±1.6, 13°51N±0°.06×90°83W±0°.04, h28$^{km}$±14$^{km}$, n26, σ1$^{s}$45/43, 4C-1D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PCG | Pacaya | 0.91 | 14 | *e*P | Pn | 02 36 29.0 | +0.2 |
| PCG | | | | *e*S | Sb | 02 36 40.0 | -0.8 |
| FUG | Fuego 3 | 0.94 | 360⇑ | *e*P | Pb | 02 36 29.4 | 0.0 |
| JAT | Jato | 1.12 | 316⇑ | *e*P | Pb | 02 36 34.1 | +1.7 |
| NBG | Las Nubes | 1.17 | 24⇓ | *e*P | Pn | 02 36 32.7 | +0.3 |
| NBG | | | | *e*S | Sn | 02 36 47.9 | +0.3 |
| RTR | El Retiro | 1.22 | 71⇑ | *i*P | Pn | 02 36 33.1 | +0.1 |
| RTR | | | | *e*S | Sn | 02 36 49.2 | +0.6 |
| SBLS | San Blas | 1.22 | 74⇑ | *i*P | Pn | 02 36 33.0 | 0.0 |
| SBLS | | | | *e*S | Sn | 02 36 48.3 | -0.5 |
| SNJE | San Jose | 1.25 | 73 | *i* P | Pn | 02 36 33.3 | -0.1 |
| RBDL | Robledal | 1.27 | 61 | *i* P | Pn | 02 36 32.9 | -0.7 |
| RBDL | | | | *e*S | Sn | 02 36 49.7 | -0.1 |
| BOQS | Boqueron | 1.53 | 81 | *e*P | Pn | 02 36 37.6 | +0.3 |
| BOQS | | | | *e*S | Sn | 02 36 56.9 | +0.6 |
| SNET | Serv Nac Est T | 1.57 | 83 | *e*P | Pn | 02 36 38.3 | +0.6 |
| SNET | | | | *e*P | Pb | 02 36 39.3 | -0.7 |
| SNET | | | | *e*S | Sn | 02 36 57.1 | -0.1 |
| SNET | | | | AML | AML | 02 37 01.4 | |
| | comp=Z,715nm,0.2s | | | | | | |
| LFU | La Fuente | 1.69 | 82 | *i* P | Pn | 02 36 40.0 | +0.6 |
| LFU | | | | *e*S | Sb | 02 37 01.7 | -1.3 |
| LFRS | El Faro | 1.73 | 86 | *i* P | Pn | 02 36 40.5 | +0.6 |
| LFRS | | | | *e*S | Sn | 02 37 01.4 | +0.3 |
| LBRS | Las Brisas | 1.76 | 82 | *e*P | Pn | 02 36 41.1 | +0.9 |
| MRL | Marmol | 1.91 | 35 | *e*P | Pn | 02 36 42.1 | -0.3 |
| THIG | | 1.97 | 315 | *e*P | Pn | 02 36 43.7 | +0.7 |
| THIG | | | | *i* S | Sn | 02 37 04.9 | -1.9 |
| THIG | | 1.97 | 315 | *e*P | Pn | 02 36 43.7 | +0.7 |
| THIG | | | | *i* S | Sn | 02 37 04.9 | -1.9 |
| CCIG | Comitan | 3.03 | 336 | *i* P | Pn | 02 36 59.3 | +1.4 |
| CCIG | | | | *i* S | Sn | 02 37 35.6 | +2.1 |
| CCIG | Comitan | 3.03 | 336 | *i* P | Pn | 02 36 59.3 | +1.4 |
| CCIG | | | | *i* S | Sn | 02 37 35.6 | +2.1 |
| PCIG | | 3.18 | 314 | *e*P | Pn | 02 37 00.5 | +0.7 |
| PCIG | | | | *e*S | Sn | 02 37 33.5 | -3.2 |
| PCIG | | 3.18 | 314 | *e*P | Pn | 02 37 00.5 | +0.7 |
| PCIG | | | | *e*S | Sn | 02 37 33.5 | -3.2 |
| TEL3 | Telica 3 | 4.00 | 103 | *e*P | Pn | 02 37 11.2 | +0.2 |
| CNGN | Cerro Negro | 4.15 | 103 | *e*P | Pn | 02 37 14.8 | +1.6 |
| MOMN | Momotombo | 4.33 | 104 | *e*P | Pn | 02 37 16.6 | +0.9 |
| COPN | Copaltepe | 4.34 | 107 | *e*P | Pn | 02 37 17.0 | +1.2 |
| COPN | | | | *e*S | Sn | 02 38 02.0 | -3.5 |
| COPN | | | | AML | AML | 02 38 08.8 | |
| | comp=Z,40nm,0.3s | | | | | | |
| APYN | Apoyeque | 4.55 | 106 | *e*P | Pn | 02 37 19.7 | +1.0 |
| JTS | JuntasAbangare | 6.58 | 118 | *e*Pn | Pn | 02 37 53.0 | +6.4 |
| JTS | | | | *e*S | Sn | 02 39 04.3 | +3.4 |

*ISCJB **19** 02:41:50.8±0.6, 32°.30N±0°.04×115°.40W±0°.07, h11$^{km}$±7$^{km}$, Error ellipse: s-maj=9.8km s-min=6.7km az=25.1*
*ECX **19** 02:41:52.1±0.5, 32°.30N×115°.40W, h6$^{km}$, MD2.5,ML2.7*
*MEX **19** 02:41:52.5±0.4, 32°.44N×115°.30W, h12$^{km}$±557$^{km}$, MD3.7*

**ISC 19 02:41:50.6±1.0, 32°30N±0°.04×115°41W±0°.03, h13$^{km}$±9$^{km}$, n19, σ0$^{s}$39/23, 4C-4D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CPBX | Cerro Prieto | 0.14 | 37 | *e*P | Pg | 02 41 54.4 | +0.2 |
| CPBX | | | | *e*S | Sg | 02 41 57.2 | +0.5 |
| CPBX | | | | IAML | | 02 41 59.0 | |
| | comp=E,8μm,0.2s | | | | | | |
| CPBX | | | | ⇓*e* | | 02 41 59.0 | |
| MBIG | Mexicali | 0.20 | 60 | *e*P | Pg | 02 41 55.2 | +0.1 |
| MBIG | | | | *i* S | Sg | 02 41 57.1 | -1.1 |
| MBIG | Mexicali | 0.20 | 60 | *e*P | Pb | 02 41 56.2 | -0.1 |
| ERPC | Ernies Place | 0.49 | 334 | ⇓*i*P | Pb | 02 42 01.1 | 0.0 |
| DREC | Desert Rsrch C | 0.50 | 356 | *e*P | Pb | 02 42 01.4 | +0.1 |
| WESC | Westside Schoo | 0.53 | 329 | ⇑*i*P | Pb | 02 42 01.7 | -0.2 |
| YUH | Yuha Desert | 0.56 | 308 | ⇑*i*P | Pg | 02 42 01.6 | 0.0 |
| EMSC | East Mesa | 0.56 | 39 | *e*P | Pb | 02 42 02.5 | +0.1 |
| RDX | Rancho Dawling | 0.59 | 231 | ⇓*e*P | Pg | 02 42 02.6 | +0.4 |
| RDX | | | | *e*S | Sg | 02 42 10.7 | +0.6 |
| RDX | | | | IAML | | 02 42 13.2 | |
| | comp=E,263nm,0.3s | | | | | | |
| RDX | | | | ⇑*e* | | 02 42 13.2 | |
| COA | Coachella | 0.61 | 23 | *e*P | Pg | 02 42 02.8 | +0.3 |
| COK | Cook Ranch | 0.61 | 334 | *e*P | Pb | 02 42 03.0 | -0.1 |
| RMX | La Rumorosa | 0.64 | 298 | *e*P | Pg | 02 42 02.9 | -0.3 |
| IBP | Imperial Bould | 0.68 | 302 | *e*P | Pg | 02 42 04.2 | +0.3 |
| CBX | Cerro Bola | 1.06 | 271 | *e*P | Pb | 02 42 11.1 | 0.0 |
| CBX | | | | *e*S | Sg | 02 42 25.0 | -0.1 |
| CBX | Cerro Bola | 1.06 | 271 | *e*P | Pb | 02 42 10.7 | -0.4 |
| ZAX | El Zacaton | 1.08 | 223 | *e*P | Pb | 02 42 10.8 | -0.5 |
| ZAX | | | | ⇓*e* | | 02 42 28.6 | |
| ZAX | | | | IAML | | 02 42 28.6 | |
| | comp=N,116nm,0.4s | | | | | | |
| BAR | Barrett | 1.13 | 290⇑ | *e*P | Pb | 02 42 12.1 | -0.1 |
| SPX | San Pedro Mart | 1.26 | 182 | *e*P | Pn | 02 42 14.3 | 0.0 |
| SDRC | San Diego Road | 1.37 | 289 | *e*P | Pb | 02 42 15.9 | -0.2 |

*ISCJB **19** 02:43:44.6±0.7, 44°.3S±0°.1×16°.0W±0°.2, h10$^{km}$, mb4.1/8, MS3.7/10, Error ellipse: s-maj=19.5km s-min=13.8km az=150.4*
*IDC **19** 02:43:44.8±0.8, 44°.44S×15°.96W, h0$^{km}$, mb4.2/7, mb1 4.3/7, mb1mx4.0/29, mbtmp4.2/7, MS3.7/10, Ms1 3.7/10, ms1mx3.6/18, Error ellipse: s-maj=26.8km s-min=21.1km az=27.0*

**ISC 19 02:43:46.5±0.8, 44°.3S±0°.1×16°.0W±0°.2, h10$^{km}$, n25, σ1$^{s}$23/12, mb4.2/8, MS3.7/10, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| VNA1 | Neumayer--Stat | 26.66 | 174 | P | P | 02 49 25.7 | +0.7 |
| VNA2 | Neumayer--Watz baz=343,slow=12 | 27.00 | 174 | P | P | 02 49 28.4 | +0.3 |
| VNA3 | Neumayer Olymp | 27.16 | 176 | P | P | 02 49 29.5 | -0.1 |
| SNAA | Sanae | 28.14 | 171 | P | P | 02 49 43.9 | +5.5 |
| SNAA | Sanae | 28.14 | 171 | P | P | 02 49 41.1 | +2.6 |
| SNAA | 0.8nm,1.0s,baz=346,slow=12,SNR=4.0 | | | LR | LR | 02 57 37.2 | |
| H10S2 | comp=Z,54nm,18.8s,baz=28,slow=30 ASCENSION HYDR | 35.26 | 2 | T | T | 03 28 17.1 | |
| H10S3 | baz=182,slow=75,SNR=13 ASCENSION HYDR | 35.27 | 2 | T | T | 03 28 21.7 | |
| H10S1 | baz=182,slow=75,SNR=14 ASCENSION HYDR | 35.28 | 2 | T | T | 03 28 10.3 | |
| BOSA | baz=182,slow=75,SNR=15 Boshof | 36.25 | 78 | LR | LR | 03 03 55.8 | |
| CPUP | comp=Z,94nm,18.3s,baz=232,slow=33 Villa Florida | 37.77 | 284 | P | P | 02 51 04.0 | +1.3 |
| BDFB | 5.2nm,0.9s,baz=110,slow=11,SNR=9.9 Brasilia | 39.42 | 306 | LR | LR | 03 03 16.1 | |
| MATP | comp=Z,108nm,21.2s,baz=176,slow=30 Matopo | 43.78 | 72 | P | P | 02 51 52.5 | 0.0 |
| MAW | 3.2nm,0.9s,baz=228,slow=11,SNR=4.4 Mawson | 45.85 | 148 | P | P | 02 52 07.8 | -0.4 |
| SIV | 2.1nm,0.8s,baz=270,slow=15,SNR=8.2 San Ignacio | 47.33 | 292 | P | P | 02 52 19.9 | -0.7 |
| DBIC | 4.5nm,0.7s,baz=148,slow=8.0,SNR=9.7 Dimbokro | 51.75 | 14 | LR | LR | 03 09 01.9 | |
| LPAZ | comp=Z,88nm,21.4s,baz=148,slow=29 La Paz | 51.92 | 285 | P | P | 02 52 55.1 | -1.1 |
| LPAZ | 1.0nm,0.7s,baz=154,slow=7.3,SNR=4.8 | | | LR | LR | 03 14 43.3 | |
| VNDA | comp=Z,117nm,19.4s,baz=137,slow=36 Vanda | 58.41 | 179 | P | P | 02 53 40.0 | -1.6 |
| VNDA | 1.0nm,1.0s,baz=199,slow=6.0,SNR=5.1 | | | LR | LR | 03 17 28.8 | |
| TORD | comp=Z,112nm,18.1s,baz=148,slow=35 Torodi Ar. Bea | 59.42 | 20 | P | P | 02 53 49.4 | +0.1 |
| TORD | 4.3nm,0.8s,baz=193,slow=7.4,SNR=22 | | | LR | LR | 03 15 32.7 | |
| ROSC | comp=Z,52nm,18.3s,baz=195,slow=32 El Rosal | 71.56 | 297 | LR | LR | 03 25 07.7 | |
| H01W2 | comp=Z,44nm,20.7s,baz=338,slow=35 Cape Leeuwin H | 89.04 | 141 | T | T | 04 35 31.1 | |
| H01W1 | baz=215,slow=74,SNR=4.4 Cape Leeuwin H | 89.05 | 141 | T | T | 04 35 29.4 | |
| H01W3 | baz=215,slow=74,SNR=5.7 Cape Leeuwin H | 89.05 | 141 | T | T | 04 35 31.2 | |
| GERES | baz=215,slow=74,SNR=5.8 GERESS Array B | 96.37 | 19 | LR | LR | 03 37 11.7 | |
| VRAC | comp=Z,23nm,19.2s,baz=276,slow=33 Vranov | 97.51 | 21 | LR | LR | 03 40 08.2 | |
| ILAR | comp=Z,21nm,20.1s,baz=248,slow=35 Eielson Array | 146.17 | 324 | PKPbc | PKPab | 03 03 26.6 | +0.1 |
| | 6.2nm,0.9s,baz=78,slow=1.7,SNR=42 | | | | | | |

*ISCJB **19** 02:45:09.9±0.4, 50°.16N±0°.03×18°.95E±0°.03, h0$^{km}$, mb2.8/1, Error ellipse: s-maj=4.4km s-min=2.2km az=20.5*
*PRU **19** 02:45:11.7, 50°.16N×19°.01E, h0$^{km}$*
*IDC **19** 02:45:11.5±1.5, 50°.19N×18°.95E, h0$^{km}$, mb3.1/1, mb1 3.5/5, mb1mx3.3/42, mbtmp3.4/5, ML2.8/4, Error ellipse: s-maj=29.5km s-min=11.3km az=136.0*

**ISC 19 02:45:10.6±0.7, 50°15N±0°.03×19°00E±0°.02, h0$^{km}$, n33, σ1$^{s}$22/48, 5C-1D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CHZP | Chorzow | 0.14 | 359 | *e*Pg | Pg | 02 45 14.3 | +1.0 |
| CHZP | | | | *e*Sg | Sg | 02 45 16.8 | +1.8 |
| OJC | Ojcow | 0.52 | 82 | *e*Pg | Pg | 02 45 20.1 | -0.5 |
| OJC | | | | *e*Sg | Sg | 02 45 26.6 | -0.7 |
| OKC | Ostrava-Krasne | 0.63 | 240 | *e*PG | Pb | 02 45 25.0 | +0.5 |
| MORC | Moravsky Berou | 1.01 | 249⇑ | *i*P | Pn | 02 45 32.0 | -0.1 |
| MORC | Moravsky Berou | 1.01 | 249 | S | Sb | 02 45 46.2 | +1.3 |
| LANS | Liptovska Anna | 1.05 | 163 | *e*PG | Pb | 02 45 32.1 | +0.4 |
| LANS | | | | *e*SG | Sg | 02 45 45.0 | +0.7 |
| NIE | Niedzica | 1.12 | 131 | *e*Pg | Pg | 02 45 32.5 | +0.4 |
| NIE | | | | *e*Sg | Sb | 02 45 48.5 | +0.4 |
| KRLC | Kraliky | 1.43 | 268 | *e*PG | Pn | 02 45 37.9 | +0.1 |
| KRLC | | | | *e*SG | Sn | 02 45 57.6 | +0.3 |
| STHS | Stebnicka Huta | 1.63 | 116 | *e*PN | Pn | 02 45 40.3 | -0.3 |
| STHS | | | | *e*SN | Sn | 02 46 02.2 | -0.2 |
| VYHS | Vyhne | 1.67 | 184 | *e*PN | Pn | 02 45 40.9 | -0.2 |
| VYHS | | | | *e*SN | Sn | 02 46 02.5 | -0.6 |
| DPC | Dobruska-Polom | 1.73 | 278 | *e*PG | Pn | 02 45 42.6 | +0.6 |
| DPC | | | | *e*SG | Sg | 02 46 06.3 | +0.2 |
| | comp=Z,22nm,0.6s | | | | | | |
| VRAC | Vranov | 1.77 | 242 | Pn | Pn | 02 45 43.4 | +0.9 |
| VRAC | 3.3nm,0.3s,baz=58,slow=13,SNR=18 | | | Sn | Sg | 02 46 07.5 | -0.1 |
| VRAC | 3.8nm,0.3s,baz=144,slow=18,SNR=9.7 Vranov | 1.77 | 242⇑ | *i*P | Pg | 02 45 44.6 | 0.0 |
| VRAC | Vranov | 1.77 | 242 | S | Sg | 02 46 07.6 | 0.0 |
| KSP | Ksiaz | 1.86 | 293 | *e*Pg | Pg | 02 45 46.2 | 0.0 |
| KSP | | | | *e*Sg | Sg | 02 46 11.2 | +0.9 |
| UPC | Upice comp=Z,6.7nm,0.4s | 1.94 | 282 | *e*SG | Sg | 02 46 14.2 | +1.2 |
| PSZ | Piszkesteto | 2.31 | 165⇓ | *i*P | Pg | 02 45 56.8 | +1.8 |
| PSZ | Piszkesteto | 2.31 | 165 | S | Sn | 02 46 18.7 | -0.6 |
| GOPC | GO Pecny, Ondr | 2.72 | 267 | *e*PG | Pg | 02 46 02.6 | -0.2 |
| GOPC | comp=Z,6.2nm,0.5s | | | *e*SG | Sg | 02 46 38.8 | +0.7 |
| PVCC | Panska Ves comp=Z,8.8nm,0.3s | 2.86 | 279 | *e*SG | Sg | 02 46 43.8 | +1.3 |
| PRU | Pruhonice | 2.87 | 268 | *e*SG | Sg | 02 46 42.4 | -0.5 |
| TRPA | Tarpa | 3.08 | 130⇑ | *i*P | Pn | 02 46 00.9 | +0.4 |
| BRG | Berggiesshubel | 3.30 | 285 | PG | Pg | 02 46 15.8 | +1.9 |
| BRG | 2.7nm,0.5s | | | SG | Sg | 02 46 57.6 | +0.9 |
| KHC | Kasperske Hory | 3.67 | 256 | *e*PN | Pn | 02 46 09.5 | +0.9 |
| KHC | | | | *ex* | x | 02 46 16.4 | |
| KHC | | | | *e*PG | Pg | 02 46 19.8 | -1.1 |
| KHC | comp=Z,6.5nm,0.5s | | | *e*SG | Sg | 02 47 07.1 | -1.2 |
| GERES | GERESS Array B | 3.69 | 251 | Pn | Pn | 02 46 09.5 | +0.5 |
| GERES | 0.2nm,0.3s,baz=66,slow=14,SNR=7.3 | | | Pg | Pb | 02 46 16.0 | -0.7 |
| NKC | 0.4nm,0.3s,baz=66,slow=17,SNR=9.7 Novy Kostel | 4.21 | 274 | *e*SG | Sg | 02 47 25.7 | 0.0 |
| BZS | comp=Z,8.0nm,0.8s Buzias | 4.87 | 158⇑ | *i*P | Pn | 02 46 25.8 | +0.7 |
| GZR | Gura Zlata | 5.40 | 150⇑ | *i*P | Pn | 02 46 33.7 | +1.2 |
| DAVOX | Davos/Dischmat | 6.94 | 244 | Pn | Pn | 02 46 55.9 | +2.2 |
| DAVOX | comp=Z,0.3nm,0.3s,baz=35,slow=12,SNR=1.8 | | | Lg | Lg | 02 48 49.5 | |
| FINES | comp=Z,0.2nm,0.3s,baz=280,slow=18,SNR=1.4 FINESS Array B | 11.99 | 17 | Pn | Pn | 02 47 57.9 | -4.6 |
| ARCES | comp=Z,0.2nm,0.3s,baz=198,slow=13,SNR=4.3 ARCESS Array B | 19.69 | 7 | Pn | P | 02 49 37.1 | -4.0 |
| TORD | comp=Z,0.1nm,0.3s,baz=193,slow=12,SNR=3.8 Torodi Ar. Bea | 39.53 | 207 | P | P | 02 52 43.8 | +0.7 |
| | comp=Z,0.1nm,0.4s,baz=15,slow=9.4,SNR=3.0 | | | | | | |

*NIED **19** 02:48:00,28°.90N×140°.70E, h8$^{km}$, Mw3.8 Best double couple: M$_0$4.78000×10$^{14}$ NP1:φ$_s$199.00000°, δ30.00000°, λ-73.00000°. NP2:φ$_s$360.00000°, δ61.00000°, λ-100.00000°.*
*IDC **19** 02:48:52.7±1.2, 28°.39N×141°.40E, h0$^{km}$, mb3.8/4, mb1 4.1/5, mb1mx3.6/47, mbtmp3.7/5, ML3.5/1, MS2.7/1, Ms1 2.9/1, ms1mx2.3/45, Error ellipse: s-maj=66.9km s-min=26.0km az=103.0*
*ISCJB **19** 02:48:53.9±0.8, 28°.92N±0°.06×140°.7E±0°.2, h50$^{km}$, mb3.8/4, MS2.7/1, Error ellipse: s-maj=24.9km s-min=5.4km az=162.6*
*JMA **19** 02:48:54.2±0.2, 28°.91N×140°.73E, h52$^{km}$, M4.1*

**ISC 19 02:48:55.6±1.2, 28°94N±0°.09×140°9E±0°.3, h50$^{km}$, n18, σ1$^{s}$56/10, mb3.9/4, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CBIJ | Chichi jima | 2.15 | 149 | P | Pn | 02 49 29.3 | +0.4 |
| CBIJ | | | | S | Sn | 02 49 56.1 | +1.7 |
| JHHJ | Haha-jima-NKT | 2.56 | 154 | P | Pn | 02 49 34.9 | +0.4 |
| JHHJ | | | | S | Sn | 02 50 04.8 | +0.4 |
| BSO1 | Boso 1 | 5.69 | 0 | P | Pn | 02 50 19.6 | +2.5 |
| BSO3 | Boso 3 | 5.85 | 357 | P | Pn | 02 50 20.7 | +1.2 |
| BSO4 | Boso 4 | 6.05 | 355 | P | Pn | 02 50 22.5 | +0.2 |
| BSO4 | | | | S | Sn | 02 51 31.1 | +0.9 |
| MJAR | Matsushiro Arr | 7.92 | 344 | Pn | Pn | 02 50 57.7 | +10 |
| | 0.6nm,0.3s,baz=158,slow=13,SNR=3.5 | | | | | | |
| H11N2 | WAKE ISLAND Hy baz=296,slow=75,SNR=154 | 25.33 | 105 | T | T | 03 21 08.9 | |
| H11N1 | WAKE ISLAND Hy baz=296,slow=75,SNR=73 | 25.33 | 105 | T | T | 03 21 11.0 | |
| H11N3 | WAKE ISLAND Hy baz=296,slow=75,SNR=104 | 25.34 | 105 | T | T | 03 21 12.0 | |
| H11S3 | WAKE ISLAND Hy baz=299,slow=76,SNR=10 | 25.72 | 108 | T | T | 03 21 38.4 | |
| H11S1 | WAKE ISLAND Hy baz=299,slow=76,SNR=10 | 25.72 | 108 | T | T | 03 21 38.1 | |
| H11S2 | WAKE ISLAND Hy baz=299,slow=76,SNR=8.3 | 25.74 | 108 | T | T | 03 21 50.0 | |
| CMAR | Chiang Mai Arr comp=Z,12nm,21.8s,baz=60,slow=34 | 39.66 | 264 | LR | LR | 03 11 45.9 | |
| WRA | Warramunga Arr 1.3nm,0.7s,baz=5.9,slow=7.8,SNR=11 | 49.02 | 188 | P | P | 02 57 38.1 | +0.7 |
| ASAR | Alice Springs 0.3nm,0.7s,baz=352,slow=5.8,SNR=2.1 | 52.74 | 188 | P | P | 02 58 05.1 | -0.4 |
| NVAR | Mina Array Bea 1.0nm,0.6s,baz=309,slow=5.7,SNR=4.5 | 80.25 | 52 | P | P | 03 01 06.0 | +4.6 |
| TXAR | Lajitas Array 0.3nm,0.7s,baz=308,slow=4.4,SNR=4.2 | 95.37 | 52 | P | P | 03 02 19.8 | +4.8 |
| LPAZ | La Paz 1.5nm,0.6s,baz=332,slow=3.6,SNR=7.9 | 150.45 | 71 | PKPbc | PKPab | 03 08 46.4 | -3.3 |

*ISCJB **19** 02:49:56.3±0.4, 51°.54N±0°.02×16°.16E±0°.02, h0$^{km}$, mb2.9/1, Error ellipse: s-maj=3.2km s-min=1.9km az=13.2*
*CSEM **19** 02:49:58.3±0.1, 51°.53N×16°.16E, h2$^{km}$, ML3.8/12, Error ellipse: s-maj=3.0km s-min=1.8km az=13.0*
*IDC **19** 02:49:58.7±0.7, 51°.55N×16°.04E, h0$^{km}$, mb3.2/1, mb1 3.6/9, mb1mx3.4/51, mbtmp3.5/9, ML3.2/7, Error ellipse: s-maj=13.9km s-min=6.8km az=106.0*
*BGR **19** 02:49:59.4±0.6, 51°.57N×16°.15E, h1$^{km}$, ML3.5/10, Error ellipse: s-maj=6.7km s-min=5.6km az=169.0*
*VIE **19** 02:50:00.7±0.7, 51°.33N×16°.12E, h0$^{km}$, mb2.9/5, ml3.1/5, Error ellipse: s-maj=4.4km s-min=3.6km az=179.0, Suspected Mining induced.*

**ISC 19 02:49:57.5±0.7, 51°57N±0°.03×16°18E±0°.02, h0$^{km}$, n92, σ1$^{s}$00/152, 15C-11D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KSP | Ksiaz | 0.73 | 174 | *i* Pg | Pg | 02 50 12.4 | +1.0 |
| KSP | | | | *e*Sg | Sg | 02 50 21.7 | +0.9 |
| KSP | | | | *e* | | 02 50 25.6 | |
| KSP | Ksiaz | 0.73 | 174 | ⇓*i*Pg | Pg | 02 50 12.4 | +1.0 |
| KSP | | | | *e*Sg | Sg | 02 50 21.7 | +0.9 |
| UPC | Upice | 1.06 | 186 | ⇓*e*PG | Pg | 02 50 18.6 | +0.7 |
| UPC | | | | *e*SG | Sg | 02 50 32.3 | +0.6 |
| | comp=Z,196nm,0.4s | | | | | | |
| UPC | Upice | 1.06 | 186 | Pg | Pg | 02 50 18.6 | +0.7 |
| UPC | | | | Sg | Sg | 02 50 32.3 | +0.6 |
| | 196nm,0.4s | | | | | | |
| DPC | Dobruska-Polom | 1.22 | 176 | ⇓*i*PG | Pg | 02 50 21.3 | +0.4 |
| DPC | | | | *e*SG | Sg | 02 50 36.8 | +0.1 |
| | comp=Z,61nm,0.4s | | | | | | |
| DPC | Dobruska-Polom | 1.22 | 176 | Pg | Pg | 02 50 21.3 | +0.4 |
| DPC | | | | Sg | Sg | 02 50 36.8 | +0.1 |
| | 61nm,0.4s | | | | | | |
| PVCC | Panska Ves | 1.45 | 225 | ⇓*e*PG | Pn | 02 50 25.1 | 0.0 |
| PVCC | | | | *e*SG | Sn | 02 50 45.1 | +0.3 |
| | comp=Z,276nm,0.3s | | | | | | |
| PVCC | Panska Ves | 1.45 | 225 | Pg | Pn | 02 50 25.1 | 0.0 |
| PVCC | | | | Sg | Sn | 02 50 45.1 | +0.3 |
| | 276nm,0.3s | | | | | | |
| KRLC | Kraliky | 1.54 | 165 | ⇓*e*PG | Pn | 02 50 26.5 | +0.2 |
| KRLC | | | | *e*SG | Sb | 02 50 46.7 | -0.3 |
| KRLC | Kraliky | 1.54 | 165 | Pg | Pn | 02 50 26.5 | +0.2 |
| KRLC | | | | Sg | Sb | 02 50 46.7 | -0.3 |
| BRG | Berggiesshubel | 1.57 | 245 | PN | Pn | 02 50 26.0 | -0.6 |
| BRG | | | | PG | Pb | 02 50 27.6 | +0.2 |
| BRG | | | | SG | Sg | 02 50 48.4 | +0.5 |
| | 349nm,0.4s | | | | | | |
| RUE | Ruedersdorf SNR=3.8 | 1.74 | 303 | *e*Sg | Sg | 02 50 54.7 | +1.2 |
| RUE | Ruedersdorf SNR=3.8 | 1.74 | 303 | Sg | Sg | 02 50 54.7 | +1.2 |
| GKP | Gorka Klasztor | 1.83 | 20 | *e*Pn | Pg | 02 50 38.2 | +5.7 |
| GKP | | | | *e*Sn | Sg | 02 51 05.7 | +10 |
| PRA | Prague | 1.86 | 217 | ⇓*e*PN | Pn | 02 50 30.4 | -0.3 |
| PRA | | | | *e*PG | Pb | 02 50 32.3 | -0.1 |
| PRA | | | | *e*SG | Sb | 02 50 56.4 | +0.2 |
| | comp=Z,63nm,0.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 1.88 | 209 | ⇓*e*PN | Pn | 02 50 30.8 | -0.1 |
| GOPC | | | | *e*PG | Pb | 02 50 32.4 | -0.3 |
| GOPC | | | | *e*SG | Sb | 02 50 56.8 | +0.2 |
| | comp=Z,76nm,0.6s | | | | | | |
| FBE | Freiberg SNR=24 | 1.89 | 251 | *e*Pg | Pg | 02 50 34.5 | +0.8 |
| FBE | | | | *e*Sg | Sg | 02 50 58.3 | +0.1 |
| | SNR=5.2 | | | | | | |
| FBE | Freiberg SNR=24 | 1.89 | 251 | Pg | Pg | 02 50 34.5 | +0.8 |
| FBE | | | | Sg | Sg | 02 50 58.3 | +0.1 |
| | SNR=5.2 | | | | | | |
| PRU | Pruhonice | 1.89 | 214 | ⇓*e*PN | Pn | 02 50 30.9 | -0.2 |
| PRU | | | | *e*PG | Pb | 02 50 33.1 | +0.2 |
| PRU | | | | *ex* | x | 02 50 50.2 | |
| PRU | | | | *e*SG | Sb | 02 50 57.5 | +0.4 |
| | comp=Z,88nm,0.4s | | | | | | |
| RAC | Raciborz | 1.96 | 139 | *e*Pg | Pg | 02 50 35.5 | +0.5 |
| RAC | | | | *e*Sg | Sg | 02 51 01.5 | +1.1 |
| MORC | Moravsky Berou | 1.99 | 154⇑ | *i*P | Pn | 02 50 32.5 | 0.0 |
| MORC | Moravsky Berou | 1.99 | 154 | S | Sn | 02 50 58.7 | +0.6 |
| MORC | Moravsky Berou | 1.99 | 154 | S | Sn | 02 50 58.7 | +0.6 |
| MORC | | | | *e*Sg | Sb | 02 51 01.0 | +1.1 |
| CLL | Collm SNR=9.8 | 2.01 | 264 | *e*Pn | Pn | 02 50 32.0 | -0.6 |
| CLL | SNR=2.9 | | | *e*Sg | Sb | 02 51 01.3 | +1.0 |
| CLL | Collm | 2.01 | 264 | *e*Pn | Pn | 02 50 32.0 | -0.6 |
| CLL | | | | *i

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PLN | | | | Sg | | Sg | 02 51 25.6 | -0.6 |
| | SNR=4.9 | | | | | | | |
| **NEUB** | **Neuenburg** | **2.78** | **264** | *e*Sg | | **Sg** | **02 51 27.9** | **+1.0** |
| | SNR=4.9 | | | | | | | |
| **NEUB** | **Neuenburg** | **2.78** | **264** | Sg | | **Sg** | **02 51 27.9** | **+1.0** |
| | SNR=4.9 | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.95** | **215** | ⇓*e*PN | | **Pn** | **02 50 45.7** | **0.0** |
| KHC | | | | *e*PG | | **Pb** | **02 50 51.9** | **+0.9** |
| KHC | | | | *e*SG | | **Sg** | **02 51 30.8** | **-1.5** |
| | comp=Z,44nm,0.5s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.95** | **215** | Pn | | **Pn** | **02 50 45.7** | **0.0** |
| KHC | | | | Sg | | **Sg** | **02 51 30.8** | **-1.5** |
| | comp=Z,44nm,0.5s | | | | | | | |
| **MOX** | **Moxa** | **3.02** | **254** | *e*Sg | | **Sg** | **02 51 35.3** | **+0.7** |
| | SNR=7.4 | | | | | | | |
| **MOX** | **Moxa** | **3.02** | **254** | Sg | | **Sg** | **02 51 35.3** | **+0.7** |
| | SNR=7.4 | | | | | | | |
| **MANZ** | **Manzenberg** | **3.03** | **240** | *e*Pn | | **Pn** | **02 50 47.4** | **+0.6** |
| | SNR=6.2 | | | | | | | |
| MANZ | | | | *e*Sg | | **Sg** | **02 51 36.0** | **+1.2** |
| | SNR=6.8 | | | | | | | |
| **MANZ** | **Manzenberg** | **3.03** | **240** | Pn | | **Pn** | **02 50 47.4** | **+0.6** |
| | SNR=6.2 | | | | | | | |
| MANZ | | | | Sg | | **Sg** | **02 51 36.0** | **+1.2** |
| | SNR=6.8 | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **3.10** | **236** | *e*Pn | | **Pn** | **02 50 48.1** | **+0.3** |
| | SNR=5.6 | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **3.10** | **236** | Pn | | **Pn** | **02 50 48.1** | **+0.3** |
| | SNR=5.6 | | | | | | | |
| **GEC2** | **GERESS Array S** | **3.15** | **211** | *e*Pn | | **Pn** | **02 50 49.3** | **+0.7** |
| | SNR=13 | | | | | | | |
| **GEC2** | **GERESS Array S** | **3.15** | **211** | Pn | | **Pn** | **02 50 49.3** | **+0.7** |
| | SNR=13 | | | | | | | |
| **GERES** | **GERESS Array B** | **3.15** | **211** | Pn | | **Pn** | **02 50 48.7** | **+0.2** |
| | comp=Z,3.4nm,0.3s,baz=30,slow=12,SNR=83 | | | | | | | |
| GERES | | | | Pg | | **Pb** | **02 50 55.4** | **+0.8** |
| | comp=Z,5.7nm,0.3s,baz=32,slow=14,SNR=41 | | | | | | | |
| GERES | | | | Sn | | **Sn** | **02 51 22.0** | **-4.9** |
| | comp=Z,3.4nm,0.3s,baz=37,slow=20,SNR=6.1 | | | | | | | |
| GERES | | | | Lg | | Lg | 02 51 36.3 | |
| | comp=Z,6.4nm,0.3s,baz=32,slow=28,SNR=7.8 | | | | | | | |
| **LANS** | **Liptovska Anna** | **3.21** | **138** | *e*PN | | **Pn** | **02 50 50.3** | **+1.1** |
| LANS | | | | *e*PG | | **Pg** | **02 50 58.9** | **0.0** |
| LANS | | | | *e*SG | | **Sg** | **02 51 38.6** | **-1.8** |
| **LANS** | **Liptovska Anna** | **3.21** | **138** | *e*Pn | | **Pn** | **02 50 50.3** | **+1.1** |
| **WET** | **Wettzell** | **3.22** | **222** | *e*Pn | | **Pn** | **02 50 49.6** | **+0.3** |
| | SNR=11 | | | | | | | |
| **WET** | **Wettzell** | **3.22** | **222** | Pn | | **Pn** | **02 50 49.6** | **+0.3** |
| | SNR=11 | | | | | | | |
| **NIE** | **Niedzica** | **3.40** | **128** | *e*P | | **Pg** | **02 51 01.8** | **-0.8** |
| NIE | | | | *e*S | | **Sg** | **02 51 47.7** | **+1.1** |
| **VYHS** | **Vyhne** | **3.52** | **150** | *e*PN | | **Pn** | **02 50 52.2** | **-1.3** |
| VYHS | | | | *e*PG | | **Pg** | **02 51 04.5** | **-0.4** |
| **VYHS** | **Vyhne** | **3.52** | **150** | *e*Pn | | **Pn** | **02 50 52.2** | **-1.3** |
| **CLZ** | **Clausthal** | **3.62** | **277** | *e*Pn | | **Pn** | **02 50 55.7** | **+0.8** |
| | SNR=2.3 | | | | | | | |
| **CLZ** | **Clausthal** | **3.62** | **277** | Pn | | **Pn** | **02 50 55.7** | **+0.8** |
| | SNR=2.3 | | | | | | | |
| **BSD** | **Bornholm Skovb** | **3.64** | **348** | *i* P | | **Pn** | **02 50 55.1** | **+0.1** |
| BSD | | | | *i* S | | **Sn** | **02 51 34.7** | **-3.9** |
| **BSD** | **Bornholm Skovb** | **3.64** | **348** | *i* P | | **Pn** | **02 50 55.2** | **+0.2** |
| | SNR=49 | | | | | | | |
| **CONA** | **Conrad Observa** | **3.65** | **183** | ⇑*i*Pn | | **Pn** | **02 50 55.9** | **+0.6** |
| CONA | | | | ⇑*i*Sg | | **Sg** | **02 51 53.8** | **-0.8** |
| | comp=Z,39nm,0.5s | | | | | | | |
| **CONA** | **Conrad Observa** | **3.65** | **183** | Pn | | **Pn** | **02 50 55.9** | **+0.6** |
| CONA | | | | Sg | | **Sg** | **02 51 53.8** | **-0.8** |
| | comp=Z,39nm,0.5s | | | | | | | |
| **STHS** | **Stebnicka Huta** | **3.88** | **122** | *e*PN | | **Pn** | **02 50 59.7** | **+1.2** |
| STHS | | | | *e*PG | | **Pg** | **02 51 12.9** | **+1.0** |
| STHS | | | | *e*SG | | **Sg** | **02 52 05.1** | **+2.9** |
| **STHS** | **Stebnicka Huta** | **3.88** | **122** | *e*Pn | | **Pn** | **02 50 59.7** | **+1.2** |
| **MOA** | **Molln** | **3.92** | **199** | ⇑*i*Pn | | **Pn** | **02 50 59.7** | **+0.7** |
| MOA | | | | ⇑*i*Sg | | **Sg** | **02 52 01.7** | **-1.8** |
| | comp=Z,46nm,0.6s | | | | | | | |
| **MOA** | **Molln** | **3.92** | **199** | Pn | | **Pn** | **02 50 59.7** | **+0.7** |
| MOA | | | | Sg | | **Sg** | **02 52 01.7** | **-1.8** |
| | comp=Z,46nm,0.6s | | | | | | | |
| **ARSA** | **Arzberg** | **4.34** | **186** | ⇑*i*Pn | | **Pn** | **02 51 05.2** | **+0.4** |
| ARSA | | | | ⇑*i*Sg | | **Sg** | **02 52 16.5** | **-0.4** |
| | comp=Z,32nm,0.7s | | | | | | | |
| **ARSA** | **Arzberg** | **4.34** | **186** | Pn | | **Pn** | **02 51 05.2** | **+0.4** |
| ARSA | | | | Sg | | **Sg** | **02 52 16.5** | **-0.4** |
| | comp=Z,32nm,0.7s | | | | | | | |
| **PSZ** | **Piszkesteto** | **4.37** | **145** | S | | **Sn** | **02 51 55.6** | **-1.3** |
| **PSZ** | **Piszkesteto** | **4.37** | **145** | S | | **Sn** | **02 51 55.6** | **-1.3** |
| **KWP** | **Kalwaria Pacla** | **4.58** | **112** | *e*Pn | | **Pg** | **02 51 24.8** | **-0.6** |
| KWP | | | | *e*Sn | | **Sg** | **02 52 25.9** | **+1.2** |
| **KOLS** | **Kolonicke sedl** | **4.71** | **122** | *e*PN | | **Pn** | **02 51 10.4** | **+0.5** |
| KOLS | | | | *e*PG | | **Pg** | **02 51 29.6** | **+1.8** |
| **KOLS** | **Kolonicke sedl** | **4.71** | **122** | *e*Pn | | **Pn** | **02 51 10.4** | **+0.5** |
| **TRPA** | **Tarpa** | **5.36** | **127** | ⇑*i*P | | **Pn** | **02 51 19.3** | **+0.6** |
| **TRPA** | **Tarpa** | **5.36** | **127** | ⇑*i*P | | **Pn** | **02 51 19.3** | **+0.6** |
| **DAVOX** | **Davos/Dischmat** | **6.32** | **223** | Pn | | **Pn** | **02 51 32.1** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=27,slow=16,SNR=2.4 | | | | | | | |
| DAVOX | | | | Sn | | **Sn** | **02 52 46.2** | **+1.0** |
| | comp=Z,0.3nm,0.3s,baz=17,slow=20,SNR=2.1 | | | | | | | |
| DAVOX | | | | Lg | | Lg | 02 53 17.4 | |
| | comp=Z,0.5nm,0.3s,baz=211,slow=19,SNR=3.9 | | | | | | | |
| **DRGR** | | **6.41** | **136** | ⇑*i*P | | **Pn** | **02 51 33.3** | **0.0** |
| **DRGR** | | **6.41** | **136** | ⇑*i*P | | **Pn** | **02 51 33.3** | **0.0** |
| **BURAR** | **Bucovina Array** | **7.08** | **120** | ⇑*i*P | | **Pn** | **02 51 43.2** | **+0.8** |
| **BURAR** | **Bucovina Array** | **7.08** | **120** | ⇑*i*P | | **Pn** | **02 51 43.2** | **+0.8** |
| **AKASG** | **Malin Array Be** | **8.25** | **91** | Pn | | **Pn** | **02 51 57.2** | **-1.2** |
| | comp=Z,1.3nm,0.3s,baz=281,slow=12,SNR=6.8 | | | | | | | |
| AKASG | | | | Lg | | Lg | 02 54 28.4 | |
| | comp=Z,0.3nm,0.3s,baz=272,slow=23,SNR=3.1 | | | | | | | |
| **HFS** | **Hagfors** | **8.70** | **352** | Pn | | **Pn** | **02 52 03.9** | **-0.6** |
| | comp=Z,0.1nm,0.3s,baz=163,slow=15,SNR=1.5 | | | | | | | |
| HFS | | | | Sn | | Sn | 02 53 35.5 | -7.8 |
| | comp=Z,0.1nm,0.3s,baz=135,slow=27,SNR=2.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **9.89** | **346** | Pn | | **Pn** | **02 52 19.5** | **-1.3** |
| | comp=Z,0.1nm,0.3s,baz=153,slow=13,SNR=2.8 | | | | | | | |
| NOA | | | | Sn | | Sn | 02 53 58.4 | -14 |
| | comp=Z,0.1nm,0.3s,baz=146,slow=18,SNR=2.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **11.29** | **25** | Pn | | **Pn** | **02 52 37.7** | **-2.3** |
| | comp=Z,0.1nm,0.3s,baz=211,slow=11,SNR=3.6 | | | | | | | |
| FINES | | | | Sn | | Sn | 02 54 37.4 | -9.4 |
| | comp=Z,0.2nm,0.3s,baz=213,slow=25,SNR=1.6 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **12.12** | **296** | Pn | | Pn | 02 52 47.0 | -4.3 |
| | baz=102,slow=14,SNR=2.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.56** | **10** | Pn | | P | 02 54 11.1 | -4.5 |
| | comp=Z,0.1nm,0.3s,baz=197,slow=12,SNR=3.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **40.07** | **202** | P | | **P** | **02 57 34.5** | **0.0** |
| | comp=Z,0.3nm,0.9s,baz=7.8,slow=7.6,SNR=3.3 | | | | | | | |

*IDC* ***19*** *03:23:45.8±1.5, 1°.86S×136°.22E, h0km, mb3.6/2, mb1 3.9/4, mb1mx3.6/31, mbtmp3.7/4, ML3.5/1, Error ellipse: s-maj=40.6km s-min=27.0km az=72.0*

*ISCJB* ***19*** *03:23:47.3±1.2, 2°.04S±0°.08×136°.38E±0°.03, h9km±8km, mb3.6/2, Error ellipse: s-maj=14.4km s-min=5.1km az=7.6*

*DJA* ***19*** *03:23:48.2±0.4, 2°.S±7°.×13°.6E±°, h11km±2km, M4.2/7, mb4.2/4, mB5.8/1, MLv4.1/7, Mw(mB)5.4/1*

**ISC 19 03:23:48.4±1.2, 2°.0S±0°.1×136°.38E±0°.04, h15km±8km, n10, σ1°65/18, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SRPI** | **Serui, Papua** | **0.17** | **306** | P | | **Pg** | **03 23 52.4** | **-0.3** |
| SRPI | | | | S | | **Sg** | **03 23 55.5** | **0.0** |
| **RKPI** | **Ransiki, Papua** | **2.25** | **282** | P | | **Pn** | **03 24 25.8** | **+0.7** |
| RKPI | | | | S | | **Sb** | **03 24 54.8** | **-1.7** |
| **SMPI** | **Sarmi** | **2.33** | **90** | P | | **Pn** | **03 24 27.1** | **+1.0** |
| SMPI | | | | S | | **Sn** | **03 24 55.4** | **+0.9** |
| **GENI** | **Genyem** | **3.83** | **99** | P | | **Pn** | **03 24 46.6** | **-0.2** |
| GENI | | | | S | | **Sn** | **03 25 33.7** | **+2.0** |
| **FAKI** | **Fak Fak** | **4.24** | **257** | P | | **Pn** | **03 24 52.7** | **+0.3** |
| FAKI | | | | S | | **Sn** | **03 25 44.1** | **+2.5** |
| **JAY** | **Jayapura** | **4.35** | **97** | Pn | | **Pn** | **03 24 55.6** | **+1.6** |
| | baz=272,slow=1.7 | | | | | | | |
| JAY | | | | Sn | | **Sn** | **03 25 42.5** | **-2.0** |
| | 7.4nm,0.3s,baz=24,slow=1.1,SNR=2.4 | | | | | | | |
| **SWI** | **Sorong** | **5.24** | **282** | P | | **Pn** | **03 25 06.1** | **-0.1** |
| | 25nm,0.9s,0.1nm | | | | | | | |
| SWI | | | | S | | **Sn** | **03 26 08.7** | **+2.3** |
| | 25nm,0.9s,0.1nm | | | | | | | |
| **WRA** | **Warramunga Arr** | **17.97** | **186** | P | | **Pn** | **03 27 58.1** | **+0.3** |
| | 0.2nm,0.3s,baz=7.1,slow=13,SNR=5.2 | | | | | | | |
| WRA | | | | S | | Sn | 03 31 05.8 | -12 |
| | 0.3nm,0.3s,baz=0.9,slow=23,SNR=5.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.70** | **186** | P | | **P** | **03 28 40.0** | **+1.0** |
| | 2.3nm,0.8s,baz=13,slow=11,SNR=14 | | | | | | | |
| ASAR | | | | S | | **S** | **03 32 36.1** | **-2.8** |
| | 0.9nm,0.9s,baz=10,slow=27,SNR=3.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.80** | **323** | P | | **P** | **03 34 44.5** | **-1.3** |
| | 0.3nm,0.5s,baz=111,slow=7.9,SNR=2.7 | | | | | | | |

*IGIL* ***19*** *03:54:17.9, 37°.33N×8°.49W, h13km, ML0.7*

*MDD* ***19*** *03:54:17.9±1.2, 37°.34N×8°.50W, h6km±13km, mbLg0.7/4, Error ellipse: s-maj=6.8km s-min=5.7km az=138.0, PRXIMO*

*CSEM* ***19*** *03:54:20.2±0.2, 37°.30N×8°.35W, h10km, ML1.0/4, Error ellipse: s-maj=6.3km s-min=3.7km az=169.0*

**INMG 19 03:54:19.0±1.1, 37°.34N×8°.49W, h0km, ML0.3, Error ellipse: s-maj=3.0km s-min=2.6km az=7.0, Portugal**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MORF** | **Marmelete** | **0.13** | **255** | *e*P | | Pg | 03 54 21.1 | -0.5 |
| MORF | | | | *e*S | | Sg | 03 54 23.4 | 0.0 |
| MORF | | | | AML | | AML | 03 54 23.9 | |
| | comp=N,22nm,0.3s | | | | | | | |
| **MORF** | **Marmelete** | **0.13** | **255** | *e*Pg | | Pg | 03 54 21.1 | -0.5 |
| MORF | | | | *e*Sg | | Sg | 03 54 23.6 | +0.2 |
| MORF | | | | A | | A | 03 54 23.8 | |
| | comp=N,16nm,0.2s | | | | | | | |
| **MORF** | **Marmelete** | **0.13** | **255** | *e*Sg | | Sg | 03 54 28.1 | +4.7 |
| MORF | | | | A | | A | 03 54 28.5 | |
| | comp=N,8.5nm,0.2s | | | | | | | |
| **MORF** | **Marmelete** | **0.13** | **255** | Pg | | Pg | 03 54 21.1 | -0.5 |
| MORF | | | | Lg | | Lg | 03 54 23.6 | |
| | comp=N,16nm,0.2s | | | | | | | |
| **MORF** | **Marmelete** | **0.13** | **255** | Pg | | Pg | 03 54 21.1 | -0.5 |
| MORF | | | | Lg | | Lg | 03 54 23.6 | |
| | comp=N,16nm,0.2s | | | | | | | |
| MORF | | | | *e*Sg | | Sg | 03 54 28.1 | +4.7 |
| | comp=N,8.5nm,0.2s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **0.28** | **318** | *e*Sg | | Sg | 03 54 27.3 | -0.6 |
| PTEO | | | | A | | A | 03 54 29.1 | |
| | comp=N,1.5nm,0.1s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **0.28** | **318** | *e*Sg | | Sb | 03 54 32.8 | +0.7 |
| PTEO | | | | A | | A | 03 54 48.9 | |
| | comp=N,4.3nm,0.8s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **0.28** | **318** | Lg | | Lg | 03 54 27.3 | |
| | comp=N,0.8nm,0.1s | | | | | | | |
| **PTEO** | **Sao Teotonio** | **0.28** | **318** | Lg | | Lg | 03 54 27.3 | |
| | comp=N,0.8nm,0.1s | | | | | | | |
| PTEO | | | | *e*Sg | | Sb | 03 54 32.8 | +0.7 |
| | comp=N,4.3nm,0.8s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.34** | **232** | *e*Pg | | Pg | 03 54 25.1 | -0.4 |
| PFVI | | | | *e*Sg | | Sg | 03 54 28.7 | -1.2 |
| PFVI | | | | A | | A | 03 54 28.8 | |
| | comp=N,3.1nm,0.1s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.34** | **232** | *e*Pg | | Pb | 03 54 28.7 | +0.8 |
| PFVI | | | | *e*Sg | | Sb | 03 54 32.5 | -1.4 |
| PFVI | | | | A | | A | 03 54 33.0 | |
| | comp=N,3.4nm,0.6s | | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.34** | **232** | Lg | | Lg | 03 54 28.6 | |
| | comp=N,32nm,1.4s,SNR=7.9 | | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.34** | **232** | Lg | | Lg | 03 54 28.6 | |
| | comp=N,32nm,1.4s,SNR=7.9 | | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.34** | **232** | *e*Pg | | Pb | 03 54 28.7 | +0.8 |
| PFVI | | | | *e*Sg | | Sb | 03 54 32.5 | -1.4 |
| | comp=N,3.4nm,0.6s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.46** | **102** | *e*Pg | | Pg | 03 54 27.3 | -0.6 |
| PBDV | | | | *e*Sg | | Sg | 03 54 33.5 | -0.3 |
| PBDV | | | | A | | A | 03 54 39.4 | |
| | comp=N,2.4nm,0.9s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.46** | **102** | *e*Sg | | Sb | 03 54 41.1 | +3.7 |
| **PBDV** | **Barranco-do-Ve** | **0.46** | **102** | Pg | | Pg | 03 54 27.3 | -0.6 |
| PBDV | | | | Lg | | Lg | 03 54 33.5 | |
| | comp=N,2.4nm,0.9s | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.46** | **102** | Pg | | Pg | 03 54 27.3 | -0.6 |
| PBDV | | | | Lg | | Lg | 03 54 33.5 | |
| | comp=N,2.4nm,0.9s | | | | | | | |
| PBDV | | | | *e*Sg | | Sb | 03 54 41.1 | +3.7 |
| **PCVE** | **Castro Verde** | **0.46** | **51** | *e*Pg | | Pg | 03 54 27.5 | -0.4 |
| PCVE | | | | *e*Sg | | Sg | 03 54 32.7 | -1.3 |
| PCVE | | | | A | | A | 03 54 34.9 | |
| | comp=N,0.7nm,0.3s | | | | | | | |
| **PCVE** | **Castro Verde** | **0.46** | **51** | *e*Sg | | Sb | 03 54 40.9 | +3.4 |
| PCVE | | | | A | | A | 03 54 41.4 | |
| | comp=N,1.5nm,0.8s | | | | | | | |
| **PCVE** | **Castro Verde** | **0.46** | **51** | Pg | | Pg | 03 54 27.5 | -0.4 |
| PCVE | | | | Lg | | Lg | 03 54 32.7 | |
| | comp=N,0.7nm,0.3s | | | | | | | |
| **PCVE** | **Castro Verde** | **0.46** | **51** | Pg | | Pg | 03 54 27.5 | -0.4 |
| PCVE | | | | Lg | | Lg | 03 54 32.7 | |
| | comp=N,0.7nm,0.3s | | | | | | | |
| PCVE | | | | *e*Sg | | Sb | 03 54 40.9 | +3.4 |
| | comp=N,1.5nm,0.8s | | | | | | | |
| **MESJ** | **Messejana** | **0.54** | **23** | *e*Sg | | Sn | 03 54 43.0 | -0.9 |
| MESJ | | | | A | | A | 03 54 43.8 | |
| | comp=N,1.8nm,0.6s | | | | | | | |
| **MESJ** | **Messejana** | **0.54** | **23** | *e*Sg | | Sn | 03 54 43.0 | -0.9 |
| | comp=N,1.8nm,0.6s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.62** | **84** | *e*Pg | | Pg | 03 54 30.3 | -0.6 |
| PVAQ | | | | *e*Sg | | Sg | 03 54 37.5 | -1.5 |
| PVAQ | | | | A | | A | 03 54 39.2 | |
| | comp=N,0.9nm,0.2s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.62** | **84** | *e*Sg | | Sn | 03 54 46.0 | +0.2 |
| PVAQ | | | | A | | A | 03 54 47.0 | |
| | comp=N,1.5nm,0.9s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.62** | **84** | Pg | | Pg | 03 54 30.3 | -0.6 |
| PVAQ | | | | Lg | | Lg | 03 54 37.5 | |
| | comp=N,0.9nm,0.2s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.62** | **84** | Pg | | Pg | 03 54 30.3 | -0.6 |
| PVAQ | | | | Lg | | Lg | 03 54 37.5 | |
| | comp=N,0.9nm,0.2s | | | | | | | |
| PVAQ | | | | *e*Sg | | Sn | 03 54 46.0 | +0.2 |
| | comp=N,1.5nm,0.9s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **0.77** | **358** | *e*S | | Sg | 03 54 43.9 | +0.1 |
| PNCL | | | | A | | A | 03 54 44.5 | |
| | comp=N,0.7nm,0.1s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **0.77** | **358** | *e*Sg | | Sn | 03 54 48.5 | -0.9 |
| PNCL | | | | A | | A | 03 54 50.0 | |
| | comp=N,1.5nm,0.2s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **0.77** | **358** | *e*Sg | | Sn | 03 54 48.5 | -0.9 |
| | comp=N,1.5nm,0.2s | | | | | | | |
| **EGRO** | **El Granado** | **0.83** | **76** | Lg | | Lg | 03 54 45.1 | |
| | comp=N,4.2nm,0.8s,SNR=7.9 | | | | | | | |
| **EGRO** | **El Granado** | **0.83** | **76** | Lg | | Lg | 03 54 45.1 | |
| | comp=N,4.2nm,0.8s,SNR=7.9 | | | | | | | |

*IDC* ***19*** *03:56:53.0±0.7, 19°.38N×68°.22W, h0km, mb3.9/13, mb1 4.1/16, mb1mx4.0/32, mbtmp4.0/16, ML2.9/2, MS2.5/1, Ms1 2.5/1, ms1mx2.4/30, Error ellipse: s-maj=19.2km s-min=15.9km az=37.0*

*ISCJB* ***19*** *03:56:55.1±0.9, 19°.41N±0°.03×68°.20W±0°.02, h26km±8km, mb3.9/16, Error ellipse: s-maj=6.1km s-min=2.8km az=26.3*

*RSPR* ***19*** *03:56:55.4, 19°.31N×68°.33W, h93km±5km, MD4.1/17*

*NEIC* ***19*** *03:56:57.5±0.3, 19°.28N×68°.20W, h35km, mb4.2/2, MD4.1(RSPR), Error ellipse: s-maj=7.1km s-min=4.0km az=203.0*

*NEIC Felt at Mayaguez and Rincon, Puerto Rico.*

**ISC 19 03:56:55.3±1.6, 19°.35N±0°.05×68°.22W±0°.03, h16km±10km, n93, σ1°19/115, mb4.1/16, 25C-8D, North Atlantic Ocean**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SMN1** | **Samana, DR** | **1.00** | **261** | ⇑*e*P | | **Pb** | **03 57 13.5** | **-0.9** |
| **SMN1** | **Samana, DR** | **1.00** | **261** | *e*S | | **Sg** | **03 57 28.1** | **+0.2** |
| **SMN1** | **Samana, DR** | **1.00** | **261** | ⇑*e*P | | **Pb** | **03 57 13.5** | **-0.9** |
| SMN1 | | | | *e*S | | **Sg** | **03 57 28.1** | **+0.2** |
| **IDE** | **Isla Desecheo** | **1.19** | **143** | ⇓*e*P | | **Pn** | **03 57 15.8** | **-1.4** |
| **IDE** | **Isla Desecheo** | **1.19** | **143** | ⇓*e*P | | **Pn** | **03 57 15.8** | **-1.4** |
| **DR12** | **Loma Pena Alta** | **1.23** | **243** | ⇑*e*P | | **Pn** | **03 57 15.9** | **-1.9** |
| **DR12** | **Loma Pena Alta** | **1.23** | **243** | ⇑*e*P | | **Pn** | **03 57 15.9** | **-1.9** |
| **AGPR** | **Aguadilla, PR** | **1.37** | **129** | ⇓*e*P | | **Pn** | **03 57 19.9** | **+0.1** |
| **AGPR** | **Aguadilla, PR** | **1.37** | **129** | *e*S | | **Sg** | **03 57 39.2** | **-0.3** |
| **AGPR** | **Aguadilla, PR** | **1.37** | **129** | *e*Pn | | **Pn** | **03 57 17.9** | **-1.8** |
| AGPR | | | | *e*S | | **Sn** | **03 57 37.5** | **-0.1** |
| **AGP** | **Aguadilla** | **1.39** | **132** | *e*Pn | | **Pn** | **03 57 18.3** | **-1.7** |
| AGP | | | | *e*Sn | | **Sn** | **03 57 36.6** | **-1.4** |
| **MPR** | **Mayaguez** | **1.53** | **137** | ⇑*e*P | | **Pn** | **03 57 21.9** | **0.0** |
| **MPR** | **Mayaguez** | **1.53** | **137** | *e*S | | **Sb** | **03 57 42.8** | **+0.5** |
| **MPR** | **Mayaguez** | **1.53** | **137** | ⇑*e*P | | **Pn** | **03 57 21.9** | **0.0** |
| MPR | | | | *e*S | | **Sb** | **03 57 42.8** | **+0.5** |
| **LSP** | **Las Mesas** | **1.59** | **137** | ⇑*e*P | | **Pn** | **03 57 21.7** | **-1.1** |
| **LSP** | **Las Mesas** | **1.59** | **137** | *e*Pn | | **Pn** | **03 57 21.7** | **-1.1** |
| **LRS** | **Lares** | **1.68** | **129** | ⇓*e*P | | **Pn** | **03 57 22.8** | **-1.2** |
| **LRS** | **Lares** | **1.68** | **129** | ⇓*e*P | | **Pn** | **03 57 22.8** | **-1.2** |
| **CRPR** | **Cabo Rojo, PR** | **1.70** | **141** | ⇓*e*P | | **Pn** | **03 57 24.5** | **+0.2** |
| **CRPR** | **Cabo Rojo, PR** | **1.70** | **141** | ⇓*e*P | | **Pn** | **03 57 24.5** | **+0.2** |
| CRPR | | | | *e*S | | **Sn** | **03 57 44.9** | **-0.9** |
| **AOPR** | **Arecibo Observ** | **1.71** | **125** | ⇑*e*P | | **Pn** | **03 57 23.8** | **-0.7** |
| **AOPR** | **Arecibo Observ** | **1.71** | **125** | *e*S | | **Sn** | **03 57 46.0** | **0.0** |
| **AOPR** | **Arecibo Observ** | **1.71** | **125** | ⇑*e*P | | **Pn** | **03 57 23.8** | **-0.7** |
| AOPR | | | | *e*S | | **Sn** | **03 57 46.0** | **0.0** |
| **SDD** | **Santo Domingo** | **1.83** | **241** | *e*Pn | | **Pn** | **03 57 26.5** | **+0.5** |
| SDD | | | | *e*Sn | | **Sn** | **03 57 49.4** | **+0.5** |
| **GBPR** | **Guanica, Bosqu** | **1.87** | **137** | ⇑*e*P | | **Pn** | **03 57 27.1** | **+0.5** |
| **GBPR** | **Guanica, Bosqu** | **1.87** | **137** | *e*S | | **Sn** | **03 57 50.0** | **+0.1** |
| **GBPR** | **Guanica, Bosqu** | **1.87** | **137** | ⇑*e*P | | **Pn** | **03 57 27.1** | **+0.5** |
| GBPR | | | | *e*S | | **Sn** | **03 57 50.0** | **+0.1** |
| **CELP** | **Cerrillos** | **2.01** | **129** | ⇓*e*P | | **Pn** | **03 57 28.3** | **-0.2** |
| CELP | | | | *e*S | | **Sn** | **03 57 52.7** | **-0.7** |
| **CELP** | **Cerrillos** | **2.01** | **129** | *e*Pn | | **Pn** | **03 57 28.7** | **+0.2** |
| CELP | | | | *e*S | | **Sn** | **03 57 52.6** | **-0.7** |
| **OBIP** | **Obispado Ponce** | **2.01** | **130** | ⇑*e*P | | **Pn** | **03 57 27.5** | **-1.0** |
| **OBIP** | **Obispado Ponce** | **2.01** | **130** | *e*S | | **Sn** | **03 57 53.1** | **-0.2** |
| **OBIP** | **Obispado Ponce** | **2.01** | **130** | ⇑*e*P | | **Pn** | **03 57 27.5** | **-1.0** |
| OBIP | | | | *e*S | | **Sn** | **03 57 53.1** | **-0.2** |
| **ICMP** | **Isla Caja de M** | **2.17** | **132** | ⇑*e*P | | Pn | 03 57 27.5 | -3.2 |
| **ICMP** | **Isla Caja de M** | **2.17** | **132** | *e*S | | **Sn** | **03 57 57.8** | **+0.5** |
| **ICMP** | **Isla Caja de M** | **2.17** | **132** | ⇑*e*P | | Pn | 03 57 27.5 | -3.2 |
| ICMP | | | | *e*S | | **Sn** | **03 57 57.8** | **+0.5** |
| **BANI** | **BANI** | **2.23** | **245** | *e*Pn | | **Pn** | **03 57 33.2** | **+1.4** |
| **SJG** | **San Juan** | **2.32** | **122** | ⇑*e*P | | **Pn** | **03 57 33.1** | **+0.3** |
| SJG | | | | *e*S | | **Sn** | **03 58 01.9** | **+0.9** |
| **SJG** | **San Juan** | **2.32** | **122** | ⇑*e*P | | **Pn** | **03 57 32.7** | **-0.1** |
| SJG | | | | *e*S | | **Sn** | **03 58 01.9** | **+0.9** |
| **SJG** | **San Juan** | **2.32** | **122** | Pn | | **Pn** | **03 57 33.1** | **+0.3** |
| | 156nm,0.3s,baz=304,slow=10,SNR=159 | | | | | | | |
| SJG | | | | Sn | | **Sn** | **03 58 01.2** | **+0.2** |
| | 180nm,0.3s,baz=249,slow=17,SNR=7.7 | | | | | | | |
| SJG | | | | LR | | LR | 03 58 11.8 | |
| | comp=Z,116nm,21.2s,baz=360,slow=34 | | | | | | | |
| **SJG** | **San Juan** | **2.32** | **122** | *e*Pn | | **Pn** | **03 57 33.0** | **+0.3** |
| SJG | | | | *e*S | | **Sn** | **03 58 00.3** | **-0.6** |
| **CPD** | **Cerro la Pandu** | **2.55** | **120** | ⇑*e*P | | **Pn** | **03 57 36.1** | **+0.1** |
| **CPD** | **Cerro la Pandu** | **2.55** | **120** | ⇑*e*P | | **Pn** | **03 57 36.1** | **+0.1** |
| **HUMP** | **Col San Antoni** | **2.55** | **118** | ⇑*e*P | | **Pn** | **03 57 36.0** | **0.0** |
| **HUMP** | **Col San Antoni** | **2.55** | **118** | *e*S | | **Sn** | **03 58 07.2** | **+0.5** |
| **HUMP** | **Col San Antoni** | **2.55** | **118** | ⇑*e*P | | **Pn** | **03 57 36.0** | **0.0** |
| HUMP | | | | *e*S | | **Sn** | **03 58 07.2** | **+0.5** |
| **SDDR** | **Presa de Saban** | **2.92** | **263** | *e*Pn | | **Pn** | **03 57 43.2** | **+2.1** |
| SDDR | | | | *e*S | | **Sb** | **03 58 25.6** | **+3.1** |
| **STVI** | **Saint Thomas** | **3.25** | **107** | ⇑*e*P | | **Pn** | **03 57 44.9** | **-0.8** |
| **STVI** | **Saint Thomas** | **3.25** | **107** | *e*S | | **Sn** | **03 58 23.9** | **-0.1** |
| **STVI** | **Saint Thomas** | **3.25** | **107** | ⇑*e*P | | **Pn** | **03 57 44.9** | **-0.8** |
| STVI | | | | *e*S | | **Sn** | **03 58 23.9** | **-0.1** |
| **GRTK** | **Grand Turk** | **3.48** | **309** | *e*Pn | | **Pn** | **03 57 48.3** | **-0.4** |
| GRTK | | | | *e*S | | **Sn** | **03 58 28.1** | **-1.5** |
| **TBVI** | **Tortola** | **3.54** | **105** | ⇑*e*P | | **Pn** | **03 57 49.0** | **-0.6** |
| **TBVI** | **Tortola** | **3.54** | **105** | ⇑*e*P | | **Pn** | **03 57 49.0** | **-0.6** |
| **PAPH** | **Port-au-Prince** | **3.94** | **259** | *e*Pn | | **Pn** |

| | | | | | | |
|---|---|---|---|---|---|---|
| **X37A** | **Clayton** | **2.61** | **254** | Sb | **Sb** | **04 00 21.0 +1.7** |
| | baz=2.6 | | | | | |

*IDC* ***19*** *04:04:36.0±2.4, 3.˚46N×93.˚64E, h0km, mb3.8/5, mb1 4.0/7, mb1mx3.7/34, mbtmp3.9/7, ML4.3/2, MS3.5/7, Ms1 3.5/7, ms1mx3.1/46, Error ellipse: s-maj=70.5km s-min=22.5km az=57.0*

*ISCJB* ***19*** *04:04:43.7±0.9, 4.˚04N±0.˚06×94.˚16E±0.˚06, h24km, mb4.0/5, MS3.6/5, Error ellipse: s-maj=10.4km s-min=7.0km az=44.9*

*DJA* ***19*** *04:04:54.0±0.8, 4.˚N±3.˚×9.˚5E±.˚, h102km±9km, M4.4/14, mb4.7/6, mB5.1/2, MLv4.3/14, Mw(mB)4.4/2*

**ISC 19 04:04:44.2±1.3, 4.05N±0.˚07×94.14E±0.˚09, h24km, n28, σ1§78/20, mb4.0/5, MS3.6/5, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLSI** | **Meulaboh, Aceh** | **2.27** | **84** | P | **Pb** | **04 05 23.1** | **-1.4** |
| MLSI | | | | S | **Sn** | **04 05 47.4** | **0.0** |
| **SNSI** | **Sinabang, Aceh** | **2.72** | **127** | P | **Pb** | **04 05 30.0** | **-2.2** |
| SNSI | | | | S | **Sn** | **04 05 58.5** | **-0.1** |
| **LHMI** | **Lhok Sumawe** | **3.04** | **67** | P | **Pn** | **04 05 33.3** | **+2.6** |
| LHMI | | | | S | **Sn** | **04 06 06.0** | **-0.3** |
| **KCSI** | **Kotacane, Aceh** | **3.66** | **98** | P | **Pn** | **04 05 42.0** | **+2.6** |
| KCSI | | | | S | **Sn** | **04 06 20.1** | **-1.7** |
| **GSI** | **Gunungsitoli** | **4.38** | **128** | P | **Pn** | **04 05 52.3** | **+3.0** |
| GSI | | | | S | **Sn** | **04 06 38.8** | **-0.8** |
| **TSI** | **Tuntungan** | **4.45** | **97** | P | **Pn** | **04 05 52.2** | **+2.0** |
| **PSI** | **Prapat** | **4.93** | **104** | Pn | **Pn** | **04 05 57.7** | **+0.7** |
| | 5.1nm,0.3s,baz=302,slow=7.6,SNR=18 | | | | | | |
| PSI | | | | Sn | **Sn** | **04 06 54.4** | **+1.0** |
| | baz=18,slow=20,SNR=1.9 | | | | | | |
| **MNSI** | **Mandailing Nat** | **6.32** | **121** | P | **Pn** | **04 06 18.2** | **+2.3** |
| | 108nm,0.5s,4µm0.7nm | | | | | | |
| **SISI** | **Saibi** | **7.28** | **137** | P | **Pn** | **04 06 30.9** | **+1.8** |
| | 92nm,0.9s,0.3nm | | | | | | |
| **PPI** | **Padang Panjang** | **7.69** | **125** | P | **Pn** | **04 06 36.7** | **+2.0** |
| **PALK** | **Pallekele** | **13.75** | **284** | LR | LR | 04 12 11.5 | |
| | comp=Z,116nm,20.3s,baz=116,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **15.07** | **18** | Pn | **P** | **04 08 19.6** | **-1.2** |
| | 0.6nm,0.3s,baz=214,slow=12,SNR=3.8 | | | | | | |
| CMAR | | | | LR | LR | 04 15 27.2 | |
| | comp=Z,104nm,18.6s,baz=194,slow=41 | | | | | | |
| **H08S2** | **Diego Garcia H** | **24.52** | **242** | T | T | 04 34 44.8 | |
| | baz=63,slow=75,SNR=640 | | | | | | |
| **H08S3** | **Diego Garcia H** | **24.52** | **242** | T | T | 04 34 42.6 | |
| | baz=63,slow=75,SNR=107 | | | | | | |
| **H08S1** | **Diego Carcia H** | **24.54** | **242** | T | T | 04 34 36.6 | |
| | baz=63,slow=75,SNR=106 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **43.05** | **156** | T | T | 04 58 02.3 | |
| | baz=331,slow=76,SNR=70 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **43.06** | **156** | T | T | 04 58 00.2 | |
| | baz=331,slow=76,SNR=70 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **43.07** | **156** | T | T | 04 58 01.3 | |
| | baz=331,slow=76,SNR=76 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.80** | **348** | P | **P** | **04 12 47.4** | **-0.7** |
| | 1.3nm,0.6s,baz=168,slow=8.5,SNR=6.1 | | | | | | |
| **SONM** | **Songino Array** | **44.88** | **12** | P | **P** | **04 12 57.3** | **+0.5** |
| | 1.5nm,0.9s,baz=191,slow=9.3,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.13** | **123** | P | P | 04 13 02.2 | -4.9 |
| | 1.1nm,0.6s,baz=299,slow=8.8,SNR=2.8 | | | | | | |
| **GEYT** | **Ailbeck** | **47.09** | **321** | LR | LR | 04 34 28.9 | |
| | comp=Z,59nm,18.1s,baz=205,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **47.54** | **127** | P | P | 04 13 14.6 | -3.4 |
| | 1.8nm,0.8s,baz=308,slow=8.1,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.33** | **353** | P | **P** | **04 13 38.6** | **-0.3** |
| | 1.0nm,0.5s,baz=162,slow=8.1,SNR=3.8 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **51.44** | **50** | LR | LR | 04 34 15.0 | |
| | comp=Z,195nm,19.9s,slow=34 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.77** | **45** | LR | LR | 04 36 58.5 | |
| | comp=Z,23nm,19.6s,baz=45,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **54.50** | **104** | LR | LR | 04 40 29.4 | |
| | comp=Z,48nm,18.9s,baz=115,slow=39 | | | | | | |
| **ARU** | **Arti** | **59.40** | **338** | LR | LR | 04 42 16.2 | |
| | comp=Z,34nm,18.7s,baz=158,slow=38 | | | | | | |

*NIED* ***19*** *04:29:00, 41.˚60N×142.˚10E, h50km, Mw4.1 Best double couple: M0 1.87000×10^15 NP1:φs195.00000°, δ26.00000°, λ86.00000°. NP2:φs20.00000°, δ64.00000°, λ92.00000°.*

*BJI* ***19*** *04:29:13.6, 41.˚80N×142.˚00E, h50km, mb4.7/5, mB4.6/2, Ms4.5/2, MS7 4.0/2*

*MOS* ***19*** *04:29:14.2±1.3, 41.˚77N×142.˚00E, h59km, mb4.4/19, Error ellipse: s-maj=10.2km s-min=7.9km az=80.0*

*ISCJB* ***19*** *04:29:14.3±0.3, 41.˚60N±0.˚03×142.˚06E±0.˚04, h68km±3km, mb4.0/22, Error ellipse: s-maj=6.0km s-min=3.9km az=139.9*

*JMA* ***19*** *04:29:14.7±0.1, 41.˚57N×142.˚06E, h64km±3km, M3.9 Broadband fault plane solution: P waves. NP1: φs18.00000°, δ86.00000°, λ100.00000°. NP2: φs130.00000°, δ11.00000°, λ22.00000°. Principal axes: T Plg48.0000°, Azm299.0000°; N Plg10.0000°, Azm198.0000°; P Plg40.0000°, Azm99.0000°;*

*JMA Felt I J1.*

*IDC* ***19*** *04:29:17.3±0.9, 41.˚70N×142.˚03E, h77km±6km, mb3.7/14, mb1 3.9/18, mb1mx3.7/57, mbtmp4.0/18, MS3.2/7, Ms1 3.2/7, ms1mx3.0/33 Error ellipse: s-maj=17.1km s-min=10.5km az=121.0*

**ISC 19 04:29:16.1±0.6, 41.˚61N±0.˚04×142.˚05E±0.˚04, h70km±5km, n82, σ1§44/91, mb4.2/22, 8C-9D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKB** | **Kayabe** | **0.81** | **290** | ⇓P | **Pn** | **04 29 30.5** | **-1.7** |
| JKB | | | | *e*S | **Sn** | **04 29 43.0** | **-1.1** |
| **JNBK** | **Urakawa-nobuka** | **0.85** | **38** | ⇑P | **Pn** | **04 29 30.9** | **-1.9** |
| **ERM** | **Erimo** | **0.92** | **64** | *d* iP | **Pn** | **04 29 32.1** | **-1.5** |
| ERM | | | | *i* S | **Sn** | **04 29 45.4** | **-1.2** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,855nm,0.8s | | | | | | |
| **JEM** | **Erimo** | **0.92** | **64** | ⇑P | **Pn** | **04 29 32.0** | **-1.6** |
| JEM | | | | *e*S | **Sn** | **04 29 44.6** | **-2.1** |
| **JTM** | **Tenmabayashi** | **1.10** | **222** | ⇓P | **Pn** | **04 29 34.5** | **-1.4** |
| JTM | | | | *e*S | **Sn** | **04 29 48.5** | **-2.2** |
| **JNB** | **Noboribetsu** | **1.14** | **319** | ⇓P | **Pn** | **04 29 34.8** | **-1.5** |
| JNB | | | | *e*S | **Sn** | **04 29 50.1** | **-1.3** |
| **JBT2** | **Biratori 2** | **1.19** | **11** | ⇓P | **Pn** | **04 29 36.1** | **-0.9** |
| **JSR** | **Shiriuchi** | **1.22** | **267** | ⇓P | **Pn** | **04 29 36.2** | **-1.2** |
| **JANG** | **Nango** | **1.30** | **198** | P | **Pn** | **04 29 36.4** | **-2.1** |
| JANG | | | | *e*S | **Sn** | **04 29 52.5** | **-2.7** |
| **JEW** | **Eniwo** | **1.30** | **340** | ⇓P | **Pn** | **04 29 37.9** | **-0.6** |
| JEW | | | | *e*S | **Sn** | **04 29 54.4** | **-0.9** |
| **JYM2** | **Yakumo 2** | **1.35** | **293** | ⇓P | **Pn** | **04 29 38.5** | **-0.6** |
| **JCH** | **Churui** | **1.40** | **44** | P | **Pn** | **04 29 39.3** | **-0.4** |
| **JFR** | **Furan** | **1.60** | **14** | P | **Pn** | **04 29 41.6** | **-0.8** |
| **ASAJ** | **Asahikawa** | **2.54** | **9** | P | **Pn** | **04 29 54.3** | **-0.7** |
| | comp=Z,20nm,0.3s,baz=209,slow=12,SNR=25 | | | | | | |
| ASAJ | | | | S | **Sn** | **04 30 25.0** | **+0.2** |
| | comp=Z,12nm,0.3s,baz=151,slow=19,SNR=9.9 | | | | | | |
| ASAJ | | | | LR | LR | 04 31 16.6 | |
| | comp=Z,256nm,19.7s,baz=303,slow=49 | | | | | | |
| **ASAJ** | **Asahikawa** | **2.54** | **9** | P | **Pn** | **04 29 54.3** | **-0.7** |
| ASAJ | | | | S | **Sn** | **04 30 25.0** | **+0.2** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,20nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,12nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.71** | **48** | *c* iP | **Pn** | **04 30 09.9** | **-1.0** |
| YUK | | | | *i* S | **Sn** | **04 30 50.1** | **-3.2** |
| YUK | | | | pmax | pmax | | |
| | comp=N,72nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,121nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,84nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,343nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,627nm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **4.18** | **56** | *d* iP | **Pn** | **04 30 14.6** | **-2.8** |
| SHO | | | | *i* S | Sn | 04 30 58.2 | -6.8 |
| SHO | | | | pmax | pmax | | |
| | comp=E,27nm,0.5s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,35nm,0.5s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,22nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,283nm,0.6s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,250nm,0.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.37** | **5** | *e*P | Pn | 04 30 41.0 | +7.5 |
| **KUR** | **Kuril'sk** | **5.57** | **48** | P | **Pn** | **04 30 37.6** | **+1.2** |
| KUR | | | | *i* S | **Sn** | **04 31 39.7** | **+0.7** |
| KUR | | | | smax | smax | | |
| | comp=N,31nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,38nm,0.3s | | | | | | |
| **MAJO** | **Matsushiro** | **5.88** | **212** | *e*P | **Pn** | **04 30 40.8** | **+0.2** |
| **MAT** | **Matsushiro** | **5.88** | **212** | P | **Pn** | **04 30 40.7** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **5.88** | **212** | P | **Pn** | **04 30 42.4** | **+1.8** |
| | comp=E,0.7nm,0.3s,baz=20,slow=16,SNR=4.9 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **5.88** | **212** | P | **Pn** | **04 30 42.4** | **+1.8** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **UGL** | **Uglegorsk** | **7.47** | **0** | *e*P | Pn | 04 31 14.0 | +12 |
| UGL | | | | *e*S | **Sn** | **04 32 20.9** | **-4.4** |
| **USRK** | **Ussuriysk Ar.** | **7.82** | **293** | P | **Pn** | **04 31 07.3** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=101,slow=14,SNR=13 | | | | | | |
| USRK | | | | LR | LR | 04 34 10.7 | |
| | comp=Z,48nm,18.5s,baz=84,slow=38 | | | | | | |
| **MSHR** | **Mys Shultsa** | **8.15** | **280** | *i* P | **Pn** | **04 31 12.7** | **+1.0** |
| **HABR** | **Khabarovsk** | **8.46** | **327** | P | Pn | 04 31 12.0 | -3.8 |
| HABR | | | | *e*S | **Sn** | **04 32 45.4** | **-4.2** |
| **KLR** | **Kul'dur** | **10.50** | **320** | *e*P | **Pn** | **04 31 42.7** | **-0.9** |
| **KSRS** | **Korea Array** | **11.67** | **254** | P | Pn | 04 32 03.1 | +3.5 |
| | comp=Z,0.6nm,0.3s,baz=64,slow=14,SNR=9.5 | | | | | | |
| KSRS | | | | LR | LR | 04 35 51.4 | |
| | comp=Z,97nm,19.0s,baz=60,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **11.67** | **254** | P | Pn | 04 32 03.1 | +3.5 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,97nm,19.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **22.88** | **278** | *e*P | **P** | **04 34 12.4** | **-1.5** |
| HHC | | | | S | **S** | **04 38 11.8** | **-6.4** |
| HHC | | | | PMZ | | | |
| | comp=Z,15nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,39nm,4.0s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,210nm,7.4s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,140nm,12.0s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,130nm,9.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **25.48** | **296** | *e*P | **P** | **04 34 36.8** | **-0.9** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **25.92** | **296** | P | **P** | **04 34 41.5** | **-0.1** |
| | comp=Z,2.6nm,0.8s,baz=82,slow=9.0,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **25.92** | **296** | P | **P** | **04 34 41.5** | **-0.1** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **BILL** | **Bilibino** | **29.52** | **18** | *e*P | **P** | **04 35 13.3** | **-0.1** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,12nm,1.5s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.34** | **128** | T | T | 05 06 51.1 | |
| | baz=322 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.36** | **128** | T | T | 05 06 56.7 | |
| | baz=322 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.36** | **128** | T | T | 05 06 58.7 | |
| | baz=322 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.19** | **130** | T | T | 05 07 53.9 | |
| | baz=324,slow=76,SNR=83 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.19** | **130** | T | T | 05 08 04.0 | |
| | baz=324,slow=76,SNR=98 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.21** | **130** | T | T | 05 07 55.1 | |
| | baz=324,slow=76,SNR=81 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.32** | **308** | P | **P** | **04 36 37.9** | **-0.2** |
| | comp=Z,3.0nm,0.6s,baz=90,slow=7.5,SNR=13 | | | | | | |
| ZALV | | | | PcP | **PcP** | **04 38 45.5** | **+0.2** |
| | comp=Z,0.4nm,0.4s,baz=100,slow=3.5,SNR=4.5 | | | | | | |
| ZALV | | | | LR | LR | 04 53 42.2 | |
| | comp=Z,45nm,18.5s,baz=70,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.32** | **308** | *i* P | **P** | **04 36 38.4** | **+0.3** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **42.25** | **298** | P | **P** | **04 37 01.9** | **-0.4** |
| | comp=Z,3.2nm,0.9s,baz=81,slow=8.9,SNR=7.4 | | | | | | |
| MKAR | | | | PcP | **PcP** | **04 38 55.3** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=66,slow=3.5,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.25** | **298** | P | **P** | **04 37 01.9** | **-0.4** |
| MKAR | | | | | | 04 38 55.3 | |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.29** | **251** | P | **P** | **04 37 11.7** | **+0.8** |
| | comp=Z,1.1nm,0.3s,baz=39,slow=7.9,SNR=4.5 | | | | | | |
| CMAR | | | | LR | LR | 04 57 34.4 | |
| | comp=Z,17nm,19.4s,baz=156,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.29** | **251** | *c* eP | P | 04 37 14.3 | +3.3 |
| CMAR | | | | *e**SP | sP | 04 37 32.9 | -3.5 |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **COLA** | **College** | **44.99** | **35** | ⇑P | **P** | **04 37 24.9** | **+0.9** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **45.41** | **35** | P | **P** | **04 37 27.8** | **+0.4** |
| | comp=Z,3.0nm,0.9s,baz=263,slow=6.3,SNR=13 | | | | | | |
| **ILAR** | **Eielson Array** | **45.41** | **35** | P | **P** | **04 37 27.8** | **+0.4** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **TAPN** | **Taplejung** | **46.27** | **270** | *e*P | **P** | **04 37 35.8** | **+0.8** |
| | comp=Z,8.6nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **47.32** | **270** | *e*P | **P** | **04 37 43.5** | **+0.4** |
| | comp=Z,19nm,0.9s | | | | | | |
| **GUN** | **Gumba** | **47.35** | **272** | *e*P | **P** | **04 37 43.8** | **+0.4** |
| | comp=Z,20nm,0.6s | | | | | | |
| **KKN** | **Kakani** | **47.86** | **272** | *e*P | **P** | **04 37 47.8** | **+0.6** |
| | comp=Z,16nm,0.9s | | | | | | |
| **PKI** | **Pulchoki** | **47.88** | **272** | *e*P | **P** | **04 37 47.6** | **+0.1** |
| **PKIN** | **Phulchoki** | **47.89** | **272** | *e*P | **P** | **04 37 47.4** | **-0.1** |
| | comp=Z,3.8nm,0.6s | | | | | | |
| **BVAR** | **Borovoye Array** | **47.95** | **309** | P | **P** | **04 37 47.7** | **+0.4** |
| | comp=Z,1.4nm,0.4s,baz=75,slow=8.6,SNR=7.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **47.95** | **309** | P | **P** | **04 37 47.7** | **+0.4** |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **BRVK** | **Borovoye** | **48.00** | **310** | ⇑ *i* P | **P** | **04 37 48.0** | **+0.3** |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **DMN** | **Daman** | **48.09** | **272** | *e*P | **P** | **04 37 49.6** | **+0.6** |
| **GKN** | **Gorkha** | **48.23** | **273** | *e*P | **P** | **04 37 50.6** | **+0.6** |
| **AAK** | **Ala-Archa** | **48.87** | **295** | ⇑ *i* P | **P** | **04 37 54.8** | **0.0** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| **KOLN** | **Koldanda** | **49.13** | **273** | *e*P | **P** | **04 37 57.5** | **+0.5** |
| **INK** | **Inuvik** | **50.12** | **29** | P | **P** | **04 38 04.3** | **+0.7** |
| | comp=Z,2.4nm,0.7s,baz=296,slow=7.2,SNR=6.1 | | | | | | |
| **INK** | **Inuvik** | **50.12** | **29** | P | **P** | **04 38 04.4** | **+0.7** |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **OBN** | **Obninsk** | **64.75** | **322** | *i* P | **P** | **04 39 47.5** | **+0.8** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **FINES** | **FINESS Array B** | **65.01** | **332** | P | **P** | **04 39 48.0** | **-0.3** |
| | comp=Z,2.7nm,0.7s,baz=44,slow=8.5,SNR=11 | | | | | | |
| FINES | | | | pP | **pP** | **04 40 07.7** | **+1.0** |
| | comp=Z,3.1nm,0.6s,baz=54,slow=7.2,SNR=2.4 | | | | | | |
| FINES | | | | LR | LR | 05 09 05.2 | |
| | comp=Z,42nm,18.0s,baz=341,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **65.01** | **332** | P | **P** | **04 39 48.0** | **-0.3** |
| FINES | | | | *PP | **pP** | **04 40 07.7** | **+1.0** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,42nm,18.0s | | | | | | |
| **KIV** | **Kislovodsk** | **68.31** | **310** | *e*P | **P** | **04 40 11.3** | **+1.5** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **68.33** | **310** | P | **P** | **04 40 10.2** | **+0.5** |
| | comp=Z,1.8nm,0.8s,baz=11,slow=5.2,SNR=4.0 | | | | | | |
| **KBZ** | **Khabaz** | **68.33** | **310** | P | **P** | **04 40 10.2** | **+0.5** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.17** | **337** | P | **P** | **04 40 20.3** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=48,slow=5.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.17** | **337** | P | **P** | **04 40 19.8** | **-1.1** |
| | comp=Z,1.0nm,0.6s,baz=39,slow=5.8,SNR=3.8 | | | | | | |
| NOA | | | | LR | LR | 05 19 47.6 | |
| | comp=Z,30nm,18.5s,baz=330,slow=43 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.00** | **322** | P | **P** | **04 40 25.3** | **-0.6** |
| | comp=Z,1.0nm,0.5s,baz=45,slow=6.0,SNR=8.6 | | | | | | |
| AKASG | | | | pP | **PcP** | **04 40 47.0** | **+1.0** |
| | comp=Z,1.1nm,0.6s,baz=44,slow=6.1,SNR=3.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.00** | **322** | *c* eP | **P** | **04 40 25.7** | **-0.3** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **KIEV** | **Kiev** | **71.01** | **322** | *i* P | **P** | **04 40 25.2** | **-0.9** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,20nm,2.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **71.89** | **55** | P | **P** | **04 40 32.5** | **+0.6** |
| | comp=Z,0.2nm,0.6s,baz=316,slow=6.3,SNR=3.5 | | | | | | |
| NVAR | | | | pP | **PcP** | **04 40 52.0** | **+1.6** |
| | comp=Z,1.0nm,0.7s,baz=294,slow=6.8,SNR=6.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.20** | **311** | P | **P** | **04 40 57.2** | **+0.3** |
| | comp=Z,0.6nm,0.6s,baz=40,slow=4.7,SNR=3.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.20** | **311** | P | **P** | **04 40 57.2** | **+0.3** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **TXAR** | **Lajitas Array** | **86.95** | **53** | P | **P** | **04 41 52.5** | **-1.3** |
| | comp=Z,0.2nm,0.7s,baz=310,slow=5.6,SNR=2.6 | | | | | | |
| TXAR | | | | pP | **pP** | **04 42 14.9** | **+2.0** |
| | comp=Z,0.4nm,0.6s,baz=305,slow=3.2,SNR=3.5 | | | | | | |
| **SNAA** | **Sanae** | **145.25** | **199** | P | **PKPab** | **04 48 45.0** | **+0.5** |
| **VNA2** | **Neumayer--Watz** | **146.83** | **198** | P | **PKPdf** | **04 48 47.4** | **+0.3** |
| | baz=77,slow=2.5 | | | | | | |

*ISCJB* ***19*** *04:32:16.3±0.5, 6.˚76S±0.˚04×129.˚88E±0.˚09, h150km, mb3.8/4, Error ellipse: s-maj=12.0km s-min=6.2km az=0.3*

*AUST* ***19*** *04:32:18.3, 6.˚98S×130.˚04E, h100km*

*IDC* ***19*** *04:32:18.0±2.3, 6.˚69S×129.˚78E, h169km±20km, mb3.6/3, mb1 3.8/6, mb1mx3.4/33, mbtmp4.3/6, Error ellipse: s-maj=35.9km s-min=20.6km az=90.0*

**ISC 19 04:32:15.8±0.7, 6.89S±0.˚06×129.96E±0.˚09, h150km, n20, σ2§54/20, mb3.8/4, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **4.55** | **30** | P | **Pn** | **04 33 25.2** | **+1.9** |
| | baz=4.6,SNR=14 | | | | | | |
| **MTN** | **Manton Dam** | **6.03** | **169** | P | Pn | 04 33 47.1 | +4.2 |
| | baz=6.0,SNR=46 | | | | | | |
| **SIJI** | **Sorong** | **6.12** | **12** | P | **Pn** | **04 33 44.5** | **+0.4** |
| | 37nm,0.3s,baz=205,slow=22,SNR=82 | | | | | | |
| SIJI | | | | S | **Sn** | **04 34 49.3** | **-3.9** |
| | 8.4nm,0.3s,baz=253,slow=19,SNR=11 | | | | | | |
| **SWI** | **Sorong** | **6.12** | **12** | P | **Pn** | **04 33 44.7** | **+0.6** |
| | baz=6.2,SNR=12 | | | | | | |
| **KDU** | **Kakadu** | **6.27** | **157** | P | Pn | 04 33 50.8 | +4.7 |
| | baz=6.2,SNR=237 | | | | | | |
| **SOEI** | **Soe** | **6.32** | **243** | P | **Pn** | **04 33 49.0** | **+2.1** |
| | baz=6.3,SNR=3.1 | | | | | | |
| **BATI** | **Baumata** | **7.05** | **242** | P | **Pn** | **04 33 58.0** | **+1.5** |
| | 2.6nm,0.3s,baz=204,slow=10.0,SNR=4.4 | | | | | | |
| BATI | | | | S | **Sn** | **04 35 11.8** | **-3.8** |
| | 14nm,0.3s,baz=49,slow=20,SNR=6.3 | | | | | | |
| **KNRA** | **Kununurra** | **8.82** | **188** | P | **Pn** | **04 34 22.4** | **+2.4** |
| | baz=8.8,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.66** | **162** | P | **Pn** | **04 35 23.8** | **+0.4** |
| | 0.5nm,0.3s,baz=345,slow=13,SNR=27 | | | | | | |
| WRA | | | | S | **Sn** | **04 37 49.9** | **-4.9** |
| | 0.8nm,0.3s,baz=345,slow=22,SNR=5.6 | | | | | | |
| **COEN** | **Coen** | **14.77** | **119** | P | P | 04 35 44.9 | +5.4 |
| | baz=15,SNR=4.8 | | | | | | |
| **QIS** | **Mount Isa** | **16.49** | **146** | P | **Pn** | **04 36 02.6** | **+4.0** |
| | baz=16,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **17.11** | **168** | P | **Pn** | **04 36 08.7** | **+2.7** |
| | 1.4nm,0.3s,baz=344,slow=10,SNR=47 | | | | | | |
| ASAR | | | | S | **S** | **04 39 15.3** | **-0.9** |
| | 0.3nm,0.3s,baz=352,slow=24,SNR=5.4 | | | | | | |
| **WRKA** | **Warakurna** | **18.12** | **185** | P | **Pn** | **04 36 19.5** | **+1.4** |
| | baz=18,SNR=14 | | | | | | |
| **UGM** | **Wanagama** | **19.30** | **266** | P | Pn | 04 36 39.1 | +7.0 |
| | baz=19,SNR=3.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.63** | **310** | P | **P** | **04 39 35.6** | **+2.5** |
| | 0.6nm,0.3s,baz=140,slow=5.8,SNR=4.9 | | | | | | |
| **SONM** | **Songino Array** | **58.32** | **342** | P | **P** | **04 41 54.3** | **-0.8** |
| | 0.3nm,0.4s,baz=158,slow=7.9,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.11** | **327** | P | **P** | **04 42 58.5** | **-0.9** |
| | 2.6nm,0.4s,baz=126,slow=7.6,SNR=18 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.47** | **334** | P | **P** | **04 43 17.5** | **-2.2** |
| | 0.5nm,0.4s,baz=104,slow=6.9,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.75** | **281** | PKP | **PKPdf** | **04 51 05.5** | **-0.9** |
| | 0.4nm,1.0s,baz=58,slow=3.1,SNR=2.9 | | | | | | |
| **LPAZ** | **La Paz** | **150.83** | **142** | PKPbc | **PKPbc** | **04 51 52.9** | **+0.6** |
| | 0.4nm,0.5s,baz=180,slow=1.0,SNR=6.7 | | | | | | |

**MEX 19 05:16:12.9±0.6, 14.˚25N×92.˚22W, h15km±180km, MD4.0, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.74** | **326** | *i* P | Pn | 05 16 39.2 | -3.4 |
| **CCIG** | **Comitan** | **2.02** | **2** | *i* P | Pn | 05 16 44.0 | -2.8 |
| CCIG | | | | *i* S | Sn | 05 17 07.1 | -4.9 |

*NIED* ***19*** *05:25:00, 41.˚60N×142.˚10E, h44km, Mw4.4 Best double couple: M0 4.32000×10^15 NP1:φs191.00000°, δ17.00000°, λ77.00000°. NP2:φs24.00000°, δ74.00000°, λ94.00000°.*

*ISCJB* ***19*** *05:25:47.9±0.4, 41.˚57N±0.˚03×142.˚06E±0.˚05, h70km±4km, mb3.8/13, Error ellipse: s-maj=7.5km s-min=4.6km az=31.4*

*MOS* ***19*** *05:25:48.1±0.9, 41.˚57N×142.˚22E, h83km, mb4.0/10, Error ellipse: s-maj=18.6km s-min=11.1km az=66.7*

*JMA* ***19*** *05:25:48.4±0.1, 41.˚57N×142.˚05E, h64km±2km, M4.0 Broadband fault plane solution: P waves. NP1: φs16.00000°, δ83.00000°, λ99.00000°. NP2:φs143.00000°, δ12.00000°, λ37.00000°. Principal axes: T Plg51.0000°, Azm297.0000°; N Plg9.0000°, Azm195.0000°; P Plg37.0000°, Azm98.0000°;*

*JMA Felt I J1.*

*IDC* ***19*** *05:25:50.0±0.8, 41.˚60N×142.˚04E,

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SHO | | | | pmax | pmax | | |
| | comp=E,38nm,0.6s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,49nm,0.6s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,11nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,244nm,0.6s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,199nm,0.6s | | | | | | |
| **MAT** | **Matsushiro** | **5.86** | **212** | P | Pn | 05 27 17.3 | +3.5 |
| MAT | | | | *eS* | **Sn** | **05 28 23.4** | **+3.8** |
| **MJAR** | **Matsushiro Arr** | **5.86** | **212** | P | **Pn** | **05 27 15.1** | **+1.3** |
| | comp=E,1.0nm,0.3s,baz=29,slow=12,SNR=5.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **5.86** | **212** | P | **Pn** | **05 27 15.1** | **+1.3** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **7.86** | **293** | P | **Pn** | **05 27 41.1** | **+0.1** |
| | comp=Z,0.3nm,0.3s,baz=107,slow=14,SNR=9.0 | | | | | | |
| USRK | | | | LR | LR | 05 30 46.0 | |
| | comp=Z,139nm,19.7s,baz=107,slow=38 | | | | | | |
| **KSRS** | **Korea Array** | **11.68** | **254** | P | **Pn** | **05 28 35.6** | **+2.4** |
| | comp=Z,0.5nm,0.3s,baz=63,slow=14,SNR=8.1 | | | | | | |
| KSRS | | | | LR | LR | 05 32 37.3 | |
| | comp=Z,101nm,19.4s,baz=48,slow=35 | | | | | | |
| **JNU** | **Nakatsue** | **12.26** | **230** | LR | LR | 05 32 36.2 | |
| | comp=Z,82nm,19.6s,baz=112,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **25.96** | **296** | P | **P** | **05 31 15.4** | **0.0** |
| | comp=Z,1.7nm,0.7s,baz=84,slow=8.7,SNR=8.5 | | | | | | |
| SONM | | | | LR | LR | 05 41 03.6 | |
| | comp=Z,73nm,21.9s,baz=140,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **25.96** | **296** | P | **P** | **05 31 15.4** | **0.0** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,73nm,21.9s | | | | | | |
| **GUMO** | **Guam** | **27.99** | **174** | LR | LR | 05 40 58.8 | |
| | comp=Z,53nm,20.2s,baz=4.0,slow=32 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.30** | **128** | T | T | 06 03 28.3 | |
| | baz=322,slow=75,SNR=63 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.31** | **128** | T | T | 06 03 29.0 | |
| | baz=322,slow=75,SNR=60 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.32** | **128** | T | T | 06 03 42.2 | |
| | baz=322,slow=75,SNR=57 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.15** | **130** | T | T | 06 04 45.3 | |
| | baz=324,slow=76,SNR=31 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.15** | **130** | T | T | 06 04 40.1 | |
| | baz=324,slow=76,SNR=62 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.16** | **130** | T | T | 06 04 29.5 | |
| | baz=324,slow=76,SNR=23 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **39.37** | **308** | P | **P** | **05 33 11.5** | **-0.3** |
| | comp=Z,2.4nm,0.6s,baz=86,slow=7.2,SNR=11 | | | | | | |
| ZALV | | | | PcP | **PcP** | **05 35 19.2** | **+0.3** |
| | comp=Z,1.3nm,0.6s,baz=89,slow=0.3,SNR=4.1 | | | | | | |
| ZALV | | | | LR | LR | 05 48 39.0 | |
| | comp=Z,64nm,18.4s,baz=70,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.29** | **298** | P | **P** | **05 33 35.6** | **-0.5** |
| | comp=Z,3.1nm,1.0s,baz=77,slow=7.7,SNR=6.7 | | | | | | |
| MKAR | | | | LR | LR | 05 52 29.1 | |
| | comp=Z,53nm,18.9s,baz=108,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.29** | **298** | P | **P** | **05 33 35.6** | **-0.5** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| MKAR | | | | MLR | MLR | | |
| | comp=Z,53nm,18.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.30** | **251** | P | **P** | **05 33 44.7** | **+0.2** |
| | comp=Z,1.1nm,0.7s,baz=53,slow=8.1,SNR=5.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.30** | **251** | P | **P** | **05 33 44.7** | **+0.2** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **45.43** | **35** | P | **P** | **05 34 01.1** | **+0.1** |
| | comp=Z,3.1nm,0.9s,baz=267,slow=6.1,SNR=19 | | | | | | |
| ILAR | | | | pP | **pP** | **05 34 18.9** | **+0.6** |
| | comp=Z,1.2nm,0.9s,baz=266,slow=4.5,SNR=2.9 | | | | | | |
| **ILAR** | **Eielson Array** | **45.43** | **35** | P | **P** | **05 34 01.1** | **+0.1** |
| ILAR | | | | *PP | **pP** | **05 34 19.0** | **+0.6** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **50.14** | **29** | P | **P** | **05 34 37.5** | **+0.3** |
| | comp=Z,4.1nm,1.0s,baz=309,slow=6.5,SNR=3.6 | | | | | | |
| **INK** | **Inuvik** | **50.14** | **29** | P | **P** | **05 34 37.5** | **+0.3** |
| INK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **ARU** | **Arti** | **53.36** | **317** | LR | LR | 06 00 06.2 | |
| | comp=Z,98nm,18.1s,baz=62,slow=39 | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.95** | **339** | LR | LR | 06 03 36.3 | |
| | comp=Z,41nm,18.6s,baz=332,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **61.62** | **188** | P | **P** | **05 35 58.4** | **-1.4** |
| | comp=Z,1.4nm,0.8s,baz=5.6,slow=6.9,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **61.62** | **188** | P | **P** | **05 35 58.4** | **-1.4** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **63.91** | **256** | LR | LR | 06 05 17.0 | |
| | comp=Z,45nm,19.5s,baz=110,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **65.06** | **332** | P | **P** | **05 36 21.4** | **-0.6** |
| | comp=Z,2.1nm,0.6s,baz=33,slow=4.5,SNR=8.2 | | | | | | |
| FINES | | | | pP | **pP** | **05 36 41.0** | **+0.5** |
| | comp=Z,2.4nm,0.5s,baz=46,slow=8.2,SNR=2.5 | | | | | | |
| FINES | | | | LR | LR | 06 06 03.2 | |
| | comp=Z,59nm,22.0s,baz=2.0,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **65.06** | **332** | P | **P** | **05 36 21.4** | **-0.6** |
| FINES | | | | *PP | **pP** | **05 36 41.0** | **+0.5** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,59nm,22.0s | | | | | | |
| **ASAR** | **Alice Springs** | **65.35** | **188** | P | **P** | **05 36 24.1** | **-0.3** |
| | comp=Z,0.9nm,0.8s,baz=8.7,slow=6.9,SNR=8.6 | | | | | | |
| **ASAR** | **Alice Springs** | **65.35** | **188** | P | **P** | **05 36 24.1** | **-0.3** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **NB2** | **NORSAR Subarra** | **70.21** | **337** | P | **P** | **05 36 53.6** | **-1.0** |
| | comp=Z,0.6nm,0.4s,baz=36,slow=6.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.21** | **337** | P | **P** | **05 36 54.2** | **-0.4** |
| | comp=Z,1.6nm,0.8s,baz=38,slow=6.3,SNR=3.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **70.21** | **337** | P | **P** | **05 36 54.2** | **-0.4** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **71.04** | **322** | P | **P** | **05 36 58.6** | **-1.1** |
| | comp=Z,0.9nm,0.5s,baz=44,slow=5.9,SNR=6.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.04** | **322** | P | **P** | **05 36 58.6** | **-1.1** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **71.90** | **55** | P | **P** | **05 37 06.1** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=309,slow=5.7,SNR=2.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.24** | **311** | LR | LR | 06 16 46.7 | |
| | comp=Z,16nm,21.0s,baz=342,slow=40 | | | | | | |
| **PPT** | **Papeete** | **86.23** | **117** | LR | LR | 06 15 31.7 | |
| | comp=Z,65nm,19.0s,baz=158,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.96** | **53** | P | **P** | **05 38 28.4** | **+1.2** |
| | comp=Z,0.3nm,0.8s,baz=308,slow=3.3,SNR=2.9 | | | | | | |
| TXAR | | | | pP | **pP** | **05 38 48.5** | **+2.1** |
| | comp=Z,0.5nm,0.8s,baz=305,slow=3.9,SNR=3.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.96** | **53** | P | **P** | **05 38 28.4** | **+1.2** |
| TXAR | | | | *PP | **pP** | **05 38 48.5** | **+2.1** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **SNAA** | **Sanae** | **145.22** | **199** | P | **PKPab** | **05 45 18.5** | **+0.6** |
| **VNA2** | **Neumayer--Watz** | **146.81** | **198** | P | **PKPbc** | **05 45 22.0** | **-0.4** |
| | baz=104,slow=3.9 | | | | | | |

*CSEM **19** 05:26:51.1,38°.19N×26°.37W,h1km±3km,ML2.4,After PDA*
**PDA 19 05:26:51.1±0.8,38°.19N×26°.37W,h1km±3km,MD3.6,**
**ML2.4,Error ellipse: s-maj=5.7km s-min=1.1km az=34.0,**
**Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSET** | **Sete Cidades** | **0.63** | **125** | *eP* | Pg | 05 27 02.1 | -1.1 |
| PSET | | | | *eS* | Sg | 05 27 10.6 | -0.7 |
| PSET | | | | A | A | 05 27 13.6 | |
| | 49nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **0.63** | **125** | *eP* | Pg | 05 27 02.1 | -1.1 |
| PSET | | | | *eS* | Sg | 05 27 10.6 | -0.7 |
| **PDA** | **Ponta Delgada** | **0.71** | **128** | *eP* | Pg | 05 27 03.3 | -1.4 |
| PDA | | | | *eS* | Sg | 05 27 12.6 | -1.3 |
| PDA | | | | A | A | 05 27 17.0 | |
| | 53nm,0.3s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.71** | **128** | *eP* | Pg | 05 27 03.3 | -1.4 |
| PDA | | | | *eS* | Sg | 05 27 12.6 | -1.3 |
| **GRON** | **Grota Negra** | **0.78** | **122** | *eP* | Pg | 05 27 05.9 | -0.2 |
| GRON | | | | *eS* | Sg | 05 27 16.3 | 0.0 |
| GRON | | | | A | A | 05 27 20.4 | |
| | 14nm,0.2s | | | | | | |
| **ADH** | **Angra Heroismo** | **0.83** | **305** | *eP* | Pg | 05 27 04.7 | -2.3 |
| ADH | | | | *eS* | Sg | 05 27 15.3 | -2.4 |
| ADH | | | | A | A | 05 27 20.1 | |
| | 104nm,0.4s | | | | | | |
| **ADH** | **Angra Heroismo** | **0.83** | **305** | *eP* | Pg | 05 27 04.7 | -2.3 |
| ADH | | | | *eS* | Sg | 05 27 15.3 | -2.4 |
| **BART** | **Pico Bartolome** | **1.03** | **113** | *eP* | Pg | 05 27 07.7 | -3.3 |
| BART | | | | *eS* | Sg | 05 27 20.5 | -4.0 |
| BART | | | | A | A | 05 27 25.3 | |
| | 20nm,0.2s | | | | | | |
| **BART** | **Pico Bartolome** | **1.03** | **113** | *eP* | Pg | 05 27 07.7 | -3.3 |
| BART | | | | *eS* | Sg | 05 27 20.5 | -4.0 |
| **PMAN** | **Manadas** | **1.42** | **289** | *eS* | Sg | 05 27 29.6 | -7.3 |
| PMAN | | | | A | A | 05 27 31.2 | |
| | 26nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.42** | **289** | *eS* | Sg | 05 27 29.6 | -7.3 |
| **PGRA** | **Graciosa** | **1.52** | **304** | *eP* | Pn | 05 27 14.9 | -4.6 |
| PGRA | | | | *eS* | Sb | 05 27 32.1 | -7.8 |
| PGRA | | | | A | A | 05 27 34.1 | |
| | 24nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.52** | **304** | *eP* | Pn | 05 27 14.9 | -4.6 |
| PGRA | | | | *eS* | Sb | 05 27 32.1 | -7.8 |
| **PPNO** | **Prainha do Nor** | **1.52** | **281** | *eP* | Pn | 05 27 14.7 | -4.8 |
| PPNO | | | | *eS* | Sb | 05 27 32.3 | -7.7 |
| PPNO | | | | A | A | 05 27 34.5 | |
| | 35nm,0.1s | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.52** | **281** | *eP* | Pn | 05 27 14.7 | -4.8 |
| PPNO | | | | *eS* | Sb | 05 27 32.3 | -7.7 |
| **PSMA** | **Santa Maria** | **1.54** | **140** | *eS* | Sn | 05 27 32.9 | -7.6 |
| PSMA | | | | A | A | 05 27 34.2 | |
| | 10nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **1.56** | **290** | *eP* | Pn | 05 27 15.2 | -4.9 |
| ROSA | | | | *eS* | Sn | 05 27 33.5 | -7.6 |
| ROSA | | | | A | A | 05 27 36.3 | |
| | 18nm,0.1s | | | | | | |
| **ROSA** | **Rosais** | **1.56** | **290** | *eP* | Pn | 05 27 15.2 | -4.9 |
| ROSA | | | | *eS* | Sn | 05 27 33.5 | -7.6 |
| **PSMN** | **Pico do Norte,** | **1.57** | **138** | *eS* | Sn | 05 27 33.1 | -8.1 |
| PSMN | | | | A | A | 05 27 34.5 | |
| | 16nm,0.3s | | | | | | |
| **PSMN** | **Pico do Norte,** | **1.57** | **138** | *eS* | Sn | 05 27 33.1 | -8.1 |
| **PICO** | **Pico** | **1.65** | **282** | *eP* | Pn | 05 27 16.4 | -4.9 |
| PICO | | | | *eS* | Sn | 05 27 35.4 | -7.9 |
| **PICO** | **Pico** | **1.65** | **282** | *eP* | Pn | 05 27 16.4 | -4.9 |
| PICO | | | | *eS* | Sn | 05 27 35.4 | -7.9 |
| **PCAN** | **Candelaria** | **1.69** | **280** | *eP* | Pn | 05 27 16.8 | -5.0 |
| PCAN | | | | *eS* | Sn | 05 27 36.6 | -7.5 |
| PCAN | | | | A | A | 05 27 38.8 | |
| | 15nm,0.2s | | | | | | |
| **PCAN** | **Candelaria** | **1.69** | **280** | *eP* | Pn | 05 27 16.8 | -5.0 |
| PCAN | | | | *eS* | Sn | 05 27 36.6 | -7.5 |
| **HOR** | **Horta** | **1.81** | **281** | *eS* | Sn | 05 27 39.3 | -7.8 |
| **HOR** | **Horta** | **1.81** | **281** | *eS* | Sn | 05 27 39.3 | -7.8 |
| **CALA** | **Caldeira** | **1.88** | **283** | *eP* | Pn | 05 27 19.6 | -4.9 |
| CALA | | | | *eS* | Sn | 05 27 41.0 | -7.9 |
| **CALA** | **Caldeira** | **1.88** | **283** | *eP* | Pn | 05 27 19.6 | -4.9 |
| CALA | | | | *eS* | Sn | 05 27 41.0 | -7.9 |
| **PCED** | **Cedros** | **1.89** | **284** | *eP* | Pn | 05 27 19.7 | -4.8 |
| PCED | | | | *eS* | Sn | 05 27 41.0 | -8.0 |
| PCED | | | | A | A | 05 27 44.9 | |
| | 19nm,0.2s | | | | | | |
| **PCED** | **Cedros** | **1.89** | **284** | *eP* | Pn | 05 27 19.7 | -4.8 |
| PCED | | | | *eS* | Sn | 05 27 41.0 | -8.0 |

*IDC **19** 05:42:30.8±0.9,35°.64N×72°.95E,h0km,mb3.9/8,*
*mb1 4.0/12,mb1mx3.8/47,mbtmp3.8/12,ML3.5/3,MS2.6/2,*
*Ms1 2.6/2,ms1mx2.3/52,Error ellipse: s-maj=23.5km*
*s-min=18.5km az=76.0*
*ISCJB **19** 05:42:33.2±0.5,35°.55N±0°.03×73°.09E±0°.08,h40km,*
*mb3.7/7,Error ellipse: s-maj=10.2km s-min=3.6km*
*az=160.1*
*NNC **19** 05:42:41.6±3.0,35°.87N×72°.33E,h125km±64km,mb3.1,*
*mpv3.8,Error ellipse: s-maj=36.0km s-min=24.0km*
*az=86.0*
**ISC 19 05:42:35.6±0.7,35°.57N±0°.05×72°.91E±0°.07,h40km,n34,**
**σ2s25/35,mb3.8/7,5C-9D,Pakistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **4.46** | **6** | ⇑P | Pn | 05 43 45.8 | +4.8 |
| | 10.0nm,0.4s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **05 44 34.3** | **+2.6** |
| | 19nm,0.3s | | | | | | |
| **DZET** | **Dzherino** | **4.59** | **316** | ⇓P | **Pn** | **05 43 42.0** | **-0.6** |
| | 12nm,0.4s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **05 44 30.4** | **-4.3** |
| | 46nm,0.5s | | | | | | |
| **SMLA** | **Simla** | **5.68** | **140** | *eP* | Pn | 05 44 00.1 | +2.5 |
| SMLA | | | | *i* P | Pn | 05 44 00.5 | +2.9 |
| SMLA | | | | *eS* | **Sn** | **05 45 04.7** | **+3.2** |
| SMLA | | | | AML | AML | 05 45 34.6 | |
| | comp=N,82nm,0.2s | | | | | | |
| SMLA | | | | AML | AML | 05 45 34.6 | |
| | comp=E,112nm,0.5s | | | | | | |
| **KKR** | **Kurukshetra** | **6.49** | **148** | *eS* | **Sn** | **05 45 20.5** | **-1.0** |
| **MNAS** | **Manas** | **6.91** | **357** | ⇓P | **Pn** | **05 44 15.9** | **+1.4** |
| | comp=E,2.1nm,0.4s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **05 45 32.5** | **+0.6** |
| | comp=E,6.2nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **7.16** | **9** | ⇓P | **Pn** | **05 44 20.1** | **+2.3** |
| | comp=E,6.9nm,1.3s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **05 45 38.6** | **+0.7** |
| | comp=E,11nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **7.16** | **9** | Pn | **Pn** | **05 44 19.0** | **+1.2** |
| | comp=E,0.7nm,0.3s,baz=172,slow=5.2,SNR=4.1 | | | | | | |
| AAK | | | | Sn | **Sn** | **05 45 39.8** | **+1.8** |
| | comp=E,0.6nm,0.3s,baz=325,slow=19,SNR=3.7 | | | | | | |
| AAK | | | | LR | LR | 05 47 17.8 | |
| | comp=E,74nm,18.9s,baz=162,slow=40 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.63** | **15** | ⇑P | **Pn** | **05 44 27.4** | **+3.1** |
| | comp=E,4.6nm,0.9s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **05 45 51.7** | **+2.1** |
| | comp=E,5.9nm,0.6s | | | | | | |
| **BHGR** | **Bahadurgarh** | **7.67** | **152** | *eS* | Sn | 05 45 31.0 | -19 |
| **KK31** | **Karatay Array** | **7.75** | **347** | ⇓P | **Pn** | **05 44 24.5** | **-1.3** |
| | comp=E,2.5nm,0.4s,baz=133,slow=11,SNR=8.7 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **05 45 47.9** | **-4.3** |
| | comp=E,2.2nm,0.6s,baz=40,slow=26,SNR=17 | | | | | | |
| **KHET** | **Khetri** | **7.87** | **161** | *eP* | **Pn** | **05 44 28.6** | **+1.0** |
| KHET | | | | *eS* | **Sn** | **05 45 56.8** | **+1.4** |
| KHET | | | | AML | AML | 05 46 47.8 | |
| | comp=E,7.4nm,0.2s | | | | | | |
| KHET | | | | AML | AML | 05 46 47.9 | |
| | comp=N,7.7nm,0.2s | | | | | | |
| **DANN** | **Dangsing** | **11.69** | **125** | *eP* | **Pn** | **05 45 18.2** | **-1.9** |
| **KOLN** | **Koldanda** | **11.97** | **128** | *eP* | **Pn** | **05 45 22.3** | **-1.6** |
| | comp=N,21nm,0.4s | | | | | | |
| **GEYT** | **Alibeck** | **12.10** | **286** | LR | LR | 05 50 21.3 | |
| | comp=N,17nm,21.1s,baz=100,slow=39 | | | | | | |
| **GKN** | **Gorkha** | **12.50** | **124** | *eP* | **Pn** | **05 45 28.6** | **-2.5** |
| GKN | | | | *eS* | **Sn** | **05 47 43.3** | **-5.8** |
| **DMN** | **Daman** | **13.07** | **124** | *eP* | **Pn** | **05 45 36.6** | **-2.4** |
| | comp=N,17nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **13.07** | **123** | *eP* | **Pn** | **05 45 35.9** | **-3.1** |
| **MKAR** | **Makanchi Array** | **13.24** | **29** | Pn | **Pn** | **05 45 40.0** | **-0.9** |
| | comp=N,0.1nm,0.3s,baz=218,slow=16,SNR=4.2 | | | | | | |
| **PKIN** | **Phulchoki** | **13.29** | **123** | *eP* | Pn | 05 45 38.7 | -3.2 |
| **PKI** | **Pulchoki** | **13.30** | **123** | *eP* | Pn | 05 45 38.7 | -3.5 |
| **GUN** | **Gumba** | **13.41** | **121** | *eP* | Pn | 05 45 40.1 | -3.6 |
| **RAMN** | **Ramite** | **14.51** | **123** | *eP* | Pn | 05 45 54.4 | -4.2 |
| **TAPN** | **Taplejung** | **15.04** | **119** | *eP* | Pn | 05 46 00.6 | -5.1 |
| | comp=N,9.5nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **16.66** | **329** | ⇑P | **Pn** | **05 46 24.6** | **-1.4** |
| | comp=N,0.8nm,0.7s,baz=145,slow=12,SNR=6.4 | | | | | | |
| AB31 | | | | ⇑S | Sn | 05 49 21.4 | -8.4 |
| | comp=N,1.8nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **17.54** | **355** | P | **Pn** | **05 46 35.3** | **-1.6** |
| | baz=167,slow=8.9,SNR=2.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **18.37** | **329** | P | **Pn** | **05 46 46.8** | **-0.3** |
| | comp=N,0.2nm,0.3s,baz=140,slow=10,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.17** | **21** | P | **P** | **05 47 05.7** | **-0.8** |
| | comp=N,3.9nm,0.3s,baz=214,slow=10,SNR=24 | | | | | | |
| **SONM** | **Songino Array** | **27.61** | **53** | P | **P** | **05 48 21.0** | **+1.7** |
| | comp=N,0.5nm,0.8s,baz=265,slow=7.2,SNR=2.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.65** | **120** | P | **P** | **05 48 29.5** | **+0.9** |
| | comp=N,1.4nm,0.4s,baz=309,slow=12,SNR=3.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **42.59** | **338** | P | **P** | **05 50 28.5** | **+1.1** |
| | comp=N,2.7nm,0.8s,baz=114,slow=8.0,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.26** | **270** | P | **P** | **05 53 27.5** | **+1.2** |
| | comp=N,0.4nm,0.3s,baz=48,slow=6.0,SNR=16 | | | | | | |
| **ILAR** | **Eielson Array** | **75.24** | **16** | P | **P** | **05 54 14.4** | **+0.6** |
| | comp=N,1.2nm,1.0s,baz=302,slow=4.5,SNR=4.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.19** | **123** | P | **P** | **05 54 42.9** | **+0.9** |
| | comp=N,0.2nm,0.3s,baz=324,slow=5.1,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **82.45** | **126** | P | **P** | **05 54 55.1** | **+1.2** |
| | comp=N,0.2nm,0.3s,baz=306,slow=5.2,SNR=4.5 | | | | | | |

*DDA **19** 05:55:07.3,36°.37N×34°.88E,h7km,Md2.8*
*ISK **19** 05:55:09.5,36°.43N×34°.80E,h33km,MD2.7*
*CSEM **19** 05:55:09.2±0.3,36°.41N×34°.79E,h32km±7km,MD2.7,*
*Error ellipse: s-maj=8.4km s-min=7.1km az=173.0*
**ISC 19 05:55:07.6±1.3,36°.35N±0°.05×34°.79E±0°.04,h29km±13km,**
**n17,σ0s89/26,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KRTS** | **Karatas** | **0.52** | **64** | *e*PG | **Pn** | **05 55 19.4** | **+0.3** |
| KRTS | | | | *e*SG | **Sn** | **05 55 28.6** | **+1.6** |
| **KRTS** | **Karatas** | **0.52** | **64** | *e*Pg | **Pn** | **05 55 19.4** | **+0.3** |
| KRTS | | | | *e*Sg | **Sn** | **05 55 28.6** | **+1.6** |
| **KIZK** | **Mersin** | **0.54** | **284** | *i* P | **Pn** | **05 55 19.6** | **+0.3** |
| KIZK | | | | *i* S | **Sn** | **05 55 27.5** | **+0.1** |
| **KIZK** | **Mersin** | **0.54** | **284** | P | **Pn** | **05 55 19.6** | **+0.3** |
| KIZK | | | | S | **Sn** | **05 55 27.5** | **+0.1** |
| **GULE** | **Gulek** | **0.94** | **359** | *i* P | **Pb** | **05 55 24.9** | **-0.4** |
| GULE | | | | *i* S | **Sb** | **05 55 37.8** | **+0.3** |
| **GULE** | **Gulek** | **0.94** | **359** | P | **Pb** | **05 55 24.9** | **-0.4** |
| GULE | | | | S | **Sb** | **05 55 37.8** | **+0.3** |
| **KARA** | **Karaisali** | **0.94** | **13** | *e*PG | **Pb** | **05 55 25.0** | **-0.3** |
| KARA | | | | *e*SG | **Sb** | **05 55 37.6** | **+0.3** |
| **KARA** | **Karaisali** | **0.94** | **13** | *e*Pg | **Pb** | **05 55 25.0** | **-0.3** |
| KARA | | | | *e*Sg | **Sb** | **05 55 37.6** | **+0.3** |
| **EREN** | **Erenkoy** | **0.96** | **212** | *e*PG | Pn | 05 55 28.4 | +3.3 |
| **EREN** | **Erenkoy** | **0.96** | **212** | *e*Pg | Pn | 05 55 28.4 | +3.3 |
| **CEYT** | **Ceyhan** | **1.01** | **49** | *e*PG | **Pb** | **05 55 27.3** | **+0.8** |
| **CEYT** | **Ceyhan** | **1.01** | **49** | *e*Pg | **Pb** | **05 55 27.3** | **+0.8** |
| **YAYL** | **Yayladag** | **1.11** | **106** | *i* P | **Pb** | **05 55 28.0** | **-0.2** |
| YAYL | | | | *i* S | **Sb** | **05 55 41.7** | **-0.7** |
| **YAYL** | **Yayladag** | **1.11** | **106** | P | **Pb** | **05 55 28.0** | **-0.2** |
| YAYL | | | | S | **Sb** | **05 55 41.7** | **-0.7** |
| **TAHT** | **Tahtakopru-Hat** | **1.13** | **88** | *e*PN | **Pb** | **05 55 29.3** | **+0.9** |
| **TAHT** | **Tahtakopru-Hat** | **1.13** | **88** | *e*Pn | **Pb** | **05 55 29.3** | **+0.9** |
| **AYKD** | **Aykdinkavak** | **1.94** | **56** | P | Pn | **05 55 36.7** | **-1.9** |
| AYKD | | | | S | **Sn** | **05 56 00.0** | **-2.0** |

*ISCJB **19** 06:20:30.9±0.6,72°.85N±0°.04×5°.7E±0°.2,h10km,mb3.5/5,*
*MS3.5/11,Error ellipse: s-maj=8.0km s-min=5.8km*
*az=162.6*
*IDC **19** 06:20:30.5±1.2,72°.74N×4°.60E,h0km,mb3.6/5,*
*mb1 3.8/10,mb1mx3.6/38,mbtmp3.7/10,ML3.5/5,MS3.5/16,*
*Ms1 3.5/16,ms1mx3.3/33,Error ellipse: s-maj=27.0km*
*s-min=16.8km az=73.0*
*CSEM **19** 06:20:33.2±0.4,72°.86N×5°.43E,h12km,ML2.7,Error*
*ellipse: s-maj=12.9km s-min=6.1km az=87.0*
*NAO **19** 06:20:33.2±9.5,72°.78N×4°.99E,h20km±91km,ML3.5*
*BER **19** 06:20:35.3±3.7,72°.89N×4°.84E,h23km±38km,MD2.6,*
*ML2.7,ML3.5(NAO)*
**ISC 19 06:20:31.6±0.8,72°.82N±0°.05×5°.18E±0°.08,h10km,n60,**
**σ1s80/55,mb3.6/5,MS3.5/11,Norwegian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JMIC** | **Jan Mayen** | **4.64** | **253** | LR | LR | 06 23 05.6 | |
| | comp=Z,302nm,19.6s,baz=258,slow=35 | | | | | | |
| **HSPB** | **Hornsund (broa** | **4.99** | **28** | Pn | **Pn** | **06 21 45.4** | **-1.0** |
| **HSPB** | **Hornsund (broa** | **4.99** | **28** | Pn | **Pn** | **06 21 45.4** | **-1.0** |
| | SNR=55 | | | | | | |
| **HSP** | **Hornsund** | **5.00** | **28** | Pn | Pn | 06 21 45.4 | -1.1 |
| **LOF** | **Lofoten** | **5.48** | **145** | *eP* | Pn | 06 21 55.9 | +2.8 |
| LOF | | | | *eS* | **Sn** | **06 22 51.1** | **-4.9** |
| LOF | | | | IAML | | 06 22 59.6 | |
| | comp=Z,17nm,0.4s | | | | | | |
| **LOF** | **Lofoten** | **5.48** | **145** | *eP* | Pn | 06 21 55.9 | +2.8 |
| | SNR=53 | | | | | | |
| **STEI** | **Steigen** | **5.96** | **140** | *eP* | **Pn** | **06 22 01.7** | **+2.0** |
| STEI | | | | *eS* | **Sn** | **06 23 05.4** | **-2.5** |
| STEI | | | | IAML | | 06 23 09.4 | |
| | comp=Z,13nm,0.5s | | | | | | |
| **STEI** | **Steigen** | **5.96** | **140** | *eP* | **Pn** | **06 22 01.7** | **+2.0** |
| | SNR=53 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **6.06** | **22** | Pn | **Pn** | **06 22 01.9** | **+0.8** |
| | baz=228,slow=16 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **6.06** | **22** | Pn | **Pn** | **06 22 01.9** | **+0.8** |
| | baz=228,slow=16 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **6.06** | **22** | Pn | **Pn** | **06 22 01.9** | **+0.8** |
| | baz=228,slow=15,SNR=55 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **6.06** | **22** | Pn | **Pn** | **06 22 01.5** | **+0.4** |
| | baz=206,slow=17,SNR=8.9 | | | | | | |
| SPITS | | | | LR | LR | 06 23 60.0 | |
| | comp=Z,194nm,19.6s,baz=225,slow=34 | | | | | | |
| **HAMF** | **Hammerfest** | **6.20** | **102** | *eP* | **Pn** | **06 22 04.1** | **+1.0** |
| HAMF | | | | *eS* | **Sn** | **06 23 11.7** | **-2.3** |
| **HAMF** | **Hammerfest** | **6.20** | **102** | *eP* | **Pn** | **06 22 04.1** | **+1.0** |
| | SNR=51 | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=347,slow=14 | | | | | | |
| **HFS** | **Hagfors** | **13.16** | **161** | Pn | **Pn** | **06 23 38.5** | **+0.2** |
| | comp=Z,1.1nm,0.3s,baz=356,slow=13,SNR=27 | | | | | | |
| HFS | | | | Sn | Sn | 06 25 57.7 | -6.8 |
| | comp=Z,0.2nm,0.3s,baz=357,slow=23,SNR=3.3 | | | | | | |
| HFS | | | | LR | LR | 06 28 33.0 | |
| | comp=Z,203nm,18.1s,baz=338,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **13.16** | **161** | Pn | **Pn** | **06 23 39.2** | **+0.9** |
| | baz=347,slow=13,SNR=55 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.89** | **134** | Pn | **Pn** | **06 23 47.2** | **-0.9** |
| | baz=330,slow=10 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.89** | **134** | P | **Pn** | **06 23 47.2** | **-0.9** |
| | baz=330,slow=10 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.89** | **134** | P | **Pn** | **06 23 47.2** | **-0.9** |
| | baz=330,slow=10.0,SNR=51 | | | | | | |
| **FINES** | **FINESS Array B** | **13.89** | **134** | Pn | **Pn** | **06 23 48.8** | **+0.7** |
| | comp=Z,0.3nm,0.3s,baz=324,slow=9.4,SNR=6.7 | | | | | | |
| FINES | | | | Sn | Sn | 06 26 11.5 | -11 |
| | comp=Z,0.1nm,0.3s,baz=335,slow=26,SNR=2.7 | | | | | | |
| FINES | | | | LR | LR | 06 28 28.6 | |
| | comp=Z,168nm,20.2s,baz=19,slow=34 | | | | | | |
| **OBN** | **Obninsk** | **21.99** | **127** | LR | LR | 06 33 45.4 | |
| | comp=Z,172nm,19.4s,baz=272,slow=36 | | | | | | |
| **GERES** | **GERESS Array B** | **24.36** | **166** | P | **P** | **06 25 48.8** | **-0.7** |
| | comp=Z,0.8nm,0.6s,baz=357,slow=9.6,SNR=5.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **24.57** | **141** | P | **P** | **06 25 51.7** | **+0.5** |
| | comp=Z,0.7nm,0.5s,baz=348,slow=9.3,SNR=2.7 | | | | | | |
| AKASG | | | | LR | LR | 06 35 16.3 | |
| | comp=Z,234nm,19.7s,baz=345,slow=36 | | | | | | |
| **RES** | **Resolute Bay** | **24.95** | **322** | LR | LR | 06 35 54.1 | |
| | comp=Z,132nm,19.1s,baz=50,slow=37 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **26.21** | **173** | LR | LR | 06 36 28.4 | |
| | comp=Z,94nm,19.2s,baz=344,slow=37 | | | | | | |
| **ARU** | **Arti** | **26.82** | **99** | LR | LR | 06 35 52.8 | |
| | comp=Z,60nm,18.6s,baz=298,slow=34 | | | | | | |
| **KBZ** | **Khabaz** | **34.09** | **128** | LR | LR | 06 41 16.6 | |
| | comp=Z,119nm,19.3s,baz=5.5,slow=36 | | | | | | |
| **BRTR** | **Keskin Array B** | **35.97** | **141** | P | **P** | **06 27 33.9** | **+1.7** |
| | comp=Z,1.4nm,0.7s,baz=340,slow=8.2,SNR=5.5 | | | | | | |
| BRTR | | | | LR | LR | 06 43 03.6 | |
| | comp=Z,50nm,18.7s,baz=332,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **41.40** | **342** | P | **P** | **06 28 17.3** | **0.0** |
| | comp=Z,0.2nm,0.7s,baz=5.4,slow=6.7,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.33** | **84** | LR | LR | 06 49 11.2 | |
| | comp=Z,34nm,19.6s,baz=317,slow=40 | | | | | | |
| **GEYT** | **Alibeck** | **43.44** | **113** | LR | LR | 06 47 49.6 | |
| | comp=Z,83nm,18.5s,baz=325,slow=38 | | | | | | |
| **ULM** | **Lac du Bonnet** | **45.93** | **299** | LR | LR | 06 47 14.4 | |
| | comp=Z,84nm,18.4s,baz=268,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **59.68** | **184** | P | **P** | **06 30 36.5** | **+0.7** |
| | comp=Z,1.1nm,0.7s,baz=355,slow=6.9,SNR=10.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.47** | **312** | LR | LR | 06 58 35.4 | |
| | comp=Z,96nm,18.3s,baz=56,slow=37 | | | | | | |

*ISK **19** 07:04:13.7, 39˚.46N×33˚.05E, h5km, MD2.7*
*CSEM **19** 07:04:14.3±0.1, 39˚.45N×33˚.04E, h5km, MD2.7, Error ellipse: s-maj=3.3km s-min=3.1km az=129.0*
*DDA **19** 07:04:14.0, 39˚.44N×33˚.04E, h5km, Md2.8*

**ISC 19 07:04:14.4±0.9, 39˚.44N±0˚.02×33˚.04E±0˚.02, h4km±6km, n35, σ0s69/50, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFSR** | **Afˇar-Bala (A** | **0.02** | **77** | *e*PG | **Pg** | **07 04 14.8** | **-0.5** |
| **AFSR** | **Afˇar-Bala (A** | **0.02** | **77** | *e*Pg | **Pg** | **07 04 14.9** | **-0.5** |
| **BBAL** | **Bala** | **0.12** | **31** | *i* P | **Pg** | **07 04 16.7** | **-0.1** |
| BBAL | | | | *i* S | **Sg** | **07 04 18.9** | **+0.4** |
| **BBAL** | **Bala** | **0.12** | **31** | P | **Pg** | **07 04 16.7** | **-0.1** |
| BBAL | | | | S | **Sg** | **07 04 18.9** | **+0.4** |
| **LOD** | **Lodumlu** | **0.50** | **334** | *e*PG | **Pg** | **07 04 23.5** | **-0.5** |
| LOD | | | | *e*SG | **Sg** | **07 04 31.1** | **+0.7** |
| **LOD** | **Lodumlu** | **0.50** | **334** | *e*Pg | **Pg** | **07 04 23.5** | **-0.5** |
| LOD | | | | *e*Sg | **Sg** | **07 04 31.1** | **+0.7** |
| **KAMT** | **Kaman** | **0.52** | **98** | *e*PG | **Pg** | **07 04 24.5** | **0.0** |
| KAMT | | | | *e*SG | **Sg** | **07 04 31.9** | **+0.7** |
| **KAMT** | **Kaman** | **0.52** | **98** | *e*Pg | **Pg** | **07 04 24.5** | **0.0** |
| KAMT | | | | *e*Sg | **Sg** | **07 04 31.9** | **+0.7** |
| **SERE** | **Sereflikochisa** | **0.64** | **141** | *e*PG | **Pg** | **07 04 27.2** | **+0.6** |
| **SERE** | **Sereflikochisa** | **0.64** | **141** | *e*Pg | **Pg** | **07 04 27.2** | **+0.6** |
| **YAYX** | **Yaylak** | **0.78** | **130** | *e*PG | **Pg** | **07 04 29.1** | **-0.2** |
| **YAYX** | **Yaylak** | **0.78** | **130** | *e*Pg | **Pg** | **07 04 29.1** | **-0.2** |
| **CHBY** | **Cihanbeyli** | **0.87** | **188** | *e*PG | **Pg** | **07 04 31.0** | **0.0** |
| **CHBY** | **Cihanbeyli** | **0.87** | **188** | *e*Pg | **Pg** | **07 04 31.0** | **0.0** |
| **CDAG** | **Cicekdag** | **1.04** | **80** | *i* P | **Pg** | **07 04 33.9** | **-0.5** |
| CDAG | | | | *i* S | **Sb** | **07 04 48.8** | **-0.4** |
| **CDAG** | **Cicekdag** | **1.04** | **80** | P | **Pg** | **07 04 33.9** | **-0.5** |
| CDAG | | | | S | **Sb** | **07 04 48.8** | **-0.4** |
| **KIZT** | **Kizilcal** | **1.06** | **239** | *e*PG | **Pg** | **07 04 34.1** | **-0.7** |
| **KIZT** | **Kizilcal** | **1.06** | **239** | *e*Pg | **Pg** | **07 04 34.1** | **-0.7** |
| **ELDT** | **Eldivan** | **1.09** | **16** | *i* P | **Pb** | **07 04 35.9** | **0.0** |
| ELDT | | | | *i* S | **Sb** | **07 04 50.9** | **+0.4** |
| **ELDT** | **Eldivan** | **1.09** | **16** | P | **Pb** | **07 04 35.9** | **0.0** |
| ELDT | | | | S | **Sb** | **07 04 50.9** | **+0.4** |
| **KDHN** | **Kadinhani** | **1.17** | **218** | *i* P | **Pn** | **07 04 38.2** | **+0.5** |
| KDHN | | | | *i* S | **Sn** | **07 04 53.4** | **-0.7** |
| **KDHN** | **Kadinhani** | **1.17** | **218** | P | **Pn** | **07 04 38.2** | **+0.5** |
| KDHN | | | | S | **Sn** | **07 04 53.4** | **-0.7** |
| **SVRH** | **Sivrihisar-ESK** | **1.18** | **271** | *e*PN | **Pb** | **07 04 37.0** | **-0.3** |
| **SVRH** | **Sivrihisar-ESK** | **1.18** | **271** | *e*Pn | **Pb** | **07 04 37.1** | **-0.3** |
| **AUMIH** | **MIHALICIK** | **1.28** | **290** | P | **Pb** | **07 04 39.2** | **+0.1** |
| AUMIH | | | | S | **Sb** | **07 04 55.8** | **-0.2** |
| **CORM** | **Corum** | **1.43** | **58** | *e*PN | **Pn** | **07 04 40.8** | **-0.4** |
| **CORM** | **Corum** | **1.43** | **58** | *e*Pn | **Pn** | **07 04 40.8** | **-0.4** |
| **GULA** | **Gulagac** | **1.44** | **139** | *e*PN | **Pn** | **07 04 41.1** | **-0.2** |
| **GULA** | **Gulagac** | **1.44** | **139** | *e*Pn | **Pn** | **07 04 41.1** | **-0.2** |
| **BCAM** | **Yenicaga** | **1.56** | **332** | *i* P | **Pn** | **07 04 42.4** | **-0.7** |
| BCAM | | | | *i* S | **Sg** | **07 05 07.2** | **+2.5** |
| **BCAM** | **Yenicaga** | **1.56** | **332** | P | **Pn** | **07 04 42.4** | **-0.7** |
| BCAM | | | | S | **Sg** | **07 05 07.2** | **+2.5** |
| **KONT** | **Konya--Tatoy** | **1.59** | **200** | *e*PN | **Pb** | **07 04 44.0** | **-0.3** |
| **KONT** | **Konya--Tatoy** | **1.59** | **200** | *e*Pn | **Pb** | **07 04 44.0** | **-0.3** |
| **YOZ** | **Yozgat** | **1.77** | **83** | *e*PN | **Pn** | **07 04 46.0** | **+0.1** |
| **YOZ** | **Yozgat** | **1.77** | **83** | *e*Pn | **Pn** | **07 04 46.1** | **+0.1** |

**WEL 19 07:12:06.8±0.4, 46˚.44S×166˚.05E, h12km, ML3.5/10, 2C-1D, Error ellipse: s-maj=3.8km s-min=1.3km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **0.52** | **58** | ⇓P* | Pg | 07 12 16.8 | -0.2 |
| PYZ | | | | S* | Sg | 07 12 24.4 | +0.6 |
| **DCZ** | **Deep Cove** | **1.23** | **39** | P* | Pn | 07 12 25.7 | -4.1 |
| DCZ | | | | AML | AML | 07 12 42.6 | |
| DCZ | | | | AML | AML | 07 12 54.9 | |
| DCZ | | | | AML | AML | 07 12 56.7 | |
| DCZ | | | | AML | AML | 07 12 56.7 | |
| **APZ** | **The Paps** | **1.39** | **107** | ⇑PN | Pn | 07 12 31.3 | -0.9 |
| APZ | | | | SN | Sn | 07 12 49.8 | -0.7 |
| APZ | | | | AML | AML | 07 12 53.6 | |
| **WHZ** | **Wether Hill Ro** | **1.43** | **68** | ⇑PN | Pn | 07 12 31.2 | -1.4 |
| WHZ | | | | SN | Sn | 07 12 49.9 | -1.4 |
| WHZ | | | | AML | AML | 07 12 52.8 | |
| **MLZ** | **Mavora Lakes** | **1.84** | **54** | PN | Pn | 07 12 37.0 | -1.3 |
| MLZ | | | | AML | AML | 07 13 09.4 | |
| MLZ | | | | AML | AML | 07 13 09.8 | |
| **SYZ** | **Scrubby Hill** | **2.14** | **94** | PN | Pn | 07 12 41.7 | -0.5 |
| SYZ | | | | AML | AML | 07 13 11.0 | |
| SYZ | | | | AML | AML | 07 13 16.6 | |
| **MSZ** | **Milford Sound** | **2.21** | **37** | AML | AML | 07 13 19.7 | |
| MSZ | | | | AML | AML | 07 13 22.4 | |
| **TUZ** | **Tuapeka** | **2.54** | **80** | PN | Pn | 07 12 46.8 | -0.9 |
| TUZ | | | | AML | AML | 07 13 17.9 | |
| TUZ | | | | AML | AML | 07 13 21.2 | |
| **EAZ** | **Earnscleugh** | **2.58** | **63** | PN | Pn | 07 12 47.6 | -0.8 |
| EAZ | | | | AML | AML | 07 13 22.5 | |
| EAZ | | | | AML | AML | 07 13 34.9 | |
| **WKZ** | **Wanaka** | **2.63** | **53** | PN | Pn | 07 12 48.9 | -0.2 |
| WKZ | | | | AML | AML | 07 13 27.5 | |
| **ODZ** | **Otahua Downs** | **3.51** | **68** | PN | Pn | 07 12 58.7 | -2.4 |
| ODZ | | | | AML | AML | 07 15 30.1 | |

*JMA **19** 07:19:09.2, 22˚.54N×121˚.10E, h14km±3km, M3.8*
*ISCJB **19** 07:19:11.1±0.5, 22˚.53N±0˚.02×121˚.17E±0˚.02, h12km±3km, Error ellipse: s-maj=3.9km s-min=3.3km az=151.7*
*TAP **19** 07:19:11.7, 22.62N×121.02E, h8km, ML4.1, B*

**ISC 19 07:19:10.9±0.9, 22˚.56N±0˚.02×121˚.11E±0˚.02, h15km±6km, n67, σ1s03/95, 11C-5D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ECL** | **Taimali** | **0.15** | **284** | *i* P | **Pg** | **07 19 13.8** | **-1.1** |
| | baz=247 | | | | | | |
| **TTN** | **Taitung** | **0.20** | **10** | ⇓*i* P | **Pg** | **07 19 16.8** | **+1.3** |
| | baz=32 | | | | | | |
| TTN | | | | S | **Sg** | **07 19 20.9** | **+2.4** |
| | baz=32 | | | | | | |
| **TWG** | **Pinlang** | **0.26** | **352** | ⇑*i* P | **Pb** | **07 19 16.4** | **-1.0** |
| | baz=1.0 | | | | | | |
| **TAW** | **Tawu** | **0.28** | **225** | ⇓*i* P | **Pb** | **07 19 18.0** | **+0.3** |
| | baz=215 | | | | | | |
| TAW | | | | S | **Sb** | **07 19 22.1** | **-0.2** |
| | baz=215 | | | | | | |
| **EAST** | **Anshuo** | **0.30** | **234** | ⇓*i* P | **Pb** | **07 19 18.0** | **-0.1** |
| | baz=223 | | | | | | |
| **SSD** | **Sandimen** | **0.48** | **293** | ⇑*i* P | **Pg** | **07 19 19.4** | **-1.1** |
| | baz=298 | | | | | | |
| SSD | | | | S | **Sg** | **07 19 23.9** | **-3.0** |
| | baz=298 | | | | | | |
| **SCZT** | **Fangliau** | **0.49** | **248** | ⇓*i* P | **Pb** | **07 19 21.1** | **-0.2** |
| | baz=239 | | | | | | |
| SCZT | | | | *e*S | **Sg** | **07 19 26.6** | **-0.8** |
| | baz=239 | | | | | | |
| **CHKT** | **Chengkung** | **0.58** | **24** | *e*P | **Pb** | **07 19 23.3** | **+0.4** |
| | baz=12 | | | | | | |
| **SGLT** | **Jiouru** | **0.60** | **286** | P | **Pb** | **07 19 22.8** | **-0.3** |
| | baz=283 | | | | | | |
| SGLT | | | | S | **Sb** | **07 19 30.0** | **-1.4** |
| | baz=283 | | | | | | |
| **ELDTW** | **Lidau** | **0.63** | **352** | ⇑*i* P | **Pg** | **07 19 22.9** | **-0.5** |
| | baz=358 | | | | | | |
| **HEN** | **Hengchun** | **0.65** | **212** | *e*P | **Pn** | **07 19 25.4** | **-0.3** |
| | baz=205 | | | | | | |
| **LAY** | **Lan-yu** | **0.66** | **142** | *e*P | **Pn** | **07 19 25.8** | **0.0** |
| | baz=141 | | | | | | |
| **TWK1** | **Hengchun** | **0.68** | **205** | *e*P | **Pn** | **07 19 26.0** | **0.0** |
| | baz=186 | | | | | | |
| TWK1 | | | | *e*S | **Sn** | **07 19 38.3** | **+2.0** |
| | baz=186 | | | | | | |
| **STYT** | **Tauyuan** | **0.68** | **332** | ⇑*i* P | **Pg** | **07 19 23.8** | **-0.6** |
| | baz=335 | | | | | | |
| STYT | | | | S | **Sg** | **07 19 30.8** | **-2.6** |
| | baz=335 | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **0.69** | **197** | *e*P | **Pn** | **07 19 26.8** | **+0.7** |
| | baz=179 | | | | | | |
| **TWM1** | **Shoushan** | **0.69** | **292** | ⇑*i* P | **Pb** | **07 19 24.9** | **+0.2** |
| | baz=291 | | | | | | |
| TWM1 | | | | S | **Sb** | **07 19 33.8** | **-0.3** |
| | baz=291 | | | | | | |
| **SGST** | **Jiashian** | **0.71** | **317** | ⇑*i* P | **Pb** | **07 19 24.4** | **-0.7** |
| | baz=327 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **0.72** | **253** | *e*P | **Pn** | **07 19 28.2** | **+1.5** |
| | baz=239 | | | | | | |
| **KAU** | **Kaohsiung** | **0.74** | **271** | *e*P | **Pn** | **07 19 27.5** | **+0.6** |
| | baz=274 | | | | | | |
| **TWF1** | **Yuli** | **0.81** | **12** | ⇓*e*P | **Pg** | **07 19 25.4** | **-1.2** |
| | baz=13 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **07 19 37.6** | **+0.2** |
| | baz=13 | | | | | | |
| **CHN1** | **Nanshi** | **0.82** | **319** | *e*P | **Pb** | **07 19 26.9** | **0.0** |
| | baz=328 | | | | | | |
| **WTP** | **Ta-pu** | **0.82** | **326** | ⇑*i* P | **Pb** | **07 19 26.9** | **-0.1** |
| | baz=341 | | | | | | |
| **CHN3** | **Shinhua** | **0.86** | **307** | *e*P | **Pn** | **07 19 29.1** | **+0.6** |
| | baz=309 | | | | | | |
| **TWK** | **Hsinying** | **0.91** | **321** | *e*P | **Pn** | **07 19 28.8** | **-0.5** |
| | baz=326 | | | | | | |
| TWK | | | | *e*S | **Sn** | **07 19 41.4** | **-0.8** |
| | baz=326 | | | | | | |
| **YUS** | **Yu-Shan** | **0.94** | **351** | ⇑*i* P | **Pb** | **07 19 28.7** | **-0.5** |
| | baz=354 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.94** | **301** | *e*P | **Pn** | **07 19 30.5** | **+0.8** |
| | baz=303 | | | | | | |
| **EHY** | **Hungye** | **0.96** | **12** | *e*P | **Pg** | **07 19 27.9** | **-1.7** |
| | baz=11 | | | | | | |
| EHY | | | | *e*S | **Sg** | **07 19 41.0** | **-1.1** |
| | baz=11 | | | | | | |
| **ALS** | **Alishan** | **0.99** | **343** | *e*P | **Pb** | **07 19 29.6** | **-0.3** |
| | baz=355 | | | | | | |
| **SCLT** | **Jiali** | **1.04** | **306** | *e*P | **Pn** | **07 19 30.9** | **-0.2** |
| | baz=306 | | | | | | |
| SCLT | | | | *e*S | **Sn** | **07 19 46.9** | **+1.5** |
| | baz=306 | | | | | | |
| **CHN5** | **Tsauling** | **1.11** | **339** | *e*P | **Pn** | **07 19 32.2** | **+0.2** |
| | baz=348 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **07 19 47.7** | **+0.6** |
| | baz=348 | | | | | | |
| **CHY** | **Chiayi** | **1.13** | **326** | ⇑P | **Pn** | **07 19 33.0** | **+0.7** |
| | baz=337 | | | | | | |
| CHY | | | | *e*S | **Sn** | **07 19 48.5** | **+1.0** |
| | baz=337 | | | | | | |
| **CHN2** | **Minshiung** | **1.13** | **329** | *e*P | **Pn** | **07 19 33.0** | **+0.7** |
| | baz=340 | | | | | | |
| CHN2 | | | | *e*S | **Sn** | **07 19 49.8** | **+2.2** |
| | baz=340 | | | | | | |
| **CHN8** | **Yiju** | **1.14** | **313** | *e*P | **Pn** | **07 19 32.4** | **0.0** |
| | baz=331 | | | | | | |
| **WDT** | **Danda** | **1.19** | **1** | *e*P | **Pb** | **07 19 32.8** | **-0.7** |
| | baz=360 | | | | | | |
| WDT | | | | *e*S | **Sg** | **07 19 49.0** | **-0.5** |
| | baz=360 | | | | | | |
| **WGK** | **Gukeng** | **1.23** | **336** | ⇑*i* P | **Pg** | **07 19 35.1** | **+0.4** |
| | baz=337 | | | | | | |
| WGK | | | | *e*S | **Sn** | **07 19 53.3** | **+3.3** |
| | baz=337 | | | | | | |
| **ESL** | **Shilin** | **1.28** | **13** | *e*P | **Pn** | **07 19 34.3** | **-0.1** |
| | baz=24 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.33** | **352** | *e*P | **Pg** | **07 19 35.9** | **-0.7** |
| | baz=352 | | | | | | |
| SMLT | | | | *e*S | **Sg** | **07 19 55.5** | **+1.5** |
| | baz=352 | | | | | | |
| **WSF** | **Szhu** | **1.35** | **323** | *e*P | **Pg** | **07 19 36.2** | **-0.8** |
| | baz=323 | | | | | | |
| WSF | | | | *e*S | **Sg** | **07 19 54.4** | **-0.1** |
| | baz=323 | | | | | | |
| **TYC** | **Yuchr** | **1.36** | **350** | ⇑P | **Pg** | **07 19 36.7** | **-0.4** |
| TYC | | | | *e*S | **Sg** | **07 19 55.6** | **+0.8** |
| **WNT** | **Mingjian** | **1.37** | **343** | *e*P | **Pg** | **07 19 37.3** | **0.0** |
| | baz=331 | | | | | | |
| WNT | | | | *e*S | **Sg** | **07 19 56.0** | **+0.8** |
| | baz=331 | | | | | | |
| **HWA** | **Hwalien** | **1.48** | **18** | *e*P | **Pg** | **07 19 39.2** | **-0.3** |
| | baz=13 | | | | | | |
| **WDGT** | **Dungji** | **1.51** | **298** | *e*P | **Pn** | **07 19 37.2** | **-0.2** |
| | baz=300 | | | | | | |
| **TWD** | **Chiawan** | **1.58** | **16** | *e*P | **Pn** | **07 19 38.1** | **-0.3** |
| | baz=27 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.58** | **5** | *e*P | **Pn** | **07 19 38.9** | **0.0** |
| | baz=8.0 | | | | | | |
| WHF | | | | *e*S | **Sg** | **07 20 02.6** | **+0.5** |
| | baz=8.0 | | | | | | |
| **TCU** | **Taichung** | **1.63** | **346** | *e*P | **Pg** | **07 19 41.3** | **-1.0** |
| | baz=350 | | | | | | |
| **TWT** | **Tachien** | **1.69** | **2** | *e*P | **Pb** | **07 19 41.8** | **-0.1** |
| | baz=5.0 | | | | | | |
| **PNG** | **Penghu** | **1.75** | **305** | *e*P | **Pn** | **07 19 40.6** | **-0.1** |
| | baz=310 | | | | | | |
| **TWQ1** | **Liyutan** | **1.81** | **350** | *e*P | **Pb** | **07 19 44.0** | **+0.3** |
| | baz=350 | | | | | | |
| TWQ1 | | | | *e*S | **Sg** | **07 20 08.3** | **-0.8** |
| | baz=350 | | | | | | |
| **NSY** | **Sanyi** | **1.88** | **350** | *e*P | **Pb** | **07 19 44.9** | **-0.1** |
| | baz=353 | | | | | | |
| **NNS** | **Nan Shan** | **1.89** | **7** | *e*P | **Pg** | **07 19 46.2** | **-1.0** |
| | baz=1.0 | | | | | | |
| NNS | | | | *e*S | **Sg** | **07 20 12.1** | **+0.3** |
| | baz=1.0 | | | | | | |
| **ENA** | **Nanau** | **1.95** | **17** | *e*P | **Pb** | **07 19 45.0** | **-1.2** |
| | baz=24 | | | | | | |
| **NSTT** | **Nanjuang** | **2.06** | **357** | *e*P | **Pb** | **07 19 48.6** | **+0.5** |
| | baz=355 | | | | | | |
| NSTT | | | | *e*S | **Sg** | **07 20 16.1** | **-1.3** |
| | baz=355 | | | | | | |
| **ENTT** | **Nioudou** | **2.11** | **11** | *e*P | **Pb** | **07 19 48.9** | **-0.1** |
| | baz=16 | | | | | | |
| **NSK** | **Sanguang** | **2.12** | **6** | *e*P | **Pn** | **07 19 47.1** | **+1.2** |
| | baz=2.0 | | | | | | |
| **TWC** | **Suao** | **2.15** | **18** | *e*P | **Pb** | **07 19 48.6** | **-1.0** |
| | baz=23 | | | | | | |
| **TWE** | **Neicheng** | **2.21** | **13** | *e*P | **Pb** | **07 19 49.9** | **-0.7** |
| | baz=17 | | | | | | |
| **EGS** | | **2.40** | **18** | *e*P | **Pb** | **07 19 52.7** | **-1.1** |
| | baz=21 | | | | | | |
| **TWA** | **Mucha** | **2.45** | **10** | *e*P | **Pb** | **07 19 55.0** | **+0.3** |
| | baz=20 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **2.52** | **41** | *e*S | **Sn** | **07 20 22.5** | **+0.5** |
| **NWF** | **Wu-fen Shan** | **2.57** | **14** | *e*P | **Pn** | **07 19 52.8** | **+0.6** |
| | baz=15 | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.57** | **42** | P | **Pn** | **07 19 51.4** | **-0.7** |
| **HATJ** | **Hateruma jima** | **2.89** | **58** | P | **Pn** | **07 19 55.6** | **-0.9** |
| HATJ | | | | *e*S | **Sn** | **07 20 30.3** | **-0.7** |
| **IRIF** | **Iriomote-Funau** | **2.98** | **53** | P | **Pn** | **07 19 58.7** | **+0.9** |
| **KNM** | **Kinmen** | **3.08** | **307** | *e*P | **Pn** | **07 20 01.8** | **+2.7** |
| | baz=310 | | | | | | |
| **JKRS** | **Kuro-shima** | **3.14** | **57** | P | **Pn** | **07 20 01.0** | **+1.1** |
| JKRS | | | | *e*S | **Sn** | **07 20 38.2** | **+1.0** |
| **JISG** | **Ishigakijimahi** | **3.56** | **55** | P | **Pn** | **07 20 06.1** | **+0.4** |
| JISG | | | | *e*S | **Sn** | **07 20 48.3** | **+0.7** |
| **JTJ** | **Tarama** | **3.89** | **57** | *e*S | **Sn** | **07 20 56.4** | **+0.7** |

*ISCJB **19** 07:33:55.9±0.5, 23˚.50S±0˚.06×115˚.0W±0˚.1, h10km, mb4.5/37, MS4.1/11, Error ellipse: s-maj=15.6km s-min=8.1km az=163.1*
*IDC **19** 07:33:56.0±1.2, 23˚.54S×115˚.23W, h0km, mb4.3/6, mb1 4.5/6, mb1mx4.1/24, mbtmp4.3/6, MS4.0/12, Ms1 4.0/12, ms1mx4.0/20, Error ellipse: s-maj=44.2km s-min=21.1km az=36.0*
*NEIC **19** 07:33:57.6±0.4, 23˚.55S×115˚.19W, h10km, mb4.8/30, Error ellipse: s-maj=13.8km s-min=8.3km az=62.0*
*GCMT **19** 07:33:57.6±0.3, 23˚.57S×115˚.23W, h25km±1km, MW5.0/81, Moment Tensor Solution. s34,c39; s81,c114; Duration: 0 Moment tensor: Scale 10^16 Nm; Mw 0.12±.14; Mθθ -2.61±.13; Mϕϕ 2.49±.12; Mrθ -0.37±.25; Mϕϕ 2.50±.10; Mθϕ 0.30±.26; Best double couple: M0 3.60200×10^16 NP1: ϕs 157.00000°, δ87.00000°, λ -173.00000°. NP2: ϕs 67.00000°, δ83.00000°, λ -3.00000°. Principal axes: T 3.5170, Plg 2.0000°, Azm 292.0000°; N 0.1730, Plg 83.0000°, Azm 183.0000°; P -3.6860, Plg 7.0000°, Azm 22.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 19 07:33:57.2±0.7, 23˚.6S±0.1×115˚.3W±0˚.2, h10km, n354, σ0s62/335, mb4.7/37, MS4.0/11, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RPN** | **Rapa Nui** | **6.38** | **124** | LR | LR | 07 37 22.3 | |
| | comp=Z,2μm,18.7s,baz=310,slow=32 | | | | | | |
| **RKT** | **Rikitea** | **18.11** | **268** | *e*LQ | LQ | 07 41 26.5 | |
| | 2μm,27.0s | | | | | | |
| RKT | | | | *e*LR | LR | 07 42 16.7 | |
| | 1μm,26.5s | | | | | | |
| **RKT** | **Rikitea** | **18.11** | **268** | *e*T | T | 07 56 21.5 | |
| | 2.6nm,0.3s | | | | | | |
| **TBI** | **Tubuai** | **31.33** | **264** | *e*LQ | LQ | 07 47 03.3 | |
| | 233nm,28.2s | | | | | | |
| TBI | | | | *e*LR | LR | 07 48 21.3 | |
| | 512nm,25.0s | | | | | | |
| **TBI** | **Tubuai** | **31.33** | **264** | *e*T | T | 08 12 55.7 | |
| | 3.1nm,0.3s | | | | | | |
| **TIAR** | **Tiarei** | **32.43** | **274** | *e*T | T | 08 14 06.7 | |
| | 4.2nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **32.63** | **274** | *e*S | S | 07 45 37.0 | -8.7 |
| | 84nm,25.8s | | | | | | |
| PPT2 | | | | *e*LQ | LQ | 07 47 31.3 | |
| | 465nm,24.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 07 48 49.5 | |
| | 540nm,25.2s,baz=98 | | | | | | |
| **PPT** | **Papeete** | **32.63** | **274** | LR | LR | 07 49 58.5 | |
| | comp=Z,289nm,18.6s,baz=120,slow=30 | | | | | | |
| **CFAA** | **Coronel Fontan** | **42.15** | **112** | P | **P** | **07 41 50.7** | **+0.6** |
| | 0.4nm,0.9s,baz=269,slow=7.1,SNR=5.1 | | | | | | |
| **LVC** | **Limon Verde** | **42.49** | **98** | P | **P** | **07 41 54.1** | **+0.8** |
| | 0.3nm,0.9s,baz=273,slow=11,SNR=3.6 | | | | | | |
| **OTAV** | **Otavalo** | **42.89** | **62** | *e*P | **P** | **07 41 58.5** | **+1.7** |
| | 12nm,1.4s | | | | | | |
| **LPAZ** | **La Paz** | **44.73** | **90** | P | **P** | **07 42 11.9** | **+0.1** |
| | 5.1nm,1.1s,baz=281,slow=8.3,SNR=8.6 | | | | | | |
| LPAZ | | | | LR | LR | 07 56 17.2 | |
| | comp=Z,318nm,20.9s,baz=248,slow=30 | | | | | | |
| **ROSC** | **El Rosal** | **48.93** | **60** | LR | LR | 07 59 23.5 | |
| | comp=Z,99nm,18.3s,baz=184,slow=31 | | | | | | |
| **SAML** | **Samuel** | **51.79** | **83** | *e*P | **P** | **07 43 02.9** | **-2.8** |
| | 26nm,2.0s | | | | | | |
| **CPUP** | **Villa Florida** | **52.20** | **106** | P | **P** | **07 43 08.5** | **0.0** |
| | 1.4nm,0.8s,baz=267,slow=9.4,SNR=4.2 | | | | | | |
| CPUP | | | | LR | LR | 08 00 42.2 | |
| | comp=Z,327nm,21.6s,baz=213,slow=31 | | | | | | |
| **034A** | **Hebbronville** | **52.89** | **19** | P | **P** | **07 43 14.0** | **+0.5** |
| | baz=53 | | | | | | |
| **035A** | **Encino** | **52.94** | **19** | P | **P** | **07 43 14.4** | **+0.6** |
| | baz=53 | | | | | | |
| **933A** | **Laredo** | **53.23** | **18** | P | **P** | **07 43 16.9** | **+0.9** |
| | baz=53 | | | | | | |
| **832A** | **Faith Ranch, C** | **53.68** | **17** | P | **P** | **07 43 18.7** | **-0.6** |
| | baz=54,SNR=5.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.83** | **13** | P | **P** | **07 43 20.3** | **-0.2** |
| | 1.3nm,0.9s,baz=194,slow=9.7,SNR=10 | | | | | | |
| TXAR | | | | LR | LR | 08 01 20.0 | |
| | comp=Z,114nm,21.9s,baz=0.0,slow=31 | | | | | | |
| **833A** | **Chaparral WMA,** | **53.87** | **17** | P | **P** | **07 43 20.4** | **-0.3** |
| | baz=54 | | | | | | |
| **834A** | **Tilden** | **53.92** | **18** | P | **P** | **07 43 21.4** | **+0.3** |
| | baz=54 | | | | | | |
| **732A** | **Laxson Ranch,** | **54.10** | **17** | P | **P** | **07 43 22.5** | **+0.1** |
| | baz=54 | | | | | | |
| **733A** | **Divot King Ran** | **54.28** | **17** | P | **P** | **07 43 23.8** | **+0.2** |
| | baz=54 | | | | | | |
| **631A** | **Perdido Creek** | **54.60** | **16** | P | **P** | **07 43 25.4** | **-0.6** |
| | baz=55 | | | | | | |
| **735A** | **Kenedy** | **54.83** | **19** | P | **P** | **07 43 27.1** | **-0.5** |
| | baz=55 | | | | | | |
| **632A** | **Uvalde** | **54.89** | **17** | P | **P** | **07 43 27.5** | **-0.6** |
| | baz=55 | | | | | | |
| **529A** | **Stev Forest Ra** | **54.90** | **14** | P | **P** | **07 43 27.9** | **-0.3** |
| | baz=55,SNR=8.0 | | | | | | |
| **633A** | **Saathoff Ranch** | **55.01** | **17** | P | **P** | **07 43 28.8** | **-0.1** |
| | baz=55 | | | | | | |
| **530

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 333A | Richland Sprin<br>baz=57,SNR=6.6 | 56.83 | 17 | P | P | 07 43 41.2 | -0.8 |
| BC3 | Big Chuckawall<br>baz=57 | 56.97 | 360 | P | P | 07 43 43.7 | +0.7 |
| 334A | Lometa<br>baz=57,SNR=6.3 | 57.04 | 17 | P | P | 07 43 42.8 | -0.6 |
| Y12C | Blythe<br>baz=57 | 57.07 | 1 | P | P | 07 43 44.4 | +0.8 |
| 231A | Bronte<br>baz=57 | 57.08 | 15 | P | P | 07 43 43.0 | -0.7 |
| 232A | Coleman<br>baz=57 | 57.20 | 16 | P | P | 07 43 43.9 | -0.6 |
| 128A | Castleberry Fa<br>baz=58 | 57.26 | 13 | P | P | 07 43 44.8 | -0.2 |
| BELC | Belle Mtn. Jos<br>baz=58,SNR=8.0 | 57.32 | 359 | P | P | 07 43 45.8 | +0.2 |
| 129A | Stewart Farms,<br>baz=58 | 57.39 | 13 | P | P | 07 43 45.9 | -0.1 |
| BSC | Santa Cruz Isl<br>baz=58 | 57.46 | 356 | P | P | 07 43 48.0 | +1.6 |
| IRM | Iron Mountain<br>baz=58 | 57.48 | 0 | P | P | 07 43 47.2 | +0.7 |
| 233A | Rising Star<br>baz=58,SNR=6.7 | 57.51 | 16 | P | P | 07 43 45.8 | -1.0 |
| 130A | Snyder<br>baz=58,SNR=6.0 | 57.56 | 14 | P | P | 07 43 46.6 | -0.6 |
| 439A | Center Grove,<br>baz=58 | 57.58 | 21 | P | P | 07 43 46.8 | -0.5 |
| BFSC | Mount Baldy Ra<br>baz=58,SNR=5.0 | 57.60 | 358 | P | P | 07 43 47.2 | -0.3 |
| PDMCI | Parker Dam,Lak<br>baz=58 | 57.63 | 1 | P | P | 07 43 48.0 | +0.5 |
| 131A | Roby<br>baz=58 | 57.77 | 15 | P | P | 07 43 48.0 | -0.7 |
| 440A | Kirbyville<br>baz=58 | 57.80 | 22 | P | P | 07 43 48.6 | -0.2 |
| WHTX | Lake Whitney<br>baz=58 | 57.88 | 18 | P | P | 07 43 48.8 | -0.5 |
| ABTX | Abilene, Hawle<br>baz=58 | 57.90 | 16 | P | P | 07 43 48.9 | -0.7 |
| Z28A | Tucker Farm, M<br>baz=58 | 57.92 | 13 | P | P | 07 43 49.1 | -0.7 |
| Z29A | Hungry Hill Ra<br>baz=58 | 58.03 | 13 | P | P | 07 43 49.9 | -0.7 |
| 133A | Hamilton Ranch<br>baz=58 | 58.06 | 16 | P | P | 07 43 50.0 | -0.7 |
| GMRC | Granite Mounta<br>baz=58 | 58.10 | 360 | P | P | 07 43 51.1 | +0.1 |
| HEC | Hector,Ludlow<br>baz=58 | 58.15 | 359 | P | P | 07 43 51.6 | +0.2 |
| Z30A | Sanderson Ranc<br>baz=58 | 58.19 | 14 | P | P | 07 43 50.8 | -0.8 |
| LAZ | Ladron<br>7.7nm,1.4s | 58.23 | 8 | eP | P | 07 43 52.1 | +0.1 |
| 134A | White-Moore Ra<br>baz=58 | 58.25 | 17 | P | P | 07 43 51.5 | -0.4 |
| EDW2 | Edwards Air Fo<br>baz=58 | 58.25 | 357 | P | P | 07 43 52.2 | +0.2 |
| PKM | Peak Mountain<br>baz=59 | 58.37 | 356 | P | P | 07 43 53.9 | +0.9 |
| Z31A | Sharp Cattle R<br>baz=59,SNR=6.1 | 58.44 | 15 | P | P | 07 43 52.6 | -0.7 |
| MSTX | Muleshoe<br>baz=59 | 58.51 | 12 | P | P | 07 43 53.2 | -0.7 |
| MSTX | Muleshoe<br>9.0nm,1.1s | 58.51 | 12 | eP | P | 07 43 52.6 | -1.3 |
| Y28A | McKinney Farm,<br>baz=59 | 58.55 | 13 | P | P | 07 43 53.6 | -0.6 |
| Z32A | Haskell<br>baz=59,SNR=14 | 58.59 | 15 | P | P | 07 43 53.9 | -0.4 |
| 136A | Ennis<br>baz=59 | 58.59 | 19 | P | P | 07 43 53.8 | -0.5 |
| Y29A | Porterfield Fa<br>baz=59 | 58.62 | 13 | P | P | 07 43 54.1 | -0.6 |
| GSC | Goldstone<br>baz=59 | 58.63 | 359 | P | P | 07 43 55.6 | +0.9 |
| Z33A | Whitaker Ranch<br>baz=59 | 58.75 | 16 | P | P | 07 43 55.0 | -0.4 |
| ANMO | Albuquerque<br>5.3nm,1.5s | 58.86 | 8 | eP | P | 07 43 56.1 | -0.2 |
| WUAZ | Wupatki<br>baz=59 | 58.95 | 4 | P | P | 07 43 57.3 | +0.3 |
| Y31A | Rekieta Farm,<br>baz=59 | 59.03 | 15 | P | P | 07 43 56.7 | -0.7 |
| ISA | Isabella<br>baz=59 | 59.05 | 357 | P | P | 07 43 58.5 | +0.9 |
| ISA | Isabella<br>5.7nm,1.1s | 59.05 | 357 | eP | P | 07 43 58.5 | +0.9 |
| X28A | Dimmitt<br>baz=59 | 59.15 | 13 | P | P | 07 43 57.8 | -0.5 |
| Z35A | Perchaven, San<br>baz=59 | 59.19 | 18 | P | P | 07 43 58.2 | -0.3 |
| 138A | Matatall Enter<br>baz=59 | 59.20 | 20 | P | P | 07 43 58.2 | -0.3 |
| Y32A | R-V Farms, Ver<br>baz=60 | 59.26 | 15 | P | P | 07 43 58.7 | -0.3 |
| VES | Vestal, Richgr<br>baz=60,SNR=6.4 | 59.27 | 356 | P | P | 07 44 01.5 | +2.6 |
| X30A | Coker Ranch, T<br>baz=60 | 59.36 | 14 | P | P | 07 43 58.8 | -0.8 |
| Z36A | Blue Ridge<br>baz=60 | 59.37 | 18 | P | P | 07 43 59.5 | -0.2 |
| MPMC | Manual Prospec<br>baz=60,SNR=6.8 | 59.41 | 358 | P | P | 07 44 00.7 | +0.5 |
| Y33A | Hilltop Ranch,<br>baz=60 | 59.47 | 16 | P | P | 07 43 59.8 | -0.6 |
| AMTX | Amarillo<br>baz=60 | 59.61 | 13 | P | P | 07 44 00.8 | -0.6 |
| Y34A | Reagan Ranch,<br>baz=60 | 59.65 | 17 | P | P | 07 44 01.0 | -0.6 |
| X32A | Elmer<br>baz=60 | 59.70 | 15 | P | P | 07 44 01.4 | -0.6 |
| X31A | McDonald Ranch<br>baz=60 | 59.74 | 15 | P | P | 07 44 01.7 | -0.6 |
| Z38A | Mt. Pleasant<br>baz=60 | 59.78 | 20 | P | P | 07 44 02.3 | -0.2 |
| Y35A | Marietta<br>baz=60 | 59.79 | 18 | P | P | 07 44 02.3 | -0.4 |
| FURC | Furnace Creek,<br>baz=60 | 59.80 | 359 | P | P | 07 44 03.2 | +0.6 |
| CWC | Cottonwood Cre<br>baz=60 | 59.81 | 357 | P | P | 07 44 03.7 | +0.7 |
| W29A | Amraillo<br>baz=60 | 59.84 | 13 | P | P | 07 44 02.7 | -0.4 |
| WMOK | Wichita Mounta<br>8.9nm,1.5s | 60.12 | 16 | eP | P | 07 44 04.1 | -0.9 |
| V27A | Dan Oppiter Fa<br>baz=60 | 60.23 | 12 | P | P | 07 44 05.2 | -0.5 |
| X34A | Smith Ranch, M<br>baz=60 | 60.23 | 17 | P | P | 07 44 05.2 | -0.5 |
| TPNV | Topopah Spring<br>baz=60,SNR=7.2 | 60.27 | 359 | P | P | 07 44 06.7 | +0.7 |
| X35A | Drake<br>baz=60 | 60.27 | 17 | P | P | 07 44 05.7 | -0.3 |
| W31A | Holland Ranch,<br>baz=60 | 60.28 | 14 | P | P | 07 44 05.2 | -0.8 |
| GRAC | Grapevine Rang<br>baz=61 | 60.34 | 358 | P | P | 07 44 07.3 | +0.9 |
| W32A | Sentinel<br>baz=61 | 60.38 | 15 | P | P | 07 44 06.0 | -0.6 |
| X36A | Centrahoma<br>baz=61 | 60.61 | 18 | P | P | 07 44 07.6 | -0.6 |
| Y39A | Lockesburg<br>baz=61 | 60.69 | 20 | P | P | 07 44 08.3 | -0.5 |
| W34A | Bridge Creek,<br>baz=61 | 60.85 | 16 | P | P | 07 44 09.2 | -0.7 |
| MVCO | Mesa Verde<br>baz=61,SNR=6.0 | 60.85 | 6 | P | P | 07 44 10.0 | -0.1 |
| U27A | Thompson Grove<br>baz=61 | 60.88 | 11 | P | P | 07 44 09.5 | -0.7 |
| X37A | Clayton<br>baz=61 | 60.91 | 19 | P | P | 07 44 09.5 | -0.8 |
| U28A | Mallet<br>baz=61 | 60.95 | 12 | P | P | 07 44 10.0 | -0.7 |
| V32A | Arapaho<br>baz=61 | 61.00 | 15 | P | P | 07 44 10.5 | -0.4 |
| W35A | Tecumseh<br>baz=61 | 61.01 | 17 | P | P | 07 44 10.0 | -0.9 |
| X38A | Whitesboro<br>baz=61 | 61.14 | 19 | P | P | 07 44 10.9 | -0.9 |
| W36A | Wetumka<br>baz=61 | 61.18 | 18 | P | P | 07 44 11.5 | -0.5 |
| V33A | Lossen Ranch,<br>baz=62 | 61.28 | 16 | P | P | 07 44 12.6 | -0.2 |
| T25A | Trinidad<br>baz=62 | 61.31 | 10 | P | P | 07 44 13.0 | -0.2 |
| U30A | WK&E Inc. Balk<br>baz=62 | 61.41 | 13 | P | P | 07 44 13.2 | -0.6 |
| MIAR | Mount Ida<br>baz=62 | 61.42 | 20 | P | P | 07 44 13.0 | -0.7 |
| U31A | Nine Bar Ranch<br>baz=62 | 61.43 | 14 | P | P | 07 44 13.3 | -0.6 |
| T26A | Comanche Natio<br>baz=62,SNR=5.5 | 61.48 | 11 | P | P | 07 44 13.7 | -0.6 |
| T27A | Campo<br>baz=62 | 61.52 | 11 | P | P | 07 44 14.3 | -0.2 |
| CMB | Columbia Colle<br>13nm,1.5s | 61.53 | 355 | eP | P | 07 44 14.4 | -0.1 |
| S22A | 4UR Ranch, Cre<br>baz=62 | 61.57 | 8 | P | P | 07 44 14.7 | -0.3 |
| V35A | Meyer Ranch, C<br>baz=62 | 61.59 | 17 | P | P | 07 44 14.5 | -0.4 |
| U32A | Winter Ranch,<br>baz=62 | 61.64 | 15 | P | P | 07 44 14.6 | -0.5 |
| R11A | Troy Canyon, C<br>baz=62,SNR=12 | 61.66 | 360 | P | P | 07 44 15.8 | +0.3 |
| R11A | Troy Canyon, C<br>7.8nm,1.2s | 61.66 | 360 | eP | P | 07 44 16.1 | +0.6 |
| T28A | Walsh<br>baz=62 | 61.69 | 12 | P | P | 07 44 14.9 | -0.7 |
| SDCO | Great Sand Dun<br>baz=62,SNR=10 | 61.74 | 9 | P | P | 07 44 15.9 | -0.3 |
| SDCO | Great Sand Dun<br>9.2nm,1.3s | 61.74 | 9 | eP | P | 07 44 15.9 | -0.3 |
| NVAR | Mina Array Bea<br>5.2nm,0.9s,baz=181,slow=9.6,SNR=34 | 61.80 | 357 | P | P | 07 44 16.5 | 0.0 |
| NVAR | | | | LR | LR | 08 05 02.1 | |
| | comp=Z,122nm,18.6s,baz=184,slow=30 | | | | | | |
| V36A | Jenks<br>baz=62 | 61.86 | 18 | P | P | 07 44 15.9 | -0.8 |
| S26A | Kim<br>baz=62 | 61.93 | 11 | P | P | 07 44 16.8 | -0.5 |
| T31A | Randall Ranch,<br>baz=62 | 62.17 | 14 | P | P | 07 44 18.5 | -0.3 |
| V37A | Hulbert<br>baz=62 | 62.18 | 18 | P | P | 07 44 18.0 | -0.8 |
| S28A | Manter<br>baz=62 | 62.18 | 12 | P | P | 07 44 18.3 | -0.7 |
| S29A | Ulysses<br>baz=63 | 62.37 | 13 | P | P | 07 44 19.6 | -0.6 |
| U36A | Oologah<br>baz=63 | 62.49 | 18 | P | P | 07 44 20.3 | -0.6 |
| S30A | Montezuma<br>baz=63 | 62.52 | 13 | P | P | 07 44 20.6 | -0.6 |
| U37A | Salina<br>baz=63 | 62.68 | 18 | P | P | 07 44 21.4 | -0.7 |
| T34A | McClaskey Farm<br>baz=63 | 62.69 | 16 | P | P | 07 44 21.5 | -0.7 |
| R27A | Eads<br>baz=63 | 62.70 | 11 | P | P | 07 44 21.9 | -0.4 |
| S31A | Mullinville<br>baz=63 | 62.71 | 14 | P | P | 07 44 21.7 | -0.7 |
| T35A | Sooner Cattle<br>baz=63 | 62.77 | 17 | P | P | 07 44 22.3 | -0.5 |
| S32A | Newby Ranch, P<br>baz=63 | 62.91 | 14 | P | P | 07 44 23.4 | -0.3 |
| U38A | Gravette<br>baz=63 | 62.92 | 19 | P | P | 07 44 22.9 | -0.9 |
| R28A | Tribune<br>baz=63,SNR=8.8 | 62.93 | 12 | P | P | 07 44 23.2 | -0.7 |
| T36A | Boggs Farm, Ca<br>baz=63 | 63.08 | 17 | P | P | 07 44 24.2 | -0.6 |
| R29A | Marienthal<br>baz=63 | 63.14 | 12 | P | P | 07 44 24.4 | -0.8 |
| R30A | Dighton<br>baz=63 | 63.18 | 13 | P | P | 07 44 24.7 | -0.8 |
| R31A | Burdett<br>baz=64 | 63.34 | 14 | P | P | 07 44 25.7 | -0.8 |
| BDFB | Brasilia<br>2.3nm,0.6s,baz=243,slow=6.8,SNR=2.6 | 63.34 | 96 | P | P | 07 44 27.2 | -0.1 |
| BDFB | | | | LR | LR | 08 09 45.4 | |
| | comp=Z,213nm,18.2s,baz=224,slow=34 | | | | | | |
| S34A | Willow Spring<br>baz=64 | 63.35 | 16 | P | P | 07 44 25.6 | -1.0 |
| T37A | Cheneyville 18<br>baz=64 | 63.40 | 18 | P | P | 07 44 26.2 | -0.7 |
| KSCO | Kaye Shedlock'<br>baz=64 | 63.43 | 11 | P | P | 07 44 26.9 | -0.3 |
| S35A | Otter Creek Ra<br>baz=64 | 63.54 | 17 | P | P | 07 44 27.5 | -0.4 |
| DUG | Dugway<br>baz=64 | 63.54 | 2 | P | P | 07 44 28.3 | +0.3 |
| DUG | Dugway<br>6.0nm,1.0s | 63.54 | 2 | eP | P | 07 44 27.8 | -0.2 |
| Q29A | Oakley<br>baz=64 | 63.62 | 12 | P | P | 07 44 28.1 | -0.3 |
| Q28A | Sharon Springs<br>baz=64 | 63.62 | 12 | P | P | 07 44 27.9 | -0.6 |
| R32A | Long Quarter,<br>baz=64 | 63.65 | 14 | P | P | 07 44 27.8 | -0.9 |
| R33A | Olander Ranch,<br>baz=64 | 63.72 | 15 | P | P | 07 44 28.3 | -0.7 |
| ISCO | Idaho Springs<br>baz=64,SNR=5.3 | 63.75 | 8 | P | P | 07 44 29.2 | -0.4 |
| S36A | Lake Cedric, C<br>baz=64 | 63.77 | 17 | P | P | 07 44 28.9 | -0.5 |
| CBKS | Cedar Bluff<br>baz=64 | 63.80 | 13 | P | P | 07 44 29.3 | -0.3 |
| Q30A | Quinter<br>baz=64 | 63.86 | 13 | P | P | 07 44 29.6 | -0.4 |
| R34A | Isabella, Hill<br>baz=64 | 63.89 | 16 | P | P | 07 44 29.5 | -0.6 |
| S37A | Fort Scott<br>baz=64 | 64.02 | 18 | P | P | 07 44 30.5 | -0.5 |
| ELK | Elko<br>7.7nm,1.4s | 64.05 | 0 | eP | P | 07 44 31.4 | -0.1 |
| Q31A | Ellis<br>baz=64 | 64.06 | 14 | P | P | 07 44 30.8 | -0.5 |
| R35A | Emporia Munici<br>baz=64 | 64.18 | 17 | P | P | 07 44 31.8 | -0.3 |
| Q32A | Meitler Ranch,<br>baz=64 | 64.23 | 14 | P | P | 07 44 32.2 | -0.2 |
| R36A | Gordon, Harris<br>baz=65 | 64.36 | 17 | P | P | 07 44 33.0 | -0.3 |
| P30A | Selden<br>baz=65 | 64.40 | 13 | P | P | 07 44 33.0 | -0.5 |
| Q33A | Connelly Farm,<br>baz=65 | 64.41 | 15 | P | P | 07 44 33.2 | -0.4 |
| Q34A | Chapman<br>baz=65 | 64.55 | 16 | P | P | 07 44 34.1 | -0.4 |
| P31A | Stockton<br>baz=65 | 64.56 | 14 | P | P | 07 44 34.1 | -0.5 |
| N02D | Trinity Center<br>baz=65 | 64.65 | 354 | P | P | 07 44 35.8 | +0.6 |
| O28A | Kreisinger Ran<br>baz=65 | 64.67 | 11 | P | P | 07 44 34.8 | -0.5 |
| Q35A | Mercer Eighty,<br>baz=65 | 64.72 | 17 | P | P | 07 44 35.1 | -0.5 |
| N23A | Red Feather La<br>baz=65 | 64.78 | 8 | P | P | 07 44 36.1 | -0.1 |
| SWET | Sewanee<br>3.9nm,1.4s | 64.80 | 26 | eP | P | 07 44 35.1 | -1.1 |
| KSU1 | Kansas State U<br>baz=65 | 64.80 | 16 | P | P | 07 44 35.9 | -0.3 |
| KSU1 | Kansas State U<br>25nm,1.3s | 64.80 | 16 | eP | P | 07 44 35.7 | -0.4 |
| P32A | Huiting Farm,<br>baz=65 | 64.83 | 14 | P | P | 07 44 36.4 | +0.1 |
| WVT | Waverly<br>8.5nm,1.2s | 64.85 | 24 | eP | P | 07 44 35.1 | -1.4 |
| P33A | Williams Farm,<br>baz=65 | 64.86 | 15 | P | P | 07 44 36.3 | -0.1 |
| Q36A | Arnold C. Orve<br>baz=65 | 64.97 | 17 | P | P | 07 44 36.7 | -0.5 |
| M02C | Callahan<br>baz=65 | 65.08 | 354 | P | P | 07 44 38.9 | +1.0 |
| P34A | Walnut Farm, R<br>baz=65 | 65.17 | 16 | P | P | 07 44 38.4 | -0.2 |
| O31A | Woolen Ranch,<br>baz=65 | 65.17 | 13 | P | P | 07 44 38.2 | -0.4 |
| M04C | Macdoel<br>baz=66 | 65.37 | 355 | P | P | 07 44 40.9 | +1.0 |
| MOD | Modoc<br>14nm,1.3s | 65.37 | 356 | eP | P | 07 44 40.0 | 0.0 |
| O33A | Hebron<br>baz=66 | 65.49 | 15 | P | P | 07 44 40.3 | -0.3 |
| SIUC | Southern Illin<br>9.4nm,0.8s | 65.76 | 22 | eP | P | 07 44 41.1 | -1.2 |
| O34A | Beatrice<br>baz=66 | 65.81 | 16 | P | P | 07 44 42.3 | -0.3 |
| N31A | Bailey Ranch,<br>baz=66 | 65.90 | 13 | P | P | 07 44 43.1 | -0.2 |
| O35A | Humboldt<br>baz=66 | 66.08 | 16 | P | P | 07 44 43.8 | -0.5 |
| N33A | J Bar K, Exete<br>baz=66 | 66.15 | 15 | P | P | 07 44 44.4 | -0.4 |
| K22A | Casper<br>baz=67 | 66.45 | 7 | P | P | 07 44 46.7 | -0.1 |
| N34A | Lincoln<br>baz=67 | 66.47 | 15 | P | P | 07 44 46.5 | -0.4 |
| QSPA | South Pole Qui<br>16nm,1.6s | 66.52 | 180 | eP | P | 07 44 48.4 | +1.3 |
| BGNE | Belgrade<br>baz=67 | 66.63 | 14 | P | P | 07 44 47.6 | -0.3 |
| N35A | Tabor<br>baz=67 | 66.71 | 16 | P | P | 07 44 47.9 | -0.4 |
| MFID | Camas Ranch<br>5.2nm,1.0s | 66.72 | 360 | eP | P | 07 44 48.4 | -0.1 |
| L29A | Maesberg Ranch<br>baz=67 | 66.78 | 12 | P | P | 07 44 48.8 | -0.1 |
| J05D | Fort Rock, OR<br>baz=67 | 66.82 | 355 | P | P | 07 44 50.1 | +1.0 |
| HLID | Hailey<br>baz=67 | 66.87 | 1 | P | P | 07 44 50.1 | +0.5 |
| HLID | Hailey<br>13nm,1.1s | 66.87 | 1 | eP | P | 07 44 49.7 | +0.2 |
| L31A | Butterfield Fa<br>baz=67 | 67.22 | 13 | P | P | 07 44 51.6 | 0.0 |
| L32A | Elgin<br>baz=68 | 67.23 | 14 | P | P | 07 44 51.3 | -0.4 |
| K28A | Ten Mile Ranch<br>baz=68 | 67.25 | 11 | P | P | 07 44 51.7 | -0.1 |
| I04A | Tendick Farm,<br>baz=68 | 67.42 | 354 | P | P | 07 44 53.1 | +0.2 |
| K29A | Lazy Trails An<br>baz=68 | 67.49 | 12 | P | P | 07 44 53.1 | -0.3 |
| J25A | Sunshine Ranch<br>baz=68 | 67.52 | 9 | P | P | 07 44 53.3 | -0.3 |
| K30A | Basset<br>baz=68 | 67.54 | 12 | P | P | 07 44 53.3 | -0.4 |
| J26A | Sides Ranch, S<br>baz=68 | 67.55 | 10 | P | P | 07 44 53.1 | -0.7 |
| J27A | Elkhorn Farm,<br>baz=68 | 67.67 | 10 | P | P | 07 44 54.4 | -0.1 |
| K31A | O'Neill<br>baz=68 | 67.67 | 13 | P | P | 07 44 53.8 | -0.7 |
| K32A | Verdigre<br>baz=68 | 67.87 | 14 | P | P | 07 44 55.3 | -0.4 |
| I05D | Terrebonne, OR<br>baz=68 | 67.87 | 355 | P | P | 07 44 56.6 | +0.9 |
| L35A | Bielow Farm, R<br>baz=68 | 67.91 | 16 | P | P | 07 44 55.5 | -0.5 |
| J28A | Allard Ranch,<br>baz=68 | 67.96 | 11 | P | P | 07 44 56.2 | -0.1 |
| K33A | Hardington<br>baz=68 | 68.03 | 14 | P | P | 07 44 56.4 | -0.3 |
| J29A | Okreek<br>baz=68 | 68.11 | 12 | P | P | 07 44 57.0 | -0.2 |
| I25A | Rochford<br>baz=68 | 68.15 | 9 | P | P | 07 44 57.1 | -0.6 |
| MCMT | McKenzie Canyo<br>3.7nm,1.3s | 68.17 | 2 | eP | P | 07 44 57.7 | -0.1 |
| J30A | Dallas<br>baz=68 | 68.19 | 12 | P | P | 07 44 57.3 | -0.4 |
| RSSD | Black Hills<br>7.0nm,1.3s | 68.21 | 9 | eP | P | 07 44 57.2 | -0.9 |
| HDIL | Hopedale<br>baz=68 | 68.28 | 21 | P | P | 07 44 57.6 | -0.7 |
| I26A | New Underwood<br>baz=68 | 68.29 | 10 | P | P | 07 44 58.4 | +0.1 |
| I27A | Quinn<br>baz=69 | 68.45 | 10 | P | P | 07 44 59.1 | -0.3 |
| I28A | Midland<br>baz=69 | 68.53 | 11 | P | P | 07 44 59.4 | -0.5 |
| J32A | Parkston<br>baz=69 | 68.57 | 14 | P | P | 07 44 59.8 | -0.3 |
| RLMT | Red Lodge<br>baz=69 | 68.64 | 5 | P | P | 07 44 60.0 | -0.8 |
| H25A | Fruitdale<br>baz=69 | 68.76 | 9 | P | P | 07 45 01.4 | +0.1 |
| G05D | Wamic, OR<br>baz=69 | 68.77 | 355 | P | P | 07 45 01.8 | +0.5 |
| H26A | Fairpoint<br>baz=69 | 68.87 | 10 | P | P | 07 45 01.8 | -0.2 |
| SFIN | Scholer Farm<br>baz=69 | 68.88 | 23 | P | P | 07 45 01.8 | -0.2 |
| H27A | Howes<br>baz=69 | 69.00 | 10 | P | P | 07 45 02.3 | -0.4 |
| K37A | Belmond<br>baz=69 | 69.02 | 17 | P | P | 07 45 01.9 | -1.0 |
| BOZ | Bozeman (W)<br>baz=69 | 69.03 | 3 | P | P | 07 45 03.1 | +0.1 |
| I31A | Royce, Wessing<br>baz=69 | 69.06 | 13 | P | P | 07 45 02.7 | -0.4 |
| ECSD | EROS Data Cent<br>baz=69 | 69.19 | 14 | P | P | 07 45 03.2 | -0.7 |
| H28A | Mission Ridge<br>baz=69 | 69.22 | 11 | P | P | 07 45 03.8 | -0.3 |
| H29A | Onida<br>baz=70 | 69.31 | 11 | P | P | 07 45 04.2 | -0.5 |
| J36A | Seneca 1, Swea<br>baz=70 | 69.36 | 16 | P | P | 07 45 04.2 | -0.7 |
| I33A | Coleman<br>baz=70 | 69.45 | 14 | P | P | 07 45 05.1 | -0.5 |
| J37A | Redenius Farm,<br>baz=70 | 69.55 | 17 | P | P | 07 45 05.5 | -0.6 |
| G26A | Maurine<br>baz=70 | 69.56 | 10 | P | P | 07 45 05.8 | -0.4 |
| G28A | Parade<br>baz=70 | 69.62 | 11 | P | P | 07 45 06.1 | -0.5 |
| I34A | Hadley<br>baz=70 | 69.65 | 15 | P | P | 07 45 06.0 | -0.8 |
| I35A | Creekview Farm<br>baz=70 | 69.69 | 16 | P | P | 07 45 06.1 | -1.0 |
| H32A | Carlson Farm,<br>baz=70 | 69.74 | 13 | P | P | 07 45 06.4 | -0.9 |
| G27A | Dupree<br>baz=70 | 69.75 | 10 | P | P | 07 45 06.3 | -1.1 |
| G29A | Hoven<br>baz=70 | 69.91 | 11 | P | P | 07 45 07.5 | -0.9 |
| F25A | Bowman<br>baz=70 | 70.06 | 9 | P | P | 07 45 08.8 | -0.5 |
| H33A | Prehn Over Nor<br>baz=70 | 70.06 | 14 | P | P | 07 45 09.0 | -0.3 |
| HRY | Holter Researc<br>8.1nm,1.2s | 70.08 | 3 | eP | P | 07 45 09.3 | -0.2 |
| F26A | Lodgepole<br>baz=70 | 70.10 | 9 | P | P | 07 45 09.1 | -0.4 |
| MSO | Missoula<br>baz=70 | 70.14 | 1 | P | P | 07 45 09.8 | -0.1 |
| F27A | Lemmon<br>baz=70 | 70.22 | 10 | P | P | 07 45 09.7 | -0.6 |
| I37A | Lemond, Waseca<br>baz=70 | 70.24 | 17 | P | P | 07 45 09.7 | -0.7 |
| H34A | Spellman Lake,<br>baz=70 | 70.27 | 15 | P | P | 07 45 09.8 | -0.7 |
| G32A | Webster<br>baz=71 | 70.45 | 13 | P | P | 07 45 10.8 | -0.8 |
| LAO | LASA Array<br>baz=71 | 70.47 | 7 | P | P | 07 45 11.4 | -0.4 |
| H35A | Sunnyside Ranc<br>baz=71 | 70.52 | 15 | P | P | 07 45 11.2 | -0.8 |
| F29A | Eureka<br>baz=71 | 70.55 | 11 | P | P | 07 45 12.0 | -0.3 |
| I38A | Scanlan Farm,<br>baz=71 | 70.55 | 17 | P | P | 07 45 11.8 | -0.5 |
| G33A | Ortonville<br>baz=71 | 70.62 | 14 | P | P | 07 45 12.1 | -0.6 |
| H36A | Jessenland, He<br>baz=71 | 70.63 | 16 | P | P | 07 45 12.5 | -0.2 |
| E26A | Carlson Angus<br>baz=71 | 70.73 | 9 | P | P | 07 45 13.3 | -0.1 |
| E27A | Carson<br>baz=71 | 70.83 | 10 | P | P | 07 45 13.8 | -0.2 |
| H37A | Dierke Farm, C<br>baz=71 | 70.89 | 17 | P | P | 07 45 13.8 | -0.6 |
| JTMT | Jette<br>5.6nm,1.2s | 71.06 | 1 | eP | P | 07 45 15.2 | -0.2 |
| E28A | Huff<br>baz=71 | 71.11 | 11 | P | P | 07 45 15.0 | -0.7 |
| DZM | Mont Dzumac<br>comp=Z,140nm,19.4s,baz=232,slow=31 | 71.25 | 254 | LR | LR | 08 10 52.5 | |
| F33A | 5 Mile Ranch,<br>baz=72 | 71.26 | 14 | P | P | 07 45 15.9 | -0.7 |
| D25A | Fairfield<br>baz=72 | 71.28 | 9 | P | P | 07 45 16.3 | -0.4 |
| D26A | Manning<br>baz=72 | 71.28 | 9 | P | P | 07 45 16.0 | -0.7 |
| E29A | Napoleon<br>baz=72 | 71.29 | 11 | P | P | 07 45 16.3 | -0.5 |
| G36A | St. Michael<br>baz=72 | 71.29 | 16 | P | P | 07 45 16.9 | +0.1 |
| E30A | Jud<br>baz=72 | 71.36 | 12 | P | P | 07 45 16.5 | -0.6 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EGMT** | **Eagleton** baz=72 | **71.50** | **4** | P | **P** | 07 45 18.6 | | **+0.5** |
| **NEW** | **Newport** baz=72 | **71.59** | **359** | P | **P** | 07 45 19.0 | | **+0.4** |
| **NEW** | **Newport** 12nm,1.4s | **71.59** | **359** | *e*P | **P** | 07 45 18.4 | | **-0.1** |
| **E31A** | **Nome** baz=72 | **71.61** | **13** | P | **P** | 07 45 18.4 | | **-0.3** |
| **F35A** | **Swanville** baz=72 | **71.67** | **15** | P | **P** | 07 45 18.6 | | **-0.5** |
| **F36A** | **Milaca** baz=72 | **71.93** | **16** | P | **P** | 07 45 20.0 | | **-0.6** |
| **E33A** | **Westby DABS, E** baz=72 | **71.95** | **14** | P | **P** | 07 45 19.7 | | **-1.1** |
| **D30A** | **Buchanan** baz=72 | **71.97** | **12** | P | **P** | 07 45 19.8 | | **-1.0** |
| **E34A** | **Wadena** baz=72 | **72.15** | **14** | P | **P** | 07 45 21.3 | | **-0.6** |
| **A04D** | **Lummi Island** baz=73 | **72.33** | **355** | P | **P** | 07 45 23.6 | | **+0.7** |
| **DGMT** | **Dagmar** baz=73 | **72.46** | **8** | P | **P** | 07 45 23.5 | | **-0.2** |
| **C30A** | **Mose, Pekin** baz=73 | **72.60** | **12** | P | **P** | 07 45 23.9 | | **-0.6** |
| **VNA3** | **Neumayer Olymp** | **72.69** | **161** | P | **P** | 07 45 25.2 | | **+0.2** |
| **C31A** | **Landman Farms,** baz=73 | **72.83** | **12** | P | **P** | 07 45 25.8 | | **-0.2** |
| **D35A** | **Remer** baz=73 | **72.95** | **15** | P | **P** | 07 45 26.4 | | **-0.2** |
| **B28A** | **Dugan Ranch, T** baz=73 | **72.99** | **10** | P | **P** | 07 45 26.7 | | **-0.2** |
| **A26A** | **Wade Farm, Ken** baz=73 | **73.16** | **9** | P | **P** | 07 45 27.4 | | **-0.5** |
| **C33A** | **Trail** baz=73 | **73.20** | **14** | P | **P** | 07 45 27.4 | | **-0.7** |
| **D36A** | **Goodland** baz=74 | **73.25** | **16** | P | **P** | 07 45 28.1 | | **-0.4** |
| **B30A** | **Myrvik Farm, E** baz=74 | **73.34** | **12** | P | **P** | 07 45 28.8 | | **-0.1** |
| **VNA1** | **Neumayer--Stat** | **73.35** | **161** | P | **P** | 07 45 27.3 | | **-1.5** |
| **A28A** | **Rude Farm, Bot** baz=74 | **73.45** | **10** | P | **P** | 07 45 29.4 | | **-0.2** |
| **VNA2** | **Neumayer--Watz** baz=263,slow=3.5 | **73.50** | **161** | P | **P** | 07 45 30.3 | | **+0.5** |
| **C35A** | **Jirik Farms, M** baz=74 | **73.55** | **15** | P | **P** | 07 45 29.7 | | **-0.5** |
| **A29A** | **Manning Farm,** baz=74 | **73.64** | **11** | P | **P** | 07 45 29.9 | | **-0.7** |
| **C36A** | **Pine Crest Far** baz=74 | **73.87** | **16** | P | **P** | 07 45 32.1 | | **0.0** |
| **C37A** | **Embarrass** baz=74 | **74.01** | **16** | P | **P** | 07 45 32.4 | | **-0.5** |
| **A31A** | **Linda, St. Vin** baz=74 | **74.02** | **12** | P | **P** | 07 45 32.7 | | **-0.3** |
| **B34A** | **Aery, Baudette** baz=74 | **74.13** | **14** | P | **P** | 07 45 33.2 | | **-0.3** |
| **EYMN** | **Ely** baz=75 | **74.39** | **16** | P | **P** | 07 45 34.3 | | **-0.8** |
| **SNAA** | **Sanae** | **74.48** | **162** | P | **P** | 07 45 34.6 | | **-1.0** |
| **SNAA** | **Sanae** comp=Z,48nm,20.1s,baz=206,slow=32 | **74.48** | **162** | LR | LR | 08 13 43.5 | | |
| **SNAA** | **Sanae** 7.7nm,1.8s | **74.48** | **162** | *e*P | **P** | 07 45 36.1 | | **+0.6** |
| **ULM** | **Lac du Bonnet** comp=Z,76nm,19.2s,baz=176,slow=33 | **75.54** | **13** | LR | LR | 08 15 12.3 | | |
| **H11S2** | **WAKE ISLAND Hy** baz=116,slow=75,SNR=151 | **86.86** | **292** | T | T | 09 22 27.9 | | |
| **H11S1** | **WAKE ISLAND Hy** baz=116,slow=75,SNR=157 | **86.88** | **292** | T | T | 09 22 36.1 | | |
| **H11S3** | **WAKE ISLAND Hy** baz=116,slow=75,SNR=150 | **86.88** | **292** | T | T | 09 22 29.2 | | |
| **H11N3** | **WAKE ISLAND Hy** baz=117,slow=75,SNR=58 | **87.23** | **293** | T | T | 09 23 03.2 | | |
| **H11N1** | **WAKE ISLAND Hy** baz=117,slow=75,SNR=34 | **87.24** | **293** | T | T | 09 23 00.4 | | |
| **H11N2** | **WAKE ISLAND Hy** baz=117,slow=75,SNR=120 | **87.25** | **293** | T | T | 09 23 04.5 | | |
| **SCHQ** | **Schefferville** comp=Z,48nm,20.7s,baz=276,slow=34 | **88.46** | **26** | LR | LR | 08 24 12.8 | | |
| **ZALV** | **Zalesovo Beam** 1.1nm,0.6s,baz=331,slow=1.9,SNR=6.4 | **146.17** | **339** | PKPbc | **PKPbc** | **07 53 36.9** | | **-0.6** |
| **ARU** | **Arti** | **146.93** | **6** | *e*PKPbc | **PKPab** | **07 53 41.1** | | **+0.2** |
| **CMAR** | **Chiang Mai Arr** 1.4nm,0.3s,baz=120,slow=1.1,SNR=8.9 | **147.72** | **267** | PKPbc | **PKPab** | **07 53 44.2** | | **-1.1** |
| **BRVK** | **Borovoye** | **150.32** | **353** | *e*PKPbc | **PKPbc** | **07 53 50.2** | | **+1.7** |
| **BVAR** | **Borovoye Array** 0.8nm,0.7s,baz=356,slow=4.5,SNR=4.6 | **150.34** | **353** | PKPbc | **PKPbc** | **07 53 47.8** | | **-0.8** |
| **KURK** | **Kurchatov** | **150.90** | **342** | *e*PKPbc | **PKPbc** | **07 53 49.7** | | **-0.3** |
| **MKAR** | **Makanchi Array** 0.3nm,0.6s,baz=77,slow=3.1,SNR=3.0 | **152.93** | **333** | PKPbc | **PKPbc** | **07 53 53.2** | | **-1.5** |
| **ABKAR** | **Akbulak array** | **154.15** | **7** | *e*PKPab | **PKPab** | **07 54 10.4** | | **-0.5** |

**WEL 19 07:38:54.5±0.6, 47°37S×165°40E, h33km, ML3.8/9, 1D, Error ellipse: s-maj=6.6km s-min=4.0km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PYZ** | **Puysegur Point** | **1.49** | **37** | PN | Pn | 07 39 18.4 | -0.6 |
| **APZ** | **The Paps** | **1.85** | **74** | ⇓PN | Pn | 07 39 22.9 | -1.0 |
| APZ | | | | SN | Sn | 07 39 44.8 | -1.4 |
| APZ | | | | AML | AML | 07 39 46.5 | |
| **DCZ** | **Deep Cove** | **2.25** | **33** | PN | Pn | 07 39 28.9 | -0.5 |
| DCZ | | | | SN | Sn | 07 39 54.2 | -1.8 |
| DCZ | | | | AML | AML | 07 40 01.1 | |
| **WHZ** | **Wether Hill Ro** | **2.29** | **51** | PN | Pn | 07 39 29.8 | -0.3 |
| WHZ | | | | SN | Sn | 07 39 56.1 | -1.1 |
| WHZ | | | | AML | AML | 07 39 57.1 | |
| **SYZ** | **Scrubby Hill** | **2.69** | **73** | PN | Pn | 07 39 35.6 | +0.2 |
| SYZ | | | | SN | Sn | 07 40 05.2 | -1.6 |
| SYZ | | | | AML | AML | 07 40 10.3 | |
| SYZ | | | | AML | AML | 07 40 10.3 | |
| SYZ | | | | AML | AML | 07 40 11.0 | |
| **MLZ** | **Mavora Lakes** | **2.79** | **44** | PN | Pn | 07 39 36.9 | 0.0 |
| MLZ | | | | AML | AML | 07 40 16.2 | |
| MLZ | | | | AML | AML | 07 40 18.0 | |
| **MSZ** | **Milford Sound** | **3.22** | **34** | *e*PN | Pn | 07 39 44.3 | +1.5 |
| MSZ | | | | AML | AML | 07 40 33.7 | |
| MSZ | | | | AML | AML | 07 40 38.9 | |
| **TUZ** | **Tuapeka** | **3.24** | **66** | PN | Pn | 07 39 42.8 | -0.1 |
| TUZ | | | | AML | AML | 07 40 21.0 | |
| TUZ | | | | AML | AML | 07 40 35.4 | |
| **EAZ** | **Earnscleugh** | **3.45** | **53** | PN | Pn | 07 39 45.7 | -0.2 |
| EAZ | | | | AML | AML | 07 40 29.1 | |
| EAZ | | | | AML | AML | 07 40 29.8 | |
| **WKZ** | **Wanaka** | **3.58** | **46** | PN | Pn | 07 39 48.8 | +1.1 |
| WKZ | | | | AML | AML | 07 40 37.7 | |
| WKZ | | | | AML | AML | 07 40 39.0 | |
| **ODZ** | **Otahua Downs** | **4.32** | **59** | PN | Pn | 07 39 56.0 | -1.8 |

**GUC 19 07:45:31.9±0.5, 35°07S×72°60W, h20km±8km, ML3.5, 2C, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.83** | **36** | *e*P | Pb | 07 45 47.5 | -0.2 |
| CHPI | | | | *i* S | Sg | 07 45 59.6 | +0.3 |
| **TALC** | **Talca** | **0.86** | **113** | *e*P | Pg | 07 45 48.5 | -0.2 |
| TALC | | | | *i* S | Sg | 07 46 00.4 | +0.2 |
| **NICH** | **Los Niches** | **1.13** | **87** | ⇑*i* P | Pn | 07 45 51.9 | -0.7 |
| NICH | | | | *i* S | Sn | 07 46 08.0 | +0.4 |
| **ANTU** | **Antumapu** | **2.21** | **48** | *e*P | Pb | 07 46 09.9 | -1.4 |
| ANTU | | | | *e*S | Sb | 07 46 39.0 | +0.7 |
| ANTU | comp=E,382nm,0.5s | | | AML | AML | 07 46 43.6 | |
| **CLCH** | **Cerro Calan** | **2.39** | **46** | *e*P | Pb | 07 46 12.6 | -1.8 |
| CLCH | | | | *e*S | Sb | 07 46 43.6 | +0.1 |
| CLCH | comp=E,360nm,0.3s | | | AML | AML | 07 46 53.8 | |
| **PEL** | **Peldehue** | **2.49** | **40** | ⇑*i* P | Pb | 07 46 14.1 | -2.0 |
| PEL | comp=N,338nm,0.6s | | | AML | AML | 07 46 51.1 | |

**IDC 19 07:59:49.8±3.7, 4°77S×150°86E, h155km±31km, mb3.8/4, mb1 4.1/6, mb1mx3.6/31, mbtmp4.4/6, Error ellipse: s-maj=55.8km s-min=24.2km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** 28nm,0.3s,baz=56,slow=7.0,SNR=42 | **5.89** | **218** | P | Pn | 08 01 16.5 | +1.3 |
| PMG | | | | S | Sn | 08 02 22.9 | +0.9 |
| **CTA** | **Charters Tower** 0.4nm,0.3s,baz=22,slow=9.3,SNR=8.0 | **15.88** | **196** | P | P | 08 03 26.0 | +0.6 |
| **WRA** | **Warramunga Arr** 8.1nm,0.7s,baz=51,slow=10,SNR=74 | **22.05** | **225** | P | P | 08 04 31.8 | -0.5 |
| **ASAR** | **Alice Springs** 12nm,0.7s,baz=56,slow=8.9,SNR=78 | **24.91** | **219** | P | P | 08 04 59.1 | +0.6 |
| **ILAR** | **Eielson Array** 0.7nm,0.8s,baz=254,slow=4.6,SNR=2.3 | **82.86** | **22** | P | P | 08 11 56.0 | -0.5 |
| **QSPA** | **South Pole Qui** 0.9nm,0.7s,baz=333,slow=2.3,SNR=6.2 | **85.19** | **180** | P | P | 08 12 07.8 | -0.7 |
| **TORD** | **Torodi Ar. Bea** 0.1nm,0.3s,baz=86,slow=2.4,SNR=4.3 | **148.46** | **287** | PKPbc | PKPbc | 08 19 19.1 | 0.0 |

*ISK **19** 08:00:29.8, 39°99N×38°70E, h8km, MD2.6*
*ISCJB **19** 08:00:30.5±0.6, 40°00N±0°04×38°68E±0°05, h9km±9km, Error ellipse: s-maj=7.4km s-min=5.7km az=166.4*
*DDA **19** 08:00:30.8, 39°99N×38°67E, h7km, Md2.7*
*CSEM **19** 08:00:30.3±0.2, 39°99N×38°68E, h12km, MD2.7, Error ellipse: s-maj=5.1km s-min=4.1km az=120.0*

**ISC 19 08:00:30.4±1.2, 40°00N±0°03×38°67E±0°03, h9km±14km, n18, σ0°40/28, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SUSE** | **Susehri** | **0.41** | **301** | *i* P | **Pg** | **08 00 38.5** | **0.0** |
| SUSE | | | | *i* S | **Sb** | **08 00 46.3** | **-0.2** |
| **SUSE** | **Susehri** | **0.41** | **301** | P | **Pg** | **08 00 38.5** | **0.0** |
| SUSE | | | | S | **Sb** | **08 00 46.3** | **-0.2** |
| **KELT** | **Kelkit** | **0.48** | **71** | *i* P | **Pg** | **08 00 40.1** | **+0.4** |
| KELT | | | | *i* S | **Sb** | **08 00 48.0** | **-0.3** |
| **KELT** | **Kelkit** | **0.48** | **71** | P | **Pg** | **08 00 40.1** | **+0.4** |
| KELT | | | | S | **Sb** | **08 00 48.0** | **-0.3** |
| **ILIC** | **ilic-Erzincan** | **0.55** | **188** | *e*PG | **Pg** | **08 00 40.8** | **-0.2** |
| **ILIC** | **ilic-Erzincan** | **0.55** | **188** | *e*Pg | **Pg** | **08 00 40.8** | **-0.2** |
| **KEMA** | **Kemaliye** | **0.74** | **191** | *i* P | **Pg** | **08 00 44.0** | **-0.6** |
| KEMA | | | | *i* S | **Sb** | **08 00 56.5** | **+0.9** |
| **KEMA** | **Kemaliye** | **0.74** | **191** | P | **Pg** | **08 00 44.0** | **-0.6** |
| KEMA | | | | S | **Sb** | **08 00 56.5** | **+0.9** |
| **GUMT** | **Gumushane** | **0.78** | **53** | *e*PG | **Pg** | **08 00 45.1** | **-0.2** |
| GUMT | | | | *e*SG | **Sg** | **08 00 55.6** | **+0.2** |
| **GUMT** | **Gumushane** | **0.78** | **53** | *e*Pg | **Pg** | **08 00 45.1** | **-0.2** |
| GUMT | | | | *e*Sg | **Sg** | **08 00 55.7** | **+0.2** |
| **ESPY** | **Espiye-Giresun** | **0.92** | **3** | *e*PG | **Pg** | **08 00 47.7** | **-0.4** |
| ESPY | | | | *e*SG | **Sb** | **08 01 01.3** | **+0.4** |
| **ESPY** | **Espiye-Giresun** | **0.92** | **3** | *e*Pg | **Pg** | **08 00 47.7** | **-0.4** |
| ESPY | | | | *e*Sg | **Sb** | **08 01 01.3** | **+0.4** |
| **BAYT** | **Ayd¨--ntepe-Bay** | **1.20** | **70** | *e*PN | **Pb** | **08 00 53.1** | **-0.2** |
| **BAYT** | **Ayd¨--ntepe-Bay** | **1.20** | **70** | *e*Pn | **Pb** | **08 00 53.1** | **-0.2** |
| **PTK** | **Pertek** | **1.24** | **153** | *e*PN | **Pb** | **08 00 53.8** | **-0.2** |
| **PTK** | **Pertek** | **1.24** | **153** | *e*Pn | **Pb** | **08 00 53.8** | **-0.2** |
| **SVSK** | **Karacayir** | **1.28** | **267** | *e*PN | **Pb** | **08 00 54.8** | **+0.1** |
| **SVSK** | **Karacayir** | **1.28** | **267** | *e*Pn | **Pb** | **08 00 54.8** | **+0.1** |

*IDC **19** 08:06:48.3±0.8, 63°42S×166°76W, h0km, mb4.2/7, mb1 4.4/8, mb1mx4.3/24, mbtmp4.2/8, ML4.5/1, MS4.7/16, Ms1 4.7/16, ms1mx4.7/16, Error ellipse: s-maj=26.3km s-min=20.6km az=48.0*
*ISCJB **19** 08:06:49.2±0.5, 63°58S±0°07×167°0W±0°2, h10km, mb4.6/13, MS4.8/15, Error ellipse: s-maj=12.0km s-min=10.4km az=1.1*
*NEIC **19** 08:06:50.7±0.4, 63°51S×166°85W, h10km, mb4.9/11, Error ellipse: s-maj=11.9km s-min=11.3km az=57.0*
*GCMT **19** 08:06:50.7±0.2, 63°61S×166°83W, h12km, MW5.3/103, Moment Tensor Solution. s73,c104; s103,c173; Duration: 1s1 Moment tensor: Scale 10^17 Nm; Mrr=0.04±.02; Mθθ=0.21±.02; Mφφ=0.25±.02; Mrθ=0.30±.04; Mrφ=0.88±.01; Mθφ=0.47±.04; Best double couple: Ms=1.04200×10^17 NP1:φs=170.00000°, δ=76.00000°, λ=159.00000°. NP2:φs=266.00000°, δ=70.00000°, λ=15.00000°. Principal axes: T 1.1880, Plg24.0000°, Azm127.0000°; N -0.2910, Plg65.0000°, Azm319.0000°; P -0.8960, Plg4.0000°, Azm219.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI **19** 08:06:51.0, 63°60S×166°90W, h10km, mB5.6/8, Ms5.6/8, Ms7 5.1/8*

**ISC 19 08:06:51.5±0.4, 63°62S±0°09×166°64W±0°09, h10km, n73, σ1°93/68, mb4.7/13, MS4.7/15, 1C, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SBA** | **Scott Base** 40nm,0.8s | **16.47** | **200** | *e*P | **Pn** | **08 10 41.2** | **-0.9** |
| **VNDA** | **Vanda** 1.6nm,0.3s,baz=62,slow=17,SNR=65 | **17.04** | **203** | P | **Pn** | **08 10 49.4** | **0.0** |
| VNDA | comp=Z,3μm,20.9s,baz=66,slow=32 | | | LR | LR | 08 15 58.4 | |
| **VNDA** | **Vanda** 102nm,2.0s | **17.04** | **203** | *e*P | **Pn** | **08 10 49.6** | **+0.2** |
| **RPZ** | **Rata Peaks** comp=Z,3μm,20.9s,baz=163,slow=31 | **23.68** | **317** | LR | LR | 08 19 02.9 | |
| **QSPA** | **South Pole Qui** 8.6nm,1.0s,baz=52,slow=4.9,SNR=9.4 | **26.48** | **180** | P | **P** | **08 12 28.8** | **+0.2** |
| QSPA | comp=Z,2μm,18.1s,baz=50,slow=34 | | | LR | LR | 08 21 53.4 | |
| **QSPA** | **South Pole Qui** 36nm,1.2s | **26.48** | **180** | *e*P | **P** | **08 12 29.0** | **+0.4** |
| **URZ** | **Urewera** comp=Z,2μm,21.3s,baz=166,slow=32 | **27.21** | **331** | LR | LR | 08 21 13.5 | |
| **CASY** | **Casey** 7.7nm,1.0s | **32.78** | **228** | *e*P | **P** | **08 13 24.6** | **+0.4** |
| **RAO** | **Raoul Island** comp=Z,743nm,21.7s,baz=173,slow=30 | **35.14** | **343** | LR | LR | 08 24 11.9 | |
| **TBI** | **Tubuai** 273nm,29.8s | **41.85** | **24** | *e*S | **S** | **08 21 00.5** | **+1.5** |
| TBI | 2μm,31.2s | | | *e*LQ | LQ | 08 24 17.4 | |
| TBI | 3μm,28.2s,baz=192 | | | *e*LR | LR | 08 26 04.2 | |
| **TBI** | **Tubuai** 35nm,0.3s | **41.85** | **24** | *e*T | T | 08 59 07.8 | |
| **RAR** | **Rarotonga** comp=Z,567nm,19.8s,baz=185,slow=30 | **42.64** | **9** | LR | LR | 08 27 44.7 | |
| **MAW** | **Mawson** 1.7nm,0.8s,baz=187,slow=8.1,SNR=2.6 | **44.34** | **205** | P | **P** | **08 15 02.0** | **+1.0** |
| MAW | comp=Z,2μm,20.6s,baz=149,slow=34 | | | LR | LR | 08 32 20.5 | |
| **VNA3** | **Neumayer Olymp** | **44.47** | **170** | P | **P** | **08 15 01.0** | **-1.1** |
| **SNAA** | **Sanae** | **44.52** | **173** | P | **P** | **08 15 01.6** | **-0.9** |
| **SNAA** | **Sanae** 1.9nm,0.8s,baz=192,slow=6.6,SNR=18 | **44.52** | **173** | P | **P** | **08 15 01.3** | **-1.2** |
| **SNAA** | **Sanae** 10nm,1.2s | **44.52** | **173** | *e*P | **P** | **08 15 01.4** | **-1.2** |
| **VNA2** | **Neumayer--Watz** baz=188,slow=8.3 | **44.96** | **171** | P | **P** | **08 15 05.2** | **-0.8** |
| **VNA1** | **Neumayer--Stat** | **45.16** | **170** | P | **P** | **08 15 07.0** | **-0.6** |
| **DZM** | **Mont Dzumac** 2μm,23.1s | **45.27** | **324** | *e*LR | LR | 08 27 48.3 | |
| **RKT** | **Rikitea** 3μm,28.8s,baz=197 | **45.62** | **43** | *e*LR | LR | 08 28 01.0 | |
| **RKT** | **Rikitea** 8.4nm,0.2s | **45.62** | **43** | *e*T | T | 09 03 48.8 | |
| **SYO** | **Syowa Base** | **46.36** | **193** | ⇑*e*pP | **P** | **08 15 17.4** | **+0.4** |
| **BBOO** | **Buckleboo** 19nm,1.4s | **46.71** | **283** | *e*P | **P** | **08 15 19.4** | **-0.8** |
| **TVO** | **Taravao** 3.1nm,0.3s | **47.33** | **23** | *e*T | T | 09 05 58.1 | |
| **PAE** | **Paea** 2.0nm,0.3s | **47.39** | **22** | *e*T | T | 09 06 02.8 | |
| **MEH** | **Mehetia** 17nm,0.2s | **47.45** | **24** | *e*T | T | 09 06 06.9 | |
| **PPT2** | **Papeete2** 337nm,24.5s | **47.46** | **22** | *e*S | **S** | **08 22 21.4** | **+0.8** |
| PPT2 | 2μm,25.5s | | | *e*LQ | LQ | 08 26 37.3 | |
| PPT2 | 2μm,25.2s,baz=191 | | | *e*LR | LR | 08 28 49.5 | |
| **PPT2** | **Papeete2** 5.5nm,0.3s | **47.46** | **22** | *e*T | T | 09 06 08.2 | |
| **PPT** | **Papeete** comp=Z,648nm,18.5s,baz=188,slow=31 | **47.48** | **22** | LR | LR | 08 31 20.2 | |
| **AFI** | **Afiamalu** comp=Z,166nm,19.2s,baz=180,slow=30 | **49.78** | **353** | LR | LR | 08 31 47.8 | |
| **VAH** | **Vaihoa** 49nm,0.2s | **50.11** | **24** | *e*T | T | 09 09 24.6 | |
| **PMOR** | **Pomariorio Ree** 2.7nm,0.3s | **50.29** | **24** | *e*T | T | 09 09 39.6 | |
| **H01W1** | **Cape Leeuwin H** baz=147,slow=76,SNR=146 | **54.67** | **262** | T | T | 09 15 44.3 | |
| **H01W2** | **Cape Leeuwin H** baz=147,slow=76,SNR=165 | **54.68** | **262** | T | T | 09 15 44.6 | |
| **H01W3** | **Cape Leeuwin H** baz=147,slow=76,SNR=136 | **54.69** | **262** | T | T | 09 15 45.5 | |
| **AS01** | **Alice Springs** | **55.56** | **287** | *e*P | **P** | **08 16 24.7** | **-2.2** |
| **ASAR** | **Alice Springs** 1.8nm,0.7s,baz=151,slow=7.2,SNR=23 | **55.58** | **287** | P | **P** | **08 16 25.1** | **-1.8** |
| ASAR | comp=Z,1μm,21.3s,baz=150,slow=33 | | | LR | LR | 08 37 09.7 | |
| **WRA** | **Warramunga Arr** 1.9nm,0.9s,baz=157,slow=5.9,SNR=25 | **58.69** | **289** | P | **P** | **08 16 46.4** | **-2.6** |
| WRA | comp=Z,1μm,18.8s,baz=155,slow=34 | | | LR | LR | 08 39 35.1 | |
| **WRAB** | **Tennant Creek** 15nm,1.3s | **58.70** | **289** | *e*P | **P** | **08 16 47.1** | **-1.9** |
| **TRQA** | **Tornquist** 23nm,1.3s | **62.61** | **121** | *e*P | **P** | **08 17 15.6** | **+0.1** |
| **LCO** | **Las Campanas** 42nm,1.6s | **66.97** | **109** | *e*P | **P** | **08 17 44.0** | **-0.4** |
| **LVC** | **Limon Verde** 18nm,1.0s | **73.35** | **107** | *e*P | **P** | **08 18 24.7** | **+1.2** |
| **CPUP** | **Villa Florida** 3.2nm,0.7s,baz=236,slow=5.4,SNR=7.0 | **74.80** | **119** | P | **P** | **08 18 30.9** | **-0.7** |
| CPUP | comp=Z,1μm,20.8s,baz=202,slow=32 | | | LR | LR | 08 46 45.7 | |
| **CPUP** | **Villa Florida** | **74.80** | **119** | *e*P | **P** | **08 18 31.5** | **-0.1** |
| **LPAZ** | **La Paz** 5.2nm,0.9s,baz=165,slow=5.1,SNR=9.2 | **79.28** | **105** | P | **P** | **08 18 57.9** | **+0.2** |
| LPAZ | comp=Z,285nm,21.3s,baz=175,slow=29 | | | LR | LR | 08 45 27.0 | |
| **LPAZ** | **La Paz** 24nm,1.4s | **79.28** | **105** | *e*P | **P** | **08 18 58.3** | **+0.6** |
| **BOSA** | **Boshof** comp=Z,273nm,19.3s,baz=173,slow=34 | **87.60** | **190** | LR | LR | 08 56 37.1 | |
| **BDFB** | **Brasilia** comp=Z,1μm,18.1s,baz=190,slow=34 | **88.08** | **122** | LR | LR | 08 57 22.5 | |
| **H06E1** | **SOCORRO T-PHAS** SNR=7.5 | **92.74** | **52** | T | T | 10 03 14.2 | |
| **ROSC** | **El Rosal** comp=Z,285nm,18.6s,baz=201,slow=31 | **95.34** | **90** | LR | LR | 08 56 25.3 | |
| **GYA** | **Guiyang** | **111.93** | **285** | *e*Pdif | **Pdif** | **08 21 30.3** | | **+0.8** |
| GYA | | | | PKP | **PKiKP** | **08 25 25.4** | | **-0.9** |
| GYA | | | | PP | **PP** | **08 26 14.8** | | **+4.8** |
| GYA | 120nm,7.2s | | | PPMZ | | | | |
| **KMI** | **Kunming** | **112.47** | **281** | PKP | **PKiKP** | **08 25 27.6** | | **+0.1** |
| KMI | | | | sPKP | | 08 25 32.3 | | |
| KMI | | | | PP | **PP** | **08 26 18.3** | | **+4.3** |
| KMI | | | | PKS | **PKSdf** | **08 29 01.1** | | **-3.4** |
| KMI | | | | SKS | **SKSdf** | **08 32 37.4** | | **-2.2** |
| KMI | | | | SKKS | **SKKSac** | **08 33 10.8** | | **-5.2** |
| KMI | | | | SS | **SS** | **08 41 55.3** | | **+0.8** |
| KMI | 82nm,4.9s | | | PPMZ | | | | |
| KMI | 230nm,7.3s | | | LN | | | | |
| KMI | 260nm,7.3s | | | LE | | | | |
| KMI | 190nm,7.6s | | | LZ | | | | |
| **CD2** | **Chengdu** | **117.04** | **285** | PKP | **PKPdf** | **08 25 36.0** | | **+0.1** |
| CD2 | | | | sPKP | | 08 25 40.8 | | |
| CD2 | | | | PP | **PP** | **08 26 45.8** | | **-0.3** |
| CD2 | | | | SKS | **SKSdf** | **08 32 48.5** | | **+0.8** |
| CD2 | | | | SKKS | **SKKSac** | **08 33 45.1** | | **-1.1** |
| CD2 | | | | SS | **SS** | **08 42 56.0** | | **+1.7** |
| CD2 | 120nm,7.2s | | | PPMZ | | | | |
| **HHC** | **Hu-ho-hao-te** | **122.32** | **297** | *e*PKP | **PKPdf** | **08 25 42.3** | | **-3.5** |
| HHC | | | | PP | **PP** | **08 27 23.1** | | **+0.7** |
| HHC | | | | SS | SS | 08 43 56.8 | | -5.5 |
| HHC | 80nm,5.0s | | | PPMZ | | | | |
| HHC | 260nm,13.6s | | | LN | | | | |
| HHC | 200nm,14.8s | | | LE | | | | |
| HHC | 200nm,16.0s | | | LZ | | | | |
| **GTA** | **Gaotai** | **125.95** | **287** | *e*PKP | **PKPdf** | **08 25 53.4** | | **+0.6** |
| **CCB** | **Clear Creek Bu** | **128.72** | **10** | *e*PKPdf | **PKPdf** | **08 25 56.6** | | **-0.5** |
| **IL1** | **Eielson Array** | **128.91** | **11** | *e*PKPdf | **PKPdf** | **08 25 57.2** | | **-0.3** |
| **ILAR** | **Eielson Array** 2.9nm,0.7s,baz=205,slow=2.4,SNR=26 | **128.91** | **11** | PKP | **PKPdf** | **08 25 55.0** | | **-2.5** |
| **EGAK** | **Eagle** | **129.46** | **14** | *e*PKPdf | **PKPdf** | **08 25 58.5** | | **-0.1** |
| **SONA1** | **Songino Array** | **130.19** | **298** | *e*PKPdf | **PKPdf** | **08 26 01.4** | | **+0.8** |
| **WMQ** | **Urumqi** | **134.80** | **281** | *e*PKP | **PKPdf** | **08 26 12.0** | | **+2.6** |
| WMQ | | | | PP | **PP** | **08 28 48.0** | | **+3.8** |
| WMQ | | | | SKS | **SKSdf** | **08 33 22.0** | | **+2.0** |
| WMQ | | | | SKKS | **SKKSac** | **08 35 40.0** | | **+1.6** |
| WMQ | | | | SS | **SS** | **08 46 32.0** | | **-4.7** |
| WMQ | 120nm,25.0s | | | LN | | | | |
| WMQ | 150nm,25.0s | | | LE | | | | |
| WMQ | 150nm,25.0s | | | LZ | | | | |
| **KSH** | **Kashi** | **136.55** | **267** | *e*PKP | **PKPdf** | **08 26 14.6** | | **+1.7** |
| KSH | | | | *e*PP | **PP** | **08 28 58.4** | | **+3.2** |
| KSH | | | | PKS | **PKSdf** | **08 29 49.1** | | **0.0** |
| KSH | | | | SKKS | | 08 35 48.3 | | |
| KSH | | | | SS | **SS** | **08 46 56.8** | | **-0.9** |
| KSH | 210nm,7.1s | | | PPMZ | | | | |
| KSH | 180nm,5.4s | | | LN | | | | |
| KSH | 210nm,5.8s | | | LE | | | | |
| KSH | 340nm,6.0s | | | LZ | | | | |
| **ZAA0** | **Zalesovo Array** | **143.67** | **289** | *e*PKPdf | **PKPdf** | **08 26 25.3** | | **+0.2** |
| **ZALV** | **Zalesovo Beam** 0.5nm,0.3s,baz=56,slow=5.4,SNR=3.8 | **143.67** | **289** | PKP | PKPab | 08 26 20.4 | | -1.4 |
| **KURK** | **Kurchatov** | **144.04** | **280** | *e*PKPdf | **PKPab** | **08 26 23.4** | | **0.0** |
| **ROSA** | **Rosais** | **144.95** | **115** | *e*PKPbc | **PKPab** | **08 26 26.4** | | **-0.8** |
| **RES** | **Resolute Bay** 5.3nm,1.1s,baz=168,slow=5.0,SNR=4.2 | **145.62** | **27** | PKPbc | **PKPdf** | **08 26 25.5** | | **-2.3** |
| **BRVK** | **Borovoye** | **149.37** | **277** | *e*PKPbc | **PKPbc** | **08 26 38.3** | | **-0.9** |
| **PFVI** | **Vila Bisbo** | **150.27** | **143** | *e*PKPbc | **PKPbc** | **08 26 42.3** | | **+0.5** |
| **BRTR** | **Keskin Array B** 0.8nm,0.7s,baz=148,slow=7.3,SNR=5.1 | **153.21** | **216** | PKPbc | **PKPbc** | **08 26 45.9** | | **-2.8** |
| **BR231** | **Keskin MP Arra** | **153.55** | **215** | *e*PKPbc | **PKPbc** | **08 26 48.2** | | **-1.2** |
| **VYHS** | **Vyhne** | **164.54** | **194** | *e*PKP | **PKPab** | **08 27 53.5** | | **+4.3** |

**PRE 19 08:15:03.3±1.5, 26°43S×27°32E, h2km, ML2.6, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WDLM** | **Western Deep L** | **0.09** | **86** | *e*P | Pg | 08 15 06.0 | +0.6 |
| WDLM | | | | *e*S | Sg | 08 15 06.5 | -0.3 |
| WDLM | comp=Z,5μm,0.2s | | | AML | AML | 08 15 09.2 | |
| **KLOF** | **Kloof** | **0.27** | **73** | *e*P | Pg | 08 15 09.2 | +0.4 |
| KLOF | | | | *e*S | Sg | 08 15 12.0 | -0.6 |
| KLOF | comp=Z,1μm,0.1s | | | AML | AML | 08 15 12.5 | |
| **BFSD** | **Buffelsfontein** | **0.64** | **228** | *e*P | Pb | 08 15 16.7 | -0.8 |
| BFSD | | | | *e*S | Sg | 08 15 25.0 | +0.6 |
| BFSD | comp=Z,116nm,0.3s | | | AML | AML | 08 15 26.5 | |
| **KSR** | **Koster** | **0.69** | **327** | *e*P | Pg | 08 15 16.7 | -0.1 |
| KSR | | | | *e*S | Sg | 08 15 26.1 | +0.2 |
| KSR | comp=Z,69nm,0.4s | | | AML | AML | 08 15 33.9 | |
| **POGA** | **Pongola** | **3.95** | **105** | *e*P | Pn | 08 16 06.4 | +1.5 |
| POGA | | | | *e*S | Sn | 08 16 52.4 | +0.6 |
| POGA | comp=Z,8.6nm,0.5s | | | AML | AML | 08 16 56.5 | |
| **HVD** | **Gariep Dam** | **4.46** | **201** | *e*P | Pn | 08 16 12.4 | +0.2 |
| HVD | comp=Z,7.7nm,0.9s | | | AML | AML | 08 16 58.0 | |
| **UPI** | **Upington** | **5.72** | **249** | *e*P | Pn | 08 16 30.4 | +0.9 |
| UPI | | | | *e*S

**n19,σ0$40/24,5C-8D,California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPBX** | **Cerro Prieto** | **0.15** | **6** | ⇓*e*P | **Pg** | **08 22 48.8** | **+0.2** |
| CPBX | | | | ⇓*e*P | **Pg** | **08 22 48.9** | **+0.2** |
| CPBX | | | | IAML | | 08 22 55.0 | |
| | comp=E,3μm,0.2s | | | | | | |
| CPBX | | | | ⇓*e* | | 08 22 55.0 | |
| **MBIG** | **Mexicali** | **0.18** | **37** | *e*P | **Pg** | **08 22 49.0** | **0.0** |
| MBIG | | | | *e*S | **Sg** | **08 22 51.3** | **-0.7** |
| **MBIG** | **Mexicali** | **0.18** | **37** | ⇓*e*P | **Pg** | **08 22 49.4** | **+0.4** |
| **SGL** | **Mount Signal** | **0.51** | **318** | ⇑*i*P | **Pb** | **08 22 55.2** | **0.0** |
| **DREC** | **Desert Rsrch C** | **0.55** | **349** | *e*P | **Pb** | **08 22 56.3** | **+0.5** |
| **EMSC** | **East Mesa** | **0.55** | **31** | *e*P | **Pb** | **08 22 55.9** | **0.0** |
| **ERPC** | **Ernies Place** | **0.56** | **329** | ⇓*i*P | **Pb** | **08 22 56.5** | **+0.6** |
| **WESC** | **Westside Schoo** | **0.60** | **325** | ⇑*e*P | **Pb** | **08 22 57.1** | **+0.4** |
| **COA** | **Coachella** | **0.62** | **16** | *e*P | **Pg** | **08 22 57.0** | **+0.2** |
| **RDX** | **Rancho Dawling** | **0.62** | **238** | ⇑*e*P | **Pg** | **08 22 57.2** | **+0.2** |
| RDX | | | | *e*S | **Sg** | **08 23 05.8** | **+0.5** |
| RDX | | | | ⇑*e* | | 08 23 07.7 | |
| RDX | | | | IAML | | 08 23 07.7 | |
| | comp=N,102nm,0.3s | | | | | | |
| **YUH** | **Yuha Desert** | **0.63** | **307** | ⇑*i*P | **Pg** | **08 22 57.2** | **+0.1** |
| **RMX** | **La Rumorosa** | **0.72** | **298** | *e*P | **Pg** | **08 22 58.5** | **-0.2** |
| RMX | | | | *e*S | **Sg** | **08 23 08.0** | **-0.4** |
| **IBP** | **Imperial Bould** | **0.76** | **301** | *e*P | **Pb** | **08 22 59.9** | **+0.4** |
| **ZAX** | **El Zacaton** | **1.10** | **227** | *e*P | **Pn** | **08 23 05.9** | **+0.4** |
| ZAX | | | | IAML | | 08 23 22.8 | |
| | comp=E,117nm,0.6s | | | | | | |
| ZAX | | | | ⇓*e* | | 08 23 22.8 | |
| **CBX** | **Cerro Bola** | **1.14** | **273** | *e*P | **Pb** | **08 23 05.9** | **-0.1** |
| CBX | | | | *e*S | **Sb** | **08 23 19.6** | **-0.9** |
| **CBX** | **Cerro Bola** | **1.14** | **273** | ⇓*e*P | **Pb** | **08 23 06.0** | **+0.1** |
| **BAR** | **Barrett** | **1.21** | **290** | *e*P | **Pn** | **08 23 07.1** | **+0.2** |
| **SPX** | **San Pedro Mart** | **1.22** | **186** | ⇓*e*P | **Pn** | **08 23 07.0** | **-0.3** |
| **SDRC** | **San Diego Road** | **1.45** | **289** | *e*P | **Pb** | **08 23 11.2** | **0.0** |

*ISCJB **19** 08:36:58.7±0.6,32.°14N±0.°03×115.°08W±0.°02,h12km±3km, Error ellipse: s-maj=4.4km s-min=3.5km az=174.8*
*NEIC **19** 08:37:01.2,32.°10N×115.°15W,h6km,ML2.8(PAS), ML2.9(ECX), After ECX.*
*ECX **19** 08:37:01.0±0.5,32.°10N×115.°14W,h6km,MD2.8,ML3.0*
*MEX **19** 08:37:01.8±0.9,32.°19N×115.°08W,h8km±420km,MD3.9*

**ISC 19 08:36:59.3±1.1,32.°12N±0.°03×115.°13W±0.°02,h14km±8km, n39,σ1$06/60,4C-8D,California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.29** | **349** | *e*P | **Pb** | **08 37 06.6** | **+0.4** |
| MBIG | | | | *i* S | **Sg** | **08 37 09.0** | **-0.5** |
| **MBIG** | **Mexicali** | **0.29** | **349** | ⇓*e*P | **Pb** | **08 37 06.9** | **+0.6** |
| **CPBX** | **Cerro Prieto** | **0.33** | **334** | ⇓*e*P | **Pb** | **08 37 07.1** | **+0.2** |
| CPBX | | | | ⇓*e*P | **Pb** | **08 37 07.1** | **+0.2** |
| CPBX | | | | *e*S | **Sb** | **08 37 12.4** | **+0.3** |
| CPBX | | | | *e* | | 08 37 15.3 | |
| CPBX | | | | IAML | | 08 37 15.3 | |
| | comp=E,5μm,0.2s | | | | | | |
| **CPBX** | **Cerro Prieto** | **0.33** | **334** | *e*P | **Pb** | **08 37 07.1** | **+0.2** |
| CPBX | | | | *i* S | **Sg** | **08 37 10.2** | **-0.6** |
| **EMSC** | **East Mesa** | **0.63** | **11** | ⇓*i*P | **Pb** | **08 37 12.3** | **+0.3** |
| **RDX** | **Rancho Dawling** | **0.72** | **255** | ⇑*e*P | **Pg** | **08 37 13.3** | **0.0** |
| RDX | | | | *e*S | **Sg** | **08 37 23.0** | **+0.2** |
| RDX | | | | *e* | | 08 37 24.8 | |
| RDX | | | | IAML | | 08 37 24.8 | |
| | comp=N,474nm,0.4s | | | | | | |
| **SGL** | **Mount Signal** | **0.73** | **316** | *e*P | **Pb** | **08 37 13.8** | **0.0** |
| **DREC** | **Desert Rsrch C** | **0.73** | **339** | ⇑*e*P | **Pb** | **08 37 14.3** | **+0.5** |
| **WESC** | **Westside Schoo** | **0.81** | **322** | *e*P | **Pg** | **08 37 15.7** | **+0.6** |
| **YUH** | **Yuha Desert** | **0.85** | **308** | ⇓*i*P | **Pb** | **08 37 15.5** | **-0.3** |
| **RMX** | **La Rumorosa** | **0.93** | **301** | ⇓*e*P | **Pb** | **08 37 16.8** | **-0.5** |
| RMX | | | | *e*S | **Sb** | **08 37 29.1** | **-0.5** |
| **GLA** | **Glamis** | **0.96** | **15** | P | **Pb** | **08 37 16.9** | **-0.9** |
| | baz=1.0,SNR=31 | | | | | | |
| GLA | | | | S | **Sb** | **08 37 29.3** | **-1.0** |
| | baz=1.0 | | | | | | |
| **GLA** | **Glamis** | **0.96** | **15** | *e*Pg | **Pb** | **08 37 16.7** | **-1.0** |
| GLA | | | | *e*Sg | **Sb** | **08 37 30.6** | **+0.3** |
| **IBP** | **Imperial Bould** | **0.97** | **304** | P | **Pb** | **08 37 17.8** | **-0.2** |
| | baz=1.0,SNR=67 | | | | | | |
| IBP | | | | S | **Sg** | **08 37 31.5** | **+0.5** |
| | baz=1.0 | | | | | | |
| **IBP** | **Imperial Bould** | **0.97** | **304** | ⇑*e*P | **Pb** | **08 37 18.1** | **+0.2** |
| **SWSC** | **Sam W. Stewart** | **0.99** | **326** | P | **Pb** | **08 37 17.1** | **-1.1** |
| | baz=1.0,SNR=10 | | | | | | |
| **SPX** | **San Pedro Mart** | **1.11** | **195** | ⇓*e*P | **Pb** | **08 37 20.3** | **-0.2** |
| **SPX** | **San Pedro Mart** | **1.11** | **195** | *e*P | **Pb** | **08 37 20.3** | **-0.2** |
| SPX | | | | *i* S | **Sn** | **08 37 35.7** | **-0.2** |
| **ZAX** | **El Zacaton** | **1.15** | **238** | ⇑*e* | Sg | 08 37 43.1 | +6.7 |
| ZAX | | | | IAML | | 08 37 43.1 | |
| | comp=E,347nm,0.6s | | | | | | |
| **CBX** | **Cerro Bola** | **1.31** | **279** | *e*P | **Pn** | **08 37 23.2** | **0.0** |
| CBX | | | | *e*S | **Sn** | **08 37 40.0** | **-0.6** |
| **CBX** | **Cerro Bola** | **1.31** | **279** | ⇓*e*P | **Pn** | **08 37 23.3** | **0.0** |
| CBX | | | | IAML | | 08 37 44.4 | |
| | comp=E,473nm,0.3s | | | | | | |
| **CBX** | **Cerro Bola** | **1.31** | **279** | *e*P | **Pn** | **08 37 23.2** | **0.0** |
| CBX | | | | *e*S | **Sn** | **08 37 40.0** | **-0.6** |
| **MONP** | **Monument Peak** | **1.33** | **305** | P | **Pn** | **08 37 23.0** | **-0.6** |
| | baz=1.3,SNR=32 | | | | | | |
| MONP | | | | S | **Sb** | **08 37 41.5** | **+0.3** |
| | baz=1.3 | | | | | | |
| **BAR** | **Barrett** | **1.42** | **294** | *e*Pn | **Pn** | **08 37 24.4** | **-0.3** |
| BAR | | | | *e*Sn | **Sb** | **08 37 44.1** | **+0.7** |
| **BC3** | **Big Chuckawall** | **1.55** | **350** | P | **Pn** | **08 37 25.3** | **-1.3** |
| | baz=1.6,SNR=7.8 | | | | | | |
| BC3 | | | | S | **Sn** | **08 37 45.0** | **-1.6** |
| | baz=1.6 | | | | | | |
| **Y12C** | **Blythe** | **1.70** | **17** | P | **Pn** | **08 37 27.4** | **-1.1** |
| | baz=1.7 | | | | | | |
| Y12C | | | | Sb | **Sn** | **08 37 50.6** | **+0.6** |
| | baz=1.7 | | | | | | |
| **109C** | **Camp Elliot, M** | **1.83** | **295** | P | **Pn** | **08 37 30.4** | **0.0** |
| | baz=1.8,SNR=21 | | | | | | |
| 109C | | | | Sb | **Sb** | **08 37 56.5** | **+1.1** |
| | baz=1.8 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.85** | **323** | *e*Pn | **Pn** | **08 37 29.7** | **-1.1** |
| **214A** | **Organ Pipe Nat** | **1.98** | **94** | P | **Pn** | **08 37 31.2** | **-1.1** |
| | baz=2.0 | | | | | | |
| 214A | | | | S | **Sn** | **08 37 55.4** | **-1.5** |
| | baz=2.0 | | | | | | |
| **214A** | **Organ Pipe Nat** | **1.98** | **94** | *e*Pn | **Pn** | **08 37 30.9** | **-1.4** |
| **BELC** | **Belle Mtn. Jos** | **2.01** | **339** | Pg | **Pg** | **08 37 37.2** | **-0.7** |
| | baz=2.0,SNR=7.0 | | | | | | |
| **IRM** | **Iron Mountain** | **2.03** | **360** | Pg | **Pg** | **08 37 37.4** | **-0.9** |
| | baz=2.1,SNR=23 | | | | | | |
| IRM | | | | S | **Sn** | **08 37 56.9** | **-1.4** |
| | baz=2.1 | | | | | | |
| **MURC** | **Murrieta** | **2.28** | **311** | P | **Pn** | **08 37 36.1** | **-0.5** |
| | baz=2.3,SNR=12 | | | | | | |
| **BBRC** | **Big Bear Solar** | **2.61** | **325** | P | **Pn** | **08 37 40.3** | **-1.0** |
| | baz=2.6 | | | | | | |
| **MWC** | **Mount Wilson** | **3.23** | **311** | *e*Pg | **Pb** | **08 37 58.5** | **+2.0** |
| MWC | | | | *e*Sg | **Sg** | **08 38 40.8** | **-2.2** |
| **GSC** | **Goldstone** | **3.46** | **337** | *e*Pg | **Pg** | **08 38 07.6** | **+1.9** |
| **TUC** | **Tucson** | **3.69** | **86** | *e*Pg | **Pg** | **08 38 09.2** | **-0.8** |
| TUC | | | | *e*Sg | **Sg** | **08 39 01.0** | **+3.2** |
| **WUAZ** | **Wupatki** | **4.61** | **42** | *e*Pn | **Pn** | **08 38 10.7** | **+2.1** |
| WUAZ | | | | *e*Sn | **Sn** | **08 39 04.5** | **+2.5** |
| **R11A** | **Troy Canyon, C** | **6.22** | **357** | *e*Pg | **Pg** | **08 38 59.5** | **+1.0** |

*IGIL **19** 08:42:34.2,36.°74N×11.°08W,h1km,ML1.8*
*INMG **19** 08:42:35.9±1.3,36.°58N×11.°15W,h31km,ML2.1,Error ellipse: s-maj=7.4km s-min=5.6km az=88.0*
*MDD **19** 08:42:35.1±0.4,36.°61N×11.°27W,h34km±13km,mb3.7/11, Error ellipse: s-maj=4.3km s-min=3.6km az=172.0, PRXIMO*
*CSEM **19** 08:42:36.7±0.3,36.°80N×11.°01W,h30km,ML2.9/4,Error ellipse: s-maj=5.0km s-min=3.9km az=38.0*

**ISC 19 08:42:34.0±3.4,36.°8N±0.°1×11.°0W±0.°1,h10km,n64, σ0$87/115,3C,Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **1.78** | **78** | ⇑*i*Pn | **Pn** | **08 43 05.1** | **+0.3** |
| PFVI | | | | *e*Sn | **Sn** | **08 43 26.8** | **-0.6** |
| PFVI | | | | A | A | 08 43 28.4 | |
| | 15nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.78** | **78** | ⇑P | **Pn** | **08 43 05.1** | **+0.3** |
| | 23nm,0.1s,SNR=18 | | | | | | |
| PFVI | | | | S | **Sn** | **08 43 26.8** | **-0.6** |
| | 12nm,0.1s,SNR=5.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.78** | **78** | P | **Pn** | **08 43 05.1** | **+0.3** |
| | 23nm,0.1s,SNR=18 | | | | | | |
| PFVI | | | | S | **Sn** | **08 43 26.8** | **-0.6** |
| | 12nm,0.1s,SNR=5.9 | | | | | | |
| **MORF** | **Marmelete** | **1.95** | **74** | *e*P | **Pn** | **08 43 07.5** | **+0.2** |
| MORF | | | | *e*S | **Sn** | **08 43 31.7** | **-0.1** |
| MORF | | | | AML | AML | 08 43 32.3 | |
| | comp=N,8.1nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **1.95** | **74** | *e*Pn | **Pn** | **08 43 07.6** | **+0.4** |
| MORF | | | | *e*Sn | **Sn** | **08 43 31.3** | **-0.5** |
| MORF | | | | A | A | 08 43 41.6 | |
| | comp=N,5.7nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **1.95** | **74** | P | **Pn** | **08 43 07.6** | **+0.4** |
| MORF | | | | S | **Sn** | **08 43 31.3** | **-0.5** |
| | comp=N,5.7nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **1.95** | **74** | P | **Pn** | **08 43 07.6** | **+0.4** |
| MORF | | | | S | **Sn** | **08 43 31.3** | **-0.5** |
| | comp=N,5.7nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **1.97** | **67** | *e*Pn | **Pn** | **08 43 08.2** | **+0.8** |
| PTEO | | | | *e*Sn | **Sn** | **08 43 32.3** | **+0.1** |
| PTEO | | | | A | A | 08 43 34.5 | |
| | comp=N,4.2nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **1.97** | **67** | P | **Pn** | **08 43 08.2** | **+0.8** |
| PTEO | | | | S | **Sn** | **08 43 32.3** | **+0.1** |
| | comp=N,2.1nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **1.97** | **67** | P | **Pn** | **08 43 08.2** | **+0.8** |
| PTEO | | | | S | **Sn** | **08 43 32.3** | **+0.1** |
| | comp=N,2.1nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.37** | **55** | *e*Pn | **Pn** | **08 43 13.7** | **+0.8** |
| PNCL | | | | *e*Sn | **Sn** | **08 43 42.3** | **+0.3** |
| PNCL | | | | A | A | 08 43 49.0 | |
| | comp=N,5.2nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.37** | **55** | *e*Pn | **Pn** | **08 43 13.7** | **+0.8** |
| PNCL | | | | *e*Sn | **Sn** | **08 43 42.3** | **+0.3** |
| | comp=N,5.2nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **2.45** | **64** | *e*P | **Pn** | **08 43 14.7** | **+0.6** |
| MESJ | | | | *e*S | **Sn** | **08 43 43.9** | **-0.2** |
| MESJ | | | | AML | AML | 08 43 45.5 | |
| | comp=N,3.5nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.45** | **64** | *e*Pn | **Pn** | **08 43 14.7** | **+0.6** |
| MESJ | | | | *e*Sn | **Sn** | **08 43 44.8** | **+0.7** |
| MESJ | | | | A | A | 08 43 51.2 | |
| | comp=N,2.6nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **2.45** | **64** | P | **Pn** | **08 43 14.7** | **+0.6** |
| MESJ | | | | S | **Sn** | **08 43 44.8** | **+0.7** |
| | comp=N,2.6nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **2.45** | **64** | P | **Pn** | **08 43 14.7** | **+0.6** |
| MESJ | | | | S | **Sn** | **08 43 44.8** | **+0.7** |
| | comp=N,2.6nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.50** | **79** | *e*Pn | **Pn** | **08 43 15.4** | **+0.7** |
| PBDV | | | | *e*Sn | **Sn** | **08 43 44.2** | **-1.1** |
| PBDV | | | | A | A | 08 43 52.8 | |
| | comp=N,8.3nm,0.4s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.50** | **79** | P | **Pn** | **08 43 15.4** | **+0.7** |
| PBDV | | | | S | **Sn** | **08 43 44.2** | **-1.1** |
| | comp=N,8.3nm,0.4s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.50** | **79** | P | **Pn** | **08 43 15.4** | **+0.7** |
| PBDV | | | | S | **Sn** | **08 43 44.2** | **-1.1** |
| | comp=N,8.3nm,0.4s | | | | | | |
| **PCVE** | **Castro Verde** | **2.51** | **70** | *e*Pn | **Pn** | **08 43 15.5** | **+0.6** |
| PCVE | | | | *e*Sn | **Sn** | **08 43 44.9** | **-0.6** |
| PCVE | | | | A | A | 08 43 49.3 | |
| | comp=N,2.5nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **2.51** | **70** | P | **Pn** | **08 43 15.5** | **+0.6** |
| PCVE | | | | S | **Sn** | **08 43 44.9** | **-0.6** |
| | comp=N,2.5nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **2.51** | **70** | P | **Pn** | **08 43 15.5** | **+0.6** |
| PCVE | | | | S | **Sn** | **08 43 44.9** | **-0.6** |
| | comp=N,2.5nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **2.55** | **32** | *e*Sn | **Sn** | **08 43 47.4** | **+0.8** |
| PMAFR | | | | A | A | 08 43 48.1 | |
| | comp=N,25nm,0.4s | | | | | | |
| **PMAFR** | **Mafra** | **2.55** | **32** | P | **Pn** | **08 43 16.0** | **+0.6** |
| | comp=N,3.2nm,0.6s,SNR=7.9 | | | | | | |
| PMAFR | | | | S | **Sn** | **08 43 47.2** | **+0.6** |
| | comp=N,3.6nm,0.1s,SNR=6.5 | | | | | | |
| **PMAFR** | **Mafra** | **2.55** | **32** | P | **Pn** | **08 43 16.0** | **+0.6** |
| | comp=N,3.2nm,0.6s,SNR=7.9 | | | | | | |
| PMAFR | | | | S | **Sn** | **08 43 47.2** | **+0.6** |
| | comp=N,3.6nm,0.1s,SNR=6.5 | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.70** | **76** | *e*Pn | **Pn** | **08 43 18.1** | **+0.7** |
| PVAQ | | | | *e*Sn | **Sn** | **08 43 49.7** | **-0.4** |
| PVAQ | | | | A | A | 08 43 54.0 | |
| | comp=N,2.8nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.70** | **76** | P | **Pn** | **08 43 18.1** | **+0.7** |
| PVAQ | | | | S | **Sn** | **08 43 49.7** | **-0.4** |
| | comp=N,2.8nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.70** | **76** | P | **Pn** | **08 43 18.1** | **+0.7** |
| PVAQ | | | | S | **Sn** | **08 43 49.7** | **-0.4** |
| | comp=N,2.8nm,0.3s | | | | | | |
| **PBEJ** | **Beja** | **2.79** | **63** | *e*Sn | **Sn** | **08 43 52.8** | **+0.5** |
| PBEJ | | | | A | A | 08 43 55.5 | |
| | comp=N,3.8nm,0.3s | | | | | | |
| **PBEJ** | **Beja** | **2.79** | **63** | S | **Sn** | **08 43 52.8** | **+0.5** |
| | comp=N,1.9nm,0.3s | | | | | | |
| **PBEJ** | **Beja** | **2.79** | **63** | S | **Sn** | **08 43 52.8** | **+0.5** |
| | comp=N,1.9nm,0.3s | | | | | | |
| **EGRO** | **El Granado** | **2.91** | **74** | ⇑P | **Pn** | **08 43 21.0** | **+0.7** |
| | comp=N,0.3nm,0.1s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sn** | **08 43 55.6** | **+0.4** |
| | comp=N,1.7nm,0.1s,SNR=7.9 | | | | | | |
| **EGRO** | **El Granado** | **2.91** | **74** | P | **Pn** | **08 43 21.0** | **+0.7** |
| | comp=N,0.3nm,0.1s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sn** | **08 43 55.7** | **+0.4** |
| | comp=N,1.7nm,0.1s,SNR=7.9 | | | | | | |
| **EVO** | **Evora** | **2.94** | **53** | *e*Sn | **Sn** | **08 43 56.6** | **+0.5** |
| EVO | | | | A | A | 08 43 59.5 | |
| | comp=N,10.0nm,0.3s | | | | | | |
| **EVO** | **Evora** | **2.94** | **53** | S | **Sn** | **08 43 56.6** | **+0.5** |
| | comp=N,10.0nm,0.3s | | | | | | |
| **EVO** | **Evora** | **2.94** | **53** | S | **Sn** | **08 43 56.6** | **+0.5** |
| | comp=N,10.0nm,0.3s | | | | | | |
| **PBAR** | **Barrancos** | **3.44** | **65** | *e*Pn | **Pn** | **08 43 28.5** | **+0.8** |
| PBAR | | | | *e*Sn | **Sn** | **08 44 08.9** | **+0.4** |
| PBAR | | | | A | A | 08 44 11.9 | |
| | comp=N,3.2nm,0.1s | | | | | | |
| **PBAR** | **Barrancos** | **3.44** | **65** | P | **Pn** | **08 43 28.5** | **+0.8** |
| PBAR | | | | S | **Sn** | **08 44 08.9** | **+0.4** |
| | comp=N,3.2nm,0.1s | | | | | | |
| **PBAR** | **Barrancos** | **3.44** | **65** | P | **Pn** | **08 43 28.5** | **+0.8** |
| PBAR | | | | S | **Sn** | **08 44 08.9** | **+0.4** |
| | comp=N,3.2nm,0.1s | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.59** | **73** | P | **Pn** | **08 43 30.1** | **+0.4** |
| | comp=N,0.1nm,0.1s,SNR=11 | | | | | | |
| EMIN | | | | S | **Sn** | **08 44 12.2** | **+0.1** |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.59** | **73** | P | **Pn** | **08 43 30.1** | **+0.4** |
| | comp=N,0.1nm,0.1s,SNR=11 | | | | | | |
| EMIN | | | | S | **Sn** | **08 44 12.2** | **+0.1** |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | |
| **EBAD** | **Badajoz** | **3.72** | **57** | P | **Pn** | **08 43 32.4** | **+0.9** |
| | comp=N,0.8nm,0.1s,SNR=4.0 | | | | | | |
| EBAD | | | | S | **Sn** | **08 44 15.3** | **-0.1** |
| | comp=N,1.0nm,0.1s,SNR=7.9 | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.81** | **30** | *e*Pn | **Pn** | **08 43 34.0** | **+1.4** |
| PCAS | | | | *e*Sn | **Sn** | **08 44 18.1** | **+0.6** |
| PCAS | | | | A | A | 08 44 19.7 | |
| | comp=N,4.7nm,0.7s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.81** | **30** | *e*Pn | **Pn** | **08 43 34.0** | **+1.4** |
| PCAS | | | | *e*Sn | **Sn** | **08 44 18.1** | **+0.6** |
| | comp=N,4.7nm,0.7s | | | | | | |
| **PMRV** | **Marv??o** | **3.88** | **46** | *e*Pn | **Pn** | **08 43 33.7** | **0.0** |
| PMRV | | | | *e*Sn | **Sn** | **08 44 18.7** | **-0.6** |
| PMRV | | | | A | A | 08 44 20.0 | |
| | comp=N,2.7nm,0.2s | | | | | | |
| **PMRV** | **Marv??o** | **3.88** | **46** | P | **Pn** | **08 43 33.7** | **0.0** |
| PMRV | | | | S | **Sn** | **08 44 18.7** | **-0.6** |
| | comp=N,2.7nm,0.2s | | | | | | |
| **PMRV** | **Marv??o** | **3.88** | **46** | *e*Pn | **Pn** | **08 43 33.7** | **0.0** |
| PMRV | | | | S | **Sn** | **08 44 18.7** | **-0.6** |
| | comp=N,2.7nm,0.2s | | | | | | |
| **ECAB** | **El Cabril** | **4.63** | **72** | P | **Pn** | **08 43 44.4** | **+0.4** |
| | comp=N,0.5nm,0.1s,SNR=18 | | | | | | |
| ECAB | | | | S | **Sn** | **08 44 37.0** | **-0.7** |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **4.63** | **72** | P | **Pn** | **08 43 44.4** | **+0.4** |
| | comp=N,0.5nm,0.1s,SNR=18 | | | | | | |
| ECAB | | | | S | **Sn** | **08 44 37.0** | **-0.7** |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | |
| **EPLA** | **Plasencia** | **5.06** | **48** | P | **Pn** | **08 43 50.7** | **+0.8** |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | |
| EPLA | | | | S | **Sn** | **08 44 47.1** | **-1.4** |
| | comp=N,2.1nm,0.2s,SNR=7.9 | | | | | | |
| **EPLA** | **Plasencia** | **5.06** | **48** | P | **Pn** | **08 43 50.7** | **+0.8** |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | |
| EPLA | | | | S | **Sn** | **08 44 47.1** | **-1.4** |
| | comp=N,2.1nm,0.2s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **5.29** | **73** | P | **Pn** | **08 43 53.8** | **+0.7** |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **08 44 52.1** | **-2.1** |
| | comp=N,0.8nm,0.1s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **5.29** | **73** | P | **Pn** | **08 43 53.8** | **+0.7** |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **08 44 52.1** | **-2.1** |
| | comp=N,0.8nm,0.1s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **5.35** | **34** | *e*Sn | **Sn** | **08 44 54.5** | **-1.2** |
| MVO | | | | A | A | 08 44 55.2 | |
| | comp=N,3.0nm,0.5s | | | | | | |
| **MVO** | **Moncorvo** | **5.35** | **34** | S | **Sn** | **08 44 54.0** | **-1.7** |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **5.35** | **34** | S | **Sn** | **08 44 54.0** | **-1.7** |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | |
| MVO | | | | *e*Sn | **Sn** | **08 44 54.5** | **-1.2** |
| | comp=N,3.0nm,0.5s | | | | | | |
| **ELOB** | **Lobios** | **5.56** | **23** | P | **Pn** | **08 43 57.6** | **+0.8** |
| | comp=N,0.2nm,0.0s,SNR=4.0 | | | | | | |
| ELOB | | | | S | Sn | 08 44 57.8 | -3.0 |
| | comp=N,1.1nm,0.1s,SNR=7.9 | | | | | | |
| **ELOB** | **Lobios** | **5.56** | **23** | P | **Pn** | **08 43 57.6** | **+0.8** |
| | comp=N,0.2nm,0.0s,SNR=4.0 | | | | | | |
| **PGAV** | **Gavieira, Arco** | **5.58** | **21** | *e*Pn | **Pn** | **08 43 57.8** | **+0.6** |
| PGAV | | | | *e*Sn | **Sn** | **08 44 59.1** | **-2.3** |
| PGAV | | | | A | A | 08 45 05.3 | |
| | comp=N,1.4nm,0.1s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **5.58** | **21** | *e*Pn | **Pn** | **08 43 57.8** | **+0.6** |
| PGAV | | | | *e*Sn | **Sn** | **08 44 59.1** | **-2.3** |
| | comp=N,1.4nm,0.1s | | | | | | |
| **ECAL** | **Calabor** | **6.11** | **31** | P | **Pn** | **08 44 05.3** | **+0.9** |
| | comp=N,0.7nm,3.0s,SNR=7.9 | | | | | | |
| ECAL | | | | S | **Sn** | **08 45 12.1** | **-2.4** |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | |
| **ECAL** | **Calabor** | **6.11** | **31** | P | **Pn** | **08 44 05.3** | **+0.9** |
| | comp=N,0.7nm,3.0s,SNR=7.9 | | | | | | |
| ECAL | | | | S | **Sn** | **08 45 12.1** | **-2.4** |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.41** | **20** | P | **Pn** | **08 44 09.0** | **+0.6** |
| | comp=N,6.3nm,4.1s,SNR=7.9 | | | | | | |
| EAGO | | | | S | Sn | 08 45 18.6 | -3.0 |
| | comp=N,14nm,1.8s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.41** | **20** | P | **Pn** | **08 44 09.0** | **+0.6** |
| | comp=N,6.3nm,4.1s,SNR=7.9 | | | | | | |

*CSEM **19** 08:51:27.1,38.°24N×26.°32W,h0km,ML2.4,After PDA*

**PDA 19 08:51:27.1±0.7,38.°24N×26.°32W,h0km±6km,MD3.6, ML2.4,Error ellipse: s-maj=11.0km s-min=2.1km az=38.0,Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSET** | **Sete Cidades** | **0.63** | **131** | *e*S | Sg | 08 51 46.6 | -0.9 |
| PSET | | | | A | A | 08 51 48.7 | |
| | 48nm,0.3s | | | | | | |
| **PSET** | **Sete Cidades** | **0.63** | **131** | *e*S | Sg | 08 51 46.6 | -0.9 |
| **ADH** | **Angra Heroismo** | **0.83** | **300** | *e*P | Pg | 08 51 41.1 | -1.9 |
| ADH | | | | *e*S | Sg | 08 51 51.3 | -2.5 |
| ADH | | | | A | A | 08 51 54.9 | |
| | 69nm,0.4s | | | | | | |
| **ADH** | **Angra Heroismo** | **0.83** | **300** | *e*P | Pg | 08 51 41.1 | -1.9 |
| ADH | | | | *e*S | Sg | 08 51 51.3 | -2.5 |
| **ROSA** | **Rosais** | **1.58** | **288** | *e*P | Pn | 08 51 51.4 | -5.0 |
| ROSA | | | | *e*S | Sn | 08 52 10.0 | -7.6 |
| ROSA | | | | A | A | 08 52 10.6 | |
| | 16nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **1.58** | **288** | *e*P | Pn | 08 51 51.4 | -5.0 |
| ROSA | | | | *e*S | Sn | 08 52 10.0 | -7.6 |
| **PICO** | **Pico** | **1.68** | **280** | *e*P | Pn | 08 51 53.0 | -4.8 |
| PICO | | | | *e*S | Sn | 08 52 12.0 | -8.0 |
| **PICO** | **Pico** | **1.68** | **280** | *e*P | Pn | 08 51 53.0 | -4.8 |
| PICO | | | | *e*S | Sn | 08 52 12.0 | -8.0 |
| **CALA** | **Caldeira** | **1.90** | **281** | *e*S | Sn | 08 52 18.0 | -7.6 |
| **CALA** | **Caldeira** | **1.90** | **281** | *e*S | Sn | 08 52 18.0 | -7.6 |

*NEIC **19** 08:55:24.0,35.°32N×92.°30W,h4km,MD2.6(CERI),After CERI.*
*NEIC Felt at Greenbrier and Rose Bud.*

**ISC 19 08:55:23.9±1.3,35.°32N±0.°04×92.°32W±0.°02,h2km±13km, n16,σ1$08/28,Arkansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UALR** | **University of** | **0.54** | **182** | *e*Pg | **Pb** | **08 55 35.2** | **-0.8** |
| UALR | | | | *e*Sg | **Sb** | **08 55 44.8** | **+0.6** |
| **MIAR** | **Mount Ida** | **1.29** | **234** | P | **Pb** | **08 55 48.7** | **-0.1** |
| | baz=1.3 | | | | | | |
| **MIAR** | **Mount Ida** | **1.29** | **234** | *e*Pn | **Pb** | **08 55 48.5** | **-0.2** |
| MIAR | | | | *e*Sn | **Sg** | **08 56 06.7** | **+1.5** |
| **HBAR** | **Harrisburg** | **1.38** | **80** | *e*Pn | **Pg** | **08 55 50.7** | **+0.5** |
| HBAR

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SRKR** | **Sorokina** | **1.56** | **15** | *e*P | | Pb | 09 02 30.6 | -0.1 |
| SRKR | | | | *e*S | | Sg | 09 02 52.3 | +0.8 |
| **KBTR** | **Krutoberegovo** | **1.72** | **51** | *e*P | | Pn | 09 02 31.7 | -0.1 |
| KBTR | | | | *e*S | | Sb | 09 02 55.4 | +0.2 |
| **GNL** | **Ganaly** | **2.06** | **226** | *e*P | | Pn | 09 02 37.2 | +0.7 |
| GNL | | | | *e*S | | Sb | 09 03 04.8 | -0.3 |
| **SPN** | **Mys Shipunski** | **2.07** | **187** | *e*P | | Pn | 09 02 36.4 | -0.1 |
| SPN | | | | *e*S | | Sn | 09 03 03.2 | +0.4 |
| **KRX** | **Arik** | **2.07** | **211** | *e*P | | Pn | 09 02 38.0 | +1.2 |
| **NLC** | **Nalytchevo** | **2.08** | **198** | *e*P | | Pb | 09 02 38.8 | -0.5 |
| NLC | | | | *e*S | | Sb | 09 03 05.7 | +0.2 |
| **SDLR** | **Sedlovina** | **2.08** | **206** | *e*P | | Pb | 09 02 38.2 | -1.3 |
| SDLR | | | | *e*S | | Sb | 09 03 05.6 | -0.3 |
| **SMAR** | **Somma** | **2.12** | **207** | *e*P | | Pn | 09 02 38.4 | +0.9 |
| SMAR | | | | *e*S | | Sb | 09 03 06.7 | -0.4 |
| **AVH** | **Avacha** | **2.13** | **208** | *e*P | | Pb | 09 02 39.3 | -1.0 |
| **KOK** | **Koryaka** | **2.14** | **210** | *e*P | | Pb | 09 02 39.2 | -1.2 |
| KOK | | | | *e*S | | Sb | 09 03 07.2 | -0.2 |
| **PET** | **Petropavlovsk** | **2.37** | **207** | *e*P | | Pn | 09 02 42.3 | +1.6 |
| PET | | | | *e*S | | Sb | 09 03 12.1 | -1.7 |
| **RUS** | **Russkaya** | **2.95** | **203** | *e*P | | Pn | 09 02 49.9 | +1.3 |
| RUS | | | | *e*S | | Sn | 09 03 26.7 | +2.3 |
| **MTVR** | **Mutnovka** | **2.98** | **207** | *e*P | | Pb | 09 02 52.6 | -2.3 |
| MTVR | | | | *e*S | | Sb | 09 03 29.4 | -2.4 |
| **ASAK** | **Asacha** | **3.15** | **209** | P | | Pb | 09 02 55.3 | -2.4 |

**KRSC 19 09:03:21.1±0.5, 55°.13N×160°.41E, h4km±3km, ML3.5, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZV** | **Kizimen** | **0.07** | **258** | *i* P | Pg | 09 03 23.5 | +0.7 |
| **TUMR** | **Tumrok** | **0.22** | **316** | *i* P | Pg | 09 03 25.9 | +0.4 |
| **KMNR** | **Kamenistaya** | **0.64** | **351** | *e*P | Pg | 09 03 34.1 | +0.5 |
| KMNR | | | | *e*S | Sb | 09 03 43.8 | -0.6 |
| **KIRR** | **Kirishev** | **0.83** | **357** | S | Sb | 09 03 50.4 | +0.4 |
| **KPT** | **Kopyto** | **0.85** | **353** | S | Sn | 09 03 52.0 | -1.0 |
| **MKZ** | **Mys Kozlova** | **0.95** | **126** | *e*P | Pb | 09 03 39.9 | -0.3 |
| MKZ | | | | *e*S | Sb | 09 03 53.8 | +0.6 |
| **KOZ** | **Kozyrevsk** | **0.98** | **342** | P | Pg | 09 03 40.0 | 0.0 |
| KOZ | | | | S | Sb | 09 03 54.1 | 0.0 |
| **KLY** | **Klyuchi** | **1.20** | **7** | P | Pn | 09 03 45.7 | +1.0 |
| **KII** | **Karymskiy** | **1.23** | **207** | P | Pb | 09 03 44.9 | -0.1 |
| **SRDR** | **Sredinnyy** | **1.25** | **342** | P | Pb | 09 03 45.5 | 0.0 |
| **ESO** | **Esso** | **1.26** | **310** | *e*S | Sg | 09 04 01.5 | -0.2 |
| **KBTR** | **Krutoberegovo** | **1.74** | **51** | *e*P | Pn | 09 03 52.5 | +0.3 |
| KBTR | | | | *e*S | Sb | 09 04 15.8 | -0.2 |
| **GNL** | **Ganaly** | **2.03** | **226** | P | Pn | 09 03 57.0 | +0.7 |
| GNL | | | | S | Sb | 09 04 24.4 | -0.2 |
| **SPN** | **Mys Shipunski** | **2.05** | **187** | *e*P | Pn | 09 03 56.7 | +0.4 |
| SPN | | | | *e*S | Sb | 09 04 23.8 | -0.8 |
| **KRX** | **Arik** | **2.05** | **211** | P | Pb | 09 03 59.1 | 0.0 |

*IGIL **19** 09:08:56.4, 36°.82N×12°.49W, h1km, ML2.5*
*MDD **19** 09:08:57.2±0.2, 36°.70N×12°.69W, h68km±10km, mb3.8/25, Error ellipse: s-maj=2.3km s-min=1.8km az=109.0, PRXIMO*
*CSEM **19** 09:08:57.1±0.3, 36°.85N×12°.32W, h10km, ML3.6/4, Error ellipse: s-maj=6.7km s-min=4.8km az=71.0*
*INMG **19** 09:08:58.2±1.1, 36°.70N×12°.80W, h10km, ML2.7, Error ellipse: s-maj=5.5km s-min=4.4km az=88.0*
*CNRM **19** 09:09:01.1, 36°.34N×12°.49W, h31km, MD3.5*

**ISC 19 09:08:55.0±3.0, 36°.92N±0°.09×12°.5W±0°.1, h10km, n88, σ1§57/149, 5C-2D, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **2.92** | **85** | ⇑*i*Pn | **Pn** | **09 09 42.5** | **+1.0** |
| PFVI | | | | *e*Sn | **Sn** | **09 10 15.0** | **-1.7** |
| PFVI | | | | A | A | 09 10 18.4 | |
| | 12nm,0.1s | | | | | | |
| **PFVI** | **Vila Bisbo** | **2.92** | **85** | ⇑P | **Pn** | **09 09 42.5** | **+1.0** |
| | 6.7nm,0.1s,SNR=18 | | | | | | |
| PFVI | | | | S | **Sn** | **09 10 15.7** | **-1.0** |
| | 30nm,0.2s,SNR=7.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **2.92** | **85** | P | **Pn** | **09 09 42.5** | **+1.0** |
| | 6.7nm,0.1s,SNR=18 | | | | | | |
| PFVI | | | | *e*Sn | **Sn** | **09 10 15.0** | **-1.7** |
| | 12nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **3.08** | **82** | *e*P | **Pn** | **09 09 44.7** | **+1.0** |
| MORF | | | | *e*S | **Sn** | **09 10 20.0** | **-0.5** |
| MORF | | | | AML | AML | 09 10 22.2 | |
| | comp=E,30nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **3.08** | **82** | ⇑*e*Pn | **Pn** | **09 09 44.7** | **+1.0** |
| MORF | | | | *e*Sn | **Sn** | **09 10 19.8** | **-0.7** |
| MORF | | | | A | A | 09 10 23.8 | |
| | comp=E,21nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **3.08** | **82** | P | **Pn** | **09 09 44.7** | **+1.0** |
| MORF | | | | S | **Sn** | **09 10 19.8** | **-0.7** |
| | comp=E,21nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **3.08** | **82** | P | **Pn** | **09 09 44.7** | **+1.0** |
| MORF | | | | S | **Sn** | **09 10 19.8** | **-0.7** |
| | comp=E,21nm,0.1s | | | | | | |
| **PMAFR** | **Mafra** | **3.24** | **50** | ⇑*e*Pn | **Pn** | **09 09 48.0** | **+2.2** |
| PMAFR | | | | *e*Sn | **Sn** | **09 10 25.5** | **+1.0** |
| PMAFR | | | | A | A | 09 10 27.0 | |
| | comp=E,39nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **3.24** | **50** | ⇑P | **Pn** | **09 09 48.0** | **+2.2** |
| | comp=E,10nm,0.1s,SNR=18 | | | | | | |
| PMAFR | | | | S | **Sn** | **09 10 25.9** | **+1.4** |
| | comp=E,97nm,0.3s,SNR=6.5 | | | | | | |
| **PMAFR** | **Mafra** | **3.24** | **50** | P | **Pn** | **09 09 48.0** | **+2.2** |
| | comp=E,10nm,0.1s,SNR=18 | | | | | | |
| PMAFR | | | | *e*Sn | **Sn** | **09 10 25.5** | **+1.0** |
| | comp=E,39nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **3.35** | **68** | *e*Pn | **Pn** | **09 09 48.9** | **+1.5** |
| PNCL | | | | *e*Sn | **Sn** | **09 10 27.6** | **+0.4** |
| PNCL | | | | A | A | 09 10 28.7 | |
| | comp=E,9.6nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **3.35** | **68** | *e*Pn | **Pn** | **09 09 48.9** | **+1.5** |
| PNCL | | | | *e*Sn | **Sn** | **09 10 27.6** | **+0.4** |
| | comp=E,9.6nm,0.2s | | | | | | |
| **PACT** | **Alcochete** | **3.42** | **56** | *e*Pn | Pn | 09 09 45.9 | -2.4 |
| PACT | | | | *e*Sn | **Sn** | **09 10 26.3** | **-2.6** |
| **MESJ** | **Messejana** | **3.51** | **74** | *e*P | **Pn** | **09 09 50.8** | **+1.3** |
| MESJ | | | | *e*S | **Sn** | **09 10 30.6** | **-0.5** |
| MESJ | | | | AML | AML | 09 10 32.9 | |
| | comp=N,7.4nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **3.51** | **74** | P | **Pn** | **09 09 50.8** | **+1.3** |
| MESJ | | | | S | **Sn** | **09 10 30.6** | **-0.5** |
| | comp=N,7.4nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **3.51** | **74** | P | **Pn** | **09 09 50.8** | **+1.3** |
| MESJ | | | | S | **Sn** | **09 10 30.6** | **-0.5** |
| | comp=N,7.4nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **3.60** | **77** | *e*Pn | **Pn** | **09 09 52.8** | **+1.9** |
| PCVE | | | | *e*Sn | **Sn** | **09 10 32.0** | **-1.5** |
| PCVE | | | | A | A | 09 10 33.5 | |
| | comp=N,7.5nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **3.60** | **77** | P | **Pn** | **09 09 52.8** | **+1.9** |
| PCVE | | | | S | **Sn** | **09 10 32.0** | **-1.5** |
| | comp=N,7.5nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **3.60** | **77** | P | **Pn** | **09 09 52.8** | **+1.9** |
| PCVE | | | | S | **Sn** | **09 10 32.0** | **-1.5** |
| | comp=N,7.5nm,0.6s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.64** | **84** | *e*Pn | **Pn** | **09 09 52.7** | **+1.3** |
| PBDV | | | | *e*Sn | **Sn** | **09 10 35.2** | **+0.7** |
| PBDV | | | | A | A | 09 10 39.3 | |
| | comp=N,6.9nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.64** | **84** | P | **Pn** | **09 09 52.7** | **+1.3** |
| PBDV | | | | S | **Sn** | **09 10 35.2** | **+0.7** |
| | comp=N,6.9nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **3.64** | **84** | P | **Pn** | **09 09 52.7** | **+1.3** |
| PBDV | | | | S | **Sn** | **09 10 35.2** | **+0.7** |
| | comp=N,6.9nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.83** | **81** | *e*Pn | **Pn** | **09 09 55.2** | **+1.3** |
| PVAQ | | | | *e*Sn | **Sn** | **09 10 38.3** | **-0.7** |
| PVAQ | | | | A | A | 09 10 41.4 | |
| | comp=N,7.6nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.83** | **81** | P | **Pn** | **09 09 55.2** | **+1.3** |
| PVAQ | | | | S | **Sn** | **09 10 38.3** | **-0.7** |
| | comp=N,7.6nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **3.83** | **81** | P | **Pn** | **09 09 55.2** | **+1.3** |
| PVAQ | | | | S | **Sn** | **09 10 38.3** | **-0.7** |
| | comp=N,7.6nm,0.2s | | | | | | |
| **EVO** | **Evora** | **3.88** | **64** | *e*Pn | **Pn** | **09 09 55.9** | **+1.2** |
| EVO | | | | *e*Sn | **Sn** | **09 10 40.1** | **-0.3** |
| EVO | | | | A | A | 09 10 48.4 | |
| | comp=N,12nm,0.1s | | | | | | |
| **EVO** | **Evora** | **3.88** | **64** | P | **Pn** | **09 09 55.9** | **+1.2** |
| EVO | | | | S | **Sn** | **09 10 40.1** | **-0.3** |
| | comp=N,12nm,0.1s | | | | | | |
| **EVO** | **Evora** | **3.88** | **64** | P | **Pn** | **09 09 55.9** | **+1.2** |
| EVO | | | | S | **Sn** | **09 10 40.1** | **-0.3** |
| | comp=N,12nm,0.1s | | | | | | |
| **EGRO** | **El Granado** | **4.03** | **80** | P | **Pn** | **09 09 58.3** | **+1.6** |
| | comp=N,0.7nm,0.1s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sn** | **09 10 43.1** | **-0.8** |
| | comp=N,4.8nm,0.1s,SNR=6.4 | | | | | | |
| **EGRO** | **El Granado** | **4.03** | **80** | P | **Pn** | **09 09 58.3** | **+1.6** |
| | comp=N,0.7nm,0.1s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sn** | **09 10 43.1** | **-0.8** |
| | comp=N,4.8nm,0.1s,SNR=6.4 | | | | | | |
| **PCAS** | **Casmilo, Conde** | **4.42** | **44** | *e*Pn | **Pn** | **09 10 04.2** | **+2.2** |
| PCAS | | | | *e*Sn | **Sn** | **09 10 53.5** | **0.0** |
| PCAS | | | | A | A | 09 11 08.4 | |
| | comp=N,7.9nm,0.6s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **4.42** | **44** | *e*Pn | **Pn** | **09 10 04.2** | **+2.2** |
| PCAS | | | | *e*Sn | **Sn** | **09 10 53.5** | **0.0** |
| | comp=N,7.9nm,0.6s | | | | | | |
| **PBAR** | **Barrancos** | **4.49** | **72** | *e*Pn | **Pn** | **09 10 04.8** | **+1.7** |
| PBAR | | | | *e*Sn | **Sn** | **09 10 54.4** | **-1.0** |
| PBAR | | | | A | A | 09 11 00.9 | |
| | comp=N,8.6nm,0.4s | | | | | | |
| **PBAR** | **Barrancos** | **4.49** | **72** | P | **Pn** | **09 10 04.8** | **+1.7** |
| PBAR | | | | S | **Sn** | **09 10 54.4** | **-1.0** |
| | comp=N,8.6nm,0.4s | | | | | | |
| **PBAR** | **Barrancos** | **4.49** | **72** | P | **Pn** | **09 10 04.8** | **+1.7** |
| PBAR | | | | S | **Sn** | **09 10 54.4** | **-1.0** |
| | comp=N,8.6nm,0.4s | | | | | | |
| **EBAD** | **Badajoz** | **4.69** | **65** | P | **Pn** | **09 10 07.5** | **+1.7** |
| | comp=N,1.5nm,0.1s,SNR=11 | | | | | | |
| EBAD | | | | S | **Sn** | **09 11 00.1** | **-0.2** |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | |
| **EBAD** | **Badajoz** | **4.69** | **65** | P | **Pn** | **09 10 07.5** | **+1.7** |
| | comp=N,1.5nm,0.1s,SNR=11 | | | | | | |
| EBAD | | | | S | **Sn** | **09 11 00.1** | **-0.2** |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **4.70** | **78** | ⇓P | **Pn** | **09 10 07.0** | **+1.1** |
| | comp=N,0.4nm,0.1s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sn** | **09 10 59.0** | **-1.4** |
| | comp=N,3.0nm,0.3s,SNR=6.6 | | | | | | |
| **EMIN** | **Mina Concepcio** | **4.70** | **78** | P | **Pn** | **09 10 07.0** | **+1.1** |
| | comp=N,0.4nm,0.1s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sn** | **09 10 59.0** | **-1.4** |
| | comp=N,3.0nm,0.3s,SNR=6.6 | | | | | | |
| **PMRV** | **Marv??o** | **4.72** | **56** | *e*Pn | **Pn** | **09 10 07.9** | **+1.7** |
| PMRV | | | | *e*Sn | **Sn** | **09 10 59.9** | **-1.2** |
| PMRV | | | | A | A | 09 11 10.7 | |
| | comp=N,3.5nm,0.1s | | | | | | |
| **PMRV** | **Marv??o** | **4.72** | **56** | P | **Pn** | **09 10 07.9** | **+1.7** |
| PMRV | | | | S | **Sn** | **09 10 59.9** | **-1.2** |
| | comp=N,3.5nm,0.1s | | | | | | |
| **PMRV** | **Marv??o** | **4.72** | **56** | P | **Pn** | **09 10 07.9** | **+1.7** |
| PMRV | | | | S | **Sn** | **09 10 59.9** | **-1.2** |
| | comp=N,3.5nm,0.1s | | | | | | |
| **MTE** | **Manteigas** | **5.19** | **46** | *e*Pn | **Pn** | **09 10 14.5** | **+1.8** |
| MTE | | | | *e*Sn | **Sn** | **09 11 11.9** | **-0.8** |
| MTE | | | | A | A | 09 11 14.5 | |
| | comp=N,7.5nm,0.3s | | | | | | |
| **MTE** | **Manteigas** | **5.19** | **46** | P | **Pn** | **09 10 14.5** | **+1.8** |
| MTE | | | | S | **Sn** | **09 11 11.9** | **-0.8** |
| | comp=N,3.8nm,0.3s | | | | | | |
| **MTE** | **Manteigas** | **5.19** | **46** | P | **Pn** | **09 10 14.5** | **+1.8** |
| MTE | | | | S | **Sn** | **09 11 11.9** | **-0.8** |
| | comp=N,3.8nm,0.3s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **5.64** | **225** | P | Pn | 09 10 11.4 | -7.5 |
| | comp=N,12nm,1.2s,SNR=7.9 | | | | | | |
| PMOZ | | | | S | Sn | 09 11 10.3 | -14 |
| | comp=N,36nm,4.1s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **5.72** | **76** | P | **Pn** | **09 10 21.1** | **+1.1** |
| | comp=N,2.0nm,0.2s,SNR=4.0 | | | | | | |
| ECAB | | | | S | **Sn** | **09 11 23.6** | **-2.2** |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **5.72** | **76** | P | **Pn** | **09 10 21.1** | **+1.1** |
| | comp=N,2.0nm,0.2s,SNR=4.0 | | | | | | |
| **POLO** | **Lamas de Olo** | **5.74** | **38** | *e*Pn | **Pn** | **09 10 22.1** | **+1.7** |
| POLO | | | | *e*Sn | **Sn** | **09 11 24.1** | **-2.3** |
| POLO | | | | A | A | 09 11 27.3 | |
| | comp=N,2.0nm,0.2s | | | | | | |
| **POLO** | **Lamas de Olo** | **5.74** | **38** | *e*Pn | **Pn** | **09 10 22.1** | **+1.7** |
| POLO | | | | *e*Sn | **Sn** | **09 11 24.1** | **-2.3** |
| | comp=N,2.0nm,0.2s | | | | | | |
| **EPLA** | **Plasencia** | **5.91** | **56** | ⇓P | **Pn** | **09 10 24.3** | **+1.7** |
| | comp=N,4.3nm,0.1s,SNR=18 | | | | | | |
| EPLA | | | | S | **Sn** | **09 11 29.6** | **-0.9** |
| | comp=N,1.2nm,0.1s,SNR=7.9 | | | | | | |
| **EPLA** | **Plasencia** | **5.91** | **56** | P | **Pn** | **09 10 24.3** | **+1.7** |
| | comp=N,4.3nm,0.1s,SNR=18 | | | | | | |
| EPLA | | | | S | **Sn** | **09 11 29.6** | **-0.9** |
| | comp=N,1.2nm,0.1s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **5.99** | **43** | *e*Pn | **Pn** | **09 10 25.9** | **+2.2** |
| MVO | | | | *e*Sn | **Sn** | **09 11 30.1** | **-2.4** |
| MVO | | | | A | A | 09 11 34.8 | |
| | comp=N,7.7nm,0.4s | | | | | | |
| **MVO** | **Moncorvo** | **5.99** | **43** | P | **Pn** | **09 10 25.3** | **+1.6** |
| | comp=N,0.3nm,0.1s,SNR=4.0 | | | | | | |
| MVO | | | | S | **Sn** | **09 11 30.1** | **-2.4** |
| | comp=N,3.2nm,0.1s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **5.99** | **43** | P | **Pn** | **09 10 25.3** | **+1.6** |
| | comp=N,0.3nm,0.1s,SNR=4.0 | | | | | | |
| **MVO** | **Moncorvo** | **5.99** | **43** | *e*Pn | **Pn** | **09 10 25.9** | **+2.2** |
| MVO | | | | S | **Sn** | **09 11 30.1** | **-2.4** |
| | comp=N,3.2nm,0.1s,SNR=7.9 | | | | | | |
| **PGAV** | **Gavieira, Arco** | **6.00** | **32** | *e*Pn | **Pn** | **09 10 25.8** | **+2.0** |
| PGAV | | | | *e*Sn | **Sn** | **09 11 30.2** | **-2.4** |
| PGAV | | | | A | A | 09 11 35.3 | |
| | comp=N,4.8nm,0.3s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **6.00** | **32** | *e*Pn | **Pn** | **09 10 25.8** | **+2.0** |
| **ELOB** | **Lobios** | **6.01** | **33** | P | **Pn** | **09 10 26.1** | **+2.1** |
| | comp=N,0.5nm,0.1s,SNR=8.8 | | | | | | |
| ELOB | | | | S | **Sn** | **09 11 31.4** | **-1.4** |
| | comp=N,2.5nm,0.1s,SNR=6.1 | | | | | | |
| **ELOB** | **Lobios** | **6.01** | **33** | P | **Pn** | **09 10 26.1** | **+2.1** |
| | comp=N,0.5nm,0.1s,SNR=8.8 | | | | | | |
| ELOB | | | | S | **Sn** | **09 11 31.4** | **-1.4** |
| | comp=N,2.5nm,0.1s,SNR=6.1 | | | | | | |
| **EADA** | **Adamuz** | **6.39** | **76** | P | **Pn** | **09 10 30.4** | **+1.2** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **09 11 39.8** | **-2.5** |
| | comp=N,1.3nm,0.1s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **6.39** | **76** | P | **Pn** | **09 10 30.4** | **+1.2** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| **EMAZ** | **Mazaricos** | **6.59** | **23** | P | **Pn** | **09 10 33.3** | **+1.4** |
| | comp=N,5.2nm,1.8s,SNR=7.9 | | | | | | |
| EMAZ | | | | S | Sn | 09 11 42.1 | -5.1 |
| | comp=N,4.4nm,0.1s,SNR=8.2 | | | | | | |
| **EMAZ** | **Mazaricos** | **6.59** | **23** | P | **Pn** | **09 10 33.3** | **+1.4** |
| | comp=N,5.2nm,1.8s,SNR=7.9 | | | | | | |
| **ECAL** | **Calabor** | **6.70** | **40** | P | **Pn** | **09 10 35.3** | **+1.9** |
| | comp=N,2.8nm,0.2s,SNR=8.2 | | | | | | |
| ECAL | | | | S | **Sn** | **09 11 47.8** | **-2.0** |
| | comp=N,2.1nm,0.1s,SNR=6.9 | | | | | | |
| **ECAL** | **Calabor** | **6.70** | **40** | P | **Pn** | **09 10 35.3** | **+1.9** |
| | comp=N,2.8nm,0.2s,SNR=8.2 | | | | | | |
| ECAL | | | | S | **Sn** | **09 11 47.8** | **-2.0** |
| | comp=N,2.1nm,0.1s,SNR=6.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.77** | **28** | P | **Pn** | **09 10 36.2** | **+1.8** |
| | comp=N,0.1nm,0.0s,SNR=7.9 | | | | | | |
| EAGO | | | | S | Sn | 09 11 47.1 | -4.6 |
| | comp=N,1.4nm,0.1s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.77** | **28** | P | **Pn** | **09 10 36.2** | **+1.8** |
| | comp=N,0.1nm,0.0s,SNR=7.9 | | | | | | |
| **KIB** | **El Ksiba** | **6.84** | **127** | P | **Pn** | **09 10 34.0** | **-1.4** |
| KIB | | | | S | Sn | 09 11 43.0 | -10 |
| **KIB** | **El Ksiba** | **6.84** | **127** | P | **Pn** | **09 10 34.0** | **-1.4** |
| **TZC** | **Tazercounte** | **6.85** | **132** | P | **Pn** | **09 10 35.0** | **-0.7** |
| TZC | | | | S | Sn | 09 11 44.0 | -10 |
| **TZC** | **Tazercounte** | **6.85** | **132** | P | **Pn** | **09 10 35.0** | **-0.7** |
| **OUK** | **Oukaimeden** | **6.85** | **145** | P | Pn | 09 10 33.0 | -2.8 |
| OUK | | | | S | Sn | 09 11 41.0 | -13 |
| **CZD** | **Col de Zad** | **7.22** | **120** | P | **Pn** | **09 10 41.0** | **+0.2** |
| CZD | | | | S | Sn | 09 11 55.0 | -8.1 |
| **CZD** | **Col de Zad** | **7.22** | **120** | P | **Pn** | **09 10 41.0** | **+0.2** |
| CZD | | | | S | Sn | 09 11 55.0 | -8.1 |
| **ESDC** | **Sonseca Array** | **7.23** | **65** | P | **Pn** | **09 10 42.4** | **+1.6** |
| | comp=N,1.4nm,0.3s,baz=248,slow=14,SNR=6.4 | | | | | | |
| **GUD** | **Guadarrama** | **7.48** | **58** | P | **Pn** | **09 10 45.7** | **+1.4** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| GUD | | | | S | **Sn** | **09 12 06.3** | **-2.9** |
| | comp=N,0.1nm,0.1s,SNR=4.0 | | | | | | |
| **EQES** | **Quesada** | **7.54** | **80** | P | **Pn** | **09 10 46.2** | **+1.1** |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | |
| EQES | | | | S | Sn | 09 12 06.4 | -4.2 |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | |
| **EPON** | **Pontenova** | **7.59** | **31** | P | **Pn** | **09 10 47.4** | **+1.8** |
| | comp=N,0.6nm,0.2s,SNR=7.9 | | | | | | |
| EPON | | | | S | **Sn** | **09 12 09.1** | **-2.5** |
| | comp=N,1.8nm,0.2s,SNR=7.9 | | | | | | |
| **EPON** | **Pontenova** | **7.59** | **31** | P | **Pn** | **09 10 47.4** | **+1.8** |
| | comp=N,0.6nm,0.2s,SNR=7.9 | | | | | | |
| EPON | | | | S | **Sn** | **09 12 09.1** | **-2.5** |
| | comp=N,1.8nm,0.2s,SNR=7.9 | | | | | | |
| **EARI** | **Arriondas** | **8.46** | **39** | P | **Pn** | **09 10 59.0** | **+1.4** |
| | comp=N,1.7nm,3.0s,SNR=7.9 | | | | | | |
| EARI | | | | S | **Sn** | **09 12 29.1** | **-4.0** |
| | comp=N,2.6nm,5.4s,SNR=7.9 | | | | | | |
| **EARI** | **Arriondas** | **8.46** | **39** | P | **Pn** | **09 10 59.0** | **+1.4** |
| | comp=N,1.7nm,3.0s,SNR=7.9 | | | | | | |
| EARI | | | | S | **Sn** | **09 12 29.1** | **-4.0** |
| | comp=N,2.6nm,5.4s,SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **8.82** | **75** | P | **Pn** | **09 11 03.4** | **+0.8** |
| | comp=N,0.5nm,1.1s,SNR=7.9 | | | | | | |
| **ETOR** | **Torete** | **9.01** | **61** | P | **Pn** | **09 11 06.7** | **+1.6** |
| | comp=N,15nm,0.2s,SNR=15 | | | | | | |
| **ELIZ** | **Elizondo** | **10.45** | **50** | P | **Pn** | **09 11 27.1** | **+2.3** |
| | comp=N,2.0nm,0.5s,SNR=7.9 | | | | | | |
| **YASP** | **Aspurt** | **10.45** | **53** | P | **Pn** | **09 11 26.4** | **+1.6** |
| | comp=N,10nm,4.1s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **10.46** | **52** | P | **Pn** | **09 11 26.8** | **+1.8** |
| | comp=N,7.5nm,1.8s,SNR=7.9 | | | | | | |
| **YSIG** | **Sigues** | **10.51** | **54** | P | **Pn** | **09 11 26.9** | **+1.2** |
| | comp=N,1.9nm,1.7s,SNR=7.9 | | | | | | |

**PGC 19 09:22:47.0±0.9, 48°.84N×129°.05W, h10km, ML2.9/16, Mw3.5/16, 231km west of Tofino, Bc Vancouver Island Region, Vancouver Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BPBC** | **Brooks Peninsu** | **1.56** | **32** | Pn | Pn | 09 23 12.9 | -2.0 |
| **EDB** | **Eliza Dome** | **1.63** | **50** | Pn | Pn | 09 23 13.6 | -2.2 |
| EDB | | | | Sn | Sn | 09 23 32.7 | -4.2 |
| **FHRB** | **Fair Harbour** | **1.75** | **45** | Pn | Pn | 09 23 15.5 | -1.9 |
| FHRB | | | | Sn | Sn | 09 23 35.8 | -3.9 |
| **MAYB** | **Maynard** | **1.98** | **37** | Pn | Pn | 09 23 19.0 | -1.8 |
| **WOSB** | **Woss** | **2.09** | **50** | Pn | Pn | 09 23 20.8 | -1.4 |
| **TOFB** | **Tofino** | **2.10** | **80** | Pn | Pn | 09 23 20.3 | -1.8 |
| TOFB | | | | Sn | Sn | 09 23 45.0 | -3.2 |
| **PHC** | **Port Hardy** | **2.14** | **29** | Pn | Pn | 09 23 21.1 | -1.7 |
| PHC | | | | Sn | Sn | 09 23 45.8 | -3.7 |
| **OZB** | **Mount Ozzard** | **2.35** | **86** | Pn | Pn | 09 23 23.8 | -2.0 |
| OZB | | | | Sn | Sn | 09 23 50.7 | -4.0 |
| **BTB** | **Buttle Lake** | **2.40** | **74** | Pn | Pn | 09 23 25.4 | -1.3 |
| BTB | | | | Sn | Sn | 09 23 52.8 | -3.5 |
| **SPLB** | **Strathcona Par** | **2.46** | **63** | Pn | Pn | 09 23 26.1 | -1.0 |
| **NCRB** | **Newcastle Ridg** | **2.50** | **50** | Pn | Pn | 09 23 27.0 | -0.9 |
| **B928** | **Bamfield** | **2.59** | **89** | Pn | Pn | 09 23 27.1 | -1.7 |
| B928 | | | | Sn | Sn | 09 23 56.5 | -3.8 |
| **CBB** | **Campbell River** | **2.69** | **62** | Pn | Pn | 09 23 29.4 | -0.9 |
| **MGB** | **Mount Grey** | **2.88** | **85** | Pn | Pn | 09 23 31.3 | -1.9 |
| MGB | | | | Sn | Sn | 09 24 04.5 | -3.5 |
| **TXB** | **Texada** | **3.14** | **72** | Pn | Pn | 09 23 35.9 | -0.7 |
| **YOUB** | **Youbou, Lake C** | **3.16** | **87** | Pn | Pn | 09 23 36.2 | -0.8 |
| **NLLB** | **Nanaimo Lost L** | **3.35** | **81** | Pn | Pn | 09 23 39.5 | 0.0 |
| **BBB** | **Bella Bella** | **3.40** | **10** | Pn | Pn | 09 23 39.2 | -0.9 |
| BBB | | | | Sn | Sn | 09 24 16.8 | -3.6 |
| **SHB** | **Sechelt** | **3.48** | **75** | Pn | Pn | 09 23 40.9 | -0.4 |

*AUST **19** 09:22:46.8, 24°.16S×179°.87E, h450km*
*ISCJB **19** 09:22:49.3±1.0, 23°.51S±0°.10×179°.8E±0°.1, h535km, mb3.9/7, Error ellipse: s-maj=18.7km s-min=12.1km az=158.6*
*IDC **19** 09:22:54.6±2.7, 23°.46S×179°.76E, h589km±32km, mb3.5/7, mb1 3.7/7, mb1mx3.4/19, mbtmp4.4/7, Error ellipse: s-maj=21.8km s-min=14.6km az=11.0*

**ISC 19 09:22:50.0±0.9, 23°.65S±0°.1×179°.8E±0°.1, h535km, n21, σ1§56/24, mb4.0/7, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **14.78** | **188** | P | **P** | **09 25 57.6** | **+0.4** |
| | 1.4nm,0.3s,baz=279,slow=3.9,SNR=10 | | | | | | |
| URZ | | | | S | **S** | **09 28 29.5** | **-2.0** |
| | 1.5nm,0.3s,baz=150,slow=22,SNR=5.3 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.17** | **248** | P | **P** | **09 28 27.1** | **+1.7** |
| | baz=31,SNR=5.6 | | | | | | |
| **QLP** | **Quilpie** | **32.30** | **257** | P | **P** | **09 28 36.9** | **+1.8** |
| | baz=32,SNR=7.2 | | | | | | |
| **MTSU** | **Mount Surprise** | **33.56** | **273** | P | **P** | **09 28 47.4** | **+1.5** |
| | baz=34,SNR=9.1 | | | | | | |
| **HTT** | **Hallett** | **37.04** | **245** | P | **P** | **09 29 11.5** | **-3.1** |
| | baz=37,SNR=4.9 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZAX** | **El Zacaton** | **1.14** | **244** | *e*P | **Pg** | **09 41 20.6** | **-0.1** |
| ZAX | | | | IAML | | 09 41 38.5 | |
| | comp=N,391nm,0.7s | | | | | | |
| ZAX | | | | ⇑*e* | | 09 41 38.5 | |
| **CBX** | **Cerro Bola** | **1.37** | **283** | *e*P | **Pn** | **09 41 24.0** | **-1.4** |
| CBX | | | | *e*S | **Sg** | **09 41 41.2** | **-1.9** |
| **CBX** | **Cerro Bola** | **1.37** | **283** | *e*P | **Pn** | **09 41 24.4** | **-1.0** |
| CBX | | | | *e*S | **Sg** | **09 41 43.5** | **+0.4** |
| CBX | | | | IAML | | 09 41 44.6 | |
| | comp=N,275nm,0.5s | | | | | | |
| CBX | | | | ⇓*e* | | 09 41 44.6 | |
| **CBX** | **Cerro Bola** | **1.37** | **283** | *e*P | **Pn** | **09 41 24.0** | **-1.4** |
| CBX | | | | *i* S | **Sg** | **09 41 42.5** | **-0.6** |
| **BAR** | **Barrett** | **1.50** | **296** | *e*Pn | **Pn** | **09 41 27.1** | **+0.1** |
| BAR | | | | *e*Sn | **Sb** | **09 41 46.6** | **-0.6** |
| **214A** | **Organ Pipe Nat** | **1.93** | **91** | *e*Pn | **Pn** | **09 41 30.2** | **-2.7** |
| 214A | | | | *e*Sn | **Sb** | **09 41 59.4** | **-0.2** |
| **PFO** | **Pinyon Flat Ob** | **1.96** | **324** | *e*Pn | **Pn** | **09 41 34.2** | **+0.7** |
| PFO | | | | *e*Sn | **Sg** | **09 42 01.8** | **-0.1** |
| **MWC** | **Mount Wilson** | **3.33** | **312** | *e*Pn | **Pn** | **09 41 52.7** | **+0.4** |
| MWC | | | | *e*Sn | **Sn** | **09 42 34.1** | **+1.5** |
| **GSC** | **Goldstone** | **3.57** | **337** | *e*Pn | **Pn** | **09 41 56.8** | **+1.2** |
| GSC | | | | *e*Pg | **Pg** | **09 42 10.4** | **+3.0** |
| GSC | | | | *e*Sn | **Sn** | **09 42 39.0** | **+0.4** |
| **TUC** | **Tucson** | **3.65** | **84** | *e*Pn | **Pn** | **09 41 57.9** | **+1.2** |
| TUC | | | | *e*Sn | **Sn** | **09 42 39.4** | **-1.2** |
| **WUAZ** | **Wupatki** | **4.65** | **41** | *e*Pn | **Pn** | **09 42 10.6** | **0.0** |
| WUAZ | | | | *e*Sn | **Sn** | **09 43 06.3** | **+1.0** |
| **121A** | **Cookes Peak, D** | **6.20** | **83** | *e*Pn | **Pn** | **09 42 33.2** | **+1.4** |
| 121A | | | | *e*Sg | **Sg** | **09 44 20.2** | **+2.1** |

**IDC 19 09:48:49.1±2.2,2°81S×150°89E,h0km,mb3.4/3, mb1 3.8/3,mb1mx3.5/23,mbtmp3.4/3,MS2.6/1,Ms1 2.6/1, ms1mx2.5/17,Error ellipse: s-maj=176.3km s-min=31.7km az=124.0,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **17.36** | **340** | LR | LR | 09 59 32.6 | |
| | comp=Z,21nm,20.1s,baz=183,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.47** | **222** | P | P | 09 53 59.0 | -1.6 |
| | 0.8nm,0.7s,baz=48,slow=9.8,SNR=3.6 | | | | | | |
| **ASAR** | **Alice Springs** | **26.45** | **217** | P | P | 09 54 29.6 | +1.5 |
| | 0.5nm,0.6s,baz=52,slow=8.5,SNR=5.5 | | | | | | |
| **ILAR** | **Eielson Array** | **81.06** | **23** | P | P | 10 01 05.5 | -0.3 |
| | 0.3nm,0.6s,baz=244,slow=4.9,SNR=2.4 | | | | | | |

*MOS **19** 10:06:06.8±1.0,55.˚19N×160.˚20E,h6km,mb5.0/44, MS4.2/21,Error ellipse: s-maj=7.8km s-min=3.6km az=84.7*
*KRSC **19** 10:06:07.3±0.4,55.˚15N×160.˚34E,h4km±2km,ML4.9*
*ISCJB **19** 10:06:10.0±0.4,55.˚22N±0.˚02×160.˚32E±0.˚03,h30km±3km, mb4.8/116,MS4.4/26,Error ellipse: s-maj=3.5km s-min=2.3km az=43.7*
*BJI **19** 10:06:11.0,55.˚23N×160.˚36E,h43km,mb4.8/37,mB5.2/32, Ms4.9/37,Ms7 4.6/35*
*NEIC **19** 10:06:12.7±0.2,55.˚14N×160.˚17E,h35km,mb5.0/64,Error ellipse: s-maj=6.3km s-min=3.6km az=163.0*
*IDC **19** 10:06:13.6±2.1,55.˚10N×160.˚23E,h44km±21km,mb4.1/26, mb1 4.2/30,mb1mx4.1/41,mbtmp4.3/30,ML3.4/4,MS4.2/21, Ms1 4.2/21,ms1mx4.0/39,Error ellipse: s-maj=15.0km s-min=10.3km az=159.0*

**ISC 19 10:06:08.8±0.6,55.˚15N±0.˚02×160.˚27E±0.˚03,h12km±3km, n423,σ1§42/453,mb4.9/117,MS4.5/26,10C-8D, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KZV** | **Kizimen** | **0.04** | **159** | *e*P | **Pg** | **10 06 09.5** | **-1.8** |
| **TUMR** | **Tumrok** | **0.15** | **332** | *e*P | **Pg** | **10 06 12.0** | **-0.6** |
| **TUMR** | **Tumrok** | **0.15** | **332** | PN | **Pg** | **10 06 12.0** | **-0.6** |
| **KMNR** | **Kamenistaya** | **0.61** | **358** | *e*P | **Pg** | **10 06 19.9** | **-0.8** |
| **KMNR** | **Kamenistaya** | **0.61** | **358** | PN | **Pg** | **10 06 19.9** | **-0.8** |
| **BZMR** | **Bezymyannaya** | **0.80** | **9** | *e*P | **Pb** | **10 06 23.4** | **-1.3** |
| BZMR | | | | *e*S | **Sb** | **10 06 35.2** | **-0.3** |
| **KIRR** | **Kirishev** | **0.81** | **3** | *e*P | **Pg** | **10 06 23.1** | **-1.4** |
| KIRR | | | | *e*S | **Sb** | **10 06 35.0** | **-0.8** |
| **KPT** | **Kopyto** | **0.82** | **358** | *e*P | **Pg** | **10 06 23.4** | **-1.3** |
| **KPT** | **Kopyto** | **0.82** | **358** | PN | **Pg** | **10 06 23.4** | **-1.3** |
| **BZWR** | **Bezymyannyi-We** | **0.83** | **9** | *e*P | **Pb** | **10 06 24.0** | **-1.2** |
| **ZLN** | **Zelenaya** | **0.92** | **19** | *e*P | **Pb** | **10 06 25.9** | **-0.9** |
| **ZLN** | **Zelenaya** | **0.92** | **19** | PN | **Pb** | **10 06 25.9** | **-0.9** |
| **KOZ** | **Kozyrevsk** | **0.94** | **346** | *e*P | **Pg** | **10 06 25.5** | **-1.5** |
| **KOZ** | **Kozyrevsk** | **0.94** | **346** | PN | **Pg** | **10 06 25.5** | **-1.5** |
| **MKZ** | **Mys Kozlova** | **1.03** | **124** | *e*P | **Pg** | **10 06 26.0** | **-2.6** |
| **MKZ** | **Mys Kozlova** | **1.03** | **124** | PN | **Pg** | **10 06 26.0** | **-2.6** |
| **ESO** | **Esso** | **1.19** | **312** | *e*P | **Pg** | **10 06 29.5** | **-2.1** |
| ESO | | | | *e*S | **Sg** | **10 06 46.5** | **-0.5** |
| **ESO** | **Esso** | **1.19** | **312** | PN | **Pg** | **10 06 29.5** | **-2.1** |
| ESO | | | | S | **Sg** | **10 06 46.5** | **-0.5** |
| **KLY** | **Klyuchi** | **1.19** | **10** | *e*P | **Pn** | **10 06 30.9** | **-0.3** |
| KLY | | | | *e*S | **Sn** | **10 06 48.0** | **+0.8** |
| KLY | | | | *e*S | **Sb** | **10 06 48.4** | **+1.9** |
| **KII** | **Karymskiy** | **1.21** | **204** | *e*P | **Pg** | **10 06 31.1** | **-1.0** |
| **KII** | **Karymskiy** | **1.21** | **204** | PN | **Pg** | **10 06 31.1** | **-1.0** |
| **SRDR** | **Sredinnyy** | **1.22** | **345** | *e*P | Pg | 10 06 29.3 | -2.9 |
| SRDR | | | | *e*S | **Sg** | **10 06 46.0** | **-2.0** |
| **SRDR** | **Sredinnyy** | **1.22** | **345** | PN | Pg | 10 06 29.3 | -2.9 |
| SRDR | | | | S | **Sg** | **10 06 46.0** | **-2.0** |
| **BDR** | **Baidarnaya** | **1.52** | **20** | *e*P | **Pb** | **10 06 35.9** | **-1.0** |
| BDR | | | | *e*S | **Sg** | **10 06 56.9** | **-0.8** |
| **SMKR** | **Semkarok** | **1.59** | **25** | *e*P | **Pb** | **10 06 37.0** | **-1.1** |
| **SMKR** | **Semkarok** | **1.59** | **25** | PN | **Pb** | **10 06 37.0** | **-1.1** |
| **SRKR** | **Sorokina** | **1.59** | **18** | *e*P | **Pn** | **10 06 36.6** | **-0.2** |
| SRKR | | | | *e*S | **Sg** | **10 06 58.1** | **-2.0** |
| **SRKR** | **Sorokina** | **1.59** | **18** | PN | **Pn** | **10 06 36.6** | **-0.2** |
| SRKR | | | | S | **Sg** | **10 06 58.1** | **-2.0** |
| **KBG** | **Krutoberegovo** | **1.77** | **50** | *e*P | **Pn** | **10 06 38.2** | **-0.9** |
| KBG | | | | *e*S | **Sb** | **10 07 01.9** | **-1.3** |
| **KBTR** | **Krutoberegovo** | **1.79** | **53** | *e*P | **Pn** | **10 06 38.2** | **-1.3** |
| **KBTR** | **Krutoberegovo** | **1.79** | **53** | PN | **Pn** | **10 06 38.2** | **-1.3** |
| **GNL** | **Ganaly** | **1.99** | **224** | *e*P | **Pn** | **10 06 43.1** | **+0.8** |
| **GNL** | **Ganaly** | **1.99** | **224** | PN | **Pn** | **10 06 43.1** | **+0.8** |
| **KRX** | **Arik** | **2.03** | **209** | *e*P | **Pn** | **10 06 44.1** | **+1.3** |
| **SDLR** | **Sedlovina** | **2.04** | **204** | *e*P | **Pb** | **10 06 44.6** | **-1.2** |
| **SDLR** | **Sedlovina** | **2.04** | **204** | PN | **Pb** | **10 06 44.6** | **-1.2** |
| **NLC** | **Nalytchevo** | **2.05** | **196** | *e*P | **Pb** | **10 06 44.5** | **-1.4** |
| NLC | | | | *e*S | **Sb** | **10 07 11.6** | **+0.3** |
| **NLC** | **Nalytchevo** | **2.05** | **196** | PN | **Pb** | **10 06 44.5** | **-1.4** |
| NLC | | | | S | **Sb** | **10 07 11.6** | **+0.3** |
| **SPN** | **Mys Shipunski** | **2.06** | **184** | *e*P | **Pn** | **10 06 42.8** | **-0.3** |
| SPN | | | | *e*S | **Sn** | **10 07 08.9** | **+0.3** |
| **SPN** | **Mys Shipunski** | **2.06** | **184** | PN | **Pn** | **10 06 42.8** | **-0.3** |
| SPN | | | | S | **Sn** | **10 07 08.9** | **+0.3** |
| **SMAR** | **Somma** | **2.08** | **205** | *e*P | **Pn** | **10 06 44.8** | **+1.3** |
| **SMAR** | **Somma** | **2.08** | **205** | PN | **Pn** | **10 06 44.8** | **+1.3** |
| **AVH** | **Avacha** | **2.09** | **206** | *e*P | **Pb** | **10 06 45.1** | **-1.5** |
| **AVH** | **Avacha** | **2.09** | **206** | PN | **Pb** | **10 06 45.1** | **-1.5** |
| **KOK** | **Koryaka** | **2.09** | **208** | *e*P | **Pb** | **10 06 45.6** | **-1.0** |
| **KOK** | **Koryaka** | **2.09** | **208** | PN | **Pb** | **10 06 45.6** | **-1.0** |
| **UGLR** | **Uglovaya** | **2.12** | **204** | *e*P | **Pb** | **10 06 46.1** | **-1.0** |
| **PET** | **Petropavlovsk** | **2.33** | **205** | *e*P | **Pb** | **10 06 48.8** | **-1.8** |
| PET | | | | *e*S | **Sb** | **10 07 19.2** | **-0.1** |
| **PET** | **Petropavlovsk** | **2.33** | **205** | ⇓*i* PN | **Pn** | **10 06 48.4** | **+1.6** |
| PET | | | | *e*S | **Sb** | **10 07 18.9** | **-0.4** |
| PET | | | | pmax | pmax | | |
| | comp=Z,1μm,0.5s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,1μm,0.7s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,2μm,1.2s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,8μm,13.0s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,12μm,10.0s | | | | | | |
| **PET** | **Petropavlovsk** | **2.33** | **205** | *e*Pn | **Pn** | **10 06 47.6** | **+0.8** |
| PET | | | | *e*Sn | **Sn** | **10 07 13.1** | **-2.3** |
| **PEA0** | **Petropavlovsk-** | **2.54** | **218** | *e*Pn | **Pn** | **10 06 50.5** | **+0.7** |
| **PETK** | **Petropavlovsk-** | **2.54** | **218** | P | **Pn** | **10 06 50.6** | **+0.9** |
| | comp=Z,22nm,0.3s,baz=55,slow=16,SNR=97 | | | | | | |
| PETK | | | | LR | LR | 10 07 29.0 | |
| | comp=Z,323nm,20.2s,baz=38,slow=30 | | | | | | |
| **APC** | **Apacha** | **2.88** | **221** | *e*P | **Pn** | **10 06 56.9** | **+2.4** |
| APC | | | | *e*S | **Sb** | **10 07 33.7** | **-1.6** |
| **APC** | **Apacha** | **2.88** | **221** | PN | **Pn** | **10 06 56.9** | **+2.4** |
| APC | | | | S | **Sb** | **10 07 33.7** | **-1.6** |
| **RUS** | **Russkaya** | **2.91** | **202** | *e*P | **Pn** | **10 06 56.1** | **+1.3** |
| RUS | | | | *e*S | **Sn** | **10 07 32.3** | **+2.6** |
| **RUS** | **Russkaya** | **2.91** | **202** | PN | **Pn** | **10 06 56.1** | **+1.3** |
| RUS | | | | S | **Sn** | **10 07 32.3** | **+2.6** |
| **MTVR** | **Mutnovka** | **2.94** | **206** | *e*P | **Pn** | **10 06 57.7** | **+2.3** |
| MTVR | | | | *e*S | **Sb** | **10 07 35.2** | **-1.9** |
| **ASAK** | **Asacha** | **3.11** | **208** | *e*P | **Pn** | **10 07 00.2** | **+2.6** |
| **PAU** | **Pauzhetka** | **4.23** | **211** | *e*P | Pb | 10 07 17.9 | -5.1 |
| **PAU** | **Pauzhetka** | **4.23** | **211** | PN | Pb | 10 07 17.9 | -5.1 |
| **OSSR** | **Ossora** | **4.38** | **19** | *e*P | Pn | 10 07 18.2 | +3.2 |
| **SKR** | **Severo-Kuril's** | **5.13** | **211** | *e*P | Pn | 10 07 30.1 | +4.8 |
| **SKR** | **Severo-Kuril's** | **5.13** | **211** | *e*PN | **Pn** | **10 07 22.5** | **-2.8** |
| SKR | | | | S | **Sb** | **10 08 40.0** | **+0.2** |
| SKR | | | | pmax | pmax | | |
| | comp=N,220nm,1.0s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=E,220nm,1.0s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,310nm,1.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,270nm,1.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,450nm,1.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=N,6μm,8.0s | | | | | | |
| SKR | | | | smax | smax | | |
| | comp=E,8μm,6.0s | | | | | | |
| SKR | | | | MLR | MLR | | |
| | comp=Z,3μm,12.0s | | | | | | |
| **SEY** | **Seymchan** | **8.80** | **336** | P | **Pn** | **10 08 17.7** | **+2.1** |
| | comp=Z,0.4nm,0.3s,baz=139,slow=15,SNR=5.5 | | | | | | |
| **SEY** | **Seymchan** | **8.80** | **336** | *e*PN | **Pn** | **10 08 16.0** | **+0.4** |
| **KUR** | **Kuril'sk** | **12.69** | **224** | PN | Pn | 10 09 14.5 | +5.6 |
| KUR | | | | *i* S | **Sn** | **10 11 35.7** | **+5.7** |
| KUR | | | | pmax | pmax | | |
| | comp=N,45nm,0.7s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,23nm,0.7s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,776nm,15.0s | | | | | | |
| **UGL** | **Uglegorsk** | **12.71** | **249** | *e*PN | Pn | 10 09 15.2 | +6.0 |
| UGL | | | | *e*SS | Sn | 10 11 40.9 | +10 |
| **BILL** | **Bilibino** | **13.24** | **10** | *i* PN | **Pn** | **10 09 15.9** | **-0.3** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,12nm,1.2s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,872nm,14.0s | | | | | | |
| **BILL** | **Bilibino** | **13.24** | **10** | *e*Pn | **Pn** | **10 09 17.3** | **+1.1** |
| | comp=Z,11nm,0.7s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **14.49** | **226** | P | **P** | **10 09 38.3** | **-1.8** |
| YUK | | | | *i* S | Sn | 10 12 20.8 | +7.0 |
| YUK | | | | pmax | pmax | | |
| | comp=N,55nm,1.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,25nm,1.6s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,76nm,1.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,472nm,3.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,884nm,3.5s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=E,676nm,17.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,710nm,17.0s | | | | | | |
| **ASAJ** | **Asahikawa** | **15.85** | **233** | P | **Pn** | **10 09 52.3** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=77,slow=15,SNR=2.8 | | | | | | |
| ASAJ | | | | LR | LR | 10 15 33.6 | |
| | comp=Z,525nm,18.1s,baz=58,slow=35 | | | | | | |
| **HABR** | **Khabarovsk** | **16.91** | **257** | *de*P | **Pn** | **10 10 03.3** | **-1.6** |
| HABR | | | | *e*S | **Sn** | **10 13 09.4** | **-3.1** |
| HABR | | | | MLR | MLR | | |
| | comp=Z,588nm,16.0s | | | | | | |
| **YAK** | **Yakutsk** | **17.24** | **306** | P | **P** | **10 10 12.7** | **+2.3** |
| | comp=Z,0.0nm,0.3s,baz=285,slow=20,SNR=4.1 | | | | | | |
| YAK | | | | LR | LR | 10 17 16.5 | |
| | comp=Z,1μm,19.7s,baz=112,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **17.24** | **306** | *e*P | P | 10 10 15.4 | +4.9 |
| YAK | | | | pmax | pmax | | |
| | comp=Z,44nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,18nm,1.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,45nm,1.2s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,1μm,17.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,812nm,16.0s | | | | | | |
| **YAK** | **Yakutsk** | **17.24** | **306** | *e*Pn | **P** | **10 10 09.9** | **-0.6** |
| | comp=E,55nm,0.7s | | | | | | |
| **ERM** | **Erimo** | **17.28** | **228** | *e*P | **P** | **10 10 10.5** | **-0.6** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,25nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **18.38** | **263** | *e*P | **P** | **10 10 24.7** | **+1.5** |
| KLR | | | | MLR | MLR | | |
| | comp=E,1μm,16.0s | | | | | | |
| KLR | | | | MLR | MLR | | |
| | comp=Z,4μm,11.0s | | | | | | |
| **CLNS** | **Chul'man** | **19.73** | **290** | *e*P | **Pn** | **10 10 40.1** | **+0.7** |
| CLNS | | | | *e*S | **S** | **10 14 20.8** | **+0.9** |
| CLNS | | | | pmax | pmax | | |
| | comp=N,20nm,1.0s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=Z,33nm,1.0s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=E,27nm,0.9s | | | | | | |
| CLNS | | | | smax | smax | | |
| | comp=N,240nm,11.5s | | | | | | |
| CLNS | | | | smax | smax | | |
| | comp=E,307nm,12.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=Z,296nm,11.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=E,739nm,12.0s | | | | | | |
| CLNS | | | | MLR | MLR | | |
| | comp=Z,1μm,13.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.18** | **251** | P | **P** | **10 10 56.3** | **+2.6** |
| | comp=Z,4.5nm,0.6s,baz=46,slow=11,SNR=22 | | | | | | |
| USRK | | | | LR | LR | 10 18 36.8 | |
| | comp=Z,171nm,18.5s,baz=46,slow=35 | | | | | | |
| **MDJ** | **Mudanjiang** | **22.22** | **254** | P | **P** | **10 11 05.3** | **+0.4** |
| MDJ | | | | sP | sP | 10 11 18.1 | +8.1 |
| MDJ | | | | PMZ | | | |
| | comp=Z,25nm,1.4s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,200nm,6.2s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,660nm,18.5s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,750nm,19.6s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,910nm,14.2s | | | | | | |
| **MDJ** | **Mudanjiang** | **22.22** | **254** | *e*P | **P** | **10 11 06.2** | **+1.3** |
| | comp=Z,80nm,1.6s | | | | | | |
| **TTA** | **Tatalina** | **23.38** | **53** | *e*P | **P** | **10 11 16.8** | **-0.1** |
| **TTA** | **Tatalina** | **23.38** | **53** | *e*P | **P** | **10 11 16.8** | **-0.1** |
| **MAJO** | **Matsushiro** | **23.95** | **228** | *i* P | **P** | **10 11 21.4** | **-1.3** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,131nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **23.95** | **228** | *e*P | **P** | **10 11 21.8** | **-0.9** |
| | comp=Z,95nm,1.7s | | | | | | |
| **MAT** | **Matsushiro** | **23.95** | **228** | P | **P** | **10 11 22.9** | **+0.2** |
| MAT | | | | S | **S** | **10 15 41.2** | **+2.3** |
| **CN2** | **Changchun** | **25.04** | **258** | *e*P | **P** | **10 11 34.8** | **+2.3** |
| CN2 | | | | *e*S | **S** | **10 15 52.1** | **-4.2** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,200nm,3.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,500nm,15.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,500nm,15.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,600nm,15.0s | | | | | | |
| **PPLA** | **Purkeypile** | **25.13** | **53** | *e*P | **P** | **10 11 34.1** | **+0.8** |
| | comp=Z,34nm,1.5s | | | | | | |
| **RSO** | **Redoubt South** | **25.14** | **59** | *e*P | **P** | **10 11 32.0** | **-1.4** |
| **CAST** | **Castle Rocks** | **25.14** | **51** | *e*P | **P** | **10 11 33.7** | **+0.5** |
| | comp=Z,35nm,1.7s | | | | | | |
| **BOD** | **Bodaibo** | **25.30** | **295** | *e*P | **P** | **10 11 34.7** | **0.0** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,30nm,1.4s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **25.59** | **50** | *e*P | **P** | **10 11 38.8** | **+1.4** |
| | comp=Z,73nm,2.3s | | | | | | |
| **MLY** | **Manley** | **25.67** | **48** | *e*P | **P** | **10 11 37.2** | **-0.9** |
| | comp=Z,31nm,1.6s | | | | | | |
| **KDAK** | **Kodiak Island** | **25.77** | **65** | P | **P** | **10 11 40.5** | **+1.6** |
| | comp=Z,4.2nm,0.7s,baz=293,slow=3.3,SNR=6.8 | | | | | | |
| **KDAK** | **Kodiak Island** | **25.77** | **65** | P | **P** | **10 11 40.5** | **+1.6** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **COLA** | **College** | **26.91** | **48** | *e*P | **P** | **10 11 50.2** | **+1.0** |
| COLA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.2s | | | | | | |
| **IL1** | **Eielson Array** | **27.33** | **48** | *e*P | **P** | **10 11 52.3** | **-0.7** |
| **ILAR** | **Eielson Array** | **27.33** | **48** | P | **P** | **10 11 52.5** | **-0.5** |
| | comp=Z,1.6nm,0.7s,baz=254,slow=5.9,SNR=23 | | | | | | |
| ILAR | | | | LR | LR | 10 22 55.0 | |
| | comp=Z,156nm,20.2s,baz=298,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **27.33** | **48** | P | **P** | **10 11 52.5** | **-0.5** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ILAR | | | | MLR | MLR | | |
| | comp=Z,156nm,20.2s | | | | | | |
| **KS01** | **Wonju Array Si** | **28.14** | **245** | *e*P | **P** | **10 12 01.8** | **+1.4** |
| **KSRS** | **Korea Array** | **28.14** | **245** | P | **P** | **10 12 01.2** | **+0.7** |
| | comp=Z,2.6nm,0.8s,baz=41,slow=9.8,SNR=7.4 | | | | | | |
| **KSRS** | **Korea Array** | **28.14** | **245** | P | **P** | **10 12 01.2** | **+0.7** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.17** | **245** | P | **P** | **10 12 01.2** | **+0.4** |
| **KSAR** | **Wonju Array Be** | **28.17** | **245** | P | **P** | **10 12 01.2** | **+0.4** |
| **INK** | **Inuvik** | **32.20** | **40** | P | **P** | **10 12 37.4** | **+1.4** |
| | comp=Z,4.1nm,0.8s,baz=268,slow=8.3,SNR=5.7 | | | | | | |
| **INK** | **Inuvik** | **32.20** | **40** | P | **P** | **10 12 37.4** | **+1.4** |
| INK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **BJI** | **Beijing** | **32.73** | **261** | P | **P** | **10 12 41.9** | **+0.9** |
| BJI | | | | S | **S** | **10 17 56.8** | **-0.3** |
| BJI | | | | PMZ | | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,190nm,4.6s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,670nm,16.3s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,810nm,15.3s | | | | | | |
| **TLY** | **Talaya** | **33.14** | **288** | *e*P | **P** | **10 12 46.7** | **+2.2** |
| TLY | | | | *e* | | 10 13 51.1 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,18nm,1.6s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,548nm,16.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **33.20** | **280** | *i* P | **P** | **10 12 44.0** | **-1.2** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,17nm,2.5s | | | | | | |
| **SONA1** | **Songino Array** | **33.57** | **280** | *e*P | **P** | **10 12 50.5** | **+2.0** |
| **SONM** | **Songino Array** | **33.58** | **280** | P | **P** | **10 12 49.9** | **+1.4** |
| | comp=Z,2.8nm,0.6s,baz=56,slow=8.4,SNR=15 | | | | | | |
| SONM | | | | PcP | **PcP** | **10 15 28.5** | **-0.1** |
| | comp=Z,1.0nm,0.6s,baz=92,slow=1.7,SNR=5.3 | | | | | | |
| SONM | | | | LR | LR | 10 27 05.7 | |
| | comp=Z,429nm,19.2s,baz=59,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **33.58** | **280** | P | **P** | **10 12 49.9** | **+1.4** |
| SONM | | | | | | 10 15 28.5 | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,429nm,19.2s | | | | | | |
| **ZAK** | **Zakamensk** | **33.98** | **286** | *e*P | **P** | **10 12 52.4** | **+0.5** |
| **HHC** | **Hu-ho-hao-te** | **34.83** | **266** | *e*P | **P** | **10 13 01.4** | **+2.0** |
| HHC | | | | PP | **PP** | **10 14 20.6** | **+2.4** |
| HHC | | | | S | S | 10 18 24.8 | -5.0 |
| HHC | | | | PMZ | | | |
| | comp=Z,29nm,0.8s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,700nm,11.8s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,730nm,12.9s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,470nm,11.8s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.71** | **169** | T | T | 10 50 17.1 | |
| | baz=354,slow=76,SNR=201 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.73** | **169** | T | T | 10 50 11.3 | |
| | baz=354,slow=76,SNR=165 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.73** | **169** | T | T | 10 50 16.8 | |
| | baz=354,slow=76,SNR=233 | | | | | | |
| **DLBC** | **Dease Lake** | **36.76** | **56** | P | **P** | **10 13 17.4** | **+1.6** |
| | comp=Z,3.3nm,0.8s,baz=294,slow=11,SNR=4.1 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.90** | **170** | T | T | 10 51 56.5 | |
| | baz=89,slow=73,SNR=8.1 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **36.91** | **170** | T | T | 10 51 49.4 | |
| | baz=89,slow=73,SNR=5.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **36.92** | **170** | T | T | 10 52 03.8 | |
| | baz=89,slow=73,SNR=7.5 | | | | | | |
| **WHN** | **Wuhan** | **40.66** | **252** | P | P | 10 13 54.4 | +5.8 |
| **XAN** | **Xi'an** | **41.07** | **261** | P | **P** | **10 13 50.3** | **-1.7** |
| XAN | | | | pP | pP | 10 14 00.6 | +4.7 |
| XAN | | | | PP | **PP** | **10 15 25.8** | **-0.8** |
| XAN | | | | S | **S** | **10 20 01.3** | **-2.9** |
| XAN | | | | SS | **SS** | **10 23 04.9** | **-1.4** |
| XAN | | | | PMZ | | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,110nm,5.7s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,470nm,15.9s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,550nm,15.4s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,720nm,14.5s | | | | | | |
| **YKA** | **Yellowknife Ar** | **41.59** | **44** | P | **P** | **10 13 57.3** | **+1.4** |
| | comp=Z,3.4nm,0.8s,baz=298,slow=7.7,SNR=3.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **41.59** | **44** | P | **P** | **10 13 57.3** | **+1.4** |
| YKA | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **41.78** | **301** | *e*P | **P** | **10 13 58.0** | **+0.4** |
| ZAA0 | | | | *e*PP | **PP** | **10 15 35.4** | **+1.5** |
| **ZALV** | **Zalesovo Beam** | **41.78** | **301** | P | **P** | **10 13 57.8** | **+0.2** |
| | comp=Z,1.8nm,0.7s,baz=54,slow=7.5,SNR=6.7 | | | | | | |
| ZALV | | | | PP | **PP** | **10 15 34.3** | **+0.4** |
| | comp=Z,2.7nm,0.9s,baz=37,slow=10,SNR=4.0 | | | | | | |
| ZALV | | | | LR | LR | 10 32 50.3 | |
| | comp=Z,819nm,18.6s,baz=70,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.78** | **301** | P | **P** | **10 13 57.8** | **+0.2** |
| ZALV | | | | | | 10 15 34.3 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| ZAL

WMQ PMZ
comp=Z,59nm,1.0s
WMQ PMZ
comp=Z,140nm,5.0s
WMQ LN
comp=Z,1μm,20.0s
WMQ LE
comp=Z,640nm,16.0s
WMQ LZ
comp=Z,510nm,18.0s
**KURK Kurchatov 46.76 300** *e*P **P 10 14 37.0 -0.4**
KURK pmax pmax
comp=Z,80nm,1.2s
**KURK Kurchatov 46.76 300** P **P 10 14 37.5 +0.1**
comp=Z,165nm,1.4s,SNR=9.3
**KURK Kurchatov 46.76 300** *e*P **P 10 14 37.0 -0.4**
comp=Z,80nm,1.2s
**MK31 Makanchi Array 47.38 294** *i* P **P 10 14 41.8 -0.6**
MK31 pmax pmax
comp=Z,16nm,0.9s
**MKAR Makanchi Array 47.38 294** P **P 10 14 42.0 -0.4**
comp=Z,2.2nm,0.6s,baz=57,slow=7.0,SNR=20
MKAR PP **PP 10 16 37.5 +4.1**
comp=Z,1.9nm,1.0s,baz=57,slow=14,SNR=3.7
MKAR LR LR 10 35 49.1
comp=Z,579nm,18.6s,baz=56,slow=38
**MKAR Makanchi Array 47.38 294** P **P 10 14 42.0 -0.4**
MKAR 10 16 37.5
MKAR pmax pmax
comp=Z,2.0nm,0.6s
MKAR pmax pmax
comp=Z,2.0nm,1.0s
MKAR MLR MLR
comp=Z,579nm,18.6s
**MK01 Makanchi Array 47.40 294** *e*P **P 10 14 41.8 -0.7**
**EDM Edmonton 47.46 55** *e*P **P 10 14 43.8 +0.8**
EDM pmax pmax
comp=Z,152nm,2.3s
**EDM Edmonton 47.46 55** *e*P **P 10 14 43.8 +0.8**
comp=Z,152nm,2.3s
**MAKZ Makanchi 47.54 294** *e*P **P 10 14 43.8 +0.2**
**GYA Guiyang 48.07 256** *e*P **P 10 14 49.3 +1.2**
GYA pP pP 10 15 00.6 +8.6
GYA PP **PP 10 16 41.0 +0.9**
GYA ScP **ScP 10 20 06.4 -3.3**
GYA S **S 10 21 43.8 -2.4**
GYA sS sS 10 22 03.0 +10
GYA SS SS 10 25 06.8 -8.2
GYA PMZ
comp=Z,10.0nm,0.8s
GYA PMZ
comp=Z,120nm,5.0s
GYA LN
comp=Z,460nm,18.0s
GYA LE
comp=Z,420nm,18.2s
GYA LZ
comp=Z,390nm,18.2s
**I03D Drain, OR 48.57 70** P **P 10 14 50.9 -0.7**
baz=48
**G05D Wamic, OR 48.63 67** P **P 10 14 51.3 -0.8**
baz=48
**NEW Newport 48.81 62** P **P 10 14 53.2 -0.2**
comp=Z,1.5nm,0.7s,baz=323,slow=10,SNR=4.6
**NEW Newport 48.81 62** P **P 10 14 53.2 -0.2**
NEW pmax pmax
comp=Z,2.0nm,0.7s
**NEW Newport 48.81 62** P **P 10 14 53.0 -0.5**
baz=49
**VOSK Vostochnaya 49.14 306** *i* P **P 10 14 54.8 -1.0**
VOSK pmax pmax
comp=Z,15nm,1.1s
**BVA0 Borovoye Array 49.21 307** P **P 10 14 55.0 -1.4**
BVA0 pmax pmax
comp=Z,20nm,1.0s
**BRVK Borovoye 49.24 307** *c i*P **P 10 14 56.7 +0.1**
BRVK pmax pmax
comp=Z,45nm,1.7s
**BRVK Borovoye 49.24 307** P **P 10 14 57.6 +1.0**
comp=Z,104nm,0.8s,SNR=9.0
**BRVK Borovoye 49.24 307** *e*P **P 10 14 56.9 +0.3**
comp=Z,84nm,1.7s
**WALA Waterton Lakes 49.89 59** *e*P **P 10 15 03.2 +1.5**
comp=Z,105nm,2.5s
**ZRNK Zerenda 49.89 308** *i* P **P 10 14 59.3 -2.3**
ZRNK pmax pmax
comp=Z,14nm,0.8s
**J05D Fort Rock, OR 49.98 69** P **P 10 15 02.9 +0.3**
baz=50
**YBH Yreka Blue Hor 50.24 72** P **P 10 15 06.4 +1.9**
comp=Z,1.9nm,0.9s,baz=355,slow=11,SNR=2.9
**YBH Yreka Blue Hor 50.24 72** P **P 10 15 06.4 +1.9**
YBH pmax pmax
comp=Z,2.0nm,0.9s
**BSMT Bassoo Peak 50.26 61** *e*P **P 10 15 05.4 +0.7**
**JTMT Jette 50.58 61** *e*P **P 10 15 05.4 -1.6**
**SVE Sverdlovsk 50.87 316** *e*P **P 10 15 10.0 +1.1**
SVE pmax pmax
comp=Z,29nm,1.6s
SVE MLR MLR
comp=Z,1μm,20.0s
**SWMT Swartz Lake 50.88 61** *e*P **P 10 15 09.4 +0.1**
**PDGK Podgornoye 51.18 292** P **P 10 15 11.5 +0.1**
PDGK pmax pmax
comp=Z,47nm,1.4s
**KMI Kunming 51.31 258** P **P 10 15 14.4 +1.5**
KMI pP pP 10 15 25.9 +9.1
KMI sP sP 10 15 30.5 +12
KMI PcP **PcP 10 16 32.3 +4.6**
KMI PP **PP 10 17 13.4 +3.7**
KMI S **S 10 22 28.6 -3.2**
KMI sS sS 10 22 48.0 +10
KMI ScS **ScS 10 24 58.5 -4.8**
KMI SS **SS 10 26 01.9 -5.2**
KMI PMZ
comp=Z,6.0nm,1.3s
KMI PMZ
comp=Z,240nm,4.6s
KMI LN
comp=Z,700nm,13.4s
KMI LE
comp=Z,530nm,14.2s
KMI LZ
comp=Z,410nm,11.3s
**SLMT Seeley Lake 51.32 61** *e*P **P 10 15 13.4 +0.8**
**ARCES ARCESS Array B 51.37 341** P **P 10 15 14.1 +1.6**
comp=Z,5.0nm,1.0s,baz=17,slow=8.9,SNR=3.7
ARCES LR LR 10 40 10.0
comp=Z,140nm,19.5s,baz=40,slow=40
**ARCES ARCESS Array B 51.37 341** P **P 10 15 14.1 +1.6**
ARCES pmax pmax
comp=Z,5.0nm,1.0s
ARCES MLR MLR
comp=Z,140nm,19.5s
**MSO Missoula 51.37 61** P **P 10 15 12.6 -0.4**
baz=51
**MSO Missoula 51.37 61** *e*P P 10 15 20.3 +7.3
comp=Z,25nm,1.4s
**APA Apatity 51.40 337** *e*P **P 10 15 10.4 -2.3**
APA MLR MLR
comp=Z,2μm,13.0s
**MOD Modoc 51.43 70** *e*P **P 10 15 14.6 +1.1**
comp=Z,39nm,2.1s
**OTUK Ortayu 51.48 301** P **P 10 15 11.9 -1.7**
OTUK pmax pmax
comp=Z,27nm,1.5s
**WVOR Wild Horse Val 51.96 68** *e*P **P 10 15 18.4 +1.0**
WVOR pmax pmax
comp=Z,21nm,1.8s
**WVOR Wild Horse Val 51.96 68** *e*P **P 10 15 18.4 +1.0**
comp=Z,21nm,1.8s
**ARU Arti 51.97 316** *d i*P **P 10 15 17.7 +0.6**
ARU 10 17 13.6
ARU S **S 10 22 40.9 +1.3**
ARU SS **SS 10 26 11.4 -4.4**
ARU pmax pmax
comp=Z,29nm,1.2s
ARU MLR MLR
comp=Z,770nm,19.0s
**ARU Arti 51.97 316** *e*P **P 10 15 17.7 +0.6**
comp=Z,46nm,1.5s
**QIZ Qiongzhong 52.31 247** P **P 10 15 21.4 +1.3**
QIZ pP pP 10 15 30.1 +6.0
QIZ sP sP 10 15 35.1 +9.5
QIZ PP **PP 10 17 20.1 +1.5**
QIZ S **S 10 22 45.0 -0.2**
QIZ sS sS 10 23 00.5 +8.8
QIZ LZ
comp=Z,160nm,18.2s
**HRY Holter Researc 52.51 60** *e*P **P 10 15 22.5 +1.0**
**OHCM Honcut 52.58 73** *e*P **P 10 15 23.9 +2.0**
**MFID Camas Ranch 52.76 66** *e*P **P 10 15 25.7 +2.3**
comp=Z,64nm,2.7s
**DLMT Dillon 53.06 62** *e*P P 10 15 28.7 +3.1
comp=Z,11nm,1.2s
**BOZ Bozeman (W) 53.35 61** *e*P **P 10 15 29.1 +1.4**
BOZ pmax pmax
comp=Z,74nm,2.9s
**BOZ Bozeman (W) 53.35 61** P **P 10 15 25.9 -1.8**
baz=53
**BOZ Bozeman (W) 53.35 61** *e*P **P 10 15 29.1 +1.4**
comp=Z,74nm,2.9s
**HLID Hailey 53.39 64** P **P 10 15 26.8 -1.2**
baz=53
**HLID Hailey 53.39 64** *e*P **P 10 15 30.5 +2.4**
comp=Z,41nm,2.6s
**TKM2 Tokmak 2 53.51 295** *e*P **P 10 15 29.4 +0.4**
TKM2 pmax pmax
comp=Z,12nm,1.2s
**TKM2 Tokmak 2 53.51 295** *e*P **P 10 15 29.4 +0.4**
comp=Z,12nm,1.3s
**QLMT Earthquake Lak 54.02 62** *e*P **P 10 15 34.0 +1.2**
comp=Z,0.6nm,0.6s
**FRU Bishkek 54.08 295** *e*P **P 10 15 31.0 -2.0**
FRU *i* 10 15 34.0
**AAK Ala-Archa 54.28 295** *i* P **P 10 15 32.8 -1.8**
AAK pmax pmax
comp=Z,50nm,1.3s
**AAK Ala-Archa 54.28 295** P **P 10 15 34.4 -0.2**
comp=Z,111nm,1.1s,SNR=7.1
**AAK Ala-Archa 54.28 295** *e*P **P 10 15 33.7 -0.9**
comp=Z,49nm,1.4s
**YFT Old Faithful 54.59 61** *e*P **P 10 15 38.5 +1.6**
comp=Z,8.1nm,0.7s
**EKS2 Erkin-Say 54.64 295** *e*P **P 10 15 37.3 +0.2**
EKS2 pmax pmax
comp=Z,27nm,1.2s
**EKS2 Erkin-Say 54.64 295** *e*P **P 10 15 37.0 -0.1**
comp=Z,27nm,1.3s
**H17A Grant Village 54.76 61** P **P 10 15 39.8 +1.6**
baz=55
**H17A Grant Village 54.76 61** *e*P **P 10 15 40.5 +2.3**
comp=Z,6.5nm,0.8s
**RLMT Red Lodge 54.90 60** P **P 10 15 39.7 +0.5**
baz=55
**RLMT Red Lodge 54.90 60** *e*P **P 10 15 40.2 +1.1**
comp=Z,9.0nm,0.9s
**FLWY Flagg Ranch 54.92 62** *e*P **P 10 15 41.2 +2.0**
comp=Z,67nm,2.1s
**NV01 Mina Array Sit 54.97 72** *e*P **P 10 15 40.6 +0.9**
**NVAR Mina Array Bea 54.97 72** P **P 10 15 41.0 +1.3**
comp=Z,4.0nm,0.8s,baz=304,slow=7.5,SNR=27
NVAR LR LR 10 36 11.8
comp=Z,105nm,19.8s,baz=320,slow=33
**FXWY Fox Creek 55.07 62** *e*P **P 10 15 41.2 +0.8**
comp=Z,37nm,2.3s
**MOOW Moose Ponds 55.14 62** *e*P **P 10 15 41.9 +1.0**
comp=Z,11nm,1.5s
**TPAW Teton Pass 55.22 62** *e*P **P 10 15 43.2 +1.7**
comp=Z,120nm,2.8s
**KSH Kashi 55.73 291** P P 10 15 49.0 +3.9
KSH *e*pP pP 10 16 01.8 +13
KSH *e*PP PP 10 17 55.8 +6.7
KSH PcS **PcS 10 20 45.6 +1.0**
KSH S **S 10 23 32.5 +1.2**
KSH PMZ
comp=Z,49nm,1.4s
KSH LN
comp=Z,210nm,6.7s
KSH LE
comp=Z,440nm,10.1s
KSH LZ
comp=Z,470nm,8.9s
**KKAR Karatay Array 56.00 298** *e*P **P 10 15 46.3 -0.5**
KKAR pmax pmax
comp=Z,23nm,1.2s
**KKAR Karatay Array 56.00 298** *e*P **P 10 15 46.3 -0.5**
comp=Z,23nm,1.2s
**HWUT Hardware Ranch 56.26 64** *e*P **P 10 15 49.1 +0.2**
comp=Z,26nm,1.8s
**BW06 Boulder Array 56.45 62** *e*P **P 10 15 51.1 +0.8**
**R11A Troy Canyon, C 56.50 70** P **P 10 15 50.3 -0.3**
baz=56
**R11A Troy Canyon, C 56.50 70** *e*P **P 10 15 51.6 +1.0**
comp=Z,18nm,1.8s
**GRAC Grapevine Rang 56.51 72** P **P 10 15 51.6 +1.1**
baz=56
**CWC Cottonwood Cre 56.53 73** P **P 10 15 51.2 +0.4**
baz=56
**AB31 Akbulak array 56.55 309** P **P 10 15 50.0 -0.6**
AB31 pmax pmax
comp=Z,46nm,1.3s
**ABKAR Akbulak array 56.55 309** *e*P **P 10 15 51.1 +0.5**
comp=Z,19nm,1.0s
**DUG Dugway 56.63 66** *e*P **P 10 15 52.5 +1.0**
DUG pmax pmax
comp=Z,5.0nm,0.8s
**DUG Dugway 56.63 66** P **P 10 15 51.8 +0.3**
baz=56
**DUG Dugway 56.63 66** *e*P **P 10 15 52.5 +1.0**
comp=Z,4.7nm,0.8s
**SFK Sufi-Kurgan 56.69 293** P **P 10 15 51.9 -0.1**
SFK pmax pmax
comp=Z,9.0nm,1.4s
**CTU Camp Tracy 56.83 65** *e*P P 10 15 55.9 +3.0
CTU *e*pP pP 10 16 05.7 +8.8
**DAC Darwin (Calif) 56.92 73** *e*P **P 10 15 55.3 +1.7**
DAC pmax pmax
comp=Z,3.0nm,0.9s
**DAC Darwin (Calif) 56.92 73** *e*P **P 10 15 55.3 +1.7**
comp=Z,3.3nm,0.8s
**MPMC Manual Prospec 57.13 73** P **P 10 15 54.9 -0.3**
baz=57
**TPNV Topopah Spring 57.16 71** *e*P **P 10 15 56.5 +1.2**
TPNV pmax pmax
comp=Z,59nm,2.3s
**TPNV Topopah Spring 57.16 71** P **P 10 15 55.6 +0.3**
baz=57
**TPNV Topopah Spring 57.16 71** *e*P **P 10 15 56.5 +1.2**
comp=Z,59nm,2.3s
**FURC Furnace Creek, 57.18 72** P **P 10 15 56.3 +1.1**
baz=57
**NLU North Lily Min 57.19 66** *e*P **P 10 15 56.8 +1.3**
comp=Z,27nm,1.9s
**MPU Maple Canyon 57.38 66** *e*P **P 10 15 58.1 +1.3**
comp=Z,58nm,1.4s
**EDW2 Edwards Air Fo 57.73 74** P **P 10 15 59.5 +0.3**
baz=58
**GSC Goldstone 58.07 73** *e*P **P 10 16 02.7 +1.0**
GSC pmax pmax
comp=Z,9.0nm,1.3s
**GSC Goldstone 58.07 73** P **P 10 16 02.0 +0.4**
baz=58
**GSC Goldstone 58.07 73** *e*P **P 10 16 02.7 +1.0**
comp=Z,9.3nm,1.3s
**TMUT Trail Mountain 58.13 66** *e*P **P 10 16 03.7 +1.4**
comp=Z,87nm,1.9s
**RSSD Black Hills 58.19 57** *e*P **P 10 16 03.2 +0.6**
RSSD pmax pmax
comp=Z,50nm,2.0s
**RSSD Black Hills 58.19 57** *e*P **P 10 16 03.2 +0.6**
comp=Z,50nm,2.0s
**MSU Marysvale 58.20 67** *e*P **P 10 16 04.4 +1.7**
**MSU Marysvale 58.20 67** *e*P **P 10 16 04.4 +1.7**
**P17A Butcher Ranch, 58.24 66** *e*P P 10 16 06.1 +3.2
comp=Z,5.8nm,1.0s
**G27A Dupree 58.27 55** P **P 10 16 01.8 -1.0**
baz=58
**CCUT Cedar City 58.27 69** *e*P **P 10 16 05.0 +1.8**
comp=Z,24nm,2.3s
**FINES FINESS Array B 58.28 336** P **P 10 16 04.8 +2.2**
comp=Z,2.3nm,0.5s,baz=38,slow=7.9,SNR=18
FINES LR LR 10 45 18.7
comp=Z,305nm,18.9s,baz=10.0,slow=40
**FINES FINESS Array B 58.28 336** P **P 10 16 04.8 +2.2**
FINES pmax pmax
comp=Z,2.0nm,0.5s
FINES MLR MLR
comp=Z,305nm,18.9s
**C31A Landman Farms, 58.38 51** P **P 10 16 03.8 +0.2**
baz=58
**P18A Preston Nutter 58.39 65** *e*P **P 10 16 06.8 +2.7**
comp=Z,12nm,1.1s
**D30A Buchanan 58.44 52** P **P 10 16 03.9 -0.1**
baz=58
**SRU San Rafael 58.62 66** *e*P **P 10 16 06.5 +0.9**
SRU pmax pmax
comp=Z,8.0nm,0.8s
**SRU San Rafael 58.62 66** *e*P **P 10 16 06.5 +0.9**
comp=Z,8.3nm,0.8s
**CMAR Chiang Mai Arr 58.73 257** LR LR 10 44 30.2
comp=Z,211nm,18.0s,baz=49,slow=39
**H27A Howes 58.75 56** P **P 10 16 05.3 -0.9**
baz=59
**O20A White River Ci 59.05 63** P **P 10 16 09.1 +0.5**
baz=59
**O20A White River Ci 59.05 63** *e*P **P 10 16 09.4 +0.9**
comp=Z,5.9nm,0.6s
**GMRC Granite Mounta 59.08 73** P **P 10 16 09.0 +0.2**
baz=59
**MURC Murrieta 59.12 75** P **P 10 16 09.7 +0.8**
baz=59
**I27A Quinn 59.19 56** P **P 10 16 09.1 -0.2**
baz=59
**B34A Aery, Baudette 59.21 48** P **P 10 16 08.3 -1.0**
baz=59
**H28A Mission Ridge 59.22 55** P **P 10 16 09.5 +0.1**
baz=59
**J26A Sides Ranch, S 59.26 58** P **P 10 16 09.8 0.0**
baz=59
**I28A Midland 59.66 56** P **P 10 16 11.1 -1.4**
baz=60
**JAY Jayapura 59.69 203** LR LR 10 39 05.8
comp=Z,62nm,20.9s,baz=322,slow=33
**J27A Elkhorn Farm, 59.82 57** P **P 10 16 13.5 -0.2**
baz=60
**IRM Iron Mountain 59.83 73** P **P 10 16 13.3 -0.5**
baz=60
**D34A Park Rapids 60.04 50** P **P 10 16 13.6 -1.4**
baz=60
**J28A Allard Ranch, 60.06 56** P **P 10 16 15.3 0.0**
baz=60
**F33A 5 Mile Ranch, 60.51 51** P **P 10 16 17.0 -1.3**
baz=60
**I30A Oacoma 60.55 55** P **P 10 16 17.0 -1.6**
baz=60
**ISCO Idaho Springs 60.64 62** *e*P **P 10 16 21.0 +1.4**
ISCO pmax pmax
comp=Z,19nm,1.7s
**ISCO Idaho Springs 60.64 62** P **P 10 16 19.4 -0.2**
baz=60
**ISCO Idaho Springs 60.64 62** *e*P **P 10 16 21.0 +1.4**
comp=Z,19nm,1.7s
**GLA Glamis 60.84 73** P **P 10 16 19.6 -1.1**
baz=61
**OBN Obninsk 60.85 327** *i* P **P 10 16 19.1 -1.2**
OBN pmax pmax
comp=Z,13nm,1.4s
OBN MLR MLR
comp=Z,444nm,19.0s
**WUAZ Wupatki 60.86 69** *e*P **P 10 16 22.4 +1.4**
comp=Z,13nm,1.5s
**G33A Ortonville 60.94 52** P **P 10 16 18.8 -2.4**
baz=61
**MVCO Mesa Verde 61.10 66** P **P 10 16 22.7 0.0**
baz=61
**MVCO Mesa Verde 61.10 66** *e*P **P 10 16 23.2 +0.5**
comp=Z,36nm,2.0s
**S22A 4UR Ranch, Cre 61.57 64** P **P 10 16 26.6 +0.7**
baz=61
**S22A 4UR Ranch, Cre 61.57 64** *e*P **P 10 16 27.2 +1.2**
comp=Z,24nm,2.0s
**NB2 NORSAR Subarra 61.60 343** P **P 10 16 26.8 +1.3**
comp=Z,18nm,1.4s,baz=20,slow=6.9
**NOA NORSAR Array B 61.60 343** P **P 10 16 24.7 -0.8**
comp=Z,2.1nm,0.8s,baz=21,slow=6.8,SNR=4.1
NOA LR LR 10 46 30.1
comp=Z,29nm,18.7s,baz=25,slow=39
**NOA NORSAR Array B 61.60 343** P **P 10 16 24.7 -0.8**
NOA pmax pmax
comp=Z,2.0nm,0.8s
NOA MLR MLR
comp=Z,29nm,18.7s
**ECSD EROS Data Cent 61.99 53** P **P 10 16 27.8 -0.6**
baz=62
**J33A Davis 62.15 54** P **P 10 16 29.6 +0.2**
baz=62
**L31A Butterfield Fa 62.15 56** P **P 10 16 29.2 -0.3**
baz=62
**LPSR Galich'ya Gora 62.18 324** *e*P **P 10 16 28.4 -1.0**
LPSR pmax pmax
comp=E,10.0nm,1.1s
LPSR pmax pmax
comp=Z,20nm,1.1s
LPSR pmax pmax
comp=N,7.0nm,1.0s
**SDCO Great Sand Dun 62.25 63** P **P 10 16 30.5 0.0**
baz=62
**SDCO Great Sand Dun 62.25 63** *e*P **P 10 16 33.4 +2.8**
comp=N,6.0nm,1.4s
**O28A Krutsinger Ran 62.31 59** P **P 10 16 30.6 -0.1**
baz=62
**VRH Novokhopyorsk 62.36 321** *e*P **P 10 16 30.9 +0.2**
VRH pmax pmax
comp=N,30nm,0.9s
VRH pmax pmax
comp=E,10.0nm,0.9s
VRH pmax pmax
comp=Z,10.0nm,0.9s
**P28A Saint Francis 62.74 59** P **P 10 16 32.2 -1.4**
baz=63
**R27A Eads 63.21 61** P **P 10 16 37.1 +0.4**
baz=63
**VSR Storozhevoye 63.25 323** *e*P **P 10 16 35.5 -1.1**
VSR pmax pmax
comp=N,20nm,1.1s
VSR pmax pmax
comp=E,10.0nm,1.1s
VSR pmax pmax
comp=Z,20nm,1.1s
**S26A Kim 63.38 62** P **P 10 16 36.9 -1.0**
baz=63
**VORD Divnogorie 63.42 323** *e*P **P 10 16 37.8 +0.1**
VORD pmax pmax
comp=E,10.0nm,0.5s
VORD pmax pmax
comp=Z,10.0nm,0.5s
VORD pmax pmax
comp=N,10.0nm,0.4s
**O31A Woolen Ranch, 63.48 57** P **P 10 16 37.0 -1.4**
baz=63
**Q29A Oakley 63.65 59** P **P 10 16 38.6 -1.0**
baz=64
**R28A Tribune 63.66 60** P **P 10 16 40.0 +0.3**
baz=64
**T26A Comanche Natio 63.66 62** P **P 10 16 39.7 -0.1**
baz=64
**L35A Bielow Farm, R 63.74 54** P **P 10 16 39.8 -0.2**
baz=64
**SCHQ Schefferville 63.78 28** P **P 10 16 41.5 +1.4**
comp=N,7.5nm,1.0s,baz=36,slow=8.7,SNR=3.4
**ANMO Albuquerque 63.90 66** *i* P **P 10 16 43.7 +2.3**
ANMO pmax pmax
comp=Z,6.0nm,1.7s
**ANMO Albuquerque 63.90 66** *e*P **P 10 16 42.3 +0.9**
comp=Z,29nm,2.5s
**P31A Stockton 63.95 58** P **P 10 16 40.5 -0.9**
baz=64
**LAZ Ladron 63.96 67** *e*P **P 10 16 44.0 +2.3**
comp=Z,6.6nm,1.5s
**Q30A Quinter 63.96 59** P **P 10 16 40.7 -0.9**
baz=64
**M35A Neola 64.18 54** P **P 10 16 42.8 -0.1**
baz=64
**T27A Campo 64.19 62** P **P 10 16 43.7 +0.5**
baz=64
**S28A Manter 64.20 61** P **P 10 16 42.7 -0.5**
baz=64
**P32A Huiting Farm, 64.25 57** P **P 10 16 42.4 -1.0**
baz=64
**N34A Lincoln 64.30 55** P **P 10 16 41.7 -1.9**
baz=64
**CBKS Cedar Bluff 64.32 59** P **P 10 16 42.7 -1.2**
baz=64
**O33A Hebron 64.38 56** P **P 10 16 41.2 -3.0**
baz=64
**T28A Walsh 64.45 61** P **P 10 16 42.9 -2.0**
baz=64
**U27A Thompson Grove 64.64 62** P **P 10 16 45.2 -0.9**
baz=64
**N35A Tabor 64.68 54** P **P 10 16 45.5 -0.6**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=64 | | | | | | | | |
| **O34A** | **Beatrice** | **64.72** | **56** | P | | **P** | **10 16 44.7** | **-1.8** |
| | baz=64 | | | | | | | | |
| **Q32A** | **Meitler Ranch,** | **64.76** | **58** | P | | **P** | **10 16 45.6** | **-1.2** |
| | baz=65 | | | | | | | | |
| **S30A** | **Montezuma** | **64.88** | **60** | P | | **P** | **10 16 45.9** | **-1.7** |
| | baz=65 | | | | | | | | |
| **Q33A** | **Connelly Farm,** | **65.10** | **57** | P | | **P** | **10 16 47.7** | **-1.3** |
| | baz=65 | | | | | | | | |
| **P34A** | **Walnut Farm, R** | **65.16** | **56** | P | | **P** | **10 16 47.8** | **-1.5** |
| | baz=65 | | | | | | | | |
| **SBUM** | **Sibu** | **65.28** | **235** | *eP* | | **P** | **10 16 51.6** | **+1.2** |
| | comp=Z,51nm,1.7s | | | | | | | | |
| **KSU1** | **Kansas State U** | **65.61** | **56** | *eP* | | **P** | **10 16 52.5** | **+0.3** |
| | comp=Z,24nm,1.6s | | | | | | | | |
| **GEYT** | **Alibeck** | **66.07** | **302** | P | | **P** | **10 16 55.8** | **+0.6** |
| | comp=Z,3.9nm,0.4s,baz=0.0,slow=4.4,SNR=4.0 | | | | | | | | |
| GEYT | | | | LR | | LR | 10 48 12.4 | | |
| | comp=Z,635nm,18.8s,baz=50,slow=38 | | | | | | | | |
| **ISHV** | **Shirvan** | **66.58** | **302** | *eP* | | **P** | **10 17 00.5** | **+1.7** |
| **ISFR** | **Sfrayin** | **66.82** | **302** | *eP* | | **P** | **10 17 00.6** | **+0.2** |
| **AKASG** | **Malin Array Be** | **66.91** | **329** | P | | **P** | **10 16 59.8** | **-0.5** |
| | comp=Z,1.1nm,0.5s,baz=28,slow=6.5,SNR=9.4 | | | | | | | | |
| AKASG | | | | LR | | LR | 10 49 48.7 | | |
| | comp=Z,481nm,18.8s,baz=60,slow=39 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **66.91** | **329** | P | | **P** | **10 16 59.8** | **-0.5** |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| AKASG | | | | MLR | | MLR | | | |
| | comp=Z,481nm,18.8s | | | | | | | | |
| **KIEV** | **Kiev** | **66.92** | **329** | *eP* | | **P** | **10 17 01.5** | **+1.1** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,58nm,1.9s | | | | | | | | |
| **KIEV** | **Kiev** | **66.92** | **329** | *eP* | | **P** | **10 17 01.5** | **+1.1** |
| | comp=Z,58nm,1.9s | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **66.98** | **67** | P | | **P** | **10 17 01.0** | **-0.1** |
| | baz=67 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **66.98** | **67** | *eP* | | **P** | **10 16 59.6** | **-1.5** |
| | comp=Z,28nm,1.9s | | | | | | | | |
| **W32A** | **Sentinel** | **67.46** | **61** | P | | **P** | **10 17 04.6** | **+0.4** |
| | baz=67 | | | | | | | | |
| **X31A** | **McDonald Ranch** | **67.48** | **62** | P | | **P** | **10 17 04.0** | **-0.3** |
| | baz=67 | | | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **67.68** | **64** | P | | **P** | **10 17 04.9** | **-0.8** |
| | baz=68 | | | | | | | | |
| **128A** | **Castleberry Fa** | **67.78** | **65** | P | | **P** | **10 17 05.5** | **-0.7** |
| | baz=68 | | | | | | | | |
| **T37A** | **Cheneyville 18** | **67.99** | **56** | P | | **P** | **10 17 06.0** | **-1.5** |
| | baz=68 | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **68.00** | **61** | *eP* | | **P** | **10 17 07.3** | **-0.3** |
| WMOK | | | | pmax | | pmax | | | |
| | comp=Z,61nm,2.4s | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **68.00** | **61** | *eP* | | **P** | **10 17 07.2** | **-0.3** |
| | comp=Z,61nm,2.4s | | | | | | | | |
| **KIV** | **Kislovodsk** | **68.02** | **316** | *eP* | | **P** | **10 17 07.3** | **-0.3** |
| KIV | | | | *eS* | | **S** | **10 26 03.9** | **-2.5** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| KIV | | | | MLR | | MLR | | | |
| | comp=Z,332nm,17.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **68.12** | **316** | P | | **P** | **10 17 09.1** | **+1.0** |
| | comp=Z,17nm,1.0s,baz=40,slow=8.9,SNR=8.6 | | | | | | | | |
| KBZ | | | | LR | | LR | 10 50 34.3 | | |
| | comp=Z,560nm,20.0s,baz=23,slow=39 | | | | | | | | |
| **KBZ** | **Khabaz** | **68.12** | **316** | P | | **P** | **10 17 09.1** | **+1.0** |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| KBZ | | | | MLR | | MLR | | | |
| | comp=Z,560nm,20.0s | | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **68.43** | **63** | P | | **P** | **10 17 09.5** | **-0.9** |
| | baz=68 | | | | | | | | |
| **U37A** | **Salina** | **68.47** | **57** | P | | **P** | **10 17 09.2** | **-1.3** |
| | baz=68 | | | | | | | | |
| **ZEI** | **Tsey** | **68.50** | **315⇑** | *eP* | | **P** | **10 17 08.0** | **-2.8** |
| ZEI | | | | pmax | | pmax | | | |
| | comp=Z,73nm,1.1s | | | | | | | | |
| **NEY** | **Neytrino** | **68.59** | **316** | *eP* | | **P** | **10 17 11.4** | **+0.1** |
| NEY | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.5s | | | | | | | | |
| **W35A** | **Tecumseh** | **68.61** | **59** | P | | **P** | **10 17 08.4** | **-3.0** |
| | baz=68 | | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **68.93** | **65** | P | | **P** | **10 17 11.8** | **-1.7** |
| | baz=69 | | | | | | | | |
| **V38A** | **Canehill** | **69.25** | **57** | P | | **P** | **10 17 14.5** | **-0.8** |
| | baz=69 | | | | | | | | |
| **W37A** | **Quinton** | **69.33** | **58** | P | | **P** | **10 17 14.8** | **-1.0** |
| | baz=69 | | | | | | | | |
| **X36A** | **Centrahoma** | **69.34** | **59** | P | | **P** | **10 17 15.1** | **-0.8** |
| | baz=69 | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **69.75** | **68** | *eP* | | **P** | **10 17 18.7** | **+0.1** |
| **TXAR** | **Lajitas Array** | **69.75** | **68** | P | | **P** | **10 17 19.1** | **+0.6** |
| | comp=Z,3.1nm,0.6s,baz=303,slow=4.2,SNR=35 | | | | | | | | |
| TXAR | | | | LR | | LR | 10 47 45.4 | | |
| | comp=Z,96nm,18.3s,baz=0.0,slow=36 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **69.75** | **68** | P | | **P** | **10 17 19.2** | **+0.6** |
| TXAR | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| TXAR | | | | MLR | | MLR | | | |
| | comp=Z,96nm,18.3s | | | | | | | | |
| **331A** | **San Angelo** | **69.88** | **64** | P | | **P** | **10 17 18.7** | **-0.6** |
| | baz=70 | | | | | | | | |
| **529A** | **Stev Forest Ra** | **69.89** | **66** | P | | **P** | **10 17 19.0** | **-0.5** |
| | baz=70 | | | | | | | | |
| **332A** | **Millersview** | **70.17** | **64** | P | | **P** | **10 17 20.2** | **-0.9** |
| | baz=70 | | | | | | | | |
| **431A** | **Sonora** | **70.28** | **65** | P | | **P** | **10 17 21.2** | **-0.7** |
| | baz=70 | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **70.31** | **333** | *eP* | | **P** | **10 17 22.4** | **+0.8** |
| STHS | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **70.31** | **333** | *eP* | | **P** | **10 17 22.4** | **+0.8** |
| **GNI** | **Garni** | **70.35** | **313** | *d iP* | | **P** | **10 17 23.4** | **+1.2** |
| **GNI** | **Garni** | **70.35** | **313** | *eP* | | **P** | **10 17 23.9** | **+1.7** |
| | comp=Z,93nm,0.8s | | | | | | | | |
| **CLL** | **Collm** | **70.47** | **339** | *eP* | | **P** | **10 17 25.0** | **+2.4** |
| CLL | | | | *e* | | | 10 17 31.0 | | |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,37nm,1.7s | | | | | | | | |
| **CLL** | **Collm** | **70.47** | **339** | *eP* | | **P** | **10 17 24.0** | **+1.4** |
| | comp=Z,37nm,1.7s | | | | | | | | |
| CLL | | | | *e*(pP) | | pP | 10 17 31.0 | +4.4 | |
| **432A** | **Menard** | **70.55** | **64** | P | | **P** | **10 17 22.8** | **-0.6** |
| | baz=70 | | | | | | | | |
| **333A** | **Richland Sprin** | **70.61** | **63** | P | | **P** | **10 17 22.5** | **-1.3** |
| | baz=70 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **70.65** | **336** | *eP* | | **P** | **10 17 24.9** | **+1.2** |
| **DPC** | **Dobruska-Polom** | **70.65** | **336** | *eP* | | **P** | **10 17 24.9** | **+1.2** |
| **BRG** | **Berggiesshubel** | **70.68** | **338** | *e*(P) | | **P** | **10 17 26.1** | **+2.2** |
| | comp=Z,18nm,1.7s | | | | | | | | |
| | comp=N,551nm,17.2s | | | | | | | | |
| | comp=E,349nm,18.4s | | | | | | | | |
| | comp=Z,663nm,16.3s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **70.68** | **338** | *eP* | | **P** | **10 17 26.1** | **+2.2** |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,18nm,1.7s | | | | | | | | |
| BRG | | | | MLR | | MLR | | | |
| | comp=N,551nm,17.2s | | | | | | | | |
| BRG | | | | MLR | | MLR | | | |
| | comp=E,349nm,18.4s | | | | | | | | |
| BRG | | | | MLR | | MLR | | | |
| | comp=Z,663nm,16.3s | | | | | | | | |
| **MIAR** | **Mount Ida** | **70.71** | **57** | *eP* | | **P** | **10 17 24.8** | **+0.5** |
| MIAR | | | | pmax | | pmax | | | |
| | comp=Z,79nm,2.5s | | | | | | | | |
| **MIAR** | **Mount Ida** | **70.71** | **57** | P | | **P** | **10 17 23.8** | **-0.5** |
| | baz=70 | | | | | | | | |
| **MIAR** | **Mount Ida** | **70.71** | **57** | *eP* | | **P** | **10 17 24.8** | **+0.5** |
| | comp=Z,79nm,2.5s | | | | | | | | |
| **BUR04** | **Bucovina Ar. S** | **70.85** | **330** | *eP* | | **P** | **10 17 24.8** | **-0.3** |
| **BURAR** | **Bucovina Array** | **70.85** | **330** | *‖iP* | | **P** | **10 17 25.1** | **0.0** |
| **MORC** | **Moravsky Berou** | **70.90** | **335** | *eP* | | **P** | **10 17 25.8** | **+0.5** |
| MORC | | | | pmax | | pmax | | | |
| | comp=Z,51nm,1.2s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **70.90** | **335** | *⇑iP* | | **P** | **10 17 26.1** | **+0.8** |
| **MORC** | **Moravsky Berou** | **70.90** | **335** | *eP* | | **P** | **10 17 25.8** | **+0.5** |
| | comp=Z,51nm,1.2s | | | | | | | | |
| **LANS** | **Liptovska Anna** | **71.01** | **334** | *eP* | | **P** | **10 17 27.1** | **+1.2** |
| **LANS** | **Liptovska Anna** | **71.01** | **334** | *eP* | | **P** | **10 17 27.1** | **+1.2** |
| **433A** | **Art** | **71.01** | **63** | P | | **P** | **10 17 25.4** | **-0.8** |
| | baz=71 | | | | | | | | |
| **TRPA** | **Tarpa** | **71.14** | **332** | *⇑iP* | | **P** | **10 17 27.2** | **+0.6** |
| **631A** | **Perdido Creek** | **71.31** | **65** | P | | **P** | **10 17 27.5** | **-0.6** |
| | baz=71 | | | | | | | | |
| **VRAC** | **Vranov** | **71.56** | **336⇑** | *iP* | | **P** | **10 17 30.4** | **+1.2** |
| **VYHS** | **Vyhne** | **71.77** | **334** | *eP* | | **P** | **10 17 31.2** | **+0.7** |
| VYHS | | | | pmax | | pmax | | | |
| | comp=Z,24nm,2.6s | | | | | | | | |
| **VYHS** | **Vyhne** | **71.77** | **334** | *eP* | | **P** | **10 17 31.1** | **+0.6** |
| **CFR** | **Carcaliu** | **72.16** | **327⇑** | *iP* | | P | 10 17 37.3 | +4.5 |
| **732A** | **Laxson Ranch,** | **72.18** | **65** | P | | **P** | **10 17 33.1** | **-0.1** |
| | baz=72 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **72.41** | **338** | *eP* | | **P** | **10 17 35.3** | **+0.9** |
| **KHC** | **Kasperske Hory** | **72.41** | **338** | *eP* | | **P** | **10 17 35.3** | **+0.9** |
| **KHC** | **Kasperske Hory** | **72.41** | **338** | *eP* | | P | 10 17 39.5 | +5.1 |
| | comp=Z,64nm,3.0s | | | | | | | | |
| **832A** | **Faith Ranch, C** | **72.53** | **66** | P | | **P** | **10 17 35.6** | **+0.2** |
| | baz=72 | | | | | | | | |
| **GERES** | **GERESS Array B** | **72.65** | **338** | P | | **P** | **10 17 37.0** | **+1.1** |
| | comp=Z,0.7nm,0.6s,baz=19,slow=4.5,SNR=5.8 | | | | | | | | |
| GERES | | | | LR | | LR | 10 54 46.3 | | |
| | comp=Z,302nm,18.1s,baz=32,slow=40 | | | | | | | | |
| **GERES** | **GERESS Array B** | **72.65** | **338** | P | | **P** | **10 17 37.0** | **+1.1** |
| GERES | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| GERES | | | | MLR | | MLR | | | |
| | comp=Z,302nm,18.1s | | | | | | | | |
| **VOIR** | | **72.87** | **329⇑** | *iP* | | **P** | **10 17 38.0** | **+0.8** |
| **SIRR** | **Siria** | **73.08** | **331** | *‖iP* | | **P** | **10 17 39.2** | **+0.8** |
| **GZR** | **Gura Zlata** | **73.57** | **330⇑** | *iP* | | **P** | **10 17 41.8** | **+0.5** |
| **BZS** | **Buzias** | **73.69** | **331⇑** | *iP* | | **P** | **10 17 44.9** | **+2.9** |
| **KBA** | **Koelnbreinsper** | **74.40** | **337⇑** | *iP* | | **P** | **10 17 46.1** | **-0.2** |
| | comp=Z,20nm,1.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.11** | **320** | P | | **P** | **10 17 50.7** | **+0.3** |
| | comp=Z,2.0nm,0.8s,baz=60,slow=3.0,SNR=7.3 | | | | | | | | |
| BRTR | | | | LR | | LR | 10 56 24.5 | | |
| | comp=Z,114nm,18.7s,baz=27,slow=40 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **75.11** | **320** | *i* P | | **P** | **10 17 51.4** | **+0.9** |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **BR231** | **Keskin MP Arra** | **75.32** | **321** | *eP* | | **P** | **10 17 51.7** | **+0.1** |
| **DZM** | **Mont Dzumac** | **77.08** | **174** | *eLR* | | LR | 10 41 49.7 | | |
| | comp=Z,482nm,24.7s | | | | | | | | |
| **UOSS** | **Wadi Hilu** | **77.48** | **296** | *eP* | | **P** | **10 18 05.0** | **+1.0** |
| | comp=Z,29nm,1.6s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **77.98** | **205** | *d iP* | | **P** | **10 18 06.6** | **0.0** |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,35nm,1.2s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **77.99** | **205** | P | | **P** | **10 18 06.2** | **-0.5** |
| | comp=Z,3.1nm,0.7s,baz=18,slow=5.9,SNR=24 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **77.99** | **205** | P | | **P** | **10 18 06.2** | **-0.5** |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **AS01** | **Alice Springs** | **81.66** | **204** | *eP* | | **P** | **10 18 26.3** | **-0.2** |
| **ASAR** | **Alice Springs** | **81.68** | **204** | P | | **P** | **10 18 26.7** | **+0.1** |
| | comp=Z,3.7nm,0.8s,baz=14,slow=4.8,SNR=41 | | | | | | | | |
| **ASAR** | **Alice Springs** | **81.68** | **204** | P | | **P** | **10 18 26.7** | **+0.1** |
| ASAR | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **PPT** | **Papeete** | **83.96** | **133** | LR | | LR | 10 48 08.9 | | |
| | comp=Z,115nm,21.9s,baz=307,slow=30 | | | | | | | | |
| **PPT2** | **Papeete2** | **83.98** | **133** | *eLR* | | LR | 10 45 01.5 | | |
| | comp=Z,319nm,25.5s,baz=331 | | | | | | | | |
| **RAYN** | **Ar Rayn** | **84.02** | **303** | *eP* | | **P** | **10 18 37.8** | **-1.2** |
| | comp=Z,19nm,1.6s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **84.59** | **348** | P | | **P** | **10 18 40.6** | **-1.1** |
| | comp=Z,0.5nm,0.3s,baz=343,slow=9.8,SNR=7.9 | | | | | | | | |
| **KEST** | **Kesra** | **86.11** | **337** | LR | | LR | 11 04 39.4 | | |
| | comp=Z,212nm,18.1s,baz=306,slow=41 | | | | | | | | |
| **TBI** | **Tubuai** | **89.17** | **135** | *eLR* | | LR | 10 47 24.9 | | |
| | comp=Z,206nm,30.0s,baz=329 | | | | | | | | |
| **VNDA** | **Vanda** | **132.41** | **180** | PKP | | **PKPdf** | **10 25 21.4** | **+0.5** |
| | comp=Z,0.4nm,0.8s,baz=291,slow=4.2,SNR=4.6 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **144.90** | **180** | *e*PKPdf | | **PKPab** | **10 25 42.6** | **-0.8** |
| **SYO** | **Syowa Base** | **150.38** | **219‖** | *e*PKPdf | | **PKPbc** | **10 25 56.5** | **-1.7** |
| **SNAA** | **Sanae** | **161.90** | **197** | P | | **PKPab** | **10 26 53.9** | **-0.4** |
| **VNA3** | **Neumayer Olymp** | **163.26** | **191** | P | | **PKPab** | **10 26 59.1** | **-1.0** |
| **VNA2** | **Neumayer--Watz** | **163.27** | **194** | P | | **PKPab** | **10 26 59.3** | **-0.9** |
| | baz=191,slow=3.3 | | | | | | | | |

*IDC **19** 10:06:42.3±4.9, 27°.98N×136°.95E, h0km, mb3.8/3, mb1 4.0/3, mb1mx3.6/30, mbtmp3.8/3, Error ellipse: s-maj=379.1km s-min=32.7km az=80.0*
*ISCJB **19** 10:07:29.0±0.8, 27°.87N±0°.05×139°.2E±0°.2, h500km, mb3.2/3, Error ellipse: s-maj=17.8km s-min=6.3km az=172.7*
*JMA **19** 10:07:30.3±0.2, 27°.93N×139°.31E, h494km, M3.6*

**ISC 19 10:07:30.0±1.0, 27°.90N±0°.08×139°.3E±0°.2, h500km, n13, σ1s22/18, mb3.0/3, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CBIJ** | **Chichi jima** | **2.65** | **107** | P | **P** | **10 08 39.0** | **+0.2** |
| CBIJ | | | | S | **S** | **10 09 33.4** | **-1.2** |
| **JHHJ** | **Haha-jima-NKT** | **2.82** | **116** | P | **P** | **10 08 40.5** | **+0.6** |
| JHHJ | | | | S | **S** | **10 09 36.5** | **-0.1** |
| **BSO1** | **Boso 1** | **6.88** | **11** | S | **S** | **10 10 39.6** | **-0.2** |
| **BSO3** | **Boso 3** | **6.95** | **8** | S | **S** | **10 10 40.4** | **-1.3** |
| **BSO4** | **Boso 4** | **7.12** | **7** | *eS* | **S** | **10 10 43.9** | **-1.2** |
| **JHU** | **Hanno** | **7.93** | **360** | P | **P** | **10 09 26.6** | **+1.0** |
| **JRY** | **Ryogami san** | **8.10** | **357** | P | **P** | **10 09 28.1** | **+0.7** |
| **JAG** | **Ashikaga** | **8.50** | **1** | P | **P** | **10 09 32.3** | **+0.8** |
| JAG | | | | S | **S** | **10 11 09.1** | **-2.2** |
| **JHO** | **Hitachi** | **8.75** | **7** | P | **P** | **10 09 35.7** | **+1.6** |
| JHO | | | | S | **S** | **10 11 14.2** | **-1.8** |
| **JFK** | **Kawauchi** | **9.53** | **7** | P | **P** | **10 09 44.2** | **+1.9** |
| JFK | | | | S | **S** | **10 11 30.6** | **-0.5** |
| **WRA** | **Warramunga Arr** | **47.81** | **186** | P | **P** | **10 15 21.1** | **-0.6** |
| | 0.2nm,0.3s,baz=2.0,slow=7.9,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **51.53** | **186** | P | **P** | **10 15 48.9** | **-0.3** |
| | 0.2nm,0.4s,baz=2.9,slow=6.1,SNR=5.3 | | | | | | |
| **FINES** | **FINESS Array B** | **76.10** | **333** | P | **P** | **10 18 25.7** | **+0.1** |
| | 5.6nm,1.0s,baz=73,slow=6.6,SNR=3.6 | | | | | | |

*CSEM **19** 10:16:21.5, 41°.51N×44°.08E, h0km, ML1.2, After TIF*

**TIF 19 10:16:21.5, 41°.51N×44°.08E, h14km, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKH** | **Akhalkalaki** | **0.45** | **257** | P | Pn | 10 16 36.0 | +2.3 |
| **AKH** | **Akhalkalaki** | **0.45** | **257** | P | Pn | 10 16 36.1 | +2.4 |
| **TBLG** | **Delisi** | **0.55** | **66** | P | Pn | 10 16 40.8 | +6.0 |
| **TBLG** | **Delisi** | **0.55** | **66** | P | Pn | 10 16 40.8 | +5.9 |
| **DGRG** | **David-gareji** | **0.98** | **93** | P | Pb | 10 16 39.4 | -0.9 |
| DGRG | | | | S | Sb | 10 16 52.3 | -0.8 |
| **DGRG** | **David-gareji** | **0.98** | **93** | P | Pb | 10 16 39.4 | -0.9 |
| DGRG | | | | S | Sb | 10 16 52.3 | -0.8 |
| **ONI** | **Oni** | **1.18** | **337** | P | Sg | 10 17 00.1 | +0.4 |
| **ONI** | **Oni** | **1.18** | **337** | P | Sg | 10 17 08.6 | +8.9 |

**IDC 19 10:24:26.2±3.7, 5°.45S×150°.93E, h0km, mb3.2/2, mb1 3.5/3, mb1mx3.3/28, mbtmp3.4/3, ML1.4/1, Error ellipse: s-maj=155.1km s-min=43.5km az=119.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.43** | **223** | Pn | Pn | 10 25 50.4 | +2.0 |
| | 0.8nm,0.3s,baz=174,slow=19,SNR=1.9 | | | | | | |
| PMG | | | | Sn | Sn | 10 26 49.8 | -1.9 |
| | 1.6nm,0.3s,baz=97,slow=22,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.64** | **227** | P | P | 10 29 17.7 | -0.6 |
| | 0.8nm,0.7s,baz=53,slow=10,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **24.43** | **220** | P | P | 10 29 46.5 | -0.3 |
| | 0.4nm,0.7s,baz=54,slow=9.2,SNR=8.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.72** | **286** | PKPbc | PKPbc | 10 44 16.1 | -0.5 |
| | 1.0nm,0.6s,baz=57,slow=1.6,SNR=7.3 | | | | | | |

*IDC **19** 10:33:10.8±0.8, 15°.00S×173°.36W, h0km, mb4.0/8, mb1 4.2/8, mb1mx4.1/24, mbtmp4.0/8, MS3.8/3, Ms1 3.8/3, ms1mx3.3/25, Error ellipse: s-maj=36.3km s-min=20.5km az=129.0*
*ISCJB **19** 10:33:12.7±0.6, 15°.05S±0°.1×173°.2W±0°.1, h29km, mb4.1/11, MS3.9/3, Error ellipse: s-maj=26.2km s-min=10.8km az=136.9*
*NEIC **19** 10:33:12.5±0.5, 15°.01S×173°.38W, h10km, mb4.4/3, Error ellipse: s-maj=22.5km s-min=13.5km az=124.0*

**ISC 19 10:33:14.6±0.7, 15°.05S±0°.2×173°.0W±0°.2, h29km, n29, σ2s10/15, mb4.1/11, MS3.9/3, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **1.57** | **49** | Pn | **Pn** | **10 33 39.1** | **-1.6** |
| | 42nm,0.3s,baz=198,slow=3.5,SNR=128 | | | | | | |
| AFI | | | | Sn | **Sn** | **10 33 57.3** | **-2.9** |
| | 475nm,0.3s,baz=105,slow=18,SNR=27 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.73** | **247** | *eLR* | LR | 10 42 46.0 | |
| | 482nm,24.7s | | | | | | |
| **PPT2** | **Papeete2** | **22.64** | **100** | *eLR* | LR | 10 43 38.6 | |
| | 234nm,25.2s | | | | | | |
| **PPT2** | **Papeete2** | **22.64** | **100** | *eT* | T | 11 01 10.1 | |
| | 3.1nm,0.4s | | | | | | |
| **PAE** | **Paea** | **22.64** | **100** | *eT* | T | 11 01 09.3 | |
| | 1.3nm,0.3s | | | | | | |
| **TVO** | **Taravao** | **22.96** | **100** | *eT* | T | 11 01 33.2 | |
| | 0.9nm,0.3s | | | | | | |
| **TBI** | **Tubuai** | **23.73** | **114** | *eLR* | LR | 10 43 58.8 | |
| | 257nm,26.0s | | | | | | |
| **URZ** | **Urewera** | **24.81** | **199** | P | **P** | **10 38 32.4** | **-1.9** |
| | 6.2nm,0.7s,baz=53,slow=6.5,SNR=3.2 | | | | | | |
| **URZ** | **Urewera** | **24.81** | **199** | *eP* | **P** | **10 38 33.3** | **-0.9** |
| **RKT** | **Rikitea** | **36.77** | **109** | *eT* | T | 11 18 48.9 | |
| | 2.7nm,0.3s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.78** | **328** | T | T | 11 22 29.7 | |
| | baz=149,slow=76,SNR=7.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.79** | **328** | T | T | 11 22 02.1 | |
| | baz=149,slow=76,SNR=9.5 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.80** | **328** | T | T | 11 22 11.2 | |
| | baz=149,slow=76,SNR=8.5 | | | | | | |
| **PMG** | **Port Moresby** | **39.29** | **273** | LR | LR | 10 54 14.5 | |
| | comp=Z,85nm,19.9s,baz=227,slow=32 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **39.72** | **330** | T | T | 11 23 17.4 | |
| | baz=150,slow=76,SNR=3.3 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **39.72** | **330** | T | T | 11 23 22.0 | |
| | baz=150,slow=76,SNR=5.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **39.73** | **330** | T | T | 11 23 24.2 | |
| | baz=150,slow=76,SNR=4.6 | | | | | | |
| **WRAB** | **Tennant Creek** | **50.31** | **256** | *eP* | **P** | **10 42 07.1** | **-2.1** |
| | 3.8nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **50.32** | **256** | P | **P** | **10 42 06.8** | **-2.4** |
| | 1.0nm,0.6s,baz=92,slow=7.2,SNR=24 | | | | | | |
| **ASAR** | **Alice Springs** | **50.62** | **252** | P | **P** | **10 42 08.5** | **-2.9** |
| | 2.3nm,0.6s,baz=88,slow=8.0,SNR=53 | | | | | | |
| ASAR | | | | LR | LR | 11 01 41.6 | |
| | comp=Z,180nm,20.3s,baz=102,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **63.86** | **186** | P | **P** | **10 43 43.9** | **-0.2** |
| | 0.7nm,0.8s,baz=15,slow=8.3,SNR=5.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.74** | **42** | P | **P** | **10 44 48.0** | **+1.6** |
| | 0.5nm,0.8s,baz=236,slow=10.0,SNR=4.5 | | | | | | |
| **QSPA** | **South Pole Qui** | **75.09** | **180** | *eP* | **P** | **10 44 53.6** | **-0.2** |
| | 1.7nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **80.04** | **56** | P | **P** | **10 45 24.1** | **+2.2** |
| | 1.4nm,1.1s,baz=224,slow=5.2,SNR=5.2 | | | | | | |
| **COLA** | **College** | **81.85** | **11** | *eP* | **P** | **10 45 33.0** | **+2.3** |
| | 12nm,1.1s | | | | | | |
| **ILAR** | **Eielson Array** | **81.93** | **11** | P | **P** | **10 45 32.5** | **+1.4** |
| | 1.4nm,0.9s,baz=209,slow=6.4,SNR=7.7 | | | | | | |
| **MAW** | **Mawson** | **88.34** | **199** | P | **P** | **10 46 05.3** | **+2.0** |
| | 0.7nm,0.7s,baz=149,slow=8.1,SNR=5.2 | | | | | | |
| **JTS** | **JuntasAbangare** | **90.75** | **80** | LR | LR | 11 21 10.5 | |
| | comp=Z,44nm,18.7s,baz=265,slow=32 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.05** | **322** | PKPbc | **PKPab** | **10 52 53.2** | **+0.4** |
| | 4.1nm,0.9s,baz=72,slow=4.0,SNR=11 | | | | | | |

**IDC 19 10:46:39.0±13.0, 23°.51S×175°.98W, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.6/27, mbtmp3.6/3, Error ellipse: s-maj=351.6km s-min=60.0km az=35.0, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **45.73** | **259** | P | P | 10 55 02.0 | -0.3 |
| | 0.4nm,0.8s,baz=95,slow=7.4,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.11** | **264** | P | P | 10 55 05.3 | -0.1 |
| | 0.5nm,0.6s,baz=104,slow=8.1,SNR=9.9 | | | | | | |
| **MAW** | **Mawson** | **79.37** | **199** | P | P | 10 58 46.5 | +0.1 |
| | 0.9nm,0.7s,baz=110,slow=7.2,SNR=2.4 | | | | | | |

**WEL 19 10:50:59.4±0.7, 47°.13S×165°.50E, h5km, ML3.7/10, 1D, Error ellipse: s-maj=6.4km s-min=4.7km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PYZ** | **Puysegur Point** | **1.26** | **41** | P* | Pg | 10 51 22.2 | -1.5 |
| **APZ** | **The Paps** | **1.73** | **81** | PN | Pn | 10 51 29.1 | -1.1 |
| APZ | | | | SN | Sn | 10 51 51.7 | -1.1 |
| APZ | | | | AML | AML | 10 52 04.0 | |
| **DCZ** | **Deep Cove** | **2.01** | **35** | *e*PN | Pn | 10 51 33.3 | -0.8 |
| DCZ | | | | AML | AML | 10 52 17.0 | |
| DCZ | | | | AML | AML | 10 52 18.9 | |
| **WHZ** | **Wether Hill Ro** | **2.10** | **55** | PN | Pn | 10 51 34.1 | -1.1 |
| WHZ | | | | SN | Sn | 10 52 00.8 | -0.9 |
| WHZ | | | | AML | AML | 10 52 05.2 | |
| **SYZ** | **Scrubby Hill** | **2.57** | **78** | *‖*PN | Pn | 10 51 41.6 | -0.1 |
| SYZ | | | | *e*SN | Sn | 10 52 12.6 | -0.6 |
| SYZ | | | | AML | AML | 10 52 16.0 | |
| SYZ | | | | AML | AML | 10 52 18.1 | |
| SYZ | | | | AML | AML | 10 52 24.0 | |
| **MLZ** | **Mavora Lakes** | **2.58** | **47** | PN | Pn | 10 51 41.0 | -0.8 |
| MLZ | | | | SN | Sn | 10 52 11.3 | -2.2 |
| MLZ | | | | AML | AML | 10 52 17.3 | |
| **MSZ** | **Milford Sound** | **2.99** | **35** | *e*PN | Pn | 10 51 47.2 | -0.3 |
| MSZ | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PPT** | **Papeete** | **23.18** | **87** | LR | LR | 11 10 17.8 | | |
| | comp=Z,178nm,19.3s,baz=232,slow=31 | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.34** | **205** | P | **P** | **11 03 50.8** | **+1.9** | |
| | 17nm,0.9s,baz=16,slow=7.4,SNR=4.0 | | | | | | | |
| **HNR** | **Honiara** | **27.51** | **290** | LR | LR | 11 14 16.8 | | |
| | comp=Z,153nm,18.9s,baz=117,slow=35 | | | | | | | |
| **RMQ** | **Roma** | **34.67** | **253** | P | **P** | **11 05 02.8** | **+0.1** | |
| | baz=35,SNR=7.8 | | | | | | | |
| **CNB** | **Canberra Magne** | **35.44** | **238** | P | **P** | **11 05 09.5** | **+0.2** | |
| | baz=36,SNR=4.7 | | | | | | | |
| **CAN** | **Canberra** | **35.73** | **238** | P | **P** | **11 05 12.1** | **+0.4** | |
| | baz=36 | | | | | | | |
| **YNG** | **Young** | **35.97** | **240** | P | **P** | **11 05 14.0** | **+0.2** | |
| | baz=37 | | | | | | | |
| **RKT** | **Rikitea** | **36.17** | **101** | *e*LR | LR | 11 14 30.2 | | |
| | 357nm,39.0s | | | | | | | |
| **CTA** | **Charters Tower** | **37.31** | **263** | P | **P** | **11 05 24.4** | **-0.9** | |
| | 5.1nm,0.5s,baz=92,slow=11,SNR=10 | | | | | | | |
| **CTA** | **Charters Tower** | **37.31** | **263** | P | **P** | **11 05 24.8** | **-0.6** | |
| | baz=38 | | | | | | | |
| **CTAO** | **Charters Tower** | **37.31** | **263** | *e*P | **P** | **11 05 24.6** | **-0.8** | |
| | 4.9nm,0.5s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **37.75** | **245** | P | **P** | **11 05 28.4** | **-0.5** | |
| | baz=38,SNR=7.2 | | | | | | | |
| **QLP** | **Quilpie** | **38.73** | **253** | P | **P** | **11 05 36.4** | **-0.9** | |
| | baz=39,SNR=7.9 | | | | | | | |
| **TOO** | **Toolangi** | **39.02** | **235** | P | **P** | **11 05 39.7** | **+0.1** | |
| | baz=40,SNR=4.7 | | | | | | | |
| **MTSU** | **Mount Surprise** | **39.42** | **266** | P | **P** | **11 05 42.7** | **-0.5** | |
| | baz=40,SNR=19 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **41.70** | **237** | P | **P** | **11 06 01.7** | **-0.1** | |
| | baz=42 | | | | | | | |
| **BBOO** | **Buckleboo** | **45.99** | **244** | P | **P** | **11 06 36.1** | **-0.2** | |
| | baz=47 | | | | | | | |
| **JAY** | **Jayapura** | **47.71** | **286** | P | **P** | **11 06 50.0** | **-0.1** | |
| | baz=48,SNR=6.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.25** | **256** | P | **P** | **11 06 52.6** | **-1.5** | |
| | 6.2nm,0.7s,baz=98,slow=7.8,SNR=113 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 08 21.0** | **0.0** | |
| | 2.0nm,0.9s,baz=110,slow=3.8,SNR=5.3 | | | | | | | |
| **AS13** | **Alice Springs** | **48.26** | **256** | P | **P** | **11 06 53.3** | **-0.9** | |
| | baz=49 | | | | | | | |
| **WRAB** | **Tennant Creek** | **48.39** | **261** | P | **P** | **11 06 53.8** | **-1.4** | |
| | 50nm,0.9s,SNR=8.3 | | | | | | | |
| **WRAB** | **Tennant Creek** | **48.39** | **261** | *e*P | **P** | **11 06 52.5** | **-2.7** | |
| | 4.4nm,0.7s | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.40** | **261** | P | **P** | **11 06 53.5** | **-1.8** | |
| | 4.4nm,0.8s,baz=98,slow=6.6,SNR=55 | | | | | | | |
| **MTN** | **Manton Dam** | **53.00** | **269** | P | **P** | **11 07 29.3** | **-0.7** | |
| | baz=54,SNR=3.7 | | | | | | | |
| **WRKA** | **Warakurna** | **53.16** | **254** | P | **P** | **11 07 29.9** | **-1.2** | |
| | baz=54,SNR=29 | | | | | | | |
| **KNRA** | **Kununurra** | **54.49** | **265** | P | **P** | **11 07 40.5** | **-0.3** | |
| | baz=55,SNR=3.9 | | | | | | | |
| **FAKI** | **Fak Fak** | **55.26** | **281** | P | **P** | **11 07 44.3** | **-2.2** | |
| | baz=56 | | | | | | | |
| **SBA** | **Scott Base** | **58.16** | **185** | *e*P | **P** | **11 08 07.8** | **+1.6** | |
| | 5.8nm,0.9s | | | | | | | |
| **VNDA** | **Vanda** | **58.28** | **186** | P | **P** | **11 08 08.3** | **+1.3** | |
| | 2.6nm,0.8s,baz=5.2,slow=6.3,SNR=8.9 | | | | | | | |
| **SOEI** | **Soe** | **60.34** | **270** | *e*P | **P** | **11 08 23.3** | **+0.9** | |
| | 29nm,0.9s | | | | | | | |
| **KLBR** | **Kellerberrin** | **61.53** | **244** | P | **P** | **11 08 28.2** | **-1.9** | |
| | baz=62 | | | | | | | |
| **MEEK** | **Meekatharra** | **61.54** | **250** | P | **P** | **11 08 29.3** | **-1.0** | |
| | baz=62,SNR=4.1 | | | | | | | |
| **MBWA** | **Marble Bar** | **61.59** | **256** | *e*P | **P** | **11 08 29.8** | **-0.9** | |
| | 5.8nm,0.6s | | | | | | | |
| **MORW** | **Morawa** | **63.37** | **247** | P | **P** | **11 08 42.4** | **0.0** | |
| | baz=64,SNR=6.6 | | | | | | | |
| **QSPA** | **South Pole Qui** | **69.57** | **180** | *e*P | **P** | **11 09 21.9** | **+0.3** | |
| | 2.6nm,0.8s | | | | | | | |
| **CBKC** | **Canebrake** | **76.48** | **47** | *e*P | **P** | **11 10 02.9** | **+0.1** | |
| **YUH** | **Yuha Desert** | **76.56** | **47** | *e*P | **P** | **11 10 01.9** | **-1.3** | |
| **ERPC** | **Ernies Place** | **76.80** | **47** | *e*P | **P** | **11 10 02.4** | **-2.2** | |
| **CWC** | **Cottonwood Cre** | **77.36** | **43** | *e*P | **P** | **11 10 10.4** | **+2.5** | |
| **NVAR** | **Mina Array Bea** | **78.44** | **41** | P | **P** | **11 10 12.6** | **-1.3** | |
| | 2.8nm,0.8s,baz=225,slow=9.4,SNR=28 | | | | | | | |
| **CCUT** | **Cedar City** | **81.07** | **44** | *e*P | **P** | **11 10 27.8** | **-0.4** | |
| | 29nm,2.4s | | | | | | | |
| **SHW** | **Mount Saint He** | **81.17** | **33** | *e*P | **P** | **11 10 27.8** | **-0.6** | |
| **MSU** | **Marysvale** | **82.39** | **44** | *e*P | **P** | **11 10 35.0** | **-0.1** | |
| **MAW** | **Mawson** | **82.83** | **199** | P | **P** | **11 10 37.0** | **+0.2** | |
| | 1.9nm,0.7s,baz=126,slow=8.4,SNR=11 | | | | | | | |
| **NJ2** | **Nanjing** | **82.87** | **308** | *e*P | P | 11 10 41.6 | +4.1 | |
| NJ2 | | | | PMZ | | | | |
| | 40nm,0.8s | | | | | | | |
| **TMUT** | **Trail Mountain** | **83.45** | **44** | *e*P | **P** | **11 10 40.6** | **-0.1** | |
| | 27nm,1.0s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **83.70** | **36** | *e*P | **P** | **11 10 41.1** | **-0.5** | |
| | 45nm,2.1s | | | | | | | |
| **SRU** | **San Rafael** | **83.80** | **44** | *e*P | **P** | **11 10 41.9** | **-0.5** | |
| | 5.4nm,0.8s | | | | | | | |
| **P17A** | **Butcher Ranch,** | **83.85** | **44** | *e*P | **P** | **11 10 43.2** | **+0.5** | |
| | 6.8nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **83.85** | **56** | P | **P** | **11 10 41.4** | **-1.4** | |
| | 1.5nm,0.8s,baz=214,slow=8.8,SNR=17 | | | | | | | |
| **HLID** | **Hailey** | **83.86** | **39** | *e*P | **P** | **11 10 40.4** | **-2.2** | |
| | 25nm,2.0s | | | | | | | |
| **TCUT** | **Toone Canyon** | **84.32** | **42** | *e*P | **P** | **11 10 44.6** | **-0.4** | |
| | 16nm,1.1s | | | | | | | |
| **ANMO** | **Albuquerque** | **84.44** | **50** | *e*P | **P** | **11 10 44.9** | **-0.8** | |
| | 2.2nm,0.9s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **84.49** | **42** | *e*P | **P** | **11 10 44.6** | **-1.2** | |
| | 2.2nm,0.8s | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **85.57** | **47** | *e*P | **P** | **11 10 51.4** | **-0.1** | |
| **TRF** | **Thorofare Moun** | **85.70** | **10** | *e*P | **P** | **11 10 50.6** | **-0.8** | |
| | 7.6nm,0.9s | | | | | | | |
| **BW06** | **Boulder Array** | **86.37** | **42** | *e*P | **P** | **11 10 52.6** | **-2.6** | |
| **MSTX** | **Muleshoe** | **86.66** | **52** | *e*P | **P** | **11 10 54.9** | **-1.8** | |
| | 9.2nm,0.8s | | | | | | | |
| **ILAR** | **Eielson Array** | **87.51** | **11** | P | **P** | **11 10 58.4** | **-1.6** | |
| | 0.7nm,0.7s,baz=208,slow=5.9,SNR=7.7 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **87.85** | **175** | P | **P** | **11 11 01.0** | **-0.8** | |
| **SNAA** | **Sanae** | **87.86** | **177** | P | **P** | **11 11 00.5** | **-1.4** | |
| **VNA2** | **Neumayer--Watz** | **88.33** | **176** | P | **P** | **11 11 02.7** | **-1.3** | |
| | baz=171,slow=3.2 | | | | | | | |
| **GYA** | **Guiyang** | **90.01** | **298** | *e*P | P | 11 11 19.6 | +6.8 | |
| GYA | | | | PP | PP | 11 14 55.4 | +9.0 | |
| GYA | | | | SKS | **SKSac** | **11 21 48.9** | **+6.5** | |
| GYA | | | | S | **ScS** | **11 22 12.0** | **+3.4** | |
| GYA | | | | SS | SS | 11 28 16.3 | +13 | |
| GYA | | | | PMZ | | | | |
| | 10.0nm,1.0s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | 110nm,6.2s | | | | | | | |
| GYA | | | | LN | | | | |
| | 490nm,20.6s | | | | | | | |
| GYA | | | | LE | | | | |
| | 440nm,21.4s | | | | | | | |
| GYA | | | | LZ | | | | |
| | 360nm,20.2s | | | | | | | |
| **XAN** | **Xi'an** | **91.22** | **306** | P | P | 11 11 23.5 | +5.3 | |
| XAN | | | | PMZ | | | | |
| | 4.0nm,1.2s | | | | | | | |
| XAN | | | | PMZ | | | | |
| | 150nm,5.8s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **92.13** | **313** | *e*P | P | 11 11 27.8 | +5.5 | |
| HHC | | | | PP | PP | 11 15 08.3 | +5.4 | |
| HHC | | | | PMZ | | | | |
| | 17nm,1.0s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | 220nm,4.2s | | | | | | | |
| **KMI** | **Kunming** | **92.79** | **296** | P | P | 11 11 33.1 | +7.2 | |
| KMI | | | | PMZ | | | | |
| | 6.0nm,1.1s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **93.72** | **288** | *e*P | P | 11 11 34.1 | +4.0 | |
| **CMAR** | **Chiang Mai Arr** | **93.75** | **288** | P | **P** | **11 11 28.6** | **-1.5** | |
| | 0.4nm,0.4s,baz=83,slow=2.8,SNR=3.2 | | | | | | | |
| **CD2** | **Chengdu** | **94.05** | **301** | *e*P | P | 11 11 37.5 | +6.2 | |
| CD2 | | | | pP | pP | 11 11 40.9 | +0.8 | |
| CD2 | | | | PP | PP | 11 15 24.6 | +6.6 | |
| CD2 | | | | SKS | SKSac | 11 22 12.4 | +7.7 | |
| CD2 | | | | S | ScS | 11 22 49.8 | +8.0 | |
| CD2 | | | | sS | sS | 11 22 55.4 | +0.3 | |
| CD2 | | | | SS | SS | 11 29 13.0 | +12 | |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | 120nm,5.2s | | | | | | | |
| **MDND** | **Maddock** | **94.96** | **41** | *e*P | **P** | **11 11 34.6** | **-0.5** | |
| | 10nm,0.4s | | | | | | | |
| **KSH** | **Kashi** | **118.04** | **305** | *e*PKP | PKPdf | 11 17 05.5 | +5.6 | |
| KSH | | | | PP | PP | 11 18 23.5 | +8.5 | |
| KSH | | | | SKS | **SKSdf** | **11 24 16.3** | **+5.9** | |
| KSH | | | | SKKS | **SKKSac** | **11 25 14.4** | **+0.7** | |
| KSH | | | | SS | **SS** | **11 34 33.4** | **+5.1** | |
| KSH | | | | PPMZ | | | | |
| | 250nm,6.2s | | | | | | | |
| KSH | | | | LN | | | | |
| | 330nm,6.1s | | | | | | | |
| KSH | | | | LE | | | | |
| | 180nm,6.0s | | | | | | | |
| KSH | | | | LZ | | | | |
| | 290nm,5.9s | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.78** | **334** | PKP | **PKPab** | **11 17 47.4** | **-0.9** | |
| | 0.3nm,0.3s,baz=38,slow=4.3,SNR=9.5 | | | | | | | |
| **DPC** | **Dobruska-Polom** | **149.13** | **347** | *e*PKPAB | **PKPab** | **11 18 07.9** | **+2.6** | |
| **BRTR** | **Keskin Array B** | **149.62** | **315** | PKPbc | **PKPdf** | **11 17 59.0** | **+1.0** | |
| | 0.7nm,0.7s,baz=88,slow=3.3,SNR=2.5 | | | | | | | |
| **KHC** | **Kasperske Hory** | **150.81** | **350** | *e*PKPAB | **PKPab** | **11 18 13.9** | **+1.7** | |
| KHC | | | | *ex* | x | 11 18 23.0 | | |
| **GERES** | **GERESS Array B** | **151.07** | **350** | PKPbc | **PKPbc** | **11 18 05.8** | **0.0** | |
| | 0.3nm,0.2s,baz=134,slow=3.9,SNR=3.6 | | | | | | | |

*CSEM **19** 11:05:24.9, 39.43N×29.81W, h10km, ML2.7, After PDA*
**PDA 19 11:05:24.9±1.0, 39.43N×29.81W, h10km, MD3.6, ML2.7, Error ellipse: s-maj=19.5km s-min=8.1km az=42.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCED** | **Cedros** | **1.18** | **132** | *e*P | Pb | 11 05 42.6 | -4.8 |
| PCED | | | | *e*S | Sb | 11 05 55.7 | -7.0 |
| PCED | | | | A | A | 11 05 58.0 | |
| | 41nm,0.3s | | | | | | |
| **PCED** | **Cedros** | **1.18** | **132** | *e*P | Pb | 11 05 42.6 | -4.8 |
| PCED | | | | *e*S | Sb | 11 05 55.7 | -7.0 |
| **CALA** | **Caldeira** | **1.21** | **134** | *e*P | Pn | 11 05 43.2 | -4.8 |
| CALA | | | | *e*S | Sb | 11 05 57.4 | -6.5 |
| **CALA** | **Caldeira** | **1.21** | **134** | *e*P | Pn | 11 05 43.2 | -4.8 |
| CALA | | | | *e*S | Sb | 11 05 57.4 | -6.5 |
| **ROSA** | **Rosais** | **1.42** | **120** | *e*S | Sn | 11 06 02.2 | -7.2 |
| ROSA | | | | A | A | 11 06 03.5 | |
| | 17nm,0.2s | | | | | | |
| **ROSA** | **Rosais** | **1.42** | **120** | *e*S | Sn | 11 06 02.2 | -7.2 |
| **PCAN** | **Candelaria** | **1.42** | **133** | *e*P | Pn | 11 05 45.9 | -4.9 |
| PCAN | | | | *e*S | Sn | 11 06 02.1 | -7.4 |
| PCAN | | | | A | A | 11 06 03.6 | |
| | 91nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.42** | **133** | *e*P | Pn | 11 05 45.9 | -4.9 |
| PCAN | | | | *e*S | Sn | 11 06 02.1 | -7.4 |
| **PICO** | **Pico** | **1.43** | **130** | *e*P | Pn | 11 05 46.6 | -4.4 |
| PICO | | | | *e*S | Sn | 11 06 02.3 | -7.5 |
| **PICO** | **Pico** | **1.43** | **130** | *e*P | Pn | 11 05 46.6 | -4.4 |
| PICO | | | | *e*S | Sn | 11 06 02.3 | -7.5 |
| **PMAN** | **Manadas** | **1.56** | **120** | *e*S | Sn | 11 06 04.9 | -8.1 |
| PMAN | | | | A | A | 11 06 08.5 | |
| | 18nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.56** | **120** | *e*S | Sn | 11 06 04.9 | -8.1 |

*IDC **19** 11:11:15.8±0.8, 23.35S×115.12W, h0km, mb4.0/8, mb1 4.2/8, mb1mx4.1/23, mbtmp4.0/8, MS4.2/7, Ms1 4.2/7, ms1mx4.1/15, Error ellipse: s-maj=26.5km s-min=22.2km az=61.0*
*NEIC **19** 11:11:17.0±0.5, 23.42S×115.19W, h10km, mb4.7/5, Error ellipse: s-maj=18.2km s-min=13.7km az=66.0*
*GCMT **19** 11:11:17.0±0.3, 23.56S×115.25W, h19km±1km, MW5.0/89, Moment Tensor Solution. s38,c47; s89,c139; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=0.34±.13; Mθθ=1.69±.12; Mϕϕ2.03±.12; Mrθ 0.41±.24; Mrϕ 3.03±.10; Mθϕ0.67±.24; Best double couple: M☉3.62900×10¹⁶ NP1:φs344.00000°, δ82.00000°, λ173.00000°. Principal axes: T 3.8720, Plg11.0000°, Azm299.0000°; N -0.4900, Plg79.0000°, Azm116.0000°; P -3.3860, Plg1.0000°, Azm209.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
**ISC 19 11:11:16.4±1.2, 23.5S±0.2×115.3W±0.2, h10km, n38, σ0.5 72/18, mb4.4/13, MS4.2/6, Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RPN** | **Rapa Nui** | **6.47** | **125** | LR | LR | 11 14 40.8 | |
| | comp=Z,3μm,18.7s,baz=326,slow=32 | | | | | | |
| **RKT** | **Rikitea** | **18.09** | **267** | *e*LQ | LQ | 11 18 54.5 | |
| | 3μm,27.2s | | | | | | |
| RKT | | | | *e*LR | LR | 11 19 36.5 | |
| | 2μm,26.5s,baz=106 | | | | | | |
| **RKT** | **Rikitea** | **18.09** | **267** | *e*T | T | 11 33 42.4 | |
| | 3.3nm,0.3s | | | | | | |
| **MEH** | **Mehetia** | **31.13** | **274** | *e*T | T | 11 49 49.7 | |
| | 11nm,0.3s | | | | | | |
| **TBI** | **Tubuai** | **31.31** | **263** | *e*LQ | LQ | 11 24 31.0 | |
| | 482nm,28.2s | | | | | | |
| TBI | | | | *e*LR | LR | 11 25 42.6 | |
| | 540nm,24.5s | | | | | | |
| **TBI** | **Tubuai** | **31.31** | **263** | *e*T | T | 11 50 16.8 | |
| | 7.9nm,0.3s | | | | | | |
| **TIAR** | **Tiarei** | **32.39** | **274** | *e*T | T | 11 51 19.5 | |
| | 3.1nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **32.59** | **274** | *e*LQ | LQ | 11 25 01.3 | |
| | 666nm,25.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 11 25 54.4 | |
| | 754nm,27.2s | | | | | | |
| **CFAA** | **Coronel Fontan** | **42.22** | **112** | P | **P** | **11 19 09.7** | **-0.1** |
| | 0.3nm,0.7s,baz=274,slow=4.6,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **44.76** | **90** | P | **P** | **11 19 31.2** | **0.0** |
| | 3.9nm,0.7s,baz=276,slow=6.4,SNR=11 | | | | | | |
| **CMIG** | **Matias Romero** | **45.02** | **28** | P | **P** | **11 19 32.0** | **-0.4** |
| | 3.1nm,1.1s,baz=103,slow=3.0,SNR=3.9 | | | | | | |
| **ROSC** | **El Rosal** | **48.90** | **60** | LR | LR | 11 36 40.7 | |
| | comp=Z,166nm,18.4s,baz=197,slow=31 | | | | | | |
| **CPUP** | **Villa Florida** | **52.26** | **106** | P | **P** | **11 20 27.7** | **-0.4** |
| | 2.6nm,0.8s,baz=259,slow=8.0,SNR=6.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.73** | **13** | P | **P** | **11 20 38.3** | **-0.6** |
| | 0.5nm,0.8s,baz=193,slow=10,SNR=6.2 | | | | | | |
| TXAR | | | | LR | LR | 11 39 11.1 | |
| | comp=Z,88nm,19.2s,baz=0.0,slow=31 | | | | | | |
| **JCT** | **Junction City** | **55.72** | **16** | *e*P | **P** | **11 20 53.0** | **-0.2** |
| | 8.2nm,0.8s | | | | | | |
| **HKT** | **Hockley** | **56.36** | **20** | *e*P | **P** | **11 20 58.5** | **+0.9** |
| | 14nm,1.5s | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.69** | **357** | P | **P** | **11 21 35.8** | **+0.9** |
| | 1.9nm,0.8s,baz=192,slow=9.3,SNR=13 | | | | | | |
| **MSU** | **Marysvale** | **61.78** | **3** | *e*P | **P** | **11 21 35.1** | **-0.4** |
| | 9.1nm,1.6s | | | | | | |
| **BDFB** | **Brasilia** | **63.38** | **96** | P | **P** | **11 21 47.3** | **+0.7** |
| | 3.1nm,0.6s,baz=229,slow=0.9,SNR=4.1 | | | | | | |
| **MOD** | **Modoc** | **65.26** | **356** | *e*P | **P** | **11 21 59.0** | **+0.6** |
| | 8.6nm,1.2s | | | | | | |
| **VNDA** | **Vanda** | **65.66** | **194** | P | P | 11 22 03.9 | +3.6 |
| | 0.7nm,0.9s,baz=116,slow=5.7,SNR=2.8 | | | | | | |
| VNDA | | | | LR | LR | 11 44 20.3 | |
| | comp=Z,428nm,18.3s,baz=129,slow=30 | | | | | | |
| **HRY** | **Holter Researc** | **69.97** | **3** | *e*P | **P** | **11 22 28.4** | **+0.4** |
| | 3.0nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **71.25** | **254** | *e*LR | LR | 11 44 25.6 | |
| | 208nm,25.1s | | | | | | |
| **ULM** | **La du Bonnet** | **75.44** | **13** | LR | LR | 11 51 38.4 | |
| | comp=Z,112nm,19.5s,baz=328,slow=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **86.80** | **292** | T | T | 12 59 50.5 | |
| | baz=116,slow=75,SNR=330 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **86.81** | **292** | T | T | 12 59 52.2 | |
| | baz=116,slow=75,SNR=416 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **86.82** | **292** | T | T | 12 59 51.8 | |
| | baz=116,slow=75,SNR=300 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **87.16** | **293** | T | T | 13 00 19.0 | |
| | baz=117,slow=76,SNR=175 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **87.17** | **293** | T | T | 13 00 16.1 | |
| | baz=117,slow=76,SNR=59 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **87.18** | **293** | T | T | 13 00 20.4 | |
| | baz=117,slow=76,SNR=256 | | | | | | |
| **SCHQ** | **Schefferville** | **88.37** | **26** | LR | LR | 12 02 44.7 | |
| | comp=Z,86nm,18.1s,baz=280,slow=35 | | | | | | |
| **MAW** | **Mawson** | **89.14** | **179** | LR | LR | 11 59 38.4 | |
| | comp=Z,271nm,18.3s,baz=234,slow=32 | | | | | | |
| **PAB** | **San Pablo** | **120.35** | **57** | *e*PKPdf | **PKPdf** | **11 30 09.4** | **+1.2** |
| **ZALV** | **Zalesovo Beam** | **146.06** | **339** | PKPbc | **PKPbc** | **11 30 56.5** | **+0.2** |
| | 2.3nm,0.8s,baz=48,slow=4.0,SNR=8.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.70** | **268** | PKPbc | **PKPbc** | **11 31 02.2** | **+0.2** |
| | 1.2nm,0.4s,baz=133,slow=0.6,SNR=15 | | | | | | |
| **CHTO** | **Chiang Mai** | **147.78** | **268** | *e*PKPbc | **PKPbc** | **11 31 02.2** | **-0.1** |
| **BRTR** | **Keskin Array B** | **149.20** | **51** | PKPbc | **PKPbc** | **11 31 04.3** | **-1.3** |
| | 4.2nm,0.9s,baz=259,slow=1.3,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **152.82** | **333** | PKPbc | **PKPbc** | **11 31 12.5** | **-1.2** |
| | 0.5nm,0.6s,baz=48,slow=1.8,SNR=4.1 | | | | | | |

*IDC **19** 11:15:58.1±1.4, 23.81S×115.34W, h0km, mb4.1/4, mb1 4.4/4, mb1mx3.9/22, mbtmp4.1/4, Error ellipse: s-maj=41.8km s-min=38.5km az=28.0*
*ISCJB **19** 11:16:00.3±1.2, 23.5S±0.1×115.2W±0.3, h10km, mb4.1/4, Error ellipse: s-maj=45.3km s-min=20.7km az=175.2*
**ISC 19 11:16:02.6±1.1, 23.5S±0.2×115.0W±0.3, h10km, n12, σ1 27/10, mb4.2/4, Easter Island region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPAZ** | **La Paz** | **44.50** | **90** | P | **P** | **11 24 15.7** | **+0.4** |
| | 3.2nm,1.0s,baz=273,slow=5.3,SNR=5.8 | | | | | | |
| **CMIG** | **Matias Romero** | **44.85** | **28** | P | **P** | **11 24 16.5** | **-0.8** |
| | 4.0nm,1.1s,baz=158,slow=2.8,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.62** | **12** | P | **P** | **11 25 24.7** | **+0.4** |
| | 0.6nm,0.8s,baz=186,slow=7.3,SNR=7.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.65** | **357** | P | **P** | **11 26 20.8** | **-0.1** |
| | 3.5nm,0.8s,baz=185,slow=9.7,SNR=26 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **72.77** | **161** | P | **P** | **11 27 30.5** | **-0.3** |
| **VNA1** | **Neumayer--Stat** | **73.42** | **161** | P | **P** | **11 27 34.1** | **-0.5** |
| **VNA2** | **Neumayer--Watz** | **73.58** | **161** | P | P | 11 27 40.4 | +4.9 |
| | baz=262,slow=4.4 | | | | | | |
| **SNAA** | **Sanae** | **74.56** | **162** | P | P | 11 27 45.3 | +3.8 |
| **ZALV** | **Zalesovo Beam** | **146.11** | **339** | PKPbc | **PKPdf** | **11 35 40.0** | **-1.8** |
| | 1.1nm,0.6s,baz=8.5,slow=2.9,SNR=5.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **147.96** | **268** | PKPbc | **PKPdf** | **11 35 45.9** | **-0.1** |
| | 0.6nm,0.4s,baz=99,slow=0.8,SNR=5.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **148.96** | **51** | PKPbc | **PKPdf** | **11 35 47.9** | **+0.7** |
| | 2.4nm,0.9s,baz=322,slow=4.0,SNR=8.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **152.89** | **333** | PKPbc | **PKPdf** | **11 35 55.4** | **+2.5** |
| | 0.7nm,0.6s,baz=74,slow=2.1,SNR=4.5 | | | | | | |

*GCMT **19** 11:16:40.0±0.4, 23.56S×115.29W, h24km±1km, MW5.0/61, Moment Tensor Solution. s15,c18; s61,c89; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=1.24±.24; Mθθ-1.18±.15; Mϕϕ2.42±.17; Mrθ-2.08±.44; Mrϕ 1.54±.11; Mθϕ1.22±.36; Best double couple: M☉3.47000×10¹⁶ NP1:φs162.00000°, δ68.00000°, λ-142.00000°. NP2: φs56.00000°, δ55.00000°, λ-27.00000°. Principal axes: T 3.0470, Plg8.0000°, Azm286.0000°; N 0.8470, Plg47.0000°, Azm188.0000°; P -3.8940, Plg42.0000°, Azm23.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
**IDC 19 11:16:31.4±1.8, 23.85S×114.91W, h0km, mb3.8/2, mb1 4.3/2, mb1mx3.8/15, mbtmp3.8/2 Error ellipse: s-maj=101.7km s-min=49.8km az=109.0, Easter Island region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RKT** | **Rikitea** | **18.42** | **268** | *e*LQ | LQ | 11 24 11.7 | |
| | 2μm,28.8s | | | | | | |
| RKT | | | | *e*LR | LR | 11 24 54.1 | |
| | 2μm,27.5s,baz=103 | | | | | | |
| **RKT** | **Rikitea** | **18.42** | **268** | *e*T | T | 11 39 07.6 | |
| | 2.4nm,0.3s | | | | | | |
| **TBI** | **Tubuai** | **31.62** | **264** | *e*LQ | LQ | 11 30 03.0 | |
| | 209nm,34.8s | | | | | | |
| TBI | | | | *e*LR | LR | 11 30 59.9 | |
| | 748nm,26.0s,baz=97 | | | | | | |
| **PPT2** | **Papeete2** | **32.96** | **274** | *e*LQ | LQ | 11 30 20.9 | |
| | 338nm,24.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 11 31 27.6 | |
| | 584nm,26.2s,baz=106 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.98** | **12** | P | P | 11 25 58.2 | +0.9 |
| | 0.3nm,0.6s,baz=201,slow=7.6,SNR=3.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.04** | **357** | P | P | 11 26 53.6 | -0.3 |
| | 3.0nm,0.8s,baz=182,slow=10,SNR=8.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **71.49** | **254** | *e*LR | LR | 11 49 34.2 | |
| | 320nm,27.1s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **87.24** | **291** | T | T | 13 05 13.5 | |
| | baz=116,slow=75,SNR=139 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **87.25** | **291** | T | T | 13 05 08.4 | |
| | baz=116,slow=75,SNR=150 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **87.26** | **291** | T | T | 13 05 19.3 | |
| | baz=116,slow=75,SNR=153 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **87.61** | **293** | T | T | 13 05 41.0 | |
| | baz=117,slow=76,SNR=57 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **87.62** | **293** | T | T | 13 05 42.5 | |
| | baz=117,slow=76,SNR=29 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **87.62** | **293** | T | T | 13 05 47.1 | |
| | baz=117,slow=76,SNR=125 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **146.49** | **339** | PKPbc | PKPdf | 11 36 13.4 | +0.5 |
| | 2.3nm,1.0s,baz=29,slow=3.4,SNR=4.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **148.03** | **267** | PKPbc | PKPbc | 11 36 20.3 | +0.6 |
| | 5.1nm,1.0s,baz=83,slow=0.7,SNR=6.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.13** | **52** | PKPbc | PKPbc | 11 36 21.7 | -0.4 |
| | 3.1nm,0.8s,baz=220,slow=1.0,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **153.27** | **333** | PKPbc | PKPbc | 11 36 29.2 | -2.2 |
| | 1.5nm,0.8s,baz=46,slow=3.5,SNR=4.7 | | | | | | |

**IDC 19 11:20:17.2±6.1, 5.87S×146.94E, h0km, mb2.7/1, mb1 3.3/2, mb1mx3.2/16, mbtmp3.0/2, ML3.2/1, Error ellipse: s-maj=252.5km s-min=48.4km az=110.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **18.59** | **220** | P | P | 11 24 35.8 | -0.4 |
| | 0.1nm,0.3s,baz=47,slow=12,SNR=6.7 | | | | | | |
| **ASAR** | **Alice Springs** | **21.69** | **214** | P | P | 11 25 10.2 | +0.3 |
| | 0.3nm,0.8s,baz=43,slow=8.4,SNR=8.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.00** | **284** | PKPbc | PKPbc | 11 39 56.0 | -0.9 |
| | 

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DIX | | | | | Sg | | Sg | 11 39 09.8 | -0.2 | |
| **DIX** | **Grande Dixence** | **0.41** | **259** | ⇓*i* | Pg | | **Pg** | **11 39 04.6** | **0.0** | |
| | 183nm,0.3s | | | | | | | | | |
| DIX | | | | *e* | Sg | | **Sg** | 11 39 09.8 | -0.2 | |
| | 183nm,0.3s | | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **0.52** | **294** | *e* | Pg | | **Pg** | **11 39 07.0** | **+0.4** | |
| | 13nm,0.5s | | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **0.52** | **294** | *e* | Pg | | **Pg** | **11 39 07.0** | **+0.4** | |
| | 13nm,0.5s | | | | | | | | | |
| **FUSIO** | **Fusio** | **0.56** | **57** | *e* | Pg | | **Pg** | **11 39 07.7** | **+0.3** | |
| | 103nm,0.1s | | | | | | | | | |
| **FUSIO** | **Fusio** | **0.56** | **57** | | Pg | | **Pg** | **11 39 07.6** | **+0.2** | |
| FUSIO | | | | | Sg | | **Sg** | **11 39 15.2** | **+0.4** | |
| **FUSIO** | **Fusio** | **0.56** | **57** | | Pg | | **Pg** | **11 39 07.6** | **+0.2** | |
| FUSIO | | | | | Sg | | **Sg** | **11 39 15.2** | **+0.4** | |
| **HASLI** | **Hasliberg/Brie** | **0.61** | **11** | *e* | Pg | | **Pg** | **11 39 08.6** | **+0.2** | |
| | 112nm,0.2s | | | | | | | | | |
| **HASLI** | **Hasliberg/Brie** | **0.61** | **11** | *e* | Pg | | **Pg** | **11 39 08.6** | **+0.2** | |
| | 112nm,0.2s | | | | | | | | | |
| **RITOM** | **Lago Ritom (SB** | **0.61** | **52** | *e* | Pg | | **Pg** | **11 39 08.7** | **+0.2** | |
| | 70nm,0.1s | | | | | | | | | |
| **RITOM** | **Lago Ritom (SB** | **0.61** | **52** | *e* | Pg | | **Pg** | **11 39 08.7** | **+0.2** | |
| | 70nm,0.1s | | | | | | | | | |
| **VARE** | **Varese** | **0.62** | **117** | | Pg | | **Pg** | **11 39 08.9** | **+0.3** | |
| VARE | | | | | Sg | | **Sg** | **11 39 17.0** | **+0.3** | |
| | 22nm,0.2s | | | | | | | | | |
| **VARE** | **Varese** | **0.62** | **117** | | Pg | | **Pg** | **11 39 08.9** | **+0.3** | |
| VARE | | | | | Sg | | **Sg** | **11 39 17.0** | **+0.3** | |
| | 22nm,0.2s | | | | | | | | | |
| **CIRO** | **Champorcher** | **0.62** | **208** | | P | | **Pg** | **11 39 08.8** | **+0.1** | |
| CIRO | | | | | S | | **Sg** | **11 39 16.8** | **-0.1** | |
| **TRAV** | **Traversella** | **0.66** | **194** | | Pg | | **Pg** | **11 39 09.6** | **+0.2** | |
| TRAV | | | | | Sg | | **Sg** | **11 39 17.9** | **-0.2** | |
| | 35nm,0.1s | | | | | | | | | |
| **TRAV** | **Traversella** | **0.66** | **194** | | P | | **Pg** | **11 39 09.4** | **0.0** | |
| TRAV | | | | | S | | **Sg** | **11 39 17.6** | **-0.5** | |
| TRAV | | | | | Sg | | **Sg** | **11 39 17.9** | **-0.2** | |
| | 35nm,0.1s | | | | | | | | | |
| **PIORA** | **Tunnel** | **0.67** | **55** | ⇓*i* | Pg | | **Pg** | **11 39 09.6** | **0.0** | |
| | 56nm,0.2s | | | | | | | | | |
| **PIORA** | **Tunnel** | **0.67** | **55** | ⇓*i* | Pg | | **Pg** | **11 39 09.6** | **0.0** | |
| | 56nm,0.2s | | | | | | | | | |
| **MUGIO** | **Muggio** | **0.78** | **107** | *e* | Pg | | **Pg** | **11 39 11.8** | **+0.3** | |
| | 62nm,0.1s | | | | | | | | | |
| **MUGIO** | **Muggio** | **0.78** | **107** | | Pg | | **Pg** | **11 39 11.8** | **+0.3** | |
| MUGIO | | | | | Sg | | **Sg** | **11 39 21.7** | **+0.1** | |
| **MUGIO** | **Muggio** | **0.78** | **107** | *e* | Pg | | **Pg** | **11 39 11.8** | **+0.3** | |
| | 62nm,0.1s | | | | | | | | | |
| MUGIO | | | | | Sg | | **Sg** | **11 39 21.7** | **+0.1** | |
| **BNALP** | **Bannalp** | **0.78** | **23** | *e* | Pg | | **Pg** | **11 39 11.6** | **+0.1** | |
| | 31nm,0.3s | | | | | | | | | |
| **BNALP** | **Bannalp** | **0.78** | **23** | *e* | Pg | | **Pg** | **11 39 11.6** | **+0.1** | |
| | 31nm,0.3s | | | | | | | | | |
| **CUNA** | **Curaglia** | **0.79** | **49** | ⇑*i* | Pg | | **Pg** | **11 39 10.3** | **-1.5** | |
| | 105nm,0.2s | | | | | | | | | |
| **CUNA** | **Curaglia** | **0.79** | **49** | ⇑*i* | Pg | | **Pg** | **11 39 10.3** | **-1.5** | |
| | 105nm,0.2s | | | | | | | | | |
| **LSD** | **Lago del Serru** | **0.92** | **221** | | P | | **Pg** | **11 39 13.8** | **-0.4** | |
| LSD | | | | | S | | **Sg** | **11 39 25.1** | **-1.0** | |
| **TUE** | **Stuetta** | **1.00** | **71** | | Pg | | **Pg** | **11 39 15.7** | **0.0** | |
| TUE | | | | | Sg | | **Sg** | **11 39 28.3** | **-0.4** | |
| **TUE** | **Stuetta** | **1.00** | **71** | | Pg | | **Pg** | **11 39 15.7** | **0.0** | |
| TUE | | | | | Sg | | **Sg** | **11 39 28.3** | **-0.4** | |

*NAO **19** 11:39:24.8±1.1,67.°62N×34.°11E,ML3.1*
*HEL **19** 11:39:24.2±0.5,67.°78N×34.°21E,h0km,ML2.7,Explosion*
*KOLA **19** 11:39:25.3,67.°69N×34.°08E,h0km*
*CSEM **19** 11:39:25.6±0.7,67.°70N×33.°76E,h1km,ML3.1,Error ellipse: s-maj=13.4km s-min=8.6km az=79.0,Mining explosion.*
*IDC **19** 11:39:26.2±1.8,67.°70N×33.°81E,h0km,mb1 3.8/5, mb1mx3.4/40,mbtmp3.9/5,ML3.2/5,Error ellipse: s-maj=20.1km s-min=8.6km az=82.0*

**ISC 19 11:39:20.7±1.5,67.°61N±0.°04×34.°56E±0.°08,h0km,n46, σ1§62/74,Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APA** | **Apatity** | **0.44** | **266** | P | **Pg** | **11 39 30.3** | **+1.1** |
| APA | | | | S | **Sg** | **11 39 34.0** | **-1.0** |
| **APZ9** | **Apatity** | **0.44** | **266** | Pg | **Pg** | **11 39 30.2** | **+1.0** |
| APZ9 | | | | Lg | Lg | 11 39 34.6 | |
| APZ9 | | | | Rg | Rg | 11 39 35.8 | |
| **APZ9** | **Apatity** | **0.44** | **266** | Pg | **Pg** | **11 39 30.2** | **+1.0** |
| APZ9 | | | | Lg | Lg | 11 39 34.6 | |
| **APA0** | **Apatity Array** | **0.60** | **271** | Pg | **Pg** | **11 39 32.8** | **+0.6** |
| | baz=87,slow=16 | | | | | | |
| APA0 | | | | Lg | Lg | 11 39 38.2 | |
| | baz=73,slow=28 | | | | | | |
| APA0 | | | | Rg | Rg | 11 39 41.0 | |
| | baz=90,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **0.60** | **271** | Pg | **Pg** | **11 39 30.2** | **-2.0** |
| APA0 | | | | Pg | **Pg** | **11 39 32.8** | **+0.6** |
| | baz=87,slow=16 | | | | | | |
| APA0 | | | | Lg | Lg | 11 39 34.6 | |
| APA0 | | | | Rg | Rg | 11 39 35.8 | |
| APA0 | | | | Lg | Lg | 11 39 38.2 | |
| | baz=73,slow=28 | | | | | | |
| APA0 | | | | Rg | Rg | 11 39 41.0 | |
| | baz=90,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **0.60** | **271** | P | **Pg** | **11 39 32.8** | **+0.6** |
| APA0 | | | | S | **Sg** | **11 39 38.3** | **-1.7** |
| **APA0** | **Apatity Array** | **0.60** | **271** | Pg | **Pg** | **11 39 32.8** | **+0.6** |
| | SNR=465 | | | | | | |
| APA0 | | | | Lg | Lg | 11 39 34.6 | |
| **VRF** | **Varrio** | **1.90** | **277** | PG | **Pn** | **11 39 55.3** | **+1.0** |
| VRF | | | | MSG | | 11 40 16.3 | |
| | comp=Z,119nm,0.2s | | | | | | |
| VRF | | | | SG | **Sn** | **11 40 18.0** | **-0.9** |
| **VRF** | **Varrio** | **1.90** | **277** | Pg | **Pn** | **11 39 55.3** | **+1.0** |
| VRF | | | | Sg | **Sn** | **11 40 18.0** | **-0.9** |
| **KU6** | **Riekki** | **2.44** | **232** | PN | **Pb** | **11 40 04.6** | **-0.8** |
| | baz=46 | | | | | | |
| KU6 | | | | MSG | | 11 40 36.5 | |
| | comp=Z,24nm,0.2s | | | | | | |
| KU6 | | | | SB | **Sg** | **11 40 37.5** | **-1.4** |
| **KU6** | **Riekki** | **2.44** | **232** | Pn | **Pb** | **11 40 04.5** | **-0.8** |
| KU6 | | | | Sb | **Sg** | **11 40 37.5** | **-1.4** |
| **MSF** | **Maaselka** | **2.77** | **235** | PN | **Pb** | **11 40 10.2** | **-1.0** |
| | baz=41 | | | | | | |
| MSF | | | | SB | **Sb** | **11 40 46.6** | **+1.1** |
| **MSF** | **Maaselka** | **2.77** | **235** | Pn | **Pb** | **11 40 10.1** | **-1.0** |
| MSF | | | | Sb | **Sb** | **11 40 46.6** | **+1.1** |
| **SGF** | **Sodankyl** | **3.09** | **271** | PN | **Pn** | **11 40 12.5** | **+1.8** |
| SGF | | | | SG | **Sb** | **11 40 54.2** | **-0.5** |
| **SGF** | **Sodankyl** | **3.09** | **271** | Pn | **Pn** | **11 40 12.5** | **+1.8** |
| SGF | | | | Sg | **Sb** | **11 40 54.2** | **-0.5** |
| **RNF** | **Rovaniemi** | **3.49** | **257** | PN | **Pn** | **11 40 17.6** | **+1.5** |
| RNF | | | | SN | **Sn** | **11 40 59.0** | **+1.0** |
| **RNF** | **Rovaniemi** | **3.49** | **257** | Pn | **Pn** | **11 40 17.6** | **+1.5** |
| **ARA0** | **ARCESS Array S** | **3.85** | **304** | Pn | **Pn** | **11 40 22.5** | **+1.4** |
| | baz=120,slow=14 | | | | | | |
| ARA0 | | | | Pg | **Pb** | **11 40 30.5** | **+1.1** |
| | baz=118,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **11 41 04.4** | **-2.5** |
| | baz=116,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 11 41 15.8 | |
| | baz=109,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.85** | **304** | Pn | **Pn** | **11 40 22.5** | **+1.4** |
| | baz=120,slow=14 | | | | | | |
| ARA0 | | | | Pg | **Pb** | **11 40 30.5** | **+1.1** |
| | baz=118,slow=16 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **11 41 04.4** | **-2.5** |
| | baz=116,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 11 41 15.8 | |
| | baz=109,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.85** | **304** | Pn | **Pn** | **11 40 22.5** | **+1.4** |
| | SNR=648 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **11 41 04.4** | **-2.5** |
| | SNR=7.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **3.85** | **304** | Pn | **Pn** | **11 40 22.5** | **+1.4** |
| | comp=Z,3.1nm,0.3s,baz=120,slow=14,SNR=463 | | | | | | |
| ARCES | | | | Pg | **Pb** | **11 40 30.2** | **+0.8** |
| | comp=Z,4.5nm,0.3s,baz=120,slow=18,SNR=27 | | | | | | |
| ARCES | | | | Sn | **Sn** | **11 41 04.7** | **-2.3** |
| | comp=Z,4.2nm,0.3s,baz=120,slow=27,SNR=9.6 | | | | | | |
| ARCES | | | | Lg | Lg | 11 41 15.9 | |
| | comp=Z,19nm,0.3s,baz=116,slow=32,SNR=15 | | | | | | |
| **ARE0** | **ARCESS Array S** | **3.85** | **304** | *e*P | **Pn** | **11 40 22.3** | **+1.2** |
| ARE0 | | | | *e*S | **Sn** | **11 41 04.8** | **-2.1** |
| **ARE0** | **ARCESS Array S** | **3.85** | **304** | *e*P | **Pn** | **11 40 22.3** | **+1.2** |
| | SNR=50 | | | | | | |
| ARE0 | | | | *e*S | **Sn** | **11 41 04.8** | **-2.1** |
| **HEF** | **Hetta** | **4.18** | **286** | PN | **Pn** | **11 40 26.3** | **+0.6** |
| HEF | | | | SG | **Sb** | **11 41 28.1** | **+2.1** |
| **HEF** | **Hetta** | **4.18** | **286** | Pn | **Pn** | **11 40 26.2** | **+0.6** |
| HEF | | | | Sg | **Sb** | **11 41 28.1** | **+2.1** |
| **OUL** | **Oulu** | **4.31** | **238** | PN | **Pn** | **11 40 30.5** | **+3.1** |
| **OUL** | **Oulu** | **4.31** | **238** | Pn | **Pn** | **11 40 30.5** | **+3.1** |
| **KTK1** | **Kautokeino** | **4.43** | **294** | *e*P | **Pn** | **11 40 30.3** | **+1.2** |
| | SNR=49 | | | | | | |
| **LANU** | **Lannavaara** | **4.78** | **281** | PN | **Pn** | **11 40 33.8** | **-0.2** |
| LANU | | | | SG | **Sb** | **11 41 47.4** | **+3.9** |
| **LANU** | **Lannavaara** | **4.78** | **281** | Pn | **Pn** | **11 40 33.8** | **-0.2** |
| LANU | | | | Sg | **Sb** | **11 41 47.3** | **+3.9** |
| **HAMF** | **Hammerfest** | **4.94** | **313** | *e*P | **Pn** | **11 40 37.0** | **+0.9** |
| | SNR=49 | | | | | | |
| **FIA0** | **FINESS Array S** | **7.18** | **215** | Pn | **Pn** | **11 41 09.2** | **+2.4** |
| | baz=30,slow=14 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **11 42 27.1** | **-1.9** |
| | baz=28,slow=22 | | | | | | |
| **FIA0** | **FINESS Array S** | **7.18** | **215** | Pn | **Pn** | **11 41 09.2** | **+2.4** |
| | baz=30,slow=14 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **11 42 27.1** | **-1.9** |
| | baz=28,slow=22 | | | | | | |
| **FIA0** | **FINESS Array S** | **7.18** | **215** | Pn | **Pn** | **11 41 09.2** | **+2.4** |
| | SNR=1.5 | | | | | | |
| **FINES** | **FINESS Array B** | **7.18** | **215** | Pn | **Pn** | **11 41 08.8** | **+2.1** |
| | comp=Z,0.4nm,0.3s,baz=30,slow=11,SNR=16 | | | | | | |
| FINES | | | | Sn | **Sn** | **11 42 29.0** | **+0.1** |
| | comp=Z,0.4nm,0.3s,baz=39,slow=22,SNR=3.4 | | | | | | |
| FINES | | | | Lg | Lg | 11 43 05.8 | |
| | comp=Z,1.0nm,0.3s,baz=40,slow=28,SNR=4.3 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **11.79** | **342** | Pn | **Pn** | **11 42 09.0** | **-0.9** |
| | baz=145,slow=14 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **11.79** | **342** | Pn | **Pn** | **11 42 09.0** | **-0.9** |
| | baz=145,slow=14 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **11.79** | **342** | Pn | **Pn** | **11 42 08.6** | **-1.3** |
| | baz=92,slow=15,SNR=3.3 | | | | | | |
| **HFS** | **Hagfors** | **11.80** | **241** | Pn | **Pn** | **11 42 09.7** | **-0.4** |
| | baz=44,slow=9.3 | | | | | | |
| **HFS** | **Hagfors** | **11.80** | **241** | Pn | **Pn** | **11 42 09.7** | **-0.4** |
| | baz=44,slow=9.3 | | | | | | |
| **HFS** | **Hagfors** | **11.80** | **241** | Pn | **Pn** | **11 42 07.7** | **-2.4** |
| | comp=Z,0.2nm,0.3s,baz=34,slow=10,SNR=3.1 | | | | | | |
| **HFS** | **Hagfors** | **11.80** | **241** | Pn | **Pn** | **11 42 09.6** | **-0.4** |
| | SNR=4.2 | | | | | | |
| **NB2** | **NORSAR Subarra** | **12.01** | **248** | Pn | **Pn** | **11 42 12.2** | **-0.7** |
| **NB2** | **NORSAR Subarra** | **12.01** | **248** | Pn | **Pn** | **11 42 12.2** | **-0.7** |
| **NB2** | **NORSAR Subarra** | **12.01** | **248** | Pn | **Pn** | **11 42 12.2** | **-0.7** |
| **NOA** | **NORSAR Array B** | **12.01** | **248** | Pn | **Pn** | **11 42 12.2** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=43,slow=11,SNR=2.8 | | | | | | |

*ISK **19** 11:47:17.1,40.°15N×38.°04E,h5km,MD2.8*
*DDA **19** 11:47:17.7,40.°18N×38.°01E,h7km,Md2.8*
*ISCJB **19** 11:47:18.1±0.6,40.°16N±0.°04×38.°05E±0.°05,h3km±7km, Error ellipse: s-maj=7.8km s-min=4.3km az=41.4*
*CSEM **19** 11:47:18.4±0.2,40.°13N×38.°09E,h2km,MD2.8,Error ellipse: s-maj=6.2km s-min=4.5km az=107.0*

**ISC 19 11:47:18.1±1.0,40.°15N±0.°03×38.°04E±0.°03,h13km±8km, n26,σ0§55/35,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SUSE** | **Susehri** | **0.14** | **65** | *i* P | **Pg** | **11 47 22.1** | **+0.2** |
| **SUSE** | **Susehri** | **0.14** | **65** | P | **Pg** | **11 47 22.1** | **+0.2** |
| **CUZAR** | **Zara_SIVAS** | **0.33** | **218** | P | **Pg** | **11 47 24.8** | **-0.1** |
| CUZAR | | | | S | **Sg** | **11 47 30.2** | **+0.7** |
| **GRSN** | **GIRESUNGRSN** | **0.80** | **13** | *i* P | **Pb** | **11 47 33.9** | **+0.1** |
| GRSN | | | | *i* S | **Sg** | **11 47 42.8** | **-1.2** |
| **GRSN** | **GIRESUNGRSN** | **0.80** | **13** | P | **Pb** | **11 47 33.9** | **+0.1** |
| GRSN | | | | S | **Sg** | **11 47 42.8** | **-1.2** |
| **ILIC** | **ilic-Erzincan** | **0.81** | **149** | *e*PG | **Pg** | **11 47 33.6** | **-0.2** |
| **ILIC** | **ilic-Erzincan** | **0.81** | **149** | *e*Pg | **Pg** | **11 47 33.6** | **-0.2** |
| **SVSK** | **Karacayir** | **0.83** | **254** | *e*PG | **Pg** | **11 47 34.2** | **0.0** |
| **SVSK** | **Karacayir** | **0.83** | **254** | *e*Pg | **Pg** | **11 47 34.2** | **0.0** |
| **ESPY** | **Espiye-Giresun** | **0.93** | **34** | *e*PG | **Pb** | **11 47 36.1** | **0.0** |
| ESPY | | | | *e*SG | **Sn** | **11 47 50.1** | **0.0** |
| **ESPY** | **Espiye-Giresun** | **0.93** | **34** | *e*Pg | **Pb** | **11 47 36.1** | **0.0** |
| ESPY | | | | *e*Sg | **Sn** | **11 47 50.1** | **0.0** |
| **KELT** | **Kelkit** | **0.94** | **90** | *i* P | **Pb** | **11 47 36.0** | **-0.3** |
| **KELT** | **Kelkit** | **0.94** | **90** | P | **Pb** | **11 47 36.0** | **-0.3** |
| **CUKAN** | **kangal_SIVAS** | **0.94** | **208** | P | **Pb** | **11 47 35.8** | **-0.5** |
| CUKAN | | | | S | **Sn** | **11 47 50.2** | **-0.3** |
| **KEMA** | **Kemaliye** | **0.95** | **158** | *i* P | **Pb** | **11 47 35.6** | **-0.8** |
| **KEMA** | **Kemaliye** | **0.95** | **158** | P | **Pb** | **11 47 35.6** | **-0.8** |
| **GUMT** | **Gumushane** | **1.15** | **74** | *e*PN | **Pb** | **11 47 40.0** | **+0.1** |
| **GUMT** | **Gumushane** | **1.15** | **74** | *e*Pn | **Pb** | **11 47 40.0** | **+0.1** |
| **ERZN** | **Erzincan** | **1.42** | **113** | *e*PN | **Pg** | **11 47 45.5** | **-0.2** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.56** | **243** | P | **Pb** | **11 47 46.8** | **-0.1** |
| CUSAR | | | | S | **Sb** | **11 48 07.8** | **+1.2** |
| **PTK** | **Pertek** | **1.64** | **140** | *e*PN | **Pb** | **11 47 48.3** | **0.0** |
| **PTK** | **Pertek** | **1.64** | **140** | *e*Pn | **Pb** | **11 47 48.3** | **0.0** |
| **AKCD** | **Akcadag** | **1.85** | **183** | *i* P | **Pb** | **11 47 51.6** | **-0.3** |
| AKCD | | | | *i* S | **Sb** | **11 48 15.9** | **+0.9** |
| **AKCD** | **Akcadag** | **1.85** | **183** | P | **Pb** | **11 47 51.6** | **-0.3** |
| AKCD | | | | S | **Sb** | **11 48 15.9** | **+0.9** |
| **YOZ** | **Yozgat** | **2.15** | **257** | *e*PN | **Pb** | **11 47 56.5** | **-0.5** |
| **YOZ** | **Yozgat** | **2.15** | **257** | *e*Pn | **Pb** | **11 47 56.5** | **-0.5** |

*IDC **19** 11:53:23.9±4.4,2.°56N×96.°34E,h0km,mb3.7/4,mb1 3.8/4, mb1mx3.4/33,mbtmp3.7/4,MS4.1/1,Ms1 4.1/1, ms1mx3.0/42,Error ellipse: s-maj=171.3km s-min=28.1km az=58.0*
*DJA **19** 11:53:27.8±1.4,2.°N±5.°×96.°6E±1.°0,h19km±4km,M3.2/7, MLv3.2/7*

**ISC 19 11:53:27.6±1.1,2.°51N±0.°06×96.°3E±0.°1,h26km±7km,n15, σ0§90/12,mb3.8/4,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SNSI** | **Sinabang, Aceh** | **0.11** | **159** | P | **Pb** | **11 53 32.2** | **-0.3** |
| SNSI | | | | S | **Sb** | **11 53 35.7** | **0.0** |
| **MLSI** | **Meulaboh, Aceh** | **1.75** | **4** | P | **Pb** | **11 53 58.6** | **-0.5** |
| MLSI | | | | S | **Sb** | **11 54 22.2** | **+1.5** |
| **GSI** | **Gunungsitoli** | **1.76** | **133** | P | **Pn** | **11 53 56.3** | **-0.2** |
| GSI | | | | S | **Sn** | **11 54 18.9** | **+0.9** |
| **KCSI** | **Kotacane, Aceh** | **1.79** | **56** | P | **Pb** | **11 53 58.7** | **-1.1** |
| **MNSI** | **Mandailing Nat** | **3.70** | **117** | P | **Pn** | **11 54 24.3** | **+1.1** |
| **H08S2** | **Diego Garcia H** | **25.80** | **247** | T | T | 12 25 21.1 | |
| | baz=68,slow=76,SNR=120 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.80** | **247** | T | T | 12 25 22.1 | |
| | baz=68,slow=76,SNR=112 | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.81** | **247** | T | T | 12 25 22.6 | |
| | baz=68,slow=76,SNR=95 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.80** | **157** | T | T | 12 44 18.0 | |
| | baz=333,slow=76,SNR=95 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.81** | **157** | T | T | 12 44 18.7 | |
| | baz=333,slow=76,SNR=116 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.81** | **157** | T | T | 12 44 19.2 | |
| | baz=333,slow=76,SNR=94 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.50** | **123** | P | **P** | **12 01 29.2** | **-0.2** |
| | 0.3nm,0.5s,baz=302,slow=8.9,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.76** | **347** | P | **P** | **12 01 47.0** | **0.0** |
| | 0.6nm,0.4s,baz=156,slow=9.3,SNR=5.6 | | | | | | |
| **SONM** | **Songino Array** | **45.99** | **9** | P | **P** | **12 01 48.8** | **0.0** |
| | 0.7nm,0.7s,baz=179,slow=8.5,SNR=4.1 | | | | | | |
| SONM | | | | LR | LR | 12 24 05.1 | |
| | comp=Z,205nm,20.2s,baz=75,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.13** | **351** | P | **P** | **12 02 34.9** | **-0.8** |
| | 0.8nm,0.4s,baz=168,slow=7.4,SNR=4.4 | | | | | | |

*ISK **19** 12:17:11.7,38.°48N×37.°58E,h5km,MD2.6*
*CSEM **19** 12:17:13.7±0.6,38.°51N×37.°57E,h10km,MD2.6,Error ellipse: s-maj=18.6km s-min=14.1km az=7.0*
*DDA **19** 12:17:14.1,38.°65N×37.°44E,h7km,Md2.8*

**ISC 19 12:17:13.8±0.9,38.°59N±0.°03×37.°51E±0.°03,h6km±5km, n20,σ1§26/31,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DARE** | **Darende-Malaty** | **0.03** | **228** | *e*PG | **Pg** | **12 17 14.6** | **-0.6** |
| DARE | | | | *e*SG | **Sg** | **12 17 16.6** | **+0.5** |
| **DARE** | **Darende-Malaty** | **0.03** | **228** | *e*Pg | **Pg** | **12 17 14.6** | **-0.6** |
| DARE | | | | *e*Sg | **Sg** | **12 17 16.6** | **+0.5** |
| **CUGUR** | **Gurin_S¨VAS** | **0.23** | **305** | P | **Pg** | **12 17 16.9** | **-1.5** |
| **AKCD** | **Akcadag** | **0.44** | **133** | *i* P | **Pg** | **12 17 22.4** | **+0.1** |
| AKCD | | | | *i* S | **Sb** | **12 17 31.9** | **+1.0** |
| **AKCD** | **Akcadag** | **0.44** | **133** | P | **Pg** | **12 17 22.4** | **+0.1** |
| AKCD | | | | S | **Sb** | **12 17 31.9** | **+1.0** |
| **CUKAN** | **kangal_SIVAS** | **0.72** | **357** | P | **Pg** | **12 17 27.8** | **+0.1** |
| CUKAN | | | | S | **Sg** | **12 17 37.2** | **0.0** |
| **SARI** | **SarD1z-Kayseri** | **0.88** | **258** | *e*PG | **Pg** | **12 17 30.1** | **-0.6** |
| SARI | | | | *e*SG | **Sb** | **12 17 44.7** | **+1.1** |
| **KEMA** | **Kemaliye** | **1.02** | **48** | *i* P | **Pg** | **12 17 32.6** | **-0.8** |
| KEMA | | | | *i* S | **Sn** | **12 17 49.1** | **-0.4** |
| **KEMA** | **Kemaliye** | **1.02** | **48** | P | **Pg** | **12 17 32.6** | **-0.8** |
| KEMA | | | | S | **Sn** | **12 17 49.1** | **-0.4** |
| **KMRS** | **Kahramanmaras** | **1.19** | **204** | *e*PN | **Pg** | **12 17 34.0** | **-2.6** |
| **KMRS** | **Kahramanmaras** | **1.19** | **204** | *e*Pn | **Pg** | **12 17 34.0** | **-2.6** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.29** | **310** | P | **Pg** | **12 17 36.8** | **-1.8** |
| CUSAR | | | | S | **Sb** | **12 17 56.9** | **+1.5** |
| **AYKD** | **Aykdinkavak** | **1.30** | **206** | P | **Pn** | **12 17 39.2** | **+0.6** |
| AYKD | | | | S | **Sn** | **12 17 59.2** | **+2.9** |
| **CUZAR** | **Zara_SIVAS** | **1.31** | **9** | P | **Pn** | **12 17 37.7** | **-1.1** |
| CUZAR | | | | S | **Sg** | **12 17 55.8** | **-0.1** |
| **SVSK** | **Karacayir** | **1.38** | **343** | *e*PN | **Pg** | **12 17 41.1** | **+0.8** |
| **SVSK** | **Karacayir** | **1.38** | **343** | *e*Pn | **Pg** | **12 17 41.1** | **+0.8** |
| **SVRC** | **Sivrice-ELAZID** | **1.42** | **98** | *e*PN | **Pn** | **12 17 39.6** | **-0.8** |
| **SVRC** | **Sivrice-ELAZID** | **1.42** | **98** | *e*Pn | **Pn** | **12 17 39.6** | **-0.8** |
| **PTK** | **Pertek** | **1.50** | **78** | *e*PN | **Pn** | **12 17 40.3** | **-1.1** |
| **PTK** | **Pertek** | **1.50** | **78** | *e*Pn | **Pn** | **12 17 40.3** | **-1.1** |

*IDC **19** 12:21:22.8±2.4,36.°32N×71.°05E,h233km±22km,mb3.4/13, mb1 3.5/17,mb1mx3.3/46,mbtmp4.0/17,Error ellipse: s-maj=16.9km s-min=12.4km az=31.0*
*ISCJB **19** 12:21:23.2±0.3,36.°49N±0.°03×71.°22E±0.°06,h250km, mb3.6/12,Error ellipse: s-maj=6.4km s-min=3.5km az=163.0*
*NNC **19** 12:21:27.9±1.0,36.°85N×71.°10E,h226km±7km,mb3.2, mpv4.6,Error ellipse: s-maj=11.2km s-min=5.3km az=158.0*

**ISC 19 12:21:24.0±0.5,36.°43N±0.°06×71.°10E±0.°07,h250km,n57, σ1§23/61,mb3.6/12,15C-7D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CEP** | **Cherat** | **2.68** | **165** | ⇑P | **Pn** | **12 22 13.1** | **-0.3** |
| CEP | | | | S | **S** | **12 22 50.0** | **-2.3** |
| **DZET** | **Dzherino** | **2.98** | **323** | ⇑P | **Pn** | **12 22 15.3** | **-1.0** |
| | 209nm,0.3s | | | | | | |
| DZET | | | | ⇑S | **S** | **12 22 52.7** | **-5.2** |
| | 490nm,0.4s | | | | | | |
| **CHCP** | **Chirah Chowk** | **3.28** | **147** | ⇑P | **Pn** | **12 22 19.5** | **-0.2** |
| **THW** | **Thamme Wali** | **3.66** | **171** | P | **Pn** | **12 22 23.9** | **-0.1** |
| **SFK** | **Sufi-Kurgan** | **4.05** | **27** | ⇓P | **Pn** | **12 22 27.3** | **-1.3** |
| | 23nm,0.3s | | | | | | |
| SFK | | | | ⇑S | S | 12 23 14.6 | -5.3 |
| | 195nm,0.4s | | | | | | |
| **SARP** | **Sargodha** | **4.68** | **163** | ⇓P | **Pn** | **12 22 35.2** | **-0.8** |
| **AML** | **Almayashu** | **6.04** | **19** | P | **Pn** | **12 22 51.9** | **-1.1** |
| | SNR=36 | | | | | | |
| **MNAS** | **Manas** | **6.15** | **10** | ⇑P | **Pn** | **12 22 52.7** | **-1.4** |
| | 84nm,0.8s | | | | | | |
| MNAS | | | | ⇑S | S | 12 24 00.6 | -5.5 |
| | 110nm,0.9s | | | | | | |
| **UCH** | **Uchtor** | **6.37** | **24** | P | **Pn** | **12 22 56.0** | **-1.1** |
| | SNR=158 | | | | | | |
| **KZA** | **Kyzart** | **6.50** | **28** | P | **Pn** | **12 22 57.2** | **-1.5** |
| | SNR=20 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.56** | **18** | P | **Pn** | **12 22 58.4** | **-0.8** |
| | SNR=28 | | | | | | |
| **KK31** | **Karatay Array** | **6.69** | **356** | ⇑P | **Pn** | **12 22 59.3** | **-1.3** |
| | 24nm,0.5s,baz=178,slow=12,SNR=201 | | | | | | |
| KK31 | | | | ⇑S | S | 12 24 12.3 | -5.8 |
| | 64nm,0.8s,baz=190,slow=20,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **6.73** | **22** | ⇓P | **Pn** | **12 23 00.5** | **-0.9** |
| | 16nm,0.4s | | | | | | |
| AAK | | | | ⇑S | S | 12 24 12.5 | -7.0 |
| | 65nm,1.4s | | | | | | |
| **AAK** | **Ala-Archa** | **6.73** | **22** | P | **Pn** | **12 23 00.6** | **-0.7** |
| | 11nm,0.3s,baz=189,slow=6.0,SNR=66 | | | | | | |
| AAK | | | | S | S | 12 24 14.4 | -5.0 |
| | 4.7nm,0.3s,baz=325,slow=16,SNR=7.7 | | | | | | |
| **AAK** | **Ala-Archa** | **6.73** | **22** | P | **Pn** | **12 23 00.6** | **-0.9** |
| | SNR=40 | | | | | | |
| **KBK** | **Karagaybulak** | **6.90** | **24** | P | **Pn** | **12 23 03.0** | **-0.4** |
| | SNR=15 | | | | | | |
| **ULHL** | **Ulahol** | **7.05** | **33** | P | **Pn** | **12 23 04.3** | **-1.1** |
| | SNR=6.6 | | | | | | |
| **CHMS** | **Chumysh** | **7.14** | **22** | P | **Pn** | **12 23 05.9** | **-0.5** |
| | SNR=10 | | | | | | |
| **USP** | **Ospenovka** | **7.32** | **20** | P | **Pn** | **12 23 07.8** | **-0.8** |
| | SNR=8.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.36** | **27** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **84.15** | **125** | P | | **P** | **12 33 27.6** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=309,slow=4.4,SNR=6.6 | | | | | | | |

*ISCJB **19** 12:25:41.8±0.8, 32°.44N±0°.05×115°.18W±0°.06, h13km±5km, Error ellipse: s-maj=9.2km s-min=7.0km az=31.3*
*ECX **19** 12:25:42.8±0.6, 32°.42N×115°.18W, h6km, MD1.9, ML2.1*
*MEX **19** 12:25:43.1±0.5, 32°.46N×115°.08W, h5km, MD3.7*

**ISC 19 12:25:41.6**±1.1, **32°.39N**±0°.05×**115°.19W**±0°.04, **h14**km±5km, **n16**, σ0**841**/17, **6C-3D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MBIG** | **Mexicali** | **0.02** | **341** | *eP* | **Pg** | **12 25 43.5** | **-0.5** |
| MBIG | | | | *eS* | **Sg** | **12 25 45.8** | **+0.1** |
| **MBIG** | **Mexicali** | **0.02** | **341** | ⇓*eP* | **Pg** | **12 25 43.9** | **0.0** |
| **CPBX** | **Cerro Prieto** | **0.10** | **287** | *eP* | Pb | 12 25 45.0 | -0.4 |
| CPBX | | | | ⇓*eP* | Pb | 12 25 45.2 | -0.2 |
| CPBX | | | | *eS* | **Sg** | **12 25 47.1** | **+0.3** |
| CPBX | | | | ⇓*e* | | 12 25 49.8 | |
| CPBX | | | | IAML | | 12 25 49.8 | |
| | comp=E,2μm,0.4s | | | | | | |
| **EMSC** | **East Mesa** | **0.39** | **26**⇑ | *iP* | **Pg** | **12 25 49.5** | **0.0** |
| **DREC** | **Desert Rsrch C** | **0.47** | **333** | *eP* | **Pb** | **12 25 51.5** | **-0.2** |
| **COA** | **Coachella** | **0.48** | **7**⇑ | *iP* | **Pg** | **12 25 51.0** | **0.0** |
| **SGL** | **Mount Signal** | **0.52** | **300**⇑ | *iP* | **Pg** | **12 25 51.6** | **-0.2** |
| **YMD** | **Yuma Desert** | **0.57** | **73**⇑ | *iP* | **Pg** | **12 25 52.1** | **-0.7** |
| **WESC** | **Westside Schoo** | **0.59** | **309**⇑ | *iP* | **Pg** | **12 25 52.9** | **-0.2** |
| **YUH** | **Yuha Desert** | **0.67** | **293**⇑ | *iP* | **Pg** | **12 25 54.1** | **-0.5** |
| **IBP** | **Imperial Bould** | **0.81** | **290** | *eP* | **Pg** | **12 25 56.6** | **-0.7** |
| **CBX** | **Cerro Bola** | **1.25** | **267** | *eP* | **Pn** | **12 26 05.2** | **+0.4** |
| **CBX** | **Cerro Bola** | **1.25** | **267** | *eP* | **Pn** | **12 26 04.9** | **+0.1** |
| **BAR** | **Barrett** | **1.28** | **283** | *eP* | **Pn** | **12 26 05.3** | **+0.1** |
| **SPX** | **San Pedro Mart** | **1.36** | **190** | *eP* | **Pb** | **12 26 07.3** | **+0.2** |
| **SDRC** | **San Diego Road** | **1.52** | **284** | *eP* | **Pn** | **12 26 08.9** | **+0.5** |

*ISCJB **19** 12:31:59.6±0.3, 5°.88N±0°.02×125°.55E±0°.04, h99km±5km, mb3.7/6, Error ellipse: s-maj=6.4km s-min=3.9km az=0.1*
*MAN **19** 12:32:00.5°.84N×125°.39E, h73km, mb4.9, ML3.9, MS3.9*
*IDC **19** 12:32:01.4±1.2, 5°.88N×125°.63E, h100km±11km, mb3.5/6, mb1 3.8/7, mb1mx3.3/57, mbtmp3.9/7, Error ellipse: s-maj=37.1km s-min=13.5km az=71.0*
*DJA **19** 12:32:02.3±0.4, 6°N±3°×12°6E±1°, h88km±11km, M4.7/15, mb4.5/15, mB5.2/8, ML4.8/13, Mw(mB)4.6/8*

**ISC 19 12:32:00.9**±0.8, **5°.88N**±0°.04×**125°.55E**±0°.06, **h95**km±9km, **n29**, σ1**911**/40, **mb3.7**/6, **4C-1D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSPH** | **General Santos** | **0.63** | **289**⇓ | *eP* | Pn | 12 32 14.1 | -3.3 |
| GSPH | | | | *eS* | Sn | 12 32 24.2 | -5.6 |
| **DAV** | **Davao City (W)** | **1.18** | **1** | P | **Pn** | **12 32 23.4** | **+0.3** |
| | 135nm,0.3s,baz=241,slow=8.1,SNR=8.0 | | | | | | |
| DAV | | | | S | **Sn** | **12 32 41.1** | **+1.4** |
| | 287nm,0.3s,baz=329,slow=21,SNR=11 | | | | | | |
| DAV | | | | LR | LR | 12 32 54.1 | |
| | comp=Z,180nm,18.2s,baz=169,slow=44 | | | | | | |
| **DMPH** | **Davao City--Mi** | **1.19** | **358**⇑ | *eP* | **Pn** | **12 32 23.5** | **+0.2** |
| DMPH | | | | *eS* | **Sn** | **12 32 39.3** | **-0.7** |
| **MATI** | **Mati** | **1.27** | **33** | *eP* | **Pn** | **12 32 23.2** | **-0.9** |
| MATI | | | | *eS* | **Sn** | **12 32 39.4** | **-2.2** |
| **CTBH** | **Cotabato--PC H** | **1.86** | **316**⇑ | *eP* | Pn | 12 32 29.5 | -2.0 |
| CTBH | | | | *eS* | Sn | 12 32 51.1 | -3.7 |
| **BUKP** | **Musuan** | **2.04** | **346** | *eP* | **Pn** | **12 32 33.4** | **-0.5** |
| BUKP | | | | *eS* | **Sn** | **12 32 59.9** | **+0.8** |
| **SGSI** | **Sangihe** | **2.18** | **181** | P | **Pn** | **12 32 34.9** | **-0.9** |
| SGSI | | | | S | **Sn** | **12 33 01.3** | **-1.0** |
| **BIPH** | **Bislig** | **2.42** | **19**⇑ | *eP* | **Pn** | **12 32 41.1** | **+2.2** |
| BIPH | | | | *eS* | **Sn** | **12 33 09.5** | **+1.6** |
| **PAGZ** | **Pagadian** | **2.91** | **312** | *eP* | Pn | 12 32 44.0 | -1.3 |
| PAGZ | | | | *eS* | **Sn** | **12 33 19.6** | **0.0** |
| **IPIL** | **Ipil** | **3.52** | **303**⇑ | *iP* | **Pn** | **12 32 52.8** | **-0.8** |
| IPIL | | | | *iS* | **Sn** | **12 33 32.8** | **-1.4** |
| **TNTI** | **Ternate** | **5.39** | **160** | P | **Pn** | **12 33 18.9** | **-0.1** |
| | 75nm,1.0s,1μm0.4nm | | | | | | |
| TNTI | | | | S | **Sn** | **12 34 20.0** | **+0.2** |
| | 75nm,1.0s,1μm0.4nm | | | | | | |
| **KMSI** | **Cibinong** | **5.50** | **197** | P | **Pn** | **12 33 20.3** | **-0.2** |
| | 129nm,0.7s,6μm1.8nm | | | | | | |
| KMSI | | | | S | **Sn** | **12 34 22.8** | **+0.3** |
| | 129nm,0.7s,6μm1.8nm | | | | | | |
| **GTOI** | **Gorontalo** | **5.80** | **206** | P | **Pn** | **12 33 23.4** | **-1.1** |
| | 66nm,0.7s,1μm0.4nm | | | | | | |
| GTOI | | | | S | Sn | 12 34 22.8 | -6.9 |
| | 66nm,0.7s,1μm0.4nm | | | | | | |
| **MRSI** | **Marisa** | **6.47** | **214** | P | **Pn** | **12 33 33.4** | **-0.2** |
| | 69nm,0.6s,5μm1.4nm | | | | | | |
| MRSI | | | | S | Sn | 12 34 39.8 | -6.2 |
| | 69nm,0.6s,5μm1.4nm | | | | | | |
| **LBMI** | **Labuha** | **6.76** | **163** | P | **Pn** | **12 33 38.2** | **+0.5** |
| | 25nm,0.5s,0.2nm | | | | | | |
| **LUWI** | **Luwuk** | **7.42** | **202** | P | **Pn** | **12 33 48.4** | **+1.8** |
| | 81nm,0.7s,0.7nm | | | | | | |
| LUWI | | | | S | **Sn** | **12 35 11.2** | **+2.0** |
| | 81nm,0.7s,0.7nm | | | | | | |
| **APSI** | **Ampana** | **7.79** | **210** | P | **Pn** | **12 33 53.6** | **+1.9** |
| | 51nm,1.0s,0.4nm | | | | | | |
| APSI | | | | S | **Sn** | **12 35 19.5** | **+1.1** |
| | 51nm,1.0s,0.4nm | | | | | | |
| **MPSI** | **Mapaga** | **7.89** | **226** | P | **Pn** | **12 33 53.2** | **+0.2** |
| | 24nm,0.5s,5μm0.4nm | | | | | | |
| MPSI | | | | S | **Sn** | **12 35 22.9** | **+2.2** |
| | 24nm,0.5s,5μm0.4nm | | | | | | |
| **SANI** | **Sanana** | **7.89** | **177** | P | **Pn** | **12 33 52.4** | **-0.6** |
| | 27nm,0.7s,928nm0.2nm | | | | | | |
| **SWI** | **Sorong** | **8.80** | **139** | P | **Pn** | **12 34 05.9** | **+0.5** |
| | 16nm,1.3s | | | | | | |
| **SIJI** | **Sorong** | **8.80** | **139** | P | **Pn** | **12 34 05.0** | **-0.5** |
| | 1.4nm,0.3s,baz=340,slow=17,SNR=6.1 | | | | | | |
| **NLAI** | **Namlea** | **9.19** | **170** | P | **Pn** | **12 34 09.4** | **-1.4** |
| | 27nm,0.6s,1μm | | | | | | |
| NLAI | | | | S | Sn | 12 35 45.7 | -6.8 |
| | 27nm,0.6s,1μm | | | | | | |
| **TTSI** | **Tana Toraja** | **10.56** | **213** | S | **Sn** | **12 36 26.7** | **+1.0** |
| **WRA** | **Warramunga Arr** | **27.08** | **162** | P | **P** | **12 37 34.5** | **-0.4** |
| | 0.5nm,0.3s,baz=342,slow=12,SNR=21 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.80** | **298** | P | **P** | **12 37 51.0** | **+0.7** |
| | 0.5nm,0.4s,baz=126,slow=8.4,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **30.48** | **165** | P | **P** | **12 38 04.7** | **-0.4** |
| | 0.7nm,0.4s,baz=341,slow=7.0,SNR=16 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 41 02.5** | **+0.1** |
| | 0.5nm,0.4s,baz=350,slow=2.6,SNR=5.1 | | | | | | |
| **KSRS** | **Korea Array** | **31.50** | **4** | P | **P** | **12 38 13.7** | **-0.2** |
| | 1.1nm,0.7s,baz=187,slow=9.5,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.13** | **325** | P | **P** | **12 41 23.2** | **-0.3** |
| | 0.4nm,0.3s,baz=117,slow=7.0,SNR=7.1 | | | | | | |
| **ILAR** | **Eielson Array** | **83.68** | **26** | P | **P** | **12 44 18.5** | **-0.4** |
| | 1.0nm,0.6s,baz=264,slow=4.3,SNR=18 | | | | | | |

*MOS **19** 12:33:13.4±0.8, 46°.29N×150°.28E, h180km, mb4.2/1, Error ellipse: s-maj=32.7km s-min=14.0km az=47.9*
*SKHL **19** 12:33:15.7±0.4, 45°.05N×150°.85E, h145km±5km, mb4.8/7, msh5.4/3*
*IDC **19** 12:33:15.5±2.4, 46°.51N×150°.05E, h189km±24km, mb3.3/6, mb1 3.6/10, mb1mx3.2/61, mbtmp3.9/10, Error ellipse: s-maj=31.4km s-min=12.6km az=136.0*
*JMA **19** 12:33:17.3±0.5, 45°.61N×150°.22E, h178km, M3.9*

**ISC 19 12:33:17.6**±1.0, **45°.5N**±0°.1×**150°.2E**±0°.1, **h200**km, **n50**, σ1**954**/54, **mb3.6**/6, **2C-2D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.65** | **261** | *c iPN* | **Pn** | **12 33 53.2** | **+0.6** |
| KUR | | | | *iS* | **Sn** | **12 34 22.2** | **+2.4** |
| KUR | | | | pmax | pmax | | |
| | comp=N,23nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,21nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,18nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,117nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,111nm,0.3s | | | | | | |
| **KUR** | **Kuril'sk** | **1.65** | **261** | *i* P | **Pn** | **12 33 53.5** | **+0.9** |
| KUR | | | | AMB | AMB | 12 33 59.5 | |
| | comp=E,21nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 12 33 59.5 | |
| | comp=E,12nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 12 33 59.5 | |
| | comp=E,60nm,0.2s | | | | | | |
| KUR | | | | *i* S | **Sn** | **12 34 22.2** | **+2.4** |
| KUR | | | | A | A | 12 34 23.6 | |
| | comp=E,175nm,0.3s | | | | | | |
| KUR | | | | A | A | 12 34 23.6 | |
| | comp=E,98nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.90** | **236** | *c iPN* | **Pn** | **12 34 06.4** | **+0.5** |
| SHO | | | | *iS* | **Sn** | **12 34 45.5** | **+1.7** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,18nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,17nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,13nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,96nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,178nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **2.90** | **236** | *i* P | **Pn** | **12 34 06.5** | **+0.5** |
| SHO | | | | AMB | AMB | 12 34 09.1 | |
| | comp=E,149nm,0.4s | | | | | | |
| SHO | | | | *i* S | **Sn** | **12 34 44.3** | **+0.5** |
| SHO | | | | A | A | 12 34 51.5 | |
| | comp=E,240nm,0.5s | | | | | | |
| SHO | | | | A | A | 12 34 51.5 | |
| | comp=E,210nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.41** | **246** | *d iPN* | **Pn** | **12 34 13.2** | **+1.1** |
| YUK | | | | *iS* | **Sn** | **12 34 57.7** | **+3.0** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,29nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,21nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,17nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,51nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,110nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **3.41** | **246** | *i* P | **Pn** | **12 34 13.2** | **+1.1** |
| YUK | | | | AMB | AMB | 12 34 17.6 | |
| | comp=E,21nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 12 34 17.6 | |
| | comp=E,107nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 12 34 17.6 | |
| | comp=E,29nm,0.3s | | | | | | |
| YUK | | | | *i* S | **Sn** | **12 34 57.1** | **+2.4** |
| YUK | | | | A | A | 12 35 00.3 | |
| | comp=E,51nm,0.3s | | | | | | |
| YUK | | | | A | A | 12 35 00.3 | |
| | comp=E,150nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **3.84** | **237** | P | **Pn** | **12 34 17.6** | **+0.3** |
| NEM2 | | | | *eS* | **Sn** | **12 35 04.5** | **+0.4** |
| **JRA** | **Rausu** | **3.93** | **248** | P | **Pn** | **12 34 18.7** | **+0.3** |
| **JNK** | **Nakash** | **4.35** | **246** | P | **Pn** | **12 34 24.8** | **+1.1** |
| **JAK** | **Akkeshi** | **4.67** | **239** | P | **Pn** | **12 34 28.2** | **+0.4** |
| JAK | | | | *eS* | **Sn** | **12 35 23.5** | **+0.5** |
| **JTKR** | **Abashiri--Toko** | **4.72** | **253** | P | **Pn** | **12 34 29.1** | **+0.7** |
| **JAR** | **Ashorobuto** | **5.10** | **246** | P | **Pn** | **12 34 35.0** | **+1.8** |
| **JOB** | **Onbets** | **5.25** | **242** | P | **Pn** | **12 34 36.2** | **+1.0** |
| JOB | | | | *eS* | **Sn** | **12 35 37.2** | **+0.8** |
| **YSS** | **Yuzh-Sakhalins** | **5.34** | **288** | ⇓*eP* | Pn | 12 34 31.0 | -5.2 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,50nm,1.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **5.34** | **288** | *eP* | Pn | 12 34 44.3 | +8.1 |
| YSS | | | | AMB | AMB | 12 35 18.1 | |
| | comp=Z,35nm,1.0s | | | | | | |
| **JKK2** | **Kamakawa 2** | **5.54** | **255** | P | **Pn** | **12 34 39.8** | **+0.9** |
| **JKA** | **Kamikawa-asahi** | **5.57** | **258** | *eP* | **Pn** | **12 34 38.7** | **-0.5** |
| **ASAJ** | **Asahikawa** | **5.57** | **258** | P | **Pn** | **12 34 40.2** | **+1.0** |
| **ASAJ** | **Asahikawa** | **5.57** | **258** | P | **Pn** | **12 34 38.6** | **-0.5** |
| | comp=Z,4.2nm,0.3s,baz=58,slow=13,SNR=42 | | | | | | |
| **ASAJ** | **Asahikawa** | **5.57** | **258** | PN | **Pn** | **12 34 38.7** | **-0.5** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.3s | | | | | | |
| **JCH** | **Churui** | **5.70** | **242** | P | **Pn** | **12 34 41.5** | **+0.6** |
| JCH | | | | *eS* | **Sn** | **12 35 46.0** | **-0.8** |
| **JWK2** | **Keihoku** | **5.83** | **271** | P | **Pn** | **12 34 42.4** | **-0.1** |
| **MYR** | **Moyori** | **5.93** | **239** | *eP* | **Pn** | **12 34 44.5** | **+0.6** |
| MYR | | | | *eS* | **Sn** | **12 35 50.6** | **-1.5** |
| **JEM** | **Erimo** | **6.17** | **238** | *eS* | **Sn** | **12 35 56.0** | **-1.7** |
| **JBT2** | **Biratori 2** | **6.25** | **247** | *eS* | **Sn** | **12 35 58.3** | **-1.3** |
| **JNBK** | **Urakawa-nobuka** | **6.26** | **241** | P | **Pn** | **12 34 48.4** | **+0.2** |
| JNBK | | | | *eS* | **Sn** | **12 35 57.7** | **-2.2** |
| **SKR** | **Severo-Kuril's** | **6.52** | **35** | *eP* | **Pn** | **12 34 51.0** | **-0.3** |
| SKR | | | | AMB | AMB | 12 34 57.8 | |
| | comp=Z,160nm,1.0s | | | | | | |
| **UGL** | **Uglegorsk** | **6.56** | **306** | *eP* | Pn | 12 35 01.3 | +9.4 |
| UGL | | | | AMB | AMB | 12 35 05.0 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **PAU** | **Pauzhetka** | **7.40** | **34** | *eP* | **Pn** | **12 35 03.5** | **+0.7** |
| PAU | | | | AMB | AMB | 12 35 10.7 | |
| | comp=Z,120nm,1.0s | | | | | | |
| **JKB** | **Kayabe** | **7.55** | **244** | P | **Pn** | **12 35 04.1** | **-0.8** |
| JKB | | | | *eS* | **Sn** | **12 36 26.7** | **-3.6** |
| **JYM2** | **Yakumo 2** | **7.86** | **248** | P | **Pn** | **12 35 08.4** | **-0.6** |
| **JSR** | **Shiriuchi** | **8.13** | **244** | P | **Pn** | **12 35 12.3** | **-0.2** |
| **JTM** | **Tenmabayashi** | **8.16** | **238** | *eS* | **Sn** | **12 36 41.5** | **-3.3** |
| **JANG** | **Nango** | **8.17** | **234** | P | **Pn** | **12 35 12.7** | **-0.3** |
| JANG | | | | *eS* | **Sn** | **12 36 41.5** | **-3.5** |
| **JOSM** | **Okushiri--Mats** | **8.47** | **250** | P | **Pn** | **12 35 16.9** | **+0.1** |
| **OFUJ** | **Ofunato** | **9.00** | **227** | *eS* | **Sn** | **12 37 04.8** | **0.0** |
| **PETK** | **Petropavlovsk-** | **9.04** | **30** | P | Pn | 12 35 11.8 | -12 |
| | comp=Z,0.4nm,0.3s,baz=168,slow=15,SNR=4.7 | | | | | | |
| **JIO** | **Ouri** | **9.64** | **226** | *eS* | **Sn** | **12 37 19.0** | **-0.9** |
| **JFK** | **Kawauchi** | **10.72** | **224** | *eS* | **Sn** | **12 37 46.2** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** | **12.97** | **271** | P | **Pn** | **12 36 12.4** | **-2.2** |
| | comp=Z,0.4nm,0.3s,baz=68,slow=11,SNR=5.8 | | | | | | |
| **EKMR** | **Ekimchan** | **13.52** | **310** | *erx* | rx | 12 36 15.9 | |
| **KSRS** | **Korea Array** | **18.48** | **252** | P | **Pn** | **12 37 22.0** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=50,slow=10,SNR=7.7 | | | | | | |
| **ILAR** | **Eielson Array** | **38.77** | **38** | P | P | 12 40 15.7 | -6.6 |
| | comp=Z,1.0nm,0.5s,baz=266,slow=7.7,SNR=22 | | | | | | |
| **ILAR** | **Eielson Array** | **38.77** | **38** | P | P | 12 40 15.7 | -6.6 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.69** | **297** | P | P | 12 41 12.2 | -6.1 |
| | comp=Z,0.3nm,0.5s,baz=72,slow=6.2,SNR=3.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **64.82** | **60** | P | P | 12 43 31.0 | -4.1 |
| | comp=Z,0.6nm,0.5s,baz=293,slow=7.4,SNR=6.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **66.72** | **196** | P | P | 12 43 51.2 | +4.1 |
| | comp=Z,0.7nm,1.0s,baz=13,slow=6.6,SNR=3.9 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 44 17.8** | **+3.3** |
| | comp=Z,0.7nm,1.2s,baz=7.5,slow=4.8,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **70.43** | **196** | P | P | 12 44 15.3 | +5.4 |
| | comp=Z,0.6nm,0.5s,baz=9.1,slow=6.2,SNR=9.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **79.88** | **58** | P | **P** | **12 45 01.1** | **-3.0** |
| | comp=Z,0.8nm,0.6s,baz=298,slow=4.7,SNR=5.8 | | | | | | |
| **SNAA** | **Sanae** | **150.79** | **197** | PKPbc | **PKPbc** | **12 52 45.1** | **+0.3** |
| | comp=Z,0.3nm,0.9s,baz=180,slow=15,SNR=6.0 | | | | | | |

**IDC 19 12:54:08.6**±999.0, **51°.55N**×**54°.45E, h0**km, **Error ellipse: s-maj=470.7km s-min=58.0km az=114.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **2.54** | **115** | *i* | | 13 13 30.0 | |
| | baz=298,slow=320,SNR=22 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **18.47** | **71** | *i* | | 14 41 20.0 | |
| | baz=269,slow=324,SNR=2.3 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **33.25** | **76** | *i* | | 16 13 00.0 | |
| | baz=297,slow=330,SNR=0.4 | | | | | | |

*ISCJB **19** 13:11:22.9±0.8, 32°.22N±0°.03×116°.96W±0°.09, h10km, Error ellipse: s-maj=11.0km s-min=4.1km az=177.0*
*CSEM **19** 13:11:24.6±0.5, 32°.26N×116°.95W, h10km, ML1.9, Error ellipse: s-maj=14.5km s-min=6.7km az=82.0*
*MDD **19** 13:11:25.3±0.4, 32°.36N×117°.06W, h0km, mb3.6/2, Error ellipse: s-maj=5.5km s-min=2.1km az=89.0, PRXIMO*
*INMG **19** 13:11:29.3±1.3, 32°.44N×117°.08W, h0km, MD3.2, ML1.9, Error ellipse: s-maj=9.4km s-min=7.2km az=4.0*

**ISC 19 13:11:23.6**±1.1, **32°.26N**±0°.05×**117°.00W**±0°.06, **h10**km, **n17**, σ0**998**/31, **1D, Madeira Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FUL** | **Funchal** | **0.40** | **13** | *eP* | **Pb** | **13 11 33.3** | **+0.6** |
| FUL | | | | *eS* | **Sg** | **13 11 37.6** | **+1.0** |
| FUL | | | | A | A | 13 11 39.1 | |
| | 291nm,0.1s | | | | | | |
| **FUL** | **Funchal** | **0.40** | **13** | P | **Pb** | **13 11 33.3** | **+0.6** |
| FUL | | | | S | **Sg** | **13 11 37.6** | **+1.0** |
| | 146nm,0.1s | | | | | | |
| **PMAR** | **Madeira** | **0.47** | **9** | *eP* | **Pb** | **13 11 34.8** | **+0.8** |
| PMAR | | | | *eS* | **Sg** | **13 11 38.7** | **-0.2** |
| PMAR | | | | A | A | 13 11 41.6 | |
| | 165nm,0.2s | | | | | | |
| **PMAR** | **Madeira** | **0.47** | **9** | P | **Pb** | **13 11 34.8** | **+0.8** |
| PMAR | | | | S | **Sg** | **13 11 38.7** | **-0.2** |
| | 83nm,0.2s | | | | | | |
| **PMAR** | **Madeira** | **0.47** | **9** | *eP* | **Pb** | **13 11 34.8** | **+0.8** |
| PMAR | | | | S | **Sg** | **13 11 38.7** | **-0.2** |
| | 83nm,0.2s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **0.58** | **343**⇓ | *iP* | **Pb** | **13 11 36.2** | **+0.2** |
| PMOZ | | | | *eS* | **Sg** | **13 11 41.4** | **-1.3** |
| PMOZ | | | | A | A | 13 11 44.5 | |
| | 278nm,0.4s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **0.58** | **343** | P | **Pb** | **13 11 36.2** | **+0.2** |
| | 83nm,0.3s | | | | | | |
| PMOZ | | | | S | **Sg** | **13 11 41.7** | **-1.0** |
| | 256nm,0.3s | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **0.58** | **343** | P | **Pb** | **13 11 36.2** | **+0.2** |
| | 83nm,0.3s | | | | | | |
| PMOZ | | | | S | **Sg** | **13 11 41.7** | **-1.0** |
| | 256nm,0.3s | | | | | | |
| **PMPS** | **Porto Santo** | **0.97** | **35** | *eS* | **Sg** | **13 11 53.5** | **-1.4** |
| PMPS | | | | A | A | 13 11 56.3 | |
| | 20nm,0.1s | | | | | | |
| **PMPS** | **Porto Santo** | **0.97** | **35** | P | **Pb** | **13 11 43.1** | **+0.6** |
| PMPS | | | | S | **Sg** | **13 11 53.5** | **-1.4** |
| | 10nm,0.1s | | | | | | |
| **PMPS** | **Porto Santo** | **0.97** | **35** | P | **Pb** | **13 11 43.1** | **+0.6** |
| PMPS | | | | S | **Sg** | **13 11 53.5** | **-1.4** |
| | 10nm,0.1s | | | | | | |
| **PMPST** | **Porto Santo, M** | **0.99** | **34** | *eP* | **Pb** | **13 11 43.1** | **+0.3** |
| PMPST | | | | *eS* | **Sg** | **13 11 53.6** | **-1.9** |
| PMPST | | | | A | A | 13 11 56.7 | |
| | 21nm,0.4s | | | | | | |
| **PMPST** | **Porto Santo, M** | **0.99** | **34** | *eP* | **Pb** | **13 11 43.1** | **+0.3** |
| PMPST | | | | *eS* | **Sg** | **13 11 53.6** | **-1.9** |
| | 21nm,0.4s | | | | | | |
| **EGOM** | **La Gomera** | **4.09** | **183** | S | **Sn** | **13 13 13.1** | **-1.0** |
| | 29nm,1.8s,SNR=7.9 | | | | | | |
| **EGOM** | **La Gomera** | **4.09** | **183** | S | **Sn** | **13 13 13.1** | **-1.0** |
| | 29nm,1.8s,SNR=7.9 | | | | | | |
| **CFTV** | **Fuerteventura** | **4.59** | **146** | P | **Pn** | **13 12 34.0** | **+0.9** |
| | 43nm,2.9s,SNR=7.9 | | | | | | |
| CFTV | | | | S | **Sn** | **13 13 26.0** | **-0.4** |
| | 7.7nm,1.3s,SNR=7.9 | | | | | | |
| **CFTV** | **Fuerteventura** | **4.59** | **146** | P | **Pn** | **13 12 34.0** | **+0.9** |
| | 43nm,2.9s,SNR=7.9 | | | | | | |
| CFTV | | | | S | **Sn** | **13 13 26.0** | **-0.4** |
| | 7.7nm,1.3s,SNR=7.9 | | | | | | |

*ISK **19** 13:16:05.6, 37°.14N×38°.75E, h5km, MD2.6*
*DDA **19** 13:16:06.2, 37°.10N×38°.67E, h6km, Md2.6*
*CSEM **19** 13:16:06.0±0.5, 37°.09N×38°.74E, h1km±3km, MD2.6, Error ellipse: s-maj=6.8km s-min=4.3km az=140.0*

**ISC 19 13:16:06.6**±1.4, **37°.10N**±0°.05×**38°.70E**±0°.04, **h7**km±11km, **n13**, σ0**946**/24, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URFA** | **Urfa** | **0.35** | **16** | *ePG* | **Pg** | **13 16 13.0** | **-0.5** |
| **URFA** | **Urfa** | **0.35** | **16** | *ePg* | **Pg** | **13 16 13.0** | **-0.5** |
| **AKCD** | **Akcadag** | **1.34** | **333** | *i* P | Pn | **13 16 31.7** | **-0.2** |
| AKCD | | | | *i* S | **Sn** | **13 16 50.1** | **+0.1** |
| **AKCD** | **Akcadag** | **1.34** | **333** | P | Pn | **13 16 31.7** | **-0.2** |
| AKCD | | | | S | **Sn** | **13 16 50.1** | **+0.1** |
| **KUZU** | **Kuzuini** | **1.35** | **256** | *i* P | Pn | **13 16 32.0** | **+0.1** |
| KUZU | | | | *i* S | **Sg** | **13 16 50.4** | **+0.5** |
| **KUZU** | **Kuzuini** | **1.35** | **256** | P | Pn | **13 16 32.0** | **+0.1** |
| KUZU | | | | S | **Sg** | **13 16 50.4** | **+0.5** |
| **SVRC** | **Sivrice-ELAZID** | **1.36** | **20** | *ePN* | **Pn** | **13 16 31.8** | **-0.4** |
| SVRC | | | | *eSN* | **Sg** | **13 16 50.9** | **+0.5** |
| **SVRC** | **Sivrice-ELAZID** | **1.36** | **20** | *ePn* | **Pn** | **13 16 31.8** | **-0.4** |
| SVRC | | | | *eSn* | **Sg** | **13 16 50.9** | **+0.5** |
| **ELZG** | **Elazig** | **1.41** | **9** | *i* P | **Pn** | **13 16 33.0** | **+0.1** |
| ELZG | | | | *i* S | **Sg** | **13 16 52.7** | **+0.7** |
| **ELZG** | **Elazig** | **1.41** | **9** | P | **Pn** | **13 16 33.0** | **+0.1** |
| ELZG | | | | S | **Sg** | **13 16 52.7** | **+0.7** |
| **MAZI** | **Mazidag** | **1.44** | **75** | *ePN* | **Pn** | **13 16 33.0** | **-0.1** |
| MAZI | | | | *eSN* | **Sg** | **13 16 53.3** | **+0.5** |
| **MAZI** | **Mazidag** | **1.44** | **75** | *ePn* | **Pn** | **13 16 33.0** | **-0.1** |
| MAZI | | | | *eSn* | **Sg** | **13 16 53.3** | **+0.5** |
| **AYKD** | **Aykdinkavak** | **1.54** | **282** | P | **Pn** | **13 16 33.9** | **-0.7** |
| AYKD | | | | S | **Sb** | **13 16 55.5** | **+0.1** |

*CSEM **19** 13:23:01.4±0.1, 40°.85N×40°.50E, h2km, MD2.6, Error ellipse: s-maj=5.3km s-min=1.9km az=155.0*
*ISK **19** 13:23:01.3, 40°.85N×40°.45E, h6km, MD2.6*

**ISC 19 13:23:01.2**±1.3, **40°.90N**±0°.07×**40°.46E**±0°.04, **h3**km±15km, **n21**, σ0**828**/34, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KTUT** | **Trabzon** | **0.53** | **279** | *ePG* | **Pb** | **13 23 13.0** | **-0.2** |
| **KTUT** | **Trabzon** | **0.53** | **279** | *ePg* | **Pb** | **13 23 13.0** | **-0.2** |
| **BAYT** | **Ayd¯¯ntepe-Bay** | **0.57** | **206** | *ePG* | **Pg** | **13 23 12.2** | **+0.1** |
| BAYT | | | | *eSG* | **Sg** | **13 23 19.4** | **0.0** |
| **BAYT** | **Ayd¯¯ntepe-Bay** | **0.57** | **206** | *ePg* | **Pg** | **13 23 12.

σ0$86/13, mb3.5/5, Near east coast of eastern Honshu

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| JYT | Yasato | 0.34 | 354 | P | Pn | 13 24 10.7 | +0.9 |
| JYT | | | | S | Sn | 13 24 16.0 | +0.4 |
| JHO | Hitachi | 0.76 | 20 | P | Pn | 13 24 15.7 | 0.0 |
| JHO | | | | S | Sn | 13 24 24.5 | -1.6 |
| JAG | Ashikaga | 0.83 | 310 | P | Pn | 13 24 17.3 | +0.7 |
| JAG | | | | S | Sn | 13 24 27.3 | -0.4 |
| MAT | Matsushiro | 1.77 | 292 | P | Pn | 13 24 29.4 | -0.2 |
| MAT | | | | eS | Sn | 13 24 50.5 | -0.3 |
| ZALV | Zalesovo Beam | 41.99 | 313 | P | P | 13 31 49.2 | +0.2 |
| | 0.4nm,0.4s,baz=106,slow=11,SNR=2.5 | | | | | | |
| MKAR | Makanchi Array | 43.93 | 303 | P | P | 13 32 03.3 | -1.5 |
| | 0.3nm,0.5s,baz=87,slow=5.9,SNR=3.1 | | | | | | |
| ILAR | Eielson Array | 50.96 | 32 | P | P | 13 33 00.0 | +0.9 |
| | 0.5nm,0.6s,baz=275,slow=6.1,SNR=6.8 | | | | | | |
| WRA | Warramunga Arr | 55.81 | 187 | P | P | 13 33 35.0 | -0.2 |
| | 0.6nm,0.6s,baz=5.4,slow=7.5,SNR=9.8 | | | | | | |
| ASAR | Alice Springs | 59.54 | 187 | P | P | 13 34 01.7 | +0.3 |
| | 0.2nm,0.5s,baz=11,slow=11,SNR=9.2 | | | | | | |

**IDC 19 13:30:50.1±999.0, 52°26N×53°30E, h0km, Error ellipse: s-maj=469.5km s-min=78.0km az=118.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I31KZ | AKTYUBINSK INF | 3.50 | 120 | *i* | | 13 56 20.0 | |
| | baz=303,slow=334,SNR=10 | | | | | | |
| I46RU | ZALESOVO INFRA | 18.92 | 72 | *i* | | 15 24 20.0 | |
| | baz=272,slow=323,SNR=3.5 | | | | | | |
| I34MN | SONGINO INFRAS | 33.77 | 76 | *i* | | 16 54 00.0 | |
| | baz=299,slow=328,SNR=0.4 | | | | | | |

*ISCJB 19 13:42:36.3±0.4, 49°.85N×0°.03×18°.40E±0°.03, h0km, Error ellipse: s-maj=4.9km s-min=2.4km az=14.1*
*IPEC 19 13:42:36.8±0.2, 49°.83N×18°.56E, h0km±3km, ML2.2/3, Error ellipse: s-maj=2.1km s-min=1.1km az=161.0*
*CSEM 19 13:42:37.7±0.2, 49°.81N×18°.40E, h1km, ML3.0/6, Error ellipse: s-maj=7.1km s-min=3.2km az=17.0*

**ISC 19 13:42:37.8±0.8, 49°.83N±0°.04×18°.48E±0°.02, h0km, n32, σ0$84/57, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| OKC | Ostrava-Krasne | 0.21 | 272 | ePG | Pg | 13 42 42.5 | +0.7 |
| OKC | | | | eSG | Sg | 13 42 46.3 | +1.7 |
| OKC | Ostrava-Krasne | 0.21 | 272 | Pg | Pg | 13 42 42.5 | +0.7 |
| OKC | | | | Sg | Sg | 13 42 46.3 | +1.7 |
| MORC | Moravsky Berou | 0.61 | 265 | ePg | Pg | 13 42 49.3 | -0.1 |
| MORC | | | | eSg | Sg | 13 42 57.5 | +0.3 |
| LANS | Liptovska Anna | 0.94 | 136 | ePG | Pg | 13 42 55.7 | 0.0 |
| LANS | | | | eSG | Sb | 13 43 09.2 | -0.7 |
| LANS | Liptovska Anna | 0.94 | 136 | ePg | Pg | 13 42 55.7 | 0.0 |
| LANS | | | | eSg | Sb | 13 43 09.2 | -0.7 |
| OJC | Ojcow | 0.94 | 65 | ePg | Pg | 13 42 54.6 | -1.2 |
| OJC | | | | eSg | Sg | 13 43 07.2 | -0.7 |
| KRLC | Kraliky | 1.12 | 283 | ePG | Pg | 13 42 58.0 | -1.3 |
| KRLC | | | | eSG | Sg | 13 43 13.7 | -0.1 |
| KRLC | Kraliky | 1.12 | 283 | Pg | Pg | 13 42 58.0 | -1.3 |
| KRLC | | | | Sg | Sg | 13 43 13.7 | -0.1 |
| NIE | Niedzica | 1.26 | 108 | ePg | Pn | 13 43 02.7 | +0.1 |
| NIE | | | | eSg | Sn | 13 43 21.0 | +0.8 |
| NIE | Niedzica | 1.26 | 108 | ePg | Pn | 13 43 02.7 | +0.1 |
| NIE | | | | eSg | Sn | 13 43 21.0 | +0.8 |
| VRAC | Vranov | 1.33 | 248 | ePg | Pg | 13 43 02.6 | -0.7 |
| VRAC | | | | eSg | Sg | 13 43 20.0 | -0.5 |
| | 30nm,0.4s | | | | | | |
| VYHS | Vyhne | 1.36 | 170 | ePN | Pg | 13 43 02.8 | -1.0 |
| VYHS | | | | eSN | Sb | 13 43 21.6 | -0.4 |
| VYHS | Vyhne | 1.36 | 170 | ePn | Pg | 13 43 02.8 | -1.0 |
| VYHS | | | | eSn | Sb | 13 43 21.6 | -0.4 |
| DPC | Dobruska-Polom | 1.48 | 291 | ePG | Pn | 13 43 05.0 | -0.7 |
| DPC | | | | eSG | Sg | 13 43 25.3 | -0.1 |
| | comp=Z,9.3nm,0.3s | | | | | | |
| DPC | Dobruska-Polom | 1.48 | 291 | Pg | Pn | 13 43 05.0 | -0.7 |
| DPC | | | | Sg | Sg | 13 43 25.3 | -0.1 |
| | 9.3nm,0.3s | | | | | | |
| KRUC | Moravsky | 1.56 | 241 | ePg | Pn | 13 43 06.0 | -0.8 |
| KRUC | | | | eSg | Sn | 13 43 27.2 | -0.5 |
| | 26nm,0.6s | | | | | | |
| UPC | Upice | 1.72 | 294 | ePG | Pn | 13 43 09.2 | +0.2 |
| UPC | | | | eSG | Sg | 13 43 32.9 | -0.2 |
| | comp=Z,29nm,0.7s | | | | | | |
| UPC | Upice | 1.72 | 294 | Pg | Pn | 13 43 09.2 | +0.2 |
| UPC | | | | Sg | Sg | 13 43 32.9 | -0.2 |
| | 29nm,0.7s | | | | | | |
| KSP | Ksiaz | 1.73 | 307 | ePg | Pb | 13 43 10.2 | -0.2 |
| KSP | | | | eSg | Sg | 13 43 33.1 | -0.2 |
| KSP | Ksiaz | 1.73 | 307 | ePg | Pb | 13 43 10.2 | -0.2 |
| KSP | | | | eSg | Sg | 13 43 33.1 | -0.2 |
| STHS | Stebnicka Huta | 1.85 | 102 | ePN | Pg | 13 43 13.2 | 0.0 |
| STHS | | | | eSN | Sg | 13 43 39.1 | +2.0 |
| STHS | Stebnicka Huta | 1.85 | 102 | ePn | Pg | 13 43 13.2 | 0.0 |
| GOPC | GO Pecny, Ondr | 2.39 | 273 | eSG | Sb | 13 43 52.8 | +1.2 |
| GOPC | GO Pecny, Ondr | 2.39 | 273 | Sg | Sb | 13 43 52.8 | +1.2 |
| PRU | Pruhonice | 2.55 | 275 | ePG | Pb | 13 43 24.7 | +0.4 |
| PRU | | | | eSG | Sb | 13 43 57.3 | +1.1 |
| PRU | Pruhonice | 2.55 | 275 | Pg | Pb | 13 43 24.7 | +0.4 |
| PRU | | | | Sg | Sb | 13 43 57.3 | +1.1 |
| PVCC | Panska Ves | 2.61 | 287 | eSG | Sg | 13 44 00.3 | -1.2 |
| | comp=Z,10nm,0.3s | | | | | | |
| PVCC | Panska Ves | 2.61 | 287 | Sg | Sg | 13 44 00.3 | -1.2 |
| | 10nm,0.3s | | | | | | |
| KHC | Kasperske Hory | 3.27 | 260 | ePG | Pb | 13 43 37.8 | +1.1 |
| KHC | | | | eSG | Sg | 13 44 21.6 | -1.1 |
| | comp=Z,7.2nm,0.6s | | | | | | |
| KHC | Kasperske Hory | 3.27 | 260 | Pg | Pb | 13 43 37.8 | +1.1 |
| KHC | | | | Sg | Sg | 13 44 21.6 | -1.1 |
| | 7.2nm,0.6s | | | | | | |
| NKC | Novy Kostel | 3.91 | 278 | eSG | Sg | 13 44 42.3 | -0.9 |
| NKC | Novy Kostel | 3.91 | 278 | Sg | Sg | 13 44 42.3 | -0.9 |

*IDC 19 13:42:39.4±1.9, 30°.75N×49°.52E, h0km, mb3.8/8, mb1 4.0/12, mb1mx3.8/47, mbtmp3.9/12, ML3.7/4, MS3.2/3, Ms1 3.2/3, ms1mx2.7/42, Error ellipse: s-maj=39.5km s-min=19.4km az=165.0*
*ISCJB 19 13:42:40.0±0.5, 30°.80N±0°.04×49°.48E±0°.04, h10km, mb3.8/7, MS3.1/3, Error ellipse: s-maj=7.0km s-min=4.1km az=34.1*
*THR 19 13:42:41.8±0.4, 30°.83N×49°.64E, h18km±4km, ML4.0*
*TEH 19 13:42:41.4, 30°.84N×49°.50E, h8km, ML4.0*
*CSEM 19 13:42:42.0±0.3, 30°.86N×49°.58E, h10km, ML4.0, Error ellipse: s-maj=9.1km s-min=4.9km az=36.0*
*ISN 19 13:42:44.2±1.8, 29°.94N×48°.49E, h0km±7km, ML4.0*

**ISC 19 13:42:41.1±0.7, 30°.80N±0°.05×49°.52E±0°.04, h10km, n71, σ1$29/68, mb3.9/7, MS3.1/3, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SHGR | Shooshtar-Gavs | 1.45 | 335 | ePg | Pg | 13 43 08.8 | 0.0 |
| SHGR | | | | eSg | Sg | 13 43 28.1 | +0.5 |
| SHGR | | | | AML | AML | 13 43 32.0 | |
| | comp=N,2μm,0.8s | | | | | | |
| SHGR | | | | AML | AML | 13 43 43.7 | |
| | comp=E,3μm,0.6s | | | | | | |
| SHGR | Shooshtar-Gavs | 1.45 | 335 | ePg | Pg | 13 43 08.8 | 0.0 |
| SHGR | | | | eSg | Sg | 13 43 28.1 | +0.5 |
| IKAZ | Kazeroun | 2.25 | 116 | ePn | Pn | 13 43 19.8 | +1.1 |
| IKAZ | | | | eSg | Sb | 13 43 52.4 | +2.4 |
| IKAZ | | | | *e* | | 13 44 00.4 | |
| | comp=Z,18μm,0.3s | | | | | | |
| IKAZ | Kazeroun | 2.25 | 116 | ePn | Pn | 13 43 19.8 | +1.1 |
| IKAZ | | | | eSg | Sb | 13 43 52.4 | +2.4 |
| AHBU | AHRAM | 2.47 | 141 | eP | Pn | 13 43 22.7 | +1.4 |
| IRAM | Ramesheh | 2.65 | 67 | ePn | Pn | 13 43 24.2 | +0.1 |
| IRAM | | | | *e* | | 13 44 10.5 | |
| | comp=Z,5μm,0.3s | | | | | | |
| IRAM | Ramesheh | 2.65 | 67 | ePn | Pn | 13 43 24.2 | +0.1 |
| IGAR | Gharneh | 2.68 | 53 | ePn | Pn | 13 43 25.1 | +0.5 |
| IGAR | | | | *e* | | 13 43 29.4 | |
| | comp=Z,3μm,0.1s | | | | | | |
| NSR | Nassriya | 2.91 | 275 | ePG | x | 13 43 34.0 | |
| NSR | | | | eSG | x | 13 44 07.5 | |
| NSR | Nassriya | 2.91 | 275 | ePg | Pb | 13 43 34.0 | +0.9 |
| | SNR=90 | | | | | | |
| KHMZ | Khomeyn | 2.96 | 7 | ePn | Pn | 13 43 29.5 | +1.2 |
| KHMZ | Khomeyn | 2.96 | 7 | *e*P | Pn | 13 43 29.4 | +1.1 |
| IKLH | Kolahrood | 3.06 | 34 | *e*Pn | Pn | 13 43 30.6 | +0.8 |
| IKLH | | | | *e* | | 13 44 20.0 | |
| | comp=Z,4μm,0.3s | | | | | | |
| IKLH | Kolahrood | 3.06 | 34 | *e*Pn | Pn | 13 43 30.6 | +0.8 |
| IZEF | Zefreh | 3.18 | 48 | *e*Pn | Pn | 13 43 31.7 | +0.3 |
| IZEF | | | | *e* | | 13 44 28.6 | |
| | comp=Z,1μm,0.4s | | | | | | |
| IZEF | Zefreh | 3.18 | 48 | *e*Pn | Pn | 13 43 31.7 | +0.3 |
| IPAR | Pars | 3.20 | 106 | *e*Pn | Pn | 13 43 32.0 | +0.3 |
| IPAR | | | | *e* | | 13 44 37.8 | |
| | comp=Z,2μm,0.3s | | | | | | |
| IPAR | Pars | 3.20 | 106 | *e*Pn | Pn | 13 43 32.0 | +0.3 |
| QAM | Ghamsar | 3.37 | 28 | *e*Pn | Pn | 13 43 35.7 | +1.6 |
| QAM | | | | *e* | | 13 43 39.1 | |
| | comp=Z,5μm,0.2s | | | | | | |
| ISRV | Sarvestan | 3.42 | 113 | *e*Pn | Pn | 13 43 36.0 | +1.2 |
| ISRV | | | | *e* | | 13 45 07.0 | |
| | comp=Z,4μm,0.5s | | | | | | |
| ISRV | Sarvestan | 3.42 | 113 | *e*Pn | Pn | 13 43 36.0 | +1.2 |
| ISAD | Sadrabad | 3.73 | 72 | *e*Pn | Pn | 13 43 39.5 | +0.5 |
| ISAD | | | | *e* | | 13 44 30.1 | |
| | comp=Z,2μm,0.3s | | | | | | |
| ISAD | Sadrabad | 3.73 | 72 | *e*Pn | Pn | 13 43 39.5 | +0.5 |
| IKOM | Komasi | 3.77 | 334 | *e* | | 13 45 04.8 | |
| | comp=Z,3μm,0.3s | | | | | | |
| IBDR | Badra | 3.83 | 308 | *e*PN | x | 13 43 44.1 | |
| IBDR | | | | *e*Sn | x | 13 44 27.1 | |
| GHIR | Ghir-Karzin | 3.92 | 129 | *e*Pn | Pn | 13 43 42.5 | +1.0 |
| GHIR | Ghir-Karzin | 3.92 | 129 | *e*P | Pn | 13 43 42.5 | +1.0 |
| GHVR | GHOM | 3.97 | 22 | *e*Pn | Pn | 13 43 42.8 | +0.7 |
| GHVR | | | | *e*Sg | Sb | 13 44 42.4 | +3.1 |
| GHVR | | | | AML | AML | 13 44 54.4 | |
| | comp=E,166nm,0.7s | | | | | | |
| GHVR | GHOM | 3.97 | 22 | *e*P | Pn | 13 43 42.7 | +0.7 |
| IVIS | Veis | 4.35 | 330 | *e*Pn | Pn | 13 43 48.3 | +0.9 |
| IVIS | | | | *e* | | 13 45 21.8 | |
| | comp=Z,1μm,0.3s | | | | | | |
| IVIS | Veis | 4.35 | 330 | *e*Pn | Pn | 13 43 48.3 | +0.9 |
| IMEH | Mehriz | 4.41 | 81 | *e*Pn | Pn | 13 43 48.3 | 0.0 |
| IMEH | | | | *e* | | 13 45 07.9 | |
| | comp=Z,1μm,0.6s | | | | | | |
| IMEH | Mehriz | 4.41 | 81 | *e*Pn | Pn | 13 43 48.3 | 0.0 |
| ICHK | Chekchek | 4.42 | 70 | *e*Pn | Pn | 13 43 48.7 | +0.3 |
| ICHK | | | | *e*Sn | Sn | 13 44 36.9 | -3.1 |
| ICHK | | | | *e* | | 13 44 39.5 | |
| | comp=E,938nm,0.3s | | | | | | |
| ICHK | Chekchek | 4.42 | 70 | *e*Pn | Pn | 13 43 48.7 | +0.3 |
| ICHK | | | | *e*Sn | Sn | 13 44 36.9 | -3.1 |
| IRAZ | Razeghan | 4.61 | 4 | *e*Pn | Pn | 13 43 52.3 | +1.3 |
| IRAZ | | | | *e* | | 13 45 22.5 | |
| | comp=Z,3μm,0.6s | | | | | | |
| IRAZ | Razeghan | 4.61 | 4 | *e*Pn | Pn | 13 43 52.3 | +1.3 |
| SNGE | Sanandaj | 4.66 | 337 | *e*Pn | Pn | 13 43 53.6 | +1.9 |
| SNGE | Sanandaj | 4.66 | 337 | *e*P | Pn | 13 43 53.6 | +1.9 |
| IDHR | Dehrash | 4.70 | 327 | *e*Pn | Pn | 13 43 50.9 | -1.4 |
| IDHR | | | | *e* | | 13 44 51.7 | |
| | comp=Z,3μm,0.2s | | | | | | |
| IDHR | Dehrash | 4.70 | 327 | *e*Pn | Pn | 13 43 50.9 | -1.4 |
| IMHD | Mahdasht | 4.97 | 11 | *e*Pn | Pn | 13 43 55.7 | -0.2 |
| IMHD | | | | *e* | | 13 44 11.1 | |
| | comp=Z,648nm,0.2s | | | | | | |
| IMHD | Mahdasht | 4.97 | 11 | *e*Pn | Pn | 13 43 55.7 | -0.2 |
| BHD | Baghdad | 5.01 | 301 | *e*PN | x | 13 43 58.7 | |
| BHD | | | | *e*SN | x | 13 44 52.0 | |
| BHD | Baghdad | 5.01 | 301 | *e*Pn | Pn | 13 43 58.7 | +2.4 |
| | SNR=39 | | | | | | |
| BHD | | | | *e*Sn | Sn | 13 44 52.0 | -2.3 |
| | SNR=39 | | | | | | |
| IDMV | Damavand | 5.21 | 23 | *e*Pn | Pn | 13 43 59.2 | -0.2 |
| IDMV | | | | *e* | | 13 45 45.2 | |
| | comp=Z,922nm,0.5s | | | | | | |
| IDMV | Damavand | 5.21 | 23 | *e*Pn | Pn | 13 43 59.2 | -0.2 |
| IBAF | Bafgh | 5.24 | 80 | *e*Pn | Pn | 13 43 59.0 | -0.6 |
| IBAF | | | | *e* | | 13 45 48.4 | |
| | comp=Z,489nm,0.5s | | | | | | |
| IBAF | Bafgh | 5.24 | 80 | *e*Pn | Pn | 13 43 59.0 | -0.6 |
| IGZV | Ghazvin | 5.61 | 6 | *e*Pn | Pn | 13 44 02.9 | -1.8 |
| IGZV | | | | *e* | | 13 45 56.3 | |
| | comp=Z,580nm,0.4s | | | | | | |
| IGZV | Ghazvin | 5.61 | 6 | *e*Pn | Pn | 13 44 02.9 | -1.8 |
| IKRK | Kirkuk | 6.32 | 318 | *e*PN | x | 13 44 22.5 | |
| IKRK | | | | *e*SN | x | 13 45 31.4 | |
| MSL | Mosul | 7.73 | 318 | *e*PN | x | 13 44 42.0 | |
| MSL | | | | *i* SN | x | 13 46 05.8 | |
| RTB | Rutbah | 8.14 | 288 | *e*PN | x | 13 44 39.3 | |
| RTB | | | | *e*SN | x | 13 45 59.6 | |
| RTB | Rutbah | 8.14 | 288 | *e*Pn | Pn | 13 44 39.3 | -0.1 |
| | SNR=39 | | | | | | |
| GEYT | Alibeck | 10.05 | 43 | Pn | Pn | 13 45 06.0 | +0.5 |
| | comp=Z,3.1nm,0.3s,baz=138,slow=30,SNR=9.3 | | | | | | |
| ASF | Jabal al Asfar | 10.87 | 281 | Pn | Pn | 13 45 16.7 | 0.0 |
| | comp=Z,1.0nm,0.3s,baz=77,slow=13,SNR=3.5 | | | | | | |
| KBZ | Khabaz | 13.94 | 340 | Pn | P | 13 46 03.1 | -3.6 |
| | comp=Z,0.0nm,0.3s,baz=198,slow=19,SNR=2.9 | | | | | | |
| BRTR | Keskin Array B | 15.72 | 309 | Pn | P | 13 46 25.4 | -1.3 |
| | comp=Z,0.3nm,0.3s,baz=90,slow=14,SNR=6.2 | | | | | | |
| AKTO | Aktyubinsk | 20.62 | 16 | P | Pn | 13 47 22.0 | -0.8 |
| | comp=Z,4.8nm,0.6s,baz=201,slow=11,SNR=14 | | | | | | |
| AAK | Ala-Archa | 23.16 | 52 | P | P | 13 47 49.5 | +1.7 |
| | comp=Z,1.4nm,0.7s,baz=202,slow=7.2,SNR=5.0 | | | | | | |
| AAK | | | | LR | LR | 13 57 19.4 | |
| | comp=Z,71nm,18.2s,baz=237,slow=38 | | | | | | |
| MLR | Muntele Rosu | 23.53 | 315 | P | P | 13 47 52.8 | +1.4 |
| | comp=Z,0.9nm,0.9s,baz=348,slow=2.8,SNR=4.5 | | | | | | |
| BVAR | Borovoye Array | 26.91 | 28 | P | P | 13 48 21.9 | -0.3 |
| | comp=Z,2.1nm,0.6s,baz=225,slow=8.0,SNR=5.0 | | | | | | |
| VYHS | Vyhne | 29.23 | 316 | *e*P | P | 13 48 43.1 | +0.1 |
| MKAR | Makanchi Array | 29.86 | 48 | LR | LR | 14 01 00.8 | |
| | comp=Z,34nm,21.2s,baz=293,slow=37 | | | | | | |
| GERES | GERESS Array B | 32.50 | 314 | LR | LR | 14 05 45.8 | |
| | comp=Z,42nm,19.6s,baz=263,slow=43 | | | | | | |
| FINES | FINESS Array B | 34.30 | 340 | P | P | 13 49 25.6 | -1.7 |
| | comp=Z,3.6nm,0.8s,baz=147,slow=9.0,SNR=4.8 | | | | | | |
| ZALV | Zalesovo Beam | 34.30 | 37 | P | P | 13 49 27.8 | +0.3 |
| | comp=Z,0.7nm,0.4s,baz=243,slow=9.8,SNR=4.7 | | | | | | |
| SONM | Songino Array | 46.11 | 52 | P | P | 13 51 04.4 | -1.1 |
| | comp=Z,0.5nm,0.4s,baz=238,slow=8.3,SNR=4.9 | | | | | | |
| TORD | Torodi Ar. Bea | 47.32 | 259 | P | P | 13 51 15.3 | 0.0 |
| | comp=Z,0.6nm,0.8s,baz=61,slow=7.4,SNR=4.8 | | | | | | |
| HHC | Hu-ho-hao-te | 50.36 | 60 | *e*P | P | 13 51 39.6 | +1.1 |

*GUC 19 13:46:22.5±0.4, 34°.79S×71°.74W, h46km±2km, ML4.1*

**ISC 19 13:46:20.6±3.1, 34°.80S±0°.04×71°.83W±0°.06, h19km±9km, n21, σ1$06/28, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CHPI | Pichilemu | 0.43 | 341 | *i* P | Pn | 13 46 32.3 | +0.5 |
| CHPI | | | | *i* S | Sn | 13 46 40.3 | +1.2 |
| NICH | Los Niches | 0.54 | 113 | *i* P | Pn | 13 46 32.8 | -0.5 |
| NICH | | | | *i* S | Sn | 13 46 40.8 | -1.1 |
| NICH | | | | AML | AML | 13 46 41.9 | |
| | comp=E,23μm,0.6s | | | | | | |
| TALC | Talca | 0.62 | 165 | *i* P | Pn | 13 46 34.8 | +0.4 |
| TALC | | | | *i* S | Sn | 13 46 44.0 | +0.1 |
| TALC | | | | AML | AML | 13 46 45.8 | |
| | comp=E,18μm,0.1s | | | | | | |
| COCH | Cobquecura | 1.54 | 210 | *i* P | Pb | 13 46 48.4 | -0.2 |
| ANTU | Antumapu | 1.58 | 39 | *i* P | Pn | 13 46 47.6 | -0.1 |
| ANTU | | | | *i* S | Sn | 13 47 06.6 | -1.0 |
| ANTU | | | | AML | AML | 13 47 11.2 | |
| | comp=E,3μm,0.3s | | | | | | |
| CLCH | Cerro Calan | 1.76 | 38 | AML | AML | 13 47 17.6 | |
| | comp=E,2μm,0.6s | | | | | | |
| PEL | Peldehue | 1.91 | 30 | AML | AML | 13 47 21.4 | |
| | comp=N,3μm,1.0s | | | | | | |
| ROC1 | El Roble | 1.94 | 21 | *e*P | Pn | 13 46 50.9 | -1.9 |
| ROC1 | | | | *e*S | Sb | 13 47 20.4 | +1.0 |
| ROCH | El Roble | 1.94 | 21 | *i* P | Pn | 13 46 52.9 | 0.0 |
| ROCH | | | | *i* S | Sn | 13 47 16.4 | -0.5 |
| AAGR | Agrelo | 3.03 | 56 | *e*P | Pn | 13 47 09.5 | +1.9 |
| ARCO | CERRO ARCO | 3.10 | 52 | *e*P | Pn | 13 47 10.4 | +1.7 |
| ARCO | | | | IAML | | 13 47 20.5 | |
| | comp=Z,136nm,0.8s | | | | | | |
| ARCO | | | | *e*S | Sb | 13 47 54.6 | +1.7 |
| AUSP | Uspallata | 3.28 | 39 | *e*P | Pn | 13 47 12.4 | +1.1 |
| AUSP | | | | *e*S | Sb | 13 47 57.9 | -0.2 |
| ASAL | Salagasta | 3.33 | 49 | *e*P | Pn | 13 47 13.1 | +1.3 |
| ASAL | | | | *e*S | Sb | 13 47 59.3 | 0.0 |
| RTLS | Leoncito | 3.67 | 36 | *e*P | Pn | 13 47 17.1 | +0.5 |
| RTCV | Cerro Valdivia | 4.02 | 44 | *e*P | Pn | 13 47 22.0 | +0.7 |
| CFAA | Coronel Fontan | 4.38 | 44 | *e*P | Pn | 13 47 26.7 | +0.4 |
| RTLL | Cerro Villicun | 4.46 | 40 | *e*P | Pn | 13 47 27.4 | +0.1 |
| ACAN | Cantantal | 4.62 | 58 | *e*P | Pn | 13 47 30.5 | +0.9 |
| AMOG | MOGNA | 4.76 | 37 | *e*P | Pn | 13 47 31.2 | -0.3 |
| AVFE | Valle Fertil | 5.54 | 43 | *e*P | Pn | 13 47 41.9 | -0.2 |
| AVFE | | | | IAML | | 13 48 54.5 | |
| | comp=Z,48nm,0.5s | | | | | | |
| VCA | Vinchina | 6.79 | 28 | *e*P | Pn | 13 47 57.4 | -2.0 |
| VCA | | | | IAML | | 13 49 32.5 | |
| | comp=Z,49nm,0.5s | | | | | | |

*ISCJB 19 13:46:52.8±0.7, 43°.33N±0°.09×88°.5E±0°.1, h10km, mb3.4/3, Error ellipse: s-maj=18.0km s-min=6.7km az=138.3*
*IDC 19 13:46:53.5±1.2, 43°.11N×88°.64E, h0km, mb3.5/3, mb1 3.7/5, mb1mx3.4/42, mbtmp3.4/5, ML3.3/2, Error ellipse: s-maj=91.4km s-min=16.0km az=46.0*

**ISC 19 13:46:54.5±1.0, 43°.2N±0°.1×88°.4E±0°.1, h10km, n9, σ1$35/11, mb3.6/3, 2C-4D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MK31 | Makanchi Array | 5.65 | 312 | ⇓Pn | Pn | 13 48 20.3 | +1.7 |
| | 0.4nm,0.3s,baz=129,slow=14,SNR=21 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 13 49 22.1 | -1.5 |
| | 3.6nm,0.5s,baz=127,slow=26,SNR=5.8 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 13 49 47.6 | |
| | 4.3nm,0.5s,baz=118,slow=28,SNR=4.4 | | | | | | |
| MKAR | Makanchi Array | 5.65 | 312 | Pn | Pn | 13 48 20.6 | +2.0 |
| | 0.4nm,0.3s,baz=127,slow=14,SNR=12 | | | | | | |
| MKAR | | | | Sn | Sn | 13 49 24.2 | +0.7 |
| | 1.4nm,0.3s,baz=126,slow=25,SNR=8.3 | | | | | | |
| MKAR | | | | Lg | Lg | 13 49 58.6 | |
| | 1.2nm,0.3s,baz=129,slow=27,SNR=4.4 | | | | | | |
| PDGK | Podgornoye | 6.54 | 274 | ⇓Pn | Pn | 13 48 35.4 | +4.7 |
| | 4.6nm,1.1s | | | | | | |
| PDGK | | | | ⇓Sn | Sn | 13 49 43.9 | -1.3 |
| | 3.4nm,0.5s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 13 50 15.2 | |
| | 11nm,0.7s | | | | | | |
| ZALV | Zalesovo Beam | 11.03 | 349 | Sn | Sn | 13 51 34.1 | -1.4 |
| | 0.3nm,0.3s,baz=169,slow=25,SNR=5.4 | | | | | | |
| BVAR | Borovoye Array | 15.52 | 316 | Pn | Pn | 13 50 32.5 | -0.8 |
| | 0.2nm,0.3s,baz=107,slow=12,SNR=2.7 | | | | | | |
| CD2 | Chengdu | 17.28 | 130 | eP | P | 13 50 58.0 | +0.6 |
| CMAR | Chiang Mai Arr | 26.21 | 157 | P | P | 13 52 29.1 | -0.4 |
| | 0.9nm,0.9s,baz=335,slow=8.2,SNR=5.1 | | | | | | |
| WRA | Warramunga Arr | 75.67 | 136 | P | P | 13 58 39.4 | -0.6 |
| | 0.6nm,1.1s,baz=328,slow=4.2,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 78.58 | 138 | P | P | 13 58 56.1 | -0.1 |
| | 0.3nm,0.5s,baz=346,slow=6.1,SNR=3.3 | | | | | | |

**IDC 19 14:09:30.7±2.0, 11°.19N×123°.92E, h0km, mb3.5/3, mb1 3.7/3, mb1mx3.3/33, mbtmp3.5/3, Error ellipse: s-maj=216.0km s-min=28.6km az=68.0, Cebu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | Warramunga Arr | 32.59 | 162 | P | P | 14 16 04.2 | +0.1 |
| | 0.5nm,0.5s,baz=342,slow=10,SNR=7.6 | | | | | | |
| ASAR | Alice Springs | 35.99 | 164 | P | P | 14 16 33.4 | -0.2 |
| | 0.3nm,0.4s,baz=341,slow=7.0,SNR=5.1 | | | | | | |
| ZALV | Zalesovo Beam | 52.73 | 332 | P | | 14 18 47.0 | -0.1 |
| | 0.4nm,0.5s,baz=133,slow=8.1,SNR=3.6 | | | | | | |

*DDA 19 14:32:12.8, 39°.39N×33°.12E, h7km, Ml4.3*
*IDC 19 14:32:12.9±0.7, 39°.41N×33°.16E, h0km, mb4.0/11, mb1 3.9/15, mb1mx3.8/41, mbtmp3.8/15, ML3.8/3, MS3.1/6, Ms1 3.1/6, ms1mx2.8/41, Error ellipse: s-maj=13.5km s-min=7.5km az=147.0*
*ISCJB 19 14:32:13.3±0.4, 39°.40N±0°.02×33°.13E±0°.02, h4km±3km, mb3.9/11, MS3.1/3, Error ellipse: s-maj=2.9km s-min=2.6km az=7.8*
*NEIC 19 14:32:13.0, 39°.38N×33°.14E, h5km, mb3.9/2, ML4.0(ISK), After ISK.*
*ISK 19 14:32:13.0, 39°.40N×33°.13E, h4km, ML3.9*
*CSEM 19 14:32:13.8±0.1, 39°.42N×33°.15E, h2km, ML3.9, Error ellipse: s-maj=2.4km s-min=2.2km az=5.0*

**ISC 19 14:32:13.6±1.0, 39°.41N±0°.02×33°.15E±0°.02, h4km±7km, n190, σ0$99/215, mb3.9/11, MS3.1/3, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFSR | Af˙ar-Bala (A | 0.07 | 306 | PG | Pg | 14 32 14.7 | -0.6 |
| AFSR | Af˙ar-Bala (A | 0.07 | 306 | *i* Pg | Pg | 14 32 14.7 | -0.6 |
| BBAL | Bala | 0.14 | 352 | *i* P | Pg | 14 32 16.5 | +0.1 |
| BBAL | | | | *i* S | Sg | 14 32 19.2 | +0.9 |
| BBAL | Bala | 0.14 | 352 | P | Pg | 14 32 16.5 | +0.1 |
| BBAL | | | | S | Sg | 14 32 19.2 | +0.9 |
| KAMT | Kaman | 0.44 | 94 | ePG | Pg | 14 32 22.4 | +0.3 |
| KAMT | Kaman | 0.44 | 94 | ePg | Pg | 14 32 22.4 | +0.3 |
| BRTR | Keskin Array B | 0.50 | 50 | Pg | Pg | 14 32 23.2 | 0.0 |
| | 421nm,0.3s,baz=218,slow=17,SNR=6410 | | | | | | |
| BRTR | | | | Lg | Lg | 14 32 30.3 | |
| | 2μm,0.3s,baz=220,slow=38,SNR=173 | | | | | | |
| ANTO | Ankara | 0.54 | 330 | ePg | Pg | 14 32 23.6 | -0.4 |
| ANTO | Ankara | 0.54 | 330 | ePg | Pg | 14 32 23.6 | -0.4 |
| SERE | Sereflikochisa | 0.56 | 145 | ePG | Pg | 14 32 24.6 | +0.2 |
| SERE | Sereflikochisa | 0.56 | 145 | ePg | Pg | 14 32 24.6 | +0.2 |
| DAD | Ankara | 0.59 | 329 | *i* P | Pg | 14 32 24.6 | -0.3 |
| DAD | | | | *i* S | Sg | 14 32 32.9 | +0.3 |
| DAD | Ankara | 0.59 | 329 | P | Pg | 14 32 24.6 | -0.3 |
| DAD | | | | P | Pg | 14 32 24.6 | -0.3 |
| DAD | | | | S | Sg | 14 32 32.9 | +0.3 |
| DAD | | | | S | Sg | 14 32 32.9 | +0.3 |
| YAYX | Yaylak | 0.69 | 132 | ePG | Pg | 14 32 27.2 | +0.3 |
| YAYX | Yaylak | 0.69 | 132 | ePg | Pg | 14 32 27.2 | +0.3 |
| CHBY | Cihanbeyli | 0.84 | 194 | ePG | Pg | 14 32 29.9 | +0.1 |
| CHBY | Cihanbeyli | 0.84 | 194 | ePg | Pg | 14 32 29.9 | +0.1 |
| CDAG | Cicekdag | 0.97 | 77 | *i* P | Pg | 14 32 31.8 | -0.4 |
| CDAG | | | | *i* S | Sb | 14 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SAFT | Safranbolu | 1.87 | 349 | *e*PN | Pn | 14 32 47.0 | +0.7 |
| SAFT | Safranbolu | 1.87 | 349 | *e*Pn | Pn | 14 32 47.0 | +0.7 |
| BTAS | Taskesti | 2.02 | 306 | *i* P | Pn | 14 32 49.0 | +0.6 |
| BTAS | Taskesti | 2.02 | 306 | P | Pn | 14 32 49.0 | +0.6 |
| BTAS | | | | S | Sg | 14 33 21.9 | +3.4 |
| BORA | Eskisehir | 2.13 | 284 | *i* P | Pn | 14 32 48.9 | -1.1 |
| BORA | Eskisehir | 2.13 | 284 | P | Pn | 14 32 48.9 | -1.1 |
| SHUT | Suhut-Afyon | 2.19 | 248 | *e*PN | Pn | 14 32 51.0 | +0.1 |
| SHUT | Suhut-Afyon | 2.19 | 248 | *e*Pn | Pn | 14 32 51.0 | +0.1 |
| GULT | Gulveren | 2.27 | 298 | *e*PN | Pn | 14 32 52.5 | +0.6 |
| GULT | Gulveren | 2.27 | 298 | *e*Pn | Pn | 14 32 52.5 | +0.6 |
| KDZE | Karadeniz Ereo | 2.31 | 326 | *e*PN | Pn | 14 32 53.0 | +0.6 |
| KDZE | Karadeniz Ereo | 2.31 | 326 | *e*Pn | Pn | 14 32 53.0 | +0.6 |
| GPA | Golpazari | 2.36 | 293 | *e*PN | Pn | 14 32 53.2 | +0.2 |
| GPA | Golpazari | 2.36 | 293 | *e*Pn | Pn | 14 32 53.2 | +0.2 |
| CUSAR | Sarkisla-SIVAS | 2.40 | 89 | P | Pn | 14 32 54.7 | +1.0 |
| CUSAR | | | | S | Sg | 14 33 30.9 | +0.2 |
| BYBT | Boyabat | 2.40 | 30 | *e*PN | Pn | 14 32 54.7 | +1.1 |
| BYBT | Boyabat | 2.40 | 30 | *e*Pn | Pn | 14 32 54.7 | +1.1 |
| BOYT | Boyabat | 2.42 | 33 | *i* P | Pn | 14 32 53.8 | -0.2 |
| BOYT | Boyabat | 2.42 | 33 | P | Pn | 14 32 53.8 | -0.2 |
| SPNC | Sapanca-Adapaz | 2.53 | 301 | *e*PN | Pn | 14 32 56.5 | +1.1 |
| SPNC | Sapanca-Adapaz | 2.53 | 301 | *e*Pn | Pn | 14 32 56.5 | +1.1 |
| SUTC | Sutluce-Ispart | 2.56 | 222 | *e*PN | Pn | 14 32 57.4 | +1.5 |
| SUTC | Sutluce-Ispart | 2.56 | 222 | *e*Pn | Pn | 14 32 57.4 | +1.5 |
| ISP | Isparta | 2.59 | 233 | *e*PN | Pn | 14 32 57.6 | +1.3 |
| ISP | Isparta | 2.59 | 233 | *e*Pn | Pn | 14 32 56.6 | +0.2 |
| ISP | Isparta | 2.59 | 233 | *e*Pn | Pn | 14 32 57.7 | +1.3 |
| KARA | Karaisali | 2.61 | 144 | *e*PN | Pn | 14 32 57.7 | +1.1 |
| KARA | Karaisali | 2.61 | 144 | *e*Pn | Pn | 14 32 57.7 | +1.1 |
| BZK | Bozkurt | 2.63 | 14 | *e*PN | Pn | 14 32 57.7 | +0.9 |
| BZK | Bozkurt | 2.63 | 14 | *e*Pn | Pn | 14 32 57.7 | +0.9 |
| CAVI | Cavuskoy | 2.67 | 288 | *e*PN | Pn | 14 32 57.9 | +0.6 |
| CAVI | Cavuskoy | 2.67 | 288 | *e*Pn | Pn | 14 32 57.9 | +0.6 |
| SARI | SarD1z-Kayseri | 2.74 | 110 | *e*PN | Pn | 14 32 59.1 | +0.7 |
| DIKM | Dikmen | 2.76 | 35 | *e*PN | Pn | 14 32 59.5 | +0.9 |
| DIKM | Dikmen | 2.76 | 35 | *e*Pn | Pn | 14 32 59.5 | +0.9 |
| KVT | Kavak | 2.78 | 52 | *e*PN | Pn | 14 33 00.1 | +1.2 |
| KVT | Kavak | 2.78 | 52 | *e*Pn | Pn | 14 33 00.1 | +1.2 |
| BCK | Bucak | 2.79 | 227 | *e*PN | Pn | 14 33 00.2 | +1.1 |
| BCK | Bucak | 2.79 | 227 | *e*Pn | Pn | 14 33 00.2 | +1.1 |
| CUALT | Altinyayla-SIV | 2.80 | 92 | P | Pn | 14 33 00.8 | +1.4 |
| CUALT | | | | S | Sg | 14 33 43.2 | -0.5 |
| ADVT | Abdulvahap | 2.81 | 292 | *e*PN | Pn | 14 33 00.4 | +1.1 |
| ADVT | Abdulvahap | 2.81 | 292 | *e*Pn | Pn | 14 33 00.4 | +1.1 |
| IZI | Iznik | 2.98 | 289 | *e*PN | Pn | 14 33 01.3 | -0.3 |
| IZI | Iznik | 2.98 | 289 | *e*Pn | Pn | 14 33 01.3 | -0.3 |
| SVSK | Karacayir | 3.02 | 79 | *e*PN | Pn | 14 33 03.4 | +1.3 |
| SVSK | Karacayir | 3.02 | 79 | *e*Pn | Pn | 14 33 03.4 | +1.3 |
| KHL | Karahalli | 3.03 | 250 | *e*PN | Pn | 14 33 02.9 | +0.6 |
| KHL | Karahalli | 3.03 | 250 | *e*Pn | Pn | 14 33 02.9 | +0.6 |
| KHAL | Karahalli | 3.03 | 251 | *i* P | Pn | 14 33 02.2 | -0.2 |
| KHAL | Karahalli | 3.03 | 251 | P | Pn | 14 33 02.2 | -0.2 |
| SNOP | Sinop | 3.04 | 30 | *e*PN | Pn | 14 33 03.3 | +0.8 |
| SNOP | Sinop | 3.04 | 30 | *e*Pn | Pn | 14 33 03.3 | +0.8 |
| CEYT | Ceyhan | 3.15 | 139 | *e*PN | Pn | 14 33 05.2 | +1.3 |
| CEYT | Ceyhan | 3.15 | 139 | *e*Pn | Pn | 14 33 05.2 | +1.3 |
| SILT | Sile | 3.20 | 304 | *e*PN | Pn | 14 33 05.6 | +1.0 |
| SILT | Sile | 3.20 | 304 | *e*Pn | Pn | 14 33 05.6 | +1.0 |
| CUGUR | Gurin_S¨VAS | 3.28 | 101 | P | Pg | 14 33 17.0 | +0.5 |
| CUGUR | | | | S | Sg | 14 33 58.9 | -0.1 |
| KRTS | Karatas | 3.33 | 147 | *e*PN | Pn | 14 33 07.7 | +1.3 |
| KRTS | Karatas | 3.33 | 147 | *e*Pn | Pn | 14 33 07.7 | +1.3 |
| ORLT | Orhaneli | 3.34 | 282 | *e*PN | Pn | 14 33 07.4 | +0.8 |
| ORLT | Orhaneli | 3.34 | 282 | *e*Pn | Pn | 14 33 07.4 | +0.8 |
| CUKAN | kangal_SIVAS | 3.35 | 90 | P | Pn | 14 33 08.0 | +1.1 |
| CUKAN | | | | S | Sg | 14 34 06.7 | -0.5 |
| RSDY | Resadiye-TOKAT | 3.37 | 72 | *e*PN | Pn | 14 33 08.3 | +1.4 |
| RSDY | Resadiye-TOKAT | 3.37 | 72 | *e*Pn | Pn | 14 33 08.3 | +1.4 |
| MDNY | Mudanya-Bursa | 3.42 | 288 | *e*PN | Pn | 14 33 08.8 | +1.2 |
| MDNY | Mudanya-Bursa | 3.42 | 288 | *e*Pn | Pn | 14 33 08.8 | +1.2 |
| DARE | Darende-Malaty | 3.48 | 102 | *e*PN | Pn | 14 33 09.8 | +1.2 |
| DARE | Darende-Malaty | 3.48 | 102 | *e*Pn | Pn | 14 33 09.8 | +1.2 |
| ARMT | Armutlu | 3.49 | 291 | *e*PN | Pn | 14 33 09.8 | +1.2 |
| ARMT | Armutlu | 3.49 | 291 | *e*Pn | Pn | 14 33 09.8 | +1.2 |
| KMRS | Kahramanmaras | 3.50 | 122 | *e*PN | Pn | 14 33 10.5 | +1.7 |
| KMRS | Kahramanmaras | 3.50 | 122 | *e*Pn | Pn | 14 33 10.5 | +1.7 |
| ISK | Istanbul-Kandi | 3.54 | 299 | *e*PN | Pn | 14 33 09.8 | +0.5 |
| ISK | Istanbul-Kandi | 3.54 | 299 | *e*Pn | Pn | 14 33 09.8 | +0.5 |
| CUZAR | Zara_SIVAS | 3.60 | 81 | P | Pn | 14 33 12.1 | +1.9 |
| CUZAR | | | | S | Sg | 14 34 06.5 | -2.8 |
| KULA | Kula-Manisa | 3.61 | 257 | *e*PN | Pn | 14 33 10.8 | +0.5 |
| KULA | Kula-Manisa | 3.61 | 257 | *e*Pn | Pn | 14 33 10.8 | +0.5 |
| KLYT | Kilyos | 3.64 | 302 | *e*PN | Pn | 14 33 11.2 | +0.6 |
| KLYT | Kilyos | 3.64 | 302 | *e*Pn | Pn | 14 33 11.2 | +0.6 |
| ELL | Elmali | 3.68 | 225 | *e*PN | Pn | 14 33 12.6 | +1.2 |
| ELL | Elmali | 3.68 | 225 | *e*Pn | Pn | 14 33 12.6 | +1.2 |
| BGKT | Bogazkoy | 3.79 | 299 | *e*PN | Pn | 14 33 13.0 | +0.3 |
| BGKT | Bogazkoy | 3.79 | 299 | *e*Pn | Pn | 14 33 13.0 | +0.3 |
| KCTX | Karacabey (Bur | 3.79 | 285 | *e*PN | Pn | 14 33 14.1 | +1.4 |
| KCTX | Karacabey (Bur | 3.79 | 285 | *e*Pn | Pn | 14 33 14.1 | +1.4 |
| EREN | Erenkoy | 3.95 | 168 | *e*PN | Pn | 14 33 16.9 | +2.0 |
| EREN | Erenkoy | 3.95 | 168 | *e*Pn | Pn | 14 33 17.0 | +2.0 |
| CTKS | Kestanelik-??a | 3.99 | 299 | *e*PN | Pn | 14 33 16.6 | +1.1 |
| CTKS | Kestanelik-??a | 3.99 | 299 | *e*Pn | Pn | 14 33 16.6 | +1.1 |
| BALB | Balikesir | 4.08 | 275 | *e*PN | Pn | 14 33 18.2 | +1.5 |
| BALB | Balikesir | 4.08 | 275 | *e*Pn | Pn | 14 33 18.2 | +1.5 |
| LFK | Lefkose | 4.13 | 176 | *e*PN | Pn | 14 33 18.9 | +1.5 |
| LFK | Lefkose | 4.13 | 176 | *e*Pn | Pn | 14 33 18.9 | +1.5 |
| AKS | Akhisar | 4.18 | 264 | *e*PN | Pn | 14 33 19.1 | +1.0 |
| AKS | Akhisar | 4.18 | 264 | *e*Pn | Pn | 14 33 19.1 | +1.0 |
| FETY | Fethiye | 4.24 | 231 | *e*PN | Pn | 14 33 20.3 | +1.4 |
| FETY | Fethiye | 4.24 | 231 | *e*Pn | Pn | 14 33 20.3 | +1.4 |
| CTYL | Yal??k??y-??at | 4.24 | 301 | *e*PN | Pn | 14 33 20.2 | +1.2 |
| CTYL | Yal??k??y-??at | 4.24 | 301 | *e*Pn | Pn | 14 33 20.2 | +1.2 |
| GONE | Gonen-Balikesi | 4.26 | 280 | *e*PN | Pn | 14 33 20.3 | +1.2 |
| GONE | Gonen-Balikesi | 4.26 | 280 | *e*Pn | Pn | 14 33 20.3 | +1.2 |
| MALT | Malatya | 4.26 | 103 | *e*PN | Pn | 14 33 21.7 | +2.4 |
| MALT | Malatya | 4.26 | 103 | *e*Pn | Pn | 14 33 21.7 | +2.4 |
| AYDB | Zeytinkoy-Aydi | 4.36 | 252 | *e*PN | Pn | 14 33 22.1 | +1.4 |
| AYDB | Zeytinkoy-Aydi | 4.36 | 252 | *e*Pn | Pn | 14 33 22.1 | +1.4 |
| DALY | Dalyan (Mu¨la | 4.38 | 235 | *e*PN | Pn | 14 33 22.4 | +1.5 |
| DALY | Dalyan (Mu¨la | 4.38 | 235 | *e*Pn | Pn | 14 33 22.4 | +1.5 |
| MRMT | Marmara Adasi | 4.43 | 287 | *e*PN | Pn | 14 33 22.7 | +1.1 |
| MRMT | Marmara Adasi | 4.43 | 287 | *e*Pn | Pn | 14 33 22.7 | +1.1 |
| YER | Yerkesik | 4.45 | 241 | *e*PN | Pn | 14 33 23.2 | +1.4 |
| YER | Yerkesik | 4.45 | 241 | *e*Pn | Pn | 14 33 23.2 | +1.4 |
| TIRR | Tirgusor | 6.16 | 327 | *e*P | Pn | 14 33 46.1 | +0.9 |
| TIRR | Tirgusor | 6.16 | 327 | *e*P | Pn | 14 33 46.1 | +0.9 |
| MMAI | Mount Meron Ar | 6.63 | 163 | Pn | Pn | 14 33 52.5 | +0.6 |
| | 2.2nm,0.3s,baz=6.2,slow=16,SNR=4.0 | | | | | | |
| MMAI | | | | LR | LR | 14 37 21.9 | |
| | comp=Z,173nm,18.0s,baz=340,slow=47 | | | | | | |
| SANT | Santorini | 6.79 | 246 | *e*Pn | Pn | 14 33 53.7 | -0.3 |
| SANT | Santorini | 6.79 | 246 | *e*Pn | Pn | 14 33 53.7 | -0.3 |
| IDI | Anoyia | 7.75 | 241 | LR | LR | 14 37 34.0 | |
| | comp=Z,120nm,20.4s,baz=82,slow=41 | | | | | | |
| MLR | Muntele Rosu | 8.08 | 321 | Pn | Pn | 14 34 13.9 | +2.1 |
| | baz=152,slow=18 | | | | | | |
| MLR | | | | LR | LR | 14 37 35.6 | |
| | comp=Z,34nm,18.4s,baz=112,slow=40 | | | | | | |
| AKASG | Malin Array Be | 11.63 | 348 | Pn | Pn | 14 34 57.2 | -3.0 |
| | 0.7nm,0.3s,baz=154,slow=13,SNR=3.1 | | | | | | |
| STHS | Stebnicka Huta | 13.12 | 324 | *e*PN | Pn | 14 35 18.0 | -2.6 |
| GEYT | Alibeck | 19.54 | 86 | P | P | 14 36 41.6 | -0.5 |
| | 0.3nm,0.3s,baz=294,slow=11,SNR=5.8 | | | | | | |
| BNI | Bardonecchia | 20.35 | 295 | P | P | 14 36 51.2 | +0.2 |
| | 14nm,1.0s | | | | | | |
| BNI | Bardonecchia | 20.35 | 295 | P | P | 14 36 51.2 | +0.2 |
| | 14nm,1.0s | | | | | | |
| AKTO | Aktyubinsk | 20.68 | 50 | P | P | 14 36 53.1 | -1.3 |
| | 2.7nm,0.7s,baz=250,slow=11,SNR=11 | | | | | | |
| ABKAR | Akbulak array | 21.45 | 54 | *e*P | P | 14 37 01.2 | -1.5 |
| | 2.2nm,0.7s | | | | | | |
| ABKAR | Akbulak array | 21.45 | 54 | *e*P | P | 14 37 01.2 | -1.5 |
| | 2.2nm,0.7s | | | | | | |
| FINES | FINESS Array B | 22.49 | 351 | P | P | 14 37 14.1 | +0.3 |
| | 5.1nm,0.8s,baz=154,slow=11,SNR=6.5 | | | | | | |
| FINES | | | | LR | LR | 14 47 35.9 | |
| | comp=Z,78nm,18.5s,baz=15,slow=41 | | | | | | |
| HFS | Hagfors | 24.08 | 336 | P | P | 14 37 30.1 | +0.4 |
| | 3.0nm,0.8s,baz=104,slow=18,SNR=2.3 | | | | | | |
| HFS | | | | LR | LR | 14 48 45.7 | |
| | comp=Z,55nm,18.7s,baz=124,slow=41 | | | | | | |
| NOA | NORSAR Array B | 25.57 | 335 | LR | LR | 14 49 51.4 | |
| | comp=Z,42nm,21.4s,baz=265,slow=41 | | | | | | |
| ESDC | Sonseca Array | 28.49 | 283 | P | P | 14 38 09.9 | 0.0 |
| | 0.2nm,0.3s,baz=70,slow=10,SNR=3.0 | | | | | | |
| ARCES | ARCESS Array B | 30.47 | 355 | P | P | 14 38 27.0 | 0.0 |
| | 1.5nm,0.8s,baz=173,slow=9.1,SNR=2.9 | | | | | | |
| MKAR | Makanchi Array | 36.14 | 62 | P | P | 14 39 16.9 | +0.3 |
| | 1.1nm,1.0s,baz=246,slow=7.8,SNR=5.1 | | | | | | |
| MKAR | Makanchi Array | 36.14 | 62 | P | P | 14 39 17.0 | +0.3 |
| ZALV | Zalesovo Beam | 37.44 | 50 | P | P | 14 39 27.5 | -0.2 |
| | 0.7nm,0.3s,baz=310,slow=9.0,SNR=4.7 | | | | | | |
| TORD | Torodi Ar. Bea | 38.12 | 235 | P | P | 14 39 33.7 | -0.1 |
| | 2.3nm,0.8s,baz=35,slow=8.1,SNR=14 | | | | | | |
| DBIC | Dimbokro | 47.20 | 236 | P | P | 14 40 47.8 | +0.2 |
| | 6.9nm,1.0s,baz=82,slow=11,SNR=3.1 | | | | | | |
| CMAR | Chiang Mai Arr | 59.97 | 90 | P | P | 14 42 20.2 | -1.0 |
| | 1.0nm,0.8s,baz=305,slow=8.4,SNR=6.6 | | | | | | |
| BOSA | Boshof | 68.07 | 187 | P | P | 14 43 15.2 | +0.9 |
| | 5.2nm,1.1s,baz=5.3,slow=3.7,SNR=4.9 | | | | | | |

*IDC **19** 14:36:53.4±4.2, 7.78S×147.80E, h33km±30km, mb3.9/11, mb1 4.1/14, mb1mx4.0/27, mbtmp4.1/14, ML3.8/3, MS3.1/2, Ms1 3.1/2, ms1mx2.7/26, Error ellipse: s-maj=35.0km s-min=15.0km az=84.0*

*ISCJB **19** 14:36:54.6±0.4, 7.71S±0.04×147.51E±0.08, h52km, mb4.2/11, MS2.9/2, Error ellipse: s-maj=11.4km s-min=6.2km az=7.9*

*NEIC **19** 14:36:56.2±1.2, 7.79S×147.64E, h57km±10km, mb4.2/2, Error ellipse: s-maj=17.1km s-min=7.8km az=79.0*

*AUST **19** 14:36:58.9±0.0, 7.95S×147.74E, h70km, Error ellipse: s-maj=1.5km s-min=1.0km az=310.0*

**ISC 19 14:36:56.1±0.6, 7.75S±0.06×147.6E±0.1, h52km, n44, σ1§20/41, mb4.1/11, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 1.69 | 194 | Pn | | Pn | Pn | 14 37 21.6 | -1.7 |
| | 99nm,0.3s,baz=19,slow=7.0,SNR=117 | | | | | | | | |
| PMG | | | | Lg | | Lg | | 14 37 49.4 | |
| | 383nm,0.3s,baz=22,slow=18,SNR=15 | | | | | | | | |
| PMG | | | | LR | | LR | | 14 38 16.8 | |
| | comp=Z,617nm,19.3s,baz=14,slow=48 | | | | | | | | |
| PMG | Port Moresby | 1.69 | 194 | P | | Pn | Pn | 14 37 23.8 | +0.5 |
| | baz=1.6,SNR=468 | | | | | | | | |
| PMG | Port Moresby | 1.69 | 194 | *e*P | | Pn | Pn | 14 37 23.8 | +0.5 |
| PMG | | | | Lg | | Lg | | 14 37 49.4 | |
| RABL | Rabaul | 5.78 | 53 | P | | Pn | Pn | 14 38 20.6 | +1.1 |
| | baz=5.8,SNR=8.2 | | | | | | | | |
| COEN | Coen | 7.52 | 215 | P | | Pn | Pn | 14 38 43.9 | +0.6 |
| | baz=7.5,SNR=25 | | | | | | | | |
| JAY | Jayapura | 8.58 | 307 | Pn | | Pn | Pn | 14 38 58.8 | +0.9 |
| | 0.7nm,0.3s,baz=172,slow=6.3,SNR=6.1 | | | | | | | | |
| MTSU | Mount Surprise | 10.79 | 197 | P | | Pn | Pn | 14 39 30.3 | +2.2 |
| | baz=11,SNR=11 | | | | | | | | |
| CTA | Charters Tower | 12.33 | 186 | Pn | | Pn | Pn | 14 39 46.9 | -2.2 |
| | 0.1nm,0.3s,baz=344,slow=14,SNR=1.7 | | | | | | | | |
| CTAO | Charters Tower | 12.33 | 186 | *e*P | | Pn | Pn | 14 39 50.5 | +1.4 |
| QIS | Mount Isa | 14.88 | 210 | P | | Pn | Pn | 14 40 24.3 | +0.9 |
| | baz=15,SNR=4.5 | | | | | | | | |
| WRAB | Tennant Creek | 17.62 | 225 | *e*P | | Pn | Pn | 14 40 57.6 | -0.6 |
| | 4.6nm,0.6s | | | | | | | | |
| WRA | Warramunga Arr | 17.64 | 225 | P | | Pn | Pn | 14 40 58.0 | -0.3 |
| | 0.8nm,0.3s,baz=54,slow=13,SNR=35 | | | | | | | | |
| EIDS | Eidsvold | 17.84 | 170 | P | | P | | 14 41 09.6 | +8.7 |
| | baz=18,SNR=4.6 | | | | | | | | |
| RMQ | Roma | 18.67 | 177 | P | | Pn | Pn | 14 41 13.2 | +2.4 |
| | baz=19,SNR=9.2 | | | | | | | | |
| QLP | Quilpie | 18.99 | 189 | P | | Pn | Pn | 14 41 15.1 | +0.4 |
| | baz=19,SNR=13 | | | | | | | | |
| KNRA | Kununurra | 20.01 | 245 | P | | Pn | Pn | 14 41 27.7 | +0.9 |
| | baz=20,SNR=7.5 | | | | | | | | |
| ASAR | Alice Springs | 20.54 | 218 | P | | P | Pn | 14 41 30.2 | -0.3 |
| | 2.6nm,0.5s,baz=52,slow=8.7,SNR=58 | | | | | | | | |
| ASAR | | | | LR | | LR | | 14 48 40.0 | |
| | comp=Z,79nm,20.5s,baz=49,slow=34 | | | | | | | | |
| GUMO | Guam | 21.37 | 353 | LR | | LR | | 14 48 25.4 | |
| | comp=Z,32nm,20.9s,baz=184,slow=32 | | | | | | | | |
| ARMA | Armidale | 22.87 | 171 | P | | P | | 14 41 56.9 | +1.5 |
| | baz=23,SNR=7.1 | | | | | | | | |
| CMSA | Cobar Meteorol | 23.73 | 184 | P | | P | | 14 42 03.7 | +0.1 |
| | baz=24,SNR=24 | | | | | | | | |
| WRKA | Warakurna | 25.18 | 225 | P | | P | | 14 42 15.5 | -1.4 |
| | baz=25,SNR=23 | | | | | | | | |
| YNG | Young | 26.43 | 178 | P | | P | | 14 42 28.6 | +0.5 |
| | baz=26,SNR=11 | | | | | | | | |
| HTT | Hallett | 26.78 | 196 | P | | P | | 14 42 27.2 | -4.1 |
| | baz=27,SNR=6.1 | | | | | | | | |
| ARPS | Mount Arapiles | 29.35 | 189 | P | | P | | 14 42 54.7 | +0.6 |
| | baz=29,SNR=5.1 | | | | | | | | |
| TOO | Toolangi | 29.75 | 183 | P | | P | | 14 42 58.1 | +0.5 |
| | baz=30,SNR=7.2 | | | | | | | | |
| MEEK | Meekatharra | 33.29 | 232 | P | | P | | 14 43 28.2 | -0.8 |
| | baz=33,SNR=9.1 | | | | | | | | |
| MORW | Morawa | 36.46 | 230 | P | | P | | 14 43 56.3 | 0.0 |
| | baz=36,SNR=5.0 | | | | | | | | |
| KLBR | Kellerberrin | 36.52 | 225 | P | | P | | 14 43 56.5 | -0.2 |
| | baz=37,SNR=6.3 | | | | | | | | |
| JNU | Nakatsue | 43.64 | 340 | *e*P | | P | | 14 44 55.6 | 0.0 |
| KSRS | Korea Array | 48.58 | 339 | P | | P | | 14 45 34.5 | +0.2 |
| | 7.6nm,0.7s,baz=156,slow=8.6,SNR=26 | | | | | | | | |
| KSAR | Wonju Array Be | 48.58 | 339 | P | | P | | 14 45 34.5 | +0.1 |
| USRK | Ussuriysk Ar. | 53.59 | 346 | P | | P | | 14 46 11.4 | -0.5 |
| | 2.2nm,0.7s,baz=179,slow=11,SNR=6.0 | | | | | | | | |
| CMAR | Chiang Mai Arr | 54.58 | 299 | P | | P | | 14 46 21.0 | +1.4 |
| | 0.7nm,0.4s,baz=132,slow=6.5,SNR=6.7 | | | | | | | | |
| PETK | Petropavlovsk- | 61.23 | 7 | P | | P | | 14 47 04.7 | -1.0 |
| | 6.1nm,0.9s,baz=187,slow=10,SNR=4.1 | | | | | | | | |
| SONM | Songino Array | 66.20 | 331 | P | | P | | 14 47 39.1 | +0.5 |
| | 0.5nm,0.5s,baz=133,slow=3.2,SNR=3.8 | | | | | | | | |
| VNDA | Vanda | 70.14 | 177 | P | | P | | 14 48 02.7 | 0.0 |
| | 1.9nm,0.6s,baz=328,slow=6.8,SNR=26 | | | | | | | | |
| MKAR | Makanchi Array | 79.20 | 321 | P | | P | | 14 48 55.9 | +0.2 |
| | 0.6nm,0.5s,baz=99,slow=7.3,SNR=8.2 | | | | | | | | |
| ZALV | Zalesovo Beam | 80.78 | 328 | P | | P | | 14 49 04.5 | +0.5 |
| | 0.6nm,0.4s,baz=64,slow=3.4,SNR=2.5 | | | | | | | | |
| MAW | Mawson | 80.86 | 203 | P | | P | | 14 49 03.5 | -0.7 |
| | 1.8nm,0.9s,baz=41,slow=5.2,SNR=4.7 | | | | | | | | |
| QSPA | South Pole Qui | 82.23 | 180 | *e*P | | P | | 14 49 10.7 | -1.0 |
| | 4.8nm,0.8s | | | | | | | | |
| ILAR | Eielson Array | 86.86 | 23 | P | | P | | 14 49 33.9 | -1.0 |
| | 0.9nm,0.7s,baz=250,slow=4.9,SNR=13 | | | | | | | | |
| TORD | Torodi Ar. Bea | 146.03 | 282 | PKPbc | | PKPbc | | 14 56 31.0 | -0.3 |
| | 2.4nm,0.6s,baz=78,slow=3.2,SNR=5 | | | | | | | | |
| BDFB | Brasilia | 152.10 | 146 | PKPbc | | PKPbc | | 14 56 45.9 | -1.0 |
| | 2.3nm,0.5s,baz=177,slow=6.7,SNR=3.9 | | | | | | | | |
| DBIC | Dimbokro | 152.62 | 270 | PKPbc | | PKPbc | | 14 56 47.4 | -0.7 |
| | 3.4nm,0.8s,baz=328,slow=2.9,SNR=4.3 | | | | | | | | |

**KRSC 19 14:51:51.8±0.8, 53.35N×160.59E, h46km±10km, ML3.8, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SPN | Mys Shipunski | 0.42 | 233 | *e*P | | Pn | | 14 52 02.8 | +0.9 |
| SPN | | | | *e*S | | Sn | | 14 52 09.6 | +0.6 |
| NLC | Nalytchevo | 0.77 | 257 | *e*P | | Pn | | 14 52 07.6 | +1.4 |
| NLC | | | | *e*S | | Sn | | 14 52 18.0 | +1.3 |
| KII | Karymskiy | 0.96 | 316 | *e*P | | Pn | | 14 52 09.8 | +0.8 |
| KII | | | | *e*S | | Sn | | 14 52 22.3 | +0.6 |
| SDLR | Sedlovina | 1.02 | 267 | *e*P | | Pn | | 14 52 11.3 | +1.4 |
| SDLR | | | | *e*S | | Sn | | 14 52 24.5 | +1.3 |
| UGLR | Uglovaya | 1.07 | 263 | *e*P | | Pn | | 14 52 12.2 | +1.7 |
| UGLR | | | | *e*S | | Sn | | 14 52 27.1 | +2.8 |
| SMAR | Somma | 1.07 | 266 | *e*P | | Pn | | 14 52 12.0 | +1.3 |
| AVH | Avacha | 1.11 | 266 | *e*P | | Pn | | 14 52 12.9 | +1.9 |
| AVH | | | | *e*S | | Sn | | 14 52 27.4 | +2.1 |
| KRX | Arik | 1.16 | 271 | *e*P | | Pn | | 14 52 13.2 | +1.4 |
| KRX | | | | *e*S | | Sn | | 14 52 27.3 | +0.7 |
| KOK | Koryaka | 1.17 | 268 | *e*P | | Pn | | 14 52 13.4 | +1.5 |
| KOK | | | | *e*S | | Sn | | 14 52 28.0 | +1.2 |
| PET | Petropavlovsk | 1.21 | 255 | *e*P | | Pn | | 14 52 13.5 | +1.3 |
| PET | | | | *e*S | | Sn | | 14 52 28.2 | +0.8 |
| MKZ | Mys Kozlova | 1.38 | 29 | *e*P | | Pn | | 14 52 16.0 | +1.4 |
| MKZ | | | | *e*S | | Sn | | 14 52 32.6 | +0.9 |
| RUS | Russkaya | 1.56 | 235 | *e*P | | Pn | | 14 52 18.1 | +1.1 |
| RUS | | | | *e*S | | Sn | | 14 52 36.6 | +0.7 |
| GNL | Ganaly | 1.62 | 283 | *e*P | | Pn | | 14 52 20.2 | +2.2 |
| GNL | | | | *e*S | | Sn | | 14 52 40.4 | +2.7 |
| MTVR | Mutnovka | 1.69 | 240 | *e*P | | Pn | | 14 52 20.7 | +1.6 |
| MTVR | | | | *e*S | | Sn | | 14 52 40.8 | +1.1 |
| KZV | Kizimen | 1.77 | 355 | *e*P | | Pn | | 14 52 22.4 | +2.2 |
| KZV | | | | *e*S | | Sn | | 14 52 44.0 | +2.3 |
| ASAK | Asacha | 1.90 | 240 | *e*P | | Pn | | 14 52 24.1 | +2.4 |
| ASAK | | | | *e*S | | Sn | | 14 52 46.5 | +2.0 |
| TUMR | Tumrok | 1.95 | 353 | *e*P | | Pn | | 14 52 25.3 | +2.7 |
| TUMR | | | | *e*S | | Sn | | 14 52 49.5 | +3.5 |
| APC | Apacha | 2.11 | 260 | *e*P | | Pn | | 14 52 27.4 | +2.9 |
| APC | | | | *e*S | | Sn | | 14 52 52.3 | +2.8 |
| ESO | Esso | 2.80 | 338 | *e*P | | Pn | | 14 52 36.8 | +2.7 |
| ESO | | | | *e*S | | Sn | | 14 53 09.2 | +2.5 |
| PAU | Pauzhetka | 2.98 | 232 | *e*P | | Pn | | 14 52 40.9 | +4.4 |
| SRDR | Sredinnyy | 3.02 | 351 | *e*P | | Pn | | 14 52 40.9 | +3.8 |
| KBTR | Krutoberegovo | 3.14 | 23 | *e*P | | Pn | | 14 52 41.4 | +2.7 |
| KBTR | | | | *e*S | | Sn | | 14 53 20.0 | +5.1 |
| SKR | Severo-Kuril's | 3.84 | 228 | *e*S | | Sn | | 14 53 36.1 | +4.0 |

*ISK **19** 14:52:00.3, 39.41N×33.16E, h5km, MD2.6*

*CSEM **19** 14:52:01.3±0.2, 39.40N×33.14E, h2km, MD2.6, Error ellipse: s-maj=4.1km s-min=3.9km az=103.0*

*DDA **19** 14:52:01.0, 39.43N×33.10E, h5km, Md2.8*

**ISC 19 14:52:01.5±1.1, 39.40N±0.02×33.12E±0.02, h2km±10km, n34, σ0§67/52, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| AFSR | Af¨ar-Bala (A | 0.06 | 318 | PG | | Pg | | 14 52 02.0 | -0.6 |
| AFSR | Af¨ar-Bala (A | 0.06 | 318 | *i* Pg | | Pg | | 14 52 02.1 | -0.6 |
| BBAL | Bala | 0.14 | 0 | *i* P | | Pg | | 14 52 03.8 | -0.5 |
| BBAL | | | | *i* S | | Sg | | 14 52 06.4 | +0.3 |
| BBAL | Bala | 0.14 | 0 | P | | Pg | | 14 52 03.8 | -0.5 |
| BBAL | | | | S | | Sg | | 14 52 06.4 | +0.3 |
| KAMT | Kaman | 0.46 | 94 | *e*PG | | Pg | | 14 52 09.8 | -0.5 |
| KAMT | | | | *e*SG | | Sg | | 14 52 16.9 | +0.7 |
| KAMT | Kaman | 0.46 | 94 | *e*Pg | | Pg | | 14 52 09.8 | -0.5 |
| KAMT | | | | *e*Sg | | Sg | | 14 52 16.9 | +0.7 |
| SERE | Sereflikochisa | 0.57 | 143 | *e*PG | | Pg | | 14 52 12.7 | +0.3 |
| SERE | Sereflikochisa | 0.57 | 143 | *e*Pg | | Pg | | 14 52 12.7 | +0.3 |
| YAYX | Yaylak | 0.71 | 131 | *e*PG | | Pg | | 14 52 14.9 | -0.1 |
| YAYX | | | | *e*SG | | Sg | | 14 52 24.9 | +0.7 |
| YAYX | Yaylak | 0.71 | 131 | *e*Pg | | Pg | | 14 52 14.9 | -0.1 |
| YAYX | | | | *e*Sg | | Sg | | 14 52 24.9 | +0.7 |
| CHBY | Cihanbeyli | 0.84 | 193 | *e*PG | | Pg | | 14 52 16.9 | -0.7 |
| CHBY | Cihanbeyli | 0.84 | 193 | *e*Pg | | Pg | | 14 52 16.9 | -0.7 |
| CDAG | Cicekdag | 0.99 | 77 | *i* P | | Pg | | 14 52 19.3 | -1.2 |
| CDAG | | | | *i* S | | Sb | | 14 52 35.0 | 0.0 |
| CDAG | Cicekdag | 0.99 | 77 | P | | Pg | | 14 52 19.3 | -1.2 |
| CDAG | | | | S | | Sb | | 14 52 35.0 | 0.0 |
| ELDT | Eldivan | 1.11 | 12 | *i* P | | Pg | | 14 52 22.5 | -0.3 |
| ELDT | | | | *i* S | | Sb | | 14 52 38.7 | +0.2 |
| ELDT | Eldivan | 1.11 | 12 | P | | Pg | | 14 52 22.5 | -0.3 |
| ELDT | | | | S | | Sb | | 14 52 38.7 | +0.2 |
| KDHN | Kadinhani | 1.18 | 222 | *i* P | | Pg | | 14 52 24.1 | 0.0 |
| KDHN | | | | *i* S | | Sn | | 14 52 42.1 | +0.3 |
| KDHN | Kadinhani | 1.18 | 222 | P | | Pg | | 14 52 24.1 | 0.0 |
| KDHN | | | | S | | Sn | | 14 52 42.1 | +0.3 |
| SVRH | Sivrihisar-ESK | 1.24 | 273 | *e*PN | | Pn | | 14 52 25.8 | -0.1 |
| SVRH | Sivrihisar-ESK | 1.24 | 273 | *e*P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BAYT** | **Ayd¨–ntepe-Bay** | **0.90** | **249** | *e*Pg | **Pg** | **14 57 34.9** | **-0.1** |
| BAYT | | | | *e*Sg | **Sb** | **14 57 47.8** | **-0.1** |
| **GUMT** | **Gumushane** | **1.37** | **260** | *e*PN | **Pn** | **14 57 43.1** | **0.0** |
| **GUMT** | **Gumushane** | **1.37** | **260** | *e*Pn | **Pn** | **14 57 43.2** | **0.0** |
| **KELT** | **Kelkit** | **1.62** | **250** | *i* P | **Pb** | **14 57 48.1** | **+0.1** |
| KELT | | | | *i* S | **Sg** | **14 58 09.9** | **+0.1** |
| **KELT** | **Kelkit** | **1.62** | **250** | P | **Pb** | **14 57 48.1** | **+0.1** |
| KELT | | | | S | **Sg** | **14 58 09.9** | **+0.1** |

*NEIC* ***19*** *15:11:24.9, 32°.30N×115°.37W, h6km, ML2.5(PAS), ML2.9(ECX), After ECX.*

**ECX 19 15:11:24.9±0.5, 32°.30N×115°.36W, h6km, MD2.5, ML2.7, 13C-2D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CPBX** | **Cerro Prieto** | **0.13** | **21**⇑ | *e*P | Pg | 15 11 27.5 | -0.1 |
| CPBX | | | | *e*S | Sg | 15 11 29.3 | -0.2 |
| CPBX | | | ⇑ | *e* | | 15 11 31.9 | |
| CPBX | | | | IAML | | 15 11 31.9 | |
| | comp=N,7μm,0.1s | | | | | | |
| **MBIG** | **Mexicali** | **0.18** | **51**⇑ | *e*P | Pg | 15 11 28.6 | +0.1 |
| **SGL** | **Mount Signal** | **0.47** | **319**⇑ | *i*P | Pg | 15 11 33.1 | -0.9 |
| SGL | | | ⇑ | *i*P | Pb | 15 11 33.1 | -2.5 |
| **EMSC** | **East Mesa** | **0.54** | **36** | *e*P | Pg | 15 11 34.6 | -0.7 |
| EMSC | | | | *e*P | Pb | 15 11 34.9 | -2.0 |
| **WESC** | **Westside Schoo** | **0.56** | **326**⇑ | *e*P | Pg | 15 11 35.0 | -0.7 |
| **YUH** | **Yuha Desert** | **0.59** | **306**⇑ | *i*P | Pg | 15 11 35.1 | -1.2 |
| YUH | | | ⇑ | *i*P | Pg | 15 11 35.1 | -1.2 |
| **COA** | **Coachella** | **0.60** | **19** | *e*P | Pg | 15 11 35.6 | -0.8 |
| COA | | | | *e*P | Pb | 15 11 35.7 | -2.1 |
| **RDX** | **Rancho Dawling** | **0.62** | **233**⇑ | *e*P | Pg | 15 11 35.9 | -1.2 |
| RDX | | | | *e*S | Sg | 15 11 44.2 | -1.0 |
| RDX | | | ⇓ | *e* | | 15 11 46.3 | |
| RDX | | | | IAML | | 15 11 46.3 | |
| | comp=N,370nm,0.4s | | | | | | |
| **RMX** | **La Rumorosa** | **0.68** | **297**⇑ | *e*P | Pg | 15 11 36.3 | -1.9 |
| RMX | | | | *e*S | Sg | 15 11 45.0 | -2.2 |
| RMX | | | | IAML | | 15 11 47.1 | |
| | comp=N,377nm,0.2s | | | | | | |
| RMX | | | ⇑ | *e* | | 15 11 47.1 | |
| **IBP** | **Imperial Bould** | **0.72** | **301**⇑ | *e*P | Pg | 15 11 37.5 | -1.3 |
| IBP | | | | *e*S | Sg | 15 11 47.1 | -1.2 |
| **GLA** | **Glamis** | **0.88** | **31** | *e*Pg | Pg | 15 11 39.6 | -2.3 |
| GLA | | | | *e*Sg | Sg | 15 11 49.5 | -3.8 |
| **ZAX** | **El Zacaton** | **1.10** | **225** | *e*P | Pg | 15 11 44.0 | -2.2 |
| **CBX** | **Cerro Bola** | **1.10** | **271** | *e*P | Pg | 15 11 44.2 | -2.1 |
| CBX | | | | *e*S | Sg | 15 11 59.2 | -1.6 |
| **BAR** | **Barrett** | **1.17** | **289**⇑ | *e*P | Pg | 15 11 45.4 | -2.1 |
| BAR | | | | *e*S | Sg | 15 12 00.9 | -1.9 |
| **BAR** | **Barrett** | **1.17** | **289** | *e*Pg | Pg | 15 11 44.9 | -2.6 |
| BAR | | | | *e*Sg | Sg | 15 12 00.6 | -2.1 |
| **SPX** | **San Pedro Mart** | **1.25** | **184**⇓ | *e*P | Pb | 15 11 46.5 | -2.9 |
| **PFO** | **Pinyon Flat Ob** | **1.60** | **325** | *e*Pn | Pn | 15 11 49.7 | -4.2 |
| **214A** | **Organ Pipe Nat** | **2.19** | **98** | *e*Pn | Pn | 15 12 00.8 | -1.2 |
| 214A | | | | *e*Pg | Pg | 15 12 06.4 | -0.6 |

*IDC* ***19*** *15:19:01.1±1.5, 4°.45N×95°.91E, h0km, mb3.8/6, mb1 3.9/8, mb1mx3.7/44, mbtmp3.7/8, ML3.6/2, MS3.5/6, Ms1 3.5/6, ms1mx3.1/45, Error ellipse: s-maj=55.6km s-min=17.6km az=52.0*

*ISCJB* ***19*** *15:19:04.9±0.7, 4°.72N±0°.05×96°.12E±0°.07, h31km, mb3.9/7, MS3.5/5, Error ellipse: s-maj=9.9km s-min=6.6km az=162.1*

*DJA* ***19*** *15:19:04.3±0.8, 5°.N±3°×9°.6E±°, h10km, M4.6/12, mb4.5/3, mB5.0/1, MLv4.6/12, Mw(mB)4.2/1*

*NEIC* ***19*** *15:19:08.1±1.4, 4°.65N×96°.31E, h44km±13km, mb4.4/1, Error ellipse: s-maj=20.0km s-min=9.1km az=73.0*

**ISC 19 15:19:06.2±0.8, 4°.63N±0°.05×96°.21E±0°.07, h31km, n28, σ1ᵍ91/26, mb3.9/7, MS3.5/5, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLSI** | **Meulaboh, Aceh** | **0.41** | **152** | P | **Pb** | **15 19 12.8** | **-2.6** |
| MLSI | | | | S | **Sb** | **15 19 18.9** | **-2.7** |
| **LHMI** | **Lhok Sumawe** | **0.94** | **51** | P | **Pn** | **15 19 22.2** | **-1.1** |
| LHMI | | | | S | **Sn** | **15 19 35.0** | **-0.8** |
| **LHMI** | **Lhok Sumawe** | **0.94** | **51** | *e*Pn | **Pn** | **15 19 22.3** | **-1.1** |
| **KCSI** | **Kotacane, Aceh** | **1.91** | **125** | P | **Pb** | **15 19 39.5** | **-0.9** |
| KCSI | | | | S | **Sb** | **15 20 04.4** | **+0.5** |
| **TSI** | **Tuntungan** | **2.60** | **116** | P | **Pb** | **15 19 50.9** | **-1.3** |
| TSI | | | | S | **Sb** | **15 20 26.9** | **+3.1** |
| **PSI** | **Prapat** | **3.26** | **124** | Pn | **Pn** | **15 19 58.1** | **+2.7** |
| | 10nm,0.3s,baz=310,slow=15,SNR=27 | | | | | | |
| PSI | | | | Sn | **Sb** | **15 20 41.1** | **-1.8** |
| | 15nm,0.3s,baz=316,slow=20,SNR=4.2 | | | | | | |
| **GSI** | **Gunungsitoli** | **3.58** | **158** | P | **Pn** | **15 20 01.5** | **+1.9** |
| GSI | | | | S | **Sb** | **15 20 47.1** | **-4.8** |
| **GSI** | **Gunungsitoli** | **3.58** | **158** | *e*P | **Pn** | **15 20 00.4** | **+0.8** |
| **KULM** | **Kulim** | **4.47** | **81** | *e*Pn | **Pn** | **15 20 11.8** | **-0.1** |
| **IPM** | **Ipoh** | **4.80** | **92** | *e*Pn | **Pn** | **15 20 16.0** | **-0.5** |
| **MNSI** | **Mandailing Nat** | **5.08** | **138** | P | **Pn** | **15 20 23.0** | **+2.6** |
| | 82nm,0.5s,1μm0.9nm | | | | | | |
| **SISI** | **Saibi** | **6.58** | **154** | P | **Pn** | **15 20 42.5** | **+1.5** |
| **CMAR** | **Chiang Mai Arr** | **14.00** | **11** | Pn | **Pn** | **15 22 24.9** | **+2.3** |
| | 0.1nm,0.3s,baz=205,slow=13,SNR=4.4 | | | | | | |
| **PALK** | **Pallekele** | **15.65** | **280** | LR | LR | 15 28 26.4 | |
| | comp=Z,112nm,18.7s,baz=116,slow=37 | | | | | | |
| **KAPI** | **Kappang** | **25.39** | **112** | LR | LR | 15 35 27.6 | |
| | comp=Z,79nm,18.3s,baz=272,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.62** | **243** | T | T | 15 51 51.1 | |
| | baz=62,slow=75,SNR=6.6 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.62** | **243** | T | T | 15 51 51.1 | |
| | baz=62,slow=75,SNR=9.2 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.64** | **243** | T | T | 15 51 51.1 | |
| | baz=62,slow=75,SNR=7.3 | | | | | | |
| **AAK** | **Ala-Archa** | **42.48** | **336** | LR | LR | 15 45 19.7 | |
| | comp=Z,80nm,20.0s,baz=155,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.69** | **346** | P | **P** | **15 27 09.1** | **+0.7** |
| | 0.5nm,0.8s,baz=167,slow=9.8,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **43.92** | **10** | P | **P** | **15 27 10.8** | **+0.4** |
| | 0.5nm,0.6s,baz=190,slow=7.3,SNR=2.0 | | | | | | |
| SONM | | | | LR | LR | 15 47 16.3 | |
| | comp=Z,58nm,19.0s,baz=274,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.73** | **124** | P | **P** | **15 27 16.5** | **-0.6** |
| | 1.7nm,0.5s,baz=301,slow=9.2,SNR=12 | | | | | | |
| **WRAB** | **Tennant Creek** | **44.73** | **124** | *e*P | **P** | **15 27 16.7** | **-0.4** |
| | 3.1nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **46.28** | **129** | P | **P** | **15 27 29.9** | **+0.6** |
| | 2.6nm,0.9s,baz=307,slow=7.7,SNR=18 | | | | | | |
| **GEYT** | **Alibeck** | **47.98** | **319** | LR | LR | 15 50 56.7 | |
| | comp=Z,74nm,18.2s,baz=35,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.03** | **351** | P | **P** | **15 27 58.3** | **+0.5** |
| | 0.5nm,0.4s,baz=181,slow=8.5,SNR=5.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **50.40** | **33** | LR | LR | 15 51 46.2 | |
| | comp=Z,43nm,18.5s,baz=51,slow=39 | | | | | | |
| **BRTR** | **Keskin Array B** | **66.10** | **312** | P | **P** | **15 29 50.3** | **-0.6** |
| | 0.5nm,0.6s,baz=94,slow=6.1,SNR=2.6 | | | | | | |

**DJA 19 15:23:23.9±0.9, 9°S±10°×11°8E±°, h15km±6km, M3.6/9, MLv3.6/9, Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TWSI** | **Taliwang, Sumb** | **1.37** | **275** | P | Pn | 15 23 47.3 | -1.2 |
| **WSI** | **Waingapu** | **2.17** | **112** | P | Pg | 15 24 04.9 | -0.6 |
| WSI | | | | S | Sg | 15 24 36.5 | +2.9 |
| **IGBI** | **Denpasar** | **3.08** | **271** | P | Pn | 15 24 13.6 | +1.6 |
| IGBI | | | | S | Sn | 15 24 49.9 | +1.3 |
| **SRBI** | **Singaraja** | **3.11** | **284** | P | Pn | 15 24 13.0 | +0.5 |
| **BKSI** | **Bulukumba** | **3.97** | **28** | P | Pn | 15 24 24.3 | 0.0 |
| **JAGI** | **Jajag, Banyuwa** | **4.08** | **275** | P | Pn | 15 24 26.6 | +0.8 |
| JAGI | | | | S | Sn | 15 25 13.6 | +0.2 |

*GUC* ***19*** *15:32:33.4±0.4, 33°.85S×72°.55W, h22km±4km, ML3.5*

**ISC 19 15:32:31.7±2.7, 33.88S±0.05×72.6W±0.1, h13km±11km, n18, σ1ᵍ35/22, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.71** | **137** | *i* P | **Pg** | **15 32 45.8** | **+0.3** |
| CHPI | | | | *i* S | **Sg** | **15 32 55.2** | **+0.4** |
| **NICH** | **Los Niches** | **1.59** | **135** | *i* P | **Pn** | **15 32 60.0** | **+0.4** |
| NICH | | | | *i* S | **Sn** | **15 33 20.0** | **0.0** |
| **ANTU** | **Antumapu** | **1.66** | **80** | AML | AML | 15 33 25.6 | |
| | comp=E,911nm,0.8s | | | | | | |
| **TALC** | **Talca** | **1.71** | **153** | *i* P | **Pn** | **15 33 01.8** | **+0.6** |
| TALC | | | | *i* S | **Sn** | **15 33 23.4** | **+0.4** |
| **PEL** | **Peldehue** | **1.75** | **66** | *i* P | **Pn** | **15 33 01.9** | **+0.1** |
| PEL | | | | *i* S | **Sn** | **15 33 23.4** | **-0.5** |
| PEL | | | | AML | AML | 15 33 34.1 | |
| | comp=N,2μm,0.4s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.78** | **75** | *i* P | **Pn** | **15 33 02.2** | **0.0** |
| CLCH | | | | *i* S | **Sn** | **15 33 24.3** | **-0.4** |
| CLCH | | | | AML | AML | 15 33 39.5 | |
| | comp=E,532nm,0.5s | | | | | | |
| **AUSP** | **Uspallata** | **3.15** | **59** | *e*P | **Pb** | **15 33 25.9** | **-1.8** |
| AUSP | | | | *e*S | **Sg** | **15 34 13.9** | **+0.9** |
| **ARCO** | **CERRO ARCO** | **3.23** | **72** | *e*P | **Pb** | **15 33 27.4** | **-1.6** |
| ARCO | | | | IAML | | 15 33 33.3 | |
| | comp=Z,134nm,0.3s | | | | | | |
| ARCO | | | | *e*S | **Sg** | **15 34 16.4** | **+1.0** |
| **AAGR** | **Agrelo** | **3.24** | **77** | *e*P | **Pb** | **15 33 27.6** | **-1.6** |
| **ASAL** | **Salagasta** | **3.40** | **69** | *e*P | **Pb** | **15 33 29.4** | **-2.4** |
| ASAL | | | | *e*S | **Sg** | **15 34 20.4** | **-0.4** |
| **RTLS** | **Leoncito** | **3.46** | **54** | *e*P | Pb | 15 33 29.8 | -3.2 |
| **RTCV** | **Cerro Valdivia** | **3.95** | **61** | *e*P | Pn | 15 33 36.2 | +4.1 |
| **RTLL** | **Cerro Villicun** | **4.30** | **55** | *e*P | **Pn** | **15 33 39.2** | **+2.3** |
| **CFAA** | **Coronel Fontan** | **4.31** | **59** | *e*P | **Pn** | **15 33 39.2** | **+2.2** |
| CFAA | | | | *e*S | **Sb** | **15 34 40.3** | **+1.1** |
| **AMOG** | **MOGNA** | **4.53** | **51** | *e*P | **Pn** | **15 33 42.1** | **+2.0** |
| **ACAN** | **Cantantal** | **4.80** | **72** | *e*P | Pn | 15 33 48.4 | +4.6 |
| **AVFE** | **Valle Fertil** | **5.40** | **55** | *e*P | Pn | 15 33 55.4 | +3.3 |
| AVFE | | | | IAML | | 15 35 15.2 | |
| | comp=Z,12nm,0.5s | | | | | | |
| **VCA** | **Vinchina** | **6.35** | **37** | *e*P | **Pn** | **15 34 05.1** | **0.0** |

*IDC* ***19*** *15:43:31.7±3.4, 36°.35N×70°.38E, h180km±33km, mb3.5/4, mb1 3.4/9, mb1mx3.0/53, mbtmp3.9/9, MS3.6/2, Ms1 3.6/2, ms1mx2.8/33, Error ellipse: s-maj=40.2km s-min=20.6km az=138.0*

*ISCJB* ***19*** *15:43:33.0±0.4, 36°.56N±0°.03×70°.37E±0°.05, h204km, mb3.5/3, Error ellipse: s-maj=5.7km s-min=4.5km az=157.7*

*NNC* ***19*** *15:43:37.5±0.8, 36°.84N×70°.39E, h188km±6km, mb3.0, mpv4.0, Error ellipse: s-maj=8.9km s-min=4.3km az=162.0*

**ISC 19 15:43:33.9±0.7, 36°.57N±0°.07×70°.36E±0°.06, h204km, n40, σ1ᵍ27/47, mb3.9/3, 8C-8D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.54** | **332** | ⇑P | **Pn** | **15 44 18.5** | **-0.1** |
| | 19nm,0.3s | | | | | | |
| DZET | | | | ⇓S | **S** | **15 44 51.3** | **-1.6** |
| | 343nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.23** | **35** | ⇑P | **Pn** | **15 44 38.9** | **0.0** |
| | 3.8nm,0.2s | | | | | | |
| SFK | | | | ⇓S | **S** | **15 45 28.5** | **-1.2** |
| | 40nm,0.3s | | | | | | |
| **AML** | **Almayashu** | **6.12** | **24** | P | **Pn** | **15 45 03.3** | **+0.1** |
| | SNR=47 | | | | | | |
| **MNAS** | **Manas** | **6.14** | **15** | ⇑P | **Pn** | **15 45 03.3** | **+0.3** |
| | 22nm,0.8s | | | | | | |
| MNAS | | | | ⇓S | **S** | **15 46 11.1** | **-2.3** |
| | 48nm,0.4s | | | | | | |
| **UCH** | **Uchtor** | **6.50** | **28** | P | **Pn** | **15 45 08.2** | **+0.1** |
| | SNR=39 | | | | | | |
| **KK31** | **Karatay Array** | **6.52** | **1** | P | **Pn** | **15 45 07.8** | **-0.2** |
| | 1.9nm,0.2s,baz=199,slow=18,SNR=83 | | | | | | |
| KK31 | | | | ⇑S | **S** | **15 46 19.3** | **-3.1** |
| | 5.7nm,0.6s,baz=188,slow=22,SNR=5.1 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.63** | **22** | P | **Pn** | **15 45 09.9** | **+0.5** |
| | SNR=23 | | | | | | |
| **AAK** | **Ala-Archa** | **6.84** | **27** | ⇓P | **Pn** | **15 45 12.5** | **+0.3** |
| | 5.6nm,0.3s | | | | | | |
| AAK | | | | ⇑S | **S** | **15 46 28.0** | **-2.1** |
| | 28nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **6.84** | **27** | P | **Pn** | **15 45 12.6** | **+0.4** |
| | 5.8nm,0.3s,baz=200,slow=9.6,SNR=52 | | | | | | |
| AAK | | | | S | **S** | **15 46 28.2** | **-2.0** |
| | 1.0nm,0.3s,baz=338,slow=19,SNR=3.9 | | | | | | |
| **AAK** | **Ala-Archa** | **6.84** | **27** | P | **Pn** | **15 45 12.6** | **+0.4** |
| | SNR=24 | | | | | | |
| **KBK** | **Karagaybulak** | **7.03** | **29** | P | **Pn** | **15 45 15.3** | **+0.6** |
| | SNR=9.8 | | | | | | |
| **CHMS** | **Chumysh** | **7.25** | **26** | P | **Pn** | **15 45 17.8** | **+0.4** |
| | SNR=8.5 | | | | | | |
| **USP** | **Ospenovka** | **7.41** | **24** | P | **Pn** | **15 45 19.7** | **+0.3** |
| | SNR=12 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.51** | **31** | ⇓P | **Pn** | **15 45 21.0** | **0.0** |
| | 19nm,0.5s | | | | | | |
| TKM2 | | | | ⇓S | **S** | **15 46 43.1** | **-3.0** |
| | 11nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.51** | **31** | P | **Pn** | **15 45 21.1** | **0.0** |
| | SNR=29 | | | | | | |
| **GEYT** | **Alibeck** | **9.85** | **282** | P | **Pn** | **15 45 49.7** | **-1.5** |
| | 0.3nm,0.3s,baz=94,slow=5.9,SNR=5.3 | | | | | | |
| GEYT | | | | S | **S** | **15 47 39.2** | **-2.3** |
| | 0.2nm,0.3s,baz=97,slow=34,SNR=2.6 | | | | | | |
| **MK31** | **Makanchi Array** | **13.54** | **37** | P | **Pn** | **15 46 38.3** | **+0.4** |
| | 2.9nm,0.7s,baz=216,slow=11,SNR=16 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.54** | **37** | P | **Pn** | **15 46 38.5** | **+0.6** |
| | 0.3nm,0.3s,baz=211,slow=11,SNR=14 | | | | | | |
| **KOLN** | **Koldanda** | **14.23** | **124** | *e*P | **Pn** | **15 46 47.3** | **+0.5** |
| | 3.2nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **14.78** | **332** | ⇓P | **P** | **15 46 56.1** | **+2.3** |
| | 0.5nm,0.4s,baz=145,slow=14,SNR=20 | | | | | | |
| **GKN** | **Gorkha** | **14.78** | **121** | *e*P | **Pn** | **15 46 53.2** | **-0.3** |
| | 8.6nm,0.4s | | | | | | |
| GKN | | | | *e*S | S | 15 49 24.4 | -13 |
| **DMN** | **Daman** | **15.35** | **121** | *e*P | **Pn** | **15 47 00.5** | **-0.1** |
| | 6.2nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **15.36** | **121** | *e*P | **Pn** | **15 46 59.7** | **-0.9** |
| | 6.6nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **15.57** | **121** | *e*P | **Pn** | **15 47 03.5** | **+0.3** |
| | 7.4nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **15.59** | **121** | *e*P | **P** | **15 47 03.0** | **-0.4** |
| | 7.1nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **15.70** | **119** | *e*P | **P** | **15 47 03.5** | **-1.2** |
| **VOSK** | **Vostochnaya** | **16.16** | **1** | ⇑P | **Pn** | **15 47 10.8** | **+1.1** |
| | 0.8nm,0.5s | | | | | | |
| **ZRNK** | **Zerenda** | **16.41** | **357** | ⇑P | **Pn** | **15 47 13.8** | **+1.1** |
| | 0.9nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **16.45** | **0** | P | **Pn** | **15 47 13.4** | **+0.1** |
| | 0.4nm,0.3s,baz=181,slow=12,SNR=6.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.46** | **331** | P | **Pn** | **15 47 15.2** | **+1.8** |
| | 0.1nm,0.3s,baz=138,slow=15,SNR=3.3 | | | | | | |
| **BRVK** | **Borovoye** | **16.48** | **360** | ⇑P | **Pn** | **15 47 15.4** | **+1.8** |
| | 6.3nm,0.9s | | | | | | |
| **RAMN** | **Ramite** | **16.80** | **120** | *e*P | **P** | **15 47 16.4** | **-0.3** |
| | 3.4nm,0.2s | | | | | | |
| **CHKZ** | **Chkalovo** | **17.11** | **1** | ⇓P | **Pn** | **15 47 21.4** | **+0.5** |
| | 1.2nm,0.8s | | | | | | |
| **TAPN** | **Taplejung** | **17.34** | **117** | *e*P | **P** | **15 47 21.5** | **-1.1** |
| **ODAN** | **Odare** | **17.41** | **119** | *e*P | **Pn** | **15 47 24.9** | **-0.2** |
| | 8.9nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.07** | **25** | P | **P** | **15 47 52.8** | **+1.3** |
| | 2.0nm,0.4s,baz=220,slow=12,SNR=17 | | | | | | |
| **ASF** | **Jabal al Asfar** | **27.88** | **271** | LR | LR | 16 03 40.9 | |
| | comp=Z,75nm,21.9s,baz=338,slow=43 | | | | | | |
| **FINES** | **FINESS Array B** | **37.13** | **326** | P | **P** | **15 50 26.7** | **+2.0** |
| | 2.7nm,0.8s,baz=120,slow=13,SNR=3.4 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **48.50** | **227** | P | **P** | **15 51 56.1** | **-0.5** |
| | 1.4nm,0.2s,baz=27,slow=9.0,SNR=3.8 | | | | | | |
| KMBO | | | | LR | LR | 16 14 48.1 | |
| | comp=Z,116nm,18.7s,baz=94,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.20** | **268** | P | **P** | **15 53 53.2** | **-0.5** |
| | 0.1nm,0.3s,baz=40,slow=6.3,SNR=2.9 | | | | | | |

*ISK* ***19*** *15:48:49.3, 39°.89N×40°.10E, h9km, MD2.6*

*CSEM* ***19*** *15:48:49.9±0.6, 39°.86N×40°.11E, h5km, MD2.6, Error ellipse: s-maj=12.8km s-min=9.3km az=141.0*

*ISCJB* ***19*** *15:48:50.5±0.7, 39°.89N±0°.04×40°.10E±0°.05, h6km±8km, Error ellipse: s-maj=7.8km s-min=5.1km az=37.3*

*DDA* ***19*** *15:48:50.3, 39°.91N×40°.11E, h7km, Md2.6*

**ISC 19 15:48:50.3±1.1, 39.89N±0°.03×40.10E±0°.03, h11km±13km, n14, σ0ᵍ73/23, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KOPT** | **Kop Dagi** | **0.33** | **67** | *i* P | **Pg** | **15 48 57.3** | **+0.3** |
| KOPT | | | | *i* S | **Sb** | **15 49 04.2** | **+0.4** |
| **KOPT** | **Kop Dagi** | **0.33** | **67** | P | **Pg** | **15 48 57.3** | **+0.3** |
| KOPT | | | | S | **Sb** | **15 49 04.2** | **+0.4** |
| **ERZN** | **Erzincan** | **0.42** | **224** | *e*PG | **Pg** | **15 48 58.2** | **-0.5** |
| ERZN | | | | *e*SG | **Sg** | **15 49 04.3** | **0.0** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **0.50** | **3** | *e*PG | **Pg** | **15 48 59.8** | **-0.4** |
| BAYT | | | | *e*SG | **Sg** | **15 49 07.1** | **+0.1** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **0.50** | **3** | *e*Pg | **Pg** | **15 48 59.8** | **-0.4** |
| BAYT | | | | *e*Sg | **Sg** | **15 49 07.1** | **+0.1** |
| **KELT** | **Kelkit** | **0.70** | **292** | *i* P | **Pb** | **15 49 04.5** | **-0.2** |
| KELT | | | | *i* S | **Sb** | **15 49 15.2** | **+0.7** |
| **KELT** | **Kelkit** | **0.70** | **292** | P | **Pb** | **15 49 04.5** | **-0.2** |
| KELT | | | | S | **Sb** | **15 49 15.2** | **+0.7** |
| **GUMT** | **Gumushane** | **0.74** | **320** | *e*PG | **Pg** | **15 49 04.1** | **-0.6** |
| **GUMT** | **Gumushane** | **0.74** | **320** | *e*Pg | **Pg** | **15 49 04.1** | **-0.6** |
| **MACK** | **Trabzon** | **1.08** | **346** | P | Pb | 15 49 03.1 | -8.0 |
| MACK | | | | S | **Sg** | **15 49 25.3** | **0.0** |
| **PTK** | **Pertek** | **1.14** | **209** | *e*PN | **Pb** | **15 49 11.0** | **-1.2** |
| **PTK** | **Pertek** | **1.14** | **209** | *e*Pn | **Pb** | **15 49 11.0** | **-1.2** |
| **KEMA** | **Kemaliye** | **1.39** | **244** | *i* P | **Pb** | **15 49 16.3** | **-0.1** |
| KEMA | | | | *i* S | **Sg** | **15 49 36.6** | **+1.5** |
| **KEMA** | **Kemaliye** | **1.39** | **244** | P | **Pb** | **15 49 16.3** | **-0.1** |
| KEMA | | | | S | **Sg** | **15 49 36.5** | **+1.5** |

*ISCJB* ***19*** *15:49:20.4±0.5, 32°.42N±0°.03×115°.21W±0°.03, h13km±3km, Error ellipse: s-maj=4.8km s-min=3.8km az=40.9*

*NEIC* ***19*** *15:49:22.0±0.5, 32°.38N×115°.20W, h7km, ML3.0(ECX), ML3.1(PAS), After ECX.*

*ECX* ***19*** *15:49:22.0±0.5, 32°.38N×115°.20W, h7km, MD2.9, ML3.1*

**ISC 19 15:49:20.3±0.9, 32°.38N±0°.03×115°.21W±0°.03, h14km±4km, n34, σ0ᵍ77/41, 4C-6D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.03** | **22** | *e*P | **Pg** | **15 49 22.2** | **-0.6** |
| MBIG | | | | *e*S | **Sg** | **15 49 23.9** | **-0.6** |
| **CPBX** | **Cerro Prieto** | **0.09** | **296**⇑ | *e*P | **Pb** | **15 49 23.8** | **+0.5** |
| CPBX | | | | *e*S | **Sg** | **15 49 25.9** | **+0.6** |
| CPBX | | | ⇓ | *e* | | 15 49 26.4 | |
| CPBX | | | | IAML | | 15 49 26.4 | |
| | comp=N,21μm,0.2s | | | | | | |
| CPBX | | | | IAML | | 15 49 26.8 | |
| | comp=E,34μm,0.3s | | | | | | |
| CPBX | | | ⇓ | *e* | | 15 49 26.8 | |
| **EMSC** | **East Mesa** | **0.41** | **28**⇓ | *i*P | **Pb** | **15 49 29.3** | **0.0** |
| **DREC** | **Desert Rsrch C** | **0.47** | **335** | *e*P | **Pb** | **15 49 30.6** | **+0.2** |
| **COA** | **Coachella** | **0.49** | **9**⇓ | *i*P | **Pb** | **15 49 30.8** | **0.0** |
| **SGL** | **Mount Signal** | **0.51** | **302** | *e*P | **Pg** | **15 49 30.9** | **+0.4** |
| **YUH** | **Yuha Desert** | **0.66** | **294** | *e*P | **Pg** | **15 49 33.3** | **+0.1** |
| **GLA** | **Glamis** | **0.74** | **26** | P | **Pg** | **15 49 34.4** | **-0.5** |
| | baz=0.8 | | | | | | |
| GLA | | | | S | **Sg** | **15 49 44.1** | **-0.6** |
| | baz=0.8 | | | | | | |
| **GLA** | **Glamis** | **0.74** | **26** | *e*Pg | **Pg** | **15 49 34.3** | **-0.6** |
| GLA | | | | *e*Sg | **Sg** | **15 49 44.7** | **0.0** |
| **SWSC** | **Sam W. Stewart** | **0.75** | **319** | P | **Pg** | **15 49 34.3** | **-0.5** |
| | baz=0.8 | | | | | | |
| **RDX** | **Rancho Dawling** | **0.77** | **234**⇓ | *e*P | **Pb** | **15 49 35.6** | **+0.1** |
| RDX | | | | *e*S | **Sb** | **15 49 46.3** | **+0.3** |
| RDX | | | ⇓ | *e* | | 15 49 48.0 | |
| RDX | | | | IAML | | 15 49 48.0 | |
| | comp=N,349nm,0.2s | | | | | | |
| **RMX** | **La Rumorosa** | **0.77** | **287**⇑ | *e*P | **Pg** | **15 49 35.0** | **-0.3** |
| **IBP** | **Imperial Bould** | **0.80** | **291** | P | **Pg** | **15 49 35.7** | **-0.1** |
| | baz=0.8 | | | | | | |
| IBP | | | | S | **Sg** | **15 49 46.3** | **0.0** |
| | baz=0.8 | | | | | | |
| **IBP** | **Imperial Bould** | **0.80** | **291**⇑ | *e*P | **Pg** | **15 49 36.0** | **+0.2** |
| **MONP** | **Monument Peak** | **1.14** | **297** | P | **Pb** | **15 49 40.8** | **-1.2** |
| | baz=1.1 | | | | | | |
| **CBX** | **Cerro Bola** | **1.23** | **267** | *e*P | **Pn** | **15 49 43.5** | **+0.2** |
| **BAR** | **Barrett** | **1.27** | **284** | *e*P | **Pn** | **15 49 44.2** | **+0.5** |
| **BAR** | **Barrett** | **1.27** | **284** | *e*Pn | **Pn** | **15 49 43.3** | **-0.5** |
| **BC3** | **Big Chuckawall** | **1.29** | **351** | P | **Pn** | **15 49 42.5** | **-1.6** |
| | baz=1.3 | | | | | | |
| **SPX** | **San Pedro Mart** | **1.35** | **189**⇑ | *e*P | **Pb** | **15 49 45.5** | **-0.1** |
| SPX | | | | *e*S | **Sg** | **15 50 03.8** | **-0.1** |
| **Y12C** | **Blythe** | **1.48** | **23** | Sb | **Sb** | **15 50 06.6** | **+0.2** |
| | baz=1.5 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.61** | **320** | *e*Pn | **Pn** | **15 49 46.8** | **-1.8** |
| **IRM** | **Iron Mountain** | **1.78** | **2** | Pg | **Pb** | **15 49 53.1** | **+0.4** |
| | baz=1.8 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.08** | **101** | P | **Pn** | **15 49 53.5** | **-1.3** |
| | baz=2.1 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.08** | **101** | *e*Pn | **Pn** | **15 49 53.6** | **-1.3** |
| **PDMCI** | **Parker Dam,Lak** | **2.12** | **25** | Sb | **Sb** | **15 50 25.3** | **+0.7** |
| | baz=2.1 | | | | | | |
| **MWC** | **Mount Wilson** | **3.01** | **308** | *e*Pg | **Pg** | **15 50 16.9** | **-1.2** |
| **GSC** | **Goldstone** | **3.20** | **336** | *e*Pg | **Pg** | **15 50 22.7** | **+1.0** |
| **TUC** | **Tucson** | **3.75** | **90** | *e*Pn | **Pn** | **15 50 18.8** | **+0.9** |
| **ISA** | **Isabella** | **4.25** | **321** | *e*Pg | **Pg** | **

*ISCJB **19** 16:05:57.2±0.5, 36°.35N±0°.04×70°.96E±0°.06, h188km, mb3.1/1, Error ellipse: s-maj=7.2km s-min=4.5km az=148.7*
*IDC **19** 16:05:57.7±5.7, 36°.47N×70°.87E, h106km±44km, mb2.9/1, mb1 3.3/7, mb1mx3.0/42, mbtmp3.7/7, MS3.0/1, Ms1 3.0/1, ms1mx2.5/15, Error ellipse: s-maj=63.4km s-min=18.7km az=151.0*
*NNC **19** 16:06:03.2±1.7, 36°.72N×70°.92E, h146km±19km, mb3.3, mpv4.2, Error ellipse: s-maj=16.7km s-min=8.8km az=162.0*

**ISC 19 16:05:58.2**±0.9, **36°.42N**±0°.07×**70°.94E**±0°.06, **h188**km, **n39,** σ1§**97**/44, **6C-5D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.91** | **325** | | ⇑ | P | **Pn** | **16 06 46.0** | **-0.3** |
| | 39nm,0.2s | | | | | | | | |
| DZET | | | | | ⇑ | S | **Sn** | **16 07 20.0** | **-3.8** |
| | 275nm,0.4s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.12** | **29** | | ⇓ | P | **Pn** | **16 07 01.6** | **+0.4** |
| | 89nm,0.4s | | | | | | | | |
| SFK | | | | | ⇓ | S | **Sn** | **16 07 49.1** | **-1.6** |
| | 39nm,0.3s | | | | | | | | |
| **AML** | **Almayashu** | **6.09** | **20** | | | P | **Pn** | **16 07 26.9** | **+0.2** |
| | SNR=83 | | | | | | | | |
| **MNAS** | **Manas** | **6.18** | **11** | | ⇑ | P | **Pn** | **16 07 27.5** | **-0.2** |
| | 5.6nm,0.4s | | | | | | | | |
| MNAS | | | | | ⇓ | S | **Sn** | **16 08 35.2** | **-3.2** |
| | 30nm,0.7s | | | | | | | | |
| **UCH** | **Uchtor** | **6.42** | **24** | | | P | **Pn** | **16 07 31.4** | **+0.2** |
| | SNR=33 | | | | | | | | |
| **KZA** | **Kyzart** | **6.56** | **29** | | | P | **Pn** | **16 07 33.2** | **+0.3** |
| | SNR=7.1 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.61** | **19** | | | P | **Pn** | **16 07 33.9** | **+0.7** |
| | SNR=34 | | | | | | | | |
| **KK31** | **Karatay Array** | **6.68** | **357** | | | P | **Pn** | **16 07 35.2** | **+1.1** |
| | 2.9nm,0.2s,baz=235,slow=7.5,SNR=44 | | | | | | | | |
| KK31 | | | | | | S | **Sn** | **16 08 46.2** | **-3.8** |
| | 4.3nm,0.3s,baz=188,slow=25,SNR=8.5 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.78** | **23** | | ⇓ | P | **Pn** | **16 07 36.3** | **+0.7** |
| | 16nm,0.5s | | | | | | | | |
| AAK | | | | | ⇓ | S | **Sn** | **16 08 50.4** | **-2.3** |
| | 24nm,0.9s | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.78** | **23** | | | P | **Pn** | **16 07 36.5** | **+0.8** |
| | 11nm,0.3s,baz=196,slow=5.0,SNR=138 | | | | | | | | |
| AAK | | | | | | S | **Sn** | **16 08 50.0** | **-2.6** |
| | 1.3nm,0.3s,baz=333,slow=21,SNR=9.9 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.78** | **23** | | | P | **Pn** | **16 07 36.5** | **+0.8** |
| | SNR=18 | | | | | | | | |
| **KBK** | **Karagaybulak** | **6.95** | **25** | | | P | **Pn** | **16 07 39.0** | **+1.2** |
| | SNR=13 | | | | | | | | |
| **ULHL** | **Ulahol** | **7.12** | **34** | | | P | **Pn** | **16 07 40.2** | **+0.1** |
| | SNR=8.8 | | | | | | | | |
| **CHMS** | **Chumysh** | **7.20** | **23** | | | P | **Pn** | **16 07 42.3** | **+1.4** |
| | SNR=10 | | | | | | | | |
| **USP** | **Ospenovka** | **7.36** | **21** | | | P | **Pn** | **16 07 44.2** | **+1.1** |
| | SNR=17 | | | | | | | | |
| **SMLA** | **Simla** | **7.40** | **134** | *i* | P | | **Pn** | **16 07 41.6** | **-2.0** |
| SMLA | | | | *i* | S | | Sn | 16 08 57.0 | -10 |
| SMLA | | | | | AML | | AML | 16 09 01.8 | |
| | comp=E,562nm,0.2s | | | | | | | | |
| SMLA | | | | | AML | | AML | 16 09 03.4 | |
| | comp=N,1μm,0.3s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.42** | **28** | | ⇑ | P | **Pn** | **16 07 44.4** | **+0.4** |
| | comp=N,9.2nm,1.1s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.42** | **28** | | | P | **Pn** | **16 07 45.0** | **+1.1** |
| | SNR=9.5 | | | | | | | | |
| **KHET** | **Khetri** | **9.29** | **152** | *e* | S | | Sn | 16 09 40.2 | -12 |
| KHET | | | | | AML | | AML | 16 09 43.2 | |
| | comp=E,12nm,0.3s | | | | | | | | |
| KHET | | | | | AML | | AML | 16 09 43.5 | |
| | comp=N,13nm,0.2s | | | | | | | | |
| **GEYT** | **Alibeck** | **10.34** | **282** | | | P | **Pn** | **16 08 20.5** | **-1.6** |
| | comp=N,1.0nm,0.3s,baz=92,slow=13,SNR=8.4 | | | | | | | | |
| GEYT | | | | | | S | **Sn** | **16 10 16.1** | **-1.1** |
| | comp=N,1.1nm,0.3s,baz=107,slow=13,SNR=6.2 | | | | | | | | |
| **MK31** | **Makanchi Array** | **13.38** | **36** | | | P | **P** | **16 09 06.0** | **+2.2** |
| | comp=N,0.4nm,0.4s,baz=212,slow=12,SNR=3.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.38** | **36** | | | P | **P** | **16 09 02.4** | **-1.4** |
| | comp=N,0.1nm,0.3s,baz=212,slow=13,SNR=3.8 | | | | | | | | |
| **DANN** | **Dangsing** | **13.49** | **123** | *e* | P | | **Pn** | **16 09 00.7** | **-1.8** |
| **KOLN** | **Koldanda** | **13.76** | **125** | *e* | P | | **Pn** | **16 09 05.1** | **-0.7** |
| | comp=N,14nm,0.3s | | | | | | | | |
| **GKN** | **Gorkha** | **14.30** | **122** | *e* | P | | **Pn** | **16 09 11.1** | **-1.5** |
| | comp=N,28nm,0.4s | | | | | | | | |
| GKN | | | | *e* | S | | Sn | 16 11 37.2 | -15 |
| **DMN** | **Daman** | **14.87** | **122** | *e* | P | | **Pn** | **16 09 18.9** | **-0.8** |
| | comp=N,17nm,0.4s | | | | | | | | |
| **KKN** | **Kakani** | **14.88** | **121** | *e* | P | | **Pn** | **16 09 17.8** | **-1.9** |
| | comp=N,22nm,0.5s | | | | | | | | |
| **PKIN** | **Phulchoki** | **15.09** | **122** | *e* | P | | **Pn** | **16 09 21.5** | **-0.9** |
| | comp=N,22nm,0.5s | | | | | | | | |
| **PKI** | **Pulchoki** | **15.11** | **122** | *e* | P | | **Pn** | **16 09 21.6** | **-1.0** |
| | comp=N,11nm,0.3s | | | | | | | | |
| **AB31** | **Akbulak array** | **15.13** | **331** | | ⇑ | P | **P** | **16 09 27.6** | **+4.5** |
| | comp=N,0.7nm,0.3s,baz=160,slow=12,SNR=56 | | | | | | | | |
| **GUN** | **Gumba** | **15.22** | **120** | *e* | P | | **Pn** | **16 09 22.6** | **-1.4** |
| | comp=N,18nm,0.4s | | | | | | | | |
| **RAMN** | **Ramite** | **16.32** | **121** | *e* | P | | **P** | **16 09 36.4** | **-0.3** |
| | comp=N,11nm,0.3s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **16.61** | **359** | | | P | **Pn** | **16 09 43.9** | **+3.7** |
| | comp=N,0.3nm,0.3s,baz=185,slow=16,SNR=3.6 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.82** | **330** | | ⇑ | P | Pn | 16 09 48.2 | +5.4 |
| | comp=N,4.5nm,1.2s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.82** | **330** | | | P | **Pn** | **16 09 47.4** | **+4.6** |
| | comp=N,0.1nm,0.3s,baz=135,slow=16,SNR=1.9 | | | | | | | | |
| AKTO | | | | | | S | **S** | **16 12 44.3** | **-3.2** |
| | comp=N,0.1nm,0.3s,baz=323,slow=20,SNR=3.2 | | | | | | | | |
| **TAPN** | **Taplejung** | **16.85** | **118** | *e* | P | | **P** | **16 09 43.1** | **+0.5** |
| | comp=N,14nm,0.3s | | | | | | | | |
| **ODAN** | **Odare** | **16.92** | **120** | *e* | P | | **Pn** | **16 09 44.8** | **+0.3** |
| | comp=N,16nm,0.5s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.01** | **24** | | | P | **Pn** | **16 10 20.8** | **+0.4** |
| | comp=N,0.6nm,0.3s,baz=223,slow=11,SNR=9.9 | | | | | | | | |
| ZALV | | | | | | LR | LR | 16 18 55.7 | |
| | comp=N,48nm,20.2s,baz=86,slow=39 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.67** | **269** | | | P | P | 16 16 30.8 | +8.1 |
| | comp=N,0.2nm,0.7s,baz=58,slow=6.3,SNR=2.4 | | | | | | | | |

*ISCJB **19** 16:27:18.3±0.6, 34°.50S±0°.03×73°.55W±0°.05, h10km, mb4.0/5, Error ellipse: s-maj=6.6km s-min=4.2km az=26.7*
*IDC **19** 16:27:18.9±1.3, 34°.57S×73°.59W, h0km, mb4.1/4, mb1 4.2/5, mb1mx4.0/15, mbtmp4.1/5, ML3.6/1, Error ellipse: s-maj=50.9km s-min=30.6km az=84.0*
*NEIC **19** 16:27:20.8±0.9, 34°.45S×73°.42W, h10km, mb4.2/1, Error ellipse: s-maj=36.8km s-min=14.9km az=94.0*
*GUC **19** 16:27:21.7±0.4, 34°.53S×73°.47W, h34km±2km, ML4.3*

**ISC 19 16:27:20.1**±0.8, **34°.59S**±0°.04×**73°.46W**±0°.06, **h10**km, **n31,** σ1§**03**/49, **mb4.2/5, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **1.22** | **81** | | *e* | P | **Pg** | **16 27 42.9** | **-0.6** |
| CHPI | | | | | *e* | S | **Sg** | **16 27 59.0** | **-0.4** |
| **COCH** | **Cobquecura** | **1.63** | **160** | | *e* | P | **Pn** | **16 27 48.8** | **0.0** |
| COCH | | | | | *e* | S | **Sn** | **16 28 08.1** | **-1.8** |
| **TALC** | **Talca** | **1.70** | **119** | | *i* | P | **Pb** | **16 27 51.1** | **-0.3** |
| TALC | | | | | *e* | S | **Sb** | **16 28 13.0** | **+0.1** |
| **NICH** | **Los Niches** | **1.88** | **103** | | *i* | P | **Pb** | **16 27 53.2** | **-1.3** |
| NICH | | | | | *i* | S | **Sb** | **16 28 17.1** | **-1.0** |
| **TACH** | **Talagante** | **2.29** | **67** | | *e* | P | **Pn** | **16 27 57.2** | **-0.7** |
| **CCHI** | **Chillan** | **2.30** | **151** | | *i* | P | **Pb** | **16 27 59.2** | **-2.4** |
| CCHI | | | | | *i* | S | **Sn** | **16 28 27.5** | **+1.1** |
| CCHI | | | | | AML | | AML | 16 28 29.6 | |
| | comp=N,9μm,0.5s | | | | | | | | |
| **ROC1** | **El Roble** | **2.60** | **52** | | *e* | P | **Pn** | **16 28 01.1** | **-1.3** |
| ROC1 | | | | | *e* | S | **Sn** | **16 28 34.5** | **+0.4** |
| **ROCH** | **El Roble** | **2.60** | **52** | | *i* | P | **Pn** | **16 28 01.5** | **-0.9** |
| ROCH | | | | | *i* | S | **Sn** | **16 28 32.3** | **-1.9** |
| **CLCH** | **Cerro Calan** | **2.71** | **65** | | *i* | P | **Pn** | **16 28 04.0** | **+0.3** |
| CLCH | | | | | *i* | S | **Sn** | **16 28 36.1** | **-0.4** |
| CLCH | | | | | AML | | AML | 16 28 38.4 | |
| | comp=N,378nm,0.6s | | | | | | | | |
| **PEL** | **Peldehue** | **2.72** | **59** | | *e* | P | **Pn** | **16 28 04.0** | **+0.1** |
| PEL | | | | | *e* | S | **Sn** | **16 28 36.4** | **-0.6** |
| PEL | | | | | AML | | AML | 16 28 39.4 | |
| | comp=N,1μm,0.6s | | | | | | | | |
| **AAGR** | **Agrelo** | **4.14** | **70** | | *e* | P | **Pn** | **16 28 23.2** | **-0.3** |
| **AUSP** | **Uspallata** | **4.15** | **56** | | *e* | P | **Pn** | **16 28 24.0** | **+0.3** |
| AUSP | | | | | *e* | S | **Sn** | **16 29 13.7** | **+1.3** |
| **ARCO** | **CERRO ARCO** | **4.16** | **66** | | *e* | P | **Pn** | **16 28 23.3** | **-0.4** |
| ARCO | | | | | IAML | | | 16 29 22.9 | |
| | comp=Z,31nm,0.5s | | | | | | | | |
| **ASAL** | **Salagasta** | **4.35** | **64** | | *e* | P | **Pn** | **16 28 26.0** | **-0.2** |
| ASAL | | | | | *e* | S | **Sn** | **16 29 18.2** | **+1.2** |
| **RTLS** | **Leoncito** | **4.47** | **53** | | *e* | P | **Pn** | **16 28 28.6** | **+0.5** |
| RTLS | | | | | *e* | S | **Sn** | **16 29 21.8** | **+1.5** |
| **RTCV** | **Cerro Valdivia** | **4.94** | **58** | | *e* | P | **Pn** | **16 28 34.5** | **+0.1** |
| RTCV | | | | | *e* | S | **Sn** | **16 29 32.3** | **+0.7** |
| **CFAA** | **Coronel Fontan** | **5.30** | **57** | | *e* | P | **Pn** | **16 28 39.5** | **+0.1** |
| CFAA | | | | | *e* | S | **Sn** | **16 29 41.4** | **+0.9** |
| **RTLL** | **Cerro Villicun** | **5.30** | **54** | | *e* | P | **Pn** | **16 28 39.3** | **-0.1** |
| RTLL | | | | | *e* | S | **Sn** | **16 29 41.4** | **+0.7** |
| **AMOG** | **MOGNA** | **5.55** | **50** | | *e* | P | **Pn** | **16 28 42.5** | **-0.3** |
| AMOG | | | | | *e* | S | **Sn** | **16 29 46.4** | **-0.2** |
| **LCO** | **Las Campanas** | **6.04** | **24** | | *e* | Pn | **Pn** | **16 28 46.9** | **-2.8** |
| **AVFE** | **Valle Fertil** | **6.41** | **54** | | *e* | P | **Pn** | **16 28 53.6** | **-0.9** |
| AVFE | | | | | *e* | S | **Sn** | **16 30 06.7** | **-1.1** |
| AVFE | | | | | IAML | | | 16 30 08.2 | |
| | comp=Z,13nm,0.2s | | | | | | | | |
| **LPAZ** | **La Paz** | **18.84** | **16** | | | P | **Pn** | **16 31 41.6** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=174,slow=8.6,SNR=6.8 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **49.26** | **157** | | | P | **P** | **16 36 07.8** | **-0.7** |
| **SNAA** | **Sanae** | **51.49** | **158** | | | P | **P** | **16 36 26.8** | **+1.4** |
| **SNAA** | **Sanae** | **51.49** | **158** | | *e* | P | **P** | **16 36 26.8** | **+1.4** |
| | comp=Z,4.6nm,1.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **69.69** | **332** | | | P | **P** | **16 38 29.5** | **-0.6** |
| | comp=Z,0.6nm,0.9s,baz=148,slow=10,SNR=3.9 | | | | | | | | |
| **MAW** | **Mawson** | **72.94** | **164** | | | P | **P** | **16 38 49.9** | **+0.8** |
| | comp=Z,2.1nm,0.7s,baz=233,slow=12,SNR=7.2 | | | | | | | | |
| **DBIC** | **Dimbokro** | **76.48** | **72** | | | P | **P** | **16 39 11.4** | **+1.0** |
| | comp=Z,2.5nm,1.0s,baz=243,slow=2.3,SNR=4.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **85.52** | **71** | | | P | **P** | **16 39 59.1** | **+0.5** |
| | comp=Z,1.0nm,0.8s,baz=250,slow=4.1,SNR=7.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **155.35** | **32** | | | PKP | **PKPdf** | **16 47 14.6** | **+1.6** |
| | comp=Z,0.3nm,0.4s,baz=298,slow=3.1,SNR=2.5 | | | | | | | | |
| ZALV | | | | | | PKPab | **PKPab** | **16 47 39.1** | **+0.7** |
| | comp=Z,0.4nm,0.5s,baz=298,slow=4.6,SNR=2.5 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **158.04** | **49** | | | PKPab | **PKPab** | **16 47 50.5** | **+0.1** |
| | comp=Z,0.6nm,0.7s,baz=317,slow=3.4,SNR=5.9 | | | | | | | | |

*CSEM **19** 16:47:03.2±0.1, 47°.35N×11°.68E, h10km, ML2.8/12, Error ellipse: s-maj=1.5km s-min=1.3km az=96.0*
*VIE **19** 16:47:03.6±0.1, 47°.32N×11°.66E, h12km, Error ellipse: s-maj=0.9km s-min=0.5km az=3.0, felt 3 ems98 at Schwaz / Tyrol 5 km SW of Schwaz*
*BGR **19** 16:47:04.6±0.3, 47°.36N×11°.66E, h10km, ML2.4/5, Error ellipse: s-maj=6.7km s-min=3.3km az=151.0*
*ROM **19** 16:47:05.0±0.3, 47°.27N×11°.69E, h9km±2km, Md2.5/8, Ml2.1/6, Error ellipse: s-maj=6.9km s-min=2.8km az=170.0*
*PRU **19** 16:47:05.2, 47°.41N×11°.71E, h9km, Schwaz*

**ISC 19 16:47:03.9**±0.8, **47°.37N**±0°.01×**11°.69E**±0°.02, **h11**km±4km, **n88,** σ0§**72**/141, **22C-8D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WATA** | **Walderalm** | **0.08** | **247** | | *e* | Pg | **Pg** | **16 47 06.4** | **-0.2** |
| | 128nm,0.2s,SNR=647 | | | | | | | | |
| WATA | | | | | ⇓ | *i* Sg | **Sg** | **16 47 07.8** | **-0.7** |
| | 653nm,0.1s | | | | | | | | |
| **WATA** | **Walderalm** | **0.08** | **247** | | | Pg | **Pg** | **16 47 06.4** | **-0.2** |
| | 128nm,0.2s,SNR=647 | | | | | | | | |
| WATA | | | | | | Sg | **Sg** | **16 47 07.8** | **-0.7** |
| | 653nm,0.1s | | | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **199** | | *e* | Pg | **Pg** | **16 47 06.6** | **-0.3** |
| | SNR=156 | | | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **199** | | ⇑ | *e* Pg | **Pg** | **16 47 06.8** | **-0.2** |
| | 152nm,0.1s,SNR=397 | | | | | | | | |
| WTTA | | | | | ⇑ | *e* Sg | **Sg** | **16 47 08.7** | **-0.4** |
| | 400nm,0.2s,SNR=329 | | | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **199** | | ⇑ | *i* Pg | **Pg** | **16 47 06.8** | **-0.2** |
| WTTA | | | | | | Sg | **Sg** | **16 47 08.8** | **-0.3** |
| | 572nm,0.3s | | | | | | | | |
| **WTTA** | **Wattenberg** | **0.11** | **199** | | | Pg | **Pg** | **16 47 06.6** | **-0.3** |
| | SNR=156 | | | | | | | | |
| WTTA | | | | | | Sg | **Sg** | **16 47 08.7** | **-0.4** |
| | 400nm,0.2s,SNR=329 | | | | | | | | |
| **MOTA** | **Moosalm** | **0.40** | **267** | | ⇑ | *i* Pg | **Pg** | **16 47 11.0** | **-0.9** |
| | 5.4nm,0.1s | | | | | | | | |
| MOTA | | | | | ⇑ | *i* Sg | **Sg** | **16 47 16.8** | **-0.4** |
| | 39nm,0.2s | | | | | | | | |
| **MOTA** | **Moosalm** | **0.40** | **267** | | | Pg | **Pg** | **16 47 11.0** | **-0.9** |
| | 5.4nm,0.1s | | | | | | | | |
| MOTA | | | | | | Sg | **Sg** | **16 47 16.8** | **-0.4** |
| | 39nm,0.2s | | | | | | | | |
| **ROSI** | **Rosskopf** | **0.48** | **203** | | | Pg | **Pg** | **16 47 12.6** | **-0.8** |
| ROSI | | | | | | Sg | **Sg** | **16 47 19.3** | **-0.4** |
| | 163nm,0.5s | | | | | | | | |
| **ROSI** | **Rosskopf** | **0.48** | **203** | | ⇑ | *e* Pg | **Pg** | **16 47 12.7** | **-0.7** |
| ROSI | | | | | | Sg | **Sg** | **16 47 19.3** | **-0.4** |
| | 163nm,0.5s | | | | | | | | |
| **RISI** | **Rein** | **0.50** | **148** | | | Pg | **Pg** | **16 47 13.3** | **-0.4** |
| RISI | | | | | | Sg | **Sg** | **16 47 20.1** | **-0.2** |
| | 215nm,0.4s | | | | | | | | |
| **RISI** | **Rein** | **0.50** | **148** | | | Pg | **Pg** | **16 47 13.3** | **-0.4** |
| RISI | | | | | *e* | Sg | **Sg** | **16 47 19.5** | **-0.8** |
| **ABSI** | **Aberstueckl** | **0.69** | **202** | | ⇑ | *e* Pg | **Pg** | **16 47 16.5** | **-0.8** |
| ABSI | | | | | *e* | Sg | **Sg** | **16 47 25.3** | **-1.0** |
| **FETA** | **Feichten** | **0.74** | **242** | | ⇑ | *i* Pg | **Pg** | **16 47 17.4** | **-0.9** |
| | 1.1nm,0.1s | | | | | | | | |
| FETA | | | | | ⇑ | *e* Sg | **Sg** | **16 47 27.1** | **-0.9** |
| | 4.2nm,0.2s,SNR=7.3 | | | | | | | | |
| **FETA** | **Feichten** | **0.74** | **242** | | | Pg | **Pg** | **16 47 17.4** | **-0.9** |
| | 1.1nm,0.1s | | | | | | | | |
| FETA | | | | | | Sg | **Sg** | **16 47 27.1** | **-0.9** |
| | 4.2nm,0.2s,SNR=7.3 | | | | | | | | |
| **RJOB** | **Jochberg** | **0.83** | **63** | | *e* | Pg | **Pn** | **16 47 23.0** | **+1.3** |
| | SNR=5.8 | | | | | | | | |
| **RJOB** | **Jochberg** | **0.83** | **63** | | | Pg | **Pn** | **16 47 23.0** | **+1.3** |
| | SNR=5.8 | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.84** | **138** | | ⇓ | *e* Pg | **Pg** | **16 47 19.5** | **-0.6** |
| | 1.0nm,0.1s,SNR=4.9 | | | | | | | | |
| ABTA | | | | | ⇓ | *e* Sg | **Sg** | **16 47 30.3** | **-0.7** |
| | 4.1nm,0.1s,SNR=5.6 | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.84** | **138** | | | Pg | **Pg** | **16 47 19.5** | **-0.6** |
| | 1.0nm,0.1s,SNR=4.9 | | | | | | | | |
| ABTA | | | | | | Sg | **Sg** | **16 47 30.3** | **-0.7** |
| | 4.1nm,0.1s,SNR=5.6 | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **0.84** | **341** | | *e* | Pg | **Pb** | **16 47 21.1** | **+0.5** |
| | SNR=2.8 | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **0.84** | **341** | | | Pg | **Pb** | **16 47 21.1** | **+0.5** |
| | SNR=2.8 | | | | | | | | |
| **KOSI** | **Kohlern** | **0.93** | **193** | | | Pg | **Pg** | **16 47 20.9** | **-0.9** |
| KOSI | | | | | | Sg | **Sg** | **16 47 33.0** | **-1.0** |
| | 49nm,0.3s | | | | | | | | |
| **KOSI** | **Kohlern** | **0.93** | **193** | | ⇑ | *e* Pg | **Pg** | **16 47 21.0** | **-0.9** |
| KOSI | | | | | | Sg | **Sg** | **16 47 33.0** | **-1.0** |
| | 49nm,0.3s | | | | | | | | |
| **APPI** | **Appiano** | **0.94** | **200** | | | Pg | **Pg** | **16 47 21.2** | **-0.9** |
| APPI | | | | | | Sg | **Sg** | **16 47 33.4** | **-1.0** |
| | 77nm,0.3s | | | | | | | | |
| **APPI** | **Appiano** | **0.94** | **200** | | | Pg | **Pg** | **16 47 21.2** | **-0.9** |
| APPI | | | | | | Sg | **Sg** | **16 47 33.4** | **-1.0** |
| | 77nm,0.3s | | | | | | | | |
| **FVI** | **Forni Avoltri** | **1.07** | **136** | | | Pg | **Pg** | **16 47 23.9** | **-0.7** |
| FVI | | | | | | Sg | **Sg** | **16 47 37.9** | **-0.7** |
| | 18nm,0.3s | | | | | | | | |
| **FVI** | **Forni Avoltri** | **1.07** | **136** | | | Pg | **Pg** | **16 47 23.9** | **-0.7** |
| FVI | | | | | | Sg | **Sg** | **16 47 37.9** | **-0.7** |
| | 18nm,0.3s | | | | | | | | |
| **CSMI** | **Casera Mimoias** | **1.08** | **142** | | ⇑ | *e* Pg | **Pg** | **16 47 24.1** | **-0.6** |
| CSMI | | | | | | *e* Sg | **Sg** | **16 47 38.3** | **-0.5** |
| **CSMI** | **Casera Mimoias** | **1.08** | **142** | | ⇑ | *e* Pg | **Pg** | **16 47 24.1** | **-0.6** |
| CSMI | | | | | | *e* Sg | **Sg** | **16 47 38.3** | **-0.5** |
| **AGOR** | **Agordo** | **1.11** | **167** | | | *e* Pg | **Pg** | **16 47 24.8** | **-0.6** |
| **AGOR** | **Agordo** | **1.11** | **167** | | | Pg | **Pg** | **16 47 24.7** | **-0.6** |
| | 34nm,0.4s | | | | | | | | |
| **CIMO** | **Cimolais** | **1.18** | **154** | | *e* | Pg | **Pg** | **16 47 26.3** | **-0.2** |
| CIMO | | | | | *e* | Sg | **Sg** | **16 47 41.1** | **-0.7** |
| **CIMO** | **Cimolais** | **1.18** | **154** | | *e* | Pg | **Pg** | **16 47 26.3** | **-0.2** |
| CIMO | | | | | *e* | Sg | **Sg** | **16 47 41.1** | **-0.7** |
| **ZOU** | **Zoufplan** | **1.20** | **132** | | ⇓ | *e* Pg | **Pg** | **16 47 26.2** | **-0.8** |
| ZOU | | | | | ⇓ | *e* Sg | **Sg** | **16 47 42.1** | **-0.4** |
| **DAVA** | **Damuels** | **1.23** | **267** | | *e* | Pg | **Pn** | **16 47 27.9** | **+0.6** |
| | SNR=5.4 | | | | | | | | |
| DAVA | | | | | *e* | Sg | **Sn** | **16 47 44.6** | **+0.5** |
| | SNR=4.6 | | | | | | | | |
| **DAVA** | **Damuels** | **1.23** | **267** | | ⇓ | *e* Pg | **Pg** | **16 47 26.9** | **-0.7** |
| | 2.8nm,0.1s,SNR=10 | | | | | | | | |
| DAVA | | | | | ⇓ | *e* Sg | **Sg** | **16 47 43.6** | **0.0** |
| | 66nm,0.2s,SNR=15 | | | | | | | | |
| **DAVA** | **Damuels** | **1.23** | **267** | | | Pg | **Pg** | **16 47 26.9** | **-0.7** |
| | 2.8nm,0.1s,SNR=10 | | | | | | | | |
| DAVA | | | | | | Sg | **Sg** | **16 47 43.6** | **0.0** |
| | 66nm,0.2s,SNR=15 | | | | | | | | |
| **PANI** | **Panarotta** | **1.35** | **191** | | ⇑ | *e* Pg | **Pn** | **16 47 28.4** | **-0.5** |
| **PANI** | **Panarotta** | **1.35** | **191** | | ⇑ | *e* Pg | **Pn** | **16 47 28.4** | **-0.5** |
| **DAVOX** | **Davos/Dischmat** | **1.37** | **245** | | | Pg | **Pb** | **16 47 30.1** | **+0.4** |
| **DAVOX** | **Davos/Dischmat** | **1.37** | **245** | | | Pg | **Pb** | **16 47 30.1** | **+0.4** |
| **CGRP** | **Cima Grappa** | **1.49** | **177** | | *e* | Pg | **Pn** | **16 47 31.7** | **+0.8** |
| **CGRP** | **Cima Grappa** | **1.49** | **177** | | *e* | Pg | **Pn** | **16 47 31.7** | **+0.8** |
| **PTCC** | **Patocco-Chiusa** | **1.49** | **130** | | *e* | Pg | **Pg** | **16 47 32.3** | **-0.3** |
| **ACOM** | **Acomizza, Ital** | **1.50** | **123** | | ⇑ | *e* Pg | **Pb** | **16 47 32.1** | **+0.3** |
| **ACOM** | **Acomizza, Ital** | **1.50** | **123** | | | Pg | **Pg** | **16 47 32.4** | **-0.2** |
| **ACOM** | **Acomizza, Ital** | **1.50** | **123** | | ⇑ | *e* Pg | **Pb** | **16 47 32.1** | **+0.3** |
| **MYKA** | **Terra Mystica** | **1.53** | **118** | | ⇑ | *e* Pg | **Pg** | **16 47 33.0** | **-0.2** |
| | 3.1nm,0.2s,SNR=5.0 | | | | | | | | |
| MYKA | | | | | ⇓ | *e* Sn | **Sn** | **16 47 51.6** | **+0.5** |
| | SNR=4.6 | | | | | | | | |
| MYKA | | | | | ⇑ | *i* Sg | **Sg** | **16 47 54.1** | **+1.1** |
| | 6.5nm,0.3s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **1.53** | **118** | | | Pg | **Pg** | **16 47 33.0** | **-0.2** |
| | 3.1nm,0.2s,SNR=5.0 | | | | | | | | |
| MYKA | | | | | | Sn | **Sn** | **16 47 51.6** | **+0.5** |
| | SNR=4.6 | | | | | | | | |
| MYKA | | | | | | Sg | **Sg** | **16 47 54.1** | **+1.1** |
| | 6.5nm,0.3s | | | | | | | | |
| **DDS** | **Dosso del Somm** | **1.53** | **193** | | ⇑ | *e* Pg | **Pn** | **16 47 31.6** | **+0.2** |
| DDS | | | | | | *e* Sg | **Sn** | **16 47 51.2** | **-0.1** |
| **DDS** | **Dosso del Somm** | **1.53** | **193** | | ⇑ | *e* Pg | **Pn** | **16 47 31.6** | **+0.2** |
| DDS | | | | | | *e* Sg | **Sn** | **16 47 51.2** | **-0.1** |
| **VINO** | **Villanova** | **1.56** | **135** | | *e* | Pg | **Pb** | **16 47 33.0** | **+0.2** |
| **VINO** | **Villanova** | **1.56** | **135** | | *e* | Pg | **Pb** | **16 47 33.0** | **+0.2** |
| **PLONS** | **Plons/SG** | **1.61** | **259** | | *e* | Pg | **Pb** | **16 47 34.0** | **+0.3** |
| | SNR=2.7 | | | | | | | | |
| PLONS | | | | | *e* | Sg | **Sg** | **16 47 55.4** | **-0.2** |
| | SNR=3.4 | | | | | | | | |
| **PLONS** | **Plons/SG** | **1.61** | **259** | | | Pg | **Pb** | **16 47 34.0** | **+0.3** |
| | SNR=2.7 | | | | | | | | |
| PLONS | | | | | | Sg | **Sg** | **16 47 55.4** | **-0.2** |
| | SNR=3.4 | | | | | | | | |
| **MARN** | **Marana (Italy)** | **1.76** | **191** | | *e* | Pg | **Pn** | **16 47 35.5** | **+1.0** |
| MARN | | | | | *e* | Sg | **Sn** | **16 47 57.8** | **+0.9** |
| **MARN** | **Marana (Italy)** | **1.76** | **191** | | *e* | Pg | **Pn** | **16 47 35.5** | **+1.0** |
| MARN | | | | | *e* | Sg | **Sn** | **16 47 57.8** | **+0.9** |
| **WILA** | **Wila** | **1.89** | **272** | | *e* | Sg | **Sg** | **16 48 04.2** | **-0.5** |
| | SNR=5.8 | | | | | | | | |
| **WILA** | **Wila** | **1.89** | **272** | | | Sg | **Sg** | **16 48 04.2** | **-0.5** |
| | SNR=5.8 | | | | | | | | |
| **WET** | **Wettzell** | **1.95** | **24** | | *e* | Pn | **Pn** | **16 47 37.0** | **0.0** |
| | SNR=2.8 | | | | | | | | |
| WET | | | | | *e* | Pg | **Pg** | **16 47 40.7** | **-0.5** |
| | SNR=1.9 | | | | | | | | |
| WET | | | | | *e* | Sn | **Sn** | **16 48 01.0** | **-0.4** |
| | SNR=2.1 | | | | | | | | |
| WET | | | | | *e* | Sg | **Sg** | **16 48 05.7** | **-0.7** |
| | SNR=1.5 | | | | | | | | |
| **WET** | **Wettzell** | **1.95** | **24** | | | Pn | **Pn** | **16 47 37.0** | **0.0** |
| | SNR=2.8 | | | | | | | | |
| **WET** | **Wettzell** | **1.95** | **24** | | | Pg | **Pg** | **16 47 40.7** | **-0.5** |
| | SNR=1.9 | | | | | | | | |
| WET | | | | | | Sn | **Sn** | **16 48 01.0** | **-0.4** |
| | SNR=2.1 | | | | | | | | |
| WET | | | | | | Sg | **Sg** | **16 48 05.7** | **-0.7** |
| | SNR=1.5 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **2.00** | **42** | | *e* | Sn | **Sn** | **16 48 03.4** | **+0.5** |
| | SNR=2.4 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **2.00** | **42** | | | Sn | **Sn** | **16 48 03.4** | **+0.5** |
| | SNR=2.4 | | | | | | | | |
| **OBKA** | **Obir** | **2.14** | **113** | | ⇑ | *i* Pn |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HNKL | | | | S | | Sn | 16 48 37.1 | +0.3 | |
| | baz=248 | | | | | | | | |
| **HNKL** | **Nakhl** | **1.22** | **249** | P | | **Pn** | **16 48 20.2** | **-0.3** | |
| HNKL | | | | S | | **Sn** | **16 48 37.1** | **+0.3** | |
| **HBST** | **Basata** | **1.26** | **203** | P | | **Pn** | **16 48 20.8** | **-0.2** | |
| | baz=206 | | | | | | | | |
| HBST | | | | S | | **Sn** | **16 48 38.0** | **+0.4** | |
| | baz=206 | | | | | | | | |
| **HBST** | **Basata** | **1.26** | **203** | P | | **Pn** | **16 48 20.8** | **-0.2** | |
| HBST | | | | S | | **Sn** | **16 48 38.0** | **+0.4** | |
| **NUB** | | **1.46** | **203** | P | | **Pn** | **16 48 23.8** | **+0.1** | |
| | baz=205 | | | | | | | | |
| **HDHB** | **Dhahab** | **1.75** | **200** | P | | **Pn** | **16 48 27.2** | **-0.6** | |
| | baz=202 | | | | | | | | |
| **HDHB** | **Dhahab** | **1.75** | **200** | P | | **Pn** | **16 48 27.2** | **-0.6** | |
| **AMAG** | **Maghara** | **1.82** | **279** | P | | **Pn** | **16 48 27.9** | **-0.8** | |
| | baz=277 | | | | | | | | |
| **AMAG** | **Maghara** | **1.82** | **279** | P | | **Pn** | **16 48 27.9** | **-0.8** | |
| **SLTI** | **Sal'it** | **1.86** | **353** | Pn | | **Pn** | **16 48 29.3** | **0.0** | |
| SLTI | | | | Sn | | **Sn** | **16 48 53.4** | **+0.8** | |
| **SLTI** | **Sal'it** | **1.86** | **353** | Pn | | **Pn** | **16 48 29.3** | **0.0** | |
| SLTI | | | | Sn | | **Sn** | **16 48 53.4** | **+0.8** | |
| **HMDT** | **Nahal Hemdat** | **1.88** | **6** | Pn | | **Pn** | **16 48 29.8** | **+0.3** | |
| HMDT | | | | Sn | | **Sn** | **16 48 53.5** | **+0.6** | |
| **HMDT** | **Nahal Hemdat** | **1.88** | **6** | Pn | | **Pn** | **16 48 29.8** | **+0.3** | |
| HMDT | | | | Sn | | **Sn** | **16 48 53.5** | **+0.6** | |
| **MMLI** | **Mount Malkishu** | **2.05** | **3** | Pn | | **Pn** | **16 48 32.2** | **+0.2** | |
| MMLI | | | | Sn | | **Sn** | **16 48 58.4** | **+1.1** | |
| **MMLI** | **Mount Malkishu** | **2.05** | **3** | Pn | | **Pn** | **16 48 32.2** | **+0.2** | |
| MMLI | | | | Sn | | **Sn** | **16 48 58.4** | **+1.1** | |
| **HKAT** | **Jabal Katrina** | **2.17** | **212** | P | | **Pn** | **16 48 33.1** | **-0.6** | |
| | baz=213 | | | | | | | | |
| **HKAT** | **Jabal Katrina** | **2.17** | **212** | P | | **Pn** | **16 48 33.1** | **-0.6** | |
| **OFRI** | **'Ofer** | **2.25** | **353** | Pn | | **Pn** | **16 48 35.2** | **+0.6** | |
| **OFRI** | **'Ofer** | **2.25** | **353** | Pn | | **Pn** | **16 48 35.2** | **+0.6** | |
| **TCHB** | **Talchebab** | **2.35** | **14** | *e*P | | **Pn** | **16 48 35.4** | **-0.7** | |
| TCHB | | | | *e*S | | **Sb** | **16 49 08.3** | **-0.6** | |
| TCHB | | | | | AML | AML | 16 49 15.7 | | |
| | comp=E,169nm,0.3s | | | | | | | | |
| TCHB | | | | | AML | AML | 16 49 16.8 | | |
| | comp=N,262nm,0.4s | | | | | | | | |
| **TCHB** | **Talchebab** | **2.35** | **14** | *e*P | | **Pn** | **16 48 35.5** | **-0.7** | |
| TCHB | | | | *e*S | | **Sn** | **16 49 04.6** | **-0.1** | |
| TCHB | | | | | AML | AML | 16 49 15.6 | | |
| | comp=E,169nm,0.3s | | | | | | | | |
| TCHB | | | | | AML | AML | 16 49 16.8 | | |
| | comp=N,262nm,0.4s | | | | | | | | |
| **TCHB** | **Talchebab** | **2.35** | **14** | *e*P | | **Pn** | **16 48 35.5** | **-0.6** | |
| TCHB | | | | *e*S | | **Sn** | **16 49 04.6** | **-0.1** | |
| | comp=N,262nm,0.4s | | | | | | | | |
| **HRDS** | **Abu Rudays** | **2.41** | **227** | P | | **Pn** | **16 48 36.6** | **-0.2** | |
| | baz=228 | | | | | | | | |
| **TR2** | | **2.42** | **215** | P | | **Pn** | **16 48 36.2** | **-0.7** | |
| | baz=216 | | | | | | | | |
| **TR2** | | **2.42** | **215** | P | | **Pn** | **16 48 36.2** | **-0.7** | |
| **MMA0B** | **Mount Meron ar** | **2.63** | **2** | Pn | | **Pn** | **16 48 40.6** | **+0.7** | |
| **MMA0B** | **Mount Meron ar** | **2.63** | **2** | Pn | | **Pn** | **16 48 40.6** | **+0.7** | |
| **SALA** | **Sala** | **2.63** | **28** | *e*P | | **Pn** | **16 48 39.6** | **-0.4** | |
| SALA | | | | *e*S | | **Sn** | **16 49 12.8** | **+1.1** | |
| SALA | | | | | AML | AML | 16 49 25.3 | | |
| | comp=E,15nm,0.5s | | | | | | | | |
| SALA | | | | | AML | AML | 16 49 30.2 | | |
| | comp=N,67nm,0.6s | | | | | | | | |
| **SALA** | **Sala** | **2.63** | **28** | *e*P | | **Pn** | **16 48 39.5** | **-0.5** | |
| SALA | | | | *e*S | | **Sn** | **16 49 12.0** | **+0.3** | |
| SALA | | | | | AML | AML | 16 49 25.3 | | |
| | comp=E,15nm,0.5s | | | | | | | | |
| SALA | | | | | AML | AML | 16 49 30.1 | | |
| | comp=N,67nm,0.6s | | | | | | | | |
| **SALA** | **Sala** | **2.63** | **28** | *e*P | | **Pn** | **16 48 39.5** | **-0.5** | |
| SALA | | | | *e*S | | **Sn** | **16 49 12.0** | **+0.3** | |
| | comp=N,67nm,0.6s | | | | | | | | |
| **TR1** | | **2.64** | **207** | P | | **Pn** | **16 48 39.3** | **-0.7** | |
| | baz=208 | | | | | | | | |
| **TR1** | | **2.64** | **207** | P | | **Pn** | **16 48 39.3** | **-0.7** | |
| **SH2** | **Sharm el Sheik** | **2.71** | **203** | P | | **Pn** | **16 48 40.5** | **-0.4** | |
| | baz=205 | | | | | | | | |
| **SH2** | **Sharm el Sheik** | **2.71** | **203** | P | | **Pn** | **16 48 40.5** | **-0.4** | |
| **HHAG** | **Hagoal** | **2.80** | **262** | P | | **Pn** | **16 48 41.6** | **-0.6** | |
| | baz=262 | | | | | | | | |
| HHAG | | | | S | | **Sn** | **16 49 15.8** | **+0.1** | |
| | baz=262 | | | | | | | | |
| **HHAG** | **Hagoal** | **2.80** | **262** | P | | **Pn** | **16 48 41.6** | **-0.6** | |
| HHAG | | | | S | | **Sn** | **16 49 15.8** | **+0.1** | |
| **KSDI** | **Kefar Szold** | **2.82** | **6** | Pn | | **Pn** | **16 48 43.2** | **+0.8** | |
| **KSDI** | **Kefar Szold** | **2.82** | **6** | Pn | | **Pn** | **16 48 43.2** | **+0.8** | |
| **KOT** | **Kottamia** | **3.03** | **262** | P | | **Pn** | **16 48 45.1** | **-0.3** | |
| | baz=262 | | | | | | | | |
| KOT | | | | S | | **Sn** | **16 49 20.9** | **-0.6** | |
| | baz=262 | | | | | | | | |
| **KOT** | **Kottamia** | **3.03** | **262** | P | | **Pn** | **16 48 45.1** | **-0.3** | |
| KOT | | | | S | | **Sn** | **16 49 20.9** | **-0.6** | |
| **BRBR** | **Barbar** | **3.07** | **10** | *e*P | | **Pn** | **16 48 46.2** | **0.0** | |
| BRBR | | | | *e*S | | **Sn** | **16 49 23.7** | **+1.0** | |
| BRBR | | | | | AML | AML | 16 49 39.7 | | |
| | comp=E,29nm,0.9s | | | | | | | | |
| BRBR | | | | | AML | AML | 16 49 47.8 | | |
| | comp=N,25nm,0.5s | | | | | | | | |
| **BRBR** | **Barbar** | **3.07** | **10** | *e*P | | **Pn** | **16 48 46.3** | **+0.2** | |
| BRBR | | | | *e*S | | **Sn** | **16 49 23.3** | **+0.6** | |
| BRBR | | | | | AML | AML | 16 49 39.6 | | |
| | comp=E,29nm,0.9s | | | | | | | | |
| BRBR | | | | | AML | AML | 16 49 47.7 | | |
| | comp=N,25nm,0.5s | | | | | | | | |
| **BRBR** | **Barbar** | **3.07** | **10** | *e*P | | **Pn** | **16 48 46.3** | **+0.2** | |
| BRBR | | | | *e*S | | **Sn** | **16 49 23.3** | **+0.6** | |
| | comp=N,25nm,0.5s | | | | | | | | |
| **ZALF** | **Zalf** | **3.07** | **34** | *e*P | | **Pn** | **16 48 45.7** | **-0.3** | |
| ZALF | | | | *e*S | | **Sn** | **16 49 23.5** | **+1.0** | |
| ZALF | | | | | AML | AML | 16 49 39.5 | | |
| | comp=N,100nm,0.6s | | | | | | | | |
| ZALF | | | | | AML | AML | 16 49 40.7 | | |
| | comp=E,81nm,0.5s | | | | | | | | |
| **ZALF** | **Zalf** | **3.07** | **34** | *e*P | | **Pn** | **16 48 45.6** | **-0.4** | |
| ZALF | | | | *e*S | | **Sn** | **16 49 21.2** | **-1.3** | |
| ZALF | | | | | AML | AML | 16 49 39.5 | | |
| | comp=N,100nm,0.6s | | | | | | | | |
| ZALF | | | | | AML | AML | 16 49 40.6 | | |
| | comp=E,81nm,0.5s | | | | | | | | |
| **ZALF** | **Zalf** | **3.07** | **34** | *e*P | | **Pn** | **16 48 45.6** | **-0.4** | |
| ZALF | | | | *e*S | | **Sn** | **16 49 21.2** | **-1.3** | |
| | comp=E,81nm,0.5s | | | | | | | | |
| **TOTH** | **TOTAH** | **3.12** | **18** | *e*P | | **Pn** | **16 48 47.5** | **+0.8** | |
| TOTH | | | | *e*S | | **Sn** | **16 49 24.0** | **+0.2** | |
| TOTH | | | | | AML | AML | 16 49 39.4 | | |
| | comp=E,52nm,0.3s | | | | | | | | |
| TOTH | | | | | AML | AML | 16 49 40.5 | | |
| | comp=N,38nm,0.5s | | | | | | | | |
| **TOTH** | **TOTAH** | **3.12** | **18** | *e*P | | **Pn** | **16 48 47.5** | **+0.8** | |
| TOTH | | | | *e*S | | **Sn** | **16 49 24.0** | **+0.2** | |
| | comp=N,38nm,0.5s | | | | | | | | |
| **GLL** | **Jalalah** | **3.21** | **256** | P | | **Pn** | **16 48 48.1** | **+0.2** | |
| | baz=256 | | | | | | | | |
| **GLL** | **Jalalah** | **3.21** | **256** | P | | **Pn** | **16 48 48.1** | **+0.2** | |

*ISCJB **19** 16:48:30.1±0.3, 47°.39N±0°.02×11°.68E±0°.03, h12km±4km, Error ellipse: s-maj=3.7km s-min=3.0km az=41.7*
*VIE **19** 16:48:31.4±0.2, 47°.32N×11°.65E, h10km±1km, mb1.7/1, ml2.4/10, Error ellipse: s-maj=1.6km s-min=1.0km az=37.0*
*CSEM **19** 16:48:31.1±0.1, 47°.36N×11°.68E, h10km, ML2.7/8, Error ellipse: s-maj=2.5km s-min=1.8km az=126.0*
*ROM **19** 16:48:32.4±0.4, 47°.29N×11°.71E, h10km±2km, Md2.1/5, Ml2.2/1, Error ellipse: s-maj=6.7km s-min=3.2km az=170.0*
*BGR **19** 16:48:32.7±0.5, 47°.38N×11°.68E, h10km, ML2.3/4, Error ellipse: s-maj=6.7km s-min=3.3km az=166.0*
*PRU **19** 16:48:33.4, 47°.43N×11°.70E, h0km, Schwaz*

**ISC 19 16:48:31.5±0.8, 47°.36N±0°.02×11°.68E±0°.02, h12km±4km, n44, σ0s84/78, 7C-5D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WATA** | **Walderalm** | **0.07** | **251** | ⇑*e*P | g | **Pg** | | **16 48 34.1** | **-0.1** |
| | 66nm,0.1s,SNR=21 | | | | | | | | |
| WATA | | | | ⇓*i*Sg | | **Sg** | | **16 48 35.4** | **-0.7** |
| | 254nm,0.1s | | | | | | | | |
| **WATA** | **Walderalm** | **0.07** | **251** | Pg | | **Pg** | | **16 48 34.1** | **-0.1** |
| | 66nm,0.1s,SNR=21 | | | | | | | | |
| WATA | | | | Sg | | **Sg** | | **16 48 35.4** | **-0.7** |
| | 254nm,0.1s | | | | | | | | |
| **WTTA** | **Wattenberg** | **0.10** | **196** | ⇑*i*Pg | | **Pg** | | **16 48 34.5** | **0.0** |
| | 87nm,0.1s | | | | | | | | |
| WTTA | | | | ⇓*i*Sg | | **Sg** | | **16 48 35.9** | **-0.7** |
| | 286nm,0.2s | | | | | | | | |
| **WTTA** | **Wattenberg** | **0.10** | **196** | Pg | | **Pg** | | **16 48 34.5** | **0.0** |
| WTTA | | | | Sg | | **Sg** | | **16 48 36.6** | **0.0** |
| **WTTA** | **Wattenberg** | **0.10** | **196** | Pg | | **Pg** | | **16 48 34.5** | **0.0** |
| | 87nm,0.1s | | | | | | | | |
| WTTA | | | | Sg | | **Sg** | | **16 48 35.9** | **-0.7** |
| | 286nm,0.2s | | | | | | | | |
| **MOTA** | **Moosalm** | **0.39** | **268** | ⇑*i*Pg | | **Pg** | | **16 48 38.9** | **-0.4** |
| | 5.8nm,0.1s | | | | | | | | |
| MOTA | | | | ⇓*i*Sg | | **Sg** | | **16 48 44.5** | **-0.1** |
| | 22nm,0.1s | | | | | | | | |
| **MOTA** | **Moosalm** | **0.39** | **268** | Pg | | **Pg** | | **16 48 38.9** | **-0.4** |
| | 5.8nm,0.1s | | | | | | | | |
| MOTA | | | | Sg | | **Sg** | | **16 48 44.5** | **-0.1** |
| | 22nm,0.1s | | | | | | | | |
| **ROSI** | **Rosskopf** | **0.47** | **203** | Pg | | **Pg** | | **16 48 40.5** | **-0.2** |
| ROSI | | | | Sg | | **Sg** | | **16 48 46.8** | **-0.2** |
| **ROSI** | **Rosskopf** | **0.47** | **203** | Pg | | **Pg** | | **16 48 40.5** | **-0.2** |
| ROSI | | | | Sg | | **Sg** | | **16 48 46.8** | **-0.2** |
| **RISI** | **Rein** | **0.49** | **146** | Pg | | **Pg** | | **16 48 41.1** | **-0.1** |
| RISI | | | | Sg | | **Sg** | | **16 48 47.8** | **0.0** |
| **RISI** | **Rein** | **0.49** | **146** | Pg | | **Pg** | | **16 48 41.1** | **-0.1** |
| RISI | | | | Sg | | **Sg** | | **16 48 47.8** | **0.0** |
| **FETA** | **Feichten** | **0.73** | **243** | ⇑*i*Pg | | **Pg** | | **16 48 45.0** | **-0.6** |
| | 1.4nm,0.2s | | | | | | | | |
| FETA | | | | ⇑*e*Sg | | **Sg** | | **16 48 54.8** | **-0.4** |
| | 1.6nm,0.1s,SNR=5.3 | | | | | | | | |
| **FETA** | **Feichten** | **0.73** | **243** | Pg | | **Pg** | | **16 48 45.0** | **-0.6** |
| | 1.4nm,0.2s | | | | | | | | |
| FETA | | | | Sg | | **Sg** | | **16 48 54.8** | **-0.4** |
| | 1.6nm,0.1s,SNR=5.3 | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.84** | **137** | ⇑*i*Pg | | **Pg** | | **16 48 47.2** | **-0.5** |
| | 0.7nm,0.1s | | | | | | | | |
| ABTA | | | | ⇓*e*Sg | | **Sg** | | **16 48 57.8** | **-0.8** |
| | 4.7nm,0.1s,SNR=8.4 | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.84** | **137** | Pg | | **Pg** | | **16 48 47.2** | **-0.5** |
| | 0.7nm,0.1s | | | | | | | | |
| ABTA | | | | Sg | | **Sg** | | **16 48 57.8** | **-0.8** |
| | 4.7nm,0.1s,SNR=8.4 | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **0.85** | **342** | *e*Pg | | **Pb** | | **16 48 49.0** | **+0.7** |
| **FUR** | **Furstenfeldbru** | **0.85** | **342** | Pg | | **Pb** | | **16 48 49.0** | **+0.7** |
| **KOSI** | **Kohlern** | **0.92** | **193** | Pg | | **Pg** | | **16 48 48.9** | **-0.3** |
| KOSI | | | | Sg | | **Sg** | | **16 49 00.8** | **-0.5** |
| **KOSI** | **Kohlern** | **0.92** | **193** | Pg | | **Pg** | | **16 48 48.9** | **-0.3** |
| KOSI | | | | Sg | | **Sg** | | **16 49 00.8** | **-0.5** |
| **APPI** | **Appiano** | **0.93** | **199** | Pg | | **Pg** | | **16 48 48.9** | **-0.6** |
| APPI | | | | Sg | | **Sg** | | **16 49 01.0** | **-0.7** |
| | 71nm,0.4s | | | | | | | | |
| **APPI** | **Appiano** | **0.93** | **199** | Pg | | **Pg** | | **16 48 48.9** | **-0.6** |
| APPI | | | | Sg | | **Sg** | | **16 49 01.0** | **-0.7** |
| | 71nm,0.4s | | | | | | | | |
| **DAVA** | **Damuels** | **1.23** | **267** | *e*Pg | | **Pg** | | **16 48 55.9** | **+0.8** |
| DAVA | | | | *e*Sg | | **Sn** | | **16 49 11.9** | **+0.6** |
| **DAVA** | **Damuels** | **1.23** | **267** | ⇑*i*Pg | | **Pn** | | **16 48 54.7** | **+0.1** |
| | 2.2nm,0.1s | | | | | | | | |
| DAVA | | | | ⇓*e*Sg | | **Sg** | | **16 49 11.3** | **+0.3** |
| | 20nm,0.2s,SNR=9.0 | | | | | | | | |
| **DAVA** | **Damuels** | **1.23** | **267** | Pg | | **Pn** | | **16 48 54.7** | **+0.1** |
| | 2.2nm,0.1s | | | | | | | | |
| DAVA | | | | Sg | | **Sg** | | **16 49 11.3** | **+0.3** |
| | 20nm,0.2s,SNR=9.0 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **1.36** | **245** | Pg | | **Pg** | | **16 48 58.0** | **+0.4** |
| **DAVOX** | **Davos/Dischmat** | **1.36** | **245** | Pg | | **Pg** | | **16 48 58.0** | **+0.4** |
| **MOA** | **Molln** | **1.82** | **73** | *e*Pg | | **Pg** | | **16 49 06.5** | **+0.1** |
| MOA | | | | *e*Sg | | **Sg** | | **16 49 30.8** | **+0.9** |
| **MOA** | **Molln** | **1.82** | **73** | Pg | | **Pg** | | **16 49 06.5** | **+0.1** |
| MOA | | | | Sg | | **Sg** | | **16 49 30.8** | **+0.9** |
| **WET** | **Wettzell** | **1.96** | **24** | *e*Pn | | **Pn** | | **16 49 04.9** | **+0.3** |
| WET | | | | *e*Sn | | **Sn** | | **16 49 28.8** | **-0.3** |
| WET | | | | *e*Sg | | **Sg** | | **16 49 33.6** | **-0.8** |
| **WET** | **Wettzell** | **1.96** | **24** | Pn | | **Pn** | | **16 49 04.9** | **+0.3** |
| WET | | | | Sn | | **Sn** | | **16 49 28.8** | **-0.3** |
| WET | | | | Sg | | **Sg** | | **16 49 33.6** | **-0.8** |
| **GEC2** | **GERESS Array S** | **2.01** | **42** | *e*Sn | | **Sn** | | **16 49 31.5** | **+0.9** |
| GEC2 | | | | *e*Sg | | **Sg** | | **16 49 35.7** | **-0.5** |
| **GEC2** | **GERESS Array S** | **2.01** | **42** | Sn | | **Sn** | | **16 49 31.5** | **+0.9** |
| GEC2 | | | | Sg | | **Sg** | | **16 49 35.7** | **-0.5** |
| **KHC** | **Kasperske Hory** | **2.18** | **35** | *e*PG | | **Pb** | | **16 49 12.2** | **+1.3** |
| KHC | | | | *e*SG | | **Sg** | | **16 49 40.8** | **-0.8** |
| | comp=Z,4.5nm,0.2s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.18** | **35** | Pg | | **Pb** | | **16 49 12.2** | **+1.3** |
| KHC | | | | Sg | | **Sg** | | **16 49 40.8** | **-0.8** |
| | 4.5nm,0.2s | | | | | | | | |
| **GRA1** | **Grafenberg Arr** | **2.35** | **353** | Sg | | **Sg** | | **16 49 47.6** | **+0.5** |
| **GRF** | **Grafenberg Arr** | **2.35** | **353** | *e*Sg | | **Sg** | | **16 49 47.6** | **+0.5** |
| **BFO** | **Black Forest** | **2.46** | **295** | *e*Sn | | **Sn** | | **16 49 39.1** | **-2.3** |
| BFO | | | | *e*Sg | | **Sg** | | **16 49 49.9** | **-0.4** |
| **BFO** | **Black Forest** | **2.46** | **295** | Sn | | **Sn** | | **16 49 39.1** | **-2.3** |
| BFO | | | | Sg | | **Sg** | | **16 49 49.9** | **-0.4** |
| **NKC** | **Novy Kostel** | **2.92** | **10** | *e*SG | | **Sg** | | **16 50 04.3** | **-1.0** |
| **NKC** | **Novy Kostel** | **2.92** | **10** | Sg | | **Sg** | | **16 50 04.3** | **-1.0** |
| **GOPC** | **GO Pecny, Ondr** | **3.28** | **38** | *e*SG | | **Sg** | | **16 50 14.7** | **-2.2** |
| **GOPC** | **GO Pecny, Ondr** | **3.28** | **38** | Sg | | **Sg** | | **16 50 14.7** | **-2.2** |
| **DPC** | **Dobruska-Polom** | **4.29** | **44** | *e*SG | | **Sg** | | **16 50 46.8** | **-2.2** |
| **DPC** | **Dobruska-Polom** | **4.29** | **44** | Sg | | **Sg** | | **16 50 46.8** | **-2.2** |

*ISCJB **19** 16:54:33.2±0.6, 6°.94S±0°.07×127°.0E±0°.1, h407km, mb3.2/2, Error ellipse: s-maj=15.7km s-min=8.4km az=23.5*
*DJA **19** 16:54:34.7±1.5, 7°.5S±5°×12°.7E±°, h400km±32km, M4.0/9, mb3.8/3, MLv4.0/9*
*IDC **19** 16:54:36.4±5.9, 7°.17S×126°.51E, h446km±84km, mb2.9/2, mb1 2.8/5, mb1mx2.7/32, mbtmp3.6/5, Error ellipse: s-maj=134.3km s-min=22.4km az=48.0*

**ISC 19 16:54:34.1±1.0, 6°.92S±0°.09×126°.9E±0°.2, h407km, n13, σ1s34/12, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **3.48** | **23** | P | | **P** | | **16 55 43.4** | **+1.6** |
| **NLAI** | **Namlea** | **3.66** | **4** | P | | **P** | | **16 55 44.8** | **+1.4** |
| **SOEI** | **Soe** | **3.81** | **222** | P | | **P** | | **16 55 46.0** | **+1.1** |
| **MSAI** | **Masohi** | **4.11** | **30** | P | | P | | 16 55 45.7 | -1.8 |
| **BATI** | **Baumata** | **4.54** | **224** | P | | **P** | | **16 55 53.6** | **+1.8** |
| | 8.6nm,0.3s,baz=34,slow=2.8,SNR=14 | | | | | | | | |
| BATI | | | | S | | **S** | | **16 56 54.1** | **-0.9** |
| | 8.5nm,0.3s,baz=145,slow=21,SNR=12 | | | | | | | | |
| **BATI** | **Baumata** | **4.54** | **224** | P | | **P** | | **16 55 53.5** | **+1.8** |
| **SANI** | **Sanana** | **4.91** | **350** | P | | **P** | | **16 55 56.0** | **+0.6** |
| **LBMI** | **Labuha** | **6.27** | **6** | P | | **P** | | **16 56 10.2** | **+0.5** |
| | 38nm,0.5s,0.2nm | | | | | | | | |
| **FAKI** | **Fak Fak** | **6.68** | **54** | P | | P | | 16 56 12.1 | -2.9 |
| | 23nm,1.3s,0.1nm | | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.85** | **151** | P | | **P** | | **16 57 43.9** | **-0.9** |
| | 0.2nm,0.3s,baz=324,slow=12,SNR=10 | | | | | | | | |
| **ASAR** | **Alice Springs** | **17.98** | **159** | P | | **P** | | **16 58 18.4** | **+0.1** |
| | 0.3nm,0.3s,baz=343,slow=13,SNR=29 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **66.48** | **328** | P | | **P** | | **17 04 40.9** | **-0.6** |
| | 0.2nm,0.5s,baz=144,slow=5.2,SNR=3.1 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.16** | **335** | P | | **P** | | **17 05 02.8** | **-1.1** |
| | 0.4nm,0.3s,baz=143,slow=5.0,SNR=3.1 | | | | | | | | |

*ISCJB **19** 17:03:20.9±0.6, 29°.31S±0°.06×178°.8W±0°.1, h210km, mb3.8/6, Error ellipse: s-maj=15.1km s-min=6.1km az=20.6*
*IDC **19** 17:03:20.3±0.6, 28°.66S×178°.38W, h213km±5km, mb3.7/6, mb1 3.9/6, mb1mx3.6/26, mbtmp4.3/6, Error ellipse: s-maj=21.0km s-min=18.0km az=45.0*

**ISC 19 17:03:21.2±0.8, 29°.23S±0°.08×178°.9W±0°.1, h210km, n40, σ1s74/43, mb3.9/6, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.89** | **92** | P | | **Pn** | | **17 03 50.1** | **-1.1** |
| | 129nm,0.3s,baz=291,slow=21,SNR=8.9 | | | | | | | | |
| RAO | | | | S | | **S** | | **17 04 13.4** | **-1.1** |
| | 481nm,0.3s,baz=191,slow=23,SNR=6.5 | | | | | | | | |
| **MXZ** | **Matakaoa Point** | **8.63** | **195** | *e*PN | | **Pn** | | **17 05 21.0** | **-1.4** |
| MXZ | | | | SN | | **S** | | **17 07 00.7** | **+1.2** |
| **HAZ** | **Te Kaha** | **8.94** | **197** | *e*PN | | **Pn** | | **17 05 27.0** | **+0.6** |
| HAZ | | | | SN | | **S** | | **17 07 09.4** | **+2.6** |
| **PUZ** | **Puketiti** | **9.13** | **194** | PN | | **Pn** | | **17 05 27.3** | **-1.6** |
| PUZ | | | | SN | | **S** | | **17 07 12.9** | **+1.4** |
| **TWGZ** | **Tauwhareparae** | **9.29** | **195** | *e*PN | | **Pn** | | **17 05 30.9** | **-0.2** |
| TWGZ | | | | SN | | **S** | | **17 07 16.9** | **+1.6** |
| **MWZ** | **Matawai** | **9.55** | **197** | PN | | **Pn** | | **17 05 33.6** | **-0.8** |
| **URZ** | **Urewera** | **9.59** | **199** | P | | **Pn** | | **17 05 35.4** | **+0.5** |
| | 1.3nm,0.3s,baz=268,slow=5.8,SNR=5.6 | | | | | | | | |
| URZ | | | | S | | **S** | | **17 07 22.2** | **-0.2** |
| | 16nm,0.3s,baz=351,slow=23,SNR=16 | | | | | | | | |
| **URZ** | **Urewera** | **9.59** | **199** | PN | | **Pn** | | **17 05 35.2** | **+0.4** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **RIGZ** | **Rimuhau** | **9.84** | **195** | *e*SN | | **S** | | **17 07 28.2** | **-0.4** |
| **PRGZ** | **Paritu Road** | **10.03** | **194** | *e*PN | | **Pn** | | **17 05 40.3** | **-0.2** |
| **MHGZ** | **Mahia Peninsul** | **10.24** | **194** | *e*PN | | **Pn** | | **17 05 43.1** | **-0.2** |
| **ARHZ** | **Aropaoanui** | **10.56** | **197** | PN | | **Pn** | | **17 05 46.1** | **-1.3** |
| **BKZ** | **Black Stump Fm** | **10.61** | **200** | PN | | **Pn** | | **17 05 47.8** | **-0.2** |
| **BHHZ** | **Black Hill Sta** | **11.04** | **201** | PN | | **Pn** | | **17 05 53.9** | **+0.4** |
| **KAHZ** | **Kahuranaki** | **11.09** | **197** | PN | | **Pn** | | **17 05 52.5** | **-1.8** |
| **PXZ** | **Pawanui** | **11.32** | **197** | PN | | Pn | | 17 05 53.7 | -3.3 |
| PXZ | | | | *e*SN | | **S** | | **17 07 58.9** | **-3.4** |
| **PNHZ** | **Pukenui** | **11.39** | **199** | PN | | **Pn** | | **17 05 58.8** | **+0.9** |
| **TSZ** | **Takapari Road** | **11.59** | **200** | *e*PN | | **Pn** | | **17 05 59.0** | **-1.6** |
| TSZ | | | | SN | | **S** | | **17 08 05.1** | **-3.7** |
| **BFZ** | **Birch Farm** | **12.09** | **198** | *e*SN | | **S** | | **17 08 17.2** | **-3.4** |
| **MRZ** | **Mangatainoka R** | **12.26** | **200** | SN | | **S** | | **17 08 19.7** | **-5.1** |
| **NNZ** | **Nelson** | **13.51** | **206** | *e*PN | | **P** | | **17 06 27.2** | **+0.5** |
| NNZ | | | | *e*SN | | **S** | | **17 08 52.5** | **-1.6** |
| **CTZ** | **Chatham Island** | **14.60** | **173** | *e*SN | | **S** | | **17 09 20.8** | **+1.3** |
| **RPZ** | **Rata Peaks** | **16.53** | **206** | P | | **Pn** | | **17 07 02.4** | **+1.1** |
| | 0.5nm,0.3s,baz=299,slow=2.1,SNR=4.7 | | | | | | | | |
| RPZ | | | | S | | **S** | | **17 09 57.5** | **-4.9** |
| | 6.0nm,0.3s,baz=73,slow=15,SNR=7.0 | | | | | | | | |
| **CTA** | **Charters Tower** | **32.82** | **278** | P | | P | | 17 09 38.1 | +3.0 |
| | 1.5nm,0.5s,baz=100,slow=14,SNR=5.3 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.37** | **266** | P | | P | | 17 10 57.9 | +2.8 |
| | 1.7nm,0.4s,baz=100,slow=6.4,SNR=122 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.25** | **271** | P | | **P** | | **17 11 04.2** | **+2.1** |
| | 1.3nm,0.4s,baz=109,slow=7.8,SNR=20 | | | | | | | | |
| **VNDA** | **Vanda** | **49.18** | **185** | P | | P | | 17 11 51.4 | +4.0 |
| | 2.6nm,0.6s,baz=5.0,slow=7.6,SNR=35 | | | | | | | | |
| **MAW** | **Mawson** | **73.12** | **201** | P | | **P** | | **17 14 30.6** | **+2.5** |
| | 6.5nm,0.6s,baz=127,slow=7.5,SNR=30 | | | | | | | | |
| **SNAA** | **Sanae** | **79.34** | **179** | P | | **P** | | **17 15 03.8** | **+0.6** |
| **VNA3** | **Neumayer Olymp** | **79.52** | **176** | P | | **P** | | **17 15 04.6** | **+0.4** |
| **VNA2** | **Neumayer--Watz** | **79.95** | **177** | P | | **P** | | **17 15 07.1** | **+0.7** |
| | baz=173,slow=3.8 | | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **80.18** | **177** | P | | **P** | | **17 15 08.6** | **+1.0** |
| **NVAR** | **Mina Array Bea** | **87.94** | **43** | P | | P | | 17 15 42.5 | -4.9 |
| | 0.3nm,0.5s,baz=215,slow=4.9,SNR=4.2 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **116.40** | **311** | PKP | | **PKPdf** | | **17 21 36.7** | **-2.8** |
| | 0.2nm,0.5s,baz=147,slow=2.9,SNR=3.1 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **125.00** | **316** | PKP | | **PKPdf** | | **17 21 54.7** | **-1.2** |
| | 0.7nm,0.6s,baz=90,slow=3.0,SNR=4.9 | | | | | | | | |
| **FINES** | **FINESS Array B** | **143.77** | **340** | PKP | | PKPab | | 17 22 25.8 | -2.1 |
| | 2.8nm,0.9s,baz=236,slow=1.0,SNR=4.4 | | | | | | | | |
| **HFS** | **Hagfors** | **147.93** | **348** | PKPbc | | **PKPdf** | | **17 22 38.1** | **+0.6** |
| | 6.4nm,1.1s,baz=44,slow=4.4,SNR=3.3 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **149.88** | **323** | PKPbc | | **PKPbc** | | **17 22 44.6** | **-1.4** |
| | 1.1nm,0.4s,baz=45,slow=3.2,SNR=4.9 | | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **150.44** | **286** | PKPbc | | **PKPbc** | | **17 22 48.3** | **+0.2** |
| | 2.3nm,0.7s,baz=72,slow=4.7,SNR=4.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **163.99** | **182** | PKPab | | **PKPab** | | **17 23 53.8** | **0.0** |
| | 1.6nm,0.7s,baz=172,slow=3.8,SNR=9.2 | | | | | | | | |

*JMA **19** 17:20:14.6±0.3, 24°.76N×120°.78E, h0km, M3.4*
*TAP **19** 17:20:15.7, 24°.78N×120°.87E, h5km, ML3.6, C*
*ISCJB **19** 17:20:16.2±0.6, 24°.84N±0°.02×120°.81E±0°.02, h10km±3km, Error ellipse: s-maj=4.9km s-min=2.5km az=138.6*

**ISC 19 17:20:16.2±1.0, 24°.81N±0°.03×120°.80E±0°.03, h14km±6km, n58, σ0s66/91, 5C-14D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HSN** | **Hsinchu** | **0.15** | **91** | ⇓*i*P |

| | | | | | | |
|---|---|---|---|---|---|---|
| **WGK** | **Gukeng** baz=202 | **1.14** | **191** | *e*P | **Pn** | **17 20 37.7 +0.1** |
| WGK | baz=202 | | | S | **Sn** | **17 20 54.1 +1.0** |
| **ESL** | **Shilin** baz=145 | **1.14** | **150** | *e*P | **Pg** | **17 20 37.6 -0.6** |
| **CHN5** | **Tsauling** baz=197 | **1.21** | **185** | *e*P | **Pb** | **17 20 38.5 -0.4** |
| CHN5 | baz=197 | | | *e*S | **Sn** | **17 20 55.5 +0.5** |
| **WSF** | **Szhu** baz=214 | **1.28** | **205** | *e*P | **Pn** | **17 20 39.5 -0.1** |
| WSF | baz=214 | | | *e*S | **Sn** | **17 20 58.2 +1.7** |
| **ALS** | **Alishan** baz=191 | **1.29** | **180** | *e*P | **Pn** | **17 20 40.0 0.0** |
| ALS | baz=191 | | | *e*S | **Sn** | **17 20 57.9 +0.7** |
| **YUS** | **Yu-Shan** baz=187 | **1.32** | **174** | ⇓P | **Pb** | **17 20 40.8 -0.2** |
| **CHY** | **Chiayi** baz=206 | **1.35** | **195** | *e*P | **Pn** | **17 20 40.4 -0.1** |
| CHY | baz=206 | | | *e*S | **Sg** | **17 21 00.7 +1.0** |
| **EHY** | **Hungye** baz=159 | **1.38** | **160** | *e*P | **Pb** | **17 20 41.3 -0.4** |
| EHY | baz=159 | | | *e*S | **Sg** | **17 20 59.9 -0.7** |
| **TWF1** | **Yuli** baz=162 | **1.52** | **163** | *e*P | **Pb** | **17 20 43.7 -0.4** |
| TWF1 | baz=162 | | | *e*S | **Sg** | **17 21 04.5 -0.6** |
| **TWK** | **Hsinying** baz=205 | **1.56** | **191** | *e*P | **Pn** | **17 20 43.7 +0.2** |
| **WTP** | **Ta-pu** baz=197 | **1.56** | **186** | *e*P | **Pn** | **17 20 43.7 +0.2** |
| WTP | baz=197 | | | *e*S | **Sg** | **17 21 05.2 -1.4** |
| **ELDTW** | **Lidau** baz=187 | **1.62** | **173** | *e*P | **Pn** | **17 20 45.0 +0.5** |
| **CHN1** | **Nanshi** baz=200 | **1.63** | **189** | *e*P | **Pn** | **17 20 44.6 +0.1** |
| CHN1 | baz=200 | | | *e*S | **Sb** | **17 21 07.2 +0.7** |
| **STYT** | **Tauyuan** baz=191 | **1.64** | **181** | ⇑*e*P | **Pn** | **17 20 45.0 +0.5** |
| STYT | baz=191 | | | *e*S | **Sb** | **17 21 07.3 +0.7** |
| **PNG** | **Penghu** baz=235 | **1.68** | **223** | *e*P | **Pb** | **17 20 46.4 -0.4** |
| **SCLT** | **Jiali** baz=212 | **1.72** | **199** | *e*P | **Pg** | **17 20 47.8 -1.3** |
| **SGST** | **Jiashian** baz=202 | **1.73** | **187** | *e*P | **Pn** | **17 20 46.4 +0.6** |
| **CHN3** | **Shinhua** baz=208 | **1.77** | **193** | *e*P | **Pb** | **17 20 48.4 0.0** |
| **WDGT** | **Dungji** baz=227 | **1.86** | **214** | *e*P | **Pb** | **17 20 49.6 -0.3** |
| **JYNG** | **Yonagunijimaku** | **1.98** | **100** | P | **Pn** | **17 20 49.0 -0.3** |
| **TWG** | **Pinlang** baz=188 | **1.99** | **173** | *e*P | **Pn** | **17 20 50.5 +1.1** |
| **YOJ** | **Yonaguni jima** | **2.04** | **99** | P | **Pn** | **17 20 49.3 -0.7** |
| **YOJ** | **Yonaguni jima** baz=78 | **2.04** | **99** | *e*P | **Pn** | **17 20 51.1 +1.0** |
| **SSD** | **Sandimen** baz=201 | **2.06** | **184** | *e*P | **Pb** | **17 20 52.0 -1.3** |
| **KNM** | **Kinmen** baz=264 | **2.19** | **260** | *e*P | **Pb** | **17 20 54.3 -1.3** |
| **EAST** | **Anshuo** baz=212 | **2.41** | **179** | *e*P | **Pn** | **17 20 57.2 +1.9** |
| **SCZT** | **Fangliau** baz=200 | **2.43** | **184** | *e*P | **Pn** | **17 20 56.2 +0.8** |
| **IRIF** | **Iriomote-Funau** | **2.71** | **99** | P | **Pn** | **17 20 58.6 -0.6** |
| **JISG** | **Ishigakijimahi** | **3.20** | **93** | P | **Pn** | **17 21 06.5 +0.5** |

*ISK **19** 17:28:37.8,37.°06N×35.°58E,h5km,MD2.6*
*ISCJB **19** 17:28:38.9±0.6,37.°03N±0.°04×35.°61E±0.°03,h9km±5km, Error ellipse: s-maj=6.1km s-min=4.2km az=163.3*
*CSEM **19** 17:28:38.8±0.2,37.°00N×35.°59E,h10km,MD2.6, Error ellipse: s-maj=5.9km s-min=4.9km az=22.0*
*DDA **19** 17:28:39.6,37.°02N×35.°62E,h13km, Md2.8*
**ISC 19 17:28:38.6±0.8, 37.°03N±0.°03×35.°63E±0.°03, h13km±6km, n21, σ0°64/34, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CEYT** | **Ceyhan** | **0.10** | **104** | *e*PG | **Pg** | **17 28 41.2** | **-0.4** |
| CEYT | | | | *e*SG | **Sg** | **17 28 44.1** | **+0.5** |
| **CEYT** | **Ceyhan** | **0.10** | **104** | *e*Pg | **Pg** | **17 28 41.2** | **-0.4** |
| CEYT | | | | *e*Sg | **Sg** | **17 28 44.2** | **+0.5** |
| **KRTS** | **Karatas** | **0.50** | **204** | *e*PG | **Pg** | **17 28 48.8** | **+0.2** |
| KRTS | | | | *e*SG | **Sb** | **17 28 57.9** | **+1.4** |
| **KRTS** | **Karatas** | **0.50** | **204** | *e*Pg | **Pg** | **17 28 48.8** | **+0.2** |
| **KARA** | **Karaisali** | **0.52** | **296** | *e*PG | **Pg** | **17 28 48.0** | **-0.8** |
| **KARA** | **Karaisali** | **0.52** | **296** | *e*Pg | **Pg** | **17 28 48.0** | **-0.8** |
| **GULE** | **Gulek** | **0.73** | **290** | *i* P | **Pg** | **17 28 52.6** | **-0.3** |
| GULE | | | | *i* S | **Sg** | **17 29 02.5** | **0.0** |
| **GULE** | **Gulek** | **0.73** | **290** | P | **Pg** | **17 28 52.6** | **-0.3** |
| GULE | | | | S | **Sg** | **17 29 02.5** | **0.0** |
| **ANDN** | **Andirin** | **0.79** | **46** | *i* P | **Pn** | **17 28 56.1** | **+0.6** |
| ANDN | | | | *i* S | **Sn** | **17 29 07.0** | **-0.2** |
| **ANDN** | **Andirin** | **0.79** | **46** | P | **Pn** | **17 28 56.1** | **+0.6** |
| ANDN | | | | S | **Sn** | **17 29 07.0** | **-0.2** |
| **TAHT** | **Tahtakopru-Hat** | **0.79** | **146** | *e*PG | **Pb** | **17 28 54.5** | **+0.3** |
| **TAHT** | **Tahtakopru-Hat** | **0.79** | **146** | *e*Pg | **Pb** | **17 28 54.5** | **+0.3** |
| **KAMA** | **Osmaniye** | **0.84** | **79** | P | **Pg** | **17 28 53.7** | **-1.3** |
| KAMA | | | | S | **Sb** | **17 29 06.8** | **+0.4** |
| **AYKD** | **Aykdinkavak** | **1.01** | **68** | P | **Pb** | **17 28 57.4** | **-0.6** |
| AYKD | | | | S | **Sg** | **17 29 12.1** | **+0.7** |
| **YAYL** | **Yayladag** | **1.07** | **159** | *i* P | **Pb** | **17 28 57.8** | **-1.2** |
| YAYL | | | | *i* S | **Sb** | **17 29 13.2** | **+0.3** |
| **YAYL** | **Yayladag** | **1.07** | **159** | P | **Pb** | **17 28 57.8** | **-1.2** |
| YAYL | | | | S | **Sb** | **17 29 13.2** | **+0.3** |
| **KIZK** | **Mersin** | **1.32** | **246** | *i* P | **Pn** | **17 29 02.2** | **-0.5** |
| KIZK | | | | *i* S | **Sg** | **17 29 21.2** | **+0.1** |
| **KIZK** | **Mersin** | **1.32** | **246** | P | **Pn** | **17 29 02.2** | **-0.5** |
| KIZK | | | | S | **Sg** | **17 29 21.2** | **+0.1** |
| **NIG** | **Nigde** | **1.35** | **323** | *e*PN | **Pn** | **17 29 03.9** | **+0.5** |
| **NIG** | **Nigde** | **1.35** | **323** | *e*Pn | **Pn** | **17 29 03.9** | **+0.5** |
| **SARI** | **SarD1z-Kayseri** | **1.51** | **24** | *e*PN | **Pb** | **17 29 07.0** | **+0.4** |

**IDC 19 17:30:52.5±999.0, 56.°74N×33.°10E, h0km, Error ellipse: s-maj=1190.0km s-min=66.1km az=89.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I43RU** | **DUBNA INFRASON** | **2.27** | **89** | *i* | | 17 46 00.0 | |
| | baz=274,slow=305,SNR=2.3 | | | | | | |
| **I31KZ** | **AKTYUBINSK INFRA** | **16.05** | **103** | *i* | | 19 02 43.9 | |
| | baz=301,slow=330 | | | | | | |
| **I46RU** | **ZALESSOVO INFRA** | **28.97** | **73** | *i* | | 20 29 10.0 | |
| | baz=293,slow=328,SNR=2.4 | | | | | | |

*ISCJB **19** 17:51:48.9±1.0,38.°68N±0.°07×122.°9W±0.°2,h8km, Error ellipse: s-maj=18.9km s-min=6.4km az=151.7*
*NEIC **19** 17:51:48.9,38.°84N×122.°79W,h1km,MW3.5(BRK), After NCEDC.*
*NEIC Felt at Kelseyville, Middletown and Sacramento.*
**ISC 19 17:51:49.3±1.4, 38.°86N±0.°06×122.°83W±0.°07, h8km, n18, σ1°50/17, Northern California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KCPM** | **Cahto Peak** | **1.01** | **325** | *e*Pg | **Pn** | **17 52 10.7** | **+0.8** |
| **KIPM** | **Iron Peak** | **1.07** | **332** | *e*Pg | **Pn** | **17 52 11.2** | **+0.4** |
| **SAC** | **San Andreas** | **1.32** | **166** | *e*Pn | **Pn** | **17 52 12.1** | **-2.0** |
| **O03D** | **Paynes Creek** baz=1.6 | **1.64** | **29** | P | **Pn** | **17 52 18.1** | **-0.4** |
| **WDC** | **Whiskeytown Da** | **1.73** | **7** | *e*Pn | **Pb** | **17 52 21.8** | **+0.5** |
| **CMB** | **Columbia Colle** | **2.09** | **113** | *e*Pn | **Pn** | **17 52 23.7** | **-1.0** |
| **KHMM** | **Horse Mountain** | **2.12** | **341** | Pn | **Pb** | **17 52 28.7** | **+0.5** |
| **YBH** | **Yreka Blue Hor** | **2.87** | **2** | *e*Pn | **Pb** | **17 52 40.4** | **-0.4** |
| **M04C** | **Macdoel** baz=3.0 | **3.01** | **14** | P | **Pb** | **17 52 40.6** | **-2.8** |
| **MLAC** | **Mammoth Lakes** baz=3.3 | **3.38** | **110** | P | **Pn** | **17 52 44.0** | **+1.4** |
| **MOD** | **Modoc** | **3.60** | **32** | *e*Pn | **Pb** | **17 52 50.9** | **-2.4** |
| **BMN** | **Battle Mountai** | **4.60** | **68** | *e*Pg | **Pb** | **17 53 09.4** | **-1.0** |
| **ISA** | **Isabella** baz=4.7 | **4.72** | **131** | P | **Pn** | **17 53 01.6** | **+0.7** |
| **ISA** | **Isabella** | **4.72** | **131** | *e*Pn | **Pn** | **17 53 00.8** | **-0.1** |
| **WVOR** | **Wild Horse Val** | **4.79** | **40** | *e*Pg | **Pb** | **17 53 15.9** | **+2.4** |
| **DAC** | **Darwin (Calif)** | **4.90** | **120** | *e*Pn | Pb | 17 53 11.2 | -4.2 |
| **TPNV** | **Topopah Spring** baz=5.5 | **5.54** | **108** | P | **Pb** | **17 53 28.0** | **+1.6** |
| **EDW2** | **Edwards Air Fo** baz=5.5 | **5.55** | **134** | P | **Pn** | **17 53 12.7** | **+0.4** |

**IDC 19 18:08:07.1±1.8, 4.°14S×151.°24E, h0km, mb3.4/3, mb1 3.8/3, mb1mx3.4/34, mbtmp3.5/3, MS4.1/1, Ms1 4.1/1, ms1mx3.1/10, Error ellipse: s-maj=134.5km s-min=28.7km az=125.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **20.22** | **279** | LR | LR | 18 20 31.1 | |
| | comp=Z,536nm,21.9s,baz=78,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.76** | **225** | P | P | 18 13 09.8 | -1.6 |
| | 1.2nm,0.9s,baz=42,slow=10.0,SNR=9.0 | | | | | | |
| **ASAR** | **Alice Springs** | **25.63** | **219** | P | P | 18 13 38.9 | +0.2 |
| | 0.7nm,0.8s,baz=55,slow=8.0,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **82.14** | **22** | P | P | 18 20 27.9 | -1.6 |
| | 0.4nm,0.8s,baz=248,slow=4.8,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **136.09** | **119** | PKP | PKPdf | 18 27 33.2 | +1.0 |
| | 0.8nm,0.3s,baz=270,slow=3.0,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.63** | **288** | PKPbc | PKPbc | 18 27 58.4 | +1.1 |
| | 0.5nm,0.9s,baz=60,slow=3.5,SNR=3.0 | | | | | | |

*IDC **19** 18:10:13.1±1.6,3.°81S×150.°18E,h0km,mb3.8/8, mb1 4.1/8,mb1mx3.8/32,mbtmp3.9/8,MS3.9/14, Ms1 3.9/14,ms1mx3.9/18, Error ellipse: s-maj=52.3km s-min=22.4km az=115.0*
*ISCJB **19** 18:10:16.4±1.3,4.°0S±0.°1×150.°1E±0.°3,h33km,mb4.0/12, MS3.9/12, Error ellipse: s-maj=39.8km s-min=12.2km az=18.5*
*NEIC **19** 18:10:18.1±1.2,3.°97S×150.°12E,h35km,mb4.5/3, Error ellipse: s-maj=38.0km s-min=11.6km az=109.0*
**ISC 19 18:10:18.0±1.6, 4.°0S±0.°2×150.°1E±0.°3, h35km, n28, σ1°14/15, mb4.0/12, MS3.9/12, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **6.12** | **209** | Pn | **Pn** | **18 11 46.0** | **0.0** |
| **HNR** | **Honiara** | **11.14** | **119** | LR | LR | 18 18 04.6 | |
| | comp=Z,632nm,18.3s,baz=296,slow=42 | | | | | | |
| **GUMO** | **Guam** | **18.25** | **343** | LR | LR | 18 19 42.5 | |
| | comp=Z,349nm,21.4s,baz=164,slow=32 | | | | | | |
| **WRAB** | **Tennant Creek** | **22.07** | **223** | *e*P | **P** | **18 15 09.8** | **-0.3** |
| | 15nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.09** | **223** | P | **P** | **18 15 12.3** | **+2.0** |
| | 12nm,1.0s,baz=46,slow=10,SNR=21 | | | | | | |
| WRA | | | | LR | LR | 18 24 48.1 | |
| | comp=Z,265nm,19.6s,baz=45,slow=39 | | | | | | |
| **DZM** | **Mont Dzumac** | **23.93** | **140** | LR | LR | 18 24 03.0 | |
| | comp=Z,515nm,20.5s,baz=351,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **25.05** | **217** | P | **P** | **18 15 41.1** | **+1.9** |
| | 4.9nm,1.0s,baz=48,slow=8.3,SNR=16 | | | | | | |
| ASAR | | | | LR | LR | 18 26 33.6 | |
| | comp=Z,278nm,22.0s,baz=44,slow=39 | | | | | | |
| **BATI** | **Baumata** | **26.96** | **255** | P | **P** | **18 15 56.9** | **+0.2** |
| | 20nm,0.9s,baz=117,slow=4.5,SNR=3.0 | | | | | | |
| BATI | | | | LR | LR | 18 28 52.1 | |
| | comp=Z,376nm,19.4s,baz=96,slow=41 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.68** | **36** | T | T | 18 45 16.5 | |
| | baz=218 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.69** | **36** | T | T | 18 45 17.2 | |
| | baz=218 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.70** | **36** | T | T | 18 45 17.9 | |
| | baz=218 | | | | | | |
| **MBWA** | **Marble Bar** | **34.10** | **237** | *e*P | **P** | **18 16 57.5** | **-2.1** |
| | 5.8nm,1.0s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **41.85** | **346** | LR | LR | 18 35 37.5 | |
| | comp=Z,101nm,18.1s,baz=200,slow=37 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **50.68** | **343** | LR | LR | 18 39 59.0 | |
| | comp=Z,70nm,18.6s,baz=157,slow=35 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.13** | **296** | P | **P** | **18 19 47.2** | **-0.2** |
| | 1.1nm,0.9s,baz=100,slow=5.4,SNR=5.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.26** | **5** | LR | LR | 18 41 05.9 | |
| | comp=Z,46nm,19.3s,baz=176,slow=32 | | | | | | |
| **PPT** | **Papeete** | **60.50** | **108** | LR | LR | 18 43 35.9 | |
| | comp=Z,96nm,18.1s,baz=194,slow=33 | | | | | | |
| **SONM** | **Songino Array** | **64.26** | **329** | P | **P** | **18 20 50.5** | **+0.7** |
| | 0.3nm,0.6s,baz=129,slow=6.1,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **77.99** | **319** | P | **P** | **18 22 13.0** | **+0.1** |
| | 0.4nm,0.8s,baz=108,slow=4.0,SNR=3.7 | | | | | | |
| MKAR | | | | LR | LR | 18 57 42.5 | |
| | comp=Z,47nm,18.2s,baz=88,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **79.03** | **327** | P | **P** | **18 22 17.8** | **-0.6** |
| | 0.5nm,0.7s,baz=102,slow=5.0,SNR=2.5 | | | | | | |
| ZALV | | | | LR | LR | 18 56 02.8 | |
| | comp=Z,81nm,20.6s,baz=70,slow=35 | | | | | | |
| **KURK** | **Kurchatov** | **81.52** | **322** | P | **P** | **18 22 31.2** | **-0.7** |
| **AAK** | **Ala-Archa** | **82.20** | **314** | P | P | 18 22 41.6 | +5.7 |
| **ILAR** | **Eielson Array** | **82.44** | **23** | P | **P** | **18 22 35.6** | **-0.8** |
| | 1.2nm,0.9s,baz=253,slow=5.0,SNR=7.3 | | | | | | |
| **KKAR** | **Karaty Array** | **85.16** | **314** | P | **P** | **18 22 51.9** | **+1.0** |
| | 5.2nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **85.27** | **203** | LR | LR | 18 58 45.2 | |
| | comp=Z,196nm,18.9s,baz=238,slow=34 | | | | | | |
| **BVAR** | **Borovoye Array** | **87.02** | **323** | P | **P** | **18 23 00.3** | **+0.5** |
| | 0.3nm,0.5s,baz=126,slow=3.7,SNR=2.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.69** | **52** | LR | LR | 19 04 23.4 | |
| | comp=Z,54nm,18.3s,baz=246,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.53** | **288** | PKPbc | **PKPbc** | **18 30 00.1** | **+0.4** |
| | 4.1nm,1.1s,baz=66,slow=2.9,SNR=7.3 | | | | | | |

*ISCJB **19** 18:44:48.3±0.7,4.°3S±0.°1×152.°86E±0.°08,h100km, mb3.6/8, Error ellipse: s-maj=15.9km s-min=9.2km az=26.6*
*IDC **19** 18:44:50.4±1.2,4.°32S×152.°83E,h107km±9km,mb3.5/8, mb1 3.7/8,mb1mx3.5/23,mbtmp3.9/8, Error ellipse: s-maj=26.2km s-min=17.8km az=92.0*
**ISC 19 18:44:49.9±0.7, 4.°3S±0.°1×152.°9E±0.°1, h100km, n19, σ0°80/22, mb3.5/8, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **0.69** | **277** | P | **Pn** | **18 45 08.0** | **+0.8** |
| | baz=2.8,SNR=259 | | | | | | |
| **PMG** | **Port Moresby** | **7.61** | **228** | P | Pn | 18 46 44.8 | +6.7 |
| | baz=9.9,SNR=3.2 | | | | | | |
| **HNR** | **Honiara** | **8.71** | **126** | S | **Sn** | **18 48 30.6** | **+0.9** |
| | 7.9nm,0.3s,baz=126,slow=19,SNR=3.0 | | | | | | |
| **KDU** | **Kakadu** | **21.80** | **246** | P | **P** | **18 49 33.4** | **-0.7** |
| | baz=24,SNR=11 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.06** | **145** | P | **P** | **18 49 36.3** | **-0.6** |
| | 3.9nm,0.5s,baz=360,slow=18,SNR=9.2 | | | | | | |
| **MTN** | **Manton Dam** | **23.08** | **247** | P | **P** | **18 49 46.5** | **-0.7** |
| | baz=25,SNR=3.1 | | | | | | |
| **QLP** | **Quilpie** | **23.67** | **200** | P | **P** | **18 49 53.2** | **+0.8** |
| | baz=26,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.83** | **228** | P | **P** | **18 49 53.3** | **-0.7** |
| | 7.4nm,0.6s,baz=53,slow=9.9,SNR=79 | | | | | | |
| WRA | | | | pP | **pP** | **18 50 14.8** | **-0.4** |
| | 2.8nm,0.8s,baz=51,slow=11,SNR=4.2 | | | | | | |
| **KNRA** | **Kununurra** | **26.25** | **243** | P | **P** | **18 50 16.0** | **+0.1** |
| | baz=28,SNR=7.3 | | | | | | |
| **ASAR** | **Alice Springs** | **26.57** | **222** | P | **P** | **18 50 18.0** | **-0.8** |
| | 0.4nm,0.4s,baz=55,slow=8.7,SNR=14 | | | | | | |
| ASAR | | | | pP | **pP** | **18 50 42.5** | **+1.5** |
| | 3.0nm,0.7s,baz=60,slow=8.7,SNR=13 | | | | | | |
| **WRKA** | **Warakurna** | **31.35** | **226** | P | **P** | **18 51 00.3** | **-0.9** |
| | baz=34,SNR=7.8 | | | | | | |
| **SONM** | **Songino Array** | **65.91** | **328** | P | **P** | **18 55 25.7** | **+0.5** |
| | 0.3nm,0.5s,baz=114,slow=6.0,SNR=2.8 | | | | | | |
| SONM | | | | pP | **pP** | **18 55 51.9** | **+1.6** |
| | 0.2nm,0.3s,baz=99,slow=5.1,SNR=2.0 | | | | | | |
| **VNDA** | **Vanda** | **73.35** | **178** | P | **P** | **18 56 10.3** | **0.0** |
| | 0.6nm,0.6s,baz=324,slow=6.7,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **79.96** | **319** | P | **P** | **18 56 48.0** | **-0.1** |
| | 0.3nm,0.4s,baz=90,slow=7.4,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **81.66** | **22** | P | **P** | **18 56 55.7** | **-1.1** |
| | 0.3nm,0.7s,baz=260,slow=5.4,SNR=3.5 | | | | | | |
| **MAW** | **Mawson** | **86.07** | **203** | P | **P** | **18 57 18.8** | **-0.3** |
| | 1.5nm,0.6s,baz=97,slow=7.6,SNR=8.7 | | | | | | |
| **LPAZ** | **La Paz** | **134.62** | **118** | PKP | **PKPdf** | **19 03 58.6** | **+0.1** |
| | 0.4nm,0.6s,baz=240,slow=3.1,SNR=4.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.18** | **289** | PKPbc | **PKPbc** | **19 04 29.6** | **-0.7** |
| | 1.3nm,0.4s,baz=74,slow=2.4,SNR=51 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **19 04 36.4** | **-0.2** |
| | 0.3nm,0.4s,baz=78,slow=3.0,SNR=4.3 | | | | | | |
| **BDFB** | **Brasilia** | **151.40** | **134** | PKPbc | **PKPbc** | **19 04 33.1** | **-0.2** |
| | 3.5nm,0.6s,baz=244,slow=0.8,SNR=4.2 | | | | | | |

*IDC **19** 18:47:59.6±0.6,4.°85S×133.°73E,h0km,mb4.0/10, mb1 4.3/15,mb1mx4.2/28,mbtmp4.2/15,ML4.5/5,MS3.7/9, Ms1 3.7/9,ms1mx3.4/25, Error ellipse: s-maj=24.6km s-min=16.0km az=66.0*
*ISCJB **19** 18:48:00.9±0.3,5.°04S±0.°03×133.°66E±0.°04,h25km, mb4.3/21,MS3.7/6, Error ellipse: s-maj=5.7km s-min=3.9km az=156.7*
*NEIC **19** 18:48:00.9±0.4,4.°90S×133.°69E,h10km,mb4.6/17, Error ellipse: s-maj=8.7km s-min=7.1km az=49.0*
*DJA **19** 18:48:03.9±0.5,5.°S±3.°×13.°4E±.°,h74km±16km,M4.9/15, mb5.2/15,mB5.3/11,MLv5.0/13,Mw(mB)4.7/11*
*BJI **19** 18:48:03.9,4.°90S×133.°43E,h19km,mb4.6/25,mB5.1/21, Ms5.0/13,Ms7 4.6/12*
*AUST **19** 18:48:04.1,4.°96S×133.°53E,h60km*
**ISC 19 18:48:03.3±0.4, 4.°93S±0.°04×133.°70E±0.°05, h25km, n102, σ1°68/116, mb4.4/22, MS3.7/6, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.46** | **324** | P | **Pn** | **18 48 40.8** | **-1.1** |
| | baz=2.4,SNR=420 | | | | | | |
| **FAKI** | **Fak Fak** | **2.46** | **324** | P | **Pn** | **18 48 40.9** | **-1.1** |
| **FAKI** | **Fak Fak** | **2.46** | **324** | *e*Pn | **Pn** | **18 48 40.8** | **-1.1** |
| FAKI | | | | *e*Sn | Sn | 18 49 04.7 | -6.5 |
| **RKPI** | **Ransiki, Papua** | **3.42** | **8** | P | **Pn** | **18 48 55.5** | **+0.4** |
| **BNDI** | **Bandanaira** | **3.80** | **276** | P | **Pn** | **18 49 01.4** | **+1.1** |
| **SAUI** | **Saumlaki** | **3.86** | **218** | P | **Pn** | **18 49 03.1** | **+2.0** |
| **SAUI** | **Saumlaki** | **3.86** | **218** | *e*Pn | **Pn** | **18 49 03.4** | **+2.2** |
| SAUI | | | | *e*Sn | **Sn** | **18 49 47.0** | **+1.3** |
| **SIJI** | **Sorong** | **4.70** | **329** | Pn | **Pn** | **18 49 11.7** | **-1.1** |
| | 19nm,0.3s,baz=162,slow=13,SNR=123 | | | | | | |
| SIJI | | | | Sn | **Sn** | **18 50 01.3** | **-5.2** |
| | 21nm,0.3s,baz=270,slow=20,SNR=11 | | | | | | |
| **SWI** | **Sorong** | **4.71** | **329** | P | **Pn** | **18 49 11.8** | **-1.0** |
| | baz=23,SNR=62 | | | | | | |
| **SWI** | **Sorong** | **4.71** | **329** | P | **Pn** | **18 49 12.3** | **-0.5** |
| **MSAI** | **Masohi** | **5.01** | **288** | P | **Pn** | **18 49 17.1** | **+0.2** |
| | 88nm,0.6s,1µm0.3nm | | | | | | |
| **AAI** | **Ambon** | **5.62** | **282** | P | **Pn** | **18 49 25.6** | **+0.2** |
| | baz=5.5,SNR=53 | | | | | | |
| **AAI** | **Ambon** | **5.62** | **282** | P | **Pn** | **18 49 25.4** | **0.0** |
| | 493nm,0.7s,5µm2.0nm | | | | | | |
| **NLAI** | **Namlea** | **6.79** | **284** | P | **Pn** | **18 49 42.7** | **+1.3** |
| | 205nm,0.5s,3µm0.8nm | | | | | | |
| **JAY** | **Jayapura** | **7.39** | **71** | Pn | **Pn** | **18 49 48.6** | **-1.1** |
| | 12nm,0.3s,baz=293,slow=0.4,SNR=4.4 | | | | | | |
| JAY | | | | Sn | **Sn** | **18 51 09.2** | **-3.6** |
| | 5.9nm,0.3s,baz=277,slow=19,SNR=2.9 | | | | | | |
| **JAY** | **Jayapura** | **7.39** | **71** | P | Pn | 18 49 43.0 | -6.7 |
| | baz=7.6,SNR=4.0 | | | | | | |
| **LBMI** | **Labuha** | **7.51** | **304** | P | **Pn** | **18 49 51.7** | **+0.4** |
| | 88nm,0.7s,987nm0.4nm | | | | | | |
| **KDU** | **Kakadu** | **7.81** | **189** | P | **Pn** | **18 49 55.5** | **+0.1** |
| | baz=7.8,SNR=27 | | | | | | |
| **SANI** | **Sanana** | **8.21** | **290** | P | **Pn** | **18 50 00.0** | **-0.9** |
| | 84nm,0.8s,992nm | | | | | | |
| **MTN** | **Manton Dam** | **8.27** | **198** | *e*Pn | **Pn** | **18 50 00.9** | **-0.8** |
| MTN | | | | *e*Sn | **Sn** | **18 51 31.3** | **-3.0** |
| **SOEI** | **Soe** | **10.51** | **242** | P | **Pn** | **18 50 32.7** | **+0.1** |
| | baz=31,SNR=24 | | | | | | |
| **SOEI** | **Soe** | **10.51** | **242** | P | **Pn** | **18 50 32.5** | **-0.1** |
| | baz=10,SNR=9.0 | | | | | | |
| **SOEI** | **Soe** | **10.51** | **242** | P | **Pn** | **18 50 31.6** | **-1.0** |
| | 155nm,0.8s,1µm | | | | | | |
| **SOEI** | **Soe** | **10.51** | **242** | *e*Pn | **Pn** | **18 50 31.9** | **-0.7** |
| SOEI | | | | *e*Sn | Sn | 18 52 15.5 | -14 |
| **KMSI** | **Cibinong** | **11.14** | **299** | P | **Pn** | **18 50 41.1** | **0.0** |
| | 147nm,1.0s,2µm | | | | | | |
| **BATI** | **Baumata** | **11.24** | **242** | Pn | **Pn** | **18 50 41.0** | **-1.5** |
| | 10.0nm,0.3s,baz=139,slow=3.8,SNR=21 | | | | | | |
| BATI | | | | Sn | **Sn** | **18 52 42.8** | **-4.8** |
| | 9.0nm,0.3s,baz=163,slow=11,SNR=4.7 | | | | | | |
| **BATI** | **Baumata** | **11.24** | **242** | P | **Pn** | **18 50 42.2** | **-0.4** |
| | 50nm,0.8s | | | | | | |
| **LUWI** | **Luwuk** | **11.57** | **289** | P | **Pn** | **18 50 46.4** | **-0.6** |
| | baz=32,SNR=12 | | | | | | |
| **LUWI** | **Luwuk** | **11.57** | **289** | *e*Pn | **Pn** | **18 50 46.0** | **-1.0** |
| LUWI | | | | *e*Sn | **Sn** | **18 52 51.5** | **-4.1** |
| **KNRA** | **Kununurra** | **11.73** | **204** | P | **Pn** | **18 50 47.7** | **-1.5** |
| | baz=12,SNR=82 | | | | | | |
| **APSI** | **Ampana** | **12.68** | **288** | P | **Pn** | **18 51 01.3** | **-0.8** |
| | 111nm,0.9s,948nm | | | | | | |
| **MRSI** | **Marisa** | **12.91** | **294** | P | **Pn** | **18 51 05.0** | **-0.4** |
| | 24nm,1.0s | | | | | | |
| **COEN** | **Coen** | **12.95** | **135** | P | **Pn** | **18 51 04.2** | **-1.7** |
| | baz=13,SNR=15 | | | | | | |
| **COEN** | **Coen** | **12.95** | **135** | *e*Pn | **Pn** | **18 51 03.4** | **-2.5** |
| COEN | | | | *e*Sn | Sn | 18 53 11.9 | -17 |
| **KAPI** | **Kappang** | **13.89** | **269** | Pn | **Pn** | **18 51 20.0** | **+1.2** |
| | 0.2nm,0.3s,baz=90,slow=12,SNR=1.8 | | | | | | |
| KAPI | | | | LR | LR | 18 57 58.2 | |
| | comp=Z,314nm,20.4s,baz=103,slow=43 | | | | | | |
| **KAPI** | **Kappang** | **13.89** | **269** | *e*Pn | **Pn** | **18 51 19.8** | **+1.1** |
| **SPSI** | **Sidrap Palu** | **13.92** | **273** | P | **Pn** | **18 51 20.1** | **+1.0** |
| **PMG** | **Port Moresby** | **14.07** | **109** | Pn | **Pn** | **18 51 19.6** | **-1.7** |
| **WRAB** | **Tennant Creek** | **14.93** | **178** | *e*Pn | Pn | 18 51 27.6 | -5.2 |
| | 34nm,0.6s | | | | | | |
| WRAB | | | | *e*Sn | Sn | 18 54 01.1 | -17 |
| **WRA** | **Warramunga Arr** | **14.94** | **178** | Pn | Pn | 18 51 28.4 | -4.6 |
| | 3.1nm,0.3s,baz=5.9,slow=13,SNR=26 | | | | | | |
| WRA | | | | Sn | Sn | 18 54 05.4 | -13 |
| | 4.2nm,0.3s,baz=358,slow=23,SNR=9.4 | | | | | | |
| WRA | | | | LR | LR | 18 58 31.0 | |
| | comp=Z,288nm,19.6s,baz=0.0,slow=42 | | | | | | |
| **QIS** | **Mount Isa** | **16.57** | **160** | P | **Pn** | **18 51 52.7** | **-1.3

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 7.0nm,1.2s | | | | | | |
| KMI | | | | PMZ | | | |
| | 290nm,4.2s | | | | | | |
| KMI | | | | LN | | | |
| | 360nm,5.3s | | | | | | |
| KMI | | | | LE | | | |
| | 440nm,5.3s | | | | | | |
| KMI | | | | LZ | | | |
| | 310nm,5.3s | | | | | | |
| **KSRS** | **Korea Array** | **42.50 353** | | LR | LR | 19 12 23.1 | |
| | comp=Z,83nm,20.2s,baz=173,slow=34 | | | | | | |
| **XAN** | **Xi'an** | **45.28 331** | | P | **P** | **18 56 20.4** | **+1.3** |
| XAN | | | | pP | **pP** | **18 56 27.5** | **+0.8** |
| XAN | | | | PMZ | | | |
| | 5.0nm,1.3s | | | | | | |
| XAN | | | | PMZ | | | |
| | 100nm,6.2s | | | | | | |
| **CD2** | **Chengdu** | **45.70 323** | *e*P | | **P** | **18 56 22.8** | **+0.4** |
| CD2 | | | | pP | **pP** | **18 56 30.0** | **-0.1** |
| CD2 | | | | PP | **PP** | **18 58 10.1** | **+0.3** |
| CD2 | | | | PcS | **PcS** | **19 01 54.3** | **-0.3** |
| CD2 | | | | S | **S** | **19 03 05.4** | **+1.1** |
| CD2 | | | | sS | **sS** | **19 03 17.9** | **+1.0** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **48.92 358** | | P | **P** | **18 56 46.4** | **-0.9** |
| | 3.6nm,0.6s,baz=186,slow=7.9,SNR=11 | | | | | | |
| USRK | | | | LR | LR | 19 16 35.9 | |
| | comp=Z,82nm,18.9s,baz=190,slow=35 | | | | | | |
| **MDJ** | **Mudanjiang** | **49.45 356** | | P | **P** | **18 56 50.3** | **-1.1** |
| **LZH** | **Lanzhou** | **49.46 328** | *e*P | | P | 18 56 55.9 | +4.1 |
| LZH | | | | pP | pP | 18 57 01.1 | +1.6 |
| LZH | | | | sP | sP | 18 57 03.4 | +0.9 |
| LZH | | | | PMZ | | | |
| | 57nm,1.7s | | | | | | |
| LZH | | | | PMZ | | | |
| | 150nm,6.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.87 338** | *e*P | | **P** | **18 56 57.0** | **+2.3** |
| HHC | | | | S | **S** | **19 04 03.9** | **+0.6** |
| HHC | | | | PMZ | | | |
| | 34nm,0.8s | | | | | | |
| HHC | | | | LN | | | |
| | 200nm,13.6s | | | | | | |
| HHC | | | | LE | | | |
| | 150nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | 130nm,12.3s | | | | | | |
| **GTA** | **Gaotai** | **54.06 328** | *e*P | | **P** | **18 57 27.8** | **+1.7** |
| GTA | | | | pP | **pP** | **18 57 35.0** | **+1.2** |
| GTA | | | | sP | **sP** | **18 57 38.4** | **+1.6** |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.3s | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.55 339** | | P | **P** | **18 57 52.2** | **+1.3** |
| | 2.5nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **57.76 339** | | P | **P** | **18 57 52.4** | **+0.1** |
| | 0.3nm,0.4s,baz=151,slow=8.3,SNR=2.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **61.27 16** | | LR | LR | 19 29 08.0 | |
| | comp=Z,19nm,18.0s,baz=110,slow=40 | | | | | | |
| **WMQ** | **Urumqi** | **63.76 325** | | P | **P** | **18 58 34.0** | **+0.7** |
| **YAK** | **Yakutsk** | **66.83 358** | *e*P | | **P** | **18 58 52.6** | **-0.1** |
| | 6.9nm,0.6s | | | | | | |
| **MK01** | **Makanchi Array** | **68.57 325** | *e*P | | **P** | **18 59 04.8** | **+0.8** |
| **MKAR** | **Makanchi Array** | **68.59 325** | | P | **P** | **18 59 03.8** | **-0.3** |
| | 0.6nm,0.4s,baz=114,slow=7.1,SNR=13 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.59 325** | *e*P | | **P** | **18 59 04.8** | **+0.7** |
| **MAKZ** | **Makanchi** | **68.78 325** | *e*P | | **P** | **18 59 06.8** | **+1.4** |
| **KSH** | **Kashi** | **69.05 316** | *e*P | | P | 18 59 12.1 | +4.8 |
| KSH | | | | *es*P | sP | 18 59 22.8 | +4.5 |
| KSH | | | | *e*PcP | **PcP** | **18 59 35.5** | **+4.2** |
| KSH | | | | *e*PP | PP | 19 01 47.3 | +7.2 |
| KSH | | | | S | **S** | **19 08 14.5** | **+3.2** |
| KSH | | | | PMZ | | | |
| | 83nm,4.8s | | | | | | |
| KSH | | | | LN | | | |
| | 190nm,6.4s | | | | | | |
| KSH | | | | LE | | | |
| | 190nm,6.3s | | | | | | |
| KSH | | | | LZ | | | |
| | 260nm,6.7s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **71.43 332** | *e*P | | **P** | **18 59 20.9** | **-0.5** |
| **ZALV** | **Zalesovo Beam** | **71.43 332** | | P | **P** | **18 59 20.4** | **-0.9** |
| | 0.4nm,0.3s,baz=116,slow=6.6,SNR=4.4 | | | | | | |
| **KURK** | **Kurchatov** | **72.74 327** | *e*P | | **P** | **18 59 28.8** | **-0.4** |
| | 8.6nm,1.0s | | | | | | |
| **VNDA** | **Vanda** | **74.08 174** | | P | **P** | **18 59 37.2** | **+0.4** |
| | 1.6nm,0.9s,baz=325,slow=6.1,SNR=7.9 | | | | | | |
| VNDA | | | | LR | LR | 19 29 36.7 | |
| | comp=Z,120nm,20.2s,baz=146,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **74.08 174** | *e*P | | **P** | **18 59 37.5** | **+0.8** |
| | 35nm,2.5s | | | | | | |
| **KKAR** | **Karatay Array** | **74.27 317** | | P | P | 18 59 35.0 | -3.5 |
| | 1.5nm,0.8s | | | | | | |
| **SBA** | **Scott Base** | **74.92 173** | *e*P | | **P** | **18 59 43.2** | **+1.6** |
| | 9.1nm,1.5s | | | | | | |
| **PPT** | **Papeete** | **75.89 107** | | LR | LR | 19 31 30.8 | |
| | comp=Z,37nm,19.0s,baz=185,slow=34 | | | | | | |
| **BILL** | **Bilibino** | **76.30 12** | | P | **P** | **18 59 50.7** | **+1.1** |
| | 5.5nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **78.22 202** | | P | **P** | **19 00 01.6** | **+1.2** |
| | 1.7nm,0.9s,baz=41,slow=9.1,SNR=5.0 | | | | | | |
| **MAW** | **Mawson** | **78.22 202** | *e*P | | **P** | **19 00 02.2** | **+1.8** |
| | 5.6nm,2.2s | | | | | | |
| **BRVK** | **Borovoye** | **78.40 327** | *e*P | | **P** | **18 59 58.9** | **-2.8** |
| | 4.7nm,1.1s | | | | | | |
| **GEYT** | **Alibeck** | **81.72 309** | | P | **P** | **19 00 19.9** | **-0.1** |
| | 0.8nm,0.5s,baz=129,slow=4.7,SNR=4.4 | | | | | | |
| **ABKAR** | **Akbulak array** | **83.21 321** | *e*P | | **P** | **19 00 27.6** | **+0.1** |
| **QSPA** | **South Pole Qui** | **85.04 180** | | P | **P** | **19 00 37.1** | **+0.5** |
| | 2.7nm,1.0s,baz=110,slow=2.0,SNR=5.7 | | | | | | |
| **QSPA** | **South Pole Qui** | **85.04 180** | *e*P | | **P** | **19 00 36.8** | **+0.1** |
| **ILAR** | **Eielson Array** | **89.92 25** | | P | **P** | **19 01 00.2** | **+0.2** |
| | 0.5nm,0.7s,baz=270,slow=3.8,SNR=6.5 | | | | | | |
| **VYHS** | **Vyhne** | **110.02 320** | | PDIF | **Pdif** | **19 02 30.4** | **-0.6** |
| **TORD** | **Torodi Ar. Bea** | **131.97 283** | | PKP | **PKPdf** | **19 07 17.1** | **+1.4** |
| | 1.0nm,0.7s,baz=68,slow=2.0,SNR=6.6 | | | | | | |
| **CPUP** | **Villa Florida** | **147.14 162** | | PKPbc | **PKPbc** | **19 07 45.1** | **+0.1** |
| | 2.4nm,0.7s,baz=187,slow=3.6,SNR=6.9 | | | | | | |
| **LPAZ** | **La Paz** | **149.82 135** | | PKP | **PKPdf** | **19 07 48.8** | **+0.5** |
| | 1.3nm,0.4s,baz=309,slow=6.5,SNR=9.1 | | | | | | |
| LPAZ | | | | PKPbc | **PKPbc** | **19 07 52.0** | **-1.1** |
| | 1.3nm,0.4s,baz=258,slow=5.7,SNR=9.5 | | | | | | |

**MAN 19 18:58:06,16.57N×120.43E,h19km,mb4.6,ML3.4,MS3.4, 2C,Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABRA** | **Dolores** | **1.11** | **14** | *e*P | Pn | 18 58 26.1 | -0.5 |
| ABRA | | | | *e*S | Sg | 18 58 42.9 | +0.7 |
| **PCPH** | **Palayan** | **1.19** | **147** | *e*P | Pn | 18 58 26.6 | -1.0 |
| PCPH | | | | *e*S | Sn | 18 58 43.5 | +0.4 |
| **BALP** | **Baler** | **1.37** | **126** | *e*P | Pn | 18 58 30.2 | 0.0 |
| BALP | | | | *e*S | Sn | 18 58 47.1 | -0.7 |
| **CAUP** | **Cauayan** | **1.39** | **74** | *e*P | Pg | 18 58 34.8 | +1.9 |
| **APYP** | **Conner** | **1.51** | **31** | *e*P | Pn | 18 58 31.5 | -0.5 |
| APYP | | | | *e*S | Sn | 18 58 51.2 | +0.1 |
| **PIP** | **Pasuquin** | **1.76** | **61** | *e*P | Pn | 18 58 35.0 | -0.5 |

*ISCJB **19** 19:07:10.4±0.4,39.30N±0.02×26.11E±0.03,h10km±3km, Error ellipse: s-maj=4.3km s-min=3.0km az=163.9*
*CSEM **19** 19:07:10.2±0.1,39.29N×26.11E,h12km,MD2.8, Error ellipse: s-maj=3.8km s-min=2.7km az=76.0*
*DDA **19** 19:07:10.1,39.28N×26.10E,h7km,Md3.1*
*ATH **19** 19:07:10.5,39.30N×26.13E,h11km±2km,MD2.8/7*
*ISK **19** 19:07:10.2,39.31N×26.08E,h23km,MD3.0*

**ISC 19 19:07:10.1±0.8,39.30N±0.02×26.12E±0.02,h12km±6km, n54,σ0852/80,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRK** | **Paraskevi** | **0.13** | **116** | *e*PG | **Pg** | **19 07 13.5** | **+0.1** |
| PRK | | | | *e*SG | **Sg** | **19 07 15.8** | **+0.1** |
| **PRK** | **Paraskevi** | **0.13** | **116** | *e*Pg | **Pg** | **19 07 13.5** | **+0.1** |
| PRK | | | | *e*Sg | **Sg** | **19 07 15.8** | **+0.1** |
| **SIGR** | **SIGRI** | **0.22** | **246** | *e*PG | **Pg** | **19 07 14.7** | **-0.2** |
| SIGR | | | | *e*SG | **Sg** | **19 07 17.9** | **-0.2** |
| **SIGR** | **SIGRI** | **0.22** | **246** | *e*Pg | **Pg** | **19 07 14.7** | **-0.2** |
| SIGR | | | | *e*Sg | **Sg** | **19 07 17.9** | **-0.2** |
| **AYVA** | **Ayvalik** | **0.45** | **89** | *i* P | **Pg** | **19 07 19.2** | **+0.3** |
| AYVA | | | | *i* S | **Sb** | **19 07 26.2** | **-0.3** |
| **AYVA** | **Ayvalik** | **0.45** | **89** | P | **Pg** | **19 07 19.2** | **+0.3** |
| AYVA | | | | S | **Sb** | **19 07 26.2** | **-0.3** |
| **BOZC** | **Bozcaada** | **0.54** | **355** | P | **Pb** | **19 07 21.3** | **-0.3** |
| BOZC | | | | S | **Sb** | **19 07 29.5** | **+0.2** |
| **EZN** | **Ezine** | **0.55** | **17** | *e*PG | **Pb** | **19 07 21.5** | **-0.2** |
| EZN | | | | *e*SG | **Sb** | **19 07 29.9** | **+0.4** |
| **EZN** | **Ezine** | **0.55** | **17** | *e*Pg | **Pb** | **19 07 21.5** | **-0.2** |
| EZN | | | | *e*Sg | **Sb** | **19 07 29.9** | **+0.4** |
| **DKL** | **Dikili** | **0.66** | **110** | *e*PG | **Pn** | **19 07 24.8** | **-0.5** |
| DKL | | | | *e*SG | **Sn** | **19 07 34.7** | **-0.8** |
| **DKL** | **Dikili** | **0.66** | **110** | *e*Pg | **Pn** | **19 07 24.8** | **-0.5** |
| DKL | | | | *e*Sg | **Sn** | **19 07 34.7** | **-0.8** |
| **GADA** | **Gvkgeada** | **0.90** | **349** | *e*PG | **Pn** | **19 07 28.1** | **-0.6** |
| **GADA** | **Gvkgeada** | **0.90** | **349** | *e*Pg | **Pn** | **19 07 28.1** | **-0.6** |
| **CHOS** | **Chios island** | **0.92** | **183** | *e*PB | **Pb** | **19 07 28.1** | **+0.1** |
| CHOS | | | | *e*SB | **Sb** | **19 07 41.0** | **+0.8** |
| **CHOS** | **Chios island** | **0.92** | **183** | *e*Pb | **Pb** | **19 07 28.1** | **+0.1** |
| CHOS | | | | *e*Sb | **Sb** | **19 07 41.0** | **+0.8** |
| **LIA** | **Limnos Island** | **0.94** | **310** | *e*PN | **Pn** | **19 07 29.5** | **+0.4** |
| LIA | | | | *e*SB | **Sn** | **19 07 42.3** | **-0.1** |
| **LIA** | **Limnos Island** | **0.94** | **310** | *e*Pn | **Pn** | **19 07 29.5** | **+0.4** |
| LIA | | | | *e*Sb | **Sn** | **19 07 42.3** | **-0.1** |
| **URLA** | **Izmir** | **1.01** | **158** | *i* P | **Pb** | **19 07 29.5** | **-0.1** |
| URLA | | | | *i* S | **Sg** | **19 07 43.5** | **+0.6** |
| **URLA** | **Izmir** | **1.01** | **158** | P | **Pb** | **19 07 29.5** | **-0.1** |
| URLA | | | | S | **Sg** | **19 07 43.5** | **+0.6** |
| **ZEY** | **˜zmir** | **1.10** | **164** | P | **Pb** | **19 07 30.9** | **-0.3** |
| ZEY | | | | S | **Sg** | **19 07 46.0** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.13** | **14** | *e*PN | **Pb** | **19 07 31.0** | **-0.6** |
| **GELI** | **Tayfur-Gelibol** | **1.13** | **14** | *e*Pn | **Pb** | **19 07 31.0** | **-0.6** |
| **BLCB** | **Balcova** | **1.17** | **141** | *e*PN | **Pb** | **19 07 31.6** | **-0.6** |
| **BLCB** | **Balcova** | **1.17** | **141** | *e*Pn | **Pb** | **19 07 31.7** | **-0.6** |
| **BALY** | **Balya** | **1.24** | **69** | *i* P | **Pg** | **19 07 33.9** | **-0.1** |
| BALY | | | | *i* S | **Sg** | **19 07 51.8** | **+1.6** |
| **BALY** | **Balya** | **1.24** | **69** | P | **Pg** | **19 07 33.9** | **-0.1** |
| BALY | | | | S | **Sg** | **19 07 51.8** | **+1.6** |
| **SMTH** | **Samothraki Isl** | **1.25** | **339** | *e*PB | **Pg** | **19 07 34.1** | **-0.1** |
| SMTH | | | | *e*SB | **Sg** | **19 07 51.6** | **+1.1** |
| **SMTH** | **Samothraki Isl** | **1.25** | **339** | *e*Pb | **Pg** | **19 07 34.1** | **-0.1** |
| SMTH | | | | *e*Sb | **Sg** | **19 07 51.6** | **+1.1** |
| **ERIK** | **Erikli-Kesan** | **1.40** | **12** | *e*PN | **Pn** | **19 07 35.5** | **0.0** |
| **ERIK** | **Erikli-Kesan** | **1.40** | **12** | *e*Pn | **Pn** | **19 07 35.5** | **0.0** |
| **BALB** | **Balikesir** | **1.41** | **76** | *e*PN | **Pn** | **19 07 35.8** | **+0.2** |
| **BALB** | **Balikesir** | **1.41** | **76** | *e*Pn | **Pn** | **19 07 35.8** | **+0.2** |
| **KRBG** | **Karabiga-Canak** | **1.42** | **39** | *e*PN | **Pn** | **19 07 36.0** | **+0.2** |
| **KRBG** | **Karabiga-Canak** | **1.42** | **39** | *e*Pn | **Pn** | **19 07 36.0** | **+0.2** |
| **ALN** | **Alexandroupoli** | **1.59** | **358** | *e*PB | **Pg** | **19 07 40.4** | **-0.3** |
| ALN | | | | *e*SB | **Sg** | **19 08 01.0** | **-0.4** |
| **ALN** | **Alexandroupoli** | **1.59** | **358** | *e*Pb | **Pg** | **19 07 40.4** | **-0.3** |
| ALN | | | | *e*Sb | **Sg** | **19 08 01.0** | **-0.4** |
| **RKY** | **Sarkoy-Tekirda** | **1.60** | **30** | *e*PN | **Pn** | **19 07 38.1** | **-0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.60** | **30** | *e*Pn | **Pn** | **19 07 38.2** | **-0.2** |
| **SMG** | **Samos** | **1.69** | **160** | *e*PG | **Pb** | **19 07 41.5** | **+0.3** |
| SMG | | | | *e*SB | **Sg** | **19 08 04.8** | **+0.3** |
| **SMG** | **Samos** | **1.69** | **160** | *e*Pg | **Pb** | **19 07 41.5** | **+0.3** |
| SMG | | | | *e*Sb | **Sg** | **19 08 04.8** | **+0.3** |
| **EDC** | **Edincik** | **1.70** | **52** | *e*PN | **Pn** | **19 07 39.0** | **-0.7** |
| **EDC** | **Edincik** | **1.70** | **52** | *e*Pn | **Pn** | **19 07 39.0** | **-0.7** |
| **MRMT** | **Marmara Adasi** | **1.73** | **41** | *e*PN | **Pn** | **19 07 39.5** | **-0.6** |
| **MRMT** | **Marmara Adasi** | **1.73** | **41** | *e*Pn | **Pn** | **19 07 39.5** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.94** | **134** | *e*PN | **Pn** | **19 07 42.6** | **-0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.94** | **134** | *e*Pn | **Pn** | **19 07 42.6** | **-0.5** |
| **KCTX** | **Karacabey (Bur** | **1.98** | **60** | *e*PN | **Pn** | **19 07 43.1** | **-0.4** |
| **KCTX** | **Karacabey (Bur** | **1.98** | **60** | *e*Pn | **Pn** | **19 07 43.1** | **-0.4** |
| **ARMT** | **Armutlu** | **2.46** | **58** | *e*PN | **Pn** | **19 07 50.0** | **-0.1** |
| **ARMT** | **Armutlu** | **2.46** | **58** | *e*Pn | **Pn** | **19 07 50.0** | **-0.1** |
| **EDRB** | **Edirne** | **2.58** | **10** | *e*PN | **Pn** | **19 07 52.6** | **+0.8** |
| **EDRB** | **Edirne** | **2.58** | **10** | *e*Pn | **Pn** | **19 07 52.6** | **+0.8** |
| **CTKS** | **Kestenalik-??a** | **2.66** | **43** | *e*PN | **Pn** | **19 07 53.0** | **+0.2** |
| **CTKS** | **Kestenalik-??a** | **2.66** | **43** | *e*Pn | **Pn** | **19 07 53.0** | **+0.2** |

*MDD **19** 19:12:29.9±1.6,35.30N×2.05E,h0km,mb3.7/9,Error ellipse: s-maj=21.5km s-min=8.1km az=6.0,PRX/MO*
*ISCJB **19** 19:12:30.3±1.0,35.44N±0.07×1.96E±0.05,h10km, Error ellipse: s-maj=10.5km s-min=6.2km az=6.9*
*CSEM **19** 19:12:30.3±0.4,35.41N×2.04E,h5km,mb3.7, Error ellipse: s-maj=10.7km s-min=4.9km az=2.0*
*CRAAG **19** 19:12:30.8,35.61N×1.99E,MI3.3*

**ISC 19 19:12:29.2±1.8,35.32N±0.10×2.05E±0.05,h10km,n31, σ0999/46,Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EANR** | **'Ain N'Sour** | **0.99** | **309** | P | **Pg** | **19 12 47.5** | **-0.8** |
| **EANR** | **'Ain N'Sour** | **0.99** | **309** | P | **Pg** | **19 12 47.5** | **-0.8** |
| **EANR** | **'Ain N'Sour** | **0.99** | **309** | P | **Pg** | **19 12 47.5** | **-0.8** |
| **ADJB** | **Djebel Djouab** | **1.40** | **53** | P | **Pn** | **19 12 55.1** | **+0.2** |
| **ADJB** | **Djebel Djouab** | **1.40** | **53** | P | **Pn** | **19 12 55.1** | **+0.2** |
| **ADJB** | **Djebel Djouab** | **1.40** | **53** | P | **Pn** | **19 12 55.1** | **+0.2** |
| **AKET** | **Djebel Ketaf** | **1.66** | **64** | P | **Pn** | **19 12 59.5** | **+1.1** |
| **AKET** | **Djebel Ketaf** | **1.66** | **64** | P | **Pn** | **19 12 59.5** | **+1.1** |
| **AKET** | **Djebel Ketaf** | **1.66** | **64** | P | **Pn** | **19 12 59.5** | **+1.1** |
| **EMUR** | **La Murta** | **3.65** | **314** | P | **Pn** | **19 13 26.4** | **+0.6** |
| | 0.9nm,0.2s,SNR=7.9 | | | | | | |
| **EMUR** | **La Murta** | **3.65** | **314** | P | **Pn** | **19 13 26.4** | **+0.6** |
| | 0.9nm,0.2s,SNR=7.9 | | | | | | |
| **EIBI** | **Ibiza** | **3.74** | **352** | P | **Pn** | **19 13 27.7** | **+0.8** |
| | 3.1nm,0.1s,SNR=9.2 | | | | | | |
| EIBI | | | | S | **Sn** | **19 14 11.4** | **+0.4** |
| | 1.2nm,0.2s,SNR=7.9 | | | | | | |
| **EIBI** | **Ibiza** | **3.74** | **352** | P | **Pn** | **19 13 27.7** | **+0.8** |
| | 3.1nm,0.1s,SNR=9.2 | | | | | | |
| EIBI | | | | S | **Sn** | **19 14 11.4** | **+0.4** |
| | 1.2nm,0.2s,SNR=7.9 | | | | | | |
| **EBEN** | **Beniarda** | **3.83** | **332** | P | **Pn** | **19 13 29.6** | **+1.3** |
| | 1.7nm,1.0s,SNR=7.9 | | | | | | |
| EBEN | | | | S | **Sn** | **19 14 13.2** | **-0.2** |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| **EBEN** | **Beniarda** | **3.83** | **332** | P | **Pn** | **19 13 29.6** | **+1.3** |
| | 1.7nm,1.0s,SNR=7.9 | | | | | | |
| EBEN | | | | S | **Sn** | **19 14 13.2** | **-0.2** |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| **EBER** | **Berja** | **4.30** | **293** | P | **Pn** | **19 13 34.8** | **0.0** |
| | 1.1nm,0.2s,SNR=9.4 | | | | | | |
| EBER | | | | S | **Sn** | **19 14 24.3** | **-0.7** |
| | 0.5nm,0.2s,SNR=7.9 | | | | | | |
| **EBER** | **Berja** | **4.30** | **293** | P | **Pn** | **19 13 34.8** | **0.0** |
| | 1.1nm,0.2s,SNR=9.4 | | | | | | |
| **ETOB** | **Tobarra** | **4.39** | **320** | P | **Pn** | **19 13 37.3** | **+1.4** |
| | 1.7nm,0.2s,SNR=17 | | | | | | |
| ETOB | | | | S | **Sn** | **19 14 26.5** | **-0.7** |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **4.39** | **320** | P | **Pn** | **19 13 37.3** | **+1.4** |
| | 1.7nm,0.2s,SNR=17 | | | | | | |
| ETOB | | | | S | **Sn** | **19 14 26.5** | **-0.7** |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| **ETOS** | **Mallorca** | **4.48** | **8** | P | **Pn** | **19 13 37.6** | **+0.5** |
| | 1.4nm,2.3s,SNR=7.9 | | | | | | |
| **ETOS** | **Mallorca** | **4.48** | **8** | P | **Pn** | **19 13 37.6** | **+0.5** |
| | 1.4nm,2.3s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **4.49** | **305** | P | **Pn** | **19 13 38.6** | **+1.3** |
| | 1.1nm,0.3s,SNR=7.9 | | | | | | |
| EHUE | | | | S | **Sn** | **19 14 28.7** | **-0.9** |
| | 0.2nm,0.1s,SNR=4.0 | | | | | | |
| **EHUE** | **Huescar** | **4.49** | **305** | P | **Pn** | **19 13 38.6** | **+1.3** |
| | 1.1nm,0.3s,SNR=7.9 | | | | | | |
| EHUE | | | | S | **Sn** | **19 14 28.7** | **-0.9** |
| | 0.2nm,0.1s,SNR=4.0 | | | | | | |
| **SESP** | **Santiago Espad** | **4.63** | **308** | P | **Pn** | **19 13 41.0** | **+1.7** |
| | 1.6nm,0.1s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **19 14 32.9** | **-0.3** |
| | 0.2nm,0.3s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **4.63** | **308** | P | **Pn** | **19 13 41.0** | **+1.7** |
| | 1.6nm,0.1s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **19 14 32.9** | **-0.3** |
| | 0.2nm,0.3s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **4.81** | **302** | P | **Pn** | **19 13 43.4** | **+1.6** |
| | 7.4nm,0.3s,SNR=42 | | | | | | |
| EQES | | | | S | **Sn** | **19 14 37.0** | **-0.5** |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **4.81** | **302** | P | **Pn** | **19 13 43.3** | **+1.6** |
| | 7.4nm,0.3s,SNR=42 | | | | | | |
| EQES | | | | S | **Sn** | **19 14 37.0** | **-0.5** |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **4.82** | **295** | P | **Pn** | **19 13 43.3** | **+1.5** |
| | 0.7nm,0.1s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **4.82** | **295** | P | **Pn** | **19 13 43.3** | **+1.5** |
| | 0.7nm,0.1s,SNR=7.9 | | | | | | |
| **EMOS** | **Mosqueruela** | **5.41** | **339** | P | **Pn** | **19 13 51.4** | **+1.3** |
| | 0.6nm,0.1s,SNR=10 | | | | | | |
| EMOS | | | | S | **Sn** | **19 14 51.8** | **-0.8** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **EMOS** | **Mosqueruela** | **5.41** | **339** | P | **Pn** | **19 13 51.4** | **+1.3** |
| | 0.6nm,0.1s,SNR=10 | | | | | | |
| EMOS | | | | S | **Sn** | **19 14 51.8** | **-0.8** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |

**GUC 19 19:14:50.0±0.6,35.06S×72.79W,h32km±7km,ML3.8, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.93** | **44** | *i* P | Pb | 19 15 07.5 | -0.1 |
| CHPI | | | | *i* S | Sb | 19 15 20.3 | +0.7 |
| **TALC** | **Talca** | **1.00** | **110** | *i* P | Pb | 19 15 08.6 | -0.2 |
| TALC | | | | *i* S | Sb | 19 15 22.6 | +0.9 |
| **COCH** | **Cobquecura** | **1.07** | **180** | *i* P | Pn | 19 15 09.3 | +0.5 |
| COCH | | | | *i* S | Sb | 19 15 23.9 | +0.4 |
| **NICH** | **Los Niches** | **1.28** | **88** | *i* P | Pb | 19 15 12.9 | -0.6 |
| NICH | | | | *i* S | Sb | 19 15 30.6 | +0.9 |
| **CCHI** | **Chillan** | **1.64** | **160** | *i* P | Pb | 19 15 18.5 | -1.1 |
| CCHI | | | | *i* S | Sb | 19 15 40.7 | +0.7 |
| CCHI | | | | AML | AML | 19 15 50.7 | |
| | comp=E,2μm,0.5s | | | | | | |
| **CLCH** | **Cerro Calan** | **2.50** | **49** | AML | AML | 19 16 17.9 | |
| | comp=N,489nm,0.7s | | | | | | |
| **PEL** | **Peldehue** | **2.59** | **43** | *i* P | Pn | 19 15 32.6 | +2.8 |
| PEL | | | | *i* S | Sb | 19 16 09.0 | +1.7 |
| PEL | | | | AML | AML | 19 16 15.4 | |
| | comp=N,493nm,0.5s | | | | | | |

*IDC **19** 19:45:08.1±1.9,1.05N×125.64E,h0km,mb3.3/3, mb1 3.6/3,mb1mx3.3/25,mbtmp3.4/3,Error ellipse: s-maj=184.1km s-min=24.7km az=65.0*
*ISCJB **19** 19:45:12.0±1.1,1.5N±0.1×126.46E±0.06,h47km,mb3.2/3, Error ellipse: s-maj=15.5km s-min=7.6km az=22.1*
*DJA **19** 19:45:12.8±1.0,1.7N±7×12.6E±.°,h24km±18km,M3.4/4, MLv3.4/4*

**ISC 19 19:45:13.3±1.4,1.5N±0.1×126.50E±0.07,h47km,n9, σ1819/11,mb3.3/3,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.10** | **128** | P | **Pn** | **19 45 32.2** | **-0.1** |
| **LBMI** | **Labuha** | **2.30** | **154** | P | **Pn** | **19 45 49.1** | **+0.3** |
| LBMI | | | | S | **Sn** | **19 46 16.0** | **0.0** |
| **KMSI** | **Cibinong** | **2.66** | **251** | P | **Pn** | **19 45 53.0** | **-0.7** |
| KMSI | | | | S | **Sn** | **19 46 22.9** | **-1.9** |
| **SANI** | **Sanana** | **3.51** | **188** | P | **Pn** | **19 46 05.8** | **+0.4** |
| **GTOI** | **Gorontalo** | **3.58** | **257** | P | **Pn** | **19 46 06.5** | **+0.2** |
| **APSI** | **Ampana** | **5.39** | **244** | P | **Pn** | **19 46 33.7** | **+2.6** |
| **WRA** | **Warramunga Arr** | **22.61** | **160** | P | **P** | **19 50 09.8** | **-0.4** |
| | 0.7nm,0.3s,baz=337,slow=11,SNR=30 | | | | | | |
| **ASAR** | **Alice Springs** | **25.98** | **164** | P | **P** | **19 50 41.5** | **-0.4** |
| | 0.2nm,0.4s,baz=343,slow=8.3,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.30** | **326** | P | **P** | **19 55 10.7** | **+0.4** |
| | 0.1nm,0.4s,baz=119,slow=8.4,SNR=3.0 | | | | | | |

*NIED **19** 20:08:00,23.30N×124.30E,h8km,Mw4.0 Best double couple: M0 1.23000×10^15 NP1:φ±48.00000°,δ49.00000°, λ36.00000°. NP2:φ±293.00000°,δ63.00000°,λ133.00000°.*
*IDC **19** 20:08:11.8±0.8,23.36N×124.35E,h0km,mb4.0/12, mb1 4.2/14,mb1mx4.0/46,mbtmp4.0/14,ML2.3/2,MS3.0/2, Ms1 3.0/2,ms1mx2.7/44,Error ellipse: s-maj=22.8km s-min=16.9km az=74.0*
*ISCJB **19** 20:08:14.0±1.0,23.33N±0.04×124.26E±0.03,h28km±7km, mb4.1/18,Error ellipse: s-maj=6.5km s-min=4.8km az=152.2*
*JMA **19** 20:08:14.3±0.2,23.32N×124.32E,h40km±5km,M3.6*
*NEIC **19** 20:08:17.0±0.5,23.37N×124.17E,h35km,mb4.5/7, MW4.0(NIED),Error ellipse: s-maj=10.7km s-min=8.3km az=171.0*

**ISC 19 20:08:13.4±2.0,23.35N±0.06×124.24E±0.04,h9km±12km, n49,σ1831/58,mb4.3/18,Southwestern Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HATJ** | **Hateruma jima** | **0.81** | **330** | P | **Pn** | **20 08 30.1** | **-0.8** |
| HATJ | | | | *e*S | **Sn** | **20 08 42.0** | **-1.1** |
| **JKRS** | **Kuro-shima** | **0.91** | **346** | P | **Pn** | **20 08 31.8** | **-0.5** |
| JKRS | | | | *e*S | **Sn** | **20 08 44.2** | **-1.3** |
| **IRIF** | **Iriomote-Funau** | **1.09** | **334** | P | **Pn** | **20 08 34.6** | **+0.4** |
| IRIF | | | | *e*S | **Sn** | **20 08 48.3** | **-1.6** |
| **JISG** | **Ishigakijimahi** | **1.23** | **3** | P | **Pn** | **20 08 35.9** | **-0.8** |
| JISG | | | | *e*S | **Sn** | **20 08 51.9** | **-1.6** |
| **JTJ** | **Tarama** | **1.35** | **18** | P | **Pn** | **20 08 37.6** | **-0.8** |
| **YOJ** | **Yonaguni jima** | **1.58** | **315** | P | **Pb** | **20 08 41.8** | **-0.9** |
| YOJ | | | | *e*S | **Sn** | **20 09 01.2** | **-0.9** |
| **YOJ** | **Yonaguni jima** | **1.58** | **315** | *e*Pn | **Pn** | **20 08 41.1** | **-0.4** |
| **JYNG** | **Yonaguni jima** | **1.62** | **313** | P | **Pn** | **20 08 42.2** | **+0.2** |
| JYNG | | | | *e*S | **Sn** | **

0.7nm,0.7s,baz=39,slow=8.0,SNR=2.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PSZ** | **Piszkesteto** | **82.04** | **319** | P | **P** | **20** | **20** | **34.1** **0.0** |

*BJI **19** 20:17:53.3, 43.50S × 172.40E, h20km*
*ISCJB **19** 20:17:54.1±0.3, 43.58S±0.03 × 172.46E±0.04, h25km±3km, mb3.4/2, Error ellipse: s-maj=6.6km s-min=3.5km az=143.2*
*IDC **19** 20:17:55.1±1.6, 43.30S × 172.29E, h0km, mb3.5/2, mb1 3.7/3, mb1mx3.5/24, mbtmp3.5/3, ML3.0/1, MS3.3/1, Ms1 3.3/1, ms1mx2.8/20, Error ellipse: s-maj=48.8km s-min=12.6km az=148.0*
*NEIC **19** 20:17:55.2, 43.59S × 172.41E, h15km, MW4.1, ML4.5(WEL), Moment Tensor Solution. s26 Moment tensor: Scale 10^15 Nm; Mrr-0.36; Mθθ 0.75; Mφφ-0.39; Mrθ 0.35; Mθφ-1.52; Mφr 0.22; Best double couple: M0 1.70000×10^15 NP1 φs 261.00000°, δ 81.00000°, λ-164.00000°. NP2 φs 169.00000°, δ 74.00000°, λ-9.00000°. Principal axes: T 1.8200, Plg 5.0000°, Azm 34.0000°; N -0.2500, Plg 72.0000°, Azm 290.0000°; P -1.5600, Plg 18.0000°, Azm 126.0000°; After WEL.*
*NEIC Felt in the Christchurch area.*
*WEL **19** 20:17:55.4±0.1, 43.59S × 172.38E, h8km±1km, ML4.5/36 Error ellipse: s-maj=1.0km s-min=1.0km az=0.0*
*WEL Felt in the Canterbury region, maximum reported intensity MM 6.*

**ISC 19 20:17:54.3**±0.8, **43.54S**±0.03 × **172.41E**±0.02, **h19**km±2km, **n86**, σ1s**11**/73, **1D**, **South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.16** | **103** | Op<br>PG | | **Pg** | **20 17 59.0** | **+0.3** |
| CRLZ | | | | SG | | **Sg** | **20 18 01.5** | **-0.3** |
| CRLZ | | | | AML | AML | | 20 18 02.0 | |
| CRLZ | | | | AML | AML | | 20 18 02.1 | |
| CRLZ | | | | AML | AML | | 20 18 02.2 | |
| **CRLZ** | **Canterbury Las** | **0.16** | **103** | P* | | **Pg** | **20 17 58.8** | **0.0** |
| CRLZ | | | | S* | | **Sg** | **20 18 01.6** | **-0.2** |
| **MQZ** | **McQueen's Vall** | **0.24** | **133** | PG | | **Pg** | **20 18 00.4** | **+0.4** |
| MQZ | | | | SG | | **Sg** | **20 18 04.1** | **+0.3** |
| MQZ | | | | AML | AML | | 20 18 04.9 | |
| **MQZ** | **McQueen's Vall** | **0.24** | **133** | *e*Pg | | **Pg** | **20 18 00.2** | **+0.2** |
| MQZ | | | | P* | | **Pg** | **20 18 00.4** | **+0.4** |
| MQZ | | | | *e*Sg | | **Sg** | **20 18 04.1** | **+0.3** |
| MQZ | | | | S* | | **Sg** | **20 18 04.3** | **+0.9** |
| **OXZ** | **Oxford** | **0.35** | **309** | PG | | **Pg** | **20 18 01.8** | **+0.2** |
| OXZ | | | | SG | | **Sg** | **20 18 07.1** | **+0.4** |
| **OXZ** | **Oxford** | **0.35** | **309** | P* | | **Pg** | **20 18 01.2** | **-0.5** |
| OXZ | | | | *e*Sg | | **Sb** | **20 18 07.5** | **+0.4** |
| **LTZ** | **Lake Taylor** | **0.77** | **352** | P* | | **Pn** | **20 18 10.4** | **+0.3** |
| LTZ | | | | AML | AML | | 20 18 21.4 | |
| LTZ | | | | AML | AML | | 20 18 23.7 | |
| **LTZ** | **Lake Taylor** | **0.77** | **352** | P* | | **Pg** | **20 18 09.8** | **+0.5** |
| **RPZ** | **Rata Peaks** | **1.00** | **260** | P* | | **Pn** | **20 18 13.8** | **+0.5** |
| RPZ | | | | S* | | **Sg** | **20 18 27.3** | **+0.5** |
| RPZ | | | | AML | AML | | 20 18 32.1 | |
| **RPZ** | **Rata Peaks** | **1.00** | **260** | Pg | | **Pn** | **20 18 13.8** | **+0.5** |
| | 595nm,0.3s,baz=82,slow=3.0,SNR=832 | | | | | | | |
| RPZ | | | | Lg | | Lg | 20 18 27.9 | |
| | 1μm,0.3s,baz=197,slow=20,SNR=69 | | | | | | | |
| RPZ | | | | LR | | LR | 20 18 41.4 | |
| | comp=Z,30nm,19.1s,baz=319,slow=47 | | | | | | | |
| **RPZ** | **Rata Peaks** | **1.00** | **260** | *e*Pg | | **Pn** | **20 18 13.7** | **+0.5** |
| RPZ | | | | *e*Sg | | **Sb** | **20 18 25.2** | **-0.5** |
| **WVZ** | **Waitaha Valley** | **1.31** | **290** | AML | | AML | 20 18 42.8 | |
| WVZ | | | | AML | | AML | 20 18 47.9 | |
| **WVZ** | **Waitaha Valley** | **1.31** | **290** | Pn | | **Pb** | **20 18 18.6** | **+0.4** |
| **KHZ** | **Kahutara** | **1.40** | **37** | PN | | **Pn** | **20 18 19.4** | **+0.7** |
| KHZ | | | | AML | AML | | 20 18 41.3 | |
| KHZ | | | | AML | AML | | 20 18 49.5 | |
| **KHZ** | **Kahutara** | **1.40** | **37** | *e*Pn | | **Pn** | **20 18 19.4** | **+0.7** |
| KHZ | | | | *e*Sn | | **Sb** | **20 18 37.3** | **+0.1** |
| **LBZ** | **Lake Benmore** | **1.81** | **241** | AML | | AML | 20 18 57.2 | |
| LBZ | | | | AML | | AML | 20 18 57.2 | |
| LBZ | | | | AML | | AML | 20 18 59.2 | |
| LBZ | | | | AML | | AML | 20 18 59.3 | |
| **LBZ** | **Lake Benmore** | **1.81** | **241** | Pn | | **Pn** | **20 18 25.2** | **+0.7** |
| **THZ** | **Tophouse** | **1.81** | **12** | ‖PN | | **Pn** | **20 18 25.3** | **+0.8** |
| THZ | | | | AML | | AML | 20 19 00.0 | |
| THZ | | | | AML | | AML | 20 19 05.1 | |
| **THZ** | **Tophouse** | **1.81** | **12** | Pn | | **Pn** | **20 18 25.3** | **+0.8** |
| **DSZ** | **Denniston Nort** | **1.85** | **346** | AML | | AML | 20 18 57.6 | |
| DSZ | | | | AML | | AML | 20 18 57.6 | |
| DSZ | | | | AML | | AML | 20 18 58.5 | |
| DSZ | | | | AML | | AML | 20 18 58.6 | |
| **ODZ** | **Otahua Downs** | **1.96** | **220** | AML | | AML | 20 19 00.5 | |
| ODZ | | | | AML | | AML | 20 19 00.5 | |
| ODZ | | | | AML | | AML | 20 19 02.8 | |
| ODZ | | | | AML | | AML | 20 19 02.8 | |
| **ODZ** | **Otahua Downs** | **1.96** | **220** | Pn | | **Pn** | **20 18 26.9** | **+0.3** |
| ODZ | | | | *e*Pg | | **Pg** | **20 18 31.5** | **-0.6** |
| ODZ | | | | *e*Sn | | **Sb** | **20 18 55.6** | **+2.0** |
| **FOZ** | **Fox Glacier** | **1.98** | **268** | AML | | AML | 20 18 58.4 | |
| FOZ | | | | AML | | AML | 20 18 58.5 | |
| FOZ | | | | AML | | AML | 20 19 05.4 | |
| FOZ | | | | AML | | AML | 20 19 05.4 | |
| **FOZ** | **Fox Glacier** | **1.98** | **268** | Pn | | **Pn** | **20 18 27.6** | **+0.9** |
| **BSWZ** | **Blackbirch Sta** | **2.12** | **31** | AML | | AML | 20 18 59.7 | |
| BSWZ | | | | AML | | AML | 20 18 59.9 | |
| **BSWZ** | **Blackbirch Sta** | **2.12** | **31** | Pn | | **Pn** | **20 18 29.8** | **+1.1** |
| **TUWZ** | **Tuamarina** | **2.40** | **29** | AML | | AML | 20 18 47.5 | |
| TUWZ | | | | AML | | AML | 20 19 22.1 | |
| **TUWZ** | **Tuamarina** | **2.40** | **29** | Pn | | **Pn** | **20 18 33.1** | **+0.6** |
| **NNZ** | **Nelson** | **2.43** | **18** | AML | | AML | 20 19 25.4 | |
| NNZ | | | | AML | | AML | 20 19 25.4 | |
| NNZ | | | | AML | | AML | 20 19 27.1 | |
| NNZ | | | | AML | | AML | 20 19 27.1 | |
| **NNZ** | **Nelson** | **2.43** | **18** | Pn | | **Pn** | **20 18 34.4** | **+1.4** |
| **HHSZ** | **Highcliff Hill** | **2.67** | **208** | Pn | | **Pn** | **20 18 36.4** | **0.0** |
| **JCZ** | **Jackson Bay** | **2.69** | **257** | AML | | AML | 20 19 28.7 | |
| JCZ | | | | AML | | AML | 20 19 31.0 | |
| **JCZ** | **Jackson Bay** | **2.69** | **257** | Pn | | **Pn** | **20 18 37.3** | **+0.6** |
| **TCW** | **Tory Channel** | **2.71** | **31** | AML | | AML | 20 19 15.9 | |
| TCW | | | | AML | | AML | 20 19 36.0 | |
| **TCW** | **Tory Channel** | **2.71** | **31** | Pn | | **Pn** | **20 18 37.2** | **+0.5** |
| **QRZ** | **Quartz Range** | **2.71** | **2** | AML | | AML | 20 19 28.0 | |
| QRZ | | | | AML | | AML | 20 19 28.0 | |
| QRZ | | | | AML | | AML | 20 19 29.2 | |
| QRZ | | | | AML | | AML | 20 19 29.2 | |
| **QRZ** | **Quartz Range** | **2.71** | **2** | Pn | | **Pn** | **20 18 38.1** | **+1.2** |
| **WKZ** | **Wanaka** | **2.76** | **241** | AML | | AML | 20 19 28.5 | |
| WKZ | | | | AML | | AML | 20 19 28.8 | |
| WKZ | | | | AML | | AML | 20 19 30.5 | |
| WKZ | | | | AML | | AML | 20 19 30.5 | |
| **WKZ** | **Wanaka** | **2.76** | **241** | Pn | | **Pn** | **20 18 38.0** | **+0.5** |
| **EAZ** | **Earnscleugh** | **2.79** | **232** | AML | | AML | 20 19 27.5 | |
| EAZ | | | | AML | | AML | 20 19 27.5 | |
| EAZ | | | | AML | | AML | 20 19 27.8 | |
| EAZ | | | | AML | | AML | 20 19 27.8 | |
| **EAZ** | **Earnscleugh** | **2.79** | **232** | Pn | | **Pn** | **20 18 38.3** | **+0.4** |
| **SNZO** | **South Karori** | **2.81** | **38** | *e*Pn | | **Pn** | **20 18 38.4** | **+0.3** |
| **PLWZ** | **Palliser** | **2.88** | **48** | Pn | | **Pn** | **20 18 39.3** | **+0.1** |
| **DUWZ** | **D'Urville Isla** | **2.96** | **23** | AML | | AML | 20 19 23.0 | |
| DUWZ | | | | AML | | AML | 20 19 43.5 | |
| **DUWZ** | **D'Urville Isla** | **2.96** | **23** | Pn | | **Pn** | **20 18 42.4** | **+2.2** |
| **MSWZ** | **Moikau Station** | **2.99** | **46** | AML | | AML | 20 19 23.5 | |
| MSWZ | | | | AML | | AML | 20 19 23.7 | |
| **MSWZ** | **Moikau Station** | **2.99** | **46** | Pn | | **Pn** | **20 18 40.8** | **+0.1** |
| **TUZ** | **Tuapeka** | **3.12** | **218** | AML | | AML | 20 19 40.0 | |
| TUZ | | | | AML | | AML | 20 19 40.0 | |
| TUZ | | | | AML | | AML | 20 19 42.1 | |
| TUZ | | | | AML | | AML | 20 19 42.1 | |
| **TUZ** | **Tuapeka** | **3.12** | **218** | Pn | | **Pn** | **20 18 42.5** | **+0.1** |
| **CAW** | **Cannon Point** | **3.13** | **40** | AML | | AML | 20 19 19.7 | |
| CAW | | | | AML | | AML | 20 19 21.2 | |
| **CAW** | **Cannon Point** | **3.13** | **40** | Pn | | **Pn** | **20 18 42.8** | **+0.2** |
| **TRWZ** | **Traveller** | **3.24** | **50** | AML | | AML | 20 19 38.6 | |
| TRWZ | | | | AML | | AML | 20 19 50.2 | |
| **TRWZ** | **Traveller** | **3.24** | **50** | Pn | | **Pn** | **20 18 44.2** | **+0.2** |
| **KIW** | **Kapiti Island** | **3.26** | **36** | AML | | AML | 20 19 49.5 | |
| KIW | | | | AML | | AML | 20 19 55.2 | |
| **KIW** | **Kapiti Island** | **3.26** | **36** | Pn | | **Pn** | **20 18 45.3** | **+0.9** |
| **MTW** | **Mount Morrison** | **3.31** | **45** | AML | | AML | 20 19 23.6 | |
| MTW | | | | AML | | AML | 20 20 16.6 | |
| **MTW** | **Mount Morrison** | **3.31** | **45** | Pn | | **Pn** | **20 18 44.9** | **-0.1** |
| **OGWZ** | **Otaki Gorge** | **3.41** | **38** | Pn | | **Pn** | **20 18 46.4** | **0.0** |
| **MSZ** | **Milford Sound** | **3.42** | **249** | AML | | AML | 20 19 48.9 | |
| MSZ | | | | AML | | AML | 20 19 48.9 | |
| MSZ | | | | AML | | AML | 20 19 50.9 | |
| MSZ | | | | AML | | AML | 20 19 50.9 | |
| **MSZ** | **Milford Sound** | **3.42** | **249** | Pn | | **Pn** | **20 18 46.8** | **+0.3** |
| **MLZ** | **Mavora Lakes** | **3.53** | **238** | AML | | AML | 20 19 57.1 | |
| MLZ | | | | AML | | AML | 20 19 57.8 | |
| **MLZ** | **Mavora Lakes** | **3.53** | **238** | Pn | | **Pn** | **20 18 49.0** | **+0.8** |
| **MRZ** | **Mangatainoka R** | **3.72** | **40** | AML | | AML | 20 14 56.8 | |
| MRZ | | | | AML | | AML | 20 19 35.9 | |
| **SYZ** | **Scrubby Hill** | **3.79** | **217** | AML | | AML | 20 20 05.9 | |
| SYZ | | | | AML | | AML | 20 20 06.0 | |
| SYZ | | | | AML | | AML | 20 20 09.9 | |
| SYZ | | | | AML | | AML | 20 20 10.0 | |
| **SYZ** | **Scrubby Hill** | **3.79** | **217** | Pn | | **Pn** | **20 18 52.1** | **+0.5** |
| **WHZ** | **Wether Hill Ro** | **3.96** | **232** | AML | | AML | 20 20 07.7 | |
| WHZ | | | | AML | | AML | 20 20 18.2 | |
| **WHZ** | **Wether Hill Ro** | **3.96** | **232** | *e*Pn | | **Pn** | **20 18 53.0** | **-1.0** |
| WHZ | | | | *e*Pg | | **Pg** | **20 19 07.7** | **-2.3** |
| WHZ | | | | *e*Sn | | **Sn** | **20 19 40.6** | **+0.8** |
| **BFZ** | **Birch Farm** | **4.04** | **46** | AML | | AML | 20 20 10.5 | |
| **BFZ** | **Birch Farm** | **4.04** | **46** | Pn | | **Pn** | **20 18 54.7** | **-0.4** |
| BFZ | | | | *e*Sn | | **Sn** | **20 19 41.0** | **-0.9** |
| **DCZ** | **Deep Cove** | **4.23** | **241** | AML | | AML | 20 20 12.0 | |
| DCZ | | | | AML | | AML | 20 20 15.8 | |
| **DCZ** | **Deep Cove** | **4.23** | **241** | *e*Pn | | **Pn** | **20 18 57.6** | **0.0** |
| DCZ | | | | *e*Pg | | Pg | 20 19 12.2 | -3.0 |
| DCZ | | | | *e*Sg | | **Sg** | **20 20 09.7** | **-0.3** |
| **APZ** | **The Paps** | **4.54** | **222** | AML | | AML | 20 20 26.3 | |
| APZ | | | | AML | | AML | 20 20 31.7 | |
| **VRZ** | **Vera Road** | **4.75** | **23** | AML | | AML | 20 20 04.4 | |
| VRZ | | | | AML | | AML | 20 20 06.2 | |
| **BKZ** | **Black Stump Fm** | **5.34** | **36** | *e*Pn | | Pn | 20 19 09.9 | -3.2 |
| **HIZ** | **Hauiti** | **5.35** | **21** | AML | | AML | 20 20 16.6 | |
| HIZ | | | | AML | | AML | 20 20 54.1 | |
| **HIZ** | **Hauiti** | **5.35** | **21** | *e*Pn | | **Pn** | **20 19 14.0** | **+0.8** |
| **URZ** | **Urewera** | **6.37** | **36** | Pn | | **Pn** | **20 19 26.1** | **-1.0** |
| | 0.4nm,0.3s,baz=255,slow=3.9,SNR=3.7 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **20 20 34.9** | **-4.3** |
| | 2.8nm,0.3s,baz=74,slow=14,SNR=9.6 | | | | | | | |
| URZ | | | | LR | | LR | 20 22 29.6 | |
| | comp=Z,249nm,20.1s,baz=267,slow=44 | | | | | | | |
| **URZ** | **Urewera** | **6.37** | **36** | *e*Pn | | **Pn** | **20 19 26.7** | **-0.3** |
| URZ | | | | *e*Sn | | **Sn** | **20 20 35.4** | **-3.8** |
| **ASAR** | **Alice Springs** | **37.27** | **290** | P | | **P** | **20 25 07.4** | **+2.4** |
| | 0.5nm,0.5s,baz=130,slow=7.5,SNR=6.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **39.53** | **294** | P | | **P** | **20 25 25.6** | **+1.6** |
| | 0.3nm,0.6s,baz=135,slow=7.5,SNR=4.5 | | | | | | | |
| **CD2** | **Chengdu** | **97.08** | **306** | *e*P | | Pdif | 20 31 26.0 | +0.9 |
| **HHC** | **Hu-ho-hao-te** | **100.28** | **318** | *e*P | | **Pdif** | **20 31 41.4** | **+2.3** |
| **WMQ** | **Urumqi** | **115.16** | **307** | PKP | | **PKPdf** | **20 36 32.0** | **-1.8** |
| **TORD** | **Torodi Ar. Bea** | **148.67** | **198** | PKPbc | | **PKPab** | **20 37 43.9** | **-0.1** |
| | 0.4nm,0.7s,baz=181,slow=1.5,SNR=5.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **148.97** | **338** | PKPbc | | **PKPab** | **20 37 44.1** | **+0.3** |
| | 4.8nm,1.0s,baz=48,slow=4.3,SNR=4.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **149.18** | **277** | PKPbc | | **PKPab** | **20 37 44.4** | **-1.3** |
| | 0.3nm,0.5s,baz=148,slow=3.5,SNR=2.8 | | | | | | | |

*IDC **19** 20:21:47.9±1.3, 19.08N × 105.34E, h0km, mb3.4/4, mb1 3.4/5, mb1mx3.3/34, mbtmp3.3/5, ML3.6/1, MS3.1/1, Ms1 3.3/1, ms1mx2.7/30, Error ellipse: s-maj=28.7km s-min=20.2km az=32.0*
*PLV **19** 20:21:49.7±2.7, 19.06N × 105.35E, h0km±14km, MD3.4, ML4.1*

**ISC 19 20:21:49.5**±2.5, **19.02N**±0.10 × **105.34E**±0.04, **h10**km±17km, **n18**, σ1s**10**/32, **mb3.5**/4, **Vietnam**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MCVV** | **Moc Chau** | **1.89** | **340** | Op<br>*e*Pn | | **Pb** | **20 22 23.6** | **-0.6** |
| MCVV | | | | *e*Pg | | **Pg** | **20 22 26.6** | **+0.8** |
| MCVV | | | | *e*Sg | | **Sg** | **20 22 52.7** | **+2.4** |
| MCVV | | | | AML | | AML | 20 23 01.5 | |
| | comp=E,2μm,0.4s | | | | | | | |
| **PLV** | **Phu-Lien** | **2.15** | **34** | *e*Pn | | **Pn** | **20 22 25.7** | **+0.3** |
| PLV | | | | *e*Pg | | **Pg** | **20 22 31.9** | **+1.0** |
| PLV | | | | *e*Sg | | **Sg** | **20 22 59.0** | **+0.3** |
| **BGV** | **Bac-Giang** | **2.41** | **20** | *e*Pg | | **Pg** | **20 22 36.2** | **+0.4** |
| BGV | | | | *e*Sg | | **Sg** | **20 23 07.3** | **+0.2** |
| BGV | | | | AML | | AML | 20 23 11.9 | |
| | comp=N,1μm,0.4s | | | | | | | |
| **TTVN** | **Tram Tau** | **2.61** | **339** | *e*Pg | | **Pg** | **20 22 38.0** | **-1.6** |
| TTVN | | | | *e*Sg | | **Sg** | **20 23 13.6** | **+0.1** |
| TTVN | | | | AML | | AML | 20 23 23.3 | |
| | comp=E,361nm,0.8s | | | | | | | |
| **MTZV** | **Met** | **2.69** | **20** | *e*Pg | | **Pg** | **20 22 40.7** | **-0.4** |
| MTZV | | | | *e*Sg | | **Sg** | **20 23 14.0** | **-1.9** |
| MTZV | | | | AML | | AML | 20 23 22.7 | |
| | comp=N,1μm,0.5s | | | | | | | |
| **BCVB** | **Bac Can** | **2.88** | **8** | *e*Pg | | **Pg** | **20 22 44.6** | **-0.2** |
| BCVB | | | | *e*Sg | | **Sg** | **20 23 21.4** | **-0.7** |
| BCVB | | | | AML | | AML | 20 23 26.4 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **TIYB** | **Tien Yen** | **3.00** | **40** | *e*Pn | | **Pn** | **20 22 37.7** | **+0.6** |
| TIYB | | | | *e*Sg | | **Sg** | **20 23 25.0** | **-1.0** |
| **TGV** | **Tuan Giao** | **3.13** | **325** | *e*Pn | | **Pn** | **20 22 40.1** | **+1.2** |
| TGV | | | | *e*Pg | | **Pb** | **20 22 46.8** | **+1.5** |
| TGV | | | | *e*Sg | | **Sg** | **20 23 30.3** | **+0.2** |
| TGV | | | | AML | | AML | 20 23 37.6 | |
| | comp=N,672nm,0.5s | | | | | | | |
| **VTVB** | **Vinh Tuy** | **3.25** | **353** | *e*Pg | | **Pg** | **20 22 50.5** | **-1.2** |
| VTVB | | | | *e*Sg | | **Sg** | **20 23 33.5** | **-0.3** |
| **SPV** | **Sa-pa** | **3.59** | **337** | *e*Pn | | **Pn** | **20 22 46.7** | **+1.3** |
| SPV | | | | *e*Pg | | **Pg** | **20 22 57.2** | **-1.2** |
| SPV | | | | *e*Sg | | **Sg** | **20 23 45.7** | **+0.7** |
| **MLVB** | **Muong La stati** | **3.64** | **326** | *e*Pg | | Pn | 20 22 41.9 | -4.0 |
| MLVB | | | | *e*Sg | | Sn | 20 23 18.8 | -10 |
| MLVB | | | | AML | | AML | 20 23 28.6 | |
| | comp=N,425nm,0.4s | | | | | | | |
| **CBVB** | **Cao Bang** | **3.70** | **12** | *e*Sg | | **Sg** | **20 23 47.6** | **-0.9** |
| **HGVB** | **Ha Giang** | **3.81** | **355** | *e*Pg | | **Pg** | **20 23 02.7** | **+0.1** |
| HGVB | | | | *e*Sg | | **Sg** | **20 23 50.6** | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **6.09** | **266** | Pn | | **Pn** | **20 23 18.9** | **-0.7** |
| | comp=N,0.4nm,0.3s,baz=79,slow=12,SNR=6.7 | | | | | | | |
| CMAR | | | | Pg | | Pb | 20 23 39.8 | +4.1 |
| | comp=N,1.9nm,0.3s,baz=84,slow=16,SNR=27 | | | | | | | |
| CMAR | | | | Lg | | Lg | 20 25 01.9 | |
| | comp=N,1.8nm,0.3s,baz=86,slow=28,SNR=4.7 | | | | | | | |
| CMAR | | | | LR | | LR | 20 25 46.3 | |
| | comp=N,163nm,20.4s,baz=102,slow=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **33.54** | **331** | P | | **P** | **20 28 27.3** | **-2.1** |
| | comp=N,0.3nm,0.4s,baz=133,slow=10,SNR=3.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **38.28** | **340** | P | | **P** | **20 29 09.8** | **-0.1** |
| | comp=N,0.4nm,0.3s,baz=159,slow=8.6,SNR=3.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **48.04** | **142** | P | | **P** | **20 30 29.6** | **+0.4** |
| | comp=N,0.4nm,0.9s,baz=330,slow=8.2,SNR=2.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **50.76** | **146** | P | | **P** | **20 30 50.8** | **+0.8** |
| | comp=N,0.2nm,0.7s,baz=322,slow=7.4,SNR=3.9 | | | | | | | |

*ISK **19** 20:21:55.6, 38.61N × 27.98E, h20km, MD2.6*
*ISCJB **19** 20:21:56.7±0.5, 38.61N±0.02 × 27.99E±0.04, h0km±8km, Error ellipse: s-maj=5.0km s-min=4.1km az=7.6*
*CSEM **19** 20:21:56.4±0.3, 38.60N × 27.98E, h10km, MD2.6, Error ellipse: s-maj=6.2km s-min=5.1km az=77.0*
*DDA **19** 20:21:56.7, 38.59N × 28.00E, h7km, Md2.9*

**ISC 19 20:21:56.5**±0.9, **38.60N**±0.02 × **27.99E**±0.03, **h12**km±8km, **n25**, σ0s**80**/40, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AKHS** | **Akhisar** | **0.31** | **334** | Op<br>*i* P | | **Pg** | **20 22 03.0** | **+0.2** |
| AKHS | | | | *i* S | | **Sg** | **20 22 07.8** | **+0.8** |
| **AKHS** | **Akhisar** | **0.31** | **334** | P | | **Pg** | **20 22 03.0** | **+0.2** |
| AKHS | | | | S | | **Sg** | **20 22 07.8** | **+0.8** |
| **AKS** | **Akhisar** | **0.31** | **334** | *e*PG | | **Pg** | **20 22 02.9** | **+0.1** |
| AKS | | | | *e*SG | | **Sg** | **20 22 07.7** | **+0.7** |
| **AKS** | **Akhisar** | **0.31** | **334** | *e*Pg | | **Pg** | **20 22 02.9** | **+0.1** |
| AKS | | | | *e*Sg | | **Sg** | **20 22 07.7** | **+0.7** |
| **MANT** | **Manisa** | **0.46** | **104** | *i* P | | **Pb** | **20 22 06.1** | **-0.7** |
| MANT | | | | *i* S | | **Sg** | **20 22 11.9** | **0.0** |
| **MANT** | **Manisa** | **0.46** | **104** | P | | **Pb** | **20 22 06.1** | **-0.7** |
| MANT | | | | S | | **Sg** | **20 22 11.9** | **0.0** |
| **KULA** | **Kula-Manisa** | **0.54** | **99** | *e*PG | | **Pg** | **20 22 06.8** | **-0.2** |
| **KULA** | **Kula-Manisa** | **0.54** | **99** | *e*Pg | | **Pg** | **20 22 06.8** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.66** | **187** | *e*PG | | **Pb** | **20 22 09.0** | **-1.1** |
| AYDB | | | | *e*SG | | **Sb** | **20 22 19.5** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.66** | **187** | *e*Pg | | **Pb** | **20 22 09.0** | **-1.1** |
| **DEMI** | **Demirci** | **0.72** | **52** | *i* P | | **Pg** | **20 22 10.4** | **-0.1** |
| DEMI | | | | *i* S | | **Sb** | **20 22 21.3** | **+0.3** |
| **DEMI** | **Demirci** | **0.72** | **52** | P | | **Pg** | **20 22 10.4** | **-0.1** |
| DEMI | | | | S | | **Sb** | **20 22 21.3** | **+0.3** |
| **BLCB** | **Balcova** | **0.77** | **254** | *e*PG | | **Pg** | **20 22 10.2** | **-1.3** |
| **BLCB** | **Balcova** | **0.77** | **254** | *e*Pg | | **Pg** | **20 22 10.2** | **-1.3** |
| **AYDN** | **Tasoluk** | **0.94** | **185** | *i* P | | **Pn** | **20 22 16.3** | **+0.6** |
| **AYDN** | **Tasoluk** | **0.94** | **185** | P | | **Pn** | **20 22 16.3** | **+0.6** |
| AYDN | | | | S | | **Sn** | **20 22 31.1** | **+1.9** |
| **BALB** | **Balikesir** | **1.04** | **356** | *e*PG | | **Pg** | **20 22 15.7** | **-0.8** |
| **BALB** | **Balikesir** | **1.04** | **356** | *e*Pg | | **Pg** | **20 22 15.7** | **-0.8** |
| **DURS** | **Dursunbey** | **1.07** | **21** | *i* P | | **Pn** | **20 22 17.2** | **-0.2** |
| DURS | | | | *i* S | | **Sn** | **20 22 33.1** | **+0.8** |
| **DURS** | **Dursunbey** | **1.07** | **21** | P | | **Pn** | **20 22 17.2** | **-0.2** |
| DURS | | | | S | | **Sn** | **20 22 33.1** | **+0.8** |
| **DST** | **Dursunbey** | **1.11** | **26** | *e*PN | | **Pb** | **20 22 16.2** | **-1.6** |
| **DST** | **Dursunbey** | **1.11** | **26** | *e*Pn | | **Pb** | **20 22 16.2** | **-1.6** |
| **BALY** | **Balya** | **1.17** | **346** | *i* P | | **Pg** | **20 22 19.5** | **+0.5** |
| BALY | | | | *i* S | | **Sn** | **20 22 35.1** | **+0.3** |
| **BALY** | **Balya** | **1.17** | **346** | P | | **Pg** | **20 22 19.6** | **+0.5** |
| BALY | | | | S | | **Sn** | **20 22 35.1** | **+0.3** |
| **ZEY** | **˜zmir** | **1.22** | **253** | P | | **Pg** | **20 22 20.1** | **+0.1** |
| ZEY | | | | S | | **Sn** | **20 22 36.4** | **+0.6** |

*DDA **19** 20:22:46.5, 40.10N × 40.32E, h5km, Md3.0*
*ISK **19** 20:22:46.7, 40.05N × 40.33E, h6km, MD2.6*
*CSEM **19** 20:22:47.7±0.2, 40.08N × 40.35E, h5km, MD3.0, Error ellipse: s-maj=4.4km s-min=3.0km az=4.0*

**ISC 19 20:22:47.1**±1.2, **40.13N**±0.03 × **40.31E**±0.02, **h1**km±12km, **n37**, σ0s**81**/58, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KOPT** | **Kop Dagi** | **0.19** | **128** | Op<br>*i* P | | **Pg** | **20 22 50.5** | **-0.2** |
| KOPT | | | | *i* S | | **Sg** | **20 22 53.8** | **+0.7** |
| **KOPT** | **Kop Dagi** | **0.19** | **128** | P | | **Pg** | **20 22 50.5** | **-0.2** |
| KOPT | | | | S | | **Sg** | **20 22 53.8** | **+0.7** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **0.29** | **334** | *e*PG | | **Pb** | **20 22 54.8** | **-0.5** |
| BAYT | | | | *e*SG | | **Sb** | **20 23 00.2** | **-0.5** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **0.29** | **334** | *e*Pg | | **Pb** | **20 22 54.8** | **-0.5** |
| BAYT | | | | *e*Sg | | **Sb** | **20 23 00.2** | **-0.5** |
| **ERZN** | **Erzincan** | **0.71** | **220** | *e*PG | | **Pg** | **20 23 00.3** | **-0.3** |
| ERZN | | | | *e*SG | | **Sg** | **20 23 08.9** | **-0.9** |
| **GUMT** | **Gumushane** | **0.71** | **298** | *e*PG | | **Pb** | **20 23 02.1** | **-0.3** |
| **GUMT** | **Gumushane** | **0.71** | **298** | *e*Pg | | **Pb** | **20 23 02.1** | **-0.3** |
| **KELT** | **Kelkit** | **0.81** | **271** | *i* P | | **Pb** | **20 23 04.0** | **-0.1** |
| KELT | | | | *i* S | | **Sb** | **20 23 16.0** | **+0.5** |
| **KELT** | **Kelkit** | **0.81** | **271** | P | | **Pb** | **20 23 04.0** | **-0.1** |
| KELT | | | | S | | **Sb** | **20 23 16.0** | **+0.5** |
| **EZC** | **Erzincan** | **0.82** | **243** | *e*Pg | | **Pg** | **20 23 00.3** | **-2.6** |
| **EZM** | **Erzurum** | **0.84** | **105** | *e*PG | | **Pg** | **20 23 02.6** | **-0.7** |
| **ERZM** | **Erzurum** | **0.84** | **105** | *i* P | | **Pg** | **20 23 02.6** | **-0.7** |
| **ERZM** | **Erzurum** | **0.84** | **105** | P | | **Pg** | **20 23 02.6** | **-0.7** |
| ERZM | | | | S | | **Sb** | **20 23 16.1** | **-0.7** |
| **MACK** | **Trabzon** | **0.91** | **333** | *i* P | | **Pn** | **20 23 06.4** | **-0.7** |
| MACK | | | | *i* S | | **Sb** | **20 23 19.3** | **+1.0** |
| **MACK** | **Trabzon** | **0.91** | **333** | P | | **Pn** | **20 23 06.4** | **-0.7** |
| MACK | | | | S | | **Sb** | **20 23 19.3** | **+1.0** |
| **KTUT** | **Trabzon** | **0.95** | **334** | *e*PG | | **Pb** | **20 23 06.5** | **+0.2** |
| **KTUT** | **Trabzon** | **0.95** | **334** | *e*Pg | | **Pb** | **20 23 06.5** | **+0.2** |
| **HOMI** | **Horasan** | **1.23** | **94** | P | | **Pn** | **20 23 11.9** | **+0.2** |
| **DDEM** | **Demirkent** | **1.34** | **55** | *i* P | | **Pb** | **20 23 13.0** | **-0.1** |
| DDEM | | | | *i* S | | **Sn** | **20 23 32.1** | **+0.5** |
| **DDEM** | **Demirkent** | **1.34** | **55** | P | | **Pb** | **20 23 12.9** | **-0.1** |
| DDEM | | | | S | | **Sn** | **20 23 32.1** | **+0.5** |
| **DBAD** | **Bademkaya** | **1.38** | **50** | *i* P | | **Pn** | **20 23 12.8** | **-0.8** |
| DBAD | | | | *i* S | | **Sg** | **20 23 31.2** | **-0.2** |
| **DBAD** | **Bademkaya** | **1.38** | **50** | P | | **Pn** | **20 23 12.8** | **-0.8** |
| DBAD | | | | S | | **Sg** | **20 23 31.2** | **-0.2** |
| **PTK** | **Pertek** | **1.43** | **210** | *e*PN | | **Pn** | **20 23 13.5** | **-0.8** |
| **PTK** | **Pertek** | **1.43** | **210** | *e*Pn | | **Pn** | **20 23 13.5** | **-0.8** |
| **ESP

DZM eLR LR 20 48 17.4
5µm,23.0s
**DZM Mont Dzumac 18.70 262** P **P** **20 43 55.2 -0.4**
1.2nm,0.3s,baz=64,slow=0.3,SNR=13
DZM LR LR 20 50 25.5
comp=Z,5µm,18.9s,baz=169,slow=35
**DZM Mont Dzumac 18.70 262** P **P** **20 43 55.2 -0.4**
**URZ Urewera 19.43 203** P **Pn** **20 44 05.1 +0.6**
2.4nm,0.3s,baz=56,slow=2.4,SNR=13
URZ S Sn 20 47 28.1 -14
0.5nm,0.3s,baz=312,slow=18,SNR=4.2
**URZ Urewera 19.43 203** eP **P** **20 44 04.9 +1.7**
78nm,1.2s
URZ S Sn 20 47 28.1 -14
**BFZ Birch Farm 21.89 201** eP **P** **20 44 31.5 +1.7**
724nm,2.3s
**TBI Tubuai 22.52 102** eP **P** **20 44 35.9 -0.9**
645nm,1.3s
TBI eLQ LQ 20 49 01.6
709nm,27.2s
TBI eLR LR 20 49 35.5
5µm,29.5s,baz=269
**PPT2 Papeete2 22.84 87** eS S 20 48 41.3 -7.9
685nm,23.1s
PPT2 eLQ LQ 20 48 55.6
3µm,25.6s
PPT2 eLR LR 20 49 37.8
5µm,29.5s,baz=250
**PPT Papeete 22.85 87** LR LR 20 51 42.1
comp=Z,3µm,19.2s,baz=236,slow=32
**PPT Papeete 22.85 87** eP **P** **20 44 39.6 -0.7**
**PPT Papeete 22.85 87** eP **P** **20 44 39.6 -0.7**
**OXZ Oxford 25.73 205** eP **P** **20 45 06.8 -0.4**
OXZ esP **sP** **20 45 15.0 -0.4**
**RPZ Rata Peaks 26.45 206** P **P** **20 45 13.4 -0.4**
13nm,0.8s,baz=300,slow=10,SNR=4.1
**RPZ Rata Peaks 26.45 206** P **P** **20 45 13.4 -0.4**
**HNR Honiara 27.83 289** LR LR 20 55 42.5
comp=Z,2µm,19.3s,baz=126,slow=35
**HNR Honiara 27.83 289** PFAKE 20 45 40.0 +14
HNR LR LR
comp=Z,2µm,19.0s
**EIDS Eidsvold 32.86 255** P **P** **20 46 11.4 +0.5**
baz=30,SNR=3.3
**RMQ Roma 34.98 253** P **P** **20 46 29.6 +0.3**
baz=32,SNR=8.0
**CNB Canberra Magne 35.70 238** P **P** **20 46 35.3 -0.1**
baz=33,SNR=7.9
**RKT Rikitea 35.84 101** eP P 20 46 34.7 -2.0
comp=Z,84nm,1.0s
RKT eLR LR 20 55 44.5
comp=Z,3µm,29.0s,baz=270
**CAN Canberra 35.98 238** eP **P** **20 46 37.2 -0.7**
CAN pmax pmax
comp=Z,31nm,1.1s
**CAN Canberra 35.98 238** eP **P** **20 46 37.2 -0.7**
comp=Z,31nm,1.1s
CAN LR LR
comp=Z,2µm,19.0s
**YNG Young 36.24 240** P **P** **20 46 39.9 -0.1**
baz=34,SNR=5.6
**JOHN Johnston Islan 37.25 6** PFAKE 20 47 00.0 +11
JOHN LR LR
comp=Z,184nm,19.0s
**CTA Charters Tower 37.63 263** P **P** **20 46 50.2 -1.9**
comp=Z,12nm,0.7s,baz=97,slow=9.7,SNR=14
**CTA Charters Tower 37.63 263** P **P** **20 46 50.2 -1.9**
**CTAO Charters Tower 37.63 263** eP **P** **20 46 50.0 -2.0**
CTAO pmax pmax
comp=Z,180nm,2.0s
**CTAO Charters Tower 37.63 263** eP **P** **20 46 50.0 -2.0**
comp=Z,181nm,2.0s
CTAO LR LR
comp=Z,2µm,20.0s
**CMSA Cobar Meteorol 38.03 245** P **P** **20 46 53.7 -1.5**
baz=35,SNR=24
**TOO Toolangi 39.27 235** P **P** **20 47 05.4 -0.3**
baz=37,SNR=9.1
**PMG Port Moresby 39.43 280***c iP* P 20 47 04.7 -2.5
PMG pmax pmax
comp=Z,252nm,1.2s
**PMG Port Moresby 39.43 280** eP **P** **20 47 05.0 -2.2**
comp=Z,58nm,0.9s
**TAU Tasmania Unive 39.58 227** PFAKE 20 47 20.0 +12
TAU LR LR
comp=Z,2µm,19.0s
**MTSU Mount Surprise 39.75 266** P **P** **20 47 07.8 -2.1**
baz=37,SNR=16
**COEN Coen 41.75 272** P **P** **20 47 24.8 -1.5**
baz=39,SNR=7.1
**ARPS Mount Arapiles 41.96 237** P **P** **20 47 27.1 -0.7**
baz=39,SNR=10
**HTT Hallett 43.91 243** P P 20 47 38.1 -5.7
baz=41,SNR=6.1
**KIP Kipapa 44.38 21** *i* P **P** **20 47 46.5 -0.9**
KIP pmax pmax
comp=Z,352nm,1.7s
**BBOO Buckleboo 46.27 244** eP **P** **20 48 00.5 -2.0**
comp=Z,26nm,1.1s
**JAY Jayapura 48.04 286** P **P** **20 48 14.9 -1.7**
baz=45,SNR=37
**GENI Genyem 48.49 285** P **P** **20 48 19.0 -1.0**
comp=Z,293nm,1.2s,comp=Z,4µm
**AS01 Alice Springs 48.52 256** eP P 20 48 17.6 -2.5
AS01 ePcP **PcP** **20 49 46.0 -0.1**
**ASAR Alice Springs 48.56 256** P P 20 48 18.1 -2.4
comp=Z,11nm,0.9s,baz=92,slow=8.1,SNR=70
ASAR PcP **PcP** **20 49 46.1 -0.1**
comp=Z,6.4nm,0.9s,baz=98,slow=5.0,SNR=6.4
ASAR LR LR 21 08 07.2
comp=Z,2µm,19.1s,baz=97,slow=35
**ASAR Alice Springs 48.56 256** P P 20 48 18.1 -2.4
ASAR PcP **PcP** **20 49 46.1 -0.1**
**WRAB Tennant Creek 48.71 261** *i* P P 20 48 18.4 -3.3
WRAB pmax pmax
comp=Z,187nm,2.5s
**WRAB Tennant Creek 48.71 261** P P 20 48 18.3 -3.3
comp=Z,120nm,1.3s,SNR=8.3
**WRAB Tennant Creek 48.71 261** eP P 20 48 18.4 -3.3
comp=Z,15nm,0.9s
**WRA Warramunga Arr 48.72 261** P P 20 48 18.8 -2.9
comp=Z,9.8nm,1.0s,baz=96,slow=8.3,SNR=47
WRA PcP **PcP** **20 49 46.9 +0.1**
comp=Z,6.1nm,0.9s,baz=95,slow=3.7,SNR=6.2
**WRA Warramunga Arr 48.72 261** P P 20 48 18.8 -2.9
WRA PcP **PcP** **20 49 46.9 +0.1**
**MTN Manton Dam 53.33 269** eP P 20 48 53.2 -3.3
comp=Z,23nm,0.9s
**WRKA Warakurna 53.46 254** P P 20 48 55.0 -2.4
baz=50,SNR=44
**KNRA Kununurra 54.81 265** P **P** **20 49 05.8 -1.5**
baz=52,SNR=5.8
**FAKI Fak Fak 55.59 281** P **P** **20 49 10.7 -2.2**
comp=Z,51nm,1.5s,comp=Z,1µm
**SIJI Sorong 57.30 283** P **P** **20 49 23.5 -1.6**
comp=Z,124nm,0.9s,baz=82,slow=5.9,SNR=35
SIJI LR LR 21 12 11.7
comp=Z,1µm,21.9s,baz=10.0,slow=34
**SWI Sorong 57.30 283** P **P** **20 49 23.7 -1.4**
baz=55,SNR=14
**SWI Sorong 57.30 283** P **P** **20 49 23.7 -1.4**
comp=Z,184nm,0.9s,comp=Z,2µm
**SBA Scott Base 58.15 185** eP **P** **20 49 33.0 +3.0**
SBA pmax pmax
comp=Z,160nm,2.0s
**SBA Scott Base 58.15 185** eP **P** **20 49 33.0 +3.0**
comp=Z,164nm,2.0s
**VNDA Vanda 58.28 186** P **P** **20 49 33.1 +2.1**
comp=Z,4.5nm,0.9s,baz=12,slow=6.8,SNR=18
VNDA LR LR 21 09 48.7
comp=Z,458nm,20.2s,baz=16,slow=31
**VNDA Vanda 58.28 186** eP **P** **20 49 33.9 +2.9**
VNDA pmax pmax
comp=Z,60nm,1.9s
**VNDA Vanda 58.28 186** eP **P** **20 49 33.9 +2.9**
comp=Z,60nm,1.9s
**NLAI Namlea 60.22 278** P **P** **20 49 43.7 -1.7**
comp=Z,44nm,1.6s,comp=Z,740nm
**SOEI Soe 60.67 270** P **P** **20 49 48.6 -0.1**
baz=58,SNR=9.6
**SOEI Soe 60.67 270** P **P** **20 49 48.0 -0.6**
comp=Z,102nm,1.1s
**SOEI Soe 60.67 270** eP **P** **20 49 47.6 -1.0**
comp=Z,75nm,0.9s
**LBMI Labuha 60.84 281** P **P** **20 49 48.6 -1.0**
comp=Z,73nm,1.1s,comp=Z,907nm
**BATI Baumata 61.10 269** P **P** **20 49 50.4 -1.0**
comp=Z,12nm,0.7s,baz=355,slow=12,SNR=2.5
BATI LR LR 21 16 21.0
comp=Z,1µm,19.8s,baz=131,slow=36
**BATI Baumata 61.10 269** P **P** **20 49 50.4 -1.0**
**TNTI Ternate 61.52 283** P **P** **20 49 52.9 -1.3**
comp=Z,174nm,1.0s,comp=Z,2µm
**TNTI Ternate 61.52 283** eP **P** **20 49 53.0 -1.3**
comp=Z,134nm,0.9s
**SANI Sanana 61.69 279** P **P** **20 49 54.4 -1.0**
comp=Z,42nm,1.3s,comp=Z,622nm
**KLBR Kellerberrin 61.81 244** P **P** **20 49 55.6 -0.4**
baz=59,SNR=10
**MEEK Meekatharra 61.84 250** P **P** **20 49 54.8 -1.4**
baz=59,SNR=4.9
**MBWA Marble Bar 61.91 256** eP **P** **20 49 54.8 -2.0**
comp=Z,12nm,0.8s
MBWA LR LR
comp=Z,2µm,20.0s
**NWAO Narrogin (SRO) 62.07 243** P **P** **20 49 56.9 -0.9**
comp=Z,18nm,0.9s,baz=143,slow=0.1,SNR=5.4
**NWAO Narrogin (SRO) 62.07 243** P **P** **20 49 57.7 0.0**
baz=59,SNR=3.8
**NWAO Narrogin (SRO) 62.07 243** P **P** **20 49 56.9 -0.9**
**BLDU Ballidu 62.84 245** P **P** **20 50 02.3 -0.6**
baz=60,SNR=9.2
**MORW Morawa 63.66 247** P **P** **20 50 07.8 -0.6**
baz=61,SNR=8.9
**LUWI Luwuk 65.05 279** P **P** **20 50 17.2 -0.4**
baz=62,SNR=4.7
**LUWI Luwuk 65.05 279** eP **P** **20 50 16.1 -1.5**
comp=Z,100nm,1.2s
**DAV Davao City (W) 65.78 288** PFAKE 20 50 30.0 +7.6
DAV LR LR
comp=Z,520nm,21.0s
**BKSI Bulukumba 65.99 273** P **P** **20 50 21.8 -2.0**
comp=Z,18nm,1.6s
**KAPI Kappang 66.44 274** PFAKE 20 50 40.0 +13
KAPI LR LR
comp=Z,347nm,19.0s
**SPSI Sidrap Palu 66.79 275** P **P** **20 50 30.1 +1.2**
**TWSI Taliwang, Sumb 67.91 269** P **P** **20 50 38.8 +2.8**
**QSPA South Pole Qui 69.54 180** eP **P** **20 50 46.6 +1.2**
comp=Z,157nm,2.0s
**MIR Mirnyy 72.72 205***⇑ eP* P 20 51 16.0 +12
MIR pmax pmax
comp=Z,40nm,3.0s
**MJAR Matsushiro Arr 72.78 321** P **P** **20 51 03.5 -1.8**
comp=Z,4.6nm,0.7s,baz=157,slow=5.6,SNR=3.8
**MJAR Matsushiro Arr 72.78 321** P **P** **20 51 03.5 -1.8**
**MAJO Matsushiro 72.79 321** eP P 20 51 02.9 -2.4
MAJO pmax pmax
comp=Z,51nm,0.9s
**MAJO Matsushiro 72.79 321** PFAKE 20 51 20.0 +15
MAJO LR LR
comp=Z,445nm,19.0s
**KKM Kota Kinabalu 73.81 283** PFAKE 20 51 20.0 +8.0
KKM LR LR
comp=Z,415nm,20.0s
**ERM Erimo 73.99 328** PFAKE 20 51 20.0 +7.8
ERM LR LR
comp=Z,698nm,19.0s
**YUK Yuzh-Kuril'sk 74.23 331***c iP* **P** **20 51 13.6 0.0**
YUK *i* 20 51 33.7
YUK *i* S **S** **21 00 48.5 +2.3**
YUK pmax pmax
comp=Z,348nm,4.5s
**KUR Kuril'sk 74.28 333** P P 20 51 03.6 -10
KUR *i* 21 01 20.2
KUR pmax pmax
comp=Z,641nm,3.7s
**JNU Nakatsue 75.22 314** P **P** **20 51 18.4 -1.2**
comp=Z,7.4nm,0.7s,baz=285,slow=20,SNR=3.9
**JNU Nakatsue 75.22 314** P **P** **20 51 18.4 -1.2**
**BTM Bintulu 75.61 279***⇑ iP* **P** **20 51 23.1 +0.7**
**MWC Mount Wilson 75.84 45** eP **P** **20 51 22.3 -1.1**
MWC pmax pmax
comp=Z,13nm,1.3s
**MWC Mount Wilson 75.84 45** eP **P** **20 51 22.3 -1.1**
comp=Z,13nm,1.3s
**ARVC Arvin 75.88 44** P **P** **20 51 23.9 +0.5**
baz=76
**BFSC Mount Baldy Ra 76.11 45** P **P** **20 51 24.5 -0.4**
baz=76
**SBUM Sibu 76.13 278***⇓ iP* **P** **20 51 27.0 +1.7**
**MONP Monument Peak 76.14 47** P **P** **20 51 25.0 -0.1**
baz=76
**VES Vestal, Richgr 76.16 43** P **P** **20 51 25.0 +0.1**
baz=76
**IBP Imperial Bould 76.23 47** P **P** **20 51 25.6 0.0**
baz=76
**EDW2 Edwards Air Fo 76.28 44** P **P** **20 51 25.5 -0.2**
baz=76
**ISA Isabella 76.44 43** eP **P** **20 51 26.7 +0.1**
ISA e 20 51 38.6
**ISA Isabella 76.44 43** P **P** **20 51 26.5 -0.1**
baz=77
**ISA Isabella 76.44 43** eP **P** **20 51 26.7 +0.1**
ISA ePcP **PcP** **20 51 38.6 +0.3**
**PFO Pinyon Flat Ob 76.54 46** eP **P** **20 51 27.6 +0.3**
PFO e 20 51 39.4
PFO pmax pmax
comp=Z,170nm,2.6s
**PFO Pinyon Flat Ob 76.54 46** eP **P** **20 51 27.6 +0.3**
comp=Z,169nm,2.6s
PFO ePcP **PcP** **20 51 39.4 +0.5**
PFO LR LR
comp=Z,821nm,19.0s
**SWSC Sam W. Stewart 76.60 47** P **P** **20 51 27.7 +0.2**
baz=77
**CMB Columbia Colle 76.72 40** eP **P** **20 51 28.3 +0.1**
CMB e 20 51 39.6
**CMB Columbia Colle 76.72 40** eP **P** **20 51 28.2 +0.1**
CMB ePcP **PcP** **20 51 39.6 +0.2**
**LRMC Laurel Mountai 76.83 44** P **P** **20 51 28.6 -0.3**
baz=77
**OHCM Honcut 76.90 39** eP **P** **20 51 28.7 -0.3**
**BELC Belle Mtn. Jos 77.08 46** P **P** **20 51 30.5 +0.1**
baz=77
**BC3 Big Chuckawall 77.25 47** P **P** **20 51 31.5 +0.2**
baz=78
**N02D Trinity Center 77.27 37** P **P** **20 51 31.8 +0.6**
baz=78
**GSC Goldstone 77.31 45** eP **P** **20 51 31.8 +0.3**
GSC pmax pmax
comp=Z,280nm,2.9s
**GSC Goldstone 77.31 45** P **P** **20 51 31.4 -0.2**
baz=78
**GSC Goldstone 77.31 45** eP **P** **20 51 31.8 +0.3**
comp=Z,282nm,2.9s
**MPMC Manual Prospec 77.31 44** P **P** **20 51 31.7 0.0**
baz=78
**GLA Glamis 77.33 47** eP **P** **20 51 32.6 +0.9**
GLA pmax pmax
comp=Z,88nm,1.9s
**GLA Glamis 77.33 47** P **P** **20 51 32.1 +0.4**
baz=78
**GLA Glamis 77.33 47** eP **P** **20 51 32.6 +0.9**
comp=Z,88nm,1.9s
**HEC Hector,Ludlow 77.34 45** P **P** **20 51 31.4 -0.3**
baz=78
**O03D Paynes Creek 77.34 38** P **P** **20 51 30.6 -1.0**
baz=78
**DAC Darwin (Calif) 77.38 43** eP **P** **20 51 32.4 +0.3**
DAC pmax pmax
comp=Z,120nm,2.2s
**DAC Darwin (Calif) 77.38 43** eP **P** **20 51 32.4 +0.3**
comp=Z,120nm,2.2s
**MTUM Tungsten Hills 77.42 42** eP **P** **20 51 31.6 -0.7**
MTUM ePcP **PcP** **20 51 41.8 -0.9**
**PETK Petropavlovsk- 77.46 343** P **P** **20 51 30.3 -1.6**
comp=Z,3.3nm,0.6s,baz=145,slow=8.9,SNR=5.8
PETK LR LR 21 21 45.9
comp=Z,155nm,21.2s,baz=170,slow=33
**PETK Petropavlovsk- 77.46 343** P **P** **20 51 30.3 -1.6**
**M02C Callahan 77.47 37** P **P** **20 51 32.6 +0.3**
baz=78
**TPUB Ta-pu 77.54 301** eP P 20 51 29.9 -3.2
comp=Z,969nm,2.8s
**L02D Cave Junction, 77.57 36** P **P** **20 51 33.1 +0.3**
baz=78
**IRM Iron Mountain 77.74 46** P **P** **20 51 34.2 +0.3**
baz=78
**GMRC Granite Mounta 77.76 46** P **P** **20 51 34.3 +0.1**
baz=78
**YBH Yreka Blue Hor 77.78 36** eP **P** **20 51 34.2 +0.1**
YBH pmax pmax
comp=Z,180nm,2.8s
**YBH Yreka Blue Hor 77.78 36** eP **P** **20 51 34.2 +0.1**
comp=Z,175nm,2.8s
**YSS Yuzh-Sakhalins 77.87 331** eP **P** **20 51 34.0 -0.2**
YSS e 20 51 46.0
YSS MLR MLR
comp=Z,800nm,18.0s
**Y12C Blythe 77.94 47** P **P** **20 51 35.3 +0.3**
baz=78
**GRAC Grapevine Rang 77.96 43** P **P** **20 51 35.8 +0.7**
baz=78
**TUQ Turquoise Moun 77.97 45** P **P** **20 51 35.4 +0.1**
baz=78
**214A Organ Pipe Nat 78.13 49** P **P** **20 51 36.2 0.0**
baz=78
**214A Organ Pipe Nat 78.13 49** eP **P** **20 51 35.8 -0.4**
comp=Z,474nm,2.0s
**NVAR Mina Array Bea 78.24 41** P **P** **20 51 35.8 -1.1**
comp=Z,6.0nm,0.8s,baz=225,slow=7.9,SNR=40
NVAR LR LR 21 21 32.7
comp=Z,1µm,18.6s,baz=246,slow=32
**NVAR Mina Array Bea 78.24 41** P **P** **20 51 35.8 -1.1**
**NV01 Mina Array Sit 78.25 41** eP **P** **20 51 36.1 -0.7**
**M04C Macdoel 78.30 37** P **P** **20 51 36.7 -0.3**
baz=78
**PDMCI Parker Dam,Lak 78.51 47** P **P** **20 51 38.1 0.0**
baz=79
**TPNV Topopah Spring 78.65 43** P **P** **20 51 39.1 0.0**
baz=79
**SHPR Sheep Range 79.09 44** eP **P** **20 51 41.2 -0.4**
**MOD Modoc 79.25 38** eP **P** **20 51 41.6 -0.6**
comp=Z,80nm,2.1s
**K05A Summer Lake 79.45 37** eP **P** **20 51 44.3 +1.0**
comp=Z,256nm,2.5s
**J05D Fort Rock, OR 79.62 36** P **P** **20 51 43.5 -0.7**
baz=80
**KSRS Korea Array 79.73 316** P **P** **20 51 45.0 +0.3**
comp=Z,11nm,1.1s,baz=133,slow=5.7,SNR=15
KSRS LR LR 21 22 31.9
comp=Z,406nm,20.7s,baz=126,slow=32
**KSAR Wonju Array Be 79.75 316** P **P** **20 51 45.0 +0.2**
**KSAR Wonju Array Be 79.75 316** P **P** **20 51 45.0 +0.2**
**KS01 Wonju Array Si 79.76 316** eP **P** **20 51 45.0 +0.1**
**TUC Tucson 79.77 50** eP **P** **20 51 46.1 +0.9**
TUC *e* 20 51 55.1
TUC pmax pmax
comp=Z,160nm,2.4s
**TUC Tucson 79.77 50** eP **P** **20 51 46.1 +0.9**
comp=Z,160nm,2.5s
TUC ePcP **PcP** **20 51 55.1 +2.2**
**R11A Troy Canyon, C 79.90 43** P **P** **20 51 45.5 -0.4**
baz=80
**R11A Troy Canyon, C 79.90 43** eP **P** **20 51 44.5 -1.4**
comp=Z,14nm,1.2s
**KDAK Kodiak Island 79.96 11** PFAKE 20 52 00.0 +15
KDAK LR LR
comp=Z,1µm,20.0s
**BMN Battle Mountai 80.13 40** eP **P** **20 51 47.7 +0.6**
BMN pmax pmax
comp=Z,130nm,2.4s
**BMN Battle Mountai 80.13 40** eP **P** **20 51 47.7 +0.6**
comp=Z,128nm,2.4s
**WVOR Wild Horse Val 80.54 38** eP **P** **20 51 48.4 -0.8**
WVOR pmax pmax
comp=Z,23nm,1.3s
**WVOR Wild Horse Val 80.54 38** eP **P** **20 51 48.4 -0.8**
comp=Z,22nm,1.4s
**INCN Inchon 80.59 316** PFAKE 20 52 00.0 +11
INCN LR LR
comp=Z,535nm,19.0s
**CCUT Cedar City 80.87 44** eP **P** **20 51 51.8 +0.6**
comp=Z,26nm,1.3s
**SSE Sheshan 80.95 308** eP **P** **20 51 50.6 -0.9**
SSE sP **sP** **20 51 59.6 -0.4**
SSE S **S** **21 01 59.8 +0.2**
SSE sS **SKSac** **21 02 11.8 +2.3**
SSE PMZ
comp=Z,46nm,0.7s
SSE PMZ
comp=Z,440nm,4.5s
SSE LN
comp=Z,110nm,21.7s
SSE LE
comp=Z,41nm,21.7s
SSE LZ
comp=Z,190nm,20.0s
**WUAZ Wupatki 81.07 47** P **P** **20 51 52.6 +0.3**
baz=81
**WUAZ Wupatki 81.07 47** eP **P** **20 51 53.4 +1.2**
comp=Z,245nm,2.8s
WUAZ ePP **PP** **20 54 56.3 -1.4**
**I07A Izee 81.09 36** eP **P** **20 51 51.7 -0.4**
comp=Z,56nm,2.0s
**J08A Circle Bar Ran 81.21 37** eP **P** **20 51 52.6 -0.1**
comp=Z,120nm,2.5s
**G06A Carlson Farm, 81.23 35** eP **P** **20 51 52.0 -0.7**
comp=Z,102nm,2.1s
**USRK Ussuriysk Ar. 81.40 324** P **P** **20 51 53.5 0.0**
comp=Z,9.4nm,1.1s,baz=145,slow=4.7,SNR=10
**ELK Elko 81.53 41** eP **P** **20 51 54.9 +0.3**
ELK pmax pmax
comp=Z,140nm,2.8s
**ELK Elko 81.53 41** eP **P** **20 51 54.9 +0.3**
comp=Z,142nm,2.8s
**LON Longmire 81.61 33** eP **P** **20 51 54.9 +0.2**
LON pmax pmax
comp=Z,31nm,1.8s
**LON Longmire 81.61 33** eP **P** **20 51 54.9 +0.2**
comp=Z,31nm,1.8s
**D05A Enumclaw 81.82 33** eP **P** **20 51 55.5 -0.1**
comp=Z,94nm,1.6s
**W18A Petrified Fore 81.99 48** P **P** **20 51 58.1 +1.0**
baz=82
**121A Cookes Peak, D 82.05 51** P **P** **20 51 58.2 +0.7**
baz=82
**121A Cookes Peak, D 82.05 51** eP **P** **20 51 57.8 +0.3**
comp=Z,133nm,2.3s
**G08A Pilot Rock 82.17 36** eP **P** **20 51 56.8 -0.9**
comp=Z,203nm,2.7s
**MSU Marysvale 82.18 44** eP **P** **20 51 58.9 +0.7**
**MSU Marysvale 82.18 44** eP **P** **20 51 58.9 +0.7**
**A04D Lummi Island 82.50 31** P **P** **20 51 59.5 +0.4**
baz=83
**LTY Liberty 82.53 33** eP **P** **20 51 59.8 +0.2**
comp=Z,34nm,1.6s
**HAWA Hanford 82.56 34** eP **P** **20 51 58.7 -0.9**
comp=Z,54nm,1.7s
HAWA LR LR
comp=Z,2µm,19.0s
**HABR Khabarovsk 82.60 328***de* eP P 20 51 56.7 -3.0
HABR *e* 20 52 01.5
HABR *e* 20 55 05.4
HABR ePPP PPP 20 56 56.7
HABR eS S 21 02 11.4 -4.5
HABR eSS **SS** **21 07 33.4 -4.9**
HABR eSSS SSS 21 11 02.3
HABR pmax pmax
comp=N,35nm,2.8s
HABR pmax pmax
comp=E,62nm,2.8s
HABR pmax pmax
comp=Z,118nm,2.8s
HABR MLR MLR
comp=Z,274nm,18.0s
**DUG Dugway 82.72 42** eP **P** **20 52 00.6 -0.2**
DUG pmax pmax
comp=Z,40nm,1.8s
**DUG Dugway 82.72 42** P **P** **20 52 00.8 0.0**
baz=83
**DUG Dugway 82.72 42** eP **P** **20 52 00.6 -0.2**
comp=Z,40nm,1.8s
DUG LR LR
comp=Z,592nm,20.0s
**MFID Camas Ranch 82.77 38** eP **P** **20 52 01.0 +0.1**
comp=Z,86nm,2.2s
**MAW Mawson 82.91 199** P **P** **20 52 01.9 +0.8**
comp=Z,3.3nm,0.8s,baz=144,slow=8.1,SNR=7.6
**MAW Mawson 82.91 199** eP **P** **20 52 02.0 +0.8**
MAW pmax pmax
comp=Z,14nm,1.9s
**MAW Mawson 82.91 199** P **P** **20 52 03.2 +2.0**
baz=81,SNR=5.4
**MAW Mawson 82.91 199** eP **P** **20 52 02.0 +0.9**
comp=Z,14nm,1.9s
**MDJ Mudanjiang 83.00 323** P **P** **20 52 02.6 +0.7**
MDJ pP **PcP** **20 52 10.3 +3.7**

MDJ sP sP 20 52 12.4 +2.0
MDJ PMZ
comp=Z,20nm,1.1s
MDJ PMZ
comp=Z,190nm,5.1s
MDJ LN
comp=Z,360nm,22.1s
MDJ LE
comp=Z,330nm,23.9s
MDJ LZ
comp=Z,750nm,20.4s
**MDJ Mudanjiang 83.00 323** *e*P **P 20 52 03.0 +1.0**
MDJ LR LR
comp=Z,767nm,20.0s
**NJ2 Nanjing 83.16 308** *e*P P 20 52 01.0 -2.0
NJ2 PMZ
comp=Z,60nm,0.9s
**TMUT Trail Mountain 83.25 44** *e*P **P 20 52 04.4 +0.7**
comp=Z,2µm,3.0s
**D08A Wollman Farm, 83.31 34** *e*P **P 20 52 03.6 +0.1**
comp=Z,87nm,1.9s
**MNTX Cornudas Mount 83.41 53** P **P 20 52 03.5 -0.9**
baz=84
**MNTX Cornudas Mount 83.41 53** *e*P **P 20 52 04.3 -0.1**
comp=Z,88nm,2.3s
MNTX LR LR
comp=Z,615nm,19.0s
**LAZ Ladron 83.46 50** *e*P **P 20 52 05.3 +0.5**
LAZ *e*PP **PP 20 55 16.3 -1.0**
**F10A Beach Ranch, E 83.54 36** *e*P **P 20 52 03.5 -1.4**
comp=Z,267nm,2.6s
**O16A Springville 83.56 43** *e*P P 20 52 03.6 -1.6
comp=Z,112nm,1.8s
**SPUT South Promonto 83.58 42** *e*P **P 20 52 05.2 0.0**
comp=Z,82nm,1.8s
**SRU San Rafael 83.59 44** *e*P **P 20 52 05.3 -0.1**
SRU pmax pmax
comp=Z,140nm,1.8s
**SRU San Rafael 83.59 44** *e*P **P 20 52 05.2 -0.1**
comp=Z,138nm,1.9s
**TX31 Lajitas Ar. Si 83.60 56** *e*P **P 20 52 05.2 -0.3**
**TXAR Lajitas Array 83.60 56** P **P 20 52 05.2 -0.3**
comp=Z,3.0nm,1.0s,baz=212,slow=6.8,SNR=21
TXAR LR LR 21 22 33.4
comp=Z,634nm,19.8s,baz=0.0,slow=31
**TXAR Lajitas Array 83.60 56** P **P 20 52 05.2 -0.3**
**P17A Butcher Ranch, 83.65 44** *e*P **P 20 52 06.8 +1.1**
comp=Z,186nm,2.0s
**HLID Hailey 83.68 39** P **P 20 52 05.1 -0.6**
baz=84
**HLID Hailey 83.68 39** *e*P **P 20 52 05.3 -0.4**
comp=Z,185nm,2.5s
HLID LR LR
comp=Z,284nm,19.0s
**MYKOM Kota Tinggi 83.69 274** ⇓P **P 20 52 07.1 +0.8**
**BNM Barren Site 83.70 50** *e*P **P 20 52 06.4 +0.3**
BNM *e*PP **PP 20 55 23.8 +4.5**
**LPM Los Pinos Moun 83.77 50** *e*P **P 20 52 06.9 +0.5**
**MVCO Mesa Verde 83.94 47** P **P 20 52 07.4 +0.1**
baz=84
**MVCO Mesa Verde 83.94 47** *e*P **P 20 52 08.5 +1.2**
comp=Z,76nm,1.8s
**P18A Preston Nutter 84.05 44** *e*P **P 20 52 07.7 -0.1**
comp=Z,308nm,2.8s
**TCUT Toone Canyon 84.12 42** *e*P **P 20 52 07.8 -0.3**
comp=Z,298nm,1.9s
**C09A Chrisman Ranch 84.12 34** *e*P **P 20 52 07.0 -0.7**
comp=Z,96nm,2.2s
**ANMO Albuquerque 84.21 50** *i* P **P 20 52 08.4 -0.3**
ANMO pmax pmax
comp=Z,81nm,2.5s
**ANMO Albuquerque 84.21 50** *e*P **P 20 52 09.6 +0.9**
comp=Z,257nm,2.5s
ANMO LR LR
comp=Z,544nm,20.0s
**KGM Kluang 84.27 274** ⇑P **P 20 52 09.8 +0.6**
**HWUT Hardware Ranch 84.29 42** *e*P **P 20 52 07.7 -1.2**
comp=Z,68nm,1.8s
**QIZ Qiongzhong 84.70 292** P **P 20 52 10.9 -0.3**
QIZ S **S 21 02 37.4 -0.9**
QIZ LZ
comp=Z,200nm,27.5s
**KLR Kul'dur 84.74 328** *e*P P 20 52 19.8 +9.1
**CN2 Changchun 84.92 321** *e*P **P 20 52 12.1 +0.3**
CN2 *e*S **S 21 02 42.9 +3.3**
CN2 PMZ
comp=Z,20nm,1.4s
CN2 PMZ
comp=Z,200nm,3.0s
CN2 LN
comp=Z,600nm,20.0s
CN2 LE
comp=Z,300nm,20.0s
CN2 LZ
comp=Z,300nm,23.0s
**MA2 Magadan 84.99 343** PFAKE 20 52 20.0 +8.3
MA2 LR LR
comp=Z,1.0nm,21.0s
**529A Stev Forest Ra 85.08 55** P **P 20 52 11.8 -1.2**
baz=85
**AHID Auburn Hatcher 85.22 41** *e*P **P 20 52 13.7 +0.1**
comp=Z,40nm,1.3s
AHID LR LR
comp=Z,881nm,20.0s
**MCMT McKenzie Canyo 85.33 39** *e*P **P 20 52 14.3 +0.1**
**S22A 4UR Ranch, Cre 85.35 47** P **P 20 52 15.2 +0.7**
baz=86
**429A Davenport Ranc 85.56 55** P **P 20 52 14.9 -0.5**
baz=86
**TRF Thorofare Moun 85.68 10** *e*P **P 20 52 14.5 -0.8**
comp=Z,26nm,1.0s
**228A UT Block 9, Go 85.70 54** P **P 20 52 15.3 -0.7**
baz=86
**REDW Red Top Meadow 85.70 41** *e*P **P 20 52 16.3 +0.3**
comp=Z,164nm,2.3s
**TPAW Teton Pass 85.71 40** *e*P **P 20 52 15.8 -0.3**
comp=Z,22nm,1.3s
**FXWY Fox Creek 85.75 40** *e*P **P 20 52 16.5 +0.3**
comp=Z,64nm,2.0s
**530A J-C Ranch, Com 85.77 56** P **P 20 52 16.1 -0.3**
baz=86
**DLMT Dillon 85.79 38** *e*P **P 20 52 16.0 -0.3**
comp=Z,197nm,2.8s
**SNOW Snow King Moun 85.82 40** *e*P **P 20 52 17.4 +0.8**
comp=Z,343nm,2.8s
**WHN Wuhan 85.86 305** P **P 20 52 17.6 +0.9**
**RND Reindeer 85.88 11** *e*P **P 20 52 15.7 -0.5**
RND pmax pmax
comp=Z,190nm,2.2s
**RND Reindeer 85.88 11** *e*P **P 20 52 15.7 -0.5**
comp=Z,194nm,2.2s
**IMW Indian Meadow 85.94 40** *e*P **P 20 52 17.8 +0.6**
comp=Z,91nm,2.3s
**MOOW Moose Ponds 85.98 40** *e*P **P 20 52 17.5 +0.2**
comp=Z,104nm,2.6s
**LOHW Long Hollow 85.99 40** *e*P **P 20 52 17.7 +0.3**
comp=Z,71nm,2.0s
**BSMT Bassoo Peak 86.01 35** *e*P **P 20 52 18.0 +0.6**
**128A Castleberry Fa 86.01 53** P **P 20 52 16.6 -1.0**
baz=86
**832A Faith Ranch, C 86.03 58** P **P 20 52 17.2 -0.5**
baz=86
**631A Perdido Creek 86.04 57** P **P 20 52 17.4 -0.3**
baz=86
**LRM Limekiln Ridge 86.13 38** *e*P **P 20 52 17.2 -0.9**
**430A Baggett Ranch, 86.14 55** P **P 20 52 17.8 -0.4**
baz=86
**MCK McKinley 86.17 11** *e*P **P 20 52 16.4 -1.1**
MCK pmax pmax
comp=Z,25nm,0.9s
**MCK McKinley 86.17 11** *e*P **P 20 52 16.4 -1.1**
comp=Z,25nm,0.9s
**QLMT Earthquake Lak 86.17 39** *e*P **P 20 52 18.3 +0.1**
**BW06 Boulder Array 86.18 42** *e*P P 20 52 16.7 -1.7
BW06 LR LR
comp=Z,761nm,19.0s
**FLWY Flagg Ranch 86.19 40** *e*P **P 20 52 17.9 -0.5**
comp=Z,30nm,1.4s
**732A Laxson Ranch, 86.22 58** P **P 20 52 18.3 -0.3**
baz=86
**SDCO Great Sand Dun 86.27 47** P **P 20 52 19.0 0.0**
baz=86
**SDCO Great Sand Dun 86.27 47** *e*P **P 20 52 19.4 +0.4**
comp=Z,40nm,1.8s
SDCO LR LR
comp=Z,387nm,20.0s
**933A Laredo 86.30 59** P **P 20 52 19.0 0.0**
baz=86
**CHMT Chamberlain Mo 86.31 37** *e*P **P 20 52 18.4 -0.5**
**Z28A Tucker Farm, M 86.39 53** P **P 20 52 19.1 -0.4**
baz=87
**531A Rocksprings 86.39 56** P **P 20 52 19.1 -0.4**
baz=87
**TIA Tai'an 86.42 311** ⇓P **P 20 52 19.4 0.0**
TIA PMZ
comp=Z,30nm,1.1s
**MSTX Muleshoe 86.42 52** P **P 20 52 19.4 -0.2**
baz=87
**MSTX Muleshoe 86.42 52** *e*P **P 20 52 19.4 -0.2**
comp=Z,98nm,1.6s
**MENT Mentasta 86.46 13** *e*P **P 20 52 18.6 -0.4**
**833A Chaparral WMA, 86.50 58** P **P 20 52 19.3 -0.7**
baz=87
**BOZ Bozeman (W) 86.51 38** *e*P **P 20 52 19.1 -0.7**
BOZ pmax pmax
comp=Z,16nm,1.1s
**BOZ Bozeman (W) 86.51 38** P **P 20 52 18.8 -1.0**
baz=87
**BOZ Bozeman (W) 86.51 38** *e*P **P 20 52 19.1 -0.7**
comp=Z,16nm,1.1s
BOZ LR LR
comp=Z,774nm,19.0s
**034A Hebbronville 86.54 60** P **P 20 52 20.9 +0.7**
baz=87
**LKWY Lake 86.64 40** PFAKE 20 52 30.0 +9.4
LKWY LR LR
comp=Z,1µm,19.0s
**632A Uvalde 86.70 57** P **P 20 52 20.5 -0.5**
baz=87
**532A Rocksprings 86.88 56** P **P 20 52 21.5 -0.4**
baz=87
**331A San Angelo 86.99 55** P **P 20 52 21.8 -0.5**
baz=87
**WRH Wood River Hil 87.00 11** *e*P **P 20 52 20.5 -1.1**
comp=Z,34nm,1.1s
**MLY Manley 87.08 9** *e*P **P 20 52 20.7 -1.3**
comp=Z,133nm,2.6s
**X28A Dimmitt 87.09 52** P **P 20 52 22.6 -0.3**
baz=87
**JCT Junction City 87.11 56** P **P 20 52 22.4 -0.6**
baz=87
**JCT Junction City 87.11 56** PFAKE 20 52 30.0 +7.0
JCT LR LR
comp=Z,870nm,19.0s
**130A Snyder 87.15 54** P **P 20 52 22.8 -0.3**
baz=87
**633A Saathoff Ranch 87.16 57** P **P 20 52 23.1 -0.1**
baz=87
**Y29A Porterfield Fa 87.18 52** P **P 20 52 23.4 +0.1**
baz=87
**V27A Dan Oppiter Fa 87.20 50** P **P 20 52 23.9 +0.5**
baz=87
**ISCO Idaho Springs 87.20 46** PFAKE 20 52 30.0 +6.4
ISCO LR LR
comp=Z,359nm,20.0s
**IPM Ipoh 87.28 276** ⇑P **P 20 52 25.2 +1.1**
**432A Menard 87.29 56** P **P 20 52 23.2 -0.6**
baz=88
**Z30A Sanderson Ranc 87.33 53** P **P 20 52 23.8 -0.2**
baz=88
**231A Bronte 87.35 55** P **P 20 52 23.6 -0.5**
baz=88
**KVTX Kingsville 87.38 59** PFAKE 20 52 40.0 +16
KVTX LR LR
comp=Z,846nm,19.0s
**COLA College 87.41 11** *e*P P 20 52 20.2 -3.3
COLA pmax pmax
comp=Z,15nm,0.9s
**COLA College 87.41 11** *e*P **P 20 52 22.6 -0.9**
comp=Z,22nm,0.9s
COLA LR LR
comp=Z,1µm,20.0s
**SEY Seymchan 87.42 345** *e*P **P 20 52 22.7 -0.9**
**X29A Tulia 87.42 52** P **P 20 52 24.6 +0.1**
baz=88
**IL1 Eielson Array 87.48 11** *e*P P 20 52 22.1 -1.8
**ILAR Eielson Array 87.48 11** P P 20 52 22.1 -1.8
comp=Z,2.7nm,0.7s,baz=222,slow=5.6,SNR=22
**ILAR Eielson Array 87.48 11** P P 20 52 22.1 -1.8
**U27A Thompson Grove 87.51 50** P **P 20 52 24.8 -0.1**
baz=88
**533A Kerrville 87.53 57** P **P 20 52 24.6 -0.4**
baz=88
**332A Millersview 87.55 55** P **P 20 52 24.9 -0.2**
baz=88
**SYO Syowa Base 87.56 191** ⇑*e*P **P 20 52 24.7 +0.3**
**131A Roby 87.62 54** P **P 20 52 25.1 -0.3**
baz=88
**AMTX Amarillo 87.64 51** P **P 20 52 25.4 -0.1**
baz=88
**AMTX Amarillo 87.64 51** *e*P **P 20 52 25.1 -0.4**
comp=Z,392nm,3.0s
**W29A Amraillo 87.77 51** P **P 20 52 25.7 -0.4**
baz=88
**433A Art 87.78 56** P **P 20 52 25.5 -0.7**
baz=88
**VNA3 Neumayer Olymp 87.78 175** P **P 20 52 26.1 +0.6**
**SNAA Sanae 87.81 177** P **P 20 52 26.1 +0.4**
**SNAA Sanae 87.81 177** *e*P P 20 52 24.1 -1.6
**SNAA Sanae 87.81 177** *e*P **P 20 52 25.9 +0.2**
comp=Z,17nm,1.9s
**232A Coleman 87.84 55** P **P 20 52 25.1 -1.3**
baz=88
**T27A Campo 87.88 49** P **P 20 52 26.5 -0.2**
baz=88
**KULM Kulim 87.91 276** ⇓P **P 20 52 28.1 +1.0**
**KULM Kulim 87.91 276** PFAKE 20 52 40.0 +13
KULM LR LR
comp=Z,405nm,20.0s
**534A Blanco 87.95 57** P **P 20 52 26.7 -0.4**
baz=88
**735A Kenedy 87.99 58** P **P 20 52 27.6 +0.4**
baz=88
**X30A Coker Ranch, T 88.04 52** P **P 20 52 28.5 +1.1**
baz=88
**PHWY Pilot Hill 88.04 44** *e*P **P 20 52 27.7 +0.2**
comp=Z,75nm,2.5s
**Z31A Sharp Cattle R 88.08 53** P **P 20 52 27.7 +0.1**
baz=88
**333A Richland Sprin 88.11 56** P **P 20 52 27.5 -0.2**
baz=88
**ABTX Abilene, Hawle 88.16 54** P **P 20 52 27.9 0.0**
baz=88
**ABTX Abilene, Hawle 88.16 54** *e*P **P 20 52 27.9 0.0**
comp=Z,276nm,2.5s
**VNA2 Neumayer--Watz 88.27 175** P **P 20 52 28.7 +0.9**
baz=175,slow=2.6
**Y31A Rekieta Farm, 88.28 53** P **P 20 52 28.5 0.0**
baz=88
**R27A Eads 88.40 48** P **P 20 52 29.7 +0.6**
baz=89
**434A Burnet 88.45 56** P **P 20 52 28.3 -1.1**
baz=89
**VNA1 Neumayer--Stat 88.47 175** P **P 20 52 29.8 +1.0**
**Z32A Haskell 88.58 54** P **P 20 52 29.6 -0.3**
baz=89
**EGAK Eagle 88.62 13** PFAKE 20 52 40.0 +11
EGAK LR LR
comp=Z,865nm,19.0s
**PSI Prapat 88.65 273** P **P 20 52 29.9 -1.0**
comp=Z,3.3nm,0.4s,baz=202,slow=1.7,SNR=6.3
**PSI Prapat 88.65 273** P **P 20 52 30.9 +0.1**
baz=86,SNR=9.0
**PSI Prapat 88.65 273** P **P 20 52 29.9 -1.0**
**334A Lometa 88.69 56** P **P 20 52 30.1 -0.3**
baz=89
**BJT Baijiatuau 88.88 314** *e*P **P 20 52 31.9 +0.8**
**BJT Baijiatuau 88.88 314** *e*P **P 20 52 31.9 +0.8**
BJT LR LR
comp=Z,401nm,20.0s
**BJI Beijing 88.89 314** P **P 20 52 30.9 -0.2**
BJI S **S 21 03 18.9 +0.9**
BJI PMZ
comp=Z,24nm,1.9s
BJI PMZ
comp=Z,280nm,3.6s
BJI LN
comp=Z,260nm,16.1s
BJI LE
comp=Z,340nm,19.2s
BJI LZ
comp=Z,250nm,25.2s
**EGMT Eagleton 88.89 37** PFAKE 20 52 40.0 +8.9
EGMT LR LR
comp=Z,1µm,19.0s
**Y32A R-V Farms, Ver 88.91 53** P **P 20 52 31.3 -0.2**
baz=89
**234A Clairette 89.05 55** P **P 20 52 31.9 -0.2**
baz=89
**Z33A Whitaker Ranch 89.11 54** P **P 20 52 32.4 0.0**
baz=89
**335A Moody 89.30 56** P **P 20 52 33.5 +0.2**
baz=90
**W32A Sentinel 89.54 52** P **P 20 52 34.5 +0.1**
baz=90
**ENH Enshi 89.54 303** *e*P **P 20 52 34.1 -0.4**
ENH LR LR
comp=Z,384nm,22.0s
**BILL Bilibino 89.55 353** *i* P **P 20 52 31.9 -1.7**
BILL *i* 20 52 37.6
BILL *e* 20 56 10.9
BILL pmax pmax
comp=Z,6.0nm,1.3s
BILL MLR MLR
comp=Z,572nm,19.0s
**BILL Bilibino 89.55 353** PFAKE 20 52 40.0 +6.4
BILL LR LR
comp=Z,1µm,22.0s
**WMOK Wichita Mounta 89.72 53** *e*P **P 20 52 35.2 0.0**
WMOK pmax pmax
comp=Z,110nm,2.9s
**WMOK Wichita Mounta 89.72 53** *e*P **P 20 52 35.2 0.0**
comp=Z,106nm,3.0s
**HKT Hockley 90.01 58** *e*P **P 20 52 37.1 +0.5**
HKT pmax pmax
comp=Z,58nm,1.8s
**HKT Hockley 90.01 58** *e*P **P 20 52 37.1 +0.5**
comp=Z,58nm,1.8s
**KRAB Krabi 90.29 279** P P 20 52 41.7 +3.4
comp=Z,23nm,0.7s
**GYA Guiyang 90.32 298** P **P 20 52 38.8 +0.5**
GYA sP sP 20 52 48.3 +1.4
GYA PP **PP 20 56 15.0 +2.2**
GYA SKS **SKSac 21 03 06.6 -2.5**
GYA S **SKKSac 21 03 29.5 +6.6**
GYA SS **SS 21 09 34.4 +1.7**
GYA PMZ
comp=Z,30nm,1.0s
GYA PMZ
comp=Z,130nm,5.8s
GYA LN
comp=Z,890nm,21.6s
GYA LE
comp=Z,640nm,20.4s
GYA LZ
comp=Z,760nm,22.2s
**RSSD Black Hills 90.33 42** *e*P **P 20 52 37.1 -1.0**
RSSD pmax pmax
comp=Z,37nm,1.9s
**RSSD Black Hills 90.33 42** *e*P **P 20 52 37.1 -1.0**
comp=Z,37nm,1.9s
**CBKS Cedar Bluff 90.78 49** PFAKE 20 52 50.0 +10
CBKS LR LR
comp=Z,526nm,20.0s
**LCO Las Campanas 90.82 121** PFAKE 20 52 50.0 +9.0
LCO LR LR
comp=Z,1µm,20.0s
**S32A Newby Ranch, P 90.87 50** P **P 20 52 41.4 +0.9**
baz=91
**HIA Hailar 91.19 323** PFAKE 20 52 50.0 +8.3
HIA LR LR
comp=Z,1µm,19.0s
**G25A Newell 91.23 42** P **P 20 52 42.4 +0.4**
baz=91
**Y36A Durant 91.25 54** P **P 20 52 42.7 +0.4**
baz=92
**W35A Tecumseh 91.31 53** P **P 20 52 43.1 +0.5**
baz=92
**XAN Xi'an 91.50 306** P **P 20 52 44.3 +0.7**
XAN PMZ
comp=Z,21nm,1.5s
XAN PMZ
comp=Z,200nm,7.4s
**PBKT Sadao Pong 91.60 287** P P 20 52 47.7 +3.4
comp=Z,25nm,1.1s
**LOEI Loei 91.67 288** P **P 20 52 46.6 +1.9**
comp=Z,107nm,1.8s,comp=Z,6µm
**G26A Maurine 91.78 42** P **P 20 52 45.6 +0.9**
baz=92
**W36A Wetumka 91.79 53** P **P 20 52 44.7 -0.1**
baz=92
**NNA Nana 92.02 103** PFAKE 20 53 00.0 +14
NNA LR LR
comp=Z,555nm,19.0s
**G27A Dupree 92.24 42** P **P 20 52 47.7 +0.9**
baz=92
**JTS JuntasAbangare 92.25 80** *e*P **P 20 52 47.0 -0.5**
JTS pmax pmax
comp=Z,38nm,1.1s
**JTS JuntasAbangare 92.25 80** *e*P **P 20 52 48.8 +1.3**
comp=Z,30nm,1.0s
JTS LR LR
comp=Z,646nm,21.0s
**DGMT Dagmar 92.31 39** PFAKE 20 53 00.0 +13
DGMT LR LR
comp=Z,708nm,20.0s
**PHIT Phitsanulok 92.32 287** P P 20 52 51.0 +3.4
comp=Z,13nm,1.1s
**UTTA Uttaradit 92.39 288** P P 20 52 51.5 +3.6
comp=Z,3.4nm,1.1s,comp=Z,51nm
**HHC Hu-ho-hao-te 92.40 313** *e*P **P 20 52 48.4 +0.8**
HHC PP **PP 20 56 29.3 +0.4**
HHC S **S 21 03 47.1 -3.4**
HHC sS **sS 21 04 00.8 -0.2**
HHC PMZ
comp=Z,25nm,1.1s
HHC LN
comp=Z,240nm,12.3s
HHC LE
comp=Z,170nm,13.6s
HHC LZ
comp=Z,240nm,11.8s
**F27A Lemmon 92.41 42** P **P 20 52 48.0 +0.5**
baz=93
**NANT Nan 92.63 289** P **P 20 52 51.6 +2.5**
comp=Z,3.6nm,1.2s
**X38A Whitesboro 92.66 54** P **P 20 52 48.8 -0.1**
baz=93
**KMI Kunming 93.10 296** P **P 20 52 50.9 -0.5**
KMI pP **pP 20 52 59.0 +1.3**
KMI sP sP 20 53 01.6 +1.6
KMI PP **PP 20 56 38.8 +3.8**
KMI S **S 21 03 53.8 -3.9**
KMI sS **sS 21 04 06.3 -1.9**
KMI PMZ
comp=Z,13nm,1.1s
KMI LN
comp=Z,470nm,10.4s
KMI LE
comp=Z,720nm,10.2s
KMI LZ
comp=Z,810nm,14.6s
**KSU1 Kansas State U 93.11 49** PFAKE 20 53 00.0 +9.2
KSU1 LR LR
comp=Z,961nm,19.0s
**P34A Walnut Farm, R 93.14 49** P **P 20 52 50.9 -0.1**
baz=93
**INK Inuvik 93.26 14** LR LR 21 30 50.8
comp=Z,454nm,18.9s,baz=164,slow=33
**J31A Geddes 93.38 45** P **P 20 52 50.7 -1.3**
baz=94
**V38A Canehill 93.44 53** P **P 20 52 51.4 -1.1**
baz=94
**LAMP Lampang 93.48 288** P P 20 52 56.5 +3.5
comp=Z,5.4nm,0.9s
**T37A Cheneyville 18 93.55 52** P **P 20 52 52.5 -0.4**
baz=94
**MIAR Mount Ida 93.57 55** PFAKE 20 53 00.0 +7.0
MIAR LR LR
comp=Z,885nm,20.0s
**CM01 Chiang Mai Arr 94.05 288** *e*P **P 20 52 55.9 +0.3**
**CMAR Chiang Mai Arr 94.07 288** P **P 20 52 56.6 +0.9**
comp=Z,4.6nm,1.0s,baz=108,slow=2.3,SNR=18
CMAR LR LR 21 33 21.4
comp=Z,151nm,20.0s,baz=130,slow=34
**CMAR Chiang Mai Arr 94.07 288** P **P 20 52 56.6 +0.9**
**CHTO Chiang Mai 94.19 288** P **P 20 52 59.3 +3.0**
**CHTO Chiang Mai 94.19 288** *e*P **P 20 52 55.4 -0.9**
CHTO pmax pmax

comp=Z,130nm,2.8s
CHTO MLR MLR
comp=Z,361nm,20.0s
**CHTO Chiang Mai 94.19 288** *e*P **P 20 52 55.4 -0.9**
comp=Z,130nm,2.8s
CHTO LR LR
comp=Z,361nm,20.0s
**CD2 Chengdu 94.34 301** *e*P **P 20 52 56.6 -0.2**
CD2 pP **pP 20 53 03.6 +0.5**
CD2 PP **PP 20 56 43.8 -0.6**
CD2 SKS **SKSac 21 03 30.1 -1.2**
CD2 S **S 21 04 07.4 -0.6**
CD2 sS **sS 21 04 19.5 +1.0**
CD2 SS **SS 21 10 31.0 +0.6**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,160nm,5.2s
**LVC Limon Verde 94.91 116** *e*P **P 20 53 02.1 +2.2**
comp=Z,61nm,2.0s
LVC LR LR
comp=Z,1μm,20.0s
**ECSD EROS Data Cent 94.97 45** P **P 20 52 58.4 -0.9**
baz=95
**ECSD EROS Data Cent 94.97 45** *e*P **P 20 52 58.8 -0.5**
comp=Z,211nm,2.5s
**LZH Lanzhou 96.13 306** *e*P **P 20 53 07.8 +2.8**
LZH pP pP 20 53 14.8 +3.5
LZH sP sP 20 53 17.3 +3.8
LZH SKS **SKSac 21 03 43.3 +2.5**
LZH *e*S **S 21 04 22.0 -1.5**
LZH sS **sS 21 04 33.3 -0.8**
LZH PMZ
comp=Z,31nm,1.2s
LZH PMZ
comp=Z,230nm,5.5s
LZH LN
comp=Z,600nm,16.3s
LZH LE
comp=Z,420nm,15.8s
LZH LZ
comp=Z,660nm,19.6s
**FFC Flin Flon 96.44 34** PFAKE 20 53 20.0 +14
FFC LR LR
comp=Z,1μm,20.0s
**BCIP Isla Barro Col 96.61 83** PFAKE 20 53 20.0 +13
BCIP LR LR
comp=Z,330nm,19.0s
**AGMN Agassiz Nation 97.25 41** PFAKE 20 53 20.0 +10
AGMN LR LR
comp=Z,582nm,20.0s
**BRAL Brewton 97.44 60** PFAKE 20 53 20.0 +9.1
BRAL LR LR
comp=Z,779nm,20.0s
**ULM Lac du Bonnet 97.99 39** LR LR 21 32 11.7
comp=Z,629nm,19.6s,baz=276,slow=32
**ULN Ulaanbaatar 98.14 318** *e*P P 20 53 11.6 -2.2
ULN pmax pmax
comp=Z,2.0nm,1.0s
**LPAZ La Paz 98.17 111** LR LR 21 28 55.9
comp=Z,592nm,20.0s,baz=259,slow=30
**LPAZ La Paz 98.17 111** *e*P P 20 53 10.3 -4.9
LPAZ *e* 20 53 17.6
**SONA1 Songino Array 98.55 318** *e*PP PP 20 57 12.9 -3.7
**SONM Songino Array 98.55 318** P **P 20 53 14.5 -1.0**
comp=Z,0.3nm,0.6s,baz=76,slow=6.1,SNR=2.9
SONM PP PP 20 57 11.9 -4.6
comp=Z,1.0nm,0.9s,baz=126,slow=7.3,SNR=5.1
SONM LR LR 21 36 03.0
comp=Z,234nm,18.4s,baz=96,slow=34
**SONM Songino Array 98.55 318** P **P 20 53 14.5 -1.0**
SONM PP PP 20 57 11.9 -4.6
**HDIL Hopedale 98.88 50** PFAKE 20 53 30.0 +13
HDIL LR LR
comp=Z,1μm,19.0s
**JFWS Jewell Farm 98.99 48** PFAKE 20 53 30.0 +12
JFWS LR LR
comp=Z,524nm,19.0s
**EYMN Ely 99.85 43** PFAKE 20 53 30.0 +8.8
EYMN LR LR
comp=Z,706nm,19.0s
**GTA Gaotai 100.25 308** *e*P **Pdif 20 53 26.5 +3.2**
GTA pP pP 20 53 34.5 +4.8
GTA sP sP 20 53 38.3 +6.3
GTA PMZ
comp=Z,4.0nm,1.1s
**COWI Conover 100.78 45** PFAKE 20 53 40.0 +15
COWI LR LR
comp=Z,711nm,19.0s
**GOGA Godfrey 101.09 58** PFAKE 20 53 40.0 +13
GOGA LR LR
comp=Z,796nm,19.0s
**TZTN Tazewell 101.93 55** *e*Pdif **Pdif 20 53 31.6 +0.9**
**ACSO Alum Creek Sta 103.39 52** PFAKE 20 53 50.0 +13
ACSO LR LR
comp=Z,818nm,21.0s
**AAM Ann Arbor 103.45 50** PFAKE 20 53 50.0 +13
AAM LR LR
comp=Z,990nm,19.0s
**NHSC New Hope 103.64 60** PFAKE 20 53 50.0 +12
NHSC LR LR
comp=Z,567nm,19.0s
**LSA Lhasa 104.31 297** PFAKE 20 53 50.0 +7.9
LSA LR LR
comp=Z,203nm,20.0s
**GTBY Guantanamo Bay 104.33 74** PFAKE 20 53 50.0 +8.2
GTBY LR LR
comp=Z,229nm,19.0s
**BLA Blacksburg 104.53 55** PFAKE 20 53 50.0 +7.7
BLA LR LR
comp=Z,908nm,19.0s
**CNNC Cliffs of the 106.02 58** PFAKE 20 58 10.0
CNNC LR LR
comp=Z,531nm,20.0s
**CBN Corbin 107.11 55** PFAKE 20 58 10.0
CBN LR LR
comp=Z,1μm,19.0s
**DGAR Diego Garcia 109.47 254** PFAKE 20 58 20.0
DGAR LR LR
comp=Z,891nm,20.0s
**WMQ Urumqi 110.11 310** *e*PKP 20 58 06.0
WMQ PP **PP 20 58 44.0 +1.4**
WMQ SKS SKSdf 21 05 13.0 -6.8
WMQ PPMZ
comp=Z,33nm,8.0s
WMQ LN
comp=Z,230nm,25.0s
WMQ LE
comp=Z,220nm,23.0s
WMQ LZ
comp=Z,250nm,23.0s
**LONY Lake Ozonia 110.39 49** PFAKE 20 58 20.0
LONY LR LR
comp=Z,769nm,20.0s
**NCB Newcomb 110.55 50** PFAKE 20 58 20.0
NCB LR LR
comp=Z,851nm,21.0s
**ZAA0 Zalesovo Array 113.14 321** *e*PP PP 20 58 59.1 -4.8
**ZALV Zalesovo Beam 113.14 321** PP PP 20 58 58.9 -5.0
comp=Z,0.4nm,0.4s,baz=86,slow=2.2,SNR=4.1
**ZALV Zalesovo Beam 113.14 321** PP PP 20 58 58.9 -5.0
**GRGR Grenville 114.50 86** PFAKE 20 58 30.0 +12
GRGR LR LR
comp=Z,251nm,19.0s
**FDF Fort de France 115.70 83** PFAKE 20 58 30.0 +10
FDF LR LR
comp=Z,257nm,19.0s
**BBSR BB Station 116.24 63** PFAKE 20 58 30.0 +9.5
BBSR LR LR
comp=Z,370nm,19.0s
**KURK Kurchatov 116.85 317** PFAKE 20 58 30.0 +8.9
KURK LR LR
comp=Z,872nm,21.0s
**TKM2 Tokmak 2 118.80 308** PFAKE 20 58 40.0 +15
TKM2 LR LR
comp=Z,222nm,19.0s
**AAK Ala-Archa 119.60 308** PFAKE 20 58 40.0 +13
AAK LR LR
comp=Z,321nm,20.0s
**EKS2 Erkin-Say 120.13 308** PFAKE 20 58 40.0 +12
EKS2 LR LR
comp=Z,191nm,22.0s
**BVAR Borovoye Array 121.78 320** PKP **PKPdf 20 58 29.5 -1.1**
comp=Z,2.0nm,0.6s,baz=150,slow=0.7,SNR=11
**BVAR Borovoye Array 121.78 320** PKP **PKPdf 20 58 29.5 -1.1**
**BRVK Borovoye 121.84 320** *i* PKIKP **PKPdf 20 58 28.4 -2.3**
**BRVK Borovoye 121.84 320** PFAKE 20 58 40.0 +9.3
BRVK LR LR
comp=Z,641nm,21.0s
**ABPO Ambohimpanom 123.95 228** PFAKE 20 58 50.0 +14
ABPO LR LR
comp=Z,217nm,19.0s
**SVE Sverdlovsk 126.35 326** *e*PKIKP **PKPdf 20 58 38.9 -0.3**
**ARU Arti 127.57 326** *i* PKIKP **PKPdf 20 58 38.9 -2.6**
ARU 21 00 38.1
ARU 21 05 41.5
ARU SS SS 21 17 44.3 -8.1
ARU MLR MLR
comp=Z,744nm,21.0s
**ARU Arti 127.57 326** *e*PKPpre PKPpre 20 58 35.7
ARU *e*PKPdf **PKPdf 20 58 42.3 +0.7**
ARU *e*PP PP 21 00 36.5 -6.0
ARU LR LR
comp=Z,913nm,19.0s
**LVZ Lovozero 129.45 347** PFAKE 20 59 00.0 +15
LVZ LR LR
comp=Z,706nm,19.0s
**ARCES ARCESS Array B 129.64 351** PKP **PKPdf 20 58 45.7 +0.6**
comp=Z,9.6nm,1.2s,baz=358,slow=5.4,SNR=4.3
**ARCES ARCESS Array B 129.64 351** PKP **PKPdf 20 58 45.7 +0.6**
**APA Apatity 129.99 347** *i* PKIKP **PKPdf 20 58 46.6 +0.8**
APA MLR MLR
comp=Z,2μm,17.0s
**GEYT Alibeck 132.31 303** PKP **PKPdf 20 58 48.9 -2.3**
comp=Z,0.5nm,0.4s,baz=215,slow=25,SNR=2.6
**MATP Matopo 133.93 209** PKP **PKPdf 20 58 54.8 -0.2**
comp=Z,2.1nm,0.9s,baz=127,slow=0.7,SNR=4.7
**MATP Matopo 133.93 209** PKP **PKPdf 20 58 54.8 -0.2**
**LSZ Lusaka 138.49 213** PFAKE 20 59 20.0 +16
LSZ LR LR
comp=Z,467nm,20.0s
**OBN Obninsk 138.69 334** PFAKE 20 59 10.0 +7.6
OBN LR LR
comp=Z,352nm,20.0s
**KIV Kislovodsk 141.92 316** *i* PKIKP **PKPdf 20 59 09.1 +0.3**
KIV pmax pmax
comp=Z,8.0nm,1.1s
KIV MLR MLR
comp=Z,409nm,21.0s
**KIV Kislovodsk 141.92 316** PFAKE 20 59 20.0 +11
KIV LR LR
comp=Z,455nm,19.0s
**GNI Garni 141.98 310** PFAKE 20 59 20.0 +11
GNI LR LR
comp=Z,408nm,20.0s
**KMBO Kilima Mbogo 142.94 238** PKhKP PKPpre 20 59 08.5
comp=Z,2.4nm,0.8s,baz=40,slow=5.3,SNR=5.9
**KMBO Kilima Mbogo 142.94 238** *e*PKHKP PKPpre 20 59 08.3
**KMBO Kilima Mbogo 142.94 238** *e*PKPpre PKPpre 20 59 08.2
KMBO LR LR
comp=Z,270nm,20.0s
**RAYN Ar Rayn 143.75 282** PFAKE 20 59 20.0 +7.4
RAYN LR LR
comp=Z,290nm,20.0s
**DBAD Bademkaya 143.82 312** P PKPab 20 59 10.5 +1.2
**HOMI Horasan 144.05 311** P PKPab 20 59 11.1 +0.7
**EKAR Karacoban 144.23 309** P **PKPab 20 59 12.4 +1.4**
**ANN Anapa 144.78 321** *i* PKIKP PKPdf 20 59 24.8 +11
ANN pmax pmax
comp=Z,60nm,1.4s
**AKASG Malin Array Be 144.95 335** PKP **PKPab 20 59 11.4 -1.6**
comp=Z,14nm,0.7s,baz=40,slow=4.3,SNR=43
**AKASG Malin Array Be 144.95 335** PKP **PKPab 20 59 11.4 -1.6**
**KIEV Kiev 144.96 335** *i* PKHKP **PKPab 20 59 10.3 -2.7**
**KIEV Kiev 144.96 335** *e*PKPdf **PKPab 20 59 11.7 -1.3**
KIEV LR LR
comp=Z,241nm,19.0s
**AK11 Malin Array Si 144.99 335** *e*PKPdf **PKPab 20 59 11.7 -1.5**
**BNGL BINGOL 145.00 309** P **PKPab 20 59 14.5 +0.6**
**RGN Rugen 145.64 353** *e*P **PKPdf 20 59 13.0 -1.8**
baz=9.2,slow=2.9
**GRSN GIRESUNGRSN 146.20 314** P **PKPdf 20 59 18.3 +1.9**
**BSEG Bad Segeberg 146.53 356** *e*P **PKPdf 20 59 17.9 +1.6**
baz=9.2,slow=2.9
**SIM Simferopol' 146.61 323** *de*PKP2 **PKPdf 20 59 18.3 +1.5**
SIM pmax pmax
comp=Z,15nm,0.9s
**ELZG Elazig 146.74 310** P **PKPbc 20 59 19.9 +0.6**
**KEMA Kemaliye 146.77 311** P **PKPdf 20 59 19.6 +2.1**
**FURI Furi 146.82 254** *i* P PKPdf 20 59 14.5 -4.1
**FURI Furi 146.82 254** *e*PKPdf **PKPdf 20 59 20.6 +2.0**
**MALT Malatya 147.21 310** ⇑PKP2 **PKPbc 20 59 21.1 +0.6**
**MALT Malatya 147.21 310** ⇑*i*P **PKPbc 20 59 21.1 +0.6**
**LVV L'vov 147.61 339** *e*PKIKP **PKPdf 20 59 20.3 +1.9**
**KSRV Kasrt alli 147.68 305** *e*P **PKPdf 20 59 19.0 +0.1**
**NRDL Niedersach Rie 147.97 356** *e*P **PKPbc 20 59 21.9 +0.1**
baz=9.2,slow=2.9
**CUSAR Sarkila-SIVAS 148.27 313** P **PKPbc 20 59 24.4 +1.1**
**IBBN Ibbenburen 148.27 358** *e*P **PKPbc 20 59 22.6 -0.1**
baz=9.2,slow=2.9
**MBAR Mbarara 148.27 231** PKPbc **PKPdf 20 59 23.9 +3.2**
comp=Z,3.6nm,0.2s,baz=99,slow=2.8,SNR=9.5
**MBAR Mbarara 148.27 231** *e*PKHKP **PKPdf 20 59 18.4 -2.4**
MBAR *e* 20 59 24.7
**MBAR Mbarara 148.27 231** *e*PKPbc **PKPbc 20 59 24.7 +0.6**
MBAR LR LR
comp=Z,731nm,22.0s
**ASSE Asse, Remlinge 148.29 355** *e*P **PKPbc 20 59 23.5 +0.8**
baz=9.2,slow=2.9
**OJC Ojcow 148.54 343** *e*PKP **PKPbc 20 59 23.8 +0.3**
**OJC Ojcow 148.54 343** *e*PKP2 **PKPbc 20 59 23.8 +0.3**
**OJC Ojcow 148.54 343** *e*PKPbc **PKPbc 20 59 23.7 +0.2**
**CLZ Clausthal 148.60 355** *e*P **PKPbc 20 59 24.2 +0.5**
baz=9.2,slow=2.9
**KSP Ksiaz 148.77 348** *e*PKP **PKPdf 20 59 21.7 +1.5**
**KSP Ksiaz 148.77 348** *e*PKIKP **PKPdf 20 59 21.8 +1.5**
**PRAR RASCA 148.79 334** ⇑*i*P **PKPbc 20 59 24.7 +0.4**
**STHS Stebnicka Huta 148.86 341** *e*PKIKP **PKPdf 20 59 23.6 +3.2**
**STHS Stebnicka Huta 148.86 341** *e*PKP **PKPdf 20 59 23.6 +3.2**
**CLL Collm 148.86 352** *e*PKHKP **PKPdf 20 59 19.8 -0.6**
**CLL Collm 148.86 352** *e*P **PKPbc 20 59 24.2 0.0**
baz=9.2,slow=2.9
CLL *e*L L 22 11 19.3
comp=Z,359nm,19.3s
**CLL Collm 148.86 352** *e*PKPbc **PKPbc 20 59 24.0 -0.3**
comp=Z,63nm,1.4s
CLL *e*PKPlp 20 59 27.0
comp=Z,300nm,17.2s
CLL *i* 20 59 38.2
CLL LmV 22 11 00.0
comp=Z,400nm,19.3s
**CLL Collm 148.86 352** *e*PKPdf **PKPdf 20 59 19.8 -0.6**
**GTTG Gyttingen 148.93 356** *e*P **PKPbc 20 59 24.5 +0.1**
baz=9.2,slow=2.9
**KOLS Kolonicke sedl 148.96 340** *e*PKP2 **PKPbc 20 59 25.0 +0.4**
**KOLS Kolonicke sedl 148.96 340** *e*PKP **PKPbc 20 59 25.0 +0.4**
**BUR04 Bucovina Ar. S 149.00 335** *e*PKPbc **PKPbc 20 59 24.8 -0.1**
**BURAR Bucovina Array 149.00 335** ⇑PKP2 **PKPbc 20 59 25.3 +0.4**
**BURAR Bucovina Array 149.00 335** ⇑*i*P **PKPbc 20 59 25.3 +0.4**
**ANDN Andirin 149.01 310** P **PKPbc 20 59 24.8 -0.4**
**NEUB Neuenburg 149.10 353** *e*P **PKPbc 20 59 25.0 +0.2**
baz=9.2,slow=2.9
**NIE Niedzica 149.13 342** *e*PKP **PKPbc 20 59 25.7 +0.6**
**NIE Niedzica 149.13 342** *e*PKP2 **PKPbc 20 59 25.7 +0.6**
**UPC Upice 149.15 348** *e*PKP2 **PKPbc 20 59 25.8 +0.8**
**UPC Upice 149.15 348** ⇑*e*PKP **PKPbc 20 59 25.8 +0.8**
**BUG Bochum--Univer 149.15 359** *e*P **PKPbc 20 59 24.8 -0.2**
baz=9.2,slow=2.9
**BRG Berggiesshubel 149.15 351** *e*P **PKPdf 20 59 22.4 +1.6**
comp=Z,48nm,2.2s
BRG *e* 20 59 25.8
comp=Z,305nm,2.6s
BRG *e* 20 59 38.9
comp=Z,148nm,2.0s
**BRG Berggiesshubel 149.15 351** *e*PKIKP **PKPdf 20 59 22.4 +1.6**
BRG *e* 20 59 25.8
BRG pmax pmax
comp=Z,48nm,2.2s
**BRG Berggiesshubel 149.15 351** *e*P **PKPbc 20 59 25.3 +0.3**
baz=9.2,slow=2.9
**FBE Freiberg 149.19 351** *e*P **PKPbc 20 59 25.6 +0.5**
baz=9.2,slow=2.9
**UZH Uzhgorod 149.21 339** *e*PKP2 **PKPbc 20 59 25.1 -0.1**
**DPC Dobruska-Polom 149.24 348** *e*PKPDF **PKPdf 20 59 21.0 -0.1**
DPC ⇑*e*PKP **PKPbc 20 59 26.1 +0.8**
DPC *e*pPKP **PKPab 20 59 31.4 +1.6**
DPC *ex* x 20 59 36.7
DPC *ex* x 21 00 05.0
**TESR Tescani 149.28 332** ⇑*i*P **PKPbc 20 59 26.4 +0.9**
**OKC Ostrava-Krasne 149.31 345** *e*PKP2 **PKPbc 20 59 25.5 0.0**
**OKC Ostrava-Krasne 149.31 345** ⇑*e*PKP **PKPbc 20 59 25.5 0.0**
OKC *e*PKPAB **PKPab 20 59 31.1 +1.1**
OKC *ex* x 20 59 40.0
OKC *ex* x 21 00 04.9
**PVCC Panska Ves 149.39 350** *e*PKP2 **PKPbc 20 59 26.2 +0.6**
**PVCC Panska Ves 149.39 350** ⇑*e*PKP **PKPbc 20 59 26.2 +0.6**
**KRLC Kraliky 149.40 347** *e*PKP2 **PKPbc 20 59 26.3 +0.5**
**KRLC Kraliky 149.40 347** ⇑*e*PKP **PKPbc 20 59 26.3 +0.5**
KRLC *e*PKPAB **PKPab 20 59 32.1 +1.6**
KRLC *ex* x 21 00 06.0
**MORC Moravsky Berou 149.51 346** *e*PKIKP **PKPdf 20 59 23.2 +1.7**
**MORC Moravsky Berou 149.51 346** ⇑*i*P **PKPbc 20 59 25.7 -0.3**
**MORC Moravsky Berou 149.51 346** *e*PKPdf **PKPdf 20 59 23.2 +1.7**
**BTCH Batrach 149.55 307** *e*P **PKPdf 20 59 22.6 +0.6**
**TRPA Tarpa 149.56 338** ⇑*i*P **PKPbc 20 59 26.1 0.0**
**CFR Carcaliu 149.60 329** ⇑PKIKP **PKPbc 20 59 26.0 -0.3**
**CFR Carcaliu 149.60 329** ⇑*i*P **PKPbc 20 59 26.0 -0.3**
**LANS Liptovska Anna 149.61 343** *e*PKP2 **PKPbc 20 59 27.1 +0.8**
**LANS Liptovska Anna 149.61 343** *e*PKP **PKPbc 20 59 27.1 +0.8**
**MOX Moxa 149.68 353** *e*P **PKPbc 20 59 26.4 0.0**
baz=9.2,slow=2.9
MOX *e*L L 22 13 56.9
comp=Z,372nm,18.3s
**VRI Vrincioaia 149.74 331** ⇓PKP2 **PKPbc 20 59 26.7 0.0**
**VRI Vrincioaia 149.74 331** ⇓*i*P **PKPbc 20 59 26.7 0.0**
**ARCR ARCALIA 149.77 335** ⇓*i*P **PKPbc 20 59 28.5 +1.8**
**PLN Plauen 149.77 353** *e*P **PKPbc 20 59 26.7 +0.1**
baz=9.2,slow=2.9
**PLOR Plostina 149.79 331** ⇑PKIKP **PKPdf 20 59 25.5 +3.4**
**PLOR Plostina 149.79 331** ⇑*i*P **PKPdf 20 59 25.5 +3.4**
**WERD Werda 149.79 353** *e*P **PKPbc 20 59 26.8 +0.1**
baz=9.2,slow=2.9
**TANN Tannenbergstha 149.81 352** *e*P **PKPbc 20 59 26.9 +0.1**
baz=9.2,slow=2.9
**PRA Prague 149.85 350** *e*PKP2 **PKPbc 20 59 27.2 +0.4**
**PRA Prague 149.85 350** ⇑*e*PKP **PKPbc 20 59 27.2 +0.4**
**GUNZ Gunzen 149.87 352** *e*P **PKPbc 20 59 27.0 +0.1**
baz=9.2,slow=2.9
**BRTR Keskin Array B 149.87 315** PKP **PKPdf 20 59 21.1 -1.5**
comp=Z,0.7nm,0.9s,baz=107,slow=1.5,SNR=3.3
BRTR PKPbc **PKPbc 20 59 26.6 -0.8**
comp=Z,3.8nm,0.8s,baz=111,slow=4.0,SNR=16
**BRTR Keskin Array B 149.87 315** PKP **PKPdf 20 59 21.1 -1.5**
BRTR PKPbc **PKPbc 20 59 26.6 -0.8**
**SLNF Slenfeh 149.89 306** *e*P **PKPdf 20 59 25.8 +3.0**
**PRU Pruhonice 149.91 350** *e*PKP2 **PKPbc 20 59 27.2 +0.3**
PRU MLR MLR
comp=Z,700nm,17.5s
**PRU Pruhonice 149.91 350** ⇑*e*PKP **PKPbc 20 59 27.2 +0.3**
PRU *ex* x 21 00 06.5
PRU AMS AMS 22 14 10.0
comp=Z,700nm,17.5s
**WERN Wernitzgruen 149.94 352** *e*P **PKPbc 20 59 27.3 +0.3**
baz=9.2,slow=2.9
**GOPC GO Pecny, Ondr 149.94 349** *e*PKP2 **PKPbc 20 59 27.2 +0.1**
GOPC MLR MLR
comp=Z,500nm,18.1s
**GOPC GO Pecny, Ondr 149.94 349** ⇑*e*PKP **PKPbc 20 59 27.2 +0.1**
GOPC *ex* x 20 59 39.5
GOPC AMS AMS 22 13 50.0
comp=Z,500nm,18.1s
**TIRR Tirgusor 149.98 328** ⇑PKP2 **PKPbc 20 59 27.3 +0.1**
**TIRR Tirgusor 149.98 328** ⇑*i*P **PKPbc 20 59 27.3 +0.1**
**NKC Novy Kostel 149.99 352** *e*PKP2 **PKPbc 20 59 27.2 +0.1**
**NKC Novy Kostel 149.99 352** ⇑*e*PKP **PKPbc 20 59 27.2 +0.1**
NKC *ex* x 20 59 39.8
NKC *ex* x 21 00 06.7
**BIDA Albida 150.03 305** *e*P **PKPdf 20 59 26.4 +3.5**
**HARR Harsova 150.05 328** ⇑PKP2 **PKPbc 20 59 28.3 +0.9**
**HARR Harsova 150.05 328** ⇑*i*P **PKPbc 20 59 28.3 +0.9**
**BCLA Clavier 150.16 1** PKPbc **PKPbc 20 59 29.3 +1.8**
**VRAC Vranov 150.17 347** ⇑PKP2 **PKPbc 20 59 28.6 +1.0**
**VRAC Vranov 150.17 347** ⇑*i*P **PKPbc 20 59 28.6 +1.0**
**DOPR Dopca 150.25 333** ⇑*i*P **PKPbc 20 59 28.5 +0.6**
**MANZ Manzenberg 150.27 353** *e*P **PKPbc 20 59 28.0 +0.1**
baz=9.2,slow=2.9
**TNS Taunus Mts 150.33 357** *e*P **PKPbc 20 59 28.1 +0.1**
baz=9.2,slow=2.9
**ANTO Ankara 150.35 316** *e*PKPdf **PKPdf 20 59 25.2 +2.0**
ANTO LR LR
comp=Z,210nm,20.0s
**CJR Cluj-Napoca 150.37 336** ⇑PKP2 **PKPbc 20 59 29.2 +1.0**
**CJR Cluj-Napoca 150.37 336** ⇑*i*P **PKPbc 20 59 29.2 +1.0**
**BR231 Keskin MP Arra 150.38 316** *e*PKPdf **PKPdf 20 59 24.4 +1.1**
**VYHS Vyhne 150.38 343** *e*PKP **PKPbc 20 59 28.3 +0.2**
**ISR Istrita 150.39 331** ⇓PKP2 **PKPbc 20 59 28.6 +0.3**
**ISR Istrita 150.39 331** ⇓*i*P **PKPbc 20 59 28.6 +0.3**
**TREC Trest 150.41 348** *e*PKIKP **PKPbc 20 59 28.2 0.0**
**TREC Trest 150.41 348** ⇑*e*PKP **PKPbc 20 59 28.2 0.0**
**ASF Jabal al Asfar 150.46 299** PKPbc **PKPbc 20 59 29.0 +0.1**
comp=Z,2.9nm,0.9s,baz=326,slow=1.4,SNR=12
**ASF Jabal al Asfar 150.46 299** PKPbc **PKPbc 20 59 29.0 +0.1**
**DOU Dourbes 150.47 2** PKPbc **PKPbc 20 59 27.5 -0.7**
**ROTZ Rotzenmuhle 150.47 352** *e*P **PKPbc 20 59 28.6 +0.3**
baz=9.2,slow=2.9
**PSZ Piszkesteto 150.60 341** ⇑PKIKP **PKPbc 20 59 29.1 +0.3**
**PSZ Piszkesteto 150.60 341** ⇑*i*P **PKPbc 20 59 29.1 +0.3**
**PSZ Piszkesteto 150.60 341** ⇓*e*PKPdf **PKPbc 20 59 29.0 +0.3**
**PSZ Piszkesteto 150.60 341** *e*PKPbc **PKPbc 20 59 29.3 +0.5**
PSZ LR LR
comp=Z,294nm,19.0s
**DRGR 150.64 337** ⇑PKIKP **PKPbc 20 59 28.8 -0.1**
**DRGR 150.64 337** ⇑*i*P **PKPbc 20 59 28.8 -0.1**
**GRF Grafenberg Arr 150.66 354** *e*L L 22 10 37.7
comp=Z,480nm,18.9s
**SECR 150.68 331** ⇑*i*P **PKPbc 20 59 28.9 -0.1**
**VOIR 150.81 333** ⇓PKIKP **PKPbc 20 59 30.0 +0.6**
**VOIR 150.81 333** ⇓*i*P **PKPbc 20 59 30.0 +0.6**
**KHC Kasperske Hory 150.90 350** *e*PKIKP **PKPbc 20 59 29.1 -0.3**
**KHC Kasperske Hory 150.90 350** ⇑*e*PKP **PKPbc 20 59 29.0 -0.3**
KHC *e*PKPAB **PKPab 20 59 36.4 -0.2**
KHC *ep*PKP PKiKP 20 59 41.9 +12
KHC *ex* x 21 00 09.2
**KHC Kasperske Hory 150.90 350** *e*PKPbc **PKPbc 20 59 29.1 -0.3**
**ARR Arges 151.05 333** ⇑*i*P **PKPbc 20 59 30.5 +0.6**
**GEC2 GERESS Array S 151.16 350** *e*PKIKP **PKPbc 20 59 29.3 -0.8**
GEC2 *e* 20 59 30.1
**GEC2 GERESS Array S 151.16 350** *e*P **PKPbc 20 59 29.6 -0.5**
baz=9.2,slow=2.9
GEC2 *e*L L 22 08 53.0
comp=Z,370nm,20.7s
**GEC2 GERESS Array S 151.16 350** *e*PKPbc **PKPbc 20 59 29.3 -0.8**
**GERES GERESS Array B 151.16 350** PKPbc **PKPbc 20 59 29.5 -0.6**
comp=Z,2.8nm,0.9s,baz=29,slow=3.0,SNR=11
**GERES GERESS Array B 151.16 350** PKPbc **PKPbc 20 59 29.5 -0.6**
**LOT Lotru 151.34 334** ⇓*i*P **PKPbc 20 59 29.2 -1.4**
**MMAI Mount Meron Ar 151.42 302** PKPbc **PKPbc 20 59 31.2 0.0**
comp=Z,1.1nm,0.9s,baz=72,slow=5.0,SNR=11
MMAI PKPab **PKPab 20 59 39.2 -0.2**
comp=Z,9.1nm,0.7s,baz=64,slow=5.7,SNR=12
**MMAI Mount Meron Ar 151.42 302** PKPbc **PKPbc 20 59 31.2 0.0**
MMAI PKPab **PKPab 20 59 39.2 -0.2**
**SIRR Siria 151.47 338** ⇓*i*P **PKPbc 20 59 30.4 -0.4**
**CONA Conrad Observa 151.63 347** ⇓*i*PKiKP **PKPbc 20 59 31.8 +0.6**
comp=Z,18nm,1.6s
**GZR Gura Zlata 151.79 335** ⇓PKIKP **PKPbc 20 59 31.3 -0.3**
**GZR Gura Zlata 151.79 335** ⇓*i*P **PKPbc 20 59 31.3 -0.3**
**BZS Buzias 152.04 337** ⇑PKIKP **PKPbc 20 59 31.8 -0.3**
**BZS Buzias 152.04 337** ⇑*i*P **PKPbc 20 59 31.8 -0.3**
**BZS Buzias 152.04 337** ⇑*i*P **PKPbc 20 59 33.3 +1.2**
**BFO Black Forest 152.23 357** *e*L L 22 13 41.2
comp=Z,277nm,18.5s
**BFO Black Forest 152.23 357** PFAKE 20 59 40.0 -2.2
BFO LR LR
comp=Z,278nm,19.0s
**CSS Prodhromos 152.32 307** *e*PKPbc **PKPbc 20 59 31.9 -1.2**
CSS LR LR
comp=Z,99nm,20.0s
**ARSA Arzberg 152.35 347** ⇑*i*PKiKP **PKPbc 20 59 32.9 +0.2**
comp=Z,11nm,1.5s
**EIL Elat 152.69 295** PKPbc **PKPbc 20 59 34.1 0.0**
comp=Z,2.7nm,0.6s,baz=219,slow=6.0,SNR=7.1
EIL PKPab **PKPab 20 59 44.3 -0.5**
comp=Z,9.1nm,1.1s,baz=41,slow=3.6,SNR=5.2
**EIL Elat 152.69 295** PKPbc **PKPbc 20 59 34.1 0.0**
EIL PKPab **PKPab 20 59 44.3 -0.5**
**ISP Isparta 152.95 315** PFAKE 20 59 40.0 +5.5
ISP LR LR
comp=Z,356nm,20.0s
**SSB Saint Sauveur 155.27 3** PFAKE 20 59 40.0 +10
SSB LR LR
comp=Z,519nm,20.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BNI** | **Bardonecchia** | **155.55** | **360** | *e*PKIKP | **PKPdf** | **20 59 31.6** | **+0.9** |
| BNI | | | | *e* | | 20 59 57.1 | |
| **BNI** | **Bardonecchia** | **155.55** | **360** | *e*PKPdf | **PKPdf** | **20 59 31.6** | **+0.9** |
| BNI | | | | *e*PKPab | **PKPab** | **20 59 57.1** | **+0.6** |
| BNI | | | | LR | LR | | |
| | comp=Z,619nm,19.0s | | | | | | |
| **TIR** | **Tirane** | **156.33** | **334** | PFAKE | | 20 59 40.0 | +8.3 |
| TIR | | | | LR | LR | | |
| | comp=Z,875nm,20.0s | | | | | | |
| **MTE** | **Manteigas** | **156.87** | **28** | PFAKE | | 20 59 40.0 | +7.5 |
| MTE | | | | LR | LR | | |
| | comp=Z,567nm,20.0s | | | | | | |
| **ESDC** | **Sonseca Array** | **158.94** | **23** | PKPab | **PKPab** | **21 00 10.6** | **-0.5** |
| | comp=Z,0.2nm,0.4s,baz=300,slow=2.5,SNR=3.2 | | | | | | |
| **ESDC** | **Sonseca Array** | **158.94** | **23** | PKPab | **PKPab** | **21 00 10.6** | **-0.5** |
| **CUC** | **Castrocucco** | **159.01** | **340** | PFAKE | | 20 59 50.0 | +15 |
| CUC | | | | LR | LR | | |
| | comp=Z,311nm,20.0s | | | | | | |
| **TIP** | **Timpagrande** | **159.41** | **337** | PFAKE | | 20 59 50.0 | +14 |
| TIP | | | | LR | LR | | |
| | comp=Z,548nm,19.0s | | | | | | |
| **CLTB** | **Caltabellotta** | **162.03** | **342** | PFAKE | | 20 59 50.0 | +11 |
| CLTB | | | | LR | LR | | |
| | comp=Z,369nm,20.0s | | | | | | |
| **RTC** | **Rabat Centre** | **162.15** | **39** | PFAKE | | 20 59 50.0 | +11 |
| RTC | | | | LR | LR | | |
| | comp=Z,6μm,21.0s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **171.36** | **147** | *e*PKPdf | **PKPdf** | **20 59 44.7** | **-1.5** |
| TOA0 | | | | *e*PKPab | **PKPab** | **21 01 06.4** | **+0.1** |
| **TORD** | **Torodi Ar. Bea** | **171.36** | **147** | PKP | **PKPdf** | **20 59 44.1** | **-2.1** |
| | comp=Z,0.6nm,0.7s,baz=8.4,slow=1.3,SNR=4.7 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **21 01 05.4** | **-0.9** |
| | comp=Z,1.1nm,1.0s,baz=160,slow=4.6,SNR=4.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **171.36** | **147** | PKP | **PKPdf** | **20 59 44.1** | **-2.1** |
| TORD | | | | PKPab | **PKPab** | **21 01 05.4** | **-0.9** |
| **TAM** | **Tamanrasset** | **177.60** | **21** | PFAKE | | 21 00 00.0 | +12 |
| TAM | | | | LR | LR | | |
| | comp=Z,358nm,19.0s | | | | | | |

*ISCJB* ***19*** *20:46:24.5±0.6,38°.83N±0°.04×31°.44E±0°.04, h9km, Error ellipse: s-maj=6.7km s-min=4.0km az=21.7*
*DDA* ***19*** *20:46:24.7,38°.80N×31°.41E, h7km, Md2.6*
*CSEM* ***19*** *20:46:24.5±0.3,38°.83N×31°.43E, h10km, MD2.6, Error ellipse: s-maj=9.5km s-min=6.3km az=25.0*
*ISK* ***19*** *20:46:25.9,38°.88N×31°.61E, h16km, MD2.6*

**ISC 19 20:46:24.7±0.9, 38°.90N±0°.04×31°.46E±0°.03, h9km, n16, σ1§20/25, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KIZT** | **Kizilcal** | **0.33** | **93** | *e*PG | **Pg** | **20 46 30.7** | **-0.6** |
| KIZT | | | | *e*SG | **Sg** | **20 46 35.6** | **-0.1** |
| **KIZT** | **Kizilcal** | **0.33** | **93** | *e*Pg | **Pg** | **20 46 30.7** | **-0.6** |
| KIZT | | | | *e*Sg | **Sg** | **20 46 35.6** | **-0.1** |
| **BOLV** | **Bolvadin** | **0.43** | **246** | *e*P | **Pg** | **20 46 32.1** | **-1.1** |
| BOLV | | | | *i* S | **Sg** | **20 46 38.0** | **-0.9** |
| **BOLV** | **Bolvadin** | **0.43** | **246** | P | **Pg** | **20 46 32.1** | **-1.1** |
| BOLV | | | | S | **Sg** | **20 46 38.0** | **-0.9** |
| **SVRH** | **Sivrihisar-ESK** | **0.55** | **5** | *e*PG | **Pb** | **20 46 37.7** | **+1.1** |
| **SVRH** | **Sivrihisar-ESK** | **0.55** | **5** | *e*Pg | **Pb** | **20 46 37.7** | **+1.1** |
| **KDHN** | **Kadinhani** | **0.64** | **126** | *i* P | **Pg** | **20 46 36.4** | **-0.6** |
| KDHN | | | | *i* S | **Sb** | **20 46 46.3** | **-0.8** |
| **KDHN** | **Kadinhani** | **0.64** | **126** | P | **Pg** | **20 46 36.4** | **-0.6** |
| KDHN | | | | S | **Sb** | **20 46 46.3** | **-0.8** |
| **ESKT** | **Eskisehir** | **0.78** | **323** | P | **Pg** | **20 46 37.3** | **-2.4** |
| ESKT | | | | S | **Sb** | **20 46 53.3** | **+2.0** |
| **SEYT** | **Eskypehyr** | **0.78** | **323** | *i* S | **Sb** | **20 46 53.3** | **+2.0** |
| **SHUT** | **Suhut-Afyon** | **0.79** | **244** | *e*PG | **Pn** | **20 46 43.5** | **+1.5** |
| **SHUT** | **Suhut-Afyon** | **0.79** | **244** | *e*Pg | **Pn** | **20 46 43.6** | **+1.5** |
| **KONT** | **Konya--Tatoy** | **1.19** | **143** | *e*PN | **Pn** | **20 46 47.5** | **0.0** |
| **KONT** | **Konya--Tatoy** | **1.19** | **143** | *e*Pn | **Pn** | **20 46 47.5** | **0.0** |
| **BORA** | **Eskisehir** | **1.25** | **322** | *i* P | **Pn** | **20 46 47.4** | **-1.1** |
| BORA | | | | *i* S | **Sb** | **20 47 05.7** | **+0.9** |
| **BORA** | **Eskisehir** | **1.25** | **322** | P | **Pn** | **20 46 47.4** | **-1.1** |
| BORA | | | | S | **Sb** | **20 47 05.7** | **+0.9** |

*IDC* ***19*** *20:49:02.2±0.5, 6°.31S×104°.96E, h0km, mb4.2/23, mb1 4.3/23, mb1mx4.1/57, mbtmp4.2/23, ML5.9/1, MS3.4/3, Ms1 3.4/3, ms1mx3.1/38, Error ellipse: s-maj=15.2km s-min=10.1km az=35.0*
*BJI* ***19*** *20:49:02.5, 7°.18S×104°.88E, h40km, mb4.6/15, mB5.2/15, Ms4.9/9, Ms7 4.4/9*
*ISCJB* ***19*** *20:49:09.2±0.5, 6°.52S±0°.04×104°.91E±0°.04, h70km±4km, mb4.3/31, Error ellipse: s-maj=8.9km s-min=4.0km az=42.5*
*AUST* ***19*** *20:49:09.6±0.0, 6°.77S×104°.80E, h44km, Error ellipse: s-maj=1.3km s-min=1.0km az=249.0*
*DJA* ***19*** *20:49:09.6±0.8, 7°.S±6°×10°.5E±°, h18km±7km, M4.9/20, mb5.0/10, mB5.5/6, MLv4.8/20, Mw(mB)4.9/6*
*NEIC* ***19*** *20:49:09.4±0.7, 6°.37S×104°.94E, h54km±7km, mb4.8/13, Error ellipse: s-maj=9.5km s-min=5.6km az=213.0*

**ISC 19 20:49:09.2±0.5, 6°.54S±0°.05×104°.89E±0°.05, h50km±4km, n127, σ1§48/130, mb4.4/31, Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CGJI** | **Cibinong** | **0.80** | **95** | P | **Pn** | **20 49 24.2** | **-0.1** |
| **KASI** | **Kota Agung** | **1.08** | **339** | P | **Pn** | **20 49 28.8** | **+0.8** |
| **SBJI** | **Serang** | **1.30** | **71** | P | **Pn** | **20 49 31.3** | **+0.3** |
| **KLJI** | **Kotabumi** | **1.66** | **359** | P | **Pn** | **20 49 37.6** | **+1.6** |
| **SKJI** | **Sukabumi** | **1.72** | **106** | P | **Pn** | **20 49 37.0** | **+0.3** |
| **LWLI** | **Liwa** | **1.72** | **331** | P | **Pn** | **20 49 39.3** | **+2.4** |
| LWLI | | | | S | **Sn** | **20 50 01.2** | **+3.4** |
| **TNG** | **Tangerang** | **1.78** | **78** | P | **Pn** | **20 49 38.4** | **+0.8** |
| **CBJI** | **Citeko** | **1.95** | **87** | P | **Pn** | **20 49 42.6** | **+2.7** |
| **MDSI** | **Maura Dua** | **2.16** | **341** | P | **Pn** | **20 49 44.7** | **+2.0** |
| **CNJI** | **Cibinong** | **2.35** | **109** | P | **Pn** | **20 49 44.9** | **-0.5** |
| **MNAI** | **Manna** | **2.90** | **318** | P | **Pn** | **20 49 55.3** | **+2.4** |
| | baz=3.0,SNR=5.0 | | | | | | |
| **MNAI** | **Manna** | **2.90** | **318** | *e*Pn | **Pn** | **20 49 54.5** | **+1.6** |
| **CISI** | **Cisompet, Garu** | **3.08** | **109** | P | **Pn** | **20 49 55.6** | **+0.2** |
| | baz=3.1,SNR=113 | | | | | | |
| **CISI** | **Cisompet, Garu** | **3.08** | **109** | P | **Pn** | **20 49 55.6** | **+0.2** |
| **CISI** | **Cisompet, Garu** | **3.08** | **109** | *e*Pn | **Pn** | **20 49 55.5** | **+0.2** |
| **KSI** | **Kapahiang** | **3.67** | **321** | P | **Pn** | **20 50 06.9** | **+3.4** |
| **CMJI** | **Cimerak** | **3.74** | **110** | P | **Pn** | **20 50 05.1** | **+0.6** |
| **XMI** | **Christmas Isla** | **3.97** | **169** | P | **Pn** | **20 50 05.3** | **-2.3** |
| | baz=3.8,SNR=19 | | | | | | |
| **XMIS** | **Christmas Isla** | **3.99** | **169** | P | Pn | 20 50 04.4 | -3.5 |
| | baz=3.8,SNR=68 | | | | | | |
| **XMIS** | **Christmas Isla** | **3.99** | **169** | *e*Pn | Pn | 20 50 04.2 | -3.7 |
| XMIS | | | | *e*Sn | Sn | 20 50 42.1 | -11 |
| **PPBI** | **Pangkal Pinang** | **4.52** | **16** | P | **Pn** | **20 50 16.9** | **+1.7** |
| **TPI** | **Tanjungpandan** | **4.66** | **36** | P | **Pn** | **20 50 17.9** | **+0.8** |
| **SMRI** | **Semarang** | **5.54** | **96** | Pn | **Pn** | **20 50 27.6** | **-1.6** |
| **UGM** | **Wanagama** | **5.75** | **104** | P | **Pn** | **20 50 33.9** | **+1.7** |
| | baz=5.8,SNR=10 | | | | | | |
| **UGM** | **Wanagama** | **5.75** | **104** | P | **Pn** | **20 50 34.5** | **+2.3** |
| | 182nm,1.2s,0.9nm | | | | | | |
| **UGM** | **Wanagama** | **5.75** | **104** | *e*Pn | **Pn** | **20 50 33.9** | **+1.7** |
| **PPSI** | **Pulau Pagai** | **6.14** | **307** | P | **Pn** | **20 50 38.1** | **+0.7** |
| | 202nm,0.9s,0.8nm | | | | | | |
| **PCJI** | **Pacitan** | **6.45** | **105** | P | **Pn** | **20 50 44.0** | **+2.3** |
| | 85nm,1.5s,2μm0.4nm | | | | | | |
| **NGJI** | **Ngawi** | **6.58** | **98** | P | Pn | 20 50 55.7 | +12 |
| **PWJI** | **Pagerwojo** | **7.02** | **103** | P | Pn | 20 50 53.1 | +3.7 |
| | 72nm,0.9s,2μm0.4nm | | | | | | |
| **GMJI** | **Gumukmas** | **8.66** | **102** | P | **Pn** | **20 51 14.8** | **+2.9** |
| | 62nm,0.7s,2μm | | | | | | |
| **ABJI** | **Asem Bagus** | **9.36** | **98** | P | Pn | 20 51 26.1 | +4.6 |
| | 548nm,0.7s,5μm | | | | | | |
| **ABJI** | **Asem Bagus** | **9.36** | **98** | P | Pn | 20 51 26.1 | +4.6 |
| **JAGI** | **Jajag, Banyuwa** | **9.38** | **102** | P | **Pn** | **20 51 23.3** | **+1.4** |
| | baz=9.4,SNR=63 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **9.38** | **102** | P | **Pn** | **20 51 23.2** | **+1.3** |
| | 231nm,0.9s,4μm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **9.38** | **102** | *e*Pn | **Pn** | **20 51 23.1** | **+1.1** |
| JAGI | | | | *e*Sn | **Sn** | **20 53 03.6** | **-2.4** |
| **COCO** | **West Island** | **9.73** | **234** | *e*Pn | **Pn** | **20 51 27.4** | **+0.8** |
| **SRBI** | **Singaraja** | **10.36** | **99** | P | **Pn** | **20 51 37.2** | **+2.0** |
| | 70nm,0.6s,2μm | | | | | | |
| **GSI** | **Gunungsitoli** | **10.68** | **317** | P | **Pn** | **20 51 36.9** | **-2.7** |
| **GSI** | **Gunungsitoli** | **10.68** | **317** | *e*Pn | **Pn** | **20 51 36.6** | **-3.0** |
| **PSI** | **Prapat** | **11.02** | **327** | LR | LR | 20 56 03.3 | |
| | comp=Z,145nm,19.5s,baz=172,slow=39 | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **12.09** | **101** | P | **Pn** | **20 51 57.5** | **-1.4** |
| **KAPI** | **Kappang** | **14.87** | **85** | LR | LR | 20 58 47.1 | |
| | comp=Z,126nm,19.6s,baz=222,slow=40 | | | | | | |
| **TRTT** | **Trang** | **15.19** | **340** | P | **Pn** | **20 52 38.9** | **-1.8** |
| | 63nm,1.4s,1μm | | | | | | |
| **MMRI** | **Maumere** | **17.32** | **98** | *e*Pn | **Pn** | **20 53 07.6** | **-0.1** |
| | 58nm,0.7s | | | | | | |
| **GIRL** | **Giralia** | **18.37** | **152** | P | **Pn** | **20 53 21.1** | **+0.7** |
| | baz=18,SNR=8.3 | | | | | | |
| **BATI** | **Baumata** | **18.93** | **102** | P | **P** | **20 53 24.7** | **-1.6** |
| | 33nm,0.3s,baz=293,slow=9.2,SNR=36 | | | | | | |
| BATI | | | | S | **S** | **20 56 59.1** | **+0.2** |
| | 4.1nm,0.3s,baz=114,slow=21,SNR=7.4 | | | | | | |
| **SOEI** | **Soe** | **19.45** | **101** | P | **P** | **20 53 31.9** | **-0.1** |
| | baz=20,SNR=20 | | | | | | |
| **SOEI** | **Soe** | **19.45** | **101** | *e*P | **P** | **20 53 31.2** | **-0.8** |
| | 90nm,0.7s | | | | | | |
| SOEI | | | | *e*S | **S** | **20 57 08.4** | **-1.1** |
| **MBWA** | **Marble Bar** | **20.44** | **137** | *e*P | **P** | **20 53 42.9** | **+0.3** |
| | 9.5nm,0.6s | | | | | | |
| MBWA | | | | *e*S | S | 20 57 08.6 | -20 |
| **KNRA** | **Kununurra** | **25.10** | **113** | P | **P** | **20 54 28.7** | **-0.8** |
| | baz=25,SNR=12 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.52** | **347** | P | **P** | **20 54 32.7** | **-0.6** |
| | 1.3nm,0.7s,baz=182,slow=8.1,SNR=6.1 | | | | | | |
| **MTN** | **Manton Dam** | **26.60** | **106** | P | **P** | **20 54 43.7** | **+0.5** |
| | baz=27,SNR=11 | | | | | | |
| **MTN** | **Manton Dam** | **26.60** | **106** | *e*P | **P** | **20 54 44.6** | **+1.4** |
| | 26nm,0.5s | | | | | | |
| **PALK** | **Pallekele** | **27.75** | **299** | LR | LR | 21 04 33.6 | |
| | comp=Z,102nm,18.8s,baz=116,slow=34 | | | | | | |
| **KDU** | **Kakadu** | **27.86** | **105** | P | **P** | **20 54 53.5** | **-1.0** |
| | baz=28,SNR=5.4 | | | | | | |
| **WRKA** | **Warakurna** | **28.99** | **132** | P | **P** | **20 55 05.1** | **+0.6** |
| | baz=29,SNR=5.0 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **29.47** | **164** | T | T | 21 25 44.0 | |
| | baz=344,slow=76,SNR=104 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **29.48** | **164** | T | T | 21 25 47.0 | |
| | baz=344,slow=76,SNR=97 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **29.48** | **164** | T | T | 21 25 45.2 | |
| | baz=344,slow=76,SNR=93 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.54** | **118** | P | **P** | **20 55 26.9** | **-0.1** |
| | 4.8nm,0.4s,baz=304,slow=8.9,SNR=54 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 58 19.1** | **0.0** |
| | 0.9nm,0.5s,baz=298,slow=2.1,SNR=5.2 | | | | | | |
| **KMI** | **Kunming** | **31.54** | **356** | P | **P** | **20 55 28.3** | **+1.1** |
| KMI | | | | pP | **pP** | **20 55 40.5** | **+0.5** |
| KMI | | | | sP | **sP** | **20 55 45.4** | **-0.5** |
| KMI | | | | PP | **PnPn** | **20 56 35.5** | **+3.5** |
| KMI | | | | PcP | **PcP** | **20 58 21.6** | **+2.4** |
| KMI | | | | S | **S** | **21 00 31.3** | **-1.2** |
| KMI | | | | PMZ | | | |
| | 290nm,4.3s | | | | | | |
| KMI | | | | LN | | | |
| | 500nm,5.1s | | | | | | |
| KMI | | | | LE | | | |
| | 500nm,4.3s | | | | | | |
| KMI | | | | LZ | | | |
| | 350nm,4.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **31.54** | **118** | P | **P** | **20 55 27.6** | **+0.5** |
| | 93nm,0.9s,SNR=32 | | | | | | |
| **WRAB** | **Tennant Creek** | **31.54** | **118** | *e*P | **P** | **20 55 26.8** | **-0.3** |
| | 11nm,0.6s | | | | | | |
| **H08S2** | **Diego Garcia H** | **32.16** | **266** | T | T | 21 29 42.3 | |
| | baz=90,slow=75,SNR=272 | | | | | | |
| **H08S3** | **Diego Garcia H** | **32.17** | **266** | T | T | 21 29 41.6 | |
| | baz=90,slow=75,SNR=290 | | | | | | |
| **H08S1** | **Diego Garcia H** | **32.18** | **266** | T | T | 21 29 41.3 | |
| | baz=90,slow=75,SNR=271 | | | | | | |
| **ASAR** | **Alice Springs** | **32.67** | **125** | P | **P** | **20 55 37.2** | **+0.2** |
| | 2.9nm,0.4s,baz=300,slow=7.5,SNR=51 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 58 22.6** | **+0.5** |
| | 1.4nm,0.6s,baz=303,slow=2.4,SNR=7.7 | | | | | | |
| **AS01** | **Alice Springs** | **32.71** | **124** | *e*P | **P** | **20 55 37.2** | **-0.1** |
| **QIS** | **Mount Isa** | **36.41** | **116** | P | **P** | **20 56 09.3** | **-0.1** |
| | baz=36,SNR=8.7 | | | | | | |
| **CD2** | **Chengdu** | **37.25** | **358** | *e*P | **P** | **20 56 17.3** | **+1.0** |
| CD2 | | | | pP | **pP** | **20 56 28.8** | **-0.6** |
| CD2 | | | | PP | **PP** | **20 57 42.9** | **+0.8** |
| CD2 | | | | S | **S** | **21 02 03.1** | **+2.9** |
| CD2 | | | | PMZ | | | |
| | 20nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 160nm,5.0s | | | | | | |
| **ODAN** | **Odare** | **37.28** | **334** | *e*P | **P** | **20 56 14.5** | **-2.3** |
| | 8.4nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **37.57** | **334** | *e*P | **P** | **20 56 16.6** | **-2.7** |
| **RAMN** | **Ramite** | **37.71** | **333** | *e*P | **P** | **20 56 19.4** | **-1.1** |
| | 3.8nm,0.3s | | | | | | |
| **WHN** | **Wuhan** | **37.97** | **13** | P | P | 20 56 27.8 | +5.5 |
| **COEN** | **Coen** | **38.35** | **104** | P | **P** | **20 56 24.9** | **-0.9** |
| | baz=38,SNR=8.5 | | | | | | |
| **LSA** | **Lhasa** | **38.37** | **341** | *e*P | **P** | **20 56 24.2** | **-2.0** |
| | 4.6nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **38.79** | **332** | *e*P | **P** | **20 56 28.8** | **-0.9** |
| | 3.2nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **38.80** | **332** | *e*P | **P** | **20 56 28.8** | **-0.9** |
| | 2.7nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **38.86** | **333** | *e*P | **P** | **20 56 28.7** | **-1.6** |
| | 14nm,0.4s | | | | | | |
| **DMN** | **Daman** | **38.97** | **331** | *e*P | **P** | **20 56 29.7** | **-1.4** |
| | 2.8nm,0.2s | | | | | | |
| **KKN** | **Kakani** | **39.03** | **332** | *e*P | **P** | **20 56 29.8** | **-1.8** |
| | 5.4nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **39.52** | **331** | *e*P | **P** | **20 56 33.8** | **-1.8** |
| | 12nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **39.83** | **330** | *e*P | **P** | **20 56 37.3** | **-0.9** |
| | 7.7nm,0.3s | | | | | | |
| **MTSU** | **Mount Surprise** | **40.11** | **110** | P | **P** | **20 56 40.8** | **+0.3** |
| | baz=40,SNR=14 | | | | | | |
| **XAN** | **Xi'an** | **40.53** | **5** | P | **P** | **20 56 44.3** | **+0.5** |
| XAN | | | | pP | **pP** | **20 56 56.0** | **-0.9** |
| XAN | | | | PMZ | | | |
| | 5.0nm,1.2s | | | | | | |
| XAN | | | | PMZ | | | |
| | 190nm,5.9s | | | | | | |
| **NJ2** | **Nanjing** | **40.62** | **18** | *e*P | **P** | **20 56 42.8** | **-1.6** |
| NJ2 | | | | PMZ | | | |
| | 80nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **41.94** | **97** | *e*P | **P** | **20 56 54.6** | **-1.0** |
| | 18nm,0.7s | | | | | | |
| **CTAO** | **Charters Tower** | **42.31** | **113** | P | **P** | **20 56 59.3** | **+0.7** |
| **LZH** | **Lanzhou** | **42.41** | **359** | *e*P | P | 20 57 03.0 | +3.8 |
| LZH | | | | pP | pP | 20 57 12.0 | -0.5 |
| LZH | | | | sP | sP | 20 57 16.8 | -1.4 |
| LZH | | | | PMZ | | | |
| | 15nm,1.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **45.49** | **129** | P | **P** | **20 57 25.6** | **+1.7** |
| | baz=46,SNR=5.9 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **47.55** | **7** | *e*P | **P** | **20 57 41.4** | **+1.4** |
| HHC | | | | PP | **PP** | **20 59 32.1** | **+0.1** |
| HHC | | | | S | **S** | **21 04 34.3** | **+2.6** |
| HHC | | | | PMZ | | | |
| | 17nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | 180nm,4.6s | | | | | | |
| HHC | | | | LN | | | |
| | 220nm,13.6s | | | | | | |
| HHC | | | | LE | | | |
| | 150nm,11.1s | | | | | | |
| HHC | | | | LZ | | | |
| | 140nm,13.6s | | | | | | |
| **WMQ** | **Urumqi** | **52.48** | **344** | *e*P | **P** | **20 58 17.0** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **53.02** | **34** | P | P | 20 58 18.1 | -3.2 |
| | 1.4nm,0.6s,baz=201,slow=8.5,SNR=5.9 | | | | | | |
| **KSH** | **Kashi** | **53.05** | **332** | *e*P | **P** | **20 58 22.6** | **+1.0** |
| KSH | | | | *es*P | **sP** | **20 58 40.9** | **0.0** |
| KSH | | | | *e*PP | **PP** | **21 00 23.9** | **+1.9** |
| KSH | | | | PcS | **PcS** | **21 03 28.3** | **-0.2** |
| KSH | | | | S | **S** | **21 05 47.4** | **-0.9** |
| KSH | | | | ScS | **ScS** | **21 08 05.1** | **-2.1** |
| KSH | | | | PMZ | | | |
| | 130nm,6.8s | | | | | | |
| KSH | | | | LN | | | |
| | 240nm,6.6s | | | | | | |
| KSH | | | | LE | | | |
| | 110nm,6.1s | | | | | | |
| KSH | | | | LZ | | | |
| | 220nm,8.5s | | | | | | |
| **SONM** | **Songino Array** | **54.15** | **1** | P | **P** | **20 58 28.3** | **-1.2** |
| | 0.4nm,0.3s,baz=162,slow=7.9,SNR=3.1 | | | | | | |
| SONM | | | | PcP | **PcP** | **20 59 32.9** | **-0.8** |
| | 1.1nm,0.6s,baz=182,slow=4.5,SNR=4.7 | | | | | | |
| **USRK** | **Usuriysk Ar.** | **56.11** | **23** | P | **P** | **20 58 41.5** | **-2.1** |
| | 1.2nm,0.4s,baz=215,slow=6.9,SNR=7.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.77** | **342** | P | **P** | **20 58 46.7** | **-1.6** |
| | 3.1nm,0.4s,baz=144,slow=7.6,SNR=2.3 | | | | | | |
| **IPAY** | **Payeh** | **60.62** | **318** | *e*P | **P** | **20 59 13.9** | **-1.6** |
| **DZM** | **Mont Dzumac** | **61.23** | **111** | P | **P** | **20 59 19.6** | **-0.1** |
| | 7.9nm,0.9s,baz=180,slow=18,SNR=3.4 | | | | | | |
| **GEYT** | **Alibeck** | **62.04** | **319** | P | **P** | **20 59 24.0** | **-0.8** |
| | 0.9nm,0.3s,baz=140,slow=4.7,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.59** | **347** | P | **P** | **20 59 25.7** | **-2.4** |
| | 2.4nm,0.4s,baz=161,slow=5.8,SNR=13 | | | | | | |
| **BVAR** | **Borovoye Array** | **66.14** | **338** | P | **P** | **20 59 49.8** | **-1.5** |
| | 0.5nm,0.3s,baz=142,slow=5.4,SNR=5.3 | | | | | | |
| **BRVK** | **Borovoye** | **66.21** | **338** | P | **P** | **20 59 50.9** | **-0.8** |
| | 5.0nm,1.0s | | | | | | |
| **MAW** | **Mawson** | **67.21** | **196** | P | **P** | **20 59 59.5** | **+1.5** |
| | 0.8nm,0.5s,baz=73,slow=6.1,SNR=4.7 | | | | | | |
| **ABKAR** | **Akbulak array** | **67.96** | **330** | *e*P | **P** | **21 00 01.9** | **-1.0** |
| | 9.1nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **69.67** | **330** | P | **P** | **21 00 12.6** | **-1.0** |
| | 1.4nm,0.5s,baz=114,slow=4.3,SNR=5.3 | | | | | | |
| **ARU** | **Arti** | **73.31** | **335** | P | **P** | **21 00 34.5** | **-0.9** |
| | 0.4nm,0.4s,baz=233,slow=20,SNR=2.1 | | | | | | |
| **ARU** | **Arti** | **73.31** | **335** | *e*P | **P** | **21 00 34.5** | **-0.9** |
| | 3.9nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.23** | **30** | P | **P** | **21 00 39.7** | **-1.2** |
| | 4.1nm,0.8s,baz=258,slow=13,SNR=3.4 | | | | | | |
| **MATP** | **Matopo** | **75.02** | **251** | P | **P** | **21 00 47.8** | **+1.5** |
| | 2.4nm,0.8s,baz=80,slow=6.7,SNR=5.2 | | | | | | |
| **VNDA** | **Vanda** | **76.81** | **169** | P | **P** | **21 00 56.6** | **+1.4** |
| | 1.0nm,0.8s,baz=293,slow=5.0,SNR=6.7 | | | | | | |
| **VNDA** | **Vanda** | **76.81** | **169** | *e*P | **P** | **21 00 57.0** | **+1.8** |
| | 62nm,3.0s | | | | | | |
| **BOSA** | **Boshof** | **77.81** | **242** | P | **P** | **21 01 02.9** | **+0.8** |
| | 2.3nm,0.8s,baz=120,slow=4.7,SNR=3.7 | | | | | | |
| **SBA** | **Scott Base** | **77.89** | **169** | P | **P** | **21 01 01.1** | **-0.2** |
| | 4.6nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **79.96** | **312** | P | **P** | **21 01 13.2** | **-0.3** |
| | 1.4nm,0.6s,baz=134,slow=6.7,SNR=4.8 | | | | | | |
| **SUR** | **Sutherland** | **81.55** | **238** | P | **P** | **21 01 19.8** | **-2.5** |
| | 37nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **83.45** | **180** | P | **P** | **21 01 32.4** | **+1.0** |
| | 0.8nm,0.5s,baz=115,slow=1.4,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **86.03** | **322** | P | **P** | **21 01 43.9** | **-0.5** |
| | 0.9nm,0.5s,baz=88,slow=4.7,SNR=3.8 | | | | | | |
| **BUR04** | **Bucovina Ar. S** | **87.87** | **318** | *e*P | **P** | **21 01 55.1** | **+1.4** |
| **SNAA** | **Sanae** | **89.34** | **198** | P | **P** | **21 02 02.0** | **+1.9** |
| | 0.2nm,0.5s,baz=135,slow=7.1,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **90.38** | **332** | P | **P** | **21 02 03.5** | **-1.4** |
| | 4.1nm,0.8s,baz=159,slow=4.2,SNR=5.2 | | | | | | |
| **VYHS** | **Vyhne** | **92.23** | **318** | *e*P | **P** | **21 02 16.0** | **+2.1** |
| **NVAR** | **Mina Array Bea** | **129.71** | **44** | PKP | **PKPdf** | **21 08 13.6** | **-0.1** |
| | 0.2nm,0.5s,baz=238,slow=5.2,SNR=2.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **144.80** | **46** | PKP | PKPbc | 21 08 40.7 | +0.1 |
| | 2.3nm,0.7s,baz=285,slow=1.2,SNR=18 | | | | | | |
| **BDFB** | **Brasilia** | **145.27** | **230** | PKPbc | **PKPdf** | **21 08 43.8** | **+1.0** |
| | 0.9nm,0.3s,baz=157,slow=15,SNR=3.1 | | | | | | |
| **LPAZ** | **La Paz** | **156.29** | **197** | PKPab | **PKPab** | **21 09 27.4** | **-0.7** |
| | 1.0nm,0.6s,baz=116,slow=2.5,SNR=3.6 | | | | | | |

*ISCJB* ***19*** *20:50:52.2±0.5, 17°.4S±0°.1×174°.85W±0°.10, h10km, mb4.4/16, MS4.2/3, Error ellipse: s-maj=20.8km s-min=9.4km az=149.5*
*IDC* ***19*** *20:50:52.6±0.7, 17°.49S×174°.71W, h0km, mb4.3/9, mb1 4.5/10, mb1mx4.2/40, mbtmp4.3/10, ML3.6/1, MS4.1/4, Ms1 4.1/4, ms1mx3.8/37, Error ellipse: s-maj=29.0km s-min=19.3km az=131.0*
*NEIC* ***19*** *20:50:53.4±0.4, 17°.52S×174°.74W, h10km, mb4.6/8, Error ellipse: s-maj=16.8km s-min=9.2km az=147.0*

**ISC 19 20:50:53.7±0.5, 17°.5S±0°.1×174°.8W±0°.1, h10km, n67, σ1§22/54, mb4.4/16, MS4.3/3, 10C-4D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.62** | **39** | Pn | Pn | 20 51 57.6 | -6.1 |
| | 4.5nm,0.3s,baz=108,slow=19,SNR=2.6 | | | | | | |
| AFI | | | | LR | LR | 20 53 24.4 | |
| | comp=Z,1μm,21.4s,baz=165,slow=33 | | | | | | |
| AFI | | | | T | T | 20 56 48.6 | |
| | 4.7nm,0.3s,baz=336,slow=23,SNR=3.8 | | | | | | |
| **MSVF** | **Nonsavu** | **6.84** | **267** | *e*Pn | **Pn** | **20 52 32.8** | **-1.4** |
| **DZM** | **Mont Dzumac** | **18.24** | **253** | *e*LR | LR | 20 59 53.6 | |
| | 1μm,25.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.24** | **253** | P | **P** | **20 55 07.9** | **+0.6** |
| | 0.2nm,0.3s,baz=180,slow=17,SNR=2.5 | | | | | | |
| **URZ** | **Urewera** | **21.84** | **197** | P | **P** | **20 55 46.1** | **-0.2** |
| | 18nm,1.0s,baz=100,slow=7.3,SNR=3.9 | | | | | | |
| **PPT2** | **Papeete2** | **24.02** | **94** | *e*LR | LR | 21 01 34.5 | |
| | 888nm,27.8s | | | | | | |
| **PPT** | **Papeete** | **24.02** | **94** | LR | LR | 21 04 45.1 | |
| | comp=Z,319nm,18.0s,baz=198,slow=35 | | | | | | |
| **TBI** | **Tubuai** | **24.40** | **108** | *e*LR | LR | 21 02 08.2 | |
| | 1μm,27.5s | | | | | | |
| **HNR** | **Honiara** | **25.84** | **285** | LR | LR | 21 04 52.2 | |
| | comp=Z,942nm,20.8s,baz=136,slow=32 | | | | | | |
| **PMOR** | **Pomariorio Ree** | **25.92** | **88** | *e*T | T | 21 23 09.2 | |
| | 4.5nm,0.3s | | | | | | |
| **VAH**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NKC | | | | *ex* | x | 21 10 43.9 | | |
| **BRTR** | **Keskin Array B** | **146.91 318** | | PKPbc | **PKPab** | **21 10 37.2** | **-1.0** | |
| | comp=Z,2.7nm,0.8s,baz=122,slow=1.9,SNR=13 | | | | | | | |
| **VRAC** | **Vranov** | **146.99 346** | ⇑ | *i*P | **PKPab** | **21 10 37.7** | **-0.3** | |
| **DOPR** | **Dopca** | **147.06 334** | ⇑ | *i*P | **PKPab** | **21 10 38.7** | **+0.3** | |
| **DRGR** | | **147.44 337** | ⇑ | *i*P | **PKPbc** | **21 10 38.1** | **+0.1** | |
| **KHC** | **Kasperske Hory** | **147.76 350** | | *e*PKP | **PKPab** | **21 10 39.6** | **-1.5** | |
| KHC | | | | *ep*PKP | **PKiKP** | **21 10 44.5** | **+3.7** | |
| **ARR** | **Arges** | **147.86 334** | ⇑ | *i*P | **PKPab** | **21 10 41.1** | **-0.6** | |
| **GERES** | **GERESS Array B** | **148.01 349** | | PKPbc | **PKPbc** | **21 10 39.7** | **+0.1** | |
| | comp=Z,1.3nm,0.8s,baz=53,slow=0.7,SNR=7.7 | | | | | | | |
| **SIRR** | **Siria** | **148.26 338** | ⇑ | *i*P | **PKPbc** | **21 10 39.6** | **-0.6** | |
| **CONA** | **Conrad Observa** | **148.45 346** | ⇓ | *i*PKiKP | **PKiKP** | **21 10 42.0** | **-0.4** | |
| | comp=Z,12nm,1.5s | | | | | | | |
| **BZS** | **Buzias** | **148.84 337** | ⇑ | *i*P | **PKPbc** | **21 10 42.3** | **+0.6** | |
| **CSS** | **Prodhromos** | **149.54 310** | | *e*PKPbc | **PKPbc** | **21 10 44.1** | **+0.2** | |
| **WTTA** | **Wattenberg** | **149.88 351** | ⇑ | *i*pPKPbc | pPKPbc | 21 10 46.5 | -1.4 | |
| | comp=Z,16nm,1.7s | | | | | | | |
| **FETA** | **Feichten** | **150.24 352** | ⇑ | *i*PKiKP | **PKiKP** | **21 10 46.2** | **0.0** | |
| | comp=Z,7.7nm,1.0s | | | | | | | |
| **ESDC** | **Sonseca Array** | **156.53 18** | | PKPab | **PKPab** | **21 11 17.4** | **-0.6** | |
| | comp=Z,0.1nm,0.3s,baz=335,slow=5.7,SNR=4.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **174.47 142** | | PKPab | **PKPab** | **21 12 37.3** | **-0.1** | |
| | comp=Z,0.8nm,1.1s,baz=235,slow=4.9,SNR=3.0 | | | | | | | |

*CSEM **19** 20:52:19.2, 40.60N×24.15E, h13km, MD2.7, After ATH*
**ATH 19 20:52:19.3, 40.61N×24.14E, h13km±7km, MD2.7/5, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OUR** | **Ouranopolis** | **0.30** | **204** | *e*PG | Pg | 20 52 25.7 | +0.2 |
| OUR | | | | *e*SG | Sg | 20 52 29.8 | +0.2 |
| **OUR** | **Ouranopolis** | **0.30** | **204** | *e*Pb | Pg | 20 52 25.7 | +0.2 |
| OUR | | | | *e*Sb | Sg | 20 52 29.8 | +0.2 |
| **PLG** | **Polygyros** | **0.58** | **246** | *e*PG | Pg | 20 52 30.6 | -0.1 |
| PLG | | | | *e*SB | Sg | 20 52 38.1 | -0.4 |
| **PLG** | **Polygyros** | **0.58** | **246** | *e*Pg | Pg | 20 52 30.6 | -0.1 |
| PLG | | | | *e*Sb | Sg | 20 52 38.1 | -0.4 |
| **SRS** | **Serrai** | **0.66** | **321** | *e*PB | Pg | 20 52 31.4 | -0.7 |
| **SRS** | **Serrai** | **0.66** | **321** | *e*Pb | Pg | 20 52 31.4 | -0.7 |
| **PAIG** | **Paliouri** | **0.77** | **207** | *e*PB | Pg | 20 52 33.7 | -0.5 |
| **PAIG** | **Paliouri** | **0.77** | **207** | *e*Pg | Pg | 20 52 33.7 | -0.5 |
| **NVR** | **Nevrokopi** | **0.77** | **344** | *e*PB | Pg | 20 52 34.1 | -0.2 |
| NVR | | | | *e*SB | Sb | 20 52 45.0 | -0.1 |
| **NVR** | **Nevrokopi** | **0.77** | **344** | *e*Pb | Pg | 20 52 34.1 | -0.2 |
| NVR | | | | *e*Sb | Sb | 20 52 45.0 | -0.1 |

*IDC **19** 20:55:25.3±2.0, 44.29N×81.26E, h0km, mb3.4/1, mb1 3.4/4, mb1mx3.2/48, mbtmp3.2/4, ML2.7/3, Error ellipse: s-maj=37.7km s-min=10.3km az=136.0*
*ISCJB **19** 20:55:28.1±0.8, 44.36N±0.06×81.2E±0.1, h10km, mb3.4/1, Error ellipse: s-maj=12.6km s-min=5.8km az=33.5*
*NNC **19** 20:55:29.2±1.2, 44.24N×81.30E, h14km±6km, mb4.0, mpv3.5, Error ellipse: s-maj=13.5km s-min=3.4km az=129.0*
*BJI **19** 20:55:29.6, 44.29N×81.35E, h5km, ML3.2/8*
**ISC 19 20:55:29.1±1.0, 44.30N±0.07×81.27E±0.08, h10km, n29, σ1§56/27, 10C-15D, Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PDGK** | **Podgornoye** | **1.62** | **234** | ⇓P | **Pn** | **20 55 57.1** | **-0.6** |
| | 18nm,0.2s | | | | | | |
| PDGK | | | | ⇑S | **Sn** | **20 56 18.5** | **0.0** |
| | 348nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **2.59** | **16** | Pn | **Pn** | **20 56 11.0** | **-0.1** |
| | 0.5nm,0.2s,baz=203,slow=13,SNR=315 | | | | | | |
| MK31 | | | | Pg | **Pb** | **20 56 18.0** | **+2.3** |
| | 6.7nm,0.3s,baz=200,slow=13,SNR=58 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 20 56 55.9 | |
| | 36nm,0.5s,baz=197,slow=30,SNR=7.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **2.59** | **16** | Pn | **Pn** | **20 56 11.2** | **+0.1** |
| | 1.2nm,0.3s,baz=196,slow=14,SNR=38 | | | | | | |
| MKAR | | | | Sn | **Sn** | **20 56 43.5** | **+0.8** |
| | 12nm,0.3s,baz=200,slow=26,SNR=7.8 | | | | | | |
| **KNDC** | **Almaty** | **3.30** | **252** | ⇑Pg | **Pb** | **20 56 29.0** | **+1.2** |
| | 19nm,0.5s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 20 57 14.2 | |
| | 106nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.35** | **253** | ⇓Pg | **Pb** | **20 56 48.4** | **+2.7** |
| | 21nm,0.6s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 20 57 46.7 | |
| | 32nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.35** | **253** | P | **Pg** | **20 56 52.2** | **-0.2** |
| | SNR=13 | | | | | | |
| **KBK** | **Karagaybulak** | **4.89** | **253** | P | **Pg** | **20 57 02.5** | **-0.2** |
| | SNR=6.6 | | | | | | |
| **CHMS** | **Chumysh** | **4.91** | **257** | P | **Pg** | **20 57 01.4** | **-1.7** |
| | SNR=6.8 | | | | | | |
| **USP** | **Ospenovka** | **5.01** | **260** | P | **Pb** | **20 56 59.3** | **+2.4** |
| | SNR=5.8 | | | | | | |
| **AAK** | **Ala-Archa** | **5.21** | **254** | ⇑Pg | **Pb** | **20 57 03.1** | **+2.8** |
| | 5.5nm,0.5s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 20 58 12.8 | |
| | 20nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **5.21** | **254** | Pn | **Pn** | **20 56 47.3** | **+0.1** |
| | 0.3nm,0.3s,baz=117,slow=2.3,SNR=2.8 | | | | | | |
| AAK | | | | Pg | **Pb** | **20 57 01.0** | **+0.7** |
| | 0.7nm,0.3s,baz=115,slow=12,SNR=6.3 | | | | | | |
| AAK | | | | Lg | Lg | 20 58 09.3 | |
| | 1.1nm,0.3s,baz=302,slow=17,SNR=9.4 | | | | | | |
| **AAK** | **Ala-Archa** | **5.21** | **254** | P | **Pg** | **20 57 06.8** | **-2.0** |
| | SNR=7.0 | | | | | | |
| **UCH** | **Uchtor** | **5.35** | **250** | P | **Pg** | **20 57 10.4** | **-1.3** |
| | SNR=12 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.70** | **256** | P | **Pn** | **20 56 54.5** | **+0.6** |
| | SNR=5.8 | | | | | | |
| **KSH** | **Kashi** | **6.20** | **221** | *e*Pg | **Pg** | **20 57 27.8** | **-0.1** |
| KSH | | | | SMN | | | |
| | 9.0nm,1.0s | | | | | | |
| KSH | | | | SME | | | |
| | 9.0nm,1.0s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.59** | **345** | Pn | **Pn** | **20 57 05.2** | **-0.8** |
| KURBB | | | | ⇑Lg | Lg | 20 59 01.8 | |
| | 43nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **6.64** | **257** | ⇓Pg | Pb | 20 57 30.8 | +6.1 |
| | 2.6nm,0.6s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 20 58 59.7 | |
| | 6.3nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **6.66** | **345** | Pn | **Pn** | **20 57 04.8** | **-2.1** |
| KURK | | | | ⇑Lg | Lg | 20 59 03.7 | |
| | 71nm,1.2s | | | | | | |
| **OTUK** | **Ortayu** | **7.34** | **306** | ⇑Lg | Lg | 20 59 23.5 | |
| | 11nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **7.89** | **265** | ⇓Pg | Pg | 20 57 55.0 | -5.1 |
| | 0.6nm,0.4s,baz=69,slow=14,SNR=4.6 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 20 59 40.2 | |
| | 11nm,1.1s,baz=78,slow=28,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **9.93** | **12** | Pn | **Pn** | **20 57 50.0** | **-1.8** |
| | 0.4nm,0.3s,baz=200,slow=13,SNR=5.1 | | | | | | |
| ZALV | | | | Lg | Lg | 21 00 41.6 | |
| | baz=190,slow=25,SNR=3.4 | | | | | | |
| **VOSK** | **Vostochnaya** | **10.84** | **325** | ⇓Pn | Pn | 20 58 07.6 | +3.4 |
| | 4.3nm,1.1s | | | | | | |
| VOSK | | | | ⇓Lg | Lg | 21 01 08.9 | |
| | 7.7nm,1.0s | | | | | | |
| **BVA0** | **Borovoye Array** | **11.30** | **324** | ⇑Pn | **Pn** | **20 58 12.1** | **+1.5** |
| | 5.8nm,1.3s,baz=260,slow=3.3,SNR=8.8 | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 21 01 27.1 | |
| | 5.8nm,1.0s,baz=123,slow=18,SNR=3.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **11.30** | **324** | Lg | Lg | 21 01 27.0 | |
| | 0.2nm,0.3s,baz=120,slow=20,SNR=3.5 | | | | | | |
| **BRVK** | **Borovoye** | **11.37** | **324** | ⇓Lg | Lg | 21 01 35.0 | |
| | 10nm,1.0s | | | | | | |
| **CHKZ** | **Chkalovo** | **11.69** | **327** | ⇓Pn | **Pn** | **20 58 16.0** | **+0.1** |
| | 1.6nm,0.7s | | | | | | |
| CHKZ | | | | ⇓Lg | Lg | 21 01 35.1 | |
| | 7.6nm,1.3s | | | | | | |
| **ZRNK** | **Zerenda** | **11.85** | **321** | ⇓Pn | **Pn** | **20 58 19.1** | **+1.0** |
| | 6.0nm,1.3s | | | | | | |
| ZRNK | | | | ⇑Lg | Lg | 21 01 40.1 | |
| | 6.9nm,1.2s | | | | | | |
| **CD2** | **Chengdu** | **22.18** | **119** | *e*P | **P** | **21 00 26.6** | **+1.2** |
| **ILAR** | **Eielson Array** | **64.94** | **21** | P | **P** | **21 06 05.7** | **-2.6** |
| | 0.3nm,0.7s,baz=317,slow=6.5,SNR=4.2 | | | | | | |

*CSEM **19** 20:57:21.3, 36.27N×22.14E, h29km, MD3.0, After ATH*
**ATH 19 20:57:21.3, 36.27N×22.14E, h29km±1km, MD3.0/11, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PYL** | **PYLOS** | **0.70** | **333** | *e*PB | Pb | 20 57 34.5 | -0.6 |
| PYL | | | | *e*SN | Sn | 20 57 46.0 | +0.8 |
| **PYL** | **PYLOS** | **0.70** | **333** | *e*Pb | Pb | 20 57 34.5 | -0.6 |
| PYL | | | | *e*Sn | Sn | 20 57 46.0 | +0.8 |
| **KYTH** | **Kithira** | **0.72** | **89** | *e*PN | Pn | 20 57 35.8 | +0.2 |
| **KYTH** | **Kithira** | **0.72** | **89** | *e*Pn | Pn | 20 57 35.8 | +0.2 |
| **VLI** | **Veliai** | **0.78** | **55** | *e*PN | Pn | 20 57 37.4 | +1.0 |
| VLI | | | | *e*SN | Sn | 20 57 48.0 | +0.8 |
| **VLI** | **Veliai** | **0.78** | **55** | *e*Pn | Pn | 20 57 37.4 | +1.0 |
| VLI | | | | *e*Sn | Sn | 20 57 48.0 | +0.8 |
| **ITM** | **Ithomi** | **0.92** | **349** | *e*PB | Pn | 20 57 38.2 | -0.2 |
| ITM | | | | *e*SN | Sb | 20 57 53.0 | +2.2 |
| **ITM** | **Ithomi** | **0.92** | **349** | *e*Pb | Pn | 20 57 38.2 | -0.2 |
| ITM | | | | *e*Sn | Sb | 20 57 53.0 | +2.2 |
| **VLX** | **Vlachokerasia** | **1.11** | **10** | *e*PB | Pb | 20 57 41.8 | -0.3 |
| VLX | | | | *e*SN | Sb | 20 57 58.6 | +2.2 |
| **VLX** | **Vlachokerasia** | **1.11** | **10** | *e*Pb | Pb | 20 57 41.8 | -0.3 |
| VLX | | | | *e*Sn | Sb | 20 57 58.6 | +2.2 |
| **AMT** | **Artemida-Makis** | **1.31** | **345** | *e*PN | Pb | 20 57 45.0 | -0.3 |
| **AMT** | **Artemida-Makis** | **1.31** | **345** | *e*Pn | Pb | 20 57 45.0 | -0.3 |
| **DID** | **Didima** | **1.52** | **35** | *e*PN | Pb | 20 57 48.9 | +0.1 |
| DID | | | | *e*SN | Sb | 20 58 07.9 | +0.2 |
| **DID** | **Didima** | **1.52** | **35** | *e*Pn | Pb | 20 57 48.9 | +0.1 |
| DID | | | | *e*Sn | Sb | 20 58 07.9 | +0.2 |
| **GUR** | **Goura** | **1.67** | **5** | *e*PN | Pb | 20 57 51.7 | +0.1 |
| **GUR** | **Goura** | **1.67** | **5** | *e*Pn | Pb | 20 57 51.7 | +0.1 |
| **DRO** | **Drossia** | **1.71** | **349** | *e*PN | Pb | 20 57 51.4 | -0.8 |
| **DRO** | **Drossia** | **1.71** | **349** | *e*Pn | Pb | 20 57 51.4 | -0.8 |
| **KLV** | **Kalavryta, Ach** | **1.77** | **0** | *e*PN | Pb | 20 57 53.1 | -0.1 |
| KLV | | | | *e*SN | Sb | 20 58 14.2 | -0.9 |
| **KLV** | **Kalavryta, Ach** | **1.77** | **0** | *e*Pn | Pb | 20 57 53.1 | -0.1 |
| KLV | | | | *e*Sn | Sb | 20 58 14.2 | -0.9 |
| **LTK** | **Loutraki** | **1.87** | **20** | *e*PN | Pb | 20 57 53.3 | -1.6 |
| **LTK** | **Loutraki** | **1.87** | **20** | *e*Pn | Pb | 20 57 53.3 | -1.6 |
| **VAM** | **Vamos** | **1.88** | **117** | *e*PB | Pb | 20 57 53.7 | -1.3 |
| **VAM** | **Vamos** | **1.88** | **117** | *e*Pb | Pb | 20 57 53.7 | -1.3 |

*NEIC **19** 20:58:44.7, 32.16N×115.24W, h7km, ML3.7(PAS), ML3.9(ECX), ML3.9(ECX), After ECX.*
*ECX **19** 20:58:44.7±0.6, 32.16N×115.24W, h7km, MD3.7, ML3.9*
*MEX **19** 20:58:44.9±0.8, 32.29N×115.07W, h32km±11km, MD4.0*
**ISC 19 20:58:42.1±1.3, 32.12N±0.04×115.20W±0.03, h6km±11km, n52, σ0§97/67, 5C-10D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MBIG** | **Mexicali** | **0.29** | **1** | *i*P | **Pb** | **20 58 49.3** | **-0.4** |
| MBIG | | | | *i*S | **Sg** | **20 58 52.0** | **+0.5** |
| **MBIG** | **Mexicali** | **0.29** | **1** | *e*P | **Pb** | **20 58 50.0** | **+0.3** |
| **CPBX** | **Cerro Prieto** | **0.31** | **344** | *e*P | **Pb** | **20 58 49.9** | **-0.2** |
| CPBX | | | | ⇓*e*P | **Pb** | **20 58 49.9** | **-0.2** |
| CPBX | | | | *e*S | **Sg** | **20 58 53.6** | **+1.3** |
| CPBX | | | | ⇑*e* | | 20 58 55.7 | |
| CPBX | | | | IAML | | 20 58 55.7 | |
| | comp=E,43μm,0.2s | | | | | | |
| **CPBX** | **Cerro Prieto** | **0.31** | **344** | *e*P | **Pb** | **20 58 49.9** | **-0.2** |
| CPBX | | | | *i*S | **Sg** | **20 58 53.5** | **+1.3** |
| **EMSC** | **East Mesa** | **0.65** | **16** | ⇑*i*P | **Pb** | **20 58 55.6** | **-0.2** |
| **RDX** | **Rancho Dawling** | **0.66** | **254** | ⇑*e*P | **Pb** | **20 58 56.3** | **+0.2** |
| RDX | | | | *e*S | **Sb** | **20 59 05.5** | **-0.1** |
| RDX | | | | IAML | | 20 59 06.4 | |
| | comp=N,5μm,0.5s | | | | | | |
| **SGL** | **Mount Signal** | **0.69** | **320** | ⇓*i*P | **Pg** | **20 58 55.9** | **+0.5** |
| **YMD** | **Yuma Desert** | **0.71** | **52** | ⇑*i*P | **Pb** | **20 58 56.6** | **-0.2** |
| **DREC** | **Desert Rsrch C** | **0.72** | **343** | *e*P | **Pb** | **20 58 56.8** | **-0.2** |
| **COA** | **Coachella** | **0.75** | **5** | ⇓*i*P | **Pg** | **20 58 56.9** | **+0.4** |
| **WESC** | **Westside Schoo** | **0.78** | **325** | *e*P | **Pg** | **20 58 57.3** | **+0.2** |
| **YUH** | **Yuha Desert** | **0.81** | **311** | ⇓*i*P | **Pg** | **20 58 57.7** | **+0.1** |
| **RMX** | **La Rumorosa** | **0.89** | **303** | ⇓*e*P | **Pg** | **20 58 58.8** | **-0.3** |
| RMX | | | | *e*S | **Sg** | **20 59 09.9** | **-0.8** |
| RMX | | | | IAML | | 20 59 11.4 | |
| | comp=N,5μm,0.2s | | | | | | |
| RMX | | | | ⇓*e* | | 20 59 11.4 | |
| **IBP** | **Imperial Bould** | **0.93** | **306** | P | **Pg** | **20 58 59.9** | **0.0** |
| | baz=0.9 | | | | | | |
| IBP | | | | S | **Sg** | **20 59 11.9** | **-0.1** |
| | baz=0.9 | | | | | | |
| **IBP** | **Imperial Bould** | **0.93** | **306** | ⇓*e*P | **Pg** | **20 58 59.9** | **0.0** |
| IBP | | | | *e*S | **Sg** | **20 59 12.1** | **+0.1** |
| **SWSC** | **Sam W. Stewart** | **0.96** | **329** | P | **Pg** | **20 58 59.6** | **-1.0** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.98** | **19** | P | **Pg** | **20 59 00.2** | **-0.8** |
| | baz=1.0 | | | | | | |
| GLA | | | | S | **Sg** | **20 59 11.9** | **-1.9** |
| | baz=1.0 | | | | | | |
| **GLA** | **Glamis** | **0.98** | **19** | *e*Pg | **Pg** | **20 58 60.0** | **-1.0** |
| GLA | | | | *e*Sg | **Sg** | **20 59 12.8** | **-1.0** |
| **SPX** | **San Pedro Mart** | **1.09** | **192** | ⇓*e*P | **Pn** | **20 59 04.4** | **+0.1** |
| **SPX** | **San Pedro Mart** | **1.09** | **192** | *e*P | **Pn** | **20 59 04.4** | **+0.1** |
| SPX | | | | *e*S | **Sn** | **20 59 20.3** | **+0.4** |
| **ZAX** | **El Zacaton** | **1.09** | **237** | ⇓*e*P | **Pb** | **20 59 03.5** | **+0.1** |
| **CBX** | **Cerro Bola** | **1.25** | **279** | *e*P | **Pn** | **20 59 05.7** | **-0.6** |
| CBX | | | | *e*S | **Sb** | **20 59 21.5** | **-1.2** |
| **CBX** | **Cerro Bola** | **1.25** | **279** | *e*P | **Pn** | **20 59 05.6** | **-0.8** |
| CBX | | | | *e*S | **Sb** | **20 59 22.0** | **-0.7** |
| CBX | | | | ⇑*e* | | 20 59 24.9 | |
| CBX | | | | IAML | | 20 59 24.9 | |
| | comp=E,4μm,0.4s | | | | | | |
| **CBX** | **Cerro Bola** | **1.25** | **279** | *e*P | **Pn** | **20 59 05.7** | **-0.6** |
| CBX | | | | *e*S | **Sb** | **20 59 21.5** | **-1.2** |
| **MONP** | **Monument Peak** | **1.29** | **307** | P | **Pn** | **20 59 05.2** | **-1.7** |
| | baz=1.2 | | | | | | |
| MONP | | | | S | **Sb** | **20 59 22.6** | **-1.2** |
| | baz=1.2 | | | | | | |
| **BAR** | **Barrett** | **1.36** | **295** | ⇓*e*P | **Pn** | **20 59 06.8** | **-0.9** |
| **BAR** | **Barrett** | **1.36** | **295** | *e*Pn | **Pn** | **20 59 06.7** | **-1.1** |
| BAR | | | | *e*Sn | **Sb** | **20 59 24.8** | **-1.0** |
| **BC3** | **Big Chuckawall** | **1.55** | **352** | P | **Pn** | **20 59 08.4** | **-2.0** |
| | baz=1.5 | | | | | | |
| **109C** | **Camp Elliot, M** | **1.78** | **296** | P | **Pn** | **20 59 12.7** | **-0.8** |
| | baz=1.7 | | | | | | |
| 109C | | | | Sb | **Sb** | **20 59 37.0** | **-0.8** |
| | baz=1.7 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.82** | **325** | *e*Pn | **Pn** | **20 59 12.0** | **-2.1** |
| **214A** | **Organ Pipe Nat** | **2.04** | **94** | P | **Pn** | **20 59 16.0** | **-1.0** |
| | baz=2.1 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.04** | **94** | *e*Pn | **Pn** | **20 59 15.5** | **-1.5** |
| **IRM** | **Iron Mountain** | **2.04** | **1** | Pb | **Pn** | **20 59 17.2** | **+0.2** |
| | baz=2.0 | | | | | | |
| **MURC** | **Murrieta** | **2.24** | **312** | Sb | **Sb** | **20 59 51.3** | **+0.3** |
| | baz=2.2 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **2.95** | **316** | Sb | **Sb** | **21 00 12.5** | **+0.8** |
| | baz=2.9 | | | | | | |
| **SCI** | **San Clemente I** | **2.95** | **288** | Sb | **Sb** | **21 00 12.7** | **+1.1** |
| | baz=2.9 | | | | | | |
| **MWC** | **Mount Wilson** | **3.19** | **312** | Pn | **Pn** | **20 59 34.8** | **+1.8** |
| MWC | | | | *e*Sg | **Sb** | **21 00 19.8** | **+1.3** |
| **GSC** | **Goldstone** | **3.45** | **338** | Pn | Pb | 20 59 39.9 | -3.8 |
| **TUC** | **Tucson** | **3.75** | **86** | *e*Pn | **Pn** | **20 59 41.2** | **+0.7** |
| **SHPR** | **Sheep Range** | **4.38** | **0** | *e*Pn | **Pn** | **20 59 49.9** | **+0.5** |
| **ISA** | **Isabella** | **4.46** | **323** | Pn | **Pn** | **20 59 51.6** | **+1.2** |
| **DAC** | **Darwin (Calif)** | **4.60** | **335** | Pn | Pn | 20 59 55.3 | +2.9 |
| **WUAZ** | **Wupatki** | **4.65** | **42** | P | **Pn** | **20 59 54.4** | **+1.3** |
| | baz=4.6 | | | | | | |
| **WUAZ** | **Wupatki** | **4.65** | **42** | *e*Pn | **Pn** | **20 59 53.9** | **+0.8** |
| **W18A** | **Petrified Fore** | **5.45** | **55** | P | **Pn** | **21 00 05.5** | **+1.4** |
| | baz=5.5 | | | | | | |
| **W18A** | **Petrified Fore** | **5.45** | **55** | *e*Pn | **Pn** | **21 00 05.3** | **+1.2** |
| | comp=E,12nm,0.5s | | | | | | |
| **CCUT** | **Cedar City** | **5.63** | **15** | Pn | **Pn** | **21 00 07.7** | **+1.1** |
| | comp=E,5.5nm,0.8s | | | | | | |
| **121A** | **Cookes Peak, D** | **6.29** | **84** | P | **Pn** | **21 00 15.6** | **0.0** |
| | baz=6.3 | | | | | | |
| **MSU** | **Marysvale** | **6.84** | **20** | Pn | Pb | 21 00 35.0 | -6.6 |
| | comp=E,5.3nm,0.6s | | | | | | |
| **MVCO** | **Mesa Verde** | **7.50** | **46** | *e*Pn | **Pn** | **21 00 34.4** | **+2.1** |
| | comp=E,6.6nm,0.6s | | | | | | |
| **MNTX** | **Cornudas Mount** | **8.36** | **90** | P | **Pn** | **21 00 44.4** | **+0.6** |
| | baz=8.4 | | | | | | |
| **MNTX** | **Cornudas Mount** | **8.36** | **90** | *e*Pn | **Pn** | **21 00 44.4** | **+0.6** |
| | comp=E,1.0nm,0.4s | | | | | | |

*ISCJB **19** 21:09:23.0±0.8, 17.4S±0.2×174.9W±0.2, h10km, mb3.9/6, Error ellipse: s-maj=38.8km s-min=20.2km az=142.8*
*IDC **19** 21:09:23.3±0.9, 17.34S×174.84W, h0km, mb3.8/6, mb1 4.2/6, mb1mx4.0/27, mbtmp3.8/6, MS3.4/1, Ms1 3.4/1, ms1mx3.1/26, Error ellipse: s-maj=43.9km s-min=23.6km az=140.0*
**ISC 19 21:09:24.9±0.8, 17.3S±0.2×174.9W±0.2, h10km, n23, σ1§22/20, mb3.9/6, 7C-1D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **4.53** | **42** | Pn | Pn | 21 10 28.0 | -5.6 |
| | 5.3nm,0.3s,baz=97,slow=22,SNR=5.9 | | | | | | |
| AFI | | | | LR | LR | 21 12 08.3 | |
| | comp=Z,398nm,18.1s,baz=196,slow=37 | | | | | | |
| AFI | | | | T | T | 21 15 00.2 | |
| | 4.3nm,0.3s,baz=340,slow=22,SNR=3.7 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.93** | **333** | T | T | 22 01 05.3 | |
| | baz=152,slow=76,SNR=4.5 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.93** | **333** | T | T | 22 01 05.6 | |
| | baz=152,slow=76,SNR=8.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.95** | **333** | T | T | 22 01 06.6 | |
| | baz=152,slow=76,SNR=8.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.05** | **259** | P | **P** | **21 18 04.4** | **-0.5** |
| | 1.4nm,0.9s,baz=92,slow=7.3,SNR=4.6 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 19 32.8** | **0.0** |
| | 0.5nm,0.8s,baz=85,slow=4.0,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **48.18** | **254** | P | **P** | **21 18 06.2** | **+0.3** |
| | 4.4nm,0.6s,baz=88,slow=8.1,SNR=43 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 19 33.6** | **+0.3** |
| | 0.5nm,0.7s,baz=101,slow=3.0,SNR=2.9 | | | | | | |
| **VNDA** | **Vanda** | **61.33** | **186** | P | **P** | **21 19 40.0** | **-0.3** |
| | 0.8nm,0.8s,baz=24,slow=4.7,SNR=5.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.70** | **42** | P | **P** | **21 21 16.6** | **-0.1** |
| | 1.0nm,0.9s,baz=231,slow=8.9,SNR=5.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **82.86** | **56** | P | **P** | **21 21 50.5** | **+0.4** |
| | 0.3nm,0.9s,baz=230,slow=7.0,SNR=3.1 | | | | | | |
| **ILAR** | **Eielson Array** | **84.60** | **12** | P | **P** | **21 21 57.0** | **-1.1** |
| | 0.4nm,0.5s,baz=211,slow=5.2,SNR=6.3 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **143.41** | **243** | PKhKP | PKPpre | 21 28 57.7 | |
| | 0.8nm,0.7s,baz=74,slow=7.0,SNR=3.5 | | | | | | |
| **BURAR** | **Bucovina Array** | **145.57** | **336** | ⇑*i*P | **PKPab** | **21 29 05.0** | **+1.0** |
| **DPC** | **Dobruska-Polom** | **145.85** | **347** | *e*P | **PKPab** | **21 29 05.8** | **+0.9** |
| DPC | | | | *ex* | x | 21 29 11.1 | |
| **PVCC** | **Panska Ves** | **146.02** | **349** | *e*P | **PKPab** | **21 29 06.0** | **+0.6** |
| PVCC | | | | *ex* | x | 21 29 11.2 | |
| **TRPA** | **Tarpa** | **146.13** | **339** | ⇑*i*P | **PKPab** | **21 29 05.5** | **-0.4** |
| **VRI** | **Vrincioaia** | **146.33** | **332** | ⇑*i*P | **PKPab** | **21 29 11.0** | **+4.2** |
| **BRTR** | **Keskin Array B** | **146.69** | **318** | PKPbc | **PKPbc** | **21 29 07.5** | **0.0** |
| | 1.4nm,0.8s,baz=106,slow=2.7,SNR=7.8 | | | | | | |
| **DOPR** | **Dopca** | **146.83** | **334** | ⇑*i*P | **PKPab** | **21 29 09.1** | **+0.3** |
| **MLR** | **Muntele Rosu** | **146.97** | **333** | ⇓*i*P | **PKPab** | **21 29 09.0** | **-0.4** |
| **DRGR** | | **147.21** | **337** | ⇑*i*P | **PKPbc** | **21 29 08.9** | **+0.3** |
| **ARR** | **Arges** | **147.63** | **334** | ⇑*i*P | **PKPab** | **21 29 11.5** | **-0.5** |
| **GERES** | **GERESS Array B** | **147.79** | **349** | PKPbc | **PKPbc** | **21 29 10.5** | **+0.3** |
| | 0.6nm,0.6s,baz=108,slow=3.0,SNR=4.1 | | | | | | |
| **SIRR** | **Siria** | **148.04** | **338** | ⇑*i*P | **PKPab** | **21 29 11.8** | **-1.7** |

*NSSP **19** 21:12:07.4, 41.80N×45.92E, h10km, Ms2.8*
*TIF **19** 21:12:08.8, 41.82N×46.09E, h17km±1km*
*CSEM **19** 21:12:09.4±0.2, 41.84N×46.09E, h5km, ML1.5, Error ellipse: s-maj=3.8km s-min=2.7km az=153.0*
*MOS **19** 21:12:10.5±1.0, 41.89N×46.09E, h15km, mb3.9/1, Error ellipse: s-maj=8.2km s-min=6.5km az=74.8*
**ISC 19 21:12:10.0±1.1, 41.80N±0.02×46.09E±0.02, h20km±5km, n60, σ0§99/116, 8C-10D, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DGRG** | **David-gareji** | **0.64** | **237** | P | **Pn** | **21 12 23.7** | **-0.4** |
| DGRG | | | | S | **Sn** | **21 12 35.4** | **+1.8** |
| **DGRG** | **David-gareji** | **0.64** | **237** | *e*PG | **Pn** | **21 12 23.6** | **-0.4** |
| DGRG | | | | *e*S | **Sn** | **21 12 35.4** | **+1.8** |
| **DGRG** | **David-gareji** | **0.64** | **237** | *e*Pg | **Pn** | **21 12 23.6** | **-0.4** |
| DGRG | | | | S | **Sn** | **21 12 35.4** | **+1.8** |
| **KMKR** | **Kumukh** | **0.82** | **66** | ⇑*i*PG | **Pb** | **21 12 24.9** | **-0.9** |
| KMKR | | | | *e*S | **Sb** | **21 12 36.5** | **-0.1** |
| KMKR | | | | pmax | pmax | | |
| | comp=Z,62nm,0.2s | | | | | | |
| **KMKR** | **Kumukh** | **0.82** | **66** | *i* Pg | **Pb** | **21 12 24.9** | **-0.9** |
| | comp=Z,62nm,0.2s | | | | | | |
| KMKR | | | | *e*Sg | **Sb** | **21 12 36.5** | **-0.1** |
| **XNZR** | **Khunzakh** | **0.87** | **32** | *i* PG | **Pb** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MTKZ** | **Martakert** | **1.69** | **161** | ⇓P | **Pn** | **21 12 38.4** | **-0.1** |
| MTKZ | | | | S | **Sn** | **21 13 00.5** | **+0.8** |
| **ZEI** | **Tsey** | **1.90** | **302** | *e*Pn | **Pn** | **21 12 42.1** | **+0.6** |
| ZEI | | | | *i* S | **Sb** | **21 13 07.6** | **+0.2** |
| **ZEI** | **Tsey** | **1.90** | **302** | *e*Pn | **Pn** | **21 12 42.1** | **+0.6** |
| ZEI | | | | *i* Sg | **Sb** | **21 13 07.6** | **+0.2** |
| **BTKR** | **Batakoyurt** | **1.94** | **325** | *e*PN | **Pb** | **21 12 43.4** | **-1.3** |
| BTKR | | | | *e*S | **Sb** | **21 13 09.7** | **+1.2** |
| **BTKR** | **Batakoyurt** | **1.94** | **325** | *e*Pn | **Pb** | **21 12 43.4** | **-1.3** |
| BTKR | | | | *e*Sg | **Sb** | **21 13 09.7** | **+1.2** |
| **GNI** | **Garni** | **1.94** | **212** | ⇓*i*P | **Pb** | **21 12 44.7** | **-0.1** |
| GNI | | | | ⇓*i*S | **Sg** | **21 13 11.5** | **-1.1** |
| **GNI** | **Garni** | **1.94** | **212** | ⇓P | **Pb** | **21 12 44.7** | **-0.1** |
| GNI | | | | S | **Sg** | **21 13 11.5** | **-1.1** |
| **KORR** | **Kora** | **1.97** | **311** | ⇓*i*PN | **Pb** | **21 12 43.7** | **-1.5** |
| KORR | | | | *e*S | **Sb** | **21 13 10.2** | **+0.9** |
| **KORR** | **Kora** | **1.97** | **311** | *i* Pn | **Pb** | **21 12 43.7** | **-1.5** |
| KORR | | | | *e*Sg | **Sb** | **21 13 10.2** | **+0.9** |
| **AKH** | **Akhalkalaki** | **1.98** | **259** | P | **Pb** | **21 12 44.9** | **-0.7** |
| AKH | | | | S | **Sb** | **21 13 10.8** | **+0.9** |
| **AKH** | **Akhalkalaki** | **1.98** | **259** | *e*PN | **Pb** | **21 12 44.8** | **-0.7** |
| **AKH** | **Akhalkalaki** | **1.98** | **259** | *e*Pn | **Pb** | **21 12 44.8** | **-0.7** |
| AKH | | | | S | **Sb** | **21 13 10.8** | **+0.9** |
| **STKZ** | | **2.05** | **165** | ⇑*i*P | **Pn** | **21 12 40.7** | **-2.8** |
| STKZ | | | | ⇑*i*S | **Sn** | **21 13 09.0** | **+0.5** |
| **STKZ** | | **2.05** | **165** | ⇑P | **Pn** | **21 12 40.7** | **-2.8** |
| STKZ | | | | S | **Sn** | **21 13 09.0** | **+0.5** |
| **ONI** | **Oni** | **2.11** | **293** | P | **Pb** | **21 12 46.3** | **-1.3** |
| ONI | | | | S | **Sb** | **21 13 13.5** | **0.0** |
| **ONI** | **Oni** | **2.11** | **293** | *e*PN | **Pb** | **21 12 46.3** | **-1.3** |
| ONI | | | | *e*S | **Sb** | **21 13 13.4** | **0.0** |
| **ONI** | **Oni** | **2.11** | **293** | P | **Pb** | **21 12 46.3** | **-1.3** |
| ONI | | | | *e*Sb | **Sb** | **21 13 13.4** | **0.0** |
| **DIGR** | **Digorskoe uzhe** | **2.16** | **301** | *e*PN | **Pn** | **21 12 46.2** | **+1.2** |
| DIGR | | | | *e*S | **Sb** | **21 13 14.6** | **-0.3** |
| **DIGR** | **Digorskoe uzhe** | **2.16** | **301** | *e*Pn | **Pn** | **21 12 46.2** | **+1.2** |
| DIGR | | | | *e*Sb | **Sb** | **21 13 14.6** | **-0.3** |

*AUST* ***19*** *21:16:14.6±0.3,20.˚28S×173.˚24W, h0km, Error ellipse: s-maj=9.1km s-min=5.2km az=139.0*
*IDC* ***19*** *21:16:17.8±0.4,20.˚29S×173.˚72W, h0km, mb4.7/25, mb1 4.8/27, mb1mx4.8/41, mbtmp4.7/27, ML4.8/2, MS4.4/16, Ms1 4.4/16, ms1mx4.3/27, Error ellipse: s-maj=15.9km s-min=12.9km az=133.0*
*GCMT* ***19*** *21:16:19.4±0.3,20.˚49S×173.˚08W, h17km±1km, MW4.9/66, Moment Tensor Solution. s28,c34; s66,c86; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr2.52±.18; Mθθ-0.13±.12; Mϕϕ-2.39±.12; Mre1.06±.37; Mθϕ-0.30±.08; Mϕr1.55±.28; Best double couple: M₀3.09900×10¹⁶ NP1:ϕs175.00000°,δ29.00000°,λ66.00000°. NP2: ϕs175.00000°,δ29.00000°,λ66.00000°. Principal axes: T 3.2320, Plg69.0000°, Azm318.0000°; N -0.2640, Plg12.0000°, Azm197.0000°; P -2.9670, Plg18.0000°, Azm103.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC* ***19*** *21:16:19.4±0.2,20.˚26S×173.˚77W, h10km, mb5.1/86 Error ellipse: s-maj=8.2km s-min=4.8km az=142.0*
*ISCJB* ***19*** *21:16:21.3±0.1,20.˚34S±0.˚04×173.˚77W±0.˚03, h33km, mb5.1/123, MS4.5/15, Error ellipse: s-maj=6.4km s-min=3.2km az=150.7*
*BJI* ***19*** *21:16:25.1,19.˚78S×173.˚75W, h40km, mb5.1/36, mB5.6/24, Ms5.4/21, Ms7 5.1/19*
*MOS* ***19*** *21:16:31.2±1.3,18.˚12S×173.˚51W, h33km, mb5.2/27, Error ellipse: s-maj=17.7km s-min=10.0km az=68.6*

**ISC 19 21:16:22.6±0.8,20.˚32S±0.˚06×173.72W±0.˚05, h32km±5km, n541, σ1§25/539, mb5.1/121, MS4.5/15, 38C-10D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **3.78** | **72** | P | Pn | 21 17 07.7 | -11 |
| | baz=3.3,SNR=53 | | | | | | |
| **AFI** | **Afiamalu** | **6.64** | **17** | Pn | Pn | 21 17 51.4 | -6.7 |
| | 14nm,0.3s,baz=107,slow=18,SNR=9.3 | | | | | | |
| AFI | | | | Sn | Sn | 21 18 56.2 | -17 |
| | 21nm,0.3s,baz=204,slow=19,SNR=2.5 | | | | | | |
| AFI | | | | T | T | 21 24 35.5 | |
| | 5.6nm,0.3s,baz=201,slow=14,SNR=5.4 | | | | | | |
| **AFI** | **Afiamalu** | **6.64** | **17** | *e*P | Pn | 21 17 52.4 | -5.7 |
| **AFI** | **Afiamalu** | **6.64** | **17** | *e*Pn | Pn | 21 17 52.4 | -5.7 |
| AFI | | | | *e*Sn | Sn | 21 19 01.9 | -11 |
| **MSVF** | **Nonsavu** | **8.20** | **287** | *e*P | **Pn** | **21 18 19.7** | **+0.3** |
| **MSVF** | **Nonsavu** | **8.20** | **287** | Pn | Pn | 21 18 26.0 | +6.5 |
| | 833nm,1.2s,SNR=33 | | | | | | |
| **MSVF** | **Nonsavu** | **8.20** | **287** | *e*Pn | **Pn** | **21 18 19.7** | **+0.3** |
| **RAO** | **Raoul Island** | **9.67** | **202** | Sn | Sn | 21 20 19.5 | -7.7 |
| | 67nm,0.3s,baz=79,slow=23,SNR=13 | | | | | | |
| RAO | | | | LR | LR | 21 22 24.8 | |
| | comp=Z,867nm,19.1s,baz=39,slow=38 | | | | | | |
| **RAO** | **Raoul Island** | **9.67** | **202** | *e*Sn | Sn | 21 20 19.5 | -7.7 |
| RAO | | | | *e*Sn | Sn | 21 20 21.3 | -5.9 |
| **RAR** | **Rarotonga** | **13.08** | **96** | Pn | Pn | 21 19 14.8 | -11 |
| | 9.7nm,0.3s,baz=261,slow=7.4,SNR=28 | | | | | | |
| RAR | | | | Sn | Sn | 21 21 28.1 | -23 |
| | 1.5nm,0.3s,baz=187,slow=18,SNR=3.5 | | | | | | |
| RAR | | | | LR | LR | 21 24 00.0 | |
| | comp=Z,1μm,19.6s,baz=288,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.58** | **261** | *e*P | **Pn** | **21 20 38.6** | **+1.0** |
| | 364nm,1.6s | | | | | | |
| DZM | | | | *e*LQ | LQ | 21 24 49.8 | |
| | 2μm,25.2s | | | | | | |
| DZM | | | | *e*LR | LR | 21 25 47.5 | |
| | 2μm,22.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.58** | **261** | P | **Pn** | **21 20 37.9** | **+0.3** |
| | 2.2nm,0.3s,baz=4.8,slow=23,SNR=20 | | | | | | |
| DZM | | | | LR | LR | 21 27 08.0 | |
| | comp=Z,2μm,18.4s,baz=164,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.58** | **261** | *e*P | **Pn** | **21 20 38.6** | **+1.0** |
| | 213nm,1.4s | | | | | | |
| **OUZ** | **Omahuta** | **18.58** | **214** | *e*P | **P** | **21 20 34.7** | **-2.2** |
| | 262nm,2.0s | | | | | | |
| **URZ** | **Urewera** | **19.56** | **202** | P | **Pn** | **21 20 48.8** | **-0.4** |
| | 3.2nm,0.3s,baz=8.9,slow=3.4,SNR=15 | | | | | | |
| URZ | | | | S | S | 21 24 13.8 | -13 |
| | 1.1nm,0.3s,baz=124,slow=21,SNR=6.2 | | | | | | |
| **URZ** | **Urewera** | **19.56** | **202** | *e*P | **Pn** | **21 20 48.8** | **-0.4** |
| | 39nm,0.8s | | | | | | |
| URZ | | | | *e*S | S | 21 24 14.3 | -12 |
| **BKZ** | **Black Stump Fm** | **20.59** | **202** | *e*P | **P** | **21 20 57.9** | **-1.1** |
| | 202nm,2.0s | | | | | | |
| **BFZ** | **Birch Farm** | **22.03** | **201** | *e*P | **P** | **21 21 15.2** | **+0.8** |
| | 443nm,2.2s | | | | | | |
| **TBI** | **Tubuai** | **22.71** | **102** | *e*P | **P** | **21 21 18.3** | **-3.5** |
| | 441nm,1.3s | | | | | | |
| TBI | | | | *e*LQ | LQ | 21 25 36.6 | |
| | 536nm,23.2s | | | | | | |
| TBI | | | | *e*LR | LR | 21 26 17.3 | |
| | 1μm,29.8s | | | | | | |
| **TBI** | **Tubuai** | **22.71** | **102** | *e*T | T | 21 21 11.7 | |
| | 5.5nm,0.2s | | | | | | |
| **PAE** | **Paea** | **22.98** | **87** | *e*T | T | 21 20 44.5 | |
| | 4.8nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **22.99** | **87** | *e*P | **P** | **21 21 20.3** | **-4.6** |
| | 109nm,1.2s | | | | | | |
| PPT2 | | | | *e*LR | LR | 21 26 21.1 | |
| | 1μm,29.0s | | | | | | |
| **PPT** | **Papeete** | **23.00** | **87** | LR | LR | 21 28 24.5 | |
| | comp=Z,895nm,19.3s,baz=198,slow=32 | | | | | | |
| **TIAR** | **Tiarei** | **23.21** | **87** | *e*T | T | 21 20 59.9 | |
| | 5.0nm,0.3s | | | | | | |
| **THZ** | **Tophouse** | **24.19** | **205** | *e*P | **P** | **21 21 37.1** | **+0.8** |
| | 210nm,1.8s | | | | | | |
| THZ | | | | *e*S | **S** | **21 25 51.2** | **-1.2** |
| **MEH** | **Mehetia** | **24.36** | **89** | *e*T | T | 21 22 30.2 | |
| | 17nm,0.3s | | | | | | |
| **KHZ** | **Kahutara** | **24.51** | **203** | *e*P | **P** | **21 21 40.5** | **+1.5** |
| | 627nm,2.4s | | | | | | |
| **OXZ** | **Oxford** | **25.86** | **204** | *e*P | **P** | **21 21 49.7** | **-1.6** |
| | 59nm,0.9s | | | | | | |
| **RPZ** | **Rata Peaks** | **26.57** | **205** | P | **P** | **21 21 58.1** | **+0.4** |
| | 18nm,0.8s,baz=30,slow=14,SNR=4.4 | | | | | | |
| **RPZ** | **Rata Peaks** | **26.57** | **205** | *e*P | **P** | **21 21 58.0** | **+0.3** |
| | 708nm,2.7s | | | | | | |
| **HNR** | **Honiara** | **27.61** | **289** | P | **P** | **21 22 05.4** | **-1.9** |
| | 23nm,0.4s,baz=208,slow=6.3,SNR=4.7 | | | | | | |
| **WKZ** | **Wanaka** | **28.32** | **206** | *e*P | **P** | **21 22 15.5** | **+2.1** |
| | 123nm,1.3s | | | | | | |
| **DCZ** | **Deep Cove** | **29.63** | **208** | *e*P | **P** | **21 22 25.4** | **+0.4** |
| | 442nm,2.4s | | | | | | |
| **EIDS** | **Eidsvold** | **32.76** | **254** | *e*P | **P** | **21 22 51.4** | **-1.4** |
| | 22nm,1.1s | | | | | | |
| **RMQ** | **Roma** | **34.89** | **253** | P | **P** | **21 23 11.8** | **+0.5** |
| | baz=35,SNR=8.4 | | | | | | |
| **CNB** | **Canberra Magne** | **35.68** | **237** | P | **P** | **21 23 17.4** | **-0.6** |
| | baz=36,SNR=7.7 | | | | | | |
| **CAN** | **Canberra** | **35.97** | **238** | P | **P** | **21 23 20.2** | **-0.3** |
| | baz=36 | | | | | | |
| **CAN** | **Canberra** | **35.97** | **238** | *e*P | **P** | **21 23 20.0** | **-0.5** |
| | 29nm,1.1s | | | | | | |
| **RKT** | **Rikitea** | **36.03** | **102** | *e*P | P | 21 23 16.9 | -4.3 |
| | 86nm,1.2s | | | | | | |
| RKT | | | | *e*LR | LR | 21 32 26.6 | |
| | 882nm,29.5s | | | | | | |
| **YNG** | **Young** | **36.21** | **239** | P | **P** | **21 23 22.6** | **+0.1** |
| | baz=37,SNR=5.3 | | | | | | |
| **MILA** | **Mila** | **36.31** | **235** | P | **P** | **21 23 23.3** | **-0.2** |
| | baz=37 | | | | | | |
| **CTA** | **Charters Tower** | **37.50** | **263** | P | **P** | **21 23 32.8** | **-0.9** |
| | 10nm,0.7s,baz=96,slow=10,SNR=11 | | | | | | |
| **CTA** | **Charters Tower** | **37.50** | **263** | P | **P** | **21 23 33.0** | **-0.7** |
| | baz=38 | | | | | | |
| **CTAO** | **Charters Tower** | **37.50** | **263** | *e*P | **P** | **21 23 33.1** | **-0.6** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,28nm,1.1s | | | | | | |
| **CTAO** | **Charters Tower** | **37.50** | **263** | *e*P | **P** | **21 23 33.1** | **-0.6** |
| | comp=Z,28nm,1.1s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **37.98** | **245** | P | **P** | **21 23 36.7** | **-0.9** |
| | baz=38,SNR=29 | | | | | | |
| **QLP** | **Quilpie** | **38.94** | **253** | P | **P** | **21 23 44.8** | **-1.0** |
| | baz=39,SNR=5.9 | | | | | | |
| **PMG** | **Port Moresby** | **39.24** | **280** | *e*P | **P** | **21 23 47.6** | **-0.8** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,253nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **39.24** | **280** | P | **P** | **21 23 48.0** | **-0.4** |
| | baz=40,SNR=5.2 | | | | | | |
| **PMG** | **Port Moresby** | **39.24** | **280** | *e*P | **P** | **21 23 46.1** | **-2.2** |
| | comp=Z,68nm,0.9s | | | | | | |
| **TOO** | **Toolangi** | **39.27** | **235** | P | **P** | **21 23 48.1** | **-0.3** |
| | baz=40,SNR=9.7 | | | | | | |
| **MTSU** | **Mount Surprise** | **39.61** | **266** | P | **P** | **21 23 50.8** | **-0.7** |
| | baz=40,SNR=21 | | | | | | |
| **COEN** | **Coen** | **41.58** | **272** | P | **P** | **21 24 07.7** | **-0.1** |
| | baz=42,SNR=12 | | | | | | |
| **COEN** | **Coen** | **41.58** | **272** | *e*P | **P** | **21 24 07.0** | **-0.7** |
| | comp=Z,340nm,2.8s | | | | | | |
| **ARPS** | **Mount Arapiles** | **41.94** | **237** | P | **P** | **21 24 10.1** | **-0.4** |
| | baz=42,SNR=8.2 | | | | | | |
| **KKH** | **Kailua Kona** | **43.35** | **25** | *e*P | P | 21 24 18.4 | -3.6 |
| **KKH** | **Kailua Kona** | **43.35** | **25** | *e*P | P | 21 24 18.4 | -3.6 |
| **KIP** | **Kipapa** | **44.24** | **21** | *e*P | **P** | **21 24 28.9** | **-0.2** |
| KIP | | | | pmax | pmax | | |
| | comp=Z,162nm,1.3s | | | | | | |
| **BBOO** | **Buckleboo** | **46.22** | **244** | P | **P** | **21 24 43.8** | **-1.1** |
| | baz=47 | | | | | | |
| **BBOO** | **Buckleboo** | **46.22** | **244** | *e*P | **P** | **21 24 44.1** | **-0.7** |
| | comp=Z,16nm,1.0s | | | | | | |
| **JAY** | **Jayapura** | **47.83** | **286** | P | **P** | **21 24 57.9** | **+0.2** |
| | baz=48,SNR=47 | | | | | | |
| **GENI** | **Genyem** | **48.28** | **285** | P | **P** | **21 25 01.2** | **+0.1** |
| | comp=Z,355nm,1.2s | | | | | | |
| **AS01** | **Alice Springs** | **48.42** | **256** | *e*P | **P** | **21 24 59.0** | **-3.2** |
| **AS12** | **Alice Springs** | **48.46** | **256** | *e*P | **P** | **21 25 01.1** | **-1.4** |
| AS12 | | | | *e*PcP | **PcP** | **21 26 29.5** | **+1.1** |
| AS12 | | | | *e*S | **S** | **21 32 00.0** | **-1.6** |
| **ASAR** | **Alice Springs** | **48.46** | **256** | P | **P** | **21 25 01.1** | **-1.4** |
| | comp=Z,10nm,0.7s,baz=91,slow=8.1,SNR=89 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 26 29.5** | **+1.1** |
| | comp=Z,8.1nm,0.9s,baz=99,slow=4.8,SNR=9.1 | | | | | | |
| ASAR | | | | S | **S** | **21 32 00.0** | **-1.6** |
| | comp=Z,0.7nm,0.8s,baz=95,slow=16,SNR=4.3 | | | | | | |
| ASAR | | | | LR | LR | 21 44 50.1 | |
| | comp=Z,605nm,18.4s,baz=100,slow=35 | | | | | | |
| **AS13** | **Alice Springs** | **48.47** | **256** | P | **P** | **21 25 01.4** | **-1.1** |
| | baz=49 | | | | | | |
| **WRAB** | **Tennant Creek** | **48.59** | **261** | *c i*P | **P** | **21 25 01.4** | **-2.0** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,46nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **48.59** | **261** | P | **P** | **21 25 01.8** | **-1.6** |
| | comp=Z,104nm,1.0s,SNR=7.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.60** | **261** | P | **P** | **21 25 01.8** | **-1.8** |
| | comp=Z,14nm,1.1s,baz=96,slow=7.2,SNR=45 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 26 29.9** | **+0.9** |
| | comp=Z,6.5nm,0.9s,baz=94,slow=3.7,SNR=6.6 | | | | | | |
| WRA | | | | LR | LR | 21 45 09.1 | |
| | comp=Z,299nm,18.1s,baz=100,slow=36 | | | | | | |
| **SMPI** | **Sarmi** | **49.85** | **285** | P | **P** | **21 25 12.7** | **-0.4** |
| | comp=Z,58nm,1.0s,comp=Z,16μm | | | | | | |
| **KDU** | **Kakadu** | **51.96** | **270** | P | **P** | **21 25 28.4** | **-0.6** |
| | baz=52,SNR=3.9 | | | | | | |
| **MTN** | **Manton Dam** | **53.18** | **269** | *e*P | **P** | **21 25 37.4** | **-0.6** |
| | comp=Z,29nm,0.9s | | | | | | |
| **WRKA** | **Warakurna** | **53.37** | **253** | P | **P** | **21 25 38.6** | **-0.8** |
| | baz=54,SNR=51 | | | | | | |
| **KNRA** | **Kununurra** | **54.67** | **265** | P | **P** | **21 25 47.8** | **-1.2** |
| | baz=55,SNR=3.4 | | | | | | |
| **FAKI** | **Fak Fak** | **55.39** | **281** | P | **P** | **21 25 53.6** | **-0.6** |
| | baz=56,SNR=3.4 | | | | | | |
| **FAKI** | **Fak Fak** | **55.39** | **281** | P | **P** | **21 25 53.1** | **-1.1** |
| | comp=Z,52nm,1.4s | | | | | | |
| **SIJI** | **Sorong** | **57.09** | **283** | P | **P** | **21 26 06.2** | **-0.1** |
| | comp=Z,170nm,0.9s,baz=88,slow=5.9,SNR=54 | | | | | | |
| **SWI** | **Sorong** | **57.10** | **283** | P | **P** | **21 26 06.6** | **+0.2** |
| | baz=58,SNR=14 | | | | | | |
| **SWI** | **Sorong** | **57.10** | **283** | P | **P** | **21 26 06.2** | **-0.2** |
| | comp=Z,253nm,1.0s,comp=Z,2μm | | | | | | |
| **SBA** | **Scott Base** | **58.35** | **185** | *e*P | **P** | **21 26 17.1** | **+2.9** |
| | comp=Z,23nm,1.1s | | | | | | |
| **VNDA** | **Vanda** | **58.48** | **186** | P | **P** | **21 26 16.1** | **+1.1** |
| | comp=Z,4.7nm,0.9s,baz=11,slow=7.1,SNR=24 | | | | | | |
| VNDA | | | | LR | LR | 21 46 21.2 | |
| | comp=Z,157nm,20.7s,baz=358,slow=31 | | | | | | |
| **VNDA** | **Vanda** | **58.48** | **186** | *e*P | **P** | **21 26 16.8** | **+1.7** |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **NLAI** | **Namlea** | **60.03** | **278** | P | **P** | **21 26 26.0** | **-0.8** |
| | comp=Z,47nm,1.6s | | | | | | |
| **SOEI** | **Soe** | **60.51** | **270** | P | **P** | **21 26 31.2** | **+0.9** |
| | baz=61,SNR=10 | | | | | | |
| **SOEI** | **Soe** | **60.51** | **270** | P | **P** | **21 26 31.0** | **+0.8** |
| | comp=Z,134nm,0.9s,comp=Z,1μm | | | | | | |
| **SOEI** | **Soe** | **60.51** | **270** | *e*P | **P** | **21 26 31.1** | **+0.8** |
| | comp=Z,107nm,0.9s | | | | | | |
| **LBMI** | **Labuha** | **60.64** | **281** | P | **P** | **21 26 31.2** | **+0.2** |
| | comp=Z,87nm,1.0s,comp=Z,770nm | | | | | | |
| **TNTI** | **Ternate** | **61.32** | **283** | P | **P** | **21 26 35.1** | **-0.5** |
| | comp=Z,234nm,1.0s,comp=Z,2μm | | | | | | |
| **TNTI** | **Ternate** | **61.32** | **283** | *e*P | **P** | **21 26 35.9** | **+0.3** |
| | comp=Z,181nm,0.9s | | | | | | |
| **SANI** | **Sanana** | **61.50** | **279** | P | **P** | **21 26 36.8** | **0.0** |
| | comp=Z,57nm,1.2s,comp=Z,615nm | | | | | | |
| **KLBR** | **Kellerberrin** | **61.76** | **244** | P | **P** | **21 26 38.5** | **+0.1** |
| | baz=62,SNR=19 | | | | | | |
| **MEEK** | **Meekatharra** | **61.76** | **250** | P | **P** | **21 26 37.7** | **-0.7** |
| | baz=62,SNR=9.0 | | | | | | |
| **MBWA** | **Marble Bar** | **61.80** | **256** | *e*P | **P** | **21 26 37.8** | **-1.0** |
| | comp=Z,44nm,1.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **62.03** | **243** | P | **P** | **21 26 41.1** | **+1.0** |
| | baz=62,SNR=5.9 | | | | | | |
| **BLDU** | **Ballidu** | **62.78** | **245** | P | **P** | **21 26 45.3** | **+0.1** |
| | baz=63,SNR=11 | | | | | | |
| **MORW** | **Morawa** | **63.60** | **247** | P | **P** | **21 26 50.8** | **+0.2** |
| | baz=64,SNR=4.8 | | | | | | |
| **LUWI** | **Luwuk** | **64.86** | **279** | P | **P** | **21 26 59.8** | **+0.7** |
| | baz=65,SNR=5.4 | | | | | | |
| **LUWI** | **Luwuk** | **64.86** | **279** | *e*P | **P** | **21 26 59.9** | **+0.7** |
| | comp=Z,159nm,1.3s | | | | | | |
| **GTOI** | **Gorontalo** | **65.27** | **281** | P | **P** | **21 27 02.1** | **+0.3** |
| | comp=Z,34nm,0.9s | | | | | | |
| **APSI** | **Ampana** | **65.95** | **278** | P | **P** | **21 27 06.7** | **+0.5** |
| **GIRL** | **Giralia** | **66.46** | **253** | P | **P** | **21 27 09.6** | **+0.3** |
| | baz=67,SNR=3.7 | | | | | | |
| **QSPA** | **South Pole Qui** | **69.75** | **180** | P | **P** | **21 27 29.9** | **+0.6** |
| | comp=Z,11nm,1.0s,baz=37,slow=3.3,SNR=22 | | | | | | |
| **QSPA** | **South Pole Qui** | **69.75** | **180** | *e*P | **P** | **21 27 30.4** | **+1.0** |
| **MYLDM** | **Lahad Datu** | **71.18** | **283** | *e*P | **P** | **21 27 37.0** | **-1.8** |
| | comp=Z,73nm,1.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.52** | **321** | P | **P** | **21 27 46.5** | **+0.2** |
| | comp=Z,8.1nm,0.9s,baz=161,slow=6.1,SNR=14 | | | | | | |
| **MAJO** | **Matsushiro** | **72.52** | **321** | *c i*P | **P** | **21 27 47.0** | **+0.6** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,78nm,0.9s | | | | | | |
| **MAJO** | **Matsushiro** | **72.52** | **321** | *e*P | **P** | **21 27 47.4** | **+1.0** |
| | comp=Z,12nm,0.8s | | | | | | |
| **MAT** | **Matsushiro** | **72.52** | **321** | P | **P** | **21 27 46.7** | **+0.3** |
| **YUK** | **Yuzh-Kuril'sk** | **73.97** | **331** | *d i*P | P | 21 27 47.4 | -7.3 |
| YUK | | | | *i* | | 21 28 04.9 | |
| YUK | | | | | | 21 30 29.8 | |
| YUK | | | | *i* S | SKiKP | 21 37 08.1 | -13 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,174nm,5.7s | | | | | | |
| **KUR** | **Kuril'sk** | **74.02** | **333** | *d* iP | P | 21 27 58.5 | +3.5 |
| KUR | | | | *i* | | 21 37 52.8 | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,270nm,5.4s | | | | | | |
| **BSC** | **Santa Cruz Isl** | **74.62** | **44** | P | **P** | **21 28 01.6** | **+2.7** |
| | baz=75 | | | | | | |
| **JNU** | **Nakatsue** | **74.96** | **314** | P | **P** | **21 28 01.7** | **+0.8** |
| | comp=Z,13nm,0.8s,baz=112,slow=3.4,SNR=4.4 | | | | | | |
| **JNU** | **Nakatsue** | **74.96** | **314** | *e*P | **P** | **21 28 00.1** | **-0.8** |
| | comp=Z,120nm,1.9s | | | | | | |
| **FMP** | **Fort Macarthur** | **75.33** | **45** | P | **P** | **21 28 03.4** | **+0.6** |
| | baz=76 | | | | | | |
| **ASAJ** | **Asahikawa** | **75.56** | **329** | P | **P** | **21 28 04.5** | **+0.6** |
| | comp=Z,5.9nm,0.8s,baz=150,slow=15,SNR=2.8 | | | | | | |
| ASAJ | | | | LR | LR | 21 55 53.9 | |
| | comp=Z,285nm,21.6s,slow=32 | | | | | | |
| **PASC** | **Pasadena Art C** | **75.68** | **45** | *e*P | **P** | **21 28 05.7** | **+0.8** |
| **MURC** | **Murrieta** | **76.00** | **46** | P | **P** | **21 28 07.0** | **+0.3** |
| | baz=76 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **76.07** | **45** | P | **P** | **21 28 07.3** | **0.0** |
| | baz=76 | | | | | | |
| **VES** | **Vestal, Richgr** | **76.11** | **43** | P | **P** | **21 28 07.1** | **-0.2** |
| | baz=76 | | | | | | |
| **MONP** | **Monument Peak** | **76.11** | **47** | P | **P** | **21 28 07.7** | **0.0** |
| | baz=76 | | | | | | |
| **IBP** | **Imperial Bould** | **76.21** | **47** | P | **P** | **21 28 07.6** | **-0.5** |
| | baz=76 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **76.23** | **44** | P | **P** | **21 28 07.5** | **-0.7** |
| | baz=76,SNR=7.0 | | | | | | |
| **SNDA** | **J Saunders Pla** | **76.37** | **46** | *e*P | **P** | **21 28 06.0** | **-3.0** |
| **ISA** | **Isabella** | **76.39** | **44** | *e*P | **P** | **21 28 09.7** | **+0.7** |
| ISA | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| **ISA** | **Isabella** | **76.39** | **44** | P | **P** | **21 28 09.4** | **+0.4** |
| | baz=77 | | | | | | |
| **ISA** | **Isabella** | **76.39** | **44** | *e*P | **P** | **21 28 09.7** | **+0.7** |
| | comp=Z,19nm,1.1s | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.51** | **46** | P | **P** | **21 28 10.5** | **+0.7** |
| | comp=Z,5.4nm,1.0s,baz=230,slow=6.3,SNR=4.8 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.51** | **46** | *e*P | **P** | **21 28 10.0** | **+0.2** |
| PFO | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.51** | **46** | *e*P | **P** | **21 28 10.0** | **+0.2** |
| | comp=Z,17nm,1.1s | | | | | | |
| **SWSC** | **Sam W. Stewart** | **76.57** | **47** | P | **P** | **21 28 10.9** | **+0.9** |
| | baz=77 | | | | | | |
| **CMB** | **Columbia Colle** | **76.66** | **41** | *e*P | **P** | **21 28 09.3** | **-1.2** |
| CMB | | | | *e**PP | **PcP** | **21 28 22.0** | **+0.2** |
| **CMB** | **Columbia Colle** | **76.66** | **41** | *e*P | **P** | **21 28 09.3** | **-1.2** |
| CMB | | | | *e*pP | **PcP** | **21 28 22.0** | **+0.2** |
| **LRMC** | **Laurel Mountai** | **76.79** | **44** | P | **P** | **21 28 11.4** | **+0.1** |
| | baz=77 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **77.04** | **46** | P | **P** | **21 28 13.0** | **+0.2** |
| | baz=77 | | | | | | |
| **CWC** | **Cottonwood Cre** | **77.12** | **43** | P | **P** | **21 28 13.5** | **+0.3** |
| | baz=77 | | | | | | |
| **N02D** | **Trinity Center** | **77.20** | **37** | P | **P** | **21 28 14.2** | **+0.8** |
| | baz=77 | | | | | | |
| **PEA2** | **Petropavlovsk-** | **77.20** | **343** | *e*P | **P** | **21 28 13.0** | **-0.1** |
| **PEA0** | **Petropavlovsk-** | **77.21** | **343** | *e*P | **P** | **21 28 14.2** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **77.21** | **343** | P | **P** | **21 28 13.0** | **-0.1** |
| | comp=Z,14nm,1.0s,baz=144,slow=10,SNR=4.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **77.21** | **343** | P | **P** | **21 28 13.0** | **-0.1** |
| **PETK** | **Petropavlovsk-** | **77.21** | **343** | P | **P** | **21 28 13.0** | **-0.1** |
| **BC3** | **Big Chuckawall** | **77.22** | **47** | P | **P** | **21 28 14.1** | **+0.4** |
| | baz=77 | | | | | | |
| **GSC** | **Goldstone** | **77.27** | **45** | *e*P | **P** | **21 28 15.1** | **+1.1** |
| GSC | | | | pmax | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | |
| **GSC** | **Goldstone** | **77.27** | **45** | P | **P** | **21 28 14.2** | **+0.2** |
| | baz=78 | | | | | | |
| **GSC** | **Goldstone** | **77.27** | **45** | *e*P | **P** | **21 28 15.1** | **+1.1** |
| | comp=Z,18nm,1.2s | | | | | | |
| **MPMC** | **Manual Prospec** | **77.27** | **44** | P | **P** | **21 28 13.8** | **-0.3** |
| | baz=78,SNR=11 | | | | | | |
| **O03D** | **Paynes Creek** | **77.27** | **38** | P | **P** | **21 28 15.0** | **+1.1** |
| | baz=78 | | | | | | |
| **TPUB** | **Ta-pu** | **77.29** | **301** | *e*P | **P** | **21 28 14.3** | **+0.1** |
| | comp=Z,59nm,0.9s | | | | | | |
| **GLA** | **Glamis** | **77.30** | **47** | *e*P | **P** | **21 28 15.7** | **+1.5** |
| GLA | | | | pmax | pmax | | |
| | comp=Z,23nm,1.1s | | | | | | |
| **GLA** | **Glamis** | **77.30** | **47** | P | **P** | **21 28 15.0** | **+0.8** |
| | baz=78 | | | | | | |
| **GLA** | **Glamis** | **77.30** | **47** | *e*P | **P** | **21 28 15.7** | **+1.5** |
| | comp=Z,22nm,1.1s | | | | | | |
| **HEC** | **Hector,Ludlow** | **77.30** | **45** | P | **P** | **21 28 13.8** | **-0.4** |
| | baz=78,SNR=8.0 | | | | | | |
| **DAC** | **Darwin (Calif)** | **77.33** | **43** | *e*P | **P** | **21 28 15.7** | **+1.3** |
| DAC | | | | pmax | pmax | | |
| | comp=Z,19nm,1.5s | | | | | | |
| **DAC** | **Darwin (Calif)** | **77.33** | **43** | *e*P | **P** | **21 28 15.7** | **+1.3** |
| | comp=Z,19nm,1.5s | | | | | | |
| **MTUM** | **T

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WUAZ | **Wupatki** | 81.05 | 47 | *e*P | | **P** | **21 28 33.8** | **-0.9** |
| | comp=Z,15nm,1.1s | | | | | | | |
| USRK | **Ussuriysk Ar.** | 81.13 | 324 | P | | **P** | **21 28 36.2** | **+1.5** |
| | comp=Z,3.6nm,0.8s,baz=141,slow=3.9,SNR=8.5 | | | | | | | |
| USRK | | | | LR | | LR | 22 00 56.3 | |
| | comp=Z,394nm,19.3s,baz=129,slow=33 | | | | | | | |
| J08A | **Circle Bar Ran** | 81.14 | 37 | *e*P | | **P** | **21 28 36.1** | **+1.2** |
| | comp=Z,11nm,1.1s | | | | | | | |
| J08A | | | | *e*pP | | **pP** | **21 28 45.1** | **-0.1** |
| ELK | **Elko** | 81.47 | 41 | *e*P | | **P** | **21 28 38.0** | **+1.0** |
| ELK | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.1s | | | | | | | |
| ELK | **Elko** | 81.47 | 41 | *e*P | | **P** | **21 28 38.0** | **+1.0** |
| | comp=Z,8.1nm,1.1s | | | | | | | |
| LON | **Longmire** | 81.52 | 33 | *e*P | | **P** | **21 28 37.4** | **+0.5** |
| LON | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| LON | **Longmire** | 81.52 | 33 | *e*P | | **P** | **21 28 37.4** | **+0.5** |
| | comp=Z,8.4nm,1.2s | | | | | | | |
| D05A | **Enumclaw** | 81.72 | 33 | *e*P | | **P** | **21 28 37.5** | **-0.4** |
| D05A | | | | *e*pP | | **pP** | **21 28 50.3** | **+2.3** |
| 121A | **Cookes Peak, D** | 82.04 | 51 | P | | **P** | **21 28 40.4** | **+0.3** |
| | baz=82 | | | | | | | |
| G08A | **Pilot Rock** | 82.08 | 36 | *e*P | | **P** | **21 28 40.1** | **+0.2** |
| | comp=Z,18nm,1.1s | | | | | | | |
| MSU | **Marysvale** | 82.14 | 44 | *e*P | | **P** | **21 28 41.7** | **+1.2** |
| MSU | **Marysvale** | 82.14 | 44 | *e*P | | **P** | **21 28 41.7** | **+1.2** |
| HABR | **Khabarovsk** | 82.33 | 328 | *e*P | | **P** | **21 28 39.5** | **-1.5** |
| HABR | | | | *e* | | | 21 28 44.6 | |
| HABR | | | | *e* | | | 21 31 49.0 | |
| HABR | | | | *e*S | | S | 21 38 49.7 | -4.8 |
| HABR | | | | *e*'SS | | ScS | 21 39 26.7 | +17 |
| HABR | | | | MLR | | MLR | | |
| | comp=Z,181nm,21.0s | | | | | | | |
| A04D | **Lummi Island** | 82.40 | 31 | P | | **P** | **21 28 42.4** | **+1.1** |
| | baz=83 | | | | | | | |
| DUG | **Dugway** | 82.67 | 42 | *e*P | | **P** | **21 28 44.3** | **+1.2** |
| DUG | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| DUG | **Dugway** | 82.67 | 42 | *e*P | | **P** | **21 28 44.3** | **+1.2** |
| | comp=Z,8.5nm,1.2s | | | | | | | |
| MFID | **Camas Ranch** | 82.70 | 38 | *e*P | | **P** | **21 28 44.4** | **+1.2** |
| | comp=Z,11nm,1.1s | | | | | | | |
| MDJ | **Mudanjiang** | 82.73 | 323 | P | | **P** | **21 28 44.4** | **+1.2** |
| MDJ | | | | PMZ | | | | |
| | comp=Z,14nm,1.4s | | | | | | | |
| MDJ | | | | PMZ | | | | |
| | comp=Z,200nm,6.8s | | | | | | | |
| NJ2 | **Nanjing** | 82.90 | 308 | *e*P | | **P** | **21 28 45.6** | **+1.3** |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| BGU | **Big Grassy Mou** | 82.94 | 42 | *e*P | | **P** | **21 28 46.8** | **+2.2** |
| | comp=Z,11nm,1.5s | | | | | | | |
| MAW | **Mawson** | 83.06 | 199 | P | | **P** | **21 28 45.6** | **+1.1** |
| | comp=Z,3.2nm,0.9s,baz=110,slow=5.4,SNR=6.4 | | | | | | | |
| MAW | | | | LR | | LR | 22 05 10.5 | |
| | comp=Z,414nm,19.0s,baz=80,slow=35 | | | | | | | |
| MAW | **Mawson** | 83.06 | 199 | P | | **P** | **21 28 42.0** | **-2.5** |
| | baz=83,SNR=4.4 | | | | | | | |
| MAW | **Mawson** | 83.06 | 199 | *e*P | | **P** | **21 28 46.4** | **+1.9** |
| | comp=Z,2.8nm,1.2s | | | | | | | |
| TMUT | **Trail Mountain** | 83.20 | 44 | *e*P | | **P** | **21 28 47.4** | **+1.2** |
| | comp=Z,111nm,1.0s | | | | | | | |
| D08A | **Wollman Farm,** | 83.23 | 34 | *e*P | | **P** | **21 28 47.0** | **+1.3** |
| | comp=Z,22nm,1.3s | | | | | | | |
| MNTX | **Cornudas Mount** | 83.41 | 53 | *e*P | | **P** | **21 28 47.2** | **+0.2** |
| | comp=Z,8.8nm,1.0s | | | | | | | |
| F10A | **Beach Ranch, E** | 83.46 | 36 | *e*P | | **P** | **21 28 47.0** | **0.0** |
| | comp=Z,17nm,1.0s | | | | | | | |
| O16A | **Springville** | 83.51 | 43 | *e*P | | P | 21 28 43.1 | -4.4 |
| O16A | | | | *e*pP | | **PcP** | **21 28 49.0** | **-2.8** |
| SRU | **San Rafael** | 83.55 | 44 | *e*P | | **P** | **21 28 48.6** | **+0.8** |
| SRU | | | | pmax | | pmax | | |
| | comp=Z,31nm,1.0s | | | | | | | |
| SRU | **San Rafael** | 83.55 | 44 | *e*P | | **P** | **21 28 48.5** | **+0.8** |
| | comp=Z,31nm,1.0s | | | | | | | |
| P17A | **Butcher Ranch,** | 83.60 | 44 | *e*P | | **P** | **21 28 49.5** | **+1.5** |
| | comp=Z,36nm,1.2s | | | | | | | |
| TX31 | **Lajitas Ar. Si** | 83.61 | 56 | *e*P | | **P** | **21 28 48.0** | **-0.3** |
| TXAR | **Lajitas Array** | 83.61 | 56 | P | | **P** | **21 28 48.1** | **-0.1** |
| | comp=Z,2.4nm,0.8s,baz=216,slow=5.6,SNR=18 | | | | | | | |
| TXAR | | | | LR | | LR | 21 59 15.6 | |
| | comp=Z,188nm,19.7s,baz=0.0,slow=31 | | | | | | | |
| HLID | **Hailey** | 83.62 | 39 | *e*P | | **P** | **21 28 48.5** | **+0.5** |
| BNM | **Barren Site** | 83.68 | 50 | *e*P | | **P** | **21 28 46.0** | **-2.6** |
| LPM | **Los Pinos Moun** | 83.76 | 50 | *e*P | | **P** | **21 28 49.6** | **+0.7** |
| MVCO | **Mesa Verde** | 83.91 | 47 | *e*P | | **P** | **21 28 49.0** | **-0.7** |
| | comp=Z,29nm,1.2s | | | | | | | |
| P18A | **Preston Nutter** | 84.01 | 44 | *e*P | | **P** | **21 28 51.0** | **+0.7** |
| | comp=Z,13nm,1.0s | | | | | | | |
| C09A | **Chrisman Ranch** | 84.04 | 34 | *e*P | | **P** | **21 28 50.3** | **+0.4** |
| | comp=Z,14nm,1.1s | | | | | | | |
| TCUT | **Toone Canyon** | 84.07 | 42 | *e*P | | **P** | **21 28 51.1** | **+0.6** |
| | comp=Z,66nm,1.0s | | | | | | | |
| ANMO | **Albuquerque** | 84.20 | 50 | P | | **P** | **21 28 51.0** | **-0.2** |
| | comp=Z,5.3nm,1.0s,baz=207,slow=5.5,SNR=11 | | | | | | | |
| ANMO | **Albuquerque** | 84.20 | 50 | *i* P | | **P** | **21 28 50.8** | **-0.4** |
| ANMO | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| ANMO | **Albuquerque** | 84.20 | 50 | *e*P | | **P** | **21 28 51.8** | **+0.6** |
| | comp=Z,18nm,1.2s | | | | | | | |
| HWUT | **Hardware Ranch** | 84.24 | 42 | *e*P | | **P** | **21 28 51.2** | **-0.1** |
| | comp=Z,10nm,1.1s | | | | | | | |
| CN2 | **Changchun** | 84.66 | 321 | *e*P | | **P** | **21 28 54.1** | **+1.0** |
| CN2 | | | | *e*S | | **S** | **21 39 19.8** | **+1.6** |
| CN2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| CN2 | | | | PMZ | | | | |
| | comp=Z,200nm,3.0s | | | | | | | |
| CN2 | | | | LN | | | | |
| | comp=Z,300nm,19.0s | | | | | | | |
| CN2 | | | | LE | | | | |
| | comp=Z,400nm,19.0s | | | | | | | |
| CN2 | | | | LZ | | | | |
| | comp=Z,300nm,17.0s | | | | | | | |
| NEW | **Newport** | 84.93 | 34 | P | | **P** | **21 28 53.4** | **-1.0** |
| | comp=Z,2.2nm,1.0s,baz=198,slow=9.6,SNR=4.0 | | | | | | | |
| NEW | **Newport** | 84.93 | 34 | *e*P | | **P** | **21 28 53.4** | **-1.0** |
| NEW | | | | pmax | | pmax | | |
| | comp=Z,40nm,2.2s | | | | | | | |
| NEW | **Newport** | 84.93 | 34 | *e*P | | **P** | **21 28 53.4** | **-1.0** |
| | comp=Z,40nm,2.2s | | | | | | | |
| AHID | **Auburn Hatcher** | 85.17 | 41 | *e*pP | | pP | 21 29 08.0 | +1.9 |
| MCMT | **McKenzie Canyo** | 85.27 | 39 | *e*P | | **P** | **21 28 57.1** | **+0.7** |
| S22A | **4UR Ranch, Cre** | 85.32 | 47 | P | | **P** | **21 28 54.8** | **-2.2** |
| | baz=86 | | | | | | | |
| TRF | **Thorofare Moun** | 85.50 | 10 | *e*P | | **P** | **21 28 55.2** | **-1.8** |
| | comp=Z,219nm,2.7s | | | | | | | |
| 429A | **Davenport Ranc** | 85.56 | 55 | P | | **P** | **21 28 56.9** | **-1.1** |
| | baz=86,SNR=15 | | | | | | | |
| O20A | **White River Ci** | 85.59 | 44 | P | | **P** | **21 28 58.2** | **+0.2** |
| | baz=86 | | | | | | | |
| REDW | **Red Top Meadow** | 85.64 | 41 | *e*P | | **P** | **21 28 58.6** | **+0.3** |
| | comp=Z,15nm,1.1s | | | | | | | |
| TPAW | **Teton Pass** | 85.65 | 40 | *e*P | | **P** | **21 28 56.6** | **-1.8** |
| | comp=Z,6.9nm,0.9s | | | | | | | |
| FXWY | **Fox Creek** | 85.69 | 40 | *e*P | | **P** | **21 28 56.5** | **-2.1** |
| | comp=Z,10nm,1.1s | | | | | | | |
| RND | **Reindeer** | 85.70 | 11 | *e*P | | **P** | **21 28 58.7** | **+0.8** |
| RND | | | | pmax | | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| RND | **Reindeer** | 85.70 | 11 | *e*P | | **P** | **21 28 58.7** | **+0.8** |
| | comp=Z,14nm,0.9s | | | | | | | |
| 228A | **UT Block 9, Go** | 85.70 | 54 | P | | **P** | **21 28 58.8** | **+0.1** |
| | baz=86 | | | | | | | |
| DLMT | **Dillon** | 85.72 | 38 | *e*P | | **P** | **21 28 57.2** | **-1.3** |
| | comp=Z,19nm,1.3s | | | | | | | |
| 530A | **J-C Ranch, Com** | 85.78 | 56 | P | | **P** | **21 28 58.8** | **-0.3** |
| | baz=86 | | | | | | | |
| IMW | **Indian Meadow** | 85.88 | 40 | *e*P | | **P** | **21 28 58.7** | **-0.9** |
| | comp=Z,14nm,1.1s | | | | | | | |
| MOOW | **Moose Ponds** | 85.92 | 40 | *e*P | | **P** | **21 28 57.6** | **-2.0** |
| | comp=Z,40nm,2.4s | | | | | | | |
| MCK | **McKinley** | 85.99 | 11 | *e*P | | **P** | **21 28 59.8** | **+0.5** |
| MCK | | | | pmax | | pmax | | |
| | comp=Z,25nm,1.1s | | | | | | | |
| MCK | **McKinley** | 85.99 | 11 | *e*P | | **P** | **21 28 59.8** | **+0.5** |
| | comp=Z,25nm,1.1s | | | | | | | |
| 128A | **Castleberry Fa** | 86.01 | 53 | P | | **P** | **21 28 59.8** | **-0.4** |
| | baz=86,SNR=5.2 | | | | | | | |
| 832A | **Faith Ranch, C** | 86.05 | 58 | P | | **P** | **21 28 59.8** | **-0.6** |
| | baz=86 | | | | | | | |
| 631A | **Perdido Creek** | 86.06 | 57 | P | | **P** | **21 28 59.1** | **-1.3** |
| | baz=86,SNR=6.7 | | | | | | | |
| QLMT | **Earthquake Lak** | 86.10 | 39 | *e*P | | **P** | **21 29 00.7** | **+0.2** |
| BW06 | **Boulder Array** | 86.12 | 42 | *e*P | | **P** | **21 28 59.0** | **-1.7** |
| BW06 | | | | *e*pP | | pP | 21 29 11.8 | +0.8 |
| 430A | **Baggett Ranch,** | 86.14 | 55 | P | | **P** | **21 29 00.3** | **-0.6** |
| | baz=86 | | | | | | | |
| TIA | **Tai'an** | 86.16 | 311 | ⇓P | | **P** | **21 29 02.8** | **+2.1** |
| TIA | | | | PMZ | | | | |
| | comp=Z,30nm,1.1s | | | | | | | |
| 229A | **Bryant Ranch,** | 86.23 | 54 | P | | **P** | **21 29 00.9** | **-0.4** |
| | baz=86 | | | | | | | |
| SDCO | **Great Sand Dun** | 86.24 | 48 | *e*P | | **P** | **21 29 00.2** | **-1.2** |
| | comp=Z,6.3nm,1.1s | | | | | | | |
| 732A | **Laxson Ranch,** | 86.24 | 58 | P | | **P** | **21 29 01.1** | **-0.2** |
| | baz=86 | | | | | | | |
| 933A | **Laredo** | 86.32 | 59 | P | | **P** | **21 29 01.4** | **-0.4** |
| | baz=86 | | | | | | | |
| DLBC | **Dease Lake** | 86.37 | 21 | LR | | LR | 22 00 49.8 | |
| | comp=Z,184nm,21.0s,baz=210,slow=31 | | | | | | | |
| 531A | **Rocksprings** | 86.41 | 56 | P | | **P** | **21 29 01.1** | **-1.1** |
| | baz=87,SNR=9.6 | | | | | | | |
| MSTX | **Muleshoe** | 86.41 | 52 | P | | **P** | **21 29 01.7** | **-0.5** |
| | baz=87 | | | | | | | |
| MSTX | **Muleshoe** | 86.41 | 52 | *e*P | | **P** | **21 29 02.3** | **+0.1** |
| | comp=Z,24nm,0.8s | | | | | | | |
| BOZ | **Bozeman (W)** | 86.44 | 38 | *e*P | | **P** | **21 29 01.1** | **-1.0** |
| BOZ | | | | pmax | | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | | |
| BOZ | **Bozeman (W)** | 86.44 | 38 | *e*P | | **P** | **21 29 01.1** | **-1.0** |
| | comp=Z,12nm,1.1s | | | | | | | |
| 833A | **Chaparral WMA,** | 86.53 | 58 | P | | **P** | **21 29 02.4** | **-0.3** |
| | baz=87 | | | | | | | |
| LKWY | **Lake** | 86.57 | 40 | *e*P | | **P** | **21 29 01.8** | **-1.1** |
| LKWY | | | | pmax | | pmax | | |
| | comp=Z,25nm,0.5s | | | | | | | |
| LKWY | **Lake** | 86.57 | 40 | *e*P | | **P** | **21 29 01.8** | **-1.1** |
| | comp=Z,24nm,0.5s | | | | | | | |
| 431A | **Sonora** | 86.58 | 56 | P | | **P** | **21 29 02.7** | **-0.3** |
| | baz=87 | | | | | | | |
| T25A | **Trinidad** | 86.71 | 48 | P | | **P** | **21 29 05.2** | **+1.5** |
| | baz=87 | | | | | | | |
| 632A | **Uvalde** | 86.72 | 57 | P | | **P** | **21 29 02.8** | **-0.9** |
| | baz=87,SNR=7.0 | | | | | | | |
| 230A | **Sterling City** | 86.72 | 54 | P | | **P** | **21 29 03.7** | **0.0** |
| | baz=87 | | | | | | | |
| WRH | **Wood River Hil** | 86.82 | 11 | *e*P | | **P** | **21 29 03.5** | **+0.2** |
| | comp=Z,17nm,1.0s | | | | | | | |
| Z29A | **Hungry Hill Ra** | 86.88 | 53 | P | | **P** | **21 29 04.2** | **-0.3** |
| | baz=87 | | | | | | | |
| 532A | **Rocksprings** | 86.89 | 56 | P | | **P** | **21 29 03.8** | **-0.8** |
| | baz=87,SNR=13 | | | | | | | |
| MLY | **Manley** | 86.90 | 10 | *e*P | | **P** | **21 29 02.7** | **-1.0** |
| | comp=Z,7.1nm,1.0s | | | | | | | |
| 035A | **Encino** | 86.99 | 60 | P | | **P** | **21 29 07.6** | **+2.7** |
| | baz=87 | | | | | | | |
| 331A | **San Angelo** | 87.00 | 55 | P | | **P** | **21 29 06.2** | **+1.2** |
| | baz=87 | | | | | | | |
| X28A | **Dimmitt** | 87.09 | 52 | P | | **P** | **21 29 05.5** | **0.0** |
| | baz=87 | | | | | | | |
| IPM | **Ipoh** | 87.10 | 276 | *e*P | | **P** | **21 29 07.5** | **+1.7** |
| | comp=Z,254nm,2.6s | | | | | | | |
| WALA | **Waterton Lakes** | 87.11 | 35 | *e*PP | | PP | 21 32 30.9 | +1.5 |
| 130A | **Snyder** | 87.15 | 54 | P | | **P** | **21 29 05.5** | **-0.3** |
| | baz=87 | | | | | | | |
| ISCO | **Idaho Springs** | 87.16 | 46 | *e*P | | **P** | **21 29 04.4** | **-1.6** |
| ISCO | | | | *e*'PP | | pP | 21 29 20.6 | +4.3 |
| ISCO | **Idaho Springs** | 87.16 | 46 | *e*P | | **P** | **21 29 04.4** | **-1.6** |
| ISCO | | | | *e*pP | | pP | 21 29 20.6 | +4.3 |
| SEY | **Seymchan** | 87.17 | 345 | P | | **P** | **21 29 05.3** | **+0.3** |
| | comp=Z,10nm,1.0s,baz=146,slow=6.9,SNR=5.6 | | | | | | | |
| SEY | **Seymchan** | 87.17 | 345 | *e*P | | **P** | **21 29 03.2** | **-1.8** |
| Y29A | **Porterfield Fa** | 87.18 | 52 | P | | **P** | **21 29 05.8** | **-0.1** |
| | baz=87 | | | | | | | |
| 633A | **Saathoff Ranch** | 87.18 | 57 | P | | **P** | **21 29 05.6** | **-0.3** |
| | baz=87 | | | | | | | |
| COLA | **College** | 87.23 | 11 | *e*P | | **P** | **21 29 04.0** | **-1.2** |
| COLA | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| COLA | **College** | 87.23 | 11 | *e*P | | **P** | **21 29 04.7** | **-0.6** |
| | comp=Z,14nm,0.8s | | | | | | | |
| 432A | **Menard** | 87.30 | 56 | P | | **P** | **21 29 05.8** | **-0.7** |
| | baz=88 | | | | | | | |
| T26A | **Comanche Natio** | 87.30 | 49 | P | | **P** | **21 29 06.2** | **-0.4** |
| | baz=88 | | | | | | | |
| IL1 | **Eielson Array** | 87.31 | 11 | *e*P | | **P** | **21 29 05.0** | **-0.7** |
| ILAR | **Eielson Array** | 87.31 | 11 | P | | **P** | **21 29 05.4** | **-0.3** |
| | comp=Z,1.9nm,0.8s,baz=214,slow=6.2,SNR=17 | | | | | | | |
| ILB | **Eielson Array** | 87.31 | 11 | *e*P | | **P** | **21 29 05.4** | **-0.3** |
| Z30A | **Sanderson Ranc** | 87.33 | 53 | P | | **P** | **21 29 06.0** | **-0.6** |
| | baz=88,SNR=5.4 | | | | | | | |
| 231A | **Bronte** | 87.35 | 55 | P | | **P** | **21 29 05.9** | **-0.8** |
| | baz=88 | | | | | | | |
| N23A | **Red Feather La** | 87.48 | 45 | P | | **P** | **21 29 06.8** | **-0.6** |
| | baz=88 | | | | | | | |
| 332A | **Millersview** | 87.56 | 55 | P | | **P** | **21 29 06.8** | **-0.9** |
| | baz=88,SNR=5.5 | | | | | | | |
| S26A | **Kim** | 87.59 | 48 | P | | **P** | **21 29 07.4** | **-0.5** |
| | baz=88 | | | | | | | |
| 131A | **Roby** | 87.62 | 54 | P | | **P** | **21 29 07.6** | **-0.4** |
| | baz=88 | | | | | | | |
| AMTX | **Amarillo** | 87.63 | 52 | *e*P | | **P** | **21 29 07.5** | **-0.6** |
| AMTX | | | | *e*pP | | pP | 21 29 19.3 | +1.0 |
| Y30A | **Stafford Cattl** | 87.76 | 53 | P | | **P** | **21 29 09.2** | **+0.6** |
| | baz=88 | | | | | | | |
| 433A | **Art** | 87.80 | 56 | P | | **P** | **21 29 07.9** | **-1.0** |
| | baz=88,SNR=8.9 | | | | | | | |
| 634A | **China Grove, S** | 87.80 | 58 | P | | **P** | **21 29 08.7** | **-0.2** |
| | baz=88 | | | | | | | |
| 232A | **Coleman** | 87.85 | 55 | P | | **P** | **21 29 08.5** | **-0.6** |
| | baz=88,SNR=5.5 | | | | | | | |
| 534A | **Blanco** | 87.97 | 57 | P | | **P** | **21 29 09.3** | **-0.4** |
| | baz=88,SNR=7.9 | | | | | | | |
| K22A | **Casper** | 87.98 | 43 | P | | **P** | **21 29 09.9** | **+0.3** |
| | baz=88 | | | | | | | |
| VNA3 | **Neumayer Olymp** | 88.01 | 175 | P | | **P** | **21 29 09.1** | **-0.1** |
| X30A | **Coker Ranch, T** | 88.03 | 52 | P | | **P** | **21 29 09.4** | **-0.5** |
| | baz=88 | | | | | | | |
| SNAA | **Sanae** | 88.03 | 177 | P | | **P** | **21 29 09.2** | **-0.2** |
| SNAA | **Sanae** | 88.03 | 177 | *e*P | | **P** | **21 29 09.2** | **-0.2** |
| | comp=Z,6.4nm,1.5s | | | | | | | |
| Z31A | **Shp Cattle R** | 88.08 | 53 | P | | **P** | **21 29 09.8** | **-0.4** |
| | baz=88 | | | | | | | |
| 333A | **Richland Sprin** | 88.12 | 56 | P | | **P** | **21 29 10.1** | **-0.3** |
| | baz=88 | | | | | | | |
| ABTX | **Abilene, Hawle** | 88.17 | 54 | P | | **P** | **21 29 10.2** | **-0.4** |
| | baz=88 | | | | | | | |
| ABTX | **Abilene, Hawle** | 88.17 | 54 | *e*P | | **P** | **21 29 10.8** | **+0.2** |
| ABTX | | | | *e*pP | | pP | 21 29 21.9 | +1.0 |
| Y31A | **Rekieta Farm,** | 88.28 | 53 | P | | **P** | **21 29 10.7** | **-0.4** |
| | baz=88 | | | | | | | |
| T28A | **Walsh** | 88.32 | 49 | P | | **P** | **21 29 11.0** | **-0.3** |
| | baz=88 | | | | | | | |
| R27A | **Eads** | 88.37 | 48 | P | | **P** | **21 29 10.7** | **-0.8** |
| | baz=88 | | | | | | | |
| SKLT | **Songkhla** | 88.41 | 278 | P | | **P** | **21 29 15.2** | **+3.1** |
| | comp=Z,28nm,1.3s | | | | | | | |
| 434A | **Burnet** | 88.46 | 56 | P | | **P** | **21 29 11.2** | **-0.9** |
| | baz=89 | | | | | | | |
| 233A | **Rising Star** | 88.48 | 55 | P | | **P** | **21 29 11.6** | **-0.5** |
| | baz=89 | | | | | | | |
| VNA2 | **Neumayer--Watz** | 88.50 | 176 | P | | **P** | **21 29 12.1** | **+0.6** |
| | baz=182,slow=3.1 | | | | | | | |
| Z32A | **Haskell** | 88.58 | 54 | P | | **P** | **21 29 11.9** | **-0.6** |
| | baz=89 | | | | | | | |
| VNA1 | **Neumayer--Stat** | 88.70 | 175 | P | | **P** | **21 29 12.3** | **-0.1** |
| 334A | **Lometa** | 88.70 | 56 | P | | **P** | **21 29 12.5** | **-0.6** |
| | baz=89 | | | | | | | |
| 133A | **Hamilton Ranch** | 88.71 | 55 | P | | **P** | **21 29 13.0** | **-0.2** |
| | baz=89 | | | | | | | |
| Y32A | **R-V Farms, Ver** | 88.91 | 53 | P | | **P** | **21 29 14.4** | **+0.4** |
| | baz=89 | | | | | | | |
| R28A | **Tribune** | 89.09 | 48 | P | | **P** | **21 29 15.2** | **+0.3** |
| | baz=89 | | | | | | | |
| X32A | **Elmer** | 89.20 | 53 | P | | **P** | **21 29 15.6** | **+0.1** |
| | baz=89 | | | | | | | |
| ENH | **Enshi** | 89.29 | 303 | *e*P | | **P** | **21 29 18.7** | **+2.8** |
| | comp=Z,31nm,1.5s | | | | | | | |
| BILL | **Bilibino** | 89.32 | 353 | *e*P | | **P** | **21 29 15.8** | **+0.7** |
| BILL | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| 134A | **White-Moore Ra** | 89.34 | 55 | P | | **P** | **21 29 16.4** | **+0.3** |
| | baz=90 | | | | | | | |
| TRTT | **Trang** | 89.51 | 278 | P | | P | 21 29 21.7 | +4.4 |
| | comp=Z,29nm,1.7s | | | | | | | |
| W32A | **Sentinel** | 89.53 | 52 | P | | **P** | **21 29 17.2** | **+0.3** |
| | baz=90 | | | | | | | |
| 436A | **Wall Ranch, Ga** | 89.60 | 57 | P | | **P** | **21 29 17.7** | **+0.4** |
| | baz=90 | | | | | | | |
| Q29A | **Oakley** | 89.92 | 48 | P | | **P** | **21 29 19.4** | **+0.7** |
| | baz=90 | | | | | | | |
| HKT | **Hockley** | 90.03 | 58 | *e*P | | **P** | **21 29 19.5** | **+0.2** |
| HKT | | | | pmax | | pmax | | |
| | comp=Z,25nm,1.7s | | | | | | | |
| HKT | **Hockley** | 90.03 | 58 | *e*P | | **P** | **21 29 19.5** | **+0.2** |
| | comp=Z,25nm,1.7s | | | | | | | |
| GYA | **Guiyang** | 90.08 | 298 | P | | **P** | **21 29 21.0** | **+1.2** |
| GYA | | | | pP | | pP | 21 29 34.8 | +4.7 |
| GYA | | | | sP | | sP | 21 29 40.0 | +6.2 |
| GYA | | | | PP | | **PP** | **21 32 57.4** | **+3.8** |
| GYA | | | | SKS | | **SKSac** | **21 39 47.3** | **-1.6** |
| GYA | | | | S | | **S** | **21 40 09.3** | **-2.0** |
| GYA | | | | SS | | **SS** | **21 46 12.6** | **+1.8** |
| GYA | | | | PMZ | | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=Z,120nm,5.6s | | | | | | | |
| GYA | | | | LN | | | | |
| | comp=Z,530nm,21.8s | | | | | | | |
| GYA | | | | LE | | | | |
| | comp=Z,500nm,20.2s | | | | | | | |
| GYA | | | | LZ | | | | |
| | comp=Z,520nm,22.6s | | | | | | | |
| KRAB | **Krabi** | 90.10 | 279 | P | | P | 21 29 24.3 | +4.3 |
| | comp=Z,23nm,0.8s | | | | | | | |
| RSSD | **Black Hills** | 90.28 | 42 | *e*P | | **P** | **21 29 20.0** | **-0.5** |
| RSSD | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| RSSD | **Black Hills** | 90.28 | 42 | *e*P | | **P** | **21 29 20.0** | **-0.5** |
| | comp=Z,8.2nm,1.0s | | | | | | | |
| I25A | **Rochford** | 90.42 | 43 | P | | **P** | **21 29 21.5** | **+0.4** |
| | baz=91 | | | | | | | |
| LCO | **Las Campanas** | 91.07 | 121 | *e*P | | **P** | **21 29 24.8** | **+0.1** |
| | comp=Z,16nm,1.0s | | | | | | | |
| XAN | **Xi'an** | 91.25 | 306 | P | | **P** | **21 29 26.8** | **+1.8** |
| XAN | | | | pP | | pP | 21 29 38.8 | +3.5 |
| XAN | | | | PMZ | | | | |
| | comp=Z,18nm,1.3s | | | | | | | |
| XAN | | | | PMZ | | | | |
| | comp=Z,200nm,5.3s | | | | | | | |
| W35A | **Tecumseh** | 91.31 | 53 | P | | **P** | **21 29 24.6** | **-0.6** |
| | baz=92 | | | | | | | |
| R33A | **Olander Ranch,** | 91.79 | 50 | P | | **P** | **21 29 28.0** | **+0.6** |
| | baz=92 | | | | | | | |
| W36A | **Wetumka** | 91.79 | 53 | P | | **P** | **21 29 27.4** | **0.0** |
| | baz=92 | | | | | | | |
| T34A | **McClaskey Farm** | 91.84 | 51 | P | | **P** | **21 29 28.2** | **+0.5** |
| | baz=92 | | | | | | | |
| I28A | **Midland** | 92.06 | 44 | P | | **P** | **21 29 29.4** | **+0.9** |
| | baz=92 | | | | | | | |
| PHIT | **Phitsanulok** | 92.10 | 287 | P | | P | 21 29 33.2 | +4.0 |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| HHC | **Hu-ho-hao-te** | 92.14 | 313 | *e*P | | **P** | **21 29 30.8** | **+1.8** |
| HHC | | | | PP | | **PP** | **21 33 12.3** | **+2.7** |
| HHC | | | | S | | S | 21 40 24.9 | -4.5 |
| HHC | | | | PMZ | | | | |
| | comp=Z,26nm,0.8s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,230nm,4.4s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,240nm,15.3s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,280nm,14.9s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,290nm,13.6s | | | | | | | |
| UTTA | **Uttaradit** | 92.17 | 288 | P | | P | 21 29 34.0 | +4.5 |
| | comp=Z,2.1nm,1.4s | | | | | | | |
| X37A | **Clayton** | 92.22 | 54 | P | | **P** | **21 29 31.2** | **+1.8** |
| | baz=92 | | | | | | | |
| V36A | **Jenks** | 92.26 | 53 | P | | **P** | **21 29 29.7** | **+0.1** |
| | baz=92 | | | | | | | |
| T35A | **Sooner Cattle** | 92.29 | 51 | P | | **P** | **21 29 30.0** | **+0.3** |
| | baz=92 | | | | | | | |
| R34A | **Isabella, Hill** | 92.31 | 50 | P | | **P** | **21 29 30.1** | **+0.3** |
| | baz=92 | | | | | | | |
| JTS | **JuntasAbangare** | 92.37 | 80 | *e*P | | **P** | **21 29 30.6** | **0.0** |
| JTS | | | | pmax | | pmax | | |
| | comp=Z,39nm,1.1s | | | | | | | |
| JTS | **JuntasAbangare** | 92.37 | 80 | *e*P | | **P** | **21 29 31.6** | **+1.0** |
| JTS | | | | *e*pP | | pP | 21 29 42.8 | +1.8 |
| NANT | **Nan** | 92.41 | 289 | P | | P | 21 29 34.7 | +4.0 |
| | comp=Z,3.1nm,1.0s | | | | | | | |
| P33A | **Williams Farm,** | 92.46 | 49 | P | | **P** | **21 29 31.5** | **+1.0** |
| | baz=93 | | | | | | | |
| D26A | **Manning** | 92.63 | 40 | P | | **P** | **21 29 31.4** | **+0.4** |
| | baz=93 | | | | | | | |
| X38A | **Whitesboro** | 92.66 | 54 | P | | **P** | **21 29 30.8** | **-0.7** |
| | baz=93 | | | | | | | |
| S35A | **Otter Creek Ra** | 92.74 | 51 | P | | **P** | **21 29 32.2** | **+0.4** |
| | baz=93 | | | | | | | |
| B25A | **Knox Farm, Ray** | 92.76 | 39 | P | | **P** | **21 29 32.8** | **+1.1** |
| | baz=93 | | | | | | | |
| TEIG | **Tepich** | 92.79 | 70 | *e*P | | **P** | **21 29 31.2** | **-1.1** |
| | comp=Z,85nm,0.5s | | | | | | | |
| T36A | **Boggs Farm, Ca** | 92.81 | 52 | P | | **P** | **21 29 31.8** | **-0.3** |
| | baz=93 | | | | | | | |
| KMI | **Kunming** | 92.87 | 296 | P | | **P** | **21 29 34.3** | **+1.4** |
| KMI | | | | pP | | pP | 21 29 48.3 | +5.1 |
| KMI | | | | sP | | sP | 21 29 53.3 | +6.4 |
| KMI | | | | PP | | **PP** | **21 33 20.1** | **+4.2** |
| KMI | | | | SKS | | **SKSac** | **21 40 03.9** | **-1.1** |
| KMI | | | | S | | **S** | **21 40 33.3** | **-3.6** |
| KMI | | | | sS | | sS | 21 40 56.5 | +2.5 |
| KMI | | | | SS | | **SS** | **21 46 51.1** | **-0.2** |
| KMI | | | | PMZ | | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| KMI | | | | LN | | | | |
| | comp=Z,560nm,5.5s | | | | | | | |
| KMI | | | | LE | | | | |
| | comp=Z,590nm,5.3s | | | | | | | |
| KMI | | | | LZ | | | | |
| | comp=Z,400nm,6.9s | | | | | | | |
| V37A | **Hulbert** | 92.90 | 53 | P | | **P** | **21 29 32.0** | **-0.5** |
| | baz=93 | | | | | | | |
| P34A | **Walnut Farm, R** | 93.12 | 49 | P | | **P** | **21 29 33.5** | **0.0** |
| | baz=93 | | | | | | | |
| U37A | **Salina** | 93.12 | 52 | P | | **P** | **21 29 33.7** | **+0.1** |
| | baz=93 | | | | | | | |
| LAMP | **Lampang** | 93.26 | 288 | P | | P | 21 29 39.4 | +4.8 |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| G29A | **Hoven** | 93.38 | 43 | P | | **P** | **21 29 35.2** | **+0.6** |
| | baz=94 | | | | | | | |
| V38A | **Canehill** | 93.44 | 53 | P | | **P** | **21 29 34.0** | **-1.0** |
| | baz=94 | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LZH | | | | | LZ | | | | |
| | comp=Z,580nm,16.0s | | | | | | | | |
| **MET** | **Memphis--Engin** | **96.57** | **55** | *e*PP | | PP | | 21 33 44.2 | 0.0 |
| **J37A** | **Redenius Farm,** | **96.83** | **46** | P | | **P** | | **21 29 51.1** | **+0.7** |
| | baz=97 | | | | | | | | |
| **E34A** | **Wadena** | **96.95** | **43** | P | | **P** | | **21 29 51.5** | **+0.7** |
| | baz=97 | | | | | | | | |
| **A33A** | **Warroad** | **97.72** | **41** | P | | **P** | | **21 29 54.1** | **-0.2** |
| | baz=98 | | | | | | | | |
| **F36A** | **Milaca** | **97.78** | **44** | P | | Pdif | | 21 29 54.9 | +0.3 |
| | baz=98 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **97.88** | **318** | *e*P | | **P** | | **21 29 54.0** | **-1.2** |
| ULN | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **97.92** | **39** | LR | | LR | | 22 08 55.1 | |
| | comp=Z,254nm,19.0s,baz=288,slow=32 | | | | | | | | |
| **SONA0** | **Songino Array** | **98.28** | **318** | *e*P | | Pdif | | 21 29 57.1 | +0.1 |
| SONA0 | | | | *e*PP | | **PP** | | **21 33 54.9** | **-2.4** |
| **SONM** | **Songino Array** | **98.28** | **318** | P | | Pdif | | 21 29 57.1 | +0.1 |
| | comp=Z,0.2nm,0.4s,baz=145,slow=3.5,SNR=2.4 | | | | | | | | |
| SONM | | | | | PP | **PP** | | **21 33 54.9** | **-2.4** |
| | comp=Z,1.3nm,0.9s,baz=116,slow=8.0,SNR=4.3 | | | | | | | | |
| **LPAZ** | **La Paz** | **98.39** | **111** | P | | Pdif | | 21 29 59.5 | +0.6 |
| | comp=Z,1.8nm,0.9s,baz=280,slow=3.8,SNR=4.9 | | | | | | | | |
| LPAZ | | | | | LR | LR | | 22 07 10.1 | |
| | comp=Z,81nm,18.9s,baz=224,slow=31 | | | | | | | | |
| **LPAZ** | **La Paz** | **98.39** | **111** | *e*P | | Pdif | | 21 30 02.2 | +3.3 |
| LPAZ | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.4s | | | | | | | | |
| **LPAZ** | **La Paz** | **98.39** | **111** | *e*P | | Pdif | | 21 30 02.2 | +3.3 |
| | comp=Z,7.3nm,1.4s | | | | | | | | |
| **D37A** | **Cotton** | **98.94** | **43** | Pdiff | | **P** | | **21 29 59.8** | **0.0** |
| | baz=99 | | | | | | | | |
| **WMQ** | **Urumqi** | **109.85** | **310** | *e*Pdif | | **Pdif** | | **21 30 51.0** | **+2.5** |
| WMQ | | | | PP | | PP | | 21 35 30.0 | +6.5 |
| WMQ | | | | SS | | SS | | 21 50 45.0 | -1.1 |
| WMQ | | | | PPMZ | | | | | |
| | comp=Z,52nm,8.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,100nm,20.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,110nm,20.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,97nm,20.0s | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **112.87** | **321** | *e*PP | | PP | | 21 35 41.6 | -3.1 |
| **ZAA1** | **Zalesovo Array** | **112.87** | **321** | *e*PKiKP | | **PKiKP** | | **21 34 55.4** | **-0.5** |
| ZAA1 | | | | *e*PP | | **PP** | | **21 35 41.4** | **-3.3** |
| **ZALV** | **Zalesovo Beam** | **112.87** | **321** | PKiKP | | **PKiKP** | | **21 34 55.4** | **-0.5** |
| | comp=Z,0.3nm,0.4s,baz=46,slow=4.2,SNR=2.5 | | | | | | | | |
| ZALV | | | | PP | | **PP** | | **21 35 41.4** | **-3.3** |
| | comp=Z,0.4nm,0.3s,baz=100,slow=7.5,SNR=5.4 | | | | | | | | |
| **MK01** | **Makanchi Array** | **113.99** | **313** | *e*PP | | PP | | 21 35 49.8 | -3.1 |
| **MK32** | **Makanchi Array** | **114.00** | **313** | *e*PKiKP | | **PKiKP** | | **21 34 58.0** | **-0.4** |
| MK32 | | | | *e*PP | | **PP** | | **21 35 50.2** | **-2.8** |
| **MKAR** | **Makanchi Array** | **114.00** | **313** | PKiKP | | **PKiKP** | | **21 34 58.0** | **-0.4** |
| | comp=Z,0.3nm,0.3s,baz=231,slow=3.9,SNR=4.4 | | | | | | | | |
| MKAR | | | | PP | | **PP** | | **21 35 50.2** | **-2.8** |
| | comp=Z,1.6nm,0.9s,baz=98,slow=8.7,SNR=7.5 | | | | | | | | |
| **KSH** | **Kashi** | **118.08** | **305** | *e*PKP | | **PKPdf** | | **21 35 08.8** | **+2.2** |
| KSH | | | | *es*PKP | | | | 21 35 23.8 | |
| KSH | | | | *e*PP | | PP | | 21 36 29.5 | +7.5 |
| KSH | | | | PKS | | **PKSdf** | | **21 38 44.8** | **+1.4** |
| KSH | | | | SKS | | **SKSdf** | | **21 42 15.8** | **-0.7** |
| KSH | | | | SKKS | | **SKKSac** | | **21 43 18.4** | **-1.7** |
| KSH | | | | PPMZ | | | | | |
| | comp=Z,140nm,5.5s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,220nm,8.8s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,140nm,6.4s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,330nm,6.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **121.57** | **320** | *e*PKiKP | | **PKPdf** | | **21 35 12.5** | **-0.2** |
| **ARU** | **Arti** | **127.30** | **326** | *i* PKiKP | | **PKPdf** | | **21 35 23.5** | **-0.1** |
| ARU | | | | | | | | 21 37 24.9 | |
| **ARA0** | **ARCESS Array S** | **129.41** | **351** | *e*PKPdf | | **PKPdf** | | **21 35 28.2** | **+0.9** |
| **ARCES** | **ARCESS Array B** | **129.41** | **351** | PKP | | **PKPdf** | | **21 35 28.2** | **+0.9** |
| | comp=Z,2.8nm,0.9s,baz=3.8,slow=3.6,SNR=3.5 | | | | | | | | |
| **GEYT** | **Alibeck** | **132.06** | **303** | PKP | | **PKPdf** | | **21 35 34.5** | **+1.2** |
| | comp=Z,1.3nm,0.7s,baz=151,slow=3.4,SNR=4.2 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **142.92** | **239** | PKP | | **PKPdf** | | **21 35 53.1** | **-1.1** |
| | comp=Z,2.0nm,0.8s,baz=74,slow=3.7,SNR=7.2 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **142.92** | **239** | *e*PKPdf | | **PKPdf** | | **21 35 53.7** | **-0.6** |
| **HAKT** | **HAKKARI** | **143.31** | **306** | P | | **PKPdf** | | **21 35 53.8** | **-0.5** |
| **RAYN** | **Ar Rayn** | **143.55** | **282** | *e*PKPdf | | PKPbc | | 21 35 53.3 | +1.1 |
| **EKAR** | **Karacoban** | **143.97** | **309** | P | | **PKPdf** | | **21 35 55.2** | **-0.1** |
| **AKASG** | **Malin Array Be** | **144.69** | **335** | PKP | | **PKPab** | | **21 35 54.5** | **-0.1** |
| | comp=Z,11nm,0.8s,baz=38,slow=4.2,SNR=34 | | | | | | | | |
| **AKBB** | **Malin Array Si** | **144.69** | **335** | *e*PKPdf | | **PKPab** | | **21 35 54.5** | **-0.1** |
| **KIEV** | **Kiev** | **144.70** | **335** | *e*PKPdf | | **PKPab** | | **21 35 54.5** | **-0.1** |
| **AK11** | **Malin Array Si** | **144.73** | **335** | *e*PKPdf | | PKPbc | | 21 35 55.0 | +0.1 |
| **BNGL** | **BINGOL** | **144.74** | **309** | P | | **PKPdf** | | **21 35 57.5** | **+0.8** |
| **KELT** | **Kelkit** | **145.61** | **312** | P | | **PKPab** | | **21 36 00.4** | **+1.8** |
| **SIM** | **Simferopol'** | **146.35** | **323** | *de*PKHKP | | **PKPab** | | **21 36 01.2** | **+0.2** |
| SIM | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| SIM | | | | | MLR | MLR | | | |
| | comp=Z,70nm,15.0s | | | | | | | | |
| **KEMA** | **Kemaliye** | **146.51** | **311** | P | | **PKPab** | | **21 36 02.3** | **+0.3** |
| **FURI** | **Furi** | **146.73** | **255** | *e*PKPdf | | **PKPab** | | **21 36 06.5** | **+2.7** |
| **CUZAR** | **Zara_SIVAS** | **146.75** | **313** | P | | **PKPbc** | | **21 36 02.4** | **+0.6** |
| **MALT** | **Malatya** | **146.95** | **310** | *i*P | | **PKPab** | | **21 36 04.2** | **+0.4** |
| **CUKAN** | **kangal_SIVAS** | **147.21** | **312** | P | | **PKPab** | | **21 36 04.1** | **-0.7** |
| **AKCD** | **Akcadag** | **147.32** | **310** | P | | **PKPab** | | **21 36 07.5** | **+2.2** |
| **LVV** | **L'vov** | **147.35** | **339** | *e*PKP2 | | **PKPbc** | | **21 36 03.5** | **+0.6** |
| **KWP** | **Kalwaria Pacla** | **147.95** | **340** | *e*PKP | | **PKPab** | | **21 36 08.5** | **+1.3** |
| **KWP** | **Kalwaria Pacla** | **147.95** | **340** | *e*PKP2 | | **PKPab** | | **21 36 08.5** | **+1.3** |
| **GZT** | **Gaziantep** | **147.96** | **309** | P | | **PKPbc** | | **21 36 05.8** | **+0.7** |
| **CUSAR** | **Sarkisla-SIVAS** | **148.01** | **313** | P | | **PKPab** | | **21 36 06.8** | **-1.1** |
| **MBAR** | **Mbarara** | **148.28** | **232** | *e*PKIKP | | **PKPab** | | **21 36 10.4** | **+0.6** |
| **MBAR** | **Mbarara** | **148.28** | **232** | *e*PKPab | | **PKPab** | | **21 36 10.3** | **+0.6** |
| **OJC** | **Ojcow** | **148.29** | **343** | *e*PKP | | **PKPbc** | | **21 36 06.4** | **+1.0** |
| **OJC** | **Ojcow** | **148.29** | **343** | *e*PKIKP | | **PKPbc** | | **21 36 06.5** | **+1.0** |
| **KSP** | **Ksiaz** | **148.53** | **348** | *e*PKP | | **PKPbc** | | **21 36 07.4** | **+1.4** |
| **KSP** | **Ksiaz** | **148.53** | **348** | *e*PKIKP | | **PKPbc** | | **21 36 07.4** | **+1.4** |
| **CLL** | **Collm** | **148.63** | **352** | *e*PKIKP | | **PKPbc** | | **21 36 07.2** | **+1.0** |
| **CLL** | **Collm** | **148.63** | **352** | *e*PKPbc | | **PKPbc** | | **21 36 07.0** | **+0.8** |
| | comp=Z,20nm,1.4s | | | | | | | | |
| CLL | | | | *e*PKiKP | | **PKPab** | | **21 36 09.0** | **-0.8** |
| CLL | | | | *ep*PKPab | | **pPKPab** | | **21 36 13.0** | **-7.2** |
| CLL | | | | LmV | | | | 22 45 00.0 | |
| | comp=Z,200nm,18.0s | | | | | | | | |
| **CLL** | **Collm** | **148.63** | **352** | *e*PKPbc | | **PKPbc** | | **21 36 07.2** | **+1.0** |
| **KOLS** | **Kolonicke sedl** | **148.70** | **340** | *e*PKIKP | | **PKPbc** | | **21 36 07.4** | **+0.9** |
| KOLS | | | | *e* | | | | 21 36 14.1 | |
| **KOLS** | **Kolonicke sedl** | **148.70** | **340** | *e*PKP | | **PKPbc** | | **21 36 07.4** | **+0.9** |
| KOLS | | | | *e* | | | | 21 36 14.1 | |
| KOLS | | | | *e* | | | | 21 48 18.0 | |
| **BUR04** | **Bucovina Ar. S** | **148.74** | **335** | *e*PKPbc | | **PKPbc** | | **21 36 07.8** | **+1.0** |
| **BURAR** | **Bucovina Array** | **148.74** | **335** | *i*PKIKP | | **PKPbc** | | **21 36 08.2** | **+1.4** |
| **BURAR** | **Bucovina Array** | **148.74** | **335** | *i*P | | **PKPbc** | | **21 36 08.2** | **+1.4** |
| **NIE** | **Niedzica** | **148.88** | **342** | *e*PKP | | **PKPbc** | | **21 36 08.5** | **+1.5** |
| **NIE** | **Niedzica** | **148.88** | **342** | *e*PKIKP | | **PKPbc** | | **21 36 08.5** | **+1.5** |
| **UPC** | **Upice** | **148.91** | **348** | *e*PKIKP | | **PKPbc** | | **21 36 08.8** | **+1.8** |
| UPC | | | | *e* | | | | 21 36 18.3 | |
| **UPC** | **Upice** | **148.91** | **348** | *e*PKP | | **PKPbc** | | **21 36 08.8** | **+1.8** |
| UPC | | | | *ex* | | x | | 21 36 18.3 | |
| **BRG** | **Berggiesshubel** | **148.92** | **351** | *e*P | | **PKPbc** | | **21 36 07.9** | **+0.9** |
| | comp=Z,138nm,2.6s | | | | | | | | |
| BRG | | | | *e* | | | | 21 36 14.3 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **148.92** | **351** | *e*PKIKP | | **PKPbc** | | **21 36 07.9** | **+0.9** |
| BRG | | | | *e* | | | | 21 36 14.3 | |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,138nm,2.6s | | | | | | | | |
| **UZH** | **Uzhgorod** | **148.96** | **339** | *e*PKIKP | | **PKPbc** | | **21 36 07.3** | **+0.2** |
| UZH | | | | *e* | | | | 21 36 11.0 | |
| UZH | | | | *e* | | | | 21 36 18.0 | |
| **TLCR** | | **148.99** | **328** | *i*PKIKP | | **PKPbc** | | **21 36 09.4** | **+2.1** |
| **TLCR** | | **148.99** | **328** | *i*P | | **PKPbc** | | **21 36 09.4** | **+2.1** |
| **DPC** | **Dobruska-Polom** | **149.00** | **347** | *e*PKIKP | | **PKPbc** | | **21 36 08.7** | **+1.4** |
| **DPC** | **Dobruska-Polom** | **149.00** | **347** | *i*PKP | | **PKPbc** | | **21 36 08.7** | **+1.4** |
| **TESR** | **Tescani** | **149.02** | **332** | *i*P | | **PKPbc** | | **21 36 08.7** | **+1.3** |
| **OKC** | **Ostrava-Krasne** | **149.07** | **345** | *e*PKIKP | | **PKPbc** | | **21 36 08.6** | **+1.2** |
| **OKC** | **Ostrava-Krasne** | **149.07** | **345** | *i*PKP | | **PKPbc** | | **21 36 08.6** | **+1.2** |
| **PVCC** | **Panska Ves** | **149.15** | **350** | *e*PKIKP | | **PKPbc** | | **21 36 09.1** | **+1.5** |
| **PVCC** | **Panska Ves** | **149.15** | **350** | *e*PKP | | **PKPbc** | | **21 36 09.1** | **+1.5** |
| **KRLC** | **Kraliky** | **149.16** | **347** | *e*PKIKP | | **PKPbc** | | **21 36 09.1** | **+1.4** |
| **KRLC** | **Kraliky** | **149.16** | **347** | *i*PKP | | **PKPbc** | | **21 36 09.1** | **+1.4** |
| **MORC** | **Moravsky Berou** | **149.27** | **346** | *e*PKIKP | | **PKPbc** | | **21 36 08.7** | **+0.7** |
| **MORC** | **Moravsky Berou** | **149.27** | **346** | *i*P | | **PKPbc** | | **21 36 09.5** | **+1.5** |
| **MORC** | **Moravsky Berou** | **149.27** | **346** | *e*PKPbc | | **PKPbc** | | **21 36 08.7** | **+0.7** |
| **BTCH** | **Batrach** | **149.29** | **307** | *e*P | | **PKPbc** | | **21 36 09.1** | **+0.6** |
| **TRPA** | **Tarpa** | **149.31** | **338** | *i*P | | **PKPbc** | | **21 36 08.9** | **+0.9** |
| **CFR** | **Carcaliu** | **149.33** | **329** | *i*PKIKP | | **PKPbc** | | **21 36 09.4** | **+1.2** |
| **CFR** | **Carcaliu** | **149.33** | **329** | *i*P | | **PKPbc** | | **21 36 09.4** | **+1.2** |
| **LANS** | **Liptovska Anna** | **149.36** | **343** | *e*PKIKP | | **PKPbc** | | **21 36 10.3** | **+2.1** |
| **LANS** | **Liptovska Anna** | **149.36** | **343** | *e*PKP | | **PKPbc** | | **21 36 10.3** | **+2.1** |
| **VRI** | **Vrincioaia** | **149.48** | **331** | *i*P | | **PKPbc** | | **21 36 08.4** | **-0.2** |
| **ARCR** | **ARCALIA** | **149.51** | **335** | *i*P | | **PKPbc** | | **21 36 09.9** | **+1.3** |
| **PLOR** | **Plostina** | **149.52** | **331** | *i*P | | **PKPbc** | | **21 36 07.9** | **-0.8** |
| **YAYL** | **Yayladag** | **149.56** | **307** | P | | **PKPbc** | | **21 36 10.3** | **+1.1** |
| **BR101** | **Keskin Array S** | **149.61** | **316** | *e*PKPbc | | **PKPbc** | | **21 36 08.6** | **-0.6** |
| **BRTR** | **Keskin Array B** | **149.61** | **316** | PKPbc | | **PKPbc** | | **21 36 08.6** | **-0.6** |
| | comp=Z,4.3nm,1.0s,baz=72,slow=4.0,SNR=12 | | | | | | | | |
| **SLNF** | **Slenfeh** | **149.64** | **306** | *e*P | | **PKPbc** | | **21 36 10.9** | **+1.4** |
| **ZALF** | **Zalf** | **149.65** | **301** | *e*P | | **PKPbc** | | **21 36 10.1** | **+0.7** |
| **PRU** | **Pruhonice** | **149.68** | **349** | *e*PKIKP | | **PKPbc** | | **21 36 09.9** | **+1.0** |
| **PRU** | **Pruhonice** | **149.68** | **349** | *e*PKP | | **PKPbc** | | **21 36 09.9** | **+1.0** |
| **GOPC** | **GO Pecny, Ondr** | **149.71** | **349** | *e*PKIKP | | **PKPbc** | | **21 36 10.3** | **+1.3** |
| GOPC | | | | *e* | | | | 21 36 20.6 | |
| **GOPC** | **GO Pecny, Ondr** | **149.71** | **349** | *e*PKP | | **PKPbc** | | **21 36 10.3** | **+1.3** |
| GOPC | | | | *ex* | | x | | 21 36 20.6 | |
| **NKC** | **Novy Kostel** | **149.75** | **352** | *e*PKIKP | | **PKPbc** | | **21 36 10.3** | **+1.2** |
| NKC | | | | *e* | | | | 21 36 17.9 | |
| **NKC** | **Novy Kostel** | **149.75** | **352** | *e*PKP | | **PKPbc** | | **21 36 10.3** | **+1.2** |
| NKC | | | | *ep*PKP | | **PKPab** | | **21 36 17.9** | **+3.5** |
| **BIDA** | **Albida** | **149.78** | **305** | *e*P | | **PKPbc** | | **21 36 10.0** | **+0.2** |
| **VRAC** | **Vranov** | **149.92** | **346** | *i*PKIKP | | **PKPbc** | | **21 36 11.1** | **+1.5** |
| **VRAC** | **Vranov** | **149.92** | **346** | *i*P | | **PKPbc** | | **21 36 11.1** | **+1.5** |
| **DOPR** | **Dopca** | **149.99** | **333** | *i*P | | **PKPbc** | | **21 36 11.1** | **+1.3** |
| **BR231** | **Keskin MP Arra** | **150.11** | **316** | *e*PKPbc | | **PKPbc** | | **21 36 08.6** | **-1.9** |
| **CJR** | **Cluj-Napoca** | **150.11** | **336** | *i*PKIKP | | **PKPbc** | | **21 36 12.0** | **+1.8** |
| **CJR** | **Cluj-Napoca** | **150.11** | **336** | *i*P | | **PKPbc** | | **21 36 12.0** | **+1.8** |
| **MLR** | **Muntele Rosu** | **150.12** | **332** | *i*PKIKP | | **PKPbc** | | **21 36 11.4** | **+1.1** |
| **MLR** | **Muntele Rosu** | **150.12** | **332** | *i*P | | **PKPbc** | | **21 36 11.4** | **+1.1** |
| **VYHS** | **Vyhne** | **150.13** | **343** | *e*PKIKP | | **PKPbc** | | **21 36 10.5** | **+0.4** |
| **VYHS** | **Vyhne** | **150.13** | **343** | *e*PKP | | **PKPbc** | | **21 36 10.5** | **+0.4** |
| **ISR** | **Istrita** | **150.13** | **331** | *i*PKIKP | | **PKPbc** | | **21 36 11.9** | **+1.6** |
| **ISR** | **Istrita** | **150.13** | **331** | *i*P | | **PKPbc** | | **21 36 11.9** | **+1.6** |
| **TREC** | **Trest** | **150.17** | **348** | *e*PKIKP | | **PKPbc** | | **21 36 11.2** | **+1.0** |
| **TREC** | **Trest** | **150.17** | **348** | *e*PKP | | **PKPbc** | | **21 36 11.2** | **+1.0** |
| **TOTH** | **TOTAH** | **150.25** | **302** | *e*P | | **PKPbc** | | **21 36 12.1** | **+1.1** |
| **PSZ** | **Piszkesteto** | **150.34** | **341** | *i*P | | **PKPbc** | | **21 36 09.9** | **-0.8** |
| **PSZ** | **Piszkesteto** | **150.34** | **341** | *e*PKPbc | | **PKPbc** | | **21 36 12.2** | **+1.5** |
| **DRGR** | | **150.38** | **337** | *i*PKIKP | | **PKPbc** | | **21 36 11.4** | **+0.6** |
| **DRGR** | | **150.38** | **337** | *i*P | | **PKPbc** | | **21 36 11.4** | **+0.6** |
| **VOIR** | | **150.55** | **333** | *i*PKIKP | | **PKPbc** | | **21 36 13.2** | **+1.9** |
| **VOIR** | | **150.55** | **333** | *i*P | | **PKPbc** | | **21 36 13.1** | **+1.8** |
| **KHC** | **Kasperske Hory** | **150.67** | **350** | *e*PKIKP | | **PKPbc** | | **21 36 11.7** | **+0.3** |
| KHC | | | | *e* | | | | 21 36 21.1 | |
| **KHC** | **Kasperske Hory** | **150.67** | **350** | *e*PKP | | **PKPbc** | | **21 36 11.7** | **+0.3** |
| KHC | | | | *ep*PKP | | **PKPab** | | **21 36 21.1** | **+2.9** |
| KHC | | | | *ex* | | x | | 21 36 32.8 | |
| **KHC** | **Kasperske Hory** | **150.67** | **350** | *e*PKPbc | | **PKPbc** | | **21 36 12.5** | **+1.1** |
| **ARR** | **Arges** | **150.79** | **333** | *i*P | | **PKPbc** | | **21 36 14.2** | **+2.4** |
| **GEC2** | **GERESS Array S** | **150.92** | **350** | *e*PKIKP | | **PKPbc** | | **21 36 13.5** | **+1.4** |
| **GEC2** | **GERESS Array S** | **150.92** | **350** | *e*PKPbc | | **PKPbc** | | **21 36 13.5** | **+1.4** |
| **GERES** | **GERESS Array B** | **150.92** | **350** | PKPbc | | **PKPbc** | | **21 36 12.8** | **+0.7** |
| | comp=Z,2.3nm,1.0s,baz=25,slow=4.4,SNR=11 | | | | | | | | |
| **SIRR** | **Siria** | **151.21** | **338** | *i*P | | **PKPbc** | | **21 36 14.2** | **+1.5** |
| **KDHN** | **Kadinhani** | **151.25** | **315** | P | | **PKPbc** | | **21 36 13.4** | **+0.2** |
| **CONA** | **Conrad Observa** | **151.39** | **346** | *i*PKiKP | | **PKiKP** | | **21 36 14.7** | **+1.0** |
| | comp=Z,17nm,1.2s | | | | | | | | |
| **GZR** | **Gura Zlata** | **151.53** | **335** | *i*PKIKP | | **PKPbc** | | **21 36 14.4** | **+0.9** |
| **GZR** | **Gura Zlata** | **151.53** | **335** | *i*P | | **PKPbc** | | **21 36 14.4** | **+0.9** |
| **ERMK** | **Ermenek** | **151.63** | **311** | P | | **PKPbc** | | **21 36 15.3** | **+1.0** |
| **BZS** | **Buzias** | **151.78** | **337** | *i*P | | **PKPbc** | | **21 36 15.0** | **+1.0** |
| **CSS** | **Prodhromos** | **152.06** | **307** | *e*PKPab | | **PKPab** | | **21 36 24.6** | **+0.1** |
| **GAZI** | **Gazipasa** | **152.25** | **310** | P | | **PKPab** | | **21 36 25.9** | **+0.7** |
| **BNI** | **Bardonecchia** | **155.33** | **359** | *ep*PKPab | | pPKPab | | 21 36 51.8 | +3.3 |
| **ESDC** | **Sonseca Array** | **158.80** | **22** | PKPab | | **PKPab** | | **21 36 54.5** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=349,slow=1.3,SNR=3.4 | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **171.62** | **148** | *e*PKPdf | | **PKPdf** | | **21 36 26.9** | **-1.9** |
| TOA0 | | | | *e*PKPdf | | PKPdf | | 21 36 29.2 | +0.4 |
| TOA0 | | | | *e*PKPab | | **PKPab** | | **21 37 48.3** | **-1.8** |
| **TORD** | **Torodi Ar. Bea** | **171.62** | **148** | PKP | | **PKPdf** | | **21 36 26.9** | **-1.9** |
| | comp=Z,1.2nm,1.0s,baz=225,slow=3.9,SNR=5.3 | | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | | **21 37 48.3** | **-1.8** |
| | comp=Z,1.3nm,1.0s,baz=283,slow=4.5,SNR=3.6 | | | | | | | | |

*ISCJB **19** 21:32:23.6±1.0,36°.27N±0°.04×27°.68E±0°.04,h9km±7km, Error ellipse: s-maj=6.6km s-min=5.6km az=37.4*
*ATH **19** 21:32:23.8,36°.34N×27°.79E,h31km±1km, MD2.9/5*
*CSEM **19** 21:32:24.2±0.3,36°.23N×27°.66E,h5km, MD2.9, Error ellipse: s-maj=7.9km s-min=6.9km az=149.0*
*ISK **19** 21:32:25.1,36°.34N×27°.77E,h7km, MD2.8*
*DDA **19** 21:32:31.0,36°.56N×27°.91E,h7km, Md2.7*

**ISC 19 21:32:24.7±1.1,36°.26N±0°.04×27°.70E±0°.03,h16km±9km, n29,σ1°01/44,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARG** | **Arkhangelos** | **0.34** | **96** | *e*PB | **Pg** | **21 32 31.7** | **-0.1** |
| ARG | | | | *e*SB | **Sb** | **21 32 37.1** | **-0.6** |
| **ARG** | **Arkhangelos** | **0.34** | **96** | *e*Pb | **Pg** | 21 32 31.7 | -0.1 |
| ARG | | | | *e*Sb | **Sb** | **21 32 37.1** | **-0.6** |
| **NIS1** | **Nisyros Isl.** | **0.55** | **309** | *e*PN | **Pg** | **21 32 35.6** | **0.0** |
| NIS1 | | | | *e*SN | **Sb** | **21 32 44.4** | **+0.8** |
| **NIS1** | **Nisyros Isl.** | **0.55** | **309** | *e*Pn | **Pg** | **21 32 35.6** | **0.0** |
| **KARP** | **Karpathos** | **0.83** | **212** | *e*PN | **Pn** | **21 32 42.2** | **+0.4** |
| **KARP** | **Karpathos** | **0.83** | **212** | *e*Pn | **Pn** | **21 32 42.2** | **+0.4** |
| **BDRM** | **Kayabasi** | **0.84** | **346** | *i* P | **Pg** | **21 32 40.5** | **-0.5** |
| BDRM | | | | *i* S | **Sg** | **21 32 52.2** | **+0.2** |
| **BDRM** | **Kayabasi** | **0.84** | **346** | P | **Pg** | 21 32 40.5 | -0.5 |
| BDRM | | | | S | **Sg** | **21 32 52.2** | **+0.2** |
| **BODT** | **Bodrum** | **0.87** | **339** | *e*PG | **Pg** | 21 32 40.7 | -0.9 |
| BODT | | | | *e*SG | **Sg** | **21 32 52.8** | **-0.2** |
| **BODT** | **Bodrum** | **0.87** | **339** | *e*Pg | **Pg** | 21 32 40.7 | -0.9 |
| BODT | | | | *e*Sg | **Sg** | **21 32 52.8** | **-0.2** |
| **DALY** | **Dalyan (Mu¨la** | **0.95** | **53** | *e*PG | **Pg** | **21 32 41.8** | **-1.3** |
| **DALY** | **Dalyan (Mu¨la** | **0.95** | **53** | *e*Pg | **Pg** | **21 32 41.8** | **-1.3** |
| **TURN** | **Turunc** | **0.95** | **49** | P | Pg | 21 32 37.7 | -5.5 |
| TURN | | | | S | Sg | 21 32 47.7 | -8.0 |
| **YER** | **Yerkesik** | **0.99** | **28** | *e*PG | **Pg** | **21 32 43.4** | **-0.6** |
| YER | | | | *e*SG | **Sg** | **21 32 55.3** | **-1.8** |
| **YER** | **Yerkesik** | **0.99** | **28** | *e*Pg | **Pg** | **21 32 43.4** | **-0.6** |
| YER | | | | *e*Sg | **Sg** | **21 32 55.3** | **-1.8** |
| **AYDN** | **Tasoluk** | **1.41** | **6** | *i* P | **Pg** | **21 32 52.9** | **+1.0** |
| AYDN | | | | *i* S | **Sg** | **21 33 12.9** | **+2.6** |
| **AYDN** | **Tasoluk** | **1.41** | **6** | P | **Pg** | **21 32 52.9** | **+1.0** |
| AYDN | | | | S | **Sg** | **21 33 12.9** | **+2.6** |
| **SMG** | **Samos** | **1.61** | **335** | *e*PN | **Pn** | **21 32 51.7** | **-0.8** |
| SMG | | | | *e*SN | **Sn** | **21 33 11.4** | **-1.6** |
| **SMG** | **Samos** | **1.61** | **335** | *e*Pn | **Pn** | **21 32 51.7** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.70** | **5** | *e*PN | **Pn** | **21 32 54.8** | **+0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.70** | **5** | *e*Pn | **Pn** | **21 32 54.8** | **+0.9** |
| **GOLH** | **Golhisar** | **1.79** | **56** | *e*P | **Pg** | **21 32 58.9** | **-0.2** |
| GOLH | | | | *i* S | **Sg** | **21 33 23.2** | **+0.9** |
| **GOLH** | **Golhisar** | **1.79** | **56** | P | **Pg** | **21 32 58.9** | **-0.2** |
| GOLH | | | | S | **Sg** | **21 33 23.2** | **+0.9** |
| **ELL** | **Elmali** | **1.84** | **74** | *e*PN | **Pn** | **21 32 56.9** | **+1.0** |
| **ELL** | **Elmali** | **1.84** | **74** | *e*Pn | **Pn** | **21 32 56.9** | **+1.0** |
| **NPS** | **Neapolis** | **1.97** | **240** | *e*PN | **Pn** | **21 32 57.5** | **+0.1** |
| NPS | | | | *e*SN | **Sn** | **21 33 22.3** | **+0.5** |
| **NPS** | **Neapolis** | **1.97** | **240** | *e*Pn | **Pn** | **21 32 57.5** | **+0.1** |
| NPS | | | | *e*Sn | **Sn** | **21 33 22.3** | **+0.5** |
| **IDI** | **Anoyia** | **2.48** | **248** | *e*PN | **Pn** | **21 33 03.9** | **-0.7** |
| **IDI** | **Anoyia** | **2.48** | **248** | *e*Pn | **Pn** | **21 33 03.9** | **-0.7** |

**DDA 19 21:35:03.1,38°.80N×27°.82E,h5km,Md2.6,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKHS** | **Akhisar** | **0.07** | **358** | P | Pg | 21 35 05.1 | +0.3 |
| AKHS | | | | S | Sg | 21 35 06.5 | +0.5 |
| **DURS** | **Dursunbey** | **0.95** | **32** | P | Pb | 21 35 22.4 | +0.3 |
| DURS | | | | S | Sn | 21 35 36.2 | -1.0 |

**GUC 19 21:35:16.8±0.5,20°.77S×70°.26W,h58km±12km,ML4.1,1D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB01** | **IPOC Station P** | **0.77** | **111** | *i* P | Pn | 21 35 32.9 | +0.9 |
| PB01 | | | | *i* S | Sn | 21 35 43.9 | +0.9 |
| PB01 | | | | AML | AML | 21 35 44.7 | |
| | comp=N,11μm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.01** | **160** | *i* P | Pn | 21 35 35.8 | +0.6 |
| PB07 | | | | *i* S | Sn | 21 35 49.4 | +0.7 |
| **PB11** | **IPOC Station P** | **1.15** | **29** | *i* P | Pn | 21 35 37.6 | +0.5 |
| PB11 | | | | *i* S | Sn | 21 35 53.2 | +1.1 |
| PB11 | | | | AML | AML | 21 35 55.7 | |
| | comp=N,8μm,0.3s | | | | | | |
| **PB09** | **IPOC Station P** | **1.39** | **137** | *i* P | Pn | 21 35 41.2 | +0.9 |
| PB09 | | | | *i* S | Sn | 21 35 59.2 | +1.3 |
| PB09 | | | | AML | AML | 21 36 00.8 | |
| | comp=E,6μm,0.7s | | | | | | |
| **MACH** | **Maria Elena** | **1.49** | **162** | *i* P | Pn | 21 35 42.4 | +0.7 |
| MACH | | | | *i* S | Sn | 21 36 01.7 | +1.3 |
| **MNMC** | **Minimini** | **1.75** | **21** | *i* P | Pn | 21 35 46.1 | +0.9 |
| MNMC | | | | *i* S | Sn | 21 36 07.9 | +1.3 |
| **PB06** | **IPOC Station P** | **2.03** | **162** | *i* P | Pn | 21 35 48.7 | -0.2 |
| PB06 | | | | *i* S | Sn | 21 36 13.4 | +0.2 |

**IDC 19 21:41:31.8±3.9,15°.62S×176°.73W,h96km±42km,mb3.4/4, mb1 3.8/5,mb1mx3.5/29,mbtmp3.8/5,Error ellipse: s-maj=182.3km s-min=20.9km az=155.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **5.09** | **71** | P | Pn | 21 42 45.1 | -0.7 |
| | 2.3nm,0.3s,baz=262,slow

BSO1 S **Sn** **21 51 21.3 -0.4**
**BSO3 Boso 3 2.07 223** P **Pn** **21 50 58.9 -1.3**
BSO3 S **Sn** **21 51 25.0 +0.2**
**JAG Ashikaga 2.24 273** P **Pn** **21 51 01.2 -1.6**
**JRY Ryogami san 2.71 264** ⇑P **Pn** **21 51 07.7 -1.6**
JRY S **Sn** **21 51 40.1 -0.8**
**JMK Ichinoseki 2.73 343** P **Pn** **21 51 08.4 -1.1**
JMK S **Sn** **21 51 40.9 -0.6**
**JOD2 Odawara 2 2.77 248** P **Pn** **21 51 08.7 -1.3**
**JYK Kaneyama 2.98 331** ⇑P **Pn** **21 51 12.1 -0.8**
**JYN Shimob 3.10 255** P **Pn** **21 51 14.3 -0.4**
**JOM Ohasama 3.22 347** P **Pn** **21 51 15.1 -1.2**
**MAJO Matsushiro 3.25 275** *c iP* **Pn** **21 51 16.4 -0.3**
**MAJO Matsushiro 3.25 275** *e*Pn **Pn** **21 51 16.2 -0.4**
MAJO *e*Sn **Sn** **21 51 54.7 +0.5**
**MAT Matsushiro 3.25 275** P **Pn** **21 51 16.3 -0.4**
MAT *e*S **Sn** **21 51 55.5 +1.3**
**MAT Matsushiro 3.25 275** P **Pn** **21 51 16.5 -0.2**
**JHJ Hachijo jima 2 3.79 213** Pn **Pn** **21 51 23.1 -1.0**
144nm,0.3s,baz=85,slow=23,SNR=9.8
JHJ Sn **Sn** **21 52 03.5 -4.0**
100nm,0.3s,baz=40,slow=22,SNR=7.0
**ERM Erimo 5.72 7** *e*P **Pn** **21 51 48.9 -1.7**
ERM pmax pmax
comp=Z,36nm,0.6s
**ERM Erimo 5.72 7** *e*Pn **Pn** **21 51 48.9 -1.7**
comp=Z,36nm,0.6s
**ASAJ Asahikawa 7.78 2** Pn **Pn** **21 52 16.8 -2.0**
comp=Z,5.5nm,0.3s,baz=221,slow=9.9,SNR=17
ASAJ Sn **Sn** **21 53 43.7 -2.1**
comp=Z,3.3nm,0.3s,baz=95,slow=30,SNR=8.6
**ASAJ Asahikawa 7.78 2** P **Pn** **21 52 16.8 -2.0**
ASAJ 21 53 43.7
ASAJ pmax pmax
comp=Z,6.0nm,0.3s
ASAJ smax smax
comp=N,3.0nm,0.3s
**YUK Yuzh-Kuril'sk 8.18 19** P Pn 21 52 20.6 -3.7
YUK S **Sn** **21 53 50.2 -5.3**
**KUR Kuril'sk 9.86 24** P **Pn** **21 52 48.1 +0.7**
KUR S Sn 21 54 30.8 -6.1
KUR pmax pmax
comp=N,40nm,0.5s
KUR pmax pmax
comp=Z,44nm,0.5s
KUR pmax pmax
comp=Z,494nm,2.8s
KUR MLR MLR
comp=N,462nm,5.0s
KUR MLR MLR
comp=Z,560nm,5.0s
**JNU Nakatsue 9.87 254** Pn **Pn** **21 52 47.9 +0.2**
comp=Z,0.4nm,0.3s,baz=65,slow=14,SNR=3.3
JNU LR LR 21 56 49.6
comp=Z,450nm,18.9s,baz=104,slow=39
**VLA Vladivostok 10.45 314** *e*P **Pn** **21 52 55.5 0.0**
VLA pmax pmax
comp=Z,17nm,0.8s
**MSHR Mys Shultsa 10.59 309** *e*P **Pn** **21 52 57.2 -0.1**
**YSS Yuzh-Sakhalins 10.62 2** *e*P **Pn** **21 52 55.6 -2.1**
YSS pmax pmax
comp=Z,17nm,0.8s
**USRK Ussuriysk Ar. 11.08 318** Pn **Pn** **21 53 04.2 +0.1**
comp=Z,0.4nm,0.3s,baz=130,slow=13,SNR=9.7
**KSRS Korea Array 11.51 280** Pn **Pn** **21 53 12.5 +2.5**
comp=Z,0.3nm,0.3s,baz=96,slow=13,SNR=11
**KSAR Wonju Array Be 11.54 280** P **Pn** **21 53 12.5 +2.1**
**KSAR Wonju Array Be 11.54 280** Pn **Pn** **21 53 12.5 +2.1**
**TJN Taejon 11.99 275** *e*P **Pn** **21 53 15.9 -0.6**
**HABR Khabarovsk 13.23 339** *e*P **Pn** **21 53 30.5 -2.9**
HABR *e*S **Sn** **21 55 57.4 -1.9**
HABR pmax pmax
comp=Z,48nm,1.6s
HABR MLR MLR
comp=Z,354nm,14.0s
**KLR Kul'dur 14.99 333** *e*P **Pn** **21 53 58.0 +0.7**
**PETK Petropavlovsk- 19.98 28** P **P** **21 54 57.1 -0.3**
comp=Z,6.3nm,0.9s,baz=210,slow=11,SNR=2.4
**PETK Petropavlovsk- 19.98 28** P **P** **21 54 57.1 -0.3**
PETK pmax pmax
comp=Z,6.0nm,0.9s
**CLNS Chul'man 23.59 336** *e*P **P** **21 55 36.9 +1.3**
CLNS pmax pmax
comp=Z,13nm,1.2s
CLNS pmax pmax
comp=N,22nm,1.0s
CLNS pmax pmax
comp=E,7.0nm,1.0s
CLNS MLR MLR
comp=Z,291nm,17.0s
CLNS MLR MLR
comp=N,304nm,14.0s
CLNS MLR MLR
comp=E,309nm,14.0s
**HHC Hu-ho-hao-te 24.32 290** *e*P **P** **21 55 42.8 +0.1**
HHC S **S** **21 59 56.1 -3.7**
HHC PMZ
comp=E,25nm,1.0s
HHC PMZ
comp=E,180nm,4.0s
HHC LN
comp=E,180nm,11.1s
HHC LE
comp=E,300nm,10.2s
HHC LZ
comp=E,320nm,11.1s
**YAK Yakutsk 26.90 347** P **P** **21 56 05.3 -0.3**
comp=E,5.6nm,0.4s,baz=149,slow=7.1,SNR=3.0
**YAK Yakutsk 26.90 347** *e*P **P** **21 56 04.6 -1.0**
YAK *e* 21 56 15.7
YAK pmax pmax
comp=N,21nm,1.5s
YAK pmax pmax
comp=E,6.0nm,1.1s
YAK pmax pmax
comp=Z,31nm,1.0s
**H11N2 WAKE ISLAND Hy 27.23 121** T T 22 24 50.1
baz=312,slow=75,SNR=58
**H11N1 WAKE ISLAND Hy 27.24 121** T T 22 24 43.1
baz=312,slow=75,SNR=23
**H11N3 WAKE ISLAND Hy 27.25 121** T T 22 24 44.4
baz=312,slow=75,SNR=22
**H11S1 WAKE ISLAND Hy 27.93 123** T T 22 25 34.0
baz=314,slow=75,SNR=22
**H11S3 WAKE ISLAND Hy 27.93 123** T T 22 25 39.2
baz=314,slow=75,SNR=18
**ENH Enshi 27.94 267** *e*P **P** **21 56 14.4 -1.0**
comp=Z,9.7nm,0.7s
**H11S2 WAKE ISLAND Hy 27.95 123** T T 22 25 37.4
baz=314,slow=75,SNR=20
**ULN Ulaanbaatar 28.29 305** *c iP* **P** **21 56 18.6 +0.1**
ULN pmax pmax
comp=Z,14nm,1.0s
**ULN Ulaanbaatar 28.29 305** *e*P P 21 56 23.1 +4.6
comp=Z,24nm,1.2s
**BOD Bodaibo 28.47 328** *e*P **P** **21 56 18.4 -1.4**
BOD pmax pmax
comp=Z,12nm,1.2s
**SONM Songino Array 28.72 305** P **P** **21 56 22.6 +0.3**
comp=Z,14nm,0.8s,baz=106,slow=8.7,SNR=59
**SONM Songino Array 28.72 305** P **P** **21 56 22.6 +0.3**
SONM pmax pmax
comp=Z,14nm,0.8s
**ZAK Zakamensk 31.22 309** *e*P P 21 56 33.9 -10
ZAK pmax pmax
comp=Z,13nm,1.2s
**TLY Talaya 31.28 312** *e*P **P** **21 56 42.8 -2.0**
TLY pmax pmax
comp=Z,17nm,1.2s
TLY MLR MLR
comp=Z,185nm,13.0s
**GTA Gaotai 33.40 288** P **P** **21 57 03.6 0.0**
GTA pP **pP** **21 57 14.5 +1.5**
GTA PMZ
comp=Z,31nm,0.8s
**BILL Bilibino 34.52 16** *i* P **P** **21 57 10.4 -2.4**
BILL pmax pmax
comp=Z,6.0nm,0.9s
**HVS Khovu-Aksy 37.34 309** *e*P **P** **21 57 37.8 +0.5**
HVS pmax pmax
comp=Z,10.0nm,0.9s
**CMAR Chiang Mai Arr 41.96 257** P **P** **21 58 15.5 -0.6**
comp=Z,1.7nm,0.8s,baz=46,slow=5.8,SNR=13
CMAR LR LR 22 16 56.2
comp=Z,77nm,19.3s,baz=60,slow=38
**CMAR Chiang Mai Arr 41.96 257** *i* P **P** **21 58 16.2 +0.2**
CMAR pmax pmax
comp=Z,2.0nm,0.8s
**ZALV Zalesovo Beam 42.87 313** P **P** **21 58 23.4 +0.4**
comp=Z,4.5nm,0.7s,baz=92,slow=6.9,SNR=18
**ZALV Zalesovo Beam 42.87 313** P **P** **21 58 23.4 +0.4**
ZALV pmax pmax
comp=Z,5.0nm,0.7s
**LSA Lhasa 42.93 276** P **P** **21 58 25.4 +1.1**
**LSA Lhasa 42.93 276** *e*P **P** **21 58 24.3 0.0**
LSA pmax pmax
comp=Z,10.0nm,0.9s
**LSA Lhasa 42.93 276** *e*P **P** **21 58 24.3 0.0**
comp=Z,10.0nm,0.9s
**NVS Novosibirsk 43.80 314** *e*P **P** **21 58 31.1 +0.7**
NVS *i* 21 58 42.2
NVS pmax pmax
comp=N,2.0nm,0.4s
NVS pmax pmax
comp=E,5.0nm,0.4s
NVS pmax pmax
comp=E,4.0nm,0.5s
**MK31 Makanchi Array 45.05 303** *i* P **P** **21 58 40.7 +0.1**
MK31 pmax pmax
comp=Z,8.0nm,0.5s
**MKAR Makanchi Array 45.05 303** P **P** **21 58 40.7 +0.1**
comp=Z,9.2nm,0.6s,baz=86,slow=9.5,SNR=55
MKAR LR LR 22 17 58.3
comp=Z,133nm,18.1s,baz=80,slow=37
**MKAR Makanchi Array 45.05 303** P **P** **21 58 40.7 +0.1**
MKAR pmax pmax
comp=Z,9.0nm,0.6s
MKAR MLR MLR
comp=Z,133nm,18.1s
**TAPN Taplejung 46.65 275** *e*P **P** **21 58 54.0 +0.2**
comp=Z,21nm,0.8s
**KURK Kurchatov 46.88 309** *e*P **P** **21 58 54.2 -0.7**
KURK pmax pmax
comp=Z,30nm,0.7s
**KURK Kurchatov 46.88 309** *e*P **P** **21 58 54.2 -0.7**
comp=Z,30nm,0.7s
**ODAN Odare 47.12 275** *e*P **P** **21 58 57.4 0.0**
comp=Z,15nm,0.6s
**PDGK Podgornoye 47.69 299** P **P** **21 59 01.5 +0.2**
PDGK pmax pmax
comp=Z,30nm,1.0s
**RAMN Ramite 47.71 275** *e*P **P** **21 59 02.2 +0.2**
comp=Z,45nm,0.8s
**GUN Gumba 47.88 277** *e*P **P** **21 59 04.3 +0.8**
**PKI Pulchoki 48.40 277** *e*P **P** **21 59 07.2 -0.3**
comp=Z,27nm,0.4s
**PKIN Phulchoki 48.41 277** *e*P **P** **21 59 07.3 -0.1**
comp=Z,6.2nm,0.6s
**KKN Kakani 48.41 277** *e*P **P** **21 59 07.6 +0.2**
comp=Z,7.1nm,0.6s
**HNR Honiara 48.48 156** LR LR 22 16 46.5
comp=Z,63nm,19.6s,baz=334,slow=33
**DMN Daman 48.63 277** *e*P **P** **21 59 09.7 +0.6**
**GKN Gorkha 48.84 277** *e*P **P** **21 59 10.6 0.0**
comp=Z,18nm,0.7s
**DANN Dangsing 49.39 278** *e*P **P** **21 59 15.4 +0.4**
**ILAR Eielson Array 49.74 32** P **P** **21 59 17.1 +0.4**
comp=Z,0.8nm,0.7s,baz=265,slow=6.2,SNR=7.9
**ILAR Eielson Array 49.74 32** P **P** **21 59 17.1 +0.4**
ILAR pmax pmax
comp=Z,1.0nm,0.7s
**KOLN Koldanda 49.77 278** *e*P **P** **21 59 17.9 +0.1**
comp=Z,5.4nm,0.5s
**TKM2 Tokmak 2 50.54 299** *e*P **P** **21 59 24.1 +0.7**
TKM2 pmax pmax
comp=Z,12nm,0.7s
**TKM2 Tokmak 2 50.54 299** *e*P **P** **21 59 24.1 +0.7**
comp=Z,12nm,0.7s
**KSH Kashi 51.29 295** P P 21 59 33.5 +4.5
KSH PMZ
comp=Z,4.0nm,1.0s
**OTUK Ortayu 51.37 307** *i* P **P** **21 59 28.6 -0.7**
OTUK pmax pmax
comp=Z,14nm,1.2s
**AAK Ala-Archa 51.40 299** ⇑*i*P **P** **21 59 29.9 0.0**
AAK pmax pmax
comp=Z,4.0nm,0.7s
**AAK Ala-Archa 51.40 299** *e*P **P** **21 59 28.9 -1.0**
comp=Z,6.8nm,0.8s
**BRVK Borovoye 51.58 313** *e*P **P** **21 59 31.3 +0.5**
BRVK pmax pmax
comp=Z,5.0nm,1.0s
**BRVK Borovoye 51.58 313** *e*P **P** **21 59 31.2 +0.3**
comp=Z,10.0nm,1.1s
**EKS2 Erkin-Say 51.90 299** *e*P **P** **21 59 32.4 -1.1**
EKS2 pmax pmax
comp=Z,5.0nm,0.8s
**EKS2 Erkin-Say 51.90 299** *e*P **P** **21 59 32.4 -1.1**
comp=Z,5.0nm,0.8s
**MNAS Manas 52.84 299** *i* P **P** **21 59 40.9 +0.3**
MNAS pmax pmax
comp=Z,11nm,0.9s
**KK31 Karatay Array 54.04 301** *i* P **P** **21 59 49.1 -0.1**
KK31 pmax pmax
comp=Z,3.0nm,0.6s
**KKAR Karatay Array 54.04 301** *e*P **P** **21 59 48.5 -0.7**
KKAR pmax pmax
comp=Z,3.0nm,0.6s
**KKAR Karatay Array 54.04 301** *e*P **P** **21 59 48.5 -0.7**
comp=Z,2.8nm,0.6s
**SVE Sverdlovsk 56.10 319** *e*P **P** **22 00 05.0 +1.2**
SVE pmax pmax
comp=Z,21nm,1.4s
**WRAB Tennant Creek 56.45 189** *e*P **P** **22 00 04.9 -1.8**
WRAB pmax pmax
comp=Z,13nm,1.0s
**WRAB Tennant Creek 56.45 189** *e*P **P** **22 00 05.1 -1.6**
**WRA Warramunga Arr 56.47 189** P **P** **22 00 06.3 -0.4**
comp=Z,1.1nm,0.5s,baz=7.4,slow=7.5,SNR=8.8
**WRA Warramunga Arr 56.47 189** P **P** **22 00 06.3 -0.4**
WRA pmax pmax
comp=Z,1.0nm,0.5s
**DZET Dzherino 56.74 296** *i* P **P** **22 00 08.0 -0.8**
DZET pmax pmax
comp=Z,12nm,0.6s
**ARU Arti 57.32 319** *c iP* **P** **22 00 12.8 +0.4**
ARU 22 02 18.3
ARU S **S** **22 08 10.2 +3.9**
ARU SS **SS** **22 11 56.4 +1.0**
ARU pmax pmax
comp=Z,18nm,1.7s
**ARU Arti 57.32 319** *e*P **P** **22 00 12.6 +0.2**
comp=Z,20nm,1.3s
**KBL Kabul 58.28 292** P **P** **22 00 21.5 +1.7**
KBL pmax pmax
comp=Z,41nm,0.7s
**ABKAR Akbulak array 58.89 311** *e*P **P** **22 00 23.5 0.0**
comp=Z,3.3nm,0.5s
**ASAR Alice Springs 60.19 189** P **P** **22 00 32.6 -0.1**
comp=Z,12nm,0.7s,baz=15,slow=7.5,SNR=11
**ASAR Alice Springs 60.19 189** P **P** **22 00 32.6 -0.1**
ASAR pmax pmax
comp=Z,1.0nm,0.7s
**GEYT Alibeck 64.75 300** P **P** **22 01 03.5 +0.2**
comp=Z,2.2nm,0.7s,baz=357,slow=3.0,SNR=6.8
**ARCES ARCESS Array B 64.88 340** P **P** **22 01 03.4 -0.1**
comp=Z,6.7nm,1.1s,baz=41,slow=8.0,SNR=4.0
**ARCES ARCESS Array B 64.88 340** P **P** **22 01 03.4 -0.1**
ARCES pmax pmax
comp=Z,7.0nm,1.1s
**FINES FINESS Array B 69.74 333** P **P** **22 01 34.1 -0.3**
comp=Z,8.5nm,0.9s,baz=57,slow=7.0,SNR=7.5
**FINES FINESS Array B 69.74 333** P **P** **22 01 34.1 -0.3**
FINES pmax pmax
comp=Z,9.0nm,0.9s
**KBZ Khabaz 71.85 311** P **P** **22 01 48.5 +1.0**
comp=Z,5.3nm,0.9s,baz=52,slow=4.2,SNR=11
**KBZ Khabaz 71.85 311** P **P** **22 01 48.5 +1.0**
KBZ pmax pmax
comp=Z,5.0nm,0.9s
**KIV Kislovodsk 71.86 311** *e*P **P** **22 01 46.7 -1.0**
KIV pmax pmax
comp=Z,13nm,0.9s
KIV MLR MLR
comp=Z,209nm,17.0s
**KIV Kislovodsk 71.86 311** *e*P **P** **22 01 48.3 +0.6**
comp=Z,11nm,0.9s
**NEY Neytrino 72.22 311** *e*P **P** **22 01 49.3 -0.7**
NEY pmax pmax
comp=Z,1.0nm,1.0s
**GNI Garni 72.65 307** *e*P **P** **22 01 53.1 +0.5**
GNI pmax pmax
comp=Z,24nm,1.0s
**ANN Anapa 74.49 314** *e*P **P** **22 02 00.6 -2.5**
ANN pmax pmax
comp=Z,48nm,1.1s
**NVAR Mina Array Bea 74.88 53** P **P** **22 02 07.4 +1.6**
comp=Z,0.7nm,0.6s,baz=291,slow=5.0,SNR=5.9
**NB2 NORSAR Subarra 75.08 338** P **P** **22 02 07.0 +0.7**
comp=Z,10nm,1.0s,baz=38,slow=6.2
**NOA NORSAR Array B 75.08 338** P **P** **22 02 07.2 +0.9**
comp=Z,4.2nm,0.8s,baz=39,slow=5.7,SNR=8.3
**NOA NORSAR Array B 75.08 338** P **P** **22 02 07.2 +0.9**
NOA pmax pmax
comp=Z,4.0nm,0.8s
**AKASG Malin Array Be 75.25 323** P **P** **22 02 07.6 +0.2**
comp=Z,2.2nm,0.5s,baz=46,slow=6.1,SNR=8.6
AKASG LR LR 22 37 55.8
comp=Z,129nm,19.9s,baz=80,slow=38
**AKASG Malin Array Be 75.25 323** P **P** **22 02 07.6 +0.2**
AKASG pmax pmax
comp=Z,2.0nm,0.5s
AKASG MLR MLR
comp=Z,129nm,19.9s
**KIEV Kiev 75.26 323** *e*P **P** **22 02 07.6 +0.2**
KIEV pmax pmax
comp=Z,4.0nm,1.0s
**MALT Malatya 77.72 309** ⇓*i*P **P** **22 02 23.7 +1.9**
**LVV L'vov 78.33 324** *e*P P 22 02 37.7 +13
**BURAR Bucovina Array 79.26 322** ⇑*i*P **P** **22 02 31.0 +0.9**
**BRTR Keskin Array B 79.80 312** P **P** **22 02 33.5 +0.3**
comp=Z,2.1nm,0.9s,baz=84,slow=5.1,SNR=9.1
**BRTR Keskin Array B 79.80 312** *i* P **P** **22 02 34.0 +0.8**
BRTR pmax pmax
comp=Z,2.0nm,0.9s
**STHS Stebnicka Huta 79.91 325** *e*P **P** **22 02 32.3 -1.1**
**STHS Stebnicka Huta 79.91 325** *e*P **P** **22 02 32.3 -1.1**
**LANS Liptovska Anna 80.91 326** *e*P **P** **22 02 40.5 +1.6**
**LANS Liptovska Anna 80.91 326** *e*P **P** **22 02 40.5 +1.6**
**ARR Arges 81.10 321** ⇑*i*P **P** **22 02 42.3 +2.3**
**DPC Dobruska-Polom 81.40 328** *e*P **P** **22 02 43.5 +2.1**
DPC *e* 22 02 56.9
**DPC Dobruska-Polom 81.40 328** *e*P **P** **22 02 43.5 +2.1**
DPC *ex* x 22 02 56.9
**VYHS Vyhne 81.67 326** *e*P **P** **22 02 43.5 +0.6**
VYHS pmax pmax
comp=Z,2.0nm,1.3s
**VYHS Vyhne 81.67 326** *e*P **P** **22 02 43.5 +0.6**
**CLL Collm 82.03 331** *e*P **P** **22 02 45.0 +0.3**
CLL *i* 22 02 56.8
CLL pmax pmax
comp=Z,11nm,1.4s
**CLL Collm 82.03 331** *e*P **P** **22 02 45.0 +0.3**
comp=Z,11nm,1.4s
CLL *i* 22 02 56.8
**PRU Pruhonice 82.42 329** *e*P **P** **22 02 47.2 +0.4**
PRU *e* 22 02 59.1
**PRU Pruhonice 82.42 329** *e*P **P** **22 02 47.2 +0.4**
PRU *ex* x 22 02 59.1
**KHC Kasperske Hory 83.48 329** *e*P **P** **22 02 52.8 +0.5**
KHC *e* 22 03 05.4
**KHC Kasperske Hory 83.48 329** *e*P **P** **22 02 52.8 +0.5**
KHC *ex* x 22 03 05.4
**GERES GERESS Array B 83.65 329** P **P** **22 02 53.5 +0.2**
comp=Z,1.0nm,0.6s,baz=27,slow=7.5,SNR=5.2
**GERES GERESS Array B 83.65 329** P **P** **22 02 53.5 +0.2**
GERES pmax pmax
comp=Z,1.0nm,0.6s
**TXAR Lajitas Array 90.03 53** P **P** **22 03 26.3 +1.6**
comp=Z,0.5nm,0.7s,baz=310,slow=4.1,SNR=5.9
**TXAR Lajitas Array 90.03 53** P **P** **22 03 26.3 +1.6**
TXAR pmax pmax
comp=Z,1.0nm,0.7s

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*DDA* ***19*** *22:00:08.6,38.88N×26.03E,h5km,Md3.2*
*ISK* ***19*** *22:00:08.4,38.85N×26.00E,h5km,MD2.8*
*ATH* ***19*** *22:00:09.2,38.88N×26.06E,h21km±1km,MD3.0/8*
*CSEM* ***19*** *22:00:09.6±0.1,38.87N×26.01E,h5km,MD3.0,Error ellipse: s-maj=3.3km s-min=2.2km az=79.0*

**ISC 19 22:00:09.8**±1.0,**38.88N**±0.02×**26.01E**±0.02,**h9km**±9km,
**n69,σ0.65/101,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PRK** | **Paraskevi** | **0.42** | **28** | *e*PB | | **Pg** | **22 00 18.0** | **0.0** |
| PRK | | | | *e*SB | | **Sg** | **22 00 23.4** | **-0.2** |
| **PRK** | **Paraskevi** | **0.42** | **28** | *e*Pb | | **Pg** | **22 00 18.0** | **0.0** |
| PRK | | | | *e*Sb | | **Sg** | **22 00 23.4** | **-0.2** |
| **CHOS** | **Chios island** | **0.49** | **176** | *e*PB | | **Pg** | **22 00 19.4** | **+0.1** |
| CHOS | | | | *e*SB | | **Sg** | **22 00 26.4** | **+0.7** |
| **CHOS** | **Chios island** | **0.49** | **176** | *e*Pb | | **Pg** | **22 00 19.4** | **+0.1** |
| CHOS | | | | *e*Sb | | **Sg** | **22 00 26.4** | **+0.7** |
| **AYVA** | **Ayvalik** | **0.68** | **50** | *i* P | | **Pg** | **22 00 22.3** | **-0.6** |
| AYVA | | | | *i* S | | **Sg** | **22 00 31.8** | **-0.1** |
| **AYVA** | **Ayvalik** | **0.68** | **50** | P | | **Pg** | **22 00 22.3** | **-0.6** |
| AYVA | | | | S | | **Sg** | **22 00 31.8** | **-0.1** |
| **URLA** | **Izmir** | **0.69** | **138** | *i* P | | **Pg** | **22 00 22.3** | **-0.7** |
| URLA | | | | *i* S | | **Sb** | **22 00 33.0** | **-0.5** |
| **URLA** | **Izmir** | **0.69** | **138** | P | | **Pg** | **22 00 22.3** | **-0.7** |
| URLA | | | | S | | **Sb** | **22 00 33.0** | **-0.5** |
| **DKL** | **Dikili** | **0.72** | **74** | *e*PG | | **Pg** | **22 00 23.1** | **-0.5** |
| **DKL** | **Dikili** | **0.72** | **74** | *e*Pg | | **Pg** | **22 00 23.2** | **-0.5** |
| **ZEY** | **˙zmir** | **0.74** | **149** | P | | **Pg** | **22 00 23.0** | **-1.0** |
| ZEY | | | | S | | **Sb** | **22 00 34.6** | **-0.4** |
| **BLCB** | **Balcova** | **0.94** | **121** | *e*PG | | **Pg** | **22 00 26.9** | **-1.0** |
| BLCB | | | | *e*SG | | **Sg** | **22 00 40.3** | **+0.1** |
| **BLCB** | **Balcova** | **0.94** | **121** | *e*Pg | | **Pg** | **22 00 26.9** | **-1.0** |
| BLCB | | | | *e*Sg | | **Sg** | **22 00 40.3** | **+0.1** |
| **BOZC** | **Bozcaada** | **0.97** | **2** | P | | **Pg** | **22 00 28.0** | **-0.3** |
| BOZC | | | | S | | **Sb** | **22 00 42.1** | **+0.6** |
| **EZN** | **Ezine** | **0.98** | **14** | *e*PG | | **Pg** | **22 00 28.2** | **-0.4** |
| EZN | | | | *e*SG | | **Sn** | **22 00 42.8** | **-0.8** |
| **EZN** | **Ezine** | **0.98** | **14** | *e*Pg | | **Pg** | **22 00 28.2** | **-0.4** |
| EZN | | | | *e*Sg | | **Sn** | **22 00 42.8** | **-0.8** |
| **LIA** | **Limnos Island** | **1.21** | **328** | *e*PN | | **Pg** | **22 00 33.0** | **0.0** |
| LIA | | | | *e*SN | | **Sn** | **22 00 48.7** | **-0.5** |
| **LIA** | **Limnos Island** | **1.21** | **328** | *e*Pn | | **Pg** | **22 00 33.0** | **0.0** |
| LIA | | | | *e*Sn | | **Sn** | **22 00 48.7** | **-0.5** |
| **GADA** | **Gvkgeada** | **1.32** | **356** | *e*PN | | **Pb** | **22 00 34.4** | **-0.2** |
| **GADA** | **Gvkgeada** | **1.32** | **356** | *e*Pn | | **Pb** | **22 00 34.4** | **-0.2** |
| **SMG** | **Samos** | **1.33** | **151** | *e*PN | | **Pn** | **22 00 34.2** | **-0.3** |
| SMG | | | | *e*SN | | **Sg** | **22 00 52.8** | **+0.2** |
| **SMG** | **Samos** | **1.33** | **151** | *e*Pn | | **Pn** | **22 00 34.2** | **-0.3** |
| SMG | | | | *e*Sn | | **Sg** | **22 00 52.8** | **+0.2** |
| **AKHS** | **Akhisar** | **1.41** | **89** | *i* P | | **Pn** | **22 00 35.6** | **+0.1** |
| AKHS | | | | *i* S | | **Sg** | **22 00 56.3** | **+1.3** |
| **AKHS** | **Akhisar** | **1.41** | **89** | P | | **Pn** | **22 00 35.6** | **+0.1** |
| AKHS | | | | S | | **Sg** | **22 00 56.3** | **+1.3** |
| **AKS** | **Akhisar** | **1.41** | **89** | *e*PN | | **Pn** | **22 00 35.7** | **+0.2** |
| **AKS** | **Akhisar** | **1.41** | **89** | *e*Pn | | **Pn** | **22 00 35.7** | **+0.2** |
| **BALY** | **Balya** | **1.52** | **55** | *i* P | | **Pn** | **22 00 36.7** | **-0.4** |
| BALY | | | | *i* S | | **Sg** | **22 01 00.0** | **+1.5** |
| **BALY** | **Balya** | **1.52** | **55** | P | | **Pn** | **22 00 36.7** | **-0.4** |
| BALY | | | | S | | **Sg** | **22 01 00.0** | **+1.5** |
| **GCAM** | **G?zelcaml?** | **1.52** | **140** | *i* P | | **Pb** | **22 00 38.0** | **0.0** |
| GCAM | | | | *i* S | | **Sg** | **22 00 59.7** | **+1.2** |
| **GCAM** | **G?zelcaml?** | **1.52** | **140** | P | | **Pb** | **22 00 38.0** | **0.0** |
| GCAM | | | | S | | **Sg** | **22 00 59.7** | **+1.2** |
| **GELI** | **Tayfur-Gelibol** | **1.56** | **13** | *e*PN | | **Pb** | **22 00 38.3** | **-0.5** |
| **GELI** | **Tayfur-Gelibol** | **1.56** | **13** | *e*Pn | | **Pb** | **22 00 38.3** | **-0.5** |
| **LPK** | **Lapseki** | **1.60** | **21** | *e*PN | | **Pn** | **22 00 38.4** | **+0.2** |
| **LPK** | **Lapseki** | **1.60** | **21** | *e*Pn | | **Pn** | **22 00 38.4** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **1.64** | **347** | *e*PN | | **Pn** | **22 00 39.1** | **+0.4** |
| SMTH | | | | *e*SN | | **Sb** | **22 01 01.0** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **1.64** | **347** | *e*Pn | | **Pn** | **22 00 39.1** | **+0.4** |
| SMTH | | | | *e*Sn | | **Sb** | **22 01 01.0** | **+0.2** |
| **BALB** | **Balikesir** | **1.64** | **62** | *e*PN | | **Pn** | **22 00 38.5** | **-0.2** |
| **BALB** | **Balikesir** | **1.64** | **62** | *e*Pn | | **Pn** | **22 00 38.5** | **-0.2** |
| **EREA** | **Eretria** | **1.69** | **255** | *e*PN | | **Pb** | **22 00 40.5** | **-0.5** |
| **EREA** | **Eretria** | **1.69** | **255** | *e*Pn | | **Pb** | **22 00 40.5** | **-0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.74** | **122** | *e*PN | | **Pn** | **22 00 40.6** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.74** | **122** | *e*Pn | | **Pn** | **22 00 40.6** | **+0.3** |
| **GONE** | **Gonen-Balikesi** | **1.75** | **47** | *e*PN | | **Pn** | **22 00 40.6** | **+0.4** |
| **GONE** | **Gonen-Balikesi** | **1.75** | **47** | *e*Pn | | **Pn** | **22 00 40.6** | **+0.4** |
| **KRBG** | **Karabiga-Canak** | **1.81** | **33** | *e*PN | | **Pn** | **22 00 41.1** | **0.0** |
| **KRBG** | **Karabiga-Canak** | **1.81** | **33** | *e*Pn | | **Pn** | **22 00 41.1** | **0.0** |
| **ERIK** | **Erikli-Kesan** | **1.83** | **12** | *e*PN | | **Pn** | **22 00 41.8** | **+0.4** |
| **ERIK** | **Erikli-Kesan** | **1.83** | **12** | *e*Pn | | **Pn** | **22 00 41.8** | **+0.4** |
| **APE** | **Apeiranthos** | **1.84** | **192** | *e*PN | | **Pn** | **22 00 41.0** | **-0.6** |
| **APE** | **Apeiranthos** | **1.84** | **192** | *e*PB | | **Pn** | **22 00 40.2** | **-1.4** |
| APE | | | | *e*SN | | **Sn** | **22 01 05.6** | **+0.6** |
| **APE** | **Apeiranthos** | **1.84** | **192** | *e*Pn | | **Pn** | **22 00 41.0** | **-0.6** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| APE | | | | *e*Sn | **Sn** | 22 01 05.6 | +0.6 | |
| **AYDN** | **Tasoluk** | **1.90** | **129** | *i* P | **Pg** | 22 00 46.5 | +0.2 | |
| **AYDN** | **Tasoluk** | **1.90** | **129** | P | **Pg** | 22 00 46.5 | +0.2 | |
| AYDN | | | | S | **Sg** | 22 01 13.7 | +2.7 | |
| **ALN** | **Alexandroupoli** | **2.02** | **1** | *e*PB | **Pn** | 22 00 43.6 | -0.3 | |
| **RKY** | **Sarkoy-Tekirda** | **2.02** | **26** | *e*PN | **Pn** | 22 00 44.3 | +0.3 | |
| **RKY** | **Sarkoy-Tekirda** | **2.02** | **26** | *e*Pn | **Pn** | 22 00 44.3 | +0.3 | |
| **MANT** | **Manisa** | **2.03** | **100** | *i* P | **Pg** | 22 00 48.7 | 0.0 | |
| **MANT** | **Manisa** | **2.03** | **100** | P | **Pg** | 22 00 48.7 | 0.0 | |
| MANT | | | | S | **Sg** | 22 01 14.9 | 0.0 | |
| **DURS** | **Dursunbey** | **2.04** | **68** | *i* P | **Pn** | 22 00 44.7 | +0.3 | |
| **DURS** | **Dursunbey** | **2.04** | **68** | P | **Pn** | 22 00 44.7 | +0.3 | |
| DURS | | | | S | **Sg** | 22 01 15.4 | 0.0 | |
| **KULA** | **Kula-Manisa** | **2.10** | **99** | *e*PN | **Pn** | 22 00 45.8 | +0.6 | |
| **KULA** | **Kula-Manisa** | **2.10** | **99** | *e*Pn | **Pn** | 22 00 45.8 | +0.6 | |
| **MRMT** | **Marmara Adasi** | **2.11** | **35** | *e*PN | **Pn** | 22 00 46.1 | +0.8 | |
| **MRMT** | **Marmara Adasi** | **2.11** | **35** | *e*Pn | **Pn** | 22 00 46.1 | +0.8 | |
| **DEMI** | **Demirci** | **2.11** | **85** | *i* P | **Pb** | 22 00 48.5 | +0.2 | |
| **DEMI** | **Demirci** | **2.11** | **85** | P | **Pb** | 22 00 48.5 | +0.2 | |
| DEMI | | | | S | **Sg** | 22 01 16.6 | -1.2 | |
| **OUR** | **Ouranopolis** | **2.14** | **314** | *e*PB | **Pn** | 22 00 45.7 | +0.1 | |
| **SRS** | **Serrai** | **2.91** | **321** | *e*PN | **Pn** | 22 00 57.2 | +1.0 | |
| **SRS** | **Serrai** | **2.91** | **321** | *e*Pn | **Pn** | 22 00 57.2 | +1.0 | |

**IDC 19 22:06:47.3±4.5, 3°80S×149°53E, h0km, mb3.4/2, mb1 3.8/2, mb1mx3.3/23, mbtmp3.5/2, Error ellipse: s-maj=189.9km s-min=48.4km az=111.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.84** | **222** | P | P | 22 11 41.2 | -0.4 |
| | 1.8nm,0.9s,baz=46,slow=10,SNR=8.0 | | | | | | |
| **ASAR** | **Alice Springs** | **24.86** | **216** | P | P | 22 12 12.1 | +0.3 |
| | 0.7nm,0.6s,baz=55,slow=7.8,SNR=8.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.90** | **288** | PKPbc | PKPbc | 22 26 31.9 | -0.9 |
| | 0.8nm,1.1s,baz=61,slow=3.7,SNR=2.9 | | | | | | |

**IDC 19 22:10:48.8±4.6, 3°48S×148°47E, h0km, mb3.3/2, mb1 3.7/2, mb1mx3.3/23, mbtmp3.4/2, Error ellipse: s-maj=179.9km s-min=48.5km az=107.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.40** | **219** | P | P | 22 15 39.5 | +1.1 |
| | 1.3nm,0.9s,baz=44,slow=11,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **24.52** | **214** | P | P | 22 16 09.4 | -0.8 |
| | 1.0nm,0.9s,baz=40,slow=8.8,SNR=6.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.26** | **39** | T | T | 22 45 31.4 | |
| | baz=220,slow=76,SNR=57 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.27** | **39** | T | T | 22 45 45.7 | |
| | baz=220,slow=76,SNR=41 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.28** | **39** | T | T | 22 45 48.5 | |
| | baz=220,slow=76,SNR=45 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.31** | **37** | T | T | 22 47 05.1 | |
| | baz=218,slow=76,SNR=20 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.32** | **37** | T | T | 22 47 06.2 | |
| | baz=218,slow=76,SNR=22 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.32** | **37** | T | T | 22 47 04.4 | |
| | baz=218,slow=76,SNR=46 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.79** | **288** | PKPbc | PKPdf | 22 30 30.1 | -0.5 |
| | 0.3nm,0.8s,baz=64,slow=3.4,SNR=2.2 | | | | | | |

*ISCJB **19** 22:11:28.9±0.4, 28°.19S±0°.07×112°.89W±0°.08, h10km, mb4.1/17, MS3.9/2, Error ellipse: s-maj=11.5km s-min=9.8km az=137.0*

*IDC **19** 22:11:29.3±0.7, 28°.13S×112°.97W, h0km, mb3.9/15, mb1 4.0/15, mb1mx3.9/28, mbtmp3.9/15, MS3.9/2, Ms1 3.9/2, ms1mx3.4/23, Error ellipse: s-maj=22.6km s-min=15.9km az=166.0*

*NEIC **19** 22:11:30.6±0.3, 28°.15S×112°.91W, h10km, mb4.8/7, Error ellipse: s-maj=10.0km s-min=8.5km az=138.0*

**ISC 19 22:11:30.7±0.5, 28°.13S±0°.09×112°.93W±0°.09, h10km, n34, σ0°99/30, mb4.0/19, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TRIS** | **Tristan da Cun** | **8.93** | **177** | *e*Pn | **Pn** | **22 13 39.2** | **-0.6** |
| **H10S2** | **ASCENSION HYDR** | **19.14** | **355** | T | T | 22 35 24.0 | |
| | baz=175,slow=75,SNR=76 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **19.15** | **355** | T | T | 22 35 24.7 | |
| | baz=175,slow=75,SNR=80 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **19.16** | **355** | T | T | 22 35 25.4 | |
| | baz=175,slow=75,SNR=74 | | | | | | |
| **TSUM** | **Tsumeb** | **29.26** | **79** | P | **P** | **22 17 33.2** | **-0.1** |
| | 2.2nm,0.9s,baz=221,slow=11,SNR=2.5 | | | | | | |
| TSUM | | | | LR | LR | 22 27 42.7 | |
| | comp=Z,144nm,18.6s,baz=232,slow=33 | | | | | | |
| **BOSA** | **Boshof** | **33.51** | **100** | P | **P** | **22 18 10.3** | **-0.4** |
| | 3.3nm,1.0s,baz=253,slow=11,SNR=2.1 | | | | | | |
| **BOSA** | **Boshof** | **33.51** | **100** | *e*P | **P** | **22 18 09.0** | **-1.7** |
| | 134nm,2.2s | | | | | | |
| **LBTB** | **Lobatse** | **34.50** | **94** | *e*P | **P** | **22 18 17.4** | **-1.9** |
| | 243nm,3.0s | | | | | | |
| **BDFB** | **Brasilia** | **34.72** | **284** | P | **P** | **22 18 21.8** | **+0.5** |
| | 2.0nm,0.6s,baz=114,slow=12,SNR=2.3 | | | | | | |
| **DBIC** | **Dimbokro** | **35.47** | **14** | P | **P** | **22 18 27.2** | **-0.3** |
| | 4.2nm,1.1s,baz=192,slow=18,SNR=1.6 | | | | | | |
| **DBIC** | **Dimbokro** | **35.47** | **14** | *e*P | **P** | **22 18 27.2** | **-0.3** |
| | 27nm,1.4s | | | | | | |
| **MATP** | **Matopo** | **38.39** | **88** | P | **P** | **22 18 52.0** | **-0.7** |
| | 2.7nm,0.8s,baz=278,slow=2.3,SNR=3.1 | | | | | | |
| **CPUP** | **Villa Florida** | **39.36** | **262** | P | **P** | **22 19 01.4** | **+0.9** |
| | 0.8nm,0.3s,baz=90,slow=8.1,SNR=3.0 | | | | | | |
| **LSZ** | **Lusaka** | **40.10** | **80** | P | **P** | **22 19 08.9** | **+2.0** |
| | 0.8nm,0.8s,baz=253,slow=18,SNR=2.8 | | | | | | |
| **LSZ** | **Lusaka** | **40.10** | **80** | *e*P | **P** | **22 19 08.9** | **+2.0** |
| | 61nm,2.2s | | | | | | |
| **TRQA** | **Tornquist** | **41.85** | **243** | *e*P | **P** | **22 19 20.8** | **-0.3** |
| | 39nm,2.2s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **43.41** | **21** | *e*P | **P** | **22 19 34.7** | **+0.9** |
| **TORD** | **Torodi Ar. Bea** | **43.41** | **21** | P | **P** | **22 19 34.4** | **+0.7** |
| | 1.9nm,0.8s,baz=198,slow=7.7,SNR=9.2 | | | | | | |
| TORD | | | | LR | LR | 22 33 08.6 | |
| | comp=Z,258nm,22.0s,baz=305,slow=30 | | | | | | |
| **SNAA** | **Sanae** | **43.94** | **175** | P | **P** | **22 19 37.8** | **+0.2** |
| | 0.4nm,0.9s,baz=312,slow=15,SNR=2.0 | | | | | | |
| **SNAA** | **Sanae** | **43.94** | **175** | *e*P | **P** | **22 19 37.8** | **+0.2** |
| | 28nm,2.7s | | | | | | |
| **CFAA** | **Coronel Fontan** | **47.66** | **252** | P | **P** | **22 20 05.8** | **-1.7** |
| | 0.4nm,0.7s,baz=112,slow=5.4,SNR=6.1 | | | | | | |
| **LPAZ** | **La Paz** | **52.06** | **271** | P | **P** | **22 20 41.8** | **0.0** |
| | 1.2nm,0.8s,baz=90,slow=3.0,SNR=2.8 | | | | | | |
| **MAW** | **Mawson** | **58.92** | **154** | P | **P** | **22 21 30.3** | **+0.7** |
| | 0.8nm,0.8s,baz=291,slow=8.6,SNR=2.1 | | | | | | |
| **MAW** | **Mawson** | **58.92** | **154** | *e*P | **P** | **22 21 30.3** | **+0.7** |
| | 10nm,3.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **62.09** | **180** | *e*P | **P** | **22 21 52.2** | **+0.6** |
| | 129nm,3.0s | | | | | | |
| **WLF** | **Walferdange** | **79.29** | **12** | *e*P | P | 22 23 30.6 | -5.5 |
| | 30nm,1.4s | | | | | | |
| **BR231** | **Keskin MP Arra** | **79.89** | **34** | *e*P | **P** | **22 23 38.6** | **-1.2** |
| **BRTR** | **Keskin Array B** | **80.23** | **35** | P | **P** | **22 23 42.4** | **+0.8** |
| | 0.4nm,0.3s,baz=214,slow=3.6,SNR=4.4 | | | | | | |
| **BR101** | **Keskin Array S** | **80.23** | **35** | *e*P | **P** | **22 23 42.4** | **+0.8** |
| **GEC2** | **GERESS Array S** | **80.25** | **17** | *e*P | **P** | **22 23 40.8** | **-0.7** |
| **GERES** | **GERESS Array B** | **80.25** | **17** | P | **P** | **22 23 40.8** | **-0.7** |
| | 0.4nm,0.6s,baz=232,slow=4.8,SNR=3.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **86.88** | **25** | P | **P** | **22 24 14.9** | **-0.4** |
| | 0.2nm,0.3s,baz=222,slow=4.4,SNR=1.7 | | | | | | |
| **AKBB** | **Malin Array Si** | **86.88** | **25** | *e*P | **P** | **22 24 14.9** | **-0.4** |
| **TKL** | **Tuckaleechee C** | **92.08** | **310** | *e*P | **P** | **22 24 39.7** | **-0.5** |

**IDC 19 22:19:17.2±5.0, 3°36S×148°39E, h0km, mb3.6/2, mb1 3.9/2, mb1mx3.4/25, mbtmp3.7/2, Error ellipse: s-maj=200.9km s-min=48.2km az=107.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.44** | **219** | P | P | 22 24 06.8 | -0.3 |
| | 2.5nm,1.1s,baz=44,slow=11,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **24.57** | **213** | P | P | 22 24 39.3 | +0.2 |
| | 2.0nm,1.0s,baz=46,slow=8.1,SNR=13 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.22** | **39** | T | T | 22 54 16.5 | |
| | baz=220,slow=76,SNR=80 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.23** | **39** | T | T | 22 54 17.0 | |
| | baz=220,slow=76,SNR=63 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.24** | **39** | T | T | 22 54 17.9 | |
| | baz=220,slow=76,SNR=63 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.26** | **38** | T | T | 22 55 34.5 | |
| | baz=218,slow=76,SNR=45 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.28** | **38** | T | T | 22 55 38.8 | |
| | baz=218,slow=76,SNR=53 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.28** | **38** | T | T | 22 55 35.8 | |
| | baz=218,slow=76,SNR=64 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.68** | **288** | PKPbc | PKPdf | 22 38 58.1 | -0.6 |
| | 0.4nm,0.8s,baz=66,slow=3.5,SNR=2.8 | | | | | | |

**IDC 19 22:20:24.1±6.9, 3°14S×147°77E, h0km, mb3.6/2, mb1 4.0/2, mb1mx3.4/25, mbtmp3.7/2, Error ellipse: s-maj=300.7km s-min=48.4km az=106.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.23** | **217** | P | P | 22 25 12.6 | +0.7 |
| | 1.7nm,0.6s,baz=41,slow=12,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **24.42** | **212** | P | P | 22 25 44.2 | -0.5 |
| | 1.9nm,0.8s,baz=43,slow=7.9,SNR=3.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.03** | **288** | PKPbc | PKPbc | 22 40 03.0 | -0.9 |
| | 0.6nm,0.9s,baz=102,slow=2.0,SNR=6.3 | | | | | | |

**IDC 19 22:25:33.4±2.0, 3°55S×148°13E, h0km, mb3.7/4, mb1 3.9/4, mb1mx3.5/32, mbtmp3.7/4, MS3.8/2, Ms1 3.8/2, ms1mx3.1/24, Error ellipse: s-maj=68.9km s-min=30.6km az=93.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **17.33** | **349** | LR | LR | 22 34 33.2 | |
| | comp=Z,192nm,20.4s,baz=158,slow=31 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.13** | **218** | P | P | 22 30 20.1 | 0.0 |
| | 4.3nm,1.2s,baz=44,slow=12,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **24.27** | **213** | P | P | 22 30 52.9 | +0.3 |
| | 3.0nm,0.9s,baz=45,slow=8.7,SNR=18 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **28.53** | **39** | T | T | 23 00 29.8 | |
| | baz=220,slow=76,SNR=135 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **28.54** | **39** | T | T | 23 00 22.4 | |
| | baz=220,slow=76,SNR=90 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **28.55** | **39** | T | T | 23 00 23.4 | |
| | baz=220,slow=76,SNR=108 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.57** | **38** | T | T | 23 01 48.6 | |
| | baz=218,slow=76,SNR=69 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.58** | **38** | T | T | 23 01 49.7 | |
| | baz=218,slow=76,SNR=83 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.59** | **38** | T | T | 23 01 50.0 | |
| | baz=218,slow=76,SNR=158 | | | | | | |
| **VNDA** | **Vanda** | **74.28** | **177** | P | P | 22 37 12.0 | -0.1 |
| | 0.3nm,0.7s,baz=329,slow=6.7,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **76.35** | **320** | P | P | 22 37 24.4 | -0.1 |
| | 0.2nm,0.3s,baz=101,slow=7.5,SNR=6.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.98** | **52** | LR | LR | 23 17 56.8 | |
| | comp=Z,65nm,18.0s,baz=42,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.49** | **288** | PKPbc | PKPdf | 22 45 13.8 | -0.8 |
| | 0.8nm,0.8s,baz=66,slow=3.6,SNR=5.3 | | | | | | |

*CSEM **19** 22:25:52.4±0.3, 30°.86N×56°.62E, h10km, ML3.7, Error ellipse: s-maj=7.5km s-min=6.1km az=65.0*

**TEH 19 22:25:52.6, 30°.85N×56°.55E, h12km, ML3.7, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KHGB** | **Koh Gabri** | **0.48** | **188** | *e*Pg | Pg | 22 26 01.6 | -0.8 |
| **KHGB** | **Koh Gabri** | **0.48** | **188** | *e*Pg | Pg | 22 26 01.6 | -0.8 |
| **KRBR** | **Kerman** | **0.89** | **168** | *e*Pg | Pg | 22 26 09.5 | -0.6 |
| KRBR | | | | *e*Sg | Sb | 22 26 22.7 | +0.3 |
| **CHMN** | **Cheshme madani** | **1.30** | **139** | *e*Pg | Pn | 22 26 16.1 | -1.0 |
| **CHMN** | **Cheshme madani** | **1.30** | **139** | *e*Pg | Pn | 22 26 16.1 | -1.0 |
| **IMEH** | **Mehriz** | **1.75** | **288** | *e*Pn | Pn | 22 26 22.2 | -0.9 |
| IMEH | | | | *e*Sn | Sn | 22 26 45.1 | -0.5 |
| IMEH | | | | *e* | | 22 26 49.4 | |
| | comp=Z,11μm,0.1s | | | | | | |
| **IMEH** | **Mehriz** | **1.75** | **288** | *e*Pn | Pn | 22 26 22.2 | -0.9 |
| IMEH | | | | *e*Sn | Sn | 22 26 45.1 | -0.4 |
| **ICHK** | **Chekchek** | **2.30** | **308** | *e*Pn | Pn | 22 26 30.2 | -0.4 |
| ICHK | | | | *e* | | 22 27 06.2 | |
| | comp=Z,7μm,0.2s | | | | | | |
| **ICHK** | **Chekchek** | **2.30** | **308** | *e*Pn | Pn | 22 26 30.2 | -0.5 |
| **IKOO** | **Kooshah** | **2.61** | **53** | *e*Pn | Pn | 22 26 34.7 | -0.3 |
| IKOO | | | | *e* | | 22 27 22.7 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **IKOO** | **Kooshah** | **2.61** | **53** | *e*Pn | Pn | 22 26 34.7 | -0.3 |
| **ISAD** | **Sadrabad** | **2.67** | **294** | *e*Pn | Pn | 22 26 36.2 | +0.3 |
| ISAD | | | | *e* | | 22 27 16.7 | |
| | comp=Z,5μm,0.1s | | | | | | |
| **ISAD** | **Sadrabad** | **2.67** | **294** | *e*Pn | Pn | 22 26 36.2 | +0.4 |
| **TABS** | **Tabas** | **2.83** | **10** | *e*Pn | Pn | 22 26 37.6 | -0.2 |
| TABS | | | | *e*Sg | Sb | 22 27 18.5 | +0.5 |
| **IPAR** | **Pars** | **3.19** | **253** | *e*Pn | Pn | 22 26 45.8 | +2.7 |
| IPAR | | | | *e* | | 22 27 44.6 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **IPAR** | **Pars** | **3.19** | **253** | *e*Pn | Pn | 22 26 45.8 | +2.8 |
| **ISRV** | **Sarvestan** | **3.32** | **245** | *e*Pn | Pn | 22 26 47.0 | +2.2 |
| ISRV | | | | *e* | | 22 27 43.7 | |
| | comp=Z,779nm,0.3s | | | | | | |
| **ISRV** | **Sarvestan** | **3.32** | **245** | *e*Pn | Pn | 22 26 47.0 | +2.2 |
| **IRAM** | **Ramesheh** | **3.69** | **286** | *e*Pn | Pn | 22 26 50.2 | +0.4 |
| IRAM | | | | *e* | | 22 27 53.3 | |
| | comp=Z,444nm,0.4s | | | | | | |
| **IRAM** | **Ramesheh** | **3.69** | **286** | *e*Pn | Pn | 22 26 50.2 | +0.4 |
| **NASN** | **Na'in** | **3.73** | **302** | *e*Pn | Pn | 22 26 50.9 | +0.4 |
| **GHIR** | **Ghir-Karzin** | **4.02** | **231** | *e*Pn | Pn | 22 26 55.7 | +1.5 |
| **IZEF** | **Zefreh** | **4.13** | **301** | *e*Pn | Pn | 22 26 56.2 | +0.3 |
| IZEF | | | | *e* | | 22 28 05.6 | |
| | comp=Z,452nm,0.3s | | | | | | |
| **IZEF** | **Zefreh** | **4.13** | **301** | *e*Pn | Pn | 22 26 56.2 | +0.3 |
| **IKAZ** | **Kazeroun** | **4.21** | **256** | *e*Pn | Pn | 22 26 58.1 | +1.0 |
| IKAZ | | | | *e* | | 22 27 51.6 | |
| | comp=Z,559nm,0.2s | | | | | | |
| **IKAZ** | **Kazeroun** | **4.21** | **256** | *e*Pn | Pn | 22 26 58.1 | +1.0 |
| **SHRT** | **Shahrakht** | **4.22** | **48** | *e*Pn | Pn | 22 26 57.0 | +0.2 |
| **IDMV** | **Damavand** | **6.05** | **322** | *e*Pn | Pn | 22 27 22.6 | +0.4 |
| IDMV | | | | *e* | | 22 29 12.5 | |
| | comp=Z,154nm,0.3s | | | | | | |
| **IDMV** | **Damavand** | **6.05** | **322** | *e*Pn | Pn | 22 27 22.6 | +0.4 |

*NIED **19** 22:32:00, 23°.10N×121°.40E, h8km, Mw4.0 Best double couple: M0 1.23000×10^15 NP1:φs=250.00000°, δ52.00000°, λ-145.00000°. NP2:φs=137.00000°, δ63.00000°, λ-44.00000°.*

*JMA **19** 22:32:14.9±0.1, 23°.15N×121°.39E, h1km±2km, M3.9*

*TAP **19** 22:32:15.9, 23°.24N×121°.06E, h4km, ML4.3, B*

*IDC **19** 22:32:15.4±1.1, 23°.07N×121°.33E, h0km, mb3.7/6, mb1 3.7/7, mb1mx3.5/42, mbtmp3.7/7, ML2.5/2, MS3.6/2, Ms1 3.6/2, ms1mx3.0/40, Error ellipse: s-maj=37.2km s-min=20.2km az=66.0*

*ISCJB **19** 22:32:16.1±0.3, 23°.19N±0°.01×121°.12E±0°.02, h6km±2km, mb3.6/6, MS3.6/2, Error ellipse: s-maj=2.6km s-min=2.1km az=42.8*

**ISC 19 22:32:16.2±0.9, 23°.20N±0°.02×121°.13E±0°.02, h8km±7km, n97, σ0°88/130, mb3.6/6, 13C-19D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ELDTW** | **Lidau** | **0.10** | **263** | ⇓*i*P | **Pg** | **22 32 17.8** | **-0.8** |
| | baz=211 | | | | | | |
| **TWF1** | **Yuli** | **0.22** | **46** | ⇓*i*P | **Pg** | **22 32 21.6** | **+1.0** |
| | baz=64 | | | | | | |
| TWF1 | | | | *e*S | **Sg** | **22 32 24.8** | **+1.2** |
| | baz=64 | | | | | | |
| **CHKT** | **Chengkung** | **0.24** | **115** | ⇑P | Pg | 22 32 23.8 | +2.8 |
| | baz=117 | | | | | | |
| CHKT | | | | *e*S | Sg | 22 32 30.3 | +6.0 |
| | baz=117 | | | | | | |
| **YUS** | **Yu-Shan** | **0.33** | **331** | ⇑*i*P | **Pg** | **22 32 21.9** | **-1.0** |
| | baz=329 | | | | | | |
| **STYT** | **Tauyuan** | **0.34** | **264** | ⇓*i*P | **Pg** | **22 32 22.1** | **-0.8** |
| | baz=254 | | | | | | |
| STYT | | | | *i* S | **Sg** | **22 32 25.8** | **-1.7** |
| | baz=254 | | | | | | |
| **EHY** | **Hungye** | **0.35** | **31** | ⇓*i*P | **Pg** | **22 32 23.3** | **+0.1** |
| | baz=43 | | | | | | |
| EHY | | | | *i* S | **Sg** | **22 32 27.8** | **0.0** |
| | baz=43 | | | | | | |
| **TWG** | **Pinlang** | **0.38** | **187** | ⇓*i*P | **Pb** | **22 32 24.5** | **-0.7** |
| | baz=178 | | | | | | |
| TWG | | | | S | **Sb** | **22 32 30.0** | **-1.3** |
| | baz=178 | | | | | | |
| **ALS** | **Alishan** | **0.43** | **316** | ⇑*i*P | **Pg** | **22 32 23.7** | **-0.9** |
| | baz=320 | | | | | | |
| **TTN** | **Taitung** | **0.45** | **178** | *e*P | **Pb** | **22 32 26.1** | **-0.2** |
| | baz=169 | | | | | | |
| **WTP** | **Ta-pu** | **0.47** | **276** | ⇑*i*P | **Pg** | **22 32 24.9** | **-0.5** |
| | baz=270 | | | | | | |
| **SGST** | **Jiashian** | **0.51** | **257** | ⇓*i*P | **Pg** | **22 32 26.0** | **-0.1** |
| | baz=243 | | | | | | |
| SGST | | | | S | **Sg** | **22 32 32.7** | **-0.2** |
| | baz=243 | | | | | | |
| **CHN1** | **Nanshi** | **0.55** | **268** | ⇑*i*P | **Pg** | **22 32 26.9** | **+0.1** |
| | baz=263 | | | | | | |
| CHN1 | | | | *i* S | **Sg** | **22 32 34.5** | **+0.5** |
| | baz=263 | | | | | | |
| **WDT** | **Danda** | **0.55** | **1** | ⇓*i*P | **Pg** | **22 32 25.9** | **-1.0** |
| | baz=18 | | | | | | |
| **CHN5** | **Tsauling** | **0.57** | **314** | ⇑*i*P | **Pg** | **22 32 26.7** | **-0.5** |
| | baz=316 | | | | | | |
| **TWK** | **Hsinying** | **0.59** | **276** | ⇑*i*P | **Pg** | **22 32 27.4** | **-0.2** |
| | baz=273 | | | | | | |
| TWK | | | | *e*S | **Sg** | **22 32 35.0** | **-0.4** |
| | baz=273 | | | | | | |
| **ECL** | **Taimali** | **0.62** | **195** | P | **Pg** | **22 32 28.3** | **+0.1** |
| | baz=173 | | | | | | |
| **TEGC** | **Jichi Village** | **0.63** | **37** | *e*P | **Pn** | **22 32 31.0** | **-0.5** |
| | baz=33 | | | | | | |
| **SSD** | **Sandimen** | **0.64** | **225** | ⇓*i*P | **Pg** | **22 32 28.0** | **-0.5** |
| | baz=218 | | | | | | |
| **ESL** | **Shilin** | **0.67** | **25** | ⇓*i*P | **Pg** | **22 32 28.8** | **-0.4** |
| | baz=41 | | | | | | |
| ESL | | | | *e*S | **Sg** | **22 32 38.1** | **+0.2** |
| | baz=41 | | | | | | |
| **CHN2** | **Minshiung** | **0.68** | **299** | P | **Pg** | **22 32 29.4** | **0.0** |
| | baz=298 | | | | | | |
| CHN2 | | | | *e*S | **Sg** | **22 32 38.7** | **+0.5** |
| | baz=298 | | | | | | |
| **WGK** | **Gukeng** | **0.71** | **313** | ⇑*i*P | **Pg** | **22 32 30.1** | **+0.2** |
| | baz=322 | | | | | | |
| WGK | | | | *e*S | **Sg** | **22 32 39.3** | **+0.3** |
| | baz=322 | | | | | | |
| **CHY** | **Chiayi** | **0.71** | **295** | ⇑*i*P | **Pg** | **22 32 29.6** | **-0.2** |
| | baz=294 | | | | | | |
| CHY | | | | *e*S | **Sg** | **22 32 39.2** | **+0.1** |
| | baz=294 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.71** | **343** | ⇓*i*P | **Pg** | **22 32 28.7** | **-1.2** |
| | baz=348 | | | | | | |
| **CHN3** | **Shinhua** | **0.71** | **260** | ⇑*i*P | **Pb** | **22 32 31.4** | **+0.6** |
| | baz=255 | | | | | | |
| CHN3 | | | | *i* S | **Sb** | **22 32 42.2** | **+1.4** |
| | baz=255 | | | | | | |
| **TYC** | **Yuchr** | **0.74** | **341** | ⇓*i*P | **Pg** | **22 32 29.4** | **-1.1** |
| | baz=352 | | | | | | |
| TYC | | | | *e*S | **Sg** | **22 32 40.7** | **+0.6** |
| | baz=352 | | | | | | |
| **TWM1** | **Shoushan** | **0.75** | **240** | ⇓P | **Pb** | **22 32 31.6** | **+0.1** |
| | baz=234 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.75** | **28** | *e*P | **Pg** | **22 32 30.7** | **0.0** |
| | baz=26 | | | | | | |
| **SGLT** | **Jiouru** | **0.75** | **231** | *e*P | **Pg** | **22 32 31.0** | **+0.4** |
| | baz=219 | | | | | | |
| SGLT | | | | *e*S | **Sn** | **22 32 45.1** | **+0.4** |
| | baz=219 | | | | | | |
| **WNT** | **Mingjian** | **0.79** | **329** | ⇑*i*P | **Pg** | **22 32 31.8** | **+0.5** |
| | baz=332 | | | | | | |
| WNT | | | | S | **Sg** | **22 32 42.5** | **+1.0** |
| | baz=332 | | | | | | |
| **TAI1** | **Yung-k'ang** | **0.84** | **259** | *e*P | **Pb** | **22 32 33.8** | **+0.8** |
| | baz=269 | | | | | | |
| TAI1 | | | | *e*S | **Sn** | **22 32 46.7** | **-0.2** |
| | baz=269 | | | | | | |
| **CHN8** | **Yiju** | **0.85** | **280** | *e*P | **Pg** | **22 32 32.2** | **-0.4** |
| | baz=278 | | | | | | |
| CHN8 | | | | *e*S | **Sg** | **22 32 44.7** | **+1.0** |
| | baz=278 | | | | | | |
| **EAST** | **Anshuo** | **0.85** | **198** | ⇓*i*P | **Pg** | **22 32 32.8** | **+0.2** |
| | baz=191 | | | | | | |
| **SCLT** | **Jiali** | **0.86** | **268** | *e*P | **Pb** | **22 32 33.4** | **0.0** |
| | baz=266 | | | | | | |
| SCLT | | | | *e*S | **Sb** | **22 32 46.2** | **+1.2** |
| | baz=266 | | | | | | |
| **TAW** | **Tawu** | **0.87** | **194** | ⇓*i*P | **Pg** | **22 32 33.0** | **+0.2** |
| | baz=174 | | | | | | |
| **HWA** | **Hwalien** | **0.89** | **30** | *e*P | **Pg** | **22 32 32.6** | **-0.7** |
| | baz=36 | | | | | | |
| **WSF** | **Szhu** | **0.94** | **298** | P | **Pg** | **22 32 33.5** | **-0.7** |
| | baz=298 | | | | | | |
| WSF | | | | *e*S | **Sg** | **22 32 45.6** | **-0.8** |
| | baz=298 | | | | | | |
| **SCZT** | **Fangliau** | **0.95** | **210** | ⇓*e*P | **Pg** | **22 32 34.1** | **-0.3** |
| | baz=197 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.95** | **8** | ⇓*e*P | **Pg** | **22 32 33.0** | **-1.5** |
| | baz=12 | | | | | | |
| WHF | | | | *e*S | **Sb** | **22 32 48.1** | **+0.1** |
| | baz=12 | | | | | | |
| **TWD** | **Chiawan** | **0.97** | **26** | ⇓*i*P | **Pg** | **22 32 34.2** | **-0.7** |
| | baz=17 | | | | | | |
| TWD | | | | *e*S | **Sb** | **22 32 47.8** | **-0.6** |
| | baz=17 | | | | | | |
| **KAU** | **Kaohsiung** | **0.98** | **230** | *e*P | **Pb** | **22 32 36.1** | **+0.6** |
| | baz=225 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.02** | **311** | *e*P | **Pg** | **22 32 34.6** | **-1.2** |
| | baz=311 | | | | | | |
| WTCT | | | | *e*S | **Sg** | **22 32 48.7** | **-0.3** |
| | baz=311 | | | | | | |
| **TCU** | **Taichung** | **1.03** | **336** | *e*P | **Pg** | **22 32 36.1** | **+0.1** |
| | baz=323 | | | | | | |
| TCU | | | | *e*S | **Sb** | **22 32 50.1** | **+0.2** |
| | baz=323 | | | | | | |
| **TWT** | **Tachien** | **1.05** | **2** | *e*P | **Pg** | **22 32 34.3** | **-2.0** |
| | baz=7.0 | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.10** | **220** | *e*P | **Pn** | **22 32 39.5** | **+1.5** |
| | baz=214 | | | | | | |
| **TWQ1** | **Liyutan** | **1.19** | **344** | P | **Pg** | **22 32 38.9** | **-0.1** |
| | baz=330 | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **22 32 55.0** | **+0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EGS** | | **1.79** | **24** | *eP* | | **Pb** | **22 32 49.1** | **-0.2** |
| | baz=47 | | | | | | | |
| **TWA** | **Mucha** | **1.82** | **13** | *eP* | | **Pb** | **22 32 49.4** | **-0.4** |
| | baz=36 | | | | | | | |
| **TAP** | **Taipei** | **1.86** | **11** | *eP* | | **Pb** | **22 32 50.6** | **+0.1** |
| | baz=13 | | | | | | | |
| TAP | | | | *eS* | | **Sb** | **22 33 14.0** | **+0.1** |
| | baz=13 | | | | | | | |
| **TAP1** | **Taipei** | **1.86** | **11** | *eP* | | **Pg** | **22 32 51.6** | **-0.3** |
| | baz=13 | | | | | | | |
| TAP1 | | | | *eS* | | **Sb** | **22 33 13.8** | **-0.3** |
| | baz=13 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.91** | **8** | *eP* | | **Pb** | **22 32 50.9** | **-0.4** |
| | baz=21 | | | | | | | |
| TWS1 | | | | *eS* | | **Sb** | **22 33 15.4** | **+0.1** |
| | baz=21 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.96** | **18** | *eP* | | **Pn** | **22 32 50.7** | **+0.9** |
| | baz=34 | | | | | | | |
| NWF | | | | *eS* | | **Sb** | **22 33 17.7** | **+1.0** |
| | baz=34 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.96** | **23** | *eP* | | **Pb** | **22 32 51.3** | **-0.9** |
| | baz=42 | | | | | | | |
| **JYNG** | **Yonaguni jima** | **2.08** | **53** | P | | **Pn** | **22 32 51.9** | **+0.5** |
| **YOJ** | **Yonaguni jima** | **2.13** | **54** | P | | **Pn** | **22 32 52.4** | **+0.3** |
| YOJ | | | | S | | **Sn** | **22 33 18.8** | **0.0** |
| **YOJ** | **Yonaguni jima** | **2.13** | **54** | *eP* | | **Pn** | **22 32 51.4** | **-0.7** |
| | baz=56 | | | | | | | |
| **PCYT** | **Pengchaiyu** | **2.57** | **19** | *eP* | | **Pb** | **22 33 01.7** | **-0.8** |
| | baz=30 | | | | | | | |
| **HATJ** | **Hateruma jima** | **2.60** | **70** | *eS* | | **Sn** | **22 33 30.2** | **-0.2** |
| **IRIF** | **Iriomote-Funau** | **2.64** | **64** | P | | **Pn** | **22 32 58.9** | **-0.2** |
| IRIF | | | | *eS* | | **Sn** | **22 33 30.9** | **-0.4** |
| **KNM** | **Kinmen** | **2.75** | **297** | *eP* | | **Pn** | **22 33 00.3** | **-0.3** |
| | baz=294 | | | | | | | |
| **JKRS** | **Kuro-shima** | **2.84** | **68** | P | | **Pn** | **22 33 01.9** | **+0.1** |
| **QZH** | **Quanzhou** | **2.89** | **307** | Pn | | **Pn** | **22 33 03.1** | **+0.5** |
| QZH | | | | Sn | | **Sn** | **22 33 36.3** | **-1.3** |
| QZH | | | | smax | | smax | | |
| | comp=N,400nm,0.6s | | | | | | | |
| QZH | | | | smax | | smax | | |
| | comp=E,370nm,0.7s | | | | | | | |
| **JISG** | **Ishigakijimahi** | **3.23** | **64** | P | | **Pn** | **22 33 06.6** | **-0.5** |
| JISG | | | | *eS* | | **Sn** | **22 33 43.0** | **-2.8** |
| **JTJ** | **Tarama** | **3.57** | **66** | *eS* | | **Sn** | **22 33 53.3** | **-1.1** |
| **JOW** | **Kunigami** | **7.42** | **59** | Pn | | **Pn** | **22 34 05.0** | **+0.1** |
| | comp=E,0.1nm,0.3s,baz=107,slow=19,SNR=3.7 | | | | | | | |
| **KSRS** | **Korea Array** | **15.36** | **21** | Pn | | **Pn** | **22 35 54.2** | **+0.9** |
| | comp=E,0.1nm,0.3s,baz=205,slow=13,SNR=1.8 | | | | | | | |
| **CD2** | **Chengdu** | **17.26** | **300** | *eP* | | **Pn** | **22 36 17.5** | **-0.2** |
| **GUMO** | **Guam** | **24.44** | **109** | LR | | LR | 22 45 24.3 | |
| | comp=E,45nm,19.6s,baz=252,slow=33 | | | | | | | |
| **SONM** | **Songino Array** | **27.25** | **338** | P | | **P** | **22 38 02.9** | **+1.9** |
| | comp=E,0.5nm,0.6s,baz=163,slow=11,SNR=2.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.01** | **317** | P | | **P** | **22 39 45.2** | **+2.0** |
| | comp=E,0.4nm,0.6s,baz=102,slow=7.6,SNR=3.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.04** | **328** | P | | **P** | **22 40 00.5** | **+0.5** |
| | comp=E,0.6nm,0.4s,baz=125,slow=5.2,SNR=3.2 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **42.60** | **86** | T | | T | 23 25 24.3 | |
| | baz=283,slow=74,SNR=12 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **42.61** | **86** | T | | T | 23 25 24.8 | |
| | baz=283,slow=74,SNR=12 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **42.62** | **86** | T | | T | 23 25 25.5 | |
| | baz=283,slow=74,SNR=13 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **42.71** | **87** | T | | T | 23 25 37.7 | |
| | baz=284,slow=75,SNR=20 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **42.71** | **87** | T | | T | 23 25 35.3 | |
| | baz=284,slow=75,SNR=8.4 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **42.72** | **87** | T | | T | 23 25 36.5 | |
| | baz=284,slow=75,SNR=8.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.78** | **162** | P | | **P** | **22 40 28.6** | **-1.9** |
| | comp=E,0.9nm,0.8s,baz=343,slow=8.7,SNR=3.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **48.21** | **164** | P | | **P** | **22 40 57.2** | **-0.3** |
| | comp=E,0.2nm,0.4s,baz=348,slow=7.5,SNR=4.1 | | | | | | | |
| **GEYT** | **Alibeck** | **55.25** | **301** | P | | P | 22 41 54.0 | +3.9 |
| | comp=E,0.9nm,0.6s,baz=76,slow=6.1,SNR=2.8 | | | | | | | |
| **ASF** | **Jabal al Asfar** | **73.38** | **298** | LR | | LR | 23 17 58.9 | |
| | comp=E,114nm,18.5s,baz=256,slow=37 | | | | | | | |

*DDA **19** 22:32:49.7,39°.46N×33°.07E,h17km,Md2.6*
*ISK **19** 22:32:49.3,39°.38N×33°.08E,h5km,MD2.6*
*ISCJB **19** 22:32:50.0±0.7,39°.39N±0°.04×33°.11E±0°.04,h2km±7km, Error ellipse: s-maj=6.3km s-min=5.2km az=22.8*
*CSEM **19** 22:32:50.0±0.2,39°.41N×33°.10E,h8km,MD2.6,Error ellipse: s-maj=4.9km s-min=3.9km az=20.0*

**ISC 19 22:32:50.0±0.9, 39°.42N±0°.03×33°.10E±0°.03, h10km±6km, n26, σ0§51/36, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFSR** | **Afʿar-Bala (A** | **0.04** | **326** | PG | **Pg** | **22 32 51.4** | **-0.6** |
| **AFSR** | **Afʿar-Bala (A** | **0.04** | **326** | *i* Pg | **Pg** | **22 32 51.4** | **-0.6** |
| **BBAL** | **Bala** | **0.13** | **9** | *i* P | **Pg** | **22 32 53.3** | **+0.2** |
| BBAL | | | | *i* S | **Sg** | **22 32 55.9** | **+0.6** |
| **BBAL** | **Bala** | **0.13** | **9** | P | **Pg** | **22 32 53.3** | **+0.2** |
| BBAL | | | | S | **Sg** | **22 32 55.9** | **+0.6** |
| **KAMT** | **Kaman** | **0.48** | **95** | *e*PG | **Pg** | **22 32 59.3** | **-0.1** |
| KAMT | | | | *e*SG | **Sg** | **22 33 06.5** | **+0.8** |
| **KAMT** | **Kaman** | **0.48** | **95** | *e*Pg | **Pg** | **22 32 59.3** | **-0.1** |
| KAMT | | | | *e*Sg | **Sg** | **22 33 06.5** | **+0.8** |
| **LOD** | **Lodumlu** | **0.54** | **332** | *e*PG | **Pg** | **22 33 00.2** | **-0.3** |
| LOD | | | | *e*SG | **Sb** | **22 33 09.5** | **0.0** |
| **LOD** | **Lodumlu** | **0.54** | **332** | *e*Pg | **Pg** | **22 33 00.2** | **-0.3** |
| LOD | | | | *e*Sg | **Sb** | **22 33 09.5** | **0.0** |
| **SERE** | **Sereflikochisa** | **0.59** | **142** | *e*PG | **Pg** | **22 33 00.9** | **-0.6** |
| **SERE** | **Sereflikochisa** | **0.59** | **142** | *e*Pg | **Pg** | **22 33 00.9** | **-0.6** |
| **YAYX** | **Yaylak** | **0.73** | **130** | *e*PG | **Pg** | **22 33 03.8** | **-0.4** |
| **YAYX** | **Yaylak** | **0.73** | **130** | *e*Pg | **Pg** | **22 33 03.8** | **-0.4** |
| **CDAG** | **Cicekdag** | **1.01** | **78** | *i* P | **Pg** | **22 33 08.9** | **-0.5** |
| CDAG | | | | *i* S | **Sn** | **22 33 24.1** | **-0.6** |
| **CDAG** | **Cicekdag** | **1.01** | **78** | P | **Pg** | **22 33 08.9** | **-0.5** |
| CDAG | | | | S | **Sn** | **22 33 24.1** | **-0.6** |
| **KDHN** | **Kadinhani** | **1.18** | **221** | *i* P | **Pn** | **22 33 13.4** | **+0.7** |
| KDHN | | | | *i* S | **Sn** | **22 33 29.4** | **+0.6** |
| **KDHN** | **Kadinhani** | **1.18** | **221** | P | **Pn** | **22 33 13.4** | **+0.7** |
| KDHN | | | | S | **Sn** | **22 33 29.4** | **+0.6** |
| **SVRH** | **Sivrihisar-ESK** | **1.22** | **272** | *e*PN | **Pn** | **22 33 12.7** | **-0.6** |
| **SVRH** | **Sivrihisar-ESK** | **1.22** | **272** | *e*Pn | **Pn** | **22 33 12.7** | **-0.6** |
| **GULA** | **Gulagac** | **1.39** | **140** | *e*PN | **Pb** | **22 33 16.0** | **-0.2** |
| **GULA** | **Gulagac** | **1.39** | **140** | *e*Pn | **Pb** | **22 33 16.0** | **-0.2** |
| **CORM** | **Corum** | **1.41** | **57** | *e*PN | **Pn** | **22 33 16.2** | **+0.3** |
| **CORM** | **Corum** | **1.41** | **57** | *e*Pn | **Pn** | **22 33 16.2** | **+0.3** |
| **YOZ** | **Yozgat** | **1.73** | **82** | *e*PN | **Pb** | **22 33 21.6** | **-0.4** |
| **YOZ** | **Yozgat** | **1.73** | **82** | *e*Pn | **Pb** | **22 33 21.6** | **-0.4** |
| **NIG** | **Nigde** | **1.76** | **137** | *e*PN | **Pn** | **22 33 21.0** | **+0.2** |
| **NIG** | **Nigde** | **1.76** | **137** | *e*Pn | **Pn** | **22 33 21.0** | **+0.2** |

**MEX 19 22:37:44.4±0.5, 16°.23N×98°.14W, h3km±8km, MD3.9, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.17** | **4** | *i* P | Pg | 22 37 47.3 | -0.5 |
| PNIG | | | | *i* S | Sg | 22 37 49.9 | -0.1 |
| **TLIG** | **Tlapa** | **1.39** | **343** | *e*P | Pn | 22 38 07.1 | -3.8 |
| TLIG | | | | *e*S | Sg | 22 38 24.6 | -4.9 |

**WEL 19 22:41:34.4±0.4, 37°.96S×176°.48E, h155km±3km, ML3.9/18, 24C-4D, Error ellipse: s-maj=2.4km s-min=2.1km az=0.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRRZ** | **Plateau Road** | **0.54** | **187** | PN | Pn | 22 41 56.8 | +0.2 |
| PRRZ | | | | SN | Sn | 22 42 13.4 | -0.2 |
| **URZ** | **Urewera** | **0.58** | **121** | ⇑PN | Pn | 22 41 56.4 | -0.3 |
| URZ | | | | AML | AML | 22 42 12.7 | |
| URZ | | | | AML | AML | 22 42 13.0 | |
| **ALRZ** | **Allen Road** | **0.61** | **190** | PN | Pn | 22 41 57.2 | +0.3 |
| **MWZ** | **Matawai** | **0.91** | **115** | ⇑PN | Pn | 22 41 58.7 | -0.3 |
| MWZ | | | | AML | AML | 22 42 17.0 | |
| MWZ | | | | AML | AML | 22 42 17.0 | |
| MWZ | | | | AML | AML | 22 42 18.3 | |
| MWZ | | | | AML | AML | 22 42 18.4 | |
| **HAZ** | **Te Kaha** | **1.05** | **79** | ⇓PN | Pn | 22 41 59.5 | -0.6 |
| **RATZ** | **Rangitukua** | **1.06** | **211** | ⇑PN | Pn | 22 42 00.6 | +0.4 |
| **SNGZ** | **Shannon Statio** | **1.06** | **141** | PN | Pn | 22 42 00.3 | +0.1 |
| SNGZ | | | | SN | Sn | 22 42 18.6 | -1.5 |
| **RAHZ** | **Arahi** | **1.07** | **154** | ⇑PN | Pn | 22 42 00.5 | +0.2 |
| RAHZ | | | | SN | Sn | 22 42 19.2 | -0.9 |
| **NMHZ** | **Naumai** | **1.17** | **167** | ⇑PN | Pn | 22 42 01.7 | +0.5 |
| NMHZ | | | | SN | Sn | 22 42 21.1 | -0.8 |
| **TKGZ** | **Te Karaka** | **1.18** | **114** | PN | Pn | 22 42 01.1 | -0.2 |
| **BKZ** | **Black Stump Fm** | **1.21** | **179** | PN | Pn | 22 42 01.1 | -0.5 |
| BKZ | | | | AML | AML | 22 42 21.0 | |
| BKZ | | | | AML | AML | 22 42 21.2 | |
| **TWGZ** | **Tauwhareparae** | **1.21** | **101** | PN | Pn | 22 42 01.9 | +0.3 |
| **WHHZ** | **Waihua** | **1.26** | **152** | PN | Pn | 22 42 02.1 | 0.0 |
| **KRVZ** | **Karewarewa** | **1.31** | **210** | PN | Pn | 22 42 02.9 | +0.3 |
| **WTVZ** | **West Tongariro** | **1.35** | **211** | PN | Pn | 22 42 03.0 | 0.0 |
| **ARHZ** | **Aropaoanui** | **1.36** | **163** | ⇑PN | Pn | 22 42 03.1 | +0.1 |
| **NGZ** | **Ngauruhoe** | **1.40** | **209** | PN | Pn | 22 42 03.6 | +0.1 |
| **KNZ** | **Kokohu** | **1.42** | **139** | PN | Pn | 22 42 03.2 | -0.3 |
| KNZ | | | | AML | AML | 22 42 25.6 | |
| KNZ | | | | AML | AML | 22 42 25.6 | |
| **WPVZ** | **Whakapapa** | **1.44** | **210** | *e*PN | Pn | 22 42 03.9 | -0.1 |
| **TUVZ** | **Tukino** | **1.46** | **206** | ⇑PN | Pn | 22 42 04.3 | +0.2 |
| **CNGZ** | **Carnagh Station** | **1.46** | **112** | PN | Pn | 22 42 04.3 | +0.4 |
| **PRGZ** | **Paritu Road** | **1.47** | **132** | PN | Pn | 22 42 03.6 | -0.4 |
| **FWVZ** | **Far West T-bar** | **1.48** | **209** | ⇑PN | Pn | 22 42 04.3 | -0.2 |
| **MCHZ** | **McNeill Hill** | **1.49** | **173** | ⇑PN | Pn | 22 42 04.5 | +0.2 |
| **WHVZ** | **Whangaehu Hut** | **1.49** | **208** | PN | Pn | 22 42 04.4 | -0.2 |
| **DRZ** | **Dome Shelter** | **1.50** | **208** | PN | Pn | 22 42 04.8 | +0.1 |
| **MXZ** | **Matakaoa Point** | **1.50** | **75** | *e*PN | Pn | 22 42 04.3 | 0.0 |
| MXZ | | | | AML | AML | 22 42 29.8 | |
| **TRVZ** | **Turoa** | **1.52** | **208** | PN | Pn | 22 42 05.0 | +0.1 |
| **WNVZ** | **Wahianoa** | **1.53** | **206** | ⇑PN | Pn | 22 42 04.9 | 0.0 |
| **WMGZ** | **Waiomatatini S** | **1.54** | **85** | ⇓PN | Pn | 22 42 04.7 | -0.1 |
| **MOVZ** | **Moawhango** | **1.55** | **201** | ⇑PN | Pn | 22 42 04.5 | -0.5 |
| **BHHZ** | **Black Hill Sta** | **1.56** | **192** | ⇑PN | Pn | 22 42 04.6 | -0.5 |
| **PKVZ** | **Pokaka** | **1.60** | **213** | ⇑PN | Pn | 22 42 05.7 | +0.2 |
| **MTVZ** | **Mangateitei** | **1.63** | **209** | ⇑PN | Pn | 22 42 05.9 | +0.1 |
| **KRHZ** | **Kereru** | **1.69** | **183** | ⇑PN | Pn | 22 42 05.8 | -0.6 |
| **CKHZ** | **Cape Kidnapper** | **1.76** | **165** | ⇑PN | Pn | 22 42 06.9 | -0.2 |
| **KAHZ** | **Kahuranaki** | **1.86** | **170** | ⇑PN | Pn | 22 42 08.0 | -0.3 |
| **PNHZ** | **Pukenui** | **1.96** | **186** | PN | Pn | 22 42 08.4 | -1.1 |
| **PXZ** | **Pawanui** | **2.09** | **172** | ⇑PN | Pn | 22 42 09.9 | -0.9 |
| PXZ | | | | AML | AML | 22 42 38.3 | |
| PXZ | | | | AML | AML | 22 42 38.4 | |
| PXZ | | | | AML | AML | 22 42 38.4 | |
| PXZ | | | | AML | AML | 22 42 38.5 | |
| **WPHZ** | **Waipukurau** | **2.10** | **181** | PN | Pn | 22 42 10.0 | -1.1 |
| **TSZ** | **Takapari Road** | **2.14** | **191** | ⇑PN | Pn | 22 42 10.4 | -1.1 |
| TSZ | | | | AML | AML | 22 42 38.5 | |
| TSZ | | | | AML | AML | 22 42 38.7 | |
| **WAZ** | **Wanganui** | **2.14** | **213** | ⇑PN | Pn | 22 42 11.4 | -0.1 |
| **NEZ** | **North Egmont** | **2.28** | **234** | ⇓PN | Pn | 22 42 14.7 | +1.5 |
| **PRHZ** | **Porangahau** | **2.31** | **177** | ⇓PN | Pn | 22 42 12.3 | -1.2 |
| **DVHZ** | **Dannevirke** | **2.35** | **186** | PN | Pn | 22 42 12.4 | -1.6 |
| **POWZ** | **Post Office Ro** | **2.49** | **193** | PN | Pn | 22 42 14.2 | -1.4 |
| **ANWZ** | **Angora Road** | **2.50** | **180** | ⇓PN | Pn | 22 42 14.6 | -1.1 |
| **PRWZ** | **Pori Road** | **2.62** | **188** | PN | Pn | 22 42 15.9 | -1.3 |
| **BFZ** | **Birch Farm** | **2.72** | **184** | PN | Pn | 22 42 16.8 | -1.7 |
| BFZ | | | | AML | AML | 22 42 51.8 | |
| BFZ | | | | AML | AML | 22 42 52.0 | |
| BFZ | | | | AML | AML | 22 42 52.2 | |
| BFZ | | | | AML | AML | 22 42 52.2 | |
| **MRZ** | **Mangatainoka R** | **2.79** | **194** | ⇑PN | Pn | 22 42 17.4 | -1.9 |
| MRZ | | | | AML | AML | 22 42 51.6 | |
| MRZ | | | | AML | AML | 22 42 52.0 | |
| **TIWZ** | **Tintock** | **2.85** | **189** | ⇑PN | Pn | 22 42 18.3 | -1.8 |
| TIWZ | | | | AML | AML | 22 42 55.2 | |
| TIWZ | | | | AML | AML | 22 42 56.0 | |
| **HOWZ** | **Holdsworth Sta** | **3.03** | **194** | ⇑PN | Pn | 22 42 20.0 | -2.3 |
| **OGWZ** | **Otaki Gorge** | **3.03** | **199** | PN | Pn | 22 42 20.4 | -1.9 |
| **KIW** | **Kapiti Island** | **3.14** | **202** | PN | Pn | 22 42 21.5 | -2.3 |
| KIW | | | | AML | AML | 22 42 59.6 | |
| KIW | | | | AML | AML | 22 42 59.9 | |
| **TMWZ** | **Te Maipa** | **3.18** | **188** | PN | Pn | 22 42 20.8 | -2.1 |
| **MTW** | **Mount Morrison** | **3.28** | **193** | PN | Pn | 22 42 22.8 | -2.8 |
| MTW | | | | AML | AML | 22 43 00.9 | |
| MTW | | | | AML | AML | 22 43 01.3 | |
| **CAW** | **Cannon Point** | **3.33** | **199** | PN | Pn | 22 42 23.6 | -2.5 |
| CAW | | | | AML | AML | 22 43 04.9 | |
| CAW | | | | AML | AML | 22 43 05.8 | |
| **DUWZ** | **D'Urville Isla** | **3.46** | **214** | PN | Pn | 22 42 25.5 | -2.4 |
| **TRWZ** | **Traveller** | **3.49** | **190** | PN | Pn | 22 42 25.4 | -2.7 |
| TRWZ | | | | AML | AML | 22 43 06.8 | |
| TRWZ | | | | AML | AML | 22 43 06.8 | |
| **PAWZ** | **Paruwai Farm** | **3.51** | **193** | PN | Pn | 22 42 25.6 | -2.9 |
| PAWZ | | | | AML | AML | 22 43 06.8 | |
| PAWZ | | | | AML | AML | 22 43 08.1 | |
| **MSWZ** | **Moikau Station** | **3.58** | **195** | PN | Pn | 22 42 26.4 | -3.0 |
| MSWZ | | | | AML | AML | 22 43 07.0 | |
| MSWZ | | | | AML | AML | 22 43 07.0 | |
| **TCW** | **Tory Channel** | **3.67** | **207** | PN | Pn | 22 42 27.6 | -2.8 |
| TCW | | | | AML | AML | 22 43 12.4 | |
| TCW | | | | AML | AML | 22 43 12.5 | |
| **PLWZ** | **Palliser** | **3.73** | **194** | PN | Pn | 22 42 28.0 | -3.3 |
| **NNZ** | **Nelson** | **4.04** | **215** | PN | Pn | 22 42 32.6 | -2.6 |
| **QRZ** | **Quartz Range** | **4.19** | **226** | PN | Pn | 22 42 34.7 | -2.6 |
| **BSWZ** | **Blackbirch Sta** | **4.25** | **207** | PN | Pn | 22 42 35.0 | -3.1 |
| **THZ** | **Tophouse** | **4.69** | **215** | PN | Pn | 22 42 40.9 | -3.0 |
| **KHZ** | **Kahutara** | **4.99** | **206** | PN | Pn | 22 42 44.3 | -3.4 |
| KHZ | | | | AML | AML | 22 43 40.7 | |

*ISCJB **19** 23:00:49.0±0.5, 16°.74S±0°.04×69°.40W±0°.07, h200km, mb3.5/6, Error ellipse: s-maj=9.6km s-min=5.7km az=6.3*
*IDC **19** 23:00:50.9±1.1, 16°.69S×69°.27W, h198km±9km, mb3.5/7, mb1 3.6/11,mb1mx3.4/34, mbtmp4.0/11, Error ellipse: s-maj=20.4km s-min=16.5km az=35.0*
*GUC **19** 23:01:13.0, 18°.44S×68°.79W, h20km*

**ISC 19 23:00:50.6±0.6, 16°.80S±0°.06×69°.28W±0°.09, h200km, n22, σ1§32/27, mb3.7/6, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **1.22** | **65** | P | **Pn** | **23 01 23.1** | **+0.3** |
| | 369nm,0.3s,baz=291,slow=6.3,SNR=6125 | | | | | | |
| LPAZ | | | | S | **Sn** | **23 01 46.7** | **-0.7** |
| | 14nm,0.3s,baz=141,slow=23,SNR=6.2 | | | | | | |
| **PB13** | **IPOC Station P** | **1.54** | **188** | *e*P | **Pn** | **23 01 26.6** | **+1.2** |
| PB13 | | | | *e*S | **Sn** | **23 01 54.7** | **+2.1** |
| PB13 | | | | AML | AML | 23 01 59.1 | |
| | comp=N,1μm,0.4s | | | | | | |
| PB13 | | | | AML | AML | 23 01 59.5 | |
| | comp=N,290nm,7.6s | | | | | | |
| **MNMC** | **Minimini** | **2.34** | **187** | *e*P | **Pn** | **23 01 33.4** | **+0.4** |
| MNMC | | | | *e*S | **Sn** | **23 02 05.5** | **-0.7** |
| **PB11** | **IPOC Station P** | **2.97** | **187** | *e*P | **Pn** | **23 01 40.3** | **+0.3** |
| PB11 | | | | *e*S | **Sn** | **23 02 17.4** | **-1.5** |
| PB11 | | | | AML | AML | 23 02 21.7 | |
| | comp=N,1μm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **4.22** | **183** | *e*P | **Pn** | **23 01 55.5** | **+0.1** |
| PB01 | | | | *e*S | **Sn** | **23 02 43.1** | **-3.2** |
| **LVC** | **Limon Verde** | **5.79** | **177** | P | **Pn** | **23 02 16.5** | **+1.0** |
| | comp=N,119nm,0.3s,baz=352,slow=9.5,SNR=11 | | | | | | |
| LVC | | | | S | **Sn** | **23 03 20.3** | **-2.3** |
| | comp=N,344nm,0.3s,baz=142,slow=18,SNR=26 | | | | | | |
| **SIV** | **San Ignacio** | **7.92** | **85** | P | **Pn** | **23 02 42.4** | **-0.6** |
| | comp=N,0.7nm,0.3s,baz=274,slow=11,SNR=8.3 | | | | | | |
| SIV | | | | S | Sn | 23 04 05.7 | -6.7 |
| | baz=295,slow=17,SNR=3.3 | | | | | | |
| **NNA** | **Nana** | **8.75** | **302** | P | Pn | 23 02 49.6 | -4.1 |
| | comp=N,2.6nm,0.3s,baz=127,slow=9.4,SNR=14 | | | | | | |
| NNA | | | | S | Sn | 23 04 20.1 | -12 |
| | comp=N,2.7nm,0.3s,baz=208,slow=19,SNR=4.7 | | | | | | |
| **CPUP** | **Villa Florida** | **14.60** | **133** | P | **Pn** | **23 04 08.7** | **+0.6** |
| | comp=N,0.1nm,0.3s,baz=309,slow=14,SNR=3.0 | | | | | | |
| **CFAA** | **Coronel Fontan** | **14.77** | **177** | P | **Pn** | **23 04 10.0** | **-0.1** |
| | comp=N,0.0nm,0.3s,baz=0.0,slow=4.0,SNR=2.6 | | | | | | |
| **PTGA** | **Pitinga** | **18.42** | **31** | P | **P** | **23 04 49.0** | **-2.2** |
| | comp=N,0.4nm,0.3s,baz=212,slow=15,SNR=4.4 | | | | | | |
| **BDFB** | **Brasilia** | **20.45** | **90** | P | **P** | **23 05 13.9** | **+0.7** |
| | comp=N,3.9nm,0.4s,baz=248,slow=14,SNR=10.0 | | | | | | |
| **CMIG** | **Matias Romero** | **42.08** | **322** | P | **P** | **23 08 21.8** | **-1.3** |
| | comp=N,0.6nm,0.4s,baz=98,slow=7.1,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.62** | **324** | P | **P** | **23 10 12.1** | **-0.9** |
| | comp=N,0.2nm,0.8s,baz=138,slow=11,SNR=3.7 | | | | | | |
| **DBIC** | **Dimbokro** | **67.82** | **75** | P | **P** | **23 11 27.8** | **+0.1** |
| | comp=N,2.8nm,0.7s,baz=246,slow=6.8,SNR=4.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **71.61** | **321** | P | **P** | **23 11 51.1** | **+0.5** |
| | comp=N,0.4nm,0.7s,baz=142,slow=4.6,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.16** | **72** | P | **P** | **23 12 17.2** | **0.0** |
| | comp=N,2.1nm,0.5s,baz=254,slow=5.7,SNR=56 | | | | | | |
| **YKA** | **Yellowknife Ar** | **86.66** | **341** | P | **P** | **23 13 10.9** | **-0.3** |
| | comp=N,1.3nm,0.8s,baz=135,slow=4.2,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **133.84** | **210** | PKP | **PKPdf** | **23 19 45.9** | **+1.2** |
| | comp=N,0.2nm,0.4s,baz=124,slow=2.7,SNR=3.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **137.82** | **23** | PKP | **PKPdf** | **23 19 52.5** | **+1.6** |
| | comp=N,0.7nm,0.6s,baz=299,slow=1.5,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **141.95** | **32** | SKPbc | **SKiKP** | **23 23 20.1** | **+1.1** |
| | comp=N,0.2nm,0.3s,baz=358,slow=2.3,SNR=2.8 | | | | | | |
| **SONM** | **Songino Array** | **148.85** | **6** | PKPbc | **PKPbc** | **23 20 16.1** | **+1.4** |
| | comp=N,1.7nm,0.5s,baz=329,slow=2.2,SNR=12 | | | | | | |

*ISCJB **19** 23:02:25.5±0.6,37°.56N±0°.04×72°.30E±0°.08,h176km, Error ellipse: s-maj=9.7km s-min=5.1km az=153.5*
*NNC **19** 23:02:32.7±4.6,38°.06N×71°.99E,h0km,mb3.8,mpv3.4, Error ellipse: s-maj=44.9km s-min=16.0km az=154.0*

**ISC 19 23:02:25.6±1.0, 37°.53N±0°.07×72°.30E±0°.08, h176km, n15, σ1§64/19, 2C-6D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **2.65** | **20** | ⇓P | **Pn** | **23 03 11.8** | **+1.7** |
| | 14nm,0.4s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **23 03 44.8** | **+0.1** |
| | 34nm,0.2s | | | | | | |
| **DZET** | **Dzherino** | **3.02** | **296** | ⇓P | **Pn** | **23 03 15.4** | **+1.1** |
| | 11nm,0.3s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **23 03 51.6** | **-0.7** |
| | 206nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **4.95** | **2** | ⇓P | **Pn** | **23 03 39.8** | **+0.8** |
| | 3.7nm,0.3s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **23 04 33.9** | **-2.6** |
| | 17nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **5.37** | **18** | ⇓P | **Pn** | **23 03 45.6** | **+1.2** |
| | 3.4nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **23 04 44.7** | **-1.6** |
| | 7.9nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **5.73** | **347** | P | **Pn** | **23 03 50.4** | **+1.5** |
| | 0.4nm,0.3s,baz=156,slow=12,SNR=7.8 | | | | | | |
| KK31 | | | | S | Sn | 23 04 50.9 | -3.7 |
| | 6.0nm,0.3s,baz=166,slow=22,SNR=21 | | | | | | |
| **KOLN** | **Koldanda** | **13.61** | **132** | *e*P | **Pn** | **23 05 30.8** | **-0.9** |
| | 3.5nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **14.06** | **129** | *e*P | **Pn** | **23 05 36.6** | **-0.8** |
| | 5.3nm,0.2s | | | | | | |
| **KKN** | **Kakani** | **14.61** | **128** | *e*P | **P** | **23 05 43.9** | **-2.1** |
| **DMN** | **Daman** | **14.63** | **129** | *e*P | **P** | **23 05 45.1** | **-1.1** |
| | 6.2nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **14.84** | **128** | *e*P | **P** | **23 05 47.9** | **-0.6** |
| | 5.5nm,0.5s | | | | | | |
| **PKI** | **Pulchoki** | **14.85** | **128** | *e*P | **P** | **23 05 48.2** | **-0.5** |
| | 5.5nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **14.91** | **126** | *e*P | **P** | **23 05 48.3** | **-1.1** |
| **RAMN** | **Ramite** | **16.03** | **127** | *e*P | **P** | **23 06 02.9** | **+1.2** |
| | 5.0nm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **16.48** | **124** | *e*P | **Pn** | **23 06 09.8** | **+2.6** |
| **ODAN** | **Odare** | **16.60** | **126** | *e*P | **Pn** | **23 06 11.3** | **+2.7** |
| | 3.3nm,0.4s | | | | | | |

*KLM **19** 23:04:05.6,4°.93S×102°.48E,h39km,mb4.6,ML4.4,MS5.8*
*BJI **19** 23:04:05.0,4°.90S×102°.40E,h43km,mb4.8/28,mB5.2/23, Ms4.8/13,Ms7 4.5/12*
*AUST **19** 23:04:05.1±0.6,4°.87S×102°.45E,h15km,Error ellipse: s-maj=1.2km s-min=0.8km az=245.0*
*DJA **19** 23:04:06.9±1.2,5°.S±.5×10°.3E±°,h14km±9km,M4.7/21, mb4.8/9,mB5.1/6,MLv4.9/21,Mw(mB)4.5/6*
*MOS **19** 23:04:06.8±1.5,4°.67S×102°.73E,h54km,mb5.0/20, Error ellipse: s-maj=14.1km s-min=7.1km az=112.9*
*ISCJB **19** 23:04:07.9±0.5,4°.74S±0°.04×102°.58E±0°.04,h61km±4km, mb4.6/48, Error ellipse: s-maj=7.8km s-min=4.1km az=42.0*
*NEIC **19** 23:04:08.9±1.6,4°.71S×102°.60E,h54km±12km,mb4.7/6, Error ellipse: s-maj=17.0km s-min=8.8km az=225.0*
*IDC **19** 23:04:08.7±1.1,4°.66S×102°.70E,h48km±8km,mb4.3/25, mb1 4.4/26,mb1mx4.2/41,mbtmp4.5/26,MS3.3/5, Ms1 3.3/5,ms1mx3.0/29,Error ellipse: s-maj=21.2km s-min=12.1km az=42.0*

**ISC 19 23:04:08.2±0.5, 4°.80S±0°.04×102°.54E±0°.05, h50km±3km, h50km:pP-P,n186, σ1§69/199, mb4.7/

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CM01** | **Chiang Mai Arr** | **23.34** | **351** | *e*P | | **P** | **23 09 11.2** | **-1.0** |
| **LAMP** | **Lampang** | **23.35** | **353** | P | | **P** | **23 09 13.8** | **+1.5** |
| | 5.2nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **23.38** | **351** | P | | **P** | **23 09 11.6** | **-1.0** |
| | 8.8nm,0.6s,baz=182,slow=8.9,SNR=39 | | | | | | | |
| CMAR | | | | pP | | **pP** | **23 09 23.5** | **-1.3** |
| | 2.8nm,0.7s,baz=184,slow=9.4,SNR=2.4 | | | | | | | |
| CMAR | | | | LR | | LR | 23 18 42.0 | |
| | comp=Z,43nm,19.8s,baz=174,slow=38 | | | | | | | |
| **CHTO** | **Chiang Mai** | **23.73** | **352** | P | | **P** | **23 09 15.2** | **-0.7** |
| | 75nm,1.6s | | | | | | | |
| **CHTO** | **Chiang Mai** | **23.73** | **352** | *e*P | | **P** | **23 09 15.0** | **-0.9** |
| CHTO | | | | pmax | | pmax | | |
| | comp=Z,37nm,1.6s | | | | | | | |
| **CHTO** | **Chiang Mai** | **23.73** | **352** | *e*P | | **P** | **23 09 15.0** | **-0.9** |
| | comp=Z,37nm,1.6s | | | | | | | |
| **CMAI** | **Chiengmai2** | **24.82** | **352** | P | | **P** | **23 09 26.4** | **+0.4** |
| **LBMI** | **Labuha** | **25.27** | **81** | P | | **P** | **23 09 33.2** | **+3.2** |
| **DAV** | **Davao City (W)** | **25.84** | **63** | LR | | LR | 23 20 08.7 | |
| | comp=Z,41nm,18.1s,baz=222,slow=37 | | | | | | | |
| **MEEK** | **Meekatharra** | **26.60** | **146** | P | | **P** | **23 09 42.5** | **+0.6** |
| | baz=27,SNR=4.9 | | | | | | | |
| **KNRA** | **Kununurra** | **27.94** | **115** | P | | **P** | **23 09 56.6** | **+2.6** |
| | baz=28,SNR=3.1 | | | | | | | |
| **KMI** | **Kunming** | **29.74** | **0** | P | | P | 23 10 14.3 | +4.1 |
| KMI | | | | pP | | pP | 23 10 25.8 | +2.6 |
| KMI | | | | sP | | sP | 23 10 30.6 | +1.4 |
| KMI | | | | PP | | **PnPn** | **23 11 12.3** | **+4.8** |
| KMI | | | | S | | **S** | **23 15 08.3** | **+5.1** |
| KMI | | | | sS | | sS | 23 15 27.3 | +2.1 |
| KMI | | | | PMZ | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,200nm,4.2s | | | | | | | |
| KMI | | | | LN | | | | |
| | comp=Z,520nm,4.5s | | | | | | | |
| KMI | | | | LE | | | | |
| | comp=Z,410nm,5.1s | | | | | | | |
| KMI | | | | LZ | | | | |
| | comp=Z,310nm,5.8s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **30.00** | **263** | T | | T | 23 41 37.4 | |
| | baz=87,slow=76,SNR=34 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **30.00** | **263** | T | | T | 23 41 38.2 | |
| | baz=87,slow=76,SNR=17 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **30.02** | **263** | T | | T | 23 41 38.2 | |
| | baz=87,slow=76,SNR=14 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **31.80** | **162** | T | | T | 23 44 25.9 | |
| | baz=339,slow=76,SNR=60 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **31.82** | **162** | T | | T | 23 44 22.6 | |
| | baz=339,slow=76,SNR=73 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **31.82** | **162** | T | | T | 23 44 27.0 | |
| | baz=339,slow=76,SNR=70 | | | | | | | |
| **WRKA** | **Warakurna** | **31.88** | **132** | P | | **P** | **23 10 31.0** | **+2.1** |
| | baz=32,SNR=3.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.42** | **119** | P | | **P** | **23 10 51.1** | **0.0** |
| | comp=Z,3.4nm,0.4s,baz=300,slow=9.1,SNR=12 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **23 13 26.2** | **+0.3** |
| | comp=Z,1.3nm,0.6s,baz=294,slow=1.8,SNR=4.2 | | | | | | | |
| **WRAB** | **Tennant Creek** | **34.42** | **119** | *e*P | | **P** | **23 10 49.3** | **-1.8** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **ODAN** | **Odare** | **34.72** | **336** | *e*P | | **P** | **23 10 54.3** | **+0.5** |
| | comp=Z,31nm,0.5s | | | | | | | |
| **TAPN** | **Taplejung** | **35.03** | **337** | *e*P | | **P** | **23 10 57.0** | **+0.5** |
| **RAMN** | **Ramite** | **35.13** | **335** | *e*P | | **P** | **23 10 58.1** | **+0.8** |
| | comp=Z,17nm,0.4s | | | | | | | |
| **CD2** | **Chengdu** | **35.53** | **2** | *e*P | | **P** | **23 11 02.6** | **+2.1** |
| CD2 | | | | pP | | **pP** | **23 11 14.3** | **+0.7** |
| CD2 | | | | S | | **S** | **23 16 38.3** | **+5.6** |
| CD2 | | | | sS | | **sS** | **23 16 58.0** | **+3.2** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,120nm,5.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **35.58** | **125** | P | | **P** | **23 11 01.6** | **+0.6** |
| | comp=Z,3.1nm,0.5s,baz=293,slow=7.2,SNR=23 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **23 13 30.3** | **+1.0** |
| | comp=Z,1.4nm,0.5s,baz=296,slow=2.1,SNR=8.8 | | | | | | | |
| ASAR | | | | S | | **S** | **23 16 31.0** | **-2.7** |
| | comp=Z,0.4nm,0.6s,baz=292,slow=14,SNR=5.6 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **23 17 11.0** | **-0.2** |
| | comp=Z,0.3nm,0.7s,baz=299,slow=3.8,SNR=4.8 | | | | | | | |
| ASAR | | | | LR | | LR | 23 28 43.5 | |
| | comp=Z,55nm,18.7s,baz=240,slow=42 | | | | | | | |
| **AS01** | **Alice Springs** | **35.61** | **125** | *e*P | | **P** | **23 10 59.7** | **-1.7** |
| AS01 | | | | *e*PcP | | **PcP** | **23 13 29.7** | **+0.3** |
| **PKI** | **Pulchoki** | **36.18** | **334** | *e*P | | **P** | **23 11 06.6** | **+0.1** |
| | comp=Z,13nm,0.6s | | | | | | | |
| **PKIN** | **Phulchoki** | **36.19** | **334** | *e*P | | **P** | **23 11 06.5** | **0.0** |
| | comp=Z,12nm,0.5s | | | | | | | |
| **GUN** | **Gumba** | **36.27** | **335** | *e*P | | **P** | **23 11 07.9** | **+0.6** |
| | comp=Z,72nm,0.5s | | | | | | | |
| **DMN** | **Daman** | **36.35** | **333** | *e*P | | **P** | **23 11 08.2** | **+0.4** |
| **KKN** | **Kakani** | **36.43** | **334** | *e*P | | **P** | **23 11 08.8** | **+0.3** |
| | comp=Z,37nm,0.6s | | | | | | | |
| **GKN** | **Gorkha** | **36.90** | **333** | *e*P | | **P** | **23 11 12.8** | **+0.4** |
| | comp=Z,23nm,0.5s | | | | | | | |
| **KOLN** | **Koldanda** | **37.18** | **332** | *e*P | | **P** | **23 11 15.5** | **+0.7** |
| | comp=Z,38nm,0.7s | | | | | | | |
| **DANN** | **Dangsing** | **37.60** | **332** | *e*P | | **P** | **23 11 19.0** | **+0.6** |
| | comp=Z,9.4nm,0.5s | | | | | | | |
| **XAN** | **Xi'an** | **39.10** | **8** | P | | **P** | **23 11 29.4** | **-1.3** |
| XAN | | | | pP | | **pP** | **23 11 44.3** | **+0.3** |
| XAN | | | | PMZ | | | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| XAN | | | | PMZ | | | | |
| | comp=Z,220nm,5.2s | | | | | | | |
| **QIS** | **Mount Isa** | **39.27** | **117** | P | | **P** | **23 11 32.7** | **+0.4** |
| | baz=39,SNR=3.3 | | | | | | | |
| **LZH** | **Lanzhou** | **40.69** | **2** | *e*P | | **P** | **23 11 44.0** | **0.0** |
| LZH | | | | pP | | **pP** | **23 11 55.1** | **-2.3** |
| LZH | | | | sP | | **sP** | **23 12 00.8** | **-2.5** |
| LZH | | | | PMZ | | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,210nm,5.4s | | | | | | | |
| **MTSU** | **Mount Surprise** | **42.91** | **111** | P | | **P** | **23 12 02.6** | **+0.2** |
| | baz=43,SNR=25 | | | | | | | |
| **HTT** | **Hallett** | **44.24** | **135** | P | | P | 23 12 20.0 | +7.2 |
| | baz=44,SNR=4.5 | | | | | | | |
| **PMG** | **Port Moresby** | **44.49** | **98** | *i* P | | P | 23 12 10.7 | -4.3 |
| PMG | | | | pmax | | pmax | | |
| | comp=Z,108nm,1.2s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **46.17** | **9** | *e*P | | **P** | **23 12 29.9** | **+1.8** |
| HHC | | | | PP | | **PP** | **23 14 17.3** | **+0.1** |
| HHC | | | | S | | **S** | **23 19 13.3** | **+2.5** |
| HHC | | | | PMZ | | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,150nm,4.8s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,170nm,12.3s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,210nm,13.6s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,130nm,13.6s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.20** | **27** | P | | **P** | **23 12 43.6** | **-0.2** |
| **KSAR** | **Wonju Array Be** | **48.20** | **27** | P | | **P** | **23 12 43.6** | **-0.2** |
| **KSRS** | **Korea Array** | **48.23** | **27** | P | | **P** | **23 12 43.6** | **-0.4** |
| | comp=Z,24nm,0.6s,baz=226,slow=6.6,SNR=6.6 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **48.39** | **129** | P | | **P** | **23 12 47.0** | **+1.6** |
| | baz=48,SNR=7.3 | | | | | | | |
| **WMQ** | **Urumqi** | **50.22** | **346** | P | | **P** | **23 12 59.8** | **+0.6** |
| WMQ | | | | sP | | **sP** | **23 13 18.0** | **-0.7** |
| WMQ | | | | S | | **S** | **23 20 08.0** | **+0.2** |
| WMQ | | | | SS | | **SS** | **23 23 38.0** | **-4.0** |
| WMQ | | | | PMZ | | | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| WMQ | | | | PMZ | | | | |
| | comp=Z,230nm,5.0s | | | | | | | |
| WMQ | | | | LN | | | | |
| | comp=Z,47nm,15.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | comp=Z,39nm,16.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | comp=Z,49nm,15.0s | | | | | | | |
| **KSH** | **Kashi** | **50.45** | **333** | P | | **P** | **23 12 59.9** | **-1.2** |
| KSH | | | | *e*sP | | **sP** | **23 13 17.3** | **-3.3** |
| KSH | | | | *e*ScP | | **ScP** | **23 18 09.3** | **-1.4** |
| KSH | | | | PcS | | **PcS** | **23 18 14.8** | **-1.3** |
| KSH | | | | S | | **S** | **23 20 07.0** | **-4.2** |
| KSH | | | | SS | | **SS** | **23 23 41.0** | **-4.9** |
| KSH | | | | PMZ | | | | |
| | comp=Z,130nm,6.0s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,220nm,6.3s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,150nm,5.8s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,150nm,6.0s | | | | | | | |
| **SONM** | **Songino Array** | **52.52** | **3** | P | | **P** | **23 13 16.6** | **+0.2** |
| | comp=Z,8.4nm,0.7s,baz=181,slow=9.1,SNR=52 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **23 14 26.3** | **0.0** |
| | comp=Z,2.8nm,0.5s,baz=181,slow=4.3,SNR=8.9 | | | | | | | |
| **SONA1** | **Songino Array** | **52.53** | **3** | *e*P | | **P** | **23 13 16.5** | **0.0** |
| SONA1 | | | | *e*PcP | | **PcP** | **23 14 26.0** | **-0.3** |
| **ULN** | **Ulaanbaatar** | **52.59** | **4** | *c i*P | | **P** | **23 13 14.2** | **-2.8** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.7s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **52.59** | **4** | *e*P | | **P** | **23 13 16.2** | **-0.7** |
| | comp=Z,6.7nm,1.0s | | | | | | | |
| **CN2** | **Changchun** | **52.60** | **21** | *e*P | | **P** | **23 13 15.4** | **-1.5** |
| CN2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.94** | **36** | P | | **P** | **23 13 17.4** | **-2.2** |
| | comp=Z,2.3nm,0.5s,baz=210,slow=8.6,SNR=8.0 | | | | | | | |
| **TKM2** | **Tokmak 2** | **53.40** | **336** | *e*P | | **P** | **23 13 23.5** | **+0.4** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **53.40** | **336** | *e*P | | **P** | **23 13 23.5** | **+0.4** |
| | comp=Z,10nm,0.6s | | | | | | | |
| **DZET** | **Dzherino** | **53.43** | **327** | *i* P | | **P** | **23 13 21.1** | **-2.2** |
| DZET | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **53.63** | **334** | *i* P | | **P** | **23 13 23.3** | **-1.4** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **EKS2** | **Erkin-Say** | **53.97** | **334** | *e*P | | **P** | **23 13 27.8** | **+0.7** |
| EKS2 | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **EKS2** | **Erkin-Say** | **53.97** | **334** | *e*P | | **P** | **23 13 27.8** | **+0.7** |
| | comp=Z,7.7nm,0.8s | | | | | | | |
| **MK01** | **Makanchi Array** | **54.38** | **343** | *e*P | | **P** | **23 13 29.4** | **-0.6** |
| **MNAS** | **Manas** | **54.39** | **333** | *i* P | | **P** | **23 13 29.3** | **-1.0** |
| MNAS | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **MK31** | **Makanchi Array** | **54.41** | **343** | *e*P | | **P** | **23 13 29.2** | **-1.0** |
| MK31 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.41** | **343** | P | | **P** | **23 13 29.6** | **-0.5** |
| | comp=Z,13nm,0.6s,baz=149,slow=8.2,SNR=114 | | | | | | | |
| MKAR | | | | pP | | **pP** | **23 13 43.4** | **-0.6** |
| | comp=Z,3.7nm,0.7s,baz=147,slow=8.5,SNR=6.0 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.50** | **25** | P | | **P** | **23 13 37.4** | **-0.6** |
| | comp=Z,5.6nm,0.6s,baz=217,slow=6.3,SNR=17 | | | | | | | |
| **KK31** | **Karatay Array** | **55.79** | **332** | *e*P | | **P** | **23 13 38.7** | **-1.5** |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **KKAR** | **Karatay Array** | **55.79** | **332** | *e*P | | **P** | **23 13 38.4** | **-1.8** |
| **KKAR** | **Karatay Array** | **55.79** | **332** | *e*P | | **P** | **23 13 38.4** | **-1.8** |
| **IMOG** | **Moghan** | **57.35** | **319** | *e*P | | **P** | **23 13 51.3** | **-0.5** |
| **IPAY** | **Payeh** | **57.77** | **319** | *e*P | | **P** | **23 13 54.9** | **+0.2** |
| **IKRD** | **Kardeh** | **58.28** | **319** | *e*P | | P | 23 13 53.5 | -4.7 |
| **ISAD** | **Sadrabad** | **59.08** | **312** | *e*P | | **P** | **23 14 02.9** | **-1.0** |
| **OTUK** | **Ortayu** | **59.08** | **337** | *i* P | | **P** | **23 14 01.7** | **-1.5** |
| OTUK | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **GEYT** | **Alibeck** | **59.21** | **320** | P | | **P** | **23 14 04.8** | **+0.4** |
| | comp=Z,4.0nm,0.5s,baz=132,slow=6.0,SNR=16 | | | | | | | |
| **KLR** | **Kul'dur** | **59.51** | **22** | *e*P | | **P** | **23 14 04.8** | **-1.4** |
| **ZAA0** | **Zalesovo Array** | **60.39** | **348** | *e*P | | **P** | **23 14 11.2** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **60.39** | **348** | P | | **P** | **23 14 11.3** | **-0.8** |
| | comp=Z,23nm,0.5s,baz=166,slow=5.5,SNR=120 | | | | | | | |
| ZALV | | | | pP | | **pP** | **23 14 26.8** | **+0.6** |
| | comp=Z,3.0nm,0.4s,baz=158,slow=6.2,SNR=3.3 | | | | | | | |
| ZALV | | | | PP | | **PP** | **23 16 22.3** | **-3.5** |
| | comp=Z,1.1nm,0.4s,baz=151,slow=6.3,SNR=3.1 | | | | | | | |
| ZALV | | | | LR | | LR | 23 43 13.5 | |
| | comp=Z,58nm,20.0s,baz=72,slow=39 | | | | | | | |
| **IFIR** | **Firoozkooh** | **61.58** | **315** | *e*P | | **P** | **23 14 20.8** | **-0.2** |
| **IRAZ** | **Razeghan** | **63.49** | **314** | *e*P | | **P** | **23 14 34.1** | **+0.6** |
| **BRVK** | **Borovoye** | **63.74** | **339** | *c i*P | | **P** | **23 14 33.6** | **-1.0** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **63.74** | **339** | *e*P | | **P** | **23 14 33.9** | **-0.7** |
| **AB31** | **Akbulak array** | **65.30** | **331** | *i*P | | **P** | **23 14 43.9** | **-1.0** |
| AB31 | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **65.30** | **331** | *e*P | | **P** | **23 14 44.5** | **-0.3** |
| **ISRB** | **Sarab** | **66.21** | **315** | *e*P | | **P** | **23 14 52.2** | **+0.9** |
| **YAK** | **Yakutsk** | **69.83** | **13** | *e*P | | P | 23 15 09.2 | -4.0 |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,1.0nm,0.3s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=N,1.0nm,0.6s | | | | | | | |
| **SVE** | **Sverdlovsk** | **70.22** | **337** | *e*P | | **P** | **23 15 16.1** | **+0.4** |
| SVE | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | | |
| **ARU** | **Arti** | **70.77** | **336** | *d i*P | | **P** | **23 15 17.5** | **-1.6** |
| ARU | | | | | | | 23 17 53.1 | |
| ARU | | | | S | | **S** | **23 24 29.3** | **-0.6** |
| ARU | | | | SS | | **SS** | **23 28 57.5** | **-5.6** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **ARU** | **Arti** | **70.77** | **336** | *e*P | | **P** | **23 15 18.6** | **-0.4** |
| **ZEI** | **Tsey** | **71.00** | **318** | *i*P | | **P** | **23 15 21.1** | **+0.1** |
| ZEI | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **NCK** | **Nalchik** | **71.51** | **319** | *i* P | | **P** | **23 15 23.8** | **-0.1** |
| **NEY** | **Neytrino** | **71.98** | **318** | *i* P | | **P** | **23 15 27.7** | **+0.8** |
| NEY | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **KBZ** | **Khabaz** | **72.07** | **319** | P | | **P** | **23 15 28.1** | **+1.0** |
| | comp=Z,4.8nm,0.8s,baz=134,slow=6.3,SNR=12 | | | | | | | |
| **ASF** | **Jabal al Asfar** | **72.27** | **306** | P | | **P** | **23 15 31.0** | **+2.3** |
| | comp=Z,2.9nm,0.8s,baz=124,slow=3.6,SNR=6.9 | | | | | | | |
| **EIL** | **Elat** | **73.16** | **303** | P | | **P** | **23 15 35.5** | **+1.6** |
| | comp=Z,2.7nm,0.6s,baz=101,slow=10,SNR=5.3 | | | | | | | |
| **SOKR** | **Solikamsk** | **73.61** | **338** | *e*P | | **P** | **23 15 35.3** | **-0.6** |
| SOKR | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.5s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **73.72** | **306** | P | | **P** | **23 15 39.8** | **+2.5** |
| | comp=Z,3.6nm,0.6s,baz=90,slow=8.3,SNR=10 | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.07** | **312** | P | | **P** | **23 15 56.6** | **+0.1** |
| | comp=Z,3.4nm,0.7s,baz=126,slow=7.0,SNR=25 | | | | | | | |
| **BRTR** | **Keskin Array B** | **77.07** | **312** | *e*P | | **P** | **23 15 56.7** | **+0.2** |
| BRTR | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **BR231** | **Keskin MP Arra** | **77.74** | **312** | *e*P | | **P** | **23 15 57.4** | **-2.7** |
| **VNDA** | **Vanda** | **78.94** | **169** | P | | **P** | **23 16 07.1** | **+1.1** |
| | comp=Z,0.4nm,0.6s,baz=286,slow=5.0,SNR=4.0 | | | | | | | |
| **OBN** | **Obninsk** | **80.50** | **328** | P | | **P** | **23 16 14.3** | **-0.3** |
| | comp=Z,10nm,0.5s,baz=127,slow=24,SNR=3.9 | | | | | | | |
| **OBN** | **Obninsk** | **80.50** | **328** | *i*P | | **P** | **23 16 14.1** | **-0.6** |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **IDI** | **Anoyia** | **82.73** | **306** | P | | **P** | **23 16 28.3** | **+1.2** |
| | comp=Z,6.1nm,0.6s,baz=84,slow=9.2,SNR=5.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **83.23** | **322** | P | | **P** | **23 16 29.2** | **0.0** |
| | comp=Z,1.6nm,0.5s,baz=90,slow=4.6,SNR=8.2 | | | | | | | |
| **KIEV** | **Kiev** | **83.24** | **322** | *e*P | | **P** | **23 16 28.5** | **-0.7** |
| **VRI** | **Vrincioaia** | **83.61** | **317** | *i*P | | **P** | **23 16 33.0** | **+1.7** |
| **TESR** | **Tescani** | **83.82** | **318** | *i*P | | **P** | **23 16 33.7** | **+1.4** |
| **MLR** | **Muntele Rosu** | **84.06** | **317** | P | | **P** | **23 16 34.5** | **+0.7** |
| | comp=Z,1.1nm,0.8s,baz=104,slow=4.2,SNR=7.3 | | | | | | | |
| **MLR** | **Muntele Rosu** | **84.06** | **317** | *i*P | | **P** | **23 16 34.6** | **+0.8** |
| **BURAR** | **Bucovina Array** | **85.02** | **319** | *i*P | | **P** | **23 16 40.6** | **+2.1** |
| **KOLS** | **Kolonicke sedl** | **87.21** | **319** | *e*P | | **P** | **23 16 50.8** | **+1.6** |
| KOLS | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **87.21** | **319** | *e*P | | **P** | **23 16 50.8** | **+1.6** |
| **FINES** | **FINESS Array B** | **87.75** | **332** | P | | **P** | **23 16 52.0** | **+0.6** |
| | comp=Z,3.9nm,0.5s,baz=114,slow=5.5,SNR=35 | | | | | | | |
| **STHS** | **Stebnicka Huta** | **87.96** | **320** | *e*P | | **P** | **23 16 54.4** | **+1.6** |
| **STHS** | **Stebnicka Huta** | **87.96** | **320** | *e*P | | **P** | **23 16 54.4** | **+1.6** |
| **VYHS** | **Vyhne** | **89.39** | **319** | *e*P | | **P** | **23 17 01.1** | **+1.6** |
| **VYHS** | **Vyhne** | **89.39** | **319** | *e*P | | **P** | **23 17 01.1** | **+1.6** |
| **ARCES** | **ARCESS Array B** | **89.95** | **340** | P | | **P** | **23 17 02.0** | **+0.3** |
| | comp=Z,5.8nm,1.0s,baz=108,slow=3.8,SNR=11 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **89.95** | **340** | P | | **P** | **23 17 02.0** | **+0.3** |
| **GERES** | **GERESS Array B** | **92.81** | **319** | P | | **P** | **23 17 16.3** | **+0.8** |
| | comp=Z,0.4nm,0.5s,baz=104,slow=4.1,SNR=4.6 | | | | | | | |
| **HFS** | **Hagfors** | **93.55** | **330** | P | | **P** | **23 17 18.9** | **+0.3** |
| | comp=Z,2.5nm,0.6s,baz=96,slow=8.0,SNR=8.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.06** | **42** | PKP | | **PKPdf** | **23 23 14.4** | **+1.2** |
| | comp=Z,1.3nm,0.5s,baz=291,slow=2.5,SNR=17 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **132.12** | **16** | PKP | | **PKPdf** | **23 23 16.3** | **-0.2** |
| | comp=Z,4.0nm,0.7s,baz=247,slow=1.9,SNR=3.3 | | | | | | | |
| **BDFB** | **Brasilia** | **144.47** | **235** | PKP | | **PKPdf** | **23 23 40.4** | **+0.3** |
| | comp=Z,2.2nm,0.6s,baz=135,slow=5.7,SNR=3.7 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.21** | **43** | PKPbc | | **PKPdf** | **23 23 41.0** | **-0.1** |
| | comp=Z,4.2nm,0.5s,baz=282,slow=0.8,SNR=111 | | | | | | | |

*DJA* ***19*** *23:05:35.5±1.1,9°S±6°×11°9E±1°0,h131km±12km,M4.0/8, mb4.3/2,MLv3.9/8*
*ISCJB* ***19*** *23:05:37.3±0.8,8°38S±0°06×119°56E±0°09,h170km, mb3.8/1, Error ellipse: s-maj=13.4km s-min=6.4km az=152.9*
*IDC* ***19*** *23:05:41.1±2.8,8°06S×120°02E,h192km±21km,mb3.0/2, mb1 3.1/5,mb1mx3.0/35,mbtmp3.6/5, Error ellipse: s-maj=65.1km s-min=8.9km az=53.0*

**ISC 19 23:05:37.9±1.1,8°41S±0°09×119°6E±0°1,h170km,n16, σ0.95/16,Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **BASI** | **Baing, Sumba** | **2.05** | **152** | P | | Pn | 23 06 10.6 | -4.3 |
| **EDFI** | **Ende, Flores** | **2.11** | **99** | P | | **Sn** | **23 06 46.1** | **+1.3** |
| **MMRI** | **Maumere** | **2.63** | **95** | P | | **Pn** | **23 06 21.9** | **+0.2** |
| **TWSI** | **Taliwang, Sumb** | **2.69** | **263** | P | | Pn | 23 06 13.9 | -8.5 |
| **BKSI** | **Bulukumba** | **3.11** | **10** | P | | **Pn** | **23 06 27.8** | **+0.3** |
| **KAPI** | **Kappang** | **3.38** | **3** | P | | **Pn** | **23 06 31.0** | **+0.2** |
| | 7.0nm,0.3s,baz=180,slow=7.4,SNR=17 | | | | | | | |
| KAPI | | | | S | | **Sn** | **23 07 10.2** | **-1.9** |
| | 0.9nm,0.3s,baz=164,slow=15,SNR=1.9 | | | | | | | |
| **BATI** | **Baumata** | **4.40** | **114** | P | | **Pn** | **23 06 44.0** | **0.0** |
| | 16nm,0.3s,baz=85,slow=0.8,SNR=22 | | | | | | | |
| BATI | | | | S | | **Sn** | **23 07 35.4** | **-0.2** |
| | 15nm,0.3s,baz=181,slow=21,SNR=6.9 | | | | | | | |
| **BATI** | **Baumata** | **4.40** | **114** | P | | **Pn** | **23 06 43.9** | **-0.1** |
| **SPSI** | **Sidrap Palu** | **4.42** | **2** | P | | **Pn** | **23 06 46.1** | **+1.9** |
| **SOEI** | **Soe** | **4.81** | **107** | P | | **Pn** | **23 06 50.0** | **+0.6** |
| | baz=9.5,SNR=6.9 | | | | | | | |
| **SOEI** | **Soe** | **4.81** | **107** | P | | **Pn** | **23 06 49.6** | **+0.2** |
| | 31nm,0.8s,0.2nm | | | | | | | |
| **MTN** | **Manton Dam** | **12.17** | **112** | P | | **Pn** | **23 08 25.6** | **-0.4** |
| | baz=16,SNR=8.5 | | | | | | | |
| **GIRL** | **Giralia** | **15.06** | **199** | P | | **Pn** | **23 09 02.3** | **0.0** |
| | baz=21,SNR=4.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **18.31** | **130** | P | | **Pn** | **23 09 41.7** | **+0.3** |
| | 0.2nm,0.3s,baz=309,slow=12,SNR=2.6 | | | | | | | |
| WRA | | | | S | | **S** | **23 12 58.6** | **-1.3** |
| | 0.1nm,0.3s,baz=299,slow=19,SNR=2.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **20.45** | **140** | P | | Pn | 23 10 05.0 | -1.8 |
| | 0.4nm,0.6s,baz=312,slow=9.1,SNR=4.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.20** | **332** | P | | **P** | **23 15 54.4** | **-0.1** |
| | 1.1nm,0.7s,baz=126,slow=7.3,SNR=5.0 | | | | | | | |

*CRAAG* ***19*** *23:14:59.5,35°98N×4°08E,Ml3.7*
*CSEM* ***19*** *23:15:01.4±0.3,35°97N×4°04E,h2km,mb4.0*
*MDD* ***19*** *23:15:03.1±0.7,36°01N×3°97E,h0km,mb4.0/16, Error ellipse: s-maj=10.8km s-min=4.6km az=3.0, PRXIMO*
*IDC* ***19*** *23:15:04.5±4.3,35°85N×4°09E,h35km±47km, mb2.9/2, mb1 3.1/5,mb1mx3.0/39,mbtmp3.1/5,ML3.4/3,MS3.2/1, Ms1 3.2/1,ms1mx2.5/13, Error ellipse: s-maj=34.7km s-min=23.0km az=164.0*

**ISC 19 23:15:01.5±0.8,35°97N±0°05×4°00E±0°03,h9km±3km,n79, σ1.54/80,Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AKET** | **Djebel Ketaf** | **0.13** | **309** | P | | **Pg** | **23 15 04.3** | **-0.1** |
| **AKET** | **Djebel Ketaf** | **0.13** | **309** | P | | **Pg** | **23 15 04.3** | **-0.1** |
| **AKET** | **Djebel Ketaf** | **0.13** | **309** | P | | **Pg** | **23 15 04.3** | **-0.1** |
| **ATAF** | **Djebel Tarf** | **0.24** | **113** | P | | Pg | 23 15 04.2 | -2.2 |
| **ATAF** | **Djebel Tarf** | **0.24** | **113** | P | | Pg | 23 15 04.2 | -2.2 |
| **ADJB** | **Djebel Djouab** | **0.49** | **293** | P | | **Pg** | **23 15 11.4** | **+0.3** |
| **ADJB** | **Djebel Djouab** | **0.49** | **293** | P | | **Pg** | **23 15 11.4** | **+0.3** |
| **ADJB** | **Djebel Djouab** | **0.49** | **293** | P | | **Pg** | **23 15 11.4** | **+0.3** |
| **EMHD** | **Djebel Mahouad** | **0.88** | **286** | P | | Pb | 23 15 13.4 | -5.7 |
| **ABA** | **Alger-Bouzarea** | **1.14** | **317** | P | | **Pb** | **23 15 23.8** | **+0.4** |
| **ABA** | **Alger-Bouzarea** | **1.14** | **317** | P | | **Pb** | **23 15 23.8** | **+0.4** |
| **ABA** | **Alger-Bouzarea** | **1.14** | **317** | P | | **Pb** | **23 15 23.8** | **+0.4** |
| **SET** | **Setif** | **1.16** | **78** | P | | **Pn** | **23 15 24.0** | **0.0** |
| **SET** | **Setif** | **1.16** | **78** | P | | **Pn** | **23 15 24.0** | **0.0** |
| **SET** | **Setif** | **1.16** | **78** | P | | **Pn** | **23 15 24.0** | **0.0** |
| **DFRA** | **Djebel Bou Aff** | **1.62** | **69** | P | | **Pn** | **23 15 31.7** | **+1.3** |
| **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 4.9nm,0.2s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **5.66** | **294** | P | **Pn** | **23 16 27.1** | **+1.1** |
| | 4.9nm,0.2s,SNR=7.9 | | | | | | |
| **EMLI** | **Melilla** | **5.70** | **265** | P | Pn | 23 16 28.9 | +2.6 |
| | 16nm,0.6s,SNR=7.9 | | | | | | |
| **EMEL** | **Melilla** | **5.71** | **265** | P | Pn | 23 16 28.9 | +2.5 |
| | 16nm,0.6s,SNR=7.9 | | | | | | |
| EMEL | | | | S | **Sn** | **23 17 28.4** | **-3.7** |
| | 127nm,1.8s,SNR=7.9 | | | | | | |
| **CFON** | **Fontmartina** | **5.91** | **349** | P | **Pn** | **23 16 30.2** | **+0.8** |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| **CFON** | **Fontmartina** | **5.91** | **349** | P | **Pn** | **23 16 30.2** | **+0.8** |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **5.96** | **290** | P | **Pn** | **23 16 31.1** | **+1.1** |
| | 3.8nm,0.3s,SNR=23 | | | | | | |
| EQES | | | | S | **Sn** | **23 17 34.6** | **-3.8** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **5.96** | **290** | P | **Pn** | **23 16 31.1** | **+1.1** |
| | 3.8nm,0.3s,SNR=23 | | | | | | |
| **EMIR** | **Miracle** | **6.24** | **343** | P | **Pn** | **23 16 35.0** | **+1.1** |
| | 0.9nm,0.2s,SNR=7.9 | | | | | | |
| **EMIR** | **Miracle** | **6.24** | **343** | P | **Pn** | **23 16 35.0** | **+1.1** |
| | 0.9nm,0.2s,SNR=7.9 | | | | | | |
| **EJON** | **La Jonquera** | **6.53** | **353** | P | **Pn** | **23 16 39.2** | **+1.4** |
| | 14nm,0.6s,SNR=7.9 | | | | | | |
| **EJON** | **La Jonquera** | **6.53** | **353** | P | **Pn** | **23 16 39.2** | **+1.4** |
| | 14nm,0.6s,SNR=7.9 | | | | | | |
| **SJAF** | **Saint Jean de** | **6.56** | **353** | P | **Pn** | **23 16 39.7** | **+1.5** |
| | 26nm,2.3s,SNR=7.9 | | | | | | |
| **SJAF** | **Saint Jean de** | **6.56** | **353** | P | **Pn** | **23 16 39.7** | **+1.5** |
| | 26nm,2.3s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **6.69** | **347** | P | **Pn** | **23 16 41.6** | **+1.5** |
| | 16nm,1.4s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **6.69** | **347** | P | **Pn** | **23 16 41.6** | **+1.5** |
| | 16nm,1.4s,SNR=7.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **7.31** | **303** | Pn | Pn | 23 16 50.8 | +2.3 |
| | 0.5nm,0.3s,baz=118,slow=13,SNR=6.9 | | | | | | |
| **MDT** | **Midelt** | **7.78** | **249** | Pn | **Pn** | **23 16 55.6** | **+0.5** |
| | 0.2nm,0.3s,baz=65,slow=15,SNR=4.1 | | | | | | |
| MDT | | | | Sn | **Sn** | **23 18 20.5** | **-2.9** |
| | 0.2nm,0.3s,baz=31,slow=18,SNR=2.2 | | | | | | |
| MDT | | | | Lg | Lg | 23 19 11.9 | |
| | 0.2nm,0.3s,baz=232,slow=20,SNR=3.5 | | | | | | |
| **VRAC** | **Vranov** | **16.20** | **31** | LR | LR | 23 24 19.0 | |
| | comp=Z,76nm,18.9s,baz=82,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.82** | **186** | P | **P** | **23 20 03.4** | **-1.4** |
| | 0.5nm,0.9s,baz=353,slow=9.4,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.45** | **53** | P | **P** | **23 24 49.7** | **-1.0** |
| | 0.2nm,0.5s,baz=280,slow=8.2,SNR=2.6 | | | | | | |

**MAN 19 23:28:36,12.00N×121.04E,h2km,mb4.7,ML3.6,MS3.5, 1C,Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SJMP** | **San Jose** | **0.46** | **10** | *e*P | Pg | 23 28 45.5 | +0.6 |
| SJMP | | | | *e*S | Sb | 23 28 58.5 | +4.3 |
| **BUSP** | **Coron** | **0.82** | **270** | *e*P | Pb | 23 28 52.6 | -0.3 |
| BUSP | | | | *e*S | Sn | 23 29 07.4 | +0.1 |
| **OTRP** | **Odiongan** | **1.03** | **70** | *e*P | Pg | 23 28 55.9 | +0.2 |
| **AUQP** | **San Andres** | **2.07** | **50** | *e*P | Pn | 23 29 13.1 | +1.2 |
| **GQP** | **Guinayangan** | **2.34** | **36** | *e*P | Pg | 23 29 22.1 | +1.2 |
| GQP | | | | *e*S | Sn | 23 29 41.0 | -3.8 |

*CSEM **19** 23:44:13.8±0.2,39.10N×38.90E,h5km, MD2.7, Error ellipse: s-maj=5.8km s-min=3.6km az=78.0*
*ISK **19** 23:44:13.0,39.13N×38.87E,h21km, MD2.7*
*ISCJB **19** 23:44:14.1±0.6,39.12N±0.04×38.96E±0.05,h10km, Error ellipse: s-maj=6.4km s-min=4.9km az=44.4*
*DDA **19** 23:44:14.3,39.19N×38.99E,h7km, Md2.6*

**ISC 19 23:44:14.3±0.9,39.13N±0.03×38.95E±0.03,h10km,n16, σ1.900/22,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PTK** | **Pertek** | **0.42** | **124** | *e*PG | **Pg** | **23 44 22.7** | **+0.1** |
| PTK | | | | *e*SG | **Sb** | **23 44 31.4** | **+1.1** |
| **PTK** | **Pertek** | **0.42** | **124** | *e*Pg | **Pg** | **23 44 22.7** | **+0.1** |
| **ILIC** | **ilic-Erzincan** | **0.44** | **318** | *e*PG | **Pg** | **23 44 22.2** | **-0.7** |
| ILIC | | | | *e*SG | **Sg** | **23 44 28.2** | **-0.6** |
| **ILIC** | **ilic-Erzincan** | **0.44** | **318** | *e*Pg | **Pg** | **23 44 22.3** | **-0.7** |
| ILIC | | | | *e*Sg | **Sg** | **23 44 28.2** | **-0.6** |
| **EZC** | **Erzincan** | **0.70** | **27** | *e*PG | **Pg** | **23 44 28.3** | **-0.4** |
| **ERZN** | **Erzincan** | **0.75** | **52** | *e*PG | **Pg** | **23 44 28.3** | **-0.6** |
| **SVRC** | **Sivrice-ELAZID** | **0.80** | **159** | *e*PG | **Pg** | **23 44 28.9** | **-0.9** |
| **SVRC** | **Sivrice-ELAZID** | **0.80** | **159** | *e*Pg | **Pg** | **23 44 28.9** | **-0.9** |
| **MALT** | **Malatya** | **0.91** | **207** | *e*PG | **Pg** | **23 44 30.8** | **-1.1** |
| **MALT** | **Malatya** | **0.91** | **207** | *e*Pg | **Pg** | **23 44 30.8** | **-1.1** |
| **KELT** | **Kelkit** | **1.04** | **13** | *i* P | **Pn** | **23 44 35.7** | **+0.4** |
| KELT | | | | *i* S | **Sg** | **23 44 47.4** | **-0.7** |
| **KELT** | **Kelkit** | **1.04** | **13** | P | **Pn** | **23 44 35.7** | **+0.4** |
| KELT | | | | S | **Sg** | **23 44 47.4** | **-0.7** |
| **AKCD** | **Akcadag** | **1.16** | **224** | S | **Sn** | **23 44 55.4** | **+2.7** |
| **CUKAN** | **kangal_SIVAS** | **1.17** | **280** | P | **Pg** | **23 44 36.9** | **+0.1** |
| CUKAN | | | | S | **Sn** | **23 44 54.1** | **+1.2** |
| **BINT** | **Bingol** | **1.23** | **101** | *e*Pn | **Pg** | **23 44 38.0** | **+0.1** |
| **BNGB** | **Bing ‖l** | **1.35** | **95** | *e*PN | **Pn** | **23 44 38.0** | **-1.3** |

*ISCJB **19** 23:53:40.5±1.0,27.29N±0.05×56.50E±0.09,h10km, Error ellipse: s-maj=12.4km s-min=6.0km az=153.5*
*CSEM **19** 23:53:40.0±0.5,27.27N×56.53E,h2km, ML3.6, Error ellipse: s-maj=15.2km s-min=7.1km az=71.0*
*DSN **19** 23:53:42.2±0.8,27.22N×56.49E,h15km, mb3.2/8, ML3.6/7, Error ellipse: s-maj=26.6km s-min=6.5km az=100.0*
*OMAN **19** 23:53:51.2±99.0,26.48N×55.77E,h10km, Error ellipse: s-maj=732.1km s-min=1.6km az=4.0*

**ISC 19 23:53:40.7±1.3,27.26N±0.05×56.51E±0.09,h10km,n19, σ0.992/23,2C-6D,Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDS** | **Bandar-Abbas** | **0.34** | **295** | *e*Pg | **Pg** | **23 53 46.7** | **-0.7** |
| BNDS | | | | *e*Sg | **Sg** | **23 53 51.4** | **-0.5** |
| **BANOM** | **Banah** | **1.34** | **188** | ⇓P | **Pn** | **23 54 05.4** | **-0.2** |
| | SNR=305 | | | | | | |
| **BANOM** | **Banah** | **1.34** | **188** | ⇑*e*P | **Pn** | **23 54 05.3** | **-0.2** |
| | SNR=5.8 | | | | | | |
| BANOM | | | | ⇓S | **Sg** | **23 54 24.3** | **+0.4** |
| **BANOM** | **Banah** | **1.34** | **188** | P | **Pn** | **23 54 05.4** | **-0.2** |
| | SNR=305 | | | | | | |
| BANOM | | | | S | **Sg** | **23 54 24.3** | **+0.4** |
| **NAZ** | **Nazwa, Dubai** | **2.39** | **199** | ⇓*e*P | **Pn** | **23 54 21.1** | **+1.2** |
| | SNR=12 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **2.39** | **199** | P | **Pn** | **23 54 21.1** | **+1.2** |
| | SNR=12 | | | | | | |
| **HATD** | **Hatta, Dubai** | **2.45** | **188** | ⇓*e*P | **Pn** | **23 54 21.7** | **+1.0** |
| | SNR=19 | | | | | | |
| **HATD** | **Hatta, Dubai** | **2.45** | **188** | P | **Pn** | **23 54 21.7** | **+1.0** |
| | SNR=19 | | | | | | |
| **ASHO** | **Ashiyiah** | **2.60** | **189** | ⇓P | **Pn** | **23 54 23.2** | **+0.4** |
| | SNR=14 | | | | | | |
| **ASHO** | **Ashiyiah** | **2.60** | **189** | ⇑*e*P | **Pn** | **23 54 23.3** | **+0.5** |
| | SNR=14 | | | | | | |
| **ASHO** | **Ashiyiah** | **2.60** | **189** | P | **Pn** | **23 54 23.2** | **+0.5** |
| | SNR=14 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.64** | **199** | *e*P | **Pn** | **23 54 23.7** | **+0.4** |
| | SNR=38 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **2.64** | **199** | P | **Pn** | **23 54 23.7** | **+0.4** |
| | SNR=38 | | | | | | |
| **KRBR** | **Kerman** | **2.72** | **5** | *e*Pn | **Pn** | **23 54 25.1** | **+0.3** |
| KRBR | | | | *e*Sg | **Sb** | **23 55 03.5** | **+0.3** |
| **ASUD** | **Al Ashush, Dub** | **2.83** | **202** | *e*P | **Pn** | **23 54 27.0** | **+1.0** |
| | SNR=21 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.83** | **202** | P | **Pn** | **23 54 27.0** | **+1.0** |
| | SNR=21 | | | | | | |
| **GHIR** | **Ghir-Karzin** | **3.29** | **289** | *e*P | **Pn** | **23 54 33.4** | **+1.0** |
| **ABTO** | **Aybut** | **10.30** | **197** | ⇓P | **Pn** | **23 56 06.8** | **-1.8** |
| | SNR=6.1 | | | | | | |
| **ABTO** | **Aybut** | **10.30** | **197** | P | **Pn** | **23 56 06.8** | **-1.8** |
| | SNR=6.1 | | | | | | |

**GCMT 20 00:06:56.0±0.5,57.60S×147.55W,h30km±2km,MW5.0/56, Moment Tensor Solution. s23,c26; s56,c75; Duration: 0 Moment tensor: Scale 10^16 Nm;**
Mrr=0.64±.27; Mθθ3.16±.26; Mϕϕ-2.52±.19; Mrθ-0.70±.35; Mθϕ1.45±.15; Mrϕ0.59±.29; **Best double couple:** M≥3.33600×10^16 **NP1:**ϕs120.00000°,δ83.00000°, λ-17.00000°. **NP2:**ϕs212.00000°,δ73.00000°, λ-173.00000°. **Principal axes:** T 3.5810, Plg8.0000°, Azm167.0000°; N -0.4850, Plg71.0000°, Azm280.0000°; P -3.0920, Plg17.0000°, Azm75.0000°; **nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s. Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TBI** | **Tubuai** | **34.24** | **357** | *e*LR | LR | 00 22 30.0 | |
| | 516nm,29.5s,baz=176 | | | | | | |
| **TBI** | **Tubuai** | **34.24** | **357** | *e*T | T | 00 49 27.1 | |
| | 14nm,0.3s | | | | | | |
| **RKT** | **Rikitea** | **35.63** | **20** | *e*T | T | 00 51 17.8 | |
| | 4.6nm,0.3s | | | | | | |
| **MEH** | **Mehetia** | **39.66** | **359** | *e*T | T | 00 56 11.1 | |
| | 28nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **39.98** | **357** | *e*LR | LR | 00 25 09.7 | |
| | 498nm,25.2s | | | | | | |
| **VAH** | **Vaihoa** | **42.29** | **360** | *e*T | T | 00 59 27.8 | |
| | 24nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **48.57** | **297** | *e*LR | LR | 00 29 03.8 | |
| | 155nm,25.5s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **48.70** | **164** | P | P | 00 15 37.7 | +0.8 |
| | baz=200,slow=7.5 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **48.82** | **163** | P | P | 00 15 38.7 | +0.9 |

*DDA **20** 00:20:31.6,36.03N×28.01E,h7km, Md2.7*
*ATH **20** 00:20:32.8,36.36N×28.20E,h6km, MD2.7/4*
*CSEM **20** 00:20:33.7±1.0,36.21N×27.96E,h0km±2km, MD2.7, Error ellipse: s-maj=19.4km s-min=7.8km az=18.0*
*ISK **20** 00:20:33.6,36.26N×28.01E,h6km, MD2.7*

**ISC 20 00:20:34.5±1.1,36.26N±0.04×28.00E±0.03,h5km±10km, n25,σ0.993/36,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARG** | **Arkhangelos** | **0.11** | **112** | *e*PG | **Pg** | **00 20 36.5** | **-0.3** |
| ARG | | | | *e*SG | **Sg** | **00 20 38.3** | **0.0** |
| **ARG** | **Arkhangelos** | **0.11** | **112** | *e*Pg | **Pg** | **00 20 36.5** | **-0.3** |
| ARG | | | | *e*Sg | **Sg** | **00 20 38.3** | **0.0** |
| **NIS1** | **Nisyros Isl.** | **0.75** | **298** | *e*PB | **Pg** | **00 20 49.0** | **+0.1** |
| **NIS1** | **Nisyros Isl.** | **0.75** | **298** | *e*Pb | **Pg** | **00 20 49.0** | **+0.1** |
| **DALY** | **Dalyan (Mu¨la** | **0.77** | **43** | *e*PG | **Pg** | **00 20 49.5** | **+0.3** |
| DALY | | | | *e*SG | **Sg** | **00 20 59.5** | **+0.3** |
| **DALY** | **Dalyan (Mu¨la** | **0.77** | **43** | *e*Pg | **Pg** | **00 20 49.5** | **+0.3** |
| DALY | | | | *e*Sg | **Sg** | **00 20 59.6** | **+0.3** |
| **TURN** | **Turunc** | **0.78** | **38** | P | Pg | 00 20 44.3 | -5.2 |
| TURN | | | | S | Sg | 00 20 53.0 | -6.7 |
| **YER** | **Yerkesik** | **0.91** | **14** | *e*PG | **Pg** | **00 20 51.6** | **-0.3** |
| YER | | | | *e*SG | **Sg** | **00 21 04.1** | **+0.4** |
| **YER** | **Yerkesik** | **0.91** | **14** | *e*Pg | **Pg** | **00 20 51.6** | **-0.3** |
| YER | | | | *e*Sg | **Sg** | **00 21 04.1** | **+0.4** |
| **BDRM** | **Kayabasi** | **0.92** | **331** | *i* P | **Pb** | **00 20 52.6** | **-0.4** |
| BDRM | | | | *i* S | **Sn** | **00 21 06.9** | **-0.9** |
| **BDRM** | **Kayabasi** | **0.92** | **331** | P | **Pb** | **00 20 52.6** | **-0.4** |
| BDRM | | | | S | **Sn** | **00 21 06.9** | **-0.9** |
| **FETY** | **Fethiye** | **0.95** | **66** | *e*PG | **Pg** | **00 20 51.8** | **-1.0** |
| FETY | | | | *e*SG | **Sg** | **00 21 05.6** | **+0.5** |
| **FETY** | **Fethiye** | **0.95** | **66** | *e*Pg | **Pg** | **00 20 51.8** | **-1.0** |
| FETY | | | | *e*Sg | **Sg** | **00 21 05.6** | **+0.5** |
| **BODT** | **Bodrum** | **0.98** | **326** | *e*PG | **Pg** | **00 20 52.3** | **-1.0** |
| **BODT** | **Bodrum** | **0.98** | **326** | *e*Pg | **Pg** | **00 20 52.3** | **-1.0** |
| **KARP** | **Karpathos** | **0.98** | **224** | *e*PB | **Pn** | **00 20 56.0** | **+1.0** |
| **KARP** | **Karpathos** | **0.98** | **224** | *e*Pb | **Pn** | **00 20 56.0** | **+1.0** |
| **AYDN** | **Tasoluk** | **1.41** | **356** | *e*P | **Pg** | **00 21 02.8** | **+1.3** |
| **AYDN** | **Tasoluk** | **1.41** | **356** | P | **Pg** | **00 21 02.8** | **+1.3** |
| AYDN | | | | S | Sg | 00 21 27.1 | +7.4 |
| **GOLH** | **Golhisar** | **1.59** | **52** | *i* P | **Pg** | **00 21 05.1** | **+0.1** |
| GOLH | | | | *i* S | **Sg** | **00 21 28.3** | **+2.7** |
| **GOLH** | **Golhisar** | **1.59** | **52** | P | **Pg** | **00 21 05.1** | **+0.1** |
| GOLH | | | | S | **Sg** | **00 21 28.3** | **+2.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.69** | **357** | *e*PN | **Pn** | **00 21 04.4** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.69** | **357** | *e*Pn | **Pn** | **00 21 04.4** | **-0.4** |
| **SMG** | **Samos** | **1.72** | **328** | *e*PG | **Pn** | **00 21 04.9** | **-0.3** |
| **SMG** | **Samos** | **1.72** | **328** | *e*Pg | **Pn** | **00 21 04.9** | **-0.3** |

*IDC **20** 00:44:19.2±1.6,11.93N×124.28E,h0km,mb3.9/8, mb1 4.0/8,mb1mx3.7/40,mbtmp4.0/8,MS2.8/1,Ms1 3.0/1, ms1mx2.6/29, Error ellipse: s-maj=126.9km s-min=18.0km az=72.0*
*ISCJB **20** 00:44:21.1±2.0,12.53N±0.06×125.9E±0.2,h34km±17km, mb3.9/9,MS2.7/1,Error ellipse: s-maj=25.5km s-min=10.3km az=173.7*
*MAN **20** 00:44:21,12.49N×125.73E,h14km,mb4.9,ML3.8,MS3.9*

**ISC 20 00:44:19.9±2.2,12.48N±0.06×125.8E±0.1,h16km±13km, n23,σ2.901/18,mb4.0/9,3C-1D,Samar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLP** | **Palo** | **1.51** | **210** | ⇓*e*P | **Pn** | **00 44 46.0** | **-0.4** |
| PLP | | | | *e*S | **Sn** | **00 45 02.6** | **-3.2** |
| **OCLP** | **Ormoc** | **1.81** | **219** | *e*P | **Pn** | **00 44 52.4** | **+1.9** |
| OCLP | | | | *e*S | **Sb** | **00 45 15.5** | **+0.3** |
| **PVCP** | **Virac** | **1.92** | **306** | ⇑*e*P | **Pn** | **00 44 52.3** | **+0.3** |
| PVCP | | | | *i* S | Sg | 00 45 30.6 | +8.8 |
| **MSLP** | **Maasin** | **2.49** | **201** | *e*P | **Pn** | **00 45 01.9** | **+2.0** |
| MSLP | | | | *e*S | **Sn** | **00 45 33.0** | **+3.1** |
| **SCPH** | **Surigao** | **2.69** | **186** | *e*P | **Pg** | **00 45 11.2** | **-0.3** |
| SCPH | | | | *e*S | **Sn** | **00 45 33.4** | **-1.5** |
| **RCP** | **Roxas** | **3.09** | **253** | ⇑*e*P | **Pg** | **00 45 10.6** | **+2.5** |
| **SNPH** | **Sibulan** | **3.98** | **219** | ⇑*e*P | **Pb** | **00 45 29.2** | **-0.5** |
| **BUKP** | **Musuan** | **4.62** | **189** | *e*P | Pn | 00 45 34.0 | +4.8 |
| **BATI** | **Baumata** | **22.63** | **185** | P | P | 00 49 16.0 | -4.4 |
| | 11nm,0.4s,baz=300,slow=16,SNR=1.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.50** | **286** | P | **P** | **00 49 53.4** | **-3.6** |
| | 1.2nm,0.7s,baz=91,slow=7.2,SNR=4.0 | | | | | | |
| CMAR | | | | LR | LR | 00 58 50.0 | |
| | comp=Z,20nm,19.0s,baz=105,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **36.79** | **167** | P | **P** | **00 51 26.9** | **-0.3** |
| | 0.7nm,0.5s,baz=345,slow=7.0,SNR=3.3 | | | | | | |
| **SONM** | **Songino Array** | **38.79** | **339** | P | **P** | **00 51 45.7** | **+1.6** |
| | 0.5nm,0.7s,baz=142,slow=7.3,SNR=4.4 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.83** | **76** | T | T | 01 34 55.0 | |
| | baz=268,slow=75,SNR=9.5 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.84** | **76** | T | T | 01 34 48.3 | |
| | baz=268,slow=75,SNR=4.2 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.85** | **76** | T | T | 01 34 48.9 | |
| | baz=268,slow=75,SNR=7.0 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.09** | **74** | T | T | 01 35 10.5 | |
| | baz=266,slow=74,SNR=24 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.10** | **74** | T | T | 01 35 18.3 | |
| | baz=266,slow=74,SNR=19 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.11** | **74** | T | T | 01 35 11.1 | |
| | baz=266,slow=74,SNR=25 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.99** | **322** | P | P | 00 53 09.9 | -3.6 |
| | 1.8nm,0.6s,baz=121,slow=8.0,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.47** | **331** | P | **P** | **00 53 33.0** | **+1.0** |
| | 0.7nm,0.6s,baz=111,slow=6.3,SNR=3.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **59.58** | **325** | P | **P** | **00 54 24.0** | **+1.1** |
| | 1.1nm,0.7s,baz=126,slow=9.5,SNR=5.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **84.55** | **321** | P | **P** | **00 56 51.1** | **-1.4** |
| | 0.4nm,0.4s,baz=60,slow=5.6,SNR=4.5 | | | | | | |
| **VNDA** | **Vanda** | **92.17** | **173** | P | **P** | **00 57 28.4** | **+0.2** |
| | 0.6nm,1.0s,baz=295,slow=5.1,SNR=2.9 | | | | | | |

**IGQ 20 01:00:57±1.4,0.25S×81.21W,h5km±10km,Mb4.0,8C-4D, Error ellipse: s-maj=8.4km s-min=3.7km az=18.1,Off coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHIS** | **Cerro-Chispas-** | **0.94** | **149** | P | Pg | 01 01 14.4 | -0.6 |
| **CHIS** | **Cerro-Chispas-** | **0.94** | **149** | S | Sg | 01 01 25.0 | -2.2 |
| **JAMA** | **Jama** | **1.01** | **91** | ⇑P | Pg | 01 01 16.7 | +0.2 |
| **PECV** | **Mancha de Ca P** | **1.28** | **114** | ⇑P | Pg | 01 01 15.3 | -6.3 |
| **PECV** | **Mancha de Ca P** | **1.28** | **114** | ⇑S | Sg | 01 01 28.3 | -10 |
| **MAG1** | **Magdalena** | **1.45** | **83** | ⇓P | Pb | 01 01 24.3 | -0.3 |
| **JUA2** | **San Juan 2** | **2.61** | **89** | P | Pn | 01 01 40.9 | +0.4 |
| **PAST** | **Pastocalle** | **2.61** | **100** | P | Pn | 01 01 40.9 | +0.4 |
| **GGP** | **Refugio Guagua** | **2.62** | **88** | P | Pn | 01 01 40.8 | +0.1 |
| **CAMI** | **Rancho Maria** | **2.74** | **99** | ⇓P | Pn | 01 01 43.9 | +1.6 |
| **BNAS** | **Cotopaxi Volca** | **2.77** | **99** | ⇑P | Pn | 01 01 43.9 | +1.2 |
| **NAS2** | **Nasa** | **2.77** | **98** | P | Pn | 01 01 44.6 | +1.7 |
| **BMOR** | **Cotopaxi Volca** | **2.80** | **100** | ⇑P | Pn | 01 01 43.3 | +0.1 |
| **PITA** | **Cotopaxi Volc** | **2.80** | **96** | P | Pn | 01 01 43.3 | +0.2 |
| **BREF** | **Cotopaxi Volca** | **2.80** | **99** | ⇑P | Pn | 01 01 44.0 | +0.6 |
| **BVC2** | **Cotopaxi Volca** | **2.83** | **98** | ⇑P | Pn | 01 01 44.3 | +0.6 |
| **VC1** | **Cotopaxi 1** | **2.84** | **98** | ⇓P | Pn | 01 01 45.5 | +1.8 |
| **BTAM** | **Cotopaxi Volca** | **2.85** | **99** | ⇑P | Pn | 01 01 45.1 | +1.2 |
| **TAMB** | **Tambo** | **2.88** | **99** | P | Pn | 01 01 45.1 | +0.8 |
| **COV1** | **Cotopaxi Volc** | **2.90** | **98** | P | Pn | 01 01 44.1 | -0.6 |
| **COTA** | **Cotacachi** | **2.93** | **79** | P | Pn | 01 01 45.1 | +0.1 |
| **PISA** | **Pisayambo** | **2.94** | **106** | P | Pn | 01 01 47.0 | +1.9 |
| **JUI6** | **Juive** | **2.98** | **113** | P | Pn | 01 01 46.5 | +1.0 |
| **BMAS** | **Trigal station** | **3.00** | **115** | P | Pn | 01 01 46.2 | +0.4 |
| **RUN5** | **Runtun** | **3.02** | **113** | P | Pn | 01 01 48.8 | +2.8 |
| **ARRY** | **Arrayan** | **3.03** | **114** | P | Pn | 01 01 47.6 | +1.5 |
| **BRUN** | **Tungurahua Vol** | **3.03** | **113** | P | Pn | 01 01 47.5 | +1.3 |
| **BULB** | **Ulba Tungurahu** | **3.04** | **113** | ⇓P | Pn | 01 01 47.5 | +1.1 |
| **PAT1** | **Patacocha** | **3.04** | **114** | P | Pn | 01 01 48.4 | +1.9 |
| **BPAT** | **Tungurahua Vol** | **3.05** | **114** | P | Pn | 01 01 47.3 | +0.7 |
| **ANTI** | **Antisana** | **3.06** | **94** | P | Pn | 01 01 47.1 | +0.3 |
| **CAYA** | **Cayambe** | **3.24** | **84** | P | Pn | 01 01 50.9 | +1.6 |

*IGQ **20** 01:05:49.0±0.7,0.13S×81.29W,h3km±4km, Mb4.6, Error ellipse: s-maj=5.5km s-min=3.1km az=19.0*
*IDC **20** 01:05:53.9±0.7,0.26S×80.78W,h0km,mb4.3/15, mb1 4.5/17,mb1mx4.3/31,mbtmp4.3/17,ML3.8/2,MS3.9/15, Ms1 3.9/15,ms1mx3.7/30,Error ellipse: s-maj=26.8km s-min=12.3km az=54.0*
*ISCJB **20** 01:05:54.9±0.2,0.37S±0.03×80.97W±0.02,h10km, mb4.7/67,MS3.9/12,Error ellipse: s-maj=5.0km s-min=2.1km az=33.3*
*BJI **20** 01:05:59.9,0.40S×80.80W,h40km,mB5.3/4,Ms5.3/3, Ms7 5.0/4*
*NEIC **20** 01:06:00.6±0.6,0.38S×80.79W,h49km±5km,mb4.8/54, MD4.5(IGQ),Error ellipse: s-maj=6.1km s-min=4.1km az=54.0*
*NEIC Felt by people in high-rise buildings at Bahia de Caraquez and Manta.*

**ISC 20 01:05:55.7±0.3,0.40S±0.04×80.79W±0.04,h10km,n352, σ1.910/357,mb4.8/66,MS4.0/12,27C-2D,Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAMA** | **Jama** | **0.60** | **77** | ⇑P | **Pb** | **01 00 09.2** | **+0.8** |
| **CHIS** | **Cerro-Chispas-** | **0.65** | **174** | ⇓P | **Pg** | **01 00 08.1** | **-0.2** |
| **PECV** | **Mancha de Ca P** | **0.83** | **117** | ⇑P | **Pg** | **01 00 09.9** | **-1.9** |
| **MAG1** | **Magdalena** | **1.07** | **72** | ⇑P | **Pn** | **01 00 18.8** | **+1.9** |
| **PAST** | **Pastocalle** | **2.17** | **98** | ⇑P | **Pn** | **01 00 33.5** | **+1.1** |
| **JUA2** | **San Juan 2** | **2.19** | **85** | P | **Pn** | **01 00 33.1** | **+0.4** |
| **TERV** | **Terraza Guagua** | **2.20** | **84** | P | **Pn** | **01 00 33.1** | **+0.2** |
| **GGP** | **Refugio Guagua** | **2.21** | **84** | ⇑P | **Pn** | **01 00 33.1** | **+0.1** |
| **CAMI** | **Rancho Maria** | **2.30** | **97** | P | **Pn** | **01 00 36.1** | **+1.9** |
| **BNAS** | **Cotopaxi Volca** | **2.33** | **97** | ⇑P | **Pb** | **01 00 37.6** | **-0.5** |
| **NAS2** | **Nasa** | **2.34** | **96** | ⇑P | **Pb** | **01 00 37.9** | **-0.3** |
| **BMOR** | **Cotopaxi Volca** | **2.36** | **98** | ⇑P | **Pb** | **01 00 37.9** | **-0.7** |
| **PITA** | **Cotopaxi Volc** | **2.37** | **94** | P | **Pn** | **01 00 37.9** | **+2.8** |
| **BREF** | **Cotopaxi Volca** | **2.37** | **96** | ⇑P | **Pb** | **01 00 38.6** | **-0.3** |
| **MOV1** | **Cotopaxi Vol s** | **2.37** | **97** | ⇑P | **Pn** | **01 00 37.2** | **+1.9** |
| **BVC2** | **Cotopaxi Volca** | **2.39** | **96** | ⇑P | **Pb** | **01 00 38.8** | **-0.4** |
| **VC1** | **Cotopaxi 1** | **2.40** | **96** | ⇑P | **Pb** | **01 00 38.8** | **-0.6** |
| **IGUA** | **Iguilata** | **2.41** | **117** | P | **Pb** | **01 00 38.8** | **-0.8** |
| **BTAM** | **Cotopaxi Volca** | **2.41** | **96** | ⇑P | **Pb** | **01 00 39.6** | **+0.1** |
| **OTAV** | **Otavalo** | **2.43** | **75** | ⇑P | **Pn** | **01 00 36.8** | **+0.9** |
| **OTAV** | **Otavalo** | **2.43** | **75** | *e*Pn | **Pn** | **01 00 35.7** | **-0.2** |
| OTAV | | | | *e*Sn | **Sn** | **01 07 06.0** | **+0.1** |
| **TAMB** | **Tambo** | **2.44** | **97** | P | **Pn** | **01 00 38.9** | **+2.7** |
| **COV1** | **Cotopaxi Volc** | **2.46** | **96** | ⇑P | **Pn** | **01 00 38.7** | **+2.2** |
| **PISA** | **Pisayambo** | **2.49** | **105** | ⇓P | **Pb** | **01 00 40.7** | **-0.2** |
| **BBIL** | **Ulba Tungurahu** | **2.53** | **114** | ⇑P | **Pb** | **01 00 40.5** | **-0.9** |
| **CUIC** | **Volcan Cuicoch** | **2.53** | **74** | ⇑P | **Pn** | **01 00 37.4** | **+0.2** |
| **JUI6** | **Juive** | **2.54** | **114** | P | **Pn** | **01 00 39.0** | **+1.7** |
| **RIOE** | **Riobamba** | **2.54** | **122** | P | **Pn** | **01 00 39.3** | **+1.9** |
| **BMAS** | **Trigal station** | **2.56** | **115** | ⇑P | **Pb** | **01 00 40.9** | **-1.0** |
| **RETU** | **Refugio** | **2.57** | **114** | P | **Pn** | **01 00 40.5** | **+2.6** |
| **RUN5** | **Runtun** | **2.57** | **113** | P | **Pb** | **01 00 41.6** | **-0.6** |
| **RUN5** | **Runtun** | **2.57** | **113** | S | **Sb** | **01 07 16.4** | **+2.4** |
| **BRUN** | **Tungurahua Vol** | **2.59** | **113** | ⇑P | **Pn** | **01 00 40.1** | **+2.2** |
| **BRUN** | **Tungurahua Vol** | **2.59** | **113** | ⇑S | **Sb** | **01 07 

comp=Z,269nm,21.8s,baz=337,slow=42
732A Laxson Ranch, 34.29 329 P P 01 12 42.9 +0.5
baz=34
633A Saathoff Ranch 34.50 331 P P 01 12 44.1 -0.1
baz=35
534A Blanco 34.64 332 P P 01 12 45.3 -0.2
baz=35
632A Uvalde 34.84 330 P P 01 12 47.3 +0.2
baz=35
533A Kerrville 34.94 332 P P 01 12 48.2 +0.2
baz=35
631A Perdido Creek 35.16 329 P P 01 12 49.5 -0.4
baz=35
434A Burnet 35.21 333 P P 01 12 50.2 -0.1
baz=35
237A Washetta, Mont 35.22 338 P P 01 12 50.8 +0.4
baz=35
KMSC Kings Mountain 35.36 359 P P 01 12 51.7 +0.2
baz=36
KMSC Kings Mountain 35.36 359 eP P 01 12 54.7 +3.1
26nm,1.3s
532A Rocksprings 35.40 331 P P 01 12 51.7 -0.4
baz=36,SNR=7.7
433A Art 35.53 332 P P 01 12 53.3 +0.2
baz=36,SNR=20
CNNC Cliffs of the 35.56 4 eP P 01 12 53.4 +0.2
57nm,0.3s
334A Lometa 35.64 334 P P 01 12 53.4 -0.6
baz=36
JCT Junction City 35.64 331 P P 01 12 53.4 -0.7
baz=36
JCT Junction City 35.64 331 eP P 01 12 53.2 -0.9
14nm,1.0s
BDFB Brasilia 35.72 117 P P 01 12 54.4 -0.7
6.1nm,0.9s,baz=281,slow=9.3,SNR=5.4
BDFB LR LR 01 28 48.0
comp=Z,385nm,21.1s,baz=286,slow=38
531A Rocksprings 35.75 330 P P 01 12 55.5 +0.5
baz=36,SNR=6.5
SWET Sewanee 35.76 353 eP P 01 12 54.3 -0.7
17nm,1.1s
CPCT Cooper Cave 35.84 355 eP P 01 12 55.0 -0.6
333A Richland Sprin 35.97 333 P P 01 12 56.7 -0.2
baz=36
432A Menard 35.97 332 P P 01 12 56.6 -0.2
baz=36
TKL Tuckaleechee C 35.98 356 eP P 01 12 57.0 +0.1
530A J-C Ranch, Com 36.14 329 P P 01 12 58.1 -0.3
baz=36
431A Sonora 36.20 330 P P 01 12 58.9 0.0
baz=36,SNR=8.4
332A Millersview 36.36 332 P P 01 13 00.2 -0.1
baz=36,SNR=13
Y39A Lockesburg 36.37 341 P P 01 13 00.7 +0.5
baz=36
233A Rising Star 36.52 334 P P 01 13 01.5 0.0
baz=37
430A Baggett Ranch, 36.60 330 P P 01 13 02.3 -0.1
baz=37
331A San Angelo 36.63 331 P P 01 13 02.5 0.0
baz=37
134A White-Moore Ra 36.64 335 P P 01 13 02.4 -0.1
baz=37
232A Coleman 36.74 333 P P 01 13 03.5 +0.1
baz=37,SNR=7.1
TXAR Lajitas Array 36.77 325 P P 01 13 02.5 -1.3
1.3nm,1.1s,baz=145,slow=9.5,SNR=6.0
TXAR PcP PcP 01 15 26.6 +0.5
0.8nm,0.9s,baz=134,slow=3.6,SNR=3.7
TX31 Lajitas Ar. Si 36.77 325 eP P 01 13 03.1 -0.7
MIAR Mount Ida 36.77 342 P P 01 13 03.5 -0.1
baz=37
429A Davenport Ranc 36.81 329 P P 01 13 03.7 -0.3
baz=37
TZTN Tazewell 36.85 356 eP P 01 13 02.9 -1.4
31nm,1.4s
Y37A Hugo 36.93 339 P P 01 13 05.1 +0.2
baz=37
Z35A Perchaven, San 36.96 337 P P 01 13 05.6 +0.3
baz=37
133A Hamilton Ranch 37.02 334 P P 01 13 05.5 -0.4
baz=37
330A Mertzon 37.07 330 P P 01 13 05.8 -0.5
baz=37
231A Bronte 37.09 332 P P 01 13 06.5 0.0
baz=37
X38A Whitesboro 37.28 341 P P 01 13 07.7 -0.3
baz=37
ABTX Abilene, Hawle 37.36 333 P P 01 13 08.4 -0.3
baz=38
ABTX Abilene, Hawle 37.36 333 eP P 01 13 07.9 -0.8
12nm,1.1s
Y35A Marietta 37.38 337 P P 01 13 09.1 +0.2
baz=38
329A Wagon Wheel Ra 37.54 330 P P 01 13 10.1 -0.2
baz=38
Z33A Whitaker Ranch 37.54 335 P P 01 13 10.2 0.0
baz=38
W38A Poteau 37.55 341 P P 01 13 10.6 +0.3
baz=38
Y34A Reagan Ranch, 37.71 337 P P 01 13 12.1 +0.5
baz=38
131A Roby 37.74 332 P P 01 13 11.3 -0.7
baz=38
W37A Quinton 37.91 340 P P 01 13 13.6 +0.3
baz=38
130A Snyder 37.95 332 P P 01 13 13.7 0.0
baz=38
Y33A Hilltop Ranch, 38.10 336 P P 01 13 15.1 +0.2
baz=38
Z31A Sharp Cattle R 38.17 333 P P 01 13 15.5 -0.1
baz=38
V38A Canehill 38.24 342 P P 01 13 16.8 +0.7
baz=38
X34A Smith Ranch, M 38.30 337 P P 01 13 17.0 +0.3
baz=38
228A UT Block 9, Go 38.36 329 P P 01 13 17.2 0.0
baz=38
129A Stewart Farms, 38.41 331 P P 01 13 17.7 +0.1
baz=38
W35A Tecumseh 38.43 339 P P 01 13 17.7 0.0
baz=39
Y32A R-V Farms, Ver 38.44 335 P P 01 13 18.2 +0.4
baz=39
V37A Hulbert 38.50 341 P P 01 13 18.7 +0.4
baz=39
X33A Lawton 38.52 336 P P 01 13 18.7 +0.3
baz=39
Z30A Sanderson Ranc 38.59 332 P P 01 13 19.3 +0.1
baz=39
SIUC Southern Illin 38.72 349 eP P 01 13 19.3 -0.7
31nm,1.3s
TUL1 Tulsa 38.74 340 P P 01 13 20.2 -0.1
baz=39
X32A Elmer 38.74 335 P P 01 13 20.1 -0.2
baz=39
Y31A Rekieta Farm, 38.77 334 P P 01 13 20.9 +0.3
baz=39,SNR=9.3
U38A Gravette 38.77 342 P P 01 13 20.6 +0.1
baz=39
W34A Bridge Creek, 38.84 338 P P 01 13 21.2 +0.1
baz=39
Z29A Hungry Hill Ra 38.84 332 P P 01 13 21.2 -0.1
baz=39
U37A Salina 38.97 341 P P 01 13 22.1 -0.1
baz=39
Y30A Stafford Cattl 38.98 333 P P 01 13 22.2 -0.2
baz=39
W33A Caddo, Fort Co 39.04 337 P P 01 13 22.5 -0.3
baz=39
X31A McDonald Ranch 39.21 335 P P 01 13 24.4 +0.1
baz=39
V34A Guthrie 39.28 338 P P 01 13 25.1 +0.4
baz=39
W32A Sentinel 39.33 336 P P 01 13 25.4 +0.1
baz=40
X30A Coker Ranch, T 39.45 333 P P 01 13 26.4 +0.2
baz=40
MNTX Cornudas Mount 39.52 326 P P 01 13 26.2 -0.7
baz=40,SNR=7.1
MNTX Cornudas Mount 39.52 326 eP P 01 13 26.5 -0.4
20nm,1.8s
V33A Lossen Ranch, 39.55 337 P P 01 13 27.4 +0.3
baz=40
T37A Cheneyville 18 39.56 342 P P 01 13 27.5 +0.3
baz=40,SNR=8.1
T35A Sooner Cattle 39.89 340 P P 01 13 29.9 0.0
baz=40
MSTX Muleshoe 39.94 331 P P 01 13 30.3 -0.1
baz=40
MSTX Muleshoe 39.94 331 eP P 01 13 30.3 -0.1
14nm,0.9s
S37A Fort Scott 40.12 343 P P 01 13 32.1 +0.3
baz=40
AMTX Amarillo 40.17 333 P P 01 13 32.3 0.0
baz=40
AMTX Amarillo 40.17 333 eP P 01 13 32.5 +0.1
9.9nm,0.8s
T34A McClaskey Farm 40.22 340 P P 01 13 33.0 +0.4
baz=40
U32A Winter Ranch, 40.32 337 P P 01 13 33.6 +0.2
baz=40
S36A Lake Cedric, C 40.33 342 P P 01 13 33.9 +0.4
baz=40
W29A Amraillo 40.36 333 P P 01 13 34.0 +0.1
baz=40
W28A Vega 40.72 333 P P 01 13 37.1 +0.2
baz=41
S34A Willow Spring 40.80 340 P P 01 13 38.1 +0.6
baz=41
T32A Huddler Ranch, 40.99 338 P P 01 13 39.9 +0.9
baz=41
LUPA Lehigh Univers 41.11 6 eP P 01 13 40.7 +0.8
19nm,1.2s
U30A WK&E Inc. Balk 41.12 335 P P 01 13 40.6 +0.5
baz=41
R34A Isabella, Hill 41.39 340 P P 01 13 42.8 +0.5
baz=42
Q36A Arnold C. Orve 41.42 343 P P 01 13 42.8 +0.3
baz=42
HDIL Hopedale 41.49 350 P P 01 13 43.9 +0.8
baz=42
121A Cookes Peak, D 41.50 325 P P 01 13 43.9 +0.4
baz=42,SNR=5.5
121A Cookes Peak, D 41.50 325 eP P 01 13 43.4 -0.1
23nm,1.7s
Q35A Mercer Eighty, 41.51 342 P P 01 13 43.7 +0.5
baz=42
S31A Mullinville 41.59 337 P P 01 13 44.7 +0.7
baz=42
R33A Olander Ranch, 41.65 340 P P 01 13 45.2 +0.8
baz=42
U28A Mallet 41.66 334 P P 01 13 45.5 +0.8
baz=42
Q34A Chapman 41.85 341 P P 01 13 46.8 +0.8
baz=42
KSU1 Kansas State U 41.91 341 P P 01 13 46.9 +0.4
baz=42
KSU1 Kansas State U 41.91 341 eP P 01 13 46.3 -0.2
37nm,1.4s
T29A Hugoton 41.92 335 P P 01 13 47.1 +0.4
baz=42
P36A Good Intent, A 41.96 343 P P 01 13 47.5 +0.6
baz=42
U27A Thompson Grove 41.97 333 P P 01 13 47.2 0.0
baz=42
S30A Montezuma 41.99 336 P P 01 13 47.3 +0.1
baz=42
R32A Long Quarter, 42.01 339 P P 01 13 48.3 +0.9
baz=42
P35A Duane Minner, 42.11 342 P P 01 13 48.7 +0.5
baz=42
R31A Burdett 42.19 338 P P 01 13 49.4 +0.5
baz=42
Q33A Connelly Farm, 42.22 340 P P 01 13 49.2 +0.2
baz=42
T28A Walsh 42.23 334 P P 01 13 49.2 -0.2
baz=42
S29A Ulysses 42.24 336 P P 01 13 49.7 +0.4
baz=42
P34A Walnut Farm, R 42.38 342 P P 01 13 51.0 +0.6
baz=42
T27A Campo 42.45 334 P P 01 13 51.8 +0.6
baz=43
Q32A Meitler Ranch, 42.46 339 P P 01 13 51.6 +0.6
baz=43
R30A Dighton 42.48 337 P P 01 13 51.7 +0.5
baz=43
ANMO Albuquerque 42.57 328 eP P 01 13 51.7 -0.5
8.5nm,0.9s
Q31A Ellis 42.77 339 P P 01 13 54.1 +0.5
baz=43
O34A Beatrice 42.92 342 P P 01 13 55.2 +0.5
baz=43
T26A Comanche Natio 42.94 333 P P 01 13 55.6 +0.4
baz=43
S27A Las Animas 43.05 334 P P 01 13 56.5 +0.5
baz=43
Q30A Quinter 43.06 338 P P 01 13 56.0 +0.1
baz=43
O33A Hebron 43.10 341 P P 01 13 57.0 +0.7
baz=43
R28A Tribune 43.14 336 P P 01 13 57.0 +0.4
baz=43,SNR=8.5
TUC Tucson 43.14 322 eP P 01 13 56.0 -0.7
8.1nm,1.4s
P31A Stockton 43.22 339 P P 01 13 57.7 +0.5
baz=43
S26A Kim 43.25 333 P P 01 13 58.2 +0.6
baz=43
Q29A Oakley 43.27 337 P P 01 13 58.6 +0.9
baz=43
T25A Trinidad 43.28 332 P P 01 13 58.2 +0.2
baz=43,SNR=7.0
T25A Trinidad 43.28 332 eP P 01 13 57.6 -0.4
9.1nm,1.0s
R27A Eads 43.51 335 P P 01 13 59.8 +0.2
baz=44,SNR=8.2
P30A Selden 43.56 338 P P 01 14 01.1 +1.1
baz=44
N33A J Bar K, Exete 43.66 342 P P 01 14 02.1 +1.4
baz=44
O31A Woolen Ranch, 43.76 339 P P 01 14 02.7 +1.1
baz=44
KSCO Kaye Shedlock' 44.04 335 P P 01 14 04.2 +0.2
baz=44
214A Organ Pipe Nat 44.19 320 P P 01 14 04.8 -0.4
baz=44
SDCO Great Sand Dun 44.28 332 P P 01 14 06.5 +0.4
baz=44,SNR=9.0
SDCO Great Sand Dun 44.28 332 eP P 01 14 06.0 -0.1
5.8nm,0.9s
W18A Petrified Fore 44.49 326 P P 01 14 08.0 +0.3
baz=45
W18A Petrified Fore 44.49 326 eP P 01 14 08.4 +0.7
19nm,1.3s
S22A 4UR Ranch, Cre 44.93 330 P P 01 14 11.2 -0.1
baz=45
S22A 4UR Ranch, Cre 44.93 330 eP P 01 14 11.8 +0.5
47nm,2.5s
MVCO Mesa Verde 45.36 329 P P 01 14 14.6 -0.1
baz=46
M29A Burnside Ranch 45.39 339 P P 01 14 14.9 +0.3
baz=46
L31A Butterfield Fa 45.41 341 P P 01 14 15.3 +0.7
baz=46
I38A Scanlan Farm, 45.43 348 P P 01 14 15.7 +0.9
baz=46
WUAZ Wupatki 45.71 325 P P 01 14 17.4 0.0
baz=46,SNR=12
WUAZ Wupatki 45.71 325 eP P 01 14 17.8 +0.4
13nm,1.1s
K31A O'Neill 45.78 341 P P 01 14 18.4 +0.8
baz=46
ISCO Idaho Springs 45.99 333 P P 01 14 20.2 +0.5
baz=46
K30A Basset 46.11 341 P P 01 14 21.4 +1.1
baz=46
SMCO Snowmass 46.12 332 eP P 01 14 21.2 +0.4
40nm,2.2s
ECSD EROS Data Cent 46.16 344 P P 01 14 21.7 +1.1
baz=46
ECSD EROS Data Cent 46.16 344 eP P 01 14 22.2 +1.5
77nm,2.5s
J30A Dallas 46.65 341 P P 01 14 25.1 +0.7
baz=47
K28A Ten Mile Ranch 46.74 339 P P 01 14 25.7 +0.4
baz=47
IBP Imperial Bould 46.79 318 P P 01 14 25.8 0.0
baz=47
BC3 Big Chuckawall 46.98 320 P P 01 14 27.6 +0.2
baz=47
J29A Okreek 46.99 341 P P 01 14 27.8 +0.6
baz=47
H32A Carlson Farm, 47.10 344 P P 01 14 28.8 +0.8
baz=47
IRM Iron Mountain 47.11 320 P P 01 14 28.3 +0.1
baz=47
J28A Allard Ranch, 47.32 340 P P 01 14 30.4 +0.7
baz=48
O20A White River Ci 47.48 331 P P 01 14 31.8 +0.5
baz=48
BELC Belle Mtn. Jos 47.55 320 P P 01 14 32.1 +0.3
baz=48
I28A Midland 47.80 340 P P 01 14 34.2 +0.7
baz=48
G32A Webster 47.81 344 P P 01 14 34.5 +1.0
baz=48
GMRC Granite Mounta 47.83 321 P P 01 14 33.9 0.0
baz=48
SRU San Rafael 47.84 329 eP P 01 14 34.1 +0.1
22nm,1.6s
J26A Sides Ranch, S 47.88 338 P P 01 14 35.2 +1.0
baz=48
P18A Preston Nutter 48.08 329 eP P 01 14 36.1 0.0
42nm,2.2s
CCUT Cedar City 48.28 325 eP P 01 14 37.7 +0.2
11nm,1.5s
TMUT Trail Mountain 48.34 328 eP P 01 14 38.3 +0.3
149nm,2.5s
I26A New Underwood 48.42 339 P P 01 14 38.7 +0.4
baz=49
SHPR Sheep Range 48.63 323 eP P 01 14 40.1 0.0
H27A Howes 48.67 340 P P 01 14 40.2 +0.1
baz=49
I25A Rochford 48.74 338 P P 01 14 41.7 +0.9
baz=49
BFSC Mount Baldy Ra 48.79 319 P P 01 14 41.2 -0.1
baz=49
H26A Fairpoint 48.90 339 P P 01 14 42.6 +0.7
baz=49
RSSD Black Hills 48.94 338 eP P 01 14 43.0 +0.6
16nm,1.6s
F29A Eureka 49.01 342 P P 01 14 42.6 -0.1
baz=49
H25A Fruitdale 49.20 339 P P 01 14 44.5 +0.3
baz=49
G27A Dupree 49.28 340 P P 01 14 45.1 +0.3
baz=49
EDW2 Edwards Air Fo 49.39 319 P P 01 14 45.8 -0.1
baz=50
G26A Maurine 49.43 340 P P 01 14 46.7 +0.7
baz=50
FURC Furnace Creek, 49.65 321 P P 01 14 47.8 +0.1
baz=50
TCUT Toone Canyon 49.79 330 eP P 01 14 49.6 +0.5
30nm,1.4s
DUG Dugway 49.84 328 P P 01 14 49.0 -0.3
baz=50
D30A Buchanan 49.86 344 P P 01 14 49.5 +0.3
baz=50
E28A Huff 49.94 342 P P 01 14 50.3 +0.5
baz=50
E27A Carson 50.08 341 P P 01 14 51.8 +0.8
baz=50
R11A Troy Canyon, C 50.11 324 P P 01 14 51.7 +0.3
baz=50
BW06 Boulder Array 50.15 333 eP P 01 14 50.5 -1.2
ISA Isabella 50.18 320 P P 01 14 51.7 -0.1
baz=50
HWUT Hardware Ranch 50.23 330 eP P 01 14 51.7 -0.6
16nm,1.4s
GRAC Grapevine Rang 50.30 322 P P 01 14 53.0 +0.2
baz=50
E26A Carlson Angus 50.41 341 P P 01 14 54.6 +1.2
baz=51
SPUT South Promonto 50.46 329 eP P 01 14 53.6 -0.4
13nm,1.3s
VES Vestal, Richgr 50.68 319 P P 01 14 56.3 +0.7
baz=51
E25A Miller Ranch, 50.76 340 P P 01 14 56.9 +0.9
baz=51
D26A Manning 50.90 341 P P 01 14 57.4 +0.3
baz=51
REDW Red Top Meadow 51.21 332 eP P 01 14 59.1 -0.6
B29A Wagenman Farm, 51.26 344 P P 01 15 00.7 +0.9
baz=51
LOHW Long Hollow 51.29 332 eP P 01 14 59.9 -0.4
40nm,2.5s
D25A Fairfield 51.29 340 P P 01 15 00.9 +0.8
baz=51
MOOW Moose Ponds 51.46 332 eP P 01 15 00.5 -1.0
5.2nm,1.2s
FXWY Fox Creek 51.51 332 eP P 01 15 01.1 -0.9
3.7nm,1.1s
ELK Elko 51.54 327 eP P 01 15 02.2 -0.1
7.7nm,1.5s
IMW Indian Meadow 51.66 332 eP P 01 15 02.9 -0.3
6.0nm,1.3s
NV01 Mina Array Sit 51.78 323 eP P 01 15 04.0 -0.1
NVAR Mina Array Bea 51.78 323 P P 01 15 04.0 0.0
4.9nm,1.0s,baz=124,slow=7.8,SNR=23
NVAR LR LR 01 35 48.3
comp=Z,76nm,18.6s,baz=82,slow=35
A26A Wade Farm, Ken 52.42 342 P P 01 15 09.0 +0.6
baz=53
BMN Battle Mountai 52.44 325 eP P 01 15 08.6 -0.2
14nm,1.4s
QLMT Earthquake Lak 52.60 333 eP P 01 15 11.5 +1.4
1.1nm,1.1s
HLID Hailey 53.09 330 P P 01 15 13.7 0.0
baz=53
BOZ Bozeman (W) 53.32 333 P P 01 15 15.5 +0.2
baz=54
MFID Camas Ranch 53.71 329 eP P 01 15 18.4 +0.2
6.1nm,0.9s
EGMT Eaglon 54.40 336 P P 01 15 23.4 +0.3
baz=54
WVOR Wild Horse Val 54.56 326 eP P 01 15 24.2 -0.1
10.0nm,1.3s
O03D Paynes Creek 55.06 322 P P 01 15 28.1 +0.1
baz=55
MSO Missoula 55.27 333 P P 01 15 29.6 +0.2
baz=55
M04C Macdoel 55.99 324 P P 01 15 35.0 +0.3
baz=56
N02D Trinity Center 56.02 322 P P 01 15 34.6 -0.3
baz=56
I07A Izee 56.12 327 eP P 01 15 36.2 +0.7
4.9nm,1.0s
M02C Callahan 56.36 323 P P 01 15 37.4 +0.1
baz=56
J05D Fort Rock, OR 56.57 325 P P 01 15 39.3 +0.5
baz=57
G08A Pilot Rock 56.63 329 eP P 01 15 39.3 +0.1
8.0nm,1.0s
J04D Umpqua Nationa 57.04 325 P P 01 15 42.5 +0.3
baz=57
RKT Rikitea 57.22 243 eLR LR 01 32 36.7
477nm,39.0s
L02D Cave Junction, 57.26 323 P P 01 15 43.9 +0.3
baz=57
I05D Terrebonne, OR 57.29 326 P P 01 15 44.1 +0.2
baz=57
G06A Carlson Farm, 57.48 328 eP P 01 15 45.6 +0.5
10nm,1.1s
I04A Tendick Farm, 57.55 325 P P 01 15 45.6 0.0
baz=58
NEW Newport 57.78 332 P P 01 15 47.8 +0.6
baz=58
LON Longmire 59.09 328 eP P 01 15 57.2 +0.8
24nm,2.1s
A04D Lummi Island 60.82 330 P P 01 16 08.6 +0.5
baz=61
YKA Yellowknife Ar 67.69 344 P P 01 16 52.4 -0.5
3.9nm,1.0s,baz=128,slow=7.3,SNR=4.4
PPT Papeete 69.68 251 LR LR 01 42 14.3
comp=Z,117nm,18.1s,baz=127,slow=31
PPT2 Papeete2 69.68 251 eLR LR 01 38 19.2
97nm,25.2s
LIC Lamto 75.89 84 eP P 01 17 42.7 -0.6
87nm,1.4s
TIC Toumodi 75.92 83 eP P 01 17 42.7 -0.7
DBIC Dimbokro 76.08 83 P P 01 17 43.7 -0.6
16nm,1.0s,baz=243,slow=4.5,SNR=6.3
DBIC LR LR 01 51 11.7
comp=Z,87nm,18.1s,baz=210,slow=36
DBIC Dimbokro 76.08 83 eP P 01 17 42.3 -2.0
KIC Kosan Boka 76.18 83 eP P 01 17 44.5 -0.4
66nm,0.9s
INK Inuvik 77.37 342 eP P 01 17 50.4 -0.1
26nm,1.5s
EGAK Eagle 78.14 338 eP P 01 17 54.8 0.0
18nm,1.3s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ESDC** | **Sonseca Array** | **80.13** | **50** | P | | **P** | **01 18 06.2** | **-0.2** |
| | 1.6nm,1.0s,baz=261,slow=6.2,SNR=4.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **80.36** | **337** | P | | **P** | **01 18 05.3** | **-1.8** |
| | 0.8nm,1.0s,baz=107,slow=4.2,SNR=5.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.77** | **77** | P | | **P** | **01 18 19.5** | **-1.3** |
| | 3.2nm,1.0s,baz=279,slow=6.0,SNR=14 | | | | | | | |
| TORD | | | | LR | | LR | 01 55 22.3 | |
| | comp=Z,59nm,18.8s,baz=235,slow=36 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **83.61** | **162** | P | | **P** | **01 18 23.9** | **-0.1** |
| **VNA1** | **Neumayer--Stat** | **83.88** | **161** | P | | **P** | **01 18 25.6** | **+0.2** |
| **VNA2** | **Neumayer--Watz** | **84.23** | **162** | P | | **P** | **01 18 26.4** | **-0.8** |
| | baz=308,slow=5.2 | | | | | | | |
| **SNAA** | **Sanae** | **85.83** | **162** | P | | **P** | **01 18 34.4** | **-0.9** |
| **SNAA** | **Sanae** | **85.83** | **162** | LR | | LR | 01 57 44.4 | |
| | comp=Z,46nm,18.6s,baz=198,slow=36 | | | | | | | |
| **SNAA** | **Sanae** | **85.83** | **162** | *e*P | | **P** | **01 18 34.2** | **-1.1** |
| | 29nm,2.6s | | | | | | | |
| **QSPA** | **South Pole Qui** | **89.65** | **180** | *e*P | | **P** | **01 18 53.6** | **-0.2** |
| | 4.4nm,0.9s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **91.86** | **12** | LR | | LR | 02 01 43.2 | |
| | comp=Z,32nm,19.0s,baz=190,slow=36 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **125.32** | **10** | PKP | | **PKPdf** | **01 24 55.3** | **-1.6** |
| | 0.8nm,0.5s,baz=346,slow=1.8,SNR=4.3 | | | | | | | |
| **GEYT** | **Alibeck** | **126.89** | **41** | PKP | | **PKPdf** | **01 25 00.2** | **-0.2** |
| | 1.1nm,0.4s,baz=331,slow=12,SNR=3.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **131.48** | **15** | PKP | | **PKPdf** | **01 25 06.9** | **-2.0** |
| | 0.6nm,0.8s,baz=294,slow=1.4,SNR=3.4 | | | | | | | |
| **KSRS** | **Korea Array** | **134.60** | **328** | PKP | | **PKPdf** | **01 25 14.3** | **-0.6** |
| | 2.1nm,0.8s,baz=7.4,slow=1.4,SNR=5.2 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **134.63** | **328** | PKP | | **PKPdf** | **01 25 14.3** | **-0.7** |
| **WMQ** | **Urumqi** | **135.57** | **12** | *e*PKP | | **PKPdf** | **01 25 16.0** | **-0.7** |
| **KSH** | **Kashi** | **135.66** | **26** | *e*PKP | | **PKPdf** | **01 25 16.8** | **-0.3** |
| KSH | | | | *es*PKP | | | 01 25 31.3 | |
| KSH | | | | *e*PP | | PP | 01 28 00.0 | +6.3 |
| KSH | | | | SKKS | | | 01 34 47.8 | |
| KSH | | | | SS | | **SS** | **01 45 53.9** | **+3.0** |
| KSH | | | | PPMZ | | | | |
| | 84nm,5.7s | | | | | | | |
| KSH | | | | LZ | | | | |
| | 200nm,7.6s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **138.21** | **346** | *e*PKP | | **PKPdf** | **01 25 20.4** | **-1.4** |
| HHC | | | | PP | | **PP** | **01 28 12.0** | **+2.8** |
| HHC | | | | SS | | SS | 01 46 16.9 | -3.7 |
| HHC | | | | PPMZ | | | | |
| | 74nm,5.8s | | | | | | | |
| HHC | | | | LN | | | | |
| | 230nm,18.5s | | | | | | | |
| HHC | | | | LE | | | | |
| | 180nm,13.6s | | | | | | | |
| HHC | | | | LZ | | | | |
| | 130nm,16.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **138.68** | **232** | PKP | | **PKPdf** | **01 25 21.6** | **-1.4** |
| | 0.7nm,0.8s,baz=114,slow=3.1,SNR=5.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **140.09** | **238** | PKP | | **PKPdf** | **01 25 24.6** | **-1.0** |
| | 1.2nm,0.9s,baz=125,slow=2.0,SNR=4.5 | | | | | | | |
| **LZH** | **Lanzhou** | **144.24** | **354** | *e*PKP | | **PKPab** | **01 25 29.3** | **-1.2** |
| LZH | | | | pPKP | | **PKiKP** | **01 25 40.3** | **+3.9** |
| LZH | | | | sPKP | | | 01 25 44.5 | |
| LZH | | | | LN | | | | |
| | 120nm,18.1s | | | | | | | |
| LZH | | | | LE | | | | |
| | 120nm,18.3s | | | | | | | |
| LZH | | | | LZ | | | | |
| | 160nm,20.2s | | | | | | | |
| **XAN** | **Xi'an** | **145.32** | **346** | PKPbc | | **PKPbc** | **01 25 33.9** | **-0.4** |
| **CD2** | **Chengdu** | **149.35** | **352** | PKPbc | | **PKPdf** | **01 25 38.4** | **-3.0** |
| CD2 | | | | pPKP | | **PKPab** | **01 25 50.6** | **+0.4** |
| CD2 | | | | sPKP | | | 01 25 55.3 | |
| CD2 | | | | PP | | **PP** | **01 29 15.3** | **-0.7** |
| CD2 | | | | SKS | | **SKSdf** | **01 32 43.5** | **-6.5** |
| CD2 | | | | SKKS | | **SKKSac** | **01 36 02.5** | **-6.7** |
| CD2 | | | | SS | | **SS** | **01 48 26.4** | **-2.1** |
| CD2 | | | | PPMZ | | | | |
| | 120nm,5.0s | | | | | | | |
| **KMI** | **Kunming** | **155.19** | **352** | PKP | | **PKPdf** | **01 25 52.3** | **+1.9** |

*ISCJB **20** 01:17:34.3±0.6,24.80N±0.05×122.30E±0.03,h32km±4km, Error ellipse: s-maj=8.5km s-min=4.2km az=8.2*
*TAP **20** 01:17:36.0,24.89N×122.02E,h41km,ML2.8,D*
*JMA **20** 01:17:35.7±0.1,24.75N×122.37E,h43km±3km,M2.2*

**ISC 20 01:17:34.0±2.5,24.86N±0.07×122.30E±0.03,h36km±2km, n19,σ1°32/31,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.32** | **298** | P | | **Pn** | **01 17 43.2** | **+1.0** |
| | baz=351 | | | | | | | |
| TWB1 | | | | S | | **Sn** | **01 17 48.1** | **-0.7** |
| | baz=351 | | | | | | | |
| **TWC** | **Suao** | **0.48** | **239** | P | | **Pn** | **01 17 44.7** | **+0.5** |
| | baz=207 | | | | | | | |
| TWC | | | | S | | **Sn** | **01 17 51.4** | **-0.1** |
| | baz=207 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.52** | **294** | *e*P | | **Pn** | **01 17 46.3** | **+1.4** |
| | baz=310 | | | | | | | |
| NWF | | | | *e*S | | **Sn** | **01 17 54.2** | **+1.7** |
| | baz=310 | | | | | | | |
| **TWE** | **Neicheng** | **0.59** | **257** | *e*P | | **Pn** | **01 17 45.3** | **-0.7** |
| | baz=241 | | | | | | | |
| TWE | | | | *e*S | | **Sn** | **01 17 52.5** | **-1.8** |
| | baz=241 | | | | | | | |
| **TWA** | **Mucha** | **0.66** | **281** | *e*S | | **Sn** | **01 17 53.8** | **-2.2** |
| | baz=283 | | | | | | | |
| **ENA** | **Nanau** | **0.67** | **230** | *e*P | | **Pn** | **01 17 47.8** | **+0.8** |
| | baz=208 | | | | | | | |
| ENA | | | | *e*S | | **Sn** | **01 17 56.6** | **+0.5** |
| | baz=208 | | | | | | | |
| **ENTT** | **Nioudou** | **0.70** | **252** | *e*P | | **Pn** | **01 17 49.4** | **+2.0** |
| | baz=238 | | | | | | | |
| ENTT | | | | *e*S | | **Sn** | **01 17 55.4** | **-1.6** |
| | baz=238 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.71** | **125** | P | | **Pn** | **01 17 47.7** | **+0.1** |
| JYNG | | | | *e*S | | **Sn** | **01 17 56.6** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **0.76** | **121** | P | | **Pn** | **01 17 48.4** | **+0.3** |
| YOJ | | | | *e*S | | **Sn** | **01 17 57.4** | **-0.9** |
| **NSK** | **Sanguang** | **0.88** | **258** | *e*P | | **Pn** | **01 17 49.5** | **-0.3** |
| | baz=250 | | | | | | | |
| NSK | | | | *e*S | | **Sn** | **01 17 59.1** | **-2.3** |
| | baz=250 | | | | | | | |
| **NNS** | **Nan Shan** | **0.94** | **244** | *e*P | | **Pn** | **01 17 52.5** | **+1.7** |
| | baz=232 | | | | | | | |
| NNS | | | | *e*S | | **Sn** | **01 18 03.7** | **+0.6** |
| | baz=232 | | | | | | | |
| **TWD** | **Chiawan** | **1.01** | **220** | *e*S | | **Sn** | **01 18 04.9** | **+0.4** |
| | baz=205 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.18** | **233** | *e*P | | Pn | 01 17 58.1 | +3.7 |
| | baz=222 | | | | | | | |
| WHF | | | | *e*S | | **Sn** | **01 18 08.4** | **-1.0** |
| | baz=222 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.20** | **259** | *e*S | | **Sn** | **01 18 06.4** | **-2.9** |
| | baz=254 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.40** | **112** | P | | **Pn** | **01 17 57.7** | **+0.7** |
| **WDT** | **Danda** | **1.53** | **224** | *e*P | | **Pn** | **01 17 60.0** | **+0.9** |
| | baz=215 | | | | | | | |
| WDT | | | | *e*S | | **Sn** | **01 18 17.7** | **-0.2** |
| | baz=215 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.60** | **233** | *e*P | | **Pn** | **01 18 00.4** | **+0.5** |
| | baz=225 | | | | | | | |
| **TYC** | **Yuchr** | **1.62** | **234** | *e*P | | **Pn** | **01 18 00.2** | **+0.2** |
| | baz=226 | | | | | | | |
| **ALS** | **Alishan** | **1.92** | **226** | *e*P | | **Pn** | **01 18 05.8** | **+1.5** |
| | baz=218 | | | | | | | |
| ALS | | | | *e*S | | **Sn** | **01 18 26.6** | **-0.7** |
| | baz=218 | | | | | | | |

**IDC 20 01:59:26.7±1.4,5.51S×151.33E,h0km,mb3.8/4, mb1 4.2/4,mb1mx3.7/29,mbtmpg3.8/4,MS3.4/1,Ms1 3.4/1, ms1mx2.7/25,Error ellipse: s-maj=112.2km s-min=25.2km az=129.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **11.01** | **285** | LR | | LR | 02 05 30.0 | |
| | comp=Z,182nm,20.3s,baz=210,slow=33 | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.88** | **228** | P | | P | 02 04 21.7 | +0.2 |
| | 1.6nm,0.8s,baz=53,slow=9.8,SNR=7.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.65** | **221** | P | | P | 02 04 49.0 | -0.4 |
| | 2.2nm,0.7s,baz=52,slow=9.4,SNR=27 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.37** | **22** | P | | P | 02 11 54.9 | -0.6 |
| | 1.5nm,0.8s,baz=250,slow=5.3,SNR=11 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **93.67** | **52** | P | | P | 02 12 46.1 | +0.3 |
| | 0.1nm,0.3s,baz=250,slow=4.5,SNR=2.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.12** | **286** | PKPbc | | PKPbc | 02 19 18.2 | +0.1 |
| | 1.1nm,0.6s,baz=77,slow=3.1,SNR=13 | | | | | | | |

**IDC 20 02:10:24.8±5.2,5.40S×132.97E,h0km,mb3.8/1, mb1 3.6/4,mb1mx3.4/19,mbtmpg3.5/4,ML3.5/3,Error ellipse: s-maj=327.0km s-min=24.8km az=76.0,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.81** | **339** | Pn | | Pn | 02 11 38.4 | -0.2 |
| | 1.1nm,0.3s,baz=119,slow=19,SNR=4.1 | | | | | | | |
| SIJI | | | | Sn | | Sn | 02 12 34.5 | -0.7 |
| | 0.8nm,0.3s,baz=319,slow=19,SNR=3.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.52** | **175** | Pn | | Pn | 02 13 51.7 | 0.0 |
| | 0.3nm,0.3s,baz=352,slow=13,SNR=13 | | | | | | | |
| WRA | | | | Sn | | Sn | 02 16 27.1 | -6.4 |
| | 0.1nm,0.3s,baz=0.0,slow=23,SNR=2.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.18** | **177** | P | | Pn | 02 14 38.2 | -0.7 |
| | 0.2nm,0.3s,baz=4.5,slow=11,SNR=7.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.56** | **325** | P | | P | 02 21 29.9 | +0.4 |
| | 0.5nm,0.4s,baz=124,slow=7.7,SNR=4.6 | | | | | | | |

*DDA **20** 02:25:05.1,35.90N×39.95E,h12km,Md2.7*
*ISK **20** 02:25:12.5,36.28N×39.16E,h5km,MD3.0*
*CSEM **20** 02:25:15.5±2.4,36.41N×39.33E,h2km,MD3.0,Error ellipse: s-maj=68.1km s-min=29.7km az=130.0*

**ISC 20 02:25:09.0±4.6,36.2N±0.2×39.6E±0.2,h10km,n11, σ0°45/14,Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **URFA** | **Urfa** | **1.42** | **336** | *e*PN | | **Pg** | **02 25 35.9** | **-0.4** |
| URFA | | | | *e*SN | | **Sn** | **02 25 54.1** | **+0.4** |
| **URFA** | **Urfa** | **1.42** | **336** | *e*Pn | | **Pg** | **02 25 35.9** | **-0.4** |
| URFA | | | | *e*Sn | | **Sn** | **02 25 54.1** | **+0.4** |
| **MARD** | **Mardin** | **1.52** | **40** | P | | Pn | 02 25 31.1 | -5.4 |
| MARD | | | | S | | Sn | 02 25 53.9 | -2.6 |
| **KUZU** | **Kuzuini** | **2.09** | **288** | *i* P | | **Pg** | **02 25 49.1** | **0.0** |
| **KUZU** | **Kuzuini** | **2.09** | **288** | P | | **Pg** | **02 25 49.1** | **0.0** |
| KUZU | | | | S | | Sg | 02 26 18.4 | +2.1 |
| **SVRC** | **Sivrice-ELAZID** | **2.23** | **355** | *e*PN | | **Pb** | **02 25 50.2** | **+0.6** |
| SVRC | | | | *e*SN | | **Sb** | **02 26 17.6** | **+0.2** |
| **SVRC** | **Sivrice-ELAZID** | **2.23** | **355** | *e*Pn | | **Pb** | **02 25 50.2** | **+0.6** |
| SVRC | | | | *e*Sn | | **Sb** | **02 26 17.6** | **+0.2** |
| **MALT** | **Malatya** | **2.34** | **338** | *e*PN | | **Pb** | **02 25 50.9** | **-0.4** |
| **MALT** | **Malatya** | **2.34** | **338** | *e*Pn | | **Pb** | **02 25 50.9** | **-0.4** |
| **PTK** | **Pertek** | **2.74** | **357** | *e*PN | | **Pb** | **02 25 57.8** | **-0.5** |
| **PTK** | **Pertek** | **2.74** | **357** | *e*Pn | | **Pb** | **02 25 57.8** | **-0.5** |

*IDC **20** 02:32:13.0±2.4,44.17N×148.31E,h0km,mb3.9/11, mb1 4.2/11,mb1mx3.9/29,mbtmpg3.9/11,ML2.8/1,Error ellipse: s-maj=69.9km s-min=21.7km az=177.0*
*NEIC **20** 02:32:17.8±1.2,44.03N×148.25E,h35km,mb4.4/5,Error ellipse: s-maj=35.8km s-min=9.0km az=173.0*
*JMA **20** 02:32:20.6±0.2,43.69N×148.12E,h9km,M4.1*
*MOS **20** 02:32:22.0±1.1,44.17N×148.06E,h81km,mb4.2/10,Error ellipse: s-maj=16.3km s-min=11.7km az=120.5*
*ISCJB **20** 02:32:22.1±0.8,44.10N±0.05×148.08E±0.08,h86km±5km, mb3.9/16,Error ellipse: s-maj=10.4km s-min=6.6km az=36.3*
*SKHL **20** 02:32:22.2±0.6,44.03N×148.15E,h88km±2km,mb4.9/4, msh5.2/3*

**ISC 20 02:32:22.7±1.3,44.04N±0.06×148.15E±0.08,h78km±10km, n67,σ0°90/71,mb4.0/16,3D,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SHO** | **Shikotan** | **0.96** | **260** | *d* iPN | | **Pn** | **02 32 40.5** | **-0.6** |
| SHO | | | | *i* S | | **Sn** | **02 32 54.3** | **-0.6** |
| SHO | | | | pmax | | pmax | | |
| | comp=N,17nm,0.2s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=Z,28nm,0.2s | | | | | | | |
| SHO | | | | pmax | | pmax | | |
| | comp=E,10.0nm,0.1s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=N,2μm,0.3s | | | | | | | |
| SHO | | | | smax | | smax | | |
| | comp=E,1μm,0.3s | | | | | | | |
| **SHO** | **Shikotan** | **0.96** | **260** | *i* P | | **Pn** | **02 32 40.5** | **-0.6** |
| SHO | | | | AMB | | AMB | 02 32 41.6 | |
| | comp=E,280nm,0.2s | | | | | | | |
| SHO | | | | *i* S | | **Sn** | **02 32 54.3** | **-0.6** |
| SHO | | | | A | | A | 02 32 56.4 | |
| | comp=E,124nm,0.3s | | | | | | | |
| SHO | | | | A | | A | 02 32 56.4 | |
| | comp=E,241nm,0.3s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.21** | **351** | *d* iPN | | **Pn** | **02 32 43.9** | **-0.2** |
| KUR | | | | *i* S | | **Sn** | **02 33 00.7** | **+0.5** |
| KUR | | | | pmax | | pmax | | |
| | comp=N,67nm,0.1s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=E,229nm,0.1s | | | | | | | |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,326nm,0.1s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=N,462nm,0.5s | | | | | | | |
| KUR | | | | smax | | smax | | |
| | comp=E,241nm,0.5s | | | | | | | |
| **KUR** | **Kuril'sk** | **1.21** | **351** | *i* P | | **Pn** | **02 32 43.9** | **-0.2** |
| KUR | | | | AMB | | AMB | 02 32 44.5 | |
| | comp=E,67nm,0.2s | | | | | | | |
| KUR | | | | AMB | | AMB | 02 32 44.5 | |
| | comp=E,229nm,0.2s | | | | | | | |
| KUR | | | | AMB | | AMB | 02 32 44.5 | |
| | comp=E,326nm,0.2s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **02 33 00.7** | **+0.5** |
| KUR | | | | A | | A | 02 33 02.6 | |
| | comp=E,460nm,0.4s | | | | | | | |
| KUR | | | | A | | A | 02 33 02.6 | |
| | comp=E,270nm,0.4s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.65** | **271** | *d* iPN | | **Pn** | **02 32 50.0** | **+0.2** |
| YUK | | | | *i* S | | **Sn** | **02 33 10.7** | **+0.4** |
| YUK | | | | pmax | | pmax | | |
| | comp=N,32nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=E,40nm,0.2s | | | | | | | |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,107nm,0.2s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=N,697nm,0.5s | | | | | | | |
| YUK | | | | smax | | smax | | |
| | comp=E,792nm,0.5s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.65** | **271** | *i* P | | **Pn** | **02 32 50.0** | **+0.2** |
| YUK | | | | AMB | | AMB | 02 32 51.7 | |
| | comp=E,32nm,0.2s | | | | | | | |
| YUK | | | | AMB | | AMB | 02 32 51.7 | |
| | comp=E,40nm,0.2s | | | | | | | |
| YUK | | | | AMB | | AMB | 02 32 51.7 | |
| | comp=E,107nm,0.2s | | | | | | | |
| YUK | | | | *e*S | | **Sn** | **02 33 10.5** | **+0.2** |
| YUK | | | | A | | A | 02 33 13.7 | |
| | comp=E,700nm,0.5s | | | | | | | |
| YUK | | | | A | | A | 02 33 13.7 | |
| | comp=E,790nm,0.5s | | | | | | | |
| **NEM2** | **Nemuro 2** | **1.87** | **250** | P | | **Pn** | **02 32 51.9** | **-0.8** |
| NEM2 | | | | *e*S | | **Sn** | **02 33 14.3** | **-1.2** |
| **JRA** | **Rausu** | **2.18** | **268** | P | | **Pn** | **02 32 58.0** | **+1.1** |
| JRA | | | | *e*S | | **Sn** | **02 33 25.0** | **+1.9** |
| **JAK** | **Akkeshi** | **2.72** | **249** | P | | **Pn** | **02 33 03.6** | **-0.5** |
| JAK | | | | *e*S | | **Sn** | **02 33 35.3** | **-0.6** |
| **JTKR** | **Abashiri--Toko** | **3.06** | **270** | P | | **Pn** | **02 33 10.0** | **+1.3** |
| **JAR** | **Ashorobuto** | **3.26** | **258** | P | | **Pn** | **02 33 11.7** | **+0.2** |
| JAR | | | | *e*S | | **Sn** | **02 33 49.8** | **+0.6** |
| **JCH** | **Churui** | **3.77** | **249** | P | | **Pn** | **02 33 18.3** | **-0.1** |
| **ASAJ** | **Asahikawa** | **4.00** | **273** | Pn | | Pn | 02 33 16.4 | -5.0 |
| | comp=E,0.5nm,0.3s,baz=75,slow=15,SNR=2.4 | | | | | | | |
| **ASAJ** | **Asahikawa** | **4.00** | **273** | PN | | Pn | 02 33 16.5 | -5.0 |
| ASAJ | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **ERM** | **Erimo** | **4.18** | **243** | *e*PN | | **Pn** | **02 33 25.2** | **+1.3** |
| **ERM** | **Erimo** | **4.18** | **243** | *e*P | | **Pn** | **02 33 25.2** | **+1.3** |
| **JNBK** | **Urakawa-nobuka** | **4.32** | **248** | P | | **Pn** | **02 33 25.5** | **-0.4** |
| **YSS** | **Yuzh-Sakhalins** | **4.78** | **309** | *e*P | | **Pn** | **02 33 32.7** | **+0.6** |
| YSS | | | | AMB | | AMB | 02 33 38.7 | |
| | comp=Z,30nm,0.3s | | | | | | | |
| **JKB** | **Kayabe** | **5.64** | **250** | P | | **Pn** | **02 33 44.0** | **+0.1** |
| JKB | | | | *e*S | | **Sn** | **02 34 44.3** | **-3.0** |
| **JANG** | **Nango** | **6.14** | **236** | *e*S | | Sn | 02 34 53.1 | -6.3 |
| **UGL** | **Uglegorsk** | **6.55** | **322** | *e*PN | | **Pn** | **02 33 54.4** | **-1.9** |
| UGL | | | | *e*S | | **Sn** | **02 35 08.1** | **-1.4** |
| **HABR** | **Khabarovsk** | **10.09** | **301** | *e*PN | | **Pn** | **02 34 43.3** | **-1.3** |
| HABR | | | | *e*S | | **Sn** | **02 36 35.5** | **-0.4** |
| HABR | | | | pmax | | pmax | | |
| | comp=Z,40nm,1.5s | | | | | | | |
| **HABR** | **Khabarovsk** | **10.09** | **301** | *e*P | | **Pn** | **02 34 43.3** | **-1.3** |
| **KROS** | **Kirovskiy** | **17.23** | **315** | *e*P | | **Pn** | **02 36 17.0** | **-1.1** |
| KROS | | | | AMB | | AMB | 02 36 20.1 | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.86** | **141** | T | | T | 03 09 07.0 | |
| | baz=332,slow=76,SNR=91 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.88** | **141** | T | | T | 03 09 07.1 | |
| | baz=332,slow=76,SNR=108 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.88** | **141** | T | | T | 03 09 14.5 | |
| | baz=332,slow=76,SNR=106 | | | | | | | |
| **SONM** | **Songino Array** | **29.02** | **292** | P | | **P** | **02 38 15.8** | **+0.6** |
| | comp=Z,0.4nm,0.4s,baz=97,slow=7.3,SNR=4.4 | | | | | | | |
| **SONM** | **Songino Array** | **29.02** | **292** | *e*P | | **P** | **02 38 17.2** | **+2.0** |
| **H11S1** | **WAKE ISLAND Hy** | **29.85** | **143** | T | | T | 03 10 24.9 | |
| | baz=333,slow=76,SNR=144 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.85** | **143** | T | | T | 03 10 18.0 | |
| | baz=333,slow=76,SNR=101 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.87** | **143** | T | | T | 03 10 26.3 | |
| | baz=333,slow=76,SNR=114 | | | | | | | |
| **ILAR** | **Eielson Array** | **40.83** | **36** | P | | **P** | **02 39 55.3** | **-0.9** |
| | comp=Z,0.4nm,0.5s,baz=276,slow=8.2,SNR=5.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **40.83** | **36** | *e*P | | **P** | **02 39 57.8** | **+1.6** |
| **ILAR** | **Eielson Array** | **40.83** | **36** | *e*P | | **P** | **02 39 57.8** | **+1.6** |
| **MKAR** | **Makanchi Array** | **45.09** | **298** | P | | **P** | **02 40 31.6** | **+0.8** |
| | comp=Z,0.7nm,0.5s,baz=83,slow=8.0,SNR=6.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **45.09** | **298** | *e*P | | **P** | **02 40 31.6** | **+0.8** |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **KURK** | **Kurchatov** | **45.96** | **304** | *e*P | | **P** | **02 40 37.7** | **+0.1** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.5s | | | | | | | |
| **KURK** | **Kurchatov** | **45.96** | **304** | *e*P | | **P** | **02 40 37.7** | **+0.1** |
| **KURK** | **Kurchatov** | **45.96** | **304** | *e*P | | **P** | **02 40 37.7** | **+0.1** |
| | comp=Z,4.2nm,0.5s | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.03** | **296** | *e*P | | **P** | **02 41 17.3** | **+0.4** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.03** | **296** | *e*P | | **P** | **02 41 17.3** | **+0.4** |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **ARU** | **Arti** | **54.62** | **317** | *e*P | | **P** | **02 41 42.5** | **-0.4** |
| ARU | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **ARU** | **Arti** | **54.62** | **317** | *e*P | | **P** | **02 41 42.5** | **-0.4** |
| **ARU** | **Arti** | **54.62** | **317** | *e*P | | **P** | **02 41 42.5** | **-0.4** |
| | comp=Z,3.5nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **57.44** | **309** | *e*P | | **P** | **02 42 03.4** | **+0.3** |
| | comp=Z,1.6nm,0.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.22** | **340** | P | | **P** | **02 42 14.7** | **-0.6** |
| | comp=Z,3.2nm,0.9s,baz=40,slow=7.1,SNR=6.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.22** | **340** | *e*P | | **P** | **02 42 14.6** | **-0.6** |
| ARCES | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **FINES** | **FINESS Array B** | **64.94** | **333** | P | | **P** | **02 42 53.2** | **-0.3** |
| | comp=Z,4.8nm,0.6s,baz=49,slow=5.8,SNR=15 | | | | | | | |
| **FINES** | **FINESS Array B** | **64.94** | **333** | *e*P | | **P** | **02 42 53.5** | **0.0** |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **64.94** | **333** | *e*P | | **P** | **02 42 53.5** | **0.0** |
| **BOZ** | **Bozeman (W)** | **66.18** | **49** | *e*P | | **P** | **02 43 01.4** | **-0.6** |
| BOZ | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **66.18** | **49** | *e*P | | **P** | **02 43 01.4** | **-0.6** |
| **BOZ** | **Bozeman (W)** | **66.18** | **49** | *e*P | | **P** | **02 43 01.4** | **-0.6** |
| | comp=Z,1.1nm,0.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **66.81** | **59** | P | | **P** | **02 43 06.0** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=301,slow=6.0,SNR=4.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **66.81** | **59** | P | | **P** | **02 43 06.0** | **-0.3** |
| **NB2** | **NORSAR Subarra** | **69.59** | **339** | P | | **P** | **02 43 22.6** | **-0.3** |
| | comp=Z,1.2nm,0.5s,baz=31,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.59** | **339** | P | | **P** | **02 43 22.7** | **-0.3** |
| | comp=Z,1.3nm,0.5s,baz=32,slow=6.6,SNR=13 | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.59** | **339** | *e*P | | **P** | **02 43 22.8** | **-0.2** |
| NOA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **NOA** | **NORSAR Array B** | **69.59** | **339** | *e*P | | **P** | **02 43 22.8** | **-0.2** |
| **KBZ** | **Khabaz** | **70.14** | **312** | P | | **P** | **02 43 27.8** | **+1.2** |
| | comp=Z,1.6nm,0.8s,baz=21,slow=8.4,SNR=5.0 | | | | | | | |
| **KBZ** | **Khabaz** | **70.14** | **312** | P | | **P** | **02 43 27.8** | **+1.2** |
| KBZ | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.77** | **324** | P | | **P** | **02 43 36.1** | **-0.2** |
| | comp=Z,0.5nm,0.3s,baz=39,slow=6.8,SNR=5.3 | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.77** | **324** | *e*P | | **P** | **02 43 36.6** | **+0.3** |
| AKASG | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **GERES** | **GERESS Array B** | **79.25** | **331** | P | | **P** | **02 44 19.7** | **+0.4** |
| | comp=Z,0.3nm,0.4s,baz=104,slow=11,SNR=3.4 | | | | | | | |
| **TXAR** | **Lajitas Array** | **81.89** | **57** | P | | **P** | **02 44 33.0** | **-0.8** |
| | comp=Z,0.3nm,0.5s,baz=267,slow=2.7,SNR=5.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **81.89** | **57** | P | | **P** | **02 44 33.0** | **-0.8** |

**IDC 20 02:50:41.6±2.8,37.22S×73.77W,h0km,mb3.6/3, mb1 3.9/3,mb1mx3.7/14,mbtmpg3.6/3,MS3.7/1,Ms1 3.7/1, ms1mx3.1/18,Error ellipse: s-maj=74.1km s-min=52.3km az=36.0,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CPUP** | **Villa Florida** | **17.68** | **57** | LR | | LR | 03 02 21.6 | |
| | comp=Z,238nm,19.6s,baz=227,slow=40 | | | | | | | |
| **LPAZ** | **La Paz** | **21.44** | **15** | P | | P | 02 55 32.1 | -0.1 |
| | 2.6nm,1.0s,baz=165,slow=9.6,SNR=6.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **71.90** | **333** | P | | P | 03 02 06.5 | 0.0 |
| | 0.3nm,0.7s,baz=155,slow=8.8,SNR=3.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.62** | **71** | P | | P | 03 03 27.2 | 0.0 |
| | 0.5nm,0.7s

SRIG *i* S Sn 03 41 06.6 -7.0
**HSIG** **4.57 337** *i* P **Pn** **03 40 36.5 -1.3**
HSIG *i* S **Sn** **03 41 28.7 -1.9**
**HSIG** **4.57 337** *i* P **Pn** **03 40 36.5 -1.3**
HSIG *i* S **Sn** **03 41 28.7 -1.9**
**ZAIG Zacatecas** **6.19 108** *i* P Pb 03 41 10.6 -6.2
**ZAIG Zacatecas** **6.19 108** *i* P Pb 03 41 10.6 -6.2
**TX31 Lajitas Ar. Si** **6.53 45** *e*Pn Pn 03 41 11.7 +6.9
**TXAR Lajitas Array** **6.53 45** Pn **Pn** **03 41 03.3 -1.5**
0.2nm,0.3s,baz=226,slow=13,SNR=9.3
TXAR Sn **Sn** **03 42 19.1 +0.1**
1.9nm,0.3s,baz=226,slow=16,SNR=4.6
TXAR Lg Lg 03 42 54.7
5.5nm,0.3s,baz=227,slow=28,SNR=4.3
**MNTX Cornudas Mount** **7.56 24** P **Pn** **03 41 17.8 -1.1**
baz=7.6
**MNTX Cornudas Mount** **7.56 24** *e*Pn **Pn** **03 41 18.2 -0.8**
MNTX *e*S Sb 03 43 30.9 +21
**TUC Tucson** **7.66 348** *e*Pn **Pn** **03 41 19.0 -1.3**
TUC *e*S Sb 03 43 22.9 +10
**121A Cookes Peak, D** **7.78 7** P **Pn** **03 41 21.4 -0.6**
baz=7.9
**121A Cookes Peak, D** **7.78 7** *e*Pn **Pn** **03 41 21.5 -0.5**
46nm,0.9s
121A *e*S Sb 03 43 31.3 +15
**214A Organ Pipe Nat** **7.90 335** P **Pn** **03 41 24.2 +0.6**
baz=8.0
**529A Stev Forest Ra** **7.99 47** P **Pn** **03 41 23.5 -1.4**
baz=8.0
**430A Baggett Ranch,** **9.07 47** P **Pn** **03 41 39.9 +0.3**
baz=9.1
**531A Rocksprings** **9.18 53** P **Pn** **03 41 41.4 +0.2**
baz=9.2
**632A Uvalde** **9.41 58** P **Pn** **03 41 43.7 -0.6**
baz=9.4
**431A Sonora** **9.43 50** P **Pn** **03 41 43.8 -0.8**
baz=9.4
**034A Hebbronville** **9.52 74** P **Pn** **03 41 44.4 -1.3**
baz=9.5
**BNM Barren Site** **9.54 12** *e*Pn **Pn** **03 41 49.0 +2.7**
**LPM Los Pinos Moun** **9.70 11** *e*Pn **Pn** **03 41 50.0 +1.7**
15nm,1.2s
**GLA Glamis** **9.70 329** P **Pn** **03 41 49.2 +0.9**
baz=9.8
**GLA Glamis** **9.70 329** *e*Pn **Pn** **03 41 49.0 +0.7**
**LAZ Ladron** **9.70 9** *e*Pn **Pn** **03 41 50.1 +1.7**
1µm,1.3s
**834A Tilden** **9.89 68** P **Pn** **03 41 48.9 -2.0**
baz=9.8,SNR=5.4
**JCT Junction City** **9.89 53** *e*Pn **Pn** **03 41 50.8 -0.1**
**331A San Angelo** **9.94 47** P **Pn** **03 41 50.4 -1.1**
baz=9.9,SNR=8.4
**IBP Imperial Bould** **10.03 323** P **Pn** **03 41 54.1 +1.2**
baz=10
**432A Menard** **10.12 51** P **Pn** **03 41 53.2 -0.7**
baz=10
**Y12C Blythe** **10.16 333** P **Pn** **03 41 56.1 +1.6**
baz=10
**Z28A Tucker Farm, M** **10.22 33** P **Pn** **03 41 55.4 -0.1**
baz=10
**W18A Petrified Fore** **10.31 356** P **Pn** **03 41 57.2 +0.4**
baz=10,SNR=5.1
**W18A Petrified Fore** **10.31 356** *e*Pn **Pn** **03 41 58.4 +1.7**
**ANMO Albuquerque** **10.34 11** Pn **Pn** **03 41 58.2 +1.0**
0.1nm,0.3s,baz=197,slow=14,SNR=9.4
ANMO Lg Lg 03 44 54.0
0.2nm,0.3s,baz=319,slow=19,SNR=2.6
ANMO LR LR 03 46 21.4
comp=Z,3µm,19.2s,baz=198,slow=39
**ANMO Albuquerque** **10.34 11** *e*Pn **Pn** **03 41 59.1 +1.8**
ANMO Lg Lg 03 44 54.0
**BAR Barrett** **10.37 321** *e*Pn **Pn** **03 41 58.6 +1.1**
**MONP Monument Peak** **10.38 323** P **Pn** **03 41 59.1 +1.3**
baz=10,SNR=8.6
**231A Bronte** **10.41 45** P **Pn** **03 41 57.7 -0.3**
baz=10
**332A Millersview** **10.45 49** P **Pn** **03 41 57.8 -0.6**
baz=10
**130A Snyder** **10.46 40** P **Pn** **03 41 59.3 +0.6**
baz=10
**BC3 Big Chuckawall** **10.49 329** P **Pn** **03 42 00.4 +1.2**
baz=11
**433A Art** **10.55 54** P **Pn** **03 41 59.4 -0.5**
baz=11,SNR=6.1
**MSTX Muleshoe** **10.61 29** *e*Pn **Pn** **03 42 01.0 +0.3**
5.5nm,0.4s
**IRM Iron Mountain** **10.78 331** P **Pn** **03 42 04.4 +1.4**
baz=11
**Y28A McKinney Farm,** **10.80 31** P **Pn** **03 42 03.8 +0.5**
baz=11
**232A Coleman** **10.82 47** P **Pn** **03 42 03.0 -0.6**
baz=11
**131A Roby** **10.86 42** P **Pn** **03 42 04.5 +0.3**
baz=11
**WUAZ Wupatki** **10.89 349** P **Pn** **03 42 05.7 +1.0**
baz=11
**WUAZ Wupatki** **10.89 349** *e*Pn **Pn** **03 42 05.4 +0.7**
**333A Richland Sprin** **10.94 51** P **Pn** **03 42 05.4 +0.2**
baz=11
**PFO Pinyon Flat Ob** **10.95 325** Pn **Pn** **03 42 06.2 +0.7**
0.1nm,0.3s,baz=148,slow=13,SNR=12
**PFO Pinyon Flat Ob** **10.95 325** *e*Pn **Pn** **03 42 05.7 +0.1**
**BELC Belle Mtn. Jos** **11.04 328** P **Pn** **03 42 08.2 +1.6**
baz=11
**BELC Belle Mtn. Jos** **11.04 328** *e*Pn Pn 03 42 00.8 -5.9
**ABTX Abilene, Hawle** **11.29 44** P **Pn** **03 42 10.4 +0.4**
baz=11
**ABTX Abilene, Hawle** **11.29 44** *e*Pn **Pn** **03 42 10.8 +0.8**
**MURC Murrieta** **11.35 323** P Pn 03 42 13.8 +3.0
baz=12
**233A Rising Star** **11.40 49** P **Pn** **03 42 11.9 +0.4**
baz=11
**Z31A Sharp Cattle R** **11.46 40** P **Pn** **03 42 13.2 +0.9**
baz=12
**334A Lometa** **11.48 53** P **Pn** **03 42 13.2 +0.6**
baz=12
**X29A Tulia** **11.49 32** P **Pn** **03 42 13.6 +0.7**
baz=12
**GMRC Granite Mounta** **11.53 331** P **Pn** **03 42 15.5 +2.1**
baz=12
**SCI San Clemente I** **11.71 316** P **Pn** **03 42 18.2 +2.5**
baz=12
**Z32A Haskell** **11.85 42** P **Pn** **03 42 18.5 +0.8**
baz=12
**Y31A Rekieta Farm,** **11.86 38** P **Pn** **03 42 18.8 +1.0**
baz=12
**AMTX Amarillo** **11.87 30** P **Pn** **03 42 19.3 +1.4**
baz=12
**AMTX Amarillo** **11.87 30** *e*Pn **Pn** **03 42 19.9 +1.9**
**HEC Hector,Ludlow** **11.87 329** *e*Pn Pn 03 42 22.7 +4.7
**234A Clairette** **11.92 51** P **Pn** **03 42 19.1 +0.4**
baz=12
**Z33A Whitaker Ranch** **12.28 44** P **Pn** **03 42 22.8 -0.7**
baz=12,SNR=8.8
**MVCO Mesa Verde** **12.38 2** P **Pn** **03 42 26.7 +1.6**
baz=12
**MVCO Mesa Verde** **12.38 2** *e*Pn **Pn** **03 42 24.7 -0.4**
**WHTX Lake Whitney** **12.39 52** P **Pn** **03 42 25.8 +0.7**
baz=12
**WHTX Lake Whitney** **12.39 52** *e*Pn **Pn** **03 42 22.9 -2.2**
**GSC Goldstone** **12.48 329** *e*Pn Pn 03 42 30.3 +4.0
**X31A McDonald Ranch** **12.52 36** P **Pn** **03 42 28.1 +1.3**
baz=13
**336A Riesel** **12.54 56** P **Pn** **03 42 27.6 +0.6**
baz=12
**738A Farr-Stevens R** **12.54 68** P **Pn** **03 42 27.6 +0.5**
baz=12
**IR2C Iron Canyon** **12.60 322** *e*Pn P 03 42 33.2 -6.2
**U27A Thompson Grove** **12.73 23** P **Pn** **03 42 30.9 +1.1**
baz=13
**HKT Hockley** **12.73 63** *e*Pn **Pn** **03 42 29.8 +0.1**
44nm,1.8s
**EDW2 Edwards Air Fo** **12.74 324** P **Pn** **03 42 31.5 +1.6**
baz=13,SNR=10
**SHPR Sheep Range** **12.83 337** *e*Pn P 03 42 37.3 -4.8
**T25A Trinidad** **12.90 16** *e*Pn **Pn** **03 42 33.4 +1.1**
**OSI Osito Adit** **12.95 321** *e*Pn Pn 03 42 37.2 +4.5
**S22A 4UR Ranch, Cre** **13.04 7** P **Pn** **03 42 35.0 +0.9**
baz=13
**S22A 4UR Ranch, Cre** **13.04 7** *e*Pn P 03 42 40.0 -4.6
**LRMC Laurel Mountai** **13.05 327** P **Pn** **03 42 34.7 +0.6**
baz=13,SNR=36
**BSC Santa Cruz Isl** **13.06 317** P **Pn** **03 42 36.0 +1.8**
baz=13
**T26A Comanche Natio** **13.16 19** P **Pn** **03 42 37.7 +1.9**
baz=13

**SDCO Great Sand Dun** **13.24 12** P **Pn** **03 42 38.3 +1.4**
baz=13
**SDCO Great Sand Dun** **13.24 12** *e*Pn Pn 03 42 40.1 +3.2
**CCUT Cedar City** **13.26 345** *e*Pn **Pn** **03 42 38.6 +1.5**
**WMOK Wichita Mounta** **13.26 39** *e*Pn **Pn** **03 42 36.5 -0.5**
**W32A Sentinel** **13.28 37** P **Pn** **03 42 38.3 +1.0**
baz=13
**136A Ennis** **13.32 52** P **Pn** **03 42 38.3 +0.7**
baz=13
**Y34A Reagan Ranch,** **13.36 44** P **Pn** **03 42 38.8 +0.5**
baz=13
**ARVC Arvin** **13.38 323** P **Pn** **03 42 40.0 +1.5**
baz=14,SNR=7.0
**MPMC Manual Prospec** **13.42 329** P **Pn** **03 42 39.8 +0.5**
baz=14,SNR=20
**FURC Furnace Creek,** **13.47 332** P **Pn** **03 42 40.1 +0.3**
baz=14,SNR=7.1
**ISA Isabella** **13.59 325** P **Pn** **03 42 41.8 +0.3**
baz=14,SNR=16
**ISA Isabella** **13.59 325** *e*Pn **Pn** **03 42 42.0 +0.5**
**T28A Walsh** **13.61 24** P **Pn** **03 42 42.3 +0.5**
baz=14
**S26A Kim** **13.61 19** P **Pn** **03 42 42.5 +0.6**
baz=14,SNR=6.4
**DAC Darwin (Calif)** **13.64 329** *e*Pn **Pn** **03 42 42.8 +0.5**
**Z36A Blue Ridge** **13.82 49** P **Pn** **03 42 44.0 -0.5**
baz=14
**MSU Marysvale** **13.95 349** *e*Pn Pn 03 42 50.0 +3.5
**CWC Cottonwood Cre** **14.01 328** P **Pn** **03 42 47.3 +0.1**
baz=14,SNR=8.3
**VES Vestal, Richgr** **14.05 324** P **Pn** **03 42 48.1 +0.4**
baz=14,SNR=8.9
**GRAC Grapevine Rang** **14.14 331** P **Pn** **03 42 50.5 +1.5**
baz=14
**SMMC Simmler** **14.18 320** P **Pn** **03 42 51.0 +1.5**
baz=14
**SRU San Rafael** **14.34 355** *e*Pn **Pn** **03 42 53.7 +1.9**
**R27A Eads** **14.43 20** P **Pn** **03 42 53.0 0.0**
baz=14,SNR=5.8
**SMCO Snowmass** **14.44 6** *e*Pn **P** **03 42 59.0 -1.2**
**Q24A Divide** **14.49 12** P **Pn** **03 42 54.6 +0.6**
baz=15
**RCTC Rector, Farmer** **14.49 325** P **Pn** **03 42 56.2 +2.6**
baz=15
**TMUT Trail Mountain** **14.58 353** *e*Pn **Pn** **03 42 55.9 +0.6**
**R11A Troy Canyon, C** **14.64 339** P **Pn** **03 42 57.0 +1.0**
baz=15
**R11A Troy Canyon, C** **14.64 339** *e*Pn **Pn** **03 42 56.6 +0.7**
**W35A Tecumseh** **14.69 43** P **Pn** **03 42 56.2 -0.2**
baz=15
**P17A Butcher Ranch,** **14.71 355** *e*Pn **Pn** **03 42 56.2 -0.7**
**V34A Guthrie** **14.77 39** *e*Pn **Pn** **03 42 58.2 +0.7**
**P18A Preston Nutter** **14.83 356** *e*Pn **Pn** **03 42 59.1 +0.5**
**MTUM Tungsten Hills** **14.97 329** *e*Pn **Pn** **03 43 02.0 +1.6**
**W36A Wetumka** **15.08 44** P **Pn** **03 43 01.2 -0.5**
baz=15,SNR=5.4
**KSCO Kaye Shedlock'** **15.15 19** *e*Pn **Pn** **03 43 04.2 +1.4**
**U34A Anderson Ranch** **15.19 38** P **Pn** **03 43 03.4 +0.2**
baz=15
**U34A Anderson Ranch** **15.19 38** *e*Pn **Pn** **03 43 05.6 +2.5**
21nm,1.0s
**CMIG Matias Romero** **15.21 118** Pn **Pn** **03 43 05.1 +1.7**
0.0nm,0.3s,baz=297,slow=14,SNR=8.6
CMIG LR LR 03 48 28.4
comp=Z,1µm,18.4s,baz=276,slow=36
**ISCO Idaho Springs** **15.22 10** *e*Pn **Pn** **03 43 06.0 +2.1**
19nm,1.1s
**O20A White River Ci** **15.31 2** P **Pn** **03 43 05.8 +0.9**
baz=15,SNR=13
**O20A White River Ci** **15.31 2** *e*Pn **P** **03 43 09.3 -0.3**
**R30A Dighton** **15.33 27** P **Pn** **03 43 05.9 +0.7**
baz=15,SNR=14
**MPU Maple Canyon** **15.34 352** *e*Pn **P** **03 43 07.4 -2.7**
51nm,1.2s
**S32A Newby Ranch, P** **15.44 31** P **Pn** **03 43 07.2 +0.7**
baz=16
**LRV Little Rabbit** **15.55 321** *e*Pn **Pn** **03 43 09.1 +1.2**
**W37A Quinton** **15.59 45** P **Pn** **03 43 08.8 +0.4**
baz=16,SNR=13
**U35A Pawnee** **15.60 39** P **Pn** **03 43 09.1 +0.6**
baz=16
**R31A Burdett** **15.65 29** P **Pn** **03 43 09.6 +0.3**
baz=16
**DUG Dugway** **15.69 349** P **Pn** **03 43 11.2 +1.3**
baz=16
**DUG Dugway** **15.69 349** *e*Pn **P** **03 43 11.8 -2.1**
21nm,1.2s
**X38A Whitesboro** **15.71 48** P **Pn** **03 43 09.5 -0.4**
baz=16
**NV01 Mina Array Sit** **15.74 332** *e*Pn **Pn** **03 43 11.0 +0.5**
**NVAR Mina Array Bea** **15.74 332** Pn **Pn** **03 43 11.1 +0.5**
0.2nm,0.3s,baz=153,slow=12,SNR=17
NVAR LR LR 03 49 23.8
comp=Z,751nm,20.6s,baz=153,slow=38
**T34A McClaskey Farm** **15.81 37** P **Pn** **03 43 11.7 +0.5**
baz=16
**Y39A Lockesburg** **15.82 51** P **Pn** **03 43 11.1 -0.3**
baz=16,SNR=5.8
**TUL1 Tulsa** **15.85 43** P **Pn** **03 43 12.5 +0.8**
baz=16
**TUL1 Tulsa** **15.85 43** *e*Pn **Pn** **03 43 10.9 -0.8**
**P28A Saint Francis** **15.93 21** P **Pn** **03 43 13.5 +0.5**
baz=16,SNR=6.8
**Q30A Quinter** **15.95 25** P **Pn** **03 43 13.4 +0.3**
baz=16,SNR=7.7
**CBKS Cedar Bluff** **16.01 27** P **Pn** **03 43 14.6 +0.8**
baz=16
**CBKS Cedar Bluff** **16.01 27** *e*Pn **P** **03 43 16.5 -0.8**
85nm,1.1s
**CTU Camp Tracy** **16.02 352** *e*Pn **Pn** **03 43 14.8 +0.6**
**SAO San Andreas Ge** **16.03 321** *e*Pn **Pn** **03 43 14.8 +0.7**
**T35A Sooner Cattle** **16.11 38** P **Pn** **03 43 15.7 +0.7**
baz=16
**R32A Long Quarter,** **16.13 30** P **Pn** **03 43 16.2 +0.8**
baz=16
**W38A Poteau** **16.15 47** P **Pn** **03 43 15.9 +0.3**
baz=16,SNR=11
**V37A Hulbert** **16.24 44** P **Pn** **03 43 17.1 +0.4**
baz=16
**N23A Red Feather La** **16.25 8** P **P** **03 43 18.5 -1.7**
baz=16
**N23A Red Feather La** **16.25 8** *e*Pn **P** **03 43 19.0 -1.1**
**S34A Willow Spring** **16.35 35** P **P** **03 43 20.0 -1.1**
baz=16
**R33A Olander Ranch,** **16.38 32** P **Pn** **03 43 19.8 +1.3**
baz=16
**CMB Columbia Colle** **16.39 326** *e*Pn **P** **03 43 21.0 -0.5**
22nm,1.4s
**TCUT Toone Canyon** **16.41 353** *e*Pn **P** **03 43 22.6 +0.7**
42nm,1.2s
TCUT *e*Sn **Sn** **03 46 16.5 -4.5**
**P30A Selden** **16.43 24** P **P** **03 43 21.4 -0.6**
baz=16
**BGU Big Grassy Mou** **16.44 349** *e*Pn **Pn** **03 43 20.2 +0.7**
24nm,1.4s
**MIAR Mount Ida** **16.50 50** P **Pn** **03 43 21.3 +1.1**
baz=16
**MIAR Mount Ida** **16.50 50** *e*Pn **Pn** **03 43 17.1 -3.1**
28nm,1.3s
**T36A Boggs Farm, Ca** **16.57 39** P **Pn** **03 43 21.4 +0.4**
baz=17
**U37A Salina** **16.59 43** P **Pn** **03 43 21.5 +0.3**
baz=17
**V38A Canehill** **16.69 45** P **Pn** **03 43 22.5 -0.1**
baz=17
**PHWY Pilot Hill** **16.72 9** *e*Pn **P** **03 43 25.7 +0.3**
24nm,1.3s
**SPUT South Promonto** **16.72 351** *e*Pn **Pn** **03 43 22.3 -0.8**
43nm,1.5s
**R34A Isabella, Hill** **16.73 34** P **Pn** **03 43 23.4 +0.3**
baz=17
**ELK Elko** **16.75 343** *e*Pn **Pn** **03 43 23.6 +0.1**
31nm,1.4s
**P31A Stockton** **16.75 27** P **Pn** **03 43 23.8 +0.4**
baz=17
**S35A Otter Creek Ra** **16.76 37** P **Pn** **03 43 23.5 +0.1**
baz=17
**HWUT Hardware Ranch** **16.91 353** *e*Pn **Pn** **03 43 25.5 +0.1**
69nm,1.7s
**Q33A Connelly Farm,** **17.00 31** P **P** **03 43 27.9 -0.3**
baz=17
**U38A Gravette** **17.06 44** P **Pn** **03 43 28.0 +0.9**
baz=17
**BMN Battle Mountai** **17.06 338** *e*Pn **P** **03 43 27.8 -1.3**
72nm,1.5s
**OGNE Ogallala** **17.11 18** *e*Pn **P** **03 43 30.1 +0.6**
**P32A Huiting Farm,** **17.16 28** P **Pn** **03 43 29.0 +0.5**
baz=17,SNR=5.8
**T37A Cheneyville 18** **17.18 41** P **Pn** **03 43 28.3 -0.3**
baz=17
**S36A Lake Cedric, C** **17.20 38** P **Pn** **03 43 28.9 +0.1**
baz=17
**HVU Hansel Valley** **17.23 350** *e*Pn **P** **03 43 29.9 -1.0**
24nm,1.0s
**Q34A Chapman** **17.36 33** P **Pn** **03 43 31.6 +0.6**
baz=17
**UALR University of** **17.49 52** *e*Pn **P** **03 43 33.8 +0.2**
46nm,1.4s
**S37A Fort Scott** **17.66 40** P **P** **03 43 35.1 -0.3**
baz=18
**KSU1 Kansas State U** **17.67 33** P **P** **03 43 35.5 -0.2**
baz=18
**KSU1 Kansas State U** **17.67 33** *e*Pn **P** **03 43 35.4 -0.2**
**R36A Gordon, Harris** **17.67 37** P **P** **03 43 35.4 -0.3**
baz=18
**Q35A Mercer Eighty,** **17.78 35** P **P** **03 43 36.9 +0.1**
baz=18
**P34A Walnut Farm, R** **17.91 32** P **P** **03 43 39.0 +0.7**
baz=18
**K22A Casper** **17.92 6** P **P** **03 43 40.1 +1.6**
baz=18
**K22A Casper** **17.92 6** *e*Pn **P** **03 43 38.7 +0.2**
26nm,1.1s
**NSHM Saint Helena R** **17.92 323** *e*Pn **P** **03 43 40.0 +1.6**
**BW06 Boulder Array** **17.93 359** *e*Pn **P** **03 43 39.7 +1.0**
**O33A Hebron** **17.98 29** P **P** **03 43 39.7 +0.7**
baz=18
**Q36A Arnold C. Orve** **18.15 36** P **P** **03 43 41.6 +0.7**
baz=18
**N32A Stulken Farm,** **18.25 27** P **P** **03 43 43.2 +1.2**
baz=18
**P35A Duane Minner,** **18.29 33** P **P** **03 43 43.1 +0.7**
baz=18
**O34A Beatrice** **18.47 31** P **Pn** **03 43 45.7 +1.1**
baz=18
**REDW Red Top Meadow** **18.59 356** *e*Pn **Pn** **03 43 47.6 +1.4**
22nm,1.3s
**SNOW Snow King Moun** **18.68 356** *e*Pn **Pn** **03 43 49.9 +2.6**
24nm,1.1s
**TPAW Teton Pass** **18.72 355** *e*Pn **Pn** **03 43 47.6 -0.2**
22nm,1.2s
**P36A Good Intent, A** **18.77 35** P **Pn** **03 43 48.4 +0.2**
baz=19
**LOHW Long Hollow** **18.82 356** *e*Pn **Pn** **03 43 49.7 +0.7**
148nm,3.0s
**O03D Paynes Creek** **18.84 328** P **Pn** **03 43 50.5 +1.4**
baz=19,SNR=10
**BGNE Belgrade** **18.85 26** *e*Pn **P** **03 43 48.1 -0.5**
**FXWY Fox Creek** **18.87 355** *e*P **Pn** **03 43 50.5 +0.8**
20nm,1.3s
**MOOW Moose Ponds** **18.96 356** *e*P **Pn** **03 43 53.1 +2.3**
18nm,1.2s
**J26A Sides Ranch, S** **19.09 13** P **Pn** **03 43 51.9 -0.3**
baz=19
**IMW Indian Meadow** **19.12 356** *e*P **Pn** **03 43 52.6 -0.1**
20nm,1.1s
**HLID Hailey** **19.25 348** P **Pn** **03 43 54.6 +0.5**
baz=19
**HLID Hailey** **19.25 348** *e*P **Pn** **03 43 54.5 +0.3**
41nm,1.6s
**FLWY Flagg Ranch** **19.29 356** *e*P **Pn** **03 43 55.5 +0.8**
355nm,2.8s
**WVOR Wild Horse Val** **19.33 338** *e*P **Pn** **03 43 54.6 -0.5**
34nm,1.3s
**MFID Camas Ranch** **19.41 345** *e*P **Pn** **03 43 55.9 -0.2**
**WDC Whiskeytown Da** **19.42 327** *e*P **Pn** **03 43 55.9 -0.1**
20nm,1.4s
**MOD Modoc** **19.49 334** *e*P **Pn** **03 43 57.6 +0.6**
50nm,1.6s
**H17A Grant Village** **19.60 357** *e*P **Pn** **03 43 58.6 +0.2**
46nm,1.6s
**J28A Allard Ranch,** **19.63 17** P **Pn** **03 43 59.6 +0.9**
baz=20
**RSSD Black Hills** **19.69 11** *e*P **P** **03 43 57.8 -0.2**
18nm,1.4s
**KMRM Mail Ridge** **19.74 325** *e*P **Pn** **03 44 02.7 +2.7**
487nm,2.6s
**LKWY Lake** **19.76 357** *e*P **Pn** **03 44 00.3 0.0**
**I26A New Underwood** **19.82 13** P **Pn** **03 44 01.8 +0.8**
baz=20
**PBMO Poplar Bluff** **19.86 49** *e*P **Pn** **03 44 01.9 +0.6**
148nm,2.6s
**J29A Okreek** **19.87 19** P **Pn** **03 44 02.3 +0.9**
baz=20
**CCM Cathedral Cave** **20.03 45** *e*P Pn 03 44 03.1 -0.2
31nm,1.4s
**M04C Macdoel** **20.04 331** P Pn 03 44 03.1 -0.4
baz=20,SNR=6.5
**QLMT Earthquake Lak** **20.09 355** *e*P Pn 03 44 06.1 +1.8
**J08A Circle Bar Ran** **20.10 339** *e*P **P** **03 44 02.6 +0.3**
118nm,1.8s
**I28A Midland** **20.19 16** P Pn 03 44 04.2 -0.9
baz=20,SNR=6.6
**KHMM Horse Mountain** **20.23 326** *e*P Pn 03 44 05.4 -0.5
110nm,1.8s
**MCMT McKenzie Canyo** **20.23 352** *e*P Pn 03 44 05.8 -0.2
**H25A Fruitdale** **20.25 11** P Pn 03 44 06.6 +0.6
baz=20
**RLMT Red Lodge** **20.28 359** P Pn 03 44 06.2 -0.3
baz=20
**RLMT Red Lodge** **20.28 359** *e*P Pn 03 44 08.4 +1.9
22nm,1.4s
**YBH Yreka Blue Hor** **20.39 329** P **P** **03 44 05.9 +0.3**
0.8nm,0.6s,baz=96,slow=10,SNR=3.4
YBH LR LR 03 50 38.0
comp=Z,317nm,20.1s,baz=283,slow=33
**K05A Summer Lake** **20.42 334** *e*P Pn 03 44 07.3 -0.7
288nm,1.9s
**I29A Vivian Onida** **20.44 18** P **P** **03 44 06.6 +0.6**
baz=20,SNR=7.3
**H27A Howes** **20.57 14** P Pn 03 44 08.4 -1.2
baz=21,SNR=9.1
**K04D Chiloquin, OR** **20.68 332** P Pn 03 44 10.5 -0.6
baz=21
**DLMT Dillon** **20.73 353** *e*P Pn 03 44 13.0 +1.3
42nm,1.1s
**LRAL Lakeview Retre** **20.87 62** *e*P **P** **03 44 11.6 +0.9**
24nm,1.2s
**BOZ Bozeman (W)** **20.92 355** P **P** **03 44 11.7 +0.4**
baz=21
**BOZ Bozeman (W)** **20.92 355** *e*P Pn 03 44 13.2 -0.6
56nm,1.6s
**H29A Onida** **21.02 18** P **P** **03 44 12.5 +0.3**
baz=21,SNR=8.2
**J05D Fort Rock, OR** **21.02 334** P **P** **03 44 13.4 +1.0**
baz=21,SNR=5.9
**I07A Izee** **21.08 338** *e*P **P** **03 44 12.2 -0.9**
66nm,1.5s
**G26A Maurine** **21.09 13** P **P** **03 44 13.9 +0.9**
baz=21
**LRM Limekiln Ridge** **21.17 353** *e*P **P** **03 44 17.6 +3.5**
**G28A Parade** **21.26 16** P **P** **03 44 15.5 +0.7**
baz=21
**G27A Dupree** **21.31 14** P **P** **03 44 15.8 +0.5**
baz=21,SNR=6.7
**J04D Umpqua Nationa** **21.34 333** P **P** **03 44 17.6 +1.7**
baz=22
**ECSD EROS Data Cent** **21.42 25** P **P** **03 44 17.6 +1.1**
baz=22
**ECSD EROS Data Cent** **21.42 25** *e*P **P** **03 44 18.6 +2.0**
46nm,1.5s
**F25A Bowman** **21.54 10** P **P** **03 44 20.7 +2.8**
baz=22
**F26A Lodgepole** **21.61 12** P **P** **03 44 21.1 +2.5**
baz=22
**G29A Hoven** **21.62 18** P **P** **03 44 21.1 +2.4**
baz=22
**F27A Lemmon** **21.76 13** P **P** **03 44 22.7 +2.5**
baz=22
**H32A Carlson Farm,** **21.78 23** P **P** **03 44 22.3 +1.9**
baz=22
**I04A Tendick Farm,** **21.92 333** P **P** **03 44 24.8 +2.9**
baz=22
**K37A Belmond** **21.92 31** P **P** **03 44 24.2 +2.3**
baz=22
**I05D Terrebonne, OR** **21.95 336** P **P** **03 44 24.8 +2.5**
baz=22
**LAO LASA Array** **21.96 5** P **P** **03 44 24.4 +2.1**
baz=22
**LAO LASA Array** **21.96 5** *e*P **P** **03 44 24.4 +2.1**
65nm,1.4s
**HRY Holter Researc** **21.99 355** *e*P **P** **03 44 27.2 +4.4**
**G08A Pilot Rock** **21.99 341** *e*P **P** **03 44 26.3 +3.5**
123nm,2.9s
**F28A McLaughlin** **22.01 15** P **P** **03 44 24.2 +1.3**

baz=22
**J36A Seneca 1, Swea 22.04 29 P P 03 44 24.5 +1.3**
baz=22
**F10A Beach Ranch, E 22.16 345** *e*P P 03 44 28.9 +4.4
185nm,2.5s
**E26A Carlson Angus 22.25 12 P P 03 44 28.0 +2.6**
baz=22
**CHMT Chamberlain Mo 22.34 352** *e*P **P 03 44 30.2 +3.6**
**MSO Missoula 22.35 351** P **P 03 44 28.4 +1.9**
baz=22
**MSO Missoula 22.35 351** *e*P **P 03 44 30.0 +3.5**
46nm,1.3s
**USIN University of 22.35 49** *e*P **P 03 44 26.2 -0.4**
**SWET Sewanee 22.43 57** *e*P **P 03 44 26.9 -0.6**
142nm,2.1s
**OLIL Olney 22.46 47** *e*P **P 03 44 28.5 +0.9**
44nm,1.0s
**G06A Carlson Farm, 22.48 338** *e*P **P 03 44 30.9 +3.0**
53nm,1.8s
**H34A Spellman Lake, 22.53 25** P **P 03 44 29.7 +1.3**
baz=23
**H04A Detroit Lake 22.57 335** *e*P **P 03 44 33.0 +4.1**
45nm,1.6s
**SLMT Seeley Lake 22.69 352** *e*P **P 03 44 33.4 +3.1**
**E28A Huff 22.72 15** P **P 03 44 32.0 +1.6**
baz=23
**G05D Wamic, OR 22.72 337** P **P 03 44 33.3 +2.8**
baz=23
**HDIL Hopedale 22.74 42** *e*P **P 03 44 31.5 +0.8**
109nm,1.6s
**D25A Fairfield 22.76 10** P **P 03 44 33.2 +2.4**
baz=23
**I37A Lemond, Waseca 23.00 30** P **P 03 44 34.5 +1.2**
baz=23
**SWMT Swartz Lake 23.02 351** *e*P **P 03 44 35.7 +2.0**
**HAWA Hanford 23.16 341** *e*P **P 03 44 37.2 +2.2**
63nm,1.6s
**EGMT Eagleton 23.19 359** *e*P **P 03 44 38.3 +2.9**
104nm,1.4s
**JTMT Jette 23.29 351** *e*P **P 03 44 38.6 +2.1**
**YBMT Yellow Bay 23.37 351** *e*P **P 03 44 37.6 +0.4**
**WCI Wyandotte Cave 23.43 50** *e*P **P 03 44 38.0 +0.2**
667nm,2.3s
**BSMT Bassoo Peak 23.47 350** *e*P P 03 44 43.9 +5.6
**I38A Scanlan Farm, 23.51 31** P **P 03 44 40.6 +2.1**
baz=24
**BLMT Blacktail Moun 23.56 351** *e*P **P 03 44 43.0 +3.8**
**CPCT Cooper Cave 23.59 58** *e*P **P 03 44 39.2 -0.2**
**D08A Wollman Farm, 23.60 343** *e*P **P 03 44 41.2 +1.8**
84nm,2.1s
**C27A Sayler Ranch, 23.62 13** P **P 03 44 43.5 +3.9**
baz=24
**D30A Buchanan 23.70 17** P **P 03 44 44.0 +3.6**
baz=24
**JFWS Jewell Farm 23.74 36** *e*P **P 03 44 39.6 -1.1**
11nm,0.8s
**GOGA Godfrey 23.82 63** *e*P **P 03 44 42.1 +0.5**
70nm,1.9s
**SFIN Scholer Farm 24.00 44** P **P 03 44 43.4 +0.2**
baz=24
**SFIN Scholer Farm 24.00 44** *e*P **P 03 44 43.4 +0.2**
32nm,0.9s
**C09A Chrisman Ranch 24.12 344** *e*P **P 03 44 46.8 +2.5**
17nm,1.3s
**LON Longmire 24.20 338** *e*P **P 03 44 45.5 +0.3**
36nm,1.3s
**SPMN St. Paul 24.21 29** *e*P **P 03 44 48.2 +3.1**
**TKL Tuckaleechee C 24.23 58** P **P 03 44 44.8 -0.7**
5.9nm,0.9s,baz=265,slow=8.1,SNR=7.8
TKL LR LR 03 54 41.1
comp=Z,742nm,18.9s,baz=254,slow=37
**TKL Tuckaleechee C 24.23 58** *e*P **P 03 44 45.5 0.0**
**LTY Liberty 24.28 340** *e*P **P 03 44 49.7 +3.8**
151nm,2.2s
**NEW Newport 24.30 347** P **P 03 44 45.1 -0.9**
29nm,1.1s,baz=144,slow=11,SNR=9.1
NEW LR LR 03 53 25.4
comp=Z,474nm,19.1s,baz=170,slow=34
**NEW Newport 24.30 347** P **P 03 44 46.6 +0.6**
baz=24
**NEW Newport 24.30 347** *e*P **P 03 44 45.7 -0.2**
81nm,1.4s
**WALA Waterton Lakes 24.53 352** *e*P **P 03 44 50.6 +2.5**
58nm,1.3s
**C31A Landman Farms, 24.61 18** P **P 03 44 51.1 +2.2**
baz=25
**D33A AnnSam, Waubun 24.62 22** P **P 03 44 50.8 +1.9**
baz=25
**D05A Enumclaw 24.64 338** *e*P **P 03 44 51.7 +2.6**
**E35A Pequot Lakes 24.64 25** P **P 03 44 50.5 +1.5**
baz=25
**TZTN Tazewell 24.71 56** *e*P **P 03 44 51.2 +1.4**
141nm,2.2s
**A29A Manning Farm, 25.26 15** P **P 03 44 55.8 +1.1**
baz=25,SNR=5.1
**B05A Bryant 25.62 339** P **P 03 45 00.4 +2.5**
baz=26
**KMSC Kings Mountain 25.98 60** P **P 03 45 01.5 +0.2**
baz=26
**A04D Lummi Island 26.22 339** P **P 03 45 05.4 +2.1**
baz=26
**EYMN Ely 26.92 26** *e*P **P 03 45 14.3 +4.6**
37nm,1.2s
**JTS JuntasAbangare 26.98 118** LR LR 03 56 02.7
comp=Z,393nm,20.2s,baz=310,slow=37
**ULM Lac du Bonnet 27.36 18** LR LR 03 57 19.9
comp=Z,430nm,19.2s,baz=197,slow=39
**C39A Grand Marais 27.39 28** P **P 03 45 16.7 +2.9**
baz=27
**EDM Edmonton 28.58 354** *e*P P 03 45 30.2 +5.7
76nm,1.4s
**YKA Yellowknife Ar 37.88 356** P **P 03 46 45.6 +0.4**
4.1nm,1.0s,baz=344,slow=4.7,SNR=3.5
**OTAV Otavalo 38.30 125** *e*P **P 03 46 51.0 +1.1**
22nm,1.4s
**ROSC El Rosal 38.71 115** LR LR 04 02 46.6
comp=Z,150nm,18.4s,baz=356,slow=36
**SCHQ Schefferville 43.09 35** LR LR 04 06 53.0
comp=Z,242nm,18.1s,baz=250,slow=38
**EGAK Eagle 45.06 341** *e*P P 03 47 50.0 +5.8
35nm,1.8s
**IL1 Eielson Array 46.84 339** *e*P **P 03 47 57.5 -0.7**
**ILAR Eielson Array 46.84 339** P **P 03 47 56.8 -1.4**
0.6nm,0.6s,baz=138,slow=7.0,SNR=8.4
ILAR LR LR 04 09 27.4
comp=Z,228nm,19.0s,baz=134,slow=38
**WRH Wood River Hil 47.05 338** *e*P P 03 48 03.9 +4.0
127nm,2.8s
**TRF Thorofare Moun 47.22 336** *e*P **P 03 48 00.5 -0.9**
66nm,1.3s
**BWN Browne 47.34 337** *e*P **P 03 48 03.0 +0.9**
64nm,1.4s
**PPLA Purkeypile 47.62 335** *e*P P 03 48 07.4 +3.0
56nm,1.0s
**SVW2 Sparrevohn 48.11 332** *e*P **P 03 48 10.1 +2.0**
68nm,2.0s
**MLY Manley 48.30 338** *e*P **P 03 48 11.0 +1.5**
20nm,1.4s
**RKT Rikitea 53.91 210** *e*LR LR 04 04 28.7
269nm,25.2s
**SAML Samuel 55.81 121** *e*P **P 03 49 04.0 -2.1**
39nm,1.8s
**PPT2 Papeete2 57.81 227** *e*LR LR 04 06 07.9
199nm,24.8s,baz=39
**TBI Tubuai 61.92 223** *e*LR LR 04 08 04.6
163nm,24.5s,baz=43
**CPUP Villa Florida 71.19 132** P **P 03 50 46.5 -1.1**
1.9nm,0.8s,baz=343,slow=5.6,SNR=5.3
**ARCES ARCESS Array B 80.41 15** P **P 03 51 39.8 +0.1**
14nm,1.2s,baz=332,slow=5.4,SNR=2.8
**ESDC Sonseca Array 85.19 48** P **P 03 52 03.6 -1.6**
1.3nm,0.8s,baz=296,slow=7.7,SNR=2.8
**WMQ Urumqi 110.03 347** *e*PKP **PKiKP 03 57 57.0 -3.3**
**KSH Kashi 115.86 356** *e*PKP **PKPdf 03 58 13.3 +1.7**
KSH *e*PP PP 03 59 18.8 +5.1
KSH PPMZ
150nm,6.9s
KSH LN
260nm,6.8s
KSH LE
200nm,5.5s
KSH LZ
260nm,8.7s
**CD2 Chengdu 116.37 329** PKP **PKPdf 03 58 12.6 -0.1**
CD2 sPKP 03 58 17.0
CD2 SKS **SKSdf 04 05 25.0 +0.4**
CD2 SKKS **SKKSac 04 06 17.5 -2.2**
CD2 SS **SS 04 15 22.6 +1.7**
**ASAR Alice Springs 123.14 257** PKP **PKPdf 03 58 24.6 -1.2**
0.2nm,0.4s,baz=69,slow=2.1,SNR=2.9

*ISCJB **20** 03:53:35.8±0.2, 19.°39S±0.°05×174.°36W±0.°07, h33km, mb4.6/24, Error ellipse: s-maj=10.5km s-min=6.5km az=32.7*
*NEIC **20** 03:53:38.0±1.2, 19.°30S×174.°51W, h43km±11km, mb4.8/11, Error ellipse: s-maj=11.1km s-min=6.4km az=130.0*
*IDC **20** 03:53:39.7±3.3, 19.°28S×174.°52W, h58km±29km, mb4.2/15, mb1 4.4/16, mb1mx4.3/25, mbtmp4.5/16, ML5.0/1, Error ellipse: s-maj=22.2km s-min=13.7km az=116.0*
*BJI **20** 03:53:40.0, 19.°30S×174.°00W, h61km, mb5.1/16, mB5.3/13, Ms5.2/6, Ms7 4.8/6*

**ISC 20 03:53:36.9±0.4, 19.°36S±0.°07×174.°09W±0.°10, h32km, n107, σ1°69/101, mb4.5/24, 7C-4D, Tonga Islands**

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

**AFI Afiamalu 5.86 23** P **Pn 03 55 04.6 +2.9**
35nm,0.3s,baz=213,slow=5.2,SNR=34
AFI S **Sn 03 56 04.6 -3.3**
81nm,0.3s,baz=22,slow=24,SNR=10.0
**AFI Afiamalu 5.86 23** *e*Pn **Pn 03 55 04.5 +2.8**
AFI *e*S **Sn 03 56 05.2 -2.7**
**MSVF Nonsavu 7.63 281** *e*Pn Pn 03 55 33.4 +7.4
**RAR Rarotonga 13.56 100** P Pn 03 56 50.9 +3.8
9.0nm,0.3s,baz=213,slow=5.1,SNR=18
RAR S Sn 03 59 09.5 -7.3
1.3nm,0.3s,baz=139,slow=20,SNR=4.2
**RAR Rarotonga 13.56 100** *e*Pn Pn 03 56 51.3 +4.2
RAR S Sn 03 59 09.5 -7.3
**DZM Mont Dzumac 18.41 258** *e*P **Pn 03 57 52.7 +2.9**
58nm,1.4s
**DZM Mont Dzumac 18.41 258** P **Pn 03 57 50.3 +0.5**
1.1nm,0.3s,baz=358,slow=17,SNR=8.9
**URZ Urewera 20.32 200** P **P 03 58 10.3 -0.1**
30nm,0.4s,baz=294,slow=3.0,SNR=40
URZ S S 04 01 39.6 -17
23nm,1.0s,baz=150,slow=20,SNR=3.1
**BKZ Black Stump Fm 21.35 200** *e*P **P 03 58 20.8 -0.8**
253nm,2.3s
**TBI Tubuai 23.27 104** *e*LR LR 04 04 12.7
103nm,33.8s
**TBI Tubuai 23.27 104** *e*T T 04 22 51.5
15nm,0.2s
**PAE Paea 23.30 90** *e*T T 04 22 56.5
10nm,0.3s
**PPT2 Papeete2 23.32 90** *e*LR LR 04 04 11.8
131nm,30.0s
**PPT2 Papeete2 23.32 90** *e*T T 04 22 58.1
5.6nm,0.3s
**TVO Taravao 23.60 90** *e*T T 04 23 10.7
1.8nm,0.3s
**MEH Mehetia 24.70 91** *e*T T 04 24 41.3
41nm,0.2s
**PMOR Pomariorio Ree 25.39 84** *e*T T 04 25 33.5
2.2nm,0.2s
**OXZ Oxford 26.59 203** *e*P **P 03 59 14.9 +2.7**
49nm,1.1s
**RPZ Rata Peaks 27.29 204** P **P 03 59 19.5 +1.0**
14nm,0.6s,baz=322,slow=3.5,SNR=7.4
**RPZ Rata Peaks 27.29 204** *e*P **P 03 59 19.6 +1.0**
10nm,0.5s
**TAOE Nuku Hiva Isla 34.47 77** *e*T T 04 36 46.8
142nm,0.3s
**RKT Rikitea 36.58 103** *e*T T 04 39 28.8
3.8nm,0.2s
**CTAO Charters Tower 37.27 262** *e*P **P 04 00 44.0 -2.2**
**ASAR Alice Springs 48.36 255** P P 04 02 12.2 -3.8
2.1nm,0.5s,baz=94,slow=8.1,SNR=30
ASAR PcP **PcP 04 03 39.6 -2.8**
1.4nm,0.6s,baz=94,slow=4.9,SNR=7.0
**WRAB Tennant Creek 48.40 260** *e*P P 04 02 13.1 -3.3
**WRA Warramunga Arr 48.41 260** P P 04 02 12.9 -3.5
0.8nm,0.3s,baz=97,slow=8.4,SNR=19
WRA PcP **PcP 04 03 40.7 -1.9**
1.2nm,0.7s,baz=93,slow=3.8,SNR=5.2
**SBA Scott Base 59.27 185** *e*P **P 04 03 36.4 +1.5**
6.6nm,0.8s
**VNDA Vanda 59.39 186** P **P 04 03 36.8 +1.0**
3.2nm,0.8s,baz=2.9,slow=6.3,SNR=21
**VNDA Vanda 59.39 186** *e*P **P 04 03 37.1 +1.4**
3.6nm,0.8s
**MBWA Marble Bar 61.69 256** *e*P P 04 03 48.7 -3.7
**QSPA South Pole Qui 70.70 180** *e*P **P 04 04 49.3 -0.3**
5.0nm,0.9s
**MJAR Matsushiro Arr 71.56 321** P **P 04 04 52.7 -2.3**
1.9nm,0.5s,baz=156,slow=6.2
**KMRM Mail Ridge 75.58 38** *e*P **P 04 05 21.2 +2.6**
23nm,1.0s
**HOLC Holcomb Ridge 75.65 45** *e*P **P 04 05 20.0 +0.8**
**ISA Isabella 75.94 44** *e*P **P 04 05 22.5 +1.6**
**CMB Columbia Colle 76.17 41** *e*P **P 04 05 23.3 +1.2**
6.1nm,1.4s
**PETK Petropavlovsk- 76.19 343** P **P 04 05 20.8 -1.0**
7.9nm,0.8s,baz=120,slow=8.9,SNR=4.6
**NV01 Mina Array Sit 77.71 42** *e*P **P 04 05 32.1 +1.2**
**NVAR Mina Array Bea 77.71 42** P **P 04 05 32.2 +1.3**
0.8nm,0.2s,baz=223,slow=7.7,SNR=22
**KSRS Korea Array 78.54 316** P **P 04 05 34.6 -0.6**
2.1nm,0.8s,baz=142,slow=6.4,SNR=5.2
**KSAR Wonju Array Be 78.55 316** P **P 04 05 34.6 -0.8**
**SHPR Sheep Range 78.62 45** *e*P **P 04 05 37.7 +1.8**
**WVOR Wild Horse Val 79.94 38** *e*P **P 04 05 43.9 +1.0**
7.9nm,1.3s
**CCUT Cedar City 80.39 45** *e*P **P 04 05 47.6 +1.9**
**I07A Izee 80.46 37** *e*P **P 04 05 47.2 +1.5**
**J08A Circle Bar Ran 80.60 38** *e*P **P 04 05 45.5 -1.0**
**G08A Pilot Rock 81.52 36** *e*P **P 04 05 52.4 +1.1**
**NJ2 Nanjing 82.04 308** *e*P **P 04 05 56.9 +2.7**
NJ2 PMZ
50nm,0.8s
**D08A Wollman Farm, 82.64 34** *e*P **P 04 05 58.5 +1.4**
**TMUT Trail Mountain 82.76 44** *e*P **P 04 06 00.4 +2.2**
**F10A Beach Ranch, E 82.89 36** *e*P **P 04 05 59.0 +0.5**
**HLID Hailey 83.10 39** *e*P **P 04 06 01.1 +1.3**
**SRU San Rafael 83.11 45** *e*P **P 04 06 01.7 +1.8**
**MNTX Cornudas Mount 83.12 53** *e*P **P 04 06 02.0 +2.1**
**TX31 Lajitas Ar. Si 83.36 56** *e*P **P 04 06 03.0 +1.7**
**TXAR Lajitas Array 83.36 56** P **P 04 06 02.8 +1.5**
0.8nm,0.8s,baz=222,slow=5.0,SNR=8.8
**ANMO Albuquerque 83.85 50** *e*P **P 04 06 05.1 +1.3**
**MAW Mawson 83.85 199** P **P 04 06 01.8 -1.2**
1.5nm,0.6s,baz=142,slow=7.5,SNR=8.3
**TRF Thorofare Moun 84.62 10** *e*P **P 04 06 06.0 -1.1**
**MCMT McKenzie Canyo 84.74 39** *e*P **P 04 06 08.1 0.0**
**RND Reindeer 84.83 11** *e*P **P 04 06 08.7 +0.7**
**S22A 4UR Ranch, Cre 84.93 47** *e*P **P 04 06 09.9 +0.5**
**MCK McKinley 85.12 11** *e*P **P 04 06 08.8 -0.5**
11nm,0.9s
**IMW Indian Meadow 85.38 40** *e*P **P 04 06 12.8 +1.3**
**WRH Wood River Hil 85.95 11** *e*P **P 04 06 13.2 -0.2**
**DOT Dot Lake 86.00 13** *e*P **P 04 06 13.8 +0.1**
**MLY Manley 86.02 10** *e*P **P 04 06 13.2 -0.6**
**CCB Clear Creek Bu 86.16 11** *e*P **P 04 06 14.0 -0.5**
**SEY Seymchan 86.16 345** P **P 04 06 13.2 -1.2**
2.5nm,0.5s,baz=84,slow=6.0,SNR=3.9
**COLA College 86.36 11** *e*P **P 04 06 14.8 -0.6**
10nm,0.8s
**ILAR Eielson Array 86.44 11** P **P 04 06 15.2 -0.7**
1.7nm,0.7s,baz=220,slow=4.7,SNR=24
**BJI Beijing 87.71 314** P **P 04 06 22.8 +0.2**
BJI PMZ
7.0nm,1.9s
**VNA3 Neumayer Olymp 88.99 175** P **P 04 06 27.2 -1.0**
**SNAA Sanae 89.00 177** P **P 04 06 26.9 -1.5**
**GYA Guiyang 89.32 298** *e*P **P 04 06 33.0 +2.3**
GYA PMZ
10.0nm,1.0s
**VNA2 Neumayer--Watz 89.47 176** P **P 04 06 29.8 -0.7**
baz=192,slow=3.3
**VNA1 Neumayer--Stat 89.68 175** P **P 04 06 30.8 -0.6**
**XAN Xi'an 90.41 306** P **P 04 06 35.4 -0.1**
XAN pP pP 04 06 54.5 +8.8
XAN PMZ
5.0nm,1.2s
XAN PMZ
260nm,6.7s
**HHC Hu-ho-hao-te 91.23 313** *e*P **P 04 06 41.5 +2.3**
HHC PP PP 04 10 23.1 +6.3
**HHC Hu-ho-hao-te 91.23 313** SS SS 04 23 46.4 +5.0
HHC pmax pmax
comp=Z,16nm,0.9s
HHC LR LR
comp=Z,160nm,4.6s
HHC LR LR
comp=N,470nm,19.0s
HHC LR LR
comp=E,1μm,19.4s
HHC LR LR
comp=Z,510nm,13.5s
**HHC Hu-ho-hao-te 91.23 313** *e*P P 04 06 42.8 +3.6
HHC pP pP 04 06 59.8 +10
HHC sP sP 04 07 06.8 +14
HHC SKS **SKSac 04 17 08.4 -0.9**
HHC S **S 04 17 34.0 -1.7**
HHC sS sS 04 18 04.3 +12
HHC PMZ
comp=Z,18nm,0.7s
HHC PMZ
comp=Z,160nm,7.2s
HHC LN
comp=Z,330nm,14.8s
HHC LE
comp=Z,300nm,18.4s
HHC LZ
comp=Z,210nm,18.2s
**KMI Kunming 92.14 296** P **P 04 06 44.1 +0.1**
KMI PMZ
comp=Z,12nm,0.7s
KMI PMZ
comp=Z,440nm,5.2s
**CMAR Chiang Mai Arr 93.22 288** P **P 04 06 48.1 -0.7**
comp=Z,0.8nm,0.4s,baz=123,slow=3.3,SNR=8.6
**CD2 Chengdu 93.30 301** *e*P **P 04 06 50.1 +1.1**
CD2 pP pP 04 07 07.4 +8.2
CD2 PP **PP 04 10 34.8 +1.5**
CD2 SKS **SKSac 04 17 18.5 -2.7**
CD2 sS sS 04 18 23.3 +12
CD2 SS **SS 04 24 12.4 +1.0**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.6s
**YKA Yellowknife Ar 93.98 24** P **P 04 06 51.2 0.0**
comp=Z,0.9nm,0.7s,baz=246,slow=4.3,SNR=3.1
**LZH Lanzhou 95.03 306** *e*P **P 04 06 59.4 +2.5**
LZH pP pP 04 07 17.0 +10
LZH sP sP 04 07 23.8 +13
LZH PP **PP 04 10 52.0 +5.1**
LZH PMZ
comp=Z,17nm,1.5s
LZH PMZ
comp=Z,83nm,9.2s
LZH LN
comp=Z,260nm,16.8s
LZH LE
comp=Z,240nm,17.2s
LZH LZ
comp=Z,350nm,19.7s
**KSH Kashi 117.25 305** *e*PKP **PKPdf 04 12 22.1 +2.7**
KSH *e*PP **PP 04 13 31.3 +0.7**
KSH PKS **PKSdf 04 15 57.8 +1.6**
KSH SKKS 04 20 20.9
KSH PPMZ
comp=Z,59nm,6.5s
KSH LN
comp=Z,210nm,12.7s
KSH LE
comp=Z,160nm,7.2s
KSH LZ
comp=Z,220nm,9.2s
**BVAR Borovoye Array 120.55 321** PKP **PKPdf 04 12 22.9 -2.3**
comp=Z,0.6nm,0.4s,baz=45,slow=2.7,SNR=4.1
**ARCES ARCESS Array B 128.41 351** PKP **PKPdf 04 12 37.9 -1.9**
comp=Z,2.9nm,0.7s,baz=17,slow=1.2,SNR=11
**FINES FINESS Array B 135.63 346** PKP **PKPdf 04 12 50.2 -3.4**
comp=Z,1.5nm,0.6s,baz=29,slow=3.2,SNR=4.5
**AKASG Malin Array Be 143.68 335** PKhKP PKPpre 04 13 04.1
comp=Z,0.9nm,0.4s,baz=38,slow=3.6,SNR=4.7
**MALT Malatya 146.07 311** *i*P **PKPdf 04 13 13.8 +0.6**
**CLL Collm 147.63 352** *i*PKPbc **PKPdf 04 13 17.0 +1.7**
comp=Z,13nm,1.2s
CLL *i* PKPab **PKPbc 04 13 19.0 +1.0**
comp=Z,7.0nm,0.9s
**BURAR Bucovina Array 147.73 335** *i*P **PKPbc 04 13 19.0 +0.5**
**BRG Berggiesshubel 147.92 350** *i* PKP **PKPdf 04 13 17.8 +2.0**
comp=Z,4.9nm,0.6s
**TRPA Tarpa 148.29 339** *i*P **PKPbc 04 13 19.0 -0.8**
**BRTR Keskin Array B 148.68 316** PKPbc **PKPdf 04 13 19.6 +2.0**
comp=Z,2.9nm,0.8s,baz=82,slow=3.2,SNR=15
**MLR Muntele Rosu 149.11 332** *i*P **PKPbc 04 13 22.1 -0.1**
**PSZ Piszkesteto 149.33 341** *i*P **PKPdf 04 13 14.7 -3.6**
**DRGR 149.37 337** *i*P **PKPbc 04 13 21.7 -1.1**
**KHC Kasperske Hory 149.67 350** *i*PKP **PKPbc 04 13 22.0 -1.4**
**ARR Arges 149.78 333** *i*P **PKPbc 04 13 24.2 +0.4**
**GERES GERESS Array B 149.92 350** PKPbc **PKPbc 04 13 23.1 -1.0**
comp=Z,3.2nm,0.9s,baz=57,slow=3.6,SNR=12
**BZS Buzias 150.77 337** *i*P **PKPbc 04 13 25.0 -1.1**
**DIVS Divibare 152.66 338** *i*P **PKPbc 04 13 30.2 -0.4**
**ESDC Sonseca Array 158.04 21** PKPab **PKPab 04 14 05.0 +0.7**
comp=Z,0.5nm,0.6s,baz=343,slow=4.6,SNR=4.3
**TORD Torodi Ar. Bea 172.61 146** PKP **PKPdf 04 13 40.9 -2.8**
comp=Z,0.6nm,0.7s,baz=236,slow=1.1,SNR=5.2
TORD PKPab **PKPab 04 15 07.9 -0.9**
comp=Z,0.5nm,0.8s,baz=204,slow=3.5,SNR=2.8

*CSEM **20** 03:55:34.0, 37.°52N×25.°13W, h0km, ML1.4, After PDA*

**PDA 20 03:55:34.0±0.6, 37.°52N×25.°13W, h0km±9km, MD3.5, ML1.4, Error ellipse: s-maj=8.6km s-min=2.9km az=118.0, Azores Islands**

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**BART Pico Bartolome 0.26 354** *i*P Pg 03 55 39.0 -0.1
BART *e*S Sg 03 55 42.7 +0.1
BART A A 03 55 44.6
79nm,0.4s
**BART Pico Bartolome 0.26 354** *i*P Pg 03 55 39.0 -0.1
BART *e*S Sg 03 55 42.7 +0.1
**GRON Grota Negra 0.40 308** *e*P Pg 03 55 40.1 -1.7
GRON *e*S Sg 03 55 44.5 -2.6
GRON A A 03 55 45.6
13nm,0.1s
**PDA Ponta Delgada 0.48 298** *e*P Pg 03 55 42.6 -0.6
PDA *e*S Sg 03 55 49.1 -0.3
PDA A A 03 55 50.2
10nm,0.2s
**PDA Ponta Delgada 0.48 298** *e*P Pg 03 55 42.6 -0.6
PDA *e*S Sg 03 55 49.1 -0.3
**PSET Sete Cidades 0.56 303** *e*P Pg 03 55 44.0 -0.7
PSET *e*S Sg 03 55 51.7 -0.3
PSET A A 03 55 55.5
16nm,0.2s
**PSET Sete Cidades 0.56 303** *e*P Pg 03 55 44.0 -0.7
PSET *e*S Sg 03 55 51.7 -0.3

*IDC **20** 03:58:51.2±1.9, 43.°36N×13.°92E, h0km, mb3.8/1, mb1 3.8/3, mb1mx3.4/43, mbtmp3.7/3, ML3.5/2, Error ellipse: s-maj=70.2km s-min=13.8km az=98.0*
*ROM **20** 03:58:52.5±0.2, 43.°33N×13.°78E, h5km±1km, Ml3.5/29, Error ellipse: s-maj=2.0km s-min=1.3km az=73.0*
*LDG **20** 03:58:52.6±0.1, 43.°38N×13.°93E, h2km, Ml3.4/28, Error ellipse: s-maj=2.2km s-min=1.5km az=31.0*
*PRU **20** 03:58:53.8, 43.°38N×13.°86E, h0km*
*CSEM **20** 03:58:53.5±0.1, 43.°31N×13.°72E, h12km, ML3.3/12, Error ellipse: s-maj=2.9km s-min=2.5km az=62.0*
*VIE **20** 03:58:57.0±0.4, 43.°60N×13.°82E, h10km, mb2.9/13, ml3.2/15, Error ellipse: s-maj=3.2km s-min=3.1km az=164.0*

**ISC 20 03:58:53.7±0.9, 43.°32N±0.°02×13.°70E±0.°03, h17km±6km, n185, σ1°32/235, 11C-3D, Central Italy**

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

**AOI Ancona 0.24 342** Pg **Pg 03 58 58.2 -0.9**
AOI Sg **Sg 03 59 03.0 +0.2**
2μm,0.4s
**AOI Ancona 0.24 342** Pg **Pg 03 58 58.2 -0.9**
AOI Sg **Sg 03 59 03.0 +0.2**
2μm,0.4s
**GUMA Gualdo di Mace 0.31 147** Pg **Pb 03 59 01.8 +1.0**
GUMA Sg **Sn 03 59 09.3 -0.4**

14µm,0.3s
**CING Cingoli 0.37 278** Pg **Pg** 03 59 01.7 +0.3
CING Sg **Sb** 03 59 08.8 +1.4
2µm,0.6s
**CING Cingoli 0.37 278** Pg **Pg** 03 59 01.7 +0.3
CING Sg **Sb** 03 59 08.8 +1.4
2µm,0.6s
**OFFI Offida 0.39 182** Pg **Pb** 03 59 02.4 +0.3
6µm,0.4s
**OFFI Offida 0.39 182** Pg **Pb** 03 59 02.4 +0.3
6µm,0.4s
**SENI Senigallia 0.51 318** Pg **Pb** 03 59 04.6 +0.4
443nm,0.6s
**SENI Senigallia 0.51 318** Pg **Pb** 03 59 04.6 +0.4
443nm,0.6s
**FDMO Fiordimonte 0.53 238** Pg **Pg** 03 59 04.1 -0.2
FDMO Sg **Sb** 03 59 13.8 +1.8
2µm,0.3s
**FDMO Fiordimonte 0.53 238** Pg **Pg** 03 59 04.1 -0.2
**SNTG Esanatoglia 0.56 263** Pg **Pg** 03 59 04.8 0.0
SNTG Sg **Sn** 03 59 14.8 -1.0
1µm,0.3s
**SNTG Esanatoglia 0.56 263** Pg **Pg** 03 59 04.8 0.0
**ARVD Arcevia 0.58 288** Pg **Pg** 03 59 05.1 -0.1
ARVD Sg **Sb** 03 59 14.8 +1.4
692nm,0.7s
**ARVD Arcevia 0.58 288** Pg **Pg** 03 59 05.1 -0.1
ARVD Sg **Sb** 03 59 14.8 +1.4
692nm,0.7s
**CESI CESI - Serrava 0.66 242** Pg **Pg** 03 59 06.5 -0.2
CESI Sg **Sn** 03 59 18.2 -0.3
643nm,0.3s
**CESI CESI - Serrava 0.66 242** Pg **Pg** 03 59 06.5 -0.2
**TERO Teramo 0.70 186** Pg **Pg** 03 59 06.9 -0.6
**TERO Teramo 0.70 186** Pg **Pg** 03 59 06.9 -0.6
**SMA1 SAN MARTINO 0.74 201** Pg **Pg** 03 59 07.5 -0.7
SMA1 Sg **Sn** 03 59 20.2 -0.2
2µm,0.4s
**SMA1 SAN MARTINO 0.74 201** Pg **Pg** 03 59 07.5 -0.7
**FSSB Fossombrone 0.77 299** Pg **Pb** 03 59 08.7 +0.1
402nm,0.4s
**FSSB Fossombrone 0.77 299** Pg **Pb** 03 59 08.7 +0.1
402nm,0.4s
**RM32 Poggio Cancell 0.81 202** Pg **Pg** 03 59 09.0 -0.5
1µm,0.5s
**RM32 Poggio Cancell 0.81 202** Pg **Pg** 03 59 09.0 -0.5
1µm,0.5s
**CAMP Campotosto 0.81 195** Pg **Pg** 03 59 08.8 -0.8
1µm,0.4s
**CAMP Campotosto 0.81 195** Pg **Pg** 03 59 08.8 -0.8
1µm,0.4s
**ATFO Monte Foce - G 0.82 273** Pg **Pg** 03 59 09.7 -0.1
2µm,0.5s
**ATFO Monte Foce - G 0.82 273** Pg **Pg** 03 59 09.7 -0.1
2µm,0.5s
**RM29 Verrico (Monte 0.84 206** Pg **Pb** 03 59 09.7 -0.3
2µm,0.3s
**RM29 Verrico (Monte 0.84 206** Pg **Pb** 03 59 09.7 -0.3
2µm,0.3s
**MURB Monte Urbino 0.86 266** Pg **Pg** 03 59 10.7 +0.3
5µm,0.3s
**MURB Monte Urbino 0.86 266** Pg **Pg** 03 59 10.7 +0.3
5µm,0.3s
**LNSS Leonessa 0.87 214** Pg **Pb** 03 59 10.0 -0.3
3µm,0.3s
**LNSS Leonessa 0.87 214** Pg **Pb** 03 59 10.0 -0.3
3µm,0.3s
**PIEI Pieia 0.88 284** Pg **Pb** 03 59 10.3 -0.2
671nm,0.4s
**PIEI Pieia 0.88 284** Pg **Pb** 03 59 10.3 -0.2
671nm,0.4s
**PESA Pesaro 0.88 315** Pg **Pn** 03 59 11.2 -0.1
1µm,0.7s
**PESA Pesaro 0.88 315** Pg **Pn** 03 59 11.2 -0.1
1µm,0.7s
**RM33 Pellescritta ( 0.89 204** Pg **Pb** 03 59 10.2 -0.5
2µm,0.4s
**RM33 Pellescritta ( 0.89 204** Pg **Pb** 03 59 10.2 -0.5
2µm,0.4s
**ATPC Poggio Castell 0.92 280** Pg **Pg** 03 59 11.7 +0.2
1µm,0.4s
**ATPC Poggio Castell 0.92 280** Pg **Pg** 03 59 11.7 +0.2
1µm,0.4s
**VCEL Villa Celiera 0.93 174** Pg **Pb** 03 59 10.8 -0.7
2µm,0.4s
**VCEL Villa Celiera 0.93 174** Pg **Pb** 03 59 10.8 -0.7
2µm,0.4s
**ATVO AVT- Monte Val 0.95 274** Pg **Pg** 03 59 12.0 0.0
**ATVO AVT- Monte Val 0.95 274** Pg **Pg** 03 59 12.0 0.0
**ATPI Pietralunga - 0.95 278** Pg **Pb** 03 59 12.0 +0.2
968nm,0.4s
**ATPI Pietralunga - 0.95 278** Pg **Pb** 03 59 12.0 +0.2
968nm,0.4s
**CESX Cesi 1.09 229** Pg **Pb** 03 59 13.9 -0.2
1µm,0.4s
**CESX Cesi 1.09 229** Pg **Pb** 03 59 13.9 -0.2
1µm,0.4s
**PARC Parchiule 1.11 288** Pg **Pg** 03 59 15.1 -0.1
902nm,0.7s
**PARC Parchiule 1.11 288** Pg **Pg** 03 59 15.1 -0.1
902nm,0.7s
**FIAM Fiamignano 1.14 202** Pg **Pn** 03 59 14.4 -0.5
1µm,0.8s
**FIAM Fiamignano 1.14 202** Pg **Pn** 03 59 14.4 -0.5
1µm,0.8s
**MNS Montasola 1.20 219** Pg **Pn** 03 59 15.7 0.0
1µm,0.5s
**MNS Montasola 1.20 219** Pg **Pn** 03 59 15.7 0.0
1µm,0.5s
**MGAB Montegabbione 1.23 251** Pg **Pb** 03 59 17.0 +0.5
**MGAB Montegabbione 1.23 251** Pg **Pb** 03 59 17.0 +0.5
**INTR Introdacqua 1.32 173** Pg **Pn** 03 59 17.9 +0.5
902nm,0.4s
**INTR Introdacqua 1.32 173** Pg **Pn** 03 59 17.9 +0.5
902nm,0.4s
**SFI Santa Sofia 1.47 294** Pg **Pg** 03 59 21.7 -0.2
**SFI Santa Sofia 1.47 294** Pg **Pg** 03 59 21.7 -0.2
**LATE Laterza 1.56 244** Pg **Pb** 03 59 22.4 +0.2
**LATE Laterza 1.56 244** Pg **Pb** 03 59 22.4 +0.2
**MIDA Miranda 1.73 166** Pn **Pn** 03 59 23.8 +0.8
175nm,0.3s
**MIDA Miranda 1.73 166** Pn **Pn** 03 59 23.8 +0.8
175nm,0.3s
**CERA Filignano 1.74 172** Pn **Pn** 03 59 24.5 +1.3
280nm,0.5s
**CERA Filignano 1.74 172** Pn **Pn** 03 59 24.5 +1.3
280nm,0.5s
**SKDS Skadanscina 2.23 6** *i* Pn **Pn** 03 59 29.9 0.0
SKDS *e*Sn **Sn** 03 59 58.5 +1.3
comp=Z,94nm,0.4s
**SKDS Skadanscina 2.23 6** *i* Pn **Pn** 03 59 29.9 0.0
SKDS *e*Sn **Sn** 03 59 58.5 +1.3
comp=Z,94nm,0.4s
**MS1 Monte Sant'Ang 2.31 134** *e*Pn **Pn** 03 59 30.3 -0.8
**CEY Cerknica 2.47 12** *e*Sn **Sn** 04 00 04.4 +1.4
comp=Z,69nm,0.4s
**CEY Cerknica 2.47 12** *e*Sn **Sn** 04 00 04.4 +1.4
comp=Z,69nm,0.4s
**VOJS Vojsko 2.71 3** *i* Pn **Pn** 03 59 36.6 +0.1
VOJS *i* Sn **Sn** 04 00 11.0 +2.0
comp=Z,89nm,0.7s
**VOJS Vojsko 2.71 3** *i* Pn **Pn** 03 59 36.6 +0.1
VOJS *i* Sn **Sn** 04 00 11.0 +2.0
comp=Z,89nm,0.7s
**BAI Bari 3.24 132** *e*Pn **Pn** 03 59 45.5 +1.8
BAI Sn **Sn** 04 00 20.8 -1.0
**MYKA Terra Mystica 3.31 359**⇑ *i*Pn **Pn** 03 59 45.2 +0.5
**MYKA Terra Mystica 3.31 359** Pn **Pn** 03 59 45.2 +0.5
**SG1 Sgolgore (BA) 3.33 137** *e*Pn **Pn** 03 59 44.8 -0.2
SG1 Sn **Sn** 04 00 24.2 +0.1
**ABTA Abfaltersbach 3.53 347**⇑ *i*Pn **Pn** 03 59 48.8 +1.0
SNR=6.3
**ABTA Abfaltersbach 3.53 347** Pn **Pn** 03 59 48.8 +1.0
SNR=6.3
**PGF Pioggiola 3.54 259** *e*Pn **Pn** 03 59 50.2 +2.3
PGF *e*Sn **Sn** 04 00 30.5 +1.1
comp=Z,9.4nm,0.4s
**PGF Pioggiola 3.54 259** *e*Pn **Pn** 03 59 50.2 +2.3
PGF *e*Sn **Sn** 04 00 30.5 +1.1
comp=Z,4.7nm,0.4s
**PE1 Pezze di Greco 3.74 131** *e*Pn **Pn** 03 59 50.4 -0.2
**KBA Koelnbreinsper 3.76 356**⇑ *i*Pn **Pn** 03 59 51.8 +0.7
KBA ⇓ *i*Sn **Sn** 04 00 34.1 -1.0
**KBA Koelnbreinsper 3.76 356** Pn **Pn** 03 59 51.8 +0.7
KBA Sn **Sn** 04 00 34.1 -1.0
**BBLS Lazići 4.18 81** *e*Pn Pn 04 00 01.1 +4.4
**WTTA Wattenberg 4.20 340**⇑ *i*Pn **Pn** 03 59 58.3 +1.2
**WTTA Wattenberg 4.20 340** Pn **Pn** 03 59 58.3 +1.2
**FETA Feichten 4.25 331**⇑ *i*Pn **Pn** 03 59 59.3 +1.5
**FETA Feichten 4.25 331** Pn **Pn** 03 59 59.3 +1.5
**WATA Walderalm 4.28 340**⇑ *i*Pn **Pn** 03 59 59.3 +1.1
SNR=7.3
**WATA Walderalm 4.28 340** Pn **Pn** 03 59 59.3 +1.1
SNR=7.3
**MOTA Moosalm 4.42 336**⇑ *i*Pn **Pn** 04 00 01.7 +1.6
SNR=8.4
**MOTA Moosalm 4.42 336** Pn **Pn** 04 00 01.7 +1.6
SNR=8.4
**MOA Molln 4.54 5**⇑ *i*Pn **Pn** 04 00 01.9 +0.2
MOA ⇓ *i*Sn **Sn** 04 00 53.1 -1.0
**MOA Molln 4.54 5** Pn **Pn** 04 00 01.9 +0.2
MOA Sn **Sn** 04 00 53.1 -1.0
**SBF Sospel 4.58 279** *e*Pn **Pn** 04 00 04.1 +1.8
SBF *e*Sn **Sn** 04 00 55.2 +0.1
comp=Z,33nm,0.6s
**SBF Sospel 4.58 279** *e*Pn **Pn** 04 00 04.1 +1.8
SBF *e*Sn **Sn** 04 00 55.2 +0.1
comp=Z,16nm,0.6s
**RETA Reutte 4.65 335**⇓ *i*Pn **Pn** 04 00 04.8 +1.6
**RETA Reutte 4.65 335** Pn **Pn** 04 00 04.8 +1.6
**IVAS Ivanjica 4.70 85** *e*Pn **Pn** 04 00 04.9 +1.0
**DAVA Damuels 4.79 327**⇑ *i*Pn **Pn** 04 00 07.5 +2.3
DAVA ⇑ *i*Sn **Sn** 04 01 01.8 +1.4
**DAVA Damuels 4.79 327** Pn **Pn** 04 00 07.5 +2.3
**TRUS Trudelj 4.94 77** *e*Pn **Pn** 04 00 05.6 -1.5
**GRUS Gruza 5.12 81** *e*Pn **Pn** 04 00 12.7 +3.1
**FRF La Foret Royal 5.14 275** *e*Pn **Pn** 04 00 12.7 +2.8
FRF *e*Sn **Sn** 04 01 08.6 -0.2
comp=Z,10.0nm,0.6s
**FRF La Foret Royal 5.14 275** *e*Pn **Pn** 04 00 12.7 +2.8
FRF *e*Sn **Sn** 04 01 08.6 -0.2
comp=Z,5.0nm,0.6s
**MBDF Montbardon 5.19 288** *e*Pn **Pn** 04 00 11.8 +1.1
MBDF *e*Sn **Sn** 04 01 09.5 -0.7
comp=Z,11nm,0.5s
**MBDF Montbardon 5.19 288** *e*Pn **Pn** 04 00 11.8 +1.1
MBDF *e*Sn **Sn** 04 01 09.5 -0.7
comp=Z,5.7nm,0.5s
**LMR La Mourre 5.25 273** *e*Pn **Pn** 04 00 14.0 +2.7
LMR *e*Sn **Sn** 04 01 11.1 -0.3
comp=Z,3.3nm,0.3s
**LMR La Mourre 5.25 273** *e*Pn **Pn** 04 00 14.0 +2.7
LMR *e*Sn **Sn** 04 01 11.1 -0.3
comp=Z,1.6nm,0.3s
**SELS Selova 5.42 89** *e*Pn **Pn** 04 00 12.9 -0.8
**LPG La Plagne 5.43 296** *e*Pn **Pn** 04 00 14.1 0.0
**LPG La Plagne 5.43 296** *e*P **Pn** 04 00 16.8 +2.7
LPG *e*Sn **Sn** 04 01 15.0 -1.4
comp=Z,18nm,0.5s
**LPG La Plagne 5.43 296** *e*Pn **Pn** 04 00 14.1 0.0
**LPG La Plagne 5.43 296** *e*P **Pn** 04 00 16.8 +2.7
**LPL La Plagne 5.45 296** *e*Pn **Pn** 04 00 14.6 +0.3
**LPL La Plagne 5.45 296** *e*P **Pn** 04 00 17.2 +2.9
LPL *e*Sn **Sn** 04 01 15.2 -1.5
comp=Z,22nm,0.6s
**LPL La Plagne 5.45 296** *e*Pn **Pn** 04 00 14.6 +0.3
**LPL La Plagne 5.45 296** *e*P **Pn** 04 00 17.2 +2.9
**GERES GERESS Array B 5.52 0** Pn **Pn** 04 00 14.8 -0.3
comp=Z,0.9nm,0.3s,baz=175,slow=12,SNR=14
GERES Sn **Sn** 04 01 17.9 -0.5
comp=Z,2.0nm,0.3s,baz=174,slow=26,SNR=7.4
**KHC Kasperske Hory 5.81 359** *e*PN **Pn** 04 00 18.7 -0.4
KHC *ex* x 04 00 59.0
KHC *e*SN **Sn** 04 01 23.5 -1.8
**KHC Kasperske Hory 5.81 359** Pn **Pn** 04 00 18.7 -0.4
**ORIF Oris-en-Rattie 5.85 289** *e*Pn **Pn** 04 00 21.2 +1.5
ORIF *e*Sn **Sn** 04 01 25.2 -1.2
comp=Z,23nm,0.8s
**ORIF Oris-en-Rattie 5.85 289** *e*Pn **Pn** 04 00 21.2 +1.5
**SMRF Simiane la Rot 5.93 279** *e*Pn **Pn** 04 00 21.2 +0.4
SMRF *e*Sn **Sn** 04 01 27.3 -1.0
comp=Z,1.3nm,0.4s
**SMRF Simiane la Rot 5.93 279** *e*Pn **Pn** 04 00 21.2 +0.4
SMRF *e*Sn **Sn** 04 01 27.3 -1.0
comp=Z,0.6nm,0.4s
**BARS Barje 5.97 92**⇑ *i*Pn **Pn** 04 00 21.6 +0.4
**NEST Nestorio 6.21 115** *e*P **Pn** 04 00 26.1 +1.5
**NEST Nestorio 6.21 115** *e*P **Pn** 04 00 26.1 +1.5
**FNA Florina 6.25 111** *e*Pn **Pn** 04 00 26.6 +1.4
**FNA Florina 6.25 111** *e*P **Pn** 04 00 26.6 +1.4
**IGT Igoumenitsa 6.26 125** *e*P **Pn** 04 00 25.2 0.0
**IGT Igoumenitsa 6.26 125** *e*P **Pn** 04 00 25.2 0.0
**VYHS Vyhne 6.29 33** *e*PN **Pn** 04 00 26.5 +0.9
VYHS *e* 04 01 47.1
**VYHS Vyhne 6.29 33** *e*Pn **Pn** 04 00 26.5 +0.9
**CABF La Chapelle 6.32 304** *e*Pn **Pn** 04 00 26.4 +0.2
CABF *e*Sn **Sn** 04 01 35.6 -2.4
comp=Z,5.3nm,0.4s
**CABF La Chapelle 6.32 304** *e*Pn **Pn** 04 00 26.4 +0.2
**ZAPS Zavoj 6.52 87** *e*Pn **Pn** 04 00 29.4 +0.6
**HINF Hinteralfeld 6.58 315** *e*Pn **Pn** 04 00 29.4 -0.2
HINF *e*Sn **Sn** 04 01 41.2 -3.0
comp=Z,11nm,0.4s
**HINF Hinteralfeld 6.58 315** *e*Pn **Pn** 04 00 29.4 -0.2
**VIVF Saint-Julien-l 6.68 286** *e*Pn **Pn** 04 00 32.3 +1.3
VIVF *e*Sn **Sn** 04 01 45.2 -1.5
comp=Z,3.8nm,0.5s
**VIVF Saint-Julien-l 6.68 286** *e*Pn **Pn** 04 00 32.3 +1.3
**CDF Champ du Feu 6.78 321** *e*Pn **Pn** 04 00 32.1 -0.4
CDF *e*Sn **Sn** 04 01 45.8 -3.5
comp=Z,7.3nm,0.7s
**CDF Champ du Feu 6.78 321** *e*Pn **Pn** 04 00 32.1 -0.4
**GRG Griva 6.88 107** *e*Pn **Pn** 04 00 33.4 -0.5
**GRG Griva 6.88 107** *e*P **Pn** 04 00 33.4 -0.5
**HAU Haudompre 6.96 315** *e*Pn **Pn** 04 00 34.3 -0.5
HAU *e*Sn **Sn** 04 01 50.4 -3.2
comp=Z,22nm,0.5s
**HAU Haudompre 6.96 315** *e*Pn **Pn** 04 00 34.3 -0.5
**LASF Ste Croix 7.17 279** *e*Pn **Pn** 04 00 39.0 +1.2
**LASF Ste Croix 7.17 279** *e*Pn **Pn** 04 00 39.0 +1.2
**PDO Prodromos 7.37 127** *e*P **Pn** 04 00 39.7 -0.8
**PDO Prodromos 7.37 127** *e*P **Pn** 04 00 39.7 -0.8
**EVR Evrytania 7.54 123** *e*P **Pn** 04 00 43.7 +0.8
**EVR Evrytania 7.54 123** *e*P **Pn** 04 00 43.7 +0.8
**BRG Berggiesshubel 7.56 1** SG 04 02 59.9
comp=Z,3.9nm,0.7s
**PAGF Fort de Pagny 7.63 316** *e*Pn **Pn** 04 00 43.4 -0.6
baz=129
PAGF *e*Sn **Sn** 04 02 06.2 -3.9
comp=Z,1.4nm,0.4s
**PAGF Fort de Pagny 7.63 316** *e*Pn **Pn** 04 00 43.4 -0.6
**MAKR Makrakomi, Fth 7.68 121** *e*P **Pn** 04 00 44.8 +0.1
**MAKR Makrakomi, Fth 7.68 121** *e*P **Pn** 04 00 44.8 +0.1
**SMF Signal de Mont 7.74 299** *e*Pn **Pn** 04 00 45.6 +0.1
SMF *e*Sn **Sn** 04 02 09.6 -3.1
comp=Z,9.3nm,0.3s
**SMF Signal de Mont 7.74 299** *e*Pn **Pn** 04 00 45.6 +0.1
**SFTF Sexfontaines 7.78 312** *e*Pn **Pn** 04 00 45.3 -0.7
SFTF *e*Sn **Sn** 04 02 10.0 -3.7
comp=Z,5.9nm,0.5s
**NVR Nevrokopi 7.78 101** *e*P **Pn** 04 00 46.7 +0.5
**NVR Nevrokopi 7.78 101** *e*P **Pn** 04 00 46.7 +0.5
**PLG Polygyros 7.85 109** *e*P **Pn** 04 00 45.1 -2.0
**PLG Polygyros 7.85 109** *e*P **Pn** 04 00 45.1 -2.0
**MEZF Maizieres J'vi 7.95 314** *e*Pn **Pn** 04 00 47.6 -0.7
baz=123
MEZF *e*Sn **Sn** 04 02 13.7 -4.1
comp=Z,15nm,0.3s
**LOR Lormes 7.98 303** *e*Pn **Pn** 04 00 48.5 -0.3
baz=121
LOR *e*Sn **Sn** 04 02 15.1 -3.6
comp=Z,12nm,0.4s
**LOR Lormes 7.98 303** *e*Pn **Pn** 04 00 48.5 -0.3
**CLL Collm 8.00 357** *e*Sg 04 03 14.0
**AVF Avril sur Loir 8.10 299** *e*Pn **Pn** 04 00 50.3 -0.2
AVF *e*Sn **Sn** 04 02 18.3 -3.4
comp=Z,6.0nm,0.7s
**AVF Avril sur Loir 8.10 299** *e*Pn **Pn** 04 00 50.3 -0.2
**SSF Saint Saulge 8.11 301** *e*Pn **Pn** 04 00 50.3 -0.3
SSF *e*Sn **Sn** 04 02 18.3 -3.6
comp=Z,4.9nm,0.5s
**SSF Saint Saulge 8.11 301** *e*Pn **Pn** 04 00 50.3 -0.3
**KEST Kesra 8.29 205** Pn **Pn** 04 00 56.1 +2.9
comp=Z,0.7nm,0.3s,baz=56,slow=17,SNR=8.8
**BGF Bois d'Agland 8.35 297** *e*Pn **Pn** 04 00 53.9 0.0
BGF *e*Sn **Sn** 04 02 24.1 -3.7
comp=Z,12nm,0.5s
**BGF Bois d'Agland 8.35 297** *e*Pn **Pn** 04 00 53.9 0.0
**MTLF Montolieu 8.37 274** *e*Pn **Pn** 04 00 54.6 +0.4
**MTLF Montolieu 8.37 274** *e*Pn **Pn** 04 00 54.6 +0.4
**TCF Toulx Ste Croi 8.69 294** *e*Pn **Pn** 04 00 58.4 -0.2
TCF *e*Sn **Sn** 04 02 32.6 -3.6
comp=Z,4.2nm,0.5s
**TCF Toulx Ste Croi 8.69 294** *e*Pn **Pn** 04 00 58.4 -0.2
**TORD Torodi Ar. Bea 31.80 203** P **P** 04 05 17.6 +0.3
comp=Z,0.8nm,0.6s,baz=18,slow=8.8,SNR=16

*DDA* **20** *04:05:49.6,41.56N×43.80E,h7km,Md2.9*
*ISCJB* **20** *04:05:50.9±0.7,41.54N±0.04×43.85E±0.04,h5km±6km, Error ellipse: s-maj=7.0km s-min=3.8km az=154.9*
*CSEM* **20** *04:05:50.8±0.2,41.52N×43.85E,h2km,ML3.0, Error ellipse: s-maj=6.2km s-min=3.6km az=154.0*
*TIF* **20** *04:05:50.1,41.56N×43.90E,h15km±1km*
**ISC 20 04:05:50.5±1.0, 41.56N±0.04×43.86E±0.02, h13km±8km, n21,σ0.954/40, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **AKH** | **Akhalkalaki** | **0.32** | **241** | P | | **Pg** | **04 05 57.3** | **+0.2** |
| AKH | | | | S | | **Sg** | **04 06 01.7** | **+0.2** |
| **AKH** | **Akhalkalaki** | **0.32** | **241** | P | | **Pg** | **04 05 57.3** | **+0.2** |
| AKH | | | | S | | **Sg** | **04 06 01.7** | **+0.2** |
| **TBLG** | **Delisi** | **0.68** | **75** | P | | **Pg** | **04 06 03.7** | **0.0** |
| TBLG | | | | S | | **Sb** | **04 06 13.3** | **-0.3** |
| **TBLG** | **Delisi** | **0.68** | **75** | P | | **Pg** | **04 06 03.7** | **0.0** |
| TBLG | | | | *i* S | | **Sb** | **04 06 13.8** | **+0.2** |
| **SEAG** | **Tbilisi Sea** | **0.73** | **74** | P | | Pn | 04 06 16.5 | +10 |
| **DUS** | **Dusheti** | **0.82** | **50** | P | | **Pn** | **04 06 07.9** | **-0.1** |
| DUS | | | | S | | **Sn** | **04 06 19.8** | **-0.2** |
| **DUS** | **Dusheti** | **0.82** | **50** | P | | **Pn** | **04 06 07.9** | **-0.1** |
| DUS | | | | S | | **Sn** | **04 06 19.8** | **-0.2** |
| **ONI** | **Oni** | **1.07** | **344** | P | | **Pb** | **04 06 10.7** | **-0.3** |
| ONI | | | | S | | **Sn** | **04 06 26.6** | **+0.4** |
| **ONI** | **Oni** | **1.07** | **344** | P | | **Pb** | **04 06 10.7** | **-0.3** |
| ONI | | | | S | | **Sn** | **04 06 26.6** | **+0.4** |
| **DGRG** | **David-gareji** | **1.14** | **95** | P | | **Pb** | **04 06 12.2** | **0.0** |
| DGRG | | | | S | | **Sn** | **04 06 28.6** | **+0.7** |
| **DGRG** | **David-gareji** | **1.14** | **95** | *i* P | | **Pb** | **04 06 12.1** | **0.0** |
| DGRG | | | | *i* S | | **Sn** | **04 06 29.5** | **+1.6** |
| **DIGO** | **Kars** | **1.20** | **198** | *i* P | | **Pn** | **04 06 12.3** | **-1.1** |
| DIGO | | | | *i* S | | **Sb** | **04 06 29.1** | **+0.1** |
| **DIGO** | **Kars** | **1.20** | **198** | P | | **Pn** | **04 06 12.3** | **-1.1** |
| DIGO | | | | S | | **Sb** | **04 06 29.1** | **+0.1** |
| **ARTV** | **Artvin** | **1.50** | **256** | *i* P | | **Pb** | **04 06 18.4** | **-0.1** |
| ARTV | | | | *i* S | | **Sn** | **04 06 37.5** | **+0.4** |
| **ARTV** | **Artvin** | **1.50** | **256** | P | | **Pb** | **04 06 18.4** | **-0.1** |
| ARTV | | | | S | | **Sn** | **04 06 37.5** | **+0.4** |
| **DBOC** | **Borcka** | **1.67** | **263** | *i* P | | **Pb** | **04 06 21.3** | **+0.2** |
| DBOC | | | | *i* S | | **Sb** | **04 06 42.4** | **+0.4** |
| **DBOC** | **Borcka** | **1.67** | **263** | P | | **Pb** | **04 06 21.3** | **+0.2** |
| DBOC | | | | S | | **Sb** | **04 06 42.4** | **+0.4** |
| **DBAD** | **Bademkaya** | **1.72** | **252** | *i* P | | **Pb** | **04 06 21.6** | **-0.5** |
| DBAD | | | | *i* S | | **Sb** | **04 06 44.3** | **+0.6** |
| **DBAD** | **Bademkaya** | **1.72** | **252** | P | | **Pb** | **04 06 21.6** | **-0.5** |
| DBAD | | | | S | | **Sb** | **04 06 44.3** | **+0.6** |
| **DDEM** | **Demirkent** | **1.73** | **248** | *i* P | | **Pg** | **04 06 23.2** | **-0.5** |
| DDEM | | | | *i* S | | **Sn** | **04 06 43.3** | **+0.8** |
| **DDEM** | **Demirkent** | **1.73** | **248** | P | | **Pg** | **04 06 23.2** | **-0.5** |
| DDEM | | | | S | | **Sn** | **04 06 43.3** | **+0.8** |

*ISCJB* **20** *04:09:42.3±0.2,24.67N±0.02×109.02W±0.01,h10km, mb5.5/183,MS5.6/321,Error ellipse: s-maj=2.3km s-min=1.5km az=28.0*
*MEX* **20** *04:09:42.6±1.2,24.73N×109.23W,h10km,MD5.9*
*GCMT* **20** *04:09:42.8±0.1,24.74N×109.19W,h19km,MW5.9/129, Moment Tensor Solution. s115,c233; s129,c375; Duration: 2821 Moment tensor: Scale 1018Nm; Mrr=0.12±.01; Mθθ=0.70±.01; Mϕϕ=0.82±.01; Mrθ=0.14±.02; Mθϕ=-0.03±.01; Mϕr=0.05±.01; Best double couple: Mo=0.78300×1018 NP1:ϕs=223.00000°, δ=83.00000°, λ=-11.00000°. NP2:ϕs=315.00000°, δ=79.00000°, λ=-173.00000°. Principal axes: T 0.8270, Plg=3.0000°, Azm=269.0000°; N -0.0880, Plg=77.0000°, Azm=11.0000°; P -0.7400, Plg=13.0000°, Azm=178.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*IDC* **20** *04:09:42.2±0.4,24.67N×109.37W,h0km,mb4.7/23, mb1 4.8/27,mb1mx4.8/33,mbtmp4.7/27,ML3.6/4,MS5.5/29, Ms1 5.5/29,ms1mx5.4/34 Error ellipse: s-maj=9.9km s-min=9.1km az=136.0*
*MOS* **20** *04:09:42.0±1.2,24.64N×109.03W,h10km,mb5.8/46, MS5.7/32,Error ellipse: s-maj=7.0km s-min=4.0km az=96.0*
*BJI* **20** *04:09:43.3,24.53N×109.18W,h19km,mb5.3/9,mB5.7/19, Ms6.0/22,Ms7 5.6/22*
*NEIC* **20** *04:09:44.0±0.0,24.61N×109.06W,h15km,Moment Tensor Solution. s22 Moment tensor: Scale 1017Nm; Mrr=1.22; Mθθ=5.02; Mϕϕ=6.24; Mrθ=3.86; Mθϕ=-0.31; Mϕr=2.12; Best double couple: Mo7.20000×1017 NP1:θs316.00000°, δ80.00000°,λ=142.00000°. NP2:ϕs219.00000°, δ53.00000°,λ=-12.00000°. Principal axes: T 6.9600, Plg18.0000°, Azm83.0000°; N 0.5200, Plg52.0000°, Azm329.0000°; P -7.4800, Plg33.0000°, Azm184.0000°;*
*SZGRF* **20** *04:10:02.4,27.34N×111.25W,h10km,mb5.5/14(BGR), Ms6.0/6(BGR)*
**ISC 20 04:09:43.6±0.2, 24.59N±0.03×109.13W±0.04, h10km, n1254,σ1.932/1012, mb5.6/185, MS5.6/322, 4C-8D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SLBS** | **Sierra La Lagu** | **1.17** | **220** | *e*Pg | | **Pb** | **04 10 03.6** | **-2.3** |
| SLBS | | | | *e*Pn | | **Pb** | **04 10 04.1** | **-2.0** |
| SLBS | | | | *e*Sg | | **Sb** | **04 10 17.6** | **-3.6** |
| SLBS | | | | *e*Sn | | **Sg** | **04 10 17.8** | **-3.5** |
| **LPIG** | **La Paz** | **1.18** | **246** | Pg | | Pb | 04 10 01.4 | -4.7 |
| | 420nm,0.3s,baz=58,slow=9.5,SNR=238 | | | | | | | |
| LPIG | | | | Lg | | Lg | 04 10 16.4 | |
| | 2µm,0.3s,baz=340,slow=16,SNR=39 | | | | | | | |
| **LPIG** | **La Paz** | **1.18** | **246** | *e*P | | Pb | 04 10 02.2 | -3.9 |
| LPIG | | | | *e*S | | Sb | 04 10 15.1 | -6.4 |
| **LPIG** | **La Paz** | **1.18** | **246** | *e*Pg | | Pb | 04 10 01.4 | -4.7 |
| LPIG | | | | *e*S | | Sb | 04 10 15.1 | -6.4 |
| **MAIG** | **Mazatlaan** | **2.84** | **119** | *e*P | | **Pn** | **04 10 26.7** | **-2.3** |
| MAIG | | | | *e*S | | **Sn** | **04 11 02.5** | **-0.7** |
| **MAIG** | **Mazatlaan** | **2.84** | **119** | *e*P | | **Pn** | **04 10 26.7** | **-2.3** |
| MAIG | | | | *e*S | | **Sn** | **04 11 02.5** | **-0.7** |
| **SRIG** | **Santa Rosalia** | **3.91** | **315** | *e*P | | Pn | 04 10 38.5 | -5.2 |
| SRIG | | | | *e*S | | Sn | 04 11 20.4 | -9.1 |
| **SRIG** | **Santa Rosalia** | **3.91** | **315** | *e*P | | Pn | 04 10 38.5 | -5.2 |
| SRIG | | | | *e*S | | Sn | 04 11 20.4 | -9.1 |
| **HSIG** | | **4.70** | **340** | *e*P | | Pn | 04 10 47.9 | -6.7 |
| HSIG | | | | *i* S | | Sn | 04 11 39.4 | -10 |
| **HSIG** | | **4.70** | **340** | *e*P | | Pn | 04 10 47.9 | -6.7 |
| HSIG | | | | *i* S | | Sn | 04 11 39.4 | -10 |
| **ANIG** | **Ahuacatlan** | **5.52** | **129** | *i* P | | **Pn** | **04 11 05.2** | **-0.7** |
| ANIG | | | | *e*S | | **Sn** | **04 12 10.0** | **+0.5** |
| **ANIG** | **Ahuacatlan** | **5.52** | **129** | *i* P | | **Pn** | **04 11 05.2** | **-0.7** |
| ANIG | | | | *e*S | | **Sn** | **04 12 10.0** | **+0.5** |
| **H06E1** | **SOCORRO T-PHAS** | **6.02** | **196** | T | | T | 04 17 50.9 | |
| | SNR=17 | | | | | | | |
| **ZAIG** | **Zacatecas** | **6.28** | **105** | *e*P | | **Pn** | **04 11 15.5** | **-1.1** |
| ZAIG | | | | *e*S | | **Sn** | **04 12 28.2** | **-0.4** |
| **ZAIG** | **Zacatecas** | **6.28** | **105** | *e*P | | **Pn** | **04 11 15.5** | **-1.1** |
| ZAIG | | | | *e*S | | **Sn** | **04 12 28.2** | **-0.4** |
| **CJM** | **Chamela** | **6.33** | **142** | *i* P | | **Pn** | **04 11 18.1** | **+1.1** |
| CJM | | | | *e*S | | **Sn** | **04 12 30.8** | **+1.6** |
| **CJM** | **Chamela** | **6.33** | **142** | *i* P | | **Pn** | **04 11 18.1** | **+1.1** |
| CJM | | | | *e*S | | **Sn** | **04 12 30.8** | **+1.6** |
| **TX31** | **Lajitas Ar. Si** | **6.79** | **45** | *e*Pn | | **Pn** | **04 11 20.9** | **-2.5** |
| **TXAR** | **Lajitas Array** | **6.79** | **45** | Pn | | **Pn** | **04 11 20.8** | **-2.5** |
| | 1.7nm,0.3s,baz=224,slow=14,SNR=50 | | | | | | | |
| TXAR | | | | Pg | | Pb | 04 11 45.0 | +3.3 |
| | 6.3nm,0.3s,baz=227,slow=14,SNR=13 | | | | | | | |
| TXAR | | | | Sn | | **Sn** | **04 12 37.3** | **-3.4** |
| | 17nm,0.3s,baz=314,slow=7.1,SNR=5.7 | | | | | | | |
| TXAR | | | | Lg | | Lg | 04 13 14.1 | |
| | 24nm,0.3s,baz=220,slow=26,SNR=5.5 | | | | | | | |
| **SFJM** | **Santa Fe** | **6.95** | **125** | *e*P | | Pn | 04 11 30.8 | +5.1 |
| **SFJM** | **Santa Fe** | **6.95** | **125** | *e*P | | Pn | 04 11 30.8 | +5.1 |
| **R15V** | | **7.20** | **137** | *e*P | | **Pn** | **04 11 29.3** | **+0.3** |
| R15V | | | | *e*S | | **S

MNTX Cornudas Mount 7.81 24 P Pn 04 11 35.7 -1.6
baz=7.9
MNTX Cornudas Mount 7.81 24 ePn Pn 04 11 34.6 -2.8
TUC Tucson 7.83 350 eP Pn 04 11 36.4 -1.2
TUC e 04 13 14.1
TUC Tucson 7.83 350 ePn Pn 04 11 36.4 -1.2
TUC eSn Sn 04 13 14.1 +7.8
121A Cookes Peak, D 8.00 8 P Pn 04 11 38.5 -1.5
baz=8.1,SNR=75
214A Organ Pipe Nat 8.02 337 P Pn 04 11 39.6 -0.6
baz=8.1
IGIG Irapuato, Guan 8.15 116 eP Pn 04 11 42.9 +0.8
IGIG eS Sn 04 13 15.5 +1.0
529A Stev Forest Ra 8.25 47 P Pn 04 11 43.2 -0.2
baz=8.3
MMIG Aquila 8.26 138 i P Pn 04 11 49.0 +5.4
MMIG eS Sn 04 13 18.9 +1.9
MMIG Aquila 8.26 138 i P Pn 04 11 49.0 +5.4
MMIG eS Sn 04 13 18.9 +1.9
SPX San Pedro Mart 8.53 320 eP Pn 04 11 43.4 -4.1
SPX i S Sn 04 13 27.8 +3.8
429A Davenport Ranc 8.79 45 P Pn 04 11 51.0 +0.2
baz=8.8,SNR=40
MOIG Morelia 8.83 122 eP Pn 04 11 46.9 -4.7
MOIG eS Sn 04 13 43.7 +12
MOIG Morelia 8.83 122 eP Pn 04 11 46.9 -4.7
MOIG eS Sn 04 13 43.7 +12
530A J-C Ranch, Com 8.86 50 P Pn 04 11 51.2 -0.6
baz=8.9,SNR=16
CLNB Carlsbad 8.93 30 ePn Pn 04 11 50.9 -1.9
832A Faith Ranch, C 8.99 64 P Pn 04 11 51.9 -1.6
baz=9.0,SNR=30
631A Perdido Creek 9.01 56 P Pn 04 11 52.7 -1.1
baz=9.0,SNR=72
732A Laxson Ranch, 9.17 61 P Pn 04 11 55.3 -0.7
baz=9.2,SNR=39
430A Baggett Ranch, 9.32 47 P Pn 04 11 58.1 -0.1
baz=9.3,SNR=29
430A S Sn 04 13 40.1 -3.0
baz=9.3
329A Wagon Wheel Ra 9.33 41 P Pn 04 11 57.9 -0.3
baz=9.4,SNR=23
933A Laredo 9.35 69 P Pn 04 11 57.2 -1.2
baz=9.3,SNR=21
531A Rocksprings 9.43 52 P Pn 04 11 58.8 -0.8
baz=9.4,SNR=56
228A UT Block 9, Go 9.45 36 P Pn 04 12 00.3 +0.4
baz=9.5
833A Chaparral WMA, 9.48 65 P Pn 04 11 59.2 -1.0
baz=9.5,SNR=35
Y22D IRIS PASSCAL I 9.64 11 P Pn 04 12 03.1 +0.6
baz=9.7,SNR=9.9
632A Uvalde 9.66 57 P Pn 04 12 02.0 -0.7
baz=9.7,SNR=47
431A Sonora 9.69 49 P Pn 04 12 03.0 -0.1
baz=9.7,SNR=41
733A Divot King Ran 9.71 63 P Pn 04 12 02.6 -0.7
baz=9.7,SNR=14
034A Hebbronville 9.73 73 P Pn 04 12 03.3 -0.3
baz=9.7,SNR=60
330A Mertzon 9.77 44 P Pn 04 12 04.2 0.0
baz=9.8,SNR=20
BNM Barren Site 9.77 12 ePn Pn 04 12 04.4 0.0
229A Bryant Ranch, 9.77 40 P Pn 04 12 05.1 +0.8
baz=9.8
GLA Glamis 9.80 331 eP Pn 04 12 04.6 0.0
GLA Glamis 9.80 331 P Pn 04 12 04.2 -0.4
baz=9.9,SNR=13
GLA S Sn 04 13 53.6 -1.1
baz=9.9
GLA Glamis 9.80 331 ePn Pn 04 12 04.6 0.0
532A Rocksprings 9.88 54 P Pn 04 12 05.5 -0.2
baz=9.9,SNR=44
128A Castleberry Fa 9.90 35 P Pn 04 12 06.0 0.0
baz=9.9
LPM Los Pinos Moun 9.93 12 ePn Pn 04 12 07.3 +0.8
LAZ Ladron 9.93 10 ePn Pn 04 12 07.0 +0.5
ZIIG Zihuatanejo 9.97 133 i P Pn 04 12 10.0 +3.1
ZIIG eS Sn 04 14 05.2 +6.3
ZIIG Zihuatanejo 9.97 133 i P Pn 04 12 10.0 +3.1
ZIIG eS Sn 04 14 05.2 +6.3
934A Benavides 9.99 70 P Pn 04 12 06.3 -1.0
baz=10.0,SNR=17
IBP Imperial Bould 10.10 324 P Pn 04 12 09.5 +0.7
baz=10
633A Saathoff Ranch 10.11 59 P Pn 04 12 08.2 -0.7
baz=10,SNR=18
834A Tilden 10.12 67 P Pn 04 12 07.8 -1.2
baz=10,SNR=64
230A Sterling City 10.13 42 P Pn 04 12 09.2 0.0
baz=10,SNR=17
JCT Junction City 10.14 53 eP Pn 04 12 10.3 +1.0
JCT Junction City 10.14 53 P Pn 04 12 09.0 -0.3
baz=10,SNR=26
JCT Junction City 10.14 53 ePn Pn 04 12 10.3 +1.0
CBX Cerro Bola 10.15 321 eP Pn 04 12 01.3 -8.3
CBX Cerro Bola 10.15 321 eP Pn 04 12 01.3 -8.3
035Z Hargill 10.16 77 P Pn 04 12 09.2 -0.3
baz=10
SWSC Sam W. Stewart 10.17 326 P Pn 04 12 10.1 +0.5
baz=10
331A San Angelo 10.19 47 P Pn 04 12 10.4 +0.4
baz=10,SNR=41
035A Encino 10.21 74 P Pn 04 12 10.3 +0.1
baz=10,SNR=9.1
TOVM TOLUCA 10.23 119 eP Pn 04 12 16.2 +5.3
129A Stewart Farms, 10.24 37 P Pn 04 12 10.5 -0.2
baz=10,SNR=15
Y12C Blythe 10.27 334 P Pn 04 12 11.4 +0.3
baz=10,SNR=23
ARIG Puente Sto Nin 10.31 126 i P Pn 04 12 13.6 +2.0
ARIG eS Sn 04 14 17.9 +11
734A La Parita Cree 10.36 64 P Pn 04 12 12.1 -0.1
baz=10,SNR=8.3
432A Menard 10.37 51 P Pn 04 12 12.8 +0.4
baz=10,SNR=31
BAR Barrett 10.43 322 ePn Pn 04 12 14.9 +1.6
ZUVM ZUMPANGO 10.45 115 eP Pn 04 12 09.4 -4.4
MONP Monument Peak 10.45 324 P Pn 04 12 14.7 +1.0
baz=10,SNR=29
Z28A Tucker Farm, M 10.48 33 P Pn 04 12 14.3 +0.2
baz=10,SNR=11
533A Kerrville 10.50 56 P Pn 04 12 13.8 -0.4
baz=10
W18A Petrified Fore 10.51 357 P Pn 04 12 14.9 +0.5
baz=11,SNR=66
W18A Petrified Fore 10.51 357 ePn Pn 04 12 15.7 +1.2
KVTX Kingsville 10.52 71 ePn Pn 04 12 13.7 -0.7
PTVM Pico Tres Padr 10.53 116 eP Pn 04 12 13.9 -1.0
PTVM Pico Tres Padr 10.53 116 eP Pn 04 12 13.9 -1.0
MAVM Malinalco, Edo 10.56 120 eP Pn 04 12 21.0 +5.8
ANMO Albuquerque 10.58 12 Pn Pn 04 12 15.0 -0.4
0.2nm,0.3s,baz=195,slow=13,SNR=56
ANMO Lg Lg 04 15 11.6
0.9nm,0.3s,baz=116,slow=22,SNR=3.9
ANMO LR LR 04 16 40.1
comp=Z,44µm,18.5s,baz=187,slow=40
ANMO Albuquerque 10.58 12d i P Pn 04 12 15.4 0.0
ANMO Albuquerque 10.58 12 ePn Pn 04 12 15.8 +0.4
BC3 Big Chuckawall 10.59 330 P Pn 04 12 16.1 +0.6
baz=11,SNR=14
PDMCI Parker Dam,Lak 10.61 337 P Pn 04 12 16.0 +0.3
baz=11,SNR=8.8
PBIG Penon de los B 10.63 117 eP Pn 04 12 23.6 +7.6
MZVM 10.64 118 eP Pn 04 12 09.4 -6.8
231A Bronte 10.67 45 P Pn 04 12 16.1 -0.4
baz=11,SNR=30
332A Millersview 10.70 49 P Pn 04 12 16.9 -0.1
baz=11,SNR=38
130A Snyder 10.72 40 P Pn 04 12 17.4 +0.2
baz=11,SNR=16
VTVM Tizayuca 10.72 115 eP Pn 04 12 21.0 +3.5
634A China Grove, S 10.73 61 P Pn 04 12 16.6 -0.7
baz=11,SNR=11
835A Beeville 10.77 68 P Pn 04 12 17.5 -0.4
baz=11,SNR=16
433A Art 10.80 53 P Pn 04 12 17.9 -0.5
baz=11,SNR=49
Z29A Hungry Hill Ra 10.81 35 P Pn 04 12 18.4 0.0
baz=11,SNR=16
109C Camp Elliot, M 10.83 322 P Pn 04 12 18.7 0.0
baz=11
IIO Organos 10.85 115 i P Pn 04 12 23.6 +4.2
IIO Organos 10.85 115 i P Pn 04 12 23.6 +4.2
MSTX Muleshoe 10.86 29 P Pn 04 12 19.2 -0.1
baz=11,SNR=18
MSTX Muleshoe 10.86 29 ePn Pn 04 12 19.2 -0.1
PLIG Platanillo 10.87 123 eP Pn 04 12 19.3 -0.1
PLIG eS Sn 04 14 31.6 +10
PLIG Platanillo 10.87 123 eP Pn 04 12 19.3 -0.1
PLIG eS Sn 04 14 31.6 +10
IRM Iron Mountain 10.88 333 P Pn 04 12 20.4 +0.9
baz=11,SNR=25
534A Blanco 10.91 58 P Pn 04 12 19.7 -0.1
baz=11,SNR=19
YAIG Yautepec 10.95 119 i P Pn 04 12 25.8 +5.3
YAIG eS Sn 04 14 47.7 +24
YAIG Yautepec 10.95 119 i P Pn 04 12 25.8 +5.3
YAIG eS Sn 04 14 47.7 +24
735A Kenedy 10.97 65 P Pn 04 12 20.5 -0.1
baz=11,SNR=14
936A North Padre Is 11.00 73 P Pn 04 12 21.2 +0.2
baz=11
FRD Ford Ranch 11.02 325 ePn Pn 04 12 22.9 +1.5
AMVM AMECAMECA 11.03 117 i P Pn 04 12 27.5 +5.7
PFO Pinyon Flat Ob 11.03 326 Pn Pn 04 12 22.8 +1.2
0.2nm,0.3s,baz=142,slow=14,SNR=32
PFO LR LR 04 15 55.4
comp=Z,7µm,18.4s,baz=312,slow=34
PFO Pinyon Flat Ob 11.03 326 eP Pn 04 12 23.1 +1.5
PFO Pinyon Flat Ob 11.03 326 Pn Pn 04 12 23.3 +1.7
767nm,1.8s,SNR=44
PFO Pinyon Flat Ob 11.03 326 Pn Pn 04 12 23.3 +1.7
767nm,1.8s,SNR=44
Y28A McKinney Farm, 11.05 31 P Pn 04 12 22.9 +1.0
baz=11,SNR=14
WUAZ Wupatki 11.06 350 P Pn 04 12 21.4 -0.7
baz=11,SNR=48
WUAZ Wupatki 11.06 350 ePn Pn 04 12 23.1 +1.1
232A Coleman 11.07 47 P Pn 04 12 21.3 -0.8
baz=11,SNR=18
131A Roby 11.12 42 P Pn 04 12 21.7 -1.0
baz=11,SNR=12
BELC Belle Mtn. Jos 11.13 329 P Pn 04 12 22.6 -0.3
baz=11,SNR=17
Z30A Sanderson Ranc 11.14 37 P Pn 04 12 21.8 -1.2
baz=11,SNR=17
635A Leesville 11.19 62 P Pn 04 12 22.8 -0.8
baz=11,SNR=12
333A Richland Sprin 11.19 51 P Pn 04 12 22.7 -1.0
baz=11,SNR=24
Y29A Porterfield Fa 11.30 33 P Pn 04 12 25.0 -0.1
baz=11,SNR=13
MURC Murrieta 11.41 324 P Pn 04 12 26.3 -0.4
baz=12,SNR=15
434A Burnet 11.44 55 P Pn 04 12 26.8 -0.3
baz=11,SNR=8.5
ABTX Abilene, Hawle 11.55 44 P Pn 04 12 27.9 -0.6
baz=12,SNR=17
ABTX Abilene, Hawle 11.55 44 ePn Pn 04 12 28.4 -0.1
X28A Dimmitt 11.58 30 P Pn 04 12 30.0 +0.9
baz=12
535A Dale 11.61 60 P Pn 04 12 29.2 -0.2
baz=12,SNR=10.0
736A Circle Diamond 11.62 65 P Pn 04 12 29.3 -0.1
baz=12,SNR=25
GMRC Granite Mounta 11.63 332 P Pn 04 12 30.0 +0.3
baz=12,SNR=13
233A Rising Star 11.65 48 P Pn 04 12 28.7 -1.3
baz=12,SNR=20
LDFC Landfair 11.67 335 ePn Pn 04 12 32.1 +1.8
Y30A Stafford Cattl 11.71 36 P Pn 04 12 31.1 +0.3
baz=12
Z31A Sharp Cattle R 11.72 40 P Pn 04 12 30.0 -0.9
baz=12,SNR=28
334A Lometa 11.73 53 P Pn 04 12 30.1 -1.0
baz=12,SNR=28
SCI San Clemente I 11.75 317 P Pn 04 12 31.0 -0.2
baz=12
X29A Tulia 11.75 32 P Pn 04 12 31.0 -0.4
baz=12,SNR=10
BBRC Big Bear Solar 11.79 327 P Pn 04 12 34.3 +2.3
baz=12
636A Smothers Creek 11.81 63 P Pn 04 12 32.5 +0.4
baz=12,SNR=11
435B Jarrell 11.94 56 P Pn 04 12 33.9 0.0
baz=12,SNR=14
CIS Catalina Islan 11.96 319 P Pn 04 12 34.5 +0.4
baz=12
HEC Hector,Ludlow 11.97 330 P Pn 04 12 34.0 -0.3
baz=12,SNR=38
133A Hamilton Ranch 12.01 46 P Pn 04 12 32.9 -1.9
baz=12,SNR=18
536A Bastrop 12.03 60 P Pn 04 12 35.1 -0.1
baz=12
737A Port Lavaca 12.08 67 P Pn 04 12 35.5 -0.3
baz=12,SNR=5.6
FMP Fort Macarthur 12.11 321 P Pn 04 12 35.7 -0.4
baz=12
Z32A Haskell 12.11 42 P Pn 04 12 35.4 -0.8
baz=12,SNR=55
Y31A Rekieta Farm, 12.12 38 P Pn 04 12 35.6 -0.8
baz=12,SNR=19
AMTX Amarillo 12.12 30 P Pn 04 12 36.0 -0.5
baz=12
AMTX Amarillo 12.12 30 ePn Pn 04 12 37.0 +0.6
BFSC Mount Baldy Ra 12.15 324 P Pn 04 12 37.7 +0.8
baz=12,SNR=13
X30A Coker Ranch, T 12.16 34 P Pn 04 12 37.0 0.0
baz=12,SNR=7.6
234A Clairette 12.17 50 P Pn 04 12 35.9 -1.2
baz=12,SNR=58
W28A Vega 12.20 28 P Pn 04 12 36.9 -0.7
baz=12
335A Moody 12.30 55 P Pn 04 12 38.1 -0.8
baz=12,SNR=20
TUQ Turquoise Moun 12.30 333 P Pn 04 12 39.5 +0.5
baz=12
RRX Edison Barstow 12.32 328 P Pn 04 12 40.0 +0.9
baz=12
W29A Amraillo 12.33 30 P Pn 04 12 39.6 +0.3
baz=12,SNR=13
V27A Dan Oppiter Fa 12.38 25 P Pn 04 12 40.5 +0.5
baz=12,SNR=18
637A Eagle Lake 12.38 64 P Pn 04 12 40.1 +0.1
baz=12,SNR=17
PASC Pasadena Art C 12.38 323 ePn Pn 04 12 40.2 +0.3
DECC Green Verdugo 12.52 322 P Pn 04 12 41.8 0.0
baz=13
SNCC San Nicolas Is 12.54 316 P Pn 04 12 41.7 -0.4
baz=13
436A Wall Ranch, Ga 12.54 58 P Pn 04 12 41.5 -0.5
baz=12
Z33A Whitaker Ranch 12.54 44 P Pn 04 12 40.6 -1.5
baz=13,SNR=37
134A White-Moore Ra 12.54 48 P Pn 04 12 39.7 -2.4
baz=13,SNR=7.4
GSC Goldstone 12.57 330 eP Pn 04 12 44.5 +1.9
GSC Goldstone 12.57 330 P Pn 04 12 43.6 +1.0
baz=13,SNR=23
GSC Goldstone 12.57 330 ePn Pn 04 12 44.5 +1.9
MVCO Mesa Verde 12.59 2 P Pn 04 12 42.4 -0.6
baz=13,SNR=13
MVCO Mesa Verde 12.59 2 ePn Pn 04 12 42.8 -0.2
V28A Channing 12.62 27 P Pn 04 12 44.1 +0.8
baz=13,SNR=8.1
Y32A R-V Farms, Ver 12.62 40 P Pn 04 12 41.4 -1.8
baz=13,SNR=12
537A Green Hill Far 12.63 62 P Pn 04 12 42.8 -0.5
baz=13
WHTX Lake Whitney 12.65 52 P Pn 04 12 42.2 -1.3
baz=13,SNR=20
WHTX Lake Whitney 12.65 52 ePn Pn 04 12 43.2 -0.3
738A Farr-Stevens R 12.77 68 P Pn 04 12 44.2 -1.0
baz=13
EKU East Kanab 12.78 348 ePn Pn 04 12 47.2 +1.8
X31A McDonald Ranch 12.78 36 P Pn 04 12 44.2 -1.1
baz=13,SNR=23
336A Riesel 12.79 55 P Pn 04 12 44.4 -1.0
baz=13,SNR=10
EDW2 Edwards Air Fo 12.82 325 P Pn 04 12 47.2 +1.3
baz=13,SNR=52
BLG Laguna Peak 12.84 320 P Pn 04 12 45.3 -0.9
baz=13
SHOC Shoshone 12.85 333 P Pn 04 12 46.9 +0.6
baz=13,SNR=11
W30A Crocket Farms 12.89 33 P Pn 04 12 46.0 -1.0
baz=13
SHPR Sheep Range 12.96 338 ePn Pn 04 12 48.9 +0.9
HKT Hockley 12.97 63 eP Pn 04 12 46.8 -1.1
HKT Hockley 12.97 63 ePn Pn 04 12 46.8 -1.1
U27A Thompson Grove 12.98 23 P Pn 04 12 49.1 +0.9
baz=13,SNR=7.5
135A Vickery Place, 12.99 50 P Pn 04 12 47.0 -1.3
baz=13
X32A Elmer 13.01 39 P Pn 04 12 47.0 -1.5
baz=13,SNR=22
OSI Osito Adit 13.01 322 P Pn 04 12 48.7 +0.1
baz=13
OSI Osito Adit 13.01 322 ePn Pn 04 12 50.4 +1.8
V29A Stinnett 13.02 29 P Pn 04 12 48.4 -0.3
baz=13
437A Phantom Ranch, 13.07 59 P Pn 04 12 48.4 -0.9
baz=13
BSC Santa Cruz Isl 13.10 318 P Pn 04 12 48.5 -1.2
baz=13
Y33A Hilltop Ranch, 13.11 42 P Pn 04 12 47.4 -2.4
baz=13,SNR=13
LRMC Laurel Mountai 13.13 328 P Pn 04 12 51.0 +0.7
baz=13,SNR=7.7
Z34A Collier Ranch, 13.14 46 P Pn 04 12 48.0 -2.2
baz=13
T25A Trinidad 13.14 17 P Pn 04 12 50.2 -0.4
baz=13
T25A Trinidad 13.14 17 ePn Pn 04 12 51.2 +0.7
U28A Mallet 13.16 25 P Pn 04 12 51.0 +0.2
baz=13,SNR=6.4
W31A Holland Ranch, 13.22 35 P Pn 04 12 51.9 +0.5
baz=13,SNR=8.6
S22A 4UR Ranch, Cre 13.26 8 P Pn 04 12 53.5 +1.3
baz=13,SNR=27
S22A 4UR Ranch, Cre 13.26 8 ePn Pn 04 12 53.2 +1.0
V30A Spur Ranch, Mi 13.30 31 P Pn 04 12 51.9 -0.7
baz=13
236A Katherine and 13.32 54 P Pn 04 12 51.1 -1.6
baz=13,SNR=9.3
538A Harpers Horsep 13.35 62 P Pn 04 12 52.2 -0.8
baz=13
T26A Comanche Natio 13.41 19 P Pn 04 12 55.0 +0.9
baz=14,SNR=20
CCUT Cedar City 13.42 345 ePn Pn 04 12 56.5 +2.3
ARVC Arvin 13.45 324 P Pn 04 12 55.9 +1.4
baz=14,SNR=51
SBC Santa Barbara 13.46 319 P Pn 04 12 54.9 +0.3
baz=14
SDCO Great Sand Dun 13.47 12 P Pn 04 12 56.6 +1.5
baz=14,SNR=32
SDCO Great Sand Dun 13.47 12 ePn Pn 04 12 56.6 +1.5
337A Centerville 13.48 57 P Pn 04 12 53.5 -1.4
baz=14,SNR=7.4
MPMC Manual Prospec 13.51 330 P Pn 04 12 56.4 +0.9
baz=14,SNR=56
WMOK Wichita Mounta 13.52 39 eP Pn 04 12 54.0 -1.6
WMOK Wichita Mounta 13.52 39 ePn Pn 04 12 54.0 -1.6
W32A Sentinel 13.54 37 P Pn 04 12 55.1 -0.7
baz=14,SNR=35
X33A Lawton 13.55 41 P Pn 04 12 54.8 -1.0
baz=14
Z35A Perchaven, San 13.55 47 P Pn 04 12 54.1 -1.8
baz=14
438A Sam Houston St 13.56 60 P Pn 04 12 54.6 -1.4
baz=14,SNR=7.6
136A Ennis 13.57 52 P Pn 04 12 54.5 -1.6
baz=14,SNR=16
FURC Furnace Creek, 13.58 332 P Pn 04 12 56.9 +0.7
baz=14,SNR=17
T27A Campo 13.59 22 P Pn 04 12 55.6 -1.0
baz=14
Y34A Reagan Ranch, 13.61 44 P Pn 04 12 54.0 -2.7
baz=14,SNR=15
U29A Oasis Ranch, S 13.62 28 P Pn 04 12 56.2 -0.6
baz=14
ISA Isabella 13.67 326 eP Pn 04 12 58.3 +0.7
ISA Isabella 13.67 326 P Pn 04 12 58.3 +0.7
baz=14,SNR=31
ISA Isabella 13.67 326 ePn Pn 04 12 58.3 +0.7
V31A Spring Creek L 13.73 34 P Pn 04 12 58.1 -0.2
baz=14
DAC Darwin (Calif) 13.74 330 eP Pn 04 12 59.6 +1.0
DAC Darwin (Calif) 13.74 330 ePn Pn 04 12 59.6 +1.0
237A Washetta, Mont 13.86 55 P Pn 04 12 58.7 -1.4
baz=14
S26A Kim 13.86 19 P Pn 04 13 01.0 +0.8
baz=14,SNR=27
T28A Walsh 13.86 24 P Pn 04 13 00.8 +0.6
baz=14,SNR=16
539A Cross D Ranch, 13.93 64 P Pn 04 13 00.4 -0.6
baz=14
338A Crockett 13.94 58 P Pn 04 13 00.6 -0.6
baz=14
U30A WK&E Inc. Balk 13.95 29 P Pn 04 13 01.0 -0.4
baz=14
X34A Smith Ranch, M 13.99 42 P Pn 04 12 59.5 -2.4
baz=14,SNR=22
W33A Caddo, Fort Co 14.00 39 P Pn 04 13 00.4 -1.6
baz=14,SNR=16
Y35A Marietta 14.04 46 P Pn 04 13 01.2 -1.4
baz=14
Z36A Blue Ridge 14.07 49 P Pn 04 13 01.3 -1.7
baz=14,SNR=35
S27A Las Animas 14.09 21 P Pn 04 13 04.2 +0.8
baz=14,SNR=5.5
CWC Cottonwood Cre 14.10 329 P Pn 04 13 04.8 +1.3
baz=14,SNR=50
V32A Arapaho 14.10 36 P Pn 04 13 02.7 -0.7
baz=14
MSU Marysvale 14.12 350 eP Pn 04 13 04.3 +0.4
MSU Marysvale 14.12 350 ePn Pn 04 13 04.3 +0.4
VES Vestal, Rlchgr 14.12 325 P Pn 04 13 04.5 +0.8
baz=14,SNR=23
439A Center Grove, 14.14 61 P Pn 04 13 03.1 -0.9
baz=14
137A Heron Place, G 14.19 53 P Pn 04 13 03.5 -1.1
baz=14
U31A Nine Bar Ranch 14.19 32 P Pn 04 13 04.8 +0.1
baz=14
T29A Hugoton 14.21 26 P Pn 04 13 04.9 0.0
baz=14
SMMC Simmler 14.23 321 P Pn 04 13 05.3 0.0
baz=14
GRAC Grapevine Rang 14.24 332 P Pn 04 13 06.4 +1.0
baz=14,SNR=13
S28A Manter 14.35 24 P Pn 04 13 06.1 -0.8
baz=14
238A Jacksonville 14.37 56 P Pn 04 13 06.4 -0.7
baz=14,SNR=6.5
X35A Drake 14.39 44 P Pn 04 13 05.8 -1.6
baz=14
T30A Plains 14.44 29 P Pn 04 13 08.5 +0.3
baz=14
W34A Bridge Creek, 14.46 40 P Pn 04 13 08.0 -0.3
baz=14
W34A Bridge Creek, 14.46 40 ePn Pn 04 13 06.1 -2.2
339A Huntington 14.52 59 P Pn 04 13 08.1 -1.0
baz=14
SRU San Rafael 14.53 356 eP Pn 04 13 09.5 +0.1
SRU San Rafael 14.53 356 ePn Pn 04 13 09.5 +0.1
Y36A Durant 14.54 47 P Pn 04 13 08.5 -0.9
baz=15,SNR=6.7
RCTC Rector, Farmer 14.56 326 P Pn 04 13 10.5 +0.8
baz=15,SNR=6.4
540A Vidor 14.57 64 P Pn 04 13 08.4 -1.4
baz=15
V33A Lossen Ranch, 14.59 37 P Pn 04 13 11.1 +1.1
baz=15,SNR=9.4
Z37A Pogue Cattle C 14.60 51 P Pn 04 13 08.6 -1.6
baz=15
NATX Nacogdoches 14.61 58 P Pn 04 13 09.7 -0.7
baz=15
NATX Nacogdoches 14.61 58 ePn Pn 04 13 10.0 -0.5
U32A Winter Ranch, 14.62 34 P Pn 04 13 10.7 +0.1
baz=15,SNR=9.4
SMCO Snowmass 14.66 7 ePn Pn 04 13 11.8 +0.5
TIN Tinemaha 14.67 330 P Pn 04 13 12.4 +1.1
baz=15
R27A Eads 14.68 20 P Pn 04 13 11.4 +0.1
baz=15,SNR=20
S29A Ulysses 14.68 26 P Pn 04 13 11.9 +0.5
baz=15
138A Matatall Enter 14.71 54 P Pn 04 13 11.7 -0.1
baz=15
Q24A Divide 14.72 12 P Pn 04 13 13.3 +1.1
baz=15,SNR=10
Q24A Divide 14.72 12 ePn Pn 04 13 13.3 +1.1
440A Kirbyville 14.77 62 P Pn 04 13 10.5 -2.0
baz=15
R11A Troy Canyon, C 14.78 340 P Pn 04 13 13.5 +0.7
baz=15,SNR=21
R11A Troy Canyon, C 14.78 340 ePn Pn 04 13 13.0 +0.3
T31A Randall Ranch, 14.86 31 P Pn 04 13 12.7 -1.2

baz=15,SNR=7.6
239A **Gary** 14.87 57 P Pn 04 13 12.5 -1.5
baz=15,SNR=5.6
X36A **Centrahoma** 14.90 45 P Pn 04 13 11.7 -2.6
baz=15,SNR=7.3
P17A **Butcher Ranch,** 14.90 355 ePn Pn 04 13 13.9 -0.5
W35A **Tecumseh** 14.94 42 P Pn 04 13 12.2 -2.7
baz=15,SNR=30
S30A **Montezuma** 14.96 28 P Pn 04 13 14.5 -0.7
baz=15,SNR=9.7
P18A **Preston Nutter** 15.02 357 ePn Pn 04 13 16.3 0.0
88nm,1.0s
V34A **Guthrie** 15.03 39 P Pn 04 13 14.4 -1.6
baz=15,SNR=11
V34A **Guthrie** 15.03 39 ePn Pn 04 13 14.9 -1.1
109nm,1.0s
Y37A **Hugo** 15.03 48 P Pn 04 13 14.9 -1.2
baz=15
R28A **Tribune** 15.05 23 P Pn 04 13 15.9 -0.5
baz=15
MTUM **Tungsten Hills** 15.07 330 ePn Pn 04 13 17.8 +1.1
340A **Bronson** 15.07 60 P Pn 04 13 14.3 -2.3
baz=15,SNR=15
Z38A **Mt. Pleasant** 15.08 52 P Pn 04 13 15.3 -1.5
baz=15
U33A **Lingo Farm, Me** 15.13 36 P Pn 04 13 16.7 -0.7
baz=15,SNR=8.7
139A **Bunkhouse Ranc** 15.23 55 P Pn 04 13 17.9 -0.8
baz=15
CMIG **Matias Romero** 15.25 117 Pn Pn 04 13 21.0 +1.9
0.2nm,0.3s,baz=300,slow=10,SNR=29
CMIG LR LR 04 19 10.5
comp=Z,37µm,21.2s,baz=278,slow=37
T32A **Huddler Ranch,** 15.29 32 P Pn 04 13 19.3 -0.2
baz=15,SNR=11
W36A **Wetumka** 15.34 44 P Pn 04 13 18.9 -1.2
baz=15,SNR=19
R29A **Marienthal** 15.37 24 P Pn 04 13 20.1 -0.6
baz=15,SNR=16
V35A **Meyer Ranch, C** 15.38 41 P Pn 04 13 19.6 -1.1
baz=15,SNR=8.7
S31A **Mullinville** 15.38 30 P Pn 04 13 20.5 -0.2
baz=15,SNR=19
KSCO **Kaye Shedlock'** 15.39 19 P Pn 04 13 21.3 +0.3
baz=16
KSCO **Kaye Shedlock'** 15.39 19 ePn Pn 04 13 20.1 -0.9
155nm,1.2s
MLAC **Mammoth Lakes** 15.42 330 P Pn 04 13 22.5 +1.1
baz=16,SNR=31
U34A **Anderson Ranch** 15.45 37 P Pn 04 13 21.1 -0.5
baz=16,SNR=8.4
U34A **Anderson Ranch** 15.45 37 ePn Pn 04 13 21.9 +0.3
163nm,0.9s
ISCO **Idaho Springs** 15.45 10 eP Pn 04 13 22.5 +0.6
ISCO pmax pmax
comp=Z,400nm,1.5s
ISCO **Idaho Springs** 15.45 10 P Pn 04 13 22.6 +0.7
baz=16,SNR=38
ISCO **Idaho Springs** 15.45 10 ePn Pn 04 13 22.5 +0.6
comp=Z,397nm,1.5s
O20A **White River Ci** 15.52 3 P Pn 04 13 23.8 +1.1
baz=16,SNR=36
O20A **White River Ci** 15.52 3 ePn Pn 04 13 23.0 +0.3
comp=Z,394nm,1.2s
NLU **North Lily Min** 15.52 352 ePn Pn 04 13 23.2 +0.5
comp=Z,241nm,1.9s
MPU **Maple Canyon** 15.53 353 ePn Pn 04 13 22.8 0.0
comp=Z,51nm,0.9s
T33A **Patterson Ranc** 15.55 34 P Pn 04 13 22.6 -0.3
baz=16,SNR=9.5
X37A **Clayton** 15.55 47 P Pn 04 13 22.3 -0.7
baz=16
R30A **Dighton** 15.59 27 P Pn 04 13 22.6 -0.9
baz=16,SNR=25
LRV **Little Rabbit** 15.61 322 ePn Pn 04 13 25.6 +1.9
Y38A **Idabel** 15.62 50 P Pn 04 13 20.9 -2.9
baz=16,SNR=19
Z39A **Irene McRaven,** 15.66 53 P Pn 04 13 22.9 -1.4
baz=16
Q28A **Sharon Springs** 15.69 21 P Pn 04 13 24.6 -0.3
baz=16,SNR=13
S32A **Newby Ranch, P** 15.70 31 P Pn 04 13 24.2 -0.7
baz=16
Q29A **Oakley** 15.84 24 P Pn 04 13 26.5 -0.2
baz=16,SNR=9.8
NV01 **Mina Array Sit** 15.85 333 ePn Pn 04 13 27.4 +0.4
NVAR **Mina Array Bea** 15.85 333 Pn Pn 04 13 28.1 +1.1
comp=Z,0.4nm,0.3s,baz=151,slow=12,SNR=57
NVAR LR LR 04 19 42.9
comp=Z,12µm,19.6s,baz=154,slow=38
W37A **Quinton** 15.85 45 P Pn 04 13 25.5 -1.3
baz=16,SNR=54
U35A **Pawnee** 15.86 39 P Pn 04 13 26.1 -0.8
baz=16,SNR=15
DUG **Dugway** 15.87 350 eP Pn 04 13 27.7 +0.6
DUG pmax pmax
comp=Z,180nm,1.3s
DUG **Dugway** 15.87 350 P Pn 04 13 26.7 -0.5
baz=16,SNR=70
DUG **Dugway** 15.87 350 ePn Pn 04 13 27.7 +0.6
comp=Z,178nm,1.3s
R31A **Burdett** 15.91 29 P Pn 04 13 26.7 -0.9
baz=16,SNR=20
V36A **Jenks** 15.93 42 P Pn 04 13 25.7 -2.2
baz=16,SNR=26
X38A **Whitesboro** 15.96 48 P Pn 04 13 26.5 -1.8
baz=16,SNR=22
T34A **McClaskey Farm** 16.07 37 P Pn 04 13 29.5 -0.1
baz=16,SNR=30
S33A **Kaszmaul Farm,** 16.07 34 P Pn 04 13 29.6 -0.1
baz=16,SNR=7.9
Y39A **Locksburg** 16.07 51 P Pn 04 13 28.2 -1.5
baz=16,SNR=22
SAO **San Andreas Ge** 16.09 322 eP Pn 04 13 29.5 -0.4
SAO pmax pmax
comp=Z,379nm,2.0s
SAO **San Andreas Ge** 16.09 322 ePn Pn 04 13 29.5 -0.4
comp=Z,379nm,2.0s
TUL1 **Tulsa** 16.11 42 P Pn 04 13 27.9 -2.2
baz=16,SNR=9.4
TUL1 **Tulsa** 16.11 42 ePn Pn 04 13 27.8 -2.3
comp=Z,114nm,1.0s
P28A **Saint Francis** 16.18 21 P Pn 04 13 31.5 +0.3
baz=16,SNR=20
Q30A **Quinter** 16.20 26 P Pn 04 13 31.2 -0.2
baz=16,SNR=14
CTU **Camp Tracy** 16.21 353 ePn Pn 04 13 31.3 -0.3
comp=Z,95nm,1.1s
CBKS **Cedar Bluff** 16.26 27 eP Pn 04 13 31.8 -0.3
CBKS pmax pmax
comp=Z,810nm,1.1s
CBKS **Cedar Bluff** 16.26 27 P Pn 04 13 31.5 -0.6
baz=16,SNR=13
CBKS **Cedar Bluff** 16.26 27 ePn Pn 04 13 31.8 -0.3
comp=Z,808nm,1.1s
T35A **Sooner Cattle** 16.37 38 P Pn 04 13 32.9 -0.5
baz=16,SNR=26
R32A **Long Quarter,** 16.38 30 P Pn 04 13 33.1 -0.6
baz=16,SNR=25
W38A **Poteau** 16.41 47 P Pn 04 13 32.9 -1.0
baz=16,SNR=67
U36A **Oologah** 16.46 41 P Pn 04 13 34.2 -0.4
baz=16
N23A **Red Feather La** 16.48 9 P Pn 04 13 35.5 +0.4
baz=17,SNR=12
N23A **Red Feather La** 16.48 9 ePn Pn 04 13 35.9 +0.8
comp=Z,231nm,1.5s
CMB **Columbia Colle** 16.48 327 eP Pn 04 13 34.8 -0.1
CMB pmax pmax
comp=Z,650nm,2.5s
CMB **Columbia Colle** 16.48 327 ePn Pn 04 13 34.8 -0.1
comp=Z,648nm,2.5s
P29A **Atwood** 16.49 23 P Pn 04 13 35.2 +0.2
baz=17,SNR=10.0
V37A **Hulbert** 16.49 44 P Pn 04 13 34.7 -0.4
baz=16,SNR=52
Q31A **Ellis** 16.57 28 P Pn 04 13 36.1 +0.1
baz=17,SNR=14
S34A **Willow Spring** 16.61 35 P Pn 04 13 35.6 -1.0
baz=17
R33A **Olander Ranch,** 16.64 32 P Pn 04 13 37.0 +0.1
baz=17,SNR=21
O28A **Krutsinger Ran** 16.68 20 P Pn 04 13 36.7 -0.8
baz=17,SNR=12
P30A **Selden** 16.69 25 P Pn 04 13 37.5 -0.1
baz=17,SNR=26
MIAR **Mount Ida** 16.76 50 eP Pn 04 13 38.2 -0.2
MIAR pmax pmax
comp=Z,336nm,1.1s
MIAR **Mount Ida** 16.76 50 P Pn 04 13 37.4 -1.0
baz=17,SNR=114
MIAR **Mount Ida** 16.76 50 ePn Pn 04 13 38.2 -0.2
comp=Z,336nm,1.1s
T36A **Boggs Farm, Ca** 16.83 39 P Pn 04 13 36.8 -2.5
baz=17,SNR=20
U37A **Salina** 16.84 42 P Pn 04 13 37.0 -2.5
baz=17,SNR=17
SPUT **South Promonto** 16.90 351 ePn Pn 04 13 40.4 0.0
comp=Z,183nm,1.3s
ELK **Elko** 16.90 344 eP Pn 04 13 40.9 +0.4
ELK pmax pmax
comp=Z,920nm,2.2s
ELK **Elko** 16.90 344 ePn Pn 04 13 40.9 +0.4
comp=Z,920nm,2.2s
Q32A **Meitler Ranch,** 16.92 29 P Pn 04 13 39.5 -0.9
baz=17,SNR=20
MCU **Monte Cristo P** 16.94 354 ePn Pn 04 13 40.8 -0.2
PHWY **Pilot Hill** 16.94 10 ePn Pn 04 13 41.2 +0.1
comp=Z,197nm,1.2s
V38A **Canehill** 16.95 45 P Pn 04 13 38.1 -2.8
baz=17,SNR=51
R34A **Isabella, Hill** 16.99 34 P Pn 04 13 41.0 -0.4
baz=17,SNR=13
O29A **4D Ranch, Culb** 17.00 22 P Pn 04 13 41.5 0.0
baz=17,SNR=19
P31A **Stockton** 17.01 27 P Pn 04 13 41.4 -0.2
baz=17,SNR=24
S35A **Otter Creek Ra** 17.02 37 P Pn 04 13 41.9 +0.1
baz=17,SNR=32
HWUT **Hardware Ranch** 17.09 354 ePn Pn 04 13 42.7 -0.1
comp=Z,354nm,1.6s
LTU **Little Mountai** 17.15 352 ePn Pn 04 13 43.6 +0.1
BMN **Battle Mountai** 17.19 339 eP P 04 13 44.7 -1.0
BMN pmax pmax
comp=Z,810nm,1.6s
BMN **Battle Mountai** 17.19 339 ePn P 04 13 44.6 -1.0
comp=Z,811nm,1.6s
SAC **San Andreas** 17.22 322 eP Pn 04 13 42.0 -2.2
SAC **San Andreas** 17.22 322 ePn Pn 04 13 41.3 -2.9
Q33A **Connelly Farm,** 17.25 31 P Pn 04 13 43.1 -1.5
baz=17,SNR=23
N28A **Pribbeno Ranch** 17.26 20 P Pn 04 13 44.6 -0.3
baz=17
MTUT **Morton Thiokol** 17.30 352 ePn Pn 04 13 44.8 -0.5
O30A **MW Ranch, Wils** 17.31 24 P Pn 04 13 44.7 -0.7
baz=17,SNR=13
U38A **Gravette** 17.32 44 P Pn 04 13 42.1 -3.4
baz=17,SNR=39
OGNE **Ogallala** 17.35 18 P Pn 04 13 45.1 -0.9
baz=17,SNR=18
OGNE **Ogallala** 17.35 18 ePn Pn 04 13 45.5 -0.5
comp=Z,620nm,1.6s
HVU **Hansel Valley** 17.41 351 eP Pn 04 13 47.0 +0.3
HVU pmax pmax
comp=Z,171nm,1.2s
HVU **Hansel Valley** 17.41 351 ePn Pn 04 13 47.0 +0.3
comp=Z,172nm,1.2s
P32A **Huiting Farm,** 17.42 28 P Pn 04 13 46.8 +0.1
baz=18,SNR=23
T37A **Cheneyville 18** 17.43 41 P Pn 04 13 45.5 -1.4
baz=18,SNR=34
S36A **Lake Cedric, C** 17.45 38 P Pn 04 13 46.2 -0.9
baz=18
R35A **Emporia Munici** 17.55 36 P Pn 04 13 47.4 -1.0
baz=18,SNR=13
O31A **Woolen Ranch,** 17.57 26 P Pn 04 13 47.4 -1.2
baz=18,SNR=19
MLI **Malad Range** 17.57 353 ePn Pn 04 13 48.4 -0.3
Q34A **Chapman** 17.62 33 P Pn 04 13 48.7 -0.5
baz=18,SNR=15
P33A **Williams Farm,** 17.67 30 P Pn 04 13 47.7 -2.1
baz=18,SNR=5.7
N29A **Votaw Ranch, W** 17.68 22 P Pn 04 13 49.5 -0.4
baz=18
UALR **University of** 17.74 51 ePn Pn 04 13 49.5 -1.2
comp=Z,594nm,1.8s
N30A **Hueftle Ranch,** 17.84 23 P Pn 04 13 51.4 -0.5
baz=18
S37A **Fort Scott** 17.92 40 P Pn 04 13 50.7 -2.2
baz=18,SNR=14
KSU1 **Kansas State U** 17.93 33 P Pn 04 13 52.6 -0.4
baz=18,SNR=7.8
KSU1 **Kansas State U** 17.93 33 ePn Pn 04 13 52.8 -0.2
comp=Z,138nm,0.9s
R36A **Gordon, Harris** 17.93 37 P Pn 04 13 50.9 -2.1
baz=18,SNR=13
M28A **Bar X Bar Ranc** 17.96 19 P Pn 04 13 52.7 -0.8
baz=18
NSHM **Saint Helena R** 17.99 324 ePn P 04 13 54.1 -0.2
OHCM **Honcut** 18.03 328 ePn P 04 13 56.5 +1.8
VBMS **Vicksburg** 18.03 61 P Pn 04 13 52.9 -1.4
baz=18,SNR=13
Q35A **Mercer Eighty,** 18.04 35 P Pn 04 13 52.9 -1.5
baz=18,SNR=40
O32A **Brockman Farm,** 18.09 28 P Pn 04 13 54.0 -1.0
baz=18,SNR=8.5
BW06 **Boulder Array** 18.13 359 ePn Pn 04 13 54.1 -1.7
comp=Z,376nm,2.0s
K22A **Casper** 18.14 6 P Pn 04 13 54.6 -1.2
baz=18,SNR=37
K22A **Casper** 18.14 6 ePn Pn 04 13 55.4 -0.3
comp=Z,167nm,1.2s
P34A **Waut Farm, R** 18.17 32 P Pn 04 13 54.8 -1.2
baz=18,SNR=14
AHID **Auburn Hatcher** 18.20 355 ePn Pn 04 13 53.8 -2.7
comp=Z,278nm,1.8s
M29A **Burnside Ranch** 18.22 21 P Pn 04 13 55.1 -1.5
baz=18,SNR=13
O33A **Hebron** 18.23 29 P Pn 04 13 55.9 -0.9
baz=18,SNR=13
N31A **Bailey Ranch,** 18.29 25 P Pn 04 13 56.9 -0.6
baz=18
Q36A **Arnold C. Orve** 18.41 36 P P 04 13 57.9 -1.0
baz=18
L28A **Connealy Angus** 18.48 18 P P 04 13 59.6 -0.2
baz=19
N32A **Stulken Farm,** 18.50 27 P P 04 13 59.3 -0.6
baz=19
P35A **Duane Minner,** 18.55 33 P P 04 13 59.6 -0.8
baz=19,SNR=29
M30A **Dale-Ortello V** 18.57 22 P Pn 04 14 00.8 -0.2
baz=19
HOPS **Hopland** 18.59 324 eP P 04 13 58.8 -2.1
comp=Z,241nm,1.5s
M31A **Lambtecht Ranc** 18.73 24 P Pn 04 14 02.8 0.0
baz=19,SNR=7.3
O34A **Beatrice** 18.73 31 P P 04 14 01.5 -0.9
baz=19,SNR=10
REDW **Red Top Meadow** 18.78 356 eP P 04 14 02.1 -1.0
comp=Z,191nm,1.4s
N33A **J Bar K, Exete** 18.84 28 P P 04 14 02.9 -0.6
baz=19,SNR=8.0
L29A **Maesberg Ranch** 18.85 20 P Pn 04 14 04.3 0.0
baz=19,SNR=5.3
SNOW **Snow King Moun** 18.87 356 eP P 04 14 03.7 -0.5
comp=Z,126nm,1.1s
Q37A **Longview Farm,** 18.90 38 P P 04 14 03.6 -0.7
baz=19
TPAW **Teton Pass** 18.91 356 eP P 04 14 03.9 -0.8
comp=Z,163nm,1.1s
O03D **Paynes Creek** 18.93 329 P Pn 04 14 06.0 +0.6
baz=19,SNR=17
L30A **Spencer Herefo** 18.99 22 P Pn 04 14 06.4 +0.4
baz=19,SNR=5.4
LOHW **Long Hollow** 19.01 357 eP P 04 14 04.6 -1.1
comp=Z,115nm,1.1s
P36A **Good Intent, A** 19.03 35 P P 04 14 05.6 -0.1
baz=19,SNR=14
FXWY **Creek** 19.07 356 eP P 04 14 05.7 -0.6
comp=Z,84nm,1.0s
BGNE **Belgrade** 19.10 26 P Pn 04 14 07.4 +0.1
baz=19,SNR=16
BGNE **Belgrade** 19.10 26 eP Pn 04 14 07.6 +0.3
comp=Z,847nm,1.1s
MOOW **Moose Ponds** 19.16 356 eP P 04 14 06.7 -0.6
comp=Z,640nm,2.1s
O35A **Humboldt** 19.17 32 P P 04 14 07.0 -0.2
baz=19,SNR=17
K28A **Ten Mile Ranch** 19.18 18 P Pn 04 14 08.0 -0.3
baz=19,SNR=7.9
J25A **Sunshine Ranch** 19.26 12 P Pn 04 14 08.7 -0.6
baz=19,SNR=11
IMW **Indian Meadow** 19.32 356 eP P 04 14 09.2 +0.1
comp=Z,194nm,1.3s
J26A **Sides Ranch, S** 19.33 13 P Pn 04 14 09.4 -0.7
baz=19,SNR=12
HBAR **Harrisburg** 19.33 51 eP P 04 14 09.3 +0.3
N34A **Lincoln** 19.34 30 P P 04 14 08.2 -0.9
baz=19
KCPM **Cahto Peak** 19.36 324 eP Pn 04 14 12.3 +1.7
comp=Z,368nm,2.0s
KIPM **Iron Peak** 19.40 325 eP Pn 04 14 12.0 +1.0
HLID **Hailey** 19.42 348 P P 04 14 09.9 -0.2
baz=20,SNR=51
HLID **Hailey** 19.42 348 eP Pn 04 14 10.6 -0.7
comp=Z,125nm,1.2s
WVOR **Wild Horse Val** 19.46 338 eP P 04 14 10.7 +0.2
WVOR pmax pmax
comp=Z,210nm,1.2s
WVOR **Wild Horse Val** 19.46 338 eP P 04 14 10.7 +0.2
comp=Z,206nm,1.3s
FLWY **Flagg Ranch** 19.49 357 eP Pn 04 14 11.9 -0.2
comp=Z,886nm,2.1s
L31A **Butterfield Fa** 19.50 23 P P 04 14 11.3 +0.4
baz=20
WDC **Whiskeytown Da** 19.50 328 eP P 04 14 10.9 0.0
WDC pmax pmax
comp=Z,100nm,1.4s
WDC **Whiskeytown Da** 19.50 328 eP P 04 14 10.4 -0.5
comp=Z,105nm,1.4s
J27A **Elkhorn Farm,** 19.52 16 P Pn 04 14 11.6 -0.8
baz=20,SNR=15
K29A **Lazy Trails An** 19.53 20 P Pn 04 14 12.5 +0.1
baz=20,SNR=8.9
O36A **Bolckow** 19.54 34 P P 04 14 11.1 -0.1
baz=20,SNR=22
MFID **Camas Ranch** 19.57 345 eP P 04 14 11.9 +0.2
comp=Z,193nm,1.3s
MOD **Modoc** 19.60 334 eP P 04 14 12.0 -0.1
comp=Z,78nm,0.9s
M33A **Taylor Creek F** 19.63 27 P P 04 14 12.3 0.0
baz=20,SNR=5.6
MET **Memphis--Engin** 19.65 53 eP P 04 14 12.5 0.0
comp=Z,611nm,1.4s
L32A **Elgin** 19.67 25 P P 04 14 13.2 +0.5
baz=20
K30A **Basset** 19.68 21 P Pn 04 14 13.5 -0.7
baz=20,SNR=12
N35A **Tabor** 19.76 32 P P 04 14 13.5 -0.2
baz=20,SNR=32
OXF **Oxford** 19.77 55 eP P 04 14 14.0 +0.2
OXF pmax pmax
comp=Z,140nm,1.0s
OXF **Oxford** 19.77 55 eP P 04 14 13.2 -0.6
comp=Z,138nm,1.0s
H17A **Grant Village** 19.79 357 P P 04 14 14.9 +0.6
baz=20,SNR=20
H17A **Grant Village** 19.79 357 eP Pn 04 14 15.9 +0.1
comp=Z,124nm,1.2s
KMRM **Mail Ridge** 19.82 325 eP P 04 14 12.4 -2.0
comp=Z,363nm,1.3s
M34A **Aspy Farms, Fr** 19.84 29 P P 04 14 14.8 +0.2
baz=20,SNR=7.9
J28A **Allard Ranch,** 19.87 17 P P 04 14 15.1 +0.1
baz=20,SNR=27
I25A **Rochford** 19.88 12 P P 04 14 15.3 +0.2
baz=20,SNR=11
N02D **Trinity Center** 19.89 328 P P 04 14 15.1 -0.1
baz=20
K31A **O'Neill** 19.92 23 P P 04 14 16.0 +0.6
baz=20,SNR=7.7
RSSD **Black Hills** 19.92 11 eP P 04 14 15.4 -0.3
RSSD pmax pmax
comp=Z,450nm,2.4s
RSSD **Black Hills** 19.92 11 eP P 04 14 15.4 -0.3
comp=Z,450nm,2.4s
LKWY **Lake** 19.95 357 eP Pn 04 14 17.8 0.0
LKWY pmax pmax
comp=Z,156nm,1.1s
LKWY MLR MLR
comp=Z,34µm,20.0s
LKWY **Lake** 19.95 357 eP Pn 04 14 17.8 0.0
comp=Z,156nm,1.1s
LKWY LR LR
comp=Z,34µm,20.0s
GNAR **Gosnell** 19.98 51 eP Pn 04 14 17.1 -0.8
I26A **New Underwood** 20.06 13 P Pn 04 14 18.0 -0.8
baz=20,SNR=13
YMR **Madison River** 20.09 356 PFAKE 04 14 30.0 +11
YMR LR LR
comp=Z,15µm,21.0s
L33A **Hoskins** 20.09 26 P P 04 14 18.0 +0.6
baz=20,SNR=13
PBMO **Poplar Bluff** 20.11 48 eP Pn 04 14 18.7 -0.6
comp=Z,155nm,1.2s
PBMO LR LR
comp=Z,20µm,19.0s
J29A **Okreek** 20.11 19 P Pn 04 14 18.4 -1.0
baz=20,SNR=6.9
YNR **Norris Junctio** 20.12 357 PFAKE 04 14 30.0 +10
YNR LR LR
comp=Z,24µm,18.0s
M04C **Macdoel** 20.14 331 P Pn 04 14 18.8 -1.0
baz=20,SNR=14
YHH **Holmes Hill** 20.20 356 eP P 04 14 18.8 +0.1
M35A **Neola** 20.21 30 P P 04 14 17.9 -0.7
baz=20,SNR=18
J08A **Circle Bar Ran** 20.24 340 eP P 04 14 19.4 +0.5
comp=Z,351nm,1.3s
J08A LR LR
comp=Z,10µm,20.0s
K32A **Verdigre** 20.24 24 P P 04 14 19.5 +0.5
baz=20,SNR=12
I27A **Quinn** 20.27 15 P P 04 14 19.6 +0.3
baz=20,SNR=22
QLMT **Earthquake Lak** 20.28 355 eP Pn 04 14 21.5 -0.1
M02C **Callahan** 20.29 329 P P 04 14 19.5 0.0
baz=20
CCM **Cathedral Cave** 20.29 44 PFAKE 04 14 30.0 +8.6
CCM LR LR
comp=Z,22µm,18.0s
J30A **Dallas** 20.30 21 P P 04 14 19.1 -0.4
baz=20,SNR=7.8
L34A **Svendsen Farm,** 20.30 28 P P 04 14 19.4 -0.3
baz=20
KHMM **Horse Mountain** 20.32 327 eP P 04 14 20.7 +0.8
comp=Z,475nm,1.6s
KHMM LR LR
comp=Z,18µm,18.0s
MCMT **McKenzie Canyo** 20.42 352 eP P 04 14 21.8 +0.8
I28A **Midland** 20.43 17 P P 04 14 20.7 -0.2
baz=20,SNR=11
HALT **Halls** 20.44 52 eP P 04 14 21.4 +0.3
H25A **Fruitdale** 20.48 11 P P 04 14 22.0 +0.4
baz=21,SNR=9.2
RLMT **Red Lodge** 20.48 360 P P 04 14 21.5 -0.3
baz=21,SNR=28
RLMT **Red Lodge** 20.48 360 eP P 04 14 21.4 -0.4
comp=Z,256nm,1.5s
RLMT LR LR
comp=Z,12µm,21.0s
YBH **Yreka Blue Hor** 20.49 330 P P 04 14 19.6 -2.1
comp=Z,4.6nm,0.7s,baz=139,slow=4.2,SNR=9.1
YBH **Yreka Blue Hor** 20.49 330 eP Pn 04 14 22.9 -1.0
YBH pmax pmax
comp=Z,23nm,1.0s
YBH **Yreka Blue Hor** 20.49 330 eP P 04 14 19.8 -1.8
comp=Z,23nm,1.0s
YBH LR LR
comp=Z,5µm,21.0s
J31A **Geddes** 20.52 22 P P 04 14 21.9 0.0
baz=21,SNR=16
BRAL **Brewton** 20.53 67 eP Pn 04 14 23.7 -0.6
comp=Z,184nm,1.0s
BRAL LR LR
comp=Z,18µm,20.0s
K05A **Summer Lake** 20.53 335 eP P 04 14 23.0 +0.7
comp=Z,1µm,1.8s
K05A LR LR
comp=Z,11µm,19.0s
K33A **Hardington** 20.57 26 P P 04 14 22.9 +0.4
baz=21
H26A **Fairpoint** 20.64 13 P P 04 14 23.1 -0.2
baz=21,SNR=11
GLAT **Glass** 20.65 51 eP Pn 04 14 25.2 -0.5
I29A **Vivian Onida** 20.68 18 P P 04 14 24.4 +0.6
baz=21,SNR=14
BGMT **Barton Gulch** 20.73 354 eP Pn 04 14 25.5 -1.3
L35A **Bielow Farm, R** 20.79 29 P P 04 14 24.5 -0.4
baz=21
K04D **Chiloquin, OR** 20.79 333 P P 04 14 25.3 +0.2
baz=21,SNR=22
H27A **Howes** 20.80 14 P P 04 14 25.1 0.0

baz=21,SNR=32
**I30A Oacoma 20.85 20** P **P** 04 14 26.1 +0.6
baz=21
**J32A Parkston 20.90 24** P **P** 04 14 26.3 +0.2
baz=21,SNR=7.0
**DLMT Dillon 20.91 353** *eP* **P** 04 14 27.0 +0.6
comp=Z,176nm,1.1s
DLMT LR LR
comp=Z,24µm,19.0s
**UTMT University of 20.98 51** *eP* Pn 04 14 28.6 -1.0
comp=Z,1µm,1.6s
**K34A Le Mars 21.01 28** P **P** 04 14 26.7 -0.6
baz=21,SNR=23
**G25A Newell 21.07 11** P **P** 04 14 28.0 +0.1
baz=21,SNR=11
**H28A Mission Ridge 21.10 16** P **P** 04 14 28.2 0.0
baz=21,SNR=12
**BOZ Bozeman (W) 21.11 355** *eP* **P** 04 14 28.2 -0.2
BOZ pmax pmax
comp=Z,240nm,1.4s
**BOZ Bozeman (W) 21.11 355** P **P** 04 14 28.3 -0.2
baz=21,SNR=38
**BOZ Bozeman (W) 21.11 355** *eP* **P** 04 14 28.2 -0.2
comp=Z,238nm,1.4s
BOZ LR LR
comp=Z,20µm,18.0s
**J05D Fort Rock, OR 21.14 335** P **P** 04 14 28.9 +0.1
baz=21,SNR=75
**GCMT Greycliff 21.16 359** *eP* **P** 04 14 28.7 -0.2
**J33A Davis 21.19 25** P **P** 04 14 29.9 +0.8
baz=21,SNR=12
**I07A Izee 21.21 339** *eP* **P** 04 14 29.6 +0.1
comp=Z,433nm,1.4s
I07A LR LR
comp=Z,7µm,19.0s
**L02D Cave Junction, 21.23 329** P **P** 04 14 30.0 +0.3
baz=21
**I31A Royce, Wessing 21.24 21** P **P** 04 14 30.1 +0.4
baz=21
**H29A Onida 21.27 18** P **P** 04 14 30.2 +0.2
baz=21,SNR=15
**SLM Saint Louis 21.27 44** PFAKE 04 14 40.0 +10
SLM LR LR
comp=Z,27µm,18.0s
**G26A Maurine 21.32 13** P **P** 04 14 30.7 +0.1
baz=21,SNR=16
**LRM Limekiln Ridge 21.35 354** *eP* **P** 04 14 31.4 +0.2
**K35A Storm Lake 21.41 29** P **P** 04 14 31.6 0.0
baz=22,SNR=7.6
**SIUC Southern Illin 21.43 48** *eP* **P** 04 14 32.1 +0.3
comp=Z,996nm,2.1s
SIUC LR LR
comp=Z,17µm,19.0s
**J04D Umpqua Nationa 21.45 333** P **P** 04 14 31.7 -0.5
baz=22,SNR=12
**SUSD South Dakota S 21.47 20** P **P** 04 14 32.0 -0.2
baz=22,SNR=6.9
**G28A Parade 21.50 16** P **P** 04 14 31.7 -0.8
baz=22,SNR=11
**G27A Dupree 21.54 14** P **P** 04 14 31.8 -1.2
baz=22,SNR=19
**J34A George 21.56 27** P **P** 04 14 33.2 0.0
baz=22,SNR=8.7
**KBO Bosley Butte 21.57 328** *eP* **P** 04 14 34.6 +1.3
comp=Z,478nm,1.4s
KBO LR LR
comp=Z,15µm,20.0s
**I32A Karley and Nic 21.61 23** P **P** 04 14 33.6 0.0
baz=22
**WVT Waverly 21.63 53** PFAKE 04 14 50.0 +16
WVT LR LR
comp=Z,5µm,20.0s
**H31A Wolsey 21.66 21** P **P** 04 14 34.4 +0.3
baz=22
**SNET Serv Nac Est T 21.67 116** PFAKE 04 14 50.0 +15
SNET LR LR
comp=Z,27µm,19.0s
**ECSD EROS Data Cent 21.68 25** P **P** 04 14 34.6 +0.2
baz=22,SNR=36
**ECSD EROS Data Cent 21.68 25** *eP* **P** 04 14 35.7 +1.3
comp=Z,329nm,1.4s
ECSD LR LR
comp=Z,2µm,18.0s
**SCIA State Center 21.74 34** *eP* **P** 04 14 34.2 -0.9
comp=Z,990nm,2.0s
SCIA LR LR
comp=Z,17µm,20.0s
**F25A Bowman 21.77 11** P **P** 04 14 34.8 -0.7
baz=22,SNR=12
**F26A Lodgepole 21.84 12** P **P** 04 14 35.6 -0.7
baz=22,SNR=15
**G29A Hoven 21.87 18** P **P** 04 14 35.5 -1.0
baz=22,SNR=10
**I33A Coleman 21.87 24** P **P** 04 14 36.1 -0.4
baz=22
**J35A Milford 21.94 28** P **P** 04 14 36.8 -0.5
baz=22,SNR=14
**F27A Lemmon 22.00 13** P **P** 04 14 37.2 -0.7
baz=22,SNR=23
**I04A Tendick Farm, 22.03 334** P **P** 04 14 37.7 -0.5
baz=22,SNR=11
**H32A Carlson Farm, 22.03 23** P **P** 04 14 37.2 -1.1
baz=22,SNR=27
**I05D Terrebonne, OR 22.08 336** P **P** 04 14 38.7 0.0
baz=22,SNR=12
**KEBM Edson Butte 22.13 329** *eP* **P** 04 14 39.7 +0.4
comp=Z,784nm,1.5s
KEBM LR LR
comp=Z,15µm,18.0s
**G08A Pilot Rock 22.14 341** *eP* **P** 04 14 38.5 -0.9
G08A LR LR
comp=Z,15µm,19.0s
**LAO LASA Array 22.17 5** P **P** 04 14 38.4 -1.4
baz=22,SNR=22
**LAO LASA Array 22.17 5** *eP* **P** 04 14 38.7 -1.1
comp=Z,326nm,1.3s
LAO LR LR
comp=Z,16µm,19.0s
**K37A Belmond 22.18 31** P **P** 04 14 39.6 -0.2
baz=22,SNR=22
**HRY Holter Researc 22.18 355** *eP* **P** 04 14 39.8 -0.2
**I34A Hadley 22.23 26** P **P** 04 14 40.0 -0.4
baz=22
**F28A McLaughlin 22.25 16** P **P** 04 14 40.2 -0.3
baz=22,SNR=7.3
**J36A Seneca 1, Swea 22.29 29** P **P** 04 14 40.2 -0.8
baz=22,SNR=25
**F10A Beach Ranch, E 22.31 345** *eP* **P** 04 14 40.4 -0.9
comp=Z,241nm,1.3s
F10A LR LR
comp=Z,1µm,18.0s
**E25A Miller Ranch, 22.34 10** P **P** 04 14 41.3 -0.3
baz=22
**I03D Drain, OR 22.34 332** P **P** 04 14 41.3 -0.2
baz=22
**G31A Conde 22.41 21** P **P** 04 14 41.6 -0.6
baz=22
**H33A Prehn Over Nor 22.43 24** P **P** 04 14 42.2 -0.4
baz=22
**I35A Creekview Farm 22.44 28** P **P** 04 14 42.3 -0.3
baz=22,SNR=11
**E26A Carlson Angus 22.48 12** P **P** 04 14 43.1 0.0
baz=23,SNR=12
**F29A Eureka 22.48 17** P **P** 04 14 42.5 -0.6
baz=23,SNR=9.9
**K38A Parkersburg 22.51 33** P **P** 04 14 43.2 -0.1
baz=23,SNR=16
**CHMT Chamberlain Mo 22.52 353** *eP* **P** 04 14 43.2 -0.5
**MSO Missoula 22.52 351** P **P** 04 14 42.9 -0.6
baz=23,SNR=63
**MSO Missoula 22.52 351** *eP* **P** 04 14 43.0 -0.6
comp=Z,286nm,1.2s
MSO LR LR
comp=Z,16µm,19.0s
**USIN University of 22.61 49** *eP* **P** 04 14 44.9 +0.4
comp=Z,228nm,1.1s
USIN LR LR
comp=Z,17µm,18.0s
**G06A Carlson Farm, 22.61 338** *eP* **P** 04 14 43.5 -0.9
G06A LR LR
comp=Z,13µm,20.0s
**E27A Carson 22.62 14** P **P** 04 14 43.3 -1.2
baz=23,SNR=12
**J37A Redenius Farm, 22.64 31** P **P** 04 14 43.9 -0.8
baz=23,SNR=20
**G32A Webster 22.67 22** P **P** 04 14 43.6 -1.4
baz=23,SNR=5.5
**SWET Sewanee 22.67 57** *eP* **P** 04 14 44.9 -0.4
comp=Z,669nm,1.8s
SWET LR LR
comp=Z,36µm,18.0s
**H04A Detroit Lake 22.69 335** *eP* **P** 04 14 44.2 -1.0
comp=Z,248nm,1.6s
H04A LR LR
comp=Z,12µm,18.0s
**F30A Leola 22.71 19** P **P** 04 14 44.8 -0.6
baz=23
**OLIL Olney 22.71 47** *eP* **P** 04 14 45.5 0.0
comp=Z,439nm,1.2s
OLIL LR LR
comp=Z,13µm,18.0s
**H34A Spellman Lake, 22.79 25** P **P** 04 14 45.8 -0.5
baz=23,SNR=31
**G05D Wamic, OR 22.85 337** P **P** 04 14 46.6 -0.4
baz=23
**SLMT Seeley Lake 22.87 352** *eP* **P** 04 14 46.5 -0.8
**E28A Huff 22.96 15** P **P** 04 14 47.2 -0.8
baz=23,SNR=12
**F31A Hecla 22.96 20** P **P** 04 14 47.1 -1.0
baz=23
**I36A Fitzsimmons Fa 22.98 29** P **P** 04 14 48.3 0.0
baz=23
**D25A Fairfield 22.99 10** P **P** 04 14 48.2 -0.2
baz=23
**G33A Ortonville 22.99 23** P **P** 04 14 47.4 -0.9
baz=23,SNR=6.5
**HDIL Hopedale 23.00 41** P **P** 04 14 47.5 -1.0
baz=23,SNR=16
**HDIL Hopedale 23.00 41** *eP* **P** 04 14 47.6 -0.9
comp=Z,2µm,2.5s
HDIL LR LR
comp=Z,14µm,19.0s
**D26A Manning 23.02 12** P **P** 04 14 48.5 -0.3
baz=23,SNR=30
**COR Corvallis 23.05 333** *eP* **P** 04 14 51.0 +2.1
COR pmax pmax
comp=Z,107nm,1.0s
COR MLR MLR
comp=Z,6µm,21.0s
**COR Corvallis 23.05 333** *eP* **P** 04 14 51.0 +2.1
comp=Z,107nm,1.0s
COR LR LR
comp=Z,6µm,21.0s
**TGUH Tegucigalpa,Un 23.10 113** *eP* **P** 04 14 51.1 +1.4
comp=Z,156nm,1.1s
TGUH LR LR
comp=Z,22µm,20.0s
**H35A Sunnyside Ranc 23.19 27** P **P** 04 14 49.6 -0.8
baz=23,SNR=13
**SWMT Swartz Lake 23.20 352** *eP* **P** 04 14 50.4 -0.2
**E29A Napoleon 23.21 17** P **P** 04 14 50.3 -0.4
baz=23
**I37A Lemond, Waseca 23.25 30** P **P** 04 14 50.1 -1.0
baz=23
**D27A Center 23.28 13** P **P** 04 14 50.6 -0.7
baz=23
**HAWA Hanford 23.30 342** *eP* **P** 04 14 50.4 -1.2
comp=Z,651nm,1.9s
HAWA LR LR
comp=Z,6µm,19.0s
**G34A Benson 23.32 25** P **P** 04 14 51.4 -0.3
baz=23,SNR=5.8
**E30A Jud 23.35 18** P **P** 04 14 50.2 -1.8
baz=23,SNR=6.5
**EGMT Eagleton 23.39 359** P **P** 04 14 51.6 -1.0
baz=24,SNR=43
**EGMT Eagleton 23.39 359** *eP* **P** 04 14 52.1 -0.4
comp=Z,751nm,1.4s
EGMT LR LR
comp=Z,8µm,20.0s
**H36A Jessenland, He 23.47 28** P **P** 04 14 52.5 -0.7
baz=24
**JTMT Jette 23.47 351** *eP* **P** 04 14 51.7 -1.7
**TIGA Tifton 23.52 67** P **P** 04 14 52.4 -1.5
baz=24,SNR=15
**TIGA Tifton 23.52 67** *eP* **P** 04 14 52.2 -1.7
comp=Z,2µm,2.5s
**C25A Freed Ranch, W 23.54 10** P **P** 04 14 53.8 -0.2
baz=24
**G03D McMinnville, O 23.55 334** P **P** 04 14 53.4 -0.6
baz=24
**YBMT Yellow Bay 23.55 352** *eP* **P** 04 14 53.1 -1.0
**E07A Sunnyside 23.55 341** *eP* **P** 04 14 52.8 -1.3
comp=Z,437nm,1.4s
E07A LR LR
comp=Z,4µm,20.0s
**D28A Regan 23.57 15** P **P** 04 14 53.4 -0.8
baz=24,SNR=8.0
**F33A 5 Mile Ranch, 23.59 23** P **P** 04 14 54.0 -0.5
baz=24
**BSMT Bassoo Peak 23.65 350** *eP* **P** 04 14 53.7 -1.5
BSMT *eP* PcP PcP 04 18 32.7 -7.0
**D29A Pettibone, Tap 23.68 16** P **P** 04 14 54.7 -0.6
baz=24
**WCI Wyandotte Cave 23.68 50** PFAKE 04 15 10.0 +15
WCI LR LR
comp=Z,15µm,22.0s
**E31A Nome 23.70 20** P **P** 04 14 55.0 -0.5
baz=24,SNR=6.5
**BLMT Blacktail Moun 23.74 351** *eP* **P** 04 14 55.1 -1.0
**D08A Wollman Farm, 23.75 343** *eP* **P** 04 14 54.0 -1.9
comp=Z,647nm,2.3s
D08A LR LR
comp=Z,9µm,18.0s
**G35A Watkins 23.75 26** P **P** 04 14 55.4 -0.7
baz=24,SNR=5.4
**I38A Scanlan Farm, 23.77 31** P **P** 04 14 55.2 -1.0
baz=24,SNR=19
**CPCT Cooper Cave 23.83 57** *eP* **P** 04 14 56.3 -0.6
**F04A Amboy 23.84 337** PFAKE 04 15 10.0 +13
F04A LR LR
comp=Z,5µm,22.0s
**C26A Wahner Farm, P 23.85 12** P **P** 04 14 54.8 -2.2
baz=24,SNR=6.9
**C27A Sayler Ranch, 23.86 13** P **P** 04 14 56.9 -0.2
baz=24
**H37A Dierke Farm, C 23.91 29** P **P** 04 14 57.6 +0.1
baz=24
**F34A Alexandria 23.93 24** P **P** 04 14 57.9 +0.2
baz=24
**D30A Buchanan 23.95 18** P **P** 04 14 58.6 +0.7
baz=24
**E32A Braaten, Kindr 23.99 21** P **P** 04 14 57.0 -1.3
baz=24
**BLO Bloomington 23.99 47** *eP* **P** 04 14 57.4 -1.0
BLO pmax pmax
comp=Z,173nm,1.1s
BLO MLR MLR
comp=Z,4µm,21.0s
**BLO Bloomington 23.99 47** *eP* **P** 04 14 57.4 -1.0
comp=Z,173nm,1.1s
BLO LR LR
comp=Z,4µm,21.0s
**JFWS Jewell Farm 24.00 36** *eP* **P** 04 14 58.1 -0.3
JFWS pmax pmax
comp=Z,1µm,2.3s
**JFWS Jewell Farm 24.00 36** *eP* **P** 04 14 56.5 -1.9
JFWS LR LR
comp=Z,12µm,18.0s
**GOGA Godfrey 24.05 63** *eP* **P** 04 14 57.0 -2.0
GOGA pmax pmax
comp=Z,242nm,1.6s
GOGA MLR MLR
comp=Z,39µm,20.0s
**GOGA Godfrey 24.05 63** *eP* **P** 04 14 57.0 -2.0
comp=Z,242nm,1.6s
GOGA LR LR
comp=Z,39µm,20.0s
**G36A St. Michael 24.07 27** P **P** 04 14 58.1 -0.9
baz=24,SNR=7.9
**C28A Hausauer Farms 24.10 15** P **P** 04 14 58.6 -0.8
baz=24
**B25A Knox Farm, Ray 24.10 10** P **P** 04 14 58.7 -0.6
baz=24
**DGMT Dagmar 24.15 8** P **P** 04 14 58.3 -1.5
baz=24,SNR=9.2
**DGMT Dagmar 24.15 8** *eP* **P** 04 14 59.1 -0.7
comp=Z,600nm,1.5s
DGMT LR LR
comp=Z,24µm,20.0s
**F04D Rainier, OR 24.18 336** P **P** 04 14 59.9 -0.2
baz=24
**D31A Mcclaflin, Tow 24.19 19** P **P** 04 14 59.6 -0.6
baz=24
**F35A Swanville 24.25 25** P **P** 04 15 00.4 -0.3
baz=24
**SFIN Scholer Farm 24.26 44** P **P** 04 15 00.1 -0.7
baz=24,SNR=30
**SFIN Scholer Farm 24.26 44** *eP* **P** 04 15 00.3 -0.5
comp=Z,218nm,0.9s
SFIN LR LR
comp=Z,21µm,18.0s
**F03A Seaside 24.26 335** *eP* **P** 04 15 00.6 -0.2
comp=Z,376nm,1.4s
F03A LR LR
comp=Z,7µm,22.0s
**E33A Westby DABS, E 24.27 22** P **P** 04 15 00.2 -0.6
baz=24
**C09A Chrisman Ranch 24.28 345** *eP* **P** 04 14 58.8 -2.1
comp=Z,413nm,2.0s
C09A LR LR
comp=Z,9µm,21.0s
**LON Longmire 24.33 339** *eP* **P** 04 15 01.5 0.0
LON pmax pmax
comp=Z,853nm,2.0s
LON MLR MLR
comp=Z,11µm,22.0s
**LON Longmire 24.33 339** *eP* **P** 04 15 01.5 0.0
comp=Z,853nm,2.0s
LON LR LR
comp=Z,11µm,22.0s
**B26A Jensen Ranch, 24.36 11** P **P** 04 15 01.1 -0.6
baz=24
**MDND Maddock 24.41 16** P **P** 04 15 01.4 -0.8
baz=24,SNR=6.3
**MDND Maddock 24.41 16** *eP* **P** 04 14 58.8 -3.4
comp=Z,133nm,0.9s
MDND LR LR
comp=Z,8µm,20.0s
**LTY Liberty 24.42 341** *eP* **P** 04 15 01.2 -1.2
comp=Z,568nm,1.8s
LTY LR LR
comp=Z,15µm,18.0s
**NEW Newport 24.46 347** P **P** 04 15 02.2 -0.4
comp=Z,101nm,1.0s,baz=160,slow=11,SNR=51
NEW LR LR 04 23 44.0
comp=Z,8µm,18.4s,baz=172,slow=35
**NEW Newport 24.46 347** *eP* **P** 04 15 01.5 -1.2
NEW pmax pmax
comp=Z,560nm,1.3s
**NEW Newport 24.46 347** P **P** 04 15 01.9 -0.7
baz=25,SNR=79
**NEW Newport 24.46 347** *eP* **P** 04 15 01.5 -1.2
comp=Z,556nm,1.4s
NEW LR LR
comp=Z,1µm,20.0s
**SPMN St. Paul 24.47 29** P **P** 04 15 02.5 -0.2
baz=24,SNR=10
**SPMN St. Paul 24.47 29** *eP* **P** 04 15 02.7 0.0
comp=Z,110nm,1.1s
SPMN LR LR
comp=Z,11µm,18.0s
**TKL Tuckaleechee C 24.48 57** P **P** 04 15 02.7 -0.2
comp=Z,66nm,1.1s,baz=223,slow=7.9,SNR=30
TKL LR LR 04 25 21.7
comp=Z,23µm,18.9s,baz=253,slow=38
**TKL Tuckaleechee C 24.48 57** *eP* **P** 04 15 01.5 -1.4
**D32A Dogwood Acres, 24.49 20** P **P** 04 15 02.0 -0.8
baz=25
**B27A Peters Farms, 24.57 13** P **P** 04 15 03.5 -0.1
baz=25
**C30A Mose, Pekin 24.57 17** P **P** 04 15 03.0 -0.6
baz=25
**E34A Wadena 24.57 24** P **P** 04 15 03.1 -0.5
baz=25
**F36A Milaca 24.67 27** P **P** 04 15 03.7 -0.8
baz=25,SNR=13
**WALA Waterton Lakes 24.71 352** *eP* **P** 04 15 04.3 -0.7
comp=Z,336nm,1.1s
WALA LR LR
comp=Z,27µm,20.0s
**A25A Svangstu Ranch 24.76 9** P **P** 04 15 05.0 -0.3
baz=25,SNR=9.4
**D05A Enumclaw 24.77 339** *eP* **P** 04 15 04.7 -0.7
comp=Z,691nm,1.8s
D05A LR LR
comp=Z,8µm,19.0s
**E03A Lebam 24.78 336** *eP* **P** 04 15 04.6 -0.8
comp=Z,327nm,1.2s
E03A LR LR
comp=Z,7µm,20.0s
**B28A Dugan Ranch, T 24.80 14** P **P** 04 15 05.2 -0.5
baz=25,SNR=13
**C31A Landman Farms, 24.86 18** P **P** 04 15 05.6 -0.7
baz=25,SNR=9.3
**D33A AnnSam, Waubun 24.87 22** P **P** 04 15 05.8 -0.6
baz=25
**A26A Wade Farm, Ken 24.89 11** P **P** 04 15 06.4 -0.1
baz=25
**E35A Pequot Lakes 24.89 25** P **P** 04 15 05.9 -0.6
baz=25,SNR=18
**TZTN Tazewell 24.96 55** *eP* **P** 04 15 06.2 -1.0
comp=Z,319nm,1.7s
**B29A Wagenman Farm, 25.05 15** P **P** 04 15 07.4 -0.5
baz=25,SNR=6.4
**D34A Park Rapids 25.05 23** P **P** 04 15 07.4 -0.6
baz=25,SNR=6.4
**C06D Leavworth 25.09 341** P **P** 04 15 07.8 -0.5
baz=25,SNR=6.0
**A27A Ledoux Ranch, 25.10 12** P **P** 04 15 07.5 -0.8
baz=25
**A28A Rude Farm, Bot 25.25 14** P **P** 04 15 09.4 -0.4
baz=25,SNR=7.0
**B30A Myrvik Farm, E 25.29 17** P **P** 04 15 09.3 -0.9
baz=25,SNR=24
**C33A Trail 25.44 21** P **P** 04 15 11.1 -0.3
baz=26,SNR=8.2
**B31A Greenbush Farm 25.45 18** P **P** 04 15 10.8 -0.7
baz=26,SNR=8.0
**D35A Remer 25.46 24** P **P** 04 15 11.2 -0.5
baz=26,SNR=12
**A29A Manning Farm, 25.50 15** P **P** 04 15 10.9 -1.1
baz=26,SNR=17
**A30A Hoffart Farm, 25.75 17** P **P** 04 15 13.5 -0.7
baz=26,SNR=13
**B32A Ashes, Strandq 25.75 20** P **P** 04 15 13.9 -0.4
baz=26,SNR=12
**B05A Bryant 25.76 340** P **P** 04 15 13.3 -1.0
baz=26,SNR=8.1
**AGMN Agassiz Nation 25.88 21** P **P** 04 15 15.0 -0.4
baz=26
**AGMN Agassiz Nation 25.88 21** *eP* **P** 04 15 13.7 -1.8
comp=Z,167nm,1.6s
AGMN LR LR
comp=Z,13µm,20.0s
**D36A Goodland 25.89 25** P **P** 04 15 15.1 -0.4
baz=26
**C35A Jirik Farms, M 26.01 24** P **P** 04 15 17.6 +0.9
baz=26,SNR=9.8
**A31A Linda, St. Vin 26.05 18** P **P** 04 15 16.8 -0.1
baz=26
**D37A Cotton 26.16 26** P **P** 04 15 18.1 +0.1
baz=26
**KMSC Kings Mountain 26.22 60** P **P** 04 15 18.0 -0.6
baz=26,SNR=22
**KMSC Kings Mountain 26.22 60** *eP* **P** 04 15 17.0 -1.7
comp=Z,435nm,1.9s
KMSC LR LR
comp=Z,26µm,19.0s
**A04D Lummi Island 26.35 339** P **P** 04 15 20.1 +0.4
baz=26,SNR=38
**B34A Aery, Baudette 26.44 22** P **P** 04 15 20.5 -0.1
baz=26,SNR=6.7
**C36A Pine Crest Far 26.49 25** P **P** 04 15 21.1 +0.1
baz=26,SNR=8.9
**PGC Sidney 26.53 338** PFAKE 04 15 30.0 +8.7
PGC LR LR
comp=Z,9µm,22.0s
**A33A Warroad 26.59 20** P **P** 04 15 22.3 +0.5
baz=27,SNR=11
**NHSC New Hope 26.67 65** *eP* **P** 04 15 22.1 -0.7
comp=Z,140nm,1.2s
NHSC LR LR
comp=Z,8µm,20.0s
**C37A Embarrass 26.72 26** P **P** 04 15 22.5 -0.5
baz=27,SNR=11
**ACSO Alum Creek Sta 26.89 48** *eP* **P** 04 15 24.5 -0.2
ACSO LR LR
comp=Z,11µm,18.0s
**JTS JuntasAbangare 27.03 118** P **P** 04 15 28.7 +2.6
comp=Z,12nm,1.0s,baz=303,slow=7.0,SNR=9.4
JTS LR LR 04 26 19.2
comp=Z,11µm,20.1s,baz=309,slow=37
**JTS JuntasAbangare 27.03 118** *eP* **P** 04 15 26.8 +0.6

JTS pmax pmax
comp=Z,82nm,1.4s
JTS MLR MLR
comp=Z,11µm,19.0s
**JTS JuntasAbangare 27.03 118** P **P 04 15 29.2 +3.0**
comp=Z,192nm,1.6s,SNR=5.2
**JTS JuntasAbangare 27.03 118** *e*P **P 04 15 26.8 +0.6**
comp=Z,82nm,1.4s
JTS LR LR
comp=Z,11µm,19.0s
**C38A Sawbill Land. 27.08 27** P **P 04 15 26.2 -0.2**
baz=27
**EYMN Ely 27.17 26** P **P 04 15 26.9 -0.3**
baz=27
**EYMN Ely 27.17 26** *e*P **P 04 15 25.6 -1.5**
comp=Z,140nm,1.0s
EYMN LR LR
comp=Z,12µm,18.0s
**AAM Ann Arbor 27.48 44** *e*P **P 04 15 27.3 -2.6**
**AAM Ann Arbor 27.48 44** *e*P **P 04 15 27.3 -2.6**
comp=Z,56nm,1.1s
AAM LR LR
comp=Z,27µm,18.0s
**BLA Blacksburg 27.54 56** *e*P **P 04 15 30.3 -0.4**
BLA pmax pmax
comp=Z,110nm,1.3s
**BLA Blacksburg 27.54 56** *e*P **P 04 15 30.3 -0.4**
comp=Z,110nm,1.3s
BLA LR LR
comp=Z,21µm,20.0s
**ULM Lac du Bonnet 27.61 19** P **P 04 15 31.4 +0.4**
comp=Z,11nm,1.1s,baz=217,slow=6.8,SNR=4.1
ULM LR LR 04 27 03.2
comp=Z,19µm,18.2s,baz=204,slow=38
**ULM Lac du Bonnet 27.61 19** *e*P **P 04 15 31.8 +0.8**
ULM pmax pmax
comp=Z,180nm,1.4s
**ULM Lac du Bonnet 27.61 19** *e*P **P 04 15 31.8 +0.8**
comp=Z,183nm,1.4s
ULM LR LR
comp=Z,22µm,19.0s
**C39A Grand Marais 27.64 28** P **P 04 15 30.4 -0.9**
baz=28
**EDM Edmonton 28.77 355** *e*P **P 04 15 40.5 -0.9**
EDM pmax pmax
comp=Z,880nm,1.9s
**EDM Edmonton 28.77 355** *e*P **P 04 15 40.5 -0.9**
comp=Z,876nm,1.9s
EDM LR LR
comp=Z,18µm,19.0s
**MCWV Mont Chateau 28.83 52** *e*P **P 04 15 38.9 -3.2**
comp=Z,32nm,1.4s
MCWV LR LR
comp=Z,8µm,20.0s
**CNNC Cliffs of the 28.97 61** *e*P **P 04 15 42.3 -1.0**
comp=Z,53nm,0.9s
CNNC LR LR
comp=Z,22µm,21.0s
**ERPA Erie 29.76 47** PFAKE 04 16 00.0 +10
ERPA LR LR
comp=Z,6µm,22.0s
**URVA University of 29.84 57** *e*P **P 04 15 51.2 +0.2**
**MTDJ Mount Denham 30.04 96** PFAKE 04 16 00.0 +6.9
MTDJ LR LR
comp=Z,8µm,21.0s
**CBN Corbin 30.15 56** *e*P **P 04 15 52.4 -1.3**
comp=Z,98nm,1.4s
CBN LR LR
comp=Z,15µm,18.0s
**FFC Flin Flon 30.56 8** *e*P **P 04 15 55.9 -1.3**
FFC pmax pmax
comp=Z,390nm,2.0s
**FFC Flin Flon 30.56 8** *e*P **P 04 15 55.9 -1.3**
comp=Z,387nm,2.0s
FFC LR LR
comp=Z,29µm,18.0s
**SDMD Soldier's Deli 30.92 54** PFAKE 04 16 10.0 +9.5
SDMD LR LR
comp=Z,1µm,20.0s
**PAYG Puerto Ayora 31.05 141** PFAKE 04 16 10.0 +8.1
PAYG LR LR
comp=Z,3µm,22.0s
**BBB Bella Bella 31.12 337** LR LR 04 28 08.9
comp=Z,8µm,18.3s,baz=160,slow=36
**MMNY Mt. Morris Dam 31.42 47** PFAKE 04 16 20.0 +15
MMNY LR LR
comp=Z,8µm,21.0s
**MVL Millersville 31.47 53** PFAKE 04 16 20.0 +15
MVL LR LR
comp=Z,6µm,22.0s
**SADO Sadowa 31.56 43** P **P 04 16 08.2 +2.2**
comp=Z,12nm,1.0s,baz=258,slow=7.7,SNR=3.4
SADO LR LR 04 29 12.3
comp=Z,14µm,18.6s,baz=249,slow=37
**SADO Sadowa 31.56 43** PFAKE 04 16 20.0 +14
SADO LR LR
comp=Z,25µm,19.0s
**GTBY Guantanamo Bay 31.77 92** *e*P **P 04 16 08.0 -0.3**
comp=Z,83nm,1.2s
GTBY LR LR
comp=Z,10µm,20.0s
**BCIP Isla Barro Col 31.85 114** *e*P **P 04 16 08.3 -0.6**
comp=Z,22nm,1.0s
BCIP LR LR
comp=Z,9µm,18.0s
**LUPA Lehigh Univers 32.37 52** *e*P **P 04 16 11.7 -1.6**
comp=Z,44nm,1.3s
LUPA LR LR
comp=Z,15µm,20.0s
**KSPA Keystone Colle 32.42 50** *e*P **P 04 16 11.5 -2.2**
comp=Z,61nm,1.2s
KSPA LR LR
comp=Z,22µm,18.0s
**BINY Binghamton 32.50 49** *e*P **P 04 16 12.6 -1.9**
comp=Z,452nm,2.5s
BINY LR LR
comp=Z,14µm,18.0s
**BRNJ Basking Ridge 32.98 52** PFAKE 04 16 30.0 +11
BRNJ LR LR
comp=Z,12µm,22.0s
**ODNJ Ogdensburg 33.08 52** *e*P **P 04 16 17.9 -1.6**
comp=Z,227nm,2.3s
ODNJ LR LR
comp=Z,14µm,19.0s
**CPNY Central Park 33.45 52** PFAKE 04 16 30.0 +7.3
CPNY LR LR
comp=Z,13µm,19.0s
**PAL Palisades 33.56 52** *e*P **P 04 16 20.5 -3.1**
PAL pmax pmax
comp=Z,30nm,0.9s
PAL MLR MLR
comp=Z,17µm,18.0s
**PAL Palisades 33.56 52** *e*P **P 04 16 20.5 -3.1**
comp=Z,30nm,0.9s
PAL LR LR
comp=Z,17µm,18.0s
**TRY Troy 34.30 49** PFAKE 04 16 40.0 +10
TRY LR LR
comp=Z,19µm,18.0s
**YLE Yale 34.35 52** PFAKE 04 16 40.0 +9.5
YLE LR LR
comp=Z,34µm,18.0s
**NCB Newcomb 34.37 47** PFAKE 04 16 40.0 +9.2
NCB LR LR
comp=Z,14µm,18.0s
**LONY Lake Ozonia 34.39 46** *e*P **P 04 16 30.6 -0.3**
comp=Z,93nm,1.9s
LONY LR LR
comp=Z,16µm,18.0s
**LGNH LØogne 34.43 93** PFAKE 04 16 40.0 +8.5
LGNH LR LR
comp=Z,8µm,21.0s
**ACCN Adirondack Com 34.53 48** PFAKE 04 16 40.0 +7.9
ACCN LR LR
comp=Z,9µm,19.0s
**PAPH Port-au-Prince 34.71 93** PFAKE 04 16 40.0 +6.1
PAPH LR LR
comp=Z,9µm,21.0s
**GRTK Grand Turk 35.02 87** PFAKE 04 16 50.0 +13
GRTK LR LR
comp=Z,9µm,20.0s
**SDDR Presa de Saban 35.50 91** PFAKE 04 16 50.0 +9.2
SDDR LR LR
comp=Z,7µm,21.0s
**BRYW Bryant College 35.53 52** *e*P **P 04 16 38.2 -2.6**
comp=Z,34nm,1.1s
BRYW LR LR

comp=Z,29µm,18.0s
**HRV Adam Dziewonsk 35.69 51** *e*P **P 04 16 39.6 -2.5**
HRV *e* 04 19 08.5
HRV pmax pmax
comp=Z,61nm,1.2s
HRV MLR MLR
comp=Z,12µm,19.0s
**HRV Adam Dziewonsk 35.69 51** *e*P **P 04 16 39.6 -2.5**
HRV *e*PcP **PcP 04 19 08.5 -1.8**
HRV LR LR
comp=Z,12µm,19.0s
**FCC Fort Churchill 35.77 13** PFAKE 04 16 50.0 +7.5
FCC LR LR
comp=Z,9µm,18.0s
**WRAK Wrangell Islan 36.01 338** *e*P **P 04 16 45.1 +0.6**
comp=Z,53nm,1.0s
WRAK LR LR
comp=Z,2µm,20.0s
**LBNH Lisbon 36.01 48** *e*P **P 04 16 42.3 -2.5**
LBNH pmax pmax
comp=Z,121nm,1.8s
LBNH MLR MLR
comp=Z,15µm,18.0s
**LBNH Lisbon 36.01 48** *e*P **P 04 16 42.3 -2.5**
comp=Z,121nm,1.8s
LBNH LR LR
comp=Z,15µm,18.0s
**SDD Santo Domingo 36.90 92** PFAKE 04 17 00.0 +7.4
SDD LR LR
comp=Z,6µm,21.0s
**DLBC Dease Lake 36.94 342** PFAKE 04 17 00.0 +7.3
DLBC LR LR
comp=Z,14µm,18.0s
**WVL Waterville 37.65 48** PFAKE 04 17 10.0 +11
WVL LR LR
comp=Z,15µm,20.0s
**YKA Yellowknife Ar 38.07 356** P **P 04 17 00.5 -1.5**
comp=Z,7.8nm,0.9s,baz=169,slow=7.7,SNR=8.9
YKA PcP **PcP 04 19 17.6 +0.6**
comp=Z,1.5nm,0.9s,baz=161,slow=2.7,SNR=4.7
**PKME Peaks-Kenny Pk 38.12 47** PFAKE 04 17 10.0 +7.2
PKME LR LR
comp=Z,10µm,20.0s
**OTAV Otavalo 38.31 125** *e*P **P 04 17 07.8 +2.6**
comp=Z,37nm,1.1s
OTAV LR LR
comp=Z,3µm,21.0s
**ROSC El Rosal 38.77 115** P P 04 17 12.8 +3.9
comp=Z,27nm,1.1s,baz=65,slow=3.4,SNR=27
ROSC LR LR 04 34 47.8
comp=Z,4µm,18.1s,baz=346,slow=39
**ROSC El Rosal 38.77 115** *e*P **P 04 17 11.9 +3.0**
**SKAG Skagway 39.38 339** *e*P **P 04 17 14.7 +1.6**
comp=Z,26nm,1.0s
SKAG LR LR
comp=Z,7µm,18.0s
**AGP Aguadilla 39.43 91** PFAKE 04 17 20.0 +5.9
AGP LR LR
comp=Z,5µm,20.0s
**LSP Las Mesas 39.55 91** *e*P **P 04 17 15.7 +0.6**
**CRPR Cabo Rojo, PR 39.58 91** *e*P **P 04 17 14.7 -0.6**
comp=Z,206nm,1.4s
CRPR LR LR
comp=Z,14µm,20.0s
**BBSR BB Station 39.59 68** PFAKE 04 17 30.0 +15
BBSR LR LR
comp=Z,5µm,21.0s
**LRS Lares 39.74 91** *e*P **P 04 17 17.2 +0.6**
**SDV Santo Domingo 39.86 106** *e*P **P 04 17 18.3 +0.4**
comp=Z,85nm,1.1s
SDV LR LR
comp=Z,8µm,21.0s
**OBIP Obispado Ponce 40.02 91** *e*P **P 04 17 18.4 -0.6**
comp=Z,59nm,1.0s
**CELP Cerrillos 40.04 91** *e*P **P 04 17 18.8 -0.3**
**DHAK Deception Hill 40.09 337** PFAKE 04 17 30.0 +11
DHAK LR LR
comp=Z,5µm,20.0s
**SJG San Juan 40.42 91** *e*P **P 04 17 21.7 -0.6**
SJG pmax pmax
comp=Z,112nm,1.1s
SJG MLR MLR
comp=Z,8µm,21.0s
**SJG San Juan 40.42 91** *e*P **P 04 17 21.6 -0.6**
comp=Z,112nm,1.1s
SJG LR LR
comp=Z,8µm,21.0s
**CPD Cerro la Pandu 40.66 91** *e*P **P 04 17 23.6 -0.7**
CPD pmax pmax
comp=Z,222nm,1.1s
CPD MLR MLR
comp=Z,31µm,21.0s
**CPD Cerro la Pandu 40.66 91** *e*P **P 04 17 23.6 -0.7**
comp=Z,222nm,1.1s
CPD LR LR
comp=Z,31µm,21.0s
**HUMP Col San Antoni 40.68 90** *e*P **P 04 17 23.5 -0.9**
comp=Z,42nm,0.9s
HUMP LR LR
comp=Z,7µm,20.0s
**STVI Saint Thomas 41.44 90** PFAKE 04 17 40.0 +9.3
STVI LR LR
comp=Z,8µm,22.0s
**PCA Pinnacle 41.53 337** PFAKE 04 17 40.0 +9.0
PCA LR LR
comp=Z,4µm,20.0s
**POHA Pohakuloa 43.09 273** PFAKE 04 18 00.0 +16
POHA LR LR
comp=Z,8µm,19.0s
**SABA Saba 43.21 90** PFAKE 04 18 00.0 +15
SABA LR LR
comp=Z,2µm,20.0s
**SMRT St. Maarten 43.24 89** PFAKE 04 18 00.0 +15
SMRT LR LR
comp=Z,7µm,20.0s
**SCHQ Schefferville 43.35 35** P **P 04 17 45.6 -0.3**
comp=Z,9.9nm,1.0s,baz=251,slow=13,SNR=3.2
SCHQ LR LR 04 36 44.1
comp=Z,7µm,18.9s,baz=244,slow=37
**SCHQ Schefferville 43.35 35** *e*P **P 04 17 43.2 -2.7**
comp=Z,566nm,2.8s
**RAGM Ragged Mountai 43.36 335** PFAKE 04 18 00.0 +14
RAGM LR LR
comp=Z,6µm,22.0s
**SEUS St. Eustatius 43.48 90** PFAKE 04 18 00.0 +13
SEUS LR LR
comp=Z,5µm,22.0s
**ATAH Atahualpa 43.49 133** P **P 04 17 50.9 +3.0**
comp=Z,23nm,0.9s,baz=324,slow=8.7,SNR=7.2
ATAH LR LR 04 32 07.1
comp=Z,4µm,20.9s,baz=324,slow=31
**BMRM Bremner River 43.71 336** PFAKE 04 18 00.0 +11
BMRM LR LR
comp=Z,4µm,19.0s
**EYAK Cordova Ski Ar 43.88 335** PFAKE 04 18 00.0 +10
EYAK LR LR
comp=Z,6µm,21.0s
**DAWY Dawson 44.16 341** PFAKE 04 18 00.0 +7.8
DAWY LR LR
comp=Z,6µm,18.0s
**DIV Divide 44.25 335** PFAKE 04 18 00.0 +7.0
DIV LR LR
comp=Z,5µm,20.0s
**ANWB Willy Bob 44.52 89** PFAKE 04 18 10.0 +14
ANWB LR LR
comp=Z,5µm,22.0s
**KLU Klutina 44.53 336** *e*P **P 04 17 55.2 -0.1**
comp=Z,53nm,1.2s
KLU LR LR
comp=Z,3µm,19.0s
**HARP HAARP 44.84 337** PFAKE 04 18 10.0 +12
HARP LR LR
comp=Z,3µm,19.0s
**KIP Kipapa 44.93 276** *e*P **P 04 17 59.7 +0.8**
KIP pmax pmax
comp=Z,248nm,1.2s
**KIP Kipapa 44.93 276** PFAKE 04 18 10.0 +11
KIP LR LR
comp=Z,8µm,21.0s
**SEW Seward 45.10 333** PFAKE 04 18 10.0 +10
SEW LR LR
comp=Z,3µm,19.0s
**EGAK Eagle 45.20 341** *e*P **P 04 17 58.3 -2.1**
comp=Z,44nm,1.1s
EGAK LR LR
comp=Z,5µm,20.0s

**SCM Sheep Creek Mo 45.27 336** *e*P P 04 18 05.7 +4.5
SCM pmax pmax
comp=Z,73nm,1.1s
**SCM Sheep Creek Mo 45.27 336** PFAKE 04 18 10.0 +8.8
SCM LR LR
comp=Z,4µm,22.0s
**KDAK Kodiak Island 45.30 329** *e*P P 04 18 04.6 +3.3
KDAK pmax pmax
comp=Z,190nm,1.5s
**KDAK Kodiak Island 45.30 329** *e*P P 04 17 56.6 -4.7
comp=Z,189nm,1.5s
KDAK LR LR
comp=Z,5µm,20.0s
**DOT Dot Lake 45.30 339** *e*P **P 04 18 01.6 +0.3**
comp=Z,165nm,1.2s
DOT LR LR
comp=Z,15µm,18.0s
**PAX Paxson 45.32 338** PFAKE 04 18 10.0 +8.4
PAX LR LR
comp=Z,4µm,18.0s
**OHAK Old Harbor 45.37 328** *e*P **P 04 17 59.7 -2.2**
comp=Z,80nm,1.1s
**SII Sitkinak Islan 45.52 327** PFAKE 04 18 10.0 +6.9
SII LR LR
comp=Z,4µm,19.0s
**BRLK Bradley Lake 45.53 332** *e*P **P 04 18 01.9 -1.3**
comp=Z,92nm,0.8s
BRLK LR LR
comp=Z,2µm,18.0s
**CNPM China Poot 45.55 331** PFAKE 04 18 10.0 +6.6
CNPM LR LR
comp=Z,3µm,21.0s
**RC01 Rabbit Creek A 45.77 334** PFAKE 04 18 20.0 +15
RC01 LR LR
comp=Z,2µm,21.0s
**HOM Homer 45.80 331** PFAKE 04 18 20.0 +15
HOM LR LR
comp=Z,3µm,18.0s
**PMR Palmer 45.82 335** *e*P **P 04 18 02.9 -2.5**
PMR pmax pmax
comp=Z,79nm,1.2s
PMR MLR MLR
comp=Z,4µm,21.0s
**PMR Palmer 45.82 335** *e*P **P 04 18 02.9 -2.5**
comp=Z,79nm,1.2s
PMR LR LR
comp=Z,4µm,21.0s
**FDF Fort de France 46.03 93** PFAKE 04 18 20.0 +12
FDF LR LR
comp=Z,3µm,20.0s
**INK Inuvik 46.18 348** P **P 04 18 08.5 +0.4**
comp=Z,3.3nm,0.9s,baz=152,slow=6.6,SNR=16
INK LR LR 04 37 30.6
comp=Z,13µm,18.3s,baz=146,slow=36
**INK Inuvik 46.18 348** *e*P **P 04 18 08.3 +0.2**
**INK Inuvik 46.18 348** *e*P **P 04 18 08.2 +0.2**
**SUA Susitna One 46.38 334** *e*P **P 04 18 13.0 +3.0**
comp=Z,76nm,0.9s
SUA LR LR
comp=Z,3µm,20.0s
**RSO Redoubt South 46.69 332** *e*P **P 04 18 12.4 -0.1**
**HDA Harding Lake 46.76 339** PFAKE 04 18 20.0 +7.2
HDA LR LR
comp=Z,5µm,19.0s
**SPU Mount Spurr 46.77 333** *e*P **P 04 18 12.9 0.0**
**RND Reindeer 46.79 337** *e*P **P 04 18 13.1 0.0**
RND pmax pmax
comp=Z,68nm,1.0s
RND MLR MLR
comp=Z,4µm,20.0s
**RND Reindeer 46.79 337** *e*P **P 04 18 13.1 0.0**
comp=Z,68nm,1.0s
RND LR LR
comp=Z,4µm,20.0s
**DRLN Deer Lake 46.93 45** PFAKE 04 18 30.0 +16
DRLN LR LR
comp=Z,16µm,18.0s
**IL1 Eielson Array 46.97 339** *e*P **P 04 18 13.3 -1.1**
**ILAR Eielson Array 46.97 339** P **P 04 18 13.4 -1.0**
comp=Z,7.9nm,0.8s,baz=150,slow=6.5,SNR=52
ILAR LR LR 04 39 55.4
comp=Z,4µm,18.0s,baz=137,slow=39
**ILB Eielson Array 46.97 339** *e*P **P 04 18 13.4 -1.0**
**MCK McKinley 47.02 337** *e*P **P 04 18 14.8 0.0**
MCK pmax pmax
comp=Z,75nm,0.9s
**MCK McKinley 47.02 337** *e*P **P 04 18 14.8 0.0**
comp=Z,75nm,0.9s
MCK LR LR
comp=Z,5µm,21.0s
**WRH Wood River Hil 47.18 338** *e*P **P 04 18 15.2 -0.9**
comp=Z,53nm,0.9s
WRH LR LR
comp=Z,4µm,18.0s
**CCB Clear Creek Bu 47.20 338** *e*P **P 04 18 15.4 -0.7**
comp=Z,28nm,0.8s
CCB LR LR
comp=Z,4µm,18.0s
**TRF Thorofare Moun 47.34 336** *e*P **P 04 18 17.2 -0.3**
comp=Z,222nm,1.0s
TRF LR LR
comp=Z,4µm,18.0s
**COLA College 47.36 339** *i* P **P 04 18 17.7 +0.3**
COLA pmax pmax
comp=Z,46nm,1.1s
**COLA College 47.36 339** *e*P **P 04 18 16.0 -1.4**
comp=Z,40nm,1.0s
COLA LR LR
comp=Z,6µm,19.0s
**BWN Browne 47.47 337** *e*P **P 04 18 17.9 -0.4**
comp=Z,377nm,1.2s
BWN LR LR
comp=Z,5µm,18.0s
**MDM Murphy Dome 47.53 339** PFAKE 04 18 30.0 +11
MDM LR LR
comp=Z,6µm,20.0s
**FYU Fort Yukon 47.67 341** *e*P **P 04 18 18.6 -1.1**
comp=Z,117nm,1.2s
FYU LR LR
comp=Z,5µm,18.0s
**PPLA Purkeypile 47.74 335** *e*P **P 04 18 19.5 -1.1**
comp=Z,278nm,1.1s
PPLA LR LR
comp=Z,3µm,18.0s
**BPAW Bear Paw Mtn. 47.97 337** PFAKE 04 18 30.0 +7.8
BPAW LR LR
comp=Z,4µm,19.0s
**CAST Castle Rocks 47.99 336** PFAKE 04 18 30.0 +7.6
CAST LR LR
comp=Z,3µm,19.0s
**BBGH Gun Hill 48.04 94** PFAKE 04 18 30.0 +6.6
BBGH LR LR
comp=Z,10µm,22.0s
**NNA Nana 48.11 135** P **P 04 18 25.6 +1.7**
comp=Z,18nm,1.0s,baz=270,slow=7.1
NNA LR LR 04 36 39.7
comp=Z,2µm,20.5s,baz=321,slow=34
**NNA Nana 48.11 135** PFAKE 04 18 30.0 +6.1
NNA LR LR
comp=Z,2µm,18.0s
**SVW2 Sparrevohn 48.21 332** *e*P **P 04 18 23.0 -1.1**
comp=Z,56nm,0.9s
SVW2 LR LR
comp=Z,3µm,18.0s
**SDPT Sand Point 48.36 323** *e*P **P 04 18 24.0 -1.3**
comp=Z,233nm,1.4s
**MLY Manley 48.42 338** *e*P **P 04 18 24.5 -1.3**
comp=Z,86nm,1.1s
MLY LR LR
comp=Z,4µm,18.0s
**TTA Tatalina 49.26 334** *e*P **P 04 18 31.5 -0.7**
**TTA Tatalina 49.26 334** *e*P **P 04 18 31.5 -0.7**
comp=Z,90nm,1.2s
**COLD Coldfoot 49.58 340** *e*P **P 04 18 34.0 -0.5**
comp=Z,40nm,1.0s
COLD LR LR
comp=Z,6µm,18.0s
**FALS False Pass 49.84 322** PFAKE 04 18 50.0 +13
FALS LR LR
comp=Z,3µm,21.0s
**RES Resolute Bay 50.70 5** P P 04 18 46.7 +3.9
comp=Z,12nm,1.0s,baz=200,slow=11,SNR=5.2
**RES Resolute Bay 50.70 5** *e*P P 04 18 48.2 +5.4
**UNV Unalaska Valle 51.38 320** PFAKE 04 19 00.0 +12
UNV LR LR
comp=Z,3µm,19.0s
**XMAS Kiritimati 51.71 252** PFAKE 04 19 00.0 +8.7

XMAS LR LR
comp=Z,12µm,19.0s
**NIKH Nikolski High 52.62 319** PFAKE 04 19 10.0 +12
NIKH LR LR
comp=Z,2µm,20.0s
**RKT Rikitea 53.65 210** *e*S **S** **04 26 40.7 +1.4**
RKT LQ LQ 04 32 22.6
comp=Z,3µm,29.5s
RKT LR LR 04 34 35.5
comp=Z,4µm,28.8s
**PTGA Pitinga 53.84 110** *e*P **P** **04 19 07.0 -0.1**
PTGA LR LR
comp=Z,94nm,1.3s
**TNA Tin City 55.07 334** PFAKE 04 19 30.0 +15
TNA LR LR
comp=Z,3µm,20.0s
**SFJD Kangerlussuaq 55.43 24** *i* P P 04 19 23.1 +5.3
SFJD pmax pmax
comp=Z,2µm,21.0s
SFJD MLR MLR
comp=Z,240nm,1.6s
**SFJD Kangerlussuaq 55.43 24** *i* P P 04 19 23.1 +5.3
comp=Z,240nm,1.6s
**SFJD Kangerlussuaq 55.43 24** PFAKE 04 19 30.0 +12
SFJD LR LR
comp=Z,9µm,17.0s
**ATKA Atka Island 55.78 318** PFAKE 04 19 30.0 +9.4
ATKA LR LR
comp=Z,7µm,18.0s
**SAML Samuel 55.84 121** *e*P **P** **04 19 19.3 -2.2**
comp=Z,3µm,19.0s
SAML LR LR
comp=Z,38nm,1.1s
**GAMB Gambell 56.15 332** PFAKE 04 19 40.0 +17
GAMB LR LR
comp=Z,1µm,18.0s
**JOHN Johnston Islan 56.69 274** PFAKE 04 19 40.0 +12
JOHN LR LR
comp=Z,3µm,20.0s
**KULLO Kullorsuaq 56.70 15**⇑ *i*P P 04 19 31.5 +4.7
comp=Z,7µm,20.0s
**LPAZ La Paz 57.01 131** P **P** **04 19 31.6 +1.1**
comp=Z,123nm,1.2s
LPAZ LR LR 04 41 41.4
comp=Z,1.8nm,0.6s,baz=324,slow=7.3,SNR=12
**LPAZ La Paz 57.01 131** *e*P **P** **04 19 30.8 +0.3**
comp=Z,3µm,20.1s,baz=328,slow=34
LPAZ pmax pmax
comp=Z,13nm,0.9s
**LPAZ La Paz 57.01 131** *e*P **P** **04 19 30.8 +0.3**
comp=Z,13nm,0.9s
**PPT Papeete 57.54 227** LR LR 04 38 05.0
comp=Z,2µm,18.7s,baz=38,slow=30
**PPT2 Papeete2 57.56 227** *e*S **S** **04 27 34.6 +2.8**
comp=Z,3µm,27.0s
PPT2 *e*LQ LQ 04 33 59.9
comp=Z,3µm,22.0s
PPT2 *e*LR LR 04 36 21.2
comp=Z,7µm,26.8s,baz=30
**ALE Alert 60.52 6** P P 04 19 57.2 +3.8
comp=Z,190nm,1.1s,SNR=7.8
**SUMG Summit 60.96 19** *e*P **P** **04 19 55.7 -1.3**
SUMG pmax pmax
comp=Z,101nm,1.1s
SUMG MLR MLR
comp=Z,7µm,19.0s
**SUMG Summit 60.96 19** *i* P P 04 20 02.5 +5.5
comp=Z,142nm,1.3s
**SUMG Summit 60.96 19** *e*P **P** **04 19 55.7 -1.3**
comp=Z,101nm,1.1s
SUMG LR LR
comp=Z,7µm,19.0s
**LVC Limon Verde 61.04 137** P **P** **04 20 00.4 +2.4**
baz=326,slow=5.8
**LVC Limon Verde 61.04 137** *e*P **P** **04 19 59.4 +1.3**
comp=Z,120nm,2.0s
**TBI Tubuai 61.66 223** *e*S **S** **04 28 26.0 +1.5**
comp=Z,2µm,28.5s
TBI *e*LQ LQ 04 35 42.7
comp=Z,5µm,36.8s
TBI *e*LR LR 04 38 08.5
comp=Z,4µm,28.2s,baz=31
**BILL Bilibino 65.44 336** *i* P **P** **04 20 25.4 -0.9**
BILL *e*S **S** **04 29 14.5 +4.0**
BILL pmax pmax
comp=Z,53nm,0.8s
BILL MLR MLR
comp=Z,3µm,17.0s
**BILL Bilibino 65.44 336** PFAKE 04 20 40.0 +14
BILL LR LR
comp=Z,3µm,18.0s
**DAG Danmarks Havn 66.36 15** *i* P P 04 20 37.5 +5.4
DAG pmax pmax
comp=Z,83nm,1.0s
**DAG Danmarks Havn 66.36 15** *i* P P 04 20 37.5 +5.4
comp=Z,83nm,1.0s
**RAR Rarotonga 67.06 232** LR LR 04 41 44.1
comp=Z,2µm,20.6s,baz=45,slow=29
**RAR Rarotonga 67.06 232** PFAKE 04 20 50.0 +13
RAR LR LR
comp=Z,3µm,20.0s
**BORG Borgarnes 67.12 28** PFAKE 04 20 50.0 +13
BORG LR LR
comp=Z,8µm,18.0s
**CFAA Coronel Fontan 68.20 143** P **P** **04 20 46.2 +1.8**
baz=306,slow=6.3
**CPUP Villa Florida 71.17 132** P **P** **04 21 03.8 +1.0**
comp=Z,10nm,0.9s,baz=312,slow=7.1,SNR=14
CPUP LR LR 04 53 19.1
comp=Z,892nm,18.4s,baz=338,slow=37
**KBS Kingsbay 71.63 10** PFAKE 04 21 20.0 +15
KBS LR LR
comp=Z,9µm,19.0s
**BDFB Brasilia 71.77 117** P **P** **04 21 08.4 +1.7**
comp=Z,17nm,1.0s,baz=270,slow=10,SNR=14
BDFB LR LR 04 55 22.2
comp=Z,2µm,19.3s,baz=298,slow=38
**BDFB Brasilia 71.77 117** PFAKE 04 21 20.0 +13
BDFB LR LR
comp=Z,6µm,20.0s
**PET Petropavlovsk 72.03 321** *e*P P 04 21 13.0 +5.4
PET *e*PPP PPP 04 25 30.4
PET *e*S **S** **04 30 30.2 +1.0**
PET *e*SS **SS** **04 35 07.5 +2.0**
PET pmax pmax
comp=Z,100nm,15.6s
**AFI Afiamalu 72.10 245** LR LR 04 45 33.0
comp=Z,2µm,19.5s,baz=56,slow=30
**AFI Afiamalu 72.10 245** PFAKE 04 21 20.0 +11
AFI LR LR
comp=Z,3µm,20.0s
**SEY Seymchan 72.15 332** *e*P **P** **04 21 10.4 +2.2**
**PEA2 Petropavlovsk- 72.55 321** *e*P **P** **04 21 10.7 -0.1**
**PETK Petropavlovsk- 72.56 321** P **P** **04 21 10.7 -0.1**
comp=Z,8.3nm,0.8s,baz=120,slow=5.2,SNR=3.2
**MA2 Magadan 74.04 329** *i* P **P** **04 21 21.8 +2.4**
**PLCA Paso Flores 74.23 151** *e*P **P** **04 21 19.5 -1.2**
PLCA pmax pmax
comp=Z,266nm,2.5s
**PLCA Paso Flores 74.23 151** *e*P **P** **04 21 19.5 -1.2**
comp=Z,266nm,2.5s
**TRQA Tornquist 76.42 143** *e*P **P** **04 21 33.0 -0.3**
comp=Z,45nm,1.6s
**WAKE Wake Island 77.15 285** PFAKE 04 21 50.0 +12
WAKE LR LR
comp=Z,4µm,21.0s
**RCBR Riachuelo 77.31 102** PFAKE 04 21 50.0 +11
RCBR LR LR
comp=Z,2µm,22.0s
**DSB Dublin 77.88 37** PFAKE 04 21 50.0 +8.6
DSB LR LR
comp=Z,7µm,18.0s
**TARA Tarawa 78.48 266** PFAKE 04 22 00.0 +15
TARA LR LR
comp=Z,5µm,20.0s
**PMOZ Porto Moniz, M 78.61 59** *e*SKS S 04 32 01.0 +18
**PMOZ Porto Moniz, M 78.61 59** *e*LR LR 04 47 02.1
comp=Z,3µm,18.0s
**ESK Eskdalemuir 78.65 34** PFAKE 04 22 00.0 +14
ESK LR LR
comp=Z,5µm,19.0s
**ARA0 ARCESS Array S 80.65 15** *e*P **P** **04 21 55.5 -0.8**
**ARCES ARCESS Array B 80.65 15** P **P** **04 21 55.2 -1.1**
comp=Z,8.2nm,0.9s,baz=325,slow=3.4,SNR=17
ARCES LR LR 05 00 46.9
comp=Z,4µm,18.3s,baz=332,slow=38

**CWF Charnwood Fore 80.84 36** PFAKE 04 22 10.0 +12
CWF LR LR
comp=Z,6µm,18.0s
**KUR Kuril'sk 81.49 316** *d i*P **P** **04 22 02.3 +1.2**
KUR *i* 04 22 06.0
KUR *i* S **S** **04 32 15.6 +2.8**
KUR pmax pmax
comp=Z,679nm,4.0s
**PGAV Gavieira, Arco 81.50 48** *e*SKS S 04 32 25.0 +12
**PGAV Gavieira, Arco 81.50 48** *e*LQ LQ 04 43 20.6
PGAV *e*LR LR 04 49 13.4
comp=Z,5µm,22.0s
**YAK Yakutsk 81.80 336** *d i*P P 04 22 07.9 +5.4
YAK *e* 04 22 13.7
YAK *e* 04 25 18.7
YAK *e*S **S** **04 32 19.0 +3.6**
YAK pmax pmax
comp=Z,157nm,0.9s
YAK pmax pmax
comp=N,13nm,0.9s
YAK pmax pmax
comp=E,32nm,1.0s
YAK pmax pmax
comp=Z,88nm,6.2s
YAK pmax pmax
comp=E,24nm,3.7s
YAK pmax pmax
comp=N,15nm,4.2s
YAK smax smax
comp=N,601nm,14.1s
YAK smax smax
comp=E,198nm,9.5s
**YAK Yakutsk 81.80 336** PFAKE 04 22 10.0 +7.5
YAK LR LR
comp=Z,2µm,19.0s
**NBO02 NORSAR Array S 81.94 25** *e*P **P** **04 22 03.2 -0.1**
**POLO Lamas de Olo 82.08 48** *e*P **P** **04 22 03.8 -0.7**
comp=Z,45nm,1.5s
**PMAFR Mafra 82.08 51** *e*P **P** **04 22 06.7 +2.2**
comp=Z,122nm,2.0s
**NB2 NORSAR Subarra 82.09 25** P **P** **04 22 04.7 +0.6**
comp=Z,199nm,1.7s,baz=313,slow=5.6
**NB2 NORSAR Subarra 82.09 25** P **P** **04 22 04.7 +0.6**
baz=313,slow=5.6
**NB200 NORSAR Array S 82.09 25** *e*P **P** **04 22 04.6 +0.5**
**NOA NORSAR Array B 82.09 25** P **P** **04 22 04.6 +0.5**
comp=Z,3.3nm,0.9s,baz=309,slow=5.1,SNR=4.6
NOA LR LR 04 57 23.8
comp=Z,3µm,21.4s,baz=310,slow=35
**PCAS Casmilo, Conde 82.16 50** *e*P **P** **04 22 05.9 +1.0**
comp=Z,90nm,1.5s
**PVRL Vila Real 82.17 48** *e*P **P** **04 22 04.5 -0.5**
comp=Z,89nm,1.4s
**KONO Kongsberg 82.28 27** *e*P **P** **04 22 04.7 -0.4**
KONO pmax pmax
comp=Z,157nm,1.1s
KONO MLR MLR
comp=Z,6µm,22.0s
**KONO Kongsberg 82.28 27** *e*P **P** **04 22 04.7 -0.4**
comp=Z,157nm,1.1s
KONO LR LR
comp=Z,6µm,22.0s
**PVIS Viseu 82.29 49** *e*P **P** **04 22 05.6 0.0**
comp=Z,77nm,1.5s
**MSVF Nonsavu 82.47 247** PFAKE 04 22 20.0 +13
MSVF LR LR
comp=Z,4µm,21.0s
**PACT Alcochete 82.48 51** *e*P **P** **04 22 08.9 +2.4**
comp=Z,117nm,1.3s
**PBRG Braganca 82.60 47** *e*P **P** **04 22 07.3 +0.1**
comp=Z,53nm,1.8s
**MTE Manteigas 82.67 49** *e*P **P** **04 22 06.9 -0.7**
comp=Z,92nm,1.0s
**MTE Manteigas 82.67 49** *e*SKS S 04 32 35.9 +10
**MTE Manteigas 82.67 49** *e*LQ LQ 04 44 16.0
MTE *e*LR LR 04 49 26.3
comp=Z,6µm,20.0s
**MTE Manteigas 82.67 49** *e*P **P** **04 22 06.4 -1.2**
comp=Z,75nm,0.9s
MTE LR LR
comp=Z,8µm,22.0s
**MVO Moncorvo 82.69 48** *e*P **P** **04 22 06.7 -1.0**
comp=Z,118nm,1.6s
**MVO Moncorvo 82.69 48** *e*SKS S 04 32 36.9 +11
**MVO Moncorvo 82.69 48** *e*LQ LQ 04 44 16.5
MVO *e*LR LR 04 49 34.9
comp=Z,4µm,18.0s
**PCBR Castelo Branco 82.96 49** *e*P **P** **04 22 08.2 -0.8**
comp=Z,60nm,1.6s
**PNCL Nicolau / Gran 82.98 51** *e*P **P** **04 22 09.4 +0.3**
comp=Z,71nm,1.5s
**PTEO Sao Teotonio 83.08 52** *e*P **P** **04 22 09.6 -0.1**
comp=Z,127nm,1.6s
**EVO Evora 83.16 51** *e*P **P** **04 22 09.8 -0.3**
comp=Z,86nm,1.9s
**PFVI Vila Bisbo 83.19 52** PFAKE 04 22 20.0 +10
PFVI LR LR
comp=Z,6µm,20.0s
**PMRV Marv??o 83.20 50** *e*P **P** **04 22 11.1 +0.8**
comp=Z,109nm,1.8s
**PMRV Marv??o 83.20 50** *e*SKS **S** **04 32 35.3 +4.6**
**PMRV Marv??o 83.20 50** *e*LQ LQ 04 44 23.9
PMRV *e*LR LR 04 49 03.4
comp=Z,6µm,20.0s
**MORF Marmelete 83.24 52** *e*P **P** **04 22 10.6 0.0**
MORF AMb AMB 04 22 20.7
comp=Z,60nm,1.8s
**MORF Marmelete 83.24 52** *e*P **P** **04 22 10.2 -0.4**
comp=Z,61nm,1.6s
**MORF Marmelete 83.24 52** *e*P **P** **04 22 10.6 0.0**
MORF pmax pmax
comp=Z,60nm,1.8s
**YUK Yuzh-Kuril'sk 83.31 315** *c i*P **P** **04 22 12.2 +1.5**
YUK *i* 04 22 16.2
YUK *i* S **S** **04 32 34.2 +2.7**
**MESJ Messejana 83.31 52** *e*P **P** **04 22 11.0 +0.1**
MESJ AMb AMB 04 22 21.6
comp=Z,67nm,1.6s
**MESJ Messejana 83.31 52** *e*P **P** **04 22 10.8 -0.1**
comp=Z,69nm,1.9s
**MESJ Messejana 83.31 52** *e*P **P** **04 22 11.0 +0.1**
MESJ pmax pmax
comp=Z,67nm,1.6s
**PBEJ Beja 83.48 51** *e*P **P** **04 22 12.6 +0.8**
comp=Z,55nm,1.8s
**PCVE Castro Verde 83.53 52** *e*P **P** **04 22 12.0 0.0**
comp=Z,113nm,1.9s
**PBDV Barranco-do-Ve 83.78 52** *e*P **P** **04 22 13.7 +0.4**
comp=Z,132nm,1.8s
**YSS Yuzh-Sakhalins 83.83 319** *e*P **P** **04 22 15.7 +2.4**
YSS *e* 04 22 19.4
YSS *e**SP **sP** **04 22 22.0 +4.2**
YSS *e* 04 32 36.0
YSS *e*S **SKKSac** **04 32 40.0 -1.3**
YSS *e*PS **PnS** **04 33 28.0 -0.6**
YSS *e*SS SS 04 38 12.0 +8.8
YSS MLR MLR
comp=Z,1µm,20.0s
**PVAQ Vaqueiros 83.86 52** *e*P **P** **04 22 14.2 +0.5**
comp=Z,104nm,1.7s
**PVAQ Vaqueiros 83.86 52** *e*SKS **S** **04 32 38.3 +0.9**
**PVAQ Vaqueiros 83.86 52** *e*LQ LQ 04 44 37.8
PVAQ *e*LR LR 04 52 18.9
comp=Z,6µm,18.0s
**LVZ Lovozero 83.97 13** *i* P **P** **04 22 14.8 +1.1**
LVZ pmax pmax
comp=Z,177nm,1.7s
**LVZ Lovozero 83.97 13** PFAKE 04 22 20.0 +6.3
LVZ LR LR
comp=Z,4µm,21.0s
**APA Apatity 83.98 14**⇓ *i*P P 04 22 20.6 +6.9
APA *i* 04 25 26.0
APA pmax pmax
comp=Z,184nm,1.6s
**MUD Monsted U'grnd 84.00 29** *e*P P 04 22 17.1 +3.1
MUD pmax pmax
comp=Z,45nm,1.0s
**MUD Monsted U'grnd 84.00 29** *i* P P 04 22 17.1 +3.1
comp=Z,45nm,1.0s
**PBAR Barrancos 84.00 51** *e*P **P** **04 22 14.5 +0.1**
comp=Z,174nm,1.8s
**PAB San Pablo 85.25 49** *e*P **P** **04 22 19.6 -1.2**
PAB pmax pmax
comp=Z,276nm,2.0s
PAB MLR MLR
comp=Z,5µm,21.0s

**PAB San Pablo 85.25 49** *e*P **P** **04 22 19.6 -1.2**
comp=Z,276nm,2.0s
PAB LR LR
comp=Z,5µm,21.0s
**ASAJ Asahikawa 85.33 317** PFAKE 04 22 30.0 +9.0
ASAJ LR LR
comp=Z,1µm,19.0s
**DOU Dourbes 85.37 36** P P 04 22 27.9 +6.8
**ESDC Sonseca Array 85.45 48** P **P** **04 22 21.6 -0.2**
comp=Z,1.8nm,0.7s,baz=308,slow=4.5,SNR=15
**ES19 SONSECA Array 85.48 48** *e*P **P** **04 22 20.7 -1.2**
**BCLA Clavier 85.57 36** P P 04 22 30.0 +8.0
**HGN Heimansgroeve 85.71 35** *e*P P 04 22 29.8 +7.1
comp=Z,26nm,1.0s
**MEM Membach 85.84 35** P P 04 22 29.2 +5.9
**ERM Erimo 86.01 315** *ce*P **P** **04 22 24.2 -0.2**
ERM pmax pmax
comp=Z,69nm,1.2s
**ERM Erimo 86.01 315** PFAKE 04 22 40.0 +16
ERM LR LR
comp=Z,1µm,19.0s
**RTC Rabat Centre 86.01 54** PFAKE 04 22 40.0 +15
RTC LR LR
comp=Z,20µm,22.0s
**WLF Walferdange 86.45 36** P P 04 22 34.2 +7.7
**WLF Walferdange 86.45 36** PFAKE 04 22 40.0 +14
WLF LR LR
comp=Z,7µm,20.0s
**NRDL Niedersach Rie 86.81 32** *e*P P 04 22 34.1 +6.0
comp=Z,33nm,1.0s,baz=311,slow=4.8
**FIA0 FINESS Array S 86.99 20** *e*P **P** **04 22 30.2 +1.4**
**FIA0 FINESS Array S 86.99 20** *e*P **P** **04 22 30.2 +1.4**
**FINES FINESS Array B 86.99 20** P **P** **04 22 30.2 +1.4**
comp=Z,18nm,0.9s,baz=22,slow=2.1,SNR=10
FINES LR LR 04 59 35.6
comp=Z,4µm,18.9s,baz=304,slow=34
**FINES FINESS Array B 86.99 20** *i* P **P** **04 22 31.2 +2.4**
FINES pmax pmax
comp=Z,28nm,0.7s
**RGN Rugen 87.03 29** PFAKE 04 22 40.0 +11
RGN LR LR
comp=Z,4µm,22.0s
**ASSE Asse, Remlinge 87.31 32** *e*P P 04 22 36.6 +6.1
comp=Z,40nm,1.2s,baz=311,slow=4.8
**GTTG Gvttingen 87.32 33** *e*P P 04 22 36.4 +5.8
comp=Z,114nm,2.1s,baz=311,slow=4.8
**TNS Taunus Mts 87.34 35** *e*P P 04 22 36.7 +5.9
comp=Z,103nm,2.2s,baz=311,slow=4.8
**CLZ Clausthal 87.34 33** *e*P P 04 22 36.9 +6.1
comp=Z,50nm,1.3s,baz=311,slow=4.8
**HABR Khabarovsk 87.42 323** *e*P **P** **04 22 30.4 -0.8**
HABR *e* 04 22 32.2
HABR *e**SP **sP** **04 22 35.1 -0.6**
HABR *e*PPP PPP 04 27 49.1
HABR S **SKSac** **04 32 57.1 -1.9**
HABR *e* 04 33 17.4
HABR *e*SS **SS** **04 38 57.3 +1.5**
HABR *e*SSS SSS 04 42 29.5
HABR pmax pmax
comp=Z,14nm,1.0s
HABR pmax pmax
comp=N,16nm,1.0s
HABR pmax pmax
comp=E,30nm,1.0s
HABR pmax pmax
comp=Z,15nm,1.0s
HABR MLR MLR
comp=Z,1µm,21.0s
**SSB Saint Sauveur 87.99 40** PFAKE 04 22 40.0 +5.9
SSB LR LR
comp=Z,5µm,19.0s
**BFO Black Forest 88.39 36** *e*L L 05 00 17.5
comp=Z,5µm,19.4s
**BFO Black Forest 88.39 36** PFAKE 04 22 50.0 +14
BFO LR LR
comp=Z,6µm,18.0s
**NEUB Neuenburg 88.42 33** *e*P P 04 22 41.6 +5.7
comp=Z,188nm,2.2s,baz=311,slow=4.8
**STU Stuttgart 88.59 36** PFAKE 04 22 50.0 +13
STU LR LR
comp=Z,5µm,20.0s
**MOX Moxa 88.69 33** *e*P P 04 22 42.8 +5.6
comp=Z,66nm,2.2s,baz=311,slow=4.8
MOX *e*L L 05 01 56.7
comp=Z,4µm,20.8s
**KLR Kul'dur 88.74 325** *e*P **P** **04 22 37.3 -0.1**
**CLL Collm 88.95 32** *e*P P 04 22 42.0 +3.6
CLL pmax pmax
comp=Z,78nm,2.4s
CLL MLR MLR
comp=Z,5µm,18.1s
**CLL Collm 88.95 32** *e*L L 05 01 39.4
comp=Z,5µm,20.0s
**CLL Collm 88.95 32** *e*(P) P 04 22 42.0 +3.6
comp=Z,78nm,2.4s
CLL *e* 04 23 07.0
CLL *e*S S 04 33 35.0 +8.5
CLL *e*PS **PnS** **04 34 26.0 -4.1**
CLL *e*SS **SS** **04 39 17.0 -1.0**
CLL *e*SSS SSS 04 43 00.0
CLL *e*SSSS 04 46 06.0
CLL LmH 04 59 00.0
comp=N,4µm,20.8s
CLL LmH 04 59 00.0
comp=E,2µm,20.3s
CLL LmV 05 04 00.0
comp=Z,5µm,18.1s
**CLL Collm 88.95 32** PFAKE 04 22 50.0 +12
CLL LR LR
comp=Z,6µm,19.0s
**PLN Plauen 89.06 33** *e*P P 04 22 44.1 +5.1
comp=Z,127nm,2.7s,baz=311,slow=4.8
**GRF Grafenberg Arr 89.08 34** *e*P P 04 22 45.3 +6.2
comp=Z,25nm,1.0s,baz=311,slow=4.8
GRF *e*L L 05 03 14.1
comp=Z,7µm,19.2s
**GRFO Grafenberg 89.08 34** PFAKE 04 22 50.0 +11
GRFO LR LR
comp=Z,7µm,18.0s
**WERD Werda 89.16 33** *e*P P 04 22 44.8 +5.4
baz=311,slow=4.8
**GUNZ Gunzen 89.22 33** *e*P P 04 22 45.3 +5.5
comp=Z,23nm,1.4s,baz=311,slow=4.8
**MANZ Manzenberg 89.35 34** *e*P P 04 22 45.9 +5.5
comp=Z,11nm,1.0s,baz=311,slow=4.8
**NKC Novy Kostel 89.36 33** *e*P **P** **04 22 39.2 -1.2**
NKC MLR MLR
comp=Z,4µm,17.4s
**NKC Novy Kostel 89.36 33** *e*P **P** **04 22 39.2 -1.2**
NKC AMS AMS 05 05 00.0
comp=Z,4µm,17.4s
**BNI Bardonecchia 89.37 40** PFAKE 04 22 50.0 +9.3
BNI LR LR
comp=Z,6µm,18.0s
**VSU Vasula 89.50 21** *ce*P **P** **04 22 41.0 +0.2**
VSU pmax pmax
comp=Z,127nm,1.7s
**ROTZ Rotzenmuhle 89.54 34** *e*P P 04 22 46.8 +5.6
baz=311,slow=4.8
**BRG Berggiesshubel 89.69 32** *e*P P 04 22 47.0 +5.2
comp=Z,23nm,1.7s
BRG *e* 04 28 37.8
comp=Z,18nm,1.5s
BRG S **S** **04 33 37.0 +3.6**
BRG SS **SS** **04 39 32.0 +3.4**
**BRG Berggiesshubel 89.69 32** *e*P P 04 22 47.0 +5.1
BRG S **S** **04 33 37.0 +3.6**
BRG SS **SS** **04 39 32.0 +3.4**
BRG pmax pmax
comp=Z,23nm,1.7s
BRG MLR MLR
comp=N,4µm,19.1s
BRG MLR MLR
comp=E,2µm,15.3s
BRG MLR MLR
comp=Z,4µm,15.9s
**BRG Berggiesshubel 89.69 32** *e*P P 04 22 47.2 +5.3
comp=Z,62nm,2.2s,baz=311,slow=4.8
**TUE Stuetta 90.05 37** PFAKE 04 22 50.0 +6.1
TUE LR LR
comp=Z,10µm,18.0s
**FUR Furstenfeldbru 90.06 35** *e*L L 05 08 09.9
comp=Z,4µm,19.3s
**PVCC Panska Ves 90.22 32** AMS AMS 05 02 00.0
comp=Z,5µm,17.0s
**BOD Bodaibo 90.34 339** *e*P **P** **04 22 41.8 -3.0**

BOD pmax pmax
comp=Z,20nm,1.5s
**PRA Prague 90.45 32** AMS AMS 05 01 50.0
comp=Z,6µm,19.5s
**FUORN Ofenpass-Fuorn 90.47 37** PFAKE 04 23 00.0 +14
FUORN LR LR
comp=Z,6µm,18.0s
**FETA Feichten 90.47 36** ⇓*i*PcP **P 04 22 44.3 -1.5**
comp=Z,5.8nm,1.1s
**PRU Pruhonice 90.56 32** *e*P P 04 22 50.9 +5.0
PRU MLR MLR
comp=Z,6µm,19.5s
**PRU Pruhonice 90.56 32** *e*P P 04 22 50.9 +5.0
PRU AMS AMS 05 01 50.0
comp=Z,6µm,19.5s
**KHC Kasperske Hory 90.63 34** *e*P P 04 22 51.7 +5.3
KHC MLR MLR
comp=Z,6µm,17.3s
**KHC Kasperske Hory 90.63 34** *e*P P 04 22 51.7 +5.3
KHC *e*SKS **SKSac 04 33 23.9 +5.7**
KHC AMS AMS 05 03 50.0
comp=Z,6µm,17.3s
**KHC Kasperske Hory 90.63 34** PFAKE 04 23 00.0 +14
KHC LR LR
comp=Z,2µm,18.0s
**GOPC GO Pecny, Ondr 90.72 32** *e*P P 04 22 51.6 +4.8
GOPC MLR MLR
comp=Z,6µm,19.6s
**GOPC GO Pecny, Ondr 90.72 32** *e*P P 04 22 51.6 +4.8
GOPC AMS AMS 05 02 00.0
comp=Z,6µm,19.6s
**GEC2 GERESS Array S 90.88 34** *e*P **P 04 22 46.7 -0.9**
**GEC2 GERESS Array S 90.88 34** *e*P P 04 22 52.7 +5.1
comp=Z,49nm,2.3s,baz=311,slow=4.8
GEC2 *e*L L 05 04 18.0
comp=Z,6µm,19.2s
**GEC2 GERESS Array S 90.88 34** *e*P **P 04 22 46.7 -0.9**
**GERES GERESS Array B 90.88 34** P **P 04 22 46.7 -0.9**
comp=Z,0.2nm,0.2s,baz=357,slow=3.9,SNR=3.1
GERES LR LR 05 04 11.0
comp=Z,3µm,19.9s,baz=302,slow=36
**UPC Upice 90.92 31** AMS AMS 05 11 10.0
comp=Z,5µm,17.0s
**KLMR Klimovskoe 91.13 15** *e*P **P 04 22 45.7 -2.6**
KLMR pmax pmax
comp=Z,105nm,1.8s
**DPC Dobruska-Polom 91.17 31** *e*P P 04 22 53.8 +4.9
DPC *e* 04 23 02.8
DPC MLR MLR
comp=Z,5µm,17.0s
**DPC Dobruska-Polom 91.17 31** *e*P P 04 22 53.8 +4.9
DPC *ex* x 04 23 02.8
DPC AMS AMS 05 05 40.0
comp=Z,5µm,17.0s
**TREC Trest 91.47 33** AMS AMS 05 02 20.0
comp=Z,6µm,19.8s
**USRK Ussuriysk Ar. 91.65 321** P **P 04 22 49.9 -1.2**
comp=Z,1.9nm,0.7s,baz=59,slow=5.6,SNR=5.1
**KBA Koelnbreinsper 91.83 35** ⇓*i*PcP **P 04 22 50.5 -1.6**
comp=Z,8.0nm,0.9s
**VLC Villacollemand 92.03 39** PFAKE 04 23 00.0 +7.0
VLC LR LR
comp=Z,3µm,19.0s
**MAJO Matsushiro 92.13 312** *e*P **P 04 22 52.9 -0.7**
MAJO pmax pmax
comp=Z,103nm,0.9s
**MAJO Matsushiro 92.13 312** PFAKE 04 23 00.0 +6.4
MAJO LR LR
comp=Z,2µm,21.0s
**MAT Matsushiro 92.13 312** P **P 04 22 56.2 +2.6**
MAT S **S 04 33 56.8 +0.5**
**MJAR Matsushiro Arr 92.13 312** LR LR 04 59 07.8
comp=Z,1µm,19.7s,baz=85,slow=32
**MORC Moravsky Berou 92.14 31** PFAKE 04 23 00.0 +6.6
MORC LR LR
comp=Z,18µm,19.0s
**OKC Ostrava-Krasne 92.39 31** AMS AMS 05 03 20.0
comp=Z,5µm,17.6s
**MDJ Mudanjiang 92.75 322** P **P 04 22 56.4 +0.2**
MDJ pP **pP 04 22 59.8 +0.3**
MDJ PP **PP 04 26 36.1 -1.4**
MDJ S **S 04 34 00.8 -0.7**
MDJ SS **SS 04 40 17.6 +4.6**
MDJ PMZ
comp=Z,3.0nm,0.6s
MDJ PMZ
comp=Z,150nm,5.4s
MDJ LN
comp=Z,580nm,23.6s
MDJ LE
comp=Z,1µm,22.5s
MDJ LZ
comp=Z,1µm,22.5s
**MDJ Mudanjiang 92.75 322** PFAKE 04 23 10.0 +14
MDJ LR LR
comp=Z,2µm,18.0s
**TRI Trieste 92.93 36** PFAKE 04 23 10.0 +13
TRI LR LR
comp=Z,6µm,18.0s
**SOKA Soboth 92.97 35** ⇓*i*PcP **P 04 22 56.0 -1.3**
comp=Z,7.2nm,0.9s
**MSHR Mys Shultsa 93.11 320** *e*P **P 04 22 57.5 -0.4**
**URZ Urewera 93.14 229** PFAKE 04 23 10.0 +12
URZ LR LR
comp=Z,3µm,22.0s
**VYHS Vyhne 93.64 32** *e*P **P 04 23 02.4 +2.1**
**VYHS Vyhne 93.64 32** *e*P **P 04 23 02.4 +2.1**
**BKZ Black Stump Fm 94.00 229** PFAKE 04 23 10.0 +8.0
BKZ LR LR
comp=Z,2µm,20.0s
**STHS Stebnicka Huta 94.11 30** *e*P **P 04 23 02.4 0.0**
STHS pmax pmax
comp=Z,4.0nm,1.0s
**STHS Stebnicka Huta 94.11 30** *e*P **P 04 23 02.4 0.0**
**CBIJ Chichi jima 94.16 302** PFAKE 04 23 10.0 +6.9
CBIJ LR LR
comp=Z,4µm,22.0s
**DZM Mont Dzumac 94.17 248** *e*SS SS 04 40 35.1 -0.8
comp=Z,706nm,23.3s
DZM *e*LQ LQ 04 49 30.4
comp=Z,2µm,26.6s
DZM *e*LR LR 04 53 31.9
comp=Z,5µm,25.4s
**DZM Mont Dzumac 94.17 248** *e*LR LR 04 22 42.6
comp=Z,210nm,23.8s
**DZM Mont Dzumac 94.17 248** PFAKE 04 23 10.0 +6.8
DZM LR LR
comp=Z,3µm,20.0s
**OUZ Omahuta 94.21 233** PFAKE 04 23 10.0 +7.1
OUZ LR LR
comp=Z,3µm,19.0s
**VSL Villasalto 94.25 43** PFAKE 04 23 10.0 +6.8
VSL LR LR
comp=Z,3µm,21.0s
**PSZ Piszkesteto 94.55 32** PFAKE 04 23 20.0 +15
PSZ LR LR
comp=Z,5µm,21.0s
**HIA Hailar 94.56 330** PFAKE 04 23 20.0 +15
HIA LR LR
comp=Z,2µm,20.0s
**HNR Honiara 94.70 262** PFAKE 04 23 20.0 +14
HNR LR LR
comp=Z,6µm,21.0s
**BFZ Birch Farm 94.89 227** PFAKE 04 23 20.0 +14
BFZ LR LR
comp=Z,3µm,19.0s
**KOLS Kolonicke sedl 94.93 30** *e*P **P 04 23 06.2 0.0**
**KOLS Kolonicke sedl 94.93 30** *e*P **P 04 23 06.2 0.0**
**LVV L'vov 95.05 28** *e*P P 04 23 00.7 -6.0
LVV *e*PPP PPP 04 29 08.6
LVV *e* 04 33 45.5
LVV *e*PS **PS 04 35 41.0 +2.4**
**OBN Obninsk 95.36 19** *i* P **P 04 23 08.6 +0.7**
OBN *i* 04 26 56.3
OBN *i* S **SKSac 04 33 44.0 +0.1**
OBN *i* 04 35 48.5
OBN *i* SS SS 04 40 56.8 +7.5
OBN pmax pmax
comp=Z,15nm,1.2s
OBN MLR MLR
comp=Z,3µm,18.0s
**OBN Obninsk 95.36 19** PFAKE 04 23 20.0 +12
OBN LR LR
comp=Z,4µm,19.0s
**SNZO South Karori 96.21 227** PFAKE 04 23 20.0 +8.1
SNZO LR LR
comp=Z,2µm,21.0s
**KEST Kesra 96.46 46** LR LR 05 06 36.1
comp=Z,4µm,19.1s,baz=259,slow=35
**KIEV Kiev 96.50 25** *e*P **P 04 23 12.8 -0.4**
KIEV pmax pmax
comp=Z,7.0nm,1.5s
**KIEV Kiev 96.50 25** PFAKE 04 23 20.0 +6.8
KIEV LR LR
comp=Z,5µm,18.0s
**AKASG Malin Array Be 96.50 25** P **P 04 23 10.4 -2.8**
comp=Z,0.2nm,0.3s,baz=324,slow=3.9,SNR=4.4
AKASG PP **PP 04 27 01.6 -4.8**
comp=Z,0.8nm,0.7s,baz=322,slow=6.5,SNR=5.5
AKASG LR LR 05 06 60.0
comp=Z,3µm,19.0s,baz=300,slow=36
**AKBB Malin Array Si 96.50 25** *e*P **P 04 23 10.4 -2.8**
AKBB *e* 04 27 01.6
**AKBB Malin Array Si 96.50 25** *e*P **P 04 23 10.4 -2.8**
AKBB *e*PP **PP 04 27 01.6 -4.8**
**BUR04 Bucovina Ar. S 97.22 29** *e*P P 04 23 13.5 -3.3
**CLTB Caltabellotta 97.80 43** PFAKE 04 23 30.0 +10
CLTB LR LR
comp=Z,4µm,20.0s
**CUC Castrococco 97.80 39** PFAKE 04 23 30.0 +11
CUC LR LR
comp=Z,4µm,19.0s
**LPSR Galich'ya Gora 98.23 19** *e*P Pdif 04 23 26.1 +5.1
LPSR pmax pmax
comp=Z,20nm,0.9s
LPSR pmax pmax
comp=N,4.0nm,0.5s
LPSR pmax pmax
comp=E,8.0nm,1.0s
**ARU Arti 98.63 7***d i*P Pdif 04 23 28.0 +5.3
ARU 04 27 32.6
ARU SS SS 04 41 41.0 +5.7
ARU pmax pmax
comp=Z,30nm,1.7s
**ARU Arti 98.63 7** *e*P **P 04 23 20.1 -2.6**
comp=Z,17nm,1.0s
ARU LR LR
comp=Z,5µm,19.0s
**MQZ McQueen's Vall 98.64 226** PFAKE 04 23 30.0 +7.2
MQZ LR LR
comp=Z,2µm,18.0s
**TLY Talaya 98.79 340** *e*P Pdif 04 23 28.8 +5.2
TLY *e* 04 27 25.9
TLY *e*SS SS 04 41 54.6 +17
TLY pmax pmax
comp=Z,15nm,1.7s
TLY MLR MLR
comp=Z,1µm,17.0s
**TLY Talaya 98.79 340** PFAKE 04 23 30.0 +6.4
TLY LR LR
comp=Z,2µm,20.0s
**OXZ Oxford 98.88 226** PFAKE 04 23 30.0 +6.1
OXZ LR LR
comp=Z,2µm,18.0s
**TIP Timpagrande 98.88 40** PFAKE 04 23 30.0 +5.7
TIP LR LR
comp=Z,4µm,19.0s
**INCN Inchon 99.02 318** PFAKE 04 23 40.0 +15
INCN LR LR
comp=Z,1µm,20.0s
**TIR Tirane 99.14 36** PFAKE 04 23 40.0 +15
TIR LR LR
comp=Z,4µm,22.0s
**KIS Kishinev 99.26 28** *e*PS PS 04 36 34.0 +10
KIS *e*SS SS 04 41 04.0 -41
KIS LRM MLR 05 08 44.0
comp=Z,3µm,20.0s
**VSR Storozhevoye 99.52 20** *e*P **Pdif 04 23 26.1 -0.7**
VSR pmax pmax
comp=E,5.0nm,0.5s
VSR pmax pmax
comp=Z,6.0nm,0.5s
VSR pmax pmax
comp=N,20nm,1.2s
**WDD Wield Dalam 99.69 43** PFAKE 04 23 40.0 +12
WDD LR LR
comp=Z,2µm,21.0s
**VORD Divnogorie 99.78 20** *e*P **Pdif 04 23 27.6 -0.3**
VORD pmax pmax
comp=Z,7.0nm,0.4s
VORD pmax pmax
comp=N,30nm,0.6s
VORD pmax pmax
comp=E,20nm,0.6s
**ZAK Zakamensk 100.03 340** *e*P **Pdif 04 23 24.5 -4.8**
ZAK pmax pmax
comp=Z,5.0nm,1.6s
**VRH Novokhopyorsk 100.28 18** *e*P **Pdif 04 23 29.6 -0.6**
VRH pmax pmax
comp=Z,5.0nm,0.4s
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,1.0s
**ZAA1 Zalesovo Array 100.86 352** *e*Pdif **Pdif 04 23 32.1 -0.6**
**ZAA0 Zalesovo Array 100.86 352** *e*Pdif **Pdif 04 23 35.4 +2.7**
**ZALV Zalesovo Beam 100.86 352** P **Pdif 04 23 32.1 -0.6**
comp=E,0.4nm,0.3s,baz=0.0,slow=2.9,SNR=2.2
**ULN Ulaanbaatar 100.89 336** *e*P **Pdif 04 23 33.2 0.0**
ULN pmax pmax
comp=Z,4.0nm,1.1s
**ULN Ulaanbaatar 100.89 336** PFAKE 04 23 40.0 +6.8
ULN LR LR
comp=Z,2µm,20.0s
**TAM Tamanrasset 101.01 59** PFAKE 04 23 40.0 +5.8
TAM LR LR
comp=Z,3µm,20.0s
**TIRR Tirgusor 101.08 30** PFAKE 04 23 40.0 +6.1
TIRR LR LR
comp=Z,5µm,20.0s
**SONA1 Songino Array 101.14 336** *e*Pdif **Pdif 04 23 32.5 -1.7**
**SONA0 Songino Array 101.15 336** *e*Pdif **Pdif 04 23 33.8 -0.5**
**SONM Songino Array 101.15 336** P **Pdif 04 23 33.8 -0.5**
comp=Z,0.6nm,0.7s,baz=20,slow=4.6,SNR=4.1
**HVS Khovu-Aksy 101.96 346** *e*P **Pdif 04 23 37.8 0.0**
HVS pmax pmax
comp=Z,8.0nm,0.9s
**RDO Rodhopi 102.24 33** PFAKE 04 23 50.0 +11
RDO LR LR
comp=Z,19µm,22.0s
**BRVK Borovoye 102.68 0** *e*P **Pdif 04 23 38.0 -2.8**
BRVK pmax pmax
comp=Z,5.0nm,0.9s
**BRVK Borovoye 102.68 0** *e*Pdif **Pdif 04 23 41.2 +0.4**
BRVK LR LR
comp=Z,4µm,19.0s
**TOA0 Torodi Ar. Sit 102.81 69** *e*Pdif **Pdif 04 23 40.7 -1.5**
TOA0 *e*PKKPbc **PKKPbc 04 39 41.9 +2.1**
**TORD Torodi Ar. Bea 102.81 69** P **Pdif 04 23 40.7 -1.5**
comp=Z,1.2nm,1.2s,baz=330,slow=5.0,SNR=3.8
TORD PKKPbc **PKKPbc 04 39 41.9 +2.1**
comp=Z,0.4nm,0.9s,baz=80,slow=3.2,SNR=2.5
**BJI Beijing 103.09 326** P **Pdif 04 23 42.3 -0.6**
BJI PP **PP 04 27 59.1 +2.4**
**BJI Beijing 103.09 326** SS SS 04 42 47.9 +10
**BJT Baijiatuau 103.11 326** PFAKE 04 23 50.0 +7.0
BJT LR LR
comp=Z,2µm,19.0s
**MANU Manus Island 103.13 274** PFAKE 04 23 50.0 +6.4
MANU LR LR
comp=Z,1µm,20.0s
**KURK Kurchatov 104.72 355** PFAKE 04 24 00.0 +10
KURK LR LR
comp=Z,7µm,18.0s
**SANT Santorini 105.75 37** PFAKE 04 28 20.0
SANT LR LR
comp=Z,2µm,20.0s
**ABKAR Akbulak array 105.84 7** *e*Pdif **Pdif 04 23 53.8 -1.2**
**IDI Anoyia 106.23 38** PFAKE 04 28 20.0
IDI LR LR
comp=Z,2µm,20.0s
**PMG Port Moresby 106.27 267** PFAKE 04 28 20.0
PMG LR LR
comp=Z,4µm,20.0s
**ANTO Ankara 106.70 30** PFAKE 04 28 20.0
ANTO LR LR
comp=Z,3µm,20.0s
**KIV Kislovodsk 107.05 21** PFAKE 04 28 20.0
KIV LR LR
comp=Z,3µm,19.0s
**BRTR Keskin Array B 107.19 29** PKKPbc PKKPbc 04 39 26.3 -1.0
comp=Z,0.6nm,0.8s,baz=52,slow=2.4,SNR=3.0
**ISP Isparta 107.26 32** PFAKE 04 28 20.0
ISP LR LR
comp=Z,6µm,20.0s
**MK32 Makanchi Array 108.20 352** *e*PP PP 04 28 38.9 +4.8
MK32 *e*PKKPbc PKKPbc 04 39 30.7 +6.4
**MKAR Makanchi Array 108.20 352** PP PP 04 28 38.9 +4.8
comp=Z,1.4nm,0.9s,baz=356,slow=4.8,SNR=4.6
MKAR PKKP PKKPbc 04 39 30.7 +6.4
comp=Z,1.0nm,0.9s,baz=190,slow=3.8,SNR=5.0
**MAKZ Makanchi 108.23 352** PFAKE 04 28 20.0
MAKZ LR LR
comp=Z,6µm,20.0s
**EIDS Eidsvold 108.44 250** PFAKE 04 28 20.0
EIDS LR LR
comp=Z,2µm,19.0s
**ARMA Armidale 109.56 245** PFAKE 04 28 30.0
ARMA LR LR
comp=Z,3µm,19.0s
**WMQ Urumqi 110.19 347** Pdif **Pdif 04 24 12.0 -2.6**
WMQ PP PP 04 28 54.0 +5.4
WMQ SS SS 04 44 18.0 +3.7
WMQ PPMZ
comp=Z,71nm,10.0s
WMQ LN
comp=Z,2µm,24.0s
WMQ LE
comp=Z,2µm,22.0s
WMQ LZ
comp=Z,2µm,24.0s
**GTA Gaotai 110.83 336** *e*PKP **PKiKP 04 28 18.9 +1.6**
GTA PP **PP 04 28 57.8 +4.3**
GTA SKKS 04 35 51.9
GTA SS **SS 04 44 24.1 +0.9**
GTA PPMZ
comp=Z,240nm,8.8s
GTA LN
comp=Z,870nm,21.9s
GTA LE
comp=Z,1µm,20.9s
GTA LZ
comp=Z,940nm,25.9s
**CSS Prodhromos 110.90 32** PFAKE 04 28 30.0
CSS LR LR
comp=Z,500nm,20.0s
**CTAO Charters Tower 110.93 257** PFAKE 04 28 30.0
CTAO LR LR
comp=Z,2µm,19.0s
**COEN Coen 111.58 264** PFAKE 04 28 30.0
COEN LR LR
comp=Z,3µm,21.0s
**LZH Lanzhou 112.08 332** *e*PKP **PKiKP 04 28 19.3 -0.5**
LZH sPKP 04 28 25.5
LZH *e*PP **PP 04 29 06.5 +3.8**
LZH SKKS 04 35 59.0
LZH *e*SS **SS 04 44 38.0 -2.3**
LZH PPMZ
comp=Z,170nm,7.2s
LZH LN
comp=Z,2µm,18.0s
LZH LE
comp=Z,2µm,18.3s
LZH LZ
comp=Z,3µm,20.1s
**SBA Scott Base 112.62 193** PFAKE 04 28 30.0
SBA LR LR
comp=Z,1µm,18.0s
**TKM2 Tokmak 2 112.69 356** PFAKE 04 28 30.0
TKM2 LR LR
comp=Z,5µm,19.0s
**AAK Ala-Archa 113.03 357** PFAKE 04 28 30.0
AAK LR LR
comp=Z,6µm,18.0s
**EKS2 Erkin-Say 113.03 358** PFAKE 04 28 30.0
EKS2 LR LR
comp=Z,4µm,19.0s
**CAN Canberra 113.04 240** PFAKE 04 28 30.0
CAN LR LR
comp=Z,2µm,22.0s
**KSH Kashi 116.05 356** *e*PKP **PKPdf 04 28 28.1 +0.8**
KSH *e*PP **PP 04 29 33.4 +3.1**
KSH PKS **PKSdf 04 32 03.4 -0.7**
KSH SKKS 04 36 26.9
KSH PPMZ
comp=Z,130nm,6.6s
KSH LN
comp=Z,2µm,17.9s
KSH LE
comp=Z,2µm,15.6s
KSH LZ
comp=Z,2µm,20.0s
**CD2 Chengdu 116.46 329** PKP **PKPdf 04 28 27.0 -1.2**
CD2 sPKP 04 28 33.3
CD2 SKS **SKSdf 04 35 38.8 -2.0**
CD2 SKKS **SKSac 04 36 31.4 -4.9**
CD2 SS **SS 04 45 36.8 -1.2**
CD2 PPMZ
comp=Z,160nm,5.4s
CD2 LN
comp=Z,2µm,12.2s
CD2 LE
comp=Z,2µm,14.2s
CD2 LZ
comp=Z,2µm,15.2s
**VNA1 Neumayer--Stat 116.57 159** P **PKPdf 04 28 27.5 +0.5**
**VNA2 Neumayer--Watz 116.85 159** P **PKPdf 04 28 27.0 -0.6**
baz=317,slow=3.9
**FAKI Fak Fak 117.16 280** PFAKE 04 28 40.0 +10
FAKI LR LR
comp=Z,3µm,22.0s
**DAV Davao City (W) 118.13 293** PFAKE 04 28 40.0 +8.3
DAV LR LR
comp=Z,3µm,22.0s
**GYA Guiyang 118.59 323** *e*Pdif **Pdif 04 24 52.0 -0.3**
GYA PKP **PKPdf 04 28 32.0 -0.5**
GYA PP **PP 04 29 52.4 +3.6**
GYA PKS **PKSdf 04 32 07.8 -1.7**
GYA SKKS 04 36 42.6
GYA SS **SS 04 46 05.3 -0.9**
GYA PPMZ
comp=Z,180nm,8.2s
GYA LN
comp=Z,530nm,21.8s
GYA LE
comp=Z,500nm,20.2s
GYA LZ
comp=Z,520nm,22.6s
**TNTI Ternate 119.80 286** PFAKE 04 28 50.0 +15
TNTI LR LR
comp=Z,3µm,21.0s
**DRV Dumont d'Urvil 120.58 206** SS SS 04 46 47.0 +15
DRV L L 04 59 00.0
DRV R 05 05 00.0
**KBL Kabul 121.17 2** PFAKE 04 28 50.0 +13
KBL LR LR
comp=Z,4µm,21.0s
**WRAB Tennant Creek 121.52 261** PFAKE 04 28 50.0 +12
WRAB LR LR
comp=Z,3µm,19.0s
**WRA Warramunga Arr 121.53 261** PKP **PKPdf 04 28 36.5 -1.5**
comp=Z,1.3nm,0.8s,baz=69,slow=2.3,SNR=6.6
**KMI Kunming 121.74 326** PKP **PKPdf 04 28 39.9 +1.1**
KMI SS SS 04 46 49.0 +2.2
KMI LN
comp=Z,690nm,20.7s
KMI LE
comp=Z,2µm,19.8s
KMI LZ
comp=Z,1µm,23.5s
**MTN Manton Dam 122.13 270** PFAKE 04 28 50.0 +11
MTN LR LR
comp=Z,3µm,22.0s
**QIZ Qiongzhong 122.38 315** PKP **PKPdf 04 28 39.8 0.0**
QIZ PP **PP 04 30 15.4 +0.5**
QIZ SS SS 04 46 55.9 +0.8
QIZ LE
comp=Z,640nm,26.3s
QIZ LZ
comp=Z,1µm,28.0s
**LSA Lhasa 122.61 339** PFAKE 04 28 50.0 +9.4
LSA LR LR
comp=Z,2µm,20.0s
**AS01 Alice Springs 122.89 257** *e*PKPdf **PKPdf 04 28 39.1 -1.5**
**AS12 Alice Springs 122.94 257** *e*PKPpre PKPpre 04 28 34.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AS12 | | | | | *e*PKPdf | **PKPdf** | **04 28 39.5** | **-1.3** |
| AS12 | | | | | *e*PKKPbc | **PKKPbc** | **04 38 34.5** | **+2.4** |
| **ASAR** | **Alice Springs** | **122.94** | **257** | | PKhKP | PKPpre | 04 28 34.1 | |
| | comp=Z,0.7nm,0.8s,baz=72,slow=4.1,SNR=4.1 | | | | | | | |
| ASAR | | | | | PKP | **PKPdf** | **04 28 39.5** | **-1.3** |
| | comp=Z,4.2nm,1.0s,baz=70,slow=2.1,SNR=9.0 | | | | | | | |
| ASAR | | | | | PKKPbc | **PKKPbc** | **04 38 34.5** | **+2.4** |
| | comp=Z,0.5nm,0.8s,baz=250,slow=4.2,SNR=5.3 | | | | | | | |
| **BBOO** | **Buckleboo** | **123.02** | **246** | | PFAKE | | 04 28 50.0 | +9.4 |
| BBOO | | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **LUWI** | **Luwuk** | **124.69** | **287** | | PFAKE | | 04 29 00.0 | +16 |
| LUWI | | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **125.03** | **296** | | PFAKE | | 04 29 00.0 | +15 |
| MYLDM | | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | | |
| **GUN** | **Gumba** | **125.84** | **344** | *e*P | | **PKPdf** | **04 28 45.5** | **-1.2** |
| | comp=Z,33nm,0.8s | | | | | | | |
| **TAPN** | **Taplejung** | **125.87** | **341** | *e*P | | **PKPdf** | **04 28 45.1** | **-1.6** |
| | comp=Z,54nm,1.1s | | | | | | | |
| **GKN** | **Gorkha** | **126.06** | **345** | *e*P | | **PKPdf** | **04 28 44.3** | **-2.6** |
| **KKN** | **Kakani** | **126.10** | **344** | *e*P | | **PKPdf** | **04 28 44.5** | **-2.6** |
| | comp=Z,15nm,0.7s | | | | | | | |
| **RAYN** | **Ar Rayn** | **126.21** | **29** | | PFAKE | | 04 29 00.0 | +13 |
| RAYN | | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | | |
| **PKIN** | **Phulchoki** | **126.28** | **344** | *e*P | | **PKPdf** | **04 28 44.4** | **-3.1** |
| | comp=Z,12nm,0.9s | | | | | | | |
| **PKI** | **Pulchoki** | **126.28** | **344** | *e*P | | **PKPdf** | **04 28 44.9** | **-2.6** |
| **DMN** | **Daman** | **126.32** | **344** | *e*P | | **PKPdf** | **04 28 44.2** | **-3.3** |
| | comp=Z,17nm,1.0s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **126.38** | **299** | | PFAKE | | 04 29 00.0 | +12 |
| KKM | | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | | |
| **ODAN** | **Odare** | **126.42** | **342** | *e*P | | **PKPdf** | **04 28 44.2** | **-3.5** |
| **KOLN** | **Koldanda** | **126.52** | **346** | *e*P | | **PKPdf** | **04 28 43.1** | **-4.7** |
| **RAMN** | **Ramite** | **126.56** | **342** | *e*P | | **PKPdf** | **04 28 43.8** | **-4.2** |
| **SOEI** | **Soe** | **127.21** | **276** | | PFAKE | | 04 29 00.0 | +11 |
| SOEI | | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| **MMRI** | **Maumere** | **128.59** | **279** | | PFAKE | | 04 29 00.0 | +8.2 |
| MMRI | | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | | |
| **UOSS** | **Wadi Hilu** | **128.75** | **17** | *e*PKPdf | | **PKPdf** | **04 28 50.0** | **-1.9** |
| UOSS | | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **128.92** | **325** | | PFAKE | | 04 29 00.0 | +7.7 |
| CHTO | | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **129.22** | **325** | *e*PKPdf | | **PKPdf** | **04 28 52.4** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **129.22** | **325** | PKP | | **PKPdf** | **04 28 52.4** | **-0.5** |
| | comp=Z,3.0nm,0.4s,baz=323,slow=1.4,SNR=4.0 | | | | | | | |
| **KAPI** | **Kappang** | **129.22** | **284** | | PFAKE | | 04 29 00.0 | +7.0 |
| KAPI | | | | | LR | LR | | |
| | comp=Z,700nm,20.0s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **129.24** | **325** | *e*PKPdf | | **PKPdf** | **04 28 53.1** | **+0.2** |
| **CASY** | **Casey** | **131.45** | **200** | | PFAKE | | 04 29 10.0 | +14 |
| CASY | | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | | |
| **SBUM** | **Sibu** | **131.70** | **298** | | PFAKE | | 04 29 10.0 | +12 |
| SBUM | | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | | |
| **DAMY** | **Dhamar** | **133.28** | **36** | | PFAKE | | 04 29 10.0 | +9.0 |
| DAMY | | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | | |
| **KSM** | **Kuching** | **133.81** | **298** | | PFAKE | | 04 29 10.0 | +8.3 |
| KSM | | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | | |
| **FURI** | **Furi** | **134.24** | **47** | | PFAKE | | 04 29 10.0 | +7.1 |
| FURI | | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | | |
| **MAW** | **Mawson** | **136.69** | **176** | | PKP | **PKPdf** | **04 29 06.2** | **+0.8** |
| | comp=Z,4.1nm,0.9s,baz=254,slow=3.9,SNR=8.1 | | | | | | | |
| **MAW** | **Mawson** | **136.69** | **176** | *e*PKIKP | | **PKPdf** | **04 29 03.1** | **-2.3** |
| MAW | | | | | MLR | MLR | | |
| | comp=Z,300nm,20.0s | | | | | | | |
| **MAW** | **Mawson** | **136.69** | **176** | *e*PKPdf | | **PKPdf** | **04 29 03.1** | **-2.3** |
| MAW | | | | | LR | LR | | |
| | comp=Z,300nm,20.0s | | | | | | | |
| **KULM** | **Kulim** | **138.50** | **312** | | PFAKE | | 04 29 20.0 | +10 |
| KULM | | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | | |
| **MYKOM** | **Kota Tinggi** | **138.63** | **305** | | PFAKE | | 04 29 20.0 | +9.3 |
| MYKOM | | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | | |
| **UGM** | **Wanagama** | **138.67** | **287** | | PFAKE | | 04 29 20.0 | +9.3 |
| UGM | | | | | LR | LR | | |
| | comp=Z,900nm,19.0s | | | | | | | |
| **IPM** | **Ipoh** | **138.82** | **310** | | PFAKE | | 04 29 20.0 | +9.0 |
| IPM | | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | | |
| **LSZ** | **Lusaka** | **138.96** | **85** | | PFAKE | | 04 29 20.0 | +8.7 |
| LSZ | | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | | |
| **BOSA** | **Boshof** | **139.20** | **106** | | PKP | **PKPdf** | **04 29 11.8** | **+0.4** |
| | comp=Z,3.7nm,1.0s,baz=147,slow=2.2,SNR=3.7 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **140.00** | **59** | | PKP | **PKPdf** | **04 29 12.9** | **-0.5** |
| | comp=Z,0.8nm,0.3s,baz=355,slow=11,SNR=3.3 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **140.00** | **59** | *e*PKIKP | | PKPpre | 04 29 09.1 | |
| KMBO | | | | | MLR | MLR | | |
| | comp=Z,2µm,18.0s | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **140.00** | **59** | *e*PKPdf | | PKPpre | 04 29 09.1 | |
| KMBO | | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | | |
| **CISI** | **Cisompet, Garu** | **140.84** | **289** | | PFAKE | | 04 29 30.0 | +15 |
| CISI | | | | | LR | LR | | |
| | comp=Z,700nm,19.0s | | | | | | | |
| **PSI** | **Prapat** | **141.48** | **311** | | PFAKE | | 04 29 30.0 | +14 |
| PSI | | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | | |
| **BKNI** | **Bangkinang** | **141.69** | **306** | | PFAKE | | 04 29 30.0 | +14 |
| BKNI | | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | | |
| **PALK** | **Pallekele** | **146.91** | **342** | | PFAKE | | 04 29 40.0 | +12 |
| PALK | | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | | |
| **ABPO** | **Ambohimpanom** | **157.37** | **80** | | PFAKE | | 04 29 50.0 | +9.2 |
| ABPO | | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | | |

*ISCJB* ***20*** *04:14:24.5±0.8,24.6′N±0.1′×109.3′W±0.1′,h10km,mb3.9/6, Error ellipse: s-maj=20.4km s-min=15.1km az=138.4*
*IDC* ***20*** *04:14:24.6±0.9,24.6′.68N×109.29W,h0km,mb3.9/6, mb1 4.2/6,mb1mx3.9/34,mbtmp3.9/6,Error ellipse: s-maj=23.9km s-min=17.7km az=136.0*

**ISC 20 04:14:26.1±0.9,24.6′N±0.1′×109.3′W±0.1′,h10km,n9, σ1§54/8,mb4.2/6,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.01** | **242** | Pg | | **Pg** | **04 14 45.1** | **-0.5** |
| | 81nm,0.3s,baz=58,slow=15,SNR=3.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **6.92** | **46** | Pn | | Pn | 04 16 03.2 | -4.6 |
| | baz=228,slow=13,SNR=1.9 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.78** | **333** | Pn | | **P** | **04 18 14.8** | **+2.2** |
| | 0.1nm,0.3s,baz=155,slow=13,SNR=5.5 | | | | | | | |
| **NEW** | **Newport** | **24.43** | **347** | P | | **P** | **04 19 44.9** | **-0.1** |
| | 5.4nm,0.9s,baz=184,slow=9.4,SNR=3.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **46.92** | **339** | P | | **P** | **04 22 57.0** | **+0.3** |
| | 1.3nm,0.6s,baz=151,slow=6.4,SNR=9.6 | | | | | | | |
| **CFAA** | **Coronel Fontan** | **68.30** | **143** | P | | **P** | **04 25 28.9** | **+1.4** |
| | 0.2nm,0.7s,baz=315,slow=7.1,SNR=3.4 | | | | | | | |
| **CPUP** | **Villa Florida** | **71.30** | **132** | P | | **P** | **04 25 46.5** | **+0.4** |
| | 1.8nm,1.0s,baz=351,slow=6.4,SNR=3.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.71** | **15** | P | | **P** | **04 26 37.7** | **-1.4** |
| | 2.0nm,0.7s,baz=316,slow=5.0,SNR=5.2 | | | | | | | |
| **ESDC** | **Sonseca Array** | **85.59** | **48** | P | | **P** | **04 27 03.5** | **-1.6** |
| | 0.4nm,0.7s,baz=288,slow=3.8,SNR=4.0 | | | | | | | |

*MEX* ***20*** *04:15:31.7±0.3,25.09N×109.23W,h10km,MD5.6*
*ISCJB* ***20*** *04:15:33.7±0.2,24.48N±0.02×109.13W±0.02,h10km, mb5.3/112,MS5.8/85,Error ellipse: s-maj=3.3km s-min=2.9km az=14.5*
*IDC* ***20*** *04:15:33.6±0.5,24.57N×109.23W,h0km,mb4.5/23, mb1 4.6/26,mb1mx4.6/35,mbtmp4.5/26,ML3.7/3,MS5.1/1, Ms1 5.1/1,ms1mx4.2/32,Error ellipse: s-maj=11.1km s-min=9.5km az=167.0*
*GCMT* ***20*** *04:15:34.8±0.2,24.69N×109.15W,h17km,MW5.7/124, Moment Tensor Solution. s57,c87; s124,c313; Duration: 1§8 Moment tensor: Scale 10¹⁷Nm;*
*Mrr-1.75±.09; Mθθ-3.80±.07; Mϕϕ5.55±.09; Mrθ-0.75±.22; Mrϕ-0.36±.07; Mθϕ1.98±.22; Best double couple: M₀5.06900×10¹⁷ NP1:ϕ₁135.00000°,δ86.00000°, λ-155.00000°. NP2:ϕ₂44.00000°,δ65.00000°,λ-4.00000°. Principal axes: T 6.0810, Plg14.0000°, Azm267.0000°; N -2.0240, Plg65.0000°, Azm143.0000°; P -4.0570, Plg20.0000°, Azm2.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*MOS* ***20*** *04:15:34.4±1.1,24.47N×109.09W,h10km,mb5.7/29 Error ellipse: s-maj=11.0km s-min=5.5km az=109.2*
*BJI* ***20*** *04:15:34.9,24.40N×109.37W,h7km,mb5.6/3,mB5.8/17, Ms5.9/16,Ms7 5.5/15*
*NEIC* ***20*** *04:15:34.8±0.3,24.47N×109.14W,h10km,mb5.6/104, MS5.8/83,MW5.9,MD5.6(MEX),Error ellipse: s-maj=6.9km s-min=4.3km az=44.0,Moment Tensor Solution. s14 Moment tensor: Scale 10¹⁷Nm; Mrr-0.87; Mθθ-5.09; Mϕϕ5.97; Mrθ-1.46; Mθϕ-5.71; Mrϕ2.43; Best double couple: M₀8.50000×10¹⁷ NP1:ϕ₁23.00000°,δ76.00000°, λ9.00000°. NP2:ϕ₂291.00000°,δ82.00000°,λ166.00000°. Principal axes: T 9.1700, Plg16.0000°, Azm247.0000°; N -1.6300, Plg74.0000°, Azm81.0000°; P -7.5300, Plg4.0000°, Azm338.0000°;*

**ISC 20 04:15:35.5±0.3,24.52N±0.04×109.19W±0.04,h10km, n539,σ1§53/429,mb5.5/113,MS5.8/85,3C-1D,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SLBS** | **Sierra La Lagu** | **1.08** | **220** | *e*Pn | | **Pb** | **04 15 54.9** | **-1.3** |
| SLBS | | | | *e*Pg | | **Pg** | **04 15 55.2** | **-0.9** |
| SLBS | | | | *e*Sg | | **Sg** | **04 16 05.4** | **-4.8** |
| SLBS | | | | *e*Sn | | **Sb** | **04 16 10.1** | **-0.3** |
| **LPIG** | **La Paz** | **1.10** | **248** | Pg | | **Pb** | **04 15 53.9** | **-2.7** |
| | 903nm,0.3s,baz=162,slow=2.6,SNR=17 | | | | | | | |
| LPIG | | | | Lg | | Lg | 04 16 09.2 | |
| | 1µm,0.3s,baz=324,slow=19,SNR=17 | | | | | | | |
| **LPIG** | **La Paz** | **1.10** | **248** | *e*P | | Pb | 04 15 53.6 | -3.0 |
| LPIG | | | | *i* S | | **Sb** | **04 16 10.6** | **-0.4** |
| **LPIG** | **La Paz** | **1.10** | **248** | *e*Pn | | **Pb** | **04 15 53.9** | **-2.7** |
| LPIG | | | | *i* S | | **Sb** | **04 16 10.6** | **-0.4** |
| **MAIG** | **Mazatlaan** | **2.85** | **117** | *e*P | | **Pn** | **04 16 19.1** | **-2.0** |
| MAIG | | | | *i* S | | **Sn** | **04 16 55.1** | **-0.4** |
| **MAIG** | **Mazatlaan** | **2.85** | **117** | *e*P | | **Pn** | **04 16 19.1** | **-2.0** |
| MAIG | | | | *i* S | | **Sn** | **04 16 55.1** | **-0.4** |
| **SRIG** | **Santa Rosalia** | **3.92** | **316** | *e*P | | Pn | 04 16 32.1 | -3.6 |
| **SRIG** | **Santa Rosalia** | **3.92** | **316** | *e*P | | Pn | 04 16 32.1 | -3.6 |
| **HPIG** | | **3.99** | **52** | *e*P | | Pn | 04 16 31.4 | -5.5 |
| **HPIG** | | **3.99** | **52** | *e*P | | Pn | 04 16 31.4 | -5.5 |
| **ANIG** | **Ahuacatlan** | **5.51** | **128** | *e*P | | **Pn** | **04 16 58.7** | **+0.9** |
| **ANIG** | **Ahuacatlan** | **5.51** | **128** | *e*P | | **Pn** | **04 16 58.7** | **+0.9** |
| **H06E1** | **SOCORRO T-PHAS** | **5.93** | **196** | T | | T | 04 23 14.3 | |
| | SNR=35 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **6.88** | **45** | *e*Pn | | **Pn** | **04 17 17.1** | **+0.5** |
| TX31 | | | | *e*Sn | | Sb | 04 18 47.0 | -11 |
| **TXAR** | **Lajitas Array** | **6.88** | **45** | Pn | | Pn | 04 17 11.7 | -4.9 |
| | 1.0nm,0.3s,baz=227,slow=21,SNR=4.4 | | | | | | | |
| TXAR | | | | Sn | | Sn | 04 18 27.8 | -7.1 |
| | 9.8nm,0.3s,baz=131,slow=32,SNR=4.0 | | | | | | | |
| TXAR | | | | Lg | | Lg | 04 19 03.4 | |
| | 22nm,0.3s,baz=235,slow=22,SNR=5.4 | | | | | | | |
| TXAR | | | | LR | | LR | 04 19 38.7 | |
| | comp=Z,15µm,19.1s,baz=0.0,slow=36 | | | | | | | |
| **TUC** | **Tucson** | **7.89** | **350** | *e*P | | **Pn** | **04 17 27.5** | **-2.9** |
| TUC | | | | *e* | | | 04 18 58.6 | |
| **TUC** | **Tucson** | **7.89** | **350** | *e*Pn | | **Pn** | **04 17 27.5** | **-2.9** |
| TUC | | | | *e*Sn | | **Sn** | **04 18 58.6** | **-1.3** |
| **MNTX** | **Cornudas Mount** | **7.91** | **24** | *e*Pn | | **Pn** | **04 17 27.8** | **-2.7** |
| MNTX | | | | *e*Sn | | **Sn** | **04 18 55.8** | **-4.3** |
| **CLNB** | **Carlsbad** | **9.02** | **30** | *e*Pn | | **Pn** | **04 17 44.0** | **-2.0** |
| **GLA** | **Glamis** | **9.84** | **331** | *e*P | | **Pn** | **04 17 58.8** | **+1.8** |
| **GLA** | **Glamis** | **9.84** | **331** | *e*Pn | | **Pn** | **04 17 58.8** | **+1.8** |
| **BNM** | **Barren Site** | **9.86** | **13** | *e*Pn | | **Pn** | **04 17 56.8** | **-0.7** |
| **LAZ** | **Ladron** | **10.01** | **10** | *e*Pn | | **Pn** | **04 17 57.2** | **-2.4** |
| LAZ | | | | *e*Sn | | **Sn** | **04 19 49.8** | **-2.3** |
| **BAR** | **Barrett** | **10.46** | **323** | *e*Pn | | **Pn** | **04 18 06.9** | **+1.3** |
| **MONP** | **Monument Peak** | **10.48** | **324** | P | | **Pn** | **04 18 08.2** | **+2.2** |
| | baz=11,SNR=6.1 | | | | | | | |
| **ANMO** | **Albuquerque** | **10.66** | **12** | Lg | | Lg | 04 21 03.6 | |
| | 0.3nm,0.3s,baz=210,slow=20,SNR=2.5 | | | | | | | |
| **ANMO** | **Albuquerque** | **10.66** | **12** | *e*P | | **Pn** | **04 18 10.4** | **+1.9** |
| **PFO** | **Pinyon Flat Ob** | **11.06** | **327** | Pn | | **Pn** | **04 18 16.1** | **+2.2** |
| | 0.2nm,0.3s,baz=142,slow=8.7,SNR=6.6 | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **12.85** | **326** | P | | **Pn** | **04 18 40.4** | **+2.2** |
| | baz=13 | | | | | | | |
| **SRTC** | **Snort** | **13.37** | **328** | *e*Pn | | Pn | 04 18 38.6 | -6.8 |
| SRTC | | | | *e*Sn | | **Sn** | **04 21 12.0** | **-2.1** |
| **ARVC** | **Arvin** | **13.48** | **324** | P | | **Pn** | **04 18 48.7** | **+1.9** |
| | baz=14 | | | | | | | |
| **MPMC** | **Manual Prospec** | **13.55** | **330** | P | | **Pn** | **04 18 50.6** | **+2.7** |
| | baz=14,SNR=7.7 | | | | | | | |
| **ISA** | **Isabella** | **13.70** | **326** | *e*P | | P | 04 18 54.4 | -4.4 |
| **ISA** | **Isabella** | **13.70** | **326** | P | | **Pn** | **04 18 52.7** | **+2.8** |
| | baz=14 | | | | | | | |
| **ISA** | **Isabella** | **13.70** | **326** | *e*Pn | | P | 04 18 54.4 | -4.4 |
| **CWC** | **Cottonwood Cre** | **14.13** | **329** | P | | **Pn** | **04 18 58.5** | **+2.6** |
| | baz=14,SNR=7.8 | | | | | | | |
| **VES** | **Vestal, Richgr** | **14.15** | **325** | P | | P | 04 19 00.1 | -3.5 |
| | baz=14 | | | | | | | |
| **RCTC** | **Rector, Farmer** | **14.60** | **326** | P | | **Pn** | **04 19 04.6** | **+2.5** |
| | baz=15 | | | | | | | |
| **Q24A** | **Divide** | **14.81** | **12** | P | | **Pn** | **04 19 06.8** | **+1.6** |
| | baz=15 | | | | | | | |
| **MTUM** | **Tungsten Hills** | **15.10** | **330** | *e*Pn | | **Pn** | **04 19 11.2** | **+2.0** |
| **CMIG** | **Matias Romero** | **15.27** | **116** | Pn | | **Pn** | **04 19 12.5** | **+1.2** |
| | 0.1nm,0.3s,baz=298,slow=14,SNR=7.2 | | | | | | | |
| **MLAC** | **Mammoth Lakes** | **15.45** | **330** | P | | **Pn** | **04 19 15.7** | **+1.9** |
| | baz=16,SNR=5.8 | | | | | | | |
| **LRV** | **Little Rabbit** | **15.63** | **322** | *e*Pn | | **P** | **04 19 19.4** | **-0.8** |
| **NV01** | **Mina Array Sit** | **15.89** | **333** | *e*Pn | | **P** | **04 19 23.0** | **-0.2** |
| **NVAR** | **Mina Array Bea** | **15.89** | **333** | Pn | | **Pn** | **04 19 21.1** | **+1.6** |
| | 0.5nm,0.3s,baz=156,slow=9.7,SNR=17 | | | | | | | |
| **DUG** | **Dugway** | **15.93** | **350** | P | | **P** | **04 19 21.8** | **-1.7** |
| | baz=16 | | | | | | | |
| **SAO** | **San Andreas Ge** | **16.12** | **322** | *e*P | | **P** | **04 19 24.2** | **-1.3** |
| SAO | | | | pmax | | pmax | | |
| | comp=Z,197nm,1.9s | | | | | | | |
| **SAO** | **San Andreas Ge** | **16.12** | **322** | *e*Pn | | **P** | **04 19 24.2** | **-1.3** |
| | comp=Z,197nm,1.9s | | | | | | | |
| **S33A** | **Kaszmaul Farm,** | **16.16** | **34** | P | | **P** | **04 19 24.9** | **-1.1** |
| | baz=16 | | | | | | | |
| **Q30A** | **Quinter** | **16.30** | **26** | P | | **P** | **04 19 26.8** | **-0.7** |
| | baz=16 | | | | | | | |
| **CMB** | **Columbia Colle** | **16.51** | **327** | *e*P | | **Pn** | **04 19 26.7** | **-0.5** |
| CMB | | | | pmax | | pmax | | |
| | comp=Z,180nm,1.9s | | | | | | | |
| **CMB** | **Columbia Colle** | **16.51** | **327** | *e*Pn | | **Pn** | **04 19 26.7** | **-0.5** |
| | comp=Z,180nm,1.9s | | | | | | | |
| **P29A** | **Atwood** | **16.58** | **23** | P | | **P** | **04 19 30.5** | **-0.2** |
| | baz=17 | | | | | | | |
| **SAC** | **San Andreas** | **17.24** | **322** | *e*P | | **P** | **04 19 37.8** | **-0.1** |
| **SAC** | **San Andreas** | **17.24** | **322** | *e*Pn | | **P** | **04 19 37.8** | **-0.1** |
| **BMN** | **Battle Mountai** | **17.24** | **339** | *e*P | | **P** | **04 19 38.3** | **+0.2** |
| BMN | | | | pmax | | pmax | | |
| | comp=Z,487nm,1.5s | | | | | | | |
| **BMN** | **Battle Mountai** | **17.24** | **339** | *e*Pn | | **P** | **04 19 38.3** | **+0.2** |
| | comp=Z,487nm,1.5s | | | | | | | |
| **HVU** | **Hansel Valley** | **17.48** | **351** | *e*P | | **P** | **04 19 40.8** | **+0.1** |
| HVU | | | | pmax | | pmax | | |
| | comp=Z,342nm,1.6s | | | | | | | |
| **HVU** | **Hansel Valley** | **17.48** | **351** | *e*Pn | | **P** | **04 19 40.8** | **+0.1** |
| | comp=Z,342nm,1.6s | | | | | | | |
| **S37A** | **Fort Scott** | **18.01** | **39** | P | | **P** | **04 19 46.9** | **+0.5** |
| | baz=18 | | | | | | | |
| **NSHM** | **Saint Helena R** | **18.02** | **324** | *e*Pn | | **Pn** | **04 19 45.8** | **-0.3** |
| **OHCM** | **Honcut** | **18.06** | **328** | *e*Pn | | **P** | **04 19 49.4** | **+2.5** |
| **VBMS** | **Vicksburg** | **18.12** | **61** | P | | **P** | **04 19 48.7** | **+1.0** |
| | baz=18 | | | | | | | |
| **Q35A** | **Mercer Eighty,** | **18.13** | **35** | P | | **P** | **04 19 49.7** | **+2.0** |
| | baz=18 | | | | | | | |
| **BW06** | **Boulder Array** | **18.21** | **359** | *e*Pn | | **Pn** | **04 19 47.0** | **-1.6** |
| **K22A** | **Casper** | **18.22** | **6** | P | | **P** | **04 19 49.7** | **+0.7** |
| | baz=18 | | | | | | | |
| **K22A** | **Casper** | **18.22** | **6** | *e*Pn | | **Pn** | **04 19 44.7** | **-4.0** |
| | comp=Z,2µm,3.0s | | | | | | | |
| **M29A** | **Burnside Ranch** | **18.31** | **21** | P | | **P** | **04 19 50.7** | **+0.9** |
| | baz=18 | | | | | | | |
| **Q36A** | **Arnold C. Orve** | **18.51** | **36** | P | | **Pn** | **04 19 52.2** | **+0.2** |
| | baz=18 | | | | | | | |
| **HOPS** | **Hopland** | **18.61** | **324** | *e*P | | **Pn** | **04 19 55.0** | **+1.7** |
| | comp=Z,116nm,1.4s | | | | | | | |
| **N33A** | **J Bar K, Exete** | **18.93** | **28** | P | | **Pn** | **04 19 57.3** | **+0.1** |
| | baz=19 | | | | | | | |
| **O03D** | **Paynes Creek** | **18.97** | **329** | P | | **Pn** | **04 19 59.0** | **+1.3** |
| | baz=19,SNR=10.0 | | | | | | | |
| **Q37A** | **Longview Farm,** | **19.00** | **38** | P | | **Pn** | **04 19 58.4** | **+0.5** |
| | baz=19 | | | | | | | |
| **LOHW** | **Long Hollow** | **19.09** | **357** | *e*P | | **P** | **04 19 53.8** | **-4.6** |
| | comp=Z,1µm,3.0s | | | | | | | |
| **J25A** | **Sunshine Ranch** | **19.34** | **12** | P | | **Pn** | **04 20 01.6** | **-0.6** |
| | baz=19,SNR=5.7 | | | | | | | |
| **IMW** | **Indian Meadow** | **19.39** | **356** | *e*P | | **P** | **04 19 59.9** | **-1.9** |
| | comp=Z,748nm,2.3s | | | | | | | |
| **KIPM** | **Iron Peak** | **19.43** | **325** | *e*P | | **Pn** | **04 20 04.2** | **+1.0** |
| **N34A** | **Lincoln** | **19.43** | **30** | P | | **Pn** | **04 20 04.0** | **+0.8** |
| | baz=20 | | | | | | | |
| **HLID** | **Hailey** | **19.48** | **349** | P | | **Pn** | **04 20 04.4** | **+0.5** |
| | baz=20,SNR=18 | | | | | | | |
| **HLID** | **Hailey** | **19.48** | **349** | *e*P | | **Pn** | **04 20 04.5** | **+0.6** |
| | comp=Z,131nm,1.5s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **19.51** | **339** | *e*P | | **Pn** | **04 20 05.5** | **+1.3** |
| WVOR | | | | pmax | | pmax | | |
| | comp=Z,300nm,1.5s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **19.51** | **339** | *e*P | | **Pn** | **04 20 04.4** | **+0.2** |
| | comp=Z,304nm,1.5s | | | | | | | |
| **WDC** | **Whiskeytown Da** | **19.54** | **328** | *e*P | | **Pn** | **04 20 06.5** | **+2.0** |
| WDC | | | | pmax | | pmax | | |
| | comp=Z,83nm,1.6s | | | | | | | |
| **WDC** | **Whiskeytown Da** | **19.54** | **328** | *e*P | | **Pn** | **04 20 06.5** | **+2.0** |
| | comp=Z,83nm,1.6s | | | | | | | |
| **FLWY** | **Flagg Ranch** | **19.56** | **357** | *e*P | | **Pn** | **04 20 06.8** | **+1.9** |
| | comp=Z,473nm,1.8s | | | | | | | |
| **MFID** | **Camas Ranch** | **19.63** | **345** | *e*P | | **Pn** | **04 20 05.5** | **-0.1** |
| | comp=Z,622nm,2.0s | | | | | | | |
| **O36A** | **Bolckow** | **19.63** | **34** | P | | **P** | **04 20 04.5** | **+0.3** |
| | baz=20 | | | | | | | |
| **MOD** | **Modoc** | **19.64** | **335** | *e*P | | **Pn** | **04 20 05.8** | **-0.1** |
| | comp=Z,416nm,1.8s | | | | | | | |
| **M33A** | **Taylor Creek F** | **19.73** | **28** | P | | **P** | **04 20 00.7** | **-4.5** |
| | baz=20 | | | | | | | |
| **L32A** | **Elgin** | **19.76** | **25** | P | | **P** | **04 20 02.1** | **-3.5** |
| | baz=20 | | | | | | | |
| **K30A** | **Basset** | **19.77** | **21** | P | | **P** | **04 20 03.2** | **-2.5** |
| | baz=20 | | | | | | | |
| **KMRM** | **Mail Ridge** | **19.85** | **326** | *e*P | | **Pn** | **04 20 07.8** | **-0.5** |
| | comp=Z,581nm,1.9s | | | | | | | |
| **N35A** | **Tabor** | **19.85** | **32** | P | | **P** | **04 20 02.0** | **-4.6** |
| | baz=20 | | | | | | | |
| **H17A** | **Grant Village** | **19.86** | **357** | P | | **Pn** | **04 20 08.9** | **+0.3** |
| | baz=20,SNR=9.8 | | | | | | | |
| **H17A** | **Grant Village** | **19.86** | **357** | *e*P | | **Pn** | **04 20 11.1** | **+2.5** |
| | comp=Z,291nm,1.8s | | | | | | | |
| **M34A** | **Aspy Farms, Fr** | **19.93** | **29** | P | | **P** | **04 20 04.8** | **-2.7** |
| | baz=20 | | | | | | | |
| **LKWY** | **Lake** | **20.03** | **357** | *e*P | | Pn | 04 20 11.3 | +0.7 |
| LKWY | | | | pmax | | pmax | | |
| | comp=Z,773nm,2.5s | | | | | | | |
| **LKWY** | **Lake** | **20.03** | **357** | *e*P | | Pn | 04 20 11.3 | +0.7 |
| | comp=Z,773nm,2.5s | | | | | | | |
| **GNAR** | **Gosnell** | **20.07** | **51** | *e*P | | Pn | 04 20 10.4 | -0.4 |
| **I26A** | **New Underwood** | **20.15** | **13** | P | | Pn | 04 20 12.2 | +0.5 |
| | baz=20,SNR=7.5 | | | | | | | |
| **M04C** | **Macdoel** | **20.18** | **332** | P | | Pn | 04 20 11.9 | -0.4 |
| | baz=20,SNR=13 | | | | | | | |
| **J08A** | **Circle Bar Ran** | **20.29** | **340** | *e*P | | Pn | 04 20 13.0 | -0.5 |
| | comp=Z,471nm,1.6s | | | | | | | |
| **K32A** | **Verdigre** | **20.33** | **24** | P | | Pn | 04 20 13.3 | -0.6 |
| | baz=20,SNR=5.2 | | | | | | | |
| **KHMM** | **Horse Mountain** | **20.35** | **327** | *e*P | | Pn | 04 20 13.6 | -0.7 |
| | comp=Z,188nm,1.2s | | | | | | | |
| **QLMT** | **Earthquake Lak** | **20.35** | **355** | *e*P | | Pn | 04 20 14.8 | +0.4 |
| **I27A** | **Quinn** | **20.36** | **15** | P | | Pn | 04 20 13.2 | -1.1 |
| | baz=20,SNR=9.2 | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **20.48** | **353** | *e*P | | **P** | **04 20 13.7** | **-0.1** |
| **YBH** | **Yreka Blue Hor** | **20.52** | **330** | P | | **P** | **04 20 12.4** | **-1.7** |
| | comp=Z,3.7nm,0.9s,baz=112,slow=8.9,SNR=4.4 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **20.52** | **330** | *e*P | | **P** | **04 20 11.3** | **-2.7** |
| **YBH** | **Yreka Blue Hor** | **20.52** | **330** | *e*P | | **P** | **04 20 11.2** | **-2.7** |
| | comp=Z,54nm,1.7s | | | | | | | |
| **HALT** | **Halls** | **20.53** | **52** | *e*P | | **P** | **04 20 14.2** | **+0.1** |
| **RLMT** | **Red Lodge** | **20.56** | **360** | P | | **P** | **04 20 14.4** | **-0.2** |
| | baz=21,SNR=5.6 | | | | | | | |
| **RLMT** | **Red Lodge** | **20.56** | **360** | *e*P | | **P** | **04 20 13.1** | **-1.5** |
| | comp=Z,243nm,1.8s | | | | | | | |
| **K05A** | **Summer Lake** | **20.58** | **335** | *e*P | | Pn | 04 20 16.3 | -0.7 |
| | comp=Z,1µm,1.7s | | | | | | | |
| **K33A** | **Hardington** | **20.66** | **26** | P | | **P** | **04 20 14.4** | **-1.1** |
| | baz=21 | | | | | | | |
| **H26A** | **Fairpoint** | **20.73** | **13** | P | | **P** | **04 20 14.7** | **-1

baz=22
F28A McLaughlin 22.34 16 P P 04 20 33.0 -0.4
baz=22,SNR=7.0
F10A Beach Ranch, E 22.37 345 eP P 04 20 34.2 +0.3
comp=Z,784nm,2.1s
I03D Drain, OR 22.38 332 P P 04 20 33.7 -0.2
baz=22,SNR=5.9
J36A Seneca 1, Swea 22.39 29 P P 04 20 33.5 -0.5
baz=22,SNR=8.3
E25A Miller Ranch, 22.43 11 P P 04 20 34.0 -0.4
baz=22,SNR=6.3
H33A Prehn Over Nor 22.53 24 P P 04 20 34.8 -0.6
baz=23,SNR=7.7
I35A Creekview Farm 22.53 28 P P 04 20 34.0 -1.5
baz=23
E26A Carlson Angus 22.57 12 P P 04 20 36.1 +0.2
baz=23,SNR=6.0
F29A Eureka 22.57 17 P P 04 20 34.4 -1.5
baz=23
CHMT Chamberlain Mo 22.59 353 eP P 04 20 36.3 0.0
MSO Missoula 22.59 351 P P 04 20 36.1 -0.1
baz=23,SNR=9.9
MSO Missoula 22.59 351 eP P 04 20 37.5 +1.3
comp=Z,288nm,1.6s
K38A Parkersburg 22.60 33 P P 04 20 35.0 -1.3
baz=23
G06A Carlson Farm, 22.66 339 eP P 04 20 36.5 -0.4
USIN University of 22.70 49 eP P 04 20 35.8 -1.5
comp=Z,1µm,2.8s
E27A Carson 22.71 14 P P 04 20 36.8 -0.6
baz=23
J37A Redenius Farm, 22.73 31 P P 04 20 36.8 -0.8
baz=23,SNR=5.9
H04A Detroit Lake 22.73 335 eP P 04 20 37.5 -0.1
comp=Z,218nm,1.9s
SWET Sewanee 22.76 57 eP P 04 20 38.4 +0.3
comp=Z,584nm,1.9s
OLIL Olney 22.81 47 eP P 04 20 37.2 -1.2
comp=Z,218nm,0.9s
H34A Spellman Lake, 22.88 25 P P 04 20 38.3 -0.9
baz=23,SNR=5.7
G05D Wamic, OR 22.90 338 P P 04 20 40.1 +0.7
baz=23
SLMT Seeley Lake 22.94 352 eP P 04 20 40.6 +0.7
E28A Huff 23.04 15 P P 04 20 39.3 -1.6
baz=23,SNR=6.8
G33A Ortonville 23.08 23 P P 04 20 40.2 -1.0
baz=23
COR Corvallis 23.09 334 eP P 04 20 44.6 +3.3
COR pmax pmax
comp=Z,97nm,1.1s
HDIL Hopedale 23.09 41 P P 04 20 40.6 -0.8
baz=23
HDIL Hopedale 23.09 41 eP P 04 20 41.1 -0.3
comp=Z,917nm,1.9s
D26A Manning 23.11 12 P P 04 20 40.5 -1.1
baz=23,SNR=14
TGUH Tegucigalpa,Un 23.12 113 eP P 04 20 44.8 +2.9
comp=Z,203nm,1.4s
SWMT Swartz Lake 23.27 352 eP P 04 20 43.5 +0.3
H35A Sunnyside Ranc 23.28 27 P P 04 20 42.1 -1.2
baz=23,SNR=7.5
E29A Napoleon 23.30 17 P P 04 20 43.0 -0.5
baz=23,SNR=9.7
I37A Lemond, Waseca 23.35 30 P P 04 20 43.2 -0.8
baz=23
HAWA Hanford 23.36 342 eP P 04 20 43.2 -0.9
comp=Z,365nm,1.8s
G34A Benson 23.41 25 P P 04 20 43.7 -0.9
baz=24
E30A Jud 23.44 18 P P 04 20 44.1 -0.8
baz=24,SNR=5.1
EGMT Eagleton 23.47 359 P P 04 20 45.4 +0.2
baz=24,SNR=28
EGMT Eagleton 23.47 359 eP P 04 20 46.1 +0.9
comp=Z,1µm,1.9s
JTMT Jette 23.54 351 eP P 04 20 45.3 -0.6
H36A Jessenland, He 23.56 28 P P 04 20 45.3 -0.8
baz=24
E07A Sunnyside 23.60 341 eP P 04 20 46.1 -0.4
comp=Z,605nm,2.0s
TIGA Tifton 23.60 67 P P 04 20 45.1 -1.5
baz=24,SNR=6.3
TIGA Tifton 23.60 67 eP P 04 20 45.6 -1.0
comp=Z,965nm,2.3s
YBMT Yellow Bay 23.61 352 eP P 04 20 46.1 -0.7
D28A Regan 23.65 15 P P 04 20 47.2 +0.2
baz=24,SNR=7.9
F33A 5 Mile Ranch, 23.68 23 P P 04 20 46.7 -0.6
baz=24,SNR=6.7
BSMT Bassoo Peak 23.71 351 eP P 04 20 47.2 -0.5
E31A Nome 23.79 20 P P 04 20 47.3 -1.0
baz=24
D08A Wollman Farm, 23.80 343 eP P 04 20 47.6 -0.8
comp=Z,297nm,1.9s
BLMT Blacktail Moun 23.81 351 eP P 04 20 46.8 -1.9
G35A Watkins 23.85 26 P P 04 20 48.0 -0.9
baz=24
F04A Amboy 23.88 337 eP P 04 20 49.5 +0.3
comp=Z,380nm,1.8s
CPCT Cooper Cave 23.92 57 eP P 04 20 47.9 -1.8
C26A Wahner Farm, P 23.94 12 P P 04 20 48.4 -1.3
baz=24
C27A Sayler Ranch, 23.95 13 P P 04 20 48.8 -1.0
baz=24
H37A Dierke Farm, C 24.00 29 P P 04 20 49.4 -1.0
baz=24
D30A Buchanan 24.04 18 P P 04 20 50.4 -0.3
baz=24,SNR=5.7
BLO Bloomington 24.08 47 eP P 04 20 51.9 +0.8
BLO pmax pmax
comp=Z,440nm,2.0s
BLO Bloomington 24.08 47 eP P 04 20 48.8 -2.3
comp=Z,438nm,2.0s
JFWS Jewell Farm 24.09 36 eP P 04 20 51.1 -0.1
JFWS pmax pmax
comp=Z,700nm,2.0s
JFWS Jewell Farm 24.09 36 eP P 04 20 51.1 -0.1
comp=Z,700nm,2.0s
GOGA Godfrey 24.14 63 eP P 04 20 50.7 -1.0
GOGA pmax pmax
comp=Z,87nm,1.4s
GOGA Godfrey 24.14 63 eP P 04 20 50.7 -1.0
comp=Z,88nm,1.4s
G36A St. Michael 24.16 27 P P 04 20 51.1 -0.7
baz=24
B25A Knox Farm, Ray 24.19 10 P P 04 20 52.0 -0.1
baz=24
DGMT Dagmar 24.23 8 P P 04 20 52.9 +0.5
baz=24,SNR=8.1
DGMT Dagmar 24.23 8 eP P 04 20 51.9 -0.6
comp=Z,886nm,1.9s
F03A Seaside 24.30 335 eP P 04 20 49.5 -3.6
C09A Chrisman Ranch 24.33 345 eP P 04 20 50.0 -3.4
comp=Z,207nm,2.0s
SFIN Scholer Farm 24.35 44 P P 04 20 52.7 -0.9
baz=24,SNR=8.5
SFIN Scholer Farm 24.35 44 eP P 04 20 51.2 -2.4
comp=Z,151nm,1.0s
E33A Westby DABS, E 24.36 22 P P 04 20 53.7 0.0
baz=24
LON Longmire 24.38 339 eP P 04 20 53.5 -0.4
LON pmax pmax
comp=Z,700nm,2.1s
LON Longmire 24.38 339 eP P 04 20 53.5 -0.4
comp=Z,696nm,2.1s
LTY Liberty 24.47 341 eP P 04 20 54.3 -0.5
comp=Z,788nm,2.4s
MDND Maddock 24.50 16 eP P 04 20 56.3 +1.4
comp=Z,209nm,1.5s
NEW Newport 24.52 347 P P 04 20 54.1 -1.0
comp=Z,22nm,1.1s,baz=163,slow=9.2,SNR=10
NEW Newport 24.52 347 eP P 04 20 55.9 +0.8
NEW pmax pmax
comp=Z,490nm,1.6s
NEW Newport 24.52 347 P P 04 20 55.6 +0.5
baz=25,SNR=18
NEW Newport 24.52 347 eP P 04 20 55.9 +0.8
comp=Z,491nm,1.6s
SPMN St. Paul 24.56 29 P P 04 20 55.5 +0.1
baz=25,SNR=5.3
SPMN St. Paul 24.56 29 eP P 04 20 55.5 +0.1
comp=Z,285nm,1.6s
TKL Tuckaleechee C 24.57 57 P P 04 20 54.0 -1.6
comp=Z,14nm,1.1s,baz=234,slow=9.5,SNR=8.5
TKL Tuckaleechee C 24.57 57 eP P 04 20 55.8 +0.1
TKL Tuckaleechee C 24.57 57 eP P 04 20 55.8 +0.1
B27A Peters Farms, 24.65 13 P P 04 20 56.5 +0.2
baz=25
C30A Mose, Pekin 24.66 18 P P 04 20 56.8 +0.5
baz=25
E34A Wadena 24.66 24 P P 04 20 55.8 -0.6
baz=25
F36A Milaca 24.76 27 P P 04 20 57.1 -0.2
baz=25,SNR=8.6
WALA Waterton Lakes 24.78 353 eP P 04 20 56.9 -0.6
comp=Z,399nm,1.7s
E03A Lebam 24.82 336 eP P 04 20 58.3 +0.5
comp=Z,1µm,2.3s
D05A Enumclaw 24.82 339 eP P 04 20 58.4 +0.6
comp=Z,288nm,1.5s
A25A Svangstu Ranch 24.84 10 P P 04 20 58.3 +0.3
baz=25
B28A Dugan Ranch, T 24.89 14 P P 04 20 58.5 +0.2
baz=25,SNR=7.1
C31A Landman Farms, 24.95 19 P P 04 20 59.1 +0.2
baz=25
A26A Wade Farm, Ken 24.98 11 P P 04 20 59.5 +0.3
baz=25
E35A Pequot Lakes 24.99 25 P P 04 20 59.3 0.0
baz=25,SNR=18
TZTN Tazewell 25.05 55 eP P 04 20 59.9 -0.1
comp=Z,596nm,1.9s
C06D Leavenworth 25.14 341 P P 04 21 01.2 +0.6
baz=25,SNR=6.2
D34A Park Rapids 25.14 23 P P 04 21 00.8 +0.1
baz=25
A27A Ledoux Ranch, 25.18 12 P P 04 21 01.8 +0.7
baz=25,SNR=6.4
A28A Rude Farm, Bot 25.34 14 P P 04 21 02.8 +0.3
baz=25,SNR=8.6
B30A Myrvik Farm, E 25.38 17 P P 04 21 03.0 +0.1
baz=26,SNR=11
C33A Trail 25.53 21 P P 04 21 04.7 +0.6
baz=26,SNR=6.4
B31A Greenbush Farm 25.54 18 P P 04 21 03.9 -0.4
baz=26
D35A Remer 25.56 24 P P 04 21 04.1 -0.4
baz=26,SNR=6.3
A29A Manning Farm, 25.59 15 P P 04 21 04.0 -0.7
baz=26
B05A Bryant 25.81 340 P P 04 21 07.2 +0.5
baz=26,SNR=5.9
A30A Hoffart Farm, 25.84 17 P P 04 21 07.2 +0.2
baz=26
B32A Ashes, Strandq 25.84 20 P P 04 21 07.0 0.0
baz=26,SNR=5.7
AGMN Agassiz Nation 25.97 21 P P 04 21 08.0 -0.2
baz=26,SNR=8.3
AGMN Agassiz Nation 25.97 21 eP P 04 21 07.5 -0.7
D36A Goodland 25.98 25 P P 04 21 07.2 -1.1
baz=26,SNR=7.5
C35A Jirik Farms, M 26.11 24 P P 04 21 07.9 -1.5
baz=26
D37A Cotton 26.26 26 P P 04 21 09.9 -1.0
baz=26
KMSC Kings Mountain 26.30 60 P P 04 21 09.3 -2.1
baz=26
KMSC Kings Mountain 26.30 60 eP P 04 21 09.8 -1.5
comp=Z,37nm,1.0s
A04D Lummi Island 26.40 340 P P 04 21 12.4 +0.4
baz=26,SNR=8.5
A05A Maple Falls 26.46 341 PFAKE 04 21 20.0 +7.4
A05A LR LR
comp=Z,900nm,20.0s
B34A Aery, Baudette 26.53 22 P P 04 21 13.1 -0.2
baz=27
C36A Pine Crest Far 26.58 25 P P 04 21 13.3 -0.4
baz=27,SNR=7.6
A33A Warroad 26.68 21 P P 04 21 14.8 +0.2
baz=27,SNR=7.1
C37A Embarrass 26.81 26 P P 04 21 15.8 -0.1
baz=27,SNR=5.6
ACSO Alum Creek Sta 26.98 48 eP P 04 21 19.5 +2.1
comp=Z,219nm,2.0s
JTS JuntasAbangare 27.04 117 P P 04 21 18.8 +0.6
comp=Z,8.3nm,0.8s,baz=331,slow=6.6,SNR=6.1
C38A Sawbill Land. 27.18 27 P P 04 21 17.5 -1.6
baz=27
EYMN Ely 27.27 26 P P 04 21 18.9 -1.0
baz=27,SNR=13
EYMN Ely 27.27 26 eP P 04 21 18.8 -1.0
comp=Z,166nm,1.3s
BLA Blacksburg 27.63 56 eP P 04 21 21.6 -1.7
BLA pmax pmax
comp=Z,135nm,1.7s
BLA Blacksburg 27.63 56 eP P 04 21 21.6 -1.7
comp=Z,135nm,1.7s
ULM Lac du Bonnet 27.70 19 P P 04 21 24.9 +1.2
comp=Z,9.0nm,0.9s,baz=206,slow=11,SNR=4.1
ULM Lac du Bonnet 27.70 19 eP P 04 21 29.1 +5.4
ULM pmax pmax
comp=Z,220nm,1.7s
ULM Lac du Bonnet 27.70 19 eP P 04 21 29.1 +5.4
comp=Z,219nm,1.7s
C39A Grand Marais 27.74 28 P P 04 21 22.8 -1.3
baz=28
EDM Edmonton 28.84 355 eP P 04 21 36.3 +2.4
EDM pmax pmax
comp=Z,360nm,1.7s
EDM Edmonton 28.84 355 eP P 04 21 34.1 +0.2
comp=Z,358nm,1.8s
URVA University of 29.93 57 eP P 04 21 43.0 -0.7
CBN Corbin 30.24 56 eP P 04 21 42.3 -4.1
comp=Z,172nm,1.8s
FFC Flin Flon 30.65 8 eP P 04 21 54.4 +4.5
FFC pmax pmax
comp=Z,160nm,1.7s
FFC Flin Flon 30.65 8 eP P 04 21 47.5 -2.3
comp=Z,162nm,1.7s
GTBY Guantanamo Bay 31.83 91 PFAKE 04 22 10.0 +9.4
GTBY LR LR
comp=Z,10µm,21.0s
BCIP Isla Barro Col 31.87 114 eP P 04 21 57.4 -3.6
comp=Z,30nm,1.0s
LUPA Lehigh Univers 32.46 52 eP P 04 22 05.3 -0.7
comp=Z,92nm,2.0s
KSPA Keystone Colle 32.51 50 eP P 04 22 04.8 -1.7
comp=Z,99nm,1.7s
BINY Binghamton 32.60 49 eP P 04 22 05.5 -1.7
comp=Z,52nm,1.3s
GRTK Grand Turk 35.08 87 PFAKE 04 22 40.0 +11
GRTK LR LR
comp=Z,10µm,20.0s
HRV Adam Dziewonsk 35.78 51 eP P 04 22 41.5 +6.7
YKA Yellowknife Ar 38.14 356 P P 04 22 54.4 -0.1
comp=Z,1.5nm,0.7s,baz=159,slow=8.7,SNR=3.4
ROSC El Rosal 38.78 115 P P 04 23 03.6 +2.5
comp=Z,18nm,1.1s,baz=313,slow=1.3,SNR=12
BBSR BB Station 39.67 68 PFAKE 04 23 20.0 +12
BBSR LR LR
comp=Z,5µm,21.0s
SDV Santo Domingo 39.90 106 eP P 04 23 09.9 -0.2
comp=Z,98nm,1.0s
SJG San Juan 40.48 90 P P 04 23 14.0 -0.6
comp=Z,35nm,0.8s,baz=286,slow=7.6,SNR=9.9
SJG San Juan 40.48 90 eP P 04 23 14.5 -0.1
SJG pmax pmax
comp=Z,96nm,1.0s
SJG San Juan 40.48 90 eP P 04 23 12.2 -2.4
comp=Z,96nm,1.0s
CPD Cerro la Pandu 40.71 90 eP P 04 23 15.9 -0.8
CPD pmax pmax
comp=Z,220nm,1.0s
CPD Cerro la Pandu 40.71 90 eP P 04 23 14.8 -1.8
comp=Z,218nm,1.0s
HUMP Col San Antoni 40.74 90 eP P 04 23 13.5 -3.3
comp=Z,56nm,1.1s
RAGM Ragged Mountai 43.41 335 PFAKE 04 23 50.0 +12
RAGM LR LR
comp=Z,6µm,22.0s
SCHQ Schefferville 43.45 35 P P 04 23 37.8 -0.7
comp=Z,3.0nm,0.8s,baz=246,slow=15,SNR=2.5
ATAH Atahualpa 43.48 132 P P 04 23 39.5 -0.2
comp=Z,10nm,0.9s,baz=329,slow=11,SNR=4.9
EYAK Cordova Ski Ar 43.92 335 PFAKE 04 23 50.0 +7.8
EYAK LR LR
comp=Z,6µm,21.0s
KLU Klutina 44.58 336 PFAKE 04 24 00.0 +12
KLU LR LR
comp=Z,4µm,21.0s
KIP Kipapa 44.88 276 i P P 04 23 50.7 +0.3
EGAK Eagle 45.26 341 eP P 04 23 49.7 -3.1
comp=Z,40nm,1.2s
EGAK LR LR
comp=Z,5µm,20.0s
SCM Sheep Creek Mo 45.32 336 eP P 04 23 59.2 +5.7
SCM pmax pmax
comp=Z,37nm,1.1s
KDAK Kodiak Island 45.33 329 i P P 04 23 55.8 +2.3
DOT Dot Lake 45.35 339 eP P 04 23 53.9 +0.3
comp=Z,115nm,1.2s
PMR Palmer 45.86 335 eP P 04 24 06.4 +8.8
FDF Fort de France 46.09 93 eP P 04 24 08.8 +8.7
INK Inuvik 46.24 348 P P 04 24 00.2 -0.3
comp=Z,2.4nm,0.9s,baz=233,slow=5.1,SNR=2.7
INK Inuvik 46.24 348 eP P 04 23 57.5 -3.0
INK pmax pmax
comp=Z,54nm,1.5s
INK Inuvik 46.24 348 eP P 04 23 57.5 -3.0
comp=Z,54nm,1.5s
SUA Susitna One 46.43 334 PFAKE 04 24 10.0 +7.7
SUA LR LR
comp=Z,3µm,20.0s
RSO Redoubt South 46.73 332 eP P 04 24 03.7 -1.1
HDA Harding Lake 46.81 339 PFAKE 04 24 20.0 +15
HDA LR LR
comp=Z,5µm,19.0s
SPU Mount Spurr 46.81 333 eP P 04 24 04.0 -1.2
RND Reindeer 46.84 337 eP P 04 24 07.3 +1.9
RND pmax pmax
comp=Z,130nm,1.6s
RND Reindeer 46.84 337 eP P 04 24 04.9 -0.5
comp=Z,126nm,1.7s
IL1 Eielson Array 47.02 339 eP P 04 24 06.1 -0.7
ILAR Eielson Array 47.02 339 P P 04 24 06.2 -0.6
comp=Z,4.2nm,0.8s,baz=150,slow=6.2,SNR=16
ILB Eielson Array 47.02 339 eP P 04 24 06.2 -0.6
MCK McKinley 47.06 337 eP P 04 24 08.0 +0.9
MCK pmax pmax
comp=Z,63nm,1.1s
MCK McKinley 47.06 337 eP P 04 24 06.1 -1.1
comp=Z,63nm,1.1s
WRH Wood River Hil 47.23 338 eP P 04 24 07.4 -1.0
comp=Z,21nm,1.0s
CCB Clear Creek Bu 47.25 339 eP P 04 24 07.5 -1.0
comp=Z,16nm,1.0s
CCB LR LR
comp=Z,4µm,19.0s
TRF Thorofare Moun 47.38 336 eP P 04 24 08.8 -0.9
comp=Z,161nm,1.0s
TRF LR LR
comp=Z,4µm,18.0s
COLA College 47.41 339⇑ eP P 04 24 10.5 +0.8
COLA pmax pmax
comp=Z,25nm,2.7s
COLA College 47.41 339 PFAKE 04 24 20.0 +10
COLA LR LR
comp=Z,6µm,19.0s
BWN Browne 47.52 337 eP P 04 24 10.4 -0.2
comp=Z,355nm,1.6s
BWN LR LR
comp=Z,5µm,18.0s
FYU Fort Yukon 47.72 341 eP P 04 24 10.6 -1.5
comp=Z,147nm,1.6s
PPLA Purkeypile 47.78 335 eP P 04 24 11.9 -0.9
comp=Z,213nm,1.2s
CAST Castle Rocks 48.03 336 PFAKE 04 24 30.0 +15
CAST LR LR
comp=Z,3µm,18.0s
NNA Nana 48.10 135 P P 04 24 16.7 +0.9
comp=Z,10nm,0.8s,baz=6.5,slow=7.1,SNR=4.4
NNA Nana 48.10 135 eP P 04 24 14.6 -1.1
NNA pmax pmax
comp=Z,26nm,1.1s
NNA Nana 48.10 135 eP P 04 24 14.6 -1.1
comp=Z,26nm,1.1s
MLY Manley 48.47 338 eP P 04 24 18.0 -0.1
comp=Z,73nm,1.4s
MLY LR LR
comp=Z,4µm,18.0s
TTA Tatalina 49.30 334 eP P 04 24 26.4 +1.9
TTA pmax pmax
comp=Z,58nm,1.2s
TTA Tatalina 49.30 334 eP P 04 24 22.7 -1.8
comp=Z,58nm,1.3s
COLD Coldfoot 49.64 340 eP P 04 24 25.9 -0.9
comp=Z,33nm,1.2s
RKT Rikitea 53.56 210 eLQ LQ 04 38 19.0
RKT comp=Z,2µm,29.0s eLR LR 04 40 40.3
comp=Z,2µm,25.0s,baz=29
PTGA Pitinga 53.87 110 eP P 04 24 58.4 -0.8
comp=Z,57nm,1.0s
PTGA LR LR
comp=Z,4µm,21.0s
TNA Tin City 55.12 334 PFAKE 04 25 20.0 +12
TNA LR LR
comp=Z,2µm,21.0s
SAML Samuel 55.85 121 eP P 04 25 11.5 -2.0
comp=Z,38nm,1.1s
GAMB Gambell 56.19 332 PFAKE 04 25 30.0 +15
GAMB LR LR
comp=Z,3µm,20.0s
LPAZ La Paz 57.00 131 P P 04 25 22.2 -0.2
comp=Z,3.1nm,0.9s,baz=356,slow=6.9,SNR=5.6
LPAZ La Paz 57.00 131 eP P 04 25 23.2 +0.8
LPAZ La Paz 57.00 131 eP P 04 25 19.6 -2.8
comp=Z,91nm,2.3s
PPT2 Papeete2 57.46 227 eS S 04 33 25.6 +3.1
comp=Z,4µm,24.0s
PPT2 eLQ LQ 04 39 50.6
comp=Z,3µm,25.2s
PPT2 eLR LR 04 42 13.7
comp=Z,7µm,26.5s,baz=29
LVC Limon Verde 61.03 137 P P 04 25 51.9 +2.1
comp=Z,26nm,1.0s,baz=314,slow=5.9,SNR=4.9
LVC Limon Verde 61.03 137 eP P 04 25 50.0 +0.2
comp=Z,111nm,2.3s
SUMG Summit 61.05 19 eP P 04 25 49.4 -0.1
SUMG pmax pmax
comp=Z,140nm,1.6s
SUMG Summit 61.05 19⇑ iP P 04 25 54.4 +4.9
comp=Z,144nm,1.6s
SUMG Summit 61.05 19 eP P 04 25 48.0 -1.5
comp=Z,143nm,1.6s
SUMG ePP PP 04 27 52.9 -11
SUMG LR LR
comp=Z,7µm,19.0s
TBI Tubuai 61.57 223 eLQ LQ 04 41 36.1
comp=Z,3µm,36.2s
TBI eLR LR 04 44 01.1
comp=Z,3µm,28.8s,baz=34
BILL Bilibino 65.49 336 eP P 04 26 19.2 +0.7
BILL pmax pmax
comp=Z,14nm,1.4s
BORG Borgarnes 67.21 28 PFAKE 04 26 40.0 +10
BORG LR LR
comp=Z,8µm,18.0s
CFAA Coronel Fontan 68.17 143 P P 04 26 36.7 +0.6
comp=Z,2.0nm,0.9s,baz=316,slow=4.8,SNR=18
CPUP Villa Florida 71.17 132 P P 04 26 54.7 +0.1
comp=Z,12nm,0.9s,baz=327,slow=7.2,SNR=15
CPUP Villa Florida 71.17 132 eP P 04 26 54.6 -0.1
KBS Kingsbay 71.71 10 PFAKE 04 27 10.0 +13
KBS LR LR
comp=Z,9µm,19.0s
BDFB Brasilia 71.79 117 P P 04 26 58.8 0.0
comp=Z,15nm,1.0s,baz=286,slow=6.3,SNR=9.3
BDFB Brasilia 71.79 117 eP P 04 26 59.7 +1.0
BDFB pmax pmax
comp=Z,56nm,1.0s
PET Petropavlovsk 72.05 321 eP P 04 27 01.7 +2.0
PET eS S 04 36 17.6 -3.8
SEY Seymchan 72.19 332 eP P 04 27 00.0 -0.3
PLCA Paso Flores 74.19 150 eP P 04 27 14.1 +1.7
PLCA Paso Flores 74.19 150 eP P 04 27 11.4 -1.0
comp=Z,118nm,1.9s
TRQA Tornquist 76.40 143 eP P 04 27 23.2 -1.9
comp=Z,32nm,1.5s
DSB Dublin 77.97 37 PFAKE 04 27 40.0 +6.1
DSB LR LR
comp=Z,7µm,18.0s
ESK Eskdalemuir 78.75 34 PFAKE 04 27 50.0 +12
ESK LR LR
comp=Z,5µm,19.0s
ARA0 ARCESS Array S 80.74 15 eP P 04 27 46.9 -1.8
ARCES ARCESS Array B 80.74 15 P P 04 27 46.7 -2.0
comp=Z,3.4nm,0.6s,baz=316,slow=3.3,SNR=13
CWF Charnwood Fore 80.94 36 PFAKE 04 28 00.0 +10

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| CWF | | | | | LR | LR | | | | | |
| | comp=Z,6μm,18.0s | | | | | | | | | | |
| **KUR** | **Kuril'sk** | **81.50** | **316** | | *e*S | S | 04 38 11.3 | +6.4 | | | |
| KUR | | | | | MLR | MLR | | | | | |
| | comp=N,879nm,13.0s | | | | | | | | | | |
| KUR | | | | | MLR | MLR | | | | | |
| | comp=Z,708nm,13.0s | | | | | | | | | | |
| **YAK** | **Yakutsk** | **81.84** | **336** | | *e*P | P | 04 28 00.7 | +6.1 | | | |
| YAK | | | | | *e* | | 04 28 06.8 | | | | |
| YAK | | | | | *e*S | **S** | **04 38 12.8** | **+5.0** | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=Z,62nm,1.1s | | | | | | | | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=E,29nm,1.3s | | | | | | | | | | |
| YAK | | | | | pmax | pmax | | | | | |
| | comp=N,9.0nm,1.5s | | | | | | | | | | |
| YAK | | | | | smax | smax | | | | | |
| | comp=E,101nm,9.1s | | | | | | | | | | |
| YAK | | | | | smax | smax | | | | | |
| | comp=N,91nm,6.8s | | | | | | | | | | |
| **YAK** | **Yakutsk** | **81.84** | **336** | | *e*P | **P** | **04 27 53.4** | **-1.2** | | | |
| | comp=N,96nm,1.2s | | | | | | | | | | |
| **PCAB** | **Cabril** | **81.87** | **48** | | *e*PcP | **PcP** | **04 28 01.6** | **+0.7** | | | |
| PCAB | | | | | A | A | 04 28 04.2 | | | | |
| | comp=N,69nm,1.6s | | | | | | | | | | |
| **POLO** | **Lamas de Olo** | **82.17** | **48** | | *e*PcP | **PcP** | **04 28 02.8** | **+0.5** | | | |
| POLO | | | | | A | A | 04 28 05.2 | | | | |
| | comp=N,41nm,1.4s | | | | | | | | | | |
| **PMAFR** | **Mafra** | **82.17** | **51** | | *e*P | **P** | **04 27 58.0** | **+1.1** | | | |
| | comp=N,67nm,1.8s | | | | | | | | | | |
| **PMAFR** | **Mafra** | **82.17** | **51** | | *e*PcP | **PcP** | **04 28 02.8** | **+0.5** | | | |
| **NB2** | **NORSAR Subarra** | **82.18** | **25** | | P | **P** | **04 27 57.1** | **+0.6** | | | |
| | comp=Z,132nm,1.7s,baz=306,slow=5.1 | | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **82.18** | **25** | | P | **P** | **04 27 57.1** | **+0.6** | | | |
| | baz=306,slow=5.1 | | | | | | | | | | |
| **NB200** | **NORSAR Array S** | **82.18** | **25** | | *e*P | **P** | **04 27 56.0** | **-0.5** | | | |
| **NOA** | **NORSAR Array B** | **82.18** | **25** | | P | **P** | **04 27 56.0** | **-0.5** | | | |
| | comp=Z,1.5nm,0.7s,baz=308,slow=5.1,SNR=5.1 | | | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **82.25** | **50** | | *e*PcP | **PcP** | **04 28 03.4** | **+0.8** | | | |
| PCAS | | | | | A | A | 04 28 05.8 | | | | |
| | comp=Z,70nm,1.6s | | | | | | | | | | |
| **PMST** | **Lisbon--Monsan** | **82.34** | **51** | | *e*PcP | **PcP** | **04 28 03.5** | **+0.5** | | | |
| PMST | | | | | A | A | 04 28 06.2 | | | | |
| | comp=Z,80nm,1.4s | | | | | | | | | | |
| **KONO** | **Kongsberg** | **82.37** | **27** | | *e*P | P | 04 28 05.1 | +7.6 | | | |
| **KONO** | **Kongsberg** | **82.37** | **27** | | PFAKE | | 04 28 10.0 | +13 | | | |
| KONO | | | | | LR | LR | | | | | |
| | comp=Z,6μm,22.0s | | | | | | | | | | |
| **PVIS** | **Viseu** | **82.39** | **49** | | *e*P | **P** | **04 27 58.8** | **+0.8** | | | |
| | comp=Z,45nm,1.4s | | | | | | | | | | |
| **PVIS** | **Viseu** | **82.39** | **49** | | *e*PcP | **PcP** | **04 28 03.7** | **+0.5** | | | |
| **PACT** | **Alcochete** | **82.57** | **51** | | *e*P | **P** | **04 27 59.7** | **+0.8** | | | |
| | comp=Z,109nm,1.4s | | | | | | | | | | |
| **PBRG** | **Braganca** | **82.69** | **47** | | *e*PcP | **PcP** | **04 28 05.5** | **+1.0** | | | |
| PBRG | | | | | A | A | 04 28 08.2 | | | | |
| | comp=Z,29nm,1.9s | | | | | | | | | | |
| **MTE** | **Manteigas** | **82.76** | **49** | | *e*P | **P** | **04 27 59.2** | **-0.8** | | | |
| | comp=Z,70nm,1.2s | | | | | | | | | | |
| **MTE** | **Manteigas** | **82.76** | **49** | | *e*P | **P** | **04 27 59.3** | **-0.8** | | | |
| | comp=Z,41nm,1.0s | | | | | | | | | | |
| **MVO** | **Moncorvo** | **82.78** | **48** | | *e*PcP | **PcP** | **04 28 06.0** | **+1.0** | | | |
| MVO | | | | | A | A | 04 28 10.8 | | | | |
| | comp=Z,91nm,1.7s | | | | | | | | | | |
| **PCBR** | **Castelo Branco** | **83.05** | **49** | | *e*P | **P** | **04 28 00.7** | **-0.7** | | | |
| | comp=Z,37nm,1.3s | | | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **83.07** | **51** | | *e*PcP | **PcP** | **04 28 07.2** | **+1.0** | | | |
| PNCL | | | | | A | A | 04 28 11.1 | | | | |
| | comp=Z,40nm,1.7s | | | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **83.17** | **52** | | *e*PcP | **PcP** | **04 28 07.8** | **+1.2** | | | |
| PTEO | | | | | A | A | 04 28 11.6 | | | | |
| | comp=Z,96nm,1.9s | | | | | | | | | | |
| **EVO** | **Evora** | **83.25** | **51** | | *e*PcP | **PcP** | **04 28 08.3** | **+1.3** | | | |
| EVO | | | | | A | A | 04 28 11.9 | | | | |
| | comp=Z,80nm,1.7s | | | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **83.28** | **52** | | PFAKE | | 04 28 10.0 | +7.4 | | | |
| PFVI | | | | | LR | LR | | | | | |
| | comp=Z,6μm,20.0s | | | | | | | | | | |
| **PMRV** | **Marv??o** | **83.29** | **50** | | *e*PcP | **PcP** | **04 28 08.4** | **+1.2** | | | |
| PMRV | | | | | A | A | 04 28 12.0 | | | | |
| | comp=Z,85nm,1.7s | | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **83.32** | **315** | | P | P | 04 28 06.7 | +4.0 | | | |
| YUK | | | | | *i* | | 04 28 09.3 | | | | |
| YUK | | | | | *i* PPP | PPP | 04 33 06.7 | | | | |
| YUK | | | | | *i* S | **S** | **04 38 29.5** | **+5.9** | | | |
| YUK | | | | | pmax | pmax | | | | | |
| | comp=Z,252nm,2.2s | | | | | | | | | | |
| **MORF** | **Marmelete** | **83.33** | **52** | | *e*PcP | **PcP** | **04 28 08.0** | **+0.6** | | | |
| MORF | | | | | A | A | 04 28 12.7 | | | | |
| | comp=Z,59nm,1.8s | | | | | | | | | | |
| **MESJ** | **Messejana** | **83.41** | **51** | | *e*PcP | **PcP** | **04 28 08.3** | **+0.6** | | | |
| MESJ | | | | | A | A | 04 28 12.7 | | | | |
| | comp=Z,66nm,1.7s | | | | | | | | | | |
| **PBEJ** | **Beja** | **83.58** | **51** | | *e*PcP | **PcP** | **04 28 10.0** | **+1.6** | | | |
| PBEJ | | | | | A | A | 04 28 12.6 | | | | |
| | comp=Z,47nm,1.8s | | | | | | | | | | |
| **PCVE** | **Castro Verde** | **83.62** | **52** | | *e*PcP | **PcP** | **04 28 10.5** | **+1.8** | | | |
| PCVE | | | | | A | A | 04 28 14.0 | | | | |
| | comp=Z,98nm,1.7s | | | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **83.85** | **319** | | *e*P | **P** | **04 28 03.0** | **-2.3** | | | |
| YSS | | | | | *e* | | 04 28 11.0 | | | | |
| **PBDV** | **Barranco-do-Ve** | **83.87** | **52** | | *e*PcP | **PcP** | **04 28 11.7** | **+1.9** | | | |
| PBDV | | | | | A | A | 04 28 15.5 | | | | |
| | comp=Z,106nm,1.8s | | | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **83.95** | **52** | | *e*PcP | **PcP** | **04 28 11.8** | **+1.7** | | | |
| PVAQ | | | | | A | A | 04 28 15.6 | | | | |
| | comp=Z,86nm,1.8s | | | | | | | | | | |
| **LVZ** | **Lovozero** | **84.05** | **13** | | *e*P | **P** | **04 28 07.6** | **+1.5** | | | |
| LVZ | | | | | pmax | pmax | | | | | |
| | comp=Z,69nm,2.3s | | | | | | | | | | |
| **LVZ** | **Lovozero** | **84.05** | **13** | | PFAKE | | 04 28 20.0 | +14 | | | |
| LVZ | | | | | LR | LR | | | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | | |
| **APA** | **Apatity** | **84.07** | **14** | ⇑ | *i*P | P | 04 28 12.6 | +6.5 | | | |
| APA | | | | | pmax | pmax | | | | | |
| | comp=Z,96nm,1.5s | | | | | | | | | | |
| **PBAR** | **Barrancos** | **84.10** | **51** | | *e*PcP | **PcP** | **04 28 12.1** | **+1.4** | | | |
| PBAR | | | | | A | A | 04 28 16.1 | | | | |
| | comp=Z,174nm,1.8s | | | | | | | | | | |
| **PAB** | **San Pablo** | **85.34** | **49** | | *e*P | **P** | **04 28 13.4** | **+0.2** | | | |
| PAB | | | | | pmax | pmax | | | | | |
| | comp=Z,110nm,1.7s | | | | | | | | | | |
| **PAB** | **San Pablo** | **85.34** | **49** | | *e*P | **P** | **04 28 13.4** | **+0.2** | | | |
| | comp=Z,114nm,1.7s | | | | | | | | | | |
| **DOU** | **Dourbes** | **85.47** | **36** | | P | P | 04 28 19.4 | +6.0 | | | |
| **ESDC** | **Sonseca Array** | **85.54** | **48** | | P | **P** | **04 28 13.4** | **-0.8** | | | |
| | comp=Z,2.6nm,0.7s,baz=304,slow=4.8,SNR=15 | | | | | | | | | | |
| **ES19** | **SONSECA Array** | **85.57** | **48** | | *e*P | **P** | **04 28 13.7** | **-0.6** | | | |
| **BCLA** | **Clavier** | **85.67** | **36** | | P | P | 04 28 21.3 | +6.8 | | | |
| **ERM** | **Erimo** | **86.03** | **315** | | *i*P | **P** | **04 28 16.7** | **+0.3** | | | |
| ERM | | | | | pmax | pmax | | | | | |
| | comp=Z,33nm,1.5s | | | | | | | | | | |
| **WLF** | **Walferdange** | **86.54** | **36** | | PFAKE | | 04 28 30.0 | +11 | | | |
| WLF | | | | | LR | LR | | | | | |
| | comp=Z,7μm,19.0s | | | | | | | | | | |
| **FIA0** | **FINESS Array S** | **87.08** | **20** | | *e*P | **P** | **04 28 20.4** | **-0.8** | | | |
| **FIA0** | **FINESS Array S** | **87.08** | **20** | | *e*P | **P** | **04 28 20.4** | **-0.8** | | | |
| **FINES** | **FINESS Array B** | **87.08** | **20** | | P | **P** | **04 28 20.4** | **-0.8** | | | |
| | comp=Z,6.0nm,0.8s,baz=22,slow=2.1,SNR=6.8 | | | | | | | | | | |
| **RGN** | **Rugen** | **87.13** | **29** | | PFAKE | | 04 28 30.0 | +8.5 | | | |
| RGN | | | | | LR | LR | | | | | |
| | comp=Z,4μm,22.0s | | | | | | | | | | |
| **SSB** | **Saint Sauveur** | **88.09** | **40** | | PFAKE | | 04 28 40.0 | +14 | | | |
| SSB | | | | | LR | LR | | | | | |
| | comp=Z,5μm,19.0s | | | | | | | | | | |
| **BFO** | **Black Forest** | **88.48** | **36** | | PFAKE | | 04 28 40.0 | +12 | | | |
| BFO | | | | | LR | LR | | | | | |
| | comp=Z,6μm,18.0s | | | | | | | | | | |
| **STU** | **Stuttgart** | **88.69** | **36** | | PFAKE | | 04 28 40.0 | +11 | | | |
| STU | | | | | LR | LR | | | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | | |
| **KLR** | **Kul'dur** | **88.77** | **325** | | *e*P | **P** | **04 28 31.1** | **+1.6** | | | |
| **CLL** | **Collm** | **89.05** | **32** | | *e*P | P | 04 28 34.0 | +3.2 | | | |
| **CLL** | **Collm** | **89.05** | **32** | | *e*(P) | P | 04 28 34.0 | +3.2 | | | |
| **CLL** | **Collm** | **89.05** | **32** | | PFAKE | | 04 28 40.0 | +9.2 | | | |
| CLL | | | | | LR | LR | | | | | |
| | comp=Z,6μm,19.0s | | | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **89.06** | **38** | | PFAKE | | 04 28 40.0 | +8.7 | | | |
| SENIN | | | | | LR | LR | | | | | |
| | comp=Z,6μm,20.0s | | | | | | | | | | |
| **GRFO** | **Grafenberg** | **89.18** | **34** | | PFAKE | | 04 28 40.0 | +8.6 | | | |
| GRFO | | | | | LR | LR | | | | | |
| | comp=Z,7μm,18.0s | | | | | | | | | | |
| **BNI** | **Bardonecchia** | **89.46** | **40** | | PFAKE | | 04 28 40.0 | +6.9 | | | |
| BNI | | | | | LR | LR | | | | | |
| | comp=Z,6μm,18.0s | | | | | | | | | | |
| **TUE** | **Stuetta** | **90.14** | **37** | | PFAKE | | 04 28 50.0 | +14 | | | |
| TUE | | | | | LR | LR | | | | | |
| | comp=Z,10μm,18.0s | | | | | | | | | | |
| **BOD** | **Bodaibo** | **90.39** | **339** | | *e*P | P | 04 28 41.3 | +4.4 | | | |
| BOD | | | | | pmax | pmax | | | | | |
| | comp=Z,21nm,1.7s | | | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **90.56** | **37** | | PFAKE | | 04 28 50.0 | +12 | | | |
| FUORN | | | | | LR | LR | | | | | |
| | comp=Z,6μm,18.0s | | | | | | | | | | |
| **PRU** | **Pruhonice** | **90.65** | **32** | | *e*P | P | 04 28 43.0 | +4.7 | | | |
| **PRU** | **Pruhonice** | **90.65** | **32** | | *e*P | P | 04 28 43.0 | +4.7 | | | |
| **KHC** | **Kasperske Hory** | **90.73** | **34** | | PFAKE | | 04 28 50.0 | +11 | | | |
| KHC | | | | | LR | LR | | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | | |
| **GEC2** | **GERESS Array S** | **90.97** | **34** | | *e*P | **P** | **04 28 38.3** | **-1.7** | | | |
| **GEC2** | **GERESS Array S** | **90.97** | **34** | | *e*P | **P** | **04 28 38.2** | **-1.7** | | | |
| **GERES** | **GERESS Array B** | **90.97** | **34** | | P | **P** | **04 28 38.2** | **-1.7** | | | |
| | comp=Z,0.6nm,0.6s,baz=335,slow=5.9,SNR=4.5 | | | | | | | | | | |
| **KLMR** | **Klimovskoe** | **91.22** | **15** | | *e*P | P | 04 28 45.5 | +4.8 | | | |
| KLMR | | | | | pmax | pmax | | | | | |
| | comp=Z,72nm,1.6s | | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **91.27** | **31** | | *e*P | P | 04 28 47.0 | +5.8 | | | |
| **DPC** | **Dobruska-Polom** | **91.27** | **31** | | *e*P | P | 04 28 47.0 | +5.8 | | | |
| **USRK** | **Ussuriysk Ar.** | **91.67** | **321** | | P | **P** | **04 28 43.4** | **+0.2** | | | |
| | comp=Z,0.8nm,0.7s,baz=72,slow=2.3,SNR=3.3 | | | | | | | | | | |
| **MAJO** | **Matsushiro** | **92.14** | **312** | | *e*P | P | 04 28 53.4 | +7.9 | | | |
| **MAT** | **Matsushiro** | **92.14** | **312** | | P | **P** | **04 28 48.4** | **+2.9** | | | |
| MAT | | | | | S | **S** | **04 39 51.4** | **+3.1** | | | |
| **MORC** | **Moravsky Berou** | **92.24** | **31** | | PFAKE | | 04 29 00.0 | +14 | | | |
| MORC | | | | | LR | LR | | | | | |
| | comp=Z,18μm,19.0s | | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **92.77** | **322** | | PFAKE | | 04 29 00.0 | +12 | | | |
| MDJ | | | | | LR | LR | | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | | |
| **TRI** | **Trieste** | **93.03** | **36** | | PFAKE | | 04 29 00.0 | +11 | | | |
| TRI | | | | | LR | LR | | | | | |
| | comp=Z,6μm,18.0s | | | | | | | | | | |
| **VYHS** | **Vyhne** | **93.74** | **32** | | *e*P | P | 04 28 56.9 | +4.3 | | | |
| **VYHS** | **Vyhne** | **93.74** | **32** | | *e*P | P | 04 28 56.9 | +4.3 | | | |
| **DZM** | **Mont Dzumac** | **94.08** | **248** | | *e*LR | LR | 04 59 04.8 | | | | |
| | comp=Z,4μm,22.9s | | | | | | | | | | |
| **PSZ** | **Piszkesteto** | **94.64** | **32** | | PFAKE | | 04 29 10.0 | +13 | | | |
| PSZ | | | | | LR | LR | | | | | |
| | comp=Z,5μm,21.0s | | | | | | | | | | |
| **OBN** | **Obninsk** | **95.45** | **19** | | *e*P | **P** | **04 29 01.8** | **+1.6** | | | |
| OBN | | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | | | | |
| OBN | | | | | MLR | MLR | | | | | |
| | comp=Z,4μm,17.0s | | | | | | | | | | |
| **OBN** | **Obninsk** | **95.45** | **19** | | PFAKE | | 04 29 10.0 | +10 | | | |
| OBN | | | | | LR | LR | | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **96.59** | **25** | | *i* P | **P** | **04 29 04.6** | **-1.0** | | | |
| AKASG | | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | | | |
| **KIEV** | **Kiev** | **96.59** | **25** | | PFAKE | | 04 29 20.0 | +14 | | | |
| KIEV | | | | | LR | LR | | | | | |
| | comp=Z,5μm,18.0s | | | | | | | | | | |
| **CLTB** | **Caltabellotta** | **97.89** | **43** | | PFAKE | | 04 29 20.0 | +8.1 | | | |
| CLTB | | | | | LR | LR | | | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | | |
| **CUC** | **Castrocucco** | **97.89** | **39** | | PFAKE | | 04 29 20.0 | +8.2 | | | |
| CUC | | | | | LR | LR | | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | | |
| **MQZ** | **McQueen's Vall** | **98.54** | **226** | | PFAKE | | 04 29 20.0 | +5.7 | | | |
| MQZ | | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | | |
| **ARU** | **Arti** | **98.71** | **7** | *d* | *i*P | Pdif | 04 29 20.3 | +5.3 | | | |
| ARU | | | | | | | 04 33 24.5 | | | | |
| ARU | | | | | S | **SKSac** | **04 39 58.9** | **+5.7** | | | |
| ARU | | | | | SS | SS | 04 47 39.7 | +11 | | | |
| ARU | | | | | pmax | pmax | | | | | |
| | comp=Z,18nm,1.7s | | | | | | | | | | |
| **ARU** | **Arti** | **98.71** | **7** | | PFAKE | | 04 29 30.0 | +15 | | | |
| ARU | | | | | LR | LR | | | | | |
| | comp=Z,5μm,19.0s | | | | | | | | | | |
| **OXZ** | **Oxford** | **98.78** | **226** | | PFAKE | | 04 29 30.0 | +15 | | | |
| OXZ | | | | | LR | LR | | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | | |
| **TLY** | **Talaya** | **98.84** | **340** | | PFAKE | | 04 29 30.0 | +14 | | | |
| TLY | | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | | |
| **TIP** | **Timpagrande** | **98.97** | **40** | | PFAKE | | 04 29 30.0 | +13 | | | |
| TIP | | | | | LR | LR | | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **100.93** | **336** | | PFAKE | | 04 29 40.0 | +15 | | | |
| ULN | | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | | |
| **TAM** | **Tamanrasset** | **101.10** | **59** | | PFAKE | | 04 29 40.0 | +13 | | | |
| TAM | | | | | LR | LR | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | | |
| **TIRR** | **Tirgusor** | **101.17** | **29** | | PFAKE | | 04 29 40.0 | +14 | | | |
| TIRR | | | | | LR | LR | | | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | | |
| **BRVK** | **Borovoye** | **102.76** | **0** | | PFAKE | | 04 29 40.0 | +6.9 | | | |
| BRVK | | | | | LR | LR | | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **102.89** | **69** | | *e*Pdif | **Pdif** | **04 29 34.3** | **-0.1** | | | |
| **TORD** | **Torodi Ar. Bea** | **102.89** | **69** | | P | **Pdif** | **04 29 34.3** | **-0.1** | | | |
| | comp=Z,1.5nm,1.2s,baz=305,slow=3.0,SNR=2.7 | | | | | | | | | | |
| **BJT** | **Baijiatuan** | **103.14** | **326** | | PFAKE | | 04 29 50.0 | +15 | | | |
| BJT | | | | | LR | LR | | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | | |
| **KURK** | **Kurchatov** | **104.78** | **355** | | PFAKE | | 04 29 50.0 | +7.8 | | | |
| KURK | | | | | LR | LR | | | | | |
| | comp=Z,8μm,18.0s | | | | | | | | | | |
| **SANT** | **Santorini** | **105.84** | **37** | | PFAKE | | 04 34 10.0 | | | | |
| SANT | | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | | |
| **ANTO** | **Ankara** | **106.79** | **30** | | PFAKE | | 04 34 10.0 | | | | |
| ANTO | | | | | LR | LR | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | | |
| **KIV** | **Kislovodsk** | **107.14** | **21** | | PFAKE | | 04 34 10.0 | | | | |
| KIV | | | | | LR | LR | | | | | |
| | comp=Z,3μm,19.0s | | | | | | | | | | |
| **ISP** | **Isparta** | **107.35** | **32** | | PFAKE | | 04 34 10.0 | | | | |
| ISP | | | | | LR | LR | | | | | |
| | comp=Z,6μm,20.0s | | | | | | | | | | |
| **MAKZ** | **Makanchi** | **108.30** | **352** | | PFAKE | | 04 34 10.0 | | | | |
| MAKZ | | | | | LR | LR | | | | | |
| | comp=Z,6μm,20.0s | | | | | | | | | | |
| **WMQ** | **Urumqi** | **110.26** | **347** | | Pdif | **Pdif** | **04 30 08.0** | **+1.2** | | | |
| WMQ | | | | | PP | PP | 04 34 48.0 | +7.0 | | | |
| WMQ | | | | | SS | SS | 04 50 10.0 | +3.0 | | | |
| WMQ | | | | | PPMZ | | | | | | |
| | comp=Z,53nm,10.0s | | | | | | | | | | |
| WMQ | | | | | LN | | | | | | |
| | comp=Z,1μm,24.0s | | | | | | | | | | |
| WMQ | | | | | LE | | | | | | |
| | comp=Z,2μm,23.0s | | | | | | | | | | |
| WMQ | | | | | LZ | | | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | | |
| **GTA** | **Gaotai** | **110.87** | **336** | | *e*PKP | **PKiKP** | **04 34 12.3** | **+3.0** | | | |
| **LZH** | **Lanzhou** | **112.12** | **332** | | *e*PKP | **PKiKP** | **04 34 11.0** | **-0.8** | | | |
| LZH | | | | | sPKP | | 04 34 15.5 | | | | |
| LZH | | | | | *e*PP | **PP** | **04 34 58.3** | **+3.4** | | | |
| LZH | | | | | SKKS | | 04 41 49.8 | | | | |
| LZH | | | | | PPMZ | | | | | | |
| | comp=Z,150nm,8.7s | | | | | | | | | | |
| LZH | | | | | LN | | | | | | |
| | comp=Z,2μm,18.2s | | | | | | | | | | |
| LZH | | | | | LE | | | | | | |
| | comp=Z,2μm,18.1s | | | | | | | | | | |
| LZH | | | | | LZ | | | | | | |
| | comp=Z,2μm,20.3s | | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **112.76** | **356** | | PFAKE | | 04 34 20.0 | | | | |
| TKM2 | | | | | LR | LR | | | | | |
| | comp=Z,5μm,19.0s | | | | | | | | | | |
| **AAK** | **Ala-Archa** | **113.10** | **357** | | PFAKE | | 04 34 20.0 | | | | |
| AAK | | | | | LR | LR | | | | | |
| | comp=Z,6μm,18.0s | | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **113.10** | **358** | | PFAKE | | 04 34 20.0 | | | | |
| EKS2 | | | | | LR | LR | | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | | |
| **KSH** | **Kashi** | **116.12** | **356** | | *e*PKP | **PKPdf** | **04 34 20.1** | **+0.7** | | | |
| KSH | | | | | PKS | **PKSdf** | **04 37 55.8** | **-0.4** | | | |
| KSH | | | | | PPMZ | | | | | | |
| | comp=Z,200nm,6.4s | | | | | | | | | | |
| KSH | | | | | LN | | | | | | |
| | comp=Z,3μm,17.2s | | | | | | | | | | |
| KSH | | | | | LE | | | | | | |
| | comp=Z,2μm,16.8s | | | | | | | | | | |
| KSH | | | | | LZ | | | | | | |
| | comp=Z,3μm,16.6s | | | | | | | | | | |
| **CD2** | **Chengdu** | **116.49** | **329** | | PKP | **PKPdf** | **04 34 20.0** | **-0.2** | | | |
| CD2 | | | | | SKS | **SKSdf** | **04 41 30.1** | **-2.6** | | | |
| CD2 | | | | | SKKS | **SKKSac** | **04 42 23.3** | **-5.1** | | | |
| CD2 | | | | | SS | **SS** | **04 51 29.3** | **-1.0** | | | |
| CD2 | | | | | PPMZ | | | | | | |
| | comp=Z,120nm,5.6s | | | | | | | | | | |
| **SNAA** | **Sanae** | **118.20** | **160** | | *e*PKIKP | PKPdf | 04 34 28.3 | +6.1 | | | |
| **GYA** | **Guiyang** | **118.62** | **323** | | *e*Pdif | **Pdif** | **04 30 44.3** | **-0.1** | | | |
| GYA | | | | | PKP | **PKiKP** | **04 34 24.8** | **+0.3** | | | |
| GYA | | | | | PP | **PP** | **04 35 45.0** | **+4.1** | | | |
| GYA | | | | | PKS | **PKSdf** | **04 38 00.6** | **-0.9** | | | |
| GYA | | | | | SKKS | | 04 42 37.8 | | | | |
| GYA | | | | | SS | **SS** | **04 51 59.4** | **+0.9** | | | |
| GYA | | | | | PPMZ | | | | | | |
| | comp=Z,140nm,8.0s | | | | | | | | | | |
| GYA | | | | | LN | | | | | | |
| | comp=Z,210nm,23.8s | | | | | | | | | | |
| GYA | | | | | LE | | | | | | |
| | comp=Z,180nm,22.2s | | | | | | | | | | |
| **SAUI** | **Saumlaki** | **120.09** | **275** | | PFAKE | | 04 34 40.0 | +13 | | | |
| SAUI | | | | | LR | LR | | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | | |
| **KBL** | **Kabul** | **121.25** | **2** | | PFAKE | | 04 34 40.0 | +11 | | | |
| KBL | | | | | LR | LR | | | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **121.46** | **261** | | PKP | **PKPdf** | **04 34 29.1** | **-0.8** | | | |
| | comp=Z,0.8nm,0.8s,baz=76,slow=2.2,SNR=4.5 | | | | | | | | | | |
| **KMI** | **Kunming** | **121.77** | **326** | | PKP | **PKPdf** | **04 34 31.3** | **+0.6** | | | |
| KMI | | | | | sPKP | | 04 34 36.3 | | | | |
| KMI | | | | | LN | | | | | | |
| | comp=Z,1μm,17.5s | | | | | | | | | | |
| KMI | | | | | LE | | | | | | |
| | comp=Z,1μm,22.5s | | | | | | | | | | |
| KMI | | | | | LZ | | | | | | |
| | comp=Z,1μm,26.0s | | | | | | | | | | |
| **LSA** | **Lhasa** | **122.67** | **339** | | PFAKE | | 04 34 40.0 | +7.3 | | | |
| LSA | | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | | |
| **AS01** | **Alice Springs** | **122.82** | **257** | | *e*PKPdf | **PKPdf** | **04 34 29.1** | **-3.4** | | | |
| **AS12** | **Alice Springs** | **122.86** | **257** | | *e*PKPdf | **PKPdf** | **04 34 32.5** | **0.0** | | | |
| **ASAR** | **Alice Springs** | **122.86** | **257** | | PKP | **PKPdf** | **04 34 32.5** | **0.0** | | | |
| | comp=Z,4.6nm,1.1s,baz=35,slow=1.3,SNR=5.4 | | | | | | | | | | |
| **RAYN** | **Ar Rayn** | **126.31** | **29** | | PFAKE | | 04 34 50.0 | +11 | | | |
| RAYN | | | | | LR | LR | | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | | |
| **UOSS** | **Wadi Hilu** | **128.84** | **17** | | PFAKE | | 04 34 50.0 | +6.0 | | | |
| UOSS | | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | | |
| **CHTO** | **Chiang Mai** | **128.95** | **325** | | PFAKE | | 04 35 00.0 | +16 | | | |
| CHTO | | | | | LR | LR | | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **129.24** | **325** | | *e*PKPdf | **PKPdf** | **04 34 47.3** | **+2.4** | | | |
| **CMAR** | **Chiang Mai Arr** | **129.24** | **325** | | PKP | **PKPdf** | **04 34 47.3** | **+2.4** | | | |
| | comp=Z,0.8nm,0.3s,baz=5.4,slow=1.9,SNR=2.9 | | | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **129.27** | **325** | | *e*PKPdf | **PKPdf** | **04 34 47.4** | **+2.4** | | | |
| **DAMY** | **Dhamar** | **133.37** | **36** | | PFAKE | | 04 35 00.0 | +6.9 | | | |
| DAMY | | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | | |
| **FURI** | **Furi** | **134.33** | **47** | | PFAKE | | 04 35 10.0 | +15 | | | |
| FURI | | | | | LR | LR | | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | | |
| **MAW** | **Mawson** | **136.62** | **176** | | PKP | **PKPdf** | **04 34 58.4** | **+1.2** | | | |
| | comp=Z,2.7nm,0.8s,baz=260,slow=3.4,SNR=7.5 | | | | | | | | | | |
| **MAW** | **Mawson** | **136.62** | **176** | | *e*PKIKP | **PKPdf** | **04 34 56.0** | **-1.2** | | | |
| MAW | | | | | MLR | MLR | | | | | |
| | comp=Z,300nm,20.0s | | | | | | | | | | |
| **MAW** | **Mawson** | **136.62** | **176** | | *e*PKPdf | **PKPdf** | **04 34 56.0** | **-1.2** | | | |
| MAW | | | | | LR | LR | | | | | |
| | comp=Z,300nm,20.0s | | | | | | | | | | |
| **KULM** | **Kulim** | **138.51** | **312** | | PFAKE | | 04 35 10.0 | +7.6 | | | |
| KULM | | | | | LR | LR | | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | | |
| **IPM** | **Ipoh** | **138.83** | **310** | | PFAKE | | 04 35 10.0 | +7.0 | | | |
| IPM | | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | | |
| **LSZ** | **Lusaka** | **139.02** | **85** | | PFAKE | | 04 35 10.0 | +6.7 | | | |
| LSZ | | | | | LR | LR | | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | | |
| **BOSA** | **Boshof** | **139.23** | **106** | | PKP | **PKPdf** | **04 35 02.6** | **-0.8** | | | |
| | comp=Z,1.9nm,0.8s,baz=230,slow=4.6,SNR=3.0 | | | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **140.08** | **59** | | *i* PKIKP | PKPdf | 04 35 13.5 | +7.9 | | | |
| KMBO | | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.2s | | | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **140.08** | **59** | | PFAKE | | 04 35 20.0 | +14 | | | |
| KMBO | | | | | LR | LR | | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | | |
| **PSI** | **Prapat** | **141.49** | **311** | | PFAKE | | 04 35 20.0 | +12 | | | |
| PSI | | | | | LR | LR | | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | | |
| **GSI** | **Gunungsitoli** | **143.49** | **311** | | PFAKE | | 04 35 20.0 | +8.7 | | | |
| GSI | | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | | |
| **PALK** | **Pallekele** | **146.97** | **342** | | PFAKE | | 04 35 30.0 | +9.4 | | | |
| PALK | | | | | LR | LR | | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | | |
| **ABPO** | **Ambohimpan

*ellipse: s-maj=20.7km s-min=11.0km az=160.0*

*NEIC **20** 04:30:34.1±0.6,24°.37N×109°.03W,h10km,mb4.7/69, MD4.6(MEX),Error ellipse: s-maj=8.0km s-min=7.4km az=189.0*

*NEIC Felt at La Paz, Baja California Sur.*

*BJI **20** 04:30:37.3,24°.30N×109°.30W,h10km,mb5.1/1,mB5.6/2, Ms5.3/2,Ms7 5.2/3*

*MEX **20** 04:30:38.2±0.4,24°.70N×109°.47W,h10km,MD4.6*

**ISC 20 04:30:34.3**±0.5**,24°.39N**±0°.05×**109°.18W**±0°.05**,h10km, n330,**σ1.36/293**,mb4.8**/45**,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SLBS | Sierra La Lagu | 0.99 | 225 | ePg | Pn | 04 30 54.6 | +0.3 |
| LPIG | La Paz | 1.07 | 254 | Pg | Pg | 04 30 54.6 | -0.2 |
| | 56nm,0.3s,baz=235,slow=1.3,SNR=24 | | | | | | |
| LPIG | | | | Lg | Lg | 04 31 08.9 | |
| | 134nm,0.3s,baz=0.0,slow=20,SNR=22 | | | | | | |
| LPIG | La Paz | 1.07 | 254 | eP | Pg | 04 30 54.2 | -0.5 |
| LPIG | | | | iS | Sg | 04 31 06.2 | -2.4 |
| MAIG | Mazatlaan | 2.80 | 115 | eP | Pb | 04 31 24.6 | +0.2 |
| MAIG | Mazatlaan | 2.80 | 115 | eP | Pb | 04 31 24.6 | +0.2 |
| SRIG | Santa Rosalia | 4.01 | 317 | iP | Pn | 04 31 30.7 | -5.1 |
| SRIG | Santa Rosalia | 4.01 | 317 | iP | Pn | 04 31 30.7 | -5.1 |
| ANIG | Ahuacatlan | 5.44 | 127 | eP | Pn | 04 32 03.0 | +7.5 |
| ANIG | Ahuacatlan | 5.44 | 127 | eP | Pn | 04 32 03.0 | +7.5 |
| TX31 | Lajitas Ar. Si | 6.96 | 44 | ePn | Pn | 04 32 25.4 | +8.9 |
| TX31 | | | | ePg | Pg | 04 32 44.0 | -3.6 |
| TXAR | Lajitas Array | 6.96 | 44 | Pn | Pn | 04 32 12.6 | -3.9 |
| | baz=228,slow=13,SNR=1.8 | | | | | | |
| TXAR | | | | Pg | Pb | 04 32 35.7 | +0.3 |
| | 0.4nm,0.3s,baz=217,slow=14,SNR=3.1 | | | | | | |
| TXAR | | | | Sn | Sn | 04 33 28.5 | -7.3 |
| | 0.4nm,0.3s,baz=254,slow=30,SNR=2.5 | | | | | | |
| TXAR | | | | Lg | Lg | 04 34 05.4 | |
| | 1.9nm,0.3s,baz=233,slow=27,SNR=5.5 | | | | | | |
| MNTX | Cornudas Mount | 8.02 | 24 | ePn | Pn | 04 32 26.7 | -4.2 |
| MNTX | | | | eS | Sb | 04 34 24.8 | -4.1 |
| LPM | Los Pinos Moun | 10.13 | 12 | ePn | Pn | 04 32 59.9 | -0.1 |
| LAZ | Ladron | 10.13 | 10 | ePn | Pn | 04 32 59.2 | -0.9 |
| 432A | Menard | 10.53 | 50 | P | Pn | 04 33 06.8 | +1.4 |
| | baz=10 | | | | | | |
| MONP | Monument Peak | 10.58 | 325 | P | Pn | 04 33 06.5 | +0.3 |
| | baz=11 | | | | | | |
| W18A | Petrified Fore | 10.70 | 358 | P | Pn | 04 33 09.6 | +1.8 |
| | baz=11,SNR=7.1 | | | | | | |
| W18A | Petrified Fore | 10.70 | 358 | ePn | Pn | 04 33 04.0 | -3.8 |
| ANMO | Albuquerque | 10.78 | 12 | Pn | Pn | 04 33 10.1 | +1.2 |
| | 0.1nm,0.3s,baz=174,slow=7.9,SNR=5.2 | | | | | | |
| ANMO | | | | Lg | Lg | 04 36 08.1 | |
| | 0.1nm,0.3s,baz=187,slow=17,SNR=2.8 | | | | | | |
| ANMO | Albuquerque | 10.78 | 12 | ePn | Pn | 04 33 07.6 | -1.3 |
| ANMO | | | | Lg | Lg | 04 36 08.1 | |
| IRM | Iron Mountain | 11.03 | 333 | P | Pn | 04 33 13.2 | +1.0 |
| | baz=11 | | | | | | |
| PFO | Pinyon Flat Ob | 11.17 | 327 | ePn | Pn | 04 33 11.2 | -3.0 |
| WUAZ | Wupatki | 11.25 | 351 | ePn | Pn | 04 33 16.9 | +1.6 |
| 434A | Burnet | 11.60 | 54 | P | Pn | 04 33 20.8 | +0.9 |
| | baz=12 | | | | | | |
| ABTX | Abilene, Hawle | 11.73 | 43 | P | Pn | 04 33 22.8 | +1.1 |
| | baz=12 | | | | | | |
| X28A | Dimmitt | 11.78 | 29 | P | Pn | 04 33 25.2 | +2.7 |
| | baz=12 | | | | | | |
| 233A | Rising Star | 11.82 | 48 | P | Pn | 04 33 24.3 | +1.2 |
| | baz=12 | | | | | | |
| Z31A | Sharp Cattle R | 11.90 | 40 | P | Pn | 04 33 24.4 | +0.2 |
| | baz=12 | | | | | | |
| HEC | Hector,Ludlow | 12.11 | 331 | ePn | Pn | 04 33 22.2 | -4.8 |
| Z32A | Haskell | 12.29 | 42 | P | Pn | 04 33 28.2 | -1.2 |
| | baz=12,SNR=5.5 | | | | | | |
| AMTX | Amarillo | 12.32 | 30 | P | Pn | 04 33 30.4 | +0.5 |
| | baz=12 | | | | | | |
| AMTX | Amarillo | 12.32 | 30 | ePn | Pn | 04 33 29.3 | -0.6 |
| MVCO | Mesa Verde | 12.79 | 2 | ePn | Pn | 04 33 36.6 | +0.2 |
| Y33A | Hilltop Ranch, | 13.29 | 41 | P | Pn | 04 33 45.7 | +2.6 |
| | baz=13 | | | | | | |
| T25A | Trinidad | 13.35 | 17 | ePn | Pn | 04 33 44.8 | +0.7 |
| S22A | 4UR Ranch, Cre | 13.46 | 8 | P | Pn | 04 33 48.0 | +2.3 |
| | baz=14 | | | | | | |
| S22A | 4UR Ranch, Cre | 13.46 | 8 | ePn | P | 04 33 52.7 | -2.4 |
| SRTC | Snort | 13.47 | 329 | ePn | Pn | 04 33 48.7 | +3.0 |
| CCUT | Cedar City | 13.59 | 346 | ePn | Pn | 04 33 46.0 | -1.4 |
| MPMC | Manual Prospec | 13.66 | 330 | P | Pn | 04 33 50.5 | +2.3 |
| | baz=14,SNR=9.0 | | | | | | |
| SDCO | Great Sand Dun | 13.68 | 12 | P | Pn | 04 33 51.4 | +2.8 |
| | baz=14 | | | | | | |
| SDCO | Great Sand Dun | 13.68 | 12 | ePn | Pn | 04 33 47.0 | -1.6 |
| WMOK | Wichita Mounta | 13.71 | 39 | ePn | Pn | 04 33 45.2 | -3.5 |
| X33A | Lawton | 13.73 | 40 | P | Pn | 04 33 51.3 | +2.2 |
| | baz=14 | | | | | | |
| ISA | Isabella | 13.81 | 327 | P | Pn | 04 33 51.5 | +1.4 |
| | baz=14,SNR=8.6 | | | | | | |
| ISA | Isabella | 13.81 | 327 | ePn | Pn | 04 33 51.9 | +1.7 |
| T28A | Walsh | 14.06 | 24 | P | Pn | 04 33 55.3 | +1.6 |
| | baz=14 | | | | | | |
| S26A | Kim | 14.06 | 19 | P | Pn | 04 33 55.5 | +1.8 |
| | baz=14 | | | | | | |
| X34A | Smith Ranch, M | 14.17 | 42 | P | Pn | 04 33 56.1 | +1.0 |
| | baz=14 | | | | | | |
| W33A | Caddo, Fort Co | 14.18 | 38 | P | Pn | 04 33 56.9 | +1.6 |
| | baz=14,SNR=6.2 | | | | | | |
| CWC | Cottonwood Cre | 14.24 | 330 | P | Pn | 04 33 56.7 | +0.5 |
| | baz=14,SNR=7.6 | | | | | | |
| VES | Vestal, Richgr | 14.26 | 325 | P | Pn | 04 33 56.3 | +0.1 |
| | baz=14 | | | | | | |
| T29A | Hugoton | 14.41 | 26 | P | Pn | 04 33 60.0 | +1.6 |
| | baz=14 | | | | | | |
| SMCO | Snowmass | 14.86 | 7 | ePn | P | 04 34 11.6 | +0.9 |
| R27A | Eads | 14.88 | 20 | P | Pn | 04 34 06.2 | +1.4 |
| | baz=15,SNR=6.0 | | | | | | |
| R11A | Troy Canyon, C | 14.94 | 340 | P | Pn | 04 34 06.4 | +0.6 |
| | baz=15,SNR=5.5 | | | | | | |
| R11A | Troy Canyon, C | 14.94 | 340 | ePn | P | 04 34 13.5 | +2.1 |
| TMUT | Trail Mountain | 14.96 | 354 | ePn | Pn | 04 34 07.2 | +1.1 |
| | 287nm,2.1s | | | | | | |
| T31A | Randall Ranch, | 15.06 | 31 | P | Pn | 04 34 09.7 | +2.5 |
| | baz=15 | | | | | | |
| X36A | Centrahoma | 15.08 | 45 | P | Pn | 04 34 10.0 | +2.6 |
| | baz=15 | | | | | | |
| P17A | Butcher Ranch, | 15.09 | 355 | ePn | P | 04 34 14.2 | +1.1 |
| | 20nm,1.3s | | | | | | |
| W35A | Tecumseh | 15.12 | 42 | P | Pn | 04 34 10.8 | +2.7 |
| | baz=15 | | | | | | |
| S30A | Montezuma | 15.16 | 27 | P | P | 04 34 11.4 | -2.3 |
| | baz=15 | | | | | | |
| Y37A | Hugo | 15.20 | 48 | P | Pn | 04 34 12.0 | +2.9 |
| | baz=15 | | | | | | |
| MTUM | Tungsten Hills | 15.21 | 330 | ePn | P | 04 34 16.9 | +2.5 |
| CMIG | Matias Romero | 15.21 | 116 | Pn | Pn | 04 34 06.6 | -2.8 |
| | 0.0nm,0.3s,baz=348,slow=14,SNR=2.9 | | | | | | |
| V34A | Guthrie | 15.21 | 39 | P | Pn | 04 34 11.3 | +2.1 |
| | baz=15 | | | | | | |
| 340A | Bronson | 15.22 | 59 | P | Pn | 04 34 10.5 | +1.2 |
| | baz=15 | | | | | | |
| P18A | Preston Nutter | 15.22 | 357 | ePn | P | 04 34 14.1 | -0.5 |
| | 56nm,1.7s | | | | | | |
| W36A | Wetumka | 15.52 | 43 | P | P | 04 34 16.2 | -1.4 |
| | baz=15,SNR=8.0 | | | | | | |
| R29A | Marienthal | 15.57 | 24 | P | P | 04 34 17.4 | -0.9 |
| | baz=16,SNR=6.9 | | | | | | |
| S31A | Mullinville | 15.57 | 30 | P | P | 04 34 17.2 | -1.1 |
| | baz=16,SNR=5.3 | | | | | | |
| ISCO | Idaho Springs | 15.65 | 10 | P | P | 04 34 17.6 | -1.9 |
| | baz=16 | | | | | | |
| ISCO | Idaho Springs | 15.65 | 10 | ePn | Pn | 04 34 12.4 | -2.9 |
| | 239nm,3.0s | | | | | | |
| NLU | North Lily Min | 15.71 | 352 | ePn | Pn | 04 34 13.9 | -1.9 |
| | 152nm,2.9s | | | | | | |
| MPU | Maple Canyon | 15.71 | 353 | ePn | Pn | 04 34 14.3 | -1.6 |
| | 68nm,1.2s | | | | | | |
| O20A | White River Ci | 15.72 | 3 | P | P | 04 34 19.7 | -0.4 |
| | baz=16,SNR=9.7 | | | | | | |
| O20A | White River Ci | 15.72 | 3 | ePn | P | 04 34 21.1 | +1.0 |
| | 56nm,1.1s | | | | | | |
| X37A | Clayton | 15.73 | 47 | P | Pn | 04 34 17.7 | +1.8 |
| | baz=16 | | | | | | |
| T33A | Patterson Ranc | 15.74 | 34 | P | P | 04 34 18.5 | -1.6 |
| | baz=16 | | | | | | |
| Y38A | Idabel | 15.79 | 50 | P | Pn | 04 34 18.9 | +2.2 |
| | baz=16,SNR=7.3 | | | | | | |
| R30A | Dighton | 15.79 | 27 | P | P | 04 34 20.2 | -0.4 |
| | baz=16,SNR=22 | | | | | | |
| S32A | Newby Ranch, P | 15.89 | 31 | P | Pn | 04 34 20.2 | +2.1 |
| | baz=16 | | | | | | |
| Q28A | Sharon Springs | 15.90 | 21 | P | Pn | 04 34 20.3 | +2.1 |
| | baz=16 | | | | | | |
| NV01 | Mina Array Sit | 16.00 | 333 | ePn | Pn | 04 34 21.3 | +1.7 |
| NVAR | Mina Array Bea | 16.00 | 333 | Pn | Pn | 04 34 20.9 | +1.2 |
| | 0.2nm,0.3s,baz=144,slow=11,SNR=12 | | | | | | |
| W37A | Quinton | 16.02 | 45 | P | P | 04 34 21.9 | -1.3 |
| | baz=16,SNR=7.0 | | | | | | |
| U35A | Pawnee | 16.04 | 39 | P | P | 04 34 22.2 | -1.3 |
| | baz=16 | | | | | | |
| DUG | Dugway | 16.05 | 350 | P | P | 04 34 22.3 | -1.4 |
| | baz=16 | | | | | | |
| DUG | Dugway | 16.05 | 350 | ePn | Pn | 04 34 20.6 | +0.3 |
| | 29nm,1.3s | | | | | | |
| R31A | Burdett | 16.11 | 28 | P | P | 04 34 23.0 | -1.2 |
| | baz=16 | | | | | | |
| V36A | Jenks | 16.11 | 42 | P | Pn | 04 34 22.8 | +1.9 |
| | baz=16,SNR=16 | | | | | | |
| Y39A | Lockesburg | 16.24 | 51 | P | P | 04 34 24.5 | -1.1 |
| | baz=16,SNR=7.4 | | | | | | |
| T34A | McClaskey Farm | 16.25 | 36 | P | P | 04 34 25.2 | -0.6 |
| | baz=16 | | | | | | |
| TUL1 | Tulsa | 16.29 | 42 | P | Pn | 04 34 24.6 | +1.5 |
| | baz=16 | | | | | | |
| P28A | Saint Francis | 16.38 | 21 | P | P | 04 34 26.5 | -0.8 |
| | baz=16 | | | | | | |
| CTU | Camp Tracy | 16.39 | 353 | ePn | P | 04 34 30.2 | +2.7 |
| | 258nm,2.9s | | | | | | |
| Q30A | Quinter | 16.41 | 25 | P | P | 04 34 27.2 | -0.4 |
| | baz=16 | | | | | | |
| CBKS | Cedar Bluff | 16.46 | 27 | P | P | 04 34 27.3 | -0.8 |
| | baz=16 | | | | | | |
| CBKS | Cedar Bluff | 16.46 | 27 | ePn | Pn | 04 34 23.5 | -1.9 |
| | 74nm,1.0s | | | | | | |
| T35A | Sooner Cattle | 16.55 | 38 | P | P | 04 34 28.2 | -0.9 |
| | baz=16 | | | | | | |
| W38A | Poteau | 16.58 | 47 | P | P | 04 34 28.7 | -0.6 |
| | baz=16,SNR=6.4 | | | | | | |
| R32A | Long Quarter, | 16.58 | 30 | P | P | 04 34 28.6 | -0.8 |
| | baz=17 | | | | | | |
| CMB | Columbia Colle | 16.61 | 328 | ePn | P | 04 34 29.9 | 0.0 |
| | 96nm,2.8s | | | | | | |
| U36A | Oologah | 16.64 | 41 | P | Pn | 04 34 29.0 | +1.3 |
| | baz=17 | | | | | | |
| V37A | Hulbert | 16.67 | 43 | P | Pn | 04 34 29.3 | +1.3 |
| | baz=17 | | | | | | |
| N23A | Red Feather La | 16.68 | 9 | P | P | 04 34 30.5 | -0.3 |
| | baz=17 | | | | | | |
| Q31A | Ellis | 16.76 | 27 | P | P | 04 34 31.3 | -0.2 |
| | baz=17,SNR=7.2 | | | | | | |
| R33A | Olander Ranch, | 16.83 | 32 | P | P | 04 34 31.7 | -0.4 |
| | baz=17 | | | | | | |
| O28A | Krutsinger Ran | 16.88 | 20 | P | P | 04 34 32.2 | -0.6 |
| | baz=17 | | | | | | |
| P30A | Selden | 16.89 | 24 | P | P | 04 34 33.0 | +0.2 |
| | baz=17,SNR=7.2 | | | | | | |
| MIAR | Mount Ida | 16.93 | 50 | P | Pn | 04 34 32.1 | +0.8 |
| | baz=17 | | | | | | |
| MIAR | Mount Ida | 16.93 | 50 | ePn | Pn | 04 34 31.9 | +0.6 |
| | 41nm,1.1s | | | | | | |
| T36A | Boggs Farm, Ca | 17.01 | 39 | P | Pn | 04 34 32.2 | -0.2 |
| | baz=17,SNR=6.4 | | | | | | |
| U37A | Salina | 17.02 | 42 | P | Pn | 04 34 33.2 | +0.7 |
| | baz=17,SNR=5.8 | | | | | | |
| ELK | Elko | 17.08 | 344 | ePn | P | 04 34 40.3 | +5.1 |
| | 50nm,1.6s | | | | | | |
| Q32A | Meitler Ranch, | 17.11 | 29 | P | Pn | 04 34 34.6 | +1.0 |
| | baz=17 | | | | | | |
| V38A | Canehill | 17.12 | 45 | P | Pn | 04 34 34.1 | +0.3 |
| | baz=17,SNR=6.7 | | | | | | |
| PHWY | Pilot Hill | 17.15 | 10 | ePn | P | 04 34 41.7 | +5.7 |
| | 50nm,1.6s | | | | | | |
| R34A | Isabella, Hill | 17.19 | 33 | P | P | 04 34 35.7 | -0.4 |
| | baz=17 | | | | | | |
| O29A | 4D Ranch, Culb | 17.20 | 22 | P | P | 04 34 36.9 | +0.6 |
| | baz=17,SNR=6.0 | | | | | | |
| S35A | Otter Creek Ra | 17.21 | 37 | P | Pn | 04 34 35.4 | +0.6 |
| | baz=17,SNR=5.6 | | | | | | |
| HWUT | Hardware Ranch | 17.28 | 354 | ePn | Pn | 04 34 32.7 | -3.1 |
| | 110nm,2.0s | | | | | | |
| BMN | Battle Mountai | 17.36 | 339 | ePn | P | 04 34 45.1 | +6.9 |
| | 85nm,1.5s | | | | | | |
| Q33A | Connelly Farm, | 17.45 | 31 | P | P | 04 34 39.2 | +0.1 |
| | baz=17 | | | | | | |
| N28A | Pribbeno Ranch | 17.47 | 20 | P | P | 04 34 39.4 | +0.1 |
| | baz=18 | | | | | | |
| U38A | Gravette | 17.50 | 43 | P | Pn | 04 34 38.7 | +0.3 |
| | baz=17 | | | | | | |
| O30A | MW Ranch, Wils | 17.51 | 24 | P | P | 04 34 39.8 | +0.1 |
| | baz=18 | | | | | | |
| OGNE | Ogallala | 17.56 | 18 | P | P | 04 34 40.5 | +0.2 |
| | baz=18 | | | | | | |
| HVU | Hansel Valley | 17.59 | 351 | ePn | Pn | 04 34 37.9 | -1.9 |
| | 27nm,1.1s | | | | | | |
| HVU | | | | eS | Sn | 04 37 17.7 | -38 |
| P32A | Huiting Farm, | 17.62 | 28 | P | P | 04 34 41.2 | +0.4 |
| | baz=18 | | | | | | |
| T37A | Cheneyville 18 | 17.62 | 41 | P | Pn | 04 34 40.7 | +0.8 |
| | baz=18 | | | | | | |
| S36A | Lake Cedric, C | 17.64 | 38 | P | Pn | 04 34 40.6 | +0.4 |
| | baz=18 | | | | | | |
| R35A | Emporia Munici | 17.74 | 35 | P | P | 04 34 42.4 | +0.1 |
| | baz=18 | | | | | | |
| O31A | Woolen Ranch, | 17.77 | 25 | P | P | 04 34 43.0 | +0.4 |
| | baz=18 | | | | | | |
| Q34A | Chapman | 17.82 | 33 | P | P | 04 34 43.5 | +0.4 |
| | baz=18,SNR=6.6 | | | | | | |
| N29A | Votaw Ranch, W | 17.88 | 22 | P | P | 04 34 43.8 | -0.1 |
| | baz=18 | | | | | | |
| KSU1 | Kansas State U | 18.12 | 33 | P | Pn | 04 34 46.1 | +0.1 |
| | baz=18 | | | | | | |
| KSU1 | Kansas State U | 18.12 | 33 | ePn | Pn | 04 34 44.0 | -2.1 |
| | 45nm,1.1s | | | | | | |
| Q35A | Mercer Eighty, | 18.23 | 35 | P | Pn | 04 34 47.1 | -0.3 |
| | baz=18,SNR=7.5 | | | | | | |
| O32A | Brockman Farm, | 18.29 | 27 | P | Pn | 04 34 48.1 | 0.0 |
| | baz=18 | | | | | | |
| BW06 | Boulder Array | 18.33 | 359 | ePn | Pn | 04 34 48.0 | -0.9 |
| K22A | Casper | 18.34 | 6 | P | Pn | 04 34 48.6 | -0.4 |
| | baz=18 | | | | | | |
| K22A | Casper | 18.34 | 6 | eP | P | 04 34 49.2 | +0.2 |
| | 60nm,1.4s | | | | | | |
| P34A | Walnut Farm, R | 18.36 | 32 | P | Pn | 04 34 48.9 | -0.2 |
| | baz=18,SNR=5.4 | | | | | | |
| AHID | Auburn Hatcher | 18.39 | 356 | ePn | P | 04 34 51.0 | +1.4 |
| M29A | Burnside Ranch | 18.42 | 21 | P | P | 04 34 49.9 | +0.1 |
| | baz=18 | | | | | | |
| O33A | Hebron | 18.43 | 29 | P | P | 04 34 49.8 | -0.1 |
| | baz=18 | | | | | | |
| L28A | Connealy Angus | 18.68 | 18 | P | P | 04 34 52.5 | -0.2 |
| | baz=19 | | | | | | |
| P35A | Duane Minner, | 18.74 | 33 | P | P | 04 34 52.9 | -0.3 |
| | baz=19 | | | | | | |
| O34A | Beatrice | 18.92 | 31 | P | P | 04 34 55.3 | 0.0 |
| | baz=19 | | | | | | |
| M31A | Lambtecht Ranc | 18.93 | 24 | P | P | 04 34 55.8 | +0.5 |
| | baz=19 | | | | | | |
| REDW | Red Top Meadow | 18.97 | 356 | eP | Pn | 04 34 59.3 | +2.6 |
| | 105nm,2.3s | | | | | | |
| SNOW | Snow King Moun | 19.07 | 356 | eP | Pn | 04 34 59.6 | +1.8 |
| | 56nm,1.8s | | | | | | |
| Q37A | Longview Farm, | 19.09 | 37 | P | P | 04 34 56.2 | -0.9 |
| | baz=19 | | | | | | |
| TPAW | Teton Pass | 19.11 | 356 | eP | Pn | 04 34 59.5 | +1.1 |
| | 177nm,2.4s | | | | | | |
| L30A | Spencer Herefo | 19.19 | 22 | P | P | 04 34 57.9 | -0.4 |
| | baz=19 | | | | | | |
| LOHW | Long Hollow | 19.21 | 357 | eP | Pn | 04 35 04.0 | +4.5 |
| | 19nm,1.3s | | | | | | |
| P36A | Good Intent, A | 19.22 | 35 | P | P | 04 34 58.6 | 0.0 |
| | baz=19,SNR=5.2 | | | | | | |
| FXWY | Fox Creek | 19.26 | 356 | eP | Pn | 04 35 03.0 | +2.8 |
| | 159nm,2.5s | | | | | | |
| BGNE | Belgrade | 19.30 | 26 | P | P | 04 34 59.6 | +0.2 |
| | baz=19 | | | | | | |
| BGNE | Belgrade | 19.30 | 26 | eP | Pn | 04 35 00.2 | -0.2 |
| | 96nm,1.0s | | | | | | |
| MOOW | Moose Ponds | 19.35 | 357 | eP | Pn | 04 35 02.1 | +0.8 |
| | 82nm,2.2s | | | | | | |
| K28A | Ten Mile Ranch | 19.38 | 18 | P | P | 04 34 59.5 | -0.8 |
| | baz=19 | | | | | | |
| J25A | Sunshine Ranch | 19.46 | 12 | P | P | 04 35 00.7 | -0.6 |
| | baz=20 | | | | | | |
| IMW | Indian Meadow | 19.51 | 356 | eP | Pn | 04 35 03.3 | +0.1 |
| | 29nm,1.4s | | | | | | |
| J26A | Sides Ranch, S | 19.53 | 13 | P | P | 04 35 01.9 | 0.0 |
| | baz=20 | | | | | | |
| HLID | Hailey | 19.60 | 349 | P | P | 04 35 02.8 | 0.0 |
| | baz=20 | | | | | | |
| HLID | Hailey | 19.60 | 349 | eP | P | 04 35 03.4 | +0.6 |
| | 79nm,2.1s | | | | | | |
| WVOR | Wild Horse Val | 19.62 | 339 | eP | P | 04 35 01.8 | -1.3 |
| | 60nm,1.4s | | | | | | |
| FLWY | Flagg Ranch | 19.68 | 357 | eP | Pn | 04 35 12.5 | +7.4 |
| | 163nm,2.3s | | | | | | |
| O36A | Bolckow | 19.73 | 34 | P | P | 04 35 04.4 | +0.4 |
| | baz=20,SNR=5.4 | | | | | | |
| MFID | Camas Ranch | 19.75 | 346 | eP | Pn | 04 35 08.0 | +2.2 |
| | 36nm,1.5s | | | | | | |
| MOD | Modoc | 19.76 | 335 | eP | Pn | 04 35 11.9 | +5.9 |
| | 56nm,1.6s | | | | | | |
| N35A | Tabor | 19.95 | 31 | P | P | 04 35 06.0 | -0.5 |
| | baz=20,SNR=5.5 | | | | | | |
| H17A | Grant Village | 19.99 | 357 | P | P | 04 35 06.7 | -0.4 |
| | baz=20,SNR=7.1 | | | | | | |
| H17A | Grant Village | 19.99 | 357 | eP | Pn | 04 35 13.1 | +4.2 |
| | 64nm,1.8s | | | | | | |
| YFT | Old Faithful | 20.06 | 357 | eP | Pn | 04 35 09.3 | -0.4 |
| | 19nm,1.0s | | | | | | |
| J28A | Allard Ranch, | 20.08 | 17 | P | P | 04 35 08.3 | +0.4 |
| | baz=20 | | | | | | |
| I25A | Rochford | 20.08 | 12 | P | P | 04 35 07.6 | -0.4 |
| | baz=20 | | | | | | |
| RSSD | Black Hills | 20.13 | 11 | eP | P | 04 35 08.0 | -0.6 |
| | 16nm,1.5s | | | | | | |
| LKWY | Lake | 20.15 | 357 | eP | P | 04 35 05.6 | -3.3 |
| | 31nm,1.3s | | | | | | |
| PBMO | Poplar Bluff | 20.28 | 48 | eP | Pn | 04 35 17.0 | +4.9 |
| | 190nm,3.0s | | | | | | |
| YMR | Madison River | 20.28 | 356 | eP | P | 04 35 11.1 | +0.8 |
| | 36nm,1.2s | | | | | | |
| M04C | Macdoel | 20.29 | 332 | P | P | 04 35 10.7 | +0.4 |
| | baz=20,SNR=13 | | | | | | |
| YNR | Norris Junctio | 20.31 | 357 | P | P | 04 35 10.9 | +0.3 |
| | 52nm,1.5s | | | | | | |
| J08A | Circle Bar Ran | 20.40 | 340 | eP | Pn | 04 35 12.8 | -0.9 |
| | 64nm,1.4s | | | | | | |
| M35A | Neola | 20.40 | 30 | P | P | 04 35 11.2 | -0.2 |
| | baz=20 | | | | | | |
| K32A | Verdigre | 20.44 | 24 | P | P | 04 35 11.8 | -0.1 |
| | baz=20 | | | | | | |
| QLMT | Earthquake Lak | 20.47 | 355 | eP | Pn | 04 35 18.1 | +3.5 |
| I27A | Quinn | 20.48 | 15 | P | P | 04 35 12.5 | +0.3 |
| | baz=20 | | | | | | |
| HALT | Halls | 20.60 | 52 | eP | Pn | 04 35 17.9 | +2.1 |
| MCMT | McKenzie Canyo | 20.60 | 353 | eP | Pn | 04 35 16.8 | +0.7 |
| I28A | Midland | 20.63 | 17 | P | P | 04 35 14.0 | +0.1 |
| | baz=21 | | | | | | |
| RLMT | Red Lodge | 20.68 | 360 | P | P | 04 35 14.7 | 0.0 |
| | baz=21 | | | | | | |
| RLMT | Red Lodge | 20.68 | 360 | eP | P | 04 35 14.1 | -0.5 |
| | 3.0nm,1.0s | | | | | | |
| K05A | Summer Lake | 20.69 | 335 | eP | Pn | 04 35 17.6 | +0.5 |
| | 133nm,1.6s | | | | | | |
| H25A | Fruitdale | 20.69 | 11 | P | P | 04 35 14.7 | +0.2 |
| | baz=21 | | | | | | |
| J31A | Geddes | 20.72 | 22 | P | P | 04 35 15.0 | +0.2 |
| | baz=21 | | | | | | |
| H26A | Fairpoint | 20.84 | 13 | P | P | 04 35 16.9 | +0.7 |
| | baz=21 | | | | | | |
| I29A | Vivian Onida | 20.89 | 18 | P | P | 04 35 17.3 | +0.7 |
| | baz=21 | | | | | | |
| L35A | Bielow Farm, R | 20.98 | 29 | P | P | 04 35 17.5 | -0.2 |
| | baz=21 | | | | | | |
| H27A | Howes | 21.01 | 14 | P | P | 04 35 18.3 | +0.3 |
| | baz=21 | | | | | | |
| DLMT | Dillon | 21.10 | 353 | eP | P | 04 35 22.1 | +3.0 |
| | 34nm,1.3s | | | | | | |
| J32A | Parkston | 21.10 | 23 | P | P | 04 35 18.9 | -0.1 |
| | baz=21 | | | | | | |
| K34A | Le Mars | 21.21 | 27 | P | P | 04 35 20.1 | 0.0 |
| | baz=21 | | | | | | |
| J05D | Fort Rock, OR | 21.29 | 335 | P | P | 04 35 20.7 | -0.5 |
| | baz=21,SNR=9.9 | | | | | | |
| BOZ | Bozeman (W) | 21.30 | 355 | P | P | 04 35 21.4 | +0.1 |
| | baz=21 | | | | | | |
| BOZ | Bozeman (W) | 21.30 | 355 | eP | P | 04 35 21.1 | -0.1 |
| | 46nm,1.6s | | | | | | |
| H28A | Mission Ridge | 21.30 | 16 | P | P | 04 35 21.6 | +0.5 |
| | baz=21 | | | | | | |
| I07A | Izee | 21.38 | 339 | eP | P | 04 35 23.3 | +1.2 |
| | 34nm,1.1s | | | | | | |
| J33A | Davis | 21.39 | 25 | P | P | 04 35 22.2 | +0.2 |
| | baz=21 | | | | | | |
| H29A | Onida | 21.47 | 18 | P | P | 04 35 22.9 | 0.0 |
| | baz=22 | | | | | | |
| G26A | Maurine | 21.53 | 13 | P | P | 04 35 23.7 | +0.1 |
| | baz=22 | | | | | | |
| LRM | Limekiln Ridge | 21.54 | 354 | eP | P | 04 35 30.0 | +6.0 |
| G27A | Dupree | 21.75 | 14 | P | P | 04 35 25.4 | -0.5 |
| | baz=22,SNR=5.3 | | | | | | |
| WVT | Waverly | 21.79 | 53 | eP | P | 04 35 26.1 | -0.3 |
| | 30nm,1.4s | | | | | | |
| ECSD | EROS Data Cent | 21.88 | 25 | P | P | 04 35 27.5 | +0.2 |
| | baz=22 | | | | | | |
| ECSD | EROS Data Cent | 21.88 | 25 | eP | P | 04 35 26.0 | -1.2 |
| | 39nm,1.3s | | | | | | |
| F25A | Bowman | 21.98 | 11 | P | P | 04 35 28.7 | +0.3 |
| | baz=22 | | | | | | |
| F26A | Lodgepole | 22.05 | 12 | P | P | 04 35 29.5 | +0.4 |
| | baz=22 | | | | | | |
| F27A | Lemmon | 22.20 | 13 | P | P | 04 35 30.9 | +0.1 |
| | baz=22 | | | | | | |
| H32A | Carlson Farm, | 22.23 | 23 | P | P | 04 35 31.4 | +0.3 |
| | baz=22 | | | | | | |
| I05D | Terrebonne, OR | 22.24 | 336 | P | P | 04 35 30.3 | -0.9 |
| | baz=22 | | | | | | |
| G08A | Pilot Rock | 22.30 | 342 | eP | P | 04 35 33.5 | +1.5 |
| | 18nm,1.4s | | | | | | |
| HRY | Holter Researc | 22.37 | 355 | eP | P | 04 35 34.1 | +1.4 |
| K37A | Belmond | 22.37 | 31 | P | P | 04 35 32.6 | -0.1 |
| | baz=22 | | | | | | |
| LAO | LASA Array | 22.37 | 5 | P | P | 04 35 32.7 | 0.0 |
| | baz=22 | | | | | | |
| LAO | LASA Array | 22.37 | 5 | eP | P | 04 35 34.0 | +1.4 |
| | 90nm,1.7s | | | | | | |
| F28A | McLaughlin | 22.45 | 15 | P | P | 04 35 33.7 | +0.2 |
| | baz=22 | | | | | | |
| F10A | Beach Ranch, E | 22.49 | 345 | eP | P | 04 35 33.6 | -0.3 |
| | 37nm,1.4s | | | | | | |
| J36A | Seneca 1, Swea | 22.49 | 29 | P | P | 04 35 33.8 | 0.0 |
| | baz=22 | | | | | | |
| E25A | Miller Ranch, | 22.54 | 10 | P | P | 04 35 34.5 | +0.1 |
| | baz=23 | | | | | | |
| H33A | Prehn Over Nor | 22.64 | 24 | P | P | 04 35 35.0 | -0.4 |
| | baz=23 | | | | | | |
| E26A | Carlson Angus | 22.68 | 12 | P | P | 04 35 35.6 | -0.3 |
| | baz=23 | | | | | | |
| F29A | Eureka | 22.69 | 17 | P | P | 04 35 36.1 | +0.1 |
| | baz=23 | | | | | | |
| CHMT | Chamberlain Mo | 22.71 | 353 | eP | P | 04 35 37.1 | +0.7 |
| MSO | Missoula | 22.71 | 352 | P | P | 04 35 36.0 | -0.3 |
| | baz=23 | | | | | | |
| MSO | Missoula | 22.71 | 352 | eP | P | 04 35 37.5 | +1.2 |
| | 42nm,1.3s | | | | | | |
| E27A | Carson | 22.82 | 14 | P | P | 04 35 37.2 | -0.2 |
| | baz=23 | | | | | | |
| SWET | Sewanee | 22.82 | 56 | eP | P | 04 35 41.3 | +3.7 |
| | 48nm,1.4s | | | | | | |
| H04A | Detroit Lake | 22.84 | 336 | eP | P | 04 35 39.6 | +1.9 |
| OLIL | Olney | 22.89 | 46 | eP | P | 04 35 44.0 | +6.0 |
| | 64nm,0.9s | | | | | | |
| H34A | Spellman Lake, | 22.98 | 25 | P | P | 04 35 39.1 | +0.1 |
| | baz=23,SNR=7.7 | | | | | | |
| SLMT | Seeley Lake | 23.06 | 352 | eP | P | 04 35 40.9 | +0.9 |
| E28A | Huff | 23.16 | 15 | P | P | 04 35 40.0 | -0.8 |
| | baz=23 | | | | | | |
| HDIL | Hopedale | 23.18 | 41 | P | P | 04 35 39.7 | -1.4 |
| | baz=23 | | | | | | |
| HDIL | Hopedale | 23.18 | 41 | eP | P | 04 35 40.8 | -0.3 |
| | 125nm,1.7s | | | | | | |
| D25A | Fairfield | 23.19 | 10 | P | P | 04 35 40.3 | -0.9 |
| | baz=23 | | | | | | |
| D26A | Manning | 23.23 | 12 | P | P | 04 35 40.1 | -1.4 |
| | baz=23 | | | | | | |
| SWMT | Swartz Lake | 23.39 | 352 | eP | P | 04 35 43.9 | +0.6 |
| E29A | Napoleon | 23.42 | 17 | P | P | 04 35 42.6 | -0.8 |
| | baz=23 | | | | | | |
| I37A | Lemond, Waseca | 23.45 | 30 | P | P | 04 35 43.1 | -0.7 |
| | baz=23 | | | | | | |
| HAWA | Hanford | 23.48 | 342 | eP | P | 04 35 43.2 | -0.8 |
| | 41nm,1.5s | | | | | | |
| G34A | Benson | 23.52 | 24 | P | P | 04 35 43.6 | -0.9 |
| | baz=24 | | | | | | |
| EGMT | Eagleton | 23.59 | 359 | P | P | 04 35 44.2 | -1.0 |
| | baz=24 | | | | | | |
| EGMT | Eagleton | 23.59 | 359 | eP | P | 04 35 43.9 | -1.3 |
| | 90nm,1.4s | | | | | | |
| TIGA | Tifton | 23.65 | 67 | eP | P | 04 35 46.0 | +0.1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 31nm,1.1s | | | | | | | | |
| **JTMT** | **Jette** | | **23.66** | **351** | *e*P | | **P** | **04 35 44.4** | **-1.5** |
| **H36A** | **Jessenland, He** | | **23.66** | **28** | P | | **P** | **04 35 45.2** | **-0.7** |
| | baz=24 | | | | | | | | | |
| **YBMT** | **Yellow Bay** | | **23.73** | **352** | *e*P | | **P** | **04 35 46.1** | **-0.6** |
| **WCI** | **Wyandotte Cave** | | **23.85** | **49** | *e*P | | **P** | **04 35 47.8** | **0.0** |
| | 46nm,0.8s | | | | | | | | | |
| **D08A** | **Wollman Farm,** | | **23.92** | **343** | *e*P | | **P** | **04 35 47.3** | **-1.0** |
| | 174nm,2.9s | | | | | | | | | |
| **I38A** | **Scanlan Farm,** | | **23.96** | **31** | P | | **P** | **04 35 47.4** | **-1.3** |
| | baz=24 | | | | | | | | | |
| **CPCT** | **Cooper Cave** | | **23.98** | **57** | *e*P | | **P** | **04 35 49.0** | **0.0** |
| **C27A** | **Sayler Ranch,** | | **24.06** | **13** | P | | **P** | **04 35 48.1** | **-1.6** |
| | baz=24 | | | | | | | | | |
| **H37A** | **Dierke Farm, C** | | **24.11** | **29** | P | | **P** | **04 35 48.5** | **-1.6** |
| | baz=24 | | | | | | | | | |
| **G36A** | **St. Michael** | | **24.27** | **27** | P | | **P** | **04 35 50.5** | **-1.1** |
| | baz=24 | | | | | | | | | |
| **SFIN** | **Scholer Farm** | | **24.43** | **44** | P | | **P** | **04 35 51.2** | **-1.9** |
| | baz=24 | | | | | | | | | |
| **SFIN** | **Scholer Farm** | | **24.43** | **44** | *e*P | | **P** | **04 35 53.6** | **+0.4** |
| | 42nm,0.9s | | | | | | | | | |
| **C09A** | **Chrisman Ranch** | | **24.45** | **345** | *e*P | | P | 04 35 59.0 | +5.7 |
| | 22nm,1.4s | | | | | | | | | |
| **LTY** | **Liberty** | | **24.59** | **341** | *e*P | | P | 04 36 01.2 | +6.6 |
| **TKL** | **Tuckaleechee C** | | **24.63** | **57** | P | | **P** | **04 35 52.2** | **-2.8** |
| | 0.9nm,0.5s,baz=228,slow=15,SNR=1.9 | | | | | | | | | |
| **TKL** | **Tuckaleechee C** | | **24.63** | **57** | *e*P | | P | 04 35 59.9 | +4.9 |
| **NEW** | **Newport** | | **24.64** | **347** | P | | **P** | **04 35 55.0** | **0.0** |
| | 9.0nm,1.0s,baz=167,slow=8.9,SNR=9.6 | | | | | | | | | |
| **NEW** | **Newport** | | **24.64** | **347** | P | | **P** | **04 35 54.4** | **-0.6** |
| | baz=25 | | | | | | | | | |
| **NEW** | **Newport** | | **24.64** | **347** | *e*P | | **P** | **04 35 53.4** | **-1.6** |
| | 62nm,1.3s | | | | | | | | | |
| **SPMN** | **St. Paul** | | **24.66** | **29** | P | | **P** | **04 35 53.8** | **-1.4** |
| | baz=25 | | | | | | | | | |
| **SPMN** | **St. Paul** | | **24.66** | **29** | *e*P | | P | 04 36 00.9 | +5.7 |
| | 32nm,1.3s | | | | | | | | | |
| **B27A** | **Peters Farms,** | | **24.77** | **13** | P | | **P** | **04 35 55.6** | **-0.6** |
| | baz=25 | | | | | | | | | |
| **F36A** | **Milaca** | | **24.87** | **27** | P | | **P** | **04 35 56.2** | **-0.8** |
| | baz=25,SNR=6.4 | | | | | | | | | |
| **WALA** | **Waterton Lakes** | | **24.90** | **353** | *e*P | | **P** | **04 35 58.3** | **+0.9** |
| | 28nm,0.9s | | | | | | | | | |
| **B28A** | **Dugan Ranch, T** | | **25.00** | **14** | P | | **P** | **04 35 57.1** | **-1.1** |
| | baz=25 | | | | | | | | | |
| **C31A** | **Landman Farms,** | | **25.06** | **18** | P | | **P** | **04 35 58.0** | **-0.7** |
| | baz=25 | | | | | | | | | |
| **E35A** | **Pequot Lakes** | | **25.09** | **25** | P | | **P** | **04 35 58.5** | **-0.5** |
| | baz=25,SNR=6.6 | | | | | | | | | |
| **A26A** | **Wade Farm, Ken** | | **25.10** | **11** | P | | **P** | **04 35 58.0** | **-1.1** |
| | baz=25 | | | | | | | | | |
| **A28A** | **Rude Farm, Bot** | | **25.46** | **14** | P | | **P** | **04 36 01.5** | **-0.9** |
| | baz=26 | | | | | | | | | |
| **B30A** | **Myrvik Farm, E** | | **25.50** | **17** | P | | **P** | **04 36 01.6** | **-1.1** |
| | baz=26 | | | | | | | | | |
| **C33A** | **Trail** | | **25.64** | **21** | P | | **P** | **04 36 02.9** | **-1.0** |
| | baz=26 | | | | | | | | | |
| **D35A** | **Remer** | | **25.67** | **24** | P | | **P** | **04 36 03.3** | **-1.0** |
| | baz=26 | | | | | | | | | |
| **A29A** | **Manning Farm,** | | **25.71** | **15** | P | | **P** | **04 36 03.6** | **-1.0** |
| | baz=26 | | | | | | | | | |
| **B05A** | **Bryant** | | **25.92** | **340** | P | | **P** | **04 36 05.2** | **-1.3** |
| | baz=26 | | | | | | | | | |
| **A30A** | **Hoffart Farm,** | | **25.95** | **17** | P | | **P** | **04 36 06.2** | **-0.6** |
| | baz=26 | | | | | | | | | |
| **B32A** | **Ashes, Strandq** | | **25.96** | **19** | P | | **P** | **04 36 05.7** | **-1.1** |
| | baz=26 | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | | **26.08** | **20** | P | | **P** | **04 36 06.6** | **-1.4** |
| | baz=26 | | | | | | | | | |
| **D36A** | **Goodland** | | **26.09** | **25** | P | | **P** | **04 36 06.5** | **-1.5** |
| | baz=26 | | | | | | | | | |
| **C35A** | **Jirik Farms, M** | | **26.21** | **24** | P | | **P** | **04 36 08.0** | **-1.2** |
| | baz=26 | | | | | | | | | |
| **KMSC** | **Kings Mountain** | | **26.36** | **60** | P | | **P** | **04 36 08.2** | **-2.5** |
| | baz=26 | | | | | | | | | |
| **D37A** | **Cotton** | | **26.36** | **26** | P | | **P** | **04 36 08.9** | **-1.7** |
| | baz=26 | | | | | | | | | |
| **B34A** | **Aery, Baudette** | | **26.64** | **22** | P | | **P** | **04 36 11.9** | **-1.2** |
| | baz=27 | | | | | | | | | |
| **C36A** | **Pine Crest Far** | | **26.69** | **25** | P | | **P** | **04 36 12.3** | **-1.2** |
| | baz=27 | | | | | | | | | |
| **C37A** | **Embarrass** | | **26.92** | **26** | P | | **P** | **04 36 14.5** | **-1.1** |
| | baz=27 | | | | | | | | | |
| **COWI** | **Conover** | | **27.01** | **32** | *e*P | | **P** | **04 36 13.5** | **-2.9** |
| | 89nm,1.9s | | | | | | | | | |
| **EYMN** | **Ely** | | **27.37** | **26** | P | | **P** | **04 36 18.4** | **-1.3** |
| | baz=27 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | | **27.81** | **18** | P | | **P** | **04 36 21.9** | **-1.6** |
| | 3.5nm,0.9s,baz=194,slow=4.2,SNR=2.2 | | | | | | | | | |
| **OTAV** | **Otavalo** | | **38.24** | **124** | *e*P | | **P** | **04 37 53.6** | **-1.7** |
| | 9.6nm,1.1s | | | | | | | | | |
| **ILAR** | **Eielson Array** | | **47.14** | **339** | P | | **P** | **04 39 06.5** | **0.0** |
| | 2.0nm,0.9s,baz=146,slow=6.6,SNR=16 | | | | | | | | | |
| **TRF** | **Thorofare Moun** | | **47.50** | **336** | *e*P | | **P** | **04 39 07.8** | **-1.7** |
| | 38nm,1.2s | | | | | | | | | |
| **BWN** | **Browne** | | **47.63** | **337** | *e*P | | P | 04 39 16.8 | +6.5 |
| | 47nm,1.4s | | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | | **48.13** | **337** | *e*P | | **P** | **04 39 14.3** | **+0.2** |
| | 6.3nm,1.6s | | | | | | | | | |
| **PTGA** | **Pitinga** | | **53.82** | **110** | *e*P | | **P** | **04 39 59.2** | **+1.5** |
| | 32nm,1.1s | | | | | | | | | |
| **SAML** | **Samuel** | | **55.79** | **121** | *e*P | | P | 04 40 17.8 | +5.9 |
| | 17nm,1.4s | | | | | | | | | |
| **CPUP** | **Villa Florida** | | **71.08** | **132** | P | | **P** | **04 41 53.3** | **+0.4** |
| | 1.7nm,0.7s,baz=290,slow=7.5,SNR=5.1 | | | | | | | | | |
| **BDFB** | **Brasilia** | | **71.73** | **117** | P | | **P** | **04 41 57.8** | **+0.6** |
| | 8.6nm,0.9s,baz=265,slow=12,SNR=3.2 | | | | | | | | | |
| **POLO** | **Lamas de Olo** | | **82.25** | **48** | *e*P | | P | 04 43 01.9 | +5.8 |
| | 11nm,1.8s | | | | | | | | | |
| **PVRL** | **Vila Real** | | **82.34** | **48** | *e*P | | P | 04 43 01.6 | +5.0 |
| | 24nm,2.0s | | | | | | | | | |
| **PVIS** | **Viseu** | | **82.46** | **49** | *e*P | | P | 04 43 02.1 | +4.9 |
| | 20nm,1.7s | | | | | | | | | |
| **PTOM** | **Tomar** | | **82.58** | **50** | *e*P | | P | 04 43 03.6 | +5.8 |
| | 22nm,1.6s | | | | | | | | | |
| **MTE** | **Manteigas** | | **82.84** | **49** | *e*P | | P | 04 43 04.7 | +5.5 |
| | 23nm,1.1s | | | | | | | | | |
| **MTE** | **Manteigas** | | **82.84** | **49** | *e*P | | **P** | **04 42 57.1** | **-2.1** |
| **PCBR** | **Castelo Branco** | | **83.13** | **49** | *e*P | | P | 04 43 05.8 | +5.2 |
| | 20nm,2.5s | | | | | | | | | |
| **PTEO** | **Sao Teotonio** | | **83.24** | **52** | *e*P | | P | 04 43 07.1 | +5.9 |
| | 35nm,1.5s | | | | | | | | | |
| **PMRV** | **Marv??o** | | **83.37** | **50** | *e*P | | P | 04 43 07.5 | +5.6 |
| | 19nm,1.7s | | | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | | **83.94** | **52** | *e*P | | P | 04 43 10.9 | +6.0 |
| | 30nm,1.2s | | | | | | | | | |
| **PBAR** | **Barrancos** | | **84.17** | **51** | *e*P | | P | 04 43 10.7 | +4.7 |
| | 27nm,1.6s | | | | | | | | | |
| **PAB** | **San Pablo** | | **85.42** | **49** | *e*P | | P | 04 43 18.3 | +5.9 |
| **ESDC** | **Sonseca Array** | | **85.62** | **48** | P | | **P** | **04 43 13.8** | **+0.4** |
| | 0.1nm,0.3s,baz=302,slow=2.9,SNR=3.1 | | | | | | | | | |
| **LZH** | **Lanzhou** | | **112.23** | **332** | *e*PKP | | **PKiKP** | **04 49 13.0** | **+2.1** |
| LZH | | | | | sPKP | | | 04 49 17.5 | | |
| LZH | | | | | LN | | | | | |
| | 110nm,18.2s | | | | | | | | | |
| LZH | | | | | LE | | | | | |
| | 120nm,18.5s | | | | | | | | | |
| LZH | | | | | LZ | | | | | |
| | 150nm,20.2s | | | | | | | | | |
| **KSH** | **Kashi** | | **116.24** | **356** | *e*PKP | | **PKPdf** | **04 49 21.6** | **+3.2** |
| KSH | | | | | SKS | | **SKSdf** | **04 56 31.5** | **+0.6** |
| KSH | | | | | PPMZ | | | | | |
| | 44nm,5.5s | | | | | | | | | |
| KSH | | | | | LZ | | | | | |
| | 970nm,16.6s | | | | | | | | | |
| **CD2** | **Chengdu** | | **116.60** | **328** | PKP | | **PKPdf** | **04 49 21.9** | **+2.7** |

*ISCJB **20** 04:47:45.8±0.3, 47°.38N±0°.02×11°.71E±0°.03, h7km±4km, Error ellipse: s-maj=3.0km s-min=2.5km az=23.6*
*CSEM **20** 04:47:46.8±0.1, 47°.35N×11°.70E, h10km, ML2.6/8, Error ellipse: s-maj=2.1km s-min=1.6km az=107.0*
*VIE **20** 04:47:47.1±0.1, 47°.33N×11°.66E, h13km, mb1.7/5, ml2.5/11, Error ellipse: s-maj=0.9km s-min=0.6km az=17.0, felt 3 ems98 at Schwaz / Tyrol*
*PRU **20** 04:47:49.2, 47°.40N×11°.73E, h0km*
*BGR **20** 04:47:51.5±0.5, 47°.57N×11°.63E, h10km, ML2.2/7, Error ellipse: s-maj=15.6km s-min=6.7km az=163.0*

**ISC 20 04:47:47.5±0.8, 47°36N±0°.02×11°69E±0°.02, h12km±4km, n58, σ0°70/94, 13C-5D, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WATA** | **Walderalm** | **0.08** | **253** | ⇑*e*Pg | **Pg** | **04 47 50.0** | **-0.2** |
| | 160nm,0.2s,SNR=679 | | | | | | |
| WATA | | | | ⇑*i*Sg | **Sg** | **04 47 52.0** | **-0.2** |
| | 678nm,0.2s | | | | | | |
| **WATA** | **Walderalm** | **0.08** | **253** | Pg | **Pg** | **04 47 50.0** | **-0.2** |
| | 160nm,0.2s,SNR=679 | | | | | | |
| WATA | | | | Sg | **Sg** | **04 47 52.0** | **-0.2** |
| | 678nm,0.2s | | | | | | |
| **WTTA** | **Wattenberg** | **0.10** | **201** | ⇑*e*Pg | **Pg** | **04 47 50.4** | **-0.1** |
| | 113nm,0.1s,SNR=376 | | | | | | |
| WTTA | | | | ⇓*e*Sg | **Sg** | **04 47 52.5** | **-0.1** |
| | 450nm,0.2s,SNR=244 | | | | | | |
| **WTTA** | **Wattenberg** | **0.10** | **201** | Pg | **Pg** | **04 47 50.4** | **-0.1** |
| | 113nm,0.1s,SNR=376 | | | | | | |
| WTTA | | | | Sg | **Sg** | **04 47 52.5** | **-0.1** |
| | 450nm,0.2s,SNR=244 | | | | | | |
| **MOTA** | **Moosalm** | **0.40** | **268** | ⇑*e*Pg | **Pg** | **04 47 54.6** | **-0.8** |
| | 5.8nm,0.1s,SNR=10 | | | | | | |
| MOTA | | | | ⇑*i*Sg | **Sg** | **04 48 00.4** | **-0.4** |
| | 30nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **0.40** | **268** | Pg | **Pg** | **04 47 54.6** | **-0.8** |
| | 5.8nm,0.1s,SNR=10 | | | | | | |
| MOTA | | | | Sg | **Sg** | **04 48 00.4** | **-0.4** |
| | 30nm,0.1s | | | | | | |
| **ROSI** | **Rosskopf** | **0.47** | **204** | ⇑*e*Pg | **Pg** | **04 47 56.2** | **-0.5** |
| ROSI | | | | *e*Sg | **Sg** | **04 48 02.4** | **-0.6** |
| **RISI** | **Rein** | **0.49** | **147** | ⇓*e*Pg | **Pg** | **04 47 56.9** | **-0.2** |
| **RETA** | **Reutte** | **0.64** | **282** | ⇑*e*Sg | **Sg** | **04 48 08.3** | **-0.2** |
| | 9.0nm,0.2s,SNR=5.8 | | | | | | |
| **RETA** | **Reutte** | **0.64** | **282** | Sg | **Sg** | **04 48 08.3** | **-0.2** |
| | 9.0nm,0.2s,SNR=5.8 | | | | | | |
| **ABSI** | **Aberstueckl** | **0.68** | **202** | ⇑*e*Pg | **Pg** | **04 48 00.1** | **-0.6** |
| ABSI | | | | *e*Sg | **Sg** | **04 48 09.1** | **-0.5** |
| **FETA** | **Feichten** | **0.74** | **243** | ⇑*i*Pg | **Pg** | **04 48 01.0** | **-0.7** |
| | 1.0nm,0.1s | | | | | | |
| FETA | | | | ⇑*e*Sg | **Sg** | **04 48 10.5** | **-0.9** |
| | 9.4nm,0.3s,SNR=10 | | | | | | |
| **FETA** | **Feichten** | **0.74** | **243** | Pg | **Pg** | **04 48 01.0** | **-0.7** |
| | 1.0nm,0.1s | | | | | | |
| FETA | | | | Sg | **Sg** | **04 48 10.5** | **-0.9** |
| | 9.4nm,0.3s,SNR=10 | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.83** | **137** | ⇓*i*Pg | **Pg** | **04 48 03.1** | **-0.4** |
| | 0.7nm,0.1s | | | | | | |
| ABTA | | | | ⇓*e*Sg | **Sg** | **04 48 14.2** | **-0.3** |
| | 11nm,0.2s,SNR=16 | | | | | | |
| **ABTA** | **Abfaltersbach** | **0.83** | **137** | Pg | **Pg** | **04 48 03.1** | **-0.4** |
| | 0.7nm,0.1s | | | | | | |
| ABTA | | | | Sg | **Sg** | **04 48 14.1** | **-0.3** |
| | 11nm,0.2s,SNR=16 | | | | | | |
| **RJOB** | **Jochberg** | **0.84** | **63** | *e*Sg | **Sn** | **04 48 21.0** | **+3.5** |
| | SNR=6.7 | | | | | | |
| **KOSI** | **Kohlern** | **0.92** | **194** | ⇑*e*Pg | **Pg** | **04 48 04.6** | **-0.6** |
| KOSI | | | | *e*Sg | **Sg** | **04 48 16.7** | **-0.6** |
| **CSMI** | **Casera Mimoias** | **1.07** | **142** | *e*Pg | **Pb** | **04 48 07.7** | **-0.5** |
| CSMI | | | | *e*Sg | **Sb** | **04 48 21.8** | **-0.3** |
| **CSMI** | **Casera Mimoias** | **1.07** | **142** | Pg | **Pb** | **04 48 07.6** | **-0.5** |
| **CSMI** | **Casera Mimoias** | **1.07** | **142** | Pg | **Pb** | **04 48 07.6** | **-0.5** |
| **ZOU** | **Zoufplan** | **1.19** | **132** | *e*Pg | **Pn** | **04 48 09.7** | **-0.4** |
| ZOU | | | | *e*Sg | **Sb** | **04 48 25.5** | **-0.1** |
| **DAVA** | **Damuels** | **1.23** | **267** | *e*Sg | **Sg** | **04 48 28.6** | **+1.4** |
| | SNR=7.0 | | | | | | |
| **DAVA** | **Damuels** | **1.23** | **267** | ⇑*i*Pg | **Pn** | **04 48 10.7** | **0.0** |
| | 1.6nm,0.1s | | | | | | |
| DAVA | | | | ⇑*e*Sg | **Sb** | **04 48 27.1** | **+0.4** |
| | 17nm,0.2s,SNR=7.9 | | | | | | |
| **DAVA** | **Damuels** | **1.23** | **267** | Pg | **Pn** | **04 48 10.7** | **0.0** |
| | 1.6nm,0.1s | | | | | | |
| DAVA | | | | Sg | **Sb** | **04 48 27.1** | **+0.4** |
| | 17nm,0.2s,SNR=7.9 | | | | | | |
| **PANI** | **Panarotta** | **1.34** | **191** | *e*Pg | **Pn** | **04 48 12.0** | **-0.2** |
| PANI | | | | *e*Sg | **Sb** | **04 48 29.3** | **-0.4** |
| **PANI** | **Panarotta** | **1.34** | **191** | *e*Pg | **Pn** | **04 48 12.0** | **-0.2** |
| **PANI** | **Panarotta** | **1.34** | **191** | *e*Pg | **Pn** | **04 48 12.0** | **-0.2** |
| PANI | | | | *e*Sg | **Sb** | **04 48 29.3** | **-0.4** |
| **CGRP** | **Cima Grappa** | **1.48** | **177** | *e*Pg | **Pg** | **04 48 16.2** | **+0.3** |
| **CGRP** | **Cima Grappa** | **1.48** | **177** | *e*Pg | **Pb** | **04 48 15.2** | **+0.2** |
| **CGRP** | **Cima Grappa** | **1.48** | **177** | *e*Pg | **Pb** | **04 48 15.2** | **+0.2** |
| **ACOM** | **Acomizza, Ital** | **1.49** | **122** | *e*Pg | **Pg** | **04 48 16.1** | **+0.1** |
| **ACOM** | **Acomizza, Ital** | **1.49** | **122** | *e*Pg | **Pg** | **04 48 16.1** | **+0.1** |
| **ACOM** | **Acomizza, Ital** | **1.49** | **122** | *e*Pg | **Pg** | **04 48 16.1** | **+0.1** |
| **DDS** | **Dosso del Somm** | **1.52** | **193** | *e*Pg | **Pn** | **04 48 15.3** | **+0.7** |
| DDS | | | | *e*Sg | **Sn** | **04 48 35.0** | **+0.6** |
| **DDS** | **Dosso del Somm** | **1.52** | **193** | *e*Pg | **Pn** | **04 48 15.3** | **+0.7** |
| **DDS** | **Dosso del Somm** | **1.52** | **193** | *e*Pg | **Pn** | **04 48 15.3** | **+0.7** |
| DDS | | | | *e*Sg | **Sn** | **04 48 35.0** | **+0.6** |
| **VINO** | **Villanova** | **1.55** | **135** | *e*Pg | **Pg** | **04 48 17.2** | **-0.1** |
| **VINO** | **Villanova** | **1.55** | **135** | *e*Pg | **Pg** | **04 48 17.2** | **-0.1** |
| **MARN** | **Marana (Italy)** | **1.75** | **191** | *e*Pg | **Pb** | **04 48 19.6** | **0.0** |
| **MARN** | **Marana (Italy)** | **1.75** | **191** | *e*Pg | **Pb** | **04 48 19.6** | **0.0** |
| **MOA** | **Molln** | **1.81** | **73** | *e*Sg | **Sg** | **04 48 46.0** | **+0.3** |
| | SNR=5.0 | | | | | | |
| **MOA** | **Molln** | **1.81** | **73** | Sg | **Sg** | **04 48 46.0** | **+0.3** |
| | SNR=5.0 | | | | | | |
| **WET** | **Wettzell** | **1.96** | **24** | *e*Pn | **Pn** | **04 48 20.6** | **+0.1** |
| | SNR=2.1 | | | | | | |
| WET | | | | *e*Pg | **Pg** | **04 48 24.4** | **-0.6** |
| | SNR=2.1 | | | | | | |
| WET | | | | *e*Sn | **Sn** | **04 48 44.6** | **-0.5** |
| | SNR=4.5 | | | | | | |
| WET | | | | *e*Sg | **Sg** | **04 48 49.7** | **-0.6** |
| | SNR=2.2 | | | | | | |
| **WET** | **Wettzell** | **1.96** | **24** | Pn | **Pn** | **04 48 20.6** | **+0.1** |
| | SNR=2.1 | | | | | | |
| **GEC2** | **GERESS Array S** | **2.01** | **41** | *e*Sn | **Sn** | **04 48 47.1** | **+0.7** |
| | SNR=2.4 | | | | | | |
| GEC2 | | | | *e*Sg | **Sg** | **04 48 51.3** | **-0.7** |
| | SNR=2.4 | | | | | | |
| **KHC** | **Kasperske Hory** | **2.18** | **35** | *e*PG | **Pb** | **04 48 27.5** | **+0.7** |
| KHC | | | | *e*SN | **Sn** | **04 48 51.0** | **+0.5** |
| KHC | | | | *e*SG | **Sg** | **04 48 56.7** | **-0.7** |
| | comp=Z,7.6nm,0.3s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.18** | **35** | Pg | **Pb** | **04 48 27.5** | **+0.7** |
| KHC | | | | Sg | **Sg** | **04 48 56.7** | **-0.7** |
| | 7.6nm,0.3s | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **2.44** | **8** | *e*Pn | **Pn** | **04 48 26.9** | **-0.2** |
| | SNR=1.0 | | | | | | |
| ROTZ | | | | *e*Pg | **Pg** | **04 48 33.7** | **-0.4** |
| | SNR=3.5 | | | | | | |
| ROTZ | | | | *e*Sn | **Sn** | **04 48 56.0** | **-0.8** |
| | SNR=2.5 | | | | | | |
| ROTZ | | | | *e*Sg | **Sg** | **04 49 05.1** | **-0.6** |
| | SNR=3.2 | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **2.44** | **8** | Pn | **Pn** | **04 48 26.9** | **-0.2** |
| | SNR=1.0 | | | | | | |
| ROTZ | | | | Sn | **Sn** | **04 48 56.0** | **-0.8** |
| | SNR=2.5 | | | | | | |
| ROTZ | | | | Sg | **Sg** | **04 49 05.1** | **-0.6** |
| | SNR=3.2 | | | | | | |
| **BFO** | **Black Forest** | **2.46** | **294** | *e*Pn | **Pn** | **04 48 29.4** | **+1.9** |
| | SNR=1.1 | | | | | | |
| BFO | | | | *e*Pg | **Pg** | **04 48 35.9** | **+1.2** |
| | SNR=1.6 | | | | | | |
| BFO | | | | *e*Sn | **Sn** | **04 48 56.6** | **-0.9** |
| | SNR=2.9 | | | | | | |
| BFO | | | | *e*Sg | **Sg** | **04 49 05.7** | **-0.8** |
| | SNR=2.3 | | | | | | |
| **BFO** | **Black Forest** | **2.46** | **294** | Pn | **Pn** | **04 48 29.4** | **+1.9** |
| | SNR=1.1 | | | | | | |
| **MANZ** | **Manzenberg** | **2.64** | **6** | *e*Pg | **Pg** | **04 48 37.7** | **-0.4** |
| | SNR=1.7 | | | | | | |
| **NKC** | **Novy Kostel** | **2.92** | **10** | *e*SG | **Sg** | **04 49 20.5** | **-0.7** |
| **NKC** | **Novy Kostel** | **2.92** | **10** | Sg | **Sg** | **04 49 20.5** | **-0.7** |
| **WERN** | **Wernitzgruen** | **2.97** | **9** | *e*Pg | **Pg** | **04 48 43.8** | **-0.5** |
| | SNR=1.6 | | | | | | |
| **GUNZ** | **Gunzen** | **3.04** | **8** | *e*Pg | **Pg** | **04 48 45.1** | **-0.6** |
| | SNR=1.8 | | | | | | |
| **TANN** | **Tannenbergstha** | **3.10** | **9** | *e*Pg | **Pg** | **04 48 46.0** | **-0.8** |
| | SNR=1.8 | | | | | | |
| **TANN** | **Tannenbergstha** | **3.10** | **9** | Pg | **Pg** | **04 48 46.0** | **-0.8** |
| | SNR=1.8 | | | | | | |

*DDA **20** 05:16:33.4, 38°.15N×34°.75E, h7km, Md2.8*
*ISK **20** 05:16:33.0, 38°.15N×34°.75E, h4km, MD2.7*
*CSEM **20** 05:16:33.9±0.2, 38°.13N×34°.70E, h5km, MD2.7, Error ellipse: s-maj=4.8km s-min=3.2km az=52.0*

**ISC 20 05:16:34.0±1.1, 38°13N±0°.03×34°72E±0°.03, h4km±10km, n29, σ0°47/41, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIG** | **Nigde** | **0.09** | **255** | PG | **Pg** | **05 16 35.9** | **-0.1** |
| **NIG** | **Nigde** | **0.09** | **255** | *i* Pg | **Pg** | **05 16 35.9** | **-0.1** |
| **GULA** | **Gulagac** | **0.43** | **299** | *e*PG | **Pg** | **05 16 42.4** | **0.0** |
| GULA | | | | *e*SG | **Sg** | **05 16 48.5** | **+0.4** |
| **GULA** | **Gulagac** | **0.43** | **299** | *e*Pg | **Pg** | **05 16 42.4** | **0.0** |
| GULA | | | | *e*Sg | **Sg** | **05 16 48.5** | **+0.4** |
| **YESY** | **Yesilyurt** | **0.85** | **246** | *e*PG | **Pg** | **05 16 50.5** | **+0.2** |
| YESY | | | | *e*SG | **Sb** | **05 17 03.6** | **+0.5** |
| **YESY** | **Yesilyurt** | **0.85** | **246** | *e*Pg | **Pg** | **05 16 50.5** | **+0.2** |
| **GULE** | **Gulek** | **0.85** | **177** | *i* P | **Pg** | **05 16 49.7** | **-0.6** |
| GULE | | | | *i* S | **Sg** | **05 17 01.4** | **+0.1** |
| **GULE** | **Gulek** | **0.85** | **177** | P | **Pg** | **05 16 49.7** | **-0.6** |
| GULE | | | | S | **Sg** | **05 17 01.4** | **+0.1** |
| **KARA** | **Karaisali** | **0.91** | **163** | *e*PG | **Pg** | **05 16 50.9** | **-0.6** |
| **KARA** | **Karaisali** | **0.91** | **163** | *e*Pg | **Pg** | **05 16 50.9** | **-0.6** |
| **YAYX** | **Yaylak** | **1.07** | **319** | *e*PG | **Pg** | **05 16 54.5** | **-0.1** |
| **YAYX** | **Yaylak** | **1.07** | **319** | *e*Pg | **Pg** | **05 16 54.5** | **-0.1** |
| **SERE** | **Serefiikochisa** | **1.22** | **312** | *e*PN | **Pg** | **05 16 57.0** | **-0.3** |
| **SERE** | **Serefiikochisa** | **1.22** | **312** | *e*Pn | **Pg** | **05 16 57.1** | **-0.3** |
| **CEYT** | **Ceyhan** | **1.39** | **144** | *e*PN | **Pn** | **05 16 59.0** | **-0.2** |
| **CEYT** | **Ceyhan** | **1.39** | **144** | *e*Pn | **Pn** | **05 16 59.9** | **-0.2** |
| **ANDN** | **Andirin** | **1.40** | **113** | *i* P | **Pg** | **05 17 01.9** | **+1.0** |
| ANDN | | | | *i* S | **Sb** | **05 17 19.0** | **-0.1** |
| **ANDN** | **Andirin** | **1.40** | **113** | P | **Pg** | **05 17 01.9** | **+1.0** |
| ANDN | | | | S | **Sb** | **05 17 19.0** | **-0.1** |
| **PINB** | **Pinarbasi** | **1.43** | **67** | *i* P | **Pn** | **05 16 59.9** | **-1.1** |
| PINB | | | | *i* S | **Sn** | **05 17 20.6** | **+0.3** |
| **PINB** | **Pinarbasi** | **1.43** | **67** | P | **Pn** | **05 16 59.9** | **-1.1** |
| PINB | | | | S | **Sn** | **05 17 20.6** | **+0.3** |
| **CDAG** | **Cicekdag** | **1.51** | **350** | *i* P | **Pn** | **05 17 01.7** | **-0.3** |
| CDAG | | | | *i* S | **Sg** | **05 17 22.9** | **+0.3** |
| **CDAG** | **Cicekdag** | **1.51** | **350** | P | **Pn** | **05 17 01.7** | **-0.3** |
| CDAG | | | | S | **Sg** | **05 17 22.9** | **+0.3** |
| **KRTS** | **Karatas** | **1.64** | **161** | *e*PN | **Pn** | **05 17 04.0** | **+0.5** |
| **KRTS** | **Karatas** | **1.64** | **161** | *e*Pn | **Pn** | **05 17 04.1** | **+0.5** |
| **AYKD** | **Aykdinkavak** | **1.80** | **113** | P | **Pb** | **05 17 07.3** | **-0.3** |
| AYKD | | | | S | **Sg** | **05 17 32.5** | **+0.5** |
| **AFSR** | **Afar-Bala (A** | **1.84** | **316** | *e*PN | **Pn** | **05 17 06.3** | **-0.1** |
| **AFSR** | **Afar-Bala (A** | **1.84** | **316** | *e*Pn | **Pn** | **05 17 06.3** | **-0.1** |
| **CORM** | **Corum** | **2.04** | **358** | *e*PN | **Pn** | **05 17 09.1** | **-0.2** |
| **CORM** | **Corum** | **2.04** | **358** | *e*Pn | **Pn** | **05 17 09.1** | **-0.2** |

*ISCJB **20** 05:26:41.8±0.7, 36°.32N±0°.05×70°.84E±0°.09, h100km, Error ellipse: s-maj=12.0km s-min=5.0km az=150.6*
*NNC **20** 05:26:49.1±4.7, 36°.86N×70°.74E, h148km±49km, mb2.9, mpv3.7, Error ellipse: s-maj=45.9km s-min=21.5km az=163.0*

**ISC 20 05:26:42.9±1.1, 36°41N±0°.07×70°92E±0°.08, h100km, n20, σ1°89/25, 3C-8D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.91** | **326** | ⇓P | **Pn** | **05 27 29.8** | **+2.3** |
| | 5.6nm,0.2s | | | | | | |
| DZET | | | | ⇑S | **Sn** | **05 28 01.9** | **0.0** |
| | 90nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.13** | **29** | ⇓P | **Pn** | **05 27 47.0** | **+3.0** |
| | 14nm,0.3s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **05 28 33.2** | **+1.7** |
| | 54nm,0.2s | | | | | | |
| **AML** | **Almayashu** | **6.11** | **20** | P | **Pn** | **05 28 12.2** | **+1.2** |
| | SNR=58 | | | | | | |
| **MNAS** | **Manas** | **6.19** | **11** | ⇓P | **Pn** | **05 28 12.9** | **+1.1** |
| | 2.4nm,0.4s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **05 29 18.5** | **-2.8** |
| | 12nm,0.7s | | | | | | |
| **UCH** | **Uchtor** | **6.44** | **25** | P | **Pn** | **05 28 18.0** | **+2.4** |
| | SNR=11 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.62** | **19** | P | **Pn** | **05 28 19.7** | **+2.0** |
| | SNR=13 | | | | | | |
| **KK31** | **Karatay Array** | **6.69** | **357** | ⇑P | **Pn** | **05 28 19.3** | **+0.7** |
| | 3.3nm,0.3s,baz=179,slow=12,SNR=103 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **05 29 28.9** | **-4.4** |
| | 10nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **6.80** | **23** | ⇑P | **Pn** | **05 28 21.2** | **+1.0** |
| | 2.8nm,0.4s | | | | | | |
| AAK | | | | S | **Sn** | **05 29 34.5** | **-1.7** |
| | 17nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **6.80** | **23** | P | **Pn** | **05 28 22.8** | **+2.7** |
| | SNR=5.7 | | | | | | |
| **SMLA** | **Simla** | **7.40** | **134** | *i* P | **Pn** | **05 28 30.2** | **+2.0** |
| SMLA | | | | *i* S | **Sn** | **05 29 48.5** | **-2.1** |
| SMLA | | | | AML | AML | 05 29 54.8 | |
| | comp=N,920nm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 05 29 55.6 | |
| | comp=E,695nm,0.2s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.44** | **28** | P | Pn | 05 28 33.0 | +4.2 |
| | SNR=5.1 | | | | | | |
| **KOLN** | **Koldanda** | **13

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NVAR | **Mina Array Bea** | **89.10** | **51** | P | | P | | 06 04 04.3 | +0.9 |
| | 0.2nm,0.5s,baz=292,slow=4.8,SNR=3.3 | | | | | | | | |

**NEIC 20 05:51:22.6±0.9, 24°.34N×109°.09W, h10km, mb4.2/16, Error ellipse: s-maj=11.7km s-min=7.8km az=167.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SLBS | **Sierra La Lagu** | **1.02** | **230** | *e*Pg | Pg | 05 51 42.3 | 0.0 |
| TX31 | **Lajitas Ar. Si** | **6.94** | **43** | *e*Pn | Pn | 05 53 04.3 | -0.1 |
| MNTX | **Cornudas Mount** | **8.03** | **23** | *e*Pn | Pn | 05 53 18.2 | -1.1 |
| TUC | **Tucson** | **8.08** | **350** | *e*Pn | Pn | 05 53 17.7 | -2.4 |
| 121A | **Cookes Peak, D** | **8.24** | **8** | Pn | Pn | 05 53 21.6 | -0.9 |
| | 20nm,0.9s | | | | | | |
| LAZ | **Ladron** | **10.17** | **9** | *e*Pn | Pn | 05 53 46.4 | -2.5 |
| JCT | **Junction City** | **10.27** | **51** | *e*Pn | Pn | 05 53 49.8 | -0.3 |
| ANMO | **Albuquerque** | **10.81** | **12** | *e*Pn | Pn | 05 53 57.2 | -0.5 |
| WUAZ | **Wupatki** | **11.31** | **350** | *e*Pn | Pn | 05 54 03.7 | -0.9 |
| HMTC | **Hemet** | **11.62** | **325** | *e*Pn | Pn | 05 54 14.3 | +5.8 |
| DANC | **Danby, Needles** | **11.63** | **333** | *e*Pn | Pn | 05 54 16.4 | +7.7 |
| DANC | | | | *e*Sn | Sn | 05 56 35.1 | +16 |
| DANC | | | | *e*Lg | Lg | 05 57 44.5 | |
| ABTX | **Abilene, Hawle** | **11.70** | **43** | *e*Pn | Pn | 05 54 11.4 | +1.7 |
| AMTX | **Amarillo** | **12.32** | **30** | *e*Pn | Pn | 05 54 18.2 | 0.0 |
| BFSC | **Mount Baldy Ra** | **12.37** | **325** | *e*Pn | Pn | 05 54 21.4 | +2.4 |
| EDW2 | **Edwards Air Fo** | **13.04** | **326** | *e*Pn | Pn | 05 54 23.7 | -4.3 |
| EDW2 | | | | *e*Sn | S | 05 57 06.4 | -12 |
| HKT | **Hockley** | **13.05** | **62** | *e*Pn | Pn | 05 54 28.8 | +0.8 |
| SHPR | **Sheep Range** | **13.20** | **338** | *e*Pn | Pn | 05 54 31.7 | +1.3 |
| SHPR | | | | *e*Sn | Sn | 05 56 48.9 | -8.6 |
| CCUT | **Cedar City** | **13.67** | **345** | *e*Pn | Pn | 05 54 36.7 | 0.0 |
| WMOK | **Wichita Mounta** | **13.70** | **38** | *e*Pn | Pn | 05 54 36.8 | -0.1 |
| ISA | **Isabella** | **13.90** | **326** | *e*Pn | Pn | 05 54 39.1 | -0.6 |
| | 32nm,2.0s | | | | | | |
| DAC | **Darwin (Calif)** | **13.97** | **330** | *e*Pn | Pn | 05 54 40.7 | -0.2 |
| MSU | **Marysvale** | **14.37** | **350** | *e*Pn | Pn | 05 54 49.2 | +2.7 |
| | 3.5nm,1.1s | | | | | | |
| SMCO | **Snowmass** | **14.90** | **6** | *e*Pn | Pn | 05 54 53.6 | -0.3 |
| MTUM | **Tungsten Hills** | **15.30** | **330** | *e*Pn | Pn | 05 54 59.0 | +0.1 |
| MTUM | | | | *e*P | pP | 05 55 05.2 | -1.3 |
| O20A | **White River Ci** | **15.77** | **2** | *e*Pn | P | 05 55 07.7 | -1.2 |
| | 37nm,1.6s | | | | | | |
| LRV | **Little Rabbit** | **15.83** | **322** | *e*Pn | Pn | 05 55 05.4 | -0.1 |
| LRV | | | | *e*Sn | Sn | 05 57 59.4 | -1.7 |
| LRV | | | | *e*S | S | 05 58 17.1 | +1.4 |
| O16A | **Springville** | **15.95** | **353** | *e*Pn | Pn | 05 54 52.9 | -14 |
| NV01 | **Mina Array Sit** | **16.09** | **333** | *e*Pn | Pn | 05 55 08.6 | -0.5 |
| DUG | **Dugway** | **16.12** | **350** | *e*Pn | Pn | 05 55 09.0 | -0.4 |
| DUG | | | | *e*sP | sP | 05 55 17.6 | +0.8 |
| MIAR | **Mount Ida** | **16.89** | **49** | *e*Pn | P | 05 55 20.4 | -0.8 |
| | 11nm,1.0s | | | | | | |
| PHWY | **Pilot Hill** | **17.18** | **9** | *e*Pn | P | 05 55 28.8 | +4.1 |
| | 68nm,3.0s | | | | | | |
| HWUT | **Hardware Ranch** | **17.34** | **354** | *e*Pn | Pn | 05 55 23.3 | -1.7 |
| | 17nm,1.5s | | | | | | |
| BMN | **Battle Mountai** | **17.44** | **339** | *e*Pn | P | 05 55 27.4 | 0.0 |
| | 17nm,1.4s | | | | | | |
| BW06 | **Boulder Array** | **18.38** | **359** | *e*Pn | P | 05 55 39.2 | +1.3 |
| | 75nm,3.0s | | | | | | |
| FXWY | **Fox Creek** | **19.32** | **356** | *e*P | P | 05 55 47.9 | -0.2 |
| | 54nm,2.5s | | | | | | |
| HLID | **Hailey** | **19.67** | **348** | *e*P | P | 05 55 52.0 | +0.1 |
| | 51nm,2.8s | | | | | | |
| WVOR | **Wild Horse Val** | **19.70** | **339** | *e*P | P | 05 55 52.8 | +0.6 |
| | 18nm,1.6s | | | | | | |
| MFID | **Camas Ranch** | **19.82** | **345** | *e*P | P | 05 55 53.0 | -0.5 |
| | 3.3nm,1.2s | | | | | | |
| MOD | **Modoc** | **19.84** | **335** | *e*P | P | 05 55 53.9 | +0.1 |
| | 6.5nm,1.0s | | | | | | |
| MCMT | **McKenzie Canyo** | **20.67** | **352** | *e*P | P | 05 56 02.7 | -0.2 |
| DLMT | **Dillon** | **21.17** | **353** | *e*P | Pn | 05 56 08.8 | +0.6 |
| | 9.6nm,1.2s | | | | | | |
| HRY | **Holter Researc** | **22.43** | **355** | *e*P | P | 05 56 21.0 | -0.7 |
| | 6.4nm,0.8s | | | | | | |
| OLIL | **Olney** | **22.86** | **46** | *e*P | P | 05 56 29.7 | +3.7 |
| | 18nm,1.0s | | | | | | |
| SWMT | **Swartz Lake** | **23.45** | **352** | *e*P | P | 05 56 31.2 | -1.0 |
| | 9.2nm,1.1s | | | | | | |
| CPCT | **Cooper Cave** | **23.94** | **57** | *e*P | P | 05 56 36.2 | -0.8 |
| NEW | **Newport** | **24.71** | **347** | *e*P | P | 05 56 43.2 | -0.7 |
| | 27nm,1.5s | | | | | | |
| RSO | **Redoubt South** | **46.92** | **332** | *e*P | P | 05 59 50.9 | -2.5 |

**DJA 20 05:51:40.2±0.7, 7°S±5°×107°E±°, h25km±6km, M3.7/13, MLv3.7/13, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CGJI | **Cibinong** | **0.56** | **15** | P | Pb | 05 51 52.0 | +0.5 |
| CGJI | | | | S | Sb | 05 51 58.8 | -0.3 |
| SKJI | **Sukabumi** | **1.01** | **81** | P | Pb | 05 51 59.5 | +0.4 |
| SBJI | **Serang** | **1.18** | **29** | P | Pb | 05 52 02.1 | +0.1 |
| TNG | **Tangerang** | **1.47** | **48** | P | Pn | 05 52 05.9 | +0.8 |
| CBJI | **Citeko** | **1.49** | **60** | P | Pn | 05 52 05.7 | +0.4 |
| CNJI | **Cibinong** | **1.57** | **95** | P | Pn | 05 52 06.7 | +0.1 |
| CNJI | | | | S | Sn | 05 52 25.5 | -0.6 |
| KASI | **Kota Agung** | **1.93** | **327** | P | Pn | 05 52 11.7 | +0.2 |
| CISI | **Cisompet, Garu** | **2.28** | **100** | P | Pn | 05 52 17.3 | +0.9 |
| CISI | | | | S | Sn | 05 52 43.4 | -0.4 |
| CMJI | **Cimerak** | **2.94** | **102** | P | Pn | 05 52 26.3 | +0.9 |
| MDSI | **Maura Dua** | **2.99** | **333** | P | Pn | 05 52 26.4 | +0.4 |
| MNAI | **Manna** | **3.79** | **317** | P | Pn | 05 52 36.5 | -0.6 |

*IDC **20** 05:59:42.9±0.6, 31°.74N×40°.73W, h0km, mb4.1/17, mb1 4.3/17, mb1mx4.1/45, mbtmp4.1/17, MS4.0/4, Ms1 4.0/4, ms1mx3.5/27, Error ellipse: s-maj=20.7km s-min=15.5km az=159.0*
*ISCJB **20** 05:59:43.2±0.4, 31°.78N±0°.09×40°.78W±0°.08, h14km, mb4.3/25, MS4.0/4, Error ellipse: s-maj=13.6km s-min=9.1km az=160.5*
*NEIC **20** 05:59:44.3±0.3, 31°.76N×40°.76W, h10km, mb4.7/7, Error ellipse: s-maj=9.0km s-min=6.3km az=161.0*
**ISC 20 05:59:45.0±0.5, 31°.8N±0°.1×40°.76W±0°.09, h14km, n37, σ0s61/29, mb4.3/25, MS4.0/4, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| ESDC | **Sonseca Array** | **30.73** | **65** | P | **P** | **06 05 59.8** | **+0.1** |
| | 0.3nm,0.4s,baz=268,slow=8.3,SNR=7.5 | | | | | | |
| BLA | **Blacksburg** | **32.96** | **291** | *e*P | **P** | **06 06 18.1** | **-1.2** |
| SDV | **Santo Domingo** | **35.88** | **237** | *e*P | **P** | **06 06 45.8** | **+0.9** |
| | 19nm,1.0s | | | | | | |
| PTGA | **Pitinga** | **37.09** | **213** | P | **P** | **06 06 55.0** | **0.0** |
| | 2.3nm,0.8s,baz=60,slow=9.8,SNR=4.3 | | | | | | |
| DBIC | **Dimbokro** | **41.78** | **119** | P | **P** | **06 07 33.8** | **-0.3** |
| | 6.4nm,1.0s,baz=306,slow=8.7,SNR=2.9 | | | | | | |
| TORD | **Torodi Ar. Bea** | **43.07** | **106** | P | **P** | **06 07 44.3** | **-0.4** |
| | 6.3nm,1.1s,baz=298,slow=5.1,SNR=20 | | | | | | |
| GERES | **GERESS Array B** | **43.91** | **51** | P | **P** | **06 07 50.7** | **-0.5** |
| | 0.5nm,0.3s,baz=268,slow=7.9,SNR=4.6 | | | | | | |
| BRG | **Berggiesshubel** | **44.18** | **48** | *e*P | **P** | **06 07 53.3** | **+0.1** |
| | 12nm,1.5s | | | | | | |
| ULM | **Lac du Bonnet** | **44.40** | **311** | LR | LR | 06 26 27.9 | |
| | comp=Z,140nm,19.9s,baz=12,slow=36 | | | | | | |
| NOA | **NORSAR Array B** | **44.52** | **33** | P | **P** | **06 07 54.7** | **-1.1** |
| | 1.5nm,0.7s,baz=254,slow=8.1,SNR=2.9 | | | | | | |
| SAML | **Samuel** | **45.82** | **212** | *e*P | **P** | **06 08 06.5** | **-0.1** |
| | 4.7nm,1.0s | | | | | | |
| H10N2 | **ASCENSION HYDR** | **46.70** | **143** | T | T | 06 58 04.2 | |
| | baz=329,slow=75,SNR=200 | | | | | | |
| H10N3 | **ASCENSION HYDR** | **46.70** | **143** | T | T | 06 58 10.8 | |
| | baz=329,slow=75,SNR=150 | | | | | | |
| H10N1 | **ASCENSION HYDR** | **46.72** | **143** | T | T | 06 58 07.9 | |
| | baz=329,slow=75,SNR=261 | | | | | | |
| H10S1 | **ASCENSION HYDR** | **47.57** | **144** | T | T | 06 59 16.2 | |
| | baz=330,slow=75,SNR=64 | | | | | | |
| H10S3 | **ASCENSION HYDR** | **47.57** | **144** | T | T | 06 59 14.1 | |
| | baz=330,slow=75,SNR=86 | | | | | | |
| H10S2 | **ASCENSION HYDR** | **47.58** | **144** | T | T | 06 59 16.6 | |
| | baz=330,slow=75,SNR=77 | | | | | | |
| WHTX | **Lake Whitney** | **47.65** | **286** | *e*P | **P** | **06 08 20.2** | **-0.7** |
| | 22nm,1.3s | | | | | | |
| FINES | **FINESS Array B** | **51.65** | **34** | P | **P** | **06 08 51.6** | **+0.8** |
| | 8.4nm,1.0s,baz=202,slow=10,SNR=4.9 | | | | | | |
| TXAR | **Lajitas Array** | **53.55** | **285** | P | **P** | **06 09 06.0** | **+0.4** |
| | 0.6nm,0.7s,baz=99,slow=6.6,SNR=7.5 | | | | | | |
| TXAR | | | | LR | LR | 06 30 19.9 | |
| | comp=Z,64nm,18.3s,baz=0.0,slow=34 | | | | | | |
| AKASG | **Malin Array Be** | **53.86** | **48** | P | **P** | **06 09 07.0** | **-0.4** |
| | 2.5nm,0.6s,baz=270,slow=7.0,SNR=12 | | | | | | |
| BW06 | **Boulder Array** | **54.45** | **302** | *e*P | **P** | **06 09 12.2** | **0.0** |
| | 12nm,1.1s | | | | | | |
| LPAZ | **La Paz** | **54.52** | **213** | P | **P** | **06 09 12.9** | **-0.4** |
| | 0.9nm,0.8s,baz=9.5,slow=6.1,SNR=4.9 | | | | | | |
| SNOW | **Snow King Moun** | **55.16** | **304** | *e*P | **P** | **06 09 17.7** | **+0.4** |
| | 12nm,1.1s | | | | | | |
| HWUT | **Hardware Ranch** | **56.18** | **302** | *e*P | **P** | **06 09 24.4** | **-0.2** |
| | 4.5nm,1.3s | | | | | | |
| BRTR | **Keskin Array B** | **59.33** | **60** | P | **P** | **06 09 47.1** | **+0.5** |
| | 3.1nm,1.0s,baz=266,slow=5.7,SNR=9.5 | | | | | | |
| INK | **Inuvik** | **61.89** | **335** | P | **P** | **06 10 03.6** | **+0.2** |
| | 2.9nm,0.8s,baz=114,slow=4.5,SNR=3.0 | | | | | | |
| NVAR | **Mina Array Bea** | **62.05** | **300** | P | **P** | **06 10 05.7** | **+0.3** |
| | 0.8nm,0.7s,baz=78,slow=6.8,SNR=7.4 | | | | | | |
| KBZ | **Khabaz** | **64.59** | **53** | P | **P** | **06 10 23.0** | **+1.2** |
| | 4.1nm,0.9s,baz=291,slow=3.4,SNR=5.7 | | | | | | |
| ILAR | **Eielson Array** | **68.16** | **334** | P | **P** | **06 10 45.4** | **+1.1** |
| | 1.5nm,1.0s,baz=57,slow=4.5,SNR=8.8 | | | | | | |
| ILAR | | | | LR | LR | 06 38 12.1 | |
| | comp=Z,126nm,20.9s,baz=7.0,slow=34 | | | | | | |
| ABKAR | **Akbulak array** | **73.01** | **42** | *e*P | **P** | **06 11 14.8** | **+0.6** |
| | 1.9nm,0.8s | | | | | | |
| H09W1 | **TRISTAN DA CUN** | **73.49** | **157** | T | T | 07 30 03.0 | |
| | SNR=46 | | | | | | |
| KMBO | **Kilima Mbogo** | **80.41** | **97** | LR | LR | 06 46 09.1 | |
| | comp=Z,145nm,21.1s,baz=285,slow=35 | | | | | | |
| ZALV | **Zalesovo Beam** | **82.55** | **29** | P | **P** | **06 12 06.6** | **-0.6** |
| | 1.3nm,0.6s,baz=293,slow=7.6,SNR=4.5 | | | | | | |
| MKAR | **Makanchi Array** | **86.47** | **35** | P | **P** | **06 12 27.3** | **0.0** |
| | 0.9nm,0.7s,baz=327,slow=5.8,SNR=5.8 | | | | | | |
| VNDA | **Vanda** | **133.03** | **187** | PKP | **PKPdf** | **06 18 59.3** | **+0.5** |
| | 0.7nm,0.9s,baz=205,slow=4.4,SNR=4.6 | | | | | | |
| ASAR | **Alice Springs** | **170.65** | **32** | PKP | **PKPdf** | **06 19 52.6** | **-0.5** |
| | 0.9nm,0.9s,baz=225,slow=0.4,SNR=7.7 | | | | | | |
| ASAR | | | | PKPab | **PKPab** | **06 21 10.6** | **+0.1** |
| | 1.7nm,1.0s,baz=331,slow=4.8,SNR=8.7 | | | | | | |

*IDC **20** 06:08:55.9±1.8, 52°.59N×169°.50W, h0km, mb3.7/3, mb1 3.9/4, mb1mx3.5/39, mbtmp3.5/4, ML3.3/1, Error ellipse: s-maj=51.9km s-min=31.3km az=141.0*
*NEIC **20** 06:09:00.2, 52°.65N×169°.14W, h18km, ML3.5(AEIC), After AEIC.*
**ISC 20 06:09:01.4±1.2, 52°.8N±0°.2×169°.31W±0°.10, h31km±8km, n30, σ1s22/27, mb4.0/3, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIKH | **Nikolski High** | **0.32** | **60** | P | **Pb** | **06 09 08.2** | **-0.9** |
| NIKH | | | | S | **Sb** | **06 09 15.2** | **+0.8** |
| OKSO | **Okmok South** | **0.88** | **51** | P | **Pb** | **06 09 17.0** | **-1.1** |
| OKSO | | | | S | **Sb** | **06 09 30.8** | **+1.2** |
| OKCE | **Okmok Cone E** | **0.92** | **48** | P | **Pn** | **06 09 18.2** | **0.0** |
| OKTU | **Okmok Mt. Tuli** | **0.95** | **53** | P | **Pn** | **06 09 18.9** | **+0.3** |
| OKAK | **Okmok** | **0.95** | **36** | P | **Pn** | **06 09 17.3** | **-1.3** |
| OKFG | **Magazine Ridge** | **1.03** | **54** | P | **Pn** | **06 09 19.3** | **-0.3** |
| OKFG | | | | S | **Sn** | **06 09 34.7** | **+1.7** |
| MSOM | **Makushin Julie** | **1.73** | **54** | P | **Pn** | **06 09 29.6** | **+0.3** |
| MGOD | **Makushin Gods** | **1.76** | **55** | P | **Pn** | **06 09 30.1** | **+0.4** |
| MCIR | **Makushin Cirqu** | **1.84** | **51** | P | **Pn** | **06 09 32.0** | **+1.2** |
| MSW | **Makushin Switc** | **1.87** | **53** | P | **Pn** | **06 09 31.5** | **+0.3** |
| MSW | | | | S | **Sn** | **06 09 56.3** | **+2.5** |
| UNV | **Unalaska Valle** | **1.97** | **57** | P | **Pn** | **06 09 32.6** | **0.0** |
| UNV | | | | S | **Sn** | **06 09 57.2** | **+1.0** |
| AKGG | **Akutan Green G** | **2.42** | **54** | P | **Pn** | **06 09 40.2** | **+1.5** |
| AKUT | **Akutan** | **2.49** | **57** | *e*Pn | **Pn** | **06 09 41.9** | **+2.2** |
| KOKL | **Mount Kliuchef** | **3.03** | **263** | P | **Pn** | **06 09 48.4** | **+1.3** |
| ATKA | **Atka Island** | **3.05** | **260** | P | **Pn** | **06 09 48.5** | **+1.1** |
| WECS | **Westdahl Cape** | **3.19** | **56** | P | **Pn** | **06 09 50.5** | **+1.1** |
| KDAK | **Kodiak Island** | **10.74** | **56** | Pn | **Pn** | **06 11 33.2** | **+0.4** |
| | 0.2nm,0.3s,baz=225,slow=11,SNR=2.1 | | | | | | |
| ILAR | **Eielson Array** | **16.56** | **35** | Pn | **Pn** | **06 12 50.0** | **-1.0** |
| | 0.1nm,0.3s,baz=233,slow=11,SNR=4.2 | | | | | | |
| NVAR | **Mina Array Bea** | **37.63** | **92** | P | **P** | **06 16 12.9** | **-0.5** |
| | 0.2nm,0.5s,baz=302,slow=7.3,SNR=2.4 | | | | | | |
| H11N2 | **WAKE ISLAND Hy** | **37.83** | **218** | T | T | 06 56 12.5 | |
| | baz=26 | | | | | | |
| H11N3 | **WAKE ISLAND Hy** | **37.84** | **218** | T | T | 06 56 11.4 | |
| | baz=26 | | | | | | |
| H11N1 | **WAKE ISLAND Hy** | **37.85** | **218** | T | T | 06 56 15.8 | |
| | baz=26 | | | | | | |
| H11S1 | **WAKE ISLAND Hy** | **39.02** | **218** | T | T | 06 57 40.2 | |
| | baz=25 | | | | | | |
| H11S2 | **WAKE ISLAND Hy** | **39.03** | **218** | T | T | 06 57 41.1 | |
| | baz=25 | | | | | | |
| H11S3 | **WAKE ISLAND Hy** | **39.04** | **218** | T | T | 06 57 43.7 | |
| | baz=25 | | | | | | |
| SONM | **Songino Array** | **51.10** | **301** | PcP | **PcP** | **06 19 15.8** | **-0.3** |
| | 0.7nm,0.8s,baz=64,slow=3.4,SNR=3.8 | | | | | | |
| TXAR | **Lajitas Array** | **52.70** | **89** | P | **P** | **06 18 13.4** | **+0.5** |
| | 1.3nm,0.6s,baz=298,slow=5.2,SNR=18 | | | | | | |
| H06N1 | **SOCORRO T-PHAS** | **56.13** | **104** | T | T | 07 19 19.7 | |
| H06E1 | **SOCORRO T-PHAS** | **56.23** | **104** | T | T | 07 19 25.9 | |
| | SNR=4.4 | | | | | | |
| ASAR | **Alice Springs** | **90.71** | **230** | P | **P** | **06 21 59.2** | **-1.7** |
| | 0.5nm,0.6s,baz=32,slow=4.6,SNR=5.3 | | | | | | |

**IDC 20 06:09:56.5±10.0, 4°.69S×154°.07E, h372km±102km, mb2.9/3, mb1 3.2/3, mb1mx2.9/29, mbtmp3.6/3, Error ellipse: s-maj=77.7km s-min=43.3km az=122.0, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** | **24.47** | **230** | P | P | 06 14 43.9 | +0.3 |
| | 0.7nm,0.4s,baz=54,slow=9.3,SNR=4.6 | | | | | | |
| ASAR | **Alice Springs** | **27.09** | **224** | P | P | 06 15 06.5 | -0.4 |
| | 0.5nm,0.6s,baz=56,slow=8.5,SNR=4.1 | | | | | | |
| ILAR | **Eielson Array** | **81.59** | **22** | P | P | 06 21 33.4 | 0.0 |
| | 0.2nm,0.5s,baz=256,slow=4.5,SNR=3.9 | | | | | | |
| BDFB | **Brasilia** | **150.23** | **133** | PKPbc | PKPbc | 06 29 04.7 | -0.6 |
| | 1.0nm,0.3s,baz=180,slow=2.0,SNR=3.0 | | | | | | |
| TORD | **Torodi Ar. Bea** | **151.47** | **289** | PKPbc | PKPbc | 06 29 08.0 | -0.1 |
| | 0.2nm,0.4s,baz=66,slow=1.5,SNR=6.8 | | | | | | |

*IDC **20** 06:10:27.8±1.1, 52°.68N×169°.73W, h0km, mb3.8/7, mb1 4.1/8, mb1mx3.7/39, mbtmp3.7/8, ML3.4/1, Error ellipse: s-maj=44.0km s-min=20.4km az=140.0*
*NEIC **20** 06:10:30.5, 52°.58N×169°.27W, h15km, mb4.1/1, ML3.7(AEIC), After AEIC.*
*ISCJB **20** 06:10:31.2±1.1, 52°.7N±0°.1×169°.4W±0°.1, h30km±7km, mb3.8/7, Error ellipse: s-maj=23.8km s-min=5.6km az=149.0*
**ISC 20 06:10:33.1±1.2, 52°.8N±0°.2×169°.42W±0°.08, h30km±8km, n36, σ1s33/35, mb3.6/7, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIKH | **Nikolski High** | **0.37** | **69** | P | **Pb** | **06 10 40.4** | **-1.1** |
| NIKH | | | | S | **Sb** | **06 10 47.6** | **+0.4** |
| OKSO | **Okmok South** | **0.92** | **56** | P | **Pn** | **06 10 49.3** | **-0.6** |
| OKSO | | | | S | **Sn** | **06 11 03.2** | **+1.1** |
| OKWR | **Okmok West Rim** | **0.94** | **51** | P | **Pb** | **06 10 51.2** | **+0.3** |
| OKCE | **Okmok Cone E** | **0.96** | **52** | P | **Pn** | **06 10 50.2** | **-0.2** |
| OKAK | **Okmok** | **0.98** | **41** | P | **Pn** | **06 10 49.6** | **-1.1** |
| OKFG | **Magazine Ridge** | **1.07** | **57** | P | **Pn** | **06 10 51.5** | **-0.5** |
| OKFG | | | | S | **Sb** | **06 11 07.6** | **+0.9** |
| MSOM | **Makushin Julie** | **1.77** | **56** | P | **Pn** | **06 11 01.4** | **-0.2** |
| MSOM | | | | S | **Sn** | **06 11 24.5** | **+1.4** |
| MGOD | **Makushin Gods** | **1.80** | **57** | P | **Pn** | **06 11 01.8** | **-0.3** |
| MCIR | **Makushin Cirqu** | **1.88** | **53** | P | **Pn** | **06 11 03.3** | **+0.2** |
| MSW | **Makushin Switc** | **1.91** | **55** | P | **Pn** | **06 11 03.5** | **0.0** |
| MSW | | | | S | **Sn** | **06 11 28.8** | **+2.3** |
| UNV | **Unalaska Valle** | **2.02** | **59** | P | **Pn** | **06 11 04.9** | **0.0** |
| UNV | | | | S | **Sn** | **06 11 29.9** | **+0.8** |
| AKRB | **Akutan Reef Bi** | **2.38** | **56** | P | **Pn** | **06 11 10.9** | **+0.9** |
| ZRO | **Akutan Zero** | **2.41** | **57** | P | **Pn** | **06 11 11.1** | **+0.7** |
| KOFP | **Korovin Flat P** | **2.91** | **261** | P | **Pn** | **06 11 17.8** | **+0.5** |
| KOKL | **Mount Kliuchef** | **2.96** | **262** | P | **Pn** | **06 11 18.0** | **0.0** |
| ATKA | **Atka Island** | **2.98** | **259** | P | **Pn** | **06 11 18.2** | **0.0** |
| WESE | **West Dahl East** | **3.31** | **59** | P | **Pn** | **06 11 23.7** | **+0.9** |
| KDAK | **Kodiak Island** | **10.79** | **56** | Pn | **Pn** | **06 13 06.0** | **+0.8** |
| | 0.2nm,0.3s,baz=216,slow=8.7,SNR=4.4 | | | | | | |
| KDAK | | | | Sn | **Sn** | **06 14 59.4** | **-5.2** |
| | 0.1nm,0.3s,baz=144,slow=19,SNR=2.0 | | | | | | |
| ILAR | **Eielson Array** | **16.58** | **35** | Pn | **Pn** | **06 14 22.8** | **-0.1** |
| | 0.1nm,0.3s,baz=231,slow=12,SNR=4.6 | | | | | | |
| SKAG | **Skagway** | **19.94** | **57** | *e*P | **P** | **06 15 02.1** | **0.0** |
| | 7.4nm,0.7s | | | | | | |
| DLBC | **Dease Lake** | **22.67** | **60** | P | **P** | **06 15 33.4** | **+1.7** |
| | 1.1nm,0.6s,baz=328,slow=15,SNR=3.1 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| INK | **Inuvik** | **22.97** | **34** | P | | **P** | | **06 15 35.3** | **+0.8** |
| | 1.7nm,0.8s,baz=270,slow=5.1,SNR=3.0 | | | | | | | | |
| YKA | **Yellowknife Ar** | **29.96** | **49** | P | | **P** | | **06 16 38.8** | **+0.7** |
| | 0.6nm,0.6s,baz=277,slow=7.0,SNR=3.8 | | | | | | | | |
| NVAR | **Mina Array Bea** | **37.71** | **92** | P | | **P** | | **06 17 47.0** | **+1.2** |
| | 0.6nm,0.8s,baz=306,slow=7.7,SNR=5.2 | | | | | | | | |
| H11N2 | **WAKE ISLAND Hy** | **37.81** | **218** | T | | T | | 06 57 44.0 | |
| | baz=24,slow=76,SNR=250 | | | | | | | | |
| H11N3 | **WAKE ISLAND Hy** | **37.81** | **218** | T | | T | | 06 57 43.6 | |
| | baz=24,slow=76,SNR=297 | | | | | | | | |
| H11N1 | **WAKE ISLAND Hy** | **37.82** | **218** | T | | T | | 06 57 45.3 | |
| | baz=24,slow=76,SNR=222 | | | | | | | | |
| H11S1 | **WAKE ISLAND Hy** | **39.00** | **218** | T | | T | | 06 59 12.7 | |
| | baz=23,slow=76,SNR=24 | | | | | | | | |
| H11S2 | **WAKE ISLAND Hy** | **39.01** | **218** | T | | T | | 06 59 12.1 | |
| | baz=23,slow=76,SNR=1563 | | | | | | | | |
| H11S3 | **WAKE ISLAND Hy** | **39.01** | **218** | T | | T | | 06 59 11.6 | |
| | baz=23,slow=76,SNR=1187 | | | | | | | | |
| SONM | **Songino Array** | **51.03** | **300** | PcP | | **PcP** | | **06 20 47.1** | **-0.6** |
| | 1.3nm,0.8s,baz=83,slow=3.5,SNR=6.0 | | | | | | | | |
| TXAR | **Lajitas Array** | **52.77** | **89** | P | | **P** | | **06 19 45.6** | **+0.3** |
| | 2.6nm,0.6s,baz=296,slow=5.4,SNR=26 | | | | | | | | |
| H06N1 | **SOCORRO T-PHAS** | **56.21** | **104** | T | | T | | 07 20 56.3 | |
| | SNR=4.0 | | | | | | | | |
| H06E1 | **SOCORRO T-PHAS** | **56.31** | **104** | T | | T | | 07 20 58.5 | |
| | SNR=6.2 | | | | | | | | |
| WRA | **Warramunga Arr** | **87.27** | **232** | P | | **P** | | **06 23 14.7** | **-1.9** |
| | 0.7nm,0.7s,baz=33,slow=5.8,SNR=5.9 | | | | | | | | |
| ASAR | **Alice Springs** | **90.67** | **230** | P | | **P** | | **06 23 31.3** | **-1.2** |
| | 1.0nm,0.7s,baz=29,slow=4.4,SNR=11 | | | | | | | | |

*MOS **20** 06:21:18.0±2.3, 49°.19N×157°.16E, h47km, mb4.2/1, Error ellipse: s-maj=51.2km s-min=8.3km az=82.4*
**KRSC 20 06:21:18.0±1.5, 49°.19N×157°.16E, h47km±19km, ML4.0, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | **Severo-Kuril's** | **1.64** | **336** | *e*P | Pn | 06 21 45.0 | +0.7 |
| SKR | | | | *e*S | Sn | 06 22 05.5 | +1.2 |
| SKR | **Severo-Kuril's** | **1.64** | **336** | *e*PN | Pn | 06 21 37.4 | -6.9 |
| SKR | | | | pmax | pmax | | |
| | comp=N,80nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,90nm,0.5s | | | | | | |
| PAU | **Pauzhetka** | **2.29** | **355** | *e*P | Pn | 06 21 55.8 | +2.5 |
| PAU | | | | *e*S | Sn | 06 22 23.7 | +3.4 |
| PAU | **Pauzhetka** | **2.29** | **355** | PN | Pn | 06 21 56.8 | +2.5 |
| PAU | | | | S | Sn | 06 22 23.7 | +3.4 |
| RUS | **Russkaya** | **3.36** | **14** | *e*P | Pn | 06 22 11.8 | +3.9 |
| RUS | | | | *e*S | Sn | 06 22 51.0 | +4.4 |
| RUS | **Russkaya** | **3.36** | **14** | PN | Pn | 06 22 11.8 | +3.9 |
| RUS | | | | S | Sn | 06 22 51.0 | +4.4 |
| MTVR | **Mutnovka** | **3.37** | **11** | *e*P | Pn | 06 22 12.8 | +4.6 |
| MTVR | | | | *e*S | Sn | 06 22 51.7 | +4.7 |
| AVH | **Avacha** | **4.21** | **13** | *e*P | Pn | 06 22 24.4 | +4.8 |
| AVH | **Avacha** | **4.21** | **13** | PN | Pn | 06 22 24.4 | +4.8 |
| SMAR | **Somma** | **4.21** | **14** | *e*P | Pn | 06 22 24.5 | +4.6 |
| SMAR | **Somma** | **4.21** | **14** | PN | Pn | 06 22 24.5 | +4.6 |
| NLC | **Nalytchevo** | **4.22** | **18** | P | Pn | 06 22 23.3 | +3.6 |
| NLC | | | | *e*S | Sn | 06 23 11.2 | +3.5 |
| NLC | **Nalytchevo** | **4.22** | **18** | PN | Pn | 06 22 23.3 | +3.6 |
| NLC | | | | S | Sn | 06 23 11.2 | +3.5 |
| SDLR | **Sedlovina** | **4.24** | **14** | *e*P | Pn | 06 22 23.7 | +3.6 |
| SDLR | **Sedlovina** | **4.24** | **14** | PN | Pn | 06 22 23.7 | +3.6 |
| KRX | **Arik** | **4.28** | **12** | *e*P | Pn | 06 22 24.9 | +4.1 |
| SPN | **Mys Shipunski** | **4.31** | **24** | *e*P | Pn | 06 22 25.4 | +4.4 |
| SPN | | | | *e*S | Sn | 06 23 15.5 | +5.5 |
| SPN | **Mys Shipunski** | **4.31** | **24** | PN | Pn | 06 22 25.4 | +4.4 |
| SPN | | | | S | Sn | 06 23 15.5 | +5.5 |
| GNL | **Ganaly** | **4.54** | **6** | *e*P | Pn | 06 22 28.6 | +4.3 |
| GNL | **Ganaly** | **4.54** | **6** | PN | Pn | 06 22 28.6 | +4.3 |
| MKZ | **Mys Kozlova** | **6.08** | **26** | *e*P | Pn | 06 22 49.0 | +3.9 |
| MKZ | **Mys Kozlova** | **6.08** | **26** | PN | Pn | 06 22 49.0 | +3.9 |
| KBTR | **Krutoberegovo** | **7.83** | **24** | *e*P | Pn | 06 23 12.7 | +3.6 |
| KBTR | **Krutoberegovo** | **7.83** | **24** | PN | Pn | 06 23 12.7 | +3.6 |

*ISCJB **20** 06:30:21.7±0.3, 41°.32S±0°.03×173°.34E±0°.05, h125km±4km, Error ellipse: s-maj=7.2km s-min=3.3km az=38.0*
*NEIC **20** 06:30:22.2±0.3, 41°.32S×173°.38E, h132km±6km, MG4.3(WEL), Error ellipse: s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MTW | | | | AML | AML | 06 31 14.4 | |
| **MTW** | **Mount Morrison** | **1.65** | **86** | Pn | **Pn** | **06 30 51.8** | **+0.6** |
| **HOWZ** | **Holdsworth Sta** | **1.71** | **77** | ⇑PN | **Pn** | **06 30 52.4** | **+0.6** |
| **HOWZ** | **Holdsworth Sta** | **1.71** | **77** | Pn | **Pn** | **06 30 52.5** | **+0.6** |
| **TRWZ** | **Traveller** | **1.79** | **94** | PN | **Pn** | **06 30 53.6** | **+0.8** |
| TRWZ | | | | AML | AML | 06 31 15.9 | |
| TRWZ | | | | AML | AML | 06 31 17.5 | |
| **TRWZ** | **Traveller** | **1.79** | **94** | Pn | **Pn** | **06 30 53.8** | **+1.0** |
| **MRZ** | **Mangatainoka R** | **1.82** | **71** | PN | **Pn** | **06 30 53.7** | **+0.5** |
| MRZ | | | | AML | AML | 06 31 18.1 | |
| MRZ | | | | AML | AML | 06 31 19.9 | |
| **MRZ** | **Mangatainoka R** | **1.82** | **71** | Pn | **Pn** | **06 30 53.7** | **+0.5** |
| **NMEZ** | **Namu Road** | **1.93** | **13** | PN | **Pn** | **06 30 56.0** | **+1.5** |
| **NMEZ** | **Namu Road** | **1.93** | **13** | Pn | **Pn** | **06 30 56.0** | **+1.5** |
| **TMWZ** | **Te Maipa** | **1.95** | **85** | PN | **Pn** | **06 30 55.5** | **+0.7** |
| **TMWZ** | **Te Maipa** | **1.95** | **85** | Pn | **Pn** | **06 30 55.5** | **+0.7** |
| **LREZ** | **Lake Rotokare** | **2.01** | **25** | PN | **Pn** | **06 30 57.3** | **+1.8** |
| **TIWZ** | **Tintock** | **2.01** | **76** | PN | **Pn** | **06 30 55.9** | **+0.3** |
| TIWZ | | | | AML | AML | 06 31 21.9 | |
| TIWZ | | | | AML | AML | 06 31 22.7 | |
| **PREZ** | **Palmer Road** | **2.05** | **19** | ⇓PN | **Pn** | **06 30 57.8** | **+1.7** |
| **PREZ** | **Palmer Road** | **2.05** | **19** | Pn | **Pn** | **06 30 57.8** | **+1.7** |
| **NWEZ** | **Newall Road** | **2.06** | **12** | PN | **Pn** | **06 30 57.7** | **+1.5** |
| **NWEZ** | **Newall Road** | **2.06** | **12** | Pn | **Pn** | **06 30 57.7** | **+1.5** |
| **POWZ** | **Post Office Ro** | **2.06** | **65** | PN | **Pn** | **06 30 56.7** | **+0.4** |
| **POWZ** | **Post Office Ro** | **2.06** | **65** | Pn | **Pn** | **06 30 56.7** | **+0.4** |
| **KHEZ** | **Kahui Hut** | **2.07** | **15** | PN | **Pn** | **06 30 57.7** | **+1.4** |
| **KHEZ** | **Kahui Hut** | **2.07** | **15** | Pn | **Pn** | **06 30 57.7** | **+1.4** |
| **NEZ** | **North Egmont** | **2.10** | **17** | ⇓PN | **Pn** | **06 30 58.0** | **+1.2** |
| **NEZ** | **North Egmont** | **2.10** | **17** | Pn | **Pn** | **06 30 58.0** | **+1.2** |
| **PRWZ** | **Pori Road** | **2.14** | **71** | PN | **Pn** | **06 30 57.9** | **+0.7** |
| **PRWZ** | **Pori Road** | **2.14** | **71** | Pn | **Pn** | **06 30 57.9** | **+0.7** |
| **PKE** | **Pukeiti** | **2.16** | **14** | PN | **Pn** | **06 30 58.8** | **+1.4** |
| **PKE** | **Pukeiti** | **2.16** | **14** | Pn | **Pn** | **06 30 58.8** | **+1.4** |
| **DREZ** | **Durham Road** | **2.21** | **18** | PN | **Pn** | **06 30 59.4** | **+1.4** |
| **DREZ** | **Durham Road** | **2.21** | **18** | Pn | **Pn** | **06 30 59.4** | **+1.4** |
| **CPWZ** | **Castlepoint** | **2.21** | **81** | PN | **Pn** | **06 30 59.4** | **+1.4** |
| **CPWZ** | **Castlepoint** | **2.21** | **81** | Pn | **Pn** | **06 30 59.4** | **+1.4** |
| **OXZ** | **Oxford** | **2.24** | **205** | PN | **Pn** | **06 30 59.5** | **+1.1** |
| **OXZ** | **Oxford** | **2.24** | **205** | Pn | **Pn** | **06 30 59.5** | **+1.1** |
| **BFZ** | **Birch Farm** | **2.30** | **76** | PN | **Pn** | **06 30 59.4** | **+0.2** |
| BFZ | | | | AML | AML | 06 31 27.9 | |
| BFZ | | | | AML | AML | 06 31 27.9 | |
| BFZ | | | | AML | AML | 06 31 28.0 | |
| BFZ | | | | AML | AML | 06 31 28.0 | |
| **BFZ** | **Birch Farm** | **2.30** | **76** | Pn | **Pn** | **06 30 59.4** | **+0.2** |
| **CRLZ** | **Canterbury Las** | **2.34** | **192** | PN | **Pn** | **06 31 00.8** | **+1.2** |
| **CRLZ** | **Canterbury Las** | **2.34** | **192** | Pn | **Pn** | **06 31 00.8** | **+1.2** |
| **MHEZ** | **Mangahewa** | **2.34** | **20** | ⇑PN | **Pn** | **06 31 01.6** | **+1.9** |
| **MHEZ** | **Mangahewa** | **2.34** | **20** | Pn | **Pn** | **06 31 01.6** | **+1.9** |
| **TSZ** | **Takapari Road** | **2.36** | **59** | PN | **Pn** | **06 31 00.1** | **+0.1** |
| TSZ | | | | AML | AML | 06 31 30.3 | |
| TSZ | | | | AML | AML | 06 31 33.9 | |
| **TSZ** | **Takapari Road** | **2.36** | **59** | Pn | **Pn** | **06 31 00.1** | **+0.1** |
| **MQZ** | **McQueen's Vall** | **2.46** | **191** | ⇓PN | **Pn** | **06 31 02.0** | **+0.8** |
| **MQZ** | **McQueen's Vall** | **2.46** | **191** | Pn | **Pn** | **06 31 02.0** | **+0.8** |
| **MTVZ** | **Mangateitei** | **2.52** | **42** | PN | **Pn** | **06 31 03.2** | **+1.2** |
| **MTVZ** | **Mangateitei** | **2.52** | **42** | Pn | **Pn** | **06 31 03.2** | **+1.2** |
| **PKVZ** | **Pokaka** | **2.53** | **39** | PN | **Pn** | **06 31 03.0** | **+0.8** |
| **PKVZ** | **Pokaka** | **2.53** | **39** | Pn | **Pn** | **06 31 03.0** | **+0.8** |
| **PNHZ** | **Pukenui** | **2.59** | **59** | PN | **Pn** | **06 31 02.8** | **-0.2** |
| **PNHZ** | **Pukenui** | **2.59** | **59** | Pn | **Pn** | **06 31 02.8** | **-0.2** |
| **WVZ** | **Waitaha Valley** | **2.62** | **226** | PN | **Pn** | **06 31 04.3** | **+1.1** |
| **WVZ** | **Waitaha Valley** | **2.62** | **226** | Pn | **Pn** | **06 31 04.6** | **+1.4** |
| **TRVZ** | **Turoa** | **2.62** | **41** | PN | **Pn** | **06 31 04.2** | **+0.6** |
| **TRVZ** | **Turoa** | **2.62** | **41** | Pn | **Pn** | **06 31 04.2** | **+0.6** |
| **WNVZ** | **Wahianoa** | **2.62** | **42** | PN | **Pn** | **06 31 04.1** | **+0.5** |
| **WNVZ** | **Wahianoa** | **2.62** | **42** | Pn | **Pn** | **06 31 04.2** | **+0.6** |
| **MOVZ** | **Moawhango** | **2.65** | **45** | PN | **Pn** | **06 31 03.9** | **+0.2** |
| **MOVZ** | **Moawhango** | **2.65** | **45** | Pn | **Pn** | **06 31 04.0** | **+0.3** |
| **WHVZ** | **Whangaehu Hut** | **2.66** | **42** | ⇓PN | **Pn** | **06 31 04.8** | **+0.8** |
| **WHVZ** | **Whangaehu Hut** | **2.66** | **42** | Pn | **Pn** | **06 31 04.8** | **+0.8** |
| **FWVZ** | **Far West T-bar** | **2.66** | **41** | PN | **Pn** | **06 31 04.6** | **+0.6** |
| **FWVZ** | **Far West T-bar** | **2.66** | **41** | Pn | **Pn** | **06 31 04.6** | **+0.6** |
| **WPVZ** | **Whakapapa** | **2.69** | **40** | PN | **Pn** | **06 31 05.0** | **+0.6** |
| **WPVZ** | **Whakapapa** | **2.69** | **40** | Pn | **Pn** | **06 31 05.0** | **+0.6** |
| **COVZ** | **Chateau Observ** | **2.70** | **40** | ⇓PN | **Pn** | **06 31 05.2** | **+0.8** |
| **COVZ** | **Chateau Observ** | **2.70** | **40** | Pn | **Pn** | **06 31 05.2** | **+0.8** |
| **TUVZ** | **Tukino** | **2.70** | **42** | PN | **Pn** | **06 31 05.4** | **+0.9** |
| **TUVZ** | **Tukino** | **2.70** | **42** | Pn | **Pn** | **06 31 05.4** | **+0.9** |
| **TWVZ** | **Taurewa** | **2.75** | **37** | PN | **Pn** | **06 31 05.6** | **+0.6** |
| **TWVZ** | **Taurewa** | **2.75** | **37** | Pn | **Pn** | **06 31 05.8** | **+0.8** |
| **BHHZ** | **Black Hill Sta** | **2.76** | **50** | PN | **Pn** | **06 31 05.4** | **+0.1** |
| **BHHZ** | **Black Hill Sta** | **2.76** | **50** | Pn | **Pn** | **06 31 05.4** | **+0.1** |
| **WTVZ** | **West Tongariro** | **2.78** | **39** | PN | **Pn** | **06 31 06.2** | **+0.7** |
| **WTVZ** | **West Tongariro** | **2.78** | **39** | Pn | **Pn** | **06 31 06.2** | **+0.7** |
| **KRVZ** | **Karewarewa** | **2.83** | **40** | PN | **Pn** | **06 31 06.8** | **+0.7** |
| **KRVZ** | **Karewarewa** | **2.83** | **40** | Pn | **Pn** | **06 31 06.8** | **+0.7** |
| **KRHZ** | **Kereru** | **2.85** | **56** | PN | **Pn** | **06 31 06.2** | **-0.1** |
| **RPZ** | **Rata Peaks** | **2.94** | **214** | ⇑PN | **Pn** | **06 31 08.3** | **+0.8** |
| **RPZ** | **Rata Peaks** | **2.94** | **214** | Pn | **Pn** | **06 31 08.3** | **+0.8** |
| RPZ | | | | *e*Sn | **Sn** | **06 31 42.1** | **-0.5** |
| **PXZ** | **Pawanui** | **2.98** | **66** | AML | AML | 06 31 43.7 | |
| PXZ | | | | AML | AML | 06 31 45.1 | |
| **HIZ** | **Hauiti** | **3.02** | **24** | PN | **Pn** | **06 31 09.4** | **+1.0** |
| **HIZ** | **Hauiti** | **3.02** | **24** | Pn | **Pn** | **06 31 09.5** | **+1.0** |
| **RATZ** | **Rangitukua** | **3.07** | **39** | Pn | Pn | 06 31 12.5 | +3.3 |
| **RATZ** | **Rangitukua** | **3.07** | **39** | Pn | Pn | 06 31 13.3 | +4.1 |
| **KAHZ** | **Kahuranaki** | **3.10** | **62** | PN | **Pn** | **06 31 09.3** | **-0.2** |
| **KAHZ** | **Kahuranaki** | **3.10** | **62** | Pn | **Pn** | **06 31 09.3** | **-0.2** |
| **MCHZ** | **McNeill Hill** | **3.17** | **56** | PN | **Pn** | **06 31 10.6** | **0.0** |
| **MCHZ** | **McNeill Hill** | **3.17** | **56** | Pn | **Pn** | **06 31 10.6** | **0.0** |
| **CKHZ** | **Cape Kidnapper** | **3.30** | **62** | PN | **Pn** | **06 31 11.8** | **-0.4** |
| **TLZ** | **Tolley Road** | **3.42** | **31** | PN | **Pn** | **06 31 14.7** | **+0.9** |
| **TLZ** | **Tolley Road** | **3.42** | **31** | Pn | **Pn** | **06 31 14.9** | **+1.1** |
| **NMHZ** | **Naumai** | **3.46** | **52** | PN | **Pn** | **06 31 14.0** | **-0.3** |
| **NMHZ** | **Naumai** | **3.46** | **52** | Pn | **Pn** | **06 31 13.5** | **-0.8** |
| **FOZ** | **Fox Glacier** | **3.52** | **229** | PN | **Pn** | **06 31 14.7** | **-0.3** |
| **FOZ** | **Fox Glacier** | **3.52** | **229** | Pn | **Pn** | **06 31 14.9** | **-0.1** |
| **LBZ** | **Lake Benmore** | **3.86** | **216** | PN | **Pn** | **06 31 19.6** | **0.0** |
| **LBZ** | **Lake Benmore** | **3.86** | **216** | Pn | **Pn** | **06 31 19.6** | **0.0** |
| **TOZ** | **Tahuroa Road** | **3.94** | **26** | PN | **Pn** | **06 31 21.7** | **+1.1** |
| **TOZ** | **Tahuroa Road** | **3.94** | **26** | Pn | **Pn** | **06 31 21.9** | **+1.3** |
| **KNZ** | **Kokohu** | **4.04** | **57** | PN | **Pn** | **06 31 20.5** | **-1.4** |
| KNZ | | | | AML | AML | 06 32 07.5 | |
| **KNZ** | **Kokohu** | **4.04** | **57** | Pn | **Pn** | **06 31 20.6** | **-1.4** |
| **MHGZ** | **Mahia Peninsul** | **4.11** | **60** | PN | **Pn** | **06 31 22.1** | **-0.9** |
| **MHGZ** | **Mahia Peninsul** | **4.11** | **60** | Pn | **Pn** | **06 31 22.1** | **-0.9** |
| **URZ** | **Urewera** | **4.21** | **45** | PN | **Pn** | **06 31 22.5** | **-1.8** |
| URZ | | | | AML | AML | 06 32 12.5 | |
| URZ | | | | AML | AML | 06 32 13.3 | |
| **URZ** | **Urewera** | **4.21** | **45** | Pn | **Pn** | **06 31 22.5** | **-1.8** |
| **ODZ** | **Otahua Downs** | **4.23** | **207** | PN | **Pn** | **06 31 25.7** | **+1.2** |
| **ODZ** | **Otahua Downs** | **4.23** | **207** | Pn | **Pn** | **06 31 25.7** | **+1.2** |
| **RIGZ** | **Rimuhau** | **4.28** | **54** | PN | **Pn** | **06 31 23.6** | **-1.7** |
| **JCZ** | **Jackson Bay** | **4.36** | **229** | PN | **Pn** | **06 31 26.9** | **+0.5** |
| **JCZ** | **Jackson Bay** | **4.36** | **229** | Pn | **Pn** | **06 31 26.9** | **+0.5** |
| **KBAZ** | **Karaka Road Bo** | **4.36** | **17** | PN | **Pn** | **06 31 28.8** | **+2.5** |
| **KBAZ** | **Karaka Road Bo** | **4.36** | **17** | Pn | **Pn** | **06 31 28.8** | **+2.5** |
| **MWZ** | **Matawai** | **4.38** | **49** | PN | **Pn** | **06 31 25.0** | **-1.7** |
| MWZ | | | | AML | AML | 06 32 16.0 | |
| MWZ | | | | AML | AML | 06 32 21.5 | |
| **MWZ** | **Matawai** | **4.38** | **49** | Pn | **Pn** | **06 31 25.0** | **-1.7** |
| **MKAZ** | **Moumakai** | **4.42** | **20** | ⇓PN | **Pn** | **06 31 28.4** | **+1.3** |
| **MKAZ** | **Moumakai** | **4.42** | **20** | Pn | **Pn** | **06 31 28.4** | **+1.3** |
| **WTAZ** | **Waiatarua** | **4.46** | **13** | PN | **Pn** | **06 31 29.2** | **+1.5** |
| **WTAZ** | **Waiatarua** | **4.46** | **13** | Pn | **Pn** | **06 31 29.2** | **+1.5** |
| **ETAZ** | **East Tamaki Re** | **4.51** | **17** | PN | **Pn** | **06 31 29.7** | **+1.3** |
| **ETAZ** | **East Tamaki Re** | **4.51** | **17** | Pn | **Pn** | **06 31 29.7** | **+1.3** |
| **WKZ** | **Wanaka** | **4.73** | **220** | PN | **Pn** | **06 31 30.3** | **-1.0** |
| **WKZ** | **Wanaka** | **4.73** | **220** | Pn | **Pn** | **06 31 30.3** | **-1.0** |
| **EAZ** | **Earnscleugh** | **4.91** | **215** | PN | **Pn** | **06 31 33.0** | **-0.6** |
| **EAZ** | **Earnscleugh** | **4.91** | **215** | Pn | **Pn** | **06 31 33.0** | **-0.6** |
| **KUZ** | **Kuaotunu** | **4.91** | **23** | PN | **Pn** | **06 31 34.5** | **+0.8** |
| **KUZ** | **Kuaotunu** | **4.91** | **23** | Pn | **Pn** | **06 31 34.5** | **+0.8** |
| **MSZ** | **Milford Sound** | **5.20** | **228** | ⇑PN | **Pn** | **06 31 38.6** | **+1.1** |
| **MSZ** | **Milford Sound** | **5.20** | **228** | Pn | **Pn** | **06 31 38.6** | **+1.1** |
| **WMGZ** | **Waiomatatini S** | **5.25** | **50** | PN | **Pn** | **06 31 36.2** | **-2.0** |
| **WMGZ** | **Waiomatatini S** | **5.25** | **50** | Pn | **Pn** | **06 31 36.2** | **-2.0** |
| **TUZ** | **Tuapeka** | **5.37** | **209** | PN | **Pn** | **06 31 40.5** | **+0.6** |
| **TUZ** | **Tuapeka** | **5.37** | **209** | Pn | **Pn** | **06 31 40.5** | **+0.6** |
| **WCZ** | **Waipu Caves** | **5.40** | **9** | Pn | **Pn** | **06 31 40.7** | **+0.3** |
| **SYZ** | **Scrubby Hill** | **6.05** | **208** | PN | **Pn** | **06 31 49.3** | **+0.4** |
| **SYZ** | **Scrubby Hill** | **6.05** | **208** | Pn | **Pn** | **06 31 49.3** | **+0.4** |
| **CTZ** | **Chatham Island** | **7.83** | **112** | PN | **Pn** | **06 32 14.9** | **+1.9** |
| **CTZ** | **Chatham Island** | **7.83** | **112** | Pn | **Pn** | **06 32 15.0** | **+2.0** |

**IDC 20 06:30:29.1±5.1, 24°49N×108°85W, h0km, mb3.1/1,**

**mb1 3.5/3, mb1mx3.4/26, mbtmp3.0/3, ML2.9/2, Error ellipse: s-maj=77.3km s-min=24.9km az=156.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TXAR** | **Lajitas Array** | **6.68** | **43** | Pn | Pn | 06 32 09.4 | +0.8 |
| | 0.1nm,0.3s,baz=218,slow=14,SNR=4.3 | | | | | | |
| TXAR | | | | Pg | Pg | 06 32 37.9 | +0.6 |
| | 0.3nm,0.3s,baz=222,slow=15,SNR=6.6 | | | | | | |
| TXAR | | | | Sn | Sn | 06 33 23.5 | -2.2 |
| | 0.2nm,0.3s,baz=202,slow=14,SNR=3.0 | | | | | | |
| TXAR | | | | Lg | Lg | 06 34 00.4 | |
| | 0.4nm,0.3s,baz=226,slow=30,SNR=4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.05** | **332** | Pn | P | 06 34 20.3 | +0.3 |
| | 0.0nm,0.3s,baz=157,slow=13,SNR=3.2 | | | | | | |
| **ILAR** | **Eielson Array** | **47.16** | **339** | P | P | 06 39 02.5 | -0.4 |
| | 0.2nm,0.7s,baz=148,slow=5.3,SNR=3.9 | | | | | | |

**IDC 20 06:40:15.9±4.0, 7°14S×156°22E, h0km, mb3.7/4, mb1 3.8/4, mb1mx3.6/25, mbtmp3.7/4, Error ellipse: s-maj=130.7km s-min=31.9km az=112.0, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **24.74** | **237** | P | P | 06 45 39.7 | +0.3 |
| | 0.4nm,0.3s,baz=60,slow=9.2,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **27.00** | **230** | P | P | 06 45 59.5 | -0.2 |
| | 0.2nm,0.3s,baz=60,slow=9.7,SNR=3.6 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.48** | **22** | T | T | 07 14 31.0 | |
| | baz=202,slow=75,SNR=23 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.49** | **22** | T | T | 07 14 30.5 | |
| | baz=202,slow=75,SNR=17 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.50** | **22** | T | T | 07 14 30.5 | |
| | baz=202,slow=75,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **70.11** | **327** | P | P | 06 51 30.9 | +0.6 |
| | 0.5nm,0.4s,baz=145,slow=7.0,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **84.31** | **318** | P | P | 06 52 50.0 | +0.1 |
| | 0.7nm,0.7s,baz=108,slow=6.5,SNR=8.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **154.23** | **285** | PKPbc | PKPbc | 07 00 18.0 | -1.1 |
| | 0.2nm,0.4s,baz=71,slow=1.6,SNR=4.5 | | | | | | |

**IDC 20 06:49:35.0±4.6, 24°16N×108°72W, h0km, mb3.1/1, mb1 3.5/3, mb1mx3.4/36, mbtmp3.1/3, ML3.2/2, MS4.0/1, Ms1 4.0/1, ms1mx2.9/12, Error ellipse: s-maj=78.9km s-min=20.4km az=148.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.45** | **268** | Pn | Pn | 06 50 01.7 | -0.7 |
| | 80nm,0.3s,baz=228,slow=11,SNR=7.3 | | | | | | |
| LPIG | | | | Sn | Sg | 06 50 16.9 | -4.8 |
| | 35nm,0.3s,baz=218,slow=14,SNR=5.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.86** | **40** | Pn | Pn | 06 51 17.1 | +0.1 |
| | 0.1nm,0.3s,baz=230,slow=15,SNR=4.0 | | | | | | |
| TXAR | | | | Pg | Pg | 06 51 45.3 | -1.2 |
| | 0.2nm,0.3s,baz=222,slow=13,SNR=4.7 | | | | | | |
| TXAR | | | | Lg | Lg | 06 53 10.1 | |
| | 0.5nm,0.3s,baz=223,slow=27,SNR=5.4 | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.40** | **332** | Pn | P | 06 53 30.2 | +0.4 |
| | 0.1nm,0.3s,baz=159,slow=13,SNR=3.2 | | | | | | |
| **TEIG** | **Tepich** | **19.33** | **98** | LR | LR | 07 03 21.5 | |
| | comp=Z,422nm,19.0s,baz=282,slow=43 | | | | | | |
| **ILAR** | **Eielson Array** | **47.51** | **339** | P | P | 06 58 12.2 | +0.6 |
| | 0.2nm,0.7s,baz=157,slow=6.0,SNR=4.5 | | | | | | |

**IDC 20 06:51:46.7±3.2, 24°45N×109°05W, h0km, mb2.9/1, mb1 3.7/3, mb1mx3.5/33, mbtmp3.2/3, ML3.7/2, Error ellipse: s-maj=63.4km s-min=18.6km az=144.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.20** | **254** | Pn | Pg | 06 52 09.9 | +0.2 |
| | 39nm,0.3s,baz=50,slow=6.2,SNR=11 | | | | | | |
| LPIG | | | | Sn | Sg | 06 52 23.5 | -1.8 |
| | 104nm,0.3s,baz=137,slow=19,SNR=14 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.84** | **43** | Pn | Pn | 06 53 28.0 | -0.4 |
| | 0.7nm,0.3s,baz=223,slow=13,SNR=5.3 | | | | | | |
| TXAR | | | | Lg | Lg | 06 55 21.1 | |
| | 0.5nm,0.3s,baz=225,slow=29,SNR=4.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.01** | **333** | Pn | Pn | 06 55 35.4 | +1.8 |
| | 0.1nm,0.3s,baz=142,slow=9.0,SNR=2.2 | | | | | | |
| **ILAR** | **Eielson Array** | **47.13** | **339** | P | P | 07 00 21.9 | +1.5 |
| | 0.1nm,0.5s,baz=145,slow=6.6,SNR=2.7 | | | | | | |

*CSEM* ***20*** *06:57:05.5±0.3, 38°71N×42°39E, h5km, MD2.9, Error ellipse: s-maj=6.8km s-min=5.3km az=70.0*
*DDA* ***20*** *06:57:05.9, 38°72N×42°44E, h7km, Md2.9*
*ISK* ***20*** *06:57:05.4, 38°75N×42°33E, h10km, MD2.8*

**ISC 20 06:57:05.9±1.0, 38°71N±0°02×42°41E±0°02, h10km±8km, n24, σ1°04/42, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TATV** | **Tatvan** | **0.23** | **210** | *i* P | **Pg** | **06 57 11.0** | **+0.3** |
| TATV | | | | *i* S | **Sg** | **06 57 14.0** | **+0.1** |
| **TATV** | **Tatvan** | **0.23** | **210** | P | **Pg** | **06 57 11.0** | **+0.3** |
| TATV | | | | S | **Sg** | **06 57 14.0** | **+0.1** |
| **EKAR** | **Karacoban** | **0.61** | **334** | *i* P | **Pg** | **06 57 18.1** | **+0.2** |
| EKAR | | | | *i* S | **Sb** | **06 57 26.6** | **-1.1** |
| **EKAR** | **Karacoban** | **0.61** | **334** | P | **Pg** | **06 57 18.1** | **+0.2** |
| EKAR | | | | S | **Sb** | **06 57 26.6** | **-1.1** |
| **GEVA** | **Gevas** | **0.64** | **128** | *i* P | **Pg** | **06 57 17.5** | **-0.9** |
| GEVA | | | | *i* S | **Sg** | **06 57 26.9** | **+0.1** |
| **GEVA** | **Gevas** | **0.64** | **128** | P | **Pg** | **06 57 17.5** | **-0.9** |
| GEVA | | | | S | **Sg** | **06 57 26.9** | **+0.1** |
| **TVAN** | **Van** | **0.80** | **103** | *i* P | **Pg** | **06 57 21.1** | **-0.3** |
| TVAN | | | | *i* S | **Sg** | **06 57 22.4** | **+0.4** |
| **TVAN** | **Van** | **0.80** | **103** | P | **Pg** | **06 57 21.1** | **-0.3** |
| TVAN | | | | S | **Sg** | **06 57 22.4** | **+0.4** |
| **AGRB** | **Hanur-Agry** | **0.98** | **27** | *e*PG | **Pg** | **06 57 24.1** | **-0.7** |
| AGRB | | | | *e*SG | **Sb** | **06 57 38.8** | **+0.6** |
| **AGRB** | **Hanur-Agry** | **0.98** | **27** | *e*Pg | **Pg** | **06 57 24.1** | **-0.7** |
| AGRB | | | | *e*Sg | **Sb** | **06 57 38.8** | **+0.6** |
| **BNGL** | **BINGOL** | **1.02** | **284** | P | **Pg** | **06 57 24.5** | **-1.0** |
| BNGL | | | | S | **Sb** | **06 57 39.6** | **+0.3** |
| **SVAN** | **Silvan-Diyarba** | **1.10** | **240** | *e*PG | **Pg** | **06 57 26.5** | **-0.6** |
| **SVAN** | **Silvan-Diyarba** | **1.10** | **240** | *e*Pg | **Pg** | **06 57 26.5** | **-0.6** |
| **SIRT** | **Sirnak** | **1.20** | **179** | *e*PN | **Pb** | **06 57 29.2** | **+0.4** |
| SIRT | | | | *e*SN | **Sn** | **06 57 47.1** | **+1.7** |
| **SIRT** | **Sirnak** | **1.20** | **179** | *e*Pn | **Pb** | **06 57 29.3** | **+0.4** |
| SIRT | | | | *e*Sn | **Sn** | **06 57 47.1** | **+1.7** |
| **SIRN** | **S¨¨rnak** | **1.21** | **180** | *i* P | **Pb** | **06 57 27.4** | **-1.6** |
| SIRN | | | | *i* S | **Sn** | **06 57 46.1** | **+0.6** |
| **SIRN** | **S¨¨rnak** | **1.21** | **180** | P | **Pb** | **06 57 27.4** | **-1.6** |
| SIRN | | | | S | **Sn** | **06 57 46.1** | **+0.6** |
| **ERZM** | **Erzurum** | **1.45** | **326** | *i* P | **Pg** | **06 57 33.5** | **-0.2** |
| ERZM | | | | *i* S | **Sg** | **06 57 54.9** | **+2.4** |
| **ERZM** | **Erzurum** | **1.45** | **326** | P | **Pg** | **06 57 33.5** | **-0.2** |
| ERZM | | | | S | **Sg** | **06 57 54.9** | **+2.4** |
| **EZM** | **Erzurum** | **1.45** | **326** | *e*PN | **Pn** | **06 57 31.2** | **-1.2** |
| **HAKT** | **HAKKARI** | **1.54** | **138** | *i* P | **Pg** | **06 57 35.9** | **+0.5** |
| **HAKT** | **HAKKARI** | **1.54** | **138** | P | **Pg** | **06 57 35.9** | **+0.5** |
| HAKT | | | | S | **Sg** | **06 57 57.9** | **+2.6** |
| **MAZI** | **Mazidag** | **1.99** | **232** | *e*PN | **Pn** | **06 57 39.1** | **-0.7** |
| **MAZI** | **Mazidag** | **1.99** | **232** | *e*Pn | **Pn** | **06 57 39.1** | **-0.7** |

*IDC* ***20*** *06:58:11.4±0.5, 24°52N×109°11W, h0km, mb4.5/27, mb1 4.6/31, mb1mx4.6/40, mbtmp4.5/31, ML3.7/4, MS5.4/23, Ms1 5.4/23, ms1mx5.1/40, Error ellipse: s-maj=12.4km s-min=7.6km az=52.0*
*MEX* ***20*** *06:58:12.9±0.5, 24°68N×109°14W, h6km±13km, MD5.8*
*ISCJB* ***20*** *06:58:13.2±0.2, 24°61N±0°02×108°93W±0°01, h10km, mb5.3/139, MS5.5/203, Error ellipse: s-maj=2.6km s-min=1.6km az=16.8*
*MOS* ***20*** *06:58:13.2±1.3, 24°57N×108°99W, h10km, mb5.7/39, MS5.8/9, Error ellipse: s-maj=6.5km s-min=3.7km az=96.5*
*BJI* ***20*** *06:58:13.4, 24°32N×109°70W, h8km, mb5.3/7, mB5.8/20, Ms5.9/24, Ms7 5.6/24*
*GCMT* ***20*** *06:58:14.1±0.1, 24°72N×109°18W, h16km, MW5.8/128, Moment Tensor Solution. s112,c207; s128,c387; Duration: 1s9 Moment tensor: Scale 10¹⁷Nm; Mrr-0.70±.05; Mθθ-5.48±.05; Mϕϕ6.18±.06; Mrθ1.30±.15; Mθϕ-1.21±.04; Mrϕ0.23±.15; Best double couple: M₀6.12000×10¹⁷ NP1:ϕs218.00000°, δ81.00000°, λ-11.00000°. NP2:ϕs310.00000°, δ80.00000°, λ-170.00000°. Principal axes: T 6.3050, Plg1.0000°, Azm264.0000°; N -0.3750, Plg76.0000°, Azm357.0000°; P -5.9350, Plg14.0000°, Azm174.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*NEIC* ***20*** *06:58:15.0±0.0, 24°62N×108°99W, h15km, Moment Tensor Solution. s29 Moment tensor: Scale 10¹⁷Nm; Mrr-0.38; Mθθ-5.08; Mϕϕ5.46; Mrϕ2.94; Mθθ-1.07; Mθr-1.36; Best double couple: M₀6.30000×10¹⁷ NP1:ϕs310.00000°, δ83.00000°, λ-150.00000°. NP2:ϕs217.00000°, δ60.00000°, λ-7.00000°. Principal axes: T 6.0400, Plg16.0000°, Azm80.0000°; N 0.4600, Plg59.0000°, Azm321.0000°; P -6.5100, Plg25.0000°, Azm178.0000°;*

**ISC 20 06:58:14.3±0.3, 24°52N±0°03×109°09W±0°03, h10km, n1085, σ1°39/976, mb5.5/143, MS5.5/205, 5C-6D, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.19** | **250** | Pn | Pn | 06 58 33.1 | -3.9 |
| | 279nm,0.3s,baz=124,slow=3.6,SNR=126 | | | | | | |
| LPIG | | | | Sn | **Sb** | **06 58 48.4** | **-4.0** |
| | 2µm,0.3s,baz=120,slow=20,SNR=24 | | | | | | |
| **LPIG** | **La Paz** | **1.19** | **250** | *e*P | Pn | 06 58 32.6 | -4.4 |
| LPIG | | | | *i* S | **Sb** | **06 58 48.2** | **-4.2** |
| **LPIG** | **La Paz** | **1.19** | **250** | *e*P | Pn | 06 58 32.6 | -4.4 |
| LPIG | | | | Pn | Pn | 06 58 33.1 | -3.9 |
| LPIG | | | | *i* S | **Sb** | **06 58 48.2** | **-4.2** |
| LPIG | | | | Sn | **Sb** | **06 58 48.4** | **-4.0** |
| **MAIG** | **Mazatlaan** | **2.78** | **118** | *e*P | **Pn** | **06 58 56.8** | **-2.0** |
| MAIG | | | | *i* S | **Sn** | **06 59 30.5** | **-1.9** |
| **MAIG** | **Mazatlaan** | **2.78** | **118** | *e*P | **Pn** | **06 58 56.8** | **-2.0** |
| MAIG | | | | *i* S | **Sn** | **06 59 30.5** | **-1.9** |
| **SRIG** | **Santa Rosalia** | **3.98** | **315** | *e*P | Pn | 06 59 10.0 | -5.4 |
| SRIG | | | | *i* S | Sn | 06 59 53.4 | -8.7 |
| **SRIG** | **Santa Rosalia** | **3.98** | **315** | *e*P | Pn | 06 59 10.0 | -5.4 |
| SRIG | | | | *i* S | Sn | 06 59 53.4 | -8.7 |
| **HSIG** | | **4.78** | **340** | *i* P | Pn | 06 59 22.7 | -3.7 |
| HSIG | | | | *i* S | Sn | 07 00 13.6 | -8.3 |
| **HSIG** | | **4.78** | **340** | *i* P | Pn | 06 59 22.7 | -3.7 |
| HSIG | | | | *i* S | Sn | 07 00 13.6 | -8.3 |
| **ANIG** | **Ahuacatlan** | **5.45** | **128** | *e*P | **Pn** | **06 59 35.6** | **-0.1** |
| ANIG | | | | *e*S | **Sn** | **07 00 37.0** | **-1.6** |
| **ANIG** | **Ahuacatlan** | **5.45** | **128** | *e*P | **Pn** | **06 59 35.6** | **-0.1** |
| ANIG | | | | *e*S | **Sn** | **07 00 37.0** | **-1.6** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 129A | Stewart Farms, baz=10 | 10.27 | 37 | P | | Pn | 07 00 41.1 | -0.8 |
| Y12C | Blythe baz=10 | 10.35 | 334 | P | | Pn | 07 00 43.1 | +0.3 |
| 734A | La Parita Cree baz=10 | 10.35 | 63 | P | | Pn | 07 00 42.0 | -0.9 |
| 432A | Menard baz=10,SNR=43 | 10.38 | 50 | P | | Pn | 07 00 43.5 | +0.1 |
| ZUVM | ZUMPANGO | 10.38 | 115 | *e*P | | Pn | 07 00 48.3 | +4.7 |
| MAVM | Malinalco, Edo | 10.49 | 120 | *e*P | | Pn | 07 00 51.7 | +6.6 |
| BAR | Barrett | 10.51 | 322 | *e*Pn | | Pn | 07 00 46.6 | +1.5 |
| 533A | Kerrville baz=10,SNR=6.1 | 10.51 | 56 | P | | Pn | 07 00 44.2 | -0.9 |
| Z28A | Tucker Farm, M baz=11,SNR=8.3 | 10.52 | 32 | P | | Pn | 07 00 44.8 | -0.5 |
| MONP | Monument Peak baz=11,SNR=22 | 10.53 | 324 | P | | Pn | 07 00 46.9 | +1.4 |
| PBIG | Penon de los B | 10.57 | 117 | *e*P | | Pn | 07 00 52.5 | +6.7 |
| W18A | Petrified Fore baz=11,SNR=14 | 10.58 | 357 | P | | Pn | 07 00 46.7 | +0.6 |
| W18A | Petrified Fore | 10.58 | 357 | *e*Pn | | Pn | 07 00 48.0 | +1.8 |
| ANMO | Albuquerque 0.1nm,0.3s,baz=199,slow=13,SNR=20 | 10.64 | 12 | Pn | | Pn | 07 00 45.8 | -1.1 |
| ANMO | 0.3nm,0.3s,baz=222,slow=14,SNR=1.9 | | | Sn | | Sn | 07 02 46.5 | +0.2 |
| ANMO | 0.7nm,0.3s,baz=266,slow=19,SNR=2.6 | | | Lg | | Lg | 07 03 41.5 | |
| ANMO | comp=Z,52µm,18.9s,baz=190,slow=40 | | | LR | | LR | 07 05 11.7 | |
| ANMO | Albuquerque | 10.64 | 12 | *i*P | | Pn | 07 00 47.6 | +0.6 |
| ANMO | comp=Z,119nm,2.5s | | | pmax | | pmax | | |
| ANMO | Albuquerque | 10.64 | 12 | *e*Pn | | Pn | 07 00 46.9 | 0.0 |
| ANMO | | | | Sn | | Sn | 07 02 46.5 | +0.2 |
| ANMO | | | | Lg | | Lg | 07 03 41.5 | |
| BC3 | Big Chuckawall baz=11,SNR=24 | 10.66 | 330 | P | | Pn | 07 00 47.0 | -0.3 |
| 231A | Bronte baz=11,SNR=22 | 10.69 | 44 | P | | Pn | 07 00 47.0 | -0.6 |
| PDMC | Parker Dam,Lak baz=11,SNR=17 | 10.69 | 337 | P | | Pn | 07 00 47.8 | +0.3 |
| 332A | Millersview baz=11,SNR=29 | 10.72 | 48 | P | | Pn | 07 00 48.2 | +0.2 |
| 634A | China Grove, S baz=11 | 10.73 | 61 | P | | Pn | 07 00 47.7 | -0.4 |
| 130A | Snyder baz=11,SNR=29 | 10.75 | 40 | P | | Pn | 07 00 47.2 | -1.2 |
| 835A | Beeville baz=11 | 10.77 | 67 | P | | Pn | 07 00 47.9 | -0.6 |
| IIO | Organos | 10.79 | 115 | *e*P | | Pn | 07 00 51.7 | +2.4 |
| IIO | Organos | 10.79 | 115 | *e*P | | Pn | 07 00 51.7 | +2.4 |
| PLIG | Platanillo | 10.81 | 123 | *e*P | | Pn | 07 00 49.0 | -0.2 |
| PLIG | | | | *i*P | | Pn | 07 00 54.9 | +5.6 |
| PLIG | | | | *e*S | | Sn | 07 02 54.6 | +4.2 |
| PLIG | Platanillo | 10.81 | 123 | *e*P | | Pn | 07 00 49.0 | -0.2 |
| PLIG | | | | *i*P | | Pn | 07 00 54.9 | +5.6 |
| PLIG | | | | *e*S | | Sn | 07 02 54.6 | +4.2 |
| 433A | Art baz=11,SNR=42 | 10.82 | 53 | P | | Pn | 07 00 48.6 | -0.7 |
| Z29A | Hungry Hill Ra baz=11,SNR=14 | 10.84 | 35 | P | | Pn | 07 00 49.7 | 0.0 |
| YAIG | Yautepec | 10.88 | 119 | *i*P | | Pn | 07 00 55.1 | +4.7 |
| YAIG | | | | *e*S | | Sn | 07 03 07.1 | +15 |
| YAIG | Yautepec | 10.88 | 119 | *i*P | | Pn | 07 00 55.1 | +4.7 |
| YAIG | | | | *e*S | | Sn | 07 03 07.1 | +15 |
| 109C | Camp Elliot, M baz=11 | 10.90 | 322 | P | | Pn | 07 00 51.3 | +0.9 |
| MSTX | Muleshoe baz=11 | 10.91 | 29 | P | | Pn | 07 00 51.0 | +0.4 |
| MSTX | Muleshoe | 10.91 | 29 | *e*Pn | | Pn | 07 00 50.6 | 0.0 |
| 534A | Blanco baz=11 | 10.92 | 58 | P | | Pn | 07 00 50.3 | -0.3 |
| IRM | Iron Mountain baz=11,SNR=17 | 10.96 | 333 | P | | Pn | 07 00 50.7 | -0.6 |
| AMVM | AMECAMECA | 10.97 | 117 | *e*P | | Pn | 07 00 56.3 | +4.6 |
| 735A | Kenedy baz=11 | 10.97 | 64 | P | | Pn | 07 00 51.2 | -0.1 |
| 936A | North Padre Is baz=11 | 10.98 | 72 | P | | Pn | 07 00 51.1 | -0.4 |
| 232A | Coleman baz=11,SNR=26 | 11.10 | 46 | P | | Pn | 07 00 52.3 | -0.8 |
| Y28A | McKinney Farm, baz=11,SNR=13 | 11.10 | 31 | P | | Pn | 07 00 52.6 | -0.6 |
| PFO | Pinyon Flat Ob comp=Z,0.1nm,0.3s,baz=153,slow=12,SNR=14 | 11.11 | 326 | Pn | | Pn | 07 00 52.2 | -1.2 |
| PFO | | | | Sn | | Sn | 07 02 58.5 | +0.8 |
| PFO | comp=Z,0.0nm,0.3s,baz=214,slow=15,SNR=1.4 | | | LR | | LR | 07 04 43.2 | |
| PFO | comp=Z,15µm,18.2s,baz=174,slow=35 | 11.11 | 326 | *e*P | | Pn | 07 00 55.4 | +2.0 |
| PFO | Pinyon Flat Ob comp=Z,928nm,1.8s,SNR=49 | 11.11 | 326 | Pn | | Pn | 07 00 56.0 | +2.6 |
| PFO | Pinyon Flat Ob comp=Z,928nm,1.8s,SNR=49 | 11.11 | 326 | Pn | | Pn | 07 00 55.2 | +1.8 |
| PFO | Pinyon Flat Ob | 11.11 | 326 | *e*Pn | | Pn | 07 00 55.4 | +2.0 |
| PFO | | | | Sn | | Sn | 07 02 58.5 | +0.8 |
| WUAZ | Wupatki baz=11,SNR=42 | 11.14 | 350 | P | | Pn | 07 00 53.7 | -0.1 |
| WUAZ | Wupatki | 11.14 | 350 | *e*Pn | | Pn | 07 00 54.5 | +0.8 |
| 131A | Roby baz=11,SNR=15 | 11.15 | 41 | P | | Pn | 07 00 52.4 | -1.4 |
| Z30A | Sanderson Ranc baz=11,SNR=22 | 11.17 | 37 | P | | Pn | 07 00 52.8 | -1.4 |
| 635A | Leesville baz=11,SNR=5.8 | 11.19 | 62 | P | | Pn | 07 00 54.5 | +0.1 |
| BELC | Belle Mtn. Jos baz=11,SNR=17 | 11.20 | 329 | P | | Pn | 07 00 54.4 | -0.3 |
| 333A | Richland Sprin baz=11,SNR=16 | 11.21 | 51 | P | | Pn | 07 00 53.3 | -1.4 |
| Y29A | Porterfield Fa baz=11,SNR=16 | 11.33 | 33 | P | | Pn | 07 00 55.4 | -1.0 |
| 434A | Burnet baz=11,SNR=11 | 11.45 | 54 | P | | Pn | 07 00 57.7 | -0.3 |
| MURC | Murrieta baz=12,SNR=12 | 11.49 | 324 | P | | Pn | 07 00 58.4 | -0.1 |
| ABTX | Abilene, Hawle baz=12,SNR=28 | 11.57 | 44 | P | | Pn | 07 00 58.1 | -1.6 |
| ABTX | Abilene, Hawle | 11.57 | 44 | *e*Pn | | Pn | 07 00 59.5 | -0.1 |
| 736A | Circle Diamond baz=12,SNR=12 | 11.61 | 65 | P | | Pn | 07 00 59.9 | -0.3 |
| 535A | Dale baz=12 | 11.62 | 59 | P | | Pn | 07 00 59.9 | -0.3 |
| X28A | Dimmitt baz=12 | 11.62 | 29 | P | | Pn | 07 00 59.8 | -0.6 |
| 233A | Rising Star baz=12,SNR=17 | 11.67 | 48 | P | | Pn | 07 00 58.8 | -2.3 |
| GMRC | Granite Mounta baz=12 | 11.71 | 332 | P | | Pn | 07 01 03.0 | +1.5 |
| Y30A | Stafford Cattl baz=12 | 11.74 | 36 | P | | Pn | 07 01 01.4 | -0.6 |
| 334A | Lometa baz=12,SNR=16 | 11.75 | 52 | P | | Pn | 07 01 00.5 | -1.5 |
| Z31A | Sharp Cattle R baz=12,SNR=30 | 11.75 | 40 | P | | Pn | 07 01 00.8 | -1.3 |
| X29A | Tulia baz=12,SNR=13 | 11.79 | 31 | P | | Pn | 07 01 03.4 | +0.7 |
| 636A | Smothers Creek baz=12 | 11.81 | 63 | P | | Pn | 07 01 02.7 | -0.1 |
| SCI | San Clemente I baz=12 | 11.82 | 318 | P | | Pn | 07 01 04.3 | +1.3 |
| BBRC | Big Bear Solar baz=12 | 11.86 | 327 | P | | Pn | 07 01 04.6 | +0.8 |
| 435B | Jarrell baz=12 | 11.95 | 56 | P | | Pn | 07 01 04.3 | -0.4 |
| 133A | Hamilton Ranch baz=12,SNR=13 | 12.03 | 46 | P | | Pn | 07 01 04.0 | -1.8 |
| CIS | Catalina Islan baz=12 | 12.03 | 319 | P | | Pn | 07 01 06.8 | +0.9 |
| 536A | Bastrop baz=12 | 12.04 | 60 | P | | Pn | 07 01 05.3 | -0.7 |
| HEC | Hector,Ludlow baz=12,SNR=14 | 12.04 | 330 | P | | Pn | 07 01 08.1 | +2.0 |
| 737A | Port Lavaca baz=12 | 12.07 | 67 | P | | Pn | 07 01 06.0 | -0.5 |
| Z32A | Haskell baz=12,SNR=51 | 12.14 | 42 | P | | Pn | 07 01 06.0 | -1.3 |
| Y31A | Rekieta Farm, baz=12,SNR=18 | 12.15 | 37 | P | | Pn | 07 01 06.1 | -1.5 |
| AMTX | Amarillo baz=12 | 12.16 | 30 | P | | Pn | 07 01 08.3 | +0.6 |
| AMTX | Amarillo | 12.16 | 30 | *e*Pn | | Pn | 07 01 07.7 | -0.1 |
| FMP | Fort Macarthur baz=12 | 12.19 | 321 | P | | Pn | 07 01 09.1 | +1.1 |
| 234A | Clairette baz=12,SNR=26 | 12.19 | 50 | P | | Pn | 07 01 06.1 | -2.0 |
| X30A | Coker Ranch, T baz=12,SNR=9.2 | 12.20 | 34 | P | | Pn | 07 01 07.6 | -0.6 |
| BFSC | Mount Baldy Ra baz=12,SNR=7.4 | 12.22 | 324 | P | | Pn | 07 01 10.1 | +1.4 |
| W28A | Vega baz=12 | 12.25 | 28 | P | | Pn | 07 01 07.8 | -1.1 |
| 335A | Moody baz=12 | 12.31 | 54 | P | | Pn | 07 01 09.1 | -0.7 |
| W29A | Amraillo baz=12 | 12.38 | 30 | P | | Pn | 07 01 10.9 | +0.2 |
| TUQ | Turquoise Moun baz=12 | 12.38 | 333 | P | | Pn | 07 01 11.3 | +0.5 |
| 637A | Eagle Lake baz=12 | 12.38 | 64 | P | | Pn | 07 01 10.3 | -0.4 |
| RRX | Edison Barstow baz=12 | 12.40 | 328 | P | | Pn | 07 01 12.2 | +1.3 |
| MWC | Mount Wilson | 12.43 | 323 | *e*P | | Pn | 07 01 12.9 | +1.4 |
| MWC | comp=Z,556nm,1.8s | | | pmax | | pmax | | |
| MWC | Mount Wilson comp=Z,556nm,1.8s | 12.43 | 323 | *e*Pn | | Pn | 07 01 12.9 | +1.4 |
| V27A | Dan Oppiter Fa baz=12 | 12.43 | 24 | P | | Pn | 07 01 11.4 | -0.1 |
| PASC | Pasadena Art C | 12.46 | 323 | *e*Pn | | Pn | 07 01 13.6 | +1.9 |
| 436A | Wall Ranch, Ga baz=12 | 12.54 | 58 | P | | Pn | 07 01 11.9 | -1.0 |
| 134A | White-Moore Ra baz=13,SNR=6.3 | 12.56 | 48 | P | | Pn | 07 01 11.0 | -2.1 |
| Z33A | Whitaker Ranch baz=13,SNR=36 | 12.56 | 44 | P | | Pn | 07 01 11.5 | -1.7 |
| DECC | Green Verdugo baz=13,SNR=5.9 | 12.60 | 322 | P | | Pn | 07 01 14.3 | +0.6 |
| SNCC | San Nicolas Is baz=13 | 12.61 | 316 | P | | Pn | 07 01 14.0 | +0.2 |
| 537A | Green Hill Far baz=13 | 12.63 | 61 | P | | Pn | 07 01 13.0 | -1.0 |
| Y32A | R-V Farms, Ver baz=13,SNR=23 | 12.65 | 39 | P | | Pn | 07 01 12.2 | -2.1 |
| GSC | Goldstone | 12.65 | 330 | *e*P | | Pn | 07 01 15.5 | +1.1 |
| GSC | Goldstone baz=13,SNR=25 | 12.65 | 330 | P | | Pn | 07 01 15.8 | +1.4 |
| GSC | Goldstone | 12.65 | 330 | *e*Pn | | Pn | 07 01 15.5 | +1.1 |
| MVCO | Mesa Verde baz=13,SNR=10 | 12.66 | 2 | P | | Pn | 07 01 13.3 | -1.4 |
| MVCO | Mesa Verde | 12.66 | 2 | *e*Pn | | Pn | 07 01 14.7 | +0.1 |
| WHTX | Lake Whitney baz=13,SNR=12 | 12.66 | 51 | P | | Pn | 07 01 13.0 | -1.5 |
| WHTX | Lake Whitney | 12.66 | 51 | *e*Pn | | Pn | 07 01 14.1 | -0.4 |
| V28A | Channing baz=13 | 12.66 | 26 | P | | Pn | 07 01 14.0 | -0.6 |
| 738A | Farr-Stevens R baz=13 | 12.76 | 67 | P | | Pn | 07 01 14.3 | -1.5 |
| 336A | Riesel baz=13,SNR=12 | 12.80 | 55 | P | | Pn | 07 01 15.3 | -1.0 |
| X31A | McDonald Ranch baz=13,SNR=20 | 12.81 | 36 | P | | Pn | 07 01 15.0 | -1.6 |
| EDW2 | Edwards Air Fo baz=13,SNR=31 | 12.89 | 325 | P | | Pn | 07 01 18.6 | +0.9 |
| BLG | Laguna Peak baz=13 | 12.91 | 320 | P | | Pn | 07 01 18.7 | +0.8 |
| SHOC | Shoshone baz=13,SNR=6.7 | 12.93 | 333 | P | | Pn | 07 01 18.5 | +0.4 |
| W30A | Crocket Farms baz=13 | 12.93 | 33 | P | | Pn | 07 01 16.5 | -1.7 |
| HKT | Hockley | 12.97 | 62 | *e*P | | Pn | 07 01 18.0 | -0.6 |
| HKT | Hockley | 12.97 | 62 | *e*Pn | | Pn | 07 01 18.0 | -0.6 |
| 135A | Vickery Place, baz=13 | 13.01 | 49 | P | | Pn | 07 01 17.9 | -1.4 |
| U27A | Thompson Grove baz=13,SNR=9.9 | 13.03 | 23 | P | | Pn | 07 01 20.3 | +0.7 |
| SHPR | Sheep Range | 13.04 | 338 | *e*Pn | | Pn | 07 01 20.9 | +1.1 |
| SHPR | | | | *e* | | | 07 01 26.0 | |
| X32A | Elmer baz=13,SNR=37 | 13.04 | 39 | P | | Pn | 07 01 17.9 | -1.7 |
| V29A | Stinnett baz=13 | 13.06 | 28 | P | | Pn | 07 01 19.3 | -0.7 |
| 437A | Phantom Ranch, baz=13 | 13.08 | 58 | P | | Pn | 07 01 19.5 | -0.7 |
| OSI | Osito Adit baz=13,SNR=8.5 | 13.09 | 322 | P | | Pn | 07 01 21.6 | +1.3 |
| OSI | Osito Adit | 13.09 | 322 | *e*Pn | | Pn | 07 01 22.6 | +2.3 |
| Y33A | Hilltop Ranch, baz=13,SNR=14 | 13.13 | 42 | P | | Pn | 07 01 18.7 | -2.3 |
| Z34A | Collier Ranch, baz=13 | 13.16 | 45 | P | | Pn | 07 01 20.0 | -1.3 |
| BSC | Santa Cruz Isl baz=13 | 13.18 | 318 | P | | Pn | 07 01 21.7 | +0.2 |
| T25A | Trinidad baz=13,SNR=7.8 | 13.20 | 17 | P | | Pn | 07 01 23.0 | +1.0 |
| T25A | Trinidad | 13.20 | 17 | *e*Pn | | Pn | 07 01 24.1 | +2.1 |
| LRMC | Laurel Mountai baz=13,SNR=17 | 13.21 | 328 | P | | Pn | 07 01 23.0 | +0.9 |
| U28A | Mallet baz=13,SNR=9.7 | 13.21 | 25 | P | | Pn | 07 01 22.9 | +0.8 |
| W31A | Holland Ranch, baz=13 | 13.26 | 35 | P | | Pn | 07 01 21.9 | -0.7 |
| S22A | 4UR Ranch, Cre baz=13,SNR=13 | 13.32 | 8 | P | | Pn | 07 01 24.3 | +0.5 |
| S22A | 4UR Ranch, Cre | 13.32 | 8 | *e*Pn | | Pn | 07 01 24.9 | +1.1 |
| 236A | Katherine and baz=13 | 13.33 | 53 | P | | Pn | 07 01 22.4 | -1.3 |
| V30A | Spur Ranch, Mi baz=13 | 13.35 | 31 | P | | Pn | 07 01 23.1 | -0.8 |
| 538A | Harpers Horsep baz=13 | 13.35 | 62 | P | | Pn | 07 01 23.3 | -0.5 |
| T26A | Comanche Natio baz=14,SNR=17 | 13.46 | 19 | P | | Pn | 07 01 26.7 | +1.1 |
| 337A | Centerville baz=14 | 13.49 | 57 | P | | Pn | 07 01 24.5 | -1.3 |
| CCUT | Cedar City | 13.49 | 345 | *e*Pn | | Pn | 07 01 27.6 | +1.6 |
| ARVC | Arvin baz=14,SNR=58 | 13.53 | 324 | P | | Pn | 07 01 27.0 | +0.7 |
| SBC | Santa Barbara baz=14 | 13.53 | 319 | P | | Pn | 07 01 28.1 | +1.8 |
| SDCO | Great Sand Dun baz=14,SNR=11 | 13.53 | 12 | P | | Pn | 07 01 28.9 | +2.3 |
| SDCO | Great Sand Dun | 13.53 | 12 | *e*Pn | | P | 07 01 31.1 | -4.9 |
| WMOK | Wichita Mounta | 13.55 | 39 | *e*P | | Pn | 07 01 25.3 | -1.4 |
| WMOK | Wichita Mounta | 13.55 | 39 | *e*Pn | | Pn | 07 01 25.3 | -1.4 |
| 438A | Sam Houston St baz=14 | 13.56 | 60 | P | | Pn | 07 01 25.1 | -1.7 |
| Z35A | Perchaven, San baz=14 | 13.57 | 47 | P | | Pn | 07 01 25.5 | -1.5 |
| W32A | Sentinel baz=14,SNR=10 | 13.58 | 37 | P | | Pn | 07 01 25.6 | -1.5 |
| X33A | Lawton baz=14,SNR=9.6 | 13.58 | 40 | P | | Pn | 07 01 24.8 | -2.2 |
| 136A | Ennis baz=14,SNR=14 | 13.58 | 51 | P | | Pn | 07 01 25.3 | -1.7 |
| MPMC | Manual Prospec baz=14,SNR=57 | 13.59 | 330 | P | | Pn | 07 01 27.1 | -0.2 |
| Y34A | Reagan Ranch, baz=14 | 13.64 | 44 | P | | Pn | 07 01 26.6 | -1.2 |
| T27A | Campo baz=14 | 13.64 | 22 | P | | Pn | 07 01 29.0 | +1.1 |
| U29A | Oasis Ranch, S baz=14 | 13.66 | 28 | P | | Pn | 07 01 28.6 | +0.4 |
| ISA | Isabella | 13.75 | 326 | *e*P | | Pn | 07 01 32.1 | +2.7 |
| ISA | Isabella baz=14,SNR=56 | 13.75 | 326 | P | | Pn | 07 01 30.5 | +1.1 |
| ISA | Isabella | 13.75 | 326 | *e*Pn | | Pn | 07 01 32.1 | +2.7 |
| V31A | Spring Creek L baz=14 | 13.77 | 33 | P | | Pn | 07 01 30.2 | +0.6 |
| DAC | Darwin (Calif) | 13.82 | 330 | *e*P | | Pn | 07 01 31.7 | +1.3 |
| DAC | Darwin (Calif) | 13.82 | 330 | *e*Pn | | Pn | 07 01 31.7 | +1.3 |
| 237A | Washetta, Mont baz=14 | 13.87 | 55 | P | | Pn | 07 01 28.4 | -2.5 |
| T28A | Walsh baz=14,SNR=10 | 13.91 | 24 | P | | Pn | 07 01 31.5 | 0.0 |
| S26A | Kim baz=14,SNR=27 | 13.91 | 19 | P | | Pn | 07 01 31.8 | +0.2 |
| 539A | Cross D Ranch, baz=14 | 13.93 | 63 | P | | Pn | 07 01 29.8 | -1.9 |
| 338A | Crockett baz=14 | 13.95 | 58 | P | | Pn | 07 01 30.6 | -1.4 |
| U30A | WK&E Inc. Balk baz=14 | 13.99 | 29 | P | | Pn | 07 01 30.9 | -1.9 |
| X34A | Smith Ranch, M baz=14 | 14.02 | 42 | P | | Pn | 07 01 30.6 | -2.4 |
| W33A | Caddo, Fort Co baz=14,SNR=9.3 | 14.03 | 39 | P | | Pn | 07 01 31.5 | -1.7 |
| Y35A | Marietta baz=14 | 14.07 | 46 | P | | Pn | 07 01 31.0 | -2.7 |
| Z36A | Blue Ridge baz=14,SNR=25 | 14.09 | 49 | P | | Pn | 07 01 31.4 | -2.6 |
| V32A | Arapaho baz=14 | 14.13 | 36 | P | | Pn | 07 01 33.9 | -0.7 |
| 439A | Center Grove, baz=14 | 14.14 | 61 | P | | Pn | 07 01 32.8 | -1.9 |
| S27A | Las Animas baz=14 | 14.15 | 20 | P | | Pn | 07 01 34.9 | 0.0 |
| CWC | Cottonwood Cre baz=14,SNR=42 | 14.17 | 329 | P | | Pn | 07 01 35.5 | +0.2 |
| MSU | Marysvale | 14.19 | 350 | *e*P | | Pn | 07 01 35.4 | -0.2 |
| MSU | Marysvale | 14.19 | 350 | *e*Pn | | Pn | 07 01 35.4 | -0.2 |
| VES | Vestal, Richgr baz=14 | 14.20 | 325 | P | | Pn | 07 01 36.5 | +0.9 |
| 137A | Heron Place, G baz=14 | 14.20 | 52 | P | | Pn | 07 01 33.8 | -1.8 |
| U31A | Nine Bar Ranch baz=14 | 14.23 | 32 | P | | Pn | 07 01 34.4 | -1.7 |
| T29A | Hugoton baz=14 | 14.25 | 26 | P | | Pn | 07 01 36.4 | 0.0 |
| SMMC | Simmler baz=14,SNR=12 | 14.31 | 321 | P | | Pn | 07 01 37.8 | +0.7 |
| GRAC | Grapevine Rang baz=14,SNR=21 | 14.32 | 332 | P | | Pn | 07 01 37.5 | +0.3 |
| 238A | Jacksonville baz=14 | 14.38 | 56 | P | | Pn | 07 01 36.3 | -1.7 |
| S28A | Manter baz=14,SNR=7.3 | 14.40 | 24 | P | | Pn | 07 01 37.9 | -0.4 |
| X35A | Drake baz=14,SNR=18 | 14.42 | 44 | P | | Pn | 07 01 35.3 | -3.2 |
| T30A | Plains baz=14 | 14.49 | 28 | P | | Pn | 07 01 38.2 | -1.2 |
| W34A | Bridge Creek, baz=14 | 14.49 | 40 | P | | Pn | 07 01 37.6 | -1.9 |
| W34A | Bridge Creek, | 14.49 | 40 | *e*Pn | | Pn | 07 01 38.2 | -1.3 |
| 339A | Huntington baz=14 | 14.52 | 59 | P | | Pn | 07 01 37.9 | -2.0 |
| Y36A | Durant baz=15 | 14.56 | 47 | P | | Pn | 07 01 39.2 | -1.3 |
| 540A | Vidor baz=14 | 14.57 | 64 | P | | Pn | 07 01 39.1 | -1.5 |
| SRU | San Rafael | 14.60 | 356 | *e*P | | Pn | 07 01 42.1 | +1.0 |
| SRU | San Rafael | 14.60 | 356 | *e*Pn | | Pn | 07 01 42.1 | +1.0 |
| Z37A | Pogue Cattle C baz=15 | 14.62 | 51 | P | | Pn | 07 01 38.8 | -2.4 |
| V33A | Lossen Ranch, baz=15 | 14.62 | 37 | P | | Pn | 07 01 39.6 | -1.6 |
| NATX | Nacogdoches baz=15 | 14.62 | 57 | P | | Pn | 07 01 39.6 | -1.7 |
| RCTC | Rector, Farmer baz=15,SNR=11 | 14.64 | 326 | P | | Pn | 07 01 41.9 | +0.4 |
| U32A | Winter Ranch, baz=15,SNR=11 | 14.66 | 34 | P | | Pn | 07 01 40.9 | -1.0 |
| 138A | Matatall Enter baz=15 | 14.72 | 53 | P | | Pn | 07 01 40.9 | -1.7 |
| SMCO | Snowmass | 14.72 | 6 | *e*Pn | | Pn | 07 01 43.5 | +0.5 |
| S29A | Ulysses baz=15,SNR=8.0 | 14.72 | 26 | P | | Pn | 07 01 41.7 | -1.1 |
| R27A | Eads baz=15,SNR=24 | 14.73 | 20 | P | | Pn | 07 01 42.3 | -0.5 |
| TIN | Tinemaha baz=15,SNR=8.1 | 14.74 | 330 | P | | Pn | 07 01 43.4 | +0.4 |
| 440A | Kirbyville baz=15 | 14.77 | 62 | P | | Pn | 07 01 41.1 | -2.2 |
| Q24A | Divide baz=15,SNR=7.2 | 14.78 | 12 | P | | Pn | 07 01 42.5 | -1.2 |
| TMUT | Trail Mountain | 14.84 | 354 | *e*Pn | | Pn | 07 01 44.8 | +0.2 |
| R11A | Troy Canyon, C baz=15,SNR=26 | 14.85 | 340 | P | | Pn | 07 01 44.7 | +0.1 |
| R11A | Troy Canyon, C | 14.85 | 340 | *e*Pn | | Pn | 07 01 45.1 | +0.5 |
| 239A | Gary baz=15 | 14.88 | 57 | P | | Pn | 07 01 43.0 | -1.8 |
| T31A | Randall Ranch, baz=15,SNR=11 | 14.90 | 31 | P | | Pn | 07 01 43.8 | -1.4 |
| X36A | Centrahoma baz=15 | 14.92 | 45 | P | | Pn | 07 01 43.0 | -2.3 |
| W35A | Tecumseh baz=15,SNR=16 | 14.97 | 42 | P | | Pn | 07 01 42.9 | -3.2 |
| P17A | Butcher Ranch, | 14.97 | 355 | *e*Pn | | Pn | 07 01 47.0 | +0.8 |
| S30A | Montezuma baz=15,SNR=7.6 | 15.01 | 27 | P | | Pn | 07 01 44.5 | -2.1 |
| Y37A | Hugo baz=15 | 15.05 | 48 | P | | Pn | 07 01 44.4 | -2.7 |
| V34A | Guthrie baz=15,SNR=10 | 15.06 | 39 | P | | Pn | 07 01 46.1 | -1.1 |
| V34A | Guthrie | 15.06 | 39 | *e*Pn | | Pn | 07 01 45.6 | -1.6 |
| 340A | Bronson baz=15 | 15.08 | 60 | P | | Pn | 07 01 45.1 | -2.3 |
| P18A | Preston Nutter | 15.09 | 357 | *e*Pn | | Pn | 07 01 48.8 | +0.9 |
| Z38A | Mt. Pleasant baz=15 | 15.10 | 52 | P | | Pn | 07 01 45.8 | -1.9 |
| R28A | Tribune baz=15 | 15.11 | 22 | P | | Pn | 07 01 46.8 | -1.1 |
| MTUM | Tungsten Hills | 15.14 | 330 | *e*Pn | | Pn | 07 01 49.8 | +1.3 |
| U33A | Lingo Farm, Me baz=15 | 15.17 | 36 | P | | Pn | 07 01 46.4 | -2.3 |
| CMIG | Matias Romero baz=221,slow=20 | 15.19 | 116 | Pn | | Pn | 07 01 46.1 | -2.9 |
| CMIG | comp=Z,26µm,20.4s,baz=276,slow=38 | | | LR | | LR | 07 07 50.1 | |
| 139A | Bunkhouse Ranc baz=15 | 15.24 | 54 | P | | Pn | 07 01 47.3 | -2.3 |
| T32A | Huddler Ranch, baz=15,SNR=6.7 | 15.33 | 32 | P | | Pn | 07 01 49.1 | -1.7 |
| W36A | Wetumka baz=15,SNR=16 | 15.36 | 44 | P | | Pn | 07 01 47.8 | -3.5 |
| V35A | Meyer Ranch, C baz=15,SNR=13 | 15.40 | 41 | P | | Pn | 07 01 48.7 | -3.1 |
| S31A | Mullinville baz=16,SNR=23 | 15.42 | 30 | P | | Pn | 07 01 50.2 | -1.8 |
| R29A | Marienthal baz=16 | 15.42 | 24 | P | | Pn | 07 01 50.1 | -2.0 |
| KSCO | Kaye Shedlock' baz=16 | 15.45 | 19 | P | | Pn | 07 01 50.8 | -1.6 |
| KSCO | Kaye Shedlock' comp=Z,286nm,1.7s | 15.45 | 19 | *e*Pn | | Pn | 07 01 53.5 | +1.0 |
| U34A | Anderson Ranch baz=16,SNR=14 | 15.48 | 37 | P | | Pn | 07 01 51.8 | -1.0 |
| U34A | Anderson Ranch comp=Z,67nm,0.9s | 15.48 | 37 | *e*Pn | | Pn | 07 01 51.3 | -1.5 |
| MLAC | Mammoth Lakes baz=16,SNR=17 | 15.49 | 330 | P | | Pn | 07 01 53.3 | +0.2 |
| ISCO | Idaho Springs | 15.51 | 10 | *e*P | | Pn | 07 01 54.8 | +1.4 |
| ISCO | comp=Z,170nm,1.3s | | | pmax | | pmax | | |
| ISCO | Idaho Springs baz=16,SNR=21 | 15.51 | 10 | P | | Pn | 07 01 52.6 | -0.9 |
| ISCO | Idaho Springs comp=Z,171nm,1.4s | 15.51 | 10 | *e*Pn | | Pn | 07 01 54.8 | +1.4 |
| X37A | Clayton baz=16 | 15.58 | 47 | P | | Pn | 07 01 51.5 | -2.5 |
| O20A | White River Ci baz=16,SNR=29 | 15.59 | 2 | P | | Pn | 07 01 52.9 | -1.4 |
| T33A | Patterson Ranc baz=16 | 15.59 | 34 | P | | Pn | 07 01 52.4 | -1.8 |
| NLU | North Lily Min comp=Z,455nm,2.5s | 15.59 | 351 | *e*Pn | | Pn | 07 01 54.3 | -0.2 |
| R30A | Dighton baz=16,SNR=31 | 15.63 | 27 | P | | Pn | 07 01 53.9 | -0.9 |
| Y38A | Idabel baz=16,SNR=9.7 | 15.64 | 50 | P | | Pn | 07 01 51.7 | -3.0 |
| Z39A | Irene McRaven, baz=16 | 15.67 | 53 | P | | Pn | 07 01 53.1 | -2.1 |
| LRV | Little Rabbit | 15.68 | 322 | *e*Pn | | P | 07 01 57.9 | -1.7 |
| S32A | Newby Ranch, P baz=16 | 15.74 | 31 | P | | Pn | 07 01 54.3 | -1.8 |
| Q28A | Sharon Springs baz=16,SNR=17 | 15.75 | 21 | P | | Pn | 07 01 56.5 | +0.2 |
| W37A | Quinton baz=16,SNR=28 | 15.87 | 45 | P | | Pn | 07 01 54.5 | -3.4 |
| U35A | Pawnee baz=16 | 15.89 | 39 | P | | Pn | 07 01 55.9 | -2.1 |
| Q29A | Oakley baz=16,SNR=29 | 15.89 | 24 | P | | Pn | 07 01 56.4 | -1.7 |
| NV01 | Mina Array Sit | 15.92 | 333 | *e*Pn | | Pn | 07 01 59.1 | +0.4 |
| NVAR | Mina Array Bea comp=Z,0.2nm,0.3s,baz=153,slow=11,SNR=39 | 15.92 | 333 | Pn | | Pn | 07 01 58.2 | -0.5 |
| NVAR | | | | Sn | | S | 07 05 11.4 | +1.7 |
| DUG | comp=Z,0.1nm,0.3s,baz=125,slow=23,SNR=2.2 Dugway | 15.94 | 350 | *e*P | | Pn | 07 01 59.3 | +0.5 |
| DUG | comp=Z,300nm,1.8s | | | pmax | | pmax | | |
| DUG | Dugway baz=16,SNR=27 | 15.94 | 350 | P | | Pn | 07 01 58.3 | -0.5 |
| DUG | Dugway comp=Z,299nm,1.8s | 15.94 | 350 | *e*Pn | | Pn | 07 01 59.3 | +0.5 |
| R31A | Burdett baz=16,SNR=19 | 15.95 | 28 | P | | Pn | 07 01 57.2 | -1.7 |
| V36A | Jenks baz=16,SNR=10 | 15.96 | 42 | P | | Pn | 07 01 56.4 | -2.6 |
| X38A | Whitesboro baz=16,SNR=14 | 15.98 | 47 | P | | Pn | 07 01 56.7 | -2.6 |
| Y39A | Lockesburg baz=16,SNR=17 | 16.09 | 51 | P | | Pn | 07 01 58.2 | -2.4 |

T34A **McClaskey Farm** 16.10 37 P Pn 07 01 59.1 -1.7
baz=16,SNR=23
S33A **Kaszmaul Farm,** 16.11 33 P Pn 07 01 59.5 -1.4
baz=16,SNR=28
TUL1 **Tulsa** 16.13 42 P Pn 07 02 00.4 -0.8
baz=16
TUL1 **Tulsa** 16.13 42 *e*Pn Pn 07 01 58.9 -2.3
comp=Z,173nm,1.4s
SAO **San Andreas Ge** 16.17 322 *e*P P 07 02 04.9 +0.1
SAO pmax pmax
comp=Z,360nm,1.9s
SAO **San Andreas Ge** 16.17 322 *e*Pn P 07 02 04.9 +0.1
comp=Z,362nm,1.9s
P28A **Saint Francis** 16.23 21 P Pn 07 02 02.7 +0.1
baz=16,SNR=10
Q30A **Quinter** 16.25 25 P Pn 07 02 01.8 -0.9
baz=16,SNR=31
CTU **Camp Tracy** 16.28 353 *e*Pn Pn 07 02 02.8 -0.4
comp=Z,89nm,1.2s
CBKS **Cedar Bluff** 16.31 27 *e*P Pn 07 02 02.7 -0.7
CBKS pmax pmax
comp=Z,970nm,1.9s
CBKS **Cedar Bluff** 16.31 27 P Pn 07 02 01.9 -1.6
baz=16,SNR=29
T35A **Sooner Cattle** 16.40 38 P Pn 07 02 02.7 -1.9
baz=16,SNR=18
R32A **Long Quarter,** 16.43 30 P Pn 07 02 02.9 -2.1
baz=16,SNR=18
W38A **Poteau** 16.43 47 P Pn 07 02 03.0 -2.0
baz=16,SNR=24
U36A **Oologah** 16.49 41 P Pn 07 02 03.5 -2.3
baz=16
V37A **Hulbert** 16.52 44 P Pn 07 02 03.5 -2.7
baz=16,SNR=21
P29A **Atwood** 16.54 23 P Pn 07 02 05.4 -1.0
baz=17,SNR=10
N23A **Red Feather La** 16.54 8 P Pn 07 02 05.6 -1.0
baz=17,SNR=10
N23A **Red Feather La** 16.54 8 *e*Pn P 07 02 09.6 +0.3
comp=Z,314nm,1.7s
CMB **Columbia Colle** 16.55 327 *e*P Pn 07 02 06.4 -0.2
CMB pmax pmax
comp=Z,610nm,2.3s
CMB **Columbia Colle** 16.55 327 *e*Pn Pn 07 02 06.4 -0.2
comp=Z,609nm,2.3s
Q31A **Ellis** 16.61 27 P Pn 07 02 05.5 -1.8
baz=17,SNR=22
S34A **Willow Spring** 16.65 35 P Pn 07 02 07.2 -0.6
baz=17,SNR=5.4
TCUT **Toone Canyon** 16.66 354 *e*Pn Pn 07 02 07.8 -0.4
comp=Z,1µm,2.7s
R33A **Olander Ranch,** 16.68 32 P Pn 07 02 06.7 -1.4
baz=17,SNR=24
BGU **Big Grassy Mou** 16.69 350 *e*Pn Pn 07 02 08.0 -0.4
comp=Z,996nm,2.3s
O28A **Krutsinger Ran** 16.73 20 P Pn 07 02 08.6 -0.3
baz=17,SNR=8.5
P30A **Selden** 16.73 24 P Pn 07 02 08.3 -0.6
baz=17,SNR=31
MIAR **Mount Ida** 16.78 50 *e*P P 07 02 10.8 -0.8
MIAR **Mount Ida** 16.78 50 P Pn 07 02 08.1 -1.3
baz=17,SNR=28
MIAR **Mount Ida** 16.78 50 *e*P P 07 02 10.8 -0.8
T36A **Boggs Farm, Ca** 16.86 39 P Pn 07 02 08.1 -2.3
baz=17,SNR=21
U37A **Salina** 16.87 42 P Pn 07 02 07.9 -2.7
baz=17,SNR=40
Q32A **Meitler Ranch,** 16.96 29 P Pn 07 02 09.1 -2.6
baz=17,SNR=31
V38A **Canehill** 16.97 45 P Pn 07 02 08.9 -3.0
baz=17,SNR=18
SPUT **South Promonto** 16.98 351 *e*Pn Pn 07 02 11.9 -0.1
comp=Z,939nm,2.5s
ELK **Elko** 16.98 344 *e*P Pn 07 02 12.5 +0.3
ELK pmax pmax
comp=Z,300nm,1.5s
PHWY **Pilot Hill** 17.01 9 *e*P P 07 02 14.4 0.0
R34A **Isabella, Hill** 17.03 33 P Pn 07 02 11.3 -1.3
baz=17,SNR=29
O29A **4D Ranch, Culb** 17.05 22 P Pn 07 02 12.3 -0.6
baz=17
P31A **Stockton** 17.05 26 P Pn 07 02 11.5 -1.4
baz=17,SNR=30
S35A **Otter Creek Ra** 17.05 37 P Pn 07 02 10.6 -2.3
baz=17,SNR=15
BMN **Battle Mountai** 17.27 339 *e*P Pn 07 02 16.3 +0.6
BMN pmax pmax
comp=Z,730nm,1.5s
BMN **Battle Mountai** 17.27 339 *e*Pn Pn 07 02 16.3 +0.6
comp=Z,730nm,1.5s
SAC **San Andreas** 17.29 322 *e*P Pn 07 02 15.3 -0.5
SAC **San Andreas** 17.29 322 *e*Pn Pn 07 02 15.3 -0.5
Q33A **Connelly Farm,** 17.30 31 P Pn 07 02 15.3 -0.6
baz=17,SNR=20
N28A **Pribbeno Ranch** 17.32 20 P Pn 07 02 15.7 -0.5
baz=17
U38A **Gravette** 17.34 43 P Pn 07 02 13.7 -2.8
baz=17,SNR=9.9
O30A **MW Ranch, Wils** 17.36 24 P Pn 07 02 15.8 -1.0
baz=17,SNR=14
OGNE **Ogallala** 17.41 18 P Pn 07 02 16.8 -0.6
baz=18,SNR=7.3
OGNE **Ogallala** 17.41 18 *e*Pn Pn 07 02 15.9 -1.5
comp=Z,212nm,1.4s
P32A **Huiting Farm,** 17.46 28 P Pn 07 02 16.6 -1.4
baz=18,SNR=34
T37A **Cheneyville 18** 17.46 41 P Pn 07 02 15.8 -2.2
baz=18,SNR=27
HVU **Hansel Valley** 17.48 351 *e*P Pn 07 02 18.8 +0.4
HVU pmax pmax
comp=Z,224nm,1.4s
HVU **Hansel Valley** 17.48 351 *e*Pn Pn 07 02 18.8 +0.4
comp=Z,224nm,1.4s
S36A **Lake Cedric, C** 17.49 38 P Pn 07 02 16.5 -1.8
baz=18,SNR=17
R35A **Emporia Munici** 17.59 35 P Pn 07 02 17.8 -1.8
baz=18,SNR=12
O31A **Woolen Ranch,** 17.61 25 P Pn 07 02 18.7 -1.2
baz=18,SNR=19
Q34A **Chapman** 17.66 33 P Pn 07 02 19.0 -1.5
baz=18,SNR=20
P33A **Williams Farm,** 17.71 30 P Pn 07 02 20.6 -0.4
baz=18
N29A **Votaw Ranch, W** 17.73 22 P Pn 07 02 20.7 -0.7
baz=18
UALR **University of** 17.76 51 *e*Pn Pn 07 02 20.0 -1.7
comp=Z,751nm,2.1s
N30A **Hueftle Ranch,** 17.89 23 P Pn 07 02 22.5 -0.8
baz=18
S37A **Fort Scott** 17.95 39 P Pn 07 02 22.0 -2.0
baz=18,SNR=21
R36A **Gordon, Harris** 17.96 37 P Pn 07 02 22.3 -1.9
baz=18,SNR=19
KSU1 **Kansas State U** 17.96 33 P Pn 07 02 23.1 -1.1
baz=18,SNR=14
M28A **Bar X Bar Ranc** 18.02 19 P Pn 07 02 24.3 -0.6
baz=18
VBMS **Vicksburg** 18.04 61 P Pn 07 02 23.3 -1.8
baz=18
NSHM **Saint Helena R** 18.07 324 *e*Pn P 07 02 26.2 +0.3
Q35A **Mercer Eighty,** 18.07 35 P Pn 07 02 23.4 -2.1
baz=18,SNR=51
OHCM **Honcut** 18.11 328 *e*Pn P 07 02 29.2 +2.9
O32A **Brockman Farm,** 18.13 27 P Pn 07 02 24.3 -2.0
baz=18,SNR=10
BW06 **Boulder Array** 18.20 359 *e*Pn Pn 07 02 25.9 -1.4
comp=Z,165nm,1.4s
P34A **Walnut Farm, R** 18.21 32 P Pn 07 02 25.7 -1.4
baz=18,SNR=17
K22A **Casper** 18.21 6 P Pn 07 02 26.4 -0.9
baz=18,SNR=37
K22A **Casper** 18.21 6 *e*Pn Pn 07 02 27.0 -0.3
comp=Z,121nm,1.1s
M29A **Burnside Ranch** 18.27 21 P Pn 07 02 27.5 -0.5
baz=18,SNR=8.9
AHID **Auburn Hatcher** 18.27 355 *e*Pn P 07 02 28.2 -0.1
comp=Z,213nm,1.6s
O33A **Hebron** 18.28 29 P Pn 07 02 26.4 -1.6
baz=18,SNR=24
R37A **Teagarden Farm** 18.33 38 P Pn 07 02 27.4 -1.3
baz=18
N31A **Bailey Ranch,** 18.34 25 P Pn 07 02 28.2 -0.6
baz=18
Q36A **Arnold C. Orve** 18.45 35 P P 07 02 28.8 -1.3
baz=18
L28A **Connealy Angus** 18.54 18 P P 07 02 30.7 -0.4
baz=19
N32A **Stulken Farm,** 18.55 27 P P 07 02 30.4 -0.7
baz=19
P35A **Duane Minner,** 18.59 33 P P 07 02 30.3 -1.3
baz=19,SNR=30
M30A **Dale-Ortello V** 18.62 22 P Pn 07 02 32.0 -0.3
baz=19
HOPS **Hopland** 18.66 324 *e*P Pn 07 02 34.6 +1.9
comp=Z,300nm,1.7s
O34A **Beatrice** 18.77 31 P P 07 02 32.4 -1.2
baz=19,SNR=14
M31A **Lambtecht Ranc** 18.78 24 P Pn 07 02 33.7 -0.4
baz=19,SNR=8.5
REDW **Red Top Meadow** 18.85 356 *e*P P 07 02 33.8 -0.9
comp=Z,399nm,1.8s
N33A **J Bar K, Exete** 18.88 28 P P 07 02 34.2 -0.6
baz=19
L29A **Maesberg Ranch** 18.90 20 P P 07 02 34.8 -0.3
baz=19
Q37A **Longview Farm,** 18.93 37 P P 07 02 34.5 -0.9
baz=19,SNR=7.0
SNOW **Snow King Moun** 18.94 356 *e*P P 07 02 35.5 -0.2
comp=Z,151nm,1.4s
TPAW **Teton Pass** 18.98 356 *e*P P 07 02 35.9 -0.4
comp=Z,251nm,1.5s
O03D **Paynes Creek** 19.01 329 P Pn 07 02 38.5 +1.5
baz=19,SNR=16
L30A **Spencer Herefo** 19.04 22 P Pn 07 02 37.0 -0.4
baz=19
P36A **Good Intent, A** 19.07 35 P P 07 02 36.3 -0.6
baz=19,SNR=21
LOHW **Long Hollow** 19.09 357 *e*P P 07 02 36.8 -0.4
comp=Z,282nm,1.8s
FXWY **Fox Creek** 19.14 356 *e*P P 07 02 37.2 -0.6
comp=Z,210nm,1.5s
BGNE **Belgrade** 19.15 26 P Pn 07 02 37.9 -0.7
baz=19,SNR=24
BGNE **Belgrade** 19.15 26 *e*P P 07 02 37.5 -0.3
comp=Z,258nm,0.9s
O35A **Humboldt** 19.21 32 P P 07 02 38.1 -0.3
baz=19,SNR=15
MOOW **Moose Ponds** 19.23 356 *e*P P 07 02 37.0 -1.8
comp=Z,1µm,3.0s
K28A **Ten Mile Ranch** 19.23 17 P Pn 07 02 39.1 -0.6
baz=19,SNR=9.6
J25A **Sunshine Ranch** 19.32 12 P Pn 07 02 39.9 -0.8
baz=19
HBAR **Harrisburg** 19.34 51 *e*P Pn 07 02 40.8 -0.2
N34A **Lincoln** 19.38 30 P P 07 02 40.0 -0.3
baz=19
J26A **Sides Ranch, S** 19.39 13 P Pn 07 02 40.8 -0.8
baz=20
IMW **Indian Meadow** 19.39 356 *e*P P 07 02 40.9 +0.2
comp=Z,600nm,2.0s
KCPM **Cahto Peak** 19.44 325 *e*P Pn 07 02 47.4 +5.2
comp=Z,142nm,1.4s
KIPM **Iron Peak** 19.47 325 *e*P Pn 07 02 47.1 +4.5
HLID **Hailey** 19.49 348 P Pn 07 02 42.4 -0.4
baz=20
HLID **Hailey** 19.49 348 *e*P P 07 02 41.9 +0.2
comp=Z,127nm,1.4s
WVOR **Wild Horse Val** 19.54 338 *e*P P 07 02 42.5 +0.4
WVOR pmax pmax
comp=Z,420nm,1.4s
WVOR **Wild Horse Val** 19.54 338 *e*P P 07 02 42.5 +0.4
comp=Z,425nm,1.4s
L31A **Butterfield Fa** 19.55 23 P Pn 07 02 43.1 -0.3
baz=20,SNR=7.0
FLWY **Flagg Ranch** 19.56 357 *e*P Pn 07 02 43.9 +0.1
comp=Z,407nm,1.6s
J27A **Elkhorn Farm,** 19.57 16 P Pn 07 02 42.9 -0.9
baz=20,SNR=13
O36A **Bolckow** 19.57 34 P P 07 02 41.6 -0.8
baz=20,SNR=11
K29A **Lazy Trails An** 19.58 20 P P 07 02 42.7 +0.1
baz=20
WDC **Whiskeytown Da** 19.58 328 *e*P P 07 02 42.2 -0.3
WDC pmax pmax
comp=Z,700nm,2.6s
WDC **Whiskeytown Da** 19.58 328 *e*P P 07 02 42.2 -0.3
comp=Z,699nm,2.6s
MFID **Camas Ranch** 19.64 345 *e*P P 07 02 43.3 0.0
comp=Z,320nm,1.6s
M33A **Taylor Creek F** 19.68 27 P P 07 02 43.3 -0.2
baz=20,SNR=8.5
MOD **Modoc** 19.68 334 *e*P P 07 02 44.4 +0.7
comp=Z,320nm,1.4s
L32A **Elgin** 19.71 25 P P 07 02 43.6 -0.3
baz=20
K30A **Basset** 19.73 21 P Pn 07 02 45.2 -0.3
baz=20,SNR=14
OXF **Oxford** 19.78 55 *e*P P 07 02 44.5 -0.1
OXF pmax pmax
comp=Z,95nm,1.1s
OXF **Oxford** 19.78 55 *e*P P 07 02 44.5 -0.1
comp=Z,95nm,1.1s
N35A **Tabor** 19.80 31 P P 07 02 44.3 -0.5
baz=20,SNR=11
H17A **Grant Village** 19.86 357 P P 07 02 46.3 +0.5
baz=20,SNR=25
H17A **Grant Village** 19.86 357 *e*P Pn 07 02 47.5 +0.1
comp=Z,213nm,1.6s
M34A **Aspy Farms, Fr** 19.88 29 P P 07 02 45.5 -0.2
baz=20,SNR=6.4
KMRM **Mail Ridge** 19.89 325 *e*P Pn 07 02 47.5 -0.1
comp=Z,601nm,1.4s
J28A **Allard Ranch,** 19.93 17 P P 07 02 46.8 +0.4
baz=20,SNR=10
YFT **Old Faithful** 19.93 356 *e*P Pn 07 02 49.9 +1.7
comp=Z,263nm,1.4s
I25A **Rochford** 19.94 11 P Pn 07 02 47.2 -1.0
baz=20,SNR=16
N02D **Trinity Center** 19.97 329 P Pn 07 02 47.9 -0.6
baz=20
K31A **O'Neill** 19.97 23 P P 07 02 46.7 0.0
baz=20
RSSD **Black Hills** 19.98 11 *e*P Pn 07 02 48.7 -0.1
RSSD pmax pmax
comp=Z,380nm,2.4s
GNAR **Gosnell** 20.00 51 *e*P Pn 07 02 48.0 -0.8
LKWY **Lake** 20.02 357 *e*P Pn 07 02 50.1 +0.7
LKWY pmax pmax
comp=Z,110nm,1.1s
LKWY **Lake** 20.02 357 *e*P Pn 07 02 50.1 +0.7
comp=Z,114nm,1.1s
LKWY LR LR
comp=Z,36µm,21.0s
I26A **New Underwood** 20.12 13 P Pn 07 02 49.4 -0.9
baz=20,SNR=9.3
PBMO **Poplar Bluff** 20.13 48 *e*P P 07 02 48.7 +0.2
comp=Z,727nm,2.7s
L33A **Hoskins** 20.14 26 P P 07 02 48.3 -0.3
baz=20
YMR **Madison River** 20.16 356 *e*P Pn 07 02 51.2 +0.2
comp=Z,314nm,1.5s
J29A **Okreek** 20.17 19 P P 07 02 49.4 +0.6
baz=20,SNR=12
YNR **Norris Junctio** 20.19 357 *e*P Pn 07 02 51.6 +0.3
comp=Z,248nm,1.5s
M04C **Macdoel** 20.22 331 P Pn 07 02 50.6 -0.9
baz=20,SNR=40
M35A **Neda** 20.25 30 P P 07 02 50.1 +0.4
baz=20
K32A **Verdigre** 20.29 24 P P 07 02 50.4 +0.2
baz=20,SNR=10
J08A **Circle Bar Ran** 20.31 340 *e*P P 07 02 51.3 +0.7
comp=Z,437nm,1.4s
J08A LR LR
comp=Z,11µm,20.0s
I27A **Quinn** 20.33 15 P Pn 07 02 51.7 -1.1
baz=20,SNR=12
J30A **Dallas** 20.35 20 P Pn 07 02 51.8 -1.2
baz=20,SNR=6.7
L34A **Svendsen Farm,** 20.35 28 P P 07 02 51.0 +0.1
baz=20
QLMT **Earthquake Lak** 20.35 355 *e*P Pn 07 02 53.2 0.0
M02C **Callahan** 20.36 329 P Pn 07 02 52.3 -0.9
baz=20
KHMM **Horse Mountain** 20.39 327 *e*P P 07 02 52.3 +0.8
comp=Z,857nm,1.7s
KHMM LR LR
comp=Z,27µm,18.0s
HALT **Halls** 20.45 52 *e*P Pn 07 02 53.1 -1.1
I28A **Midland** 20.48 17 P P 07 02 52.4 +0.1
baz=21,SNR=25
MCMT **McKenzie Canyo** 20.49 352 *e*P Pn 07 02 53.7 -1.1
BRAL **Brewton** 20.52 67 *e*P P 07 02 51.3 -1.5
comp=Z,246nm,1.4s
BRAL LR LR
comp=Z,14µm,21.0s
H25A **Fruitdale** 20.55 11 P P 07 02 53.4 +0.4
baz=21
RLMT **Red Lodge** 20.55 360 P P 07 02 53.5 +0.2
baz=21
RLMT **Red Lodge** 20.55 360 *e*P P 07 02 53.7 +0.4
comp=Z,203nm,1.5s
RLMT LR LR
comp=Z,17µm,19.0s
YBH **Yreka Blue Hor** 20.56 330 P P 07 02 52.3 -1.0
comp=Z,3.2nm,0.8s,baz=139,slow=11,SNR=6.2
YBH S S 07 06 43.7 +0.4
comp=Z,1.9nm,1.0s,baz=117,slow=18,SNR=6.8
YBH LR LR 07 09 42.1
comp=Z,3µm,21.6s,baz=171,slow=34
YBH **Yreka Blue Hor** 20.56 330 *e*P Pn 07 02 56.0 +0.5
YBH pmax pmax
comp=Z,460nm,2.8s
YBH **Yreka Blue Hor** 20.56 330 *e*P P 07 02 52.7 -0.6
comp=Z,456nm,2.8s
YBH S S 07 06 43.7 +0.4
J31A **Geddes** 20.57 22 P P 07 02 53.2 0.0
baz=21,SNR=13
K05A **Summer Lake** 20.61 335 P P 07 02 54.5 +0.6
K33A **Hardington** 20.62 26 P P 07 02 53.8 +0.1
baz=21,SNR=5.2
GLAT **Glass** 20.66 51 *e*P P 07 02 54.0 -0.3
H26A **Fairpoint** 20.70 13 P P 07 02 54.8 +0.2
baz=21,SNR=12
I29A **Vivian Onida** 20.74 18 P P 07 02 55.3 +0.2
baz=21,SNR=23
L35A **Bielow Farm, R** 20.83 29 P P 07 02 55.3 -0.7
baz=21,SNR=11
H27A **Howes** 20.86 14 P P 07 02 56.4 0.0
baz=21,SNR=57
K04D **Chiloquin, OR** 20.87 333 P P 07 02 56.5 -0.1
baz=21,SNR=10.0
I30A **Oacoma** 20.90 20 P P 07 02 56.4 -0.4
baz=21
J32A **Parkston** 20.95 23 P P 07 02 57.4 0.0
baz=21,SNR=13
DLMT **Dillon** 20.99 353 PFAKE 07 03 10.0 +9.5
DLMT LR LR
comp=Z,29µm,19.0s
UTMT **University of** 21.00 51 *e*P P 07 02 58.4 +0.5
comp=Z,392nm,1.2s
K34A **Le Mars** 21.06 27 P P 07 02 58.1 -0.5
baz=21,SNR=16
LRAL **Lakeview Retre** 21.11 61 *e*P P 07 02 58.2 -0.9
comp=Z,149nm,1.4s
G25A **Newell** 21.13 11 P P 07 02 59.7 +0.3
baz=21,SNR=15
H28A **Mission Ridge** 21.15 16 P P 07 02 59.8 +0.3
baz=21,SNR=15
BOZ **Bozeman (W)** 21.18 355 *e*P P 07 02 59.9 -0.1
BOZ pmax pmax
comp=Z,230nm,1.5s
BOZ **Bozeman (W)** 21.18 355 P P 07 03 00.7 +0.7
baz=21
BOZ **Bozeman (W)** 21.18 355 *e*P P 07 02 59.9 -0.1
comp=Z,229nm,1.5s
BOZ LR LR
comp=Z,23µm,20.0s
J05D **Fort Rock, OR** 21.21 335 P P 07 03 00.5 +0.1
baz=21,SNR=96
GCMT **Greycliff** 21.23 359 *e*P P 07 03 00.7 +0.3
J33A **Davis** 21.23 25 P P 07 03 00.0 -0.4
baz=21,SNR=20
I31A **Royce, Wessing** 21.29 21 P P 07 03 00.2 -0.8
baz=21
I07A **Izee** 21.29 339 *e*P P 07 03 01.4 +0.3
comp=Z,448nm,1.4s
I07A LR LR
comp=Z,9µm,21.0s
SLM **Saint Louis** 21.30 44 *e*P P 07 03 01.1 0.0
SLM pmax pmax
comp=Z,270nm,1.5s
SLM MLR MLR
comp=Z,29µm,18.0s
SLM **Saint Louis** 21.30 44 *e*P P 07 03 01.1 0.0
comp=Z,270nm,1.5s
SLM LR LR
comp=Z,29µm,18.0s
L02D **Cave Junction,** 21.31 329 P P 07 03 01.7 +0.4
baz=21
H29A **Onida** 21.32 18 P P 07 03 01.3 0.0
baz=21,SNR=20
G26A **Maurine** 21.38 13 P P 07 03 02.0 -0.1
baz=22,SNR=24
LRM **Limekiln Ridge** 21.43 354 *e*P P 07 03 03.0 +0.3
SIUC **Southern Illin** 21.45 47 PFAKE 07 03 10.0 +7.3
SIUC LR LR
comp=Z,31µm,22.0s
K35A **Storm Lake** 21.46 29 P P 07 03 02.0 -0.8
baz=22
SUSD **South Dakota S** 21.52 20 P P 07 03 03.2 -0.3
baz=22
J04D **Umpqua Nationa** 21.53 333 P P 07 03 04.2 +0.4
baz=22,SNR=18
G28A **Parade** 21.55 16 P P 07 03 03.9 0.0
baz=22,SNR=9.3
G27A **Dupree** 21.60 14 P P 07 03 04.3 -0.1
baz=22,SNR=28
J34A **George** 21.61 27 P P 07 03 04.0 -0.4
baz=22
WVT **Waverly** 21.64 53 PFAKE 07 03 20.0 +15
WVT LR LR
comp=Z,20µm,22.0s
KBO **Bosley Butte** 21.65 328 *e*P P 07 03 05.7 +0.8
comp=Z,441nm,1.4s
KBO LR LR
comp=Z,16µm,20.0s
I32A **Karley and Nic** 21.66 23 P P 07 03 04.6 -0.4
baz=22
H31A **Wolsey** 21.71 21 P P 07 03 05.1 -0.4
baz=22
ECSD **EROS Data Cent** 21.72 25 P P 07 03 05.1 -0.5
baz=22
ECSD **EROS Data Cent** 21.72 25 *e*P P 07 03 05.5 -0.2
comp=Z,224nm,1.4s
ECSD LR LR
comp=Z,14µm,18.0s
K36A **Gilmore City** 21.74 30 P P 07 03 05.6 -0.2
baz=22
SCIA **State Center** 21.78 33 *e*P P 07 03 06.5 +0.2
comp=Z,165nm,1.2s
F25A **Bowman** 21.84 11 P P 07 03 07.4 +0.5
baz=22,SNR=14
F26A **Lodgepole** 21.90 12 P P 07 03 07.2 -0.4
baz=22,SNR=22
I33A **Coleman** 21.92 24 P P 07 03 07.3 -0.5
baz=22
G29A **Hoven** 21.92 18 P P 07 03 06.9 -0.9
baz=22,SNR=8.4
J35A **Milford** 21.99 28 P P 07 03 07.8 -0.7
baz=22
F27A **Lemmon** 22.05 13 P P 07 03 09.0 -0.2
baz=22,SNR=14
H32A **Carlson Farm,** 22.08 23 P P 07 03 08.7 -0.9
baz=22,SNR=22
G30A **Faulkton** 22.09 19 P P 07 03 09.3 -0.3
baz=22
I04A **Tendick Farm,** 22.11 334 P P 07 03 09.2 -0.6
baz=22,SNR=10
I05D **Terrebonne, OR** 22.15 336 P P 07 03 10.6 +0.3
baz=22,SNR=17
KEBM **Edson Butte** 22.20 329 *e*P P 07 03 12.2 +1.3
comp=Z,1µm,1.5s
KEBM LR LR
comp=Z,19µm,19.0s
G08A **Pilot Rock** 22.21 341 *e*P P 07 03 11.2 +0.2
G08A LR LR
comp=Z,12µm,18.0s
K37A **Belmond** 22.22 31 P P 07 03 09.8 -1.2
baz=22,SNR=18
LAO **LASA Array** 22.24 5 P P 07 03 10.9 -0.3
baz=22
LAO **LASA Array** 22.24 5 *e*P P 07 03 10.9 -0.3
comp=Z,745nm,1.9s
LAO LR LR
comp=Z,4µm,22.0s
HRY **Holter Researc** 22.25 355 *e*P P 07 03 11.4 0.0
I34A **Hadley** 22.27 26 P P 07 03 10.8 -0.8
baz=22
F28A **McLaughlin** 22.31 15 P P 07 03 10.9 -1.0
baz=22
J36A **Seneca 1, Swea** 22.34 29 P P 07 03 11.7 -0.5
baz=22,SNR=13
F10A **Beach Ranch, E** 22.39 345 *e*P P 07 03 11.4 -1.5

F10A comp=Z,669nm,1.8s LR LR
**E25A** **Miller Ranch,** baz=22,SNR=10.0 **22.40 10** P **P** **07 03 13.2 +0.2**
**I03D** **Drain, OR** baz=22,SNR=6.7 **22.42 332** P **P** **07 03 12.6 -0.4**
**G31A** **Conde** baz=22 **22.46 20** P **P** **07 03 13.0 -0.6**
**I35A** **Creekview Farm** baz=22 **22.48 27** P **P** **07 03 13.2 -0.6**
**H33A** **Prehn Over Nor** baz=22,SNR=5.8 **22.48 24** P **P** **07 03 13.2 -0.7**
**E26A** **Carlson Angus** baz=23,SNR=15 **22.54 12** P **P** **07 03 13.9 -0.6**
**F29A** **Eureka** baz=23,SNR=11 **22.54 17** P **P** **07 03 13.4 -1.0**
**K38A** **Parkersburg** baz=23,SNR=6.4 **22.55 33** P **P** **07 03 13.3 -1.2**
**CROR** **Criterion Ridg** **22.59 338** P **P** **07 03 14.1 -0.9**
**CHMT** **Chamberlain Mo** **22.59 353** *eP* **P** **07 03 15.3 +0.1**
**MSO** **Missoula** baz=23 **22.60 351** P **P** **07 03 14.7 -0.4**
**MSO** **Missoula** comp=Z,470nm,1.4s **22.60 351** *eP* **P** **07 03 15.3 +0.2**
MSO LR LR
**USIN** **University of** comp=Z,239nm,1.4s **22.63 49** *eP* **P** **07 03 15.8 +0.4**
USIN LR LR
**J37A** **Redenius Farm,** baz=23 **22.68 30** P **P** **07 03 15.4 -0.5**
**E27A** **Carson** baz=23,SNR=16 **22.68 14** P **P** **07 03 16.0 0.0**
**SWET** **Sewanee** comp=Z,183nm,1.4s **22.68 57** *eP* **P** **07 03 15.4 -0.6**
SWET LR LR
**G06A** **Carlson Farm,** comp=Z,391nm,1.8s **22.69 338** *eP* **P** **07 03 15.7 -0.4**
G06A LR LR
**G32A** **Webster** baz=23 **22.72 22** P **P** **07 03 15.3 -1.0**
**OLIL** **Olney** **22.73 46** PFAKE 07 03 30.0 +13
OLIL LR LR
**F30A** **Leola** baz=23 **22.76 18** P **P** **07 03 15.9 -0.9**
**H04A** **Detroit Lake** comp=Z,949nm,2.5s **22.77 335** *eP* **P** **07 03 17.1 +0.3**
**H34A** **Spellman Lake,** baz=23,SNR=21 **22.83 25** P **P** **07 03 16.7 -0.8**
**G05D** **Wamic, OR** baz=23,SNR=11 **22.93 337** P **P** **07 03 17.7 -0.8**
**SLMT** **Seeley Lake** **22.95 352** *eP* **P** **07 03 19.1 +0.3**
**E28A** **Huff** baz=23,SNR=9.3 **23.01 15** P **P** **07 03 18.3 -1.1**
**F31A** **Hecla** baz=23 **23.02 20** P **P** **07 03 18.9 -0.5**
**I36A** **Fitzsimmons Fa** baz=23 **23.03 29** P **P** **07 03 19.0 -0.6**
**HDIL** **Hopedale** baz=23 **23.03 41** P **P** **07 03 18.9 -0.7**
**HDIL** **Hopedale** comp=Z,290nm,1.3s **23.03 41** *eP* **P** **07 03 19.5 0.0**
HDIL LR LR
**G33A** **Ortonville** baz=23 **23.04 23** P **P** **07 03 19.0 -0.6**
**TGUH** **Tegucigalpa,Un** comp=Z,1μm,2.4s **23.04 113** *eP* **P** **07 03 23.3 +3.5**
TGUH LR LR
**D25A** **Fairfield** baz=23 **23.05 10** P **P** **07 03 19.5 -0.2**
**D26A** **Manning** baz=23,SNR=32 **23.08 12** P **P** **07 03 19.1 -1.0**
**COR** **Corvallis** **23.12 333** *eP* **P** **07 03 21.7 +1.2**
COR *e*SP sP 07 03 30.0 +5.3
**COR** **Corvallis** **23.12 333** *eP* **P** **07 03 21.7 +1.2**
COR LR LR
**J38A** **Wedel Dairy, R** comp=Z,7μm,22.0s **23.19 32** P **P** **07 03 20.3 -1.0**
**H35A** **Sunnyside Ranc** baz=23,SNR=14 **23.23 26** P **P** **07 03 20.9 -0.7**
**E29A** **Napoleon** baz=23 **23.27 17** P **P** **07 03 21.2 -0.8**
**SWMT** **Swartz Lake** **23.27 352** *eP* **P** **07 03 21.3 -0.9**
**I37A** **Lemond, Waseca** baz=23,SNR=21 **23.30 30** P **P** **07 03 21.5 -0.7**
**D27A** **Center** baz=23 **23.34 13** P **P** **07 03 22.1 -0.5**
**G34A** **Benson** baz=23 **23.37 24** P **P** **07 03 21.9 -1.1**
**HAWA** **Hanford** comp=Z,450nm,1.8s **23.38 342** *eP* **P** **07 03 21.8 -1.3**
HAWA LR LR
**E30A** **Jud** baz=24 **23.41 18** P **P** **07 03 22.0 -1.3**
**EGMT** **Eagleton** baz=24 **23.46 359** P **P** **07 03 22.8 -1.1**
**EGMT** **Eagleton** comp=Z,743nm,1.6s **23.46 359** *eP* **P** **07 03 24.1 +0.1**
EGMT LR LR
**H36A** **Jessenland, He** baz=24 **23.51 28** P **P** **07 03 23.4 -1.0**
**TIGA** **Tifton** baz=24,SNR=7.7 **23.52 67** P **P** **07 03 22.5 -2.1**
**TIGA** **Tifton** comp=Z,431nm,1.8s **23.52 67** *eP* **P** **07 03 24.4 -0.2**
TIGA LR LR
**JTMT** **Jette** comp=Z,5μm,21.0s **23.54 351** *eP* **P** **07 03 23.7 -1.2**
**C25A** **Freed Ranch, W** baz=24 **23.60 10** P **P** **07 03 24.8 -0.6**
**YBMT** **Yellow Bay** **23.62 352** *eP* **P** **07 03 25.5 -0.1**
**D28A** **Regan** baz=24 **23.62 15** P **P** **07 03 24.6 -0.9**
**G03D** **McMinnville, O** baz=24,SNR=5.9 **23.62 334** P **P** **07 03 24.5 -1.0**
**F33A** **5 Mile Ranch,** baz=24 **23.64 23** P **P** **07 03 24.5 -1.1**
**WCI** **Wyandotte Cave** **23.70 49** *eP* **P** **07 03 25.6 -0.8**
WCI pmax pmax
**WCI** **Wyandotte Cave** comp=Z,219nm,0.9s **23.70 49** *eP* **P** **07 03 25.6 -0.8**
**BSMT** **Bassoo Peak** **23.72 350** *eP* **P** **07 03 25.1 -1.5**
**D29A** **Pettibone, Tap** baz=24 **23.74 16** P **P** **07 03 25.5 -1.1**
**E31A** **Nome** baz=24 **23.75 19** P **P** **07 03 25.6 -1.2**
**G35A** **Watkins** baz=24 **23.80 26** P **P** **07 03 26.2 -1.1**
**I38A** **Scanlan Farm,** baz=24,SNR=16 **23.81 31** P **P** **07 03 26.2 -1.2**
**BLMT** **Blacktail Moun** **23.81 351** *eP* **P** **07 03 26.5 -1.1**
**D08A** **Wollman Farm,** comp=Z,280nm,1.6s **23.82 343** *eP* **P** **07 03 26.1 -1.3**
D08A LR LR
**CPCT** **Cooper Cave** comp=Z,10μm,19.0s **23.84 57** *eP* **P** **07 03 26.5 -1.2**
**C26A** **Wahner Farm, P** baz=24 **23.91 12** P **P** **07 03 27.3 -1.0**
**F04A** **Amboy** **23.91 337** *eP* **P** **07 03 28.6 +0.3**
F04A LR LR
**C27A** **Sayler Ranch,** baz=24 **23.92 13** P **P** **07 03 27.4 -1.0**
**H37A** **Dierke Farm, C** baz=24 **23.95 29** P **P** **07 03 27.7 -1.0**
**F34A** **Alexandria** baz=24 **23.98 24** P **P** **07 03 27.7 -1.2**
**D30A** **Buchanan** baz=24 **24.00 18** P **P** **07 03 28.2 -1.0**
**BLO** **Bloomington** comp=Z,470nm,2.1s **24.01 47** *eP* pmax **P** pmax **07 03 29.8 +0.5**
**BLO** **Bloomington** comp=Z,471nm,2.1s **24.01 47** *eP* **P** **07 03 29.8 +0.5**
BLO LR LR
**JFWS** **Jewell Farm** comp=Z,20μm,18.0s **24.03 36** *eP* **P** **07 03 28.8 -0.6**
JFWS pmax pmax
**JFWS** **Jewell Farm** comp=Z,1μm,3.0s **24.03 36** PFAKE 07 03 40.0 +11
JFWS LR LR
**E32A** **Braaten, Kindr** comp=Z,3μm,18.0s **24.04 21** P **P** **07 03 28.3 -1.1**
**GOGA** **Godfrey** baz=24 **24.05 63** *eP* **P** **07 03 28.8 -0.9**
GOGA pmax pmax
**GOGA** **Godfrey** comp=Z,82nm,1.3s **24.05 63** *eP* **P** **07 03 28.8 -0.9**
GOGA LR LR
**NAC** **Naches** comp=Z,36μm,19.0s **24.08 340** P **P** **07 03 30.0 +0.1**
**G36A** **St. Michael** baz=24,SNR=7.7 **24.11 27** P **P** **07 03 29.4 -0.8**
**C28A** **Hausauer Farms** baz=24 **24.16 14** P **P** **07 03 30.0 -0.6**
**B25A** **Knox Farm, Ray** baz=24 **24.16 10** P **P** **07 03 29.6 -1.0**
**DGMT** **Dagmar** baz=24 **24.21 8** P **P** **07 03 30.4 -0.7**
**DGMT** **Dagmar** comp=Z,558nm,1.7s **24.21 8** *eP* **P** **07 03 30.5 -0.6**
DGMT LR LR
**D31A** **Mcclaflin, Tow** baz=24 **24.25 19** P **P** **07 03 30.5 -0.9**
**F04D** **Rainier, OR** baz=24 **24.26 336** P **P** **07 03 31.8 +0.3**
**SFIN** **Scholer Farm** baz=24,SNR=22 **24.28 44** P **P** **07 03 30.6 -1.2**
**SFIN** **Scholer Farm** comp=Z,198nm,1.3s **24.28 44** *eP* **P** **07 03 31.3 -0.5**
SFIN LR LR
**F35A** **Swanville** baz=24 **24.30 25** P **P** **07 03 31.2 -0.7**
**E33A** **Westby DABS, E** baz=24 **24.32 22** P **P** **07 03 31.6 -0.5**
**F03A** **Seaside** **24.34 335** PFAKE 07 03 40.0 +7.8
F03A LR LR
**C09A** **Chrisman Ranch** comp=Z,14μm,20.0s **24.35 345** *eP* **P** **07 03 31.7 -0.7**
C09A LR LR
**LON** **Longmire** comp=Z,16μm,18.0s **24.41 339** *eP* **P** **07 03 32.6 -0.4**
LON pmax pmax
**LON** **Longmire** comp=Z,380nm,1.5s **24.41 339** *eP* **P** **07 03 32.5 -0.4**
LON LR LR
**B26A** **Jensen Ranch,** baz=24 **24.42 11** P **P** **07 03 32.6 -0.4**
**MDND** **Maddock** baz=24 **24.47 16** P **P** **07 03 32.8 -0.6**
**MDND** **Maddock** **24.47 16** PFAKE 07 03 40.0 +6.6
MDND LR LR
**TKL** **Tuckaleechee C** comp=Z,10nm,0.7s,baz=248,slow=7.5,SNR=19 **24.48 57** P **P** **07 03 31.9 -1.8**
TKL S **S** **07 07 55.0 +0.9**
TKL comp=Z,2.9nm,0.9s,baz=326,slow=18,SNR=2.1 LR LR 07 13 51.4
**TKL** **Tuckaleechee C** comp=Z,23μm,19.1s,baz=254,slow=38 **24.48 57** *eP* **P** **07 03 32.7 -1.0**
**TKL** **Tuckaleechee C** **24.48 57** *eP* **P** **07 03 32.7 -1.0**
TKL S **S** **07 07 55.0 +0.9**
**LTY** **Liberty** comp=Z,492nm,1.7s **24.50 341** *eP* **P** **07 03 32.8 -1.0**
LTY LR LR
**SPMN** **St. Paul** baz=25,SNR=9.8 **24.51 29** P **P** **07 03 33.6 -0.2**
**SPMN** **St. Paul** comp=Z,103nm,1.1s **24.51 29** *eP* **P** **07 03 34.1 +0.3**
SPMN LR LR
**NEW** **Newport** comp=Z,15μm,18.0s **24.53 347** P **P** **07 03 33.0 -1.0**
NEW S **S** **07 07 55.1 +0.5**
NEW comp=Z,3.0nm,1.1s,baz=119,slow=19,SNR=1.6 Lg Lg 07 11 15.8
NEW comp=Z,0.3nm,0.4s,baz=324,slow=5.7,SNR=4.0 LR LR 07 12 15.1
**NEW** **Newport** comp=Z,9μm,19.6s,baz=170,slow=34 **24.53 347** *eP* **P** **07 03 32.8 -1.3**
NEW pmax pmax
**NEW** **Newport** comp=Z,590nm,1.4s **24.53 347** P **P** **07 03 33.9 -0.1**
**NEW** **Newport** baz=25 **24.53 347** *eP* **P** **07 03 32.8 -1.3**
NEW S **S** **07 07 55.1 +0.5**
NEW Lg Lg 07 11 15.8
**D32A** **Dogwood Acres,** baz=25 **24.54 20** P **P** **07 03 33.9 -0.2**
**SAW** **Saint Andrews** **24.54 343** P **P** **07 03 33.6 -0.6**
**E34A** **Wadena** baz=25 **24.62 23** P **P** **07 03 34.0 -0.9**
**C30A** **Mose, Pekin** baz=25 **24.62 17** P **P** **07 03 34.2 -0.6**
**B27A** **Peters Farms,** baz=25 **24.63 13** P **P** **07 03 34.9 +0.1**
**WTV** **Waterville** **24.69 342** P **P** **07 03 35.4 -0.1**
**ETW** **Entiat** **24.71 342** P **P** **07 03 36.2 +0.4**
**F36A** **Milaca** baz=25,SNR=17 **24.72 27** P **P** **07 03 35.0 -0.7**
**WALA** **Waterton Lakes** **24.78 352** PFAKE 07 03 50.0 +14
WALA LR LR
**A25A** **Svangstu Ranch** comp=Z,36μm,19.0s **24.82 9** P **P** **07 03 36.9 +0.3**
**D05A** **Enumclaw** baz=25,SNR=9.3 **24.85 339** *eP* **P** **07 03 37.0 +0.1**
D05A LR LR
**E03A** **Lebam** comp=Z,12μm,21.0s **24.86 336** PFAKE 07 03 50.0 +13
E03A LR LR
**B28A** **Dugan Ranch, T** comp=Z,6μm,19.0s **24.86 14** P **P** **07 03 36.5 -0.4**
**C31A** **Landman Farms,** baz=25,SNR=38 **24.91 18** P **P** **07 03 37.1 -0.4**
**D33A** **AnnSam, Waubun** baz=25,SNR=11 **24.93 22** P **P** **07 03 37.4 -0.2**
**E35A** **Pequot Lakes** baz=25 **24.94 25** P **P** **07 03 37.4 -0.4**
**A26A** **Wade Farm, Ken** baz=25,SNR=23 **24.95 11** P **P** **07 03 37.4 -0.4**
**DWPF** **Disney** baz=25,SNR=9.7 **25.02 76** *eP* **P** **07 03 38.1 -0.5**
**D34A** **Park Rapids** comp=Z,42μm,0.8s **25.10 23** P **P** **07 03 38.3 -0.8**
**B29A** **Wagenman Farm,** baz=25 **25.10 15** P **P** **07 03 38.4 -0.8**
**A27A** **Ledoux Ranch,** baz=25 **25.16 12** P **P** **07 03 39.4 -0.2**
**C06D** **Leavenworth** baz=25,SNR=5.9 **25.16 341** P **P** **07 03 39.6 -0.1**
**A28A** **Rude Farm, Bot** baz=25,SNR=12 **25.31 14** P **P** **07 03 40.7 -0.4**
**B30A** **Myrvik Farm, E** baz=25,SNR=9.6 **25.35 17** P **P** **07 03 40.4 -0.9**
**E36A** **Mcgregor** baz=25 **25.36 26** P **P** **07 03 40.7 -0.7**
**C33A** **Trail** baz=26 **25.49 21** P **P** **07 03 41.7 -0.9**
**B31A** **Greenbush Farm** baz=26 **25.51 18** P **P** **07 03 42.1 -0.7**
**D35A** **Remer** baz=26,SNR=13 **25.51 24** P **P** **07 03 42.4 -0.5**
**A29A** **Manning Farm,** baz=26,SNR=24 **25.56 15** P **P** **07 03 42.6 -0.7**
**E37A** **Wrenshall** baz=26 **25.75 27** P **P** **07 03 44.2 -0.8**
**A30A** **Hoffart Farm,** baz=26 **25.81 16** P **P** **07 03 45.2 -0.3**
**B32A** **Ashes, Strandq** baz=26,SNR=7.6 **25.81 19** P **P** **07 03 44.8 -0.7**
**B05A** **Bryant** baz=26 **25.83 340** P **P** **07 03 45.6 -0.2**
**AGMN** **Agassiz Nation** baz=26 **25.93 20** P **P** **07 03 45.7 -1.0**
**AGMN** **Agassiz Nation** comp=Z,40nm,1.0s **25.93 20** *eP* **P** **07 03 46.8 +0.1**
AGMN LR LR
**D36A** **Goodland** baz=26 **25.93 25** P **P** **07 03 45.8 -0.9**
**C35A** **Jirik Farms, M** baz=26,SNR=13 **26.06 24** P **P** **07 03 46.7 -1.2**
**A31A** **Linda, St. Vin** baz=26 **26.10 18** P **P** **07 03 47.2 -0.9**
**D37A** **Cotton** baz=26,SNR=7.4 **26.21 26** P **P** **07 03 49.1 -0.1**
**KMSC** **Kings Mountain** baz=26,SNR=12 **26.22 60** P **P** **07 03 48.5 -0.9**
**KMSC** **Kings Mountain** comp=Z,65nm,1.1s **26.22 60** *eP* **P** **07 03 48.8 -0.7**
**A04D** **Lummi Island** baz=26 **26.43 339** P **P** **07 03 51.1 0.0**
**B34A** **Aery, Baudette** baz=26 **26.49 22** P **P** **07 03 50.8 -0.9**
**C36A** **Pine Crest Far** baz=27,SNR=12 **26.54 25** P **P** **07 03 51.9 -0.2**
**PGC** **Sidney** comp=Z,262nm,1.4s **26.61 338** *eP* **P** **07 03 53.5 +0.7**
**A33A** **Warroad** baz=27 **26.64 20** P **P** **07 03 52.7 -0.4**
**NHSC** **New Hope** **26.67 65** PFAKE 07 04 00.0 +6.5
NHSC LR LR
**C37A** **Embarrass** baz=27,SNR=8.9 **26.77 26** P **P** **07 03 52.5 -1.8**
**COWI** **Conover** **26.85 32** PFAKE 07 04 10.0 +15
COWI LR LR
**ACSO** **Alum Creek Sta** comp=Z,56nm,1.3s **26.91 48** *eP* **P** **07 03 56.8 +1.2**
ACSO LR LR
**JTS** **JuntasAbangare** comp=Z,3.4nm,0.7s,baz=309,slow=18,SNR=2.3 **26.96 117** P **P** **07 03 55.0 -1.3**
JTS S **S** **07 08 33.2 -0.5**
JTS comp=Z,0.8nm,0.4s,baz=312,slow=19,SNR=2.2 LR LR 07 14 48.7
**JTS** **JuntasAbangare** comp=Z,8μm,20.0s,baz=310,slow=37 **26.96 117** P **P** **07 03 55.0 -1.3**
JTS *e* 07 03 57.0
JTS S **S** **07 08 33.2 -0.5**
**JTS** **JuntasAbangare** **26.96 117** P **P** **07 03 55.0 -1.3**
JTS *eP* **P** **07 03 57.0 +0.7**
JTS S **S** **07 08 33.2 -0.5**
**C38A** **Sawbill Land.** baz=27 **27.13 27** P **P** **07 03 56.6 -0.9**
**EYMN** **Ely** baz=27 **27.22 26** P **P** **07 03 57.4 -0.9**
**EYMN** **Ely** comp=Z,91nm,0.9s **27.22 26** *eP* **P** **07 03 57.2 -1.1**
EYMN LR LR
**AAM** **Ann Arbor** comp=Z,3μm,20.0s **27.50 44** *eP* **P** **07 03 59.4 -1.4**
**AAM** **Ann Arbor** **27.50 44** *eP* **P** **07 03 59.4 -1.4**
AAM LR LR
**BLA** **Blacksburg** comp=Z,2μm,19.0s **27.55 56** *eP* **P** **07 04 02.5 +1.0**
BLA pmax pmax
**BLA** **Blacksburg** comp=Z,35nm,1.0s **27.55 56** *eP* **P** **07 04 02.5 +1.0**
BLA LR LR
**ULM** **Lac du Bonnet** comp=Z,20μm,19.0s **27.66 18** P **P** **07 04 00.9 -1.3**
ULM S **S** **07 08 44.8 +0.7**
ULM comp=Z,24nm,1.1s,baz=220,slow=10,SNR=6.7 LR LR 07 14 14.4
**ULM** **Lac du Bonnet** comp=Z,2.1nm,0.6s,baz=180,slow=18,SNR=2.3 **27.66 18** *eP* **P** **07 04 02.0 -0.2**
ULM pmax pmax
**ULM** **Lac du Bonnet** comp=Z,6μm,20.9s,baz=204,slow=35 **27.66 18** *eP* **P** **07 04 01.9 -0.2**
ULM S **S** **07 08 44.8 +0.7**
**C39A** **Grand Marais** comp=Z,130nm,1.6s **27.69 28** P **P** **07 04 01.6 -0.9**
**EDM** **Edmonton** baz=28 **28.84 355** *eP* **P** **07 04 12.3 -0.5**
EDM pmax pmax
**EDM** **Edmonton** comp=Z,290nm,1.4s **28.84 355** *eP* **P** **07 04 12.2 -0.5**
**CNNC** **Cliffs of the** comp=Z,287nm,1.4s **28.97 61** PFAKE 07 04 30.0 +16
CNNC LR LR
**URVA** **University of** comp=Z,24μm,20.0s **29.85 57** *eP* **P** **07 04 22.5 +0.7**
**MTDJ** **Mount Denham** **30.00 96** PFAKE 07 04 30.0 +6.5
MTDJ LR LR
**CBN** **Corbin** comp=Z,6μm,21.0s **30.16 56** PFAKE 07 04 40.0 +15
CBN LR LR
**SSPA** **Standing Stone** comp=Z,12μm,19.0s **30.61 51** *eP* **P** **07 04 26.9 -1.6**
**FFC** **Flin Flon** comp=Z,97nm,1.1s **30.63 8** *eP* **P** **07 04 30.7 +2.2**
**FFC** **Flin Flon** **30.63 8** *eP* **P** **07 04 30.7 +2.2**
FFC LR LR
**PAYG** **Puerto Ayora** comp=Z,9μm,19.0s **30.98 141** PFAKE 07 04 40.0 +8.0
PAYG LR LR
**SADO** **Sadowa** comp=Z,2μm,20.0s **31.59 43** P **P** **07 04 35.1 -2.0**
**GTBY** **Guantanamo Bay** comp=Z,11nm,1.0s,baz=264,slow=10,SNR=2.9 **31.73 91** PFAKE 07 04 50.0 +11
GTBY LR LR
**BCIP** **Isla Barro Col** comp=Z,9μm,21.0s **31.79 114** PFAKE 07 04 50.0 +11
BCIP LR LR
**BINY** **Binghamton** comp=Z,7μm,22.0s **32.52 49** *eP* **P** **07 04 45.4 0.0**
**NCB** **Newcomb** comp=Z,32nm,1.1s **34.40 47** PFAKE 07 05 10.0 +8.3
NCB LR LR
**LONY** **Lake Ozonia** comp=Z,10μm,21.0s **34.42 46** PFAKE 07 05 10.0 +8.1
LONY LR LR
**GRTK** **Grand Turk** comp=Z,19μm,19.0s **34.99 87** PFAKE 07 05 20.0 +13
GRTK LR LR
**SDDR** **Presa de Saban** comp=Z,9μm,22.0s **35.46 91** PFAKE 07 05 20.0 +8.8
SDDR LR LR
**FCC** **Fort Churchill** comp=Z,5μm,19.0s **35.83 13** P **P** **07 05 14.3 +0.5**
FCC pmax pmax
**FCC** **Fort Churchill** comp=Z,168nm,1.3s **35.83 13** P **P** **07 05 14.2 +0.5**
**WRAK** **Wrangell Islan** comp=Z,168nm,1.3s **36.08 338** PFAKE 07 05 30.0 +14
WRAK LR LR
**DLBC** **Dease Lake** comp=Z,7μm,21.0s **37.02 342** *eP* **P** **07 05 24.4 +0.4**
**YKA** **Yellowknife Ar** comp=Z,134nm,1.6s **38.14 356** P **P** **07 05 32.3 -1.0**
YKA S **S** **07 11 26.0 -0.3**
**PKME** **Peaks-Kenny Pk** comp=Z,7.9nm,1.0s,baz=172,slow=7.5,SNR=10 **38.15 47** PFAKE 07 05 40.0 +6.3
PKME LR LR
**OTAV** **Otavalo** comp=Z,7,94nm,1.5s **38.24 125** *eP* P 07 05 38.7 +3.4
OTAV LR LR
**ROSC** **El Rosal** comp=Z,2μm,20.0s **38.70 115** P **P** **07 05 37.6 -1.6**
ROSC comp=Z,0.8nm,0.3s,baz=270,slow=20,SNR=1.8 S **S** **07 11 38.3 +1.7**
ROSC comp=Z,2.9nm,0.8s,baz=117,slow=18,SNR=2.2 LR LR 07 23 17.0
**SKAG** **Skagway** comp=Z,3μm,18.8s,baz=348,slow=39 **39.46 339** *eP* **P** **07 05 45.8 +1.3**
**BBSR** **BB Station** **39.58 68** PFAKE 07 06 00.0 +14
BBSR LR LR
**LRS** **Lares** comp=Z,4μm,20.0s **39.70 91** *eP* P 07 05 52.3 +5.2
**SDV** **Santo Domingo** comp=Z,68nm,1.0s **39.81 106** *eP* P 07 05 52.1 +3.9
SDV LR LR
**OBIP** **Obispado Ponce** comp=Z,6μm,21.0s **39.99 91** *eP* **P** **07 05 50.7 +1.2**
**CELP** **Cerrillos** comp=Z,522nm,2.7s **40.00 91** *eP* **P** **07 05 52.1 +2.5**

**SJG San Juan 40.38 91 eP P 07 05 53.1 +0.4**
SJG pmax pmax
comp=Z,56nm,1.0s
**SJG San Juan 40.38 91 eP P 07 05 53.1 +0.4**
comp=Z,56nm,1.0s
SJG LR LR
comp=Z,7μm,22.0s
**CPD Cerro la Pandu 40.62 91 eP P 07 05 55.3 +0.6**
CPD pmax pmax
comp=Z,130nm,1.0s
**CPD Cerro la Pandu 40.62 91 eP P 07 05 55.3 +0.6**
comp=Z,131nm,1.0s
**POHA Pohakuloa 43.13 273** PFAKE 07 06 30.0 +14
POHA LR LR
comp=Z,9μm,19.0s
**SCHQ Schefferville 43.39 34** P P **07 06 16.0 -0.9**
comp=Z,11nm,1.1s,baz=242,slow=17,SNR=2.3
SCHQ LR LR 07 25 11.9
comp=Z,6μm,18.6s,baz=245,slow=37
**SCHQ Schefferville 43.39 34** eP P 07 06 20.4 +3.6
comp=Z,156nm,1.9s
**ATAH Atahualpa 43.42 133** P P **07 06 16.3 -1.7**
comp=Z,4.2nm,0.6s,baz=292,slow=19,SNR=3.0
ATAH S S **07 12 48.9 +2.1**
comp=Z,1.7nm,0.6s,baz=345,slow=20,SNR=1.7
ATAH LR LR 07 20 59.0
comp=Z,3μm,20.9s,baz=318,slow=32
**BMRM Bremner River 43.78 336** eP P **07 06 21.5 +1.5**
comp=Z,136nm,1.5s
**DAWY Dawson 44.23 341** eP P **07 06 23.8 +0.2**
comp=Z,97nm,1.4s
**ANWB Willy Bob 44.49 89** PFAKE 07 06 40.0 +14
ANWB LR LR
comp=Z,4μm,21.0s
**MENT Mentasta 44.78 338** eP P **07 06 28.6 +0.7**
**KIP Kipapa 44.97 276** P P **07 06 32.0 +2.0**
KIP pmax pmax
comp=Z,883nm,2.2s
**KIP Kipapa 44.97 276** eP P **07 06 31.4 +1.4**
comp=Z,5μm,2.2s
KIP LR LR
comp=Z,13μm,20.0s
**EGAK Eagle 45.28 341** eP P **07 06 31.8 -0.1**
comp=Z,131nm,1.8s
EGAK LR LR
comp=Z,3μm,19.0s
**SCM Sheep Creek Mo 45.35 336** eP P 07 06 36.9 +4.4
SCM pmax pmax
comp=Z,110nm,1.5s
**SCM Sheep Creek Mo 45.35 336** eP P 07 06 36.9 +4.4
comp=Z,112nm,1.5s
**KDAK Kodiak Island 45.37 329** P P **07 06 32.3 -0.3**
comp=Z,14nm,0.7s,baz=137,slow=2.1,SNR=11
**KDAK Kodiak Island 45.37 329** eP P **07 06 34.1 +1.4**
KDAK pmax pmax
comp=Z,350nm,1.8s
**KDAK Kodiak Island 45.37 329** eP P **07 06 34.1 +1.4**
comp=Z,354nm,1.8s
KDAK LR LR
comp=Z,5μm,19.0s
**DOT Dot Lake 45.38 339** eP P **07 06 32.8 +0.1**
comp=Z,220nm,1.4s
**PAX Paxson 45.40 338** eP P **07 06 33.1 +0.2**
PAX pmax pmax
comp=Z,32nm,1.2s
**PAX Paxson 45.40 338** eP P **07 06 33.1 +0.2**
comp=Z,32nm,1.2s
**OHAK Old Harbor 45.45 328** eP P **07 06 36.1 +2.9**
comp=Z,216nm,1.7s
**BRLK Bradley Lake 45.60 332** eP P **07 06 35.2 +0.7**
comp=Z,314nm,1.8s
**RC01 Rabbit Creek A 45.85 334** eP P **07 06 38.5 +2.1**
comp=Z,120nm,1.4s
**PMR Palmer 45.90 335** eP P **07 06 37.6 +0.9**
**PMR Palmer 45.90 335** eP P **07 06 37.6 +0.9**
**FDF Fort de France 46.00 93** PFAKE 07 06 50.0 +12
FDF LR LR
comp=Z,3μm,19.0s
**INK Inuvik 46.25 348** P P **07 06 37.9 -1.6**
comp=Z,13nm,1.1s,baz=160,slow=8.5,SNR=4.4
INK LR LR 07 26 01.2
comp=Z,11μm,19.0s,baz=148,slow=36
**INK Inuvik 46.25 348** eP P **07 06 41.5 +2.1**
INK pmax pmax
comp=Z,170nm,2.0s
**INK Inuvik 46.25 348** eP P **07 06 41.5 +2.1**
comp=Z,174nm,2.0s
**SUA Susitna One 46.46 334** eP P **07 06 42.0 +0.7**
comp=Z,251nm,1.7s
**GRGR Grenville 46.47 97** PFAKE 07 06 50.0 +8.1
GRGR LR LR
comp=Z,4μm,22.0s
**RSO Redoubt South 46.77 332** eP P **07 06 44.0 +0.2**
**SPU Mount Spurr 46.84 333** eP P **07 06 44.2 -0.1**
**RND Reindeer 46.87 337** eP P **07 06 44.7 +0.3**
RND pmax pmax
comp=Z,300nm,1.8s
**RND Reindeer 46.87 337** eP P **07 06 44.7 +0.3**
comp=Z,304nm,1.9s
**ILAR Eielson Array 47.05 339** P P **07 06 45.0 -0.8**
comp=Z,9.3nm,0.9s,baz=150,slow=7.3,SNR=60
ILAR LR LR 07 28 25.9
comp=Z,4μm,21.1s,baz=138,slow=39
**ILAR Eielson Array 47.05 339** P P **07 06 45.0 -0.8**
**MCK McKinley 47.09 337** eP P **07 06 46.3 +0.1**
MCK pmax pmax
comp=Z,78nm,1.1s
**MCK McKinley 47.09 337** eP P **07 06 46.3 +0.1**
comp=Z,78nm,1.1s
**WRH Wood River Hil 47.26 338** eP P **07 06 47.6 +0.2**
comp=Z,66nm,1.3s
**CCB Clear Creek Bu 47.27 338** eP P **07 06 47.3 -0.2**
comp=Z,129nm,2.1s
**TRF Thorofare Moun 47.41 336** eP P **07 06 48.3 -0.5**
comp=Z,263nm,1.1s
**COLA College 47.43 339**|| eP P **07 06 49.2 +0.5**
COLA pmax pmax
comp=Z,25nm,1.9s
**COLA College 47.43 339** eP P **07 06 48.5 -0.2**
comp=Z,124nm,1.6s
COLA LR LR
comp=Z,6μm,20.0s
**BWN Browne 47.55 337** eP P **07 06 49.8 +0.1**
comp=Z,428nm,1.3s
**CHGN Chignik 47.66 325** eP P 07 06 54.9 +4.3
**FYU Fort Yukon 47.74 341** eP P **07 06 51.3 +0.2**
comp=Z,275nm,1.8s
**PPLA Purkeypile 47.82 335** eP P **07 06 51.9 -0.1**
comp=Z,378nm,1.2s
**BBGH Gun Hill 48.00 94** PFAKE 07 07 00.0 +6.2
BBGH LR LR
comp=Z,8μm,21.0s
**NNA Nana 48.04 135** P P **07 06 54.5 +0.4**
NNA pmax pmax
comp=Z,35nm,1.4s
NNA MLR MLR
comp=Z,2μm,21.0s
**NNA Nana 48.04 135** P P **07 06 54.5 +0.4**
comp=Z,35nm,1.4s
NNA LR LR
comp=Z,2μm,21.0s
**BPAW Bear Paw Mtn. 48.04 337** eP P **07 06 52.9 -0.6**
comp=Z,45nm,1.5s
**SVW2 Sparrevohn 48.29 332** eP P **07 06 54.7 -0.7**
comp=Z,52nm,1.0s
**SDPT Sand Point 48.44 323** eP P **07 06 57.7 +1.1**
comp=Z,120nm,1.0s
**MLY Manley 48.50 338** eP P **07 06 56.8 -0.3**
comp=Z,242nm,1.8s
**TTA Tatalina 49.34 334** eP P **07 07 02.8 -0.8**
TTA pmax pmax
comp=Z,110nm,1.4s
**TTA Tatalina 49.34 334** eP P **07 07 02.8 -0.8**
comp=Z,114nm,1.4s
**COLD Coldfoot 49.66 340** eP P **07 07 06.2 +0.3**
comp=Z,38nm,1.2s
**RES Resolute Bay 50.76 5** P P **07 07 13.5 -0.6**
comp=Z,3.1nm,0.9s,baz=225,slow=5.7,SNR=2.1
**UNV Unalaska Valle 51.45 320** eP P **07 07 20.4 +0.8**
**PTCN Pitcairn Islan 53.33 204** PFAKE 07 07 50.0 +16
PTCN LR LR
comp=Z,4μm,22.0s
**RKT Rikitea 53.61 210** eS S **07 15 12.8 +3.3**
comp=Z,2μm,28.8s
RKT eLQ LQ 07 20 53.9
comp=Z,3μm,28.8s
RKT eLR LR 07 23 08.9
comp=Z,3μm,25.0s,baz=27
**PTGA Pitinga 53.78 110** eP P **07 07 38.5 +1.0**
comp=Z,55nm,1.1s
PTGA LR LR
comp=Z,40μm,20.0s
**SFJD Kangerlussuaq 55.48 24** PFAKE 07 08 00.0 +11
SFJD LR LR
comp=Z,6μm,19.0s
**SAML Samuel 55.78 121** eP P **07 07 51.0 -0.8**
comp=Z,55nm,1.1s
SAML LR LR
comp=Z,2μm,19.0s
**JOHN Johnston Islan 56.73 274** PFAKE 07 08 10.0 +11
JOHN LR LR
comp=Z,509nm,22.0s
**LPAZ La Paz 56.94 131** P P **07 07 59.0 -1.7**
comp=Z,1.7nm,0.9s,baz=339,slow=8.6,SNR=9.5
LPAZ LR LR 07 30 01.6
comp=Z,2μm,21.4s,baz=326,slow=34
**LPAZ La Paz 56.94 131** eP P **07 08 02.6 +1.9**
LPAZ pmax pmax
comp=Z,80nm,2.1s
**LPAZ La Paz 56.94 131** eP P **07 08 02.6 +1.9**
comp=Z,80nm,2.1s
**PPT Papeete 57.52 227** LR LR 07 27 05.3
comp=Z,2μm,18.2s,baz=38,slow=30
**PPT2 Papeete2 57.53 227** eS S **07 16 04.9 +2.6**
comp=Z,1μm,23.0s
PPT2 eLQ LQ 07 22 32.4
comp=Z,3μm,22.8s
PPT2 eLR LR 07 24 51.9
comp=Z,9μm,26.8s,baz=32
**MIDW Midway 60.56 290** PFAKE 07 08 40.0 +15
MIDW LR LR
comp=Z,4μm,19.0s
**LVC Limon Verde 60.97 137** PFAKE 07 08 40.0 +12
LVC LR LR
comp=Z,2μm,22.0s
**SUMG Summit 61.02 19** eP P **07 08 26.3 -1.8**
SUMG pmax pmax
comp=Z,450nm,2.5s
**SUMG Summit 61.02 19** *i* P P **07 08 26.0 -2.1**
**SUMG Summit 61.02 19** eP P **07 08 26.3 -1.8**
comp=Z,446nm,2.5s
**TBI Tubuai 61.63 223** eS S **07 16 58.1 +3.2**
comp=Z,1μm,27.0s
TBI eLQ LQ 07 23 56.6
comp=Z,5μm,35.8s
TBI eLR LR 07 26 39.3
comp=Z,4μm,28.5s,baz=37
**BILL Bilibino 65.52 336**|| eP P **07 08 57.2 -0.3**
BILL pmax pmax
comp=Z,29nm,1.4s
BILL MLR MLR
comp=Z,2μm,16.0s
**BILL Bilibino 65.52 336** eP P **07 08 57.1 -0.4**
comp=Z,92nm,1.4s
BILL LR LR
comp=Z,2μm,22.0s
**RAR Rarotonga 67.05 232** LR LR 07 30 14.8
comp=Z,2μm,20.9s,baz=47,slow=29
**BORG Borgarnes 67.16 28** PFAKE 07 09 20.0 +12
BORG LR LR
comp=Z,6μm,20.0s
**CPUP Villa Florida 71.10 132** P P **07 09 32.8 -0.2**
comp=Z,4.1nm,0.8s,baz=316,slow=7.7,SNR=10
**CPUP Villa Florida 71.10 132** eP P **07 09 33.9 +0.9**
**CPUP Villa Florida 71.10 132** eP P **07 09 33.9 +0.9**
**KBS Kingsbay 71.69 10** PFAKE 07 09 50.0 +14
KBS LR LR
comp=Z,9μm,19.0s
**BDFB Brasilia 71.71 117** P P **07 09 36.6 -0.5**
comp=Z,5.4nm,1.0s,baz=315,slow=8.6,SNR=4.1
**BDFB Brasilia 71.71 117** eP P **07 09 38.8 +1.7**
BDFB pmax pmax
comp=Z,140nm,1.4s
**BDFB Brasilia 71.71 117** eP P **07 09 38.8 +1.7**
comp=Z,145nm,1.5s
**AFI Afiamalu 72.11 245** PFAKE 07 09 50.0 +11
AFI LR LR
comp=Z,3μm,19.0s
**PET Petropavlovsk 72.11 321** eP P 07 09 43.8 +5.0
PET eS S **07 19 00.7 -0.1**
PET eSS SS **07 23 38.7 +1.3**
PET eSSS SSS 07 26 47.9
PET pmax pmax
comp=Z,29nm,0.7s
**PET Petropavlovsk 72.11 321** PFAKE 07 09 50.0 +11
PET LR LR
comp=Z,2μm,21.0s
**SEY Seymchan 72.23 332** P P **07 09 38.5 -0.9**
comp=Z,8.8nm,0.7s,baz=108,slow=7.3,SNR=11
**SEY Seymchan 72.23 332**|| *i* P P **07 09 39.0 -0.4**
**PETK Petropavlovsk- 72.63 321** P P **07 09 42.1 +0.1**
comp=Z,13nm,1.0s,baz=100,slow=6.2,SNR=5.1
PETK LR LR 07 35 55.4
comp=Z,300nm,20.4s,baz=64,slow=31
**SPITS Spitsbergen Ar 72.85 10** LR LR 07 42 16.5
comp=Z,8μm,19.1s,baz=310,slow=36
**MA2 Magadan 74.12 329**|| eP P 07 09 54.9 +4.3
**PLCA Paso Flores 74.15 151** eP P **07 09 53.6 +2.6**
PLCA pmax pmax
comp=Z,88nm,1.6s
**PLCA Paso Flores 74.15 151** eP P **07 09 53.6 +2.6**
comp=Z,88nm,1.6s
**TRQA Tornquist 76.35 143** PFAKE 07 10 10.0 +6.3
TRQA LR LR
comp=Z,1μm,19.0s
**WAKE Wake Island 77.20 285** PFAKE 07 10 20.0 +11
WAKE LR LR
comp=Z,2μm,20.0s
**RCBR Riachuelo 77.26 102** PFAKE 07 10 20.0 +11
RCBR LR LR
comp=Z,2μm,22.0s
**TARA Tarawa 78.51 266** PFAKE 07 10 30.0 +14
TARA LR LR
comp=Z,6μm,20.0s
**PMOZ Porto Moniz, M 78.62 59** eS S 07 20 25.3 +11
**PMOZ Porto Moniz, M 78.62 59** eLR LR 07 35 34.6
comp=Z,3μm,18.0s
**ESK Eskdalemuir 78.69 34** PFAKE 07 10 30.0 +13
ESK LR LR
comp=Z,4μm,19.0s
**ARA0 ARCESS Array S 80.71 15** eP P **07 10 26.4 -0.9**
**ARCES ARCESS Array B 80.71 15** P P **07 10 26.4 -1.0**
comp=Z,11nm,0.9s,baz=328,slow=4.3,SNR=25
**KEV Kevo 80.88 14** PFAKE 07 10 40.0 +12
KEV LR LR
comp=Z,3μm,21.0s
**PGAV Gavieira, Arco 81.52 48** eLQ LQ 07 32 15.8
PGAV eLR LR 07 36 29.1
comp=Z,5μm,20.0s
**KUR Kuril'sk 81.56 316** *d* P P **07 10 35.2 +2.9**
KUR *i* 07 10 38.0
KUR *i* S S **07 20 49.6 +5.3**
KUR pmax pmax
comp=Z,429nm,3.2s
**YAK Yakutsk 81.88 336** eP P **07 10 32.1 -1.5**
YAK *e* 07 10 38.2
YAK eS S **07 20 42.8 -4.2**
YAK pmax pmax
comp=Z,37nm,1.0s
YAK pmax pmax
comp=N,6.0nm,1.3s
YAK pmax pmax
comp=E,12nm,1.3s
YAK smax smax
comp=N,292nm,12.4s
**YAK Yakutsk 81.88 336** PFAKE 07 10 40.0 +6.4
YAK LR LR
comp=Z,2μm,19.0s
**NBO02 NORSAR Array S 81.99 25** eP P **07 10 35.0 +0.7**
**POLO Lamas de Olo 82.10 48** eP P **07 10 35.7 +0.3**
comp=Z,32nm,1.4s
**NB2 NORSAR Subarra 82.13 25** P P **07 10 35.0 -0.1**
comp=Z,191nm,2.0s,baz=306,slow=5.1
**NB2 NORSAR Subarra 82.13 25** P P **07 10 35.0 -0.1**
baz=306,slow=5.1
**NOA NORSAR Array B 82.13 25** P P **07 10 34.1 -1.0**
comp=Z,2.3nm,0.9s,baz=310,slow=4.9,SNR=3.5
**PVRL Vila Real 82.19 48** eP P **07 10 36.4 +0.6**
comp=Z,66nm,1.5s
**PVIS Viseu 82.31 49** eP P **07 10 36.4 -0.1**
comp=Z,68nm,1.4s
**KONO Kongsberg 82.33 27** eP P **07 10 35.4 -0.6**
KONO MLR MLR
comp=Z,4μm,19.0s
**KONO Kongsberg 82.33 27** eP P **07 10 35.4 -0.6**
KONO LR LR
comp=Z,4μm,19.0s
**PTOM Tomar 82.43 50** eP P **07 10 37.4 +0.4**
comp=Z,58nm,1.4s
**MSVF Nonsavu 82.48 247** P P **07 10 38.3 +0.7**
MSVF pmax pmax
comp=Z,40nm,1.6s
MSVF MLR MLR
comp=Z,4μm,20.0s
**MSVF Nonsavu 82.48 247** P P **07 10 38.2 +0.7**
comp=Z,40nm,1.6s
MSVF LR LR
comp=Z,4μm,20.0s
**PACT Alcochete 82.50 51** eP P **07 10 38.9 +1.6**
comp=Z,91nm,1.4s
**MTE Manteigas 82.69 49** eP P **07 10 38.4 0.0**
comp=Z,48nm,0.8s
**MTE Manteigas 82.69 49** eS S 07 21 05.9 +10
**MTE Manteigas 82.69 49** eLQ LQ 07 32 40.5
MTE eLR LR 07 37 52.6
comp=Z,5μm,20.0s
**MTE Manteigas 82.69 49** eP P **07 10 37.0 -1.5**
MTE LR LR
comp=Z,6μm,21.0s
**MVO Moncorvo 82.71 48** eP P **07 10 40.9 +2.4**
comp=Z,58nm,2.0s
**MVO Moncorvo 82.71 48** eS S 07 21 06.1 +10
**MVO Moncorvo 82.71 48** eLQ LQ 07 32 43.6
MVO eLR LR 07 36 44.9
comp=Z,4μm,22.0s
**PCBR Castelo Branco 82.98 49** eP P **07 10 40.2 +0.3**
comp=Z,28nm,0.8s
**PNCL Nicolau / Gran 82.99 51** eP P **07 10 40.6 +0.7**
comp=Z,38nm,2.1s
**PTEO Sao Teotonio 83.10 52** eP P **07 10 40.9 +0.4**
comp=Z,57nm,2.1s
**EVO Evora 83.18 51** eP P **07 10 41.5 +0.6**
comp=Z,48nm,2.3s
**PMRV Marv??o 83.22 50** eP P **07 10 41.2 0.0**
comp=Z,53nm,1.9s
**PMRV Marv??o 83.22 50** eLQ LQ 07 32 53.4
PMRV eLR LR 07 38 00.6
comp=Z,5μm,18.0s
**MORF Marmelete 83.25 52** eP P **07 10 42.0 +0.6**
MORF eS S **07 21 02.6 +0.5**
MORF AMS AMS 07 41 42.0
comp=N,5μm,22.2s
**MORF Marmelete 83.25 52** eP P **07 10 42.0 +0.6**
comp=N,37nm,2.1s
**MORF Marmelete 83.25 52** eP P **07 10 42.0 +0.6**
MORF eS S **07 21 02.6 +0.5**
**MESJ Messejana 83.33 52** eP P **07 10 42.3 +0.5**
MESJ eS S **07 21 03.2 +0.4**
MESJ AMS AMS 07 47 58.2
comp=Z,6μm,19.2s
**MESJ Messejana 83.33 52** eP P **07 10 42.2 +0.5**
MESJ eS S **07 21 03.2 +0.4**
**YUK Yuzh-Kuril'sk 83.38 315** *c* *i* P P **07 10 44.9 +3.1**
YUK *i* 07 10 53.2
YUK *i* S S **07 21 07.3 +4.3**
YUK pmax pmax
comp=Z,248nm,4.6s
**PBEJ Beja 83.50 51** eP P **07 10 42.9 +0.3**
comp=Z,28nm,1.4s
**PCVE Castro Verde 83.55 52** eP P **07 10 43.6 +0.7**
comp=Z,51nm,1.8s
**PBDV Barranco-do-Ve 83.80 52** eP P **07 10 45.1 +0.9**
comp=Z,69nm,1.8s
**PVAQ Vaqueiros 83.88 52** eP P **07 10 45.1 +0.6**
comp=Z,59nm,1.2s
**PVAQ Vaqueiros 83.88 52** eS S **07 21 10.9 +2.6**
**PVAQ Vaqueiros 83.88 52** eLQ LQ 07 32 51.7
PVAQ eLR LR 07 38 46.7
comp=Z,5μm,16.0s
**YSS Yuzh-Sakhalins 83.90 319** eP P **07 10 43.0 -1.4**
YSS *e**SP **sP** **07 10 49.0 0.0**
YSS *e* 07 14 06.0
YSS *e* 07 21 02.0
YSS eS SKSac **07 21 06.0 -1.7**
YSS MLR MLR
comp=Z,500nm,20.0s
**YSS Yuzh-Sakhalins 83.90 319** P P **07 10 43.4 -1.1**
YSS LR LR
comp=Z,595nm,19.0s
**PBAR Barrancos 84.02 51** eP P **07 10 44.1 -1.2**
comp=Z,93nm,2.0s
**LVZ Lovozero 84.03 13** P P **07 10 46.7 +2.0**
LVZ pmax pmax
comp=Z,62nm,1.2s
**LVZ Lovozero 84.03 13** eP P **07 10 44.0 -0.7**
comp=Z,162nm,1.4s
LVZ LR LR
comp=Z,3μm,21.0s
**APA Apatity 84.04 14**|| *i* P 07 10 48.2 +3.5
APA *i* 07 14 03.0
APA *i* S S **07 21 11.0 +2.2**
APA *i* SS SS **07 26 40.0 +4.0**
**PAB San Pablo 85.27 49** eP P **07 10 52.2 +0.6**
PAB pmax pmax
comp=Z,41nm,1.2s
**PAB San Pablo 85.27 49** eP P **07 10 52.2 +0.6**
comp=Z,41nm,1.2s
PAB LR LR
comp=Z,4μm,21.0s
**ASAJ Asahikawa 85.40 317** P P **07 10 51.6 -0.5**
comp=Z,16nm,1.3s
**ESDC Sonseca Array 85.47 48** P P **07 10 50.9 -1.8**
comp=Z,3.3nm,0.9s,baz=313,slow=5.5,SNR=11
**MEM Membach 85.87 35** P P **07 10 53.6 -0.7**
comp=Z,17nm,1.8s
**RTC Rabat Centre 86.03 54** PFAKE 07 11 10.0 +15
RTC LR LR
comp=Z,11μm,20.0s
**ERM Erimo 86.09 315** P P **07 10 58.0 +2.5**
ERM pmax pmax
comp=Z,35nm,1.4s
**ERM Erimo 86.09 315** eP P **07 10 55.2 -0.3**
ERM LR LR
comp=Z,1μm,22.0s
**WLF Walferdange 86.48 36** PFAKE 07 11 10.0 +13
WLF LR LR
comp=Z,5μm,19.0s
**FINES FINESS Array B 87.04 20** P P **07 10 58.0 -1.8**
comp=Z,8.0nm,0.8s,baz=298,slow=3.0,SNR=8.9
FINES LR LR 07 49 14.4
comp=Z,4μm,18.4s,baz=330,slow=35
**FINES FINESS Array B 87.04 20** P P **07 10 58.0 -1.8**
**SSB Saint Sauveur 88.02 40** PFAKE 07 11 20.0 +15
SSB LR LR
comp=Z,3μm,21.0s
**BFO Black Forest 88.42 36** PFAKE 07 11 20.0 +13
BFO LR LR
comp=Z,5μm,19.0s
**KLR Kul'dur 88.81 325** eP P **07 11 10.0 +1.5**
**CLL Collm 89.00 32** eP P **07 11 09.0 -0.3**
**CLL Collm 89.00 32** eP P **07 11 09.0 -0.3**
CLL eS S **07 21 57.0 -0.6**
CLL ePS PnS **07 22 59.0 -2.3**
CLL eSS SS **07 27 54.0 +4.7**
CLL eSSS SSS 07 31 30.0
CLL eSSSS 07 34 36.0
CLL LmH 07 47 00.0
comp=N,4μm,19.2s
CLL LmH 07 47 00.0
comp=E,2μm,20.5s
**BNI Bardonecchia 89.40 40** PFAKE 07 11 20.0 +8.4
BNI LR LR
comp=Z,5μm,19.0s
**NKC Novy Kostel 89.40 33** AMS AMS 07 54 20.0
comp=Z,5μm,14.8s
**VSU Vasula 89.56 21** P P **07 11 12.0 +0.2**
VSU pmax pmax
comp=Z,47nm,0.8s
**BRG Berggiesshubel 89.73 32** eP P **07 11 15.1 +2.3**
comp=Z,3.6nm,0.8s
**BRG Berggiesshubel 89.73 32** S S 07 21 55.0 -10
BRG SS SS 07 27 44.0 -16
**BRG Berggiesshubel 89.73 32** eP P **07 11 15.1 +2.3**
BRG S S 07 21 55.0 -10
BRG pmax pmax
comp=Z,4.0nm,0.8s
BRG MLR MLR
comp=N,2μm,19.2s

BRG MLR MLR
comp=E,3μm,16.4s
BRG MLR MLR
comp=Z,5μm,17.3s
**TUE Stuetta 90.08 37** PFAKE 07 11 30.0 +15
TUE LR LR
comp=Z,4μm,20.0s
**PVCC Panska Ves 90.26 32** AMS AMS 07 50 20.0
comp=Z,5μm,17.2s
**BOD Bodaibo 90.42 339** *e*P **P 07 11 13.1 -2.8**
BOD pmax pmax
comp=Z,26nm,1.6s
**PRA Prague 90.49 32** AMS AMS 07 50 10.0
comp=Z,5μm,18.8s
**FETA Feichten 90.51 36**⇓ *i*PcP **P 07 11 15.9 -0.9**
comp=Z,5.9nm,1.1s
**PRU Pruhonice 90.59 33** *e*P P 07 11 21.9 +5.0
PRU MLR MLR
comp=Z,5μm,15.5s
**PRU Pruhonice 90.59 33** *e*P P 07 11 21.9 +5.0
PRU AMS AMS 07 55 10.0
comp=Z,5μm,15.5s
**KHC Kasperske Hory 90.67 34** *e*P P 07 11 27.3 +10
KHC MLR MLR
comp=Z,4μm,16.7s
**KHC Kasperske Hory 90.67 34** AMS AMS 07 52 20.0
comp=Z,4μm,16.7s
**GOPC GO Pecny, Ondr 90.76 32** AMS AMS 07 50 30.0
comp=Z,5μm,19.8s
**GERES GERESS Array B 90.92 34** P **P 07 11 16.9 -1.6**
comp=Z,0.4nm,0.3s,baz=355,slow=9.8,SNR=3.1
GERES LR LR 07 52 41.4
comp=Z,3μm,18.7s,baz=306,slow=36
**UPC Upice 90.96 31** AMS AMS 07 53 50.0
comp=Z,5μm,15.7s
**KLMR Klimovskoe 91.19 15** *e*P P 07 11 16.1 -3.3
KLMR pmax pmax
comp=Z,62nm,1.4s
**DPC Dobruska-Polom 91.22 31** AMS AMS 07 53 50.0
comp=Z,5μm,15.2s
**TREC Trest 91.51 33** AMS AMS 07 49 10.0
comp=Z,5μm,19.5s
**USRK Ussuriysk Ar. 91.72 321** P **P 07 11 21.0 -1.2**
comp=Z,1.7nm,0.8s,baz=72,slow=6.2,SNR=4.7
**VLC Villacollemand 92.06 39** PFAKE 07 11 30.0 +6.1
VLC LR LR
comp=Z,3μm,20.0s
**MJAR Matsushiro Arr 92.20 312** P **P 07 11 22.7 -1.9**
comp=Z,1.0nm,0.7s,baz=72,slow=4.3,SNR=3.4
**MAJO Matsushiro 92.20 312** P P 07 11 28.1 +3.5
MAJO pmax pmax
comp=Z,84nm,1.0s
**MAJO Matsushiro 92.20 312** PFAKE 07 11 40.0 +15
MAJO LR LR
comp=Z,2μm,20.0s
**MAT Matsushiro 92.20 312** P **P 07 11 24.1 -0.5**
MAT S **S 07 22 30.0 +2.3**
**OKC Ostrava-Krasne 92.43 31** AMS AMS 07 51 40.0
comp=Z,4μm,17.1s
**MDJ Mudanjiang 92.82 322** P **P 07 11 27.5 +0.2**
MDJ pP **pP 07 11 30.9 +0.3**
MDJ sP **sP 07 11 32.3 +0.5**
MDJ PP **PP 07 15 07.8 -1.1**
MDJ S **S 07 22 31.8 -1.1**
MDJ PMZ
comp=Z,110nm,3.8s
MDJ LN
comp=Z,820nm,16.7s
MDJ LE
comp=Z,860nm,21.6s
MDJ LZ
comp=Z,920nm,19.6s
**MDJ Mudanjiang 92.82 322** PFAKE 07 11 40.0 +13
MDJ LR LR
comp=Z,1μm,19.0s
**SOKA Soboth 93.01 35**⇑ *i*PcP **P 07 11 27.6 -0.6**
comp=Z,8.8nm,1.3s
**STHS Stebnicka Huta 94.15 30** *e*P **P 07 11 33.6 +0.2**
**STHS Stebnicka Huta 94.15 30** *e*P **P 07 11 33.6 +0.2**
**DZM Mont Dzumac 94.17 248** *e*LR LR 07 41 52.1
comp=Z,6μm,23.0s
**VSL Villasalto 94.27 43** PFAKE 07 11 40.0 +5.9
VSL LR LR
comp=Z,3μm,19.0s
**PSZ Piszkesteto 94.59 32** PFAKE 07 11 50.0 +15
PSZ LR LR
comp=Z,4μm,21.0s
**HIA Hailar 94.64 330** PFAKE 07 11 50.0 +14
HIA LR LR
comp=Z,2μm,19.0s
**HNR Honiara 94.72 262** PFAKE 07 11 50.0 +13
HNR LR LR
comp=Z,4μm,21.0s
**SOKR Solikamsk 95.39 7** *e*P P 07 11 45.1 +6.4
SOKR pmax pmax
comp=Z,10.0nm,1.3s
**OBN Obninsk 95.41 19** *i* P **P 07 11 39.2 +0.3**
OBN *e*S **SKSac 07 22 20.5 +5.6**
OBN *e*SS **SS 07 29 26.7 +5.9**
OBN pmax pmax
comp=Z,4.0nm,0.8s
OBN MLR MLR
comp=Z,2μm,18.0s
**OBN Obninsk 95.41 19** PFAKE 07 11 50.0 +11
OBN LR LR
comp=Z,3μm,21.0s
**SNZO South Karori 96.19 227** PFAKE 07 11 50.0 +7.5
SNZO LR LR
comp=Z,2μm,20.0s
**KEST Kesra 96.48 46** LR LR 07 55 05.9
comp=Z,3μm,18.9s,baz=256,slow=35
**AKASG Malin Array Be 96.55 25** P **P 07 11 41.7 -2.5**
comp=Z,0.2nm,0.3s,baz=311,slow=4.8,SNR=3.3
AKASG PP **PP 07 15 35.2 -2.3**
comp=Z,0.2nm,0.3s,baz=325,slow=5.9,SNR=3.0
AKASG LR LR 07 55 20.9
comp=Z,3μm,20.1s,baz=300,slow=36
**KIEV Kiev 96.55 25** P **P 07 11 44.0 -0.2**
KIEV pmax pmax
comp=Z,3.0nm,1.0s
**KIEV Kiev 96.55 25** PFAKE 07 12 00.0 +16
KIEV LR LR
comp=Z,3μm,20.0s
**CLTB Caltabellotta 97.82 43** PFAKE 07 12 00.0 +10
CLTB LR LR
comp=Z,1μm,20.0s
**CUC Castrocucco 97.83 39** PFAKE 07 12 00.0 +10
CUC LR LR
comp=Z,2μm,19.0s
**ARU Arti 98.69 7***c* *i*P Pdif 07 11 54.3 +0.5
ARU 07 15 55.8
ARU S **SKSac 07 22 32.5 +0.6**
ARU pmax pmax
comp=Z,8.0nm,1.2s
**ARU Arti 98.69 7** PFAKE 07 12 00.0 +6.2
ARU LR LR
comp=Z,4μm,19.0s
**TLY Talaya 98.86 340** *e*P Pdif 07 11 56.4 +1.7
TLY *e* 07 16 01.2
TLY *e*PPP PPP 07 18 00.2
TLY *e*S **SKSac 07 22 35.2 +2.2**
TLY *e*SS **SS 07 30 07.7 -2.0**
TLY *e*SSS SSS 07 33 55.5
TLY pmax pmax
comp=Z,12nm,1.5s
**TLY Talaya 98.86 340** PFAKE 07 12 10.0 +15
TLY LR LR
comp=Z,1μm,19.0s
**TIP Timpagrande 98.91 40** PFAKE 07 12 10.0 +15
TIP LR LR
comp=Z,2μm,21.0s
**INCN Inchon 99.09 318** PFAKE 07 12 10.0 +14
INCN LR LR
comp=Z,1μm,20.0s
**TIR Tirane 99.18 36** PFAKE 07 12 10.0 +14
TIR LR LR
comp=Z,4μm,22.0s
**WDD Wield Dalam 99.72 43** PFAKE 07 12 10.0 +11
WDD LR LR
comp=Z,2μm,21.0s
**HOPE Hope Point 100.06 145** PFAKE 07 12 10.0 +10
HOPE LR LR
comp=Z,1μm,20.0s
**NVS Novosibirsk 100.26 353** *e*P **Pdif 07 12 06.3 +5.6**
**ZALV Zalesovo Beam 100.94 352** PP PP 07 16 08.0 -2.8
comp=Z,0.5nm,0.4s,baz=12,slow=8.1,SNR=3.0

**ULN Ulaanbaatar 100.96 336** PFAKE 07 12 20.0 +16
ULN LR LR
comp=Z,3μm,22.0s
**TAM Tamanrasset 101.02 59** PFAKE 07 12 20.0 +15
TAM LR LR
comp=Z,3μm,21.0s
**SONA1 Songino Array 101.22 337** *e*Pdif **Pdif 07 12 08.4 +3.0**
**SONM Songino Array 101.23 337** P **Pdif 07 12 04.9 -0.5**
comp=Z,0.4nm,0.5s,baz=48,slow=6.4,SNR=3.3
SONM PP **PP 07 16 12.5 -0.9**
comp=Z,0.1nm,0.3s,baz=33,slow=5.5,SNR=2.7
**BRVK Borovoye 102.75 0** P **Pdif 07 12 14.0 +2.1**
BRVK pmax pmax
comp=Z,6.0nm,1.9s
**BRVK Borovoye 102.75 0** PFAKE 07 12 20.0 +8.1
BRVK LR LR
comp=Z,5μm,19.0s
**TOA0 Torodi Ar. Sit 102.80 69** *e*Pdif **Pdif 07 12 20.1 +7.2**
**TORD Torodi Ar. Bea 102.80 69** P **Pdif 07 12 11.5 -1.4**
comp=Z,0.8nm,1.1s,baz=270,slow=2.9,SNR=2.9
TORD PP **PP 07 16 25.0 -1.5**
comp=Z,0.9nm,1.1s,baz=327,slow=6.9,SNR=3.0
**BJT Baijiatuau 103.18 326** PFAKE 07 12 30.0 +16
BJT LR LR
comp=Z,1μm,20.0s
**KURK Kurchatov 104.79 355** PFAKE 07 12 30.0 +9.0
KURK LR LR
comp=Z,7μm,19.0s
**SANT Santorini 105.78 37** PFAKE 07 16 50.0
SANT LR LR
comp=Z,1μm,19.0s
**PMG Port Moresby 106.30 267** PFAKE 07 16 50.0
PMG LR LR
comp=Z,4μm,19.0s
**ANTO Ankara 106.74 30** PFAKE 07 16 50.0
ANTO LR LR
comp=Z,2μm,19.0s
**KIV Kislovodsk 107.11 21** PFAKE 07 16 50.0
KIV LR LR
comp=Z,2μm,19.0s
**ISP Isparta 107.30 33** PFAKE 07 16 50.0
ISP LR LR
comp=Z,4μm,19.0s
**MKAR Makanchi Array 108.28 352** PP PP 07 17 04.2 -1.2
comp=Z,0.3nm,0.6s,baz=46,slow=6.2,SNR=2.3
MKAR PKKP **PKKPdf 07 28 05.0 -2.7**
comp=Z,0.6nm,0.8s,baz=197,slow=4.5,SNR=3.7
**SHEL Horse Pasture 108.36 100** PFAKE 07 16 50.0
SHEL LR LR
comp=Z,608nm,21.0s
**WMQ Urumqi 110.27 347** Pdif **Pdif 07 12 48.0 +2.3**
WMQ PP **PP 07 17 22.0 +2.1**
WMQ SKS **SKSdf 07 23 56.0 -3.1**
WMQ S **Sdif 07 24 56.0 -4.6**
WMQ SS **SS 07 32 46.0 0.0**
WMQ PPMZ
comp=Z,65nm,10.0s
WMQ LN
comp=Z,1μm,26.0s
WMQ LE
comp=Z,2μm,26.0s
WMQ LZ
comp=Z,2μm,22.0s
**TATO Taipei 110.59 312** PFAKE 07 17 00.0
TATO LR LR
comp=Z,1μm,19.0s
**YHNB Yeheng 110.87 311** PFAKE 07 17 00.0
YHNB LR LR
comp=Z,2μm,19.0s
**GTA Gaotai 110.90 336** *e*PKP **PKiKP 07 16 45.9 -2.3**
GTA PP **PP 07 17 25.5 +0.7**
GTA SKS **SKSdf 07 23 56.8 -3.9**
GTA SKKS SKKSac 07 24 19.5 -10
GTA SS **SS 07 32 52.3 -2.7**
GTA PPMZ
comp=Z,160nm,8.5s
GTA LN
comp=Z,770nm,20.7s
GTA LE
comp=Z,1μm,18.8s
GTA LZ
comp=Z,1μm,17.1s
**CSS Prodhromos 110.94 32** PFAKE 07 17 00.0
CSS LR LR
comp=Z,281nm,19.0s
**CTAO Charters Tower 110.95 257** PFAKE 07 17 00.0
CTAO LR LR
comp=Z,2μm,19.0s
**GNI Garni 111.19 21** PFAKE 07 17 00.0
GNI LR LR
comp=Z,2μm,21.0s
**LZH Lanzhou 112.16 332** *e*PKP **PKiKP 07 16 49.0 -1.7**
LZH sPKP 07 16 53.5
LZH *e*PP **PP 07 17 36.5 +2.5**
LZH SKKS 07 24 27.8
LZH *e*SS **SS 07 33 08.1 -4.0**
LZH PPMZ
comp=Z,350nm,5.6s
LZH LN
comp=Z,2μm,18.5s
LZH LE
comp=Z,2μm,18.4s
LZH LZ
comp=Z,3μm,20.0s
**SBA Scott Base 112.56 193** PFAKE 07 17 00.0
SBA LR LR
comp=Z,1μm,21.0s
**TKM2 Tokmak 2 112.76 356** PFAKE 07 17 00.0
TKM2 LR LR
comp=Z,3μm,20.0s
**CAN Canberra 113.04 240** PFAKE 07 17 00.0
CAN LR LR
comp=Z,2μm,20.0s
**AAK Ala-Archa 113.10 357** PP PP 07 17 39.8 -0.5
comp=Z,0.8nm,0.4s,baz=16,slow=18,SNR=2.0
**AAK Ala-Archa 113.10 357** PP PP 07 17 39.8 -0.5
AAK LR LR
comp=Z,5μm,20.0s
**EKS2 Erkin-Say 113.10 358** PFAKE 07 17 00.0
EKS2 LR LR
comp=Z,5μm,19.0s
**ENH Enshi 114.14 324** PFAKE 07 17 10.0 +16
ENH LR LR
comp=Z,960nm,22.0s
**QSPA South Pole Qui 114.40 180** PFAKE 07 17 10.0 +16
QSPA LR LR
comp=Z,2μm,22.0s
**TAU Tasmania Unive 115.93 233** PFAKE 07 17 10.0 +13
TAU LR LR
comp=Z,2μm,19.0s
**KSH Kashi 116.12 356** *e*PKP **PKPdf 07 16 58.8 +0.6**
KSH PKS **PKSdf 07 20 35.1 +0.1**
KSH SKS **SKSdf 07 24 08.4 -2.3**
KSH LN
comp=Z,780nm,13.7s
KSH LE
comp=Z,1μm,12.8s
KSH LZ
comp=Z,1μm,17.5s
**CD2 Chengdu 116.53 329** PKP **PKPdf 07 16 59.3 +0.2**
CD2 PP **PP 07 18 04.4 -0.5**
CD2 SKS **SKSdf 07 24 09.8 -1.8**
CD2 SKKS **SKKSac 07 25 02.3 -5.2**
CD2 SS **SS 07 34 07.6 -2.1**
CD2 PPMZ
comp=Z,160nm,5.4s
CD2 LN
comp=Z,2μm,15.6s
CD2 LE
comp=Z,2μm,14.7s
CD2 LZ
comp=Z,2μm,16.2s
**GEYT Alibeck 116.73 11** PP PP 07 18 05.8 0.0
comp=Z,1.3nm,0.3s,baz=345,slow=10,SNR=2.7
**DAV Davao City (W) 118.19 293** PFAKE 07 17 10.0 +7.4
DAV LR LR
comp=Z,2μm,22.0s
**GYA Guiyang 118.67 323** *e*Pdif **Pdif 07 13 23.0 -0.4**
GYA PKP **PKiKP 07 17 04.3 +0.8**
GYA PP **PP 07 18 24.8 +4.8**
GYA PKS **PKSdf 07 20 39.5 -0.9**
GYA SKKS 07 25 16.4
GYA SS **SS 07 34 37.6 -0.3**
GYA PPMZ
comp=Z,240nm,8.0s
GYA LN
comp=Z,280nm,23.2s
GYA LE
comp=Z,220nm,22.5s
GYA LZ
comp=Z,240nm,24.8s
**DRV Dumont d'Urvil 120.53 206** SS SS 07 35 11.0 +9.2
DRV L L 07 48 00.0
DRV R 07 53 00.0
**WRAB Tennant Creek 121.54 261** PFAKE 07 17 20.0 +11
WRAB LR LR
comp=Z,2μm,20.0s
**WRA Warramunga Arr 121.55 261** PKP **PKPdf 07 17 08.0 -0.9**
comp=Z,1.0nm,0.6s,baz=71,slow=2.4,SNR=9.6
**WRA Warramunga Arr 121.55 261** PKIKP **PKPdf 07 17 08.0 -0.9**
**KMI Kunming 121.82 326** PKP **PKPdf 07 17 08.4 -1.2**
KMI sPKP 07 17 15.4
KMI PP PP 07 18 48.3 +6.6
KMI LN
comp=Z,880nm,24.8s
KMI LE
comp=Z,1μm,18.2s
KMI LZ
comp=Z,1μm,16.7s
**QIZ Qiongzhong 122.45 315** PKP **PKPdf 07 17 11.5 +0.8**
QIZ PP **PP 07 18 46.3 +0.2**
QIZ LE
comp=Z,580nm,20.5s
QIZ LZ
comp=Z,2μm,27.9s
**QIZ Qiongzhong 122.45 315** PFAKE 07 17 20.0 +9.3
QIZ LR LR
comp=Z,1μm,19.0s
**LSA Lhasa 122.69 339** PFAKE 07 17 20.0 +8.5
LSA LR LR
comp=Z,1μm,21.0s
**ASAR Alice Springs 122.96 257** PKP **PKPdf 07 17 09.1 -2.4**
comp=Z,0.8nm,0.6s,baz=74,slow=1.4,SNR=8.5
**RAYN Ar Rayn 126.26 29** PFAKE 07 17 30.0 +12
RAYN LR LR
comp=Z,1μm,21.0s
**KKM Kota Kinabalu 126.44 299** PFAKE 07 17 30.0 +11
KKM LR LR
comp=Z,907nm,22.0s
**CHTO Chiang Mai 129.00 325** PFAKE 07 17 30.0 +6.8
CHTO LR LR
comp=Z,1μm,20.0s
**KAPI Kappang 129.28 284** PFAKE 07 17 40.0 +16
KAPI LR LR
comp=Z,582nm,21.0s
**CMAR Chiang Mai Arr 129.29 325** PKP **PKPdf 07 17 21.8 -2.0**
comp=Z,1.1nm,0.4s,baz=5.4,slow=1.9,SNR=4.3
**TSUM Tsumeb 130.47 95** PFAKE 07 17 40.0 +14
TSUM LR LR
comp=Z,1μm,20.0s
**CASY Casey 131.40 200** PFAKE 07 17 40.0 +14
CASY LR LR
comp=Z,1μm,19.0s
**KSM Kuching 133.88 298** PFAKE 07 17 40.0 +7.4
KSM LR LR
comp=Z,1μm,22.0s
**MBAR Mbarara 134.45 65** PFAKE 07 17 50.0 +16
MBAR LR LR
comp=Z,932nm,19.0s
**MBWA Marble Bar 135.06 264** PFAKE 07 17 50.0 +15
MBWA LR LR
comp=Z,2μm,22.0s
**SUR Sutherland 135.59 112** PFAKE 07 17 50.0 +15
SUR LR LR
comp=Z,3μm,22.0s
**MAW Mawson 136.62 176** PKP **PKPdf 07 17 32.3 -3.7**
comp=Z,2.2nm,0.8s,baz=169,slow=17,SNR=3.3
**KULM Kulim 138.57 312** PFAKE 07 17 50.0 +8.7
KULM LR LR
comp=Z,845nm,20.0s
**NWAO Narrogin (SRO) 138.79 247** PFAKE 07 17 50.0 +8.9
NWAO LR LR
comp=Z,3μm,20.0s
**LSZ Lusaka 138.93 85** PFAKE 07 17 50.0 +8.0
LSZ LR LR
comp=Z,1μm,20.0s
**KMBO Kilima Mbogo 140.00 60** PKP **PKPdf 07 17 42.3 -1.9**
comp=Z,0.5nm,0.3s,baz=320,slow=2.7,SNR=3.1
**KMBO Kilima Mbogo 140.00 60** PKIKP **PKPdf 07 17 42.3 -1.9**
KMBO MLR MLR
comp=Z,2μm,21.0s
**KMBO Kilima Mbogo 140.00 60** PKP **PKPdf 07 17 42.3 -1.9**
KMBO LR LR
comp=Z,2μm,21.0s
**PSI Prapat 141.55 311** PKP **PKPdf 07 17 46.9 0.0**
comp=Z,1.1nm,0.4s,baz=120,slow=16,SNR=2.9
**PALK Pallekele 146.99 342** PKPbc **PKPdf 07 17 56.0 -0.2**
comp=Z,7.2nm,0.9s,baz=115,slow=5.3,SNR=2.2
**PALK Pallekele 146.99 342** PKIKP **PKPdf 07 17 56.0 -0.2**
**COCO West Island 152.57 292** PFAKE 07 18 20.0 -2.2
COCO LR LR
comp=Z,1μm,19.0s
**ABPO Ambohimpanom 157.35 81** PFAKE 07 18 20.0 +8.4
ABPO LR LR
comp=Z,491nm,21.0s
**DGAR Diego Garcia 162.92 355** PFAKE 07 18 30.0 +12
DGAR LR LR
comp=Z,1μm,20.0s
**RER Riviere de l'E 165.62 80** PFAKE 07 18 30.0 +10
RER LR LR
comp=Z,2μm,19.0s

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*ISCJB* ***20*** *06:58:53.3±0.6, 49.°61S±0.°07×126.°2E±0.°3, h10km, mb4.2/8, MS4.0/7, Error ellipse: s-maj=29.6km s-min=9.9km az=5.1*

*IDC* ***20*** *06:58:54.1±0.8, 49.°63S×125.°96E, h0km, mb4.3/7, mb1 4.5/8, mb1mx4.2/25, mbtmp4.3/8, ML2.8/1, MS4.1/7, Ms1 4.1/7, ms1mx3.8/19, Error ellipse: s-maj=43.2km s-min=15.4km az=97.0*

*NEIC* ***20*** *06:58:55.4±0.5, 49.°62S×125.°98E, h10km, mb4.3/3, Error ellipse: s-maj=26.0km s-min=10.0km az=94.0*

**ISC 20 06:58:55.5±0.8, 49.°6S±0.°1×126.°1E±0.°3, h10km, n30, σ0°74/17, mb4.3/8, MS4.1/7, 1C-1D, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H01W1** | **Cape Leeuwin H** | **17.13** | **325** | T | T | 07 20 27.5 | |
| | baz=153,slow=75,SNR=143 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **17.13** | **325** | T | T | 07 20 26.3 | |
| | baz=153,slow=75,SNR=166 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **17.14** | **325** | T | T | 07 20 28.7 | |
| | baz=153,slow=75,SNR=180 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **17.93** | **335** | Pn | **Pn** | **07 03 04.4** | **-0.4** |
| | 1.7nm,0.3s,baz=320,slow=0.1,SNR=9.5 | | | | | | |
| NWAO | | | | LR | LR | 07 08 04.5 | |
| | comp=Z,7.7nm,21.7s,baz=138,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **26.61** | **16** | P | **P** | **07 04 33.8** | **-0.3** |
| | 5.7nm,0.7s,baz=192,slow=9.1,SNR=53 | | | | | | |
| ASAR | | | | LR | LR | 07 14 08.2 | |
| | comp=Z,159nm,19.8s,baz=190,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.33** | **15** | P | **P** | **07 05 06.7** | **-0.5** |
| | 0.8nm,0.4s,baz=194,slow=8.3,SNR=16 | | | | | | |
| WRA | | | | LR | LR | 07 17 02.3 | |
| | comp=Z,155nm,18.1s,baz=215,slow=36 | | | | | | |
| **WRAB** | **Tennant Creek** | **30.34** | **16** | *e*P | **P** | **07 05 06.7** | **-0.6** |
| | 1.9nm,0.6s | | | | | | |
| **VNDA** | **Vanda** | **31.11** | **166** | P | **P** | **07 05 13.3** | **-0.2** |
| | 7.0nm,0.8s,baz=311,slow=8.5,SNR=35 | | | | | | |
| VNDA | | | | LR | LR | 07 16 33.2 | |
| | comp=Z,651nm,19.9s,baz=327,slow=34 | | | | | | |
| **MAW** | **Mawson** | **35.53** | **216** | P | **P** | **07 05 51.1** | **-1.0** |
| | 2.4nm,0.9s,baz=76,slow=13,SNR=4.8 | | | | | | |
| MAW | | | | LR | LR | 07 17 39.4 | |
| | comp=Z,141nm,20.4s,baz=64,slow=32 | | | | | | |
| **BATI** | **Baumata** | **39.34** | **356** | LR | LR | 07 22 38.2 | |
| | comp=Z,509nm,20.1s,slow=36 | | | | | | |
| **QSPA** | **South Pole Qui** | **40.51** | **180** | P | **P** | **07 06 33.5** | **-0.8** |
| | 6.2nm,1.0s,baz=328,slow=0.8,SNR=12 | | | | | | |
| **QSPA** | **South Pole Qui** | **40.51** | **180** | *e*P | **P** | **07 06 34.0** | **-0.4** |
| | 7.8nm,1.0s | | | | | | |
| **SYO** | **Syowa Base** | **43.71** | **211**⇑ | *e*P | **P** | **07 07 01.4** | **+1.2** |
| **SYO** | **Syowa Base** | **43.71** | **211**⇓ | *e*P | P | 07 07 05.6 | +5.4 |
| **PMG** | **Port Moresby** | **43.76** | **31** | LR | LR | 07 25 33.5 | |
| | comp=Z,273nm,20.9s,baz=199,slow=36 | | | | | | |
| **KAPI** | **Kappang** | **44.77** | **351** | LR | LR | 07 27 18.9 | |
| | comp=Z,296nm,18.3s,baz=48,slow=38 | | | | | | |
| **SNAA** | **Sanae** | **53.76** | **198** | P | **P** | **07 08 17.4** | **0.0** |
| **SNAA** | **Sanae** | **53.76** | **198** | P | **P** | **07 08 17.5** | **+0.1** |

4.1nm,1.0s,baz=146,slow=8.3,SNR=36
**SNAA Sanae 53.76 198** *e*P **P 07 08 17.2 -0.2**
5.1nm,1.0s
**VNA2 Neumayer--Watz 55.24 197** P **P 07 08 28.4 +0.3**
baz=143,slow=7.3
**VNA3 Neumayer Olymp 55.39 196** P **P 07 08 29.1 -0.1**
**VNA1 Neumayer--Stat 55.63 197** P **P 07 08 31.7 +0.8**
**H08S2 Diego Garcia H 61.12 294** T T 08 15 23.0
baz=143,slow=76,SNR=9.9
**H08S1 Diego Garcia H 61.13 294** T T 08 15 23.2
baz=143,slow=76,SNR=6.6
**H08S3 Diego Garcia H 61.14 294** T T 08 15 22.5
baz=143,slow=76,SNR=10
**CMAR Chiang Mai Arr 71.92 333** P **P 07 10 19.3 +0.4**
0.9nm,0.3s,baz=175,slow=5.3,SNR=6.9
**H10S2 ASCENSION HYDR 12.34 223** T T 09 20 20.9
baz=152,slow=74,SNR=4.7
**H10S3 ASCENSION HYDR 12.35 223** T T 09 20 19.4
baz=152,slow=74,SNR=5.0
**H10S1 ASCENSION HYDR 12.36 223** T T 09 20 22.1
baz=152,slow=74,SNR=3.5
**YKA Yellowknife Ar 145.14 45** PKPbc **PKPdf 07 18 33.4 +1.6**
2.3nm,0.6s,baz=266,slow=3.9,SNR=14

*IDC* ***20*** *07:00:29.9±1.0,24˚.45N×109˚.17W,h0km,mb4.1/9, mb1 4.3/10,mb1mx4.1/34,mbtmp4.1/10,ML3.4/1, Error ellipse: s-maj=27.0km s-min=22.4km az=55.0*
*ISCJB* ***20*** *07:00:30.1±0.7,24˚.5N±0˚.1×109˚.17W±0˚.09,h10km, mb4.1/9,Error ellipse: s-maj=19.0km s-min=9.5km az=154.9*
**ISC 20 07:00:31.5±0.8,24˚.5N±0˚.1×109˚.22W±0˚.10,h10km,n11, σ0s96/12,mb4.2/9,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.05** | **250** | Pn | | | **Pb** | **07 00 51.7** | **-0.1** |
| | 40nm,0.3s,baz=149,slow=19,SNR=2.5 | | | | | | | | |
| LPIG | | | | Sn | | | **Sn** | **07 01 06.7** | **-0.4** |
| | 287nm,0.3s,baz=124,slow=3.6,SNR=9.8 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.92** | **333** | Pn | | | **P** | **07 04 20.3** | **+0.7** |
| | 0.2nm,0.3s,baz=141,slow=10,SNR=2.8 | | | | | | | | |
| **NEW** | **Newport** | **24.57** | **347** | P | | | **P** | **07 05 52.2** | **+0.6** |
| | 3.9nm,0.7s,baz=158,slow=10,SNR=6.0 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.19** | **356** | P | | | **P** | **07 07 51.8** | **+0.7** |
| | 0.8nm,0.7s,baz=158,slow=7.3,SNR=3.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **47.06** | **339** | P | | | **P** | **07 09 03.9** | **+0.7** |
| | 1.2nm,0.8s,baz=159,slow=6.5,SNR=7.8 | | | | | | | | |
| **CPUP** | **Villa Florida** | **71.15** | **132** | P | | | **P** | **07 11 51.4** | **+0.8** |
| | 10nm,1.1s,baz=322,slow=6.5,SNR=3.1 | | | | | | | | |
| **BDFB** | **Brasilia** | **71.79** | **117** | P | | | **P** | **07 11 55.6** | **+0.8** |
| | 1.0nm,0.3s,baz=276,slow=8.4,SNR=1.7 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.80** | **15** | P | | | **P** | **07 12 44.0** | **-1.0** |
| | 1.2nm,0.5s,baz=328,slow=4.3,SNR=6.8 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **82.24** | **25** | P | | | **P** | **07 12 51.8** | **-1.1** |
| | 0.7nm,0.6s,baz=318,slow=5.9,SNR=2.4 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **85.60** | **48** | P | | | **P** | **07 13 09.4** | **-1.1** |
| | 0.3nm,0.3s,baz=321,slow=1.8,SNR=4.2 | | | | | | | | |
| **FINES** | **FINESS Array B** | **87.14** | **20** | P | | | **P** | **07 13 16.3** | **-1.2** |
| | 4.5nm,1.1s,baz=273,slow=5.3,SNR=3.0 | | | | | | | | |

*CSEM* ***20*** *07:09:56.8±0.1,44˚.61N×7˚.25E,h15km,ML2.5/10,Error ellipse: s-maj=2.8km s-min=1.5km az=73.0*
*ROM* ***20*** *07:09:57.6±0.1,44˚.62N×7˚.22E,h5km,Md1.7/3,Error ellipse: s-maj=2.2km s-min=0.8km az=100.0*
*LDG* ***20*** *07:09:57.4±0.1,44˚.62N×7˚.25E,h2km,Md2.6/3,Ml2.6/10, Error ellipse: s-maj=2.2km s-min=1.2km az=62.0*
*GEN* ***20*** *07:09:57.4,44˚.59N×7˚.24E,h13km,ML1.8*
**ISC 20 07:09:56.9±0.8,44˚.61N±0˚.02×7˚.25E±0˚.03,h15km±5km, n30,σ0s39/59,Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DOI** | **San Damiano** | **0.11** | **180** | Pg | | | **Pg** | **07 10 00.5** | **+0.2** |
| DOI | | | | Sg | | | **Sg** | **07 10 02.2** | **-0.3** |
| **DOI** | **San Damiano** | **0.11** | **180** | Pg | | | **Pg** | **07 10 00.5** | **+0.2** |
| DOI | | | | Sg | | | **Sg** | **07 10 02.2** | **-0.3** |
| **PZZ** | **Stroppo** | **0.14** | **222** | Pg | | | **Pg** | **07 10 00.8** | **+0.1** |
| PZZ | | | | Sg | | | **Sg** | **07 10 02.9** | **-0.4** |
| **PZZ** | **Stroppo** | **0.14** | **222** | Pg | | | **Pg** | **07 10 00.8** | **+0.1** |
| PZZ | | | | Sg | | | **Sg** | **07 10 02.9** | **-0.4** |
| **BHB** | **Bricherasio** | **0.23** | **3** | Pg | | | **Pg** | **07 10 02.5** | **+0.5** |
| BHB | | | | Sg | | | **Sb** | **07 10 06.7** | **-0.1** |
| **BHB** | **Bricherasio** | **0.23** | **3** | P | | | **Pg** | **07 10 02.5** | **+0.5** |
| BHB | | | | S | | | **Sg** | **07 10 06.1** | **+0.6** |
| BHB | | | | Sg | | | **Sb** | **07 10 06.7** | **-0.1** |
| **MBDF** | **Montbardon** | **0.36** | **289** | *e*Pg | | | **Pg** | **07 10 04.7** | **+0.5** |
| MBDF | | | | *e*Sg | | | **Sg** | **07 10 08.7** | **-0.6** |
| | 88nm,0.2s | | | | | | | | |
| **MBDF** | **Montbardon** | **0.36** | **289** | *e*Pg | | | **Pg** | **07 10 04.7** | **+0.5** |
| MBDF | | | | *e*Sg | | | **Sg** | **07 10 08.7** | **-0.6** |
| | 44nm,0.2s | | | | | | | | |
| **STV** | **Sant Anna di V** | **0.37** | **171** | P | | | **Pg** | **07 10 04.4** | **0.0** |
| STV | | | | S | | | **Sg** | **07 10 09.1** | **-0.5** |
| **RRL** | **Rocca Remolon** | **0.45** | **314** | P | | | **Pb** | **07 10 06.4** | **-0.3** |
| RRL | | | | S | | | **Sg** | **07 10 12.6** | **+0.6** |
| **SBF** | **Sospel** | **0.76** | **170** | *e*Pg | | | **Pg** | **07 10 12.2** | **+0.3** |
| SBF | | | | *e*Sg | | | **Sg** | **07 10 22.1** | **+0.4** |
| | 32nm,0.3s | | | | | | | | |
| **SBF** | **Sospel** | **0.76** | **170** | *e*Pg | | | **Pb** | **07 10 12.2** | **+0.3** |
| SBF | | | | *e*Sg | | | **Sg** | **07 10 22.1** | **+0.4** |
| | 16nm,0.3s | | | | | | | | |
| **LPG** | **La Plagne** | **0.95** | **339** | *e*Pg | | | **Pb** | **07 10 15.4** | **+0.1** |
| LPG | | | | *e*Sg | | | **Sb** | **07 10 27.6** | **-0.3** |
| | 16nm,0.2s | | | | | | | | |
| **LPG** | **La Plagne** | **0.95** | **339** | *e*Pg | | | **Pb** | **07 10 15.4** | **+0.1** |
| LPG | | | | *e*Sg | | | **Sb** | **07 10 27.6** | **-0.3** |
| | 8.2nm,0.2s | | | | | | | | |
| **LPL** | **La Plagne** | **0.97** | **338** | *e*Pg | | | **Pb** | **07 10 15.8** | **+0.2** |
| LPL | | | | *e*Sg | | | **Sb** | **07 10 27.9** | **-0.5** |
| | 11nm,0.3s | | | | | | | | |
| **LPL** | **La Plagne** | **0.97** | **338** | *e*Pg | | | **Pb** | **07 10 15.8** | **+0.2** |
| LPL | | | | *e*Sg | | | **Sb** | **07 10 27.9** | **-0.5** |
| | 5.7nm,0.3s | | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **288** | *e*Pg | | | **Pn** | **07 10 16.9** | **+0.1** |
| ORIF | | | | *e*Sg | | | **Sb** | **07 10 29.2** | **-0.4** |
| | 13nm,0.2s | | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **288** | *e*Pg | | | **Pn** | **07 10 16.9** | **+0.1** |
| ORIF | | | | *e*Sg | | | **Sb** | **07 10 29.2** | **-0.4** |
| | 6.4nm,0.2s | | | | | | | | |
| **FRF** | **La Foret Royal** | **1.14** | **203** | *e*Pg | | | **Pg** | **07 10 18.9** | **+0.1** |
| FRF | | | | *e*Sg | | | **Sb** | **07 10 33.4** | **+0.6** |
| | 40nm,0.2s | | | | | | | | |
| **FRF** | **La Foret Royal** | **1.14** | **203** | *e*Pg | | | **Pg** | **07 10 18.9** | **+0.1** |
| FRF | | | | *e*Sg | | | **Sb** | **07 10 33.4** | **+0.6** |
| | 20nm,0.2s | | | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.36** | **243** | *e*Pg | | | **Pg** | **07 10 23.1** | **+0.1** |
| SMRF | | | | *e*Sg | | | **Sg** | **07 10 40.8** | **+0.1** |
| | 5.0nm,0.2s | | | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.36** | **243** | *e*Pg | | | **Pg** | **07 10 23.1** | **+0.1** |
| SMRF | | | | *e*Sg | | | **Sg** | **07 10 40.8** | **+0.1** |
| | 2.5nm,0.2s | | | | | | | | |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pn | | | **Pb** | **07 10 22.7** | **+0.3** |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pg | | | **Pg** | **07 10 23.4** | **-0.1** |
| LMR | | | | *e*Sg | | | **Sb** | **07 10 40.4** | **+0.5** |
| | 57nm,0.3s | | | | | | | | |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pn | | | **Pb** | **07 10 22.7** | **+0.3** |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pg | | | **Pg** | **07 10 23.4** | **-0.1** |
| LMR | | | | *e*Sg | | | **Sb** | **07 10 40.4** | **+0.5** |
| | 28nm,0.3s | | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.85** | **278** | *e*Pn | | | **Pn** | **07 10 28.5** | **+0.4** |
| VIVF | | | | *e*Sn | | | **Sn** | **07 10 51.0** | **-0.3** |
| | 3.8nm,0.4s | | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.85** | **278** | *e*Pn | | | **Pn** | **07 10 28.5** | **+0.4** |
| VIVF | | | | *e*Sn | | | **Sn** | **07 10 51.0** | **-0.3** |
| | 1.9nm,0.4s | | | | | | | | |
| **PGF** | **Pioggiola** | **2.42** | **148** | *e*Pn | | | **Pn** | **07 10 36.0** | **-0.1** |
| PGF | | | | *e*Sn | | | **Sn** | **07 11 04.6** | **-0.9** |
| | 4.4nm,0.3s | | | | | | | | |
| **PGF** | **Pioggiola** | **2.42** | **148** | *e*Pn | | | **Pn** | **07 10 36.0** | **-0.1** |
| PGF | | | | *e*Sn | | | **Sn** | **07 11 04.6** | **-0.9** |
| | 2.2nm,0.3s | | | | | | | | |

*DJA* ***20*** *07:12:29.9±0.4,13˚.N±4˚×12˚.5E±˚,h10km,M4.8/54, mb4.9/54,mB5.3/22,Mw(mB)4.8/22*
*MAN* ***20*** *07:12:30, 12˚.88N×124˚.61E,h18km,mb5.6,ML4.6,MS5.0*
*MAN INTENSITY III - VIRAC CATANDUANES; ALLEN N. SAMAR; INTENSITY II - CATARMAN N. SAMAR; LEGASPI CITY; IROSIN SORSOGON.*
*ISCJB* ***20*** *07:12:32.1±0.4, 12˚.88N±0˚.02×124˚.78E±0˚.03,h46km±4km, mb4.6/61,MS4.9/7,Error ellipse: s-maj=5.9km s-min=3.0km az=153.9*
*IDC* ***20*** *07:12:33.1±1.7, 12˚.76N×124˚.80E,h45km±15km,mb4.0/25, mb1 4.1/28,mb1mx4.1/46,mbtmp4.3/28,ML3.5/2,MS4.6/7, Ms1 4.6/7,ms1mx3.9/50,Error ellipse: s-maj=18.3km s-min=9.0km az=78.0*
*MOS* ***20*** *07:12:33.8±1.2, 12˚.75N×124˚.72E,h67km,mb5.0/19,Error ellipse: s-maj=15.7km s-min=7.4km az=109.9*
*BJI* ***20*** *07:12:34.1, 12˚.75N×124˚.83E,h71km,mb4.7/40,mB5.1/32, Ms4.7/32,Ms7 4.3/32*
*GCMT* ***20*** *07:12:35.2±0.5, 12˚.97N×124˚.95E,h68km±4km,MW5.2/59, Moment Tensor Solution. s24,c26; s59,c85; Duration: 1s0 Moment tensor: Scale 10^17^Nm; Mrr0.90±.07; Mθθ-0.07±.05; Mφφ-0.82±.05; Mrθ0.02±.04; Mrφ0.29±.03; Mθφ-0.10±.06; Best double couple: M0.91400×10^17^ NP1:φs162.00000°,δ48.00000°,λ92.00000°. NP2: φs340.00000°,δ42.00000°,λ88.00000°. Principal axes: T 0.9030, Plg87.0000°, Azm91.0000°; N 0.0220, Plg1.0000°, Azm341.0000°; P -0.9250, Plg3.0000°, Azm251.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to surface waves, cutoff=40s.*
*NEIC* ***20*** *07:12:35.2±0.7, 12˚.88N×124˚.82E,h60km±7km,mb4.9/19 Error ellipse: s-maj=7.7km s-min=4.6km az=83.0*
*NEIC Felt [III PIVS] at Allen and [II PIVS] at Catarman. Also felt [III PIVS] at Virac, Catanduanes and [II PIVS] at Irosin and Legaspi, Luzon.*
*BKK* ***20*** *07:13:06.3±2.4, 12˚.N±14˚×12˚.4E±1˚.8,h225km±18km, M4.8/10,mB4.9/4,mb4.5/10,MLv5.1/1,Mw(mB)4.2/4*
**ISC 20 07:12:37.0±0.3,12˚.82N±0˚.03×124˚.73E±0˚.05,h74km±2km, n201,σ1s77/220,mb4.7/61,10C-8D,Samar**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CNP** | **Catarman** | **0.31** | **192** | *e*P | | | Pn | 07 12 39.6 | -9.2 |
| CNP | | | | *e*S | | | Sn | 07 12 46.7 | -1.1 |
| **PVCP** | **Virac** | **0.96** | **324** | *e*P | | | Pn | 07 12 46.5 | -8.7 |
| PVCP | | | | *i*S | | | **Sn** | **07 13 03.9** | **-4.9** |
| **PLP** | **Palo** | **1.66** | **172** | *e*P | | | Pn | 07 12 59.2 | -5.0 |
| PLP | | | | *e*S | | | **Sn** | **07 13 21.9** | **-3.0** |
| **OCLP** | **Ormoc** | **1.76** | **184** | *e*P | | | Pn | 07 13 00.8 | -4.8 |
| **RCP** | **Roxas** | **2.31** | **237** | *e*P | | | **Pn** | **07 13 10.4** | **-2.6** |
| RCP | | | | *e*S | | | **Sn** | **07 13 40.0** | **-0.5** |
| **GQP** | **Guinayangan** | **2.47** | **296** | *e*P | | | Pn | 07 13 10.8 | -4.3 |
| GQP | | | | *e*S | | | **Sn** | **07 13 41.0** | **-3.3** |
| **LLP** | **Lapu-Lapu** | **2.60** | **197** | *e*P | | | Pn | 07 13 12.8 | -4.0 |
| LLP | | | | *e*S | | | **Sn** | **07 13 47.5** | **+0.2** |
| **MSLP** | **Maasin** | **2.67** | **177** | *e*P | | | **Pn** | **07 13 15.2** | **-2.6** |
| **GUIM** | **Jordan** | **3.02** | **224** | *e*P | | | **Pn** | **07 13 19.9** | **-2.7** |
| **SCPH** | **Surigao** | **3.11** | **166** | *e*P | | | **Pn** | **07 13 20.6** | **-3.2** |
| SCPH | | | | *e*S | | | **Sn** | **07 13 59.6** | **-0.2** |
| **TBP** | **Tagbilaran** | **3.22** | **195** | *e*P | | | Pn | 07 13 21.0 | -4.3 |
| TBP | | | | *e*S | | | Sn | 07 13 30.7 | -32 |
| **LQP** | **Lukban** | **3.36** | **293** | *e*P | | | Pn | 07 13 21.9 | -5.5 |
| **BUTP** | **Butuan** | **3.92** | **167** | *e*P | | | **Pn** | **07 13 33.5** | **-1.4** |
| **DCPH** | **Dipolog City** | **4.42** | **198** | *e*P | | | Pn | 07 13 38.3 | -3.3 |
| **PCPH** | **Palayan** | **4.46** | **308** | *e*P | | | Pn | 07 13 36.5 | -5.6 |
| PCPH | | | | *e*S | | | **Sn** | **07 14 28.6** | **-4.2** |
| **BIPH** | **Bislig** | **4.88** | **161** | *i*P | | | **Pn** | **07 13 46.3** | **-1.6** |
| BIPH | | | | *e*S | | | **Sn** | **07 14 43.1** | **0.0** |
| **BUKP** | **Musuan** | **4.92** | **176** | *e*P | | | **Pn** | **07 13 46.1** | **-2.5** |
| **PAGZ** | **Pagadian** | **5.11** | **195** | *e*P | | | Pn | 07 13 46.7 | -4.5 |
| **DAV** | **Davao City (W)** | **5.77** | **172** | P | | | Pn | 07 13 56.9 | -3.3 |
| | 64nm,0.3s,baz=230,slow=14,SNR=1.9 | | | | | | | | |
| DAV | | | | | LR | | LR | 07 16 47.4 | |
| | comp=Z,2μm,20.1s,baz=308,slow=44 | | | | | | | | |
| **DAV** | **Davao City (W)** | **5.77** | **172** | *e*Pn | | | **Pn** | **07 13 59.9** | **-0.3** |
| **SZP** | **Santa** | **6.26** | **319** | *e*Pn | | | **Pn** | **07 14 06.1** | **-0.7** |
| **MYLDM** | **Land Datu** | **9.77** | **220** | *e*Pn | | | **Pn** | **07 14 55.3** | **+0.5** |
| **SSLB** | **Suanglung** | **11.48** | **342** | *e*Pn | | | Pn | 07 15 14.0 | -4.1 |
| **GTOI** | **Gorontalo** | **12.22** | **188** | P | | | Pn | 07 15 32.0 | +3.8 |
| | 33nm,1.1s,498nm | | | | | | | | |
| **TNTI** | **Ternate** | **12.25** | **167** | *e*Pn | | | **Pn** | **07 15 26.6** | **-2.0** |
| **MRSI** | **Marisa** | **12.57** | **193** | P | | | P | 07 15 38.1 | -3.6 |
| | 33nm,1.0s,1μm | | | | | | | | |
| **MPSI** | **Mapaga** | **13.29** | **201** | P | | | **P** | **07 15 48.2** | **-1.5** |
| | 18nm,1.3s | | | | | | | | |
| **LBMI** | **Labuha** | **13.65** | **168** | P | | | P | 07 16 01.0 | +7.3 |
| **LUWI** | **Luwuk** | **13.91** | **188** | *e*Pn | | | **Pn** | **07 15 52.8** | **+2.1** |
| | 172nm,1.0s | | | | | | | | |
| **APSI** | **Ampana** | **13.98** | **193** | P | | | **P** | **07 15 56.1** | **-1.3** |
| | 204nm,1.2s,2μm | | | | | | | | |
| **JOW** | **Kunigami** | **14.33** | **13** | P | | | Pn | 07 15 52.8 | -3.5 |
| | 0.3nm,0.3s,baz=111,slow=26,SNR=9.0 | | | | | | | | |
| **SWI** | **Sorong** | **15.06** | **154** | P | | | **P** | **07 16 08.1** | **-1.2** |
| | 31nm,1.0s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **15.59** | **295** | P | | | **Pn** | **07 16 13.0** | **+0.5** |
| QIZ | | | | S | | | **Sn** | **07 19 00.3** | **-4.2** |
| QIZ | | | | PMZ | | | | | |
| | 36nm,2.2s | | | | | | | | |
| **DLV** | **T Lat** | **15.89** | **269** | *e*Pn | | | **Pn** | **07 16 17.4** | **+0.8** |
| | 44nm,1.1s | | | | | | | | |
| **BKB** | **Balikpapan** | **16.00** | **210** | P | | | **P** | **07 16 21.8** | **+1.9** |
| | 86nm,1.1s | | | | | | | | |
| **NLAI** | **Namlea** | **16.12** | **171** | P | | | **P** | **07 16 21.5** | **+0.3** |
| | 48nm,1.3s | | | | | | | | |
| **TTSI** | **Tana Toraja** | **16.50** | **198** | P | | | **P** | **07 16 28.4** | **+3.1** |
| | 139nm,1.1s,1μm | | | | | | | | |
| **MSAI** | **Masohi** | **16.59** | **165** | P | | | **P** | **07 16 27.8** | **+1.4** |
| | 31nm,1.2s | | | | | | | | |
| **AAI** | **Ambon** | **16.75** | **168** | P | | | **P** | **07 16 30.3** | **+2.1** |
| | 44nm,1.1s,2μm | | | | | | | | |
| **MTKI** | **Muara Teweh, K** | **16.80** | **216** | P | | | **P** | **07 16 31.9** | **+3.2** |
| | 5μm,0.7s | | | | | | | | |
| **KDI** | **Kendari** | **16.80** | **187** | P | | | **P** | **07 16 32.5** | **+3.8** |
| | 40nm,0.7s | | | | | | | | |
| **RKPI** | **Ransiki, Papua** | **17.05** | **146** | P | | | **P** | **07 16 32.4** | **+1.0** |
| | 129nm,0.8s,8μm | | | | | | | | |
| **FAKI** | **Fak Fak** | **17.32** | **154** | P | | | **Pn** | **07 16 33.7** | **-0.5** |
| | baz=12,SNR=4.7 | | | | | | | | |
| **FAKI** | **Fak Fak** | **17.32** | **154** | P | | | **Pn** | **07 16 32.7** | **-1.4** |
| | 41nm,1.5s | | | | | | | | |
| **SPSI** | **Sidrap Palu** | **17.39** | **197** | P | | | **P** | **07 16 37.6** | **+2.4** |
| | 48nm,0.9s,622nm | | | | | | | | |
| **KBKI** | **Kotabaru** | **18.13** | **209** | P | | | Pn | 07 16 50.8 | +6.9 |
| | 39nm,1.0s,979nm | | | | | | | | |
| **KSM** | **Kuching** | **18.20** | **233** | *e*P | | | **Pn** | **07 16 44.5** | **-0.3** |
| | 67nm,1.1s | | | | | | | | |
| **KAPI** | **Kappang** | **18.39** | **196** | P | | | **P** | **07 16 44.4** | **-1.8** |
| | 0.6nm,0.3s,baz=87,slow=5.1,SNR=6.6 | | | | | | | | |
| **KAPI** | **Kappang** | **18.39** | **196** | *e*P | | | **Pn** | **07 16 47.4** | **+0.3** |
| | 80nm,1.1s | | | | | | | | |
| **BKSI** | **Bulukumba** | **18.59** | **195** | P | | | **Pn** | **07 16 49.3** | **-0.2** |
| | 30nm,1.4s,507nm | | | | | | | | |
| **BBKI** | **Banjar Baru** | **18.92** | **212** | P | | | Pn | 07 17 02.4 | +8.9 |
| **NJ2** | **Nanjing** | **19.89** | **345** | *e*P | | | **P** | **07 17 02.8** | **+0.3** |
| NJ2 | | | | PMZ | | | | | |
| | 30nm,0.8s | | | | | | | | |
| **WHN** | **Wuhan** | **20.08** | **333** | P | | | **P** | **07 17 05.1** | **+0.5** |
| **SMPI** | **Sarmi** | **20.22** | **136** | P | | | **P** | **07 17 04.7** | **-1.5** |
| | 42nm,1.6s | | | | | | | | |
| **JNU** | **Nakatsue** | **20.98** | **15** | P | | | **P** | **07 17 12.9** | **-1.3** |
| | 17nm,0.9s,baz=154,slow=5.7,SNR=4.8 | | | | | | | | |
| JNU | | | | | LR | | LR | 07 24 32.5 | |
| | comp=Z,312nm,20.6s,baz=164,slow=34 | | | | | | | | |
| **MMRI** | **Maumere** | **21.46** | **187** | *e*P | | | **P** | **07 17 18.7** | **-0.7** |
| **GENI** | **Genyem** | **21.66** | **134** | P | | | **P** | **07 17 24.0** | **+2.3** |
| | 89nm,1.3s,2μm | | | | | | | | |
| **GYA** | **Guiyang** | **21.73** | **311** | P | | | **P** | **07 17 22.8** | **+0.4** |
| GYA | | | | pP | | | **pP** | **07 17 38.4** | **+0.6** |
| GYA | | | | PP | | | **PnPn** | **07 17 50.8** | **+4.0** |
| GYA | | | | S | | | **S** | **07 21 14.0** | **-5.0** |
| GYA | | | | sS | | | **sS** | **07 21 41.3** | **-2.9** |
| GYA | | | | SS | | | **SnSn** | **07 21 55.8** | **+6.7** |
| GYA | | | | PMZ | | | | | |
| | 20nm,0.8s | | | | | | | | |
| GYA | | | | PMZ | | | | | |
| | 120nm,4.8s | | | | | | | | |
| GYA | | | | LN | | | | | |
| | 520nm,15.9s | | | | | | | | |
| GYA | | | | LE | | | | | |
| | 460nm,16.5s | | | | | | | | |
| GYA | | | | LZ | | | | | |
| | 580nm,15.8s | | | | | | | | |
| **KMMI** | **Kalianget** | **22.45** | **209** | P | | | **P** | **07 17 32.9** | **+2.8** |
| | 98nm,1.1s,2μm | | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **22.79** | **200** | P | | | P | 07 17 40.1 | +6.4 |
| | 56nm,1.4s | | | | | | | | |
| **SRBI** | **Singaraja** | **22.82** | **205** | P | | | **P** | **07 17 36.1** | **+2.1** |
| | 92nm,1.2s,1μm | | | | | | | | |
| **TPI** | **Tanjungpandan** | **22.96** | **229** | P | | | P | 07 17 41.6 | +6.2 |
| | 42nm,1.2s | | | | | | | | |
| **TJN** | **Taejon** | **23.58** | **5** | *e*P | | | **P** | **07 17 39.9** | **-1.1** |
| **PPBI** | **Pangkal Pinang** | **23.71** | **232** | P | | | P | 07 17 49.6 | +7.1 |
| | 18nm,1.1s | | | | | | | | |
| **NGJI** | **Ngawi** | **24.00** | **214** | P | | | **P** | **07 17 48.3** | **+3.3** |
| | 118nm,0.9s | | | | | | | | |
| **KMI** | **Kunming** | **24.09** | **304** | P | | | **P** | **07 17 47.9** | **+1.9** |
| KMI | | | | S | | | **S** | **07 21 56.4** | **-2.3** |
| KMI | | | | SS | | | **SnSn** | **07 22 52.3** | **+5.4** |
| KMI | | | | PMZ | | | | | |
| | 10.0nm,1.6s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | 630nm,5.7s | | | | | | | | |
| KMI | | | | LN | | | | | |
| | 450nm,17.4s | | | | | | | | |
| KMI | | | | LE | | | | | |
| | 610nm,16.2s | | | | | | | | |
| KMI | | | | LZ | | | | | |
| | 610nm,15.9s | | | | | | | | |
| **PWJI** | **Pagerwojo** | **24.36** | **212** | P | | | **P** | **07 17 51.8** | **+3.5** |
| | 46nm,2.2s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **24.68** | **6** | P | | | **P** | **07 17 49.8** | **-1.2** |
| **KSAR** | **Wonju Array Be** | **24.68** | **6** | P | | | **P** | **07 17 49.8** | **-1.2** |
| **WOJI** | **Wonju Array Si** | **24.68** | **6** | P | | | **P** | **07 17 49.8** | **-1.2** |
| **WOJI** | **Wonogiri, Jawa** | **24.68** | **214** | P | | | P | 07 17 56.7 | +5.5 |
| | 110nm,1.0s,6μm | | | | | | | | |
| **KSRS** | **Korea Array** | **24.70** | **6** | P | | | **P** | **07 17 49.8** | **-1.4** |
| | 6.5nm,0.8s,baz=191,slow=9.9,SNR=15 | | | | | | | | |
| KSRS | | | | | LR | | LR | 07 28 07.1 | |
| | comp=Z,172nm,19.7s,baz=198,slow=38 | | | | | | | | |
| **KS01** | **Wonju Array Si** | **24.72** | **6** | *e*P | | | **P** | **07 17 51.1** | **-0.2** |
| **IPM** | **Ipoh** | **24.84** | **253** | *e*P | | | **P** | **07 17 53.1** | **+0.4** |
| | 155nm,1.9s | | | | | | | | |
| **KULM** | **Kulim** | **24.91** | **255** | *e*P | | | **P** | **07 17 52.4** | **-1.0** |
| | 22nm,0.9s | | | | | | | | |
| **UGM** | **Wanagama** | **24.97** | **215** | P | | | P | 07 18 01.7 | +7.8 |
| | baz=21,SNR=3.9 | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **25.42** | **286** | *e*P | | | **P** | **07 17 57.1** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **25.45** | **286** | P | | | **P** | **07 17 56.6** | **-1.6** |
| | 3.1nm,0.8s,baz=94,slow=7.4,SNR=11 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.45** | **286** | *e*P | | | **P** | **07 17 56.4** | **-1.8** |
| CMAR | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **XAN** | **Xi'an** | **25.56** | **328** | P | | | **P** | **07 17 57.1** | **-2.0** |
| XAN | | | | | PMZ | | | | |
| | comp=Z,45nm,0.9s | | | | | | | | |
| XAN | | | | | PMZ | | | | |
| | comp=Z,420nm,6.0s | | | | | | | | |
| **MTN** | **Manton Dam** | **26.27** | **166** | P | | | **P** | **07 18 05.7** | **+0.1** |
| | baz=21,SNR=4.7 | | | | | | | | |
| **CD2** | **Chengdu** | **26.43** | **316** | *e*P | | | **P** | **07 18 06.8** | **-0.2** |
| CD2 | | | | pP | | | **pP** | **07 18 23.5** | **-0.8** |
| CD2 | | | | sP | | | **sP** | **07 18 32.1** | **-1.0** |
| CD2 | | | | S | | | **S** | **07 22 36.3** | **+0.8** |
| CD2 | | | | sS | | | **sS** | **07 23 05.6** | **+0.2** |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,820nm,5.4s | | | | | | | | |
| CD2 | | | | LN | | | | | |
| | comp=Z,2μm,13.7s | | | | | | | | |
| CD2 | | | | LE | | | | | |
| | comp=Z,1μm,14.2s | | | | | | | | |
| CD2 | | | | LZ | | | | | |
| | comp=Z,1μm,16.2s | | | | | | | | |
| **KDU** | **Kakadu** | **26.48** | **163** | P | | | **P** | **07 18 05.5** | **-1.9** |
| | baz=21,SNR=5.9 | | | | | | | | |
| **MAJO** | **Matsushiro** | **26.55** | **25** | P | | | **P** | **07 18 07.9** | **-0.1** |
| MAJO | | | | | pmax | | pmax | | |
| | comp=Z,99nm,1.5s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **26.55** | **25** | P | | | **P** | **07 18 05.1** | **-2.9** |
| | comp=Z,2.0nm,0.8s,baz=209,slow=9.8 | | | | | | | | |
| **PPI** | **Padang Panjang** | **27.50** | **243** | P | | | P | 07 18 23.6 | +6.8 |
| | comp=Z,29nm,1.5s | | | | | | | | |
| **BJI** | **Beijing** | **28.15** | **346** | P | | | **P** | **07 18 23.1** | **+0.9** |
| BJI | | | | | PMZ | | | | |
| | comp=Z,12nm,1.8s | | | | | | | | |
| **LZH** | **Lanzhou** | **29.84** | **325** | *e*P | | | **P** | **07 18 38.1** | **+0.6** |
| LZH | | | | pP | | | **pP** | **07 18 54.9** | **-0.1** |
| LZH | | | | sP | | | **sP** | **07 19 03.5** | **-0.2** |
| LZH | | | | PP | | | **PnPn** | **07 19 38.0** | **+1.5** |
| LZH | | | | *e*S | | | **S** | **07 23 29.0** | **-0.3** |
| LZH | | | | sS | | | **sS** | **07 23 58.5** | **-0.8** |
| LZH | | | | PMZ | | | | | |
| | comp=Z,39nm,1.3s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,150nm,4.9s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | comp=Z,910nm,13.0s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | comp=Z,760nm,13.3s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | comp=Z,1μm,16.7s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **30.22** | **340** | *e*P | | | **P** | **07 18 41.4** | **+0.7** |
| HHC | | | | pP | | | **pP** | **07 18 59.0** | **+0.8** |
| HHC | | | | sP | | | **sP** | **07 19 08.8** | **+1.9** |
| HHC | | | | PP | | | **PnPn** | **07 19 44.4** | **+3.0** |
| HHC | | | | S | | | **S** | **07 23 34.8** | **-0.2** |
| HHC | | | | sS | | | **sS** | **07 24 06.3** | **+1.3** |
| HHC | | | | ScS | | | **ScS** | **07 29 08.5** | **-3.4** |
| HHC | | | | PMZ | | | | | |
| | comp=Z,32nm,0.6s | | | | | | | | |
| HHC |

ASAR PcP **PcP** **07 21 59.3 -1.2**
comp=Z,0.6nm,0.3s,baz=341,slow=3.1,SNR=2.2
ASAR S **S** **07 25 25.8 +0.4**
comp=Z,2.6nm,1.0s,baz=346,slow=14,SNR=9.2
ASAR ScP **ScP** **07 25 42.1 +0.9**
comp=Z,1.7nm,0.9s,baz=336,slow=1.1,SNR=6.9
**TAPN Taplejung 37.49 298** *eP* **P** **07 19 42.7 -1.5**
**ODAN Odare 37.64 297** *eP* **P** **07 19 43.8 -1.6**
comp=Z,38nm,0.6s
**WRKA Warakurna 37.78 175** P **P** **07 19 44.9 -1.4**
baz=32,SNR=70
**ULN Ulaanbaatar 37.93 341***c iP* **P** **07 19 47.0 -0.4**
ULN pmax pmax
comp=Z,7.0nm,0.8s
**ULN Ulaanbaatar 37.93 341** *eP* **P** **07 19 47.1 -0.4**
comp=Z,23nm,1.0s
**SONM Songino Array 38.12 340** P **P** **07 19 48.5 -0.4**
comp=Z,3.2nm,0.7s,baz=156,slow=9.4,SNR=15
**SONA1 Songino Array 38.13 340** *eP* **P** **07 19 48.3 -0.7**
**RAMN Ramite 38.35 297** *eP* **P** **07 19 50.2 -1.1**
comp=Z,29nm,0.6s
**GUN Gumba 39.21 299** *eP* **P** **07 19 57.2 -1.4**
**PKI Pulchoki 39.53 298** *eP* **P** **07 19 59.4 -1.9**
comp=Z,19nm,0.6s
**PKIN Phulchoki 39.54 298** *eP* **P** **07 19 59.3 -2.0**
comp=Z,14nm,0.5s
**MEEK Meekatharra 39.67 189** P **P** **07 20 00.4 -1.5**
baz=34,SNR=7.0
**KKN Kakani 39.69 298** *eP* **P** **07 20 01.0 -1.5**
**DMN Daman 39.80 298** *eP* **P** **07 20 02.1 -1.3**
**GKN Gorkha 40.30 298** *eP* **P** **07 20 05.4 -2.0**
comp=Z,22nm,0.7s
**H11S3 WAKE ISLAND Hy 40.72 77** T T 08 03 47.0
baz=265,slow=77,SNR=618
**H11S1 WAKE ISLAND Hy 40.73 77** T T 08 03 46.4
baz=265,slow=77,SNR=243
**H11S2 WAKE ISLAND Hy 40.74 77** T T 08 03 49.0
baz=265,slow=77,SNR=309
**H11N1 WAKE ISLAND Hy 40.97 75** T T 08 04 05.2
baz=267,slow=75,SNR=2095
**H11N2 WAKE ISLAND Hy 40.97 75** T T 08 04 05.7
baz=267,slow=75,SNR=1697
**H11N3 WAKE ISLAND Hy 40.98 75** T T 08 04 06.6
baz=267,slow=75,SNR=2285
**KOLN Koldanda 41.13 298** *eP* **P** **07 20 13.3 -1.1**
comp=Z,19nm,0.7s
**ZAK Zakamensk 41.36 339** *eP* P 07 20 20.9 +5.1
ZAK pmax pmax
comp=Z,5.0nm,1.6s
**TLY Talaya 42.34 341** P **P** **07 20 23.4 -0.3**
comp=Z,3.6nm,0.7s,baz=236,slow=16,SNR=7.3
**TLY Talaya 42.34 341** *eP* **P** **07 20 23.6 -0.1**
TLY pmax pmax
comp=Z,12nm,0.9s
**TLY Talaya 42.34 341** *eP* **P** **07 20 23.6 -0.1**
comp=Z,12nm,0.9s
**QLP Quilpie 43.51 154** P **P** **07 20 31.8 -1.6**
baz=38,SNR=4.3
**WMQ Urumqi 44.30 321** P **P** **07 20 39.0 -0.6**
WMQ sP **sP** **07 21 06.0 -0.4**
WMQ PP **PP** **07 22 26.0 +1.8**
WMQ S S 07 27 00.0 -8.3
WMQ SS SS 07 30 18.0 -11
WMQ PMZ
comp=Z,21nm,1.0s
WMQ PMZ
comp=Z,18nm,5.0s
WMQ LN
comp=Z,48nm,18.0s
WMQ LE
comp=Z,26nm,17.0s
WMQ LZ
comp=Z,39nm,17.0s
**BOD Bodaibo 45.65 352** *eP* **P** **07 20 53.1 +3.1**
BOD pmax pmax
comp=Z,8.0nm,1.3s
**BBOO Buckleboo 46.64 167** P **P** **07 20 57.1 -1.0**
baz=41,SNR=25
**BBOO Buckleboo 46.64 167** *eP* **P** **07 20 57.1 -1.0**
comp=Z,35nm,0.9s
**HTT Hallett 47.94 164** P P 07 21 03.3 -5.0
baz=43,SNR=6.4
**PETK Petropavlovsk- 47.99 26** P **P** **07 21 07.8 -0.6**
comp=Z,3.5nm,0.8s,baz=222,slow=1.9,SNR=2.1
**CMSA Cobar Meteorol 48.47 156** P **P** **07 21 12.3 0.0**
baz=43,SNR=24
**MK01 Makanchi Array 49.08 322** *eP* **P** **07 21 17.4 +0.5**
**MKAR Makanchi Array 49.10 322** P **P** **07 21 17.3 +0.2**
comp=Z,2.9nm,0.7s,baz=116,slow=8.6,SNR=14
**MKAR Makanchi Array 49.10 322***ceP* **P** **07 21 17.5 +0.5**
MKAR pmax pmax
comp=Z,3.0nm,0.7s
**MKAR Makanchi Array 49.10 322** *eP* **P** **07 21 18.8 +1.7**
**MAKZ Makanchi 49.30 322** *eP* **P** **07 21 19.0 +0.5**
**ARMA Armidale 50.18 149** P **P** **07 21 26.4 +0.9**
baz=45,SNR=5.5
**ARMA Armidale 50.18 149** *eP* **P** **07 21 26.6 +1.1**
comp=Z,50nm,1.6s
**KSH Kashi 50.42 311** P **P** **07 21 29.4 +2.1**
KSH *ep*P **pP** **07 21 48.3 +2.4**
KSH *es*P **sP** **07 21 56.8 +2.5**
KSH *eP*P **PP** **07 23 27.3 +3.7**
KSH PcS **PcS** **07 26 43.3 +1.2**
KSH S **S** **07 28 36.4 +0.9**
KSH ScS **ScS** **07 31 08.9 -2.8**
KSH SS **SS** **07 32 10.8 +0.6**
KSH PMZ
comp=Z,220nm,6.2s
KSH LN
comp=Z,240nm,6.0s
KSH LE
comp=Z,250nm,9.0s
KSH LZ
comp=Z,300nm,6.8s
**ZAA0 Zalesovo Array 51.68 331** *eP* **P** **07 21 35.5 -0.8**
**ZALV Zalesovo Beam 51.68 331** P **P** **07 21 35.8 -0.5**
comp=Z,4.8nm,0.7s,baz=118,slow=8.4,SNR=11
**ARPS Mount Arapiles 51.89 163** P **P** **07 21 37.3 -0.7**
baz=47,SNR=7.6
**YNG Young 51.98 155** P **P** **07 21 39.4 +0.6**
baz=47,SNR=8.0
**AAK Ala-Archa 52.47 314** P **P** **07 21 42.4 -0.3**
comp=Z,0.4nm,0.3s,baz=180,slow=15,SNR=2.0
**NVS Novosibirsk 52.96 331** *eP* **P** **07 21 45.4 -0.3**
NVS pmax pmax
comp=Z,15nm,1.3s
NVS pmax pmax
comp=N,6.0nm,0.5s
NVS pmax pmax
comp=E,1.0nm,0.3s
**CAN Canberra 53.11 155** *eP* **P** **07 21 47.7 +0.5**
CAN pmax pmax
comp=Z,23nm,1.1s
**CAN Canberra 53.11 155** *eP* **P** **07 21 47.6 +0.5**
comp=Z,23nm,1.1s
**KURK Kurchatov 53.13 325** *eP* **P** **07 21 47.1 0.0**
KURK pmax pmax
comp=Z,70nm,0.9s
**KURK Kurchatov 53.13 325** P **P** **07 21 47.2 +0.1**
comp=Z,159nm,0.7s,SNR=10
**KURK Kurchatov 53.13 325** *eP* **P** **07 21 47.1 0.0**
comp=Z,70nm,0.9s
**CNB Canberra Magne 53.26 155** P **P** **07 21 48.9 +0.7**
baz=48,SNR=6.3
**TOO Toolangi 53.78 160** P **P** **07 21 52.2 +0.1**
baz=49,SNR=4.8
**KBL Kabul 54.67 303** *eP* **P** **07 21 58.6 -0.3**
KBL pmax pmax
comp=Z,9.0nm,0.7s
**KBL Kabul 54.67 303** *eP* **P** **07 21 58.6 -0.3**
comp=Z,8.9nm,0.7s
**KK31 Karatay Array 55.41 314** P **P** **07 22 03.0 -0.8**
KK31 pmax pmax
comp=Z,2.0nm,0.5s
**KKAR Karatay Array 55.41 314** *eP* **P** **07 22 03.6 -0.2**
**KKAR Karatay Array 55.41 314** *eP* **P** **07 22 03.6 -0.2**
**BVA0 Borovoye Array 58.73 325** *i* P **P** **07 22 27.3 +0.2**
BVA0 pmax pmax
comp=Z,15nm,1.2s
**BVAR Borovoye Array 58.73 325** P **P** **07 22 27.0 -0.1**
comp=Z,3.8nm,0.5s,baz=116,slow=5.7,SNR=23
BVAR PcP **PcP** **07 23 16.2 0.0**
comp=Z,2.1nm,0.8s,baz=102,slow=6.6,SNR=1.1
**BRVK Borovoye 58.80 325** *i iP* **P** **07 22 27.9 +0.4**
BRVK pmax pmax
comp=Z,8.0nm,1.0s

**BRVK Borovoye 58.80 325** *eP* **P** **07 22 27.2 -0.4**
comp=Z,17nm,0.8s
**GEYT Alibeck 63.83 306** P **P** **07 23 01.5 -0.3**
comp=Z,3.5nm,0.3s,baz=67,slow=23,SNR=4.5
**AB31 Akbulak array 63.98 319** *i* P **P** **07 23 01.9 -0.6**
AB31 pmax pmax
comp=Z,1.0nm,0.4s
**ABKAR Akbulak array 63.98 319** *eP* **P** **07 23 02.2 -0.4**
**SVE Sverdlovsk 65.27 327** *eP* P 07 23 21.1 +10
SVE pmax pmax
comp=Z,24nm,1.0s
**ARU Arti 66.28 326***d iP* **P** **07 23 16.8 -0.5**
ARU 07 25 43.0
ARU S **S** **07 32 04.7 +3.7**
ARU pmax pmax
comp=Z,6.0nm,0.6s
**ARU Arti 66.28 326** *eP* **P** **07 23 17.0 -0.4**
comp=Z,13nm,0.6s
**ZEI Tsey 74.72 311** *eP* P 07 24 18.9 +10
ZEI pmax pmax
comp=Z,12nm,0.4s
**RAYN Ar Rayn 75.24 291** P **P** **07 24 12.0 -0.4**
comp=Z,128nm,0.7s,SNR=9.4
**RAYN Ar Rayn 75.24 291** *eP* **P** **07 24 12.1 -0.4**
comp=Z,25nm,1.0s
**KDAK Kodiak Island 75.36 33** P **P** **07 24 12.1 -0.3**
comp=Z,5.9nm,0.9s,baz=254,slow=7.4,SNR=2.6
**KBZ Khabaz 75.39 312** LR LR 08 02 27.9
comp=Z,3μm,19.4s,baz=322,slow=40
**BPAW Bear Paw Mtn. 76.07 27** *eP* **P** **07 24 15.9 -0.4**
comp=Z,3.0nm,1.0s
**MLY Manley 76.17 26** *eP* **P** **07 24 17.9 +1.0**
comp=Z,9.6nm,0.9s
**COLD Coldfoot 76.37 24** *eP* **P** **07 24 17.9 -0.1**
comp=Z,6.1nm,1.0s
**KLMR Klimovskoe 76.58 330** *eP* **P** **07 24 19.2 0.0**
KLMR pmax pmax
comp=Z,40nm,1.9s
**MCK McKinley 76.99 27** *eP* **P** **07 24 21.3 -0.3**
**MCK McKinley 76.99 27** *eP* **P** **07 24 21.3 -0.3**
**ILAR Eielson Array 77.82 26** P **P** **07 24 25.4 -0.8**
comp=Z,0.8nm,1.0s,baz=249,slow=5.9,SNR=5.2
**OBN Obninsk 78.56 324** LR LR 07 59 58.2
comp=Z,2μm,18.0s,baz=329,slow=36
**ANN Anapa 79.19 314** *eP* **P** **07 24 31.6 -2.5**
ANN *e**PP **PcP** **07 24 43.6 +1.4**
ANN *e* 07 27 31.8
ANN *eS* **S** **07 34 29.3 +1.1**
ANN *eS*S **SS** **07 39 38.0 +2.4**
ANN pmax pmax
comp=Z,49nm,1.3s
ANN MLR MLR
comp=N,1μm,17.0s
ANN MLR MLR
comp=E,3μm,17.0s
ANN MLR MLR
comp=Z,4μm,17.0s
**ARCES ARCESS Array B 81.30 339** P **P** **07 24 45.4 +0.5**
comp=Z,2.1nm,0.7s,baz=77,slow=6.8,SNR=11
**INK Inuvik 82.48 22** P **P** **07 24 51.3 +0.2**
comp=Z,2.8nm,0.9s,baz=243,slow=2.3,SNR=2.8
**MMAI Mount Meron Ar 82.58 302** LR LR 08 04 52.0
comp=Z,994nm,20.6s,baz=315,slow=38
**BRTR Keskin Array B 82.76 309** P **P** **07 24 52.9 -0.5**
comp=Z,0.9nm,0.6s,baz=92,slow=4.2,SNR=4.9
**BRTR Keskin Array B 82.76 309***ceP* **P** **07 24 53.7 +0.3**
BRTR pmax pmax
comp=Z,1.0nm,0.6s
**FINES FINESS Array B 82.95 331** P **P** **07 24 52.9 -0.8**
comp=Z,2.5nm,0.8s,baz=90,slow=5.7,SNR=7.2
**FINES FINESS Array B 82.95 331** *i* P **P** **07 24 55.2 +1.5**
FINES pmax pmax
comp=Z,3.0nm,0.8s
**EIL Elat 83.58 299** LR LR 08 08 04.5
comp=Z,465nm,19.9s,baz=336,slow=40
**AKASG Malin Array Be 83.65 320** P **P** **07 24 56.6 -0.9**
comp=Z,0.5nm,0.5s,baz=60,slow=4.6,SNR=2.4
**KIEV Kiev 83.66 320** P **P** **07 24 59.0 +1.4**
KIEV pmax pmax
comp=Z,5.0nm,1.0s
**BUR04 Bucovina Ar. S 86.95 318** *eP* **P** **07 25 14.5 +0.3**
**NB2 NORSAR Subarra 89.82 333** P **P** **07 25 28.0 +0.6**
comp=Z,2.6nm,0.9s,baz=62,slow=5.3
**NOA NORSAR Array B 89.82 333** P **P** **07 25 27.6 +0.1**
comp=Z,0.8nm,0.6s,baz=60,slow=7.9,SNR=2.5
**YKA Yellowknife Ar 92.05 24** P **P** **07 25 37.6 -0.1**
comp=Z,0.6nm,0.7s,baz=309,slow=4.9,SNR=2.8
**VNDA Vanda 92.63 172** P **P** **07 25 39.9 0.0**
comp=Z,0.4nm,0.5s,baz=307,slow=12,SNR=3.7
**H06N1 SOCORRO T-PHASE 96.71 61** T T 09 38 52.3
SNR=7.5
**H06E1 SOCORRO T-PHASE 96.79 61** T T 09 38 55.1
SNR=6.3
**LPAZ La Paz 167.08 107** PKP **PKPdf** **07 32 35.7 -0.4**
comp=Z,1.0nm,1.0s,baz=297,slow=4.5,SNR=3.3

*ISK **20** 07:16:07.5, 37.26N×27.91E, h29km, MD2.2*
*ISCJB **20** 07:16:08.7±0.6, 37.33N±0.04×27.89E±0.04, h0km, Error ellipse: s-maj=5.3km s-min=4.4km az=156.2*
*DDA **20** 07:16:08.7, 37.30N×27.88E, h7km, Md2.6*
*CSEM **20** 07:16:08.9±0.2, 37.32N×27.90E, h1km, MD2.2, Error ellipse: s-maj=3.8km s-min=3.1km az=144.0, Mining explosion.*

**ISC 20 07:16:09.1±1.3, 37.32N±0.03×27.90E±0.03, h0km, n12, σ0.6 s8/22, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.36** | **121** | *eP*G | **Pg** | **07 16 15.8** | **-0.2** |
| YER | | | | *eS*G | **Sg** | **07 16 21.7** | **+1.0** |
| **YER** | **Yerkesik** | **0.36** | **121** | *eP*g | **Pg** | **07 16 15.8** | **-0.2** |
| YER | | | | *eS*g | **Sg** | **07 16 21.7** | **+1.0** |
| **BDRM** | **Kayabasi** | **0.44** | **235** | *i* P | **Pg** | **07 16 17.0** | **-0.6** |
| BDRM | | | | *i* S | **Sg** | **07 16 22.9** | **-0.4** |
| **BDRM** | **Kayabasi** | **0.44** | **235** | P | **Pg** | **07 16 17.0** | **-0.6** |
| BDRM | | | | S | **Sg** | **07 16 22.9** | **-0.4** |
| **BODT** | **Bodrum** | **0.54** | **241** | *eP*G | **Pg** | **07 16 19.0** | **-0.3** |
| BODT | | | | *eS*G | **Sg** | **07 16 27.0** | **+0.7** |
| **BODT** | **Bodrum** | **0.54** | **241** | *eP*g | **Pg** | **07 16 19.0** | **-0.3** |
| BODT | | | | *eS*g | **Sg** | **07 16 27.0** | **+0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.62** | **360** | *eP*G | **Pg** | **07 16 21.4** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.62** | **360** | *eP*g | **Pg** | **07 16 21.4** | **+0.3** |
| **GCAM** | **G?zelcaml?** | **0.65** | **306** | *i* P | **Pg** | **07 16 21.5** | **-0.1** |
| GCAM | | | | *i* S | **Sg** | **07 16 31.0** | **+1.0** |
| **GCAM** | **G?zelcaml?** | **0.65** | **306** | P | **Pg** | **07 16 21.5** | **-0.1** |
| GCAM | | | | S | **Sg** | **07 16 31.0** | **+1.0** |
| **MANT** | **Manisa** | **1.28** | **24** | *i* P | **Pg** | **07 16 33.2** | **-0.4** |
| MANT | | | | *i* S | **Sg** | **07 16 49.3** | **-0.9** |
| **MANT** | **Manisa** | **1.28** | **24** | P | **Pg** | **07 16 33.2** | **-0.4** |
| MANT | | | | S | **Sg** | **07 16 49.3** | **-0.9** |

**IDC 20 07:16:34.0±2.3, 24.74N×109.26W, h0km, mb3.4/1, mb1 3.4/3, mb1mx3.3/45, mbtmp2.9/3, ML2.7/2, Error ellipse: s-maj=49.2km s-min=17.9km az=138.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.15** | **237** | Pn | Pn | 07 16 57.3 | 0.0 |
| | 16nm,0.3s,baz=294,slow=19,SNR=7.6 | | | | | | |
| LPIG | | | | Sn | Sg | 07 17 11.4 | +0.4 |
| | 35nm,0.3s,baz=24,slow=4.2,SNR=9.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.76** | **46** | Pn | Pn | 07 18 15.2 | +0.5 |
| | 0.1nm,0.3s,baz=220,slow=14,SNR=3.1 | | | | | | |
| TXAR | | | | Pg | Pg | 07 18 45.4 | +1.6 |
| | 0.2nm,0.3s,baz=234,slow=17,SNR=5.7 | | | | | | |
| TXAR | | | | Lg | Lg | 07 20 07.3 | |
| | 0.4nm,0.3s,baz=225,slow=28,SNR=4.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.66** | **333** | Pn | P | 07 20 18.6 | -2.0 |
| | 0.0nm,0.3s,baz=153,slow=8.1,SNR=2.1 | | | | | | |
| **ILAR** | **Eielson Array** | **46.79** | **339** | P | P | 07 25 05.4 | +0.4 |
| | 0.4nm,0.6s,baz=133,slow=8.0,SNR=4.0 | | | | | | |

**IDC 20 07:21:33.4±2.7, 18.52S×177.77W, h618km±29km, mb2.9/5, mb1 3.2/6, mb1mx2.9/38, mbtmp4.0/6, Error ellipse: s-maj=124.0km s-min=18.3km az=152.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **7.36** | **52** | P | P | 07 23 27.2 | -0.4 |
| | 1.9nm,0.3s,baz=58,slow=7.9,SNR=4.6 | | | | | | |

**CTA Charters Tower 33.95 261** P P 07 27 28.2 +0.4
1.8nm,0.4s,baz=95,slow=10,SNR=3.2
**WRA Warramunga Arr 45.12 260** P P 07 28 56.8 -0.1
1.5nm,0.3s,baz=98,slow=6.9,SNR=50
**ASAR Alice Springs 45.21 255** P P 07 28 57.5 0.0
2.5nm,0.5s,baz=87,slow=8.1,SNR=45
ASAR PcP PcP 07 30 23.4 -0.7
0.2nm,0.5s,baz=86,slow=4.7,SNR=2.9
**NVAR Mina Array Bea 79.44 43** P P 07 32 38.6 +1.1
0.2nm,0.6s,baz=232,slow=6.8,SNR=2.8
**ILAR Eielson Array 86.34 13** P P 07 33 10.1 -0.8
0.2nm,0.5s,baz=216,slow=4.6,SNR=4.7

**HEL 20 07:33:42.2±0.2, 59.68N×22.27E, h0km, ML1.8, Explosion, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **1.20** | **63** | *eP* | Pg | 07 34 02.7 | -2.4 |
| MEF | | | | *eS* | Sg | 07 34 18.1 | -2.5 |
| **AAL** | **Aland** | **1.25** | **294** | *eP* | Pg | 07 34 04.6 | -1.5 |
| AAL | | | | *eS* | Sg | 07 34 20.4 | -1.9 |
| **MTSE** | **Matsula** | **1.26** | **140** | *eP* | Pg | 07 34 04.6 | -1.6 |
| MTSE | | | | *eS* | Sg | 07 34 20.9 | -1.6 |
| **RAF** | **Rauma** | **1.37** | **350** | *eP* | Pg | 07 34 05.8 | -2.6 |
| RAF | | | | *eS* | Sg | 07 34 23.6 | -2.5 |
| RAF | | | | MSG | | 07 34 30.9 | |
| | comp=Z,5.9nm,0.1s | | | | | | |
| **PVF** | **Pernaja** | **2.00** | **63** | *eP* | Pn | 07 34 16.6 | -0.6 |
| PVF | | | | *eS* | Sn | 07 34 42.0 | -0.8 |
| PVF | | | | MSG | | 07 34 46.5 | |
| | comp=Z,4.7nm,0.1s | | | | | | |
| **FIA0** | **FINESS Array S** | **2.58** | **45** | *eP* | Pn | 07 34 25.8 | +0.6 |
| FIA0 | | | | *eS* | Sn | 07 34 57.3 | +0.2 |
| FIA0 | | | | MSG | | 07 35 01.2 | |
| | comp=Z,5.3nm,0.1s | | | | | | |
| **VJF** | **Virojoki** | **2.78** | **70** | *eP* | Pn | 07 34 28.1 | +0.2 |
| VJF | | | | *eS* | Sn | 07 35 01.9 | -0.2 |
| **KEF** | **Keuruu** | **2.80** | **26** | *eP* | Pn | 07 34 28.6 | +0.5 |
| KEF | | | | *eS* | Sn | 07 35 01.9 | -0.6 |
| **KAF** | **Kangasniemi** | **3.13** | **37** | *eP* | Pn | 07 34 33.3 | +0.5 |
| KAF | | | | *eS* | Sn | 07 35 09.4 | -1.5 |
| **VAF** | **Ylistaro** | **3.38** | **3** | *eP* | Pn | 07 34 36.6 | +0.5 |
| VAF | | | | *eS* | Sn | 07 35 16.1 | -0.7 |
| **SUF** | **Sumiainen** | **3.58** | **30** | *eS* | Sn | 07 35 21.0 | -0.8 |

*IDC **20** 07:35:41.7±0.7, 24.53N×109.33W, h0km, mb4.2/13, mb1 4.3/17, mb1mx4.2/31, mbtmp4.1/17, ML3.4/4, MS3.4/4, Ms1 4.3/4, ms1mx3.9/35, Error ellipse: s-maj=17.1km s-min=13.8km az=47.0*
*ISCJB **20** 07:35:43.8±0.4, 24.52N±0.03×108.92W±0.02, h10km, mb4.4/41, MS4.3/3, Error ellipse: s-maj=4.9km s-min=2.7km az=15.4*
*MEX **20** 07:35:44.6±0.3, 24.78N×109.32W, h10km, MD4.4*
*NEIC **20** 07:35:45.2±0.4, 24.39N×109.03W, h10km, mb4.4/69, MD4.4(MEX), Error ellipse: s-maj=7.1km s-min=4.9km az=222.0*

**ISC 20 07:35:43.6±0.4, 24.44N±0.05×109.16W±0.03, h10km, n414, σ1.9 s36/388, mb4.6/42, MS4.3/3, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **SLBS** | **Sierra La Lagu** | **1.04** | **224** | *e*Pg | **Pn** | **07 36 05.3** | **+0.9** |
| **LPIG** | **La Paz** | **1.10** | **252** | Pn | **Pb** | **07 36 02.2** | **-2.6** |
| | 59nm,0.3s,baz=132,slow=1.2,SNR=45 | | | | | | |
| LPIG | | | | Sn | **Sb** | **07 36 19.5** | **+0.2** |
| | 455nm,0.3s,baz=202,slow=19,SNR=24 | | | | | | |
| **LPIG** | **La Paz** | **1.10** | **252** | *eP* | **Pb** | **07 36 02.6** | **-2.2** |
| LPIG | | | | *i* S | **Sg** | **07 36 16.6** | **-2.6** |
| **LPIG** | **La Paz** | **1.10** | **252** | Pn | **Pb** | **07 36 02.2** | **-2.6** |
| LPIG | | | | *eP* | **Pb** | **07 36 02.6** | **-2.2** |
| LPIG | | | | *i* S | **Sg** | **07 36 16.6** | **-2.6** |
| LPIG | | | | Sn | **Sb** | **07 36 19.5** | **+0.2** |
| **MAIG** | **Mazatlaan** | **2.80** | **116** | *eP* | **Pn** | **07 36 29.7** | **+1.3** |
| MAIG | | | | *eS* | **Sb** | **07 37 06.5** | **-1.5** |
| **MAIG** | **Mazatlaan** | **2.80** | **116** | *eP* | **Pn** | **07 36 29.7** | **+1.3** |
| MAIG | | | | *eS* | **Sb** | **07 37 06.5** | **-1.5** |
| **ANIG** | **Ahuacatlan** | **5.45** | **127** | *eP* | **Pn** | **07 37 07.8** | **+2.8** |
| ANIG | | | | *i* S | Sn | 07 38 14.9 | +7.1 |
| **ANIG** | **Ahuacatlan** | **5.45** | **127** | *eP* | **Pn** | **07 37 07.8** | **+2.8** |
| ANIG | | | | *i* S | Sn | 07 38 14.9 | +7.1 |
| **TX31** | **Lajitas Ar. Si** | **6.91** | **44** | *e*Pn | **Pn** | **07 37 23.5** | **-1.6** |
| **TXAR** | **Lajitas Array** | **6.91** | **44** | Pn | **Pn** | **07 37 23.8** | **-1.3** |
| | 0.8nm,0.3s,baz=223,slow=14,SNR=21 | | | | | | |
| TXAR | | | | Pg | **Pg** | **07 37 54.0** | **-1.9** |
| | 2.4nm,0.3s,baz=212,slow=15,SNR=18 | | | | | | |
| TXAR | | | | Sn | **Sn** | **07 38 38.1** | **-5.8** |
| | 2.9nm,0.3s,baz=224,slow=13,SNR=4.7 | | | | | | |
| TXAR | | | | Lg | Lg | 07 39 12.6 | |
| | 6.5nm,0.3s,baz=219,slow=7.7,SNR=7.7 | | | | | | |
| TXAR | | | | LR | LR | 07 40 29.4 | |
| | comp=Z,2μm,18.6s,baz=0.0,slow=41 | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.96** | **24** | *e*Pn | **Pn** | **07 37 36.6** | **-2.8** |
| **TUC** | **Tucson** | **7.97** | **350** | *e*Pn | **Pn** | **07 37 39.2** | **-0.3** |
| **121A** | **Cookes Peak, D** | **8.15** | **8** | P | **Pn** | **07 37 41.6** | **-0.5** |
| | baz=8.2,SNR=8.3 | | | | | | |
| **121A** | **Cookes Peak, D** | **8.15** | **8** | *e*Pn | **Pn** | **07 37 41.8** | **-0.4** |
| | 46nm,0.8s | | | | | | |
| **529A** | **Stev Forest Ra** | **8.37** | **46** | P | **Pn** | **07 37 46.1** | **+1.0** |
| | baz=8.3,SNR=8.1 | | | | | | |
| **429A** | **Davenport Ranc** | **8.91** | **45** | P | **Pn** | **07 37 53.6** | **+1.0** |
| | baz=8.9,SNR=14 | | | | | | |
| **530A** | **J-C Ranch, Com** | **8.98** | **49** | P | **Pn** | **07 37 54.6** | **+1.2** |
| | baz=8.9,SNR=5.7 | | | | | | |
| **832A** | **Faith Ranch, C** | **9.08** | **63** | P | **Pn** | **07 37 54.8** | **0.0** |
| | baz=9.0 | | | | | | |
| **631A** | **Perdido Creek** | **9.12** | **55** | P | **Pn** | **07 37 55.9** | **+0.6** |
| | baz=9.1,SNR=51 | | | | | | |
| **732A** | **Laxson Ranch,** | **9.26** | **61** | P | **Pn** | **07 37 57.9** | **+0.7** |
| | baz=9.2,SNR=10 | | | | | | |
| **933A** | **Laredo** | **9.43** | **68** | P | **Pn** | **07 37 59.5** | **-0.1** |
| | baz=9.3 | | | | | | |
| **430A** | **Baggett Ranch,** | **9.45** | **46** | P | **Pn** | **07 38 00.2** | **+0.3** |
| | baz=9.4 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **9.46** | **41** | P | **Pn** | **07 38 00.1** | **+0.1** |
| | baz=9.4 | | | | | | |
| **531A** | **Rocksprings** | **9.54** | **51** | P | **Pn** | **07 38 02.2** | **+1.0** |
| | baz=9.5,SNR=27 | | | | | | |
| **833A** | **Chaparral WMA,** | **9.57** | **64** | P | **Pn** | **07 38 00.9** | **-0.5** |
| | baz=9.5 | | | | | | |
| **228A** | **UT Block 9, Go** | **9.59** | **36** | P | **Pn** | **07 38 03.9** | **+2.1** |
| | baz=9.6 | | | | | | |
| **632A** | **Uvalde** | **9.76** | **57** | P | **Pn** | **07 38 04.8** | **+0.7** |
| | baz=9.7,SNR=14 | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **9.79** | **11** | P | **Pn** | **07 38 07.3** | **+2.6** |
| | baz=9.9 | | | | | | |
| **034A** | **Hebbronville** | **9.79** | **72** | P | **Pn** | **07 38 04.5** | **-0.1** |
| | baz=9.7,SNR=11 | | | | | | |
| **733A** | **Divot King Ran** | **9.80** | **62** | P | **Pn** | **07 38 05.0** | **+0.3** |
| | baz=9.7 | | | | | | |
| **431A** | **Sonora** | **9.80** | **49** | P | **Pn** | **07 38 06.4** | **+1.7** |
| | baz=9.8,SNR=18 | | | | | | |
| **330A** | **Mertzon** | **9.89** | **44** | P | **Pn** | **07 38 07.3** | **+1.4** |
| | baz=9.9 | | | | | | |
| **GLA** | **Glamis** | **9.91** | **331** | P | **Pn** | **07 38 08.8** | **+2.5** |
| | baz=10.0 | | | | | | |
| **BNM** | **Barren Site** | **9.92** | **12** | *e*Pn | **Pn** | **07 38 08.6** | **+2.1** |
| **532A** | **Rocksprings** | **9.99** | **53** | P | **Pn** | **07 38 08.1** | **+0.9** |
| | baz=9.9,SNR=5.5 | | | | | | |
| **128A** | **Castleberry Fa** | **10.04** | **34** | P | **Pn** | **07 38 08.7** | **+0.7** |
| | baz=10.0 | | | | | | |
| **934A** | **Benavides** | **10.07** | **70** | P | **Pn** | **07 38 07.3** | **-1.1** |
| | baz=10.0 | | | | | | |
| **LAZ** | **Ladron** | **10.08** | **10** | *e*Pn | **Pn** | **07 38 10.0** | **+1.4** |
| **834A** | **Tilden** | **10.20** | **67** | P | **Pn** | **07 38 08.9** | **-1.2** |
| | baz=10 | | | | | | |
| **633A** | **Saathoff Ranch** | **10.21** | **59** | P | **Pn** | **07 38 10.7** | **+0.5** |
| | baz=10,SNR=16 | | | | | | |
| **035Z** | **Hargill** | **10.22** | **76** | P | **Pn** | **07 38 08.6** | **-1.8** |
| | baz=10 | | | | | | |
| **JCT** | **Junction City** | **10.25** | **52** | *e*Pn | **Pn** | **07 38 12.6** | **+1.7** |
| **230A** | **Sterling City** | **10.26** | **42** | P | **Pn** | **07 38 12.9** | **+1.8** |
| | baz=10,SNR=7.5 | | | | | | |
| **331A** | **San Angelo** | **10.31** | **47** | P | **Pn** | **07 38 12.9** | **+1.2** |
| | baz=10,SNR=16 | | | | | | |
| **129A** | **Stewart Farms,** | **10.37** | **36** | P | **Pn** | **07 38 13.6** | **+1.1** |
| | baz=10 | | | | | | |
| **Y12C** | **Blythe** | **10.39** | **334** | P | Pn | 07 38 16.4 | +3.6 |
| | baz=10 | | | | | | |
| **432A** | **Menard** | **10.48** | **50** | P | **Pn** | **07 38 15.0** | **+1.0** |
| | baz=10,SNR=28 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MONP | Monument Peak<br>baz=11,SNR=6.6 | 10.56 | 325 | P | Pn | 07 38 17.8 | +2.6 |
| Z28A | Tucker Farm, M<br>baz=11 | 10.62 | 32 | P | Pn | 07 38 18.0 | +2.0 |
| W18A | Petrified Fore<br>baz=11 | 10.65 | 357 | P | Pn | 07 38 18.6 | +2.1 |
| ANMO | Albuquerque<br>0.1nm,0.3s,baz=222,slow=12,SNR=9.1 | 10.73 | 12 | Pn | Pn | 07 38 16.7 | -0.8 |
| ANMO | Albuquerque | 10.73 | 12 | ePn | Pn | 07 38 19.6 | +2.1 |
| 231A | Bronte<br>baz=11,SNR=13 | 10.79 | 44 | P | Pn | 07 38 18.2 | 0.0 |
| 332A | Millersview<br>baz=11,SNR=19 | 10.82 | 48 | P | Pn | 07 38 19.3 | +0.7 |
| 130A | Snyder<br>baz=11,SNR=5.8 | 10.85 | 40 | P | Pn | 07 38 20.0 | +0.9 |
| 835A | Beeville<br>baz=11 | 10.85 | 67 | P | Pn | 07 38 17.5 | -1.5 |
| 433A | Art<br>baz=11,SNR=20 | 10.91 | 53 | P | Pn | 07 38 20.5 | +0.6 |
| Z29A | Hungry Hill Ra<br>baz=11 | 10.94 | 35 | P | Pn | 07 38 20.0 | -0.3 |
| MSTX | Muleshoe<br>baz=11 | 11.01 | 29 | P | Pn | 07 38 22.3 | +1.0 |
| MSTX | Muleshoe | 11.01 | 29 | ePn | Pn | 07 38 24.8 | +3.5 |
| 735A | Kenedy<br>baz=11 | 11.06 | 64 | P | Pn | 07 38 22.8 | +0.9 |
| 936A | North Padre Is<br>baz=11 | 11.07 | 72 | P | Pn | 07 38 21.1 | -0.9 |
| PFO | Pinyon Flat Ob<br>0.1nm,0.3s,baz=151,slow=15,SNR=2.7 | 11.14 | 327 | Pn | Pn | 07 38 22.9 | -0.2 |
| PFO | Pinyon Flat Ob | 11.14 | 327 | ePn | Pn | 07 38 27.8 | +4.7 |
| 232A | Coleman<br>baz=11 | 11.19 | 46 | P | Pn | 07 38 24.6 | +0.8 |
| WUAZ | Wupatki | 11.20 | 351 | ePn | Pn | 07 38 26.0 | +2.0 |
| BELC | Belle Mtn. Jos<br>baz=11 | 11.24 | 329 | P | Pn | 07 38 27.9 | +3.5 |
| 131A | Roby<br>baz=11 | 11.25 | 41 | P | Pn | 07 38 24.4 | -0.1 |
| Z30A | Sanderson Ranc<br>baz=11,SNR=5.7 | 11.27 | 37 | P | Pn | 07 38 24.9 | +0.1 |
| 333A | Richland Sprin<br>baz=11,SNR=6.8 | 11.31 | 50 | P | Pn | 07 38 25.5 | +0.2 |
| Y29A | Porterfield Fa<br>baz=11 | 11.43 | 33 | P | Pn | 07 38 27.2 | +0.1 |
| 434A | Burnet<br>baz=12 | 11.55 | 54 | P | Pn | 07 38 28.5 | -0.1 |
| ABTX | Abilene, Hawle<br>baz=12,SNR=11 | 11.67 | 44 | P | Pn | 07 38 30.1 | -0.2 |
| ABTX | Abilene, Hawle | 11.67 | 44 | ePn | Pn | 07 38 30.5 | +0.2 |
| 736A | Circle Diamond<br>baz=12 | 11.70 | 65 | P | Pn | 07 38 30.2 | -0.5 |
| 535A | Dale<br>baz=12 | 11.71 | 59 | P | Pn | 07 38 29.4 | -1.4 |
| X28A | Dimmitt<br>baz=12 | 11.72 | 29 | P | Pn | 07 38 32.4 | +1.4 |
| GMRC | Granite Mounta<br>baz=12 | 11.75 | 333 | P | Pn | 07 38 35.7 | +4.2 |
| 233A | Rising Star<br>baz=12 | 11.77 | 48 | P | Pn | 07 38 31.4 | -0.3 |
| 334A | Lometa<br>baz=12 | 11.84 | 52 | P | Pn | 07 38 32.7 | +0.1 |
| Y30A | Stafford Cattl<br>baz=12 | 11.85 | 36 | P | Pn | 07 38 33.6 | +0.9 |
| Z31A | Sharp Cattle R<br>baz=12,SNR=5.6 | 11.85 | 40 | P | Pn | 07 38 32.8 | 0.0 |
| 636A | Smothers Creek<br>baz=12 | 11.90 | 62 | P | Pn | 07 38 32.8 | -0.6 |
| 435B | Jarrell<br>baz=12 | 12.04 | 56 | P | Pn | 07 38 36.1 | +0.8 |
| 133A | Hamilton Ranch<br>baz=12 | 12.13 | 46 | P | Pn | 07 38 34.7 | -1.8 |
| Z32A | Haskell<br>baz=12,SNR=14 | 12.24 | 42 | P | Pn | 07 38 37.8 | -0.2 |
| BFSC | Mount Baldy Ra<br>baz=12 | 12.25 | 325 | P | Pn | 07 38 41.0 | +2.7 |
| Y31A | Rekieta Farm,<br>baz=12,SNR=6.0 | 12.25 | 37 | P | Pn | 07 38 39.0 | +0.7 |
| AMTX | Amarillo | 12.26 | 30 | ePn | Pn | 07 38 40.9 | +2.4 |
| 234A | Clairette<br>baz=12,SNR=9.0 | 12.29 | 50 | P | Pn | 07 38 38.4 | -0.4 |
| 335A | Moody<br>baz=12 | 12.41 | 54 | P | Pn | 07 38 39.7 | -0.6 |
| Z33A | Whitaker Ranch<br>baz=13 | 12.66 | 44 | P | Pn | 07 38 42.3 | -1.6 |
| GSC | Goldstone<br>baz=13,SNR=5.0 | 12.69 | 330 | P | Pn | 07 38 47.5 | +3.3 |
| GSC | Goldstone | 12.69 | 330 | ePn | Pn | 07 38 47.9 | +3.7 |
| MVCO | Mesa Verde | 12.74 | 2 | ePn | Pn | 07 38 53.2 | +8.1 |
| Y32A | R-V Farms, Ver<br>baz=13 | 12.75 | 39 | P | Pn | 07 38 43.6 | -1.4 |
| WHTX | Lake Whitney<br>baz=13 | 12.76 | 51 | P | Pn | 07 38 43.5 | -1.7 |
| WHTX | Lake Whitney | 12.76 | 51 | ePn | Pn | 07 38 45.2 | +0.1 |
| 336A | Riesel<br>baz=13 | 12.89 | 55 | P | Pn | 07 38 44.4 | -2.5 |
| X31A | McDonald Ranch<br>baz=13,SNR=5.2 | 12.91 | 36 | P | Pn | 07 38 47.1 | -0.1 |
| EDW2 | Edwards Air Fo<br>baz=13 | 12.92 | 326 | P | Pn | 07 38 49.9 | +2.5 |
| SHOC | Shoshone<br>baz=13 | 12.97 | 333 | P | Pn | 07 38 48.7 | +0.7 |
| HKT | Hockley | 13.06 | 62 | ePn | Pn | 07 38 49.3 | +0.1 |
| 135A | Vickery Place,<br>baz=13 | 13.11 | 49 | P | Pn | 07 38 49.1 | -0.8 |
| U27A | Thompson Grove<br>baz=13,SNR=5.6 | 13.12 | 23 | P | Pn | 07 38 51.0 | +0.8 |
| X32A | Elmer<br>baz=13,SNR=7.0 | 13.14 | 39 | P | Pn | 07 38 49.3 | -1.0 |
| Y33A | Hilltop Ranch,<br>baz=13 | 13.23 | 42 | P | Pn | 07 38 50.8 | -0.8 |
| LRMC | Laurel Mountai<br>baz=13 | 13.24 | 328 | P | Pn | 07 38 54.5 | +2.6 |
| T25A | Trinidad | 13.29 | 17 | ePn | P | 07 39 00.1 | -2.4 |
| W31A | Holland Ranch,<br>baz=13 | 13.36 | 35 | P | Pn | 07 38 52.5 | -0.8 |
| S22A | 4UR Ranch, Cre<br>baz=14 | 13.41 | 8 | P | Pn | 07 38 55.2 | +0.9 |
| S22A | 4UR Ranch, Cre | 13.41 | 8 | ePn | P | 07 39 00.0 | -3.9 |
| 236A | Katherine and<br>baz=13 | 13.43 | 53 | P | Pn | 07 38 52.9 | -1.4 |
| ARVC | Arvin<br>baz=14 | 13.55 | 324 | P | Pn | 07 38 58.6 | +2.7 |
| CCUT | Cedar City | 13.55 | 346 | ePn | Pn | 07 39 00.2 | +4.1 |
| T26A | Comanche Natio<br>baz=14 | 13.56 | 19 | P | Pn | 07 38 56.9 | +0.7 |
| SDCO | Great Sand Dun | 13.62 | 12 | ePn | Pn | 07 39 01.3 | +4.1 |
| MPMC | Manual Prospec<br>baz=14,SNR=5.8 | 13.63 | 330 | P | Pn | 07 38 58.7 | +1.5 |
| WMOK | Wichita Mounta | 13.65 | 39 | ePn | Pn | 07 38 56.2 | -1.2 |
| W32A | Sentinel<br>baz=14,SNR=7.1 | 13.68 | 37 | P | Pn | 07 38 57.3 | -0.4 |
| X33A | Lawton<br>baz=14 | 13.68 | 40 | P | Pn | 07 38 57.6 | -0.1 |
| 136A | Ennis<br>baz=14 | 13.68 | 51 | P | Pn | 07 38 56.3 | -1.4 |
| FURC | Furnace Creek,<br>baz=14 | 13.70 | 333 | P | Pn | 07 39 00.9 | +3.0 |
| Y34A | Reagan Ranch,<br>baz=14 | 13.74 | 44 | P | Pn | 07 38 56.9 | -1.6 |
| ISA | Isabella<br>baz=14 | 13.78 | 326 | P | Pn | 07 39 02.3 | +3.2 |
| ISA | Isabella | 13.78 | 326 | ePn | Pn | 07 39 02.7 | +3.6 |
| V31A | Spring Creek L<br>baz=14 | 13.86 | 33 | P | Pn | 07 38 59.7 | -0.6 |
| T28A | Walsh<br>baz=14 | 14.00 | 24 | P | Pn | 07 39 02.5 | +0.3 |
| S26A | Kim<br>baz=14 | 14.01 | 19 | P | Pn | 07 39 02.9 | +0.7 |
| X34A | Smith Ranch, M<br>baz=14 | 14.12 | 42 | P | Pn | 07 39 02.9 | -0.8 |
| W33A | Caddo, Fort Co<br>baz=14 | 14.13 | 39 | P | Pn | 07 39 03.5 | -0.4 |
| Z36A | Blue Ridge<br>baz=14,SNR=10 | 14.19 | 49 | P | Pn | 07 39 01.6 | -3.0 |
| VES | Vestal, Richgr<br>baz=14 | 14.23 | 325 | P | Pn | 07 39 07.0 | +1.8 |
| V32A | Arapaho<br>baz=14 | 14.23 | 36 | P | Pn | 07 39 03.1 | -2.2 |
| X35A | Drake<br>baz=14,SNR=8.1 | 14.52 | 44 | P | Pn | 07 39 06.9 | -2.3 |
| W34A | Bridge Creek, | 14.59 | 40 | eP | P | 07 39 17.8 | +1.1 |
| SRU | San Rafael | 14.67 | 356 | ePn | P | 07 39 17.2 | -0.6 |
| RCTC | Rector, Farmer<br>baz=15 | 14.67 | 326 | P | Pn | 07 39 12.9 | +1.6 |
| SMCO | Snowmass | 14.81 | 7 | ePn | P | 07 39 21.1 | +1.6 |
| S29A | Ulysses<br>baz=15 | 14.82 | 26 | P | Pn | 07 39 12.9 | -0.5 |
| R27A | Eads<br>baz=15 | 14.82 | 20 | P | Pn | 07 39 12.9 | -0.5 |
| R11A | Troy Canyon, C<br>baz=15 | 14.90 | 340 | P | Pn | 07 39 16.5 | +1.9 |
| R11A | Troy Canyon, C | 14.90 | 340 | ePn | P | 07 39 17.5 | -2.8 |
| R11A | | | | eP | Pn | 07 39 23.6 | +9.0 |
| TMUT | Trail Mountain<br>34nm,1.1s | 14.91 | 354 | ePn | P | 07 39 22.9 | +2.4 |
| TMUT | | | | eSn | Sn | 07 42 00.1 | -0.1 |
| X36A | Centrahoma<br>baz=15 | 15.02 | 45 | P | Pn | 07 39 14.1 | -1.9 |
| P17A | Butcher Ranch,<br>11nm,1.2s | 15.05 | 355 | ePn | P | 07 39 26.1 | +4.2 |
| W35A | Tecumseh<br>baz=15 | 15.07 | 42 | P | Pn | 07 39 15.7 | -1.0 |
| Y37A | Hugo<br>baz=15 | 15.15 | 48 | P | Pn | 07 39 16.3 | -1.5 |
| 340A | Bronson<br>baz=15 | 15.17 | 59 | P | Pn | 07 39 15.7 | -2.3 |
| P18A | Preston Nutter<br>22nm,1.4s | 15.17 | 357 | ePn | P | 07 39 23.8 | +0.4 |
| MTUM | Tungsten Hills | 15.18 | 330 | ePn | P | 07 39 21.1 | -2.3 |
| MTUM | | | | eP | pP | 07 39 28.0 | +1.8 |
| Z38A | Mt. Pleasant<br>baz=15 | 15.19 | 52 | P | Pn | 07 39 17.0 | -1.3 |
| R28A | Tribune<br>baz=15 | 15.20 | 23 | P | Pn | 07 39 17.7 | -0.8 |
| U33A | Lingo Farm, Me<br>baz=15 | 15.27 | 36 | P | Pn | 07 39 18.2 | -1.1 |
| T32A | Huddler Ranch,<br>baz=15 | 15.43 | 32 | P | Pn | 07 39 20.8 | -0.6 |
| W36A | Wetumka<br>baz=15,SNR=11 | 15.46 | 43 | P | Pn | 07 39 21.7 | -0.2 |
| V35A | Meyer Ranch, C<br>baz=16,SNR=6.0 | 15.51 | 40 | P | Pn | 07 39 21.9 | -0.5 |
| R29A | Marienthal<br>baz=16 | 15.52 | 24 | P | Pn | 07 39 22.1 | -0.5 |
| KSCO | Kaye Shedlock'<br>12nm,0.9s | 15.54 | 19 | ePn | P | 07 39 25.7 | -1.7 |
| U34A | Anderson Ranch<br>baz=16 | 15.58 | 37 | P | Pn | 07 39 22.0 | -1.4 |
| U34A | Anderson Ranch<br>20nm,0.8s | 15.58 | 37 | ePn | P | 07 39 26.3 | -1.4 |
| ISCO | Idaho Springs<br>21nm,1.3s | 15.60 | 10 | ePn | P | 07 39 29.2 | +1.0 |
| NLU | North Lily Min | 15.66 | 352 | ePn | P | 07 39 30.0 | +1.2 |
| O20A | White River Ci<br>baz=15,SNR=6.6 | 15.67 | 3 | P | Pn | 07 39 25.1 | +0.4 |
| O20A | White River Ci<br>33nm,1.3s | 15.67 | 3 | ePn | P | 07 39 29.0 | +0.2 |
| X37A | Clayton<br>baz=16 | 15.68 | 47 | P | Pn | 07 39 21.9 | -2.7 |
| T33A | Patterson Ranc<br>baz=16,SNR=6.1 | 15.69 | 34 | P | Pn | 07 39 24.6 | -0.2 |
| R30A | Dighton<br>baz=16,SNR=13 | 15.73 | 27 | P | Pn | 07 39 24.6 | -0.8 |
| Y38A | Idabel<br>baz=16,SNR=8.9 | 15.73 | 50 | P | Pn | 07 39 23.8 | -1.6 |
| S32A | Newby Ranch, P<br>baz=16 | 15.84 | 31 | P | Pn | 07 39 25.9 | -0.8 |
| NV01 | Mina Array Sit | 15.96 | 333 | ePn | P | 07 39 30.8 | -1.4 |
| NVAR | Mina Array Bea<br>0.1nm,0.3s,baz=162,slow=12,SNR=12 | 15.96 | 333 | Pn | Pn | 07 39 27.1 | -1.4 |
| W37A | Quinton<br>baz=16,SNR=15 | 15.97 | 45 | P | Pn | 07 39 26.4 | -2.0 |
| Q29A | Oakley<br>baz=16,SNR=19 | 15.99 | 24 | P | Pn | 07 39 28.2 | -0.5 |
| DUG | Dugway<br>84nm,2.5s | 16.00 | 350 | ePn | P | 07 39 35.6 | +3.1 |
| R31A | Burdett<br>baz=16 | 16.05 | 28 | P | Pn | 07 39 28.1 | -1.4 |
| V36A | Jenks<br>baz=16,SNR=7.9 | 16.06 | 42 | P | Pn | 07 39 28.0 | -1.6 |
| X38A | Whitesboro<br>baz=16 | 16.08 | 47 | P | Pn | 07 39 27.4 | -2.5 |
| Y39A | Lockesburg<br>baz=16,SNR=12 | 16.19 | 51 | P | Pn | 07 39 29.9 | -1.2 |
| T34A | McClaskey Farm<br>baz=16 | 16.20 | 37 | P | Pn | 07 39 29.4 | -2.0 |
| TUL1 | Tulsa<br>baz=16 | 16.23 | 42 | P | Pn | 07 39 29.8 | -1.9 |
| TUL1 | Tulsa<br>15nm,0.9s | 16.23 | 42 | ePn | Pn | 07 39 31.8 | 0.0 |
| P28A | Saint Francis<br>baz=16 | 16.33 | 21 | P | Pn | 07 39 33.1 | +0.1 |
| CTU | Camp Tracy<br>9.4nm,0.9s | 16.35 | 353 | ePn | P | 07 39 36.0 | -0.3 |
| Q30A | Quinter<br>baz=16,SNR=16 | 16.35 | 25 | P | Pn | 07 39 33.4 | +0.1 |
| CBKS | Cedar Bluff<br>52nm,1.0s | 16.40 | 27 | ePn | Pn | 07 39 33.6 | -0.4 |
| T35A | Sooner Cattle<br>baz=16 | 16.50 | 38 | P | Pn | 07 39 33.8 | -1.3 |
| R32A | Long Quarter,<br>baz=16 | 16.52 | 30 | P | Pn | 07 39 34.7 | -0.8 |
| W38A | Poteau<br>baz=16,SNR=18 | 16.52 | 47 | P | Pn | 07 39 34.9 | -0.6 |
| CMB | Columbia Colle | 16.59 | 327 | ePn | P | 07 39 38.6 | -0.2 |
| CMB | | | | eP | pP | 07 39 44.4 | +2.8 |
| U36A | Oologah<br>baz=17 | 16.59 | 41 | P | Pn | 07 39 34.6 | -1.7 |
| V37A | Hulbert<br>baz=17,SNR=8.1 | 16.62 | 43 | P | Pn | 07 39 35.3 | -1.4 |
| N23A | Red Feather La<br>baz=17 | 16.62 | 9 | P | Pn | 07 39 36.1 | -1.0 |
| N23A | Red Feather La<br>25nm,1.4s | 16.62 | 9 | ePn | P | 07 39 46.1 | +6.6 |
| P29A | Atwood<br>baz=17 | 16.63 | 23 | P | Pn | 07 39 37.4 | +0.4 |
| Q31A | Ellis<br>baz=17,SNR=7.0 | 16.71 | 27 | P | Pn | 07 39 38.3 | +0.4 |
| TCUT | Toone Canyon<br>13nm,1.0s | 16.73 | 354 | ePn | P | 07 39 43.8 | +3.1 |
| S34A | Willow Spring<br>baz=17 | 16.75 | 35 | P | Pn | 07 39 37.8 | -0.5 |
| R33A | Olander Ranch,<br>baz=17 | 16.77 | 32 | P | Pn | 07 39 38.0 | -0.7 |
| O28A | Krutsinger Ran<br>baz=17 | 16.83 | 20 | P | Pn | 07 39 39.9 | +0.5 |
| P30A | Selden<br>baz=17,SNR=6.8 | 16.83 | 24 | P | Pn | 07 39 39.4 | 0.0 |
| MIAR | Mount Ida<br>45nm,1.2s | 16.87 | 50 | ePn | P | 07 39 43.1 | +1.1 |
| T36A | Boggs Farm, Ca<br>baz=17,SNR=6.9 | 16.96 | 39 | P | Pn | 07 39 40.5 | -0.5 |
| U37A | Salina<br>baz=17,SNR=7.0 | 16.97 | 42 | P | Pn | 07 39 39.9 | -1.2 |
| ELK | Elko<br>61nm,2.5s | 17.04 | 344 | ePn | P | 07 39 47.7 | +3.7 |
| SPUT | South Promonto<br>12nm,1.3s | 17.04 | 352 | ePn | P | 07 39 44.5 | +0.4 |
| Q32A | Meitler Ranch,<br>baz=17,SNR=10 | 17.06 | 29 | P | Pn | 07 39 42.8 | +0.6 |
| V38A | Canehill<br>baz=17,SNR=20 | 17.07 | 45 | P | Pn | 07 39 42.0 | -0.4 |
| R34A | Isabella, Hill<br>baz=17 | 17.13 | 33 | P | Pn | 07 39 43.0 | -0.2 |
| O29A | 4D Ranch, Culb<br>baz=17 | 17.14 | 22 | P | Pn | 07 39 43.9 | +0.5 |
| P31A | Stockton<br>baz=17 | 17.15 | 26 | P | Pn | 07 39 43.1 | -0.4 |
| S35A | Otter Creek Ra<br>baz=17,SNR=6.7 | 17.16 | 37 | P | Pn | 07 39 43.5 | 0.0 |
| HWUT | Hardware Ranch<br>17nm,1.3s | 17.23 | 354 | ePn | P | 07 39 46.8 | +0.6 |
| BMN | Battle Mountai<br>27nm,1.5s | 17.32 | 339 | ePn | P | 07 39 49.2 | +2.1 |
| Q33A | Connelly Farm,<br>baz=17 | 17.39 | 31 | P | Pn | 07 39 46.5 | 0.0 |
| U38A | Gravette<br>baz=17 | 17.44 | 43 | P | Pn | 07 39 46.3 | -0.8 |
| O30A | MW Ranch, Wils<br>baz=18 | 17.46 | 24 | P | P | 07 39 47.6 | -0.8 |
| P32A | Huiting Farm,<br>baz=18,SNR=9.5 | 17.56 | 28 | P | P | 07 39 49.1 | -0.5 |
| T37A | Cheneyville 18<br>baz=18 | 17.56 | 41 | P | Pn | 07 39 47.6 | -1.0 |
| S36A | Lake Cedric, C<br>baz=18,SNR=7.3 | 17.59 | 38 | P | Pn | 07 39 48.1 | -0.7 |
| R35A | Emporia Munici<br>baz=18 | 17.69 | 35 | P | Pn | 07 39 49.2 | -0.9 |
| O31A | Woolen Ranch,<br>baz=18 | 17.71 | 25 | P | Pn | 07 39 50.2 | -0.2 |
| Q34A | Chapman<br>baz=18 | 17.76 | 33 | P | Pn | 07 39 50.5 | -0.5 |
| P33A | Williams Farm,<br>baz=18 | 17.81 | 30 | P | Pn | 07 39 51.1 | -0.5 |
| N29A | Votaw Ranch, W<br>baz=18 | 17.82 | 22 | P | P | 07 39 52.0 | -0.6 |
| UALR | University of<br>125nm,2.1s | 17.86 | 51 | ePn | P | 07 39 54.0 | +1.1 |
| N30A | Hueftle Ranch,<br>baz=18 | 17.98 | 23 | P | P | 07 39 53.9 | -0.5 |
| S37A | Fort Scott<br>baz=18 | 18.05 | 39 | P | Pn | 07 39 53.6 | -0.9 |
| R36A | Gordon, Harris<br>baz=18 | 18.06 | 37 | P | Pn | 07 39 53.9 | -0.9 |
| KSU1 | Kansas State U<br>18nm,0.9s | 18.06 | 33 | ePn | P | 07 39 55.0 | -0.2 |
| Q35A | Mercer Eighty,<br>baz=18,SNR=16 | 18.17 | 35 | P | P | 07 39 55.9 | -0.4 |
| O32A | Brockman Farm,<br>baz=18 | 18.23 | 27 | P | P | 07 39 57.1 | +0.1 |
| BW06 | Boulder Array | 18.28 | 359 | ePn | P | 07 39 57.5 | -0.3 |
| BW06 | | | | ePn | Pn | 07 39 57.9 | +0.3 |
| K22A | Casper<br>baz=18 | 18.29 | 6 | P | P | 07 39 59.2 | +1.4 |
| K22A | Casper<br>12nm,1.1s | 18.29 | 6 | ePn | P | 07 39 59.0 | +1.2 |
| P34A | Walnut Farm, R<br>baz=18 | 18.30 | 32 | P | P | 07 39 57.9 | +0.1 |
| M29A | Burnside Ranch<br>baz=18 | 18.37 | 21 | P | P | 07 39 59.3 | +0.8 |
| O33A | Hebron<br>baz=18 | 18.38 | 29 | P | P | 07 39 58.9 | +0.3 |
| N31A | Bailey Ranch,<br>baz=18 | 18.43 | 25 | P | Pn | 07 39 60.0 | +0.7 |
| Q36A | Arnold C. Orve<br>baz=19 | 18.55 | 35 | P | P | 07 40 00.1 | -0.4 |
| N32A | Stulken Farm,<br>baz=19 | 18.64 | 27 | P | Pn | 07 40 02.0 | +0.1 |
| P35A | Duane Minner,<br>baz=19,SNR=7.1 | 18.69 | 33 | P | Pn | 07 40 02.4 | +0.1 |
| O34A | Beatrice<br>baz=19 | 18.87 | 31 | P | P | 07 40 04.0 | 0.0 |
| M31A | Lambtecht Ranc<br>baz=19 | 18.87 | 24 | P | Pn | 07 40 04.7 | +0.1 |
| REDW | Red Top Meadow<br>23nm,1.5s | 18.92 | 356 | eP | Pn | 07 40 09.3 | +3.9 |
| N33A | J Bar K, Exete<br>baz=19 | 18.98 | 28 | P | Pn | 07 40 05.7 | -0.2 |
| L29A | Maesberg Ranch<br>baz=19 | 18.99 | 20 | P | Pn | 07 40 06.5 | +0.4 |
| SNOW | Snow King Moun<br>9.4nm,1.0s | 19.02 | 356 | eP | Pn | 07 40 07.7 | +1.2 |
| Q37A | Longview Farm,<br>baz=19 | 19.03 | 37 | P | P | 07 40 05.4 | -0.4 |
| TPAW | Teton Pass<br>16nm,1.1s | 19.06 | 356 | eP | Pn | 07 40 09.2 | +2.2 |
| L30A | Spencer Herefo<br>baz=19 | 19.14 | 22 | P | Pn | 07 40 08.0 | +0.2 |
| LOHW | Long Hollow<br>20nm,1.4s | 19.16 | 357 | eP | Pn | 07 40 09.2 | +0.9 |
| P36A | Good Intent, A<br>baz=19,SNR=6.0 | 19.17 | 35 | P | Pn | 07 40 07.9 | -0.3 |
| FXWY | Fox Creek<br>14nm,1.2s | 19.21 | 356 | eP | Pn | 07 40 09.6 | +0.7 |
| BGNE | Belgrade<br>baz=19 | 19.25 | 26 | P | Pn | 07 40 09.4 | +0.3 |
| BGNE | Belgrade<br>55nm,0.9s | 19.25 | 26 | eP | Pn | 07 40 09.5 | +0.3 |
| MOOW | Moose Ponds<br>9.3nm,1.2s | 19.30 | 357 | eP | Pn | 07 40 11.1 | +1.2 |
| O35A | Humboldt<br>baz=19 | 19.31 | 32 | P | Pn | 07 40 09.4 | -0.4 |
| IMW | Indian Meadow<br>9.4nm,1.1s | 19.46 | 356 | eP | Pn | 07 40 12.8 | +0.9 |
| HLID | Hailey<br>6.7nm,1.1s | 19.55 | 349 | eP | Pn | 07 40 16.4 | +3.5 |
| WVOR | Wild Horse Val<br>44nm,1.8s | 19.59 | 339 | eP | Pn | 07 40 14.9 | +1.6 |
| FLWY | Flagg Ranch<br>11nm,0.9s | 19.63 | 357 | eP | Pn | 07 40 17.1 | +3.1 |
| L31A | Butterfield Fa<br>baz=20 | 19.65 | 23 | P | Pn | 07 40 14.1 | +0.2 |
| J27A | Elkhorn Farm,<br>baz=20 | 19.66 | 16 | P | Pn | 07 40 14.3 | +0.2 |
| O36A | Bolckow<br>baz=20 | 19.67 | 34 | P | Pn | 07 40 13.6 | -0.6 |
| K29A | Lazy Trails An<br>baz=20 | 19.68 | 20 | P | Pn | 07 40 14.5 | +0.2 |
| MFID | Camas Ranch<br>15nm,1.4s | 19.70 | 345 | eP | Pn | 07 40 17.7 | +3.0 |
| MOD | Modoc<br>9.7nm,0.9s | 19.72 | 335 | eP | Pn | 07 40 15.5 | +0.5 |
| M33A | Taylor Creek F<br>baz=20 | 19.77 | 27 | P | Pn | 07 40 15.1 | -0.4 |
| L32A | Elgin<br>baz=20 | 19.81 | 25 | P | Pn | 07 40 15.6 | -0.3 |
| K30A | Basset<br>baz=20 | 19.82 | 21 | P | Pn | 07 40 16.4 | +0.4 |
| N35A | Tabor<br>baz=20 | 19.90 | 31 | P | P | 07 40 15.7 | +0.4 |
| H17A | Grant Village<br>7.8nm,0.9s | 19.94 | 357 | eP | Pn | 07 40 22.8 | +5.2 |
| M34A | Aspy Farms, Fr<br>baz=20 | 19.98 | 29 | P | Pn | 07 40 17.0 | -0.9 |
| N02D | Trinity Center<br>baz=20 | 20.00 | 329 | P | Pn | 07 40 19.0 | +0.9 |
| J28A | Allard Ranch,<br>baz=20 | 20.02 | 17 | P | Pn | 07 40 18.3 | -0.1 |
| I25A | Rochford<br>baz=20 | 20.03 | 11 | P | Pn | 07 40 18.2 | -0.4 |
| GNAR | Gosnell | 20.10 | 51 | eP | Pn | 07 40 21.4 | +2.1 |
| I26A | New Underwood<br>baz=20 | 20.21 | 13 | P | Pn | 07 40 20.0 | -0.6 |
| PBMO | Poplar Bluff<br>12nm,0.8s | 20.23 | 48 | eP | Pn | 07 40 20.9 | +0.1 |
| M04C | Macdoel<br>baz=20,SNR=9.3 | 20.25 | 332 | P | Pn | 07 40 22.1 | +0.9 |
| J29A | Okreek<br>baz=20 | 20.26 | 19 | P | Pn | 07 40 20.4 | -0.8 |
| M35A | Neola<br>baz=20 | 20.35 | 30 | P | P | 07 40 20.6 | +0.5 |
| J08A | Circle Bar Ran<br>14nm,1.0s | 20.36 | 340 | eP | Pn | 07 40 22.4 | -0.1 |
| K32A | Verdigre<br>baz=20 | 20.39 | 24 | P | Pn | 07 40 22.6 | 0.0 |
| CCM | Cathedral Cave<br>25nm,1.2s | 20.41 | 44 | eP | P | 07 40 21.5 | +0.6 |
| I27A | Quinn<br>baz=20 | 20.42 | 15 | P | Pn | 07 40 22.9 | -0.3 |
| L34A | Svendsen Farm,<br>baz=20 | 20.45 | 28 | P | P | 07 40 21.6 | +0.4 |
| MCMT | McKenzie Canyo | 20.56 | 353 | eP | Pn | 07 40 25.5 | +0.5 |
| I28A | Midland<br>baz=21 | 20.58 | 17 | P | Pn | 07 40 23.8 | -1.1 |
| YBH | Yreka Blue Hor<br>0.3nm,0.3s,baz=58,slow=13,SNR=2.0 | 20.60 | 330 | P | P | 07 40 21.3 | -1.7 |
| RLMT | Red Lodge<br>17nm,1.4s | 20.63 | 360 | eP | Pn | 07 40 26.4 | +0.6 |
| H25A | Fruitdale<br>baz=21 | 20.63 | 11 | P | Pn | 07 40 25.1 | -0.5 |
| K05A | Summer Lake<br>34nm,1.1s | 20.65 | 335 | eP | Pn | 07 40 26.6 | +0.6 |
| GLAT | Glass | 20.76 | 51 | eP | Pn | 07 40 26.0 | -1.0 |
| H26A | Fairpoint<br>baz=21 | 20.79 | 13 | P | Pn | 07 40 26.0 | -1.4 |
| I29A | Vivian Onida<br>baz=21 | 20.83 | 18 | P | P | 07 40 26.1 | +0.7 |
| K04D | Chiloquin, OR<br>baz=21 | 20.91 | 333 | P | Pn | 07 40 28.4 | -0.6 |
| L35A | Bielow Farm, R<br>baz=21 | 20.93 | 29 | P | P | 07 40 26.6 | +0.2 |
| H27A | Howes<br>baz=21 | 20.95 | 14 | P | P | 07 40 27.6 | +0.9 |
| J32A | Parkston<br>baz=21,SNR=6.2 | 21.05 | 23 | P | P | 07 40 30.1 | +2.4 |
| DLMT | Dillon<br>16nm,1.0s | 21.06 | 353 | eP | P | 07 40 31.9 | +3.9 |
| K34A | Le Mars<br>baz=21,SNR=5.3 | 21.16 | 27 | P | P | 07 40 30.8 | +1.9 |
| G25A | Newell<br>baz=21 | 21.22 | 11 | P | P | 07 40 30.4 | +0.8 |
| H28A | Mission Ridge<br>baz=21 | 21.25 | 16 | P | P | 07 40 30.4 | +0.6 |
| BOZ | Bozeman (W)<br>44nm,2.0s | 21.25 | 355 | eP | P | 07 40 31.7 | +1.7 |
| J05D | Fort Rock, OR<br>baz=21,SNR=12 | 21.26 | 335 | P | P | 07 40 31.7 | +1.6 |
| J33A | Davis<br>baz=21 | 21.33 | 25 | P | P | 07 40 30.9 | +0.2 |
| I07A | Izee<br>37nm,1.7s | 21.34 | 339 | eP | P | 07 40 32.5 | +1.5 |
| H29A | Onida<br>baz=22 | 21.41 | 18 | P | P | 07 40 30.9 | -0.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| G26A | **Maurine** baz=22 | 21.47 | 13 | P | P | 07 40 31.4 | -0.9 |
| LRM | **Limekiln Ridge** | 21.50 | 354 | *eP* | P | 07 40 35.0 | +2.2 |
| G28A | **Parade** baz=22 | 21.64 | 16 | P | P | 07 40 34.0 | -0.1 |
| G27A | **Dupree** baz=22 | 21.69 | 14 | P | P | 07 40 34.6 | -0.1 |
| WVT | **Waverly** 14nm,0.8s | 21.74 | 53 | *eP* | P | 07 40 35.6 | +0.4 |
| ECSD | **EROS Data Cent** 33nm,1.4s | 21.82 | 25 | *eP* | P | 07 40 37.9 | +1.8 |
| F25A | **Bowman** baz=22 | 21.92 | 11 | P | P | 07 40 37.2 | +0.1 |
| F26A | **Lodgepole** baz=22 | 21.99 | 12 | P | P | 07 40 38.4 | +0.5 |
| G29A | **Hoven** baz=22 | 22.02 | 18 | P | P | 07 40 38.3 | +0.1 |
| F27A | **Lemmon** baz=22 | 22.14 | 13 | P | P | 07 40 40.1 | +0.6 |
| H32A | **Carlson Farm,** baz=22 | 22.18 | 23 | P | P | 07 40 39.9 | 0.0 |
| I05D | **Terrebonne, OR** baz=22 | 22.20 | 336 | P | P | 07 40 42.0 | +1.9 |
| G08A | **Pilot Rock** 7.8nm,1.2s | 22.27 | 342 | *eP* | P | 07 40 48.9 | +8.0 |
| K37A | **Belmond** baz=22 | 22.32 | 31 | P | P | 07 40 40.8 | -0.6 |
| HRY | **Holter Researc** | 22.32 | 355 | *eP* | P | 07 40 43.8 | +2.3 |
| F10A | **Beach Ranch, E** 28nm,1.6s | 22.45 | 345 | *eP* | P | 07 40 44.3 | +1.5 |
| E25A | **Miller Ranch,** baz=23 | 22.49 | 10 | P | P | 07 40 43.8 | +0.5 |
| E26A | **Carlson Angus** baz=23 | 22.63 | 12 | P | P | 07 40 44.9 | +0.2 |
| F29A | **Eureka** baz=23 | 22.63 | 17 | P | P | 07 40 44.8 | +0.1 |
| K38A | **Parkersburg** baz=23 | 22.65 | 33 | P | P | 07 40 44.2 | -0.7 |
| CHMT | **Chamberlain Mo** | 22.66 | 353 | *eP* | P | 07 40 47.3 | +2.1 |
| MSO | **Missoula** 17nm,1.2s | 22.66 | 351 | *eP* | P | 07 40 48.0 | +2.9 |
| USIN | **University of** 35nm,0.9s | 22.73 | 49 | *eP* | P | 07 40 46.9 | +1.2 |
| E27A | **Carson** baz=23 | 22.77 | 14 | P | P | 07 40 46.5 | +0.3 |
| SWET | **Sewanee** 29nm,1.1s | 22.78 | 57 | *eP* | P | 07 40 46.9 | +0.5 |
| OLIL | **Olney** 53nm,1.0s | 22.83 | 46 | *eP* | P | 07 40 47.9 | +1.0 |
| H34A | **Spellman Lake,** baz=23,SNR=5.4 | 22.93 | 25 | P | P | 07 40 48.8 | +1.0 |
| SLMT | **Seeley Lake** | 23.01 | 352 | *eP* | P | 07 40 50.5 | +1.6 |
| HDIL | **Hopedale** 32nm,0.9s | 23.13 | 41 | *eP* | P | 07 40 51.1 | +1.2 |
| D26A | **Manning** baz=23 | 23.17 | 12 | P | P | 07 40 49.5 | -0.8 |
| H35A | **Sunnyside Ranc** baz=23 | 23.33 | 26 | P | P | 07 40 50.6 | -1.3 |
| SWMT | **Swartz Lake** | 23.34 | 352 | *eP* | P | 07 40 53.7 | +1.6 |
| I37A | **Lemond, Waseca** baz=23 | 23.39 | 30 | P | P | 07 40 51.1 | -1.5 |
| E30A | **Jud** baz=24 | 23.50 | 18 | P | P | 07 40 52.1 | -1.5 |
| EGMT | **Eagleton** 50nm,1.8s | 23.54 | 359 | *eP* | P | 07 40 56.0 | +1.9 |
| JTMT | **Jette** 3.7nm,1.2s | 23.61 | 351 | *eP* | P | 07 40 55.8 | +1.0 |
| WCI | **Wyandotte Cave** 62nm,0.8s | 23.80 | 49 | *eP* | P | 07 40 57.2 | +0.6 |
| E31A | **Nome** baz=24 | 23.85 | 19 | P | P | 07 40 56.9 | -0.1 |
| G35A | **Watkins** baz=24 | 23.90 | 26 | P | P | 07 40 57.4 | -0.1 |
| I38A | **Scanlan Farm,** baz=24 | 23.91 | 31 | P | P | 07 40 57.0 | -0.6 |
| CPCT | **Cooper Cave** | 23.94 | 57 | *eP* | P | 07 40 58.4 | +0.5 |
| H37A | **Dierke Farm, C** baz=24 | 24.05 | 29 | P | P | 07 40 58.7 | -0.3 |
| BLO | **Bloomington** 40nm,1.2s | 24.11 | 47 | *eP* | P | 07 41 01.3 | +1.8 |
| JFWS | **Jewell Farm** 38nm,1.5s | 24.13 | 36 | *eP* | P | 07 41 00.5 | +0.8 |
| GOGA | **Godfrey** 7.7nm,0.8s | 24.15 | 62 | *eP* | P | 07 41 00.7 | +0.8 |
| G36A | **St. Michael** baz=24 | 24.21 | 27 | P | P | 07 41 00.7 | +0.3 |
| SFIN | **Scholer Farm** baz=24,SNR=6.3 | 24.38 | 44 | P | P | 07 41 01.6 | -0.4 |
| SFIN | **Scholer Farm** 31nm,0.8s | 24.38 | 44 | *eP* | P | 07 41 03.0 | +1.0 |
| LON | **Longmire** 24nm,1.5s | 24.46 | 339 | *eP* | P | 07 41 04.8 | +2.1 |
| LTY | **Liberty** 128nm,3.0s | 24.55 | 341 | *eP* | P | 07 41 06.7 | +3.1 |
| MDND | **Maddock** baz=25 | 24.56 | 16 | P | P | 07 41 03.6 | +0.1 |
| TKL | **Tuckaleechee C** 6.5nm,0.8s,baz=222,slow=8.6,SNR=7.9 | 24.58 | 57 | P | P | 07 41 04.5 | +0.6 |
| TKL | comp=Z,1μm,18.5s,baz=268,slow=38 | | | LR | LR | 07 51 07.3 | |
| TKL | **Tuckaleechee C** | 24.58 | 57 | *eP* | P | 07 41 04.7 | +0.8 |
| NEW | **Newport** 12nm,1.0s,baz=190,slow=13,SNR=11 | 24.60 | 347 | P | P | 07 41 03.4 | -0.6 |
| NEW | **Newport** 35nm,1.4s | 24.60 | 347 | *eP* | P | 07 41 04.7 | +0.7 |
| SPMN | **St. Paul** baz=25 | 24.61 | 29 | P | P | 07 41 04.0 | 0.0 |
| SPMN | **St. Paul** 11nm,1.1s | 24.61 | 29 | *eP* | P | 07 41 05.9 | +1.9 |
| E34A | **Wadena** baz=25 | 24.72 | 24 | P | P | 07 41 04.9 | -0.1 |
| F36A | **Milaca** baz=25 | 24.81 | 27 | P | P | 07 41 06.1 | +0.2 |
| WALA | **Waterton Lakes** 17nm,1.1s | 24.85 | 353 | *eP* | P | 07 41 07.8 | +1.4 |
| A25A | **Svangstu Ranch** baz=25 | 24.91 | 9 | P | P | 07 41 07.5 | +0.8 |
| B28A | **Dugan Ranch, T** baz=25 | 24.95 | 14 | P | P | 07 41 08.1 | +1.1 |
| C31A | **Landman Farms,** baz=25 | 25.01 | 18 | P | P | 07 41 08.8 | +1.2 |
| D33A | **AnnSam, Waubun** baz=25 | 25.02 | 22 | P | P | 07 41 07.8 | +0.1 |
| E35A | **Pequot Lakes** baz=25,SNR=5.8 | 25.04 | 25 | P | P | 07 41 08.5 | +0.6 |
| A26A | **Wade Farm, Ken** baz=25 | 25.04 | 11 | P | P | 07 41 09.1 | +1.2 |
| TZTN | **Tazewell** 126nm,2.0s | 25.07 | 55 | *eP* | P | 07 41 08.5 | +0.3 |
| A27A | **Ledoux Ranch,** baz=25 | 25.25 | 12 | P | P | 07 41 11.0 | +1.3 |
| A28A | **Rude Farm, Bot** baz=26 | 25.40 | 14 | P | P | 07 41 11.3 | 0.0 |
| B30A | **Myrvik Farm, E** baz=26 | 25.44 | 17 | P | P | 07 41 11.4 | -0.2 |
| C33A | **Trail** baz=26 | 25.58 | 21 | P | P | 07 41 12.6 | -0.2 |
| D35A | **Remer** baz=26 | 25.61 | 24 | P | P | 07 41 12.6 | -0.5 |
| A29A | **Manning Farm,** baz=26 | 25.65 | 15 | P | P | 07 41 13.1 | -0.4 |
| D36A | **Goodland** baz=26 | 26.03 | 25 | P | P | 07 41 16.2 | -0.7 |
| C35A | **Jirik Farms, M** baz=26 | 26.16 | 24 | P | P | 07 41 16.9 | -1.1 |
| D37A | **Cotton** baz=26 | 26.31 | 26 | P | P | 07 41 18.5 | -0.9 |
| KMSC | **Kings Mountain** baz=26,SNR=5.8 | 26.31 | 60 | P | P | 07 41 19.5 | -0.1 |
| KMSC | **Kings Mountain** 17nm,0.9s | 26.31 | 60 | *eP* | P | 07 41 20.7 | +1.1 |
| A04D | **Lummi Island** baz=27 | 26.48 | 340 | P | P | 07 41 20.9 | 0.0 |
| B34A | **Aery, Baudette** baz=27 | 26.59 | 22 | P | P | 07 41 20.5 | -1.4 |
| C36A | **Pine Crest Far** baz=27 | 26.63 | 25 | P | P | 07 41 21.1 | -1.2 |
| A33A | **Warroad** baz=27 | 26.74 | 20 | P | P | 07 41 22.3 | -1.0 |
| C37A | **Embarrass** baz=27 | 26.86 | 26 | P | P | 07 41 23.8 | -0.6 |
| JTS | **JuntasAbangare** 3.2nm,0.9s,baz=304,slow=18,SNR=2.2 | 26.98 | 117 | P | P | 07 41 27.1 | +1.3 |
| EYMN | **Ely** | 27.32 | 26 | *eP* | P | 07 41 28.8 | +0.3 |
| YKA | **Yellowknife Ar** 1.0nm,0.9s,baz=164,slow=9.5,SNR=4.2 | 38.22 | 356 | P | P | 07 43 01.0 | -2.3 |
| OTAV | **Otavalo** 30nm,1.9s | 38.25 | 124 | *eP* | P | 07 43 02.5 | -2.2 |
| ROSC | **El Rosal** 1.5nm,0.3s,baz=305,slow=11,SNR=1.3 | 38.73 | 115 | P | P | 07 43 09.1 | +0.4 |
| SJG | **San Juan** 15nm,0.7s,baz=299,slow=13,SNR=4.0 | 40.45 | 90 | P | P | 07 43 23.4 | +0.9 |
| SCHQ | **Schefferville** 9.4nm,1.1s,baz=196,slow=7.4,SNR=2.3 | 43.49 | 34 | P | P | 07 43 47.2 | +0.2 |
| IL1 | **Eielson Array** | 47.10 | 339 | *eP* | P | 07 44 16.2 | +0.8 |
| ILAR | **Eielson Array** 2.8nm,0.8s,baz=151,slow=6.5,SNR=29 | 47.10 | 339 | P | P | 07 44 14.8 | -0.7 |
| PTGA | **Pitinga** 11nm,1.0s | 53.81 | 110 | *eP* | P | 07 45 10.4 | +3.5 |
| SAML | **Samuel** 5.5nm,0.9s | 55.79 | 121 | *eP* | P | 07 45 22.7 | +1.5 |
| LPAZ | **La Paz** 0.6nm,0.7s,baz=315,slow=7.1,SNR=2.8 | 56.93 | 131 | P | P | 07 45 31.3 | +1.2 |
| PPT | **Papeete** comp=Z,300nm,19.3s,baz=322,slow=29 | 57.42 | 227 | LR | LR | 08 03 04.5 | |
| PPT2 | **Papeete2** 379nm,24.5s | 57.44 | 227 | *e*LR | LR | 08 02 24.0 | |
| CPUP | **Villa Florida** 1.5nm,0.9s,baz=314,slow=7.7,SNR=6.0 | 71.10 | 132 | P | P | 07 47 03.4 | +1.1 |
| BDFB | **Brasilia** 5.2nm,1.1s,baz=329,slow=5.8,SNR=4.3 | 71.73 | 117 | P | P | 07 47 07.1 | +0.6 |
| ARCES | **ARCESS Array B** 2.1nm,1.0s,baz=316,slow=5.0,SNR=7.6 | 80.80 | 15 | P | P | 07 47 55.9 | -1.2 |
| NOA | **NORSAR Array B** comp=Z,108nm,21.1s,baz=110,slow=35 | 82.23 | 25 | LR | LR | 08 24 01.0 | |
| MTE | **Manteigas** 17nm,1.1s | 82.79 | 49 | *eP* | P | 07 48 08.8 | +0.6 |
| ESDC | **Sonseca Array** 0.3nm,0.4s,baz=306,slow=4.6,SNR=4.1 | 85.57 | 48 | P | P | 07 48 23.1 | +0.7 |
| WRA | **Warramunga Arr** 0.1nm,0.5s,baz=71,slow=2.2,SNR=3.0 | 121.48 | 261 | PKP | PKPdf | 07 54 37.7 | -0.4 |

*ISCJB **20** 07:37:59.0±0.4,59.°72N±0.°03×22.°32E±0.°04,h0km, Error ellipse: s-maj=4.7km s-min=3.0km az=166.1*
*UPP **20** 07:37:59.1,59.°71N×22.°45E,h0km,ML2.3,Suspected Mining explosion.*
*CSEM **20** 07:37:59.9±0.2,59.°69N×22.°32E,h2km,ML2.3,Error ellipse: s-maj=5.0km s-min=3.1km az=165.0,Mining explosion.*
*HEL **20** 07:38:00.2±0.1,59.°70N×22.°28E,h0km,ML2.3, ML2.3(UPP),Explosion*
*NAO **20** 07:38:00.3±1.8,59.°74N×22.°43E,ML2.1*
*IDC **20** 07:38:00.4±1.7,59.°70N×22.°27E,h0km,mb1 3.1/4, mb1mx2.9/43,mbtmp3.0/4,ML2.7/4,Error ellipse: s-maj=22.5km s-min=7.6km az=162.0*
*BER **20** 07:38:02.3±2.7,59.°83N×22.°34E,h0km,ML2.1(NAO), Suspected explosion*

**ISC 20 07:37:59.0±0.8,59.°70N±0.°03×22.°27E±0.°02,h0km,n57, σ1§12/87,Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| MEF | **Metsahovi** | 1.19 | 63 | *eP* | | Pg | 07 38 21.0 | -0.7 |
| MEF | | | | *eS* | | Sg | 07 38 36.5 | -0.6 |
| MEF | **Metsahovi** | 1.19 | 63 | P | | Pg | 07 38 21.0 | -0.7 |
| MEF | | | | S | | Sg | 07 38 36.5 | -0.6 |
| AAL | **Aland** | 1.24 | 294 | *eP* | | Pg | 07 38 22.3 | -0.4 |
| AAL | | | | *eS* | | Sg | 07 38 39.1 | +0.4 |
| AAL | **Aland** | 1.24 | 294 | P | | Pg | 07 38 22.3 | -0.4 |
| AAL | | | | S | | Sg | 07 38 39.1 | +0.4 |
| MTSE | **Matsula** | 1.27 | 141 | *eP* | | Pg | 07 38 22.5 | -0.8 |
| MTSE | | | | *eS* | | Sg | 07 38 39.4 | -0.4 |
| MTSE | **Matsula** | 1.27 | 141 | P | | Pg | 07 38 22.5 | -0.8 |
| MTSE | | | | S | | Sg | 07 38 39.3 | -0.4 |
| RAF | **Rauma** | 1.35 | 350 | *eP* | | Pg | 07 38 24.2 | -0.6 |
| RAF | | | | *eS* | | Sg | 07 38 41.4 | -0.9 |
| RAF | comp=Z,26nm,0.2s | | | MSG | | | 07 38 43.2 | |
| RAF | **Rauma** | 1.35 | 350 | P | | Pg | 07 38 24.2 | -0.6 |
| RAF | | | | S | | Sg | 07 38 41.3 | -0.9 |
| NRTU | **Norrtaelje** | 1.84 | 271 | *eP* | | Pn | 07 38 32.7 | +0.9 |
| NRTU | | | | *eS* | | Sg | 07 38 58.0 | -0.2 |
| NRTU | **Norrtaelje** | 1.84 | 271 | P | | Pn | 07 38 32.7 | +0.9 |
| NRTU | | | | S | | Sg | 07 38 57.9 | -0.2 |
| PVF | **Pernaja** | 1.99 | 63 | *eP* | | Pn | 07 38 34.7 | +0.9 |
| PVF | | | | *eS* | | Sn | 07 39 00.0 | +0.7 |
| PVF | comp=Z,21nm,0.1s | | | MSG | | | 07 39 03.1 | |
| PVF | **Pernaja** | 1.99 | 63 | P | | Pn | 07 38 34.7 | +0.9 |
| PVF | | | | S | | Sn | 07 39 00.0 | +0.7 |
| FORU | **Forsmark** | 2.16 | 290 | *eP* | | Pn | 07 38 37.5 | +1.4 |
| FORU | | | | *eS* | | Sb | 07 39 06.5 | +0.2 |
| FORU | **Forsmark** | 2.16 | 290 | P | | Pn | 07 38 37.5 | +1.4 |
| FORU | | | | S | | Sb | 07 39 06.4 | +0.2 |
| FLYU | **Flymyra** | 2.25 | 283 | *eP* | | Pn | 07 38 38.4 | +1.1 |
| FLYU | | | | *eS* | | Sb | 07 39 09.1 | +0.4 |
| FLYU | **Flymyra** | 2.25 | 283 | P | | Pn | 07 38 38.4 | +1.1 |
| FLYU | | | | S | | Sb | 07 39 09.0 | +0.4 |
| NYNU | **Nynaeshamn** | 2.29 | 254 | *eP* | | Pn | 07 38 39.8 | +1.8 |
| NYNU | **Nynaeshamn** | 2.29 | 254 | P | | Pn | 07 38 39.7 | +1.8 |
| UPP | **Uppsala** | 2.35 | 276 | *eP* | | Pb | 07 38 41.2 | -0.9 |
| UPP | **Uppsala** | 2.35 | 276 | P | | Pb | 07 38 41.2 | -0.9 |
| FIA0 | **FINESS Array S** baz=223,slow=14 | 2.57 | 46 | Pn | | Pn | 07 38 43.5 | +1.8 |
| FIA0 | | | | Lg | | Lg | 07 39 17.2 | |
| FIA0 | **FINESS Array S** baz=223,slow=14 | 2.57 | 46 | Pn | | Pn | 07 38 43.5 | +1.8 |
| FIA0 | | | | Lg | | Lg | 07 39 17.2 | |
| FIA0 | **FINESS Array S** | 2.57 | 46 | *eP* | | Pn | 07 38 43.6 | +1.8 |
| FIA0 | | | | *eS* | | Sn | 07 39 14.5 | +0.8 |
| FIA0 | comp=Z,16nm,0.2s | | | MSG | | | 07 39 19.5 | |
| FIA0 | **FINESS Array S** | 2.57 | 46 | P | | Pn | 07 38 43.5 | +1.8 |
| FIA0 | | | | S | | Sn | 07 39 14.4 | +0.8 |
| FIA0 | | | | Lg | | Lg | 07 39 17.2 | |
| FINES | **FINESS Array B** comp=Z,1.0nm,0.3s,baz=227,slow=15,SNR=43 | 2.57 | 46 | Pn | | Pn | 07 38 43.6 | +1.8 |
| FINES | | | | Sn | | Sb | 07 39 17.3 | -0.6 |
| BACU | comp=Z,5.5nm,0.3s,baz=229,slow=23,SNR=30 **Backbrunna** | 2.61 | 276 | *eP* | | Pn | 07 38 44.0 | +1.6 |
| BACU | **Backbrunna** | 2.61 | 276 | P | | Pn | 07 38 44.0 | +1.6 |
| OSTU | **Oestervaala** | 2.63 | 284 | *eP* | | Pn | 07 38 44.0 | +1.4 |
| OSTU | **Oestervaala** | 2.63 | 284 | P | | Pn | 07 38 44.0 | +1.4 |
| IGGU | **Iggoen** | 2.73 | 298 | *eP* | | Pn | 07 38 45.2 | +1.2 |
| IGGU | **Iggoen** | 2.73 | 298 | P | | Pn | 07 38 45.2 | +1.2 |
| KEF | **Keuruu** | 2.78 | 26 | *eP* | | Pn | 07 38 46.6 | +1.9 |
| KEF | | | | *eS* | | Sn | 07 39 19.5 | +0.6 |
| KEF | **Keuruu** | 2.78 | 26 | P | | Pn | 07 38 46.6 | +1.9 |
| KEF | | | | S | | Sn | 07 39 19.5 | +0.6 |
| GOTU | **Gotland** | 2.80 | 225 | *eP* | | Pn | 07 38 45.8 | +0.9 |
| GOTU | **Gotland** | 2.80 | 225 | P | | Pn | 07 38 45.8 | +0.9 |
| ESKU | **Eskilstuna** | 3.03 | 264 | *eP* | | Pn | 07 38 49.6 | +1.4 |
| ESKU | **Eskilstuna** | 3.03 | 264 | P | | Pn | 07 38 49.5 | +1.4 |
| KAF | **Kangasniemi** | 3.12 | 37 | *eP* | | Pn | 07 38 51.2 | +1.9 |
| KAF | | | | *eS* | | Sn | 07 39 27.6 | +0.3 |
| KAF | **Kangasniemi** | 3.12 | 37 | P | | Pn | 07 38 51.2 | +1.9 |
| KAF | | | | S | | Sn | 07 39 27.5 | +0.3 |
| FALU | **Falun** | 3.32 | 287 | *eP* | | Pn | 07 38 53.4 | +1.3 |
| FALU | **Falun** | 3.32 | 287 | P | | Pn | 07 38 53.4 | +1.3 |
| VAF | **Ylistaro** | 3.36 | 3 | *eP* | | Pn | 07 38 54.0 | +1.5 |
| VAF | | | | *eS* | | Sn | 07 39 33.3 | +0.2 |
| VAF | **Ylistaro** | 3.36 | 3 | P | | Pn | 07 38 54.0 | +1.5 |
| VAF | | | | S | | Sn | 07 39 33.2 | +0.2 |
| HFS | **Hagfors** baz=84,slow=16 | 4.34 | 279 | Pn | | Pn | 07 39 07.2 | +1.1 |
| HFS | | | | Sn | | Sn | 07 39 57.6 | +0.4 |
| HFS | **Hagfors** baz=84,slow=16 | 4.34 | 279 | Pn | | Pn | 07 39 07.2 | +1.1 |
| HFS | | | | Sn | | Sn | 07 39 57.6 | +0.4 |
| HFS | **Hagfors** comp=Z,0.3nm,0.3s,baz=90,slow=14,SNR=14 | 4.34 | 279 | Pn | | Pn | 07 39 06.6 | +0.6 |
| HFS | comp=Z,0.4nm,0.3s,baz=98,slow=29,SNR=3.5 | | | Sn | | Sn | 07 39 57.8 | +0.5 |
| HFS | comp=Z,0.7nm,0.3s,baz=90,slow=31,SNR=5.1 | | | Lg | | Lg | 07 40 12.6 | |
| HFS | **Hagfors** baz=84,slow=14,SNR=50 | 4.34 | 279 | Pn | | Pn | 07 39 07.2 | +1.1 |
| HFS | | | | Sn | | Sn | 07 39 57.6 | +0.4 |
| NB2 | baz=85,slow=21,SNR=50 **NORSAR Subarra** baz=96,slow=14 | 5.64 | 288 | Pn | | Pn | 07 39 23.9 | -0.1 |
| NB2 | **NORSAR Subarra** baz=96,slow=14 | 5.64 | 288 | Pn | | Pn | 07 39 23.9 | -0.1 |
| NB2 | **NORSAR Subarra** baz=96,slow=12,SNR=50 | 5.64 | 288 | Pn | | Pn | 07 39 24.0 | -0.1 |
| NOA | **NORSAR Array B** comp=Z,0.4nm,0.3s,baz=97,slow=14,SNR=9.4 | 5.64 | 288 | Pn | | Pn | 07 39 24.2 | +0.1 |
| NOA | comp=Z,0.3nm,0.3s,baz=113,slow=18,SNR=2.2 | | | Sn | | Sn | 07 40 27.2 | -2.4 |
| APA0 | **Apatity Array** baz=210,slow=14 | 9.24 | 26 | Pn | | Pn | 07 40 14.6 | +1.4 |
| APA0 | **Apatity Array** baz=210,slow=14 | 9.24 | 26 | Pn | | Pn | 07 40 14.6 | +1.4 |
| APA0 | **Apatity Array** baz=210,slow=12,SNR=50 | 9.24 | 26 | Pn | | Pn | 07 40 14.6 | +1.4 |
| ARA0 | **ARCESS Array S** baz=187,slow=14 | 9.97 | 7 | Pn | | Pn | 07 40 21.8 | -1.4 |
| ARA0 | baz=189,slow=28 | | | Sn | | Sn | 07 42 08.0 | -7.6 |
| ARA0 | **ARCESS Array S** baz=187,slow=14 | 9.97 | 7 | Pn | | Pn | 07 40 21.8 | -1.4 |
| ARA0 | baz=189,slow=28 | | | Sn | | Sn | 07 42 08.0 | -7.6 |
| ARCES | **ARCESS Array B** comp=Z,0.4nm,0.3s,baz=184,slow=12,SNR=20 | 9.97 | 7 | Pn | | Pn | 07 40 22.1 | -1.1 |
| ARCES | comp=Z,0.1nm,0.3s,baz=191,slow=23,SNR=2.5 | | | Sn | | Sn | 07 42 09.0 | -6.6 |

**IDC 20 07:38:21.6±1.8,59.°75N×22.°26E,h0km,mb1 3.1/4, mb1mx3.0/43,mbtmp3.1/4,ML2.7/4,Error ellipse: s-maj=23.5km s-min=8.4km az=162.0,Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| FINES | **FINESS Array B** 1.0nm,0.3s,baz=226,slow=14,SNR=13 | 2.54 | 46 | Pn | | Pn | 07 39 04.7 | +0.7 |
| FINES | | | | Sn | | Sn | 07 39 36.6 | +1.2 |
| HFS | 4.8nm,0.3s,baz=232,slow=23,SNR=11 **Hagfors** 0.2nm,0.3s,baz=94,slow=14,SNR=7.2 | 4.33 | 279 | Pn | | Pn | 07 39 28.5 | -0.1 |
| HFS | | | | Lg | | Lg | 07 40 33.8 | |
| NOA | 1.1nm,0.3s,baz=95,slow=31,SNR=5.2 **NORSAR Array B** 0.4nm,0.3s,baz=100,slow=13,SNR=7.0 | 5.63 | 288 | Pn | | Pn | 07 39 44.6 | -1.9 |
| NOA | | | | Sn | | Sn | 07 40 48.4 | -3.4 |
| ARCES | 0.6nm,0.3s,baz=81,slow=11,SNR=2.9 **ARCESS Array B** 0.3nm,0.3s,baz=184,slow=12,SNR=7.4 | 9.92 | 7 | Pn | | Pn | 07 40 42.5 | -2.7 |
| ARCES | 0.2nm,0.3s,baz=191,slow=23,SNR=3.8 | | | Sn | | Sn | 07 42 29.5 | -7.7 |

*ISCJB **20** 07:42:07.2±0.4,32.°48N±0.°02×115.°56W±0.°02,h13km±3km, Error ellipse: s-maj=4.1km s-min=3.1km az=10.5*
*ECX **20** 07:42:08.4±0.6,32.°44N×115.°60W,h4km,MD3.2,ML3.4*
*NEIC **20** 07:42:08.3,32.°45N×115.°61W,h4km,MD3.6(MEX), ML3.3(PAS),ML3.4(ECX),After ECX.*
*NEIC Felt [II] at Mexicali. Also felt at Calexico and El Centro, California.*
*MEX **20** 07:42:09.4±1.4,32.°39N×115.°47W,h18km±768km,MD3.6*

**ISC 20 07:42:07.4±1.0,32.°46N±0.°02×115.°57W±0.°02,h18km±3km, n39,σ0§94/59,13C-6D,California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| CPBX | **Cerro Prieto** | 0.23 | 100 | ⇑*eP* | | Pb | 07 42 13.0 | +0.3 |
| CPBX | | | | ⇑*eP* | | Pb | 07 42 13.0 | +0.3 |
| CPBX | | | | *eS* | | Sg | 07 42 17.3 | +1.0 |
| CPBX | comp=E,24μm,0.3s | | | IAML | | | 07 42 19.2 | |
| CPBX | | | | ⇓*e* | | | 07 42 19.2 | |
| CPBX | **Cerro Prieto** | 0.23 | 100 | *eP* | | Pb | 07 42 13.0 | +0.3 |
| CPBX | | | | *i* S | | Sg | 07 42 17.7 | +1.3 |
| SGL | **Mount Signal** | 0.23 | 325 | ⇓*i*P | | Pb | 07 42 12.3 | -0.6 |
| MBIG | **Mexicali** | 0.32 | 99 | *eP* | | Pb | 07 42 14.8 | +0.4 |
| MBIG | | | | *eS* | | Sb | 07 42 17.1 | -2.2 |
| MBIG | **Mexicali** | 0.32 | 99 | ⇑*eP* | | Pb | 07 42 15.0 | +0.5 |
| WESC | **Westside Schoo** | 0.33 | 335 | ⇓*i*P | | Pg | 07 42 14.4 | 0.0 |
| WESC | | | | *eS* | | Sb | 07 42 19.8 | 0.0 |
| YUH | **Yuha Desert** | 0.36 | 302 | ⇑*i*P | | Pg | 07 42 14.5 | -0.4 |
| DREC | **Desert Rsrch C** | 0.36 | 16 | ⇑*eP* | | Pb | 07 42 15.4 | +0.1 |
| COK | **Cook Ranch** | 0.41 | 341 | ⇓*i*P | | Pg | 07 42 16.0 | +0.1 |
| RMX | **La Rumorosa** | 0.46 | 288 | ⇑*eP* | | Pb | 07 42 15.9 | -1.1 |
| RMX | | | | *eS* | | Sg | 07 42 21.9 | -1.2 |
| RMX | comp=N,6μm,0.1s | | | IAML | | | 07 42 22.2 | |
| RMX | | | | ⇑*e* | | | 07 42 22.2 | |
| IBP | **Imperial Bould** baz=0.5 | 0.49 | 295 | P | | Pb | 07 42 17.0 | -0.5 |
| IBP | | | | S | | Sb | 07 42 23.6 | -0.9 |
| IBP | baz=0.5 **Imperial Bould** | 0.49 | 295 | ⇑*eP* | | Pb | 07 42 17.1 | -0.5 |
| IBP | | | | *eS* | | Sb | 07 42 23.6 | -0.9 |
| SWSC | **Sam W. Stewart** baz=0.5 | 0.52 | 338 | P | | Pb | 07 42 17.4 | -0.5 |
| SWSC | | | | S | | Sb | 07 42 24.5 | -0.6 |
| COA | baz=0.5 **Coachella** | 0.55 | 43 | ⇑*i*P | | Pb | 07 42 18.5 | +0.1 |
| EMSC | **East Mesa** | 0.56 | 60 | ⇑*i*P | | Pg | 07 42 19.0 | +0.3 |
| RDX | **Rancho Dawling** | 0.62 | 211 | ⇑*eP* | | Pb | 07 42 19.3 | -0.4 |
| RDX | | | | *eS* | | Sb | 07 42 27.4 | -0.7 |
| RDX | | | | ⇓*e* | | | 07 42 28.2 | |
| RDX | comp=N,1μm,0.3s | | | IAML | | | 07 42 28.2 | |
| MONP | **Monument Peak** baz=0.8 | 0.84 | 301 | P | | Pb | 07 42 23.4 | -0.2 |
| GLA | **Glamis** baz=0.9 | 0.86 | 46 | P | | Pb | 07 42 22.8 | -1.0 |
| GLA | baz=0.9 | | | S | | Sb | 07 42 33.9 | -1.1 |
| GLA | **Glamis** | 0.86 | 46 | *e*Pg | | Pb | 07 42 23.1 | -0.7 |
| GLA | | | | *e*Sg | | Sb | 07 42 33.7 | -1.3 |
| CBX | **Cerro Bola** | 0.94 | 261 | *eP* | | Pb | 07 42 25.1 | -0.1 |
| CBX | | | | *i* S | | Sb | 07 42 37.4 | 0.0 |
| CBX | **Cerro Bola** | 0.94 | 261 | ⇑*eP* | | Pb | 07 42 25.4 | +0.2 |
| CBX | | | | *eS* | | Sb | 07 42 37.7 | +0.3 |
| CBX | | | | ⇑*e* | | | 07 42 40.8 | |
| CBX | comp=N,1μm,0.6s | | | IAML | | | 07 42 40.8 | |
| CBX | **Cerro Bola** | 0.94 | 261 | *eP* | | Pb | 07 42 25.1 | -0.1 |
| CBX | | | | *i* S | | Sb | 07 42 37.4 | 0.0 |
| BAR | **Barrett** | 0.96 | 284 | *e*Pg | | Pb | 07 42 25.5 | -0.1 |
| BAR | | | | *e*Sg | | Sb | 07 42 37.5 | -0.4 |
| BC3 | **Big Chuckawall** baz=1.2 | 1.20 | 4 | P | | Pn | 07 42 27.9 | -1.4 |
| 109C | **Camp Elliot, M** baz=1.3 | 1.37 | 289 | P | | Pn | 07 42 31.4 | -0.2 |
| 109C | baz=1.3 | | | S | | Sn | 07 42 49.5 | +0.2 |
| PFO | **Pinyon Flat Ob** | 1.37 | 327 | *e*Pn | | Pn | 07 42 30.9 | -0.9 |
| PFO | | | | *e*Sn | | Sb | 07 42 50.3 | +0.5 |
| SPX | **San Pedro Mart** | 1.41 | 176 | ⇓*eP* | | Pn | 07 42 32.6 | +0.2 |
| SPX | **San Pedro Mart** | 1.41 | 176 | *eP* | | Pn | 07 42 32.2 | -0.3 |
| SPX | | | | *eS* | | Sg | 07 42 52.8 | -0.4 |
| Y12C | **Blythe** baz=1.6 | 1.56 | 34 | P | | Pn | 07 42 33.2 | -0.9 |
| BELC | **Belle Mtn. Jos** baz=1.6 | 1.58 | 347 | P | | Pn | 07 42 33.8 | -0.8 |
| IRM | **Iron Mountain** baz=1.8 | 1.73 | 11 | P | | Pn | 07 42 35.8 | -0.9 |
| MURC | **Murrieta** baz=1.8 | 1.78 | 310 | Sg | | Sb | 07 43 02.6 | +1.0 |
| BBRC | **Big Bear Solar** baz=2.1 | 2.13 | 328 | Sg | | Sb | 07 43 13.9 | +2.2 |
| BFSC | **Mount Baldy Ra** baz=2.5 | 2.49 | 316 | Sb | | Sb | 07 43 23.5 | +1.3 |
| MWC | **Mount Wilson** | 2.73 | 311 | *e*Pn | | Pb | 07 42 56.1 | +0.3 |
| MWC | | | | *e*Sn | | Sb | 07 43 30.6 | +1.6 |
| PASC | **Pasadena Art C** | 2.78 | 309 | *e*Pn | | Pb | 07 42 56.5 | 0.0 |
| PASC | | | | *e*Sn | | Sn | 07 43 25.9 | +1.8 |
| GSC | **Goldstone** | 3.02 | 340 | *e*Pn | | Pn | 07 42 54.9 | +0.6 |
| EDW2 | **Edwards Air Fo** baz=3.1 | 3.15 | 321 | Sb | | Sb | 07 43 44.1 | +3.2 |
| ISA | **Isabella** | 4.00 | 324 | *e*Pn | | Pn | 07 43 11.3 | +3.4 |

**IDC 20 07:43:32.0±5.8,5.°36S×133.°41E,h0km,mb3.8/1, mb1 3.6/3,mb1mx3.4/18,mbtmp3.5/3,ML3.1/2,Error ellipse: s-maj=342.2km s-min=32.3km az=77.0,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| WRA | **Warramunga Arr** 0.1nm,0.3s,baz=354,slow=13,SNR=6.1 | 14.53 | 176 | Pn | | Pn | 07 46 57.8 | -1.2 |
| WRA | | | | Sn | | Sn | 07 49 36.9 

0.1nm,0.3s,baz=360,slow=22,SNR=3.3
**ASAR Alice Springs 18.21 179** P P 07 47 46.8 +0.1
0.1nm,0.3s,baz=5.7,slow=10,SNR=6.0
**MKAR Makanchi Array 68.78 325** P P 07 54 38.0 0.0
0.6nm,0.6s,baz=118,slow=7.5,SNR=6.0

*THE **20** 07:55:05.7, 38.74N×20.50E, h10km, ML2.6/2, Error ellipse: s-maj=1.3km s-min=0.7km az=291.0*
*CSEM **20** 07:55:06.9±0.2, 38.69N×20.61E, h2km, MD3.0, Error ellipse: s-maj=4.5km s-min=3.1km az=66.0*
*ATH **20** 07:55:07.1, 38.67N×20.61E, h5km±2km, MD3.0/13*
**ISC 20 07:55:07.0±1.1, 38.68N±0.02×20.60E±0.03, h3km±9km, n64, σ0s53/101, Greece**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LKD2** | **Lefkada island** | **0.12** | **24** | *e*PG | | | **Pg** | **07 55 09.4** | **0.0** |
| **LKD2** | **Lefkada island** | **0.12** | **24** | P | | | **Pg** | **07 55 08.8** | **-0.6** |
| LKD2 | | | | S | | | **Sg** | **07 55 10.5** | **-0.5** |
| **LKD2** | **Lefkada island** | **0.12** | **24** | P | | | **Pg** | **07 55 08.8** | **-0.6** |
| **LKD2** | **Lefkada island** | **0.12** | **24** | *e*Pg | | | **Pg** | **07 55 09.4** | **0.0** |
| LKD2 | | | | S | | | **Sg** | **07 55 10.5** | **-0.5** |
| **PDO** | **Prodromos** | **0.47** | **100** | *e*PB | | | **Pg** | **07 55 16.1** | **+0.2** |
| PDO | | | | *e*SB | | | **Sg** | **07 55 22.9** | **+0.9** |
| **PDO** | **Prodromos** | **0.47** | **100** | P | | | **Pg** | **07 55 16.1** | **+0.2** |
| PDO | | | | S | | | **Sb** | **07 55 24.4** | **-0.7** |
| **PDO** | **Prodromos** | **0.47** | **100** | P | | | **Pg** | **07 55 16.1** | **+0.2** |
| PDO | | | | *e*Sb | | | **Pg** | **07 55 22.9** | **+0.9** |
| PDO | | | | S | | | **Sb** | **07 55 24.4** | **-0.7** |
| **VLS** | **Valsamata** | **0.50** | **181** | *e*PB | | | **Pg** | **07 55 17.0** | **+0.4** |
| **VLS** | **Valsamata** | **0.50** | **181** | P | | | **Pg** | **07 55 16.5** | **-0.1** |
| VLS | | | | S | | | **Sb** | **07 55 25.0** | **-1.1** |
| **VLS** | **Valsamata** | **0.50** | **181** | P | | | **Pg** | **07 55 16.5** | **-0.1** |
| **VLS** | **Valsamata** | **0.50** | **181** | *e*Pb | | | **Pg** | **07 55 17.0** | **+0.4** |
| VLS | | | | S | | | **Sb** | **07 55 25.0** | **-1.1** |
| **KFL** | **Anninata** | **0.59** | **165** | P | | | **Pg** | **07 55 18.5** | **+0.2** |
| KFL | | | | S | | | **Sb** | **07 55 28.7** | **+0.1** |
| **KFL** | **Anninata** | **0.59** | **165** | P | | | **Pg** | **07 55 18.5** | **+0.2** |
| KFL | | | | S | | | **Sb** | **07 55 28.7** | **+0.1** |
| **DSL** | **Palaion Diasel** | **0.60** | **41** | *e*PG | | | **Pg** | **07 55 18.5** | **0.0** |
| DSL | | | | *e*SB | | | **Sg** | **07 55 27.1** | **+0.8** |
| **DSL** | **Palaion Diasel** | **0.60** | **41** | P | | | **Pg** | **07 55 17.5** | **-1.0** |
| DSL | | | | S | | | **Sg** | **07 55 27.0** | **+0.8** |
| **DSL** | **Palaion Diasel** | **0.60** | **41** | P | | | **Pg** | **07 55 17.5** | **-1.0** |
| **DSL** | **Palaion Diasel** | **0.60** | **41** | *e*Pg | | | **Pg** | **07 55 18.5** | **0.0** |
| DSL | | | | S | | | **Sg** | **07 55 27.0** | **+0.8** |
| **PVO** | **Paravola** | **0.73** | **95** | P | | | **Pg** | **07 55 21.2** | **+0.2** |
| PVO | | | | S | | | **Sb** | **07 55 33.5** | **+0.8** |
| **PVO** | **Paravola** | **0.73** | **95** | P | | | **Pg** | **07 55 21.2** | **+0.2** |
| PVO | | | | S | | | **Sb** | **07 55 33.5** | **+0.8** |
| **AXS** | **Araxos** | **0.78** | **128** | P | | | **Pg** | **07 55 22.0** | **+0.1** |
| **AXS** | **Araxos** | **0.78** | **128** | P | | | **Pg** | **07 55 22.0** | **+0.1** |
| **IGT** | **Igoumenitsa** | **0.88** | **347** | *e*PB | | | **Pb** | **07 55 24.7** | **-0.1** |
| IGT | | | | *e*SB | | | **Sb** | **07 55 36.7** | **-0.2** |
| **IGT** | **Igoumenitsa** | **0.88** | **347** | *e*Pb | | | **Pb** | **07 55 24.7** | **-0.1** |
| IGT | | | | *e*Sb | | | **Sb** | **07 55 36.7** | **-0.2** |
| **RLS** | **Riolos of Patr** | **0.93** | **132** | *e*PB | | | **Pg** | **07 55 24.8** | **+0.1** |
| **RLS** | **Riolos of Patr** | **0.93** | **132** | P | | | **Pg** | **07 55 24.8** | **+0.1** |
| RLS | | | | S | | | **Sn** | **07 55 39.6** | **-0.9** |
| **RLS** | **Riolos of Patr** | **0.93** | **132** | P | | | **Pg** | **07 55 24.8** | **+0.1** |
| RLS | | | | S | | | **Sn** | **07 55 39.6** | **-0.9** |
| **SGD** | **Sagiada** | **0.97** | **343** | *e*PG | | | **Pg** | **07 55 25.8** | **+0.2** |
| **SGD** | **Sagiada** | **0.97** | **343** | *e*Pg | | | **Pg** | **07 55 25.8** | **+0.2** |
| **EVR** | **Evrytania** | **0.98** | **76** | *e*PN | | | **Pg** | **07 55 26.1** | **+0.4** |
| EVR | | | | *e*SB | | | **Sb** | **07 55 39.6** | **-0.3** |
| **EVR** | **Evrytania** | **0.98** | **76** | *e*Pn | | | **Pg** | **07 55 26.1** | **+0.4** |
| EVR | | | | *e*Sb | | | **Sb** | **07 55 39.6** | **-0.3** |
| **EFP** | **Efpalio** | **1.06** | **103** | *e*PB | | | **Pg** | **07 55 27.1** | **-0.1** |
| EFP | | | | *e*SB | | | **Sb** | **07 55 41.8** | **-0.3** |
| **EFP** | **Efpalio** | **1.06** | **103** | P | | | **Pg** | **07 55 26.5** | **-0.7** |
| EFP | | | | S | | | **Sn** | **07 55 43.3** | **-0.5** |
| **EFP** | **Efpalio** | **1.06** | **103** | P | | | **Pg** | **07 55 26.5** | **-0.7** |
| **EFP** | **Efpalio** | **1.06** | **103** | *e*Pb | | | **Pg** | **07 55 27.1** | **-0.1** |
| EFP | | | | *e*Sb | | | **Sb** | **07 55 41.8** | **-0.3** |
| EFP | | | | S | | | **Sn** | **07 55 43.3** | **-0.5** |
| **DRO** | **Drossia** | **1.14** | **129** | *e*PB | | | **Pg** | **07 55 28.9** | **+0.1** |
| **DRO** | **Drossia** | **1.14** | **129** | P | | | **Pg** | **07 55 28.1** | **-0.7** |
| DRO | | | | S | | | **Sn** | **07 55 46.5** | **+0.6** |
| **DRO** | **Drossia** | **1.14** | **129** | P | | | **Pg** | **07 55 28.1** | **-0.7** |
| **DRO** | **Drossia** | **1.14** | **129** | *e*Pb | | | **Pg** | **07 55 28.9** | **+0.1** |
| DRO | | | | S | | | **Sn** | **07 55 46.5** | **+0.6** |
| **LAKA** | **Lakka** | **1.17** | **112** | *e*PN | | | **Pg** | **07 55 28.8** | **-0.6** |
| **LAKA** | **Lakka** | **1.17** | **112** | P | | | **Pg** | **07 55 28.3** | **-1.1** |
| LAKA | | | | S | | | **Sn** | **07 55 46.4** | **-0.3** |
| **LAKA** | **Lakka** | **1.17** | **112** | P | | | **Pg** | **07 55 28.3** | **-1.1** |
| **LAKA** | **Lakka** | **1.17** | **112** | *e*Pn | | | **Pg** | **07 55 28.8** | **-0.6** |
| LAKA | | | | S | | | **Sn** | **07 55 46.4** | **-0.3** |
| **SERG** | **Sergoula** | **1.18** | **103** | P | | | **Pg** | **07 55 28.6** | **-0.9** |
| SERG | | | | S | | | **Sn** | **07 55 46.2** | **-0.6** |
| **SERG** | **Sergoula** | **1.18** | **103** | P | | | **Pg** | **07 55 28.6** | **-0.9** |
| SERG | | | | S | | | **Sn** | **07 55 46.2** | **-0.6** |
| **KEK** | **Kerkira** | **1.20** | **329** | *e*PB | | | **Pn** | **07 55 31.1** | **+0.4** |
| KEK | | | | *e*SB | | | **Sn** | **07 55 47.2** | **-0.3** |
| **KEK** | **Kerkira** | **1.20** | **329** | *e*Pb | | | **Pn** | **07 55 31.1** | **+0.4** |
| KEK | | | | *e*Sb | | | **Sn** | **07 55 47.2** | **-0.3** |
| **MAKR** | **Makrakomi, Fth** | **1.24** | **74** | *e*PB | | | **Pg** | **07 55 30.8** | **0.0** |
| MAKR | | | | *e*SB | | | **Sb** | **07 55 47.7** | **+0.2** |
| **MAKR** | **Makrakomi, Fth** | **1.24** | **74** | *e*Pb | | | **Pg** | **07 55 30.8** | **0.0** |
| MAKR | | | | *e*Sb | | | **Sb** | **07 55 47.7** | **+0.2** |
| **KALE** | **Kalithea** | **1.25** | **103** | *e*PB | | | **Pg** | **07 55 30.6** | **-0.2** |
| **KALE** | **Kalithea** | **1.25** | **103** | *e*Pb | | | **Pg** | **07 55 30.6** | **-0.2** |
| **KLV** | **Kalavryta, Ach** | **1.38** | **117** | *e*PB | | | **Pn** | **07 55 33.1** | **0.0** |
| **KLV** | **Kalavryta, Ach** | **1.38** | **117** | *e*Pb | | | **Pn** | **07 55 33.1** | **0.0** |
| **AGG** | **Agios Georgios** | **1.40** | **75** | *e*PG | | | **Pn** | **07 55 32.8** | **-0.5** |
| AGG | | | | *e*SB | | | **Sn** | **07 55 52.9** | **+0.6** |
| **AGG** | **Agios Georgios** | **1.40** | **75** | *e*Pg | | | **Pn** | **07 55 32.8** | **-0.5** |
| AGG | | | | *e*Sb | | | **Sn** | **07 55 52.9** | **+0.6** |
| **THL** | **Klokotos Trika** | **1.41** | **51** | *e*PB | | | **Pg** | **07 55 34.6** | **+0.5** |
| **THL** | **Klokotos Trika** | **1.41** | **51** | *e*Pb | | | **Pg** | **07 55 34.6** | **+0.5** |
| **DSF** | **Desfina** | **1.54** | **99** | *e*PB | | | **Pb** | **07 55 35.9** | **-0.2** |
| **DSF** | **Desfina** | **1.54** | **99** | *e*Pb | | | **Pb** | **07 55 35.9** | **-0.2** |
| **DESF** | **Desfina** | **1.54** | **99** | *e*PB | | | **Pg** | **07 55 36.4** | **-0.1** |
| **DESF** | **Desfina** | **1.54** | **99** | *e*Pb | | | **Pg** | **07 55 36.4** | **-0.1** |
| **GUR** | **Goura** | **1.56** | **118** | *e*PG | | | **Pn** | **07 55 36.1** | **+0.4** |
| **GUR** | **Goura** | **1.56** | **118** | *e*Pg | | | **Pn** | **07 55 36.1** | **+0.4** |
| **LTK** | **Loutraki** | **1.98** | **109** | *e*PN | | | **Pb** | **07 55 43.8** | **+0.2** |
| **LTK** | **Loutraki** | **1.98** | **109** | *e*Pn | | | **Pb** | **07 55 43.8** | **+0.2** |

**IDC 20 08:00:18.3±2.7, 52.49N×34.76E, h0km, mb3.5/1, mb1 3.6/4, mb1mx3.2/40, mbtmp3.5/4, ML3.1/3, Error ellipse: s-maj=40.1km s-min=14.0km az=122.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OBN** | **Obninsk** | **2.84** | **21** | Sn | | | Sn | 08 01 39.9 | +0.3 |
| | 5.6nm,0.3s,baz=21,slow=22,SNR=3.8 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **3.89** | **245** | Pn | | | Pn | 08 01 16.5 | -2.7 |
| | 2.1nm,0.3s,baz=57,slow=14,SNR=5.8 | | | | | | | | |
| AKASG | | | | Sn | | | Sn | 08 02 05.4 | -0.2 |
| | 2.5nm,0.3s,baz=341,slow=29,SNR=4.3 | | | | | | | | |
| AKASG | | | | Lg | | | Lg | 08 02 22.6 | |
| | 2.6nm,0.3s,baz=67,slow=28,SNR=3.3 | | | | | | | | |
| **FINES** | **FINESS Array B** | **10.14** | **336** | Pn | | | Pn | 08 02 39.5 | -5.4 |
| | 0.2nm,0.3s,baz=152,slow=14,SNR=6.1 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **17.64** | **349** | Pn | | | Pn | 08 04 20.5 | -4.6 |
| | 0.3nm,0.3s,baz=165,slow=11,SNR=9.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **47.31** | **226** | P | | | P | 08 08 54.5 | +1.0 |
| | 0.7nm,1.0s,baz=32,slow=6.7,SNR=3.5 | | | | | | | | |

**MEX 20 08:16:45.7±0.3, 16.36N×95.97W, h90km±23km, MD4.1, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HUIG** | **Huatulco** | **0.60** | **193** | *i* P | | | Pn | 08 16 60.0 | -1.3 |
| HUIG | | | | *e*S | | | Sn | 08 17 11.1 | -1.7 |
| **PCIG** | | **2.72** | **103** | *e*P | | | Pn | 08 17 26.5 | -0.9 |
| PCIG | | | | *i* S | | | Sn | 08 17 56.7 | -2.8 |
| **TGIG** | | **2.76** | **81** | *e*P | | | Pn | 08 17 27.2 | -0.9 |
| TGIG | | | | *e*S | | | Sn | 08 17 59.2 | -1.5 |
| **CCIG** | **Comitan** | **3.68** | **91** | *e*P | | | Pn | 08 17 39.7 | -0.9 |
| CCIG | | | | *e*S | | | Sn | 08 18 21.7 | -1.5 |

*IDC **20** 08:24:47.3±4.5, 5.66S×149.88E, h100km±42km, mb3.7/5, mb1 3.9/6, mb1mx3.5/38, mbtmp4.1/6, Error ellipse: s-maj=31.7km s-min=28.4km az=66.0*

*ISCJB **20** 08:24:49.6±1.0, 5.75S±0.1×149.7E±0.2, h135km, mb3.7/4, Error ellipse: s-maj=26.4km s-min=12.6km az=32.2*
**ISC 20 08:24:50.9±1.2, 5.75S±0.2×149.8E±0.2, h135km, n6, σ1s06/6, mb3.7/4, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.49** | **215** | P | | | Pn | 08 25 53.2 | -4.0 |
| | 12nm,0.3s,baz=34,slow=4.9,SNR=20 | | | | | | | | |
| PMG | | | | S | | | **Sn** | **08 26 48.5** | **-0.3** |
| | 7.9nm,0.3s,baz=20,slow=18,SNR=11 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.62** | **225** | P | | | **P** | **08 29 19.2** | **-0.6** |
| | 17nm,0.9s,baz=52,slow=11,SNR=70 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **22.86** | **137** | P | | | **P** | **08 29 43.5** | **+0.6** |
| | 8.1nm,0.8s,baz=356,slow=19,SNR=4.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **23.49** | **219** | P | | | **P** | **08 29 49.2** | **+0.6** |
| | 3.0nm,0.6s,baz=53,slow=9.1,SNR=21 | | | | | | | | |
| **SONM** | **Songino Array** | **65.56** | **329** | P | | | **P** | **08 35 21.1** | **+0.9** |
| | 0.3nm,0.5s,baz=142,slow=4.9,SNR=3.2 | | | | | | | | |
| **ILAR** | **Eielson Array** | **84.16** | **23** | P | | | **P** | **08 37 05.4** | **-1.2** |
| | 0.3nm,0.7s,baz=251,slow=5.5,SNR=3.7 | | | | | | | | |

*AUST **20** 08:30:58.9±3.3, 5.21S×149.67E, h16km, Error ellipse: s-maj=1.7km s-min=1.0km az=327.0*
*BJI **20** 08:31:00.0, 5.70S×149.90E, h24km, mb4.6/6, mB4.8/2*
*ISCJB **20** 08:31:03.6±0.5, 5.73S±0.05×149.77E±0.07, h50km, mb4.6/20, MS3.7/2, Error ellipse: s-maj=10.3km s-min=7.0km az=174.8*
*IDC **20** 08:31:04.6±2.1, 5.70S×149.83E, h46km±20km, mb4.1/11, mb1 4.2/14, mb1mx4.0/34, mbtmp4.4/14, ML3.4/3, MS3.8/2, Ms1 3.8/2, ms1mx3.2/24, Error ellipse: s-maj=17.4km s-min=11.8km az=100.0*
*NEIC **20** 08:31:06.3±1.5, 5.76S×149.76E, h62km±13km, mb4.1/1, Error ellipse: s-maj=15.7km s-min=8.2km az=66.0*
*DJA **20** 08:31:15.4±0.8, 6°S±4°×149°E±°, h118km±7km, M4.9/25, mb4.5/25, mB5.8/5, ML4.8/1, Mw(mB)5.4/5*
**ISC 20 08:31:05.5±0.7, 5.70S±0.06×149.83E±0.09, h50km, n50, σ1s67/49, mb4.6/20, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.76** | **57** | P | | | Pn | 08 31 42.3 | -5.0 |
| | baz=2.7,SNR=22 | | | | | | | | |
| **PMG** | **Port Moresby** | **4.54** | **216** | P | | | **Pn** | **08 32 11.9** | **+0.2** |
| | 30nm,0.3s,baz=22,slow=6.9,SNR=58 | | | | | | | | |
| PMG | | | | S | | | **Sn** | **08 33 06.8** | **+3.5** |
| | 47nm,0.3s,baz=52,slow=20,SNR=9.0 | | | | | | | | |
| **PMG** | **Port Moresby** | **4.54** | **216** | P | | | **Pn** | **08 32 12.1** | **+0.4** |
| | baz=4.9,SNR=41 | | | | | | | | |
| **PMG** | **Port Moresby** | **4.54** | **216** | P | | | **Pn** | **08 32 11.9** | **+0.2** |
| PMG | | | | *e*Pn | | | Pn | 08 32 12.1 | +0.3 |
| PMG | | | | *e*Sn | | | **Sn** | **08 33 01.7** | **-1.5** |
| PMG | | | | S | | | **Sn** | **08 33 06.8** | **+3.5** |
| **JAY** | **Jayapura** | **9.63** | **289** | P | | | **Pn** | **08 33 21.6** | **-0.1** |
| | 0.6nm,0.3s,baz=68,slow=13,SNR=4.1 | | | | | | | | |
| **GENI** | **Genyem** | **10.12** | **287** | P | | | Pn | 08 33 33.1 | +4.9 |
| | 59nm,1.1s | | | | | | | | |
| **COEN** | **Coen** | **10.51** | **218** | P | | | **Pn** | **08 33 33.5** | **-0.1** |
| | baz=11,SNR=12 | | | | | | | | |
| **COEN** | **Coen** | **10.51** | **218** | *e*Pn | | | **Pn** | **08 33 33.0** | **-0.5** |
| **MTSU** | **Mount Surprise** | **13.48** | **203** | P | | | Pn | 08 34 17.4 | +3.1 |
| | baz=14,SNR=4.2 | | | | | | | | |
| **FAKI** | **Fak Fak** | **17.75** | **278** | P | | | **P** | **08 35 10.1** | **+0.7** |
| | 24nm,1.5s | | | | | | | | |
| **QIS** | **Mount Isa** | **17.80** | **213** | P | | | **P** | **08 35 10.1** | **+0.1** |
| | baz=18,SNR=9.8 | | | | | | | | |
| **KDU** | **Kakadu** | **18.48** | **247** | P | | | **P** | **08 35 14.6** | **-2.9** |
| | baz=18,SNR=5.3 | | | | | | | | |
| **SIJI** | **Sorong** | **19.14** | **284** | P | | | **P** | **08 35 24.0** | **-0.8** |
| | 0.5nm,0.3s,baz=94,slow=13,SNR=3.4 | | | | | | | | |
| **EIDS** | **Eidsvold** | **19.60** | **177** | P | | | **Pn** | **08 35 31.0** | **-0.4** |
| | baz=20,SNR=3.6 | | | | | | | | |
| **EIDS** | **Eidsvold** | **19.60** | **177** | *e*P | | | **P** | **08 35 28.5** | **-1.2** |
| | 7.8nm,0.7s | | | | | | | | |
| **MTN** | **Manton Dam** | **19.76** | **248** | P | | | **P** | **08 35 28.8** | **-2.7** |
| | baz=20,SNR=4.0 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.66** | **225** | *e*P | | | **P** | **08 35 40.0** | **-1.3** |
| | 97nm,0.9s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.68** | **225** | P | | | **P** | **08 35 40.1** | **-1.3** |
| | 80nm,0.9s,baz=52,slow=11,SNR=122 | | | | | | | | |
| WRA | | | | S | | | **S** | **08 39 30.0** | **+0.2** |
| | 1.2nm,0.8s,baz=46,slow=20,SNR=5.0 | | | | | | | | |
| **RMQ** | **Roma** | **20.70** | **183** | P | | | **P** | **08 35 43.1** | **+1.4** |
| | baz=21,SNR=7.5 | | | | | | | | |
| **QLP** | **Quilpie** | **21.45** | **194** | P | | | P | 08 35 55.1 | +5.5 |
| | baz=22,SNR=7.2 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **22.87** | **137** | P | | | **P** | **08 36 03.7** | **-1.3** |
| | 25nm,0.7s,baz=358,slow=12,SNR=19 | | | | | | | | |
| DZM | | | | LR | | | LR | 08 43 49.0 | |
| | comp=Z,325nm,19.5s,baz=308,slow=33 | | | | | | | | |
| **KNRA** | **Kunurra** | **22.93** | **243** | P | | | **P** | **08 36 03.8** | **-1.8** |
| | baz=23,SNR=11 | | | | | | | | |
| **ASAR** | **Alice Springs** | **23.55** | **219** | P | | | **P** | **08 36 10.3** | **-1.2** |
| | 12nm,0.7s,baz=53,slow=8.7,SNR=51 | | | | | | | | |
| ASAR | | | | S | | | **S** | **08 40 23.8** | **+1.6** |
| | 0.5nm,0.9s,baz=32,slow=21,SNR=2.5 | | | | | | | | |
| **ARMA** | **Armidale** | **24.65** | **176** | P | | | **P** | **08 36 25.8** | **+4.1** |
| | baz=25,SNR=4.0 | | | | | | | | |
| **SOEI** | **Soe** | **25.64** | **259** | P | | | **P** | **08 36 29.0** | **-1.9** |
| | 29nm,1.3s | | | | | | | | |
| **SGSI** | **Sangihe** | **26.00** | **290** | P | | | **P** | **08 36 35.4** | **+1.4** |
| | 339nm,0.7s | | | | | | | | |
| **GTOI** | **Gorontalo** | **27.51** | **282** | P | | | **P** | **08 36 49.3** | **+1.7** |
| | 21nm,1.2s | | | | | | | | |
| **EDFI** | **Ende, Flores** | **28.08** | **262** | P | | | **P** | **08 36 51.1** | **-1.7** |
| | 54nm,0.7s,7µm | | | | | | | | |
| **WRKA** | **Warakurna** | **28.21** | **225** | P | | | **P** | **08 36 51.7** | **-2.1** |
| | baz=28,SNR=25 | | | | | | | | |
| **BASI** | **Baing, Sumba** | **29.31** | **259** | P | | | **P** | **08 37 01.6** | **-2.0** |
| | 109nm,1.5s,7µm | | | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.78** | **192** | P | | | **P** | **08 37 24.9** | **-0.2** |
| | baz=32,SNR=5.7 | | | | | | | | |
| **MEEK** | **Meekatharra** | **36.32** | **232** | P | | | **P** | **08 38 02.8** | **-2.0** |
| | baz=37,SNR=54 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **42.23** | **157** | P | | | **P** | **08 38 54.2** | **+0.5** |
| | 8.7nm,0.6s,baz=354,slow=3.9,SNR=5.2 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.40** | **346** | LR | | | LR | 08 55 51.5 | |
| | comp=Z,85nm,21.4s,baz=255,slow=34 | | | | | | | | |
| **KSRS** | **Korea Array** | **47.54** | **336** | P | | | **P** | **08 39 37.0** | **+1.0** |
| | 1.1nm,0.8s,baz=148,slow=8.0,SNR=3.6 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.55** | **336** | P | | | **P** | **08 39 37.0** | **+0.9** |
| **USRK** | **Ussuriysk Ar.** | **52.20** | **344** | P | | | **P** | **08 40 10.5** | **-0.8** |
| | 1.1nm,0.6s,baz=175,slow=7.3,SNR=6.1 | | | | | | | | |
| **LOEI** | **Loei** | **53.21** | **297** | P | | | **P** | **08 40 18.1** | **-1.1** |
| | 9.8nm,1.0s | | | | | | | | |
| **UTTA** | **Uttaradit** | **53.92** | **297** | P | | | **P** | **08 40 26.7** | **+2.3** |
| | 2.7nm,0.9s | | | | | | | | |
| **PHRA** | **Phrae** | **54.48** | **297** | P | | | **P** | **08 40 30.9** | **+2.4** |
| | 380nm,1.2s | | | | | | | | |
| **KMI** | **Kunming** | **55.07** | **306** | P | | | **P** | **08 40 33.1** | **+0.1** |
| KMI | | | | PMZ | | | | | |
| | 16nm,1.1s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.61** | **297** | P | | | **P** | **08 40 35.8** | **-0.9** |
| | 2.8nm,0.8s,baz=124,slow=5.8,SNR=11 | | | | | | | | |
| **GTA** | **Gaotai** | **64.34** | **319** | *e*P | | | **P** | **08 41 38.8** | **+2.4** |
| GTA | | | | pP | | | pP | 08 41 44.6 | -5.8 |
| GTA | | | | sP | | | sP | 08 41 47.8 | -8.3 |
| GTA | | | | PMZ | | | | | |
| | 6.0nm,0.9s | | | | | | | | |
| **SONM** | **Songino Array** | **65.54** | **329** | P | | | **P** | **08 41 43.3** | **-0.7** |
| | 9.9nm,1.2s,baz=126,slow=7.5,SNR=20 | | | | | | | | |
| **YAK** | **Yakutsk** | **69.30** | **350** | P | | | **P** | **08 42 07.8** | **+0.6** |
| | 3.7nm,0.4s,baz=180,slow=3.0,SNR=2.4 | | | | | | | | |
| **VNDA** | **Vanda** | **72.06** | **177** | P | | | **P** | **08 42 23.4** | **-0.5** |
| | 3.2nm,0.8s,baz=322,slow=7.2,SNR=22 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **79.07** | **320** | P | | | **P** | **08 43 03.3** | **-1.3** |
| | 0.3nm,0.3s,baz=91,slow=7.5,SNR=5.1 | | | | | | | | |
| **MAW** | **Mawson** | **83.61** | **203** | P | | | **P** | **08 43 28.0** | **-0.2** |
| | 2.0nm,0.9s,baz=128,slow=4.5,SNR=4.3 | | | | | | | | |
| **ILAR** | **Eielson Array** | **84.11** | **23** | P | | | P | 08 43 26.8 | -4.0 |
| | 0.7nm,0.7s,baz=241,slow=4.9,SNR=7.9 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.73** | **286** | PKPbc | | | **PKPdf** | **08 50 44.4** | **+1.5** |
| | 1.6nm,1.0s,baz=54,slow=3.3,SNR=7.0 | | | | | | | | |

*CSEM **20** 08:44:47.9±0.3, 30.90N×56.57E, h2km, ML3.5, Error ellipse: s-maj=8.3km s-min=6.7km az=85.0*
**TEH 20 08:44:48.2, 30.91N×56.48E, h5km, ML3.5, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KHGB** | **Koh Gabri** | **0.54** | **180** | *e*Pg | | | Pg | 08 44 57.5 | -1.4 |
| **KHGB** | **Koh Gabri** | **0.54** | **180** | *e*Pg | | | Pg | 08 44 57.5 | -1.4 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KRBR** | **Kerman** | **0.96** | **165** | *e*Pg | | | Pg | 08 45 05.4 | -1.7 |
| **IBAF** | **Bafgh** | **1.03** | **311** | *e* | | | | 08 45 21.4 | |
| | comp=Z,17µm,0.1s | | | | | | | | |
| IBAF | | | | *e*Pg | | | Pg | 08 45 05.9 | -2.4 |
| **CHMN** | **Cheshme madani** | **1.39** | **139** | *e*Pg | | | Pn | 08 45 13.4 | -1.4 |
| **CHMN** | **Cheshme madani** | **1.39** | **139** | *e*Pg | | | Pn | 08 45 13.4 | -1.4 |
| **IMEH** | **Mehriz** | **1.67** | **287** | *e*Pn | | | Pn | 08 45 18.1 | -0.3 |
| IMEH | | | | *e* | | | | 08 45 46.0 | |
| | comp=Z,6µm,0.1s | | | | | | | | |
| **IMEH** | **Mehriz** | **1.67** | **287** | *e*Pn | | | Pn | 08 45 18.1 | -0.3 |
| **ICHK** | **Chekchek** | **2.21** | **307** | *e*Pn | | | Pn | 08 45 25.8 | -0.1 |
| **ICHK** | **Chekchek** | **2.21** | **307** | *e*Pn | | | Pn | 08 45 25.8 | -0.1 |
| **ISAD** | **Sadrabad** | **2.59** | **293** | *e*Pn | | | Pn | 08 45 31.5 | +0.4 |
| ISAD | | | | *e*Sg | | | Sb | 08 46 09.1 | +1.2 |
| ISAD | | | | *e* | | | | 08 46 12.2 | |
| | comp=Z,4µm,0.1s | | | | | | | | |
| **ISAD** | **Sadrabad** | **2.59** | **293** | *e*Pn | | | Pn | 08 45 31.5 | +0.4 |
| **IKOO** | **Kooshah** | **2.63** | **54** | *e*Pn | | | Pn | 08 45 31.2 | -0.4 |
| IKOO | | | | *e* | | | | 08 46 12.1 | |
| | comp=N,6µm,0.3s | | | | | | | | |
| **IKOO** | **Kooshah** | **2.63** | **54** | *e*Pn | | | Pn | 08 45 31.2 | -0.5 |
| **TABS** | **Tabas** | **2.78** | **11** | *e*Pn | | | Pn | 08 45 34.0 | +0.4 |
| TABS | | | | *e*Sg | | | Sg | 08 46 15.5 | -2.4 |
| **IPAR** | **Pars** | **3.15** | **251** | *e*Pn | | | Pn | 08 45 41.5 | +2.6 |
| IPAR | | | | *e* | | | | 08 46 40.5 | |
| | comp=Z,951nm,0.4s | | | | | | | | |
| **IPAR** | **Pars** | **3.15** | **251** | *e*Pn | | | Pn | 08 45 41.5 | +2.6 |
| **ISRV** | **Sarvestan** | **3.29** | **243** | *e*Pn | | | Pn | 08 45 43.2 | +2.3 |
| ISRV | | | | *e* | | | | 08 46 53.5 | |
| | comp=Z,562nm,0.3s | | | | | | | | |
| **ISRV** | **Sarvestan** | **3.29** | **243** | *e*Pn | | | Pn | 08 45 43.2 | +2.4 |
| **NASN** | **Na'in** | **3.65** | **302** | *e*Pn | | | Pn | 08 45 46.8 | +1.1 |
| **GHIR** | **Ghir-Karzin** | **4.01** | **230** | *e*Pn | | | Pn | 08 45 52.2 | +1.7 |
| **IZEF** | **Zefreh** | **4.04** | **300** | *e*Pn | | | Pn | 08 45 52.2 | +1.1 |
| IZEF | | | | *e* | | | | 08 47 02.7 | |
| | comp=Z,298nm,0.2s | | | | | | | | |
| **IZEF** | **Zefreh** | **4.04** | **300** | *e*Pn | | | Pn | 08 45 52.2 | +1.1 |
| **SHRT** | **Shahrakht** | **4.22** | **49** | *e*Pn | | | Pn | 08 45 53.6 | +0.2 |
| **SHRO** | **Shahrood** | **5.08** | **356** | *e*Pn | | | Pn | 08 46 06.4 | +1.2 |

*ISCJB **20** 08:45:10.3±0.4, 59.79N±0.03×22.24E±0.04, h0km, Error ellipse: s-maj=4.3km s-min=2.8km az=177.2*
*CSEM **20** 08:45:11.7±0.2, 59.80N×22.24E, h2km, ML2.0, Error ellipse: s-maj=4.7km s-min=3.1km az=176.0, Mining explosion.*
*HEL **20** 08:45:11.8±0.1, 59.78N×22.23E, h0km, ML2.0, ML2.1(UPP), Explosion*
*NAO **20** 08:45:11.4±1.1, 59.83N×22.39E, ML2.1*
*UPP **20** 08:45:12.6, 59.80N×22.10E, h0km, ML2.1, Suspected Mining explosion.*
*BER **20** 08:45:12.4±4.0, 59.84N×22.37E, h0km, ML2.1(NAO), Suspected explosion*
*IDC **20** 08:45:12.0±1.9, 59.78N×22.49E, h0km, mb1 3.0/4, mb1mx2.9/45, mbtmp2.9/4, ML2.6/4, Error ellipse: s-maj=26.8km s-min=8.3km az=160.0*
**ISC 20 08:45:10.9±0.8, 59.79N±0.03×22.24E±0.02, h0km, n60, σ1s14/92, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MEF** | **Metsahovi** | **1.17** | **67** | *e*P | | | **Pg** | **08 45 32.2** | **-1.1** |
| MEF | | | | *e*S | | | **Sg** | **08 45 47.6** | **-0.8** |
| **MEF** | **Metsahovi** | **1.17** | **67** | P | | | **Pg** | **08 45 32.1** | **-1.1** |
| MEF | | | | S | | | **Sg** | **08 45 47.6** | **-0.8** |
| **AAL** | **Aland** | **1.19** | **290** | *e*P | | | **Pg** | **08 45 33.0** | **-0.8** |
| AAL | | | | *e*S | | | **Sg**

baz=100,slow=11
HFS Sn **Sn** **08 47 07.9 -0.6**
baz=90,slow=22
HFS Lg Lg 08 47 24.9
baz=104,slow=37
**HFS Hagfors 4.31 278** Pn **Pn** **08 46 19.9 +2.3**
comp=Z,0.2nm,0.3s,baz=91,slow=13,SNR=5.9
HFS Pg **Pb** **08 46 28.5 +1.0**
comp=Z,0.3nm,0.3s,baz=96,slow=15,SNR=6.1
HFS Sn **Sn** **08 47 10.3 +1.8**
comp=Z,0.2nm,0.3s,baz=90,slow=23,SNR=3.3
HFS Lg Lg 08 47 25.2
comp=Z,0.9nm,0.3s,baz=103,slow=32,SNR=10
**HFS Hagfors 4.31 278** Pn **Pn** **08 46 19.1 +1.5**
baz=100,slow=11,SNR=50
HFS Sn **Sn** **08 47 07.9 -0.6**
baz=90,slow=21,SNR=50
**NB2 NORSAR Subarra 5.61 288** Pn **Pn** **08 46 35.7 +0.3**
baz=97,slow=14
**NB2 NORSAR Subarra 5.61 288** Pn **Pn** **08 46 35.7 +0.3**
baz=97,slow=14
**NB2 NORSAR Subarra 5.61 288** Pn **Pn** **08 46 35.7 +0.3**
baz=97,slow=12,SNR=50
**NOA NORSAR Array B 5.61 288** Pn **Pn** **08 46 35.7 +0.3**
comp=Z,0.2nm,0.3s,baz=87,slow=14,SNR=4.0
NOA Sn **Sn** **08 47 41.2 +0.7**
comp=Z,0.2nm,0.3s,baz=63,slow=18,SNR=2.2
**APA0 Apatity Array 9.17 27** Pn **Pn** **08 47 24.4 +0.1**
baz=231,slow=16
**APA0 Apatity Array 9.17 27** Pn **Pn** **08 47 24.4 +0.1**
baz=231,slow=16
**APA0 Apatity Array 9.17 27** Pn **Pn** **08 47 24.4 +0.1**
baz=231,slow=14,SNR=50
**ARA0 ARCESS Array S 9.89 7** Pn **Pn** **08 47 31.8 -2.3**
baz=190,slow=14
ARA0 Sn Sn 08 49 16.2 -9.4
baz=185,slow=22
**ARA0 ARCESS Array S 9.89 7** Pn **Pn** **08 47 31.8 -2.3**
baz=190,slow=14
ARA0 Sn Sn 08 49 16.2 -9.4
baz=185,slow=22
**ARCES ARCESS Array B 9.89 7** Pn **Pn** **08 47 32.1 -1.9**
comp=Z,0.2nm,0.3s,baz=192,slow=14,SNR=11
ARCES Sn Sn 08 49 17.7 -7.9
comp=Z,0.1nm,0.3s,baz=188,slow=25,SNR=2.3

*IDC **20** 08:47:39.6±5.1,5.2°S×132.3°E,h0km,mb4.2/1, mb1 4.5/3,mb1mx3.8/24,mbtmp4.3/3,ML4.4/2,Error ellipse: s-maj=333.8km s-min=30.2km az=75.0*
*ISCJB **20** 08:47:54.8±0.5,6.07°S±0.04°×130.84°E±0.06,h86km, mb4.0/1,Error ellipse: s-maj=9.1km s-min=5.9km az=163.7*
*AUST **20** 08:47:55.2±0.0,6.03°S×130.73°E,h62km,Error ellipse: s-maj=1.2km s-min=0.8km az=279.0*
*DJA **20** 08:47:56.8±0.4,6°S±3°×13°1E±°,h137km±12km,M4.8/16, mb4.7/9,mB5.6/4,MLv4.6/16,Mw(mB)5.2/4*
**ISC 20 08:47:55.7±1.0,6°05S±0°09×130°87E±0°09,h86km,n26, σ1§46/22,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.79** | **328** | P | **Pn** | **08 48 28.0** | **+2.9** |
| **SAUI** | **Saumlaki** | **1.97** | **167** | P | Pn | 08 48 32.8 | +5.4 |
| **MSAI** | **Masohi** | **3.31** | **324** | P | **Pn** | **08 48 46.1** | **+0.8** |
| **FAKI** | **Fak Fak** | **3.40** | **24** | P | **Pn** | **08 48 47.8** | **+1.2** |
| baz=3.5,SNR=56 | | | | | | | |
| **FAKI** | **Fak Fak** | **3.40** | **24** | P | **Pn** | **08 48 47.8** | **+1.2** |
| **AAI** | **Ambon** | **3.55** | **311** | P | **Pn** | **08 48 50.2** | **+1.6** |
| **NLAI** | **Namlea** | **4.68** | **306** | P | **Pn** | **08 49 05.4** | **+1.5** |
| **SWI** | **Sorong** | **5.16** | **4** | P | **Pn** | **08 49 10.0** | **-0.6** |
| baz=5.2,SNR=61 | | | | | | | |
| **SWI** | **Sorong** | **5.16** | **4** | P | **Pn** | **08 49 10.1** | **-0.5** |
| 144nm,0.3s,10μm1.8nm | | | | | | | |
| **RKPI** | **Ransiki, Papua** | **5.59** | **36** | P | **Pn** | **08 49 16.2** | **-0.2** |
| 196nm,0.7s,1.7nm | | | | | | | |
| **SANI** | **Sanana** | **6.28** | **309** | P | **Pn** | **08 49 26.8** | **+1.0** |
| 20nm,0.9s,0.1nm | | | | | | | |
| **LBMI** | **Labuha** | **6.34** | **328** | P | **Pn** | **08 49 25.7** | **-0.9** |
| 58nm,0.5s,2μm0.4nm | | | | | | | |
| **MTN** | **Manton Dam** | **6.76** | **178** | P | **Pn** | **08 49 34.0** | **+1.7** |
| baz=6.8,SNR=465 | | | | | | | |
| **KDU** | **Kakadu** | **6.79** | **167** | P | **Pn** | **08 49 34.3** | **+1.6** |
| baz=6.9,SNR=106 | | | | | | | |
| **SOEI** | **Soe** | **7.50** | **240** | P | **Pn** | **08 49 44.6** | **+2.0** |
| baz=7.4,SNR=4.5 | | | | | | | |
| **SOEI** | **Soe** | **7.50** | **240** | P | **Pn** | **08 49 43.6** | **+1.0** |
| 29nm,1.4s,0.3nm | | | | | | | |
| **WAMI** | **Wamena** | **8.11** | **75** | P | **Pn** | **08 49 52.6** | **+1.9** |
| **LUWI** | **Luwuk** | **9.48** | **301** | P | **Pn** | **08 50 07.4** | **-2.1** |
| baz=9.4,SNR=4.7 | | | | | | | |
| **KNRA** | **Kununurra** | **9.79** | **192** | P | **Pn** | **08 50 13.0** | **-0.7** |
| baz=9.8,SNR=84 | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.22** | **167** | Pn | Pn | 08 51 09.7 | -3.4 |
| 1.5nm,0.3s,baz=352,slow=13,SNR=41 | | | | | | | |
| WRA | | | | Sn | Sn | 08 53 39.7 | -10 |
| 1.5nm,0.3s,baz=353,slow=23,SNR=6.5 | | | | | | | |
| **COEN** | **Coen** | **14.44** | **124** | P | **P** | **08 51 19.4** | **-1.0** |
| baz=15,SNR=14 | | | | | | | |
| **QIS** | **Mount Isa** | **16.73** | **150** | P | **P** | **08 51 46.8** | **+1.0** |
| baz=17,SNR=8.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.76** | **171** | P | **P** | **08 51 56.8** | **-0.4** |
| 2.0nm,0.3s,baz=349,slow=10,SNR=91 | | | | | | | |
| ASAR | | | | S | Sn | 08 55 06.2 | -9.1 |
| 0.5nm,0.3s,baz=350,slow=25,SNR=8.0 | | | | | | | |
| **MTSU** | **Mount Surprise** | **17.80** | **134** | P | Pn | 08 52 05.0 | +7.1 |
| baz=18,SNR=3.8 | | | | | | | |
| **WRKA** | **Warakurna** | **19.04** | **187** | P | **P** | **08 52 10.6** | **-0.6** |
| baz=19,SNR=50 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.91** | **326** | P | P | 08 58 40.9 | -4.3 |
| 1.0nm,0.4s,baz=111,slow=7.9,SNR=11 | | | | | | | |

*CSEM **20** 08:48:01.1,42.53N×13.20E,h8km,MD2.5/16,After ROM*
**ROM 20 08:48:01.1±0.1,42.53N×13.20E,h8km,Md2.5/16, Ml2.5/11,2C-4D,Error ellipse: s-maj=1.2km s-min=1.0km az=71.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RM33** | **Pellescritta (** | **0.03** | **159** | ⇓*i* | Pg | 08 48 03.0 | +0.2 |
| RM33 | | | | | Sg | 08 48 04.0 | 0.0 |
| 10μm,0.2s | | | | | | | |
| **RM33** | **Pellescritta (** | **0.03** | **159** | ⇓*i* | Pg | 08 48 03.0 | +0.2 |
| RM33 | | | | | Sg | 08 48 04.0 | 0.0 |
| 10μm,0.2s | | | | | | | |
| **RM29** | **Verrico (Monte** | **0.03** | **0** | | Pg | 08 48 03.1 | +0.2 |
| RM29 | | | | | Sg | 08 48 04.0 | -0.1 |
| 17μm,0.2s | | | | | | | |
| **RM29** | **Verrico (Monte** | **0.03** | **0** | | Pg | 08 48 03.1 | +0.2 |
| RM29 | | | | | Sg | 08 48 04.0 | -0.1 |
| 17μm,0.2s | | | | | | | |
| **RM32** | **Poggio Cancell** | **0.08** | **61** | ⇓*i* | Pg | 08 48 03.5 | +0.1 |
| RM32 | | | | | Sg | 08 48 04.9 | -0.1 |
| 1μm,0.4s | | | | | | | |
| **RM32** | **Poggio Cancell** | **0.08** | **61** | ⇓*i* | Pg | 08 48 03.5 | +0.1 |
| RM32 | | | | | Sg | 08 48 04.9 | -0.1 |
| 1μm,0.4s | | | | | | | |
| **LNSS** | **Leonessa** | **0.14** | **300** | ⇑*i* | Pg | 08 48 05.0 | +0.7 |
| LNSS | | | | | Sg | 08 48 07.8 | +1.3 |
| 3μm,0.4s | | | | | | | |
| **LNSS** | **Leonessa** | **0.14** | **300** | ⇑*i* | Pg | 08 48 05.0 | +0.7 |
| LNSS | | | | | Sg | 08 48 07.8 | +1.3 |
| 3μm,0.4s | | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.14** | **45** | | Pg | 08 48 04.7 | +0.4 |
| SMA1 | | | | | Sg | 08 48 07.1 | +0.6 |
| 4μm,0.6s | | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.14** | **45** | | Pg | 08 48 04.7 | +0.4 |
| SMA1 | | | | | Sg | 08 48 07.1 | +0.6 |
| 4μm,0.6s | | | | | | | |
| **T0104** | **Madonna delle** | **0.20** | **150** | | Pg | 08 48 05.9 | +0.6 |
| T0104 | | | | | Sg | 08 48 09.8 | +1.7 |
| **FIAM** | **Fiamignano** | **0.27** | **193** | | Pg | 08 48 07.3 | +0.6 |
| FIAM | | | | | Sg | 08 48 11.9 | -1.3 |
| 515nm,0.5s | | | | | | | |
| **FIAM** | **Fiamignano** | **0.27** | **193** | | Pg | 08 48 07.3 | +0.6 |
| FIAM | | | | | Sg | 08 48 11.9 | -1.3 |
| 515nm,0.5s | | | | | | | |
| **TERO** | **Teramo** | **0.31** | **73** | | Pg | 08 48 07.4 | +0.1 |
| TERO | | | | | Sg | 08 48 12.9 | -1.3 |
| **TERO** | **Teramo** | **0.31** | **73** | | Pg | 08 48 07.4 | +0.1 |
| TERO | | | | | Sg | 08 48 12.9 | -1.3 |
| **FAGN** | **Fagnano** | **0.39** | **133** | | Pg | 08 48 09.6 | -0.7 |
| 547nm,0.5s | | | | | | | |
| **FAGN** | **Fagnano** | **0.39** | **133** | | Pg | 08 48 09.6 | -0.7 |
| 547nm,0.5s | | | | | | | |
| **MNS** | **Montasola** | **0.41** | **249** | | Pg | 08 48 09.7 | +0.4 |
| 202nm,0.6s | | | | | | | |
| **MNS** | **Montasola** | **0.41** | **249** | | Pg | 08 48 09.7 | +0.4 |
| 202nm,0.6s | | | | | | | |
| **CESX** | **Cesi** | **0.47** | **280** | | Pg | 08 48 10.4 | +0.2 |
| 204nm,0.7s | | | | | | | |
| **CESX** | **Cesi** | **0.47** | **280** | | Pg | 08 48 10.4 | +0.2 |
| 204nm,0.7s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.49** | **106** | | Pg | 08 48 11.5 | -0.7 |
| VCEL | | | | | Sg | 08 48 19.3 | -0.3 |
| 752nm,0.8s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.49** | **106** | | Pg | 08 48 11.5 | -0.7 |
| VCEL | | | | | Sg | 08 48 19.3 | -0.3 |
| 752nm,0.8s | | | | | | | |
| **FDMO** | **Fiordimonte** | **0.51** | **351** | | Pg | 08 48 11.1 | 0.0 |
| FDMO | | | | | Sg | 08 48 19.0 | -1.0 |
| 89nm,0.3s | | | | | | | |
| **FDMO** | **Fiordimonte** | **0.51** | **351** | | Pg | 08 48 11.1 | 0.0 |
| FDMO | | | | | Sg | 08 48 19.0 | -1.0 |
| 89nm,0.3s | | | | | | | |
| **CESI** | **CESI - Serrava** | **0.52** | **335** | | Pg | 08 48 11.4 | +0.1 |
| CESI | | | | | Sg | 08 48 19.6 | -0.8 |
| 56nm,0.4s | | | | | | | |
| **CESI** | **CESI - Serrava** | **0.52** | **335** | | Pg | 08 48 11.4 | +0.1 |
| CESI | | | | | Sg | 08 48 19.6 | -0.8 |
| 56nm,0.4s | | | | | | | |
| **OFFI** | **Offida** | **0.54** | **41** | | Pg | 08 48 12.5 | -0.3 |
| OFFI | | | | | Sg | 08 48 21.0 | +0.3 |
| 895nm,0.6s | | | | | | | |
| **OFFI** | **Offida** | **0.54** | **41** | | Pg | 08 48 12.5 | -0.3 |
| OFFI | | | | | Sg | 08 48 21.0 | +0.3 |
| 895nm,0.6s | | | | | | | |
| **INTR** | **Introdacqua** | **0.74** | **135** | | Pg | 08 48 15.2 | -0.2 |
| **INTR** | **Introdacqua** | **0.74** | **135** | | Pg | 08 48 15.2 | -0.2 |
| **GUMA** | **Gualdo di Mace** | **0.76** | **45** | | Pg | 08 48 11.9 | -3.9 |
| GUMA | | | | | Sg | 08 48 20.7 | -5.0 |
| 654nm,0.5s | | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.76** | **45** | | Pg | 08 48 11.9 | -3.9 |
| GUMA | | | | | Sg | 08 48 20.7 | -5.0 |
| 654nm,0.5s | | | | | | | |

*CSEM **20** 08:48:19.5,42.53N×13.21E,h10km,MD2.0/7,After ROM*
**ROM 20 08:48:19.5±0.1,42.53N×13.21E,h10km±1km,Md2.0/7, Ml2.3/3,Error ellipse: s-maj=1.8km s-min=1.5km az=141.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RM33** | **Pellescritta (** | **0.02** | **174** | | Pg | 08 48 21.7 | +0.3 |
| RM33 | | | | | Sg | 08 48 22.6 | -0.2 |
| 1μm,0.2s | | | | | | | |
| **RM33** | **Pellescritta (** | **0.02** | **174** | | Pg | 08 48 21.7 | +0.3 |
| RM33 | | | | | Sg | 08 48 22.6 | -0.2 |
| 1μm,0.2s | | | | | | | |
| **RM29** | **Verrico (Monte** | **0.03** | **348** | | Pg | 08 48 21.8 | +0.2 |
| RM29 | | | | | Sg | 08 48 22.9 | -0.2 |
| 2μm,0.2s | | | | | | | |
| **RM29** | **Verrico (Monte** | **0.03** | **348** | | Pg | 08 48 21.8 | +0.2 |
| RM29 | | | | | Sg | 08 48 22.9 | -0.2 |
| 2μm,0.2s | | | | | | | |
| **RM32** | **Poggio Cancell** | **0.07** | **54** | | Pg | 08 48 22.2 | +0.2 |
| RM32 | | | | | Sg | 08 48 23.6 | -0.2 |
| 542nm,0.4s | | | | | | | |
| **RM32** | **Poggio Cancell** | **0.07** | **54** | | Pg | 08 48 22.2 | +0.2 |
| RM32 | | | | | Sg | 08 48 23.6 | -0.2 |
| 542nm,0.4s | | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.14** | **41** | | Pg | 08 48 23.4 | +0.6 |
| SMA1 | | | | | Sg | 08 48 25.9 | +0.7 |
| 1μm,0.6s | | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.14** | **41** | | Pg | 08 48 23.4 | +0.6 |
| SMA1 | | | | | Sg | 08 48 25.9 | +0.7 |
| 1μm,0.6s | | | | | | | |
| **LNSS** | **Leonessa** | **0.15** | **301** | | Pg | 08 48 23.7 | +0.7 |
| LNSS | | | | | Sg | 08 48 26.4 | +1.0 |
| 984nm,0.4s | | | | | | | |
| **LNSS** | **Leonessa** | **0.15** | **301** | | Pg | 08 48 23.7 | +0.7 |
| LNSS | | | | | Sg | 08 48 26.4 | +1.0 |
| 984nm,0.4s | | | | | | | |
| **T0104** | **Madonna delle** | **0.19** | **151** | | Pg | 08 48 24.8 | +1.1 |
| T0104 | | | | | Sg | 08 48 28.2 | +1.7 |
| **FIAM** | **Fiamignano** | **0.27** | **195** | | Pg | 08 48 24.9 | -0.2 |
| FIAM | | | | | Sg | 08 48 30.1 | -1.2 |
| 103nm,0.5s | | | | | | | |
| **FIAM** | **Fiamignano** | **0.27** | **195** | | Pg | 08 48 24.9 | -0.2 |
| FIAM | | | | | Sg | 08 48 30.1 | -1.2 |
| 103nm,0.5s | | | | | | | |
| **TERO** | **Teramo** | **0.30** | **72** | | Pg | 08 48 26.0 | +0.3 |
| TERO | | | | | Sg | 08 48 31.3 | -1.0 |
| **TERO** | **Teramo** | **0.30** | **72** | | Pg | 08 48 26.0 | +0.3 |
| TERO | | | | | Sg | 08 48 31.3 | -1.0 |

*ISCJB **20** 08:51:10.0±0.6,59.00N±0.04°×18.28E±0.08,h0km,Error ellipse: s-maj=7.0km s-min=4.2km az=138.4*
*CSEM **20** 08:51:10.9±0.1,59.00N×18.22E,h2km,ML2.1,Error ellipse: s-maj=3.9km s-min=2.3km az=116.0,Mining explosion.*
*UPP **20** 08:51:11.0,58.99N×18.19E,h0km,ML2.1,Mining explosion.*
*HEL **20** 08:51:11.8±0.1,58.99N×18.19E,h0km,ML2.1(UPP), Explosion*
**ISC 20 08:51:09.5±0.9,58.94N±0.03×18.35E±0.03,h0km,n34, σ0§94/41,Baltic Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NYNU** | **Nynaeshamn** | **0.19** | **289** | *i* P | **Pg** | **08 51 13.1** | **0.0** |
| NYNU | | | | *i* S | **Sg** | **08 51 14.5** | **-1.0** |
| **NYNU** | **Nynaeshamn** | **0.19** | **289** | P | **Pg** | **08 51 13.1** | **0.0** |
| NYNU | | | | S | **Sg** | **08 51 14.5** | **-1.0** |
| **NRTU** | **Norrtaelje** | **0.75** | **11** | *i* P | **Pg** | **08 51 24.6** | **+0.7** |
| **NRTU** | **Norrtaelje** | **0.75** | **11** | P | **Pg** | **08 51 24.5** | **+0.7** |
| **VIKU** | **Vikbolandet** | **0.97** | **243** | *eP* | **Pg** | **08 51 28.4** | **+0.4** |
| **VIKU** | **Vikbolandet** | **0.97** | **243** | P | **Pg** | **08 51 28.4** | **+0.4** |
| **ESKU** | **Eskilstuna** | **1.05** | **287** | *eP* | **Pg** | **08 51 28.9** | **-0.7** |
| **ESKU** | **Eskilstuna** | **1.05** | **287** | P | **Pg** | **08 51 28.9** | **-0.7** |
| **BACU** | **Backbrunna** | **1.11** | **326** | *eP* | **Pg** | **08 51 30.4** | **-0.4** |
| **BACU** | **Backbrunna** | **1.11** | **326** | P | **Pg** | **08 51 30.4** | **-0.4** |
| **FLYU** | **Flymyra** | **1.21** | **349** | *eP* | **Pg** | **08 51 32.7** | **0.0** |
| **FLYU** | **Flymyra** | **1.21** | **349** | P | **Pg** | **08 51 32.7** | **0.0** |
| **GOTU** | **Gotland** | **1.27** | **175** | *eP* | **Pn** | **08 51 35.3** | **+0.9** |
| **GOTU** | **Gotland** | **1.27** | **175** | P | **Pn** | **08 51 35.3** | **+0.9** |
| **OSTU** | **Oestervaala** | **1.43** | **335** | *eP* | **Pn** | **08 51 36.2** | **-0.4** |
| **OSTU** | **Oestervaala** | **1.43** | **335** | P | **Pn** | **08 51 36.2** | **-0.4** |
| **FORU** | **Forsmark** | **1.45** | **357** | *eP* | **Pn** | **08 51 37.0** | **+0.1** |
| **FORU** | **Forsmark** | **1.45** | **357** | P | **Pn** | **08 51 37.0** | **+0.1** |
| **AAL** | **Aland** | **1.50** | **33** | *eP* | **Pg** | **08 51 38.4** | **+0.3** |
| AAL | | | | *eS* | **Sg** | **08 51 57.4** | **-0.1** |
| **AAL** | **Aland** | **1.50** | **33** | P | **Pg** | **08 51 38.4** | **+0.3** |
| AAL | | | | S | **Sg** | **08 51 57.4** | **-0.1** |
| **VSTU** | **Vaestervik** | **1.60** | **217** | *eP* | **Pb** | **08 51 40.2** | **+0.3** |
| **VSTU** | **Vaestervik** | **1.60** | **217** | P | **Pb** | **08 51 40.2** | **+0.3** |
| **LNKU** | **Linkoeping** | **1.66** | **245** | *eP* | **Pn** | **08 51 40.5** | **+0.8** |
| **LNKU** | **Linkoeping** | **1.66** | **245** | P | **Pn** | **08 51 40.5** | **+0.8** |
| **ASPU** | **Aespoe** | **1.79** | **212** | *eP* | **Pb** | **08 51 44.0** | **+0.8** |
| **ASPU** | **Aespoe** | **1.79** | **212** | P | **Pb** | **08 51 43.9** | **+0.8** |
| **NRAU** | **Nora** | **1.81** | **292** | *eP* | **Pn** | **08 51 42.5** | **+0.6** |
| **NRAU** | **Nora** | **1.81** | **292** | P | **Pn** | **08 51 42.5** | **+0.6** |
| **ASKU** | **Askersund** | **1.83** | **270** | *eP* | **Pn** | **08 51 42.8** | **+0.7** |
| **ASKU** | **Askersund** | **1.83** | **270** | P | **Pn** | **08 51 42.8** | **+0.7** |
| **RAF** | **Rauma** | **2.70** | **38** | *eP* | **Pn** | **08 51 55.7** | **+1.6** |
| RAF | | | | *eS* | **Sn** | **08 52 28.1** | **+0.6** |
| **RAF** | **Rauma** | **2.70** | **38** | P | **Pn** | **08 51 55.7** | **+1.6** |
| RAF | | | | S | **Sn** | **08 52 28.1** | **+0.6** |
| **MTSE** | **Matsula** | **2.85** | **92** | *eP* | **Pn** | **08 51 54.9** | **-1.3** |
| MTSE | | | | *eS* | **Sn** | **08 52 27.6** | **-3.6** |
| **MTSE** | **Matsula** | **2.85** | **92** | P | **Pn** | **08 51 54.8** | **-1.3** |

**GUC 20 10:02:19.0±0.4,36.00S×73.69W,h28km±4km,ML3.9,3C, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **0.75** | **101** | ⇑*i* | Pb | 10 02 32.3 | -1.1 |
| COCH | | | | *i* S | Sb | 10 02 42.0 | -1.2 |
| COCH | | | | AML | AML | 10 02 43.6 | |
| comp=N,8μm,0.5s | | | | | | | |
| **CCHI** | **Chillan** | **1.44** | **115** | *eP* | Pn | 10 02 43.0 | -0.1 |
| CCHI | | | | *eS* | Sn | 10 03 01.4 | +0.2 |
| CCHI | | | | AML | AML | 10 03 09.2 | |
| comp=E,4μm,0.6s | | | | | | | |
| **TALC** | **Talca** | **1.78** | **71** | ⇑*i* | P | Pb | 10 02 49.4 | -1.5 |
| TALC | | | | *i* | S | Sb | 10 03 11.9 | -0.9 |
| **NICH** | **Los Niches** | **2.24** | **64** | *eP* | | Pn | 10 02 55.3 | +1.0 |
| NICH | | | | *i* | S | Sn | 10 03 22.5 | +1.5 |
| **CLCH** | **Cerro Calan** | **3.67** | **46** | ⇑*i* | P | Pn | 10 03 14.7 | +0.6 |
| **PEL** | **Peldehue** | **3.78** | **42** | *eP* | | Pn | 10 03 16.4 | +0.9 |
| PEL | | | | *eS* | | Sn | 10 03 59.7 | +0.7 |

*ISCJB **20** 10:13:03.1±0.6,1.26N±0.07°×26.93E±0.05,h10km, mb4.0/8,MS3.2/3,Error ellipse: s-maj=11.1km s-min=7.3km az=18.1*
*IDC **20** 10:13:03.4±0.8,1.29N×26.89E,h0km,mb4.0/8, mb1 4.1/10,mb1mx3.9/34,mbtmp4.1/10,ML4.5/3,MS3.3/3, Ms1 3.3/3,ms1mx2.8/34,Error ellipse: s-maj=21.7km s-min=16.8km az=84.0*
*NEIC **20** 10:13:05.1±0.5,1.29N×26.82E,h10km,mb4.3/1,Error ellipse: s-maj=10.4km s-min=9.4km az=81.0*
**ISC 20 10:13:04.9±0.7,1.22N±0.09×26.92E±0.07,h10km,n17, σ1§16/19,mb4.0/8,MS3.0/3,Zaire**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MBAR** | **Mbarara** | **4.22** | **115** | P | **Pn** | **10 14 08.1** | **-1.5** |
| 49nm,0.3s,baz=307,slow=23,SNR=51 | | | | | | | |
| MBAR | | | | Sn | **Sn** | **10 14 57.2** | **-1.9** |
| 217nm,0.3s,baz=79,slow=1.5,SNR=7.8 | | | | | | | |
| MBAR | | | | Lg | Lg | 10 15 09.7 | |
| 185nm,0.3s,baz=213,slow=22,SNR=9.6 | | | | | | | |
| **MBAR** | **Mbarara** | **4.22** | **115** | *e*Pn | Pn | 10 14 13.1 | +3.5 |
| MBAR | | | | Sn | **Sn** | **10 14 57.2** | **-1.9** |
| MBAR | | | | Lg | Lg | 10 15 09.7 | |
| **ENT** | **Entebbe** | **5.67** | **102** | *i* P | **Pn** | **10 14 29.6** | **+0.2** |
| ENT | | | | *i* S | **Sn** | **10 15 36.4** | **+1.6** |
| **KMBO** | **Kilima Mbogo** | **10.59** | **103** | Pn | **Pn** | **10 15 38.0** | **+0.9** |
| 1.3nm,0.3s,baz=276,slow=14,SNR=12 | | | | | | | |
| KMBO | | | | Lg | Lg | 10 18 30.0 | |
| 2.0nm,0.3s,baz=54,slow=18,SNR=7.7 | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **10.59** | **103** | *e*Pn | **Pn** | **10 15 37.6** | **+0.5** |
| KMBO | | | | Lg | Lg | 10 18 30.0 | |
| **LSZ** | **Lusaka** | **16.44** | **176** | Pn | **Pn** | **10 16 56.6** | **+0.5** |
| 0.4nm,0.3s,baz=357,slow=14,SNR=4.1 | | | | | | | |
| LSZ | | | | Sn | Sn | 10 19 44.7 | -14 |
| 0.2nm,0.3s,baz=323,slow=18,SNR=2.3 | | | | | | | |
| LSZ | | | | Lg | Lg | 10 21 27.6 | |
| 0.4nm,0.3s,baz=21,slow=7.0,SNR=5.5 | | | | | | | |
| **MATP** | **Matopo** | **21.57** | **176** | P | **P** | **10 17 55.5** | **+0.5** |
| 2.0nm,0.5s,baz=5.0,slow=9.9,SNR=5.8 | | | | | | | |
| MATP | | | | Lg | Lg | 10 24 19.6 | |
| 13nm,1.1s,baz=70,slow=20,SNR=4.3 | | | | | | | |
| MATP | | | | LR | LR | 10 26 46.7 | |
| comp=Z,53nm,18.6s,baz=212,slow=38 | | | | | | | |
| **DAMY** | **Dhamar** | **21.77** | **52** | *eP* | **P** | **10 17 58.1** | **+0.7** |
| **TSUM** | **Tsumeb** | **22.27** | **204** | P | **P** | **10 18 03.9** | **+1.3** |
| 7.7nm,0.8s,baz=6.9,slow=12,SNR=16 | | | | | | | |
| TSUM | | | | Lg | Lg | 10 24 40.4 | |
| 1.4nm,0.3s,baz=54,slow=12,SNR=4.8 | | | | | | | |
| **TSUM** | **Tsumeb** | **22.27** | **204** | *eP* | **P** | **10 18 03.5** | **+1.0** |
| 11nm,0.9s | | | | | | | |
| TSUM | | | | *eS* | **S** | **10 22 08.0** | **+0.1** |
| TSUM | | | | Lg | Lg | 10 24 40.4 | |
| **LBTB** | **Lobatse** | **26.11** | **183** | P | **P** | **10 18 40.4** | **+1.1** |
| 2.1nm,0.5s,baz=7.2,slow=10,SNR=4.8 | | | | | | | |
| LBTB | | | | LR | LR | 10 28 34.9 | |
| comp=Z,52nm,21.6s,baz=321,slow=36 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **27.65** | **297** | P | **P** | **10 18 52.1** | **-1.1** |
| 0.7nm,0.3s,baz=109,slow=7.9,SNR=19 | | | | | | | |
| **DBIC** | **Dimbokro** | **32.15** | **281** | P | **P** | **10 19 32.1** | **-1.0** |
| 1.1nm,0.3s,baz=58,slow=2.3,SNR=6.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **38.81** | **8** | P | **P** | **10 20 30.9** | **+0.7** |
| 2.4nm,0.7s,baz=183,slow=9.8,SNR=14 | | | | | | | |
| **MKAR** | **Makanchi Array** | **66.06** | **38** | P | **P** | **10 23 51.4** | **-0.8** |
| 0.6nm,0.6s,baz=246,slow=4.8,SNR=4.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **68.20** | **359** | P | **P** | **10 24 05.0** | **-0.2** |
| 0.9nm,0.7s,baz=191,slow=3.2,SNR=5.9 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **77.09** | **358** | LR | LR | 10 58 47.1 | |
| comp=Z,27nm,21.9s,baz=50,slow=36 | | | | | | | |

*AUST **20** 10:15:13.2,6.50S×122.50E,h35km*
*ISCJB **20** 10:15:41.1±0.5,8.55S±0.05°×123.41E±0.05,h133km, Error ellipse: s-maj=7.5km s-min=6.8km az=137.8*
*DJA **20** 10:15:42.4±0.5,9°S±5°×12°3E±°,h135km±10km,M4.1/19, mb4.0/9,MLv4.1/19*
**ISC 20 10:15:42.5±1.1,8.54S±0.07×123.34E±0.08,h133km,n24, σ0§93/19,Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MMRI** | **Maumere** | **1.09** | **265** | P | **Pn** | **10 16 07.0** | **+0.4** |
| **SOEI** | **Soe** | **1.51** | **143** | P | **Pn** | **10 16 11.9** | **+0.8** |
| baz=3.7,SNR=66 | | | | | | | |
| **SOEI** | **Soe** | **1.51** | **143** | P | **Pn** | **10 16 11.8** | **+0.7** |
| **EDFI** | **Ende, Flores** | **1.64** | **263** | P | **Pn** | **10 16 11.7** | **-0.8** |
| **BATI** | **Baumata** | **1.69** | **169** | P | **Pn** | **10 16 13.8** | **+0.8** |
| **BBSI** | **Bau Bau** | **3.13** | **346** | P | **Pn** | **10 16 31.7** | **+0.8** |
| **BASI** | **Baing, Sumba** | **3.19** | **238** | P | **Pn** | **10 16 32.1** | **+0.3** |
| **WSI** | **Waingapu** | **3.21** | **249** | P | **Pn** | **10 16 32.5** | **+0.6** |
| **BKSI** | **Bulukumba** | **4.52** | **315** | P | **Pn** | **10 16 48.6** | **-0.7** |
| **SPSI** | **Sidrap Palu** | **5.77** | **322** | P | **Pn** | **10 17 05.8** | **-0.2** |
| 11nm,0.8s,0.1nm | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **6.39** | **268** | P | **Pn** | **10 17 13.4** | **-0.9** |
| 18nm,1.2s,0.2nm | | | | | | | |
| **NLAI** | **Namlea** | **6.46** | **36** | P | **Pn** | **10 17 15.8** | **+0.5** |
| 32nm,0.8s,0.1nm | | | | | | | |
| **AAI** | **Ambon** | **6.82** | **45** | P | **Pn** | **10 17 19.2** | **-0.9** |
| 27nm,0.8s,0.2nm | | | | | | | |
| **SANI** | **Sanana** | **6.97** | **22** | P | **Pn** | **10 17 21.1** | **-1.0** |
| 7.3nm,0.8s,0.0nm | | | | | | | |
| **MTN** | **Manton Dam** | **8.77** | **120** | P | **Pn** | **10 17 44.0** | **-2.4** |
| baz=11,SNR=83 | | | | | | | |
| **KNRA** | **Kununurra** | **8.85** | **144** | P | Pn | 10 17 44.7 | -2.8 |
| baz=11,SNR=63 | | | | | | | |
| **KDU** | **Kakadu** | **9.88** | **115** | P | Pn | 10 17 58.0 | -3.2 |
| baz=12,SNR=8.1 | | | | | | | |
| **SWI** | **Sorong** | **10.38** | **58** | P | Pn | 10 17 29.2 | -10 |
| baz=10,SNR=3.6 | | | | | | | |
| **WRKA** | **Warakurna** | **17.07** | **165** | P | **P** | **10 19 32.9** | **0.0** |
| baz=19,SNR=22 | | | | | | | |
| **MEEK** | **Meekatharra** | **18.55** | **193** | P | **P** | **10 19 49.7** | **+0.7** |
| baz=20,SNR=5.7 | | | | | | | |
| **QIS** | **Mount Isa** | **19.74** | **129** | P | **P** | **10 20 02.6** | **+0.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CAMP | | | | Sg | | Sg | 10 23 36.9 | -0.1 |
| | 3μm,0.4s | | | | | | | |
| **T0104** | **Madonna delle** | **0.23** | **139** | Pg | | **Pg** | **10 23 34.3** | **-0.3** |
| T0104 | | | | Sg | | **Sg** | **10 23 38.4** | **+0.6** |
| **FIAM** | **Fiamignano** | **0.27** | **183** | ⇑*i*Pg | | **Pg** | **10 23 35.1** | **-0.2** |
| FIAM | | | | Sg | | **Sg** | **10 23 39.4** | **+0.4** |
| | 3μm,0.3s | | | | | | | |
| **FIAM** | **Fiamignano** | **0.27** | **183** | ⇑*i*Pg | | **Pg** | **10 23 35.1** | **-0.2** |
| FIAM | | | | Sg | | **Sg** | **10 23 39.4** | **+0.4** |
| | 3μm,0.3s | | | | | | | |
| **T0106** | **Roio Piano** | **0.29** | **141** | Pg | | **Pg** | **10 23 35.4** | **-0.4** |
| T0106 | | | | Sg | | **Sg** | **10 23 41.0** | **+1.2** |
| **NRCA** | **Norcia** | **0.30** | **357** | Pg | | **Pg** | **10 23 35.4** | **-0.5** |
| NRCA | | | | Sg | | **Sg** | **10 23 40.2** | **+0.3** |
| | 7μm,0.1s | | | | | | | |
| **NRCA** | **Norcia** | **0.30** | **357** | Pg | | **Pg** | **10 23 35.4** | **-0.5** |
| NRCA | | | | Sg | | **Sg** | **10 23 40.2** | **+0.3** |
| | 7μm,0.1s | | | | | | | |
| **TERO** | **Teramo** | **0.36** | **76** | ⇑*i*Pg | | **Pg** | **10 23 36.1** | **-0.9** |
| TERO | | | | Sg | | **Sg** | **10 23 41.2** | **-0.5** |
| | 2μm,0.3s | | | | | | | |
| **TERO** | **Teramo** | **0.36** | **76** | ⇑*i*Pg | | **Pg** | **10 23 36.1** | **-0.9** |
| TERO | | | | Sg | | **Sg** | **10 23 41.2** | **-0.5** |
| | 2μm,0.3s | | | | | | | |
| **MNS** | **Montasola** | **0.37** | **246** | ⇑*i*Pg | | **Pg** | **10 23 37.0** | **-0.2** |
| MNS | | | | Sg | | **Sg** | **10 23 42.8** | **+0.8** |
| | 1μm,0.3s | | | | | | | |
| **MNS** | **Montasola** | **0.37** | **246** | ⇑*i*Pg | | **Pg** | **10 23 37.0** | **-0.2** |
| MNS | | | | Sg | | **Sg** | **10 23 42.8** | **+0.8** |
| | 1μm,0.3s | | | | | | | |
| **FAGN** | **Fagnano** | **0.43** | **129** | Pg | | **Pg** | **10 23 38.1** | **-0.2** |
| **FAGN** | **Fagnano** | **0.43** | **129** | Pg | | **Pg** | **10 23 38.1** | **-0.2** |
| **CESI** | **CESI - Serrava** | **0.50** | **340** | Pg | | **Pg** | **10 23 39.1** | **-0.5** |
| CESI | | | | Sg | | **Sg** | **10 23 46.9** | **+0.8** |
| | 439nm,0.2s | | | | | | | |
| **CESI** | **CESI - Serrava** | **0.50** | **340** | Pg | | **Pg** | **10 23 39.1** | **-0.5** |
| CESI | | | | Sg | | **Sg** | **10 23 46.9** | **+0.8** |
| | 439nm,0.2s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.54** | **105** | Pg | | **Pg** | **10 23 39.8** | **-0.7** |
| VCEL | | | | Sg | | **Sb** | **10 23 48.5** | **-1.2** |
| | 1μm,0.4s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.54** | **105** | Pg | | **Pg** | **10 23 39.8** | **-0.7** |
| VCEL | | | | Sg | | **Sb** | **10 23 48.5** | **-1.2** |
| | 1μm,0.4s | | | | | | | |
| **PTQR** | **Pietraquaria** | **0.55** | **159** | Pg | | **Pg** | **10 23 39.3** | **-1.3** |
| | 106nm,0.3s | | | | | | | |
| **PTQR** | **Pietraquaria** | **0.55** | **159** | Pg | | **Pg** | **10 23 39.3** | **-1.3** |
| | 106nm,0.3s | | | | | | | |
| **OFFI** | **Offida** | **0.57** | **45** | ⇑*i*Pg | | **Pg** | **10 23 40.9** | **0.0** |
| | 2μm,0.6s | | | | | | | |
| **OFFI** | **Offida** | **0.57** | **45** | ⇑*i*Pg | | **Pg** | **10 23 40.9** | **0.0** |
| | 2μm,0.6s | | | | | | | |
| **MTCE** | **Montecelio** | **0.59** | **210** | Pg | | **Pg** | **10 23 40.4** | **-0.9** |
| | 633nm,0.9s | | | | | | | |
| **MTCE** | **Montecelio** | **0.59** | **210** | Pg | | **Pg** | **10 23 40.4** | **-0.9** |
| | 633nm,0.9s | | | | | | | |
| **TRTR** | **Tortoreto Alta** | **0.64** | **65** | Pg | | **Pg** | **10 23 42.4** | **+0.2** |
| **TRTR** | **Tortoreto Alta** | **0.64** | **65** | Pg | | **Pg** | **10 23 42.4** | **+0.2** |
| **SNTG** | **Esanatoglia** | **0.73** | **349** | Pg | | **Pg** | **10 23 43.1** | **-0.9** |
| SNTG | | | | Sg | | **Sb** | **10 23 54.4** | **-0.7** |
| | 391nm,0.4s | | | | | | | |
| **SNTG** | **Esanatoglia** | **0.73** | **349** | Pg | | **Pg** | **10 23 43.1** | **-0.9** |
| SNTG | | | | Sg | | **Sb** | **10 23 54.4** | **-0.7** |
| | 391nm,0.4s | | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.76** | **151** | Pg | | **Pg** | **10 23 44.9** | **+0.4** |
| | 332nm,0.6s | | | | | | | |
| **VVLD** | **Villa Vallelon** | **0.76** | **151** | Pg | | **Pg** | **10 23 44.9** | **+0.4** |
| | 332nm,0.6s | | | | | | | |
| **INTR** | **Introdacqua** | **0.78** | **132** | Pg | | **Pg** | **10 23 43.8** | **-1.1** |
| | 447nm,0.6s | | | | | | | |
| **INTR** | **Introdacqua** | **0.78** | **132** | Pg | | **Pg** | **10 23 43.8** | **-1.1** |
| | 447nm,0.6s | | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.79** | **48** | ⇑*i*Pg | | Pg | 10 23 40.1 | -5.0 |
| GUMA | | | | Sg | | Sg | 10 23 48.8 | -6.6 |
| | 3μm,0.4s | | | | | | | |
| **RDP** | **Rocca di Papa** | **0.84** | **202** | Pg | | **Pg** | **10 23 45.2** | **-0.8** |
| | 1μm,0.6s | | | | | | | |
| **RDP** | **Rocca di Papa** | **0.84** | **202** | Pg | | **Pg** | **10 23 45.2** | **-0.8** |
| | 1μm,0.6s | | | | | | | |
| **CING** | **Cingoli** | **0.84** | **3** | Pg | | **Pg** | **10 23 44.9** | **-1.2** |
| **CING** | **Cingoli** | **0.84** | **3** | Pg | | **Pg** | **10 23 44.9** | **-1.2** |
| **MGAB** | **Montegabbione** | **0.84** | **297** | Pg | | **Pg** | **10 23 45.7** | **-0.4** |
| | 691nm,0.5s | | | | | | | |
| **MGAB** | **Montegabbione** | **0.84** | **297** | Pg | | **Pg** | **10 23 45.7** | **-0.4** |
| | 691nm,0.5s | | | | | | | |
| **MURB** | **Monte Urbino** | **0.85** | **329** | Pg | | **Pg** | **10 23 45.7** | **-0.6** |
| | 1μm,0.3s | | | | | | | |
| **MURB** | **Monte Urbino** | **0.85** | **329** | Pg | | **Pg** | **10 23 45.7** | **-0.6** |
| | 1μm,0.3s | | | | | | | |
| **POFI** | **Posta Fibreno** | **0.93** | **152** | Pg | | **Pg** | **10 23 47.2** | **-0.5** |
| | 296nm,1.1s | | | | | | | |
| **POFI** | **Posta Fibreno** | **0.93** | **152** | Pg | | **Pg** | **10 23 47.2** | **-0.5** |
| | 296nm,1.1s | | | | | | | |
| **ATFO** | **Monte Foce - G** | **0.93** | **334** | Pg | | **Pg** | **10 23 47.3** | **-0.5** |
| | 279nm,0.4s | | | | | | | |
| **ATFO** | **Monte Foce - G** | **0.93** | **334** | Pg | | **Pg** | **10 23 47.3** | **-0.5** |
| | 279nm,0.4s | | | | | | | |
| **SACS** | **San Casciano d** | **0.95** | **289** | Pg | | **Pg** | **10 23 47.9** | **-0.4** |
| | 282nm,0.7s | | | | | | | |
| **TOLF** | **Tolfa** | **0.96** | **241** | Pg | | **Pg** | **10 23 47.4** | **-1.1** |
| | 193nm,0.6s | | | | | | | |
| **TOLF** | **Tolfa** | **0.96** | **241** | Pg | | **Pg** | **10 23 47.4** | **-1.1** |
| | 193nm,0.6s | | | | | | | |
| **ARVD** | **Arcevia** | **0.97** | **352** | Pg | | **Pg** | **10 23 47.3** | **-1.3** |
| | 361nm,0.6s | | | | | | | |
| **ARVD** | **Arcevia** | **0.97** | **352** | Pg | | **Pg** | **10 23 47.3** | **-1.3** |
| | 361nm,0.6s | | | | | | | |
| **LATE** | **Laterza** | **0.98** | **275** | Pg | | **Pg** | **10 23 48.3** | **-0.6** |
| | 603nm,0.7s | | | | | | | |
| **LATE** | **Laterza** | **0.98** | **275** | Pg | | **Pg** | **10 23 48.3** | **-0.6** |
| | 603nm,0.7s | | | | | | | |
| **ATVO** | **AVT- Monte Val** | **1.00** | **328** | Pg | | **Pg** | **10 23 47.9** | **-1.2** |
| | 261nm,0.6s | | | | | | | |
| **ATVO** | **AVT- Monte Val** | **1.00** | **328** | Pg | | **Pg** | **10 23 47.9** | **-1.2** |
| | 261nm,0.6s | | | | | | | |
| **ATPC** | **Poggio Castell** | **1.07** | **332** | Pg | | **Pg** | **10 23 49.4** | **-1.0** |
| | 449nm,0.5s | | | | | | | |
| **ATPC** | **Poggio Castell** | **1.07** | **332** | Pg | | **Pg** | **10 23 49.4** | **-1.0** |
| | 449nm,0.5s | | | | | | | |
| **AOI** | **Ancona** | **1.07** | **19** | Pg | | **Pg** | **10 23 49.2** | **-1.3** |
| | 347nm,0.7s | | | | | | | |
| **AOI** | **Ancona** | **1.07** | **19** | Pg | | **Pg** | **10 23 49.2** | **-1.3** |
| | 347nm,0.7s | | | | | | | |
| **PIEI** | **Pieia** | **1.09** | **336** | Pg | | **Pg** | **10 23 49.5** | **-1.4** |
| | 181nm,0.4s | | | | | | | |
| **PIEI** | **Pieia** | **1.09** | **336** | Pg | | **Pg** | **10 23 49.5** | **-1.4** |
| | 181nm,0.4s | | | | | | | |
| **MCIV** | **Monte Civitell** | **1.10** | **283** | Pg | | **Pg** | **10 23 50.6** | **-0.5** |
| | 102nm,0.4s | | | | | | | |
| **MCIV** | **Monte Civitell** | **1.10** | **283** | Pg | | **Pg** | **10 23 50.6** | **-0.5** |
| | 102nm,0.4s | | | | | | | |
| **CERA** | **Filignano** | **1.15** | **145** | Pg | | **Pg** | **10 23 51.7** | **-0.2** |
| **CERA** | **Filignano** | **1.15** | **145** | Pg | | **Pg** | **10 23 51.7** | **-0.2** |
| **FSSB** | **Fossombrone** | **1.18** | **347** | Pg | | **Pg** | **10 23 51.2** | **-1.5** |
| | 206nm,0.5s | | | | | | | |
| **FSSB** | **Fossombrone** | **1.18** | **347** | Pg | | **Pg** | **10 23 51.2** | **-1.5** |
| | 206nm,0.5s | | | | | | | |
| **PARC** | **Parchiule** | **1.29** | **330** | Pg | | **Pn** | **10 23 53.7** | **-0.5** |
| | 179nm,0.8s | | | | | | | |
| **PARC** | **Parchiule** | **1.29** | **330** | Pg | | **Pn** | **10 23 53.7** | **-0.5** |
| | 179nm,0.8s | | | | | | | |
| **CRE** | **Caprese Michel** | **1.39** | **322** | Pg | | **Pn** | **10 23 54.6** | **-1.0** |
| | 42nm,0.5s | | | | | | | |
| **CRE** | **Caprese Michel** | **1.39** | **322** | Pg | | **Pn** | **10 23 54.6** | **-1.0** |
| | 42nm,0.5s | | | | | | | |
| **SKDS** | **Skadanscina** | **3.08** | **12** | *i* Pn | | **Pn** | **10 24 19.1** | **+0.4** |
| SKDS | | | | *i* Sn | | **Sn** | **10 24 55.2** | **-0.5** |
| **SKDS** | **Skadanscina** | **3.08** | **12** | *i* Pn | | **Pn** | **10 24 19.1** | **+0.4** |
| SKDS | | | | *i* Sn | | **Sn** | **10 24 55.2** | **-0.5** |
| **BOJS** | **Bojanci** | **3.34** | **27** | *i* Pn | | **Pn** | **10 24 24.4** | **+2.1** |
| BOJS | | | | *i* Sn | | **Sn** | **10 25 04.3** | **+2.2** |
| **BOJS** | **Bojanci** | **3.34** | **27** | *i* Pn | | **Pn** | **10 24 24.4** | **+2.1** |
| BOJS | | | | *i* Sn | | **Sn** | **10 25 04.3** | **+2.2** |
| **STON** | **Ston** | **3.38** | **83** | *e*Pn | | **Pn** | **10 24 22.6** | **-0.3** |
| **VISS** | **Visnje** | **3.49** | **20** | *i* Pn | | **Pn** | **10 24 27.3** | **+2.9** |
| VISS | | | | *i* Sn | | **Sn** | **10 25 07.1** | **+1.3** |
| **VISS** | **Visnje** | **3.49** | **20** | *i* Pn | | **Pn** | **10 24 27.3** | **+2.9** |
| VISS | | | | *i* Sn | | **Sn** | **10 25 07.1** | **+1.3** |
| **ABTA** | **Abfaltersbach** | **4.23** | **354** | ⇓*i*Pn | | **Pn** | **10 24 35.8** | **+1.1** |
| **ABTA** | **Abfaltersbach** | **4.23** | **354** | Pn | | **Pn** | **10 24 35.8** | **+1.1** |
| **BBLS** | **Lazići** | **4.77** | **72** | *e*Pn | | **Pn** | **10 24 42.5** | **+0.4** |
| **DIVS** | **Divibare** | **5.24** | **70** | *e*Pn | | **Pn** | **10 24 45.9** | **-2.7** |
| **IVAS** | **Ivanjica** | **5.25** | **76** | *e*Pn | | **Pn** | **10 24 49.1** | **+0.5** |
| **SELS** | **Selova** | **5.91** | **81** | *e*Pn | | **Pn** | **10 24 57.8** | **+0.1** |
| **BARS** | **Barje** | **6.41** | **85** | *e*Pn | | **Pn** | **10 25 04.9** | **+0.4** |

**VIE 20 10:30:28.7±0.6, 46°.67N×15°.35E, h0km, ml0.8/1, 1C, Error ellipse: s-maj=5.6km s-min=1.4km az=28.0, Suspected Mining explosion., Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SOKA** | **Soboth** | **0.22** | **271** | ⇑*i*Pg | Pg | 10 30 33.1 | +0.1 |

*ISCJB **20** 10:49:57.5±0.5, 59°.82N±0°.03×22°.83E±0°.05, h0km, Error ellipse: s-maj=4.7km s-min=3.6km az=5.1*
*HEL **20** 10:49:59.6±0.2, 59°.83N×22°.89E, h0km, ML1.9, Explosion*
*IDC **20** 10:49:59.4±2.2, 59°.85N×22°.99E, h0km, mb1 3.2/3, mb1mx3.0/35, mbtmp3.1/3, ML2.6/3, Error ellipse: s-maj=25.1km s-min=7.3km az=157.0*

**ISC 20 10:49:57.7±0.8, 59°.85N±0°.04×22°.85E±0°.03, h0km, n14, σ1s50/27, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MEF** | **Metsahovi** | **0.86** | **64** | *e*P | **Pg** | **10 50 14.3** | **+0.1** |
| MEF | | | | *e*S | **Sg** | **10 50 24.9** | **-0.4** |
| **MTSE** | **Matsula** | **1.24** | **156** | *e*P | **Pg** | **10 50 21.6** | **0.0** |
| MTSE | | | | *e*S | **Sg** | **10 50 36.3** | **-1.4** |
| **RAF** | **Rauma** | **1.29** | **336** | *e*P | **Pb** | **10 50 23.1** | **+0.3** |
| RAF | | | | *e*S | **Sb** | **10 50 40.1** | **+0.1** |
| RAF | | | | MSG | | 10 50 46.5 | |
| | comp=Z,15nm,0.2s | | | | | | |
| **AAL** | **Aland** | **1.47** | **284** | *e*P | **Pg** | **10 50 26.3** | **+0.4** |
| AAL | | | | *e*S | **Sg** | **10 50 45.0** | **0.0** |
| **PVF** | **Pernaja** | **1.66** | **64** | *e*P | **Pn** | **10 50 28.4** | **+0.4** |
| PVF | | | | *e*S | **Sn** | **10 50 49.5** | **-0.4** |
| PVF | | | | MSG | | 10 50 53.9 | |
| | comp=Z,6.8nm,0.2s | | | | | | |
| **FIA0** | **FINESS Array S** | **2.25** | **43** | *e*P | **Pb** | **10 50 38.4** | **-0.8** |
| FIA0 | | | | *e*S | **Sn** | **10 51 06.3** | **+1.6** |
| FIA0 | | | | MSG | | 10 51 09.5 | |
| | comp=Z,7.2nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **2.25** | **43** | Pg | **Pb** | **10 50 38.5** | **-0.7** |
| | comp=Z,2.2nm,0.3s,baz=221,slow=16,SNR=6.3 | | | | | | |
| FINES | | | | Lg | Lg | 10 51 07.7 | |
| | comp=Z,1.7nm,0.3s,baz=228,slow=26,SNR=4.8 | | | | | | |
| **VSU** | **Vasula** | **2.44** | **123** | *e*P | **Pn** | **10 50 40.8** | **+2.1** |
| VSU | | | | *e*S | **Sn** | **10 51 09.8** | **+0.6** |
| **VJF** | **Virojoki** | **2.45** | **72** | *e*P | **Pn** | **10 50 39.7** | **+0.8** |
| VJF | | | | *e*S | **Sn** | **10 51 11.0** | **+1.5** |
| **KEF** | **Keuruu** | **2.52** | **22** | *e*P | **Pb** | **10 50 42.6** | **-1.2** |
| KEF | | | | *e*S | **Sn** | **10 51 13.2** | **+1.9** |
| **KAF** | **Kangasniemi** | **2.83** | **35** | *e*P | **Pn** | **10 50 46.7** | **+2.6** |
| KAF | | | | *e*S | **Sn** | **10 51 20.4** | **+1.7** |
| **HFS** | **Hagfors** | **4.61** | **277** | Pn | **Pn** | **10 51 10.4** | **+1.8** |
| | comp=Z,0.2nm,0.3s,baz=99,slow=12,SNR=2.1 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 52 02.2** | **-0.5** |
| | comp=Z,0.2nm,0.3s,baz=94,slow=20,SNR=1.9 | | | | | | |
| HFS | | | | Lg | Lg | 10 52 23.3 | |
| | comp=Z,0.4nm,0.3s,baz=93,slow=32,SNR=1.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **5.88** | **287** | Pn | **Pn** | **10 51 27.1** | **+1.0** |
| | comp=Z,0.3nm,0.3s,baz=92,slow=12,SNR=2.0 | | | | | | |
| NOA | | | | Sn | **Sn** | **10 52 34.1** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=95,slow=19,SNR=2.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.79** | **6** | Pn | **Pn** | **10 52 19.1** | **-0.5** |
| | comp=Z,0.0nm,0.3s,baz=182,slow=14,SNR=1.2 | | | | | | |
| ARCES | | | | Sn | **Sn** | **10 54 05.5** | **-4.5** |
| | comp=Z,0.1nm,0.3s,baz=190,slow=21,SNR=1.7 | | | | | | |

*CSEM **20** 11:02:15.3±0.2, 47°.00N×22°.23E, h2km, ML1.8, Error ellipse: s-maj=5.0km s-min=2.9km az=121.0*

**BUC 20 11:02:14.6±0.7, 47°.00N×22°.26E, h3km±5km, MD2.8/3, 17C-15D, Error ellipse: s-maj=5.3km s-min=3.7km az=132.0, Romania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DRGR** | | **0.37** | **123** | ⇑*i*P | Pg | 11 02 22.1 | +0.2 |
| DRGR | | | | *i* S | Sg | 11 02 27.3 | +0.5 |
| **DRGR** | | **0.37** | **123** | ⇑*i*P | Pg | 11 02 22.1 | +0.2 |
| DRGR | | | | S | Sg | 11 02 27.3 | +0.5 |
| **DRGR** | | **0.37** | **123** | *i* Pg | Pg | 11 02 22.1 | +0.2 |
| DRGR | | | | S | Sg | 11 02 27.3 | +0.5 |
| **SIRR** | **Siria** | **0.84** | **210** | ⇓*i*P | Pb | 11 02 31.8 | 0.0 |
| SIRR | | | | *i* S | Sb | 11 02 43.2 | -0.3 |
| **SIRR** | **Siria** | **0.84** | **210** | ⇓*i*P | Pb | 11 02 31.8 | 0.0 |
| **SIRR** | **Siria** | **0.84** | **210** | ⇓*i*Pg | Pb | 11 02 31.8 | 0.0 |
| SIRR | | | | S | Sb | 11 02 43.2 | -0.3 |
| **CJR** | **Cluj-Napoca** | **0.96** | **107** | ⇓*i*P | Pb | 11 02 34.5 | +0.5 |
| **CJR** | **Cluj-Napoca** | **0.96** | **107** | ⇓*i*P | Pb | 11 02 34.5 | +0.5 |
| **CJR** | **Cluj-Napoca** | **0.96** | **107** | ⇓*i*Pg | Pb | 11 02 34.5 | +0.5 |
| **BMR** | **Baia Mare** | **1.08** | **51** | ⇓*i*P | Pn | 11 02 36.6 | -0.1 |
| BMR | | | | *i* S | Sn | 11 02 51.4 | -0.8 |
| **BMR** | **Baia Mare** | **1.08** | **51** | ⇓*i*P | Pn | 11 02 36.6 | -0.1 |
| **BMR** | **Baia Mare** | **1.08** | **51** | ⇓*i*Pg | Pn | 11 02 36.6 | -0.1 |
| BMR | | | | S | Sn | 11 02 51.4 | -0.8 |
| **TRPA** | **Tarpa** | **1.15** | **9** | ⇑*i*P | Pb | 11 02 37.1 | -0.1 |
| **TRPA** | **Tarpa** | **1.15** | **9** | ⇑*i*P | Pb | 11 02 37.1 | -0.1 |
| **TRPA** | **Tarpa** | **1.15** | **9** | *i* Pg | Pb | 11 02 37.1 | -0.1 |
| **DEV** | **Deva** | **1.20** | **158** | ⇓*i*P | Pn | 11 02 38.5 | +0.2 |
| **DEV** | **Deva** | **1.20** | **158** | ⇓*i*P | Pn | 11 02 38.5 | +0.2 |
| **DEV** | **Deva** | **1.20** | **158** | ⇓*i*P | Pn | 11 02 38.5 | +0.2 |
| **ARCR** | **ARCALIA** | **1.44** | **86** | ⇑*i*P | Pg | 11 02 42.4 | +0.2 |
| ARCR | | | | *i* S | Sn | 11 03 02.4 | +1.4 |
| **ARCR** | **ARCALIA** | **1.44** | **86** | ⇑*i*P | Pg | 11 02 42.4 | +0.2 |
| **ARCR** | **ARCALIA** | **1.44** | **86** | *i* Pn | Pg | 11 02 42.4 | +0.2 |
| ARCR | | | | S | Sn | 11 03 02.4 | +1.4 |
| **BZS** | **Buzias** | **1.45** | **198** | ⇑*i*P | Pn | 11 02 41.5 | -0.2 |
| BZS | | | | *i* S | Sn | 11 03 01.9 | +0.7 |
| **BZS** | **Buzias** | **1.45** | **198** | ⇑*i*P | Pn | 11 02 41.5 | -0.2 |
| **BZS** | **Buzias** | **1.45** | **198** | S | Sn | 11 03 01.9 | +0.7 |
| **BZS** | **Buzias** | **1.45** | **198** | *i* Pn | Pn | 11 02 41.5 | -0.2 |
| BZS | | | | S | Sn | 11 03 01.9 | +0.7 |
| **GZR** | **Gura Zlata** | **1.64** | **167** | ⇑*i*P | Pb | 11 02 45.7 | +0.1 |
| GZR | | | | *i* S | Sg | 11 03 08.3 | +0.7 |
| **GZR** | **Gura Zlata** | **1.64** | **167** | ⇑*i*P | Pb | 11 02 45.7 | +0.1 |
| **GZR** | **Gura Zlata** | **1.64** | **167** | S | Sg | 11 03 08.3 | +0.7 |
| **GZR** | **Gura Zlata** | **1.64** | **167** | ⇑*i*P | Pb | 11 02 45.7 | +0.1 |
| GZR | | | | S | Sg | 11 03 08.3 | +0.7 |
| **LOT** | **Lotru** | **1.87** | **145** | ⇓*i*P | Pb | 11 02 49.0 | -0.6 |
| **LOT** | **Lotru** | **1.87** | **145** | ⇓*i*P | Pb | 11 02 49.0 | -0.6 |
| **LOT** | **Lotru** | **1.87** | **145** | ⇓*i*P | Pb | 11 02 49.0 | -0.6 |
| **BURAR** | **Bucovina Array** | **2.11** | **72** | ⇑*i*P | Pn | 11 02 51.5 | +0.6 |
| BURAR | | | | *i* S | Sn | 11 03 19.0 | +1.2 |
| **BURAR** | **Bucovina Array** | **2.11** | **72** | ⇑*i*P | Pn | 11 02 51.5 | +0.6 |
| **BURAR** | **Bucovina Array** | **2.11** | **72** | ⇑*i*P | Pn | 11 02 51.5 | +0.6 |
| BURAR | | | | S | Sn | 11 03 19.0 | +1.2 |
| **VOIR** | | **2.49** | **128** | ⇑*i*P | Pn | 11 02 57.0 | +0.9 |
| **VOIR** | | **2.49** | **128** | ⇑*i*P | Pn | 11 02 57.0 | +0.9 |
| **VOIR** | | **2.49** | **128** | ⇑*i*P | Pn | 11 02 57.0 | +0.9 |

*NIED **20** 11:26:00, 35°.80N×136°.90E, h17km, Mw3.4 Best double couple: M0 1.51000×10^14 NP1:φs29.00000°, δ86.00000°, λ-178.00000°. NP2:φs299.00000°, δ88.00000°, λ-4.00000°.*

**JMA 20 11:26:24.7, 35°.80N×136°.90E, h12km±1km, M3.5, 1D Broadband fault plane solution: P waves. NP1:** φs216.00000°, δ82.00000°, λ164.00000°. **NP2:** φs308.00000°, δ74.00000°, λ8.00000°. **Principal axes:** T Plg17.0000°, Azm171.0000°; N Plg72.0000°, Azm12.0000°; P Plg6.0000°, Azm263.0000°; **Western Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JGM** | **Miyama** | **0.18** | **236** | ⇓P | Pg | 11 26 28.7 | -0.1 |
| JGM | | | | S | Sg | 11 26 31.3 | -0.3 |
| **JGM** | **Niukaw** | **0.54** | **38** | S | Pg | 11 26 35.3 | -0.1 |
| JGN | | | | S | Sg | 11 26 42.5 | -0.2 |
| **JKG** | **Kaga** | **0.66** | **316** | P | Pg | 11 26 37.6 | 0.0 |
| JKG | | | | S | Sg | 11 26 46.8 | +0.5 |
| **MAT** | **Matsushiro** | **1.29** | **55** | P | Pb | 11 26 48.9 | -0.1 |
| MAT | | | | S | Sg | 11 27 06.4 | 0.0 |

*BJI **20** 11:27:21.6, 31°.83S×179°.12W, h404km, mb4.7/9, mB5.1/5*
*ISCJB **20** 11:27:25.7±0.3, 31°.45S±0°.02×179°.75E±0°.07, h400km, mb4.1/20, Error ellipse: s-maj=8.4km s-min=3.2km az=6.2*
*IDC **20** 11:27:25.1±0.7, 31°.26S×179°.78E, h387km±7km, mb3.8/13, mb1 4.0/16, mb1mx3.8/27, mbtmp4.6/16, Error ellipse: s-maj=14.3km s-min=9.7km az=124.0*

*NEIC **20** 11:27:26.5±0.5, 31°.32S×179°.98E, h404km±5km, mb4.4/7, Error ellipse: s-maj=9.7km s-min=6.7km az=111.0*
*AUST **20** 11:27:26.7, 32°.10S×179°.38W, h450km*

**ISC 20 11:27:26.0±0.4, 31°.44S±0°.05×179°.88E±0°.08, h400km, n139, σ1s39/161, mb4.1/20, 4C-2D, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **2.90** | **42** | P | **Pn** | **11 28 26.9** | **-1.5** |
| | 155nm,0.3s,baz=233,slow=20,SNR=4.0 | | | | | | |
| RAO | | | | S | **S** | **11 29 14.2** | **-4.7** |
| | 577nm,0.3s,baz=100,slow=22,SNR=14 | | | | | | |
| **MXZ** | **Matakaoa Point** | **6.25** | **192** | *e*PN | **Pn** | **11 29 01.2** | **0.0** |
| MXZ | | | | SN | **S** | **11 30 17.9** | **-0.9** |
| **OUZ** | **Omahuta** | **6.47** | **233** | *e*Pn | Pn | 11 29 08.1 | +4.4 |
| OUZ | | | | *e*S | S | 11 30 31.6 | +8.2 |
| **WMGZ** | **Waiomatatini S** | **6.48** | **190** | PN | **Pn** | **11 29 04.0** | **+0.2** |
| WMGZ | | | | SN | **S** | **11 30 21.8** | **-1.8** |
| **HAZ** | **Te Kaha** | **6.54** | **195** | *e*PN | **Pn** | **11 29 03.4** | **-0.9** |
| HAZ | | | | SN | **S** | **11 30 24.6** | **0.0** |
| **PKGZ** | **Pakihiroa** | **6.58** | **193** | *e*PN | **P** | **11 29 06.1** | **+0.6** |
| **TWGZ** | **Tauwhareparae** | **6.90** | **193** | PN | **Pn** | **11 29 08.2** | **-0.3** |
| TWGZ | | | | SN | **S** | **11 30 32.2** | **-0.1** |
| **MWZ** | **Matawai** | **7.15** | **195** | PN | **Pn** | **11 29 10.8** | **-0.5** |
| MWZ | | | | SN | **S** | **11 30 36.3** | **-1.0** |
| **CNGZ** | **Carnagh Statio** | **7.16** | **191** | *e*PN | **P** | **11 29 12.0** | **+0.1** |
| **URZ** | **Urewera** | **7.17** | **198** | P | **Pn** | **11 29 10.0** | **-1.5** |
| | 60nm,0.3s,baz=270,slow=2.1,SNR=79 | | | | | | |
| URZ | | | | S | **S** | **11 30 35.8** | **-2.0** |
| | 54nm,0.3s,baz=28,slow=23,SNR=15 | | | | | | |
| **URZ** | **Urewera** | **7.17** | **198** | PN | **Pn** | **11 29 10.1** | **-1.5** |
| URZ | | | | SN | **S** | **11 30 34.6** | **-3.2** |
| **URZ** | **Urewera** | **7.17** | **198** | *e*Pn | **P** | **11 29 14.0** | **+2.0** |
| URZ | | | | S | **S** | **11 30 35.8** | **-2.0** |
| **TKGZ** | **Te Karaka** | **7.18** | **193** | PN | **P** | **11 29 12.8** | **+0.7** |
| **RAGZ** | **Rawiri** | **7.32** | **195** | PN | **Pn** | **11 29 13.7** | **-0.1** |
| **RIGZ** | **Iumuhau** | **7.46** | **193** | PN | **Pn** | **11 29 14.7** | **0.0** |
| **SNGZ** | **Shannon Statio** | **7.62** | **195** | PN | **P** | **11 29 19.5** | **+2.4** |
| **KNZ** | **Kokohu** | **7.78** | **193** | *e*PN | **Pn** | **11 29 17.5** | **-0.8** |
| **MHGZ** | **Mahia Peninsul** | **7.87** | **191** | PN | **P** | **11 29 21.3** | **+1.6** |
| **WHHZ** | **Waihua** | **7.92** | **195** | PN | **P** | **11 29 21.2** | **+0.8** |
| **NMHZ** | **Naumai** | **8.04** | **197** | PN | **P** | **11 29 21.8** | **0.0** |
| **MCHZ** | **McNeill Hill** | **8.40** | **197** | PN | **P** | **11 29 26.5** | **+0.8** |
| **NGZ** | **Ngauruhoe** | **8.47** | **203** | PN | **P** | **11 29 28.3** | **+1.6** |
| **CKHZ** | **Cape Kidnapper** | **8.51** | **195** | PN | **P** | **11 29 28.2** | **+1.2** |
| **COVZ** | **Chateau Observ** | **8.51** | **203** | PN | **P** | **11 29 28.6** | **+1.5** |
| **TUVZ** | **Tukino** | **8.54** | **203** | PN | **P** | **11 29 29.2** | **+1.8** |
| **WHVZ** | **Whangaehu Hut** | **8.57** | **203** | PN | **P** | **11 29 28.6** | **+0.7** |
| **TRVZ** | **Turoa** | **8.60** | **203** | PN | **P** | **11 29 29.0** | **+0.8** |
| **BHHZ** | **Black Hill Sta** | **8.61** | **200** | PN | **Pn** | **11 29 27.5** | **-0.5** |
| **MOVZ** | **Moawhango** | **8.63** | **202** | PN | **P** | **11 29 28.3** | **0.0** |
| **KRHZ** | **Kereru** | **8.67** | **198** | PN | **P** | **11 29 28.9** | **+0.1** |
| **KAHZ** | **Kahuranaki** | **8.69** | **195** | *e*PN | **Pn** | **11 29 28.2** | **-0.6** |
| **PXZ** | **Pawanui** | **8.92** | **195** | PN | **Pn** | **11 29 31.3** | **0.0** |
| PXZ | | | | *e*SN | S | 11 31 07.4 | -6.9 |
| **PNHZ** | **Pukenui** | **8.97** | **198** | PN | **Pn** | **11 29 31.2** | **-0.8** |
| **WPHZ** | **Waipukurau** | **9.05** | **197** | PN | **P** | **11 29 33.5** | **+0.6** |
| **PRHZ** | **Porangahau** | **9.19** | **196** | PN | **Pn** | **11 29 35.7** | **+1.1** |
| **POWZ** | **Post Office Ro** | **9.54** | **199** | PN | **Pn** | **11 29 38.4** | **-0.1** |
| **PRWZ** | **Pori Road** | **9.63** | **198** | PN | **Pn** | **11 29 41.0** | **+1.3** |
| **BFZ** | **Birch Farm** | **9.68** | **197** | *e*P | **Pn** | **11 29 40.9** | **+0.7** |
| **MRZ** | **Mangatainoka R** | **9.84** | **199** | PN | **P** | **11 29 40.8** | **-0.9** |
| MRZ | | | | SN | S | 11 31 27.1 | -6.4 |
| **TIWZ** | **Tintock** | **9.86** | **198** | *e*PN | **P** | **11 29 41.7** | **-0.2** |
| **OGWZ** | **Otaki Gorge** | **10.10** | **201

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KSRS** | **Korea Array** | **83.98** | **321** | P | | **P** | **11 39 13.2** | **+0.7** |
| | 3.8nm,0.8s,baz=143,slow=5.8,SNR=11 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **83.99** | **321** | P | | **P** | **11 39 13.2** | **+0.6** |
| **KS01** | **Wonju Array Si** | **84.01** | **321** | *e*P | | **P** | **11 39 13.0** | **+0.3** |
| **GSI** | **Gunungsitoli** | **84.10** | **275** | *e*P | | **P** | **11 39 13.9** | **+0.2** |
| **YSS** | **Yuzh-Sakhalins** | **84.91** | **335** | *e*P | | **P** | **11 39 16.5** | **-0.3** |
| | 17nm,0.7s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **86.38** | **347** | P | | **P** | **11 39 24.2** | **+0.4** |
| | 13nm,1.0s,baz=142,slow=7.3,SNR=3.1 | | | | | | | |
| **USRK** | **Uusuriysk Ar.** | **87.04** | **328** | P | | **P** | **11 39 27.6** | **+0.4** |
| | 3.9nm,0.7s,baz=146,slow=3.7,SNR=10.0 | | | | | | | |
| **ISA** | **Isabella** | **88.32** | **46** | *e*P | | **P** | **11 39 35.0** | **+1.4** |
| | 4.9nm,0.9s | | | | | | | |
| **CN2** | **Changchun** | **89.88** | **324** | *e*P | | **P** | **11 39 40.8** | **+0.3** |
| CN2 | | | | PMZ | | | | |
| | 10.0nm,0.8s | | | | | | | |
| **NV01** | **Mina Array Sit** | **90.24** | **44** | *e*P | | **P** | **11 39 43.1** | **+0.5** |
| **NVAR** | **Mina Array Bea** | **90.24** | **44** | P | | **P** | **11 39 43.5** | **+0.8** |
| | 1.6nm,0.8s,baz=217,slow=7.5,SNR=14 | | | | | | | |
| **MOD** | **Modoc** | **91.41** | **40** | *e*P | | **P** | **11 39 48.5** | **+0.6** |
| | 3.7nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.03** | **290** | P | | **P** | **11 39 52.2** | **+1.1** |
| | 0.5nm,0.4s,baz=133,slow=4.8,SNR=4.3 | | | | | | | |
| **BJI** | **Beijing** | **92.40** | **316** | P | | **P** | **11 39 53.1** | **+0.9** |
| BJI | | | | PMZ | | | | |
| | 10.0nm,1.6s | | | | | | | |
| BJI | | | | PMZ | | | | |
| | 280nm,3.4s | | | | | | | |
| **KMI** | **Kunming** | **92.67** | **298** | P | | **P** | **11 39 54.6** | **+0.4** |
| KMI | | | | PMZ | | | | |
| | 8.0nm,1.0s | | | | | | | |
| **CD2** | **Chengdu** | **95.11** | **303** | *e*P | | **P** | **11 40 06.3** | **+1.3** |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| **LZH** | **Lanzhou** | **97.89** | **307** | *e*P | | Pdif | 11 40 21.5 | +4.0 |
| LZH | | | | pP | | pP | 11 41 53.6 | +3.3 |
| LZH | | | | PP | | PP | 11 44 29.0 | +6.4 |
| LZH | | | | PMZ | | | | |
| | 15nm,1.5s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | 49nm,9.3s | | | | | | | |
| **MKAR** | **Makanchi Array** | **117.04** | **310** | PKP | | **PKPdf** | **11 45 22.9** | **-1.0** |
| | 0.9nm,0.7s,baz=85,slow=2.9,SNR=8.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **117.59** | **318** | PKP | | **PKPdf** | **11 45 23.2** | **-1.4** |
| | 0.7nm,0.5s,baz=72,slow=4.7,SNR=3.2 | | | | | | | |
| **KSH** | **Kashi** | **119.20** | **301** | *e*PKP | | **PKPdf** | **11 45 25.1** | **-3.3** |
| KSH | | | | *es*PKP | | | 11 47 46.8 | |
| KSH | | | | PPMZ | | | | |
| | 96nm,4.0s | | | | | | | |
| **KURK** | **Kurchatov** | **120.45** | **314** | *e*PKPdf | | **PKPdf** | **11 45 29.3** | **-0.9** |
| **AAK** | **Ala-Archa** | **121.17** | **304** | PKP | | **PKPdf** | **11 45 31.6** | **-0.5** |
| | 0.8nm,0.4s,baz=195,slow=3.4,SNR=4.2 | | | | | | | |
| **KKAR** | **Karatay Array** | **124.12** | **303** | *e*PKPdf | | **PKPdf** | **11 45 37.4** | **-0.2** |
| **BVAR** | **Borovoye Array** | **125.87** | **315** | PKP | | **PKPdf** | **11 45 40.4** | **-0.1** |
| | 2.7nm,0.6s,baz=81,slow=4.7,SNR=13 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **132.60** | **355** | PKP | | **PKPdf** | **11 45 53.2** | **+0.5** |
| | 19nm,1.1s,baz=60,slow=8.5,SNR=4.1 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **133.44** | **312** | PKP | | **PKPdf** | **11 45 55.4** | **+0.3** |
| | 2.0nm,0.6s,baz=49,slow=1.5,SNR=5.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **139.19** | **347** | PKhKP | | PKPpre | 11 45 57.1 | |
| | 1.7nm,0.7s,baz=61,slow=1.8,SNR=8.6 | | | | | | | |
| ARCES | | | | PKP | | **PKPdf** | **11 46 06.2** | **+1.1** |
| | 2.0nm,0.6s,baz=48,slow=1.8,SNR=5.8 | | | | | | | |
| **DGRG** | **David-gareji** | **142.44** | **298** | P | | **PKPdf** | **11 46 09.3** | **-2.6** |
| **DUS** | **Dusheti** | **142.93** | **299** | P | | **PKPdf** | **11 46 15.1** | **+2.3** |
| **ONI** | **Oni** | **143.83** | **300** | P | | PKPbc | 11 46 13.5 | +0.6 |
| **KBZ** | **Khabaz** | **144.15** | **302** | PKP | | **PKPab** | **11 46 14.1** | **+0.2** |
| | 12nm,0.7s,baz=152,slow=2.0,SNR=19 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.46** | **338** | PKPbc | | **PKPdf** | **11 46 16.7** | **+0.3** |
| | 23nm,0.7s,baz=66,slow=3.3,SNR=100 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **149.46** | **349** | PKP | | **PKPbc** | **11 46 27.4** | **-0.6** |
| | comp=Z,26nm,1.2s,baz=17,slow=2.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **149.46** | **349** | PKPbc | | **PKPbc** | **11 46 27.4** | **-0.6** |
| | comp=Z,4.9nm,0.7s,baz=16,slow=4.2,SNR=15 | | | | | | | |
| **AKASG** | **Malin Array Be** | **150.97** | **320** | PKPbc | | **PKPbc** | **11 46 30.8** | **-1.0** |
| | comp=Z,6.5nm,0.8s,baz=57,slow=2.7,SNR=15 | | | | | | | |
| AKASG | | | | PKPab | | **PKPab** | **11 46 39.5** | **-1.6** |
| | comp=Z,2.8nm,0.5s,baz=49,slow=4.5,SNR=8.7 | | | | | | | |
| **KIEV** | **Kiev** | **150.98** | **320** | *e*PKPbc | | **PKPbc** | **11 46 31.6** | **-0.2** |
| KIEV | | | | *e*PKPab | | **PKPab** | **11 46 40.4** | **-0.6** |
| **BRTR** | **Keskin Array B** | **151.45** | **296** | PKPbc | | **PKPbc** | **11 46 33.0** | **-0.5** |
| | comp=Z,5.4nm,0.8s,baz=113,slow=3.2,SNR=22 | | | | | | | |
| BRTR | | | | PKPab | | **PKPab** | **11 46 43.2** | **-0.4** |
| | comp=Z,3.8nm,0.8s,baz=92,slow=4.0,SNR=10.0 | | | | | | | |
| **VRI** | **Vrincioaia** | **154.71** | **312** | ⇑*i*P | | **PKPab** | **11 46 58.6** | **+1.5** |
| **BURAR** | **Bucovina Array** | **154.81** | **317** | ⇑*i*P | | **PKPab** | **11 46 58.3** | **+0.7** |
| **MLR** | **Muntele Rosu** | **155.37** | **312** | ⇓*i*P | | **PKPab** | **11 47 00.4** | **+0.3** |
| **VOIR** | | **155.96** | **313** | ⇑*i*P | | **PKPab** | **11 47 03.4** | **+0.8** |
| **DRGR** | | **156.69** | **318** | ⇓*i*P | | **PKPab** | **11 47 05.3** | **-0.4** |
| **CLL** | **Collm** | **157.90** | **338** | *i* P | | **PKPab** | **11 47 10.4** | **-0.2** |
| | comp=Z,13nm,1.1s | | | | | | | |
| **GERES** | **GERESS Array B** | **159.71** | **333** | PKPab | | **PKPab** | **11 47 17.8** | **-1.0** |
| | comp=Z,2.0nm,0.7s,baz=29,slow=3.0,SNR=7.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **161.72** | **186** | PKP | | **PKPdf** | **11 46 40.7** | **+0.1** |
| | comp=Z,1.2nm,0.9s,baz=203,slow=2.3,SNR=6.3 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **11 47 27.8** | **-0.3** |
| | comp=Z,1.3nm,0.8s,baz=176,slow=3.3,SNR=6.5 | | | | | | | |
| **ESDC** | **Sonseca Array** | **171.21** | **20** | PKP | | **PKPdf** | **11 46 47.7** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=355,slow=3.2,SNR=4.5 | | | | | | | |

**KRSC 20 11:31:32.8±0.7, 53.28°N×161.82°E, h42km±10km, ML3.6, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SPN** | **Mys Shipunski** | **1.10** | **261** | *i* P | Pn | 11 31 52.8 | +1.2 |
| SPN | | | | *e*S | Sn | 11 32 07.5 | +1.9 |
| **MKZ** | **Mys Kozlova** | **1.28** | **358** | *e*P | Pn | 11 31 55.1 | +1.0 |
| MKZ | | | | *e*S | Sn | 11 32 12.0 | +1.9 |
| **NLC** | **Nalytchevo** | **1.49** | **267** | *e*P | Pn | 11 31 58.6 | +1.6 |
| NLC | | | | *e*S | Sn | 11 32 17.5 | +2.2 |
| **KII** | **Karymskiy** | **1.60** | **299** | *e*P | Pn | 11 31 59.7 | +1.0 |
| **SDLR** | **Sedlovina** | **1.76** | **271** | *i* P | Pn | 11 32 02.7 | +1.8 |
| **UGLR** | **Uglovaya** | **1.80** | **269** | *e*P | Pn | 11 32 03.6 | +2.1 |
| **SMAR** | **Somma** | **1.81** | **271** | *e*P | Pn | 11 32 03.6 | +1.8 |
| **AVH** | **Avacha** | **1.85** | **271** | *e*P | Pn | 11 32 04.4 | +2.3 |
| **KRX** | **Arik** | **1.91** | **274** | *e*P | Pn | 11 32 04.6 | +1.7 |
| KRX | | | | *e*S | Sn | 11 32 27.9 | +2.1 |
| **KOK** | **Koryaka** | **1.91** | **272** | *e*P | Pn | 11 32 05.2 | +2.2 |
| **PET** | **Petropavlovsk** | **1.93** | **264** | *e*P | Pn | 11 32 05.2 | +2.2 |
| PET | | | | *e*S | Sn | 11 32 28.9 | +3.0 |
| **KZV** | **Kizimen** | **2.04** | **335** | *e*P | Pn | 11 32 07.0 | +2.1 |
| KZV | | | | *e*S | Sn | 11 32 31.8 | +2.5 |
| **RUS** | **Russkaya** | **2.18** | **248** | *e*P | Pn | 11 32 08.5 | +2.1 |
| RUS | | | | *e*S | Sn | 11 32 34.2 | +2.1 |
| **TUMR** | **Tumrok** | **2.23** | **335** | *e*P | Pn | 11 32 10.0 | +2.6 |
| **MTVR** | **Mutnovka** | **2.34** | **252** | *e*P | Pn | 11 32 11.4 | +2.5 |
| MTVR | | | | *e*S | Sn | 11 32 39.4 | +2.8 |
| **GNL** | **Ganaly** | **2.35** | **282** | *e*P | Pn | 11 32 11.9 | +2.8 |
| GNL | | | | *e*S | Sn | 11 32 40.1 | +3.3 |
| **ASAK** | **Asacha** | **2.54** | **251** | *e*P | Pn | 11 32 14.6 | +3.0 |
| **KMNR** | **Kamenistaya** | **2.65** | **340** | *e*P | Pn | 11 32 16.9 | +3.8 |
| **APC** | **Apacha** | **2.83** | **265** | *e*P | Pn | 11 32 19.3 | +3.9 |
| APC | | | | *e*S | Sn | 11 32 52.2 | +3.9 |
| **KBTR** | **Krutoberegovo** | **2.99** | **11** | *e*P | Pn | 11 32 20.9 | +3.3 |
| **ESO** | **Esso** | **3.21** | **327** | *e*P | Pn | 11 32 23.8 | +3.1 |

*IDC **20** 12:04:24.8±7.0, 27.73°N×54.71°E, h0km, mb3.7/3, mb1 3.8/3, mb1mx3.4/37, mbtmp3.7/3, Error ellipse: s-maj=133.2km s-min=57.9km az=112.0*
*ISCJB **20** 12:04:30.0±0.6, 27.91°N±0.05°×54.74°E±0.07°, h17km, mb3.6/3, Error ellipse: s-maj=9.9km s-min=5.7km az=140.5*
*CSEM **20** 12:04:29.0±0.2, 27.90°N×54.69°E, h2km, ML3.4, Error ellipse: s-maj=7.5km s-min=4.6km az=48.0*
*DSN **20** 12:04:30.8±1.1, 27.82°N×54.63°E, h10km, mb2.8/6, ML3.6/2, Error ellipse: s-maj=21.4km s-min=8.3km az=46.0*

**ISC 20 12:04:29.2±0.8, 27.84N±0.07°×54.70E±0.06, h17km, n17, σ1§99/20, mb3.5/3, 2C-3D, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDS** | **Bandar-Abbas** | **1.38** | **108** | *e*Pg | **Pb** | **12 04 55.0** | **+0.3** |
| **GHIR** | **Ghir-Karzin** | **1.57** | **287** | *e*Pg | **Pb** | **12 04 58.0** | **0.0** |
| GHIR | | | | *e*Sg | **Sb** | **12 05 19.1** | **+1.4** |
| **BANOM** | **Banah** | **2.39** | **143** | ⇓P | **Pb** | **12 05 09.9** | **-1.9** |
| BANOM | | | | ⇓S | **Sb** | **12 05 41.7** | **+0.8** |
| **BANOM** | **Banah** | **2.39** | **143** | P | **Pb** | **12 05 09.9** | **-1.9** |
| BANOM | | | | S | **Sb** | **12 05 41.7** | **+0.8** |
| **KRBR** | **Kerman** | **2.80** | **40** | *e*Pn | **Pn** | **12 05 14.7** | **+1.2** |
| **FAQ** | **Al Faqa, Dubai** | **3.18** | **165** | ⇓P | **Pn** | **12 05 21.5** | **+2.9** |
| **FAQ** | **Al Faqa, Dubai** | **3.18** | **165** | P | **Pn** | **12 05 21.5** | **+3.0** |
| **HATD** | **Hatta, Dubai** | **3.27** | **156** | ⇑P | **Pn** | **12 05 22.2** | **+2.5** |
| **HATD** | **Hatta, Dubai** | **3.27** | **156** | P | **Pn** | **12 05 22.2** | **+2.5** |
| **ASHO** | **Ashiyiah** | **3.37** | **158** | ⇑P | **Pn** | **12 05 24.0** | **+2.8** |
| **ASHO** | **Ashiyiah** | **3.37** | **158** | P | **Pn** | **12 05 24.0** | **+2.8** |
| **NASN** | **Na'in** | **5.21** | **342** | *e*Pn | **Pn** | **12 05 47.7** | **+1.1** |
| **TABS** | **Tabas** | **6.16** | **19** | *e*Pn | **Pn** | **12 06 00.6** | **+1.1** |
| **KHMZ** | **Khomeyn** | **7.15** | **326** | *e*Pn | **Pn** | **12 06 14.7** | **+1.4** |
| **BRTR** | **Keskin Array B** | **21.08** | **310** | P | **P** | **12 09 11.8** | **-1.1** |
| | 1.2nm,0.6s,baz=124,slow=13,SNR=5.9 | | | | | | |
| **FINES** | **FINESS Array B** | **38.66** | **338** | P | **P** | **12 11 50.4** | **-1.1** |
| | 3.2nm,0.9s,baz=156,slow=7.2,SNR=1.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.38** | **265** | P | **P** | **12 13 31.6** | **-1.8** |
| | 0.3nm,0.5s,baz=65,slow=8.8,SNR=2.8 | | | | | | |

**GUC 20 12:31:06.0±0.3, 23.79°S×67.25°W, h225km, ML3.9, 2C-3D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB06** | **IPOC Station P** | **2.39** | **296** | ⇑*i*P | Pn | 12 31 52.5 | +1.9 |
| PB06 | | | | *i* S | S | 12 32 27.7 | +2.4 |
| PB06 | | | | AML | AML | 12 32 32.4 | |
| | comp=E,116nm,0.1s | | | | | | |
| **PB09** | **IPOC Station P** | **2.70** | **317** | ⇑*i*P | Pn | 12 31 56.6 | +2.6 |
| PB09 | | | | *i* S | S | 12 32 34.8 | +3.4 |
| PB09 | | | | AML | AML | 12 32 41.9 | |
| | comp=N,211nm,0.2s | | | | | | |
| **ANCH** | **Antofagasta** | **2.90** | **271** | *i* P | Pn | 12 31 47.8 | -8.0 |
| ANCH | | | | *i* S | S | 12 32 27.1 | -7.6 |
| **PB04** | **IPOC Station P** | **3.04** | **298** | ⇓*i*P | Pn | 12 31 59.9 | +2.2 |
| PB04 | | | | *i* S | S | 12 32 40.3 | +2.3 |
| PB04 | | | | AML | AML | 12 32 47.5 | |
| | comp=N,111nm,0.2s | | | | | | |
| **PB10** | **IPOC Station P** | **3.04** | **274** | *i* P | Pn | 12 31 59.4 | +1.9 |
| PB10 | | | | *i* S | S | 12 32 39.8 | +2.1 |
| PB10 | | | | AML | AML | 12 32 44.7 | |
| | comp=E,203nm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **3.18** | **310** | ⇓*i*P | Pn | 12 32 01.5 | +2.2 |
| PB07 | | | | *i* S | S | 12 32 43.3 | +2.3 |
| PB07 | | | | AML | AML | 12 32 45.4 | |
| | comp=E,167nm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **3.43** | **322** | ⇓*i*P | Pn | 12 32 04.1 | +2.0 |
| PB01 | | | | *i* S | S | 12 32 48.6 | +2.6 |
| PB01 | | | | AML | AML | 12 32 51.3 | |
| | comp=N,94nm,0.3s | | | | | | |
| **PB11** | **IPOC Station P** | **4.59** | **330** | *i* P | Pn | 12 32 17.7 | +1.5 |
| PB11 | | | | *i* S | S | 12 33 13.2 | +1.6 |
| **MNMC** | **Minimini** | **5.12** | **334** | *e*P | Pn | 12 32 25.2 | +2.2 |
| MNMC | | | | *e*S | S | 12 33 25.9 | +2.0 |

*IDC **20** 12:56:04.5±1.6, 4.94°S×133.88E, h0km, mb4.0/5, mb1 4.2/6, mb1mx3.9/33, mbtmp4.1/6, ML4.7/1, MS3.2/6, Ms1 3.2/6, ms1mx3.1/21, Error ellipse: s-maj=114.1km s-min=21.2km az=75.0*
*NEIC **20** 12:56:05.8±0.6, 5.12°S×133.88E, h10km, mb4.6/2, Error ellipse: s-maj=14.2km s-min=8.4km az=57.0*
*ISCJB **20** 12:56:06.2±0.5, 5.13°S±0.04°×133.89E±0.05°, h28km, mb4.1/7, MS3.2/4, Error ellipse: s-maj=7.9km s-min=4.6km az=146.9*
*DJA **20** 12:56:09.5±0.5, 5°S×4°×13°4E±°, h10km, M4.9/5, mb4.9/5, mB5.4/4, MLv4.9/4, Mw(mB)4.8/4*
*AUST **20** 12:56:11.0±0.6, 5.14°S×133.74°E, h45km, Error ellipse: s-maj=1.2km s-min=0.7km az=240.0*

**ISC 20 12:56:08.5±0.7, 4.95°S±0.06°×133.85°E±0.07°, h28km, n51, σ1§56/43, mb4.2/7, MS3.2/4, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.57** | **322** | P | **Pn** | **12 56 48.0** | **-0.4** |
| | baz=2.7,SNR=52 | | | | | | |
| **FAKI** | **Fak Fak** | **2.57** | **322** | P | **Pn** | **12 56 47.6** | **-0.8** |
| FAKI | | | | S | **Sn** | **12 57 16.5** | **-2.2** |
| **FAKI** | **Fak Fak** | **2.57** | **322** | *e*Pn | **Pn** | **12 56 48.0** | **-0.4** |
| FAKI | | | | *e*Sn | **Sn** | **12 57 17.9** | **-0.8** |
| **RKPI** | **Ransiki, Papua** | **3.44** | **6** | P | **Pn** | **12 57 02.0** | **+1.8** |
| **SAUI** | **Saumlaki** | **3.93** | **220** | P | Pn | 12 57 10.6 | +3.5 |
| SAUI | | | | S | **Sn** | **12 57 54.6** | **+2.3** |
| **BNDI** | **Bandanaira** | **3.95** | **276** | P | **Pn** | **12 57 08.7** | **+1.4** |
| BNDI | | | | S | **Sn** | **12 57 54.3** | **+1.5** |
| **SWI** | **Sorong** | **4.81** | **327** | P | **Pn** | **12 57 21.2** | **+2.0** |
| | baz=4.9,SNR=5.0 | | | | | | |
| **SWI** | **Sorong** | **4.81** | **327** | P | **Pn** | **12 57 21.4** | **+2.2** |
| **MSAI** | **Masohi** | **5.16** | **288** | P | **Pn** | **12 57 26.4** | **+2.5** |
| | 44nm,0.6s,702nm0.2nm | | | | | | |
| **AAI** | **Ambon** | **5.77** | **282** | P | **Pn** | **12 57 33.6** | **+1.2** |
| | baz=5.7,SNR=19 | | | | | | |
| **AAI** | **Ambon** | **5.77** | **282** | P | **Pn** | **12 57 34.3** | **+1.9** |
| | 228nm,0.6s,5μm1.2nm | | | | | | |
| AAI | | | | S | **Sn** | **12 58 35.7** | **-2.1** |
| | 228nm,0.6s,5μm1.2nm | | | | | | |
| **NLAI** | **Namlea** | **6.94** | **284** | P | **Pn** | **12 57 50.3** | **+1.9** |
| **LBMI** | **Labuha** | **7.65** | **304** | P | **Pn** | **12 57 58.8** | **+0.6** |
| **KDU** | **Kakadu** | **7.80** | **190** | P | **Pn** | **12 58 00.0** | **-0.3** |
| | baz=7.6,SNR=119 | | | | | | |
| **MTN** | **Manton Dam** | **8.29** | **199** | P | **Pn** | **12 58 06.4** | **-0.5** |
| | baz=8.1,SNR=320 | | | | | | |
| **SANI** | **Sanana** | **8.36** | **290** | P | **Pn** | **12 58 07.9** | **0.0** |
| **TNTI** | **Ternate** | **8.61** | **311** | *e*Pn | **Pn** | **12 58 14.3** | **+2.9** |
| **SOEI** | **Soe** | **10.63** | **243** | P | **Pn** | **12 58 39.6** | **+0.4** |
| | baz=10,SNR=5.1 | | | | | | |
| **SOEI** | **Soe** | **10.63** | **243** | P | **Pn** | **12 58 38.9** | **-0.3** |
| **SOEI** | **Soe** | **10.63** | **243** | *e*Pn | **Pn** | **12 58 38.4** | **-0.8** |
| | 29nm,0.6s | | | | | | |
| **LUWI** | **Luwuk** | **11.72** | **289** | P | **Pn** | **12 58 55.7** | **+1.7** |
| | baz=12,SNR=3.3 | | | | | | |
| **KNRA** | **Kununurra** | **11.77** | **205** | P | **Pn** | **12 58 52.8** | **-1.9** |
| | baz=12,SNR=224 | | | | | | |
| **GTOI** | **Gorontalo** | **12.16** | **297** | P | Pn | 12 59 04.1 | +4.0 |
| **COEN** | **Coen** | **12.83** | **135** | P | **Pn** | **12 59 06.7** | **-2.5** |
| | baz=13,SNR=11 | | | | | | |
| **COEN** | **Coen** | **12.83** | **135** | *e*Pn | Pn | 12 59 05.4 | -3.8 |
| **PMG** | **Port Moresby** | **13.93** | **109** | LR | LR | 13 06 02.6 | |
| | comp=Z,73nm,21.8s,baz=280,slow=43 | | | | | | |
| **PMG** | **Port Moresby** | **13.93** | **109** | *e*Pn | **Pn** | **12 59 23.6** | **-0.6** |
| **KAPI** | **Kappang** | **14.04** | **269** | LR | LR | 13 05 37.6 | |
| | comp=Z,130nm,20.3s,baz=107,slow=41 | | | | | | |
| **WRAB** | **Tennant Creek** | **14.90** | **178** | *e*Pn | Pn | 12 59 33.0 | -4.4 |
| | 16nm,0.4s | | | | | | |
| WRAB | | | | *e*Sn | Sn | 13 02 09.8 | -12 |
| WRAB | | | | *e*ScP | ScP | 13 07 57.1 | -22 |
| **WRA** | **Warramunga Arr** | **14.91** | **178** | Pn | Pn | 12 59 33.3 | -4.2 |
| | 2.8nm,0.3s,baz=9.3,slow=12,SNR=125 | | | | | | |
| WRA | | | | Sn | Sn | 13 02 11.9 | -10 |
| | 1.3nm,0.3s,baz=352,slow=23,SNR=4.4 | | | | | | |
| **QIS** | **Mount Isa** | **16.49** | **161** | P | **Pn** | **12 59 54.8** | **-3.2** |
| | baz=16,SNR=15 | | | | | | |
| **MTSU** | **Mount Surprise** | **16.63** | **143** | P | **P** | **13 00 03.6** | **+1.6** |
| | baz=17,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **18.61** | **180** | P | **P** | **13 00 21.8** | **-2.1** |
| | 2.2nm,0.3s,baz=352,slow=9.1,SNR=169 | | | | | | |
| ASAR | | | | S | Sn | 13 03 41.3 | -10 |
| | 0.4nm,0.3s,baz=359,slow=26,SNR=4.1 | | | | | | |
| **WRKA** | **Warakurna** | **20.67** | **194** | P | **P** | **13 00 46.8** | **+0.4** |
| | baz=21,SNR=62 | | | | | | |
| **MBWA** | **Marble Bar** | **21.15** | **219** | *e*P | **P** | **13 00 50.7** | **-0.8** |
| | 17nm,0.9s | | | | | | |
| MBWA | | | | *e*S | S | 13 04 36.5 | -9.0 |
| **QLP** | **Quilpie** | **23.69** | **156** | P | **P** | **13 01 19.6** | **+1.5** |
| | baz=24,SNR=11 | | | | | | |
| **LEM** | **Lembang** | **26.15** | **265** | LR | LR | 13 14 20.5 | |
| | comp=Z,61nm,18.9s,baz=116,slow=42 | | | | | | |
| **HNR** | **Honiara** | **26.27** | **101** | LR | LR | 13 11 49.9 | |
| | comp=Z,90nm,20.7s,baz=270,slow=36 | | | | | | |
| **BBOO** | **Buckleboo** | **27.79** | **176** | P | **P** | **13 01 55.8** | **+0.5** |
| | baz=28,SNR=6.5 | | | | | | |
| **BBOO** | **Buckleboo** | **27.79** | **176** | *e*P | **P** | **13 01 54.0** | **-1.3** |
| | 11nm,0.6s | | | | | | |
| **HTT** | **Hallett** | **28.73** | **171** | P | P | 13 01 59.8 | -3.9 |
| | baz=29,SNR=4.5 | | | | | | |
| **ARPS** | **Mount Arapiles** | **32.51** | **168** | P | **P** | **13 02 38.2** | **+1.3** |
| | baz=32,SNR=10.0 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **41.53** | **305** | P | P | 13 04 03.0 | +9.2 |
| | baz=42,SNR=3.1 | | | | | | |
| **KSRS** | **Korea Array** | **42.55** | **353** | LR | LR | 13 23 26.4 | |
| | comp=Z,34nm,18.2s,baz=182,slow=39 | | | | | | |
| **PETK** | **Petropavlovsk-** | **61.25** | **16** | LR | LR | 13 30 57.5 | |
| | comp=Z,14nm,21.7s,baz=118,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.70** | **325** | P | **P** | **13 07 10.2** | **+0.6** |
| | 0.7nm,0.5s,baz=104,slow=8.8,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.52** | **332** | P | **P** | **13 07 26.7** | **0.0** |
| | 0.3nm,0.3s,baz=101,slow=6.2,SNR=2.7 | | | | | | |
| **VNDA** | **Vanda** | **74.03** | **174** | P | **P** | **13 07 41.4** | **0.0** |
| | 2.0nm,0.8s,baz=313,slow=5.6,SNR=13 | | | | | | |
| **MAW** | **Mawson** | **78.25** | **202** | P | **P** | **13 08 07.1** | **+1.7** |
| | 1.9nm,0.8s,baz=96,slow=6.5,SNR=7.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **78.43** | **327** | P | **P** | **13 08 07.0** | **+0.3** |
| | 0.6nm,0.6s,baz=123,slow=5.5,SNR=3.9 | | | | | | |
| **CPUP** | **Villa Florida** | **147.07** | **161** | PKPbc | **PKPab** | **13 15 50.6** | **-0.4** |
| | 3.3nm,0.7s,baz=199,slow=2.1,SNR=7.4 | | | | | | |

**IDC 20 12:57:44.1±99.0, 52.60N×53.15E, h0km, Error ellipse: s-maj=417.7km s-min=83.7km az=121.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **3.76** | **124** | *i* | | 13 22 52.7 | |
| | baz=307,slow=331,SNR=9.5 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **18.91** | **73** | *i* | | 14 51 30.0 | |
| | baz=277,slow=325,SNR=3.6 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **33.78** | **76** | *i* | | 16 23 40.0 | |
| | baz=299,slow=326,SNR=0.3 | | | | | | |

*ISCJB **20** 13:00:40.8±0.3, 21.09S±0.07°×178.69W±0.06, h579km, mb4.3/26, Error ellipse: s-maj=10.5km s-min=6.7km az=149.9*
*BJI **20** 13:00:40.0, 20.63S×177.85W, h584km, mb4.7/19, mB5.3/13*
*NEIC **20** 13:00:40.5±0.8, 21.08S×178.55W, h569km±8km, mb4.5/10, Error ellipse: s-maj=14.6km s-min=9.2km az=146.0*
*NEIC Felt at Tumbou.*
*AUST **20** 13:00:43.3, 20.57S×178.80W, h600km*
*IDC **20** 13:00:44.1±1.9, 21.07S×178.78W, h602km±21km, mb3.8/17, mb1 3.9/18, mb1mx3.8/29, mbtmp4.7/18, Error ellipse: s-maj=16.1km s-min=10.8km az=157.0*

**ISC 20 13:00:41.8±0.4, 21.24S±0.08°×178.63W±0.07, h579km, n122, σ1§34/137, mb4.4/26, 16C-10D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.69** | **318** | *e*P | **P** | **13 02 10.0** | **-1.1** |
| **NIUE** | **Niue** | **8.45** | **77** | P | **P** | **13 02 45.8** | **+1.0** |
| | baz=8.5,SNR=5.3 | | | | | | |
| **AFI** | **Afiamalu** | **9.79** | **43** | P | P | 13 02 53.6 | -4.7 |
| | 4.9nm,0.3s,baz=135,slow=2.9,SNR=12 | | | | | | |
| AFI | | | | S | S | 13 04 38.7 | -11 |
| | 3.3nm,0.3s,baz=46,slow=22,SNR=8.5 | | | | | | |
| **AFI** | **Afiamalu** | **9.79** | **43** | *e*P | P | 13 02 53.6 | -4.7 |
| | 20nm,0.5s | | | | | | |
| AFI | | | | S | S | 13 04 38.7 | -11 |
| **DZM** | **Mont Dzumac** | **13.91** | **264** | P | **P** | **13 03 39.4** | **-0.7** |
| | 2.0nm,0.3s,baz=169,slow=4.3,SNR=14 | | | | | | |
| **URZ** | **Urewera** | **17.35** | **191** | P | P | **13 04 11.3** | **-0.9** |
| | 2.3nm,0.3s,baz=264,slow=2.0,SNR=10 | | | | | | |
| URZ | | | | S | **S** | **13 06 59.2** | **-4.2** |
| | 1.0nm,0.3s,baz=173,slow=18,SNR=5.8 | | | | | | |
| **EIDS** | **Eidsvold** | **28.09** | **256** | P | P | **13 05 48.5** | **+0.3** |
| | baz=28,SNR=12 | | | | | | |
| **ARMA** | **Armidale** | **28.22** | **245** | P | P | **13 05 50.8** | **+1.5** |
| | baz=28,SNR=9.9 | | | | | | |
| **RMQ** | **Roma** | **30.23** | **254** | P | P | **13 06 08.0** | **+1.4** |
| | baz=30,SNR=6.0 | | | | | | |
| **CNB** | **Canberra Magne** | **31.33** | **236** | P | P | **13 06 17.4** | **+1.4** |
| | baz=32,SNR=12 | | | | | | |
| **CTA** | **Charters Tower** | **32.84** | **266** | P | P | **13 06 28.8** | **-0.2** |
| | 11nm,0.4s,baz=86,slow=11,SNR=27 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **33.44** | **245** | P | P | **13 06 34.4** | **+0.6** |
| | baz=34,SNR=25 | | | | | | |
| **QLP** | **Quilpie** | **34.28** | **254** | P | P | **13 06 41.2** | **+0.2** |
| | baz=34,SNR=13 | | | | | | |
| **PMG** | **Port Moresby** | **34.95** | **284** | P | P | **13 06 45.9** | **-0.8** |
| | 20nm,0.7s,baz=84,slow=5.7,SNR=6.6 | | | | | | |
| **MTSU** | **Mount Surprise** | **34.98** | **268** | P | P | **13 06 47.0** | **+0.1** |
| | baz=35,SNR=9.8 | | | | | | |
| **TOO** | **Toolangi** | **34.99** | **234** | P | P | **13 06 47.6** | **+0.9** |
| | baz=35,SNR=5.7 | | | | | | |
| **COEN** | **Coen** | **37.05** | **275** | P | P | **13 07 04.0

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **XAN** | **Xi'an** | **88.12** | **308** | P | | **P** | **13 12 31.9** | **+0.1** | |
| XAN | | | | PMZ | | | | | |
| | 13nm,1.3s | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **88.90** | **40** | *e*P | | **P** | **13 12 35.5** | **+0.1** | |
| | 2.2nm,1.1s | | | | | | | | |
| **COLA** | **College** | **89.06** | **13** | P | | **P** | **13 12 32.9** | **-2.4** | |
| | 14nm,1.3s | | | | | | | | |
| **KMI** | **Kunming** | **89.17** | **297** | P | | **P** | **13 12 36.8** | **-0.3** | |
| KMI | | | | PMZ | | | | | |
| | 10.0nm,0.9s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | 590nm,5.8s | | | | | | | | |
| **ILAR** | **Eielson Array** | **89.17** | **13** | P | | **P** | **13 12 34.0** | **-1.8** | |
| | 3.0nm,0.8s,baz=218,slow=5.0,SNR=24 | | | | | | | | |
| **TPAW** | **Teton Pass** | **89.38** | **42** | *e*P | | **P** | **13 12 37.7** | **0.0** | |
| | 2.0nm,0.9s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **89.45** | **315** | *e*P | | **P** | **13 12 36.8** | **-1.1** | |
| HHC | | | | pP | | **pP** | **13 14 48.3** | **+4.6** | |
| HHC | | | | sP | | **sP** | **13 15 46.4** | **+4.9** | |
| HHC | | | | PP | | **PP** | **13 16 21.3** | **+1.0** | |
| HHC | | | | SKS | | **SKSac** | **13 22 09.4** | **-3.9** | |
| HHC | | | | S | | **SKKSac** | **13 22 33.3** | **+4.9** | |
| HHC | | | | sS | | **sS** | **13 26 23.3** | **-1.2** | |
| HHC | | | | PMZ | | | | | |
| | 13nm,0.7s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | 180nm,8.0s | | | | | | | | |
| **IMW** | **Indian Meadow** | **89.59** | **42** | *e*P | | **P** | **13 12 38.2** | **-0.4** | |
| | 5.2nm,1.0s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.81** | **290** | P | | **P** | **13 12 41.1** | **+1.2** | |
| | 6.6nm,0.9s,baz=125,slow=3.1,SNR=36 | | | | | | | | |
| **CD2** | **Chengdu** | **90.70** | **303** | *e*P | | **P** | **13 12 43.8** | **0.0** | |
| CD2 | | | | PMZ | | | | | |
| | 10.0nm,0.5s | | | | | | | | |
| **LZH** | **Lanzhou** | **92.75** | **308** | *e*P | | **P** | **13 12 53.5** | **+0.2** | |
| LZH | | | | pP | | **pP** | **13 15 01.0** | **+1.5** | |
| LZH | | | | sP | | **sP** | **13 15 58.3** | **+1.1** | |
| LZH | | | | PP | | **PP** | **13 16 45.6** | **-0.5** | |
| LZH | | | | PMZ | | | | | |
| | 16nm,1.5s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | 55nm,9.4s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **110.70** | **321** | PKiKP | | **PKiKP** | **13 18 07.1** | **-1.9** | |
| | 0.9nm,0.5s,baz=306,slow=1.1,SNR=5.0 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **111.28** | **313** | PKiKP | | **PKiKP** | **13 18 08.9** | **-1.6** | |
| | 0.5nm,0.4s,baz=140,slow=0.4,SNR=12 | | | | | | | | |
| **KSH** | **Kashi** | **114.83** | **305** | *e*PKP | | PKPdf | 13 18 16.5 | -1.1 | |
| KSH | | | | *e*PP | | **PP** | **13 19 30.5** | **+3.1** | |
| KSH | | | | PPMZ | | | | | |
| | 140nm,5.2s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **119.27** | **320** | PKP | | **PKPdf** | **13 18 24.4** | **-1.2** | |
| | 2.2nm,0.3s,baz=124,slow=2.6,SNR=22 | | | | | | | | |
| **GEYT** | **Ailbeck** | **128.68** | **302** | PKP | | **PKPdf** | **13 18 43.5** | **-0.6** | |
| | 2.0nm,0.6s,baz=49,slow=4.5,SNR=5.3 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.54** | **349** | PKP | | **PKPdf** | **13 18 43.6** | **-1.1** | |
| | 2.7nm,0.6s,baz=58,slow=1.0,SNR=11 | | | | | | | | |
| **FINES** | **FINESS Array B** | **136.31** | **343** | PKhKP | | PKPpre | 13 18 48.1 | | |
| | 3.2nm,1.0s,baz=241,slow=3.9,SNR=3.6 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **139.64** | **353** | PKP | | PKPpre | 13 18 56.0 | | |
| | comp=Z,0.6nm,0.5s,baz=16,slow=3.2 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **139.64** | **353** | PKhKP | | PKPpre | 13 18 56.7 | | |
| | comp=Z,1.6nm,0.8s,baz=24,slow=3.9,SNR=4.2 | | | | | | | | |
| **HFS** | **Hagfors** | **140.18** | **350** | PKhKP | | PKPpre | 13 18 57.4 | | |
| | comp=Z,2.6nm,0.3s,baz=74,slow=2.2,SNR=23 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.37** | **330** | PKP | | PKPab | 13 19 07.5 | -1.6 | |
| | comp=Z,10nm,0.5s,baz=42,slow=4.4,SNR=68 | | | | | | | | |
| **KIEV** | **Kiev** | **143.38** | **330** | *e*PKPpre | | PKPpre | 13 19 07.6 | | |
| **ASF** | **Jabal al Asfar** | **146.59** | **297** | PKPbc | | **PKPbc** | **13 19 19.1** | **-0.5** | |
| | comp=Z,6.8nm,0.9s,baz=119,slow=3.6,SNR=6.1 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.89** | **311** | PKPbc | | **PKPbc** | **13 19 19.2** | **-1.0** | |
| | comp=Z,5.2nm,0.8s,baz=123,slow=5.0,SNR=23 | | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **147.00** | **334** | *e*PKP | | **PKPbc** | **13 19 19.6** | **-0.4** | |
| **BURAR** | **Bucovina Array** | **147.41** | **329** | ⇓*i*P | | **PKPbc** | **13 19 21.1** | **-0.2** | |
| **ANTO** | **Ankara** | **147.42** | **312** | *e*PKPbc | | **PKPbc** | **13 19 21.2** | **-0.3** | |
| **TESR** | **Tescani** | **147.47** | **327** | ⇑*i*P | | **PKPbc** | **13 19 20.9** | **-0.4** | |
| **CFR** | **Carcaliu** | **147.54** | **324** | ⇓*i*P | | **PKPbc** | **13 19 20.9** | **-0.6** | |
| **OJC** | **Ojcow** | **147.63** | **338** | *e*PKP | | **PKPbc** | **13 19 21.2** | **-0.4** | |
| **MMAI** | **Mount Meron Ar** | **147.66** | **298** | PKPbc | | **PKPbc** | **13 19 22.7** | **+0.4** | |
| | comp=Z,9.8nm,0.5s,baz=83,slow=6.8,SNR=12 | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **147.73** | **334** | *e*PKP | | **PKPbc** | **13 19 22.0** | **+0.1** | |
| KOLS | | | | *e* | | | 13 19 26.0 | | |
| **STHS** | **Stebnicka Huta** | **147.75** | **335** | *e*PKP | | **PKPbc** | **13 19 21.9** | **-0.1** | |
| **VRI** | **Vrincioaia** | **147.86** | **326** | ⇓*i*P | | **PKPbc** | **13 19 21.4** | **-1.0** | |
| **NIE** | **Niedzica** | **148.11** | **336** | *e*PKP | | **PKPbc** | **13 19 22.9** | **0.0** | |
| **KSP** | **Ksiaz** | **148.22** | **342** | *e*PKP | | **PKPbc** | **13 19 23.2** | **+0.1** | |
| **TRPA** | **Tarpa** | **148.24** | **333** | ⇑*i*P | | **PKPbc** | **13 19 22.8** | **-0.4** | |
| **DOPR** | **Dopca** | **148.48** | **327** | ⇑*i*P | | **PKPbc** | **13 19 24.2** | **+0.3** | |
| **MLR** | **Muntele Rosu** | **148.52** | **326** | PKPbc | | **PKPbc** | **13 19 23.9** | **-0.2** | |
| | comp=Z,2.5nm,0.6s,baz=50,slow=3.1,SNR=11 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **148.52** | **326** | ⇓*i*P | | **PKPbc** | **13 19 24.0** | **-0.2** | |
| **UPC** | **Upice** | **148.60** | **342** | ⇑*i*PKP | | **PKPbc** | **13 19 23.7** | **-0.3** | |
| **EIL** | **Elat** | **148.63** | **292** | PKPbc | | **PKPbc** | **13 19 24.9** | **+0.2** | |
| | comp=Z,4.2nm,0.5s,baz=6.7,slow=2.3,SNR=5.5 | | | | | | | | |
| **LANS** | **Liptovska Anna** | **148.64** | **337** | *e*PKP | | **PKPbc** | **13 19 25.0** | **+0.8** | |
| LANS | | | | *e* | | | 13 19 30.6 | | |
| **CLL** | **Collm** | **148.65** | **346** | ⇓*i*PKPbc | | **PKPbc** | **13 19 23.6** | **-0.5** | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| CLL | | | | ⇑*i*PKPab | | **PKPab** | **13 19 28.3** | **-1.7** | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **148.65** | **341** | ⇑*i*PKP | | **PKPbc** | **13 19 24.0** | **-0.2** | |
| DPC | | | | *e*PKPAB | | **PKPab** | **13 19 30.5** | **+0.3** | |
| **KRLC** | **Kraliky** | **148.75** | **341** | ⇑*i*PKP | | **PKPbc** | **13 19 24.4** | **-0.1** | |
| **BRG** | **Berggiesshubel** | **148.82** | **345** | *e*PKP | | **PKPbc** | **13 19 23.8** | **-0.7** | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| BRG | | | | *e* | | | 13 19 29.5 | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **PVCC** | **Panska Ves** | **148.98** | **344** | ⇑*i*PKP | | **PKPbc** | **13 19 24.8** | **-0.1** | |
| **VOIR** | | **149.02** | **327** | ⇓*i*P | | **PKPbc** | **13 19 25.1** | **-0.2** | |
| **DRGR** | | **149.18** | **331** | ⇑*i*P | | **PKPbc** | **13 19 25.2** | **-0.4** | |
| **VYHS** | **Vyhne** | **149.42** | **337** | *e*PKP | | **PKPbc** | **13 19 25.5** | **-0.6** | |
| VYHS | | | | *e* | | | 13 19 33.2 | | |
| **PRU** | **Pruhonice** | **149.48** | **343** | ⇑*i*PKP | | **PKPbc** | **13 19 25.7** | **-0.4** | |
| PRU | | | | *e*PKPAB | | **PKPab** | **13 19 33.4** | **-0.1** | |
| **GOPC** | **GO Pecny, Ondr** | **149.48** | **343** | ⇑*i*PKP | | **PKPbc** | **13 19 25.8** | **-0.4** | |
| **VRAC** | **Vranov** | **149.49** | **340** | PKPbc | | **PKPbc** | **13 19 26.4** | **+0.2** | |
| | comp=Z,5.2nm,0.6s,baz=111,slow=1.1,SNR=5.4 | | | | | | | | |
| **NKC** | **Novy Kostel** | **149.78** | **346** | ⇑*i*PKP | | **PKPbc** | **13 19 26.6** | **-0.3** | |
| **TREC** | **Trest** | **149.84** | **341** | ⇑*i*PKP | | **PKPbc** | **13 19 26.6** | **-0.5** | |
| **SIRR** | **Siria** | **150.05** | **331** | ⇑*i*P | | **PKPbc** | **13 19 27.6** | **0.0** | |
| **GZR** | **Gura Zlata** | **150.18** | **329** | ⇑*i*P | | **PKPbc** | **13 19 27.5** | **-0.5** | |
| **KHC** | **Kasperske Hory** | **150.52** | **344** | ⇑*i*PKP | | **PKPbc** | **13 19 28.3** | **-0.4** | |
| KHC | | | | *e*PKPAB | | **PKPab** | **13 19 37.7** | **-0.3** | |
| KHC | | | | *ex* | | x | 13 21 12.0 | | |
| **KHC** | **Kasperske Hory** | **150.52** | **344** | *e*PKPbc | | **PKPbc** | **13 19 28.1** | **-0.6** | |
| KHC | | | | *e*PKPab | | **PKPab** | **13 19 37.4** | **-0.5** | |
| **BZS** | **Buzias** | **150.56** | **330** | ⇓*i*P | | **PKPbc** | **13 19 28.2** | **-0.6** | |
| **GERES** | **GERESS Array B** | **150.75** | **343** | PKPbc | | **PKPbc** | **13 19 28.6** | **-0.7** | |
| | comp=Z,5.0nm,0.8s,baz=54,slow=2.3,SNR=22 | | | | | | | | |
| **CONA** | **Conrad Observa** | **150.93** | **340** | ⇓*i*PKiKP | | **PKPbc** | **13 19 29.4** | **-0.3** | |
| | comp=Z,9.2nm,0.7s | | | | | | | | |
| **SOKA** | **Soboth** | **152.30** | **340** | ⇓*i*PKPbc | | **PKPbc** | **13 19 31.5** | **-1.3** | |
| | comp=Z,6.0nm,1.3s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **152.99** | **343** | ⇓*i*PKPbc | | **PKPbc** | **13 19 32.9** | **-1.4** | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **161.07** | **13** | PKPab | | **PKPab** | **13 20 22.1** | **-1.6** | |
| | comp=Z,0.2nm,0.3s,baz=353,slow=5.1,SNR=4.5 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **171.94** | **182** | PKP | | **PKPdf** | **13 19 44.1** | **-1.4** | |
| | comp=Z,1.9nm,0.9s,baz=220,slow=1.2,SNR=7.8 | | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **13 21 11.6** | **-0.6** | |
| | comp=Z,0.9nm,0.9s,baz=178,slow=3.6,SNR=3.6 | | | | | | | | |

*CSEM* ***20*** *13:35:47.9±0.2, 42.49°N×21.56°E, h10km, ML2.6, Error ellipse: s-maj=4.8km s-min=2.7km az=72.0*
*SKO* ***20*** *13:35:47.4, 42.44°N×21.62°E, h18km, M1.0*
*THE* ***20*** *13:35:48.0, 42.43°N×21.55°E, h0km±3km, ML2.6/4, Error ellipse: s-maj=3.8km s-min=1.4km az=337.0*
*BEO* ***20*** *13:35:48.4±0.4, 42.48°N×21.63°E, h13km±3km, ML2.6/9*
*ATH* ***20*** *13:35:56.6, 41.82°N×21.85°E, h94km±6km*
**ISC 20 13:35:47.7±0.9, 42.46°N±0.02°×21.61°E±0.03°, h16km±8km, n47, σ1§25/74, 4C, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BARS** | **Barje** | **0.39** | **22** | ⇑*i*Pg | **Pg** | **13 35 55.7** | **0.0** |
| BARS | | | | *i* Sg | **Sb** | **13 36 01.7** | **-0.3** |
| **BARS** | **Barje** | **0.39** | **22** | ⇑*i*Pg | **Pg** | **13 35 55.7** | **0.0** |
| BARS | | | | *i* Sg | **Sb** | **13 36 01.7** | **-0.3** |
| **SKO** | **Skopje** | **0.50** | **195** | *i* Pg | **Pg** | **13 35 57.4** | **-0.3** |
| SKO | | | | *i* Sg | **Sg** | **13 36 03.9** | **-0.5** |
| SKO | | | | *e*Lg | Lg | 13 36 04.0 | |
| | comp=N,36nm,0.6s | | | | | | |
| SKO | | | | *e*Lg | Lg | 13 36 04.1 | |
| | comp=E,31nm,0.4s | | | | | | |
| **SKO** | **Skopje** | **0.50** | **195** | *i* Pg | **Pg** | **13 35 57.4** | **-0.3** |
| SKO | | | | *i* Sg | **Sg** | **13 36 03.9** | **-0.5** |
| SKO | | | | *e*Lg | Lg | 13 36 04.0 | |
| | comp=E,31nm,0.4s | | | | | | |
| **SELS** | **Selova** | **0.84** | **335** | ⇑*i*Pg | **Pg** | **13 36 03.1** | **-1.0** |
| SELS | | | | *e*Sg | **Sb** | **13 36 16.2** | **+1.1** |
| **ZAPS** | **Zavoj** | **1.11** | **42** | *e*Pg | **Pn** | **13 36 09.3** | **+0.7** |
| ZAPS | | | | *e*Sg | **Sn** | **13 36 24.1** | **+0.5** |
| **ZAPS** | **Zavoj** | **1.11** | **42** | *e*Pg | **Pn** | **13 36 09.3** | **+0.7** |
| ZAPS | | | | *e*Sg | **Sn** | **13 36 24.1** | **+0.5** |
| **BOVS** | **Bovan** | **1.18** | **3** | *e*Pg | **Pb** | **13 36 09.9** | **+0.2** |
| BOVS | | | | *e*Sg | **Sg** | **13 36 24.8** | **-1.1** |
| **BOVS** | **Bovan** | **1.18** | **3** | *e*Pg | **Pb** | **13 36 09.9** | **+0.2** |
| BOVS | | | | *e*Sg | **Sg** | **13 36 24.8** | **-1.1** |
| **VAY** | **Valandovo** | **1.34** | **147** | *e*Sg | **Sg** | **13 36 30.8** | **-0.2** |
| **VAY** | **Valandovo** | **1.34** | **147** | *e*Sg | **Sg** | **13 36 30.8** | **-0.2** |
| **BOLS** | **Boljevac** | **1.40** | **10** | *e*Pg | **Pn** | **13 36 12.2** | **-0.3** |
| BOLS | | | | *e*Sg | **Sb** | **13 36 31.3** | **+0.4** |
| **BOLS** | **Boljevac** | **1.40** | **10** | *e*Pg | **Pn** | **13 36 12.2** | **-0.3** |
| BOLS | | | | *e*Sg | **Sb** | **13 36 31.3** | **+0.4** |
| **SJES** | **Sjenica** | **1.45** | **304** | ⇑*i*Pg | **Pg** | **13 36 15.6** | **0.0** |
| SJES | | | | *i* Sg | **Sb** | **13 36 33.8** | **+1.2** |
| **IVAS** | **Ivanjica** | **1.55** | **317** | *e*Pg | **Pn** | **13 36 15.7** | **+1.0** |
| **IVAS** | **Ivanjica** | **1.55** | **317** | *e*Pg | **Pn** | **13 36 15.7** | **+1.0** |
| **GRUS** | **Gruza** | **1.57** | **336** | *e*Pn | **Pb** | **13 36 16.9** | **+0.5** |
| GRUS | | | | *e*Sg | **Sg** | **13 36 39.2** | **+0.7** |
| **GRUS** | **Gruza** | **1.57** | **336** | *e*Pn | **Pb** | **13 36 16.9** | **+0.5** |
| GRUS | | | | *e*Sg | **Sg** | **13 36 39.2** | **+0.7** |
| **GRG** | **Griva** | **1.61** | **158** | *e*P | **Pn** | **13 36 16.6** | **+1.1** |
| GRG | | | | *e*S | **Sn** | **13 36 31.5** | **-4.4** |
| **GRG** | **Griva** | **1.61** | **158** | P | **Pn** | **13 36 16.8** | **+1.3** |
| GRG | | | | S | **Sg** | **13 36 38.9** | **-0.7** |
| **GRG** | **Griva** | **1.61** | **158** | P | **Pn** | **13 36 16.8** | **+1.3** |
| GRG | | | | S | **Sg** | **13 36 38.9** | **-0.7** |
| **KNT** | **Kendrikon** | **1.61** | **143** | *e*P | **Pb** | **13 36 17.6** | **+0.6** |
| KNT | | | | *e*S | **Sn** | **13 36 33.0** | **-2.9** |
| **KNT** | **Kendrikon** | **1.61** | **143** | P | **Pn** | **13 36 16.7** | **+1.3** |
| KNT | | | | S | **Sg** | **13 36 38.5** | **-1.1** |
| **KNT** | **Kendrikon** | **1.61** | **143** | *e*P | **Pb** | **13 36 17.6** | **+0.6** |
| KNT | | | | S | **Sg** | **13 36 38.5** | **-1.1** |
| **FNA** | **Florina** | **1.68** | **186** | *e*P | **Pb** | **13 36 18.1** | **-0.2** |
| FNA | | | | *e*S | **Sn** | **13 36 34.5** | **-3.2** |
| **FNA** | **Florina** | **1.68** | **186** | P | **Pb** | **13 36 18.0** | **-0.2** |
| FNA | | | | S | **Sb** | **13 36 40.4** | **+1.2** |
| **FNA** | **Florina** | **1.68** | **186** | *e*P | **Pb** | **13 36 18.1** | **-0.2** |
| FNA | | | | S | **Sb** | **13 36 40.4** | **+1.2** |
| **KUBS** | **Kucevo** | **1.96** | **1** | *e*Pn | **Pn** | **13 36 20.2** | **0.0** |
| **KUBS** | **Kucevo** | **1.96** | **1** | *e*Pn | **Pn** | **13 36 20.2** | **0.0** |
| **TRUS** | **Trudelj** | **1.97** | **334** | *e*Pn | **Pn** | **13 36 20.9** | **+0.5** |
| **TRUS** | **Trudelj** | **1.97** | **334** | *e*Pn | **Pn** | **13 36 20.9** | **+0.5** |
| **SRS** | **Serrai** | **2.00** | **131** | *e*P | **Pb** | **13 36 24.0** | **+0.4** |
| **SRS** | **Serrai** | **2.00** | **131** | P | **Pn** | **13 36 22.6** | **+1.9** |
| SRS | | | | S | **Sg** | **13 36 50.4** | **-1.5** |
| **SRS** | **Serrai** | **2.00** | **131** | P | **Pn** | **13 36 22.6** | **+1.9** |
| SRS | | | | S | **Sg** | **13 36 50.4** | **-1.5** |
| **NVR** | **Nevrokopi** | **2.01** | **123** | *e*P | **Pb** | **13 36 24.0** | **+0.2** |
| **NVR** | **Nevrokopi** | **2.01** | **123** | P | **Pn** | **13 36 22.6** | **+1.6** |
| NVR | | | | S | **Sb** | **13 36 50.4** | **+1.8** |
| **NVR** | **Nevrokopi** | **2.01** | **123** | P | **Pn** | **13 36 22.6** | **+1.6** |
| NVR | | | | S | **Sb** | **13 36 50.4** | **+1.8** |
| **DIVS** | **Divibare** | **2.02** | **325** | *e*Pn | **Pn** | **13 36 22.5** | **+1.3** |
| **DIVS** | **Divibare** | **2.02** | **325** | P | **Pn** | **13 36 22.6** | **+1.3** |
| **DIVS** | **Divibare** | **2.02** | **325** | *e*Pn | **Pn** | **13 36 22.5** | **+1.3** |
| **NEST** | **Nestorio** | **2.08** | **192** | *e*P | **Pn** | **13 36 24.0** | **+2.0** |
| **SOH** | **Sokhos** | **2.09** | **141** | *e*P | **Pn** | **13 36 24.0** | **+1.9** |
| **SOH** | **Sokhos** | **2.09** | **141** | *e*P | **Pn** | **13 36 24.0** | **+1.9** |
| **BBLS** | **Lazići** | **2.14** | **312** | *e*Pn | **Pn** | **13 36 23.3** | **+0.5** |
| **BBLS** | **Lazići** | **2.14** | **312** | *e*Pn | **Pn** | **13 36 23.3** | **+0.5** |
| **HORT** | **Hortiatis** | **2.17** | **149** | *e*P | **Pn** | **13 36 24.7** | **+1.5** |
| **HORT** | **Hortiatis** | **2.17** | **149** | *e*P | **Pn** | **13 36 24.7** | **+1.5** |

*IDC* ***20*** *13:44:58.4±2.7, 0.70S×133.08E, h0km, mb3.6/2, mb1 3.8/3, mb1mx3.4/21, mbtmp3.6/3, ML3.6/1, Error ellipse: s-maj=132.4km s-min=27.5km az=74.0*
*AUST* ***20*** *13:45:11.1, 1.49S×131.00E, h10km*
**ISC 20 13:45:01.0±2.0, 0.8S±0.1°×132.7E±0.5, h10km, n7, σ1§36/7, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.19** | **193** | P | **Pg** | **13 45 42.3** | **-0.7** |
| | baz=1.9,SNR=9.0 | | | | | | |
| **KDU** | **Kakadu** | **11.84** | **181** | P | **Pn** | **13 47 50.9** | **+0.8** |
| | baz=11,SNR=3.1 | | | | | | |
| **MTN** | **Manton Dam** | **12.10** | **187** | P | **Pn** | **13 47 55.6** | **+2.0** |
| | baz=11,SNR=7.5 | | | | | | |
| **KNRA** | **Kununurra** | **15.32** | **195** | P | **Pn** | **13 48 37.9** | **+0.4** |
| | baz=14,SNR=6.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.12** | **175** | P | **P** | **13 49 22.9** | **-1.4** |
| | 0.2nm,0.3s,baz=355,slow=11,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **22.79** | **177** | P | **P** | **13 50 03.9** | **-0.2** |
| | 0.9nm,0.3s,baz=358,slow=12,SNR=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.67** | **324** | P | **P** | **13 55 39.1** | **-0.1** |
| | 0.4nm,0.7s,baz=108,slow=7.7,SNR=4.2 | | | | | | |

**IDC 20 13:53:51.1±3.4, 2.66N×95.35W, h0km, mb3.8/5, mb1 4.2/5, mb1mx3.8/32, mbtmp3.8/5, MS3.4/6, Ms1 3.5/6, ms1mx3.2/27, Error ellipse: s-maj=191.1km s-min=25.4km az=52.0, Galapagos Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTS** | **JuntasAbangare** | **12.81** | **53** | LR | LR | 14 00 13.9 | |
| | comp=Z,222nm,20.1s,baz=232,slow=30 | | | | | | |
| **CMIG** | **Matias Romero** | **14.35** | **2** | LR | LR | 14 01 32.2 | |
| | comp=Z,212nm,21.3s,baz=162,slow=32 | | | | | | |
| **ATAH** | **Atahualpa** | **19.52** | **120** | LR | | 14 04 19.6 | |
| | comp=Z,77nm,18.3s,baz=294,slow=32 | | | | | | |
| **ROSC** | **El Rosal** | **21.09** | **83** | LR | LR | 14 04 59.9 | |
| | comp=Z,76nm,19.2s,baz=238,slow=32 | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **22.12** | **318** | T | T | 14 21 51.8 | |
| | SNR=5.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **27.68** | **344** | P | P | 13 59 42.2 | +1.1 |
| | 0.8nm,0.8s,baz=168,slow=11,SNR=7.6 | | | | | | |
| TXAR | | | | LR | LR | 14 09 39.2 | |
| | comp=Z,101nm,19.4s,baz=0.0,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **32.83** | **126** | P | P | 14 00 27.9 | +0.3 |
| | 0.7nm,0.7s,baz=288,slow=9.6,SNR=2.8 | | | | | | |
| LPAZ | | | | LR | LR | 14 12 22.5 | |
| | comp=Z,89nm,18.3s,baz=222,slow=34 | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.33** | **332** | P | P | 14 01 40.3 | +1.3 |
| | 1.5nm,0.9s,baz=156,slow=8.9,SNR=9.8 | | | | | | |
| **YKA** | **Yellowknife Ar** | **61.40** | **350** | P | P | 14 04 07.7 | -1.1 |
| | 1.4nm,0.9s,baz=152,slow=6.8,SNR=4.5 | | | | | | |
| **ILAR** | **Eielson Array** | **72.07** | **339** | P | P | 14 05 15.4 | -1.5 |
| | 1.1nm,0.9s,baz=151,slow=5.2,SNR=7.7 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **96.69** | **289** | T | T | 15 55 04.9 | |
| | baz=86,slow=75,SNR=7.0 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **96.69** | **289** | T | T | 15 54 59.6 | |
| | baz=86,slow=75,SNR=5.3 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **96.70** | **289** | T | T | 15 55 04.6 | |
| | baz=86,slow=75,SNR=7.3 | | | | | | |

**MEX 20 13:56:17.5±0.3, 15.17N×92.42W, h96km±18km, MD3.8, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.94** | **304** | *e*P | Pn | 13 56 40.4 | +3.5 |
| PCIG | | | | *i* S | Sn | 13 56 55.0 | +3.4 |
| **CCIG** | **Comitan** | **1.13** | **14** | *i* P | Pn | 13 56 38.1 | -1.3 |
| CCIG | | | | *e*S | Sn | 13 56 53.9 | -2.0 |

*ISCJB* ***20*** *14:02:15.3±0.4, 59.83N±0.03°×22.92E±0.04, h0km, Error ellipse: s-maj=4.7km s-min=3.1km az=166.4*
*CSEM* ***20*** *14:02:16.4±0.2, 59.80N×22.95E, h2km, ML1.9, Error ellipse: s-maj=5.1km s-min=3.6km az=165.0, Mining explosion.*
*HEL* ***20*** *14:02:16.9±0.1, 59.82N×22.92E, h0km, ML1.9, ML2.1(UPP), Explosion*
*IDC* ***20*** *14:02:17.0±1.8, 59.85N×23.00E, h0km, mb1 3.2/4, mb1mx3.0/36, mbtmp3.1/4, ML2.5/4, Error ellipse: s-maj=23.5km s-min=9.2km az=157.0*
*UPP* ***20*** *14:02:18.4, 60.08N×22.72E, h0km, ML2.1, Suspected Mining explosion.*
**ISC 20 14:02:15.5±0.8, 59.83N±0.03°×22.89E±0.02, h0km, n34, σ1§31/62, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **0.85** | **62** | *e*P | **Pg** | **14 02 31.7** | **-0.1** |
| MEF | | | | *e*S | **Sg** | **14 02 41.9** | **-0.8** |
| **MEF** | **Metsahovi** | **0.85** | **62** | P | **Pg** | **14 02 31.6** | **-0.1** |
| MEF | | | | S | **Sg** | **14 02 41.9** | **-0.8** |
| **MTSE** | **Matsula** | **1.21** | **157** | *e*P | **Pg** | **14 02 38.6** | **-0.1** |
| MTSE | | | | *e*S | **Sg** | **14 02 53.9** | **-0.5** |
| **MTSE** | **Matsula** | **1.21** | **157** | P | **Pg** | **14 02 38.6** | **-0.1** |
| MTSE | | | | S | **Sg** | **14 02 53.9** | **-0.5** |
| **RAF** | **Rauma** | **1.32** | **335** | *e*P | **Pg** | **14 02 40.5** | **-0.4** |
| RAF | | | | *e*S | **Sg** | **14 02 57.3** | **-0.7** |
| RAF | | | | MSG | | 14 03 03.8 | |
| | comp=Z,14nm,0.2s | | | | | | |
| **RAF** | **Rauma** | **1.32** | **335** | P | **Pg** | **14 02 40.4** | **-0.4** |
| **AAL** | **Aland** | **1.50** | **285** | *e*P | **Pn** | **14 02 43.5** | **0.0** |
| AAL | | | | *e*S | **Sb** | **14 03 02.3** | **-1.3** |
| **AAL** | **Aland** | **1.50** | **285** | P | **Pn** | **14 02 43.6** | **0.0** |
| AAL | | | | S | **Sb** | **14 03 02.9** | **-0.8** |
| **PVF** | **Pernaja** | **1.65** | **63** | *e*P | **Pn** | **14 02 45.7** | **0.0** |
| PVF | | | | *e*S | **Sn** | **14 03 06.4** | **-1.2** |
| PVF | | | | MSG | | 14 03 07.5 | |
| | comp=Z,6.1nm,0.2s | | | | | | |
| **PVF** | **Pernaja** | **1.65** | **63** | P | **Pn** | **14 02 45.6** | **0.0** |
| PVF | | | | S | **Sn** | **14 03 06.3** | **-1.2** |
| **FIA0** | **FINESS Array S** | **2.25** | **43** | *e*P | **Pn** | **14 02 55.7** | **+1.7** |
| FIA0 | | | | *e*S | **Sn** | **14 03 23.8** | **+1.3** |
| FIA0 | | | | MSG | | 14 03 26.7 | |
| | comp=Z,6.1nm,0.2s | | | | | | |
| **FIA0** | **FINESS Array S** | **2.25** | **43** | P | **Pn** | **14 02 55.7** | **+1.7** |
| FIA0 | | | | S | **Sn** | **14 03 23.8** | **+1.3** |
| **FINES** | **FINESS Array B** | **2.25** | **43** | Pn | **Pb** | **14 02 56.1** | **-0.9** |
| | comp=Z,2.1nm,0.3s,baz=220,slow=16,SNR=90 | | | | | | |
| FINES | | | | Sn | **Sb** | **14 03 25.0** | **-0.4** |
| | comp=Z,1.7nm,0.3s,baz=228,slow=26,SNR=21 | | | | | | |
| **VJF** | **Virojoki** | **2.44** | **71** | *e*P | **Pn** | **14 02 57.1** | **+0.6** |
| VJF | | | | *e*S | **Sn** | **14 03 27.8** | **+0.8** |
| **VJF** | **Virojoki** | **2.44** | **71** | P | **Pn** | **14 02 57.0** | **+0.6** |
| VJF | | | | S | **Sn** | **14 03 27.7** | **+0.8** |
| **FLYU** | **Flymyra** | **2.54** | **279** | *e*P | **Pn** | **14 02 59.2** | **+1.3** |
| FLYU | | | | *e*S | **Sn** | **14 03 30.9** | **+1.5** |
| **FLYU** | **Flymyra** | **2.54** | **279** | P | **Pn** | **14 02 59.1** | **+1.3** |
| FLYU | | | | S | **Sn** | **14 03 30.9** | **+1.5** |
| **KEF** | **Keuruu** | **2.54** | **21** | *e*P | **Pn** | **14 02 59.7** | **+1.9** |
| KEF | | | | *e*S | **Sn** | **14 03 29.7** | **+0.3** |
| **KEF** | **Keuruu** | **2.54** | **21** | P | **Pn** | **14 02 59.7** | **+1.9** |
| KEF | | | | S | **Sn** | **14 03 29.7** | **+0.3** |
| **KAF** | **Kangasniemi** | **2.83** | **35** | *e*P | **Pn** | **14 03 03.4** | **+1.5** |
| KAF | | | | *e*S | **Sn** | **14 03 36.9** | **+0.2** |
| **KAF** | **Kangasniemi** | **2.83** | **35** | P | **Pn** | **14 03 03.4** | **+1.5** |
| KAF | | | | S | **Sn** | **14 03 36.9** | **+0.2** |
| **OSTU

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **43.42** | **289** | P | **P** | 14 34 56.5 | **+0.1** | |
| | 18nm,0.6s,baz=155,slow=2.2,SNR=16 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.74** | **257** | P | **P** | 14 34 58.8 | **+0.1** | |
| | 5.5nm,0.7s,baz=98,slow=7.5,SNR=95 | | | | | | | |
| ASAR | | | | PcP | **PcP** | 14 36 31.1 | **+0.5** | |
| | 1.2nm,0.6s,baz=104,slow=3.9,SNR=10.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.84** | **262** | P | **P** | 14 34 58.6 | **-0.9** | |
| | 2.0nm,0.6s,baz=96,slow=6.7,SNR=158 | | | | | | | |
| WRA | | | | PcP | **PcP** | 14 36 31.5 | **+0.6** | |
| | 0.3nm,0.7s,baz=90,slow=3.3,SNR=2.8 | | | | | | | |
| **VNDA** | **Vanda** | **57.60** | **185** | P | **P** | 14 36 39.2 | **+1.7** | |
| | 0.7nm,0.7s,baz=354,slow=5.5,SNR=9.0 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.97** | **324** | P | **P** | 14 37 55.3 | **-1.1** | |
| | 2.8nm,0.7s,baz=159,slow=5.8,SNR=7.4 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.71** | **44** | P | **P** | 14 39 01.9 | **+0.9** | |
| | 0.9nm,0.6s,baz=227,slow=8.2,SNR=9.4 | | | | | | | |
| **ILAR** | **Eielson Array** | **88.72** | **13** | P | **P** | 14 39 33.1 | **-0.6** | |
| | 1.6nm,0.8s,baz=218,slow=5.5,SNR=15 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.50** | **290** | P | **P** | 14 39 40.6 | **+2.2** | |
| | 1.5nm,0.8s,baz=118,slow=2.2,SNR=8.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **110.22** | **321** | PKiKP | **PKiKP** | 14 45 06.2 | **-1.3** | |
| | 0.4nm,0.4s,baz=134,slow=4.2,SNR=2.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **110.83** | **313** | PKiKP | **PKiKP** | 14 45 09.3 | **+0.3** | |
| | 0.2nm,0.4s,baz=29,slow=1.1,SNR=5.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **135.80** | **343** | PKP | **PKPdf** | 14 45 55.9 | **-0.1** | |
| | 1.6nm,0.9s,baz=106,slow=4.5,SNR=3.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.87** | **330** | PKP | **PKPdf** | 14 46 06.7 | **-2.4** | |
| | 6.8nm,0.6s,baz=42,slow=4.3,SNR=28 | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.46** | **312** | PKPbc | **PKPdf** | 14 46 17.2 | **+1.3** | |
| | 1.6nm,0.8s,baz=121,slow=5.4,SNR=8.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **150.23** | **343** | PKPbc | **PKPbc** | 14 46 27.4 | **-0.1** | |
| | 1.1nm,0.7s,baz=48,slow=2.0,SNR=7.0 | | | | | | | |

*AUST* ***20*** *14:35:49.6±7.2,20.2±1.2°S×173.3±4.3°W,h0km, Error ellipse: s-maj=1.8km s-min=1.3km az=296.0*

*IDC* ***20*** *14:35:52.3±0.4,20.3±7.3°S×173.7±3.7°W,h0km,mb4.7/21, mb1 4.9/23,mb1mx4.8/29,mbtmp4.7/23,ML4.6/2,MS4.3/21, Ms1 4.3/21,ms1mx4.2/29, Error ellipse: s-maj=17.5km s-min=13.8km az=137.0*

*GCMT* ***20*** *14:35:53.7±0.3,20.5±1.5°S×173.1±0.6°W,h18±1km,MW5.0/64, Moment Tensor Solution. s40,c52; s64,c96; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr3.50±.19; Mθθ-0.71±.12; Mφφ-2.79±.13; Mrθ1.15±.31; Mrφ-0.88±.08; Mθφ2.24±.26; Best double couple: M0 4.15500×10^16 NP1:ϕ24.0000°,δ64.0000°,λ93.0000°. NP2: ϕ197.0000°,δ27.0000°,λ84.0000°. Principal axes: T 4.3560, Plg71.0000°, Azm301.0000°; N -0.4030, Plg3.0000°, Azm203.0000°; P -3.9530, Plg19.0000°, Azm112.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC* ***20*** *14:35:53.7±0.2,20.4±1.5°S×173.7±2.9°W,h10km,mb5.2/82 Error ellipse: s-maj=8.4km s-min=4.6km az=138.0*

*ISCJB* ***20*** *14:35:55.8±0.1,20.4±1.0°S×173.7±1.8°W,h33km, mb5.1/114,MS4.4/21, Error ellipse: s-maj=7.0km s-min=3.7km az=149.8*

*BJI* ***20*** *14:35:55.9,20.1±2.5°S×173.6±2.9°W,h24km,mb5.2/31, mB5.7/26,Ms5.3/13,Ms7 5.1/16*

*MOS* ***20*** *14:35:58.7±3.2,20.1±5.1°S×173.8±2.0°W,h33km,mb5.3/26, Error ellipse: s-maj=10.5km s-min=9.4km az=80.5*

**ISC 20 14:35:55.7±0.5,20.4±0.6°S×173.7±1.0°W±0.6,h22km±3km, h22km:pP-P,n400,σ1s38/419,mb5.1/116,MS4.3/21, 29C-19D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **3.81** | **70** | P | Pn | 14 36 42.6 | -11 |
| | baz=3.4,SNR=78 | | | | | | |
| **AFI** | **Afiamalu** | **6.76** | **16** | Pn | Pn | 14 37 26.8 | -7.0 |
| | 22nm,0.3s,baz=76,slow=1.2,SNR=32 | | | | | | |
| AFI | | | | Sn | Sn | 14 38 31.8 | -18 |
| | 13nm,0.3s,baz=279,slow=19,SNR=2.2 | | | | | | |
| AFI | | | | T | T | 14 44 12.5 | |
| | 12nm,0.3s,baz=95,slow=15,SNR=7.4 | | | | | | |
| **AFI** | **Afiamalu** | **6.76** | **16** | *e*P | Pn | 14 37 24.5 | -9.3 |
| AFI | | | | *e* | | 14 38 39.3 | |
| **AFI** | **Afiamalu** | **6.76** | **16** | *e*Pn | Pn | 14 37 24.5 | -9.3 |
| AFI | | | | Sn | Sn | 14 38 31.8 | -18 |
| AFI | | | | *e*Sn | Sn | 14 38 39.3 | -11 |
| AFI | | | | TT | | 14 44 12.5 | |
| **MSVF** | **Nonsavu** | **8.24** | **288** | *e*P | Pn | 14 38 00.3 | +6.1 |
| **MSVF** | **Nonsavu** | **8.24** | **288** | Pn | Pn | 14 38 01.0 | +6.8 |
| | 885nm,1.2s,SNR=22 | | | | | | |
| **MSVF** | **Nonsavu** | **8.24** | **288** | *e*Pn | Pn | 14 38 00.2 | +6.1 |
| **RAO** | **Raoul Island** | **9.56** | **203** | Pn | Pn | 14 38 08.7 | -3.4 |
| | 52nm,0.3s,baz=90,slow=20,SNR=2.3 | | | | | | |
| RAO | | | | Sn | Sn | 14 39 50.5 | -8.5 |
| | 131nm,0.3s,baz=102,slow=23,SNR=8.3 | | | | | | |
| RAO | | | | LR | LR | 14 41 59.5 | |
| | comp=Z,709nm,19.7s,baz=70,slow=38 | | | | | | |
| **RAO** | **Raoul Island** | **9.56** | **203** | *e*P | **Pn** | **14 38 09.5** | **-2.7** |
| **RAO** | **Raoul Island** | **9.56** | **203** | *e*Pn | **Pn** | **14 38 09.5** | **-2.7** |
| RAO | | | | *e*Sn | Sn | 14 39 52.0 | -7.0 |
| **RAR** | **Rarotonga** | **13.06** | **96** | Pn | Pn | 14 38 49.7 | -10 |
| | 19nm,0.3s,baz=252,slow=7.9,SNR=32 | | | | | | |
| RAR | | | | Sn | Sn | 14 40 59.7 | -25 |
| | 1.3nm,0.3s,baz=202,slow=19,SNR=1.8 | | | | | | |
| RAR | | | | LR | LR | 14 43 44.0 | |
| | comp=Z,1μm,19.0s,baz=246,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.57** | **261** | *e*P | **Pn** | **14 40 12.4** | **+0.7** |
| | 42nm,0.7s | | | | | | |
| DZM | | | | *e*LR | LR | 14 44 36.9 | |
| | 2μm,22.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.57** | **261** | P | **Pn** | **14 40 12.6** | **+0.9** |
| | 1.0nm,0.3s,baz=359,slow=22,SNR=9.6 | | | | | | |
| DZM | | | | LR | LR | 14 46 41.6 | |
| | comp=Z,2μm,18.9s,baz=204,slow=35 | | | | | | |
| **URZ** | **Urewera** | **19.45** | **202** | P | **Pn** | **14 40 22.3** | **+0.1** |
| | 3.9nm,0.3s,baz=310,slow=3.5,SNR=21 | | | | | | |
| URZ | | | | S | S | 14 43 42.5 | -17 |
| | 0.4nm,0.3s,baz=287,slow=19,SNR=3.1 | | | | | | |
| **URZ** | **Urewera** | **19.45** | **202** | *e*P | **Pn** | **14 40 22.0** | **-0.1** |
| | 81nm,1.1s | | | | | | |
| URZ | | | | S | S | 14 43 42.5 | -17 |
| **HIZ** | **Hauiti** | **20.54** | **206** | *e*P | **P** | **14 40 33.8** | **+1.0** |
| | 111nm,0.9s | | | | | | |
| **TBI** | **Tubuai** | **22.68** | **102** | *e*P | **P** | **14 40 54.3** | **-1.6** |
| | 532nm,1.2s | | | | | | |
| TBI | | | | *e*LQ | LQ | 14 45 26.5 | |
| | 322nm,27.0s | | | | | | |
| TBI | | | | *e*LR | LR | 14 45 51.9 | |
| | 1μm,30.5s,baz=269 | | | | | | |
| **PPT2** | **Papeete2** | **22.99** | **87** | *e*LQ | LQ | 14 45 09.7 | |
| | 982nm,26.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 14 46 13.8 | |
| | 860nm,21.8s,baz=253 | | | | | | |
| **PPT** | **Papeete** | **22.99** | **87** | LR | LR | 14 48 09.0 | |
| | comp=Z,1μm,18.9s,baz=246,slow=32 | | | | | | |
| **THZ** | **Tophouse** | **24.09** | **205** | *e*P | **P** | **14 41 12.3** | **+2.6** |
| | 330nm,2.0s | | | | | | |
| **KHZ** | **Kahutara** | **24.40** | **203** | *e*P | **P** | **14 41 13.4** | **+0.9** |
| | 43nm,0.7s | | | | | | |
| **OXZ** | **Oxford** | **25.75** | **204** | *e*P | **P** | **14 41 24.0** | **-0.7** |
| | 68nm,0.9s | | | | | | |
| **RPZ** | **Rata Peaks** | **26.47** | **205** | P | **P** | **14 41 30.6** | **-0.7** |
| | 24nm,0.8s,baz=36,slow=4.6,SNR=6.1 | | | | | | |
| **HNR** | **Honiara** | **27.66** | **289** | LR | LR | 14 51 59.0 | |
| | comp=Z,709nm,19.1s,baz=152,slow=35 | | | | | | |
| **ARMA** | **Armidale** | **32.73** | **245** | P | **P** | **14 42 27.3** | **+0.2** |
| | baz=33,SNR=4.2 | | | | | | |
| **ARMA** | **Armidale** | **32.73** | **245** | *e*P | **P** | **14 42 26.6** | **-0.6** |
| | 10nm,0.9s | | | | | | |
| **MGCD** | **Mangrove Creek** | **33.71** | **240** | P | **P** | **14 42 36.0** | **+0.5** |
| | baz=34,SNR=5.2 | | | | | | |
| **RMQ** | **Roma** | **34.86** | **253** | P | **P** | **14 42 45.7** | **+0.1** |
| | baz=35,SNR=11 | | | | | | |
| **CNB** | **Canberra Magne** | **35.62** | **238** | P | **P** | **14 42 52.4** | **+0.3** |
| | baz=36,SNR=18 | | | | | | |
| **CAN** | **Canberra** | **35.91** | **238** | *e*P | **P** | **14 42 53.8** | **-0.8** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,26nm,0.8s | | | | | | |
| **CAN** | **Canberra** | **35.91** | **238** | *e*P | **P** | **14 42 53.8** | **-0.8** |
| | comp=Z,26nm,0.8s | | | | | | |
| **RKT** | **Rikitea** | **36.00** | **101** | *e*LR | LR | 14 52 04.1 | |
| | comp=Z,846nm,27.5s | | | | | | |
| **YNG** | **Young** | **36.15** | **240** | P | **P** | **14 42 56.8** | **+0.2** |
| | baz=37,SNR=8.4 | | | | | | |
| **MILA** | **Mila** | **36.25** | **235** | P | **P** | **14 42 58.1** | **+0.6** |
| | baz=37,SNR=6.5 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **37.93** | **245** | P | **P** | **14 43 10.7** | **-1.1** |
| | baz=38,SNR=42 | | | | | | |
| **QLP** | **Quilpie** | **38.91** | **253** | P | **P** | **14 43 19.6** | **-0.5** |
| | baz=39,SNR=12 | | | | | | |
| **TOO** | **Toolangi** | **39.20** | **235** | P | **P** | **14 43 22.2** | **-0.2** |
| | baz=40,SNR=22 | | | | | | |
| **PMG** | **Port Moresby** | **39.27** | **280** | P | **P** | **14 43 21.8** | **-1.4** |
| | comp=Z,47nm,0.9s,baz=122,slow=4.1,SNR=8.6 | | | | | | |
| PMG | | | | LR | LR | 14 57 38.4 | |
| | comp=Z,422nm,18.7s,baz=144,slow=33 | | | | | | |
| **PMG** | **Port Moresby** | **39.27** | **280** | *c i*P | **P** | **14 43 21.9** | **-1.3** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,246nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **39.27** | **280** | P | **P** | **14 43 22.4** | **-0.8** |
| | baz=40,SNR=6.8 | | | | | | |
| **PMG** | **Port Moresby** | **39.27** | **280** | *e*P | **P** | **14 43 22.1** | **-1.0** |
| | comp=Z,52nm,0.9s | | | | | | |
| **MOO** | **Moorlands** | **39.45** | **227** | P | **P** | **14 43 25.7** | **+1.3** |
| | baz=40,SNR=3.6 | | | | | | |
| **COEN** | **Coen** | **41.60** | **272** | P | **P** | **14 43 42.6** | **+0.2** |
| | baz=42,SNR=8.6 | | | | | | |
| **ARPS** | **Mount Arapiles** | **41.88** | **237** | P | **P** | **14 43 44.6** | **+0.1** |
| | baz=42,SNR=16 | | | | | | |
| **HTT** | **Hallett** | **43.82** | **243** | P | P | 14 43 55.1 | -5.3 |
| | baz=44,SNR=4.7 | | | | | | |
| **BBOO** | **Buckleboo** | **46.18** | **244** | P | **P** | **14 44 18.1** | **-0.9** |
| | baz=46,SNR=8.2 | | | | | | |
| **BBOO** | **Buckleboo** | **46.18** | **244** | *e*P | **P** | **14 44 17.6** | **-1.5** |
| | comp=Z,15nm,0.9s | | | | | | |
| **JAY** | **Jayapura** | **47.87** | **286** | P | **P** | **14 44 31.9** | **-0.6** |
| | baz=48,SNR=53 | | | | | | |
| **JAY** | **Jayapura** | **47.87** | **286** | P | **P** | **14 44 32.0** | **-0.6** |
| | comp=Z,2μm,0.9s,comp=Z,19μm | | | | | | |
| **GENI** | **Genyem** | **48.32** | **285** | P | **P** | **14 44 36.0** | **0.0** |
| | comp=Z,246nm,1.0s,comp=Z,3μm | | | | | | |
| **AS01** | **Alice Springs** | **48.40** | **256** | *e*P | **P** | **14 44 33.5** | **-3.1** |
| **ASAR** | **Alice Springs** | **48.44** | **256** | P | **P** | **14 44 35.0** | **-1.9** |
| | comp=Z,18nm,0.9s,baz=87,slow=8.5,SNR=109 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 46 03.2** | **+0.2** |
| | comp=Z,8.6nm,0.8s,baz=104,slow=4.1,SNR=14 | | | | | | |
| ASAR | | | | LR | LR | 15 04 23.6 | |
| | comp=Z,662nm,19.0s,baz=105,slow=35 | | | | | | |
| **WRAB** | **Tennant Creek** | **48.58** | **261** | *c e*P | **P** | **14 44 35.6** | **-2.3** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,81nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **48.58** | **261** | P | **P** | **14 44 36.0** | **-1.9** |
| | comp=Z,121nm,1.2s,SNR=17 | | | | | | |
| **WRAB** | **Tennant Creek** | **48.58** | **261** | *e*P | **P** | **14 44 35.5** | **-2.5** |
| | comp=Z,24nm,1.0s | | | | | | |
| WRAB | | | | *e*PcP | **PcP** | **14 46 04.2** | **+0.6** |
| **WRA** | **Warramunga Arr** | **48.59** | **261** | P | **P** | **14 44 35.9** | **-2.1** |
| | comp=Z,12nm,0.9s,baz=98,slow=7.6,SNR=58 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 46 04.1** | **+0.5** |
| | comp=Z,8.7nm,0.8s,baz=92,slow=3.8,SNR=13 | | | | | | |
| WRA | | | | LR | LR | 15 04 33.2 | |
| | comp=Z,292nm,19.3s,baz=90,slow=35 | | | | | | |
| **SMPI** | **Sarmi** | **49.90** | **285** | P | **P** | **14 44 47.4** | **-0.6** |
| | comp=Z,50nm,0.9s,comp=Z,16μm | | | | | | |
| **KDU** | **Kakadu** | **51.97** | **270** | P | **P** | **14 45 03.0** | **-0.7** |
| | baz=52,SNR=3.5 | | | | | | |
| **GUMO** | **Guam** | **52.94** | **306** | LR | LR | 15 02 25.2 | |
| | comp=Z,90nm,21.9s,baz=114,slow=30 | | | | | | |
| **MTN** | **Manton Dam** | **53.18** | **269** | P | **P** | **14 45 11.2** | **-1.4** |
| | baz=54,SNR=4.6 | | | | | | |
| **WRKA** | **Warakurna** | **53.34** | **254** | P | **P** | **14 45 12.3** | **-1.5** |
| | baz=54,SNR=47 | | | | | | |
| **KNRA** | **Kununurra** | **54.67** | **265** | P | **P** | **14 45 22.5** | **-1.0** |
| | baz=55,SNR=11 | | | | | | |
| **SWI** | **Sorong** | **57.14** | **283** | P | **P** | **14 45 40.9** | **-0.4** |
| | baz=58,SNR=22 | | | | | | |
| **SWI** | **Sorong** | **57.14** | **283** | P | **P** | **14 45 40.5** | **-0.7** |
| | comp=Z,205nm,1.0s,comp=Z,2μm | | | | | | |
| **PALU** | **Palau** | **57.93** | **293** | P | **P** | **14 45 46.9** | **+0.1** |
| | baz=58,SNR=4.9 | | | | | | |
| **SBA** | **Scott Base** | **58.23** | **185** | *e*P | **P** | **14 45 50.6** | **+2.7** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| **SBA** | **Scott Base** | **58.23** | **185** | *e*P | **P** | **14 45 50.6** | **+2.7** |
| | comp=Z,17nm,1.0s | | | | | | |
| **VNDA** | **Vanda** | **58.35** | **186** | P | **P** | **14 45 50.5** | **+1.7** |
| | comp=Z,6.3nm,1.0s,baz=6.8,slow=6.7,SNR=27 | | | | | | |
| VNDA | | | | LR | LR | 15 06 05.5 | |
| | comp=Z,166nm,20.3s,baz=16,slow=31 | | | | | | |
| **VNDA** | **Vanda** | **58.35** | **186** | *e*P | **P** | **14 45 50.7** | **+1.9** |
| VNDA | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | |
| **VNDA** | **Vanda** | **58.35** | **186** | *e*P | **P** | **14 45 50.7** | **+1.9** |
| | comp=Z,16nm,1.3s | | | | | | |
| **AAI** | **Ambon** | **58.88** | **278** | P | **P** | **14 45 52.7** | **-0.8** |
| | comp=Z,35nm,1.4s | | | | | | |
| **NLAI** | **Namlea** | **60.06** | **278** | P | **P** | **14 46 00.9** | **-0.7** |
| | comp=Z,38nm,1.3s | | | | | | |
| **SOEI** | **Soe** | **60.52** | **270** | P | **P** | **14 46 05.7** | **+0.8** |
| | baz=61,SNR=8.3 | | | | | | |
| **SOEI** | **Soe** | **60.52** | **270** | P | **P** | **14 46 05.7** | **+0.8** |
| | comp=Z,125nm,1.0s | | | | | | |
| **SOEI** | **Soe** | **60.52** | **270** | *e*P | **P** | **14 46 05.2** | **+0.3** |
| | comp=Z,112nm,1.0s | | | | | | |
| **LBMI** | **Labuha** | **60.67** | **281** | P | **P** | **14 46 06.0** | **+0.2** |
| | comp=Z,68nm,1.0s | | | | | | |
| **TNTI** | **Ternate** | **61.35** | **283** | P | **P** | **14 46 10.8** | **+0.4** |
| | comp=Z,151nm,1.0s,comp=Z,2μm | | | | | | |
| **TNTI** | **Ternate** | **61.35** | **283** | *e*P | **P** | **14 46 09.1** | **-1.3** |
| | comp=Z,136nm,1.0s | | | | | | |
| **SANI** | **Sanana** | **61.53** | **279** | P | **P** | **14 46 11.9** | **+0.3** |
| | comp=Z,41nm,1.2s | | | | | | |
| **KLBR** | **Kelberrin** | **61.71** | **244** | P | **P** | **14 46 13.1** | **+0.5** |
| | baz=62,SNR=11 | | | | | | |
| **MEEK** | **Meekatharra** | **61.73** | **250** | P | **P** | **14 46 11.9** | **-0.9** |
| | baz=62,SNR=6.0 | | | | | | |
| **MBWA** | **Marble Bar** | **61.78** | **256** | *e*P | **P** | **14 46 11.8** | **-1.5** |
| | comp=Z,31nm,1.3s | | | | | | |
| **BLDU** | **Ballidu** | **62.74** | **245** | P | **P** | **14 46 19.9** | **+0.3** |
| | baz=63,SNR=7.8 | | | | | | |
| **MORW** | **Morawa** | **63.56** | **247** | P | **P** | **14 46 25.4** | **+0.4** |
| | baz=64,SNR=5.2 | | | | | | |
| **KMSI** | **Cibinong** | **64.39** | **281** | P | P | 14 46 38.5 | +7.9 |
| **CASY** | **Casey** | **65.74** | **205** | *e*P | **P** | **14 46 39.5** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **72.62** | **321** | P | **P** | **14 47 21.3** | **-0.3** |
| | comp=Z,8.5nm,0.8s,baz=160,slow=6.0,SNR=25 | | | | | | |
| MJAR | | | | LR | LR | 15 14 52.5 | |
| | comp=Z,84nm,21.1s,baz=100,slow=32 | | | | | | |
| **MAJO** | **Matsushiro** | **72.62** | **321** | *c i*P | **P** | **14 47 21.6** | **0.0** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,98nm,0.9s | | | | | | |
| **MAJO** | **Matsushiro** | **72.62** | **321** | *e*P | **P** | **14 47 21.1** | **-0.5** |
| | comp=Z,103nm,0.5s | | | | | | |
| **MAT** | **Matsushiro** | **72.62** | **321** | P | **P** | **14 47 21.2** | **-0.4** |
| MAT | | | | *e*S | **S** | **14 56 50.0** | **+4.5** |
| **ERM** | **Erimo** | **73.83** | **328** | *e*P | **P** | **14 47 27.0** | **-1.6** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,23nm,1.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **74.08** | **331** | *e*P | **P** | **14 47 28.5** | **-1.5** |
| YUK | | | | | | 14 50 16.5 | |
| YUK | | | | *e*S | **SKiKP** | **14 56 59.1** | **+2.1** |
| **KUR** | **Kuril'sk** | **74.13** | **333** | P | **P** | **14 47 29.2** | **-1.1** |
| KUR | | | | *e*S | **S** | **14 56 59.8** | **-2.3** |
| **ASAJ** | **Asahikawa** | **75.67** | **329** | *e*P | **P** | **14 47 40.9** | **+1.7** |
| | comp=Z,13nm,0.9s | | | | | | |
| **SBUM** | **Sibu** | **75.97** | **278** | *e*P | **P** | **14 47 42.8** | **+1.2** |
| | comp=Z,26nm,1.5s | | | | | | |
| **IBP** | **Imperial Bould** | **76.28** | **47** | P | **P** | **14 47 42.9** | **-0.2** |
| | baz=76 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **76.32** | **44** | P | **P** | **14 47 43.2** | **0.0** |
| | baz=76 | | | | | | |
| **ISA** | **Isabella** | **76.47** | **43** | *e*P | **P** | **14 47 44.2** | **+0.1** |
| ISA | | | | pmax | pmax | | |
| | comp=Z,23nm,1.3s | | | | | | |
| **ISA** | **Isabella** | **76.47** | **43** | P | **P** | **14 47 44.4** | **+0.3** |
| | baz=77 | | | | | | |
| **ISA** | **Isabella** | **76.47** | **43** | *e*P | **P** | **14 47 44.2** | **+0.1** |
| | comp=Z,23nm,1.3s | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.58** | **46** | P | **P** | **14 47 45.6** | **+0.7** |
| | comp=Z,4.8nm,0.9s,baz=290,slow=8.0,SNR=2.1 | | | | | | |
| **CMB** | **Columbia Colle** | **76.75** | **41** | *e*P | **P** | **14 47 45.1** | **-0.5** |
| CMB | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| **CMB** | **Columbia Colle** | **76.75** | **41** | *e*P | **P** | **14 47 45.0** | **-0.5** |
| | comp=Z,12nm,1.1s | | | | | | |
| **TWG** | **Pinlang** | **76.78** | **301** | *e*P | **P** | **14 47 44.5** | **-1.5** |
| **YULB** | **Yu-li** | **76.87** | **301** | *e*P | **P** | **14 47 44.4** | **-2.1** |
| **PET** | **Petropavlovsk** | **76.99** | **343** | *e*P | **P** | **14 47 48.7** | **+2.2** |
| PET | | | | *e*S | **S** | **14 57 36.6** | **+3.2** |
| PET | | | | MLR | MLR | | |
| | comp=Z,200nm,18.0s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **77.12** | **46** | P | **P** | **14 47 48.5** | **+0.6** |
| | baz=77 | | | | | | |
| **CWC** | **Cottonwood Cre** | **77.20** | **43** | P | **P** | **14 47 48.2** | **-0.1** |
| | baz=77 | | | | | | |
| **PETK** | **Petropavlovsk-** | **77.33** | **343** | P | **P** | **14 47 47.9** | **-0.6** |
| | comp=Z,11nm,0.8s,baz=124,slow=8.1,SNR=12 | | | | | | |
| PETK | | | | LR | LR | 15 18 03.5 | |
| | comp=Z,62nm,20.8s,baz=168,slow=33 | | | | | | |
| **SSLB** | **Suanglung** | **77.34** | **301** | *e*P | **P** | **14 47 49.8** | **+0.6** |
| **MPMC** | **Manual Prospec** | **77.35** | **44** | P | **P** | **14 47 49.1** | **-0.1** |
| | baz=78 | | | | | | |
| **TPUB** | **Ta-pu** | **77.36** | **301** | *e*P | **P** | **14 47 48.7** | **-0.6** |
| | comp=Z,1μm,2.8s | | | | | | |
| **GLA** | **Glamis** | **77.38** | **47** | P | **P** | **14 47 49.4** | **+0.2** |
| GLA | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| **GLA** | **Glamis** | **77.38** | **47** | P | **P** | **14 47 49.4** | **+0.2** |
| | comp=Z,14nm,1.0s | | | | | | |
| **HEC** | **Hector,Ludlow** | **77.38** | **45** | P | **P** | **14 47 48.7** | **-0.6** |
| | baz=78 | | | | | | |
| **KSM** | **Kuching** | **77.39** | **276** | P | **P** | **14 47 51.3** | **+1.6** |
| | baz=78,SNR=8.3 | | | | | | |
| **KSM** | **Kuching** | **77.39** | **276** | *e*P | **P** | **14 47 50.8** | **+1.0** |
| | comp=Z,46nm,1.2s | | | | | | |
| **MTUM** | **Tungsten Hills** | **77.45** | **42** | *e*P | **P** | **14 47 49.6** | **-0.1** |
| **M02C** | **Callahan** | **77.49** | **37** | P | **P** | **14 47 50.1** | **+0.4** |
| | baz=78 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **77.72** | **331** | *e*P | **P** | **14 47 51.0** | **+0.3** |
| YSS | | | | *e* | | 14 48 02.8 | |
| YSS | | | | pmax | pmax | | |
| | comp=Z,50nm,1.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **77.72** | **331** | *e*P | **P** | **14 47 51.1** | **+0.3** |
| | comp=Z,33nm,0.8s | | | | | | |
| **IRM** | **Iron Mountain** | **77.79** | **46** | P | **P** | **14 47 51.5** | **0.0** |
| | baz=78 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **77.79** | **37** | P | **P** | **14 47 51.8** | **+0.3** |
| | comp=Z,2.1nm,0.6s,baz=37,slow=3.7,SNR=4.3 | | | | | | |
| **GRAC** | **Grapevine Rang** | **77.99** | **43** | P | **P** | **14 47 52.8** | **+0.2** |
| | baz=78 | | | | | | |
| **NV01** | **Mina Array Sit** | **78.28** | **41** | *e*P | **P** | **14 47 53.5** | **-0.9** |
| **NVAR** | **Mina Array Bea** | **78.28** | **41** | P | **P** | **14 47 53.2** | **-1.2** |
| | comp=Z,4.4nm,0.7s,baz=226,slow=8.9,SNR=36 | | | | | | |
| NVAR | | | | LR | LR | 15 18 00.2 | |
| | comp=Z,492nm,18.5s,baz=234,slow=32 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **78.56** | **47** | P | **P** | **14 47 55.8** | **+0.1** |
| | baz=79 | | | | | | |
| **TPNV** | **Topopah Spring** | **78.68** | **44** | P | **P** | **14 47 56.5** | **0.0** |
| | baz=79 | | | | | | |
| **SHPR** | **Sheep Range** | **79.13** | **44** | *e*P | **P** | **14 47 58.2** | **-0.8** |
| **K05A** | **Summer Lake** | **79.46** | **37** | *e*P | **P** | **14 48 00.3** | **-0.4** |
| | comp=Z,29nm,1.4s | | | | | | |
| **KSRS** | **Korea Array** | **79.56** | **316** | P | **P** | **14 48 03.0** | **+1.9** |
| | comp=Z,9.0nm,0.8s,baz=136,slow=5.9,SNR=19 | | | | | | |
| KSRS | | | | LR | LR | 15 18 49.3 | |
| | comp=Z,141nm,20.4s,baz=122,slow=32 | | | | | | |
| **KSAR** | **Wonju Array Be** | **79.58** | **316** | P | **P** | **14 48 03.0** | **+1.8** |
| **KSAR** | **Wonju Array Be** | **79.58** | **316** | P | **P** | **14 48 03.0** | **+1.8** |
| **KS01** | **Wonju Array Si** | **79.59** | **316** | *e*P | **P** | **14 48 01.9** | **+0.6** |
| **J05D** | **Fort Rock, OR** | **79.64** | **36** | P | **P** | **14 48 01.3** | **-0.3** |
| | baz=80 | | | | | | |
| **TUC** | **Tucson** | **79.82** | **50** | *e*P | **P** | **14 48 02.3** | **-0.5** |
| TUC | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | |
| **TUC** | **Tucson** | **79.82** | **50** | *e*P | **P** | **14 48 02.3** | **-0.5** |
| | comp=Z,14nm,1.1s | | | | | | |
| **R11A** | **Troy Canyon, C** | **79.93** | **43** | P | **P** | **14 48 03.0** | **-0.3** |
| | baz=80 | | | | | | |
| **R11A** | **Troy Canyon, C** | **79.93** | **43** | *e*P | **P** | **14 48 02.6** | **-0.7** |
| | comp=Z,11nm,1.3s | | | | | | |
| R11A | | | | *e* | | 14 48 13.9 | |
| **BMN** | **Battle Mountai** | **80.16** | **40** | *e*P | **P** | **14 48 04.3** | **-0.2** |
| BMN | | | | pmax | pmax | | |
| | comp=Z,17nm,1.2s | | | | | | |
| **BMN** | **Battle Mountai** | **80.16** | **40** | *e*P | **P** | **14 48 04.3** | **-0.2** |
| | comp=Z,17nm,1.2s | | | | | | |
| **WVOR** | **Wild Horse Val** | **80.56** | **38** | *e*P | **P** | **14 48 05.8** | **-0.8** |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **80.56** | **38** | *e*P | **P** | **14 48 05.8** | **-0.8** |
| | comp=Z,11nm,1.0s | | | | | | |
| **G05D** | **Wamic, OR** | **80.88** | **35** | P | **P** | **14 48 07.9** | **-0.2** |
| | baz=81 | | | | | | |
| **CCUT** | **Cedar City** | **80.91** | **44** | *e*P | **P** | **14 48 07.6** | **-1.1** |
| | comp=Z,14nm,1.2s | | | | | | |
| **I07A** | **Izee** | **81.11** | **36** | *e*P | **P** | **14 48 09.4** | **-0.1** |
| | comp=Z,11nm,1.3s | | | | | | |
| **WUAZ** | **Wupatki** | **81.12** | **47** | *e*P | **P** | **14 48 09.5** | **-0.3** |
| | comp=Z,18nm,1.3s | | | | | | |
| **J08A** | **Circle Bar Ran** | **81.23** | **37** | *e*P | **P** | **14 48 09.3** | **-0.9** |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **81.24** | **324** | P | **P** | **14 48 11.3** | **+1.3** |
| | comp=Z,4.0nm,0.9s,baz=106,slow=2.8,SNR=6.6 | | | | | | |
| USRK | | | | LR | LR | 15 20 51.6 | |
| | comp=Z,446nm,19.3s,baz=134,slow=33 | | | | | | |
| **ELK** | **Elko** | **81.56** | **41** | *e*P | **P** | **14 48 12.0** | **-0.1** |
| ELK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | |
| **ELK** | **Elko** | **81.56** | **41** | *e*P | **P** | **14 48 12.0** | **-0.1** |
| | comp=Z,8

TXAR LR LR 15 18 51.5
comp=Z,243nm,19.8s,baz=0.0,slow=31
**P17A Butcher Ranch, 83.69 44** *e*P **P 14 48 24.2 +1.1**
comp=Z,344nm,1.2s
**HLID Hailey 83.71 39** P **P 14 48 23.2 +0.1**
baz=84
**HLID Hailey 83.71 39** *e*P **P 14 48 23.6 +0.5**
comp=Z,23nm,1.3s
HLID *e* 14 48 33.6
**BNM Barren Site 83.75 50** *e*P **P 14 48 24.8 +1.1**
**LPM Los Pinos Moun 83.83 50** *e*P **P 14 48 24.2 +0.3**
**P18A Preston Nutter 84.09 44** *e*P **P 14 48 26.0 +0.7**
comp=Z,28nm,1.1s
**PMR Palmer 84.10 12** *e*P **P 14 48 22.5 -1.9**
PMR pmax pmax
comp=Z,8.0nm,1.0s
**PMR Palmer 84.10 12** *e*P **P 14 48 22.5 -1.9**
comp=Z,7.9nm,1.0s
**TCUT Toone Canyon 84.15 42** P **P 14 48 23.3 -2.3**
comp=Z,50nm,1.1s
**ANMO Albuquerque 84.27 50**⇑ *e*P **P 14 48 26.2 0.0**
ANMO pmax pmax
comp=Z,9.0nm,1.3s
**ANMO Albuquerque 84.27 50** *e*P **P 14 48 24.7 -1.6**
comp=Z,22nm,1.3s
**QIZ Qiongzhong 84.53 292** P **P 14 48 29.3 +1.7**
QIZ S **S 14 58 59.1 +5.5**
QIZ PMZ
comp=Z,22nm,2.0s
**KLR Kul'dur 84.58 328** *e*P **P 14 48 24.2 -3.0**
**CN2 Changchun 84.76 321** *e*P **P 14 48 29.3 +1.1**
CN2 PMZ
comp=Z,10.0nm,1.0s
**AHID Auburn Hatcher 85.25 41** P **P 14 48 30.3 -0.7**
comp=Z,16nm,1.0s
**CAST Castle Rocks 85.29 10** *e*P **P 14 48 29.3 -1.2**
comp=Z,65nm,2.4s
**MCMT McKenzie Canyo 85.36 39** *e*P **P 14 48 31.6 +0.1**
**S22A 4UR Ranch, Cre 85.40 47** P **P 14 48 32.4 +0.4**
baz=86
**S22A 4UR Ranch, Cre 85.40 47** *e*P **P 14 48 32.7 +0.7**
comp=Z,24nm,1.2s
**SKAG Skagway 85.59 19** *e*P **P 14 48 33.8 +1.8**
comp=Z,78nm,2.0s
**TRF Thorofare Moun 85.61 10** *e*P **P 14 48 31.6 -0.6**
comp=Z,20nm,0.8s
**429A Davenport Ranc 85.63 55** P **P 14 48 32.2 -0.8**
baz=86
**O20A White River Ci 85.67 44** P **P 14 48 32.8 -0.4**
baz=86
**REDW Red Top Meadow 85.73 41** P **P 14 48 32.9 -0.6**
comp=Z,15nm,1.4s
**TPAW Teton Pass 85.74 40** *e*P **P 14 48 33.2 -0.3**
comp=Z,11nm,1.2s
**FXWY Fox Creek 85.78 40** *e*P **P 14 48 36.2 +2.5**
comp=Z,15nm,1.5s
**RND Reindeer 85.82 11** *e*P **P 14 48 32.9 -0.3**
RND pmax pmax
comp=Z,19nm,0.8s
**RND Reindeer 85.82 11** *e*P **P 14 48 32.9 -0.3**
comp=Z,19nm,0.8s
**530A J-C Ranch, Com 85.84 56** P **P 14 48 34.3 +0.2**
baz=86
**CMIG Matias Romero 85.85 70** P **P 14 48 34.9 +0.6**
comp=Z,2.0nm,0.8s,baz=225,slow=5.7,SNR=3.3
**IMW Indian Meadow 85.97 40** *e*P **P 14 48 34.7 0.0**
comp=Z,11nm,1.2s
IMW *e* 14 48 45.3
**MOOW Moose Ponds 86.01 40** P P 14 48 31.1 -3.7
comp=Z,12nm,1.4s
**LOHW Long Hollow 86.02 40** P **P 14 48 34.7 -0.1**
comp=Z,13nm,1.6s
LOHW *e* 14 48 44.6
**832A Faith Ranch, C 86.10 58** P **P 14 48 35.0 -0.3**
baz=86
**MCK McKinley 86.11 11** *e*P **P 14 48 33.4 -1.1**
MCK pmax pmax
comp=Z,28nm,0.8s
**MCK McKinley 86.11 11** *e*P **P 14 48 33.4 -1.1**
comp=Z,28nm,0.8s
**631A Perdido Creek 86.12 57** P **P 14 48 34.7 -0.6**
baz=86
**QLMT Earthquake Lak 86.19 39** *e*P **P 14 48 36.1 +0.5**
**430A Baggett Ranch, 86.21 55** P **P 14 48 35.3 -0.5**
baz=86
**TIA Tai'an 86.24 311** ⇓P **P 14 48 37.3 +1.5**
TIA PMZ
comp=Z,40nm,0.9s
**SDCO Great Sand Dun 86.31 48** P **P 14 48 36.0 -0.5**
baz=86
**SDCO Great Sand Dun 86.31 48** *e*P **P 14 48 36.5 0.0**
comp=Z,39nm,2.4s
**MENT Mentasta 86.41 13** *e*P **P 14 48 36.1 +0.1**
**Z28A Tucker Farm, M 86.45 53** P **P 14 48 36.5 -0.5**
baz=87
**531A Rocksprings 86.47 56** P **P 14 48 36.5 -0.7**
baz=87
**MSTX Muleshoe 86.48 52** P **P 14 48 36.7 -0.5**
baz=87
**MSTX Muleshoe 86.48 52** *e*P **P 14 48 36.4 -0.8**
comp=Z,27nm,1.0s
**BOZ Bozeman (W) 86.53 38** *e*P **P 14 48 35.6 -1.6**
BOZ *e* 14 48 47.9
BOZ pmax pmax
comp=Z,14nm,1.2s
**BOZ Bozeman (W) 86.53 38** P **P 14 48 36.9 -0.3**
baz=87
**BOZ Bozeman (W) 86.53 38** *e*P **P 14 48 35.6 -1.6**
comp=Z,14nm,1.2s
BOZ *e* 14 48 47.9
**632A Uvalde 86.78 57** P **P 14 48 38.1 -0.5**
baz=87
**WRH Wood River Hil 86.94 11** *e*P **P 14 48 37.5 -1.1**
comp=Z,20nm,0.8s
**532A Rocksprings 86.95 56** P **P 14 48 38.8 -0.7**
baz=87
**DOT Dot Lake 86.96 13** *e*P **P 14 48 38.5 -0.3**
comp=Z,21nm,0.8s
**MLY Manley 87.02 10** *e*P **P 14 48 39.0 0.0**
comp=Z,32nm,1.8s
**IPM Ipoh 87.12 276** *e*P **P 14 48 41.1 +0.4**
comp=Z,19nm,1.0s
**CCB Clear Creek Bu 87.15 11** *e*P **P 14 48 38.6 -0.9**
comp=Z,13nm,0.8s
**633A Saathoff Ranch 87.24 57** P **P 14 48 41.3 +0.4**
baz=87
**Y29A Porterfield Fa 87.25 52** P **P 14 48 41.4 +0.5**
baz=87
**SEY Seymchan 87.29 345**⇓ *e*P **P 14 48 40.8 +0.5**
**COLA College 87.35 11** *d i*P **P 14 48 40.0 -0.5**
COLA pmax pmax
comp=Z,20nm,0.8s
**COLA College 87.35 11** *e*P **P 14 48 39.9 -0.5**
comp=Z,21nm,0.8s
**432A Menard 87.36 56** P **P 14 48 41.2 -0.3**
baz=88
**Z30A Sanderson Ranc 87.39 53** P **P 14 48 40.3 -1.3**
baz=88
**IL1 Eielson Array 87.42 11** *e*P **P 14 48 39.6 -1.3**
**ILAR Eielson Array 87.42 11** P **P 14 48 40.3 -0.6**
comp=Z,3.2nm,0.8s,baz=212,slow=6.0,SNR=33
**332A Millersview 87.62 55** P **P 14 48 42.0 -0.7**
baz=88
**SYO Syowa Base 87.62 191**⇑ *e*P **P 14 48 41.0 -1.0**
**131A Roby 87.68 54** P **P 14 48 42.8 -0.2**
baz=88
**AMTX Amarillo 87.70 52** P **P 14 48 43.6 +0.5**
baz=88
**433A Art 87.86 56** P **P 14 48 43.4 -0.5**
baz=88
**VNA3 Neumayer Olymp 87.89 175** P **P 14 48 43.9 +0.6**
**232A Coleman 87.91 55** P **P 14 48 43.9 -0.2**
baz=88
**SNAA Sanae 87.91 177** P **P 14 48 44.3 +0.9**
**SNAA Sanae 87.91 177**⇑ *e*P **P 14 48 44.4 +0.9**
SNAA pmax pmax
comp=Z,2.0nm,1.1s
**SNAA Sanae 87.91 177** *e*P **P 14 48 42.6 -0.9**
comp=Z,7.3nm,1.7s
**534A Blanco 88.03 57** P **P 14 48 44.4 -0.3**
baz=88
**Z31A Sharp Cattle R 88.15 53** P **P 14 48 44.8 -0.4**
baz=88
**333A Richland Sprin 88.18 56** P **P 14 48 44.3 -1.0**
baz=88
**ABTX Abilene, Hawle 88.23 54** P **P 14 48 45.7 +0.2**
baz=88
**ABTX Abilene, Hawle 88.23 54** *e*P **P 14 48 45.3 -0.2**
comp=Z,22nm,1.2s
ABTX *e* 14 48 56.4
**DAWY Dawson 88.36 14** *e*P **P 14 48 45.0 -0.5**
comp=Z,121nm,2.9s
**VNA2 Neumayer--Watz 88.37 176** P **P 14 48 47.7 +2.1**
baz=177,slow=3.4
**PSI Prapat 88.50 274** P **P 14 48 48.0 +0.6**
baz=89,SNR=3.6
**434A Burnet 88.52 56** P **P 14 48 46.2 -0.8**
baz=89
**EGAK Eagle 88.57 13** *e*P **P 14 48 46.4 +0.1**
comp=Z,93nm,2.4s
**VNA1 Neumayer--Stat 88.58 175** P **P 14 48 46.3 -0.2**
**Z32A Haskell 88.65 54** P **P 14 48 47.0 -0.5**
baz=89
**BJI Beijing 88.72 314** P **P 14 48 49.3 +1.7**
BJI PMZ
comp=Z,18nm,2.2s
BJI PMZ
comp=Z,490nm,5.3s
**334A Lometa 88.76 56** P **P 14 48 47.4 -0.7**
baz=89
**Y32A R-V Farms, Ver 88.97 53** P **P 14 48 49.4 +0.4**
baz=89
**BILL Bilibino 89.44 353** *e*P **P 14 48 51.3 +0.9**
BILL MLR MLR
comp=Z,199nm,19.0s
**WMOK Wichita Mounta 89.78 53** *e*P **P 14 48 52.5 -0.3**
WMOK pmax pmax
comp=Z,78nm,3.0s
**WMOK Wichita Mounta 89.78 53** *e*P **P 14 48 52.5 -0.3**
comp=Z,78nm,3.0s
**GYA Guiyang 90.14 298** *e*P **P 14 48 56.0 +1.2**
GYA PP **PP 14 52 32.4 +3.7**
GYA SKS **SKSac 14 59 26.8 +1.8**
GYA S **S 14 59 48.3 +0.7**
GYA SS **SS 15 05 51.0 +3.7**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.8s
GYA LN
comp=Z,520nm,21.0s
GYA LE
comp=Z,500nm,20.4s
GYA LZ
comp=Z,540nm,22.2s
**PATY Pattaya 90.24 284** P P 14 49 03.7 +8.4
comp=Z,5.7nm,0.8s,comp=Z,2um
**PBKT Sadao Pong 91.43 287** P P 14 49 04.6 +3.8
comp=Z,11nm,1.5s
**LOEI Loei 91.50 288** P **P 14 49 02.9 +1.7**
comp=Z,63nm,1.7s
**UTTA Uttaradit 92.22 288** P P 14 49 08.8 +4.4
comp=Z,2.5nm,1.0s
**HHC Hu-ho-hao-te 92.22 313** *e*P **P 14 49 06.5 +2.4**
HHC pP **pP 14 49 11.3 -0.1**
HHC sP **sP 14 49 13.6 -0.3**
HHC PP **PP 14 52 49.6 +4.7**
HHC SKS **SKSac 14 59 38.8 +2.5**
HHC S **ScS 15 00 07.8 -0.4**
HHC sS **sS 15 00 14.6 -3.4**
HHC PMZ
comp=Z,21nm,0.7s
HHC PMZ
comp=Z,170nm,7.1s
HHC LN
comp=Z,440nm,18.1s
HHC LE
comp=Z,340nm,18.0s
HHC LZ
comp=Z,200nm,18.0s
**DGMT Dagmar 92.34 39** *e*P **P 14 49 04.7 +0.3**
comp=Z,31nm,1.0s
**JTS JuntasAbangare 92.39 80** P **P 14 49 05.3 0.0**
comp=Z,11nm,1.1s,baz=321,slow=1.7,SNR=6.7
**JTS JuntasAbangare 92.39 80** *d i*P **P 14 49 04.9 -0.4**
**JTS JuntasAbangare 92.39 80** *e*P **P 14 49 04.9 -0.4**
comp=Z,28nm,0.9s
JTS *e* 14 49 16.7
**NANT Nan 92.46 289** P P 14 49 09.0 +3.4
comp=Z,2.9nm,1.1s
**X38A Whitesboro 92.73 54** P **P 14 49 06.0 -0.5**
baz=93
**KMI Kunming 92.93 296** P **P 14 49 09.6 +1.7**
KMI pP **pP 14 49 15.1 0.0**
KMI sP **sP 14 49 17.3 -0.4**
KMI PP **PP 14 52 52.0 +1.1**
KMI S **S 15 00 14.0 +0.9**
KMI SS **SS 15 06 30.4 +2.7**
KMI PMZ
comp=Z,8.0nm,0.7s
KMI PMZ
comp=Z,720nm,6.3s
KMI LZ
comp=Z,210nm,20.7s
**YAK Yakutsk 93.61 337** *e*P **P 14 49 08.2 -1.6**
YAK pmax pmax
comp=Z,8.0nm,1.0s
YAK pmax pmax
comp=E,3.0nm,1.2s
YAK pmax pmax
comp=N,1.0nm,1.0s
**T37A Cheneyville 18 93.61 52** P **P 14 49 11.1 +0.7**
baz=94
**CM01 Chiang Mai Arr 93.88 288** *e*P **P 14 49 13.5 +1.4**
**CMAR Chiang Mai Arr 93.90 288** P **P 14 49 14.2 +1.9**
comp=N,4.3nm,1.0s,baz=113,slow=2.4,SNR=16
CMAR LR LR 15 29 18.0
comp=N,56nm,19.5s,baz=138,slow=34
**CHTO Chiang Mai 94.02 288** P P 14 49 19.4 +6.6
**CHTO Chiang Mai 94.02 288** *e*P **P 14 49 14.1 +1.3**
CHTO pmax pmax
comp=Z,120nm,3.0s
**CHTO Chiang Mai 94.02 288** *e*P **P 14 49 14.1 +1.3**
comp=Z,120nm,3.0s
**CD2 Chengdu 94.17 301** *e*P **P 14 49 12.8 -0.5**
CD2 pP **pP 14 49 23.8 +3.3**
CD2 PP **PP 14 52 59.5 -0.8**
CD2 SKS **SKSac 14 59 44.5 -2.8**
CD2 S **S 15 00 21.3 -2.1**
CD2 sS sS 15 00 40.3 +4.8
CD2 SS **SS 15 06 44.0 -0.9**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**YKA Yellowknife Ar 94.82 24** P **P 14 49 14.1 -1.3**
comp=Z,1.6nm,0.8s,baz=234,slow=4.5,SNR=6.0
**ECSD EROS Data Cent 95.02 45** P **P 14 49 17.5 +0.7**
baz=95
**ECSD EROS Data Cent 95.02 45** *e*P **P 14 49 17.9 +1.1**
comp=Z,26nm,1.4s
**LZH Lanzhou 95.96 306** *e*P P 14 49 17.8 -3.7
LZH PMZ
comp=Z,22nm,1.5s
LZH PMZ
comp=Z,160nm,9.2s
LZH LN
comp=Z,380nm,16.8s
LZH LE
comp=Z,400nm,17.2s
LZH LZ
comp=Z,520nm,19.6s
**ULN Ulaanbaatar 97.98 318** *i*P Pdif 14 49 30.9 +0.5
**ULM Lac du Bonnet 98.01 39** LR LR 15 28 39.6
comp=Z,292nm,19.2s,baz=283,slow=32
**LPAZ La Paz 98.34 111** P **P 14 49 33.2 -0.1**
comp=Z,0.5nm,0.6s,baz=217,slow=5.1,SNR=3.1
**SONM Songino Array 98.38 318** P **P 14 49 32.1 0.0**
comp=Z,0.9nm,0.7s,baz=106,slow=4.8,SNR=4.0
SONM PP **PP 14 53 29.8 -2.8**
comp=Z,0.8nm,0.8s,baz=111,slow=8.1,SNR=5.4
SONM LR LR 15 32 20.7
comp=Z,88nm,18.1s,baz=92,slow=34
**WMQ Urumqi 109.94 310** *e*Pdif **Pdif 14 50 23.0 -0.5**
WMQ PP **PP 14 55 00.0 +1.3**
WMQ SKS **SKSdf 15 01 30.0 -6.4**
WMQ S **Sdif 15 02 30.0 -5.8**
WMQ SS **SS 15 10 20.0 -2.8**
WMQ PPMZ
comp=Z,24nm,10.0s
WMQ LN
comp=Z,78nm,22.0s
WMQ LE
comp=Z,95nm,20.0s
WMQ LZ
comp=Z,110nm,20.0s
**ZALV Zalesovo Beam 112.97 321** PKiKP **PKiKP 14 54 30.1 -0.8**
comp=Z,0.9nm,0.5s,baz=171,slow=1.1,SNR=4.6
ZALV PP PP 14 55 14.6 -5.4
comp=Z,0.6nm,0.4s,baz=103,slow=6.5,SNR=4.1
**MKAR Makanchi Array 114.09 313** PKiKP PKPdf 14 54 32.0 -1.3
comp=Z,1.1nm,0.7s,baz=74,slow=1.7,SNR=11
MKAR PP **PP 14 55 23.7 -4.5**
comp=Z,1.4nm,0.9s,baz=98,slow=8.9,SNR=5.8
**KSH Kashi 118.16 305** *e*PKP **PKPdf 14 54 43.1 +1.6**
KSH *e*PP PP 14 56 03.4 +6.3
KSH PKS **PKSdf 14 58 13.6 -4.7**
KSH SS SS 15 12 16.5 +4.9
KSH PPMZ
comp=Z,110nm,4.1s
KSH LN
comp=Z,160nm,6.0s
KSH LE
comp=Z,130nm,5.1s
KSH LZ
comp=Z,150nm,6.0s
**AAK Ala-Archa 119.42 308**⇑ *i*PKIKP **PKPdf 14 54 44.4 +0.5**
**AAK Ala-Archa 119.42 308** *e*PKPdf **PKPdf 14 54 43.6 -0.2**
**BRVK Borovoye 121.67 320**⇑ *i*PKIKP **PKPdf 14 54 46.0 -1.6**
**ARU Arti 127.41 326** *i* PKIKP **PKPdf 14 54 58.5 0.0**
**ARU Arti 127.41 326** *e*PKPdf **PKPdf 14 54 58.1 -0.4**
**ARCES ARCESS Array B 129.53 351** PKP **PKPdf 14 55 02.3 +0.1**
comp=Z,2.8nm,0.8s,baz=33,slow=1.3,SNR=13
**GEYT Aliibeck 132.13 303** PKP **PKPdf 14 55 09.1 +0.9**
comp=Z,2.2nm,0.8s,baz=58,slow=3.7,SNR=5.1
**FINES FINESS Array B 136.76 346** PKP **PKPdf 14 55 17.0 +1.0**
comp=Z,4.8nm,1.0s,baz=153,slow=1.3,SNR=7.9
**OBN Obninsk 138.55 334** *e*PKIKP **PKPdf 14 55 19.2 -0.2**
OBN pmax pmax
comp=Z,4.0nm,0.9s
**KIV Kislovodsk 141.75 316** *i* PKIKP **PKPdf 14 55 26.5 +0.7**
KIV pmax pmax
comp=Z,12nm,1.0s
**KMBO Kilima Mbogo 142.86 238** PKP **PKPdf 14 55 26.4 -2.5**
comp=Z,3.4nm,0.9s,baz=99,slow=1.9,SNR=8.6
**KMBO Kilima Mbogo 142.86 238** *e*PKHKP PKPpre 14 55 25.6
**KMBO Kilima Mbogo 142.86 238** *e*PKPpre PKPpre 14 55 25.6
**ANN Anapa 144.61 321** *i* PKIKP **PKPdf 14 55 32.2 +1.5**
ANN *e* 14 58 46.9
ANN *e*SSS SSS 15 22 55.5
ANN pmax pmax
comp=Z,51nm,1.4s
**AKASG Malin Array Be 144.80 335** PKP **PKPab 14 55 29.1 -0.6**
comp=Z,10nm,0.8s,baz=40,slow=4.3,SNR=73
**KIEV Kiev 144.82 335**⇑ *i*PKIKP **PKPab 14 55 29.5 -0.3**
**KIEV Kiev 144.82 335** *e*PKPdf **PKPab 14 55 29.2 -0.5**
**SIM Simferopol' 146.45 323** *e*PKP2 **PKPab 14 55 36.4 +0.3**
SIM pmax pmax
comp=Z,25nm,0.8s
**MBAR Mbarara 148.21 232** *e*PKIKP **PKPbc 14 55 41.9 +0.6**
**MBAR Mbarara 148.21 232** *e*PKPbc **PKPbc 14 55 41.9 +0.6**
**KSP Ksiaz 148.65 348** *e*PKP **PKPbc 14 55 42.2 +1.2**
**KSP Ksiaz 148.65 348** *e*PKP2 **PKPbc 14 55 42.3 +1.2**
**STHS Stebnicka Huta 148.72 341** *e*PKP2 **PKPbc 14 55 42.6 +1.3**
**STHS Stebnicka Huta 148.72 341** *e*PKP **PKPbc 14 55 42.6 +1.3**
**CLL Collm 148.75 352** *i* PKP2 **PKPbc 14 55 41.3 +0.1**
CLL pmax pmax
comp=Z,20nm,1.1s
**CLL Collm 148.75 352** *i* PKPbc **PKPbc 14 55 41.3 +0.1**
comp=Z,20nm,1.1s
CLL *i* pPKiKP **PKPab 14 55 46.1 +1.1**
comp=Z,12nm,0.8s
CLL *i* 14 55 52.1
CLL *i* 14 55 56.0
comp=Z,38nm,1.2s
**CLL Collm 148.75 352** *e*PKPbc **PKPbc 14 55 41.4 +0.1**
**KOLS Kolonicke sedl 148.82 339** *e*PKP2 **PKPbc 14 55 42.6 +1.1**
**KOLS Kolonicke sedl 148.82 339** *e*PKP **PKPbc 14 55 42.6 +1.1**
**BUR04 Bucovina Ar. S 148.85 335** *e*PKPbc **PKPbc 14 55 42.4 +0.6**
**BURAR Bucovina Array 148.86 335** ⇓PKP2 **PKPbc 14 55 43.0 +1.2**
**BURAR Bucovina Array 148.86 335** ⇓*i*P **PKPbc 14 55 43.0 +1.2**
**NIE Niedzica 149.00 342** *e*PKP **PKPbc 14 55 43.2 +1.2**
**NIE Niedzica 149.00 342** *e*PKP2 **PKPbc 14 55 43.3 +1.2**
**UPC Upice 149.03 348** *e*PKP2 **PKPbc 14 55 42.6 +0.6**
**UPC Upice 149.03 348** *e*PKP **PKPbc 14 55 42.6 +0.6**
UPC *e*pPKP **PKPab 14 55 48.8 +2.7**
**UZH Uzhgorod 149.07 339**⇑ *i*PKP2 **PKPbc 14 55 42.7 +0.5**
**DPC Dobruska-Polom 149.12 347** *e*PKP2 **PKPbc 14 55 42.3 0.0**
**DPC Dobruska-Polom 149.12 347**⇑ *e*PKP **PKPbc 14 55 42.3 0.0**
DPC *e*pPKP PKPab 14 55 52.6 +6.0
**OKC Ostrava-Krasne 149.19 345** *e*PKP2 **PKPbc 14 55 43.0 +0.6**
**OKC Ostrava-Krasne 149.19 345**⇑ *e*PKP **PKPbc 14 55 43.0 +0.6**
OKC *ex* x 14 55 58.1
**PVCC Panska Ves 149.27 350** *e*PKP2 **PKPbc 14 55 43.5 +0.9**
**PVCC Panska Ves 149.27 350**⇑ *e*PKP **PKPbc 14 55 43.5 +0.9**
PVCC *ex* x 14 55 54.3
**KRLC Kraliky 149.28 347** *e*PKP2 **PKPbc 14 55 43.3 +0.6**
**KRLC Kraliky 149.28 347**⇑ *e*PKP **PKPbc 14 55 43.3 +0.6**
**MORC Moravsky Berou 149.39 346** *e*PKIKP **PKPbc 14 55 42.3 -0.7**
**MORC Moravsky Berou 149.39 346** *e*PKPbc **PKPbc 14 55 42.3 -0.7**
**TRPA Tarpa 149.42 338** ⇓*i*P **PKPbc 14 55 43.9 +0.9**
**CFR Carcaliu 149.44 329**⇑ ⇓PKP2 **PKPbc 14 55 44.1 +0.9**
**CFR Carcaliu 149.44 329**⇑ *i*P **PKPbc 14 55 44.1 +0.9**
**LANS Liptovska Anna 149.48 343** *e*PKP2 **PKPbc 14 55 45.2 +2.0**
**LANS Liptovska Anna 149.48 343** *e*PKP **PKPbc 14 55 45.2 +2.0**
**VRI Vrincioaia 149.59 331** ⇓PKP2 **PKPbc 14 55 43.9 +0.3**
**VRI Vrincioaia 149.59 331** ⇓*i*P **PKPbc 14 55 43.9 +0.3**
**BRTR Keskin Array B 149.70 315** PKP **PKPdf 14 55 39.2 -0.4**
comp=Z,2.7nm,1.1s,baz=48,slow=2.1,SNR=4.3
BRTR PKPbc **PKPbc 14 55 43.9 -0.3**
comp=Z,3.5nm,0.8s,baz=117,slow=3.4,SNR=16
BRTR PKPab **PKPab 14 55 49.0 -0.5**
comp=Z,5.9nm,0.9s,baz=73,slow=4.3,SNR=15
**PRA Prague 149.74 350** *e*PKP2 **PKPbc 14 55 44.7 +0.9**
**PRA Prague 149.74 350**⇑ *e*PKP **PKPbc 14 55 44.7 +0.9**
**PRU Pruhonice 149.80 349**⇑ *e*PKP **PKPbc 14 55 44.3 +0.4**
PRU *e*pPKP **PKPab 14 55 54.3 +5.0**
**TIRR Tirgusor 149.82 328**⇑ *i*P **PKPbc 14 55 43.3 -0.8**
**GOPC GO Pecny, Ondr 149.83 349**⇑ *e*PKP **PKPbc 14 55 44.4 +0.4**
GOPC *e*pPKP PKPab 14 55 54.7 +5.3
**NKC Novy Kostel 149.88 352** *e*PKP2 **PKPbc 14 55 45.4 +1.3**
**NKC Novy Kostel 149.88 352**⇑ *e*PKP **PKPbc 14 55 45.4 +1.3**
**DOPR Dopca 150.10 333** ⇓*i*P **PKPbc 14 55 46.2 +1.4**
**ANTO Ankara 150.18 316** *e*PKPbc **PKPbc 14 55 45.4 +0.1**
**BR231 Keskin MP Arra 150.21 316** *e*PKPdf **PKPdf 14 55 39.7 -0.6**
**MLR Muntele Rosu 150.23 332** ⇓*i*P **PKPbc 14 55 45.6 +0.3**
**ISR Istrita 150.24 330** ⇓*i*P **PKPbc 14 55 45.9 +0.7**
**VYHS Vyhne 150.25 340** *e*PKP **PKPbc 14 55 45.4 +0.3**
**DOU Doubes 150.38 2** PKPbc **PKPbc 14 55 45.2 -0.1**
**PSZ Piszkesteto 150.46 341** *e*PKIKP **PKPbc 14 55 45.9 +0.2**
**PSZ Piszkesteto 150.46 341** ⇓*i*P **PKPbc 14 55 46.3 +0.6**
**PSZ Piszkesteto 150.46 341** *e*PKPbc **PKPbc 14 55 45.9 +0.2**
**DRGR 150.50 337** ⇓PKIKP **PKPbc 14 55 46.3 +0.5**
**DRGR 150.50 337** ⇓*i*P **PKPbc 14 55 46.3 +0.5**
**VOIR 150.66 332**⇑ PKIKP **PKPbc 14 55 47.8 +1.5**
**VOIR 150.66 332**⇑ *i*P **PKPbc 14 55 47.8 +1.5**
**KHC Kasperske Hory 150.79 350** *e*PKIKP **PKPbc 14 55 46.8 +0.5**
**KHC Kasperske Hory 150.79 350**⇑ *e*PKP **PKPbc 14 55 46.9 +0.5**
KHC *e*pPKP **PKPab 14 55 57.8 +4.4**
**KHC Kasperske Hory 150.79 350** *e*PKPbc **PKPbc 14 55 46.8 +0.5**
**WLF Walferdange 150.84 0** PKPbc **PKPbc 14 55 47.6 +1.2**
**ARR Arges 150.90 333**⇑ *i*P **PKPbc 14 55 48.6 +1.8**
**GERES GERESS Array B 151.05 350** PKP **PKPdf 14 55 41.5 +0.2**
comp=Z,0.3nm,0.4s,baz=48,slow=2.9,SNR=3.2
GERES PKPbc **PKPbc 14 55 46.6 -0.5**
comp=Z,3.2nm,0.9s,baz=90,slow=2.0,SNR=13
GERES PKPab **PKPab 14 55 54.0 -0.6**
comp=Z,1.6nm,0.8s,baz=69,slow=5.4,SNR=5.8
**SIRR Siria 151.33 337** ⇑*i*P **PKPbc 14 55 48.7 +1.0**
**GZR Gura Zlata 151.64 335** ⇓PKIKP **PKPbc 14 55 47.9 -0.6**
**GZR Gura Zlata 151.64 335** ⇓*i*P **PKPbc 14 55 47.9 -0.6**
**BZS Buzias 151.90 337** ⇓PKIKP **PKPbc 14 55 49.4 +0.4**
**BZS Buzias 151.90 337** ⇓*i*P **PKPbc 14 55 49.4 +0.4**
**BFO Black Forest 152.13 357** *i* PKIKP **PKPbc 14 55 51.2 +1.7**
**PERS Pernice 152.90 347** *e*PKPdf **PKPbc 14 55 51.6 +0.3**
**GORS Gorjuse 153.43 348** *e*PKPdf **PKPbc 14 55 51.0 -1.5**
**FUORN Ofenpass-Fuorn 153.69 354** *e*PKPbc **PKPbc 14 55 53.1 -0.1**
**VISS Visnje 153.75 346** *i* PKPbc **PKPbc 14 55 53.4 +0.3**
**BOJS Bojanci 153.94 346** *e*PKPdf **PKPbc 14 55 54.2 +0.7**
**LAST Lasithi 157.63 315** *e*PKPab **PKPab 14 56 24.1 +1.1**
**TORD Torodi Ar. Bea 171.52 148** PKP **PKPdf 14 56 01.8 -1.7**
comp=Z,1.3nm,0.9s,baz=255,slow=1.8,SNR=6.6
TORD PKPab **PKPab 14 57 24.0 -0.2**
comp=Z,0.8nm,0.9s,baz=132,slow=2.1,SNR=2.4

*MOS **20** 14:37:09.9±2.6,49˚.61N×156˚.97E, h15km, mb4.3/1, Error ellipse: s-maj=44.0km s-min=8.3km az=81.7*

**KRSC 20 14:37:10.0**±1.6,**49˚.61N×156˚.97E, h15**km±14km,**ML4.1, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.21** | **333** | *i* | P | Pn | 14 37 29.8 | -2.5 |
| SKR | | | | | eS | Sb | 14 37 46.3 | -1.6 |
| **SKR** | **Severo-Kuril's** | **1.21** | **333** | *e* | PN | Pn | 14 37 22.6 | -10 |
| SKR | | | | | pmax | pmax | | |
| | comp=Z,80nm,0.5s | | | | | | | |
| **PAU** | **Pauzhetka** | **1.87** | **357** | *i* | P | Pn | 14 37 42.2 | +0.9 |
| PAU | | | | | eS | Sb | 14 38 06.8 | -0.1 |
| **PAU** | **Pauzhetka** | **1.87** | **357** | | PN | Pn | 14 37 42.2 | +0.9 |
| PAU | | | | | S | Sb | 14 38 06.8 | -0.1 |
| **MTVR** | **Mutnovka** | **2.98** | **14** | *e* | P | Pb | 14 38 00.0 | -3.0 |
| MTVR | | | | | eS | Sb | 14 38 36.2 | -3.1 |
| **RUS** | **Russkaya** | **3.00** | **18** | *e* | P | Pn | 14 37 59.4 | +2.6 |
| RUS | | | | | eS | Sb | 14 38 36.6 | -2.7 |
| **RUS** | **Russkaya** | **3.00** | **18** | | PN | Pn | 14 37 59.4 | +2.6 |
| RUS | | | | | S | Sb | 14 38 36.6 | -2.7 |
| **PET** | **Petropavlovsk** | **3.58** | **17** | *e* | P | Pb | 14 38 09.2 | -3.8 |
| PET | | | | | eS | Sn | 14 38 50.9 | +4.0 |
| **PET** | **Petropavlovsk** | **3.58** | **17** | *e* | PN | Pb | 14 38 12.0 | -1.0 |
| PET | | | | | eS | Sb | 14 38 54.1 | -2.1 |
| PET | | | | | smax | smax | | |
| | comp=E,49nm,0.6s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=N,46nm,0.5s | | | | | | | |
| **AVH** | **Avacha** | **3.83** | **16** | *e* | P | Pn | 14 38 12.5 | +4.1 |
| **AVH** | **Avacha** | **3.83** | **16** | | PN | Pn | 14 38 12.5 | +4.1 |
| **SMAR** | **Somma** | **3.84** | **17** | *e* | P | Pn | 14 38 13.0 | +4.3 |
| **SMAR** | **Somma** | **3.84** | **17** | | PN | Pn | 14 38 13.0 | +4.3 |
| **NLC** | **Nalytchevo** | **3.87** | **22** | *e* | S | Sn | 14 38 58.0 | +4.0 |
| **SDLR** | **Sedlovina** | **3.87** | **17** | *e* | P | Pn | 14 38 12.3 | +3.3 |
| **SDLR** | **Sedlovina** | **3.87** | **17** | | PN | Pn | 14 38 12.3 | +3.3 |
| **KRX** | **Arik** | **3.90** | **15** | *e* | P | Pn | 14 38 13.8 | +4.3 |
| **SPN** | **Mys Shipunski** | **3.99** | **28** | *e* | P | Pn | 14 38 14.6 | +4.1 |
| SPN | | | | | eS | Sn | 14 39 01.5 | +4.6 |
| **SPN** | **Mys Shipunski** | **3.99** | **28** | | PN | Pn | 14 38 14.6 | +4.1 |
| SPN | | | | | S | Sn | 14 39 01.5 | +4.6 |
| **GNL** | **Ganaly** | **4.14** | **8** | *e* | P | Pn | 14 38 17.0 | +4.2 |
| **GNL** | **Ganaly** | **4.14** | **8** | | PN | Pn | 14 38 17.0 | +4.2 |
| **MKZ** | **Mys Kozlova** | **5.76** | **29** | *e* | P | Pn | 14 38 38.0 | +3.2 |
| **MKZ** | **Mys Kozlova** | **5.76** | **29** | | PN | Pn | 14 38 38.0 | +3.2 |
| **KBTR** | **Krutoberegovo** | **7.50** | **26** | | P | Pn | 14 39 03.8 | +5.1 |
| **KBTR** | **Krutoberegovo** | **7.50** | **26** | | PN | Pn | 14 39 03.8 | +5.1 |

*IDC **20** 14:52:26.4±0.7, 19˚.70S×168˚.07E, h0km, mb4.2/13, mb1 4.4/14, mb1mx4.3/21, mbtmp4.2/14, ML3.9/1, Error ellipse: s-maj=23.6km s-min=16.5km az=82.0*
*ISCJB **20** 14:52:29.0±0.4, 19˚.77S±0˚.06×168˚.05E±0˚.07, h27km, mb4.3/16, Error ellipse: s-maj=10.7km s-min=7.8km az=34.8*
*NEIC **20** 14:52:32.2±1.7, 19˚.75S×168˚.05E, h41km±16km, mb4.5/5, Error ellipse: s-maj=15.4km s-min=12.3km az=162.0*

**ISC 20 14:52:30.7**±0.5,**19˚.74S**±0˚.08×**168˚.01E**±0˚.10,**h27**km,**n44,** σ1**s22**/42,**mb4.4**/16,**5C-1D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **DZM** | **Mont Dzumac** | **2.74** | **212** | *e* | Pn | **Pn** | **14 53 12.6** | **-0.4** |
| DZM | 151nm,0.3s | | | | | | | |
| | | | | *e* | Sn | **Sn** | **14 53 43.1** | **-2.2** |
| | 408nm,0.3s | | | | | | | |
| **DZM** | **Mont Dzumac** | **2.74** | **212** | | Pn | **Pn** | **14 53 11.9** | **-1.1** |
| | 19nm,0.3s,baz=180,slow=6.5,SNR=90 | | | | | | | |
| DZM | | | | | Sn | **Sn** | **14 53 44.3** | **-1.0** |
| | 128nm,0.3s,baz=0.0,slow=22,SNR=14 | | | | | | | |
| **MSVF** | **Nonsavu** | **9.72** | **80** | | P | **Pn** | **14 54 50.5** | **+1.5** |
| | 61nm,1.3s | | | | | | | |
| **URZ** | **Urewera** | **20.07** | **159** | | P | **P** | **14 57 01.3** | **-0.7** |
| | 4.0nm,0.7s,baz=306,slow=8.7,SNR=2.4 | | | | | | | |
| **CTA** | **Charters Tower** | **20.46** | **265** | | P | Pn | 14 57 08.0 | -0.6 |
| | 8.5nm,1.0s,baz=72,slow=15,SNR=3.8 | | | | | | | |
| **CTAO** | **Charters Tower** | **20.46** | **265** | *e* | P | Pn | 14 57 09.4 | +0.8 |
| | 14nm,1.0s | | | | | | | |
| **CNB** | **Canberra Magne** | **22.61** | **223** | | P | **P** | **14 57 32.8** | **+3.4** |
| | baz=19,SNR=5.6 | | | | | | | |
| **QLP** | **Quilpie** | **22.87** | **248** | | P | **P** | **14 57 33.6** | **+1.4** |
| | baz=19,SNR=6.4 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **23.25** | **235** | | P | **P** | **14 57 37.5** | **+1.5** |
| | baz=19,SNR=11 | | | | | | | |
| **RPZ** | **Rata Peaks** | **24.04** | **175** | | P | **P** | **14 57 45.1** | **+1.6** |
| | 22nm,1.0s,baz=0.0,slow=3.0,SNR=4.8 | | | | | | | |
| **WRAB** | **Tennant Creek** | **31.63** | **264** | *e* | P | **P** | **14 58 51.1** | **-0.6** |
| | 5.1nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.64** | **264** | | P | **P** | **14 58 50.8** | **-1.1** |
| | 1.0nm,0.4s,baz=88,slow=8.3,SNR=45 | | | | | | | |
| WRA | | | | | PcP | **PcP** | **15 01 42.6** | **-1.1** |
| | 0.9nm,1.0s,baz=87,slow=2.7,SNR=3.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **31.88** | **257** | | P | **P** | **14 58 53.9** | **-0.1** |
| | 4.5nm,0.6s,baz=84,slow=8.8,SNR=71 | | | | | | | |
| **WRKA** | **Warakurna** | **37.00** | **254** | | P | **P** | **14 59 38.6** | **+0.3** |
| | baz=33,SNR=3.6 | | | | | | | |
| **PPT2** | **Papeete2** | **40.17** | **94** | *e* | LR | LR | 15 11 09.3 | |
| | 132nm,31.5s | | | | | | | |
| **MEEK** | **Meekatharra** | **45.70** | **252** | | P | **P** | **15 00 50.3** | **+0.6** |
| | baz=42,SNR=14 | | | | | | | |
| **VNDA** | **Vanda** | **57.90** | **182** | | P | **P** | **15 02 19.9** | **+0.1** |
| | 0.5nm,0.9s,baz=3.1,slow=10,SNR=3.0 | | | | | | | |
| **SBA** | **Scott Base** | **58.15** | **180** | *e* | P | **P** | **15 02 22.7** | **+1.1** |
| | 4.0nm,1.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **62.66** | **333** | | P | **P** | **15 02 52.4** | **-0.6** |
| | 0.6nm,0.4s,baz=174,slow=7.3,SNR=5.0 | | | | | | | |
| **KSRS** | **Korea Array** | **68.28** | **327** | | P | **P** | **15 03 30.9** | **+1.7** |
| | 1.0nm,0.8s,baz=144,slow=7.1,SNR=4.4 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **68.29** | **326** | | P | **P** | **15 03 30.9** | **+1.6** |
| **USRK** | **Ussuriysk Ar.** | **71.66** | **334** | | P | **P** | **15 03 50.4** | **+0.6** |
| | 5.1nm,1.0s,baz=154,slow=5.4,SNR=7.4 | | | | | | | |
| **MAW** | **Mawson** | **77.53** | **202** | | P | **P** | **15 04 24.5** | **+0.8** |
| | 4.1nm,0.8s,baz=120,slow=7.8,SNR=14 | | | | | | | |
| **MAW** | **Mawson** | **77.53** | **202** | | P | **P** | **15 04 24.8** | **+1.1** |
| | baz=74,SNR=8.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **77.66** | **295** | | P | **P** | **15 04 26.2** | **+1.0** |
| | 2.0nm,0.8s,baz=133,slow=4.4,SNR=12 | | | | | | | |
| **SYO** | **Syowa Base** | **84.13** | **196** | *e* | pP | pP | 15 05 13.0 | +5.4 |
| **ULN** | **Ulaanbaatar** | **86.58** | **324** | *e* | P | **P** | **15 05 12.1** | **+0.5** |
| | 1.7nm,0.3s | | | | | | | |
| **SONM** | **Songino Array** | **86.93** | **324** | | P | **P** | **15 05 13.2** | **-0.1** |
| | 1.4nm,0.7s,baz=154,slow=4.3,SNR=9.6 | | | | | | | |
| **SNAA** | **Sanae** | **88.61** | **183** | | P | **P** | **15 05 20.1** | **-0.9** |
| **VNA3** | **Neumayer Olymp** | **89.24** | **181** | | P | **P** | **15 05 23.1** | **-0.8** |
| **VNA2** | **Neumayer--Watz** | **89.52** | **182** | | P | **P** | **15 05 24.8** | **-0.3** |
| | baz=152,slow=5.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.00** | **49** | | P | **P** | **15 05 27.2** | **-1.0** |
| | 1.8nm,0.7s,baz=227,slow=8.6,SNR=15 | | | | | | | |
| **ILAR** | **Eielson Array** | **91.06** | **18** | | P | **P** | **15 05 29.0** | **-3.2** |
| | 0.5nm,0.6s,baz=233,slow=4.6,SNR=8.8 | | | | | | | |
| **WVOR** | **Wild Horse Val** | **91.49** | **45** | *e* | P | **P** | **15 05 34.1** | **-0.8** |
| | 4.2nm,1.1s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **125.25** | **345** | | PKP | **PKPdf** | **15 11 27.3** | **-0.9** |
| | 1.8nm,0.8s,baz=302,slow=2.3,SNR=6.0 | | | | | | | |
| **CONA** | **Conrad Observa** | **143.96** | **328** | ⇓ *i* | PKPdf | **PKPdf** | **15 12 03.0** | **-0.7** |
| | 9.6nm,1.4s | | | | | | | |
| **GERES** | **GERESS Array B** | **144.37** | **331** | | PKP | PKPbc | 15 12 02.8 | -0.1 |
| | 1.3nm,0.7s,baz=31,slow=3.1,SNR=6.3 | | | | | | | |
| **MOA** | **Molln** | **144.80** | **329** | ⇑ *i* | PKPdf | **PKPdf** | **15 12 04.6** | **-0.5** |
| | 18nm,1.1s | | | | | | | |
| **SOKA** | **Soboth** | **145.21** | **327** | ⇑ *i* | PKPdf | **PKPdf** | **15 12 05.6** | **-0.3** |
| | 14nm,1.4s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **146.43** | **329** | ⇑ *i* | PKPbc | **PKPdf** | **15 12 08.2** | **+0.2** |
| | 10nm,1.1s | | | | | | | |
| **WLF** | **Walferdange** | **146.81** | **338** | | PKP | **PKPbc** | **15 12 09.9** | **-0.4** |
| **DOU** | **Dourbes** | **146.96** | **340** | | PKP | **PKPbc** | **15 12 10.6** | **-0.1** |
| **DAVA** | **Damuels** | **147.25** | **332** | ⇑ *i* | PKPab | **PKPbc** | **15 12 11.9** | **+0.1** |
| | 12nm,1.1s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.33** | **246** | | PKPab | **PKPab** | **15 13 30.3** | **-1.1** |
| | 1.0nm,1.1s,baz=111,slow=3.2,SNR=2.7 | | | | | | | |

**DJA 20 14:54:50.9**±0.5,**2˚N**±6˚×**12˚2E**±˚,**h10**km,**M4.3**/3,**MLv4.3**/3, **Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **MRSI** | **Marisa** | **1.59** | **166** | | P | Pn | 14 55 18.2 | -0.9 |
| **MPSI** | **Mapaga** | **2.36** | **225** | | P | Pn | 14 55 27.2 | -2.5 |
| MPSI | | | | | S | Sn | 14 55 51.9 | -6.8 |
| **KMSI** | **Cibinong** | **2.83** | **121** | | P | Pn | 14 55 36.9 | +0.7 |
| KMSI | | | | | S | Sn | 14 56 09.2 | -1.1 |
| **APSI** | **Ampana** | **2.92** | **178** | | P | Pn | 14 55 39.7 | +2.2 |
| **PCI** | **Palu** | **3.38** | **210** | | P | Pb | 14 55 50.6 | -0.4 |
| **TTSI** | **Tana Toraja** | **5.33** | **199** | | P | Pn | 14 56 10.2 | -0.4 |
| **BKB** | **Balikpapan** | **5.69** | **235** | | P | Pn | 14 56 14.2 | -1.3 |
| **SANI** | **Sanana** | **6.01** | **132** | | P | Pn | 14 56 19.3 | -0.6 |
| **SPSI** | **Sidrap Palu** | **6.21** | **197** | | P | Pn | 14 56 22.3 | -0.5 |

**MEX 20 14:57:54.7**±0.4,**14˚.19N×92˚.59W, h5**km,**MD3.7, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **1.63** | **338** | *e* | P | Pn | 14 58 20.5 | -3.5 |
| PCIG | | | | | *i* S | Sn | 14 58 40.6 | -4.8 |
| **CCIG** | **Comitan** | **2.13** | **12** | *i* | P | Pn | 14 58 31.1 | -0.1 |
| CCIG | | | | | *i* S | Sn | 14 58 56.9 | -1.3 |

*ISK **20** 14:58:22.1, 38˚.62N×38˚.16E, h5km, MD2.6*
*ISCJB **20** 14:58:23.7±0.7, 38˚.72N±0˚.04×38˚.20E±0˚.04, h2km±7km, Error ellipse: s-maj=6.4km s-min=4.5km az=154.2*
*CSEM **20** 14:58:23.4±0.5, 38˚.68N×38˚.23E, h10km, MD2.6, Error ellipse: s-maj=12.6km s-min=10.5km az=148.0*
*DDA **20** 14:58:24.4, 38˚.72N×38˚.21E, h7km, Md2.8*

**ISC 20 14:58:23.3**±1.2,**38˚.72N**±0˚.03×**38˚.21E**±0˚.03,**h5**km±11km, **n18,** σ0**s81/27, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MALT** | **Malatya** | **0.45** | **157** | *e* | PG | Pg | 14 58 28.2 | -3.7 |
| MALT | | | | | eSG | **Sg** | **14 58 37.0** | **-0.7** |
| **MALT** | **Malatya** | **0.45** | **157** | *e* | Sg | **Sg** | **14 58 37.0** | **-0.8** |
| **AKCD** | **Akcadag** | **0.48** | **208** | *i* | P | **Pg** | **14 58 33.5** | **+0.9** |
| AKCD | | | | | *i* S | **Sb** | **14 58 42.4** | **+0.6** |
| **AKCD** | **Akcadag** | **0.48** | **208** | | P | **Pg** | **14 58 33.5** | **+0.9** |
| AKCD | | | | | S | **Sb** | **14 58 42.4** | **+0.6** |
| **DARE** | **Darende-Malaty** | **0.59** | **255** | *e* | PG | **Pg** | **14 58 33.6** | **-1.0** |
| DARE | | | | | eSG | **Sg** | **14 58 42.4** | **+0.2** |
| **DARE** | **Darende-Malaty** | **0.59** | **255** | *e* | Pg | **Pg** | **14 58 33.6** | **-1.0** |
| **KEMA** | **Kemaliye** | **0.59** | **22** | *i* | P | **Pg** | **14 58 35.0** | **+0.3** |
| KEMA | | | | | *i* S | **Sb** | **14 58 45.8** | **+0.9** |
| **KEMA** | **Kemaliye** | **0.59** | **22** | | P | **Pg** | **14 58 35.0** | **+0.3** |
| KEMA | | | | | S | **Sb** | **14 58 45.8** | **+0.9** |
| **ELZG** | **Elazig** | **0.65** | **110** | *i* | P | **Pg** | **14 58 36.3** | **+0.4** |
| ELZG | | | | | *i* S | **Sb** | **14 58 46.9** | **+0.2** |
| **ELZG** | **Elazig** | **0.65** | **110** | | P | **Pg** | **14 58 36.3** | **+0.4** |
| ELZG | | | | | S | **Sb** | **14 58 46.9** | **+0.2** |
| **PTK** | **Pertek** | **0.94** | **79** | *e* | PG | **Pg** | **14 58 41.6** | **+0.2** |
| PTK | | | | | eSG | **Sn** | **14 58 58.0** | **+0.6** |
| **PTK** | **Pertek** | **0.94** | **79** | *e* | Pn | **Pg** | **14 58 41.6** | **+0.2** |
| PTK | | | | | eSn | **Sn** | **14 58 58.0** | **+0.6** |
| **SVSK** | **Karacayir** | **1.52** | **322** | *e* | PN | **Pb** | **14 58 51.8** | **-0.1** |
| **SVSK** | **Karacayir** | **1.52** | **322** | *e* | PN | **Pg** | **14 58 52.9** | **+0.5** |
| **SVSK** | **Karacayir** | **1.52** | **322** | *e* | Pn | **Pg** | **14 58 52.9** | **+0.5** |
| **AYKD** | **Aykdinkavak** | **1.71** | **221** | | P | **Pb** | **14 58 55.4** | **+0.2** |
| AYKD | | | | | S | **Sg** | **14 59 20.0** | **+1.7** |
| **BINT** | **Bingol** | **1.79** | **84** | *e* | Pn | **Pn** | **14 58 53.3** | **-1.7** |
| **BNGB** | **Bing ¶ll** | **1.95** | **81** | *e* | PN | Pn | 14 58 53.3 | -3.9 |

*MOS **20** 15:01:15.2±1.6, 51˚.25N×158˚.33E, h51km, mb4.3/1, Error ellipse: s-maj=25.9km s-min=6.3km az=83.6*

**KRSC 20 15:01:15.2**±1.0,**51˚.25N×158˚.33E, h51**km±16km,**ML4.1, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PAU** | **Pauzhetka** | **0.98** | **283** | *i* | P | Pn | 15 01 34.2 | +1.6 |
| PAU | | | | | *i* S | Sn | 15 01 46.2 | +0.7 |
| **PAU** | **Pauzhetka** | **0.98** | **283** | | PN | Pn | 15 01 34.2 | +1.6 |
| PAU | | | | | S | Sn | 15 01 46.2 | +0.7 |
| **ASAK** | **Asacha** | **1.16** | **347** | *i* | P | Pn | 15 01 37.1 | +1.8 |
| ASAK | | | | | *i* S | Sn | 15 01 51.7 | +1.5 |
| **RUS** | **Russkaya** | **1.19** | **5** | *e* | P | Pn | 15 01 36.8 | +1.3 |
| RUS | | | | | eS | Sn | 15 01 51.5 | +0.9 |
| **RUS** | **Russkaya** | **1.19** | **5** | | PN | Pn | 15 01 36.8 | +1.3 |
| RUS | | | | | S | Sn | 15 01 51.5 | +0.9 |
| **MTVR** | **Mutnovka** | **1.24** | **356** | *e* | P | Pn | 15 01 38.2 | +1.8 |
| MTVR | | | | | eS | Sn | 15 01 53.5 | +1.4 |
| **GRL** | **Gorelyy** | **1.31** | **353** | *i* | P | Pn | 15 01 39.7 | +2.3 |
| GRL | | | | | *i* S | Sn | 15 01 55.8 | +1.9 |
| **GRL** | **Gorelyy** | **1.31** | **353** | | PN | Pn | 15 01 39.7 | +2.3 |
| GRL | | | | | S | Sn | 15 01 55.8 | +1.9 |
| **SKR** | **Severo-Kuril's** | **1.51** | **249** | *i* | P | Pn | 15 01 41.4 | +1.6 |
| SKR | | | | | *i* S | Sn | 15 01 59.4 | +1.0 |
| **SKR** | **Severo-Kuril's** | **1.51** | **249** | *i* | PN | Pn | 15 01 41.4 | +1.6 |
| SKR | | | | | *i* S | Sn | 15 01 59.6 | +1.2 |
| **PET** | **Petropavlovsk** | **1.79** | **6** | *e* | P | Pn | 15 01 45.6 | +2.0 |
| PET | | | | | eS | Sn | 15 02 06.7 | +1.6 |
| **PET** | **Petropavlovsk** | **1.79** | **6** | *e* | PN | Pn | 15 01 45.7 | +2.1 |
| PET | | | | | eS | Sn | 15 02 06.9 | +1.8 |
| PET | | | | | pmax | pmax | | |
| | comp=Z,84nm,0.4s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=N,613nm,0.5s | | | | | | | |
| PET | | | | | smax | smax | | |
| | comp=E,676nm,0.5s | | | | | | | |
| **APC** | **Apacha** | **1.82** | **337** | *i* | P | Pn | 15 01 46.3 | +2.2 |
| APC | | | | | eS | Sn | 15 02 08.2 | +2.1 |
| **APC** | **Apacha** | **1.82** | **337** | | PN | Pn | 15 01 46.3 | +2.2 |
| APC | | | | | S | Sn | 15 02 08.2 | +2.1 |
| **UGLR** | **Uglovaya** | **1.98** | **9** | *e* | P | Pn | 15 01 48.1 | +2.4 |
| UGLR | | | | | *i* S | Sn | 15 02 13.7 | +3.5 |
| **NLC** | **Nalytchevo** | **2.02** | **18** | *e* | P | Pn | 15 01 47.9 | +1.1 |
| **NLC** | **Nalytchevo** | **2.02** | **18** | | PN | Pn | 15 01 47.9 | +1.1 |
| **AVH** | **Avacha** | **2.03** | **7** | *i* | P | Pn | 15 01 50.1 | +3.0 |
| AVH | | | | | eS | Sn | 15 02 14.3 | +2.9 |
| **AVH** | **Avacha** | **2.03** | **7** | | PN | Pn | 15 01 50.1 | +3.0 |
| AVH | | | | | S | Sn | 15 02 14.3 | +2.9 |
| **SMAR** | **Somma** | **2.04** | **8** | *e* | P | Pn | 15 01 49.6 | +2.3 |
| SMAR | | | | | eS | Sn | 15 02 13.8 | +2.1 |
| **SMAR** | **Somma** | **2.04** | **8** | | PN | Pn | 15 01 49.6 | +2.3 |
| SMAR | | | | | S | Sn | 15 02 13.8 | +2.1 |
| **KOK** | **Koryaka** | **2.05** | **5** | *e* | P | Pn | 15 01 50.1 | +2.7 |
| KOK | | | | | eS | Sn | 15 02 14.4 | +2.5 |
| **KOK** | **Koryaka** | **2.05** | **5** | | PN | Pn | 15 01 50.1 | +2.7 |
| KOK | | | | | S | Sn | 15 02 14.4 | +2.5 |
| **SDLR** | **Sedlovina** | **2.06** | **9** | *e* | P | Pn | 15 01 49.6 | +2.1 |
| **SDLR** | **Sedlovina** | **2.06** | **9** | | PN | Pn | 15 01 49.6 | +2.1 |
| **KRX** | **Arik** | **2.12** | **5** | *e* | P | Pn | 15 01 51.0 | +2.6 |
| KRX | | | | | eS | Sn | 15 02 16.8 | +3.1 |
| **SPN** | **Mys Shipunski** | **2.12** | **29** | *e* | P | Pn | 15 01 50.9 | +2.7 |
| SPN | | | | | eS | Sn | 15 02 16.4 | +3.0 |
| **SPN** | **Mys Shipunski** | **2.12** | **29** | | PN | Pn | 15 01 50.9 | +2.7 |
| SPN | | | | | S | Sn | 15 02 16.4 | +3.0 |
| **GNL** | **Ganaly** | **2.46** | **355** | *i* | P | Pn | 15 01 55.7 | +2.7 |
| GNL | | | | | *i* S | Sn | 15 02 24.3 | +2.4 |
| **GNL** | **Ganaly** | **2.46** | **355** | | PN | Pn | 15 01 55.7 | +2.7 |
| GNL | | | | | S | Sn | 15 02 24.3 | +2.4 |
| **KII** | **Karymskiy** | **2.87** | **13** | *e* | P | Pn | 15 02 02.1 | +3.5 |
| **KII** | **Karymskiy** | **2.87** | **13** | | PN | Pn | 15 02 02.1 | +3.5 |
| **MKZ** | **Mys Kozlova** | **3.90** | **31** | *e* | P | Pn | 15 02 14.9 | +2.4 |
| MKZ | | | | | eS | Sn | 15 03 01.3 | +4.4 |
| **MKZ** | **Mys Kozlova** | **3.90** | **31** | | PN | Pn | 15 02 14.9 | +2.4 |
| MKZ | | | | | S | Sn | 15 03 01.3 | +4.4 |
| **KZV** | **Kizimen** | **4.04** | **16** | *e* | P | Pn | 15 02 19.7 | +4.9 |
| **TUMR** | **Tumrok** | **4.18** | **14** | *e* | P | Pn | 15 02 21.3 | +4.7 |
| **TUMR** | **Tumrok** | **4.18** | **14** | | PN | Pn | 15 02 21.3 | +4.7 |
| **KBTR** | **Krutoberegovo** | **5.63** | **26** | *e* | P | Pn | 15 02 39.1 | +2.8 |
| KBTR | | | | | eS | Sn | 15 03 44.0 | +4.4 |
| **KBTR** | **Krutoberegovo** | **5.63** | **26** | | PN | Pn | 15 02 39.1 | +2.8 |
| KBTR | | | | | S | Sn | 15 03 44.0 | +4.4 |

*CSEM **20** 15:10:57.9, 43˚.96N×21˚.59E, h6km, ML1.4, After BEO*

**BEO 20 15:10:57.9**±0.4,**43˚.96N×21˚.59E, h6**km±4km,**ML1.4**/6,**2C, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **BOLS** | **Boljevac** | **0.29** | **116** | *e* | Pg | Pg | 15 11 02.7 | -0.9 |
| **BOLS** | **Boljevac** | **0.29** | **116** | *e* | Pg | Pg | 15 11 02.7 | -0.9 |
| **BOVS** | **Bovan** | **0.34** | **165** | *e* | Sg | Sg | 15 11 09.4 | +0.5 |
| **BOVS** | **Bovan** | **0.34** | **165** | *e* | Sg | Sg | 15 11 09.4 | +0.5 |
| **KUBS** | **Kucevo** | **0.46** | **8** | ⇑ *e* | Pg | Pg | 15 11 04.8 | -2.0 |
| KUBS | | | | | eSg | Sb | 15 11 14.2 | -1.4 |
| **KUBS** | **Kucevo** | **0.46** | **8** | ⇑ *e* | Pg | Pg | 15 11 04.8 | -2.0 |
| KUBS | | | | | eSg | Sb | 15 11 14.2 | -1.4 |
| **GRUS** | **Gruza** | **0.64** | **264** | *e* | Pg | Pg | 15 11 09.8 | -0.4 |
| GRUS | | | | | eSg | Sg | 15 11 18.1 | -0.4 |
| **GRUS** | **Gruza** | **0.64** | **264** | *e* | Pg | Pg | 15 11 09.8 | -0.4 |
| GRUS | | | | | eSg | Sg | 15 11 18.1 | -0.4 |
| **SELS** | **Selova** | **0.81** | **205** | *e* | Pg | Pg | 15 11 13.0 | -0.6 |
| **TRUS** | **Trudelj** | **0.89** | **288** | *e* | Pg | Pg | 15 11 14.6 | -0.5 |
| TRUS | | | | | eSg | Sg | 15 11 25.9 | -0.8 |
| **TRUS** | **Trudelj** | **0.89** | **288** | *e* | Pg | Pg | 15 11 14.6 | -0.5 |
| TRUS | | | | | eSg | Sg | 15 11 25.9 | -0.8 |
| **IVAS** | **Ivanjica** | **1.11** | **250** | *e* | Pg | Pg | 15 11 18.4 | -0.9 |
| IVAS | | | | | eSg | Sg | 15 11 33.4 | -0.4 |
| **IVAS** | **Ivanjica** | **1.11** | **250** | *e* | Pg | Pg | 15 11 18.4 | -0.9 |
| IVAS | | | | | eSg | Sg | 15 11 33.4 | -0.4 |
| **BARS** | **Barje** | **1.16** | **172** | *e* | Pg | Pg | 15 11 18.7 | -1.4 |
| BARS | | | | | eSg | Sg | 15 11 34.8 | -0.3 |
| **BARS** | **Barje** | **1.16** | **172** | *e* | Pg | Pg | 15 11 18.7 | -1.4 |
| BARS | | | | | eSg | Sg | 15 11 34.8 | -0.3 |
| **DIVS** | **Divibare** | **1.16** | **277** | *e* | Pg | Pg | 15 11 19.4 | -0.9 |
| **DIVS** | **Divibare** | **1.16** | **277** | *e* | Pg | Pg | 15 11 19.4 | -0.9 |
| **SJES** | **Sjenica** | **1.37** | **240** | *e* | Sg | Sb | 15 11 40.6 | -1.3 |

*NEIC **20** 15:12:50.2, 46˚.20S×166˚.18E, h29km, ML4.1(WEL), After WEL.*

**WEL 20 15:12:48.1**±0.8,**46˚.31S×166˚.05E, h33**km,**ML4.1**/15, **1C-4D, Error ellipse: s-maj=9.1km s-min=3.1km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PYZ** | **Puysegur Point** | **0.46** | **72** | ⇓ | PN | Pb | 15 12 57.4 | -0.8 |
| PYZ | | | | | SN | Sb | 15 13 03.2 | -1.9 |
| **PYZ** | **Puysegur Point** | **0.46** | **72** | | P* | Pb | 15 12 57.4 | -0.8 |
| PYZ | | | | | S* | Sb | 15 13 03.1 | -1.9 |
| **DCZ** | **Deep Cove** | **1.14** | **43** | ⇓ | PN | Pn | 15 13 07.0 | -0.7 |
| DCZ | | | | | SN | Sn | 15 13 20.9 | -1.2 |
| DCZ | | | | | AML | AML | 15 13 22.9 | |
| DCZ | | | | | AML | AML | 15 13 22.9 | |
| DCZ | | | | | AML | AML | 15 13 32.7 | |
| **DCZ** | **Deep Cove** | **1.14** | **43** | | Pn | Pn | 15 13 07.0 | -0.7 |
| DCZ | | | | | Sn | Sn | 15 13 20.1 | -2.0 |
| **WHZ** | **Wether Hill Ro** | **1.39** | **73** | ⇑ | PN | Pn | 15 13 11.3 | +0.1 |
| WHZ | | | | | SN | Sn | 15 13 27.9 | -0.4 |
| WHZ | | | | | AML | AML | 15 13 29.4 | |
| **WHZ** | **Wether Hill Ro** | **1.39** | **73** | | Pn | Pn | 15 13 11.3 | +0.1 |
| **APZ** | **The Paps** | **1.44** | **112** | | PN | Pn | 15 13 11.0 | -1.0 |
| APZ | | | | | SN | Sn | 15 13 27.2 | -2.6 |
| APZ | | | | | AML | AML | 15 13 28.0 | |
| **APZ** | **The Paps** | **1.44** | **112** | | Pn | Pn | 15 13 11.0 | -0.9 |
| **MLZ** | **Mavora Lakes** | **1.77** | **58** | | PN | Pn | 15 13 17.7 | +1.2 |
| MLZ | | | | | AML | AML | 15 13 40.8 | |
| MLZ | | | | | AML | AML | 15 13 41.5 | |
| **MLZ** | **Mavora Lakes** | **1.77** | **58** | | Pn | Pn | 15 13 17.7 | +1.2 |
| **MSZ** | **Milford Sound** | **2.11** | **40** | | PN | Pn | 15 13 22.8 | +1.8 |
| MSZ | | | | | AML | AML | 15 13 58.1 | |
| MSZ | | | | | AML | AML | 15 13 58.1 | |
| MSZ | | | | | AML | AML | 15 13 58.2 | |
| MSZ | | | | | AML | AML | 15 13 58.2 | |
| **MSZ** | **Milford Sound** | **2.11** | **40** | | Pn | Pn | 15 13 22.8 | +1.8 |
| **SYZ** | **Scrubby Hill** | **2.15** | **97** | | PN | Pn | 15 13 21.4 | -0.2 |
| SYZ | | | | | AML | AML | 15 13 49.2 | |
| SYZ | | | | | AML | AML | 15 13 49.2 | |
| SYZ | | | | | AML | AML | 15 13 49.2 | |
| SYZ | | | | | AML | AML | 15 13 49.3 | |
| **SYZ** | **Scrubby Hill** | **2.15** | **97** | | Pn | Pn | 15 13 21.4 | -0.2 |
| **TUZ** | **Tuapeka** | **2.52** | **83** | ⇓ | PN | Pn | 15 13 26.6 | -0.1 |
| TUZ | | | | | AML | AML | 15 13 55.8 | |
| TUZ | | | | | AML | AML | 15 13 55.8 | |
| TUZ | | | | | AML | AML | 15 13 56.4 | |
| TUZ | | | | | AML | AML | 15 13 56.5 | |
| **TUZ** | **Tuapeka** | **2.52** | **83** | | Pn | Pn | 15 13 26.6 | -0.1 |
| **EAZ** | **Earnscleugh** | **2.52** | **66** | | PN | Pn | 15 13 27.5 | +0.6 |
| EAZ | | | | | AML | AML | 15 13 59.2 | |
| EAZ | | | | | AML | AML | 15 14 00.0 | |

**ISC 20 15:13:32.7±1.4, 41°9S±0.3′, 90°5W±0.2, h10km, n17, σ0°92/13, mb4.1/7, MS3.5/5, Southeast of Easter Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **USHA** | **Ushuaia** | **19.49** | **139** | LR | LR | 15 24 25.7 | |
| | comp=Z,579nm,19.6s,baz=268,slow=34 | | | | | | |
| **CFAA** | **Coronel Fontan** | **20.53** | **67** | P | **P** | **15 18 11.7** | **+0.5** |
| | 0.6nm,0.7s,baz=233,slow=9.4,SNR=6.5 | | | | | | |
| CFAA | | | | LR | LR | 15 24 04.3 | |
| | comp=Z,44nm,20.0s,baz=251,slow=31 | | | | | | |
| **RPN** | **Rapa Nui** | **21.29** | **308** | LR | LR | 15 24 03.7 | |
| | comp=Z,120nm,20.1s,baz=174,slow=30 | | | | | | |
| **LVC** | **Limon Verde** | **26.37** | **50** | P | **P** | **15 19 08.6** | **-0.8** |
| | 12nm,0.6s,baz=255,slow=12,SNR=5.6 | | | | | | |
| **CPUP** | **Villa Florida** | **31.32** | **71** | P | **P** | **15 19 53.0** | **-0.1** |
| | 2.0nm,1.0s,baz=250,slow=12,SNR=2.7 | | | | | | |
| CPUP | | | | LR | LR | 15 31 20.2 | |
| | comp=Z,251nm,18.1s,baz=228,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **31.94** | **44** | P | **P** | **15 19 58.8** | **-0.5** |
| | 2.1nm,0.9s,baz=210,slow=7.8,SNR=7.1 | | | | | | |
| **ATAH** | **Atahualpa** | **36.21** | **21** | P | **P** | **15 20 35.8** | **-0.5** |
| | 3.7nm,0.5s,baz=221,slow=3.8,SNR=5.7 | | | | | | |
| **ROSC** | **El Rosal** | **48.78** | **22** | P | **P** | **15 22 19.0** | **+0.7** |
| | 4.3nm,0.4s,baz=102,slow=18,SNR=4.4 | | | | | | |
| **VNDA** | **Vanda** | **53.16** | **195** | LR | LR | 15 43 08.3 | |
| | comp=Z,44nm,19.0s,baz=118,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.87** | **348** | P | **P** | **15 24 55.6** | **-0.2** |
| | 0.6nm,0.6s,baz=161,slow=8.6,SNR=6.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.82** | **338** | P | **P** | **15 26 02.9** | **+0.7** |
| | 0.7nm,0.7s,baz=171,slow=7.2,SNR=5.8 | | | | | | |
| **DBIC** | **Dimbokro** | **91.18** | **82** | LR | LR | 16 07 08.7 | |
| | comp=Z,139nm,18.0s,baz=214,slow=35 | | | | | | |
| **KBZ** | **Khabaz** | **146.11** | **71** | PKPbc | **PKPbc** | **15 33 12.3** | **-0.2** |
| | 2.5nm,0.8s,baz=297,slow=5.3,SNR=4.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **149.08** | **289** | PKPbc | **PKPbc** | **15 33 21.2** | **+0.5** |
| | 0.7nm,0.5s,baz=187,slow=3.3,SNR=4.3 | | | | | | |
| **GEYT** | **Alibeck** | **155.69** | **89** | PKPab | **PKPab** | **15 33 54.3** | **+1.3** |
| | 1.5nm,0.5s,baz=328,slow=5.1,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **167.51** | **13** | PKP | **PKPdf** | **15 33 37.2** | **-1.0** |
| | 1.7nm,0.8s,baz=264,slow=1.5,SNR=7.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **172.87** | **44** | PKP | **PKPdf** | **15 33 39.8** | **-1.8** |
| | 0.4nm,0.9s,baz=354,slow=2.4,SNR=4.1 | | | | | | |

*DDA **20** 15:22:44.3, 38.88N×26.00E, h9km, Ml3.2*
*ATH **20** 15:22:44.9, 38.89N×26.05E, h23km±1km, MD3.3/16*
*CSEM **20** 15:22:45.2±0.1, 38.88N×26.00E, h2km, MD3.3, Error ellipse: s-maj=3.4km s-min=2.8km az=66.0*
*THE **20** 15:22:45.5, 38.86N×26.06E, h6km, ML3.1/6, Error ellipse: s-maj=1.1km s-min=0.4km az=91.0*
*ISK **20** 15:22:45.2, 38.95N×26.05E, h8km, MD2.8*

**ISC 20 15:22:45.5±1.0, 38.88N±0.01×26.04E±0.02, h8km±9km, n82, σ0°77/132, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIGR** | **SIGRI** | **0.36** | **337** | *e*PB | **Pg** | **15 22 52.9** | **+0.4** |
| SIGR | | | | *e*SB | **Sb** | **15 22 59.0** | **-0.8** |
| **SIGR** | **SIGRI** | **0.36** | **337** | P | **Pg** | **15 22 52.9** | **+0.4** |
| SIGR | | | | S | **Sb** | **15 22 59.2** | **-0.6** |
| **SIGR** | **SIGRI** | **0.36** | **337** | P | **Pg** | **15 22 52.9** | **+0.4** |
| SIGR | | | | *e*Sb | **Sb** | **15 22 59.0** | **-0.8** |
| **PRK** | **Paraskevi** | **0.41** | **27** | *e*PB | **Pg** | **15 22 53.5** | **0.0** |
| PRK | | | | *e*SB | **Sg** | **15 22 59.2** | **+0.3** |
| **PRK** | **Paraskevi** | **0.41** | **27** | P | **Pg** | **15 22 53.5** | **0.0** |
| PRK | | | | S | **Sb** | **15 23 00.0** | **-1.3** |
| **PRK** | **Paraskevi** | **0.41** | **27** | P | **Pg** | **15 22 53.5** | **0.0** |
| PRK | | | | *e*Sb | **Sg** | **15 22 59.2** | **+0.3** |
| PRK | | | | S | **Sb** | **15 23 00.0** | **-1.3** |
| **CHOS** | **Chios island** | **0.50** | **178** | *e*PB | **Pg** | **15 22 54.9** | **-0.3** |
| CHOS | | | | *e*SB | **Sg** | **15 22 03.3** | **+0.6** |
| **CHOS** | **Chios island** | **0.50** | **178** | P | **Pg** | **15 22 54.9** | **-0.3** |
| CHOS | | | | S | **Sg** | **15 23 01.6** | **-0.1** |
| **CHOS** | **Chios island** | **0.50** | **178** | P | **Pg** | **15 22 54.9** | **-0.3** |
| CHOS | | | | S | **Sg** | **15 23 01.6** | **-0.1** |
| CHOS | | | | *e*Sn | **Sg** | **15 22 03.3** | **+0.6** |
| **AYVA** | **Ayvalik** | **0.66** | **50** | *i* P | **Pg** | **15 22 58.1** | **-0.3** |
| AYVA | | | | *i* S | **Sb** | **15 23 08.1** | **-0.6** |
| **AYVA** | **Ayvalik** | **0.66** | **50** | P | **Pg** | **15 22 58.1** | **-0.3** |
| AYVA | | | | S | **Sb** | **15 23 08.1** | **-0.6** |
| **URLA** | **Izmir** | **0.68** | **140** | *i* P | **Pg** | **15 22 58.0** | **-0.7** |
| URLA | | | | *i* S | **Sb** | **15 23 08.7** | **-0.5** |
| **URLA** | **Izmir** | **0.68** | **140** | P | **Pg** | **15 22 58.0** | **-0.7** |
| URLA | | | | S | **Sb** | **15 23 08.7** | **-0.5** |
| **DKL** | **Dikili** | **0.70** | **74** | *e*PG | **Pg** | **15 22 58.8** | **-0.3** |
| DKL | | | | *e*SG | **Sg** | **15 23 08.7** | **+0.4** |
| **DKL** | **Dikili** | **0.70** | **74** | *e*Pg | **Pg** | **15 22 58.8** | **-0.3** |
| DKL | | | | *e*Sg | **Sg** | **15 23 08.7** | **+0.4** |
| **ZEY** | **˜zmir** | **0.74** | **150** | P | **Pg** | **15 22 59.3** | **-0.5** |
| ZEY | | | | S | **Sg** | **15 23 09.6** | **+0.1** |
| **BOZC** | **Bozcaada** | **0.96** | **1** | P | **Pg** | **15 23 03.5** | **-0.5** |
| BOZC | | | | P | **Pb** | **15 23 03.9** | **-0.4** |
| BOZC | | | | S | **Sb** | **15 23 17.1** | **0.0** |
| BOZC | | | | S | **Sg** | **15 23 17.3** | **+0.9** |
| **LIA** | **Limnos Island** | **1.21** | **327** | *e*PN | **Pb** | **15 23 08.6** | **0.0** |
| LIA | | | | *e*SN | **Sn** | **15 23 25.5** | **+0.3** |
| **LIA** | **Limnos Island** | **1.21** | **327** | P | **Pn** | **15 23 08.4** | **-0.3** |
| LIA | | | | S | **Sn** | **15 23 25.9** | **+0.7** |
| **LIA** | **Limnos Island** | **1.21** | **327** | P | **Pn** | **15 23 08.4** | **-0.3** |
| LIA | | | | *e*Sn | **Sn** | **15 23 25.5** | **+0.3** |
| LIA | | | | S | **Sn** | **15 23 25.9** | **+0.7** |
| **SMG** | **Samos** | **1.33** | **151** | *e*PN | **Pn** | **15 23 10.0** | **-0.4** |
| SMG | | | | *e*SN | **Sg** | **15 23 28.6** | **+0.2** |
| **SMG** | **Samos** | **1.33** | **151** | P | **Pn** | **15 23 09.0** | **-1.4** |
| **SMG** | **Samos** | **1.33** | **151** | P | **Pn** | **15 23 09.0** | **-1.4** |
| **SMG** | **Samos** | **1.33** | **151** | *e*Pn | **Pn** | **15 23 10.0** | **-0.4** |
| SMG | | | | *e*Sn | **Sg** | **15 23 28.6** | **+0.2** |
| **AKHS** | **Akhisar** | **1.39** | **90** | *i* P | **Pg** | **15 23 11.9** | **-0.3** |
| AKHS | | | | *i* S | **Sg** | **15 23 31.5** | **+1.3** |
| **AKHS** | **Akhisar** | **1.39** | **90** | P | **Pg** | **15 23 11.9** | **-0.3** |
| AKHS | | | | S | **Sg** | **15 23 31.5** | **+1.3** |
| **BALY** | **Balya** | **1.50** | **55** | *i* P | **Pn** | **15 23 12.4** | **-0.3** |
| BALY | | | | *i* S | **Sg** | **15 23 35.0** | **+1.3** |
| **BALY** | **Balya** | **1.50** | **55** | P | **Pn** | **15 23 12.4** | **-0.3** |
| BALY | | | | S | **Sg** | **15 23 35.0** | **+1.3** |
| **GCAM** | **G?zelcaml?** | **1.51** | **141** | *i* P | **Pn** | **15 23 11.8** | **-1.0** |
| GCAM | | | | *i* S | **Sg** | **15 23 35.4** | **+1.3** |
| **GCAM** | **G?zelcaml?** | **1.51** | **141** | P | **Pn** | **15 23 11.8** | **-1.0** |
| GCAM | | | | S | **Sg** | **15 23 35.4** | **+1.3** |
| **KARY** | **Karystos** | **1.52** | **236** | P | **Pn** | **15 23 11.8** | **-1.1** |
| **SMTH** | **Samothraki Isl** | **1.63** | **346** | *e*PN | **Pb** | **15 23 15.1** | **-0.8** |
| SMTH | | | | *e*SN | **Sn** | **15 23 35.8** | **+0.1** |
| **SMTH** | **Samothraki Isl** | **1.63** | **346** | P | **Pn** | **15 23 14.3** | **-0.2** |
| SMTH | | | | S | **Sb** | **15 23 36.3** | **-0.3** |
| **SMTH** | **Samothraki Isl** | **1.63** | **346** | P | **Pn** | **15 23 14.3** | **-0.2** |
| **SMTH** | **Samothraki Isl** | **1.63** | **346** | *e*Pn | **Pb** | **15 23 15.1** | **-0.8** |
| SMTH | | | | *e*Sn | **Sn** | **15 23 35.8** | **+0.1** |
| SMTH | | | | S | **Sb** | **15 23 36.3** | **-0.3** |
| **EREA** | **Eretria** | **1.71** | **255** | *e*PN | **Pb** | **15 23 16.6** | **-0.6** |
| **EREA** | **Eretria** | **1.71** | **255** | *e*Pn | **Pb** | **15 23 16.6** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.73** | **122** | *e*PN | **Pb** | **15 23 16.7** | **-0.9** |
| AYDB | | | | *e*SN | **Sb** | **15 23 39.9** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.73** | **122** | *e*Pn | **Pb** | **15 23 16.7** | **-0.9** |
| AYDB | | | | *e*Sn | **Sb** | **15 23 39.9** | **+0.3** |
| **APE** | **Apeiranthos** | **1.85** | **193** | *e*PN | **Pn** | **15 23 17.8** | **+0.2** |
| **APE** | **Apeiranthos** | **1.85** | **193** | *e*Pn | **Pn** | **15 23 17.8** | **+0.2** |
| **AYDN** | **Tasoluk** | **1.90** | **129** | *i* S | **Sg** | **15 23 48.1** | **+1.6** |
| **AYDN** | **Tasoluk** | **1.90** | **129** | P | **Pg** | **15 23 24.7** | **+2.8** |
| AYDN | | | | S | **Sg** | **15 23 48.1** | **+1.6** |
| **MRKA** | **Markates** | **1.92** | **265** | *e*PB | **Pn** | **15 23 18.3** | **-0.2** |
| **ALN** | **Alexandroupoli** | **2.01** | **0** | *e*PB | **Pn** | **15 23 19.2** | **-0.4** |
| **ALN** | **Alexandroupoli** | **2.01** | **0** | P | **Pn** | **15 23 19.3** | **-0.4** |
| ALN | | | | S | **Sn** | **15 23 45.9** | **+0.9** |
| **ALN** | **Alexandroupoli** | **2.01** | **0** | P | **Pn** | **15 23 19.3** | **-0.4** |
| ALN | | | | S | **Sn** | **15 23 45.9** | **+0.9** |
| **MANT** | **Manisa** | **2.01** | **100** | *i* P | **Pb** | **15 23 21.2** | **-1.3** |
| MANT | | | | *i* S | **Sg** | **15 23 48.9** | **-1.3** |
| **MANT** | **Manisa** | **2.01** | **100** | P | **Pb** | **15 23 21.2** | **-1.3** |
| MANT | | | | S | **Sg** | **15 23 48.9** | **-1.3** |
| **SKIA** | **Skiathos** | **2.02** | **279** | *e*PB | **Pn** | **15 23 19.4** | **-0.5** |
| **DURS** | **Dursunbey** | **2.03** | **69** | *i* P | **Pb** | **15 23 21.0** | **-1.6** |
| DURS | | | | *i* S | **Sg** | **15 23 51.2** | **+0.6** |
| **DURS** | **Dursunbey** | **2.03** | **69** | P | **Pb** | **15 23 21.1** | **-1.6** |
| DURS | | | | S | **Sg** | **15 23 51.2** | **+0.6** |
| **EDC** | **Edincik** | **2.03** | **43** | *e*PN | **Pn** | **15 23 19.7** | **-0.3** |
| **EDC** | **Edincik** | **2.03** | **43** | *e*Pn | **Pn** | **15 23 19.7** | **-0.3** |
| **VLY** | **Voula,Athens** | **2.04** | **240** | *e*PB | **Pn** | **15 23 19.6** | **-0.5** |
| **DEMI** | **Demirci** | **2.10** | **85** | *i* P | **Pb** | **15 23 24.4** | **+0.6** |
| DEMI | | | | *i* S | **Sb** | **15 23 51.0** | **+1.0** |
| **DEMI** | **Demirci** | **2.10** | **85** | P | **Pb** | **15 23 24.4** | **+0.6** |
| DEMI | | | | S | **Sb** | **15 23 51.0** | **+1.0** |
| **MRMT** | **Marmara Adasi** | **2.10** | **35** | *e*PN | **Pn** | **15 23 21.0** | **0.0** |
| **MRMT** | **Marmara Adasi** | **2.10** | **35** | *e*Pn | **Pn** | **15 23 21.0** | **0.0** |
| **PAIG** | **Paliouri** | **2.10** | **300** | *e*PB | **Pn** | **15 23 21.0** | **+0.1** |
| **SERI** | **Serifos** | **2.11** | **216** | *e*PB | **Pb** | **15 23 22.6** | **-1.4** |
| **SERI** | **Serifos** | **2.11** | **216** | *e*Pn | **Pb** | **15 23 22.6** | **-1.4** |
| **BDRM** | **Kayabasi** | **2.13** | **148** | *i* P | **Pb** | **15 23 24.9** | **+0.6** |
| **BDRM** | **Kayabasi** | **2.13** | **148** | P | **Pb** | **15 23 24.9** | **+0.6** |
| BDRM | | | | S | **Sg** | **15 23 55.8** | **+1.8** |
| **OUR** | **Ouranopolis** | **2.15** | **313** | *e*PB | **Pn** | **15 23 21.8** | **+0.2** |
| **OUR** | **Ouranopolis** | **2.15** | **313** | P | **Pn** | **15 23 21.7** | **+0.2** |
| **OUR** | **Ouranopolis** | **2.15** | **313** | P | **Pn** | **15 23 21.7** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **2.26** | **52** | *e*PN | **Pn** | **15 23 23.0** | **-0.2** |
| **KCTX** | **Karacabey (Bur** | **2.26** | **52** | *e*Pn | **Pn** | **15 23 23.0** | **-0.2** |
| **NAIG** | **Nisos Aigina** | **2.30** | **242** | *e*PN | **Pn** | **15 23 23.9** | **+0.3** |
| **NAIG** | **Nisos Aigina** | **2.30** | **242** | *e*Pn | **Pn** | **15 23 23.9** | **+0.3** |
| **KAVA** | **Kavala** | **2.41** | **332** | P | **Pn** | **15 23 25.0** | **-0.2** |
| **KAVA** | **Kavala** | **2.41** | **332** | P | **Pn** | **15 23 25.0** | **-0.2** |
| **PLG** | **Polygyros** | **2.49** | **307** | *e*PN | **Pn** | **15 23 26.7** | **+0.3** |
| **PLG** | **Polygyros** | **2.49** | **307** | *e*Pn | **Pn** | **15 23 26.7** | **+0.3** |
| **DID** | **Didima** | **2.60** | **239** | *e*PN | **Pn** | **15 23 27.7** | **-0.1** |
| **DID** | **Didima** | **2.60** | **239** | *e*Pn | **Pn** | **15 23 27.7** | **-0.1** |
| **IGD** | **Bursa** | **2.81** | **60** | P | **Pg** | **15 23 39.6** | **+0.3** |
| IGD | | | | S | **Sg** | **15 24 16.3** | **+0.5** |
| **NVR** | **Nevrokopi** | **2.97** | **327** | *e*PN | **Pn** | **15 23 32.8** | **-0.2** |
| **NVR** | **Nevrokopi** | **2.97** | **327** | *e*Pn | **Pn** | **15 23 32.8** | **-0.2** |
| **THL** | **Klokotos Trika** | **3.20** | **284** | *e*PN | **Pn** | **15 23 36.6** | **+0.6** |
| **THL** | **Klokotos Trika** | **3.20** | **284** | *e*Pn | **Pn** | **15 23 36.6** | **+0.6** |

*IDC **20** 15:29:21.8±0.9, 1.88N×127.15E, h0km, mb4.0/5, mb1 4.3/5, mb1mx3.8/21, mbtmp4.0/5, Error ellipse: s-maj=68.5km s-min=20.2km az=76.0*
*AUST **20** 15:29:28.0±5.8, 2.66N×127.19E, h122km, Error ellipse: s-maj=5.5km s-min=1.5km az=2.0*
*ISCJB **20** 15:29:32.2±0.6, 1.97N±0.06×127.21E±0.05, h100km, mb4.0/6, Error ellipse: s-maj=8.7km s-min=6.6km az=25.3*
*DJA **20** 15:29:33.8±0.6, 2.7N±5°×12.7E±°, h56km±12km, M4.2/9, mb4.5/6, mB5.0/3, MLv4.1/9, Mw(mB)4.3/3*
*NEIC **20** 15:29:34.3±1.1, 1.86N×127.22E, h105km±10km, mb4.6/1, Error ellipse: s-maj=16.4km s-min=13.8km az=54.0*

**ISC 20 15:29:34.0±0.7, 1.93N±0.08×127.20E±0.08, h100km, n38, σ0°88/39, mb4.0/6, 1C, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.17** | **172** | P | **Pn** | **15 29 55.2** | **-1.1** |
| **TNTI** | **Ternate** | **1.17** | **172** | *e*P | **Pn** | **15 29 55.2** | **-1.1** |
| **SGSI** | **Sangihe** | **2.41** | **316** | P | **Pn** | **15 30 10.1** | **-1.8** |
| **LBMI** | **Labuha** | **2.57** | **173** | P | **Pn** | **15 30 14.5** | **+0.4** |
| **KMSI** | **Cibinong** | **3.49** | **247** | P | **Pn** | **15 30 26.0** | **-0.3** |
| **SANI** | **Sanana** | **4.14** | **197** | P | **Pn** | **15 30 34.0** | **-1.1** |
| **GTOI** | **Gorontalo** | **4.38** | **253** | P | **Pn** | **15 30 39.1** | **+0.8** |
| **SWI** | **Sorong** | **4.92** | **124** | P | **Pn** | **15 30 46.3** | **+0.7** |
| | baz=5.4,SNR=3.4 | | | | | | |
| **SWI** | **Sorong** | **4.92** | **124** | P | **Pn** | **15 30 45.5** | **-0.2** |
| **NLAI** | **Namlea** | **5.14** | **181** | P | **Pn** | **15 30 47.9** | **-0.7** |
| | 20nm,1.0s,901nm0.3nm | | | | | | |
| **LUWI** | **Luwuk** | **5.32** | **236** | P | **Pn** | **15 30 51.7** | **+0.6** |
| | baz=5.8,SNR=40 | | | | | | |
| **LUWI** | **Luwuk** | **5.32** | **236** | *e*P | **Pn** | **15 30 51.2** | **+0.1** |
| | 72nm,0.4s | | | | | | |
| **MRSI** | **Marisa** | **5.45** | **255** | P | **Pn** | **15 30 53.1** | **+0.3** |
| | 62nm,0.5s,981nm0.3nm | | | | | | |
| **AAI** | **Ambon** | **5.67** | **170** | P | **Pn** | **15 30 56.2** | **+0.3** |
| **APSI** | **Ampana** | **6.23** | **243** | P | **Pn** | **15 31 03.8** | **+0.4** |
| | 58nm,1.0s,2µm | | | | | | |
| **FAKI** | **Fak Fak** | **6.98** | **134** | P | **Pn** | **15 31 14.9** | **+1.2** |
| | baz=7.5,SNR=5.3 | | | | | | |
| **FAKI** | **Fak Fak** | **6.98** | **134** | *e*P | **Pn** | **15 31 14.9** | **+1.2** |
| **MPSI** | **Mapaga** | **7.47** | **258** | P | **Pn** | **15 31 21.2** | **+0.9** |
| | 15nm,0.7s | | | | | | |
| **TTSI** | **Tana Toraja** | **8.88** | **236** | P | **Pn** | **15 31 38.8** | **-0.7** |
| | 40nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.46** | **232** | P | **Pn** | **15 31 45.9** | **-1.5** |
| **BKSI** | **Bulukumba** | **10.09** | **224** | P | **Pn** | **15 31 56.1** | **+0.1** |
| **MTN** | **Manton Dam** | **15.19** | **165** | P | **P** | **15 33 05.6** | **-0.4** |
| | baz=16,SNR=11 | | | | | | |
| **KDU** | **Kakadu** | **15.44** | **160** | P | **P** | **15 33 10.0** | **+1.3** |
| | baz=16,SNR=4.0 | | | | | | |
| **KNRA** | **Kununurra** | **17.57** | **175** | P | **P** | **15 33 31.7** | **-0.5** |
| | baz=18,SNR=5.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **22.84** | **162** | *e*P | **P** | **15 34 27.6** | **-1.3** |
| | 12nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.84** | **162** | P | **P** | **15 34 27.4** | **-1.4** |
| | 11nm,0.4s,baz=342,slow=10,SNR=140 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 38 17.1** | **+0.3** |
| | 0.2nm,0.4s,baz=338,slow=2.2,SNR=4.0 | | | | | | |
| **QIS** | **Mount Isa** | **25.45** | **152** | P | **P** | **15 34 52.8** | **+0.1** |
| | baz=26,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **26.27** | **166** | P | **P** | **15 34 59.3** | **-0.9** |
| | 1.7nm,0.3s,baz=345,slow=8.0,SNR=78 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 38 24.6** | **+0.3** |
| | 0.3nm,0.4s,baz=343,slow=2.2,SNR=4.5 | | | | | | |
| **WRKA** | **Warakurna** | **26.83** | **178** | P | **P** | **15 35 04.8** | **-0.3** |
| | baz=28,SNR=14 | | | | | | |
| **MEEK** | **Meekatharra** | **29.59** | **196** | P | **P** | **15 35 29.9** | **+0.2** |
| | baz=30,SNR=3.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **35.91** | **15** | P | **P** | **15 36 24.5** | **-0.1** |
| | 1.1nm,0.6s,baz=184,slow=9.6,SNR=4.6 | | | | | | |
| **HTT** | **Hallett** | **36.87** | **164** | P | P | 15 36 28.6 | -4.3 |
| | baz=38,SNR=3.2 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **37.64** | **154** | P | **P** | **15 36 40.2** | **+0.8** |
| | baz=38,SNR=7.9 | | | | | | |
| **MIDW** | **Midway** | **58.92** | **58** | *e*P | **P** | **15 39 21.9** | **-1.1** |
| **MKAR** | **Makanchi Array** | **59.29** | **326** | P | **P** | **15 39 26.6** | **+1.3** |
| | 0.3nm,0.4s,baz=118,slow=7.1,SNR=7.4 | | | | | | |
| **VNDA** | **Vanda** | **81.60** | **173** | P | **P** | **15 41 40.1** | **-0.1** |
| | 0.5nm,0.8s,baz=324,slow=7.7,SNR=5.7 | | | | | | |
| **SYO** | **Syowa Base** | **90.93** | **201** | *e*P | **P** | **15 42 25.0** | **-1.2** |
| **TORD** | **Torodi Ar. Bea** | **123.91** | **287** | PKP | **PKPdf** | **15 48 21.7** | **+0.2** |
| | 0.4nm,0.9s,baz=66,slow=2.1,SNR=2.7 | | | | | | |

*DDA **20** 15:42:05.9, 35.26N×33.07E, h7km, Md3.3*
*NSSC **20** 15:42:06.5±1.0, 35.32N×32.73E, h37km±43km, ML2.6*
*ISCJB **20** 15:42:07.4±0.3, 35.19N±0.02×32.89E±0.03, h74km±3km, Error ellipse: s-maj=3.7km s-min=3.2km az=162.1*
*ISK **20** 15:42:07.0, 35.16N×32.84E, h71km, MD3.3, ML3.2*
*NIC **20** 15:42:08.1, 35.33N×32.87E, h59km, ML3.5*
*CSEM **20** 15:42:08.7±0.1, 35.22N×32.88E, h60km, MD3.3, Error ellipse: s-maj=3.1km s-min=2.6km az=58.0*
*HLW **20** 15:42:10.1, 35.16N×32.75E, h30km±19km, Md3.3*
*GII **20** 15:42:11.6±0.0, 34.93N×32.89E, h23km, MD2.5/1*

**ISC 20 15:42:08.3±1.1, 35°21N±0.02×32°87E±0.03, h67km±5km, n108, σ0°94/164, 8C, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LEF** | **Lefka** | **0.10** | **170** | *e*PG | **Pn** | **15 42 17.7** | **-0.4** |
| LEF | | | | *e*SG | **Sn** | **15 42 25.4** | **+0.1** |
| **LEF** | **Lefka** | **0.10** | **170** | *e*Pg | **Pn** | **15 42 17.7** | **-0.4** |
| LEF | | | | *e*Sg | **Sn** | **15 42 25.4** | **+0.1** |
| **AKDN** | **Akdeniz- K˜–br** | **0.12** | **44** | *e*PG | **Pn** | **15 42 18.0** | **-0.2** |
| AKDN | | | | *e*SG | **Sn** | **15 42 26.1** | **+0.7** |
| **AKDN** | **Akdeniz- K˜–br** | **0.12** | **44** | *e*Pg | **Pn** | **15 42 18.0** | **-0.2** |
| AKDN | | | | *e*Sg | **Sn** | **15 42 26.1** | **+0.7** |
| **ALFC** | **Alevga** | **0.23** | **256** | *i*P | **Pn** | **15 42 18.0** | **-0.7** |
| | baz=51 | | | | | | |
| ALFC | | | | S | **Sn** | **15 42 25.4** | **-0.9** |
| **ALFC** | **Alevga** | **0.23** | **256** | *i*P | **Pn** | **15 42 18.0** | **-0.7** |
| ALFC | | | | S | **Sn** | **15 42 25.4** | **-0.9** |
| **MAMC** | **Mammari** | **0.29** | **98** | *i*P | **Pn** | **15 42 18.9** | **-0.1** |
| | baz=299 | | | | | | |
| **MAMC** | **Mammari** | **0.29** | **98** | *i*P | **Pn** | **15 42 18.9** | **-0.1** |
| **CSS** | **Prodhromos** | **0.45** | **123** | *e*P | **Pn** | **15 42 20.2** | **-0.2** |
| | baz=314 | | | | | | |
| CSS | | | | S | **Sn** | **15 42 30.0** | **+0.8** |
| **CSS** | **Prodhromos** | **0.45** | **123** | Pg | **Pn** | **15 42 19.9** | **-0.5** |
| **CSS** | **Prodhromos** | **0.45** | **123** | Pg | **Pn** | **15 42 19.9** | **-0.5** |
| **CSS** | **Prodhromos** | **0.45** | **123** | *e*P | **Pn** | **15 42 20.2** | **-0.2** |
| CSS | | | | S | **Sn** | **15 42 30.0** | **+0.8** |
| **SZAC** | **Souni-Zanaja** | **0.46** | **179** | *e*P | **Pn** | **15 42 20.8** | **+0.3** |
| | baz=359 | | | | | | |
| SZAC | | | | S | **Sn** | **15 42 31.1** | **+1.8** |
| **SZAC** | **Souni-Zanaja** | **0.46** | **179** | *e*P | **Pn** | **15 42 20.8** | **+0.3** |
| SZAC | | | | S | **Sn** | **15 42 31.1** | **+1.8** |
| **AKMC** | **Akamas** | **0.48** | **247** | P | **Pn** | **15 42 20.7** | **+0.1** |
| | baz=55 | | | | | | |
| **PPCY** | **Paphos** | **0.54** | **233** | P | **Pn** | **15 42 21.6** | **+0.4** |
| | baz=43 | | | | | | |
| **LFK** | **Lefkose** | **0.55** | **83** | *e*PG | **Pn** | **15 42 21.4** | **0.0** |
| **LFK** | **Lefkose** | **0.55** | **83** | *e*Pg | **Pn** | **15 42 21.4** | **0.0** |
| **EREN** | **Erenkoy** | **1.11** | **73** | *e*PN | **Pn** | **15 42 28.2** | **+0.2** |
| **EREN** | **Erenkoy** | **1.11** | **73** | *e*Pn | **Pn** | **15 42 28.2** | **+0.2** |
| **GAZI** | **Gazipasa** | **1.11** | **336** | *i* P | **Pn** | **15 42 27.0** | **-1.1** |
| GAZI | | | | *i* S | **Sn** | **15 42 41.0** | **-1.9** |
| **GAZI** | **Gazipasa** | **1.11** | **336** | P | **Pn** | **15 42 27.0** | **-1.1** |
| GAZI | | | | S | **Sn** | **15 42 41.0** | **-1.9** |
| **ERMK** | **Ermenek** | **1.43** | **1** | *i* P | **Pn** | **15 42 32.8** | **+0.4** |
| ERMK | | | | *i* S | **Sn** | **15 42 51.9** | **+1.5** |
| **ERMK** | **Ermenek** | **1.43** | **1** | P | **Pn** | **15 42 32.8** | **+0.4** |
| ERMK | | | | S | **Sn** | **15 42 51.9** | **+1.5** |
| **KIZK** | **Mersin** | **1.63** | **39** | *i* P | **Pn** | **15 42 34.6** | **-0.3** |
| KIZK | | | | *i* S | **Sn** | **15 42 54.8** | **-0.3** |
| **KIZK** | **Mersin** | **1.63** | **39** | P | **Pn** | **15 42 34.6** | **-0.3** |
| KIZK | | | | S | **Sn** | **15 42 54.8** | **-0.3** |
| **GULE** | **Gulek** | **2.58** | **36** | *i* P | **Pn** | **15 42 48.6** | **+0.8** |
| GULE | | | | *i* S | **Sn** | **15 43 20.2** | **+2.0** |
| **GULE** | **Gulek** | **2.58** | **36** | P | **Pn** | **15 42 48.6** | **+0.8** |
| GULE | | | | S | **Sn** | **15 43 20.2** | **+2.0** |
| **ARNB** | **Al Arnab** | **2.61** | **75** | *e*P | **Pn** | **15 42 48.0** | **-0.3** |
| ARNB | | | | *e*S | **Sn** | **15 43 17.6** | **-1.3** |
| ARNB | | | | AML | AML | 15 43 22.8 | |
| | comp=Z,38nm,0.3s | | | | | | |
| ARNB | | | | AML | AML | 15 43 23.5 | |
| | comp=E,17nm,0.4s | | | | | | |
| ARNB | | | | AML | AML | 15 43 23.8 | |
| | comp=N,32nm,0.7s | | | | | | |
| **ARNB** | **Al Arnab** | **2.61** | **75** | *e*P | **Pn** | **15 42 48.0** | **-0.3** |
| ARNB | | | | *e*S | **Sn** | **15 43 17.6** | **-1.3** |
| | comp=N,32nm,0.7s | | | | | | |
| **YESY** | **Yesilyurt** | **2.66** | **15** | *e*PN | **Pn** | **15 42 50.1** | **+1.2** |
| **YESY** | **Yesilyurt** | **2.66** | **15** | *e*Pn | **Pn** | **15 42 50.1** | **+1.2** |
| **DQRL** | **Deir Qamar** | **2.69** | **123** | *e*P | **Pn** | **15 42 49.9** | **+0.6** |
| **HWQ** | **Hawqa** | **2.70** | **109** | *e*P | **Pn** | **15 42 50.0** | **+0.5** |
| **HWQ** | **Hawqa** | **2.70** | **109** | *e*P | **Pn** | **15 42 50.0** | **+0.5** |
| **KARA** | **Karaisali** | **2.70** | **40** | *e*PN | **Pn** | **15 42 50.4** | **+1.0** |
| **KARA** | **Karaisali** | **2.70** | **40** | *e*Pn | **Pn** | **15 42 50.4** | **+1.0** |
| **SUTC** | **Sutluce-Ispart** | **2.72** | **327** | *e*PN | **Pn** | **15 42 50.4** | **+0.7** |
| **SUTC** | **Sutluce-Ispart** | **2.72** | **327** | *e*Pn | **Pn** | **15 42 50.4** | **+0.7** |
| **KONT** | **Konya--Tatoy** | **2.76** | **352** | *e*PN | **Pn** | **15 42 51.0** | **+0.8** |
| **KONT** | **Konya--Tatoy** | **2.76** | **352** | *e*Pn | **Pn** | **15 42 51.0** | **+0.8** |
| **YAYL** | **Yayladag** | **2.76** | **72** | *i* P | **Pn** | **15 42 50.3** | **0.0** |
| YAYL | | | | *i* S | **Sn** | **15 43 22.3** | **-0.3** |
| **YAYL** | **Yayladag** | **2.76** | **72** | P | **Pn** | **15 42 50.3** | **0.0** |
| YAYL | | | | S | **Sn** | **15 43 22.3** | **-0.3** |
| **SLNF** | **Slenfeh** | **2.77** | **81** | *e*P | **Pn** | **15 42 49.2** | **-1.2** |
| SLNF | | | | *e*S | **Sn** | **15 43 21.8** | **-1.0** |
| SLNF | | | | AML | AML | 15 

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=E,86nm,0.3s | | | | | | |
| ROOS | | | | AML | AML | 15 43 50.4 | |
| | comp=N,49nm,0.4s | | | | | | |
| ROOS | | | | AML | AML | 15 43 51.9 | |
| | comp=Z,67nm,0.5s | | | | | | |
| **ROOS** | **tl_alroos** | **3.79** | **105** | *e*P | **Pn** | **15 43 05.7** | **+1.4** |
| ROOS | | | | *e*S | **Sn** | **15 43 47.7** | **+0.1** |
| | comp=Z,67nm,0.5s | | | | | | |
| **AYKD** | **Aykdinkavak** | **3.86** | **54** | P | **Pn** | **15 43 05.5** | **+0.2** |
| AYKD | | | | S | **Sn** | **15 43 48.5** | **-1.0** |
| **SALA** | **Sala** | **4.07** | **127** | *e*P | **Pn** | **15 43 10.0** | **+1.8** |
| SALA | | | | *e*S | **Sn** | **15 43 54.4** | **-0.2** |
| SALA | | | | AML | AML | 15 43 56.4 | |
| | comp=Z,39nm,0.4s | | | | | | |
| SALA | | | | AML | AML | 15 43 57.7 | |
| | comp=E,3.1nm,0.3s | | | | | | |
| SALA | | | | AML | AML | 15 43 58.4 | |
| | comp=N,30nm,0.5s | | | | | | |
| **SALA** | **Sala** | **4.07** | **127** | *e*P | **Pn** | **15 43 10.0** | **+1.8** |
| SALA | | | | *e*S | **Sn** | **15 43 54.4** | **-0.2** |
| | comp=N,30nm,0.5s | | | | | | |
| **DSI** | **Dead Sea** | **4.20** | **149** | Pn | **Pn** | **15 43 10.8** | **+1.0** |
| **DSI** | **Dead Sea** | **4.20** | **149** | Pn | **Pn** | **15 43 10.8** | **+1.0** |
| **RSH** | | **4.30** | **170** | P | **Pn** | **15 43 11.5** | **+0.2** |
| | baz=168 | | | | | | |
| **RSH** | | **4.30** | **170** | P | **Pn** | **15 43 11.5** | **+0.2** |
| **ZALF** | **Zalf** | **4.35** | **120** | *e*P | **Pn** | **15 43 12.3** | **+0.4** |
| ZALF | | | | *e*S | **Sn** | **15 44 01.1** | **-0.4** |
| ZALF | | | | AML | AML | 15 44 09.5 | |
| | comp=E,13nm,0.4s | | | | | | |
| ZALF | | | | AML | AML | 15 44 10.1 | |
| | comp=N,12nm,0.3s | | | | | | |
| ZALF | | | | AML | AML | 15 44 14.4 | |
| | comp=Z,10nm,0.9s | | | | | | |
| **ZALF** | **Zalf** | **4.35** | **120** | *e*P | **Pn** | **15 43 12.4** | **+0.4** |
| ZALF | | | | *e*S | **Sn** | **15 44 01.1** | **-0.4** |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **MZDA** | **Masada** | **4.42** | **151** | Pn | **Pn** | **15 43 14.1** | **+1.3** |
| MZDA | | | | Sn | **Sn** | **15 44 02.5** | **-0.4** |
| **MZDA** | **Masada** | **4.42** | **151** | Pn | **Pn** | **15 43 14.1** | **+1.3** |
| MZDA | | | | Sn | **Sn** | **15 44 02.5** | **-0.4** |
| **REVI** | **Revivim** | **4.44** | **159** | Sn | **Sn** | **15 44 02.3** | **-1.3** |
| **REVI** | **Revivim** | **4.44** | **159** | Sn | **Sn** | **15 44 02.3** | **-1.3** |
| **KZIT** | **Kziot** | **4.48** | **163** | Pn | **Pn** | **15 43 14.1** | **+0.4** |
| **KZIT** | **Kziot** | **4.48** | **163** | Pn | **Pn** | **15 43 14.1** | **+0.4** |
| **AMAG** | **Maghara** | **4.57** | **176** | P | **Pn** | **15 43 15.1** | **+0.2** |
| | baz=174 | | | | | | |
| **AMAG** | **Maghara** | **4.57** | **176** | P | **Pn** | **15 43 15.1** | **+0.2** |
| **KRMI** | **Paran Flat** | **5.32** | **162** | Pn | **Pn** | **15 43 25.7** | **+0.5** |
| **KRMI** | **Paran Flat** | **5.32** | **162** | Pn | **Pn** | **15 43 25.7** | **+0.5** |
| **HRFI** | **Mount Harif** | **5.48** | **160** | Pn | **Pn** | **15 43 26.9** | **-0.5** |
| **HRFI** | **Mount Harif** | **5.48** | **160** | Pn | **Pn** | **15 43 26.9** | **-0.5** |
| **MBRI** | **Mt Berech** | **5.67** | **162** | Pn | **Pn** | **15 43 31.1** | **+1.0** |
| MBRI | | | | Sn | **Sn** | **15 44 32.4** | **-1.5** |
| **MBRI** | **Mt Berech** | **5.67** | **162** | Pn | **Pn** | **15 43 31.1** | **+1.0** |
| MBRI | | | | Sn | **Sn** | **15 44 32.4** | **-1.5** |
| **EIL** | **Elat** | **5.80** | **162** | Pn | **Pn** | **15 43 32.7** | **+0.9** |
| **EIL** | **Elat** | **5.80** | **162** | Pn | **Pn** | **15 43 32.7** | **+0.9** |
| **HMAT** | **Matruh** | **6.35** | **231** | P | **Pn** | **15 43 39.0** | **-0.2** |
| | baz=231 | | | | | | |
| HMAT | | | | S | **Sn** | **15 44 46.1** | **-4.3** |
| | baz=231 | | | | | | |
| **HMAT** | **Matruh** | **6.35** | **231** | P | **Pn** | **15 43 39.0** | **-0.2** |
| **SWA2** | | **8.65** | **229** | P | **Pn** | **15 44 10.1** | **-0.6** |
| | baz=229 | | | | | | |
| **SWA2** | | **8.65** | **229** | P | **Pn** | **15 44 10.1** | **-0.6** |

*NEIC* ***20*** *16:04:55.4, 18.30N×101.07W, h71km, MD4.0(MEX), After MEX.*

**MEX 20 16:04:55.4±0.4, 18.30N×101.07W, h71km±9km, MD4.0, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARIG** | **Puente Sto Nin** | **0.69** | **91** | *e*P | Pn | 16 05 09.0 | -1.3 |
| ARIG | | | | *e*S | Sn | 16 05 18.9 | -2.5 |
| **ZIIG** | **Zihuatanejo** | **0.78** | **209** | *i* P | Pn | 16 05 09.9 | -1.5 |
| ZIIG | | | | *i* S | Sn | 16 05 21.4 | -1.7 |
| **ZIIG** | **Zihuatanejo** | **0.78** | **209** | *i* P | Pn | 16 05 09.9 | -1.5 |
| ZIIG | | | | *i* S | Sn | 16 05 21.4 | -1.7 |
| **MEIG** | **Mezcala** | **1.43** | **105** | *e*P | Pn | 16 05 18.9 | -0.7 |
| MEIG | | | | *i* S | Sn | 16 05 35.8 | -2.1 |
| **MEIG** | **Mezcala** | **1.43** | **105** | *e*P | Pn | 16 05 18.9 | -0.7 |
| MEIG | | | | *i* S | Sn | 16 05 35.8 | -2.1 |
| **CAIG** | **El Cayaco** | **1.46** | **148** | *e*P | Pn | 16 05 18.4 | -1.5 |
| **CAIG** | **El Cayaco** | **1.46** | **148** | *e*P | Pn | 16 05 18.4 | -1.5 |
| **PLIG** | **Platanillo** | **1.50** | **86** | *e*P | Pn | 16 05 19.5 | -1.0 |
| PLIG | | | | *e*S | Sn | 16 05 37.5 | -1.9 |
| **PLIG** | **Platanillo** | **1.50** | **86** | *e*P | Pn | 16 05 19.5 | -1.0 |
| PLIG | | | | *e*S | Sn | 16 05 37.5 | -1.9 |

*IGQ* ***20*** *16:05:47.0±0.8, 0.19S×81.19W, h3km±24km, Mb4.5, Error ellipse: s-maj=6.3km s-min=2.5km az=20.7*

*ISCJB* ***20*** *16:05:51.5±0.3, 0.34S±0.03×80.94W±0.03, h10km, mb4.5/30, MS4.0/9, Error ellipse: s-maj=4.7km s-min=3.3km az=27.9*

*BJI* ***20*** *16:05:56.5, 0.30S×80.70W, h38km, mB5.3/2, Ms5.2/2, Ms7.4.8/2*

*IDC* ***20*** *16:05:58.5±2.1, 0.27S×80.63W, h56km±20km, mb4.0/14, mb1 4.2/18, mb1mx4.1/30, mbtmp4.3/18, ML3.4/4, MS3.9/12, Ms1 3.9/12, ms1mx3.8/21, Error ellipse: s-maj=23.7km s-min=12.1km az=52.0*

*NEIC* ***20*** *16:05:58.8±0.8, 0.23S×80.56W, h60km±7km, mb4.7/19, MD4.5(IGQ), Error ellipse: s-maj=9.9km s-min=5.1km az=56.0*

*NEIC Felt by people in high-rise buildings at Bahia de Caraquez, Portoviejo and San Vicente.*

**ISC 20 16:05:51.8±0.4, 0.41S±0.04×80.79W±0.04, h10km, n105, σ1977/103, mb4.5/30, MS4.1/9, 19C-2D, Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAMA** | **Jama** | **0.60** | **76** | ⇑P | **Pb** | **16 06 05.3** | **+0.9** |
| **CHIS** | **Cerro-Chispas-** | **0.64** | **175** | ⇓P | **Pg** | **16 06 04.4** | **+0.1** |
| **PECV** | **Mancha de Ca P** | **0.82** | **117** | ⇑P | **Pg** | **16 06 05.8** | **-2.0** |
| **ISPT** | **Isla de la Pla** | **0.90** | **199** | P | **Pg** | **16 06 08.6** | **-0.6** |
| **ISPT** | **Isla de la Pla** | **0.90** | **199** | S | **Sg** | **16 06 20.7** | **-0.1** |
| **MAG1** | **Magdalena** | **1.06** | **72** | ⇑P | **Pn** | **16 06 14.2** | **+1.3** |
| **PAST** | **Pastocalle** | **2.16** | **98** | P | **Pn** | **16 06 29.3** | **+1.0** |
| **JUA2** | **San Juan 2** | **2.19** | **85** | P | **Pn** | **16 06 30.5** | **+1.8** |
| **PINO** | **Pino** | **2.19** | **84** | ⇑P | **Pn** | **16 06 29.3** | **+0.5** |
| **TERV** | **Terraza Guagua** | **2.19** | **84** | P | **Pn** | **16 06 29.4** | **+0.6** |
| **GGP** | **Refugio Guagua** | **2.20** | **84** | ⇑P | **Pn** | **16 06 30.5** | **+1.5** |
| **YANA** | **Yana** | **2.23** | **83** | P | **Pn** | **16 06 30.7** | **+1.4** |
| **CAMI** | **Rancho Maria** | **2.30** | **97** | P | **Pn** | **16 06 32.4** | **+2.2** |
| **BNAS** | **Cotopaxi Volca** | **2.32** | **97** | ⇑P | **Pb** | **16 06 33.9** | **-0.2** |
| **NAS2** | **Nasa** | **2.33** | **96** | P | **Pn** | **16 06 33.2** | **+2.5** |
| **BMOR** | **Cotopaxi Volca** | **2.35** | **98** | ⇑P | **Pn** | **16 06 33.1** | **+2.2** |
| **PITA** | **Cotopaxi Volc** | **2.36** | **94** | ⇓P | **Pn** | **16 06 33.2** | **+2.2** |
| **BREF** | **Cotopaxi Volca** | **2.36** | **96** | ⇑S | **Sb** | **16 07 06.4** | **+2.1** |
| **BREF** | **Cotopaxi Volca** | **2.36** | **96** | ⇑P | **Pb** | **16 06 34.8** | **0.0** |
| **MOV1** | **Cotopaxi Vol s** | **2.36** | **97** | P | **Pn** | **16 06 33.4** | **+2.1** |
| **BVC2** | **Cotopaxi Volca** | **2.39** | **96** | P | **Pn** | **16 06 34.1** | **+2.5** |
| **VC1** | **Cotopaxi 1** | **2.39** | **96** | P | **Pn** | **16 06 34.0** | **+2.5** |
| **IGUA** | **Igualata** | **2.40** | **117** | P | **Pb** | **16 06 34.9** | **-0.7** |
| **BTAM** | **Cotopaxi Volca** | **2.40** | **96** | ⇑P | **Pb** | **16 06 35.9** | **+0.3** |
| **BTAM** | **Cotopaxi Volca** | **2.40** | **96** | ⇑S | **Sg** | **16 07 09.3** | **+0.2** |
| **OTAV** | **Otavalo** | **2.42** | **75** | *e*Pn | **Pn** | **16 06 32.2** | **+0.3** |
| **TAMB** | **Tambo** | **2.43** | **97** | P | **Pb** | **16 06 35.8** | **-0.3** |
| **COV1** | **Cotopaxi Volc** | **2.45** | **96** | ⇑P | **Pn** | **16 06 35.0** | **+2.5** |
| **PISA** | **Pisayambo** | **2.48** | **105** | P | **Pn** | **16 06 35.3** | **+2.5** |
| **BBIL** | **Ulba Tungurahu** | **2.52** | **114** | P | **Pb** | **16 06 36.7** | **-0.7** |
| **JUI6** | **Juive** | **2.53** | **114** | P | **Pn** | **16 06 35.7** | **+2.5** |
| **RIOE** | **Riobamba** | **2.54** | **122** | P | **Pn** | **16 06 35.5** | **+2.1** |
| **BMAS** | **Trigal station** | **2.55** | **115** | ⇑P | **Pn** | **16 06 36.2** | **+2.6** |
| **COTA** | **Cotacachi** | **2.56** | **73** | P | **Pn** | **16 06 35.6** | **+1.7** |
| **RETU** | **Refugio** | **2.56** | **114** | P | **Pb** | **16 06 37.1** | **-1.1** |
| **RUN5** | **Runtun** | **2.56** | **113** | P | **Pb** | **16 06 37.3** | **-0.8** |
| **BRUN** | **Tungurahua Vol** | **2.58** | **113** | P | **Pb** | **16 06 37.8** | **-0.6** |
| **BULB** | **Ulba Tungurahu** | **2.59** | **113** | P | **Pb** | **16 06 37.7** | **-0.8** |
| **PAT1** | **Patacocha** | **2.59** | **115** | ⇑P | **Pb** | **16 06 38.7** | **+0.1** |
| **BPAT** | **Tungurahua Vol** | **2.59** | **115** | ⇑P | **Pb** | **16 06 37.9** | **-0.8** |
| **URCU** | **Urcuqui** | **2.66** | **72** | ⇑P | **Pn** | **16 06 36.3** | **+1.1** |
| **LITE** | **Lita** | **2.70** | **64** | ⇑P | **Pn** | **16 06 35.0** | **-0.5** |
| **LITE** | **Lita** | **2.70** | **64** | ⇑S | **Sn** | **16 07 09.4** | **+1.0** |
| **ELAGU** | **Cayambe Volc** | **2.82** | **82** | P | **Pb** | **16 06 41.7** | **-1.0** |
| **CAYA** | **Cayambe** | **2.83** | **80** | ⇑P | **Pn** | **16 06 40.2** | **+2.5** |
| **CHAR** | **Charly** | **3.13** | **84** | P | Pn | 16 06 45.3 | +3.7 |
| **ATAH** | **Atahualpa** | **7.10** | **160** | P | Pn | 16 07 42.0 | +5.8 |
| | 1.4nm,0.3s,baz=7.5,slow=11,SNR=7.7 | | | | | | |
| ATAH | | | | S | **Sn** | **16 08 58.8** | **+1.6** |
| | 1.7nm,0.3s,baz=14,slow=15,SNR=2.0 | | | | | | |
| ATAH | | | | LR | LR | 16 11 00.7 | |
| | comp=Z,988nm,18.9s,baz=326,slow=42 | | | | | | |
| **ROSC** | **El Rosal** | **8.30** | **51** | P | **Pn** | **16 07 53.8** | **+1.1** |
| | 1.7nm,0.3s,baz=288,slow=20,SNR=2.7 | | | | | | |
| ROSC | | | | LR | LR | 16 12 05.6 | |
| | comp=Z,915nm,18.9s,baz=211,slow=45 | | | | | | |
| **PAYG** | **Puerto Ayora** | **9.50** | **268** | *e*Pn | **Pn** | **16 08 09.6** | **+0.7** |
| **BCIP** | **Isla Barro Col** | **9.56** | **6** | *e*Pn | **Pn** | **16 08 09.9** | **+0.3** |
| **JTS** | **JuntasAbangare** | **11.41** | **339** | P | **Pn** | **16 08 38.1** | **+3.1** |
| | 0.2nm,0.3s,baz=135,slow=7.0,SNR=3.7 | | | | | | |
| JTS | | | | LR | LR | 16 11 40.3 | |
| | comp=Z,143nm,21.7s,baz=125,slow=30 | | | | | | |
| **JTS** | **JuntasAbangare** | **11.41** | **339** | *e*P | **Pn** | **16 08 37.8** | **+2.9** |
| **NNA** | **Nana** | **12.15** | **161** | P | Pn | 16 08 50.4 | +5.1 |
| | 2.4nm,0.3s,baz=325,slow=12,SNR=6.7 | | | | | | |
| NNA | | | | S | **Sn** | **16 10 57.9** | **-3.1** |
| | 2.4nm,0.3s,baz=223,slow=19,SNR=4.5 | | | | | | |
| **SAML** | **Samuel** | **19.47** | **116** | *e*P | **P** | **16 10 18.0** | **-1.0** |
| | 20nm,0.8s | | | | | | |
| **LPAZ** | **La Paz** | **20.12** | **142** | P | **P** | **16 10 27.9** | **+1.2** |
| | 6.6nm,0.6s,baz=319,slow=7.3,SNR=34 | | | | | | |
| LPAZ | | | | LR | LR | 16 19 59.4 | |
| | comp=Z,728nm,18.4s,baz=314,slow=42 | | | | | | |
| **LPAZ** | **La Paz** | **20.12** | **142** | *e*P | Pn | 16 10 28.1 | -0.5 |
| | 50nm,1.8s | | | | | | |
| **PTGA** | **Pitinga** | **20.82** | **91** | P | **P** | **16 10 33.7** | **-0.1** |
| | 6.2nm,0.7s,baz=273,slow=11,SNR=14 | | | | | | |
| **CMIG** | **Matias Romero** | **22.26** | **322** | P | **P** | **16 10 49.5** | **+0.4** |
| | 4.7nm,0.9s,baz=140,slow=9.8,SNR=5.7 | | | | | | |
| **SJG** | **San Juan** | **23.36** | **37** | P | **P** | **16 11 00.9** | **+0.2** |
| | 8.1nm,0.3s,baz=266,slow=9.2,SNR=3.5 | | | | | | |
| **SIV** | **San Ignacio** | **24.86** | **129** | P | **P** | **16 11 15.6** | **+0.7** |
| | 7.7nm,0.7s,baz=311,slow=10.0,SNR=22 | | | | | | |
| **LVC** | **Limon Verde** | **24.91** | **153** | P | **P** | **16 11 17.7** | **+2.2** |
| | 10nm,0.4s,baz=310,slow=5.3,SNR=6.7 | | | | | | |
| **LVC** | **Limon Verde** | **24.91** | **153** | *e*P | **P** | **16 11 17.1** | **+1.5** |
| | 14nm,0.9s | | | | | | |
| **CPUP** | **Villa Florida** | **34.27** | **141** | LR | LR | 16 29 47.4 | |
| | comp=Z,438nm,18.5s,baz=333,slow=42 | | | | | | |
| **BDFB** | **Brasilia** | **35.71** | **117** | P | **P** | **16 12 50.9** | **-0.1** |
| | 7.0nm,0.8s,baz=254,slow=9.8,SNR=6.0 | | | | | | |
| BDFB | | | | LR | LR | 16 28 45.8 | |
| | comp=Z,402nm,20.7s,baz=288,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **36.77** | **325** | P | **P** | **16 13 00.9** | **+1.0** |
| | 0.2nm,0.4s,baz=161,slow=8.6,SNR=4.3 | | | | | | |
| TXAR | | | | PcP | **PcP** | **16 15 21.6** | **-0.7** |
| | 0.3nm,0.5s,baz=152,slow=4.1,SNR=3.5 | | | | | | |
| TXAR | | | | LR | LR | 16 25 33.0 | |
| | comp=Z,59nm,22.0s,baz=0.0,slow=32 | | | | | | |
| **MNTX** | **Cornudas Mount** | **39.52** | **326** | *e*P | **P** | **16 13 23.1** | **0.0** |
| | 57nm,2.9s | | | | | | |
| **MSTX** | **Muleshoe** | **39.94** | **331** | *e*P | **P** | **16 13 27.7** | **+1.1** |
| | 13nm,1.0s | | | | | | |
| **ANMO** | **Albuquerque** | **42.58** | **328** | *e*P | **P** | **16 13 49.3** | **+1.0** |
| | 6.8nm,0.9s | | | | | | |
| **TUC** | **Tucson** | **43.15** | **322** | *e*P | **P** | **16 13 54.1** | **+1.2** |
| | 5.3nm,1.0s | | | | | | |
| **SDCO** | **Great Sand Dun** | **44.29** | **332** | *e*P | **P** | **16 14 02.8** | **+0.5** |
| | 4.7nm,0.9s | | | | | | |
| **WUAZ** | **Wupatki** | **45.72** | **325** | *e*P | **P** | **16 14 14.9** | **+1.3** |
| | 12nm,1.1s | | | | | | |
| **SRU** | **San Rafael** | **47.85** | **329** | *e*P | **P** | **16 14 30.4** | **+0.2** |
| | 83nm,2.9s | | | | | | |
| **CCUT** | **Cedar City** | **48.28** | **325** | *e*P | **P** | **16 14 35.4** | **+1.8** |
| | 51nm,2.9s | | | | | | |
| **BGU** | **Big Grassy Mou** | **50.49** | **328** | *e*P | **P** | **16 14 51.9** | **+1.6** |
| BGU | | | | *e*pP | pP | 16 15 05.1 | +12 |
| **REDW** | **Red Top Meadow** | **51.22** | **332** | *e*P | **P** | **16 14 55.4** | **-0.4** |
| | 6.9nm,1.3s | | | | | | |
| **NV01** | **Mina Array Sit** | **51.79** | **322** | *e*P | **P** | **16 15 01.4** | **+1.2** |
| **NVAR** | **Mina Array Bea** | **51.79** | **322** | P | **P** | **16 15 01.8** | **+1.5** |
| | 2.5nm,0.9s,baz=138,slow=6.9,SNR=15 | | | | | | |
| **BMN** | **Battle Mountai** | **52.44** | **325** | *e*P | **P** | **16 15 05.9** | **+0.9** |
| | 6.8nm,1.1s | | | | | | |
| **HLID** | **Hailey** | **53.10** | **330** | *e*P | **P** | **16 15 11.9** | **+2.1** |
| | 48nm,2.8s | | | | | | |
| **BOZ** | **Bozeman (W)** | **53.33** | **333** | *e*P | **P** | **16 15 12.3** | **+0.9** |
| | 4.7nm,1.1s | | | | | | |
| **WVOR** | **Wild Horse Val** | **54.56** | **326** | *e*P | **P** | **16 15 20.9** | **+0.4** |
| | 54nm,2.5s | | | | | | |
| **G08A** | **Pilot Rock** | **56.64** | **329** | *e*P | **P** | **16 15 36.4** | **+1.0** |
| | 74nm,2.8s | | | | | | |
| **YKA** | **Yellowknife Ar** | **67.70** | **344** | P | **P** | **16 16 48.2** | **-0.9** |
| | 2.4nm,0.9s,baz=136,slow=6.5,SNR=7.1 | | | | | | |
| **PPT** | **Papeete** | **69.68** | **252** | LR | LR | 16 42 27.7 | |
| | comp=Z,121nm,18.0s,baz=105,slow=31 | | | | | | |
| **LIC** | **Lamto** | **75.89** | **84** | *e*P | **P** | **16 17 40.0** | **+0.7** |
| | 41nm,1.1s | | | | | | |
| **TIC** | **Toumodi** | **75.91** | **83** | *e*P | **P** | **16 17 39.5** | **0.0** |
| **DBIC** | **Dimbokro** | **76.07** | **83** | P | **P** | **16 17 40.2** | **-0.2** |
| | 11nm,0.9s,baz=232,slow=2.9,SNR=6.2 | | | | | | |
| DBIC | | | | LR | LR | 16 50 59.8 | |
| | comp=Z,64nm,18.4s,baz=240,slow=36 | | | | | | |
| **KIC** | **Kosan Boka** | **76.18** | **83** | *e*P | **P** | **16 17 41.1** | **+0.1** |
| | 44nm,0.8s | | | | | | |
| **INK** | **Inuvik** | **77.38** | **342** | *e*P | **P** | **16 17 44.2** | **-2.4** |
| | 140nm,2.8s | | | | | | |
| **ESDC** | **Sonseca Array** | **80.13** | **50** | P | **P** | **16 18 02.4** | **-0.1** |
| | 0.2nm,0.3s,baz=272,slow=6.1,SNR=4.5 | | | | | | |
| **ILAR** | **Eielson Array** | **80.37** | **337** | P | **P** | **16 18 03.9** | **+0.8** |
| | 0.5nm,0.8s,baz=118,slow=3.6,SNR=4.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.77** | **77** | P | **P** | **16 18 16.2** | **-0.7** |
| | 1.8nm,0.7s,baz=294,slow=6.1,SNR=10 | | | | | | |
| **SNAA** | **Sanae** | **85.83** | **162** | *e*P | **P** | **16 18 31.0** | **-0.4** |
| | 1.1nm,0.8s | | | | | | |
| **GERES** | **GERESS Array B** | **93.27** | **41** | LR | LR | 16 57 38.4 | |
| | comp=Z,34nm,19.5s,baz=274,slow=33 | | | | | | |
| **VNDA** | **Vanda** | **95.34** | **191** | LR | LR | 16 56 40.6 | |
| | comp=Z,92nm,18.2s,baz=128,slow=32 | | | | | | |
| **FINES** | **FINESS Array B** | **98.37** | **28** | LR | LR | 16 58 40.3 | |
| | comp=Z,45nm,21.7s,baz=245,slow=32 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **125.32** | **10** | PKP | **PKPdf** | **16 24 52.3** | **-0.7** |
| | 0.6nm,0.4s,baz=302,slow=2.8,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **131.48** | **15** | PKP | **PKPdf** | **16 25 04.4** | **-0.6** |
| | 0.4nm,0.8s,baz=336,slow=2.7,SNR=3.9 | | | | | | |
| **WMQ** | **Urumqi** | **135.57** | **12** | *e*PKP | **PKPdf** | **16 25 13.0** | **+0.2** |
| **KSH** | **Kashi** | **135.66** | **26** | *e*PKP | **PKPdf** | **16 25 13.6** | **+0.4** |
| KSH | | | | *es*PKP | | 16 25 28.3 | |
| KSH | | | | *e*PP | **PP** | **16 27 53.5** | **+3.7** |
| KSH | | | | SKS | **SKSdf** | **16 32 18.3** | **-6.4** |
| KSH | | | | PPMZ | | | |
| | 95nm,4.4s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **138.21** | **346** | *e*PKP | **PKPdf** | **16 25 17.4** | **-0.5** |
| HHC | | | | PP | **PP** | **16 28 05.8** | **+0.4** |
| HHC | | | | SKS | **SKSdf** | **16 32 24.3** | **-4.7** |
| HHC | | | | SKKS | **SKKSac** | **16 34 54.8** | **-6.6** |
| HHC | | | | SS | **SS** | **16 46 13.6** | **-3.1** |
| HHC | | | | PPMZ | | | |
| | 97nm,8.8s | | | | | | |
| HHC | | | | LN | | | |
| | 230nm,20.4s | | | | | | |
| HHC | | | | LE | | | |
| | 200nm,21.5s | | | | | | |
| HHC | | | | LZ | | | |
| | 200nm,22.8s | | | | | | |
| **ASAR** | **Alice Springs** | **138.69** | **232** | PKP | **PKPdf** | **16 25 18.4** | **-0.7** |
| | 0.4nm,0.7s,baz=118,slow=2.0,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **140.09** | **238** | PKhKP | PKPpre | 16 25 14.6 | |
| | 0.3nm,0.6s,baz=130,slow=2.4,SNR=4.3 | | | | | | |
| **LZH** | **Lanzhou** | **144.24** | **354** | *e*PKP | PKPbc | 16 25 27.8 | +0.8 |
| LZH | | | | pPKP | PKiKP | 16 25 39.3 | +6.8 |
| LZH | | | | sPKP | | 16 25 43.8 | |
| LZH | | | | LN | | | |
| | 110nm,18.0s | | | | | | |
| LZH | | | | LE | | | |
| | 120nm,18.2s | | | | | | |
| LZH | | | | LZ | | | |
| | 150nm,20.1s | | | | | | |
| **CD2** | **Chengdu** | **149.36** | **352** | PKPbc | **PKPdf** | **16 25 35.5** | **-2.0** |

*IDC* ***20*** *16:23:54.3±1.3, 8.69S×119.95E, h0km, mb3.6/3, mb1 4.0/4, mb1mx3.6/25, mbtmp3.7/4, ML4.0/1, MS3.2/1, Ms1 3.2/1, ms1mx2.6/23, Error ellipse: s-maj=90.9km s-min=25.4km az=57.0*

*AUST* ***20*** *16:24:07.4, 9.00S×120.48E, h100km*

*ISCJB* ***20*** *16:24:08.8±0.5, 8.67S±0.07×120.45E±0.06, h150km, mb3.1/2, Error ellipse: s-maj=10.6km s-min=7.2km az=23.2*

*DJA* ***20*** *16:24:11.0±0.7, 9°S±4°×12°0E±°, h115km±7km, M3.9/3, MLv3.9/3*

**ISC 20 16:24:10.5±0.8, 8.67S±0.07×120.47E±0.07, h150km, n23, σ1882/21, Flores region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WSI** | **Waingapu** | **1.00** | **190** | P | **Pn** | **16 24 33.5** | **-1.8** |
| WSI | | | | S | **Sn** | **16 24 50.5** | **-3.8** |
| **EDFI** | **Ende, Flores** | **1.21** | **94** | P | **Pn** | **16 24 35.5** | **-1.7** |
| **BASI** | **Baing, Sumba** | **1.54** | **176** | P | **Pn** | **16 24 39.5** | **-1.0** |
| **MMRI** | **Maumere** | **1.75** | **89** | P | **Pn** | **16 24 41.3** | **-1.4** |
| **BKSI** | **Bulukumba** | **3.35** | **354** | P | **Pn** | **16 25 01.6** | **-0.7** |
| **TWSI** | **Taliwang, Sumb** | **3.55** | **269** | P | **Pn** | **16 25 04.1** | **-0.8** |
| **SOEI** | **Soe** | **3.90** | **106** | P | **Pn** | **16 25 08.5** | **-1.0** |
| **JAGI** | **Jajag, Banyuwa** | **6.25** | **271** | P | Pn | 16 25 37.0 | -3.6 |
| | baz=6.3,SNR=16 | | | | | | |
| **UGM** | **Wanagama** | **9.88** | **274** | P | **Pn** | **16 26 27.8** | **-1.2** |
| | baz=9.8,SNR=4.0 | | | | | | |
| **KNRA** | **Kununurra** | **10.68** | **131** | P | **Pn** | **16 26 37.7** | **-1.8** |
| | baz=10,SNR=39 | | | | | | |
| **MTN** | **Manton Dam** | **11.26** | **113** | P | **Pn** | **16 26 45.6** | **-1.6** |
| | baz=11,SNR=31 | | | | | | |
| **KDU** | **Kakadu** | **12.45** | **110** | P | Pn | 16 27 00.4 | -2.2 |
| | baz=12,SNR=4.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.48** | **131** | P | **P** | **16 28 04.0** | **-0.1** |
| | 0.5nm,0.3s,baz=307,slow=12,SNR=36 | | | | | | |
| WRA | | | | S | | 16 31 07.5 | -11 |
| | 0.5nm,0.3s,baz=295,slow=21,SNR=9.3 | | | | | | |
| **WRKA** | **Warakurna** | **17.90** | **156** | P | **P** | **16 28 10.7** | **+1.9** |
| | baz=18,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **19.69** | **141** | P | **P** | **16 28 29.2** | **+1.1** |
| | 4.3nm,0.5s,baz=316,slow=9.3,SNR=68 | | | | | | |
| ASAR | | | | S | **S** | **16 32 03.8** | **+1.6** |
| | 1.1nm,0.8s,baz=314,slow=22,SNR=7.3 | | | | | | |
| **QIS** | **Mount Isa** | **21.93** | **125** | P | **P** | **16 28 53.0** | **+0.9** |
| | baz=22,SNR=5.3 | | | | | | |
| **BBOO** | **Buckleo** | **28.02** | **151** | P | **P** | **16 29 48.8** | **+1.3** |
| | baz=28,SNR=9.8 | | | | | | |
| **HTT** | **Hallett** | **29.95** | **148** | P | P | 16 30 01.7 | -3.0 |
| | baz=30,SNR=8.6 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **32.67** | **138** | P | **P** | **16 30 30.9** | **+2.3** |
| | baz=32,SNR=12 | | | | | | |
| **ARPS** | **Mount Arapiles** | **34.04** | **148** | P | **P** | **16 30 42.6** | **+2.3** |
| | baz=34,SNR=8.9 | | | | | | |
| **KSRS** | **Korea Array** | **46.41** | **8** | LR | LR | 16 53 07.2 | |
| | comp=Z,25nm,18.8s,baz=335,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.84** | **332** | P | **P** | **16 34 33.7** | **+0.3** |
| | 0.2nm,0.6s,baz=139,slow=6.3,SNR=2.5 | | | | | | |
| **VNDA** | **Vanda** | **72.08** | **171** | P | **P** | **16 35 20.4** | **+2.5** |
| | 0.2nm,0.5s,baz=330,slow=7.5,SNR=6.0 | | | | | | |

**IDC 20 16:52:15.6±2.0, 1.26N×126.16E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.2/33, mbtmp3.3/3, Error ellipse: s-maj=172.4km s-min=25.4km az=65.0, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.54** | **160** | P | P | 16 57 17.9 | +0.4 |
| | 0.5nm,0.4s,baz=338,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **25.89** | **164** | P | P | 16 57 49.0 | -0.5 |
| | 0.1nm,0.8s,baz=344,slow=11,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.27** | **326** | P | P | 17 02 19.1 | 0.0 |
| | 0.5nm,0.5s,baz=119,slow=8.6,SNR=6.6 | | | | | | |

**IDC 20 17:04:29.5±2.2, 2.43N×128.42E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.2/41, mbtmp3.3/3, Error ellipse: s-maj=156.8km s-min=24.8km az=68.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.98** | **166** | P | P | 17 09 36.4 | +0.4 |
| | 0.4nm,0.3s,baz=346,slow=11,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **26.48** | **169** | P | P | 17 10 08.2 | -0.5 |
| | 0.2nm,0.5s,baz=349,slow=8.0,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.58** | **325** | P | P | 17 14 35.2 | +0.1 |
| | 0.1nm,0.4s,baz=116,slow=8.8,SNR=2.0 | | | | | | |

*ISCJB* ***20*** *17:13:26.7±0.4, 11.64S±0.05×111.89W±0.08, h10km, mb4.8/58, MS4.0/11, Error ellipse: s-maj=10.9km s-min=6.5km az=167.6*

*IDC* ***20*** *17:13:26.4±0.7, 11.65S×112.07W, h0km, mb4.3/11, mb1 4.6/11, mb1mx4.4/26, mbtmp4.3/11, MS4.0/11, Ms1 4.0/11, ms1mx3.9/17, Error ellipse: s-maj=28.5km s-min=16.0km az=54.0*

*NEIC* ***20*** *17

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 530A | J-C Ranch, Com<br>baz=43,SNR=12 | 42.82 | 14 | P | P | 17 21 27.1 | +0.9 |
| 634A | China Grove, S<br>baz=43 | 42.88 | 18 | P | P | 17 21 27.0 | +0.3 |
| 736A | Circle Diamond<br>baz=43 | 42.88 | 19 | P | P | 17 21 28.1 | +1.4 |
| 737A | Port Lavaca<br>baz=43 | 42.91 | 20 | P | P | 17 21 27.1 | +0.2 |
| 531A | Rocksprings<br>baz=43 | 43.02 | 15 | P | P | 17 21 28.7 | +0.7 |
| 635A | Leesville<br>baz=43 | 43.06 | 18 | P | P | 17 21 28.6 | +0.5 |
| 532A | Rocksprings<br>baz=43 | 43.15 | 15 | P | P | 17 21 29.7 | +0.7 |
| 429A | Davenport Ranc<br>baz=43,SNR=10.0 | 43.15 | 13 | P | P | 17 21 29.7 | +0.7 |
| 533A | Kerrville<br>baz=44 | 43.33 | 16 | P | P | 17 21 31.2 | +0.8 |
| 636A | Smothers Creek<br>baz=44 | 43.37 | 19 | P | P | 17 21 32.0 | +1.3 |
| 214A | Organ Pipe Nat<br>baz=44 | 43.38 | 359 | P | P | 17 21 31.5 | +0.8 |
| 534A | Blanco<br>baz=44 | 43.45 | 17 | P | P | 17 21 31.6 | +0.3 |
| 430A | Baggett Ranch,<br>baz=44,SNR=5.8 | 43.45 | 13 | P | P | 17 21 32.1 | +0.7 |
| 431A | Sonora<br>baz=44,SNR=22 | 43.50 | 14 | P | P | 17 21 32.6 | +0.8 |
| JCT | Junction City<br>34nm,1.3s | 43.51 | 15 | eP | P | 17 21 32.3 | +0.4 |
| 637A | Eagle Lake<br>baz=44 | 43.57 | 20 | P | P | 17 21 33.1 | +0.9 |
| MNTX | Cornudas Mount<br>26nm,1.2s | 43.58 | 8 | eP | P | 17 21 31.6 | -0.8 |
| 535A | Dale<br>baz=44 | 43.72 | 18 | P | P | 17 21 33.7 | +0.2 |
| TUC | Tucson<br>5.0nm,0.9s | 43.74 | 1 | eP | P | 17 21 34.6 | +0.9 |
| 432A | Menard<br>baz=44,SNR=5.6 | 43.89 | 15 | P | P | 17 21 35.2 | +0.2 |
| 536A | Bastrop<br>baz=44 | 43.92 | 19 | P | P | 17 21 35.4 | +0.3 |
| 433A | Art<br>baz=44,SNR=9.0 | 43.96 | 16 | P | P | 17 21 35.7 | +0.2 |
| 329A | Wagon Wheel Ra<br>baz=44 | 43.97 | 12 | P | P | 17 21 36.1 | +0.5 |
| 330A | Mertzon<br>baz=44,SNR=14 | 44.06 | 13 | P | P | 17 21 36.7 | +0.3 |
| 121A | Cookes Peak, D<br>baz=44,SNR=13 | 44.13 | 5 | P | P | 17 21 38.2 | +1.2 |
| 121A | Cookes Peak, D<br>14nm,1.0s | 44.13 | 5 | eP | P | 17 21 37.7 | +0.7 |
| 331A | San Angelo<br>baz=44,SNR=9.2 | 44.15 | 14 | P | P | 17 21 37.1 | +0.2 |
| 537A | Green Hill Far<br>baz=44 | 44.16 | 20 | P | P | 17 21 38.0 | +1.0 |
| HKT | Hockley<br>26nm,1.4s | 44.20 | 20 | eP | P | 17 21 37.2 | -0.1 |
| 434A | Burnet<br>baz=44,SNR=7.9 | 44.25 | 17 | P | P | 17 21 38.0 | +0.2 |
| BAR | Barrett<br>16nm,1.3s | 44.32 | 354 | eP | P | 17 21 39.6 | +1.3 |
| 332A | Millersview<br>baz=45,SNR=8.3 | 44.39 | 15 | P | P | 17 21 39.0 | +0.2 |
| 435B | Jarrell<br>baz=45 | 44.42 | 18 | P | P | 17 21 39.6 | +0.5 |
| 229A | Bryant Ranch,<br>baz=45,SNR=6.5 | 44.47 | 12 | P | P | 17 21 39.9 | +0.4 |
| SWSC | Sam W. Stewart<br>baz=45 | 44.51 | 355 | P | P | 17 21 40.9 | +1.1 |
| MONP | Monument Peak<br>baz=45 | 44.51 | 355 | P | P | 17 21 41.2 | +1.2 |
| 333A | Richland Sprin<br>baz=45,SNR=13 | 44.53 | 16 | P | P | 17 21 40.2 | +0.2 |
| 230A | Sterling City<br>baz=45,SNR=6.3 | 44.54 | 13 | P | P | 17 21 40.5 | +0.3 |
| GLA | Glamis<br>baz=45 | 44.55 | 357 | P | P | 17 21 41.0 | +0.9 |
| 109C | Camp Elliot, M<br>baz=45 | 44.57 | 354 | P | P | 17 21 41.5 | +1.2 |
| 436A | Wall Ranch, Ga<br>baz=45 | 44.65 | 19 | P | P | 17 21 41.7 | +0.8 |
| 334A | Lometa<br>baz=45,SNR=13 | 44.74 | 17 | P | P | 17 21 42.0 | +0.2 |
| 231A | Bronte<br>baz=45 | 44.77 | 14 | P | P | 17 21 41.4 | -0.5 |
| SCI | San Clemente I<br>baz=45 | 44.84 | 352 | P | P | 17 21 43.1 | +0.7 |
| CFAA | Coronel Fontan<br>2.2nm,1.0s,baz=289,slow=6.7,SNR=15 | 44.88 | 123 | P | P | 17 21 43.0 | 0.0 |
| 232A | Coleman<br>baz=45,SNR=8.3 | 44.89 | 15 | P | P | 17 21 43.0 | +0.1 |
| 335A | Moody<br>baz=45 | 44.93 | 18 | P | P | 17 21 43.9 | +0.8 |
| 128A | Castleberry Fa<br>baz=45,SNR=20 | 44.96 | 11 | P | P | 17 21 43.8 | +0.2 |
| 438A | Sam Houston St<br>baz=45 | 45.06 | 20 | P | P | 17 21 45.2 | +0.9 |
| 129A | Stewart Farms,<br>baz=45 | 45.10 | 12 | P | P | 17 21 44.8 | +0.2 |
| BC3 | Big Chuckawall<br>baz=46 | 45.19 | 356 | P | P | 17 21 46.2 | +0.9 |
| 336A | Riesel<br>baz=45 | 45.20 | 18 | P | P | 17 21 45.5 | +0.1 |
| PFO | Pinyon Flat Ob<br>4.6nm,1.0s,baz=163,slow=5.6,SNR=4.6 | 45.22 | 355 | P | P | 17 21 46.1 | +0.4 |
| Y12C | Blythe<br>baz=46 | 45.23 | 357 | P | P | 17 21 46.6 | +1.1 |
| CIS | Catalina Islan<br>baz=46 | 45.24 | 352 | P | P | 17 21 47.4 | +1.8 |
| 130A | Snyder<br>baz=46,SNR=11 | 45.26 | 13 | P | P | 17 21 46.2 | +0.3 |
| MURC | Murrieta<br>baz=46 | 45.29 | 354 | P | P | 17 21 47.3 | +1.3 |
| 439A | Center Grove,<br>baz=46 | 45.34 | 21 | P | P | 17 21 46.6 | +0.2 |
| 234A | Clairette<br>baz=46,SNR=7.1 | 45.40 | 17 | P | P | 17 21 47.1 | +0.2 |
| 131A | Roby<br>baz=46,SNR=8.4 | 45.46 | 14 | P | P | 17 21 47.5 | +0.1 |
| BELC | Belle Mtn. Jos<br>baz=46 | 45.57 | 355 | P | P | 17 21 49.5 | +1.1 |
| 440A | Kirbyville<br>baz=46 | 45.59 | 22 | P | P | 17 21 49.5 | +1.1 |
| ABTX | Abilene, Hawle<br>baz=46 | 45.59 | 15 | P | P | 17 21 48.8 | +0.3 |
| ABTX | Abilene, Hawle<br>31nm,1.4s | 45.59 | 15 | eP | P | 17 21 48.9 | +0.4 |
| Z28A | Tucker Farm, M<br>baz=46 | 45.63 | 11 | P | P | 17 21 49.0 | +0.2 |
| IRM | Iron Mountain<br>baz=46,SNR=7.1 | 45.67 | 356 | P | P | 17 21 50.0 | +0.9 |
| Z29A | Hungry Hill Ra<br>baz=46,SNR=6.1 | 45.74 | 12 | P | P | 17 21 49.7 | 0.0 |
| PDMCI | Parker Dam,Lak<br>baz=46 | 45.76 | 358 | P | P | 17 21 50.7 | +1.0 |
| 133A | Hamilton Ranch<br>baz=46 | 45.76 | 15 | P | P | 17 21 50.1 | +0.3 |
| 236A | Katherine and<br>baz=46 | 45.87 | 18 | P | P | 17 21 50.9 | +0.2 |
| Z30A | Sanderson Ranc<br>baz=46,SNR=17 | 45.88 | 13 | P | P | 17 21 50.9 | +0.1 |
| 339A | Huntington<br>baz=46 | 45.91 | 21 | P | P | 17 21 51.3 | +0.4 |
| BBRC | Big Bear Solar<br>baz=46 | 45.91 | 354 | P | P | 17 21 52.5 | +1.2 |
| 134A | White-Moore Ra<br>baz=46 | 45.95 | 16 | P | P | 17 21 51.8 | +0.5 |
| BFSC | Mount Baldy Ra<br>baz=46 | 45.97 | 353 | P | P | 17 21 52.7 | +1.1 |
| 237A | Washetta, Mont<br>baz=46 | 46.10 | 19 | P | P | 17 21 52.9 | +0.4 |
| 135A | Vickery Place,<br>baz=46 | 46.13 | 17 | P | P | 17 21 52.9 | +0.2 |
| Z31A | Sharp Cattle R<br>baz=46 | 46.14 | 14 | P | P | 17 21 53.2 | +0.4 |
| 340A | Bronson<br>baz=46 | 46.22 | 22 | P | P | 17 21 53.4 | 0.0 |
| MSTX | Muleshoe<br>baz=46,SNR=8.4 | 46.22 | 11 | P | P | 17 21 53.5 | 0.0 |
| MSTX | Muleshoe<br>46nm,1.1s | 46.22 | 11 | eP | P | 17 21 53.5 | 0.0 |
| Y28A | McKinney Farm,<br>baz=46 | 46.26 | 11 | P | P | 17 21 54.0 | +0.2 |
| Z32A | Haskell<br>baz=46,SNR=6.5 | 46.28 | 15 | P | P | 17 21 54.3 | +0.4 |
| 136A | Ennis<br>baz=46 | 46.31 | 18 | P | P | 17 21 54.4 | +0.3 |
| GMRC | Granite Mounta<br>baz=47,SNR=5.3 | 46.32 | 356 | P | P | 17 21 55.3 | +1.0 |
| Y29A | Porterfield Fa<br>baz=47,SNR=12 | 46.33 | 12 | P | P | 17 21 54.8 | +0.5 |
| 238A | Jacksonville<br>baz=47 | 46.33 | 20 | P | P | 17 21 54.9 | +0.7 |
| HEC | Hector,Ludlow<br>baz=47 | 46.42 | 355 | P | P | 17 21 56.3 | +1.3 |
| Z33A | Whitaker Ranch<br>baz=47,SNR=7.4 | 46.45 | 15 | P | P | 17 21 55.6 | +0.5 |
| Y30A | Stafford Cattl<br>baz=47,SNR=8.6 | 46.50 | 13 | P | P | 17 21 55.9 | +0.2 |
| W18A | Petrified Fore<br>baz=47 | 46.58 | 3 | P | P | 17 21 57.4 | +1.0 |
| EDW2 | Edwards Air Fo<br>baz=47 | 46.64 | 353 | P | P | 17 21 57.8 | +1.1 |
| ANMO | Albuquerque<br>3.4nm,1.0s | 46.65 | 6 | eP | P | 17 21 57.8 | +0.8 |
| RAR | Rarotonga<br>comp=Z,100nm,20.8s,baz=98,slow=29 | 46.66 | 252 | LR | LR | 17 35 50.4 | |
| 137A | Heron Place, G<br>baz=47 | 46.67 | 19 | P | P | 17 21 57.7 | +0.8 |
| Y31A | Rekieta Farm,<br>baz=47 | 46.73 | 13 | P | P | 17 21 57.8 | +0.4 |
| Z34A | Collier Ranch,<br>baz=47 | 46.75 | 16 | P | P | 17 21 57.8 | +0.2 |
| X28A | Dimmitt<br>baz=47 | 46.86 | 11 | P | P | 17 21 58.3 | -0.2 |
| X29A | Tulia<br>baz=47 | 46.89 | 12 | P | P | 17 21 58.7 | 0.0 |
| Z35A | Perchaven, San<br>baz=47 | 46.90 | 17 | P | P | 17 21 59.0 | +0.3 |
| WUAZ | Wupatki<br>47nm,1.6s | 46.93 | 1 | eP | P | 17 22 00.2 | +1.1 |
| GSC | Goldstone<br>baz=47,SNR=5.3 | 46.93 | 355 | P | P | 17 22 00.3 | +1.3 |
| GSC | Goldstone<br>6.4nm,0.9s | 46.93 | 355 | eP | P | 17 21 59.9 | +0.8 |
| 138A | Matatall Enter<br>baz=47 | 46.94 | 20 | P | P | 17 21 59.8 | +0.8 |
| Y32A | R-V Farms, Ver<br>baz=47,SNR=9.6 | 46.96 | 14 | P | P | 17 21 59.9 | +0.7 |
| ARVC | Arvin<br>baz=47 | 46.99 | 352 | P | P | 17 22 00.6 | +1.3 |
| TUQ | Turquoise Moun<br>baz=47 | 46.99 | 356 | P | P | 17 22 01.0 | +1.4 |
| X30A | Coker Ranch, T<br>baz=47 | 47.06 | 13 | P | P | 17 21 59.8 | -0.2 |
| Z36A | Blue Ridge<br>baz=47 | 47.08 | 18 | P | P | 17 22 00.3 | +0.2 |
| Y33A | Hilltop Ranch,<br>baz=47,SNR=6.1 | 47.17 | 15 | P | P | 17 22 01.2 | +0.5 |
| 139A | Bunkhouse Ranc<br>baz=47 | 47.19 | 20 | P | P | 17 22 01.6 | +0.6 |
| LRMC | Laurel Mountai<br>baz=48 | 47.20 | 354 | P | P | 17 22 01.9 | +0.7 |
| Z37A | Pogue Cattle C<br>baz=48 | 47.27 | 19 | P | P | 17 22 01.5 | -0.1 |
| AMTX | Amarillo<br>45nm,1.4s | 47.31 | 12 | eP | P | 17 22 02.2 | +0.1 |
| SMMC | Simmler<br>baz=48 | 47.33 | 351 | P | P | 17 22 03.1 | +1.0 |
| Y34A | Reagan Ranch,<br>baz=48 | 47.35 | 16 | P | P | 17 22 02.2 | 0.0 |
| X32A | Elmer<br>baz=48 | 47.40 | 14 | P | P | 17 22 03.1 | +0.5 |
| X31A | McDonald Ranch<br>baz=48 | 47.43 | 13 | P | P | 17 22 03.0 | +0.1 |
| ISA | Isabella<br>baz=48 | 47.47 | 353 | P | P | 17 22 04.2 | +1.0 |
| ISA | Isabella<br>8.1nm,1.3s | 47.47 | 353 | eP | P | 17 22 04.3 | +1.0 |
| Y35A | Marietta<br>baz=48 | 47.50 | 17 | P | P | 17 22 03.3 | 0.0 |
| Z38A | Mt. Pleasant<br>baz=48 | 47.52 | 19 | P | P | 17 22 04.1 | +0.6 |
| W28A | Vega<br>baz=48 | 47.58 | 11 | P | P | 17 22 04.1 | 0.0 |
| Y36A | Durant<br>baz=48,SNR=7.9 | 47.71 | 18 | P | P | 17 22 05.8 | +0.8 |
| MPMC | Manual Prospec<br>baz=48,SNR=7.6 | 47.75 | 354 | P | P | 17 22 06.5 | +0.9 |
| WMOK | Wichita Mounta<br>4.0nm,1.0s | 47.82 | 15 | eP | P | 17 22 05.2 | -0.7 |
| X34A | Smith Ranch, M<br>baz=48 | 47.93 | 16 | P | P | 17 22 07.0 | +0.2 |
| V27A | Dan Oppiter Fa<br>baz=48 | 47.95 | 10 | P | P | 17 22 07.2 | +0.2 |
| W31A | Holland Ranch,<br>baz=48 | 47.97 | 13 | P | P | 17 22 07.2 | +0.1 |
| DAC | Davin (Calif)<br>16nm,1.3s | 47.98 | 354 | eP | P | 17 22 08.3 | +1.0 |
| X35A | Drake<br>baz=48,SNR=9.0 | 47.98 | 17 | P | P | 17 22 07.1 | 0.0 |
| Y37A | Hugo<br>baz=48 | 47.99 | 18 | P | P | 17 22 07.7 | +0.5 |
| SHPR | Sheep Range<br>35nm,1.3s | 48.01 | 357 | eP | P | 17 22 07.8 | +0.3 |
| SAML | Samuel<br>25nm,1.0s | 48.05 | 92 | eP | P | 17 22 07.0 | -1.0 |
| V28A | Channing<br>baz=48 | 48.05 | 11 | P | P | 17 22 08.1 | +0.4 |
| W32A | Sentinel<br>baz=48 | 48.08 | 14 | P | P | 17 22 08.1 | +0.2 |
| FURC | Furnace Creek,<br>baz=48 | 48.10 | 355 | P | P | 17 22 09.5 | +1.6 |
| Y38A | Idabel<br>baz=48 | 48.22 | 19 | P | P | 17 22 09.6 | +0.6 |
| W33A | Caddo, Fort Co<br>baz=48 | 48.29 | 15 | P | P | 17 22 10.0 | +0.5 |
| X36A | Centrahoma<br>baz=49 | 48.32 | 17 | P | P | 17 22 09.6 | -0.1 |
| Y39A | Lockesburg<br>baz=49 | 48.44 | 20 | P | P | 17 22 11.2 | +0.6 |
| W34A | Bridge Creek,<br>baz=49 | 48.55 | 16 | P | P | 17 22 12.3 | +0.8 |
| X37A | Clayton<br>baz=49 | 48.63 | 18 | P | P | 17 22 12.2 | +0.1 |
| GRAC | Grapevine Rang<br>baz=49,SNR=5.7 | 48.67 | 354 | P | P | 17 22 13.8 | +1.4 |
| V32A | Arapaho<br>baz=49,SNR=6.3 | 48.69 | 14 | P | P | 17 22 13.3 | +0.7 |
| W35A | Tecumseh<br>baz=49 | 48.72 | 17 | P | P | 17 22 12.6 | -0.2 |
| MVCO | Mesa Verde<br>79nm,2.0s | 48.73 | 4 | eP | P | 17 22 13.4 | +0.3 |
| X38A | Whiteboro<br>baz=49,SNR=5.9 | 48.87 | 19 | P | P | 17 22 14.0 | 0.0 |
| W36A | Wetumka<br>baz=49 | 48.89 | 17 | P | P | 17 22 14.1 | 0.0 |
| V33A | Lossen Ranch,<br>baz=49 | 48.97 | 15 | P | P | 17 22 15.1 | +0.3 |
| T25A | Trinidad<br>baz=49,SNR=6.7 | 49.06 | 8 | P | P | 17 22 16.4 | +0.7 |
| U30A | WK&E Inc. Balk<br>baz=49 | 49.11 | 12 | P | P | 17 22 16.5 | +0.6 |
| W37A | Quinton<br>baz=49 | 49.12 | 18 | P | P | 17 22 15.5 | -0.4 |
| MIAR | Mount Ida<br>8.8nm,1.0s | 49.17 | 20 | eP | P | 17 22 16.2 | 0.0 |
| V34A | Guthrie<br>baz=49 | 49.18 | 16 | P | P | 17 22 16.6 | +0.3 |
| T26A | Comanche Natio<br>baz=50,SNR=14 | 49.22 | 9 | P | P | 17 22 17.3 | +0.5 |
| T27A | Campo<br>baz=50,SNR=6.7 | 49.24 | 10 | P | P | 17 22 17.1 | +0.1 |
| V35A | Meyer Ranch, C<br>baz=50 | 49.30 | 16 | P | P | 17 22 17.4 | +0.2 |
| U32A | Winter Ranch,<br>baz=50 | 49.33 | 14 | P | P | 17 22 17.6 | +0.1 |
| W38A | Poteau<br>baz=50 | 49.34 | 19 | P | P | 17 22 17.6 | +0.1 |
| S22A | 4UR Ranch, Cre<br>baz=50,SNR=7.1 | 49.39 | 5 | P | P | 17 22 19.2 | +1.0 |
| SDCO | Great Sand Dun<br>33nm,1.1s | 49.53 | 7 | eP | P | 17 22 19.6 | +0.3 |
| V36A | Jenks<br>baz=50 | 49.57 | 17 | P | P | 17 22 19.1 | -0.2 |
| T29A | Hugoton<br>baz=50 | 49.59 | 11 | P | P | 17 22 19.9 | +0.3 |
| U33A | Lingo Farm, Me<br>baz=50 | 49.60 | 15 | P | P | 17 22 19.7 | +0.2 |
| S26A | Kim<br>baz=50,SNR=15 | 49.67 | 9 | P | P | 17 22 20.7 | +0.5 |
| TUL1 | Tulsa<br>baz=50 | 49.73 | 17 | P | P | 17 22 21.0 | +0.5 |
| U34A | Anderson Ranch<br>baz=50 | 49.75 | 15 | P | P | 17 22 20.4 | -0.2 |
| S27A | Las Animas<br>baz=50 | 49.82 | 9 | P | P | 17 22 21.5 | +0.2 |
| T31A | Randall Ranch,<br>baz=50 | 49.87 | 13 | P | P | 17 22 21.9 | +0.3 |
| R11A | Troy Canyon, C<br>baz=50,SNR=7.9 | 49.87 | 356 | P | P | 17 22 23.2 | +1.5 |
| U35A | Pawnee<br>baz=50 | 49.90 | 16 | P | P | 17 22 21.9 | +0.1 |
| V37A | Hulbert<br>baz=50,SNR=5.2 | 49.90 | 18 | P | P | 17 22 21.0 | -0.7 |
| S28A | Manter<br>baz=50 | 49.90 | 10 | P | P | 17 22 22.1 | +0.2 |
| MSU | Marysvale<br>5.4nm,1.2s | 49.92 | 360 | eP | P | 17 22 23.5 | +1.3 |
| T32A | Huddler Ranch,<br>baz=50 | 50.11 | 14 | P | P | 17 22 23.6 | +0.2 |
| T33A | Patterson Ranc<br>baz=50 | 50.18 | 14 | P | P | 17 22 24.4 | +0.4 |
| NVAR | Mina Array Bea<br>8.3nm,0.9s,baz=179,slow=10.0,SNR=53 | 50.18 | 354 | P | P | 17 22 24.4 | +0.2 |
| NVAR | comp=Z,160nm,18.9s,baz=210,slow=30 | | | LR | LR | 17 38 55.6 | |
| U36A | Oologah<br>baz=50 | 50.20 | 17 | P | P | 17 22 23.9 | -0.1 |
| S30A | Montezuma<br>baz=50 | 50.22 | 12 | P | P | 17 22 24.5 | +0.2 |
| T34A | McClaskey Farm<br>baz=51 | 50.39 | 15 | P | P | 17 22 25.4 | -0.1 |
| U37A | Salina<br>baz=51,SNR=5.2 | 50.39 | 18 | P | P | 17 22 25.0 | -0.5 |
| S31A | Mullinville<br>baz=51 | 50.41 | 13 | P | P | 17 22 25.9 | +0.2 |
| R27A | Eads<br>baz=51 | 50.43 | 9 | P | P | 17 22 26.0 | 0.0 |
| T35A | Sooner Cattle<br>baz=51 | 50.47 | 16 | P | P | 17 22 26.1 | 0.0 |
| SRU | San Rafael<br>42nm,1.7s | 50.53 | 1 | eP | P | 17 22 27.6 | +0.9 |
| U38A | Gravette<br>baz=51 | 50.64 | 18 | P | P | 17 22 27.1 | -0.3 |
| R28A | Tribune<br>baz=51 | 50.65 | 10 | P | P | 17 22 27.4 | -0.2 |
| Q24A | Divide<br>baz=51 | 50.77 | 7 | P | P | 17 22 29.0 | +0.2 |
| T36A | Boggs Farm, Ca<br>baz=51 | 50.78 | 17 | P | P | 17 22 28.4 | 0.0 |
| R29A | Marienthal<br>baz=51 | 50.85 | 11 | P | P | 17 22 29.2 | +0.2 |
| R30A | Dighton<br>baz=51,SNR=8.0 | 50.88 | 12 | P | P | 17 22 29.2 | -0.1 |
| R31A | Burdett<br>baz=51 | 51.04 | 13 | P | P | 17 22 30.2 | -0.2 |
| S34A | Willow Spring<br>baz=51 | 51.05 | 15 | P | P | 17 22 30.6 | +0.1 |
| T37A | Cheneyville 18<br>baz=51 | 51.12 | 18 | P | P | 17 22 30.8 | -0.2 |
| KSCO | Kaye Shedlock'<br>baz=51 | 51.16 | 9 | P | P | 17 22 31.5 | 0.0 |
| S35A | Otter Creek Ra<br>baz=52 | 51.24 | 16 | P | P | 17 22 32.0 | +0.1 |
| Q29A | Oakley<br>baz=52 | 51.33 | 11 | P | P | 17 22 32.4 | -0.2 |
| Q28A | Sharon Springs<br>baz=52 | 51.35 | 10 | P | P | 17 22 32.7 | -0.1 |
| R32A | Long Quarter,<br>baz=52 | 51.35 | 13 | P | P | 17 22 32.8 | 0.0 |
| NLU | North Lily Min<br>3.1nm,0.4s | 51.36 | 360 | eP | P | 17 22 34.0 | +1.0 |
| MPU | Maple Canyon<br>10nm,0.5s | 51.42 | 0 | eP | P | 17 22 34.7 | +1.2 |
| S36A | Lake Cedric, C<br>baz=52 | 51.48 | 17 | P | P | 17 22 33.5 | -0.2 |
| ISCO | Idaho Springs<br>11nm,1.1s | 51.54 | 6 | eP | P | 17 22 34.9 | +0.4 |
| Q30A | Quinter<br>baz=52 | 51.56 | 12 | P | P | 17 22 34.3 | -0.1 |
| R34A | Isabella, Hill<br>baz=52,SNR=8.4 | 51.58 | 15 | P | P | 17 22 34.6 | +0.1 |
| DUG | Dugway<br>19nm,1.4s | 51.60 | 359 | eP | P | 17 22 35.5 | +0.8 |
| S37A | Fort Scott<br>baz=52 | 51.73 | 17 | P | P | 17 22 35.5 | -0.1 |
| Q31A | Ellis<br>baz=52 | 51.76 | 12 | P | P | 17 22 36.1 | +0.2 |
| P28A | Saint Francis<br>baz=52 | 51.86 | 10 | P | P | 17 22 37.4 | +0.7 |
| R35A | Emporia Munici<br>baz=52 | 51.88 | 16 | P | P | 17 22 37.2 | +0.6 |
| Q32A | Meitler Ranch,<br>baz=52,SNR=5.1 | 51.93 | 13 | P | P | 17 22 37.1 | 0.0 |
| P29A | Atwood<br>baz=52 | 52.03 | 11 | P | P | 17 22 38.5 | +0.6 |
| R36A | Gordon, Harris<br>baz=52 | 52.06 | 16 | P | P | 17 22 38.5 | +0.4 |
| Q33A | Connelly Farm,<br>baz=52 | 52.10 | 14 | P | P | 17 22 38.8 | +0.5 |
| P30A | Selden<br>baz=52 | 52.11 | 11 | P | P | 17 22 39.0 | +0.6 |
| ELK | Elko<br>11nm,1.1s | 52.23 | 357 | eP | P | 17 22 40.5 | +1.0 |
| P31A | Stockton<br>baz=52 | 52.26 | 12 | P | P | 17 22 40.0 | +0.5 |
| Q35A | Mercer Eighty,<br>baz=53 | 52.42 | 16 | P | P | 17 22 41.1 | +0.4 |
| O03D | Paynes Creek<br>baz=53 | 52.49 | 351 | P | P | 17 22 42.5 | +1.2 |
| TCUT | Toone Canyon<br>48nm,1.4s | 52.52 | 1 | eP | P | 17 22 42.9 | +1.2 |
| P33A | Williams Farm,<br>baz=53 | 52.55 | 14 | P | P | 17 22 42.3 | +0.6 |
| N23A | Red Feather La<br>baz=53 | 52.59 | 6 | P | P | 17 22 42.5 | +0.2 |
| N28A | Pribbeno Ranch<br>baz=53 | 52.98 | 10 | P | P | 17 22 45.4 | +0.5 |
| HWUT | Hardware Ranch<br>8.2nm,0.9s | 53.01 | 0 | eP | P | 17 22 45.7 | +0.5 |
| P35A | Duane Minner,<br>baz=53 | 53.06 | 15 | P | P | 17 22 45.7 | +0.3 |
| CCM | Cathedral Cave<br>32nm,1.5s | 53.14 | 20 | eP | P | 17 22 44.6 | -1.4 |
| O33A | Hebron<br>baz=53 | 53.19 | 14 | P | P | 17 22 46.9 | +0.6 |
| CPUP | Villa Florida<br>1.5nm,0.5s,baz=269,slow=10,SNR=6.8 | 53.33 | 114 | P | P | 17 22 47.4 | -0.3 |
| CPUP | 1.4nm,0.8s,baz=301,slow=5.9,SNR=2.0 | | | PcP | PcP | 17 23 56.0 | +0.7 |
| CPUP | comp=Z,268nm,21.5s,baz=270,slow=31 | | | LR | LR | 17 41 02.1 | |
| P36A | Good Intent, A<br>baz=54 | 53.36 | 16 | P | P | 17 22 47.8 | +0.1 |
| O34A | Beatrice<br>baz=54 | 53.50 | 15 | P | P | 17 22 49.0 | +0.3 |
| M02C | Callahan<br>baz=54 | 53.74 | 350 | P | P | 17 22 51.3 | +0.8 |
| O35A | Humboldt<br>baz=54 | 53.78 | 15 | P | P | 17 22 50.8 | +0.1 |
| MOD | Modoc<br>17nm,1.2s | 53.85 | 352 | eP | P | 17 22 52.2 | +0.8 |
| M04C | Macdoel<br>baz=54,SNR=5.1 | 53.95 | 351 | P | P | 17 22 52.9 | +0.8 |
| WVOR | Wild Horse Val<br>25nm,1.3s | 54.18 | 354 | eP | P | 17 22 54.6 | +0.9 |
| K22A | Casper<br>baz=55,SNR=7.4 | 54.28 | 5 | P | P | 17 22 54.7 | +0.2 |
| K22A | Casper<br>46nm,1.4s | 54.28 | 5 | eP | P | 17 22 54.8 | +0.2 |
| REDW | Red Top Meadow<br>24nm,1.5s | 54.77 | 1 | eP | P | 17 22 57.6 | -0.6 |
| L31A | Butterfield Fa<br>baz=55 | 54.92 | 12 | P | P | 17 22 59.6 | +0.5 |
| MFID | Camas Ranch<br>21nm,1.1s | 54.93 | 357 | eP | P | 17 22 60.0 | +0.8 |
| K28A | Ten Mile Ranch<br>baz=55 | 54.98 | 10 | P | P | 17 23 00.0 | +0.5 |
| HLID | Hailey<br>24nm,1.4s | 55.01 | 358 | eP | P | 17 23 00.4 | +0.6 |
| LOHW | Long Hollow<br>4.3nm,0.9s | 55.03 | 1 | eP | P | 17 22 59.4 | -0.6 |
| MOOW | Moose Ponds<br>4.6nm,1.0s | 55.16 | 1 | eP | P | 17 23 00.2 | -0.7 |
| J25A | Sunshine Ranch<br>baz=56 | 55.30 | 7 | P | P | 17 23 01.9 | 0.0 |
| IMW | Indian Meadow<br>31nm,1.3s | 55.30 | 1 | eP | P | 17 23 01.4 | -0.7 |
| J26A | Sides Ranch, S<br>baz=56,SNR=5.7 | 55.31 | 8 | P | P | 17 23 02.2 | +0.3 |
| J05D | Fort Rock, OR<br>baz=56 | 55.34 | 352 | P | P | 17 23 02.9 | +0.7 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **J04D** | **Umpqua Nationa** baz=56 | **55.42** | **351** | P | | **P** | 17 23 03.7 | +0.9 |
| **FLWY** | **Flagg Ranch** 73nm,1.6s | **55.49** | **1** | *eP* | | **P** | 17 23 03.4 | +0.1 |
| **K32A** | **Verdigre** baz=56 | **55.57** | **13** | P | | **P** | 17 23 03.9 | +0.3 |
| **J28A** | **Allard Ranch,** baz=56 | **55.70** | **9** | P | | **P** | 17 23 04.7 | 0.0 |
| **J29A** | **Okreek** baz=56 | **55.83** | **10** | P | | **P** | 17 23 05.6 | 0.0 |
| **I25A** | **Rochford** baz=56,SNR=9.4 | **55.93** | **7** | P | | **P** | 17 23 06.5 | +0.1 |
| **RSSD** | **Black Hills** 16nm,1.1s | **55.99** | **7** | *eP* | | **P** | 17 23 06.9 | -0.1 |
| **I04A** | **Tendick Farm,** baz=56 | **56.01** | **351** | P | | **P** | 17 23 07.7 | +0.8 |
| **J31A** | **Geddes** baz=56 | **56.02** | **12** | P | | **P** | 17 23 06.9 | 0.0 |
| **I26A** | **New Underwood** baz=56 | **56.05** | **8** | P | | **P** | 17 23 07.6 | +0.4 |
| **I03D** | **Drain, OR** baz=56 | **56.06** | **350** | P | | **P** | 17 23 07.6 | +0.5 |
| **I27A** | **Quinn** baz=56 | **56.20** | **9** | P | | **P** | 17 23 08.9 | +0.7 |
| **MCMT** | **McKenzie Canyo** | **56.23** | **359** | *eP* | | **P** | 17 23 08.8 | +0.1 |
| **QLMT** | **Earthquake Lak** 3.1nm,1.4s | **56.23** | **0** | *eP* | | **P** | 17 23 09.6 | +1.0 |
| **I28A** | **Midland** baz=56 | **56.27** | **9** | P | | **P** | 17 23 09.1 | +0.4 |
| **H25A** | **Fruitdale** baz=57 | **56.53** | **7** | P | | **P** | 17 23 10.5 | -0.1 |
| **H26A** | **Fairpoint** baz=57 | **56.64** | **8** | P | | **P** | 17 23 11.2 | -0.1 |
| **H27A** | **Howes** baz=57 | **56.75** | **8** | P | | **P** | 17 23 12.3 | +0.2 |
| **DLMT** | **Dillon** 20nm,1.4s | **56.76** | **359** | *eP* | | **P** | 17 23 12.7 | +0.3 |
| **H28A** | **Mission Ridge** baz=57 | **56.95** | **9** | P | | **P** | 17 23 13.8 | +0.3 |
| **G25A** | **Newell** baz=57 | **57.12** | **7** | P | | **P** | 17 23 14.7 | -0.1 |
| **I33A** | **Coleman** baz=57 | **57.15** | **13** | P | | **P** | 17 23 15.1 | +0.2 |
| **J37A** | **Redenius Farm,** baz=58 | **57.24** | **16** | P | | **P** | 17 23 15.2 | -0.4 |
| **G05D** | **Wamic, OR** baz=58 | **57.27** | **352** | P | | **P** | 17 23 15.7 | -0.1 |
| **G26A** | **Maurine** baz=58 | **57.33** | **8** | P | | **P** | 17 23 16.2 | 0.0 |
| **G28A** | **Parade** baz=58 | **57.36** | **9** | P | | **P** | 17 23 16.6 | +0.3 |
| **H32A** | **Carlson Farm,** baz=58 | **57.44** | **12** | P | | **P** | 17 23 16.8 | -0.2 |
| **G27A** | **Dupree** baz=58 | **57.50** | **8** | P | | **P** | 17 23 17.4 | 0.0 |
| **H33A** | **Prehn Over Nor** baz=58 | **57.76** | **13** | P | | **P** | 17 23 18.8 | -0.5 |
| **F25A** | **Bowman** baz=58 | **57.84** | **7** | P | | **P** | 17 23 19.9 | +0.1 |
| **F26A** | **Lodgepole** baz=58 | **57.86** | **8** | P | | **P** | 17 23 20.1 | +0.1 |
| **I37A** | **Lemond, Waseca** baz=58 | **57.94** | **16** | P | | **P** | 17 23 20.6 | +0.1 |
| **F27A** | **Lemmon** baz=58 | **57.97** | **8** | P | | **P** | 17 23 20.5 | -0.2 |
| **TRW** | **Toppenish Ridg** | **58.20** | **353** | P | | **P** | 17 23 23.6 | +1.3 |
| **I38A** | **Scanlan Farm,** baz=58 | **58.26** | **17** | P | | **P** | 17 23 22.4 | -0.3 |
| **LAO** | **LASA Array** 22nm,1.1s | **58.32** | **5** | *eP* | | **P** | 17 23 22.7 | -0.4 |
| **CHMT** | **Chamberlain Mo** | **58.32** | **359** | P | | **P** | 17 23 23.3 | 0.0 |
| **H36A** | **Jessenland, He** baz=59 | **58.33** | **15** | P | | **P** | 17 23 23.3 | +0.1 |
| **E26A** | **Carlson Angus** baz=59 | **58.50** | **8** | P | | **P** | 17 23 24.4 | 0.0 |
| **E28A** | **Huff** baz=59 | **58.85** | **9** | P | | **P** | 17 23 26.7 | -0.1 |
| **F33A** | **5 Mile Ranch,** baz=59 | **58.96** | **13** | P | | **P** | 17 23 27.6 | 0.0 |
| **G36A** | **St. Michael** baz=59 | **58.99** | **15** | P | | **P** | 17 23 27.8 | +0.1 |
| **D26A** | **Manning** baz=59 | **59.05** | **8** | P | | **P** | 17 23 28.5 | +0.2 |
| **D25A** | **Fairfield** baz=59 | **59.06** | **7** | P | | **P** | 17 23 28.5 | +0.2 |
| **E30A** | **Jud** baz=59 | **59.08** | **10** | P | | **P** | 17 23 28.2 | -0.2 |
| **SPMN** | **St. Paul** baz=60 | **59.22** | **16** | P | | **P** | 17 23 29.6 | +0.2 |
| **BSMT** | **Bassoo Peak** | **59.30** | **358** | P | | **P** | 17 23 30.1 | 0.0 |
| **ETW** | **Entiat** | **59.47** | **353** | P | | **P** | 17 23 32.2 | +1.0 |
| **WTV** | **Waterville** | **59.52** | **354** | P | | **P** | 17 23 32.5 | +1.0 |
| **F36A** | **Milaca** baz=60 | **59.63** | **15** | P | | **P** | 17 23 31.9 | -0.3 |
| **D30A** | **Buchanan** baz=60 | **59.69** | **10** | P | | **P** | 17 23 32.4 | -0.2 |
| **C06D** | **Leavenworth** baz=60 | **59.85** | **353** | P | | **P** | 17 23 34.3 | +0.6 |
| **C26A** | **Wahner Farm, P** baz=60 | **59.88** | **8** | P | | **P** | 17 23 34.4 | +0.5 |
| **B25A** | **Knox Farm, Ray** baz=60 | **60.18** | **7** | P | | **P** | 17 23 36.2 | +0.2 |
| **C30A** | **Mose, Pekin** baz=61 | **60.32** | **10** | P | | **P** | 17 23 36.8 | -0.1 |
| **B05A** | **Bryant** baz=61 | **60.34** | **352** | P | | **P** | 17 23 37.6 | +0.6 |
| **B28A** | **Dugan Ranch, T** baz=61 | **60.73** | **9** | P | | **P** | 17 23 39.9 | +0.2 |
| **A25A** | **Svangstu Ranch** baz=61 | **60.85** | **7** | P | | **P** | 17 23 41.1 | +0.6 |
| **A26A** | **Wade Farm, Ken** baz=61 | **60.94** | **7** | P | | **P** | 17 23 41.2 | +0.1 |
| **A29A** | **Manning Farm,** baz=62 | **61.37** | **10** | P | | **P** | 17 23 44.0 | 0.0 |
| **C36A** | **Pine Crest Far** baz=62 | **61.57** | **15** | P | | **P** | 17 23 45.6 | +0.3 |
| **C37A** | **Embarrass** baz=62 | **61.70** | **15** | P | | **P** | 17 23 46.7 | +0.3 |
| **B34A** | **Aery, Baudette** baz=62 | **61.83** | **13** | P | | **P** | 17 23 47.5 | +0.4 |
| **BDFB** | **Brasilia** 4.5nm,0.7s,baz=233,slow=2.6,SNR=5.4 | **62.09** | **102** | P | | **P** | 17 23 49.4 | -0.4 |
| BDFB | comp=Z,127nm,19.4s,baz=160,slow=34 | | | LR | | LR | 17 48 27.5 | |
| **A33A** | **Warroad** baz=62 | **62.10** | **12** | P | | **P** | 17 23 49.0 | +0.1 |
| **YKA** | **Yellowknife Ar** 2.0nm,0.9s,baz=176,slow=5.9,SNR=6.9 | **73.95** | **359** | P | | **P** | 17 25 02.8 | -0.3 |
| **SBA** | **Scott Base** 18nm,1.6s | **76.83** | **192** | *eP* | | **P** | 17 25 21.3 | +1.7 |
| **VNDA** | **Vanda** 2.4nm,1.1s,baz=91,slow=6.7,SNR=6.0 | **77.86** | **193** | P | | **P** | 17 25 26.6 | +1.2 |
| VNDA | comp=Z,76nm,18.8s,baz=84,slow=30 | | | LR | | LR | 17 52 21.0 | |
| **QSPA** | **South Pole Qui** 14nm,1.3s | **78.42** | **180** | *eP* | | **P** | 17 25 30.0 | +1.1 |
| **ILAR** | **Eielson Array** 0.6nm,0.9s,baz=180,slow=6.3,SNR=4.5 | **80.63** | **346** | P | | **P** | 17 25 39.9 | -0.7 |
| ILAR | comp=Z,43nm,18.2s,baz=150,slow=32 | | | LR | | LR | 17 55 52.3 | |
| **KTH** | **Kantishna Hill** 54nm,1.6s | **80.70** | **343** | *eP* | | **P** | 17 25 40.1 | -1.0 |
| **VNA3** | **Neumayer Olymp** | **82.96** | **161** | P | | **P** | 17 25 53.1 | +0.1 |
| **VNA1** | **Neumayer--Stat** | **83.57** | **161** | P | | **P** | 17 25 56.2 | +0.2 |
| **VNA2** | **Neumayer--Watz** baz=261,slow=2.8 | **83.76** | **161** | P | | **P** | 17 25 57.1 | 0.0 |
| **SNAA** | **Sanae** | **84.90** | **163** | P | | **P** | 17 26 01.8 | -1.1 |
| **H11S2** | **WAKE ISLAND Hy** baz=104,slow=75,SNR=85 | **85.58** | **290** | T | | T | 19 00 30.1 | |
| **H11S1** | **WAKE ISLAND Hy** baz=104,slow=75,SNR=74 | **85.59** | **290** | T | | T | 19 00 30.0 | |
| **H11S3** | **WAKE ISLAND Hy** baz=104,slow=75,SNR=68 | **85.59** | **290** | T | | T | 19 00 27.0 | |
| **H11N3** | **WAKE ISLAND Hy** baz=105,slow=75,SNR=58 | **85.68** | **291** | T | | T | 19 00 33.6 | |
| **H11N2** | **WAKE ISLAND Hy** baz=105,slow=75,SNR=54 | **85.70** | **291** | T | | T | 19 00 39.1 | |
| **H11N1** | **WAKE ISLAND Hy** baz=105,slow=75,SNR=45 | **85.70** | **291** | T | | T | 19 00 34.8 | |
| **HNR** | **Honiara** comp=Z,118nm,18.6s,baz=58,slow=30 | **86.26** | **261** | LR | | LR | 17 57 17.0 | |
| **PETK** | **Petropavlovsk-** comp=Z,34nm,20.6s,baz=101,slow=29 | **99.42** | **322** | LR | | LR | 18 02 03.9 | |
| **STHS** | **Stebnicka Huta** | **126.18** | **36** | *e*PKP | | **PKPdf** | 17 32 31.0 | +0.1 |
| **AKASG** | **Malin Array Be** 0.3nm,0.4s,baz=303,slow=2.0,SNR=8.6 | **129.84** | **31** | PKP | | **PKPdf** | 17 32 36.4 | -1.3 |
| **MLR** | **Muntele Rosu** 1.2nm,1.1s,baz=33,slow=16,SNR=3.8 | **130.87** | **39** | PKP | | **PKPdf** | 17 32 39.5 | -0.5 |
| **SONM** | **Songino Array** 0.3nm,0.4s,baz=0.0,slow=2.9,SNR=2.9 | **131.75** | **326** | PKP | | **PKPdf** | 17 32 40.4 | -1.2 |
| **BVAR** | **Borovoye Array** 0.3nm,0.4s,baz=52,slow=3.3,SNR=3.2 | **138.71** | **358** | PKhKP | | PKPpre | 17 32 44.1 | |
| BVAR | 0.4nm,0.4s,baz=56,slow=5.6,SNR=4.4 | | | PKP | | **PKPdf** | 17 32 54.6 | +0.3 |
| **BRTR** | **Keskin Array B** 0.6nm,0.8s,baz=23,slow=1.5,SNR=3.3 | **138.72** | **41** | PKhKP | | PKPpre | 17 32 47.7 | |
| BRTR | 3.9nm,1.0s,baz=246,slow=1.4,SNR=13 | | | PKP | | **PKPdf** | 17 32 54.8 | -0.1 |
| **MKAR** | **Makanchi Array** 0.3nm,0.6s,baz=64,slow=3.4,SNR=3.4 | **142.97** | **344** | PKhKP | | PKPpre | 17 32 56.5 | |
| MKAR | 1.6nm,0.8s,baz=58,slow=3.0,SNR=12 | | | PKP | | **PKPdf** | 17 33 01.9 | -0.4 |
| **EIL** | **Elat** 20nm,1.0s,baz=269,slow=1.8,SNR=9.5 | **144.43** | **55** | PKP | | PKPbc | 17 33 03.9 | +0.2 |
| **ASF** | **Jabal al Asfar** 26nm,1.1s,baz=249,slow=0.4,SNR=17 | **144.85** | **50** | PKP | | **PKPdf** | 17 33 05.7 | -0.3 |
| **GNI** | **Garni** | **144.97** | **32** | *e*PKPdf | | **PKPab** | 17 33 04.9 | -0.4 |
| **IPM** | **Ipoh** | **146.57** | **260** | *e*PKPdf | | **PKPbc** | 17 33 10.6 | -0.3 |
| **KMBO** | **Kilima Mbogo** 5.8nm,1.0s,baz=264,slow=2.7,SNR=11 | **146.90** | **111** | PKPbc | | **PKPab** | 17 33 12.8 | -0.6 |
| **KMBO** | **Kilima Mbogo** | **146.90** | **111** | *e*PKPdf | | **PKPbc** | 17 33 12.1 | -0.1 |
| KMBO | | | | PKPbc | | **PKPab** | 17 33 12.8 | -0.6 |
| **PSI** | **Prapat** 9.8nm,1.0s,baz=205,slow=6.9,SNR=6.6 | **148.13** | **256** | PKPbc | | **PKPbc** | 17 33 14.2 | -1.2 |
| **TKM2** | **Tokmak 2** | **148.17** | **349** | *e*PKPbc | | **PKPbc** | 17 33 14.1 | -0.7 |
| **AAK** | **Ala-Archa** | **148.64** | **351** | *e*PKPdf | | **PKPdf** | 17 33 12.4 | +0.2 |
| **EKS2** | **Erkin-Say** | **148.72** | **352** | *e*PKPdf | | **PKPdf** | 17 33 12.7 | +0.4 |
| **CHTO** | **Chiang Mai** | **149.36** | **287** | *e*PKPbc | | **PKPbc** | 17 33 18.2 | +0.1 |
| **CMAR** | **Chiang Mai Arr** 5.0nm,0.8s,baz=52,slow=1.0,SNR=9.7 | **149.41** | **287** | PKPbc | | **PKPbc** | 17 33 17.9 | -0.5 |
| **GEYT** | **Alibeck** 1.1nm,0.5s,baz=289,slow=9.2,SNR=5.5 | **152.39** | **17** | PKP | | **PKPdf** | 17 33 16.6 | -1.5 |
| GEYT | 6.8nm,1.0s,baz=285,slow=5.7,SNR=12 | | | PKPbc | | **PKPbc** | 17 33 24.4 | -0.5 |

*IDC **20** 17:25:54.1±1.8, 1.°12N×125.°10E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.3/39, mbtmp3.4/3, MS3.9/1, Ms1 3.9/1, ms1mx2.7/18, Error ellipse: s-maj=175.9km s-min=24.5km az=64.0*
*ISCJB **20** 17:26:05.7±0.8, 1.°01N±0.°08×125.°30E±0.°04, h100km, mb3.2/3, Error ellipse: s-maj=11.1km s-min=5.1km az=15.3*
*DJA **20** 17:26:07.5±1.6, 1.°N±4.°×12.°5E±.°, h30km±22km, M3.8/6, mb4.2/1, MLv3.6/6*

**ISC 20 17:26:06.4**±1.0, **1.°00N**±0.°06×**125.°30E**±0.°05, **h100**km, **n15, s**1**s23**/19, **mb3.3**/3, **Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **1.39** | **252** | P | | **Pn** | **17 26 30.6** | **-0.7** |
| KMSI | | | | S | | **Sn** | **17 26 50.1** | **0.0** |
| **TNTI** | **Ternate** | **2.08** | **96** | P | | **Pn** | **17 26 39.5** | **-0.5** |
| TNTI | | | | S | | **Sn** | **17 27 06.0** | **+0.3** |
| **GTOI** | **Gorontalo** | **2.32** | **261** | P | | **Pn** | **17 26 43.1** | **-0.1** |
| **SGSI** | **Sangihe** | **2.68** | **5** | P | | **Sn** | **17 27 21.9** | **+2.1** |
| **LBMI** | **Labuha** | **2.74** | **126** | P | | **Pn** | **17 26 49.6** | **+0.9** |
| LBMI | | | | S | | **Sn** | **17 27 20.5** | **-0.7** |
| **SANI** | **Sanana** | **3.10** | **167** | P | | **Pn** | **17 26 53.7** | **+0.1** |
| SANI | | | | S | | **Sn** | **17 27 29.6** | **-0.4** |
| **MRSI** | **Marisa** | **3.40** | **261** | P | | **Pn** | **17 26 56.9** | **-0.6** |
| **APSI** | **Ampana** | **4.12** | **243** | P | | **Pn** | **17 27 09.2** | **+2.0** |
| **NLAI** | **Namlea** | **4.58** | **157** | P | | **Pn** | **17 27 13.2** | **-0.3** |
| **MPSI** | **Mapaga** | **5.44** | **265** | P | | **Pn** | **17 27 27.2** | **+2.0** |
| **AAI** | **Ambon** | **5.48** | **148** | P | | **Pn** | **17 27 27.0** | **+1.3** |
| AAI | | | | S | | **Sn** | **17 28 29.7** | **+2.2** |
| **WRA** | **Warramunga Arr** 0.9nm,0.5s,baz=335,slow=11,SNR=15 | **22.62** | **157** | P | | **P** | **17 30 58.7** | **-0.5** |
| **ASAR** | **Alice Springs** 0.4nm,0.5s,baz=343,slow=6.9,SNR=7.2 | **25.91** | **162** | P | | **P** | **17 31 29.5** | **+0.2** |
| **CTA** | **Charters Tower** comp=Z,187nm,18.2s,baz=4.0,slow=43 | **29.34** | **137** | LR | | LR | 17 47 17.2 | |
| **MKAR** | **Makanchi Array** 0.1nm,0.4s,baz=125,slow=8.2,SNR=2.6 | **59.01** | **327** | P | | **P** | **17 35 54.3** | **-1.5** |

**IGQ 20 17:31:34**±1.2, **0.°33S**×**81.°08W**, **h4**km±13km, **Mb4.2, 6C-3D, Error ellipse: s-maj=8.3km s-min=3.5km az=22.9, Off coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CHIS** | **Cerro-Chispas-** | **0.80** | **154** | S | | Sg | 17 31 58.2 | -1.6 |
| **CHIS** | **Cerro-Chispas-** | **0.80** | **154** | P | | Pg | 17 31 49.4 | -0.1 |
| **JAMA** | **Jama** | **0.87** | **86** | P | | Pg | 17 31 50.2 | -0.3 |
| **PECV** | **Mancha de Ca P** | **1.12** | **114** | ⇑P | | Pg | 17 31 50.8 | -4.8 |
| **MAG1** | **Magdalena** | **1.33** | **79** | ⇓P | | Pn | 17 31 59.1 | -0.3 |
| **PAST** | **Pastocalle** | **2.46** | **99** | P | | Pn | 17 32 15.6 | 0.0 |
| **JUA2** | **San Juan 2** | **2.47** | **87** | P | | Pn | 17 32 15.5 | -0.2 |
| **PINO** | **Pino** | **2.47** | **86** | P | | Pn | 17 32 14.1 | -1.8 |
| **TERV** | **Terraza Guagua** | **2.48** | **87** | P | | Pn | 17 32 16.8 | +0.9 |
| **YANA** | **Yana** | **2.51** | **85** | P | | Pn | 17 32 15.9 | -0.4 |
| **CAMI** | **Rancho Maria** | **2.59** | **98** | P | | Pn | 17 32 18.5 | +1.1 |
| **BNAS** | **Cotopaxi Volca** | **2.62** | **98** | P | | Pn | 17 32 18.6 | +0.8 |
| **NAS2** | **Nasa** | **2.63** | **97** | ⇓P | | Pn | 17 32 18.3 | +0.3 |
| **BMOR** | **Cotopaxi Volca** | **2.65** | **99** | ⇑P | | Pn | 17 32 18.0 | -0.3 |
| **PITA** | **Cotopaxi Volc** | **2.65** | **95** | P | | Pn | 17 32 18.1 | -0.1 |
| **BREF** | **Cotopaxi Volca** | **2.66** | **97** | ⇑P | | Pn | 17 32 19.6 | +1.1 |
| **MOV1** | **Cotopaxi Vol s** | **2.66** | **98** | P | | Pn | 17 32 18.4 | -0.2 |
| **BVC2** | **Cotopaxi Volca** | **2.68** | **97** | ⇑P | | Pn | 17 32 19.9 | +1.1 |
| **VC1** | **Cotopaxi 1** | **2.69** | **97** | ⇓P | | Pn | 17 32 19.2 | +0.4 |
| **BTAM** | **Cotopaxi Volca** | **2.70** | **97** | ⇑P | | Pn | 17 32 20.7 | +1.7 |
| **TAMB** | **Tambo** | **2.73** | **98** | P | | Pn | 17 32 19.3 | -0.1 |
| **COV1** | **Cotopaxi Volc** | **2.75** | **97** | P | | Pn | 17 32 19.6 | -0.2 |
| **PISA** | **Pisayambo** | **2.79** | **105** | P | | Pn | 17 32 20.8 | +0.6 |
| **COTA** | **Cotacachi** | **2.81** | **77** | P | | Pn | 17 32 20.6 | +0.1 |
| **BMAS** | **Trigal station** | **2.85** | **114** | ⇑P | | Pn | 17 32 21.1 | +0.4 |
| **BMAS** | **Trigal station** | **2.85** | **114** | P | | Pn | 17 32 21.5 | +0.7 |
| **ARRY** | **Arrayan** | **2.87** | **114** | P | | Pn | 17 32 21.2 | +0.1 |
| **BULB** | **Ulba Tungurahu** | **2.88** | **113** | P | | Pn | 17 32 22.6 | +1.3 |
| **PAT1** | **Patacocha** | **2.89** | **114** | P | | Pn | 17 32 22.4 | +1.0 |
| **BPAT** | **Tungurahua Vol** | **2.89** | **114** | P | | Pn | 17 32 22.9 | +1.4 |
| **ANTI** | **Antisana** | **2.92** | **92** | S | | Sn | 17 32 58.0 | -0.1 |
| **ANTI** | **Antisana** | **2.92** | **92** | P | | Pn | 17 32 22.9 | +0.9 |
| **CAYA** | **Cayambe** | **3.11** | **83** | P | | Pn | 17 32 25.1 | +0.4 |
| **CHAR** | **Charly** | **3.41** | **86** | P | | Pn | 17 32 30.4 | +1.8 |

*JMA **20** 17:53:59.2±0.1, 24.°44N×121.°59E, h36km±2km, M2.8*
*ISCJB **20** 17:54:00.4±0.2, 24.°46N±0.°02×121.°73E±0.°02, h23km±3km, Error ellipse: s-maj=3.5km s-min=2.4km az=140.9*
*TAP **20** 17:54:00.0, 24.°47N×121.°67E, h27km, ML3.6, B*

**ISC 20 17:54:00.4**±0.9, **24.°46N**±0.°02×**121.°69E**±0.°02, **h25**km±5km, **n54**, σ0**s92**/86, **11C-4D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ENA** | **Nanau** baz=124 | **0.06** | **129** | ⇓*iP* | | **Pb** | **17 54 05.0** | **+0.2** |
| **EHP** | **Heping Village** baz=157 | **0.16** | **164** | *eP* | | **Pb** | **17 54 06.2** | **+0.6** |
| **TWC** | **Suao** baz=51 | **0.20** | **44** | ⇓*iP* | | **Pb** | **17 54 06.2** | **0.0** |
| TWC | | | | *i* S | | **Sb** | **17 54 10.2** | **+0.1** |
| **ENTT** | **Nioudou** baz=330 | **0.21** | **327** | ⇑*iP* | | **Pb** | **17 54 06.1** | **-0.2** |
| ENTT | | | | *i* S | | **Sb** | **17 54 10.3** | **+0.1** |
| **TWE** | **Neicheng** baz=7.0 | **0.26** | **355** | ⇑*iP* | | **Pb** | **17 54 06.7** | **-0.1** |
| TWE | | | | *i* S | | **Sb** | **17 54 11.2** | **-0.1** |
| **NNS** | **Nan Shan** baz=263 | **0.29** | **266** | ⇑*iP* | | **Pb** | **17 54 07.2** | **-0.2** |
| NNS | | | | *i* S | | **Sb** | **17 54 11.8** | **-0.5** |
| **ILA** | **Ilan** baz=13 | **0.31** | **9** | ⇑*iP* | | **Pb** | **17 54 07.5** | **0.0** |
| ILA | | | | S | | **Sb** | **17 54 13.0** | **+0.6** |
| **NSK** | **Sanguang** baz=306 | **0.37** | **305** | ⇑*iP* | | **Pb** | **17 54 08.2** | **-0.4** |
| NSK | | | | *i* S | | **Sb** | **17 54 13.3** | **-0.9** |
| **TWD** | **Chiawan** baz=194 | **0.39** | **193** | ⇑*iP* | | **Pb** | **17 54 08.1** | **-0.7** |
| TWD | | | | *e*S | | **Sb** | **17 54 14.7** | **+0.2** |
| **EGS** | baz=35 | **0.44** | **30** | *eP* | | **Pb** | **17 54 09.4** | **-0.2** |
| EGS | | | | *e*S | | **Sb** | **17 54 15.7** | **-0.1** |
| **HWA** | **Hwalien** baz=196 | **0.49** | **190** | *eP* | | **Pb** | **17 54 10.1** | **-0.3** |
| **WHF** | **Hehuan Shan** baz=224 | **0.50** | **231** | ⇑P | | **Pb** | **17 54 10.3** | **-0.6** |
| WHF | | | | *e*S | | **Sb** | **17 54 18.0** | **-0.1** |
| **TWT** | **Tachien** baz=239 | **0.52** | **246** | *eP* | | **Pb** | **17 54 10.9** | **-0.1** |
| TWT | | | | *e*S | | **Sb** | **17 54 18.2** | **0.0** |
| **TWA** | **Mucha** baz=351 | **0.53** | **349** | ⇑*iP* | | **Pb** | **17 54 11.0** | **-0.1** |
| TWA | | | | *i* S | | **Sb** | **17 54 18.1** | **-0.2** |
| **TAP1** | **Taipei** baz=345 | **0.59** | **345** | *i* P | | **Pb** | **17 54 12.3** | **+0.1** |
| TAP1 | | | | S | | **Sb** | **17 54 20.4** | **+0.1** |
| **TAP** | **Taipei** baz=345 | **0.60** | **343** | *i* P | | **Pb** | **17 54 12.4** | **+0.1** |
| TAP | | | | *i* S | | **Sb** | **17 54 20.5** | **+0.1** |
| **TWB1** | **Santiao Chiao** baz=23 | **0.61** | **26** | *eP* | | **Pb** | **17 54 11.8** | **-0.5** |
| TWB1 | | | | *i* S | | **Sb** | **17 54 20.3** | **-0.2** |
| **NWF** | **Wu-fen Shan** baz=8.0 | **0.61** | **7** | *i* P | | **Pb** | **17 54 12.5** | **0.0** |
| NWF | | | | *i* S | | **Sb** | **17 54 20.9** | **+0.1** |
| **NSTT** | **Nanjuang** baz=284 | **0.65** | **285** | *i* P | | **Pn** | **17 54 13.1** | **-0.9** |
| NSTT | | | | *i* S | | **Sb** | **17 54 21.4** | **-0.5** |
| **TWS1** | **Kuangyinshan** baz=340 | **0.68** | **338** | *eP* | | **Pb** | **17 54 13.6** | **-0.1** |
| TWS1 | | | | S | | **Sn** | **17 54 24.1** | **-0.2** |
| **NCU** | **National Centr** baz=318 | **0.68** | **318** | *eP* | | **Pn** | **17 54 13.7** | **-0.7** |
| NCU | | | | *e*S | | **Sn** | **17 54 24.3** | **0.0** |
| **ESL** | **Shilin** baz=198 | **0.69** | **200** | *eP* | | **Pb** | **17 54 11.9** | **-1.8** |
| **HSN** | **Hsinchu** baz=300 | **0.74** | **297** | ⇓*eP* | | **Pb** | **17 54 14.7** | **+0.1** |
| HSN | | | | *i* S | | **Sn** | **17 54 25.2** | **-0.5** |
| **TWQ1** | **Liyutan** baz=261 | **0.85** | **262** | ⇑*iP* | | **Pb** | **17 54 17.1** | **+0.6** |
| TWQ1 | | | | *i* S | | **Sn** | **17 54 28.2** | **-0.1** |
| **NSY** | **Sanyi** baz=274 | **0.85** | **267** | *eP* | | **Pb** | **17 54 17.4** | **+0.8** |
| NSY | | | | *e*S | | **Sn** | **17 54 29.1** | **+0.7** |
| **SMLT** | **Sun Moon Lake** baz=224 | **0.93** | **232** | ⇑*iP* | | **Pb** | **17 54 17.7** | **-0.2** |
| SMLT | | | | *e*S | | **Sb** | **17 54 30.8** | **+1.0** |
| **TYC** | **Yuchr** baz=227 | **0.94** | **234** | ⇑P | | **Pb** | **17 54 18.0** | **-0.1** |
| TYC | | | | *e*S | | **Sb** | **17 54 30.8** | **+0.6** |
| **TCU** | **Taichung** baz=249 | **0.98** | **252** | *eP* | | **Pb** | **17 54 19.5** | **+0.8** |
| **EHY** | **Hungye** baz=191 | **1.01** | **200** | *eP* | | **Pn** | **17 54 17.1** | **-1.9** |
| **WNT** | **Mingjian** baz=237 | **1.09** | **238** | *eP* | | **Pb** | **17 54 21.1** | **+0.5** |
| WNT | | | | S | | **Sb** | **17 54 37.1** | **+2.7** |
| **JYNG** | **Yonaguni jima** | **1.14** | **90** | P | | **Pn** | **17 54 20.5** | **-0.2** |
| **TWF1** | **Yuli** baz=198 | **1.16** | **198** | ⇓*eP* | | **Pn** | **17 54 18.2** | **-2.9** |
| **YUS** | **Yu-Shan** baz=202 | **1.18** | **215** | *eP* | | **Pn** | **17 54 21.1** | **-0.7** |
| **YOJ** | **Yonaguni jima** | **1.20** | **90** | P | | **Pn** | **17 54 21.3** | **-0.2** |
| YOJ | | | | *e*S | | **Sb** | **17 54 38.0** | **+0.5** |
| **YOJ** | **Yonaguni jima** baz=27 | **1.20** | **90** | *eP* | | **Pn** | **17 54 21.6** | **0.0** |
| **ALS** | **Alishan** baz=209 | **1.25** | **221** | *eP* | | **Pb** | **17 54 23.1** | **-0.4** |
| ALS | | | | *e*S | | **Sb** | **17 54 41.9** | **+2.6** |
| **CHN5** | **Tsauling** baz=227 | **1.27** | **227** | *eP* | | **Pb** | **17 54 23.6** | **-0.1** |
| CHN5 | | | | *e*S | | **Sb** | **17 54 41.5** | **+2.0** |
| **WGK** | **Gukeng** baz=244 | **1.29** | **233** | *eP* | | **Pb** | **17 54 23.9** | **-0.1** |
| WGK | | | | *e*S | | **Sb** | **17 54 42.6** | **+2.4** |
| **ELDTW** | **Lidau** baz=193 | **1.41** | **206** | *eP* | | **Pn** | **17 54 23.1** | **-1.5** |
| **CHN4** | **Tsaushan** baz=222 | **1.50** | **223** | *eP* | | **Pb** | **17 54 26.8** | **-0.7** |
| CHN4 | | | | *e*S | | **Sb** | **17 54 48.2** | **+2.2** |
| **STYT** | **Tauyuan** baz=203 | **1.55** | **214** | *eP* | | **Pn** | **17 54 26.6** | **+0.1** |
| **WTP** | **Ta-pu** baz=204 | **1.56** | **219** | *eP* | | **Pb** | **17 54 27.9** | **-0.8** |
| **CHN1** | **Nanshi** baz=205 | **1.66** | **220** | *eP* | | **Pb** | **17 54 29.2** | **-1.2** |
| **SGST** | **Jiashian** baz=202 | **1.71** | **217** | *eP* | | **Pb** | **17 54 30.2** | **-1.0** |
| **TWG** | **Pinlang** baz=187 | **1.73** | **199** | *eP* | | **Pn** | **17 54 28.0** | **-0.9** |
| **IRIF** | **Iriomote-Funau** | **1.86** | **94** | P | | **Pn** | **17 54 30.8** | **+0.2** |
| IRIF | | | | *e*S | | **Sn** | **17 54 53.2** | **-0.1** |
| **SSD** | **Sandimen** baz=196 | **1.97** | **210** | *eP* | | **Pb** | **17 54 33.2** | **-2.3** |
| **HATJ** | **Hateruma jima** | **1.97** | **101** | P | | **Pn** | **17 54 31.9** | **-0.2** |
| **ECL** | **Taimali** baz=190 | **1.98** | **200** | *eP* | | **Pn** | **17 54 33.1** | **+0.9** |
| **JKRS** | **Kuro-shima** | **2.12** | **96** | P | | **Pn** | **17 54 34.8** | **+0.6** |
| JKRS | | | | *e*S | | **Sn** | **17 55 00.9** | **+1.1** |
| **JIJ** | **Ishigaki jima** | **2.23** | **92** | P | | **Pn** | **17 54 35.5** | **-0.3** |
| JIJ | | | | *e*S | | **Sn** | **17 55 02.4** | **-0.2** |
| **JISG** | **Ishigakijimahi** | **2.39** | **86** | P | | **Pn** | **17 54 38.3** | **+0.5** |
| **JTJ** | **Tarama** | **2.75** | **86** | P | | **Pn** | **17 54 43.1** | **+0.3** |
| **KNM** | **Kinmen** baz=264 | **2.97** | **270** | *eP* | | **Pn** | **17 54 46.5** | **+0.6** |

*IDC **20** 18:02:17.6±1.2, 37.°07N×31.°04E, h90km±19km, mb3.4/2, mb1 3.3/7, mb1mx3.0/35, mbtmp3.6/7, Error ellipse: s-maj=14.7km s-min=11.2km az=137.0*
*ISCJB **20** 18:02:18.6±0.4, 37.°06N±0.°02×31.°24E±0.°03, h108km±5km, mb3.6/2, Error ellipse: s-maj=4.4km s-min=3.5km az=152.5*
*DDA **20** 18:02:19.3, 37.°12N×31.°16E, h94km, Md3.3*
*ISK **20** 18:02:19.3, 37.°02N×31.°33E, h71km, MD3.4*
*CSEM **20** 18:02:20.5±0.1, 37.°06N×31.°24E, h80km, MD3.4, Error ellipse: s-maj=3.3km s-min=2.9km az=49.0*
*NIC **20** 18:02:22.4, 36.°95N×31.°41E, h72km, mb4.0, ML3.6*

**ISC 20 18:02:19.3**±0.9, **37.°07N**±0.°03×**31.°23E**±0.°03, **h94**km±8km, **n88**, σ1**s36**/121, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ANTB** | **Antalya** | **0.49** | **250** | *e*PG | | **Pn** | **18 02 33.6** | **-0.8** |
| **ANTB** | **Antalya** | **0.49** | **250** | *e*Pg | | **Pn** | **18 02 33.6** | **-0.8** |
| **BCK** | **Bucak** | **0.64** | **307** | *e*PG | | **Pn** | **18 02 35.7** | **0.0** |
| BCK | | | | *e*SG | | **Sn** | **18 02 46.5** | **-1.5** |
| **BCK** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KONT** | **Konya--Tatoy** | **1.25** | **46** | *e*PN | | **Pn** | **18 02 41.7** | **-0.6** |
| **KONT** | **Konya--Tatoy** | **1.25** | **46** | *e*Pn | | **Pn** | **18 02 41.7** | **-0.6** |
| **AKAS** | **Kas** | **1.55** | **238** | *i* P | | **Pn** | **18 02 46.7** | **+0.7** |
| AKAS | | | | *i* S | | **Sn** | **18 03 08.5** | **+2.3** |
| **AKAS** | **Kas** | **1.55** | **238** | P | | **Pn** | **18 02 46.7** | **+0.7** |
| AKAS | | | | S | | **Sn** | **18 03 08.5** | **+2.3** |
| **SHUT** | **Suhut-Afyon** | **1.57** | **340** | *e*PN | | **Pn** | **18 02 47.0** | **+0.7** |
| **SHUT** | **Suhut-Afyon** | **1.57** | **340** | *e*Pn | | **Pn** | **18 02 47.0** | **+0.7** |
| **KDHN** | **Kadinhani** | **1.61** | **26** | *i* P | | **Pn** | **18 02 47.5** | **+0.8** |
| KDHN | | | | *i* S | | **Sn** | **18 03 09.2** | **+1.7** |
| **KDHN** | **Kadinhani** | **1.61** | **26** | P | | **Pn** | **18 02 47.5** | **+0.8** |
| KDHN | | | | S | | **Sn** | **18 03 09.2** | **+1.7** |
| **BOLV** | **Bolvadin** | **1.66** | **352** | *i* P | | **Pn** | **18 02 48.0** | **+0.6** |
| BOLV | | | | *i* S | | **Sn** | **18 03 10.6** | **+1.9** |
| **BOLV** | **Bolvadin** | **1.66** | **352** | P | | **Pn** | **18 02 48.0** | **+0.6** |
| BOLV | | | | S | | **Sn** | **18 03 10.6** | **+1.9** |
| **FETY** | **Fethiye** | **1.77** | **256** | *e*PN | | **Pn** | **18 02 49.5** | **+0.7** |
| **FETY** | **Fethiye** | **1.77** | **256** | *e*Pn | | **Pn** | **18 02 49.5** | **+0.7** |
| **DNZL** | **Cakiroluk** | **1.84** | **290** | *i* P | | **Pn** | **18 02 50.2** | **+0.4** |
| DNZL | | | | *i* S | | **Sn** | **18 03 13.3** | **+0.3** |
| **DNZL** | **Cakiroluk** | **1.84** | **290** | P | | **Pn** | **18 02 50.2** | **+0.4** |
| DNZL | | | | S | | **Sn** | **18 03 13.3** | **+0.3** |
| **KIZT** | **Kizilcal** | **1.88** | **16** | *e*PN | | **Pn** | **18 02 50.9** | **+0.8** |
| **KIZT** | **Kizilcal** | **1.88** | **16** | *e*Pn | | **Pn** | **18 02 50.9** | **+0.8** |
| **KHAL** | **Karahalli** | **1.89** | **314** | *i* P | | **Pn** | **18 02 50.4** | **+0.1** |
| KHAL | | | | *i* S | | **Sn** | **18 03 13.9** | **-0.1** |
| **KHAL** | **Karahalli** | **1.89** | **314** | P | | **Pn** | **18 02 50.4** | **+0.1** |
| KHAL | | | | S | | **Sn** | **18 03 13.9** | **-0.1** |
| **CHBY** | **Cihanbeyli** | **2.00** | **41** | *e*PN | | **Pn** | **18 02 53.1** | **+1.4** |
| **CHBY** | **Cihanbeyli** | **2.00** | **41** | *e*Pn | | **Pn** | **18 02 53.1** | **+1.4** |
| **DALY** | **Dalyan (Mu˘la** | **2.08** | **264** | *e*PN | | **Pn** | **18 02 54.7** | **+2.1** |
| **DALY** | **Dalyan (Mu˘la** | **2.08** | **264** | *e*Pn | | **Pn** | **18 02 54.7** | **+2.1** |
| **TURN** | **Turunc** | **2.11** | **265** | *i* P | | Pn | 18 02 57.2 | +4.1 |
| **TURN** | **Turunc** | **2.11** | **265** | P | | Pn | 18 02 57.2 | +4.1 |
| TURN | | | | S | | Sn | 18 03 25.4 | +6.5 |
| **ALFC** | **Alevga** | **2.21** | **149** | P | | **Pn** | **18 02 55.0** | **+0.6** |
| | baz=332 | | | | | | | |
| ALFC | | | | S | | **Sn** | **18 03 20.4** | **-0.9** |
| **ALFC** | **Alevga** | **2.21** | **149** | P | | **Pn** | **18 02 55.0** | **+0.6** |
| ALFC | | | | S | | **Sn** | **18 03 20.4** | **-0.9** |
| **AKMC** | **Akamas** | **2.23** | **156** | P | | **Pn** | **18 02 55.4** | **+0.7** |
| | baz=339 | | | | | | | |
| **AKMC** | **Akamas** | **2.23** | **156** | P | | **Pn** | **18 02 55.4** | **+0.7** |
| **YER** | **Yerkesik** | **2.36** | **272** | *e*PN | | **Pn** | **18 02 58.2** | **+1.8** |
| **YER** | **Yerkesik** | **2.36** | **272** | *e*Pn | | **Pn** | **18 02 58.2** | **+1.8** |
| **PPCY** | **Paphos** | **2.36** | **157** | P | | **Pn** | **18 02 57.2** | **+0.8** |
| | baz=340 | | | | | | | |
| **PPCY** | **Paphos** | **2.36** | **157** | P | | **Pn** | **18 02 57.2** | **+0.8** |
| **LEF** | **Lefka** | **2.37** | **145** | *e*PN | | **Pn** | **18 02 55.6** | **-0.9** |
| **LEF** | **Lefka** | **2.37** | **145** | *e*Pn | | **Pn** | **18 02 55.6** | **-0.9** |
| **KULU** | **Kulu** | **2.42** | **35** | *e*PN | | **Pn** | **18 02 57.5** | **+0.3** |
| **KULU** | **Kulu** | **2.42** | **35** | *e*Pn | | **Pn** | **18 02 57.5** | **+0.3** |
| **MAMC** | **Mammari** | **2.49** | **139** | P | | **Pn** | **18 02 59.1** | **+1.0** |
| | baz=321 | | | | | | | |
| **MAMC** | **Mammari** | **2.49** | **139** | P | | **Pn** | **18 02 59.1** | **+1.0** |
| **LFK** | **Lefkose** | **2.58** | **133** | *e*PN | | **Pn** | **18 02 59.3** | **-0.1** |
| **LFK** | **Lefkose** | **2.58** | **133** | *e*Pn | | **Pn** | **18 02 59.3** | **-0.1** |
| **SZAC** | **Souni-Zanaja** | **2.67** | **149** | P | | **Pn** | **18 03 02.4** | **+1.8** |
| | baz=331 | | | | | | | |
| SZAC | | | | S | | **Sn** | **18 03 33.3** | **+1.0** |
| **SZAC** | **Souni-Zanaja** | **2.67** | **149** | P | | **Pn** | **18 03 02.4** | **+1.8** |
| SZAC | | | | S | | **Sn** | **18 03 33.3** | **+1.0** |
| **GULA** | **Gulagac** | **2.70** | **61** | *e*PN | | **Pn** | **18 03 01.9** | **+0.9** |
| **GULA** | **Gulagac** | **2.70** | **61** | *e*Pn | | **Pn** | **18 03 01.9** | **+0.9** |
| **CSS** | **Prodhromos** | **2.71** | **140** | P | | **Pn** | **18 03 01.3** | **+0.3** |
| | baz=322 | | | | | | | |
| CSS | | | | S | | **Sn** | **18 03 32.2** | **-0.9** |
| **CSS** | **Prodhromos** | **2.71** | **140** | *e*PN | | **Pn** | **18 03 00.7** | **-0.3** |
| **CSS** | **Prodhromos** | **2.71** | **140** | *e*Pn | | **Pn** | **18 03 00.7** | **-0.3** |
| **CSS** | **Prodhromos** | **2.71** | **140** | P | | **Pn** | **18 03 01.3** | **+0.3** |
| CSS | | | | S | | **Sn** | **18 03 32.2** | **-0.9** |
| **AYDN** | **Tasoluk** | **2.73** | **283** | *i* P | | **Pn** | **18 03 03.7** | **+2.4** |
| AYDN | | | | *i* S | | **Sn** | **18 03 34.9** | **+1.2** |
| **AYDN** | **Tasoluk** | **2.73** | **283** | P | | **Pn** | **18 03 03.7** | **+2.4** |
| AYDN | | | | S | | **Sn** | **18 03 34.9** | **+1.2** |
| **YAYX** | **Yaylak** | **2.76** | **47** | *e*PN | | **Pn** | **18 03 02.8** | **+1.0** |
| **YAYX** | **Yaylak** | **2.76** | **47** | *e*Pn | | **Pn** | **18 03 02.8** | **+1.0** |
| **AFSR** | **Af˘ar-Bala (A** | **2.78** | **31** | *e*PN | | **Pn** | **18 03 03.4** | **+1.4** |
| **AFSR** | **Af˘ar-Bala (A** | **2.78** | **31** | *e*Pn | | **Pn** | **18 03 03.4** | **+1.4** |
| **DEMI** | **Demirci** | **2.79** | **316** | *i* P | | **Pn** | **18 03 02.3** | **+0.1** |
| **DEMI** | **Demirci** | **2.79** | **316** | P | | **Pn** | **18 03 02.3** | **+0.1** |
| **BORA** | **Eskisehir** | **2.87** | **348** | *i* P | | **Pn** | **18 03 03.4** | **+0.2** |
| BORA | | | | *i* S | | **Sn** | **18 03 36.0** | **-1.0** |
| **BORA** | **Eskisehir** | **2.87** | **348** | P | | **Pn** | **18 03 03.4** | **+0.2** |
| BORA | | | | S | | **Sn** | **18 03 36.0** | **-1.0** |
| **BBAL** | **Bala** | **2.88** | **31** | *i* P | | **Pn** | **18 03 04.7** | **+1.2** |
| **BBAL** | **Bala** | **2.88** | **31** | P | | **Pn** | **18 03 04.7** | **+1.2** |
| **KAMT** | **Kaman** | **3.02** | **40** | *e*PN | | **Pn** | **18 03 06.7** | **+1.5** |
| **KAMT** | **Kaman** | **3.02** | **40** | *e*Pn | | **Pn** | **18 03 06.7** | **+1.5** |
| **BDRM** | **Kayabasi** | **3.03** | **271** | *i* P | | **Pn** | **18 03 05.7** | **+0.5** |
| BDRM | | | | *i* S | | **Sn** | **18 03 40.9** | **+0.2** |
| **BDRM** | **Kayabasi** | **3.03** | **271** | P | | **Pn** | **18 03 05.7** | **+0.5** |
| BDRM | | | | S | | **Sn** | **18 03 40.9** | **+0.2** |
| **LOD** | **Lodumlu** | **3.06** | **23** | *e*PN | | **Pn** | **18 03 07.1** | **+1.3** |
| **LOD** | **Lodumlu** | **3.06** | **23** | *e*Pn | | **Pn** | **18 03 07.1** | **+1.3** |
| **BRTR** | **Keskin Array B** | **3.26** | **35** | P | | **Pn** | **18 03 08.7** | **+0.2** |
| | 2.2nm,0.3s,baz=218,slow=14,SNR=48 | | | | | | | |
| BRTR | | | | S | | **Sn** | **18 03 46.9** | **+0.5** |
| | 0.7nm,0.3s,baz=210,slow=18,SNR=4.3 | | | | | | | |
| **CORM** | **Corum** | **4.09** | **40** | *e*PN | | **Pn** | **18 03 21.6** | **+1.9** |
| **CORM** | **Corum** | **4.09** | **40** | *e*Pn | | **Pn** | **18 03 21.6** | **+1.9** |
| **MMAI** | **Mount Meron Ar** | **5.30** | **139** | P | | **Pn** | **18 03 36.4** | **+0.2** |
| | 5.7nm,0.3s,baz=321,slow=12,SNR=34 | | | | | | | |
| MMAI | | | | S | | **Sn** | **18 04 34.2** | **-1.8** |
| | 7.6nm,0.3s,baz=324,slow=20,SNR=8.1 | | | | | | | |
| **IDI** | **Anoyia** | **5.43** | **253** | P | | **Pn** | **18 03 35.0** | **-2.8** |
| | 0.4nm,0.3s,baz=59,slow=18,SNR=3.4 | | | | | | | |
| IDI | | | | S | | **Sn** | **18 04 33.5** | **-5.5** |
| | 0.7nm,0.3s,baz=330,slow=16,SNR=2.9 | | | | | | | |
| **ASF** | **Jabal al Asfar** | **6.76** | **135** | P | | **Pn** | **18 03 57.3** | **+1.3** |
| | 0.2nm,0.3s,baz=315,slow=11,SNR=3.5 | | | | | | | |
| ASF | | | | S | | **Sn** | **18 05 11.5** | **0.0** |
| | 0.4nm,0.3s,baz=180,slow=20,SNR=2.0 | | | | | | | |
| **EIL** | **Elat** | **8.01** | **156** | P | | **Pn** | **18 04 12.0** | **-0.9** |
| | 0.5nm,0.3s,baz=345,slow=16,SNR=7.6 | | | | | | | |
| EIL | | | | S | | **Sn** | **18 05 38.3** | **-3.6** |
| | 1.2nm,0.3s,baz=315,slow=23,SNR=4.8 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.67** | **356** | P | | **P** | **18 08 40.6** | **-1.4** |
| | 2.1nm,0.9s,baz=170,slow=8.7,SNR=5.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.60** | **59** | P | | **P** | **18 09 32.7** | **-0.3** |
| | 0.3nm,0.6s,baz=276,slow=7.8,SNR=3.9 | | | | | | | |

**MEX 20 18:22:14.9±0.4, 15°39'N×94°59'W, h5km, MD4.2, Near coast of Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.36** | **77** | *i* P | Pn | 18 22 36.8 | -3.8 |
| PCIG | | | | *i* S | Sb | 18 22 53.9 | -4.6 |
| **TGIG** | | **1.97** | **45** | *e*P | Pn | 18 22 45.7 | -3.4 |
| TGIG | | | | *i* S | Sn | 18 23 09.4 | -4.9 |
| **CCIG** | **Comitan** | **2.52** | **69** | *i* P | Pn | 18 22 55.0 | -1.8 |
| CCIG | | | | *e*S | Sn | 18 23 24.9 | -3.2 |

**GUC 20 18:24:10.4±0.5, 35°62'S×72°18'W, h42km±2km, ML3.9, 2C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TALC** | **Talca** | **0.50** | **63** | ‖*e*P | Pn | 18 24 21.3 | +0.2 |
| TALC | | | | *i* S | Sn | 18 24 29.1 | +0.4 |
| **COCH** | **Cobquecura** | **0.71** | **224** | ⇑*i*P | Pn | 18 24 24.3 | +0.3 |
| COCH | | | | *i* S | Sn | 18 24 34.4 | +0.6 |
| COCH | | | | AML | AML | 18 24 36.4 | |
| | comp=E,5μm,0.4s | | | | | | |
| **CCHI** | **Chillan** | **0.98** | **175** | *e*P | Pn | 18 24 28.4 | +0.7 |
| CCHI | | | | *e*S | Sn | 18 24 41.5 | +1.0 |
| CCHI | | | | AML | AML | 18 24 45.0 | |
| | comp=N,4μm,0.7s | | | | | | |
| **NICH** | **Los Niches** | **0.99** | **52** | *e*P | Pn | 18 24 28.6 | +0.7 |
| NICH | | | | *i* S | Sn | 18 24 42.2 | +1.5 |
| **CHPI** | **Pichilemu** | **1.24** | **7** | *e*P | Pn | 18 24 32.0 | +0.8 |
| CHPI | | | | *e*S | Sn | 18 24 48.3 | +1.6 |
| **RCDM** | **Rinconada Maip** | **2.41** | **28** | *e*P | Pn | 18 24 48.1 | +0.7 |
| RCDM | | | | *e*S | Sn | 18 25 16.6 | +0.9 |
| **ANTU** | **Antumapu** | **2.41** | **32** | *e*P | Pn | 18 24 48.5 | +1.0 |
| ANTU | | | | AML | AML | 18 25 33.6 | |
| | comp=E,754nm,0.3s | | | | | | |
| **CLCH** | **Cerro Calan** | **2.60** | **32** | *e*P | Pn | 18 24 50.8 | +0.7 |
| CLCH | | | | *e*S | Sn | 18 25 22.5 | +1.9 |
| CLCH | | | | AML | AML | 18 25 45.9 | |
| | comp=N,774nm,0.9s | | | | | | |
| **PEL** | **Peldehue** | **2.76** | **27** | ⇑*i*P | Pn | 18 24 53.2 | +0.9 |
| PEL | | | | *e*S | Sn | 18 25 26.7 | +2.2 |
| PEL | | | | AML | AML | 18 25 43.8 | |
| | comp=E,1μm,0.4s | | | | | | |

*DDA* ***20*** *18:27:46.9, 37˚.31N×36˚.95E, h7km, Md2.9*
*NSSC* ***20*** *18:27:46.8±1.6, 37˚.02N×37˚.44E, h24km±9km, MD1.3, ML2.0*
*ISK* ***20*** *18:27:46.5, 37˚.32N×36˚.95E, h5km, MD2.9*
*ISCJB* ***20*** *18:27:47.1±0.4, 37˚.26N±0˚.03×36˚.97E±0˚.03, h8km±4km, Error ellipse: s-maj=5.0km s-min=3.8km az=43.7*
*CSEM* ***20*** *18:27:47.1±0.3, 37˚.24N×36˚.94E, h5km, MD2.9, Error ellipse: s-maj=9.1km s-min=5.8km az=113.0*

**ISC 20 18:27:46.2±1.0, 37°.24N±0°.03×37°.02E±0°.03, h8km±9km, n37, σ1§22/48, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AYKD** | **Aykdinkavak** | **0.24** | **316** | P | **Pg** | **18 27 50.8** | **-0.2** |
| AYKD | | | | S | **Sg** | **18 27 53.4** | **-0.9** |
| **KMRS** | **Kahramanmaras** | **0.28** | **341** | *e*PG | **Pg** | **18 27 51.2** | **-0.5** |
| KMRS | | | | *e*SG | **Sg** | **18 27 54.5** | **-0.9** |
| **KMRS** | **Kahramanmaras** | **0.28** | **341** | *e*Pg | **Pg** | **18 27 51.2** | **-0.5** |
| KMRS | | | | *e*Sg | **Sg** | **18 27 54.5** | **-0.9** |
| **KAMA** | **Osmaniye** | **0.28** | **258** | P | **Pg** | **18 27 52.4** | **+0.6** |
| KAMA | | | | S | **Sg** | **18 27 56.3** | **+0.6** |
| **GZT** | **Gaziantep** | **0.45** | **76** | P | **Pg** | **18 27 56.2** | **+1.2** |
| GZT | | | | S | **Sb** | **18 28 03.0** | **-0.4** |
| **KUZU** | **Kuzuini** | **0.47** | **174** | *i* P | **Pb** | **18 27 58.0** | **+1.2** |
| **KUZU** | **Kuzuini** | **0.47** | **174** | P | **Pb** | **18 27 58.0** | **+1.2** |
| KUZU | | | | S | **Sb** | **18 28 05.0** | **+1.1** |
| **CEYT** | **Ceyhan** | **1.04** | **257** | *e*PG | **Pb** | **18 28 06.8** | **+0.4** |
| CEYT | | | | *e*SG | **Sn** | **18 28 22.7** | **+0.9** |
| **CEYT** | **Ceyhan** | **1.04** | **257** | *e*Pg | **Pb** | **18 28 06.8** | **+0.4** |
| **TAHT** | **Tahtakopru-Hat** | **1.09** | **218** | *e*PN | **Pn** | **18 28 08.9** | **+1.1** |
| **TAHT** | **Tahtakopru-Hat** | **1.09** | **218** | *e*Pn | **Pn** | **18 28 08.9** | **+1.1** |
| **SLMH** | **Al Salmeh** | **1.26** | **144** | *e*P | Pn | 18 28 02.4 | -7.8 |
| SLMH | | | | *e*S | Sb | 18 28 15.1 | -12 |
| SLMH | | | | AML | AML | 18 28 26.8 | |
| | comp=Z,26nm,0.2s | | | | | | |
| **SLMH** | **Al Salmeh** | **1.26** | **144** | *e*P | Pn | 18 28 02.4 | -7.8 |
| SLMH | | | | *e*S | Sb | 18 28 15.1 | -12 |
| | comp=Z,26nm,0.2s | | | | | | |
| **BTCH** | **Batrach** | **1.28** | **201** | *e*P | **Pn** | **18 28 10.5** | **0.0** |
| BTCH | | | | *e*S | **Sb** | **18 28 25.6** | **-1.8** |
| BTCH | | | | AML | AML | 18 28 32.5 | |
| | comp=E,72nm,0.5s | | | | | | |
| BTCH | | | | AML | AML | 18 28 33.0 | |
| | comp=N,47nm,0.4s | | | | | | |
| **BTCH** | **Batrach** | **1.28** | **201** | *e*P | **Pn** | **18 28 10.5** | **0.0** |
| BTCH | | | | *e*S | **Sb** | **18 28 25.6** | **-1.8** |
| | comp=N,47nm,0.4s | | | | | | |
| **DARE** | **Darende-Malaty** | **1.38** | **15** | *e*PN | **Pg** | **18 28 13.2** | **+0.6** |
| **DARE** | **Darende-Malaty** | **1.38** | **15** | *e*Pn | **Pg** | **18 28 13.2** | **+0.6** |
| **YAYL** | **Yayladag** | **1.41** | **211** | *i* P | **Pg** | **18 28 14.3** | **+1.0** |
| YAYL | | | | *i* S | **Sg** | **18 28 32.3** | **+0.7** |
| **YAYL** | **Yayladag** | **1.41** | **211** | P | **Pg** | **18 28 14.3** | **+1.0** |
| YAYL | | | | S | **Sg** | **18 28 32.3** | **+0.7** |
| **MALT** | **Malatya** | **1.55** | **46** | *e*PN | **Pb** | **18 28 16.1** | **+0.9** |
| **MALT** | **Malatya** | **1.55** | **46** | *e*Pn | **Pb** | **18 28 16.1** | **+0.9** |
| **ARNB** | **Al Arnab** | **1.62** | **212** | *e*P | **Pn** | **18 28 14.0** | **-1.1** |
| ARNB | | | | *e*S | **Sn** | **18 28 33.9** | **-2.3** |
| ARNB | | | | AML | AML | 18 28 39.5 | |
| | comp=N,19nm,0.6s | | | | | | |
| **ARNB** | **Al Arnab** | **1.62** | **212** | *e*P | **Pn** | **18 28 14.0** | **-1.1** |
| ARNB | | | | *e*S | **Sn** | **18 28 33.9** | **-2.3** |
| | comp=N,19nm,0.6s | | | | | | |
| **KSRV** | **Kasrt alli** | **2.11** | **130** | *e*P | **Pn** | **18 28 22.1** | **+0.2** |
| KSRV | | | | *e*S | **Sn** | **18 28 47.2** | **-1.1** |
| KSRV | | | | AML | AML | 18 28 59.2 | |
| | comp=N,22nm,0.3s | | | | | | |
| KSRV | | | | AML | AML | 18 29 04.3 | |
| | comp=E,8.9nm,0.4s | | | | | | |
| **KSRV** | **Kasrt alli** | **2.11** | **130** | *e*P | **Pn** | **18 28 22.0** | **+0.2** |
| KSRV | | | | *e*S | **Sn** | **18 28 47.2** | **-1.1** |
| | comp=E,9.0nm,0.4s | | | | | | |
| **SVRC** | **Sivrice-ELAZID** | **2.14** | **57** | *e*PN | **Pb** | **18 28 25.1** | **-0.2** |
| **SVRC** | **Sivrice-ELAZID** | **2.14** | **57** | *e*Pn | **Pb** | **18 28 25.1** | **-0.2** |
| **MNKR** | **ALMNKUR** | **2.23** | **125** | *e*P | Pn | 18 28 17.0 | -6.5 |
| MNKR | | | | *e*S | Sn | 18 28 38.9 | -12 |
| MNKR | | | | AML | AML | 18 28 59.1 | |
| | comp=Z,97nm,0.2s | | | | | | |
| **MNKR** | **ALMNKUR** | **2.23** | **125** | *e*P | Pn | 18 28 17.0 | -6.5 |
| MNKR | | | | *e*S | Sn | 18 28 38.9 | -12 |
| | comp=Z,97nm,0.2s | | | | | | |
| **GULA** | **Gulagac** | **2.46** | **297** | *e*PN | **Pn** | **18 28 27.9** | **+1.2** |
| **GULA** | **Gulagac** | **2.46** | **297** | *e*Pn | **Pn** | **18 28 28.0** | **+1.2** |
| **DYBB** | **Diyarbakir** | **2.58** | **73** | *e*PN | **Pb** | **18 28 31.8** | **-1.0** |
| **DIY** | **Diyarbakir** | **2.63** | **75** | *e*Pn | **Pn** | **18 28 31.8** | **+2.7** |
| **SVSK** | **Karacayir** | **2.67** | **360** | *e*PN | **Pn** | **18 28 31.3** | **+1.8** |
| **SVSK** | **Karacayir** | **2.67** | **360** | *e*Pn | **Pn** | **18 28 31.3** | **+1.8** |
| **MAZI** | **Mazidag** | **2.74** | **84** | *e*PN | **Pb** | **18 28 33.6** | **-2.0** |
| **MAZI** | **Mazidag** | **2.74** | **84** | *e*Pn | **Pb** | **18 28 33.6** | **-2.0** |

*IDC* ***20*** *18:35:09.0±1.4, 8˚.39N×122˚.68E, h0km, mb3.6/4, mb1 3.8/4, mb1mx3.5/34, mbtmp3.6/4, MS3.1/3, Ms1 3.1/3, ms1mx2.7/40, Error ellipse: s-maj=88.9km s-min=21.3km az=56.0*
*ISCJB* ***20*** *18:35:13.7±0.7, 8˚.42N±0˚.05×122˚.62E±0˚.09, h44km, mb3.5/4, MS3.1/2, Error ellipse: s-maj=12.4km s-min=6.3km az=15.0*

**ISC 20 18:35:15.0±0.9, 8°.40N±0°.05×122°.69E±0°.09, h44km, n13, σ0§91/14, mb3.4/4, 2C-3D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IPIL** | **Ipil** | **0.61** | **191** | ‖*e*P | **Pn** | **18 35 26.8** | **-0.7** |
| IPIL | | | | *e*S | **Sn** | **18 35 35.7** | **-0.6** |
| **DCPH** | **Dipolog City** | **0.69** | **74** | ‖*e*P | **Pn** | **18 35 27.0** | **-1.4** |
| **TBP** | **Tagbilaran** | **1.73** | **42** | ‖*e*P | **Pn** | **18 35 42.9** | **+0.1** |
| **CTBH** | **Cotabato--PC H** | **1.94** | **127** | *e*P | **Pn** | **18 35 47.1** | **+1.6** |
| CTBH | | | | *i* S | Sn | 18 36 14.9 | +6.2 |
| **LLP** | **Lapu-Lapu** | **2.29** | **33** | ‖*e*P | **Pn** | **18 35 49.4** | **-1.0** |
| LLP | | | | *e*S | **Sn** | **18 36 17.3** | **0.0** |
| **RCP** | **Roxas** | **3.15** | **1** | ⇑*e*P | **Pn** | **18 36 03.0** | **+0.8** |
| **DAV** | **Davao City (W)** | **3.16** | **114** | LR | LR | 18 37 11.9 | |
| | comp=Z,145nm,20.3s,baz=356,slow=39 | | | | | | |
| **LEM** | **Lembang** | **21.31** | **225** | LR | LR | 18 50 08.6 | |
| | comp=Z,122nm,20.0s,baz=194,slow=42 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **25.13** | **296** | P | **P** | **18 40 35.4** | **-0.8** |
| | 0.7nm,0.7s,baz=122,slow=7.3,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.41** | **158** | P | **P** | **18 41 23.0** | **-0.3** |
| | 0.4nm,0.5s,baz=339,slow=9.4,SNR=12 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **31.38** | **24** | LR | LR | 18 53 34.0 | |
| | comp=Z,28nm,19.8s,baz=270,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **33.70** | **161** | P | **P** | **18 41 52.5** | **+0.2** |
| | 1.3nm,0.6s,baz=342,slow=7.2,SNR=35 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 44 31.2** | **-0.2** |
| | 0.6nm,0.7s,baz=345,slow=3.0,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.45** | **325** | P | **P** | **18 44 16.4** | **+0.4** |
| | 0.4nm,0.9s,baz=139,slow=6.8,SNR=2.8 | | | | | | |
| MKAR | | | | PcP | **PcP** | **18 45 30.9** | **+1.0** |
| | 0.5nm,0.8s,baz=112,slow=5.3,SNR=3.7 | | | | | | |

**IDC 20 18:48:04.5±6.7, 17°12S×176°99W, h0km, mb4.3/2, mb1 4.6/2, mb1mx3.7/27, mbtmp4.3/2, Error ellipse: s-maj=315.5km s-min=45.2km az=144.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **46.11** | **259** | P | P | 18 56 30.7 | -0.2 |
| | 0.4nm,0.3s,baz=95,slow=7.3,SNR=24 | | | | | | |
| **ASAR** | **Alice Springs** | **46.31** | **253** | P | P | 18 56 32.5 | 0.0 |
| | 8.9nm,0.6s,baz=88,slow=8.5,SNR=149 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.17** | **317** | PKPbc | PKPbc | 19 07 42.9 | -1.3 |
| | 0.5nm,0.8s,baz=105,slow=2.2,SNR=2.8 | | | | | | |
| **GERES** | **GERESS Array B** | **147.19** | **347** | PKPbc | PKPbc | 19 07 49.5 | -0.4 |
| | 0.2nm,0.4s,baz=7.9,slow=3.6,SNR=3.4 | | | | | | |

**IDC 20 18:48:44.3±2.1, 26°16N×99°78E, h0km, mb3.0/2, mb1 3.5/3, mb1mx3.1/42, mbtmp3.3/3, ML4.1/1, Error ellipse: s-maj=68.7km s-min=25.3km az=93.0, Yunnan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **7.70** | **186** | P | Pn | 18 50 38.5 | +0.7 |
| | 0.8nm,0.3s,baz=358,slow=16,SNR=26 | | | | | | |
| CMAR | | | | Sn | Sn | 18 52 05.3 | -0.4 |
| | 0.4nm,0.3s,baz=6.1,slow=18,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **22.26** | **12** | P | P | 18 53 43.1 | +0.2 |
| | 0.2nm,0.5s,baz=198,slow=9.1,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **24.84** | **331** | P | P | 18 54 08.0 | -0.3 |
| | 0.4nm,0.6s,baz=140,slow=10.0,SNR=4.8 | | | | | | |

*IDC* ***20*** *18:49:48.1±1.4, 17˚.99S×178˚.51W, h543km±17km, mb3.6/16, mb1 3.8/18, mb1mx3.7/27, mbtmp4.5/18, Error ellipse: s-maj=15.2km s-min=10.6km az=120.0*
*ISCJB* ***20*** *18:49:49.4±0.4, 18˚.00S±0˚.08×178˚.43W±0˚.06, h579km, mb4.2/19, Error ellipse: s-maj=10.8km s-min=6.6km az=151.0*
*AUST* ***20*** *18:49:52.9±1.4, 17˚.95S×178˚.37W, h610km, Error ellipse: s-maj=1.7km s-min=1.6km az=347.0*

**ISC 20 18:49:50.7±0.5, 18°0S±0°.1×178°44W±0°.08, h579km, n90, σ1§00/92, mb4.2/19, 12C-4D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **7.58** | **59** | P | **P** | **18 51 42.5** | **-2.9** |
| | 2.8nm,0.3s,baz=144,slow=19,SNR=2.4 | | | | | | |
| AFI | | | | S | **S** | **18 53 15.8** | **-3.5** |
| | 6.8nm,0.3s,baz=40,slow=21,SNR=3.7 | | | | | | |
| **NIUE** | **Niue** | **8.15** | **99** | P | **P** | **18 51 50.8** | **+0.1** |
| | baz=8.1,SNR=8.9 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.78** | **251** | P | **P** | **18 52 55.5** | **-1.9** |
| | 2.0nm,0.3s,baz=0.7,slow=15,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **20.59** | **190** | P | **P** | **18 53 49.2** | **-1.3** |
| | 3.4nm,0.3s,baz=32,slow=14,SNR=4.1 | | | | | | |
| **RPZ** | **Rata Peaks** | **27.15** | **197** | P | **P** | **18 54 47.0** | **-1.7** |
| | 12nm,0.8s,baz=333,slow=6.8,SNR=3.4 | | | | | | |
| **EIDS** | **Eidsvold** | **29.22** | **250** | P | **P** | **18 55 06.6** | **-0.2** |
| | baz=29,SNR=3.6 | | | | | | |
| **ARMA** | **Armidale** | **29.88** | **240** | P | **P** | **18 55 13.8** | **+1.2** |
| | baz=30,SNR=9.7 | | | | | | |
| **RMQ** | **Roma** | **31.45** | **249** | P | **P** | **18 55 27.0** | **+1.0** |
| | baz=32,SNR=5.7 | | | | | | |
| **CNB** | **Canberra Magne** | **33.36** | **232** | P | **P** | **18 55 43.2** | **+1.1** |
| | baz=33,SNR=21 | | | | | | |
| **PMG** | **Port Moresby** | **34.44** | **280** | P | **P** | **18 55 52.4** | **+1.0** |
| | baz=34,SNR=5.4 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.09** | **240** | P | **P** | **18 55 57.0** | **+0.5** |
| | baz=35,SNR=26 | | | | | | |
| **MTSU** | **Mount Surprise** | **35.37** | **264** | P | **P** | **18 55 59.1** | **+0.1** |
| | baz=35,SNR=5.5 | | | | | | |
| **QLP** | **Quilpie** | **35.48** | **249** | P | **P** | **18 55 59.9** | **+0.1** |
| | baz=36,SNR=16 | | | | | | |
| **COEN** | **Coen** | **37.07** | **271** | P | **P** | **18 56 13.7** | **+0.6** |
| | baz=37,SNR=22 | | | | | | |
| **TOO** | **Toolangi** | **37.10** | **231** | P | **P** | **18 56 14.1** | **+1.1** |
| | baz=37,SNR=10 | | | | | | |
| **ARPS** | **Mount Arapiles** | **39.59** | **234** | P | **P** | **18 56 33.6** | **+0.5** |
| | baz=40,SNR=5.0 | | | | | | |
| **QIS** | **Mount Isa** | **39.61** | **259** | P | **P** | **18 56 33.1** | **-0.4** |
| | baz=40,SNR=4.3 | | | | | | |
| **HTT** | **Hallett** | **41.09** | **240** | P | P | 18 56 41.2 | -4.0 |
| | baz=41,SNR=11 | | | | | | |
| **JAY** | **Jayapura** | **42.89** | **286** | P | **P** | **18 56 60.0** | **+0.4** |
| | baz=43,SNR=14 | | | | | | |
| **BBOO** | **Buckleboo** | **43.35** | **241** | P | **P** | **18 57 03.0** | **+0.2** |
| | baz=43,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.59** | **260** | P | **P** | **18 57 11.8** | **-0.8** |
| | 9.1nm,0.5s,baz=96,slow=6.9,SNR=159 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 58 43.1** | **+0.3** |
| | 1.7nm,0.4s,baz=90,slow=3.7,SNR=6.4 | | | | | | |
| WRA | | | | S | **S** | **19 03 03.7** | **-3.6** |
| | 1.1nm,0.8s,baz=96,slow=13

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BRG | | | | *e* | | | 19 11 27.3 | | |
| | comp=Z,8.5nm,1.5s | | | | | | | | |
| **DOPR** | **Dopca** | **145.80** | **330** | ⇓*i*P | **PKPab** | **19 08 27.1** | **-0.6** | | |
| **MLR** | **Muntele Rosu** | **145.87** | **329** | ⇑*i*P | **PKPbc** | **19 08 27.0** | **+0.8** | | |
| **PVCC** | **Panska Ves** | **145.89** | **345** | *e*PKPdf | **PKPab** | **19 08 26.9** | **-0.9** | | |
| **VOIR** | | **146.35** | **330** | ⇑*i*P | **PKPbc** | **19 08 28.2** | **+0.8** | | |
| **DRGR** | | **146.38** | **333** | ⇓*i*P | **PKPbc** | **19 08 28.0** | **+0.5** | | |
| **PRU** | **Pruhonice** | **146.40** | **345** | *e*PKPdf | **PKPbc** | **19 08 27.8** | **+0.5** | | |
| PRU | | | | *ex* | x | 19 08 30.6 | | | |
| **GOPC** | **GO Pecny, Ondr** | **146.41** | **344** | *e*PKPdf | **PKPbc** | **19 08 28.1** | **+0.7** | | |
| **VRAC** | **Vranov** | **146.46** | **342** | ⇓*i*P | **PKPab** | **19 08 31.4** | **+1.2** | | |
| **VYHS** | **Vyhne** | **146.47** | **339** | *e*PKP | **PKPbc** | **19 08 28.3** | **+0.7** | | |
| **PSZ** | **Piszkesteto** | **146.58** | **337** | ⇑*i*P | **PKPbc** | **19 08 28.3** | **+0.3** | | |
| **SIRR** | **Siria** | **147.24** | **334** | ⇑*i*P | **PKPbc** | **19 08 30.1** | **+0.4** | | |
| **KHC** | **Kasperske Hory** | **147.43** | **345** | *e*PKPdf | **PKPbc** | **19 08 30.8** | **+0.7** | | |
| KHC | | | | *ex* | x | 19 08 35.3 | | | |
| **GERES** | **GERESS Array B** | **147.67** | **345** | PKPbc | **PKPbc** | **19 08 31.3** | **+0.4** | | |
| | comp=Z,3.2nm,0.6s,baz=23,slow=2.8,SNR=21 | | | | | | | | |
| **CONA** | **Conrad Observa** | **147.91** | **342** | ⇑*i*PKPbc | **PKPbc** | **19 08 32.5** | **+1.0** | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **DIVS** | **Divibare** | **149.68** | **333** | ⇑*i*P | **PKPbc** | **19 08 36.3** | **+0.4** | | |
| **ABTA** | **Abfaltersbach** | **149.91** | **345** | ⇑*i*PKPbc | **PKPbc** | **19 08 36.0** | **-0.3** | | |
| | comp=Z,6.6nm,0.7s | | | | | | | | |
| **FETA** | **Feichten** | **150.06** | **347** | ⇑*i*PKPbc | **PKPbc** | **19 08 37.5** | **+0.7** | | |
| | comp=Z,7.6nm,1.2s | | | | | | | | |

*JMA **20** 18:58:54.1±0.2,23°.48N×121°.64E,h16km±4km,M3.5*
*ISCJB **20** 18:58:55.4±0.3,23°.51N±0°.01×121°.61E±0°.02,h20km±4km,*
*Error ellipse: s-maj=3.6km s-min=1.9km az=28.2*
*TAP **20** 18:58:55.8,23°.55N×121°.51E,h17km,ML3.6,C*
**ISC 20 18:58:55.0±0.9,23°.52N±0°.02×121°.57E±0°.02,h17km±7km, n56,σ0°60/109,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEGC** | **Jichi Village** | **0.20** | **353** | *e*P | **Pb** | **18 59 01.2** | **+1.0** |
| TEGC | baz=12 | | | *e*S | **Sb** | **18 59 04.8** | **+1.3** |
| **EHY** | **Hungye** | **0.22** | **268** | P | **Pg** | **18 59 00.3** | **+0.1** |
| EHY | baz=254 | | | S | **Sb** | **18 59 04.4** | **-0.1** |
| **TWF1** | **Yuli** | **0.29** | **237** | P | **Pb** | **18 59 02.4** | **+0.5** |
| TWF1 | baz=223 | | | S | **Sb** | **18 59 07.6** | **+1.1** |
| **ESL** | **Shilin** | **0.32** | **338** | P | **Pg** | **18 59 02.0** | **+0.1** |
| ESL | baz=346 | | | *i* S | **Sg** | **18 59 06.7** | **+0.2** |
| **ESF** | **Shoufeng Towns** | **0.36** | **351** | P | **Pb** | **18 59 04.0** | **+1.1** |
| ESF | baz=359 | | | *e*S | **Sb** | **18 59 09.6** | **+1.2** |
| **CHKT** | **Chengkung** | **0.45** | **204** | P | **Pb** | **18 59 05.4** | **+0.9** |
| CHKT | baz=195 | | | S | **Sn** | **18 59 13.0** | **-1.4** |
| **HWA** | **Hwalien** | **0.46** | **5** | *e*P | **Pn** | **18 59 06.0** | **-0.9** |
| HWA | baz=12 | | | *e*S | **Sb** | **18 59 12.8** | **+1.6** |
| **TWD** | **Chiawan** | **0.56** | **3** | P | **Pb** | **18 59 06.6** | **+0.1** |
| TWD | baz=9.0 | | | *e*S | **Sb** | **18 59 14.5** | **+0.3** |
| **YUS** | **Yu-Shan** | **0.56** | **268** | P | **Pb** | **18 59 06.7** | **0.0** |
| YUS | baz=263 | | | S | **Sg** | **18 59 14.2** | **0.0** |
| **ELDTW** | **Lidau** | **0.60** | **237** | *e*P | **Pg** | **18 59 06.8** | **-0.2** |
| ELDTW | baz=230 | | | *e*S | **Sg** | **18 59 14.9** | **-0.1** |
| **WHF** | **Hehuan Shan** | **0.69** | **336** | *e*P | **Pg** | **18 59 08.4** | **-0.2** |
| WHF | baz=339 | | | S | **Sg** | **18 59 16.5** | **-1.3** |
| **ALS** | **Alishan** | **0.70** | **270** | *i* P | **Pb** | **18 59 09.0** | **+0.1** |
| ALS | baz=266 | | | S | **Sg** | **18 59 18.2** | **0.0** |
| **SMLT** | **Sun Moon Lake** | **0.71** | **301** | *e*P | **Pg** | **18 59 08.6** | **-0.4** |
| SMLT | baz=301 | | | *e*S | **Sg** | **18 59 17.4** | **-1.1** |
| **TYC** | **Yuchr** | **0.76** | **301** | *e*P | **Pb** | **18 59 09.1** | **-0.6** |
| TYC | baz=301 | | | S | **Sb** | **18 59 19.9** | **+0.1** |
| **TWT** | **Tachien** | **0.82** | **334** | P | **Pb** | **18 59 10.9** | **0.0** |
| TWT | baz=335 | | | *e*S | **Sb** | **18 59 20.5** | **-1.2** |
| **CHN5** | **Tsauling** | **0.82** | **276** | *e*P | **Pg** | **18 59 11.2** | **+0.1** |
| CHN5 | baz=273 | | | *e*S | **Sb** | **18 59 21.9** | **+0.2** |
| **STYT** | **Tauyuan** | **0.82** | **245** | P | **Pb** | **18 59 10.8** | **-0.1** |
| STYT | baz=240 | | | *e*S | **Sb** | **18 59 21.8** | **+0.1** |
| **TWG** | **Pinlang** | **0.83** | **213** | *e*P | **Pb** | **18 59 10.1** | **-0.8** |
| TWG | baz=208 | | | *e*S | **Sb** | **18 59 21.5** | **-0.3** |
| **TTN** | **Taitung** | **0.85** | **207** | *e*P | **Pn** | **18 59 12.2** | **+0.1** |
| TTN | baz=202 | | | *e*S | **Sn** | **18 59 25.4** | **+1.2** |
| **WNT** | **Mingjian** | **0.89** | **294** | *e*P | **Pn** | **18 59 12.8** | **+0.1** |
| WNT | baz=293 | | | *e*S | **Sn** | **18 59 25.2** | **+0.1** |
| **CHN4** | **Tsaushan** | **0.91** | **260** | *e*P | **Pn** | **18 59 13.0** | **-0.1** |
| CHN4 | baz=256 | | | *e*S | **Sn** | **18 59 25.4** | **-0.3** |
| **WTP** | **Ta-pu** | **0.91** | **253** | *e*P | **Pg** | **18 59 12.8** | **-0.1** |
| WTP | baz=249 | | | *e*S | **Sg** | **18 59 25.0** | **+0.1** |
| **ENA** | **Nanau** | **0.92** | **10** | *e*P | **Pb** | **18 59 12.1** | **-0.5** |
| ENA | baz=14 | | | *e*S | **Sb** | **18 59 24.7** | **+0.2** |
| **WGK** | **Gukeng** | **0.94** | **281** | *e*P | **Pg** | **18 59 13.2** | **-0.1** |
| WGK | baz=278 | | | *e*S | **Sb** | **18 59 25.2** | **+0.3** |
| **NNS** | **Nan Shan** | **0.94** | **349** | *e*P | **Pb** | **18 59 12.5** | **-0.4** |
| NNS | baz=352 | | | *e*S | **Sb** | **18 59 24.4** | **-0.8** |
| **CHN2** | **Minshiung** | **1.00** | **271** | *e*P | **Pb** | **18 59 14.1** | **+0.2** |
| CHN2 | baz=268 | | | *e*S | **Sg** | **18 59 27.5** | **-0.1** |
| **SGST** | **Jiashian** | **1.00** | **245** | *e*P | **Pg** | **18 59 14.7** | **+0.2** |
| SGST | baz=241 | | | *e*S | **Sn** | **18 59 28.0** | **0.0** |
| **CHN1** | **Nanshi** | **1.01** | **251** | *e*P | **Pn** | **18 59 14.5** | **+0.1** |
| CHN1 | baz=248 | | | *e*S | **Sn** | **18 59 28.5** | **+0.3** |
| **TWK** | **Hsinying** | **1.02** | **256** | *e*P | **Pb** | **18 59 14.5** | **+0.2** |
| TWK | baz=252 | | | *e*S | **Sb** | **18 59 27.9** | **+0.5** |
| **TCU** | **Taichung** | **1.03** | **308** | *e*P | **Pg** | **18 59 15.1** | **+0.1** |
| TCU | baz=308 | | | *e*S | **Sn** | **18 59 28.8** | **+0.1** |
| **CHY** | **Chiayi** | **1.05** | **269** | *e*P | **Pg** | **18 59 15.6** | **+0.3** |
| CHY | baz=266 | | | *e*S | **Sg** | **18 59 29.0** | **-0.1** |
| **ECL** | **Taimali** | **1.07** | **212** | *e*P | **Pb** | **18 59 13.5** | **-1.6** |
| ECL | baz=207 | | | *e*S | **Sg** | **18 59 30.6** | **+0.6** |
| **TWQ1** | **Liyutan** | **1.10** | **319** | *e*P | **Pg** | **18 59 16.4** | **0.0** |
| TWQ1 | baz=320 | | | *e*S | **Sg** | **18 59 31.7** | **+0.8** |
| **ENTT** | **Nioudou** | **1.12** | **0** | *e*P | **Pn** | **18 59 15.3** | **-0.7** |
| ENTT | baz=3.0 | | | *e*S | **Sb** | **18 59 30.1** | **-0.2** |
| **TWC** | **Suao** | **1.12** | **13** | *e*P | **Pn** | **18 59 16.2** | **+0.3** |
| TWC | baz=16 | | | *e*S | **Sg** | **18 59 32.0** | **+0.6** |
| **SSD** | **Sandimen** | **1.15** | **228** | *e*P | **Pn** | **18 59 16.3** | **0.0** |
| SSD | baz=224 | | | *e*S | **Sg** | **18 59 32.4** | **0.0** |
| **NSY** | **Sanyi** | **1.16** | **321** | *e*P | **Pg** | **18 59 17.5** | **0.0** |
| NSY | baz=321 | | | *e*S | **Sg** | **18 59 33.6** | **+0.9** |
| **NSK** | **Sanguang** | **1.17** | **351** | *e*P | **Pn** | **18 59 16.8** | **+0.1** |
| NSK | baz=353 | | | *e*S | **Sb** | **18 59 31.2** | **-0.6** |
| **CHN3** | **Shinhua** | **1.19** | **249** | *e*P | **Pg** | **18 59 18.8** | **+0.8** |
| CHN3 | baz=245 | | | *e*S | **Sg** | **18 59 33.3** | **-0.2** |
| **TWE** | **Neicheng** | **1.20** | **4** | *e*P | **Pg** | **18 59 17.8** | **-0.5** |
| TWE | baz=7.0 | | | *e*S | **Sg** | **18 59 33.9** | **-0.2** |
| **NSTT** | **Nanjuang** | **1.23** | **335** | P | **Pb** | **18 59 17.9** | **+0.2** |
| NSTT | baz=337 | | | *e*S | **Sb** | **18 59 32.7** | **-0.6** |
| **TWM1** | **Shoushan** | **1.26** | **237** | *e*P | **Pg** | **18 59 20.1** | **+0.8** |
| TWM1 | baz=233 | | | *e*S | **Sg** | **18 59 35.4** | **-0.3** |
| **EAST** | **Anshuo** | **1.31** | **211** | *e*P | **Pn** | **18 59 18.0** | **-0.5** |
| EAST | baz=207 | | | *e*S | **Sb** | **18 59 36.1** | **+0.4** |
| **SCZT** | **Fangliau** | **1.43** | **218** | *e*P | **Pb** | **18 59 21.7** | **+0.4** |
| SCZT | baz=214 | | | *e*S | **Sb** | **18 59 39.3** | **+0.1** |
| **TWA** | **Mucha** | **1.46** | **1** | *e*P | **Pb** | **18 59 21.6** | **-0.1** |
| TWA | baz=3.0 | | | *e*S | **Sb** | **18 59 40.6** | **+0.6** |
| **LAY** | **Lan-yu** | **1.47** | **181** | *e*P | **Pn** | **18 59 19.5** | **-1.2** |
| LAY | baz=178 | | | *e*S | **Sn** | **18 59 39.8** | **+0.2** |
| **TAP** | **Taipei** | **1.52** | **358** | *e*P | **Pb** | **18 59 22.3** | **-0.4** |
| TAP | | | | *e*S | **Sb** | **18 59 42.0** | **+0.2** |
| **NWF** | **Wu-fen Shan** | **1.56** | **7** | *e*P | **Pb** | **18 59 23.3** | **-0.2** |
| NWF | baz=9.0 | | | *e*S | **Sn** | **18 59 42.0** | **0.0** |
| **YOJ** | **Yonaguni jima** | **1.62** | **54** | P | **Pn** | **18 59 23.4** | **+0.6** |
| **HATJ** | **Hateruma jima** | **2.12** | **75** | P | **Pn** | **18 59 29.8** | **+0.1** |
| HATJ | | | | *e*S | **Sn** | **18 59 55.4** | **-0.2** |
| **IRIF** | **Iriomote-Funau** | **2.14** | **67** | P | **Pn** | **18 59 30.5** | **+0.5** |
| **JKRS** | **Kuro-shima** | **2.35** | **72** | P | **Pn** | **18 59 33.5** | **+0.7** |
| JKRS | | | | *e*S | **Sn** | **19 00 00.9** | **-0.4** |
| **JJJ** | **Ishigaki jima** | **2.50** | **70** | P | **Pn** | **18 59 35.1** | **+0.1** |
| JJJ | | | | *e*S | **Sn** | **19 00 03.9** | **-1.2** |
| **JISG** | **Ishigakijimahi** | **2.73** | **66** | P | **Pn** | **18 59 37.5** | **-0.5** |
| JISG | | | | *e*S | **Sn** | **19 00 09.7** | **-0.9** |
| **JTJ** | **Tarama** | **3.08** | **68** | P | **Pn** | **18 59 43.4** | **+0.5** |
| JTJ | | | | *e*S | **Sn** | **19 00 19.8** | **+0.5** |
| **JIRB** | **Irabujima** | **3.54** | **68** | *e*S | **Sn** | **19 00 30.9** | **+0.1** |

**IDC 20 19:17:21.3±2.3,18°.85S×170°.99E,h0km,mb3.4/3, mb1 3.7/4,mb1mx3.5/17,mbtmp3.4/4,ML3.1/1,MS3.5/6, Ms1 3.5/6,ms1mx3.4/11,Error ellipse: s-maj=138.6km s-min=31.2km az=151.0,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **5.33** | **232** | *e*Pn | Pn | 19 18 42.4 | +0.1 |
| DZM | 2.0nm,0.3s | | | *e*LR | LR | 19 20 01.0 | |
| **DZM** | 688nm,26.4s **Mont Dzumac** | **5.33** | **232** | Pn | Pn | 19 18 42.5 | +0.2 |
| DZM | 0.7nm,0.3s,baz=0.0,slow=19,SNR=7.3 | | | LR | LR | 19 20 14.6 | |
| **WRA** | comp=Z,131nm,20.8s,baz=360,slow=32 **Warramunga Arr** | **34.54** | **262** | P | P | 19 24 12.6 | +0.8 |
| **ASAR** | 0.4nm,0.9s,baz=90,slow=7.5,SNR=3.0 **Alice Springs** | **34.82** | **255** | P | P | 19 24 13.3 | -1.0 |
| ASAR | 0.4nm,0.8s,baz=84,slow=9.9,SNR=5.9 | | | LR | LR | 19 38 20.2 | |
| **TBI** | comp=Z,117nm,19.2s,baz=100,slow=36 **Tubuai** | **37.09** | **104** | *e*LR | LR | 19 33 54.9 | |
| **PPT2** | 132nm,30.2s **Papeete2** | **37.43** | **95** | *e*LR | LR | 19 34 13.3 | |
| **BATI** | 92nm,26.5s **Baumata** | **46.49** | **274** | LR | LR | 19 45 26.2 | |
| **DAV** | comp=Z,183nm,18.6s,slow=36 **Davao City (W)** | **51.64** | **296** | LR | LR | 19 47 10.5 | |
| **VNDA** | comp=Z,44nm,18.7s,baz=246,slow=35 **Vanda** | **58.88** | **182** | LR | LR | 19 48 15.0 | |
| **MJAR** | comp=Z,56nm,19.3s,baz=30,slow=32 **Matsushiro Arr** | **63.20** | **331** | LR | LR | 19 51 43.1 | |
| **NVAR** | comp=Z,28nm,22.0s,baz=250,slow=33 **Mina Array Bea** | **87.31** | **48** | P | P | 19 30 10.4 | -0.1 |
| **BRG** | 0.1nm,0.3s,baz=256,slow=7.1,SNR=3.2 **Berggiesshubel** | **143.22** | **336** | *e*P | PKPbc | 19 36 54.3 | 0.0 |
| BRG | 5.3nm,1.2s | | | *e* | | 19 37 05.0 | |
| **GERES** | 7.2nm,1.4s **GERESS Array B** | **144.90** | **334** | PKP | PKPdf | 19 37 00.2 | -0.3 |
| | 0.6nm,0.6s,baz=24,slow=5.4,SNR=4.4 | | | | | | |

*ISCJB **20** 19:37:59.1±0.7,29°.08S±0°.03×69°.71W±0°.05,h115km±8km, mb3.1/1,Error ellipse: s-maj=8.0km s-min=5.2km az=157.0*
*SJA **20** 19:37:59.8±0.5,29°.14S×69°.46W,h140km±4km,ML3.2, MW3.2*
*GUC **20** 19:37:59.7±0.7,29°.07S×69°.67W,h95km±22km,ML3.0*
*IDC **20** 19:38:02.0±6.9,29°.17S×69°.53W,h125km±57km,mb2.9/1, mb1 2.7/2,mb1mx2.7/25,mbtmp3.0/2,Error ellipse: s-maj=77.1km s-min=59.2km az=114.0*
**ISC 20 19:37:59.8±0.9,29°.06S±0°.04×69°.69W±0°.05,h112km±9km, n20,σ1°11/33,1C-2D,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VACH** | **Vallenar** | **1.05** | **297** | ⇑*i*P | **Pn** | **19 38 21.8** | **0.0** |
| VACH | | | | *i* S | **Sn** | **19 38 38.2** | **-0.1** |
| **VCA** | **Vinchina** | **1.34** | **76** | *e*P | **Pn** | **19 38 26.2** | **+1.1** |
| VCA | | | | *e*S | **Sn** | **19 38 45.4** | **+1.1** |
| VCA | | | | IAML | | 19 38 49.3 | |
| **TLL** | comp=Z,456nm,0.3s **Tololo Astrono** | **1.47** | **221** | ⇓*i*P | **Pn** | **19 38 26.5** | **-0.1** |
| TLL | | | | *i* S | **Sn** | **19 38 46.7** | **-0.2** |
| TLL | | | | AML | AML | 19 38 48.2 | |
| **LSCH** | comp=E,629nm,0.1s **La Serena** | **1.59** | **238** | ⇓*i*P | **Pn** | **19 38 27.3** | **-0.5** |
| LSCH | | | | *i* S | **Sn** | **19 38 47.8** | **-1.4** |
| LSCH | | | | AML | AML | 19 38 49.2 | |
| **CPCH** | comp=N,108nm,0.3s **Copiapo** | **1.80** | **341** | *i* S | **Sn** | **19 38 52.5** | **-1.1** |
| **AMOG** | **MOGNA** | **2.14** | **151** | *e*P | **Pn** | **19 38 35.0** | **+0.3** |
| AMOG | | | | *e*S | **Sn** | **19 39 00.9** | **-0.6** |
| **CDCH** | **Caldera** | **2.23** | **333** | *e*P | **Pn** | **19 38 35.9** | **+0.2** |
| **RTLL** | **Cerro Villicun** | **2.49** | **155** | *e*P | **Pn** | **19 38 39.7** | **+0.5** |
| RTLL | | | | *e*S | **Sn** | **19 39 08.8** | **-0.7** |
| **RTLS** | **Leoncito** | **2.75** | **173** | *e*P | **Pn** | **19 38 43.8** | **+1.1** |
| RTLS | | | | *e*S | **Sn** | **19 39 16.8** | **+1.0** |
| **CFAA** | **Coronel Fontan** | **2.83** | **154** | P | **Pn** | **19 38 44.3** | **+0.7** |
| CFAA | comp=N,0.5nm,0.3s,baz=339,slow=12,SNR=44 | | | S | **Sn** | **19 39 17.3** | **-0.1** |
| **CFAA** | comp=N,2.2nm,0.3s,baz=242,slow=17,SNR=26 **Coronel Fontan** | **2.83** | **154** | *e*P | **Pn** | **19 38 43.8** | **+0.1** |
| CFAA | | | | *e*S | **Sn** | **19 39 16.1** | **-1.2** |
| **RTCV** | **Cerro Valdivia** | **2.96** | **161** | *e*P | **Pn** | **19 38 45.8** | **+0.4** |
| RTCV | | | | *e*S | **Sn** | **19 39 19.2** | **-1.3** |
| **AUSP** | **Uspallata** | **3.16** | **175** | *e*P | **Pn** | **19 38 49.3** | **+1.1** |
| AUSP | | | | *e*S | **Sn** | **19 39 26.3** | **+0.7** |
| **CYA** | **Choya** | **3.47** | **81** | *e*P | Pn | 19 39 11.7 | +20 |
| CYA | | | | *e*S | **Sn** | **19 39 29.5** | **-3.1** |
| CYA | | | | IAML | | 19 39 30.6 | |
| | comp=Z,24nm,0.3s | | | | | | |
| **ASAL** | **Salagasta** | **3.59** | **168** | *e*P | **Pn** | **19 38 53.9** | **+0.1** |
| ASAL | | | | *e*S | **Sn** | **19 39 34.4** | **-1.2** |
| **ACAN** | **Cantantal** | **3.86** | **147** | *e*P | **Pn** | **19 38 56.5** | **-0.8** |
| ACAN | | | | *e*S | **Sn** | **19 39 38.9** | **-3.0** |
| **TORD** | **Torodi Ar. Bea** | **80.62** | **69** | P | **P** | **19 50 00.7** | **+0.3** |
| | comp=Z,0.2nm,0.6s,baz=232,slow=7.1,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **126.04** | **208** | PKP | **PKPdf** | **19 56 49.7** | **+0.3** |
| | comp=Z,0.3nm,0.6s,baz=155,slow=1.7,SNR=6.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **148.97** | **30** | PKPbc | **PKPbc** | **19 57 34.1** | **0.0** |
| | comp=Z,0.9nm,0.4s,baz=318,slow=4.5,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **151.91** | **43** | PKPbc | **PKPbc** | **19 57 42.1** | **+0.8** |
| | comp=Z,0.1nm,0.4s,baz=277,slow=2.3,SNR=4.1 | | | | | | |

*CSEM **20** 19:38:11.6,42°.54N×13°.16E,h11km,MD2.1/4,After ROM*
**ROM 20 19:38:11.6±0.1,42°.54N×13°.16E,h11km,Md2.1/4,Ml2.0/8, 4C,Error ellipse: s-maj=1.5km s-min=1.2km az=75.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RM29** | **Verrico (Monte** | **0.04** | **53** | Pg | Pg | 19 38 14.2 | +0.3 |
| RM29 | | | | Sg | Sg | 19 38 15.7 | +0.2 |
| **RM29** | **Verrico (Monte** | **0.04** | **53** | Pg | Pg | 19 38 14.2 | +0.3 |
| RM29 | | | | Sg | Sg | 19 38 15.7 | +0.2 |
| **RM33** | **Pellescritta (** | **0.05** | **121** | Pg | Pg | 19 38 14.3 | +0.4 |
| RM33 | | | | Sg | Sg | 19 38 15.8 | +0.2 |
| **RM33** | **Pellescritta (** | **0.05** | **121** | Pg | Pg | 19 38 14.3 | +0.4 |
| RM33 | | | | Sg | Sg | 19 38 15.8 | +0.2 |
| **RM32** | **Poggio Cancell** | **0.11** | **71** | Pg | Pg | 19 38 15.1 | +0.5 |
| RM32 | | | | Sg | Sg | 19 38 17.2 | +0.4 |
| **RM32** | **Poggio Cancell** | **0.11** | **71** | Pg | Pg | 19 38 15.1 | +0.5 |
| RM32 | | | | Sg | Sg | 19 38 17.2 | +0.4 |
| **LNSS** | **Leonessa** | **0.11** | **308** | Pg | Pg | 19 38 14.9 | +0.3 |
| LNSS | 558nm,0.1s | | | Sg | Sg | 19 38 17.0 | +0.2 |
| **LNSS** | **Leonessa** | **0.11** | **308** | Pg | Pg | 19 38 14.9 | +0.3 |
| LNSS | 558nm,0.1s | | | Sg | Sg | 19 38 17.0 | +0.2 |
| **SMA1** | **SAN MARTINO** | **0.16** | **54** | ⇑*i*Pg | Pg | 19 38 16.1 | +0.7 |
| SMA1 | 548nm,0.2s | | | Sg | Sg | 19 38 18.9 | +0.8 |
| **SMA1** | **SAN MARTINO** | **0.16** | **54** | ⇑*i*Pg | Pg | 19 38 16.1 | +0.7 |
| SMA1 | 548nm,0.2s | | | Sg | Sg | 19 38 18.9 | +0.8 |
| **CAMP** | **Campotosto** | **0.19** | **90** | Pg | Pg | 19 38 16.3 | +0.5 |
| CAMP | 130nm,0.4s | | | Sg | Sg | 19 38 19.6 | +0.9 |
| **CAMP** | **Campotosto** | **0.19** | **90** | Pg | Pg | 19 38 16.3 | +0.5 |
| CAMP | 130nm,0.4s | | | Sg | Sg | 19 38 19.6 | +0.9 |
| **T0104** | **Madonna delle** | **0.22** | **142** | Pg | Pg | 19 38 16.6 | +0.3 |
| T0104 | | | | Sg | Sg | 19 38 20.7 | +1.2 |
| **FIAM** | **Fiamignano** | **0.27** | **186** | ⇑*i*Pg | Pg | 19 38 17.8 | +0.5 |
| FIAM | | | | Sg | Sg | 19 38 22.1 | +1.1 |
| **FIAM** | **Fiamignano** | **0.27** | **186** | ⇑*i*Pg | Pg | 19 38 17.8 | +0.5 |
| FIAM | | | | Sg | Sg | 19 38 22.1 | +1.1 |
| **T0106** | **Roio Piano** | **0.28** | **144** | Pg | Pb | 19 38 18.6 | -0.3 |
| T0106 | 52nm,0.3s | | | Sg | Sb | 19 38 22.8 | -1.0 |
| **NRCA** | **Norcia** | **0.30** | **354** | Pg | Pg | 19 38 18.1 | +0.3 |
| NRCA | 287nm,0.1s | | | Sg | Sg | 19 38 22.7 | +0.7 |
| **NRCA** | **Norcia** | **0.30** | **354** | Pg | Pg | 19 38 18.1 | +0.3 |
| NRCA | 287nm,0.1s | | | Sg | Sg | 19 38 22.7 | +0.7 |
| **TERO** | **Teramo** | **0.34** | **75** | Pg | Pg | 19 38 18.7 | +0.2 |
| TERO | 114nm,0.5s | | | Sg | Sg | 19 38 23.8 | +0.6 |
| **TERO** | **Teramo** | **0.34** | **75** | Pg | Pg | 19 38 18.7 | +0.2 |
| TERO | 114nm,0.5s | | | Sg | Sg | 19 38 23.8 | +0.6 |
| **FAGN** | **Fagnano** | **0.41** | **130** | Pg | Pg | 19 38 19.0 | -0.9 |
| | 49nm,0.3s | | | | | | |
| **FAGN** | **Fagnano** | **0.41** | **130** | Pg | Pg | 19 38 19.0 | -0.9 |
| | 49nm,0.3s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.78** | **47** | Pg | Pg | 19 38 22.9 | -3.8 |
| GUMA | 119nm,0.3s | | | Sg | Sg | 19 38 31.2 | -5.8 |
| **GUMA** | **Gualdo di Mace** | **0.78** | **47** | Pg | Pg | 19 38 22.9 | -3.8 |
| GUMA | 119nm,0.3s | | | Sg | Sg | 19 38 31.2 | -5.8 |

*CSEM **20** 19:38:55.0,42°.54N×13°.16E,h11km,MD2.2/15,After ROM*
**ROM 20 19:38:55.0±0.1,42°.54N×13°.16E,h11km,Md2.2/15, Ml2.3/9,8C-2D,Error ellipse: s-maj=1.0km s-min=0.8km az=48.0,Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RM29** | **Verrico (Monte** | **0.04** | **57** | Pg | Pg | 19 38 57.6 | +0.4 |
| RM29 | | | | Sg | Sg | 19 38 59.1 | +0.3 |
| **RM29** | **Verrico (Monte** | **0.04** | **57** | Pg | Pg | 19 38 57.6 | +0.4 |
| RM29 | | | | Sg | Sg | 19 38 59.1 | +0.3 |
| **RM33** | **Pellescritta (** | **0.05** | **124** | Pg | Pg | 19 38 57.6 | +0.3 |
| RM33 | | | | Sg | Sg | 19 38 59.1 | +0.2 |
| **RM33** | **Pellescritta (** | **0.05** | **124** | Pg | Pg | 19 38 57.6 | +0.3 |
| RM33 | | | | Sg | Sg | 19 38 59.1 | +0.2 |
| **RM32** | **Poggio Cancell** | **0.11** | **72** | Pg | Pg | 19 38 58.4 | +0.4 |
| RM32 | | | | Sg | Sg | 19 39 00.5 | +0.4 |
| **RM32** | **Poggio Cancell** | **0.11** | **72** | Pg | Pg | 19 38 58.4 | +0.4 |
| RM32 | | | | Sg | Sg | 19 39 00.5 | +0.4 |
| **LNSS** | **Leonessa** | **0.11** | **307** | ⇓*i*Pg | Pg | 19 38 58.3 | +0.3 |
| LNSS | | | | Sg | Sg | 19 39 00.2 | +0.1 |
| **LNSS** | **Leonessa** | **0.11** | **307** | ⇓*i*Pg | Pg | 19 38 58.3 | +0.3 |
| LNSS | | | | Sg | Sg | 19 39 00.2 | +0.1 |
| **SMA1** | **SAN MARTINO** | **0.16** | **55** | ⇑*i*Pg | Pg | 19 38 59.4 | +0.6 |
| SMA1 | 1μm,0.2s | | | Sg | Sg | 19 39 02.2 | +0.8 |
| **SMA1** | **SAN MARTINO** | **0.16** | **55** | ⇑*i*Pg | Pg | 19 38 59.4 | +0.6 |
| SMA1 | 1μm,0.2s | | | Sg | Sg | 19 39 02.2 | +0.8 |
| **CAMP** | **Campotosto** | **0.19** | **91** | ⇑*i*Pg | Pg | 19 38 59.6 | +0.4 |
| CAMP | 356nm,0.4s | | | Sg | Sg | 19 39 02.7 | +0.6 |
| **CAMP** | **Campotosto** | **0.19** | **91** | ⇑*i*Pg | Pg | 19 38 59.6 | +0.4 |
| CAMP | 356nm,0.4s | | | Sg | Sg | 19 39 02.7 | +0.6 |
| **T0104** | **Madonna delle** | **0.22** | **143** | Pg | Pg | 19 39 00.3 | +0.5 |
| T0104 | | | | Sg | Sg | 19 39 04.1 | +1.1 |
| **FIAM** | **Fiamignano** | **0.27** | **186** | ⇑*i*Pg | Pg | 19 39 01.1 | +0.4 |
| FIAM | 267nm,0.5s | | | Sg | Sg | 19 39 05.5 | +1.0 |
| **FIAM** | **Fiamignano** | **0.27** | **186** | ⇑*i*Pg | Pg | 19 39 01.1 | +0.4 |
| FIAM | 267nm,0.5s | | | Sg | Sg | 19 39 05.5 | +1.0 |
| **T0106** | **Roio Piano** | **0.29** | **144** | Pg | Pg | 19 39 01.5 | +0.5 |
| | 161nm,0.4s | | | | | | |
| **NRCA** | **Norcia** | **0.30** | **354** | Pg | Pg | 19 39 01.3 | +0.1 |
| NRCA | 813nm,0.2s | | | Sg | Sg | 19 39 06.0 | +0.7 |
| **NRCA** | **Norcia** | **0.30** | **354** | Pg | Pg | 19 39 01.3 | +0.1 |
| NRCA | 813nm,0.2s | | | Sg | Sg | 19 39 06.0 | +0.7 |
| **TERO** | **Teramo** | **0.34** | **75** | ⇑*i*Pg | Pg | 19 39 02.0 | +0.1 |
| TERO | 253nm,0.4s | | | Sg | Sg | 19 39 07.0 | +0.4 |
| **TERO** | **Teramo** | **0.34** | **75** | ⇑*i*Pg | Pg | 19 39 02.0 | +0.1 |
| TERO | 253nm,0.4s | | | Sg | Sg | 19 39 07.0 | +0.4 |
| **CESX** | **Cesi** | **0.43** | **280** | Pg | Pb | 19 39 04.4 | -0.3 |
| CESX | 106nm,0.3s | | | Sg | Sg | 19 39 10.1 | +0.8 |
| **CESX** | **Cesi** | **0.43** | **280** | Pg | Pb | 19 39 04.4 | -0.3 |
| CESX | 106nm,0.3s | | | Sg | Sg | 19 39 10.1 | +0.8 |
| **CESI** | **CESI - Serrava** | **0.50** | **338** | Pg | Pg | 19 39 04.9 | -0.1 |
| CESI | | | | Sg | Sg | 19 39 12.4 | +0.7 |
| **CESI** | **CESI - Serrava** | **0.50** | **338** | Pg | Pg | 19 39 04.9 | -0.1 |
| CESI | | | | Sg | Sg | 19 39 12.4 | +0.7 |
| **VCEL** | **Villa Celiera** | **0.53** | **106** | Pg | Pg | 19 39 05.8 | +0.3 |
| VCEL | | | | Sg | Sb | 19 39 13.7 | -0.5 |
| **VCEL** | **Villa Celiera** | **0.53** | **106** | Pg | Pg | 19 39 05.8 | +0.3 |
| VCEL | | | | Sg | Sb | 19 39 13.7 | -0.5 |
| **PTQR** | **Pietraquaria** | **0.55** | **161** | Pg | Pg | 19 39 05.9 | +0.1 |
| | 7.0nm,0.3s | | | | | | |
| **PTQR** | **Pietraquaria** | **0.55** | **161** | Pg | Pg | 19 39 05.9 | +0.1 |
| | 7.0nm,0.3s | | | | | | |
| **OFFI** | **Offida** | **0.56** | **44** | Pg | Pb | 19 39 06.7 | -0.1 |
| | 250nm,0.5s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OFFI** | **Offida** | **0.56** | **44** | Pg | Pb | 19 39 06.7 | -0.1 |
| | 250nm,0.5s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.73** | **348** | Pg | Pg | 19 39 08.8 | -0.5 |
| **SNTG** | **Esanatoglia** | **0.73** | **348** | Pg | Pg | 19 39 08.8 | -0.5 |
| **GUMA** | **Gualdo di Mace** | **0.78** | **47** | Pg | Pg | 19 39 05.9 | -4.2 |
| GUMA | | | | Sg | Sg | 19 39 14.5 | -5.8 |
| | 336nm,0.4s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.78** | **47** | Pg | Pg | 19 39 05.9 | -4.2 |
| GUMA | | | | Sg | Sg | 19 39 14.5 | -5.8 |
| | 336nm,0.4s | | | | | | |

*IDC **20** 19:41:27.5±2.3,4°.13S×101°.29E,h0km,mb3.8/7, mb1 4.0/7,mb1mx3.6/37,mbtmp3.9/7,MS3.2/5,Ms1 3.2/5, ms1mx2.8/31,Error ellipse: s-maj=85.7km s-min=18.8km az=57.0*

*ISCJB **20** 19:41:30.2±2.4,4°.2S±0°.3×101°.3E±0°.5,h34km,mb3.9/7, MS3.3/3,Error ellipse: s-maj=82.5km s-min=16.3km az=147.3*

**ISC 20 19:41:32.6±2.6,4°.1S±0°.4×101°.3E±0°.5,h34km,n20, σ0$45/9,mb3.9/7,MS3.2/3,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSI** | **Prapat** | **7.28** | **341** | LR | LR | 19 45 54.2 | |
| | comp=Z,90nm,21.1s,baz=115,slow=37 | | | | | | |
| **KAPI** | **Kappang** | **18.38** | **93** | LR | LR | 19 52 34.6 | |
| | comp=Z,78nm,20.5s,baz=278,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.56** | **354** | P | **P** | **19 46 30.1** | **+0.1** |
| | 0.7nm,0.5s,baz=183,slow=8.8,SNR=7.0 | | | | | | |
| CMAR | | | | LR | LR | 19 55 53.4 | |
| | comp=Z,48nm,19.4s,baz=95,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.90** | **262** | T | T | 20 17 12.7 | |
| | baz=85,slow=75,SNR=58 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.91** | **262** | T | T | 20 17 26.0 | |
| | baz=85,slow=75,SNR=78 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.92** | **262** | T | T | 20 17 26.7 | |
| | baz=85,slow=75,SNR=70 | | | | | | |
| **H08N1** | **Diego Garcia H** | **30.27** | **265** | T | T | 20 19 46.3 | |
| | baz=248 | | | | | | |
| **H08N2** | **Diego Garcia H** | **30.29** | **265** | T | T | 20 19 47.1 | |
| | baz=248 | | | | | | |
| **H08N3** | **Diego Garcia H** | **30.29** | **265** | T | T | 20 19 34.3 | |
| | baz=248 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **32.83** | **160** | T | T | 20 22 27.7 | |
| | baz=336,slow=76,SNR=9.8 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **32.84** | **160** | T | T | 20 22 28.7 | |
| | baz=336,slow=76,SNR=11 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **32.85** | **160** | T | T | 20 22 27.8 | |
| | baz=336,slow=76,SNR=9.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.79** | **119** | P | **P** | **19 48 28.7** | **-0.2** |
| | 0.7nm,0.5s,baz=308,slow=8.8,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **36.95** | **125** | P | **P** | **19 48 39.0** | **+0.2** |
| | 0.6nm,0.6s,baz=295,slow=8.2,SNR=15 | | | | | | |
| **SONM** | **Songino Array** | **51.93** | **4** | P | **P** | **19 50 38.7** | **+0.6** |
| | 1.4nm,0.7s,baz=186,slow=10,SNR=11 | | | | | | |
| SONM | | | | PcP | **PcP** | **19 51 50.2** | **-0.3** |
| | 0.3nm,0.4s,baz=171,slow=3.8,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.42** | **344** | P | **P** | **19 50 49.0** | **0.0** |
| | 0.4nm,0.5s,baz=161,slow=8.5,SNR=11 | | | | | | |
| MKAR | | | | LR | LR | 20 16 58.5 | |
| | comp=Z,22nm,20.1s,baz=106,slow=40 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.42** | **26** | P | **P** | **19 51 03.3** | **-0.3** |
| | 4.2nm,0.7s,baz=222,slow=6.2,SNR=7.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.49** | **349** | P | **P** | **19 51 31.5** | **-0.6** |
| | 1.1nm,0.4s,baz=181,slow=7.1,SNR=5.7 | | | | | | |
| **GERES** | **GERESS Array B** | **91.51** | **319** | LR | LR | 20 39 29.0 | |
| | comp=Z,24nm,20.0s,baz=286,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.50** | **41** | PKPbc | **PKPab** | **20 01 08.8** | **+0.5** |
| | 1.2nm,0.5s,baz=298,slow=0.8,SNR=13 | | | | | | |

*ISCJB **20** 19:46:46.1±0.6,50°.38N±0°.04×18°.78E±0°.03,h0km,Error ellipse: s-maj=6.3km s-min=2.4km az=15.6*

*CSEM **20** 19:46:47.3±0.3,50°.37N×18°.83E,h2km,ML2.7/5,Error ellipse: s-maj=7.5km s-min=3.2km az=13.0*

*PRU **20** 19:46:48.2,50°.36N×18°.81E,h0km*

*VIE **20** 19:46:53.1±1.0,49°.74N×18°.74E,h0km,mb2.0/2,ml2.1/3, Error ellipse: s-maj=6.7km s-min=4.6km az=127.0, Suspected Mining induced.*

**ISC 20 19:46:47.4±0.9,50°.38N±0°.04×18°.87E±0°.02,h0km,n31, σ1$10/53,1C,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHZP** | **Chorzow** | **0.12** | **139** | *e*Pg | **Pg** | **19 46 49.5** | **-0.1** |
| CHZP | | | | *e*Sg | **Sg** | **19 46 51.7** | **+0.6** |
| **OJC** | **Ojcow** | **0.61** | **105** | *e*Pg | **Pg** | **19 46 58.6** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **19 47 07.0** | **-0.1** |
| **OJC** | **Ojcow** | **0.61** | **105** | *e*Pg | **Pg** | **19 46 58.6** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **19 47 07.0** | **-0.1** |
| **OKC** | **Ostrava-Krasne** | **0.72** | **221** | *e*PG | **Pg** | **19 47 01.2** | **+0.1** |
| OKC | | | | *e*SG | **Sg** | **19 47 11.2** | **+0.9** |
| | comp=Z,25nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.72** | **221** | Pg | **Pg** | **19 47 01.2** | **+0.1** |
| OKC | | | | Sg | **Sg** | **19 47 11.2** | **+0.9** |
| | 25nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.05** | **235** | *e*Pg | **Pg** | **19 47 07.0** | **-0.4** |
| **LANS** | **Liptovska Anna** | **1.29** | **162** | *e*PG | **Pg** | **19 47 11.7** | **-0.4** |
| LANS | | | | *e*SG | **Sg** | **19 47 28.8** | **0.0** |
| **LANS** | **Liptovska Anna** | **1.29** | **162** | *e*Pg | **Pg** | **19 47 11.7** | **-0.4** |
| LANS | | | | *e*Sg | **Sg** | **19 47 28.8** | **0.0** |
| **NIE** | **Niedzica** | **1.33** | **136** | *e*Pg | **Pg** | **19 47 12.9** | **0.0** |
| NIE | | | | *e*Sg | **Sn** | **19 47 31.5** | **-0.2** |
| **NIE** | **Niedzica** | **1.33** | **136** | *e*Pg | **Pg** | **19 47 12.9** | **0.0** |
| NIE | | | | *e*Sg | **Sn** | **19 47 31.5** | **-0.2** |
| **KRLC** | **Kraliky** | **1.38** | **258** | *e*PG | **Pg** | **19 47 12.6** | **-1.1** |
| KRLC | | | | *e*SG | **Sg** | **19 47 31.4** | **-0.2** |
| **KRLC** | **Kraliky** | **1.38** | **258** | Pg | **Pg** | **19 47 12.6** | **-1.1** |
| KRLC | | | | Sg | **Sg** | **19 47 31.4** | **-0.2** |
| **DPC** | **Dobruska-Polom** | **1.63** | **270** | *e*PG | **Pn** | **19 47 17.1** | **-0.3** |
| DPC | | | | *e*SG | **Sn** | **19 47 38.4** | **-0.8** |
| | comp=Z,11nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.63** | **270** | Pg | **Pn** | **19 47 17.1** | **-0.3** |
| DPC | | | | Sg | **Sn** | **19 47 38.4** | **-0.8** |
| | 11nm,0.5s | | | | | | |
| **KSP** | **Ksiaz** | **1.71** | **287** | *e*Pg | **Pg** | **19 47 20.3** | **+0.2** |
| KSP | | | | *e*Sg | **Sg** | **19 47 42.7** | **+0.5** |
| **KSP** | **Ksiaz** | **1.71** | **287** | *e*Pg | **Pg** | **19 47 20.3** | **+0.2** |
| KSP | | | | *e*Sg | **Sg** | **19 47 42.7** | **+0.5** |
| **STHS** | **Stebnicka Huta** | **1.81** | **121** | *e*PN | **Pb** | **19 47 21.1** | **-0.3** |
| STHS | | | | *e*SN | **Sg** | **19 47 45.9** | **+0.4** |
| **STHS** | **Stebnicka Huta** | **1.81** | **121** | *e*Pn | **Pb** | **19 47 21.1** | **-0.3** |
| STHS | | | | *e*Sn | **Sg** | **19 47 45.9** | **+0.4** |
| **VRAC** | **Vranov** | **1.82** | **235** | *e*Pn | **Pn** | **19 47 20.6** | **+0.6** |
| VRAC | | | | *e*Sg | **Sb** | **19 47 44.9** | **-0.1** |
| **VYHS** | **Vyhne** | **1.89** | **181** | *e*PN | **Pn** | **19 47 20.1** | **-0.8** |
| VYHS | | | | *e*SN | **Sn** | **19 47 43.4** | **-2.0** |
| **VYHS** | **Vyhne** | **1.89** | **181** | *e*Pn | **Pn** | **19 47 20.1** | **-0.8** |
| VYHS | | | | *e*Sn | **Sn** | **19 47 43.4** | **-2.0** |
| **GOPC** | **GO Pecny, Ondr** | **2.67** | **262** | *e*SG | **Sg** | **19 48 11.4** | **-1.7** |
| **GOPC** | **GO Pecny, Ondr** | **2.67** | **262** | Sg | **Sg** | **19 48 11.4** | **-1.7** |
| **PVCC** | **Panska Ves** | **2.75** | **275** | *e*SG | **Sg** | **19 48 15.2** | **-0.6** |
| | comp=Z,9.9nm,0.6s | | | | | | |
| **PVCC** | **Panska Ves** | **2.75** | **275** | Sg | **Sg** | **19 48 15.2** | **-0.6** |
| | 9.9nm,0.6s | | | | | | |
| **PRU** | **Pruhonice** | **2.81** | **264** | *e*SG | **Sg** | **19 48 15.4** | **-2.2** |
| | comp=Z,3.9nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **2.81** | **264** | Sg | **Sg** | **19 48 15.4** | **-2.2** |
| | 3.9nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.18** | **281** | PG | **Pb** | **19 47 46.3** | **+1.6** |
| BRG | | | | SG | **Sg** | **19 48 29.3** | **-0.1** |
| | 4.7nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.65** | **252** | *e*PG | **Pb** | **19 47 53.8** | **+1.0** |
| KHC | | | | *e*SG | **Sg** | **19 48 42.6** | **-2.1** |
| | comp=Z,4.2nm,0.5s | | | | | | |
| **MOA** | **Molln** | **3.95** | **232** | *i*Sg | **Sb** | **19 48 49.1** | **+3.1** |
| | 5.2nm,0.8s | | | | | | |
| **MOA** | **Molln** | **3.95** | **232** | Sg | **Sb** | **19 48 49.1** | **+3.1** |
| | 5.2nm,0.8s | | | | | | |

*TEH **20** 19:59:28.6,38°.45N×69°.80E,h1km,ML4.3*

*IDC **20** 19:59:34.6±1.9,39°.11N×70°.41E,h0km,mb3.7/5, mb1 3.7/11,mb1mx3.6/46,mbtmp3.7/11,ML3.2/6,Error ellipse: s-maj=36.0km s-min=12.2km az=151.0*

*NNC **20** 19:59:36.3±2.5,38°.85N×69°.93E,h127km±21km,mb3.0, mpv3.8,Error ellipse: s-maj=30.1km s-min=14.4km az=160.0*

*ISCJB **20** 19:59:37.9±0.5,39°.51N±0°.06×69°.84E±0°.04,h10km, mb3.5/5,Error ellipse: s-maj=8.7km s-min=4.0km az=158.4*

**ISC 20 19:59:38.4±0.8,39°.40N±0°.06×70°.02E±0°.05,h10km,n32, σ1$38/38,mb3.5/5,6C-5D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **1.10** | **238** | ⇓P | **Pb** | **19 59 58.1** | **-1.6** |
| | 39nm,0.3s | | | | | | |
| DZET | | | | ⇓S | **Sb** | **20 00 14.7** | **+0.6** |
| | 194nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.76** | **76** | ⇓P | **Pn** | **20 00 24.2** | **+1.3** |
| | 45nm,0.7s | | | | | | |
| SFK | | | | ⇑S | **Sb** | **20 01 00.5** | **-1.4** |
| | 222nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **3.61** | **31** | ⇑P | **Pn** | **20 00 36.2** | **+1.6** |
| | 14nm,0.6s | | | | | | |
| MNAS | | | | S | **Sb** | **20 01 26.6** | **+0.2** |
| | 22nm,0.4s | | | | | | |
| **KK31** | **Karatay Array** | **3.72** | **6** | P | **Pn** | **20 00 38.8** | **+2.9** |
| | 7.1nm,0.5s,baz=186,slow=13,SNR=206 | | | | | | |
| KK31 | | | | ⇑S | **Sg** | **20 01 38.0** | **+0.1** |
| | 14nm,0.3s,baz=180,slow=29 | | | | | | |
| **AML** | **Almayashu** | **3.90** | **44** | P | **Pn** | **20 00 41.2** | **+2.4** |
| | SNR=6.7 | | | | | | |
| **UCH** | **Uchtor** | **4.43** | **49** | P | **Pn** | **20 00 46.8** | **+0.7** |
| | SNR=10 | | | | | | |
| **KSH** | **Kashi** | **4.61** | **87** | *e*Pn | Pn | 20 00 44.4 | -3.9 |
| KSH | | | | Sn | Sn | 20 01 32.9 | -9.1 |
| KSH | | | | smax | smax | | |
| | comp=N,59nm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,51nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **4.68** | **45** | ⇓P | **Pn** | **20 00 50.1** | **+0.8** |
| | comp=E,5.9nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **4.68** | **45** | Pn | **Pn** | **20 00 50.1** | **+0.8** |
| | comp=E,1.9nm,0.3s,baz=203,slow=11,SNR=17 | | | | | | |
| AAK | | | | Sn | **Sn** | **20 01 43.3** | **-0.5** |
| | comp=E,2.7nm,0.3s,baz=180,slow=20,SNR=4.1 | | | | | | |
| **AAK** | **Ala-Archa** | **4.68** | **45** | P | **Pn** | **20 00 50.2** | **+0.8** |
| | SNR=16 | | | | | | |
| **KZA** | **Kyzart** | **4.79** | **54** | P | **Pn** | **20 00 53.3** | **+2.2** |
| | SNR=38 | | | | | | |
| **KBK** | **Karagaybulak** | **4.95** | **47** | P | **Pn** | **20 00 54.5** | **+1.6** |
| | SNR=15 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.49** | **48** | ⇑P | **Pn** | **20 01 00.3** | **-0.1** |
| | comp=E,7.5nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **5.49** | **48** | P | **Pn** | **20 01 02.2** | **+1.8** |
| | SNR=14 | | | | | | |
| **ULHL** | **Ulahol** | **5.51** | **57** | P | **Pn** | **20 01 02.6** | **+1.9** |
| | SNR=6.4 | | | | | | |
| **IMYA** | **Miami** | **8.41** | **252** | *e*P | **Pn** | **20 01 40.8** | **+0.3** |
| **IEMG** | **Emamgholi** | **9.14** | **261** | *e*P | **Pn** | **20 01 51.4** | **+0.8** |
| **IPAY** | **Payeh** | **9.19** | **255** | *e*P | **Pn** | **20 01 51.8** | **+0.5** |
| **IAKL** | **Akhelmad** | **9.32** | **256** | *e*P | **Pn** | **20 01 52.8** | **-0.3** |
| **GEYT** | **Alibeck** | **9.42** | **265** | Pn | **Pn** | **20 01 54.6** | **+0.3** |
| | comp=E,0.3nm,0.3s,baz=74,slow=12,SNR=5.9 | | | | | | |
| GEYT | | | | Sn | **Sn** | **20 03 39.9** | **-0.4** |
| | comp=E,0.4nm,0.3s,baz=99,slow=9.3,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **11.61** | **47** | Pn | **Pn** | **20 02 23.3** | **-0.9** |
| | comp=E,0.0nm,0.3s,baz=232,slow=14,SNR=3.1 | | | | | | |
| **AB31** | **Akbulak array** | **12.20** | **327** | P | **Pn** | **20 02 32.5** | **+0.4** |
| | comp=E,1.1nm,0.3s,baz=134,slow=15,SNR=62 | | | | | | |
| AB31 | | | | ⇑S | **Sn** | **20 04 44.0** | **-4.1** |
| | comp=E,1.9nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **13.63** | **1** | Pn | **Pn** | **20 02 51.3** | **-0.4** |
| | comp=E,0.2nm,0.3s,baz=225,slow=43,SNR=3.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **13.91** | **326** | ⇓P | **Pn** | **20 02 56.6** | **+1.1** |
| | comp=E,3.4nm,1.1s | | | | | | |
| AKTO | | | | ⇑S | **Sn** | **20 05 28.4** | **-1.5** |
| | comp=E,5.7nm,1.2s | | | | | | |
| **AKTO** | **Aktyubinsk** | **13.91** | **326** | Pn | **Pn** | **20 02 55.5** | **0.0** |
| | comp=E,0.1nm,0.3s,baz=135,slow=17,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.69** | **3** | P | **Pn** | **20 03 44.4** | **-0.3** |
| | comp=E,0.4nm,0.3s,baz=223,slow=10,SNR=9.5 | | | | | | |
| **KBZ** | **Khabaz** | **20.71** | **291** | P | Pn | 20 04 21.1 | +0.1 |
| | comp=E,1.2nm,0.7s,baz=229,slow=19,SNR=1.9 | | | | | | |
| **SONM** | **Songino Array** | **27.44** | **60** | P | **P** | **20 05 24.8** | **+0.2** |
| | comp=E,0.3nm,0.8s,baz=281,slow=11,SNR=3.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **27.93** | **282** | P | **P** | **20 05 30.4** | **+1.4** |
| | comp=E,0.5nm,0.5s,baz=74,slow=11,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **34.66** | **324** | P | **P** | **20 06 28.1** | **+0.3** |
| | comp=E,2.8nm,0.9s,baz=128,slow=9.0,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.17** | **336** | P | **P** | **20 06 58.2** | **+0.6** |
| | comp=E,1.1nm,0.8s,baz=108,slow=7.7,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.06** | **267** | P | **P** | **20 10 18.4** | **-0.9** |
| | comp=E,0.3nm,0.8s,baz=40,slow=7.2,SNR=4.1 | | | | | | |

**MEX 20 20:19:13.7±0.4,13°.76N×92°.68W,h5km,MD4.1,Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **2.00** | **345** | *e*P | Pn | 20 19 44.9 | -3.3 |
| PCIG | | | | *e*S | Sn | 20 20 09.3 | -4.4 |
| **CCIG** | **Comitan** | **2.56** | **12** | *e*P | Pn | 20 19 56.2 | 0.0 |
| CCIG | | | | *i* S | Sn | 20 20 27.0 | -0.9 |

**IDC 20 20:24:07.9±1.7,54°.06N×168°.86E,h0km,mb3.5/5, mb1 3.7/6,mb1mx3.5/40,mbtmp3.5/6,ML2.8/1,Error ellipse: s-maj=43.9km s-min=27.6km az=163.0, Komandorsky Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PETK** | **Petropavlovsk-** | **6.71** | **266** | Pn | Pn | 20 25 49.6 | +2.0 |
| | 1.0nm,0.3s,baz=102,slow=19,SNR=11 | | | | | | |
| PETK | | | | Sn | Sn | 20 27 06.2 | +1.5 |
| | 0.4nm,0.3s,baz=56,slow=15,SNR=3.2 | | | | | | |
| **ILAR** | **Eielson Array** | **24.39** | **46** | P | P | 20 29 28.3 | +0.9 |
| | 0.4nm,0.5s,baz=257,slow=8.2,SNR=2.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.30** | **183** | T | T | 21 07 18.5 | |
| | baz=2.4,slow=76,SNR=580 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.31** | **183** | T | T | 21 07 19.5 | |
| | baz=2.4,slow=76,SNR=525 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.32** | **183** | T | T | 21 07 22.0 | |
| | baz=2.4,slow=76,SNR=452 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.52** | **184** | T | T | 21 08 52.4 | |
| | baz=2.4,slow=76,SNR=164 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.53** | **184** | T | T | 21 08 53.5 | |
| | baz=2.4,slow=76,SNR=103 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.54** | **184** | T | T | 21 08 55.1 | |
| | baz=2.4,slow=76,SNR=165 | | | | | | |
| **SONM** | **Songino Array** | **38.69** | **287** | P | P | 20 31 33.8 | +0.6 |
| | 0.3nm,0.5s,baz=66,slow=7.9,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.33** | **300** | P | P | 20 33 20.0 | -1.1 |
| | 0.4nm,0.7s,baz=49,slow=6.5,SNR=3.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **53.75** | **312** | P | P | 20 33 30.8 | -0.7 |
| | 1.5nm,0.7s,baz=59,slow=8.9,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **79.45** | **213** | P | P | 20 36 15.6 | -0.2 |
| | 0.4nm,1.0s,baz=30,slow=5.9,SNR=3.5 | | | | | | |

**MEX 20 20:29:53.8±0.6,14°.77N×93°.27W,h16km±45km,MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.93** | **3** | *i* P | Pb | 20 30 08.6 | -3.1 |
| PCIG | | | | *i* S | Sb | 20 30 19.6 | -4.1 |
| **CCIG** | **Comitan** | **1.86** | **36** | *i* P | Pn | 20 30 22.6 | -2.6 |
| CCIG | | | | *e*S | Sn | 20 30 43.8 | -4.8 |

*IDC **20** 21:10:07.2±1.1,6°.89S×155°.22E,h0km,mb3.8/7, mb1 4.0/8,mb1mx3.8/20,mbtmp3.8/8,ML2.2/1,MS3.2/2, Ms1 3.2/2,ms1mx2.7/25,Error ellipse: s-maj=34.5km s-min=23.6km az=140.0*

*ISCJB **20** 21:10:11.5±1.3,7°.0S±0°.2×155°.2E±0°.1,h41km,mb3.7/7, MS3.3/1,Error ellipse: s-maj=33.1km s-min=11.8km az=147.3*

**ISC 20 21:10:12.5±1.1,7°.0S±0°.2×155°.3E±0°.1,h41km,n15, σ0$89/13,mb3.6/7,Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **5.20** | **118** | LR | LR | 21 13 41.6 | |
| | comp=Z,182nm,19.8s,baz=280,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **8.39** | **253** | Pn | **Pn** | **21 12 11.3** | **-0.4** |
| | 1.5nm,0.3s,baz=294,slow=16,SNR=3.5 | | | | | | |
| PMG | | | | Sn | **Sn** | **21 13 45.5** | **+0.4** |
| | 0.6nm,0.3s,baz=63,slow=4.5,SNR=2.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.05** | **236** | P | **P** | **21 15 24.1** | **+0.1** |
| | 1.2nm,0.6s,baz=59,slow=9.6,SNR=15 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 19 07.1** | **+1.9** |
| | 0.2nm,0.5s,baz=59,slow=2.5,SNR=4.6 | | | | | | |
| **SIJI** | **Sorong** | **24.72** | **283** | P | **P** | **21 15 29.2** | **-1.1** |
| | 6.8nm,0.8s,baz=96,slow=18,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **26.38** | **229** | P | **P** | **21 15 45.2** | **0.0** |
| | 0.5nm,0.6s,baz=60,slow=9.3,SNR=5.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.73** | **24** | T | T | 21 44 31.0 | |
| | baz=202,slow=75,SNR=11 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.73** | **24** | T | T | 21 44 26.0 | |
| | baz=202,slow=75,SNR=10 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.75** | **24** | T | T | 21 44 11.0 | |
| | baz=202,slow=75,SNR=8.3 | | | | | | |
| **RAO** | **Raoul Island** | **33.56** | **135** | LR | LR | 21 26 55.4 | |
| | comp=Z,57nm,20.4s,baz=260,slow=30 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.06** | **295** | P | **P** | **21 20 23.6** | **+0.8** |
| | 1.5nm,0.7s,baz=120,slow=5.4,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **69.51** | **327** | P | **P** | **21 21 16.7** | **-0.3** |
| | 0.4nm,0.6s,baz=124,slow=7.9,SNR=4.4 | | | | | | |
| **ILAR** | **Eielson Array** | **83.29** | **21** | P | **P** | **21 22 34.8** | **+0.1** |
| | 0.4nm,0.6s,baz=240,slow=6.7,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **83.61** | **319** | P | **P** | **21 22 36.9** | **+0.2** |
| | 0.3nm,0.7s,baz=118,slow=8.3,SNR=3.6 | | | | | | |
| **BDFB** | **Brasilia** | **147.76** | **134** | PKPbc | **PKPab** | **21 29 55.4** | **-1.0** |
| | 1.8nm,0.6s,baz=243,slow=6.8,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **153.31** | **285** | PKPbc | **PKPbc** | **21 30 07.6** | **+0.3** |
| | 0.2nm,0.3s,baz=50,slow=2.3,SNR=12 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **21 30 18.3** | **-1.0** |
| | 0.5nm,0.6s,baz=66,slow=2.3,SNR=4.7 | | | | | | |

*SJA **20** 21:32:42.6±0.4,28°.81S×69°.56W,h144km±4km,MD3.9, ML4.0*

*ISCJB **20** 21:32:43.9±0.3,28°.86S±0°.03×69°.53W±0°.04,h106km±4km, mb3.9/9,Error ellipse: s-maj=6.5km s-min=4.9km az=168.0*

*GUC **20** 21:32:44.2±0.7,28°.91S×69°.52W,h94km±24km,ML3.8*

*IDC **20** 21:32:46.6±0.8,28°.99S×69°.42W,h112km±6km,mb3.8/9, mb1 3.9/9,mb1mx3.8/21,mbtmp4.1/9,Error ellipse: s-maj=23.2km s-min=10.1km az=75.0*

**ISC 20 21:32:45.6±0.7,28°.88S±0°.04×69°.60W±0°.04,h110km±6km, n28,σ1$45/41,mb3.9/8,3C-1D,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VACH** | **Vallenar** | **1.06** | **286** | ⇓*i*P | **Pn** | **21 33 07.0** | **-0.4** |
| VACH | | | | *i* S | **Sn** | **21 33 23.7** | **-0.2** |
| **VCA** | **Vinchina** | **1.23** | **84** | *i* P | **Pn** | **21 33 09.7** | **+0.3** |
| VCA | | | | *i* S | **Sn** | **21 33 29.0** | **+1.6** |
| **CPCH** | **Copiapo** | **1.65** | **336** | ⇑*i*P | **Pn** | **21 33 13.1** | **-1.2** |
| CPCH | | | | *i* S | **Sn** | **21 33 34.9** | **-1.1** |
| **TLL** | **Tololo Astrono** | **1.66** | **219** | ⇑*i*P | **Pn** | **21 33 13.7** | **-0.8** |
| TLL | | | | *i* S | **Sn** | **21 33 35.9** | **-0.7** |
| TLL | | | | AML | AML | 21 33 40.4 | |
| | comp=E,3μm,0.6s | | | | | | |
| **LSCH** | **La Serena** | **1.77** | **234** | ⇑*i*P | **Pn** | **21 33 14.4** | **-1.1** |
| LSCH | | | | *i* S | **Sn** | **21 33 36.9** | **-1.5** |
| LSCH | | | | AML | AML | 21 33 38.2 | |
| | comp=E,587nm,0.5s | | | | | | |
| **CDCH** | **Caldera** | **2.10** | **329** | *e*P | **Pn** | **21 33 19.4** | **-0.4** |
| CDCH | | | | *i* S | **Sn** | **21 33 45.2** | **-0.8** |
| **RTLL** | **Cerro Villicun** | **2.63** | **159** | *i* P | **Pn** | **21 33 26.5** | **-0.2** |
| RTLL | | | | *i* S | **Sn** | **21 33 59.3** | **+0.9** |
| **CFAA** | **Coronel Fontan** | **2.96** | **157** | P | **Pn** | **21 33 30.4** | **-0.7** |
| | comp=E,0.9nm,0.3s,baz=343,slow=6.7,SNR=46 | | | | | | |
| CFAA | | | | S | **Sn** | **21 34 03.8** | **-2.4** |
| | comp=E,6.1nm,0.3s,baz=216,slow=19,SNR=23 | | | | | | |
| **CYA** | **Choya** | **3.37** | **84** | *i* P | **Pn** | **21 33 34.7** | **-1.7** |
| CYA | | | | *i* S | **Sn** | **21 34 13.6** | **-2.1** |
| CYA | | | | AML | AML | 21 34 13.9 | |
| | comp=Z,280nm,0.8s | | | | | | |
| **AHML** | **Horco Molle** | **4.31** | **62** | *i* P | **Pn** | **21 33 47.1** | **-2.1** |
| **CLCH** | **Cerro Calan** | **4.58** | **190** | *e*P | **Pn** | **21 33 51.2** | **-1.5** |
| **RCDM** | **Rinconada Maip** | **4.71** | **192** | *e*P | **Pn** | **21 33 51.9** | **-2.6** |
| RCDM | | | | *i* S | **Sn** | **21 34 44.3** | **-3.8** |
| **LVC** | **Limon Verde** | **6.27** | **6** | P | **Pn** | **21 34 13.9** | **-1.9** |
| | comp=Z,197nm,0.3s,baz=177,slow=9.6,SNR=29 | | | | | | |
| LVC | | | | S | **Sn** | **21 35 24.0** | **-2.2** |
| | comp=Z,175nm,0.3s,baz=221,slow=20,SNR=5.8 | | | | | | |
| **CPUP** | **Villa Florida** | **11.18** | **80** | P | Pn | 21 35 17.4 | -4.6 |
| | comp=Z,0.6nm,0.3s,baz=260,slow=11,SNR=13 | | | | | | |
| **LPAZ** | **La Paz** | **12.60** | **6** | P | **Pn** | **21 35 39.6** | **-2.0** |
| | comp=Z,0.3nm,0.3s,baz=183,slow=7.3,SNR=10 | | | | | | |
| **BDFB** | **Brasilia** | **23.88** | **61** | P | **P** | **21 37 48.5** | **-0.8** |
| | comp=Z,2.7nm,0.5s,baz=250,slow=7.9,SNR=6.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **66.41** | **328** | P | **P** | **21 43 24.6** | **+1.5** |
| | comp=Z,1.0nm,0.7s,baz=155,slow=8.6,SNR=12 | | | | | | |
| **VNDA** | **Vanda** | **69.51** | **190** | P | **P** | **21 43 42.9** | **+1.1** |
| | comp=Z,0.3nm,0.5s,baz=124,slow=6.7,SNR=3.2 | | | | | | |
| **DBIC** | **Dimbokro** | **71.56** | **71** | P | **P** | **21 43 55.6** | **+0.4** |
| | comp=Z,2.6nm,0.7s,baz=218,slow=7.6,SNR=4.3 | | | | | | |
| **MAW** | **Mawson** | **77.48** | **163** | P | **P** | **21 44 29.2** | **+0.7**

comp=E,3μm,0.2s
**IBP Imperial Bould 1.28 358** P **Pn 22 05 52.2 +0.5**
baz=1.2
IBP S **Sb 22 06 08.0 -0.6**
baz=1.2
**BAR Barrett 1.41 337**⇓*e*P **Pn 22 05 53.3 -0.2**
**MONP Monument Peak 1.54 348** P **Pn 22 05 56.1 +0.6**
baz=1.5
MONP S **Sn 22 06 15.4 -0.1**
baz=1.5
**SWSC Sam W. Stewart 1.57 7** P **Pn 22 05 55.7 0.0**
baz=1.5
SWSC S **Sb 22 06 17.4 +0.6**
baz=1.5
**109C Camp Elliot, M 1.76 329** P **Pn 22 05 58.6 +0.3**
baz=1.7
109C S **Sn 22 06 21.0 +0.5**
baz=1.7
**GLA Glamis 1.96 31** P **Pn 22 06 00.8 -0.2**
baz=1.9
**BC3 Big Chuckawall 2.32 12** P **Pn 22 06 06.7 +0.5**
baz=2.3
**MURC Murrieta 2.43 336** P **Pn 22 06 08.8 +1.3**
baz=2.4
MURC Sb **Sb 22 06 40.4 -1.1**
baz=2.4
**BELC Belle Mtn. Jos 2.62 1** P **Pn 22 06 11.3 +1.1**
baz=2.5
BELC Sb **Sb 22 06 49.1 +2.0**
baz=2.5
**SCI San Clemente I 2.67 308** P **Pn 22 06 10.7 0.0**
baz=2.6
**Y12C Blythe 2.69 28** P **Pn 22 06 11.5 +0.5**
baz=2.6
**214A Organ Pipe Nat 2.81 77** P **Pn 22 06 12.5 -0.2**
baz=2.8
**CIS Catalina Islan 2.85 316** P **Pn 22 06 12.8 -0.5**
baz=2.8
**IRM Iron Mountain 2.87 15** P **Pn 22 06 14.5 +0.9**
baz=2.8
**BBRC Big Bear Solar 2.97 346** Sb **Sb 22 06 58.9 +1.6**
baz=2.9

*CSEM* ***20*** *22:15:27.5, 37˚.09N×24˚.65W, h5km, ML2.7, After PDA*
**PDA 20 22:15:27.5±1.1, 37˚.09N×24˚.65W, h5km, MD4.0, ML2.7, Error ellipse: s-maj=8.1km s-min=3.6km az=102.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **PSMN** | **Pico do Norte,** | **0.35** | **256** | *i* P | | Pg | 22 15 33.5 | -0.8 |
| PSMN | | | | *e*S | | Sg | 22 15 38.9 | 0.0 |
| PSMN | | | | A | | A | 22 15 39.5 | |
| | 447nm,0.3s | | | | | | | |
| **PSMN** | **Pico do Norte,** | **0.35** | **256** | *i* P | | Pg | 22 15 33.5 | -0.8 |
| PSMN | | | | *e*S | | Sg | 22 15 38.9 | 0.0 |
| **PSMA** | **Santa Maria** | **0.40** | **256** | *i* P | | Pg | 22 15 34.1 | -1.1 |
| PSMA | | | | *e*S | | Sg | 22 15 39.9 | -0.5 |
| PSMA | | | | A | | A | 22 15 40.8 | |
| | 377nm,0.1s | | | | | | | |
| **BART** | **Pico Bartolome** | **0.80** | **329** | *e*P | | Pg | 22 15 40.7 | -2.4 |
| BART | | | | *e*S | | Sg | 22 15 50.4 | -3.2 |
| BART | | | | A | | A | 22 15 53.9 | |
| | 75nm,0.1s | | | | | | | |
| **BART** | **Pico Bartolome** | **0.80** | **329** | *e*P | | Pg | 22 15 40.7 | -2.4 |
| BART | | | | *e*S | | Sg | 22 15 50.4 | -3.2 |
| **GRON** | **Grota Negra** | **0.98** | **314** | *e*S | | Sg | 22 15 52.5 | -6.6 |
| GRON | | | | A | | A | 22 15 54.3 | |
| | 31nm,0.2s | | | | | | | |
| **PDA** | **Ponta Delgada** | **1.04** | **309** | *e*S | | Sg | 22 15 55.9 | -5.1 |
| PDA | | | | A | | A | 22 15 57.5 | |
| | 55nm,0.1s | | | | | | | |
| **PDA** | **Ponta Delgada** | **1.04** | **309** | *e*S | | Sg | 22 15 55.9 | -5.1 |
| **PSET** | **Sete Cidades** | **1.13** | **311** | *e*S | | Sg | 22 15 58.5 | -5.3 |
| PSET | | | | A | | A | 22 16 01.0 | |
| | 50nm,0.2s | | | | | | | |
| **PSET** | **Sete Cidades** | **1.13** | **311** | *e*S | | Sg | 22 15 58.5 | -5.3 |
| **ROSA** | **Rosais** | **3.28** | **301** | *e*P | | Pn | 22 16 15.5 | -4.0 |
| ROSA | | | | *e*S | | Sn | 22 16 50.4 | -8.5 |
| ROSA | | | | A | | A | 22 16 53.0 | |
| | 17nm,0.3s | | | | | | | |
| **ROSA** | **Rosais** | **3.28** | **301** | *e*P | | Pn | 22 16 15.5 | -4.0 |
| ROSA | | | | *e*S | | Sn | 22 16 50.4 | -8.5 |
| **PICO** | **Pico** | **3.31** | **296** | *e*P | | Pn | 22 16 16.0 | -4.1 |
| PICO | | | | *e*S | | Sn | 22 16 51.4 | -8.4 |
| **PICO** | **Pico** | **3.31** | **296** | *e*P | | Pn | 22 16 16.0 | -4.1 |
| PICO | | | | *e*S | | Sn | 22 16 51.4 | -8.4 |
| **PCAN** | **Candelaria** | **3.34** | **295** | *e*P | | Pn | 22 16 15.6 | -4.8 |
| PCAN | | | | *e*S | | Sn | 22 16 52.2 | -8.2 |
| PCAN | | | | A | | A | 22 16 54.9 | |
| | 20nm,0.3s | | | | | | | |
| **PCAN** | **Candelaria** | **3.34** | **295** | *e*P | | Pn | 22 16 15.6 | -4.8 |
| PCAN | | | | *e*S | | Sn | 22 16 52.2 | -8.2 |

**GUC 20 22:32:47.2±0.4, 23˚.90S×70˚.72W, h40km±2km, ML3.7, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **PB10** | **IPOC Station P** | **0.42** | **21** | *i* P | | Pn | 22 32 57.3 | +0.3 |
| PB10 | | | | *i* S | | Sn | 22 33 03.8 | +0.1 |
| **PB06** | **IPOC Station P** | **1.59** | **42** | *i* P | | Pn | 22 33 14.9 | +1.7 |
| PB06 | | | | *i* S | | Sn | 22 33 35.3 | +2.6 |
| PB06 | | | | AML | | AML | 22 33 36.7 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **PB04** | **IPOC Station P** | **1.65** | **19** | *i* P | | Pn | 22 33 15.2 | +1.2 |
| PB04 | | | | *i* S | | Sn | 22 33 37.0 | +3.0 |
| PB04 | | | | AML | | AML | 22 33 39.5 | |
| | comp=E,1μm,0.5s | | | | | | | |
| **PB07** | **IPOC Station P** | **2.30** | **20** | *e*P | | Pn | 22 33 23.0 | +0.1 |
| PB07 | | | | *e*S | | Sn | 22 33 54.9 | +4.8 |
| PB07 | | | | AML | | AML | 22 34 10.1 | |
| | comp=E,502nm,0.4s | | | | | | | |
| **PB09** | **IPOC Station P** | **2.50** | **33** | *e*P | | Pn | 22 33 27.2 | +1.6 |
| PB09 | | | | *e*S | | Sn | 22 33 57.6 | +2.5 |
| **PB01** | **IPOC Station P** | **3.07** | **22** | *e*P | | Pn | 22 33 35.3 | +1.9 |

*ISCJB* ***20*** *23:01:53.7±0.5, 31˚.38N×0˚.02×116˚.05W±0˚.02, h6km±4km, mb4.0/3, MS3.8/7, Error ellipse: s-maj=4.8km s-min=2.1km az=38.4*

*NEIC* ***20*** *23:01:54.8, 31˚.40N×116˚.02W, h8km, mb4.3/14, MW4.3, ML4.7(PAS), ML4.8(ECX), Moment Tensor Solution. s33 Moment tensor: Scale 10¹⁵Nm; Mrr-0.95; Mθθ-2.05; Mφφ3.00; Mrθ-0.47; Mθφ-2.18; Mφr-1.45; Best double couple: Mo3.80000×10¹⁵ NP1:φs115.00000°, δ63.00000°, λ-172.00000°. NP2:φs22.00000°, δ83.00000°, λ-27.00000°. Principal axes: T 4.1000, Plg14.0000°, Azm71.0000°; N -0.8200, Plg62.0000°, Azm189.0000°; P -3.2800, Plg24.0000°, Azm335.0000°; After ECX.*

*NEIC Felt at Ensenada, Guadalupe Victoria, Mexicali and San Felipe.*

*IDC* ***20*** *23:01:54.4±3.0, 31˚.33N×116˚.04W, h0km, mb3.7/2, mb1 4.3/4, mb1mx3.8/24, mbtmp3.8/4, ML4.6/1, MS3.4/8, Ms1 3.4/8, ms1mx3.2/23 Error ellipse: s-maj=55.2km s-min=13.2km az=39.0*

*ECX* ***20*** *23:01:54.8±0.5, 31˚.40N×116˚.03W, h8km, MD4.5, ML4.7, Fault plane solution: NP1:φs0.00000°, δ90.00000°, λ.30.00000°.*

*MEX* ***20*** *23:01:55.6±0.5, 31˚.34N×116˚.03W, h10km, MD4.3*

**ISC 20 23:01:55.2±0.7, 31˚.40N±0˚.03×116˚.02W±0˚.03, h7km±4km, n244, σ1§67/239, mb3.7/3, MS3.7/7, 2C-10D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **ZAX** | **El Zacaton** | **0.25** | **299** | ⇓*i*P | | Pg | 23 01 59.6 | -0.5 |
| ZAX | | | | *i* S | | Sg | 23 02 03.6 | +0.2 |
| **RDX** | **Rancho Dawling** | **0.54** | **7** | ⇓*e*P | | Pg | 23 02 04.4 | -1.1 |
| RDX | | | | *i* S | | Sg | 23 02 12.3 | -0.3 |
| **ECNX** | **Esteban Cantu** | **0.56** | **298** | ⇓*e*P | | Pg | 23 02 04.8 | -1.2 |
| ECNX | | | | *e*S | | Sg | 23 02 12.3 | -1.0 |
| **SPX** | **San Pedro Mart** | **0.59** | **126** | ⇓*e*P | | Pg | 23 02 05.6 | -1.0 |
| **SPX** | **San Pedro Mart** | **0.59** | **126** | *e*P | | Pg | 23 02 05.7 | -1.0 |
| SPX | | | | *i* S | | Sg | 23 02 13.6 | -0.8 |
| **PBX** | **Punta Banda** | **0.69** | **300** | ⇓*e*P | | Pg | 23 02 07.0 | -1.5 |
| PBX | | | | *e*S | | Sg | 23 02 16.4 | -1.2 |
| **CBX** | **Cerro Bola** | **1.07** | **329** | *i* P | | Pg | 23 02 13.2 | -2.4 |
| CBX | | | | *i* S | | Sg | 23 02 27.6 | -1.9 |
| **CBX** | **Cerro Bola** | **1.07** | **329** | ⇓*e*P | | Pg | 23 02 13.2 | -2.4 |
| CBX | | | | *e*S | | Sg | 23 02 27.6 | -1.9 |
| CBX | | | | ⇑*e* | | | 23 02 32.5 | |
| CBX | | | | IAML | | | 23 02 32.5 | |
| | comp=E,30μm,0.6s | | | | | | | |
| CBX | | | | IAML | | | 23 02 32.9 | |
| | comp=N,30μm,0.5s | | | | | | | |
| CBX | | | | ⇓*e* | | | 23 02 32.9 | |
| **CBX** | **Cerro Bola** | **1.07** | **329** | *i* P | | Pg | 23 02 13.2 | -2.4 |
| CBX | | | | *i* S | | Sg | 23 02 27.6 | -1.9 |
| **CPBX** | **Cerro Prieto** | **1.19** | **31**⇑ | *e*P | | Pb | 23 02 15.5 | -2.5 |
| **CPBX** | **Cerro Prieto** | **1.19** | **31** | *i* P | | Pb | 23 02 15.6 | -2.5 |
| CPBX | | | | *e*S | | Sg | 23 02 31.7 | -1.6 |
| **RMX** | **La Rumorosa** | **1.20** | **358**⇓ | *e*P | | Pb | 23 02 15.9 | -2.6 |
| RMX | | | | *i* S | | Sg | 23 02 31.6 | -2.3 |
| **MBIG** | **Mexicali** | **1.23** | **35** | *e*P | | Pn | 23 02 16.2 | -2.6 |
| MBIG | | | | *e*S | | Sb | 23 02 31.7 | -3.0 |
| **YUH** | **Yuha Desert** | **1.25** | **4** | *e*Pn | | Pn | 23 02 18.1 | -1.0 |
| **IBP** | **Imperial Bould** | **1.26** | **357** | P | | Pn | 23 02 17.4 | -2.0 |
| | baz=1.3 | | | | | | | |
| IBP | | | | S | | Sb | 23 02 33.5 | -2.4 |
| | baz=1.3 | | | | | | | |
| **IBP** | **Imperial Bould** | **1.26** | **357** | *e*Pn | | Pn | 23 02 17.4 | -2.0 |
| **ERPC** | **Ernies Place** | **1.38** | **13** | *e*Pn | | Pn | 23 02 20.0 | -0.8 |
| **WESC** | **Westside Schoo** | **1.38** | **10** | *e*Pn | | Pn | 23 02 19.9 | -1.0 |
| **BAR** | **Barrett** | **1.40** | **337**⇓ | *e*P | | Pn | 23 02 18.4 | -2.8 |
| **BAR** | **Barrett** | **1.40** | **337** | *e*Pn | | Pn | 23 02 18.4 | -2.8 |
| **CRR** | **Carrizo Plain** | **1.49** | **2** | *e*Pn | | Pn | 23 02 21.6 | -0.7 |
| **CBKC** | **Canebrake** | **1.51** | **353** | *e*Pn | | Pn | 23 02 22.3 | -0.4 |
| **MONP** | **Monument Peak** | **1.53** | **347** | P | | Pn | 23 02 21.2 | -1.9 |
| | baz=1.5 | | | | | | | |
| MONP | | | | S | | Sn | 23 02 40.8 | -2.7 |
| | baz=1.5 | | | | | | | |
| **SDRC** | **San Diego Road** | **1.55** | **330**⇓ | *e*P | | Pn | 23 02 21.1 | -2.1 |
| **SWSC** | **Sam W. Stewart** | **1.55** | **7** | P | | Pn | 23 02 20.9 | -2.3 |
| | baz=1.6 | | | | | | | |
| SWSC | | | | S | | Sn | 23 02 42.9 | -0.8 |
| | baz=1.6 | | | | | | | |
| **SWSC** | **Sam W. Stewart** | **1.55** | **7** | *e*Pn | | Pn | 23 02 22.4 | -0.9 |
| **EMSC** | **East Mesa** | **1.60** | **33** | *e*Pn | | Pn | 23 02 21.8 | -2.1 |
| **COA** | **Coachella** | **1.65** | **27** | *e*Pn | | Pn | 23 02 22.8 | -1.8 |
| **ERRC** | **Elmore Ranch** | **1.72** | **6** | *e*Pn | | Pn | 23 02 24.9 | -0.7 |
| **109C** | **Camp Elliot, M** | **1.75** | **329** | P | | Pn | 23 02 23.6 | -2.4 |
| | baz=1.7 | | | | | | | |
| 109C | | | | S | | Sn | 23 02 46.4 | -2.2 |
| | baz=1.7 | | | | | | | |
| **CPE** | **Camp Elliot** | **1.75** | **329** | *e*Pn | | Pn | 23 02 23.8 | -2.2 |
| **HWB** | **Hans Werner Br** | **1.81** | **334** | *e*Pn | | Pn | 23 02 26.2 | -0.7 |
| **BORC** | **Borrego Spring** | **1.90** | **350** | *e*Pn | | Pn | 23 02 27.6 | -0.4 |
| **GLA** | **Glamis** | **1.94** | **31** | P | | Pn | 23 02 26.0 | -2.6 |
| | baz=1.9 | | | | | | | |
| **GLA** | **Glamis** | **1.94** | **31** | *e*Pn | | Pn | 23 02 25.3 | -3.3 |
| **BATC** | **Bat Cave Butte** | **2.06** | **4** | *e*Pn | | Pn | 23 02 30.0 | -0.3 |
| **PLM** | **Palomar** | **2.08** | **340** | *e*Pn | | Pn | 23 02 30.4 | -0.3 |
| **FRD** | **Ford Ranch** | **2.15** | **347** | *e*Pn | | Pn | 23 02 31.2 | -0.4 |
| **SNDA** | **J Saunders Pla** | **2.21** | **347** | *e*Pn | | Pn | 23 02 32.0 | -0.4 |
| **DNR** | **Dunn Ranch,Anz** | **2.23** | **347** | *e*Pn | | Pn | 23 02 32.3 | -0.4 |
| **LTC** | **Little Chuckwa** | **2.24** | **21** | *e*Pn | | Pn | 23 02 31.6 | -1.1 |
| **PFO** | **Pinyon Flat Ob** | **2.24** | **351** | *e*Pn | | Pn | 23 02 32.5 | -0.3 |
| **CRY** | **Cary Ranch** | **2.25** | **345** | *e*Pn | | Pn | 23 02 32.6 | -0.4 |
| **CTW** | **Cottonwood Mou** | **2.28** | **3** | *e*Pn | | Pn | 23 02 33.1 | -0.2 |
| **BC3** | **Big Chuckawall** | **2.30** | **12** | P | | Pn | 23 02 31.8 | -1.9 |
| | baz=2.3 | | | | | | | |
| **BACC** | **Bachelor Mtn.** | **2.37** | **339** | *e*Pn | | Pn | 23 02 34.3 | -0.3 |
| **DGR** | **Domenigoni Val** | **2.40** | **340** | *e*Pn | | Pn | 23 02 34.7 | -0.3 |
| **MURC** | **Murrieta** | **2.41** | **336** | P | | Pn | 23 02 34.0 | -1.1 |
| | baz=2.4 | | | | | | | |
| MURC | | | | S | | Sb | 23 03 07.2 | -1.8 |
| | baz=2.4 | | | | | | | |
| **HMTC** | **Hemet** | **2.45** | **340** | *e*Pn | | Pn | 23 02 35.4 | -0.3 |
| **BELC** | **Belle Mtn. Jos** | **2.60** | **0** | P | | Pn | 23 02 36.0 | -1.8 |
| | baz=2.6 | | | | | | | |
| BELC | | | | S | | Sb | 23 03 12.5 | -1.9 |
| | baz=2.6 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **2.60** | **0** | *e*Pn | | Pn | 23 02 37.5 | -0.3 |
| **SCI** | **San Clemente I** | **2.66** | **307** | P | | Pn | 23 02 35.6 | -2.9 |
| | baz=2.7 | | | | | | | |
| SCI | | | | S | | Sn | 23 03 07.5 | -3.6 |
| | baz=2.7 | | | | | | | |
| **Y12C** | **Blythe** | **2.67** | **28** | P | | Pn | 23 02 36.8 | -1.8 |
| | baz=2.7 | | | | | | | |
| **TPC** | **Twentynine Pal** | **2.70** | **359** | *e*Pn | | Pn | 23 02 39.0 | -0.2 |
| **214A** | **Organ Pipe Nat** | **2.79** | **78** | P | | Pn | 23 02 37.6 | -2.7 |
| | baz=2.8 | | | | | | | |
| 214A | | | | S | | Sn | 23 03 11.9 | -2.5 |
| | baz=2.8 | | | | | | | |
| **CIS** | **Catalina Islan** | **2.84** | **315** | P | | Pn | 23 02 37.5 | -3.5 |
| | baz=2.8 | | | | | | | |
| **IRM** | **Iron Mountain** | **2.85** | **15** | P | | Pn | 23 02 39.7 | -1.5 |
| | baz=2.9 | | | | | | | |
| **IRM** | **Iron Mountain** | **2.85** | **15** | *e*Pn | | Pn | 23 02 40.6 | -0.6 |
| **BBRC** | **Big Bear Solar** | **2.96** | **345** | Pg | | Pn | 23 02 45.8 | +2.9 |
| | baz=3.0 | | | | | | | |
| BBRC | | | | S | | Sb | 23 03 24.2 | -0.6 |
| | baz=3.0 | | | | | | | |
| **FMP** | **Fort Macarthur** | **3.00** | **321** | Pb | | Pb | 23 02 46.8 | -2.2 |
| | baz=3.0 | | | | | | | |
| **SSK** | **Sunset Peak** | **3.14** | **334** | *e*Pn | | Pn | 23 02 45.1 | -0.2 |
| **BFSC** | **Mount Baldy Ra** | **3.15** | **334** | P | | Pn | 23 02 44.2 | -1.3 |
| | baz=3.2 | | | | | | | |
| BFSC | | | | S | | Sb | 23 03 28.3 | -2.0 |
| | baz=3.2 | | | | | | | |
| **SBI** | **Santa Barbara** | **3.29** | **310** | *e*Pn | | Pn | 23 02 46.0 | -1.1 |
| **PASC** | **Pasadena Art C** | **3.31** | **327** | *e*Pn | | Pn | 23 02 45.9 | -1.6 |
| **GMRC** | **Granite Mounta** | **3.39** | **5** | Sb | | Sb | 23 03 39.1 | +2.0 |
| | baz=3.4 | | | | | | | |
| **DECC** | **Green Verdugo** | **3.45** | **326** | Sb | | Sb | 23 03 39.8 | +1.1 |
| | baz=3.5 | | | | | | | |
| **RRX** | **Edison Barstow** | **3.57** | **347** | Pb | | Pb | 23 02 56.9 | -1.8 |
| | baz=3.6 | | | | | | | |
| RRX | | | | S | | Sb | 23 03 44.1 | +1.9 |
| | baz=3.6 | | | | | | | |
| **IR2C** | **Iron Canyon** | **3.59** | **327** | *e*Pn | | Pn | 23 02 51.2 | -0.1 |
| **DSCC** | **Desert Studies** | **3.74** | **359** | *e*Pn | | Pn | 23 02 53.7 | +0.4 |
| DSCC | | | | *e*Pg | | Pb | 23 03 02.5 | +1.0 |
| **OSI** | **Osito Adit** | **3.93** | **325** | P | | Pn | 23 02 54.9 | -1.1 |
| | baz=3.9 | | | | | | | |
| **OSI** | **Osito Adit** | **3.93** | **325** | *e*Pn | | Pn | 23 02 54.4 | -1.6 |
| **GSC** | **Goldstone** | **3.95** | **351** | Sb | | Sb | 23 03 56.0 | +2.7 |
| | baz=4.0 | | | | | | | |
| **GSC** | **Goldstone** | **3.95** | **351** | *e*Pn | | Pn | 23 02 56.0 | -0.4 |
| **BSC** | **Santa Cruz Isl** | **4.00** | **311** | P | | Pn | 23 02 54.9 | -2.1 |
| | baz=4.0 | | | | | | | |
| **TUQ** | **Turquoise Moun** | **4.03** | **1** | P | | Pn | 23 02 56.5 | -0.9 |
| | baz=4.0 | | | | | | | |
| **ARVC** | **Arvin** | **4.40** | **328** | P | | Pn | 23 03 01.6 | -0.9 |
| | baz=4.4 | | | | | | | |
| **SHOC** | **Shoshone** | **4.50** | **357** | Sb | | Sb | 23 04 12.1 | +3.2 |
| | baz=4.5 | | | | | | | |
| **TUC** | **Tucson** | **4.55** | **77** | *e*Pn | | Pn | 23 03 01.9 | -2.6 |
| **ISA** | **Isabella** | **4.72** | **335** | P | | Pn | 23 03 06.5 | -0.4 |
| | baz=4.7 | | | | | | | |
| ISA | | | | S | | Sb | 23 04 17.5 | +2.0 |
| | baz=4.7 | | | | | | | |
| **ISA** | **Isabella** | **4.72** | **335** | *e*Pn | | Pn | 23 03 06.6 | -0.4 |
| **MPMC** | **Manual Prospec** | **4.81** | **346** | P | | Pn | 23 03 07.4 | -0.8 |
| | baz=4.8 | | | | | | | |
| MPMC | | | | S | | Sb | 23 04 21.9 | +3.8 |
| | baz=4.8 | | | | | | | |
| **DAC** | **Darwin (Calif)** | **5.04** | **345** | *e*Pn | | Pn | 23 03 11.3 | -0.2 |
| **VES** | **Vestal, Richgr** | **5.12** | **331** | P | | Pn | 23 03 12.2 | 0.0 |
| | baz=5.1 | | | | | | | |
| **SMMC** | **Simmler** | **5.13** | **321** | P | | Pn | 23 03 12.3 | -0.2 |
| | baz=5.1 | | | | | | | |
| **SHPR** | **Sheep Range** | **5.15** | **8** | *e*Pn | | Pn | 23 03 12.9 | +0.1 |
| **TPNV** | **Topopah Spring** | **5.54** | **358** | P | | Pn | 23 03 18.3 | +0.1 |
| | baz=5.6 | | | | | | | |
| **WUAZ** | **Wupatki** | **5.65** | **42** | P | | Pn | 23 03 19.9 | +0.1 |
| | baz=5.7 | | | | | | | |
| **WUAZ** | **Wupatki** | **5.65** | **42** | *e*Pn | | Pn | 23 03 19.7 | -0.1 |
| **ICU** | **Indian Springs** | **6.00** | **16** | *e*Pn | | Pn | 23 03 25.0 | +0.5 |
| **MTUM** | **Tungsten Hills** | **6.30** | **341** | *e*Pn | | Pn | 23 03 29.9 | +1.1 |
| **EKU** | **East Kanab** | **6.37** | **26** | *e*Pn | | Pn | 23 03 30.5 | +0.8 |
| **W18A** | **Petrified Fore** | **6.44** | **53** | P | | Pn | 23 03 30.6 | -0.1 |
| | baz=6.4 | | | | | | | |
| **W18A** | **Petrified Fore** | **6.44** | **53** | *e*Pn | | Pn | 23 03 30.6 | -0.1 |
| **CCUT** | **Cedar City** | **6.52** | **19** | *e*Pn | | Pn | 23 03 32.8 | +1.0 |
| **R11A** | **Troy Canyon, C** | **6.95** | **3** | *e*Pn | | Pn | 23 03 38.9 | +1.3 |
| **SAO** | **San Andreas Ge** | **7.00** | **321** | *e*Pn | | Pn | 23 03 37.7 | -0.4 |
| **121A** | **Cookes Peak, D** | **7.09** | **79** | P | | Pn | 23 03 38.5 | -1.1 |
| | baz=7.1 | | | | | | | |
| **BTU** | **Barney Top** | **7.21** | **27** | *e*Pn | | Pn | 23 03 43.0 | +1.7 |
| **NV01** | **Mina Array Sit** | **7.26** | **346** | *e*Pn | | Pn | 23 03 45.8 | +3.8 |
| **NVAR** | **Mina Array Bea** | **7.26** | **346** | Pn | | Pn | 23 03 43.7 | +1.8 |
| | comp=N,0.2nm,0.3s,baz=169,slow=14,SNR=13 | | | | | | | |
| NVAR | | | | | | LR | LR | 23 05 37.9 |
| | comp=N,84nm,22.0s,baz=192,slow=31 | | | | | | | |
| NVAR | | | | | | Lg | Lg | 23 05 44.2 |
| | comp=N,0.0nm,0.3s,baz=153,slow=30,SNR=1.3 | | | | | | | |
| **CMB** | **Columbia Colle** | **7.53** | **333** | *e*Pn | | Pn | 23 03 46.2 | +0.7 |
| **MMU** | **Miners Mountai** | **7.82** | **28** | *e*Pn | | Pn | 23 03 50.9 | +1.3 |
| **LAZ** | **Ladron** | **8.05** | **66** | *e*Pn | | Pn | 23 03 52.6 | -0.1 |
| **BNM** | **Barren Site** | **8.37** | **68** | *e*Pn | | Pn | 23 03 57.2 | 0.0 |
| **LPM** | **Los Pinos Moun** | **8.42** | **67** | *e*Pn | | Pn | 23 03 57.7 | 0.0 |
| **MVCO** | **Mesa Verde** | **8.50** | **45** | P | | Pn | 23 04 00.3 | +1.3 |
| | baz=8.5 | | | | | | | |
| **MVCO** | **Mesa Verde** | **8.50** | **45** | *e*Pn | | Pn | 23 04 00.3 | +1.3 |
| **ANMO** | **Albuquerque** | **8.76** | **64** | *e*Pn | | Pn | 23 04 02.7 | +0.1 |
| **TMUT** | **Trail Mountain** | **8.81** | **25** | *e*Pn | | Pn | 23 04 05.3 | +2.1 |
| **SRU** | **San Rafael** | **8.91** | **29** | *e*Pn | | Pn | 23 04 07.0 | +2.5 |
| **BMN** | **Battle Mountai** | **9.07** | **354** | *e*Pn | | Pn | 23 04 12.4 | +5.7 |
| **MNTX** | **Cornudas Mount** | **9.08** | **85** | P | | Pn | 23 04 06.6 | -0.2 |
| | baz=9.1 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **9.08** | **85** | *e*Pn | | Pn | 23 04 06.9 | +0.1 |
| **NLU** | **North Lily Min** | **9.12** | **19** | *e*Pn | | Pn | 23 04 03.2 | -4.3 |
| **P17A** | **Butcher Ranch,** | **9.14** | **27** | *e*Pn | | Pn | 23 04 11.0 | +3.4 |
| **DUG** | **Dugway** | **9.16** | **16** | *e*Pn | | Pn | 23 04 09.7 | +1.8 |
| **ELK** | **Elko** | **9.35** | **4** | *e*Pn | | Pn | 23 04 12.2 | +1.6 |
| **SLBS** | **Sierra La Lagu** | **9.38** | **143** | *e*Pn | | Pn | 23 04 13.0 | +2.0 |
| **P18A** | **Preston Nutter** | **9.46** | **28** | *e*Pn | | Pn | 23 04 14.8 | +2.5 |
| **BGU** | **Big Grassy Mou** | **9.81** | **13** | *e*Pn | | Pn | 23 04 19.9 | +3.1 |
| **S22A** | **4UR Ranch, Cre** | **9.87** | **48** | *e*Pn | | Pn | 23 04 18.6 | +0.7 |
| **SPUT** | **South Promonto** | **10.30** | **15** | *e*Pn | | Pn | 23 04 26.5 | +3.0 |
| **SMCO** | **Snowmass** | **10.71** | **41** | *e*Pn | | Pn | 23 04 32.0 | +2.6 |
| **SDCO** | **Great Sand Dun** | **10.73** | **51** | *e*Pn | | Pn | 23 04 30.8 | +1.2 |
| **HWUT** | **Hardware Ranch** | **10.80** | **18** | *e*Pn | | Pn | 23 04 35.8 | +5.4 |
| HWUT | | | | *e*Sn | | Sn | 23 06 36.4 | +4.7 |
| **TX31** | **Lajitas Ar. Si** | **10.87** | **98** | *e*Pn | | Pn | 23 04 32.5 | +1.2 |
| **TXAR** | **Lajitas Array** | **10.87** | **98** | Pn | | Pn | 23 04 32.6 | +1.4 |
| | comp=N,1.1nm,0.3s,baz=277,slow=12,SNR=99 | | | | | | | |
| TXAR | | | | | | Lg | Lg | 23 07 38.9 |
| | comp=N,0.1nm,0.3s,baz=280,slow=27,SNR=3.0 | | | | | | | |
| TXAR | | | | | | LR | LR | 23 09 16.8 |
| | comp=N,73nm,19.9s,baz=0.0,slow=41 | | | | | | | |
| **MOD** | **Modoc** | **11.03** | **343** | *e*Pn | | Pn | 23 04 38.6 | +5.1 |
| **T25A** | **Trinidad** | **11.18** | **56** | *e*Pn | | Pn | 23 04 32.2 | -3.5 |
| **WVOR** | **Wild Horse Val** | **11.21** | **350** | *e*Pn | | Pn | 23 04 40.4 | +4.4 |
| **MSTX** | **Muleshoe** | **11.45** | **74** | *e*Pn | | Pn | 23 04 42.9 | +3.5 |
| **128A** | **Castleberry Fa** | **11.56** | **80** | P | | Pn | 23 04 41.7 | +1.0 |
| | baz=12 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **11.63** | **334** | *e*Pn | | Pn | 23 04 46.1 | +4.5 |
| **ISCO** | **Idaho Springs** | **11.91** | **42** | *e*Pn | | Pn | 23 04 48.4 | +2.7 |
| **529A** | **Stev Forest Ra** | **11.94** | **93** | P | | Pn | 23 04 47.7 | +1.8 |
| | baz=12 | | | | | | | |
| **K05A** | **Summer Lake** | **11.96** | **342** | *e*Pn | | Pn | 23 04 51.8 | +5.6 |
| **MFID** | **Camas Ranch** | **12.00** | **1** | *e*Pn | | Pn | 23 04 55.2 | +8.5 |
| **J08A** | **Circle Bar Ran** | **12.10** | **351** | *e*Pn | | Pn | 23 04 53.0 | +4.9 |
| **429A** | **Davenport Ranc** | **12.14** | **90** | P | | Pn | 23 04 50.2 | +1.4 |
| | baz=12 | | | | | | | |
| **HLID** | **Hailey** | **12.21** | **6** | *e*Pn | | Pn | 23 04 58.5 | +8.7 |
| **BW06** | **Boulder Array** | **12.46** | **23** | *e*Pn | | Pn | 23 04 55.8 | +2.7 |
| **N23A** | **Red Feather La** | **12.49** | **38** | *e*Pn | | Pn | 23 04 59.5 | +5.9 |
| **AMTX** | **Amarillo** | **12.51** | **70** | P | | Pn | 23 04 55.7 | +1.9 |
| | baz=12 | | | | | | | |
| **AMTX** | **Amarillo** | **12.51** | **70** | *e*Pn | | Pn | 23 04 56.3 | +2.6 |
| **J05D** | **Fort Rock, OR** | **12.57** | **342** | P | | Pn | 23 04 58.2 | +3.7 |
| | baz=13 | | | | | | | |
| **REDW** | **Red Top Meadow** | **12.63** | **17** | *e*Pn | | Pn | 23 04 59.7 | +4.2 |
| **430A** | **Baggett Ranch,** | **12.69** | **89** | P | | Pn | 23 04 57.8 | +1.7 |
| | baz=13 | | | | | | | |
| **530A** | **J-C Ranch, Com** | **12.69** | **92** | P | | Pn | 23 04 58.7 | +2.5 |
| | baz=13 | | | | | | | |
| **TPAW** | **Teton Pass** | **12.72** | **17** | *e*Pn | | Pn | 23 04 57.1 | +0.3 |
| **Z30A** | **Sanderson Ranc** | **12.73** | **78** | P | | Pn | 23 04 57.0 | +0.2 |
| | baz=13 | | | | | | | |
| **130A** | **Snyder** | **12.84** | **81** | P | | Pn | 23 05 00.1 | +1.9 |
| | baz=13 | | | | | | | |
| **FXWY** | **Fox Creek** | **12.84** | **17** | *e*Pn | | Pn | 23 05 03.5 | +5.1 |
| **R27A** | **Eads** | **12.85** | **54** | P | | Pn | 23 05 00.3 | +2.0 |
| | baz=13 | | | | | | | |
| **LOHW** | **Long Hollow** | **12.93** | **18** | *e*Pn | | Pn | 23 05 02.6 | +3.1 |
| **I07A** | **Izee** | **12.96** | **349** | *e*Pn | | Pn | 23 05 05.8 | +5.9 |
| **Y30A** | **Stafford Cattl** | **12.98** | **75** | P | | Pn | 23 05 02.2 | +2.0 |
| | baz=13 | | | | | | | |
| **MOOW** | **Moose Ponds** | **13.02** | **17** | *e*Pn | | Pn | 23 05 05.5 | +4.7 |
| **IMW** | **Indian Meadow** | **13.11** | **16** | Pn | | Pn | 23 05 02.9 | +0.8 |
| **431A** | **Sonora** | **13.24** | **89** | P | | Pn | 23 05 05.4 | +1.7 |
| | baz=13 | | | | | | | |
| **131A** | **Roby** | **13.32** | **80** | P | | Pn | 23 05 06.5 | +1.6 |
| | baz=13 | | | | | | | |
| **FLWY** | **Flagg Ranch** | **13.34** | **17** | *e*Pn | | Pn | 23 05 08.4 | +3.2 |
| **531A** | **Rocksprings** | **13.36** | **91** | P | | Pn | 23 05 08.3 | +2.9 |
| | baz=13 | | | | | | | |
| **631A** | **Perdido Creek** | **13.48** | **94** | P | | Pn | 23 05 06.9 | 0.0 |
| | baz=14 | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **13.52** | **75** | P | | Pn | 23 05 09.6 | +2.1 |
| | baz=14 | | | | | | | |
| **K22A** | **Casper** | **13.54** | **31** | P | | Pn | 23 05 09.3 | +1.5 |
| | baz=14 | | | | | | | |
| **K22A**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **V34A** | **Guthrie** baz=16 | **16.03** | **69** | P | **Pn** | 23 05 42.4 | +1.2 |
| **V34A** | **Guthrie** comp=N,28nm,1.0s | **16.03** | **69** | *e*Pn | **Pn** | 23 05 42.0 | +0.9 |
| **U34A** | **Anderson Ranch** comp=N,23nm,1.1s | **16.14** | **67** | *e*Pn | **Pn** | 23 05 43.3 | +0.7 |
| **Q32A** | **Meitler Ranch,** baz=16 | **16.14** | **57** | P | **P** | 23 05 44.5 | -1.5 |
| **JTMT** | **Jette** | **16.38** | **4** | *e*Pn | **P** | 23 05 48.4 | -0.2 |
| **W35A** | **Tecumseh** baz=16 | **16.44** | **72** | P | **Pn** | 23 05 46.5 | 0.0 |
| **NEW** | **Newport** comp=N,6.2nm,0.8s | **16.87** | **357** | *e*Pn | **P** | 23 05 55.1 | +1.2 |
| **LAO** | **LASA Array** comp=N,88nm,1.9s | **17.04** | **24** | *e*Pn | **Pn** | 23 05 55.0 | +1.0 |
| **TUL1** | **Tulsa** comp=N,48nm,1.4s | **17.43** | **70** | *e*Pn | **Pn** | 23 05 57.4 | -1.4 |
| **HKT** | **Hockley** comp=N,30nm,1.5s | **17.43** | **90** | *e*Pn | **Pn** | 23 05 56.4 | -2.4 |
| **Q35A** | **Mercer Eighty,** baz=18 | **17.94** | **60** | P | **P** | 23 06 05.8 | 0.0 |
| **S36A** | **Lake Cedric, C** baz=18 | **17.96** | **64** | P | **P** | 23 06 06.2 | +0.2 |
| **U37A** | **Salina** baz=18 | **18.05** | **68** | P | **P** | 23 06 07.1 | +0.1 |
| **X38A** | **Whitesboro** baz=18 | **18.06** | **74** | P | **Pn** | 23 06 06.8 | 0.0 |
| **PGC** | **Sidney** comp=N,58nm,1.8s | **18.13** | **344** | *e*Pn | **P** | 23 06 09.7 | +1.9 |
| **P35A** | **Duane Minner,** baz=18 | **18.18** | **58** | P | **P** | 23 06 09.1 | +0.7 |
| **R36A** | **Gordon, Harris** baz=18 | **18.18** | **62** | P | **P** | 23 06 09.0 | +0.6 |
| **T37A** | **Cheneyville 18** baz=18 | **18.34** | **66** | P | **Pn** | 23 06 10.0 | -0.1 |
| **W38A** | **Poteau** baz=18 | **18.35** | **73** | P | **P** | 23 06 10.9 | +0.6 |
| **O35A** | **Humboldt** baz=18 | **18.52** | **56** | P | **Pn** | 23 06 14.3 | +2.0 |
| **V38A** | **Canehill** baz=18 | **18.53** | **70** | P | **Pn** | 23 06 13.1 | +0.6 |
| **S37A** | **Fort Scott** baz=18 | **18.55** | **64** | P | **Pn** | 23 06 12.8 | +0.2 |
| **Y39A** | **Lockesburg** baz=19 | **18.63** | **76** | P | **P** | 23 06 11.4 | -2.0 |
| **MIAR** | **Mount Ida** baz=19 | **19.09** | **75** | P | **Pn** | 23 06 21.9 | +2.7 |
| **MIAR** | **Mount Ida** comp=N,24nm,1.2s | **19.09** | **75** | *e*P | **P** | 23 06 16.6 | -1.9 |
| **ECSD** | **EROS Data Cent** baz=20 | **19.65** | **46** | P | **Pn** | 23 06 26.0 | +0.1 |
| **A25A** | **Svangstu Ranch** baz=20 | **20.06** | **25** | P | Pn | 23 06 32.2 | +1.5 |
| **ULM** | **Lac du Bonnet** comp=N,60nm,21.4s,baz=59,slow=38 | **24.09** | **33** | LR | LR | 23 17 17.1 | |
| **YKA** | **Yellowknife Ar** comp=N,0.2nm,0.5s,baz=175,slow=9.6,SNR=3.0 | **31.12** | **1** | P | **P** | 23 08 14.6 | +0.5 |
| **BRYW** | **Bryant College** comp=N,16nm,0.7s | **36.83** | **61** | *e*P | **P** | 23 09 03.5 | -0.5 |
| **ILAR** | **Eielson Array** comp=N,1.5nm,0.9s,baz=148,slow=7.9,SNR=11 | **38.47** | **339** | P | **P** | 23 09 18.2 | +0.7 |
| **ROSC** | **El Rosal** comp=N,37nm,18.0s,baz=67,slow=38 | **47.16** | **115** | LR | LR | 23 31 28.9 | |
| **ARCES** | **ARCESS Array B** comp=N,39nm,21.6s,baz=324,slow=36 | **75.53** | **13** | LR | LR | 23 47 12.9 | |
| **FINES** | **FINESS Array B** comp=N,44nm,18.3s,baz=316,slow=35 | **82.51** | **17** | LR | LR | 23 49 52.2 | |
| **GERES** | **GERESS Array B** comp=N,22nm,21.6s,baz=312,slow=35 | **88.39** | **31** | LR | LR | 23 53 23.8 | |
| **SONM** | **Songino Array** comp=N,56nm,19.0s,baz=45,slow=36 | **92.42** | **333** | LR | LR | 23 56 47.5 | |
| **HHC** | **Hu-ho-hao-te** | **95.73** | **326** | *e*P | **P** | **23 15 19.5** | **-2.7** |
| HHC | | | | pP | **pP** | **23 15 24.1** | **-0.3** |
| HHC | | | | sP | **sP** | **23 15 27.3** | **+2.1** |
| HHC | | | | PP | **PP** | **23 19 14.8** | **+2.0** |
| **HHC** | **Hu-ho-hao-te** | **95.73** | **326** | S | S | 23 26 31.8 | -8.5 |
| **HHC** | **Hu-ho-hao-te** | **95.73** | **326** | sS | **S** | **23 26 39.3** | **-1.0** |
| HHC | comp=Z,16nm,0.7s | | | pmax | pmax | | |
| HHC | comp=Z,320nm,7.2s | | | pmax | pmax | | |
| HHC | comp=N,260nm,21.8s | | | LR | LR | | |
| HHC | comp=E,360nm,21.1s | | | LR | LR | | |
| HHC | comp=Z,170nm,18.8s | | | LR | LR | | |
| **CD2** | **Chengdu** | **107.45** | **325** | Pdif | **Pdif** | **23 16 11.5** | **-3.2** |

*ISCJB **20** 23:09:50.9±0.7, 10°.78N±0°.05×62°.37W±0°.03, h95km±6km, Error ellipse: s-maj=8.9km s-min=4.7km az=167.0*
*FUNV **20** 23:09:53.7, 10°.75N×62°.37W, h85km, MW3.1*
*TRN **20** 23:09:53.5, 10°.99N×62°.27W, h80km, MD3.3*

**ISC 20 23:09:50.1**±1.4, **10°.86N**±0°.05×**62°.36W**±0°.04, **h104**km±9km, **n19,** σ1§**54**/32, **Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUIV** | **Guiria** | **0.25** | **148** | *e*P | **Pn** | **23 10 05.6** | **+0.7** |
| GUIV | | | | *e*S | **Sn** | **23 10 14.7** | **-1.3** |
| **TCE** | **Chacachacare** | **0.61** | **105** | *e*P | **Pn** | **23 10 08.2** | **+1.1** |
| TCE | | | | *e*S | **Sn** | **23 10 19.2** | **-0.7** |
| **CRUV** | **Carupano** | **0.88** | **258** | *e*P | **Pn** | **23 10 10.7** | **+1.2** |
| CRUV | | | | *e*S | **Sn** | **23 10 23.1** | **-1.1** |
| **GUNV** | **Guanoco** | **0.90** | **220** | *e*P | **Pn** | **23 10 11.4** | **+1.7** |
| GUNV | | | | *e*S | **Sn** | **23 10 23.7** | **-0.8** |
| **TRN** | **Trinidad (W)** | **0.96** | **102** | *e*P | **Pn** | **23 10 11.6** | **+1.3** |
| TRN | | | | *e*S | **Sn** | **23 10 24.5** | **-1.1** |
| **TBH** | **Brigand Hill** | **1.32** | **106** | *e*P | **Pn** | **23 10 16.3** | **+1.9** |
| TBH | | | | *e*S | **Sn** | **23 10 33.0** | **+0.2** |
| **GRW** | **Mount Saint Ca** | **1.46** | **28** | *e*P | **Pn** | **23 10 17.2** | **+1.0** |
| GRW | | | | *e*S | **Sn** | **23 10 33.0** | **-3.0** |
| **BOT** | **Bacolet** | **1.64** | **79** | *e*P | **Pn** | **23 10 19.4** | **+1.2** |
| **TOSP** | **Speyside** | **1.84** | **76** | *e*P | **Pn** | **23 10 21.6** | **+0.8** |
| TOSP | | | | *e*S | **Sn** | **23 10 43.6** | **-0.6** |
| **ORIV** | **Oritupano** | **2.06** | **210** | *e*P | **Pn** | **23 10 25.4** | **+1.8** |
| ORIV | | | | *e*S | **Sn** | **23 10 47.0** | **-2.1** |
| **PCRV** | **Puerto La Cruz** | **2.34** | **253** | *e*P | **Pn** | **23 10 29.2** | **+1.9** |
| PCRV | | | | *e*S | **Sn** | **23 10 54.4** | **-1.4** |
| **RIOV** | **Rio Grande** | **2.82** | **169** | *e*P | **Pn** | **23 10 35.0** | **+1.4** |
| RIOV | | | | *e*S | **Sn** | **23 11 05.2** | **-1.9** |
| **PRGV** | **PARIAGUAN** | **3.07** | **227** | *e*P | **Pn** | **23 10 37.9** | **+1.0** |
| **GURV** | **El Guri** | **3.16** | **193** | *e*P | **Pn** | **23 10 39.1** | **+1.0** |
| **CUPV** | **Cœpira** | **3.47** | **257** | *e*P | **Pn** | **23 10 44.4** | **+2.1** |
| CUPV | | | | *e*S | **Sn** | **23 11 21.1** | **-1.5** |
| **BIRV** | **Birongo** | **3.86** | **265** | *e*P | **Pn** | **23 10 49.5** | **+2.0** |
| **MERV** | **Las Mercedes** | **4.20** | **248** | *e*P | **Pn** | **23 10 53.0** | **+1.1** |
| MERV | | | | *e*S | **Sn** | **23 11 37.8** | **-2.2** |
| **LUEV** | **Luepa** | **5.06** | **170** | *e*P | **Pn** | **23 11 03.9** | **0.0** |
| **BAUV** | **El Baul** | **5.91** | **252** | *e*P | **Pn** | **23 11 16.2** | **+0.9** |

*DJA **20** 23:16:01.6±0.4, 8°.S±8°×11°.8E±°, h195km±6km, M3.6/9, MLv3.6/9*

**ISC 20 23:15:59.7**±2.0, **8°.0S**±0°.3×**117°.78E**±0°.07, **h200**km, **n14,** σ1§**02**/14, **Sumbawa region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWSI** | **Taliwang, Sumb** | **1.14** | **231** | P | **Pn** | **23 16 31.6** | **+1.2** |
| TWSI | | | | S | **Sn** | **23 16 54.3** | **0.0** |
| **SRBI** | **Singaraja** | **2.54** | **268** | P | Pn | 23 16 45.1 | +1.1 |
| **DNP** | **Denpasar** | **2.62** | **255** | P | **Pn** | **23 16 45.8** | **+0.8** |
| **IGBI** | **Denpasar** | **2.72** | **253** | P | **Pn** | **23 16 45.6** | **-0.5** |
| IGBI | | | | S | **Sn** | **23 17 20.8** | **-1.5** |
| **WSI** | **Waingapu** | **2.98** | **124** | P | **Pn** | **23 16 49.9** | **+0.9** |
| **BASI** | **Baing, Sumba** | **3.52** | **129** | P | **Pn** | **23 16 55.7** | **+0.1** |
| **BKSI** | **Bulukumba** | **3.55** | **41** | P | Pn | 23 16 59.7 | +3.8 |
| **JAGI** | **Jajag, Banyuwa** baz=12,SNR=7.8 | **3.62** | **263** | P | **Pn** | **23 16 56.9** | **+0.1** |
| **JAGI** | **Jajag, Banyuwa** | **3.62** | **263** | P | **Pn** | **23 16 57.1** | **+0.3** |
| JAGI | | | | S | **Sn** | **23 17 42.6** | **+1.1** |
| **MTN** | **Manton Dam** baz=25,SNR=5.8 | **13.98** | **111** | P | **P** | **23 19 09.5** | **-1.8** |
| **KDU** | **Kakadu** baz=26,SNR=3.3 | **15.18** | **109** | P | **P** | **23 19 25.8** | **+1.2** |
| **MEEK** | **Meekatharra** baz=30,SNR=5.0 | **18.53** | **178** | P | **P** | **23 20 01.6** | **+0.2** |
| **WRKA** | **Warakurna** baz=32,SNR=9.6 | **19.68** | **151** | P | **P** | **23 20 14.0** | **+0.3** |
| **QLP** | **Quilpie** baz=43,SNR=3.6 | **31.16** | **130** | P | P | 23 21 52.4 | -7.6 |

**DJA 20 23:27:29.8**±0.4, **1°.S**×**3°.×12°.2E**±°, **h10**km, **M3.5/6, MLv3.5/6, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **APSI** | **Ampana** | **0.68** | **244** | P | Pg | 23 27 42.3 | -0.7 |
| APSI | | | | S | Sb | 23 27 52.7 | -0.6 |
| **MRSI** | **Marisa** | **1.13** | **344** | P | Pb | 23 27 49.7 | -1.7 |
| MRSI | | | | S | Sb | 23 28 05.2 | -0.9 |
| **GTOI** | **Gorontalo** | **1.45** | **31** | P | Pn | 23 27 55.5 | -0.6 |
| **KMSI** | **Cibinong** | **2.08** | **56** | P | Pn | 23 28 04.4 | -0.4 |
| **PCI** | **Palu** | **2.44** | **263** | P | Pn | 23 28 10.5 | +0.7 |
| **MPSI** | **Mapaga** | **2.54** | **292** | P | Pn | 23 28 12.2 | +1.1 |
| **KDI** | **Kendari** | **3.34** | **174** | P | Pn | 23 28 21.8 | -0.4 |
| **TTSI** | **Tana Toraja** | **3.44** | **225** | P | Pn | 23 28 23.4 | 0.0 |
| TTSI | | | | S | Pn | 23 28 22.3 | -1.1 |
| **SPSI** | **Sidrap Palu** | **4.16** | **217** | P | Pn | 23 28 33.1 | -0.3 |

*ISCJB **21** 00:21:07.7±0.3, 37°.10N±0°.03×73°.16E±0°.05, h10km, mb4.1/16, Error ellipse: s-maj=5.8km s-min=4.1km az=169.6*
*IDC **21** 00:21:07.4±0.9, 37°.00N×73°.25E, h0km, mb3.9/13, mb1 4.1/19, mb1mx3.9/37, mbtmp4.0/19, ML3.7/6, MS2.7/1, Ms1 2.7/1, ms1mx2.3/40, Error ellipse: s-maj=22.1km s-min=15.1km az=132.0*
*NEIC **21** 00:21:14.8±2.4, 37°.13N×73°.23E, h55km±5km, mb4.7/6, Error ellipse: s-maj=16.6km s-min=13.8km az=214.0*
*MOS **21** 00:21:18.4±0.9, 37°.25N×73°.16E, h100km, mb4.0/8, Error ellipse: s-maj=14.0km s-min=6.3km az=94.4*
*NNC **21** 00:21:21.8±3.4, 37°.47N×73°.12E, h135km±47km, mb3.4, mpv4.1, Error ellipse: s-maj=33.2km s-min=16.3km az=151.0*

**ISC 21 00:21:09.3**±0.4, **37°.04N**±0°.03×**73°.09E**±0°.04, **h10**km, **n107,** σ1§**25**/101, **mb4.0**/16, **8C-11D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** 25nm,0.3s | **2.99** | **6** | ⇓P | **Pb** | **00 22 03.6** | **+0.8** |
| SFK | 138nm,0.5s | | | ⇑S | **Sb** | **00 22 38.2** | **-1.2** |
| **SFK** | **Sufi-Kurgan** | **2.99** | **6** | PN | **Pb** | **00 22 03.5** | **+0.8** |
| SFK | | | | S | **Sb** | **00 22 38.1** | **-1.2** |
| SFK | comp=Z,25nm,0.3s | | | pmax | pmax | | |
| SFK | comp=N,139nm,0.5s | | | smax | smax | | |
| **CEP** | **Cherat** | **3.35** | **197** | P | **Pg** | **00 22 13.1** | **-0.4** |
| CEP | | | | S | Sg | 00 23 10.0 | +13 |
| **CHCP** | **Chirah Chowk** | **3.38** | **177** | ⇓P | **Pg** | **00 22 13.2** | **-0.8** |
| **DZET** | **Dzherino** comp=N,14nm,0.4s | **3.80** | **299** | ⇓P | **Pb** | **00 22 16.0** | **-0.5** |
| DZET | comp=N,129nm,0.5s | | | ⇑S | **Sb** | **00 22 59.6** | **-3.1** |
| **DZET** | **Dzherino** | **3.80** | **299** | PN | **Pb** | **00 22 16.0** | **-0.5** |
| DZET | | | | S | **Sb** | **00 22 59.6** | **-3.1** |
| DZET | comp=Z,14nm,0.4s | | | pmax | pmax | | |
| DZET | comp=N,129nm,0.5s | | | smax | smax | | |
| **KBL** | **Kabul** | **4.12** | **234** | *e*PN | **Pb** | **00 22 23.1** | **+1.0** |
| **KBL** | **Kabul** | **4.12** | **234** | *e*Pn | **Pb** | **00 22 23.1** | **+1.0** |
| KBL | | | | *e*Sn | **Sb** | **00 23 09.6** | **-2.5** |
| **THW** | **Thamme Wali** | **4.38** | **195** | P | **Pb** | **00 22 26.8** | **+0.5** |
| **AML** | **Almayashu** SNR=21 | **5.11** | **5** | P | Pn | 00 22 31.3 | +5.1 |
| **SARP** | **Sargodha** | **5.12** | **184** | P | Pb | 00 22 35.0 | -3.9 |
| **UCH** | **Uchtor** SNR=94 | **5.30** | **12** | P | Pn | 00 22 34.1 | +5.2 |
| **MNAS** | **Manas** comp=N,18nm,0.4s | **5.46** | **355** | ⇓P | Pn | 00 22 36.1 | +5.3 |
| MNAS | comp=N,18nm,0.4s | | | ⇓S | **Sn** | **00 23 32.8** | **-0.9** |
| **MNAS** | **Manas** | **5.46** | **355** | PN | Pn | 00 22 36.1 | +5.3 |
| MNAS | comp=Z,18nm,0.4s | | | pmax | pmax | | |
| **EKS2** | **Erkin-Say** | **5.64** | **5** | *e*PN | Pn | 00 22 38.8 | +5.5 |
| **EKS2** | **Erkin-Say** SNR=76 | **5.64** | **5** | P | Pn | 00 22 38.8 | +5.5 |
| **EKS2** | **Erkin-Say** | **5.64** | **5** | *e*Pn | Pn | 00 22 38.8 | +5.5 |
| EKS2 | | | | *e*Sn | **Sn** | **00 23 35.7** | **-2.4** |
| **AAK** | **Ala-Archa** comp=Z,12nm,0.5s | **5.69** | **11** | ⇑P | Pn | 00 22 39.4 | +5.4 |
| AAK | comp=Z,55nm,0.9s | | | ⇓S | **Sn** | **00 23 40.4** | **+1.0** |
| **AAK** | **Ala-Archa** comp=Z,8.2nm,0.3s,baz=170,slow=7.7,SNR=89 | **5.69** | **11** | Pn | **Pn** | **00 22 36.2** | **+2.2** |
| AAK | comp=Z,2.1nm,0.3s,baz=320,slow=21,SNR=12 | | | Sn | **Sn** | **00 23 41.1** | **+1.7** |
| **AAK** | **Ala-Archa** | **5.69** | **11** | PN | Pn | 00 22 39.4 | +5.4 |
| AAK | comp=Z,12nm,0.5s | | | pmax | pmax | | |
| **AAK** | **Ala-Archa** SNR=19 | **5.69** | **11** | P | Pn | 00 22 39.5 | +5.4 |
| **AAK** | **Ala-Archa** | **5.69** | **11** | *e*Pn | **Pn** | **00 22 36.2** | **+2.2** |
| AAK | | | | *e*Pn | Pn | 00 22 39.6 | +5.6 |
| AAK | | | | *e*Pn | Pn | 00 22 39.6 | +5.6 |
| AAK | | | | *e*Sn | Sn | 00 23 32.9 | -6.5 |
| AAK | | | | *e*Sn | Sn | 00 23 33.0 | -6.5 |
| AAK | | | | *e*Sn | **Sn** | **00 23 41.1** | **+1.7** |
| **KBK** | **Karagaybulak** SNR=23 | **5.79** | **14** | P | Pn | 00 22 40.8 | +5.4 |
| **CHMS** | **Chumysh** SNR=9.9 | **6.09** | **12** | P | Pn | 00 22 44.6 | +5.3 |
| **TKM2** | **Tokmak 2** comp=Z,12nm,0.5s | **6.18** | **17** | ⇑P | Pn | 00 22 45.5 | +4.7 |
| TKM2 | comp=Z,8.5nm,0.6s | | | ⇑S | **Sn** | **00 23 50.7** | **-0.9** |
| **TKM2** | **Tokmak 2** | **6.18** | **17** | PN | Pn | 00 22 45.5 | +4.7 |
| TKM2 | comp=Z,12nm,0.5s | | | pmax | pmax | | |
| **TKM2** | **Tokmak 2** SNR=12 | **6.18** | **17** | P | Pn | 00 22 46.0 | +5.2 |
| **TKM2** | **Tokmak 2** | **6.18** | **17** | *e*Pn | Pn | 00 22 45.7 | +4.9 |
| TKM2 | | | | *e*Sn | **Sn** | **00 23 51.8** | **+0.1** |
| **USP** | **Ospenovka** SNR=20 | **6.31** | **9** | P | Pn | 00 22 47.8 | +5.3 |
| **KK31** | **Karatay Array** comp=Z,7.3nm,0.3s,baz=149,slow=12,SNR=310 | **6.37** | **343** | P | Pn | 00 22 48.6 | +5.4 |
| KK31 | comp=Z,99nm,0.8s,baz=149,slow=22,SNR=22 | | | ⇓S | **Sn** | **00 23 55.0** | **-1.0** |
| **KK31** | **Karatay Array** | **6.37** | **343** | *e*PN | Pn | 00 22 48.6 | +5.4 |
| KK31 | comp=Z,7.0nm,0.3s | | | pmax | pmax | | |
| **KKAR** | **Karatay Array** | **6.37** | **343** | *e*PN | Pn | 00 22 48.7 | +5.5 |
| **KKAR** | **Karatay Array** | **6.37** | **343** | *e*Pn | Pn | 00 22 48.7 | +5.5 |
| KKAR | | | | *e*Sn | **Sn** | **00 23 54.8** | **-1.2** |
| **SMLA** | **Simla** | **6.80** | **149** | *i* P | Pn | 00 22 55.3 | +6.2 |
| SMLA | | | | *i* S | **Sn** | **00 24 05.7** | **-0.8** |
| SMLA | | | | *i* S | **Sn** | **00 24 06.0** | **-0.5** |
| SMLA | comp=E,3μm,0.3s | | | AML | AML | 00 24 10.1 | |
| SMLA | comp=N,2μm,0.3s | | | AML | AML | 00 24 10.7 | |
| **KUDL** | **Kundal** | **9.32** | **161** | *e*P | Pn | 00 23 29.2 | +5.5 |
| **MAKZ** | **Makanchi** | **11.79** | **31** | *e*Pn | **Pn** | **00 23 58.8** | **+1.4** |
| **MK01** | **Makanchi Array** | **11.89** | **32** | *e*Pn | **Pn** | **00 23 58.9** | **0.0** |
| **MK31** | **Makanchi Array** comp=N,3.8nm,0.8s,baz=212,slow=16,SNR=13 | **11.91** | **32** | ⇑P | **Pn** | **00 24 01.0** | **+2.0** |
| **MK32** | **Makanchi Array** | **11.91** | **32** | *e*Pn | **Pn** | **00 23 58.4** | **-0.7** |
| **MKAR** | **Makanchi Array** comp=N,0.2nm,0.3s,baz=210,slow=11,SNR=14 | **11.91** | **32** | *e*Pn | **Pn** | **00 23 58.4** | **-0.7** |
| MKAR | comp=N,38nm,20.2s,baz=48,slow=40 | | | LR | LR | 00 29 07.5 | |
| **MKAR** | **Makanchi Array** | **11.91** | **32** | *e*Pn | **Pn** | **00 23 58.5** | **-0.5** |
| **GEYT** | **Alibeck** comp=N,1.6nm,0.3s,baz=107,slow=11,SNR=21 | **11.93** | **279** | Pn | **Pn** | **00 24 01.3** | **+1.9** |
| GEYT | comp=N,0.9nm,0.3s,baz=108,slow=18,SNR=5.6 | | | Sn | **Sn** | **00 26 12.3** | **-0.3** |
| **KOLN** | **Koldanda** comp=N,3.2nm,0.3s | **12.81** | **133** | *e*P | **Pn** | **00 24 13.7** | **+2.0** |
| **GKN** | **Gorkha** comp=N,8.1nm,0.5s | **13.26** | **129** | *e*P | **Pn** | **00 24 17.4** | **-0.4** |
| **DMN** | **Daman** comp=N,5.7nm,0.4s | **13.83** | **129** | *e*P | **Pn** | **00 24 25.2** | **-0.5** |
| **PKIN** | **Phulchoki** comp=N,4.3nm,0.4s | **14.04** | **129** | *e*P | **Pn** | **00 24 28.6** | **+0.1** |
| **KURBB** | **Kurchatov Arra** comp=N,8.3nm,0.7s | **14.13** | **14** | ⇓P | **Pn** | **00 24 28.5** | **-0.8** |
| **KURBB** | **Kurchatov Arra** comp=N,0.1nm,0.3s,baz=200,slow=12,SNR=11 | **14.13** | **14** | Pn | **Pn** | **00 24 29.0** | **-0.3** |
| **KURK** | **Kurchatov** | **14.23** | **14** | ⇑P | **Pn** | **00 24 30.1** | **-0.7** |
| **KURK** | **Kurchatov** comp=N,12nm,0.8s | **14.23** | **14** | P | **Pn** | **00 24 29.0** | **-1.8** |
| **KURK** | **Kurchatov** | **14.23** | **14** | *e*Pn | **Pn** | **00 24 29.0** | **-1.8** |
| KURK | | | | *e*Pn | P | 00 24 30.4 | -7.9 |
| **RAMN** | **Ramite** comp=N,7.9nm,0.6s | **15.24** | **127** | *e*P | **Pn** | **00 24 45.3** | **+0.6** |
| **AB31** | **Akbulak array** comp=N,1.1nm,0.4s,baz=132,slow=13,SNR=47 | **15.50** | **326** | P | **Pn** | **00 24 49.2** | **+1.4** |
| AB31 | | | | ⇑S | Sn | 00 27 27.2 | -12 |
| **AB31** | **Akbulak array** comp=N,3.0nm,0.6s,baz=150,slow=21,SNR=14 | **15.50** | **326** | *e*P | **Pn** | **00 24 49.2** | **+1.4** |
| AB31 | comp=Z,1.0nm,0.3s | | | pmax | pmax | | |
| **ABKAR** | **Akbulak array** | **15.50** | **326** | *e*Pn | **Pn** | **00 24 49.2** | **+1.4** |
| ABKAR | | | | *e*Sn | Sn | 00 27 27.8 | -12 |
| **VOSK** | **Vostochnaya** comp=Z,1.5nm,0.8s | **15.75** | **355** | ⇓P | **Pn** | **00 24 51.2** | **+0.1** |
| VOSK | comp=Z,2.0nm,0.8s | | | P | **Pn** | **00 24 51.2** | **+0.1** |
| VOSK | | | | pmax | pmax | | |
| **BVAR** | **Borovoye Array** comp=Z,0.7nm,0.3s,baz=142,slow=7.3,SNR=5.6 | **16.10** | **354** | Pn | **Pn** | **00 24 54.4** | **-1.1** |
| **BVAR** | **Borovoye Array** comp=Z,1.0nm,0.3s | **16.10** | **354** | P | **Pn** | **00 24 54.4** | **-1.1** |
| BVAR | | | | pmax | pmax | | |
| **ZRNK** | **Zerenda** comp=Z,4.4nm,0.7s | **16.16** | **351** | ⇓P | **P** | **00 24 57.9** | **-1.8** |
| **ZRNK** | **Zerenda** | **16.16** | **351** | P | **P** | **00 24 57.8** | **-1.8** |
| ZRNK | comp=Z,4.0nm,0.7s | | | pmax | pmax | | |
| **AKTO** | **Aktyubinsk** comp=Z,6.8nm,1.4s | **17.21** | **326** | ⇓P | **P** | **00 25 14.0** | **+2.7** |
| **AKTO** | **Aktyubinsk** comp=Z,0.4nm,0.3s,baz=131,slow=14,SNR=5.6 | **17.21** | **326** | P | **P** | **00 25 11.1** | **-0.2** |
| AKTO | comp=Z,0.1nm,0.3s,baz=143,slow=23,SNR=7.8 | | | S | Sn | 00 28 10.2 | -11 |
| **ZALV** | **Zalesovo Beam** comp=Z,0.8nm,0.3s,baz=212,slow=11,SNR=51 | **18.76** | **22** | P | **Pn** | **00 25 28.1** | **-0.6** |
| **ZALV** | **Zalesovo Beam** comp=Z,1.0nm,0.3s | **18.76** | **22** | P | **Pn** | **00 25 28.1** | **-0.6** |
| ZALV | | | | pmax | pmax | | |
| **ZAA1** | **Zalesovo Array** | **18.76** | **22** | *e*P | **Pn** | **00 25 28.1** | **-0.7** |
| **NVS** | **Novosibirsk** | **19.11** | **18** | *e*P | **Pn** | **00 25 32.2** | **-0.8** |
| **SONA0** | **Songino Array** | **26.65** | **56** | *e*P | **P** | **00 26 48.1** | **-0.1** |
| **SONM** | **Songino Array** comp=Z,0.7nm,0.9s,baz=249,slow=12,SNR=2.9 | **26.65** | **56** | P | **P** | **00 26 48.1** | **-0.1** |
| SONM | comp=Z,1.0nm,0.9s | | | pmax | pmax | | |
| **RAYN** | **Ar Rayn** comp=Z,13nm,2.1s | **27.25** | **248** | *e*P | **P** | **00 26 56.5** | **+2.7** |
| **BR101** | **Keskin Array S** | **30.87** | **287** | *e*P | **P** | **00 27 27.1** | **+1.1** |
| **BRTR** | **Keskin Array B** comp=Z,0.7nm,0.5s,baz=102,slow=6.7,SNR=7.3 | **30.87** | **287** | P | **P** | **00 27 27.1** | **+1.2** |
| **BRTR** | **Keskin Array B** comp=Z,1.0nm,0.5s | **30.87** | **287** | P | **P** | **00 27 27.1** | **+1.2** |
| BRTR | | | | pmax | pmax | | |
| **BR231** | **Keskin MP Arra** | **31.51** | **288** | *e*P | **P** | **00 27 30.4** | **-1.1** |
| **BUR04** | **Bucovina Ar. S** | **36.41** | **302** | *e*P | **P** | **00 28 12.2** | **-1.8** |
| **FIA0** | **FINESS Array S** | **37.98** | **325** | *e*P | **P** | **00 28 26.9** | **-0.1** |
| **FIA0** | **FINESS Array S** | **37.98** | **325** | *e*P | **P** | **00 28 26.9** | **-0.1** |
| **FINES** | **FINESS Array B** comp=Z,3.7nm,1.0s,baz=120,slow=7.5,SNR=7.5 | **37.98** | **325** | P | **P** | **00 28 26.9** | **-0.1** |
| **FINES** | **FINESS Array B** comp=Z,4.0nm,1.0s | **37.98** | **325** | P | **P** | **00 28 26.9** | **-0.1** |
| FINES | | | | pmax | pmax | | |
| **PSZ** | **Piszkesteto** comp=Z,17nm,1.8s | **39.98** | **303** | *e*P | **P** | **00 28 44.0** | **0.0** |
| PSZ | | | | pmax | pmax | | |
| **PSZ** | **Piszkesteto** comp=Z,17nm,1.8s | **39.98** | **303** | *e*P | **P** | **00 28 44.0** | **0.0** |
| **DLV** | **T Lat** comp=Z,281nm,2.1s | **40.39** | **119** | *e*P | **P** | **00 28 44.7** | **-3.1** |
| **ARA0** | **ARCESS Array S** | **41.30** | **337** | *e*P | **P** | **00 28 55.0** | **+0.5** |
| ARA0 | | | | *e*P | **pP** | **00 28 55.9** | **-1.8** |
| **ARCES** | **ARCESS Array B** comp=Z,1.9nm,0.9s,baz=110,slow=10,SNR=9.4 | **41.30** | **337** | P | **P** | **00 28 55.9** | **+1.4** |
| **ARCES** | **ARCESS Array B** comp=Z,2.0nm,0.9s | **41.30** | **337** | P | **P** | **00 28 55.9** | **+1.4** |
| ARCES | | | | pmax | pmax | | |
| **NB2** | **NORSAR Subarra** comp=Z,0.8nm,0.6s,baz=113,slow=7.9 | **44.96** | **323** | P | **P** | **00 29 25.0** | **+0.7** |
| **NB200** | **NORSAR Array S** | **44.96** | **323** | *e*P | **P** | **00 29 25.3** | **+1.0** |
| **NOA** | **NORSAR Array B** comp=Z,0.3nm,0.6s,baz=102,slow=7.2,SNR=4.1 | **44.96** | **323** | P | **P** | **00 29 25.3** | **+1.0** |
| **VLC** | **Villacollemand** | **47.11** | **299** | *e*pP | pP | 00 29 57.8 | +13 |
| **KMBO** | **Kilima Mbogo** comp=Z,1.0nm,0.7s,baz=60,slow=20,SNR=6.5 | **50.44** | **229** | P | **P** | **00 30 08.4** | **+0.9** |
| **KMBO** | **Kilima Mbogo** comp=Z,1.0nm,0.7s | **50.44** | **229** | P | **P** | **00 30 08.5** | **+0.9** |
| KMBO | | | | pmax | pmax | | |
| **KMBO** | **Kilima Mbogo** comp=Z,18nm,2.2s | **50.44** | **229** | *e*P | **P** | **00 30 08.4** | **+0.9** |
| **KEST** | **Kesra** comp=Z,3.9nm,1.1s,baz=299,slow=3.1,SNR=5.0 | **50.45** | **289** | P | **P** | **00 30 07.9** | **+0.6** |
| **ESDC** | **Sonseca Array** comp=Z,0.5nm,0.5s,baz=55,slow=8.5,SNR=6.9 | **58.68** | **298** | P | **P** | **00 31 08.3** | **+1.3** |
| **TOA0** | **Torodi Ar. Sit** | **67.40** | **270** | *e*P | **P** | **00 32 04.4** | **-0.8** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.4nm,0.5s,baz=50,slow=6.0,SNR=14 | **67.40** | **270** | P | **P** | **00 32 04.4** | **-0.8** |
| **INK** | **Inuvik** comp=Z,4.2nm,1.0s,baz=356,slow=11,SNR=3.0 | **73.09** | **10** | P | **P** | **00 32 38.0** | **-1.2** |
| **INK** | **Inuvik** comp=Z,4.0nm,1.0s | **73.09** | **10** | P | **P** | **00 32 38.0** | **-1.2** |
| INK | | | | pmax | pmax | | |
| **INK** | **Inuvik** comp=Z,103nm,2.8s | **73.09** | **10** | *e*P | **P** | **00 32 38.0** | **-1.2** |
| **BOSA** | **Boshof** comp=Z,2.2nm,0.9s,baz=329,slow=5.9,SNR=2.8 | **79.25** | **222** | P | **P** | **00 33 14.8** | **0.0** |
| **BOSA** | **Boshof** comp=Z,2.0nm,0.9s | **79.25** | **222** | P | **P** | **00 33 14.9** | **0.0** |
| BOSA | | | | pmax | pmax | | |
| **BOSA** | **Boshof** comp=Z,266nm,2.8s | **79.25** | **222** | *e*P | **P** | **00 33 14.6** | **-0.2** |
| BOSA | | | | *e*P | **P** | **00 33 14.8** | **0.0** |
| **YKA** | **Yellowknife Ar** comp=Z,0.6nm,0.8s,baz=346,slow=5.6,SNR=3.8 | **80.62** | **4** | P | **P** | **00 33 21.2** | **-0.5** |
| **YKA** | **Yellowknife Ar** comp=Z,1.0nm,0.8s | **80.62** | **4** | P | **P** | **00 33 21.2** | **-0.5** |
| YKA | | | | pmax | pmax | | |
| **WRA** | **Warramunga Arr** comp=Z,0.6nm,0.7s,ba

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ILS | | | | S | Sn | 00 24 44.4 | -1.6 | | |
| **KAKN** | **Katmai Knife C** | **1.03** | **194** | P | Pn | 00 24 25.2 | -1.0 | | |
| **KELA** | **Mount Kelaz** | **1.04** | **215** | P | Pn | 00 24 25.2 | -1.0 | | |
| **ILW** | **Iliamna West** | **1.07** | **43** | P | Pn | 00 24 25.8 | -0.7 | | |
| **IVE** | **Iliamna Volcan** | **1.08** | **47** | P | Pn | 00 24 25.7 | -0.8 | | |
| IVE | | | | S | Sn | 00 24 45.9 | -0.9 | | |
| **KABU** | **Katmai Buttres** | **1.09** | **199** | P | Pn | 00 24 26.0 | -0.6 | | |
| KABU | | | | S | Sn | 00 24 46.0 | -0.8 | | |
| **ACHA** | **Angle Creek He** | **1.15** | **200** | P | Pn | 00 24 26.3 | -0.9 | | |
| **KABR** | **Katmai Barrier** | **1.18** | **190** | P | Pn | 00 24 26.2 | -1.3 | | |
| **CNTC** | **Contact Creek** | **1.23** | **213** | P | Pn | 00 24 27.2 | -0.7 | | |
| CNTC | | | | S | Sn | 00 24 47.8 | -1.4 | | |
| **RED** | **Redoubt Volcan** | **1.46** | **38** | P | Pn | 00 24 29.5 | -0.5 | | |
| **RDWB** | **Redoubt West** | **1.49** | **36** | P | Pn | 00 24 29.8 | -0.6 | | |
| RDWB | | | | S | Sn | 00 24 51.8 | -1.9 | | |
| **RSO** | **Redoubt South** | **1.50** | **38** | *e*Pn | Pn | 00 24 30.1 | -0.4 | | |
| **RDN** | **Redoubt North** | **1.53** | **36** | P | Pn | 00 24 30.4 | -0.4 | | |
| **PLWL** | **Peulik Whale M** | **1.55** | **217** | P | Pn | 00 24 30.3 | -0.6 | | |
| **HOM** | **Homer** | **1.55** | **75** | *e*Pn | Pn | 00 24 30.2 | -0.6 | | |
| HOM | | | | *e*Sn | Sn | 00 24 52.1 | -2.4 | | |
| **RDJH** | **Redoubt Jeurge** | **1.58** | **34** | P | Pn | 00 24 30.9 | -0.5 | | |
| **CNPM** | **China Poot** | **1.73** | **81** | *e*Pn | Pn | 00 24 32.0 | -0.8 | | |
| CNPM | | | | *e*Sn | Sn | 00 24 54.2 | -3.8 | | |
| **PLK5** | **Peulik 5** | **1.76** | **223** | P | Pn | 00 24 33.1 | 0.0 | | |
| **PLK1** | **Peulik 1** | **1.83** | **216** | P | Pn | 00 24 33.4 | -0.4 | | |
| **PLK3** | **Peulik 3** | **1.83** | **209** | P | Pn | 00 24 33.6 | -0.4 | | |
| PLK3 | | | | S | Sn | 00 24 58.8 | -1.2 | | |
| **KDAK** | **Kodiak Island** | **1.85** | **144** | P | Pn | 00 24 32.4 | -1.7 | | |
| | 1µm,0.3s,baz=51,slow=2.8,SNR=3085 | | | | | | | | |
| KDAK | | | | S | Sn | 00 24 56.0 | -4.1 | | |
| | 276nm,0.3s,baz=153,slow=22,SNR=11 | | | | | | | | |
| KDAK | | | | LR | LR | 00 25 15.3 | | | |
| | comp=Z,353nm,20.8s,baz=29,slow=35 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **1.85** | **144** | *e*P | Pn | 00 24 32.2 | -1.9 | | |
| KDAK | | | | *e* | | 00 24 57.0 | | | |
| **KDAK** | **Kodiak Island** | **1.85** | **144** | *e*Pn | Pn | 00 24 32.2 | -1.9 | | |
| KDAK | | | | *e*Sn | Sn | 00 24 57.0 | -3.2 | | |
| **SVW2** | **Sparrevohn** | **1.87** | **345** | *e*Pn | Pn | 00 24 34.5 | +0.2 | | |
| SVW2 | | | | *e*Sn | Sn | 00 25 00.2 | -0.6 | | |
| **PLK4** | **Peulik 4** | **1.91** | **210** | P | Pn | 00 24 34.4 | -0.5 | | |
| **BRLK** | **Bradley Lake** | **1.95** | **74** | *e*Pn | Pn | 00 24 34.0 | -1.2 | | |
| BRLK | | | | *e*Sn | Sn | 00 24 58.7 | -3.6 | | |
| **PLBL** | **Peulik Blue Cr** | **1.98** | **217** | P | Pn | 00 24 35.4 | -0.2 | | |
| **OHAK** | **Old Harbor** | **2.19** | **161** | *e*Pn | Pn | 00 24 36.1 | -1.9 | | |
| OHAK | | | | *e*Sn | Sn | 00 25 03.2 | -3.9 | | |
| **CKL** | **Chakachamna La** | **2.22** | **30** | P | Pn | 00 24 38.4 | 0.0 | | |
| **SPCR** | **Spurr Chakacha** | **2.25** | **31** | P | Pn | 00 24 38.6 | -0.2 | | |
| SPCR | | | | S | Sn | 00 25 08.3 | -0.3 | | |
| **BGL** | **Barrier Glacie** | **2.26** | **28** | P | Pn | 00 24 39.0 | +0.2 | | |
| **SPBG** | **Spurr Blockage** | **2.26** | **28** | P | Pn | 00 24 39.0 | +0.1 | | |
| **SPU** | **Mount Spurr** | **2.28** | **33** | *e*Pn | Pn | 00 24 38.6 | -0.5 | | |
| SPU | | | | *e*Sn | Sn | 00 25 06.2 | -3.0 | | |
| **CKN** | **Chakachatna No** | **2.28** | **31** | P | Pn | 00 24 39.1 | +0.1 | | |
| **SLKM** | **Skilak Lake** | **2.52** | **59** | P | Pn | 00 24 40.9 | -1.0 | | |
| **SLKM** | **Skilak Lake** | **2.52** | **59** | P | Pn | 00 24 40.9 | -1.0 | | |
| **STLK** | **Strandline Lak** | **2.60** | **31** | P | Pn | 00 24 42.8 | -0.1 | | |
| **SEW** | **Seward** | **2.73** | **71** | *e*Pn | Pn | 00 24 43.5 | -0.9 | | |
| SEW | | | | *e*Sn | Sn | 00 25 12.6 | -6.2 | | |
| **SII** | **Sitkinak Islan** | **2.75** | **175** | *e*Pn | Pn | 00 24 43.0 | -1.8 | | |
| SII | | | | *e*Sn | Sn | 00 25 14.8 | -4.5 | | |
| **FIB** | **Fire Island** | **2.90** | **48** | P | Pn | 00 24 47.0 | +0.6 | | |
| **FIB** | **Fire Island** | **2.90** | **48** | P | Pn | 00 24 47.0 | +0.6 | | |
| **SUA** | **Susitna One** | **2.90** | **40** | *e*Pn | Pn | 00 24 46.2 | -0.5 | | |
| SUA | | | | *e*Sn | Sn | 00 25 18.8 | -3.9 | | |
| **RC01** | **Rabbit Creek A** | **3.02** | **51** | *e*Pn | Pn | 00 24 47.0 | -1.0 | | |
| **ANON** | **Aniakchak** | **3.04** | **220** | P | Pn | 00 24 48.5 | +0.1 | | |
| **SKT** | **Skwentna** | **3.09** | **28** | P | Pn | 00 24 48.6 | -0.3 | | |
| **ANPK** | **Aniakchak Peak** | **3.09** | **219** | P | Pn | 00 24 49.0 | -0.1 | | |
| **PTE** | **Portage** | **3.21** | **58** | P | Pn | 00 24 49.6 | -0.7 | | |
| **PWL** | **Port Wells** | **3.51** | **61** | P | Pn | 00 24 52.5 | -1.7 | | |
| **CHIR** | **Chirikof Islan** | **3.52** | **189** | P | Pn | 00 24 52.3 | -2.1 | | |
| **PMR** | **Palmer** | **3.56** | **47** | *e*P | Pn | 00 24 52.7 | -2.1 | | |
| **PMR** | **Palmer** | **3.56** | **47** | *e*Pn | Pn | 00 24 52.6 | -2.1 | | |
| **CHGN** | **Chignik** | **3.63** | **216** | P | Pn | 00 24 55.6 | -0.2 | | |
| **TT01** | **Tatalina** | **3.69** | **350** | P | Pn | 00 24 57.0 | +0.5 | | |
| **TTA** | **Tatalina** | **3.71** | **350** | *e*P | Pn | 00 24 57.3 | +0.4 | | |
| **TTA** | **Tatalina** | **3.71** | **350** | *e*Pn | Pn | 00 24 57.3 | +0.4 | | |
| **PPLA** | **Purkeypile** | **3.80** | **17** | *e*Pn | Pn | 00 24 58.8 | +0.7 | | |
| PPLA | | | | *e*Sn | Sn | 00 25 37.1 | -6.1 | | |
| **VNHG** | **Veniaminof 1** | **3.93** | **220** | P | Pn | 00 24 59.4 | -0.5 | | |
| **GLI** | **Glacier Island** | **4.08** | **64** | P | Pn | 00 24 59.9 | -1.7 | | |
| **VNWF** | **Veniaminof 8** | **4.12** | **222** | P | Pn | 00 25 00.9 | -1.4 | | |
| **CAST** | **Castle Rocks** | **4.31** | **15** | *e*Pn | Pn | 00 25 04.9 | +0.3 | | |
| **FID** | **Port Fidalgo** | **4.33** | **67** | P | Pn | 00 25 02.7 | -2.1 | | |
| **JPK** | **Jack Peak** | **4.37** | **63** | P | Pn | 00 25 04.4 | -1.0 | | |
| **SCM** | **Sheep Creek Mo** | **4.40** | **52** | *e*P | Pn | 00 25 04.0 | -1.8 | | |
| **SCM** | **Sheep Creek Mo** | **4.40** | **52** | *e*Pn | Pn | 00 25 04.0 | -1.8 | | |
| **HUR** | **Hurricane** | **4.41** | **31** | P | Pn | 00 25 05.5 | -0.4 | | |
| **VLZ** | **Valdez** | **4.52** | **62** | P | Pn | 00 25 06.4 | -0.8 | | |
| **KTH** | **Kantishna Hill** | **4.62** | **21** | P | Pn | 00 25 08.3 | -0.4 | | |
| **EYAK** | **Cordova Ski Ar** | **4.63** | **70** | *e*Pn | Pn | 00 25 07.6 | -1.1 | | |
| **TRF** | **Thorofare Moun** | **4.66** | **25** | *e*Pn | Pn | 00 25 08.9 | -0.3 | | |
| **DIV** | **Divide** | **4.77** | **64** | *e*Pn | Pn | 00 25 09.5 | -1.2 | | |
| **KLU** | **Klutina** | **4.84** | **59** | *e*Pn | Pn | 00 25 10.1 | -1.4 | | |
| **SGAM** | **Sherman Glacie** | **4.88** | **72** | P | Pn | 00 25 10.9 | -1.2 | | |
| **RND** | **Reindeer** | **4.96** | **31** | *e*P | Pn | 00 25 11.9 | -1.3 | | |
| **RND** | **Reindeer** | **4.96** | **31** | *e*Pn | Pn | 00 25 11.9 | -1.3 | | |
| **BPAW** | **Bear Paw Mtn.** | **5.12** | **18** | *e*Pn | Pn | 00 25 14.3 | -0.9 | | |
| **RAGM** | **Ragged Mountai** | **5.12** | **73** | *e*Pn | Pn | 00 25 14.3 | -0.9 | | |
| **DHY** | **Denali Highway** | **5.16** | **40** | P | Pn | 00 25 14.2 | -1.6 | | |
| **MCK** | **McKinley** | **5.21** | **29** | *e*P | Pn | 00 25 15.6 | -0.8 | | |
| **MCK** | **McKinley** | **5.21** | **29** | *e*Pn | Pn | 00 25 15.6 | -0.8 | | |
| **BMRM** | **Bremner River** | **5.27** | **67** | *e*Pn | Pn | 00 25 16.3 | -0.9 | | |
| **PS11** | **TAPS Pump St11** | **5.28** | **54** | P | Pn | 00 25 16.2 | -1.1 | | |
| **NICHA** | **Nichawak Mount** | **5.46** | **75** | P | Pn | 00 25 19.0 | -0.7 | | |
| **BWN** | **Browne** | **5.47** | **24** | *e*Pn | Pn | 00 25 19.4 | -0.3 | | |
| **HARP** | **HAARP** | **5.57** | **52** | *e*Pn | Pn | 00 25 20.3 | -0.9 | | |
| **PS4A** | **Pavlof South-4** | **5.58** | **228** | P | Pn | 00 25 21.0 | -0.2 | | |
| **BERG** | **Berg Lake** | **5.60** | **74** | P | Pn | 00 25 20.6 | -1.0 | | |
| **PAX** | **Paxson** | **5.76** | **46** | *e*P | Pn | 00 25 22.5 | -1.1 | | |
| **PAX** | **Paxson** | **5.76** | **46** | *e*Pn | Pn | 00 25 22.5 | -1.1 | | |
| **GLB** | **Gilahina Butte** | **5.77** | **63** | P | Pn | 00 25 22.9 | -0.9 | | |
| **GRIN** | **Grindle Hills** | **5.78** | **75** | P | Pn | 00 25 23.4 | -0.5 | | |
| **KHIT** | **Khitrov Hills** | **5.83** | **74** | P | Pn | 00 25 23.6 | -1.0 | | |
| **VRDI** | **Verde Repeater** | **5.88** | **66** | P | Pn | 00 25 24.5 | -0.9 | | |
| **NEA** | **Nenana** | **5.91** | **24** | P | Pn | 00 25 24.4 | -1.1 | | |
| **DT1** | **Dutton Round H** | **5.92** | **228** | P | Pn | 00 25 25.5 | -0.3 | | |
| **PS10** | **TAPS Pump St10** | **5.93** | **42** | P | Pn | 00 25 25.6 | -0.2 | | |
| **MLY** | **Manley** | **6.03** | **16** | *e*Pn | Pn | 00 25 26.3 | -0.9 | | |
| **WRH** | **Wood River Hil** | **6.04** | **28** | *e*Pn | Pn | 00 25 25.7 | -1.5 | | |
| **KULT** | **Kultieth River** | **6.08** | **76** | P | Pn | 00 25 27.4 | -0.6 | | |
| **MCARA** | **McCarthy VSAT** | **6.12** | **65** | P | Pn | 00 25 27.4 | -1.0 | | |
| **BARK** | **Barkley Ridge** | **6.20** | **74** | P | Pn | 00 25 29.1 | -0.5 | | |
| **CCB** | **Clear Creek Bu** | **6.25** | **28** | *e*Pn | Pn | 00 25 28.1 | -2.0 | | |
| **HDA** | **Harding Lake** | **6.27** | **32** | *e*Pn | Pn | 00 25 29.3 | -1.1 | | |
| **ISLE** | **Juniper Island** | **6.30** | **73** | P | Pn | 00 25 30.3 | -0.6 | | |
| **PTPK** | **Patty Peak** | **6.33** | **67** | P | Pn | 00 25 31.1 | -0.3 | | |
| **KIAG** | **Kiagna River** | **6.33** | **70** | P | Pn | 00 25 30.6 | -0.8 | | |
| **BALM** | **Baldy** | **6.36** | **69** | P | Pn | 00 25 31.0 | -0.7 | | |
| **BALM** | **Baldy** | **6.36** | **69** | P | Pn | 00 25 31.0 | -0.7 | | |
| **BAGL** | **Bagley Icefiel** | **6.41** | **74** | P | Pn | 00 25 31.8 | -0.4 | | |
| **PS08** | **TAPS Pump Stn8** | **6.42** | **32** | P | Pn | 00 25 31.0 | -1.3 | | |
| **MDM** | **Murphy Dome** | **6.42** | **25** | *e*Pn | Pn | 00 25 30.5 | -1.8 | | |
| **COLA** | **College** | **6.43** | **27** | *e*P | Pn | 00 25 30.9 | -1.5 | | |
| **COLA** | **College** | **6.43** | **27** | *e*Pn | Pn | 00 25 30.9 | -1.5 | | |
| **MESA** | **MESA** | **6.46** | **77** | P | Pn | 00 25 32.4 | -0.7 | | |
| **FALS** | **False Pass** | **6.55** | **231** | *e*Pn | Pn | 00 25 33.9 | -0.2 | | |
| **IL1** | **Eielson Array** | **6.58** | **30** | *e*Pn | Pn | 00 25 32.3 | -2.2 | | |
| **ILAR** | **Eielson Array** | **6.58** | **30** | P | Pn | 00 25 33.1 | -1.4 | | |
| | 26nm,0.3s,baz=217,slow=13,SNR=1559 | | | | | | | | |
| ILAR | | | | S | Sn | 00 26 41.3 | -7.2 | | |
| | 29nm,0.3s,baz=208,slow=20,SNR=12 | | | | | | | | |
| **ILB** | **Eielson Array** | **6.58** | **30** | *e*Pn | Pn | 00 25 33.1 | -1.4 | | |
| ILB | | | | *e*Sn | Sn | 00 26 41.3 | -7.2 | | |
| **DOT** | **Dot Lake** | **6.67** | **45** | P | Pn | 00 25 35.1 | -0.6 | | |
| **BARN** | **Barnard Glacie** | **6.69** | **69** | P | Pn | 00 25 35.5 | -0.7 | | |
| **IM3** | **Indian Mountai** | **6.73** | **3** | P | Pn | 00 25 36.6 | -0.2 | | |
| **ISLZ** | **Isanotski Laza** | **6.76** | **231** | P | Pn | 00 25 36.8 | -0.1 | | |
| **RKAV** | **Rock Avalanche** | **6.76** | **76** | P | Pn | 00 25 37.2 | +0.1 | | |
| **CTGM** | **Chitina Glacie** | **6.84** | **70** | P | Pn | 00 25 37.9 | -0.2 | | |
| **TABL** | **Table Mountain** | **6.87** | **75** | P | Pn | 00 25 38.6 | +0.1 | | |
| **SSLS** | **Shishaldin Sou** | **6.89** | **232** | P | Pn | 00 25 38.3 | -0.3 | | |
| **SSBA** | **Shishaldin** | **6.89** | **233** | P | Pn | 00 25 38.7 | 0.0 | | |
| **PS06** | **TAPS Pump Stn6** | **6.96** | **17** | P | Pn | 00 25 39.5 | +0.1 | | |
| **LOGN** | **Logan Glacier** | **6.98** | **71** | P | Pn | 00 25 39.5 | -0.4 | | |
| **BCA3** | **Beaver Creek A** | **7.25** | **53** | P | Pn | 00 25 42.7 | -0.8 | | |
| **PCA** | **Pinnacle** | **7.30** | **78** | *e*Pn | Pn | 00 25 44.4 | +0.2 | | |
| **PNL** | **Peninsula** | **7.75** | **81** | P | Pn | 00 25 49.7 | -0.3 | | |
| **PS05** | **TAPS Pump Stn5** | **7.75** | **12** | P | Pn | 00 25 50.6 | +0.6 | | |
| **COLD** | **Coldfoot** | **8.20** | **12** | *e*Pn | Pn | 00 25 54.9 | -1.1 | | |
| **EGAK** | **Eagle** | **8.36** | **43** | *e*Pn | Pn | 00 25 56.6 | -1.6 | | |
| **DHAK** | **Deception Hill** | **8.41** | **84** | *e*Pn | Pn | 00 26 01.9 | +3.0 | | |
| DHAK | | | | *e*Sn | Sn | 00 27 30.2 | -2.4 | | |
| **FYU** | **Fort Yukon** | **8.44** | **26** | *e*Pn | Pn | 00 25 56.8 | -2.4 | | |
| **UNV** | **Unalaska Valle** | **8.54** | **235** | *e*Pn | Pn | 00 25 59.8 | -0.7 | | |
| UNV | | | | *e*Sn | Sn | 00 27 33.6 | -1.8 | | |
| **MSW** | **Makushin Switc** | **8.61** | **237** | P | Pn | 00 26 01.0 | -0.5 | | |
| **DAWY** | **Dawson** | **8.66** | **50** | *e*Pn | Pn | 00 26 01.6 | -0.5 | | |
| **MSOM** | **Makushin Julie** | **8.75** | **236** | P | Pn | 00 26 02.8 | -0.5 | | |
| **MSOM** | **Makushin Julie** | **8.75** | **236** | P | Pn | 00 26 02.8 | -0.5 | | |
| **BM3** | **Burnt Mountain** | **9.29** | **25** | P | Pn | 00 26 07.6 | -2.9 | | |
| **OKTU** | **Okmok Mt. Tuli** | **9.52** | **237** | P | Pn | 00 26 13.3 | -0.3 | | |
| **SKAG** | **Skagway** | **9.83** | **81** | *e*Pn | Pn | 00 26 19.6 | +2.0 | | |
| SKAG | | | | *e*Sn | Sn | 00 28 10.4 | +3.9 | | |
| **WHY** | **Whitehorse** | **9.97** | **74** | P | Pn | 00 26 17.2 | -2.4 | | |
| **WRAK** | **Wrangell Islan** | **12.18** | **94** | *e*Pn | P | 00 26 53.3 | -0.8 | | |
| **DLBC** | **Dease Lake** | **12.72** | **83** | P | P | 00 27 00.1 | -0.2 | | |
| | 4.0nm,0.3s,baz=292,slow=12,SNR=28 | | | | | | | | |
| DLBC | | | | S | Sn | 00 29 16.1 | 0.0 | | |
| | 0.4nm,0.3s,baz=158,slow=19,SNR=3.4 | | | | | | | | |
| **DLBC** | **Dease Lake** | **12.72** | **83** | *e*P | P | 00 27 00.6 | +0.2 | | |
| DLBC | | | | *e*Sn | Sn | 00 29 16.1 | 0.0 | | |
| **INK** | **Inuvik** | **12.89** | **37** | P | Pn | 00 26 56.4 | -0.9 | | |
| | 2.6nm,0.3s,baz=241,slow=14,SNR=37 | | | | | | | | |
| INK | | | | S | Sn | 00 29 15.6 | -4.2 | | |
| | baz=335,slow=7.5,SNR=5.0 | | | | | | | | |
| **BILL** | **Bilibino** | **19.09** | **313** | *c* *i*P | Pn | 00 28 11.3 | -1.5 | | |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,53nm,1.3s | | | | | | | | |
| **BILL** | **Bilibino** | **19.09** | **313** | *e*P | Pn | 00 28 11.7 | -1.1 | | |
| | comp=Z,31nm,0.7s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.49** | **63** | P | P | 00 28 15.3 | +0.8 | | |
| | comp=Z,3.5nm,0.3s,baz=276,slow=9.8,SNR=205 | | | | | | | | |
| YKA | | | | PcP | PcP | 00 32 27.8 | 0.0 | | |
| | comp=Z,0.1nm,0.3s,baz=285,slow=1.6,SNR=7.4 | | | | | | | | |
| YKA | | | | ScP | ScP | 00 35 49.7 | +1.2 | | |
| | comp=Z,0.1nm,0.3s,baz=293,slow=2.2,SNR=7.9 | | | | | | | | |
| **E07A** | **Sunnyside** | **24.19** | **106** | *e*P | P | 00 28 58.9 | -2.8 | | |
| | comp=Z,112nm,2.8s | | | | | | | | |
| **NEW** | **Newport** | **24.40** | **100** | P | P | 00 29 05.4 | +1.8 | | |
| | comp=Z,0.7nm,0.5s,baz=315,slow=11,SNR=3.6 | | | | | | | | |
| NEW | | | | pP | pP | 00 29 39.1 | +3.6 | | |
| | comp=Z,3.4nm,1.0s,baz=308,slow=9.8,SNR=4.6 | | | | | | | | |
| **NEW** | **Newport** | **24.40** | **100** | *e*P | P | 00 29 05.4 | +1.8 | | |
| NEW | | | | *e*pP | pP | 00 29 39.1 | +3.6 | | |
| NEW | | | | *e*ScP | ScP | 00 36 03.7 | +2.3 | | |
| **SEY** | **Seymchan** | **25.25** | **301** | P | P | 00 29 11.0 | -0.1 | | |
| | comp=Z,4.2nm,0.7s,baz=148,slow=12,SNR=4.8 | | | | | | | | |
| **F10A** | **Beach Ranch, E** | **25.90** | **104** | *e*P | P | 00 29 17.8 | +0.6 | | |
| | comp=Z,98nm,2.7s | | | | | | | | |
| **RES** | **Resolute Bay** | **26.33** | **31** | P | P | 00 29 20.8 | +0.2 | | |
| | comp=Z,3.0nm,0.7s,baz=260,slow=11,SNR=4.2 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **26.45** | **117** | P | P | 00 29 24.8 | +2.6 | | |
| | comp=Z,2.3nm,0.8s,baz=229,slow=2.3,SNR=4.8 | | | | | | | | |
| YBH | | | | pP | pP | 00 29 57.6 | +2.5 | | |
| | comp=Z,2.8nm,0.7s,baz=343,slow=2.4,SNR=3.5 | | | | | | | | |
| **PEA2** | **Petropavlovsk-** | **26.75** | **278** | *e*P | P | 00 29 24.8 | +0.2 | | |
| **PETK** | **Petropavlovsk-** | **26.75** | **278** | P | P | 00 29 24.8 | +0.2 | | |
| | comp=Z,5.0nm,0.9s,baz=70,slow=12,SNR=3.4 | | | | | | | | |
| **IMW** | **Indian Meadow** | **30.52** | **101** | *e*P | P | 00 29 59.2 | +0.7 | | |
| | comp=Z,4.1nm,1.1s | | | | | | | | |
| **NV01** | **Mina Array Sit** | **31.12** | **116** | *e*P | P | 00 30 06.3 | +2.6 | | |
| NV01 | | | | *e*pP | pP | 00 30 39.5 | +2.4 | | |
| NV01 | | | | *e*PcP | PcP | 00 32 55.4 | +0.5 | | |
| NV01 | | | | *e*ScP | ScP | 00 36 24.1 | +1.7 | | |
| **NVAR** | **Mina Array Bea** | **31.12** | **116** | P | P | 00 30 05.9 | +2.2 | | |
| | comp=Z,2.4nm,0.8s,baz=310,slow=8.3,SNR=16 | | | | | | | | |
| NVAR | | | | pP | pP | 00 30 39.5 | +2.4 | | |
| | comp=Z,1.4nm,0.8s,baz=302,slow=8.9,SNR=4.8 | | | | | | | | |
| NVAR | | | | PcP | PcP | 00 32 55.4 | +0.5 | | |
| | comp=Z,0.6nm,0.8s,baz=328,slow=3.2,SNR=3.8 | | | | | | | | |
| NVAR | | | | ScP | ScP | 00 36 24.5 | +2.1 | | |
| | comp=Z,1.4nm,0.8s,baz=303,slow=4.0,SNR=10 | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **32.45** | **113** | *e*P | P | 00 30 17.9 | +2.5 | | |
| | comp=Z,33nm,2.8s | | | | | | | | |
| R11A | | | | *e*ScP | ScP | 00 36 29.0 | +2.1 | | |
| **ULM** | **Lac du Bonnet** | **33.99** | **79** | P | P | 00 30 29.4 | +1.1 | | |
| | comp=Z,4.8nm,0.7s,baz=300,slow=10,SNR=5.4 | | | | | | | | |
| **SRU** | **San Rafael** | **34.30** | **106** | *e*P | P | 00 30 34.3 | +3.0 | | |
| SRU | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **SRU** | **San Rafael** | **34.30** | **106** | *e*P | P | 00 30 34.2 | +3.0 | | |
| | comp=Z,6.1nm,0.9s | | | | | | | | |
| **SBI** | **Santa Barbara** | **34.90** | **122** | *e*P | P | 00 30 35.5 | -0.7 | | |
| SBI | | | | *e*pP | pP | 00 31 11.4 | +1.4 | | |
| SBI | | | | *e*sP | sP | 00 31 28.0 | -0.1 | | |
| SBI | | | | *e*PP | PnPn | 00 32 11.8 | +13 | | |
| SBI | | | | *e*PcP | PcP | 00 33 06.7 | +1.5 | | |
| SBI | | | | *e*S | S | 00 35 59.7 | +4.2 | | |
| SBI | | | | *e*ScP | ScP | 00 36 30.6 | -4.7 | | |
| **YAK** | **Yakutsk** | **35.25** | **308** | *e*P | P | 00 30 39.2 | +0.3 | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **EYMN** | **Ely** | **37.68** | **79** | *e*P | P | 00 31 00.5 | +0.8 | | |
| | comp=Z,84nm,1.9s | | | | | | | | |
| **HPO** | **Honuapo** | **40.16** | **181** | *e*P | P | 00 31 18.6 | -1.9 | | |
| **SUMG** | **Summit** | **41.38** | **24** | *e*P | P | 00 31 29.5 | -0.9 | | |
| | comp=Z,186nm,2.9s | | | | | | | | |
| **KLR** | **Kul'dur** | **42.03** | **290** | *e*P | P | 00 31 32.3 | -3.2 | | |
| **BOD** | **Bodaibo** | **44.08** | **310** | *i*P | P | 00 31 51.5 | -0.3 | | |
| BOD | | | | pmax | pmax | | | | |
| | comp=Z,25nm,0.7s | | | | | | | | |
| **SCHQ** | **Schefferville** | **44.63** | **55** | P | P | 00 31 56.5 | +0.2 | | |
| | comp=Z,7.9nm,0.5s,baz=314,slow=7.3,SNR=24 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **45.44** | **285** | P | P | 00 32 02.6 | -0.2 | | |
| | comp=Z,2.7nm,0.7s,baz=47,slow=9.6,SNR=6.4 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **45.52** | **108** | P | P | 00 32 06.2 | +2.5 | | |
| | comp=Z,0.7nm,0.8s,baz=328,slow=6.0,SNR=7.2 | | | | | | | | |
| TXAR | | | | pP | pP | 00 32 40.5 | +1.6 | | |
| | comp=Z,0.7nm,0.8s,baz=331,slow=6.0,SNR=3.2 | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **46.28** | **90** | *e*P | P | 00 32 09.4 | 0.0 | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **OXF** | **Oxford** | **48.56** | **91** | *e*P | P | 00 32 28.3 | +1.3 | | |
| OXF | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| **OXF** | **Oxford** | **48.56** | **91** | *e*P | P | 00 32 28.3 | +1.3 | | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| **BINY** | **Binghamton** | **49.48** | **73** | *e*P | P | 00 32 35.3 | +1.3 | | |
| | comp=Z,51nm,1.2s | | | | | | | | |
| **LUPA** | **Lehigh Univers** | **50.99** | **74** | *e*P | P | 00 32 46.7 | +1.4 | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **51.47** | **360** | *e*P | P | 00 32 47.5 | -0.9 | | |
| ARA0 | | | | *e*PcP | PcP | 00 33 59.9 | -0.5 | | |
| **ARCES** | **ARCESS Array B** | **51.47** | **360** | P | P | 00 32 47.6 | -0.9 | | |
| | comp=Z,3.0nm,1.0s,baz=8.5,slow=9.1,SNR=3.5 | | | | | | | | |
| ARCES | | | | PcP | PcP | 00 33 59.9 | -0.5 | | |
| | comp=Z,1.3nm,0.8s,baz=352,slow=5.8,SNR=2.7 | | | | | | | | |
| **KS01** | **Wonju Array Si** | **52.53** | **282** | *e*P | P | 00 32 58.0 | +1.3 | | |
| **KSRS** | **Korea Array** | **52.53** | **282** | P | P | 00 32 56.2 | -0.6 | | |
| | comp=Z,5.8nm,0.7s,baz=37,slow=6.8,SNR=11 | | | | | | | | |
| **KSRS** | **Korea Array** | **52.53** | **282** | P | P | 00 32 56.2 | -0.6 | | |
| KSRS | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **KS15** | **Wonju Array Si** | **52.56** | **282** | *e*P | P | 00 32 56.2 | -0.8 | | |
| **KSAR** | **Wonju Array Be** | **52.56** | **282** | P | P | 00 32 56.2 | -0.8 | | |
| **KSAR** | **Wonju Array Be** | **52.56** | **282** | P | P | 00 32 56.2 | -0.8 | | |
| **ULN** | **Ulaanbaatar** | **54.24** | **305** | *e*P | P | 00 33 09.6 | +0.3 | | |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **54.24** | **305** | *e*P | P | 00 33 09.6 | +0.3 | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| **SONA1** | **Songino Array** | **54.53** | **305** | *e*P | P | 00 33 12.6 | +1.3 | | |
| **SONA0** | **Songino Array** | **54.54** | **305** | *e*P | P | 00 33 12.9 | +1.5 | | |
| **SONM** | **Songino Array** | **54.54** | **305** | P | P | 00 33 12.9 | +1.5 | | |
| | comp=Z,26nm,0.8s,baz=42,slow=7.8,SNR=113 | | | | | | | | |
| **NVS** | **Novosibirsk** | **57.17** | **324** | *e*P | P | 00 33 30.0 | +0.2 | | |
| NVS | | | | *e* | | 00 34 06.7 | | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=N,2.0nm,0.6s | | | | | | | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=E,3.0nm,0.6s | | | | | | | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **ZAA1** | **Zalesovo Array** | **57.45** | **323** | *e*P | P | 00 33 31.9 | +0.1 | | |
| ZAA1 | | | | *e*pP | pP | 00 34 09.3 | +0.8 | | |
| **ZALV** | **Zalesovo Beam** | **57.45** | **323** | P | P | 00 33 31.9 | +0.1 | | |
| | comp=Z,6.6nm,0.6s,baz=28,slow=6.7,SNR=20 | | | | | | | | |
| ZALV | | | | pP | pP | 00 34 09.3 | +0.8 | | |
| | comp=Z,5.0nm,0.6s,baz=31,slow=6.4,SNR=6.4 | | | | | | | | |
| **NB200** | **NORSAR Array S** | **59.49** | **8** | *e*P | P | 00 33 44.9 | -1.0 | | |
| NB200 | | | | *e*pP | pP | 00 34 22.0 | -0.9 | | |
| **NOA** | **NORSAR Array B** | **59.49** | **8** | P | P | 00 33 44.9 | -1.0 | | |
| | comp=Z,0.8nm,0.8s,baz=359,slow=3.2,SNR=3.2 | | | | | | | | |
| NOA | | | | pP | pP | 00 34 22.0 | -0.9 | | |
| | comp=Z,1.1nm,0.8s,baz=352,slow=6.8,SNR=2.5 | | | | | | | | |
| **FIA0** | **FINESS Array S** | **59.59** | **360** | *e*P | P | 00 33 45.1 | -1.3 | | |
| **FIA0** | **FINESS Array S** | **59.59** | **360** | *e*P | P | 00 33 45.1 | -1.3 | | |
| **FINES** | **FINESS Array B** | **59.59** | **360** | P | P | 00 33 45.1 | -1.3 | | |
| | comp=Z,2.7nm,0.8s,baz=347,slow=7.8,SNR=10 | | | | | | | | |
| **ARU** | **Arti** | **61.64** | **340** | *e*P | P | 00 33 59.5 | -0.9 | | |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **ARU** | **Arti** | **61.64** | **340** | *e*P | P | 00 33 59.5 | -0.9 | | |
| | comp=Z,4.4nm,0.7s | | | | | | | | |
| **KURK** | **Kurchatov** | **62.15** | **325** | *e*P | P | 00 34 03.6 | -0.2 | | |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **62.15** | **325** | *e*P | P | 00 34 03.6 | -0.2 | | |
| | comp=Z,8.4nm,0.8s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **62.30** | **331** | *i* P | P | 00 34 04.0 | -0.9 | | |
| BVA0 | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **VOSK** | **Vostochnaya** | **62.43** | **331** | P | P | 00 34 04.8 | -1.0 | | |
| VOSK | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **ZRNK** | **Zerenda** | **

| | | | | | | |
|---|---|---|---|---|---|---|
| **KAMT** | **Kaman** | **1.68** | **118** | *e*PN | **Pn** | **01 09 45.1 +0.3** |
| **KAMT** | **Kaman** | **1.68** | **118** | *e*Pn | **Pn** | **01 09 45.1 +0.3** |
| **CORM** | **Corum** | **2.16** | **89** | *e*PN | **Pn** | **01 09 51.2 -0.3** |
| **CORM** | **Corum** | **2.16** | **89** | *e*Pn | **Pn** | **01 09 51.2 -0.3** |

*ISCJB **21** 01:23:17.2±0.9,38.78N±0.04×27.78E±0.07,h9km±7km, Error ellipse: s-maj=9.6km s-min=7.2km az=14.9*
*DDA **21** 01:23:17.9,38.82N×27.86E,h7km,Md2.7*
*CSEM **21** 01:23:17.6±0.4,38.81N×27.75E,h10km,MD2.6,Error ellipse: s-maj=7.6km s-min=6.6km az=121.0*
*ISK **21** 01:23:17.2,38.82N×27.72E,h6km,MD2.6*

**ISC 21 01:23:17.6±1.1,38.82N±0.03×27.77E±0.04,h9km±7km, n18,σ0s59/28,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKS** | **Akhisar** | **0.07** | **28** | PG | **Pg** | **01 23 19.8** | **+0.1** |
| **AKS** | **Akhisar** | **0.07** | **28** | *i* Pg | **Pg** | **01 23 19.8** | **+0.1** |
| **MANT** | **Manisa** | **0.70** | **118** | *i* P | **Pb** | **01 23 32.9** | **+0.9** |
| MANT | | | | *i* S | **Sg** | **01 23 39.3** | **-0.9** |
| **MANT** | **Manisa** | **0.70** | **118** | P | **Pb** | **01 23 32.9** | **+0.9** |
| MANT | | | | S | **Sg** | **01 23 39.3** | **-0.9** |
| **BLCB** | **Balcova** | **0.71** | **233** | *e*PG | **Pg** | **01 23 31.0** | **-0.4** |
| **BLCB** | **Balcova** | **0.71** | **233** | *e*Pg | **Pg** | **01 23 31.0** | **-0.4** |
| **DEMI** | **Demirci** | **0.77** | **73** | *i* P | **Pg** | **01 23 31.8** | **-0.6** |
| DEMI | | | | *i* S | **Sg** | **01 23 41.6** | **-1.0** |
| **DEMI** | **Demirci** | **0.77** | **73** | P | **Pg** | **01 23 31.9** | **-0.6** |
| DEMI | | | | S | **Sg** | **01 23 41.6** | **-1.0** |
| **BALB** | **Balikesir** | **0.83** | **6** | *e*PG | **Pg** | **01 23 33.1** | **-0.4** |
| BALB | | | | *e*SG | **Sb** | **01 23 46.1** | **+0.6** |
| **BALB** | **Balikesir** | **0.83** | **6** | *e*Pg | **Pg** | **01 23 33.1** | **-0.4** |
| BALB | | | | *e*Sg | **Sb** | **01 23 46.1** | **+0.6** |
| **DURS** | **Dursunbey** | **0.96** | **35** | *i* P | **Pn** | **01 23 37.4** | **0.0** |
| DURS | | | | *i* S | **Sg** | **01 23 48.7** | **+0.3** |
| **DURS** | **Dursunbey** | **0.96** | **35** | P | **Pn** | **01 23 37.4** | **0.0** |
| DURS | | | | S | **Sg** | **01 23 48.7** | **+0.3** |
| **DST** | **Dursunbey** | **1.03** | **40** | *e*PG | **Pb** | **01 23 37.8** | **+0.2** |
| DST | | | | *e*SG | **Sn** | **01 23 52.9** | **0.0** |
| **DST** | **Dursunbey** | **1.03** | **40** | *e*Pg | **Pb** | **01 23 37.8** | **+0.2** |
| DST | | | | *e*Sg | **Sn** | **01 23 52.9** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **357** | *e*PN | **Pb** | **01 23 40.6** | **-0.5** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **357** | *e*Pn | **Pb** | **01 23 40.6** | **-0.5** |
| **KCTX** | **Karacabey (Bur** | **1.52** | **17** | *e*PN | **Pn** | **01 23 45.4** | **+0.4** |
| **KCTX** | **Karacabey (Bur** | **1.52** | **17** | *e*Pn | **Pn** | **01 23 45.4** | **+0.4** |

*ISCJB **21** 01:28:51.1±0.6,26.43S±0.04×27.68E±0.03,h12km±4km, Error ellipse: s-maj=6.4km s-min=4.2km az=159.1*
*PRE **21** 01:28:51.0±1.8,26.44S×27.68E,h2km,ML3.0*

**ISC 21 01:28:51.4±0.9,26.40S±0.04×27.64E±0.03,h13km±5km, n20,σ1s25/32,1C,South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KLOF** | **Kloof** | **0.06** | **330** | *i* P | **Pg** | **01 28 54.3** | **+0.1** |
| KLOF | | | | *e*S | **Sg** | **01 28 55.3** | **-0.8** |
| KLOF | | | | AML | AML | 01 28 56.4 | |
| | comp=Z,17μm,0.2s | | | | | | |
| **WDLM** | **Western Deep L** | **0.20** | **263** | *e*P | **Pb** | **01 28 56.8** | **-0.3** |
| WDLM | | | | *e*S | **Sg** | **01 28 59.3** | **+0.2** |
| WDLM | | | | AML | AML | 01 29 01.0 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **ERPM** | **east rand prop** | **0.54** | **84** | *e*P | **Pg** | **01 29 01.1** | **-1.0** |
| ERPM | | | | *e*S | **Sg** | **01 29 08.5** | **-0.8** |
| ERPM | | | | AML | AML | 01 29 09.8 | |
| | comp=Z,371nm,0.5s | | | | | | |
| **PRYS** | **Parys** | **0.58** | **206** | *e*P | **Pg** | **01 29 03.1** | **+0.2** |
| PRYS | | | | *e*S | **Sg** | **01 29 09.8** | **-0.8** |
| PRYS | | | | AML | AML | 01 29 16.2 | |
| | comp=Z,470nm,0.7s | | | | | | |
| **KSR** | **Koster** | **0.87** | **309** | *e*P | **Pg** | **01 29 08.0** | **-0.2** |
| KSR | | | | *e*S | **Sb** | **01 29 20.5** | **+0.5** |
| KSR | | | | AML | AML | 01 29 28.5 | |
| | comp=Z,73nm,0.2s | | | | | | |
| **BFSD** | **Buffelsfontein** | **0.90** | **239** | *e*P | **Pb** | **01 29 09.4** | **+0.5** |
| BFSD | | | | AML | AML | 01 29 26.2 | |
| | comp=Z,298nm,0.1s | | | | | | |
| **MOAB** | **Moab Khotsong** | **0.95** | **232** | *e*P | **Pn** | **01 29 10.7** | **0.0** |
| MOAB | | | | *e*S | **Sg** | **01 29 22.6** | **+0.2** |
| MOAB | | | | AML | AML | 01 29 33.0 | |
| | comp=Z,270nm,0.8s | | | | | | |
| **TLEK** | **Tau Lekoa** | **1.03** | **237** | *e*P | **Pb** | **01 29 10.7** | **-0.6** |
| TLEK | | | | *e*S | **Sb** | **01 29 24.7** | **-0.1** |
| TLEK | | | | AML | AML | 01 29 29.2 | |
| | comp=Z,321nm,0.2s | | | | | | |
| **SWZ** | **Schweizer** | **2.21** | **249** | *e*P | **Pn** | **01 29 29.3** | **+1.3** |
| SWZ | | | | *e*S | **Sb** | **01 29 58.1** | **-0.5** |
| SWZ | | | | AML | AML | 01 30 00.6 | |
| | comp=Z,241nm,0.2s | | | | | | |
| **BOSA** | **Boshof** | **3.06** | **223** | *i* S | **Sb** | **01 30 24.1** | **+1.1** |
| **POGA** | **Pongola** | **3.67** | **106** | *e*P | **Pn** | **01 29 50.9** | **+3.0** |
| POGA | | | | *e*S | **Sn** | **01 30 32.9** | **+1.8** |
| POGA | | | | AML | AML | 01 30 53.3 | |
| | comp=Z,79nm,0.5s | | | | | | |
| **KSD** | **Kokstad** | **4.41** | **160** | *e*P | **Pn** | **01 29 59.6** | **+1.4** |
| KSD | | | | *e*S | **Sn** | **01 30 48.9** | **-0.6** |
| KSD | | | | AML | AML | 01 31 12.3 | |
| | comp=Z,17nm,0.6s | | | | | | |
| **MSNA** | **Messina** | **4.58** | **29** | *e*P | **Pn** | **01 30 02.1** | **+1.6** |
| MSNA | | | | *e*S | **Sn** | **01 30 52.7** | **-0.9** |
| MSNA | | | | AML | AML | 01 31 22.1 | |
| | comp=Z,28nm,0.5s | | | | | | |
| **HVD** | **Gariep Dam** | **4.59** | **204** | *e*P | **Pn** | **01 30 00.6** | **-0.1** |
| HVD | | | | *e*S | **Sn** | **01 30 53.2** | **-0.9** |
| HVD | | | | AML | AML | 01 30 53.8 | |
| | comp=Z,14nm,0.6s | | | | | | |
| **MATP** | **Matopo** | **6.00** | **8** | *i* P | Pn | 01 30 08.5 | -12 |
| MATP | | | | *i* S | Sb | 01 31 55.6 | +7.8 |
| **UPI** | **Upington** | **6.01** | **250** | *e*P | **Pn** | **01 30 21.3** | **+1.2** |
| UPI | | | | *e*S | **Sn** | **01 31 28.4** | **-0.5** |
| UPI | | | | AML | AML | 01 32 01.1 | |
| | comp=Z,21nm,0.5s | | | | | | |
| **BLWY** | **Bulawayo** | **6.29** | **8** | *i* P | Pb | 01 30 35.2 | -5.8 |
| BLWY | | | | *i* S | Sb | 01 32 03.3 | +7.0 |
| **GRM** | **Grahamstown** | **6.96** | **188** | *i* P | Pn | 01 30 28.5 | -4.6 |
| GRM | | | | *i* S | Sn | 01 32 02.8 | +11 |
| **CVNA** | **Calvinia** | **8.56** | **232** | *e*P | **Pn** | **01 30 55.5** | **+0.3** |
| CVNA | | | | *e*S | **Sn** | **01 32 29.1** | **-2.6** |
| CVNA | | | | AML | AML | 01 32 31.7 | |
| | comp=Z,8.4nm,0.3s | | | | | | |
| **KOMG** | **Komaggas** | **9.59** | **247** | *e*P | **Pn** | **01 31 10.5** | **+1.4** |
| KOMG | | | | *e*S | **Sn** | **01 32 54.1** | **-2.7** |
| KOMG | | | | AML | AML | 01 33 10.7 | |
| | comp=Z,3.0nm,0.8s | | | | | | |

**IDC 21 01:41:49.4±8.2,36.41S×78.92E,h0km,mb3.9/3, mb1 4.0/3,mb1mx3.6/20,mbtmp3.9/3,MS3.4/1,Ms1 3.3/1, ms1mx2.7/24,Error ellipse: s-maj=537.7km s-min=27.9km az=16.0,Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H01W2** | **Cape Leeuwin H** | **28.56** | **98** | T | T | 02 17 55.5 | |
| | baz=255,slow=75,SNR=287 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **28.57** | **97** | T | T | 02 17 56.7 | |
| | baz=255,slow=75,SNR=251 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **28.58** | **98** | T | T | 02 17 58.5 | |
| | baz=255,slow=75,SNR=265 | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.22** | **347** | T | T | 02 18 48.1 | |
| | baz=170,slow=76,SNR=143 | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.23** | **347** | T | T | 02 18 50.4 | |
| | baz=170,slow=76,SNR=122 | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.24** | **347** | T | T | 02 18 51.6 | |
| | baz=170,slow=76,SNR=257 | | | | | | |
| **H08N1** | **Diego Garcia H** | **30.79** | **345** | T | T | 02 20 49.1 | |
| | baz=160 | | | | | | |
| **H08N3** | **Diego Garcia H** | **30.79** | **344** | T | T | 02 20 52.2 | |
| | baz=160 | | | | | | |
| **H08N2** | **Diego Garcia H** | **30.81** | **344** | T | T | 02 20 57.2 | |
| | baz=160 | | | | | | |
| **MAW** | **Mawson** | **32.55** | **191** | LR | LR | 02 00 02.8 | |
| | comp=Z,57nm,18.1s,baz=242,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **48.68** | **91** | P | P | 01 50 35.3 | -0.3 |
| | 0.5nm,0.8s,baz=236,slow=6.6,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.87** | **87** | P | P | 01 50 52.3 | 0.0 |
| | 0.6nm,0.9s,baz=239,slow=7.1,SNR=5.1 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **52.12** | **303** | P | P | 01 51 01.8 | -0.1 |
| | 3.7nm,0.8s,baz=135,slow=19,SNR=12 | | | | | | |

**GUC 21 01:44:14.8±0.3,20.93S×68.75W,h127km±5km,ML3.5, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB01** | **IPOC Station P** | **0.70** | **261** | *e*P | Pn | 01 44 35.5 | +0.5 |
| PB01 | | | | *e*S | Sn | 01 44 50.9 | +0.6 |
| PB01 | | | | AML | AML | 01 44 51.7 | |
| | comp=N,1μm,0.4s | | | | | | |
| **PB07** | **IPOC Station P** | **1.32** | **233** | *e*P | Pn | 01 44 41.5 | +0.5 |
| PB07 | | | | *e*S | Sn | 01 45 02.1 | +1.2 |
| PB07 | | | | AML | AML | 01 45 04.8 | |
| | comp=E,690nm,0.4s | | | | | | |
| **PB06** | **IPOC Station P** | **1.93** | **203** | *e*P | Pn | 01 44 48.8 | +0.8 |
| PB06 | | | | *e*S | Sn | 01 45 14.5 | +1.3 |
| PB06 | | | | AML | AML | 01 45 15.2 | |
| | comp=E,399nm,0.4s | | | | | | |
| **MNMC** | **Minimini** | **1.96** | **336** | *e*P | Pn | 01 44 49.4 | +0.8 |
| MNMC | | | | *e*S | Sn | 01 45 15.7 | +1.3 |
| **PB13** | **IPOC Station P** | **2.68** | **344** | *e*P | Pn | 01 44 59.8 | +1.8 |
| PB13 | | | | *e*S | Sn | 01 45 33.4 | +2.3 |
| PB13 | | | | AML | AML | 01 45 36.2 | |
| | comp=E,212nm,0.5s | | | | | | |

*NEIC **21** 01:57:38.0,35.29N×92.31W,h5km,MD2.5(CERI),After CERI.*
*NEIC Felt at Greenbrier and Searcy.*

**ISC 21 01:57:37.2±1.7,35.32N±0.05×92.30W±0.04,h5km±14km, n12,σ0s95/19,Arkansas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UALR** | **University of** | **0.54** | **184** | Pg | **Pg** | **01 57 47.7** | **+0.1** |
| **MIAR** | **Mount Ida** | **1.30** | **234** | P | **Pb** | **01 58 02.0** | **-0.1** |
| | baz=1.3 | | | | | | |
| MIAR | | | | S | **Sn** | **01 58 18.9** | **-0.9** |
| | baz=1.3 | | | | | | |
| **MIAR** | **Mount Ida** | **1.30** | **234** | *e*Pn | **Pb** | **01 58 02.0** | **-0.1** |
| MIAR | | | | *e*S | **Sb** | **01 58 18.3** | **-0.8** |
| **HBAR** | **Harrisburg** | **1.36** | **80** | *e*Pn | **Pn** | **01 58 01.6** | **-1.3** |
| HBAR | | | | *e*S | **Sn** | **01 58 21.6** | **+0.2** |
| **V38A** | **Canehill** | **1.80** | **288** | Pb | **Pb** | **01 58 10.5** | **-0.2** |
| | baz=1.8 | | | | | | |
| V38A | | | | Sb | **Sb** | **01 58 34.4** | **+0.9** |
| | baz=1.8 | | | | | | |
| **W38A** | **Poteau** | **1.83** | **263** | Pb | **Pb** | **01 58 11.2** | **0.0** |
| | baz=1.8 | | | | | | |
| W38A | | | | Sb | **Sg** | **01 58 35.9** | **-0.2** |
| | baz=1.8 | | | | | | |
| **Y39A** | **Lockesburg** | **2.02** | **228** | Sn | **Sb** | **01 58 39.2** | **-0.6** |
| | baz=2.0 | | | | | | |
| **U38A** | **Gravette** | **2.03** | **304** | Sb | **Sb** | **01 58 40.8** | **+0.6** |
| | baz=2.0 | | | | | | |
| **X38A** | **Whitesboro** | **2.17** | **253** | Pb | **Pb** | **01 58 16.7** | **-0.3** |
| | baz=2.2 | | | | | | |
| **V37A** | **Hulbert** | **2.38** | **285** | Pg | **Pb** | **01 58 21.9** | **+1.3** |
| | baz=2.4 | | | | | | |
| **OXF** | **Oxford** | **2.51** | **108** | *e*Pn | **Pn** | **01 58 20.1** | **+1.5** |
| OXF | | | | *e*S | **Sn** | **01 58 50.8** | **+1.1** |
| **CCM** | **Cathedral Cave** | **2.86** | **17** | Pn | **Pn** | **01 58 23.6** | **+0.1** |
| CCM | | | | *e*S | **Sb** | **01 59 02.2** | **-1.9** |

**PRE 21 02:43:50.2±1.7,26.43S×27.68E,h2km,ML2.4,South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KLOF** | **Kloof** | **0.10** | **321** | *e*P | Pg | 02 43 53.4 | +1.0 |
| KLOF | | | | *e*S | Sg | 02 43 53.4 | -0.4 |
| KLOF | | | | AML | AML | 02 43 55.2 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **WDLM** | **Western Deep L** | **0.23** | **270** | *e*P | Pg | 02 43 55.9 | +1.0 |
| WDLM | | | | *e*S | Sg | 02 43 57.6 | -0.4 |
| WDLM | | | | AML | AML | 02 43 59.2 | |
| | comp=Z,430nm,0.4s | | | | | | |
| **ERPM** | **east rand prop** | **0.51** | **81** | *e*P | Pb | 02 44 01.3 | -0.9 |
| ERPM | | | | *e*S | Sg | 02 44 07.1 | 0.0 |
| ERPM | | | | AML | AML | 02 44 09.5 | |
| | comp=Z,59nm,0.3s | | | | | | |
| **PRYS** | **Parys** | **0.57** | **210** | *e*P | Pg | 02 44 01.5 | +0.1 |
| PRYS | | | | *e*S | Sg | 02 44 08.9 | -0.1 |
| PRYS | | | | AML | AML | 02 44 13.5 | |
| | comp=Z,94nm,0.5s | | | | | | |
| **KSR** | **Koster** | **0.90** | **309** | *e*P | Pg | 02 44 07.0 | -0.8 |
| KSR | | | | *e*S | Sg | 02 44 19.2 | -0.5 |
| KSR | | | | AML | AML | 02 44 22.9 | |
| | comp=Z,22nm,0.5s | | | | | | |
| **BFSD** | **Buffelsfontein** | **0.91** | **241** | *e*P | Pg | 02 44 08.0 | +0.1 |
| BFSD | | | | AML | AML | 02 44 26.1 | |
| | comp=Z,64nm,0.2s | | | | | | |
| **TLEK** | **Tau Lekoa** | **1.05** | **239** | *e*P | Pg | 02 44 09.3 | -1.2 |
| TLEK | | | | *e*S | Sg | 02 44 24.4 | +0.2 |
| TLEK | | | | AML | AML | 02 44 29.4 | |
| | comp=Z,50nm,0.3s | | | | | | |
| **SWZ** | **Schweizer** | **2.23** | **250** | *e*P | Pb | 02 44 30.3 | -1.2 |
| SWZ | | | | *e*S | Sn | 02 44 57.2 | +0.6 |
| SWZ | | | | AML | AML | 02 45 00.3 | |
| | comp=Z,26nm,0.3s | | | | | | |
| **POGA** | **Pongola** | **3.64** | **106** | *e*P | Pn | 02 44 50.0 | +2.5 |
| POGA | | | | *e*S | Sn | 02 45 32.0 | +0.8 |
| POGA | | | | AML | AML | 02 45 47.9 | |
| | comp=Z,10nm,0.5s | | | | | | |
| **UPI** | **Upington** | **6.03** | **250** | *e*P | Pn | 02 45 21.5 | +0.9 |
| UPI | | | | *e*S | Sn | 02 46 27.7 | -2.6 |
| UPI | | | | AML | AML | 02 46 28.5 | |
| | comp=Z,9.7nm,0.7s | | | | | | |

*ISCJB **21** 02:49:54.6±1.5,34.67S±0.02×73.77W±0.03,h9km±9km, mb5.8/239,MS5.5/306,Error ellipse: s-maj=4.6km s-min=3.3km az=139.0*
*IDC **21** 02:49:54.8±0.3,34.78S×73.79W,h0km,mb5.4/18, mb1 5.5/20,mb1mx5.4/21,mbtmp5.4/20,ML4.9/1,MS5.3/20, Ms1 5.3/20,ms1mx5.2/24,Error ellipse: s-maj=16.0km s-min=12.0km az=98.0*
*MOS **21** 02:49:55.4±1.0,34.63S×73.86W,h10km,mb5.9/62, MS5.6/34,Error ellipse: s-maj=14.0km s-min=6.2km az=100.4*
*NEIC **21** 02:49:55.6±0.1,34.74S×73.73W,h8km,mb5.9/214, ME6.0,MS5.5/272,MW5.8,ML5.8(GUC),Error ellipse: s-maj=5.2km s-min=3.3km az=81.0,Moment Tensor Solution. s50 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-3.87; $M_{\theta\theta}$-1.03; $M_{\phi\phi}$4.90; $M_{r\theta}$3.08; $M_{\theta\phi}$4.48; $M_{r\phi}$0.69; Best double couple: $M_o$7.10000×$10^{17}$ NP1:ϕs353.00000°, δ48.00000°,λ-147.00000°. NP2:ϕs240.00000°, δ66.00000°,λ-46.00000°. Principal axes: T 7.6900, Plg11.0000°, Azm301.0000°; N -1.4600, Plg39.0000°, Azm39.0000°; P -6.2300, Plg49.0000°, Azm198.0000°; Depth from synthetics of broadband displacement seismograms. Energy computed from CMT mechanism.*
*NEIC Felt [V] at Cauquenes, Longavi, Parral and Retiro; [IV] at Chanco, Cobquecura, Concepcion, Cordillera, Graneros, Hualpen, Linares, Lolol, Navidad, Paredones, Penco, Pichilemu, Rancagua, San Fernando, San Francisco de Mostazal, San Javier, San Pedro, Santa Cruz and Tome; [III] as far as Angol and Vina del Mar. Felt in much of central Chile.*
*GUC **21** 02:49:56.2±0.3,34.79S×73.96W,h33km±3km,ML5.8*
*BJI **21** 02:49:56.0,34.70S×73.70W,h10km,mB5.7/30,Ms5.9/32, Ms7 5.7/35*
*GCMT **21** 02:49:56.0±0.1,34.82S×74.07W,h12km,MW5.9/121, Moment Tensor Solution. s118,c236; s121,c361; Duration: 2s2 Moment tensor: Scale $10^{18}$Nm; $M_{rr}$-0.58±.01; $M_{\theta\theta}$-0.04±.01; $M_{\phi\phi}$0.62±.01; $M_{r\theta}$0.28±.02; $M_{\theta\phi}$0.64±.01; $M_{r\phi}$0.12±.02; Best double couple: $M_o$0.88800×$10^{18}$ NP1:ϕs237.00000°,δ60.00000°, λ-54.00000°. NP2:ϕs2.00000°,δ45.00000°,λ-136.00000°. Principal axes: T 1.0480, Plg9.0000°, Azm302.0000°; N -0.3190, Plg30.0000°, Azm38.0000°; P -0.7290, Plg58.0000°, Azm198.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

**ISC 21 02:49:55.9±0.6,34.76S±0.03×73.81W±0.04,h9km±3km, h9km:pP-P,n1312,σ1s09/1266,mb5.8/239,MS5.5/306, 23C-13D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **1.60** | **149** | *e*P | **Pn** | **02 50 23.4** | **-1.0** |
| COCH | | | | *e*S | **Sn** | **02 50 44.0** | **-1.2** |
| COCH | | | | AML | AML | 02 50 45.7 | |
| | comp=E,86μm,0.6s | | | | | | |
| **TALC** | **Talca** | **1.90** | **110** | *e*P | **Pn** | **02 50 28.7** | **+0.2** |
| TALC | | | | *e*S | **Sn** | **02 50 53.0** | **+0.5** |
| **NICH** | **Los Niches** | **2.14** | **97** | *e*P | **Pn** | **02 50 32.0** | **+0.2** |
| NICH | | | | *e*S | **Sn** | **02 50 59.4** | **+0.9** |
| **CCHI** | **Chillan** | **2.32** | **143** | *e*P | **Pn** | **02 50 33.5** | **-0.7** |
| CCHI | | | | *e*S | **Sn** | **02 51 02.0** | **-0.8** |
| CCHI | | | | AML | AML | 02 51 07.3 | |
| | comp=N,83μm,0.6s | | | | | | |
| **RCDM** | **Rinconada Maip** | **2.80** | **64** | AML | AML | 02 51 16.6 | |
| | comp=E,19μm,0.8s | | | | | | |
| **ANTU** | **Antumapu** | **2.89** | **67** | *e*P | **Pn** | **02 50 42.7** | **+0.5** |
| ANTU | | | | AML | AML | 02 51 17.8 | |
| | comp=N,57μm,0.5s | | | | | | |
| **ROCH** | **El Roble** | **2.94** | **53** | *e*P | **Pn** | **02 50 43.5** | **+0.6** |
| ROCH | | | | *e*S | **Sn** | **02 51 19.6** | **+1.2** |
| **CLCH** | **Cerro Calan** | **3.04** | **64** | *e*P | **Pn** | **02 50 44.9** | **+0.6** |
| CLCH | | | | *e*S | **Sn** | **02 51 21.8** | **+1.0** |
| CLCH | | | | AML | AML | 02 51 27.5 | |
| | comp=E,30μm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **3.06** | **59** | *e*P | **Pn** | **02 50 44.8** | **+0.2** |
| PEL | | | | *e*S | **Sn** | **02 51 21.8** | **+0.5** |
| **CFAA** | **Coronel Fontan** | **5.63** | **58** | Pn | **Pn** | **02 51 20.7** | **+0.8** |
| | baz=234,slow=13 | | | | | | |
| CFAA | | | | Sn | **Sn** | **02 52 26.4** | **+1.7** |
| | comp=E,30nm,0.3s,baz=332,slow=22,SNR=12 | | | | | | |
| CFAA | | | | LR | LR | 02 53 53.0 | |
| | comp=E,5μm,18.9s,baz=246,slow=42 | | | | | | |
| **LCO** | **Las Campanas** | **6.31** | **26** | *e*Pn | **Pn** | **02 51 27.2** | **-2.2** |
| LCO | | | | *e*Sn | **Sn** | **02 52 38.1** | **-3.7** |
| **PLCA** | **Paso Flores** | **6.50** | **158** | *e*P | **Pn** | **02 51 33.6** | **+1.8** |
| **PLCA** | **Paso Flores** | **6.50** | **158** | *e*Pn | **Pn** | **02 51 33.6** | **+1.8** |
| PLCA | | | | *e*Sn | Sn | 02 52 39.3 | -6.8 |
| **TRQA** | **Tornquist** | **10.09** | **112** | *e*Pn | **Pn** | **02 52 22.6** | **+1.6** |
| TRQA | | | | *e*Sn | **Sn** | **02 54 14.6** | **+0.3** |
| **LVC** | **Limon Verde** | **12.84** | **21** | Pn | Pn | 02 52 55.6 | -3.4 |
| | comp=E,80nm,0.3s,baz=192,slow=9.5,SNR=12 | | | | | | |
| LVC | | | | Sn | Sn | 02 55 15.7 | -6.4 |
| | comp=E,96nm,0.3s,baz=338,slow=19,SNR=3.6 | | | | | | |
| LVC | | | | LR | LR | 02 58 00.5 | |
| | comp=E,63μm,18.1s,baz=211,slow=38 | | | | | | |
| **LVC** | **Limon Verde** | **12.84** | **21** | *e*Pn | Pn | 02 52 55.3 | -3.6 |
| LVC | | | | *e*Sn | Sn | 02 54 54.8 | -28 |
| **LPA** | **La Plata** | **13.05** | **95** | *e*P | **Pn** | **02 53 01.9** | **+0.4** |
| LPA | | | | S | **Sn** | **02 55 22.0** | **-4.8** |
| LPA | | | | SS | **SnSn** | **02 55 43.0** | **+4.2** |
| LPA | | | | SS | **SbSb** | **02 56 25.0** | **+4.4** |
| LPA | | | | SSS | SSS | 02 57 08.0 | |
| LPA | | | | PKIKP | **PKiKP** | **03 06 32.0** | **+0.9** |
| | comp=Z,33μm,18.0s | | | | | | |
| **CPUP** | **Villa Florida** | **16.48** | **64** | Pn | Pn | 02 53 41.0 | -6.4 |
| | comp=Z,0.4nm,0.3s,baz=237,slow=12,SNR=19 | | | | | | |
| CPUP | | | | LR | LR | 03 00 50.3 | |
| | comp=Z,14μm,21.3s,baz=242,slow=40 | | | | | | |
| **CPUP** | **Villa Florida** | **16.48** | **64** | *e*P | Pn | 02 53 41.8 | -5.6 |
| **CPUP** | **Villa Florida** | **16.48** | **64** | *e*Pn | Pn | 02 53 41.8 | -5.6 |
| **LPAZ** | **La Paz** | **19.09** | **17** | P | **Pn** | **02 54 21.6** | **+1.3** |
| | comp=E,1.6nm,0.3s,baz=185,slow=8.8,SNR=100 | | | | | | |
| **LPAZ** | **La Paz** | **19.09** | **17** | *e*P | **Pn** | **02 54 21.2** | **+0.9** |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,200nm,1.0s | | | | | | |
| **LPAZ** | **La Paz** | **19.09** | **17** | *e*P | **Pn** | **02 54 21.2** | **+0.9** |
| | comp=Z,204nm,0.9s | | | | | | |
| **EFI** | **East Falkland** | **20.36** | **151** | *d i*P | Pn | 02 54 34.4 | -0.2 |
| EFI | | | | pmax | pmax | | |
| | comp=Z,788nm,1.2s | | | | | | |
| EFI | | | | MLR | MLR | | |
| | comp=Z,28μm,19.0s | | | | | | |
| **EFI** | **East Falkland** | **20.36** | **151** | Pn | Pn | 02 54 34.5 | -0.1 |
| | comp=Z,4μm,0.8s,SNR=37 | | | | | | |
| **EFI** | **East Falkland** | **20.36** | **151** | *e*P | **P** | **02 54 32.5** | **-0.1** |
| | comp=Z,550nm,0.9s | | | | | | |
| EFI | | | | LR | LR | | |
| | comp=Z,30μm,19.0s | | | | | | |
| **USHA** | **Ushuaia** | **20.42** | **171** | P | Pn | 02 54 34.5 | -0.7 |
| | comp=Z,475nm,1.1s,baz=345,slow=7.8,SNR=19 | | | | | | |
| USHA | | | | LR | LR | 03 03 00.8 | |
| | comp=Z,15μm,18.2s,baz=328,slow=38 | | | | | | |
| **SIV** | **San Ignacio** | **21.91** | **35** | P | **P** | **02 54 49.9** | **+0.4** |
| | comp=Z,124nm,0.9s,baz=224,slow=9.1,SNR=93 | | | | | | |
| SIV | | | | LR | LR | 03 04 23.2 | |
| | comp=Z,8μm,19.5s,baz=226,slow=40 | | | | | | |
| **NNA** | **Nana** | **22.84** | **352** | P | **P** | **02 54 59.2** | **-0.2** |
| | comp=Z,90nm,0.8s,baz=191,slow=11,SNR=24 | | | | | | |
| NNA | | | | LR | LR | 03 01 35.5 | |
| | comp=Z,16μm,20.6s,baz=184,slow=31 | | | | | | |
| **NNA** | **Nana** | **22.84** | **352** | *e*P | **P** | **02 54 58.9** | **-0.6** |
| NNA | | | | pmax | pmax | | |
| | comp=Z,1μm,2.0s | | | | | | |
| NNA | | | | MLR | MLR | | |
| | comp=Z,16μm,19.0s | | | | | | |
| **NNA** | **Nana** | **22.84** | **352** | P | **P** | **02 54 59.4** | **-0.1** |
| | comp=Z,1μm,0.9s,SNR=10 | | | | | | |
| **NNA** | **Nana** | **22.84** | **352** | *e*P | **P** | **02 54 58.9** | **-0.6** |
| | comp=Z,1μm,2.0s | | | | | | |
| **SAML** | **Samuel** | **27.48** | **23** | *e*P | **P** | **02 55 42.0** | **-0.6** |
| | comp=Z,805nm,3.0s | | | | | | |
| SAML | | | | LR | LR | | |
| | comp=Z,4μm,19.0s | | | | | | |
| **ATAH** | **Atahualpa** | **27.82** | **350** | P | **P** | **02 55 47.4** | **+1.4** |
| | comp=Z,12nm,0.8s,baz=180,slow=8.1,SNR=14 | | | | | | |
| ATAH | | | | LR | LR | 03 04 56.7 | |
| | comp=Z,7μm,19.8s,baz=192,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **29.98** | **57** | P | **P** | **02 56 04.9** | **0.0** |
| | comp=Z,13nm,0.7s,baz=229,slow=7.3,SNR=16 | | | | | | |
| BDFB | | | | LR | LR | 03 09 27.0 | |
| | comp=Z,19μm,18.1s,baz=222,slow=39 | | | | | | |
| **BDFB** | **Brasilia** | **29.98** | **57** | P | **P** | **02 56 05.0** | **0.0** |
| **PMSA** | **Palmer Station** | **30.62** | **172** | *e*P | **P** | **02 56 07.8** | **-2.2** |
| | comp=Z,205nm,1.2s | | | | | | |
| **HOPE** | **Hope Point** | **32.47** | **139** | PFAKE | | 02 56 40.0 | +14 |
| HOPE | | | | LR | LR | | |
| | comp=Z,12μm,20.0s | | | | | | |
| **OTAV** | **Otavalo** | **35.09** | **352** | *e*P | **P** | **02 56 50.6** | **+0.6** |
| | comp=Z,167nm,1.4s | | | | | | |
| OTAV | | | | *e*PcP | **PcP** | **02 59 23.2** | **+1.3** |
| OTAV | | | | LR | LR | | |
| | comp=Z,4μm,19.0s | | | | | | |
| **PTGA** | **Pitinga** | **36.24** | **24** | P | **P** | **02 56 59.7** | **+0.3** |
| | comp=Z,69nm,0.8s,baz=207,slow=9.9,SNR=72 | | | | | | |
| **PTGA** | **Pitinga** | **36.24** | **24** | *e*P | **P** | **02 56 59.3** | **-0.1** |
| | comp=Z,92nm,0.9s | | | | | | |
| PTGA | | | | *e*PcP | **PcP** | **02 59 23.7** | **-1.0** |
| PTGA | | | | LR | LR | | |
| | comp=Z,6μm,20.0s | | | | | | |
| **PAYG** | **Puerto Ayora** | **37.24** | **332** | *e*P | **P** | **02 57 05.2** | **-2.8** |
| | comp=Z,144nm,1.3s | | | | | | |
| PAYG | | | | LR | LR | | |
| | comp=Z,6μm,20.0s

BBGH LR LR
comp=Z,6µm,22.0s
**VNA1 Neumayer--Stat 49.56 157** P **P** **02 58 48.2 +1.5**
**VNA2 Neumayer--Watz 49.89 157** P **P** **02 58 50.5 +1.3**
baz=281,slow=8.8
**TGUH Tegucigalpa,Un 50.20 343** *e*P **P** **02 58 51.5 -0.6**
comp=Z,113nm,0.9s
**FDF Fort de France 50.67 16** *e*P **P** **02 58 54.6 -1.1**
FDF pmax pmax
comp=Z,140nm,1.0s
**FDF Fort de France 50.67 16** *e*P **P** **02 58 54.6 -1.1**
comp=Z,140nm,1.0s
FDF LR LR
comp=Z,4µm,21.0s
**SNAA Sanae 51.44 158** P **P** **02 59 01.8 +0.8**
**SNAA Sanae 51.44 158** *e*P **P** **02 59 01.5 +0.5**
SNAA *e* 03 00 15.3
SNAA pmax pmax
comp=Z,240nm,1.2s
**SNAA Sanae 51.44 158** *e*P **P** **02 59 00.9 -0.1**
comp=Z,244nm,1.2s
SNAA *e*PcP **PcP** **03 00 15.3 0.0**
SNAA LR LR
comp=Z,2µm,20.0s
**ICMP Isla Caja de M 52.81 9** *e*P P 02 59 08.1 -3.5
**MTDJ Mount Denham 52.81 356** PFAKE 02 59 20.0 +8.2
MTDJ LR LR
comp=Z,2µm,20.0s
**CRPR Cabo Rojo, PR 52.86 8** *e*P **P** **02 59 11.7 -0.3**
comp=Z,74nm,0.8s
CRPR LR LR
comp=Z,5µm,20.0s
**OBIP Obispado Ponce 52.95 9** *e*P **P** **02 59 10.4 -2.3**
comp=Z,98nm,1.0s
**BANI BANI 52.96 4** *e*P **P** **02 59 13.1 +0.2**
**SEUS St. Eustatius 52.97 13** PFAKE 02 59 20.0 +7.2
SEUS LR LR
comp=Z,3µm,20.0s
**LGNH LØogne 52.99 1** PFAKE 02 59 20.0 +7.1
LGNH LR LR
comp=Z,4µm,22.0s
**CELP Cerrillos 52.99 9** *e*P **P** **02 59 12.9 -0.1**
**PAPH Port-au-Prince 53.01 2** *e*P **P** **02 59 13.3 +0.2**
comp=Z,107nm,0.8s
PAPH LR LR
comp=Z,4µm,22.0s
**LSP Las Mesas 53.03 8** *e*P **P** **02 59 10.4 -2.9**
**CPD Cerro la Pandu 53.04 9** *e*P **P** **02 59 12.3 -1.1**
CPD pmax pmax
comp=Z,110nm,0.9s
**CPD Cerro la Pandu 53.04 9** *e*P **P** **02 59 12.3 -1.1**
comp=Z,110nm,0.9s
CPD LR LR
comp=Z,11µm,20.0s
**SABA Saba 53.05 13** *e*P **P** **02 59 10.8 -2.6**
comp=Z,102nm,0.8s
SABA LR LR
comp=Z,5µm,21.0s
**SDD Santo Domingo 53.05 5** PFAKE 02 59 20.0 +6.6
SDD LR LR
comp=Z,2µm,20.0s
**SJG San Juan 53.08 9** *e*P **P** **02 59 11.3 -2.3**
SJG pmax pmax
comp=Z,49nm,0.9s
**SJG San Juan 53.08 9** *e*P **P** **02 59 11.3 -2.3**
comp=Z,49nm,0.8s
SJG LR LR
comp=Z,3µm,19.0s
**HUMP Col San Antoni 53.15 9** *e*P **P** **02 59 12.2 -2.0**
comp=Z,78nm,1.4s
HUMP LR LR
comp=Z,4µm,19.0s
**LRS Lares 53.17 8** *e*P **P** **02 59 12.9 -1.4**
**AOPR Arecibo Observ 53.24 8** *e*P **P** **02 59 13.1 -1.7**
comp=Z,91nm,1.4s
**AGP Aguadilla 53.25 8** PFAKE 02 59 20.0 +5.1
AGP LR LR
comp=Z,3µm,20.0s
**ANWB Willy Bob 53.38 14** PFAKE 02 59 30.0 +14
ANWB LR LR
comp=Z,5µm,22.0s
**SDDR Presa de Saban 53.50 3** *e*P **P** **02 59 15.0 -1.8**
comp=Z,64nm,1.3s
SDDR LR LR
comp=Z,3µm,22.0s
**SMRT St. Maarten 53.50 13** PFAKE 02 59 30.0 +13
SMRT LR LR
comp=Z,5µm,20.0s
**GTBY Guantanamo Bay 54.40 358** *e*P **P** **02 59 21.7 -1.5**
comp=Z,65nm,0.8s
GTBY LR LR
comp=Z,3µm,20.0s
**QSPA South Pole Qui 55.48 180** *e*P **P** **02 59 31.8 +0.9**
comp=Z,474nm,1.3s
QSPA LR LR
comp=Z,3µm,18.0s
**GRTK Grand Turk 56.02 3** PFAKE 02 59 40.0 +5.1
GRTK LR LR
comp=Z,3µm,21.0s
**NVL N'lazarevskaya 56.21 157** ĥ *i*P P 02 59 25.2 -11
NVL *e* 03 00 37.2
NVL pmax pmax
comp=Z,186nm,0.9s
**TEIG Tepich 56.38 344** PFAKE 02 59 50.0 +12
TEIG LR LR
comp=Z,2µm,19.0s
**ASCN Ascension 60.51 79** *e*P **P** **03 00 04.2 -2.5**
comp=Z,119nm,0.8s
ASCN LR LR
comp=Z,4µm,22.0s
**SBA Scott Base 62.03 192** *e*P **P** **03 00 17.8 +1.8**
SBA pmax pmax
comp=Z,1µm,2.8s
**SBA Scott Base 62.03 192** *e*P **P** **03 00 17.3 +1.2**
comp=Z,1µm,2.8s
SBA LR LR
comp=Z,2µm,18.0s
**VNDA Vanda 63.07 192** P **P** **03 00 24.6 +1.6**
comp=Z,31nm,1.1s,baz=134,slow=5.7,SNR=79
VNDA LR LR 03 24 14.4
comp=Z,1µm,18.1s,baz=131,slow=33
VNDA PKPPKP P'P'df 03 29 24.5 -6.0
comp=Z,2.9nm,1.1s,baz=310,slow=1.4,SNR=7.4
**VNDA Vanda 63.07 192** *e*P **P** **03 00 24.7 +1.7**
VNDA pmax pmax
comp=Z,200nm,1.7s
**VNDA Vanda 63.07 192** *e*P **P** **03 00 24.6 +1.7**
comp=Z,199nm,1.7s
VNDA P'P' 03 29 24.5
**SHEL Horse Pasture 63.20 91** PFAKE 03 00 30.0 +5.2
SHEL LR LR
comp=Z,5µm,18.0s
**035Z Hargill 65.08 336** P **P** **03 00 37.2 +0.4**
baz=65
**035A Encino 65.53 336** P **P** **03 00 40.7 +1.1**
baz=66,SNR=7.3
035A S **S** **03 09 27.3 +2.5**
baz=66
**SYO Syowa Base 65.69 159** ĥ *i*P **P** **03 00 39.0 -1.3**
**034A Hebbronville 65.84 336** P **P** **03 00 42.5 +0.8**
baz=66,SNR=12
**KVTX Kingsville 66.03 337** *e*P **P** **03 00 44.4 +1.6**
comp=Z,311nm,1.5s
**934A Benavides 66.28 336** P **P** **03 00 45.7 +1.2**
baz=67,SNR=17
**TIGA Tifton 66.49 351** P **P** **03 00 44.9 -0.8**
baz=67
**TIGA Tifton 66.49 351** *e*P **P** **03 00 43.6 -2.2**
comp=Z,720nm,2.3s
TIGA *e*PP **PP** **03 03 16.5 +3.9**
TIGA LR LR
comp=Z,2µm,20.0s
**738A Farr-Stevens R 66.54 339** P **P** **03 00 46.5 +0.4**
baz=67
**933A Laredo 66.55 335** P **P** **03 00 47.3 +1.1**
baz=67,SNR=15
**BRAL Brewton 66.60 348** *e*P **P** **03 00 46.5 +0.1**
comp=Z,323nm,1.5s
**835A Beeville 66.69 337** P **P** **03 00 48.4 +1.4**
baz=67,SNR=8.6
**737A Port Lavaca 66.70 338** P **P** **03 00 47.8 +0.7**
baz=67
**834A Tilden 66.78 336** P **P** **03 00 48.7 +1.1**
baz=67,SNR=40
**736A Circle Diamond 67.07 338** P **P** **03 00 50.6 +1.1**
baz=67,SNR=41
**735A Kenedy 67.21 337** P **P** **03 00 51.4 +1.0**
baz=68,SNR=21
**833A Chaparral WMA, 67.24 336** P **P** **03 00 51.1 +0.5**
baz=68,SNR=62
**637A Eagle Lake 67.30 339** P **P** **03 00 52.1 +1.2**
baz=68,SNR=6.6
**BBSR BB Station 67.33 8** PFAKE 03 01 00.0 +9.0
BBSR LR LR
comp=Z,1µm,19.0s
**540A Vidor 67.36 341** P **P** **03 00 51.8 +0.5**
baz=68
**832A Faith Ranch, C 67.41 335** P **P** **03 00 52.0 +0.3**
baz=68,SNR=58
**734A La Parita Cree 67.45 337** P **P** **03 00 52.5 +0.6**
baz=68,SNR=6.5
**539A Cross D Ranch, 67.47 340** P **P** **03 00 52.8 +0.8**
baz=68
**SLBS Sierra La Lagu 67.49 324** *e*P **P** **03 00 51.3 -1.1**
comp=Z,261nm,1.9s
SLBS LR LR
comp=Z,2µm,18.0s
**636A Smothers Creek 67.56 338** P **P** **03 00 53.6 +1.0**
baz=68,SNR=30
**733A Divot King Ran 67.57 336** P **P** **03 00 53.0 +0.3**
baz=68,SNR=22
**HKT Hockley 67.63 339** *e*P **P** **03 00 53.6 +0.6**
HKT pmax pmax
comp=Z,380nm,2.2s
**HKT Hockley 67.63 339** *e*P **P** **03 00 53.6 +0.6**
comp=Z,384nm,2.2s
**CSU Charleston Sou 67.65 354** *e*P **P** **03 00 51.5 -1.5**
**635A Leesville 67.70 337** P **P** **03 00 53.7 +0.3**
baz=68,SNR=7.5
**NHSC New Hope 67.78 354** *e*P **P** **03 00 53.9 +0.1**
comp=Z,254nm,1.3s
NHSC LR LR
comp=Z,2µm,18.0s
**538A Harpers Horsep 67.79 340** P **P** **03 00 54.5 +0.4**
baz=68
**732A Laxson Ranch, 67.81 335** P **P** **03 00 54.3 +0.1**
baz=68,SNR=83
**440A Kirbyville 67.87 341** P **P** **03 00 55.2 +0.7**
baz=68
**634A China Grove, S 67.87 337** P **P** **03 00 54.8 +0.2**
baz=68
**537A Green Hill Far 67.90 339** P **P** **03 00 55.9 +1.2**
baz=68,SNR=15
**536A Bastrop 68.12 338** P **P** **03 00 56.4 +0.3**
baz=68,SNR=6.6
**439A Center Grove, 68.13 341** P **P** **03 00 57.0 +0.8**
baz=68,SNR=5.1
**633A Saathoff Ranch 68.22 336** P **P** **03 00 57.1 +0.3**
baz=68,SNR=43
**535A Dale 68.23 338** P **P** **03 00 56.7 -0.1**
baz=69,SNR=20
**438A Sam Houston St 68.28 340** P **P** **03 00 57.7 +0.6**
baz=69,SNR=15
**GOGA Godfrey 68.42 351** *e*P **P** **03 00 57.3 -0.6**
GOGA pmax pmax
comp=Z,140nm,1.5s
**GOGA Godfrey 68.42 351** *e*P **P** **03 00 57.3 -0.6**
comp=Z,136nm,1.5s
GOGA LR LR
comp=Z,2µm,20.0s
**VBMS Vicksburg 68.45 345** P **P** **03 00 58.5 +0.4**
baz=69
**632A Uvalde 68.46 336** P **P** **03 00 59.0 +0.7**
baz=69,SNR=53
**340A Bronson 68.49 342** P **P** **03 00 58.8 +0.5**
baz=69,SNR=14
**534A Blanco 68.51 337** P **P** **03 00 58.1 -0.5**
baz=69,SNR=16
**437A Phantom Ranch, 68.55 339** P **P** **03 00 58.8 +0.1**
baz=69
**339A Huntington 68.58 341** P **P** **03 00 59.4 +0.5**
baz=69,SNR=16
**631A Perdido Creek 68.65 335** P **P** **03 00 59.7 +0.2**
baz=69,SNR=31
**436A Wall Ranch, Ga 68.69 339** P **P** **03 00 59.8 +0.2**
baz=69
**PPT Papeete 68.69 263** P **P** **03 01 01.3 +1.2**
comp=Z,101nm,1.0s,baz=170,slow=1.6,SNR=5.3
PPT LR LR 03 24 07.6
comp=Z,915nm,20.7s,baz=108,slow=30
**533A Kerrville 68.73 337** P **P** **03 00 60.0 -0.1**
baz=69,SNR=22
**338A Crockett 68.81 340** P **P** **03 01 01.2 +0.8**
baz=69,SNR=12
**337A Centerville 68.93 340** P **P** **03 01 02.1 +0.9**
baz=69,SNR=14
**435B Jarrell 68.94 338** P **P** **03 01 01.7 +0.5**
baz=69
**NATX Nacogdoches 69.01 341** P **P** **03 01 01.6 0.0**
baz=69
**NATX Nacogdoches 69.01 341** *e*P **P** **03 01 02.6 +1.0**
comp=Z,99nm,1.4s
**532A Rocksprings 69.07 336** P **P** **03 01 02.3 +0.2**
baz=69,SNR=110
**434A Burnet 69.18 338** P **P** **03 01 02.7 0.0**
baz=70,SNR=52
**239A Gary 69.21 341** P **P** **03 01 03.1 +0.2**
baz=70
**336A Riesel 69.28 339** P **P** **03 01 03.6 +0.3**
baz=70,SNR=28
**531A Rocksprings 69.33 335** P **P** **03 01 04.4 +0.7**
baz=70,SNR=83
**335A Moody 69.35 338** P **P** **03 01 03.8 +0.1**
baz=70,SNR=9.3
**JCT Junction City 69.36 336** *e*P **P** **03 01 04.3 +0.4**
JCT pmax pmax
comp=Z,300nm,1.5s
**JCT Junction City 69.36 336** P **P** **03 01 04.2 +0.4**
baz=70
**JCT Junction City 69.36 336** *e*P **P** **03 01 04.3 +0.4**
comp=Z,303nm,1.5s
**238A Jacksonville 69.37 341** P **P** **03 01 04.2 +0.4**
baz=70
**433A Art 69.38 337** P **P** **03 01 03.8 -0.3**
baz=70,SNR=111
**237A Washetta, Mont 69.56 340** P **P** **03 01 05.6 +0.6**
baz=70,SNR=15
**530A J-C Ranch, Com 69.59 335** P **P** **03 01 06.1 +0.8**
baz=70,SNR=128
**334A Lometa 69.65 338** P **P** **03 01 05.9 +0.3**
baz=70,SNR=64
**TXAR Lajitas Array 69.70 332** P **P** **03 01 06.3 +0.1**
comp=Z,11nm,0.4s,baz=157,slow=8.1,SNR=204
TXAR LR LR 03 27 06.1
comp=Z,3µm,18.5s,baz=0.0,slow=32
TXAR PKPPKP P'P'df 03 29 13.1 +6.8
comp=Z,2.1nm,0.9s,baz=80,slow=1.0,SNR=5.3
**TX31 Lajitas Ar. Si 69.70 332** *e*P **P** **03 01 05.8 -0.4**
**432A Menard 69.72 336** P **P** **03 01 05.7 -0.4**
baz=70,SNR=35
**CNNC Cliffs of the 69.74 356** *e*P **P** **03 01 06.2 +0.1**
comp=Z,88nm,1.0s
CNNC LR LR
comp=Z,2µm,21.0s
**236A Katherine and 69.76 340** P **P** **03 01 06.1 -0.2**
baz=70,SNR=9.8
**139A Bunkhouse Ranc 69.81 342** P **P** **03 01 07.1 +0.5**
baz=70
**431A Sonora 69.82 336** P **P** **03 01 06.8 0.0**
baz=70,SNR=38
**333A Richland Sprin 69.88 337** P **P** **03 01 07.0 0.0**
baz=70,SNR=59
**529A Stev Forest Ra 69.88 334** P **P** **03 01 07.3 +0.1**
baz=70,SNR=107
**KMSC Kings Mountain 69.90 353** P **P** **03 01 06.1 -0.9**
baz=70
**KMSC Kings Mountain 69.90 353** *e*P **P** **03 01 06.8 -0.3**
comp=Z,78nm,1.0s
KMSC *e*PP PP 03 03 29.7 -12
KMSC LR LR
comp=Z,2µm,21.0s
**138A Matatall Enter 69.98 341** P **P** **03 01 08.2 +0.6**
baz=70,SNR=18
**WHTX Lake Whitney 70.02 339** P **P** **03 01 08.2 +0.3**
baz=70,SNR=18
**WHTX Lake Whitney 70.02 339** *e*P **P** **03 01 08.4 +0.5**
comp=Z,365nm,1.5s
**137A Heron Place, G 70.10 340** P **P** **03 01 09.1 +0.7**
baz=70,SNR=14
**430A Baggett Ranch, 70.13 335** P **P** **03 01 09.1 +0.4**
baz=70,SNR=91
**332A Millersview 70.17 337** P **P** **03 01 08.9 0.0**
baz=70,SNR=62
**136A Ennis 70.20 340** P **P** **03 01 09.1 +0.1**
baz=70,SNR=12
**429A Davenport Ranc 70.22 334** P **P** **03 01 09.5 +0.3**
baz=70,SNR=71
**234A Clairette 70.24 338** P **P** **03 01 09.4 +0.2**
baz=71,SNR=65
**Z39A Irene McRaven, 70.30 342** P **P** **03 01 09.9 +0.4**
baz=71
**331A San Angelo 70.33 336** P **P** **03 01 09.6 -0.3**
baz=71,SNR=51
**OXF Oxford 70.44 346** *e*P **P** **03 01 09.9 -0.5**
OXF pmax pmax
comp=Z,220nm,1.3s
**OXF Oxford 70.44 346** *e*P **P** **03 01 09.9 -0.5**
comp=Z,218nm,1.4s
**233A Rising Star 70.49 338** P **P** **03 01 10.6 -0.3**
baz=71,SNR=47
**Z38A Mt. Pleasant 70.51 341** P **P** **03 01 11.3 +0.5**
baz=71,SNR=11
**SWET Sewanee 70.53 349** *e*P **P** **03 01 11.1 +0.1**
comp=Z,310nm,1.3s
**135A Vickery Place, 70.54 339** P **P** **03 01 11.0 -0.1**
baz=71
**232A Coleman 70.61 337** P **P** **03 01 11.3 -0.3**
baz=71,SNR=46
**Z37A Pogue Cattle C 70.63 341** P **P** **03 01 11.3 -0.3**
baz=71
**330A Mertzon 70.68 335** P **P** **03 01 11.4 -0.6**
baz=71,SNR=39
**134A White-Moore Ra 70.75 338** P **P** **03 01 12.3 -0.1**
baz=71,SNR=18
**231A Bronte 70.87 336** P **P** **03 01 12.9 -0.3**
baz=71,SNR=54
**Z36A Blue Ridge 70.92 340** P **P** **03 01 13.4 0.0**
baz=71,SNR=50
**Y39A Lockesburg 70.93 342** P **P** **03 01 13.4 0.0**
baz=71,SNR=9.0
**329A Wagon Wheel Ra 71.03 335** P **P** **03 01 14.3 +0.1**
baz=71,SNR=52
**133A Hamilton Ranch 71.04 338** P **P** **03 01 13.9 -0.2**
baz=71,SNR=72
**Y38A Idabel 71.09 342** P **P** **03 01 14.5 +0.1**
baz=71,SNR=19
**230A Sterling City 71.09 336** P **P** **03 01 14.2 -0.3**
baz=71,SNR=5.8
**Z35A Perchaven, San 71.22 339** P **P** **03 01 14.9 -0.3**
baz=72,SNR=33
**ABTX Abilene, Hawle 71.29 337** P **P** **03 01 15.6 0.0**
baz=72,SNR=53
**ABTX Abilene, Hawle 71.29 337** *e*P **P** **03 01 15.6 0.0**
comp=Z,351nm,1.4s
**UALR University of 71.31 344** *e*P **P** **03 01 14.8 -0.9**
comp=Z,47nm,1.1s
**Y37A Hugo 71.37 341** P **P** **03 01 16.2 +0.1**
baz=72,SNR=14
**MIAR Mount Ida 71.38 343** *e*P **P** **03 01 16.3 +0.2**
MIAR pmax pmax
comp=Z,77nm,1.4s
**MIAR Mount Ida 71.38 343** P **P** **03 01 15.8 -0.3**
baz=72
**MIAR Mount Ida 71.38 343** *e*P **P** **03 01 16.3 +0.2**
comp=Z,77nm,1.4s
**229A Bryant Ranch, 71.41 335** P **P** **03 01 16.1 -0.3**
baz=72,SNR=24
**Z34A Collier Ranch, 71.45 339** P **P** **03 01 16.4 -0.2**
baz=72,SNR=15
**Y36A Durant 71.47 340** P **P** **03 01 16.4 -0.3**
baz=72,SNR=17
**TZTN Tazewell 71.52 352** *e*P **P** **03 01 16.1 -0.9**
comp=Z,160nm,1.5s
**131A Roby 71.57 337** P **P** **03 01 17.1 -0.3**
baz=72,SNR=14
**Z33A Whitaker Ranch 71.62 338** P **P** **03 01 17.7 +0.1**
baz=72,SNR=55
**Y35A Marietta 71.69 340** P **P** **03 01 18.0 0.0**
baz=72,SNR=28
**130A Snyder 71.69 336** P **P** **03 01 17.6 -0.5**
baz=72,SNR=18
**WVT Waverly 71.73 348** *e*P **P** **03 01 17.1 -1.0**
WVT pmax pmax
comp=Z,200nm,1.1s
**WVT Waverly 71.73 348** *e*P **P** **03 01 17.1 -1.0**
comp=Z,202nm,1.1s
**HALT Halls 71.79 347** *e*P **P** **03 01 18.0 -0.5**
**X38A Whitesboro 71.81 342** P **P** **03 01 19.1 +0.4**
baz=72,SNR=31
**228A UT Block 9, Go 71.82 335** P **P** **03 01 18.7 -0.2**
baz=72,SNR=47
**Z32A Haskell 71.86 338** P **P** **03 01 19.5 +0.4**
baz=72,SNR=100
**BLA Blacksburg 71.87 354** *e*P **P** **03 01 17.3 -1.8**
BLA pmax pmax
comp=Z,780nm,3.0s
**BLA Blacksburg 71.87 354** *e*P **P** **03 01 17.2 -1.8**
comp=Z,782nm,3.0s
BLA LR LR
comp=Z,1µm,19.0s
**X37A Clayton 71.88 341** P **P** **03 01 18.8 -0.4**
baz=72,SNR=13
**Y34A Reagan Ranch, 71.95 339** P **P** **03 01 19.0 -0.5**
baz=72,SNR=35
**GNAR Gosnell 71.97 346** *e*P **P** **03 01 20.1 +0.5**
**129A Stewart Farms, 72.03 335** P **P** **03 01 20.1 -0.1**
baz=72,SNR=6.8
**Z31A Sharp Cattle R 72.09 337** P **P** **03 01 20.2 -0.2**
baz=72,SNR=70
**UTMT University of 72.12 347** *e*P **P** **03 01 20.2 -0.3**
comp=Z,225nm,1.0s
**W38A Poteau 72.12 342** P **P** **03 01 20.4 -0.1**
baz=72,SNR=14
**GLAT Glass 72.12 347** *e*P **P** **03 01 18.7 -1.8**
**X36A Centrahoma 72.12 341** P **P** **03 01 19.7 -0.9**
baz=72,SNR=38
**X35A Drake 72.14 340** P **P** **03 01 20.0 -0.6**
baz=72,SNR=35
**128A Castleberry Fa 72.24 335** P **P** **03 01 21.1 -0.4**
baz=73,SNR=70
**Y33A Hilltop Ranch, 72.25 339** P **P** **03 01 21.1 -0.3**
baz=73,SNR=30
**Z30A Sanderson Ranc 72.38 336** P **P** **03 01 21.8 -0.4**
baz=73,SNR=59
**W37A Quinton 72.41 342** P **P** **03 01 21.5 -0.9**
baz=73,SNR=22
**MNTX Cornudas Mount 72.47 332** P **P** **03 01 21.6 -1.2**
baz=73
**MNTX Cornudas Mount 72.47 332** *e*P **P** **03 01 21.6 -1.2**
comp=Z,47nm,1.0s
MNTX LR LR
comp=Z,3µm,20.0s
**Y32A R-V Farms, Ver 72.50 338** P **P** **03 01 22.7 -0.2**
baz=73,SNR=18
**Z29A Hungry Hill Ra 72.55 336** P **P** **03 01 22.9 -0.3**
baz=73,SNR=38
**X34A Smith Ranch, M 72.57 339** P **P** **03 01 23.5 +0.2**
baz=73,SNR=35
**PARMO Parma 72.59 347** *e*P **P** **03 01 22.3 -1.1**
**W36A Wetumka 72.63 341** P **P** **03 01 22.6 -1.0**
baz=73
**X33A Lawton 72.71 339** P **P** **03 01 23.2 -0.9**
baz=73,SNR=19
**Y31A Rekieta Farm, 72.72 337** P **P** **03 01 24.0 -0.2**
baz=73,SNR=43
**Z28A Tucker Farm, M 72.81 335** P **P** **03 01 24.4 -0.5**
baz=73,SNR=27
**W35A Tecumseh 72.82 340** P **P** **03 01 23.6 -1.1**
baz=73,SNR=18
**PBMO Poplar Bluff 72.84 346** *e*P **P** **03 01 24.5 -0.3**
comp=Z,78nm,1.0s
**X32A Elmer 72.84 338** P **P** **03 01 24.9 +0.1**
baz=73
**V38A Canehill 72.84 343** P **P** **03 01 24.3 -0.6**
baz=73,SNR=28
**Y30A Stafford Cattl 72.84 337** P **P** **03 01 24.3 -0.7**
baz=73,SNR=11
**MAW Mawson 72.86 164** P **P** **03 01 25.7 +1.0**
comp=Z,75nm,0.9s,baz=212,slow=8.8,SNR=131
MAW LR LR 03 31 41.9
comp=Z,8µm,21.7s,baz=232,slow=34
**WMOK Wichita Mounta 72.98 339** *e*P **P** **03 01 25.0 -0.7**
WMOK pmax pmax
comp=Z,90nm,1.2s
**WMOK Wichita Mounta 72.98 339** *e*P **P** **03 01 25.0 -0.7**
comp=Z,90nm,1.3s
WMOK LR LR
comp=Z,1µm,21.0s
**V37A Hulbert 73.05 342** P **P** **03 01 25.3 -0.7**
baz=73,SNR=26
**Y29A Porterfield Fa 73.08 336** P **P** **03 01 26.1 -0.3**
baz=73,SNR=16
**W34A Bridge Creek, 73.15 340** P **P** **03 01 26.4 -0.3**

baz=74,SNR=15
**W34A Bridge Creek,** 73.15 340 *e*P P 03 01 26.5 -0.3
comp=Z,129nm,1.1s
**V36A Jenks** 73.16 341 P P 03 01 26.0 -0.7
baz=74,SNR=43
**TUL1 Tulsa** 73.24 341 P P 03 01 26.6 -0.6
baz=74,SNR=41
**TUL1 Tulsa** 73.24 341 *e*P P 03 01 27.0 -0.2
comp=Z,140nm,0.9s
**X31A McDonald Ranch** 73.25 338 P P 03 01 26.8 -0.5
baz=74,SNR=48
**W33A Caddo, Fort Co** 73.27 339 P P 03 01 27.8 +0.3
baz=74,SNR=64
**Y28A McKinney Farm,** 73.32 336 P P 03 01 27.4 -0.5
baz=74
**X30A Coker Ranch, T** 73.36 337 P P 03 01 27.9 -0.1
baz=74,SNR=5.6
**V35A Meyer Ranch, C** 73.38 341 P P 03 01 27.2 -0.9
baz=74,SNR=20
**U38A Gravette** 73.39 343 P P 03 01 27.5 -0.6
baz=74,SNR=14
**W32A Sentinel** 73.48 338 P P 03 01 28.5 -0.2
baz=74,SNR=128
**USIN University of** 73.49 349 *e*P P 03 01 28.0 -0.7
comp=Z,151nm,1.0s
**SIUC Southern Illin** 73.52 347 *e*P P 03 01 27.7 -1.1
comp=Z,75nm,0.9s
**U37A Salina** 73.53 342 P P 03 01 28.1 -0.8
baz=74,SNR=16
**WCI Wyandotte Cave** 73.54 350 PFAKE 03 01 40.0 +11
WCI LR LR
comp=Z,2µm,20.0s
**MSTX Muleshoe** 73.56 335 P P 03 01 28.8 -0.5
baz=74,SNR=58
**MSTX Muleshoe** 73.56 335 *e*P P 03 01 29.3 0.0
comp=Z,106nm,0.9s
MSTX LR LR
comp=Z,1µm,19.0s
**X29A Tulia** 73.63 336 P P 03 01 29.6 -0.1
baz=74,SNR=11
**V34A Guthrie** 73.64 340 P P 03 01 29.0 -0.5
baz=74,SNR=24
**V34A Guthrie** 73.64 340 *e*P P 03 01 28.2 -1.3
comp=Z,143nm,1.1s
**U36A Oologah** 73.68 342 P P 03 01 29.2 -0.6
baz=74,SNR=9.0
**W31A Holland Ranch,** 73.75 338 P P 03 01 29.9 -0.3
baz=74,SNR=22
**V33A Lossen Ranch,** 73.84 339 P P 03 01 30.5 -0.3
baz=74,SNR=36
**SDMD Soldier's Deli** 73.86 358 *e*P P 03 01 31.0 +0.3
comp=Z,38nm,1.1s
SDMD LR LR
comp=Z,800nm,21.0s
**X28A Dimmitt** 73.86 336 P P 03 01 31.1 0.0
baz=74,SNR=6.2
**U35A Pawnee** 73.92 341 P P 03 01 30.9 -0.4
baz=74,SNR=72
**W30A Crocket Farms** 73.94 337 P P 03 01 31.6 +0.1
baz=74
**V32A Arapaho** 73.97 339 P P 03 01 31.7 +0.2
baz=74,SNR=24
**AMTX Amarillo** 74.02 336 P P 03 01 32.0 +0.1
baz=74
**AMTX Amarillo** 74.02 336 *e*P P 03 01 31.9 -0.1
comp=Z,189nm,1.2s
**121A Cookes Peak, D** 74.16 331 P P 03 01 34.0 +1.1
baz=74,SNR=65
**T37A Cheneyville 18** 74.17 343 P P 03 01 31.8 -0.8
baz=74,SNR=50
**U34A Anderson Ranch** 74.20 340 P P 03 01 32.6 -0.3
baz=74,SNR=17
**U34A Anderson Ranch** 74.20 340 *e*P P 03 01 31.4 -1.5
comp=Z,95nm,1.0s
**CCM Cathedral Cave** 74.23 346 *e*P P 03 01 31.8 -1.2
**CCM Cathedral Cave** 74.23 346 *e*P P 03 01 31.8 -1.2
comp=Z,180nm,1.0s
**MCWV Mont Chateau** 74.26 355 *e*P P 03 01 32.3 -0.8
comp=Z,49nm,1.3s
MCWV LR LR
comp=Z,800nm,20.0s
**V31A Spring Creek L** 74.26 338 P P 03 01 33.9 +0.7
baz=75,SNR=18
**OLIL Olney** 74.31 348 *e*P P 03 01 31.8 -1.6
comp=Z,76nm,1.3s
**T36A Boggs Farm, Ca** 74.35 342 P P 03 01 33.0 -0.7
baz=75,SNR=25
**U33A Lingo Farm, Me** 74.36 340 P P 03 01 33.4 -0.4
baz=75,SNR=14
**T35A Sooner Cattle** 74.38 341 P P 03 01 33.4 -0.5
baz=75,SNR=41
**MVL Millersville** 74.43 358 *e*P P 03 01 34.2 +0.2
comp=Z,43nm,1.3s
**BLO Bloomington** 74.50 350 *e*P P 03 01 33.5 -1.0
BLO pmax pmax
comp=Z,160nm,1.6s
BLO MLR MLR
comp=Z,2µm,22.0s
**BLO Bloomington** 74.50 350 *e*P P 03 01 33.5 -1.0
comp=Z,160nm,1.6s
BLO LR LR
comp=Z,2µm,22.0s
**V30A Spur Ranch, Mi** 74.51 338 P P 03 01 35.1 +0.4
baz=75
**W28A Vega** 74.54 336 P P 03 01 35.1 +0.2
baz=75
**U32A Winter Ranch,** 74.57 339 P P 03 01 35.1 +0.1
baz=75,SNR=48
**SLM Saint Louis** 74.60 347 *e*P P 03 01 34.9 -0.2
SLM pmax pmax
comp=Z,150nm,1.0s
**SLM Saint Louis** 74.60 347 *e*P P 03 01 34.9 -0.2
comp=Z,149nm,1.0s
**T34A McClaskey Farm** 74.66 341 P P 03 01 35.1 -0.4
baz=75,SNR=39
**S37A Fort Scott** 74.75 343 P P 03 01 35.2 -0.8
baz=75,SNR=19
**U31A Nine Bar Ranch** 74.81 338 P P 03 01 36.5 0.0
baz=75
**V29A Stinnett** 74.88 337 P P 03 01 37.1 +0.2
baz=75
**S36A Lake Cedric, C** 74.90 342 P P 03 01 36.2 -0.7
baz=75,SNR=48
**V28A Channing** 74.99 336 P P 03 01 38.3 +0.7
baz=75
**LUPA Lehigh Univers** 75.00 359 *e*P P 03 01 37.6 +0.2
comp=Z,54nm,1.2s
LUPA LR LR
comp=Z,2µm,21.0s
**T33A Patterson Ranc** 75.01 340 P P 03 01 37.4 -0.1
baz=75,SNR=20
**RAR Rarotonga** 75.03 254 PFAKE 03 01 50.0 +12
RAR LR LR
comp=Z,2µm,19.0s
**S35A Otter Creek Ra** 75.05 342 P P 03 01 37.4 -0.3
baz=75,SNR=40
**BRNJ Basking Ridge** 75.08 359 *e*P P 03 01 37.2 -0.6
comp=Z,58nm,1.1s
BRNJ LR LR
comp=Z,1µm,19.0s
**ACSO Alum Creek Sta** 75.10 353 *e*P P 03 01 37.6 -0.4
comp=Z,174nm,1.1s
ACSO LR LR
comp=Z,2µm,19.0s
**BNM Barren Site** 75.13 332 *e*P P 03 01 39.5 +0.9
**Y22D IRIS PASSCAL I** 75.17 332 P P 03 01 39.4 +0.6
baz=76
**U30A WK&E Inc. Balk** 75.21 338 P P 03 01 38.9 +0.1
baz=76,SNR=24
**TUC Tucson** 75.22 328 *e*P P 03 01 39.5 +0.5
TUC *e* 03 01 40.0
**TUC Tucson** 75.22 328 *e*P P 03 01 39.5 +0.5
comp=Z,142nm,1.4s
TUC LR LR
comp=Z,2µm,19.0s
**LPM Los Pinos Moun** 75.27 332 *e*P P 03 01 40.8 +1.4
**R37A Teagarden Farm** 75.28 343 P P 03 01 38.2 -0.8
baz=76
**S34A Willow Spring** 75.28 341 P P 03 01 38.7 -0.4
baz=76
**T32A Huddler Ranch,** 75.29 339 P P 03 01 39.4 +0.2
baz=76
**U29A Oasis Ranch, S** 75.33 337 P P 03 01 39.6 +0.1
baz=76
**PAL Palisades** 75.39 360 PFAKE 03 01 50.0 +10
PAL LR LR
comp=Z,2µm,22.0s
**S33A Kaszmaul Farm,** 75.42 340 P P 03 01 40.0 +0.1
baz=76
**T31A Randall Ranch,** 75.44 339 P P 03 01 40.1 +0.1
baz=76,SNR=13
**R36A Gordon, Harris** 75.45 343 P P 03 01 39.3 -0.7
baz=76,SNR=5.6
**LAZ Ladron** 75.55 332 *e*P P 03 01 42.0 +1.0
**U28A Mallet** 75.57 337 P P 03 01 40.6 -0.3
baz=76,SNR=17
**R35A Emporia Munici** 75.62 342 P P 03 01 40.6 -0.5
baz=76,SNR=15
**T30A Plains** 75.65 338 P P 03 01 41.6 +0.3
baz=76,SNR=10
**YLE Yale** 75.71 1 *e*P P 03 01 41.3 -0.1
comp=Z,126nm,1.0s
**Q37A Longview Farm,** 75.72 344 P P 03 01 40.6 -0.9
baz=76,SNR=8.4
**SUR Sutherland** 75.74 120 P P 03 01 44.2 +1.8
comp=Z,436nm,1.0s,SNR=7.7
**SUR Sutherland** 75.74 120 *e*P P 03 01 44.6 +2.2
comp=Z,918nm,2.5s
SUR LR LR
comp=Z,10µm,20.0s
**ANMO Albuquerque** 75.77 333 *d i*P P 03 01 43.0 +0.8
ANMO pmax pmax
comp=Z,92nm,1.3s
ANMO MLR MLR
comp=Z,1µm,15.0s
**ANMO Albuquerque** 75.77 333 *e*P P 03 01 43.4 +1.2
comp=Z,76nm,1.1s
ANMO LR LR
comp=Z,2µm,20.0s
**SFIN Scholer Farm** 75.77 350 P P 03 01 41.4 -0.3
baz=76
**SFIN Scholer Farm** 75.77 350 PFAKE 03 01 50.0 +8.2
SFIN LR LR
comp=Z,2µm,20.0s
**S32A Newby Ranch, P** 75.78 340 P P 03 01 42.2 +0.2
baz=76,SNR=19
**214A Organ Pipe Nat** 75.82 327 P P 03 01 42.9 +0.5
baz=76
**S31A Mullinville** 75.86 339 P P 03 01 42.4 -0.1
baz=76,SNR=8.9
**R34A Isabella, Hill** 75.88 341 P P 03 01 42.1 -0.4
baz=76,SNR=28
**KSPA Keystone Colle** 75.97 358 *e*P P 03 01 42.5 -0.4
comp=Z,132nm,1.8s
KSPA LR LR
comp=Z,2µm,20.0s
**T29A Hugoton** 75.98 338 P P 03 01 43.1 -0.1
baz=76,SNR=19
**Q36A Arnold C. Orve** 76.04 343 P P 03 01 42.5 -0.9
baz=76
**R33A Olander Ranch,** 76.08 341 P P 03 01 43.3 -0.4
baz=76,SNR=15
**Q35A Mercer Eighty,** 76.09 342 P P 03 01 43.2 -0.5
baz=76,SNR=8.6
**S30A Montezuma** 76.17 338 P P 03 01 44.2 -0.1
baz=76,SNR=25
**T28A Walsh** 76.21 337 P P 03 01 44.2 -0.3
baz=77,SNR=102
**HDIL Hopedale** 76.29 348 P P 03 01 43.8 -1.0
baz=77
**HDIL Hopedale** 76.29 348 *e*P P 03 01 44.4 -0.4
comp=Z,248nm,1.4s
**BRYW Bryant College** 76.33 2 *e*P P 03 01 44.6 -0.4
comp=Z,80nm,1.0s
BRYW LR LR
comp=Z,2µm,20.0s
**T27A Campo** 76.35 337 P P 03 01 45.4 0.0
baz=77,SNR=51
**S29A Ulysses** 76.35 338 P P 03 01 45.6 +0.2
baz=77,SNR=48
**Q34A Chapman** 76.38 342 P P 03 01 45.0 -0.3
baz=77,SNR=26
**R32A Long Quarter,** 76.39 340 P P 03 01 45.6 +0.2
baz=77,SNR=31
**LIC Lamto** 76.40 72 *e*P P 03 01 45.3 -0.8
comp=Z,95nm,1.0s
**KSU1 Kansas State U** 76.46 342 P P 03 01 45.3 -0.5
baz=77
**KSU1 Kansas State U** 76.46 342 *e*P P 03 01 45.1 -0.7
comp=Z,63nm,0.9s
**R31A Burdett** 76.50 339 P P 03 01 45.8 -0.3
baz=77,SNR=26
**S28A Manter** 76.57 337 P P 03 01 46.5 0.0
baz=77,SNR=85
**P36A Good Intent, A** 76.61 343 P P 03 01 45.7 -0.9
baz=77,SNR=18
**BINY Binghamton** 76.61 358 *e*P P 03 01 45.2 -1.4
comp=Z,370nm,2.3s
BINY LR LR
comp=Z,2µm,21.0s
**TIC Toumodi** 76.67 72 *e*P P 03 01 48.4 +0.8
**Q33A Connelly Farm,** 76.69 341 P P 03 01 46.8 -0.2
baz=77,SNR=21
**KIC Kosan Boka** 76.71 73 *e*P P 03 01 47.6 -0.2
comp=Z,136nm,0.9s
**R30A Dighton** 76.71 339 P P 03 01 47.2 -0.1
baz=77,SNR=27
**ERPA Erie** 76.72 355 PFAKE 03 02 00.0 +13
ERPA LR LR
comp=Z,2µm,22.0s
**P35A Duane Minner,** 76.72 343 P P 03 01 46.4 -0.8
baz=77,SNR=22
**T26A Comanche Natio** 76.74 336 P P 03 01 48.2 +0.6
baz=77,SNR=48
**DBIC Dimbokro** 76.81 72 P P 03 01 49.0 +0.7
comp=Z,46nm,0.8s,baz=207,slow=5.4,SNR=34
DBIC LR LR 03 35 31.8
comp=Z,1µm,18.8s,baz=214,slow=36
**DBIC Dimbokro** 76.81 72 *e*P P 03 01 49.1 +0.7
DBIC pmax pmax
comp=Z,64nm,0.9s
**DBIC Dimbokro** 76.81 72 *e*P P 03 01 47.2 -1.2
comp=Z,64nm,0.9s
**Q32A Meitler Ranch,** 76.88 340 P P 03 01 48.2 0.0
baz=77,SNR=30
**HRV Adam Dziewonsk** 76.92 2 *e*P P 03 01 48.5 +0.2
HRV pmax pmax
comp=Z,52nm,0.8s
HRV MLR MLR
comp=Z,1µm,20.0s
**HRV Adam Dziewonsk** 76.92 2 *e*P P 03 01 48.5 +0.2
comp=Z,52nm,0.8s
HRV LR LR
comp=Z,1µm,20.0s
**P34A Walnut Farm, R** 76.94 342 P P 03 01 48.5 0.0
baz=77,SNR=30
**S27A Las Animas** 76.98 337 P P 03 01 49.3 +0.4
baz=77
**T25A Trinidad** 76.99 335 P P 03 01 49.9 +0.7
baz=77,SNR=115
**T25A Trinidad** 76.99 335 *e*P P 03 01 49.8 +0.7
comp=Z,233nm,1.2s
T25A LR LR
comp=Z,1µm,20.0s
**O36A Bolckow** 77.04 344 P P 03 01 47.8 -1.2
baz=77,SNR=17
**CBKS Cedar Bluff** 77.04 339 *e*P P 03 01 49.4 +0.2
CBKS pmax pmax
comp=Z,180nm,1.0s
**CBKS Cedar Bluff** 77.04 339 P P 03 01 49.3 +0.2
baz=77
**CBKS Cedar Bluff** 77.04 339 *e*P P 03 01 49.4 +0.2
comp=Z,177nm,0.9s
**P33A Williams Farm,** 77.06 341 P P 03 01 48.9 -0.2
baz=77,SNR=20
**R29A Marienthal** 77.10 338 P P 03 01 49.9 +0.4
baz=77,SNR=30
**S26A Kim** 77.11 336 P P 03 01 50.2 +0.5
baz=78,SNR=95
**TRY Troy** 77.12 0 *e*P P 03 01 48.1 -1.3
comp=Z,88nm,1.0s
**Q31A Ellis** 77.12 340 P P 03 01 49.7 +0.1
baz=78,SNR=46
**W18A Petrified Fore** 77.20 330 P P 03 01 51.0 +0.7
baz=78,SNR=13
**W18A Petrified Fore** 77.20 330 *e*P P 03 01 50.8 +0.5
comp=Z,302nm,1.4s
W18A LR LR
comp=Z,3µm,18.0s
**MMNY Mt. Morris Dam** 77.21 357 *e*P P 03 01 49.5 -0.4
comp=Z,179nm,1.3s
**AAM Ann Arbor** 77.22 353 *e*P P 03 01 49.2 -0.7
AAM pmax pmax
comp=Z,88nm,1.1s
**AAM Ann Arbor** 77.22 353 *e*P P 03 01 49.2 -0.7
comp=Z,88nm,1.1s
**R28A Tribune** 77.23 338 P P 03 01 50.2 0.0
baz=78,SNR=55
**Q30A Quinter** 77.34 339 P P 03 01 51.0 +0.2
baz=78,SNR=28
**O35A Humboldt** 77.39 343 P P 03 01 50.1 -0.9
baz=78,SNR=9.4
**P32A Huiting Farm,** 77.48 341 P P 03 01 51.4 -0.1
baz=78,SNR=32
**Q29A Oakley** 77.48 339 P P 03 01 51.4 -0.2
baz=78,SNR=26
**O34A Beatrice** 77.50 342 P P 03 01 51.2 -0.5
baz=78,SNR=23
**P31A Stockton** 77.60 340 P P 03 01 52.1 -0.2
baz=78,SNR=35
**O33A Hebron** 77.63 342 P P 03 01 52.1 -0.2
baz=78,SNR=25
**GLA Glamis** 77.66 326 *e*P P 03 01 53.8 +1.0
GLA pmax pmax
comp=Z,230nm,1.6s
**GLA Glamis** 77.66 326 P P 03 01 53.6 +0.9
baz=78,SNR=32
**GLA Glamis** 77.66 326 *e*P P 03 01 53.8 +1.0
comp=Z,226nm,1.6s
GLA LR LR
comp=Z,2µm,20.0s
**ACCN Adirondack Com** 77.77 0 *e*P P 03 01 53.2 +0.1
comp=Z,24nm,0.9s
ACCN LR LR
comp=Z,800nm,22.0s
**P30A Selden** 77.87 339 P P 03 01 53.7 -0.1
baz=78,SNR=16
**N35A Tabor** 77.89 343 P P 03 01 52.7 -1.1
baz=78,SNR=8.9
**Q28A Sharon Springs** 77.90 338 P P 03 01 54.0 0.0
baz=78,SNR=29
**SDCO Great Sand Dun** 77.91 335 P P 03 01 54.5 +0.2
baz=78
**SDCO Great Sand Dun** 77.91 335 *e*P P 03 01 54.7 +0.3
comp=Z,783nm,2.9s
SDCO LR LR
comp=Z,2µm,20.0s
**IBP Imperial Bould** 77.94 325 P P 03 01 54.7 +0.4
baz=78
**O32A Brockman Farm,** 77.99 341 P P 03 01 54.2 -0.1
baz=78,SNR=12
**SWSC Sam W. Stewart** 78.03 325 P P 03 01 56.1 +1.5
baz=78,SNR=12
**N34A Lincoln** 78.07 343 P P 03 01 54.4 -0.5
baz=78,SNR=13
**KSCO Kaye Shedlock'** 78.10 337 P P 03 01 55.7 +0.5
baz=78,SNR=27
**KSCO Kaye Shedlock'** 78.10 337 *e*P P 03 01 55.8 +0.7
comp=Z,156nm,1.1s
**Y12C Blythe** 78.11 326 P P 03 01 56.5 +1.3
baz=78,SNR=28
**P29A Atwood** 78.12 339 P P 03 01 55.7 +0.5
baz=78,SNR=51
**O31A Woolen Ranch,** 78.17 340 P P 03 01 55.7 +0.3
baz=78,SNR=10
**N33A J Bar K, Exete** 78.22 342 P P 03 01 55.8 +0.1
baz=79
**WUAZ Wupatki** 78.22 329 P P 03 01 56.6 +0.7
baz=78
**WUAZ Wupatki** 78.22 329 *e*P P 03 01 57.0 +1.1
comp=Z,122nm,1.3s
WUAZ LR LR
comp=Z,2µm,19.0s
**BAR Barrett** 78.23 324 *e*P P 03 01 56.4 +0.5
comp=Z,48nm,0.9s
BAR LR LR
comp=Z,2µm,22.0s
**MONP Monument Peak** 78.28 324 P P 03 01 57.2 +0.8
baz=79,SNR=15
**P28A Saint Francis** 78.34 338 P P 03 01 56.9 +0.5
baz=79,SNR=34
**SCIA State Center** 78.35 345 *e*P P 03 01 55.3 -1.0
comp=Z,206nm,1.2s
**NCB Newcomb** 78.36 360 *e*P P 03 01 56.3 0.0
comp=Z,41nm,1.0s
NCB LR LR
comp=Z,2µm,22.0s
**S22A 4UR Ranch, Cre** 78.39 334 P P 03 01 57.6 +0.6
baz=79
**S22A 4UR Ranch, Cre** 78.39 334 *e*P P 03 01 57.3 +0.3
comp=Z,160nm,1.7s
S22A LR LR
comp=Z,2µm,18.0s
**MDV Middlebury** 78.39 0 *e*P P 03 01 56.8 +0.4
**PDMCI Parker Dam,Lak** 78.39 327 P P 03 01 57.8 +1.1
baz=79
**O30A MW Ranch, Wils** 78.40 340 P P 03 01 56.9 +0.2
baz=79,SNR=27
**BC3 Big Chuckawall** 78.45 326 P P 03 01 58.0 +0.8
baz=79,SNR=44
**N32A Stulken Farm,** 78.46 341 P P 03 01 56.9 -0.1
baz=79,SNR=5.7
**M35A Neola** 78.48 343 P P 03 01 56.8 -0.2
baz=79
**MVCO Mesa Verde** 78.54 332 P P 03 01 58.0 +0.3
baz=79
**MVCO Mesa Verde** 78.54 332 *e*P P 03 01 58.3 +0.6
comp=Z,68nm,1.0s
MVCO LR LR
comp=Z,3µm,19.0s
**O29A 4D Ranch, Culb** 78.57 339 P P 03 01 58.3 +0.7
baz=79
**109C Camp Elliot, M** 78.61 324 P P 03 01 58.5 +0.5
baz=79
**LBNH Lisbon** 78.65 1 *e*P P 03 01 57.2 -0.7
LBNH pmax pmax
comp=Z,62nm,0.9s
LBNH MLR MLR
comp=Z,2µm,21.0s
**LBNH Lisbon** 78.65 1 *e*P P 03 01 57.1 -0.7
comp=Z,62nm,0.9s
LBNH LR LR
comp=Z,2µm,21.0s
**N31A Bailey Ranch,** 78.69 341 P P 03 01 58.1 -0.2
baz=79,SNR=6.6
**M34A Aspy Farms, Fr** 78.72 343 P P 03 01 57.9 -0.5
baz=79
**IRM Iron Mountain** 78.73 326 P P 03 01 59.5 +0.9
baz=79,SNR=34
**JFWS Jewell Farm** 78.75 348 *e*P P 03 01 58.4 -0.1
JFWS pmax pmax
comp=Z,300nm,1.5s
**JFWS Jewell Farm** 78.75 348 *e*P P 03 01 58.4 -0.1
comp=Z,297nm,1.5s
**O28A Krutsinger Ran** 78.86 339 P P 03 01 60.0 +0.7
baz=79,SNR=31
**Q24A Divide** 78.88 336 P P 03 01 60.0 +0.3
baz=79,SNR=37
**Q24A Divide** 78.88 336 *e*P P 03 02 00.4 +0.6
comp=Z,110nm,1.0s
**PFO Pinyon Flat Ob** 78.89 325 *e*P P 03 02 00.9 +1.2
PFO pmax pmax
comp=Z,90nm,1.1s
**PFO Pinyon Flat Ob** 78.89 325 P P 03 02 00.5 +0.9
comp=Z,367nm,1.4s,SNR=21
**PFO Pinyon Flat Ob** 78.89 325 *e*P P 03 02 00.9 +1.2
comp=Z,90nm,1.1s
PFO LR LR
comp=Z,2µm,19.0s
**M33A Taylor Creek F** 78.94 342 P P 03 01 58.9 -0.7
baz=79,SNR=6.3
**K38A Parkersburg** 78.97 346 P P 03 01 58.4 -1.3
baz=79,SNR=5.1
**N30A Hueftle Ranch,** 78.99 340 P P 03 01 59.6 -0.3
baz=79
**BELC Belle Mtn. Jos** 78.99 325 P P 03 02 01.6 +1.4
baz=79,SNR=19
**LONY Lake Ozonia** 79.01 359 *e*P P 03 01 59.3 -0.5
comp=Z,83nm,1.2s
LONY LR LR
comp=Z,1µm,22.0s
**BGNE Belgrade** 79.03 342 P P 03 02 00.1 0.0
baz=79,SNR=10
**BGNE Belgrade** 79.03 342 *e*P P 03 02 00.4 +0.3
comp=Z,133nm,0.9s
**WVL Waterville** 79.04 3 *e*P P 03 02 00.1 +0.1
comp=Z,88nm,0.9s
**L35A Bielow Farm, R** 79.05 344 P P 03 02 00.2 +0.1
baz=79
**L34A Svendsen Farm,** 79.11 343 P P 03 01 59.9 -0.6
baz=80,SNR=6.3
**N29A Votaw Ranch, W** 79.16 340 P P 03 02 01.3 +0.4
baz=80,SNR=20
**M31A Lambtecht Ranc** 79.19 341 P P 03 02 00.9 0.0

baz=80,SNR=22
**CASY Casey 79.23 182** *e*P P 03 02 01.1 +0.2
comp=Z,180nm,1.1s
CASY LR LR

comp=Z,3µm,19.0s
**MURC Murrieta 79.24 324** P P 03 02 02.7 +1.3
baz=80,SNR=20
**K37A Belmond 79.26 345** P P 03 02 00.4 -0.9
baz=80,SNR=6.7
**N28A Pribbeno Ranch 79.30 339** P P 03 02 01.6 -0.1
baz=80,SNR=14
**SADO Sadowa 79.31 356** *e*P P 03 02 00.6 -0.9
comp=Z,57nm,0.9s
SADO LR LR

comp=Z,1µm,20.0s
**EMMW East Machias 79.31 5** *e*P P 03 02 00.8 -0.7
comp=Z,93nm,0.9s
EMMW LR LR

comp=Z,3µm,21.0s
**SCI San Clemente I 79.39 323** P P 03 02 02.8 +0.6
baz=80
**GMRC Granite Mounta 79.48 326** P P 03 02 04.0 +1.2
baz=80,SNR=40
**L33A Hoskins 79.52 342** P P 03 02 02.3 -0.5
baz=80
**L32A Elgin 79.55 342** P P 03 02 02.6 -0.4
baz=80,SNR=6.4
**J38A Wedel Dairy, R 79.55 346** P P 03 02 02.0 -0.8
baz=80
**K35A Storm Lake 79.56 344** P P 03 02 02.7 -0.2
baz=80,SNR=5.8
**M30A Dale-Ortello V 79.61 340** P P 03 02 03.4 +0.1
baz=80,SNR=7.1
**BBRC Big Bear Solar 79.64 325** P P 03 02 05.2 +1.3
baz=80,SNR=5.5
**CIS Catalina Islan 79.66 323** P P 03 02 04.6 +0.8
baz=80
**OGNE Ogallala 79.69 339** P P 03 02 04.0 +0.2
baz=80
**OGNE Ogallala 79.69 339** *e*P P 03 02 04.5 +0.7
comp=Z,594nm,1.9s
**SMCO Snowmass 79.71 334** *e*P P 03 02 05.1 +0.8
**K34A Le Mars 79.73 343** P P 03 02 03.1 -0.7
baz=80,SNR=5.8
**M29A Burnside Ranch 79.75 340** P P 03 02 04.6 +0.5
baz=80,SNR=8.3
**PKME Peaks-Kenny Pk 79.76 3** *e*P P 03 02 04.7 +0.8
comp=Z,57nm,0.8s
PKME LR LR

comp=Z,2µm,22.0s
**J37A Redenius Farm, 79.76 345** P P 03 02 03.1 -0.9
baz=80,SNR=16
**ISCO Idaho Springs 79.79 336** *e*P P 03 02 05.1 +0.4
ISCO pmax pmax

comp=Z,41nm,1.0s
**ISCO Idaho Springs 79.79 336** P P 03 02 05.0 +0.4
baz=80
**ISCO Idaho Springs 79.79 336** *e*P P 03 02 05.1 +0.4
comp=Z,41nm,1.0s
**HEC Hector,Ludlow 79.83 326** P P 03 02 06.1 +1.4
baz=80,SNR=19
**FMP Fort Macarthur 79.86 324** P P 03 02 05.1 +0.4
baz=80
**K33A Hardington 79.87 343** P P 03 02 04.4 -0.2
baz=80
**M28A Bar X Bar Ranc 79.91 339** P P 03 02 05.6 +0.6
baz=80,SNR=6.9
**L31A Butterfield Fa 79.93 341** P P 03 02 05.5 +0.5
baz=80,SNR=31
**J36A Seneca 1, Swea 79.94 345** P P 03 02 04.7 -0.3
baz=80
**L30A Spencer Herefo 79.95 341** P P 03 02 05.5 +0.3
baz=80,SNR=25
**SSK Sunset Peak 79.97 324** *e*P P 03 02 04.4 -1.2
**BFSC Mount Baldy Ra 79.98 324** P P 03 02 06.3 +0.7
baz=80,SNR=28
**SNCC San Nicolas Is 80.09 322** P P 03 02 07.0 +1.0
baz=80
**TUQ Turquoise Moun 80.14 326** P P 03 02 07.2 +0.8
baz=80,SNR=44
**MWC Mount Wilson 80.16 324** PFAKE 03 02 20.0 +13
MWC LR LR

comp=Z,2µm,19.0s
**K32A Verdigre 80.16 342** P P 03 02 05.4 -0.7
baz=80,SNR=6.1
**J35A Milford 80.17 344** P P 03 02 05.6 -0.6
baz=80
**PASC Pasadena Art C 80.17 324** *e*P P 03 02 06.2 -0.2
comp=Z,88nm,1.3s
PASC LR LR

comp=Z,1µm,21.0s
**RRX Edison Barstow 80.19 325** P P 03 02 07.5 +1.0
baz=80
**I38A Scanlan Farm, 80.22 347** P P 03 02 05.6 -0.9
baz=81,SNR=36
**J34A George 80.26 344** P P 03 02 06.4 -0.3
baz=81
**L29A Maesberg Ranch 80.27 340** P P 03 02 07.3 +0.4
baz=81,SNR=25
**DECC Green Verdugo 80.31 324** P P 03 02 08.2 +1.0
baz=81
**K31A O'Neill 80.32 342** P P 03 02 07.2 +0.1
baz=81,SNR=67
**I37A Lemond, Waseca 80.41 346** P P 03 02 06.2 -1.3
baz=81,SNR=21
**TSUM Tsumeb 80.41 107** *e*P P 03 02 09.5 +1.1
comp=Z,66nm,1.3s
TSUM LR LR

comp=Z,5µm,19.0s
**GSC Goldstone 80.44 326** *e*P P 03 02 09.0 +1.0
GSC pmax pmax

comp=Z,41nm,1.0s
**GSC Goldstone 80.44 326** P P 03 02 09.0 +1.0
baz=81,SNR=27
**GSC Goldstone 80.44 326** *e*P P 03 02 09.0 +1.0
comp=Z,41nm,1.0s
GSC LR LR

comp=Z,1µm,20.0s
**MMU Miners Mountai 80.49 331** *e*P P 03 02 08.9 +0.5
**L28A Connealy Angus 80.51 339** P P 03 02 08.8 +0.6
baz=81
**J33A Davis 80.53 343** P P 03 02 07.6 -0.6
baz=81
**I36A Fitzsimmons Fa 80.54 345** P P 03 02 07.6 -0.5
baz=81
**BLG Laguna Peak 80.55 323** P P 03 02 09.2 +0.7
baz=81
**I35A Creekview Farm 80.59 345** P P 03 02 07.9 -0.6
baz=81,SNR=9.4
**K30A Basset 80.60 341** P P 03 02 08.8 +0.2
baz=81,SNR=74
**SHPR Sheep Range 80.69 327** *e*P P 03 02 10.3 +0.9
**SHOC Shoshone 80.69 326** P P 03 02 09.9 +0.6
baz=81,SNR=7.7
**BSC Santa Cruz Isl 80.74 323** P P 03 02 09.7 +0.2
baz=81
**CCUT Cedar City 80.79 329** *e*P P 03 02 11.3 +1.4
comp=Z,101nm,1.2s
CCUT LR LR

comp=Z,2µm,18.0s
**OSI Osito Adit 80.79 324** P P 03 02 10.4 +0.5
baz=81
**OSI Osito Adit 80.79 324** *e*P P 03 02 10.7 +0.8
comp=Z,226nm,1.6s
OSI LR LR

comp=Z,2µm,22.0s
**J32A Parkston 80.80 342** P P 03 02 09.0 -0.6
baz=81,SNR=21
**ECSD EROS Data Cent 80.84 343** P P 03 02 09.2 -0.6
baz=81
**ECSD EROS Data Cent 80.84 343** *e*P P 03 02 09.4 -0.4
comp=Z,229nm,1.1s
**H37A Dierke Farm, C 80.86 346** P P 03 02 08.7 -1.2
baz=81,SNR=15
**K29A Lazy Trails An 80.87 341** P P 03 02 10.4 +0.3
baz=81,SNR=32
**N23A Red Feather La 80.89 336** P P 03 02 10.7 +0.2
baz=81,SNR=44
**N23A Red Feather La 80.89 336** *e*P P 03 02 11.1 +0.6
comp=Z,72nm,1.0s
N23A LR LR

comp=Z,2µm,20.0s
**J31A Geddes 80.94 342** P P 03 02 10.0 -0.4
baz=81,SNR=28
**I34A Hadley 80.96 344** P P 03 02 10.0 -0.5
baz=81
**SRU San Rafael 80.97 332** *e*P P 03 02 11.3 +0.4
SRU pmax pmax

comp=Z,53nm,1.0s
**SRU San Rafael 80.97 332** *e*P P 03 02 11.2 +0.4
comp=Z,53nm,1.0s
SRU LR LR

comp=Z,2µm,22.0s
**LRMC Laurel Mountai 81.00 325** P P 03 02 12.1 +1.1
baz=81,SNR=36
**BOSA Boshof 81.01 118** P P 03 02 12.0 +0.6
comp=Z,58nm,0.9s,baz=243,slow=3.4,SNR=56
BOSA LR LR 03 32 40.7

comp=Z,5µm,21.9s,baz=224,slow=32
**BOSA Boshof 81.01 118** *e*P P 03 02 11.3 -0.2
BOSA pmax pmax

comp=Z,120nm,0.9s
**BOSA Boshof 81.01 118** *e*P P 03 02 11.3 -0.2
comp=Z,122nm,0.9s
**O20A White River Ci 81.01 334** P P 03 02 11.4 +0.4
baz=81,SNR=43
**O20A White River Ci 81.01 334** *e*P P 03 02 11.6 +0.5
comp=Z,87nm,1.0s
O20A LR LR

comp=Z,2µm,22.0s
**H36A Jessenland, He 81.05 346** P P 03 02 10.9 0.0
baz=81,SNR=12
**BFZ Birch Farm 81.08 226** *e*P P 03 02 12.8 +1.3
comp=Z,274nm,1.1s
BFZ LR LR

comp=Z,3µm,19.0s
**PHWY Pilot Hill 81.09 336** *e*P P 03 02 11.8 +0.2
comp=Z,67nm,0.9s
**MSU Marysvale 81.11 330** *e*P P 03 02 12.5 +0.8
**MSU Marysvale 81.11 330** *e*P P 03 02 12.5 +0.8
**K28A Ten Mile Ranch 81.12 340** P P 03 02 11.9 +0.5
baz=82,SNR=48
**J30A Dallas 81.17 341** P P 03 02 11.3 -0.3
baz=82,SNR=24
**I33A Coleman 81.18 343** P P 03 02 11.5 -0.1
baz=82
**MQZ McQueen's Vall 81.24 222** *e*P P 03 02 11.9 -0.3
comp=Z,168nm,1.3s
**ARVC Arvin 81.26 324** P P 03 02 13.2 +1.0
baz=82
**P18A Preston Nutter 81.31 332** *e*P P 03 02 13.5 +0.6
comp=Z,202nm,1.4s
P18A LR LR

comp=Z,2µm,20.0s
**I32A Karley and Nic 81.32 343** P P 03 02 11.8 -0.6
baz=82,SNR=5.8
**H35A Sunnyside Ranc 81.36 345** P P 03 02 12.3 -0.2
baz=82,SNR=11
**P17A Butcher Ranch, 81.37 332** *e*P P 03 02 12.8 -0.1
comp=Z,127nm,1.2s
P17A LR LR

comp=Z,2µm,22.0s
**MPMC Manual Prospec 81.38 326** P P 03 02 13.9 +0.8
baz=82,SNR=26
**FURC Furnace Creek, 81.42 326** P P 03 02 13.9 +0.8
baz=82,SNR=29
**SPMN St. Paul 81.45 347** P P 03 02 11.8 -1.2
baz=82,SNR=17
**SPMN St. Paul 81.45 347** *e*P P 03 02 12.4 -0.6
comp=Z,68nm,0.8s
SPMN LR LR

comp=Z,1µm,22.0s
**ODZ Otahua Downs 81.45 220** *e*P P 03 02 12.1 -1.2
comp=Z,156nm,1.1s
**J29A Okreek 81.47 341** P P 03 02 13.2 0.0
baz=82,SNR=80
**SGU Sterling 81.47 331** *e*P P 03 02 14.8 +1.2
**ISA Isabella 81.52 325** *e*P P 03 02 14.9 +1.2
ISA pmax pmax

comp=Z,66nm,1.2s
**ISA Isabella 81.52 325** P P 03 02 14.9 +1.2
baz=82,SNR=39
**ISA Isabella 81.52 325** *e*P P 03 02 14.9 +1.2
comp=Z,66nm,1.2s
ISA LR LR

comp=Z,2µm,19.0s
**H34A Spellman Lake, 81.53 344** P P 03 02 12.8 -0.7
baz=82,SNR=17
**KHZ Kahutara 81.57 224** *e*P P 03 02 14.2 +0.2
comp=Z,246nm,1.1s
**I31A Royce, Wessing 81.58 342** P P 03 02 13.4 -0.4
baz=82
**SNZO South Karori 81.60 225** PFAKE 03 02 20.0 +5.8
SNZO LR LR

comp=Z,2µm,19.0s
**DAC Darwin (Calif) 81.61 326** *e*P P 03 02 15.7 +1.4
DAC pmax pmax

comp=Z,75nm,1.1s
**DAC Darwin (Calif) 81.61 326** *e*P P 03 02 15.7 +1.4
comp=Z,75nm,1.1s
DAC LR LR

comp=Z,1µm,20.0s
**G36A St. Michael 81.65 346** P P 03 02 13.5 -0.5
baz=82,SNR=8.4
**I30A Oacoma 81.70 342** P P 03 02 14.0 -0.4
baz=82,SNR=28
**J28A Allard Ranch, 81.74 340** P P 03 02 14.6 -0.1
baz=82,SNR=56
**H32A Carlson Farm, 81.76 343** P P 03 02 14.2 -0.5
baz=82,SNR=32
**H33A Prehn Over Nor 81.77 344** P P 03 02 14.6 -0.1
baz=82,SNR=61
**G35A Watkins 81.78 345** P P 03 02 14.1 -0.7
baz=82
**J27A Elkhorn Farm, 81.80 340** P P 03 02 15.6 +0.6
baz=82,SNR=44
**OXZ Oxford 81.82 222** *e*P P 03 02 14.6 -0.8
comp=Z,164nm,1.2s
**FLU Fool Peak 81.85 331** *e*P P 03 02 16.5 +0.9
**BKZ Black Stump Fm 81.88 228** *e*P P 03 02 15.8 0.0
comp=Z,232nm,1.2s
BKZ LR LR

comp=Z,4µm,20.0s
**VES Vestal, Richgr 81.96 324** P P 03 02 16.8 +0.9
baz=82
**CWC Cottonwood Cre 81.97 325** P P 03 02 17.0 +0.8
baz=82,SNR=16
**SMMC Simmler 81.98 323** P P 03 02 17.4 +1.3
baz=82
**H31A Wolsey 81.99 342** P P 03 02 15.2 -0.7
baz=82,SNR=18
**I29A Vivian Onida 82.04 341** P P 03 02 15.6 -0.5
baz=82,SNR=16
**LTZ Lake Taylor 82.05 223** P* P 03 02 17.6 +1.0
**G34A Benson 82.05 345** P P 03 02 15.5 -0.7
baz=82,SNR=5.7
**URZ Urewera 82.06 229** P* P 03 02 17.7 +1.1
**URZ Urewera 82.06 229** *e*P P 03 02 15.4 -1.3
comp=Z,1µm,2.4s
URZ LR LR

comp=Z,3µm,20.0s
**SUSD South Dakota S 82.08 342** P P 03 02 15.7 -0.6
baz=82,SNR=8.9
**GRAC Grapevine Rang 82.09 326** P P 03 02 18.0 +1.3
baz=82,SNR=46
**RPZ Rata Peaks 82.11 222** *e*P P 03 02 17.4 +0.5
comp=Z,397nm,1.1s
RPZ LR LR

comp=Z,3µm,19.0s
**J26A Sides Ranch, S 82.17 339** P P 03 02 17.5 +0.6
baz=82,SNR=54
**G33A Ortonville 82.18 344** P P 03 02 16.0 -0.8
baz=82,SNR=17
**MPU Maple Canyon 82.18 332** *e*P P 03 02 17.9 +0.6
comp=Z,80nm,1.0s
MPU LR LR

comp=Z,1µm,18.0s
**F36A Milaca 82.20 346** P P 03 02 16.0 -0.9
baz=83,SNR=33
**I28A Midland 82.25 340** P P 03 02 17.2 -0.1
baz=83,SNR=52
**WHZ Wether Hill Ro 82.29 218** *e*P P 03 02 17.1 -0.6
comp=Z,192nm,1.1s
**O16A Springville 82.30 332** *e*P P 03 02 12.7 -5.2
comp=Z,123nm,1.2s
O16A LR LR

comp=Z,2µm,18.0s
**NLU North Lily Min 82.31 331** *e*P P 03 02 18.6 +0.7
comp=Z,194nm,1.6s
NLU LR LR

comp=Z,2µm,18.0s
**WMUT West Mountain 82.31 332** *e*P P 03 02 18.1 +0.1
**THZ Tophouse 82.35 224** P* P 03 02 18.3 +0.1
**THZ Tophouse 82.35 224** *e*P P 03 02 18.1 -0.2
comp=Z,2µm,2.5s
**FWVZ Far West T-bar 82.39 227** P* P 03 02 19.9 +1.2

**R11A Troy Canyon, C 82.41 328** P P 03 02 19.6 +1.1
baz=83,SNR=82
**R11A Troy Canyon, C 82.41 328** *e*P P 03 02 19.3 +0.9
comp=Z,79nm,1.3s
R11A LR LR

comp=Z,2µm,19.0s
**RCTC Rector, Farmer 82.41 325** P P 03 02 18.8 +0.5
baz=83
**F35A Swanville 82.41 346** P P 03 02 17.4 -0.7
baz=83,SNR=11
**J25A Sunshine Ranch 82.45 338** P P 03 02 18.5 +0.1
baz=83,SNR=15
**WKZ Wanaka 82.46 220** *e*P P 03 02 18.3 -0.4
comp=Z,284nm,1.3s
WKZ LR LR

comp=Z,5µm,20.0s
**G32A Webster 82.48 343** P P 03 02 17.6 -0.9
baz=83,SNR=6.4
**F34A Alexandria 82.50 345** P P 03 02 17.9 -0.6
baz=83,SNR=18
**TIN Tinemaha 82.53 326** P P 03 02 19.9 +0.9
baz=83
**I27A Quinn 82.56 340** P P 03 02 18.9 -0.1
baz=83,SNR=36
**H29A Onida 82.57 341** P P 03 02 18.6 -0.4
baz=83,SNR=38
**G31A Conde 82.63 343** P P 03 02 18.5 -0.7
baz=83
**FSU Fish Springs 82.64 330** *e*P P 03 02 20.5 +0.9
**K22A Casper 82.65 336** P P 03 02 20.0 +0.4
baz=83,SNR=75
**K22A Casper 82.65 336** *e*P P 03 02 19.8 +0.2
comp=Z,266nm,1.3s
K22A LR LR

comp=Z,1µm,20.0s
**I26A New Underwood 82.76 339** P P 03 02 20.1 +0.1
baz=83,SNR=24
**F33A 5 Mile Ranch, 82.76 344** P P 03 02 18.9 -0.9
baz=83,SNR=11
**G30A Faulkton 82.77 342** P P 03 02 19.1 -0.9
baz=83,SNR=22
**DUG Dugway 82.81 331** *e*P P 03 02 20.9 +0.5
DUG *e* 03 02 21.2
DUG pmax pmax

comp=Z,200nm,1.3s
**DUG Dugway 82.81 331** P P 03 02 21.2 +0.7
baz=83
**DUG Dugway 82.81 331** *e*P P 03 02 20.9 +0.5
comp=Z,204nm,1.3s
DUG LR LR

comp=Z,2µm,19.0s
**CTU Camp Tracy 82.81 332** *e*P P 03 02 19.9 -0.6
comp=Z,40nm,0.9s
CTU LR LR

comp=Z,300nm,20.0s
**H28A Mission Ridge 82.83 341** P P 03 02 20.0 -0.3
baz=83,SNR=38
**MTUM Tungsten Hills 82.93 326** *e*P P 03 02 21.9 +0.7
**DSZ Denniston Nort 82.98 223** P* P 03 02 21.2 -0.4
**I25A Rochford 83.00 339** P P 03 02 21.6 +0.2
baz=83,SNR=46
**G29A Hoven 83.03 342** P P 03 02 20.8 -0.5
baz=83,SNR=31
**E35A Pequot Lakes 83.05 346** P P 03 02 20.8 -0.6
baz=83
**H27A Howes 83.09 340** P P 03 02 21.2 -0.5
baz=83,SNR=41
**FPU Francis Peak 83.13 332** *e*P P 03 02 22.6 +0.3
**E34A Wadena 83.16 345** P P 03 02 21.2 -0.7
baz=84
**QRZ Quartz Range 83.17 224** P* P 03 02 22.5 +0.1
**G28A Parade 83.18 341** P P 03 02 21.4 -0.7
baz=84,SNR=45
**RSSD Black Hills 83.19 339** *e*P P 03 02 22.3 -0.1
RSSD pmax pmax

comp=Z,69nm,0.9s
**RSSD Black Hills 83.19 339** *e*P P 03 02 22.3 -0.1
comp=Z,69nm,0.8s
**F31A Hecla 83.23 343** P P 03 02 21.8 -0.5
baz=84,SNR=22
**D37A Cotton 83.25 347** P P 03 02 21.5 -0.8
baz=84,SNR=6.5
**H26A Fairpoint 83.27 340** P P 03 02 21.8 -0.9
baz=84
**SNUT Stansbury Nort 83.27 331** *e*P P 03 02 23.1 +0.2
**NAIU Northern Antel 83.28 332** *e*P P 03 02 22.7 -0.1
**HIZ Hauiti 83.28 227** *e*P P 03 02 22.5 -0.5
comp=Z,614nm,1.3s
HIZ LR LR

comp=Z,3µm,20.0s
**MLAC Mammoth Lakes 83.28 326** P P 03 02 23.9 +0.8
baz=84
**LBTB Lobatse 83.31 116** *e*P P 03 02 24.1 +0.5
LBTB pmax pmax

comp=Z,1µm,2.6s
**LBTB Lobatse 83.31 116** *e*P P 03 02 23.4 -0.2
comp=Z,1µm,2.6s
**E33A Westby DABS, E 83.33 345** P P 03 02 21.7 -1.1
baz=84
**LRV Little Rabbit 83.36 323** *e*P P 03 02 22.4 -0.8
**MCU Monte Cristo P 83.38 332** *e*P P 03 02 23.8 +0.2
**F30A Leola 83.40 343** P P 03 02 22.4 -0.8
baz=84
**D36A Goodland 83.40 347** P P 03 02 22.6 -0.6
baz=84
**D35A Remer 83.48 346** P P 03 02 22.6 -1.0
baz=84,SNR=31
**C39A Grand Marais 83.50 349** P P 03 02 22.7 -0.9
baz=84,SNR=7.7
**RSUT Red Spur Mount 83.50 333** *e*P P 03 02 24.2 +0.1
**BGU Big Grassy Mou 83.51 331** *e*P P 03 02 24.2 +0.1
comp=Z,160nm,1.7s
BGU LR LR

comp=Z,2µm,18.0s
**H25A Fruitdale 83.51 339** P P 03 02 24.0 +0.1
baz=84,SNR=23
**HWUT Hardware Ranch 83.53 332** *e*P P 03 02 24.1 0.0
comp=Z,158nm,1.0s
**GZU Grizzly Peak 83.53 332** *e*P P 03 02 24.2 -0.2
**C38A Sawbill Land. 83.58 348** P P 03 02 22.8 -1.3
baz=84,SNR=20
**F29A Eureka 83.60 342** P P 03 02 23.8 -0.4
baz=84,SNR=18
**SPUT South Promonto 83.61 332** *e*P P 03 02 24.8 +0.2
comp=Z,183nm,1.1s
SPUT LR LR

comp=Z,2µm,18.0s
**E32A Braaten, Kindr 83.65 344** P P 03 02 24.1 -0.3
baz=84
**HONU Honeyville 83.66 332** *e*P P 03 02 25.2 +0.4
**EPU East Promontor 83.67 332** *e*P P 03 02 25.0 +0.2
**WVUT Wellsville 83.68 332** *e*P P 03 02 25.0 0.0
**NV01 Mina Array Sit 83.69 326** *e*P P 03 02 25.1 0.0
**NVAR Mina Array Bea 83.69 326** P P 03 02 25.8 +0.6
comp=Z,14nm,0.8s,baz=152,slow=5.8,SNR=56
NVAR PKKPbc **PKKPbc** 03 20 43.5 +0.1
comp=Z,1.4nm,0.6s,baz=337,slow=2.1,SNR=7.6
NVAR PKPPKP P'P'df 03 28 49.0 +6.5
comp=Z,0.1nm,0.3s,baz=39,slow=0.6,SNR=2.3
NVAR LR LR 03 32 10.8
comp=Z,1µm,21.2s,baz=155,slow=30
**BMUT Black Mountain 83.70 333** *e*P P 03 02 24.5 -0.7
**D34A Park Rapids 83.71 345** P P 03 02 23.9 -0.9
baz=84,SNR=28
**G27A Dupree 83.73 340** P P 03 02 24.4 -0.6
baz=84,SNR=44
**C37A Embarrass 83.75 348** P P 03 02 24.0 -1.0
baz=84,SNR=6.6
**HDU Hyde Park 83.77 332** *e*P P 03 02 24.9 -0.6
**LTU Little Mountai 83.78 332** *e*P P 03 02 25.5 +0.1
**BW06 Boulder Array 83.79 334** *e*P P 03 02 25.1 -0.5
comp=Z,72nm,1.3s
BW06 LR LR

comp=Z,3µm,22.0s
**E31A Nome 83.80 344** P P 03 02 24.6 -0.6
baz=84
**G26A Maurine 83.84 340** P P 03 02 24.8 -0.7
baz=84,SNR=43
**SAO San Andreas Ge 83.84 323** *e*P P 03 02 25.6 -0.1
SAO pmax pmax

comp=Z,90nm,1.8s
**SAO San Andreas Ge 83.84 323** *e*P P 03 02 25.6 -0.1
comp=Z,90nm,1.8s
**EYMN Ely 83.84 348** P P 03 02 24.6 -0.8
baz=84
**EYMN Ely 83.84 348** *e*P P 03 02 24.9 -0.6
comp=Z,92nm,1.1s

**F28A McLaughlin** 83.86 341 P **P** 03 02 25.5 -0.1
baz=84,SNR=35
**C36A Pine Crest Far** 83.90 347 P **P** 03 02 24.7 -1.0
baz=84,SNR=15
**D33A AnnSam, Waubun** 83.90 345 P **P** 03 02 25.1 -0.6
baz=84,SNR=17
**MTUT Morton Thiokol** 83.96 332 eP **P** 03 02 26.2 -0.2
**G25A Newell** 83.98 339 P **P** 03 02 26.0 -0.3
baz=84,SNR=76
**E30A Jud** 83.99 343 P **P** 03 02 25.7 -0.5
baz=84,SNR=35
**C35A Jirik Farms, M** 84.06 346 P **P** 03 02 25.8 -0.7
baz=84,SNR=22
**MLI Malad Range** 84.10 332 eP **P** 03 02 27.0 -0.1
**HVU Hansel Valley** 84.14 332 eP **P** 03 02 27.2 -0.1
HVU pmax pmax
comp=Z,148nm,0.9s
HVU MLR MLR
comp=Z,2µm,19.0s
**HVU Hansel Valley** 84.14 332 eP **P** 03 02 27.2 -0.1
comp=Z,148nm,0.9s
HVU LR LR
comp=Z,2µm,19.0s
**D32A Dogwood Acres,** 84.15 344 P **P** 03 02 26.5 -0.5
baz=84
**F27A Lemmon** 84.21 341 P **P** 03 02 27.0 -0.4
baz=85,SNR=54
**D31A Mcclaflin, Tow** 84.23 344 P **P** 03 02 26.9 -0.5
baz=85,SNR=6.1
**E29A Napoleon** 84.23 342 P **P** 03 02 27.2 -0.3
baz=85,SNR=21
**ELK Elko** 84.26 330 eP **P** 03 02 28.3 +0.3
ELK pmax pmax
comp=Z,59nm,1.0s
**ELK Elko** 84.26 330 eP **P** 03 02 28.3 +0.3
comp=Z,59nm,1.0s
**CMB Columbia Colle** 84.34 325 eP **P** 03 02 28.3 +0.1
CMB e 03 05 45.2
CMB pmax pmax
comp=Z,99nm,1.7s
CMB MLR MLR
comp=Z,1µm,20.0s
**CMB Columbia Colle** 84.34 325 eP **P** 03 02 28.3 +0.1
comp=Z,99nm,1.7s
CMB ePP **PP** 03 05 45.2 +1.7
CMB LR LR
comp=Z,1µm,20.0s
**AHID Auburn Hatcher** 84.35 333 eP **P** 03 02 27.6 -0.7
comp=Z,135nm,0.8s
AHID LR LR
comp=Z,2µm,21.0s
**NPI North Pocatell** 84.36 332 eP **P** 03 02 28.4 0.0
**F26A Lodgepole** 84.37 340 P **P** 03 02 28.1 -0.1
baz=85,SNR=13
**C33A Trail** 84.47 345 P **P** 03 02 28.0 -0.6
baz=85,SNR=28
**E28A Huff** 84.51 342 P **P** 03 02 28.7 -0.2
baz=85,SNR=28
**D30A Buchanan** 84.53 343 P **P** 03 02 28.4 -0.5
baz=85,SNR=64
**E27A Carson** 84.60 341 P **P** 03 02 29.3 -0.1
baz=85,SNR=15
**F25A Bowman** 84.66 340 P **P** 03 02 29.2 -0.5
baz=85,SNR=14
**D29A Pettibone, Tap** 84.68 343 P **P** 03 02 29.4 -0.3
baz=85,SNR=9.7
**REDW Red Top Meadow** 84.78 334 eP **P** 03 02 30.5 -0.1
comp=Z,121nm,1.4s
REDW LR LR
comp=Z,2µm,20.0s
**SNOW Snow King Moun** 84.83 334 eP **P** 03 02 30.8 -0.1
comp=Z,52nm,0.9s
SNOW LR LR
comp=Z,3µm,19.0s
**BMN Battle Mountai** 84.84 328 eP **P** 03 02 30.3 -0.6
BMN pmax pmax
comp=Z,11nm,0.8s
BMN MLR MLR
comp=Z,2µm,19.0s
**BMN Battle Mountai** 84.84 328 eP **P** 03 02 30.3 -0.6
comp=Z,11nm,0.8s
BMN LR LR
comp=Z,2µm,19.0s
**E26A Carlson Angus** 84.88 341 P **P** 03 02 30.4 -0.4
baz=85,SNR=30
**DRLN Deer Lake** 84.90 11 eP **P** 03 02 29.9 -0.8
comp=Z,113nm,0.9s
**LOHW Long Hollow** 84.91 334 eP **P** 03 02 31.0 -0.2
comp=Z,71nm,1.3s
LOHW ePP **PP** 03 05 48.8 +0.5
LOHW LR LR
comp=Z,3µm,22.0s
**TPAW Teton Pass** 84.92 334 eP **P** 03 02 31.3 -0.1
comp=Z,81nm,1.0s
TPAW LR LR
comp=Z,2µm,19.0s
**C31A Landman Farms,** 84.93 344 P **P** 03 02 30.4 -0.5
baz=85,SNR=40
**B34A Aery, Baudette** 84.94 346 P **P** 03 02 30.3 -0.6
baz=85,SNR=9.6
**AGMN Agassiz Nation** 85.00 345 P **P** 03 02 30.4 -0.9
baz=85
**AGMN Agassiz Nation** 85.00 345 eP **P** 03 02 30.7 -0.6
comp=Z,90nm,0.8s
AGMN LR LR
comp=Z,2µm,21.0s
**C30A Mose, Pekin** 85.02 344 P **P** 03 02 31.2 -0.2
baz=85,SNR=54
**D28A Regan** 85.05 342 P **P** 03 02 31.5 -0.1
baz=85,SNR=9.2
**MOOW Moose Ponds** 85.08 334 eP **P** 03 02 31.7 -0.4
comp=Z,47nm,1.3s
**FXWY Fox Creek** 85.08 334 eP **P** 03 02 31.8 -0.3
comp=Z,57nm,1.2s
FXWY LR LR
comp=Z,2µm,19.0s
**E25A Miller Ranch,** 85.17 340 P **P** 03 02 32.2 0.0
baz=86,SNR=20
**D27A Center** 85.22 341 P **P** 03 02 32.2 -0.2
baz=86
**B32A Ashes, Strandq** 85.24 345 P **P** 03 02 31.7 -0.7
baz=86,SNR=52
**IMW Indian Meadow** 85.27 334 eP **P** 03 02 33.2 +0.1
comp=Z,126nm,1.3s
IMW LR LR
comp=Z,2µm,19.0s
**FLWY Flagg Ranch** 85.35 334 eP **P** 03 02 33.7 +0.3
comp=Z,116nm,1.0s
FLWY LR LR
comp=Z,3µm,22.0s
**D26A Manning** 85.39 341 P **P** 03 02 33.1 -0.2
baz=86,SNR=50
**MDND Maddock** 85.42 343 P **P** 03 02 33.1 -0.3
baz=86,SNR=20
**MDND Maddock** 85.42 343 eP **P** 03 02 33.3 -0.1
comp=Z,234nm,0.8s
**C28A Hausauer Farms** 85.49 342 P **P** 03 02 33.3 -0.4
baz=86,SNR=20
**B31A Greenbush Farm** 85.51 344 P **P** 03 02 33.0 -0.7
baz=86,SNR=15
**A33A Warroad** 85.52 346 P **P** 03 02 33.1 -0.7
baz=86,SNR=34
**H17A Grant Village** 85.58 335 P **P** 03 02 35.2 +0.6
baz=86,SNR=9.0
**H17A Grant Village** 85.58 335 eP **P** 03 02 36.0 +1.4
comp=Z,36nm,1.3s
H17A LR LR
comp=Z,4µm,20.0s
**MCID Moose Creek** 85.61 334 eP **P** 03 02 35.2 +0.5
**LKWY Lake** 85.66 335 eP **P** 03 02 35.7 +0.7
LKWY pmax pmax
comp=Z,26nm,1.0s
LKWY MLR MLR
comp=Z,3µm,21.0s
**LKWY Lake** 85.66 335 eP **P** 03 02 35.7 +0.7
comp=Z,26nm,1.0s
LKWY LR LR
comp=Z,3µm,21.0s
**PMOZ Porto Moniz, M** 85.68 45 eP **P** 03 02 35.5 +0.3
comp=Z,93nm,0.9s
**PMOZ Porto Moniz, M** 85.68 45 eLR LR 03 32 47.6
comp=Z,2µm,20.0s
**B30A Myrvik Farm, E** 85.69 344 P **P** 03 02 34.3 -0.4
baz=86,SNR=79
**YFT Old Faithful** 85.72 334 PFAKE 03 02 50.0 +15
YFT LR LR
comp=Z,3µm,19.0s
**D25A Fairfield** 85.74 340 P **P** 03 02 35.4 +0.4
baz=86,SNR=67
**RLMT Red Lodge** 85.76 336 P **P** 03 02 35.3 -0.1
baz=86
**RLMT Red Lodge** 85.76 336 eP **P** 03 02 35.2 -0.2
comp=Z,63nm,0.8s
RLMT LR LR
comp=Z,2µm,20.0s
**C27A Sayler Ranch,** 85.77 342 P **P** 03 02 35.3 +0.2
baz=86,SNR=15
**PMAR Madeira** 85.78 45 eP **P** 03 02 35.8 0.0
comp=Z,145nm,1.3s
**NSHM Saint Helena R** 85.79 324 eP **P** 03 02 37.0 +1.6
**TOA0 Torodi Ar. Sit** 85.85 71 eP **P** 03 02 34.8 -1.5
**TORD Torodi Ar. Bea** 85.85 71 P **P** 03 02 36.3 0.0
comp=Z,41nm,1.0s,baz=248,slow=3.3,SNR=74
TORD PKKPbc **PKKPbc** 03 20 37.4 +0.9
comp=Z,2.1nm,0.6s,baz=42,slow=2.1,SNR=28
TORD LR LR 03 39 25.6
comp=Z,2µm,18.7s,baz=255,slow=35
**A31A Linda, St. Vin** 85.89 345 P **P** 03 02 34.7 -1.0
baz=86,SNR=9.0
**OHCM Honcut** 85.89 325 eP **P** 03 02 36.5 +0.6
**YNR Norris Junctio** 85.89 335 PFAKE 03 02 50.0 +14
YNR LR LR
comp=Z,3µm,21.0s
**YPM Purple Mountai** 85.91 334 eP **P** 03 02 37.1 +0.9
**B29A Wagenman Farm,** 85.94 343 P **P** 03 02 35.6 -0.3
baz=86,SNR=22
**YMR Madison River** 85.95 334 PFAKE 03 02 50.0 +14
YMR LR LR
comp=Z,2µm,22.0s
**YHH Holmes Hill** 86.02 335 eP **P** 03 02 37.2 +0.4
**C26A Wahner Farm, P** 86.03 341 P **P** 03 02 36.2 -0.2
baz=86,SNR=26
**YMC Maple Creek** 86.05 334 eP **P** 03 02 37.5 +0.7
**A30A Hoffart Farm,** 86.14 344 P **P** 03 02 36.1 -0.8
baz=86,SNR=21
**OUZ Omahuta** 86.16 229 eP **P** 03 02 36.7 -0.9
comp=Z,193nm,1.5s
OUZ LR LR
comp=Z,2µm,19.0s
**B28A Dugan Ranch, T** 86.17 343 P **P** 03 02 37.1 +0.1
baz=86,SNR=24
**LAO LASA Array** 86.17 338 P **P** 03 02 37.0 -0.2
baz=86
**LAO LASA Array** 86.17 338 eP **P** 03 02 36.5 -0.7
comp=Z,110nm,0.8s
LAO LR LR
comp=Z,1µm,19.0s
**C25A Freed Ranch, W** 86.24 341 P **P** 03 02 37.1 -0.4
baz=87,SNR=31
**QLMT Earthquake Lak** 86.26 334 eP **P** 03 02 38.7 +0.8
**HLID Hailey** 86.29 332 P **P** 03 02 38.8 +0.8
baz=87
**HLID Hailey** 86.29 332 eP **P** 03 02 38.3 +0.3
comp=Z,73nm,1.0s
HLID LR LR
comp=Z,1µm,18.0s
**A29A Manning Farm,** 86.34 344 P **P** 03 02 37.2 -0.7
baz=87,SNR=62
**B27A Peters Farms,** 86.35 342 P **P** 03 02 37.7 -0.3
baz=87,SNR=7.5
**PMPS Porto Santo** 86.35 45 eP **P** 03 02 39.7 +1.4
comp=Z,102nm,1.7s
**PMPST Porto Santo, M** 86.37 45 epP **pP** 03 02 41.8 +0.3
PMPST A A 03 02 43.5
comp=Z,114nm,1.5s
**HOPS Hopland** 86.39 324 eP **P** 03 02 39.5 +1.1
comp=Z,115nm,1.5s
**GCMT Greycliff** 86.48 336 eP **P** 03 02 38.8 -0.1
**A28A Rude Farm, Bot** 86.57 343 P **P** 03 02 38.4 -0.7
baz=87,SNR=18
**B26A Jensen Ranch,** 86.57 341 P **P** 03 02 38.9 -0.2
baz=87,SNR=11
**B25A Knox Farm, Ray** 86.72 341 P **P** 03 02 40.0 +0.1
baz=87,SNR=53
**MFID Camas Ranch** 86.73 331 eP **P** 03 02 40.3 +0.2
comp=Z,63nm,1.1s
MFID LR LR
comp=Z,2µm,20.0s
**MCMT McKenzie Canyo** 86.77 333 eP **P** 03 02 41.1 +0.6
**O03D Paynes Creek** 86.80 325 P **P** 03 02 40.1 -0.4
baz=87
**A27A Ledoux Ranch,** 86.85 342 P **P** 03 02 40.5 +0.1
baz=87,SNR=9.3
**ULM Lac du Bonnet** 86.86 346 P **P** 03 02 39.7 -0.7
comp=Z,78nm,0.9s,baz=166,slow=3.5,SNR=36
**A26A Wade Farm, Ken** 87.00 342 P **P** 03 02 41.0 -0.2
baz=87,SNR=29
**BOZ Bozeman (W)** 87.03 334 eP **P** 03 02 40.4 -1.2
BOZ pmax pmax
comp=Z,49nm,1.1s
BOZ MLR MLR
comp=Z,2µm,20.0s
**BOZ Bozeman (W)** 87.03 334 P **P** 03 02 41.3 -0.3
baz=87
**BOZ Bozeman (W)** 87.03 334 eP **P** 03 02 40.4 -1.2
comp=Z,49nm,1.1s
BOZ LR LR
comp=Z,2µm,20.0s
**WVOR Wild Horse Val** 87.09 328 eP **P** 03 02 42.3 +0.4
WVOR pmax pmax
comp=Z,92nm,1.1s
**WVOR Wild Horse Val** 87.09 328 eP **P** 03 02 42.3 +0.4
comp=Z,92nm,1.1s
WVOR LR LR
comp=Z,1µm,20.0s
**DLMT Dillon** 87.14 334 eP **P** 03 02 42.5 +0.5
comp=Z,152nm,1.3s
DLMT LR LR
comp=Z,2µm,22.0s
**KCPM Cahto Peak** 87.17 324 eP **P** 03 02 40.4 -2.0
comp=Z,71nm,1.4s
**DGMT Dagmar** 87.19 340 P **P** 03 02 42.2 +0.1
baz=88
**DGMT Dagmar** 87.19 340 eP **P** 03 02 42.1 0.0
comp=Z,380nm,0.9s
**KIPM Iron Peak** 87.22 324 eP **P** 03 02 42.8 +0.2
**A25A Svangstu Ranch** 87.32 341 P **P** 03 02 42.7 0.0
baz=88,SNR=49
**WDC Whiskeytown Da** 87.37 325 eP **P** 03 02 42.5 -0.6
**WDC Whiskeytown Da** 87.37 325 eP **P** 03 02 42.5 -0.6
comp=Z,51nm,0.9s
**MOD Modoc** 87.39 327 eP **P** 03 02 44.1 +0.7
comp=Z,106nm,0.9s
MOD LR LR
comp=Z,1µm,19.0s
**LRM Limekiln Ridge** 87.48 334 eP **P** 03 02 44.2 +0.4
**KMRM Mail Ridge** 87.65 324 eP **P** 03 02 45.8 +1.2
comp=Z,130nm,1.2s
**N02D Trinity Center** 87.76 325 P **P** 03 02 45.2 +0.1
baz=88
**J08A Circle Bar Ran** 87.77 329 eP **P** 03 02 46.0 +0.8
comp=Z,199nm,0.9s
J08A LR LR
comp=Z,2µm,18.0s
**M04C Macdoel** 87.99 326 P **P** 03 02 46.8 +0.5
baz=88
**HRY Holter Researc** 88.02 335 eP **P** 03 02 46.8 +0.5
**M02C Callahan** 88.15 325 P **P** 03 02 47.4 +0.4
baz=88,SNR=18
**KHMM Horse Mountain** 88.17 325 eP **P** 03 02 45.5 -1.6
comp=Z,90nm,1.2s
**K05A Summer Lake** 88.31 327 eP **P** 03 02 48.9 +1.0
comp=Z,236nm,1.0s
K05A LR LR
comp=Z,1µm,21.0s
**YBH Yreka Blue Hor** 88.35 326 LR LR 03 37 35.8
comp=Z,407nm,18.1s,baz=150,slow=32
**YBH Yreka Blue Hor** 88.35 326 eP **P** 03 02 48.1 +0.2
**YBH Yreka Blue Hor** 88.35 326 eP **P** 03 02 48.1 +0.2
comp=Z,47nm,0.9s
**EGMT Eagleton** 88.46 337 P **P** 03 02 47.7 -0.6
baz=89
**EGMT Eagleton** 88.46 337 eP **P** 03 02 47.8 -0.4
comp=Z,32nm,0.9s
EGMT LR LR
comp=Z,800nm,19.0s
**AFI Afiamalu** 88.58 254 eP **P** 03 02 51.2 +1.5
AFI pmax pmax
comp=Z,51nm,1.0s
**AFI Afiamalu** 88.58 254 PFAKE 03 03 00.0 +10
AFI LR LR
comp=Z,2µm,19.0s
**K04D Chiloquin, OR** 88.62 327 P **P** 03 02 50.0 +0.8
baz=89,SNR=17
**CHMT Chamberlain Mo** 88.70 334 eP **P** 03 02 49.7 +0.1
**I07A Izee** 88.80 329 eP **P** 03 02 50.9 +0.9
comp=Z,84nm,0.9s
I07A LR LR
comp=Z,2µm,18.0s
**MSO Missoula** 88.88 334 P **P** 03 02 50.4 +0.1
baz=89
**MSO Missoula** 88.88 334 eP **P** 03 02 50.5 +0.2
comp=Z,65nm,1.5s
MSO LR LR
comp=Z,2µm,18.0s
**J05D Fort Rock, OR** 88.91 327 P **P** 03 02 51.1 +0.5
baz=89,SNR=76
**SLMT Seeley Lake** 89.06 334 eP **P** 03 02 51.2 0.0
**L02D Cave Junction,** 89.10 325 P **P** 03 02 52.5 +1.1
baz=89
**J04D Umpqua Nationa** 89.26 327 P **P** 03 02 53.1 +0.8
baz=90
**F10A Beach Ranch, E** 89.41 331 eP **P** 03 02 52.6 -0.1
comp=Z,278nm,2.0s
F10A LR LR
comp=Z,1µm,18.0s
**SCHQ Schefferville** 89.43 4 P **P** 03 02 52.9 +0.3
comp=Z,29nm,0.9s,baz=171,slow=3.3,SNR=17
**SWMT Swartz Lake** 89.47 334 eP **P** 03 02 52.9 -0.2
**G08A Pilot Rock** 89.55 330 eP **P** 03 02 53.9 +0.4
comp=Z,61nm,1.1s
G08A LR LR
comp=Z,2µm,18.0s
**JTMT Jette** 89.78 334 eP **P** 03 02 54.6 +0.1
**YBMT Yellow Bay** 89.78 334 eP **P** 03 02 54.6 +0.1
**I05D Terrebonne, OR** 89.79 328 P **P** 03 02 55.5 +0.9
baz=90,SNR=20
**I04A Tendick Farm,** 89.83 327 P **P** 03 02 54.9 +0.1
baz=90
**BLMT Blacktail Moun** 90.03 334 eP **P** 03 02 56.1 +0.3
**BSMT Bassoo Peak** 90.05 334 eP **P** 03 02 55.7 -0.2
**I03D Drain, OR** 90.18 327 P **P** 03 02 56.5 +0.2
baz=90
**G06A Carlson Farm,** 90.20 329 eP **P** 03 02 57.8 +1.3
comp=Z,144nm,1.5s
G06A LR LR
comp=Z,132µm,22.0s
**H04A Detroit Lake** 90.44 328 eP **P** 03 02 57.6 0.0
comp=Z,71nm,1.1s
**G05D Wamic, OR** 90.50 329 P **P** 03 02 58.3 +0.4
baz=91
**HAWA Hanford** 90.67 330 eP **P** 03 02 59.1 +0.6
comp=Z,134nm,1.4s
HAWA LR LR
comp=Z,1µm,19.0s
**WALA Waterton Lakes** 90.76 335 eP **P** 03 02 59.3 +0.3
comp=Z,64nm,1.0s
WALA LR LR
comp=Z,2µm,20.0s
**E07A Sunnyside** 90.94 330 eP **P** 03 02 59.2 -0.6
comp=Z,32nm,0.9s
E07A LR LR
comp=Z,2µm,20.0s
**LSZ Lusaka** 90.95 109 eP **P** 03 03 01.9 +1.0
LSZ pmax pmax
comp=Z,141nm,2.2s
LSZ MLR MLR
comp=Z,7µm,20.0s
**LSZ Lusaka** 90.95 109 P **P** 03 03 03.3 +2.4
SNR=14
**LSZ Lusaka** 90.95 109 eP **P** 03 03 01.9 +1.0
comp=Z,141nm,2.2s
LSZ LR LR
comp=Z,7µm,20.0s
**D08A Wollman Farm,** 90.97 331 eP **P** 03 03 00.0 +0.1
comp=Z,38nm,0.9s
D08A LR LR
comp=Z,1µm,19.0s
**NEW Newport** 91.26 333 LR LR 03 39 35.8
comp=Z,401nm,21.4s,baz=151,slow=33
**NEW Newport** 91.26 333 eP **P** 03 03 00.8 -0.5
NEW pmax pmax
comp=Z,21nm,1.0s
**NEW Newport** 91.26 333 P **P** 03 03 00.6 -0.7
baz=92
**NEW Newport** 91.26 333 eP **P** 03 03 00.8 -0.5
comp=Z,21nm,0.9s
**C09A Chrisman Ranch** 91.32 332 eP **P** 03 03 01.7 +0.2
comp=Z,55nm,1.1s
C09A LR LR
comp=Z,2µm,19.0s
**G03D McMinnville, O** 91.32 328 P **P** 03 03 01.8 +0.2
baz=92
**F04A Amboy** 91.52 328 eP **P** 03 03 03.0 +0.5
comp=Z,57nm,1.0s
F04A LR LR
comp=Z,1µm,19.0s
**LTY Liberty** 91.84 330 eP **P** 03 03 04.3 +0.2
comp=Z,27nm,1.0s
LTY LR LR
comp=Z,2µm,18.0s
**F04D Rainier, OR** 91.89 328 P **P** 03 03 04.5 +0.2
baz=92
**LON Longmire** 91.91 329 eP **P** 03 03 03.4 -0.9
LON pmax pmax
comp=Z,26nm,1.0s
**LON Longmire** 91.91 329 eP **P** 03 03 03.4 -0.9
comp=Z,26nm,1.0s
LON LR LR
comp=Z,1µm,20.0s
**D05A Enumclaw** 92.33 329 eP **P** 03 03 04.6 -1.6
comp=Z,51nm,1.0s
**FFC Flin Flon** 92.36 344 eP **P** 03 03 05.6 -0.6
FFC pmax pmax
comp=Z,49nm,1.3s
**C06D Leavenworth** 92.46 330 P **P** 03 03 06.7 -0.1
baz=93
**E03A Lebam** 92.50 328 eP **P** 03 03 06.4 -0.6
comp=Z,78nm,1.0s
**B05A Bryant** 93.22 330 P **P** 03 03 10.2 -0.1
baz=94
**PFVI Vila Bisbo** 93.61 47 PFAKE 03 03 20.0 +7.6
PFVI LR LR
comp=Z,2µm,21.0s
**MORF Marmelete** 93.83 46 eP **P** 03 03 13.7 +0.2
MORF eS **SKSac** 03 13 48.7 +0.4
MORF AMS AMS 03 45 23.0
comp=Z,2µm,17.2s
**MORF Marmelete** 93.83 46 epP **pP** 03 03 16.3 -0.2
MORF A A 03 03 44.7
comp=Z,29nm,1.6s
**MORF Marmelete** 93.83 46 eP **P** 03 03 13.6 +0.2
MORF eS **SKSac** 03 13 48.6 +0.4
**A04D Lummi Island** 93.83 330 P **P** 03 03 13.2 +0.2
baz=94
**PTEO Sao Teotonio** 93.94 46 epP **pP** 03 03 16.6 -0.4
PTEO A A 03 03 18.5
comp=Z,50nm,1.1s
**PGC Sidney** 94.08 330 eP **P** 03 03 12.2 -2.0
comp=Z,43nm,1.1s
**EDM Edmonton** 94.11 337 eP **P** 03 03 12.4 -1.9
**EDM Edmonton** 94.11 337 eP **P** 03 03 12.4 -1.9
comp=Z,45nm,0.9s
EDM LR LR
comp=Z,1µm,18.0s
**MSVF Nonsavu** 94.16 245 eP **P** 03 03 14.7 -0.9
MSVF pmax pmax
comp=Z,92nm,1.4s
**MSVF Nonsavu** 94.16 245 eP **P** 03 03 14.7 -0.9
comp=Z,92nm,1.4s
**PBDV Barranco-do-Ve** 94.22 47 eP **P** 03 03 15.8 +0.6
comp=Z,50nm,1.4s
**PCVE Castro Verde** 94.41 47 epP **pP** 03 03 19.4 +0.3
PCVE A A 03 03 20.6
comp=Z,35nm,1.6s
**PNCL Nicolau / Gran** 94.43 46 eP **P** 03 03 16.7 +0.6
comp=Z,32nm,1.6s
**MESJ Messejana** 94.44 46 eP **P** 03 03 16.4 +0.3
MESJ eS **SKSac** 03 13 52.2 +0.7
MESJ AMS AMS 03 45 50.4
comp=Z,2µm,20.4s
**MESJ Messejana** 94.44 46 eP **P** 03 03 16.6 +0.4
comp=Z,28nm,1.8s
**MESJ Messejana** 94.44 46 eP **P** 03 03 16.4 +0.3
MESJ eS **SKSac** 03 13 52.1 +0.7
**PVAQ Vaqueiros** 94.45 47 epP **pP** 03 03 19.1 -0.2
PVAQ A A 03 03 20.9
comp=Z,49nm,1.7s
**PVAQ Vaqueiros** 94.45 47 eSKS **SKSac** 03 13 57.8 +6.3
**PVAQ Vaqueiros** 94.45 47 eLQ LQ 03 29 00.9
PVAQ eLR LR 03 32 36.0
comp=Z,1µm,20.0s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TAM** | **Tamanrasset** | **94.47** | **65** | *e*P | **P** | **03 03 17.6** | **+0.7** | | | |
| TAM | | | | pmax | pmax | | | | | |
| | comp=Z,17nm,0.9s | | | | | | | | | |
| TAM | | | | MLR | MLR | | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **TAM** | **Tamanrasset** | **94.47** | **65** | *e*P | **P** | **03 03 17.6** | **+0.7** | | | |
| | comp=Z,17nm,0.9s | | | | | | | | | |
| TAM | | | | LR | LR | | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **PBEJ** | **Beja** | **94.77** | **46** | *e*pP | **pP** | **03 03 21.1** | **+0.3** | | | |
| PBEJ | | | | A | A | 03 03 21.6 | | | | |
| | comp=Z,30nm,1.3s | | | | | | | | | |
| **EVO** | **Evora** | **95.01** | **46** | *e*P | **P** | **03 03 16.9** | **-1.9** | | | |
| | comp=Z,15nm,1.2s | | | | | | | | | |
| EVO | | | | *e*pP | **pP** | **03 03 21.9** | **0.0** | | | |
| **PMTG** | **Montargil** | **95.24** | **45** | *e*P | **P** | **03 03 20.5** | **+0.7** | | | |
| | comp=Z,40nm,1.4s | | | | | | | | | |
| **PBAR** | **Barrancos** | **95.36** | **47** | *e*P | **P** | **03 03 20.1** | **-0.3** | | | |
| | comp=Z,38nm,1.5s | | | | | | | | | |
| **PTOM** | **Tomar** | **95.50** | **45** | *e*P | **P** | **03 03 21.3** | **+0.3** | | | |
| | comp=Z,46nm,1.5s | | | | | | | | | |
| **PMRV** | **Marv??o** | **95.97** | **46** | *e*pP | **pP** | **03 03 25.9** | **-0.3** | | | |
| PMRV | | | | A | A | 03 03 30.8 | | | | |
| | comp=Z,19nm,1.8s | | | | | | | | | |
| **PMRV** | **Marv??o** | **95.97** | **46** | *e*SKS | **SKSac** | **03 14 01.1** | **+1.5** | | | |
| **PMRV** | **Marv??o** | **95.97** | **46** | *e*LQ | LQ | 03 29 53.4 | | | | |
| PMRV | | | | *e*LR | LR | 03 35 47.4 | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **PCBR** | **Castelo Branco** | **96.18** | **45** | *e*pP | **pP** | **03 03 26.8** | **-0.4** | | | |
| PCBR | | | | A | A | 03 03 49.3 | | | | |
| | comp=Z,15nm,1.6s | | | | | | | | | |
| **MTE** | **Manteigas** | **96.51** | **45** | *e*P | **P** | **03 03 24.6** | **-1.1** | | | |
| | comp=Z,28nm,1.4s | | | | | | | | | |
| MTE | | | | *e*pP | **pP** | **03 03 28.5** | **-0.2** | | | |
| **MTE** | **Manteigas** | **96.51** | **45** | *e*SKS | **SKSac** | **03 14 06.1** | **+3.6** | | | |
| **MTE** | **Manteigas** | **96.51** | **45** | *e*LQ | LQ | 03 29 24.3 | | | | |
| MTE | | | | *e*LR | LR | 03 36 22.7 | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **MTE** | **Manteigas** | **96.51** | **45** | PFAKE | | 03 03 40.0 | +14 | | | |
| MTE | | | | LR | LR | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **97.12** | **43** | *e*SKS | **SKSac** | **03 14 09.1** | **+3.5** | | | |
| **PGAV** | **Gavieira, Arco** | **97.12** | **43** | *e*LQ | LQ | 03 29 36.8 | | | | |
| PGAV | | | | *e*LR | LR | 03 36 41.0 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **MVO** | **Moncorvo** | **97.30** | **44** | *e*P | Pdif | 03 03 29.7 | +0.4 | | | |
| | comp=Z,29nm,1.0s | | | | | | | | | |
| **MVO** | **Moncorvo** | **97.30** | **44** | *e*SKS | **SKSac** | **03 14 11.0** | **+4.5** | | | |
| **MVO** | **Moncorvo** | **97.30** | **44** | *e*LQ | LQ | 03 30 06.7 | | | | |
| MVO | | | | *e*LR | LR | 03 38 29.4 | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **LHI** | **Lord Howe Isla** | **97.42** | **223** | PFAKE | | 03 03 40.0 | +10 | | | |
| LHI | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **PAB** | **San Pablo** | **97.85** | **47** | *e*P | **P** | **03 03 28.9** | **-2.9** | | | |
| PAB | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| PAB | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **PAB** | **San Pablo** | **97.85** | **47** | *e*P | **P** | **03 03 28.9** | **-2.9** | | | |
| | comp=Z,10nm,1.1s | | | | | | | | | |
| PAB | | | | LR | LR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **98.16** | **47** | P | Pdif | 03 03 33.5 | +0.3 | | | |
| | comp=Z,4.0nm,0.8s,baz=243,slow=4.1,SNR=19 | | | | | | | | | |
| ESDC | | | | LR | LR | 03 44 38.2 | | | | |
| | comp=Z,940nm,21.8s,baz=205,slow=33 | | | | | | | | | |
| **ES19** | **SONSECA Array** | **98.22** | **47** | *e*P | Pdif | 03 03 33.7 | +0.2 | | | |
| **DZM** | **Mont Dzumac** | **99.61** | **235** | PFAKE | | 03 03 50.0 | +10 | | | |
| DZM | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **MBAR** | **Mbarara** | **101.59** | **99** | PFAKE | | 03 04 00.0 | +11 | | | |
| MBAR | | | | LR | LR | | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **ARMA** | **Armidale** | **102.30** | **219** | PFAKE | | 03 04 00.0 | +7.9 | | | |
| ARMA | | | | LR | LR | | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **102.31** | **342** | P | **Pdif** | **03 03 50.3** | **-0.7** | | | |
| | comp=Z,6.5nm,0.8s,baz=143,slow=4.1,SNR=22 | | | | | | | | | |
| YKA | | | | PP | **PP** | **03 08 01.4** | **-2.5** | | | |
| | comp=Z,1.1nm,0.8s,baz=143,slow=7.7,SNR=3.2 | | | | | | | | | |
| YKA | | | | PKKPbc | **PKKPbc** | **03 19 51.9** | **-2.7** | | | |
| | comp=Z,0.6nm,0.6s,baz=326,slow=3.3,SNR=4.7 | | | | | | | | | |
| **ABPO** | **Ambohimpanom** | **102.58** | **124** | PFAKE | | 03 04 00.0 | +6.4 | | | |
| ABPO | | | | LR | LR | | | | | |
| | comp=Z,8μm,20.0s | | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **103.48** | **331** | PFAKE | | 03 04 10.0 | +14 | | | |
| WRAK | | | | LR | LR | | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **DLBC** | **Dease Lake** | **104.00** | **333** | PFAKE | | 03 04 10.0 | +11 | | | |
| DLBC | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **KEST** | **Kesra** | **104.49** | **57** | Pdiff | **Pdif** | **03 04 05.7** | **+4.3** | | | |
| | comp=Z,3.4nm,0.8s,baz=336,slow=12,SNR=2.9 | | | | | | | | | |
| **DSB** | **Dublin** | **105.29** | **35** | PFAKE | | 03 08 30.0 | | | | |
| DSB | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **VSL** | **Villasalto** | **106.50** | **53** | PFAKE | | 03 08 30.0 | | | | |
| VSL | | | | LR | LR | | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **SSB** | **Saint Sauveur** | **106.53** | **46** | PFAKE | | 03 08 30.0 | | | | |
| SSB | | | | LR | LR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **106.55** | **103** | PFAKE | | 03 08 30.0 | | | | |
| KMBO | | | | LR | LR | | | | | |
| | comp=Z,3μm,19.0s | | | | | | | | | |
| **EIDS** | **Eidsvold** | **106.61** | **222** | PFAKE | | 03 08 30.0 | | | | |
| EIDS | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **SKAG** | **Skagway** | **106.71** | **332** | PFAKE | | 03 08 30.0 | | | | |
| SKAG | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **CWF** | **Charnwood Fore** | **107.46** | **37** | PFAKE | | 03 08 30.0 | | | | |
| CWF | | | | LR | LR | | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **BNI** | **Bardonecchia** | **107.69** | **47** | PFAKE | | 03 08 30.0 | | | | |
| BNI | | | | LR | LR | | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **ESK** | **Eskdalemuir** | **108.02** | **35** | PFAKE | | 03 08 30.0 | | | | |
| ESK | | | | LR | LR | | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **CLTB** | **Caltabellotta** | **108.10** | **57** | PFAKE | | 03 08 30.0 | | | | |
| CLTB | | | | LR | LR | | | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | |
| **WDD** | **Wield Dalam** | **108.16** | **59** | PFAKE | | 03 08 30.0 | | | | |
| WDD | | | | LR | LR | | | | | |
| | comp=Z,6μm,20.0s | | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **108.74** | **46** | PFAKE | | 03 08 40.0 | | | | |
| SENIN | | | | LR | LR | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **PCA** | **Pinnacle** | **109.05** | **331** | PFAKE | | 03 08 40.0 | | | | |
| PCA | | | | LR | LR | | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **VLC** | **Villacollemand** | **109.52** | **49** | PFAKE | | 03 08 40.0 | | | | |
| VLC | | | | LR | LR | | | | | |
| | comp=Z,700nm,19.0s | | | | | | | | | |
| **WLF** | **Walferdange** | **109.77** | **43** | PFAKE | | 03 08 40.0 | | | | |
| WLF | | | | LR | LR | | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **TARA** | **Tarawa** | **109.78** | **257** | PFAKE | | 03 08 40.0 | | | | |
| TARA | | | | LR | LR | | | | | |
| | comp=Z,900nm,19.0s | | | | | | | | | |
| **TUE** | **Stuetta** | **110.02** | **47** | PFAKE | | 03 08 40.0 | | | | |
| TUE | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **BFO** | **Black Forest** | **110.34** | **45** | PFAKE | | 03 08 40.0 | | | | |
| BFO | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **110.50** | **47** | PKKPbc | PKKPbc | 03 19 27.8 | -1.1 | | | |
| | comp=Z,3.1nm,0.8s,baz=286,slow=7.4,SNR=3.0 | | | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **110.65** | **47** | PFAKE | | 03 08 40.0 | | | | |
| FUORN | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **RAGM** | **Ragged Mountai** | **111.01** | **330** | PFAKE | | 03 08 40.0 | | | | |
| RAGM | | | | LR | LR | | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **CUC** | **Castrocucco** | **111.05** | **55** | PFAKE | | 03 08 40.0 | | | | |
| CUC | | | | LR | LR | | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | | |
| **STU** | **Stuttgart** | **111.06** | **45** | PFAKE | | 03 08 40.0 | | | | |
| STU | | | | LR | LR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **BMRM** | **Bremner River** | **111.30** | **330** | PFAKE | | 03 08 40.0 | | | | |
| BMRM | | | | LR | LR | | | | | |
| | comp=Z,800nm,19.0s | | | | | | | | | |
| **TIP** | **Timpagrande** | **111.31** | **57** | PFAKE | | 03 08 40.0 | | | | |
| TIP | | | | LR | LR | | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **EYAK** | **Cordova Ski Ar** | **111.55** | **330** | PFAKE | | 03 08 40.0 | | | | |
| EYAK | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **DIV** | **Divide** | **111.87** | **330** | PFAKE | | 03 08 40.0 | | | | |
| DIV | | | | LR | LR | | | | | |
| | comp=Z,700nm,19.0s | | | | | | | | | |
| **KLU** | **Klutina** | **112.12** | **330** | PFAKE | | 03 08 40.0 | | | | |
| KLU | | | | LR | LR | | | | | |
| | comp=Z,800nm,21.0s | | | | | | | | | |
| **EGAK** | **Eagle** | **112.14** | **335** | PFAKE | | 03 08 40.0 | | | | |
| EGAK | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **TRI** | **Trieste** | **112.37** | **49** | PFAKE | | 03 08 40.0 | | | | |
| TRI | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **GRFO** | **Grafenberg** | **112.66** | **45** | PFAKE | | 03 08 40.0 | | | | |
| GRFO | | | | LR | LR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **112.66** | **45** | *e*PKKPbc | PKKPbc | 03 19 20.3 | -1.2 | | | |
| GRF | | | | *e*PKKPab | **PKKPab** | **03 19 30.3** | **+3.5** | | | |
| GRF | | | | *e*L | L | 03 54 53.2 | | | | |
| | comp=Z,1μm,20.6s | | | | | | | | | |
| **HNR** | **Honiara** | **112.82** | **240** | PFAKE | | 03 08 40.0 | | | | |
| HNR | | | | LR | LR | | | | | |
| | comp=Z,500nm,20.0s | | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **112.88** | **330** | PFAKE | | 03 08 40.0 | | | | |
| SCM | | | | LR | LR | | | | | |
| | comp=Z,800nm,22.0s | | | | | | | | | |
| **RIDG** | **Independ'e Rid** | **112.91** | **333** | PFAKE | | 03 08 40.0 | | | | |
| RIDG | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **KDAK** | **Kodiak Island** | **113.16** | **325** | PFAKE | | 03 08 40.0 | | | | |
| KDAK | | | | LR | LR | | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **CLZ** | **Clausthal** | **113.17** | **42** | *e*PKKPab | PKKPab | 03 19 28.0 | +3.5 | | | |
| **OHAK** | **Old Harbor** | **113.23** | **324** | PFAKE | | 03 08 40.0 | | | | |
| OHAK | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **113.27** | **45** | *e*PKKPbc | PKKPbc | 03 19 19.3 | -0.2 | | | |
| ROTZ | | | | *e*PKKPab | **PKKPab** | **03 19 27.8** | **+3.6** | | | |
| **NRDL** | **Niedersach Rie** | **113.32** | **41** | *e*PKKPbc | PKKPbc | 03 19 19.2 | 0.0 | | | |
| NRDL | | | | *e*PKKPab | **PKKPab** | **03 19 27.2** | **+3.5** | | | |
| **MOX** | **Moxa** | **113.32** | **44** | *e*PKKPbc | PKKPbc | 03 19 19.3 | 0.0 | | | |
| MOX | | | | *e*PKKPab | **PKKPab** | **03 19 27.0** | **+3.1** | | | |
| MOX | | | | *e*L | L | 03 55 28.9 | | | | |
| | comp=Z,2μm,19.7s | | | | | | | | | |
| **WET** | **Wettzell** | **113.38** | **46** | *e*PKKPab | PKKPab | 03 19 27.4 | +3.6 | | | |
| **FURI** | **Furi** | **113.48** | **96** | PFAKE | | 03 08 50.0 | | | | |
| FURI | | | | LR | LR | | | | | |
| | comp=Z,3μm,19.0s | | | | | | | | | |
| **CTAO** | **Charters Tower** | **113.48** | **221** | PFAKE | | 03 08 40.0 | | | | |
| CTAO | | | | LR | LR | | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **PMR** | **Palmer** | **113.50** | **330** | PFAKE | | 03 08 40.0 | | | | |
| PMR | | | | LR | LR | | | | | |
| | comp=Z,700nm,18.0s | | | | | | | | | |
| **SOKA** | **Soboth** | **113.59** | **49** | ⇓*i*PKiKP | **PKiKP** | **03 08 35.1** | **+0.8** | | | |
| | comp=Z,6.6nm,1.6s | | | | | | | | | |
| **NKC** | **Novy Kostel** | **113.61** | **44** | AMS | AMS | 03 55 20.0 | | | | |
| | comp=Z,2μm,19.6s | | | | | | | | | |
| **HOM** | **Homer** | **113.63** | **327** | PFAKE | | 03 08 40.0 | | | | |
| HOM | | | | LR | LR | | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **TANN** | **Tannenbergstha** | **113.70** | **44** | *e*PKKPbc | PKKPbc | 03 19 18.1 | 0.0 | | | |
| TANN | | | | *e*PKKPab | **PKKPab** | **03 19 25.5** | **+3.2** | | | |
| **GEC2** | **GERESS Array S** | **113.73** | **46** | *e*PKKPbc | PKKPbc | 03 19 18.0 | 0.0 | | | |
| GEC2 | | | | *e*PKKPab | **PKKPab** | **03 19 25.6** | **+3.3** | | | |
| **GERES** | **GERESS Array B** | **113.73** | **46** | PKiKP | **PKiKP** | **03 08 34.4** | **-0.2** | | | |
| | comp=Z,1.7nm,0.8s,baz=169,slow=2.0,SNR=7.7 | | | | | | | | | |
| GERES | | | | PKKPbc | **PKKPbc** | **03 19 17.1** | **-0.8** | | | |
| | comp=Z,1.7nm,0.9s,baz=82,slow=1.4,SNR=8.5 | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **113.79** | **46** | *e*PS | PS | 03 19 05.2 | +0.6 | | | |
| KHC | | | | *e*PKKP | **PKKPbc** | **03 19 17.8** | **+0.1** | | | |
| KHC | | | | *ex* | x | 03 19 25.6 | | | | |
| KHC | | | | AMS | AMS | 03 59 00.0 | | | | |
| | comp=Z,2μm,19.5s | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **113.79** | **46** | PFAKE | | 03 08 40.0 | | | | |
| KHC | | | | LR | LR | | | | | |
| | comp=Z,600nm,20.0s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **114.21** | **333** | Pdiff | **Pdif** | **03 04 46.2** | **+2.3** | | | |
| | comp=Z,0.5nm,0.9s,baz=149,slow=3.8,SNR=4.8 | | | | | | | | | |
| ILAR | | | | PKP | **PKiKP** | **03 08 35.5** | **+0.7** | | | |
| | comp=Z,0.9nm,0.7s,baz=164,slow=1.4,SNR=13 | | | | | | | | | |
| ILAR | | | | PP | PP | 03 09 39.6 | +8.9 | | | |
| | comp=Z,2.3nm,0.9s,baz=109,slow=5.0,SNR=5.6 | | | | | | | | | |
| ILAR | | | | PKKPbc | **PKKPbc** | **03 19 15.6** | **-1.0** | | | |
| | comp=Z,0.7nm,0.6s,baz=316,slow=4.2,SNR=13 | | | | | | | | | |
| **RND** | **Reindeer** | **114.28** | **332** | PFAKE | | 03 08 40.0 | +4.9 | | | |
| RND | | | | LR | LR | | | | | |
| | comp=Z,800nm,20.0s | | | | | | | | | |
| **CLL** | **Collm** | **114.40** | **43** | *e*PKKPab | PKKPab | 03 19 22.0 | +2.9 | | | |
| **CLL** | **Collm** | **114.40** | **43** | *e*PS | PS | 03 19 12.0 | +2.0 | | | |
| CLL | | | | *e*SS | SS | 03 25 25.0 | +0.1 | | | |
| CLL | | | | *e* | | 03 27 10.0 | | | | |
| CLL | | | | Lm | MLR | 03 57 00.0 | | | | |
| | comp=N,500nm,20.2s | | | | | | | | | |
| CLL | | | | Lm | MLR | 03 57 00.0 | | | | |
| | comp=E,2μm,19.5s | | | | | | | | | |
| CLL | | | | Lm | MLR | 03 57 00.0 | | | | |
| | comp=Z,2μm,19.2s | | | | | | | | | |
| **CLL** | **Collm** | **114.40** | **43** | PFAKE | | 03 08 50.0 | +14 | | | |
| CLL | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **TIR** | **Tirane** | **114.41** | **56** | PFAKE | | 03 08 50.0 | +14 | | | |
| TIR | | | | LR | LR | | | | | |
| | comp=Z,4μm,20.0s | | | | | | | | | |
| **MCK** | **McKinley** | **114.47** | **332** | PFAKE | | 03 08 50.0 | +15 | | | |
| MCK | | | | LR | LR | | | | | |
| | comp=Z,803nm,18.0s | | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **114.49** | **333** | PFAKE | | 03 08 50.0 | +15 | | | |
| CCB | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **WRH** | **Wood River Hil** | **114.51** | **333** | PFAKE | | 03 08 50.0 | +15 | | | |
| WRH | | | | LR | LR | | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **FYU** | **Fort Yukon** | **114.54** | **335** | PFAKE | | 03 08 50.0 | +15 | | | |
| FYU | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **COLA** | **College** | **114.62** | **333** | *i* PKIKP | PKPdf | 03 08 34.2 | -1.4 | | | |
| **COLA** | **College** | **114.62** | **333** | PFAKE | | 03 08 50.0 | +14 | | | |
| COLA | | | | LR | LR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| **CONA** | **Conrad Observa** | **114.64** | **48** | ⇓*i*PKPdf | PKPdf | 03 08 35.6 | -0.7 | | | |
| | comp=Z,9.6nm,1.7s | | | | | | | | | |
| **PRA** | **Prague** | **114.69** | **45** | AMS | AMS | 03 59 50.0 | | | | |
| | comp=Z,1μm,19.1s | | | | | | | | | |
| **PRU** | **Pruhonice** | **114.72** | **45** | *e*PS | PS | 03 19 12.3 | -0.7 | | | |
| PRU | | | | AMS | AMS | 04 00 00.0 | | | | |
| | comp=Z,1μm,18.7s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **114.75** | **44** | *e*P | PKPdf | 03 08 36.6 | +0.3 | | | |
| | comp=Z,17nm,1.7s | | | | | | | | | |
| BRG | | | | *e* | | 03 19 13.7 | | | | |
| | comp=Z,45nm,2.2s | | | | | | | | | |
| BRG | | | | *e* | | 03 19 20.7 | | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | | |
| BRG | | | | S | PKKPdf | 03 19 29.0 | -9.5 | | | |
| BRG | | | | SS | SS | 03 25 34.0 | +4.5 | | | |
| | comp=N,1μm,24.8s | | | | | | | | | |
| | comp=E,1μm,22.2s | | | | | | | | | |
| | comp=Z,1μm,18.8s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **114.75** | **44** | *e*PKIKP | PKPdf | 03 08 36.6 | +0.3 | | | |
| BRG | | | | *e* | | 03 19 13.7 | | | | |
| BRG | | | | SS | SS | 03 25 34.0 | +4.5 | | | |
| BRG | | | | pmax | pmax | | | | | |
| | comp=Z,17nm,1.7s | | | | | | | | | |
| BRG | | | | pmax | pmax | | | | | |
| | comp=Z,45nm,2.2s | | | | | | | | | |
| BRG | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | | |
| BRG | | | | MLR | MLR | | | | | |
| | comp=N,1μm,24.8s | | | | | | | | | |
| BRG | | | | MLR | MLR | | | | | |
| | comp=E,1μm,22.2s | | | | | | | | | |
| BRG | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,18.8s | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **114.75** | **44** | *e*PKKPbc | PKKPbc | 03 19 14.0 | -0.4 | | | |
| BRG | | | | *e*PKKPab | **PKKPab** | **03 19 20.9** | **+3.3** | | | |
| **MDM** | **Murphy Dome** | **114.80** | **333** | PFAKE | | 03 08 50.0 | +14 | | | |
| MDM | | | | LR | LR | | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **114.83** | **45** | *e*PS | PS | 03 19 18.5 | +4.4 | | | |
| GOPC | | | | AMS | AMS | 04 00 10.0 | | | | |
| | comp=Z,1μm,18.6s | | | | | | | | | |
| **TRF** | **Thorofare Moun** | **114.87** | **331** | PFAKE | | 03 08 50.0 | +14 | | | |
| TRF | | | | LR | LR | | | | | |
| | comp=Z,1μm,21.0s | | | | | | | | | |
| **BWN** | **Browne** | **114.89** | **332** | PFAKE | | 03 08 50.0 | +14 | | | |
| BWN | | | | LR | LR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **114.97** | **45** | *e*PKIKP | PKPdf | 03 08 35.9 | -0.8 | | | |
| PVCC | | | | *e* | | 03 08 43.5 | | | | |
| PVCC | | | | MLR | MLR | | | | | |
| | comp=Z,2μm,20.3s | | | | | | | | | |
| **PVCC** | **Panska Ves** | **114.97** | **45** | *e*PKP | PKPdf | 03 08 35.9 | -0.8 | | | |
| PVCC | | | | *ex* | x | 03 08 43.5 | | | | |
| PVCC | | | | AMS | AMS | 03 56 10.0 | | | | |
| | comp=Z,2μm,20.3s | | | | | | | | | |
| **TREC** | **Trest** | **114.99** | **46** | AMS | AMS | 04 00 30.0 | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **AGG** | **Agios Georgios** | **115.12** | **59** | PFAKE | | 03 08 50.0 | +13 | | | |
| AGG | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **PPLA** | **Purkeypile** | **115.38** | **330** | PFAKE | | 03 08 50.0 | +13 | | | |
| PPLA | | | | LR | LR | | | | | |
| | comp=Z,800nm,20.0s | | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **115.44** | **332** | *e*PKPdf | **PKPdf** | **03 08 35.6** | **-1.7** | | | |
| BPAW | | | | LR | LR | | | | | |
| | comp=Z,900nm,20.0s | | | | | | | | | |
| **CAST** | **Castle Rocks** | **115.57** | **331** | PFAKE | | 03 08 50.0 | +12 | | | |
| CAST | | | | LR | LR | | | | | |
| | comp=Z,800nm,20.0s | | | | | | | | | |
| **VRAC** | **Vranov** | **115.65** | **47** | ⇓PKIKP | PKPdf | 03 08 49.7 | +12 | | | |
| **VRAC** | **Vranov** | **115.65** | **47** | ⇓*i*P | PKPdf | 03 08 49.7 | +12 | | | |
| **DIVS** | **Divibare** | **115.66** | **53** | ⇓*i*P | **PKPdf** | **03 08 39.0** | **+0.6** | | | |
| **MLY** | **Manley** | **115.78** | **333** | PFAKE | | 03 08 50.0 | +12 | | | |
| MLY | | | | LR | LR | | | | | |
| | comp=Z,900nm,18.0s | | | | | | | | | |
| **UPC** | **Upice** | **115.80** | **45** | *e*SP | SP | 03 19 24.4 | +3.1 | | | |
| UPC | | | | AMS | AMS | 03 57 30.0 | | | | |
| | comp=Z,1μm,19.2s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **115.92** | **45** | *e*PKIKP | **PKPdf** | **03 08 39.2** | **+0.6** | | | |
| DPC | | | | *e* | | 03 08 47.5 | | | | |
| DPC | | | | *e*SP | SP | 03 19 23.3 | +0.9 | | | |
| DPC | | | | MLR | MLR | | | | | |
| | comp=Z,800nm,18.3s | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **115.92** | **45** | *e*PKP | **PKPdf** | **03 08 39.2** | **+0.6** | | | |
| DPC | | | | *ex* | x | 03 08 47.5 | | | | |
| DPC | | | | *e*PKKP | **PKKPbc** | **03 19 08.7** | **-1.7** | | | |
| DPC | | | | *e*SP | SP | 03 19 23.3 | +0.9 | | | |
| DPC | | | | AMS | AMS | 04 01 10.0 | | | | |
| | comp=Z,800nm,18.3s | | | | | | | | | |
| **SVW2** | **Sparrevohn** | **116.03** | **328** | PFAKE | | 03 08 50.0 | +12 | | | |
| SVW2 | | | | LR | LR | | | | | |
| | comp=Z,500nm,21.0s | | | | | | | | | |
| **AS01** | **Alice Springs** | **116.20** | **208** | *e*PKPdf | **PKPdf** | **03 08 38.6** | **-1.5** | | | |
| **ASAR** | **Alice Springs** | **116.22** | **208** | Pdiff | **Pdif** | **03 04 56.7** | **+2.7** | | | |
| | comp=Z,0.7nm,0.9s,baz=156,slow=4.9,SNR=4.5 | | | | | | | | | |
| ASAR | | | | PKP | **PKiKP** | **03 08 39.1** | **-1.0** | | | |
| | comp=Z,3.3nm,0.9s,baz=140,slow=2.0,SNR=24 | | | | | | | | | |
| ASAR | | | | PP | **PP** | **03 09 43.9** | **-0.4** | | | |
| | comp=Z,2.1nm,1.0s,baz=149,slow=6.0,SNR=5.4 | | | | | | | | | |
| ASAR | | | | PKKPbc | **PKKPbc** | **03 19 09.4** | **+0.5** | | | |
| | comp=Z,3.9nm,0.8s,baz=337,slow=2.9,SNR=27 | | | | | | | | | |
| **SANT** | **Santorini** | **116.24** | **63** | PFAKE | | 03 08 50.0 | +10 | | | |
| SANT | | | | LR | LR | | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **MORC** | **Moravsky Berou** | **116.41** | **46** | PFAKE | | 03 08 50.0 | +10 | | | |
| MORC | | | | LR | LR | | | | | |
| | comp=Z,5μm,20.0s | | | | | | | | | |
| **COLD** | **Coldfoot** | **116.57** | **335** | PFAKE | | 03 08 50.0 | +11 | | | |
| COLD | | | | LR | LR | | | | | |
| | comp=Z,900nm,20.0s | | | | | | | | | |
| **APE** | **Apeiranthos** | **116.59** | **62** | *c i*PKIKP | **PKPdf** | **03 08 39.6** | **-0.7** | | | |
| **VYHS** | **Vyhne** | **116.69** | **48** | *e*PKIKP | **PKPdf** | **03 08 40.0** | **-0.1** | | | |
| **VYHS** | **Vyhne** | **116.69** | **48** | *e*PKP | **PKPdf** | **03 08 40.0** | **-0.1** | | | |
| **OKC** | **Ostrava-Krasne** | **116.79** | **46** | *e*PKIKP | **PKPdf** | **03 08 41.1** | **+0.9** | | | |
| OKC | | | | MLR | MLR | | | | | |
| | comp=Z,900nm,17.7s | | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **116.79** | **46** | *e*PKP | **PKPdf** | **03 08 41.1** | **+0.9** | | | |
| OKC | | | | *ex* | x | 03 08 50.6 | | | | |
| OKC | | | | AMS | AMS | 04 05 00.0 | | | | |
| | comp=Z,900nm,17.7s | | | | | | | | | |
| **PSZ** | **Piszkesteto** | **117.11** | **49** | PFAKE | | 03 08 50.0 | +9.0 | | | |
| PSZ | | | | LR | LR | | | | | |
| | comp=Z,1μm,18.0s | | | | | | | | | |
| **BZS** | **Buzias** | **117.32** | **52** | ⇑PKIKP | **PKPdf** | **03 08 41.5** | **+0.1** | | | |
| **BZS** | **Buzias** | **117.32** | **52** | ⇑*i*P | **PKPdf** | **03 08 41.5** | **+0.1** | | | |
| **LANS** | **Liptovska Anna** | **117.32** | **48** | *e*PKIKP | **PKPdf** | **03 08 41.7** | **+0.3** | | | |
| **LANS** | **Liptovska Anna** | **117.32** | **48** | *e*PKP | **PKPdf** | **03 08 41.7** | **+0.3** | | | |
| **NB2** | **NORSAR Subarra** | **117.46** | **33** | P | **PKKPbc** | **03 19 06.9** | **+1.7** | | | |
| | comp=Z,6.6nm,1.2s,baz=72,slow=4.4 | | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **117.46** | **33** | P | **PKKPbc** | **03 19 06.9** | **+1.7** | | | |
| | baz=72,slow=4.4 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **117.46** | **33** | PKP | **PKPdf** | **03 08 41.9** | **+0.6** | | | |
| | comp=Z,2.3nm,1.1s,baz=252,slow=1.4,SNR=2.6 | | | | | | | | | |
| NOA | | | | PKKPbc | **PKKPbc** | **03 19 05.2** | **0.0** | | | |
| | comp=Z,8.7nm,1.2s,baz=70,slow=4.4,SNR=4.7 | | | | | | | | | |
| **OJC** | **Ojcow** | **117.92** | **47** | *e*PKP | **PKPdf** | **03 08 42.8** | **+0.4** | | | |
| **OJC** | **Ojcow** | **117.92** | **47** | *e*PKIKP | **PKPdf** | **03 08 42.8**

comp=Z,200nm,18.0s
**MMAI Mount Meron Ar 122.38 70** PKP **PKPdf 03 08 51.6 -0.1**
comp=Z,3.8nm,0.5s,baz=46,slow=2.4,SNR=7.8
**KIS Kishinev 122.48 52** *e*PKP **PKPdf 03 08 51.0 -0.3**
KIS LRM MLR 03 59 00.0
comp=Z,2µm,21.0s
**KIS Kishinev 122.48 52** *e*PKIKP **PKPdf 03 08 51.0 -0.3**
KIS MLR MLR
comp=Z,2µm,21.0s
KIS MLR MLR
comp=N,800nm,20.0s
KIS MLR MLR
comp=Z,2µm,24.0s
**BR231 Keskin MP Arra 122.90 62** *e*PKPdf **PKPdf 03 08 53.4 +1.0**
**MBWA Marble Bar 122.92 195** *e*PKPdf **PKPdf 03 08 49.4 -3.6**
**ANTO Ankara 122.92 61** *e*PKIKP **PKPdf 03 08 50.8 -1.7**
ANTO MLR MLR
comp=Z,1µm,22.0s
**ANTO Ankara 122.92 61** *e*PKPdf **PKPdf 03 08 50.8 -1.7**
ANTO LR LR
comp=Z,1µm,22.0s
**KBS Kingsbay 123.03 13** PFAKE 03 09 00.0 +8.5
KBS LR LR
comp=Z,1µm,20.0s
**ASF Jabal al Asfar 123.21 71** PKP **PKPdf 03 08 53.6 +0.3**
comp=Z,4.6nm,0.9s,baz=96,slow=1.7,SNR=7.0
**BRTR Keskin Array B 123.48 62** PKP **PKPdf 03 08 53.2 -0.4**
comp=Z,8.9nm,0.8s,baz=213,slow=3.0,SNR=26
BRTR PKKPbc **PKKPbc 03 18 43.0 +0.8**
comp=Z,1.2nm,0.8s,baz=78,slow=2.8,SNR=6.4
**KIEV Kiev 123.78 48** *e*PKIKP **PKPdf 03 08 51.4 -2.2**
KIEV MLR MLR
comp=Z,1µm,19.0s
**KIEV Kiev 123.78 48** *e*PKPdf **PKPdf 03 08 51.4 -2.2**
KIEV LR LR
comp=Z,1µm,19.0s
**AKASG Malin Array Be 123.79 48** PKP **PKPdf 03 08 52.4 -1.2**
comp=Z,3.3nm,0.6s,baz=265,slow=2.8,SNR=16
AKASG PKKPbc **PKKPbc 03 18 40.2 -0.8**
comp=Z,0.2nm,0.3s,baz=59,slow=4.3,SNR=6.7
**AKASG Malin Array Be 123.79 48***c i*PKIKP **PKPdf 03 08 52.7 -0.9**
AKASG pmax pmax
comp=Z,3.0nm,0.6s
**MNK Minsk 123.91 44** *e*PKIKP PKPdf 03 08 47.0 -6.8
**MICGM Minsk 123.94 44** *e* PKPdf 03 08 47.0 -6.8
**VSU Vasula 124.20 39** PKIKP **PKPdf 03 08 53.8 -0.4**
**H11S2 WAKE ISLAND Hyl 24.30 270** T T 05 28 52.8
baz=120
**H11S1 WAKE ISLAND Hyl 24.31 270** T T 05 28 55.2
baz=120
**H11S3 WAKE ISLAND Hyl 24.31 270** T T 05 28 47.9
baz=120
**FINES FINESS Array B 124.45 35** PKP **PKPdf 03 08 54.1 -0.4**
comp=Z,5.4nm,1.0s,baz=214,slow=1.0,SNR=5.0
**H11N3 WAKE ISLAND Hyl 24.73 271** T T 05 29 06.9
baz=110
**H11N1 WAKE ISLAND Hyl 24.74 271** T T 05 28 34.3
baz=110
**H11N2 WAKE ISLAND Hyl 24.75 271** T T 05 29 11.4
baz=110
**ARCES ARCESS Array B 125.32 25** PKP **PKPdf 03 08 56.6 +0.5**
comp=Z,3.0nm,0.7s,baz=239,slow=2.3,SNR=15
**SIM Simferopol' 125.42 56** *i* PKIKP **PKPdf 03 08 59.7 +2.7**
SIM pmax pmax
comp=Z,16nm,0.8s
**RAYN Ar Rayn 126.53 85** *e*PKPdf **PKPdf 03 09 00.4 +0.6**
RAYN LR LR
comp=Z,2µm,22.0s
**MALT Malatya 126.55 65** ⇑PKIKP **PKPdf 03 09 00.1 +0.6**
**MALT Malatya 126.55 65** ⇑*i* P **PKPdf 03 09 00.1 +0.6**
**MANU Manus Island 126.81 235** PFAKE 03 09 10.0 +9.3
MANU LR LR
comp=Z,400nm,21.0s
**MTN Manton Dam 127.07 211** *e*PKPdf **PKPdf 03 08 59.9 -1.3**
MTN LR LR
comp=Z,2µm,20.0s
**ANN Anapa 127.66 57** *i* PKIKP PKPdf 03 08 52.3 -8.9
ANN pmax pmax
comp=Z,124nm,1.2s
ANN MLR MLR
comp=Z,1µm,24.0s
**LVZ Lovozero 128.61 27** PKIKP **PKPdf 03 09 02.7 +0.3**
**OBN Obninsk 129.00 44** PKP **PKPdf 03 09 03.5 +0.1**
comp=Z,6.8nm,0.3s,baz=20,slow=2.6,SNR=10
**OBN Obninsk 129.00 44** ⇑*i*PKIKP **PKPdf 03 09 03.5 +0.1**
OBN 03 11 19.0
OBN *e*PS **PS 03 21 20.4 +0.3**
OBN pmax pmax
comp=Z,78nm,1.6s
OBN MLR MLR
comp=Z,968nm,19.0s
**OBN Obninsk 129.00 44** *e*PKPdf **PKPdf 03 09 02.1 -1.3**
**MOS Moscow 129.66 43** *e*PKIKP **PKPdf 03 09 05.1 +0.4**
MOS MLR MLR
comp=Z,2µm,20.0s
**ABTO Aybut 129.99 96** PKPdf **PKPdf 03 09 07.2 +0.6**
SNR=8.0
**LPSR Galich'ya Gora 130.08 47** *e*PKIKP **PKPdf 03 09 05.5 -0.1**
LPSR pmax pmax
comp=N,10.0nm,1.1s
LPSR pmax pmax
comp=Z,20nm,1.1s
LPSR pmax pmax
comp=E,10.0nm,0.8s
**VORD Divnogorie 130.09 49** *e*PKIKP **PKPdf 03 09 03.2 -2.5**
VORD pmax pmax
comp=Z,20nm,1.6s
VORD pmax pmax
comp=N,8.0nm,0.6s
VORD pmax pmax
comp=E,10.0nm,1.0s
**TMCR Tamitsa 130.12 32** *e*PKIKP **PKPdf 03 09 06.0 +0.7**
TMCR *e* 03 11 20.0
TMCR pmax pmax
comp=Z,45nm,1.4s
**NEY Neytrino 131.01 60** *i* PKIKP **PKPdf 03 09 08.5 +0.5**
**KIV Kislovodsk 131.14 59** *i* PKIKP **PKPdf 03 09 08.2 +0.1**
KIV *e* 03 11 25.2
KIV *e*PS **PS 03 21 38.8 -0.6**
KIV *e*SS SS 03 28 58.0 -0.2
KIV pmax pmax
comp=Z,33nm,1.1s
**KIV Kislovodsk 131.14 59** PKPdf **PKPdf 03 09 09.0 +1.0**
SNR=6.1
**KIV Kislovodsk 131.14 59** *e*PKPdf **PKPdf 03 09 08.8 +0.7**
KIV LR LR
comp=Z,700nm,20.0s
**KBZ Khabaz 131.24 59** PKP **PKPdf 03 09 08.4 +0.4**
comp=Z,7.5nm,1.1s,baz=188,slow=1.5,SNR=7.1
KBZ SKPbc **SKPbc 03 12 33.1 +0.1**
comp=Z,4.3nm,1.1s,baz=222,slow=3.6,SNR=4.8
**IDHR Dehrash 131.52 72** *e*P **PKPdf 03 09 08.5 -0.8**
**IGHG Ghaleghazi 131.54 73** *e*P **PKPdf 03 09 09.2 -0.1**
**VRH Novokhopyorsk 131.64 49** *e*PKIKP **PKPdf 03 09 08.4 -0.2**
VRH pmax pmax
comp=Z,10.0nm,0.8s
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=E,7.0nm,0.5s
**NCK Nalchik 131.69 60** ⇑*i* PKIKP **PKPdf 03 09 10.0 +1.0**
**GNI Garni 131.77 65***d i* PKIKP **PKPdf 03 09 09.9 +0.4**
**GNI Garni 131.77 65** PKPdf **PKPdf 03 09 11.1 +1.6**
SNR=5.2
**IVIS Veis 131.83 72** *e*P **PKPdf 03 09 09.1 -0.6**
**ISHB Shabestar 131.96 67** *e*P **PKPdf 03 09 09.5 -0.5**
**IKOM Komasi 132.24 73** *e*P **PKPdf 03 09 10.4 -0.1**
**BATI Baumata 132.31 204** PKP **PKPdf 03 09 11.8 +0.6**
comp=E,27nm,0.6s,baz=176,slow=2.4,SNR=7.4
**SOEI Soe 132.53 205** *e*PKPdf **PKPdf 03 09 09.3 -2.4**
SOEI LR LR
comp=Z,2µm,20.0s
**BILL Bilibino 132.87 334** *e*PKIKP **PKPdf 03 09 10.9 +0.5**
**BILL Bilibino 132.87 334** *e*PKPdf **PKPdf 03 09 10.9 +0.5**
**IHRS Heris 133.05 68** *e*P **PKPdf 03 09 10.8 -1.3**
**MMRI Maumere 134.25 202** PFAKE 03 09 20.0 +5.2
MMRI LR LR
comp=Z,900nm,18.0s
**MAK Makhachkala 134.39 61** *e*P **Pdif 03 06 16.5 +2.4**
MAK *i* 03 09 14.5
MAK *e* 03 11 45.2
MAK *e*PPP PPP 03 14 42.0
MAK *e* 03 16 24.6
MAK pmax pmax
comp=Z,780nm,1.2s

**IPIR Pirpir 134.45 76** *e*P **PKPdf 03 09 13.9 -1.1**
**FAKI Fak Fak 135.23 219** PFAKE 03 09 30.0 +13
FAKI LR LR
comp=Z,2µm,18.0s
**IGAR Gharneh 135.29 77** *e*P **PKPdf 03 09 15.6 -0.8**
**UOSS Wadi Hilu 135.94 89** *e*PKPdf **PKPdf 03 09 16.8 -0.8**
UOSS LR LR
comp=Z,2µm,19.0s
**IAFJ Afjeh 136.02 72** *e*P **PKPdf 03 09 17.6 -0.2**
**ISAD Sadrabad 136.45 78** *e*P **PKPdf 03 09 18.2 -0.5**
**SIJI Sorong 137.48 219** PKhKP PKPpre 03 09 12.2
comp=Z,12nm,0.2s,baz=336,slow=5.7,SNR=4.3
SIJI PKP **PKPdf 03 09 21.3 +0.5**
comp=Z,23nm,0.2s,baz=276,slow=23,SNR=9.1
**CISI Cisompet, Garu 137.89 182** *e*PKPdf **PKPdf 03 09 19.7 -1.9**
CISI LR LR
comp=Z,1µm,19.0s
**KAPI Kappang 138.42 201** PKhKP PKPpre 03 09 17.2
comp=Z,12nm,0.7s,baz=269,slow=4.5,SNR=5.8
**KAPI Kappang 138.42 201** PKPpre PKPpre 03 09 17.2
KAPI LR LR
comp=Z,800nm,18.0s
**LEM Lembang 138.62 182** PKhKP PKPpre 03 09 14.2
comp=Z,14nm,0.4s,baz=162,slow=10.0,SNR=3.5
LEM PKP **PKPdf 03 09 22.5 -0.5**
comp=Z,83nm,0.7s,baz=18,slow=9.1,SNR=10.0
**PET Petropavlovsk 139.05 313** *i* PKHKP PKPpre 03 09 11.3
PET *e*PPS PPS 03 24 24.6
PET pmax pmax
comp=Z,200nm,14.7s
PET pmax pmax
comp=Z,400nm,14.5s
**SOKR Solikamsk 139.57 37***d i* PKIKP **PKPdf 03 09 21.2 -1.9**
SOKR pmax pmax
comp=Z,10.0nm,1.1s
**PEA0 Petropavlovsk- 139.62 313** *e*PKPdf **PKPdf 03 09 25.2 +1.7**
**PETK Petropavlovsk- 139.62 313** PKP **PKPdf 03 09 24.5 +1.1**
comp=Z,21nm,1.0s,baz=112,slow=6.6,SNR=9.4
**SEY Seymchan 139.94 329** PKIKP **PKPdf 03 09 24.7 +1.0**
**TNTI Ternate 140.83 215** PFAKE 03 09 40.0 +13
TNTI LR LR
comp=Z,600nm,20.0s
**LUWI Luwuk 141.14 207** PFAKE 03 09 40.0 +13
LUWI LR LR
comp=Z,800nm,21.0s
**ISFR Sfrayin 141.23 72** *e*P PKPdf 03 09 21.3 -5.9
**ARU Arti 141.28 41** PKhKP PKPpre 03 09 20.3
comp=Z,0.5nm,0.2s,baz=8.5,slow=24,SNR=2.3
**ARU Arti 141.28 41** *i* PKHKP PKPpre 03 09 20.6
ARU MLR MLR
comp=Z,2µm,19.0s
**ARU Arti 141.28 41** *e*PKPpre PKPpre 03 09 20.7
ARU LR LR
comp=Z,2µm,19.0s
**GEYT Alibeck 141.49 71** PKhKP PKPpre 03 09 21.6
comp=Z,3.4nm,0.3s,baz=278,slow=5.4,SNR=6.7
**MA2 Magadan 141.91 325** PKIKP **PKPdf 03 09 25.1 -2.3**
**AKTO Aktyubinsk 141.95 51** PKhKP PKPpre 03 09 22.0
comp=Z,13nm,0.8s,baz=357,slow=0.6,SNR=18
**AKTO Aktyubinsk 141.95 51** PKHKP PKPpre 03 09 21.4
AKTO pmax pmax
comp=Z,21nm,1.0s
**AKTO Aktyubinsk 141.95 51** PKPpre PKPpre 03 09 22.0
**SVE Sverdlovsk 142.28 40** *i* PKIKP **PKPdf 03 09 25.1 -3.0**
SVE *e*PPP PPP 03 15 42.9
SVE pmax pmax
comp=Z,44nm,1.8s
SVE MLR MLR
comp=Z,2µm,20.0s
SVE MLR MLR
comp=E,2µm,20.0s
**AB31 Akbulak array 143.31 52** PKIKP PKPbc 03 09 26.7 -0.6
AB31 pmax pmax
comp=Z,65nm,0.9s
**ABKAR Akbulak array 143.31 52** *e*PKPpre PKPbc 03 09 26.7 -0.5
**PALK Pallekele 143.97 133** PKP PKPab 03 09 29.9 +0.2
comp=Z,42nm,0.9s,baz=297,slow=1.6,SNR=11
**PALK Pallekele 143.97 133** *e*PKIKP PKPbc 03 09 30.1 -0.2
PALK MLR MLR
comp=Z,2µm,20.0s
**PALK Pallekele 143.97 133** PKPdf PKPbc 03 09 30.5 +0.2
SNR=6.0
**PALK Pallekele 143.97 133** *e*PKPdf PKPbc 03 09 30.1 -0.2
PALK LR LR
comp=Z,2µm,20.0s
**BKNI Bangkinang 145.41 171** *e*PKPbc **PKPbc 03 09 34.4 -0.5**
BKNI LR LR
comp=Z,1µm,21.0s
**GSI Gunungsitoli 145.76 165** *e*PKPdf **PKPdf 03 09 35.7 +0.1**
**KSM Kuching 146.66 188** *e*PKPdf **PKPdf 03 09 37.6 +0.5**
KSM LR LR
comp=Z,1µm,20.0s
**KUR Kuril'sk 146.73 301** *i* PKP2 **PKPdf 03 09 36.5 +0.3**
KUR *e* 03 13 04.6
KUR pmax pmax
comp=Z,284nm,1.1s
**POO Poona 147.07 111** ⇑*i* PS **PKPdf 03 09 34.0 -3.6**
comp=Z,531nm,1.4s
**MYKOM Kota Tinggi 147.13 176** *e*PKPdf **PKPdf 03 09 37.1 -0.8**
MYKOM *e*PKPbc **PKPbc 03 09 39.5 -0.5**
MYKOM LR LR
comp=Z,2µm,22.0s
**URV Uravakonda 147.35 120** *e*PKPbc **PKPdf 03 09 38.2 +0.1**
URV *e*PKiKP **PKPbc 03 09 40.2 -0.3**
**SBUM Sibu 147.37 191** *e*PKPdf **PKPdf 03 09 38.4 +0.1**
SBUM *e*PKPbc **PKPbc 03 09 41.1 +0.5**
SBUM LR LR
comp=Z,1µm,20.0s
**PSI Prapat 147.49 166** PKPbc **PKPbc 03 09 40.4 -0.7**
comp=Z,188nm,0.9s,baz=199,slow=3.3,SNR=69
**PSI Prapat 147.49 166** *e*PKIKP **PKPdf 03 09 37.9 -0.8**
PSI *e* 03 09 40.6
PSI MLR MLR
comp=Z,2µm,19.0s
**PSI Prapat 147.49 166** *e*PKPdf **PKPdf 03 09 37.9 -0.8**
PSI *e*PKPbc **PKPbc 03 09 40.6 -0.6**
PSI LR LR
comp=Z,2µm,19.0s
**SKHT Srikalahasti 148.22 125** *e*PKPdf **PKPdf 03 09 39.1 -0.4**
SKHT *e*PKIKP **PKPbc 03 09 43.2 +0.3**
**YUK Yuzh-Kuril'sk 148.23 299** *i* PKP2 **PKPbc 03 09 41.6 -0.5**
YUK pmax pmax
comp=Z,307nm,1.4s
**MYLDM Lahad Datu 148.44 204** *e*PKPdf **PKPdf 03 09 36.2 -3.8**
MYLDM *e*PKPbc **PKPbc 03 09 42.7 -0.8**
**BRVK Borovoye 148.76 43** *e*PKIKP **PKPdf 03 09 40.0 +0.7**
BRVK *e* 03 09 44.1
BRVK MLR MLR
comp=Z,2µm,20.0s
**BRVK Borovoye 148.76 43** PKPdf **PKPdf 03 09 39.7 +0.4**
SNR=41
**BRVK Borovoye 148.76 43** *e*PKPdf **PKPdf 03 09 40.0 +0.7**
BRVK *e*PKPbc **PKiKP 03 09 44.0 -0.5**
BRVK LR LR
comp=Z,2µm,20.0s
**BVA0 Borovoye Array 148.84 43** PKIKP **PKPdf 03 09 39.9 +0.4**
BVA0 pmax pmax
comp=Z,504nm,2.1s
**BVAR Borovoye Array 148.84 43** PKPbc **PKPbc 03 09 42.2 -1.1**
comp=Z,11nm,0.6s,baz=312,slow=5.1,SNR=25
**YAK Yakutsk 148.93 339** *e*PKP2 **PKPbc 03 09 42.3 -1.0**
YAK *e* 03 13 16.0
YAK *e* 03 16 40.9
YAK *e*SS SS 03 32 24.2 -0.3
YAK pmax pmax
comp=Z,820nm,1.8s
YAK pmax pmax
comp=E,192nm,1.9s
YAK pmax pmax
comp=N,255nm,2.0s
YAK pmax pmax
comp=Z,485nm,4.2s
YAK pmax pmax
comp=N,236nm,3.5s
**YAK Yakutsk 148.93 339** *e*PKPdf **PKPdf 03 09 39.3 0.0**
YAK *e*PKPbc **PKPbc 03 09 42.9 -0.3**
YAK LR LR
comp=Z,700nm,22.0s
**TYV Tymovskoe 149.16 313** *e*PKP2 **PKPbc 03 09 45.0 +0.8**
TYV pmax pmax
comp=Z,75nm,1.0s
**LHMI Lhok Sumawe 149.39 162** *e*PKPdf **PKPdf 03 09 39.3 -2.3**
LHMI *e*PKPbc **PKPbc 03 09 45.3 -0.7**
**IPM Ipoh 149.49 170** *e*PKPdf **PKPdf 03 09 41.5 -0.3**
IPM *e*PKPbc **PKPbc 03 09 45.8 -0.4**

IPM LR LR
comp=Z,1µm,22.0s
**NKL Nikolayevsk 149.52 318** *e*PKIKP **PKPdf 03 09 42.0 +1.5**
NKL pmax pmax
comp=Z,170nm,1.0s
NKL pmax pmax
comp=Z,2µm,4.5s
**KBL Kabul 149.55 80** *e*PKHKP **PKPdf 03 09 41.7 +0.2**
KBL MLR MLR
comp=Z,1µm,20.0s
**KBL Kabul 149.55 80** *e*PKPdf **PKPdf 03 09 41.6 +0.2**
KBL *e*PKPbc **PKPbc 03 09 45.4 -0.7**
KBL LR LR
comp=Z,1µm,20.0s
**ADKI Addanki 149.87 122** *e*PKPdf **PKPdf 03 09 42.4 +0.2**
ADKI *e*PKiKP **PKPbc 03 09 47.1 +0.1**
**NJS Nagarjunasagar 149.88 120** *e*PKPdf **PKPdf 03 09 42.1 -0.1**
NJS *e*PKiKP **PKPbc 03 09 46.8 -0.2**
**HYB Hyderabad 149.91 118** *i* PKP **PKPdf 03 09 42.0 -0.3**
HYB *e* 03 09 46.5
HYB *e* 03 09 55.5
HYB *e* 03 10 01.5
**HYBB Hyderabad (bro 149.91 118** *e*PKiKP **PKPbc 03 09 47.0 -0.1**
**DZET Dzherino 149.94 71** PKHKP PKPpre 03 09 42.4
DZET pmax pmax
comp=Z,125nm,0.7s
**KKM Kota Kinabalu 149.96 200** *e*PKPbc **PKPbc 03 09 47.0 -0.5**
KKM LR LR
comp=Z,800nm,18.0s
**YSS Yuzh-Sakhalins 150.05 305** *i* PKIKP **PKPdf 03 09 39.0 -2.5**
YSS *i* 03 09 45.0
YSS *i* 03 09 45.0
YSS *e*PPP PPP 03 16 54.0
YSS pmax pmax
comp=Z,40nm,1.3s
YSS MLR MLR
comp=Z,300nm,19.0s
**YSS Yuzh-Sakhalins 150.05 305** *e*PKPdf **PKPdf 03 09 39.5 -2.1**
YSS *e*PKPbc **PKPbc 03 09 46.2 -0.3**
YSS LR LR
comp=Z,400nm,21.0s
**KULM Kulim 150.23 169** *e*PKPdf **PKPdf 03 09 42.3 -0.6**
KULM *e*PKPbc **PKPbc 03 09 47.8 -0.2**
KULM LR LR
comp=Z,2µm,20.0s
**ERM Erimo 150.30 295** PKIKP **PKPdf 03 09 41.5 -0.6**
**ERM Erimo 150.30 295** *e*PKPdf **PKPdf 03 09 41.5 -0.6**
ERM *e*PKPbc **PKiKP 03 09 47.9 -0.2**
ERM LR LR
comp=Z,700nm,20.0s
**ASAJ Asahikawa 150.57 300** PKPbc **PKPbc 03 09 47.7 -0.2**
comp=Z,86nm,0.8s,baz=100,slow=5.2,SNR=9.6
**KK31 Karatay Array 151.20 62** *i* PKIKP **PKPbc 03 09 49.4 -0.1**
KK31 pmax pmax
comp=Z,48nm,0.9s
**KKAR Karatay Array 151.20 62** *e*PKIKP **PKPdf 03 09 43.6 +0.1**
KKAR *e* 03 09 49.6
**KKAR Karatay Array 151.20 62** *e*PKPdf **PKPdf 03 09 43.6 +0.1**
KKAR *e*PKPbc **PKPbc 03 09 49.6 +0.2**
**OTUK Ortayu 151.55 51** PKIKP **PKPdf 03 09 43.6 -0.3**
OTUK pmax pmax
comp=Z,97nm,1.4s
**PVM Polavaram 151.99 122** *e*PKPdf **PKPdf 03 09 45.7 +0.3**
PVM *e*PKiKP **PKPbc 03 09 52.0 +0.1**
**MNAS Manas 152.71 63** PKIKP **PKPdf 03 09 45.9 -0.1**
MNAS pmax pmax
comp=Z,76nm,1.8s
**SFK Sufi-Kurgan 153.60 69** PKIKP **PKPdf 03 09 47.3 -0.2**
SFK pmax pmax
comp=Z,80nm,0.9s
**EKS2 Erkin-Say 153.63 63** *e*PKIKP **PKPdf 03 09 47.6 +0.3**
EKS2 *e* 03 09 55.6
EKS2 MLR MLR
comp=Z,2µm,20.0s
**EKS2 Erkin-Say 153.63 63** *e*PKPdf **PKPdf 03 09 47.6 +0.3**
EKS2 *e*PKPbc **PKiKP 03 09 55.6 +0.5**
EKS2 LR LR
comp=Z,2µm,20.0s
**MJAR Matsushiro Arr 153.98 283** PKP **PKPdf 03 09 47.2 -0.7**
comp=Z,2.9nm,0.9s,baz=58,slow=0.9,SNR=8.8
MJAR PKPbc **PKPbc 03 09 55.1 -0.8**
comp=Z,3.9nm,0.6s,baz=114,slow=1.5,SNR=9.4
MJAR PKPab **PKPab 03 10 09.6 +0.3**
comp=Z,11nm,0.9s,baz=108,slow=1.8,SNR=9.3
**MAJO Matsushiro 153.98 283** PKIKP **PKPdf 03 09 45.6 -2.2**
**MAJO Matsushiro 153.98 283** *e*PKPdf **PKPdf 03 09 45.6 -2.2**
MAJO *e*PKPbc **PKPbc 03 09 55.3 -0.6**
MAJO LR LR
comp=Z,700nm,21.0s
**MAT Matsushiro 153.98 283** PKP **PKPdf 03 09 46.1 -1.7**
**AAK Ala-Archa 154.16 63** PKP **PKPdf 03 09 48.3 +0.2**
comp=Z,2.9nm,0.7s,baz=126,slow=4.6,SNR=6.9
AAK PKPbc **PKiKP 03 09 56.8 +0.5**
comp=Z,25nm,0.8s,baz=216,slow=4.6,SNR=15
**AAK Ala-Archa 154.16 63** *e*PKIKP **PKPdf 03 09 48.5 +0.4**
AAK *e* 03 09 55.8
AAK MLR MLR
comp=Z,2µm,21.0s
**AAK Ala-Archa 154.16 63** PKPdf **PKPbc 03 09 57.4 +1.1**
SNR=7.0
**AAK Ala-Archa 154.16 63** *e*PKPdf **PKPdf 03 09 48.5 +0.4**
AAK *e*PKPbc **PKPbc 03 09 55.8 -0.4**
AAK LR LR
comp=Z,2µm,21.0s
**FRU Bishkek 154.22 62** *e*PKIKP **PKPdf 03 09 50.0 +2.0**
FRU *i* 03 09 57.0
FRU *e* 03 13 43.0
FRU pmax pmax
comp=Z,230nm,2.6s
**NVS Novosibirsk 154.36 31** *e*PKIKP **PKPdf 03 09 48.2 +0.5**
NVS *e* 03 13 54.7
NVS pmax pmax
comp=N,15nm,1.3s
NVS pmax pmax
comp=E,17nm,1.3s
NVS pmax pmax
comp=Z,69nm,1.3s
**KURBB Kurchatov Arra 154.43 43** PKP **PKPdf 03 09 47.6 -0.3**
comp=Z,3.4nm,0.9s,baz=298,slow=2.0,SNR=19
KURBB PKPbc **PKiKP 03 09 57.6 +1.3**
comp=Z,14nm,0.9s,baz=298,slow=2.5,SNR=29
**KURK Kurchatov 154.44 43** *e*PKIKP **PKPdf 03 09 47.2 -0.7**
KURK MLR MLR
comp=Z,3µm,20.0s
**KURK Kurchatov 154.44 43** *e*PKPdf **PKPdf 03 09 47.2 -0.7**
KURK PKPbc **PKiKP 03 09 57.6 +1.3**
KURK LR LR
comp=Z,3µm,20.0s
**CLNS Chul'man 154.52 336** *e*PKIKP **PKPbc 03 09 55.3 -1.1**
CLNS pmax pmax
comp=N,5.0nm,1.0s
CLNS pmax pmax
comp=N,18nm,1.1s
CLNS pmax pmax
comp=E,5.0nm,1.6s
**CHLP Challavanipeta 154.53 124** *e*PKPdf **PKPdf 03 09 48.7 -0.4**
**HABR Khabarovsk 154.62 311** *e*PKIKP **PKPdf 03 09 46.9 -1.4**
HABR *e* 03 09 50.3
HABR *e* 03 10 10.3
HABR *e* 03 13 46.2
HABR *e* 03 16 53.7
HABR *e*PPP PPP 03 17 15.9
HABR *e*SS SS 03 33 28.1 -0.6
HABR *e*SSS SSS 03 39 22.4
HABR pmax pmax
comp=Z,175nm,2.7s
**NDI New Delhi 154.67 96** *e*P **PKPdf 03 09 47.0 -2.0**
**TKM2 Tokmak 2 154.92 62** *e*PKIKP **PKPdf 03 09 47.2 -2.0**
TKM2 MLR MLR
comp=Z,2µm,20.0s
**TKM2 Tokmak 2 154.92 62** *e*PKPdf **PKPdf 03 09 47.2 -2.0**
TKM2 LR LR
comp=Z,2µm,20.0s
**KSH Kashi 155.51 70** PKP **PKPdf 03 09 50.3 +0.3**
KSH PP **PP 03 13 52.8 -0.2**
KSH SKS **SKSdf 03 16 56.3 -0.4**
KSH SS **SS 03 33 33.8 -5.9**
KSH PPMZ
comp=Z,510nm,4.9s
KSH LN
comp=Z,370nm,12.1s
KSH LE
comp=Z,250nm,6.2s
KSH LZ

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,850nm,22.3s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **155.65** | **31** | PKP | **PKPdf** | 03 09 49.1 | -0.4 | | |
| | comp=Z,8.1nm,0.8s,baz=298,slow=3.2,SNR=20 | | | | | | | | |
| ZALV | | | | PKPbc | PKPbc | 03 09 59.6 | | | |
| | comp=Z,22nm,0.9s,baz=285,slow=2.5,SNR=16 | | | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **03 10 17.0** | **+1.3** | | |
| | comp=Z,47nm,0.9s,baz=298,slow=5.0,SNR=14 | | | | | | | | |
| **KLR** | **Kul'dur** | **156.28** | **315** | *e*PKIKP | **PKPdf** | **03 09 45.6** | **-4.9** | | |
| KLR | | | | *e* | | 03 09 46.0 | | | |
| KLR | | | | *e* | | 03 10 15.2 | | | |
| KLR | | | | *e* | | 03 14 00.0 | | | |
| KLR | | | | pmax | pmax | | | | |
| | comp=Z,160nm,2.0s | | | | | | | | |
| **BOD** | **Bodaibo** | **156.34** | **350** | *e*PKIKP | **PKPdf** | **03 09 46.8** | **-3.5** | | |
| **PDGK** | **Podgornoye** | **157.64** | **60** | PKIKP | **PKPdf** | **03 09 51.5** | **-0.9** | | |
| PDGK | | | | pmax | pmax | | | | |
| | comp=Z,63nm,0.9s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **158.04** | **303** | PKPbc | PKPdf | 03 10 04.0 | +11 | | |
| | comp=Z,1.6nm,0.6s,baz=129,slow=2.7,SNR=6.6 | | | | | | | | |
| USRK | | | | PKPab | **PKPab** | **03 10 26.6** | **+0.2** | | |
| | comp=Z,4.7nm,0.8s,baz=84,slow=4.5,SNR=9.0 | | | | | | | | |
| USRK | | | | PP | **PP** | **03 14 07.7** | **+1.2** | | |
| | comp=Z,1.2nm,0.9s,baz=99,slow=7.4,SNR=4.1 | | | | | | | | |
| **MAKZ** | **Makanchi** | **158.17** | **49** | PFAKE | | 03 10 00.0 | +7.0 | | |
| MAKZ | | | | LR | LR | | | | |
| | comp=Z,4μm,22.0s | | | | | | | | |
| **MK31** | **Makanchi Array** | **158.37** | **49** | PKIKP | **PKPdf** | **03 09 52.5** | **-0.8** | | |
| MK31 | | | | pmax | pmax | | | | |
| | comp=Z,27nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **158.37** | **49** | PKP | **PKPdf** | **03 09 53.4** | **+0.1** | | |
| | comp=Z,2.4nm,0.7s,baz=323,slow=1.8,SNR=16 | | | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **03 10 28.0** | **+0.2** | | |
| | comp=Z,26nm,0.7s,baz=290,slow=4.6,SNR=27 | | | | | | | | |
| **MK01** | **Makanchi Array** | **158.38** | **49** | *e*PKPdf | **PKPdf** | **03 09 52.1** | **-1.2** | | |
| MK01 | | | | *e*PKPab | **PKPab** | **03 10 27.6** | **-0.3** | | |
| **KOLN** | **Koldanda** | **159.50** | **104** | *e*P | **PKPdf** | **03 09 54.8** | **-0.7** | | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **159.54** | **306** | PKP | **PKPdf** | **03 09 53.8** | **-0.9** | | |
| MDJ | | | | PKS | **PKSdf** | **03 13 30.4** | **+2.4** | | |
| MDJ | | | | PP | **PP** | **03 14 17.4** | **+2.8** | | |
| MDJ | | | | SS | SS | 03 34 24.5 | +2.8 | | |
| MDJ | | | | PPMZ | | | | | |
| | comp=Z,260nm,8.3s | | | | | | | | |
| MDJ | | | | LN | | | | | |
| | comp=Z,110nm,8.6s | | | | | | | | |
| MDJ | | | | LE | | | | | |
| | comp=Z,760nm,26.4s | | | | | | | | |
| MDJ | | | | LZ | | | | | |
| | comp=Z,1μm,21.6s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **159.54** | **306** | PFAKE | | 03 10 00.0 | +5.3 | | |
| MDJ | | | | LR | LR | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| **DANN** | **Dangsing** | **159.87** | **102** | *e*P | **PKPdf** | **03 09 56.1** | **+0.1** | | |
| **GKN** | **Gorkha** | **160.43** | **104** | *e*P | **PKPdf** | **03 09 55.7** | **-0.7** | | |
| | comp=Z,83nm,1.2s | | | | | | | | |
| **DMN** | **Daman** | **160.62** | **106** | *e*P | **PKPdf** | **03 09 56.3** | **-0.5** | | |
| **PKIN** | **Phulchoki** | **160.84** | **106** | *e*P | **PKPdf** | **03 09 56.1** | **-0.9** | | |
| | comp=Z,130nm,1.7s | | | | | | | | |
| **KKN** | **Kakani** | **160.84** | **106** | *e*P | **PKPdf** | **03 09 56.4** | **-0.6** | | |
| **PKI** | **Pulchoki** | **160.85** | **106** | *e*P | **PKPdf** | **03 09 56.3** | **-0.8** | | |
| **HVS** | **Khovu-Aksy** | **161.30** | **25** | PKIKP | **PKPdf** | **03 09 56.5** | **0.0** | | |
| **GUN** | **Gumba** | **161.37** | **106** | *e*P | **PKPdf** | **03 09 57.3** | **-0.4** | | |
| **RAMN** | **Ramite** | **161.49** | **110** | *e*P | **PKPdf** | **03 09 57.6** | **-0.1** | | |
| **ODAN** | **Odare** | **162.05** | **111** | *e*P | **PKPdf** | **03 09 58.1** | **-0.2** | | |
| **KSRS** | **Korea Array** | **162.24** | **285** | PKP | **PKPdf** | **03 09 56.8** | **-1.0** | | |
| | comp=Z,13nm,1.2s,baz=116,slow=1.4,SNR=11 | | | | | | | | |
| KSRS | | | | PKPab | **PKPab** | **03 10 46.2** | **+1.3** | | |
| | comp=Z,8.3nm,1.0s,baz=105,slow=4.0,SNR=6.3 | | | | | | | | |
| **KS01** | **Wonju Array Si** | **162.26** | **285** | *e*PKPdf | **PKPdf** | **03 09 56.5** | **-1.4** | | |
| KS01 | | | | *e*PKPab | **PKPab** | **03 10 45.4** | **+0.4** | | |
| **KSAR** | **Wonju Array Be** | **162.27** | **285** | PKIKP | **PKPdf** | **03 09 56.8** | **-1.0** | | |
| **KSAR** | **Wonju Array Be** | **162.27** | **285** | PKP | **PKPdf** | **03 09 56.8** | **-1.0** | | |
| KSAR | | | | PKPab | **PKPab** | **03 10 46.2** | **+1.1** | | |
| **IRK** | **Irkutsk** | **162.47** | **4** | *e*PKIKP | **PKPdf** | **03 09 57.1** | **-0.5** | | |
| IRK | | | | *e* | | 03 10 43.6 | | | |
| IRK | | | | *e* | | 03 14 25.9 | | | |
| IRK | | | | pmax | pmax | | | | |
| | comp=Z,78nm,1.8s | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **162.50** | **157** | *e*PKPdf | **PKPdf** | **03 09 57.7** | **-0.9** | | |
| CM01 | | | | *e*PKPab | **PKPab** | **03 10 45.4** | **-0.9** | | |
| **CMAR** | **Chiang Mai Arr** | **162.53** | **157** | PKP | **PKPdf** | **03 09 58.6** | **-0.1** | | |
| | comp=Z,4.2nm,0.8s,baz=238,slow=2.6,SNR=27 | | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **03 10 45.9** | **-0.6** | | |
| | comp=Z,2.2nm,0.4s,baz=221,slow=4.1,SNR=8.2 | | | | | | | | |
| CMAR | | | | PP | **PP** | **03 14 27.1** | **-2.7** | | |
| | comp=Z,0.6nm,0.2s,baz=205,slow=4.0,SNR=3.5 | | | | | | | | |
| **TAPN** | **Taplejung** | **162.54** | **110** | *e*P | **PKPdf** | **03 09 58.5** | **-0.4** | | |
| | comp=Z,104nm,1.5s | | | | | | | | |
| **CN2** | **Changchun** | **162.60** | **307** | *e*PKP | **PKPdf** | **03 09 55.9** | **-2.1** | | |
| CN2 | | | | *e*PP | **PP** | **03 14 28.8** | **-2.2** | | |
| CN2 | | | | SKS | **SKSdf** | **03 17 01.3** | **-1.5** | | |
| CN2 | | | | PPMZ | | | | | |
| | comp=Z,450nm,7.0s | | | | | | | | |
| CN2 | | | | LN | | | | | |
| | comp=Z,280nm,22.0s | | | | | | | | |
| CN2 | | | | LE | | | | | |
| | comp=Z,740nm,22.0s | | | | | | | | |
| CN2 | | | | LZ | | | | | |
| | comp=Z,1μm,23.0s | | | | | | | | |
| **TJN** | **Taejon** | **162.69** | **281** | PKIKP | **PKPdf** | **03 09 57.6** | **-0.7** | | |
| **CHTO** | **Chiang Mai** | **162.86** | **156** | *e*PKIKP | **PKPdf** | **03 09 58.2** | **-0.8** | | |
| CHTO | | | | *e* | | 03 10 47.5 | | | |
| CHTO | | | | *e* | | 03 14 27.7 | | | |
| **CHTO** | **Chiang Mai** | **162.86** | **156** | PKPdf | **PKPdf** | **03 09 58.9** | **-0.1** | | |
| | SNR=9.8 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **162.86** | **156** | *e*PKPdf | **PKPdf** | **03 09 58.2** | **-0.8** | | |
| CHTO | | | | *e*PKPab | **PKPab** | **03 10 47.5** | **-0.4** | | |
| CHTO | | | | *e*PP | **PP** | **03 14 27.7** | **-3.9** | | |
| **TLY** | **Talaya** | **162.99** | **5** | PKP | **PKPdf** | **03 09 58.1** | **0.0** | | |
| | comp=Z,1.7nm,0.7s,baz=247,slow=20,SNR=4.1 | | | | | | | | |
| TLY | | | | PKPab | **PKPab** | **03 10 48.6** | **+0.9** | | |
| | comp=Z,6.1nm,0.8s,baz=7.5,slow=3.7,SNR=8.1 | | | | | | | | |
| **TLY** | **Talaya** | **162.99** | **5** | *e*PKIKP | **PKPdf** | **03 09 57.3** | **-0.8** | | |
| TLY | | | | *e* | | 03 10 48.1 | | | |
| TLY | | | | *e*SSS | SSS | 03 41 15.3 | | | |
| TLY | | | | pmax | pmax | | | | |
| | comp=Z,21nm,1.7s | | | | | | | | |
| **TLY** | **Talaya** | **162.99** | **5** | PKPdf | **PKPdf** | **03 09 58.4** | **+0.3** | | |
| | SNR=6.7 | | | | | | | | |
| **TLY** | **Talaya** | **162.99** | **5** | *e*PKPdf | **PKPdf** | **03 09 57.7** | **-0.4** | | |
| TLY | | | | *e*PKPab | **PKPab** | **03 10 48.4** | **+0.8** | | |
| **WMQ** | **Urumqi** | **163.09** | **52** | PKP | **PKPdf** | **03 09 59.0** | **+0.4** | | |
| WMQ | | | | PP | **PP** | **03 14 37.0** | **+3.3** | | |
| WMQ | | | | SKS | **SKSdf** | **03 17 05.0** | **+1.7** | | |
| WMQ | | | | SKKS | **SKKSac** | **03 21 24.0** | **+2.2** | | |
| WMQ | | | | SS | **SS** | **03 34 59.0** | **0.0** | | |
| WMQ | | | | PPMZ | | | | | |
| | comp=Z,110nm,9.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,980nm,28.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,1μm,26.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,2μm,28.0s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **164.00** | **193** | PKP | **PKPdf** | **03 10 02.4** | **+2.3** | | |
| QIZ | | | | PP | PP | 03 14 43.5 | +6.2 | | |
| QIZ | | | | LZ | | | | | |
| | comp=Z,1μm,22.6s | | | | | | | | |
| **ZAK** | **Zakamensk** | **164.24** | **7** | *e*PKIKP | **PKPdf** | **03 09 58.3** | **-1.2** | | |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,2.0s | | | | | | | | |
| **LSA** | **Lhasa** | **166.31** | **107** | *e*PKIKP | **PKPdf** | **03 10 02.3** | **0.0** | | |
| LSA | | | | *e* | | 03 14 53.2 | | | |
| **LSA** | **Lhasa** | **166.31** | **107** | *e*PKPdf | **PKPdf** | **03 10 02.3** | **0.0** | | |
| LSA | | | | *e*PKPab | **PKPab** | **03 11 04.7** | **+1.0** | | |
| LSA | | | | *e*PP | **PP** | **03 14 53.2** | **+1.6** | | |
| **SLVN** | **Son La** | **166.47** | **171** | *e*PKPdf | **PKPdf** | **03 09 59.0** | **-3.2** | | |
| **SSE** | **Sheshan** | **166.88** | **258** | PKP | **PKPdf** | **03 10 06.3** | **+4.2** | | |
| SSE | | | | PP | **PP** | **03 14 56.5** | **+2.5** | | |
| SSE | | | | SS | SS | 03 35 42.3 | +3.7 | | |
| SSE | | | | PPMZ | | | | | |
| | comp=Z,210nm,12.0s | | | | | | | | |
| SSE | | | | LN | | | | | |
| | comp=Z,730nm,26.1s | | | | | | | | |
| SSE | | | | LE | | | | | |
| | comp=Z,410nm,26.1s | | | | | | | | |
| SSE | | | | LZ | | | | | |
| | comp=Z,750nm,26.9s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **166.89** | **357** | *e*PKIKP | **PKPdf** | **03 10 01.5** | **-0.3** | | |
| ULN | | | | *e* | | 03 14 53.6 | | | |
| **ULN** | **Ulaanbaatar** | **166.89** | **357** | PKPdf | **PKPdf** | **03 10 01.3** | **-0.5** | | |
| | SNR=17 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **166.89** | **357** | *e*PKPdf | **PKPdf** | **03 10 01.5** | **-0.3** | | |
| ULN | | | | *e*PKPab | **PKPab** | **03 11 06.0** | **+0.9** | | |
| ULN | | | | *e*PP | **PP** | **03 14 53.6** | **+1.1** | | |
| **SONA1** | **Songino Array** | **166.92** | **359** | *e*PKPdf | **PKPdf** | **03 10 00.1** | **-1.7** | | |
| SONA1 | | | | *e*PKPab | **PKPab** | **03 11 05.6** | **+0.3** | | |
| SONA1 | | | | *e*PP | **PP** | **03 14 50.1** | **-2.5** | | |
| **SONM** | **Songino Array** | **166.94** | **359** | PKP | **PKPdf** | **03 10 01.3** | **-0.5** | | |
| | comp=Z,1.7nm,0.9s,baz=38,slow=2.6,SNR=12 | | | | | | | | |
| SONM | | | | PKPab | **PKPab** | **03 11 05.9** | **+0.6** | | |
| | comp=Z,18nm,0.9s,baz=334,slow=1.5,SNR=23 | | | | | | | | |
| SONM | | | | PP | **PP** | **03 14 52.4** | **-0.3** | | |
| | comp=Z,4.6nm,1.0s,baz=349,slow=1.3,SNR=6.7 | | | | | | | | |
| **NJ2** | **Nanjing** | **169.07** | **259** | *e*PKP | **PKPdf** | **03 10 05.3** | **+1.7** | | |
| NJ2 | | | | PP | **PP** | **03 15 07.0** | **+1.8** | | |
| NJ2 | | | | PPMZ | | | | | |
| | comp=Z,170nm,6.8s | | | | | | | | |
| NJ2 | | | | LN | | | | | |
| | comp=Z,5μm,25.7s | | | | | | | | |
| NJ2 | | | | LE | | | | | |
| | comp=Z,4μm,25.4s | | | | | | | | |
| NJ2 | | | | LZ | | | | | |
| | comp=Z,10μm,25.5s | | | | | | | | |
| **KMI** | **Kunming** | **169.94** | **162** | PKP | **PKPdf** | **03 10 04.3** | **-0.3** | | |
| KMI | | | | pPKP | **pPKPdf** | **03 10 10.3** | **+2.5** | | |
| **BJI** | **Beijing** | **170.47** | **306** | PKP | **PKPdf** | **03 10 03.3** | **-0.8** | | |
| BJI | | | | PP | **PP** | **03 15 11.5** | **-0.1** | | |
| BJI | | | | SS | SS | 03 36 13.4 | -0.1 | | |
| BJI | | | | PPMZ | | | | | |
| | comp=Z,670nm,6.8s | | | | | | | | |
| BJI | | | | LN | | | | | |
| | comp=Z,1μm,22.4s | | | | | | | | |
| BJI | | | | LE | | | | | |
| | comp=Z,890nm,27.5s | | | | | | | | |
| BJI | | | | LZ | | | | | |
| | comp=Z,1μm,37.2s | | | | | | | | |
| **TIA** | **Tai'an** | **170.96** | **282** | PKP | **PKPdf** | **03 10 03.8** | **-0.8** | | |
| **GYA** | **Guiyang** | **171.72** | **183** | *i* PKP | **PKPdf** | **03 10 05.6** | **+0.2** | | |
| GYA | | | | PKPab | **PKPab** | **03 11 28.3** | **+1.4** | | |
| GYA | | | | PKS | **PKSdf** | **03 13 36.0** | **-1.9** | | |
| GYA | | | | PKS | | 03 13 36.4 | | | |
| GYA | | | | PP | **PP** | **03 15 20.4** | **+3.6** | | |
| GYA | | | | PP | PP | 03 15 20.8 | +4.0 | | |
| GYA | | | | SKKS | | 03 22 05.3 | | | |
| GYA | | | | SS | **SS** | **03 36 25.8** | **+1.9** | | |
| GYA | | | | PPMZ | | | | | |
| | comp=Z,180nm,8.6s | | | | | | | | |
| GYA | | | | LN | | | | | |
| | comp=Z,160nm,24.6s | | | | | | | | |
| GYA | | | | LE | | | | | |
| | comp=Z,210nm,25.0s | | | | | | | | |
| GYA | | | | LZ | | | | | |
| | comp=Z,180nm,25.4s | | | | | | | | |
| **WHN** | **Wuhan** | **171.94** | **241** | PKP | **PKPdf** | **03 10 03.1** | **+0.1** | | |
| **HHC** | **Hu-ho-hao-te** | **172.58** | **327** | *e*PKP | **PKPdf** | **03 10 05.9** | **+0.6** | | |
| HHC | | | | PP | **PP** | **03 15 22.1** | **+0.5** | | |
| HHC | | | | SKS | **SKSdf** | **03 17 06.0** | **-2.8** | | |
| HHC | | | | SS | **SS** | **03 36 37.6** | **+4.2** | | |
| HHC | | | | PPMZ | | | | | |
| | comp=Z,510nm,6.3s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | comp=Z,1μm,20.1s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | comp=Z,650nm,20.6s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | comp=Z,700nm,20.8s | | | | | | | | |
| **GTA** | **Gaotai** | **173.11** | **46** | *e*PKP | **PKPdf** | **03 10 05.8** | **+0.2** | | |
| GTA | | | | PKPab | **PKPab** | **03 11 33.9** | **+0.9** | | |
| GTA | | | | PP | **PP** | **03 15 27.9** | **+3.2** | | |
| GTA | | | | SKS | **SKSdf** | **03 17 06.8** | **-2.3** | | |
| GTA | | | | SKKS | **SKKSac** | **03 22 13.6** | **+2.1** | | |
| GTA | | | | SS | **SS** | **03 36 39.3** | **0.0** | | |
| GTA | | | | PPMZ | | | | | |
| | comp=Z,630nm,10.5s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | comp=Z,2μm,19.9s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | comp=Z,2μm,22.3s | | | | | | | | |
| **CD2** | **Chengdu** | **175.65** | **151** | PKP | **PKPdf** | **03 10 06.4** | **-0.2** | | |
| CD2 | | | | pPKP | **pPKPdf** | **03 10 09.3** | **-0.5** | | |
| CD2 | | | | sPKP | | 03 10 10.5 | | | |
| CD2 | | | | PP | **PP** | **03 15 37.3** | **+1.0** | | |
| CD2 | | | | SKS | **SKSdf** | **03 17 10.0** | **+0.1** | | |
| CD2 | | | | SKKS | **SKKSac** | **03 22 23.8** | **+0.3** | | |
| CD2 | | | | SS | **SS** | **03 37 05.1** | **+2.5** | | |
| CD2 | | | | PPMZ | | | | | |
| | comp=Z,240nm,5.0s | | | | | | | | |
| **LZH** | **Lanzhou** | **177.67** | **55** | *e*PKP | **PKPdf** | **03 10 06.4** | **-0.6** | | |
| LZH | | | | pPKP | **pPKPdf** | **03 10 09.6** | **-0.6** | | |
| LZH | | | | sPKP | | 03 10 11.0 | | | |
| LZH | | | | PKS | **PKSdf** | **03 13 36.0** | **-3.2** | | |
| LZH | | | | PP | PP | 03 15 53.0 | +6.1 | | |
| LZH | | | | SKS | **SKSdf** | **03 17 08.4** | **-1.8** | | |
| LZH | | | | SKKS | **SKKSac** | **03 22 33.0** | **-0.4** | | |
| LZH | | | | SS | **SS** | **03 37 17.3** | **-6.3** | | |
| LZH | | | | PPMZ | | | | | |
| | comp=Z,1μm,7.5s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | comp=Z,2μm,18.5s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | comp=Z,3μm,18.2s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | comp=Z,3μm,20.1s | | | | | | | | |

*CSEM **21** 02:52:20.2, 44°.21N×20°.14E, h0km, ML1.3, After BEO*
**BEO 21 02:52:20.2±0.3, 44°.21N×20°.14E, h0km, ML1.3/8,**
**Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | | Op | ISC | h m s | ISC |
| **DIVS** | **Divibare** | **0.15** | **224** | *e*Pg | | Pg | 02 52 22.5 | -0.8 |
| DIVS | | | | *e*Sg | | Sg | 02 52 25.0 | -0.4 |
| **DIVS** | **Divibare** | **0.15** | **224** | *e*Pg | | Pg | 02 52 22.5 | -0.8 |
| DIVS | | | | *e*Sg | | Sg | 02 52 25.0 | -0.4 |
| **TRUS** | **Trudelj** | **0.19** | **86** | *e*Pg | | Pg | 02 52 22.8 | -1.1 |
| TRUS | | | | *e*Sg | | Sg | 02 52 25.7 | -0.8 |
| **TRUS** | **Trudelj** | **0.19** | **86** | *e*Pg | | Pg | 02 52 22.8 | -1.1 |
| TRUS | | | | *e*Sg | | Sg | 02 52 25.7 | -0.8 |
| **GRUS** | **Gruza** | **0.53** | **128** | *e*Pg | | Pg | 02 52 29.9 | -0.4 |
| GRUS | | | | *e*Sg | | Sg | 02 52 37.9 | +0.8 |
| **GRUS** | **Gruza** | **0.53** | **128** | *e*Pg | | Pg | 02 52 29.9 | -0.4 |
| GRUS | | | | *e*Sg | | Sg | 02 52 37.9 | +0.8 |
| **BBLS** | **Lazići** | **0.63** | **237** | *e*Pg | | Pg | 02 52 31.1 | -1.3 |
| BBLS | | | | *e*Sg | | Sg | 02 52 39.5 | -1.2 |
| **BBLS** | **Lazići** | **0.63** | **237** | *e*Pg | | Pg | 02 52 31.1 | -1.3 |
| BBLS | | | | *e*Sg | | Sg | 02 52 39.5 | -1.2 |
| **IVAS** | **Ivanjica** | **0.63** | **179** | *e*Pg | | Pg | 02 52 31.5 | -1.0 |
| **IVAS** | **Ivanjica** | **0.63** | **179** | *e*Pg | | Pg | 02 52 31.5 | -1.0 |
| **SJES** | **Sjenica** | **0.96** | **187** | *e*Pg | | Pg | 02 52 37.9 | -0.8 |
| SJES | | | | *e*Sg | | Sg | 02 52 50.8 | -0.4 |
| **SJES** | **Sjenica** | **0.96** | **187** | *e*Pg | | Pg | 02 52 37.9 | -0.8 |
| SJES | | | | *e*Sg | | Sg | 02 52 50.8 | -0.4 |
| **FGSL** | **Fruska Gora** | **0.98** | **346** | *e*Pg | | Pg | 02 52 38.2 | -0.8 |
| FGSL | | | | *e*Sg | | Sg | 02 52 52.1 | +0.4 |
| **FRGS** | **Fruska Gora** | **0.98** | **346** | *e*Pg | | Pg | 02 52 38.2 | -0.8 |
| FRGS | | | | *e*Sg | | Sg | 02 52 52.1 | +0.4 |
| **KUBS** | **Kucevo** | **1.12** | **79** | *e*Pg | | Pg | 02 52 40.2 | -1.5 |
| KUBS | | | | *e*Sg | | Sg | 02 52 55.2 | -1.1 |
| **KUBS** | **Kucevo** | **1.12** | **79** | *e*Pg | | Pg | 02 52 40.2 | -1.5 |
| KUBS | | | | *e*Sg | | Sg | 02 52 55.2 | -1.1 |
| **SELS** | **Selova** | **1.22** | **144** | *e*Pg | | Pg | 02 52 42.6 | -1.0 |
| **BARS** | **Barje** | **1.85** | **138** | *e*Pn | | Pn | 02 52 52.8 | -0.4 |
| **BARS** | **Barje** | **1.85** | **138** | *e*Pn | | Pn | 02 52 52.8 | -0.4 |

*CRAAG **21** 03:00:48.8, 36°.84N×2°.52E, MI3.0*
*CSEM **21** 03:00:51.8±0.3, 36°.81N×2°.70E, h20km, mb3.3, Error ellipse: s-maj=10.0km s-min=6.6km az=43.0*
**MDD 21 03:00:52.8±0.6, 36°.77N×2°.77E, h24km±17km, mb3.3/8,**
**Error ellipse: s-maj=20.4km s-min=8.9km az=102.0,**
**PRXIMO, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **ABA** | **Alger-Bouzarea** | **0.22** | **82** | P | | Pb | 03 00 58.2 | -0.4 |
| **ABA** | **Alger-Bouzarea** | **0.22** | **82** | P | | Pb | 03 00 58.2 | -0.4 |
| **ABA** | **Alger-Bouzarea** | **0.22** | **82** | P | | Pb | 03 00 58.2 | -0.4 |
| **EMHD** | **Djebel Mahouad** | **0.59** | **165** | P | | Pb | 03 01 04.0 | -0.6 |
| **EMHD** | **Djebel Mahouad** | **0.59** | **165** | P | | Pb | 03 01 04.0 | -0.6 |
| **EMHD** | **Djebel Mahouad** | **0.59** | **165** | P | | Pb | 03 01 04.0 | -0.6 |
| **EIBI** | **Ibiza** | **2.52** | **334** | P | | Pn | 03 01 31.7 | -0.6 |
| | 0.3nm,0.1s,SNR=6.7 | | | | | | | |
| EIBI | | | | S | | Sn | 03 02 00.4 | -1.8 |
| | 16nm,0.3s,SNR=5.9 | | | | | | | |
| **EIBI** | **Ibiza** | **2.52** | **334** | P | | Pn | 03 01 31.7 | -0.5 |
| | 0.3nm,0.1s,SNR=6.7 | | | | | | | |
| EIBI | | | | S | | Sn | 03 02 00.4 | -1.8 |
| | 16nm,0.3s,SNR=5.9 | | | | | | | |
| **ETOS** | **Mallorca** | **2.99** | **1** | P | | Pn | 03 01 37.4 | -1.4 |
| | 0.7nm,0.1s,SNR=7.9 | | | | | | | |
| ETOS | | | | S | | Sn | 03 02 11.0 | -3.0 |
| | 9.3nm,0.8s,SNR=7.9 | | | | | | | |
| **ETOS** | **Mallorca** | **2.99** | **1** | P | | Pn | 03 01 37.4 | -1.4 |
| | 0.7nm,0.1s,SNR=7.9 | | | | | | | |
| ETOS | | | | S | | Sn | 03 02 11.0 | -3.0 |
| | 9.3nm,0.8s,SNR=7.9 | | | | | | | |
| **EBEN** | **Beniarda** | **3.06** | **310** | P | | Pn | 03 01 38.7 | -1.1 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| EBEN | | | | S | | Sn | 03 02 13.0 | -2.7 |
| | 4.5nm,0.6s,SNR=7.9 | | | | | | | |
| **EBEN** | **Beniarda** | **3.06** | **310** | P | | Pn | 03 01 38.7 | -1.0 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| EBEN | | | | S | | Sn | 03 02 13.0 | -2.6 |
| | 4.5nm,0.6s,SNR=7.9 | | | | | | | |
| **ETOB** | **Tobarra** | **3.90** | **300** | P | | Pn | 03 01 49.8 | -1.6 |
| | 0.6nm,0.1s,SNR=8.9 | | | | | | | |
| ETOB | | | | S | | Sn | 03 02 32.5 | -3.9 |
| | 6.1nm,0.5s,SNR=7.9 | | | | | | | |
| **ETOB** | **Tobarra** | **3.90** | **300** | P | | Pn | 03 01 49.8 | -1.5 |
| | 0.6nm,0.1s,SNR=8.9 | | | | | | | |
| ETOB | | | | S | | Sn | 03 02 32.5 | -3.9 |
| | 6.1nm,0.5s,SNR=7.9 | | | | | | | |
| **EMOS** | **Mosqueruela** | **4.39** | **326** | P | | Pn | 03 01 58.1 | -0.2 |
| | 0.6nm,0.1s,SNR=7.9 | | | | | | | |
| EMOS | | | | S | | Sn | 03 02 44.3 | -4.6 |
| | 2.7nm,0.4s,SNR=7.9 | | | | | | | |
| **EMOS** | **Mosqueruela** | **4.39** | **326** | P | | Pn | 03 01 58.1 | -0.2 |
| | 0.6nm,0.1s,SNR=7.9 | | | | | | | |
| EMOS | | | | S | | Sn | 03 02 44.3 | -4.6 |
| | 2.7nm,0.4s,SNR=7.9 | | | | | | | |
| **EHUE** | **Huescar** | **4.40** | **285** | P | | Pn | 03 01 57.0 | -1.2 |
| | 0.4nm,0.1s,SNR=4.0 | | | | | | | |
| **EHUE** | **Huescar** | **4.40** | **285** | P | | Pn | 03 01 57.0 | -1.2 |
| | 0.4nm,0.1s,SNR=4.0 | | | | | | | |
| **SESP** | **Santiago Espad** | **4.44** | **289** | P | | Pn | 03 01 57.4 | -1.4 |
| | 0.4nm,0.1s,SNR=7.9 | | | | | | | |
| SESP | | | | S | | Sn | 03 02 45.7 | -4.2 |
| | 6.9nm,0.5s,SNR=7.9 | | | | | | | |
| **SESP** | **Santiago Espad** | **4.44** | **289** | P | | Pn | 03 01 57.4 | -1.4 |
| | 0.4nm,0.1s,SNR=7.9 | | | | | | | |
| SESP | | | | S | | Sn | 03 02 45.7 | -4.2 |
| | 6.9nm,0.5s,SNR=7.9 | | | | | | | |
| **EQES** | **Quesada** | **4.77** | **284** | P | | Pn | 03 02 02.8 | -0.5 |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | | |
| EQES | | | | S | | Sn | 03 02 53.8 | -4.2 |
| | 2.4nm,0.8s,SNR=7.9 | | | | | | | |
| **EQES** | **Quesada** | **4.77** | **284** | P | | Pn | 03 02 02.8 | -0.5 |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | | |
| EQES | | | | S | | Sn | 03 02 53.8 | -4.1 |
| | 2.4nm,0.8s,SNR=7.9 | | | | | | | |

*IDC **21** 03:56:01.8±1.0, 4°.79S×134°.07E, h0km, mb3.8/5,*
*mb1 4.3/10, mb1mx4.0/32, mbtmp4.2/10, ML4.4/5, Error ellipse: s-maj=31.5km s-min=19.2km az=64.0*
*AUST **21** 03:56:02.6, 4°.96S×134°.03E, h0km*
*DJA **21** 03:56:03.3±0.9, 5°.5S×13°.4E±°, h10km, M4.7/6, mb5.0/5, mB5.3/2, MLv4.5/6, Mw(mB)4.7/2*
*ISCJB **21** 03:56:04.7±0.5, 4°.92S±0°.05×133°.97E±0°.07, h28km, mb3.9/6, MS4.7/1, Error ellipse: s-maj=10.4km s-min=5.8km az=153.9*
**ISC 21 03:56:06.6±0.7, 4°.88S±0°.06×133°.89E±0°.08, h28km, n33,**
**σ1s 71/32, mb3.9/6, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.54** | **320** | P | | **Pn** | **03 56 44.7** | **-1.3** |
| | baz=2.7,SNR=77 | | | | | | | |
| **FAKI** | **Fak Fak** | **2.54** | **320** | P | | **Pn** | **03 56 44.6** | **-1.4** |
| **RKPI** | **Ransiki, Papua** | **3.35** | **5** | P | | **Pn** | **03 56 57.8** | **+0.6** |
| **BNDI** | **Bandanaira** | **3.99** | **275** | P | | **Pn** | **03 57 08.5** | **+2.6** |
| **SIJI** | **Sorong** | **4.77** | **327** | Pn | | **Pn** | **03 57 14.1** | **-2.5** |
| | 3.3nm,0.3s,baz=242,slow=23,SNR=8.6 | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **03 58 07.1** | **-3.9** |
| | 3.5nm,0.3s,baz=197,slow=19,SNR=3.6 | | | | | | | |
| **SWI** | **Sorong** | **4.78** | **327** | P | | **Pn** | **03 57 16.7** | **0.0** |
| **MSAI** | **Masohi** | **5.18** | **287** | P | | **Pn** | **03 57 23.5** | **+1.2** |
| **AAI** | **Ambon** | **5.80** | **282** | P | | **Pn** | **03 57 32.8** | **+1.9** |
| | baz=6.0,SNR=3.7 | | | | | | | |
| **AAI** | **Ambon** | **5.80** | **282** | P | | **Pn** | **03 57 32.5** | **+1.6** |
| | 90nm,0.6s,0.4nm | | | | | | | |
| **GENI** | **Genyem** | **6.66** | **70** | P | | Pn | 03 57 48.6 | +6.0 |
| **NLAI** | **Namlea** | **6.97** | **283** | P | | **Pn** | **03 57 49.7** | **+2.8** |
| | 56nm,0.6s,827nm0.2nm | | | | | | | |
| **JAY** | **Jayapura** | **7.19** | **71** | Pn | | Pn | 03 57 45.9 | -4.0 |
| | 16nm,0.3s,baz=237,slow=0.1,SNR=4.7 | | | | | | | |
| **KDU** | **Kakadu** | **7.89** | **190** | P | | **Pn** | **03 58 00.2** | **+0.7** |
| | baz=7.9,SNR=51 | | | | | | | |
| **MTN** | **Manton Dam** | **8.37** | **199** | P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SFK | | | | ⇑Lg | | Lg | 04 18 13.2 | | |
| | 26nm,0.4s | | | | | | | | |
| **MNAS** | **Manas** | **4.64** | **30** | ⇑Pn | | Pn | 04 17 33.5 | +2.5 | |
| | 4.5nm,0.7s | | | | | | | | |
| MNAS | | | | ⇓Lg | | Lg | 04 18 30.0 | | |
| | 5.7nm,0.9s | | | | | | | | |
| **KK31** | **Karatay Array** | **4.69** | **10** | ⇑Pn | | Pn | 04 17 31.4 | 0.0 | |
| | 1.8nm,0.8s,baz=179,slow=12,SNR=6.2 | | | | | | | | |
| KK31 | | | | Pg | | Pb | 04 17 44.2 | +1.6 | |
| | 1.0nm,0.4s,baz=184,slow=18,SNR=10 | | | | | | | | |
| KK31 | | | | ⇓Lg | | Lg | 04 18 44.4 | | |
| | 2.2nm,0.4s,baz=187,slow=28,SNR=4.0 | | | | | | | | |

*NIED* ***21*** *04:23:00,32.6′N×138.0′E,h400km,Mw4.9 Best double couple: M₀2.83000×10¹⁶ NP1:φ₀94.00000°, δ19.00000°,λ152.00000°. NP2:φ₀210.00000°,δ81.00000°, λ73.00000°.*

*JMA* ***21*** *04:23:41.3±0.4,32.6′N×137.9′E,h398km±4km,M4.6*

*BJI* ***21*** *04:23:41.8,32.5′8N×137.7′9E,h367km,mb4.7/36, mB5.0/26*

*ISCJB* ***21*** *04:23:42.9±0.3,32.4′7N±0.0′3×137.7′9E±0.0′3, h375km±1km,mb4.3/104,Error ellipse: s-maj=5.6km s-min=3.6km az=167.0*

*IDC* ***21*** *04:23:43.5±0.4,32.5′3N×137.8′1E,h371km±4km,mb3.8/25, mb1 4.0/30,mb1mx3.9/46,mbtmp4.6/30,Error ellipse: s-maj=8.4km s-min=8.1km az=1.0*

*NEIC* ***21*** *04:23:43.7±0.5,32.4′8N×137.7′1E,h369km±4km,mb4.4/65, Error ellipse: s-maj=6.5km s-min=3.9km az=147.0*

*MOS* ***21*** *04:23:45.0±1.0,32.7′8N×137.7′1E,h385km,mb4.3/57, Error ellipse: s-maj=9.3km s-min=5.8km az=112.4*

**ISC 21 04:23:43.6±0.4,32.5′2N±0.0′5×137.8′1E±0.0′4,h368km±2km, h367km:pP-P,n294,σ1♀34/354,mb4.3/107,13C-8D, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TK01** | **Tokai 1** | **1.25** | **352** | P | | **Pn** | | **04 24 33.0** | **+1.2** |
| TK01 | | | | S | | **S** | | **04 25 12.7** | **+2.0** |
| **TTO3** | **TONANKAI O.B.S** | **1.38** | **346** | ⇑P | | **Pn** | | **04 24 34.4** | **+1.8** |
| TTO3 | | | | S | | **S** | | **04 25 15.2** | **+3.0** |
| **TTO1** | **TONANKAI O.B.S** | **1.39** | **322** | ⇑P | | **Pn** | | **04 24 34.1** | **+1.6** |
| **TK02** | **Tokai 2** | **1.42** | **358** | ⇑P | | **Pn** | | **04 24 34.1** | **+1.4** |
| TK02 | | | | S | | **S** | | **04 25 15.4** | **+3.0** |
| **TTO4** | **TONANKAI O.B.S** | **1.50** | **351** | P | | **Pn** | | **04 24 34.5** | **+1.4** |
| TTO4 | | | | S | | **S** | | **04 25 14.9** | **+1.9** |
| **TK03** | **Tokai 3** | **1.64** | **5** | P | | **Pn** | | **04 24 35.2** | **+1.1** |
| TK03 | | | | S | | **S** | | **04 25 17.8** | **+3.0** |
| **JHCJ** | **Hachijojimakas** | **1.76** | **71** | P | | **Pn** | | **04 24 34.7** | **-0.3** |
| **JHJ** | **Hachijo jima 2** | **1.77** | **70** | P | | **Pn** | | **04 24 34.8** | **-0.3** |
| | 144nm,0.3s,baz=318,slow=20,SNR=17 | | | | | | | | |
| JHJ | | | | S | | **S** | | **04 25 16.6** | **+0.2** |
| | 498nm,0.3s,baz=66,slow=19,SNR=8.3 | | | | | | | | |
| **JHJ2** | **Mitsune** | **1.79** | **70** | P | | **Pn** | | **04 24 35.7** | **+0.5** |
| **JWZ** | **Kozaga** | **2.02** | **300** | ⇑P | | **Pn** | | **04 24 36.9** | **+0.2** |
| **JIE** | **Ise** | **2.08** | **334** | ⇑P | | **Pn** | | **04 24 37.7** | **+0.7** |
| **JOD2** | **Odawara 2** | **2.93** | **21** | P | | **Pn** | | **04 24 43.3** | **-0.4** |
| JOD2 | | | | S | | **S** | | **04 25 29.6** | **-2.5** |
| **JYN** | **Shimob** | **3.03** | **11** | P | | **Pn** | | **04 24 44.5** | **-0.1** |
| **JAI** | **Aioi** | **3.08** | **295** | ⇑P | | **Pn** | | **04 24 45.4** | **+0.4** |
| **JGM** | **Miyama** | **3.29** | **344** | ⇑P | | **Pn** | | **04 24 47.2** | **+0.3** |
| JGM | | | | S | | **S** | | **04 25 37.9** | **-0.1** |
| **BSO1** | **Boso 1** | **3.39** | **50** | P | | **Pn** | | **04 24 44.9** | **-2.2** |
| **JWT** | **Wachi** | **3.40** | **325** | ⇑P | | **Pn** | | **04 24 48.3** | **+0.5** |
| JWT | | | | S | | **S** | | **04 25 39.5** | **-0.2** |
| **JRY** | **Ryogami san** | **3.60** | **14** | ⇑P | | **Pn** | | **04 24 49.4** | **-0.3** |
| **MAJO** | **Matsushiro** | **4.02** | **5** | *e*P | | **Pn** | | **04 24 53.2** | **-0.6** |
| MAJO | | | | *e*S | | S | | 04 25 40.9 | -10 |
| **MAJO** | **Matsushiro** | **4.02** | **5** | *e*Pn | | **Pn** | | **04 24 53.2** | **-0.6** |
| MAJO | | | | *e*S | | S | | 04 25 40.9 | -10 |
| **MAT** | **Matsushiro** | **4.02** | **5** | P | | **Pn** | | **04 24 53.1** | **-0.7** |
| MAT | | | | S | | **S** | | **04 25 47.4** | **-3.2** |
| **MJAR** | **Matsushiro Arr** | **4.02** | **5** | P | | **Pn** | | **04 24 52.9** | **-0.9** |
| | 18nm,0.3s,baz=175,slow=9.8,SNR=139 | | | | | | | | |
| MJAR | | | | S | | **S** | | **04 25 46.7** | **-3.9** |
| | 8.1nm,0.3s,baz=127,slow=18,SNR=6.4 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.02** | **5** | P | | **Pn** | | **04 24 52.9** | **-0.9** |
| MJAR | | | | S | | **S** | | **04 25 46.7** | **-3.9** |
| MJAR | | | | pmax | | pmax | | | |
| | comp=Z,18nm,0.3s | | | | | | | | |
| MJAR | | | | smax | | smax | | | |
| | comp=N,8.0nm,0.3s | | | | | | | | |
| **JAG** | **Ashikaga** | **4.12** | **19** | P | | **Pn** | | **04 24 52.6** | **-2.2** |
| **JTO** | **Tosashimizu** | **4.23** | **276** | P | | **Pn** | | **04 24 56.7** | **+0.7** |
| **JHS** | **Saijyo** | **4.62** | **304** | P | | **Pn** | | **04 25 00.8** | **+0.8** |
| JHS | | | | S | | **S** | | **04 26 02.5** | **+0.7** |
| **JNU** | **Nakatsue** | **5.86** | **278** | P | | **Pn** | | **04 25 14.8** | **+1.3** |
| | comp=N,6.7nm,0.3s,baz=90,slow=5.1,SNR=50 | | | | | | | | |
| JNU | | | | S | | **S** | | **04 26 27.7** | **+1.1** |
| | comp=N,0.8nm,0.3s,baz=292,slow=19,SNR=4.7 | | | | | | | | |
| **CBIJ** | **Chichi jima** | **6.61** | **144** | P | | Pn | | 04 25 18.6 | -3.5 |
| **JMK** | **Ichinoseki** | **6.99** | **22** | P | | **Pn** | | **04 25 24.7** | **-1.4** |
| JMK | | | | S | | S | | 04 26 43.6 | -6.1 |
| **KSULJ** | **Uljin** | **8.08** | **303** | P | | **Pn** | | **04 25 38.9** | **+0.1** |
| | SNR=7.8 | | | | | | | | |
| **KSJIN** | **Jinju** | **8.55** | **291** | P | | **Pn** | | **04 25 43.7** | **-0.7** |
| | SNR=13 | | | | | | | | |
| **KSTBA** | **Taebaek** | **8.60** | **305** | P | | **P** | | **04 25 46.7** | **-0.1** |
| | SNR=11 | | | | | | | | |
| **KSTBA** | **Taebaek** | **8.60** | **305** | P | | **P** | | **04 25 46.7** | **-0.1** |
| | SNR=11 | | | | | | | | |
| **KSSAJ** | **Sangju** | **8.86** | **299** | P | | **P** | | **04 25 49.0** | **-0.5** |
| | SNR=13 | | | | | | | | |
| **KSCPR** | **CHUPUNGNYEONG** | **8.93** | **297** | P | | **P** | | **04 25 50.0** | **-0.3** |
| | SNR=9.3 | | | | | | | | |
| **KSJES** | **JEONGSEON** | **8.95** | **306** | P | | **P** | | **04 25 50.8** | **+0.2** |
| | SNR=20 | | | | | | | | |
| **KSJES** | **JEONGSEON** | **8.95** | **306** | P | | **P** | | **04 25 50.8** | **+0.2** |
| | SNR=20 | | | | | | | | |
| **KSKOH** | **Goheung** | **9.03** | **286** | P | | **P** | | **04 25 51.5** | **0.0** |
| | SNR=8.1 | | | | | | | | |
| **KSKOH** | **Goheung** | **9.03** | **286** | P | | **P** | | **04 25 51.5** | **0.0** |
| | SNR=8.1 | | | | | | | | |
| **KSDGY** | **Daegwallycong** | **9.08** | **307** | P | | **P** | | **04 25 53.3** | **+1.2** |
| | SNR=16 | | | | | | | | |
| **KSDGY** | **Daegwallycong** | **9.08** | **307** | P | | **P** | | **04 25 53.3** | **+1.2** |
| | SNR=16 | | | | | | | | |
| **KSJMJ** | **Jumunjin** | **9.13** | **308** | P | | **P** | | **04 25 53.5** | **+1.0** |
| | SNR=18 | | | | | | | | |
| **KSJMJ** | **Jumunjin** | **9.13** | **308** | P | | **P** | | **04 25 52.6** | **+0.1** |
| | SNR=12 | | | | | | | | |
| **KSBON** | **Boeun** | **9.16** | **298** | P | | **P** | | **04 25 53.1** | **+0.3** |
| | SNR=9.0 | | | | | | | | |
| **KSCHJ** | **Chungju** | **9.18** | **301** | P | | **P** | | **04 25 53.8** | **+0.7** |
| | SNR=8.4 | | | | | | | | |
| **KSCHJ** | **Chungju** | **9.18** | **301** | P | | **P** | | **04 25 53.8** | **+0.7** |
| | SNR=8.4 | | | | | | | | |
| **TJN** | **Taejon** | **9.44** | **297** | ⇓*i*P | | **P** | | **04 25 56.9** | **+0.9** |
| **KSRS** | **Korea Array** | **9.48** | **304** | P | | **P** | | **04 25 57.1** | **+0.7** |
| | comp=N,5.1nm,0.3s,baz=115,slow=11,SNR=40 | | | | | | | | |
| KSRS | | | | S | | **S** | | **04 27 48.5** | **+5.1** |
| | baz=112,slow=23,SNR=4.8 | | | | | | | | |
| **KSRS** | **Korea Array** | **9.48** | **304** | P | | **P** | | **04 25 57.1** | **+0.7** |
| KSRS | | | | S | | **S** | | **04 27 48.5** | **+5.1** |
| KSRS | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.3s | | | | | | | | |
| **KSJEU** | **Jeongeup** | **9.50** | **291** | P | | **P** | | **04 25 56.7** | **0.0** |
| | SNR=11 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **9.50** | **304** | P | | **P** | | **04 25 57.1** | **+0.4** |
| KSAR | | | | S | | **S** | | **04 27 48.5** | **+4.6** |
| **KSAR** | **Wonju Array Be** | **9.50** | **304** | P | | **P** | | **04 25 57.1** | **+0.4** |
| KSAR | | | | S | | **S** | | **04 27 48.5** | **+4.6** |
| **KSSKC** | **Sokcho** | **9.51** | **310** | P | | **P** | | **04 25 56.7** | **-0.1** |
| | SNR=7.2 | | | | | | | | |
| **KS01** | **Wonju Array Si** | **9.51** | **304** | *e*Pn | | **Pn** | | **04 25 55.8** | **+0.1** |
| **SEHB** | **SEOHWA** | **9.67** | **309** | P | | **P** | | **04 25 58.8** | **+0.2** |
| | SNR=14 | | | | | | | | |
| **KSCEA** | **Cheonan** | **9.69** | **299** | P | | **P** | | **04 26 00.1** | **+1.4** |
| | SNR=9.9 | | | | | | | | |
| **KSCHC** | **Chuncheon** | **9.71** | **305** | P | | **P** | | **04 26 00.0** | **+1.0** |
| | SNR=14 | | | | | | | | |
| **KSGUS** | **GUNSAN** | **9.77** | **294** | P | | **P** | | **04 26 00.7** | **+1.0** |
| | SNR=13 | | | | | | | | |
| **KSJDO** | **Jindo** | **9.79** | **285** | P | | **P** | | **04 26 00.2** | **+0.3** |
| | SNR=8.5 | | | | | | | | |
| **JOW** | **Kunigami** | **10.04** | **238** | P | | **P** | | **04 26 02.8** | **0.0** |
| | comp=Z,0.2nm,0.3s,baz=179,slow=30,SNR=5.6 | | | | | | | | |
| **KSCWO** | **Cheorwon** | **10.07** | **306** | P | | **P** | | **04 26 03.8** | **+0.8** |
| | SNR=37 | | | | | | | | |
| **KSSWO** | **Suwon** | **10.08** | **301** | P | | **P** | | **04 26 04.3** | **+1.3** |
| | SNR=8.7 | | | | | | | | |
| **KSSEO** | **Seoul** | **10.21** | **302** | P | | **P** | | **04 26 05.6** | **+1.1** |
| | SNR=8.5 | | | | | | | | |
| **KSSES** | **Seosan** | **10.27** | **298** | P | | **P** | | **04 26 06.3** | **+1.1** |
| | SNR=6.0 | | | | | | | | |
| **KSDDC** | **Dongducheon** | **10.30** | **304** | P | | **P** | | **04 26 06.2** | **+0.7** |
| | SNR=9.1 | | | | | | | | |
| **ERM** | **Erimo** | **10.38** | **23** | *d*iP | | **Pn** | | **04 26 05.1** | **-0.9** |
| ERM | | | | pmax | | pmax | | | |
| | comp=Z,66nm,1.7s | | | | | | | | |
| **ERM** | **Erimo** | **10.38** | **23** | *e*Pn | | **Pn** | | **04 26 05.1** | **-0.9** |
| ERM | | | | *e*S | | **S** | | **04 27 58.6** | **-4.1** |
| **INCN** | **Inchon** | **10.41** | **301** | *e*Pn | | **P** | | **04 26 07.5** | **+0.7** |
| **YNCB** | **YEONCHEON** | **10.45** | **305** | P | | **P** | | **04 26 08.0** | **+0.8** |
| | SNR=15 | | | | | | | | |
| **KSMUS** | **Musan** | **10.50** | **304** | P | | **P** | | **04 26 08.5** | **+0.7** |
| | SNR=10 | | | | | | | | |
| **KSGAH** | **Ganghwa** | **10.64** | **302** | P | | **P** | | **04 26 10.2** | **+0.9** |
| | SNR=9.1 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **12.17** | **17** | P | | **P** | | **04 26 26.4** | **+0.3** |
| | comp=Z,4.9nm,0.3s,baz=198,slow=9.0,SNR=10.0 | | | | | | | | |
| ASAJ | | | | S | | S | | 04 28 34.6 | -6.2 |
| | comp=Z,0.7nm,0.3s,baz=336,slow=20,SNR=5.2 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **12.17** | **17** | P | | **P** | | **04 26 26.5** | **+0.3** |
| ASAJ | | | | S | | S | | 04 28 34.6 | -6.2 |
| ASAJ | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.3s | | | | | | | | |
| ASAJ | | | | smax | | smax | | | |
| | comp=N,1.0nm,0.3s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **12.51** | **340** | P | | **P** | | **04 26 29.9** | **-0.1** |
| | comp=N,2.4nm,0.3s,baz=160,slow=11,SNR=56 | | | | | | | | |
| **MDJ** | **Mudanjiang** | **13.67** | **334** | P | | **P** | | **04 26 42.6** | **-0.1** |
| MDJ | | | | PMZ | | | | | |
| | comp=N,13nm,0.9s | | | | | | | | |
| MDJ | | | | PMZ | | | | | |
| | comp=N,330nm,7.5s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **13.67** | **334** | *e*P | | **P** | | **04 26 40.9** | **-1.8** |
| **CN2** | **Changchun** | **14.85** | **323** | *e*P | | **P** | | **04 26 55.0** | **-0.7** |
| CN2 | | | | PMZ | | | | | |
| | comp=N,10.0nm,0.8s | | | | | | | | |
| CN2 | | | | PMZ | | | | | |
| | comp=N,300nm,7.0s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **14.90** | **13** | ⇓*e*P | | **P** | | **04 26 56.3** | **+0.2** |
| YSS | | | | *e*S | | **S** | | **04 29 37.3** | **+1.7** |
| YSS | | | | pmax | | pmax | | | |
| | comp=N,80nm,0.9s | | | | | | | | |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,150nm,0.9s | | | | | | | | |
| YSS | | | | smax | | smax | | | |
| | comp=N,80nm,0.9s | | | | | | | | |
| YSS | | | | smax | | smax | | | |
| | comp=E,50nm,0.9s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **14.90** | **13** | *e*P | | **Pn** | | **04 26 59.6** | **+1.0** |
| | comp=E,138nm,0.7s | | | | | | | | |
| **HABR** | **Khabarovsk** | **16.07** | **353** | *e*P | | **P** | | **04 27 07.4** | **-1.3** |
| HABR | | | | *e*S | | **S** | | **04 29 57.8** | **-0.9** |
| HABR | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | | |
| HABR | | | | MLR | | MLR | | | |
| | comp=Z,356nm,17.0s | | | | | | | | |
| **YHNB** | **Yeheng** | **16.40** | **246** | *e*P | | **P** | | **04 27 11.5** | **-1.3** |
| | comp=Z,11nm,0.6s | | | | | | | | |
| **NACB** | **Jinganchiao** | **16.50** | **244** | *e*P | | **P** | | **04 27 11.3** | **-2.5** |
| | comp=Z,16nm,0.4s | | | | | | | | |
| **YULB** | **Yu-li** | **17.17** | **242** | *e*P | | **P** | | **04 27 19.5** | **-1.5** |
| **SSLB** | **Suanglung** | **17.20** | **244** | *e*P | | **P** | | **04 27 20.1** | **-1.3** |
| | comp=Z,24nm,0.7s | | | | | | | | |
| **KLR** | **Kul'dur** | **17.30** | **347** | *e*P | | **P** | | **04 27 17.6** | **-4.3** |
| KLR | | | | pmax | | pmax | | | |
| | comp=E,32nm,1.2s | | | | | | | | |
| KLR | | | | pmax | | pmax | | | |
| | comp=Z,68nm,1.2s | | | | | | | | |
| **TPUB** | **Ta-pu** | **17.73** | **243** | *e*P | | **P** | | **04 27 25.2** | **-1.7** |
| | comp=Z,8.2nm,0.4s | | | | | | | | |
| **TYV** | **Tymovskoe** | **18.67** | **10** | *e*P | | **P** | | **04 27 38.5** | **+2.0** |
| TYV | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **BJT** | **Baijiatuau** | **18.95** | **299** | *e*P | | **P** | | **04 27 38.4** | **-1.3** |
| BJT | | | | pmax | | pmax | | | |
| | comp=Z,46nm,0.7s | | | | | | | | |
| **BJT** | **Baijiatuau** | **18.95** | **299** | *e*P | | **P** | | **04 27 38.4** | **-1.3** |
| | comp=Z,46nm,0.7s | | | | | | | | |
| **BJI** | **Beijing** | **18.96** | **299** | P | | **P** | | **04 27 37.8** | **-1.9** |
| BJI | | | | sP | | **sP** | | **04 29 19.5** | **-0.2** |
| BJI | | | | S | | **S** | | **04 30 55.0** | **+0.3** |
| BJI | | | | ScP | | **ScP** | | **04 34 48.4** | **+1.3** |
| BJI | | | | PcS | | **PcS** | | **04 35 24.9** | **+0.9** |
| BJI | | | | ScS | | **ScS** | | **04 38 30.3** | **+1.5** |
| BJI | | | | PMZ | | | | | |
| | comp=Z,64nm,1.0s | | | | | | | | |
| BJI | | | | PMZ | | | | | |
| | comp=Z,520nm,5.1s | | | | | | | | |
| BJI | | | | LN | | | | | |
| | comp=Z,1μm,19.2s | | | | | | | | |
| BJI | | | | LE | | | | | |
| | comp=Z,890nm,19.2s | | | | | | | | |
| BJI | | | | LZ | | | | | |
| | comp=Z,1μm,19.2s | | | | | | | | |
| **HIA** | **Hailar** | **21.50** | **326** | *e*P | | **P** | | **04 28 03.6** | **-0.2** |
| HIA | | | | pmax | | pmax | | | |
| | comp=Z,85nm,1.4s | | | | | | | | |
| **HIA** | **Hailar** | **21.50** | **326** | *e*P | | **P** | | **04 28 03.6** | **-0.2** |
| | comp=Z,85nm,1.4s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **22.56** | **299** | *e*P | | **P** | | **04 28 14.8** | **+1.1** |
| HHC | | | | PMZ | | | | | |
| | comp=Z,32nm,1.0s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,560nm,6.5s | | | | | | | | |
| **XAN** | **Xi'an** | **24.16** | **282** | P | | **P** | | **04 28 27.4** | **-0.8** |
| XAN | | | | sP | | sP | | 04 30 10.5 | -6.0 |
| XAN | | | | PMZ | | | | | |
| | comp=Z,97nm,0.7s | | | | | | | | |
| XAN | | | | PMZ | | | | | |
| | comp=Z,500nm,6.4s | | | | | | | | |
| **ENH** | **Enshi** | **24.25** | **272** | *e*P | | **P** | | **04 28 28.1** | **-0.9** |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **CLNS** | **Chul'man** | **25.90** | **344** | *e*P | | **P** | | **04 28 42.0** | **-1.3** |
| CLNS | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| CLNS | | | | pmax | | pmax | | | |
| | comp=N,14nm,1.2s | | | | | | | | |
| **GYA** | **Guiyang** | **27.71** | **266** | *e*P | | **P** | | **04 29 01.0** | **+1.1** |
| GYA | | | | PMZ | | | | | |
| | comp=N,10.0nm,0.8s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.82** | **312** | *ce*P | | **P** | | **04 29 01.2** | **+0.6** |
| ULN | | | | *i* *PP | | **pP** | | **04 30 10.2** | **+2.2** |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,18nm,1.5s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **27.82** | **312** | *e*P | | **P** | | **04 29 00.6** | **0.0** |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **LZH** | **Lanzhou** | **28.20** | **287** | ⇓P | | **P** | | **04 29 02.8** | **-1.3** |
| LZH | | | | pP | | **pP** | | **04 30 09.5** | **-2.2** |
| LZH | | | | PP | | **PnPn** | | **04 30 15.3** | **-0.8** |
| LZH | | | | sP | | **sP** | | **04 30 51.8** | **-2.9** |
| LZH | | | | PMZ | | | | | |
| | comp=Z,25nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,60nm,5.2s | | | | | | | | |
| **SONM** | **Songino Array** | **28.21** | **312** | P | | **P** | | **04 29 04.1** | **0.0** |
| | comp=Z,2.8nm,0.4s,baz=126,slow=7.7,SNR=21 | | | | | | | | |
| SONM | | | | pP | | **pP** | | **04 30 12.2** | **+0.5** |
| | comp=Z,7.3nm,1.1s,baz=116,slow=9.8,SNR=4.5 | | | | | | | | |
| **SONM** | **Songino Array** | **28.21** | **312** | P | | **P** | | **04 29 04.1** | **0.0** |
| SONM | | | | *PP | | **pP** | | **04 30 12.2** | **+0.5** |
| SONM | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | | |
| SONM | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **CD2** | **Chengdu** | **28.94** | **276** | *e*P | | **P** | | **04 29 09.8** | **-0.8** |
| **YAK** | **Yakutsk** | **29.98** | **352** | P | | **P** | | **04 29 18.9** | **-0.3** |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,46nm,1.5s | | | | | | | | |
| **ZAK** | **Zakamensk** | **31.06** | **315** | *e*P | | **P** | | **04 29 28.5** | **-0.4** |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.4s | | | | | | | | |
| **GTA** | **Gaotai** | **31.34** | **294** | *e*P | | **P** | | **04 29 31.3** | **-0.2** |
| GTA | | | | PMZ | | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **TLY** | **Talaya** | **31.36** | **318** | P | | **P** | | **04 29 32.7** | **+1.3** |
| | comp=Z,4.7nm,0.5s,baz=127,slow=5.6,SNR=3.9 | | | | | | | | |
| **TLY** | **Talaya** | **31.36** | **318** | *e*P | | **P** | | **04 29 32.9** | **+1.5** |
| TLY | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **KMI** | **Kunming** | **31.49** | **266** | P | | **P** | | **04 29 35.3** | **+2.2** |
| KMI | | | | pP | | **pP** | | **04 30 42.8** | **+1.2** |
| KMI | | | | PP | | **PnPn** | | **04 30 56.5** | **+1.2** |
| KMI | | | | sP | | **sP** | | **04 31 24.3** | **+0.1** |
| KMI | | | | S | | **S** | | **04 34 14.3** | **+0.3** |
| KMI | | | | sS | | **sS** | | **04 36 16.9** | **-2.5** |
| KMI | | | | SS | | **SS** | | **04 36 39.1** | **-8.9** |
| KMI | | | | PMZ | | | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | | |
| **SEY** | **Seymchan** | **31.81** | **13** | P | | **P** | | **04 29 34.6** | **-0.4** |
| | comp=Z,2.6nm,0.8s,baz=213,slow=14,SNR=3.0 | | | | | | | | |
| **SEY** | **Seymchan** | **31.81** | **13** | P | | **P** | | **04 29 34.6** | **-0.4** |
| SEY | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **SIJI** | **Sorong** | **33.78** | **192** | P | | **P** | | **04 29 51.7** | **-0.9** |
| | comp=Z,7.7nm,0.7s,baz=355,slow=15,SNR=3.9 | | | | | | | | |
| **AMKA** | **Amchitka** | **35.56** | **46** | *e*P | | **P** | | **04 30 08.0** | **+0.8** |
| | comp=Z,9.3nm,0.4s | | | | | | | | |
| **HVS** | **Khovu-Aksy** | **37.09** | **313** | ⇑*e*P | | **P** | | **04 30 22.1** | **+2.0** |
| HVS | | | | pmax | | pmax | | | |
| | comp=Z,34nm,0.7s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **37.38** | **258** | *e*P | | **P** | | **04 30 21.7** | **-1.2** |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **37.38** | **258** | *e*P | | **P** | | **04 30 21.7** | **-1.2** |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.55** | **258** | P | | **P** | | **04 30 23.9** | **-0.4** |
| | comp=Z,5.6nm,0.7s,baz=49,slow=7.3,SNR=32 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.55** | **258** | *i* P | | **P** | | **04 30 24.2** | **-0.2** |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **37.56** | **258** | *e*P | | **P** | | **04 30 23.1** | **-1.3** |
| **BILL** | **Bilibino** | **39.18** | **16** | ⇑*i*P | | **P** | | **04 30 37.9** | **+0.8** |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,18nm,0.9s | | | | | | | | |
| **BILL** | **Bilibino** | **39.18** | **16** | *e*P | | **P** | | **04 30 38.0** | **+1.0** |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **LSA** | **Lhasa** | **39.80** | **279** | *e*P | | **P** | | **04 30 42.6** | **-0.7** |
| LSA | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **LSA** | **Lhasa** | **39.80** | **279** | *e*P | | **P** | | **04 30 42.6** | **-0.7** |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **WMQ** | **Urumqi** | **40.42** | **301** | P | | **P** | | **04 30 48.0** | **+0.4** |
| WMQ | | | | pP | | **pP** | | **04 31 58.0** | **-1.1** |
| WMQ | | | | sP | | **sP** | | **04 32 40.0** | **-1.0** |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,23nm,1.0s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.93** | **316** | P | | **P** | | **04 31 06.0** | **-1.4** |
| | comp=Z,3.2nm,0.5s,baz=100,slow=8.4,SNR=12 | | | | | | | | |
| ZALV | | | | PcP | | **PcP** | | **04 32 50.1** | **-0.3** |
| | comp=Z,3.2nm,0.9s,baz=79,slow=3.1,SNR=4.5 | | | | | | | | |
| ZALV | | | | ScP | | **ScP** | | **04 36 03.6** | **-2.1** |
| | comp=Z,0.8nm,0.5s,baz=93,slow=2.9,SNR=3.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.93** | **316** | P | | **P** | | **04 31 06.0** | **-1.4** |
| ZALV | | | | | | | | 04 32 50.1 | |
| ZALV | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | |
| ZALV | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| ZALV | | | | pmax | | pmax | | | |
| | comp=N,1.0nm,0.5s | | | | | | | | |
| **NVS** | **Novosibirsk** | **43.97** | **317** | *e*P | | **P** | | **04 31 15.2** | **-0.4** |
| NVS | | | | pmax | | pmax | | | |
| | comp=N,4.0nm,0.8s | | | | | | | | |
| NVS | | | | pmax | | pmax | | | |
| | comp=E,9.0nm,0.8s | | | | | | | | |
| NVS | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **MK01** | **Makanchi Array** | **44.15** | **306** | *e*P | | **P** | | **04 31 16.4** | **-0.9** |
| **MK31** | **Makanchi Array** | **44.16** | **306** | *i* P | | **P** | | **04 31 16.4** | **-0.9** |
| MK31 | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.16** | **306** | P | | **P** | | **04 31 16.4** | **-0.9** |
| | comp=Z,7.1nm,0.7s,baz=89,slow=9.7,SNR=36 | | | | | | | | |
| MKAR | | | | pP | | **pP** | | **04 32 31.9** | **+1.7** |
| | comp=Z,5.1nm,0.9s,baz=87,slow=8.6,SNR=6.2 | | | | | | | | |
| MKAR | | | | ScP | | **ScP** | | **04 36 09.6** | **-1.3** |
| | comp=Z,0.7nm,0.6s,baz=92,slow=4.3,SNR=4.1 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.16** | **306** | P | | **P** | | **04 31 16.4** | **-0.9** |
| MKAR | | | | *PP | | **pP** | | **04 32 31.9** | **+1.7** |
| MKAR | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| MKAR | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| MKAR | | | | pmax | | pmax | | | |
| | comp=N,1.0nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **44.16** | **306** | *e*P | | **P** | | **04 31 16.9** | **-0.4** |
| MKAR | | | | pP | | **pP** | | **04 32 31.9** | **+1.7** |
| MKAR | | | | ScP | | **ScP** | | **04 36 09.6** | **-1.3** |
| **IPM** | **Ipoh** | **44.27** | **239** | *e*P | | **P** | | **04 31 17.7** | **-0.8** |
| | comp=N,16nm,0.6s | | | | | | | | |
| **MAKZ** | **Makanchi** | **44.37** | **306** | *e*P | | **P** | | **04 31 18.6** | **-0.4** |
| **KURK** | **Kurchatov** | **46.52** | **311** | *e*P | | **P** | | **04 31 34.2** | **-1.2** |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,55nm,0.9s | | | | | | | | |
| **KURK** | **Kurchatov** | **46.52** | **311** | *e*P | | **P** | | **04 31 34.2** | **-1.2** |
| | comp=Z,55nm,0.9s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.57** | **311** | P | | **P** | | **04 31 34.7** | **-1.2** |
| | comp=Z,7.1nm,0.4s,baz=90,slow=9.1,SNR=71 | | | | | | | | |
| **PSI** | **Prapat** | **46.94** | **239** | P | | **P** | | **04 31 39.0** | **-0.3** |
| | comp=Z,6.3nm,0.7s,baz=51,slow=8.7,SNR=5.1 | | | | | | | | |
| **PSI** | **Prapat** | **46.94** | **239** | P | | **P** | | **04 31 39.0** | **-0.3** |
| PSI | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **GSI** | **Gunungsitoli** | **48.94** | **239** | *e*P | | **P** | | **04 31 53.9** | **-

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **ZRNK** | **Zerenda** | **52.35** | **315** | *i* P | | **P** | **04 32 17.9** | **-1.1** |
| ZRNK | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **52.45** | **39** | *i* P | | **P** | **04 32 19.8** | **+0.2** |
| **CAST** | **Castle Rocks** | **52.62** | **32** | *e*P | | **P** | **04 32 22.1** | **+1.3** |
| | comp=Z,17nm,1.4s | | | | | | | | |
| **KK31** | **Karatay Array** | **52.90** | **302** | *i* P | | **P** | **04 32 22.5** | **-0.7** |
| KK31 | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.4s | | | | | | | | |
| **KKAR** | **Karatay Array** | **52.90** | **302** | *e*P | | **P** | **04 32 22.7** | **-0.6** |
| KKAR | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | |
| **KKAR** | **Karatay Array** | **52.90** | **302** | *e*P | | **P** | **04 32 22.7** | **-0.6** |
| | comp=Z,4.2nm,0.5s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **53.11** | **31** | *e*P | | **P** | **04 32 24.9** | **+0.5** |
| | comp=Z,4.4nm,0.7s | | | | | | | | |
| **MLY** | **Manley** | **53.23** | **30** | *e*P | | **P** | **04 32 26.6** | **+1.3** |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **MCK** | **McKinley** | **54.02** | **32** | *e*P | | **P** | **04 32 31.5** | **+0.6** |
| MCK | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **MCK** | **McKinley** | **54.02** | **32** | *e*P | | **P** | **04 32 31.5** | **+0.6** |
| | comp=Z,18nm,1.3s | | | | | | | | |
| **RND** | **Reindeer** | **54.07** | **32** | *e*P | | **P** | **04 32 31.2** | **-0.1** |
| RND | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **RND** | **Reindeer** | **54.07** | **32** | *e*P | | **P** | **04 32 31.2** | **-0.1** |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **MDM** | **Murphy Dome** | **54.30** | **30** | *e*P | | **P** | **04 32 33.4** | **+0.5** |
| | comp=Z,15nm,0.6s | | | | | | | | |
| **COLA** | **College** | **54.46** | **30** | *de*P | | **P** | **04 32 34.9** | **+0.9** |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **COLA** | **College** | **54.46** | **30** | *e*P | | **P** | **04 32 34.6** | **+0.6** |
| | comp=Z,9.7nm,0.6s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **54.49** | **31** | *e*P | | **P** | **04 32 34.5** | **+0.3** |
| | comp=Z,29nm,1.9s | | | | | | | | |
| **ILAR** | **Eielson Array** | **54.88** | **30** | P | | **P** | **04 32 36.0** | **-0.9** |
| | comp=Z,4.5nm,0.6s,baz=273,slow=5.2,SNR=53 | | | | | | | | |
| **ILAR** | **Eielson Array** | **54.88** | **30** | P | | **P** | **04 32 36.1** | **-0.9** |
| ILAR | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| **IL1** | **Eielson Array** | **54.88** | **30** | *e*P | | **P** | **04 32 35.7** | **-1.3** |
| **AS01** | **Alice Springs** | **55.99** | **184** | *e*P | | **P** | **04 32 44.6** | **-0.8** |
| **ASAR** | **Alice Springs** | **56.00** | **184** | P | | **P** | **04 32 44.6** | **-0.8** |
| | comp=Z,5.4nm,0.6s,baz=1.7,slow=5.6,SNR=60 | | | | | | | | |
| **ASAR** | **Alice Springs** | **56.00** | **184** | P | | **P** | **04 32 44.6** | **-0.8** |
| ASAR | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| **DOT** | **Dot Lake** | **56.19** | **32** | *e*P | | **P** | **04 32 45.7** | **-0.6** |
| | comp=Z,18nm,0.7s | | | | | | | | |
| **ARU** | **Arti** | **57.83** | **320** | *d i*P | | **P** | **04 32 56.8** | **-0.8** |
| ARU | | | | | | | 04 33 40.5 | | |
| ARU | | | | *PP | | **pP** | **04 34 13.7** | **-1.5** |
| ARU | | | | | | | 04 34 57.5 | | |
| ARU | | | | S | | **S** | **04 40 26.9** | **-0.5** |
| ARU | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **ARU** | **Arti** | **57.83** | **320** | *e*P | | **P** | **04 32 57.0** | **-0.7** |
| | comp=Z,11nm,0.9s | | | | | | | | |
| **AB31** | **Akbulak array** | **58.63** | **311** | *e*P | | **P** | **04 33 02.4** | **-0.9** |
| AB31 | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **58.63** | **311** | *e*P | | **P** | **04 33 02.5** | **-0.8** |
| | comp=Z,4.6nm,0.4s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **59.53** | **313** | P | | **P** | **04 33 09.1** | **-0.3** |
| AKTO | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **INK** | **Inuvik** | **59.73** | **25** | P | | **P** | **04 33 10.0** | **-0.4** |
| | comp=Z,3.7nm,0.7s,baz=296,slow=5.5,SNR=15 | | | | | | | | |
| **INK** | **Inuvik** | **59.73** | **25** | P | | **P** | **04 33 10.0** | **-0.4** |
| INK | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **67.16** | **339** | P | | **P** | **04 33 58.1** | **-0.5** |
| | comp=Z,5.0nm,0.9s,baz=61,slow=7.5,SNR=10 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **67.16** | **339** | P | | **P** | **04 33 58.1** | **-0.5** |
| ARCES | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **69.18** | **28** | P | | **P** | **04 34 10.5** | **-0.6** |
| | comp=Z,2.3nm,0.7s,baz=304,slow=5.9,SNR=7.8 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **69.18** | **28** | P | | **P** | **04 34 10.5** | **-0.6** |
| YKA | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **OBN** | **Obninsk** | **69.92** | **323** | P | | **P** | **04 34 16.0** | **+0.4** |
| OBN | | | | *e**PP | | **pP** | **04 35 37.7** | **+1.0** |
| OBN | | | | *e**SP | | **sP** | **04 36 17.1** | **+1.1** |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **69.98** | **354** | *i* P | | **P** | **04 34 16.0** | **+0.3** |
| DAG | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **69.98** | **354** | *i* P | | **P** | **04 34 16.0** | **+0.3** |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **FINES** | **FINESS Array B** | **71.40** | **332** | P | | **P** | **04 34 23.4** | **-1.0** |
| | comp=Z,2.7nm,0.5s,baz=82,slow=5.1,SNR=18 | | | | | | | | |
| **FINES** | **FINESS Array B** | **71.40** | **332** | *i* P | | **P** | **04 34 23.7** | **-0.7** |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | |
| **KBZ** | **Khabaz** | **71.57** | **310** | P | | **P** | **04 34 25.2** | **-0.5** |
| | comp=Z,11nm,0.8s,baz=76,slow=5.1,SNR=13 | | | | | | | | |
| **KBZ** | **Khabaz** | **71.57** | **310** | P | | **P** | **04 34 25.2** | **-0.5** |
| KBZ | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **KIV** | **Kislovodsk** | **71.60** | **311** | *e*P | | **P** | **04 34 27.1** | **+1.0** |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **PGC** | **Sidney** | **71.62** | **44** | *e*P | | **P** | **04 34 26.3** | **+0.4** |
| | comp=Z,9.8nm,0.8s | | | | | | | | |
| **F04A** | **Amboy** | **73.55** | **46** | *e*P | | **P** | **04 34 38.6** | **+1.3** |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **LTY** | **Liberty** | **73.93** | **44** | *e*P | | **P** | **04 34 39.9** | **+0.4** |
| | comp=Z,28nm,1.9s | | | | | | | | |
| **EDM** | **Edmonton** | **74.72** | **36** | *e*P | | **P** | **04 34 44.2** | **+0.3** |
| EDM | | | | pmax | pmax | | | | |
| | comp=Z,165nm,3.0s | | | | | | | | |
| **EDM** | **Edmonton** | **74.72** | **36** | *e*P | | **P** | **04 34 44.2** | **+0.3** |
| | comp=Z,165nm,3.0s | | | | | | | | |
| **C09A** | **Chrisman Ranch** | **75.04** | **43** | *e*P | | **P** | **04 34 46.5** | **+0.7** |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **D08A** | **Wollman Farm,** | **75.06** | **44** | *e*P | | **P** | **04 34 46.6** | **+0.7** |
| | comp=Z,5.7nm,0.7s | | | | | | | | |
| **SUMG** | **Summit** | **75.15** | **359** | *e*P | | **P** | **04 34 47.3** | **+0.9** |
| SUMG | | | | pmax | pmax | | | | |
| | comp=Z,177nm,2.7s | | | | | | | | |
| **SUMG** | **Summit** | **75.15** | **359** | *i* P | | **P** | **04 34 47.0** | **+0.6** |
| | comp=Z,7.3nm,0.7s | | | | | | | | |
| **SUMG** | **Summit** | **75.15** | **359** | *e*P | | **P** | **04 34 47.3** | **+0.9** |
| | comp=Z,177nm,2.7s | | | | | | | | |
| **NEW** | **Newport** | **75.44** | **42** | *e*P | | **P** | **04 34 48.9** | **+0.8** |
| NEW | | | | pmax | pmax | | | | |
| | comp=Z,59nm,2.6s | | | | | | | | |
| **NEW** | **Newport** | **75.44** | **42** | *e*P | | **P** | **04 34 48.9** | **+0.8** |
| | comp=Z,59nm,2.6s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.01** | **322** | P | | **P** | **04 34 49.9** | **-1.2** |
| | comp=Z,1.8nm,0.5s,baz=48,slow=5.6,SNR=14 | | | | | | | | |
| AKASG | | | | pP | | **pP** | **04 36 13.9** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=45,slow=4.7,SNR=1.7 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.01** | **322** | P | | **P** | **04 34 49.9** | **-1.2** |
| AKASG | | | | *PP | | **pP** | **04 36 13.9** | **+0.2** |
| AKASG | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| **KIEV** | **Kiev** | **76.02** | **322** | *e*P | | **P** | **04 34 51.1** | **-0.1** |
| KIEV | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **K05A** | **Summer Lake** | **76.13** | **48** | *e*P | | **P** | **04 34 53.0** | **+0.8** |
| | comp=Z,299nm,3.0s | | | | | | | | |
| **MOD** | **Modoc** | **76.93** | **49** | *e*P | | **P** | **04 34 57.0** | **+0.4** |
| | comp=Z,3.3nm,0.7s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **77.15** | **336** | P | | **P** | **04 34 56.8** | **-0.5** |
| | comp=Z,3.0nm,0.7s,baz=43,slow=5.6 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **77.15** | **336** | P | | **P** | **04 34 56.6** | **-0.7** |
| | comp=Z,4.7nm,0.8s,baz=44,slow=5.6,SNR=13 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **77.15** | **336** | P | | **P** | **04 34 56.6** | **-0.7** |
| NOA | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **77.30** | **47** | *e*P | | **P** | **04 34 59.3** | **+0.8** |
| | comp=Z,8.1nm,0.8s | | | | | | | | |
| **JTMT** | **Jette** | **77.32** | **41** | *e*P | | **P** | **04 34 59.0** | **+0.4** |
| **SWMT** | **Swartz Lake** | **77.61** | **41** | *e*P | | **P** | **04 35 00.4** | **+0.2** |
| **WVOR** | **Wild Horse Val** | **77.69** | **47** | *e*P | | **P** | **04 35 01.5** | **+0.7** |
| WVOR | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **77.69** | **47** | *e*P | | **P** | **04 35 01.5** | **+0.7** |
| | comp=Z,4.7nm,0.9s | | | | | | | | |
| **SLMT** | **Seeley Lake** | **78.05** | **41** | *e*P | | **P** | **04 35 02.4** | **-0.2** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MFID** | **Camas Ranch** | **78.87** | **45** | *e*P | | **P** | **04 35 07.6** | **+0.5** |
| | comp=Z,3.8nm,0.8s | | | | | | | | |
| **CMB** | **Columbia Colle** | **78.94** | **52** | *e*P | | **P** | **04 35 06.5** | **-1.1** |
| CMB | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **CMB** | **Columbia Colle** | **78.94** | **52** | *e*P | | **P** | **04 35 06.5** | **-1.1** |
| | comp=Z,2.5nm,0.7s | | | | | | | | |
| **HRY** | **Holter Researc** | **79.28** | **41** | *e*P | | **P** | **04 35 09.3** | **0.0** |
| **LRM** | **Limekiln Ridge** | **79.46** | **42** | *e*P | | **P** | **04 35 09.0** | **-1.4** |
| | comp=Z,54nm,1.0s | | | | | | | | |
| **RAYN** | **Ar Rayn** | **79.56** | **291** | *e*P | | **P** | **04 35 10.7** | **-0.4** |
| | comp=Z,7.9nm,0.9s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.56** | **311** | P | | **P** | **04 35 10.9** | **-0.1** |
| | comp=Z,4.6nm,0.9s,baz=74,slow=5.1,SNR=21 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.56** | **311** | P | | **P** | **04 35 10.9** | **-0.1** |
| BRTR | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **HLID** | **Hailey** | **79.64** | **45** | *e*P | | **P** | **04 35 11.8** | **+0.5** |
| | comp=Z,2.9nm,0.9s | | | | | | | | |
| **DLMT** | **Dillon** | **79.65** | **42** | *e*P | | **P** | **04 35 11.4** | **+0.1** |
| | comp=Z,9.3nm,1.2s | | | | | | | | |
| **BUR04** | **Bucovina Ar. S** | **79.95** | **321** | *e*P | | **P** | **04 35 13.3** | **+0.5** |
| **BOZ** | **Bozeman (W)** | **80.03** | **42** | *e*P | | **P** | **04 35 14.1** | **+0.8** |
| BOZ | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **80.03** | **42** | *e*P | | **P** | **04 35 14.1** | **+0.8** |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **BR231** | **Keskin MP Arra** | **80.05** | **311** | *e*P | | **P** | **04 35 11.7** | **-1.8** |
| **NV01** | **Mina Array Sit** | **80.10** | **51** | *e*P | | **P** | **04 35 13.7** | **-0.3** |
| **NVAR** | **Mina Array Bea** | **80.10** | **51** | P | | **P** | **04 35 13.9** | **-0.1** |
| | comp=Z,1.8nm,0.6s,baz=290,slow=5.7,SNR=22 | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **80.67** | **323** | *e*P | | **P** | **04 35 16.6** | **+0.2** |
| KOLS | | | | pmax | pmax | | | | |
| | comp=Z,25nm,2.2s | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **80.67** | **323** | *e*P | | **P** | **04 35 16.6** | **+0.2** |
| **ELK** | **Elko** | **80.75** | **47** | *e*P | | **P** | **04 35 18.2** | **+0.8** |
| ELK | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **ELK** | **Elko** | **80.75** | **47** | *e*P | | **P** | **04 35 18.2** | **+0.8** |
| | comp=Z,2.7nm,0.8s | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **80.88** | **324** | *e*P | | **P** | **04 35 17.8** | **+0.2** |
| STHS | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.5s | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **80.88** | **324** | *e*P | | **P** | **04 35 17.8** | **+0.2** |
| **GCMT** | **Greycliff** | **81.03** | **41** | *e*P | | **P** | **04 35 19.8** | **+1.2** |
| **H17A** | **Grant Village** | **81.38** | **42** | *e*P | | **P** | **04 35 22.8** | **+2.2** |
| | comp=Z,7.5nm,0.9s | | | | | | | | |
| **IMW** | **Indian Meadow** | **81.47** | **43** | *e*P | | **P** | **04 35 21.6** | **+0.5** |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **81.50** | **43** | *e*P | | **P** | **04 35 22.9** | **+1.8** |
| | comp=Z,37nm,2.0s | | | | | | | | |
| **FXWY** | **Fox Creek** | **81.58** | **43** | *e*P | | **P** | **04 35 22.6** | **+1.0** |
| | comp=Z,41nm,2.8s | | | | | | | | |
| **MOOW** | **Moose Ponds** | **81.67** | **43** | *e*P | | **P** | **04 35 22.9** | **+0.9** |
| | comp=Z,37nm,2.5s | | | | | | | | |
| **TPAW** | **Teton Pass** | **81.71** | **43** | *e*P | | **P** | **04 35 23.0** | **+0.7** |
| | comp=Z,3.6nm,0.8s | | | | | | | | |
| **SNOW** | **Snow King Moun** | **81.84** | **43** | *e*P | | **P** | **04 35 24.7** | **+1.7** |
| | comp=Z,122nm,3.0s | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **81.91** | **50** | *e*P | | **P** | **04 35 22.9** | **-0.4** |
| | comp=Z,3.6nm,0.9s | | | | | | | | |
| **BGU** | **Big Grassy Mou** | **82.01** | **46** | *e*P | | **P** | **04 35 25.4** | **+1.7** |
| | comp=Z,32nm,2.5s | | | | | | | | |
| **LAO** | **LASA Array** | **82.33** | **39** | *e*P | | **P** | **04 35 26.1** | **+0.9** |
| | comp=Z,128nm,2.6s | | | | | | | | |
| **DUG** | **Dugway** | **82.57** | **47** | *e*P | | **P** | **04 35 27.5** | **+0.8** |
| DUG | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **DUG** | **Dugway** | **82.57** | **47** | *e*P | | **P** | **04 35 27.5** | **+0.8** |
| | comp=Z,4.1nm,0.8s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **82.63** | **327** | *e*P | | **P** | **04 35 27.5** | **+0.9** |
| DPC | | | | smax | smax | | | | |
| | comp=N,4.0nm,0.2s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **82.63** | **327** | *e*P | | **P** | **04 35 27.5** | **+0.9** |
| **FPU** | **Francis Peak** | **82.67** | **46** | *e*P | | **P** | **04 35 29.4** | **+2.0** |
| **VYHS** | **Vyhne** | **82.68** | **324** | *e*P | | **P** | **04 35 27.5** | **+0.6** |
| VYHS | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **VYHS** | **Vyhne** | **82.68** | **324** | *e*P | | **P** | **04 35 27.5** | **+0.6** |
| **TCUT** | **Toone Canyon** | **82.88** | **45** | *e*P | | **P** | **04 35 29.5** | **+1.2** |
| **BW06** | **Boulder Array** | **82.96** | **43** | *e*P | | **P** | **04 35 29.0** | **+0.3** |
| **NLU** | **North Lily Min** | **83.17** | **47** | *e*P | | **P** | **04 35 29.9** | **+0.1** |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **SHPR** | **Sheep Range** | **83.25** | **51** | *e*P | | **P** | **04 35 30.6** | **+0.4** |
| **PVCC** | **Panska Ves** | **83.31** | **327** | *e*P | | **P** | **04 35 30.7** | **+0.7** |
| **PVCC** | **Panska Ves** | **83.31** | **327** | *e*P | | **P** | **04 35 30.7** | **+0.7** |
| **BRG** | **Berggiesshubel** | **83.35** | **328** | *e*P | | **P** | **04 35 29.3** | **-0.9** |
| | comp=Z,6.4nm,1.0s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **83.35** | **328** | *e*P | | **P** | **04 35 29.3** | **-0.9** |
| BRG | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **83.46** | **329** | *i* P | | **P** | **04 35 30.5** | **-0.2** |
| CLL | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **CLL** | **Collm** | **83.46** | **329** | *i* P | | **P** | **04 35 30.5** | **-0.2** |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **MSU** | **Marysvale** | **83.97** | **48** | *e*P | | **P** | **04 35 34.3** | **+0.4** |
| **MSU** | **Marysvale** | **83.97** | **48** | *e*P | | **P** | **04 35 34.3** | **+0.4** |
| **PFO** | **Pinyon Flat Ob** | **84.06** | **54** | *e*P | | **P** | **04 35 34.5** | **+0.3** |
| PFO | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **84.06** | **54** | *e*P | | **P** | **04 35 34.5** | **+0.3** |
| | comp=Z,7.1nm,0.8s | | | | | | | | |
| **SRU** | **San Rafael** | **84.64** | **47** | *e*P | | **P** | **04 35 37.3** | **+0.2** |
| SRU | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| **SRU** | **San Rafael** | **84.64** | **47** | *e*P | | **P** | **04 35 37.3** | **+0.2** |
| | comp=Z,8.9nm,0.7s | | | | | | | | |
| **GERES** | **GERESS Array B** | **84.91** | **327** | P | | **P** | **04 35 37.6** | **-0.5** |
| | comp=Z,0.7nm,0.7s,baz=28,slow=6.0,SNR=4.7 | | | | | | | | |
| **GERES** | **GERESS Array B** | **84.91** | **327** | P | | **P** | **04 35 37.6** | **-0.5** |
| GERES | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **DYA** | **Yadsworthy** | **90.73** | **337** | *e*P | | **P** | **04 36 07.8** | **+2.3** |
| **AMTX** | **Amarillo** | **92.75** | **45** | *e*P | | **P** | **04 36 15.9** | **+0.7** |
| | comp=Z,6.3nm,0.6s | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **95.25** | **50** | *e*P | | **P** | **04 36 27.1** | **+0.3** |
| **TXAR** | **Lajitas Array** | **95.25** | **50** | P | | **P** | **04 36 26.7** | **-0.1** |
| | comp=Z,1.8nm,0.7s,baz=294,slow=3.2,SNR=25 | | | | | | | | |
| TXAR | | | | pP | | **pP** | **04 37 53.8** | **+1.2** |
| | comp=Z,0.8nm,0.9s,baz=284,slow=3.6,SNR=5.3 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **95.25** | **50** | P | | **P** | **04 36 26.7** | **-0.1** |
| TXAR | | | | *PP | | **pP** | **04 37 53.8** | **+1.2** |
| TXAR | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| TXAR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **118.17** | **310** | PKP | | **PKPdf** | **04 41 46.5** | **-1.7** |
| | comp=Z,0.2nm,0.5s,baz=20,slow=1.7,SNR=8.4 | | | | | | | | |
| **SAML** | **Samuel** | **149.54** | **44** | *e*PKPdf | | **PKPdf** | **04 42 46.4** | **+0.7** |
| SAML | | | | *e*PKPbc | | **PKPbc** | **04 42 49.5** | **-1.1** |
| **LPAZ** | **La Paz** | **151.49** | **62** | PKPbc | | **PKPbc** | **04 42 56.4** | **+0.4** |
| | comp=Z,2.1nm,0.8s,baz=350,slow=3.8,SNR=9.3 | | | | | | | | |
| **LPAZ** | **La Paz** | **151.49** | **62** | PKIKP | | **PKPbc** | **04 42 56.4** | **+0.4** |
| LPAZ | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **LPAZ** | **La Paz** | **151.49** | **62** | *e*PKPbc | | **PKPbc** | **04 42 56.8** | **+0.9** |
| **LVC** | **Limon Verde** | **154.40** | **74** | PKPab | | **PKPab** | **04 43 18.7** | **+0.9** |
| | comp=Z,20nm,0.8s,baz=286,slow=8.3,SNR=4.9 | | | | | | | | |
| **CFAA** | **Coronel Fontan** | **157.92** | **95** | PKPab | | **PKPab** | **04 43 33.2** | **+0.7** |
| | comp=Z,0.2nm,0.5s,baz=248,slow=4.6,SNR=5.2 | | | | | | | | |

*CSEM **21** 04:30:42.4, 42°.53N×13°.15E, h10km, MD2.4/20, After ROM*

**ROM 21 04:30:42.4±0.1, 42°.53N×13°.15E, h10km, Md2.4/20, Ml2.4/14, Error ellipse: s-maj=1.3km s-min=0.9km az=70.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RM29** | **Verrico (Monte** | **0.05** | **52** | Pg | Pg | 04 30 45.0 | +0.4 |
| RM29 | | | | Sg | Sg | 04 30 46.2 | 0.0 |
| | 415nm,0.1s | | | | | | |
| **RM29** | **Verrico (Monte** | **0.05** | **52** | Pg | Pg | 04 30 45.0 | +0.4 |
| RM29 | | | | Sg | Sg | 04 30 46.2 | 0.0 |
| | 415nm,0.1s | | | | | | |
| **RM33** | **Pellescritta (** | **0.05** | **113** | Pg | Pg | 04 30 45.0 | +0.4 |
| RM33 | | | | Sg | Sg | 04 30 46.4 | +0.2 |
| | 6µm,0.3s | | | | | | |
| **RM33** | **Pellescritta (** | **0.05** | **113** | Pg | Pg | 04 30 45.0 | +0.4 |
| RM33 | | | | Sg | Sg | 04 30 46.4 | +0.2 |
| | 6µm,0.3s | | | | | | |
| **LNSS** | **Leonessa** | **0.11** | **312** | Pg | Pg | 04 30 45.8 | +0.5 |
| LNSS | | | | Sg | Sg | 04 30 47.4 | 0.0 |
| | 3µm,0.3s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.11** | **69** | Pg | Pg | 04 30 45.8 | +0.4 |
| RM32 | | | | Sg | Sg | 04 30 47.9 | +0.4 |
| | 2µm,0.3s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.11** | **69** | Pg | Pg | 04 30 45.8 | +0.4 |
| RM32 | | | | Sg | Sg | 04 30 47.9 | +0.4 |
| | 2µm,0.3s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.17** | **54** | Pg | Pg | 04 30 46.8 | +0.5 |
| SMA1 | | | | Sg | Sg | 04 30 49.8 | +0.9 |
| | 2µm,0.2s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.17** | **54** | Pg | Pg | 04 30 46.8 | +0.5 |
| SMA1 | | | | Sg | Sg | 04 30 49.8 | +0.9 |
| | 2µm,0.2s | | | | | | |
| **T0104** | **Madonna delle** | **0.22** | **140** | Pg | Pg | 04 30 47.7 | +0.6 |
| T0104 | | | | Sg | Sg | 04 30 51.7 | +1.5 |
| **FIAM** | **Fiamignano** | **0.26** | **185** | Pg | Pg | 04 30 48.6 | +0.7 |
| FIAM | | | | Sg | Sb | 04 30 52.9 | -1.2 |
| | 430nm,0.8s | | | | | | |
| **FIAM** | **Fiamignano** | **0.26** | **185** | Pg | Pg | 04 30 48.6 | +0.7 |
| FIAM | | | | Sg | Sb | 04 30 52.9 | -1.2 |
| | 430nm,0.8s | | | | | | |
| **T0106** | **Roio Piano** | **0.28** | **142** | Pg | Pg | 04 30 48.8 | +0.5 |
| | 193nm,0.4s | | | | | | |
| **NRCA** | **Norcia** | **0.30** | **355** | Pg | Pg | 04 30 48.8 | +0.1 |
| NRCA | | | | Sg | Sg | 04 30 53.4 | +0.5 |
| | 1µm,0.1s | | | | | | |
| **NRCA** | **Norcia** | **0.30** | **355** | Pg | Pg | 04 30 48.8 | +0.1 |
| NRCA | | | | Sg | Sg | 04 30 53.4 | +0.5 |
| | 1µm,0.1s | | | | | | |
| **TERO** | **Teramo** | **0.35** | **74** | Pg | Pg | 04 30 49.5 | +0.1 |
| TERO | | | | Sg | Sg | 04 30 54.6 | +0.5 |
| **TERO** | **Teramo** | **0.35** | **74** | Pg | Pg | 04 30 49.5 | +0.1 |
| TERO | | | | Sg | Sg | 04 30 54.6 | +0.5 |
| **FAGN** | **Fagnano** | **0.42** | **129** | Pg | Pb | 04 30 51.5 | -0.5 |
| | 272nm,0.4s | | | | | | |
| **FAGN** | **Fagnano** | **0.42** | **129** | Pg | Pb | 04 30 51.5 | -0.5 |
| | 272nm,0.4s | | | | | | |
| **CESX** | **Cesi** | **0.43** | **281** | Pg | Pg | 04 30 51.2 | +0.3 |
| | 163nm,0.5s | | | | | | |
| **CESX** | **Cesi** | **0.43** | **281** | Pg | Pg | 04 30 51.2 | +0.3 |
| | 163nm,0.5s | | | | | | |
| **CESI** | **CESI - Serrava** | **0.51** | **339** | Pg | Pg | 04 30 52.5 | +0.1 |
| CESI | | | | Sg | Sb | 04 31 00.3 | -0.8 |
| | 45nm,0.2s | | | | | | |
| **CESI** | **CESI - Serrava** | **0.51** | **339** | Pg | Pg | 04 30 52.5 | +0.1 |
| CESI | | | | Sg | Sb | 04 31 00.3 | -0.8 |
| | 45nm,0.2s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.53** | **105** | Pg | Pb | 04 30 53.6 | -0.4 |
| VCEL | | | | Sg | Sb | 04 31 00.9 | -0.9 |
| | 228nm,0.5s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.53** | **105** | Pg | Pb | 04 30 53.6 | -0.4 |
| VCEL | | | | Sg | Sb | 04 31 00.9 | -0.9 |
| | 228nm,0.5s | | | | | | |
| **PTQR** | **Pietraquaria** | **0.54** | **160** | Pg | Pg | 04 30 52.9 | -0.2 |
| | 13nm,0.3s | | | | | | |
| **PTQR** | **Pietraquaria** | **0.54** | **160** | Pg | Pg | 04 30 52.9 | -0.2 |
| | 13nm,0.3s | | | | | | |
| **OFFI** | **Offida** | **0.57** | **44** | Pg | Pb | 04 30 54.2 | -0.3 |
| | 422nm,0.4s | | | | | | |
| **OFFI** | **Offida** | **0.57** | **44** | Pg | Pb | 04 30 54.2 | -0.3 |
| | 422nm,0.4s | | | | | | |
| **CERT** | **Cerreto** | **0.59** | **192** | Pg | Pg | 04 30 53.9 | -0.1 |
| | 82nm,0.4s | | | | | | |
| **CERT** | **Cerreto** | **0.59** | **192** | Pg | Pg | 04 30 53.9 | -0.1 |
| | 82nm,0.4s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.74** | **348** | Pg | Pg | 04 30 56.5 | -0.3 |
| SNTG | | | | Sg | Sb | 04 31 07.9 | +0.2 |
| | 54nm,0.5s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.74** | **348** | Pg | Pg | 04 30 56.5 | -0.3 |
| SNTG | | | | Sg | Sb | 04 31 07.9 | +0.2 |
| | 54nm,0.5s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.79** | **47** | Pg | Pg | 04 30 53.5 | -4.2 |
| GUMA | | | | Sg | Sg | 04 31 02.0 | -6.0 |
| | 458nm,0.3s | | | | | | |
| **GUMA** | **Gualdo di Mace** | **0.79** | **47** | Pg | Pg | 04 30 53.5 | -4.2 |
| GUMA | | | | Sg | Sg | 04 31 02.0 | -6.0 |
| | 458nm,0.3s | | | | | | |
| **CING** | **Cingoli** | **0.85** | **2** | Pg | Pg | 04 30 58.2 | -0.6 |
| CING | | | | Sg | Sb | 04 31 11.1 | +0.3 |
| **CING** | **Cingoli** | **0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **RM29** | **Verrico (Monte** | **0.03** | **69** | Pg | Pg | 04 35 05.3 | +0.3 |
| RM29 | | | | Sg | Sg | 04 35 06.4 | -0.2 |
| | 2μm,0.1s | | | | | | |
| **RM33** | **Pellescritta (** | **0.06** | **134** | Pg | Pg | 04 35 05.4 | +0.2 |
| RM33 | | | | Sg | Sg | 04 35 06.9 | 0.0 |
| | 3μm,0.2s | | | | | | |
| **RM33** | **Pellescritta (** | **0.06** | **134** | Pg | Pg | 04 35 05.4 | +0.2 |
| RM33 | | | | Sg | Sg | 04 35 06.9 | 0.0 |
| | 3μm,0.2s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.10** | **77** | Pg | Pg | 04 35 06.2 | +0.5 |
| RM32 | | | | Sg | Sg | 04 35 08.1 | +0.2 |
| | 2μm,0.2s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.10** | **77** | Pg | Pg | 04 35 06.2 | +0.5 |
| RM32 | | | | Sg | Sg | 04 35 08.1 | +0.2 |
| | 2μm,0.2s | | | | | | |
| **LNSS** | **Leonessa** | **0.10** | **302** | Pg | Pg | 04 35 06.1 | +0.4 |
| LNSS | | | | Sg | Sg | 04 35 08.1 | +0.3 |
| | 906nm,0.2s | | | | | | |
| **LNSS** | **Leonessa** | **0.10** | **302** | Pg | Pg | 04 35 06.1 | +0.4 |
| LNSS | | | | Sg | Sg | 04 35 08.1 | +0.3 |
| | 906nm,0.2s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.15** | **58** | Pg | Pg | 04 35 07.1 | +0.6 |
| SMA1 | | | | Sg | Sg | 04 35 10.1 | +1.0 |
| | 1μm,0.2s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.15** | **58** | Pg | Pg | 04 35 07.1 | +0.6 |
| SMA1 | | | | Sg | Sg | 04 35 10.1 | +1.0 |
| | 1μm,0.2s | | | | | | |
| **T0104** | **Madonna delle** | **0.23** | **145** | Pg | Pb | 04 35 08.5 | -0.6 |
| T0104 | | | | Sg | Sg | 04 35 11.9 | +0.9 |
| **FIAM** | **Fiamignano** | **0.28** | **186** | Pg | Pg | 04 35 09.0 | +0.3 |
| FIAM | | | | Sg | Sg | 04 35 13.5 | +0.9 |
| | 211nm,0.4s | | | | | | |
| **FIAM** | **Fiamignano** | **0.28** | **186** | Pg | Pg | 04 35 09.0 | +0.3 |
| FIAM | | | | Sg | Sg | 04 35 13.5 | +0.9 |
| | 211nm,0.4s | | | | | | |
| **NRCA** | **Norcia** | **0.29** | **353** | Pg | Pg | 04 35 09.0 | +0.2 |
| NRCA | | | | Sg | Sg | 04 35 13.7 | +0.9 |
| | 575nm,0.1s | | | | | | |
| **NRCA** | **Norcia** | **0.29** | **353** | Pg | Pg | 04 35 09.0 | +0.2 |
| NRCA | | | | Sg | Sg | 04 35 13.7 | +0.9 |
| | 575nm,0.1s | | | | | | |
| **T0106** | **Roio Piano** | **0.29** | **145** | Pg | Pg | 04 35 09.6 | +0.7 |
| | 111nm,0.3s | | | | | | |
| **TERO** | **Teramo** | **0.34** | **77** | Pg | Pg | 04 35 09.8 | +0.1 |
| TERO | | | | Sg | Sg | 04 35 15.0 | +0.8 |
| **TERO** | **Teramo** | **0.34** | **77** | Pg | Pg | 04 35 09.8 | +0.1 |
| TERO | | | | Sg | Sg | 04 35 15.0 | +0.8 |
| **FAGN** | **Fagnano** | **0.42** | **132** | Pg | Pb | 04 35 12.0 | -0.4 |
| | 116nm,0.3s | | | | | | |
| **FAGN** | **Fagnano** | **0.42** | **132** | Pg | Pb | 04 35 12.0 | -0.4 |
| | 116nm,0.3s | | | | | | |
| **CESX** | **Cesi** | **0.43** | **278** | Pg | Pb | 04 35 12.3 | -0.2 |
| CESX | | | | Sg | Sg | 04 35 18.0 | +0.9 |
| | 94nm,0.2s | | | | | | |
| **CESX** | **Cesi** | **0.43** | **278** | Pg | Pb | 04 35 12.3 | -0.2 |
| CESX | | | | Sg | Sg | 04 35 18.0 | +0.9 |
| | 94nm,0.2s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.53** | **107** | Pg | Pg | 04 35 13.4 | +0.1 |
| | 105nm,0.3s | | | | | | |
| **VCEL** | **Villa Celiera** | **0.53** | **107** | Pg | Pg | 04 35 13.4 | +0.1 |
| | 105nm,0.3s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.72** | **347** | Pg | Pg | 04 35 16.7 | -0.2 |
| | 29nm,0.5s | | | | | | |
| **SNTG** | **Esanatoglia** | **0.72** | **347** | Pg | Pg | 04 35 16.7 | -0.2 |
| | 29nm,0.5s | | | | | | |

**NNC 21 04:39:46.7±4.5,37°97N×77°27E,h0km,mb4.0,mpv3.6, 5C-4D,Error ellipse: s-maj=39.0km s-min=31.7km az=77.0,Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **3.57** | **306** | ⇑Pn | Pn | 04 40 38.0 | -5.7 |
| | 7.5nm,0.4s | | | | | | |
| SFK | | | | ⇑Sn | Sn | 04 41 15.2 | -12 |
| | 44nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **5.11** | **346** | ⇓Pn | Pn | 04 41 05.8 | +1.0 |
| | 15nm,0.8s | | | | | | |
| TKM2 | | | | ⇓Sn | Sn | 04 42 05.7 | +1.0 |
| | 11nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **5.12** | **336** | ⇓Pn | Pn | 04 41 03.6 | -1.3 |
| | 9.3nm,0.7s | | | | | | |
| AAK | | | | Sn | Sn | 04 42 05.4 | +0.6 |
| | 7.9nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **5.80** | **323** | ⇑Pn | Pn | 04 41 16.6 | +2.4 |
| | 1.8nm,0.5s | | | | | | |
| MNAS | | | | ⇑Sn | Sn | 04 42 22.7 | +1.1 |
| | 14nm,1.3s | | | | | | |
| **KK31** | **Karatay Array** | **7.26** | **317** | ⇑Pn | Pn | 04 41 31.2 | -2.9 |
| | 1.9nm,0.7s,baz=131,slow=13,SNR=4.3 | | | | | | |
| KK31 | | | | ⇓Sn | Sn | 04 42 59.3 | +2.0 |
| | 1.8nm,0.5s,baz=133,slow=28 | | | | | | |

*IDC **21** 04:45:37.1±0.6,34°.79S×73°.72W,h0km,mb4.4/12, mb1 4.5/15,mb1mx4.4/24,mbtmp4.4/15,ML3.8/3,MS4.0/7, Ms1 4.0/7,ms1mx3.6/30,Error ellipse: s-maj=22.6km s-min=14.4km az=101.0*
*NEIC **21** 04:45:39.0,34°.74S×73°.85W,h25km,mb4.7/19, ML4.7(GUC),After GUC.*
*GUC **21** 04:45:39.1±0.5,34°.74S×73°.85W,h25km±3km,ML4.7*
*ISCJB **21** 04:45:40.6±0.3,34°.76S±0°.03×73°.76W±0°.04,h33km, mb4.5/29,MS4.0/6,Error ellipse: s-maj=4.8km s-min=3.7km az=137.1*
*BJI **21** 04:45:43.1,34°.70S×73°.00W,h28km,mB5.2/2,Ms5.2/2, Ms7 5.2/3*

**ISC 21 04:45:41.1±1.1,34°.78S±0°.04×73°.72W±0°.06,h26km±7km, n93,σ1s74/102,mb4.7/29,MS4.1/6,1C-1D,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **1.47** | **75** | *e*P | **Pn** | **04 46 05.0** | **-0.8** |
| CHPI | | | | *e*S | **Sn** | **04 46 24.5** | **+0.3** |
| **COCH** | **Cobquecura** | **1.55** | **151** | ⇑*e*P | **Pn** | **04 46 06.0** | **-0.9** |
| COCH | | | | AML | AML | 04 46 25.6 | |
| | comp=N,11μm,0.3s | | | | | | |
| **TALC** | **Talca** | **1.81** | **110** | *e*P | **Pn** | **04 46 11.1** | **+0.5** |
| TALC | | | | *e*S | **Sb** | **04 46 34.9** | **-1.1** |
| **NICH** | **Los Niches** | **2.06** | **97** | *e*P | **Pn** | **04 46 14.6** | **+0.6** |
| NICH | | | | *e*S | **Sb** | **04 46 41.5** | **-1.3** |
| **CCHI** | **Chillan** | **2.26** | **144** | *e*P | **Pn** | **04 46 16.9** | **+0.1** |
| CCHI | | | | *e*S | **Sn** | **04 46 45.3** | **+1.6** |
| CCHI | | | | *e*S | **Sn** | **04 46 45.3** | **+1.6** |
| **RCDM** | **Rinconada Maip** | **2.73** | **63** | *e*P | **Pn** | **04 46 22.7** | **-0.6** |
| RCDM | | | | *e*S | **Sn** | **04 46 56.4** | **+0.9** |
| RCDM | | | | AML | AML | 04 46 58.4 | |
| | comp=N,2μm,0.5s | | | | | | |
| **ANTU** | **Antumapu** | **2.83** | **66** | *e*P | **Pn** | **04 46 24.6** | **0.0** |
| ANTU | | | | *e*S | **Sn** | **04 46 59.0** | **+1.2** |
| ANTU | | | | AML | AML | 04 46 59.6 | |
| | comp=N,4μm,0.5s | | | | | | |
| **ROC1** | **El Roble** | **2.88** | **52** | *e*P | **Pn** | **04 46 25.0** | **-0.5** |
| ROC1 | | | | *e*S | **Sn** | **04 47 02.5** | **+3.1** |
| **CLCH** | **Cerro Calan** | **2.98** | **63** | *e*P | **Pn** | **04 46 26.8** | **+0.1** |
| CLCH | | | | *e*S | **Sn** | **04 47 02.9** | **+1.3** |
| CLCH | | | | AML | AML | 04 47 04.1 | |
| | comp=E,2μm,0.3s | | | | | | |
| **CANA** | **Caviahue** | **3.77** | **146** | *e*P | **Pn** | **04 46 40.8** | **+3.1** |
| CANA | | | | *e*S | **Sb** | **04 47 30.0** | **-2.4** |
| **AUSP** | **Uspallata** | **4.42** | **56** | *e*P | **Pn** | **04 46 48.1** | **+1.3** |
| AUSP | | | | *e*S | **Sn** | **04 47 42.0** | **+4.3** |
| **ARCO** | **CERRO ARCO** | **4.43** | **65** | *e*P | **Pn** | **04 46 48.0** | **+1.3** |
| ARCO | | | | *e*S | **Sn** | **04 47 42.6** | **+5.1** |
| ARCO | | | | IAML | | 04 47 48.4 | |
| | comp=Z,115nm,0.5s | | | | | | |
| **ASAL** | **Salagasta** | **4.62** | **63** | *e*P | **Pn** | **04 46 50.6** | **+1.4** |
| ASAL | | | | *e*S | **Sn** | **04 47 47.0** | **+4.9** |
| **RTLS** | **Leoncito** | **4.75** | **52** | *e*P | **Pn** | **04 46 52.5** | **+1.3** |
| RTLS | | | | *e*S | **Sn** | **04 47 49.1** | **+3.5** |
| **RTCV** | **Cerro Valdivia** | **5.22** | **58** | *e*P | **Pn** | **04 46 58.4** | **+0.9** |
| **SJA** | **San Juan** | **5.41** | **55** | *e*P | **Pn** | **04 47 01.0** | **+0.9** |
| SJA | | | | IAML | | 04 49 00.2 | |
| | comp=Z,148nm,0.1s | | | | | | |
| **CFAA** | **Coronel Fontan** | **5.58** | **57** | Pn | **Pn** | **04 47 03.2** | **+0.7** |
| | comp=Z,2.2nm,0.3s,baz=230,slow=13,SNR=298 | | | | | | |
| CFAA | | | | Sn | **Sn** | **04 48 07.6** | **+1.9** |
| | comp=Z,3.0nm,0.3s,baz=315,slow=24,SNR=10 | | | | | | |
| **CFAA** | **Coronel Fontan** | **5.58** | **57** | *e*P | **Pn** | **04 47 03.0** | **+0.6** |
| **RTLL** | **Cerro Villicun** | **5.58** | **53** | *e*P | **Pn** | **04 47 02.9** | **+0.3** |
| **AMOG** | **MOGNA** | **5.83** | **50** | *e*P | **Pn** | **04 47 06.1** | **+0.2** |
| **ACAN** | **Cantantal** | **6.00** | **67** | *e*P | **Pn** | **04 47 09.1** | **+1.0** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ACAN | | | | *e*S | **Sn** | **04 48 19.7** | **+3.7** |
| **LCO** | **Las Campanas** | **6.29** | **25** | *e*Pn | **Pn** | **04 47 10.1** | **-2.4** |
| LCO | | | | *e*S | **Sn** | **04 48 18.9** | **-4.8** |
| **PLCA** | **Paso Flores** | **6.45** | **158** | *e*Pn | **Pn** | **04 47 15.3** | **+0.9** |
| PLCA | | | | *e*Sn | Sn | 04 48 33.8 | +6.6 |
| **AVFE** | **Valle Fertil** | **6.69** | **54** | *e*P | **Pn** | **04 47 17.6** | **-0.1** |
| AVFE | | | | *e*S | **Sn** | **04 48 33.8** | **+0.7** |
| AVFE | | | | IAML | | 04 48 35.6 | |
| | comp=Z,38nm,0.3s | | | | | | |
| **AGUA** | **GUANDACOL** | **6.89** | **41** | *e*P | **Pn** | **04 47 20.3** | **-0.2** |
| AGUA | | | | *e*S | **Sn** | **04 48 36.5** | **-1.7** |
| **VCA** | **Vinchina** | **7.63** | **39** | *e*P | **Pn** | **04 47 29.3** | **-1.5** |
| VCA | | | | IAML | | 04 49 07.8 | |
| | comp=Z,45nm,0.4s | | | | | | |
| **TCA** | **Tanti** | **8.39** | **68** | *e*P | **Pn** | **04 47 40.6** | **-0.5** |
| TCA | | | | IAML | | 04 47 40.7 | |
| | comp=Z,21nm,0.3s | | | | | | |
| TCA | | | | *e*S | **Sn** | **04 49 15.7** | **+0.7** |
| **CYA** | **Choya** | **9.24** | **49** | *e*P | Pn | 04 47 49.5 | -3.3 |
| CYA | | | | IAML | | 04 47 50.1 | |
| | comp=Z,14nm,0.3s | | | | | | |
| **TRQA** | **Tornquist** | **10.01** | **112** | *e*Pn | **Pn** | **04 48 02.8** | **-0.4** |
| TRQA | | | | *e*S | **Sn** | **04 49 53.2** | **-1.4** |
| **LVC** | **Limon Verde** | **12.83** | **20** | Pn | Pn | 04 48 45.5 | +3.4 |
| | comp=Z,8.3nm,0.3s,baz=138,slow=15,SNR=3.4 | | | | | | |
| LVC | | | | Sn | Sn | 04 50 57.2 | -7.0 |
| | comp=Z,10nm,0.3s,baz=307,slow=18,SNR=2.5 | | | | | | |
| LVC | | | | LR | LR | 04 52 39.3 | |
| | comp=Z,797nm,21.2s,baz=172,slow=33 | | | | | | |
| **CPUP** | **Villa Florida** | **16.42** | **64** | Pn | **Pn** | **04 49 29.6** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=238,slow=14,SNR=2.9 | | | | | | |
| **CPUP** | **Villa Florida** | **16.42** | **64** | *e*Pn | **Pn** | **04 49 26.2** | **-3.5** |
| **LPAZ** | **La Paz** | **19.08** | **17** | P | **Pn** | **04 50 03.7** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=189,slow=9.8,SNR=14 | | | | | | |
| **LPAZ** | **La Paz** | **19.08** | **17** | *e*P | **P** | **04 49 58.8** | **-3.6** |
| **EFI** | **East Falkland** | **20.30** | **151** | *e*P | **P** | **04 50 15.7** | **+0.9** |
| **SIV** | **San Ignacio** | **21.88** | **34** | P | **P** | **04 50 31.6** | **-0.6** |
| | comp=Z,10nm,0.9s,baz=220,slow=11,SNR=20 | | | | | | |
| **NNA** | **Nana** | **22.87** | **352** | P | **P** | **04 50 42.1** | **-0.5** |
| | comp=Z,6.0nm,0.5s,baz=156,slow=10,SNR=4.0 | | | | | | |
| NNA | | | | LR | LR | 04 57 35.2 | |
| | comp=Z,213nm,18.8s,baz=166,slow=31 | | | | | | |
| **SAML** | **Samuel** | **27.46** | **23** | *e*P | **P** | **04 51 25.1** | **0.0** |
| | comp=Z,7.4nm,1.5s | | | | | | |
| **ATAH** | **Atahualpa** | **27.85** | **350** | LR | LR | 05 00 18.5 | |
| | comp=Z,190nm,18.6s,baz=152,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **29.92** | **57** | P | **P** | **04 51 46.4** | **-0.8** |
| | comp=Z,3.2nm,0.7s,baz=222,slow=9.4,SNR=5.9 | | | | | | |
| **OTAV** | **Otavalo** | **35.12** | **352** | *e*P | **P** | **04 52 34.7** | **+1.7** |
| | comp=Z,14nm,1.5s | | | | | | |
| **RCBR** | **Riachuelo** | **45.23** | **59** | LR | LR | 05 14 23.5 | |
| | comp=Z,166nm,20.7s,baz=220,slow=38 | | | | | | |
| **RCBR** | **Riachuelo** | **45.23** | **59** | *e*P | **P** | **04 53 55.8** | **-0.6** |
| **VNA3** | **Neumayer Olymp** | **49.17** | **157** | P | **P** | **04 54 27.3** | **+1.0** |
| **VNA1** | **Neumayer--Stat** | **49.51** | **157** | P | **P** | **04 54 30.1** | **+1.2** |
| **VNA2** | **Neumayer--Watz** | **49.84** | **157** | P | **P** | **04 54 30.8** | **-0.6** |
| | baz=289,slow=9.2 | | | | | | |
| **SNAA** | **Sanae** | **51.39** | **158** | P | **P** | **04 54 43.2** | **0.0** |
| **SNAA** | **Sanae** | **51.39** | **158** | P | **P** | **04 54 43.7** | **+0.5** |
| | comp=Z,6.5nm,0.8s,baz=278,slow=7.8,SNR=106 | | | | | | |
| **SNAA** | **Sanae** | **51.39** | **158** | *e*P | **P** | **04 54 43.2** | **0.0** |
| | comp=Z,10nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **55.46** | **180** | P | **P** | **04 55 13.4** | **+0.1** |
| | comp=Z,10nm,1.0s,baz=141,slow=4.2,SNR=19 | | | | | | |
| **QSPA** | **South Pole Qui** | **55.46** | **180** | *e*P | **P** | **04 55 13.9** | **+0.6** |
| | comp=Z,15nm,1.0s | | | | | | |
| **VNDA** | **Vanda** | **63.06** | **192** | P | **P** | **04 56 06.2** | **+0.7** |
| | comp=Z,0.3nm,0.4s,baz=154,slow=5.1,SNR=4.1 | | | | | | |
| **SYO** | **Syowa Base** | **65.65** | **159** | *e*P | **P** | **04 56 21.2** | **-1.3** |
| **TXAR** | **Lajitas Array** | **69.76** | **332** | P | **P** | **04 56 48.6** | **-0.4** |
| | comp=Z,1.8nm,0.5s,baz=158,slow=8.4,SNR=35 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **69.76** | **332** | *e*P | **P** | **04 56 48.4** | **-0.6** |
| **MAW** | **Mawson** | **72.82** | **164** | P | **P** | **04 57 07.3** | **+0.3** |
| | comp=Z,7.0nm,0.8s,baz=203,slow=6.8,SNR=22 | | | | | | |
| MAW | | | | LR | LR | 05 28 12.7 | |
| | comp=Z,154nm,19.9s,baz=251,slow=35 | | | | | | |
| **MSTX** | **Muleshoe** | **73.61** | **335** | *e*P | **P** | **04 57 13.8** | **+1.7** |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **DBIC** | **Dimbokro** | **76.74** | **72** | P | **P** | **04 57 30.8** | **+0.3** |
| | comp=Z,4.6nm,0.5s,baz=256,slow=4.2,SNR=14 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **78.44** | **334** | *e*P | **P** | **04 57 42.8** | **+3.1** |
| | comp=Z,24nm,2.0s | | | | | | |
| **SMCO** | **Snowmass** | **79.76** | **334** | *e*P | P | 04 57 50.4 | +3.2 |
| | comp=Z,12nm,1.1s | | | | | | |
| **TSUM** | **Tsumeb** | **80.33** | **107** | *e*P | **P** | **04 57 48.8** | **-1.6** |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **CCUT** | **Cedar City** | **80.84** | **329** | *e*P | P | 04 57 58.4 | +5.6 |
| | comp=Z,4.8nm,1.1s | | | | | | |
| **ECSD** | **EROS Data Cent** | **80.88** | **343** | *e*P | P | 04 57 56.4 | +3.9 |
| | comp=Z,54nm,2.3s | | | | | | |
| **BOSA** | **Boshof** | **80.93** | **118** | P | **P** | **04 57 53.7** | **+0.2** |
| | comp=Z,11nm,0.8s,baz=212,slow=5.3,SNR=11 | | | | | | |
| BOSA | | | | LR | LR | 05 33 54.6 | |
| | comp=Z,89nm,18.1s,baz=56,slow=36 | | | | | | |
| **PHWY** | **Pilot Hill** | **81.14** | **336** | *e*P | P | 04 57 58.7 | +4.4 |
| | comp=Z,3.8nm,0.8s | | | | | | |
| **R11A** | **Troy Canyon, C** | **82.47** | **328** | *e*P | P | 04 58 05.8 | +4.5 |
| | comp=Z,6.5nm,1.4s | | | | | | |
| **DUG** | **Dugway** | **82.86** | **331** | *e*P | P | 04 58 08.1 | +4.9 |
| | comp=Z,6.1nm,1.1s | | | | | | |
| **HWUT** | **Hardware Ranch** | **83.58** | **332** | *e*P | **P** | **04 58 07.6** | **+0.6** |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **SPUT** | **South Promonto** | **83.67** | **332** | *e*P | **P** | **04 58 08.0** | **+0.6** |
| | comp=Z,9.3nm,1.2s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.75** | **326** | P | **P** | **04 58 10.1** | **+2.2** |
| | comp=Z,0.7nm,0.7s,baz=162,slow=6.2,SNR=6.0 | | | | | | |
| **BW06** | **Boulder Array** | **83.85** | **334** | *e*P | **P** | **04 58 11.0** | **+2.7** |
| **TORD** | **Torodi Ar. Bea** | **85.78** | **71** | P | **P** | **04 58 18.2** | **-0.2** |
| | comp=Z,3.8nm,0.8s,baz=262,slow=3.8,SNR=22 | | | | | | |
| **HLID** | **Hailey** | **86.35** | **332** | *e*P | P | 04 58 25.3 | +4.5 |
| | comp=Z,5.8nm,1.2s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **86.82** | **333** | *e*P | **P** | **04 58 23.1** | **-0.1** |
| **WVOR** | **Wild Horse Val** | **87.15** | **328** | *e*P | P | 04 58 29.4 | +4.8 |
| | comp=Z,11nm,1.4s | | | | | | |
| **DLMT** | **Dillon** | **87.19** | **334** | *e*P | P | 04 58 29.7 | +4.9 |
| | comp=Z,22nm,1.9s | | | | | | |
| **MOD** | **Modoc** | **87.45** | **327** | *e*P | P | 04 58 30.8 | +4.6 |
| **J08A** | **Circle Bar Ran** | **87.83** | **329** | *e*P | **P** | **04 58 29.0** | **+1.1** |
| | comp=Z,9.1nm,0.9s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **88.41** | **326** | LR | LR | 05 32 21.1 | |
| | comp=Z,106nm,18.5s,baz=18,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **119.40** | **211** | PKP | **PKPdf** | **05 04 27.1** | **-1.6** |
| | comp=Z,0.8nm,0.8s,baz=157,slow=1.7,SNR=11 | | | | | | |
| **BR231** | **Keskin MP Arra** | **122.84** | **61** | *e*PKPdf | **PKPdf** | **05 04 34.9** | **+0.2** |
| **BRTR** | **Keskin Array B** | **123.42** | **62** | PKP | **PKPdf** | **05 04 35.3** | **-0.6** |
| | comp=Z,1.1nm,0.6s,baz=200,slow=4.8,SNR=7.7 | | | | | | |
| **ABKAR** | **Akbulak array** | **143.25** | **52** | *e*PKPdf | PKPab | 05 05 09.0 | +0.7 |
| **PSI** | **Prapat** | **147.45** | **166** | *e*PKPdf | **PKPbc** | **05 05 22.6** | **-0.9** |
| **BRVK** | **Borovoye** | **148.72** | **43** | *e*PKPbc | **PKPbc** | **05 05 26.0** | **+0.5** |
| **KSH** | **Kashi** | **155.44** | **70** | *e*PKPbc | **PKPdf** | **05 05 31.0** | **-1.3** |
| KSH | | | | *ep*PKP | **pPKPdf** | **05 05 41.5** | **+0.5** |
| KSH | | | | *es*PKP | | 05 05 44.8 | |
| KSH | | | | PKS | **PKSdf** | **05 09 04.5** | **-1.9** |
| KSH | | | | *e*PP | **PP** | **05 09 30.6** | **-4.6** |
| **ZALV** | **Zalesovo Beam** | **155.62** | **32** | PKPbc | PKPdf | 05 05 40.5 | +8.6 |
| | comp=Z,0.9nm,0.5s,baz=298,slow=3.2,SNR=4.0 | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **05 05 58.7** | **+0.7** |
| | comp=Z,1.6nm,0.7s,baz=316,slow=6.0,SNR=4.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **158.32** | **49** | PKPab | **PKPab** | **05 06 09.9** | **-0.1** |
| | comp=Z,2.2nm,0.6s,baz=297,slow=4.3,SNR=12 | | | | | | |
| **WMQ** | **Urumqi** | **163.04** | **52** | *e*PKP | **PKPdf** | **05 05 41.0** | **+0.1** |
| **NJ2** | **Nanjing** | **169.15** | **259** | *e*PKP | **PKPdf** | **05 05 49.0** | **+3.0** |
| **HHC** | **Hu-ho-hao-te** | **172.64** | **327** | *e*PKP | **PKPdf** | **05 05 48.5** | **+0.8** |
| **CD2** | **Chengdu** | **175.59** | **150** | PKP | **PKPdf** | **05 05 49.8** | **+0.8** |
| **LZH** | **Lanzhou** | **177.62** | **56** | *e*PKP | **PKPdf** | **05 05 50.4** | **+1.1** |
| LZH | | | | *p*PKP | **pPKPdf** | **05 05 59.8** | **+1.7** |
| LZH | | | | *s*PKP | | 05 06 02.8 | |
| LZH | | | | LN | | | |
| | comp=Z,160nm,18.2s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,170nm,18.5s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,220nm,20.3s | | | | | | |

*ISCJB **21** 05:04:23.3±0.8,18°.45S±0°.05×69°.9W±0°.1,h112km, mb3.7/2,Error ellipse: s-maj=13.9km s-min=7.4km az=4.9*
*GUC **21** 05:04:23.9±0.4,18°.47S×69°.79W,h99km±3km,ML4.0*
*IDC **21** 05:04:28.4±2.1,18°.65S×69°.47W,h118km±18km,mb3.6/2, mb1 3.7/5,mb1mx3.3/29,mbtmp3.9/5,Error ellipse: s-maj=40.1km s-min=14.8km az=100.0*

**ISC 21 05:04:25.8±1.0,18°.49S±0°.06×69°.9W±0°.1,h112km,n11, σ2s52/16,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARCH** | **Arica** | **0.39** | **270** | *e*P | **Pn** | **05 04 39.7** | **-2.5** |
| ARCH | | | | *e*S | **Sn** | **05 04 51.3** | **-3.2** |
| **PB13** | **IPOC Station P** | **0.40** | **68** | *e*P | **Pn** | **05 04 40.1** | **-2.8** |
| PB13 | | | | *e*S | **Sn** | **05 04 52.0** | **-3.9** |
| **MNMC** | **Minimini** | **0.70** | **157** | *e*P | Pn | 05 04 41.7 | -2.9 |
| MNMC | | | | *e*S | **Sn** | **05 04 55.5** | **-3.3** |
| MNMC | | | | AML | AML | 05 04 56.2 | |
| | comp=N,10μm,0.5s | | | | | | |
| **PB01** | **IPOC Station P** | **2.57** | **172** | *e*P | **Pn** | **05 05 05.0** | **-1.2** |
| PB01 | | | | *e*S | **Sn** | **05 05 36.6** | **-0.7** |
| PB01 | | | | AML | AML | 05 05 44.9 | |
| | comp=N,403nm,0.6s | | | | | | |
| **LPAZ** | **La Paz** | **2.76** | **38** | P | **Pn** | **05 05 11.1** | **+1.9** |
| | comp=N,6.6nm,0.3s,baz=222,slow=8.0,SNR=279 | | | | | | |
| **PB07** | **IPOC Station P** | **3.22** | **180** | *e*P | **Pn** | **05 05 14.4** | **-0.6** |
| PB07 | | | | *e*S | **Sn** | **05 05 52.9** | **0.0** |
| PB07 | | | | AML | AML | 05 06 03.5 | |
| | comp=E,305nm,0.7s | | | | | | |
| **LVC** | **Limon Verde** | **4.20** | **168** | P | **Pn** | **05 05 28.9** | **+0.7** |
| | comp=E,170nm,0.3s,baz=355,slow=11,SNR=30 | | | | | | |
| LVC | | | | S | **Sn** | **05 06 14.0** | **-2.5** |
| | comp=E,226nm,0.3s,baz=204,slow=22,SNR=10 | | | | | | |
| **SIV** | **San Ignacio** | **8.78** | **75** | P | **Pn** | **05 06 28.0** | **-1.9** |
| | comp=E,1.2nm,0.3s,baz=294,slow=10,SNR=9.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.24** | **71** | P | **P** | **05 16 08.3** | **+0.2** |
| | comp=E,0.3nm,0.4s,baz=247,slow=6.0,SNR=10 | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.06** | **341** | P | **P** | **05 17 05.9** | **+2.8** |
| | comp=E,0.9nm,0.4s,baz=134,slow=4.8,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **135.02** | **213** | PKP | **PKPdf** | **05 23 35.4** | **+2.8** |
| | comp=E,0.7nm,1.1s,baz=148,slow=2.0,SNR=3.4 | | | | | | |

**NNC 21 05:05:59.1±2.0,37°.41N×71°.74E,h226km±16km,mb2.4, mpv3.6,6C-4D,Error ellipse: s-maj=19.0km s-min=7.8km az=156.0,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.68** | **302** | ⇑P | Pn | 05 06 46.8 | 0.0 |
| | 29nm,0.4s | | | | | | |
| DZET | | | | ⇓S | S | 05 07 24.8 | +0.7 |
| | 269nm,0.6s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.94** | **27** | ⇑P | Pn | 05 06 49.5 | -0.3 |
| | 11nm,0.5s | | | | | | |
| SFK | | | | ⇓S | S | 05 07 29.8 | +0.3 |
| | 34nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **5.10** | **6** | ⇑P | Pn | 05 07 16.5 | +0.9 |
| | 5.3nm,0.4s | | | | | | |
| MNAS | | | | ⇓S | S | 05 08 17.4 | +1.2 |
| | 30nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **5.63** | **21** | ⇓P | Pn | 05 07 22.7 | +0.4 |
| | 7.0nm,1.1s | | | | | | |
| AAK | | | | ⇑S | S | 05 08 29.9 | +1.7 |
| | 8.1nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **5.76** | **351** | ⇑P | Pn | 05 07 22.1 | -1.6 |
| | 0.8nm,0.3s,baz=171,slow=12,SNR=14 | | | | | | |
| KK31 | | | | ⇑S | S | 05 08 30.3 | -0.7 |
| | 5.9nm,0.5s,baz=178,slow=22,SNR=11 | | | | | | |

**IDC 21 05:14:50.5±4.2,30°.81S×139°.54E,h0km,mb3.9/1, mb1 3.5/3,mb1mx3.3/26,mbtmp3.3/3,ML3.0/2,Error ellipse: s-maj=193.7km s-min=66.7km az=62.0,South Australia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **8.71** | **323** | Pn | Pn | 05 16 57.1 | -0.7 |
| | 0.1nm,0.3s,baz=151,slow=12,SNR=5.5 | | | | | | |
| ASAR | | | | Sn | Sn | 05 18 27.2 | -10 |
| | 0.2nm,0.3s,baz=152,slow=22,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **11.80** | **335** | Pn | Pn | 05 17 40.8 | +0.6 |
| | 0.1nm,0.3s,baz=152,slow=13,SNR=8.0 | | | | | | |
| WRA | | | | Sn | Sn | 05 19 41.4 | -11 |
| | 0.0nm,0.3s,baz=162,slow=24,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **92.90** | **325** | P | P | 05 28 05.0 | -0.1 |
| | 0.3nm,0.5s,baz=129,slow=3.9,SNR=2.5 | | | | | | |

*ISCJB **21** 05:58:26.7±0.6,38°.26N±0°.07×26°.49E±0°.07,h9km±5km, Error ellipse: s-maj=13.0km s-min=6.3km az=37.1*
*CSEM **21** 05:58:26.8±0.3,38°.25N×26°.50E,h8km,MD2.6,Error ellipse: s-maj=10.5km s-min=5.1km az=40.0*
*DDA **21** 05:58:26.3,38°.27N×26°.56E,h9km,Md2.5*
*ATH **21** 05:58:26.6,38°.26N×26°.53E,h4km,MD2.6/3*

**ISC 21 05:58:26.9±1.0,38°.25N±0°.05×26°.51E±0°.04,h9km±6km, n15,σ0s66/24,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZEY** | **¨zmir** | **0.01** | **186** | P | **Pg** | **05 58 28.3** | **-0.2** |
| ZEY | | | | S | **Sg** | **05 58 29.9** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RPZ** | **Rata Peaks** | **3.63** | **62** | *e*PN | Pn | 06 05 47.9 | -1.3 |
| RPZ | | | | AML | AML | 06 07 05.6 | |
| **WVZ** | **Waitaha Valley** | **3.83** | **52** | *e*PN | Pn | 06 05 49.4 | -2.4 |

**BJI 21 06:19:36.3, 32.77N×105.45E, h6km, ML3.6/11, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CD2** | **Chengdu** | **2.35** | **218** | Pn | Pn | 06 20 14.1 | -1.4 |
| CD2 | | | | Pg | Pb | 06 20 17.3 | -1.8 |
| CD2 | | | | Sn | Sn | 06 20 44.5 | -0.2 |
| CD2 | | | | Sg | Sb | 06 20 48.3 | -0.1 |
| CD2 | | | | SMN | | | |
| | 350nm,0.5s | | | | | | |
| CD2 | | | | SME | | | |
| | 560nm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **3.17** | **65** | Pn | Pn | 06 20 26.1 | -0.7 |
| XAN | | | | Pg | Pg | 06 20 35.4 | -1.7 |
| XAN | | | | Sg | Sb | 06 21 13.3 | +1.3 |
| XAN | | | | SMN | | | |
| | 210nm,0.7s | | | | | | |
| XAN | | | | SME | | | |
| | 190nm,0.6s | | | | | | |
| **LZH** | **Lanzhou** | **3.56** | **339** | Pn | Pn | 06 20 33.8 | +1.4 |
| LZH | | | | Pg | Pb | 06 20 42.4 | +2.4 |
| LZH | | | | Sg | Sg | 06 21 27.9 | -3.4 |
| LZH | | | | SMN | | | |
| | 190nm,1.0s | | | | | | |
| LZH | | | | SME | | | |
| | 220nm,1.0s | | | | | | |
| **GTA** | **Gaotai** | **8.04** | **327** | *e*P | Pb | 06 22 01.3 | +5.1 |
| GTA | | | | pP | pP | 06 22 05.0 | |
| GTA | | | | sP | sP | 06 22 07.9 | |
| GTA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |

*ISCJB **21** 06:39:44.2±0.7, 51.41N±0.03×16.13E±0.03, h0km, Error ellipse: s-maj=4.8km s-min=2.7km az=12.1*
*CSEM **21** 06:39:45.5±0.3, 51.44N×16.13E, h2km, ML3.5/11, Error ellipse: s-maj=5.5km s-min=3.1km az=178.0, Suspected Mining induced.*
*VIE **21** 06:39:47.0±0.4, 51.26N×16.16E, h0km, mb2.4/2, ml3.0/4, Error ellipse: s-maj=2.4km s-min=2.1km az=10.0, Suspected Mining induced.*
*PRU **21** 06:39:46.8, 51.42N×16.09E, h0km*
**ISC 21 06:39:46.0±1.1, 51.43N±0.05×16.10E±0.03, h0km, n36, σ0.6s77/69, 3C-2D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.60** | **168** | *i* Pg | **Pg** | **06 39 58.2** | **+0.8** |
| KSP | | | | *e*Sg | **Sb** | **06 40 07.1** | **-1.1** |
| **KSP** | **Ksiaz** | **0.60** | **168** | ⇓*i* Pg | **Pg** | **06 39 58.2** | **+0.8** |
| **UPC** | **Upice** | **0.92** | **184** | *e*PG | **Pg** | **06 40 04.2** | **+0.6** |
| UPC | | | | *e*SG | **Sb** | **06 40 17.5** | **-0.1** |
| | comp=Z,126nm,0.3s | | | | | | |
| **UPC** | **Upice** | **0.92** | **184** | Pg | **Pg** | **06 40 04.2** | **+0.6** |
| UPC | | | | Sg | **Sb** | **06 40 17.5** | **-0.1** |
| | 126nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.09** | **172** | *e*PG | **Pg** | **06 40 07.0** | **+0.2** |
| DPC | | | | *e*SG | **Sb** | **06 40 22.0** | **-0.4** |
| | comp=Z,32nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.09** | **172** | Pg | **Pg** | **06 40 07.0** | **+0.2** |
| DPC | | | | Sg | **Sb** | **06 40 22.0** | **-0.4** |
| | 32nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.32** | **228** | *e*PG | **Pg** | **06 40 11.5** | **+0.2** |
| PVCC | | | | *e*SG | **Sn** | **06 40 30.0** | **0.0** |
| | comp=Z,150nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.32** | **228** | Pg | **Pg** | **06 40 11.5** | **+0.2** |
| PVCC | | | | Sg | **Sn** | **06 40 30.0** | **0.0** |
| | 150nm,0.2s | | | | | | |
| **KRLC** | **Kraliky** | **1.42** | **162** | *e*SG | **Sg** | **06 40 32.0** | **+0.5** |
| **KRLC** | **Kraliky** | **1.42** | **162** | Sg | **Sg** | **06 40 32.0** | **+0.5** |
| **BRG** | **Berggiesshubel** | **1.47** | **249** | PN | **Pn** | **06 40 13.0** | **-0.7** |
| BRG | | | | PG | **Pb** | **06 40 14.0** | **-0.1** |
| BRG | | | | SG | **Sn** | **06 40 34.4** | **+0.8** |
| | 87nm,0.5s | | | | | | |
| **PRA** | **Prague** | **1.72** | **219** | *e*SG | **Sb** | **06 40 41.2** | **+0.6** |
| | comp=Z,33nm,0.6s | | | | | | |
| **PRA** | **Prague** | **1.72** | **219** | Sg | **Sb** | **06 40 41.2** | **+0.6** |
| | 33nm,0.6s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.73** | **209** | *e*PG | **Pb** | **06 40 19.0** | **+0.4** |
| GOPC | | | | *e*SG | **Sg** | **06 40 42.4** | **+0.9** |
| | comp=Z,27nm,0.4s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.73** | **209** | Pg | **Pb** | **06 40 19.0** | **+0.4** |
| GOPC | | | | Sg | **Sg** | **06 40 42.4** | **+0.9** |
| | 27nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.75** | **215** | *e*PG | **Pb** | **06 40 19.2** | **+0.3** |
| PRU | | | | *e*SG | **Sg** | **06 40 42.8** | **+0.7** |
| | comp=Z,63nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.75** | **215** | Pg | **Pb** | **06 40 19.2** | **+0.3** |
| PRU | | | | Sg | **Sg** | **06 40 42.8** | **+0.7** |
| | 63nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.89** | **150** | *e*Pn | **Pn** | **06 40 18.6** | **-0.9** |
| MORC | | | | *e*Sg | **Sb** | **06 40 45.6** | **+0.1** |
| **CLL** | **Collm** | **1.95** | **268** | *e*Pn | **Pn** | **06 40 19.0** | **-1.3** |
| CLL | | | | *e*Pg | **Pb** | **06 40 22.0** | **-0.3** |
| CLL | | | | *e* | | 06 40 25.0 | |
| CLL | | | | *e*Sg | **Sg** | **06 40 48.0** | **-0.5** |
| | comp=Z,18nm,0.5s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.06** | **140** | *e*SG | **Sb** | **06 40 50.7** | **+0.5** |
| | comp=Z,32nm,0.5s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.06** | **140** | Sg | **Sb** | **06 40 50.7** | **+0.5** |
| | comp=Z,32nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **2.14** | **171** | *e*Pn | **Pn** | **06 40 23.0** | **0.0** |
| VRAC | | | | *e*Sg | **Sg** | **06 40 54.3** | **-0.5** |
| **NKC** | **Novy Kostel** | **2.61** | **244** | *e*PN | **Pn** | **06 40 29.4** | **0.0** |
| NKC | | | | *e*PG | **Pg** | **06 40 36.2** | **+0.3** |
| NKC | | | | *e*SG | **Sg** | **06 41 10.5** | **+0.8** |
| | comp=Z,37nm,0.3s | | | | | | |
| **NKC** | **Novy Kostel** | **2.61** | **244** | Pn | **Pn** | **06 40 29.4** | **0.0** |
| **KHC** | **Kasperske Hory** | **2.81** | **216** | *e*PG | **Pb** | **06 40 37.9** | **+0.9** |
| KHC | | | | *e*SN | **Sn** | **06 41 06.3** | **-0.5** |
| KHC | | | | *e*SG | **Sg** | **06 41 16.3** | **+0.1** |
| | comp=Z,12nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.81** | **216** | Pg | **Pb** | **06 40 37.9** | **+0.9** |
| KHC | | | | Sn | **Sn** | **06 41 06.3** | **-0.5** |
| KHC | | | | Sg | **Sg** | **06 41 16.3** | **+0.1** |
| | comp=Z,12nm,0.4s | | | | | | |
| **LANS** | **Liptovska Anna** | **3.14** | **135** | *e*PN | **Pn** | **06 40 36.6** | **-0.1** |
| LANS | | | | *e*PG | **Pg** | **06 40 45.3** | **-0.8** |
| LANS | | | | *e*SG | **Sg** | **06 41 27.0** | **+0.2** |
| **LANS** | **Liptovska Anna** | **3.14** | **135** | *e*Pn | **Pn** | **06 40 36.6** | **-0.1** |
| **VYHS** | **Vyhne** | **3.42** | **148** | *e*PN | **Pn** | **06 40 39.7** | **-0.9** |
| VYHS | | | | *e*PG | **Pg** | **06 40 50.3** | **-1.3** |
| VYHS | | | | *e*SG | **Sg** | **06 41 34.9** | **-1.1** |
| **VYHS** | **Vyhne** | **3.42** | **148** | *e*Pn | **Pn** | **06 40 39.7** | **-0.9** |
| **CONA** | **Conrad Observa** | **3.50** | **183** | ⇑*i* Pn | **Pn** | **06 40 40.7** | **-1.1** |
| CONA | | | | ⇑*i* Sg | **Sg** | **06 41 37.8** | **-0.7** |
| | comp=Z,19nm,0.6s | | | | | | |
| **CONA** | **Conrad Observa** | **3.50** | **183** | Pn | **Pn** | **06 40 40.7** | **-1.1** |
| CONA | | | | Sg | **Sg** | **06 41 37.8** | **-0.7** |
| | comp=Z,19nm,0.6s | | | | | | |
| **MOA** | **Molln** | **3.77** | **199** | ⇓*i* Pn | **Pn** | **06 40 44.3** | **-1.1** |
| MOA | | | | ⇑*i* Sg | **Sg** | **06 41 47.4** | **+0.3** |
| | comp=Z,15nm,0.6s | | | | | | |
| **MOA** | **Molln** | **3.77** | **199** | Pn | **Pn** | **06 40 44.3** | **-1.1** |
| MOA | | | | Sg | **Sg** | **06 41 47.4** | **+0.3** |
| | comp=Z,15nm,0.6s | | | | | | |
| **STHS** | **Stebnicka Huta** | **3.85** | **119** | *e*PN | **Pn** | **06 40 46.3** | **-0.2** |
| STHS | | | | *e*PG | **Pg** | **06 40 59.6** | **-0.2** |
| STHS | | | | *e*SG | **Sg** | **06 41 53.2** | **+3.5** |
| **STHS** | **Stebnicka Huta** | **3.85** | **119** | *e*Pn | **Pn** | **06 40 46.3** | **-0.2** |

**IDC 21 06:55:25.8±4.5, 18.96S×168.27E, h0km, mb3.8/3, mb1 4.0/4, mb1mx3.7/29, mbtmp3.7/4, ML3.4/1, Error ellipse: s-maj=102.4km s-min=32.2km az=110.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **3.54** | **209** | Pn | Pn | 06 56 21.9 | -0.3 |
| | 3.4nm,0.3s,baz=360,slow=10,SNR=66 | | | | | | |
| DZM | | | | Sn | Sn | 06 57 02.5 | -2.4 |
| | 17nm,0.3s,baz=0.0,slow=20,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.98** | **263** | P | P | 07 01 53.6 | -0.3 |
| | 0.1nm,0.4s,baz=82,slow=6.0,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **32.31** | **256** | P | P | 07 01 57.0 | +0.2 |
| | 1.4nm,0.6s,baz=83,slow=8.7,SNR=22 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **62.08** | **333** | P | P | 07 05 48.3 | -0.2 |
| | 1.7nm,0.8s,baz=167,slow=6.8,SNR=2.5 | | | | | | |

*AUST **21** 07:03:45.7±0.3, 4.64N×124.50E, h315km, Error ellipse: s-maj=1.0km s-min=0.8km az=42.0*
*MOS **21** 07:03:47.9±0.8, 4.53N×124.52E, h347km, mb4.7/36, Error ellipse: s-maj=12.4km s-min=5.4km az=115.0*
*ISCJB **21** 07:03:49.6±0.2, 4.50N±0.02×124.56E±0.03, h364km±2km, mb4.5/74, Error ellipse: s-maj=4.5km s-min=3.1km az=174.4*
*BJI **21** 07:03:49.9, 4.60N×124.60E, h351km, mb4.6/48, mB4.9/31*
*KLM **21** 07:03:50.6, 4.76N×124.55E, h351km, mb5.0, MS5.8*
*NEIC **21** 07:03:50.4±0.4, 4.52N×124.57E, h361km±4km, mb4.8/27, Error ellipse: s-maj=6.3km s-min=4.0km az=79.0*
*IDC **21** 07:03:50.5±0.7, 4.49N×124.55E, h360km±7km, mb4.0/24, mb1 4.1/28, mb1mx4.0/36, mbtmp4.7/28, Error ellipse: s-maj=12.9km s-min=6.8km az=82.0*
*MAN **21** 07:03:51, 4.47N×124.09E, h275km, MS4.8*
*DJA **21** 07:03:51.3±0.4, 4.7N±4.2×12.5E±.9°, h333km±5km, M4.7/38, mb5.0/38, mB5.2/30, MLv5.2/12, Mw(mB)4.5/30*
**ISC 21 07:03:50.2±0.3, 4.49N±0.03×124.55E±0.04, h355km±2km, h355km:pP-P, n238, σ1.910/280, mb4.5/74, 13C-11D, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **1.26** | **129** | P | **Pn** | **07 04 37.0** | **-0.7** |
| **DMPH** | **Davao City--Mi** | **2.75** | **20** | ⇑*e*P | **S** | **07 05 35.5** | **+1.3** |
| DMPH | | | | *i* S | S | 07 05 41.6 | +7.4 |
| **DAV** | **Davao City (W)** | **2.76** | **22** | P | **Pn** | **07 04 48.6** | **+0.7** |
| | 116nm,0.3s,baz=118,slow=2.2,SNR=12 | | | | | | |
| DAV | | | | S | **S** | **07 05 35.1** | **+0.8** |
| | 97nm,0.3s,baz=54,slow=23,SNR=6.1 | | | | | | |
| **MATI** | **Mati** | **2.98** | **35** | *e*P | **Pn** | **07 04 49.4** | **-0.4** |
| **BUKP** | **Musuan** | **3.41** | **9** | *e*P | **Pn** | **07 04 54.8** | **+1.0** |
| **PAGZ** | **Pagadian** | **3.54** | **341** | *e*P | Pn | 07 04 50.8 | -4.2 |
| **KMSI** | **Cibinong** | **3.93** | **188** | P | **Pn** | **07 04 58.9** | **+0.1** |
| **BIPH** | **Bislig** | **4.09** | **26** | ⇓*i* P | **Pn** | **07 05 00.5** | **0.0** |
| BIPH | | | | *i* S | **S** | **07 05 54.8** | **-2.4** |
| **GTOI** | **Gorontalo** | **4.12** | **202** | P | **Pn** | **07 04 59.7** | **-1.1** |
| **BUTP** | **Butuan** | **4.58** | **13** | *e*P | Pn | 07 04 58.1 | -7.4 |
| **TNTI** | **Ternate** | **4.64** | **143** | P | **Pn** | **07 05 05.6** | **-0.7** |
| **TNTI** | **Ternate** | **4.64** | **143** | *e*Pn | **Pn** | **07 05 05.6** | **-0.7** |
| TNTI | | | | *e*S | **S** | **07 06 07.2** | **-0.4** |
| **MRSI** | **Marisa** | **4.76** | **213** | P | **Pn** | **07 05 07.7** | **+0.2** |
| **LUWI** | **Luwuk** | **5.77** | **198** | P | Pn | 07 05 12.0 | -6.7 |
| | baz=5.9,SNR=8.5 | | | | | | |
| **LUWI** | **Luwuk** | **5.77** | **198** | *e*Pn | **Pn** | **07 05 18.7** | **0.0** |
| LUWI | | | | *e*S | **S** | **07 06 28.7** | **-1.7** |
| **LBMI** | **Labuha** | **5.88** | **150** | P | **Pn** | **07 05 19.2** | **-0.8** |
| | 2μm,0.8s,22μm8.5nm | | | | | | |
| **MYLDM** | **Lahad Datu** | **6.07** | **277** | *e*Pn | **Pn** | **07 05 22.9** | **+0.8** |
| MYLDM | | | | *e*S | **S** | **07 06 41.0** | **+4.5** |
| **APSI** | **Ampana** | **6.09** | **208** | P | **Pn** | **07 05 22.5** | **+0.1** |
| | 198nm,0.9s,5μm1.3nm | | | | | | |
| **MPSI** | **Mapaga** | **6.21** | **229** | P | **Pn** | **07 05 23.4** | **-0.3** |
| | 160nm,0.6s,2μm0.5nm | | | | | | |
| **SANI** | **Sanana** | **6.65** | **167** | P | **Pn** | **07 05 27.0** | **-1.7** |
| | 540nm,0.7s,11μm4.0nm | | | | | | |
| **TSM** | **Tawau** | **6.66** | **269** | ⇑P | **Pn** | **07 05 28.7** | **-0.2** |
| **PCI** | **Palu** | **7.13** | **221** | P | **Pn** | **07 05 33.5** | **-0.9** |
| | 437nm,1.0s,3μm1.2nm | | | | | | |
| **SDKM** | **Sandakan** | **7.42** | **279** | ⇓P | **Pn** | **07 05 37.7** | **0.0** |
| **KDM** | **Kudat** | **8.05** | **288** | ⇑P | **Pn** | **07 05 43.3** | **-1.8** |
| **NLAI** | **Namlea** | **8.09** | **162** | P | **Pn** | **07 05 45.5** | **0.0** |
| | 295nm,0.6s,8μm | | | | | | |
| **KKM** | **Kota Kinabalu** | **8.44** | **281** | P | **Pn** | **07 05 49.5** | **-0.4** |
| | baz=8.4,SNR=11 | | | | | | |
| **KKM** | **Kota Kinabalu** | **8.44** | **281** | ⇑P | **Pn** | **07 05 49.8** | **-0.1** |
| **KKM** | **Kota Kinabalu** | **8.44** | **281** | *e*Pn | **Pn** | **07 05 49.4** | **-0.4** |
| KKM | | | | *e*S | **S** | **07 07 27.0** | **-0.6** |
| **SWI** | **Sorong** | **8.55** | **128** | P | **P** | **07 05 53.4** | **-0.1** |
| | baz=8.7,SNR=3.4 | | | | | | |
| **SWI** | **Sorong** | **8.55** | **128** | P | **P** | **07 05 52.8** | **-0.7** |
| | 81nm,1.0s,1μm | | | | | | |
| **SIJI** | **Sorong** | **8.56** | **128** | P | **Pn** | **07 05 52.2** | **+1.0** |
| | 7.0nm,0.3s,baz=324,slow=8.4,SNR=23 | | | | | | |
| SIJI | | | | S | **S** | **07 07 31.5** | **+1.4** |
| | 0.5nm,0.3s,baz=53,slow=20,SNR=3.2 | | | | | | |
| **TTSI** | **Tana Toraja** | **8.85** | **212** | P | **Pn** | **07 05 55.0** | **+0.4** |
| | 140nm,0.9s,2μm | | | | | | |
| **AAI** | **Ambon** | **8.90** | **156** | P | **Pn** | **07 05 56.1** | **+0.9** |
| | 236nm,0.8s,3μm | | | | | | |
| **MSAI** | **Masohi** | **8.93** | **151** | P | **P** | **07 05 57.1** | **-0.5** |
| | 123nm,0.7s,1μm | | | | | | |
| **PVCP** | **Virac** | **9.06** | **358** | ⇑*e*P | **P** | **07 05 58.6** | **-0.5** |
| **BKB** | **Balikpapan** | **9.54** | **233** | P | **Pn** | **07 06 03.5** | **+0.7** |
| | 880nm,0.8s,7μm | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.66** | **210** | P | **Pn** | **07 06 04.0** | **-0.2** |
| | 116nm,0.9s,1μm | | | | | | |
| **PALU** | **Palau** | **10.27** | **73** | P | **P** | **07 06 14.0** | **+1.4** |
| | baz=10,SNR=17 | | | | | | |
| **BNDI** | **Bandanaira** | **10.43** | **149** | P | **P** | **07 06 14.5** | **+0.2** |
| | 759nm,1.0s,9μm | | | | | | |
| **KAPI** | **Kappang** | **10.58** | **207** | P | **Pn** | **07 06 15.6** | **+0.4** |
| | 7.9nm,0.3s,baz=17,slow=4.5,SNR=41 | | | | | | |
| KAPI | | | | S | **S** | **07 08 11.5** | **-2.8** |
| | 0.8nm,0.3s,baz=37,slow=15,SNR=4.5 | | | | | | |
| **FAKI** | **Fak Fak** | **10.64** | **134** | P | **P** | **07 06 17.4** | **+0.6** |
| | baz=11,SNR=47 | | | | | | |
| **FAKI** | **Fak Fak** | **10.64** | **134** | P | **P** | **07 06 17.2** | **+0.5** |
| | 294nm,0.8s,2μm | | | | | | |
| **FAKI** | **Fak Fak** | **10.64** | **134** | *e*Pn | **P** | **07 06 17.4** | **+0.6** |
| FAKI | | | | *e*S | S | 07 08 08.6 | -7.0 |
| **BKSI** | **Bulukumba** | **10.70** | **204** | P | **P** | **07 06 17.5** | **+0.2** |
| | 41nm,0.6s | | | | | | |
| **KBKI** | **Kotabaru** | **11.40** | **227** | P | **P** | **07 06 27.1** | **+2.0** |
| | 79nm,0.9s,2μm | | | | | | |
| **BTM** | **Bintulu** | **11.51** | **264** | ⇑P | **P** | **07 06 26.9** | **+0.5** |
| **SBUM** | **Sibu** | **12.47** | **261** | ⇓P | **Pn** | **07 06 38.7** | **+1.1** |
| **SBUM** | **Sibu** | **12.47** | **261** | *e*P | **Pn** | **07 06 38.3** | **+0.6** |
| **BBKI** | **Banjar Baru** | **12.51** | **231** | P | **Pn** | **07 06 38.9** | **+0.9** |
| | 232nm,1.3s,3μm | | | | | | |
| **SOEI** | **Soe** | **14.15** | **181** | P | **Pn** | **07 06 57.7** | **+0.3** |
| | baz=14,SNR=4.9 | | | | | | |
| **SOEI** | **Soe** | **14.15** | **181** | P | **Pn** | **07 06 57.3** | **0.0** |
| | 66nm,0.6s | | | | | | |
| **SOEI** | **Soe** | **14.15** | **181** | *e*P | **Pn** | **07 06 57.4** | **0.0** |
| SOEI | | | | *e*S | **S** | **07 09 27.6** | **-1.6** |
| **KSM** | **Kuching** | **14.53** | **259** | P | **Pn** | **07 07 01.0** | **-0.7** |
| | baz=14,SNR=29 | | | | | | |
| **KSM** | **Kuching** | **14.53** | **259** | ⇓P | **Pn** | **07 07 01.0** | **-0.7** |
| **KSM** | **Kuching** | **14.53** | **259** | *e*P | **P** | **07 07 00.3** | **+0.6** |
| | 95nm,0.5s | | | | | | |
| KSM | | | | *e*S | **S** | **07 09 38.2** | **+1.5** |
| **BATI** | **Baumata** | **14.62** | **183** | P | **P** | **07 07 01.6** | **+1.0** |
| | 38nm,0.3s,baz=276,slow=1.9,SNR=15 | | | | | | |
| BATI | | | | S | **S** | **07 09 41.0** | **+2.5** |
| | 13nm,0.3s,baz=324,slow=14,SNR=4.5 | | | | | | |
| **BATI** | **Baumata** | **14.62** | **183** | P | **Pn** | **07 07 02.1** | **-0.6** |
| | 60nm,0.5s,1μm | | | | | | |
| **PBKI** | **Pangkalan Bun** | **14.72** | **241** | P | **Pn** | **07 07 05.2** | **+1.3** |
| | 263nm,0.9s,5μm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **15.20** | **210** | P | **Pn** | **07 07 08.5** | **-0.9** |
| | 180nm,0.8s,1μm | | | | | | |
| **KMMI** | **Kalianget** | **15.58** | **223** | P | **P** | **07 07 12.5** | **+1.4** |
| | 207nm,1.0s,2μm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.53** | **219** | P | **Pn** | **07 07 24.9** | **+0.1** |
| | baz=17,SNR=5.5 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.53** | **219** | *e*P | **P** | **07 07 22.2** | **+0.8** |
| | 57nm,1.0s | | | | | | |
| **DLV** | **T Lat** | **17.53** | **296** | *e*P | **P** | **07 07 32.4** | **+0.1** |
| | 57nm,1.1s | | | | | | |
| DLV | | | | *e*S | **S** | **07 10 36.3** | **0.0** |
| **TPI** | **Tanjungpandan** | **18.35** | **247** | P | **P** | **07 07 43.9** | **+3.0** |
| | 75nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **18.42** | **159** | P | **P** | **07 07 41.8** | **+0.3** |
| | baz=19,SNR=31 | | | | | | |
| **MTN** | **Manton Dam** | **18.42** | **159** | *e*P | **P** | **07 07 41.9** | **+0.4** |
| | 40nm,0.4s | | | | | | |
| **TWG** | **Pinlang** | **18.54** | **350** | *e*P | **P** | **07 07 40.4** | **-2.3** |
| | 458nm,1.1s | | | | | | |
| **KDU** | **Kakadu** | **18.79** | **155** | P | **P** | **07 07 45.5** | **+0.1** |
| | baz=19,SNR=12 | | | | | | |
| **YULB** | **Yu-li** | **19.06** | **351** | *e*P | **P** | **07 07 46.7** | **-1.6** |
| | 1μm,2.8s | | | | | | |
| **TPUB** | **Ta-pu** | **19.09** | **349** | *e*P | **P** | **07 07 47.7** | **-0.9** |
| | 276nm,0.7s | | | | | | |
| **SSLB** | **Suanglung** | **19.50** | **350** | *e*P | **P** | **07 07 51.8** | **-1.1** |
| | 82nm,0.8s | | | | | | |
| SSLB | | | | *e*S | **S** | **07 11 11.0** | **-1.7** |
| **LEM** | **Lembang** | **20.30** | **236** | P | **P** | **07 08 01.1** | **0.0** |
| | 22nm,0.4s,baz=86,slow=7.7,SNR=6.8 | | | | | | |
| **YHNB** | **Yeheng** | **20.30** | **352** | *e*P | **P** | **07 08 00.7** | **-0.1** |
| | 81nm,0.9s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KNRA** | **Kununurra** | **20.46** | **168** | P | | **P** | **07 08 02.8** | **+0.5** |
| | baz=21,SNR=6.9 | | | | | | | |
| **MYKOM** | **Kota Tinggi** | **20.84** | **263** | ⇓P | | **P** | **07 08 06.4** | **+0.6** |
| **QZH** | **Quanzhou** | **21.13** | **345** | ⇑*i* P | | **P** | **07 08 10.8** | **+2.6** |
| **KGM** | **Kluang** | **21.34** | **264** | ⇓P | | **P** | **07 08 11.2** | **+0.9** |
| **KTGM** | **Kuala Trenggan** | **21.35** | **273** | ⇓P | | **P** | **07 08 11.1** | **+0.7** |
| **MBWA** | **Marble Bar** | **25.92** | **190** | *e*P | | **P** | **07 08 51.1** | **-0.4** |
| | 15nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **26.11** | **159** | *e*P | | **P** | **07 08 52.9** | **-0.3** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **26.11** | **159** | *e*P | | **P** | **07 08 52.9** | **-0.3** |
| | comp=Z,8.1nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.11** | **159** | P | | **P** | **07 08 52.7** | **-0.6** |
| | comp=Z,5.9nm,0.4s,baz=332,slow=11,SNR=111 | | | | | | | |
| **LOEI** | **Loei** | **26.22** | **301** | P | | **P** | **07 08 51.2** | **-3.1** |
| | comp=Z,34nm,1.1s | | | | | | | |
| **UTTA** | **Uttaradit** | **26.93** | **301** | P | | **P** | **07 09 01.0** | **+0.5** |
| | comp=Z,3.5nm,0.9s | | | | | | | |
| **WHN** | **Wuhan** | **27.65** | **341** | P | | **P** | **07 09 09.3** | **+2.6** |
| WHN | | | | PMZ | | | | |
| | comp=Z,100nm,0.6s | | | | | | | |
| **GYA** | **Guiyang** | **27.75** | **324** | P | | **P** | **07 09 08.8** | **+0.9** |
| GYA | | | | pP | | **pP** | **07 10 14.4** | **+0.9** |
| GYA | | | | sP | | **sP** | **07 10 55.3** | **+0.2** |
| GYA | | | | PcP | | **PcP** | **07 12 16.0** | **+1.7** |
| GYA | | | | S | | **S** | **07 13 26.8** | **+2.7** |
| GYA | | | | sS | | **ScP** | **07 15 22.3** | **+1.4** |
| GYA | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=Z,90nm,4.8s | | | | | | | |
| **NJ2** | **Nanjing** | **27.94** | **350** | *e*P | | **P** | **07 09 08.9** | **-0.3** |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,70nm,0.9s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **28.59** | **301** | *e*P | | **P** | **07 09 15.3** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **28.62** | **301** | P | | **P** | **07 09 15.8** | **+0.4** |
| | comp=Z,6.0nm,0.7s,baz=112,slow=6.9,SNR=23 | | | | | | | |
| CMAR | | | | ScP | | **ScP** | **07 15 23.6** | **0.0** |
| | comp=Z,1.2nm,0.8s,baz=127,slow=2.0,SNR=6.8 | | | | | | | |
| **CHTO** | **Chiang Mai** | **28.77** | **302** | P | | **P** | **07 09 16.8** | **-0.1** |
| | comp=Z,126nm,1.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **28.77** | **302** | *e*P | | **P** | **07 09 17.1** | **+0.2** |
| CHTO | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.6s | | | | | | | |
| **CHTO** | **Chiang Mai** | **28.77** | **302** | *e*P | | **P** | **07 09 17.1** | **+0.2** |
| | comp=Z,14nm,0.6s | | | | | | | |
| **GIRL** | **Giralia** | **28.79** | **200** | P | | **P** | **07 09 18.6** | **+1.8** |
| | baz=29,SNR=3.9 | | | | | | | |
| **QIS** | **Mount Isa** | **28.95** | **150** | P | | **P** | **07 09 18.7** | **+0.4** |
| | baz=29,SNR=6.4 | | | | | | | |
| **JNU** | **Nakatsue** | **29.10** | **11** | P | | **P** | **07 09 20.0** | **+0.5** |
| | comp=Z,1.1nm,0.8s,baz=134,slow=11,SNR=3.7 | | | | | | | |
| **CMAI** | **Chiengmai2** | **29.20** | **304** | P | | **P** | **07 09 20.7** | **-0.1** |
| | comp=Z,20nm,0.6s | | | | | | | |
| **KMI** | **Kunming** | **29.32** | **317** | P | | **P** | **07 09 23.3** | **+1.4** |
| KMI | | | | PMZ | | | | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **MHMT** | **Maesarieng** | **29.37** | **300** | P | | **P** | **07 09 22.5** | **+0.4** |
| | comp=Z,20nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **29.43** | **162** | P | | **P** | **07 09 22.6** | **0.0** |
| | comp=Z,3.0nm,0.3s,baz=340,slow=8.0,SNR=71 | | | | | | | |
| ASAR | | | | S | | **S** | **07 13 48.5** | **-1.8** |
| | comp=Z,6.9nm,0.9s,baz=349,slow=22,SNR=24 | | | | | | | |
| **AS01** | **Alice Springs** | **29.44** | **162** | *e*P | | **P** | **07 09 21.9** | **-0.7** |
| **WRKA** | **Warakurna** | **29.57** | **173** | P | | **P** | **07 09 24.1** | **+0.3** |
| | baz=30,SNR=42 | | | | | | | |
| **MEEK** | **Meekatharra** | **31.47** | **190** | P | | **P** | **07 09 39.8** | **-0.5** |
| | baz=32,SNR=27 | | | | | | | |
| **CD2** | **Chengdu** | **32.77** | **326** | ⇓P | | **P** | **07 09 51.8** | **+0.2** |
| CD2 | | | | pP | | **pP** | **07 10 58.3** | **-0.3** |
| CD2 | | | | sP | | **sP** | **07 11 38.9** | **-0.8** |
| CD2 | | | | S | | **S** | **07 14 43.1** | **+1.1** |
| CD2 | | | | sS | | **sS** | **07 16 44.9** | **+0.7** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,120nm,5.2s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **32.94** | **5** | P | | **P** | **07 09 52.8** | **0.0** |
| **KSAR** | **Wonju Array Be** | **32.94** | **5** | P | | **P** | **07 09 52.8** | **0.0** |
| **KSRS** | **Korea Array** | **32.96** | **5** | P | | **P** | **07 09 52.8** | **-0.2** |
| | comp=Z,5.0nm,0.5s,baz=183,slow=9.6,SNR=13 | | | | | | | |
| **KSRS** | **Korea Array** | **32.96** | **5** | P | | **P** | **07 09 52.8** | **-0.2** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **KS01** | **Wonju Array Si** | **32.98** | **5** | *e*P | | **P** | **07 09 54.3** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **34.28** | **20** | P | | **P** | **07 10 03.6** | **-0.8** |
| | comp=Z,4.9nm,0.7s,baz=190,slow=9.4,SNR=10 | | | | | | | |
| MJAR | | | | ScP | | **ScP** | **07 15 41.8** | **-0.7** |
| | comp=Z,3.4nm,0.7s,baz=177,slow=5.1,SNR=5.0 | | | | | | | |
| **MAJO** | **Matsushiro** | **34.29** | **20** | *e*P | | **P** | **07 10 04.1** | **-0.3** |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z

comp=Z,89nm,0.4s
**PKI Pulchoki 43.76 306** *e*P **P 07 11 21.9 -0.8**
comp=Z,18nm,0.3s
**PKIN Phulchoki 43.78 306** *e*P **P 07 11 22.1 -0.6**
comp=Z,10nm,0.3s
**KKN Kakani 43.96 306** *e*P **P 07 11 23.5 -0.6**
comp=Z,25nm,0.4s
**DMN Daman 44.02 306** *e*P **P 07 11 24.1 -0.5**
comp=Z,6.4nm,0.3s
**ARPS Mount Arapiles 44.10 160** P **P 07 11 26.0 +1.3**
baz=44,SNR=12
**GKN Gorkha 44.56 306** *e*P **P 07 11 28.0 -0.7**
comp=Z,27nm,0.5s
**KLR Kul'dur 45.00 7** *e*P P 07 11 27.6 -4.0
**YSS Yuzh-Sakhalins 45.14 18** *e*P **P 07 11 32.4 -0.3**
YSS pmax pmax
comp=Z,10.0nm,1.0s
**KOLN Koldanda 45.31 305** *e*P **P 07 11 34.4 -0.2**
comp=Z,83nm,0.3s
**DANN Dangsing 45.41 306** *e*P **P 07 11 35.0 -0.5**
comp=Z,4.9nm,0.3s
**ULN Ulaanbaatar 45.76 344***d i*P **P 07 11 37.2 -0.5**
ULN pmax pmax
comp=Z,20nm,1.0s
**ULN Ulaanbaatar 45.76 344** *e*P **P 07 11 38.0 +0.4**
comp=Z,24nm,0.9s
**SONM Songino Array 45.92 343** P **P 07 11 38.6 -0.3**
comp=Z,9.7nm,0.6s,baz=161,slow=8.6,SNR=59
**TOO Toolangi 46.16 157** P **P 07 11 43.1 +2.3**
baz=46,SNR=5.7
**LHI Lord Howe Isla 48.61 140** P **P 07 11 58.6 -0.9**
baz=49,SNR=3.8
**ZAK Zakamensk 49.12 342** *e*P **P 07 12 02.2 -1.0**
ZAK pmax pmax
comp=Z,6.0nm,1.3s
**TLY Talaya 50.16 343** *i*P **P 07 12 11.4 +0.6**
TLY pmax pmax
comp=Z,24nm,0.7s
**TLY Talaya 50.16 343** *e*P **P 07 12 11.6 +0.7**
comp=Z,24nm,0.7s
**WMQ Urumqi 50.87 326** P **P 07 12 17.0 +0.7**
WMQ pP **pP 07 13 30.0 +0.5**
WMQ sP **sP 07 14 08.0 -1.0**
WMQ PMZ
comp=Z,15nm,1.0s
**HVS Khovu-Aksy 53.16 336** *e*P **P 07 12 33.3 +0.4**
HVS pmax pmax
comp=Z,60nm,1.0s
**BOD Bodaibo 53.83 353** *e*P **P 07 12 36.8 -0.7**
BOD pmax pmax
comp=Z,18nm,1.1s
**PDGK Podgornoye 55.46 321** P **P 07 12 49.1 -0.2**
PDGK pmax pmax
comp=Z,21nm,1.0s
**PETK Petropavlovsk- 55.58 24** P **P 07 12 50.6 +0.5**
comp=Z,4.3nm,0.5s,baz=195,slow=4.1,SNR=14
PETK PcP **PcP 07 13 45.2 +0.3**
comp=Z,2.5nm,0.7s,baz=208,slow=5.5,SNR=3.3
**MK01 Makanchi Array 55.69 326** *e*P **P 07 12 50.6 -0.3**
**MK31 Makanchi Array 55.71 326** P **P 07 12 50.9 -0.2**
MK31 pmax pmax
comp=Z,8.0nm,0.3s
**MKAR Makanchi Array 55.71 326** P **P 07 12 50.8 -0.3**
comp=Z,24nm,0.6s,baz=121,slow=8.1,SNR=222
MKAR PcP **PcP 07 13 44.6 -1.0**
comp=Z,3.6nm,0.3s,baz=181,slow=3.2,SNR=16
**MKAR Makanchi Array 55.71 326** P **P 07 12 50.8 -0.3**
MKAR 07 13 44.6
MKAR pmax pmax
comp=Z,24nm,0.6s
MKAR pmax pmax
comp=Z,4.0nm,0.3s
**MAKZ Makanchi 55.89 326** *e*P **P 07 12 52.2 -0.2**
**KSH Kashi 55.98 316** P **P 07 12 54.4 +1.2**
KSH *e*pP **pP 07 14 07.9 -0.2**
KSH *e*sP **sP 07 14 45.8 -1.3**
KSH *e*PP **PP 07 15 05.8 +3.2**
KSH PcS **PcS 07 17 46.8 -1.2**
KSH S **S 07 20 09.3 -4.1**
KSH ScS **ScS 07 22 05.5 -0.1**
KSH sS **sS 07 22 22.5 -4.1**
KSH PMZ
comp=Z,170nm,4.2s
KSH LN
comp=Z,200nm,6.7s
KSH LE
comp=Z,190nm,6.8s
KSH LZ
comp=Z,190nm,7.1s
**KRAR Krasnoyarsk 57.26 339** *e*P **P 07 13 01.7 0.0**
KRAR pmax pmax
comp=Z,15nm,0.8s
**YAK Yakutsk 57.54 3** *e*P **P 07 13 03.5 0.0**
YAK pmax pmax
comp=Z,28nm,1.3s
YAK pmax pmax
comp=N,17nm,1.5s
**AAK Ala-Archa 58.34 318** *e*P **P 07 13 09.5 -0.1**
AAK pmax pmax
comp=Z,18nm,0.8s
**MA2 Magadan 58.53 15** *i*P **P 07 13 11.4 +1.1**
**EKS2 Erkin-Say 58.83 318** *e*P **P 07 13 13.6 +0.7**
EKS2 pmax pmax
comp=Z,15nm,0.8s
**EKS2 Erkin-Say 58.83 318** *e*P **P 07 13 13.6 +0.7**
comp=Z,15nm,0.8s
**ZAA0 Zalesovo Array 58.94 334** P **P 07 13 12.4 -0.9**
baz=59,SNR=4.9
**ZALV Zalesovo Beam 58.94 334** P **P 07 13 12.4 -0.9**
comp=Z,5.0nm,0.5s,baz=129,slow=6.6,SNR=24
ZALV PcP **PcP 07 13 57.3 -0.9**
comp=Z,1.7nm,0.3s,baz=147,slow=3.8,SNR=5.0
**KBL Kabul 59.34 308** *e*P **P 07 13 16.7 +0.1**
KBL pmax pmax
comp=Z,13nm,0.5s
**KBL Kabul 59.34 308** *e*P **P 07 13 16.7 +0.1**
comp=Z,13nm,0.5s
**MNAS Manas 59.61 317** P **P 07 13 18.4 +0.2**
MNAS pmax pmax
comp=Z,27nm,1.0s
**KURK Kurchatov 59.95 328** *e*P **P 07 13 19.7 -0.4**
KURK pmax pmax
comp=Z,113nm,0.6s
**KURK Kurchatov 59.95 328** *e*P **P 07 13 19.7 -0.4**
comp=Z,113nm,0.6s
**NVS Novosibirsk 60.23 334** *e*P **P 07 13 21.3 -0.6**
NVS pmax pmax
comp=N,8.0nm,0.8s
NVS pmax pmax
comp=E,6.0nm,0.8s
NVS pmax pmax
comp=Z,17nm,0.8s
**DZET Dzherino 60.84 312** P **P 07 13 26.0 -0.5**
DZET pmax pmax
comp=Z,23nm,0.6s
**KK31 Karatay Array 61.20 317** *i*P **P 07 13 27.9 -0.8**
KK31 pmax pmax
comp=Z,21nm,0.8s
**KKAR Karatay Array 61.20 317** *e*P **P 07 13 28.0 -0.7**
KKAR pmax pmax
comp=Z,9.0nm,0.6s
**KKAR Karatay Array 61.20 317** *e*P **P 07 13 28.0 -0.7**
comp=Z,9.1nm,0.6s
**SEY Seymchan 61.81 14** *e*P **P 07 13 32.5 +0.2**
**OTUK Ortayu 62.22 323** P **P 07 13 34.9 -0.4**
OTUK pmax pmax
comp=Z,30nm,1.1s
**VOSK Vostochnaya 65.05 327***ce*P **P 07 13 52.5 -1.1**
VOSK pmax pmax
comp=Z,27nm,1.0s
**BVA0 Borovoye Array 65.51 327** *i*P **P 07 13 55.4 -1.1**
BVA0 pmax pmax
comp=Z,40nm,1.1s
**BRVK Borovoye 65.58 327** *e*P **P 07 13 56.1 -0.8**
BRVK pmax pmax
comp=Z,35nm,1.0s
**BRVK Borovoye 65.58 327** *e*P **P 07 13 56.1 -0.8**
comp=Z,35nm,1.0s
**CHKZ Chkalovo 65.69 328** P **P 07 13 56.6 -1.0**
CHKZ pmax pmax
comp=Z,12nm,0.6s
**ZRNK Zerenda 66.22 327** P **P 07 14 00.1 -0.9**
ZRNK pmax pmax
comp=Z,40nm,1.0s
**IEMG Emamgholi 68.21 308** *e*P **P 07 14 14.4 +0.4**
**ISFR Sfrayin 68.65 308** *e*P **P 07 14 16.6 -0.1**

**GEYT Alibeck 68.73 309** P **P 07 14 16.9 0.0**
comp=Z,9.1nm,0.8s,baz=131,slow=6.1,SNR=6.9
**BILL Bilibino 69.40 16** P **P 07 14 21.0 +0.7**
BILL 07 14 42.0
BILL *PP **pP 07 15 38.0 -0.9**
BILL *SP **sP 07 16 18.0 +1.1**
BILL 07 17 03.0
BILL pmax pmax
comp=Z,3.0nm,0.9s
**AB31 Akbulak array 70.19 321** *i*P **P 07 14 24.5 -1.0**
AB31 pmax pmax
comp=Z,6.0nm,0.4s
**ABKAR Akbulak array 70.19 321** *e*P **P 07 14 24.6 -0.9**
comp=Z,4.3nm,0.3s
**AKTO Aktyubinsk 71.72 322** P **P 07 14 33.8 -0.8**
AKTO pmax pmax
comp=Z,37nm,1.0s
**SVE Sverdlovsk 72.19 329**⇓*i*P **P 07 14 36.9 -0.3**
SVE pmax pmax
comp=Z,46nm,0.9s
**ARU Arti 73.14 328** *e*P **P 07 14 41.7 -1.0**
ARU pmax pmax
comp=Z,28nm,0.7s
**ARU Arti 73.14 328** *e*P **P 07 14 41.5 -1.2**
comp=Z,21nm,0.5s
**RAYN Ar Rayn 78.19 293** *e*P **P 07 15 10.4 -1.4**
comp=Z,6.7nm,0.8s
**KBZ Khabaz 80.88 313** P **P 07 15 25.1 -0.7**
comp=Z,4.1nm,0.9s,baz=312,slow=7.2,SNR=3.8
**NEY Neytrino 80.99 313** *e*P **P 07 15 27.9 +1.3**
**KIV Kislovodsk 81.05 314** *e*P **P 07 15 25.8 -0.9**
KIV pmax pmax
comp=Z,6.0nm,0.9s
**VRH Novokhopyorsk 82.03 321** *e*P **P 07 15 30.5 -1.0**
VRH pmax pmax
comp=Z,30nm,0.7s
VRH pmax pmax
comp=N,8.0nm,0.4s
VRH pmax pmax
comp=E,20nm,0.7s
**KDAK Kodiak Island 82.42 32***ce*P **P 07 15 34.4 +1.0**
**VORD Divnogorie 83.55 321** *e*P **P 07 15 38.4 -0.9**
VORD pmax pmax
comp=Z,10.0nm,0.6s
VORD pmax pmax
comp=N,40nm,0.8s
VORD pmax pmax
comp=E,100nm,0.8s
**MAW Mawson 83.71 200** P **P 07 15 39.6 -0.1**
comp=E,1.3nm,0.7s,baz=86,slow=13,SNR=7.0
**LPSR Galich'ya Gora 83.80 322** *e*P **P 07 15 39.9 -0.6**
LPSR pmax pmax
comp=Z,40nm,1.3s
LPSR pmax pmax
comp=N,5.0nm,0.9s
LPSR pmax pmax
comp=E,10.0nm,1.1s
**COLD Coldfoot 84.05 23** *e*P **P 07 15 40.8 -0.6**
comp=E,3.6nm,0.4s
**VNDA Vanda 84.45 172** P **P 07 15 43.5 +0.3**
comp=E,0.5nm,0.6s,baz=312,slow=4.1,SNR=8.8
**TMCR Tamitsa 84.47 334** *e*P **P 07 15 43.1 -0.5**
TMCR pmax pmax
comp=Z,16nm,0.3s
**OBN Obninsk 85.19 325***ce*P **P 07 15 46.9 -0.4**
OBN *SP **sP 07 17 45.0 -1.6**
OBN pmax pmax
comp=Z,33nm,0.8s
**OBN Obninsk 85.19 325** *e*P **P 07 15 47.2 -0.1**
comp=Z,29nm,0.7s
**ILAR Eielson Array 85.36 25** P **P 07 15 47.0 -1.0**
comp=Z,0.4nm,0.5s,baz=244,slow=4.8,SNR=11
**ILAR Eielson Array 85.36 25** P **P 07 15 47.0 -1.0**
**LVZ Lovozero 85.84 338** *e*P **P 07 15 49.5 -0.8**
LVZ pmax pmax
comp=Z,9.0nm,0.8s
**KMBO Kilima Mbogo 87.39 269** P **P 07 15 59.3 +0.1**
comp=Z,2.9nm,0.7s,baz=48,slow=7.9,SNR=7.5
**KMBO Kilima Mbogo 87.39 269** P **P 07 15 59.3 +0.1**
KMBO pmax pmax
comp=Z,3.0nm,0.7s
**KMBO Kilima Mbogo 87.39 269** *e*P **P 07 15 59.2 +0.1**
comp=Z,4.6nm,1.0s
**BRTR Keskin Array B 87.87 309** P **P 07 15 58.6 -2.1**
comp=Z,1.6nm,0.4s,baz=116,slow=4.1,SNR=12
**BRTR Keskin Array B 87.87 309***ce*P **P 07 15 59.5 -1.3**
BRTR pmax pmax
comp=Z,2.0nm,0.4s
**BR231 Keskin MP Arra 88.52 310** *e*P P 07 15 59.6 -4.2
**ARCES ARCESS Array B 88.99 340** P **P 07 16 04.2 -1.0**
comp=Z,5.1nm,0.5s,baz=84,slow=6.4,SNR=20
**AKASG Malin Array Be 89.94 321** P **P 07 16 07.8 -2.1**
comp=Z,2.3nm,0.5s,baz=70,slow=4.6,SNR=7.9
**AKASG Malin Array Be 89.94 321***ce*P **P 07 16 08.6 -1.3**
AKASG pmax pmax
comp=Z,2.0nm,0.4s
**KIEV Kiev 89.95 321** *i*P **P 07 16 08.6 -1.4**
KIEV pmax pmax
comp=Z,6.0nm,1.2s
**FINES FINESS Array B 90.14 332** P **P 07 16 08.9 -1.7**
comp=Z,7.4nm,0.5s,baz=81,slow=4.2,SNR=42
**FINES FINESS Array B 90.14 332***ce*P **P 07 16 09.8 -0.8**
FINES pmax pmax
comp=Z,7.0nm,0.5s
**BUR04 Bucovina Ar. S 92.99 318** *e*P **P 07 16 23.3 -1.0**
**KOLS Kolonicke sedl 94.67 320** *e*P **P 07 16 32.7 +0.9**
**KOLS Kolonicke sedl 94.67 320** *e*P **P 07 16 32.7 +0.9**
**NB2 NORSAR Subarra 97.14 333** P **P 07 16 41.1 -1.7**
comp=Z,1.5nm,0.5s,baz=68,slow=4.6
**NOA NORSAR Array B 97.14 333** P **P 07 16 40.7 -2.0**
comp=Z,1.6nm,0.6s,baz=69,slow=4.3,SNR=5.2
**GERES GERESS Array B 100.14 321** P **Pdif 07 16 54.8 -1.6**
comp=Z,0.4nm,0.5s,baz=59,slow=4.7,SNR=4.0
**SCHQ Schefferville 120.14 8** PKP **PKPdf 07 21 58.8 -0.6**
comp=Z,1.8nm,0.4s,baz=38,slow=3.6,SNR=6.0
**TORD Torodi Ar. Bea 120.62 288** PKP **PKPdf 07 22 00.2 -1.1**
comp=Z,0.4nm,0.3s,baz=56,slow=1.6,SNR=12
**TXAR Lajitas Array 122.83 51** PKP **PKPdf 07 22 06.0 +0.6**
comp=Z,0.4nm,0.6s,baz=357,slow=1.0,SNR=9.6
**TXAR Lajitas Array 122.83 51** PKIKP **PKPdf 07 22 06.0 +0.6**

*KRNET **21** 07:24:34.6±0.1, 43°.01N×74°.93E, h22km, mb2.1*
*NNC **21** 07:24:34.4±1.9, 42°.50N×75°.18E, h0km, mb2.9, mpv2.0,*
*Error ellipse: s-maj=18.0km s-min=3.3km az=159.0*
**ISC 21 07:24:34.2**±1.2, **43°.02N**±0°.07×**74°.95E**±0°.03, **h10**km±11km, **n14**, σ0**s43**/21, **3C-11D, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CHMS** | **Chumysh** | **0.15** | **264** | P | | **Pg** | **07 24 37.6** | **0.0** |
| | SNR=26 | | | | | | | |
| **KBK** | **Karagaybulak** | **0.36** | **181** | P | | **Pb** | **07 24 43.0** | **+0.2** |
| | SNR=14 | | | | | | | |
| **USP** | **Osperovka** | **0.42** | **307** | P | | **Pg** | **07 24 42.4** | **0.0** |
| | SNR=51 | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **101** | ⇓P | | **Pb** | **07 24 45.0** | **+0.1** |
| | 1.6nm,0.4s | | | | | | | |
| TKM2 | | | | ⇓S | | **Sb** | **07 24 52.1** | **0.0** |
| | 8.9nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **0.48** | **101** | P | | **Pb** | **07 24 44.8** | **0.0** |
| | SNR=26 | | | | | | | |
| **AAK** | **Ala-Archa** | **0.51** | **222** | ⇓P | | **Pb** | **07 24 45.0** | **-0.4** |
| | 1.2nm,0.5s | | | | | | | |
| AAK | | | | ⇓S | | **Sb** | **07 24 52.2** | **-0.6** |
| | 2.6nm,0.4s | | | | | | | |
| **AAK** | **Ala-Archa** | **0.51** | **222** | P | | **Pb** | **07 24 44.9** | **-0.4** |
| | SNR=7.8 | | | | | | | |
| **UCH** | **Uchtor** | **0.85** | **203** | P | | **Pb** | **07 24 51.5** | **+0.1** |
| | SNR=8.7 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **0.90** | **126** | ⇓*i*P | | **Pn** | **07 24 52.7** | **-0.3** |
| | baz=125 | | | | | | | |
| BOOM | | | | ⇓*i*S | | **Sn** | **07 25 06.1** | **0.0** |
| | baz=125 | | | | | | | |
| **EKS** | **Erkin-Say** | **0.93** | **248** | ⇓*i*P | | **Pb** | **07 24 52.4** | **0.0** |
| | baz=248 | | | | | | | |
| EKS | | | | ⇓*i*S | | **Sn** | **07 25 06.3** | **-0.4** |
| | baz=248 | | | | | | | |
| **EKS2** | **Erkin-Say** | **0.94** | **248** | P | | **Pb** | **07 24 52.6** | **+0.1** |
| | SNR=20 | | | | | | | |
| **ARLS** | **Aral** | **1.24** | **202** | ⇓*i*P | | **Pn** | **07 24 57.7** | **-0.1** |
| | baz=201 | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sn** | **07 25 15.9** | **+1.2** |
| | baz=201 | | | | | | | |
| **MNAS** | **Manas** | **1.88** | **255** | ⇓Pn | | **Pb** | **07 25 09.3** | **+0.6** |
| | 3.9nm,1.1s | | | | | | | |
| MNAS | | | | ⇑Sn | | **Sg** | **07 25 34.7** | **0.0** |
| | 4.0nm,0.8s | | | | | | | |
| **MNAS** | **Manas** | **1.88** | **255** | ⇑*i*P | | **Pb** | **07 25 09.1** | **+0.4** |
| | baz=255 | | | | | | | |
| MNAS | | | | ⇑*i*S | | **Sg** | **07 25 34.6** | **0.0** |
| | baz=255 | | | | | | | |

*ISCJB **21** 07:25:39.9±1.2, 25°.96S±0°.04×177°.56W±0°.04, h135km±10km, mb4.9/93, Error ellipse: s-maj=6.4km s-min=5.3km az=146.3*
*MOS **21** 07:25:42.9±1.6, 25°.75S×177°.58W, h155km, mb5.0/26, Error ellipse: s-maj=10.7km s-min=8.5km az=84.7*
*AUST **21** 07:25:42.6, 25°.87S×176°.64W, h200km*
*IDC **21** 07:25:42.8±1.4, 25°.73S×177°.53W, h147km±13km, mb4.7/21, mb1 4.7/24, mb1mx4.6/34, mbtmp5.1/24, MS3.6/4, Ms1 3.6/4, ms1mx3.2/22, Error ellipse: s-maj=13.7km s-min=10.9km az=78.0*
*GCMT **21** 07:25:43.5±0.3, 25°.78S×177°.33W, h175km±2km, MW5.1/74, Moment Tensor Solution. s30,c40; s74,c111; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr0.09±.18; Mθθ-1.31±.21; Mφφ 1.22±.20; Mrθ-4.35±.14; Mrφ-3.55±.16; Mθφ-0.77±.14; Best double couple: M=5.65900×10^16 NP1:φ=96.00000°, δ89.00000°, λ-131.00000°. NP2: φ=4.00000°, δ41.00000°, λ-1.00000°. Principal axes: T 4.9050, Plg31.0000°, Azm219.0000°; N 1.5080, Plg41.0000°, Azm96.0000°; P -6.4120, Plg33.0000°, Azm332.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI **21** 07:25:43.7, 25°.16S×177°.21W, h159km, mb5.1/20, mB5.4/16*
*NEIC **21** 07:25:43.5±0.1, 25°.78S×177°.64W, mb4.9/67, Error ellipse: s-maj=6.2km s-min=4.3km az=143.0*
*NEIC Felt at Suva. Also felt at Nuku'alofa, Tonga.*
**ISC 21 07:25:44.2**±0.3, **25°.83S**±0°.04×**177°.55W**±0°.05, **h161**km±2km, **h161**km:**pP-P, n518,** σ1**9**05/562, **mb4.9**/92, **15C-27D, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **3.42** | **185** | P | | **Pn** | **07 26 36.1** | **-1.2** |
| | 444nm,0.3s,baz=28,slow=2.4,SNR=27 | | | | | | | |
| RAO | | | | S | | **Sn** | **07 27 19.3** | **+0.6** |
| | 2μm,0.3s,baz=25,slow=22,SNR=14 | | | | | | | |
| **RAO** | **Raoul Island** | **3.42** | **185** | P | | **Pn** | **07 26 36.1** | **-1.2** |
| RAO | | | | S | | **Sn** | **07 27 19.3** | **+0.6** |
| RAO | | | | pmax | pmax | | | |
| | comp=Z,445nm,0.3s | | | | | | | |
| **MSVF** | **Nonsavu** | **9.03** | **332** | *e*P | | **Pn** | **07 27 52.0** | **+0.6** |
| MSVF | | | | *e* | | | 07 29 30.8 | |
| **MSVF** | **Nonsavu** | **9.03** | **332** | Pn | | **Pn** | **07 27 52.0** | **+0.6** |
| | comp=Z,3μm,0.9s,SNR=46 | | | | | | | |
| **MSVF** | **Nonsavu** | **9.03** | **332** | *e*Pn | | **Pn** | **07 27 52.0** | **+0.6** |
| MSVF | | | | *e*Sn | | **Sn** | **07 29 30.8** | **-1.2** |
| **NIUE** | **Niue** | **9.74** | **48** | P | | Pn | 07 27 53.6 | -7.1 |
| | baz=9.2,SNR=19 | | | | | | | |
| **OUZ** | **Omahuta** | **12.07** | **217** | *e*Pn | | **Pn** | **07 28 31.9** | **+1.0** |
| **MXZ** | **Matakaoa Point** | **12.21** | **196** | *e*PN | | Pn | 07 28 20.4 | -12 |
| MXZ | | | | SN | | Sn | 07 30 35.3 | -13 |
| **WMGZ** | **Waiomatatini S** | **12.43** | **195** | SN | | Sn | 07 30 40.2 | -13 |
| **HAZ** | **Te Kaha** | **12.53** | **197** | *e*PN | | Pn | 07 28 27.6 | -9.3 |
| **PUZ** | **Puketiti** | **12.71** | **195** | SN | | Sn | 07 30 45.7 | -14 |
| **AFI** | **Afiamalu** | **13.04** | **26** | P | | Pn | 07 28 34.0 | -10 |
| | comp=Z,47nm,0.3s,baz=348,slow=1.1,SNR=70 | | | | | | | |
| AFI | | | | S | | Sn | 07 30 46.3 | -22 |
| | comp=Z,39nm,0.3s,baz=108,slow=15,SNR=7.0 | | | | | | | |
| **MWZ** | **Matawai** | **13.14** | **197** | *e*PN | | Pn | 07 28 34.2 | -11 |
| MWZ | | | | SN | | Sn | 07 30 57.5 | -13 |
| **TKGZ** | **Te Karaka** | **13.16** | **196** | SN | | Sn | 07 30 57.5 | -13 |
| **URZ** | **Urewera** | **13.19** | **199** | P | | **Pn** | **07 28 44.5** | **-0.8** |
| | comp=Z,9.6nm,0.3s,baz=259,slow=4.2,SNR=16 | | | | | | | |
| URZ | | | | S | | Sn | 07 30 57.7 | -14 |
| | comp=Z,14nm,0.3s,baz=156,slow=23,SNR=20 | | | | | | | |
| **URZ** | **Urewera** | **13.19** | **199** | *e*PN | | Pn | 07 28 35.4 | -10 |
| URZ | | | | SN | | Sn | 07 30 56.5 | -15 |
| **URZ** | **Urewera** | **13.19** | **199** | *e*Pn | | Pn | 07 28 41.2 | -4.1 |
| URZ | | | | *e*Sn | | Sn | 07 30 52.9 | -19 |
| **RIGZ** | **Rimuhau** | **13.43** | **196** | SN | | Sn | 07 31 04.6 | -13 |
| **ARHZ** | **Aropaoanui** | **14.15** | **198** | SN | | Sn | 07 31 20.6 | -14 |
| **BKZ** | **Black Stump Fm** | **14.21** | **199** | *e*Pn | | Pn | 07 28 51.9 | -6.3 |
| BKZ | | | | *e*Sn | | Sn | 07 31 23.9 | -12 |
| **PXZ** | **Pawanui** | **14.91** | **197** | *e*PN | | Pn | 07 28 59.3 | -7.6 |
| PXZ | | | | SN | | Sn | 07 31 32.1 | -21 |
| **DZM** | **Mont Dzumac** | **15.10** | **281** | *e*P | | **P** | **07 29 14.9** | **+4.0** |
| | comp=Z,220nm,1.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.10** | **281** | P | | **P** | **07 29 13.3** | **+2.4** |
| | comp=Z,0.6nm,0.3s,baz=354,slow=1.8,SNR=13 | | | | | | | |
| **DZM** | **Mont Dzumac** | **15.10** | **281** | *e*Pn | | **Pn** | **07 29 08.7** | **-0.8** |
| | comp=Z,61nm,1.0s | | | | | | | |
| DZM | | | | *e*Sn | | **Sn** | **07 31 54.0** | **-3.8** |
| **BFZ** | **Birch Farm** | **15.68** | **198** | *e*PN | | **Pn** | **07 29 12.8** | **-3.7** |
| **MRZ** | **Mangatainoka R** | **15.86** | **199** | PN | | Pn | 07 29 13.1 | -5.4 |
| **TRWZ** | **Traveller** | **16.51** | **198** | SN | | S | 07 32 11.5 | -18 |
| **RAR** | **Rarotonga** | **16.94** | **78** | P | | **P** | **07 29 31.3** | **+0.2** |
| | comp=Z,3.3nm,0.3s,baz=249,slow=8.7,SNR=8.5 | | | | | | | |
| RAR | | | | S | | S | 07 32 23.7 | -16 |
| | comp=Z,1.3nm,0.3s,baz=128,slow=19,SNR=3.5 | | | | | | | |
| **THZ** | **Tophouse** | **17.74** | **204** | PN | | **P** | **07 29 35.2** | **-4.6** |
| **KHZ** | **Kahutara** | **18.09** | **202** | PN | | P | 07 29 38.0 | -5.6 |
| KHZ | | | | SN | | S | 07 32 46.2 | -16 |
| **RPZ** | **Rata Peaks** | **20.11** | **205** | P | | **P** | **07 30 05.9** | **+0.5** |
| | comp=Z,21nm,0.7s,baz=314,slow=1.3,SNR=6.4 | | | | | | | |
| RPZ | | | | S | | S | 07 33 29.4 | -13 |
| | comp=Z,9.4nm,0.3s,baz=126,slow=23,SNR=11 | | | | | | | |
| **LHI** | **Lord Howe Isla** | **21.27** | **249** | P | | P | 07 30 23.0 | +5.1 |
| | baz=22,SNR=5.6 | | | | | | | |
| **LHI** | **Lord Howe Isla** | **21.27** | **249** | *e*P | | **P** | **07 30 22.1** | **+4.2** |
| | comp=Z,259nm,1.4s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **23.14** | **206** | *e*P | | **P** | **07 30 35.5** | **-0.6** |
| | comp=Z,14nm,0.3s | | | | | | | |
| **TBI** | **Tubuai** | **25.65** | **91** | *e*LR | | LR | 07 37 28.1 | |
| | comp=Z,69nm,38.8s | | | | | | | |
| **TBI** | **Tubuai** | **25.65** | **91** | *e*T | | T | 07 56 51.6 | |
| | comp=Z,20nm,0.3s | | | | | | | |
| **PAE** | **Paea** | **27.18** | **78** | *e*T | | T | 07 58 39.3 | |
| | comp=Z,8.6nm,0.3s | | | | | | | |
| **PPT2** | **Papeete2** | **27.21** | **78** | *e*LR | | LR | 07 38 11.2 | |
| | comp=Z,66nm,23.2s | | | | | | | |
| **PPT2** | **Papeete2** | **27.21** | **78** | *e*T | | T | 07 58 45.0 | |
| | comp=Z,5.5nm,0.3s | | | | | | | |
| **MGCD** | **Mangrove Creek** | **28.17** | **247** | P | | **P** | **07 31 24.2** | **+2.7** |
| | baz=29,SNR=4.7 | | | | | | | |
| **MEH** | **Mehetia** | **28.44** | **80** | *e*T | | T | 08 00 18.3 | |
| | comp=Z,28nm,0.2s | | | | | | | |
| **TARA** | **Tarawa** | **28.55** | **340** | *e*P | | **P** | **07 31 22.7** | **-2.4** |
| | comp=Z,172nm,0.9s | | | | | | | |
| **RMQ** | **Roma** | **30.20** | **261** | P | | P | 07 31 43.9 | +4.3 |
| | baz=31,SNR=12 | | | | | | | |
| **YNG** | **Young** | **30.54** | **246** | P | | **P** | **07 31 44.6** | **+2.1** |
| | baz=31,SNR=8.0 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **32.64** | **251** | P | | **P** | **07 32 01.9** | **+1.1** |
| | baz=33,SNR=7.2 | | | | | | | |
| **TOO** | **Toolangi** | **33.35** | **240** | P | | **P** | **07 32 08.0** | **+1.0** |
| | baz=34,SNR=6.6 | | | | | | | |
| **CTA** | **Charters Tower** | **33.74** | **272** | P | | **P** | **07 32 12.0** | **+1.4** |
| | comp=Z,17nm,0.5s,baz=93,slow=10,SNR=26 | | | | | | | |
| **CTA** | **Charters Tower** | **33.74** | **272** | P | | **P** | **07 32 12.0** | **+1.4** |
| **CTAO** | **Charters Tower** | **33.74** | **272** | *e*P | | **P** | **07 32 11.9** | **+1.4** |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,49nm,1.1s | | | | | | | |
| **CTAO** | **Charters Tower** | **33.74** | **272** | *e*P | | **P** | **07 32 11.9** | **+1.4** |
| | comp=Z,49nm,1.1s | | | | | | | |
| **QLP** | **Quilpie** | **34.21** | **260** | P | | **P** | **07 32 15.8** | **+1.3** |
| | baz=35,SNR=9.3 | | | | | | | |
| **MTSU** | **Mount Surprise** | **36.08** | **274** | P | | **P** | **07 32 32.7** | **+2.1** |
| | baz=37,SNR=23 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **36.13** | **242** | P | | **P** | **07 32 31.4** | **+0.6** |
| | baz=37,SNR=6.7 | | | | | | | |
| **PMG** | **Port Moresby** | **37.23** | **290** | P | | **P** | **07 32 40.7** | **+0.3** |
| | comp=Z,41nm,0.7s,baz=99,slow=4.5,SNR=10 | | | | | | | |
| **PMG** | **Port Moresby** | **37.23** | **290** | P | | **P** | **07 32 40.7** | **+0.3** |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,41nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **37.23** | **290** | *e*P | | **P** | **07 32 40.9** | **+0.6** |
| | comp=Z,130nm,1.5s | | | | | | | |
| **HTT** | **Hallett** | **38.36** | **248** | P | | P | 07 32 44.7 | -5.1 |
| | baz=39,SNR=18 | | | | | | | |
| **COEN** | **Coen** | **38.63** | **280** | P | | **P** | **07 32 53.7** | **+1.6** |
| | baz=39,SNR=4.0 | | | | | | | |
| **COEN** | **Coen** | **38.63** | **280** | *e*P | | **P** | **07 32 53.1** | **+1.0** |
| | comp=Z,33nm,1.0s | | | | | | | |
| **RKT** | **Rikitea** | **38.73** | **95** | *e*T | | T | 08 13 24.5 | |

comp=Z,3.0nm,0.3s
**QIS Mount Isa 39.60 268 P P 07 33 01.1 +0.9**
baz=40,SNR=6.4
**BBOO Buckleboo 40.78 249 P P 07 33 09.0 -0.7**
baz=42,SNR=11
**BBOO Buckleboo 40.78 249** *e*P **P 07 33 08.8 -1.0**
comp=Z,38nm,0.8s
**AS01 Alice Springs 43.90 262** *e*P **P 07 33 32.1 -3.0**
**ASAR Alice Springs 43.94 262** P **P 07 33 34.7 -0.7**
comp=Z,10nm,0.5s,baz=89,slow=7.0,SNR=79
ASAR ScP **ScP 07 38 56.8 +1.7**
comp=Z,1.5nm,0.8s,baz=113,slow=4.7,SNR=4.7
ASAR S **S 07 39 50.3 -4.7**
comp=Z,3.1nm,0.9s,baz=100,slow=15,SNR=11
**WRAB Tennant Creek 44.51 267***c i*P **P 07 33 40.5 +0.6**
WRAB pmax pmax
comp=Z,69nm,1.1s
**WRAB Tennant Creek 44.51 267** P **P 07 33 40.8 +0.9**
comp=Z,152nm,0.5s,SNR=17
**WRAB Tennant Creek 44.51 267** *e*P **P 07 33 39.5 -0.5**
comp=Z,24nm,0.8s
**WRA Warramunga Arr 44.52 267** P **P 07 33 39.3 -0.7**
comp=Z,15nm,0.5s,baz=104,slow=7.8,SNR=221
WRA ScP **ScP 07 38 59.6 +2.1**
comp=Z,1.5nm,0.9s,baz=108,slow=4.0,SNR=6.6
WRA S **S 07 39 59.1 -4.2**
comp=Z,3.8nm,0.8s,baz=101,slow=14,SNR=8.2
WRA LR LR 07 50 52.6
comp=Z,150nm,19.5s,baz=155,slow=34
**WRKA Warakurna 48.61 259** P **P 07 34 10.7 -1.1**
baz=49,SNR=40
**KDU Kakadu 48.68 276** P **P 07 34 12.2 -0.3**
baz=50,SNR=5.3
**KIP Kipapa 50.66 24** *e*P **P 07 34 26.4 -0.7**
KIP pmax pmax
comp=Z,327nm,1.0s
**KNRA Kununurra 50.91 270** P **P 07 34 29.2 -0.1**
baz=52,SNR=6.2
**SBA Scott Base 52.60 184** *e*P **P 07 34 43.8 +2.9**
SBA pmax pmax
comp=Z,31nm,0.8s
**SBA Scott Base 52.60 184** *e*P **P 07 34 43.8 +2.9**
comp=Z,31nm,0.8s
**VNDA Vanda 52.66 186** P **P 07 34 43.1 +1.8**
comp=Z,6.4nm,0.6s,baz=359,slow=7.8,SNR=61
**VNDA Vanda 52.66 186** *e*P **P 07 34 43.1 +1.8**
VNDA pmax pmax
comp=Z,29nm,1.5s
**VNDA Vanda 52.66 186** *e*P **P 07 34 43.1 +1.8**
comp=Z,29nm,1.5s
**FAKI Fak Fak 53.27 287** P **P 07 34 46.3 -0.3**
baz=54,SNR=4.6
**FAKI Fak Fak 53.27 287** *e*P **P 07 34 45.1 -1.5**
comp=Z,22nm,0.8s
**GUMO Guam 53.61 313** LR LR 07 55 00.6
comp=Z,35nm,21.5s,baz=130,slow=33
**SIJI Sorong 55.15 288** P **P 07 35 00.1 -0.3**
comp=Z,112nm,0.9s,baz=73,slow=6.4,SNR=36
**SWI Sorong 55.16 288** P **P 07 35 00.9 +0.6**
baz=56,SNR=6.9
**KLBR Kellerberrin 56.31 248** P **P 07 35 07.2 -1.2**
baz=57,SNR=5.9
**MEEK Meekatharra 56.70 254** P **P 07 35 09.3 -1.9**
baz=57,SNR=3.4
**MBWA Marble Bar 57.24 261** *e*P **P 07 35 13.1 -1.9**
comp=Z,170nm,2.8s
**BLDU Ballidu 57.39 249** P **P 07 35 14.8 -1.2**
baz=58,SNR=15
**CASY Casey 59.37 207** *e*P **P 07 35 28.2 -0.8**
comp=Z,52nm,0.8s
**LUWI Luwuk 62.43 283** P P 07 35 57.7 +7.1
baz=63,SNR=3.4
**QSPA South Pole Qui 64.26 180** P **P 07 36 02.9 +1.0**
comp=Z,47nm,1.0s,baz=37,slow=1.3,SNR=92
**QSPA South Pole Qui 64.26 180** *e*P **P 07 36 03.0 +1.1**
comp=Z,63nm,1.0s
**MIR Mirnyy 66.38 206**⇑ *i*P P 07 36 24.0 +8.7
MIR pmax pmax
comp=Z,100nm,1.0s
**MJAR Matsushiro Arr 74.75 324** P **P 07 37 05.2 -1.2**
comp=Z,11nm,0.8s,baz=163,slow=6.1,SNR=20
**MJAR Matsushiro Arr 74.75 324** P **P 07 37 05.2 -1.2**
MJAR pmax pmax
comp=Z,11nm,0.8s
**MAJO Matsushiro 74.75 324** *e*P **P 07 37 07.4 +1.0**
MAJO pmax pmax
comp=Z,106nm,0.9s
**MAJO Matsushiro 74.75 324** *e*P **P 07 37 07.5 +1.1**
comp=Z,19nm,0.9s
**MAT Matsushiro 74.75 324** P **P 07 37 06.8 +0.4**
**JNU Nakatsue 76.44 317** P **P 07 37 16.1 -0.1**
comp=Z,21nm,1.1s,baz=54,slow=9.4,SNR=4.0
**ERM Erimo 76.66 331** *e*P **P 07 37 17.0 0.0**
ERM pmax pmax
comp=Z,25nm,1.1s
**MAW Mawson 76.71 200** P **P 07 37 18.0 +0.9**
comp=Z,39nm,0.8s,baz=134,slow=6.3,SNR=132
**MAW Mawson 76.71 200** P **P 07 37 18.0 +0.9**
**ATKA Atka Island 77.75 2** *e*P **P 07 37 22.3 -0.6**
**ASAJ Asahikawa 78.60 332** P **P 07 37 28.6 +0.9**
comp=Z,25nm,0.7s,baz=188,slow=7.5,SNR=20
**ASAJ Asahikawa 78.60 332** P **P 07 37 28.7 +0.9**
ASAJ pmax pmax
comp=Z,25nm,0.7s
**SNCC San Nicolas Is 80.60 46** P **P 07 37 39.1 +0.3**
baz=81
**YSS Yuzh-Sakhalins 80.83 334**⇓ *i*P **P 07 37 40.0 +0.3**
YSS pmax pmax
comp=Z,70nm,1.0s
**YSS Yuzh-Sakhalins 80.83 334** *e*P **P 07 37 40.3 +0.6**
comp=Z,30nm,0.6s
**BSC Santa Cruz Isl 81.00 45** P **P 07 37 41.7 +0.7**
baz=81
**KSRS Korea Array 81.15 319** P **P 07 37 41.1 -0.6**
comp=Z,4.5nm,0.7s,baz=132,slow=6.4,SNR=10
**KSRS Korea Array 81.15 319** P **P 07 37 41.1 -0.6**
KSRS pmax pmax
comp=Z,5.0nm,0.7s
**KSAR Wonju Array Be 81.17 319** P **P 07 37 41.1 -0.6**
**KSAR Wonju Array Be 81.17 319** P **P 07 37 41.1 -0.6**
**PETK Petropavlovsk- 81.51 345** P **P 07 37 43.0 -0.2**
comp=Z,45nm,0.7s,baz=144,slow=8.0,SNR=44
**SYO Syowa Base 81.64 193**⇑ *e*P **P 07 37 41.8 -2.0**
**SYO Syowa Base 81.64 193**⇓ *e*PcP **PcP 07 37 47.4 -1.8**
**SAO San Andreas Ge 81.64 42** *e*pP pP 07 38 24.5 +0.3
**ARVC Arvin 82.22 45** P **P 07 37 48.0 +0.7**
baz=82
**MURC Murrieta 82.34 47** P **P 07 37 48.3 +0.3**
baz=83
**BFSC Mount Baldy Ra 82.43 46** P **P 07 37 48.7 +0.1**
baz=83
**VES Vestal, Richgr 82.51 44** P **P 07 37 48.8 -0.1**
baz=83,SNR=7.5
**KMRM Mail Ridge 82.62 39** *e*P **P 07 37 50.9 +1.5**
comp=Z,27nm,0.9s
**SNAA Sanae 82.69 178** P **P 07 37 48.8 -0.6**
**SNAA Sanae 82.69 178***c i*P **P 07 37 48.6 -0.8**
SNAA pmax pmax
comp=Z,13nm,1.0s
**SNAA Sanae 82.69 178** *e*P **P 07 37 48.8 -0.6**
**ISA Isabella 82.79 45** *e*P **P 07 37 51.0 +0.6**
ISA *e**PP **pP 07 38 29.4 -1.0**
ISA pmax pmax
comp=Z,8.0nm,0.8s
**ISA Isabella 82.79 45** P **P 07 37 50.9 +0.6**
baz=83,SNR=7.5
**ISA Isabella 82.79 45** *e*P **P 07 37 51.0 +0.6**
comp=Z,7.7nm,0.8s
ISA *e*pP **pP 07 38 29.4 -1.0**
**VNA3 Neumayer Olymp 82.82 176** P **P 07 37 49.7 -0.3**
**PFO Pinyon Flat Ob 82.83 47** *e*P **P 07 37 51.4 +0.7**
PFO pmax pmax
comp=Z,6.0nm,0.9s
**PFO Pinyon Flat Ob 82.83 47** *e*P **P 07 37 51.4 +0.7**
comp=Z,5.7nm,0.9s
**BBRC Big Bear Solar 82.92 47** P **P 07 37 51.9 +0.5**
baz=83
**CMB Columbia Colle 83.11 42** *e*P **P 07 37 52.1 +0.1**
CMB *e**PP **pP 07 38 30.9 -1.1**
CMB pmax pmax
comp=Z,10.0nm,0.9s
**CMB Columbia Colle 83.11 42** *e*P **P 07 37 52.1 +0.1**
comp=Z,9.8nm,0.9s
CMB *e*pP **pP 07 38 30.9 -1.1**
**LRMC Laurel Mountai 83.17 45** P **P 07 37 52.8 +0.4**
baz=83,SNR=5.9
**VNA2 Neumayer--Watz 83.26 177** P **P 07 37 52.4 +0.2**
baz=176,slow=3.3
**OHCM Honcut 83.31 40** *e*P **P 07 37 53.3 +0.5**
**BELC Belle Mtn. Jos 83.37 47** P **P 07 37 54.1 +0.6**
baz=84,SNR=11
**NVL N'lazarevskaya 83.44 183** *i*P P 07 37 45.1 -8.0
NVL pmax pmax
comp=Z,23nm,1.0s
**VNA1 Neumayer--Stat 83.49 176** P **P 07 37 53.3 0.0**
**CWC Cottonwood Cre 83.52 44** P **P 07 37 54.3 +0.1**
baz=84,SNR=6.5
**WDC Whiskeytown Da 83.52 39** *e*P **P 07 37 54.8 +0.9**
WDC *e**PP **pP 07 38 33.1 -0.9**
WDC pmax pmax
comp=Z,17nm,0.9s
**WDC Whiskeytown Da 83.52 39** *e*P **P 07 37 54.8 +0.9**
comp=Z,17nm,0.9s
WDC *e*pP **pP 07 38 33.1 -0.9**
**BC3 Big Chuckawall 83.53 48** P **P 07 37 55.0 +0.8**
baz=84
**GLA Glamis 83.59 49** P **P 07 37 55.1 +0.6**
baz=84
**USRK Ussuriysk Ar. 83.59 326** P **P 07 37 54.3 +0.2**
comp=Z,11nm,0.8s,baz=130,slow=3.3,SNR=23
**NJ2 Nanjing 83.60 310** *e*P **P 07 37 55.3 +0.8**
NJ2 PMZ
comp=Z,70nm,0.9s
**GSC Goldstone 83.63 46** *e*P **P 07 37 55.5 +0.8**
**GSC Goldstone 83.63 46** P **P 07 37 55.1 +0.4**
baz=84,SNR=8.9
**GSC Goldstone 83.63 46** *e*P **P 07 37 55.5 +0.8**
**HEC Hector,Ludlow 83.66 47** P **P 07 37 55.1 +0.2**
baz=84,SNR=6.3
**MPMC Manual Prospec 83.66 45** P **P 07 37 55.4 +0.4**
baz=84,SNR=13
**N02D Trinity Center 83.70 39** P **P 07 37 55.8 +0.9**
baz=84
**DAC Darwin (Calif) 83.73 45** *e*P **P 07 37 55.9 +0.6**
**DAC Darwin (Calif) 83.73 45** *e*P **P 07 37 55.9 +0.6**
**O03D Paynes Creek 83.76 39** P **P 07 37 55.9 +0.7**
baz=84
**MTUM Tungsten Hills 83.79 43** *e*P **P 07 37 56.5 +0.8**
**MLAC Mammoth Lakes 83.80 43** P **P 07 37 56.3 +0.6**
baz=84
**M02C Callahan 83.89 38** P **P 07 37 56.8 +0.9**
baz=84
**L02D Cave Junction, 84.00 37** P **P 07 37 57.6 +1.2**
baz=84
**IRM Iron Mountain 84.03 48** P **P 07 37 57.6 +0.9**
baz=84,SNR=11
**GMRC Granite Mounta 84.06 47** P **P 07 37 57.5 +0.5**
baz=84,SNR=5.4
**YBH Yreka Blue Hor 84.20 38** *e*P **P 07 37 58.3 +0.9**
YBH *e**PP **pP 07 38 37.5 -0.1**
YBH pmax pmax
comp=Z,8.0nm,0.7s
**YBH Yreka Blue Hor 84.20 38** *e*P **P 07 37 58.3 +0.9**
comp=Z,7.8nm,0.7s
YBH *e*pP **pP 07 38 37.5 -0.1**
**Y12C Blythe 84.21 48** P **P 07 37 58.6 +1.0**
baz=84
**TUQ Turquoise Moun 84.29 46** P **P 07 37 58.8 +0.7**
baz=84,SNR=8.1
**FURC Furnace Creek, 84.31 45** P **P 07 37 58.8 +0.8**
baz=84
**GRAC Grapevine Rang 84.31 44** P **P 07 37 58.6 +0.5**
baz=85,SNR=13
**SHOC Shoshone 84.34 46** P **P 07 37 58.4 +0.2**
baz=85,SNR=7.6
**NV01 Mina Array Sit 84.63 43** *e*P **P 07 37 59.3 -0.6**
**NVAR Mina Array Bea 84.63 43** P **P 07 38 00.1 +0.2**
comp=Z,12nm,0.7s,baz=222,slow=8.8,SNR=127
NVAR pP **pP 07 38 37.1 -2.9**
comp=Z,4.8nm,0.9s,baz=219,slow=8.7,SNR=3.8
**HUMO Hull Mountain 84.66 37** *e*P **P 07 38 00.8 +1.1**
comp=Z,96nm,1.4s
HUMO *e*pP **pP 07 38 37.7 -2.1**
**M04C Macdoel 84.72 38** P **P 07 38 00.7 +0.5**
baz=85
**PDMCI Parker Dam,Lak 84.79 48** P **P 07 38 01.5 +1.0**
baz=85
**I03D Drain, OR 85.18 36** P **P 07 38 03.1 +0.9**
baz=85
**HABR Khabarovsk 85.27 331** *e*P **P 07 38 02.2 -0.3**
HABR *e**PP **pP 07 38 41.9 -0.8**
HABR *e**SP **sP 07 38 59.0 -0.7**
HABR *e* 07 41 21.2
HABR *e*S **SKSac 07 48 10.7 -1.1**
HABR *e*SS **SS 07 53 56.7 -1.2**
HABR *e*SSS SSS 07 57 28.6
HABR pmax pmax
comp=N,19nm,1.8s
HABR pmax pmax
comp=Z,16nm,1.6s
HABR pmax pmax
comp=E,44nm,1.6s
HABR MLR MLR
comp=Z,86nm,22.0s
**K04D Chiloquin, OR 85.33 38** P **P 07 38 03.4 +0.3**
baz=86
**PLCA Paso Flores 85.33 133** *e*P **P 07 38 04.1 +0.8**
**PLCA Paso Flores 85.33 133** *e*P **P 07 38 04.1 +0.8**
**PSI Prapat 85.38 275** LR LR 08 17 24.6
comp=Z,75nm,18.7s,slow=36
**SHPR Sheep Range 85.42 46** *e*P **P 07 38 04.5 +0.7**
SHPR *e*pP **pP 07 38 43.6 -0.5**
**J04D Umpqua Nationa 85.54 37** P **P 07 38 05.0 +0.7**
baz=86
**MOD Modoc 85.66 39** *e*P **P 07 38 05.0 +0.1**
comp=Z,17nm,1.3s
MOD *e*pP **pP 07 38 44.3 -0.8**
**I04A Tendick Farm, 85.75 37** P **P 07 38 05.8 +0.7**
baz=86
**K05A Summer Lake 85.87 38** *e*P **P 07 38 06.7 +0.8**
comp=Z,33nm,1.4s
**WHN Wuhan 85.93 307** P **P 07 38 03.8 -2.4**
**TUC Tucson 85.96 51** *e*P **P 07 38 07.8 +1.3**
TUC *e**PP **pP 07 38 46.6 -0.1**
TUC pmax pmax
comp=Z,15nm,0.9s
**TUC Tucson 85.96 51** *e*P **P 07 38 07.8 +1.3**
comp=Z,15nm,0.9s
TUC *e*pP **pP 07 38 46.6 -0.1**
**J05D Fort Rock, OR 86.05 38** P **P 07 38 07.6 +0.9**
baz=86
**R11A Troy Canyon, C 86.26 44** P **P 07 38 08.5 +0.6**
baz=86
**R11A Troy Canyon, C 86.26 44** *e*P **P 07 38 08.0 +0.1**
**BMN Battle Mountai 86.53 42** *e*P **P 07 38 08.9 -0.2**
BMN *e**PP **pP 07 38 48.6 -0.9**
BMN pmax pmax
comp=Z,7.0nm,0.8s
**BMN Battle Mountai 86.53 42** *e*P **P 07 38 08.9 -0.2**
comp=Z,7.3nm,0.8s
BMN *e*pP **pP 07 38 48.6 -0.9**
**CN2 Changchun 86.76 323** *e*P **P 07 38 09.3 -0.6**
CN2 PMZ
comp=Z,20nm,1.1s
CN2 PMZ
comp=Z,200nm,4.0s
**WVOR Wild Horse Val 86.95 39** *e*P **P 07 38 11.5 +0.4**
WVOR pmax pmax
comp=Z,84nm,2.5s
**WVOR Wild Horse Val 86.95 39** *e*P **P 07 38 11.5 +0.4**
comp=Z,84nm,2.5s
**CCUT Cedar City 87.20 46** *e*P **P 07 38 13.7 +1.1**
comp=Z,8.2nm,1.2s
CCUT *e*pP **pP 07 38 52.0 -0.9**
**KLR Kul'dur 87.31 329** *e*P P 07 38 09.2 -3.2
KLR pmax pmax
comp=Z,68nm,1.6s
**SKNT Sakolnakorn 87.32 290** P **P 07 38 15.8 +2.5**
comp=Z,63nm,0.9s,comp=Z,4μm
**WUAZ Wupatki 87.35 48** P **P 07 38 13.8 +0.6**
baz=88,SNR=7.0
**WUAZ Wupatki 87.35 48** *e*P **P 07 38 14.2 +1.0**
comp=Z,9.6nm,0.9s
WUAZ *e*pP **pP 07 38 53.0 -0.6**
**I07A Izee 87.52 38** *e*P **P 07 38 14.3 +0.6**
comp=Z,82nm,2.5s
**TDL Tradedollar La 87.57 35** P **P 07 38 14.8 +0.8**
**J08A Circle Bar Ran 87.63 39** *e*P **P 07 38 14.7 +0.4**
comp=Z,6.6nm,1.0s
**G06A Carlson Farm, 87.66 36** *e*P **P 07 38 14.8 +0.5**
comp=Z,187nm,2.9s
**ELK Elko 87.92 42** *e*P **P 07 38 16.1 +0.2**
**ELK Elko 87.92 42** *e*P **P 07 38 16.1 +0.2**
**121A Cookes Peak, D 88.20 52** P **P 07 38 18.6 +1.2**
baz=88
**121A Cookes Peak, D 88.20 52** *e*P **P 07 38 18.7 +1.4**
comp=Z,6.2nm,1.0s
**PGC Sidney 88.51 33** *e*P **P 07 38 18.8 +0.7**
**MSU Marysvale 88.52 46** *e*P **P 07 38 20.0 +1.2**
MSU *e**PP **pP 07 38 56.9 -2.4**
**MSU Marysvale 88.52 46** *e*P **P 07 38 20.0 +1.2**
MSU *e*pP **pP 07 38 56.9 -2.4**
**G08A Pilot Rock 88.59 37** *e*P **P 07 38 19.0 +0.2**
comp=Z,16nm,1.1s
**TWW Teanaway 88.78 35** P **P 07 38 20.4 +0.9**
**B05A Bryant 88.91 33** P **P 07 38 20.8 +0.8**
baz=89
**A04D Lummi Island 88.92 33** P **P 07 38 20.8 +0.8**
baz=89
**E07A Sunnyside 88.93 36** *e*P **P 07 38 21.1 +0.9**
comp=Z,23nm,0.9s
**LTY Liberty 88.96 35** *e*P **P 07 38 20.7 +0.3**
**SNIWA Snively Ranch 88.97 36** P **P 07 38 21.2 +0.8**
**HAWA Hanford 88.99 36** *e*P **P 07 38 21.2 +0.7**
comp=Z,24nm,1.1s
**MA2 Magadan 89.01 344** *e*P **P 07 38 20.9 +0.7**
**DUG Dugway 89.08 44** P **P 07 38 21.5 +0.3**
baz=89
**SPU Mount Spurr 89.14 12** *e*P **P 07 38 19.9 -0.9**
**PHET Kaeng Krachan 89.22 285** P P 07 38 26.2 +4.0
comp=Z,7.3nm,1.0s
**C06D Leavenworth 89.28 34** P **P 07 38 22.4 +0.6**
baz=90
**RPW Rockport 89.32 34** P **P 07 38 22.2 +0.2**
**MNTX Cornudas Mount 89.51 54** P **P 07 38 23.5 +0.2**
baz=90,SNR=11
**MNTX Cornudas Mount 89.51 54** *e*P **P 07 38 23.8 +0.5**
comp=Z,8.2nm,1.2s
MNTX *e*pP **pP 07 39 02.4 -1.5**
**RC01 Rabbit Creek A 89.51 13** *e*P **P 07 38 22.5 0.0**
**TMUT Trail Mountain 89.59 45** *e*P **P 07 38 24.7 +0.8**
comp=Z,33nm,0.8s
TMUT *e*pP **pP 07 39 04.2 -0.2**
**TX31 Lajitas Ar. Si 89.59 57** *e*P **P 07 38 24.1 +0.3**
**TXAR Lajitas Array 89.59 57** P **P 07 38 23.9 +0.1**
comp=Z,2.3nm,0.9s,baz=212,slow=7.0,SNR=24
TXAR LR LR 08 15 01.1
comp=Z,13nm,18.7s,baz=0.0,slow=33
**WTV Waterville 89.62 35** P **P 07 38 23.7 +0.3**
**GYA Guiyang 89.64 300** *e*P **P 07 38 25.8 +1.7**
GYA pP **pP 07 39 05.4 +0.7**
GYA sP **sP 07 39 24.3 +2.7**
GYA PP **PP 07 42 02.0 +3.4**
GYA SKS **SKSac 07 48 39.6 -0.1**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.2s
**SUA Susitna One 89.65 13** *e*P **P 07 38 23.0 -0.3**
**LAZ Ladron 89.65 51** *e*P **P 07 38 25.3 +1.2**
**D08A Wollman Farm, 89.74 36** *e*P **P 07 38 24.8 +0.8**
comp=Z,24nm,0.9s
**SAW Saint Andrews 89.91 35** P **P 07 38 25.0 +0.2**
**O16A Springville 89.91 44** *e*P **P 07 38 23.9 -1.3**
comp=Z,22nm,1.7s
**SRU San Rafael 89.92 46** *e*P **P 07 38 25.3 +0.1**
SRU *e**PP **pP 07 39 05.7 -0.2**
SRU pmax pmax
comp=Z,5.0nm,0.8s
**SRU San Rafael 89.92 46** *e*P **P 07 38 25.3 +0.1**
comp=Z,5.4nm,0.8s
SRU *e*pP **pP 07 39 05.7 -0.2**
**SPUT South Promonto 89.95 43** *e*P **P 07 38 25.8 +0.5**
SPUT *e*pP **pP 07 39 05.1 -0.8**
**BJI Beijing 89.96 315** P **P 07 38 26.4 +1.3**
BJI PMZ
comp=Z,10.0nm,2.2s
**F10A Beach Ranch, E 89.97 37** *e*P **P 07 38 24.9 -0.3**
comp=Z,20nm,0.9s
**P17A Butcher Ranch, 89.98 45** *e*P **P 07 38 26.8 +1.3**
comp=Z,2.1nm,1.0s
**HVU Hansel Valley 90.03 43** *e*P **P 07 38 25.9 +0.3**
HVU *e**PP **pP 07 39 04.4 -1.8**
HVU pmax pmax
comp=Z,13nm,1.2s
**HVU Hansel Valley 90.03 43** *e*P **P 07 38 25.9 +0.3**
comp=Z,13nm,1.2s
HVU *e*pP **pP 07 39 04.4 -1.8**
**OD2 Odessa Site #2 90.07 36** P **P 07 38 26.0 +0.5**
**PMR Palmer 90.09 13** *e*P **P 07 38 25.0 -0.2**
PMR *e**PP **pP 07 39 05.4 -0.4**
**PMR Palmer 90.09 13** *e*P **P 07 38 25.0 -0.2**
PMR *e*pP **pP 07 39 05.3 -0.4**
**HLID Hailey 90.09 40** P **P 07 38 26.7 +0.8**
baz=90
**HLID Hailey 90.09 40** *e*P **P 07 38 26.2 +0.3**
comp=Z,6.3nm,1.0s
HLID *e*pP **pP 07 39 05.5 -1.0**
**MVCO Mesa Verde 90.22 48** P **P 07 38 27.2 +0.5**
baz=90
**DIV Divide 90.41 15** *e*P **P 07 38 27.0 +0.2**
**ANMO Albuquerque 90.42 51** *e*P **P 07 38 28.1 +0.4**
ANMO *e**PP **pP 07 39 06.4 -1.9**
ANMO pmax pmax
comp=Z,6.0nm,1.0s
**ANMO Albuquerque 90.42 51** *e*P **P 07 38 28.1 +0.4**
comp=Z,5.8nm,1.0s
ANMO *e*pP **pP 07 39 06.4 -1.9**
**TCUT Toone Canyon 90.49 44** *e*P **P 07 38 28.6 +0.6**
comp=Z,27nm,1.3s
**BMRM Bremner River 90.54 15** *e*P **P 07 38 27.4 0.0**
**C09A Chrisman Ranch 90.55 35** *e*P **P 07 38 27.8 0.0**
**UTTA Uttaradit 90.58 289** P P 07 38 32.0 +3.5
comp=Z,2.6nm,1.4s
**HWUT Hardware Ranch 90.67 43** *e*P **P 07 38 28.4 -0.3**
comp=Z,39nm,2.1s
**SCM Sheep Creek Mo 90.69 14** *e*P **P 07 38 28.3 +0.2**
**SCM Sheep Creek Mo 90.69 14** *e*P **P 07 38 28.3 +0.2**
**529A Stev Forest Ra 91.07 57** P **P 07 38 31.0 +0.3**
baz=91
**CAST Castle Rocks 91.20 11** *e*P **P 07 38 29.0 -1.4**
**NEW Newport 91.45 36** P **P 07 38 31.7 -0.2**
baz=92
**KTH Kantishna Hill 91.53 12** *e*P **P 07 38 30.7 -1.3**
comp=Z,24nm,0.8s
**TRF Thorofare Moun 91.56 12** *e*P **P 07 38 31.5 -0.7**
**429A Davenport Ranc 91.56 57** P **P 07 38 32.6 -0.3**
baz=92,SNR=17
**AHID Auburn Hatcher 91.61 42** *e*P **P 07 38 33.9 +0.9**
comp=Z,21nm,1.4s
AHID *e*pP **pP 07 39 13.0 -0.7**
**S22A 4UR Ranch, Cre 91.62 48** P **P 07 38 33.7 +0.4**
baz=92
**S22A 4UR Ranch, Cre 91.62 48** *e*P **P 07 38 33.6 +0.2**
**SEY Seymchan 91.64 347** P **P 07 38 32.1 -0.2**
comp=Z,7.6nm,0.8s,baz=145,slow=5.1,SNR=20
**SEY Seymchan 91.64 347**⇑ *i*P P 07 38 31.7 -0.6
**MCMT McKenzie Canyo 91.75 40** *e*P **P 07 38 34.3 +0.6**
MCMT *e*pP **pP 07 39 13.6 -0.7**
**530A J-C Ranch, Com 91.75 57** P **P 07 38 34.0 +0.2**
baz=92
**228A UT Block 9, Go 91.77 55** P **P 07 38 34.1 +0.2**
baz=92
**RND Reindeer 91.79 12** *e*P **P 07 38 33.3 +0.1**
**RND Reindeer 91.79 12** *e*P **P 07 38 33.3 +0.1**
**832A Faith Ranch, C 91.91 60** P **P 07 38 34.5 +0.1**
baz=92
**329A Wagon Wheel Ra 91.92 56** P **P 07 38 34.6 +0.1**
baz=92,SNR=5.4
**O20A White River Ci 91.96 46** P **P 07 38 35.2 +0.5**
baz=92
**631A Perdido Creek 91.98 58** P **P 07 38 34.3 -0.5**
baz=92,SNR=6.1
**BPAW Bear Paw Mtn. 92.03 11** *e*P **P 07 38 34.9 +0.7**
comp=Z,4.2nm,1.6s
**MCK McKinley 92.07 12** *e*P **P 07 38 34.0 -0.4**
MCK pmax pmax
comp=Z,17nm,0.9s
**MCK McKinley 92.07 12** *e*P **P 07 38 34.0 -0.4**
comp=Z,16nm,0.9s
**REDW Red Top Meadow 92.09 42** *e*P **P 07 38 35.4 +0.1**
comp=Z,6.6nm,0.8s
REDW *e*pP **pP 07 39 15.1 -0.8**
**128A Castleberry Fa 92.09 55** P **P 07 38 35.5 +0.1**
baz=92
**TPAW Teton Pass 92.11 42** *e*P **P 07 38 35.6 +0.2**
comp=Z,4.6nm,0.7s
**KMI Kunming 92.12 297** P **P 07 38 38.5 +2.7**

KMI pP **pP** 07 39 21.6 +5.1
KMI PMZ
comp=Z,11nm,1.0s
KMI PMZ
comp=Z,540nm,6.0s
**430A Baggett Ranch,** 92.14 57 P **P** 07 38 35.7 +0.2
baz=92
**FXWY Fox Creek** 92.14 42 *e*P **P** 07 38 35.9 +0.4
**SNOW Snow King Moun** 92.21 42 *e*P **P** 07 38 36.0 +0.1
comp=Z,15nm,1.0s
SNOW *ep*P **pP** 07 39 14.7 -1.8
**CMAR Chiang Mai Arr** 92.27 289 P **P** 07 38 38.1 +1.7
comp=Z,4.6nm,0.7s,baz=137,slow=3.2,SNR=19
**CMAR Chiang Mai Arr** 92.27 289 *i* P **P** 07 38 38.2 +1.8
CMAR pmax pmax
comp=Z,5.0nm,0.7s
**229A Bryant Ranch,** 92.27 56 P **P** 07 38 36.3 +0.1
baz=92
**SMCO Snowmass** 92.28 47 *e*P **P** 07 38 36.6 +0.1
comp=Z,4.4nm,0.9s
**MSO Missoula** 92.30 38 P **P** 07 38 36.9 +0.9
baz=92
**IMW Indian Meadow** 92.34 42 *e*P **P** 07 38 36.9 +0.4
comp=Z,4.3nm,0.7s
IMW *ep*P **pP** 07 39 16.4 -0.7
**531A Rocksprings** 92.36 58 P **P** 07 38 36.4 -0.2
baz=93,SNR=5.9
**MOOW Moose Ponds** 92.37 42 *e*P **P** 07 38 36.8 +0.2
**LOHW Long Hollow** 92.38 42 *e*P **P** 07 38 36.8 +0.2
comp=Z,7.6nm,1.2s
**CHTO Chiang Mai** 92.42 290 P **P** 07 38 39.8 +2.7
**CHTO Chiang Mai** 92.42 290 *e*P **P** 07 38 38.3 +1.2
CHTO pmax pmax
comp=Z,14nm,1.0s
**CHTO Chiang Mai** 92.42 290 *e*P **P** 07 38 38.3 +1.2
comp=Z,14nm,1.0s
**330A Mertzon** 92.48 56 P **P** 07 38 36.5 -0.7
baz=93
**Z28A Tucker Farm, M** 92.49 54 P **P** 07 38 37.2 0.0
baz=93
**SDCO Great Sand Dun** 92.52 49 P **P** 07 38 37.9 +0.4
baz=93
**MSTX Muleshoe** 92.55 53 P **P** 07 38 37.7 +0.2
baz=93
**BW06 Boulder Array** 92.55 43 *e*P **P** 07 38 36.6 -0.8
**129A Stewart Farms,** 92.56 55 P **P** 07 38 37.3 -0.2
baz=93
**QLMT Earthquake Lak** 92.58 41 *e*P **P** 07 38 38.6 +1.1
QLMT *ep*P **pP** 07 39 17.3 -0.8
**FLWY Flagg Ranch** 92.59 42 *ep*P **pP** 07 39 17.6 -0.6
FLWY *ep*P pP 07 39 17.6 -0.6
**632A Uvalde** 92.63 59 P **P** 07 38 37.8 -0.1
baz=93
**230A Sterling City** 92.76 56 P **P** 07 38 38.4 0.0
baz=93
**532A Rocksprings** 92.83 58 P **P** 07 38 38.2 -0.6
baz=93,SNR=8.1
**H17A Grant Village** 92.83 41 P **P** 07 38 40.1 +1.4
baz=93
**H17A Grant Village** 92.83 41 *e*P **P** 07 38 40.3 +1.5
comp=Z,3.3nm,0.8s
**WRH Wood River Hil** 92.90 12 *e*P **P** 07 38 37.6 -0.5
**BOZ Bozeman (W)** 92.92 40 *e*P **P** 07 38 39.3 +0.3
**BOZ Bozeman (W)** 92.92 40 P **P** 07 38 39.5 +0.6
baz=93
**BOZ Bozeman (W)** 92.92 40 *e*P **P** 07 38 39.3 +0.3
**Z29A Hungry Hill Ra** 92.98 54 P **P** 07 38 38.6 -0.8
baz=93,SNR=5.2
**331A San Angelo** 92.99 57 P **P** 07 38 39.3 -0.2
baz=93
**DOT Dot Lake** 93.00 14 *e*P **P** 07 38 38.7 -0.1
comp=Z,13nm,0.7s
DOT *ep*P **pP** 07 39 16.8 -2.6
**JCT Junction City** 93.08 58 P **P** 07 38 39.3 -0.6
baz=93
**633A Saathoff Ranch** 93.08 59 P **P** 07 38 39.5 -0.3
baz=93
**CCB Clear Creek Bu** 93.11 12 *e*P **P** 07 38 38.3 -0.9
**130A Snyder** 93.20 55 P **P** 07 38 40.3 -0.1
baz=93
**X28A Dimmitt** 93.23 53 P **P** 07 38 40.7 +0.1
baz=93
**432A Menard** 93.27 57 P **P** 07 38 40.2 -0.6
baz=94
**Y29A Porterfield Fa** 93.29 54 P **P** 07 38 40.2 -0.7
baz=94,SNR=10
**COLA College** 93.31 12 *e*P **P** 07 38 39.2 -0.8
COLA *e**PP **pP** 07 39 20.6 -0.1
COLA pmax pmax
comp=Z,4.0nm,0.7s
**COLA College** 93.31 12 *e*P **P** 07 38 39.1 -0.8
comp=Z,4.1nm,0.7s
COLA *ep*P **pP** 07 39 20.6 -0.1
**MDM Murphy Dome** 93.31 12 *e*P **P** 07 38 39.6 -0.5
**HHC Hu-ho-hao-te** 93.35 314 *e*P **P** 07 38 42.6 +1.6
HHC PMZ
comp=Z,25nm,1.1s
HHC PMZ
comp=Z,420nm,6.1s
**231A Bronte** 93.37 56 P **P** 07 38 40.2 -1.0
baz=94,SNR=6.7
**Q24A Divide** 93.38 48 P **P** 07 38 41.7 +0.2
baz=94
**ILAR Eielson Array** 93.40 13 P **P** 07 38 39.7 -0.8
comp=Z,3.9nm,0.9s,baz=224,slow=5.6,SNR=19
ILAR PP PP 07 42 21.2 -6.0
comp=Z,0.9nm,0.7s,baz=225,slow=9.1,SNR=5.0
**HRY Holter Researc** 93.41 39 *e*P **P** 07 38 41.0 -0.1
comp=Z,2.4nm,0.8s
HRY *ep*P **pP** 07 39 22.9 +1.2
**Z30A Sanderson Ranc** 93.41 55 P **P** 07 38 41.4 0.0
baz=94
**ISCO Idaho Springs** 93.50 47 P **P** 07 38 42.1 +0.1
baz=94
**332A Millersview** 93.55 57 P **P** 07 38 41.2 -0.8
baz=94,SNR=7.4
**X29A Tulia** 93.55 53 P **P** 07 38 41.9 -0.2
baz=94
**131A Roby** 93.67 55 P **P** 07 38 42.8 +0.2
baz=94
**U27A Thompson Grove** 93.71 51 P **P** 07 38 42.8 0.0
baz=94
**433A Art** 93.75 58 P **P** 07 38 42.2 -0.7
baz=94,SNR=9.5
**AMTX Amarillo** 93.78 53 P **P** 07 38 43.8 +0.7
baz=94
**N23A Red Feather La** 93.85 46 P **P** 07 38 43.4 0.0
baz=94
**N23A Red Feather La** 93.85 46 *e*P **P** 07 38 43.5 0.0
**S26A Kim** 93.85 50 P **P** 07 38 43.4 0.0
baz=94
**232A Coleman** 93.85 56 P **P** 07 38 42.5 -0.9
baz=94,SNR=9.4
**534A Blanco** 93.88 59 P **P** 07 38 43.5 -0.1
baz=94
**W29A Amraillo** 93.92 53 P **P** 07 38 44.2 +0.5
baz=94
**CD2 Chengdu** 93.99 302 *e*P **P** 07 38 44.5 +0.4
CD2 pP **pP** 07 39 24.9 +0.1
CD2 PP **PP** 07 42 32.8 +0.1
CD2 SKS **SKSac** 07 49 03.6 -0.2
CD2 S **S** 07 49 41.0 +0.4
CD2 sS **sS** 07 50 52.3 +0.6
CD2 SS **SS** 07 56 06.5 +1.6
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.4s
**RLMT Red Lodge** 94.01 41 P **P** 07 38 45.0 +0.9
baz=94
**333A Richland Sprin** 94.09 57 P **P** 07 38 44.4 -0.1
baz=94
**U28A Mallet** 94.11 52 P **P** 07 38 44.7 +0.1
baz=94
**Z31A Sharp Cattle R** 94.15 55 P **P** 07 38 44.8 0.0
baz=94
**ABTX Abilene, Hawle** 94.20 56 P **P** 07 38 44.8 -0.2
baz=94
**ABTX Abilene, Hawle** 94.20 56 *e*P **P** 07 38 44.0 -0.9
comp=Z,4.1nm,0.6s
**BILL Bilibino** 94.36 354 ⇑*i*P **P** 07 38 44.9 +0.1
BILL pmax pmax
comp=Z,14nm,0.9s
**PHWY Pilot Hill** 94.37 46 *e*P P 07 38 42.4 -3.5
**Y31A Rekieta Farm,** 94.37 54 P **P** 07 38 45.5 -0.2
baz=95

**K22A Casper** 94.38 44 P **P** 07 38 45.9 +0.1
baz=95
**DAWY Dawson** 94.45 16 *e*P **P** 07 38 46.2 +0.8
comp=Z,9.5nm,0.7s
DAWY *ep*P **pP** 07 39 28.0 +1.9
**233A Rising Star** 94.48 57 P **P** 07 38 46.2 -0.1
baz=95
**EGAK Eagle** 94.63 15 *e*P **P** 07 38 46.1 0.0
**Z32A Haskell** 94.64 55 P **P** 07 38 46.5 -0.5
baz=95,SNR=8.0
**133A Hamilton Ranch** 94.74 56 P **P** 07 38 47.5 +0.1
baz=95
**Z33A Whitaker Ranch** 95.16 56 P **P** 07 38 49.6 +0.2
baz=95
**W31A Holland Ranch,** 95.18 53 P **P** 07 38 49.5 +0.1
baz=95
**X34A Smith Ranch, M** 96.45 55 P **P** 07 38 56.2 +1.1
baz=97
**Q30A Quinter** 96.74 50 P **P** 07 38 57.1 +0.6
baz=97
**I25A Rochford** 96.83 44 P **P** 07 38 56.9 0.0
baz=97
**J26A Sides Ranch, S** 96.90 45 P **P** 07 38 57.5 +0.4
baz=97
**YAK Yakutsk** 97.19 338 *e*P **P** 07 38 57.0 -0.7
YAK pmax pmax
comp=Z,19nm,0.7s
**R32A Long Quarter,** 97.54 51 P Pdif 07 39 01.3 +1.2
baz=98
**J27A Elkhorn Farm,** 97.56 46 P Pdif 07 39 01.0 +0.9
baz=98
**G26A Maurine** 98.15 44 Pdiff Pdif 07 39 03.0 +0.4
baz=98
**X37A Clayton** 98.27 56 Pdiff Pdif 07 39 03.7 +0.4
baz=98
**K29A Lazy Trails An** 98.42 47 Pdiff Pdif 07 39 04.3 +0.4
baz=99
**I28A Midland** 98.45 45 Pdiff Pdif 07 39 04.7 +0.7
baz=99
**J29A Okreek** 98.72 46 Pdiff Pdif 07 39 05.9 +0.7
baz=99
**DGMT Dagmar** 98.72 40 Pdiff Pdif 07 39 06.5 +1.4
baz=99
**K30A Basset** 98.85 47 Pdiff Pdif 07 39 07.0 +1.2
baz=99
**J30A Dallas** 99.22 46 Pdiff **Pdif** 07 39 08.1 +0.7
baz=99
**INK Inuvik** 99.29 15 P **Pdif** 07 39 06.8 -0.2
comp=Z,1.6nm,0.7s,baz=223,slow=1.7,SNR=3.9
**SONM Songino Array** 100.01 318 PP PP 07 43 15.5 -3.2
comp=Z,0.3nm,0.5s,baz=109,slow=8.0,SNR=4.0
**D30A Buchanan** 101.36 43 Pdiff **Pdif** 07 39 17.6 +0.8
baz=102
**A29A Manning Farm,** 101.85 41 Pdiff **Pdif** 07 39 20.0 +1.1
baz=102
**ZALV Zalesovo Beam** 114.85 320 PKP PKPdf 07 44 03.9 -1.3
comp=Z,0.7nm,0.3s,baz=98,slow=2.1,SNR=5.3
**MKAR Makanchi Array** 115.09 312 PKP **PKPdf** 07 44 04.8 -1.2
comp=Z,1.2nm,0.6s,baz=114,slow=1.8,SNR=8.9
MKAR PKKPbc **PKKPbc** 07 54 42.3 -0.7
comp=Z,0.4nm,0.4s,baz=276,slow=2.7,SNR=6.1
**KSH Kashi** 118.19 303 *e*PKP **PKPdf** 07 44 12.4 +0.1
KSH *es*PKP 07 45 11.6
KSH *e*PP **PP** 07 45 31.9 +1.5
KSH PKS **PKSdf** 07 47 48.9 -0.2
KSH SKKS 07 52 07.0
KSH PPMZ
comp=Z,140nm,5.3s
KSH LN
comp=Z,250nm,7.2s
KSH LE
comp=Z,270nm,7.2s
KSH LZ
comp=Z,280nm,5.9s
**KKAR Karatay Array** 122.80 306 *e*PKIKP **PKPdf** 07 44 20.3 -0.7
**KKAR Karatay Array** 122.80 306 *e*PKPdf **PKPdf** 07 44 20.2 -0.7
**BRVK Borovoye** 123.42 318 *i* PKIKP **PKPdf** 07 44 22.0 +0.2
BRVK pmax pmax
comp=Z,1.0nm,0.6s
**SUMG Summit** 128.20 15 *e*PKIKP PKPdf 07 44 37.0 +6.1
**SUMG Summit** 128.20 15 *i* P PKPdf 07 44 37.0 +6.1
**ARU Arti** 129.75 323 *i* PKIKP **PKPdf** 07 44 33.6 -0.2
ARU 07 46 45.8
ARU 07 51 26.0
**AKTO Aktyubinsk** 131.22 315 PKP **PKPdf** 07 44 37.5 +0.7
comp=Z,1.3nm,0.5s,baz=94,slow=3.7,SNR=6.9
**ARCES ARCESS Array B** 134.21 349 PKP **PKPdf** 07 44 41.1 -0.7
comp=Z,3.0nm,0.5s,baz=18,slow=1.1,SNR=25
**BORG Borgarnes** 138.18 15 *i* PKIKP **PKPdf** 07 44 51.5 +2.2
**MOS Moscow** 140.71 329 *e*PKHKP PKPpre 07 44 32.7
**FINES FINESS Array B** 140.97 342 PKhKP PKPpre 07 44 47.5
comp=Z,1.8nm,0.6s,baz=61,slow=3.8,SNR=14
FINES PKP **PKPdf** 07 44 54.0 -0.5
comp=Z,4.6nm,0.9s,baz=64,slow=3.2,SNR=6.7
**OBN Obninsk** 141.57 329⇑ *e*PKHKP PKPpre 07 44 49.9
OBN pmax pmax
comp=Z,25nm,1.4s
**NB2 NORSAR Subarra** 144.30 353 PKP **PKPab** 07 44 58.2 -0.7
comp=Z,40nm,0.8s,baz=11,slow=3.5
**NB2 NORSAR Subarra** 144.30 353 PKP **PKPab** 07 44 58.2 -0.7
baz=11,slow=3.5
**NOA NORSAR Array B** 144.30 353 PKP **PKPab** 07 44 58.4 -0.4
comp=Z,28nm,0.8s,baz=11,slow=2.3,SNR=70
**IZAR Zarasai** 145.45 336 *e*P **PKPbc** 07 45 03.0 +0.1
IZAR IAmb IAmb 07 45 03.6
comp=Z,49nm,0.6s
**ISAL Salakas** 145.63 336 *e*P **PKPbc** 07 45 03.5 +0.1
ISAL IAmb IAmb 07 45 05.3
comp=Z,45nm,1.0s
**IIGN Ignalina** 145.77 336 *e*P **PKPbc** 07 45 04.0 +0.1
IIGN IAmb IAmb 07 45 05.7
comp=Z,43nm,0.7s
**KONO Kongsberg** 145.84 354 *e*PKP2 **PKPdf** 07 45 03.4 +0.3
**KONO Kongsberg** 145.84 354 *e*PKPbc **PKPdf** 07 45 03.4 +0.3
**NACGM Naroch** 145.90 335 *e* **PKPab** 07 45 06.0 +1.0
**MALT Malatya** 147.27 301 ⇓PKP2 **PKPbc** 07 45 09.8 +0.9
**MALT Malatya** 147.27 301 ⇓*i*P **PKPbc** 07 45 09.8 +0.9
**AKASG Malin Array Be** 147.79 327 PKPbc **PKPbc** 07 45 08.7 -1.0
comp=Z,17nm,0.5s,baz=44,slow=4.3,SNR=35
AKASG PKPab **PKPab** 07 45 12.2 -0.4
comp=Z,17nm,0.5s,baz=45,slow=4.2,SNR=54
**KIEV Kiev** 147.80 327 *i* PKIKP **PKPdf** 07 45 07.6 +1.0
KIEV pmax pmax
comp=Z,29nm,0.7s
**KIEV Kiev** 147.80 327 *e*PKPbc **PKPbc** 07 45 08.8 -1.0
KIEV *e*PKPab **PKPab** 07 45 12.2 -0.4
**SUW Suwalki** 147.92 337 *e*PKP **PKPab** 07 45 12.5 -0.5
**SUW Suwalki** 147.92 337 *e*PKP2 **PKPab** 07 45 12.5 -0.5
**SIM Simferopol'** 148.19 315 *i* PKP2 **PKPbc** 07 45 11.7 +0.7
SIM pmax pmax
comp=Z,25nm,1.3s
**BRTR Keskin Array B** 150.51 306 PKPbc **PKPbc** 07 45 16.6 -0.5
comp=Z,5.3nm,0.6s,baz=124,slow=3.2,SNR=26
BRTR PKPab **PKPab** 07 45 24.4 +0.2
comp=Z,13nm,0.7s,baz=85,slow=4.6,SNR=19
**LVV L'vov** 150.81 331 *e*PKIKP **PKPbc** 07 45 16.9 -0.3
**ANTO Ankara** 151.08 306 *e*PKIKP **PKPbc** 07 45 18.4 +0.1
ANTO *e* 07 45 27.0
**ANTO Ankara** 151.08 306 *e*PKPbc **PKPbc** 07 45 18.4 +0.1
ANTO *e*PKPab **PKPab** 07 45 27.0 +0.4
**BSEG Bad Segeberg** 151.32 350 *e*PKPbc **PKPbc** 07 45 18.7 +0.5
baz=20,slow=2.1
**TLCR** 151.33 319 ⇓PKIKP **PKPbc** 07 45 18.6 0.0
**TLCR** 151.33 319 ⇓*i*P **PKPbc** 07 45 18.6 0.0
**KWP Kalwaria Pacla** 151.52 332 *e*PKP **PKPbc** 07 45 19.0 +0.1
**KWP Kalwaria Pacla** 151.52 332 *e*PKIKP **PKPbc** 07 45 19.0 +0.1
**TESR Tescani** 151.78 323 ⇓*i*P **PKPbc** 07 45 19.4 -0.2
**BURAR Bucovina Array** 151.80 326 ⇓PKIKP **PKPbc** 07 45 20.9 +1.1
**BURAR Bucovina Array** 151.80 326 ⇓*i*P **PKPbc** 07 45 20.9 +1.1
**TIRR Tirgusor** 151.97 318 ⇓PKIKP **PKPbc** 07 45 19.5 -0.6
**TIRR Tirgusor** 151.97 318 ⇓*i*P **PKPbc** 07 45 19.5 -0.6
**ODBI Odobesti** 152.01 322 ⇓*i*P **PKPab** 07 45 28.8 -1.3
**VRI Vrincioaia** 152.13 322 ⇓*i*P **PKPab** 07 45 30.6 -0.1
**OJC Ojcow** 152.22 336 *e*PKP **PKPbc** 07 45 20.4 -0.1
**OJC Ojcow** 152.22 336 *e*PKIKP **PKPbc** 07 45 20.4 -0.1
**KOLS Kolonicke sedl** 152.23 331 *e*PKIKP **PKPbc** 07 45 21.3 +0.7
**KOLS Kolonicke sedl** 152.23 331 *e*PKP **PKPbc** 07 45 21.2 +0.7
**STHS Stebnicka Huta** 152.29 333 *e*PKIKP **PKPbc** 07 45 21.3 +0.6
STHS *e* 07 45 31.5
**STHS Stebnicka Huta** 152.29 333 *e*PKP **PKPbc** 07 45 21.3 +0.6
STHS *e* 07 45 31.5
**UZH Uzhgorod** 152.45 331 *e*PKIKP **PKPab** 07 45 27.4 -4.4
UZH *e* 07 45 30.0
**NIE Niedzica** 152.67 334 *e*PKP **PKPbc** 07 45 22.2 +0.7
**NIE Niedzica** 152.67 334 *e*PKIKP **PKPbc** 07 45 22.2 +0.7

**TRPA Tarpa** 152.72 330 ⇓*i*P **PKPab** 07 45 32.9 -0.1
**NRDL Niedersach Rie** 152.75 350 *e*PKPbc **PKPbc** 07 45 22.0 +0.5
baz=20,slow=2.1
NRDL *e*PKPab **PKPab** 07 45 32.5 -0.4
NRDL *ep*PKPab **pPKPab** 07 46 13.7 -0.2
baz=15,slow=4.4
**MLR Muntele Rosu** 152.80 322 ⇓PKP2 **PKPab** 07 45 34.5 +0.9
**MLR Muntele Rosu** 152.80 322 ⇓*i*P **PKPab** 07 45 34.5 +0.9
**KSP Ksiaz** 152.86 341 *e*PKP **PKPab** 07 45 22.2 +0.3
**KSP Ksiaz** 152.86 341 *e*PKIKP **PKPbc** 07 45 22.2 +0.3
**OKC Ostrava-Krasne** 153.13 337 *e*PKP2 **PKPab** 07 45 34.8 +0.1
**OKC Ostrava-Krasne** 153.13 337 *e*PKPAB **PKPab** 07 45 34.8 +0.1
**LANS Liptovska Anna** 153.21 335 *e*PKP2 **PKPab** 07 45 35.9 +0.8
**LANS Liptovska Anna** 153.21 335 *e*PKP **PKPab** 07 45 35.9 +0.8
**UPC Upice** 153.24 341 *e*PKP2 **PKPab** 07 45 35.4 +0.3
**UPC Upice** 153.24 341 *e*PKPAB **PKPab** 07 45 35.4 +0.3
UPC *ep*PKP **pPKPab** 07 46 16.0 -0.2
**IBBN Ibbenburen** 153.26 353 *e*PKPab **PKPab** 07 45 34.8 -0.3
**DPC Dobruska-Polom** 153.29 340 *e*PKP2 **PKPab** 07 45 36.0 +0.6
**DPC Dobruska-Polom** 153.29 340 *e*PKPAB **PKPab** 07 45 36.0 +0.6
DPC *ep*PKP **pPKPab** 07 46 16.8 +0.4
**CLL Collm** 153.31 345 ⇑*i*PKIKP **PKPbc** 07 45 22.7 -0.1
CLL *i* 07 45 34.9
CLL *e* 07 46 16.0
CLL pmax pmax
comp=Z,12nm,0.9s
CLL pmax pmax
comp=Z,16nm,0.8s
**CLL Collm** 153.31 345 *e*PKPbc **PKPbc** 07 45 23.1 +0.3
baz=20,slow=2.1
CLL *e*PKPab **PKPab** 07 45 34.9 -0.5
CLL *ep*PKPab **pPKPab** 07 46 16.3 -0.1
baz=15,slow=4.4
**CLL Collm** 153.31 345 *i* PKPbc **PKPbc** 07 45 22.7 -0.1
comp=Z,12nm,0.9s
CLL *i* 07 45 24.6
CLL ⇑*i*PKPab **PKPab** 07 45 34.9 -0.5
comp=Z,16nm,0.8s
CLL *ep*PKPab **pPKPab** 07 46 16.0 -0.4
**CLZ Clausthal** 153.34 349 *e*PKPbc **PKPbc** 07 45 23.5 +0.5
baz=20,slow=2.1
**BRG Berggiesshubel** 153.49 344 *e*PKP **PKPdf** 07 45 13.3 -2.1
comp=Z,7.2nm,0.5s
BRG *i* 07 45 23.2
comp=Z,9.9nm,0.7s
BRG *i* 07 45 35.7
comp=Z,17nm,1.0s
BRG *ep*PKP **pPKPdf** 07 45 55.0 -3.1
comp=Z,4.0nm,1.1s
BRG *es*PKP 07 46 10.3
comp=Z,6.5nm,0.8s
**BRG Berggiesshubel** 153.49 344 *e*PKIKP **PKPdf** 07 45 13.3 -2.1
BRG *i* 07 45 35.7
BRG *e* 07 45 55.0
BRG *e* 07 46 10.3
BRG pmax pmax
comp=Z,7.0nm,0.5s
BRG pmax pmax
comp=Z,10.0nm,0.7s
BRG pmax pmax
comp=Z,17nm,1.0s
BRG pmax pmax
comp=Z,4.0nm,1.1s
BRG pmax pmax
comp=N,7.0nm,0.8s
**BRG Berggiesshubel** 153.49 344 *e*PKPdf **PKPdf** 07 45 14.1 -1.3
BRG *e*PKPbc **PKiKP** 07 45 23.6 +0.3
baz=20,slow=2.1
BRG *e*PKPab **PKPab** 07 45 36.0 -0.1
BRG *ep*PKPab **pPKPab** 07 46 17.4 +0.3
baz=15,slow=4.4
**ARR Arges** 153.59 323 ⇓*i*P **PKPab** 07 45 37.9 +1.0
**DRGR** 153.61 328 ⇑PKP2 **PKPab** 07 45 36.4 -0.5
**DRGR** 153.61 328 ⇑*i*P **PKPab** 07 45 36.3 -0.6
**PVCC Panska Ves** 153.63 342 *ep*KP pPKPab 07 46 18.4 +0.6
**GTTG Gvttingen** 153.69 349 *e*PKPab **PKPab** 07 45 36.7 -0.3
**VYHS Vyhne** 153.99 335 *e*PKP2 **PKPab** 07 45 38.6 +0.2
**VYHS Vyhne** 153.99 335 *e*PKP **PKPab** 07 45 38.6 +0.2
**LOT Lotru** 154.00 324 ⇓*i*P **PKPbc** 07 45 27.2 +2.5
**PSZ Piszkesteto** 154.03 333 ⇓PKP2 **PKPab** 07 45 39.3 +0.7
**PSZ Piszkesteto** 154.03 333 ⇓*i*P **PKPab** 07 45 39.3 +0.7
**VRAC Vranov** 154.11 339 ⇓PKP2 **PKPab** 07 45 39.3 +0.4
**VRAC Vranov** 154.11 339 ⇓*i*P **PKPab** 07 45 39.3 +0.4
**GOPC GO Pecny, Ondr** 154.13 342 *e*PKP2 **PKPab** 07 45 39.0 +0.1
**GOPC GO Pecny, Ondr** 154.13 342 *e*PKPAB **PKPab** 07 45 39.0 +0.1
GOPC *ep*PKP **pPKPab** 07 46 19.0 -0.9
**PRU Pruhonice** 154.13 342 *e*PKP2 **PKPab** 07 45 39.1 +0.2
**PRU Pruhonice** 154.13 342 *e*PKPAB **PKPab** 07 45 39.1 +0.2
PRU *ep*PKP **pPKPab** 07 46 20.4 +0.5
**MOX Moxa** 154.24 346 *e*PKPab **PKPab** 07 45 39.1 -0.3
MOX *ep*PKPab **pPKPab** 07 46 20.4 +0.1
baz=15,slow=4.4
**TANN Tannenbergstha** 154.27 345 *e*PKPab **PKPab** 07 45 39.2 -0.4
TANN *ep*PKPab **pPKPab** 07 46 20.9 +0.3
baz=15,slow=4.4
**NKC Novy Kostel** 154.44 345 *e*PKP2 **PKPab** 07 45 40.3 0.0
**NKC Novy Kostel** 154.44 345 *e*PKPAB **PKPab** 07 45 40.3 0.0
NKC *ep*PKP **pPKPab** 07 46 21.2 -0.1
**GZR Gura Zlata** 154.55 325 ⇓PKIKP **PKPbc** 07 45 26.2 +0.4
**GZR Gura Zlata** 154.55 325 ⇓*i*P **PKPbc** 07 45 26.2 +0.4
**ROTZ Rotzenmuhle** 154.93 345 *e*PKPab **PKPab** 07 45 42.5 +0.1
ROTZ *ep*PKPab **pPKPab** 07 46 24.1 +0.8
baz=15,slow=4.4
**BZS Buzias** 154.98 327 ⇓PKP2 **PKPab** 07 45 42.3 -0.4
**BZS Buzias** 154.98 327 ⇓*i*P **PKPab** 07 45 42.3 -0.4
**KHC Kasperske Hory** 155.17 342 *e*PKP2 **PKPab** 07 45 43.4 0.0
**KHC Kasperske Hory** 155.17 342 *e*PKPAB **PKPab** 07 45 43.4 0.0
KHC *ep*PKP **pPKPab** 07 46 24.6 +0.2
**GRF Grafenberg Arr** 155.22 346 *e*PKPab **PKPab** 07 45 43.8 +0.2
**WET Wettzell** 155.35 343 *e*PKPab **PKPab** 07 45 44.4 +0.2
WET *ep*PKPab **pPKPab** 07 46 25.8 +0.6
baz=15,slow=4.4
**GEC2 GERESS Array S** 155.40 342 *e*PKPbc PKPdf 07 45 27.2 +8.9
baz=20,slow=2.1
GEC2 *e*PKPab **PKPab** 07 45 44.3 -0.2
**GERES GERESS Array B** 155.40 342 PKPab **PKPab** 07 45 44.0 -0.5
comp=N,3.2nm,0.8s,baz=35,slow=4.9,SNR=7.3
**GERES GERESS Array B** 155.40 342 PKP2 **PKPab** 07 45 44.0 -0.5
GERES pmax pmax
comp=Z,3.0nm,0.8s
**CONA Conrad Observa** 155.54 338 ⇑*i*PKPab **PKPab** 07 45 45.8 +0.6
comp=Z,17nm,0.9s
**FUR Furstenfeldbru** 156.65 345 *e*PKPab **PKPab** 07 45 49.7 0.0
**RJOB Jochberg** 156.66 342 *e*PKPab **PKPab** 07 45 50.4 +0.5
RJOB *ep*PKPab **pPKPab** 07 46 31.7 +0.8
baz=15,slow=4.4
**DIVS Divibare** 156.87 326 ⇓*i*P **PKPab** 07 45 50.4 -0.6
**PERS Pernice** 156.92 337 *e*PKPab **PKPab** 07 45 50.8 -0.3
**BFO Black Forest** 157.07 350 *e*PKPab **PKPab** 07 45 51.0 -0.6
BFO *ep*PKPab **pPKPab** 07 46 32.4 -0.2
baz=15,slow=4.4
**WTTA Wattenberg** 157.40 344 ⇑*i*PKPab **PKPab** 07 45 53.4 +0.1
comp=Z,24nm,1.2s
**ABTA Abfaltersbach** 157.64 342 ⇑*i*PKPab **PKPab** 07 45 53.6 -0.6
comp=Z,13nm,1.0s
**CADS Cadrg** 157.74 339 *i* PKPab **PKPab** 07 45 53.3 -1.3
**DAVA Damuels** 157.79 347 ⇑*i*PKPab **PKPab** 07 45 54.5 -0.4
comp=Z,10nm,1.1s
**KIC Kosan Boka** 159.46 159 *e*PKP2 **PKPab** 07 46 02.8 +0.1
comp=Z,32nm,0.9s
**TIC Toumodi** 159.63 158 *e*PKP2 **PKPab** 07 46 03.5 0.0
**DBIC Dimbokro** 159.71 159 PKPab **PKPab** 07 46 03.8 0.0
comp=Z,7.2nm,0.8s,baz=182,slow=6.8,SNR=6.0
**ESDC Sonseca Array** 165.19 20 PKPab **PKPab** 07 46 26.4 -0.9
comp=Z,0.6nm,0.4s,baz=331,slow=4.3,SNR=9.5
**TOA0 Torodi Ar. Sit** 167.36 177 *e*PKP2 **PKPab** 07 46 36.7 -0.6
**TORD Torodi Ar. Bea** 167.36 177 PKP **PKPdf** 07 45 30.6 -1.0
comp=Z,1.5nm,0.6s,baz=332,slow=0.2,SNR=13
TORD PKPab **PKPab** 07 46 37.1 -0.2
comp=Z,6.2nm,0.8s,baz=180,slow=3.9,SNR=23
TORD PP **PP** 07 50 24.8 +0.4
comp=Z,0.6nm,0.8s,baz=175,slow=3.4,SNR=3.3
**KEST Kesra** 168.49 331 PKPab **PKPab** 07 46 41.9 -0.2
comp=Z,6.7nm,0.9s,baz=309,slow=5.7,SNR=5.3

**DJA 21 07:27:55.8±0.7,1°N±3°,99°E±°,h175km±10km,M3.5/8, MLv3.5/8,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MNSI** | **Mandailing Nat** | **0.70** | **168** | P | | P | Pn | 07 28 22.1 | +1.1 |
| **GSI** | **Gunungsitoli** | **1.86** | **265** | P | | P | Pn | 07 28 32.6 | +1.6 |
| GSI | | | | S | | Sn | | 07 28 58.6 | +0.3 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **PPI** | **Padang Panjang** | **2.15** | **153** | P | Pn | 07 28 36.0 +1.8 |
| **KCSI** | **Kotacane, Aceh** | **2.62** | **321** | P | Pn | 07 28 39.6 -0.1 |
| **SISI** | **Saibi** | **2.81** | **187** | P | Pn | 07 28 41.8 -0.1 |
| SISI | | | | S | Sn | 07 29 18.1 +0.2 |
| **PPSI** | **Pulau Pagai** | **4.25** | **172** | P | Pn | 07 29 00.1 +0.1 |

*NNC **21** 07:32:36.0±0.7,50.01N×78.61E,h0km,mb3.5,mpv3.1, Error ellipse: s-maj=7.0km s-min=3.4km az=96.0*
*ISCJB **21** 07:32:36.6±0.7,50.04N±0.04×78.55E±0.07,h10km, Error ellipse: s-maj=6.5km s-min=5.5km az=138.1*
*IDC **21** 07:32:41.8±1.2,49.97N×79.47E,h0km,mb1 3.2/3, mb1mx3.1/38,mbtmp3.2/3,ML2.9/3, Error ellipse: s-maj=23.1km s-min=12.1km az=52.0*

**ISC 21 07:32:37.6±1.0,50.07N±0.06×78.70E±0.07,h10km,n13, σ1§32/20,14C-8D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KURBB** | **Kurchatov Arra** | **0.56** | **349** | ⇑P | **Pg** | **07 32 48.0** | **-0.5** |
| | 38nm,0.3s | | | | | | |
| KURBB | | | | ⇑S | **Sb** | **07 32 57.1** | **-0.5** |
| | 339nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **0.65** | **355** | ⇑P | **Pg** | **07 32 49.5** | **-0.6** |
| | 55nm,0.6s | | | | | | |
| KURK | | | | ⇓S | **Sb** | **07 32 59.6** | **-0.5** |
| | 60nm,0.5s | | | | | | |
| **MK31** | **Makanchi Array** | **4.06** | **143** | Pn | **Pn** | **07 33 40.6** | **+0.9** |
| | 0.4nm,0.2s,baz=323,slow=9.9,SNR=27 | | | | | | |
| MK31 | | | | ⇓Pg | **Pb** | **07 33 48.1** | **-1.0** |
| | 2.1nm,0.4s,baz=321,slow=14,SNR=11 | | | | | | |
| MK31 | | | | Lg | Lg | 07 34 42.4 | |
| | 5.3nm,0.5s,baz=331,slow=28,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **4.06** | **143** | Pn | **Pn** | **07 33 40.5** | **+0.8** |
| | 0.8nm,0.3s,baz=334,slow=12,SNR=30 | | | | | | |
| MKAR | | | | Lg | Lg | 07 34 41.0 | |
| | 3.0nm,0.3s,baz=327,slow=24,SNR=15 | | | | | | |
| **OTUK** | **Ortayu** | **4.56** | **249** | ⇑Pn | **Pn** | **07 33 46.9** | **+0.3** |
| | 0.2nm,0.1s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 07 34 60.0 | |
| | 5.1nm,0.5s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **5.42** | **42** | Pn | **Pn** | **07 34 00.5** | **+2.2** |
| | 1.8nm,0.3s,baz=230,slow=11,SNR=17 | | | | | | |
| ZALV | | | | Lg | Lg | 07 35 26.5 | |
| | 0.2nm,0.3s,baz=246,slow=21,SNR=2.3 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **5.42** | **42** | *i* | | 08 04 00.0 | |
| | baz=221,slow=331,SNR=5.4 | | | | | | |
| **VOSK** | **Vostochnaya** | **5.51** | **302** | ⇑Pn | **Pn** | **07 33 59.3** | **-0.4** |
| | 0.3nm,0.3s | | | | | | |
| VOSK | | | | ⇑Sn | **Sn** | **07 35 04.2** | **+1.1** |
| | 1.8nm,0.5s | | | | | | |
| VOSK | | | | ⇓Lg | Lg | 07 35 27.2 | |
| | 5.5nm,0.7s | | | | | | |
| **BVA0** | **Borovoye Array** | **5.97** | **303** | ⇑Pn | **Pn** | **07 34 08.1** | **+2.1** |
| | 2.0nm,0.9s,baz=134,slow=17,SNR=2.8 | | | | | | |
| BVA0 | | | | ⇑Sn | **Sn** | **07 35 15.0** | **+0.7** |
| | 2.2nm,0.6s,baz=114,slow=23,SNR=6.3 | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 07 35 47.2 | |
| | 4.9nm,0.7s | | | | | | |
| **BVAR** | **Borovoye Array** | **5.97** | **303** | Pn | Pb | 07 34 17.0 | -4.7 |
| | 0.3nm,0.3s,baz=108,slow=14,SNR=3.5 | | | | | | |
| BVAR | | | | Sn | **Sn** | **07 35 17.5** | **+3.2** |
| | 1.1nm,0.3s,baz=111,slow=21,SNR=7.8 | | | | | | |
| **BRVK** | **Borovoye** | **6.04** | **303** | ⇑Pn | **Pn** | **07 34 07.8** | **+0.9** |
| | 5.9nm,1.2s | | | | | | |
| BRVK | | | | ⇑Sn | **Sn** | **07 35 15.8** | **-0.3** |
| | 7.4nm,0.9s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 07 35 46.4 | |
| | 5.3nm,0.5s | | | | | | |
| **CHKZ** | **Chkalovo** | **6.17** | **309** | ⇓Pn | **Pn** | **07 34 09.0** | **+0.3** |
| | 0.8nm,0.5s | | | | | | |
| CHKZ | | | | ⇑Sn | **Sn** | **07 35 17.7** | **-1.6** |
| | 1.9nm,0.6s | | | | | | |
| CHKZ | | | | ⇓Lg | Lg | 07 35 54.3 | |
| | 5.7nm,0.7s | | | | | | |
| **ZRNK** | **Zerenda** | **6.71** | **299** | ⇓Pn | **Pn** | **07 34 15.5** | **-0.5** |
| | 2.0nm,1.0s | | | | | | |
| ZRNK | | | | ⇓Sn | **Sn** | **07 35 31.5** | **-0.9** |
| | 3.6nm,0.6s | | | | | | |
| ZRNK | | | | ⇑Lg | Lg | 07 36 05.9 | |
| | 5.0nm,1.1s | | | | | | |

*ISK **21** 07:40:19.5,36.27N×36.40E,h28km,MD2.6*
*DDA **21** 07:40:20.9,36.49N×36.43E,h7km,Md2.5*
*ISCJB **21** 07:40:21.3±0.7,36.44N±0.05×36.46E±0.06,h15km±19km, Error ellipse: s-maj=10.5km s-min=5.3km az=40.2*
*CSEM **21** 07:40:21.0±0.3,36.46N×36.42E,h20km,MD2.6, Error ellipse: s-maj=9.2km s-min=5.1km az=140.0*

**ISC 21 07:40:21.5±1.1,36.48N±0.04×36.43E±0.04,h17km±9km, n14,σ0§82/23,Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAHT** | **Tahtakopru-Hat** | **0.22** | **241** | *e*PG | **Pg** | **07 40 26.5** | **-0.1** |
| TAHT | | | | *e*SG | **Sg** | **07 40 30.4** | **+0.3** |
| **TAHT** | **Tahtakopru-Hat** | **0.22** | **241** | *e*Pg | **Pg** | **07 40 26.5** | **-0.1** |
| TAHT | | | | *e*Sg | **Sg** | **07 40 30.4** | **+0.3** |
| **YAYL** | **Yayladag** | **0.52** | **210** | *i* P | **Pg** | **07 40 30.7** | **-1.1** |
| YAYL | | | | *i* S | **Sg** | **07 40 39.3** | **+0.6** |
| **YAYL** | **Yayladag** | **0.52** | **210** | P | **Pg** | **07 40 30.7** | **-1.1** |
| YAYL | | | | S | **Sg** | **07 40 39.3** | **+0.6** |
| **KUZU** | **Kuzuini** | **0.60** | **61** | *i* P | **Pg** | **07 40 32.8** | **-0.5** |
| KUZU | | | | *i* S | **Sg** | **07 40 40.9** | **-0.4** |
| **KUZU** | **Kuzuini** | **0.60** | **61** | P | **Pg** | **07 40 32.8** | **-0.5** |
| KUZU | | | | S | **Sg** | **07 40 40.9** | **-0.4** |
| **KAMA** | **Osmaniye** | **0.73** | **15** | P | **Pg** | **07 40 35.6** | **-0.2** |
| KAMA | | | | S | **Sg** | **07 40 45.0** | **-0.5** |
| **CEYT** | **Ceyhan** | **0.76** | **314** | *e*PG | **Pg** | **07 40 35.7** | **-0.6** |
| CEYT | | | | *e*SG | **Sn** | **07 40 49.7** | **+1.2** |
| **CEYT** | **Ceyhan** | **0.76** | **314** | *e*Pg | **Pg** | **07 40 35.7** | **-0.6** |
| **KRTS** | **Karatas** | **0.85** | **276** | *e*PG | **Pg** | **07 40 36.4** | **-1.6** |
| **KRTS** | **Karatas** | **0.85** | **276** | *e*Pg | **Pg** | **07 40 36.4** | **-1.6** |
| **AYKD** | **Aykdinkavak** | **0.98** | **18** | P | **Pg** | **07 40 39.9** | **-0.6** |
| AYKD | | | | S | **Sg** | **07 40 53.2** | **-0.2** |
| **KMRS** | **Kahramanmaras** | **1.09** | **20** | *e*PN | **Pb** | **07 40 42.4** | **+0.5** |
| **KMRS** | **Kahramanmaras** | **1.09** | **20** | *e*Pn | **Pb** | **07 40 42.4** | **+0.5** |

**IDC 21 07:46:51.9±2.4,20.70S×170.77E,h0km,mb3.8/3, mb1 4.1/5,mb1mx3.8/21,mbtmp4.0/5,ML5.3/1,Error ellipse: s-maj=88.8km s-min=24.3km az=154.0,Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **4.26** | **250** | Pn | Pn | 07 47 57.0 | -1.1 |
| DZM | | | | Sn | Sn | 07 48 51.4 | +2.8 |
| **AFI** | **Afiamalu** | **17.97** | **71** | P | P | 07 51 03.9 | -0.1 |
| | 8.8nm,0.3s,baz=228,slow=12,SNR=6.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.13** | **265** | P | P | 07 53 38.9 | +0.1 |
| | 0.2nm,0.4s,baz=97,slow=7.8,SNR=6.9 | | | | | | |
| **ASAR** | **Alice Springs** | **34.21** | **258** | P | P | 07 53 39.5 | 0.0 |
| | 0.5nm,0.6s,baz=91,slow=8.2,SNR=7.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.36** | **352** | P | P | 07 58 31.0 | -0.2 |
| | 4.5nm,0.5s,baz=65,slow=3.9,SNR=3.6 | | | | | | |

**NNC 21 07:54:35.6±6.8,36.78N×70.88E,h158km±86km,mb2.6, mpv3.6,4C-3D,Error ellipse: s-maj=63.3km s-min=31.7km az=161.0,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.59** | **322** | ⇓P | Pn | 07 55 18.5 | +0.2 |
| | 16nm,0.4s | | | | | | |
| DZET | | | | ⇑S | Sn | 07 55 52.0 | +0.6 |
| | 18nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.82** | **32** | ⇓P | Pn | 07 55 33.4 | -0.6 |
| | 1.3nm,0.3s | | | | | | |
| SFK | | | | ⇑S | Sn | 07 56 19.3 | -0.3 |
| | 1.9nm,0.2s | | | | | | |
| **MNAS** | **Manas** | **5.83** | **12** | ⇓P | Pn | 07 56 00.0 | -0.2 |
| | 2.7nm,0.5s | | | | | | |
| MNAS | | | | ⇑S | Sn | 07 57 06.6 | 0.0 |
| | 6.7nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **6.32** | **358** | P | Pn | 07 56 07.5 | +1.0 |
| | 6.8nm,0.4s,baz=182,slow=13,SNR=115 | | | | | | |
| KK31 | | | | ⇑S | Sn | 07 57 19.3 | +1.5 |
| | 1.7nm,0.4s,baz=187,slow=25 | | | | | | |

*ISCJB **21** 07:54:49.7±0.7,31.37N±0.04×116.04W±0.04,h14km±5km, Error ellipse: s-maj=7.3km s-min=3.4km az=40.2*

*ECX **21** 07:54:51.0±0.4,31.41N×116.02W,h8km,MD3.7,ML3.9, Fault plane solution: NP1:φs=0.00000°,δ90.00000°, λ0.00000°.*

**ISC 21 07:54:49.8±1.0,31.38N±0.05×116.04W±0.03,h17km±8km, n25,σ0§71/40,2C-10D,Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZAX** | **El Zacaton** | **0.24** | **304** | ⇓*e*P | **Pg** | **07 54 55.7** | **+0.3** |
| ZAX | | | | *e*S | **Sg** | **07 54 59.5** | **+0.4** |
| **RDX** | **Rancho Dawling** | **0.55** | **8** | ⇓*e*P | **Pg** | **07 55 00.6** | **-0.3** |
| RDX | | | | *e*S | **Sg** | **07 55 07.8** | **-0.6** |
| **ECNX** | **Esteban Cantu** | **0.56** | **300** | ⇓*e*P | **Pg** | **07 55 01.0** | **+0.1** |
| ECNX | | | | *e*S | **Sg** | **07 55 08.8** | **+0.4** |
| **SPIG** | **San Pedro Mart** | **0.59** | **124** | ⇓*e*P | **Pg** | **07 55 01.8** | **+0.2** |
| SPIG | | | | *e*S | **Sg** | **07 55 09.8** | **+0.3** |
| **SPX** | **San Pedro Mart** | **0.59** | **124** | ⇓*e*P | **Pg** | **07 55 01.8** | **+0.1** |
| SPX | | | | *e*S | **Sg** | **07 55 10.2** | **+0.6** |
| SPX | | | | IAML | | 07 55 11.2 | |
| | comp=N,4μm,0.1s | | | | | | |
| SPX | | | | ⇑*e* | | 07 55 11.2 | |
| **PBX** | **Punta Banda** | **0.69** | **302** | ⇓*e*P | **Pg** | **07 55 03.1** | **-0.3** |
| PBX | | | | *e*S | **Sg** | **07 55 12.7** | **+0.1** |
| **ECBX** | **El Chinero** | **0.85** | **83** | ⇑*e*P | **Pg** | **07 55 05.8** | **-0.5** |
| ECBX | | | | *e*S | **Sg** | **07 55 16.6** | **-0.9** |
| ECBX | | | | IAML | | 07 55 18.8 | |
| | comp=E,5μm,0.3s | | | | | | |
| ECBX | | | | *e* | | 07 55 18.8 | |
| **CBX** | **Cerro Bola** | **1.07** | **330** | ⇓*e*P | **Pb** | **07 55 09.4** | **-0.7** |
| CBX | | | | *e*S | **Sb** | **07 55 23.5** | **-0.4** |
| CBX | | | | IAML | | 07 55 28.4 | |
| | comp=N,3μm,0.4s | | | | | | |
| **RMX** | **La Rumorosa** | **1.22** | **358** | ⇓*e*P | **Pn** | **07 55 12.0** | **-0.4** |
| RMX | | | | *e*S | **Sb** | **07 55 27.7** | **-0.5** |
| **IBP** | **Imperial Bould** | **1.28** | **358** | P | **Pn** | **07 55 13.6** | **+0.5** |
| | baz=1.2 | | | | | | |
| IBP | | | | S | **Sb** | **07 55 29.3** | **-0.5** |
| | baz=1.2 | | | | | | |
| **BAR** | **Barrett** | **1.41** | **338** | ⇓*e*P | **Pn** | **07 55 14.6** | **-0.2** |
| **SDRC** | **San Diego Road** | **1.56** | **331** | ⇓*e*P | **Pn** | **07 55 17.3** | **+0.5** |
| **SWSC** | **Sam W. Stewart** | **1.57** | **7** | P | **Pb** | **07 55 18.9** | **+0.4** |
| | baz=1.5 | | | | | | |
| SWSC | | | | S | **Sb** | **07 55 38.7** | **+0.6** |
| | baz=1.5 | | | | | | |
| **109C** | **Camp Elliot, M** | **1.76** | **329** | P | **Pn** | **07 55 19.7** | **+0.2** |
| | baz=1.7 | | | | | | |
| 109C | | | | S | **Sn** | **07 55 42.6** | **+1.0** |
| | baz=1.7 | | | | | | |
| **GLA** | **Glamis** | **1.96** | **31** | P | **Pn** | **07 55 22.1** | **-0.3** |
| | baz=1.9 | | | | | | |
| **BC3** | **Big Chuckawall** | **2.32** | **12** | P | **Pn** | **07 55 27.9** | **+0.5** |
| | baz=2.3 | | | | | | |
| **MURC** | **Murrieta** | **2.42** | **336** | Sb | **Sb** | **07 56 02.0** | **-0.7** |
| | baz=2.3 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **2.62** | **1** | P | **Pn** | **07 55 32.3** | **+0.9** |
| | baz=2.6 | | | | | | |
| BELC | | | | Sb | **Sb** | **07 56 09.9** | **+1.6** |
| | baz=2.6 | | | | | | |
| **SCI** | **San Clemente I** | **2.66** | **308** | P | **Pn** | **07 55 31.9** | **-0.1** |
| | baz=2.6 | | | | | | |
| **Y12C** | **Blythe** | **2.69** | **28** | P | **Pn** | **07 55 32.9** | **+0.5** |
| | baz=2.7 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.81** | **77** | P | **Pn** | **07 55 33.6** | **-0.4** |
| | baz=2.8 | | | | | | |
| **CIS** | **Catalina Islan** | **2.85** | **316** | P | **Pn** | **07 55 33.9** | **-0.7** |
| | baz=2.8 | | | | | | |
| **IRM** | **Iron Mountain** | **2.87** | **15** | P | **Pn** | **07 55 36.0** | **+1.1** |
| | baz=2.8 | | | | | | |
| **BBRC** | **Big Bear Solar** | **2.97** | **346** | Pb | **Pb** | **07 55 41.8** | **-0.7** |
| | baz=2.9 | | | | | | |
| BBRC | | | | Sb | **Sb** | **07 56 20.3** | **+1.6** |
| | baz=2.9 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **3.16** | **335** | Pb | **Pb** | **07 55 43.9** | **-1.8** |
| | baz=3.1 | | | | | | |
| BFSC | | | | Sb | **Sb** | **07 56 24.4** | **+0.4** |
| | baz=3.1 | | | | | | |

*BJI **21** 08:04:48.7,36.30N×70.25E,h194km,mb4.6/4,mB4.5/2*
*ISCJB **21** 08:04:49.1±0.4,36.46N±0.03×70.05E±0.06,h213km, mb3.7/9, Error ellipse: s-maj=6.8km s-min=3.7km az=164.0*
*IDC **21** 08:04:49.5±2.4,36.30N×70.09E,h219km±23km,mb3.6/10, mb1 3.7/16,mb1mx3.4/57,mbtmp4.3/16,MS3.3/3, Ms1 3.3/3,ms1mx2.6/47, Error ellipse: s-maj=18.6km s-min=14.8km az=140.0*
*NNC **21** 08:04:55.9±1.7,36.95N×70.04E,h222km±10km,mb3.4, mpv4.5, Error ellipse: s-maj=18.4km s-min=10.0km az=166.0*

**ISC 21 08:04:49.1±0.5,36.36N±0.05×70.11E±0.06,h213km,n60, σ2§19/64,mb3.7/9,10C-9D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.65** | **338** | ⇑P | **Pn** | **08 05 37.0** | **+1.6** |
| | 345nm,0.4s | | | | | | |
| DZET | | | | ⇑S | **S** | **08 06 09.8** | **-1.7** |
| | 1μm,0.7s | | | | | | |
| **CEP** | **Cherat** | **2.93** | **149** | ⇓P | Pn | 08 05 43.7 | +5.0 |
| CEP | | | | S | **S** | **08 06 23.0** | **+5.8** |
| **CHCP** | **Chirah Chowk** | **3.73** | **135** | ⇑P | Pn | 08 05 52.9 | +4.7 |
| **THW** | **Thamme Wali** | **3.80** | **159** | ⇓P | Pn | 08 05 53.5 | +4.5 |
| **SFK** | **Sufi-Kurgan** | **4.52** | **35** | ⇓P | **Pn** | **08 05 59.6** | **+1.7** |
| | 75nm,0.5s | | | | | | |
| SFK | | | | ⇑S | **S** | **08 06 51.3** | **-0.7** |
| | 386nm,0.4s | | | | | | |
| **SARP** | **Sargodha** | **4.91** | **154** | P | Pn | 08 06 06.9 | +4.2 |
| **KSH** | **Kashi** | **5.60** | **54** | *e*P | Pn | 08 06 08.1 | -3.4 |
| KSH | | | | S | S | 08 06 56.8 | -20 |
| KSH | | | | SMN | | | |
| | 270nm,0.4s | | | | | | |
| KSH | | | | SME | | | |
| | 200nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **6.39** | **16** | ⇓P | **Pn** | **08 06 22.5** | **+0.9** |
| | 33nm,0.6s | | | | | | |
| MNAS | | | | ⇑S | **S** | **08 07 31.0** | **-4.0** |
| | 106nm,0.6s | | | | | | |
| **AML** | **Almayashu** | **6.40** | **25** | P | **Pn** | **08 06 21.5** | **-0.4** |
| | SNR=85 | | | | | | |
| **KK31** | **Karatay Array** | **6.74** | **2** | ⇓P | **Pn** | **08 06 26.4** | **+0.5** |
| | 3.7nm,0.3s,baz=190,slow=13,SNR=104 | | | | | | |
| KK31 | | | | ⇑S | S | 08 07 35.8 | -7.3 |
| | 55nm,0.6s,baz=184,slow=19 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.90** | **23** | P | **Pn** | **08 06 29.0** | **+0.9** |
| | SNR=52 | | | | | | |
| **AAK** | **Ala-Archa** | **7.12** | **27** | P | **Pn** | **08 06 31.9** | **+0.9** |
| | 18nm,0.3s,baz=193,slow=7.6,SNR=223 | | | | | | |
| AAK | | | | S | **S** | **08 07 48.2** | **-4.0** |
| | 5.9nm,0.3s,baz=149,slow=19,SNR=11 | | | | | | |
| **KBK** | **Karagaybulak** | **7.31** | **29** | P | **Pn** | **08 06 34.7** | **+1.2** |
| | SNR=23 | | | | | | |
| **CHMS** | **Chumysh** | **7.53** | **27** | P | **Pn** | **08 06 36.3** | **+0.1** |
| | SNR=29 | | | | | | |
| **USP** | **Ospenovka** | **7.68** | **25** | P | **Pn** | **08 06 38.5** | **+0.5** |
| | SNR=26 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.80** | **31** | ⇑P | **Pn** | **08 06 39.4** | **-0.4** |
| | 40nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.80** | **31** | P | **Pn** | **08 06 40.5** | **+0.7** |
| | SNR=14 | | | | | | |
| **SMLA** | **Simla** | **7.85** | **130** | *i* P | **Pn** | **08 06 43.1** | **+2.7** |
| SMLA | | | | *i* S | **S** | **08 08 07.8** | **-1.6** |
| SMLA | | | | *i* S | S | 08 08 07.9 | -1.4 |
| SMLA | | | | AML | AML | 08 08 11.4 | |
| | comp=N,272nm,0.4s | | | | | | |
| SMLA | | | | AML | AML | 08 08 11.6 | |
| | comp=E,269nm,0.4s | | | | | | |
| **JASL** | **Jaisalmer** | **9.43** | **176** | *e*P | **Pn** | **08 07 03.1** | **+2.3** |
| JASL | | | | *e*S | **S** | **08 08 41.0** | **-5.9** |
| **KHET** | **Khetri** | **9.56** | **148** | *e*P | **Pn** | **08 07 04.0** | **+1.5** |
| KHET | | | | *e*S | **S** | **08 08 45.1** | **-4.8** |
| KHET | | | | AML | AML | 08 08 49.5 | |
| | comp=N,90nm,0.4s | | | | | | |
| KHET | | | | AML | AML | 08 08 49.8 | |
| | comp=E,78nm,0.5s | | | | | | |
| **BHGR** | **Bahadurgarh** | **9.57** | **141** | *e*P | **Pn** | **08 07 05.4** | **+2.8** |
| BHGR | | | | *e*S | **S** | **08 08 45.6** | **-4.5** |
| **GEYT** | **Alibeck** | **9.71** | **283** | P | **Pn** | **08 07 04.6** | **+0.3** |
| | comp=E,1.7nm,0.3s,baz=116,slow=13,SNR=5.4 | | | | | | |
| **NDI** | **New Delhi** | **9.72** | **140** | *ex* | **Pn** | **08 07 04.0** | **-0.5** |
| NDI | | | | *e*S | **S** | **08 08 48.0** | **-5.6** |
| **KUDL** | **Kundal** | **9.81** | **145** | *e*P | **Pn** | **08 07 07.6** | **+1.9** |
| KUDL | | | | *e*S | **S** | **08 08 50.5** | **-5.2** |
| KUDL | | | | AML | AML | 08 08 57.1 | |
| | comp=E,55nm,0.4s | | | | | | |
| KUDL | | | | AML | AML | 08 08 57.9 | |
| | comp=N,32nm,0.4s | | | | | | |
| **PDGK** | **Podgornoye** | **10.01** | **43** | ⇓P | **Pn** | **08 07 08.4** | **+0.3** |
| | comp=N,22nm,0.6s | | | | | | |
| **OTUK** | **Ortayu** | **11.99** | **7** | ⇑P | **Pn** | **08 07 31.8** | **-1.5** |
| | comp=N,18nm,1.2s | | | | | | |
| **MK31** | **Makanchi Array** | **13.83** | **37** | P | **Pn** | **08 07 56.4** | **+0.1** |
| | comp=N,19nm,0.9s,baz=220,slow=9.1,SNR=64 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.83** | **37** | P | **Pn** | **08 07 56.6** | **+0.3** |
| | comp=N,1.3nm,0.3s,baz=227,slow=12,SNR=59 | | | | | | |
| **KOLN** | **Koldanda** | **14.27** | **123** | *e*P | **P** | **08 08 04.1** | **+0.8** |
| | comp=N,18nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **14.84** | **120** | *e*P | **P** | **08 08 11.1** | **+1.5** |
| | comp=N,64nm,0.5s | | | | | | |
| **AB31** | **Akbulak array** | **14.87** | **333** | P | **Pn** | **08 08 09.0** | **0.0** |
| | comp=N,0.9nm,0.4s,baz=151,slow=11,SNR=32 | | | | | | |
| **DMN** | **Daman** | **15.41** | **120** | *e*P | **Pn** | **08 08 18.2** | **+2.2** |
| | comp=N,30nm,0.5s | | | | | | |
| **KKN** | **Kakani** | **15.42** | **119** | *e*P | **Pn** | **08 08 18.1** | **+2.0** |
| | comp=N,108nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.49** | **20** | ⇓P | **P** | **08 08 15.4** | **-0.9** |
| | comp=N,9.8nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.49** | **20** | P | **P** | **08 08 16.2** | **-0.1** |
| | comp=N,0.3nm,0.3s,baz=210,slow=11,SNR=28 | | | | | | |
| **PKIN** | **Phulchoki** | **15.63** | **120** | *e*P | **Pn** | **08 08 20.7** | **+2.0** |
| | comp=N,10.0nm,0.3s | | | | | | |
| **PKI** | **Pulchoki** | **15.65** | **120** | *e*P | **Pn** | **08 08 20.8** | **+1.9** |
| | comp=N,33nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **15.78** | **118** | *e*P | **Pn** | **08 08 22.4** | **+1.9** |
| | comp=N,71nm,0.6s | | | | | | |
| **VOSK** | **Vostochnaya** | **16.37** | **2** | ⇓P | **Pn** | **08 08 26.9** | **-0.2** |
| | comp=N,6.8nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.56** | **332** | ⇑P | **Pn** | **08 08 28.7** | **-0.5** |
| | comp=N,4.6nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.56** | **332** | P | **Pn** | **08 08 29.5** | **+0.3** |
| | comp=N,0.5nm,0.3s,baz=160,slow=13,SNR=12 | | | | | | |
| AKTO | | | | S | **S** | **08 11 29.2** | **-1.0** |
| | comp=N,0.0nm,0.3s,baz=72,slow=19,SNR=2.9 | | | | | | |
| **ZRNK** | **Zerenda** | **16.61** | **358** | ⇑P | **Pn** | **08 08 30.1** | **+0.3** |
| | comp=N,4.8nm,0.5s | | | | | | |
| **BVA0** | **Borovoye Array** | **16.66** | **1** | ⇓P | **Pn** | **08 08 32.1** | **+1.6** |
| | comp=N,11nm,1.1s,baz=163,slow=13,SNR=27 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.66** | **1** | P | **Pn** | **08 08 30.7** | **+0.3** |
| | comp=N,1.9nm,0.3s,baz=165,slow=12,SNR=22 | | | | | | |
| **RAMN** | **Ramite** | **16.86** | **119** | *e*P | **Pn** | **08 08 35.2** | **+1.9** |
| | comp=N,105nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **17.42** | **116** | *e*P | **Pn** | **08 08 41.7** | **+1.8** |
| | comp=N,61nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **17.48** | **118** | *e*P | **Pn** | **08 08 42.7** | **+2.1** |
| | comp=N,90nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.34** | **26** | P | **P** | **08 09 09.6** | **+0.6** |
| | comp=N,11nm,0.5s,baz=218,slow=12,SNR=42 | | | | | | |
| ZALV | | | | LR | LR | 08 17 24.1 | |
| | comp=N,50nm,19.7s,baz=342,slow=37 | | | | | | |
| **ARU** | **Arti** | **21.54** | **342** | P | **P** | **08 09 23.1** | **+1.7** |
| | comp=N,4.1nm,0.2s,baz=126,slow=19,SNR=1.7 | | | | | | |
| **SONM** | **Songino Array** | **29.00** | **55** | P | **P** | **08 10 29.9** | **+0.9** |
| | comp=N,1.0nm,0.8s,baz=243,slow=9.9,SNR=4.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **46.86** | **60** | LR | LR | 08 34 55.1 | |
| | comp=N,32nm,18.8s,baz=82,slow=38 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **48.21** | **227** | P | **P** | **08 13 07.8** | **-0.9** |
| | comp=N,2.4nm,0.6s,baz=182,slow=21,SNR=7.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.00** | **268** | P | **P** | **08 15 06.6** | **0.0** |
| | comp=N,0.3nm,0.6s,baz=53,slow=6.2,SNR=3.4 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **67.63** | **339** | P | **P** | **08 15 21.4** | **-1.0** |
| | comp=N,12nm,1.1s,baz=326,slow=3.6,SNR=2.3 | | | | | | |
| **DBIC** | **Dimbokro** | **73.98** | **266** | LR | LR | 08 54 31.9 | |
| | comp=N,24nm,20.3s,baz=138,slow=40 | | | | | | |
| **INK** | **Inuvik** | **74.16** | **9** | P | **P** | **08 16 01.6** | **0.0** |
| | comp=N,1.1nm,0.7s,baz=295,slow=3.2,SNR=5.3 | | | | | | |
| **ILAR** | **Eielson Array** | **75.11** | **15** | P | **P** | **08 16 07.7** | **+0.5** |
| | comp=N,0.4nm,0.9s,baz=319,slow=4.0,SNR=4.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.42** | **2** | pP | pP | 08 17 33.1 | 0.0 |
| | comp=N,0.5nm,0.5s,baz=348,slow=5.1,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **82.53** | **121** | P | **P** | **08 16 47.7** | **-0.5** |
| | comp=N,1.3nm,0.8s,baz=326,slow=4.3,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **84.76** | **124** | P | **P** | **08 16 59.6** | **+0.2** |
| | comp=N,1.1nm,0.7s,baz=309,slow=4.9,SNR=19 | | | | | | |

*ISCJB **21** 08:08:37.0±0.6,22.4N±0.1×95.4E±0.1,h33km,mb3.8/6, MS4.4/1, Error ellipse: s-maj=22.1km s-min=8.4km az=42.5*
*IDC **21** 08:08:43.0±3.8,22.35N×95.42E,h75km±36km,mb3.5/6, mb1 3.6/8,mb1mx3.3/61,mbtmp3.8/8,ML3.7/2,MS4.5/1, Ms1 4.5/1,ms1mx2.7/39, Error ellipse: s-maj=76.0km s-min=17.6km az=67.0*

**ISC 21 08:08:39.7±0.8,22.5N±0.2×95.4E±0.2,h35km,n15, σ1§26/14,mb3.8/6,Myanmar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **5.18** | **140** | P | **Pn** | **08 09 56.7** | **+2.0** |
| | 0.4nm,0.3s,baz=304,slow=13,SNR=2.8 | | | | | | |
| **ODAN** | **Odare** | **8.51** | **303** | *e*Pn | **Pn** | **08 10 41.4** | **+0.7** |
| ODAN | | | | *e*Sn | Sn | 08 11 55.2 | -21 |
| | 101nm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **8.52** | **306** | *e*Pn | **Pn** | **08 10 42.6** | **+1.7** |
| TAPN | | | | *e*Sn | Sn | 08 11 56.7 | -20 |
| | 219nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **9.18** | **301** | *e*Pn | **Pn** | **08 10 50.0** | **+0.2** |
| **GUN** | **Gumba** | **10.20** | **304** | *e*Pn | **Pn** | **08 11 04.4** | **+0.5** |
| **PKI** | **Pulchoki** | **10.40** | **301** | *e*Pn | **Pn** | **08 11 06.2** | **-0.5** |
| **PKIN** | **Phulchoki** | **10.41** | **301** | *e*Pn | **Pn** | **08 11 05.9** | **-0.9** |
| **PSI** | **Prapat** | **19.84** | **170** | P | **P** | **08 13 07.4** | **-0.4** |
| | 0.5nm,0.3s,baz=282,slow=9.3,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **26.49** | **340** | P | **P** | **08 14 14.5** | **+0.8** |
| | 0.7n

APZ9 Lg Lg 08 10 25.2
**APA0 Apatity Array 0.31 277** Pg **Pb** **08 10 25.2 -1.0**
baz=82,slow=16
APA0 Lg Lg 08 10 29.2
baz=67,slow=37
APA0 Rg Rg 08 10 30.8
baz=79,slow=37
**APA0 Apatity Array 0.31 277** Pg **Pb** **08 10 25.2 -1.0**
baz=82,slow=16
APA0 Lg Lg 08 10 29.2
baz=67,slow=37
APA0 Rg Rg 08 10 30.8
baz=79,slow=37
**APA0 Apatity Array 0.31 277** *e*P **Pg** **08 10 24.4 +0.7**
**APA0 Apatity Array 0.31 277** P **Pb** **08 10 25.2 -1.0**
APA0 S **Sg** **08 10 29.1 +1.4**
**APA0 Apatity Array 0.31 277** *e*P **Pb** **08 10 25.1 -1.0**
APA0 *e*S **Sg** **08 10 29.0 +1.4**
**APA0 Apatity Array 0.31 277** *e*P **Pg** **08 10 24.4 +0.7**
**APA0 Apatity Array 0.31 277** Pg **Pb** **08 10 25.2 -1.0**
SNR=999
APA0 S **Sg** **08 10 29.0 +1.4**
APA0 Lg Lg 08 10 29.2
**LVZ Lovozero 0.47 45***d i*P **Pg** **08 10 27.7 +1.0**
LVZ *e*S **Sg** **08 10 33.6 +0.9**
**LVZ Lovozero 0.47 45** ⇓ *i*Pg **Pg** **08 10 27.7 +1.0**
LVZ *e*Sg **Sg** **08 10 33.6 +0.9**
LVZ *e*Lg Lg 08 10 36.0
**LVZ Lovozero 0.47 45** *i* P **Pg** **08 10 27.7 +1.0**
**VRF Varrio 1.61 278** *e*P **Pn** **08 10 47.9 +0.4**
VRF *e*S **Sn** **08 11 07.8 -1.1**
**VRF Varrio 1.61 278** P **Pn** **08 10 47.8 +0.4**
VRF S **Sn** **08 11 07.7 -1.1**
**KU6 Riekki 2.19 227** *e*PG **Pb** **08 10 58.2 0.0**
KU6 *e*SG **Sg** **08 11 27.6 -0.4**
**KU6 Riekki 2.19 227** Pg **Pb** **08 10 58.2 0.0**
KU6 Sg **Sg** **08 11 27.6 -0.4**
**MSF Maaselka 2.52 231** *e*PB **Pb** **08 11 03.1 -0.7**
MSF *e*SG **Sg** **08 11 37.1 -1.4**
**MSF Maaselka 2.52 231** Pb **Pb** **08 11 03.1 -0.7**
MSF Sg **Sg** **08 11 37.1 -1.4**
**SGF Sodankyl 2.80 271** *e*P **Pn** **08 11 05.3 +1.6**
**SGF Sodankyl 2.80 271** P **Pn** **08 11 05.3 +1.6**
**RNF Rovaniemi 3.19 256** *e*S **Sn** **08 11 49.0 +1.1**
**RNF Rovaniemi 3.19 256** S **Sn** **08 11 48.9 +1.1**
**KEV Kevo 3.31 315** *e*Pn **Pn** **08 11 12.2 +1.4**
KEV *e*Pb **Pb** **08 11 16.6 -0.7**
KEV *e*Sn **Sn** **08 11 50.8 0.0**
KEV *e*Sb **Sb** **08 11 56.7 -1.4**
KEV *e*Sg **Sg** **08 12 03.6 -0.5**
**ARA0 ARCESS Array S 3.63 307** Pn **Pn** **08 11 15.8 +0.6**
baz=122,slow=12
ARA0 Pg **Pb** **08 11 23.6 +0.8**
baz=114,slow=16
ARA0 Sn **Sn** **08 11 56.5 -2.1**
baz=120,slow=28
ARA0 Lg Lg 08 12 06.4
baz=107,slow=37
**ARA0 ARCESS Array S 3.63 307** Pn **Pn** **08 11 15.8 +0.6**
baz=122,slow=12
ARA0 Pg **Pb** **08 11 23.6 +0.8**
baz=114,slow=16
ARA0 Sn **Sn** **08 11 56.5 -2.1**
baz=120,slow=28
ARA0 Lg Lg 08 12 06.4
baz=107,slow=37
**ARA0 ARCESS Array S 3.63 307** Pn **Pn** **08 11 15.8 +0.6**
SNR=985
**ARA0 ARCESS Array S 3.63 307** Pg **Pb** **08 11 23.5 +0.8**
SNR=6.5
ARA0 Sn **Sn** **08 11 56.5 -2.1**
SNR=4.6
ARA0 Lg Lg 08 12 06.4
**ARCES ARCESS Array B 3.63 307** Pn **Pn** **08 11 15.8 +0.7**
41nm,0.3s,baz=123,slow=15,SNR=1215
ARCES Sn **Sn** **08 11 56.3 -2.3**
27nm,0.3s,baz=118,slow=25,SNR=4.1
ARCES Lg Lg 08 12 06.5
207nm,0.3s,baz=112,slow=33,SNR=26
**ARCES ARCESS Array B 3.63 307** P **Pn** **08 11 15.9 +0.7**
ARCES 08 11 56.3
ARCES pmax pmax
comp=Z,41nm,0.3s
ARCES smax smax
comp=N,27nm,0.3s
**ARE0 ARCESS Array S 3.63 307** *e*P **Pn** **08 11 15.8 +0.7**
ARE0 *e*S **Sn** **08 11 56.4 -2.2**
**ARE0 ARCESS Array S 3.63 307** *e*P **Pn** **08 11 15.8 +0.7**
ARE0 *e*S **Sn** **08 11 56.3 -2.3**
**ARE0 ARCESS Array S 3.63 307** *e*P **Pn** **08 11 15.8 +0.7**
SNR=50
ARE0 S **Sn** **08 11 56.3 -2.3**
**TMCR Tamitsa 3.84 151** *i* P **Pb** **08 11 26.2 -0.1**
TMCR *i* S **Sb** **08 12 12.6 -0.7**
TMCR smax smax
comp=E,236nm,0.5s
**HEF Hetta 3.91 287** *e*P **Pn** **08 11 19.1 +0.1**
HEF *e*S **Sn** **08 12 03.9 -1.6**
HEF *e*SG **Sb** **08 12 17.4 +2.2**
HEF MSG 08 12 21.3
comp=Z,307nm,0.3s
**HEF Hetta 3.91 287** P **Pn** **08 11 19.1 +0.1**
HEF S **Sn** **08 12 03.8 -1.6**
HEF Sg **Sb** **08 12 17.4 +2.2**
**OUL Oulu 4.04 236** *e*P **Pn** **08 11 22.7 +1.9**
OUL *e*SB **Sb** **08 12 18.7 -0.4**
**OUL Oulu 4.04 236** P **Pn** **08 11 22.7 +1.9**
OUL Sb **Sb** **08 12 18.7 -0.4**
**KTK1 Kautokeino 4.18 295** *e*P **Pn** **08 11 22.9 +0.2**
KTK1 *e*S **Sn** **08 12 10.6 -1.6**
KTK1 IAML 08 12 29.1
comp=Z,296nm,0.5s
**KTK1 Kautokeino 4.18 295** *e*P **Pn** **08 11 22.9 +0.2**
SNR=49
KTK1 *e*S **Sn** **08 12 10.6 -1.6**
SNR=49
**KJN Kajaani 4.30 218** *e*SG **Sg** **08 12 31.9 -3.8**
KJN MSG 08 12 36.1
comp=Z,201nm,0.4s
**KALU Kalix 4.48 252** *e*P **Pn** **08 11 27.9 +1.0**
KALU *e*S **Sn** **08 12 19.1 -0.6**
**KALU Kalix 4.48 252** P **Pn** **08 11 27.8 +1.0**
KALU S **Sn** **08 12 19.0 -0.6**
**LANU Lannavaara 4.50 282** *e*P **Pn** **08 11 27.3 +0.1**
LANU *e*S **Sn** **08 12 17.4 -2.8**
**LANU Lannavaara 4.50 282** P **Pn** **08 11 27.3 +0.1**
LANU S **Sn** **08 12 17.4 -2.8**
**MASU Masugnsbyn 4.53 274** *e*P **Pn** **08 11 28.1 +0.5**
**MASU Masugnsbyn 4.53 274** P **Pn** **08 11 28.1 +0.5**
**ERTU Ertsjaerv 4.65 263** *e*P **Pn** **08 11 29.8 +0.5**
ERTU *e*S **Sn** **08 12 22.9 -0.9**
**ERTU Ertsjaerv 4.65 263** P **Pn** **08 11 29.7 +0.5**
ERTU S **Sn** **08 12 22.9 -0.9**
**HAMF Hammerfest 4.75 315** *e*P **Pn** **08 11 31.3 +0.7**
HAMF *e*S **Sn** **08 12 24.0 -2.3**
HAMF IAML 08 12 48.0
comp=Z,346nm,0.5s
**HAMF Hammerfest 4.75 315** *e*P **Pn** **08 11 31.3 +0.7**
SNR=49
HAMF *e*S **Sn** **08 12 24.0 -2.3**
SNR=49
**KIF Kilpisjarvi 5.03 293** Pn **Pn** **08 11 34.4 0.0**
KIF Sn **Sn** **08 12 29.8 -3.3**
KIF Lg Lg 08 12 50.0
**KIF Kilpisjarvi 5.03 293** *e*P **Pn** **08 11 34.7 +0.3**
KIF *e*S **Sn** **08 12 30.1 -3.0**
**KIF Kilpisjarvi 5.03 293** MSG 08 12 51.0
comp=Z,276nm,0.3s
**KIF Kilpisjarvi 5.03 293** Pn **Pn** **08 11 34.4 0.0**
**KIF Kilpisjarvi 5.03 293** *e*P **Pn** **08 11 34.7 +0.3**
SNR=49
KIF Sn **Sn** **08 12 29.8 -3.3**
KIF *e*S **Sn** **08 12 30.1 -3.0**
SNR=49
KIF Lg Lg 08 12 50.0
**KUA Kurravaara 5.12 281** *e*P **Pn** **08 11 35.8 +0.1**
KUA *e*S **Sn** **08 12 33.1 -2.4**
**KUA Kurravaara 5.12 281** P **Pn** **08 11 35.8 +0.1**
KUA S **Sn** **08 12 33.1 -2.4**
**DUNU Dundret 5.13 271** *e*P **Pn** **08 11 36.5 +0.7**
DUNU *e*S **Sn** **08 12 34.3 -1.4**
**DUNU Dundret 5.13 271** P **Pn** **08 11 36.5 +0.7**
DUNU S **Sn** **08 12 34.3 -1.4**

**HARU Harads 5.25 260** *e*P **Pn** **08 11 36.6 -0.7**
HARU *e*S **Sn** **08 12 36.6 -1.8**
**HARU Harads 5.25 260** P **Pn** **08 11 36.6 -0.7**
HARU S **Sn** **08 12 36.6 -1.8**
**SJUU Sjulsmark 5.29 253** *e*P **Pn** **08 11 38.0 +0.1**
SJUU *e*S **Sn** **08 12 39.9 +0.4**
**SJUU Sjulsmark 5.29 253** P **Pn** **08 11 38.0 +0.1**
SJUU S **Sn** **08 12 39.9 +0.4**
**NIKU Nikkaluokta 5.62 280** *e*P **Pn** **08 11 42.1 -0.4**
**TRO Tromso 5.82 298** *e*P **Pn** **08 11 46.3 +1.1**
TRO *e*S **Sn** **08 12 49.4 -3.1**
**BURU Burvik 5.87 245** *e*P **Pn** **08 11 47.0 +1.1**
**SALU Saltoluokta 5.88 275** *e*P **Pn** **08 11 45.7 -0.4**
**FIA0 FINESS Array S 6.99 212** Pn **Pn** **08 12 01.7 +0.4**
baz=24,slow=12
FIA0 Sn **Sn** **08 13 21.4 +0.1**
baz=29,slow=22
FIA0 Lg Lg 08 13 53.9
baz=25,slow=28
**FIA0 FINESS Array S 6.99 212** Pn **Pn** **08 12 01.7 +0.4**
baz=24,slow=12
FIA0 Sn **Sn** **08 13 21.4 +0.1**
baz=29,slow=22
FIA0 Lg Lg 08 13 53.9
baz=25,slow=28
**FINES FINESS Array B 6.99 212** Pn **Pn** **08 12 01.8 +0.5**
comp=Z,2.1nm,0.3s,baz=28,slow=12,SNR=63
FINES Sn **Sn** **08 13 20.4 -0.9**
comp=Z,3.6nm,0.3s,baz=26,slow=19,SNR=6.3
FINES Lg Lg 08 13 52.6
comp=Z,20nm,0.3s,baz=33,slow=26,SNR=11
**FINES FINESS Array B 6.99 212** P **Pn** **08 12 01.8 +0.5**
FINES 08 13 20.5
FINES pmax pmax
comp=Z,2.0nm,0.3s
FINES smax smax
comp=N,4.0nm,0.3s
**STEI Steigen 7.05 281** *e*P **Pn** **08 12 02.0 -0.1**
STEI *e*S **Sn** **08 13 19.1 -3.6**
**KLMR Klimovskoe 7.19 157** *i* P **Pn** **08 12 04.4 +0.4**
KLMR *e* 08 13 24.9
KLMR pmax pmax
comp=Z,7.0nm,0.6s
KLMR smax smax
comp=N,66nm,0.5s
**KLMR Klimovskoe 7.19 157** *i* P **Pn** **08 12 04.4 +0.4**
comp=N,7.0nm,0.6s
**MOR8 Moi Rana 7.74 269** *e*P **Pn** **08 12 08.8 -2.8**
MOR8 *e*S Sn 08 13 30.6 -9.1
MOR8 IAML 08 14 24.6
comp=Z,85nm,0.5s
**FLOS Flostrand 8.10 271** *e*P **Pn** **08 12 15.3 -1.1**
FLOS *e*S **Sn** **08 13 43.5 -5.0**
**STOK Stokkvaagen 8.23 271** *e*P **Pn** **08 12 19.0 +0.7**
STOK *e*S **Sn** **08 13 47.7 -4.2**
STOK IAML 08 14 38.6
comp=N,84nm,0.3s
**NSS Namsos 9.36 261** *e*P **Pn** **08 12 33.7 -0.1**
**VSU Vasula 9.68 203** *i* P **Pn** **08 12 37.4 -0.7**
**VSU Vasula 9.68 203** *i* P **Pn** **08 12 37.4 -0.7**
**HFS Hagfors 11.53 239** Pn **Pn** **08 13 02.6 -0.8**
baz=26,slow=12
HFS Sn Sn 08 15 05.0 -7.7
baz=56,slow=22
HFS Lg Lg 08 16 17.9
baz=51,slow=28
**HFS Hagfors 11.53 239** P **Pn** **08 13 02.6 -0.8**
baz=26,slow=12
HFS Sn Sn 08 15 05.0 -7.7
baz=56,slow=22
HFS Lg Lg 08 16 17.9
baz=51,slow=28
**HFS Hagfors 11.53 239** Pn **Pn** **08 13 02.4 -1.0**
comp=N,1.8nm,0.3s,baz=48,slow=12,SNR=26
HFS Sn Sn 08 15 04.7 -8.0
comp=N,1.3nm,0.3s,baz=51,slow=23,SNR=4.6
HFS Lg Lg 08 16 13.9
comp=N,2.9nm,0.3s,baz=53,slow=26,SNR=3.2
**HFS Hagfors 11.53 239** P **Pn** **08 13 02.4 -1.0**
HFS 08 15 04.7
HFS pmax pmax
comp=Z,2.0nm,0.3s
HFS smax smax
comp=N,1.0nm,0.3s
**NB2 NORSAR Subarra 11.72 247** Pn **Pn** **08 13 05.2 -0.9**
baz=44,slow=12
**NB2 NORSAR Subarra 11.72 247** P **Pn** **08 13 05.2 -0.9**
baz=44,slow=12
**NOA NORSAR Array B 11.72 247** Pn **Pn** **08 13 04.5 -1.6**
comp=N,1.8nm,0.3s,baz=49,slow=10,SNR=33
NOA Sn Sn 08 15 08.7 -8.8
comp=N,2.4nm,0.3s,baz=45,slow=22,SNR=6.6
NOA Lg Lg 08 16 21.2
comp=N,3.9nm,0.3s,baz=44,slow=25,SNR=5.2
NOA LR LR 08 17 34.7
comp=N,105nm,18.4s,baz=330,slow=37
**NOA NORSAR Array B 11.72 247** P **Pn** **08 13 05.7 -0.4**
**NOA NORSAR Array B 11.72 247** P **Pn** **08 13 05.7 -0.4**
**SPA0 Spitsbergen Ar 11.74 342** Pn **Pn** **08 13 03.2 -3.1**
baz=143,slow=14
**SPA0 Spitsbergen Ar 11.74 342** P **Pn** **08 13 03.2 -3.1**
baz=143,slow=14
**SPITS Spitsbergen Ar 11.74 342** Pn **Pn** **08 13 03.1 -3.1**
baz=139,slow=14,SNR=22
SPITS Sn Sn 08 15 06.2 -11
baz=138,slow=27,SNR=2.4
**OBN Obninsk 12.57 173** Sn Sn 08 15 31.1 -7.0
comp=N,7.1nm,0.3s,baz=24,slow=23,SNR=3.0
**OBN Obninsk 12.57 173** P **Pn** **08 13 16.0 -1.6**
OBN *e*S Sn 08 15 32.1 -6.0
OBN pmax pmax
comp=Z,7.0nm,0.4s
**KONO Kongsberg 13.28 245** *e*P **Pn** **08 13 25.6 -1.7**
**KONO Kongsberg 13.28 245** *e*P **Pn** **08 13 25.6 -1.7**
**KLNR Kaliningrad 14.52 213** *e*P **Pn** **08 13 42.5 -1.7**
**LPSR Galich'ya Gora 15.22 168** *e*P **Pn** **08 13 52.3 -1.5**
LPSR pmax pmax
comp=Z,8.0nm,0.9s
LPSR pmax pmax
comp=N,9.0nm,0.8s
LPSR pmax pmax
comp=E,8.0nm,0.5s
**ARU Arti 15.97 122** Pn **Pn** **08 14 00.9 -2.7**
baz=112,slow=19,SNR=8.2
ARU LR LR 08 20 31.9
comp=E,73nm,19.0s,baz=280,slow=38
**ARU Arti 15.97 122***d i*P **Pn** **08 14 02.9 -0.6**
ARU S **Sn** **08 17 00.9 -0.1**
ARU pmax pmax
comp=Z,10.0nm,0.7s
**ARU Arti 15.97 122** *e*Pn **Pn** **08 14 01.4 -2.1**
comp=Z,11nm,0.4s
**SVE Sverdlovsk 16.34 118** *e*P **Pn** **08 14 08.3 0.0**
**VRH Novokhopyorsk 16.88 163** *e*P Pn 08 14 09.3 -5.9
VRH pmax pmax
comp=Z,8.0nm,0.7s
VRH pmax pmax
comp=N,20nm,0.8s
VRH pmax pmax
comp=E,10.0nm,0.6s
**AKASG Malin Array Be 17.07 190** Pn **Pn** **08 14 12.9 -4.7**
comp=E,2.2nm,0.3s,baz=6.6,slow=12,SNR=16
AKASG Lg Lg 08 19 16.2
comp=E,0.8nm,0.3s,baz=4.1,slow=27,SNR=3.9
**AKASG Malin Array Be 17.07 190** *i* P **Pn** **08 14 13.8 -3.8**
AKASG pmax pmax
comp=Z,6.0nm,0.5s
**KIEV Kiev 17.08 190** *e*P **Pn** **08 14 14.7 -3.0**
KIEV pmax pmax
comp=Z,3.0nm,0.7s
**ORR Orenburg 19.02 137** *e*P **Pn** **08 14 43.1 +1.6**
**ORR Orenburg 19.02 137** *e*P **Pn** **08 14 43.1 +1.6**
**AKTK Aktyubinsk 20.98 133** P Pn 08 15 04.0 -0.8
comp=Z,11nm,0.6s
**AKTO Aktyubinsk 20.98 133** ⇓ P **P** **08 15 03.4 +1.2**
comp=Z,10.0nm,0.6s
AKTO ⇑ S S 08 18 49.2 -7.3
comp=Z,5.7nm,1.1s
**AKTO Aktyubinsk 20.98 133** P Pn 08 15 04.0 -0.8
comp=Z,11nm,0.6s,baz=338,slow=8.6,SNR=34
**AKTO Aktyubinsk 20.98 133** P Pn 08 15 04.0 -0.8
AKTO pmax pmax
comp=Z,11nm,0.6s
**AKTO Aktyubinsk 20.98 133** P **P** **08 15 03.4 +1.2**
comp=Z,10.0nm,0.6s
**EKA Eskdalemuir Ar 21.08 253** P **P** **08 15 03.7 +0.4**
comp=Z,0.8nm,0.5s,baz=39,slow=10,SNR=2.7
**EKA Eskdalemuir Ar 21.08 253** P **P** **08 15 03.7 +0.4**
EKA pmax pmax
comp=Z,1.0nm,0.5s
**GERES GERESS Array B 21.36 219** P **P** **08 15 08.0 +1.6**
comp=Z,0.7nm,0.6s,baz=30,slow=10,SNR=2.5
GERES LR LR 08 24 01.0
comp=Z,19nm,21.5s,baz=282,slow=38
**GERES GERESS Array B 21.36 219** P **P** **08 15 08.0 +1.6**
GERES pmax pmax
comp=Z,1.0nm,0.6s
GERES MLR MLR
comp=Z,19nm,21.5s
**AB31 Akbulak array 22.59 131** P **P** **08 15 20.6 +1.1**
comp=Z,2.8nm,0.6s,baz=323,slow=9.7,SNR=62
AB31 ⇓ S **S** **08 19 24.7 -3.0**
comp=Z,1.9nm,0.8s
**AB31 Akbulak array 22.59 131** P **P** **08 15 20.6 +1.1**
comp=Z,2.8nm,0.6s,SNR=62
**ABKAR Akbulak array 22.59 131** *e*P **P** **08 15 20.6 +1.2**
comp=Z,3.1nm,0.5s
**BRVK Borovoye 22.71 112** ⇑ P **P** **08 15 20.0 -0.8**
comp=Z,9.7nm,0.9s
**BRVK Borovoye 22.71 112** *e*P **P** **08 15 22.5 +1.7**
BRVK pmax pmax
comp=Z,5.0nm,0.8s
**BRVK Borovoye 22.71 112** *e*P **P** **08 15 22.5 +1.7**
comp=Z,5.0nm,0.8s
**BVA0 Borovoye Array 22.78 112** P **P** **08 15 23.5 +2.0**
comp=Z,5.6nm,0.8s,baz=314,slow=10,SNR=19
**BVA0 Borovoye Array 22.78 112** P **P** **08 15 23.5 +2.0**
comp=Z,5.6nm,0.8s,SNR=19
**BVAR Borovoye Array 22.78 112** P **P** **08 15 23.4 +1.9**
comp=Z,3.8nm,0.5s,baz=316,slow=10,SNR=12
**BVAR Borovoye Array 22.78 112** P **P** **08 15 23.4 +1.9**
BVAR pmax pmax
comp=Z,4.0nm,0.5s
**ANN Anapa 22.91 173** *i* P **P** **08 15 21.8 -1.1**
ANN *e*S **S** **08 19 33.7 +0.2**
ANN pmax pmax
comp=Z,123nm,1.7s
**ANN Anapa 22.91 173** *i* P **P** **08 15 21.8 -1.1**
comp=Z,123nm,1.7s
ANN *e*S **S** **08 19 33.7 +0.2**
**ZALV Zalesovo Beam 27.44 94** *i* P **P** **08 16 03.7 -1.2**
ZALV pmax pmax
comp=Z,6.0nm,0.3s
**KURK Kurchatov 27.65 105** P **P** **08 16 08.5 +1.7**
KURK pmax pmax
comp=Z,1.0nm,0.6s
**KURK Kurchatov 27.65 105** P **P** **08 16 08.4 +1.7**
**KURK Kurchatov 27.65 105** P **P** **08 16 08.5 +1.7**
comp=Z,1.0nm,0.6s
**KURBB Kurchatov Arra 27.69 105** P **P** **08 16 08.4 +1.3**
comp=Z,1.1nm,0.6s,baz=328,slow=7.9,SNR=11
**BRTR Keskin Array B 27.90 180** P **P** **08 16 10.4 +1.1**
comp=Z,0.6nm,0.6s,baz=4.5,slow=9.1,SNR=3.3
**BRTR Keskin Array B 27.90 180** P **P** **08 16 10.4 +1.1**
BRTR pmax pmax
comp=Z,1.0nm,0.6s
**KKAR Karatay Array 31.35 123** *e*P **P** **08 16 42.7 +3.0**
comp=Z,6.4nm,0.6s
**MKAR Makanchi Array 32.26 105** P **P** **08 16 49.5 +1.8**
comp=Z,1.2nm,0.6s,baz=341,slow=6.6,SNR=8.2
**MKAR Makanchi Array 32.26 105** P **P** **08 16 49.5 +1.8**
MKAR pmax pmax
comp=Z,1.0nm,0.6s
**BOD Bodaibo 35.41 66** *e*P **P** **08 17 14.3 -0.6**
BOD pmax pmax
comp=Z,5.0nm,0.8s
**BOD Bodaibo 35.41 66** *e*P **P** **08 17 14.3 -0.6**
comp=Z,5.0nm,0.8s
**ILAR Eielson Array 47.94 0** P **P** **08 18 58.4 +1.0**
comp=Z,0.4nm,0.6s,baz=352,slow=5.4,SNR=5.9
**TORD Torodi Ar. Bea 58.30 217** P **P** **08 20 14.8 +0.7**
comp=Z,0.9nm,0.6s,baz=6.6,slow=6.5,SNR=12
**TXAR Lajitas Array 78.28 323** P **P** **08 22 18.9 -0.4**
comp=Z,0.2nm,0.7s,baz=54,slow=4.7,SNR=3.8
**ASAR Alice Springs 115.49 90** PKP **PKPdf** **08 29 00.4 -0.7**
comp=Z,0.2nm,0.5s,baz=349,slow=1.5,SNR=5.3

**IDC 21 08:42:45.8±2.7, 60.90S×162.19E, h0km, mb3.8/4, mb1 3.9/5, mb1mx3.8/16, mbtmpg3.7/5, ML2.9/1, MS3.8/8, Ms1 3.8/8, ms1mx3.7/14, Error ellipse: s-maj=101.0km s-min=23.4km az=80.0, Macquarie Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNDA** | **Vanda** | **16.70** | **180** | Pn | Pn | 08 46 41.4 | +0.6 |
| | 0.0nm,0.3s,baz=8.1,slow=14,SNR=4.4 | | | | | | |
| VNDA | | | | LR | LR | 08 52 01.6 | |
| | comp=Z,221nm,18.9s,baz=6.5,slow=33 | | | | | | |
| **MAW** | **Mawson** | **39.16** | **217** | P | P | 08 50 14.9 | +0.4 |
| | 1.3nm,0.8s,baz=104,slow=14,SNR=5.1 | | | | | | |
| MAW | | | | LR | LR | 09 06 17.5 | |
| | comp=Z,220nm,18.8s,baz=66,slow=36 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **40.05** | **288** | T | T | 09 32 23.4 | |
| | baz=146,slow=76,SNR=24 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **40.06** | **288** | T | T | 09 32 25.9 | |
| | baz=146,slow=76,SNR=27 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **40.07** | **288** | T | T | 09 32 22.5 | |
| | baz=146,slow=76,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **42.02** | **320** | P | P | 08 50 38.6 | -0.1 |
| | 2.0nm,0.9s,baz=160,slow=8.3,SNR=12 | | | | | | |
| ASAR | | | | PcP | PcP | 08 52 34.2 | +0.4 |
| | 0.3nm,0.6s,baz=162,slow=3.9,SNR=3.1 | | | | | | |
| ASAR | | | | LR | LR | 09 05 44.4 | |
| | comp=Z,69nm,18.1s,baz=160,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.38** | **322** | P | P | 08 51 05.1 | -0.7 |
| | 1.7nm,1.1s,baz=162,slow=6.9,SNR=6.0 | | | | | | |
| WRA | | | | LR | LR | 09 07 26.8 | |
| | comp=Z,68nm,19.6s,baz=100,slow=33 | | | | | | |
| **SNAA** | **Sanae** | **47.30** | **186** | P | P | 08 51 19.4 | -1.0 |
| | 0.6nm,1.1s,baz=165,slow=20,SNR=4.0 | | | | | | |
| **TBI** | **Tubuai** | **50.03** | **64** | eLR | LR | 09 06 15.5 | |
| | 114nm,27.0s | | | | | | |
| **TBI** | **Tubuai** | **50.03** | **64** | *e*T | T | 09 45 42.9 | |
| | 12nm,0.3s | | | | | | |
| **PAE** | **Paea** | **55.00** | **60** | *e*T | T | 09 51 51.9 | |
| | 0.8nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **55.07** | **60** | eLR | LR | 09 08 28.2 | |
| | 253nm,27.8s,baz=198 | | | | | | |
| **PPT2** | **Papeete2** | **55.07** | **60** | *e*T | T | 09 51 57.3 | |
| | 1.8nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **55.09** | **60** | LR | LR | 09 09 35.1 | |
| | comp=Z,64nm,21.4s,baz=182,slow=29 | | | | | | |
| **RKT** | **Rikitea** | **56.90** | **78** | *e*T | T | 09 54 30.7 | |
| | 3.4nm,0.3s | | | | | | |
| **VAH** | **Vaihoa** | **57.99** | **61** | *e*T | T | 09 55 36.7 | |
| | 48nm,0.2s | | | | | | |
| **H08S2** | **Diego Garcia H** | **83.23** | **267** | T | T | 10 26 25.7 | |
| | baz=150 | | | | | | |
| **H08S1** | **Diego Garcia H** | **83.24** | **267** | T | T | 10 26 24.6 | |
| | baz=150 | | | | | | |
| **H08S3** | **Diego Garcia H** | **83.25** | **267** | T | T | 10 26 26.8 | |
| | baz=150 | | | | | | |
| **BOSA** | **Boshof** | **84.17** | **217** | LR | LR | 09 29 33.1 | |
| | comp=Z,43nm,19.3s,baz=172,slow=33 | | | | | | |
| **LVC** | **Limon Verde** | **87.14** | **134** | LR | LR | 09 27 43.2 | |
| | comp=Z,420nm,20.6s,baz=212,slow=31 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.77** | **302** | LR | LR | 09 39 28.6 | |
| | comp=Z,31nm,18.1s,baz=152,slow=36 | | | | | | |

*ISCJB **21** 08:57:56.1±0.7, 59°30N±0°03×27°04E±0°09, h0km, Error ellipse: s-maj=6.5km s-min=4.0km az=14.6*
*NAO **21** 08:57:56.7±1.1, 59°29N×26°95E, ML2.3*
*HEL **21** 08:57:57.3±0.2, 59°31N×27°14E, h0km, ML1.8, Explosion*
*CSEM **21** 08:57:57.0±0.3, 59°29N×27°04E, h2km, ML2.3, Error ellipse: s-maj=7.9km s-min=4.4km az=100.0, Mining explosion.*
*BER **21** 08:57:58.0±3.0, 59°29N×27°02E, h0km, ML2.3(NAO), Suspected explosion*

**ISC 21 08:57:56.7±0.9, 59°31N±0°02×27°01E±0°04, h0km, n32, σ1s33/52, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VSU** | **Vasula** | **0.86** | **190** | Pg | **Pg** | **08 58 13.3** | **+0.2** |
| VSU | | | | Lg | Lg | 08 58 23.8 | |
| **VSU** | **Vasula** | **0.86** | **190** | Pg | **Pg** | **08 58 13.3** | **+0.2** |
| VSU | | | | Lg | Lg | 08 58 23.8 | |
| **VSU** | **Vasula** | **0.86** | **190** | *e*P | **Pg** | **08 58 12.9** | **-0.2** |
| VSU | | | | *e*S | **Sg** | **08 58 23.6** | **-0.6** |
| **VSU** | **Vasula** | **0.86** | **190** | P | **Pg** | **08 58 12.9** | **-0.2** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **VSU** | **Vasula** | **0.86** | **190** | Pg | **Pg** | **08 58 13.3** | **+0.2** |
| VSU | | | | S | **Sg** | **08 58 23.6** | **-0.6** |
| VSU | | | | Lg | Lg | 08 58 23.8 | |
| | SNR=92 | | | | | | |
| **VJF** | **Virojoki** | **1.27** | **12** | *eP* | **Pg** | **08 58 19.7** | **-1.2** |
| VJF | | | | *eSB* | **Sg** | **08 58 37.1** | **-0.2** |
| **VJF** | **Virojoki** | **1.27** | **12** | P | **Pg** | **08 58 19.7** | **-1.2** |
| VJF | | | | Sb | **Sg** | **08 58 37.1** | **-0.2** |
| **SRPE** | **Suurupi** | **1.36** | **278** | *eP* | **Pg** | **08 58 22.4** | **-0.2** |
| SRPE | | | | *eS* | **Sg** | **08 58 40.7** | **+0.4** |
| **SRPE** | **Suurupi** | **1.36** | **278** | P | **Pg** | **08 58 22.4** | **-0.2** |
| SRPE | | | | S | **Sg** | **08 58 40.6** | **+0.4** |
| **PVF** | **Pernaja** | **1.37** | **335** | *eP* | **Pg** | **08 58 22.5** | **-0.5** |
| PVF | | | | MSG | | 08 58 39.3 | |
| | comp=Z,8.5nm,0.2s | | | | | | |
| PVF | | | | *eS* | **Sg** | **08 58 40.5** | **-0.3** |
| **PVF** | **Pernaja** | **1.37** | **335** | P | **Pg** | **08 58 22.5** | **-0.5** |
| PVF | | | | S | **Sg** | **08 58 40.4** | **-0.3** |
| **MEF** | **Metsahovi** | **1.61** | **306** | *eP* | **Pb** | **08 58 27.1** | **-0.2** |
| MEF | | | | *eSG* | **Sg** | **08 58 48.7** | **+0.4** |
| **MEF** | **Metsahovi** | **1.61** | **306** | P | **Pb** | **08 58 27.0** | **-0.2** |
| MEF | | | | Sg | **Sg** | **08 58 48.7** | **+0.4** |
| **MTSE** | **Matsula** | **1.76** | **252** | *ePG* | **Pb** | **08 58 29.8** | **0.0** |
| MTSE | | | | *eSN* | **Sg** | **08 58 53.4** | **+0.3** |
| **MTSE** | **Matsula** | **1.76** | **252** | Pg | **Pb** | **08 58 29.8** | **0.0** |
| MTSE | | | | Sn | **Sg** | **08 58 53.4** | **+0.3** |
| **FIA0** | **FINESS Array S** | **2.19** | **348** | Pn | **Pn** | **08 58 35.0** | **+0.6** |
| | baz=164,slow=18 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **08 59 02.9** | **+0.7** |
| | baz=170,slow=28 | | | | | | |
| FIA0 | | | | Lg | Lg | 08 59 06.0 | |
| | baz=170,slow=37 | | | | | | |
| FIA0 | | | | Rg | Rg | 08 59 18.4 | |
| | baz=168,slow=37 | | | | | | |
| **FIA0** | **FINESS Array S** | **2.19** | **348** | Pn | **Pn** | **08 58 35.0** | **+0.6** |
| | baz=164,slow=18 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **08 59 02.9** | **+0.7** |
| | baz=170,slow=28 | | | | | | |
| FIA0 | | | | Lg | Lg | 08 59 06.0 | |
| | baz=170,slow=37 | | | | | | |
| FIA0 | | | | Rg | Rg | 08 59 18.4 | |
| | baz=168,slow=37 | | | | | | |
| **FIA0** | **FINESS Array S** | **2.19** | **348** | *eP* | **Pn** | **08 58 35.0** | **+0.6** |
| FIA0 | | | | *eS* | **Sn** | **08 59 02.9** | **+0.7** |
| FIA0 | | | | *eSG* | **Sb** | **08 59 05.5** | **+0.6** |
| FIA0 | | | | MSG | | 08 59 06.9 | |
| | comp=Z,2.3nm,0.1s | | | | | | |
| **FIA0** | **FINESS Array S** | **2.19** | **348** | P | **Pn** | **08 58 34.9** | **+0.6** |
| FIA0 | | | | S | **Sn** | **08 59 02.9** | **+0.7** |
| FIA0 | | | | Sg | **Sb** | **08 59 05.5** | **+0.6** |
| FIA0 | | | | Lg | Lg | 08 59 06.0 | |
| | SNR=2.0 | | | | | | |
| **KAF** | **Kangasniemi** | **2.84** | **353** | *eP* | **Pn** | **08 58 44.6** | **+1.4** |
| KAF | | | | *eS* | **Sn** | **08 59 18.9** | **+0.9** |
| KAF | | | | MSG | | 08 59 21.0 | |
| | comp=Z,2.0nm,0.2s | | | | | | |
| **KAF** | **Kangasniemi** | **2.84** | **353** | P | **Pn** | **08 58 44.6** | **+1.4** |
| KAF | | | | S | **Sn** | **08 59 18.9** | **+0.9** |
| **KEF** | **Keuruu** | **3.06** | **341** | MSG | | 08 59 27.7 | |
| | comp=Z,1.6nm,0.2s | | | | | | |
| KEF | | | | *eSG* | **Sb** | **08 59 32.0** | **+2.3** |
| **RAF** | **Rauma** | **3.14** | **306** | *eP* | **Pn** | **08 58 49.7** | **+2.3** |
| RAF | | | | MSG | | 08 59 30.8 | |
| | comp=Z,2.8nm,0.2s | | | | | | |
| **RAF** | **Rauma** | **3.14** | **306** | P | **Pn** | **08 58 49.6** | **+2.3** |
| **SUF** | **Sumiainen** | **3.45** | **353** | *eP* | **Pn** | **08 58 52.6** | **+1.0** |
| **SUF** | **Sumiainen** | **3.45** | **353** | P | **Pn** | **08 58 52.6** | **+1.0** |
| **JOF** | **Joensuu** | **4.18** | **28** | *eP* | **Pn** | **08 59 02.8** | **+1.1** |
| **JOF** | **Joensuu** | **4.18** | **28** | P | **Pn** | **08 59 02.7** | **+1.1** |
| **HFS** | **Hagfors** | **6.79** | **283** | Sn | **Sn** | **09 00 50.6** | **-4.7** |
| | baz=98,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 09 01 27.7 | |
| | baz=108,slow=28 | | | | | | |
| **HFS** | **Hagfors** | **6.79** | **283** | Sn | **Sn** | **09 00 50.6** | **-4.7** |
| | baz=98,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 09 01 27.7 | |
| | baz=108,slow=28 | | | | | | |
| **ARA0** | **ARCESS Array S** | **10.29** | **357** | Pn | **Pn** | **09 00 23.5** | **-1.9** |
| | baz=175,slow=12 | | | | | | |
| **ARA0** | **ARCESS Array S** | **10.29** | **357** | Pn | **Pn** | **09 00 23.5** | **-1.9** |
| | baz=175,slow=12 | | | | | | |

*IDC **21** 08:59:01.8±0.9,34.84S×73.78W,h0km,mb3.8/5, mb1 3.9/7,mb1mx3.7/24,mbtmp3.7/7,ML3.3/2,MS3.9/2, Ms1 3.9/2,ms1mx3.0/25,Error ellipse: s-maj=38.9km s-min=21.1km az=103.0*

*ISCJB **21** 08:59:05.3±0.8,34.67S±0.07×73.83W±0.06,h33km, mb3.8/5,MS3.8/2,Error ellipse: s-maj=9.6km s-min=7.4km az=168.9*

*NEIC **21** 08:59:05.0,34.69S×73.79W,h27km,ML4.0(GUC),After GUC.*

*GUC **21** 08:59:05.4±0.4,34.69S×73.79W,h27km±3km,ML4.0*

**ISC 21 08:59:07.0±0.9,34.72S±0.08×73.79W±0.09,h35km,n16, σ0s70/20,mb3.8/5,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **1.51** | **78** | *eP* | **Pn** | **08 59 30.4** | **-1.1** |
| CHPI | | | | *eS* | **Sn** | **08 59 49.4** | **-0.7** |
| **TALC** | **Talca** | **1.89** | **112** | *eP* | **Pn** | **08 59 36.8** | **0.0** |
| TALC | | | | *eS* | **Sn** | **09 00 00.6** | **+1.1** |
| **NICH** | **Los Niches** | **2.12** | **98** | *eP* | **Pn** | **08 59 39.8** | **-0.2** |
| NICH | | | | *eS* | **Sn** | **09 00 06.3** | **+1.1** |
| **CLCH** | **Cerro Calan** | **3.01** | **65** | *eP* | **Pn** | **08 59 51.8** | **-0.5** |
| CLCH | | | | *eS* | **Sn** | **09 00 27.3** | **+0.2** |
| CLCH | | | | AML | AML | 09 00 32.2 | |
| | comp=N,281nm,0.4s | | | | | | |
| **PEL** | **Peldehue** | **3.02** | **60** | *eP* | **Pn** | **08 59 52.4** | **0.0** |
| PEL | | | | *eS* | **Sn** | **09 00 27.8** | **+0.4** |
| PEL | | | | AML | AML | 09 00 30.7 | |
| | comp=N,606nm,0.3s | | | | | | |
| **CFAA** | **Coronel Fontan** | **5.60** | **58** | Pn | **Pn** | **09 00 28.4** | **+0.6** |
| | comp=N,0.5nm,0.3s,baz=231,slow=12,SNR=59 | | | | | | |
| CFAA | | | | Sn | **Sn** | **09 01 30.8** | **-0.2** |
| | comp=N,0.4nm,0.3s,baz=281,slow=10,SNR=5.8 | | | | | | |
| **LPAZ** | **La Paz** | **19.05** | **17** | P | **Pn** | **09 03 27.5** | **-0.3** |
| | comp=N,0.1nm,0.3s,baz=190,slow=5.9,SNR=5.5 | | | | | | |
| **USHA** | **Ushuaia** | **20.45** | **171** | LR | LR | 09 11 52.7 | |
| | comp=N,248nm,22.0s,baz=228,slow=38 | | | | | | |
| **SIV** | **San Ignacio** | **21.87** | **35** | P | **P** | **09 03 57.4** | **+0.5** |
| | comp=N,2.5nm,0.9s,baz=230,slow=6.9,SNR=5.7 | | | | | | |
| **QSPA** | **South Pole Qui** | **55.52** | **180** | P | **P** | **09 08 37.7** | **-0.7** |
| | comp=N,2.7nm,1.0s,baz=136,slow=6.7,SNR=6.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.68** | **332** | P | **P** | **09 10 14.4** | **+1.3** |
| | comp=N,0.6nm,0.7s,baz=154,slow=9.1,SNR=7.3 | | | | | | |
| **MAW** | **Mawson** | **72.89** | **164** | P | **P** | **09 10 32.0** | **0.0** |
| | comp=N,0.8nm,0.7s,baz=219,slow=14,SNR=3.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.66** | **326** | LR | LR | 09 45 01.4 | |
| | comp=N,87nm,18.9s,baz=228,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **85.82** | **71** | P | **P** | **09 11 42.8** | **-0.4** |
| | comp=N,0.6nm,1.1s,baz=235,slow=6.5,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **119.42** | **211** | PKP | **PKPdf** | **09 17 52.5** | **-0.8** |
| | comp=N,0.4nm,0.8s,baz=139,slow=1.3,SNR=3.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **148.79** | **43** | PKPbc | **PKPbc** | **09 18 50.1** | **-0.1** |
| | comp=N,0.9nm,0.7s,baz=298,slow=3.2,SNR=3.7 | | | | | | |

*ISCJB **21** 09:18:55.4±0.4,59.83N±0.03×23.44E±0.04,h0km,Error ellipse: s-maj=3.9km s-min=3.1km az=154.0*

*HEL **21** 09:18:57.6±0.1,59.81N×23.34E,h0km,ML2.3, ML2.1(UPP),Explosion*

*CSEM **21** 09:18:57.2±0.3,59.89N×23.44E,h2km,ML2.3,Error ellipse: s-maj=8.6km s-min=5.7km az=168.0,Mining explosion.*

*NAO **21** 09:18:58.1±1.0,59.81N×23.36E,ML2.4*

*IDC **21** 09:18:59.7±1.8,60.01N×23.12E,h0km,mb1 3.5/4, mb1mx3.2/45,mbtmp3.4/4,ML3.3/4,Error ellipse: s-maj=25.6km s-min=6.6km az=155.0*

*BER **21** 09:18:59.0±4.5,59.79N×23.29E,h0km,ML2.4(NAO), Suspected explosion*

*UPP **21** 09:19:00.1,59.86N×23.02E,h0km,ML2.1,Suspected Mining explosion.*

**ISC 21 09:18:56.5±0.7,59.82N±0.03×23.22E±0.02,h0km,n69, σ1s64/89,Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MEF** | **Metsahovi** | **0.71** | **55** | *ePB* | **Pg** | **09 19 10.5** | **+0.4** |
| | baz=230 | | | | | | |
| MEF | | | | *eS* | **Sg** | **09 19 19.9** | **+0.5** |
| **MEF** | **Metsahovi** | **0.71** | **55** | Pb | **Pg** | **09 19 10.5** | **+0.4** |
| MEF | | | | S | **Sg** | **09 19 19.8** | **+0.5** |
| **MTSE** | **Matsula** | **1.15** | **164** | *eP* | **Pg** | **09 19 17.8** | **-0.7** |
| MTSE | | | | *eS* | **Sg** | **09 19 31.4** | **-2.0** |
| **RAF** | **Rauma** | **1.41** | **330** | *ePG* | **Pn** | **09 19 23.8** | **+0.4** |
| | baz=149 | | | | | | |
| RAF | | | | MSG | | 09 19 40.3 | |
| | comp=Z,28nm,0.2s | | | | | | |
| **RAF** | **Rauma** | **1.41** | **330** | Pg | **Pn** | **09 19 23.7** | **+0.4** |
| **PVF** | **Pernaja** | **1.51** | **60** | *ePN* | **Pn** | **09 19 24.6** | **-0.2** |
| PVF | | | | MSG | | 09 19 42.1 | |
| | comp=Z,43nm,0.2s | | | | | | |
| **PVF** | **Pernaja** | **1.51** | **60** | Pn | **Pn** | **09 19 24.5** | **-0.2** |
| **AAL** | **Aland** | **1.66** | **284** | *eP* | **Pn** | **09 19 27.9** | **+1.0** |
| | baz=101 | | | | | | |
| AAL | | | | *eSG* | **Sg** | **09 19 50.5** | **+0.7** |
| **AAL** | **Aland** | **1.66** | **284** | P | **Pn** | **09 19 27.8** | **+1.0** |
| AAL | | | | Sg | **Sg** | **09 19 50.5** | **+0.7** |
| **FIA0** | **FINESS Array S** | **2.15** | **40** | Pn | **Pb** | **09 19 36.1** | **-0.2** |
| | baz=214,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 09 20 03.7 | |
| | baz=224,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **2.15** | **40** | Pn | **Pb** | **09 19 36.1** | **-0.2** |
| | baz=214,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 09 20 03.7 | |
| | baz=224,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **2.15** | **40** | *ePG* | **Pb** | **09 19 35.5** | **-0.8** |
| | baz=221 | | | | | | |
| FIA0 | | | | *eSG* | **Sb** | **09 20 03.7** | **+0.2** |
| **FIA0** | **FINESS Array S** | **2.15** | **40** | Pg | **Pb** | **09 19 35.5** | **-0.8** |
| **FIA0** | **FINESS Array S** | **2.15** | **40** | Pn | **Pb** | **09 19 36.1** | **-0.2** |
| | SNR=50 | | | | | | |
| FIA0 | | | | Lg | Lg | 09 20 03.7 | |
| | SNR=50 | | | | | | |
| **FINES** | **FINESS Array B** | **2.15** | **40** | Pn | **Pb** | **09 19 36.0** | **-0.2** |
| | comp=Z,18nm,0.3s,baz=223,slow=16,SNR=496 | | | | | | |
| FINES | | | | Lg | Lg | 09 20 03.5 | |
| | comp=Z,13nm,0.3s,baz=230,slow=27,SNR=35 | | | | | | |
| **VSU** | **Vasula** | **2.27** | **125** | Pn | **Pn** | **09 19 37.0** | **+1.8** |
| VSU | | | | Lg | Lg | 09 20 06.2 | |
| **VSU** | **Vasula** | **2.27** | **125** | Pn | **Pn** | **09 19 37.0** | **+1.8** |
| VSU | | | | Lg | Lg | 09 20 06.2 | |
| **VSU** | **Vasula** | **2.27** | **125** | *ePG* | **Pb** | **09 19 37.7** | **-0.6** |
| VSU | | | | *eSG* | **Sb** | **09 20 06.2** | **-0.6** |
| **VSU** | **Vasula** | **2.27** | **125** | Pn | **Pn** | **09 19 37.0** | **+1.8** |
| | SNR=50 | | | | | | |
| **VSU** | **Vasula** | **2.27** | **125** | Pg | **Pb** | **09 19 37.6** | **-0.6** |
| VSU | | | | Sg | **Sb** | **09 20 06.2** | **-0.6** |
| **VJF** | **Virojoki** | **2.28** | **70** | *ePB* | **Pn** | **09 19 36.1** | **+0.7** |
| VJF | | | | MSG | | 09 20 04.4 | |
| | comp=Z,25nm,0.2s | | | | | | |
| VJF | | | | *eSG* | **Sb** | **09 20 08.2** | **+1.0** |
| **VJF** | **Virojoki** | **2.28** | **70** | Pb | **Pn** | **09 19 36.1** | **+0.7** |
| **NRTU** | **Norrtaelje** | **2.33** | **268** | *eP* | **Pn** | **09 19 38.2** | **+2.2** |
| NRTU | | | | *eS* | **Sb** | **09 20 08.0** | **-0.5** |
| **NRTU** | **Norrtaelje** | **2.33** | **268** | P | **Pn** | **09 19 38.2** | **+2.2** |
| NRTU | | | | S | **Sb** | **09 20 08.0** | **-0.5** |
| **KEF** | **Keuruu** | **2.49** | **18** | *ePG* | **Pb** | **09 19 41.7** | **-0.4** |
| | baz=201 | | | | | | |
| KEF | | | | MSG | | 09 20 10.9 | |
| | comp=Z,10nm,0.2s | | | | | | |
| KEF | | | | *eSG* | **Sb** | **09 20 14.6** | **+1.4** |
| **KEF** | **Keuruu** | **2.49** | **18** | Pg | **Pb** | **09 19 41.6** | **-0.4** |
| **FORU** | **Forsmark** | **2.59** | **285** | *eP* | **Pb** | **09 19 43.2** | **-0.5** |
| **FORU** | **Forsmark** | **2.59** | **285** | P | **Pb** | **09 19 43.2** | **-0.5** |
| **FLYU** | **Flymyra** | **2.70** | **279** | *eP* | **Pn** | **09 19 43.6** | **+2.5** |
| **FLYU** | **Flymyra** | **2.70** | **279** | P | **Pn** | **09 19 43.6** | **+2.5** |
| **KAF** | **Kangasniemi** | **2.75** | **32** | *ePB* | **Pb** | **09 19 45.2** | **-1.3** |
| | baz=219 | | | | | | |
| KAF | | | | MSG | | 09 20 18.4 | |
| | comp=Z,14nm,0.2s | | | | | | |
| KAF | | | | *eSG* | **Sb** | **09 20 21.2** | **+0.5** |
| **KAF** | **Kangasniemi** | **2.75** | **32** | Pb | **Pb** | **09 19 45.2** | **-1.3** |
| **OSTU** | **Oestervaala** | **3.08** | **280** | *eP* | **Pn** | **09 19 48.1** | **+1.7** |
| **OSTU** | **Oestervaala** | **3.08** | **280** | P | **Pn** | **09 19 48.1** | **+1.7** |
| **BACU** | **Backbrunna** | **3.09** | **273** | *eP* | **Pn** | **09 19 47.8** | **+1.4** |
| **BACU** | **Backbrunna** | **3.09** | **273** | P | **Pn** | **09 19 47.8** | **+1.4** |
| **IGGU** | **Iggoen** | **3.12** | **292** | *eP* | **Pn** | **09 19 48.8** | **+1.9** |
| **IGGU** | **Iggoen** | **3.12** | **292** | P | **Pn** | **09 19 48.7** | **+1.9** |
| **SUF** | **Sumiainen** | **3.23** | **25** | *ePB* | **Pn** | **09 19 51.7** | **+3.2** |
| | baz=209 | | | | | | |
| SUF | | | | *eSB* | **Sb** | **09 20 33.5** | **-1.2** |
| **SUF** | **Sumiainen** | **3.23** | **25** | Pb | **Pn** | **09 19 51.6** | **+3.2** |
| **VAF** | **Ylistaro** | **3.25** | **356** | *ePB* | **Pb** | **09 19 52.8** | **-2.1** |
| VAF | | | | *eSB* | **Sb** | **09 20 35.8** | **+0.9** |
| **VAF** | **Ylistaro** | **3.25** | **356** | Pb | **Pb** | **09 19 52.8** | **-2.1** |
| **ARNU** | **Arnoeviken** | **3.43** | **306** | *eP* | **Pn** | **09 19 53.1** | **+2.0** |
| **ARNU** | **Arnoeviken** | **3.43** | **306** | P | **Pn** | **09 19 53.1** | **+2.0** |
| **ESKU** | **Eskilstuna** | **3.53** | **263** | *eP* | **Pn** | **09 19 54.4** | **+1.9** |
| **ESKU** | **Eskilstuna** | **3.53** | **263** | P | **Pn** | **09 19 54.4** | **+1.9** |
| **HUDU** | **Hudiksvall** | **3.56** | **305** | *eP* | **Pn** | **09 19 54.7** | **+1.8** |
| **HUDU** | **Hudiksvall** | **3.56** | **305** | P | **Pn** | **09 19 54.6** | **+1.8** |
| **VIKU** | **Vikbolandet** | **3.61** | **251** | *eP* | **Pn** | **09 19 56.7** | **+3.1** |
| **VIKU** | **Vikbolandet** | **3.61** | **251** | P | **Pn** | **09 19 56.7** | **+3.1** |
| **FALU** | **Falun** | **3.75** | **284** | *eP* | **Pn** | **09 19 57.2** | **+1.6** |
| **FALU** | **Falun** | **3.75** | **284** | P | **Pn** | **09 19 57.2** | **+1.6** |
| **UMAU** | **Umeaa** | **4.25** | **345** | *eP* | **Pn** | **09 20 04.5** | **+2.0** |
| **UMAU** | **Umeaa** | **4.25** | **345** | P | **Pn** | **09 20 04.4** | **+2.0** |
| **HFS** | **Hagfors** | **4.80** | **278** | Pn | **Pn** | **09 20 12.0** | **+2.1** |
| | baz=93,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **09 21 07.7** | **+1.6** |
| | baz=89,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 09 21 24.9 | |
| | baz=113,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **4.80** | **278** | Pn | **Pn** | **09 20 12.0** | **+2.1** |
| | baz=93,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **09 21 07.7** | **+1.6** |
| | baz=89,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 09 21 24.9 | |
| | baz=113,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **4.80** | **278** | Pn | **Pn** | **09 20 12.1** | **+2.2** |
| | comp=Z,0.9nm,0.3s,baz=95,slow=13,SNR=27 | | | | | | |
| HFS | | | | Lg | Lg | 09 21 24.8 | |
| | comp=Z,2.4nm,0.3s,baz=84,slow=31,SNR=9.7 | | | | | | |
| **HFS** | **Hagfors** | **4.80** | **278** | Pn | **Pn** | **09 20 12.0** | **+2.1** |
| | SNR=50 | | | | | | |
| HFS | | | | Sn | **Sn** | **09 21 07.7** | **+1.6** |
| | SNR=50 | | | | | | |
| HFS | | | | Lg | Lg | 09 21 24.9 | |
| | SNR=50 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.07** | **287** | Pn | **Pn** | **09 20 27.8** | **+0.3** |
| | baz=99,slow=12 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.07** | **287** | Pn | **Pn** | **09 20 27.8** | **+0.3** |
| | baz=99,slow=12 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.07** | **287** | Pn | **Pn** | **09 20 27.8** | **+0.3** |
| | SNR=50 | | | | | | |
| **NOA** | **NORSAR Array B** | **6.07** | **287** | Pn | **Pn** | **09 20 26.2** | **-1.3** |
| | comp=Z,0.7nm,0.3s,baz=92,slow=14,SNR=12 | | | | | | |
| **APA0** | **Apatity Array** | **8.92** | **25** | Pn | **Pn** | **09 21 08.4** | **+2.0** |
| | baz=197,slow=16 | | | | | | |
| **APA0** | **Apatity Array** | **8.92** | **25** | Pn | **Pn** | **09 21 08.4** | **+2.0** |
| | baz=197,slow=16 | | | | | | |
| **APA0** | **Apatity Array** | **8.92** | **25** | Pn | **Pn** | **09 21 08.4** | **+2.0** |
| | SNR=0.5 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.80** | **5** | Pn | **Pn** | **09 21 18.5** | **0.0** |
| | baz=179,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **09 23 04.8** | **-4.3** |
| | baz=186,slow=28 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.80** | **5** | Pn | **Pn** | **09 21 18.5** | **0.0** |
| | baz=179,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **09 23 04.8** | **-4.3** |
| | baz=186,slow=28 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.80** | **5** | Pn | **Pn** | **09 21 18.5** | **0.0** |
| | SNR=50 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.80** | **5** | Pn | **Pn** | **09 21 18.4** | **-0.2** |
| | comp=Z,0.8nm,0.3s,baz=183,slow=14,SNR=58 | | | | | | |

**IDC 21 09:21:01.6±2.8,13.06N×92.95W,h0km,mb3.6/2, mb1 3.7/4,mb1mx3.4/37,mbtmp3.3/4,ML3.3/2,Error ellipse: s-maj=97.3km s-min=31.7km az=54.0,Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMIG** | **Matias Romero** | **4.42** | **335** | Pn | Pn | 09 22 09.9 | -0.1 |
| | 0.7nm,0.3s,baz=113,slow=7.3,SNR=9.0 | | | | | | |
| CMIG | | | | Lg | Lg | 09 23 22.2 | |
| | 5.1nm,0.3s,baz=198,slow=20,SNR=8.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **19.01** | **330** | P | P | 09 25 25.2 | +0.1 |
| | 0.0nm,0.3s,baz=149,slow=11,SNR=4.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **33.84** | **323** | P | P | 09 27 46.0 | -0.1 |
| | 0.3nm,0.7s,baz=128,slow=12,SNR=2.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **85.41** | **28** | P | P | 09 33 40.8 | -0.1 |
| | 0.7nm,0.8s,baz=308,slow=5.1,SNR=3.3 | | | | | | |

**IDC 21 09:31:23.7±4.5,21.91S×178.70W,h0km,mb3.2/3, mb1 3.6/3,mb1mx3.4/21,mbtmp3.2/3,Error ellipse: s-maj=299.0km s-min=31.5km az=156.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **43.58** | **258** | P | P | 09 39 29.4 | -0.5 |
| | 0.1nm,0.4s,baz=97,slow=7.5,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.78** | **264** | P | P | 09 39 31.6 | +0.1 |
| | 0.1nm,0.3s,baz=100,slow=8.2,SNR=11 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.50** | **44** | P | P | 09 43 48.6 | 0.0 |
| | 0.2nm,0.6s,baz=214,slow=6.4,SNR=3.1 | | | | | | |

*DDA **21** 09:35:21.5,37.26N×28.23E,h7km,Md2.6*

*ISK **21** 09:35:21.3,37.26N×28.23E,h2km,MD2.6*

*ISCJB **21** 09:35:22.9±0.6,37.19N±0.05×28.18E±0.05,h0km,Error ellipse: s-maj=8.3km s-min=3.6km az=33.6*

*CSEM **21** 09:35:23.0±0.2,37.17N×28.19E,h1km,MD2.6,Error ellipse: s-maj=5.9km s-min=2.7km az=28.0,Mining explosion.*

**ISC 21 09:35:22.1±1.1,37.26N±0.06×28.23E±0.04,h0km,n14, σ0s47/23,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.13** | **163** | *ePG* | **Pg** | **09 35 24.8** | **+0.2** |
| YER | | | | *eSG* | **Sg** | **09 35 26.9** | **+0.5** |
| **YER** | **Yerkesik** | **0.13** | **163** | *ePg* | **Pg** | **09 35 24.8** | **+0.2** |
| YER | | | | *eSg* | **Sg** | **09 35 26.9** | **+0.5** |
| **AYDN** | **Tasoluk** | **0.49** | **325** | *i* P | **Pb** | **09 35 33.6** | **0.0** |
| AYDN | | | | *i* S | **Sb** | **09 35 41.2** | **-0.2** |
| **AYDN** | **Tasoluk** | **0.49** | **325** | P | **Pb** | **09 35 33.6** | **0.0** |
| AYDN | | | | S | **Sb** | **09 35 41.1** | **-0.2** |
| **TURN** | **Turunc** | **0.49** | **143** | *i* P | **Pg** | **09 35 31.0** | **-0.5** |
| TURN | | | | *i* S | **Sg** | **09 35 38.2** | **+0.5** |
| **TURN** | **Turunc** | **0.49** | **143** | P | **Pg** | **09 35 31.0** | **-0.5** |
| TURN | | | | S | **Sg** | **09 35 38.2** | **+0.5** |
| **DALY** | **Dalyan (Mu¨la** | **0.56** | **143** | *ePG* | **Pg** | **09 35 33.1** | **+0.3** |
| DALY | | | | *eSG* | **Sb** | **09 35 41.9** | **-1.3** |
| **DALY** | **Dalyan (Mu¨la** | **0.56** | **143** | *ePg* | **Pg** | **09 35 33.1** | **+0.3** |
| **BDRM** | **Kayabasi** | **0.66** | **253** | *i* P | **Pg** | **09 35 34.3** | **-0.5** |
| BDRM | | | | *i* S | **Sg** | **09 35 43.8** | **+0.5** |
| **BDRM** | **Kayabasi** | **0.66** | **253** | P | **Pg** | **09 35 34.3** | **-0.5** |
| BDRM | | | | S | **Sg** | **09 35 43.8** | **+0.5** |
| **BODT** | **Bodrum** | **0.76** | **255** | *ePG* | **Pg** | **09 35 36.9** | **+0.2** |
| **BODT** | **Bodrum** | **0.76** | **255** | *ePg* | **Pg** | **09 35 36.9** | **+0.2** |
| **FETY** | **Fethiye** | **0.93** | **132** | *ePG* | **Pg** | **09 35 39.9** | **+0.1** |
| **FETY** | **Fethiye** | **0.93** | **132** | *ePg* | **Pg** | **09 35 39.9** | **+0.1** |

*NNC **21** 09:42:42.5±2.9,53.40N×87.27E,h0km,mb4.0,mpv3.7, Error ellipse: s-maj=22.3km s-min=17.9km az=16.0*

**IDC 21 09:42:39.4±2.7,53.51N×87.56E,h0km,mb1 3.7/3, mb1mx3.3/57,mbtmp3.7/3,ML3.5/3,5C-4D,Error ellipse: s-maj=25.7km s-min=12.6km az=63.0,Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I46RU** | **ZALESOVO INFRA** | **1.69** | **286** | *i* | | 09 55 15.3 | |
| | baz=100,slow=340,SNR=5.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **1.69** | **286** | Pg | Pn | 09 43 09.0 | -1.1 |
| | 12nm,0.3s,baz=101,slow=18,SNR=85 | | | | | | |
| ZALV | | | | Lg | Lg | 09 43 32.0 | |
| | 3.0nm,0.3s,baz=99,slow=27,SNR=3.5 | | | | | | |
| **KURK** | **Kurchatov** | **6.18** | **247** | ⇓Pn | Pn | 09 44 12.1 | +0.4 |
| | 2.9nm,0.4s | | | | | | |
| KURK | | | | ⇑Sn | Sn | 09 45 21.2 | -1.8 |
| | 6.6nm,0.6s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 09 45 55.4 | |
| | 18nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.27** | **246** | ⇓Pn | Pn | 09 44 13.8 | +0.7 |
| | 6.9nm,0.4s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 09 45 24.8 | -0.6 |
| | 7.7nm,0.6s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 09 45 58.5 | |
| | 24nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **6.27** | **246** | Pn | Pn | 09 44 13.9 | +0.8 |
| | 0.6nm,0.3s,baz=62,slow=14,SNR=21 | | | | | | |
| **MK31** | **Makanchi Array** | **7.52** | **209** | ⇑Pn | Pn | 09 44 31.4 | +1.0 |
| | 0.9nm,0.5s,baz=31,slow=14,SNR=9.2 | | | | | | |
| MK31 | | | | ⇓Sn | Sn | 09 45 56.1 | -0.3 |
| | 1.4nm,0.6s,baz=29,slow=26,SNR=3.8 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 09 46 37.3 | |
| | 5.6nm,0.7s,baz=38,slow=29,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.52** | **209** | Pn | Pn | 09 44 31.2 | +0.9 |
| | 1.0nm,0.3s,baz=25,slow=12,SNR=14 | | | | | | |
| MKAR | | | | Sn | Sn | 09 45 55.1 | -1.2 |
| | 0.5nm,0.3s,baz=30,slow=27,SNR=7.3 | | | | | | |
| MKAR | | | | Lg | Lg | 09 46 36.2 | |
| | 0.2nm,0.3s,baz=30,slow=29,SNR=4.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **10.30** | **274** | Pn | Pn | 09 45 08.4 | +0.1 |
| | 0.5nm,0.3s,baz=80,slow=16,SNR=4.2 | | | | | | |
| BVAR | | | | Sn | Sn | 09 46 59.1 | -5.3 |
| | 0.6nm,0.3s,baz=79,slow=23,SNR=7.9 | | | | | | |

**GUC 21 09:44:10.2±0.5,34.75S×72.59W,h11km±6km,ML4.1, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.60** | **53** | *eP* | Pg |

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BLCB | | | | | *e*Sg | **Sg** | 09 49 14.2 | -0.3 | **PLG** | **Polygyros** | **2.52 308** | P | **Pn** | 09 49 26.0 | -0.1 |
| **BOZC** | **Bozcaada** | **0.98** | **0** | P | **Pg** | 09 49 03.0 | -1.0 | **PLG** | **Polygyros** | **2.52 308** | P | **Pn** | 09 49 26.0 | -0.1 |
| BOZC | | | | P | **Pg** | 09 49 03.1 | -1.0 | **PLG** | **Polygyros** | **2.52 308** | *e*Pb | **Pn** | 09 49 26.3 | +0.2 |
| BOZC | | | | S | **Sg** | 09 49 16.8 | 0.0 | **SANT** | **Santorini** | **2.53 191** | *e*PN | **Pn** | 09 49 25.1 | -1.2 |
| BOZC | | | | S | **Sg** | 09 49 16.8 | 0.0 | **SANT** | **Santorini** | **2.53 191** | *e*Pn | **Pn** | 09 49 25.1 | -1.2 |
| **EZN** | **Ezine** | **0.99** | **12** | *e*PG | **Pg** | 09 49 03.1 | -1.1 | **MHLO** | **Agia Marina, M** | **2.53 212** | *e*PN | **Pn** | 09 49 25.0 | -1.2 |
| EZN | | | | *e*SG | **Sg** | 09 49 16.8 | -0.2 | **MHLO** | **Agia Marina, M** | **2.53 212** | P | **Pn** | 09 49 25.1 | -1.2 |
| **EZN** | **Ezine** | **0.99** | **12** | *e*Pg | **Pg** | 09 49 03.1 | -1.1 | **MHLO** | **Agia Marina, M** | **2.53 212** | P | **Pn** | 09 49 25.1 | -1.2 |
| EZN | | | | *e*Sg | **Sg** | 09 49 16.8 | -0.2 | **DENT** | **Denizli** | **2.59 114** | *e*PN | **Pn** | 09 49 26.8 | -0.4 |
| **IZM** | **Izmir** | **1.06** | **116** | *e*PG | **Pg** | 09 49 04.3 | -1.2 | **DENT** | **Denizli** | **2.59 114** | *e*Pn | **Pn** | 09 49 26.8 | -0.4 |
| **IZM** | **Izmir** | **1.06** | **116** | *e*Pg | **Pg** | 09 49 04.3 | -1.2 | **DID** | **Didima** | **2.60 240** | P | **Pn** | 09 49 26.6 | -0.6 |
| **LIA** | **Limnos Island** | **1.23** | **327** | *e*PN | **Pn** | 09 49 07.8 | -0.7 | **CRLT** | **Corlu** | **2.61 29** | *e*PN | **Pn** | 09 49 27.6 | +0.2 |
| LIA | | | | *e*SN | **Sb** | 09 49 24.2 | -0.3 | **CRLT** | **Corlu** | **2.61 29** | *e*Pn | **Pn** | 09 49 27.6 | +0.2 |
| **LIA** | **Limnos Island** | **1.23** | **327** | P | **Pn** | 09 49 07.7 | -0.7 | **DNZL** | **Cakiroluk** | **2.63 115** | *i* P | **Pn** | 09 49 26.7 | -1.1 |
| LIA | | | | S | **Sn** | 09 49 25.8 | +0.7 | **DNZL** | **Cakiroluk** | **2.63 115** | P | **Pn** | 09 49 26.7 | -1.1 |
| **LIA** | **Limnos Island** | **1.23** | **327** | P | **Pn** | 09 49 07.7 | -0.7 | DNZL | | | S | **Sg** | 09 50 10.7 | +0.9 |
| LIA | | | | *e*Sn | **Sb** | 09 49 24.2 | -0.3 | **MDNY** | **Mudanya-Bursa** | **2.66 55** | *e*PN | **Pn** | 09 49 27.7 | -0.3 |
| LIA | | | | S | **Sn** | 09 49 25.8 | +0.7 | **MDNY** | **Mudanya-Bursa** | **2.66 55** | *e*Pn | **Pn** | 09 49 27.7 | -0.3 |
| **SMG** | **Samos** | **1.31** | **151** | *e*PN | **Pb** | 09 49 09.6 | -0.2 | **KDZ** | **Kurdzhali** | **2.83 350** | P | **Pn** | 09 49 29.8 | -0.6 |
| SMG | | | | *e*SN | **Sg** | 09 49 28.3 | +1.1 | **GEMT** | **Gemlik** | **2.89 56** | *e*PN | **Pn** | 09 49 31.6 | +0.4 |
| **SMG** | **Samos** | **1.31** | **151** | P | **Pn** | 09 49 07.8 | -1.6 | **GEMT** | **Gemlik** | **2.89 56** | *e*Pn | **Pn** | 09 49 31.6 | +0.4 |
| SMG | | | | S | **Sg** | 09 49 27.4 | +0.2 | **SLVT** | **Silivri** | **2.89 34** | *e*PN | **Pn** | 09 49 31.6 | +0.5 |
| **SMG** | **Samos** | **1.31** | **151** | P | **Pn** | 09 49 07.8 | -1.6 | **SLVT** | **Silivri** | **2.89 34** | *e*Pn | **Pn** | 09 49 31.7 | +0.5 |
| **SMG** | **Samos** | **1.31** | **151** | *e*Pn | **Pb** | 09 49 09.6 | -0.2 | **DALY** | **Dalyan (Mu˘la** | **2.90 134** | *e*PN | **Pn** | 09 49 32.1 | +0.8 |
| SMG | | | | S | **Sg** | 09 49 27.4 | +0.2 | **DALY** | **Dalyan (Mu˘la** | **2.90 134** | *e*Pn | **Pn** | 09 49 32.1 | +0.8 |
| SMG | | | | *e*Sn | **Sg** | 09 49 28.3 | +1.1 | **PHSR** | **Pinarhisar** | **2.99 22** | *e*PN | **Pn** | 09 49 32.2 | -0.4 |
| **GADA** | **Gvkgeada** | **1.33** | **355** | *e*PN | **Pn** | 09 49 08.8 | -1.0 | **PHSR** | **Pinarhisar** | **2.99 22** | *e*Pn | **Pn** | 09 49 32.2 | -0.4 |
| **GADA** | **Gvkgeada** | **1.33** | **355** | *e*Pn | **Pn** | 09 49 08.8 | -1.0 | **NVR** | **Nevrokopi** | **3.00 327** | *e*PN | **Pn** | 09 49 32.3 | -0.5 |
| **AKHS** | **Akhisar** | **1.38** | **89** | *i* P | **Pn** | 09 49 08.4 | -2.0 | **NVR** | **Nevrokopi** | **3.00 327** | P | **Pn** | 09 49 32.4 | -0.4 |
| **AKHS** | **Akhisar** | **1.38** | **89** | P | **Pn** | 09 49 08.4 | -2.0 | **NVR** | **Nevrokopi** | **3.00 327** | P | **Pn** | 09 49 32.4 | -0.4 |
| AKHS | | | | S | **Sg** | 09 49 30.4 | +1.0 | **RZN** | **Rozhen** | **3.00 341** | P | **Pn** | 09 49 32.8 | -0.1 |
| **AKS** | **Akhisar** | **1.38** | **89** | *e*PN | **Pn** | 09 49 09.1 | -1.3 | **RZN** | **Rozhen** | **3.00 341** | P | **Pn** | 09 49 32.8 | -0.1 |
| **AKS** | **Akhisar** | **1.38** | **89** | *e*Pn | **Pn** | 09 49 09.1 | -1.3 | **IZI** | **Iznik** | **3.03 60** | *e*PN | **Pn** | 09 49 33.2 | 0.0 |
| **GCAM** | **G?zelcaml?** | **1.49** | **141** | *i* P | **Pn** | 09 49 12.0 | +0.1 | **IZI** | **Iznik** | **3.03 60** | *e*Pn | **Pn** | 09 49 33.2 | 0.0 |
| GCAM | | | | *i* S | **Sg** | 09 49 33.8 | +0.8 | **EDRB** | **Edirne** | **3.03 10** | *e*PN | **Pn** | 09 49 32.8 | -0.4 |
| **GCAM** | **G?zelcaml?** | **1.49** | **141** | P | **Pn** | 09 49 12.0 | +0.1 | **EDRB** | **Edirne** | **3.03 10** | *e*Pn | **Pn** | 09 49 32.8 | -0.4 |
| GCAM | | | | S | **Sg** | 09 49 33.8 | +0.8 | **CTKS** | **Kestanelik-??a** | **3.03 38** | *e*PN | **Pn** | 09 49 33.2 | +0.1 |
| **BALY** | **Balya** | **1.50** | **54** | *i* P | **Pn** | 09 49 11.2 | -1.0 | **CTKS** | **Kestanelik-??a** | **3.03 38** | *e*Pn | **Pn** | 09 49 33.2 | +0.1 |
| BALY | | | | *i* S | **Sn** | 09 49 31.2 | -0.6 | **MAKR** | **Makrakomi, Fth** | **3.06 274** | *e*PB | **Pn** | 09 49 34.8 | +1.2 |
| **BALY** | **Balya** | **1.50** | **54** | P | **Pn** | 09 49 11.2 | -1.0 | **MAKR** | **Makrakomi, Fth** | **3.06 274** | *e*Pb | **Pn** | 09 49 34.8 | +1.2 |
| BALY | | | | S | **Sn** | 09 49 31.2 | -0.6 | **KALE** | **Kalithea** | **3.10 263** | *e*PN | **Pn** | 09 49 34.9 | +0.8 |
| **KARY** | **Karystos** | **1.51** | **237** | P | **Pn** | 09 49 11.1 | -1.1 | **KALE** | **Kalithea** | **3.10 263** | *e*Pn | **Pn** | 09 49 34.9 | +0.8 |
| KARY | | | | S | **Sg** | 09 49 33.3 | -0.5 | **ARG** | **Arkhangelos** | **3.11 147** | *e*PN | **Pn** | 09 49 35.7 | +1.4 |
| **GELI** | **Tayfur-Gelibol** | **1.57** | **12** | *e*PN | **Pn** | 09 49 12.3 | -0.7 | **ARG** | **Arkhangelos** | **3.11 147** | *e*Pn | **Pn** | 09 49 35.7 | +1.4 |
| **GELI** | **Tayfur-Gelibol** | **1.57** | **12** | *e*Pn | **Pn** | 09 49 12.3 | -0.7 | **BGKT** | **Bogazkoy** | **3.12 41** | *e*PN | **Pn** | 09 49 34.8 | +0.4 |
| **LPK** | **Lapseki** | **1.61** | **20** | *e*PN | **Pn** | 09 49 13.0 | -0.6 | **BGKT** | **Bogazkoy** | **3.12 41** | *e*Pn | **Pn** | 09 49 34.8 | +0.4 |
| **LPK** | **Lapseki** | **1.61** | **20** | *e*Pn | **Pn** | 09 49 13.0 | -0.6 | **KLV** | **Kalavryta, Ach** | **3.17 256** | *e*PN | **Pn** | 09 49 35.0 | -0.1 |
| **BALB** | **Balikesir** | **1.62** | **61** | *e*PN | **Pn** | 09 49 13.0 | -0.7 | **KLV** | **Kalavryta, Ach** | **3.17 256** | *e*Pn | **Pn** | 09 49 35.0 | -0.1 |
| **BALB** | **Balikesir** | **1.62** | **61** | *e*Pn | **Pn** | 09 49 13.0 | -0.7 | **ISK** | **Istanbul-Kandi** | **3.19 45** | *e*PN | **Pn** | 09 49 35.8 | +0.4 |
| **SMTH** | **Samothraki Isl** | **1.66** | **346** | *e*PB | **Pn** | 09 49 13.4 | -0.9 | **ISK** | **Istanbul-Kandi** | **3.19 45** | *e*Pn | **Pn** | 09 49 35.8 | +0.4 |
| SMTH | | | | *e*SN | **Sb** | 09 49 37.1 | +0.3 | **DIM** | **Dimitrovgrad** | **3.21 353** | P | **Pn** | 09 49 35.3 | -0.3 |
| **SMTH** | **Samothraki Isl** | **1.66** | **346** | P | **Pn** | 09 49 13.3 | -1.0 | **DIM** | **Dimitrovgrad** | **3.21 353** | P | **Pn** | 09 49 35.3 | -0.3 |
| SMTH | | | | S | **Sb** | 09 49 37.0 | +0.3 | **THL** | **Klokotos Trika** | **3.21 284** | *e*PN | **Pn** | 09 49 36.3 | +0.7 |
| **SMTH** | **Samothraki Isl** | **1.66** | **346** | *e*Pn | **Pn** | 09 49 13.4 | -0.9 | **THL** | **Klokotos Trika** | **3.21 284** | *e*Pn | **Pn** | 09 49 36.3 | +0.7 |
| SMTH | | | | S | **Sb** | 09 49 37.0 | +0.3 | **CAVI** | **Cavuskoy** | **3.23 64** | *e*PN | **Pn** | 09 49 35.8 | 0.0 |
| **EREA** | **Eretria** | **1.72** | **256** | *e*PN | **Pn** | 09 49 14.2 | -0.9 | **CAVI** | **Cavuskoy** | **3.23 64** | *e*Pn | **Pn** | 09 49 35.8 | 0.0 |
| **EREA** | **Eretria** | **1.72** | **256** | P | **Pn** | 09 49 14.2 | -0.9 | **LAKA** | **Lakka** | **3.25 260** | *e*PN | **Pn** | 09 49 36.2 | 0.0 |
| EREA | | | | S | **Sb** | 09 49 37.9 | -0.5 | **LAKA** | **Lakka** | **3.25 260** | *e*Pn | **Pn** | 09 49 36.2 | 0.0 |
| **EREA** | **Eretria** | **1.72** | **256** | P | **Pn** | 09 49 14.2 | -0.9 | **ADVT** | **Abdulvahap** | **3.25 60** | *e*PN | **Pn** | 09 49 36.4 | +0.2 |
| **GONE** | **Gonen-Balikesi** | **1.73** | **46** | *e*PN | **Pn** | 09 49 13.7 | -1.6 | **ADVT** | **Abdulvahap** | **3.25 60** | *e*Pn | **Pn** | 09 49 36.4 | +0.2 |
| **GONE** | **Gonen-Balikesi** | **1.73** | **46** | *e*Pn | **Pn** | 09 49 13.7 | -1.6 | **MMB** | **Musomiste** | **3.25 328** | P | **Pn** | 09 49 37.2 | +0.9 |
| **KRBG** | **Karabiga-Canak** | **1.81** | **32** | *e*PN | **Pn** | 09 49 15.5 | -0.9 | **MMB** | **Musomiste** | **3.25 328** | P | **Pn** | 09 49 37.2 | +0.9 |
| **KRBG** | **Karabiga-Canak** | **1.81** | **32** | *e*Pn | **Pn** | 09 49 15.5 | -0.9 | **VLI** | **Veliai** | **3.26 230** | *e*PN | **Pn** | 09 49 35.9 | -0.4 |
| **APE** | **Apeiranthos** | **1.83** | **193** | *e*PN | **Pn** | 09 49 16.6 | -0.1 | **VLI** | **Veliai** | **3.26 230** | P | **Pn** | 09 49 35.7 | -0.6 |
| **APE** | **Apeiranthos** | **1.83** | **193** | *i* P | **Pn** | 09 49 16.0 | -0.7 | **VLI** | **Veliai** | **3.26 230** | P | **Pn** | 09 49 35.7 | -0.6 |
| APE | | | | S | **Sb** | 09 49 42.3 | +0.5 | **KLYT** | **Kilyos** | **3.31 43** | *e*PN | **Pn** | 09 49 36.9 | -0.1 |
| **APE** | **Apeiranthos** | **1.83** | **193** | *e*PB | **Pn** | 09 49 15.5 | -1.2 | **KLYT** | **Kilyos** | **3.31 43** | *e*Pn | **Pn** | 09 49 36.9 | -0.1 |
| APE | | | | *e*SN | **Sb** | 09 49 40.0 | 0.0 | **KNT** | **Kendrikon** | **3.34 315** | P | **Pn** | 09 49 37.4 | 0.0 |
| **APE** | **Apeiranthos** | **1.83** | **193** | P | **Pn** | 09 49 15.2 | -1.5 | **KNT** | **Kendrikon** | **3.34 315** | P | **Pn** | 09 49 37.4 | 0.0 |
| APE | | | | S | **Sn** | 09 49 40.0 | 0.0 | **KYTH** | **Kithira** | **3.52 224** | *e*PN | **Pn** | 09 49 39.5 | -0.3 |
| **APE** | **Apeiranthos** | **1.83** | **193** | P | **Pn** | 09 49 15.2 | -1.5 | **KYTH** | **Kithira** | **3.52 224** | P | **Pn** | 09 49 39.1 | -0.7 |
| **APE** | **Apeiranthos** | **1.83** | **193** | *e*Pb | **Pn** | 09 49 15.5 | -1.2 | **KYTH** | **Kithira** | **3.52 224** | P | **Pn** | 09 49 39.1 | -0.7 |
| **APE** | **Apeiranthos** | **1.83** | **193** | *e*Pn | **Pn** | 09 49 16.6 | -0.1 | **KYTH** | **Kithira** | **3.52 224** | *e*Pn | **Pn** | 09 49 39.5 | -0.3 |
| APE | | | | S | **Sn** | 09 49 40.0 | 0.0 | **SHUT** | **Suhut-Afyon** | **3.54 94** | *e*PN | **Pn** | 09 49 41.1 | +0.9 |
| **ERIK** | **Erikli-Kesan** | **1.84** | **11** | *e*PN | **Pn** | 09 49 16.2 | -0.5 | **SHUT** | **Suhut-Afyon** | **3.54 94** | *e*Pn | **Pn** | 09 49 41.1 | +0.9 |
| **ERIK** | **Erikli-Kesan** | **1.84** | **11** | *e*Pn | **Pn** | 09 49 16.3 | -0.5 | **SILT** | **Sile** | **3.59 49** | *e*PN | **Pn** | 09 49 41.1 | +0.4 |
| **AYDN** | **Tasoluk** | **1.87** | **129** | *i* P | **Pn** | 09 49 17.9 | +0.7 | **SILT** | **Sile** | **3.59 49** | *e*Pn | **Pn** | 09 49 41.1 | +0.4 |
| **AYDN** | **Tasoluk** | **1.87** | **129** | P | **Pn** | 09 49 17.9 | +0.7 | **ITM** | **Ithomi** | **3.66 244** | *e*PN | **Pn** | 09 49 41.1 | -0.7 |
| AYDN | | | | S | **Sg** | 09 49 48.3 | +3.0 | **ITM** | **Ithomi** | **3.66 244** | *e*Pn | **Pn** | 09 49 41.1 | -0.7 |
| **PTL** | **Penteli** | **1.90** | **245** | *e*PN | **Pn** | 09 49 16.8 | -0.8 | **ISP** | **Isparta** | **3.67 105** ⇓ | *i* P | **Pg** | 09 49 54.8 | -0.6 |
| **PTL** | **Penteli** | **1.90** | **245** | P | **Pn** | 09 49 17.1 | -0.5 | **ISP** | **Isparta** | **3.67 105** | S | Sg | 09 50 49.8 | +6.9 |
| **PTL** | **Penteli** | **1.90** | **245** | *e*Pn | **Pn** | 09 49 16.8 | -0.8 | **IDI** | **Anoyia** | **3.68 195** | Pn | **Pn** | 09 49 41.3 | -0.9 |
| **PTL** | **Penteli** | **1.90** | **245** | P | **Pn** | 09 49 17.1 | -0.5 | | 1.8nm,0.3s,baz=78,slow=22,SNR=8.0 | | | | | | |
| **MRKA** | **Markates** | **1.93** | **266** | *e*PN | **Pn** | 09 49 17.6 | -0.4 | IDI | | | Lg | Lg | 09 50 41.2 | | |
| **MRKA** | **Markates** | **1.93** | **266** | *e*Pn | **Pn** | 09 49 17.6 | -0.4 | | 5.1nm,0.3s,baz=16,slow=20,SNR=3.5 | | | | | | |
| **MRKA** | **Markates** | **1.93** | **266** | *e*Pn | **Pn** | 09 49 17.6 | -0.4 | **LAST** | **Lasithi** | **3.72 187** | *e*PN | **Pn** | 09 49 41.8 | -0.9 |
| **ATHU** | **Athens Univers** | **1.99** | **244** | P | **Pn** | 09 49 18.4 | -0.4 | **LAST** | **Lasithi** | **3.72 187** | *e*Pn | **Pn** | 09 49 41.8 | -0.9 |
| ATHU | | | | S | **Sb** | 09 49 45.2 | -1.1 | **ZKR** | **Zakros** | **3.74 178** | *e*PN | **Pn** | 09 49 42.3 | -0.6 |
| **ATHU** | **Athens Univers** | **1.99** | **244** | P | **Pn** | 09 49 18.4 | -0.4 | **ZKR** | **Zakros** | **3.74 178** | *e*Pn | **Pn** | 09 49 42.3 | -0.6 |
| **MANT** | **Manisa** | **2.00** | **100** | *i* P | **Pn** | 09 49 18.8 | -0.3 | **KKB** | **Krupnik** | **3.76 324** | P | **Pn** | 09 49 44.4 | +1.2 |
| MANT | | | | *i* S | **Sb** | 09 49 46.8 | +0.1 | **KKB** | **Krupnik** | **3.76 324** | P | **Pn** | 09 49 44.4 | +1.2 |
| **MANT** | **Manisa** | **2.00** | **100** | P | **Pn** | 09 49 18.8 | -0.3 | **PGB** | **Panagyurishte** | **3.95 339** | P | **Pn** | 09 49 45.6 | -0.3 |
| MANT | | | | S | **Sb** | 09 49 46.8 | +0.1 | **PGB** | **Panagyurishte** | **3.95 339** | P | **Pn** | 09 49 45.6 | -0.3 |
| **RKY** | **Sarkoy-Tekirda** | **2.02** | **25** | *e*PN | **Pn** | 09 49 18.4 | -0.8 | **VTS** | **Vitosha** | **4.31 331** | P | **Pn** | 09 49 51.6 | +0.8 |
| **RKY** | **Sarkoy-Tekirda** | **2.02** | **25** | *e*Pn | **Pn** | 09 49 18.5 | -0.8 | **VTS** | **Vitosha** | **4.31 331** | P | **Pn** | 09 49 51.6 | +0.8 |
| **DURS** | **Dursunbey** | **2.02** | **68** | *i* P | **Pn** | 09 49 18.3 | -1.1 | **GVD** | **Gavdhos** | **4.31 202** | *e*PN | **Pn** | 09 49 52.4 | +1.7 |
| **DURS** | **Dursunbey** | **2.02** | **68** | P | **Pn** | 09 49 18.3 | -1.1 | **GVD** | **Gavdhos** | **4.31 202** | *e*Pn | **Pn** | 09 49 52.4 | +1.7 |
| DURS | | | | S | **Sg** | 09 49 49.7 | -0.5 | **SZH** | **Strazhica** | **4.40 359** | P | **Pn** | 09 49 51.7 | -0.3 |
| **SART** | **Tekirdag** | **2.02** | **25** | *i* P | **Pn** | 09 49 18.9 | -0.5 | **SZH** | **Strazhica** | **4.40 359** | P | **Pn** | 09 49 51.7 | -0.3 |
| SART | | | | *i* S | **Sb** | 09 49 48.2 | +0.9 | **PRD** | **Provadia** | **4.46 13** | P | **Pn** | 09 49 52.1 | -0.6 |
| **SART** | **Tekirdag** | **2.02** | **25** | P | **Pn** | 09 49 18.9 | -0.5 | **PRD** | **Provadia** | **4.46 13** | P | **Pn** | 09 49 52.1 | -0.6 |
| SART | | | | S | **Sb** | 09 49 48.2 | +0.9 | **MPEP** | **Malo Peshtene** | **4.82 340** | P | **Pn** | 09 49 58.1 | +0.4 |
| **ALN** | **Alexandroupoli** | **2.04** | **360** | *e*PN | **Pn** | 09 49 19.7 | +0.3 | **BARS** | **Barje** | **5.09 322** ⇓ | *i* Pn | **Pn** | 09 50 02.4 | +0.9 |
| **ALN** | **Alexandroupoli** | **2.04** | **360** | P | **Pn** | 09 49 18.8 | -0.6 | **MSAB** | **Monastry St. A** | **5.39 14** ⇓ | *i* P | **Pn** | 09 50 05.5 | -0.1 |
| ALN | | | | S | **Sn** | 09 49 45.1 | +0.2 | **MSAB** | **Monastry St. A** | **5.39 14** ⇓ | *i* P | **Pn** | 09 50 05.5 | -0.1 |
| **ALN** | **Alexandroupoli** | **2.04** | **360** | P | **Pn** | 09 49 18.8 | -0.6 | **BOVS** | **Bovan** | **5.79 327** | *e*Pn | **Pn** | 09 50 11.8 | +0.8 |
| **ALN** | **Alexandroupoli** | **2.04** | **360** | *e*Pn | **Pn** | 09 49 19.7 | +0.3 | **BOLS** | **Boljevac** | **5.84 329** ⇑ | *i* Pn | **Pn** | 09 50 11.3 | -0.5 |
| ALN | | | | S | **Sn** | 09 49 45.1 | +0.2 | **TIRR** | **Tirgusor** | **5.87 17** ⇑ | *i* P | **Pn** | 09 50 11.9 | -0.2 |
| **SKIA** | **Skiathos** | **2.04** | **279** | *e*PN | **Pn** | 09 49 19.2 | -0.2 | **TIRR** | **Tirgusor** | **5.87 17** ⇑ | *i* P | **Pn** | 09 50 11.9 | -0.2 |
| **SKIA** | **Skiathos** | **2.04** | **279** | P | **Pn** | 09 49 19.3 | -0.2 | **BRTR** | **Keskin Array B** | **5.95 79** | Pn | **Pn** | 09 50 13.6 | +0.1 |
| SKIA | | | | S | **Sn** | 09 49 45.8 | +0.9 | | 0.3nm,0.3s,baz=260,slow=12,SNR=9.5 | | | | | | |
| **VLY** | **Voula,Athens** | **2.04** | **241** | *e*PB | **Pn** | 09 49 18.9 | -0.6 | BRTR | | | Pg | **Pb** | 09 50 30.6 | +1.5 | |
| **VLY** | **Voula,Athens** | **2.04** | **241** | P | **Pn** | 09 49 19.1 | -0.4 | | 0.4nm,0.3s,baz=266,slow=13,SNR=6.2 | | | | | | |
| **VLY** | **Voula,Athens** | **2.04** | **241** | P | **Pn** | 09 49 19.1 | -0.4 | BRTR | | | Lg | Lg | 09 51 52.8 | | |
| **EDC** | **Edincik** | **2.04** | **43** | *e*PN | **Pn** | 09 49 18.5 | -1.1 | | 0.1nm,0.3s,baz=267,slow=26,SNR=2.0 | | | | | | |
| **EDC** | **Edincik** | **2.04** | **43** | *e*Pn | **Pn** | 09 49 18.5 | -1.1 | **HARR** | **Harsova** | **5.99 13** ⇑ | *i* P | **Pn** | 09 50 13.9 | +0.1 | |
| **BODT** | **Bodrum** | **2.05** | **151** | *e*PN | **Pn** | 09 49 20.0 | +0.3 | **HARR** | **Harsova** | **5.99 13** ⇑ | *i* Pn | **Pn** | 09 50 13.9 | +0.1 | |
| **BODT** | **Bodrum** | **2.05** | **151** | *e*Pn | **Pn** | 09 49 20.0 | +0.3 | **KUBS** | **Kucevo** | **6.44 331** | *e*Pn | **Pn** | 09 50 18.7 | -1.3 | |
| **BNT** | **Bandirma** | **2.08** | **43** | *e*PN | **Pn** | 09 49 19.7 | -0.4 | **IVAS** | **Ivanjica** | **6.48 319** ⇑ | *i* Pn | **Pn** | 09 50 21.6 | +1.1 | |
| **BNT** | **Bandirma** | **2.08** | **43** | *e*Pn | **Pn** | 09 49 19.7 | -0.4 | **VOIR** | | **6.61 354** ⇑ | *i* P | **Pn** | 09 50 22.4 | 0.0 | |
| **DEMI** | **Demirci** | **2.09** | **84** | *i* P | **Pn** | 09 49 22.6 | -0.5 | **VOIR** | | **6.61 354** ⇑ | *i* P | **Pn** | 09 50 22.4 | 0.0 | |
| DEMI | | | | *i* S | **Sb** | 09 49 49.9 | +0.8 | **MLR** | **Muntele Rosu** | **6.63 359** | Pn | **Pn** | 09 50 23.5 | +0.8 | |
| **DEMI** | **Demirci** | **2.09** | **84** | P | **Pb** | 09 49 22.6 | -0.5 | | 0.7nm,0.3s,baz=190,slow=5.7,SNR=25 | | | | | | |
| DEMI | | | | S | **Sb** | 09 49 49.9 | +0.8 | MLR | | | LR | LR | 09 53 27.4 | | |
| **SERI** | **Serifos** | **2.10** | **217** | *e*PB | **Pn** | 09 49 19.1 | -1.2 | | comp=Z,38nm,19.2s,baz=242,slow=43 | | | | | | |
| **SERI** | **Serifos** | **2.10** | **217** | *e*Pb | **Pn** | 09 49 19.1 | -1.2 | **MLR** | **Muntele Rosu** | **6.63 359** ⇓ | *i* P | **Pn** | 09 50 23.9 | +1.2 | |
| **BDRM** | **Kayabasi** | **2.10** | **148** | *i* P | **Pn** | 09 49 19.0 | -1.4 | **MLR** | **Muntele Rosu** | **6.63 359** ⇓ | *i* P | **Pn** | 09 50 23.9 | +1.2 | |
| **BDRM** | **Kayabasi** | **2.10** | **148** | P | **Pn** | 09 49 19.0 | -1.4 | **LOT** | **Lotru** | **6.80 346** ⇑ | *i* P | **Pn** | 09 50 25.1 | +0.1 | |
| BDRM | | | | S | **Sg** | 09 49 55.3 | +2.6 | **LOT** | **Lotru** | **6.80 346** ⇑ | *i* P | **Pn** | 09 50 25.1 | +0.1 | |
| **MRMT** | **Marmara Adasi** | **2.11** | **34** | *e*PN | **Pn** | 09 49 20.1 | -0.5 | **TRUS** | **Trudelj** | **6.83 324** | *e*Pn | **Pn** | 09 50 25.8 | +0.5 | |
| **MRMT** | **Marmara Adasi** | **2.11** | **34** | *e*Pn | **Pn** | 09 49 20.1 | -0.5 | **DIVS** | **Divibare** | **6.93 321** ⇓ | *i* P | **Pn** | 09 50 27.3 | +0.5 | |
| **PAIG** | **Paliouri** | **2.12** | **301** | P | **Pn** | 09 49 20.3 | -0.3 | **DIVS** | **Divibare** | **6.93 321** ⇓ | *i* Pn | **Pn** | 09 50 27.1 | +0.3 | |
| PAIG | | | | S | **Sb** | 09 49 49.1 | -1.0 | **GZR** | **Gura Zlata** | **6.97 341** ⇑ | *i* P | **Pn** | 09 50 26.6 | -0.7 | |
| **DST** | **Dursunbey** | **2.13** | **69** | *e*PN | **Pn** | 09 49 20.3 | -0.5 | **GZR** | **Gura Zlata** | **6.97 341** ⇑ | *i* P | **Pn** | 09 50 26.6 | -0.7 | |
| **DST** | **Dursunbey** | **2.13** | **69** | *e*Pn | **Pn** | 09 49 20.3 | -0.5 | **PLOR** | **Plostina** | **7.00 3** ⇓ | *i* P | **Pn** | 09 50 28.9 | +1.2 | |
| **OUR** | **Ouranopolis** | **2.17** | **313** | *e*PN | **Pn** | 09 49 21.3 | 0.0 | **PLOR** | **Plostina** | **7.00 3** ⇓ | *i* P | **Pn** | 09 50 28.9 | +1.2 | |
| **OUR** | **Ouranopolis** | **2.17** | **313** | P | **Pn** | 09 49 21.1 | -0.2 | **VRI** | **Vrincioaia** | **7.02 4** ⇑ | *i* P | **Pn** | 09 50 29.2 | +1.3 | |
| **OUR** | **Ouranopolis** | **2.17** | **313** | *e*Pn | **Pn** | 09 49 21.3 | 0.0 | **VRI** | **Vrincioaia** | **7.02 4** ⇑ | *i* P | **Pn** | 09 50 29.2 | +1.3 | |
| **SMIA** | **Simia** | **2.22** | **271** | *e*PN | **Pn** | 09 49 21.9 | -0.1 | **DOPR** | **Dopca** | **7.12 356** ⇑ | *i* P | **Pn** | 09 50 29.3 | 0.0 | |
| **SMIA** | **Simia** | **2.22** | **271** | P | **Pn** | 09 49 21.9 | -0.1 | **DOPR** | **Dopca** | **7.12 356** ⇑ | *i* P | **Pn** | 09 50 29.3 | 0.0 | |
| **VILL** | **Villia** | **2.26** | **253** | P | **Pn** | 09 49 22.2 | -0.3 | **BZS** | **Buzias** | **7.51 335** ⇑ | *i* P | **Pn** | 09 50 34.4 | -0.2 | |
| **VILL** | **Villia** | **2.26** | **253** | *e*Pb | **Pn** | 09 49 21.2 | -1.3 | **BZS** | **Buzias** | **7.51 335** ⇑ | *i* P | **Pn** | 09 50 34.4 | -0.2 | |
| **KCTX** | **Karacabey (Bur** | **2.27** | **51** | *e*PN | **Pn** | 09 49 22.5 | -0.2 | **TESR** | **Tescani** | **7.66 3** ⇑ | *i* P | **Pn** | 09 50 37.1 | +0.4 | |
| **KCTX** | **Karacabey (Bur** | **2.27** | **51** | *e*Pn | **Pn** | 09 49 22.5 | -0.2 | **TESR** | **Tescani** | **7.66 3** ⇑ | *i* P | **Pn** | 09 50 37.1 | +0.4 | |
| **VIL2** | **Platees** | **2.27** | **254** | *e*PB | **Pn** | 09 49 21.2 | -1.6 | **SIRR** | **Siria** | **8.08 338** ⇓ | *i* P | **Pn** | 09 50 42.5 | 0.0 | |
| **NAIG** | **Nisos Aigina** | **2.29** | **242** | *e*PB | **Pn** | 09 49 23.5 | +0.5 | **SIRR** | **Siria** | **8.08 338** ⇓ | *i* P | **Pn** | 09 50 42.5 | 0.0 | |
| **NAIG** | **Nisos Aigina** | **2.29** | **242** | *e*Pb | **Pn** | 09 49 23.5 | +0.5 | **BURAR** | **Bucovina Array** | **8.77 356** ⇓ | *i* P | **Pn** | 09 50 54.5 | +2.4 | |
| **ATAL** | **Atalanti** | **2.37** | **267** | P | **Pn** | 09 49 23.6 | -0.5 | **MMAI** | **Mount Meron Ar** | **9.56 125** | LR | LR | 09 55 26.3 | | |
| **ATAL** | **Atalanti** | **2.37** | **267** | P | **Pn** | 09 49 23.6 | -0.5 | | comp=Z,74nm,20.3s,baz=270,slow=42 | | | | | | |
| **LKR** | **Lokris** | **2.39** | **266** | *e*PB | **Pn** | 09 49 24.5 | +0.1 | **KOLS** | **Kolonicke sedl** | **10.43 346** | *e* | **Pn** | 09 51 17.0 | +2.3 | |
| **LKR** | **Lokris** | **2.39** | **266** | *e*Pb | **Pn** | 09 49 24.5 | +0.1 | **VYHS** | **Vyhne** | **10.95 334** | *e* | **Pn** | 09 51 23.7 | +1.9 | |
| **TKR** | **Tekirdag** | **2.42** | **28** | *e*PN | **Pn** | 09 49 24.9 | +0.2 | **KBZ** | **Khabaz** | **13.56 64** | LR | LR | 09 58 38.9 | | |
| **TKR** | **Tekirdag** | **2.42** | **28** | *e*Pn | **Pn** | 09 49 24.9 | +0.2 | | comp=Z,50nm,20.0s,baz=278,slow=44 | | | | | | |
| **KAVA** | **Kavala** | **2.44** | **332** | P | **Pn** | 09 49 24.4 | -0.6 | **DAVOX** | **Davos/Dischmat** | **14.25 309** | LR | LR | 09 57 34.0 | | |
| **YER** | **Yerkesik** | **2.47** | **134** | *e*PN | **Pn** | 09 49 25.1 | -0.3 | | comp=Z,73nm,19.5s,baz=82,slow=37 | | | | | | |
| **YER** | **Yerkesik** | **2.47** | **134** | *e*Pn | **Pn** | 09 49 25.1 | -0.3 | **FINES** | **FINESS Array B** | **22.61 0** | P | **P** | **09 53 45.2** | **-0.5** | |
| **ORLT** | **Orhaneli** | **2.50** | **61** | *e*PN | **Pn** | 09 49 26.2 | +0.4 | | 5.2nm,1.1s,baz=182,slow=15,SNR=3.4 | | | | | | |
| **ORLT** | **Orhaneli** | **2.50** | **61** | *e*Pn | **Pn** | 09 49 26.3 | +0.4 | **HFS** | **Hagfors** | **22.68 344** | P | **P** | **09 53 47.2** | **+0.7** | |
| **PLG** | **Polygyros** | **2.52** | **308** | *e*PB | **Pn** | 09 49 26.3 | +0.2 | | 4.4nm,1.0s,baz=156,slow=16,SNR=3.5 | | | | | | |
| | | | | | | | | | **ESDC** | **Sonseca Array** | **23.20 282** | P | **P** | **09 53 53.2** | **+1.0** |
| | | | | | | | | | 0.2nm,0.3s,baz=81,slow=12,SNR=5.0 | | | | | | |
| | | | | | | | | | **NOA** | **NORSAR Array B** | **24.05 342** | P | **P** | **09 53 60.0** | **-0.3** |
| | | | | | | | | | 2.0nm,0.9s,baz=151,slow=9.2,SNR=3.3 | | | | | | |
| | | | | | | | | | **MDT** | **Midelt** | **25.50 266

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ARU | | | | | pmax | pmax | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **ARU** | **Arti** | **39.89** | **321** | *eP* | **P** | **10 08 00.6** | **+0.2** | |
| | comp=Z,15nm,1.2s | | | | | | | |
| ARU | | | | | P | **P** | **10 08 01.1** | **+0.7** |
| **SEY** | **Seymchan** | **42.97** | **30** | P | **P** | **10 08 26.1** | **+0.5** | |
| | comp=Z,1.6nm,0.8s,baz=37,slow=20,SNR=2.5 | | | | | | | |
| **SEY** | **Seymchan** | **42.97** | **30** | P | **P** | **10 08 26.1** | **+0.5** | |
| SEY | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **43.14** | **45** | P | **P** | **10 08 27.3** | **+0.1** | |
| | comp=Z,4.7nm,0.9s,baz=251,slow=4.4,SNR=2.4 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **43.14** | **45** | P | **P** | **10 08 27.3** | **+0.1** | |
| PETK | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **OBN** | **Obninsk** | **52.01** | **317** | LR | LR | 10 32 48.0 | | |
| | comp=Z,76nm,18.6s,baz=87,slow=37 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.50** | **336** | P | **P** | **10 10 08.6** | **+0.1** | |
| | comp=Z,1.6nm,0.4s,baz=83,slow=7.4,SNR=9.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.50** | **336** | P | **P** | **10 10 08.6** | **+0.1** | |
| ARCES | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **BRTR** | **Keskin Array B** | **56.62** | **299** | P | **P** | **10 10 10.1** | **+0.1** | |
| | comp=Z,0.7nm,0.6s,baz=75,slow=7.9,SNR=3.5 | | | | | | | |
| **BRTR** | **Keskin Array B** | **56.62** | **299** | P | **P** | **10 10 10.1** | **+0.1** | |
| BRTR | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **FINES** | **FINESS Array B** | **56.95** | **326** | P | **P** | **10 10 11.9** | **+0.1** | |
| | comp=Z,2.4nm,0.5s,baz=103,slow=8.5,SNR=10 | | | | | | | |
| FINES | | | | LR | LR | 10 38 13.1 | | |
| | comp=Z,75nm,18.3s,baz=344,slow=40 | | | | | | | |
| **FINES** | **FINESS Array B** | **56.95** | **326** | P | **P** | **10 10 11.9** | **+0.1** | |
| FINES | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| FINES | | | | | MLR | MLR | | |
| | comp=Z,75nm,18.3s | | | | | | | |
| **AKASG** | **Malin Array Be** | **57.00** | **313** | P | **P** | **10 10 11.8** | **-0.5** | |
| | comp=Z,0.6nm,0.4s,baz=68,slow=6.0,SNR=4.8 | | | | | | | |
| **AKASG** | **Malin Array Be** | **57.00** | **313** | P | **P** | **10 10 11.8** | **-0.5** | |
| AKASG | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **59.09** | **147** | *eP* | **P** | **10 10 26.9** | **-0.4** | |
| WRAB | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **WRAB** | **Tennant Creek** | **59.09** | **147** | *eP* | **P** | **10 10 26.9** | **-0.4** | |
| | comp=Z,5.3nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **59.10** | **147** | P | **P** | **10 10 26.9** | **-0.5** | |
| | comp=Z,4.6nm,0.7s,baz=339,slow=7.7,SNR=68 | | | | | | | |
| **WRA** | **Warramunga Arr** | **59.10** | **147** | P | **P** | **10 10 26.9** | **-0.5** | |
| WRA | | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **ASAR** | **Alice Springs** | **62.16** | **150** | P | **P** | **10 10 47.8** | **-0.4** | |
| | comp=Z,4.4nm,1.1s,baz=335,slow=6.6,SNR=25 | | | | | | | |
| **ASAR** | **Alice Springs** | **62.16** | **150** | P | **P** | **10 10 47.8** | **-0.4** | |
| ASAR | | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **64.02** | **327** | P | **P** | **10 10 59.4** | **-0.7** | |
| | comp=Z,1.3nm,0.5s,baz=73,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **64.02** | **327** | P | **P** | **10 10 59.5** | **-0.7** | |
| | comp=Z,1.9nm,0.8s,baz=76,slow=6.4,SNR=5.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **64.02** | **327** | P | **P** | **10 10 59.5** | **-0.7** | |
| NOA | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **65.81** | **168** | P | **P** | **10 11 12.4** | **+0.4** | |
| **NWAO** | **Narrogin (SRO)** | **65.81** | **168** | P | **P** | **10 11 12.4** | **+0.4** | |
| **GERES** | **GERESS Array B** | **67.14** | **314** | P | **P** | **10 11 21.2** | **+0.6** | |
| | comp=Z,0.3nm,0.3s,baz=96,slow=5.4,SNR=3.6 | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **67.48** | **27** | *eP* | **P** | **10 11 20.9** | **-1.5** | |
| **PPLA** | **Purkeypile** | **67.54** | **29** | P | **P** | **10 11 23.4** | **+0.4** | |
| **COLA** | **College** | **68.30** | **26** | *eP* | **P** | **10 11 27.6** | **+0.1** | |
| COLA | | | | | pmax | pmax | | |
| | comp=Z,25nm,1.5s | | | | | | | |
| **COLA** | **College** | **68.30** | **26** | *eP* | **P** | **10 11 27.6** | **+0.1** | |
| | comp=Z,25nm,1.5s | | | | | | | |
| **ILAR** | **Eielson Array** | **68.71** | **26** | P | **P** | **10 11 29.0** | **-1.1** | |
| | comp=Z,0.4nm,0.5s,baz=262,slow=6.5,SNR=6.5 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.57** | **17** | P | **P** | **10 12 38.1** | **-0.8** | |
| | comp=Z,1.9nm,0.6s,baz=326,slow=5.3,SNR=6.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.57** | **17** | P | **P** | **10 12 38.1** | **-0.8** | |
| YKA | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |

*ISCJB **21** 10:09:49.3±0.4, 59.°66N±0.°04×22.°29E±0.°05, h0km, Error ellipse: s-maj=5.7km s-min=3.6km az=18.3*
*CSEM **21** 10:09:50.1±0.3, 59.°63N×22.°33E, h2km, ML2.2, Error ellipse: s-maj=8.7km s-min=5.0km az=8.0, Mining explosion.*
*HEL **21** 10:09:50.6±0.1, 59.°65N×22.°27E, h0km, ML2.0, ML2.2(UPP), Explosion*
*IDC **21** 10:09:51.4±2.4, 59.°76N×22.°36E, h0km, mb1 3.0/3, mb1mx2.9/36, mbtmp2.9/3, ML2.6/3, Error ellipse: s-maj=33.9km s-min=10.2km az=157.0*
*UPP **21** 10:09:53.6, 59.°72N×21.°82E, h0km, ML2.2, Suspected Mining explosion.*

**ISC 21 10:09:49.8±1.0, 59.°67N±0.°04×22.°26E±0.°03, h0km, n41, σ1s15/48, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRPE** | **Suurupi** | **1.10** | **100** | *eP* | **Pg** | **10 10 10.3** | **-0.5** |
| SRPE | | | | *eS* | B **Sg** | **10 10 24.9** | **-0.2** |
| **MEF** | **Metsahovi** | **1.21** | **62** | *eP* | **Pg** | **10 10 11.7** | **-1.2** |
| MEF | | | | *eS* | **Sg** | **10 10 28.0** | **-0.5** |
| **MEF** | **Metsahovi** | **1.21** | **62** | P | **Pg** | **10 10 11.7** | **-1.2** |
| MEF | | | | S | **Sg** | **10 10 28.0** | **-0.5** |
| **MTSE** | **Matsula** | **1.25** | **140** | *eP* | **Pg** | **10 10 12.3** | **-1.4** |
| MTSE | | | | *eS* | B **Sg** | **10 10 29.9** | **+0.1** |
| **MTSE** | **Matsula** | **1.25** | **140** | P | **Pg** | **10 10 12.3** | **-1.4** |
| MTSE | | | | Sb | **Sg** | **10 10 29.9** | **+0.1** |
| **AAL** | **Aland** | **1.25** | **295** | *eP* | **Pg** | **10 10 12.5** | **-1.2** |
| AAL | | | | *eS* | **Sg** | **10 10 30.0** | **0.0** |
| **AAL** | **Aland** | **1.25** | **295** | P | **Pg** | **10 10 12.6** | **-1.2** |
| AAL | | | | S | **Sg** | **10 10 30.2** | **+0.2** |
| **RAF** | **Rauma** | **1.38** | **350** | *eS* | **Sg** | **10 10 33.6** | **-0.5** |
| **NRTU** | **Norrtaelje** | **1.84** | **272** | *eP* | **Pn** | **10 10 22.5** | **-0.1** |
| **NRTU** | **Norrtaelje** | **1.84** | **272** | P | **Pn** | **10 10 22.5** | **-0.1** |
| **PVF** | **Pernaja** | **2.00** | **63** | *eP* | **Pn** | **10 10 25.7** | **+0.8** |
| PVF | | | | MSG | | 10 10 56.7 | |
| | comp=Z,16nm,0.1s | | | | | | |
| **PVF** | **Pernaja** | **2.00** | **63** | P | **Pn** | **10 10 25.6** | **+0.8** |
| **FORU** | **Forsmark** | **2.17** | **291** | *eP* | **Pn** | **10 10 27.4** | **+0.3** |
| **FORU** | **Forsmark** | **2.17** | **291** | P | **Pn** | **10 10 27.4** | **+0.3** |
| **FLYU** | **Flymyra** | **2.25** | **284** | *eP* | **Pn** | **10 10 29.4** | **+1.1** |
| **FLYU** | **Flymyra** | **2.25** | **284** | P | **Pn** | **10 10 29.4** | **+1.1** |
| **FIA0** | **FINESS Array S** | **2.59** | **45** | *eP* | **Pn** | **10 10 34.5** | **+1.6** |
| FIA0 | | | | MSG | | 10 11 12.4 | |
| | comp=Z,5.8nm,0.1s | | | | | | |
| **FIA0** | **FINESS Array S** | **2.59** | **45** | P | **Pn** | **10 10 34.5** | **+1.6** |
| **FINES** | **FINESS Array B** | **2.59** | **45** | Pn | **Pn** | **10 10 34.7** | **+1.8** |
| | comp=Z,0.6nm,0.3s,baz=230,slow=14,SNR=18 | | | | | | |
| FINES | | | | Lg | Lg | 10 11 09.0 | |
| | comp=Z,2.5nm,0.3s,baz=226,slow=28,SNR=24 | | | | | | |
| **BACU** | **Backbrunna** | **2.62** | **276** | *eP* | **Pn** | **10 10 35.1** | **+1.9** |
| **BACU** | **Backbrunna** | **2.62** | **276** | P | **Pn** | **10 10 35.1** | **+1.9** |
| **OSTU** | **Oestervaala** | **2.64** | **284** | *eP* | **Pn** | **10 10 34.4** | **+0.8** |
| **OSTU** | **Oestervaala** | **2.64** | **284** | P | **Pn** | **10 10 34.4** | **+0.8** |
| **IGGU** | **Iggoen** | **2.74** | **298** | *eP* | **Pn** | **10 10 36.5** | **+1.5** |
| **IGGU** | **Iggoen** | **2.74** | **298** | P | **Pn** | **10 10 36.5** | **+1.5** |
| **ARNU** | **Arnoeviken** | **3.14** | **312** | *eP* | **Pn** | **10 10 41.2** | **+0.7** |
| **ARNU** | **Arnoeviken** | **3.14** | **312** | P | **Pn** | **10 10 41.2** | **+0.7** |
| **FALU** | **Falun** | **3.33** | **287** | *eP* | **Pn** | **10 10 44.0** | **+1.0** |
| **FALU** | **Falun** | **3.33** | **287** | P | **Pn** | **10 10 44.0** | **+1.0** |
| **VAF** | **Ylistaro** | **3.39** | **3** | *e*SB | **Sb** | **10 11 33.2** | **+0.8** |
| VAF | | | | MSG | | 10 11 42.5 | |
| | comp=Z,1.9nm,0.1s | | | | | | |
| **VAF** | **Ylistaro** | **3.39** | **3** | Sb | **Sb** | **10 11 33.2** | **+0.8** |
| **ROTU** | **Roteberg** | **3.64** | **302** | *eP* | **Pn** | **10 10 47.3** | **0.0** |
| **ROTU** | **Roteberg** | **3.64** | **302** | P | **Pn** | **10 10 47.3** | **0.0** |
| **HEMU** | **Hemsoen** | **3.64** | **328** | *eP* | **Pn** | **10 10 49.1** | **+1.7** |
| **HEMU** | **Hemsoen** | **3.64** | **328** | P | **Pn** | **10 10 49.1** | **+1.7** |
| **SOLU** | **Sollefteaa** | **4.32** | **328** | *eP* | **Pn** | **10 10 57.2** | **+0.6** |
| **SOLU** | **Sollefteaa** | **4.32** | **328** | P | **Pn** | **10 10 57.2** | **+0.6** |
| **UDD** | **Uddeholm** | **4.38** | **279** | *eP* | **Pn** | **10 10 59.6** | **+2.0** |
| **UDD** | **Uddeholm** | **4.38** | **279** | P | **Pn** | **10 10 59.6** | **+2.0** |
| **NOA** | **NORSAR Array B** | **5.65** | **289** | Pn | **Pn** | **10 11 14.4** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=96,slow=14,SNR=6.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **10.00** | **7** | Pn | **Pn** | **10 12 12.3** | **-2.2** |
| | comp=Z,0.2nm,0.3s,baz=187,slow=13,SNR=9.0 | | | | | | |

**IDC 21 10:11:40.8±8.4, 5.°94S×150.°33E, h86km±59km, mb3.0/2, mb1 3.2/3, mb1mx3.0/31, mbtmp3.4/3, ML1.2/1, MS2.6/1, Ms1 2.6/1, ms1mx2.3/12, Error ellipse: s-maj=115.6km s-min=55.5km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.66** | **222** | P | Pn | 10 12 48.7 | -0.2 |
| | 0.8nm,0.3s,baz=37,slow=10,SNR=2.6 | | | | | | |
| PMG | | | | S | Sn | 10 13 42.8 | +1.0 |
| | 1.9nm,0.3s,baz=132,slow=14,SNR=4.3 | | | | | | |
| **HNR** | **Honiara** | **10.14** | **111** | LR | LR | 10 17 26.8 | |
| | comp=Z,29nm,18.2s,baz=335,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.87** | **227** | P | P | 10 16 15.9 | -0.3 |
| | 0.6nm,0.6s,baz=52,slow=11,SNR=7.8 | | | | | | |
| **ASAR** | **Alice Springs** | **23.68** | **220** | P | P | 10 16 44.9 | -0.1 |
| | 0.6nm,0.6s,baz=57,slow=9.1,SNR=15 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.28** | **285** | PKPbc | PKPbc | 10 31 17.7 | -0.5 |
| | 0.4nm,0.5s,baz=88,slow=2.4,SNR=6.3 | | | | | | |

**WEL 21 10:12:58.6±0.5, 39.°09S×174.°97E, h192km±3km, ML3.5/15, 1C-6D, Error ellipse: s-maj=3.4km s-min=2.5km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FWVZ** | **Far West T-bar** | **0.48** | **110** | PN | Pn | 10 13 24.8 | -0.2 |
| FWVZ | | | | SN | Sn | 10 13 43.7 | -1.7 |
| **WNVZ** | **Wahianoa** | **0.54** | **116** | PN | Pn | 10 13 25.1 | -0.1 |
| WNVZ | | | | SN | Sn | 10 13 44.4 | -1.4 |
| **WAZ** | **Wanganui** | **0.67** | **179** | PN | Pn | 10 13 25.8 | +0.2 |
| WAZ | | | | SN | Sn | 10 13 46.0 | -0.6 |
| **MOVZ** | **Moawhango** | **0.69** | **118** | PN | Pn | 10 13 25.3 | -0.4 |
| **BHHZ** | **Black Hill Sta** | **0.94** | **116** | PN | Pn | 10 13 26.7 | -0.5 |
| **BKZ** | **Black Stump Fm** | **1.19** | **94** | ⇓PN | Pn | 10 13 28.3 | -0.7 |
| **KRHZ** | **Kereru** | **1.22** | **118** | PN | Pn | 10 13 29.2 | 0.0 |
| **TSZ** | **Takapari Road** | **1.24** | **142** | PN | Pn | 10 13 29.5 | +0.1 |
| **PNHZ** | **Pukenui** | **1.26** | **131** | PN | Pn | 10 13 29.6 | 0.0 |
| **MCHZ** | **McNeill Hill** | **1.39** | **105** | PN | Pn | 10 13 31.1 | +0.4 |
| **POWZ** | **Post Office Ro** | **1.44** | **155** | PN | Pn | 10 13 31.0 | -0.1 |
| **WPHZ** | **Waipukurau** | **1.50** | **131** | ⇓PN | Pn | 10 13 31.7 | +0.1 |
| **DVHZ** | **Dannevirke** | **1.52** | **143** | ⇓PN | Pn | 10 13 31.7 | -0.1 |
| **KAHZ** | **Kahuranaki** | **1.64** | **116** | PN | Pn | 10 13 33.3 | +0.3 |
| **MRZ** | **Mangatainoka R** | **1.64** | **164** | PN | Pn | 10 13 32.7 | -0.2 |
| **PRWZ** | **Pori Road** | **1.66** | **153** | PN | Pn | 10 13 33.3 | +0.2 |
| **OGWZ** | **Otaki Gorge** | **1.73** | **175** | PN | Pn | 10 13 33.8 | 0.0 |
| **PXZ** | **Pawanui** | **1.74** | **123** | ⇓PN | Pn | 10 13 33.9 | +0.1 |
| **KIW** | **Kapiti Island** | **1.77** | **181** | PN | Pn | 10 13 33.7 | -0.5 |
| **ANWZ** | **Angora Road** | **1.80** | **140** | ⇓PN | Pn | 10 13 34.6 | +0.2 |
| **TIWZ** | **Tintock** | **1.83** | **158** | PN | Pn | 10 13 34.5 | -0.3 |
| TIWZ | | | | AML | AML | 10 14 02.8 | |
| TIWZ | | | | AML | AML | 10 14 02.9 | |
| **HOWZ** | **Holdsworth Sta** | **1.86** | **167** | PN | Pn | 10 13 34.6 | -0.4 |
| **URZ** | **Urewera** | **1.87** | **64** | PN | Pn | 10 13 33.6 | -1.6 |
| **BFZ** | **Birch Farm** | **1.87** | **149** | PN | Pn | 10 13 34.9 | -0.3 |
| **DUWZ** | **D'Urville Isla** | **1.89** | **205** | PN | Pn | 10 13 34.9 | -0.5 |
| **CAW** | **Cannon Point** | **2.02** | **178** | PN | Pn | 10 13 36.3 | -0.4 |
| CAW | | | | AML | AML | 10 14 06.4 | |
| **KNZ** | **Kokohu** | **2.11** | **89** | PN | Pn | 10 13 36.9 | -0.8 |
| **MTW** | **Mount Morrison** | **2.11** | **169** | PN | Pn | 10 13 37.1 | -0.5 |
| MTW | | | | AML | AML | 10 14 07.5 | |
| **TMWZ** | **Te Maipa** | **2.14** | **161** | PN | Pn | 10 13 37.4 | -0.6 |
| **MWZ** | **Matawai** | **2.14** | **70** | PN | Pn | 10 13 36.7 | -1.4 |
| **TCW** | **Tory Channel** | **2.19** | **194** | PN | Pn | 10 13 38.2 | -0.3 |
| **WEL** | **Wellington** | **2.20** | **184** | PN | Pn | 10 13 38.0 | -0.6 |
| **PAWZ** | **Paruwai Farm** | **2.32** | **171** | AML | AML | 10 14 10.0 | |
| PAWZ | | | | AML | AML | 10 14 10.4 | |
| **MSWZ** | **Moikau Station** | **2.33** | **175** | PN | Pn | 10 13 39.3 | -0.9 |
| MSWZ | | | | AML | AML | 10 14 10.1 | |
| MSWZ | | | | AML | AML | 10 14 10.2 | |
| **TKGZ** | **Te Karaka** | **2.34** | **75** | PN | Pn | 10 13 39.5 | -0.8 |
| **NNZ** | **Nelson** | **2.45** | **209** | ⇓PN | Pn | 10 13 40.2 | -1.2 |
| **TUWZ** | **Tuamarina** | **2.47** | **198** | PN | Pn | 10 13 40.9 | -0.7 |
| **PLWZ** | **Paliser** | **2.49** | **175** | PN | Pn | 10 13 40.8 | -1.1 |
| **QRZ** | **Quartz Range** | **2.56** | **226** | ⇑PN | Pn | 10 13 40.7 | -2.0 |
| **BSWZ** | **Blackbirch Sta** | **2.75** | **197** | PN | Pn | 10 13 44.3 | -0.6 |
| **WMGZ** | **Waiomatatini S** | **2.99** | **66** | PN | Pn | 10 13 46.3 | -1.4 |
| **THZ** | **Tophouse** | **3.10** | **210** | PN | Pn | 10 13 47.3 | -1.9 |
| **KHZ** | **Kahutara** | **3.50** | **198** | PN | Pn | 10 13 52.7 | -1.1 |
| **DSZ** | **Denniston Nort** | **3.59** | **221** | PN | Pn | 10 13 52.6 | -2.4 |
| **LTZ** | **Lake Taylor** | **4.22** | **208** | PN | Pn | 10 14 00.8 | -2.1 |
| **OXZ** | **Oxford** | **4.78** | **207** | PN | Pn | 10 14 06.6 | -3.3 |

*CSEM **21** 10:13:00.7, 42.°55N×13.°15E, h10km, MD1.6/3, After ROM*
**ROM 21 10:13:00.7±0.1, 42.°55N×13.°15E, h10km, Md1.6/3, MI1.1/3, Error ellipse: s-maj=1.5km s-min=0.5km az=5.0, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RM29** | **Verrico (Monte** | **0.04** | **67** | Pg | Pg | 10 13 03.0 | +0.1 |
| RM29 | | | | Sg | Sg | 10 13 04.5 | 0.0 |
| **RM29** | **Verrico (Monte** | **0.04** | **67** | Pg | Pg | 10 13 03.0 | +0.1 |
| RM29 | | | | Sg | Sg | 10 13 04.5 | 0.0 |
| **LNSS** | **Leonessa** | **0.10** | **305** | Pg | Pg | 10 13 03.9 | +0.3 |
| LNSS | | | | Sg | Sg | 10 13 06.0 | +0.4 |
| | 38nm,0.3s | | | | | | |
| **LNSS** | **Leonessa** | **0.10** | **305** | Pg | Pg | 10 13 03.9 | +0.3 |
| LNSS | | | | Sg | Sg | 10 13 06.0 | +0.4 |
| | 38nm,0.3s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.11** | **76** | Pg | Pg | 10 13 03.9 | +0.2 |
| **RM32** | **Poggio Cancell** | **0.11** | **76** | Pg | Pg | 10 13 03.9 | +0.2 |
| **SMA1** | **SAN MARTINO** | **0.16** | **58** | Pg | Pg | 10 13 04.9 | +0.5 |
| SMA1 | | | | Sg | Sg | 10 13 07.9 | +0.9 |
| | 43nm,0.2s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.16** | **58** | Pg | Pg | 10 13 04.9 | +0.5 |
| SMA1 | | | | Sg | Sg | 10 13 07.9 | +0.9 |
| | 43nm,0.2s | | | | | | |
| **NRCA** | **Norcia** | **0.29** | **354** | Pg | Pg | 10 13 07.1 | +0.4 |
| NRCA | | | | Sg | Sg | 10 13 11.9 | +1.1 |
| | 30nm,0.1s | | | | | | |
| **NRCA** | **Norcia** | **0.29** | **354** | Pg | Pg | 10 13 07.1 | +0.4 |
| NRCA | | | | Sg | Sg | 10 13 11.9 | +1.1 |
| | 30nm,0.1s | | | | | | |

*ISCJB **21** 10:18:28.1±0.5, 24.°56N±0.°02×121.°91E±0.°02, h2km±5km, Error ellipse: s-maj=4.0km s-min=2.9km az=141.4*
*JMA **21** 10:18:28.6, 24.°53N×121.°75E, h30km, M2.9*
*TAP **21** 10:18:28.4, 24.°56N×121.°84E, h6km, ML3.0, C*
**ISC 21 10:18:28.2±0.8, 24.°57N±0.°02×121.°83E±0.°02, h12km±4km, n37, σ1s02/56, 1C-3D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWC** | **Suao** | **0.04** | **23** | ⇓*i*P | **Pg** | **10 18 30.1** | **-0.4** |
| | baz=23 | | | | | | |
| TWC | | | | *i* S | **Sg** | **10 18 31.1** | **-1.1** |
| | baz=23 | | | | | | |
| **ENA** | **Nanau** | **0.16** | **210** | ⇑*i*P | **Pb** | **10 18 32.3** | **-0.8** |
| | baz=212 | | | | | | |
| ENA | | | | *i* S | **Sb** | **10 18 34.5** | **0.0** |
| | baz=212 | | | | | | |
| **ILA** | **Ilan** | **0.21** | **339** | ⇓*i*P | **Pb** | **10 18 33.6** | **-0.3** |
| | baz=333 | | | | | | |
| ILA | | | | *e*S | **Sg** | **10 18 37.3** | **+1.4** |
| | baz=333 | | | | | | |
| **TWE** | **Neicheng** | **0.21** | **316** | ⇓*i*P | **Pb** | **10 18 33.4** | **-0.6** |
| | baz=317 | | | | | | |
| TWE | | | | *i* S | **Sb** | **10 18 36.4** | **+0.5** |
| | baz=317 | | | | | | |
| **ENTT** | **Nioudou** | **0.25** | **287** | P | **Pb** | **10 18 34.0** | **-0.6** |
| | baz=287 | | | | | | |
| ENTT | | | | *i* S | **Sb** | **10 18 37.9** | **-1.1** |
| | baz=287 | | | | | | |
| **NNS** | **Nan Shan** | **0.43** | **253** | *i* P | **Pg** | **10 18 37.3** | **+0.4** |
| | baz=254 | | | | | | |
| NNS | | | | *e*S | **Sg** | **10 18 43.0** | **+0.4** |
| | baz=254 | | | | | | |
| **NSK** | **Sanguang** | **0.44** | **284** | P | **Pb** | **10 18 37.7** | **-0.2** |
| | baz=291 | | | | | | |
| NSK | | | | *e*S | **Sg** | **10 18 43.2** | **+0.3** |
| | baz=291 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.46** | **18** | *e*P | **Pg** | **10 18 38.2** | **+0.9** |
| | baz=8.0 | | | | | | |
| **TWA** | **Mucha** | **0.47** | **331** | P | **Pb** | **10 18 38.5** | **+0.1** |
| | baz=331 | | | | | | |
| TWA | | | | *e*S | **Sb** | **10 18 45.5** | **+0.3** |
| | baz=331 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.50** | **355** | *e*P | **Pg** | **10 18 39.0** | **+0.9** |
| | baz=342 | | | | | | |
| NWF | | | | *i* S | **Sg** | **10 18 46.0** | **+1.2** |
| | baz=342 | | | | | | |
| **TWD** | **Chiawan** | **0.53** | **204** | *e*P | **Pg** | **10 18 39.3** | **+0.8** |
| | baz=206 | | | | | | |
| TWD | | | | *e*S | **Sb** | **10 18 46.1** | **-0.9** |
| | baz=206 | | | | | | |
| **HWA** | **Hwalien** | **0.62** | **199** | *e*P | **Pg** | **10 18 41.1** | **+0.8** |
| | baz=201 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.65** | **325** | *e*P | **Pn** | **10 18 42.6** | **-0.6** |
| | baz=314 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.67** | **231** | *e*P | **Pb** | **10 18 41.5** | **-0.5** |
| | baz=232 | | | | | | |
| WHF | | | | S | **Sn** | **10 18 52.2** | **-2.1** |
| | baz=232 | | | | | | |
| **TWT** | **Tachien** | **0.67** | **242** | *e*P | **Pn** | **10 18 42.6** | **-1.0** |
| | baz=244 | | | | | | |
| **NSTT** | **Nanjuang** | **0.76** | **275** | *e*P | **Pn** | **10 18 43.8** | **-0.9** |
| | baz=275 | | | | | | |
| **ESL** | **Shilin** | **0.83** | **206** | *e*P | **Pb** | **10 18 44.6** | **+0.1** |
| | baz=208 | | | | | | |
| **TWQ1** | **Liyutan** | **0.99** | **257** | *e*P | **Pg** | **10 18 49.0** | **+1.8** |
| | baz=258 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.02** | **96** | *e*S | **Sb** | **10 19 01.3** | **+0.1** |
| **WDT** | **Danda** | **1.03** | **218** | *e*P | **Pg** | **10 18 48.4** | **+0.3** |
| | baz=220 | | | | | | |
| WDT | | | | *e*S | **Sg** | **10 19 02.7** | **+1.2** |
| | baz=220 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.08** | **95** | P | **Pn** | **10 18 48.7** | **-0.4** |
| YOJ | | | | S | **Sb** | **10 19 03.0** | **+0.2** |
| **SMLT** | **Sun Moon Lake** | **1.09** | **231** | *e*P | **Pg** | **10 18 49.6** | **+0.5** |
| | baz=233 | | | | | | |
| SMLT | | | | *e*S | **Sg** | **10 19 04.3** | **+1.0** |
| | baz=233 | | | | | | |
| **TYC** | **Yuchr** | **1.11** | **234** | *e*P | **Pg** | **10 18 50.1** | **+0.6** |
| | baz=243 | | | | | | |
| **EHY** | **Hungye** | **1.16** | **204** | *e*P | **Pb** | **10 18 50.2** | **+0.2** |
| | baz=206 | | | | | | |
| **TWF1** | **Yuli** | **1.30** | **202** | *e*P | **Pb** | **10 18 52.5** | **-0.1** |
| | baz=216 | | | | | | |
| **ALS** | **Alishan** | **1.41** | **222** | *e*P | **Pg** | **10 18 55.8** | **+0.5** |
| | baz=224 | | | | | | |
| **CHN5** | **Tsauling** | **1.43** | **228** | *e*P | **Pg** | **10 18 56.6** | **+0.9** |
| | baz=228 | | | | | | |
| CHN5 | | | | *e*S | **Sg** | **10 19 16.9** | **+2.6** |
| | baz=228 | | | | | | |
| **ELDTW** | **Lidau** | **1.56** | **209** | *e*P | **Pg** | **10 18 58.3** | **+0.1** |
| | baz=210 | | | | | | |
| **CHN4** | **Tsaushan** | **1.66** | **223** | *e*P | **Pg** | **10 19 01.8** | **+1.8** |
| | baz=224 | | | | | | |
| CHN4 | | | | *e*S | **Sg** | **10 19 24.4** | **+2.8** |
| | baz=224 | | | | | | |
| **STYT** | **Tauyuan** | **1.71** | **215** | *e*P | **Pg** | **10 19 00.7** | **-0.3** |
| | baz=203 | | | | | | |
| **WTP** | **Ta-pu** | **1.72** | **220** | *e*P | **Pg** | **10 19 01.9** | **+0.7** |
| | baz=204 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.75** | **97** | P | **Pn** | **10 18 57.9** | **-0.3** |
| IRIF | | | | S | **Sn** | **10 19 19.4** | **-1.0** |
| **CHN1** | **Nanshi** | **1.82** | **221** | *e*P | **Pg** | **10 19 03.3** | **+0.1** |
| | baz=206 | | | | | | |
| **JKRS** | **Kuro-shima** | **2.01** | **99** | S | **Sn** | **10 19 26.0** | **-1.0** |
| **JIJ** | **Ishigaki jima** | **2.12** | **95** | P | **Pn** | **10 19 03.9** | **+0.6** |
| JIJ | | | | S | **Sn** | **10 19 27.1** | **-2.5** |
| **JISG** | **Ishigakijimahi** | **2.26** | **89** | P | **Pn** | **10 19 05.0** | **-0.3** |
| JISG | | | | S | **Sn** | **10 19 32.9** | **-0.1** |
| **JTJ** | **Tarama** | **2.62** | **88** | *e*S | **Sn** | **10 19 42.5** | **+0.6** |

**FUNV 21 10:25:43.8, 6.°84N×73.°04W, h161km, MW3.6, 1D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAPV** | **Capacho** | **1.25** | **35** | ⇓*i*P | Pn | 10 26 11.4 | -0.6 |
| CAPV | | | | *e*S | Sn | 10 26 31.6 | -2.1 |
| **VIGV** | **El Vigia** | **2.59** | **40** | *e*P | Pn | 10 26 25.6 | -1.0 |
| **SOCV** | **Socops** | **2.59** | **56** | *e*P | Pn | 10 26 26.0 | -0.6 |
| SOCV | | | | *e*S | Sn | 10 26 56.2 | -3.7 |
| **VIRV** | **Villa del Rosa** | **3.69** | **10** | *e*P | Pn | 10 26 38.4 | -2.1 |
| VIRV | | | | *e*S | Sn | 10 27 20.0 | -4.6 |
| **QARV** | **Quebrada Arrib** | **4.17** | **36** | *e*P | Pn | 10 26 45.8 | -0.9 |
| QARV | | | | *e*S | Sn | 10 27 31.1 | -4.5 |
| **SANV** | **Sanarito** | **4.36** | **52** | *e*P | Pn | 10 26 47.2 | -2.0 |
| SANV | | | | *e*S | Sn | 10 27 34.6 | -5.6 |
| **CURV** | **Curarigua** | **4.38** | **44** | *e*P | Pn | 10 26 47.9 | -1.5 |
| **DABV** | **Dabajuro** | **4.70** | **30** | *e*P | Pn | 10 26 52.3 | -1.2 |
| **TEPV** | **Terepaima** | **4.91** | **51** | *e*P | Pn | 10 26 54.9 | -1.5 |
| **BAUV** | **El Baul** | **5.37** | **67** | *e*P | Pn | 10 27 00.0 | -2.3 |
| **MAPV** | **Macapo** | **5.42** | **56** | *e*P | Pn | 10 27 01.2 | -1.8 |
| **MONV** | **Montecano** | **5.91** | **31** | *e*P | Pn | 10 27 07.1 | -2.4 |
| **TURV** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KII** | **Karymskiy** | **1.56** | **335** | *eP* | | **Pn** | **10 43 45.7** | **+0.8** |
| KII | | | | *eS* | | **Sn** | **10 44 04.4** | **+0.1** |
| **KII** | **Karymskiy** | **1.56** | **335** | PN | | **Pn** | **10 43 45.7** | **+0.8** |
| KII | | | | S | | **Sn** | **10 44 04.4** | **+0.1** |
| **ASAK** | **Asacha** | **1.66** | **262** | *i* P | | **Pn** | **10 43 47.8** | **+1.5** |
| ASAK | | | | *i* S | | **Sn** | **10 44 08.4** | **+1.6** |
| **PETK** | **Petropavlovsk-** | **1.81** | **286** | P | | **Pn** | **10 43 49.5** | **+1.3** |
| | 62nm,0.3s,baz=98,slow=20,SNR=2768 | | | | | | | |
| PETK | | | | S | | **Sn** | **10 44 10.1** | **-0.2** |
| | 67nm,0.3s,baz=117,slow=18,SNR=8.1 | | | | | | | |
| PETK | | | | LR | | LR | 10 44 30.7 | |
| | comp=Z,74nm,21.6s,baz=52,slow=44 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **1.81** | **286** | PN | | **Pn** | **10 43 49.6** | **+1.3** |
| PETK | | | | S | | **Sn** | **10 44 10.1** | **-0.2** |
| PETK | | | | pmax | pmax | | | |
| | comp=Z,62nm,0.3s | | | | | | | |
| PETK | | | | smax | smax | | | |
| | comp=N,67nm,0.3s | | | | | | | |
| **GNL** | **Ganaly** | **1.91** | **305** | *i* P | | **Pn** | **10 43 51.0** | **+1.3** |
| GNL | | | | *eS* | | **Sn** | **10 44 14.7** | **+1.9** |
| **GNL** | **Ganaly** | **1.91** | **305** | PN | | **Pn** | **10 43 51.0** | **+1.3** |
| GNL | | | | S | | **Sn** | **10 44 14.7** | **+1.9** |
| **MKZ** | **Mys Kozlova** | **2.04** | **19** | *i* P | | **Pn** | **10 43 51.6** | **+0.3** |
| MKZ | | | | *i* S | | **Sn** | **10 44 14.5** | **-1.2** |
| **MKZ** | **Mys Kozlova** | **2.04** | **19** | PN | | **Pn** | **10 43 51.6** | **+0.3** |
| MKZ | | | | S | | **Sn** | **10 44 14.5** | **-1.2** |
| **APC** | **Apacha** | **2.10** | **279** | *i* P | | **Pn** | **10 43 54.0** | **+1.9** |
| APC | | | | *i* S | | **Sn** | **10 44 18.9** | **+1.7** |
| **APC** | **Apacha** | **2.10** | **279** | PN | | **Pn** | **10 43 54.0** | **+1.9** |
| APC | | | | S | | **Sn** | **10 44 18.9** | **+1.7** |
| **MIPR** | **Malaya Ipel'ka** | **2.37** | **263** | *eP* | | **Pn** | **10 43 57.5** | **+1.7** |
| **KZV** | **Kizimen** | **2.48** | **356** | *eP* | | **Pn** | **10 43 58.8** | **+1.3** |
| KZV | | | | *eS* | | **Sn** | **10 44 27.0** | **+0.2** |
| **TUMR** | **Tumrok** | **2.66** | **355** | *eP* | | **Pn** | **10 44 01.5** | **+1.6** |
| TUMR | | | | *eS* | | **Sn** | **10 44 32.0** | **+1.0** |
| **TUMR** | **Tumrok** | **2.66** | **355** | PN | | **Pn** | **10 44 01.5** | **+1.6** |
| TUMR | | | | S | | **Sn** | **10 44 32.0** | **+1.0** |
| **KMNR** | **Kamenistaya** | **3.13** | **356** | P | | **Pn** | **10 44 07.8** | **+1.6** |
| **KMNR** | **Kamenistaya** | **3.13** | **356** | PN | | **Pn** | **10 44 07.8** | **+1.6** |
| **SKR** | **Severo-Kuril's** | **3.40** | **237** | *eP* | | **Pn** | **10 44 10.6** | **+0.7** |
| SKR | | | | *eS* | | **Sn** | **10 44 48.0** | **-0.9** |
| **SKR** | **Severo-Kuril's** | **3.40** | **237** | *e*PN | | Pn | 10 44 02.9 | -7.0 |
| SKR | | | | pmax | pmax | | | |
| | comp=E,60nm,0.5s | | | | | | | |
| SKR | | | | pmax | pmax | | | |
| | comp=Z,80nm,0.5s | | | | | | | |
| **KOZ** | **Kozyrevsk** | **3.45** | **353** | P | | **Pn** | **10 44 11.9** | **+1.4** |
| **KOZ** | **Kozyrevsk** | **3.45** | **353** | PN | | **Pn** | **10 44 11.9** | **+1.4** |
| **ESO** | **Esso** | **3.47** | **342** | *eP* | | **Pn** | **10 44 11.9** | **+1.1** |
| **ESO** | **Esso** | **3.47** | **342** | PN | | **Pn** | **10 44 11.9** | **+1.1** |
| **SRDR** | **Sredinnyy** | **3.72** | **353** | *eP* | | **Pn** | **10 44 15.4** | **+1.2** |
| **SRDR** | **Sredinnyy** | **3.72** | **353** | PN | | **Pn** | **10 44 15.4** | **+1.2** |
| **KBTR** | **Krutoberegovo** | **3.81** | **19** | *eP* | | **Pn** | **10 44 16.3** | **+0.9** |
| **KBTR** | **Krutoberegovo** | **3.81** | **19** | PN | | **Pn** | **10 44 16.3** | **+0.9** |
| **BDR** | **Baidarnaya** | **3.95** | **5** | *eP* | | **Pn** | **10 44 18.9** | **+1.4** |
| **SMKR** | **Semkarok** | **3.98** | **7** | *eP* | | **Pn** | **10 44 18.8** | **+0.9** |
| **SMKR** | **Semkarok** | **3.98** | **7** | PN | | **Pn** | **10 44 18.8** | **+0.9** |
| **SRKR** | **Sorokina** | **4.04** | **5** | *eP* | | **Pn** | **10 44 19.3** | **+0.7** |
| SRKR | | | | *eS* | | **Sn** | **10 45 05.4** | **+0.8** |
| **SRKR** | **Sorokina** | **4.04** | **5** | PN | | **Pn** | **10 44 19.3** | **+0.7** |
| SRKR | | | | S | | **Sn** | **10 45 05.4** | **+0.8** |
| **MA2** | **Magadan** | **8.85** | **326** | *e*PN | | Pn | 10 45 19.3 | -4.9 |
| **KUR** | **Kuril'sk** | **11.16** | **233** | PN | | **Pn** | **10 45 56.5** | **+0.6** |
| **ASAJ** | **Asahikawa** | **14.65** | **242** | P | | **Pn** | **10 46 42.7** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=50,slow=17,SNR=5.5 | | | | | | | |
| **ASAJ** | **Asahikawa** | **14.65** | **242** | P | | **Pn** | **10 46 42.7** | **0.0** |
| ASAJ | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **BILL** | **Bilibino** | **15.69** | **8** | *e*P | | **P** | **10 47 00.4** | **+1.7** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **ERM** | **Erimo** | **15.85** | **235** | *e*P | | **Pn** | **10 46 58.7** | **+0.7** |
| ERM | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| **HABR** | **Khabarovsk** | **16.71** | **266** | *e*P | | **Pn** | **10 47 06.5** | **-2.3** |
| HABR | | | | *e*S | | **Sn** | **10 50 08.9** | **-4.7** |
| HABR | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| HABR | | | | MLR | MLR | | | |
| | comp=Z,98nm,17.0s | | | | | | | |
| **KLR** | **Kul'dur** | **18.43** | **271** | *e*P | | **Pn** | **10 47 30.5** | **+0.7** |
| **YAK** | **Yakutsk** | **18.96** | **312** | *e*P | | **P** | **10 47 32.7** | **-2.0** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **22.48** | **233** | *e*P | | P | 10 48 20.7 | +7.7 |
| MJA0 | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **MAJO** | **Matsushiro** | **22.50** | **233** | P | | **P** | **10 48 12.0** | **-1.2** |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,43nm,1.1s | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **33.21** | **169** | T | | T | 11 25 36.3 | |
| | baz=353,slow=76,SNR=92 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **33.23** | **169** | T | | T | 11 25 30.8 | |
| | baz=353,slow=76,SNR=94 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **33.23** | **169** | T | | T | 11 25 38.0 | |
| | baz=353,slow=76,SNR=46 | | | | | | | |
| **SONM** | **Songino Array** | **34.30** | **284** | P | | **P** | **10 49 58.0** | **-1.0** |
| | comp=Z,0.6nm,0.3s,baz=64,slow=7.6,SNR=6.1 | | | | | | | |
| **SONM** | **Songino Array** | **34.30** | **284** | P | | **P** | **10 49 58.0** | **-1.0** |
| SONM | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.40** | **170** | T | | T | 11 27 19.2 | |
| | baz=352,slow=76,SNR=25 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.41** | **170** | T | | T | 11 27 15.4 | |
| | baz=352,slow=76,SNR=34 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.41** | **170** | T | | T | 11 27 07.3 | |
| | baz=352,slow=76,SNR=14 | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.62** | **296** | P | | **P** | **10 51 54.3** | **-1.7** |
| | comp=Z,0.7nm,0.4s,baz=56,slow=7.9,SNR=5.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.62** | **296** | *e*P | | **P** | **10 51 54.2** | **-1.7** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.81** | **342** | P | | **P** | **10 52 34.0** | **-0.5** |
| | comp=Z,3.8nm,0.8s,baz=34,slow=8.8,SNR=7.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **53.81** | **342** | P | | **P** | **10 52 34.0** | **-0.5** |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **55.62** | **70** | P | | **P** | **10 52 50.9** | **+2.6** |
| | comp=Z,0.5nm,0.6s,baz=299,slow=7.0,SNR=7.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.38** | **259** | P | | **P** | **10 53 07.3** | **-0.3** |
| | comp=Z,1.1nm,0.4s,baz=27,slow=7.4,SNR=4.3 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.38** | **259** | P | | **P** | **10 53 07.4** | **-0.3** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **60.65** | **337** | P | | **P** | **10 53 22.9** | **+0.2** |
| | comp=Z,1.6nm,0.3s,baz=47,slow=6.2,SNR=7.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **60.65** | **337** | P | | **P** | **10 53 22.9** | **+0.2** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **64.06** | **344** | P | | **P** | **10 53 45.1** | **-0.4** |
| | comp=Z,0.6nm,0.4s,baz=20,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **64.06** | **344** | P | | **P** | **10 53 45.4** | **-0.1** |
| | comp=Z,1.2nm,0.6s,baz=23,slow=6.8,SNR=4.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **64.06** | **344** | P | | **P** | **10 53 45.4** | **-0.1** |
| NOA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.15** | **329** | P | | **P** | **10 54 17.5** | **-0.6** |
| | comp=Z,0.7nm,0.4s,baz=30,slow=6.4,SNR=2.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **69.15** | **329** | P | | **P** | **10 54 17.5** | **-0.6** |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **TXAR** | **Lajitas Array** | **70.54** | **67** | P | | **P** | **10 54 28.9** | **+1.9** |
| | comp=Z,0.3nm,0.6s,baz=293,slow=4.7,SNR=5.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **70.54** | **67** | P | | **P** | **10 54 29.0** | **+1.9** |

*SJA **21** 10:46:41.6±0.5,24.˚15S×66.˚91W,h211km±7km, ML2.6, MW2.8*
*IDC **21** 10:46:41.4±1.2,24.˚16S×66.˚84W,h157km±17km, mb3.1/3, mb1 3.4/8,mb1mx3.2/27,mbtmp3.8/8, Error ellipse: s-maj=18.8km s-min=15.8km az=110.0*
*ISCJB **21** 10:46:42.1±0.5,24.˚17S±0.˚04×67.˚07W±0.˚06,h192km±5km, mb3.1/3, Error ellipse: s-maj=9.7km s-min=6.4km az=163.8*

**ISC 21 10:46:42.5±0.9,24.˚20S±0.˚05×67.˚13W±0.˚06,h184km±8km, n17,σ1ş50/23,mb3.5/3,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.57** | **110** | *eP* | **Pn** | **10 47 16.3** | **+0.6** |
| SLA | | | | IAML | | 10 47 17.4 | |
| | comp=Z,14nm,0.5s | | | | | | |
| SLA | | | | *eS* | **Sn** | **10 47 41.7** | **+0.4** |
| **HJA** | **Humahuaca** | **1.86** | **58** | *eP* | **Pn** | **10 47 19.4** | **+0.5** |
| HJA | | | | *eS* | **Sn** | **10 47 46.8** | **-0.1** |
| **AZAP** | **Zapla** | **1.88** | **91** | *eP* | **Pn** | **10 47 19.2** | **+0.3** |
| AZAP | | | | IAML | | 10 47 20.1 | |
| | comp=Z,50nm,0.3s | | | | | | |
| AZAP | | | | *eS* | **Sn** | **10 47 46.4** | **-0.6** |
| **FSA** | **Cafayete** | **2.14** | **152** | *eP* | **Pn** | **10 47 22.8** | **+1.2** |
| FSA | | | | IAML | | 10 47 23.6 | |
| | comp=Z,7.2nm,0.5s | | | | | | |
| **LVC** | **Limon Verde** | **2.27** | **314** | P | **Pn** | **10 47 23.9** | **+0.7** |
| | comp=Z,400nm,0.3s,baz=147,slow=10,SNR=146 | | | | | | |
| LVC | | | | S | **Sn** | **10 47 54.4** | **-0.3** |
| | comp=Z,3μm,0.3s,baz=23,slow=22,SNR=14 | | | | | | |
| **ASTB** | **Santa Barbara** | **2.43** | **85** | *eP* | **Pn** | **10 47 24.3** | **-0.6** |
| **YJA** | **Yavi** | **2.50** | **37** | *eP* | **Pn** | **10 47 26.1** | **+0.1** |
| YJA | | | | IAML | | 10 47 28.3 | |
| | comp=Z,18nm,0.7s | | | | | | |
| YJA | | | | *eS* | **Sn** | **10 47 59.0** | **-0.7** |
| **AHML** | **Horco Molle** | **3.04** | **148** | *eP* | **Pn** | **10 47 32.1** | **+0.2** |
| AHML | | | | IAML | | 10 47 33.9 | |
| | comp=Z,5.9nm,0.3s | | | | | | |
| AHML | | | | *eS* | **Sn** | **10 48 09.8** | **-0.8** |
| **VCA** | **Vinchina** | **4.62** | **192** | *eP* | **Pn** | **10 47 53.6** | **+1.7** |
| VCA | | | | IAML | | 10 47 54.7 | |
| | comp=Z,15nm,0.4s | | | | | | |
| **CFAA** | **Coronel Fontan** | **7.44** | **187** | P | **Pn** | **10 48 28.3** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=2.9,slow=13,SNR=6.3 | | | | | | |
| CFAA | | | | S | **Sn** | **10 49 47.7** | **-4.8** |
| | comp=Z,0.1nm,0.3s,baz=198,slow=20,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **7.92** | **353** | P | **Pn** | **10 48 34.9** | **-0.6** |
| | comp=Z,2.7nm,0.3s,baz=155,slow=7.5,SNR=65 | | | | | | |
| LPAZ | | | | S | **Sn** | **10 50 03.2** | **-1.8** |
| | comp=Z,0.2nm,0.3s,baz=331,slow=18,SNR=3.3 | | | | | | |
| **CPUP** | **Villa Florida** | **9.12** | **106** | P | Pn | 10 48 45.7 | -4.8 |
| | comp=Z,0.0nm,0.3s,baz=277,slow=16,SNR=1.9 | | | | | | |
| **SIV** | **San Ignacio** | **9.95** | **36** | P | Pn | 10 48 58.2 | -3.3 |
| | comp=Z,0.5nm,0.3s,baz=235,slow=12,SNR=4.6 | | | | | | |
| **BDFB** | **Brasilia** | **19.87** | **68** | P | **P** | **10 50 58.2** | **-1.7** |
| | comp=Z,0.9nm,0.3s,baz=246,slow=9.2,SNR=12 | | | | | | |
| **SNAA** | **Sanae** | **59.20** | **161** | P | **P** | **10 56 25.0** | **+1.1** |
| | comp=Z,0.1nm,0.6s,baz=280,slow=12,SNR=3.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **66.01** | **180** | P | **P** | **10 57 11.1** | **+2.0** |
| | comp=Z,1.5nm,1.2s,baz=182,slow=1.3,SNR=7.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.75** | **69** | P | **P** | **10 58 14.3** | **+0.2** |
| | comp=Z,0.5nm,0.6s,baz=248,slow=5.6,SNR=7.7 | | | | | | |

*BJI **21** 11:00:27.4,6.˚55S×151.˚63E,h59km, mb4.9/56, mB5.5/40, Ms5.4/39,Ms7 5.1/40*
*IDC **21** 11:00:29.6±1.4,6.˚04S×151.˚02E,h24km±8km, mb4.9/21, mb1 5.0/25,mb1mx5.0/29,mbtmp5.0/25,ML3.8/4, MS4.8/28, Ms1 4.9/28,ms1mx4.8/30,Error ellipse: s-maj=12.3km s-min=7.0km az=62.0*
*AUST **21** 11:00:29.1±1.1,6.˚26S×150.˚81E,h6km, Error ellipse: s-maj=0.7km s-min=0.6km az=247.0*
*ISCJB **21** 11:00:30.9±0.7,6.˚14S±0.˚03×150.˚80E±0.˚03,h39km±6km, mb5.2/123,MS5.0/41, Error ellipse: s-maj=4.4km s-min=4.0km az=137.6*
*MOS **21** 11:00:30.6±1.5,6.˚01S×150.˚77E,h33km,mb5.3/34, MS5.0/11, Error ellipse: s-maj=8.7km s-min=6.2km az=90.5*
*GCMT **21** 11:00:32.7±0.1,6.˚22S×150.˚94E,h20km,MW5.5/94, Moment Tensor Solution. s89,c159; s94,c167; Duration: 1s5 Moment tensor: Scale 10¹⁷Nm; Mrr0.38±.02; Mθθ-1.14±.02; Mϕϕ0.76±.02; Mrθ1.58±.04; Mθϕ-0.11±.02; Mϕr0.85±.04; Best double couple: M₀2.02700×10¹⁷ NP1:φs58.00000°,δ82.00000°, λ67.00000°. NP2:φs310.00000°,δ24.00000°,λ161.00000°. Principal axes: T 1.8160, Plg48.0000°, Azm304.0000°; N 0.4240, Plg23.0000°, Azm61.0000°; P -2.2370, Plg33.0000°, Azm167.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC **21** 11:00:32.7±1.0,6.˚13S×150.˚87E,h42km±9km,mb5.3/84 Error ellipse: s-maj=6.3km s-min=5.7km az=220.0*
*NEIC Felt [IV] at Kimbe.*
*DJA **21** 11:00:41.3±0.7,7.˚S×4.˚×15.˚0E±.˚,h89km±9km,M5.4/15, mb5.0/15,mB5.7/11,MLv5.8/1,Mw(mB)5.2/11,Mwp5.3/1*

**ISC 21 11:00:31.9±0.4,6.˚14S±0.˚03×150.˚91E±0.˚04,h37km±1km, n456,σ1ş57/466,mb5.2/131,MS5.1/42,18C-7D,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.31** | **33** | P | **Pn** | **11 01 08.0** | **+0.7** |
| | baz=2.5,SNR=1000 | | | | | | |
| **PMG** | **Port Moresby** | **4.93** | **229** | Pn | **Pn** | **11 01 44.6** | **+1.1** |
| | 29nm,0.3s,baz=57,slow=6.3,SNR=85 | | | | | | |
| PMG | | | | Sn | Sn | 11 02 35.5 | -3.9 |
| | 76nm,0.3s,baz=38,slow=10.0,SNR=4.9 | | | | | | |
| PMG | | | | LR | LR | 11 03 12.0 | |
| | comp=Z,4μm,20.6s,baz=33,slow=32 | | | | | | |
| **PMG** | **Port Moresby** | **4.93** | **229** | P | **Pn** | **11 01 44.8** | **+1.3** |
| | baz=4.8,SNR=201 | | | | | | |
| **MANU** | **Mus Island** | **5.39** | **319** | P | Pn | 11 01 53.9 | +4.1 |
| | baz=5.4,SNR=50 | | | | | | |
| **HNR** | **Honiara** | **9.53** | **111** | Pn | **Pn** | **11 02 45.3** | **-1.4** |
| | 4.6nm,0.3s,baz=270,slow=19,SNR=1.8 | | | | | | |
| HNR | | | | Sn | Sn | 11 04 36.4 | +3.7 |
| | baz=289,slow=18,SNR=3.6 | | | | | | |
| HNR | | | | LR | LR | 11 05 52.9 | |
| | comp=Z,11μm,22.0s,baz=276,slow=34 | | | | | | |
| **HNR** | **Honiara** | **9.53** | **111** | *e*P | Pn | 11 02 49.0 | +2.3 |
| HNR | | | | *e*S | Sn | 11 04 24.0 | -8.7 |
| **HNR** | **Honiara** | **9.53** | **111** | Pn | **Pn** | **11 02 45.3** | **-1.4** |
| HNR | | | | *e*Pn | Pn | 11 02 51.1 | +4.4 |
| HNR | | | | Sn | Sn | 11 04 36.4 | +3.7 |
| **JAY** | **Jayapura** | **10.79** | **289** | Pn | **Pn** | **11 03 04.2** | **+0.2** |
| | 0.4nm,0.3s,baz=113,slow=10,SNR=2.4 | | | | | | |
| JAY | | | | Sn | Sn | 11 05 12.6 | +9.0 |
| | 0.1nm,0.3s,baz=9.0,slow=19,SNR=2.0 | | | | | | |
| JAY | | | | LR | LR | 11 06 45.0 | |
| | comp=Z,8μm,20.0s,baz=101,slow=35 | | | | | | |
| **JAY** | **Jayapura** | **10.79** | **289** | P | Pn | 11 03 06.9 | +2.9 |
| | baz=11,SNR=7.5 | | | | | | |
| **JAY** | **Jayapura** | **10.79** | **289** | P | Pn | 11 03 08.8 | +4.8 |
| | 880nm,1.1s,15μm | | | | | | |
| **COEN** | **Coen** | **10.88** | **224** | P | **Pn** | **11 03 05.7** | **+0.6** |
| | baz=11,SNR=47 | | | | | | |
| **COEN** | **Coen** | **10.88** | **224** | *e*Pn | **Pn** | **11 03 05.3** | **+0.2** |
| **GENI** | **Genyem** | **11.27** | **288** | P | Pn | 11 03 14.2 | +3.6 |
| | 162nm,0.9s,4μm | | | | | | |
| **SMPI** | **Sarmi** | **12.85** | **288** | P | Pn | 11 03 35.6 | +3.5 |
| | 35nm,1.4s,12μm | | | | | | |
| **MTSU** | **Mount Surprise** | **13.55** | **208** | P | **Pn** | **11 03 42.5** | **+0.9** |
| | baz=14,SNR=132 | | | | | | |
| **CTA** | **Charters Tower** | **14.58** | **198** | Pn | **Pn** | **11 03 57.4** | **+1.6** |
| | 1.3nm,0.3s,baz=29,slow=14,SNR=16 | | | | | | |
| CTA | | | | Sn | S | 11 06 46.5 | -8.0 |
| | 0.4nm,0.3s,baz=75,slow=19,SNR=1.9 | | | | | | |
| CTA | | | | LR | LR | 11 09 47.8 | |
| | comp=Z,3μm,18.2s,baz=18,slow=38 | | | | | | |
| **CTAO** | **Charters Tower** | **14.58** | **198** | *e*P | **Pn** | **11 03 58.1** | **+2.3** |
| **CTAO** | **Charters Tower** | **14.58** | **198** | *e*Pn | **Pn** | **11 03 58.1** | **+2.3** |
| **PATS** | **Pohnpei** | **14.86** | **30** | P | P | 11 04 05.9 | +1.2 |
| | baz=15,SNR=3.1 | | | | | | |
| **QIS** | **Mount Isa** | **18.05** | **216** | P | Pn | **11 04 40.0** | **0.0** |
| | baz=18,SNR=65 | | | | | | |
| **FAKI** | **Fak Fak** | **18.87** | **279** | P | Pn | **11 04 50.9** | **+0.9** |
| | baz=19,SNR=6.6 | | | | | | |
| **EIDS** | **Eidsvold** | **19.12** | **180** | P | Pn | **11 04 53.1** | **+0.3** |
| | baz=19,SNR=25 | | | | | | |
| **EIDS** | **Eidsvold** | **19.12** | **180** | *e*P | Pn | **11 04 53.2** | **+0.3** |
| | 154nm,1.3s | | | | | | |
| **KDU** | **Kakadu** | **19.31** | **249** | P | **P** | **11 04 53.4** | **-0.6** |
| | baz=19,SNR=78 | | | | | | |
| **SAUI** | **Saumlaki** | **19.55** | **263** | P | Pn | 11 05 08.7 | +11 |
| **SAUI** | **Saumlaki** | **19.55** | **263** | *e*P | Pn | **11 04 58.5** | **+0.4** |
| | 175nm,0.8s | | | | | | |
| **SIJI** | **Sorong** | **20.29** | **284** | P | **P** | **11 05 05.5** | **+0.8** |
| | 18nm,0.4s,baz=91,slow=8.4,SNR=9.2 | | | | | | |
| **SWI** | **Sorong** | **20.29** | **284** | P | **P** | **11 05 05.8** | **+1.0** |
| | 75nm,1.1s,1μm | | | | | | |
| **RMQ** | **Roma** | **20.34** | **186** | P | Pn | 11 05 06.8 | -0.6 |
| | baz=20,SNR=315 | | | | | | |
| **GUMO** | **Guam** | **20.50** | **343** | P | **P** | **11 05 06.4** | **-0.5** |
| | 766nm,1.1s,baz=173,slow=11,SNR=17 | | | | | | |
| GUMO | | | | S | **S** | **11 08 54.8** | **+0.3** |
| | 34nm,0.8s,baz=18,slow=20,SNR=2.0 | | | | | | |
| GUMO | | | | LR | LR | 11 11 26.2 | |
| | comp=Z,3μm,20.8s,baz=157,slow=32 | | | | | | |
| **MTN** | **Manton Dam** | **20.60** | **250** | P | **P** | **11 05 07.8** | **-0.3** |
| | baz=20,SNR=34 | | | | | | |
| **MTN** | **Manton Dam** | **20.60** | **250** | *e*P | **P** | **11 05 07.4** | **-0.7** |
| | 242nm,0.9s | | | | | | |
| **BNDI** | **Bandanaira** | **20.97** | **273** | P | **P** | **11 05 11.9** | **-0.2** |
| | 447nm,1.5s,8μm | | | | | | |
| **WRAB** | **Tennant Creek** | **21.14** | **228** | *d* P | **P** | **11 05 13.5** | **-0.4** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,523nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.14** | **228** | P | **P** | **11 05 13.0** | **-0.9** |
| | comp=Z,2μm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **21.14** | **228** | *e*P | **P** | **11 05 13.5** | **-0.4** |
| | comp=Z,179nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.15** | **228** | P | **P** | **11 05 13.8** | **-0.2** |
| | comp=Z,217nm,1.0s,baz=50,slow=10,SNR=294 | | | | | | |
| WRA | | | | S | **S** | **11 09 06.3** | **-1.2** |
| | comp=Z,29nm,1.1s,baz=52,slow=20,SNR=16 | | | | | | |
| WRA | | | | PcP | **PcP** | **11 09 19.3** | **+0.1** |
| | comp=Z,4.7nm,0.6s,baz=46,slow=2.0,SNR=4.0 | | | | | | |
| WRA | | | | ScP | **ScP** | **11 12 54.6** | **+1.1** |
| | comp=Z,3.6nm,0.8s,baz=44,slow=3.6,SNR=4.1 | | | | | | |
| WRA | | | | LR | LR | 11 14 51.3 | |
| | comp=Z,3μm,18.5s,baz=40,slow=40 | | | | | | |
| **PALU** | **Palau** | **21.17** | **309** | P | **P** | **11 05 13.4** | **-0.8** |
| | baz=21,SNR=16 | | | | | | |
| **QLP** | **Quilpie** | **21.30** | **197** | P | **P** | **11 05 16.5** | **+1.0** |
| | baz=21,SNR=205 | | | | | | |
| **DZM** | **Mont Dzumac** | **21.82** | **138** | *e*P | **P** | **11 05 22.3** | **+1.0** |
| | comp=Z,339nm,1.1s | | | | | | |
| DZM | | | | *e*S | **S** | **11 09 17.8** | **-2.9** |
| | comp=Z,2μm,22.1s | | | | | | |
| DZM | | | | *e*LQ | LQ | 11 09 42.4 | |
| | comp=Z,7μm,26.5s | | | | | | |
| DZM | | | | *e*LR | LR | 11 10 37.2 | |
| | comp=Z,14μm,23.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.82** | **138** | P | **P** | **11 05 20.2** | **-1.0** |
| | comp=Z,97nm,0.8s,baz=359,slow=9.1,SNR=41 | | | | | | |
| DZM | | | | S | Sn | 11 09 29.9 | -1.6 |
| | comp=Z,3.4nm,0.8s,baz=1.4,slow=18,SNR=1.8 | | | | | | |
| DZM | | | | LR | LR | 11 12 25.0 | |
| | comp=Z,9μm,21.8s,baz=12,slow=33 | | | | | | |
| **TARA** | **Tarawa** | **23.21** | **72** | P | **P** | **11 05 35.9** | **0.0** |
| **KNRA** | **Kununurra** | **23.70** | **245** | P | **P** | **11 05 39.3** | **-1.2** |
| | baz=24,SNR=245 | | | | | | |
| **AS01** | **Alice Springs** | **23.87** | **221** | *e*P | **P** | **11 05 40.8** | **-1.3** |
| **ASAR** | **Alice Springs** | **23.90** | **221** | P | **P** | **11 05 42.7** | **+0.3** |
| | comp=Z,180nm,0.8s,baz=54,slow=8.9,SNR=419 | | | | | | |
| ASAR | | | | S | **S** | **11 09 53.5** | **-3.1** |
| | comp=Z,1.0nm,0.6s,baz=39,slow=15,SNR=2.3 | | | | | | |
| ASAR | | | | ScP | **ScP** | **11 13 01.2** | **+0.7** |
| | comp=Z,5.0nm,0.8s,baz=44,slow=3.0,SNR=7.2 | | | | | | |
| ASAR | | | | LR | LR | 11 16 27.1 | |
| | comp=Z,2μm,19.3s,baz=50,slow=40 | | | | | | |
| **NLAI** | **Namlea** | **23.90** | **276** | P | **P** | **11 05 43.3** | **+0.8** |
| **ARMA** | **Armidale** | **24.16** | **178** | P | **P** | **11 05 45.4** | **+0.5** |
| | baz=24,SNR=24 | | | | | | |
| **ARMA** | **Armidale** | **24.16** | **178** | *e*P | **P** | **11 05 45.3** | **+0.5** |
| | comp=Z,77nm,1.2s | | | | | | |
| **TNTI** | **Ternate** | **24.48** | **285** | *e*P | **P** | **11 05 47.9** | **0.0** |
| **CMSA** | **Cobar Meteorol** | **25.73** | **190** | P | **P** | **11 05 58.6** | **-0.5** |
| | baz=26,SNR=59 | | | | | | |
| **LHI** | **Lord Howe Isla** | **26.38** | **164** | P | **P** | **11 06 08.8** | **+3.9** |
| | baz=26,SNR=4.4 | | | | | | |
| **LHI** | **Lord Howe Isla** | **26.38** | **164** | *e*P | **P** | **11 06 05.4** | **+0.6** |
| | comp=Z,226nm,1.5s | | | | | | |
| **SOEI** | **Soe** | **26.62** | **261** | P | **P** | **11 06 08.8** | **+1.4** |
| | baz=26,SNR=10 | | | | | | |
| **SOEI** | **Soe** | **26.62** | **261** | *e*P | **P** | **11 06 07.5** | **0.0** |
| | comp=Z,174nm,0.9s | | | | | | |
| **MGCD** | **Mangrove Creek** | **26.93** | **180** | P | **P** | **11 06 12.6** | **+2.7** |
| | baz=27,SNR=7.1 | | | | | | |
| **BATI** | **Baumata** | **27.26** | **260** | P | **P** | **11 06 13.5** | **+0.5** |
| | comp=Z,80nm,0.6s,baz=122,slow=8.4,SNR=14 | | | | | | |
| BATI | | | | LR | LR | 11 19 10.8 | |
| | comp=Z,6μm,21.4s,baz=105,slow=41 | | | | | | |
| **YNG** | **Young** | **28.12** | **184** | P | **P** | **11 06 20.9** | **+0.4** |
| | baz=28,SNR=15 | | | | | | |
| **DAV** | **Davao City (W)** | **28.48** | **297** | LR | LR | 11 16 39.5 | |
| | comp=Z,630nm,19.7s,baz=124,slow=34 | | | | | | |
| **LUWI** | **Luwuk** | **28.52** | **279** | *e*P | **P** | **11 06 26.7** | **+2.4** |
| | comp=Z,54nm,0.9s | | | | | | |
| **MMRI** | **Maumere** | **28.54** | **263** | *e*P | P | 11 06 17.4 | -7.0 |
| | comp=Z,231nm,0.6s | | | | | | |
| **WRKA** | **Warakurna** | **28.67** | **227** | P | **P** | **11 06 24.9** | **-0.7** |
| | baz=29,SNR=73 | | | | | | |
| **CAN** | **Canberra** | **29.09** | **183** | *e*P | **P** | **11 06 29.2** | **0.0** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| **CAN** | **Canberra** | **29.09** | **183** | *e*P | **P** | **11 06 29.2** | **0.0** |
| | comp=Z,21nm,0.9

comp=Z,106nm,0.9s
**SSLB Suanglung 41.71 317** *e*P P **11 08 19.6 +2.2**
comp=Z,607nm,2.3s
**YHNB Yeheng 42.01 318** *e*P P **11 08 20.8 +0.8**
comp=Z,146nm,1.0s
**MQZ McQueen's Vall 42.02 156** *e*P P **11 08 21.5 +1.8**
comp=Z,150nm,1.2s
**RKGY Rocky Gully 42.22 223** P P **11 08 22.1 +0.5**
baz=42,SNR=7.4
**CISI Cisompet, Garu 42.80 266** P P **11 08 24.9 -1.6**
baz=43,SNR=35
**CISI Cisompet, Garu 42.80 266** *e*P P **11 08 25.0 -1.6**
comp=Z,364nm,0.7s
**JNU Nakatsue 43.43 335** *e*P P **11 08 31.0 -0.4**
comp=Z,75nm,0.7s
**QZH Quanzhou 44.09 316**⇑ *i*P P 11 08 39.8 +3.1
**MJAR Matsushiro Arr 44.09 345** P P **11 08 36.0 -0.6**
comp=Z,8.1nm,0.9s,baz=173,slow=7.0,SNR=14
MJAR ScP **ScP** **11 14 10.3 -0.4**
comp=Z,12nm,1.1s,baz=173,slow=4.4,SNR=12
MJAR S **S** **11 15 10.5 +3.6**
comp=Z,0.5nm,0.5s,baz=48,slow=13,SNR=2.5
MJAR LR LR 11 26 29.8
comp=Z,876nm,18.5s,baz=185,slow=36
**MAJO Matsushiro 44.10 345** *e*P P **11 08 37.6 +1.0**
MAJO pmax pmax
comp=Z,52nm,1.0s
**MAT Matsushiro 44.10 345** P P **11 08 37.5 +0.9**
MAT S **S** **11 15 04.8 -2.1**
**XMI Christmas Isla 44.92 261** P P **11 08 43.8 +0.2**
baz=45,SNR=4.3
**XMIS Christmas Isla 44.96 261** P P **11 08 44.0 +0.1**
baz=45,SNR=5.6
**XMIS Christmas Isla 44.96 261** *e*P P **11 08 44.7 +0.8**
comp=Z,153nm,0.9s
**SSE Sheshan 46.67 324** P P **11 08 58.0 +0.9**
SSE S **S** **11 15 50.0 +5.8**
SSE PMZ
comp=Z,24nm,0.6s
SSE PMZ
comp=Z,560nm,4.5s
SSE LN
comp=Z,690nm,20.2s
SSE LE
comp=Z,730nm,20.5s
SSE LZ
comp=Z,1μm,20.8s
**QIZ Qiongzhong 47.56 303** P P **11 09 05.8 +1.5**
QIZ pP pP 11 09 18.9 +3.8
QIZ sP sP 11 09 25.4 +6.0
QIZ S S 11 16 05.4 +8.1
QIZ LZ
comp=Z,2μm,24.2s
**TJN Taejon 47.71 334** *e*P P **11 09 06.5 +1.4**
**KSRS Korea Array 48.38 335** P P **11 09 10.0 -0.3**
comp=Z,22nm,0.9s,baz=155,slow=8.2,SNR=33
KSRS S **S** **11 16 09.7 +1.4**
comp=Z,1.8nm,1.0s,baz=218,slow=23,SNR=3.0
KSRS LR LR 11 27 39.4
comp=Z,1μm,21.9s,baz=156,slow=34
**KSAR Wonju Array Be 48.39 335** P P **11 09 10.0 -0.3**
KSAR S **S** **11 16 09.7 +1.3**
**KSAR Wonju Array Be 48.39 335** P P **11 09 10.0 -0.3**
KSAR *S* **S** **11 16 09.7 +1.3**
**KS01 Wonju Array Si 48.41 335** *e*P P **11 09 10.2 -0.4**
**NJ2 Nanjing 48.74 323** *e*P P **11 09 13.5 +0.4**
NJ2 PMZ
comp=Z,30nm,0.8s
**INCN Inchon 48.95 334** *e*P P **11 09 16.4 +1.7**
comp=Z,400nm,2.2s
**RAR Rarotonga 49.98 112** LR LR 11 26 30.7
comp=Z,421nm,21.6s,baz=274,slow=31
**YUK Yuzh-Kuril'sk 50.15 355***c i*P P 11 09 18.9 -4.8
YUK *e* 11 10 40.1
YUK *e* 11 11 22.2
YUK *e*PPP PPP 11 12 18.5
YUK *i*S S 11 16 25.5 -7.3
YUK *i* 11 19 04.8
YUK *i*SS **SS** **11 20 04.4 -2.3**
YUK pmax pmax
comp=Z,190nm,11.4s
YUK MLR MLR
comp=N,235nm,17.0s
YUK MLR MLR
comp=Z,644nm,17.0s
**WHN Wuhan 50.55 318** P P **11 09 28.6 +1.6**
**ASAJ Asahikawa 50.58 352** *e*P P **11 09 28.7 +1.8**
comp=Z,20nm,0.9s
**IPM Ipoh 50.91 281** *e*P P **11 09 28.5 -1.5**
IPM *e*PcP **PcP** **11 10 47.0 +0.8**
**KUR Kuril'sk 51.21 357** *e*P P 11 09 34.6 +3.0
KUR *i* 11 10 48.1
KUR *e* 11 11 28.9
KUR *e*S S 11 17 03.9 +16
KUR pmax pmax
comp=N,38nm,1.3s
KUR pmax pmax
comp=E,28nm,1.3s
KUR pmax pmax
comp=Z,63nm,1.3s
KUR pmax pmax
comp=Z,314nm,4.9s
**KULM Kulim 51.44 282** *e*P P **11 09 32.2 -1.7**
comp=Z,12nm,0.7s
**SKNT Sakolnakorn 51.76 297** P P **11 09 36.6 +0.3**
comp=Z,160nm,0.9s
**VLA Vladivostok 51.98 342**⇑ *i*P P **11 09 36.4 -1.0**
VLA *e* 11 11 34.8
VLA *e*S **S** **11 16 55.2 -3.0**
VLA pmax pmax
comp=Z,13nm,0.9s
**DL2 Dalian 52.39 331** P P **11 09 40.8 +0.2**
**PSI Prapat 52.66 278** *e*P P **11 09 41.9 -1.3**
PSI pmax pmax
comp=Z,14nm,0.9s
**PSI Prapat 52.66 278** *e*P P **11 09 41.9 -1.3**
comp=Z,14nm,0.9s
**TIA Tai'an 52.71 326**⇓ P P 11 09 46.6 +3.6
TIA PMZ
comp=Z,10.0nm,1.2s
**NONG Nongkai 52.91 298** P P **11 09 45.5 +0.7**
comp=Z,79nm,1.5s,comp=Z,4μm
**USRK Ussuriysk Ar. 52.94 343** P P **11 09 43.7 -0.8**
comp=Z,2.1nm,0.5s,baz=178,slow=8.7,SNR=6.9
USRK ScP **ScP** **11 14 48.2 +0.3**
comp=Z,1.9nm,0.8s,baz=197,slow=4.4,SNR=7.0
USRK S **S** **11 17 10.1 -1.2**
comp=Z,1.0nm,0.7s,baz=206,slow=16,SNR=2.5
USRK LR LR 11 29 20.6
comp=Z,829nm,21.9s,baz=155,slow=33
**NAYO Nakonayok 53.22 293** P P **11 09 48.9 +1.8**
comp=Z,17nm,1.2s
**YSS Yuzh-Sakhalins 53.35 353** *e*P P **11 09 47.9 +0.4**
YSS *e*S S 11 17 11.0 -5.9
YSS *e*PS **PnS** **11 17 20.0 -10**
YSS *e* 11 19 36.0
YSS *e* 11 20 52.0
YSS MLR MLR
comp=Z,600nm,17.0s
**KRAB Krabi 53.50 285** P P **11 09 48.8 -0.5**
comp=Z,22nm,0.7s,comp=Z,1μm
**COCO West Island 53.65 259** *e*P P **11 09 53.0 +2.7**
COCO pmax pmax
comp=Z,188nm,0.6s
**COCO West Island 53.65 259** *e*P P **11 09 53.0 +2.7**
comp=Z,188nm,0.6s
**ENH Enshi 53.72 315** *e*P P **11 09 53.0 +2.4**
comp=Z,19nm,0.8s
**GYA Guiyang 53.74 309** P P **11 09 53.3 +2.4**
GYA pP pP 11 10 09.4 +7.5
GYA sP sP 11 10 16.0 +10
GYA PP **PP** **11 11 55.6 +3.4**
GYA ScP **ScP** **11 14 50.8 -1.3**
GYA S **S** **11 17 22.3 -0.8**
GYA sS sS 11 17 49.0 +7.9
GYA SS **SKiKP** **11 21 03.4 +0.5**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,130nm,5.2s
GYA LN
comp=Z,620nm,18.2s
GYA LE
comp=Z,540nm,18.8s
GYA LZ
comp=Z,610nm,18.4s
**GSI Gunungsitoli 53.76 276** *e*P P **11 09 49.8 -1.4**
comp=Z,48nm,0.8s
**SNY Shenyang 53.87 335**⇑ P P **11 09 53.6 +2.2**
SNY S **S** **11 17 22.3 -1.8**
SNY PMZ
comp=Z,23nm,0.5s
SNY PMZ
comp=Z,470nm,12.0s
SNY LN
comp=Z,740nm,18.6s
SNY LE
comp=Z,790nm,14.4s
SNY LZ
comp=Z,1μm,27.6s
**MDJ Mudanjiang 54.04 341** P P 11 09 54.8 +2.2
MDJ pP pP 11 10 08.5 +4.9
MDJ sP sP 11 10 14.5 +6.6
MDJ PcP **PcP** **11 10 58.6 +1.3**
MDJ PP **PP** **11 11 56.8 +2.3**
MDJ S **S** **11 17 30.3 +4.0**
MDJ PMZ
comp=Z,15nm,0.9s
MDJ PMZ
comp=Z,260nm,6.8s
MDJ LN
comp=Z,640nm,15.3s
MDJ LE
comp=Z,390nm,13.0s
MDJ LZ
comp=Z,1μm,14.7s
**MDJ Mudanjiang 54.04 341** *e*P P 11 09 55.3 +2.6
comp=Z,164nm,2.5s
**LOEI Loei 54.36 297** P P **11 09 53.4 -2.1**
comp=Z,15nm,1.7s
**UTTA Uttaradit 55.08 296** P P **11 10 01.8 +1.2**
comp=Z,6.1nm,0.8s,comp=Z,71nm
**NANT Nan 55.33 298** P P **11 10 03.5 +1.0**
comp=Z,5.6nm,0.6s
**UTHA Uthaitani 55.34 294** P P 11 10 06.0 +3.5
comp=Z,5.1nm,0.7s
**BJT Baijiatuau 55.98 328** *e*P P **11 10 08.9 +2.2**
BJT pmax pmax
comp=Z,40nm,1.3s
**BJT Baijiatuau 55.98 328** *e*P P **11 10 08.9 +2.2**
comp=Z,40nm,1.3s
**BJI Beijing 55.99 328** P P **11 10 08.4 +1.6**
BJI sP sP 11 10 28.1 +6.0
BJI PMZ
comp=Z,23nm,0.8s
BJI LN
comp=Z,1μm,23.1s
BJI LE
comp=Z,1μm,21.2s
BJI LZ
comp=Z,1μm,24.0s
**HABR Khabarovsk 56.14 347** *e*P P **11 10 06.2 -1.5**
HABR *e**PP pP 11 10 22.2 +3.5
HABR *e* 11 11 03.6
HABR *e* 11 12 11.9
HABR *e*PPP PPP 11 13 26.4
HABR *e*S **S** **11 17 50.9 -3.3**
HABR *e* 11 19 49.8
HABR *e*SS **SS** **11 21 39.3 -1.9**
HABR pmax pmax
comp=Z,12nm,1.2s
HABR MLR MLR
comp=Z,393nm,19.0s
**CRAI Chiangrai 56.15 299** P P 11 10 03.4 -5.0
**LAMP Lampang 56.18 297** P P 11 10 12.2 +3.7
comp=Z,5.8nm,0.8s
**KMI Kunming 56.20 306** P P **11 10 10.4 +1.5**
KMI pP pP 11 10 27.5 +7.6
KMI sP sP 11 10 34.5 +10
KMI PP PP 11 12 21.8 +7.3
KMI S **S** **11 17 58.4 +2.0**
KMI sS sS 11 18 25.3 +11
KMI PMZ
comp=Z,11nm,1.0s
KMI PMZ
comp=Z,580nm,5.0s
KMI LN
comp=Z,2μm,19.7s
KMI LE
comp=Z,1μm,17.4s
KMI LZ
comp=Z,2μm,20.9s
**CM01 Chiang Mai Arr 56.74 297** *e*P P **11 10 12.4 -0.1**
**CMAR Chiang Mai Arr 56.76 297** P P **11 10 12.3 -0.4**
comp=Z,6.0nm,0.7s,baz=117,slow=5.3,SNR=15
CMAR LR LR 11 34 03.1
comp=Z,430nm,20.8s,baz=119,slow=35
**CMAR Chiang Mai Arr 56.76 297** *i* P P 11 10 16.2 +3.5
CMAR pmax pmax
comp=Z,6.0nm,0.7s
**CHTO Chiang Mai 56.89 297** P P 11 10 16.9 +3.3
comp=Z,178nm,0.8s
**CHTO Chiang Mai 56.89 297** *e*P P **11 10 15.0 +1.4**
CHTO pmax pmax
comp=Z,9.0nm,0.9s
**CHTO Chiang Mai 56.89 297** *e*P P **11 10 15.0 +1.4**
comp=Z,9.2nm,0.9s
**KIP Kipapa 57.08 60***ce*P P 11 10 19.5 +4.6
KIP pmax pmax
comp=Z,1μm,2.5s
**TYV Tymovskoe 57.22 354** *e*P P **11 10 13.5 -1.8**
TYV pmax pmax
comp=Z,13nm,0.8s
TYV MLR MLR
comp=Z,1μm,18.0s
TYV MLR MLR
comp=N,1μm,16.0s
**KLR Kul'dur 57.62 345** *e*P P 11 10 13.7 -4.5
**CD2 Chengdu 58.20 312** P P **11 10 23.6 +0.9**
CD2 pP pP 11 10 39.3 +5.5
CD2 PP **PP** **11 12 33.1 +1.1**
CD2 PcS **PcS** **11 15 15.6 +0.1**
CD2 S **S** **11 18 22.0 -0.2**
CD2 sS sS 11 18 49.3 +8.9
CD2 SS **SS** **11 22 16.0 +1.4**
CD2 PMZ
comp=N,40nm,0.5s
CD2 PMZ
comp=N,360nm,5.0s
CD2 LE
comp=N,3μm,20.1s
CD2 LZ
comp=N,4μm,19.1s
**HHC Hu-ho-hao-te 59.06 326** *e*P P 11 10 31.1 +2.5
HHC pP pP 11 10 49.0 +9.4
HHC PP PP 11 12 48.0 +8.5
HHC S **S** **11 18 32.8 -0.4**
HHC PMZ
comp=N,28nm,1.2s
HHC PMZ
comp=N,290nm,6.1s
HHC LN
comp=N,1μm,17.1s
HHC LE
comp=N,850nm,16.3s
HHC LZ
comp=N,2μm,18.6s
**PPT Papeete 59.13 107** LR LR 11 31 20.6
comp=N,218nm,20.0s,baz=290,slow=31
**PPT2 Papeete2 59.13 107** *e*S **S** **11 18 35.6 +0.8**
comp=N,797nm,25.8s
PPT2 *e*LQ LQ 11 25 28.1
comp=N,2μm,30.5s
PPT2 *e*LR LR 11 27 56.7
comp=N,478nm,27.2s
**PETK Petropavlovsk- 59.30 5** P P **11 10 28.2 -1.7**
comp=N,18nm,0.8s,baz=183,slow=8.9,SNR=14
PETK S **S** **11 18 39.4 +3.8**
comp=N,2.8nm,0.8s,baz=114,slow=1.7,SNR=2.8
PETK LR LR 11 32 33.9
comp=N,688nm,21.2s,baz=190,slow=32
**PET Petropavlovsk 59.30 5** *e*P P 11 10 34.5 +4.7
PET *e*S **S** **11 18 39.7 +4.2**
PET *e*SSS SSS 11 25 04.5
PET pmax pmax
comp=Z,200nm,14.5s
PET MLR MLR
comp=Z,1μm,20.0s
PET MLR MLR
comp=Z,1μm,21.0s
**TBI Tubuai 59.74 113** *e*S **S** **11 18 44.4 +2.1**
comp=Z,739nm,26.5s
TBI *e*LQ LQ 11 25 43.2
comp=Z,2μm,34.5s
TBI *e*LR LR 11 28 13.6
comp=Z,2μm,32.8s,baz=278
**PMOR Pomariorio Ree 60.64 104** *e*P P 11 10 42.4 +2.6
comp=Z,216nm,1.3s
**DRV Dumont d'Urvil 60.90 185** S S 11 18 46.0 -10
DRV L L 11 25 00.0
DRV R 11 29 00.0
**LZH Lanzhou 60.90 317** *e*P **P** **11 10 41.5 +0.1**
LZH pP pP 11 10 57.6 +5.1
LZH sP sP 11 11 04.8 +8.0
LZH PP **PP** **11 12 58.5 +2.6**
LZH *e*S **S** **11 18 53.3 -3.8**
LZH sS sS 11 19 21.8 +6.4
LZH PMZ
comp=Z,42nm,1.4s
LZH PMZ
comp=Z,230nm,5.7s
LZH LN
comp=Z,1μm,15.0s
LZH LE
comp=Z,790nm,15.4s
LZH LZ
comp=Z,2μm,18.0s
**HIA Hailar 61.51 337** *e*P **P** **11 10 44.8 -0.3**
HIA pmax pmax
comp=Z,30nm,1.0s
**HIA Hailar 61.51 337** *e*P **P** **11 10 44.8 -0.3**
comp=Z,30nm,1.0s
**GTA Gaotai 65.38 318** *e*P **P** **11 11 10.6 -0.4**
GTA pP pP 11 11 26.8 +4.6
GTA sP sP 11 11 34.5 +8.1
GTA PP **PP** **11 13 36.9 +1.6**
GTA S **S** **11 19 48.1 -4.8**
GTA sS sS 11 20 16.9 +5.5
GTA PMZ
comp=Z,8.0nm,1.3s
GTA PMZ
comp=Z,860nm,6.9s
GTA LN
comp=Z,670nm,16.1s
GTA LE
comp=Z,870nm,14.5s
GTA LZ
comp=Z,1μm,14.5s
**CASY Casey 66.19 197** *e*P **P** **11 11 15.7 +0.1**
comp=Z,39nm,1.1s
**CLNS Chul'man 66.28 345** *e*P **P** **11 11 15.4 -0.9**
CLNS pmax pmax
comp=E,4.0nm,0.8s
CLNS pmax pmax
comp=N,7.0nm,1.0s
CLNS pmax pmax
comp=Z,13nm,1.0s
**SONM Songino Array 66.47 329** P **P** **11 11 17.0 -0.8**
comp=Z,18nm,1.0s,baz=147,slow=5.1,SNR=26
SONM LR LR 11 39 26.9
comp=Z,1μm,21.5s,baz=132,slow=35
SONM PKP2bc 11 39 52.0
comp=Z,1.5nm,1.0s,baz=304,slow=3.4,SNR=9.3
**LSA Lhasa 67.46 306** *e*P **P** **11 11 27.4 +2.5**
LSA pmax pmax
comp=Z,17nm,1.1s
**LSA Lhasa 67.46 306** *e*P **P** **11 11 27.4 +2.5**
comp=Z,17nm,1.1s
**SEY Seymchan 68.89 1***ce*P **P** **11 11 34.3 +1.7**
**TAPN Taplejung 69.50 302** *e*P **P** **11 11 36.5 -1.0**
comp=Z,18nm,0.6s
**ZAK Zakamensk 69.67 330** *e*P **P** **11 11 36.0 -1.9**
ZAK pmax pmax
comp=Z,17nm,1.2s
**YAK Yakutsk 69.92 350** *e*P **P** **11 11 37.3 -1.7**
YAK pmax pmax
comp=Z,11nm,1.1s
**CHLP Challavanipeta 70.28 292** *e*P **P** **11 11 41.6 -0.5**
CHLP IAmb IAmb 11 11 44.8
comp=Z,20nm,0.7s
**TLY Talaya 70.31 331** *e*P **P** **11 11 40.1 -1.5**
TLY *e* 11 14 14.0
TLY *e*PPP PPP 11 16 05.8
TLY *e*S **S** **11 20 52.9 +1.7**
TLY pmax pmax
comp=Z,14nm,1.5s
**TLY Talaya 70.31 331** *e*P **P** **11 11 43.2 +1.5**
comp=Z,17nm,1.4s
**RAMN Ramite 70.31 301** *e*P **P** **11 11 42.5 0.0**
comp=Z,16nm,0.4s
**BOD Bodaibo 70.38 340** *e*P **P** **11 11 39.4 -2.5**
BOD pmax pmax
comp=Z,5.0nm,0.9s
**GUN Gumba 71.22 302** *e*P **P** **11 11 46.9 -1.2**
comp=Z,39nm,0.5s
**PKI Pulchoki 71.51 302** *e*P **P** **11 11 49.4 -0.4**
comp=Z,14nm,0.5s
**PKIN Phulchoki 71.52 302** *e*P **P** **11 11 49.5 -0.3**
**VNDA Vanda 71.57 178** P **P** **11 11 49.4 +0.5**
comp=Z,21nm,0.9s,baz=334,slow=6.3,SNR=84
VNDA S **S** **11 21 07.1 +2.0**
comp=Z,0.6nm,0.8s,baz=4.6,slow=3.2,SNR=2.0
VNDA LR LR 11 41 12.1
comp=Z,426nm,19.1s,baz=0.5,slow=34
**VNDA Vanda 71.57 178** *e*P **P** **11 11 49.6 +0.7**
VNDA S **S** **11 21 07.1 +2.0**
VNDA pmax pmax
comp=Z,18nm,0.8s
**VNDA Vanda 71.57 178** *e*P **P** **11 11 49.6 +0.7**
comp=Z,18nm,0.8s
VNDA S **S** **11 21 07.1 +2.0**
**MOY Mondy 71.60 330** *e*P **P** **11 11 49.4 -0.2**
**KKN Kakani 71.69 302** *e*P **P** **11 11 49.8 -0.9**
comp=Z,12nm,0.4s
**DMN Daman 71.78 302** *e*P **P** **11 11 50.1 -1.3**
comp=Z,24nm,0.6s
**MIR Mirnyy 72.01 201**⇑ *i*P P 11 12 01.0 +9.4
MIR pmax pmax
comp=Z,80nm,1.0s
**SBA Scott Base 72.15 177** *e*P **P** **11 11 54.3 +1.9**
SBA pmax pmax
comp=Z,36nm,1.4s
**SBA Scott Base 72.15 177** *e*P **P** **11 11 54.3 +1.9**
comp=Z,36nm,1.4s
**PVM Polavaram 72.25 290** *e*P **P** **11 11 52.9 -1.1**
PVM IAmb IAmb 11 11 55.6
comp=Z,6.4nm,0.7s
**GKN Gorkha 72.29 302** *e*P **P** **11 11 52.8 -1.5**
comp=Z,23nm,0.5s
**RKT Rikitea 73.02 112** *e*S **SKiKP** **11 21 26.9 -1.9**
comp=Z,374nm,28.2s
RKT *e*LQ LQ 11 31 18.1
comp=Z,678nm,38.5s
RKT *e*LR LR 11 34 23.9
comp=Z,2μm,34.0s
**KOLN Koldanda 73.10 301** *e*P **P** **11 11 57.6 -1.6**
comp=Z,19nm,0.6s
**SKHT Srikalahasti 73.36 286** *e*P **P** **11 11 59.6 -1.1**
SKHT IAmb IAmb 11 12 00.3
comp=Z,10nm,0.7s
**NJS Nagarjunasagar 74.28 289** *e*P **P** **11 12 04.3 -1.8**
NJS IAmb IAmb 11 12 06.1
comp=Z,4.2nm,0.7s
**RCLA Racherla 74.40 288** *e*P **P** **11 12 05.0 -1.7**
RCLA IAmb IAmb 11 12 06.2
comp=Z,4.4nm,0.7s
**SRLM Srisailam 74.58 288** *e*P **P** **11 12 06.2 -1.7**
SRLM IAmb IAmb 11 12 07.9
comp=Z,21nm,0.7s
**BILL Bilibino 74.80 6** P P 11 12 11.0 +3.0
BILL *e* 11 12 29.7
BILL *e*S **S** **11 21 42.2 +0.4**
BILL SS **SS** **11 26 36.0 +5.6**
BILL pmax pmax
comp=Z,10.0nm,0.8s
BILL MLR MLR
comp=Z,331nm,20.0s
**HYBB Hyderabad (bro 75.16 290** *e*P **P** **11 12 10.6 -0.5**
HYBB IAmb IAmb 11 12 11.1
comp=Z,9.0nm,0.6s
**WMQ Urumqi 75.46 318** P **P** **11 12 13.0 +0.6**
WMQ sP sP 11 12 31.0 +3.0
WMQ sP sP 11 12 39.0 +11
WMQ PP **PP** **11 15 06.0 +4.1**
WMQ S **S** **11 21 48.0 -2.3**
WMQ PMZ
comp=Z,12nm,1.0s
WMQ PMZ

comp=Z,98nm,8.0s
WMQ LN
comp=Z,450nm,22.0s
WMQ LE
comp=Z,650nm,22.0s
WMQ LZ
comp=Z,710nm,22.0s
**SRSP Sriramsagar 75.66 291** *e*P **P 11 12 12.2 -1.7**
SRSP IAmb IAmb 11 12 16.1
comp=Z,22nm,1.3s
**URV Uravakonda 75.92 287** *e*P **P 11 12 13.7 -1.8**
URV IAmb IAmb 11 12 15.4
comp=Z,9.7nm,0.7s
**KLRI Killari 77.11 290** *e*P **P 11 12 20.9 -1.4**
KLRI IAmb IAmb 11 12 23.0
comp=Z,12nm,0.6s
**CNPM China Poot 79.73 26** *e*P **P 11 12 36.2 +0.4**
comp=Z,49nm,0.9s
**MK01 Makanchi Array 80.09 319** *e*P **P 11 12 35.9 -2.2**
**MKAR Makanchi Array 80.10 320** P **P 11 12 37.2 -0.9**
comp=Z,1.8nm,0.6s,baz=109,slow=5.9,SNR=10
MKAR PP **PP 11 15 36.3 -4.5**
comp=Z,1.8nm,0.9s,baz=120,slow=8.5,SNR=2.6
MKAR S **S 11 22 41.6 +1.4**
comp=Z,0.1nm,0.3s,baz=122,slow=21,SNR=2.0
MKAR LR LR 11 47 13.2
comp=Z,862nm,20.3s,baz=104,slow=35
**MKAR Makanchi Array 80.10 320** *e*P **P 11 12 38.5 +0.3**
MKAR 11 15 36.3
MKAR S **S 11 22 41.6 +1.4**
**MKAR Makanchi Array 80.10 320** *e*P **P 11 12 38.5 +0.3**
MKAR PP **PP 11 15 36.3 -4.5**
MKAR S **S 11 22 41.6 +1.4**
**ZALV Zalesovo Beam 81.23 327** P **P 11 12 42.0 -1.9**
comp=Z,6.3nm,0.7s,baz=108,slow=4.8,SNR=13
ZALV S **S 11 22 52.2 +0.7**
comp=Z,0.3nm,0.2s,baz=134,slow=11,SNR=2.0
ZALV LR LR 11 50 29.5
comp=Z,656nm,19.3s,baz=70,slow=37
**CAST Castle Rocks 81.45 22** *e*P **P 11 12 43.8 -1.2**
comp=Z,18nm,1.2s
**KSH Kashi 82.38 311** P **P 11 12 52.4 +1.8**
KSH *ep*P pP 11 13 09.6 +7.6
KSH PP **PP 11 16 02.9 +3.0**
KSH S **S 11 23 00.6 -3.8**
KSH PMZ
comp=Z,110nm,5.2s
KSH LN
comp=Z,700nm,11.0s
KSH LE
comp=Z,480nm,8.2s
KSH LZ
comp=Z,850nm,20.6s
**RND Reindeer 82.69 23** *e*P **P 11 12 50.4 -1.1**
RND pmax pmax
comp=Z,15nm,0.8s
**RND Reindeer 82.69 23** *e*P **P 11 12 50.4 -1.1**
comp=Z,15nm,0.8s
**MLY Manley 82.81 21** *e*P **P 11 12 51.6 -0.5**
comp=Z,9.6nm,0.9s
**MCK McKinley 82.82 23** *e*P **P 11 12 50.7 -1.5**
MCK pmax pmax
comp=Z,30nm,1.1s
**MCK McKinley 82.82 23** *e*P **P 11 12 50.7 -1.5**
comp=Z,30nm,1.1s
**KLU Klutina 82.99 26** *e*P **P 11 12 52.9 -0.3**
comp=Z,23nm,1.2s
**WRH Wood River Hil 83.50 22** *e*P **P 11 12 54.2 -1.5**
comp=Z,11nm,0.9s
**TKM2 Tokmak 2 83.51 314** *e*P **P 11 12 56.9 +0.5**
TKM2 pmax pmax
comp=Z,295nm,2.8s
**TKM2 Tokmak 2 83.51 314** *e*P **P 11 12 56.9 +0.5**
comp=Z,295nm,2.8s
**MAW Mawson 83.62 203** P **P 11 12 56.1 -0.1**
comp=Z,11nm,1.0s,baz=70,slow=6.6,SNR=21
MAW LR LR 11 47 19.3
comp=Z,1μm,21.5s,baz=70,slow=34
**MAW Mawson 83.62 203** P **P 11 12 56.5 +0.4**
baz=83,SNR=6.2
**KURK Kurchatov 83.67 322** ⇑Pn **P 11 12 55.1 -1.6**
comp=Z,34nm,1.1s
KURK ⇓Lg Lg 11 15 28.1
comp=Z,25nm,0.7s
**KURK Kurchatov 83.67 322** *e*P **P 11 12 54.9 -1.9**
KURK pmax pmax
comp=Z,30nm,1.0s
**KURK Kurchatov 83.67 322** P **P 11 12 54.3 -2.4**
comp=Z,81nm,1.0s,SNR=5.3
**KURK Kurchatov 83.67 322** *e*P **P 11 12 54.9 -1.9**
comp=Z,30nm,1.0s
**KURBB Kurchatov Arra 83.69 322** ⇓Pn **P 11 12 56.1 -0.8**
comp=Z,7.5nm,0.8s
KURBB ⇓Lg Lg 11 15 25.1
comp=Z,39nm,0.8s,baz=283,slow=28
**CCB Clear Creek Bu 83.70 22** *e*P **P 11 12 54.2 -2.4**
comp=Z,8.9nm,0.8s
**COLA College 83.79 22** *e*P **P 11 12 55.9 -1.1**
COLA pmax pmax
comp=Z,11nm,1.0s
**COLA College 83.79 22** *e*P **P 11 12 55.9 -1.1**
comp=Z,11nm,0.7s
**QSPA South Pole Qui 83.83 180** S **S 11 23 18.3 +0.2**
comp=Z,0.7nm,1.0s,baz=241,slow=10,SNR=2.2
**QSPA South Pole Qui 83.83 180** *e*P **P 11 12 57.6 +0.1**
comp=Z,47nm,0.9s
**HDA Harding Lake 83.91 23** *e*P P 11 13 02.0 +4.3
comp=Z,137nm,1.0s
**IL1 Eielson Array 84.10 22** *e*P P 11 12 55.2 -3.5
**ILAR Eielson Array 84.10 22** P **P 11 12 55.7 -3.0**
comp=Z,8.0nm,0.8s,baz=249,slow=4.6,SNR=42
ILAR LR LR 11 49 36.4
comp=Z,904nm,19.2s,baz=266,slow=35
**COLD Coldfoot 84.14 20** *e*P **P 11 12 58.2 -0.6**
**AAK Ala-Archa 84.22 314** *e*P **P 11 13 00.5 +0.5**
AAK pmax pmax
comp=Z,16nm,0.7s
**AAK Ala-Archa 84.22 314** *e*P **P 11 13 00.9 +0.9**
comp=Z,7.6nm,0.8s
**RIDG Independ'e Rid 84.43 24** *e*P **P 11 13 00.0 -0.5**
comp=Z,64nm,1.9s
**DOT Dot Lake 84.71 24** *e*P **P 11 13 00.6 -1.2**
comp=Z,33nm,1.0s
**EKS2 Erkin-Say 84.74 314** *e*P **P 11 13 02.8 +0.2**
EKS2 pmax pmax
comp=Z,32nm,1.5s
**EKS2 Erkin-Say 84.74 314** *e*P **P 11 13 02.8 +0.2**
comp=Z,32nm,1.5s
**FYU Fort Yukon 85.54 21** *e*P P 11 13 08.3 +2.5
comp=Z,18nm,1.1s
**EGAK Eagle 86.33 23** *e*P **P 11 13 09.9 +0.1**
comp=Z,12nm,0.8s
**DAWY Dawson 86.78 24** *e*P **P 11 13 11.8 -0.3**
comp=Z,15nm,1.2s
**KKAR Karatay Array 87.18 314** *e*P **P 11 13 12.4 -2.1**
**KKAR Karatay Array 87.18 314** *e*P **P 11 13 12.4 -2.1**
**BVA0 Borovoye Array 89.18 323** Pn **P 11 13 21.5 -2.2**
comp=Z,7.8nm,0.9s,baz=92,slow=5.4,SNR=24
BVA0 ⇑Lg Lg 11 15 21.6
comp=Z,6.9nm,0.8s,baz=133,slow=26,SNR=4.9
**BRVK Borovoye 89.25 323** ⇑Pn **P 11 13 21.8 -2.2**
comp=Z,7.3nm,0.9s
BRVK ⇓Lg Lg 11 15 21.4
comp=Z,8.6nm,0.6s
**BRVK Borovoye 89.25 323** *e*P **P 11 13 22.2 -1.9**
BRVK pmax pmax
comp=Z,4.0nm,0.9s
**BRVK Borovoye 89.25 323** *e*P **P 11 13 21.9 -2.2**
comp=Z,7.4nm,0.6s
**INK Inuvik 90.37 21** *e*P **P 11 13 26.8 -2.1**
INK pmax pmax
comp=Z,21nm,1.5s
**INK Inuvik 90.37 21** *e*P **P 11 13 26.8 -2.1**
comp=Z,21nm,1.5s
**I03D Drain, OR 91.12 46** P **P 11 13 33.5 +0.5**
baz=91
**M02C Callahan 91.20 49** P **P 11 13 33.8 +0.2**
baz=91
**YBH Yreka Blue Hor 91.35 48** *e*P **P 11 13 35.9 +1.6**
YBH pmax pmax
comp=Z,120nm,2.9s
**YBH Yreka Blue Hor 91.35 48** *e*P **P 11 13 35.9 +1.6**
comp=Z,120nm,2.9s
**SYO Syowa Base 91.78 200** ⇑*e*P **P 11 13 33.6 -2.0**
**I04A Tendick Farm, 91.81 46** P **P 11 13 36.9 +0.6**
baz=92
**O03D Paynes Creek 91.86 50** P **P 11 13 36.4 -0.2**
baz=92
**J04D Umpqua Nationa 91.96 47** P **P 11 13 37.8 +0.6**
baz=92
**M04C Macdoel 92.00 48** P **P 11 13 38.5 +1.2**
baz=92
**A04D Lummi Island 92.18 41** P **P 11 13 39.5 +1.7**
baz=92
**J05D Fort Rock, OR 92.60 47** P **P 11 13 40.9 +0.8**
baz=93
**I05D Terrebonne, OR 92.64 46** P **P 11 13 40.4 +0.3**
baz=93
**CMB Columbia Colle 92.72 52** *e*P **P 11 13 41.6 +1.0**
CMB pmax pmax
comp=Z,6.0nm,0.8s
**CMB Columbia Colle 92.72 52** *e*P **P 11 13 41.6 +1.0**
comp=Z,5.5nm,0.8s
**G05D Wamic, OR 92.75 45** P **P 11 13 42.1 +1.6**
baz=93
**SMMC Simmler 92.77 55** P **P 11 13 42.0 +1.1**
baz=93
**K05A Summer Lake 92.80 48** *e*P **P 11 13 41.5 +0.4**
comp=Z,22nm,1.2s
**MOD Modoc 93.15 48** *e*P **P 11 13 43.3 +0.7**
comp=Z,6.9nm,0.8s
**VES Vestal, Richgr 93.56 54** P **P 11 13 45.5 +1.1**
baz=94
**I07A Izee 93.93 46** *e*P **P 11 13 46.7 +0.5**
comp=Z,37nm,2.2s
**ISA Isabella 94.04 55** *e*P **P 11 13 47.8 +1.0**
**ISA Isabella 94.04 55** P **P 11 13 47.5 +0.7**
baz=94
**ISA Isabella 94.04 55** *e*P **P 11 13 47.8 +1.0**
**MTUM Tungsten Hills 94.10 53** *e*P **P 11 13 48.5 +1.3**
**PASC Pasadena Art C 94.15 56** *e*P P 11 13 49.9 +2.6
comp=Z,17nm,0.9s
**MWC Mount Wilson 94.26 56** *e*P **P 11 13 49.3 +1.3**
MWC pmax pmax
comp=Z,34nm,1.0s
**MWC Mount Wilson 94.26 56** *e*P **P 11 13 49.2 +1.3**
comp=Z,34nm,1.0s
**NV01 Mina Array Sit 94.39 52** *e*P **P 11 13 48.6 +0.1**
**NVAR Mina Array Bea 94.39 52** P **P 11 13 48.2 -0.3**
comp=Z,6.3nm,0.7s,baz=255,slow=5.8,SNR=58
NVAR LR LR 11 49 03.3
comp=Z,832nm,21.5s,baz=274,slow=31
**G08A Pilot Rock 94.41 45** *e*P **P 11 13 50.2 +1.9**
comp=Z,17nm,1.6s
**CWC Cottonwood Cre 94.42 54** P **P 11 13 49.2 +0.5**
baz=94
**WVOR Wild Horse Val 94.43 48** *e*P **P 11 13 49.7 +1.2**
WVOR pmax pmax
comp=Z,12nm,1.4s
**WVOR Wild Horse Val 94.43 48** *e*P **P 11 13 49.7 +1.2**
comp=Z,12nm,1.4s
**J08A Circle Bar Ran 94.62 47** *e*P **P 11 13 49.9 +0.6**
comp=Z,66nm,2.5s
**LRMC Laurel Mountai 94.66 55** P **P 11 13 51.1 +1.4**
baz=95
**DAC Darwin (Calif) 94.80 54** *e*P **P 11 13 51.7 +1.3**
DAC *e*S **S 11 25 00.1 -1.8**
DAC pmax pmax
comp=Z,16nm,1.1s
**DAC Darwin (Calif) 94.80 54** *e*P **P 11 13 51.7 +1.3**
comp=Z,16nm,1.1s
DAC *e*S **S 11 25 00.1 -1.8**
**MPMC Manual Prospec 94.86 54** P **P 11 13 51.6 +0.8**
baz=95
**ABKAR Akbulak array 95.23 319** *e*P **P 11 13 50.0 -1.9**
ABKAR *ep*P **PP 11 17 46.5 +4.3**
**GSC Goldstone 95.37 55** *e*P **P 11 13 54.9 +2.0**
GSC pmax pmax
comp=Z,8.0nm,1.0s
**GSC Goldstone 95.37 55** P **P 11 13 53.4 +0.5**
baz=95
**GSC Goldstone 95.37 55** *e*P **P 11 13 54.9 +2.0**
comp=Z,8.3nm,1.0s
**FURC Furnace Creek, 95.40 54** P **P 11 13 53.6 +0.7**
baz=96
**PFO Pinyon Flat Ob 95.55 57** *e*P P 11 13 56.0 +2.2
PFO pmax pmax
comp=Z,10.0nm,0.9s
**PFO Pinyon Flat Ob 95.55 57** *e*P P 11 13 56.0 +2.2
comp=Z,10nm,0.9s
**F10A Beach Ranch, E 95.66 44** *e*P **P 11 13 55.0 +0.9**
comp=Z,8.1nm,1.0s
**SHOC Shoshone 95.83 55** P **P 11 13 55.7 +0.7**
baz=96
**TPNV Topaah Spring 95.92 54** P **P 11 13 56.0 +0.5**
baz=96
**GEYT Alibeck 95.93 307** LR LR 11 59 51.3
comp=Z,618nm,18.7s,baz=50,slow=37
**BELC Belle Mtn. Jos 95.95 57** P **P 11 13 56.2 +0.5**
baz=96
**TUQ Turquoise Moun 96.10 55** P **P 11 13 56.9 +0.6**
baz=96
**GMRC Granite Mounta 96.28 56** P **P 11 13 58.3 +1.2**
baz=96
**ARU Arti 96.37 326** P **P 11 13 57.2 +0.4**
ARU 11 17 50.6
ARU S **SKSac 11 24 28.0 -2.6**
ARU PS **PS 11 26 36.7 -2.1**
ARU SS SS 11 31 40.9 -6.6
ARU MLR MLR
comp=Z,1μm,21.0s
**BC3 Big Chuckawall 96.39 57** P **P 11 13 57.4 -0.2**
baz=96
**R11A Troy Canyon, C 96.52 52** P **P 11 13 58.4 +0.2**
baz=97
**R11A Troy Canyon, C 96.52 52** *e*P **P 11 13 59.8 +1.6**
comp=Z,14nm,1.8s
**SHPR Sheep Range 96.77 54** *e*P **P 11 14 01.1 +1.7**
**BSMT Bassoo Peak 97.40 43** *e*P **P 11 14 01.5 -0.5**
comp=Z,2.4nm,0.9s
**YKA Yellowknife Ar 97.48 28** P **P 11 14 00.5 -1.2**
comp=Z,1.3nm,0.6s,baz=271,slow=4.9,SNR=6.8
**HLID Hailey 97.58 47** P Pdif 11 14 03.1 +0.1
baz=98
**HLID Hailey 97.58 47** *e*P Pdif 11 14 04.0 +1.1
comp=Z,2.9nm,0.9s
**CCUT Cedar City 98.24 53** *e*P Pdif 11 14 08.6 +2.5
CCUT *ep*P pP 11 14 23.8 +6.1
**HVU Hansel Valley 98.76 49** *e*P **P 11 14 07.9 -0.3**
HVU pmax pmax
comp=Z,5.0nm,1.0s
**HVU Hansel Valley 98.76 49** *e*P **P 11 14 07.9 -0.3**
comp=Z,5.0nm,1.0s
**BOZ Bozeman (W) 99.57 45** P **Pdif 11 14 11.8 +0.1**
baz=100
**WUAZ Wupatki 99.81 55** P **Pdif 11 14 13.4 +0.4**
baz=100
**WUAZ Wupatki 99.81 55** *e*Pdif **Pdif 11 14 15.7 +2.6**
comp=Z,5.2nm,0.9s
**FXWY Fox Creek 100.04 47** *e*Pdif **Pdif 11 14 15.4 +1.4**
**SNAA Sanae 100.45 188** *e*P **Pdif 11 14 14.7 -0.3**
SNAA pmax pmax
comp=Z,2.0nm,1.2s
**SNAA Sanae 100.45 188** *e*Pdif **Pdif 11 14 14.3 -0.7**
SNAA *ep*P **PP 11 18 22.0 +0.8**
**BW06 Boulder Array 101.14 48** *e*Pdif **Pdif 11 14 19.5 +0.7**
**TXAR Lajitas Array 106.42 61** Pdiff **Pdif 11 14 44.4 +1.9**
comp=Z,0.2nm,0.8s,baz=270,slow=3.5,SNR=2.2
TXAR PKiKP **PKiKP 11 18 53.5 -0.2**
comp=Z,0.2nm,0.8s,baz=298,slow=1.9,SNR=3.2
TXAR PKKPbc **PKKPbc 11 30 11.2 -3.2**
comp=Z,0.2nm,0.7s,baz=126,slow=5.9,SNR=3.2
**ARCES ARCESS Array B 107.58 342** PKiKP **PKiKP 11 18 53.3 -1.2**
comp=Z,1.4nm,0.4s,baz=41,slow=2.2,SNR=7.1
**BGNE Belgrade 109.72 48** *e*Pdif **Pdif 11 14 51.1 -5.6**
**ECSD EROS Data Cent 110.41 46** P **PKiKP 11 19 00.7 +0.1**
baz=110
**B34A Aery, Baudette 110.67 40** P **PKiKP 11 18 60.0 -0.9**
baz=111
**FINES FINESS Array B 111.47 335** PKiKP **PKiKP 11 19 00.9 -1.1**
comp=Z,2.5nm,0.7s,baz=207,slow=2.8,SNR=4.6
**AKASG Malin Array Be 114.46 324** PKiKP PKPdf 11 19 06.8 -1.2
comp=Z,1.1nm,0.4s,baz=63,slow=2.1,SNR=6.3
**AKASG Malin Array Be 114.46 324***c* *i*PKIKP PKPdf 11 19 07.6 -0.4
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**BRTR Keskin Array B 114.77 311** PKiKP PKPdf 11 19 08.2 -1.0
comp=Z,12nm,1.0s,baz=67,slow=3.1,SNR=3.9
**BRTR Keskin Array B 114.77 311** *i* PKIKP PKPdf 11 19 05.4 -3.8
BRTR pmax pmax
comp=Z,47nm,1.0s
**HFS Hagfors 117.21 338** PKP **PKPdf 11 19 11.5 -1.5**
comp=Z,3.7nm,0.8s,baz=190,slow=0.9,SNR=3.3
**BOSA Boshof 117.32 234** PKP **PKPdf 11 19 13.2 -1.2**
comp=Z,3.4nm,0.9s,baz=120,slow=1.5,SNR=5.8
**NB2 NORSAR Subarra117.51 339** PKPdf **PKPdf 11 19 12.4 -1.2**
comp=Z,1.8nm,0.8s,baz=41,slow=1.8
**NOA NORSAR Array B 117.51 339** PKP **PKPdf 11 19 12.6 -1.0**
comp=Z,1.8nm,0.7s,baz=48,slow=1.8,SNR=7.1
**BUR04 Bucovina Ar. S 118.08 321** *e*PKPdf **PKPdf 11 19 15.6 +0.4**
**KOLS Kolonicke sedl 119.29 324** *e*PKIKP **PKPdf 11 19 18.6 +1.1**
**KOLS Kolonicke sedl 119.29 324** *e*PKP **PKPdf 11 19 18.5 +1.1**
**LSZ Lusaka 119.40 249** *e*PKIKP **PKPdf 11 19 18.5 -0.2**
**LSZ Lusaka 119.40 249** *e*PKPdf **PKPdf 11 19 18.5 -0.2**
**STHS Stebnicka Huta 119.67 325** *e*PKIKP **PKPdf 11 19 17.8 -0.3**
**STHS Stebnicka Huta 119.67 325** *e*PKP **PKPdf 11 19 17.8 -0.3**
**ACSO Alum Creek Sta 121.13 46** *e*PKPdf **PKPdf 11 19 20.6 -0.6**
**OKC Ostrava-Krasne 121.20 326** AMS AMS 12 18 20.0
comp=Z,400nm,14.3s
**VYHS Vyhne 121.50 325** *e*PKIKP **PKPdf 11 19 22.1 +0.4**
**VYHS Vyhne 121.50 325** *e*PKP **PKPdf 11 19 22.1 +0.4**
**TZTN Tazewell 121.90 51** *e*PKPdf **PKPdf 11 19 21.3 -1.5**
**DPC Dobruska-Polom 121.92 327** AMS AMS 12 13 10.0
comp=Z,900nm,17.7s
**UPC Upice 122.00 328** AMS AMS 12 13 40.0
comp=Z,1μm,19.5s
**LAST Lasithi 122.22 308** *e*PKPdf **PKPdf 11 19 23.2 -0.4**
**IDI Anoyia 122.65 308** PKP **PKPdf 11 19 23.3 -1.0**
comp=Z,6.9nm,0.4s,baz=108,slow=3.2,SNR=6.9
**IDI Anoyia 122.65 308** *e*PKPdf **PKPdf 11 19 23.3 -1.0**
IDI PKP **PKPdf 11 19 23.3 -1.0**
**BSEG Bad Segeberg 122.68 334** *e*PKPdf **PKPdf 11 19 25.2 +1.5**
baz=52,slow=1.9
**PVCC Panska Ves 122.75 328** AMS AMS 12 11 50.0
comp=Z,800nm,17.8s
**SCHQ Schefferville 122.79 25** PKP **PKPdf 11 19 23.4 -0.6**
comp=Z,5.8nm,0.8s,baz=94,slow=3.0,SNR=3.9
**BRG Berggiesshubel 122.87 329** *e*PKP **PKPdf 11 19 25.1 +0.9**
comp=Z,9.0nm,0.8s
comp=N,544nm,27.0s
comp=E,434nm,20.9s
comp=Z,566nm,19.3s
**BRG Berggiesshubel 122.87 329** *e*PKIKP **PKPdf 11 19 25.1 +0.9**
BRG pmax pmax
comp=Z,9.0nm,0.8s
BRG MLR MLR
comp=N,544nm,27.0s
BRG MLR MLR
comp=E,434nm,20.9s
BRG MLR MLR
comp=Z,566nm,19.3s
**BRG Berggiesshubel 122.87 329** *e*PKPdf **PKPdf 11 19 25.4 +1.2**
baz=52,slow=1.9
**TREC Trest 122.96 327** AMS AMS 12 13 40.0
comp=Z,700nm,20.5s
**GOPC GO Pecny, Ondr 122.98 328** AMS AMS 12 14 20.0
comp=Z,800nm,18.8s
**PRU Pruhonice 123.07 328** *e*SP SP 11 30 52.1 -3.2
PRU AMS AMS 12 14 20.0
comp=Z,800nm,17.7s
**CLL Collm 123.08 330** ⇑*i*PKIKP **PKPdf 11 19 25.4 +0.8**
CLL pmax pmax
comp=Z,9.0nm,0.8s
CLL MLR MLR
comp=Z,400nm,18.6s
**CLL Collm 123.08 330** *e*PKPdf **PKPdf 11 19 25.6 +1.0**
baz=52,slow=1.9
**CLL Collm 123.08 330** ⇑*i*PKPdf **PKPdf 11 19 25.4 +0.8**
comp=Z,9.0nm,0.8s
CLL *e*PPS PPS 11 32 23.0
CLL *e*(SSS) 11 42 00.0
CLL *e* 11 43 36.0
CLL LmV 12 18 00.0
comp=Z,400nm,18.6s
**CONA Conrad Observa 123.50 325** ⇑*i*PKiKP **PKPdf 11 19 25.2 -0.4**
comp=Z,5.9nm,0.9s
**NRDL Niedersach Rie 123.72 332** *e*PKPdf **PKPdf 11 19 27.3 +1.6**
baz=52,slow=1.9
**NKC Novy Kostel 124.02 329** *e*PKIKP **PKPdf 11 19 26.9 +0.4**
NKC MLR MLR
comp=Z,800nm,19.4s
**NKC Novy Kostel 124.02 329** *e*PKPdf **PKPdf 11 19 26.9 +0.4**
NKC AMS AMS 12 12 40.0
comp=Z,800nm,19.4s
**CLZ Clausthal 124.03 332** *e*PKPdf **PKPdf 11 19 27.8 +1.4**
baz=52,slow=1.9
**BLA Blacksburg 124.06 49** *e*PKIKP **PKPdf 11 19 26.5 -0.5**
**BLA Blacksburg 124.06 49** *e*PKPdf **PKPdf 11 19 26.5 -0.5**
**KHC Kasperske Hory 124.08 327** *e*PKIKP **PKPdf 11 19 27.0 +0.4**
KHC MLR MLR
comp=Z,800nm,20.6s
**KHC Kasperske Hory 124.08 327** *e*PKPdf **PKPdf 11 19 27.0 +0.4**
KHC AMS AMS 12 14 30.0
comp=Z,800nm,20.6s
**KHC Kasperske Hory 124.08 327** *e*PKPdf **PKPdf 11 19 27.1 +0.4**
**GEC2 GERESS Array S 124.18 327** *e*PKPdf **PKPdf 11 19 27.9 +1.0**
baz=52,slow=1.9
**GERES GERESS Array B 124.18 327** PKP **PKPdf 11 19 26.1 -0.8**
comp=Z,4.1nm,0.8s,baz=48,slow=2.0,SNR=13
**WET Wettzell 124.44 328** *e*PKPdf **PKPdf 11 19 28.4 +1.1**
baz=52,slow=1.9
**SSPA Standing Stone 124.57 44** *e*PKPdf **PKPdf 11 19 28.4 +0.7**
**JTS JuntasAbangare 124.61 82** *e*PKIKP **PKPdf 11 19 28.6 0.0**
**JTS JuntasAbangare 124.61 82** *e*PKPdf **PKPdf 11 19 28.6 0.0**
**PERS Pernice 124.62 324** *i* PKPdf **PKPdf 11 19 27.8 0.0**
**SOKA Soboth 124.65 324** ⇓*i*PKiKP **PKiKP 11 19 28.1 -0.1**
comp=Z,7.4nm,1.0s
**GRF Grafenberg Arr 124.97 329** *e*PKPdf **PKPdf 11 19 29.2 +0.9**
baz=52,slow=1.9
**BOJS Bojanci 125.14 323** *i* PKPdf **PKPdf 11 19 29.5 +0.8**
**FRNY Flat Rock 125.40 38** *e*PKPdf **PKPdf 11 19 29.3 0.0**
**MVL Millersville 125.90 44** *e*PKPdf **PKPdf 11 19 31.9 +1.6**
**ABTA Abfaltersbach 126.05 326** ⇑*i*PKiKP **PKPdf 11 19 30.7 +0.1**
comp=Z,7.3nm,0.7s
**MDV Middlebury 126.08 38** *e*PKPdf **PKPdf 11 19 31.9 +1.4**
**WTTA Wattenberg 126.23 327** ⇑*i*PKiKP **PKiKP 11 19 32.1 +0.6**
comp=Z,16nm,1.1s
**TRY Troy 126.42 40** *e*PKPdf **PKPdf 11 19 32.9 +1.7**
**EKA Eskdalemuir Ar 126.74 342** PKP **PKPdf 11 19 30.2 -1.3**
comp=Z,1.4nm,0.4s,baz=16,slow=2.8,SNR=9.7
**FETA Feichten 126.87 327** ⇑*i*PKiKP **PKiKP 11 19 33.1 +0.4**
comp=Z,12nm,1.2s
**CFAA Coronel Fontan 127.05 138** PKP **PKPdf 11 19 31.9 -1.0**
comp=Z,0.4nm,0.8s,baz=273,slow=2.9,SNR=4.9
**FUORN Ofenpass-Fuorn 127.37 327** *e*PKPdf **PKPdf 11 19 34.6 +1.3**
**DAVOX Davos/Dischmat 127.48 327** PKP **PKPdf 11 19 32.8 -0.6**
comp=Z,6.0nm,0.8s,baz=59,slow=5.9,SNR=5.4
**TSUM Tsumeb 127.59 240** *e*PKPdf **PKPdf 11 19 36.5 +2.1**
**TJE Stuetta 127.96 327** *e*PKPdf **PKPdf 11 19 35.6 +1.2**
**KEST Kesra 134.06 315** PKP **PKPdf 11 19 45.2 -0.9**
comp=Z,4.3nm,0.8s,baz=135,slow=4.3,SNR=4.4
**TRIS Tristan da Cun 134.24 199** *e*PKPdf **PKPdf 11 19 46.2 -0.1**
**LPAZ La Paz 135.41 121** PKhKP PKPpre 11 19 45.1
comp=Z,1.0nm,0.7s,baz=258,slow=3.5,SNR=4.1
**LPAZ La Paz 135.41 121** *e*PKIKP PKPpre 11 19 45.4
**LPAZ La Paz 135.41 121** *e*PKPdf PKPpre 11 19 45.4
**CPUP Villa Florida 137.67 141** PKP **PKPdf 11 19 53.5 +0.6**
comp=Z,2.0nm,0.6s,baz=270,slow=4.0,SNR=6.3
**MVO Moncorvo 139.94 334** *e*PKPdf **PKPdf 11 19 55.4 -1.4**
**POLO Lamas de Olo 140.10 335** *e*PKPdf **PKPdf 11 19 55.5 -1.6**
**MTE Manteigas 140.79 334** *e*PKPdf **PKPdf 11 19 59.4 +1.1**
**CRPR Cabo Raso, PR 141.09 69** *e*PKPdf **PKPdf 11 20 00.7 +1.3**
**PCBR Castelo Branco 141.22 333** *e*PKPdf **PKPdf 11 20 00.0 +1.0**
**SIV San Ignacio 141.45 125** PKhKP PKPpre 11 19 53.7
comp=Z,1.4nm,0.5s,baz=252,slow=0.7,SNR=4.5
**PMRV Marv??o 141.51 333** *e*PKPdf **PKPdf 11 19 56.9 -2.7**
**OBIP Obispado Ponce 141.55 69** *e*PKPdf **PKPdf 11 20 02.9 +2.7**
**CELP Cerrillos 141.56 69** *e*PKPdf **PKPdf 11 19 59.7 -0.5**
**CPD Cerro la Pandu 142.19 68** *e*PKIKP **PKPdf 11 20 03.2 +1.8**
**CPD Cerro la Pandu 142.19 68** *e*PKPdf **PKPdf 11 20 03.2 +1.8**
**HUMP Col San Antoni 142.22 68** *e*PKPdf **PKPdf 11 20 01.7 +0.3**
**EVO Evora 142.52 332** *e*PKPdf **PKPdf 11 20 02.9 +1.5**
**SAML Samuel 142.86 113** *e*PKPdf **PKPdf 11 20 00.8 -1.9**
**PNCL Nicolau / Gran 143.10 333** *e*PKPdf **PKPdf 11 20 02.3 -0.1**
**PCVE Castro Verde 143.26 332** *e*PKPdf **PKPdf 11 20 02.0 -0.7**
**PVAQ Vaqueiros 143.29 331** *e*PKPdf **PKPdf 11 20 03.6 +0.8**
**PTEO Sao Teotonio 143.65 332** *e*PKPdf **PKPdf 11 20 02.3 -1.1**
**PFVI Vila Bisbo 144.03 332** *e*PKPdf **PKPdf 11 20 04.0 -0.1**
**SMRT St. Maarten 144.80 67** *e*PKPbc **PKPdf 11 20 05.4 -0.6**
**MDT Midelt 145.02 323** PKP **PKPbc 11 20 04.9 -0.5**
comp=Z,3.1nm,0.7s,baz=89,slow=2.9,SNR=7.1
**FDF Fort de France 147.37 72** *e*PKIKP **PKPdf 11 20 11.3 +0.9**
**FDF Fort de France 147.37 72** *e*PKPdf **PKPdf 11 20 11.3 +0.9**
**PTGA Pitinga 148.43 101** PKPbc **PKPbc 11 20 15.1 -0.7**
comp=Z,18nm,0.7s,baz=274,slow=2.1,SNR=19
**PTGA Pitinga 148.43 101** *e*PKPbc **PKPbc 11 20 15.7 0.0**
**TOA0 Torodi Ar. Sit 148.88 285** *e*PKP1 **PKPbc 11 20 15.5 -1.4**
**TORD Torodi Ar. Bea 148.88 285** PKP **PKPdf 11 20 11.8 -1.1**
comp=Z,21nm,0.6s,baz=96,slow=1.2,SNR=240

TORD PKPbc **PKPbc** **11 20 15.9 -1.0**
comp=Z,70nm,0.6s,baz=68,slow=2.7,SNR=329
**PMPS Porto Santo 150.71 338** *e*PKPdf **PKPdf** **11 20 15.3 0.0**
**BDFB Brasilia 151.37 139** PKPbc **PKPbc** **11 20 22.0 -1.0**
comp=Z,7.1nm,0.4s,baz=212,slow=3.2,SNR=12
**KIC Kosan Boka 155.79 272** *e*PKP1 PKPdf 11 20 32.7 +10
comp=Z,52nm,0.7s
**DBIC Dimbokro 155.91 273** PKP **PKPdf** **11 20 22.2 -1.1**
comp=Z,5.4nm,1.0s,baz=135,slow=1.4,SNR=4.0
DBIC PKPbc PKPbc 11 20 32.5
comp=Z,6.3nm,0.8s,baz=81,slow=2.7,SNR=6.3
DBIC PKPab **PKPab** **11 20 49.2 -1.1**
comp=Z,14nm,0.7s,baz=72,slow=5.0,SNR=9.7
**DBIC Dimbokro 155.91 273** *e*PKIKP **PKPdf** **11 20 24.9 +1.6**
DBIC 11 20 32.5
DBIC 11 20 49.3
**DBIC Dimbokro 155.91 273** *e*PKPdf **PKPdf** **11 20 24.9 +1.6**
DBIC PKPbc PKPbc 11 20 32.5
DBIC PKPab **PKPab** **11 20 49.2 -1.1**
**TIC Toumodi 156.07 273** *e*PKP1 PKPdf 11 20 33.9 +10

*CSEM **21** 11:05:28.2, 40.10N×33.35E, h10km, MD2.6, After DDA*
**DDA 21 11:05:28.2, 40.10N×33.35E, h10km, Md2.6, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ELDT** | **Eldivan** | **0.40** | **9** | *i* P | Pg | 11 05 35.7 | -0.6 |
| ELDT | | | | *i* S | Sb | 11 05 43.0 | -1.0 |
| **ELDT** | **Eldivan** | **0.40** | **9** | P | Pg | 11 05 35.6 | -0.7 |
| ELDT | | | | S | Sb | 11 05 43.0 | -1.1 |
| **CDAG** | **Cicekdag** | **0.92** | **121** | *i* P | Pg | 11 05 46.1 | 0.0 |
| CDAG | | | | *i* S | Sn | 11 06 00.3 | -0.5 |
| **CDAG** | **Cicekdag** | **0.92** | **121** | P | Pg | 11 05 46.1 | 0.0 |
| CDAG | | | | S | Sn | 11 06 00.3 | -0.5 |
| **ILGA** | **Ilgaz** | **0.99** | **16** | *i* P | Pg | 11 05 46.8 | -0.9 |
| ILGA | | | | *i* S | Sg | 11 06 00.5 | -0.4 |
| **ILGA** | **Ilgaz** | **0.99** | **16** | P | Pg | 11 05 46.8 | -1.0 |
| ILGA | | | | S | Sg | 11 06 00.5 | -0.5 |
| **BCAM** | **Yenicaga** | **1.21** | **307** | *i* P | Pb | 11 05 51.5 | 0.0 |
| **BCAM** | **Yenicaga** | **1.21** | **307** | P | Pn | 11 05 51.5 | 0.0 |

**NNC 21 11:07:41.9±5.8, 38.47N×74.63E, h0km, mb3.6, mpv3.3, 2C-4D, Error ellipse: s-maj=47.1km s-min=23.1km az=124.0, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **1.77** | **331** | ⇓Pn | Pg | 11 08 17.4 | +1.2 |
| SFK | 4.1nm,0.4s | | | ⇑Sn | Sg | 11 08 44.3 | +4.9 |
| **MNAS** | 31nm,0.4s **Manas** | **4.32** | **339** | ⇓Pn | Pn | 11 08 50.1 | +0.9 |
| MNAS | 6.7nm,0.4s | | | ⇓Sn | Sn | 11 09 41.7 | +1.3 |
| **DZET** | 5.1nm,0.6s **Dzherino** | **4.55** | **276** | ⇑Pn | Pn | 11 08 51.3 | -1.0 |
| DZET | 2.8nm,0.7s | | | ⇓Sn | Sn | 11 09 46.9 | +0.8 |
| **KK31** | 7.0nm,0.4s **Karatay Array** | **5.58** | **327** | Pn | Pn | 11 09 07.0 | +0.7 |
| KK31 | 1.3nm,0.3s,baz=140,slow=13,SNR=13 | | | Sn | Sn | 11 10 11.6 | +0.5 |
| | 0.5nm,0.3s,baz=139,slow=22,SNR=4.5 | | | | | | |

*IDC **21** 11:11:05.4±0.6, 33.36S×178.61W, h0km, mb4.6/8, mb1 4.7/11, mb1mx4.4/38, mbtmp4.6/11, ML4.2/3, Error ellipse: s-maj=23.3km s-min=17.4km az=109.0*
*NEIC **21** 11:11:06.7±0.4, 33.35S×178.50W, h10km, mb5.0/1, Error ellipse: s-maj=11.0km s-min=7.6km az=116.0*
*ISCJB **21** 11:11:09.6±0.6, 33.55S±0.05×178.6W±0.1, h41km, mb4.5/8, Error ellipse: s-maj=12.7km s-min=5.7km az=16.2*
*AUST **21** 11:11:27.6±22.0, 34.27S×177.26W, h299km±1km, Error ellipse: s-maj=6.4km s-min=1.9km az=227.0*
**ISC 21 11:11:10.7±0.6, 33.39S±0.06×178.5W±0.1, h41km, n57, σ1s67/54, mb4.7/8, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **4.15** | **7** | Pn | **Pn** | **11 12 09.5** | **-2.1** |
| RAO | 55nm,0.3s,baz=212,slow=18,SNR=3.5 | | | Sn | **Sn** | **11 12 53.7** | **-5.2** |
| **MXZ** | 105nm,0.3s,baz=125,slow=23,SNR=5.8 **Matakaoa Point** | **4.91** | **211** | PN | **Pn** | **11 12 19.6** | **-2.4** |
| MXZ | | | | SN | **Sn** | **11 13 15.5** | **-2.0** |
| **WMGZ** | **Waiomatatini S** | **5.08** | **209** | PN | **Pn** | **11 12 22.3** | **-2.0** |
| **PKGZ** | **Pakihiroa** | **5.26** | **211** | PN | **Pn** | **11 12 24.6** | **-2.2** |
| **HAZ** | **Te Kaha** | **5.31** | **214** | PN | **Pn** | **11 12 25.8** | **-1.6** |
| **CNGZ** | **Carnagh Statio** | **5.75** | **207** | PN | **Pn** | **11 12 30.8** | **-2.6** |
| **MWZ** | **Matawai** | **5.90** | **212** | PN | Pn | 11 12 32.3 | -3.3 |
| MWZ | | | | SN | **Sn** | **11 13 40.5** | **-1.4** |
| **URZ** | **Urewera** | **6.03** | **215** | Pn | **Pn** | **11 12 35.3** | **-2.0** |
| URZ | 12nm,0.3s,baz=34,slow=11,SNR=63 | | | Sn | **Sn** | **11 13 43.7** | **-1.4** |
| **URZ** | 12nm,0.3s,baz=277,slow=5.5,SNR=11 **Urewera** | **6.03** | **215** | *e*PN | **Pn** | **11 12 34.2** | **-3.1** |
| URZ | | | | SN | **Sn** | **11 13 43.3** | **-1.7** |
| **SNGZ** | **Shannon Statio** | **6.35** | **211** | *e*PN | **Pn** | **11 12 40.3** | **-1.5** |
| **OUZ** | **Omahuta** | **6.79** | **252** | *e*Pn | **Pn** | **11 12 49.2** | **+1.5** |
| **BKZ** | 74nm,0.8s **Black Stump Fm** | **7.04** | **214** | *e*PN | **Pn** | **11 12 48.2** | **-3.1** |
| BKZ | | | | SN | **Sn** | **11 14 06.6** | **-3.5** |
| **MRZ** | **Mangatainoka R** | **8.66** | **211** | PN | Pn | 11 13 09.8 | -3.7 |
| MRZ | | | | *e*SN | Sn | 11 14 41.1 | -8.8 |
| **RPZ** | **Rata Peaks** | **13.15** | **215** | Pn | Pn | 11 14 10.0 | -4.8 |
| RPZ | 1.5nm,0.3s,baz=38,slow=3.6,SNR=6.4 | | | Sn | Sn | 11 16 25.0 | -15 |
| **DZM** | 1.1nm,0.3s,baz=137,slow=18,SNR=6.6 **Mont Dzumac** | **17.43** | **306** | P | **Pn** | **11 15 09.8** | **-1.1** |
| **AFI** | 0.2nm,0.3s,baz=180,slow=9.1,SNR=2.2 **Afiamalu** | **20.33** | **19** | P | **P** | **11 15 43.7** | **+0.1** |
| **EIDS** | 21nm,1.0s,baz=207,slow=2.3,SNR=3.1 **Eidsvold** | **27.61** | **279** | P | **P** | **11 16 56.1** | **+1.8** |
| **RMQ** | baz=29,SNR=5.0 **Roma** | **29.11** | **275** | P | P | 11 17 11.8 | +4.2 |
| **CMSA** | baz=30,SNR=3.9 **Cobar Meteorol** | **30.18** | **264** | P | **P** | **11 17 18.4** | **+1.3** |
| **QLP** | baz=31,SNR=5.3 **Quilpie** | **32.85** | **272** | P | **P** | **11 17 42.2** | **+1.6** |
| **CTA** | baz=34,SNR=10 **Charters Tower** | **33.98** | **284** | P | **P** | **11 17 50.2** | **-0.3** |
| **CTAO** | 10nm,0.5s,baz=121,slow=12,SNR=26 **Charters Tower** | **33.98** | **284** | *e*P | **P** | **11 17 50.2** | **-0.3** |
| **HTT** | 8.6nm,0.4s **Hallett** | **35.35** | **258** | P | P | 11 17 57.9 | -4.5 |
| **MTSU** | baz=36,SNR=4.0 **Mount Surprise** | **36.55** | **285** | P | **P** | **11 18 14.1** | **+1.5** |
| **QIS** | baz=38,SNR=6.2 **Mount Isa** | **39.21** | **278** | P | **P** | **11 18 35.7** | **+0.6** |
| **ASAR** | baz=40,SNR=4.0 **Alice Springs** | **42.61** | **270** | P | **P** | **11 19 02.8** | **-0.4** |
| **WRA** | 20nm,0.7s,baz=111,slow=7.4,SNR=256 **Warramunga Arr** | **43.87** | **276** | P | **P** | **11 19 12.9** | **-0.3** |
| **VNDA** | 18nm,0.6s,baz=116,slow=7.6,SNR=42 **Vanda** | **45.09** | **186** | P | P | 11 19 27.7 | +5.4 |
| **WRKA** | 0.8nm,0.9s,baz=28,slow=6.4,SNR=1.9 **Warakurna** | **46.75** | **266** | P | **P** | **11 19 35.0** | **-1.1** |
| **CASY** | baz=48,SNR=26 **Casey** | **52.32** | **209** | *e*P | **P** | **11 20 18.1** | **+0.2** |
| **MEEK** | **Meekatharra** | **54.15** | **259** | P | **P** | **11 20 30.8** | **-1.3** |
| **QSPA** | baz=55,SNR=5.5 **South Pole Qui** | **56.73** | **180** | P | **P** | **11 20 51.3** | **+1.2** |
| **QSPA** | 3.5nm,0.8s,baz=42,slow=1.5,SNR=7.7 **South Pole Qui** | **56.73** | **180** | P | **P** | **11 20 51.4** | **+1.2** |
| QSPA | | | | *e*P | **P** | **11 20 51.9** | **+1.8** |
| **MAW** | **Mawson** | **69.37** | **201** | P | **P** | **11 22 14.7** | **+1.0** |
| **SNAA** | 0.9nm,0.4s,baz=118,slow=6.8,SNR=5.4 **Sanae** | **75.19** | **179** | P | **P** | **11 22 49.2** | **+0.7** |
| **SNAA** | **Sanae** | **75.19** | **179** | P | P | 11 22 59.2 | +11 |
| **VNA3** | **Neumayer Olymp** | **75.36** | **176** | P | **P** | **11 22 49.6** | **+0.2** |
| **VNA3** | **Neumayer Olymp** | **75.36** | **176** | P | P | 11 23 01.0 | +12 |
| **VNA2** | **Neumayer--Watz** baz=175,slow=5.2 | **75.79** | **177** | P | **P** | **11 22 53.1** | **+1.3** |
| **VNA2** | **Neumayer--Watz** baz=170,slow=4.0 | **75.79** | **177** | P | P | 11 23 03.6 | +12 |
| **VNA1** | **Neumayer--Stat** | **76.02** | **177** | P | **P** | **11 22 54.4** | **+1.2** |
| **VNA1** | **Neumayer--Stat** | **76.02** | **177** | P | P | 11 23 04.5 | +11 |
| **PETK** | **Petropavlovsk-** 5.6nm,0.8s,baz=123,slow=5.5,SNR=4.0 | **88.59** | **346** | P | **P** | **11 23 58.6** | **-0.1** |
| **NVAR** | **Mina Array Bea** 0.6nm,1.0s,baz=225,slow=8.6,SNR=3.0 | **90.71** | **43** | P | **P** | **11 24 10.5** | **+1.2** |

**BVAR Borovoye Array 128.21 314** PKP **PKPdf** **11 30 12.0 0.0**
0.8nm,0.5s,baz=112,slow=1.6,SNR=3.7
**KBZ Khabaz 146.33 300** PKPbc **PKPab** **11 30 47.0 -0.6**
6.3nm,0.9s,baz=91,slow=3.0,SNR=5.5
**FINES FINESS Array B 147.77 338** PKPbc **PKPbc** **11 30 50.0 -0.2**
7.3nm,0.8s,baz=67,slow=2.9,SNR=15
**ASF Jabal al Asfar 150.29 278** PKPbc **PKPbc** **11 30 58.1 +0.4**
5.7nm,0.8s,baz=94,slow=2.3,SNR=8.0
**EIL Elat 151.31 272** PKPbc **PKPbc** **11 31 00.7 +0.7**
9.3nm,0.9s,baz=314,slow=1.9,SNR=3.6
**NB2 NORSAR Subarra151.62 350** PKP **PKPbc** **11 30 59.9 +0.1**
comp=Z,1.7nm,0.6s,baz=15,slow=2.5
**NOA NORSAR Array B 151.62 350** PKPbc **PKPbc** **11 31 01.2 +1.4**
comp=Z,0.9nm,0.6s,baz=23,slow=4.6,SNR=6.9
**MMAI Mount Meron Ar 151.69 279** PKPbc **PKPbc** **11 31 01.9 +1.0**
comp=Z,1.5nm,0.3s,baz=75,slow=3.5,SNR=6.9
**HFS Hagfors 152.06 347** PKPbc **PKPbc** **11 31 02.1 +1.3**
comp=Z,3.0nm,0.7s,baz=38,slow=2.6,SNR=9.4
**DBIC Dimbokro 152.77 166** PKPbc **PKPbc** **11 31 05.2 +1.4**
comp=Z,0.9nm,0.5s,baz=270,slow=2.0,SNR=1.9
**AKASG Malin Array Be 153.33 319** PKPbc **PKPbc** **11 31 04.6 +0.8**
comp=Z,1.4nm,0.5s,baz=59,slow=2.3,SNR=5.4
**BRTR Keskin Array B 153.51 293** PKPbc **PKPbc** **11 31 05.5 +0.7**
comp=Z,13nm,0.4s,baz=160,slow=3.6,SNR=2.5
**TORD Torodi Ar. Bea 159.85 181** PKPab **PKPab** **11 31 45.0 +0.2**
comp=Z,0.5nm,0.4s,baz=176,slow=3.6,SNR=7.3

*IDC **21** 11:14:50.3±0.5, 2.62S×139.61E, h0km, mb4.4/11, mb1 4.5/16, mb1mx4.3/36, mbtmp4.4/16, ML4.2/3, Error ellipse: s-maj=15.3km s-min=9.9km az=6.0*
*BJI **21** 11:14:51.0, 2.50S×139.80E, h12km, mb4.6/8, mB5.1/3, Ms5.1/1, Ms7 4.7/1*
*NEIC **21** 11:14:51.7±0.3, 2.63S×139.68E, h10km, mb4.9/8, Error ellipse: s-maj=7.7km s-min=7.0km az=83.0*
*AUST **21** 11:14:53.2, 2.93S×139.52E, h0km*
*ISCJB **21** 11:14:53.1±0.3, 2.69S±0.04×139.57E±0.03, h27km, mb4.5/18, Error ellipse: s-maj=5.2km s-min=4.3km az=17.1*
*DJA **21** 11:14:54.5±0.4, 2.5S±7°×14°0E±°, h25km±6km, M4.9/6, mb4.9/6, mB5.3/1, MLv4.8/4, Mw(mB)4.7/1*
**ISC 21 11:14:54.4±0.4, 2.60S±0.06×139.67E±0.05, h27km, n81, σ1s29/80, mb4.6/18, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GENI** | **Genyem** | **0.50** | **89** | P | **Pn** | **11 15 05.2** | **-0.6** |
| GENI | | | | S | **Sn** | **11 15 14.4** | **+0.9** |
| **JAY** | **Jayapura** | **1.04** | **85** | Pg | **Pn** | **11 15 11.3** | **-1.9** |
| JAY | 160nm,0.3s,baz=242,slow=12,SNR=378 | | | Lg | Lg | 11 15 26.5 | |
| JAY | 580nm,0.3s,baz=90,slow=20,SNR=35 | | | LR | LR | 11 15 49.2 | |
| **JAY** | comp=Z,5μm,19.4s,baz=104,slow=54 **Jayapura** | **1.04** | **85** | P | **Pn** | **11 15 11.9** | **-1.3** |
| **JAY** | baz=1.3,SNR=11 **Jayapura** | **1.04** | **85** | P | **Pn** | **11 15 11.7** | **-1.5** |
| JAY | | | | S | **Sn** | **11 15 25.2** | **-1.7** |
| **SMPI** | **Sarmi** | **1.13** | **302** | P | **Pn** | **11 15 13.1** | **-1.4** |
| SMPI | | | | S | **Sn** | **11 15 28.7** | **-0.5** |
| **WAMI** | **Wamena** | **1.59** | **217** | P | **Pb** | **11 15 21.9** | **-1.2** |
| **FAKI** | **Fak Fak** | **7.42** | **267** | P | **Pn** | **11 16 41.2** | **+0.3** |
| **FAKI** | baz=7.3,SNR=27 **Fak Fak** | **7.42** | **267** | P | **Pn** | **11 16 41.2** | **+0.3** |
| **SIJI** | 63nm,0.9s,0.2nm **Sorong** | **8.57** | **281** | Pn | **Pn** | **11 16 55.7** | **-1.1** |
| **SWI** | 1.2nm,0.3s,baz=80,slow=12,SNR=3.3 **Sorong** | **8.58** | **281** | P | Pn | 11 17 00.7 | +3.8 |
| **SWI** | baz=8.5,SNR=5.5 **Sorong** | **8.58** | **281** | P | **Pn** | **11 16 56.1** | **-0.8** |
| **SAUI** | **Saumlaki** | **9.90** | **237** | P | **Pn** | **11 17 15.5** | **+0.5** |
| **BNDI** | **Bandanaira** | **9.93** | **259** | P | **Pn** | **11 17 15.3** | **-0.1** |
| **PMG** | **Port Moresby** | **10.06** | **133** | Pn | **Pn** | **11 17 17.5** | **+0.4** |
| **PMG** | 0.8nm,0.3s,baz=315,slow=11,SNR=3.2 **Port Moresby** | **10.06** | **133** | *e*Pn | **Pn** | **11 17 16.3** | **-0.9** |
| PMG | | | | Pn | Pn | 11 17 17.5 | +0.4 |
| **MSAI** | **Masohi** | **10.75** | **266** | P | **Pn** | **11 17 26.5** | **-0.2** |
| **PALU** | **Palau** | **11.16** | **332** | P | Pn | 11 17 36.9 | +4.6 |
| **COEN** | baz=11,SNR=4.2 **Coen** | **11.80** | **163** | P | **Pn** | **11 17 43.4** | **+2.3** |
| **COEN** | baz=12,SNR=9.6 **Coen** | **11.80** | **163** | *e*Pn | **Pn** | **11 17 41.2** | **+0.1** |
| **KDU** | 22nm,0.9s **Kakadu** | **12.29** | **215** | P | **Pn** | **11 17 46.5** | **-1.2** |
| **LBMI** | baz=12,SNR=32 **Labuha** | **12.32** | **279** | P | **Pn** | **11 17 47.7** | **-0.4** |
| **NLAI** | **Namlea** | **12.57** | **267** | P | **Pn** | **11 17 51.3** | **-0.2** |
| **MTN** | **Man Dam** baz=13,SNR=28 | **13.22** | **219** | P | **Pn** | **11 17 58.6** | **-1.9** |
| **SANI** | **Sanana** | **13.68** | **272** | P | **Pn** | **11 18 07.6** | **+0.9** |
| **WRAB** | 54nm,0.7s,990nm **Tennant Creek** | **17.99** | **196** | *e*Pn | **Pn** | **11 19 00.7** | **-2.0** |
| **WRA** | **Warramunga Arr** | **18.00** | **196** | P | **Pn** | **11 19 00.2** | **-2.7** |
| WRA | 1.1nm,0.3s,baz=21,slow=13,SNR=20 | | | S | Sn | 11 22 12.0 | -11 |
| **CTA** | 0.4nm,0.3s,baz=12,slow=22,SNR=5.9 **Charters Tower** | **18.53** | **160** | P | **P** | **11 19 07.8** | **-1.1** |
| **ASAR** | 0.4nm,0.3s,baz=342,slow=14,SNR=2.9 **Alice Springs** | **21.67** | **194** | P | **P** | **11 19 42.3** | **-0.8** |
| ASAR | 5.4nm,0.7s,baz=23,slow=10,SNR=12 | | | S | **S** | **11 23 38.4** | **-3.5** |
| **QLP** | 1.4nm,0.8s,baz=23,slow=21,SNR=3.4 **Quilpie** | **24.24** | **170** | P | **P** | **11 20 10.6** | **+1.4** |
| **WRKA** | baz=24,SNR=14 **Warakurna** | **24.85** | **205** | P | **P** | **11 20 18.6** | **+3.8** |
| **EIDS** | baz=25,SNR=3.7 **Eidsvold** | **25.16** | **155** | P | **P** | **11 20 19.7** | **+2.1** |
| **EIDS** | baz=25,SNR=7.5 **Eidsvold** | **25.16** | **155** | *e*P | **P** | **11 20 17.9** | **+0.3** |
| **RMQ** | 41nm,0.9s **Roma** | **25.30** | **161** | P | P | 11 20 21.8 | +3.0 |
| **MBWA** | baz=25,SNR=5.6 **Marble Bar** | **26.78** | **225** | *e*P | **P** | **11 20 32.1** | **-0.2** |
| **CMSA** | 12nm,0.7s **Cobar Meteorol** | **29.34** | **169** | P | **P** | **11 20 56.7** | **+1.7** |
| **BBOO** | baz=29,SNR=14 **Buckleboo** | **30.24** | **186** | P | **P** | **11 21 03.3** | **+0.3** |
| **HTT** | baz=30,SNR=8.6 **Hallett** | **30.68** | **181** | P | P | 11 21 02.9 | -4.0 |
| **H11N1** | baz=30,SNR=5.9 **WAKE ISLAND Hy** | **34.74** | **49** | T | T | 11 58 13.0 | |
| **H11N2** | baz=233,slow=75,SNR=6.2 **WAKE ISLAND Hy** | **34.75** | **49** | T | T | 11 58 14.1 | |
| **H11N3** | baz=233,slow=75,SNR=6.7 **WAKE ISLAND Hy** | **34.76** | **49** | T | T | 11 58 14.2 | |
| **TOO** | baz=233,slow=75,SNR=7.0 **Toolangi** | **35.21** | **172** | P | **P** | **11 21 48.9** | **+2.4** |
| **CMAR** | baz=35,SNR=3.8 **Chiang Mai Arr** | **45.22** | **299** | P | **P** | **11 23 09.6** | **-0.1** |
| **HHC** | 2.2nm,0.7s,baz=121,slow=5.7,SNR=8.0 **Hu-ho-hao-te** | **50.28** | **332** | *e*P | P | 11 23 52.9 | +4.3 |
| HHC | | | | S | **S** | **11 31 00.3** | **+0.6** |
| HHC | 24nm,0.9s | | | PMZ | | | |
| HHC | 610nm,12.3s | | | LN | | | |
| HHC | 540nm,11.1s | | | LE | | | |
| HHC | 470nm,13.6s | | | LZ | | | |
| **GTA** | **Gaotai** | **55.56** | **323** | *e*P | **P** | **11 24 29.1** | **+1.4** |
| GTA | | | | pP | **pP** | **11 24 36.3** | **+0.2** |
| GTA | | | | sP | **sP** | **11 24 39.6** | **+0.3** |
| GTA | | | | PMZ | | | |

7.0nm,1.1s
**SONM Songino Array 58.04 334** P **P** **11 24 45.3 +0.2**
0.5nm,0.5s,baz=134,slow=6.4,SNR=4.9
**MKAR Makanchi Array 70.29 322** P **P** **11 26 06.3 +0.8**
4.5nm,0.7s,baz=112,slow=8.0,SNR=22
**ZALV Zalesovo Beam 72.33 330** P **P** **11 26 17.4 -0.2**
2.4nm,0.4s,baz=113,slow=6.0,SNR=10
**KURK Kurchatov 74.18 325** P **P** **11 26 29.2 +0.6**
**KURBB Kurchatov Arra 74.19 325** P **P** **11 26 29.2 +0.5**
3.9nm,0.8s,baz=115,slow=5.4,SNR=26
**VNDA Vanda 75.80 175** P **P** **11 26 37.8 +0.2**
1.5nm,0.7s,baz=327,slow=6.5,SNR=14
**BVAR Borovoye Array 79.77 325** P **P** **11 27 00.4 +0.3**
5.5nm,0.6s,baz=101,slow=6.7,SNR=25
**BRVK Borovoye 79.84 325** *e*P **P** **11 27 00.6 +0.1**
14nm,1.1s
**MAW Mawson 82.58 202** P **P** **11 27 14.6 0.0**
2.9nm,0.9s,baz=84,slow=4.6,SNR=7.6
**MAW Mawson 82.58 202** P **P** **11 27 15.1 +0.4**
baz=82,SNR=5.5
**RC01 Rabbit Creek A 83.00 28** P **P** **11 27 17.0 0.0**
**DIV Divide 84.86 28** *e*P **P** **11 27 27.6 +1.1**
14nm,0.9s
**ABKAR Akbulak array 85.26 320** *e*P **P** **11 27 27.8 -1.0**
1.6nm,0.8s
**ILAR Eielson Array 85.34 24** P **P** **11 27 28.6 -0.3**
3.4nm,0.8s,baz=257,slow=4.8,SNR=30
**ARU Arti 87.23 327** P **P** **11 27 37.2 -1.1**
0.9nm,0.2s,baz=270,slow=20,SNR=2.3
**EGAK Eagle 87.73 25** *e*P **P** **11 27 41.4 +0.9**
5.5nm,1.1s
**DAWY Dawson 88.36 26** *e*P **P** **11 27 45.2 +1.6**
5.5nm,1.0s
**ARCES ARCESS Array B 100.72 341** P **Pdif** **11 28 38.9 -1.1**
1.3nm,0.6s,baz=86,slow=3.7,SNR=5.3
**TORD Torodi Ar. Bea 137.14 286** PKP **PKPdf** **11 34 14.9 -1.2**
0.5nm,0.7s,baz=80,slow=2.2,SNR=3.7
**KIC Kosan Boka 144.33 277** *e*PKP1 **PKPab** **11 34 26.8 -0.4**
24nm,0.9s
**DBIC Dimbokro 144.42 278** PKP PKPbc 11 34 27.5 -0.3
11nm,0.7s,baz=74,slow=2.3,SNR=16
**TIC Toumodi 144.58 278** *e*PKP1 **PKPab** **11 34 27.5 -0.7**
**LIC Lamto 144.62 277** *e*PKP1 **PKPab** **11 34 27.7 -0.6**
17nm,0.5s
**LPAZ La Paz 146.73 125** PKPbc **PKPab** **11 34 36.0 -0.9**
5.7nm,0.8s,baz=237,slow=1.6,SNR=22
**CPUP Villa Florida 146.87 151** PKPbc **PKPab** **11 34 35.4 -0.9**
2.1nm,0.9s,baz=201,slow=1.6,SNR=5.3
**PTGA Pitinga 160.09 99** PKPab **PKPab** **11 35 33.0 +0.6**
2.6nm,0.6s,baz=219,slow=4.6,SNR=9.1

*STR **21** 11:16:54.6±0.8, 44.61N×7.21E, h5km, Ml1.7, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*LDG **21** 11:16:54.3±0.1, 44.62N×7.25E, h2km, Md1.5/2, Ml1.6/6, Error ellipse: s-maj=3.1km s-min=1.2km az=69.0*
*GEN **21** 11:16:54.5, 44.61N×7.22E, h12km, ML0.8*
**CSEM 21 11:16:54.0±0.1, 44.62N×7.24E, h10km, ML1.4/5, Error ellipse: s-maj=3.8km s-min=1.6km az=68.0, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PZZ** | **Stroppo** | **0.14** | **218** | P | Pg | 11 16 57.9 | +0.4 |
| **BHB** | **Bricherasio** | **0.22** | **5** | P | Pg | 11 16 59.3 | +0.6 |
| **OG22** | **Abries** | **0.29** | **314** | Pg | Pg | 11 17 00.6 | +0.4 |
| OG22 | | | | Sg | Sg | 11 17 04.5 | +0.2 |
| **OG22** | **Abries** | **0.29** | **314** | Pg | Pg | 11 17 00.6 | +0.4 |
| OG22 | | | | Sg | Sg | 11 17 04.5 | +0.2 |
| **MBDF** | **Montbardon** | **0.35** | **288** | *e*Pg | Pg | 11 17 01.5 | +0.3 |
| MBDF | 6.7nm,0.2s | | | *e*Sg | Sg | 11 17 05.6 | -0.4 |
| **MBDF** | **Montbardon** | **0.35** | **288** | *e*Pg | Pg | 11 17 01.5 | +0.3 |
| MBDF | 3.3nm,0.2s | | | *e*Sg | Sg | 11 17 05.6 | -0.4 |
| **STV** | **Sant Anna di V** | **0.38** | **170** | P | Pg | 11 17 01.9 | +0.3 |
| STV | | | | S | Sg | 11 17 06.9 | +0.1 |
| **RRL** | **Rocca Remolon** | **0.44** | **313** | P | Pg | 11 17 03.2 | +0.3 |
| RRL | | | | S | Sg | 11 17 09.0 | 0.0 |
| **MVIF** | **Mont Vial** | **0.73** | **185** | Pg | Pb | 11 17 09.1 | +0.1 |
| MVIF | | | | Sg | Sg | 11 17 18.1 | +0.2 |
| **MVIF** | **Mont Vial** | **0.73** | **185** | Pg | Pb | 11 17 09.1 | +0.1 |
| MVIF | | | | Sg | Sg | 11 17 18.1 | +0.2 |
| **LUCF** | **Luceram** | **0.73** | **174** | Pg | Pg | 11 17 07.8 | -0.5 |
| LUCF | | | | Sg | Sg | 11 17 18.4 | +0.4 |
| **LUCF** | **Luceram** | **0.73** | **174** | Pg | Pg | 11 17 07.8 | -0.5 |
| **SBF** | **Sospel** | **0.77** | **169** | *e*Pg | Pg | 11 17 09.0 | 0.0 |
| SBF | 2.1nm,0.2s | | | *e*Sg | Sg | 11 17 18.9 | -0.2 |
| **SBF** | **Sospel** | **0.77** | **169** | *e*Pg | Pg | 11 17 09.0 | 0.0 |
| **LPG** | **La Plagne** | **0.94** | **339** | *e*Sg | Sg | 11 17 24.2 | -1.0 |
| **LPG** | 1.2nm,0.2s **La Plagne** | **0.94** | **339** | *e*Sg | Sg | 11 17 24.2 | -1.0 |
| **LPL** | 0.6nm,0.2s **La Plagne** | **0.96** | **338** | *e*Pg | Pg | 11 17 12.6 | -0.3 |
| LPL | 1.6nm,0.3s | | | *e*Sg | Sg | 11 17 24.7 | -1.0 |
| **LPL** | **La Plagne** | **0.96** | **338** | *e*Pg | Pg | 11 17 12.6 | -0.3 |
| LPL | 0.8nm,0.3s | | | *e*Sg | Sg | 11 17 24.7 | -1.0 |
| **ORIF** | **Oris-en-Rattie** | **1.01** | **288** | *e*Pg | Pg | 11 17 13.6 | 0.0 |
| ORIF | 1.4nm,0.3s | | | *e*Sg | Sg | 11 17 26.0 | -0.9 |
| **ORIF** | **Oris-en-Rattie** | **1.01** | **288** | *e*Pg | Pg | 11 17 13.6 | 0.0 |
| ORIF | 0.7nm,0.3s | | | *e*Sg | Sg | 11 17 26.0 | -0.9 |
| **FRF** | **La Foret Royal** | **1.14** | **202** | *e*Pg | Pb | 11 17 15.7 | -0.1 |
| FRF | 1.5nm,0.2s | | | *e*Sg | Sb | 11 17 30.2 | -0.5 |
| **FRF** | **La Foret Royal** | **1.14** | **202** | *e*Pg | Pb | 11 17 15.7 | -0.1 |
| **SMRF** | **Simiane la Rot** | **1.36** | **242** | *e*Sg | Sg | 11 17 37.7 | -0.1 |
| **SMRF** | 0.7nm,0.2s **Simiane la Rot** | **1.36** | **242** | *e*Sg | Sg | 11 17 37.7 | -0.1 |
| **LMR** | 0.3nm,0.2s **La Mourre** | **1.39** | **202** | *e*Pg | Pb | 11 17 20.2 | +0.1 |
| LMR | 1.6nm,0.2s | | | *e*Sg | Sb | 11 17 37.2 | -0.6 |
| **LMR** | **La Mourre** | **1.39** | **202** | *e*Pg | Pb | 11 17 20.2 | +0.1 |

*SIGU **21** 11:21:33.6±0.2, 46.70N±0.01×24.89E±0.01, h7km±2km, mb2.4/7*
*CSEM **21** 11:21:33.8, 46.69N×24.88E, h14km, MD3.1/3, After BUC*
*BUC **21** 11:21:33.9±0.7, 46.69N×24.87E, h14km±5km, MD3.1/3, Error ellipse: s-maj=4.9km s-min=3.9km az=66.0*
*ISCJB **21** 11:21:34.3±0.7, 46.70N±0.02×24.88E±0.03, h10km±4km, Error ellipse: s-maj=3.2km s-min=2.6km az=156.6*
**ISC 21 11:21:34.3±1.0, 46.67N±0.02×24.89E±0.02, h9km±9km, n76, σ0s65/122, 15C-39D, Romania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARCR** | **ARCALIA** | **0.56** | **319** | ⇓*i*P | **Pg** | **11 21 45.0** | **-0.1** |
| ARCR | | | | *i* S | **Sg** | **11 21 52.8** | **+0.4** |
| **ARCR** | **ARCALIA** | **0.56** | **319** | ⇓*i*P | **Pg** | **11 21 45.0** | **-0.1** |
| **ARCR** | **ARCALIA** | **0.56** | **319** | ⇓*i*P | **Pg** | **11 21 45.0** | **-0.1** |
| ARCR | | | | *i* S | **Sg** | **11 21 52.8** | **+0.4** |
| **MDB** | **Medias** | **0.63** | **214** | ⇓*i*P | **Pb** | **11 21 47.2** | **-0.3** |
| MDB | | | | *i* S | **Sb** | **11 21 57.3** | **+0.8** |
| **MDB** | **Medias** | **0.63** | **214** | ⇓*i*P | **Pb** | **11 21 47.2** | **-0.3** |
| **MDB** | **Medias** | **0.63** | **214** | S | **Sb** | **11 21 57.3** | **+0.8** |
| **MDB** | **Medias** | **0.63** | **214** | ⇓*i*P | **Pb** | **11 21 47.2** | **-0.3** |
| MDB | | | | *i* S | **Sb** | **11 21 57.3** | **+0.8** |
| **DOPR** | **Dopca** | **0.78** | **153** | ⇓*i*P | **Pg** | **11 21 48.8** | **-0.6** |
| DOPR | | | | *i* S | **Sg** | **11 22 00.1** | **+0.6** |
| **DOPR** | **Dopca** | **0.78** | **153** | ⇓*i*P | **Pg** | **11 21 48.8** | **-0.6** |
| **DOPR** | **Dopca** | **0.78** | **153** | ⇓*i*P | **Pg** | **11 21 48.8** | **-0.6** |
| DOPR | | | | *i* S | **Sg** | **11 22 00.1** | **+0.6** |
| **CJR** | **Cluj-Napoca** | **0.89** | **273** | 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TESR** | **Tescani** | **1.23** | **97** | ⇑*i*P | | **Pn** | **11 21 57.6** | **0.0** |
| TESR | | | | *i* S | | **Sb** | **11 22 13.6** | **+0.1** |
| **VOIR** | | **1.24** | **175** | ⇓*i*P | | **Pn** | **11 21 57.6** | **-0.2** |
| VOIR | | | | *i* S | | **Sb** | **11 22 14.1** | **+0.2** |
| **VOIR** | | **1.24** | **175** | ⇓*i*P | | **Pn** | **11 21 57.6** | **-0.2** |
| **VOIR** | | **1.24** | **175** | ⇓*i*P | | **Pn** | **11 21 57.6** | **-0.2** |
| VOIR | | | | *i* S | | **Sb** | **11 22 13.6** | **-0.3** |
| VOIR | | | | *i* S | | **Sb** | **11 22 14.1** | **+0.2** |
| **ARR** | **Arges** | **1.31** | **188** | ⇓*i*P | | **Pn** | **11 21 58.2** | **-0.7** |
| ARR | | | | *i* S | | **Sg** | **11 22 17.2** | **+0.7** |
| **ARR** | **Arges** | **1.31** | **188** | ⇓*i*P | | **Pn** | **11 21 58.2** | **-0.7** |
| **ARR** | **Arges** | **1.31** | **188** | S | | **Sg** | **11 22 17.2** | **+0.7** |
| **ARR** | **Arges** | **1.31** | **188** | ⇓*i*P | | **Pn** | **11 21 58.2** | **-0.7** |
| ARR | | | | *i* S | | **Sg** | **11 22 17.2** | **+0.7** |
| **BMR** | **Baia Mare** | **1.38** | **317** | ⇓*i*P | | **Pn** | **11 21 59.0** | **-0.8** |
| BMR | | | | *i* S | | **Sb** | **11 22 18.0** | **-0.1** |
| **BMR** | **Baia Mare** | **1.38** | **317** | ⇓*i*P | | **Pn** | **11 21 59.0** | **-0.8** |
| **BMR** | **Baia Mare** | **1.38** | **317** | S | | **Sb** | **11 22 18.0** | **-0.1** |
| **BMR** | **Baia Mare** | **1.38** | **317** | ⇓*i*P | | **Pn** | **11 21 59.0** | **-0.8** |
| BMR | | | | *i* S | | **Sb** | **11 22 18.0** | **-0.1** |
| **MLR** | **Muntele Rosu** | **1.39** | **148** | ⇑*i*P | | **Pb** | **11 22 00.5** | **0.0** |
| MLR | | | | *i* S | | **Sg** | **11 22 19.6** | **+0.6** |
| **MLR** | **Muntele Rosu** | **1.39** | **148** | ⇑*i*P | | **Pb** | **11 22 00.5** | **0.0** |
| **MLR** | **Muntele Rosu** | **1.39** | **148** | ⇑*i*P | | **Pb** | **11 22 00.5** | **0.0** |
| MLR | | | | *i* S | | **Sg** | **11 22 19.6** | **+0.6** |
| **LOT** | **Lotru** | **1.45** | **213** | ⇓*i*P | | **Pn** | **11 22 00.0** | **-0.8** |
| LOT | | | | *i* S | | **Sn** | **11 22 19.7** | **-0.2** |
| **LOT** | **Lotru** | **1.45** | **213** | ⇓*i*P | | **Pn** | **11 22 00.0** | **-0.8** |
| **LOT** | **Lotru** | **1.45** | **213** | S | | **Sn** | **11 22 19.7** | **-0.2** |
| **LOT** | **Lotru** | **1.45** | **213** | ⇓*i*P | | **Pn** | **11 22 00.0** | **-0.8** |
| LOT | | | | *i* S | | **Sn** | **11 22 19.7** | **-0.2** |
| **RAK** | **Rakhov** | **1.46** | **342** | *e*Pn | | **Pn** | **11 21 59.8** | **-1.1** |
| RAK | | | | Pnm | | | 11 22 02.4 | |
| RAK | | | | *i* Sn | | **Sn** | **11 22 18.8** | **-1.4** |
| RAK | | | | Snm | | | 11 22 25.2 | |
| **PLOR** | **Plostina** | **1.47** | **123** | *i* S | | **Sn** | **11 22 20.0** | **-0.4** |
| **PLOR** | **Plostina** | **1.47** | **123** | S | | **Sn** | **11 22 20.0** | **-0.4** |
| **PLOR** | **Plostina** | **1.47** | **123** | *i* S | | **Sn** | **11 22 20.0** | **-0.4** |
| **DRGR** | | **1.50** | **275** | ⇓*i*P | | **Pn** | **11 22 01.0** | **-0.5** |
| DRGR | | | | *i* S | | **Sn** | **11 22 20.4** | **-0.8** |
| **DRGR** | | **1.50** | **275** | ⇓*i*P | | **Pn** | **11 22 01.0** | **-0.5** |
| **DRGR** | | **1.50** | **275** | ⇓*i*P | | **Pn** | **11 22 01.0** | **-0.5** |
| DRGR | | | | *i* S | | **Sn** | **11 22 20.4** | **-0.8** |
| **VRI** | **Vrincioaia** | **1.51** | **121** | ⇓*i*P | | **Pn** | **11 22 01.6** | **+0.1** |
| VRI | | | | *i* S | | **Sb** | **11 22 22.2** | **+0.5** |
| **VRI** | **Vrincioaia** | **1.51** | **121** | ⇓*i*P | | **Pn** | **11 22 01.6** | **+0.1** |
| **VRI** | **Vrincioaia** | **1.51** | **121** | S | | **Sb** | **11 22 22.2** | **+0.5** |
| **VRI** | **Vrincioaia** | **1.51** | **121** | ⇓*i*P | | **Pn** | **11 22 01.6** | **+0.1** |
| VRI | | | | *i* S | | **Sb** | **11 22 22.2** | **+0.5** |
| **NSLU** | **Nyzhne Selyshc** | **1.56** | **349** | *e*Pn | | **Pg** | **11 22 05.8** | **+1.6** |
| NSLU | | | | *i* Sn | | **Sg** | **11 22 28.3** | **+3.9** |
| **DEV** | **Deva** | **1.58** | **241** | ⇓*i*P | | **Pn** | **11 22 02.9** | **+0.4** |
| DEV | | | | *i* S | | **Sb** | **11 22 24.0** | **+0.1** |
| **DEV** | **Deva** | **1.58** | **241** | ⇓*i*P | | **Pn** | **11 22 02.9** | **+0.4** |
| **DEV** | **Deva** | **1.58** | **241** | ⇓*i*P | | **Pn** | **11 22 02.9** | **+0.4** |
| DEV | | | | *i* S | | **Sb** | **11 22 24.0** | **+0.1** |
| **TRSU** | **Trosnyk** | **1.94** | **318** | *e*Pn | | **Pn** | **11 22 07.6** | **+0.2** |
| TRSU | | | | *i* Sn | | **Sn** | **11 22 32.0** | **+0.1** |
| **GZR** | **Gura Zlata** | **1.95** | **230** | ⇓*i*P | | **Pn** | **11 22 08.3** | **+0.7** |
| GZR | | | | *i* S | | **Sb** | **11 22 33.6** | **-0.8** |
| **GZR** | **Gura Zlata** | **1.95** | **230** | ⇓*i*P | | **Pn** | **11 22 08.3** | **+0.7** |
| **GZR** | **Gura Zlata** | **1.95** | **230** | S | | **Sb** | **11 22 33.6** | **-0.8** |
| **GZR** | **Gura Zlata** | **1.95** | **230** | ⇓*i*P | | **Pn** | **11 22 08.3** | **+0.7** |
| GZR | | | | *i* S | | **Sb** | **11 22 33.6** | **-0.8** |
| **MEZ** | **Mezhgor'ye** | **2.07** | **334** | *e*Pn | | **Pn** | **11 22 09.1** | **-0.1** |
| MEZ | | | | *i* Sn | | **Sn** | **11 22 34.9** | **-0.2** |
| **BRIU** | **Brid** | **2.10** | **324** | *e*Pn | | **Pn** | **11 22 09.5** | **-0.1** |
| BRIU | | | | *i* Sn | | **Sn** | **11 22 35.5** | **-0.2** |
| **TRPA** | **Tarpa** | **2.16** | **313** | ⇑*i*P | | **Pn** | **11 22 10.1** | **-0.4** |
| TRPA | | | | *i* S | | **Sn** | **11 22 37.7** | **+0.3** |
| **TRPA** | **Tarpa** | **2.16** | **313** | ⇑*i*P | | **Pn** | **11 22 10.1** | **-0.4** |
| **TRPA** | **Tarpa** | **2.16** | **313** | ⇑*i*P | | **Pn** | **11 22 10.1** | **-0.4** |
| TRPA | | | | *i* S | | **Sn** | **11 22 37.7** | **+0.3** |
| **KMPD** | **K-Podol'skiy** | **2.17** | **29** | *i* Pn | | **Pn** | **11 22 10.3** | **-0.3** |
| KMPD | | | | *i* Sn | | **Sn** | **11 22 37.4** | **-0.3** |
| **BERU** | **Beregovo** | **2.18** | **317** | *i* Sn | | **Sn** | **11 22 38.4** | **+0.5** |
| **SIRR** | **Siria** | **2.27** | **261** | ⇓*i*P | | **Pn** | **11 22 12.2** | **+0.3** |
| SIRR | | | | *i* S | | **Sn** | **11 22 39.5** | **-0.5** |
| **SIRR** | **Siria** | **2.27** | **261** | ⇓*i*P | | **Pn** | **11 22 12.2** | **+0.3** |
| **SIRR** | **Siria** | **2.27** | **261** | ⇓*i*P | | **Pn** | **11 22 12.2** | **+0.3** |
| SIRR | | | | *i* S | | **Sn** | **11 22 39.5** | **-0.5** |
| **MUKU** | **Mukachevo** | **2.33** | **321** | *e*Pn | | **Pn** | **11 22 12.7** | **0.0** |
| MUKU | | | | *i* Sn | | **Sn** | **11 22 41.5** | **+0.1** |
| **BZS** | **Buzias** | **2.50** | **246** | ⇑*i*P | | **Pn** | **11 22 15.5** | **+0.3** |
| BZS | | | | *i* S | | **Sn** | **11 22 46.5** | **+0.6** |
| **BZS** | **Buzias** | **2.50** | **246** | ⇑*i*P | | **Pn** | **11 22 15.5** | **+0.3** |
| **BZS** | **Buzias** | **2.50** | **246** | S | | **Sn** | **11 22 46.5** | **+0.6** |
| **BZS** | **Buzias** | **2.50** | **246** | ⇑*i*P | | **Pn** | **11 22 15.5** | **+0.3** |
| BZS | | | | *i* S | | **Sn** | **11 22 46.5** | **+0.6** |
| **NDNU** | **Novodnistrovsk** | **2.55** | **40** | *e*Pn | | **Pn** | **11 22 16.0** | **+0.1** |
| NDNU | | | | Pnm | | | 11 22 18.6 | |
| NDNU | | | | *i* Sn | | **Sn** | **11 22 47.6** | **+0.5** |
| NDNU | | | | Snm | | | 11 22 56.0 | |
| **HORU** | **Horodok** | **2.75** | **22** | *e*Pn | | **Pn** | **11 22 18.9** | **+0.3** |
| HORU | | | | *i* Sn | | **Sn** | **11 22 52.1** | **+0.2** |

*ISCJB **21** 11:32:39.9±0.4, 59.67N±0.03×22.51E±0.04, h0km, Error ellipse: s-maj=4.9km s-min=3.1km az=163.5*
*HEL **21** 11:32:39.5, 59.56N×22.34E, h0km, ML2.2, Explosion*
*CSEM **21** 11:32:40.7±0.2, 59.67N×22.57E, h2km, ML2.1, Error ellipse: s-maj=5.0km s-min=3.4km az=177.0, Mining explosion.*
*UPP **21** 11:32:42.8, 59.70N×22.25E, h0km, ML2.1, Mining explosion.*
*IDC **21** 11:32:42.1±1.9, 59.74N×22.47E, h0km, mb1 3.1/4, mb1mx3.0/41, mbtmp3.0/4, ML2.5/4, Error ellipse: s-maj=26.1km s-min=6.7km az=160.0*

**ISC 21 11:32:40.3±0.8, 59.68N±0.03×22.44E±0.03, h0km, n41, σ1s24/55, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **1.12** | **60** | *e*PB | | **Pg** | **11 33 02.0** | **+0.1** |
| | baz=240 | | | | | | | |
| MEF | | | | *e*SB | | **Sg** | **11 33 17.7** | **+1.3** |
| **MEF** | **Metsahovi** | **1.12** | **60** | Pb | | **Pg** | **11 33 01.9** | **+0.1** |
| **MTSE** | **Matsula** | **1.20** | **143** | *e*PB | | **Pg** | **11 33 02.7** | **-0.5** |
| MTSE | | | | *e*SB | | **Sg** | **11 33 17.9** | **-0.8** |
| **MTSE** | **Matsula** | **1.20** | **143** | Pb | | **Pg** | **11 33 02.7** | **-0.5** |
| MTSE | | | | Sb | | **Sg** | **11 33 17.9** | **-0.8** |
| **AAL** | **Aland** | **1.33** | **293** | *e*P | | **Pg** | **11 33 05.4** | **-0.4** |
| **AAL** | **Aland** | **1.33** | **293** | P | | **Pg** | **11 33 05.5** | **-0.3** |
| AAL | | | | S | | **Sg** | **11 33 23.5** | **+0.5** |
| **RAF** | **Rauma** | **1.39** | **346** | *e*P | | **Pn** | **11 33 06.9** | **0.0** |
| RAF | | | | MSG | | | 11 33 24.6 | |
| | comp=Z,14nm,0.2s | | | | | | | |
| RAF | | | | *e*SB | | **Sg** | **11 33 25.9** | **+0.9** |
| **RAF** | **Rauma** | **1.39** | **346** | P | | **Pn** | **11 33 06.9** | **0.0** |
| RAF | | | | Sb | | **Sg** | **11 33 25.9** | **+0.9** |
| **PVF** | **Pernaja** | **1.92** | **62** | *e*PG | | **Pn** | **11 33 15.8** | **+1.5** |
| PVF | | | | MSG | | | 11 33 39.6 | |
| | comp=Z,16nm,0.2s | | | | | | | |
| PVF | | | | *e*SG | | **Sb** | **11 33 41.2** | **+0.5** |
| **PVF** | **Pernaja** | **1.92** | **62** | Pg | | **Pn** | **11 33 15.7** | **+1.5** |
| PVF | | | | Sg | | **Sb** | **11 33 41.2** | **+0.5** |
| **NRTU** | **Norrtaelje** | **1.93** | **272** | *e*P | | **Pn** | **11 33 15.3** | **+1.0** |
| NRTU | | | | *e*S | | **Sn** | **11 33 40.8** | **+1.5** |
| **NRTU** | **Norrtaelje** | **1.93** | **272** | P | | **Pn** | **11 33 15.3** | **+1.0** |
| NRTU | | | | S | | **Sn** | **11 33 40.8** | **+1.5** |
| **FORU** | **Forsmark** | **2.25** | **290** | *e*P | | **Pn** | **11 33 20.9** | **+2.1** |
| **FORU** | **Forsmark** | **2.25** | **290** | P | | **Pn** | **11 33 20.8** | **+2.1** |
| **FLYU** | **Flymyra** | **2.34** | **283** | *e*P | | **Pn** | **11 33 21.2** | **+1.3** |
| **FLYU** | **Flymyra** | **2.34** | **283** | P | | **Pn** | **11 33 21.2** | **+1.3** |
| **NYNU** | **Nynaeshamn** | **2.37** | **255** | *e*P | | **Pn** | **11 33 22.0** | **+1.7** |
| **NYNU** | **Nynaeshamn** | **2.37** | **255** | P | | **Pn** | **11 33 22.0** | **+1.7** |
| **FIA0** | **FINESS Array S** | **2.52** | **44** | *e*P | | **Pn** | **11 33 24.6** | **+2.1** |
| | baz=221 | | | | | | | |
| FIA0 | | | | *e*SB | | **Sb** | **11 33 58.0** | **0.0** |
| **FINES** | **FINESS Array B** | **2.52** | **44** | Pn | | **Pn** | **11 33 24.7** | **+2.2** |
| | comp=Z,1.0nm,0.3s,baz=226,slow=14,SNR=29 | | | | | | | |
| FINES | | | | Lg | | Lg | 11 33 58.6 | |
| | comp=Z,2.5nm,0.3s,baz=227,slow=28,SNR=28 | | | | | | | |
| **VSU** | **Vasula** | **2.53** | **117** | *e*SG | | **Sb** | **11 33 58.2** | **0.0** |
| **VSU** | **Vasula** | **2.53** | **117** | Sg | | **Sb** | **11 33 58.2** | **0.0** |
| **BACU** | **Backbrunna** | **2.70** | **276** | *e*P | | **Pn** | **11 33 26.5** | **+1.6** |
| **BACU** | **Backbrunna** | **2.70** | **276** | P | | **Pn** | **11 33 26.5** | **+1.6** |
| **VJF** | **Virojoki** | **2.71** | **69** | *e*P | | **Pn** | **11 33 25.9** | **+0.9** |
| VJF | | | | MSG | | | 11 34 01.6 | |
| | comp=Z,6.0nm,0.2s | | | | | | | |
| **VJF** | **Virojoki** | **2.71** | **69** | P | | **Pn** | **11 33 25.9** | **+0.9** |
| **OSTU** | **Oestervaala** | **2.73** | **284** | *e*P | | **Pn** | **11 33 26.5** | **+1.2** |
| **OSTU** | **Oestervaala** | **2.73** | **284** | P | | **Pn** | **11 33 26.5** | **+1.3** |
| **KEF** | **Keuruu** | **2.77** | **24** | *e*PB | | **Pb** | **11 33 29.5** | **-1.1** |
| | baz=205 | | | | | | | |
| KEF | | | | MSG | | | 11 34 04.8 | |
| | comp=Z,7.6nm,0.2s | | | | | | | |
| KEF | | | | *e*SB | | **Sb** | **11 34 05.5** | **+0.5** |
| **IGGU** | **Iggoen** | **2.82** | **297** | *e*P | | **Pn** | **11 33 27.6** | **+1.1** |
| **IGGU** | **Iggoen** | **2.82** | **297** | P | | **Pn** | **11 33 27.6** | **+1.1** |
| **KAF** | **Kangasniemi** | **3.09** | **36** | *e*PB | | Pn | 11 33 33.6 | +3.3 |
| KAF | | | | *e*SB | | **Sb** | **11 34 12.7** | **-1.6** |
| KAF | | | | MSG | | | 11 34 13.8 | |
| | comp=Z,8.0nm,0.2s | | | | | | | |
| **ESKU** | **Eskilstuna** | **3.12** | **264** | *e*P | | **Pn** | **11 33 32.2** | **+1.5** |
| **ESKU** | **Eskilstuna** | **3.12** | **264** | P | | **Pn** | **11 33 32.1** | **+1.5** |
| **VAF** | **Ylistaro** | **3.38** | **2** | *e*PB | | **Pb** | **11 33 39.1** | **-1.9** |
| | baz=184 | | | | | | | |
| VAF | | | | *e*SG | | **Sg** | **11 34 27.9** | **-0.9** |
| **FALU** | **Falun** | **3.41** | **287** | *e*P | | **Pn** | **11 33 36.0** | **+1.4** |
| **FALU** | **Falun** | **3.41** | **287** | P | | **Pn** | **11 33 36.0** | **+1.4** |
| **HFS** | **Hagfors** | **4.43** | **280** | Pn | | **Pn** | **11 33 49.6** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=96,slow=13,SNR=11 | | | | | | | |
| HFS | | | | Sn | | **Sn** | **11 34 41.6** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=93,slow=26,SNR=5.2 | | | | | | | |
| HFS | | | | Lg | | Lg | 11 34 57.3 | |
| | comp=Z,0.6nm,0.3s,baz=92,slow=32,SNR=6.1 | | | | | | | |
| **NACGM** | **Naroch** | **5.33** | **152** | *e*LR | | LR | 11 35 30.0 | |
| **NOA** | **NORSAR Array B** | **5.74** | **289** | Pn | | **Pn** | **11 34 06.3** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=100,slow=16,SNR=7.7 | | | | | | | |
| NOA | | | | Sn | | **Sn** | **11 35 10.9** | **-2.2** |
| | comp=Z,0.2nm,0.3s,baz=127,slow=22,SNR=2.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.99** | **6** | Pn | | **Pn** | **11 35 03.8** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=186,slow=14,SNR=10 | | | | | | | |

**MEX 21 11:33:29.8±1.3, 17.07N×94.93W, h111km±36km, MD4.3, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **HUIG** | **Huatulco** | **1.72** | **221** | *i* P | | Pn | 11 33 57.4 | -2.0 |
| HUIG | | | | *i* S | | Sn | 11 34 21.1 | -0.8 |
| **TGIG** | | **1.75** | **99** | *i* P | | Pn | 11 33 59.0 | -0.7 |
| TGIG | | | | *e*S | | Sn | 11 34 20.7 | -1.9 |
| **PCIG** | | **2.13** | **129** | *e*P | | Pn | 11 34 03.7 | -0.8 |
| PCIG | | | | *e*S | | Sn | 11 34 29.4 | -1.6 |
| **CCIG** | **Comitan** | **2.79** | **106** | *e*P | | Pn | 11 34 12.4 | -0.8 |
| CCIG | | | | *e*S | | Sn | 11 34 45.0 | -1.7 |
| **PNIG** | **Pinotepa** | **3.14** | **258** | *i* P | | Pn | 11 34 15.9 | -1.8 |
| PNIG | | | | *i* S | | Sn | 11 34 52.0 | -2.7 |
| **TLIG** | **Tlapa** | **3.51** | **279** | *i* P | | Pn | 11 34 23.1 | +0.2 |
| TLIG | | | | *i* S | | Sn | 11 35 00.2 | -3.6 |

**IDC 21 11:38:02.2±8.0, 5.66S×149.97E, h92km±56km, mb3.1/2, mb1 3.3/3, mb1mx3.0/25, mbtmp3.4/3, ML1.1/1, Error ellipse: s-maj=120.2km s-min=54.1km az=118.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.65** | **217** | P | | Pn | 11 39 10.1 | 0.0 |
| | 0.7nm,0.3s,baz=30,slow=8.1,SNR=2.1 | | | | | | | |
| PMG | | | | S | | Sn | 11 40 03.8 | +0.9 |
| | 0.6nm,0.3s,baz=180,slow=20,SNR=3.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.80** | **226** | P | | P | 11 42 36.3 | 0.0 |
| | 0.8nm,0.5s,baz=50,slow=10,SNR=8.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.66** | **219** | P | | P | 11 43 05.1 | -0.4 |
| | 0.7nm,0.6s,baz=55,slow=8.5,SNR=18 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.86** | **286** | PKPbc | | PKPbc | 11 57 37.2 | -0.4 |
| | 0.5nm,0.6s,baz=70,slow=1.9,SNR=3.4 | | | | | | | |

*IDC **21** 11:49:04.7±1.8, 12.11N×125.36E, h0km, mb3.5/4, mb1 3.7/4, mb1mx3.5/40, mbtmp3.5/4, Error ellipse: s-maj=85.9km s-min=22.8km az=56.0*
*MAN **21** 11:49:11, 12.32N×125.15E, h63km, mb4.8, ML3.7, MS3.8*

**ISC 21 11:49:09.2±1.2, 12.37N±0.06×125.5E±0.1, h33km, n16, σ2s05/15, mb3.4/4, 2D, Samar**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **CNP** | **Catarman** | **0.78** | **281** | *e*P | | **Pb** | **11 49 25.8** | **+1.3** |
| CNP | | | | *e*S | | **Sn** | **11 49 31.7** | **-2.8** |
| **PLP** | **Palo** | **1.28** | **201** | ⇓*e*P | | **Pn** | **11 49 31.8** | **+1.0** |
| PLP | | | | *e*S | | **Sb** | **11 49 51.2** | **+2.2** |
| **OCLP** | **Ormoc** | **1.55** | **212** | *e*P | | **Pb** | **11 49 37.6** | **+0.4** |
| OCLP | | | | *e*S | | **Sn** | **11 49 52.9** | **-0.5** |
| **PVCP** | **Virac** | **1.76** | **314** | *e*P | | **Pn** | **11 49 38.0** | **+0.6** |
| **MSLP** | **Maasin** | **2.29** | **195** | *e*P | | **Pn** | **11 49 47.3** | **+2.5** |
| MSLP | | | | *e*S | | **Sn** | **11 50 07.6** | **-4.3** |
| **RCP** | **Roxas** | **2.77** | **253** | ⇓*e*P | | **Pb** | **11 49 57.1** | **-0.9** |
| **CMAR** | **Chiang Mai Arr** | **26.24** | **287** | P | | **P** | **11 54 42.0** | **+0.5** |
| | 0.4nm,0.3s,baz=91,slow=7.9,SNR=4.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **33.28** | **165** | P | | **P** | **11 55 42.4** | **-1.5** |
| | 0.5nm,1.0s,baz=342,slow=8.5,SNR=2.9 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **11 58 25.8** | **0.0** |
| | 0.5nm,1.1s,baz=339,slow=2.9,SNR=3.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **36.76** | **167** | P | | **P** | **11 56 11.6** | **-2.2** |
| | 0.1nm,0.3s,baz=346,slow=7.2,SNR=7.5 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.15** | **76** | T | | T | 12 39 38.9 | |
| | baz=272,slow=73,SNR=3.9 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.16** | **76** | T | | T | 12 39 36.4 | |
| | baz=272,slow=73,SNR=5.7 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.17** | **76** | T | | T | 12 39 38.3 | |
| | baz=272,slow=73,SNR=6.5 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.41** | **74** | T | | T | 12 39 55.7 | |
| | baz=266,slow=75,SNR=36 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.42** | **74** | T | | T | 12 39 52.2 | |
| | baz=266,slow=75,SNR=22 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.43** | **74** | T | | T | 12 39 55.8 | |
| | baz=266,slow=75,SNR=22 | | | | | | | |
| **MKAR** | **Makanchi Array** | **49.88** | **322** | P | | **P** | **11 58 00.7** | **+1.1** |
| | 0.4nm,0.3s,baz=111,slow=6.3,SNR=4.8 | | | | | | | |

*BJI **21** 11:50:28.7, 33.51S×178.69W, h7km, mb5.4/16, mB5.8/11, Ms5.5/6, Ms7 5.0/7*
*ISCJB **21** 11:50:29.4±0.1, 33.54S±0.03×178.73W±0.04, h10km, mb5.1/53, MS4.4/16, Error ellipse: s-maj=5.7km s-min=2.6km az=35.4*
*NEIC **21** 11:50:31.2±2.6, 33.40S×178.73W, h13km±16km, mb5.2/37, Error ellipse: s-maj=7.8km s-min=6.2km az=109.0*
*IDC **21** 11:50:31.4±4.2, 33.27S×178.62W, h16km±25km, mb4.7/22, mb1 4.8/24, mb1mx4.6/38, mbtmp4.8/24, ML3.0/1, MS4.4/15, Ms1 4.4/15, ms1mx4.2/31, Error ellipse: s-maj=14.9km s-min=14.0km az=88.0*
*GCMT **21** 11:50:31.2±0.3, 33.41S×178.14W, h20km±1km, MW5.1/75, Moment Tensor Solution. s43,c59; s75,c109; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr4.53±.25; Mθθ-0.30±.16; Mφφ-4.22±.17; Mrθ0.85±.33; Mrφ-1.31±.10; Mθφ4.06±.32; Best double couple: M◎6.17500×10^16 NP1:φs13.00000°, δ66.00000°, λ87.00000°. NP2: φs200.00000°, δ24.00000°, λ96.00000°. Principal axes: T 6.1390, Plg69.0000°, Azm278.0000°; N 0.0760, Plg3.0000°, Azm15.0000°; P -6.2110, Plg21.0000°, Azm106.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*AUST **21** 11:50:32.0±2.5, 33.40S×178.12W, h34km Error ellipse: s-maj=1.9km s-min=1.2km az=286.0*
*MOS **21** 11:50:33.1±1.2, 33.27S×178.80W, h28km, mb5.4/17, Error ellipse: s-maj=13.2km s-min=9.6km az=95.4*

**ISC 21 11:50:30.4±0.3, 33.44S±0.04×178.55W±0.06, h10km, n399, σ1s36/398, mb5.2/54, MS4.4/16, 4C-2D, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **4.21** | **8** | Pn | | Pn | 11 51 31.3 | -3.3 |
| | 104nm,0.3s,baz=238,slow=20,SNR=4.7 | | | | | | | |
| RAO | | | | Sn | | **Sn** | **11 52 21.2** | **-2.6** |
| | 189nm,0.3s,baz=55,slow=22,SNR=5.3 | | | | | | | |
| **RAO** | **Raoul Island** | **4.21** | **8** | *e*P | | **Pn** | **11 51 32.5** | **-2.1** |
| RAO | | | | | | | 11 52 21.2 | |
| **RAO** | **Raoul Island** | **4.21** | **8** | *e*Pn | | **Pn** | **11 51 32.5** | **-2.1** |
| RAO | | | | Sn | | **Sn** | **11 52 21.2** | **-2.6** |
| **MXZ** | **Matakaoa Point** | **4.85** | **211** | PN | | **Pn** | **11 51 42.7** | **-0.7** |
| **WMGZ** | **Waiomatatini S** | **5.02** | **209** | PN | | **Pn** | **11 51 45.1** | **-0.6** |
| WMGZ | | | | SN | | **Sn** | **11 52 44.7** | **+0.9** |
| **PKGZ** | **Pakihiroa** | **5.20** | **211** | PN | | **Pn** | **11 51 47.2** | **-1.0** |
| PKGZ | | | | SN | | **Sn** | **11 52 48.7** | **+0.4** |
| **HAZ** | **Te Kaha** | **5.24** | **214** | PN | | **Pn** | **11 51 48.7** | **-0.1** |
| HAZ | | | | SN | | **Sn** | **11 52 50.5** | **+1.2** |
| **PUZ** | **Puketiti** | **5.30** | **208** | PN | | **Pn** | **11 51 47.5** | **-2.1** |
| **TWGZ** | **Tauwhareparae** | **5.50** | **210** | PN | | **Pn** | **11 51 51.8** | **-0.7** |
| **CNGZ** | **Carnagh Statio** | **5.68** | **207** | PN | | **Pn** | **11 51 53.4** | **-1.4** |
| **KUZ** | **Kuaotunu** | **5.74** | **233** | PN | | **Pn** | **11 51 56.2** | **+0.6** |
| **TKGZ** | **Te Karaka** | **5.78** | **209** | PN | | **Pn** | **11 51 55.3** | **-0.9** |
| **MWZ** | **Matawai** | **5.83** | **212** | PN | | **Pn** | **11 51 54.8** | **-2.1** |
| **OPRZ** | **Ohinepanea** | **5.93** | **221** | PN | | **Pn** | **11 51 58.3** | **0.0** |
| **URZ** | **Urewera** | **5.96** | **215** | Pn | | **Pn** | **11 51 56.3** | **-2.4** |
| | 18nm,0.3s,baz=248,slow=3.4,SNR=93 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **11 53 05.1** | **-1.9** |
| | 51nm,0.3s,baz=329,slow=23,SNR=11 | | | | | | | |
| **URZ** | **Urewera** | **5.96** | **215** | PN | | **Pn** | **11 51 56.6** | **-2.0** |
| **URZ** | **Urewera** | **5.96** | **215** | *e*Pn | | **Pn** | **11 51 58.2** | **-0.5** |
| URZ | | | | Sn | | **Sn** | **11 53 05.1** | **-1.9** |
| **MARZ** | **Manawahe** | **5.97** | **219** | PN | | **Pn** | **11 51 59.4** | **+0.5** |
| **RAGZ** | **Rawiri** | **6.01** | **212** | PN | | **Pn** | **11 51 58.7** | **-0.8** |
| **TGRZ** | **Tauranga** | **6.02** | **223** | PN | | **Pn** | **11 52 00.2** | **+0.8** |
| TGRZ | | | | SN | | **Sn** | **11 53 08.9** | **+0.5** |
| **SNGZ** | **Shannon Statio** | **6.28** | **211** | PN | | **Pn** | **11 52 02.9** | **-0.2** |
| **KNZ** | **Kokohu** | **6.35** | **208** | PN | | **Pn** | **11 52 02.4** | **-1.6** |
| **ALRZ** | **Allen Road** | **6.58** | **218** | PN | | **Pn** | **11 52 06.7** | **-0.4** |
| **OUZ** | **Omahuta** | **6.74** | **253** | PN | | Pn | 11 52 12.3 | +3.0 |
| **OUZ** | **Omahuta** | **6.74** | **253** | *e*Pn | | Pn | 11 52 12.5 | +3.2 |
| **NMHZ** | **Naumai** | **6.78** | **212** | PN | | **Pn** | **11 52 09.9** | **-0.1** |
| **ARHZ** | **Aropaoanui** | **6.83** | **210** | PN | | **Pn** | **11 52 10.0** | **-0.6** |
| **BKZ** | **Black Stump Fm** | **6.98** | **214** | PN | | **Pn** | **11 52 10.8** | **-1.9** |
| BKZ | | | | SN | | **Sn** | **11 53 28.5** | **-3.6** |
| **BKZ** | **Black Stump Fm** | **6.98** | **214** | *e*Pn | | **Pn** | **11 52 11.7** | **-1.0** |
| **BHHZ** | **Black Hill Sta** | **7.43** | **214** | PN | | **Pn** | **11 52 17.9** | **-1.0** |
| **WNVZ** | **Wahianoa** | **7.54** | **217** | PN | | **Pn** | **11 52 19.2** | **-1.2** |
| **DVHZ** | **Dannevirke** | **8.05** | **210** | PN | | **Pn** | **11 52 25.2** | **-2.2** |
| **BFZ** | **Birch Farm** | **8.34** | **208** | *e*PN | | Pn | 11 52 28.2 | -3.1 |
| **BFZ** | **Birch Farm** | **8.34** | **208** | *e*Pn | | **Pn** | **11 52 29.9** | **-1.4** |
| BFZ | | | | *e*Sn | | **Sn** | **11 54 02.0** | **-3.5** |
| **MRZ** | **Mangatainoka R** | **8.60** | **211** | PN | | Pn | 11 52 30.1 | -4.8 |
| MRZ | | | | *e*SN | | Sn | 11 54 02.2 | -10 |
| **HOWZ** | **Holdsworth Sta** | **8.82** | **211** | PN | | Pn | 11 52 34.3 | -3.6 |
| **OGWZ** | **Otaki Gorge** | **8.91** | **212** | PN | | Pn | 11 52 35.3 | -3.8 |
| **KIW** | **Kapiti Island** | **9.06** | **213** | PN | | Pn | 11 52 37.4 | -3.8 |
| **CAW** | **Cannon Point** | **9.19** | **212** | PN | | Pn | 11 52 39.2 | -3.8 |
| **PAWZ** | **Paruwai Farm** | **9.26** | **209** | PN | | **Pn** | **11 52 42.2** | **-1.7** |
| **SNZO** | **South Karori** | **9.51** | **212** | *e*Pn | | **Pn** | **11 52 45.2** | **-1.7** |
| SNZO | | | | *e*Sn | | Sn | 11 54 28.4 | -5.9 |
| **TCW** | **Tory Channel** | **9.63** | **214** | PN | | **Pn** | **11 52 46.8** | **-2.3** |
| **TUWZ** | **Tuamarina** | **9.96** | **215** | PN | | **Pn** | **11 52 51.7** | **-1.8** |
| **NNZ** | **Nelson** | **10.07** | **217** | PN | | Pn | 11 52 51.2 | -3.9 |

baz=40,SNR=10
**RKT Rikitea 39.48 86** *e*LR LR 12 08 40.5
comp=Z,776nm,30.8s,baz=246
**PMG Port Moresby 39.58 299** P **P** **11 58 00.8 -1.2**
comp=Z,16nm,0.8s,baz=143,slow=8.5,SNR=6.4
**PMG Port Moresby 39.58 299** *e*P **P** **11 58 02.7 +0.6**
PMG pmax pmax
comp=Z,79nm,0.9s
**PMG Port Moresby 39.58 299** P **P** **11 58 02.6 +0.6**
baz=40,SNR=3.5
**PMG Port Moresby 39.58 299** *e*P **P** **11 58 02.6 +0.6**
comp=Z,31nm,0.9s
**COEN Coen 39.76 290** P **P** **11 58 04.2 +0.8**
baz=40,SNR=13
**COEN Coen 39.76 290** *e*P **P** **11 58 04.3 +0.8**
comp=Z,120nm,1.8s
**AS01 Alice Springs 42.53 271** *e*P **P** **11 58 26.1 -0.2**
**ASAR Alice Springs 42.57 270** P **P** **11 58 26.0 -0.7**
comp=Z,47nm,0.7s,baz=111,slow=7.4,SNR=532
ASAR PcP **PcP** **12 00 18.3 -0.7**
comp=Z,8.5nm,0.8s,baz=115,slow=3.7,SNR=6.4
ASAR LR LR 12 15 42.7
comp=Z,458nm,18.0s,baz=129,slow=36
**WRAB Tennant Creek 43.83 276***c i*P **P** **11 58 36.0 -0.8**
WRAB pmax pmax
comp=Z,145nm,0.7s
**WRAB Tennant Creek 43.83 276** P **P** **11 58 36.0 -0.8**
comp=Z,513nm,0.7s,SNR=66
**WRAB Tennant Creek 43.83 276** *e*P **P** **11 58 35.7 -1.1**
comp=Z,60nm,0.7s
**WRA Warramunga Arr 43.83 276** P **P** **11 58 35.9 -1.0**
comp=Z,63nm,0.7s,baz=118,slow=7.6,SNR=366
WRA PcP **PcP** **12 00 22.8 -0.5**
comp=Z,4.9nm,0.7s,baz=113,slow=3.5,SNR=5.1
WRA ScP **ScP** **12 04 13.6 -1.5**
comp=Z,1.2nm,0.8s,baz=122,slow=4.4,SNR=6.4
WRA LR LR 12 15 55.1
comp=Z,422nm,18.5s,baz=140,slow=35
**SBA Scott Base 44.98 184** *e*P P 11 58 49.4 +4.1
SBA pmax pmax
comp=Z,18nm,0.9s
**SBA Scott Base 44.98 184** *e*P P 11 58 49.4 +4.1
comp=Z,18nm,0.9s
**VNDA Vanda 45.03 186** P **P** **11 58 47.8 +2.1**
comp=Z,2.0nm,0.7s,baz=23,slow=6.4,SNR=11
VNDA LR LR 12 14 21.2
comp=Z,322nm,18.3s,baz=18,slow=32
**VNDA Vanda 45.03 186** *e*P **P** **11 58 48.7 +3.0**
VNDA pmax pmax
comp=Z,6.0nm,0.9s
**VNDA Vanda 45.03 186** *e*P **P** **11 58 48.7 +3.0**
comp=Z,5.7nm,0.9s
**WRKA Warakurna 46.71 266** P **P** **11 58 57.9 -1.8**
baz=47,SNR=41
**JAY Jayapura 48.94 300** LR LR 12 18 24.0
comp=Z,390nm,21.0s,baz=73,slow=34
**KDU Kakadu 49.06 283** P **P** **11 59 17.1 -0.9**
baz=49,SNR=5.8
**MTN Manton Dam 50.07 282** P **P** **11 59 24.7 -0.9**
baz=50,SNR=5.5
**MTN Manton Dam 50.07 282** *e*P **P** **11 59 24.8 -0.9**
comp=Z,20nm,0.8s
**KNRA Kununurra 50.54 277** P **P** **11 59 28.4 -0.8**
baz=51,SNR=15
**CASY Casey 52.25 209** *e*P **P** **11 59 41.2 -0.2**
comp=Z,40nm,0.8s
**KLBR Kellerberrin 52.98 253** P **P** **11 59 45.6 -1.7**
baz=53,SNR=4.7
**MEEK Meekatharra 54.11 259** P **P** **11 59 53.8 -1.9**
baz=54,SNR=9.8
**MORW Morawa 55.27 256** P **P** **12 00 03.7 -0.3**
baz=56,SNR=4.3
**MBWA Marble Bar 55.48 266** *e*P **P** **12 00 04.0 -1.7**
comp=Z,61nm,1.8s
**QSPA South Pole Qui 56.68 180** P **P** **12 00 15.5 +1.7**
comp=Z,15nm,0.9s,baz=356,slow=0.7,SNR=56
**SIJI Sorong 57.07 294** P **P** **12 00 16.4 -0.6**
comp=Z,11nm,0.8s,baz=54,slow=4.5,SNR=7.7
**SOEI Soe 57.38 280** P **P** **12 00 20.0 +0.6**
baz=58,SNR=15
**SOEI Soe 57.38 280** *e*P **P** **12 00 20.1 +0.6**
comp=Z,66nm,0.9s
**BATI Baumata 57.63 280** P **P** **12 00 20.9 -0.2**
comp=Z,36nm,0.7s,baz=117,slow=4.1,SNR=7.2
**MIR Mirnyy 59.22 208**‖ *e*P P 12 00 40.0 +8.7
MIR pmax pmax
comp=Z,60nm,1.0s
**MMRI Maumere 59.66 280** *e*P **P** **12 00 34.5 -0.7**
comp=Z,53nm,0.9s
**LUWI Luwuk 63.61 288** P **P** **12 01 00.9 -0.9**
baz=64,SNR=5.2
**LUWI Luwuk 63.61 288** *e*P **P** **12 01 00.7 -1.1**
comp=Z,32nm,0.9s
LUWI *e*PP **PP** **12 03 17.4 -4.4**
**KAPI Kappang 63.73 282** P **P** **12 01 02.0 -0.6**
comp=Z,8.8nm,0.7s,baz=151,slow=5.9,SNR=7.6
**SPSI Sidrap Palu 64.31 283** P **P** **12 01 05.3 -1.2**
**PCI Palu 66.04 286** P P 12 01 22.6 +4.9
**BBKI Banjar Baru 68.64 280** P **P** **12 01 37.0 +2.9**
**MAW Mawson 69.31 201** P **P** **12 01 37.7 +0.2**
comp=Z,10nm,0.9s,baz=138,slow=6.3,SNR=15
**MAW Mawson 69.31 201** P **P** **12 01 37.7 +0.2**
baz=69,SNR=19
**CISI Cisompet, Garu 72.23 273** P **P** **12 01 57.3 +1.1**
**LEM Lembang 72.78 273** LR LR 12 35 34.2
comp=Z,340nm,19.1s,baz=160,slow=37
**SYO Syowa Base 74.06 193**‖ *e*P **P** **12 02 04.4 -1.6**
**SNAA Sanae 75.14 179** P **P** **12 02 12.0 -0.4**
**SNAA Sanae 75.14 179** *e*P **P** **12 02 12.8 +0.4**
SNAA pmax pmax
comp=Z,4.0nm,1.0s
**SNAA Sanae 75.14 179** *e*P **P** **12 02 12.1 -0.2**
comp=Z,7.5nm,0.8s
**VNA3 Neumayer Olymp 75.31 176** P **P** **12 02 13.3 0.0**
**VNA2 Neumayer--Watz 75.74 177** P **P** **12 02 15.5 -0.3**
baz=176,slow=4.8
**NVL N'lazarevskaya 75.82 184** *e*P **P** **12 02 16.9 +0.7**
NVL pmax pmax
comp=Z,11nm,0.7s
**VNA1 Neumayer--Stat 75.97 177** P **P** **12 02 17.2 +0.2**
**MJAR Matsushiro Arr 80.48 326** P **P** **12 02 40.9 -1.5**
comp=Z,4.6nm,0.8s,baz=153,slow=4.4,SNR=5.8
**MAJO Matsushiro 80.48 326** *e*P **P** **12 02 42.0 -0.4**
MAJO pmax pmax
comp=Z,58nm,1.0s
**MAT Matsushiro 80.48 326** P **P** **12 02 41.5 -0.9**
**ASAJ Asahikawa 84.92 333** P **P** **12 03 04.6 -0.7**
comp=Z,9.1nm,0.8s,baz=187,slow=5.0,SNR=8.4
**ASAJ Asahikawa 84.92 333** *e*P **P** **12 03 05.6 +0.4**
comp=Z,21nm,1.2s
**QIZ Qiongzhong 85.88 296** P **P** **12 03 10.8 +0.1**
QIZ pP **pP** **12 03 14.8 +0.8**
QIZ S **S** **12 13 45.5 +1.2**
QIZ PMZ
comp=Z,26nm,1.9s
QIZ LZ
comp=Z,220nm,20.0s
**KSRS Korea Array 86.36 320** P **P** **12 03 11.8 -0.8**
comp=Z,2.2nm,0.7s,baz=130,slow=5.3,SNR=7.8
KSRS LR LR 12 40 55.3
comp=Z,79nm,18.5s,baz=188,slow=35
**KSAR Wonju Array Be 86.37 320** P **P** **12 03 11.8 -0.8**
**KSAR Wonju Array Be 86.37 320** P **P** **12 03 11.8 -0.8**
**KS01 Wonju Array Si 86.39 320** *e*P **P** **12 03 12.4 -0.4**
**CIS Catalina Islan 87.27 47** P **P** **12 03 18.9 +1.6**
baz=88
**YSS Yuzh-Sakhalins 87.28 335**⇑ *i*P **P** **12 03 17.0 +0.1**
YSS pmax pmax
comp=Z,30nm,0.9s
**YSS Yuzh-Sakhalins 87.28 335** *e*P **P** **12 03 16.9 +0.1**
comp=Z,30nm,0.9s
**SMMC Simmler 87.64 44** P **P** **12 03 21.2 +2.2**
baz=88
**SAO San Andreas Ge 87.83 42** *e*P **P** **12 03 22.1 +2.3**
SAO pmax pmax
comp=Z,15nm,1.3s
**SAO San Andreas Ge 87.83 42** *e*P **P** **12 03 22.1 +2.3**
comp=Z,15nm,1.3s
**BAR Barrett 87.84 48** *e*P **P** **12 03 21.3 +1.3**
comp=Z,14nm,1.4s
**NJ2 Nanjing 87.87 311** *e*P **P** **12 03 21.3 +1.2**
NJ2 PMZ
comp=Z,80nm,1.0s
**MURC Murrieta 88.14 47** P **P** **12 03 22.8 +1.4**
baz=88
**ARVC Arvin 88.20 45** P **P** **12 03 22.8 +1.2**
baz=88
**BFSC Mount Baldy Ra 88.29 46** P **P** **12 03 22.9 +0.6**
baz=89,SNR=6.2
**NSHM Saint Helena R 88.44 41** *e*P **P** **12 03 25.2 +2.6**
**VES Vestal, Richgr 88.54 44** P **P** **12 03 24.2 +1.0**
baz=89
**SWSC Sam W. Stewart 88.56 48** P **P** **12 03 24.7 +1.4**
baz=89
**PFO Pinyon Flat Ob 88.60 48** P **P** **12 03 24.3 +0.6**
comp=Z,4.1nm,0.9s,baz=281,slow=5.2,SNR=5.6
**PFO Pinyon Flat Ob 88.60 48** *e*P **P** **12 03 24.9 +1.2**
PFO pmax pmax
comp=Z,36nm,1.9s
**PFO Pinyon Flat Ob 88.60 48** *e*P **P** **12 03 24.9 +1.2**
comp=Z,36nm,1.9s
**PETK Petropavlovsk- 88.63 346** P **P** **12 03 22.6 -0.6**
comp=Z,22nm,0.9s,baz=140,slow=7.8,SNR=13
PETK LR LR 12 39 31.2
comp=Z,126nm,19.0s,baz=167,slow=33
**ISA Isabella 88.78 45** *e*P **P** **12 03 25.6 +1.2**
ISA pmax pmax
comp=Z,14nm,1.2s
**ISA Isabella 88.78 45** P **P** **12 03 24.8 +0.4**
baz=89,SNR=13
**ISA Isabella 88.78 45** *e*P **P** **12 03 25.6 +1.2**
comp=Z,14nm,1.2s
**LRMC Laurel Mountai 89.12 45** P **P** **12 03 26.9 +0.8**
baz=90,SNR=5.9
**BELC Belle Mtn. Jos 89.15 48** P **P** **12 03 26.8 +0.6**
baz=90,SNR=8.3
**GLA Glamis 89.25 49** P **P** **12 03 27.7 +1.0**
baz=90
**BC3 Big Chuckawall 89.25 48** P **P** **12 03 28.1 +1.3**
baz=90,SNR=9.3
**CMB Columbia Colle 89.33 42** *e*P **P** **12 03 28.0 +1.1**
CMB pmax pmax
comp=Z,14nm,1.4s
**CMB Columbia Colle 89.33 42** *e*P **P** **12 03 28.0 +1.1**
comp=Z,14nm,1.4s
**USRK Ussuriysk Ar. 89.43 327** P **P** **12 03 27.0 -0.2**
comp=Z,3.5nm,0.8s,baz=143,slow=3.8,SNR=6.3
**HEC Hector,Ludlow 89.50 47** P **P** **12 03 29.0 +1.2**
baz=90
**GSC Goldstone 89.53 46** *e*P **P** **12 03 29.3 +1.3**
GSC pmax pmax
comp=Z,12nm,1.0s
**GSC Goldstone 89.53 46** P **P** **12 03 29.0 +1.0**
baz=90,SNR=10.0
**GSC Goldstone 89.53 46** *e*P **P** **12 03 29.3 +1.3**
comp=Z,12nm,1.0s
**CWC Cottonwood Cre 89.54 45** P **P** **12 03 28.9 +0.8**
baz=90
**MPMC Manual Prospec 89.63 45** P **P** **12 03 29.2 +0.6**
baz=90,SNR=6.7
**IRM Iron Mountain 89.78 48** P **P** **12 03 30.4 +1.3**
baz=90,SNR=10
**214A Organ Pipe Nat 89.82 51** P **P** **12 03 29.8 +0.5**
baz=90
**GMRC Granite Mounta 89.87 47** P **P** **12 03 30.6 +1.0**
baz=90,SNR=6.1
**MTUM Tungsten Hills 89.89 44** *e*P **P** **12 03 30.7 +1.0**
**Y12C Blythe 89.90 49** P **P** **12 03 31.0 +1.4**
baz=90
**MLAC Mammoth Lakes 89.92 43** P **P** **12 03 30.8 +0.9**
baz=90
**WDC Whiskeytown Da 89.96 39** *e*P **P** **12 03 31.2 +1.5**
WDC pmax pmax
comp=Z,12nm,1.1s
**WDC Whiskeytown Da 89.96 39** *e*P **P** **12 03 31.2 +1.5**
comp=Z,12nm,1.1s
**O03D Paynes Creek 90.15 40** P **P** **12 03 31.5 +0.8**
baz=90
**TUQ Turquoise Moun 90.15 46** P **P** **12 03 31.8 +0.8**
baz=90,SNR=6.9
**N02D Trinity Center 90.16 39** P **P** **12 03 32.0 +1.2**
baz=90
**SHOC Shoshone 90.25 46** P **P** **12 03 32.5 +1.3**
baz=91,SNR=6.5
**FURC Furnace Creek, 90.28 45** P **P** **12 03 32.8 +1.5**
baz=91
**GRAC Grapevine Rang 90.34 45** P **P** **12 03 33.3 +1.7**
baz=91
**M02C Callahan 90.39 38** P **P** **12 03 33.5 +1.7**
baz=91
**PDMCI Parker Dam,Lak 90.50 48** P **P** **12 03 33.9 +1.5**
baz=91
**TYV Tymovskoe 90.64 337** *e*P **P** **12 03 33.0 +0.4**
TYV pmax pmax
comp=Z,72nm,1.2s
**NV01 Mina Array Sit 90.78 43** *e*P **P** **12 03 33.9 0.0**
**NVAR Mina Array Bea 90.78 43** P **P** **12 03 34.1 +0.2**
comp=Z,3.6nm,1.0s,baz=216,slow=7.5,SNR=20
NVAR LR LR 12 40 09.0
comp=Z,203nm,18.3s,baz=236,slow=33
**MDJ Mudanjiang 90.86 326** P **P** **12 03 36.3 +2.5**
MDJ PMZ
comp=Z,6.0nm,0.8s
MDJ PMZ
comp=Z,190nm,5.6s
**M04C Macdoel 91.19 39** P **P** **12 03 37.0 +1.4**
baz=92
**TUC Tucson 91.37 52** *e*P **P** **12 03 39.1 +2.5**
TUC pmax pmax
comp=Z,8.0nm,1.1s
**TUC Tucson 91.37 52** *e*P **P** **12 03 39.1 +2.5**
comp=Z,8.2nm,1.1s
**MOD Modoc 92.09 39** *e*P **P** **12 03 41.3 +1.5**
comp=Z,9.9nm,1.3s
**J04D Umpqua Nationa 92.10 38** P **P** **12 03 41.5 +1.7**
baz=92
**R11A Troy Canyon, C 92.30 45** P **P** **12 03 41.8 +0.9**
baz=93
**I04A Tendick Farm, 92.34 37** P **P** **12 03 41.8 +1.0**
baz=93
**K05A Summer Lake 92.36 39** *e*P **P** **12 03 42.4 +1.3**
comp=Z,84nm,2.1s
**J05D Fort Rock, OR 92.58 38** P **P** **12 03 43.0 +1.0**
baz=93
**GYA Guiyang 92.65 300** *e*P **P** **12 03 44.0 +1.2**
GYA PP **PP** **12 07 28.9 +4.1**
GYA SKS **SKSac** **12 14 16.4 -0.3**
GYA S **S** **12 14 46.6 -1.2**
GYA SS **SS** **12 21 03.3 +2.5**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.4s
GYA LN
comp=Z,560nm,20.2s
GYA LE
comp=Z,540nm,21.0s
GYA LZ
comp=Z,510nm,20.4s
**G03D McMinnville, O 92.94 36** P **P** **12 03 45.2 +1.8**
baz=93
**WUAZ Wupatki 93.02 49** P **P** **12 03 45.0 +0.7**
baz=93
**WUAZ Wupatki 93.02 49** *e*P **P** **12 03 46.8 +2.5**
comp=Z,5.0nm,1.1s
**WVOR Wild Horse Val 93.35 40** *e*P **P** **12 03 46.5 +0.9**
WVOR pmax pmax
comp=Z,8.0nm,1.3s
**WVOR Wild Horse Val 93.35 40** *e*P **P** **12 03 46.5 +0.9**
comp=Z,8.4nm,1.3s
**KLR Kul'dur 93.42 330** *e*P **P** **12 03 45.9 +0.4**
**G05D Wamic, OR 93.92 37** P **P** **12 03 49.1 +1.0**
baz=94
**CMAR Chiang Mai Arr 93.96 289** P **P** **12 03 48.5 -0.3**
comp=Z,0.4nm,0.3s,baz=149,slow=3.9,SNR=3.4
CMAR PP **PP** **12 07 30.8 -4.2**
comp=Z,1.8nm,0.9s,baz=141,slow=6.9,SNR=7.0
**I07A Izee 94.03 38** *e*P **P** **12 03 49.7 +1.1**
comp=Z,89nm,2.8s
**J08A Circle Bar Ran 94.07 39** *e*P **P** **12 03 49.8 +0.9**
comp=Z,71nm,2.5s
**TX31 Lajitas Ar. Si 94.41 58** *e*P **P** **12 03 51.5 +0.8**
**TXAR Lajitas Array 94.41 58** P **P** **12 03 50.6 -0.2**
comp=Z,1.6nm,0.9s,baz=208,slow=7.1,SNR=12
TXAR LR LR 12 41 39.8
comp=Z,233nm,18.0s,baz=0.0,slow=32
**MNTX Cornudas Mount 94.61 55** P **P** **12 03 52.2 +0.7**
baz=95
**MNTX Cornudas Mount 94.61 55** *e*P **P** **12 03 53.1 +1.6**
comp=Z,54nm,3.0s
**KMI Kunming 94.77 297** P **P** **12 03 51.6 -1.1**
KMI PMZ
comp=Z,12nm,0.7s
**G08A Pilot Rock 95.15 38** *e*P **P** **12 03 54.6 +0.8**
comp=Z,67nm,2.8s
**B05A Bryant 95.70 34** P **P** **12 03 57.7 +1.7**
baz=96
**A04D Lummi Island 95.74 33** P **P** **12 03 57.6 +1.4**
baz=96
**ANMO Albuquerque 95.83 52** *e*P **P** **12 03 58.2 +1.0**
ANMO pmax pmax
comp=Z,2.0nm,1.1s
**MVCO Mesa Verde 95.88 49** P **P** **12 03 58.2 +0.7**
baz=96
**529A Stev Forest Ra 95.89 58** P **P** **12 03 58.4 +0.9**
baz=96
**HLID Hailey 96.40 41** P **P** **12 04 00.6 +1.0**
baz=97
**429A Davenport Ranc 96.41 58** P **P** **12 04 00.6 +0.7**
baz=97
**530A J-C Ranch, Com 96.53 58** P **P** **12 04 00.9 +0.5**
baz=97
**933A Laredo 96.59 61** P **P** **12 04 01.6 +1.0**
baz=97
**034A Hebbronville 96.72 62** P **P** **12 04 02.8 +1.6**
baz=97
**531A Rocksprings 97.11 59** P **P** **12 04 03.8 +0.8**
baz=97
**128A Castleberry Fa 97.14 56** P **P** **12 04 04.0 +0.9**
baz=97
**CD2 Chengdu 97.30 302** *e*P Pdif 12 04 05.0 +1.1
CD2 pP pP 12 04 10.5 +3.3
CD2 PP **PP** **12 08 01.9 +1.0**
CD2 SKS **SKSac** **12 14 41.4 +0.1**
CD2 S **ScS** **12 15 28.6 +0.4**
CD2 sS sS 12 15 38.0 +4.5
CD2 SS **SS** **12 22 08.8 +2.1**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**LPAZ La Paz 97.31 115** P **P** **12 04 04.9 -0.1**
comp=Z,0.8nm,0.8s,baz=188,slow=5.3,SNR=4.0
LPAZ LR LR 12 39 03.0
comp=Z,125nm,21.6s,baz=56,slow=30
**MSTX Muleshoe 97.72 54** P **P** **12 04 06.2 +0.5**
baz=98
**HHC Hu-ho-hao-te 98.00 314** *e*P Pdif 12 04 09.0 +2.1
HHC PMZ
comp=Z,18nm,1.1s
**Z29A Hungry Hill Ra 98.04 55** P **P** **12 04 07.8 +0.6**
baz=98
**CPUP Villa Florida 98.45 129** LR LR 12 44 36.6
comp=Z,306nm,18.0s,baz=254,slow=33
**232A Coleman 98.71 58** Pdiff **P** **12 04 11.0 +0.8**
baz=99
**BOZ Bozeman (W) 99.26 41** Pdiff **Pdif** **12 04 14.4 +2.1**
baz=100
**536A Bastrop 99.56 60** Pdiff **Pdif** **12 04 15.1 +1.2**
baz=100
**N23A Red Feather La 99.68 47** Pdiff **Pdif** **12 04 15.4 +0.8**
baz=100
**738A Farr-Stevens R 99.94 62** Pdiff **Pdif** **12 04 16.5 +0.9**
baz=100
**X31A McDonald Ranch 100.00 55** Pdiff **Pdif** **12 04 17.2 +1.4**
baz=100
**436A Wall Ranch, Ga 100.14 60** Pdiff **Pdif** **12 04 17.2 +0.8**
baz=100
**LZH Lanzhou 100.15 307** *e*P **Pdif** **12 04 18.1 +1.5**
LZH pP pP 12 04 23.3 +3.3
LZH sP sP 12 04 25.3 +4.1
LZH *e*PP **PP** **12 08 25.4 +2.7**
LZH SKS **SKSac** **12 14 55.0 -0.6**
LZH *e*S **Sdif** **12 15 50.3 -1.7**
LZH sS **sS** **12 15 57.8 +0.2**
LZH *e*SS **SS** **12 22 48.0 +1.3**
LZH PMZ
comp=Z,25nm,1.5s
LZH PMZ
comp=Z,150nm,9.4s
**R27A Eads 100.17 51** Pdiff **Pdif** **12 04 17.6 +1.1**
baz=100
**K22A Casper 100.36 46** Pdiff **Pdif** **12 04 18.7 +1.3**
baz=101
**ILAR Eielson Array 100.98 13** P **Pdif** **12 04 18.9 -0.4**
comp=Z,1.1nm,1.2s,baz=224,slow=6.1,SNR=2.2
ILAR PKiKP **PKiKP** **12 08 43.8 -0.7**
comp=Z,0.7nm,1.0s,baz=266,slow=1.9,SNR=3.7
**BILL Bilibino 101.81 354** P **Pdif** **12 04 25.0 +2.0**
BILL pmax pmax
comp=Z,4.0nm,1.1s
BILL MLR MLR
comp=Z,122nm,18.0s
**J25A Sunshine Ranch 102.42 46** Pdiff **Pdif** **12 04 27.2 +0.7**
baz=103
**I25A Rochford 102.82 46** Pdiff **Pdif** **12 04 29.8 +1.5**
baz=103
**WMQ Urumqi 114.71 307** *e*PKP PKPdf 12 09 09.0 -1.9
**MK01 Makanchi Array 119.32 309** *e*PKPdf **PKPdf** **12 09 18.1 -1.5**
**MKAR Makanchi Array 119.34 309** PKP **PKPdf** **12 09 18.3 -1.3**
comp=Z,3.1nm,0.9s,baz=96,slow=1.2,SNR=6.5
**ZALV Zalesovo Beam 119.96 317** PKP **PKPdf** **12 09 18.5 -2.0**
comp=Z,1.9nm,0.8s,baz=124,slow=1.2,SNR=6.4
**KSH Kashi 121.34 299** *e*PKP **PKPdf** **12 09 25.6 +1.7**
KSH *e*PP **PP** **12 10 56.4 +1.0**
KSH SKS **SKSdf** **12 16 38.0 +2.0**
KSH SKKS SKKSac 12 17 46.5 -8.2
KSH PPMZ
comp=Z,180nm,7.9s
KSH LN
comp=Z,390nm,6.7s
KSH LE
comp=Z,220nm,6.2s
KSH LZ
comp=Z,190nm,7.5s
**KURK Kurchatov 122.78 313** PKIKP **PKPdf** **12 09 24.7 -1.4**
**KURK Kurchatov 122.78 313** PKP **PKPdf** **12 09 24.7 -1.4**
**KURBB Kurchatov Arra 122.81 312** PKP **PKPdf** **12 09 24.7 -1.4**
comp=Z,5.6nm,0.8s,baz=109,slow=1.8,SNR=50
**KKAR Karatay Array 126.32 302** *e*PKIKP **PKPdf** **12 09 33.0 -0.1**
**KKAR Karatay Array 126.32 302** *e*PKPdf **PKPdf** **12 09 33.0 -0.1**
**BRVK Borovoye 128.28 314** *e*PKIKP **PKPdf** **12 09 36.2 -0.3**
**KMBO Kilima Mbogo 131.86 232** *i* PKIKP **PKPdf** **12 09 47.4 +2.5**
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**GEYT Alibeck 134.35 292** PKP **PKPdf** **12 09 48.6 0.0**
comp=Z,2.0nm,0.4s,baz=20,slow=4.6,SNR=3.4
**ABKAR Akbulak array 134.48 308** *e*PKPdf **PKPdf** **12 09 48.6 +0.2**
**ARU Arti 135.09 319** *i* PKIKP **PKPdf** **12 09 49.8 +0.5**
ARU 12 12 23.1
**ARU Arti 135.09 319** *e*PKPdf **PKPdf** **12 09 49.4 +0.1**
**RAYN Ar Rayn 140.29 267** *e*PKPdf **PKPdf** **12 09 57.2 -2.8**
**ARCES ARCESS Array B 141.44 347** PKhKP PKPpre 12 09 54.1
comp=Z,3.4nm,0.8s,baz=39,slow=1.8,SNR=7.9
ARCES PKP **PKPdf** **12 10 00.0 -0.6**
comp=Z,2.7nm,0.6s,baz=0.0,slow=1.2,SNR=12
**KLMR Klimovskoe 143.18 330** *e*PKHKP PKPpre 12 09 58.0
KLMR pmax pmax
comp=Z,22nm,1.2s
**TBLG Delisi 145.01 296** P **PKPab** **12 10 06.2 -1.0**
**TBLG Delisi 145.01 296** PKIKP **PKPab** **12 10 06.2 -1.0**
**CLDR Caldiran 145.53 292** *e*P **PKPbc** **12 10 08.5 -0.7**
**HKR Hakkari 145.54 289** *e*P **PKPbc** **12 10 08.5 -0.7**
**CUKT Cukurca 145.60 289** *e*P **PKPdf** **12 10 07.8 -1.3**
**NCK Nalchik 145.82 300** *e*PKP2 **PKPdf** **12 10 08.6 -0.5**
**VRH Novokhopyorsk 145.86 314** *e*PKP2 **PKPdf** **12 10 08.6 -0.2**
VRH pmax pmax
comp=N,20nm,0.6s
VRH pmax pmax
comp=Z,20nm,0.6s
VRH pmax pmax
comp=E,50nm,0.8s
**AKH Akhalkalaki 145.94 296** P **PKPdf** **12 10 09.0 -0.7**
**AKH Akhalkalaki 145.94 296** PKIKP **PKPdf** **12 10 08.9 -0.7**
**ONI Oni 145.96 298** P **PKPdf** **12 10 09.0 -0.4**
**ONI Oni 145.96 298** PKP2 **PKPdf** **12 10 09.0 -0.4**
**KARS Kars 146.25 294** *e*P **PKPdf** **12 10 11.0 +0.9**
**AGRB Hanur-Agry 146.28 293** *e*P **PKPbc** **12 10 11.4 0.0**
**KBZ Khabaz 146.32 300** PKPbc **PKPdf** **12 10 09.8 0.0**
comp=E,34nm,1.1s,baz=104,slow=1.1,SNR=19
**KIV Kislovodsk 146.46 301** *i* PKP2 **PKPdf** **12 10 10.6 +0.3**
KIV pmax pmax
comp=Z,21nm,1.0s
**NEY Neytrino 146.47 299** *e*PKP2 **PKPbc** **12 10 12.3 +0.5**
**MOS Moscow 146.52 323** *e*PKP2 **PKPdf** **12 10 10.0 +0.2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MOS | | | | pmax | pmax | | |
| | comp=Z,195nm,1.1s | | | | | | |
| MOS | | | | pmax | pmax | | |
| | comp=Z,300nm,1.5s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **147.07** | **317** | *e*PKP2 | **PKPdf** | **12 10 12.4** | **+1.5** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,70nm,0.9s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,8.0nm,1.0s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,30nm,1.3s | | | | | | |
| **OBN** | **Obninsk** | **147.34** | **322**⇑ | *e*PKIKP | **PKPdf** | **12 10 10.1** | **-1.1** |
| OBN | | | | *i* | | 12 10 13.2 | |
| OBN | | | | *e* | | 12 10 20.8 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,43nm,0.6s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=E,77nm,18.0s | | | | | | |
| **OBN** | **Obninsk** | **147.34** | **322** | *e*PKPdf | **PKPdf** | **12 10 10.4** | **-0.8** |
| **BCA** | **Borcka** | **147.35** | **296** | *e*P | **PKPdf** | **12 10 13.1** | **+1.4** |
| **VORD** | **Divnogorie** | **147.40** | **314** | *e*PKP2 | **PKPdf** | **12 10 12.7** | **+1.3** |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.9s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=Z,50nm,0.9s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.7s | | | | | | |
| **EZM** | **Erzurum** | **147.54** | **293** | *e*P | **PKPbc** | **12 10 15.8** | **+0.7** |
| **SVAN** | **Silvan-Diyarba** | **147.59** | **290** | *e*P | **PKPbc** | **12 10 14.9** | **-0.1** |
| **FINES** | **FINESS Array B** | **147.80** | **338** | PKPbc | **PKPdf** | **12 10 13.6** | **+1.8** |
| | comp=E,19nm,0.7s,baz=61,slow=2.4,SNR=37 | | | | | | |
| **BNGB** | **Bing˜ll** | **148.04** | **291** | *e*P | **PKPbc** | **12 10 16.4** | **+0.1** |
| **MAZI** | **Mazidag** | **148.13** | **288** | *e*P | **PKPbc** | **12 10 15.6** | **-1.0** |
| **DYBB** | **Diyarbakir** | **148.41** | **289** | *e*P | **PKPbc** | **12 10 17.1** | **-0.1** |
| **BAYT** | **Ayd˜–ntepe-Bay** | **148.48** | **294** | *e*P | **PKPbc** | **12 10 17.6** | **+0.2** |
| **SOC** | **Sochi** | **148.63** | **300** | *e*PKIKP | **PKPdf** | **12 10 15.7** | **+2.0** |
| SOC | | | | pmax | pmax | | |
| | comp=Z,39nm,0.9s | | | | | | |
| **KTUT** | **Trabzon** | **148.76** | **295** | *e*P | **PKPbc** | **12 10 16.7** | **-1.2** |
| **GUMT** | **Gumushane** | **148.99** | **294** | *e*P | **PKPbc** | **12 10 19.0** | **+0.3** |
| **PTK** | **Pertek** | **149.04** | **291** | *e*P | **PKPbc** | **12 10 19.5** | **+0.5** |
| **SVRC** | **Sivrice-ELAZID** | **149.09** | **290** | *e*P | **PKPbc** | **12 10 19.3** | **+0.3** |
| **SLMH** | **Al Salmeh** | **150.04** | **286** | *e*P | **PKPbc** | **12 10 20.6** | **-0.7** |
| **ZALF** | **Zalf** | **150.05** | **279** | *e*P | **PKPbc** | **12 10 21.6** | **+0.2** |
| **RSDY** | **Resadiye-TOKAT** | **150.63** | **292** | *e*P | **PKPbc** | **12 10 22.4** | **-0.1** |
| **TOTH** | **TOTAH** | **150.88** | **280** | *e*P | **PKPbc** | **12 10 23.7** | **+0.3** |
| **SVSK** | **Karacayir** | **150.90** | **293** | *e*P | **PKPbc** | **12 10 23.7** | **+0.6** |
| **KMRS** | **Kahramanmaras** | **150.95** | **288** | *e*P | **PKPbc** | **12 10 23.1** | **-0.3** |
| **TCHB** | **Talchebab** | **151.13** | **278** | *e*P | **PKPbc** | **12 10 24.3** | **+0.3** |
| **BTCH** | **Batrach** | **151.20** | **285** | *e*P | **PKPbc** | **12 10 23.7** | **-0.4** |
| **BIDA** | **Albida** | **151.21** | **283** | *e*P | **PKPbc** | **12 10 23.8** | **-0.4** |
| **TAHT** | **Tahtakopru-Hat** | **151.45** | **286** | *e*P | **PKPbc** | **12 10 24.6** | **0.0** |
| **KVT** | **Kavak** | **151.56** | **296** | *e*P | **PKPbc** | **12 10 24.6** | **-0.1** |
| **NB2** | **NORSAR Subarra** | **151.66** | **350** | PKP | **PKPbc** | **12 10 23.6** | **-0.7** |
| | comp=Z,6.4nm,0.8s,baz=17,slow=2.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **151.66** | **350** | PKPbc | **PKPbc** | **12 10 23.9** | **-0.4** |
| | comp=Z,5.4nm,0.7s,baz=14,slow=4.1,SNR=14 | | | | | | |
| **NB002** | **NORSAR Array S** | **151.71** | **350** | *e*PKPbc | **PKPbc** | **12 10 24.1** | **-0.3** |
| **CEYT** | **Ceyhan** | **151.84** | **287** | *e*P | **PKPbc** | **12 10 24.6** | **-0.8** |
| **MICGM** | **Minsk** | **151.91** | **327** | *e* | **PKPbc** | **12 10 23.0** | **-2.0** |
| **MNK** | **Minsk** | **151.94** | **327** | *e*PKIKP | **PKPbc** | **12 10 23.0** | **-2.0** |
| **SIM** | **Simferopol'** | **152.38** | **304** | *i* PKIKP | **PKPbc** | **12 10 26.3** | **-0.1** |
| SIM | | | | | | 12 10 40.0 | |
| SIM | | | | pmax | pmax | | |
| | comp=Z,23nm,0.8s | | | | | | |
| **KARA** | **Karaisali** | **152.41** | **288** | *e*P | **PKPbc** | **12 10 26.0** | **-0.7** |
| **KIC** | **Kosan Boka** | **152.45** | **167** | *e*P | **PKPbc** | **12 10 26.8** | **-0.7** |
| | comp=Z,58nm,1.1s | | | | | | |
| **TIC** | **Toumodi** | **152.67** | **166** | *e*P | **PKPbc** | **12 10 25.8** | **-2.2** |
| **CORM** | **Corum** | **152.70** | **294** | *e*P | **PKPbc** | **12 10 27.6** | **+0.1** |
| **DBIC** | **Dimbokro** | **152.73** | **166** | PKPbc | **PKPbc** | **12 10 28.4** | **+0.4** |
| | comp=Z,10.0nm,1.2s,baz=151,slow=4.2,SNR=3.6 | | | | | | |
| **DBIC** | **Dimbokro** | **152.73** | **166** | *e*PKIKP | **PKPdf** | **12 10 22.5** | **+1.5** |
| DBIC | | | | | | 12 10 28.5 | |
| **DBIC** | **Dimbokro** | **152.73** | **166** | *e*PKPdf | **PKPdf** | **12 10 22.5** | **+1.5** |
| DBIC | | | | PKPbc | **PKPbc** | **12 10 28.4** | **+0.4** |
| **NIG** | **Nigde** | **152.78** | **289** | *e*P | **PKPbc** | **12 10 27.7** | **-0.2** |
| **AKASG** | **Malin Array Be** | **153.35** | **319** | PKPbc | **PKPbc** | **12 10 27.4** | **-0.9** |
| | comp=Z,4.0nm,0.7s,baz=57,slow=2.6,SNR=13 | | | | | | |
| **KIEV** | **Kiev** | **153.36** | **319** | *e*PKIKP | **PKPbc** | **12 10 27.9** | **-0.5** |
| KIEV | | | | *e* | | 12 10 39.4 | |
| **KIEV** | **Kiev** | **153.36** | **319** | *e*PKPbc | **PKPbc** | **12 10 27.9** | **-0.5** |
| KIEV | | | | *e*PKPab | **PKPab** | **12 10 39.4** | **-1.1** |
| **CSS** | **Prodhromos** | **153.64** | **282** | *e*PKPbc | **PKPbc** | **12 10 29.3** | **-0.2** |
| **ANTO** | **Ankara** | **154.13** | **293** | *e*PKIKP | **PKPbc** | **12 10 30.4** | **-0.1** |
| **ANTO** | **Ankara** | **154.13** | **293** | *e*PKPbc | **PKPbc** | **12 10 30.4** | **-0.1** |
| **BUR04** | **Bucovina Ar. S** | **157.16** | **315** | *e*PKPab | **PKPab** | **12 10 56.9** | **-0.1** |
| **KOLS** | **Kolonicke sedl** | **158.08** | **321** | *e*PKP2 | **PKPab** | **12 10 58.7** | **-2.0** |
| **KOLS** | **Kolonicke sedl** | **158.08** | **321** | *e*PKP | **PKPab** | **12 10 58.7** | **-2.0** |
| **UZH** | **Uzhgorod** | **158.25** | **320** | *e*PKIKP | PKPdf | 12 10 33.6 | +6.3 |
| UZH | | | | *e* | | 12 10 42.4 | |
| **STHS** | **Stebnicka Huta** | **158.30** | **323** | *e*PKP2 | **PKPab** | **12 11 00.9** | **-0.8** |
| **STHS** | **Stebnicka Huta** | **158.30** | **323** | *e*PKP | **PKPab** | **12 11 00.9** | **-0.8** |
| **TOA0** | **Torodi Ar. Sit** | **159.80** | **181** | *e*P | **PKPab** | **12 11 08.2** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **159.80** | **181** | PKP | **PKPdf** | **12 10 30.1** | **-0.2** |
| | comp=Z,2.1nm,1.1s,baz=176,slow=1.1,SNR=8.2 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **12 11 08.4** | **-0.4** |
| | comp=Z,6.2nm,0.9s,baz=178,slow=3.2,SNR=13 | | | | | | |
| **DPC** | **Dobruska-Polom** | **159.86** | **331** | *e*PKP2 | **PKPab** | **12 11 07.6** | **-0.8** |
| **DPC** | **Dobruska-Polom** | **159.86** | **331** | *e*PKPAB | **PKPab** | **12 11 07.6** | **-0.8** |
| DPC | | | | *ex* | x | 12 11 20.3 | |
| **VYHS** | **Vyhne** | **160.10** | **324** | *e*PKP2 | **PKPab** | **12 11 08.2** | **-1.3** |
| **VYHS** | **Vyhne** | **160.10** | **324** | *e*PKP | **PKPab** | **12 11 08.1** | **-1.4** |
| **CLL** | **Collm** | **160.25** | **338** | *e*PKP2 | **PKPab** | **12 11 09.0** | **-1.0** |
| **CLL** | **Collm** | **160.25** | **338** | *e*PKPab | **PKPab** | **12 11 09.0** | **-1.0** |
| | baz=34,slow=4.4 | | | | | | |
| **CLL** | **Collm** | **160.25** | **338** | ‖ *i* PKPab | **PKPab** | **12 11 08.9** | **-1.0** |
| | comp=Z,14nm,0.9s | | | | | | |
| **CLL** | **Collm** | **160.25** | **338** | *e*PKPab | **PKPab** | **12 11 09.0** | **-1.0** |
| **BRG** | **Berggiesshubel** | **160.32** | **336** | *e*P | **PKPab** | **12 11 09.0** | **-1.3** |
| | comp=Z,8.4nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **160.32** | **336** | *e*PKP2 | **PKPab** | **12 11 09.0** | **-1.3** |
| BRG | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **BRG** | **Berggiesshubel** | **160.32** | **336** | *e*PKPab | **PKPab** | **12 11 09.6** | **-0.7** |
| | baz=34,slow=4.4 | | | | | | |
| **PVCC** | **Panska Ves** | **160.38** | **334** | *e*PKP2 | **PKPab** | **12 11 10.1** | **-0.5** |
| **PVCC** | **Panska Ves** | **160.38** | **334** | *e*PKPAB | **PKPab** | **12 11 10.1** | **-0.5** |
| **TANN** | **Tannenbergstha** | **161.20** | **338** | *e*PKPab | **PKPab** | **12 11 13.7** | **-0.6** |
| | baz=34,slow=4.4 | | | | | | |
| **MOX** | **Moxa** | **161.25** | **340** | *e*PKPab | **PKPab** | **12 11 13.7** | **-0.7** |
| | baz=34,slow=4.4 | | | | | | |
| **NKC** | **Novy Kostel** | **161.36** | **337** | *e*PKP2 | **PKPab** | **12 11 14.7** | **-0.2** |
| **NKC** | **Novy Kostel** | **161.36** | **337** | *e*PKPAB | **PKPab** | **12 11 14.7** | **-0.2** |
| **ROTZ** | **Rotzenmuhle** | **161.84** | **337** | *e*PKPab | **PKPab** | **12 11 16.8** | **-0.2** |
| | baz=34,slow=4.4 | | | | | | |
| **KHC** | **Kasperske Hory** | **161.90** | **334** | *e*PKP2 | **PKPab** | **12 11 16.6** | **-0.8** |
| **KHC** | **Kasperske Hory** | **161.90** | **334** | *e*PKPAB | **PKPab** | **12 11 16.6** | **-0.8** |
| **KHC** | **Kasperske Hory** | **161.90** | **334** | *e*PKPab | **PKPab** | **12 11 16.6** | **-0.8** |
| **GEC2** | **GERESS Array S** | **162.09** | **333** | *e*PKPab | **PKPab** | **12 11 17.1** | **-1.1** |
| | baz=34,slow=4.4 | | | | | | |
| **GERES** | **GERESS Array B** | **162.09** | **333** | PKPab | **PKPab** | **12 11 17.0** | **-1.3** |
| | comp=Z,3.0nm,0.9s,baz=66,slow=4.5,SNR=11 | | | | | | |
| **GERES** | **GERESS Array B** | **162.09** | **333** | PKP2 | **PKPab** | **12 11 17.0** | **-1.3** |
| **WET** | **Wettzell** | **162.15** | **335** | *e*PKPab | **PKPab** | **12 11 17.8** | **-0.6** |
| | baz=34,slow=4.4 | | | | | | |
| **GRF** | **Grafenberg Arr** | **162.22** | **339** | *e*PKPab | **PKPab** | **12 11 18.4** | **-0.3** |
| | baz=34,slow=4.4 | | | | | | |
| **GRFO** | **Grafenberg** | **162.22** | **339** | *e*PKIKP | PKPdf | 12 10 37.9 | +6.1 |
| **GRFO** | **Grafenberg** | **162.22** | **339** | *e*PKPdf | PKPdf | 12 10 37.9 | +6.1 |
| **WLF** | **Walferdange** | **163.41** | **349** | *e*PKPab | **PKPab** | **12 11 24.8** | **+0.9** |
| | baz=34,slow=4.4 | | | | | | |
| **BFO** | **Black Forest** | **164.25** | **343** | *e*PKPab | **PKPab** | **12 11 26.9** | **-0.8** |
| | baz=34,slow=4.4 | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **165.22** | **336** | *e*PKPab | **PKPab** | **12 11 31.8** | **-0.5** |
| **SENIN** | **Lac Senin/Sane** | **166.34** | **343** | *e*PKPab | **PKPab** | **12 11 36.9** | **-0.2** |
| **ESDC** | **Sonseca Array** | **172.41** | **33** | PKP | **PKPdf** | **12 10 40.0** | **+0.5** |
| | comp=Z,0.2nm,0.4s,baz=311,slow=4.3,SNR=4.1 | | | | | | |

*DDA **21** 11:50:34.0, 38˚.87N×25˚.91E, h20km, Md3.2*
*THE **21** 11:50:34.9, 38˚.87N×26˚.05E, h3km±1km, ML2.8/6, Error ellipse: s-maj=1.0km s-min=0.4km az=76.0*
*ATH **21** 11:50:34.2, 38˚.89N×26˚.05E, h24km, MD3.2/11*
*ISK **21** 11:50:34.4, 38˚.87N×26˚.09E, h12km, MD3.1*
*ISCJB **21** 11:50:34.3±0.5, 38˚.87N±0˚.02×26˚.03E±0˚.03, h6km±3km, Error ellipse: s-maj=4.1km s-min=2.5km az=161.4*
*CSEM **21** 11:50:35.1±0.1, 38˚.87N×26˚.05E, h11km, MD3.2, Error ellipse: s-maj=2.0km s-min=1.4km az=76.0*
**ISC 21 11:50:35.0±0.9, 38˚.87N±0˚.01×26˚.05E±0˚.02, h14km±7km, n86, σ0§64/133, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIGR** | **SIGRI** | **0.37** | **336** | *e*PG | **Pb** | **11 50 42.9** | **-0.4** |
| SIGR | | | | *e*SG | **Sb** | **11 50 48.8** | **-0.1** |
| **SIGR** | **SIGRI** | **0.37** | **336** | *e*PB | **Pg** | **11 50 42.4** | **0.0** |
| SIGR | | | | *e*SB | **Sg** | **11 50 48.0** | **+0.4** |
| **SIGR** | **SIGRI** | **0.37** | **336** | P | **Pg** | **11 50 42.5** | **0.0** |
| SIGR | | | | S | **Sg** | **11 50 47.8** | **+0.2** |
| **SIGR** | **SIGRI** | **0.37** | **336** | P | **Pg** | **11 50 42.5** | **0.0** |
| **SIGR** | **SIGRI** | **0.37** | **336** | *e*Pg | **Pb** | **11 50 42.9** | **-0.4** |
| SIGR | | | | S | **Sg** | **11 50 47.8** | **+0.2** |
| SIGR | | | | *e*Sg | **Sb** | **11 50 48.8** | **-0.1** |
| **PRK** | **Paraskevi** | **0.41** | **25** | *e*PB | **Pg** | **11 50 43.0** | **-0.3** |
| PRK | | | | *e*SB | **Sg** | **11 50 48.5** | **-0.4** |
| **PRK** | **Paraskevi** | **0.41** | **25** | P | **Pg** | **11 50 43.0** | **-0.3** |
| PRK | | | | S | **Sg** | **11 50 49.3** | **+0.4** |
| **PRK** | **Paraskevi** | **0.41** | **25** | P | **Pg** | **11 50 43.0** | **-0.3** |
| PRK | | | | *e*Sb | **Sg** | **11 50 48.5** | **-0.4** |
| PRK | | | | S | **Sg** | **11 50 49.3** | **+0.4** |
| **CHOS** | **Chios island** | **0.49** | **179** | *e*PG | **Pg** | **11 50 44.3** | **-0.4** |
| CHOS | | | | *e*SG | **Sg** | **11 50 51.6** | **+0.4** |
| **CHOS** | **Chios island** | **0.49** | **179** | *e*PN | **Pg** | **11 50 44.5** | **-0.2** |
| CHOS | | | | *e*SN | **Sb** | **11 50 52.2** | **-0.2** |
| **CHOS** | **Chios island** | **0.49** | **179** | P | **Pg** | **11 50 44.5** | **-0.2** |
| CHOS | | | | S | **Sg** | **11 50 51.2** | **0.0** |
| **CHOS** | **Chios island** | **0.49** | **179** | P | **Pg** | **11 50 44.5** | **-0.2** |
| CHOS | | | | S | **Sg** | **11 50 51.2** | **0.0** |
| CHOS | | | | *e*Sg | **Sg** | **11 50 51.6** | **+0.4** |
| CHOS | | | | *e*Sn | **Sb** | **11 50 52.2** | **-0.2** |
| **AYVA** | **Ayvalik** | **0.66** | **49** | *i* P | **Pg** | **11 50 47.7** | **-0.3** |
| AYVA | | | | *i* S | **Sb** | **11 50 57.4** | **0.0** |
| **AYVA** | **Ayvalik** | **0.66** | **49** | P | **Pg** | **11 50 47.7** | **-0.3** |
| AYVA | | | | S | **Sb** | **11 50 57.4** | **0.0** |
| **ZEY** | **˜zmir** | **0.73** | **150** | P | **Pg** | **11 50 48.3** | **-0.9** |
| ZEY | | | | S | **Sb** | **11 50 59.0** | **-0.2** |
| **BLCB** | **Balcova** | **0.92** | **122** | *e*PG | **Pb** | **11 50 52.4** | **-0.3** |
| BLCB | | | | *e*SG | **Sg** | **11 51 04.7** | **-0.2** |
| **BLCB** | **Balcova** | **0.92** | **122** | *e*Pg | **Pb** | **11 50 52.4** | **-0.3** |
| BLCB | | | | *e*Sg | **Sg** | **11 51 04.7** | **-0.2** |
| **BOZC** | **Bozcaada** | **0.97** | **0** | P | **Pb** | **11 50 52.9** | **-0.7** |
| BOZC | | | | P | **Pb** | **11 50 52.9** | **-0.7** |
| BOZC | | | | S | **Sg** | **11 51 06.5** | **+0.1** |
| BOZC | | | | S | **Sg** | **11 51 06.5** | **+0.1** |
| **EZN** | **Ezine** | **0.97** | **13** | *e*PG | **Pb** | **11 50 53.2** | **-0.4** |
| **IZM** | **Izmir** | **1.06** | **116** | *e*PG | **Pb** | **11 50 54.8** | **-0.4** |
| **IZM** | **Izmir** | **1.06** | **116** | *e*Pg | **Pb** | **11 50 54.8** | **-0.4** |
| **LIA** | **Limnos Island** | **1.22** | **327** | *e*PN | **Pn** | **11 50 57.7** | **+0.1** |
| LIA | | | | *e*SN | **Sn** | **11 51 14.0** | **+0.1** |
| **LIA** | **Limnos Island** | **1.22** | **327** | P | **Pn** | **11 50 57.6** | **0.0** |
| LIA | | | | S | **Sg** | **11 51 15.2** | **+0.7** |
| **LIA** | **Limnos Island** | **1.22** | **327** | *e*Pn | **Pn** | **11 50 57.7** | **+0.1** |
| LIA | | | | *e*Sn | **Sn** | **11 51 14.0** | **+0.1** |
| LIA | | | | S | **Sg** | **11 51 15.2** | **+0.7** |
| **SMG** | **Samos** | **1.32** | **152** | *e*PN | **Pb** | **11 50 59.6** | **+0.1** |
| SMG | | | | *e*SN | **Sg** | **11 51 17.6** | **0.0** |
| **SMG** | **Samos** | **1.32** | **152** | P | **Pb** | **11 50 59.6** | **+0.1** |
| SMG | | | | S | **Sg** | **11 51 17.7** | **+0.1** |
| **SMG** | **Samos** | **1.32** | **152** | *e*Pn | **Pb** | **11 50 59.6** | **+0.1** |
| SMG | | | | *e*Sn | **Sg** | **11 51 17.6** | **0.0** |
| **GADA** | **Gvkgeada** | **1.32** | **355** | *e*PN | **Pb** | **11 50 59.2** | **-0.3** |
| **GADA** | **Gvkgeada** | **1.32** | **355** | *e*Pn | **Pb** | **11 50 59.3** | **-0.3** |
| **AKS** | **Akhisar** | **1.38** | **89** | *e*PN | **Pb** | **11 51 00.1** | **-0.5** |
| **AKS** | **Akhisar** | **1.38** | **89** | *e*Pn | **Pb** | **11 51 00.1** | **-0.5** |
| **AKHS** | **Akhisar** | **1.38** | **89** | *i* P | **Pg** | **11 51 01.1** | **-0.5** |
| AKHS | | | | *i* S | **Sg** | **11 51 19.0** | **-0.5** |
| **AKHS** | **Akhisar** | **1.38** | **89** | P | **Pg** | **11 51 01.1** | **-0.5** |
| AKHS | | | | S | **Sg** | **11 51 19.0** | **-0.5** |
| **BALY** | **Balya** | **1.50** | **54** | P | **Pg** | **11 51 01.7** | **+0.2** |
| BALY | | | | P | **Sg** | **11 51 20.0** | **-3.2** |
| **GCAM** | **G?zelcaml?** | **1.50** | **141** | *i* S | **Sb** | **11 51 21.6** | **+0.2** |
| **GCAM** | **G?zelcaml?** | **1.50** | **141** | P | **Pb** | **11 51 02.0** | **-0.5** |
| GCAM | | | | S | **Sb** | **11 51 21.6** | **+0.2** |
| **KARY** | **Karystos** | **1.52** | **237** | P | **Pn** | **11 51 01.5** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.56** | **12** | *e*PN | **Pn** | **11 51 02.5** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.56** | **12** | *e*Pn | **Pn** | **11 51 02.5** | **+0.2** |
| **LPK** | **Lapseki** | **1.59** | **20** | *e*PN | **Pn** | **11 51 03.1** | **+0.3** |
| **LPK** | **Lapseki** | **1.59** | **20** | *e*Pn | **Pn** | **11 51 03.1** | **+0.3** |
| **BALB** | **Balikesir** | **1.62** | **61** | *e*PN | **Pn** | **11 51 03.4** | **+0.4** |
| **SMTH** | **Samothraki Isl** | **1.64** | **346** | *e*PN | **Pn** | **11 51 03.2** | **-0.2** |
| SMTH | | | | *e*SN | **Sn** | **11 51 24.8** | **+0.4** |
| **SMTH** | **Samothraki Isl** | **1.64** | **346** | P | **Pn** | **11 51 03.3** | **-0.2** |
| SMTH | | | | S | **Sb** | **11 51 26.4** | **+0.7** |
| **SMTH** | **Samothraki Isl** | **1.64** | **346** | P | **Pn** | **11 51 03.3** | **-0.2** |
| SMTH | | | | *e*Sn | **Sn** | **11 51 24.8** | **+0.4** |
| SMTH | | | | S | **Sb** | **11 51 26.4** | **+0.7** |
| **AOS** | **Alonnisos** | **1.71** | **281** | *e*PN | **Pb** | **11 51 05.4** | **-0.8** |
| **AOS** | **Alonnisos** | **1.71** | **281** | P | **Pn** | **11 51 05.0** | **+0.6** |
| AOS | | | | S | **Sb** | **11 51 28.5** | **+0.9** |
| **AOS** | **Alonnisos** | **1.71** | **281** | P | **Pn** | **11 51 05.0** | **+0.6** |
| **AOS** | **Alonnisos** | **1.71** | **281** | *e*Pn | **Pb** | **11 51 05.4** | **-0.8** |
| **EREA** | **Eretria** | **1.72** | **255** | *e*PN | **Pn** | **11 51 04.6** | **+0.1** |
| **EREA** | **Eretria** | **1.72** | **255** | P | **Pn** | **11 51 04.6** | **+0.1** |
| **EREA** | **Eretria** | **1.72** | **255** | P | **Pn** | **11 51 04.6** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.73** | **47** | *e*PN | **Pn** | **11 51 04.7** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.73** | **47** | *e*Pn | **Pn** | **11 51 04.7** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **1.80** | **32** | *e*PN | **Pn** | **11 51 06.1** | **+0.5** |
| **KRBG** | **Karabiga-Canak** | **1.80** | **32** | *e*Pn | **Pn** | **11 51 06.1** | **+0.5** |
| **ERIK** | **Erikli-Kesan** | **1.83** | **11** | *e*PN | **Pn** | **11 51 06.3** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **1.83** | **11** | *e*Pn | **Pn** | **11 51 06.3** | **+0.3** |
| **APE** | **Apeiranthos** | **1.85** | **193** | *e*PN | **Pn** | **11 51 06.6** | **+0.3** |
| **APE** | **Apeiranthos** | **1.85** | **193** | *e*PB | **Pn** | **11 51 05.4** | **-0.9** |
| **APE** | **Apeiranthos** | **1.85** | **193** | *e*Pn | **Pn** | **11 51 06.6** | **+0.3** |
| **AYDN** | **Tasoluk** | **1.88** | **129** | P | **Pn** | **11 51 06.6** | **+0.3** |
| AYDN | | | | S | **Sg** | **11 51 37.6** | **+2.0** |
| **MANT** | **Manisa** | **2.00** | **100** | *i* S | **Sb** | **11 51 38.0** | **+1.8** |
| **MANT** | **Manisa** | **2.00** | **100** | P | **Pb** | **11 51 11.1** | **-0.3** |
| MANT | | | | S | **Sb** | **11 51 38.0** | **+1.8** |
| **RKY** | **Sarkoy-Tekirda** | **2.01** | **25** | *e*PN | **Pn** | **11 51 09.0** | **+0.5** |
| **RKY** | **Sarkoy-Tekirda** | **2.01** | **25** | *e*Pn | **Pn** | **11 51 09.0** | **+0.5** |
| **SART** | **Tekirdag** | **2.01** | **25** | *i* P | **Pn** | **11 51 08.7** | **+0.1** |
| SART | | | | *i* S | **Sb** | **11 51 37.3** | **+1.0** |
| **SART** | **Tekirdag** | **2.01** | **25** | P | **Pn** | **11 51 08.7** | **+0.1** |
| SART | | | | S | **Sb** | **11 51 37.3** | **+1.0** |
| **DURS** | **Dursunbey** | **2.02** | **68** | P | **Pn** | **11 51 09.2** | **+0.5** |
| **ALN** | **Alexandroupoli** | **2.02** | **360** | *e*PN | **Pn** | **11 51 09.1** | **+0.5** |
| **ALN** | **Alexandroupoli** | **2.02** | **360** | *e*PN | **Pn** | **11 51 08.8** | **+0.2** |
| **ALN** | **Alexandroupoli** | **2.02** | **360** | P | **Pn** | **11 51 08.8** | **+0.2** |
| ALN | | | | S | **Sb** | **11 51 35.3** | **-1.2** |
| **ALN** | **Alexandroupoli** | **2.02** | **360** | P | **Pn** | **11 51 08.8** | **+0.2** |
| ALN | | | | S | **Sb** | **11 51 35.3** | **-1.2** |
| **EDC** | **Edincik** | **2.03** | **43** | *e*PN | **Pn** | **11 51 09.1** | **+0.3** |
| **EDC** | **Edincik** | **2.03** | **43** | *e*Pn | **Pn** | **11 51 09.1** | **+0.3** |
| **BODT** | **Bodrum** | **2.07** | **151** | *e*PN | **Pn** | **11 51 10.1** | **+0.8** |
| **BODT** | **Bodrum** | **2.07** | **151** | *e*Pn | **Pn** | **11 51 10.1** | **+0.8** |
| **BNT** | **Bandirma** | **2.07** | **44** | *e*PN | **Pn** | **11 51 09.8** | **+0.5** |
| **BNT** | **Bandirma** | **2.07** | **44** | *e*Pn | **Pn** | **11 51 09.8** | **+0.5** |
| **MRMT** | **Marmara Adasi** | **2.10** | **34** | *e*PN | **Pn** | **11 51 10.4** | **+0.6** |
| **MRMT** | **Marmara Adasi** | **2.10** | **34** | *e*Pn | **Pn** | **11 51 10.4** | **+0.6** |
| **BDRM** | **Kayabasi** | **2.12** | **148** | *i* P | **Pg** | **11 51 14.9** | **-0.7** |
| **BDRM** | **Kayabasi** | **2.12** | **148** | P | **Pg** | **11 51 14.9** | **-0.7** |
| BDRM | | | | S | **Sg** | **11 51 42.0** | **-1.1** |
| **ULDT** | **Uludag** | **2.71** | **61** | P | **Pb** | **11 51 24.9** | **+1.6** |
| ULDT | | | | S | **Sg** | **11 52 00.2** | **-1.7** |
| **ARMT** | **Armutlu** | **2.75** | **51** | *e*PN | **Pn** | **11 51 19.1** | **+0.4** |
| **ARMT** | **Armutlu** | **2.75** | **51** | *e*Pn | **Pn** | **11 51 19.1** | **+0.4** |

*IDC **21** 12:09:34.2±0.4, 1˚.20N×126˚.28E, h0km, mb4.6/26, mb1 4.7/27, mb1mx4.6/37, mbtmp4.6/27, ML4.4/1, MS3.7/5, Ms1 3.8/5, ms1mx3.3/33, Error ellipse: s-maj=17.2km s-min=9.6km az=76.0*
*MOS **21** 12:09:38.1±1.1, 1˚.22N×126˚.18E, h33km, mb5.0/27, Error ellipse: s-maj=13.0km s-min=6.2km az=110.6*
*ISCJB **21** 12:09:41.4±0.4, 1˚.21N±0˚.02×126˚.28E±0˚.03, h65km±4km, mb4.7/62, Error ellipse: s-maj=4.8km s-min=3.7km az=145.7*
*DJA **21** 12:09:42.5±0.2, 1˚N±3˚×12˚6E±˚, h55km±4km, M4.7/22, mb4.9/22, mB5.2/11, MLv4.8/19, Mw(mB)4.6/11, Mwp6.1/1*
*BJI **21** 12:09:43.8, 1˚.20N×126˚.20E, h67km, mb4.8/38, mB5.3/27, Ms4.9/10, Ms7 4.6/11*
*NEIC **21** 12:09:43.4±0.7, 1˚.18N×126˚.30E, h68km±6km, mb4.9/21, Error ellipse: s-maj=7.5km s-min=5.2km az=47.0*
*AUST **21** 12:09:44.3±0.2, 1˚.21N×126˚.42E, h85km, Error ellipse: s-maj=0.9km s-min=0.6km az=34.0*
*KLM **21** 12:09:44.6, 1˚.61N×125˚.96E, h66km, mb4.9, ML5.1, MS5.9*
**ISC 21 12:09:43.3±0.4, 1˚.16N±0˚.04×126˚.32E±0˚.04, h64km±3km, n214, σ1§37/233, mb4.8/62, 5C-3D, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.12** | **110** | P | **Pn** | **12 10 01.1** | **-1.9** |
| TNTI | | | | S | **Sn** | **12 10 17.4** | **-0.3** |
| **TNTI** | **Ternate** | **1.12** | **110** | *e*Pn | **Pn** | **12 10 01.1** | **-1.9** |
| **LBMI** | **Labuha** | **2.14** | **146** | P | **Pn** | **12 10 16.3** | **-0.4** |
| **KMSI** | **Cibinong** | **2.41** | **256** | P | **Pn** | **12 10 19.3** | **-1.0** |
| KMSI | | | | S | **Sn** | **12 10 48.6** | **-0.1** |
| **SGSI** | **Sangihe** | **2.63** | **343** | P | **Pn** | **12 10 21.0** | **-2.5** |
| SGSI | | | | S | **Sn** | **12 10 51.5** | **-2.8** |
| **SANI** | **Sanana** | **3.20** | **186** | P | **Pn** | **12 10 31.1** | **-0.1** |
| **LUWI** | **Luwuk** | **4.16** | **238** | P | **Pn** | **12 10 45.6** | **+1.2** |
| | baz=4.3,SNR=109 | | | | | | |
| **LUWI** | **Luwuk** | **4.16** | **238** | P | **Pn** | **12 10 45.1** | **+0.7** |
| **LUWI** | **Luwuk** | **4.16** | **238** | *e*Pn | **Pn** | **12 10 43.4** | **-1.0** |
| **MRSI** | **Marisa** | **4.43** | **261** | P | **Pn** | **12 10 47.2** | **-0.8** |
| **NLAI** | **Namlea** | **4.43** | **170** | P | **Pn** | **12 10 48.2** | **+0.1** |
| **GSPH** | **General Santos** | **5.08** | **344** | *e*P | Pn | 12 10 54.1 | -3.0 |
| **APSI** | **Ampana** | **5.10** | **246** | P | **Pn** | **12 10 57.9** | **+0.7** |
| | 1µm,0.6s,12µm3.6nm | | | | | | |
| **AAI** | **Ambon** | **5.16** | **159** | P | **Pn** | **12 10 59.6** | **+1.5** |
| | baz=5.2,SNR=4.4 | | | | | | |
| **AAI** | **Ambon** | **5.16** | **159** | P | **Pn** | **12 10 58.9** | **+0.8** |
| | 118nm,0.9s,2µm0.4nm | | | | | | |
| **MSAI** | **Masohi** | **5.18** | **150** | P | Pn | 12 11 01.6 | +3.3 |
| **SWI** | **Sorong** | **5.33** | **112** | P | **Pn** | **12 11 01.1** | **+0.7** |
| | baz=5.3,SNR=3.2 | | | | | | |
| **SWI** | **Sorong** | **5.33** | **112** | P | **Pn** | **12 11 00.9** | **+0.5** |
| | 47nm,0.9s,0.2nm | | | | | | |
| **SIJI** | **Sorong**

comp=Z,83nm,18.7s,baz=108,slow=39
**QLP Quilpie 32.55 149** P **P** 12 16 08.1 -0.3
baz=33,SNR=11
**KMBL Kambalda 32.62 187** P **P** 12 16 09.1 +0.1
baz=33,SNR=10
**BLDU Ballidu 32.89 195** P **P** 12 16 11.4 0.0
baz=33,SNR=34
**KMI Kunming 32.95 318** P P 12 16 15.8 +3.5
KMI PMZ
comp=Z,7.0nm,0.8s
KMI PMZ
comp=Z,540nm,5.8s
**KLBR Kellerberrin 33.57 193** P **P** 12 16 17.3 +0.1
baz=34,SNR=46
**NWAO Narrogin (SRO) 34.97 193** P **P** 12 16 29.0 -0.3
comp=Z,11nm,0.4s,baz=287,slow=0.0,SNR=30
**NWAO Narrogin (SRO) 34.97 193** P **P** 12 16 30.0 +0.6
baz=35,SNR=8.2
**BBOO Buckleboo 35.02 166** P **P** 12 16 29.7 -0.1
baz=35,SNR=33
**BBOO Buckleboo 35.02 166** *e*P **P** 12 16 30.0 +0.2
comp=Z,19nm,0.6s
**KSAR Wonju Array Be 36.14 2** P **P** 12 16 38.3 -1.0
**KSAR Wonju Array Be 36.14 2** P **P** 12 16 38.3 -1.0
**KSRS Korea Array 36.15 2** P **P** 12 16 38.3 -1.1
comp=Z,2.7nm,0.6s,baz=181,slow=10,SNR=12
**KSRS Korea Array 36.15 2** P **P** 12 16 38.3 -1.1
KSRS pmax pmax
comp=Z,3.0nm,0.6s
**HTT Hallett 36.40 162** P P 12 16 37.2 -4.4
baz=37,SNR=11
**CD2 Chengdu 36.51 326** *e*P **P** 12 16 43.8 +1.2
CD2 pP **pP** 12 17 00.1 +1.6
CD2 PP **PnPn** 12 18 08.1 +0.9
CD2 S **S** 12 22 22.4 +2.0
CD2 sS **sS** 12 22 50.5 +3.1
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.0s
**RKGY Rocky Gully 36.64 193** P **P** 12 16 45.4 +1.8
baz=37,SNR=13
**MJAR Matsushiro Arr 36.89 16** P **P** 12 16 44.4 -1.4
comp=Z,7.1nm,0.7s,baz=184,slow=9.7,SNR=13
**MAT Matsushiro 36.89 16** P **P** 12 16 44.4 -1.4
**CMSA Cobar Meteorol 37.35 152** P **P** 12 16 50.3 +0.5
baz=38,SNR=10
**ARMA Armidale 39.59 145** P **P** 12 17 10.0 +1.3
baz=40,SNR=9.0
**ARMA Armidale 39.59 145** *e*P **P** 12 17 10.3 +1.6
comp=Z,9.9nm,0.6s
**ARPS Mount Arapiles 40.40 161** P **P** 12 17 16.1 +1.0
baz=41,SNR=13
**LZH Lanzhou 40.53 332** *e*P P 12 17 19.6 +3.1
LZH pP pP 12 17 36.5 +4.0
LZH sP sP 12 17 43.3 +3.3
LZH PP **PnPn** 12 18 57.5 +2.2
LZH PMZ
comp=Z,23nm,1.2s
LZH PMZ
comp=Z,81nm,6.5s
LZH LN
comp=Z,410nm,13.6s
LZH LE
comp=Z,390nm,14.0s
LZH LZ
comp=Z,510nm,17.2s
**MSHR Mys Shultsa 41.47 5** *e*P **P** 12 17 25.1 +1.3
**HHC Hu-ho-hao-te 41.71 343** *e*P **P** 12 17 28.3 +2.3
HHC PMZ
comp=Z,33nm,0.9s
HHC PMZ
comp=Z,190nm,6.7s
**TOO Toolangi 42.42 157** P **P** 12 17 33.6 +1.8
baz=43,SNR=6.3
**USRK Ussuriysk Ar. 43.16 6** P **P** 12 17 37.2 -0.3
comp=Z,10nm,0.6s,baz=194,slow=6.0,SNR=26
**MDJ Mudanjiang 43.37 3** P **P** 12 17 39.5 +0.2
MDJ PMZ
comp=Z,16nm,0.9s
MDJ PMZ
comp=Z,280nm,5.8s
**MDJ Mudanjiang 43.37 3** *e*P **P** 12 17 39.8 +0.5
comp=Z,13nm,0.8s
**WAKE Wake Island 43.41 63** *e*P **P** 12 17 41.5 +1.5
WAKE *e*PP **PcP** 12 19 25.2 -2.4
**LSA Lhasa 43.86 314** *e*P **P** 12 17 44.3 +0.2
LSA pmax pmax
comp=Z,8.0nm,0.4s
**LSA Lhasa 43.86 314** *e*P **P** 12 17 44.3 +0.2
comp=Z,7.7nm,0.4s
**GTA Gaotai 45.10 331** *e*P **P** 12 17 53.3 -0.1
GTA pP **pP** 12 18 08.8 -0.9
GTA sP **sP** 12 18 15.8 -1.3
GTA PcP **PcP** 12 19 34.5 +1.4
GTA PMZ
comp=Z,9.0nm,0.8s
**TAPN Taplejung 45.24 309** *e*P **P** 12 17 52.9 -2.0
comp=Z,5.8nm,0.4s
**ODAN Odare 45.27 308** *e*P **P** 12 17 53.0 -2.0
comp=Z,7.3nm,0.5s
**RAMN Ramite 45.93 307** *e*P **P** 12 17 57.7 -2.6
comp=Z,11nm,0.5s
**YUK Yuzh-Kuril'sk 46.10 20** *e*P **P** 12 18 02.9 +1.9
**GUN Gumba 46.94 308** *e*P **P** 12 18 07.1 -1.2
comp=Z,32nm,0.4s
**PKI Pulchoki 47.16 308** *e*P **P** 12 18 08.4 -1.6
comp=Z,7.1nm,0.3s
**PKIN Phulchoki 47.17 308** *e*P **P** 12 18 08.9 -1.1
comp=Z,3.8nm,0.3s
**KKN Kakani 47.36 308** *e*P **P** 12 18 10.0 -1.4
comp=Z,11nm,0.3s
**HABR Khabarovsk 47.73 8** *e*P **P** 12 18 12.1 -1.6
HABR *e**PP pP 12 18 21.9 -8.2
HABR *e**SP sP 12 18 26.0 -11
HABR 12 19 41.3
HABR *e* 12 20 03.8
HABR *e*PPP PPP 12 20 50.3
HABR S **S** 12 25 06.3 +1.1
HABR *e**SS sS 12 25 22.8 -10
HABR *e* 12 28 02.5
HABR *e*SSS SSS 12 29 42.0
HABR pmax pmax
comp=Z,20nm,2.0s
HABR MLR MLR
comp=Z,286nm,20.0s
**YSS Yuzh-Sakhalins 47.82 15** *e*P **P** 12 18 14.0 -0.3
**GKN Gorkha 47.96 308** *e*P **P** 12 18 15.5 -0.5
comp=Z,9.3nm,0.4s
**KLR Kul'dur 48.12 5** *e*P **P** 12 18 16.5 -0.1
**KOLN Koldanda 48.69 307** *e*P **P** 12 18 20.9 -0.8
comp=Z,45nm,0.5s
**SONM Songino Array 49.60 342** P **P** 12 18 27.8 -0.4
comp=Z,2.9nm,0.6s,baz=158,slow=8.1,SNR=18
SONM PcP **PcP** 12 19 48.0 -0.9
comp=Z,2.7nm,0.8s,baz=160,slow=5.2,SNR=5.1
**TLY Talaya 53.84 343** *e*P **P** 12 19 00.1 +0.5
TLY pmax pmax
comp=Z,3.0nm,1.0s
**WMQ Urumqi 54.60 326** *e*P **P** 12 19 06.0 +0.6
WMQ pP **pP** 12 19 22.0 -0.1
WMQ sP **sP** 12 19 29.0 -0.4
WMQ PMZ
comp=Z,15nm,0.9s
**MOY Mondy 54.65 341** *e*P **P** 12 19 06.1 +0.5
**HVS Khovu-Aksy 56.90 336** *e*P **P** 12 19 23.4 +1.7
HVS pmax pmax
comp=Z,14nm,0.9s
**BOD Bodaibo 57.34 352** *e*P **P** 12 19 24.2 -0.3
BOD pmax pmax
comp=Z,8.0nm,1.1s
**PETK Petropavlovsk- 57.96 22** P **P** 12 19 27.2 -1.8
comp=Z,6.1nm,0.6s,baz=189,slow=5.7,SNR=5.7
**MK01 Makanchi Array 59.42 326** *e*P **P** 12 19 38.1 -1.2
**MK31 Makanchi Array 59.44 326** *e*P **P** 12 19 38.3 -1.1
MK31 pmax pmax
comp=Z,8.0nm,0.4s
**MKAR Makanchi Array 59.44 326** P **P** 12 19 38.4 -1.1
comp=Z,13nm,0.4s,baz=119,slow=7.5,SNR=47
MKAR PcP **PcP** 12 20 26.4 -0.2
comp=Z,2.5nm,0.5s,baz=124,slow=3.5,SNR=3.7
**MKAR Makanchi Array 59.44 326** P **P** 12 19 38.4 -1.1
MKAR 12 20 26.4
MKAR pmax pmax
comp=Z,13nm,0.4s
MKAR pmax pmax
comp=Z,3.0nm,0.5s
**MKAR Makanchi Array 59.44 326** *e*P **P** 12 19 38.7 -0.7
MKAR PcP **PcP** 12 20 26.4 -0.2
**KSH Kashi 59.59 316** P **P** 12 19 43.6 +2.9
KSH *e*pP **pP** 12 19 59.8 +2.1
KSH *e*ScP **ScP** 12 24 24.3 +1.3
KSH PcS **PcS** 12 24 31.4 +1.7
KSH S **S** 12 27 46.9 +0.6
KSH sS **sS** 12 28 14.6 -0.4
KSH PMZ
comp=Z,140nm,4.1s
KSH LN
comp=Z,490nm,9.0s
KSH LE
comp=Z,190nm,6.2s
KSH LZ
comp=Z,170nm,6.5s
**MAKZ Makanchi 59.62 326** *e*P **P** 12 19 39.9 -0.8
**YAK Yakutsk 60.78 2** *e*P **P** 12 19 48.0 -0.2
YAK pmax pmax
comp=Z,16nm,1.0s
YAK pmax pmax
comp=N,8.0nm,1.5s
**MA2 Magadan 61.28 14** *e*P **P** 12 19 52.0 +0.3
**TKM2 Tokmak 2 61.41 320** *e*P **P** 12 19 52.5 -0.7
TKM2 pmax pmax
comp=Z,99nm,2.2s
**TKM2 Tokmak 2 61.41 320** *e*P **P** 12 19 52.5 -0.7
comp=Z,99nm,2.2s
**SFK Sufi-Kurgan 61.52 316** P **P** 12 19 53.2 -0.8
SFK pmax pmax
comp=Z,7.0nm,0.9s
**EKS2 Erkin-Say 62.48 319** *e*P **P** 12 20 00.2 -0.1
EKS2 pmax pmax
comp=Z,5.0nm,0.8s
**EKS2 Erkin-Say 62.48 319** *e*P **P** 12 20 00.2 -0.1
comp=Z,5.4nm,0.8s
**ZAA0 Zalesovo Array 62.69 334** P **P** 12 20 00.2 -1.1
baz=63,SNR=3.9
**ZALV Zalesovo Beam 62.69 334** P **P** 12 19 59.8 -1.5
comp=Z,3.9nm,0.4s,baz=143,slow=7.2,SNR=16
**MNAS Manas 63.25 318** P **P** 12 20 04.3 -1.1
MNAS pmax pmax
comp=Z,7.0nm,0.8s
**KURK Kurchatov 63.69 328** *e*P **P** 12 20 06.8 -1.1
KURK pmax pmax
comp=Z,34nm,0.6s
**KURK Kurchatov 63.69 328** *e*P **P** 12 20 06.8 -1.1
comp=Z,34nm,0.6s
**NVS Novosibirsk 63.98 334** *e*P **P** 12 20 08.8 -0.9
NVS pmax pmax
comp=Z,5.0nm,0.4s
NVS pmax pmax
comp=N,4.0nm,0.5s
NVS pmax pmax
comp=E,4.0nm,0.5s
**DZET Dzherino 64.38 313** P **P** 12 20 11.4 -1.5
DZET pmax pmax
comp=Z,6.0nm,0.5s
**SEY Seymchan 64.62 13** *e*P **P** 12 20 15.6 +1.8
**KK31 Karatay Array 64.84 318** *i* P **P** 12 20 14.9 -0.8
KK31 pmax pmax
comp=Z,2.0nm,0.3s
**KKAR Karatay Array 64.84 318** *e*P **P** 12 20 15.3 -0.4
**KKAR Karatay Array 64.84 318** *e*P **P** 12 20 15.3 -0.4
**BVA0 Borovoye Array 69.25 328** P **P** 12 20 42.4 -1.0
BVA0 pmax pmax
comp=Z,5.0nm,0.5s
**BRVK Borovoye 69.32 328** *e*P **P** 12 20 43.5 -0.3
BRVK pmax pmax
comp=Z,9.0nm,1.0s
**BRVK Borovoye 69.32 328** *e*P **P** 12 20 43.5 -0.3
comp=Z,9.2nm,1.0s
**IDAH Dahanechah 69.67 305** *e*P **P** 12 20 46.7 -0.1
**IPAY Payeh 71.18 308** *e*P **P** 12 20 54.2 -1.7
**IAKL Akhelmad 71.40 308** *e*P **P** 12 20 56.2 -1.1
**BILL Bilibino 72.13 15**‖ *e*P **P** 12 21 02.0 +1.4
BILL pmax pmax
comp=Z,5.0nm,1.1s
BILL MLR MLR
comp=Z,88nm,16.0s
**GEYT Alibeck 72.19 310** P **P** 12 21 00.5 -1.2
comp=Z,2.3nm,0.5s,baz=105,slow=11,SNR=3.9
**ABKAR Akbulak array 73.88 321** *e*P **P** 12 21 10.5 -0.8
**ARU Arti 76.88 328** *d i*P **P** 12 21 27.6 -0.8
ARU S **S** 12 31 11.9 +0.7
ARU SS **SS** 12 36 10.4 +1.6
ARU pmax pmax
comp=Z,8.0nm,0.6s
**ARU Arti 76.88 328** *e*P **P** 12 21 27.3 -1.1
comp=Z,11nm,0.6s
**VNDA Vanda 80.94 173** P **P** 12 21 50.5 +0.2
comp=Z,1.8nm,0.7s,baz=320,slow=6.6,SNR=16
VNDA LR LR 12 58 31.7
comp=Z,50nm,18.3s,baz=307,slow=36
**VNDA Vanda 80.94 173** *e*P **P** 12 21 51.1 +0.8
VNDA pmax pmax
comp=Z,36nm,2.4s
**VNDA Vanda 80.94 173** *e*P **P** 12 21 51.1 +0.8
comp=Z,36nm,2.4s
**RAYN Ar Rayn 81.11 293** *e*P **P** 12 21 51.8 -0.5
comp=Z,3.4nm,0.6s
**MAW Mawson 81.21 200** P **P** 12 21 52.8 +1.0
comp=Z,2.3nm,0.5s,baz=76,slow=6.2,SNR=21
**MAW Mawson 81.21 200** P **P** 12 21 52.8 +1.0
baz=81,SNR=12
**KBZ Khabaz 84.44 314** P **P** 12 22 08.0 -1.0
comp=Z,3.2nm,0.8s,baz=306,slow=0.6,SNR=5.6
**RSO Redoubt South 84.52 29** *e*P P 12 22 12.6 +3.2
**VRH Novokhopyorsk 85.71 321** *e*P **P** 12 22 14.4 -0.9
VRH pmax pmax
comp=Z,20nm,0.6s
VRH pmax pmax
comp=N,20nm,1.2s
VRH pmax pmax
comp=E,6.0nm,0.5s
**COLD Coldfoot 86.41 23** *e*P **P** 12 22 19.8 +1.3
comp=E,79nm,2.7s
**KLMR Klimovskoe 87.43 331** *e*P **P** 12 22 21.3 -2.2
KLMR pmax pmax
comp=Z,7.0nm,0.5s
**LPSR Galich'ya Gora 87.50 322** *e*P **P** 12 22 23.5 -0.5
LPSR pmax pmax
comp=Z,3.0nm,0.5s
LPSR pmax pmax
comp=N,2.0nm,0.4s
LPSR pmax pmax
comp=E,7.0nm,1.2s
**ILAR Eielson Array 87.59 25** P **P** 12 22 22.7 -1.5
comp=E,0.8nm,0.6s,baz=244,slow=4.8,SNR=13
**ASF Jabal al Asfar 88.90 302** P **P** 12 22 30.1 -1.1
comp=E,3.4nm,0.5s,baz=48,slow=4.7,SNR=6.6
**OBN Obninsk 88.92 325**‖ *e*P **P** 12 22 29.8 -0.8
OBN *e* 12 22 36.1
OBN *e*SSS SSS 12 42 46.2
OBN pmax pmax
comp=Z,11nm,1.2s
**KMBO Kilima Mbogo 89.09 269** P **P** 12 22 32.9 +0.2
comp=Z,1.3nm,0.4s,baz=90,slow=9.1,SNR=4.3
**SYO Syowa Base 89.89 201**‖ *e*pP pP 12 22 51.8 -1.1
**MMAI Mount Meron Ar 90.14 303** P **P** 12 22 36.6 -0.5
comp=Z,2.0nm,0.4s,baz=52,slow=9.3,SNR=3.5
**ARCES ARCESS Array B 92.70 340** P **P** 12 22 46.4 -1.6
comp=Z,5.1nm,0.8s,baz=90,slow=3.7,SNR=12
**AKASG Malin Array Be 93.61 321** P **P** 12 22 51.4 -1.2
comp=Z,0.3nm,0.3s,baz=66,slow=6.0,SNR=3.6
**KIEV Kiev 93.62 321** *e*P **P** 12 22 51.8 -0.8
KIEV pmax pmax
comp=Z,3.0nm,1.3s
**FINES FINESS Array B 93.89 332** P **P** 12 22 52.1 -1.4
comp=Z,2.1nm,0.6s,baz=126,slow=2.6,SNR=4.4
**FINES FINESS Array B 93.89 332** *i* P **P** 12 22 52.7 -0.9
FINES pmax pmax
comp=Z,2.0nm,0.6s
**BUR04 Bucovina Ar. S 96.63 318** *e*P **P** 12 23 05.9 -0.7
**KOLS Kolonicke sedl 98.33 320** *e*P Pdif 12 23 15.3 +1.2
**KOLS Kolonicke sedl 98.33 320** PDIF Pdif 12 23 15.2 +1.1
**IDI Anoyia 98.66 306** P **P** 12 23 13.7 -2.2
comp=Z,9.6nm,1.0s,baz=56,slow=3.6,SNR=2.3
**HFS Hagfors 100.09 332** P **Pdif** 12 23 21.8 +0.2
comp=Z,4.7nm,1.1s,baz=133,slow=8.5,SNR=4.1
**VYHS Vyhne 100.65 320** *e*P **Pdif** 12 23 24.1 -0.3
**VYHS Vyhne 100.65 320** PDIF **Pdif** 12 23 24.1 -0.3
**NOA NORSAR Array B 100.89 333** P **Pdif** 12 23 23.9 -1.4
comp=Z,0.3nm,0.6s,baz=110,slow=4.0,SNR=2.6
**ULM Lac du Bonnet 117.40 29** PKP **PKPdf** 12 28 21.7 0.0
comp=Z,1.9nm,0.5s,baz=326,slow=7.3,SNR=2.3
**ANMO Albuquerque 119.04 48** *c i*PKIKP **PKPdf** 12 28 25.6 0.0
ANMO pmax pmax
comp=Z,5.0nm,2.5s
**MNTX Cornudas Mount 121.18 51** *e*PKPdf **PKPdf** 12 28 30.9 +1.3
**SCHQ Schefferville 123.16 9** PKP **PKPdf** 12 28 32.6 -0.1
comp=Z,2.5nm,0.5s,baz=301,slow=5.9,SNR=4.0
**TORD Torodi Ar. Bea 123.29 286** PKP **PKPdf** 12 28 33.6 -0.4
comp=Z,3.0nm,0.9s,baz=57,slow=1.8,SNR=17
TORD PKKPbc **PKKPab** 12 38 24.6 +0.4
comp=Z,0.4nm,0.6s,baz=260,slow=3.9,SNR=4.0
**TXAR Lajitas Array 123.47 53** PKP **PKPdf** 12 28 34.7 +0.5
comp=Z,0.5nm,0.6s,baz=321,slow=0.1,SNR=4.7
**JCT Junction City 126.03 50** *e*PKIKP **PKPdf** 12 28 40.2 +1.3
**JCT Junction City 126.03 50** *e*PKPdf **PKPdf** 12 28 40.2 +1.3
**CPUP Villa Florida 154.72 172** PKPbc **PKPbc** 12 29 38.5 +0.6
comp=Z,1.4nm,0.6s,baz=197,slow=5.7,SNR=4.7
CPUP PKPab **PKPab** 12 29 53.4 +0.6
comp=Z,1.5nm,0.8s,baz=225,slow=10.0,SNR=2.9
**ROSC El Rosal 158.53 74** PKP **PKPdf** 12 29 34.7 -0.4
comp=Z,6.4nm,0.5s,baz=94,slow=19,SNR=1.9
**LPAZ La Paz 159.29 137** PKP **PKPdf** 12 29 36.6 +0.4
comp=Z,1.5nm,1.1s,baz=136,slow=1.7,SNR=3.9
LPAZ PKPab **PKPab** 12 30 14.6 +0.9
comp=Z,0.5nm,0.4s,baz=166,slow=4.2,SNR=3.2

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**LJU 21 12:09:53.8, 45.93N×14.31E, h0km, ML0.6, 1D Artificial, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **CRNS** | **Crni Vrh** | **0.15** | **349** | ‖ *i* Pg | | Pg | 12 09 56.3 | -0.6 |
| CRNS | | | | *i* Sg | | Sg | 12 09 59.2 | +0.3 |
| | comp=Z,12nm,0.1s | | | | | | | |
| **JAVS** | **Javornik** | **0.17** | **257** | *i* Pg | | Pg | 12 09 56.9 | -0.4 |
| JAVS | | | | *i* Sg | | Sg | 12 10 00.2 | +0.6 |
| | comp=Z,9.0nm,0.1s | | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **0.33** | **58** | *i* Pg | | Pg | 12 10 00.2 | +0.1 |
| VNDS | | | | *i* Sg | | Sg | 12 10 05.1 | +0.7 |
| | comp=Z,5.0nm,0.1s | | | | | | | |
| **VISS** | **Visnje** | **0.40** | **109** | *i* Pg | | Pg | 12 10 01.5 | +0.1 |
| VISS | | | | *i* Sg | | Sg | 12 10 07.3 | +0.7 |
| | comp=Z,3.0nm,0.1s | | | | | | | |

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*TAP* ***21*** *12:21:29.6, 25.51N×122.79E, h206km±1km, ML3.9, C*
*ISCJB* ***21*** *12:21:31.2±0.8, 25.29N±0.07×122.78E±0.03, h201km±6km, Error ellipse: s-maj=11.9km s-min=3.5km az=169.3*
*JMA* ***21*** *12:21:32.0±0.2, 25.28N×122.74E, h195km±3km, M3.3*
**ISC 21 12:21:31.9±2.3, 25.3N±0.1×122.76E±0.04, h200km±13km, n40, σ0s79/73, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **TWB1** | **Santiao Chiao** | **0.75** | **249** | *e*P | | **Pn** | **12 21 59.8** | **-0.3** |
| | baz=235 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.84** | **169** | P | | **Pn** | **12 22 00.8** | **+0.1** |
| JYNG | | | | S | | **S** | **12 22 20.8** | **-2.1** |
| **NWF** | **Wu-fen Shan** | **0.92** | **257** | *e*P | | **Pn** | **12 22 01.6** | **+0.4** |
| | baz=240 | | | | | | | |
| **TWC** | **Suao** | **1.07** | **231** | *e*P | | **Pn** | **12 22 01.7** | **-0.5** |
| | baz=223 | | | | | | | |
| TWC | | | | *e*S | | **S** | **12 22 25.9** | **+0.6** |
| | baz=223 | | | | | | | |
| **TWA** | **Mucha** | **1.11** | **255** | *e*P | | **Pn** | **12 22 01.5** | **-1.0** |
| | baz=249 | | | | | | | |
| TWA | | | | *e*S | | **S** | **12 22 25.5** | **-0.4** |
| | baz=249 | | | | | | | |
| **TWE** | **Neicheng** | **1.14** | **241** | P | | **Pn** | **12 22 02.6** | **-0.1** |
| | baz=223 | | | | | | | |
| TWE | | | | S | | **S** | **12 22 27.7** | **+1.5** |
| | baz=223 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.23** | **262** | *e*P | | **Pn** | **12 22 03.5** | **+0.1** |
| | baz=247 | | | | | | | |
| **ENA** | **Nanau** | **1.26** | **228** | *e*P | | **Pn** | **12 22 03.6** | **0.0** |
| | baz=214 | | | | | | | |
| ENA | | | | *e*S | | **S** | **12 22 28.9** | **+1.1** |
| | baz=214 | | | | | | | |
| **ENTT** | **Nioudou** | **1.26** | **240** | P | | **Pn** | **12 22 03.5** | **-0.1** |
| | baz=225 | | | | | | | |
| ENTT | | | | *e*S | | **S** | **12 22 29.4** | **+1.6** |
| | baz=225 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.29** | **137** | P | | **Pn** | **12 22 03.9** | **+0.1** |
| IRIF | | | | S | | **S** | **12 22 28.4** | **+0.2** |
| **NSK** | **Sanguang** | **1.41** | **245** | P | | **Pn** | **12 22 04.7** | **-0.3** |
| | baz=237 | | | | | | | |
| NSK | | | | S | | **S** | **12 22 29.8** | **-0.3** |
| | baz=237 | | | | | | | |
| **NNS** | **Nan Shan** | **1.52** | **237** | *e*P | | **Pn** | **12 22 05.8** | **-0.1** |
| | baz=224 | | | | | | | |
| NNS | | | | *e*S | | **S** | **12 22 32.6** | **+0.9** |
| | baz=224 | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.54** | **132** | P | | **Pn** | **12 22 06.2** | **+0.3** |
| JKRS | | | | S | | **S** | **12 22 32.6** | **+0.8** |
| **JIJ** | **Ishigaki jima** | **1.55** | **126** | P | | **Pn** | **12 22 05.8** | **-0.3** |
| JIJ | | | | S | | **S** | **12 22 31.7** | **-0.4** |
| **JISG** | **Ishigakijimahi** | **1.56** | **116** | P | | **Pn** | **12 22 05.7** | **-0.5** |
| JISG | | | | S | | **S** | **12 22 32.3** | **0.0** |
| **TWD** | **Chiawan** | **1.60** | **222** | *e*P | | **Pn** | **12 22 06.0** | **-0.5** |
| | baz=215 | | | | | | | |
| TWD | | | | *e*S | | **S** | **12 22 32.8** | **-0.1** |
| | baz=215 | | | | | | | |
| **NSTT** | **Nanjuang** | **1.73** | **248** | P | | **Pn** | **12 22 07.1** | **-0.6** |
| | baz=242 | | | | | | | |
| NSTT | | | | *e*S | | **S** | **12 22 34.2** | **-0.7** |
| | baz=242 | | | | | | | |
| **TWT** | **Tachien** | **1.77** | **235** | *e*P | | **Pn** | **12 22 08.8** | **+0.4** |
| | baz=230 | | | | | | | |
| TWT | | | | *e*S | | **S** | **12 22 37.0** | **+1.0** |
| | baz=230 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.77** | **231** | *e*P | | **Pn** | **12 22 08.7** | **0.0** |
| | baz=225 | | | | | | | |
| WHF | | | | *e*S | | **S** | **12 22 37.0** | **+0.5** |
| | baz=225 | | | | | | | |
| **JTJ** | **Tarama** | **1.87** | **109** | P | | **Pn** | **12 22 09.6** | **+0.5** |
| JTJ | | | | S | | **S** | **12 22 37.9** | **+0.5** |
| **ESL** | **Shilin** | **1.90** | **220** | *e*P | | **Pn** | **12 22 08.4** | **-1.1** |
| | baz=222 | | | | | | | |
| ESL | | | | *e*S | | **S** | **12 22 37.7** | **-0.3** |
| | baz=222 | | | | | | | |
| **TWQ1** | **Liyutan** | **2.03** | **243** | *e*P | | **Pn** | **12 22 09.4** | **-1.4** |
| | baz=244 | | | | | | | |
| TWQ1 | | | | *e*S | | **S** | **12 22 40.0** | **-0.4** |
| | baz=244 | | | | | | | |
| **WDT** | **Danda** | **2.12** | **225** | *e*P | | **Pn** | **12 22 12.0** | **-0.1** |
| | baz=213 | | | | | | | |
| WDT | | | | *e*S | | **S** | **12 22 43.5** | **+0.9** |
| | baz=213 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **2.19** | **231** | *e*P | | **Pn** | **12 22 12.8** | **+0.2** |
| | baz=227 | | | | | | | |
| SMLT | | | | *e*S | | **S** | **12 22 44.6** | **+1.0** |
| | baz=227 | | | | | | | |
| **EHY** | **Hungye** | **2.20** | **217** | *e*P | | **Pn** | **12 22 11.5** | **-1.1** |
| | baz=213 | | | | | | | |
| **TYC** | **Yuchr** | **2.21** | **232** | *e*P | | **Pn** | **12 22 12.1** | **-0.6** |
| | baz=228 | | | | | | | |
| TYC | | | | *e*S | | **S** | **12 22 44.1** | **+0.5** |
| | baz=228 | | | | | | | |
| **JIRB** | **Irabujima** | **2.23** | **101** | P | | **Pn** | **12 22 12.9** | **+0.1** |
| JIRB | | | | S | | **S** | **12 22 43.6** | **-0.4** |
| **JIKM** | **Ikemajima** | **2.28** | **98** | P | | **Pn** | **12 22 13.6** | **+0.2** |
| JIKM | | | | S | | **S** | **12 22 44.9** | **0.0** |
| **TWF1** | **Yuli** | **2.34** | **215** | *e*P | | **Pn** | **12 22 13.2** | **-0.9** |
| | baz=216 | | | | | | | |
| **JMJ** | **Miyako jima 2** | **2.34** | **101** | P | | **Pn** | **12 22 14.2** | **+0.2** |
| JMJ | | | | S | | **S** | **12 22 46.0** | **-0.1** |
| **YUS** | **Yu-Shan** | **2.43** | **223** | *e*P | | **Pn** | **12 22 16.2** | **+0.7** |
| | baz=214 | | | | | | | |
| YUS | | | | *e*S | | **S** | **12 22 50.9** | **+2.1** |
| | baz=214 | | | | | | | |
| **JOGS** | **Gusukube** | **2.45** | **102** | P | | **Pn** | **12 22 15.9** | **+0.6** |
| JOGS | | | | S | | **S** | **12 22 48.7** | **+0.4** |
| **ALS** | **Alishan** | **2.51** | **226** | *e*P | | **Pn** | **12 22 16.3** | **+0.1** |
| | baz=229 | | | | | | | |
| ALS | | | | *e*S | | **S** | **12 22 51.7** | **+1.6** |
| | baz=229 | | | | | | | |
| **CHKT** | **Chengkung** | **2.52** | **211** | *e*P | | **Pn** | **12 22 15.7** | **-0.3** |
| | baz=203 | | | | | | | |
| **CHN5** | **Tsauling** | **2.53** | **229** | *e*P | | **Pn** | **12 22 15.9** | **-0.4** |
| | baz=225 | | | | | | | |
| CHN5 | | | | *e*S | | **S** | **12 22 51.2** | **+1.0** |
| | baz=225 | | | | | | | |
| **ELDTW** | **Lidau** | **2.62** | **218** | *e*P | | **Pn** | **12 22 16.5** | **-0.9** |
| | baz=210 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ELDTW | | | | *e*S | **S** | **12 22 52.4** | **+0.3** |
| | baz=210 | | | | | | |
| **CHN4** | **Tsaushan** | **2.76** | **226** | *e*P | **Pn** | **12 22 16.6** | **-2.2** |
| | baz=223 | | | | | | |
| CHN4 | | | | *e*S | **S** | **12 22 55.7** | **+1.1** |
| | baz=223 | | | | | | |
| **STYT** | **Tauyuan** | **2.79** | **221** | *e*P | **Pn** | **12 22 18.4** | **-0.9** |
| | baz=225 | | | | | | |
| **WTP** | **Ta-pu** | **2.82** | **225** | *e*P | **Pn** | **12 22 19.8** | **+0.2** |
| | baz=227 | | | | | | |
| WTP | | | | *e*S | **S** | **12 22 56.3** | **+0.4** |
| | baz=227 | | | | | | |
| **CHN1** | **Nanshi** | **2.92** | **225** | *e*P | **Pn** | **12 22 20.6** | **0.0** |
| | baz=222 | | | | | | |
| CHN1 | | | | *e*S | **S** | **12 22 58.1** | **+0.2** |
| | baz=222 | | | | | | |

**SKO 21 12:34:16.0, 40°.69N × 20°.83E, h23 km, M0.6, ML1.0, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OHR** | **Ohrid** | **0.42** | **357** | *i* Pg | Pb | 12 34 24.4 | -0.5 |
| OHR | | | | *i* Sg | Sb | 12 34 31.1 | +0.1 |
| OHR | | | | *e*Lg | Lg | 12 34 32.3 | |
| | comp=N,23nm,0.5s | | | | | | |
| OHR | | | | *e*Lg | Lg | 12 34 32.4 | |
| | comp=E,44nm,0.5s | | | | | | |

*ISCJB **21** 12:40:58.2± 0.8, 26°.01S ± 0°.07 × 29°.58E ± 0°.04, h0 km, Error ellipse: s-maj=10.1km s-min=5.4km az=1.2*
*PRE **21** 12:40:58.1± 1.8, 26°.08S × 29°.60E, h0 km, ML2.5, Explosion*
**ISC 21 12:40:57.5± 1.0, 26°.01S ± 0°.05 × 29°.63E ± 0°.04, h0 km, n10, σ1§62/18, South Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ERPM** | **east rand prop** | **1.29** | **255** | *e*P | **Pg** | **12 41 21.6** | **-0.6** |
| ERPM | | | | *e*S | **Sg** | **12 41 38.7** | **-0.3** |
| ERPM | | | | AML | AML | 12 41 45.5 | |
| | comp=Z,35nm,0.2s | | | | | | |
| **WDLM** | **Western Deep L** | **2.03** | **258** | *e*P | **Pn** | **12 41 33.4** | **+0.4** |
| WDLM | | | | *e*S | **Sn** | **12 41 59.3** | **+0.1** |
| WDLM | | | | AML | AML | 12 42 03.3 | |
| | comp=Z,53nm,0.2s | | | | | | |
| **POGA** | **Pongola** | **2.23** | **128** | *e*P | **Pb** | **12 41 39.0** | **+0.4** |
| POGA | | | | *e*S | **Sb** | **12 42 05.6** | **-1.2** |
| POGA | | | | AML | AML | 12 42 10.4 | |
| | comp=Z,38nm,0.5s | | | | | | |
| **PRYS** | **Parys** | **2.23** | **245** | *e*P | **Pn** | **12 41 35.1** | **-0.7** |
| PRYS | | | | *e*S | **Sb** | **12 42 04.9** | **-2.0** |
| PRYS | | | | AML | AML | 12 42 08.9 | |
| | comp=Z,23nm,0.3s | | | | | | |
| **KSR** | **Koster** | **2.47** | **273** | *e*P | **Pn** | **12 41 40.2** | **+1.1** |
| KSR | | | | *e*S | **Sn** | **12 42 12.0** | **+1.9** |
| KSR | | | | AML | AML | 12 42 26.2 | |
| | comp=Z,12nm,0.7s | | | | | | |
| **MSNA** | **Messina** | **3.67** | **6** | *e*P | **Pn** | **12 41 57.7** | **+2.1** |
| MSNA | | | | *e*S | **Sn** | **12 42 38.3** | **-1.3** |
| MSNA | | | | AML | AML | 12 42 49.1 | |
| | comp=Z,12nm,0.2s | | | | | | |
| **LBTB** | **Lobatse** | **3.78** | **284** | *i* P | **Pb** | **12 42 06.5** | **+1.3** |
| LBTB | | | | *i* S | **Sb** | **12 42 48.1** | **-3.4** |
| **SWZ** | **Schweizer** | **4.02** | **252** | *e*P | **Pn** | **12 42 01.0** | **+0.6** |
| SWZ | | | | *e*S | **Sn** | **12 42 47.5** | **-0.8** |
| SWZ | | | | AML | AML | 12 43 01.7 | |
| | comp=Z,21nm,0.5s | | | | | | |
| **BOSA** | **Boshof** | **4.67** | **235** | *i* P | Pn | 12 42 13.8 | +4.4 |
| BOSA | | | | *i* S | **Sb** | **12 43 19.9** | **+2.5** |
| **MATP** | **Matopo** | **5.66** | **349** | *i* P | **Pn** | **12 42 22.5** | **-0.4** |
| MATP | | | | *i* S | Sg | 12 43 55.4 | -3.9 |

*DDA **21** 12:44:45.8, 36°.81N × 27°.49E, h7 km, Md2.6*
*ISK **21** 12:44:46.4, 36°.86N × 27°.58E, h5 km, MD2.7*
*CSEM **21** 12:44:47.7± 0.4, 36°.85N × 27°.57E, h2 km, MD2.6, Error ellipse: s-maj=10.7km s-min=6.3km az=144.0*
**ISC 21 12:44:44.4± 1.4, 36°.81N ± 0°.06 × 27°.73E ± 0°.04, h0 km ± 12 km, n11, σ0§95/20, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BDRM** | **Kayabasi** | **0.34** | **318** | *i* P | **Pg** | **12 44 51.3** | **+0.5** |
| BDRM | | | | *i* S | **Sg** | **12 44 55.2** | **-0.1** |
| **BDRM** | **Kayabasi** | **0.34** | **318** | P | **Pg** | **12 44 51.3** | **+0.5** |
| BDRM | | | | S | **Sg** | **12 44 55.2** | **-0.1** |
| **NIS1** | **Nisyros Isl.** | **0.49** | **245** | *e*PG | **Pb** | **12 44 55.6** | **-0.2** |
| NIS1 | | | | *e*SG | **Sb** | **12 45 02.5** | **-1.0** |
| **NIS1** | **Nisyros Isl.** | **0.49** | **245** | *e*Pg | **Pb** | **12 44 55.6** | **-0.2** |
| NIS1 | | | | *e*Sg | **Sb** | **12 45 02.5** | **-1.0** |
| **YER** | **Yerkesik** | **0.55** | **54** | *e*PG | **Pn** | **12 44 59.7** | **+0.2** |
| YER | | | | *e*SG | **Sn** | **12 45 09.6** | **+0.1** |
| **YER** | **Yerkesik** | **0.55** | **54** | *e*Pg | **Pn** | **12 44 59.7** | **+0.2** |
| YER | | | | *e*Sg | **Sn** | **12 45 09.6** | **+0.1** |
| **TURN** | **Turunc** | **0.71** | **85** | P | **Pg** | **12 44 57.6** | **-0.3** |
| TURN | | | | S | **Sg** | **12 45 06.1** | **-1.0** |
| **DALY** | **Dalyan (Mu¨la** | **0.74** | **89** | *e*PG | **Pn** | **12 45 04.1** | **+2.0** |
| **DALY** | **Dalyan (Mu¨la** | **0.74** | **89** | *e*Pg | **Pn** | **12 45 04.1** | **+2.0** |
| **AYDN** | **Tasoluk** | **0.85** | **8** | *i* P | **Pn** | **12 45 04.7** | **+1.0** |
| AYDN | | | | *i* S | **Sn** | **12 45 16.2** | **-0.8** |
| **AYDN** | **Tasoluk** | **0.85** | **8** | P | **Pn** | **12 45 04.7** | **+1.0** |
| AYDN | | | | S | **Sn** | **12 45 16.2** | **-0.8** |

*MOS **21** 12:45:54.8± 0.9, 15°.04N × 122°.51E, h44 km, mb5.0/30, Error ellipse: s-maj=11.1km s-min=5.8km az=113.8*
*ISCJB **21** 12:45:55.8± 0.4, 15°.18N ± 0°.02 × 122°.45E ± 0°.03, h42 km ± 3 km, mb4.7/87, MS3.9/12, Error ellipse: s-maj=4.8km s-min=3.3km az=164.9*
*MAN **21** 12:45:55, 15°.21N × 122°.39E, h41 km, mb5.5, ML4.5, MS4.8*
*MAN INTENSITY II - PASAY CITY; QUEZON CITY; GUINAYANGAN QUEZON PROVINCE.*
*BJI **21** 12:45:58.0, 14°.89N × 122°.28E, h66 km, mb4.6/36, mB5.1/27, Ms4.9/17, Ms7 4.4/14*
*IDC **21** 12:45:58.1± 2.5, 15°.01N × 122°.49E, h59 km ± 21 km, mb4.2/31, mb1 4.2/32, mb1mx4.2/45, mbtmp4.4/32, ML3.9/1, MS3.8/10, Ms1 3.9/10, ms1mx3.5/38, Error ellipse: s-maj=15.4km s-min=8.7km az=76.0*
*NEIC **21** 12:46:02.5± 1.2, 15°.01N × 122°.44E, h95 km ± 11 km, mb4.8/28, Error ellipse: s-maj=8.5km s-min=5.8km az=83.0*
*NEIC Felt [III PIVS] at Alabat and Daet and [II PIVS] at Alabang, Guinayangan, Pasay, Quezon City and Tagkawayan, Luzon. Also felt at Magalang and [II] at Manila.*
*BKK **21** 12:46:15.4± 1.9, 15°.N ± 11°.× 12°.2E ± °, h167 km ± 18 km, M4.3/25, mB5.0/7, mb4.5/25, Mw(mB)4.3/7*
**ISC 21 12:45:57.5± 0.6, 15°.17N ± 0°.03 × 122°.41E ± 0°.04, h46 km ± 5 km, n251, σ1§53/238, mb4.7/86, MS4.0/12, 15C-10D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BALP** | **Baler** | **0.98** | **305** | *e*P | Pn | 12 46 11.7 | -3.1 |
| BALP | | | | *e*S | **Sn** | **12 46 24.7** | **-3.0** |
| **GQP** | **Guinayangan** | **1.26** | **178** | *i* P | **Pn** | **12 46 16.8** | **-2.0** |
| GQP | | | | *i* S | **Sn** | **12 46 34.0** | **-0.4** |
| **PCPH** | **Palayan** | **1.32** | **287** | *e*P | **Pn** | **12 46 17.2** | **-2.3** |
| PCPH | | | | *e*S | **Sn** | **12 46 35.2** | **-0.8** |
| **LQP** | **Lukban** | **1.35** | **219** | *e*P | Pn | 12 46 17.1 | -3.0 |
| **TGY** | **Tagaytay City** | **1.77** | **233** | *i* P | **Pn** | **12 46 51.1** | **+3.8** |
| TGY | | | | *i* S | **Sn** | **12 46 51.1** | **+3.8** |
| **CAUP** | **Cauayan** | **1.85** | **342** | *e*P | **Pn** | **12 46 24.9** | **-1.9** |
| CAUP | | | | *e*S | **Sn** | **12 46 48.8** | **-0.2** |
| **AUQP** | **San Andres** | **1.86** | **172** | *e*P | **Pn** | **12 46 27.4** | **+0.5** |
| **PALP** | **Palanan** | **1.88** | **1** | *e*P | Pn | 12 46 24.4 | -2.8 |
| PALP | | | | *e*S | **Sn** | **12 46 48.3** | **-1.5** |
| **PVCP** | **Virac** | **2.31** | **133** | *e*P | **Pn** | **12 46 32.1** | **-1.0** |
| **SCZP** | **Santa Cruz** | **2.48** | **284** | *e*P | **Pn** | **12 46 33.6** | **-1.8** |
| **LUBP** | **Lubang** | **2.53** | **236** | *e*P | **Pn** | **12 46 36.0** | **-0.1** |
| **BOLP** | **Bolinao** | **2.68** | **297** | *e*P | **Pn** | **12 46 37.5** | **-0.7** |
| **OTRP** | **Odiongan** | **2.82** | **188** | *e*P | **Pn** | **12 46 40.0** | **-0.1** |
| **APYP** | **Conner** | **2.90** | **338** | *e*P | **Pn** | **12 46 39.2** | **-1.9** |
| **ABRA** | **Dolores** | **2.95** | **327** | *e*P | **Pn** | **12 46 41.8** | **-0.1** |
| **SZP** | **Santa** | **3.02** | **322** | *e*Pn | Pn | 12 46 51.5 | +8.8 |
| **CNP** | **Catarman** | **3.44** | **140** | *e*P | **Pn** | **12 46 48.2** | **-0.4** |
| **PIP** | **Pasuquin** | **3.57** | **332** | *i* P | **Pn** | **12 46 51.8** | **+1.4** |
| PIP | | | | *e*S | **Sn** | **12 47 35.7** | **+4.3** |
| **RCP** | **Roxas** | **3.60** | **175** | *e*P | **Pn** | **12 46 52.3** | **+1.4** |
| **BUSP** | **Coron** | **3.81** | **215** | *e*P | **Pn** | **12 46 53.0** | **-0.7** |
| **CUYO** | **Cuyo Island** | **4.50** | **198** | *e*P | **Pn** | **12 47 01.6** | **-1.6** |
| **GUIM** | **Jordan** | **4.52** | **178** | *e*P | Pn | 12 46 57.8 | -5.7 |
| **OCLP** | **Ormoc** | **4.62** | **152** | *e*P | **Pn** | **12 47 05.2** | **+0.3** |
| **PLP** | **Palo** | **4.71** | **148** | *e*P | **Pn** | **12 47 05.5** | **-0.5** |
| PLP | | | | *e*S | **Sn** | **12 47 54.9** | **-4.5** |
| **ENPP** | **El Nido** | **4.89** | **217** | *e*P | **Pn** | **12 47 11.0** | **+2.4** |
| **MSLP** | **Maasin** | **5.55** | **154** | *e*P | Pn | 12 47 24.2 | +6.6 |
| **PPR** | **Puerto Princes** | **6.45** | **214** | *i* P | **Pn** | **12 47 31.3** | **+1.3** |
| **GTOI** | **Gorontalo** | **14.46** | **178** | P | P | 12 49 35.3 | +10 |
| **MRSI** | **Marisa** | **14.61** | **182** | P | **P** | **12 49 27.3** | **+0.4** |
| **MPSI** | **Mapaga** | **14.95** | **190** | P | P | 12 49 37.8 | +7.2 |
| **TNTI** | **Ternate** | **15.12** | **161** | P | P | 12 49 39.0 | +6.4 |
| **TNTI** | **Ternate** | **15.12** | **161** | *e*Pn | **Pn** | **12 49 28.2** | **0.0** |
| **APSI** | **Ampana** | **16.00** | **183** | P | **P** | **12 49 46.7** | **+4.4** |
| **LUWI** | **Luwuk** | **16.11** | **179** | *e*Pn | P | 12 49 50.0 | +6.4 |
| | 95nm,1.2s | | | | | | |
| **SBUM** | **Sibu** | **16.14** | **219** | *e*Pn | **P** | **12 49 44.1** | **+0.1** |
| | 24nm,0.8s | | | | | | |
| **WHN** | **Wuhan** | **16.99** | **336** | P | **P** | **12 49 54.0** | **+0.7** |
| **NJ2** | **Nanjing** | **17.11** | **350** | *e*P | **P** | **12 49 56.3** | **+1.7** |
| NJ2 | | | | PMZ | | | |
| | 40nm,1.1s | | | | | | |
| **SANI** | **Sanana** | **17.47** | **168** | P | **P** | **12 50 01.0** | **+2.3** |
| **SKNT** | **Sakolnakorn** | **17.80** | **278** | P | P | 12 50 10.8 | +8.5 |
| **KSM** | **Kuching** | **18.11** | **222** | *e*P | **Pn** | **12 50 08.6** | **+2.8** |
| | 24nm,1.2s | | | | | | |
| **SIJI** | **Sorong** | **18.19** | **150** | P | **P** | **12 50 05.2** | **-1.4** |
| | 0.4nm,0.3s,baz=336,slow=20,SNR=2.1 | | | | | | |
| **GYA** | **Guiyang** | **18.49** | **310** | *e*P | **Pn** | **12 50 14.0** | **+3.5** |
| GYA | | | | pP | pP | 12 50 27.4 | +6.6 |
| GYA | | | | S | **Sn** | **12 53 32.8** | **-3.5** |
| GYA | | | | sS | **sS** | **12 53 55.0** | **-1.1** |
| GYA | | | | SS | SnSn | 12 54 02.6 | +12 |
| GYA | | | | PMZ | | | |
| | 10.0nm,0.7s | | | | | | |
| GYA | | | | PMZ | | | |
| | 110nm,4.6s | | | | | | |
| GYA | | | | LN | | | |
| | 460nm,15.8s | | | | | | |
| GYA | | | | LE | | | |
| | 340nm,16.0s | | | | | | |
| GYA | | | | LZ | | | |
| | 410nm,15.4s | | | | | | |
| **NONG** | **Nongkai** | **18.68** | **282** | P | Pn | 12 50 20.6 | +7.9 |
| **KHON** | **Khomkaen** | **18.88** | **276** | P | **Pn** | **12 50 17.6** | **+2.4** |
| | 16nm,0.7s,528nm | | | | | | |
| **KBKI** | **Kotabaru** | **19.36** | **199** | P | **Pn** | **12 50 21.4** | **+0.5** |
| | 127nm,0.7s,2μm | | | | | | |
| **JNU** | **Nakatsue** | **19.45** | **22** | P | **Pn** | **12 50 24.3** | **+2.4** |
| | 0.2nm,0.3s,baz=204,slow=11,SNR=3.5 | | | | | | |
| JNU | | | | LR | LR | 12 58 46.8 | |
| | comp=Z,142nm,18.6s,baz=304,slow=39 | | | | | | |
| **MSAI** | **Masohi** | **19.50** | **160** | P | pP | 12 50 37.3 | +5.4 |
| **AAI** | **Ambon** | **19.59** | **163** | P | pP | 12 50 37.1 | +4.2 |
| **CHBT** | **CHBT** | **19.63** | **265** | P | **Pn** | **12 50 23.8** | **-0.3** |
| | 53nm,1.2s | | | | | | |
| **BBKI** | **Banjar Baru** | **19.97** | **203** | P | **Pn** | **12 50 27.4** | **-0.7** |
| | 77nm,1.5,2μm | | | | | | |
| **KAPI** | **Kappang** | **20.23** | **188** | P | Pn | 12 50 29.9 | -1.2 |
| | 9.3nm,0.7s,baz=344,slow=4.8,SNR=5.0 | | | | | | |
| **KAPI** | **Kappang** | **20.23** | **188** | *e*P | Pn | 12 50 31.2 | +0.1 |
| | 44nm,1.4s | | | | | | |
| **NAYO** | **Nakonayok** | **20.41** | **270** | P | Pn | 12 50 32.2 | -1.1 |
| | 68nm,1.0s | | | | | | |
| **BKSI** | **Bulukumba** | **20.49** | **187** | P | Pn | 12 50 44.3 | +10 |
| **PBKT** | **Sadao Pong** | **20.66** | **277** | P | Pn | 12 50 34.8 | -1.5 |
| | 42nm,1.1s,1μm | | | | | | |
| **KMI** | **Kunming** | **20.92** | **301** | P | Pn | 12 50 39.4 | -0.3 |
| KMI | | | | pP | pP | 12 50 53.3 | +5.7 |
| KMI | | | | sP | sP | 12 51 03.5 | +10 |
| KMI | | | | S | **S** | **12 54 23.4** | **-4.2** |
| KMI | | | | sS | sS | 12 54 49.1 | +3.7 |
| KMI | | | | SS | SnSn | 12 55 03.3 | +13 |
| KMI | | | | PMZ | | | |
| | 24nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | 820nm,5.7s | | | | | | |
| **PATY** | **Pattaya** | **21.01** | **267** | P | **P** | **12 50 40.2** | **+2.8** |
| | 11nm,0.9s | | | | | | |
| **NANT** | **Nan** | **21.07** | **283** | P | **P** | **12 50 38.8** | **+0.8** |
| | 8.4nm,1.0s | | | | | | |
| **UTTA** | **Uttaradit** | **21.11** | **280** | P | **P** | **12 50 39.7** | **+1.3** |
| | 4.1nm,0.8s | | | | | | |
| **TIA** | **Tai'an** | **21.48** | **348** | P | **P** | **12 50 42.6** | **+0.4** |
| TIA | | | | PMZ | | | |
| | 20nm,0.9s | | | | | | |
| **CRAI** | **Chiangrai** | **21.57** | **287** | P | P | 12 50 38.8 | -4.6 |
| **TJN** | **Taejon** | **21.58** | **11** | *e*P | **P** | **12 50 43.3** | **+0.1** |
| **GUMO** | **Guam** | **21.82** | **91** | LR | LR | 12 58 24.3 | |
| | 127nm,Z,238nm,18.6s,baz=258,slow=34 | | | | | | |
| **LAMP** | **Lampang** | **22.05** | **282** | P | **P** | **12 50 50.6** | **+2.1** |
| | 13nm,0.9s | | | | | | |
| **UTHA** | **Uthaitani** | **22.14** | **274** | P | **P** | **12 50 51.6** | **+2.1** |
| | 10.0nm,1.2s,106nm | | | | | | |
| **PHET** | **Kaeng Krachan** | **22.21** | **267** | P | **P** | **12 50 52.1** | **+1.9** |
| | 17nm,1.0s,173nm | | | | | | |
| **SRDT** | **SRDT** | **22.53** | **271** | P | **P** | **12 50 54.6** | **+0.9** |
| | 259nm,1.0s,24μm | | | | | | |
| **CM01** | **Chiang Mai Arr** | **22.67** | **281** | *e*P | **P** | **12 50 54.7** | **-0.5** |
| **UMPA** | **Umpang Tak** | **22.69** | **276** | P | **P** | **12 50 57.3** | **+1.9** |
| | 19nm,1.1s,641nm | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.69** | **282** | P | **P** | **12 50 55.8** | **+0.4** |
| | 23nm,0.8s,baz=93,slow=7.4,SNR=101 | | | | | | |
| CMAR | | | | PcP | **PcP** | **12 54 46.9** | **+0.2** |
| | 0.8nm,0.6s,baz=84,slow=0.8,SNR=4.5 | | | | | | |
| CMAR | | | | LR | LR | 13 00 02.4 | |
| | comp=Z,213nm,18.6s,baz=103,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.69** | **282** | *ce*P | **P** | **12 50 56.7** | **+1.3** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **KSAR** | **Wonju Array Be** | **22.71** | **11** | P | **P** | **12 50 55.5** | **+0.2** |
| **KSAR** | **Wonju Array Be** | **22.71** | **11** | P | **P** | **12 50 55.5** | **+0.2** |
| **CHTO** | **Chiang Mai** | **22.72** | **282** | P | **P** | **12 50 56.6** | **+0.9** |
| | comp=Z,74nm,2.7s,comp=Z,4μm | | | | | | |
| **CHTO** | **Chiang Mai** | **22.72** | **282** | *e*P | **P** | **12 50 56.7** | **+1.0** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.72** | **282** | *e*P | **P** | **12 50 56.7** | **+1.0** |
| | comp=Z,11nm,0.9s | | | | | | |
| **KSRS** | **Korea Array** | **22.73** | **11** | P | **P** | **12 50 55.5** | **0.0** |
| | comp=Z,3.8nm,0.6s,baz=198,slow=11,SNR=16 | | | | | | |
| KSRS | | | | LR | LR | 12 59 49.7 | |
| | comp=Z,107nm,18.4s,baz=205,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **22.73** | **11** | P | **P** | **12 50 55.5** | **0.0** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,107nm,18.4s | | | | | | |
| **CMAI** | **Chiengmai2** | **22.76** | **285** | P | **P** | **12 50 58.3** | **+2.0** |
| | comp=Z,77nm,0.8s | | | | | | |
| **KHLT** | **Khaolaem Dam** | **23.01** | **272** | P | **P** | **12 50 59.8** | **+1.1** |
| | comp=Z,32nm,1.2s | | | | | | |
| **TPI** | **Tanjungpandan** | **23.03** | **221** | P | **P** | **12 50 58.3** | **-0.6** |
| | comp=Z,75nm,1.1s,comp=Z,794nm | | | | | | |
| **CD2** | **Chengdu** | **23.18** | **316** | *e*P | **P** | **12 51 01.0** | **+0.7** |
| CD2 | | | | pP | pP | 12 51 17.3 | +5.7 |
| CD2 | | | | sP | sP | 12 51 26.4 | +9.0 |
| CD2 | | | | S | **S** | **12 55 08.8** | **+0.1** |
| CD2 | | | | PMZ | | | |
| | comp=Z,60nm,0.7s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,180nm,5.2s | | | | | | |
| **TRTT** | **Trang** | **23.41** | **254** | P | **P** | **12 51 02.6** | **0.0** |
| | comp=Z,52nm,1.1s | | | | | | |
| **SMPI** | **Sarmi** | **23.48** | **135** | P | **P** | **12 51 06.3** | **+3.1** |
| **KULM** | **Kulim** | **23.53** | **248** | *e*P | **P** | **12 51 03.1** | **-0.6** |
| | comp=Z,33nm,1.4s | | | | | | |
| **IPM** | **Ipoh** | **23.56** | **245** | *e*P | **P** | **12 50 59.9** | **-4.2** |
| | comp=Z,29nm,0.7s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **23.58** | **224** | P | **P** | **12 51 06.4** | **+2.2** |
| **KMMI** | **Kalianget** | **23.61** | **201** | P | **P** | **12 51 05.5** | **+1.1** |
| | comp=Z,75nm,1.1s | | | | | | |
| **NGJI** | **Ngawi** | **24.88** | **207** | P | P | 12 51 21.2 | +5.1 |
| **BATI** | **Baumata** | **25.25** | **177** | P | **P** | **12 51 17.9** | **-1.6** |
| | comp=Z,46nm,0.8s,baz=135,slow=2.5,SNR=5.4 | | | | | | |
| **BATI** | **Baumata** | **25.25** | **177** | P | **P** | **12 51 20.5** | **+1.1** |
| | comp=Z,37nm,1.0s | | | | | | |
| **BJI** | **Beijing** | **25.37** | **349** | P | **P** | **12 51 21.6** | **+1.3** |
| BJI | | | | PMZ | | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **25.52** | **31** | P | **P** | **12 51 21.9** | **+0.1** |
| | comp=Z,1.3nm,0.6s,baz=199,slow=8.9,SNR=3.7 | | | | | | |
| **PSI** | **Prapat** | **26.21** | **244** | P | **P** | **12 51 28.2** | **-0.1** |
| | comp=Z,11nm,0.9s,baz=358,slow=2.3,SNR=9.9 | | | | | | |
| **PSI** | **Prapat** | **26.21** | **244** | P | **P** | **12 51 28.2** | **-0.1** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **PSI** | **Prapat** | **26.21** | **244** | *e*P | **P** | **12 51 28.0** | **-0.3** |
| | comp=Z,24nm,1.2s | | | | | | |
| **SNY** | **Shenyang** | **26.58** | **2** | P | P | 12 51 38.8 | +7.5 |
| SNY | | | | PMZ | | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **MDSI** | **Maura Dua** | **26.60** | **224** | P | **P** | **12 51 31.9** | **+0.2** |
| | comp=Z,19nm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **26.62** | **325** | *e*P | **P** | **12 51 33.4** | **+1.4** |
| LZH | | | | pP | pP | 12 51 50.3 | +6.2 |
| LZH | | | | sP | sP | 12 51 59.4 | +10 |
| LZH | | | | PP | **PnPn** | **12 52 20.3** | **+5.9** |
| LZH | | | | *e*S | **S** | **12 56 01.5** | **-2.4** |
| LZH | | | | sS | sS | 12 56 31.3 | +6.9 |
| LZH | | | | PMZ | | | |
| | comp=Z,26nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,120nm,4.8s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,490nm,13.0s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,500nm,12.7s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,600nm,15.2s | | | | | | |
| **MNSI** | **Mandailing Nat** | **26.69** | **240** | P | **P** | **12 51 34.3** | **+1.8** |
| **PPI** | **Padang Panjang** | **26.73** | **236** | P | **P** | **12 51 33.8** | **+0.9** |
| **HHC** | **Hu-ho-hao-te** | **27.27** | **342** | *e*P | **P** | **12 51 40.6** | **+3.0** |
| HHC | | | | pP | pP | 12 51 58.8 | +9.0 |
| HHC | | | | S | **S** | **12 56 12.6** | **-1.2** |
| HHC | | | | PMZ | | | |
| | comp=Z,24nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,560nm,5.6s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,680nm,14.1s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,430nm,13.5s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,500nm,15.3s | | | | | | |
| **MDJ** | **Mudanjiang** | **29.98** | **10** | P | **P** | **12 52 02.5** | **+1.0** |
| MDJ | | | | PMZ | | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,160nm,5.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **30.06** | **14** | P | **P** | **12 52 03.7** | **+1.5** |
| | comp=Z,1.4nm,0.5s,baz=212,slow=6.6,SNR=3.9 | | | | | | |
| **LSA** | **Lhasa** | **32.18** | **302** | *e*P | **P** | **12 52 24.0** | **+2.3** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **32.18** | **302** | *e*P | **P** | **12 52 24.0** | **+2.3** |
| | comp=Z,7.9nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **33.58** | **27** | P | **P** | **12 52 34.6** | **+1.5** |
| | comp=Z,2.2nm,0.6s,baz=241,slow=11,SNR=4.0 | | | | | | |
| **ASAJ** | **Asahikawa** | **33.58** | **27** | P | **P** | **12 52 34.7** | **+1.5** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **34.41** | **296** | *e*P | **P** | **12 52 41.2** | **+0.2** |
| | comp=Z,12nm,0.6s | | | | | | |
| **ODAN** | **Odare** | **34.58** | **295** | *e*P | **P** | **12 52 42.7** | **+0.3** |
| | comp=Z,75nm,0.9s | | | | | | |
| **KLR** | **Kul'dur** | **34.82** | **11** | *e*P | **P** | **12 52 42.8** | **-1.0** |
| **SONM** | **Songino Array** | **35.16** | **341** | P | **P** | **12 52 47.5** | **+0.5** |
| | comp=Z,2.9nm,0.6s,baz=161,slow=9.2,SNR=12 | | | | | | |
| SONM | | | | LR | LR | 13 09 15.2 | |
| | comp=Z,288nm,18.3s,baz=158,slow=40 | | | | | | |
| **RAMN** | **Ramite** | **35.29** | **295** | *e*P | **P** | **12 52 49.1** | **+0.6** |
| | comp=Z,48nm,0.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **35.94** | **24** | *e*P | **P** | **12 52 54.7** | **+1.2** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **GUN** | **Gumba** | **36.12** | **297** | *e*P | **P** | **12 52 56.2** | **+0.5** |
| | comp=Z,116nm,0.9s | | | | | | |
| **MBWA** | **Marble Bar** | **36.20** | **184** | *e*P | **P** | **12 52 54.2** | **-1.7** |
| **PKI** | **Pulchoki** | **36.45** | **296** | *e*P | **P** | **12 52 58.4** | **-0.2** |
| | comp=Z,64nm,1.0s | | | | | | |
| **PKIN** | **Phulchoki** | **36.47** | **296** | *e*P | **P** | **12 52 58.8** | **+0.2** |
| | comp=Z,14nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **36.61** | **296** | *e*P | **P** | **12 52 59.8** | **0.0** |
| | comp=Z,70nm,1.1s | | | | | | |
| **DMN** | **Daman** | **36.73** | **296** | *e*P | **P** | **12 53 00.9** | **+0.1** |
| | comp=Z,83nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **36.81** | **161** | *e*P | P | 12 52 56.0 | -5.2 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,35nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **36.81** | **161** | *e*P | P | 12 52 55.9 | -5.2 |
| | comp=Z,12nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **36.81** | **161** | P | P | 12 52 57.3 | -4.0 |
| | comp=Z,4.8nm,0.6s,baz=350,slow=9.0,SNR=17 | | | | | | |
| WRA | | | | S | S | 12 58 35.8 | -6.7 |
| | comp=Z,1.6nm,0.9s,baz=344,slow=14,SNR=4.3 | | | | | | |
| WRA | | | | LR | LR | 13 10 53.5 | |
| | comp=Z,62nm,18.1s,baz=135,slow=41 | | | | | | |
| **GKN** | **Gorkha** | **37.21** | **296** | *e*P | **P** | **12 53 04.7** | **-0.1** |
| | comp=Z,89nm,0.9s | | | | | | |
| **DANN** | **Dangsing** | **38.04** | **297** | *e*P | **P** | **12 53 12.1** | **+0.1** |
| **KOLN** | **Koldanda** | **38.06** | **296** | *e*P | **P** | **12 53 12.2** | **+0.1** |
| | comp=Z,28nm,0.8s | | | | | | |
| **ZAK** | **Zakamensk** | **38.39** | **340** | *e*P | **P** | **12 53 14.4** | **+0.1** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.7s | | | | | | |
| **TLY** | **Talaya** | **39.40** | **342** | P | **P** | **12 53 22.6** | **-0.1** |
| | comp=Z,4.1nm,0.4s,baz=170,slow=4.5,SNR=7.4 | | | | | | |
| **TLY** | **Talaya** | **39.40** | **342** | *e*P | **P** | **12 53 23.3** | **+0.6** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,203nm,17.0s | | | | | | |
| **TLY** | **Talaya** | **39.40** | **342** | *e*P | **P** | **12 53 23.7** | **+1.0** |
| | comp=Z,7.7nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **40.20** | **164** | P | **P** | **12 53 27.8** | **-1.9** |
| | comp=Z,2.9nm,0.4s,baz=338,slow=7.0,SNR=25 | | | | | | |
| ASAR | | | | S | **S** | **12 59 31.2** | **-2.4** |
| | comp=Z,1.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,19nm,0.7s | | | | | | | |
| KSH | **Kashi** | **47.19** | **310** | P | P | 12 54 29.1 | +3.2 | |
| KSH | | | | *ep*P | pP | 12 54 47.8 | +9.2 | |
| KSH | | | | PcS | **PcS** | **12 59 54.1** | **+2.0** | |
| KSH | | | | S | **S** | **13 01 16.3** | **+0.7** | |
| KSH | | | | ScS | **ScS** | **13 04 13.6** | **-2.8** | |
| KSH | | | | SS | **SS** | **13 04 40.8** | **-2.4** | |
| KSH | | | | PMZ | | | | |
| | comp=Z,200nm,6.0s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,950nm,9.8s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,280nm,8.2s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,220nm,8.3s | | | | | | | |
| NWAO | **Narrogin (SRO)** | **48.08** | **186** | P | **P** | **12 54 30.9** | **-1.7** | |
| | comp=Z,9.9nm,0.7s,baz=224,slow=0.2,SNR=11 | | | | | | | |
| ZALV | **Zalesovo Beam** | **48.54** | **331** | P | **P** | **12 54 36.3** | **+0.3** | |
| | comp=Z,10nm,0.6s,baz=128,slow=6.8,SNR=53 | | | | | | | |
| ZALV | | | | LR | LR | 13 15 48.1 | | |
| | comp=Z,117nm,18.1s,baz=256,slow=37 | | | | | | | |
| AAK | **Ala-Archa** | **49.22** | **314** | *ep* | **P** | **12 54 42.9** | **+1.3** | |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| AAK | **Ala-Archa** | **49.22** | **314** | *ep* | **P** | **12 54 43.0** | **+1.5** | |
| BBOO | **Buckleboo** | **49.47** | **165** | *ep* | **P** | **12 54 42.3** | **-1.0** | |
| | comp=Z,204nm,2.8s | | | | | | | |
| NVS | **Novosibirsk** | **49.82** | **331** | *ep* | **P** | **12 54 45.9** | **+0.2** | |
| NVS | | | | pmax | pmax | | | |
| | comp=N,14nm,1.2s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=E,13nm,1.2s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.2s | | | | | | | |
| KURK | **Kurchatov** | **49.92** | **325** | *ep* | **P** | **12 54 47.3** | **+0.8** | |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,143nm,1.0s | | | | | | | |
| KURK | **Kurchatov** | **49.92** | **325** | *ep* | **P** | **12 54 47.3** | **+0.8** | |
| | comp=Z,143nm,1.0s | | | | | | | |
| MNAS | **Manas** | **50.58** | **313** | P | **P** | **12 54 52.3** | **+0.5** | |
| MNAS | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| KBL | **Kabul** | **51.50** | **302** | *ep* | **P** | **12 55 00.1** | **+1.1** | |
| KBL | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| KBL | **Kabul** | **51.50** | **302** | *ep* | **P** | **12 55 00.1** | **+1.1** | |
| | comp=Z,14nm,1.0s | | | | | | | |
| KK31 | **Karatay Array** | **52.16** | **313** | *i* P | **P** | **12 55 04.2** | **+0.7** | |
| KK31 | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| KKAR | **Karatay Array** | **52.16** | **313** | *ep* | **P** | **12 55 04.4** | **+0.9** | |
| KKAR | **Karatay Array** | **52.16** | **313** | *ep* | **P** | **12 55 04.4** | **+0.9** | |
| OTUK | **Ortayu** | **52.57** | **320** | P | **P** | **12 55 06.9** | **+0.4** | |
| OTUK | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| VOSK | **Vostochnaya** | **55.06** | **325** | P | **P** | **12 55 24.7** | **+0.1** | |
| VOSK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| BVA0 | **Borovoye Array** | **55.51** | **325** | *i* P | **P** | **12 55 27.7** | **-0.1** | |
| BVA0 | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.5s | | | | | | | |
| BRVK | **Borovoye** | **55.58** | **325** | *ep* | **P** | **12 55 29.3** | **+1.0** | |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| BRVK | **Borovoye** | **55.58** | **325** | *ep* | **P** | **12 55 29.3** | **+1.0** | |
| | comp=Z,16nm,0.8s | | | | | | | |
| CHKZ | **Chkalovo** | **55.64** | **326** | P | **P** | **12 55 28.8** | **+0.1** | |
| CHKZ | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| ZRNK | **Zerenda** | **56.26** | **324** | P | **P** | **12 55 33.7** | **+0.5** | |
| ZRNK | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.8s | | | | | | | |
| IMYA | **Miami** | **58.95** | **303** | *ep* | **P** | **12 55 53.3** | **+0.7** | |
| BILL | **Bilibino** | **59.81** | **18** | P | **P** | **12 55 57.0** | **-0.8** | |
| BILL | | | | *e**PP | pP | 12 56 15.6 | +4.7 | |
| BILL | | | | | | 12 56 41.0 | | |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| BILL | | | | MLR | MLR | | | |
| | comp=Z,109nm,17.0s | | | | | | | |
| IPAY | **Payeh** | **59.85** | **304** | *ep* | **P** | **12 55 59.3** | **+0.5** | |
| ITEG | **Tejag** | **59.93** | **299** | *ep* | **P** | **12 55 59.4** | **0.0** | |
| IEMG | **Emamgholi** | **60.17** | **305** | *ep* | **P** | **12 56 02.2** | **+1.0** | |
| IKRD | **Kardeh** | **60.25** | **304** | *ep* | P | 12 55 57.1 | -4.6 | |
| GEYT | **Alibeck** | **60.63** | **305** | P | **P** | **12 56 04.2** | **+0.3** | |
| | comp=Z,10nm,0.6s,baz=154,slow=4.1,SNR=18 | | | | | | | |
| AB31 | **Akbulak array** | **60.73** | **318** | *i* P | **P** | **12 56 04.6** | **+0.3** | |
| AB31 | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| ABKAR | **Akbulak array** | **60.73** | **318** | *ep* | **P** | **12 56 04.9** | **+0.6** | |
| SVE | **Sverdlovsk** | **62.07** | **327** | ⇓*i* P | **P** | **12 56 14.3** | **+1.0** | |
| SVE | | | | pmax | pmax | | | |
| | comp=Z,25nm,1.0s | | | | | | | |
| AKTO | **Aktyubinsk** | **62.17** | **319** | P | **P** | **12 56 14.5** | **+0.4** | |
| | comp=Z,4.9nm,0.5s,baz=93,slow=8.9,SNR=15 | | | | | | | |
| ARU | **Arti** | **63.08** | **326** | P | **P** | **12 56 20.0** | **-0.1** | |
| | comp=Z,0.7nm,0.4s,baz=287,slow=19 | | | | | | | |
| ARU | **Arti** | **63.08** | **326** | *d* P | **P** | **12 56 19.9** | **-0.1** | |
| ARU | | | | *PP | **pP** | **12 56 34.5** | **+1.3** | |
| ARU | | | | | | 12 58 35.9 | | |
| ARU | | | | S | **S** | **13 04 45.0** | **-2.4** | |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| ARU | **Arti** | **63.08** | **326** | *ep* | **P** | **12 56 20.1** | **-0.1** | |
| | comp=Z,16nm,0.5s | | | | | | | |
| IGLO | **Ghaloghah** | **64.01** | **303** | *ep* | **P** | **12 56 27.4** | **+0.6** | |
| KBZ | **Khabaz** | **72.14** | **312** | P | **P** | **12 57 17.9** | **+0.5** | |
| | comp=Z,7.4nm,0.9s,baz=154,slow=6.0,SNR=6.9 | | | | | | | |
| KIV | **Kislovodsk** | **72.28** | **312** | *ep* | **P** | **12 57 18.8** | **+0.4** | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,37nm,1.1s | | | | | | | |
| KIV | **Kislovodsk** | **72.28** | **312** | *ep* | **P** | **12 57 19.3** | **+0.9** | |
| | comp=Z,30nm,0.9s | | | | | | | |
| RAYN | **Ar Rayn** | **72.30** | **290** | *ep* | **P** | **12 57 19.2** | **+0.4** | |
| | comp=Z,11nm,0.9s | | | | | | | |
| KLMR | **Klimovskoe** | **73.42** | **330** | *ep* | **P** | **12 57 23.5** | **-1.2** | |
| KLMR | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.3s | | | | | | | |
| CAST | **Castle Rocks** | **74.56** | **28** | *ep* | **P** | **12 57 32.9** | **+1.6** | |
| | comp=Z,21nm,0.8s | | | | | | | |
| BPAW | **Bear Paw Mtn.** | **75.01** | **27** | *ep* | **P** | **12 57 35.4** | **+1.5** | |
| | comp=Z,18nm,0.9s | | | | | | | |
| MLY | **Manley** | **75.05** | **26** | *ep* | **P** | **12 57 36.0** | **+1.8** | |
| | comp=Z,9.2nm,0.8s | | | | | | | |
| KTH | **Kantishna Hill** | **75.07** | **28** | P | **P** | **12 57 34.8** | **+0.5** | |
| COLD | **Coldfoot** | **75.13** | **24** | *ep* | **P** | **12 57 36.3** | **+1.8** | |
| | comp=Z,7.6nm,1.0s | | | | | | | |
| OBN | **Obninsk** | **75.34** | **324** | ⇑*ep* | **P** | **12 57 35.9** | **0.0** | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| OBN | | | | MLR | MLR | | | |
| | comp=Z,130nm,20.0s | | | | | | | |
| MCK | **McKinley** | **75.94** | **27** | *ep* | **P** | **12 57 40.1** | **+0.8** | |
| MCK | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.8s | | | | | | | |
| MCK | **McKinley** | **75.94** | **27** | *ep* | **P** | **12 57 40.1** | **+0.8** | |
| | comp=Z,18nm,0.8s | | | | | | | |
| COLA | **College** | **76.29** | **26** | *ep* | **P** | **12 57 38.2** | **-2.9** | |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| CCB | **Clear Creek Bu** | **76.33** | **26** | *ep* | **P** | **12 57 42.4** | **+1.0** | |
| | comp=Z,44nm,2.2s | | | | | | | |
| ILAR | **Eielson Array** | **76.71** | **26** | P | **P** | **12 57 43.0** | **-0.5** | |
| | comp=Z,0.8nm,0.6s,baz=248,slow=4.1,SNR=15 | | | | | | | |
| ILAR | | | | LR | LR | 13 34 36.4 | | |
| | comp=Z,83nm,18.6s,baz=86,slow=38 | | | | | | | |
| RIDG | **Independ'e Rid** | **77.74** | **27** | *ep* | **P** | **12 57 50.1** | **+0.6** | |
| | comp=Z,13nm,0.8s | | | | | | | |
| ARCES | **ARCESS Array B** | **78.31** | **339** | P | **P** | **12 57 53.0** | **+0.6** | |
| | comp=Z,4.7nm,0.6s,baz=78,slow=7.5,SNR=37 | | | | | | | |
| EGAK | **Eagle** | **79.13** | **26** | *ep* | **P** | **12 57 58.4** | **+1.4** | |
| | comp=Z,5.5nm,0.9s | | | | | | | |
| BRTR | **Keskin Array B** | **79.54** | **308** | P | **P** | **12 57 59.4** | **-0.6** | |
| | comp=Z,0.3nm,0.3s,baz=59,slow=9.2,SNR=3.2 | | | | | | | |
| BRTR | **Keskin Array B** | **79.54** | **308** | *i* P | P | 12 58 05.5 | +5.6 | |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| FINES | **FINESS Array B** | **79.81** | **331** | P | **P** | **12 58 01.0** | **+0.3** | |
| | comp=Z,4.0nm,0.5s,baz=64,slow=4.8,SNR=31 | | | | | | | |
| VSU | **Vasula** | **80.15** | **328** | *ep* | **P** | **12 58 01.7** | **-0.9** | |
| VSU | | | | pmax | pmax | | | |
| | comp=Z,69nm,1.0s | | | | | | | |
| BR231 | **Keskin MP Arra** | **80.17** | **309** | *ep* | **P** | **12 58 05.5** | **+2.2** | |
| AKASG | **Malin Array Be** | **80.41** | **320** | P | **P** | **12 58 03.2** | **-1.0** | |
| | comp=Z,1.4nm,0.5s,baz=64,slow=4.9,SNR=7.6 | | | | | | | |
| AKASG | **Malin Array Be** | **80.41** | **320** | *ce*P | **P** | **12 58 03.7** | **-0.5** | |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| KIEV | **Kiev** | **80.42** | **320** | *ep* | **P** | **12 58 04.0** | **-0.2** | |
| KIEV | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| TESR | **Tescani** | **83.04** | **316** | ⇑*i* P | **P** | **12 58 18.5** | **+0.3** | |
| VRI | **Vrincioaia** | **83.15** | **316** | ⇓*i* P | **P** | **12 58 20.3** | **+1.5** | |
| SUW | **Suwalki** | **83.19** | **324** | *ep* | **P** | **12 58 19.2** | **+0.5** | |
| SUW | **Suwalki** | **83.19** | **324** | *ep* | **P** | **12 58 19.3** | **+0.5** | |
| BURAR | **Bucovina Array** | **83.70** | **318** | ⇓*i* P | **P** | **12 58 22.4** | **+0.7** | |
| BUR04 | **Bucovina Ar. S** | **83.70** | **318** | *ep* | **P** | **12 58 22.0** | **+0.3** | |
| MLR | **Muntele Rosu** | **83.78** | **315** | ⇑*i* P | **P** | **12 58 22.9** | **+0.7** | |
| KWP | **Kalwaria Pacla** | **84.73** | **320** | *ep* | **P** | **12 58 27.9** | **+1.1** | |
| KWP | **Kalwaria Pacla** | **84.73** | **320** | *ep* | **P** | **12 58 27.9** | **+1.1** | |
| UZH | **Uzhgorod** | **85.29** | **319** | ⇑*ep* | **P** | **12 58 29.8** | **+0.3** | |
| UZH | | | | *i* | | 12 58 45.0 | | |
| DRGR | | **85.57** | **317** | ⇓*i* P | **P** | **12 58 31.6** | **+0.5** | |
| KMBO | **Kilima Mbogo** | **85.61** | **268** | P | **P** | **12 58 32.8** | **+0.7** | |
| | comp=Z,3.4nm,0.8s,baz=31,slow=7.7,SNR=7.3 | | | | | | | |
| KMBO | **Kilima Mbogo** | **85.61** | **268** | *ce*P | **P** | **12 58 33.9** | **+1.7** | |
| KMBO | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| KMBO | **Kilima Mbogo** | **85.61** | **268** | *ep* | **P** | **12 58 33.8** | **+1.7** | |
| | comp=Z,5.3nm,0.9s | | | | | | | |
| STHS | **Stebnicka Huta** | **85.70** | **320** | *ep* | **P** | **12 58 32.4** | **+0.7** | |
| STHS | **Stebnicka Huta** | **85.70** | **320** | *ep* | **P** | **12 58 32.4** | **+0.7** | |
| GZR | **Gura Zlata** | **85.94** | **316** | ⇑*i* P | **P** | **12 58 30.1** | **-2.9** | |
| NIE | **Niedzica** | **86.29** | **320** | *ep* | **P** | **12 58 36.0** | **+1.5** | |
| NIE | **Niedzica** | **86.29** | **320** | *ep* | **P** | **12 58 36.1** | **+1.5** | |
| OJC | **Ojcow** | **86.33** | **321** | *ep* | **P** | **12 58 34.8** | **+0.1** | |
| OJC | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| OJC | **Ojcow** | **86.33** | **321** | *ep* | **P** | **12 58 34.8** | **+0.1** | |
| | comp=Z,9.1nm,0.8s | | | | | | | |
| NB2 | **NORSAR Subarra** | **86.71** | **333** | P | **P** | **12 58 36.2** | **-0.2** | |
| | comp=Z,7.9nm,0.6s,baz=62,slow=5.3 | | | | | | | |
| NOA | **NORSAR Array B** | **86.71** | **333** | P | **P** | **12 58 35.9** | **-0.5** | |
| | comp=Z,7.1nm,0.7s,baz=65,slow=4.9,SNR=25 | | | | | | | |
| NOA | | | | LR | LR | 13 40 43.2 | | |
| | comp=Z,105nm,18.8s,baz=55,slow=38 | | | | | | | |
| NBO02 | **NORSAR Array S** | **86.87** | **333** | *ep* | **P** | **12 58 37.5** | **+0.3** | |
| VYHS | **Vyhne** | **87.51** | **320** | *ep* | **P** | **12 58 38.3** | **-2.2** | |
| VYHS | **Vyhne** | **87.51** | **320** | *ep* | **P** | **12 58 38.2** | **-2.2** | |
| KSP | **Ksiaz** | **88.21** | **322** | *ep* | **P** | **12 58 44.6** | **+0.8** | |
| KSP | **Ksiaz** | **88.21** | **322** | *ep* | **P** | **12 58 44.7** | **+0.9** | |
| GERES | **GERESS Array B** | **90.53** | **321** | P | **P** | **12 58 54.0** | **-0.8** | |
| | comp=Z,1.0nm,0.8s,baz=66,slow=7.6,SNR=5.0 | | | | | | | |
| GERES | **GERESS Array B** | **90.53** | **321** | P | **P** | **12 58 54.0** | **-0.8** | |
| YKA | **Yellowknife Ar** | **90.79** | **23** | P | **P** | **12 58 55.9** | **+0.4** | |
| | comp=Z,0.9nm,0.6s,baz=303,slow=4.3,SNR=4.5 | | | | | | | |
| YKA | **Yellowknife Ar** | **90.79** | **23** | P | **P** | **12 58 55.9** | **+0.4** | |
| YKA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| MAW | **Mawson** | **93.02** | **199** | P | **P** | **12 59 04.8** | **-0.7** | |
| | comp=Z,1.5nm,0.7s,baz=54,slow=5.3,SNR=9.6 | | | | | | | |
| VNDA | **Vanda** | **95.26** | **172** | P | **P** | **12 59 14.5** | **-1.2** | |
| | comp=Z,0.3nm,0.5s,baz=270,slow=3.0,SNR=2.4 | | | | | | | |
| G06A | **Carlson Farm** | **97.20** | **39** | *ep* | Pdif | 12 59 26.8 | +1.3 | |
| | comp=Z,514nm,1.3s | | | | | | | |
| TORD | **Torodi Ar. Bea** | **114.93** | **293** | PKP | PKPdf | 13 04 33.9 | -0.4 | |
| | comp=Z,0.6nm,0.8s,baz=40,slow=0.4,SNR=3.6 | | | | | | | |
| VNA2 | **Neumayer--Watz** | **116.67** | **196** | P | **PKPdf** | **13 04 35.3** | **-0.7** | |
| | baz=56,slow=1.3 | | | | | | | |
| CPUP | **Villa Florida** | **168.89** | **181** | PKPab | **PKPab** | **13 07 08.9** | **-1.9** | |
| | comp=Z,2.8nm,1.0s,baz=171,slow=5.4,SNR=4.7 | | | | | | | |

**IDC 21 12:49:02.4±1.9, 33°.47S×178°.68W, h0$^{km}$, mb3.9/2, mb1 4.2/3, mb1mx3.7/29, mbtmp4.0/3, ML3.8/1, Error ellipse: s-maj=46.0km s-min=36.2km az=112.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| URZ | **Urewera** | **5.88** | **214** | Pn | Pn | 12 50 31.4 | +0.7 |
| | 2.5nm,0.3s,baz=266,slow=4.0,SNR=13 | | | | | | |
| URZ | | | | Sn | Sn | 12 51 38.6 | -0.3 |
| | 2.7nm,0.3s,baz=144,slow=17,SNR=3.0 | | | | | | |
| ASAR | **Alice Springs** | **42.47** | **271** | P | P | 12 56 59.0 | -0.4 |
| | 1.3nm,0.7s,baz=106,slow=7.4,SNR=4.7 | | | | | | |
| WRA | **Warramunga Arr** | **43.73** | **276** | P | P | 12 57 09.6 | 0.0 |
| | 1.7nm,0.7s,baz=119,slow=7.3,SNR=4.6 | | | | | | |
| FINES | **FINESS Array B** | **147.79** | **338** | PKPbc | PKPbc | 13 08 47.5 | -0.9 |
| | 2.0nm,0.8s,baz=33,slow=4.5,SNR=6.0 | | | | | | |
| TORD | **Torodi Ar. Bea** | **159.77** | **181** | PKPab | PKPab | 13 09 42.1 | -0.3 |
| | 0.3nm,0.6s,baz=179,slow=3.6,SNR=2.8 | | | | | | |

*ISCJB **21** 13:04:40.0±0.4, 39°.94N±0°.01×23°.79E±0°.02, h11$^{km}$±2$^{km}$, Error ellipse: s-maj=2.8km s-min=1.9km az=10.9*
*ATH **21** 13:04:39.9, 39°.94N×23°.80E, h24$^{km}$, MD3.3/59, ML2.8*
*CSEM **21** 13:04:40.2±0.1, 39°.92N×23°.77E, h10$^{km}$, MD3.3, Error ellipse: s-maj=3.5km s-min=2.3km az=102.0*
*SOF **21** 13:04:40.4, 40°.04N×23°.89E, h2$^{km}$, MD2.8*
*THE **21** 13:04:40.8, 39°.96N×23°.79E, h11$^{km}$±1$^{km}$, ML3.0/10, Error ellipse: s-maj=1.3km s-min=0.6km az=281.0*

**ISC 21 13:04:40.4±0.8, 39°.96N±0°.01×23°.80E±0°.02, h13$^{km}$±5$^{km}$, n180, $_{n}$0$^{s}$66/246, 6C, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PAIG | **Paliouri** | **0.10** | **252** | *ep*PB | **Pg** | **13 04 43.5** | **+0.2** |
| PAIG | **Paliouri** | **0.10** | **252** | P | **Pg** | **13 04 43.5** | **+0.2** |
| PAIG | | | | S | **Sg** | **13 04 45.2** | **-0.2** |
| PAIG | **Paliouri** | **0.10** | **252** | P | **Pg** | **13 04 43.5** | **+0.2** |
| PAIG | | | | S | **Sg** | **13 04 45.2** | **-0.2** |
| OUR | **Ouranopolis** | **0.40** | **20** | *ep*PG | **Pb** | **13 04 49.5** | **+0.2** |
| OUR | | | | *e*SG | **Sb** | **13 04 56.6** | **+1.2** |
| OUR | **Ouranopolis** | **0.40** | **20** | *ep*PB | **Pb** | **13 04 49.7** | **+0.3** |
| OUR | | | | *e*SB | **Sb** | **13 04 54.9** | **-0.6** |
| OUR | **Ouranopolis** | **0.40** | **20** | P | **Pb** | **13 04 49.6** | **+0.2** |
| OUR | | | | S | **Sb** | **13 04 55.6** | **+0.1** |
| OUR | **Ouranopolis** | **0.40** | **20** | P | **Pb** | **13 04 49.6** | **+0.2** |
| OUR | | | | *e*Sb | **Sb** | **13 04 54.9** | **-0.6** |
| OUR | | | | S | **Sb** | **13 04 55.6** | **+0.1** |
| OUR | | | | *e*Sg | Sg | 13 04 56.7 | +2.9 |
| PLG | **Polygyros** | **0.50** | **327** | *ep*PN | **Pg** | **13 04 49.9** | **-0.3** |
| PLG | **Polygyros** | **0.50** | **327** | P | **Pg** | **13 04 49.9** | **-0.3** |
| PLG | | | | S | **Sg** | **13 04 56.1** | **-0.8** |
| PLG | **Polygyros** | **0.50** | **327** | P | **Pg** | **13 04 49.9** | **-0.3** |
| PLG | | | | S | **Sg** | **13 04 56.1** | **-0.8** |
| XOR | **Xorichti** | **0.76** | **219** | *ep*PN | **Pg** | **13 04 55.3** | **+0.2** |
| XOR | **Xorichti** | **0.76** | **219** | *ep*Pn | **Pg** | **13 04 55.3** | **+0.2** |
| AOS | **Alonnisos** | **0.79** | **176** | *ep*PG | **Pg** | **13 04 55.9** | **+0.3** |
| AOS | | | | *e*SG | **Sb** | **13 05 07.6** | **+0.9** |
| AOS | **Alonnisos** | **0.79** | **176** | *ep*PN | **Pg** | **13 04 56.0** | **+0.3** |
| AOS | **Alonnisos** | **0.79** | **176** | P | **Pg** | **13 04 56.0** | **+0.3** |
| AOS | | | | S | **Sb** | **13 05 07.2** | **+0.5** |
| AOS | **Alonnisos** | **0.79** | **176** | P | **Pg** | **13 04 56.0** | **+0.3** |
| AOS | | | | S | **Sb** | **13 05 07.2** | **+0.5** |
| AOS | | | | *e*Sg | **Sb** | **13 05 07.6** | **+0.9** |
| NEO | **Neokhori** | **0.79** | **215** | *ep*PN | **Pb** | **13 04 56.2** | **+0.1** |
| NEO | **Neokhori** | **0.79** | **215** | P | **Pb** | **13 04 56.0** | **-0.1** |
| NEO | | | | S | **Sb** | **13 05 06.7** | **0.0** |
| NEO | **Neokhori** | **0.79** | **215** | P | **Pb** | **13 04 56.0** | **-0.1** |
| NEO | | | | S | **Sb** | **13 05 06.7** | **0.0** |
| SKIA | **Skiathos** | **0.83** | **198** | *ep*PN | **Pg** | **13 04 56.4** | **-0.1** |
| SKIA | **Skiathos** | **0.83** | **198** | P | **Pg** | **13 04 56.7** | **+0.2** |
| SKIA | | | | S | **Sb** | **13 05 07.9** | **0.0** |
| SKIA | **Skiathos** | **0.83** | **198** | *ep*Pn | **Pg** | **13 04 56.4** | **-0.1** |
| SKIA | **Skiathos** | **0.83** | **198** | P | **Pg** | **13 04 56.7** | **+0.2** |
| SKIA | | | | S | **Sb** | **13 05 07.9** | **0.0** |
| HORT | **Hortiatis** | **0.83** | **320** | *ep*PB | **Pg** | **13 04 55.8** | **-0.8** |
| HORT | | | | *e*SN | **Sg** | **13 05 07.5** | **0.0** |
| HORT | **Hortiatis** | **0.83** | **320** | P | **Pg** | **13 04 55.8** | **-0.8** |
| HORT | | | | S | **Sg** | **13 05 07.6** | **0.0** |
| HORT | **Hortiatis** | **0.83** | **320** | P | **Pg** | **13 04 55.8** | **-0.8** |
| HORT | | | | S | **Sg** | **13 05 07.6** | **0.0** |
| FYTO | **Fytoko, Volos** | **0.86** | **231** | P | **Pg** | **13 04 56.9** | **-0.2** |
| FYTO | | | | S | **Sb** | **13 05 09.0** | **+0.2** |
| FYTO | **Fytoko, Volos** | **0.86** | **231** | P | **Pg** | **13 04 56.9** | **-0.2** |
| FYTO | | | | S | **Sb** | **13 05 09.0** | **+0.2** |
| SOH | **Sokhos** | **0.93** | **338** | *ep*PN | **Pg** | **13 04 58.2** | **-0.2** |
| SOH | | | | *e*SN | **Sg** | **13 05 10.6** | **+0.1** |
| SOH | **Sokhos** | **0.93** | **338** | P | **Pg** | **13 04 58.2** | **-0.2** |
| SOH | | | | S | **Sg** | **13 05 10.4** | **-0.1** |
| SOH | **Sokhos** | **0.93** | **338** | P | **Pg** | **13 04 58.2** | **-0.2** |
| SOH | | | | S | **Sg** | **13 05 10.4** | **-0.1** |
| THE | **Thessaloniki** | **0.93** | **317** | *ep*PN | **Pg** | **13 04 58.4** | **0.0** |
| THE | **Thessaloniki** | **0.93** | **317** | P | **Pn** | **13 04 59.4** | **+0.2** |
| THE | **Thessaloniki** | **0.93** | **317** | *ep*Pn | **Pg** | **13 04 58.4** | **0.0** |
| THE | **Thessaloniki** | **0.93** | **317** | P | **Pn** | **13 04 59.4** | **+0.2** |
| LIT | **Litokhoron** | **1.02** | **278** | *ep*PN | **Pb** | **13 05 00.1** | **+0.1** |
| LIT | | | | *e*SN | **Sg** | **13 05 13.0** | **-0.3** |
| LIT | **Litokhoron** | **1.02** | **278** | P | **Pb** | **13 05 00.0** | **+0.1** |
| LIT | | | | S | **Sn** | **13 05 14.4** | **-0.3** |
| LIT | **Litokhoron** | **1.02** | **278** | P | **Pb** | **13 05 00.0** | **+0.1** |
| LIT | | | | *e*Sn | **Sg** | **13 05 13.0** | **-0.3** |
| LIT | | | | S | **Sn** | **13 05 14.4** | **-0.3** |
| LIA | **Limnos Island** | **1.06** | **93** | *ep*PN | **Pg** | **13 05 00.9** | **0.0** |
| LIA | | | | *e*SN | **Sb** | **13 05 15.3** | **+0.8** |
| LIA | **Limnos Island** | **1.06** | **93** | P | **Pb** | **13 05 00.8** | **+0.1** |
| LIA | | | | S | **Sb** | **13 05 15.3** | **+0.8** |
| LIA | **Limnos Island** | **1.06** | **93** | *ep*Pn | **Pg** | **13 05 00.9** | **0.0** |
| LIA | | | | S | **Sb** | **13 05 15.3** | **+0.8** |
| SRS | **Serrai** | **1.17** | **352** | *ep*PN | **Pb** | **13 05 02.7** | **+0.2** |
| SRS | | | | *e*SN | **Sn** | **13 05 19.2** | **+0.8** |
| SRS | **Serrai** | **1.17** | **352** | P | **Pb** | **13 05 02.6** | **+0.1** |
| SRS | **Serrai** | **1.17** | **352** | P | **Pb** | **13 05 02.6** | **+0.1** |
| SRS | | | | *e*Sn | **Sn** | **13 05 19.2** | **+0.8** |
| KAVA | **Kavala** | **1.17** | **27** | P | **Pb** | **13 05 02.3** | **-0.3** |
| KAVA | | | | S | **Sn** | **13 05 19.1** | **+0.7** |
| KAVA | **Kavala** | **1.17** | **27** | P | **Pb** | **13 05 02.3** | **-0.3** |
| KAVA | | | | S | **Sn** | **13 05 19.1** | **+0.7** |
| SMIA | **Simia** | **1.17** | **203** | *ep*PN | **Pb** | **13 05 02.3** | **-0.3** |
| SMIA | | | | *e*SN | **Sg** | **13 05 18.5** | **+0.3** |
| SMIA | **Simia** | **1.17** | **203** | P | **Pb** | **13 05 02.2** | **-0.3** |
| SMIA | **Simia** | **1.17** | **203** | *ep*Pn | **Pb** | **13 05 02.3** | **-0.3** |
| SMIA | | | | *e*Sn | **Sg** | **13 05 18.5** | **+0.3** |
| MRKA | **Markates** | **1.26** | **188** | *ep*PN | **Pn** | **13 05 03.1** | **-0.7** |
| MRKA | **Markates** | **1.26** | **188** | P | **Pn** | **13 05 03.3** | **-0.5** |
| MRKA | **Markates** | **1.26** | **188** | P | **Pn** | **13 05 03.3** | **-0.5** |
| KNT | **Kendrikon** | **1.39** | **330** | *ep*PN | **Pb** | **13 05 06.3** | **+0.1** |
| KNT | | | | *e*SN | **Sg** | **13 05 24.8** | **-0.3** |
| KNT | **Kendrikon** | **1.39** | **330** | *ep*Pn | **Pb** | **13 05 06.3** | **+0.1** |
| KNT | | | | *e*Sn | **Sg** | **13 05 24.8** | **-0.3** |
| NVR | **Nevrokopi** | **1.39** | **2** | *ep*PN | **Pn** | **13 05 05.6** | **-0.1** |
| NVR | | | | *e*SN | **Sg** | **13 05 26.0** | **+0.7** |
| NVR | **Nevrokopi** | **1.39** | **2** | P | **Pn** | **13 05 05.5** | **-0.1** |
| NVR | **Nevrokopi** | **1.39** | **2** | P | **Pn** | **13 05 05.5** | **-0.1** |
| ATAL | **Atalanti** | **1.40** | **206** | P | **Pn** | **13 05 05.1** | **-0.7** |
| ATAL | **Atalanti** | **1.40** | **206** | P | **Pn** | **13 05 05.1** | **-0.7** |
| SMTH | **Samothraki Isl** | **1.42** | **68** | *ep*PN | **Pn** | **13 05 05.7** | **-0.3** |
| SMTH | **Samothraki Isl** | **1.42** | **68** | P | **Pn** | **13 05 05.6** | **-0.4** |
| SMTH | **Samothraki Isl** | **1.42** | **68** | *ep*Pn | **Pn** | **13 05 05.7** | **-0.3** |
| THL | **Klokotos Trika** | **1.43** | **255** | *ep*PN | **Pn** | **13 05 05.8** | **-0.4** |
| THL | **Klokotos Trika** | **1.43** | **255** | *ep*Pn | **Pn** | **13 05 05.8** | **-0.4** |
| LKR | **Lokris** | **1.45** | **206** | *ep*PN | **Pn** | **13 05 05.9** | **-0.5** |
| LKR | **Lokris** | **1.45** | **206** | P | **Pn** | **13 05 05.9** | **-0.5** |
| LKR | **Lokris** | **1.45** | **206** | P | **Pn** | **13 05 05.9** | **-0.5** |
| GRG | **Griva** | **1.46** | **313** | *ep*PN | **Pb** | **13 05 07.4** | **-0.1** |
| GRG | **Griva** | **1.46** | **313** | P | **Pn** | **13 05 06.9** | **+0.3** |
| GRG | **Griva** | **1.46** | **313** | P | **Pn** | **13 05 06.9** | **+0.3** |
| GRG | **Griva** | **1.46** | **313** | *ep*Pn | **Pb** | **13 05 07.4** | **-0.1** |
| AGG | **Agios Georgios** | **1.47** | **231** | *ep*PB | **Pn** | **13 05 06.0** | **-0.7** |
| AGG | | | | *e*SN | **Sg** | **13 05 27.3** | **-0.6** |
| AGG | **Agios Georgios** | **1.47** | **231** | P | **Pn** | **13 05 06.1** | **-0.7** |
| AGG | | | | S | **Sb** | **13 05 26.9** | **+0.5** |
| AGG | **Agios Georgios** | **1.47** | **231** | P | **Pn** | **13 05 06.1** | **-0.7** |
| AGG | | | | S | **Sb** | **13 05 26.9** | **+0.5** |
| AGG | | | | *e*Sn | **Sg** | **13 05 27.3** | **-0.6** |
| AXAR | **Agios Charalam** | **1.48** | **217** | *ep*PN | **Pn** | **13 05 06.4** | **-0.5** |
| AXAR | **Agios Charalam** | **1.48** | **217** | *ep*Pn | **Pn** | **13 05 06.4** | **-0.5** |
| EREA | **Eretria** | **1.54** | **176** | *ep*PN | **Pn** | **13 05 07.3** | **-0.4** |
| EREA | **Eretria** | **1.54** | **176** | *ep*Pn | **Pn**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DID** | **Didima** | **2.49** | **190** | *e*Pn | **Pn** | **13 05 20.6** | **-0.1** |
| **DRO** | **Drossia** | **2.58** | **220** | *e*PN | **Pn** | **13 05 21.5** | **-0.5** |
| **DRO** | **Drossia** | **2.58** | **220** | *e*Pn | **Pn** | **13 05 21.5** | **-0.5** |
| **PGB** | **Panagyurishte** | **2.60** | **6** | P | **Pg** | **13 05 29.1** | **-1.2** |
| **VTS** | **Vitosha** | **2.67** | **351** | P | **Pn** | **13 05 24.4** | **+1.1** |
| **VTS** | **Vitosha** | **2.67** | **351** | P | **Pn** | **13 05 24.4** | **+1.1** |
| **LKD2** | **Lefkada island** | **2.70** | **245** | *e*PB | **Pn** | **13 05 26.2** | **+2.5** |
| **SERI** | **Serifos** | **2.84** | **169** | *e*PN | **Pn** | **13 05 25.3** | **-0.3** |
| **SERI** | **Serifos** | **2.84** | **169** | *e*Pn | **Pn** | **13 05 25.3** | **-0.3** |
| **AMT** | **Artemida-Makis** | **2.92** | **215** | *e*PN | **Pn** | **13 05 27.5** | **+0.8** |
| **AMT** | **Artemida-Makis** | **2.92** | **215** | *e*Pn | **Pn** | **13 05 27.5** | **+0.8** |
| **KEK** | **Kerkira** | **3.09** | **267** | *e*PB | **Pn** | **13 05 31.1** | **+2.1** |
| **KEK** | **Kerkira** | **3.09** | **267** | *e*Pb | **Pn** | **13 05 31.1** | **+2.1** |
| **APE** | **Apeiranthos** | **3.19** | **154** | *e*PN | **Pn** | **13 05 30.5** | **+0.1** |
| **APE** | **Apeiranthos** | **3.19** | **154** | *e*Pn | **Pn** | **13 05 30.5** | **+0.1** |
| **BARS** | **Barje** | **3.22** | **333** | *e*Pn | **Pn** | **13 05 31.7** | **+0.9** |
| **KYTH** | **Kithira** | **3.72** | **190** | *e*PN | **Pn** | **13 05 38.4** | **+0.7** |
| **KYTH** | **Kithira** | **3.72** | **190** | *e*Pn | **Pn** | **13 05 38.4** | **+0.7** |
| **BOVS** | **Bovan** | **3.99** | **338** | *e*Pn | **Pn** | **13 05 42.1** | **+0.7** |
| **BOLS** | **Boljevac** | **4.11** | **341** | *e*Pn | **Pn** | **13 05 41.9** | **-1.0** |
| **KUBS** | **Kucevo** | **4.72** | **341** | *e*Pn | **Pn** | **13 05 50.1** | **-1.3** |
| **DIVS** | **Divibare** | **5.02** | **327** | *e*Pn | **Pn** | **13 05 56.2** | **+0.7** |
| **VOIR** | | **5.55** | **9**⇑ | *i*P | **Pn** | **13 06 04.4** | **+1.5** |
| **VOIR** | | **5.55** | **9**⇑ | *i*P | **Pn** | **13 06 04.4** | **+1.5** |
| **HARR** | **Harsova** | **5.63** | **32**⇑ | *i*P | **Pb** | **13 06 16.1** | **-2.5** |
| **MLR** | **Muntele Rosu** | **5.75** | **15**⇑ | *i*P | Pb | 13 06 15.6 | -5.1 |
| **VRI** | **Vrincioaia** | **6.28** | **19**⇑ | *i*P | **Pn** | **13 06 14.2** | **+1.4** |
| **VRI** | **Vrincioaia** | **6.28** | **19**⇑ | *i*P | **Pn** | **13 06 14.2** | **+1.4** |

*ROM **21** 13:05:00.3±0.1, 44.60N×7.24E, h13km±5km, Md2.2/8, Ml1.9/7, Error ellipse: s-maj=2.2km s-min=2.0km az=94.0*
*STR **21** 13:05:00.7±0.2, 44.61N×7.26E, h5km, Ml2.4, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*LDG **21** 13:05:00.8±0.1, 44.61N×7.27E, h2km, Md2.5/1, Ml2.8/7, Error ellipse: s-maj=1.9km s-min=0.8km az=72.0*
*GEN **21** 13:05:00.9, 44.60N×7.23E, h14km, ML1.9*
**CSEM 21 13:05:00.2±0.1, 44.61N×7.26E, h15km, ML2.6/15, Error ellipse: s-maj=1.9km s-min=1.0km az=69.0, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DOI** | **San Damiano** | **0.10** | **186** | Pg | Pb | 13 05 04.1 | +0.1 |
| DOI | | | | Sg | Sg | 13 05 06.0 | +0.1 |
| | 569nm,0.2s | | | | | | |
| **DOI** | **San Damiano** | **0.10** | **186** | Pg | Pb | 13 05 04.1 | +0.1 |
| DOI | | | | Sg | Sg | 13 05 06.0 | +0.1 |
| | 569nm,0.2s | | | | | | |
| **PZZ** | **Stroppo** | **0.14** | **227** | Pg | Pg | 13 05 04.4 | +0.2 |
| PZZ | | | | Sg | Sg | 13 05 06.6 | -0.3 |
| | 957nm,0.2s | | | | | | |
| **PZZ** | **Stroppo** | **0.14** | **227** | P | Pg | 13 05 04.4 | +0.2 |
| PZZ | | | | Sg | Sg | 13 05 06.6 | -0.3 |
| | 957nm,0.2s | | | | | | |
| **BHB** | **Bricherasio** | **0.24** | **1** | Pg | Pb | 13 05 06.0 | -0.3 |
| BHB | | | | Sg | Sg | 13 05 09.3 | +0.2 |
| | 201nm,0.2s | | | | | | |
| **BHB** | **Bricherasio** | **0.24** | **1** | P | Pb | 13 05 06.0 | -0.3 |
| BHB | | | | Sg | Sg | 13 05 09.3 | +0.2 |
| | 201nm,0.2s | | | | | | |
| **OG22** | **Abries** | **0.31** | **314** | Pg | Pg | 13 05 07.3 | +0.3 |
| OG22 | | | | Sg | Sg | 13 05 11.6 | -0.1 |
| **OG22** | **Abries** | **0.31** | **314** | Pg | Pg | 13 05 07.3 | +0.3 |
| OG22 | | | | Sg | Sg | 13 05 11.6 | -0.1 |
| **SURF** | **Saint Ours** | **0.34** | **249** | Pg | Pg | 13 05 07.7 | +0.2 |
| SURF | | | | Sg | Sg | 13 05 12.4 | -0.2 |
| **SURF** | **Saint Ours** | **0.34** | **249** | Pg | Pg | 13 05 07.7 | +0.2 |
| SURF | | | | Sg | Sg | 13 05 12.4 | -0.2 |
| **STV** | **Sant Anna di V** | **0.36** | **172** | Pg | Pg | 13 05 08.0 | +0.3 |
| STV | | | | Sg | Sg | 13 05 12.8 | -0.1 |
| | 57nm,0.4s | | | | | | |
| **STV** | **Sant Anna di V** | **0.36** | **172** | P | Pg | 13 05 08.0 | +0.3 |
| STV | | | | S | Sg | 13 05 12.9 | 0.0 |
| **MBDF** | **Montbardon** SNR=1.0 | **0.37** | **289** | *e*Pg | Pg | 13 05 08.3 | +0.3 |
| MBDF | | | | *e*Sg | Sg | 13 05 13.0 | -0.3 |
| | 170nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** SNR=1.0 | **0.37** | **289** | *e*Pg | Pg | 13 05 08.3 | +0.3 |
| MBDF | | | | *e*Sg | Sg | 13 05 13.0 | -0.3 |
| | 85nm,0.2s | | | | | | |
| **RRL** | **Rocca Remolon** | **0.46** | **314** | Pg | Pg | 13 05 10.0 | +0.3 |
| RRL | | | | Sg | Sg | 13 05 15.8 | -0.4 |
| | 50nm,0.3s | | | | | | |
| **RRL** | **Rocca Remolon** | **0.46** | **314** | P | Pg | 13 05 09.9 | +0.2 |
| RRL | | | | Sg | Sg | 13 05 15.8 | -0.4 |
| | 50nm,0.3s | | | | | | |
| RRL | | | | S | Sb | 13 05 16.1 | -1.2 |
| **RSP** | **Reno Superiore** | **0.54** | **0** | Pg | Pg | 13 05 10.9 | -0.3 |
| RSP | | | | Sg | Sb | 13 05 19.2 | -0.2 |
| | 59nm,0.1s | | | | | | |
| **RSP** | **Reno Superiore** | **0.54** | **0** | Pg | Pg | 13 05 10.9 | -0.3 |
| RSP | | | | Sg | Sb | 13 05 19.2 | -0.2 |
| | 59nm,0.1s | | | | | | |
| **BNI** | **Bardonecchia** | **0.61** | **317** | Pg | Pg | 13 05 12.6 | +0.2 |
| BNI | | | | Sg | Sg | 13 05 20.2 | -0.5 |
| | 22nm,0.6s | | | | | | |
| **BNI** | **Bardonecchia** | **0.61** | **317** | Pg | Pg | 13 05 12.6 | +0.2 |
| BNI | | | | Sg | Sg | 13 05 20.2 | -0.5 |
| | 22nm,0.6s | | | | | | |
| **AUTN** | **L'Aution** | **0.62** | **169** | Pg | Pg | 13 05 12.4 | -0.3 |
| AUTN | | | | Sg | Sg | 13 05 21.4 | +0.2 |
| **AUTN** | **L'Aution** | **0.62** | **169** | Pg | Pg | 13 05 12.4 | -0.3 |
| AUTN | | | | Sg | Sg | 13 05 21.4 | +0.2 |
| **MVIF** | **Mont Vial** | **0.71** | **186** | Pg | Pg | 13 05 13.8 | -0.5 |
| MVIF | | | | Sg | Sb | 13 05 24.3 | 0.0 |
| **MVIF** | **Mont Vial** | **0.71** | **186** | Pg | Pg | 13 05 13.8 | -0.5 |
| MVIF | | | | Sg | Sb | 13 05 24.3 | 0.0 |
| **LUCF** | **Luceram** | **0.71** | **175** | Pg | Pg | 13 05 13.7 | -0.6 |
| LUCF | | | | Sg | Sb | 13 05 24.3 | +0.1 |
| **LUCF** | **Luceram** | **0.71** | **175** | Pg | Pg | 13 05 13.7 | -0.6 |
| LUCF | | | | Sg | Sb | 13 05 24.3 | +0.1 |
| **SBF** | **Sospel** SNR=1.0 | **0.75** | **170** | *e*Pg | Pg | 13 05 14.7 | -0.3 |
| SBF | | | | *e*Sg | Sb | 13 05 25.4 | +0.2 |
| | 34nm,0.3s,SNR=1.0 | | | | | | |
| **SBF** | **Sospel** SNR=1.0 | **0.75** | **170** | *e*Pg | Pg | 13 05 14.7 | -0.3 |
| SBF | | | | *e*Sg | Sb | 13 05 25.4 | +0.2 |
| | 17nm,0.3s,SNR=1.0 | | | | | | |
| **RORO** | **Rocca Rossa** | **0.76** | **130** | Pg | Pb | 13 05 15.1 | 0.0 |
| RORO | | | | Sg | Sg | 13 05 24.9 | -0.1 |
| **RORO** | **Rocca Rossa** | **0.76** | **130** | Pg | Pb | 13 05 15.1 | 0.0 |
| RORO | | | | Sg | Sg | 13 05 24.9 | -0.1 |
| **CALN** | **Calern** | **0.89** | **198** | Pg | Pn | 13 05 18.2 | -0.2 |
| CALN | | | | Sg | Sg | 13 05 30.2 | +0.6 |
| **CALN** | **Calern** | **0.89** | **198** | Pg | Pn | 13 05 18.2 | -0.2 |
| CALN | | | | Sg | Sg | 13 05 30.2 | +0.6 |
| **LPG** | **La Plagne** SNR=1.0 | **0.96** | **338** | *e*Pg | Pg | 13 05 19.2 | -0.1 |
| LPG | | | | *e*Sg | Sg | 13 05 32.2 | 0.0 |
| | 24nm,0.3s | | | | | | |
| **LPL** | **La Plagne** SNR=1.0 | **0.99** | **338** | *e*Pg | Pg | 13 05 19.6 | 0.0 |
| LPL | | | | *e*Sg | Sb | 13 05 32.0 | -0.4 |
| | 20nm,0.3s,SNR=1.0 | | | | | | |
| **ORIF** | **Oris-en-Rattie** SNR=1.0 | **1.03** | **288** | *e*Pg | Pg | 13 05 20.4 | +0.1 |
| ORIF | | | | *e*Sg | Sb | 13 05 32.7 | -0.7 |
| | 18nm,0.2s,SNR=1.0 | | | | | | |
| **ORIF** | **Oris-en-Rattie** SNR=1.0 | **1.03** | **288** | *e*Pg | Pg | 13 05 20.4 | +0.1 |
| ORIF | | | | *e*Sg | Sb | 13 05 32.7 | -0.7 |
| | 9.2nm,0.2s,SNR=1.0 | | | | | | |
| **FRF** | **La Foret Royal** | **1.13** | **203** | *e*Pg | Pg | 13 05 22.2 | +0.1 |
| FRF | | | | *e*Sg | Sn | 13 05 36.7 | -0.1 |
| | 37nm,0.2s,SNR=1.0 | | | | | | |
| **FRF** | **La Foret Royal** | **1.13** | **203** | *e*Pg | Pg | 13 05 22.2 | +0.1 |
| FRF | | | | *e*Sg | Sn | 13 05 36.7 | -0.1 |
| | 18nm,0.2s,SNR=1.0 | | | | | | |
| **SMRF** | **Simiane la Rot** SNR=1.0 | **1.36** | **243** | *e*P | Pg | 13 05 27.1 | +0.6 |
| SMRF | | | | *e*Sg | Sg | 13 05 44.0 | -0.4 |
| | 7.3nm,0.3s,SNR=1.0 | | | | | | |
| **LMR** | **La Mourre** SNR=1.0 | **1.38** | **203** | *e*Pn | Pb | 13 05 25.6 | -0.1 |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pg | Pg | 13 05 26.7 | -0.1 |
| LMR | | | | *e*Sg | Sg | 13 05 44.5 | -0.3 |
| | 43nm,0.2s,SNR=1.0 | | | | | | |
| **LMR** | **La Mourre** SNR=1.0 | **1.38** | **203** | *e*Pn | Pb | 13 05 25.6 | -0.1 |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pg | Pg | 13 05 26.7 | -0.1 |
| LMR | | | | *e*Sg | Sg | 13 05 44.5 | -0.3 |
| | 22nm,0.2s,SNR=1.0 | | | | | | |
| **VIVF** | **Saint-Julien-l** SNR=1.0 | **1.86** | **279** | *e*P | Pb | 13 05 34.1 | +0.1 |
| VIVF | | | | *e*Sg | Sg | 13 05 59.5 | -0.7 |
| | 4.8nm,0.3s | | | | | | |

*IDC **21** 13:20:58.4±2.1, 14.91N×92.36W, h0km, mb3.8/4, mb1 4.1/7, mb1mx3.8/32, mbtmp3.8/7, ML3.9/3, MS4.1/4, Ms1 4.0/4, ms1mx3.2/30, Error ellipse: s-maj=77.3km s-min=20.0km az=38.0*
*ISCJB **21** 13:21:01.1±0.8, 14.52N±0.06×93.31W±0.06, h10km, mb4.1/8, MS4.1/4, Error ellipse: s-maj=9.3km s-min=7.6km az=149.5*
*NEIC **21** 13:21:06.5, 14.59N×93.38W, h10km, mb4.2/7, MD4.2(MEX), After MEX.*
*MEX **21** 13:21:06.5±0.8, 14.59N×93.38W, h10km, MD4.2*
**ISC 21 13:21:04.8±1.0, 14.68N±0.07×93.32W±0.07, h10km, n28, σ1§01/23, mb4.2/8, MS4.2/4, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.02** | **5** | *e*P | Pg | 13 21 23.7 | -0.8 |
| PCIG | | | | *i*S | **Sg** | **13 21 38.4** | **+0.6** |
| **PCIG** | | **1.02** | **5** | *e*P | Pg | 13 21 23.7 | -0.8 |
| PCIG | | | | *i*S | **Sg** | **13 21 38.4** | **+0.6** |
| **CCIG** | **Comitan** | **1.96** | **35** | *e*P | **Pn** | **13 21 38.2** | **-0.1** |
| CCIG | | | | *i*S | **Sn** | **13 22 02.9** | **-0.1** |
| **CCIG** | **Comitan** | **1.96** | **35** | *e*P | **Pn** | **13 21 38.2** | **-0.1** |
| CCIG | | | | *i*S | **Sn** | **13 22 02.9** | **-0.1** |
| **TGIG** | | **2.09** | **5** | *e*P | **Pn** | **13 21 40.7** | **+0.6** |
| TGIG | | | | *i*S | **Sn** | **13 22 05.1** | **-1.1** |
| **TGIG** | | **2.09** | **5** | *e*P | **Pn** | **13 21 40.7** | **+0.6** |
| TGIG | | | | *i*S | **Sn** | **13 22 05.1** | **-1.1** |
| **CMIG** | **Matias Romero** 5.5nm,0.3s,baz=134,slow=9.7,SNR=35 | **2.83** | **328** | *e*Pn | **Pn** | **13 21 50.1** | **-0.1** |
| CMIG | | | | Sn | **Sb** | **13 22 30.7** | **+0.4** |
| | 33nm,0.3s,baz=131,slow=19,SNR=8.9 | | | | | | |
| CMIG | | | | Lg | Lg | 13 22 42.3 | |
| | 31nm,0.3s,baz=270,slow=20,SNR=6.9 | | | | | | |
| **JTS** | **JuntasAbangare** 0.4nm,0.3s,baz=274,slow=15,SNR=1.2 | **9.26** | **117** | Pn | Pn | 13 23 04.7 | -14 |
| JTS | | | | Pg | | 13 23 25.2 | |
| | 0.8nm,0.3s,baz=313,slow=18,SNR=8.0 | | | | | | |
| JTS | | | | Lg | Lg | 13 25 23.1 | |
| | 4.2nm,0.3s,baz=310,slow=21,SNR=6.2 | | | | | | |
| **JTS** | **JuntasAbangare** | **9.26** | **117** | *e*Pn | **Pn** | **13 23 20.2** | **+1.7** |
| JTS | | | | *e*Sn | **Sn** | **13 25 00.7** | **-2.1** |
| **H06E1** | **SOCORRO T-PHAS** SNR=5.0 | **17.35** | **286** | T | T | 13 43 00.7 | |
| **TXAR** | **Lajitas Array** 0.4nm,0.3s,baz=148,slow=13,SNR=11 | **17.44** | **328** | Pn | **Pn** | **13 25 09.7** | **+1.2** |
| **MIAR** | **Mount Ida** 12nm,1.0s | **19.78** | **359** | *e*P | **P** | **13 25 35.0** | **-0.2** |
| **MNTX** | **Cornudas Mount** 3.8nm,0.9s | **20.22** | **329** | *e*P | **P** | **13 25 38.5** | **-1.6** |
| **AMTX** | **Amarillo** 15nm,0.6s | **21.48** | **341** | *e*P | **P** | **13 25 52.8** | **-1.0** |
| **121A** | **Cookes Peak, D** 11nm,0.9s | **22.13** | **326** | *e*P | **P** | **13 26 01.6** | **+0.7** |
| **TKL** | **Tuckaleechee C** comp=Z,88nm,18.8s,baz=216,slow=42 | **22.58** | **21** | LR | LR | 13 36 21.2 | |
| **ANMO** | **Albuquerque** 0.6nm,0.5s,baz=135,slow=13,SNR=2.4 | **23.39** | **332** | P | **P** | **13 26 12.6** | **-1.6** |
| **ANMO** | **Albuquerque** 2.4nm,1.0s | **23.39** | **332** | P | P | 13 26 10.8 | -3.3 |
| **REDW** | **Red Top Meadow** 6.4nm,1.1s | **32.29** | **336** | *e*P | P | 13 27 32.2 | -2.0 |
| **NVAR** | **Mina Array Bea** 0.5nm,0.5s,baz=138,slow=8.2,SNR=5.8 | **32.35** | **322** | P | **P** | **13 27 34.2** | **-0.5** |
| **MCMT** | **McKenzie Canyo** 4.0nm,1.4s | **34.31** | **335** | *e*P | **P** | **13 27 51.5** | **-0.3** |
| **SCHQ** | **Schefferville** comp=Z,70nm,18.4s,baz=205,slow=39 | **45.04** | **21** | LR | LR | 13 50 10.6 | |
| **YKA** | **Yellowknife Ar** 3.5nm,0.7s,baz=150,slow=7.0,SNR=6.6 | **50.08** | **347** | P | P | 13 29 54.0 | -5.6 |
| **ILAR** | **Eielson Array** 0.6nm,0.9s,baz=149,slow=6.4,SNR=7.0 | **61.72** | **337** | P | P | 13 31 18.9 | -4.2 |
| **RAO** | **Raoul Island** comp=Z,367nm,18.8s,baz=280,slow=30 | **92.46** | **241** | LR | LR | 14 08 23.9 | |
| **URZ** | **Urewera** comp=Z,224nm,18.2s,baz=11,slow=30 | **98.61** | **233** | LR | LR | 14 09 58.1 | |
| **CASY** | **Casey** | **126.04** | **192** | *e*PKPdf | **PKPdf** | **13 40 07.7** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** 1.0nm,0.7s,baz=341,slow=4.3,SNR=6.0 | **144.92** | **339** | PKPbc | PKPab | 13 40 36.6 | -5.7 |

*DDA **21** 13:53:54.9, 37.47N×35.73E, h7km, Md3.0*
*ISK **21** 13:53:54.2, 37.53N×35.75E, h5km, MD3.1*
*ISCJB **21** 13:53:55.2±0.6, 37.52N±0.03×35.73E±0.03, h2km±6km, Error ellipse: s-maj=5.1km s-min=3.7km az=168.3*
*CSEM **21** 13:53:55.3±0.2, 37.52N×35.75E, h2km, MD3.0, Error ellipse: s-maj=4.6km s-min=4.1km az=8.0*
**ISC 21 13:53:55.3±1.2, 37.48N±0.03×35.74E±0.02, h6km±11km, n40, σ0§88/54, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CEYT** | **Ceyhan** | **0.47** | **179** | *e*PG | **Pb** | **13 54 05.8** | **-0.1** |
| CEYT | | | | *e*SG | **Sb** | **13 54 14.1** | **+1.1** |
| **CEYT** | **Ceyhan** | **0.47** | **179** | *e*Pg | **Pb** | **13 54 05.8** | **-0.1** |
| CEYT | | | | *e*Sg | **Sb** | **13 54 14.1** | **+1.1** |
| **ANDN** | **Andirin** | **0.49** | **78** | *i*P | **Pg** | **13 54 04.9** | **+0.1** |
| **ANDN** | **Andirin** | **0.49** | **78** | P | **Pg** | **13 54 04.9** | **+0.1** |
| ANDN | | | | S | **Sb** | **13 54 13.8** | **0.0** |
| **GULE** | **Gulek** | **0.79** | **256** | *i*P | **Pg** | **13 54 09.7** | **-0.8** |
| GULE | | | | *i*S | **Sb** | **13 54 22.3** | **-0.3** |
| **GULE** | **Gulek** | **0.79** | **256** | P | **Pg** | **13 54 09.7** | **-0.8** |
| GULE | | | | S | **Sb** | **13 54 22.3** | **-0.3** |
| **AYKD** | **Aykdinkavak** | **0.85** | **94** | P | **Pg** | **13 54 11.5** | **-0.1** |
| AYKD | | | | S | **Sb** | **13 54 24.6** | **+0.5** |
| **KMRS** | **Kahramanmaras** | **0.92** | **88** | *e*PG | **Pg** | **13 54 12.5** | **-0.5** |
| KMRS | | | | *e*SG | **Sb** | **13 54 27.3** | **+1.1** |
| **KMRS** | **Kahramanmaras** | **0.92** | **88** | *e*Pg | **Pg** | **13 54 12.5** | **-0.5** |
| KMRS | | | | *e*Sg | **Sb** | **13 54 27.3** | **+1.1** |
| **KRTS** | **Karatas** | **0.95** | **198** | *e*PG | **Pb** | **13 54 14.2** | **+0.1** |
| **KRTS** | **Karatas** | **0.95** | **198** | *e*Pg | **Pb** | **13 54 14.2** | **+0.1** |
| **NIG** | **Nigde** | **1.09** | **305** | *e*PG | **Pg** | **13 54 15.4** | **-0.9** |
| **NIG** | **Nigde** | **1.09** | **305** | *e*Pg | **Pg** | **13 54 15.4** | **-0.9** |
| **TAHT** | **Tahtakopru-Hat** | **1.16** | **162** | *e*PN | **Pg** | **13 54 17.6** | **+0.1** |
| **KUZU** | **Kuzuini** | **1.28** | **123** | *i*P | **Pn** | **13 54 19.2** | **-0.5** |
| KUZU | | | | *i*S | **Sn** | **13 54 37.3** | **+0.2** |
| **KUZU** | **Kuzuini** | **1.28** | **123** | P | **Pn** | **13 54 19.2** | **-0.5** |
| KUZU | | | | S | **Sn** | **13 54 37.3** | **+0.2** |
| **PINB** | **Pinarbasi** | **1.30** | **23** | *i*P | **Pn** | **13 54 19.3** | **-0.9** |
| **PINB** | **Pinarbasi** | **1.30** | **23** | P | **Pn** | **13 54 19.3** | **-0.9** |
| PINB | | | | S | **Sn** | **13 54 38.5** | **+0.4** |
| **GULA** | **Gulagac** | **1.47** | **306** | *e*PN | **Pn** | **13 54 22.2** | **-0.2** |
| **GULA** | **Gulagac** | **1.47** | **306** | *e*Pn | **Pn** | **13 54 22.2** | **-0.2** |
| **YAYL** | **Yayladag** | **1.47** | **168** | *i*P | **Pn** | **13 54 21.9** | **-0.5** |
| **YAYL** | **Yayladag** | **1.47** | **168** | P | **Pn** | **13 54 21.9** | **-0.5** |
| YAYL | | | | S | **Sn** | **13 54 38.9** | **-3.1** |
| **YESY** | **Yesilyurt** | **1.61** | **281** | *e*PN | **Pb** | **13 54 25.4** | **-0.1** |
| **YESY** | **Yesilyurt** | **1.61** | **281** | *e*Pn | **Pb** | **13 54 25.4** | **-0.1** |
| **KIZK** | **Mersin** | **1.62** | **233** | *i*P | **Pb** | **13 54 25.1** | **-0.5** |
| KIZK | | | | *i*S | **Sg** | **13 54 47.8** | **+0.4** |
| **KIZK** | **Mersin** | **1.62** | **233** | P | **Pb** | **13 54 25.1** | **-0.5** |
| KIZK | | | | S | **Sg** | **13 54 47.8** | **+0.4** |
| **DARE** | **Darende-Malaty** | **1.75** | **51** | *e*PN | **Pn** | **13 54 25.9** | **-0.4** |
| **DARE** | **Darende-Malaty** | **1.75** | **51** | *e*Pn | **Pn** | **13 54 25.9** | **-0.4** |
| **YAYX** | **Yaylak** | **2.10** | **314** | *e*PN | **Pn** | **13 54 31.5** | **+0.4** |
| **YAYX** | **Yaylak** | **2.10** | **314** | *e*Pn | **Pn** | **13 54 31.5** | **+0.4** |
| **KAMT** | **Kaman** | **2.47** | **320** | *e*PN | **Pn** | **13 54 37.3** | **+1.2** |
| **KAMT** | **Kaman** | **2.47** | **320** | *e*Pn | **Pn** | **13 54 37.3** | **+1.2** |
| **SVSK** | **Karacayir** | **2.62** | **22** | *e*PN | **Pn** | **13 54 38.5** | **+0.4** |
| **SVSK** | **Karacayir** | **2.62** | **22** | *e*Pn | **Pn** | **13 54 38.5** | **+0.4** |
| **HDMB** | **Hadim** | **2.65** | **260** | *e*PN | **Pn** | **13 54 40.9** | **+2.2** |
| **HDMB** | **Hadim** | **2.65** | **260** | *e*Pn | **Pn** | **13 54 40.9** | **+2.2** |
| **KULU** | **Kulu** | **2.66** | **307** | *e*PN | **Pn** | **13 54 40.0** | **+1.2** |
| **KULU** | **Kulu** | **2.66** | **307** | *e*Pn | **Pn** | **13 54 40.0** | **+1.2** |
| **CORM** | **Corum** | **2.83** | **343** | *e*PN | **Pn** | **13 54 41.2** | **+0.1** |
| **CORM** | **Corum** | **2.83** | **343** | *e*Pn | **Pn** | **13 54 41.2** | **+0.1** |

*AUST **21** 13:56:23.1±10.0, 20.17S×173.45W, h7km, Error ellipse: s-maj=1.9km s-min=1.6km az=291.0*
*IDC **21** 13:56:24.5±0.6, 20.29S×173.93W, h0km, mb4.6/18, mb1 4.7/19, mb1mx4.6/33, mbtmp4.6/19, ML4.9/1, MS3.9/9, Ms1 3.9/9, ms1mx3.7/29, Error ellipse: s-maj=18.3km s-min=15.4km az=130.0*

*NEIC **21** 13:56:26.2±0.3, 20.21S×174.01W, h10km, mb5.0/35, Error ellipse: s-maj=11.5km s-min=7.8km az=135.0*
*GCMT **21** 13:56:26.2±0.6, 20.50S×173.32W, h30km±1km, MW5.0/50, Moment Tensor Solution. s28,c34; s50,c76; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=4.30±.34; Mθθ=0.86±.21; Mφφ=3.43±.20; Mre=1.37±.37; Mθφ=0.56±.13; Mrr=0.14±.24; Best double couple: M=4.10500×10^16 NP1:ϕs=26.00000°, δ=50.00000°, λ=108.00000°. NP2: ϕs=179.00000°, δ=43.00000°, λ=70.00000°. Principal axes: T 4.6410, Plg76.0000°, Azm0.0000°; N -1.0650, Plg14.0000°, Azm194.0000°; P -3.5690, Plg3.0000°, Azm103.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI **21** 13:56:27.6, 20.16S×173.99W, h20km, mb5.2/26, mB5.5/18, Ms5.4/9, Ms7 4.9/11*
*ISCJB **21** 13:56:28.3±0.2, 20.31S±0.05×173.92W±0.05, h33km, mb4.9/61, MS4.0/9, Error ellipse: s-maj=8.5km s-min=5.0km az=144.9*
*MOS **21** 13:56:31.3±3.2, 20.08S×174.07W, h33km, mb5.1/18, Error ellipse: s-maj=11.2km s-min=10.9km az=17.1*
**ISC 21 13:56:28.9±0.6, 20.35S±0.06×173.90W±0.07, h24km±3km, n223, σ1§45/222, mb4.9/63, MS3.9/9, 21C-12D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** baz=3.5,SNR=46 | **3.95** | **72** | P | Pn | 13 57 16.9 | -11 |
| **AFI** | **Afiamalu** 5.4nm,0.3s,baz=39,slow=2.0,SNR=14 | **6.71** | **18** | Pn | Pn | 13 57 57.6 | -8.4 |
| AFI | | | | Sn | Sn | 13 59 09.6 | -12 |
| | 13nm,0.3s,baz=165,slow=20,SNR=3.6 | | | | | | |
| **AFI** | **Afiamalu** | **6.71** | **18** | *e*P | Pn | 13 57 57.0 | -9.0 |
| AFI | | | | *e* | | 13 59 19.9 | |
| **AFI** | **Afiamalu** | **6.71** | **18** | *e*Pn | Pn | 13 57 57.0 | -9.0 |
| AFI | | | | Sn | Sn | 13 59 09.6 | -12 |
| AFI | | | | *e*Sn | **Sn** | **13 59 19.9** | **-1.9** |
| **MSVF** | **Nonsavu** | **8.05** | **288** | P | Pn | 13 58 29.4 | +5.0 |
| **MSVF** | **Nonsavu** 447nm,1.1s,SNR=8.0 | **8.05** | **288** | Pn | Pn | 13 58 31.6 | +7.2 |
| **MSVF** | **Nonsavu** | **8.05** | **288** | Pn | Pn | 13 58 29.4 | +5.0 |
| **RAR** | **Rarotonga** 5.4nm,0.3s,baz=249,slow=6.8,SNR=23 | **13.24** | **96** | Pn | Pn | 13 59 23.2 | -12 |
| RAR | | | | Sn | Sn | 14 01 37.9 | -24 |
| | 1.0nm,0.3s,baz=127,slow=20,SNR=2.4 | | | | | | |
| RAR | | | | LR | LR | 14 04 51.7 | |
| | comp=Z,583nm,18.4s,baz=246,slow=38 | | | | | | |
| **DZM** | **Mont Dzumac** 158nm,1.6s | **18.41** | **261** | *e*P | **Pn** | **14 00 44.8** | **+2.1** |
| DZM | | | | *e*LR | LR | 14 04 54.2 | |
| | 582nm,25.1s | | | | | | |
| **DZM** | **Mont Dzumac** 1.0nm,0.3s,baz=178,slow=20,SNR=10 | **18.41** | **261** | P | **Pn** | **14 00 44.7** | **+2.1** |
| **URZ** | **Urewera** 3.7nm,0.3s,baz=308,slow=9.6,SNR=29 | **19.48** | **202** | P | **P** | **14 00 53.7** | **-0.3** |
| URZ | | | | S | S | 14 04 16.3 | -16 |
| | 0.8nm,0.3s,baz=308,slow=23,SNR=7.6 | | | | | | |
| **URZ** | **Urewera** 34nm,0.9s | **19.48** | **202** | *e*P | **P** | **14 00 53.2** | **-0.8** |
| URZ | | | | S | S | 14 04 16.2 | -16 |
| **BKZ** | **Black Stump Fm** 96nm,1.6s | **20.50** | **202** | *e*P | **P** | **14 01 05.8** | **+0.6** |
| **TBI** | **Tubuai** 621nm,31.8s,baz=283 | **22.87** | **102** | *e*LR | LR | 14 06 30.5 | |
| **PPT2** | **Papeete2** 475nm,26.8s | **23.16** | **87** | *e*LQ | LQ | 14 05 45.3 | |
| PPT2 | | | | *e*LR | LR | 14 06 50.5 | |
| | 804nm,27.8s,baz=259 | | | | | | |
| **PPT** | **Papeete** comp=Z,357nm,18.1s,baz=250,slow=32 | **23.16** | **87** | LR | LR | 14 08 52.4 | |
| **OXZ** | **Oxford** 68nm,0.9s | **25.77** | **204** | *e*P | **P** | **14 01 59.4** | **+1.7** |
| **RPZ** | **Rata Peaks** 17nm,0.7s,baz=10,slow=17,SNR=3.0 | **26.48** | **205** | P | **P** | **14 02 03.1** | **-1.1** |
| **HNR** | **Honiara** comp=Z,228nm,19.6s,baz=151,slow=33 | **27.46** | **289** | LR | LR | 14 11 20.8 | |
| **CNB** | **Canberra Magne** baz=36,SNR=5.2 | **35.52** | **237** | P | **P** | **14 03 24.5** | **+0.4** |
| **RKT** | **Rikitea** 531nm,30.8s,baz=282 | **36.19** | **102** | *e*LR | LR | 14 12 39.3 | |
| **CTA** | **Charters Tower** 9.4nm,0.7s,baz=92,slow=12,SNR=12 | **37.33** | **263** | P | **P** | **14 03 38.3** | **-1.3** |
| **CMSA** | **Cobar Meteorol** baz=38,SNR=13 | **37.82** | **245** | P | **P** | **14 03 42.6** | **-0.9** |
| **QLP** | **Quilpie** baz=39,SNR=3.9 | **38.78** | **253** | P | **P** | **14 03 50.6** | **-1.1** |
| **PMG** | **Port Moresby** 35nm,0.9s,baz=101,slow=8.1,SNR=9.9 | **39.08** | **280** | P | **P** | **14 03 52.9** | **-1.4** |
| **PMG** | **Port Moresby** | **39.08** | **280** | *e*P | P | 14 03 50.9 | -3.4 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,36nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** baz=40,SNR=6.7 | **39.08** | **280** | P | **P** | **14 03 54.0** | **-0.3** |
| **PMG** | **Port Moresby** comp=Z,36nm,0.9s | **39.08** | **280** | *e*P | P | 14 03 50.9 | -3.4 |
| **TOO** | **Toolangi** baz=40,SNR=9.0 | **39.12** | **235** | P | **P** | **14 03 54.2** | **-0.2** |
| **ARPS** | **Mount Arapiles** baz=42,SNR=7.2 | **41.79** | **237

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MAJO** | **Matsushiro** | **72.44** | **321** | *e*P | | **P** | | **14 07 51.5** | **-1.8** |
| | comp=Z,16nm,1.1s | | | | | | | | |
| **MAT** | **Matsushiro** | **72.44** | **321** | P | | **P** | | **14 07 53.0** | **-0.3** |
| **ERM** | **Erimo** | **73.66** | **328** | *e*P | | **P** | | **14 08 02.8** | **+2.5** |
| ERM | | | | | pmax | pmax | | | |
| | comp=Z,34nm,1.4s | | | | | | | | |
| **JNU** | **Nakatsue** | **74.86** | **314** | P | | **P** | | **14 08 06.8** | **-0.8** |
| | comp=Z,12nm,0.9s,baz=76,slow=4.2,SNR=3.1 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **75.50** | **329** | P | | **P** | | **14 08 10.6** | **-0.4** |
| | comp=Z,5.9nm,1.0s,baz=255,slow=17,SNR=2.5 | | | | | | | | |
| **ISA** | **Isabella** | **76.53** | **44** | *e*P | | **P** | | **14 08 16.2** | **-1.0** |
| ISA | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **ISA** | **Isabella** | **76.53** | **44** | P | | **P** | | **14 08 16.4** | **-0.8** |
| | baz=77 | | | | | | | | |
| **ISA** | **Isabella** | **76.53** | **44** | *e*P | | **P** | | **14 08 16.1** | **-1.0** |
| | comp=Z,6.7nm,1.1s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **76.64** | **46** | P | | **P** | | **14 08 17.2** | **-0.7** |
| | comp=Z,0.9nm,0.4s,baz=249,slow=8.6,SNR=2.6 | | | | | | | | |
| **CMB** | **Columbia Colle** | **76.79** | **41** | *e*P | | **P** | | **14 08 20.8** | **+2.3** |
| CMB | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **CMB** | **Columbia Colle** | **76.79** | **41** | *e*P | | **P** | | **14 08 20.8** | **+2.3** |
| | comp=Z,2.8nm,0.8s | | | | | | | | |
| **LEM** | **Lembang** | **76.89** | **268** | P | | P | | 14 08 15.2 | -4.6 |
| | baz=77,SNR=3.2 | | | | | | | | |
| **LRMC** | **Laurel Mountai** | **76.92** | **44** | P | | **P** | | **14 08 18.5** | **-1.0** |
| | baz=77 | | | | | | | | |
| **TPUB** | **Ta-pu** | **77.16** | **301** | *e*P | | **P** | | **14 08 20.4** | **-0.5** |
| | comp=Z,2μm,2.9s | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **77.18** | **46** | P | | **P** | | **14 08 20.1** | **-0.9** |
| | baz=77 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **77.18** | **343** | P | | **P** | | **14 08 20.3** | **0.0** |
| | comp=Z,4.8nm,0.8s,baz=135,slow=9.4,SNR=4.4 | | | | | | | | |
| **KSM** | **Kuching** | **77.21** | **276** | P | | **P** | | **14 08 22.2** | **+0.8** |
| | baz=78,SNR=4.3 | | | | | | | | |
| **KSM** | **Kuching** | **77.21** | **276** | *e*P | | **P** | | **14 08 19.5** | **-2.0** |
| **CWC** | **Cottonwood Cre** | **77.25** | **43** | P | | **P** | | **14 08 19.7** | **-1.6** |
| | baz=77 | | | | | | | | |
| **MPMC** | **Manual Prospec** | **77.40** | **44** | P | | **P** | | **14 08 21.9** | **-0.3** |
| | baz=78 | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **77.55** | **331** | *e*P | | **P** | | **14 08 22.9** | **+0.5** |
| YSS | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **77.55** | **331** | *e*P | | **P** | | **14 08 23.0** | **+0.5** |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **GMRC** | **Granite Mounta** | **77.86** | **46** | P | | **P** | | **14 08 24.0** | **-0.7** |
| | baz=78 | | | | | | | | |
| **GRAC** | **Grapevine Rang** | **78.04** | **43** | P | | **P** | | **14 08 25.1** | **-0.5** |
| | baz=78 | | | | | | | | |
| **NV01** | **Mina Array Sit** | **78.32** | **41** | *e*P | | **P** | | **14 08 25.5** | **-1.8** |
| **NVAR** | **Mina Array Bea** | **78.32** | **41** | P | | **P** | | **14 08 25.9** | **-1.4** |
| | comp=Z,1.9nm,0.7s,baz=227,slow=8.0,SNR=17 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **78.73** | **44** | P | | **P** | | **14 08 28.3** | **-1.2** |
| | baz=79 | | | | | | | | |
| **SHPR** | **Sheep Range** | **79.19** | **45** | *e*P | | P | | 14 08 28.9 | -3.1 |
| **MOD** | **Modoc** | **79.30** | **38** | *e*P | | **P** | | **14 08 34.8** | **+2.3** |
| | comp=Z,72nm,3.0s | | | | | | | | |
| **KSRS** | **Korea Array** | **79.37** | **317** | P | | **P** | | **14 08 33.5** | **+0.7** |
| | comp=Z,3.6nm,0.8s,baz=140,slow=6.0,SNR=9.2 | | | | | | | | |
| KSRS | | | | | LR | LR | | 14 37 11.3 | |
| | comp=Z,59nm,19.0s,baz=142,slow=31 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **79.39** | **316** | P | | **P** | | **14 08 33.5** | **+0.6** |
| **KSAR** | **Wonju Array Be** | **79.39** | **316** | P | | **P** | | **14 08 33.5** | **+0.6** |
| **KS01** | **Wonju Array Si** | **79.40** | **317** | *e*P | | **P** | | **14 08 34.1** | **+1.2** |
| **TUC** | **Tucson** | **79.89** | **50** | *e*P | | **P** | | **14 08 35.0** | **-0.9** |
| TUC | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.6s | | | | | | | | |
| **TUC** | **Tucson** | **79.89** | **50** | *e*P | | **P** | | **14 08 35.0** | **-0.9** |
| | comp=Z,14nm,1.6s | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **79.98** | **43** | P | | **P** | | **14 08 35.4** | **-0.9** |
| | baz=80 | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **79.98** | **43** | *e*P | | **P** | | **14 08 35.7** | **-0.7** |
| | comp=Z,42nm,2.7s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **80.59** | **38** | *e*P | | **P** | | **14 08 38.6** | **-0.9** |
| WVOR | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.3s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **80.59** | **38** | *e*P | | **P** | | **14 08 38.6** | **-0.9** |
| | comp=Z,8.2nm,1.3s | | | | | | | | |
| **CCUT** | **Cedar City** | **80.96** | **44** | *e*P | | **P** | | **14 08 41.7** | **-0.1** |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **81.06** | **324** | P | | **P** | | **14 08 42.1** | **+0.4** |
| | comp=Z,1.5nm,0.8s,baz=69,slow=10,SNR=5.8 | | | | | | | | |
| **WUAZ** | **Wupatki** | **81.18** | **47** | P | | **P** | | **14 08 42.3** | **-0.5** |
| | comp=Z,5.3nm,1.0s | | | | | | | | |
| **121A** | **Cookes Peak, D** | **82.18** | **51** | P | | **P** | | **14 08 47.3** | **-1.0** |
| | baz=82 | | | | | | | | |
| **G08A** | **Pilot Rock** | **82.20** | **36** | *e*P | | **P** | | **14 08 47.8** | **-0.2** |
| | comp=Z,77nm,3.0s | | | | | | | | |
| **HABR** | **Khabarovsk** | **82.27** | **329** | *e*P | | **P** | | **14 08 47.9** | **-0.1** |
| HABR | | | | *e**PP | | **pP** | | **14 08 58.5** | **+2.5** |
| HABR | | | | *e**SP | | **sP** | | **14 09 02.5** | **+3.7** |
| HABR | | | | *e* | | | | 14 11 56.5 | |
| HABR | | | | *e*PPP | | PPP | | 14 13 47.7 | |
| HABR | | | | *e*S | | **S** | | **14 19 01.5** | **-0.4** |
| HABR | | | | *e*SS | | **SS** | | **14 24 23.2** | **+0.2** |
| HABR | | | | *e*SSS | | SSS | | 14 27 51.6 | |
| HABR | | | | | pmax | pmax | | | |
| | comp=Z,42nm,2.5s | | | | | | | | |
| HABR | | | | | MLR | MLR | | | |
| | comp=Z,84nm,20.0s | | | | | | | | |
| **MSU** | **Marysvale** | **82.27** | **44** | *e*P | | **P** | | **14 08 48.7** | **+0.1** |
| **MSU** | **Marysvale** | **82.27** | **44** | *e*P | | **P** | | **14 08 48.7** | **+0.1** |
| **MDJ** | **Mudanjiang** | **82.65** | **323** | P | | **P** | | **14 08 51.3** | **+1.1** |
| MDJ | | | | | PMZ | | | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| MDJ | | | | | PMZ | | | | |
| | comp=Z,200nm,5.7s | | | | | | | | |
| **NJ2** | **Nanjing** | **82.78** | **308** | *e*P | | **P** | | **14 08 49.8** | **-1.3** |
| NJ2 | | | | | PMZ | | | | |
| | comp=Z,110nm,0.8s | | | | | | | | |
| **MAW** | **Mawson** | **82.98** | **199** | P | | **P** | | **14 08 51.9** | **+0.3** |
| | comp=Z,3.1nm,0.9s,baz=102,slow=6.2,SNR=10.0 | | | | | | | | |
| MAW | | | | | LR | LR | | 14 45 08.1 | |
| | comp=Z,201nm,18.4s,baz=69,slow=35 | | | | | | | | |
| **MAW** | **Mawson** | **82.98** | **199** | P | | **P** | | **14 08 52.6** | **+1.1** |
| | baz=83,SNR=7.9 | | | | | | | | |
| **TMUT** | **Trail Mountain** | **83.34** | **44** | *e*P | | **P** | | **14 08 54.3** | **+0.1** |
| | comp=Z,24nm,0.9s | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **83.56** | **53** | P | | **P** | | **14 08 54.1** | **-1.0** |
| | baz=84 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **83.56** | **53** | *e*P | | **P** | | **14 08 54.0** | **-1.2** |
| | comp=Z,11nm,1.5s | | | | | | | | |
| **SRU** | **San Rafael** | **83.68** | **44** | *e*P | | **P** | | **14 08 54.7** | **-1.2** |
| SRU | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **SRU** | **San Rafael** | **83.68** | **44** | *e*P | | **P** | | **14 08 54.7** | **-1.2** |
| | comp=Z,7.6nm,0.8s | | | | | | | | |
| **HLID** | **Hailey** | **83.74** | **39** | P | | **P** | | **14 08 55.3** | **-0.8** |
| | baz=84 | | | | | | | | |
| **HLID** | **Hailey** | **83.74** | **39** | *e*P | | **P** | | **14 08 54.6** | **-1.5** |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **83.76** | **56** | *e*P | | **P** | | **14 08 56.3** | **-0.1** |
| **TXAR** | **Lajitas Array** | **83.76** | **56** | P | | **P** | | **14 08 56.3** | **-0.1** |
| | comp=Z,1.3nm,0.9s,baz=217,slow=6.1,SNR=9.7 | | | | | | | | |
| **BNM** | **Barren Site** | **83.83** | **50** | *e*P | | **P** | | **14 08 58.8** | **+2.0** |
| **P18A** | **Preston Nutter** | **84.14** | **44** | *e*P | | **P** | | **14 08 57.9** | **-0.5** |
| | comp=Z,7.1nm,1.0s | | | | | | | | |
| **TCUT** | **Toone Canyon** | **84.20** | **42** | P | | **P** | | **14 08 57.3** | **-1.3** |
| | comp=Z,26nm,1.1s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **84.33** | **293** | P | | **P** | | **14 08 58.9** | **-0.4** |
| QIZ | | | | S | | **S** | | **14 19 20.8** | **-3.3** |
| QIZ | | | | | PMZ | | | | |
| | comp=Z,21nm,1.9s | | | | | | | | |
| **ANMO** | **Albuquerque** | **84.34** | **50** | *e*P | | **P** | | **14 08 58.5** | **-0.8** |
| ANMO | | | | | pmax | pmax | | | |
| | comp=Z,28nm,2.1s | | | | | | | | |
| **ANMO** | **Albuquerque** | **84.34** | **50** | *e*P | | **P** | | **14 08 58.5** | **-0.8** |
| | comp=Z,28nm,2.1s | | | | | | | | |
| **KLR** | **Kul'dur** | **84.41** | **328** | *e*P | | **P** | | **14 08 58.2** | **-0.8** |
| **529A** | **Stev Forest Ra** | **85.24** | **56** | P | | **P** | | **14 09 02.6** | **-1.2** |
| | baz=85 | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **85.39** | **39** | *e*P | | **P** | | **14 09 04.0** | **-0.4** |
| | comp=Z,2.7nm,1.1s | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **85.46** | **47** | P | | **P** | | **14 09 04.9** | **-0.1** |
| | baz=86 | | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **85.46** | **47** | *e*P | | **P** | | **14 09 05.6** | **+0.5** |
| | comp=Z,7.5nm,1.1s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **85.55** | **10** | *e*P | | P | | 14 09 08.6 | +3.9 |
| | comp=Z,55nm,1.8s | | | | | | | | |
| **429A** | **Davenport Ranc** | **85.72** | **55** | P | | **P** | | **14 09 05.1** | **-1.1** |
| | baz=86 | | | | | | | | |
| **FXWY** | **Fox Creek** | **85.81** | **40** | *e*P | | P | | 14 09 10.1 | +3.5 |
| | comp=Z,27nm,2.5s | | | | | | | | |
| **530A** | **J-C Ranch, Com** | **85.94** | **56** | P | | **P** | | **14 09 06.6** | **-0.7** |
| | baz=86 | | | | | | | | |
| **MCK** | **McKinley** | **86.04** | **11** | *e*P | | **P** | | **14 09 04.6** | **-2.4** |
| MCK | | | | | pmax | pmax | | | |
| | comp=Z,115nm,2.3s | | | | | | | | |
| **MCK** | **McKinley** | **86.04** | **11** | *e*P | | **P** | | **14 09 04.6** | **-2.4** |
| | comp=Z,115nm,2.3s | | | | | | | | |
| **128A** | **Castleberry Fa** | **86.16** | **53** | P | | **P** | | **14 09 07.0** | **-1.3** |
| | baz=86 | | | | | | | | |
| **631A** | **Perdido Creek** | **86.21** | **57** | P | | **P** | | **14 09 07.9** | **-0.6** |
| | baz=86 | | | | | | | | |
| **531A** | **Rocksprings** | **86.56** | **56** | P | | **P** | | **14 09 09.1** | **-1.2** |
| | baz=87 | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **86.56** | **38** | P | | **P** | | **14 09 09.3** | **-0.8** |
| | baz=87 | | | | | | | | |
| **IPM** | **Ipoh** | **86.94** | **276** | P | | P | | 14 09 07.5 | -5.0 |
| **532A** | **Rocksprings** | **87.04** | **56** | P | | **P** | | **14 09 11.8** | **-0.9** |
| | baz=87 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **87.08** | **11** | *e*P | | **P** | | **14 09 11.3** | **-0.7** |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **SEY** | **Seymchan** | **87.15** | **345** | *ce*P | | **P** | | **14 09 13.0** | **+0.7** |
| **COLA** | **College** | **87.28** | **11** | *e*P | | **P** | | **14 09 11.7** | **-1.2** |
| COLA | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **COLA** | **College** | **87.28** | **11** | *e*P | | **P** | | **14 09 11.7** | **-1.2** |
| | comp=Z,8.9nm,1.0s | | | | | | | | |
| **IL1** | **Eielson Array** | **87.36** | **11** | *e*P | | **P** | | **14 09 12.1** | **-1.3** |
| **ILAR** | **Eielson Array** | **87.36** | **11** | P | | **P** | | **14 09 11.8** | **-1.6** |
| | comp=Z,0.6nm,0.7s,baz=228,slow=6.0,SNR=16 | | | | | | | | |
| **SYO** | **Syowa Base** | **87.68** | **191** | ⇑*e*X | | **P** | | **14 09 12.4** | **-2.6** |
| **433A** | **Art** | **87.95** | **56** | P | | **P** | | **14 09 15.4** | **-1.6** |
| | baz=88 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **88.00** | **175** | P | | **P** | | **14 09 18.9** | **+2.3** |
| **SNAA** | **Sanae** | **88.02** | **177** | P | | **P** | | **14 09 18.8** | **+2.2** |
| **SNAA** | **Sanae** | **88.02** | **177** | *e*P | | **P** | | **14 09 18.9** | **+2.2** |
| SNAA | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.1s | | | | | | | | |
| **534A** | **Blanco** | **88.12** | **57** | P | | **P** | | **14 09 17.0** | **-0.9** |
| | baz=88 | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **88.48** | **176** | P | | **P** | | **14 09 19.2** | **+0.3** |
| | baz=190,slow=3.0 | | | | | | | | |
| **BJI** | **Beijing** | **88.52** | **314** | P | | **P** | | **14 09 20.0** | **+0.6** |
| BJI | | | | | PMZ | | | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| BJI | | | | | PMZ | | | | |
| | comp=Z,580nm,8.8s | | | | | | | | |
| **SKNT** | **Sakolnakorn** | **88.69** | **289** | P | | P | | 14 09 24.5 | +3.7 |
| | comp=Z,21nm,1.1s | | | | | | | | |
| **BILL** | **Bilibino** | **89.33** | **353** | P | | **P** | | **14 09 25.0** | **+2.4** |
| BILL | | | | *e*SS | | SS | | 14 26 02.8 | -3.2 |
| BILL | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **NONG** | **Nongkai** | **89.83** | **289** | P | | P | | 14 09 31.3 | +5.2 |
| | comp=Z,120nm,3.1s,comp=Z,5μm | | | | | | | | |
| **GYA** | **Guiyang** | **89.94** | **298** | *e*P | | **P** | | **14 09 27.3** | **+0.7** |
| GYA | | | | | PP | **PP** | | **14 13 02.0** | **+2.1** |
| GYA | | | | | SKS | **SKSac** | | **14 19 55.3** | **-1.0** |
| GYA | | | | | S | **S** | | **14 20 18.8** | **+0.6** |
| GYA | | | | | SS | **SS** | | **14 26 19.6** | **+2.7** |
| GYA | | | | | PMZ | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| GYA | | | | | PMZ | | | | |
| | comp=Z,120nm,5.6s | | | | | | | | |
| GYA | | | | | LN | | | | |
| | comp=Z,510nm,19.6s | | | | | | | | |
| GYA | | | | | LE | | | | |
| | comp=Z,490nm,20.0s | | | | | | | | |
| GYA | | | | | LZ | | | | |
| | comp=Z,460nm,19.4s | | | | | | | | |
| **PHET** | **Kaeng Krachan** | **91.17** | **283** | P | | P | | 14 09 35.8 | +3.4 |
| | comp=Z,6.7nm,1.0s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **92.03** | **313** | *e*P | | **P** | | **14 09 35.4** | **-0.6** |
| HHC | | | | | PMZ | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| HHC | | | | | PMZ | | | | |
| | comp=Z,420nm,5.9s | | | | | | | | |
| **UTHA** | **Uthaitani** | **92.26** | **286** | P | | P | | 14 09 40.7 | +3.3 |
| | comp=Z,3.5nm,0.9s | | | | | | | | |
| **NANT** | **Nan** | **92.26** | **289** | P | | **P** | | **14 09 40.2** | **+2.8** |
| | comp=Z,2.9nm,1.1s | | | | | | | | |
| **JTS** | **JuntasAbangare** | **92.54** | **80** | *e*P | | **P** | | **14 09 39.8** | **+1.0** |
| JTS | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **KMI** | **Kunming** | **92.73** | **296** | P | | **P** | | **14 09 41.5** | **+1.8** |
| KMI | | | | pP | | **pP** | | **14 09 45.0** | **-2.7** |
| KMI | | | | sP | | **sP** | | **14 09 47.0** | **-3.6** |
| KMI | | | | S | | **ScS** | | **14 20 46.8** | **+1.0** |
| KMI | | | | SS | | **SS** | | **14 26 55.0** | **-2.3** |
| KMI | | | | PMZ | | | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| KMI | | | | LZ | | | | | |
| | comp=Z,100nm,16.4s | | | | | | | | |
| **LAMP** | **Lampang** | **93.11** | **288** | P | | P | | 14 09 44.5 | +3.2 |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| **YAK** | **Yakutsk** | **93.45** | **337** | *e*P | | **P** | | **14 09 41.0** | **-0.8** |
| YAK | | | | | pmax | pmax | | | |
| | comp=Z,13nm,2.5s | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **93.68** | **288** | *e*P | | **P** | | **14 09 45.4** | **+1.5** |
| **CMAR** | **Chiang Mai Arr** | **93.70** | **288** | P | | **P** | | **14 09 45.4** | **+1.3** |
| | comp=Z,4.8nm,0.9s,baz=129,slow=2.8,SNR=28 | | | | | | | | |
| CMAR | | | | | LR | LR | | 14 52 01.2 | |
| | comp=Z,23nm,18.7s,baz=355,slow=36 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **93.83** | **289** | P | | **P** | | **14 09 47.3** | **+2.7** |
| **CHTO** | **Chiang Mai** | **93.83** | **289** | *e*P | | **P** | | **14 09 43.7** | **-0.9** |
| CHTO | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **93.83** | **289** | *e*P | | **P** | | **14 09 43.7** | **-0.9** |
| | comp=Z,9.4nm,1.1s | | | | | | | | |
| **CD2** | **Chengdu** | **93.97** | **301** | *e*P | | **P** | | **14 09 44.5** | **-0.6** |
| CD2 | | | | PP | | **PP** | | **14 13 30.3** | **-1.2** |
| CD2 | | | | SKS | | **SKSac** | | **14 20 19.0** | **+0.3** |
| CD2 | | | | S | | **ScS** | | **14 20 54.8** | **-0.8** |
| CD2 | | | | sS | | sS | | 14 21 00.6 | -6.9 |
| CD2 | | | | SS | | **SS** | | **14 27 15.8** | **+1.2** |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,120nm,5.2s | | | | | | | | |
| **LZH** | **Lanzhou** | **95.76** | **306** | *e*P | | **P** | | **14 09 53.0** | **-0.3** |
| LZH | | | | PP | | **PP** | | **14 13 47.5** | **+2.0** |
| LZH | | | | PMZ | | | | | |
| | comp=Z,17nm,1.6s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,79nm,9.5s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | comp=Z,300nm,17.2s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | comp=Z,290nm,17.6s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | comp=Z,380nm,19.7s | | | | | | | | |
| **SONM** | **Songino Array** | **98.19** | **318** | PP | | PP | | 14 14 01.2 | -2.7 |
| | comp=Z,0.2nm,0.3s,baz=134,slow=6.4,SNR=3.5 | | | | | | | | |
| **SSPA** | **Standing Stone** | **107.40** | **52** | *e*PKPdf | | **PKiKP** | | **14 14 53.2** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **112.79** | **321** | PP | | PP | | 14 15 47.5 | -3.9 |
| | comp=Z,0.4nm,0.4s,baz=90,slow=3.2,SNR=4.8 | | | | | | | | |
| **KSH** | **Kashi** | **117.96** | **305** | *e*PKP | | **PKPdf** | | **14 15 15.8** | **+2.0** |
| KSH | | | | *e*PP | | PP | | 14 16 35.0 | +6.5 |
| KSH | | | | SKS | | **SKSdf** | | **14 22 25.9** | **+1.3** |
| KSH | | | | SS | | **SS** | | **14 32 47.4** | **+5.9** |
| KSH | | | | PPMZ | | | | | |
| | comp=Z,180nm,5.4s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,640nm,9.8s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,310nm,8.3s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,190nm,7.7s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **142.76** | **239** | *i* PKiKP | | **PKPdf** | | **14 16 02.0** | **+0.6** |
| KMBO | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.64** | **334** | PKP | | **PKPab** | | **14 16 01.2** | **-0.7** |
| | comp=Z,5.3nm,0.8s,baz=40,slow=4.4,SNR=31 | | | | | | | | |
| **KIEV** | **Kiev** | **144.65** | **334** | *d* iPKiKP | | **PKPab** | | **14 16 01.5** | **-0.4** |
| **KIEV** | **Kiev** | **144.65** | **334** | *e*PKPdf | | **PKPab** | | **14 16 01.1** | **-0.8** |
| **MALT** | **Malatya** | **146.84** | **310** | ⇓PKP2 | | **PKPab** | | **14 16 10.6** | **-0.1** |
| **MALT** | **Malatya** | **146.84** | **310** | ⇓*i*P | | **PKPab** | | **14 16 10.6** | **-0.1** |
| **LVV** | **L'vov** | **147.31** | **338** | *e*PKiKP | | **PKPbc** | | **14 16 09.7** | **-0.5** |
| **IAS** | **Iasi** | **148.03** | **332** | ⇑*i*P | | PKPab | | 14 16 21.9 | +6.9 |
| **STHS** | **Stebnicka Huta** | **148.57** | **341** | *e*PKP2 | | **PKPbc** | | **14 16 14.8** | **+1.2** |
| **STHS** | **Stebnicka Huta** | **148.57** | **341** | *e*PKP | | **PKPbc** | | **14 16 14.8** | **+1.2** |
| STHS | | | | *e* | | | | 14 16 18.5 | |
| **CLL** | **Collm** | **148.63** | **352** | ⇑*i* PKiKP | | **PKPbc** | | **14 16 13.2** | **-0.5** |
| CLL | | | | *e* | | | | 14 16 17.0 | |
| CLL | | | | *i* | | | | 14 16 24.7 | |
| CLL | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.2s | | | | | | | | |
| **CLL** | **Collm** | **148.63** | **352** | ⇑*i*PKPbc | | **PKPbc** | | **14 16 13.2** | **-0.5** |
| | comp=Z,13nm,1.2s | | | | | | | | |
| CLL | | | | *e*PKPab | | **PKPab** | | **14 16 17.0** | **-0.2** |
| CLL | | | | *i* pPKPab | | **PKiKP** | | **14 16 18.7** | **+3.5** |
| CLL | | | | *i* | | | | 14 16 24.7 | |
| **KOLS** | **Kolonicke sedl** | **148.67** | **339** | *e*PKP2 | | **PKPbc** | | **14 16 15.1** | **+1.2** |
| **KOLS** | **Kolonicke sedl** | **148.67** | **339** | *e*PKP | | **PKPbc** | | **14 16 15.1** | **+1.2** |
| **BURAR** | **Bucovina Array** | **148.69** | **335** | ⇑PKP2 | | **PKPbc** | | **14 16 15.8** | **+1.7** |
| **BURAR** | **Bucovina Array** | **148.69** | **335** | ⇑*i*P | | **PKPbc** | | **14 16 15.8** | **+1.7** |
| **BRG** | **Berggiesshubel** | **148.91** | **350** | *e*PKP | | **PKPbc** | | **14 16 14.1** | **-0.3** |
| | comp=Z,6.4nm,1.1s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **148.91** | **350** | *e*PKIKP | | **PKPbc** | | **14 16 14.1** | **-0.3** |
| BRG | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **UZH** | **Uzhgorod** | **148.92** | **339** | ⇑*i*PKIKP | | **PKPbc** | | **14 16 14.4** | **-0.1** |
| UZH | | | | *i* | | | | 14 16 17.2 | |
| **TLCR** | | **148.93** | **328** | ⇓PKP2 | | **PKPbc** | | **14 16 14.8** | **+0.2** |
| **TLCR** | | **148.93** | **328** | ⇓*i*P | | **PKPbc** | | **14 16 14.8** | **+0.2** |
| **TESR** | **Tescani** | **148.96** | **332** | ⇑*i*P | | **PKPbc** | | **14 16 13.6** | **-1.1** |
| **DPC** | **Dobruska-Polom** | **148.98** | **347** | *e*PKP2 | | **PKPbc** | | **14 16 15.0** | **+0.3** |
| **DPC** | **Dobruska-Polom** | **148.98** | **347** | ⇑*e*PKP | | **PKPbc** | | **14 16 15.0** | **+0.3** |
| **VRI** | **Vrincioaia** | **149.42** | **331** | ⇑PKP2 | | **PKPbc** | | **14 16 16.2** | **+0.3** |
| **VRI** | **Vrincioaia** | **149.42** | **331** | ⇑*i*P | | **PKPbc** | | **14 16 16.2** | **+0.3** |
| **BRTR** | **Keskin Array B** | **149.51** | **315** | PKPbc | | **PKPbc** | | **14 16 16.2** | **-0.2** |
| | comp=Z,1.7nm,0.8s,baz=114,slow=4.1,SNR=8.2 | | | | | | | | |
| BRTR | | | | | PP | **PP** | | **14 19 47.9** | **-1.1** |
| | comp=Z,0.2nm,0.3s,baz=29,slow=6.6,SNR=2.6 | | | | | | | | |
| **VRAC** | **Vranov** | **149.91** | **346** | ⇓*i*P | | **PKPab** | | **14 16 25.8** | **+3.3** |
| **DOPR** | **Dopca** | **149.93** | **333** | ⇓*i*P | | **PKPbc** | | **14 16 18.0** | **+0.8** |
| **BR231** | **Keskin MP Arra** | **150.01** | **316** | *e*PKPbc | | **PKPbc** | | **14 16 16.9** | **-0.8** |
| **MLR** | **Muntele Rosu** | **150.06** | **331** | ⇑*i*P | | **PKPbc** | | **14 16 17.4** | **-0.2** |
| **CJR** | **Cluj-Napoca** | **150.07** | **336** | ⇓PKP2 | | **PKPbc** | | **14 16 18.2** | **+0.7** |
| **CJR** | **Cluj-Napoca** | **150.07** | **336** | ⇓*i*P | | **PKPbc** | | **14 16 18.2** | **+0.7** |
| **VYHS** | **Vyhne** | **150.10** | **343** | *e*PKP | | **PKPbc** | | **14 16 17.8** | **+0.3** |
| VYHS | | | | *e* | | | | 14 16 23.3 | |
| **DRGR** | | **150.34** | **337** | ⇓PKIKP | | **PKPbc** | | **14 16 18.2** | **0.0** |
| **DRGR** | | **150.34** | **337** | ⇓*i*P | | **PKPbc** | | **14 16 18.2** | **0.0** |
| **VOIR** | | **150.50** | **332** | ⇑PKIKP | | **PKPbc** | | **14 16 19.1** | **+0.5** |
| **VOIR** | | **150.50** | **332** | ⇑*i*P | | **PKPbc** | | **14 16 19.1** | **+0.5** |
| **KHC** | **Kasperske Hory** | **150.66** | **350** | *e*PKIKP | | **PKPbc** | | **14 16 18.8** | **0.0** |
| KHC | | | | *e* | | | | 14 16 31.6 | |
| **KHC** | **Kasperske Hory** | **150.66** | **350** | ⇑*e*PKP | | **PKPbc** | | **14 16 18.8** | **0.0** |
| KHC | | | | *ex* | | x | | 14 16 31.6 | |
| **ARR** | **Arges** | **150.73** | **333** | ⇓*i*P | | **PKPbc** | | **14 16 20.0** | **+0.9** |
| **GERES** | **GERESS Array B** | **150.92** | **350** | PKPbc | | **PKPbc** | | **14 16 18.9** | **-0.6** |
| | comp=Z,0.9nm,0.7s,baz=46,slow=3.9,SNR=6.6 | | | | | | | | |
| **GZR** | **Gura Zlata** | **151.48** | **335** | ⇑PKIKP | | **PKPbc** | | **14 16 19.3** | **-1.6** |
| **GZR** | **Gura Zlata** | **151.48** | **335** | ⇑*i*P | | **PKPbc** | | **14 16 19.3** | **-1.6** |
| **BZS** | **Buzias** | **151.74** | **337** | ⇑PKIKP | | **PKPbc** | | **14 16 18.8** | **-2.6** |
| **BZS** | **Buzias** | **151.74** | **337** | ⇑*i*P | | **PKPbc** | | **14 16 18.8** | **-2.6** |
| **DIVS** | **Divibare** | **153.64** | **337** | ⇑*i*P | | **PKPdf** | | **14 16 20.9** | **+2.9** |
| **TORD** | **Torodi Ar. Bea** | **171.69** | **149** | PKP | | **PKPdf** | | **14 16 33.9** | **-2.4** |
| | comp=Z,0.4nm,0.8s,baz=276,slow=2.8,SNR=2.5 | | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | | **14 17 56.0** | **-1.7** |
| | comp=Z,0.8nm,1.1s,baz=209,slow=2.6,SNR=2.8 | | | | | | | | |

*IDC* ***21*** *13:58:03.8±2.4, 6.98S×130.74E, h108km±27km, mb3.5/1, mb1 3.9/5, mb1mx3.5/33, mbtmp4.3/5, Error ellipse: s-maj=39.1km s-min=19.6km az=83.0*

*AUST* ***21*** *13:58:03.9, 6.97S×130.54E, h60km*

*ISCJB* ***21*** *13:58:04.3±0.4, 6.94S±0.03×130.57E±0.05, h100km, mb3.7/1, Error ellipse: s-maj=7.8km s-min=4.5km az=169.3*

*DJA* ***21*** *13:58:06.3±0.4, 7°S±2°×13°1E±°, h126km±7km, M4.5/12, mb4.6/7, mB5.1/5, MLv4.5/12, Mw(mB)4.5/5*

**ISC 21 13:58:04.4±0.8, 6.97S±0.05×130.60E±0.07, h100km, n24, σ1§99/27, Banda Sea**

| Code | Station

365nm,0.3s,baz=164,slow=23,SNR=5.0
**SLBS Sierra La Lagu 1.11 212** *e*Pg **Pb 14 27 00.6 -0.3**
**TX31 Lajitas Ar. Si 6.87 46** *e*Pn **Pn 14 28 21.4 +1.1**
**TXAR Lajitas Array 6.87 46** Pn Pn 14 28 16.9 -3.4
0.7nm,0.3s,baz=225,slow=14,SNR=14
TXAR Lg Lg 14 30 06.6
14nm,0.3s,baz=224,slow=31,SNR=7.2
**TUC Tucson 7.76 351** *e*Pn Pn 14 28 28.8 -3.7
**MNTX Cornudas Mount 7.84 25** P **Pn 14 28 30.7 -2.9**
baz=7.8,SNR=8.3
**MNTX Cornudas Mount 7.84 25** *e*Pn Pn 14 28 29.7 -3.9
**214A Organ Pipe Nat 7.92 338** P **Pn 14 28 33.5 -1.3**
baz=8.0
**121A Cookes Peak, D 7.98 9** P **Pn 14 28 33.6 -2.1**
baz=8.0,SNR=9.6
**121A Cookes Peak, D 7.98 9** *e*Pn **Pn 14 28 32.7 -3.0**
48nm,0.9s
121A *e*Sn **Sn 14 30 06.8 +0.6**
**529A Stev Forest Ra 8.34 47** P **Pn 14 28 37.7 -2.7**
baz=8.3
**429A Davenport Ranc 8.87 46** P **Pn 14 28 46.6 -1.2**
baz=8.8
**530A J-C Ranch, Com 8.96 50** P **Pn 14 28 48.1 -0.8**
baz=8.9
**CLNB Carlsbad 8.97 31** *e*Pn **Pn 14 28 48.0 -1.2**
**631A Perdido Creek 9.12 57** P **Pn 14 28 50.6 -0.6**
baz=9.0,SNR=9.1
**329A Wagon Wheel Ra 9.40 42** P **Pn 14 28 55.2 +0.1**
baz=9.3
**430A Baggett Ranch, 9.41 48** P **Pn 14 28 56.2 +1.0**
baz=9.3
**933A Laredo 9.49 70** P **Pn 14 28 58.0 +1.8**
baz=9.4
**228A UT Block 9, Go 9.51 37** P **Pn 14 28 57.6 +1.0**
baz=9.5
**531A Rocksprings 9.53 53** P **Pn 14 28 58.2 +1.4**
baz=9.5,SNR=5.7
**833A Chaparral WMA, 9.61 65** P **Pn 14 28 59.4 +1.6**
baz=9.5
**Y22D IRIS PASSCAL I 9.63 12** P **Pn 14 29 00.4 +2.2**
baz=9.6
**GLA Glamis 9.68 331** P **Pn 14 29 00.4 +1.5**
baz=9.8,SNR=5.2
**GLA Glamis 9.68 331** *e*Pn **Pn 14 28 58.9 0.0**
**BNM Barren Site 9.76 13** *e*Pn **Pn 14 28 59.4 -0.8**
**632A Uvalde 9.77 58** P **Pn 14 28 59.9 -0.1**
baz=9.7
**431A Sonora 9.78 50** P **Pn 14 29 00.9 +0.7**
baz=9.7
**330A Mertzon 9.85 45** P **Pn 14 29 01.8 +0.6**
baz=9.8
**034A Hebbronville 9.87 74** P **Pn 14 29 01.5 +0.1**
baz=9.8
**LAZ Ladron 9.91 10** *e*Pn **Pn 14 29 00.3 -1.9**
**LPM Los Pinos Moun 9.92 13** *e*Pn **Pn 14 29 01.3 -1.0**
**128A Castleberry Fa 9.96 35** P **Pn 14 29 03.7 +1.0**
baz=9.9
**IBP Imperial Bould 9.97 325** P **Pn 14 29 04.4 +1.5**
baz=10
**532A Rocksprings 9.98 55** P **Pn 14 29 04.2 +1.2**
baz=9.9
**SWSC Sam W. Stewart 10.04 327** P **Pn 14 29 05.2 +1.5**
baz=10
**Y12C Blythe 10.16 335** P **Pn 14 29 06.9 +1.5**
baz=10
**230A Sterling City 10.21 43** P **Pn 14 29 06.8 +0.6**
baz=10
**JCT Junction City 10.24 53** P **Pn 14 29 07.4 +0.9**
baz=10
**JCT Junction City 10.24 53** *e*Pn **Pn 14 29 04.3 -2.2**
15nm,0.9s
**331A San Angelo 10.28 48** P **Pn 14 29 08.2 +1.1**
baz=10
**BAR Barrett 10.30 323** *e*Pn **Pn 14 29 07.3 0.0**
**W18A Petrified Fore 10.45 358** *e*Pn **Pn 14 29 09.8 +0.2**
166nm,1.2s
**432A Menard 10.46 51** P **Pn 14 29 09.4 -0.2**
baz=10,SNR=6.0
**BC3 Big Chuckawall 10.47 331** P **Pn 14 29 11.0 +1.2**
baz=10,SNR=9.9
**PDMCI Parker Dam,Lak 10.51 337** P **Pn 14 29 12.2 +2.0**
baz=11
**Z28A Tucker Farm, M 10.53 33** P **Pn 14 29 11.8 +1.2**
baz=10
**ANMO Albuquerque 10.57 13** Pn **Pn 14 29 12.4 +1.3**
0.1nm,0.3s,baz=194,slow=14,SNR=32
ANMO Lg Lg 14 32 07.5
0.3nm,0.3s,baz=247,slow=12,SNR=4.0
**ANMO Albuquerque 10.57 13** Pn **Pn 14 29 11.3 +0.2**
ANMO Lg Lg 14 32 07.5
**IRM Iron Mountain 10.77 333** P **Pn 14 29 14.8 +1.0**
baz=11,SNR=12
**332A Millersview 10.79 49** P **Pn 14 29 15.3 +1.2**
baz=11
**130A Snyder 10.79 41** P **Pn 14 29 15.4 +1.3**
baz=11
**Z29A Hungry Hill Ra 10.86 36** P **Pn 14 29 16.3 +1.2**
baz=11
**MSTX Muleshoe 10.90 30** P **Pn 14 29 17.5 +1.8**
baz=11
**MSTX Muleshoe 10.90 30** *e*Pn **Pn 14 29 15.1 -0.6**
**433A Art 10.91 54** P **Pn 14 29 16.7 +1.1**
baz=11
**PFO Pinyon Flat Ob 10.91 327** Pn **Pn 14 29 17.0 +1.3**
0.1nm,0.3s,baz=148,slow=13,SNR=18
**PFO Pinyon Flat Ob 10.91 327** *e*Pn **Pn 14 29 17.9 +2.1**
**WUAZ Wupatki 10.99 351** P **Pn 14 29 18.5 +1.5**
baz=11,SNR=7.9
**WUAZ Wupatki 10.99 351** *e*Pn **Pn 14 29 16.5 -0.4**
**BELC Belle Mtn. Jos 11.01 330** P **Pn 14 29 18.3 +1.2**
baz=11,SNR=8.1
**735A Kenedy 11.10 65** P **Pn 14 29 19.7 +1.4**
baz=11
**Y28A McKinney Farm, 11.10 32** P **Pn 14 29 20.1 +1.7**
baz=11
**232A Coleman 11.16 47** P **Pn 14 29 20.8 +1.6**
baz=11
**131A Roby 11.19 42** P **Pn 14 29 21.4 +1.8**
baz=11
**Z30A Sanderson Ranc 11.20 38** P **Pn 14 29 21.3 +1.6**
baz=11
**MURC Murrieta 11.29 324** P **Pn 14 29 23.6 +2.8**
baz=11
**333A Richland Sprin 11.29 52** P **Pn 14 29 23.4 +2.5**
baz=11
**Y29A Porterfield Fa 11.35 34** P **Pn 14 29 24.2 +2.5**
baz=11
**GMRC Granite Mounta 11.52 333** P **Pn 14 29 25.5 +1.4**
baz=12,SNR=5.8
**SCI San Clemente I 11.61 318** P **Pn 14 29 27.4 +2.2**
baz=12
**736A Circle Diamond 11.74 66** P **Pn 14 29 28.8 +1.8**
baz=12
**233A Rising Star 11.74 49** P **Pn 14 29 29.0 +1.8**
baz=12
**Z31A Sharp Cattle R 11.79 41** P **Pn 14 29 29.7 +2.0**
baz=12
**X29A Tulia 11.80 32** P **Pn 14 29 28.9 +1.0**
baz=12
**334A Lometa 11.83 53** P **Pn 14 29 30.4 +2.1**
baz=12
**HEC Hector,Ludlow 11.85 331** P **Pn 14 29 29.6 +1.0**
baz=12
**636A Smothers Creek 11.93 63** P **Pn 14 29 29.2 -0.4**
baz=12
**BFSC Mount Baldy Ra 12.02 325** P **Pn 14 29 30.6 -0.4**
baz=12
**AMTX Amarillo 12.16 31** P **Pn 14 29 33.6 +0.7**
baz=12
**Y31A Rekieta Farm, 12.18 38** P **Pn 14 29 33.7 +0.5**
baz=12
**Z32A Haskell 12.18 43** P **Pn 14 29 33.4 +0.3**
baz=12
**TUQ Turquoise Moun 12.19 334** P **Pn 14 29 34.8 +1.5**
baz=12
**X30A Coker Ranch, T 12.22 35** P **Pn 14 29 34.7 +1.1**
baz=12
**234A Clairette 12.27 51** P **Pn 14 29 35.1 +0.8**
baz=12
**W29A Amraillo 12.38 31** P **Pn 14 29 37.2 +1.4**
baz=12
**V27A Dan Oppiter Fa 12.41 25** P **Pn 14 29 36.3 0.0**
baz=12,SNR=5.8
**GSC Goldstone 12.46 330** P **Pn 14 29 37.5 +0.6**
baz=12,SNR=8.1
**GSC Goldstone 12.46 330** *e*Pn **Pn 14 29 37.9 +1.0**
**MVCO Mesa Verde 12.55 3** P **Pn 14 29 39.1 +0.7**
baz=13
**MVCO Mesa Verde 12.55 3** *e*Pn **Pn 14 29 37.5 -0.8**
**Z33A Whitaker Ranch 12.62 45** P **Pn 14 29 39.8 +0.7**
baz=13
**Y32A R-V Farms, Ver 12.69 40** P **Pn 14 29 42.1 +2.1**
baz=13
**BLG Laguna Peak 12.70 320** P **Pn 14 29 42.8 +2.6**
baz=13
**WHTX Lake Whitney 12.74 52** P **Pn 14 29 40.7 -0.1**
baz=13
**X31A McDonald Ranch 12.84 37** P **Pn 14 29 44.6 +2.6**
baz=13
**SHPR Sheep Range 12.86 338** *e*Pn **Pn 14 29 44.5 +2.0**
**738A Farr-Stevens R 12.90 68** P **Pn 14 29 44.3 +1.4**
baz=13
**BSC Santa Cruz Isl 12.96 318** P **Pn 14 29 44.1 +0.3**
baz=13
**U27A Thompson Grove 13.00 24** P **Pn 14 29 45.0 +0.7**
baz=13
**LRMC Laurel Mountai 13.01 328** P **Pn 14 29 46.9 +2.4**
baz=13,SNR=56
**X32A Elmer 13.07 39** P **Pn 14 29 46.5 +1.3**
baz=13
**HKT Hockley 13.09 63** *e*Pn **Pn 14 29 43.7 -1.8**
**T25A Trinidad 13.15 17** P **Pn 14 29 47.4 +1.0**
baz=13
**T25A Trinidad 13.15 17** *e*Pn **Pn 14 29 46.7 +0.2**
**S22A 4UR Ranch, Cre 13.24 9** P **Pn 14 29 49.7 +1.9**
baz=13
**S22A 4UR Ranch, Cre 13.24 9** *e*Pn **Pn 14 29 49.4 +1.6**
**ARVC Arvin 13.32 324** P **Pn 14 29 50.4 +1.8**
baz=13
**CCUT Cedar City 13.33 346** *e*Pn **Pn 14 29 51.0 +2.0**
**MPMC Manual Prospec 13.39 330** P **Pn 14 29 52.1 +2.3**
baz=14,SNR=35
**T26A Comanche Natio 13.42 20** P **Pn 14 29 51.0 +0.8**
baz=13,SNR=8.8
**FURC Furnace Creek, 13.47 333** P **Pn 14 29 52.5 +1.9**
baz=14
**SDCO Great Sand Dun 13.47 13** P **Pn 14 29 51.8 +1.0**
baz=14,SNR=5.5
**SDCO Great Sand Dun 13.47 13** Pn **Pn 14 29 51.8 +1.0**
**ISA Isabella 13.55 326** P **Pn 14 29 53.5 +1.7**
baz=14,SNR=20
**ISA Isabella 13.55 326** *e*Pn **Pn 14 29 52.2 +0.5**
**WMOK Wichita Mounta 13.59 40** *e*Pn **Pn 14 29 50.5 -1.9**
**T27A Campo 13.61 23** P **Pn 14 29 54.6 +2.0**
baz=14
**DAC Darwin (Calif) 13.62 330** *e*P **Pn 14 29 54.0 +1.2**
178nm,1.8s
**BAKC Calstate 13.63 324** *e*Pn Pn 14 29 56.7 +3.9
**T28A Walsh 13.88 25** P **Pn 14 29 56.7 +0.3**
baz=14
**CWC Cottonwood Cre 13.98 329** P **Pn 14 30 00.0 +2.3**
baz=14,SNR=7.3
**VES Vestal, Richgr 14.00 325** P **Pn 14 29 58.2 +0.4**
baz=14
**MSU Marysvale 14.05 351** *e*P **Pn 14 29 58.3 -0.4**
**W33A Caddo, Fort Co 14.06 39** P **Pn 14 29 58.9 +0.1**
baz=14
**Y35A Marietta 14.13 46** P **Pn 14 29 59.3 -0.3**
baz=14
**GRAC Grapevine Rang 14.13 333** P **Pn 14 30 01.2 +1.5**
baz=14,SNR=13
**SRU San Rafael 14.47 356** *e*Pn **Pn 14 30 04.3 -0.2**
**R11A Troy Canyon, C 14.68 340** P **Pn 14 30 08.5 +1.2**
baz=15,SNR=13
**R11A Troy Canyon, C 14.68 340** *e*Pn **Pn 14 30 08.4 +1.2**
**R27A Eads 14.69 21** P **Pn 14 30 07.1 -0.4**
baz=15,SNR=9.7
**TMUT Trail Mountain 14.71 354** *e*Pn **Pn 14 30 06.9 -0.9**
67nm,1.1s
**Q24A Divide 14.71 13** P **Pn 14 30 09.1 +1.2**
baz=15
**P17A Butcher Ranch, 14.84 356** *e*Pn **Pn 14 30 10.1 +0.6**
**MTUM Tungsten Hills 14.95 330** *e*Pn **Pn 14 30 13.2 +2.3**
**P18A Preston Nutter 14.97 357** *e*Pn **Pn 14 30 12.7 +1.2**
42nm,1.4s
**W35A Tecumseh 15.02 43** P **Pn 14 30 12.5 +0.7**
baz=15
**R29A Marienthal 15.40 25** P **Pn 14 30 16.8 0.0**
baz=15
**CMIG Matias Romero 15.42 116** LR LR 14 36 07.4
comp=Z,1µm,21.2s,baz=275,slow=37
**W36A Wetumka 15.42 44** P **Pn 14 30 16.8 -0.2**
baz=15
**S31A Mullinville 15.42 31** P **Pn 14 30 17.8 +0.7**
baz=15
**ISCO Idaho Springs 15.44 11** P **Pn 14 30 17.7 +0.1**
baz=16,SNR=8.6
**ISCO Idaho Springs 15.44 11** *e*Pn **Pn 14 30 17.4 -0.2**
52nm,1.4s
**MPU Maple Canyon 15.46 353** *e*Pn **Pn 14 30 18.2 +0.4**
74nm,1.2s
**LRV Little Rabbit 15.47 322** *e*Pn **P 14 30 20.7 -1.6**
**O20A White River Ci 15.48 3** P **Pn 14 30 19.6 +1.5**
baz=16
**U34A Anderson Ranch 15.51 38** *e*Pn **Pn 14 30 17.6 -0.6**
103nm,1.9s
**T33A Patterson Ranc 15.61 35** P **Pn 14 30 21.0 +1.5**
baz=16
**R30A Dighton 15.62 27** P **Pn 14 30 21.8 +2.0**
baz=16,SNR=7.2
**X37A Clayton 15.64 47** P **Pn 14 30 20.2 +0.3**
baz=16
**NV01 Mina Array Sit 15.73 333** *e*Pn **Pn 14 30 23.1 +1.8**
**NVAR Mina Array Bea 15.73 333** Pn **P 14 30 23.4 -2.1**
baz=152,slow=12,SNR=20
**DUG Dugway 15.79 350** P **Pn 14 30 23.4 +1.3**
baz=16
**DUG Dugway 15.79 350** Pn **Pn 14 30 21.4 -0.6**
71nm,1.8s
**W37A Quinton 15.93 46** P **Pn 14 30 24.0 +0.3**
baz=16,SNR=8.0
**V36A Jenks 16.01 43** P **Pn 14 30 25.4 +0.6**
baz=16
**X38A Whitesboro 16.05 48** P **Pn 14 30 25.7 +0.3**
baz=16
**S33A Kaszmaul Farm, 16.12 34** P **Pn 14 30 26.1 -0.1**
baz=16
**T34A McClaskey Farm 16.13 37** P **Pn 14 30 26.8 +0.5**
baz=16
**CTU Camp Tracy 16.14 353** *e*Pn **Pn 14 30 27.2 +0.6**
51nm,1.6s
**P28A Saint Francis 16.20 21** P **Pn 14 30 28.2 +1.0**
baz=16
**Q30A Quinter 16.23 26** P **Pn 14 30 27.8 +0.2**
baz=16
**CBKS Cedar Bluff 16.29 28** P **Pn 14 30 28.2 -0.2**
baz=16
**CBKS Cedar Bluff 16.29 28** *e*Pn **Pn 14 30 26.9 -1.5**
66nm,1.2s
**CMB Columbia Colle 16.35 327** *e*Pn **Pn 14 30 29.4 +0.2**
54nm,1.8s
**N23A Red Feather La 16.46 9** P **P 14 30 32.3 -1.2**
baz=16
**W38A Poteau 16.49 48** P **Pn 14 30 31.5 +0.6**
baz=16,SNR=8.9
**BGU Big Grassy Mou 16.54 350** *e*Pn **Pn 14 30 31.7 0.0**
72nm,1.7s
**V37A Hulbert 16.57 44** P **Pn 14 30 32.7 +0.8**
baz=16
**Q31A Ellis 16.60 28** P **P 14 30 33.6 -1.2**
baz=17
**R33A Olander Ranch, 16.68 33** P **Pn 14 30 32.6 -0.8**
**P30A Selden 16.71 25** P **Pn 14 30 34.1 +0.4**
baz=17,SNR=6.3
**ELK Elko 16.82 344** *e*Pn **Pn 14 30 33.6 -1.6**
47nm,1.5s
**SPUT South Promonto 16.83 352** Pn **Pn 14 30 35.6 +0.2**
68nm,1.7s
**MIAR Mount Ida 16.85 51** P **Pn 14 30 35.4 -0.1**
baz=17
**MIAR Mount Ida 16.85 51** *e*Pn **Pn 14 30 34.4 -1.1**
19nm,1.0s
**T36A Boggs Farm, Ca 16.89 40** P **Pn 14 30 35.8 -0.2**
baz=17
**U37A Salina 16.92 43** P **Pn 14 30 36.3 -0.1**
baz=17
**PHWY Pilot Hill 16.93 10** *e*Pn **Pn 14 30 36.5 -0.2**
48nm,1.4s
**Q32A Meitler Ranch, 16.96 30** P **Pn 14 30 37.7 +0.9**
baz=17
**V38A Canehill 17.03 45** P **Pn 14 30 37.8 +0.1**
baz=17
**HWUT Hardware Ranch 17.03 354** Pn **Pn 14 30 35.3 -2.6**
44nm,1.3s
**P31A Stockton 17.04 27** P **Pn 14 30 37.1 -0.8**
baz=17
**R34A Isabella, Hill 17.05 34** P **Pn 14 30 37.3 -0.6**
baz=17
**S35A Otter Creek Ra 17.08 37** P **Pn 14 30 38.3 0.0**
baz=17
**BMN Battle Mountai 17.09 339** *e*Pn **Pn 14 30 38.3 -0.4**
138nm,1.6s
**Q33A Connelly Farm, 17.30 31** P **Pn 14 30 41.1 0.0**
baz=17
**O30A MW Ranch, Wils 17.34 24** P **Pn 14 30 41.7 +0.1**
baz=17
**OGNE Ogallala 17.36 19** P **Pn 14 30 42.4 +0.4**
baz=17
**OGNE Ogallala 17.36 19** *e*Pn **Pn 14 30 41.3 -0.6**
205nm,1.9s
**T37A Cheneyville 18 17.51 41** P **Pn 14 30 43.7 +0.1**
baz=18
**S36A Lake Cedric, C 17.52 39** P **Pn 14 30 44.0 +0.2**
baz=18
**O31A Woolen Ranch, 17.60 26** P **Pn 14 30 44.9 +0.1**
baz=18
**R35A Emporia Munici 17.61 36** P **Pn 14 30 45.4 +0.5**
baz=18
**Q34A Chapman 17.67 33** P **Pn 14 30 45.9 +0.2**
baz=18
**N29A Votaw Ranch, W 17.70 22** P **Pn 14 30 46.3 +0.3**
baz=18
**S37A Fort Scott 17.98 40** P **Pn 14 30 49.4 -0.1**
baz=18
**R36A Gordon, Harris 17.99 37** P **Pn 14 30 49.6 -0.1**
baz=18
**BW06 Boulder Array 18.09 359** *e*Pn **Pn 14 30 49.9 -1.2**
**Q35A Mercer Eighty, 18.09 35** P **Pn 14 30 50.6 -0.3**
baz=18
**K22A Casper 18.11 7** P **Pn 14 30 50.7 -0.6**
baz=18,SNR=6.5
**K22A Casper 18.11 7** *e*Pn **Pn 14 30 50.7 -0.6**
35nm,1.3s
**O32A Brockman Farm, 18.12 28** P **Pn 14 30 50.2 -1.1**
baz=18
**AHID Auburn Hatcher 18.14 356** *e*Pn **P 14 30 51.8 -0.2**
37nm,1.4s
**P34A Walnut Farm, R 18.21 32** P **Pn 14 30 50.9 -1.5**
baz=18,SNR=5.2
**O33A Hebron 18.27 30** P **Pn 14 30 52.9 -0.3**
baz=18
**R37A Teagarden Farm 18.36 39** P **Pn 14 30 53.4 -0.8**
baz=18
**P35A Duane Minner, 18.60 34** P **Pn 14 30 57.0 -0.1**
baz=19
**REDW Red Top Meadow 18.72 356** *e*P **P 14 30 58.3 -0.2**
34nm,1.4s
**M31A Lambtecht Ranc 18.75 25** P **Pn 14 30 59.0 0.0**
baz=19
**O34A Beatrice 18.77 31** P **Pn 14 30 59.1 -0.1**
baz=19
**O03D Paynes Creek 18.81 329** P **Pn 14 31 00.0 +0.3**
baz=19,SNR=7.1
**SNOW Snow King Moun 18.82 357** *e*P **P 14 30 59.6 +0.1**
243nm,2.5s
**TPAW Teton Pass 18.86 356** *e*P **P 14 30 58.9 -1.1**
21nm,1.1s
**L29A Maesberg Ranch 18.86 21** P **Pn 14 31 01.0 +0.7**
baz=19
**LOHW Long Hollow 18.96 357** *e*P **P 14 31 00.6 -0.4**
14nm,1.1s
**FXWY Fox Creek 19.01 356** *e*P **Pn 14 31 02.2 -0.1**
174nm,2.6s
**P36A Good Intent, A 19.09 35** P **Pn 14 31 02.7 -0.3**
baz=19
**MOOW Moose Ponds 19.10 357** *e*P **P 14 31 02.1 -0.5**
194nm,2.8s
**BGNE Belgrade 19.13 26** P **Pn 14 31 03.6 +0.1**
baz=19
**BGNE Belgrade 19.13 26** P **P 14 31 01.0 -1.8**
134nm,1.3s
**K28A Ten Mile Ranch 19.18 18** P **Pn 14 31 04.0 -0.3**
baz=19
**O35A Humboldt 19.22 33** P **Pn 14 31 04.3 -0.3**
baz=19
**J25A Sunshine Ranch 19.25 12** P **Pn 14 31 04.6 -0.4**
baz=19
**IMW Indian Meadow 19.26 356** *e*P **P 14 31 04.3 -0.1**
27nm,1.3s
**J26A Sides Ranch, S 19.32 14** P **Pn 14 31 05.8 -0.1**
baz=19
**HLID Hailey 19.34 349** P **Pn 14 31 05.8 -0.4**
baz=19,SNR=14
**HLID Hailey 19.34 349** *e*P **Pn 14 31 05.8 -0.4**
40nm,1.5s
**WVOR Wild Horse Val 19.36 339** *e*P **P 14 31 04.3 -1.0**
40nm,1.4s
**FLWY Flagg Ranch 19.43 357** *e*P **P 14 31 06.3 +0.1**
389nm,2.8s
**MFID Camas Ranch 19.48 346** P **P 14 31 06.1 -0.5**
44nm,1.6s
**MOD Modoc 19.49 335** *e*P **P 14 31 07.0 +0.2**
36nm,1.3s
**H17A Grant Village 19.74 357** P **Pn 14 31 11.0 -0.1**
baz=20
**H17A Grant Village 19.74 357** *e*P **Pn 14 31 10.9 -0.1**
41nm,1.6s
**I25A Rochford 19.87 12** P **P 14 31 10.6 -0.3**
baz=20
**J28A Allard Ranch, 19.88 17** P **P 14 31 10.9 0.0**
baz=20,SNR=5.8
**RSSD Black Hills 19.91 11** *e*P **P 14 31 10.7 -0.7**
9.6nm,0.9s
**M04C Macdoel 20.02 332** P **P 14 31 13.3 +0.7**
baz=20,SNR=7.5
**I26A New Underwood 20.05 14** P **P 14 31 13.4 +0.6**
baz=20
**QLMT Earthquake Lak 20.22 356** *e*P Pn 14 31 16.0 -0.8
**I27A Quinn 20.27 15** P **P 14 31 15.7 +0.6**
baz=20
**MCMT McKenzie Canyo 20.35 353** *e*P Pn 14 31 17.8 -0.5
**CCM Cathedral Cave 20.37 45** P **P 14 31 16.6 +0.4**
48nm,1.6s
**YBH Yreka Blue Hor 20.37 330** LR LR 14 38 36.6
comp=Z,199nm,21.0s,baz=162,slow=35
**K05A Summer Lake 20.42 335** P Pn 14 31 18.7 -0.4
**I28A Midland 20.43 17** P **P 14 31 16.7 -0.2**
baz=20,SNR=5.2
**RLMT Red Lodge 20.44 0** P **P 14 31 16.4 -0.7**
baz=20,SNR=8.6
**RLMT Red Lodge 20.44 0** *e*P **P 14 31 14.8 -2.3**
20nm,1.2s
**J31A Geddes 20.54 22** P **P 14 31 18.3 +0.4**
baz=20
**H26A Fairpoint 20.63 13** P **P 14 31 19.7 +0.6**
baz=21
**I29A Vivian Onida 20.69 19** P **P 14 31 20.0 +0.3**
baz=21
**H27A Howes 20.80 15** P **P 14 31 20.5 -0.4**
baz=21,SNR=9.9
**DLMT Dillon 20.85 353** *e*P Pn 14 31 22.8 -1.2
1.4nm,0.4s
**J05D Fort Rock, OR 21.03 335** P **P 14 31 23.6 +0.1**
baz=21,SNR=6.3
**BOZ Bozeman (W) 21.05 355** P **P 14 31 23.6 0.0**
baz=21,SNR=13
**BOZ Bozeman (W) 21.05 355** *e*P **P 14 31 23.7 0.0**
75nm,2.1s
**G25A Newell 21.06 12** P **P 14 31 24.0 +0.4**
baz=21
**H28A Mission Ridge 21.10 17** P **P 14 31 24.0 -0.1**
baz=21
**GCMT Greycliff 21.11 359** *e*P **P 14 31 22.6 -1.7**
**I07A Izee 21.12 339** *e*P **P 14 31 25.1 +0.7**
51nm,1.3s
**H29A Onida 21.27 18** P **P 14 31 24.6 -1.3**
baz=21,SNR=7.9
**LRM Limekiln Ridge 21.29 354** *e*P **P 14 31 26.6 +0.2**
**G26A Maurine 21.32 13** P **P 14 31 25.2 -1.3**
baz=21,SNR=10.0
**G27A Dupree 21.54 14** P **P 14 31 27.9 -0.9**
baz=22,SNR=7.0
**ECSD EROS Data Cent 21.70 26** P **P 14 31 30.8 +0.3**
baz=22,SNR=11
**ECSD EROS Data Cent 21.70 26** *e*P **P 14 31 28.4 -2.1**
26nm,1.0s
**WVT Waverly 21.73 53** P **P 14 31 29.8 -1.1**
37nm,1.1s
**F25A Bowman 21.76 11** P **P 14 31 31.1 -0.1**
baz=22
**F26A Lodgepole 21.84 13** P **P 14 31 31.7 -0.3**
baz=22

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **G29A** | **Hoven** | **21.87** | **18** | P | **P** | **14 31 31.9** | **-0.5** |
| | baz=22 | | | | | | |
| **I04A** | **Tendick Farm,** | **21.92** | **334** | P | **P** | **14 31 33.5** | **+0.6** |
| | baz=22 | | | | | | |
| **I05D** | **Terrebonne, OR** | **21.97** | **336** | P | **P** | **14 31 33.7** | **+0.2** |
| | baz=22 | | | | | | |
| **F27A** | **Lemmon** | **21.99** | **14** | P | **P** | **14 31 33.9** | **+0.2** |
| | baz=22 | | | | | | |
| **G08A** | **Pilot Rock** | **22.04** | **342** | *e*P | **P** | **14 31 34.3** | **0.0** |
| | 35nm,1.5s | | | | | | |
| **H32A** | **Carlson Farm,** | **22.05** | **23** | P | **P** | **14 31 34.3** | **-0.1** |
| | baz=22 | | | | | | |
| **HRY** | **Holter Researc** | **22.12** | **355** | *e*P | **P** | **14 31 35.0** | **-0.2** |
| **LAO** | **LASA Array** | **22.14** | **6** | P | **P** | **14 31 35.2** | **-0.1** |
| | baz=22 | | | | | | |
| **LAO** | **LASA Array** | **22.14** | **6** | *e*P | **P** | **14 31 34.5** | **-0.9** |
| | 87nm,1.5s | | | | | | |
| **F10A** | **Beach Ranch, E** | **22.23** | **345** | *e*P | **P** | **14 31 36.6** | **+0.4** |
| | 357nm,2.8s | | | | | | |
| **CROR** | **Criterion Ridg** | **22.41** | **338** | P | **P** | **14 31 38.3** | **+0.1** |
| **VTHM** | **Trough** | **22.44** | **339** | P | **P** | **14 31 38.7** | **+0.2** |
| **CHMT** | **Chamberlain Mo** | **22.46** | **353** | *e*P | **P** | **14 31 38.6** | **-0.2** |
| **MSO** | **Missoula** | **22.46** | **352** | P | **P** | **14 31 38.3** | **-0.4** |
| | baz=22,SNR=9.7 | | | | | | |
| **MSO** | **Missoula** | **22.46** | **352** | *e*P | **P** | **14 31 39.2** | **+0.4** |
| | 43nm,1.2s | | | | | | |
| **G06A** | **Carlson Farm,** | **22.51** | **339** | *e*P | **P** | **14 31 39.9** | **+0.6** |
| | 71nm,1.9s | | | | | | |
| **G32A** | **Webster** | **22.69** | **22** | P | **P** | **14 31 41.1** | **0.0** |
| | baz=23 | | | | | | |
| **SWET** | **Sewanee** | **22.78** | **57** | P | **P** | **14 31 41.1** | **-1.1** |
| | 52nm,1.3s | | | | | | |
| **SLMT** | **Seeley Lake** | **22.81** | **353** | *e*P | **P** | **14 31 42.7** | **+0.2** |
| **E28A** | **Huff** | **22.95** | **15** | P | **P** | **14 31 43.5** | **-0.5** |
| | baz=23 | | | | | | |
| **D25A** | **Fairfield** | **22.97** | **11** | P | **P** | **14 31 44.2** | **+0.1** |
| | baz=23 | | | | | | |
| **D26A** | **Manning** | **23.01** | **12** | P | **P** | **14 31 43.6** | **-0.9** |
| | baz=23,SNR=8.1 | | | | | | |
| **SWMT** | **Swartz Lake** | **23.13** | **352** | *e*P | **P** | **14 31 45.1** | **-0.7** |
| **HAWA** | **Hanford** | **23.21** | **342** | *e*P | **P** | **14 31 45.2** | **-1.3** |
| | 137nm,2.1s | | | | | | |
| **EGMT** | **Eagleton** | **23.35** | **359** | P | **P** | **14 31 47.2** | **-0.8** |
| | baz=23,SNR=13 | | | | | | |
| **EGMT** | **Eagleton** | **23.35** | **359** | *e*P | **P** | **14 31 47.6** | **-0.3** |
| | 97nm,1.4s | | | | | | |
| **JTMT** | **Jette** | **23.40** | **352** | *e*P | **P** | **14 31 47.5** | **-1.1** |
| **YBMT** | **Yellow Bay** | **23.48** | **352** | *e*P | **P** | **14 31 49.5** | **+0.1** |
| **BSMT** | **Bassoo Peak** | **23.57** | **351** | P | **P** | **14 31 48.9** | **-1.5** |
| **D08A** | **Wollman Farm,** | **23.66** | **343** | *e*P | **P** | **14 31 49.8** | **-1.2** |
| | 24nm,1.3s | | | | | | |
| **WCI** | **Wyandotte Cave** | **23.77** | **50** | P | **P** | **14 31 51.8** | **-0.4** |
| | 283nm,0.8s | | | | | | |
| **C09A** | **Chrisman Ranch** | **24.19** | **345** | *e*P | **P** | **14 31 55.5** | **-0.5** |
| | 49nm,1.6s | | | | | | |
| **LON** | **Longmire** | **24.23** | **339** | *e*P | **P** | **14 31 56.0** | **-0.4** |
| | 302nm,2.7s | | | | | | |
| **SFIN** | **Scholer Farm** | **24.34** | **44** | P | **P** | **14 31 56.3** | **-1.1** |
| | baz=24 | | | | | | |
| **SFIN** | **Scholer Farm** | **24.34** | **44** | *e*P | **P** | **14 31 55.5** | **-1.9** |
| | 54nm,1.2s | | | | | | |
| **FMW** | **Mount Fremont** | **24.35** | **339** | P | **P** | **14 31 59.2** | **+1.5** |
| **NEW** | **Newport** | **24.38** | **347** | P | **P** | **14 31 58.0** | **+0.2** |
| | 32nm,1.1s,baz=161,slow=10,SNR=32 | | | | | | |
| NEW | | | | LR | LR | 14 40 38.5 | |
| | comp=Z,520nm,20.1s,baz=166,slow=35 | | | | | | |
| **NEW** | **Newport** | **24.38** | **347** | P | **P** | **14 31 56.9** | **-0.9** |
| | baz=24,SNR=20 | | | | | | |
| **NEW** | **Newport** | **24.38** | **347** | *e*P | **P** | **14 31 57.1** | **-0.7** |
| | 67nm,1.3s | | | | | | |
| **C30A** | **Mose, Pekin** | **24.57** | **18** | P | **P** | **14 31 59.2** | **-0.3** |
| | baz=25 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.59** | **58** | P | **P** | **14 31 59.8** | **0.0** |
| | 1.7nm,0.6s,baz=211,slow=5.9,SNR=3.4 | | | | | | |
| TKL | | | | LR | LR | 14 42 25.8 | |
| | comp=Z,1μm,21.1s,baz=255,slow=39 | | | | | | |
| **WALA** | **Waterton Lakes** | **24.65** | **353** | *e*P | **P** | **14 31 58.2** | **-2.0** |
| | 60nm,1.4s | | | | | | |
| **F36A** | **Milaca** | **24.70** | **27** | P | **P** | **14 31 59.7** | **-1.0** |
| | baz=25 | | | | | | |
| **A25A** | **Svangstu Ranch** | **24.74** | **10** | P | **P** | **14 32 00.5** | **-0.6** |
| | baz=25 | | | | | | |
| **B28A** | **Dugan Ranch, T** | **24.79** | **14** | P | **P** | **14 32 00.8** | **-0.7** |
| | baz=25,SNR=5.8 | | | | | | |
| **C31A** | **Landman Farms,** | **24.87** | **19** | P | **P** | **14 32 02.0** | **-0.2** |
| | baz=25 | | | | | | |
| **A26A** | **Wade Farm, Ken** | **24.88** | **11** | P | **P** | **14 32 02.0** | **-0.3** |
| | baz=25 | | | | | | |
| **E35A** | **Pequot Lakes** | **24.92** | **25** | P | **P** | **14 32 02.4** | **-0.3** |
| | baz=25 | | | | | | |
| **A28A** | **Rude Farm, Bot** | **25.25** | **14** | P | **P** | **14 32 05.0** | **-0.6** |
| | baz=25 | | | | | | |
| **B30A** | **Myrvik Farm, E** | **25.30** | **17** | P | **P** | **14 32 05.7** | **-0.4** |
| | baz=25 | | | | | | |
| **D35A** | **Remer** | **25.49** | **25** | P | **P** | **14 32 06.6** | **-1.3** |
| | baz=26 | | | | | | |
| **A29A** | **Manning Farm,** | **25.50** | **16** | P | **P** | **14 32 07.8** | **-0.1** |
| | baz=26 | | | | | | |
| **D36A** | **Goodland** | **25.91** | **26** | P | **P** | **14 32 12.1** | **+0.4** |
| | baz=26 | | | | | | |
| **C35A** | **Jirik Farms, M** | **26.04** | **24** | P | **P** | **14 32 13.2** | **+0.5** |
| | baz=26 | | | | | | |
| **OFR** | **Olym-F Res Ctr** | **26.15** | **337** | *e*P | **P** | **14 32 13.0** | **-0.7** |
| **D37A** | **Cotton** | **26.20** | **27** | P | **P** | **14 32 12.6** | **-1.6** |
| | baz=26 | | | | | | |
| **A04D** | **Lummi Island** | **26.25** | **340** | P | **P** | **14 32 14.2** | **-0.4** |
| | baz=26,SNR=5.2 | | | | | | |
| **KMSC** | **Kings Mountain** | **26.33** | **60** | P | **P** | **14 32 15.4** | **-0.2** |
| | baz=26 | | | | | | |
| **B34A** | **Aery, Baudette** | **26.46** | **22** | P | **P** | **14 32 16.0** | **-0.6** |
| | baz=26 | | | | | | |
| **C36A** | **Pine Crest Far** | **26.52** | **25** | P | **P** | **14 32 16.3** | **-0.8** |
| | baz=26 | | | | | | |
| **C38A** | **Sawbill Land.** | **27.12** | **27** | P | **P** | **14 32 21.4** | **-1.1** |
| | baz=27 | | | | | | |
| **JTS** | **JuntasAbangare** | **27.19** | **117** | LR | LR | 14 43 17.0 | |
| | comp=Z,361nm,20.3s,baz=311,slow=37 | | | | | | |
| **EYMN** | **Ely** | **27.20** | **27** | P | **P** | **14 32 22.7** | **-0.6** |
| | baz=27 | | | | | | |
| **EDM** | **Edmonton** | **28.71** | **355** | *e*P | **P** | **14 32 35.3** | **-1.5** |
| | 34nm,1.1s | | | | | | |
| **DLBC** | **Dease Lake** | **36.85** | **342** | *e*P | **P** | **14 33 46.7** | **-1.1** |
| | 16nm,1.4s | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.01** | **356** | P | **P** | **14 33 56.6** | **-0.8** |
| | 3.5nm,0.9s,baz=168,slow=8.0,SNR=7.5 | | | | | | |
| **ROSC** | **El Rosal** | **38.93** | **115** | LR | LR | 14 50 33.0 | |
| | comp=Z,105nm,20.0s,baz=355,slow=37 | | | | | | |
| **SCHQ** | **Schefferville** | **43.41** | **35** | LR | LR | 14 52 51.8 | |
| | comp=Z,282nm,19.7s,baz=247,slow=36 | | | | | | |
| **DAWY** | **Dawson** | **44.06** | **342** | *e*P | **P** | **14 34 48.5** | **+1.1** |
| | 12nm,1.1s | | | | | | |
| **EGAK** | **Eagle** | **45.11** | **341** | *e*P | **P** | **14 34 55.1** | **-0.5** |
| | 9.8nm,1.0s | | | | | | |
| **RIDG** | **Independ'e Rid** | **45.52** | **339** | *e*P | **P** | **14 35 00.7** | **+1.8** |
| | 169nm,2.5s | | | | | | |
| **IL1** | **Eielson Array** | **46.87** | **339** | *e*P | **P** | **14 35 09.4** | **-0.1** |
| **ILAR** | **Eielson Array** | **46.87** | **339** | P | **P** | **14 35 09.8** | **+0.3** |
| | 5.0nm,1.0s,baz=149,slow=6.1,SNR=35 | | | | | | |
| ILAR | | | | LR | LR | 14 56 38.3 | |
| | comp=Z,197nm,18.7s,baz=130,slow=38 | | | | | | |
| **MCK** | **McKinley** | **46.91** | **337** | P | **P** | **14 35 08.4** | **-1.5** |
| | 20nm,1.3s | | | | | | |
| **TRF** | **Thorofare Moun** | **47.23** | **336** | *e*P | **P** | **14 35 12.3** | **-0.2** |
| | 27nm,0.9s | | | | | | |
| **BWN** | **Browne** | **47.37** | **337** | *e*P | **P** | **14 35 14.5** | **+1.1** |
| | 53nm,1.2s | | | | | | |
| **KTH** | **Kantishna Hill** | **47.52** | **336** | P | **P** | **14 35 12.6** | **-2.1** |
| | 18nm,1.0s | | | | | | |
| **PPLA** | **Purkeypile** | **47.63** | **335** | *e*P | **P** | **14 35 16.8** | **+1.1** |
| | 49nm,1.2s | | | | | | |
| **PTGA** | **Pitinga** | **54.01** | **110** | *e*P | **P** | **14 36 05.4** | **+1.2** |
| | 12nm,1.2s | | | | | | |
| **SAML** | **Samuel** | **56.00** | **121** | *e*P | **P** | **14 36 17.2** | **-1.3** |
| | 35nm,1.8s | | | | | | |
| **LPAZ** | **La Paz** | **57.16** | **131** | LR | LR | 14 58 28.8 | |
| | comp=Z,136nm,20.7s,baz=315,slow=33 | | | | | | |
| **PPT** | **Papeete** | **57.45** | **227** | LR | LR | 14 55 22.6 | |
| | comp=Z,81nm,18.6s,baz=4.0,slow=30 | | | | | | |
| **PPT2** | **Papeete2** | **57.47** | **227** | *e*S | **S** | **14 44 29.7** | **+3.2** |
| | 69nm,26.8s | | | | | | |
| PPT2 | | | | *e*LR | LR | 14 53 16.0 | |
| | 472nm,27.8s | | | | | | |
| **TBI** | **Tubuai** | **61.59** | **222** | *e*LR | LR | 14 55 06.2 | |
| | 214nm,29.5s,baz=29 | | | | | | |
| **CPUP** | **Villa Florida** | **71.32** | **132** | P | **P** | **14 38 00.8** | **+1.3** |
| | 2.4nm,0.8s,baz=16,slow=3.9,SNR=5.6 | | | | | | |
| CPUP | | | | LR | LR | 15 08 13.3 | |
| | comp=Z,49nm,19.2s,baz=330,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **71.32** | **132** | *e*P | **P** | **14 38 01.0** | **+1.5** |
| **BDFB** | **Brasilia** | **71.93** | **117** | P | **P** | **14 38 04.8** | **+1.3** |
| | 1.0nm,0.3s,baz=231,slow=6.5,SNR=3.6 | | | | | | |
| **SEY** | **Seymchan** | **72.04** | **332** | P | **P** | **14 38 03.3** | **0.0** |
| | 3.4nm,0.8s,baz=109,slow=8.0,SNR=6.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.42** | **321** | LR | LR | 15 06 03.4 | |
| | comp=Z,23nm,20.5s,baz=84,slow=33 | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.65** | **15** | P | **P** | **14 38 52.8** | **+0.7** |
| | 0.9nm,0.6s,baz=328,slow=3.2,SNR=3.8 | | | | | | |
| ARCES | | | | LR | LR | 15 16 18.1 | |
| | comp=Z,160nm,18.8s,baz=332,slow=37 | | | | | | |
| **YAK** | **Yakutsk** | **81.69** | **336** | P | **P** | **14 38 57.5** | **-0.2** |
| | 5.7nm,0.5s,baz=73,slow=1.7,SNR=2.5 | | | | | | |
| **YAK** | **Yakutsk** | **81.69** | **336** | *e*P | **P** | **14 38 56.6** | **-1.2** |
| **ESDC** | **Sonseca Array** | **85.54** | **48** | P | **P** | **14 39 18.3** | **+0.2** |
| | 0.3nm,0.3s,baz=352,slow=6.5,SNR=3.3 | | | | | | |
| ESDC | | | | LR | LR | 15 14 37.7 | |
| | comp=Z,156nm,20.8s,baz=295,slow=34 | | | | | | |
| **FINES** | **FINESS Array B** | **87.00** | **20** | LR | LR | 15 17 19.0 | |
| | comp=Z,158nm,18.2s,baz=344,slow=35 | | | | | | |
| **CLL** | **Collm** | **89.00** | **32** | *e*PS | PS | 14 51 30.0 | +2.4 |
| **GERES** | **GERESS Array B** | **90.93** | **34** | LR | LR | 15 20 42.2 | |
| | comp=Z,95nm,18.1s,baz=302,slow=36 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **91.98** | **312** | LR | LR | 15 15 29.5 | |
| | comp=Z,58nm,19.8s,baz=235,slow=32 | | | | | | |
| **VYHS** | **Vyhne** | **93.69** | **32** | *e*P | **P** | **14 39 56.4** | **0.0** |
| **DZM** | **Mont Dzumac** | **94.03** | **248** | *e*LR | LR | 15 10 15.7 | |
| | 253nm,23.1s | | | | | | |
| **HNR** | **Honiara** | **94.55** | **262** | LR | LR | 15 13 37.9 | |
| | comp=Z,189nm,21.2s,baz=62,slow=30 | | | | | | |
| **KOLS** | **Kolonicke sedl** | **94.97** | **30** | *e*P | **P** | **14 40 01.7** | **-0.5** |
| **AKASG** | **Malin Array Be** | **96.53** | **25** | LR | LR | 15 26 09.4 | |
| | comp=Z,93nm,18.5s,baz=330,slow=37 | | | | | | |
| **KEST** | **Kesra** | **96.54** | **46** | LR | LR | 15 23 39.8 | |
| | comp=Z,133nm,18.9s,baz=280,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **98.11** | **317** | LR | LR | 15 15 32.7 | |
| | comp=Z,27nm,22.0s,baz=73,slow=30 | | | | | | |
| **WMQ** | **Urumqi** | **110.11** | **347** | *e*Pdif | **Pdif** | **14 41 09.0** | **-1.1** |
| WMQ | | | | PP | **PP** | **14 45 49.0** | **+5.1** |
| WMQ | | | | SS | SS | 15 01 10.0 | +0.9 |
| WMQ | | | | PPMZ | | | |
| | 18nm,10.0s | | | | | | |
| WMQ | | | | LN | | | |
| | 160nm,28.0s | | | | | | |
| WMQ | | | | LE | | | |
| | 140nm,25.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | 89nm,22.0s | | | | | | |
| **LZH** | **Lanzhou** | **111.97** | **331** | *e*PKP | **PKiKP** | **14 45 14.8** | **-0.7** |
| LZH | | | | sPKP | | 14 45 26.3 | |
| LZH | | | | LN | | | |
| | 140nm,18.3s | | | | | | |
| LZH | | | | LE | | | |
| | 140nm,18.1s | | | | | | |
| LZH | | | | LZ | | | |
| | 170nm,20.2s | | | | | | |
| **KSH** | **Kashi** | **115.99** | **355** | *e*PKP | **PKPdf** | **14 45 21.8** | **-1.3** |
| KSH | | | | *es*PKP | | 14 45 35.9 | |
| KSH | | | | *e*PP | PP | 14 46 31.3 | +5.5 |
| KSH | | | | PKS | **PKSdf** | **14 48 57.9** | **-2.0** |
| KSH | | | | PPMZ | | | |
| | 170nm,5.2s | | | | | | |
| KSH | | | | LN | | | |
| | 320nm,8.4s | | | | | | |
| KSH | | | | LE | | | |
| | 280nm,7.3s | | | | | | |
| KSH | | | | LZ | | | |
| | 250nm,7.3s | | | | | | |
| **CD2** | **Chengdu** | **116.34** | **328** | PKP | **PKPdf** | **14 45 21.6** | **-2.2** |
| **WRA** | **Warramunga Arr** | **121.38** | **261** | PKP | **PKPdf** | **14 45 33.2** | **-0.5** |
| | 0.3nm,0.8s,baz=72,slow=2.2,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **122.79** | **257** | PKP | **PKPdf** | **14 45 36.5** | **+0.2** |
| | 0.5nm,1.0s,baz=94,slow=2.8,SNR=3.9 | | | | | | |

*ISCJB **21** 14:32:08.6±1.4,38°.59N±0°.06×27°.7E±0°.1,h10km, Error ellipse: s-maj=13.8km s-min=5.0km az=36.0*
*DDA **21** 14:32:08.7,38°.62N×27°.92E, h7km, Md2.7*
*ISK **21** 14:32:08.9,38°.65N×27°.82E, h18km, MD2.5*
*CSEM **21** 14:32:09.0±0.4,38°.62N×27°.86E,h15km, MD2.5, Error ellipse: s-maj=12.0km s-min=2.9km az=129.0*

**ISC 21 14:32:08.3**±1.6, **38°.58N**±0°.07×**27°.93E**±0°.09, **h10km**, **n12, σ0s47/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKHS** | **Akhisar** | **0.31** | **343** | *i* Pg | **Pg** | **14 32 14.8** | **+0.3** |
| AKHS | | | | *i* S | **Sg** | **14 32 19.1** | **+0.4** |
| **AKHS** | **Akhisar** | **0.31** | **343** | P | **Pg** | **14 32 14.8** | **+0.3** |
| AKHS | | | | S | **Sg** | **14 32 19.1** | **+0.4** |
| **AKS** | **Akhisar** | **0.31** | **343** | *e*PG | **Pg** | **14 32 14.9** | **+0.4** |
| AKS | | | | *e*SG | **Sg** | **14 32 18.7** | **0.0** |
| **AKS** | **Akhisar** | **0.31** | **343** | *e*Pg | **Pg** | **14 32 14.9** | **+0.4** |
| AKS | | | | *e*Sg | **Sg** | **14 32 18.7** | **0.0** |
| **IZM** | **Izmir** | **0.56** | **251** | *e*PG | **Pg** | **14 32 19.9** | **+0.8** |
| IZM | | | | *e*SG | **Sg** | **14 32 26.8** | **+0.3** |
| **IZM** | **Izmir** | **0.56** | **251** | *e*Pg | **Pg** | **14 32 19.9** | **+0.8** |
| IZM | | | | *e*Sg | **Sg** | **14 32 26.8** | **+0.3** |
| **BLCB** | **Balcova** | **0.73** | **255** | *e*PG | **Pg** | **14 32 21.9** | **-0.4** |
| **BLCB** | **Balcova** | **0.73** | **255** | *e*Pg | **Pg** | **14 32 21.9** | **-0.4** |
| **DURS** | **Dursunbey** | **1.10** | **22** | *i* P | **Pb** | **14 32 29.6** | **+0.1** |
| DURS | | | | *i* S | **Sg** | **14 32 44.1** | **+0.3** |
| **DURS** | **Dursunbey** | **1.10** | **22** | P | **Pb** | **14 32 29.6** | **+0.1** |
| DURS | | | | S | **Sg** | **14 32 44.1** | **+0.3** |
| **GONE** | **Gonen-Balikesi** | **1.47** | **353** | *e*PN | **Pn** | **14 32 34.2** | **-0.7** |
| **GONE** | **Gonen-Balikesi** | **1.47** | **353** | *e*Pn | **Pn** | **14 32 34.2** | **-0.7** |

**MAN 21 14:42:43, 9°.35N×126°.19E, h40km, mb4.6, ML3.4, MS3.4, 1C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BUTP** | **Butuan** | **0.68** | **236** | *e*P | Pn | 14 42 56.5 | +0.3 |
| **SCPH** | **Surigao** | **0.81** | **302** | *e*P | Pn | 14 42 58.8 | +0.8 |
| SCPH | | | | *e*S | Sn | 14 43 11.3 | +2.3 |
| **BIPH** | **Bislig** | **1.17** | **172** | *e*P | Pn | 14 43 05.5 | +2.5 |
| BIPH | | | | *e*S | Sn | 14 43 18.8 | +1.0 |
| **MSLP** | **Maasin** | **1.53** | **301** | *e*P | Pn | 14 43 09.6 | +1.8 |
| MSLP | | | | *e*S | Sn | 14 43 27.4 | +0.9 |
| **BUKP** | **Musuan** | **1.84** | **217** | *e*P | Pn | 14 43 12.9 | +0.6 |
| **MATI** | **Mati** | **2.39** | **178** | *e*P | Pn | 14 43 20.4 | +0.6 |
| **CNP** | **Catarman** | **3.48** | **335** | *e*P | Pn | 14 43 35.9 | +1.3 |

**DJA 21 15:03:28.7**±0.6, **2°S**±3°×**12°8E**±°, **h77**km±17km, **M3.0/9, MLv3.0/9, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NLAI** | **Namlea** | **1.20** | **225** | P | Pn | 15 03 50.2 | +0.1 |
| NLAI | | | | S | Sn | 15 04 06.7 | +0.5 |
| **AAI** | **Ambon** | **1.32** | **169** | P | Pn | 15 03 52.2 | +0.6 |
| **MSAI** | **Masohi** | **1.37** | **135** | P | Pn | 15 03 54.0 | +1.8 |
| **LBMI** | **Labuha** | **1.79** | **345** | P | Pn | 15 03 58.4 | +0.7 |
| LBMI | | | | S | Sn | 15 04 21.4 | +1.6 |
| **SANI** | **Sanana** | **1.99** | **279** | P | Pn | 15 04 00.0 | -0.4 |
| SANI | | | | S | Sn | 15 04 23.4 | -1.1 |
| **SWI** | **Sorong** | **3.63** | **66** | P | Pn | 15 04 22.8 | +0.1 |
| SWI | | | | S | Sn | 15 05 06.0 | +1.6 |

**SKHL 21 15:08:08.6**±0.8, **52°.60N**×**142°.10E**, **h10km**, **mb4.2**/2, **Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NKL** | **Nikolayevsk** | **1.02** | **303** | *i* Pg | Pn | 15 08 29.4 | +0.4 |
| NKL | | | | AMB | AMB | 15 08 29.6 | |
| | 86nm,0.2s | | | | | | |
| NKL | | | | *e*Sg | Sn | 15 08 43.3 | 0.0 |
| NKL | | | | A | A | 15 08 47.0 | |
| | 330nm,0.4s | | | | | | |
| NKL | | | | A | A | 15 08 47.0 | |
| | 250nm,0.4s | | | | | | |
| **OKH** | **Okha** | **1.08** | **28** | *e*Pg | Pn | 15 08 33.0 | +3.3 |
| OKH | | | | *e*Sg | Sn | 15 08 50.5 | +5.8 |
| OKH | | | | A | A | 15 08 51.5 | |
| | 290nm,0.7s | | | | | | |
| **TYV** | **Tymovskoe** | **1.77** | **169** | *e*Pg | Pg | 15 08 44.0 | +1.4 |
| TYV | | | | AMB | AMB | 15 08 45.5 | |
| | 80nm,0.6s | | | | | | |
| TYV | | | | *e*Sg | Sg | 15 09 09.0 | +3.4 |
| TYV | | | | A | A | 15 09 10.0 | |
| | 240nm,0.7s | | | | | | |
| **GRNR** | **Gornyy** | **3.98** | **245** | *e*Sg | Sg | 15 10 21.3 | +4.8 |
| GRNR | | | | *e*Sm | | 15 10 22.0 | |
| | 38nm,0.5s | | | | | | |
| **EKMR** | **Ekimchan** | **5.57** | **278** | *e*Sg | Sg | 15 11 14.3 | +7.0 |
| EKMR | | | | *e*Sm | | 15 11 15.5 | |
| | 15nm,0.8s | | | | | | |

*ISCJB **21** 15:09:04.5±0.5, 12°.21N±0°.07×144°.19E±0°.09, h30km, mb4.2/21, Error ellipse: s-maj=14.4km s-min=7.9km az=27.8*
*NEIC **21** 15:09:08.1±0.9, 12°.25N×144°.24E, h46km±7km, mb4.4/7, Error ellipse: s-maj=13.7km s-min=9.2km az=110.0*
*IDC **21** 15:09:09.1±0.8, 12°.28N×144°.35E, h52km±6km, mb3.8/14, mb1 4.0/14, mb1mx3.8/42, mbtmp4.1/14, Error ellipse: s-maj=19.5km s-min=8.9km az=115.0*

**ISC 21 15:09:06.7**±0.7, **12°.3N**±0°.1×**144°.3E**±0°.1, **h30km**, **n39, σ1s56/35, mb4.3/21, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **1.44** | **24** | P | **Pn** | **15 09 31.5** | **+0.7** |
| | 110nm,0.3s,baz=305,slow=2.1,SNR=59 | | | | | | |
| GUMO | | | | S | **Sn** | **15 09 49.0** | **+0.2** |
| | 200nm,0.3s,baz=146,slow=21,SNR=6.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.48** | **71** | T | T | 15 37 21.2 | |
| | baz=254,slow=76,SNR=104 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.49** | **71** | T | T | 15 37 21.6 | |
| | baz=254,slow=76,SNR=29 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.49** | **71** | T | T | 15 37 22.4 | |
| | baz=254,slow=76,SNR=97 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.96** | **68** | T | T | 15 37 54.7 | |
| | baz=268,SNR=2.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.97** | **68** | T | T | 15 37 54.0 | |
| | baz=268 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.98** | **68** | T | T | 15 37 54.3 | |
| | baz=268 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.78** | **348** | P | **P** | **15 14 26.2** | **+0.2** |
| | 2.2nm,0.9s,baz=167,slow=9.7,SNR=3.4 | | | | | | |
| **MAJO** | **Matsushiro** | **24.78** | **348** | P | **P** | **15 14 24.0** | **-2.0** |
| **TATO** | **Taipei** | **24.97** | **304** | P | **P** | **15 14 26.5** | **-1.2** |
| **KSRS** | **Korea Array** | **29.04** | **333** | P | **P** | **15 15 04.9** | **+0.6** |
| | 1.9nm,0.9s,baz=146,slow=10,SNR=3.4 | | | | | | |
| **KSAR** | **Wonju Array Be** | **29.05** | **332** | P | **P** | **15 15 04.9** | **+0.5** |
| **BATI** | **Baumata** | **30.29** | **223** | pP | pP | 15 15 27.6 | +3.3 |
| | 26nm,0.9s,baz=83,slow=8.1,SNR=3.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **33.45** | **197** | *e*P | **P** | **15 15 42.6** | **-0.6** |
| | 4.7nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.46** | **197** | P | **P** | **15 15 41.9** | **-1.5** |
| | 1.5nm,0.8s,baz=20,slow=9.5,SNR=6.9 | | | | | | |
| **ASAR** | **Alice Springs** | **37.12** | **196** | P | **P** | **15 16 13.7** | **-1.1** |
| | 0.9nm,0.6s,baz=20,slow=11,SNR=23 | | | | | | |
| **KULM** | **Kulim** | **43.61** | **265** | P | **P** | **15 17 08.8** | **0.0** |
| | 18nm,1.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.05** | **284** | P | **P** | **15 17 13.0** | **+0.8** |
| | 1.3nm,0.7s,baz=80,slow=6.0,SNR=9.2 | | | | | | |
| CMAR | | | | pP | **pP** | **15 17 25.4** | **+4.2** |
| | 2.2nm,0.9s,baz=89,slow=6.4,SNR=5.7 | | | | | | |
| **SONM** | **Songino Array** | **47.48** | **326** | P | **P** | **15 17 40.0** | **+0.9** |
| | 0.7nm,0.6s,baz=143,slow=8.2,SNR=3.6 | | | | | | |
| **BILL** | **Bilibino** | **57.56** | **10** | *e*P | **P** | **15 18 51.6** | **-1.6** |
| **MKAR** | **Makanchi Array** | **62.04** | **317** | P | **P** | **15 19 24.7** | **+0.2** |
| | 1.3nm,0.6s,baz=90,slow=9.5,SNR=6.6 | | | | | | |
| MKAR | | | | pP | pP | 15 19 40.9 | +7.1 |
| | 1.1nm,0.5s,baz=89,slow=9.6,SNR=3.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.36** | **325** | P | **P** | **15 19 26.6** | **+0.2** |
| | 0.5nm,0.4s,baz=124,slow=7.1,SNR=3.2 | | | | | | |
| ZALV | | | | pP | pP | 15 19 44.2 | +8.5 |
| | 0.9nm,0.5s,baz=96,slow=6.9,SNR=3.1 | | | | | | |
| **KURK** | **Kurchatov** | **65.22** | **320** | *e*P | **P** | **15 19 44.5** | **-0.8** |
| | 12nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **66.15** | **312** | *e*P | **P** | **15 19 50.4** | **-1.3** |
| | 2.4nm,0.7s | | | | | | |
| **EKS2** | **Erkin-Say** | **67.46** | **311** | P | **P** | **15 20 00.0** | **0.0** |
| **COLD** | **Coldfoot** | **69.39** | **22** | *e*P | **P** | **15 20 11.4** | **0.0** |
| | 4.0nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **70.01** | **25** | P | **P** | **15 20 13.6** | **-1.7** |
| | 0.6nm,0.5s,baz=245,slow=3.0,SNR=5.2 | | | | | | |
| **BRVK** | **Borovoye** | **70.67** | **322** | *e*P | **P** | **15 20 19.2** | **-0.3** |
| | 3.0nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **75.81** | **22** | *e*P | **P** | **15 20 49.1** | **-0.5** |
| **ABKAR** | **Akbulak array** | **77.13** | **318** | *e*P | **P** | **15 20 56.4** | **-1.0** |
| | 1.8nm,0.4s | | | | | | |
| **DLBC** | **Dease Lake** | **77.41** | **3** | P | **P** | **15 20 59.1** | **+0.2** |
| **ARU** | **Arti** | **77.52** | **325** | *e*P | **P** | **15 20 56.6** | **-2.9** |
| **YKA** | **Yellowknife Ar** | **84.30** | **27** | P | **P** | **15 21 36.0** | **+0.5** |
| | 2.2nm,0.9s,baz=286,slow=5.2,SNR=4.4 | | | | | | |
| **NEW** | **Newport** | **86.61** | **41** | P | **P** | **15 21 48.0** | **+0.5** |
| | 2.8nm,0.7s,baz=239,slow=4.1,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **88.16** | **342** | P | **P** | **15 21 53.9** | **-0.5** |
| | 2.1nm,0.8s,baz=42,slow=9.9,SNR=4.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **88.20** | **51** | P | **P** | **15 21 56.3** | **+0.7** |
| | 0.8nm,0.7s,baz=269,slow=5.1,SNR=6.2 | | | | | | |
| **FINES** | **FINESS Array B** | **92.11** | **335** | P | **P** | **15 22 11.1** | **-1.9** |
| | 2.4nm,0.7s,baz=81,slow=4.5,SNR=9.3 | | | | | | |
| **DBIC** | **Dimbokro** | **144.00** | **300** | PKP | **PKPab** | **15 28 37.8** | **+0.1** |
| | 3.3nm,0.9s,baz=126,slow=3.1,SNR=3.5 | | | | | | |
| **LPAZ** | **La Paz** | **148.37** | **101** | PKPbc | **PKPbc** | **15 28 52.6** | **+0.6** |
| | 0.7nm,0.6s,baz=225,slow=4.3,SNR=2.9 | | | | | | |
| LPAZ | | | | pPKPbc | **pPKPbc** | **15 29 06.8** | **+5.0** |
| | 1.2nm,0.8s,baz=188,slow=2.4,SNR=3.2 | | | | | | |

*ISCJB **21** 

GSC Goldstone 12.58 330 ePn Pn 15 17 10.2 +2.5
30nm,1.4s
WHTX Lake Whitney 12.59 52 ePn Pn 15 17 12.6 +4.9
HKT Hockley 12.91 63 ePn Pn 15 17 12.1 +0.1
SHPR Sheep Range 12.96 338 ePn Pn 15 17 11.6 -1.4
OSI Osito Adit 13.03 322 ePn Pn 15 17 12.1 -1.6
T25A Trinidad 13.11 17 ePn Pn 15 17 13.3 -1.6
S22A 4UR Ranch, Cre 13.23 8 ePn Pn 15 17 16.1 -0.6
CCUT Cedar City 13.41 345 ePn Pn 15 17 18.9 -0.2
SDCO Great Sand Dun 13.44 12 ePn Pn 15 17 18.2 -1.3
16nm,1.6s
WMOK Wichita Mounta 13.47 39 ePn Pn 15 17 18.9 -0.9
14nm,1.4s
ISA Isabella 13.69 326 ePn Pn 15 17 23.4 +0.7
DAC Darwin (Calif) 13.75 330 ePn Pn 15 17 25.1 +1.4
MSU Marysvale 14.11 350 Pn Pn 15 17 29.8 +1.2
SRU San Rafael 14.51 355 ePn Pn 15 17 33.5 -0.6
Q24A Divide 14.69 12 ePn Pn 15 17 36.4 -0.3
R11A Troy Canyon, C 14.77 340 ePn Pn 15 17 39.2 +1.5
P17A Butcher Ranch, 14.88 355 ePn Pn 15 17 34.0 -5.2
P18A Preston Nutter 15.01 356 ePn Pn 15 17 41.3 +0.4
20nm,1.5s
MTUM Tungsten Hills 15.07 330 ePn Pn 15 17 41.8 0.0
CMIG Matias Romero 15.21 117 LR LR 15 23 54.7
comp=Z,313nm,19.9s,baz=272,slow=37
U34A Anderson Ranch 15.40 37 ePn Pn 15 17 48.1 +2.2
21nm,1.3s
ISCO Idaho Springs 15.42 10 ePn Pn 15 17 44.6 -1.8
O20A White River Ci 15.49 2 ePn Pn 15 17 45.9 -1.4
NV01 Mina Array Sit 15.85 333 ePn Pn 15 17 51.5 -0.5
NVAR Mina Array Bea 15.85 333 Pn Pn 15 17 53.5 +1.5
0.1nm,0.3s,baz=151,slow=12,SNR=17
NVAR LR LR 15 23 34.8
comp=Z,323nm,20.3s,baz=175,slow=37
DUG Dugway 15.86 349 ePn P 15 17 55.2 -0.5
7.2nm,1.0s
TUL1 Tulsa 16.05 42 ePn P 15 17 57.1 -0.7
25nm,1.3s
CTU Camp Tracy 16.19 353 ePn Pn 15 17 57.4 +1.1
16nm,1.3s
CBKS Cedar Bluff 16.22 27 ePn P 15 18 00.6 +1.0
46nm,1.1s
N23A Red Feather La 16.45 8 ePn P 15 18 02.7 +0.3
24nm,1.5s
CMB Columbia Colle 16.49 327 ePn Pn 15 17 58.1 -1.9
11nm,1.4s
BGU Big Grassy Mou 16.60 349 Pn Pn 15 17 59.3 -2.2
14nm,1.4s
MIAR Mount Ida 16.70 50 ePn P 15 18 07.8 +2.8
23nm,1.1s
SPUT South Promonto 16.89 351 ePn P 15 18 07.7 +0.5
8.1nm,1.0s
ELK Elko 16.90 344 ePn Pn 15 18 04.7 -0.7
PHWY Pilot Hill 16.91 9 ePn P 15 18 09.1 +1.5
HWUT Hardware Ranch 17.08 354 ePn Pn 15 18 08.0 +0.4
15nm,1.3s
BMN Battle Mountai 17.19 339 ePn Pn 15 18 09.7 +0.7
21nm,1.1s
UALR University of 17.69 51 ePn Pn 15 18 13.9 -1.1
66nm,1.8s
KSU1 Kansas State U 17.88 33 ePn Pn 15 18 14.5 -2.8
23nm,0.4s
OHCM Honcut 18.04 327 ePn Pn 15 18 16.2 -3.1
BW06 Boulder Array 18.11 359 ePn P 15 18 21.6 +0.8
K22A Casper 18.11 6 ePn P 15 18 23.0 +2.3
24nm,1.4s
AHID Auburn Hatcher 18.18 355 ePn P 15 18 21.9 +0.3
6.0nm,0.9s
REDW Red Top Meadow 18.76 356 eP Pn 15 18 30.3 +1.9
9.3nm,1.1s
SNOW Snow King Moun 18.86 356 eP Pn 15 18 29.7 +0.2
35nm,1.7s
TPAW Teton Pass 18.89 356 eP P 15 18 29.8 +0.4
23nm,1.5s
TPAW eSn Sn 15 21 44.9 -17
LOHW Long Hollow 19.00 357 eP P 15 18 31.0 +0.6
15nm,1.6s
FXWY Fox Creek 19.05 356 eP Pn 15 18 33.8 +2.0
6.6nm,1.1s
FXWY eSn Sn 15 21 50.2 -15
MOOW Moose Ponds 19.14 356 eP P 15 18 32.6 +0.5
18nm,1.7s
IMW Indian Meadow 19.30 356 eP Pn 15 18 36.3 +1.4
16nm,1.3s
HLID Hailey 19.41 348 eP P 15 18 35.5 +0.5
26nm,1.5s
WVOR Wild Horse Val 19.46 338 eP P 15 18 36.4 +0.9
9.1nm,1.2s
FLWY Flagg Ranch 19.47 356 eP Pn 15 18 37.8 +0.9
40nm,1.8s
MFID Camas Ranch 19.56 345 eP P 15 18 36.7 +0.1
7.8nm,1.1s
MOD Modoc 19.61 334 eP P 15 18 37.5 +0.4
8.1nm,0.9s
H17A Grant Village 19.77 357 eP P 15 18 37.0 -2.1
CCM Cathedral Cave 20.23 44 eP Pn 15 18 46.7 +1.0
22nm,1.4s
J08A Circle Bar Ran 20.23 340 eP P 15 18 44.6 +0.7
17nm,1.0s
QLMT Earthquake Lak 20.26 355 eP Pn 15 18 46.5 +0.2
MCMT McKenzie Canyo 20.40 352 eP P 15 18 45.8 -0.1
YBH Yreka Blue Hor 20.50 330 LR LR 15 26 34.5
comp=Z,98nm,21.1s,baz=144,slow=37
K05A Summer Lake 20.54 334 eP Pn 15 18 49.8 +0.3
41nm,1.3s
DLMT Dillon 20.90 353 P Pn 15 18 53.0 -0.7
9.7nm,1.1s
BOZ Bozeman (W) 21.09 355 eP P 15 18 53.8 +0.6
51nm,2.1s
GCMT Greycliff 21.14 359 eP P 15 18 54.4 +0.7
I07A Izee 21.21 339 eP P 15 18 55.6 +1.1
15nm,1.1s
LRM Limekiln Ridge 21.34 353 eP P 15 18 58.7 +2.7
ECSD EROS Data Cent 21.63 25 P P 15 18 58.5 -0.4
51nm,1.6s
G08A Pilot Rock 22.13 341 eP P 15 19 11.5 +7.2
LAO LASA Array 22.15 5 eP P 15 19 11.6 +7.1
51nm,1.6s
HRY Holter Researc 22.16 355 eP P 15 19 06.9 +2.2
F10A Beach Ranch, E 22.31 345 eP P 15 19 08.4 +2.2
15nm,1.1s
CHMT Chamberlain Mo 22.51 352 eP P 15 19 10.1 +1.6
MSO Missoula 22.51 351 eP P 15 19 14.8 +6.5
45nm,1.4s
SLMT Seeley Lake 22.86 352 P P 15 19 13.3 +1.2
SWMT Swartz Lake 23.19 351 eP P 15 19 17.2 +1.8
EGMT Eagleton 23.37 359 P P 15 19 18.1 +0.9
44nm,1.3s
JTMT Jette 23.46 351 eP P 15 19 24.3 +6.1
YBMT Yellow Bay 23.54 352 P P 15 19 21.2 +2.3
BSMT Bassoo Peak 23.63 350 eP P 15 19 26.5 +6.5
TKL Tuckaleechee C 24.42 57 LR LR 15 29 56.5
comp=Z,578nm,20.1s,baz=244,slow=38
NEW Newport 24.45 347 P P 15 19 28.2 +0.7
3.9nm,0.8s,baz=154,slow=10,SNR=5.0
NEW LR LR 15 28 32.4
comp=Z,227nm,19.8s,baz=167,slow=36
NEW Newport 24.45 347 eP P 15 19 28.1 +0.6
57nm,1.5s
WALA Waterton Lakes 24.70 352 eP P 15 19 31.0 +1.2
34nm,1.4s
ULM Lac du Bonnet 27.57 18 LR LR 15 30 58.6
comp=Z,157nm,21.8s,baz=40,slow=37
EDM Edmonton 28.75 355 eP P 15 20 12.1 +6.0
71nm,1.8s
SCHQ Schefferville 43.30 35 LR LR 15 41 13.9
comp=Z,185nm,21.7s,baz=268,slow=38
DAWY Dawson 44.16 341 eP P 15 22 24.0 +6.9
7.7nm,1.3s
DOT Dot Lake 45.30 339 eP P 15 22 28.0 +1.8
17nm,1.1s
KDAK Kodiak Island 45.31 329 LR LR 15 38 57.0
comp=Z,96nm,18.9s,baz=120,slow=33
IL1 Eielson Array 46.97 339 eP P 15 22 40.2 +0.8
ILAR Eielson Array 46.97 339 P P 15 22 40.5 +1.1
0.7nm,0.7s,baz=155,slow=6.0,SNR=20
ILAR LR LR 15 43 58.5
comp=Z,77nm,19.9s,baz=134,slow=38
MCK McKinley 47.02 337 eP P 15 22 39.0 -0.7
14nm,1.6s
TRF Thorofare Moun 47.34 336 eP P 15 22 43.1 +0.6
14nm,0.6s
PPLA Purkeypile 47.74 335 P P 15 22 45.7 +0.1
38nm,1.4s
SAML Samuel 55.81 121 eP P 15 23 47.8 +1.6
24nm,1.9s

PPT Papeete 57.59 227 LR LR 15 41 41.3
comp=Z,94nm,19.7s,baz=20,slow=29
PPT2 Papeete2 57.61 227 eLR LR 15 40 43.1
254nm,26.2s,baz=26
TBI Tubuai 61.71 223 eLR LR 15 42 37.0
123nm,28.2s
CPUP Villa Florida 71.15 132 P P 15 25 36.1 +8.6
2.2nm,0.8s,baz=321,slow=9.0,SNR=5.7
BDFB Brasilia 71.73 117 P P 15 25 40.7 +9.3
1.1nm,0.5s,baz=12,slow=3.1,SNR=3.7
AFI Afiamalu 72.16 245 LR LR 15 48 46.9
comp=Z,74nm,19.3s,baz=53,slow=29
ARCES ARCESS Array B 80.62 15 P P 15 26 27.2 +6.2
3.3nm,0.8s,baz=347,slow=5.0,SNR=7.0
ESDC Sonseca Array 85.39 48 P P 15 26 53.6 +7.2
0.1nm,0.2s,baz=324,slow=6.3,SNR=3.9
ESDC LR LR 16 02 08.4
comp=Z,93nm,21.5s,baz=255,slow=34
FINES FINESS Array B 86.95 20 P P 15 26 59.3 +5.8
2.4nm,0.8s,baz=328,slow=6.8,SNR=4.8
DZM Mont Dzumac 94.22 248 eLR LR 15 57 29.5
131nm,24.9s
KEST Kesra 96.41 46 LR LR 16 10 40.8
comp=Z,71nm,18.8s,baz=278,slow=35
LZH Lanzhou 112.09 332 ePKP PKiKP 15 32 43.6 -1.2
LZH pPKP pPKP 15 32 46.8
LZH sPKP 15 32 48.3
LZH LR LR
comp=N,100nm,18.0s
LZH LR LR
comp=E,97nm,17.8s
LZH LR LR
comp=Z,140nm,20.0s
WRA Warramunga Arr 121.58 261 PKP PKPdf 15 33 08.9 +5.8
comp=Z,0.7nm,1.0s,baz=64,slow=1.8,SNR=3.4
ASAR Alice Springs 123.00 257 PKP PKPdf 15 33 11.2 +5.5
comp=Z,0.5nm,0.9s,baz=79,slow=2.6,SNR=4.1

**IDC 21 15:14:49.2±4.8, 5°.81S×149°.87E, h94km±40km, mb3.3/4, mb1 3.6/5, mb1mx3.3/29, mbtmp3.8/5, Error ellipse: s-maj=67.0km s-min=29.1km az=113.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PMG | Port Moresby | 4.47 | 217 | P | Pn | 15 15 55.7 | +1.0 |
| | 18nm,0.3s,baz=47,slow=12,SNR=79 | | | | | | |
| PMG | | | | S | Sn | 15 16 45.8 | +0.1 |
| | 8.7nm,0.3s,baz=78,slow=12,SNR=6.4 | | | | | | |
| WRA | Warramunga Arr | 20.63 | 226 | P | P | 15 19 21.1 | -0.2 |
| | 1.7nm,0.5s,baz=50,slow=11,SNR=14 | | | | | | |
| ASAR | Alice Springs | 23.48 | 219 | P | P | 15 19 51.2 | +0.4 |
| | 0.8nm,0.5s,baz=53,slow=9.0,SNR=17 | | | | | | |
| SONM | Songino Array | 65.66 | 329 | P | P | 15 25 24.1 | +0.4 |
| | 0.4nm,0.5s,baz=115,slow=6.7,SNR=3.4 | | | | | | |
| ILAR | Eielson Array | 84.19 | 23 | P | P | 15 27 08.9 | -0.9 |
| | 0.3nm,0.7s,baz=218,slow=5.8,SNR=4.5 | | | | | | |
| TORD | Torodi Ar. Bea | 147.81 | 285 | PKPbc | PKPbc | 15 34 23.7 | -0.7 |
| | 0.1nm,0.5s,baz=90,slow=3.5,SNR=2.3 | | | | | | |

**IDC 21 15:23:45.3±5.1, 24°.84N×109°.20W, h0km, mb3.3/1, mb1 3.8/3, mb1mx3.5/37, mbtmp3.3/3, ML3.6/1, Error ellipse: s-maj=75.5km s-min=25.0km az=163.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LPIG | La Paz | 1.25 | 234 | Pg | Pg | 15 24 04.8 | -4.5 |
| | 14nm,0.3s,baz=201,slow=2.0,SNR=7.6 | | | | | | |
| LPIG | | | | Lg | Lg | 15 24 19.4 | |
| | 70nm,0.3s,baz=148,slow=23,SNR=8.2 | | | | | | |
| TXAR | Lajitas Array | 6.66 | 47 | Pn | Pn | 15 25 26.6 | +2.1 |
| | 0.3nm,0.3s,baz=234,slow=14,SNR=3.5 | | | | | | |
| TXAR | | | | Pg | Pb | 15 25 40.3 | -1.8 |
| | 0.3nm,0.3s,baz=214,slow=14,SNR=3.9 | | | | | | |
| TXAR | | | | Lg | Lg | 15 27 14.7 | |
| | 0.8nm,0.3s,baz=223,slow=27,SNR=6.0 | | | | | | |
| NVAR | Mina Array Bea | 15.60 | 332 | Pn | P | 15 27 29.3 | -1.9 |
| | baz=158,slow=11,SNR=3.1 | | | | | | |
| ILAR | Eielson Array | 46.72 | 339 | P | P | 15 32 15.7 | -0.1 |
| | 0.3nm,0.7s,baz=148,slow=7.4,SNR=4.5 | | | | | | |

*IDC **21** 15:28:47.0±4.2, 20°.91S×178°.79W, h585km±46km, mb3.1/8, mb1 3.4/9, mb1mx3.1/36, mbtmp4.1/9, Error ellipse: s-maj=26.0km s-min=23.1km az=110.0*

*ISCJB **21** 15:28:48.6±0.9, 21°.1S±0°.2×178°.9W±0°.2, h619km, mb3.5/8, Error ellipse: s-maj=28.8km s-min=18.4km az=144.4*

**ISC 21 15:28:49.8±0.9, 21°.0S±0°.2×178°.9W±0°.2, h619km, n14, σ1s 20/16, mb3.5/8, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DZM | Mont Dzumac | 13.65 | 263 | P | **P** | 15 31 43.1 | -1.7 |
| | 0.4nm,0.3s,baz=352,slow=7.1,SNR=4.7 | | | | | | |
| ASAR | Alice Springs | 43.56 | 257 | P | **P** | 15 36 01.6 | +0.5 |
| | 1.2nm,0.8s,baz=92,slow=8.6,SNR=28 | | | | | | |
| ASAR | | | | PcP | **PcP** | 15 37 35.3 | +0.7 |
| | 0.6nm,0.6s,baz=106,slow=4.0,SNR=5.6 | | | | | | |
| WRA | Warramunga Arr | 43.67 | 263 | P | **P** | 15 36 02.1 | +0.1 |
| | 1.2nm,0.8s,baz=97,slow=7.6,SNR=58 | | | | | | |
| WRA | | | | PcP | **PcP** | 15 37 36.0 | +1.0 |
| | 0.2nm,0.4s,baz=87,slow=3.5,SNR=3.2 | | | | | | |
| VNDA | Vanda | 57.38 | 185 | P | **P** | 15 37 40.6 | +0.4 |
| | 0.3nm,0.5s,baz=16,slow=5.2,SNR=4.8 | | | | | | |
| USRK | Ussuriysk Ar. | 78.86 | 326 | P | **P** | 15 39 51.6 | +1.5 |
| | 1.0nm,0.7s,baz=164,slow=4.8,SNR=4.4 | | | | | | |
| NVAR | Mina Array Bea | 81.96 | 44 | P | **P** | 15 40 06.7 | 0.0 |
| | 0.6nm,0.5s,baz=224,slow=7.3,SNR=6.7 | | | | | | |
| SEY | Seymchan | 86.63 | 347 | P | **P** | 15 40 28.7 | +0.2 |
| | 6.9nm,1.2s,baz=71,slow=22,SNR=4.6 | | | | | | |
| ILAR | Eielson Array | 88.96 | 13 | P | **P** | 15 40 38.3 | -1.0 |
| | 0.4nm,0.4s,baz=216,slow=5.2,SNR=11 | | | | | | |
| CMAR | Chiang Mai Arr | 89.44 | 290 | P | **P** | 15 40 44.3 | +1.7 |
| | 0.9nm,0.3s,baz=131,slow=2.5,SNR=7.6 | | | | | | |
| ARCES | ARCESS Array B | 129.21 | 349 | PKP | **PKPdf** | 15 46 47.9 | -0.4 |
| | 4.6nm,1.1s,baz=20,slow=1.8,SNR=8.6 | | | | | | |
| FINES | FINESS Array B | 135.96 | 343 | PKP | **PKPdf** | 15 46 59.9 | -1.1 |
| | 3.4nm,1.1s,baz=140,slow=3.1,SNR=4.0 | | | | | | |
| AKASG | Malin Array Be | 142.98 | 330 | PKP | **PKPdf** | 15 47 11.6 | -2.5 |
| | 0.6nm,0.4s,baz=44,slow=4.3,SNR=16 | | | | | | |
| BRTR | Keskin Array B | 146.49 | 311 | PKPbc | **PKPbc** | 15 47 23.2 | -0.1 |
| | 0.6nm,0.4s,baz=128,slow=2.1,SNR=7.0 | | | | | | |
| GERES | GERESS Array B | 150.39 | 343 | PKPbc | **PKPbc** | 15 47 32.7 | +0.1 |
| | 1.0nm,0.6s,baz=20,slow=4.3,SNR=6.1 | | | | | | |

*ISCJB **21** 15:37:59.7±0.4, 24°.62N±0°.04×109°.14W±0°.02, h10km, mb4.7/59, MS3.9/22, Error ellipse: s-maj=5.6km s-min=2.7km az=6.4*

*IDC **21** 15:38:00.3±0.5, 24°.71N×109°.30W, h0km, mb4.3/16, mb1 4.5/20, mb1mx4.3/44, mbtmp4.3/20, ML3.4/3, MS3.9/25, Ms1 3.9/25, ms1mx3.8/40, Error ellipse: s-maj=12.6km s-min=9.1km az=139.0*

*NEIC **21** 15:38:01.3±0.4, 24°.59N×109°.18W, h10km, mb4.6/96, Error ellipse: s-maj=6.0km s-min=4.2km az=194.0*

*GCMT **21** 15:38:01.3±0.6, 24°.65N×109°.30W, h21km±2km, MW4.8/69, Moment Tensor Solution. s19,c21; s69,c95; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$0.28±.16; $M_{\theta\theta}$-2.41±.15; $M_{\phi\phi}$2.13±.14; $M_{r\theta}$-0.28±.22; $M_{\theta\phi}$0.42±.11; $M_{\phi r}$0.11±.22; Best double couple: $M_o$2.32600×$10^{16}$ NP1:ϕs140.00000°, δ88.00000°, λ-174.00000°. NP2: ϕs50.00000°, δ84.00000°, λ-2.00000°. Principal axes: T 2.1720, Plg3.0000°, Azm275.0000°; N 0.3110, Plg83.0000°, Azm162.0000°; P -2.4800, Plg6.0000°, Azm5.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*BJI **21** 15:38:01.6, 24°.60N×109°.20W, h10km, Ms5.0/1, Ms7 4.6/1*

**ISC 21 15:38:01.5±0.5, 24°.66N±0°.06×109°.27W±0°.06, h10km, n426, σ1s 24/397, mb4.8/59, MS3.9/22, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LPIG | La Paz | 1.10 | 240 | Pg | **Pb** | 15 38 21.4 | -1.2 |
| | 318nm,0.3s,baz=35,slow=3.2,SNR=67 | | | | | | |
| LPIG | | | | Lg | Lg | 15 38 35.6 | |
| | 494nm,0.3s,baz=233,slow=8.9,SNR=8.2 | | | | | | |
| LPIG | | | | LR | LR | 15 38 37.5 | |
| | comp=Z,174nm,20.0s,baz=56,slow=34 | | | | | | |
| TX31 | Lajitas Ar. Si | 6.83 | 46 | ePn | **Pn** | 15 39 39.6 | -2.3 |
| TXAR | Lajitas Array | 6.83 | 46 | Pn | **Pn** | 15 39 39.6 | -2.3 |
| | 1.6nm,0.3s,baz=226,slow=13,SNR=21 | | | | | | |

TXAR Pg Pb 15 40 00.4 0.0
2.1nm,0.3s,baz=233,slow=14,SNR=10.0
TXAR Sn Sn 15 41 05.8 +6.0
4.3nm,0.3s,baz=209,slow=20,SNR=4.9
TXAR Lg Lg 15 41 32.2
5.5nm,0.3s,baz=223,slow=26,SNR=6.7
TUC Tucson 7.74 350 ePn Pn 15 39 52.2 -2.1
MNTX Cornudas Mount 7.81 25 P Pn 15 39 52.8 -2.4
baz=7.9,SNR=22
MNTX Cornudas Mount 7.81 25 ePn Pn 15 39 53.0 -2.2
214A Organ Pipe Nat 7.92 338 P Pn 15 39 57.1 +0.4
baz=8.0
214A Organ Pipe Nat 7.92 338 ePn Pn 15 39 51.4 -5.3
49nm,0.8s
121A Cookes Peak, D 7.96 9 P Pn 15 39 56.0 -1.4
baz=8.0,SNR=34
121A Cookes Peak, D 7.96 9 ePn Pn 15 39 55.0 -2.4
56nm,0.8s
529A Stev Forest Ra 8.30 47 P Pn 15 40 01.1 -0.9
baz=8.3
429A Davenport Ranc 8.84 46 P Pn 15 40 09.6 +0.3
baz=8.8,SNR=12
530A J-C Ranch, Com 8.92 50 P Pn 15 40 10.1 -0.4
baz=8.9
832A Faith Ranch, C 9.07 65 P Pn 15 40 12.3 -0.2
baz=9.0
631A Perdido Creek 9.08 57 P Pn 15 40 13.8 +1.1
baz=9.1,SNR=12
732A Laxson Ranch, 9.25 62 P Pn 15 40 14.8 -0.2
baz=9.2
430A Baggett Ranch, 9.37 48 P Pn 15 40 16.4 -0.3
baz=9.4
531A Rocksprings 9.49 53 P Pn 15 40 19.0 +0.6
baz=9.5,SNR=9.4
Y22D IRIS PASSCAL I 9.61 12 P Pn 15 40 21.3 +1.4
baz=9.7
GLA Glamis 9.68 331 P Pn 15 40 23.2 +2.3
baz=9.8
GLA Glamis 9.68 331 ePn Pn 15 40 19.7 -1.2
BNM Barren Site 9.74 13 ePn Pn 15 40 21.4 -0.4
431A Sonora 9.74 50 P Pn 15 40 22.6 +0.8
baz=9.7,SNR=7.0
330A Mertzon 9.81 45 P Pn 15 40 23.9 +1.2
baz=9.8
034A Hebbronville 9.83 74 P Pn 15 40 23.9 +1.0
baz=9.8
LAZ Ladron 9.89 10 ePn Pn 15 40 22.4 -1.4
LPM Los Pinos Moun 9.89 13 ePn Pn 15 40 25.1 +1.2
128A Castleberry Fa 9.92 35 P Pn 15 40 24.8 +0.5
baz=9.9
532A Rocksprings 9.94 55 P Pn 15 40 25.2 +0.6
baz=9.9
IBP Imperial Bould 9.97 325 P Pn 15 40 27.6 +2.6
baz=10
934A Benavides 10.09 71 P Pn 15 40 28.2 +1.6
baz=10.0
Y12C Blythe 10.16 334 P Pn 15 40 29.9 +2.5
baz=10
JCT Junction City 10.20 53 P Pn 15 40 28.8 +0.7
baz=10
JCT Junction City 10.20 53 ePn Pn 15 40 28.5 +0.4
331A San Angelo 10.24 48 P Pn 15 40 29.3 +0.7
baz=10
129A Stewart Farms, 10.26 38 P Pn 15 40 29.9 +1.0
baz=10
BAR Barrett 10.30 323 Pn Pn 15 40 30.4 +1.0
432A Menard 10.43 51 P Pn 15 40 31.7 +0.6
baz=10,SNR=8.1
W18A Petrified Fore 10.44 358 ePn Pn 15 40 33.0 +1.6
154nm,1.1s
BC3 Big Chuckawall 10.47 330 P Pn 15 40 34.1 +2.4
baz=11
Z28A Tucker Farm, M 10.50 33 P Pn 15 40 32.3 +0.2
baz=10
PDMCI Parker Dam,Lak 10.50 337 P Pn 15 40 35.0 +2.8
baz=11
ANMO Albuquerque 10.54 13 Pn Pn 15 40 34.4 +1.5
0.2nm,0.3s,baz=197,slow=13,SNR=46
ANMO Lg Lg 15 43 32.5
0.2nm,0.3s,baz=272,slow=22,SNR=3.4
231A Bronte 10.71 45 P Pn 15 40 36.1 +1.1
baz=11
332A Millersview 10.75 49 P Pn 15 40 36.7 +1.1
baz=11
130A Snyder 10.76 41 P Pn 15 40 37.1 +1.4
baz=11
IRM Iron Mountain 10.77 333 P Pn 15 40 38.2 +2.4
baz=11,SNR=9.0
Z29A Hungry Hill Ra 10.83 36 P Pn 15 40 37.8 +1.2
baz=11
433A Art 10.87 54 P Pn 15 40 38.4 +1.3
baz=11
PFO Pinyon Flat Ob 10.91 327 Pn Pn 15 40 39.3 +1.5
baz=139,slow=13,SNR=9.7
PFO LR LR 15 44 19.1
comp=Z,563nm,18.6s,baz=140,slow=35
PFO Pinyon Flat Ob 10.91 327 ePn Pn 15 40 39.4 +1.5
PFO eLg Lg 15 43 57.1
WUAZ Wupatki 10.98 351 P Pn 15 40 41.0 +2.2
baz=11,SNR=8.0
WUAZ Wupatki 10.98 351 ePn Pn 15 40 41.0 +2.2
BELC Belle Mtn. Jos 11.01 329 P Pn 15 40 41.9 +2.7
baz=11
232A Coleman 11.12 47 P Pn 15 40 41.1 +0.4
baz=11
131A Roby 11.16 42 P Pn 15 40 42.6 +1.4
baz=11
Z30A Sanderson Ranc 11.16 38 P Pn 15 40 42.2 +0.9
baz=11
333A Richland Sprin 11.25 52 P Pn 15 40 43.3 +0.9
baz=11
MURC Murrieta 11.29 324 P Pn 15 40 45.7 +2.7
baz=11
GMRC Granite Mounta 11.51 333 P Pn 15 40 48.7 +2.6
baz=12
ABTX Abilene, Hawle 11.59 45 P Pn 15 40 47.8 +0.7
baz=12
ABTX Abilene, Hawle 11.59 45 ePn Pn 15 40 46.8 -0.2
SCI San Clemente I 11.61 318 P Pn 15 40 50.7 +3.4
baz=12
Z31A Sharp Cattle R 11.75 41 P Pn 15 40 49.6 +0.3
baz=12
334A Lometa 11.79 53 P Pn 15 40 50.5 +0.6
baz=12
BFSC Mount Baldy Ra 12.02 325 ePn Pn 15 40 45.6 -7.4
133A Hamilton Ranch 12.05 47 P Pn 15 40 54.1 +0.7
baz=12
AMTX Amarillo 12.13 31 ePn Pn 15 40 52.9 -1.6
Z32A Haskell 12.15 43 P Pn 15 40 54.9 +0.2
baz=12,SNR=11
X30A Coker Ranch, T 12.18 35 P Pn 15 40 55.6 +0.5
baz=12
TUQ Turquoise Moun 12.19 333 P Pn 15 40 57.0 +1.7
baz=12
234A Clairette 12.23 51 P Pn 15 40 55.9 +0.1
baz=12
W29A Amraillo 12.34 31 P Pn 15 40 57.5 +0.1
baz=12
V27A Dan Oppiter Fa 12.38 25 P Pn 15 40 58.0 +0.1
baz=12,SNR=6.1
GSC Goldstone 12.45 330 P Pn 15 41 01.7 +2.8
baz=13,SNR=5.9
GSC Goldstone 12.45 330 ePn Pn 15 41 01.3 +2.4
MVCO Mesa Verde 12.53 3 P Pn 15 41 01.3 +1.2
baz=13,SNR=7.7
MVCO Mesa Verde 12.53 3 ePn Pn 15 41 00.8 +0.7
Z33A Whitaker Ranch 12.58 44 P Pn 15 40 59.8 -0.8
baz=13,SNR=6.4
Y32A R-V Farms, Ver 12.65 40 P Pn 15 41 01.5 0.0
baz=13
WHTX Lake Whitney 12.71 52 ePn Pn 15 41 01.5 -0.8
SHPR Sheep Range 12.85 338 ePn Pn 15 41 06.3 +1.9
OSI Osito Adit 12.88 323 ePn Pn 15 41 03.1 -1.6
LRMC Laurel Mountai 13.01 328 P Pn 15 41 09.7 +3.2
baz=13,SNR=36
HKT Hockley 13.05 63 ePn Pn 15 41 05.3 -1.6
T25A Trinidad 13.12 17 P Pn 15 41 08.3 +0.2
baz=13
T25A Trinidad 13.12 17 ePn Pn 15 41 07.2 -1.0
Y33A Hilltop Ranch, 13.14 42 P Pn 15 41 07.6 -0.6
baz=13
S22A 4UR Ranch, Cre 13.21 8 P Pn 15 41 11.5 +2.0
baz=13,SNR=8.7
S22A 4UR Ranch, Cre 13.21 8 ePn Pn 15 41 11.4 +2.0
W31A Holland Ranch, 13.24 35 P Pn 15 41 10.1 +0.5
baz=13
CCUT Cedar City 13.32 346 ePn Pn 15 41 14.4 +3.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| T26A | Comanche Natio<br>baz=14,SNR=8.8 | 13.39 | 20 | P | Pn | 15 41 13.6 | +1.8 |
| MPMC | Manual Prospec<br>baz=14,SNR=20 | 13.39 | 330 | P | Pn | 15 41 14.5 | +2.7 |
| SDCO | Great Sand Dun<br>baz=14,SNR=6.5 | 13.44 | 13 | P | Pn | 15 41 14.6 | +2.1 |
| SDCO | Great Sand Dun | 13.44 | 13 | *e*Pn | Pn | 15 41 14.9 | +2.4 |
| ISA | Isabella<br>baz=14,SNR=12 | 13.55 | 326 | P | Pn | 15 41 16.1 | +2.3 |
| ISA | Isabella | 13.55 | 326 | *e*Pn | Pn | 15 41 15.2 | +1.4 |
| WMOK | Wichita Mounta | 13.55 | 40 | *e*Pn | Pn | 15 41 11.2 | -2.7 |
| DAC | Darwin (Calif) | 13.62 | 330 | *e*Pn | Pn | 15 41 17.4 | +2.5 |
| T28A | Walsh<br>baz=14 | 13.85 | 25 | P | Pn | 15 41 18.9 | +0.9 |
| CWC | Cottonwood Cre<br>baz=14,SNR=9.6 | 13.98 | 329 | P | Pn | 15 41 22.5 | +2.8 |
| VES | Vestal, Richgr<br>baz=14 | 14.00 | 325 | P | Pn | 15 41 22.6 | +2.7 |
| W33A | Caddo, Fort Co<br>baz=14,SNR=5.4 | 14.03 | 39 | P | Pn | 15 41 20.2 | -0.1 |
| MSU | Marysvale | 14.03 | 351 | *e*Pn | Pn | 15 41 22.7 | +2.1 |
| Y35A | Marietta<br>baz=14 | 14.09 | 46 | P | Pn | 15 41 21.4 | +0.2 |
| Z36A | Blue Ridge<br>baz=14 | 14.13 | 50 | P | Pn | 15 41 21.9 | +0.2 |
| GRAC | Grapevine Rang<br>baz=14,SNR=9.6 | 14.13 | 332 | P | Pn | 15 41 24.4 | +2.7 |
| SRU | San Rafael | 14.45 | 356 | *e*Pn | Pn | 15 41 26.5 | +0.2 |
| W34A | Bridge Creek, | 14.49 | 41 | *e*Pn | Pn | 15 41 28.9 | +2.2 |
| SMCO | Snowmass | 14.61 | 7 | *e*Pn | Pn | 15 41 29.2 | +0.6 |
| U32A | Winter Ranch,<br>baz=15 | 14.64 | 35 | P | Pn | 15 41 29.7 | +1.0 |
| R27A | Eads<br>baz=15,SNR=11 | 14.66 | 21 | P | Pn | 15 41 30.0 | +0.9 |
| R11A | Troy Canyon, C<br>baz=15,SNR=13 | 14.67 | 340 | P | Pn | 15 41 32.1 | +2.8 |
| R11A | Troy Canyon, C | 14.67 | 340 | *e*Pn | Pn | 15 41 31.2 | +2.0 |
| S29A | Ulysses<br>baz=15 | 14.68 | 26 | P | Pn | 15 41 29.7 | +0.4 |
| Q24A | Divide | 14.69 | 13 | *e*Pn | Pn | 15 41 32.3 | +2.7 |
| TMUT | Trail Mountain<br>35nm,1.1s | 14.69 | 354 | *e*Pn | Pn | 15 41 29.8 | +0.1 |
| P17A | Butcher Ranch, | 14.83 | 356 | *e*Pn | Pn | 15 41 31.7 | +0.3 |
| T31A | Randall Ranch,<br>baz=15 | 14.87 | 31 | P | Pn | 15 41 31.5 | -0.4 |
| X36A | Centrahoma<br>baz=15,SNR=5.7 | 14.95 | 46 | P | Pn | 15 41 34.1 | +1.2 |
| MTUM | Tungsten Hills | 14.95 | 330 | *e*Pn | Pn | 15 41 35.7 | +2.7 |
| P18A | Preston Nutter | 14.95 | 357 | *e*Pn | Pn | 15 41 34.6 | +1.3 |
| W35A | Tecumseh<br>baz=15 | 14.98 | 43 | P | Pn | 15 41 33.6 | +0.2 |
| R28A | Tribune<br>baz=15,SNR=11 | 15.04 | 23 | P | Pn | 15 41 34.5 | +0.2 |
| V34A | Guthrie<br>baz=15 | 15.06 | 40 | P | Pn | 15 41 32.6 | -1.7 |
| V34A | Guthrie | 15.06 | 40 | *e*Pn | Pn | 15 41 35.3 | +0.9 |
| Y37A | Hugo<br>baz=15 | 15.09 | 49 | P | Pn | 15 41 34.0 | -0.7 |
| Z38A | Mt. Pleasant<br>baz=15 | 15.14 | 52 | P | Pn | 15 41 34.6 | -0.8 |
| T32A | Huddler Ranch,<br>baz=15 | 15.30 | 33 | P | Pn | 15 41 37.5 | -0.1 |
| R29A | Marienthal<br>baz=15 | 15.37 | 25 | P | Pn | 15 41 38.9 | +0.5 |
| KSCO | Kaye Shedlock'<br>27nm,1.0s | 15.38 | 20 | *e*Pn | Pn | 15 41 38.5 | -0.2 |
| W36A | Wetumka<br>baz=15,SNR=11 | 15.38 | 44 | P | Pn | 15 41 38.1 | -0.5 |
| CMIG | Matias Romero<br>0.1nm,0.3s,baz=304,slow=11,SNR=7.0 | 15.40 | 117 | Pn | P | 15 41 41.6 | -2.0 |
| CMIG | | | | LR | LR | 15 47 05.6 | |
| | comp=Z,757nm,18.1s,baz=276,slow=35 | | | | | | |
| ISCO | Idaho Springs<br>baz=16,SNR=8.8 | 15.41 | 11 | P | Pn | 15 41 39.4 | +0.1 |
| ISCO | Idaho Springs<br>53nm,1.4s | 15.41 | 11 | *e*Pn | Pn | 15 41 41.0 | +1.7 |
| NLU | North Lily Min<br>23nm,1.5s | 15.44 | 352 | *e*Pn | Pn | 15 41 41.0 | +1.4 |
| MPU | Maple Canyon<br>25nm,0.8s | 15.45 | 353 | Pn | Pn | 15 41 40.6 | +1.0 |
| O20A | White River Ci | 15.46 | 3 | *e*Pn | Pn | 15 41 40.9 | +1.0 |
| U34A | Anderson Ranch<br>baz=16,SNR=6.3 | 15.47 | 38 | P | Pn | 15 41 40.3 | +0.4 |
| U34A | Anderson Ranch<br>36nm,0.8s | 15.47 | 38 | *e*Pn | Pn | 15 41 41.5 | +1.6 |
| LRV | Little Rabbit | 15.48 | 322 | *e*Pn | P | 15 41 43.2 | -1.2 |
| T33A | Patterson Ranc<br>baz=16 | 15.57 | 35 | P | Pn | 15 41 41.3 | +0.2 |
| R30A | Dighton<br>baz=16,SNR=13 | 15.59 | 27 | P | Pn | 15 41 40.8 | -0.5 |
| X37A | Clayton<br>baz=16,SNR=19 | 15.60 | 47 | P | Pn | 15 41 40.9 | -0.6 |
| Q28A | Sharon Springs<br>baz=16,SNR=6.0 | 15.68 | 22 | P | Pn | 15 41 42.5 | -0.1 |
| S32A | Newby Ranch, P<br>baz=16 | 15.71 | 32 | P | Pn | 15 41 42.0 | -0.9 |
| NV01 | Mina Array Sit | 15.73 | 333 | *e*Pn | P | 15 41 45.5 | -1.9 |
| NVAR | Mina Array Bea<br>0.2nm,0.3s,baz=150,slow=12,SNR=31 | 15.73 | 333 | Pn | Pn | 15 41 45.1 | +1.7 |
| NVAR | | | | LR | LR | 15 47 56.2 | |
| | comp=Z,545nm,18.3s,baz=156,slow=38 | | | | | | |
| DUG | Dugway<br>baz=16,SNR=9.2 | 15.78 | 350 | P | Pn | 15 41 44.2 | +0.2 |
| DUG | Dugway<br>22nm,1.1s | 15.78 | 350 | *e*Pn | Pn | 15 41 45.9 | +1.9 |
| Q29A | Oakley<br>baz=16,SNR=7.8 | 15.83 | 24 | P | Pn | 15 41 44.2 | -0.4 |
| W37A | Quinton<br>baz=16,SNR=20 | 15.89 | 46 | P | Pn | 15 41 45.0 | -0.3 |
| R31A | Burdett<br>baz=16 | 15.91 | 29 | P | Pn | 15 41 45.5 | 0.0 |
| SAO | San Andreas Ge<br>22nm,1.5s | 15.96 | 322 | *e*Pn | Pn | 15 41 47.0 | +0.9 |
| V36A | Jenks<br>baz=16,SNR=7.8 | 15.97 | 43 | P | Pn | 15 41 46.8 | +0.5 |
| X38A | Whitesboro<br>baz=16 | 16.02 | 48 | P | Pn | 15 41 46.8 | -0.1 |
| S33A | Kaszmaul Farm,<br>baz=16,SNR=6.7 | 16.09 | 34 | P | Pn | 15 41 48.2 | +0.4 |
| T34A | McClaskey Farm<br>baz=16,SNR=6.0 | 16.09 | 37 | P | Pn | 15 41 46.8 | -1.1 |
| CTU | Camp Tracy<br>39nm,1.3s | 16.13 | 353 | *e*Pn | Pn | 15 41 49.1 | +0.6 |
| Y39A | Lockesburg<br>baz=16 | 16.13 | 52 | P | Pn | 15 41 48.0 | -0.4 |
| TUL1 | Tulsa<br>56nm,1.5s | 16.14 | 43 | *e*Pn | Pn | 15 41 46.7 | -1.9 |
| P28A | Saint Francis<br>baz=16 | 16.17 | 21 | P | Pn | 15 41 48.9 | 0.0 |
| Q30A | Quinter<br>baz=16 | 16.20 | 26 | P | Pn | 15 41 49.3 | 0.0 |
| CBKS | Cedar Bluff<br>baz=16,SNR=6.1 | 16.26 | 28 | P | Pn | 15 41 48.9 | -1.1 |
| CBKS | Cedar Bluff<br>126nm,1.1s | 16.26 | 28 | *e*Pn | Pn | 15 41 48.9 | -1.1 |
| CMB | Columbia Colle<br>9.7nm,1.1s | 16.36 | 327 | *e*Pn | Pn | 15 41 52.3 | +1.0 |
| R32A | Long Quarter,<br>baz=16,SNR=5.1 | 16.39 | 31 | P | Pn | 15 41 50.2 | -1.5 |
| T35A | Sooner Cattle<br>baz=16 | 16.39 | 39 | P | Pn | 15 41 51.1 | -0.6 |
| N23A | Red Feather La<br>baz=16,SNR=5.8 | 16.43 | 9 | P | Pn | 15 41 52.0 | -0.4 |
| N23A | Red Feather La<br>24nm,1.1s | 16.43 | 9 | *e*Pn | Pn | 15 41 53.5 | +1.1 |
| W38A | Poteau<br>baz=16,SNR=28 | 16.45 | 47 | P | Pn | 15 41 52.5 | 0.0 |
| P29A | Atwood<br>baz=16 | 16.48 | 23 | P | Pn | 15 41 52.7 | -0.1 |
| BGU | Big Grassy Mou<br>103nm,2.0s | 16.53 | 350 | *e*Pn | P | 15 41 55.0 | -1.2 |
| V37A | Hulbert<br>baz=16,SNR=8.5 | 16.54 | 44 | P | Pn | 15 41 53.5 | 0.0 |
| Q31A | Ellis<br>baz=17,SNR=7.9 | 16.57 | 28 | P | Pn | 15 41 52.8 | -1.1 |
| R33A | Olander Ranch,<br>baz=17 | 16.65 | 32 | P | Pn | 15 41 54.0 | -0.9 |
| P30A | Selden<br>baz=17,SNR=10 | 16.68 | 25 | P | Pn | 15 41 54.7 | -0.7 |
| ELK | Elko<br>31nm,1.4s | 16.80 | 344 | *e*Pn | P | 15 41 58.9 | -0.4 |
| MIAR | Mount Ida<br>baz=17,SNR=12 | 16.82 | 51 | P | Pn | 15 41 57.2 | +0.1 |
| MIAR | Mount Ida<br>29nm,1.1s | 16.82 | 51 | *e*Pn | P | 15 41 59.3 | +0.1 |
| SPUT | South Promonto<br>104nm,2.1s | 16.82 | 352 | *e*Pn | P | 15 41 58.5 | -0.9 |
| T36A | Boggs Farm, Ca<br>baz=17 | 16.86 | 40 | P | Pn | 15 41 56.8 | -0.8 |
| U37A | Salina<br>baz=17,SNR=6.8 | 16.88 | 43 | P | Pn | 15 41 57.4 | -0.5 |
| PHWY | Pilot Hill<br>39nm,1.1s | 16.90 | 10 | *e*Pn | P | 15 41 59.5 | -1.0 |
| Q32A | Meitler Ranch,<br>baz=17,SNR=7.7 | 16.92 | 30 | P | Pn | 15 41 57.9 | -0.5 |
| V38A | Canehill<br>baz=17,SNR=10.0 | 16.99 | 45 | P | Pn | 15 41 58.4 | -0.9 |
| P31A | Stockton<br>baz=17 | 17.01 | 27 | P | Pn | 15 41 58.8 | -0.8 |
| R34A | Isabella, Hill<br>baz=17,SNR=6.7 | 17.01 | 34 | P | Pn | 15 41 58.7 | -0.8 |
| HWUT | Hardware Ranch<br>32nm,1.2s | 17.01 | 354 | *e*Pn | P | 15 42 00.9 | -0.7 |
| S35A | Otter Creek Ra<br>baz=17,SNR=8.0 | 17.05 | 37 | P | Pn | 15 41 59.4 | -0.6 |
| BMN | Battle Mountai<br>87nm,1.5s | 17.09 | 339 | *e*Pn | P | 15 42 02.5 | +0.1 |
| Q33A | Connelly Farm,<br>baz=17,SNR=7.0 | 17.26 | 31 | P | Pn | 15 42 02.1 | -0.7 |
| O30A | MW Ranch, Wils<br>baz=17 | 17.30 | 24 | P | Pn | 15 42 03.0 | -0.2 |
| OGNE | Ogallala<br>baz=17 | 17.33 | 19 | P | Pn | 15 42 03.1 | -0.5 |
| OGNE | Ogallala<br>181nm,1.9s | 17.33 | 19 | *e*Pn | Pn | 15 42 03.0 | -0.7 |
| U38A | Gravette<br>baz=17 | 17.36 | 44 | P | Pn | 15 42 03.5 | -0.4 |
| P32A | Huiting Farm,<br>baz=18 | 17.42 | 29 | P | Pn | 15 42 04.8 | +0.1 |
| T37A | Cheneyville 18<br>baz=18 | 17.47 | 41 | P | Pn | 15 42 04.4 | -0.9 |
| S36A | Lake Cedric, C<br>baz=18,SNR=6.2 | 17.48 | 39 | P | Pn | 15 42 04.3 | -1.1 |
| O31A | Woolen Ranch,<br>baz=18 | 17.56 | 26 | P | Pn | 15 42 05.9 | -0.6 |
| R35A | Emporia Munici<br>baz=18 | 17.57 | 36 | P | Pn | 15 42 06.5 | -0.1 |
| Q34A | Chapman<br>baz=18 | 17.64 | 33 | P | Pn | 15 42 07.4 | +0.1 |
| N29A | Votaw Ranch, W<br>baz=18 | 17.66 | 22 | P | Pn | 15 42 08.0 | +0.3 |
| P33A | Williams Farm,<br>baz=18 | 17.68 | 31 | P | P | 15 42 08.3 | -0.4 |
| UALR | University of<br>58nm,1.5s | 17.80 | 52 | *e*Pn | P | 15 42 10.5 | +0.3 |
| N30A | Hueftle Ranch,<br>baz=18 | 17.83 | 23 | P | P | 15 42 10.2 | -0.3 |
| KSU1 | Kansas State U<br>baz=18 | 17.94 | 34 | P | Pn | 15 42 11.2 | +0.1 |
| KSU1 | Kansas State U<br>36nm,0.9s | 17.94 | 34 | *e*Pn | Pn | 15 42 10.9 | -0.2 |
| S37A | Fort Scott<br>baz=18,SNR=6.3 | 17.95 | 40 | P | Pn | 15 42 09.7 | -1.5 |
| R36A | Gordon, Harris<br>baz=18 | 17.95 | 37 | P | Pn | 15 42 10.4 | -0.8 |
| Q35A | Mercer Eighty,<br>baz=18,SNR=13 | 18.05 | 35 | P | Pn | 15 42 11.4 | -1.1 |
| BW06 | Boulder Array<br>84nm,2.0s | 18.07 | 359 | *e*Pn | Pn | 15 42 12.3 | -0.5 |
| O32A | Brockman Farm,<br>baz=18 | 18.09 | 28 | P | Pn | 15 42 11.9 | -1.0 |
| K22A | Casper<br>baz=18,SNR=10 | 18.09 | 7 | P | Pn | 15 42 12.7 | -0.4 |
| K22A | Casper<br>60nm,1.5s | 18.09 | 7 | *e*Pn | P | 15 42 13.7 | +0.2 |
| AHID | Auburn Hatcher<br>53nm,1.5s | 18.13 | 356 | *e*Pn | P | 15 42 13.7 | -0.2 |
| P34A | Walnut Farm, R<br>baz=18,SNR=9.6 | 18.18 | 32 | P | Pn | 15 42 13.2 | -0.8 |
| M29A | Burnside Ranch<br>baz=18 | 18.20 | 21 | P | Pn | 15 42 13.1 | -1.3 |
| O33A | Hebron<br>baz=18 | 18.24 | 30 | P | Pn | 15 42 12.9 | -1.9 |
| R37A | Teagarden Farm<br>baz=18,SNR=8.2 | 18.32 | 39 | P | Pn | 15 42 14.2 | -1.6 |
| Q36A | Arnold C. Orve<br>baz=18 | 18.43 | 36 | P | P | 15 42 15.5 | -1.6 |
| L28A | Connealy Angus<br>baz=18 | 18.46 | 18 | P | P | 15 42 16.0 | -1.5 |
| P35A | Duane Minner,<br>baz=19 | 18.56 | 34 | P | P | 15 42 17.1 | -1.5 |
| REDW | Red Top Meadow<br>23nm,1.3s | 18.71 | 356 | *e*P | Pn | 15 42 20.8 | +0.1 |
| O34A | Beatrice<br>baz=19 | 18.74 | 31 | P | P | 15 42 19.1 | -1.3 |
| SNOW | Snow King Moun<br>13nm,0.8s | 18.80 | 357 | *e*P | Pn | 15 42 21.9 | 0.0 |
| O03D | Paynes Creek<br>baz=19 | 18.81 | 329 | P | P | 15 42 20.1 | -1.2 |
| TPAW | Teton Pass<br>19nm,1.1s | 18.84 | 356 | *e*P | Pn | 15 42 22.5 | +0.2 |
| LOHW | Long Hollow<br>208nm,3.0s | 18.94 | 357 | *e*P | Pn | 15 42 23.3 | -0.2 |
| FXWY | Fox Creek<br>88nm,2.1s | 18.99 | 356 | *e*P | Pn | 15 42 24.7 | +0.5 |
| P36A | Good Intent, A<br>baz=19,SNR=5.7 | 19.05 | 35 | P | P | 15 42 23.4 | -0.5 |
| MOOW | Moose Ponds<br>91nm,2.3s | 19.09 | 357 | *e*P | Pn | 15 42 25.2 | -0.1 |
| BGNE | Belgrade<br>baz=19,SNR=9.0 | 19.10 | 26 | P | P | 15 42 24.3 | -0.1 |
| BGNE | Belgrade<br>158nm,1.0s | 19.10 | 26 | *e*P | Pn | 15 42 25.4 | +0.2 |
| K28A | Ten Mile Ranch<br>baz=19 | 19.16 | 18 | P | P | 15 42 24.5 | -0.6 |
| O35A | Humboldt<br>baz=19 | 19.18 | 33 | P | P | 15 42 24.5 | -0.8 |
| J25A | Sunshine Ranch<br>baz=19 | 19.22 | 12 | P | P | 15 42 25.2 | -0.6 |
| IMW | Indian Meadow<br>23nm,1.0s | 19.24 | 356 | *e*P | Pn | 15 42 27.4 | +0.1 |
| J26A | Sides Ranch, S<br>baz=19,SNR=6.2 | 19.29 | 14 | P | P | 15 42 26.7 | +0.1 |
| HLID | Hailey<br>baz=20,SNR=19 | 19.33 | 349 | P | P | 15 42 27.5 | +0.5 |
| HLID | Hailey<br>17nm,1.0s | 19.33 | 349 | *e*P | Pn | 15 42 28.4 | +0.3 |
| WVOR | Wild Horse Val<br>36nm,1.5s | 19.35 | 339 | *e*P | P | 15 42 27.8 | +0.5 |
| WDC | Whiskeytown Da<br>136nm,2.9s | 19.38 | 328 | *e*P | P | 15 42 28.0 | +0.5 |
| FLWY | Flagg Ranch<br>36nm,1.2s | 19.42 | 357 | *e*P | Pn | 15 42 30.4 | +1.2 |
| QUAR | Qualls | 19.44 | 51 | *e*P | Pn | 15 42 34.1 | +4.8 |
| MFID | Camas Ranch<br>29nm,1.4s | 19.47 | 346 | *e*P | Pn | 15 42 29.7 | -0.1 |
| J27A | Elkhorn Farm,<br>baz=20 | 19.49 | 16 | P | P | 15 42 28.4 | -0.3 |
| MOD | Modoc<br>111nm,2.3s | 19.49 | 335 | *e*P | Pn | 15 42 30.1 | +0.1 |
| K30A | Basset<br>baz=20 | 19.66 | 22 | P | P | 15 42 31.1 | +0.5 |
| KMRM | Mail Ridge<br>48nm,1.3s | 19.69 | 325 | *e*P | Pn | 15 42 35.2 | +2.8 |
| H17A | Grant Village<br>baz=20 | 19.72 | 357 | P | P | 15 42 32.1 | +0.6 |
| H17A | Grant Village<br>12nm,1.1s | 19.72 | 357 | *e*P | Pn | 15 42 33.1 | +0.2 |
| I25A | Rochford<br>baz=20,SNR=6.4 | 19.84 | 12 | P | P | 15 42 32.5 | -0.2 |
| J28A | Allard Ranch,<br>baz=20 | 19.85 | 17 | P | P | 15 42 33.2 | +0.6 |
| RSSD | Black Hills<br>15nm,1.0s | 19.88 | 11 | *e*P | P | 15 42 32.3 | -0.9 |
| LKWY | Lake<br>22nm,1.0s | 19.88 | 358 | P | P | 15 42 32.1 | -1.1 |
| YMR | Madison River<br>32nm,1.0s | 20.01 | 356 | *e*P | Pn | 15 42 36.6 | +0.2 |
| M04C | Macdoel<br>baz=20,SNR=6.0 | 20.02 | 332 | P | P | 15 42 34.9 | +0.3 |
| I26A | New Underwood<br>baz=20 | 20.03 | 14 | P | P | 15 42 35.3 | +0.8 |
| YNR | Norris Junctio<br>40nm,1.2s | 20.05 | 357 | *e*P | Pn | 15 42 38.2 | +1.4 |
| J29A | Okreek<br>baz=20 | 20.09 | 19 | P | P | 15 42 35.9 | +0.6 |
| J08A | Circle Bar Ran<br>64nm,1.4s | 20.13 | 340 | *e*P | Pn | 15 42 37.3 | -0.4 |
| PBMO | Poplar Bluff<br>62nm,1.9s | 20.16 | 49 | *e*P | Pn | 15 42 37.3 | -0.6 |
| QLMT | Earthquake Lak | 20.20 | 356 | *e*P | Pn | 15 42 38.1 | -0.6 |
| I27A | Quinn<br>baz=20 | 20.24 | 15 | P | P | 15 42 37.3 | +0.4 |
| CCM | Cathedral Cave<br>19nm,1.1s | 20.33 | 45 | *e*P | P | 15 42 37.1 | -0.8 |
| MCMT | McKenzie Canyo | 20.34 | 353 | *e*P | Pn | 15 42 40.2 | 0.0 |
| YBH | Yreka Blue Hor<br>1.3nm,0.6s,baz=101,slow=10,SNR=2.8 | 20.37 | 330 | P | Pn | 15 42 39.4 | -1.0 |
| YBH | Yreka Blue Hor<br>85nm,2.8s | 20.37 | 330 | *e*P | P | 15 42 39.0 | +0.7 |
| I28A | Midland<br>baz=20,SNR=6.1 | 20.40 | 17 | P | P | 15 42 38.3 | -0.4 |
| K05A | Summer Lake<br>163nm,1.6s | 20.42 | 335 | *e*P | Pn | 15 42 40.7 | -0.4 |
| RLMT | Red Lodge<br>baz=20,SNR=6.6 | 20.42 | 360 | P | P | 15 42 38.7 | -0.3 |
| RLMT | Red Lodge<br>24nm,1.3s | 20.42 | 360 | *e*P | P | 15 42 39.3 | +0.3 |
| H25A | Fruitdale<br>baz=20 | 20.45 | 12 | P | P | 15 42 38.3 | -0.8 |
| H26A | Fairpoint<br>baz=21,SNR=9.6 | 20.60 | 13 | P | P | 15 42 40.5 | -0.3 |
| I29A | Vivian Onida<br>baz=21,SNR=6.2 | 20.66 | 19 | P | P | 15 42 40.9 | -0.5 |
| H27A | Howes<br>baz=21,SNR=16 | 20.77 | 15 | P | P | 15 42 42.1 | -0.6 |
| DLMT | Dillon<br>25nm,1.0s | 20.84 | 353 | *e*P | Pn | 15 42 44.9 | -1.0 |
| BOZ | Bozeman (W)<br>baz=21,SNR=10 | 21.03 | 355 | P | P | 15 42 44.7 | -0.8 |
| BOZ | Bozeman (W)<br>14nm,1.0s | 21.03 | 355 | *e*P | P | 15 42 46.5 | +0.9 |
| G25A | Newell<br>baz=21,SNR=6.9 | 21.03 | 12 | P | P | 15 42 44.8 | -0.7 |
| GCMT | Greycliff | 21.09 | 359 | *e*P | P | 15 42 45.5 | -0.7 |
| I07A | Izee<br>44nm,1.3s | 21.11 | 339 | *e*P | P | 15 42 47.7 | +1.3 |
| HUMO | Hull Mountain | 21.18 | 331 | *e*P | P | 15 42 46.5 | -0.4 |
| I31A | Royce, Wessing<br>baz=21 | 21.23 | 22 | P | P | 15 42 47.1 | -0.4 |
| H29A | Onida<br>baz=21 | 21.24 | 18 | P | P | 15 42 47.2 | -0.5 |
| LRM | Limekiln Ridge | 21.27 | 354 | *e*P | P | 15 42 49.4 | +1.1 |
| G26A | Maurine<br>baz=21 | 21.29 | 13 | P | P | 15 42 47.0 | -1.2 |
| J04D | Umpqua Nationa<br>baz=22 | 21.33 | 333 | P | P | 15 42 48.9 | 0.0 |
| SUSD | South Dakota S<br>baz=22 | 21.45 | 21 | P | P | 15 42 49.8 | -0.1 |
| SIUC | Southern Illin<br>24nm,0.9s | 21.48 | 48 | *e*P | P | 15 42 50.9 | +0.7 |
| G27A | Dupree<br>baz=22 | 21.51 | 14 | P | P | 15 42 50.5 | -0.1 |
| ECSD | EROS Data Cent<br>baz=22,SNR=21 | 21.67 | 25 | P | P | 15 42 51.3 | -1.0 |
| ECSD | EROS Data Cent<br>43nm,1.1s | 21.67 | 25 | *e*P | P | 15 42 52.1 | -0.2 |
| F25A | Bowman<br>baz=22 | 21.73 | 11 | P | P | 15 42 52.2 | -0.8 |
| SCIA | State Center<br>30nm,0.8s | 21.76 | 34 | P | P | 15 42 53.1 | -0.1 |
| F26A | Lodgepole<br>baz=22,SNR=9.5 | 21.81 | 12 | P | P | 15 42 53.4 | -0.4 |
| F27A | Lemmon<br>baz=22,SNR=9.6 | 21.96 | 14 | P | P | 15 42 54.4 | -1.0 |
| KEBM | Edson Butte | 22.01 | 329 | P | P | 15 42 56.1 | +0.2 |
| G08A | Pilot Rock<br>24nm,1.4s | 22.03 | 342 | *e*P | P | 15 42 57.5 | +1.2 |
| HRY | Holter Researc | 22.11 | 355 | *e*P | P | 15 42 58.2 | +1.1 |
| HRY | | | | *e*S | S | 15 46 58.3 | -2.5 |
| LAO | LASA Array<br>baz=22 | 22.12 | 6 | P | P | 15 42 55.9 | -1.3 |
| LAO | LASA Array<br>40nm,1.1s | 22.12 | 6 | *e*P | P | 15 42 56.7 | -0.5 |
| K37A | Belmond<br>baz=22,SNR=7.0 | 22.19 | 32 | P | P | 15 42 57.3 | -0.6 |
| F10A | Beach Ranch, E<br>24nm,1.1s | 22.22 | 345 | *e*P | P | 15 42 58.6 | +0.4 |
| F28A | McLaughlin<br>baz=22 | 22.22 | 16 | P | P | 15 42 57.1 | -1.1 |
| CHMT | Chamberlain Mo | 22.44 | 353 | *e*P | P | 15 43 01.1 | +0.4 |
| MSO | Missoula<br>baz=23,SNR=20 | 22.44 | 352 | P | P | 15 43 00.8 | +0.1 |
| MSO | Missoula<br>43nm,1.1s | 22.44 | 352 | *e*P | P | 15 43 01.5 | +0.9 |
| E26A | Carlson Angus<br>baz=22 | 22.44 | 12 | P | P | 15 42 59.7 | -0.9 |
| E27A | Carson<br>baz=23 | 22.59 | 14 | P | P | 15 43 01.2 | -1.0 |
| G32A | Webster<br>baz=23 | 22.66 | 22 | P | P | 15 43 01.6 | -1.2 |
| USIN | University of<br>58nm,0.9s | 22.66 | 49 | P | P | 15 43 03.3 | +0.4 |
| G05D | Wamic, OR<br>baz=23 | 22.74 | 338 | P | P | 15 43 03.6 | -0.2 |
| SWET | Sewanee<br>87nm,1.8s | 22.74 | 57 | *e*P | P | 15 43 01.5 | -2.4 |
| OLIL | Olney<br>39nm,0.8s | 22.76 | 47 | *e*P | P | 15 43 03.8 | -0.2 |
| SLMT | Seeley Lake | 22.79 | 353 | *e*P | P | 15 43 04.6 | +0.2 |
| E28A | Huff<br>baz=23,SNR=5.7 | 22.93 | 15 | P | P | 15 43 05.0 | -0.7 |
| D25A | Fairfield<br>baz=23 | 22.95 | 10 | P | P | 15 43 04.8 | -1.1 |
| G33A | Ortonville<br>baz=23 | 22.98 | 24 | P | P | 15 43 04.9 | -1.3 |
| D26A | Manning<br>baz=23 | 22.98 | 12 | P | P | 15 43 05.0 | -1.2 |
| HDIL | Hopedale<br>95nm,1.4s | 23.04 | 42 | *e*P | P | 15 43 05.6 | -1.2 |
| SWMT | Swartz Lake | 23.12 | 352 | *e*P | P | 15 43 07.3 | -0.4 |
| EGMT | Eagleton<br>baz=23,SNR=11 | 23.33 | 359 | P | P | 15 43 09.6 | -0.2 |
| EGMT | Eagleton<br>94nm,1.4s | 23.33 | 359 | *e*P | P | 15 43 09.4 | -0.4 |
| E30A | Jud<br>baz=23 | 23.33 | 18 | P | P | 15 43 08.8 | -1.0 |
| JTMT | Jette<br>22nm,1.3s | 23.39 | 351 | *e*P | P | 15 43 09.9 | -0.6 |
| YBMT | Yellow Bay<br>46nm,1.4s | 23.47 | 352 | *e*P | P | 15 43 10.2 | -1.0 |
| BSMT | Bassoo Peak<br>14nm,1.2s | 23.56 | 351 | *e*P | P | 15 43 10.1 | -2.2 |
| D08A | Wollman Farm,<br>34nm,1.6s | 23.65 | 343 | *e*P | P | 15 43 12.2 | -0.7 |
| D29A | Pettibone, Tap<br>baz=24 | 23.65 | 17 | P | P | 15 43 11.7 | -1.3 |
| E31A | Nome<br>baz=24 | 23.68 | 20 | P | P | 15 43 11.4 | -1.8 |
| I38A | Scanlan Farm,<br>baz=24 | 23.78 | 31 | P | P | 15 43 12.0 | -2.2 |
| C27A | Sayler Ranch,<br>baz=24,SNR=6.4 | 23.82 | 13 | P | P | 15 43 13.7 | -1.0 |
| G36A | St. Michael<br>baz=24 | 24.07 | 28 | P | P | 15 43 16.0 | -1.0 |
| C09A | Chrisman Ranch<br>21nm,1.3s | 24.18 | 345 | *e*P | P | 15 43 18.0 | 0.0 |
| LON | Longmire<br>48nm,1.6s | 24.23 | 339 | *e*P | P | 15 43 18.7 | +0.3 |
| SFIN | Scholer Farm<br>baz=24,SNR=8.5 | 24.30 | 44 | P | P | 15 43 18.2 | -0.9 |
| SFIN | Scholer Farm<br>49nm,0.8s | 24.30 | 44 | *e*P | P | 15 43 19.1 | 0.0 |
| LTY | Liberty<br>48nm,1.6s | 24.32 | 341 | *e*P | P | 15 43 20.9 | +1.6 |
| NEW | Newport<br>31nm,1.0s,baz=162,slow=10,SNR=35 | 24.37 | 347 | P | P | 15 43 20.1 | +0.4 |
| NEW | | | | LR | LR | 15 51 59.9 | |
| | comp=Z,197nm,18.9s,baz=176,slow=34 | | | | | | |
| NEW | Newport<br>baz=24,SNR=31 | 24.37 | 347 | P | P | 15 43 19.4 | -0.3 |
| NEW | Newport<br>54nm,1.1s | 24.37 | 347 | *e*P | P | 15 43 19.9 | +0.2 |
| MDND | Maddock<br>baz=24 | 24.38 | 16 | P | P | 15 43 19.7 | -0.1 |
| SPMN | St. Paul<br>baz=24 | 24.47 | 29 | P | P | 15 43 20.0 | -0.7 |
| SPMN | St. Paul<br>32nm,1.3s | 24.47 | 29 | *e*P | P | 15 43 20.4 | -0.3 |
| TKL | Tuckaleechee C<br>5.5nm,0.8s,baz=203,slow=10,SNR=6.4 | 24.55 | 58 | P | P | 15 43 21.4 | -0.1 |
| TKL | | | | LR | LR | 15 53 15.1 | |
| | comp=Z,422nm,18.1s,baz=264,slow=37 | | | | | | |
| WALA | Waterton Lakes<br>50nm,1.2s | 24.63 | 353 | *e*P | P | 15 43 22.1 | -0.1 |
| F36A | Milaca<br>baz=25,SNR=6.3 | 24.67 | 27 | P | P | 15 43 21.1 | -1.4 |
| A25A | Svangstu Ranch<br>baz=25 | 24.72 | 10 | P | P | 15 43 21.9 | -1.0 |
| B28A | Dugan Ranch, T<br>baz=25 | 24.77 | 14 | P | P | 15 43 22.6 | -0.7 |
| A26A | Wade Farm, Ken<br>baz=25,SNR=5.6 | 24.86 | 11 | P | P | 15 43 22.0 | -2.1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **E35A** | **Pequot Lakes** | **24.89** | **25** | P | **P** | **15 43 22.5** | **-1.9** | |
| | baz=25,SNR=6.5 | | | | | | | |
| **TZTN** | **Tazewell** | **25.03** | **56** | *eP* | **P** | **15 43 26.5** | **+0.7** | |
| | 24nm,1.1s | | | | | | | |
| **A28A** | **Rude Farm, Bot** | **25.22** | **14** | P | **P** | **15 43 26.6** | **-0.8** | |
| | baz=25,SNR=5.2 | | | | | | | |
| **B30A** | **Myrvik Farm, E** | **25.27** | **17** | P | **P** | **15 43 27.3** | **-0.6** | |
| | baz=25 | | | | | | | |
| **D35A** | **Remer** | **25.46** | **25** | P | **P** | **15 43 28.0** | **-1.5** | |
| | baz=26 | | | | | | | |
| **A29A** | **Manning Farm,** | **25.47** | **15** | P | **P** | **15 43 28.3** | **-1.4** | |
| | baz=26,SNR=6.1 | | | | | | | |
| **D36A** | **Goodland** | **25.88** | **26** | P | **P** | **15 43 30.5** | **-2.9** | |
| | baz=26 | | | | | | | |
| **C35A** | **Jirik Farms, M** | **26.00** | **24** | P | **P** | **15 43 32.9** | **-1.7** | |
| | baz=26 | | | | | | | |
| **D37A** | **Cotton** | **26.16** | **27** | P | **P** | **15 43 33.6** | **-2.3** | |
| | baz=26 | | | | | | | |
| **A04D** | **Lummi Island** | **26.25** | **340** | P | **P** | **15 43 34.8** | **-1.8** | |
| | baz=26,SNR=5.3 | | | | | | | |
| **KMSC** | **Kings Mountain** | **26.29** | **60** | P | **P** | **15 43 34.6** | **-2.7** | |
| | baz=26 | | | | | | | |
| **KMSC** | **Kings Mountain** | **26.29** | **60** | *eP* | **P** | **15 43 36.3** | **-1.0** | |
| | 13nm,0.9s | | | | | | | |
| **PGC** | **Sidney** | **26.43** | **339** | *eP* | **P** | **15 43 42.3** | **+4.1** | |
| | 22nm,1.1s | | | | | | | |
| **B34A** | **Aery, Baudette** | **26.43** | **22** | P | **P** | **15 43 35.6** | **-2.8** | |
| | baz=26 | | | | | | | |
| **C36A** | **Pine Crest Far** | **26.48** | **25** | P | **P** | **15 43 36.3** | **-2.6** | |
| | baz=26 | | | | | | | |
| **A33A** | **Warroad** | **26.57** | **21** | P | **P** | **15 43 37.8** | **-1.9** | |
| | baz=27 | | | | | | | |
| **C37A** | **Embarrass** | **26.72** | **26** | P | **P** | **15 43 38.6** | **-2.3** | |
| | baz=27 | | | | | | | |
| **COWI** | **Conover** | **26.82** | **32** | *eP* | **P** | **15 43 40.5** | **-1.5** | |
| | 28nm,1.1s | | | | | | | |
| **C38A** | **Sawbill Land.** | **27.08** | **27** | P | **P** | **15 43 41.4** | **-2.9** | |
| | baz=27 | | | | | | | |
| **JTS** | **JuntasAbangare** | **27.17** | **117** | LR | LR | 15 54 40.8 | | |
| | comp=Z,282nm,21.3s,baz=272,slow=37 | | | | | | | |
| **EYMN** | **Ely** | **27.17** | **27** | P | **P** | **15 43 42.8** | **-2.2** | |
| | baz=27,SNR=8.2 | | | | | | | |
| **EYMN** | **Ely** | **27.17** | **27** | *eP* | **P** | **15 43 44.5** | **-0.5** | |
| | 34nm,0.9s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **27.59** | **19** | P | **P** | **15 43 47.8** | **-0.9** | |
| | 5.8nm,0.8s,baz=211,slow=8.5,SNR=3.7 | | | | | | | |
| ULM | | | | LR | LR | 15 54 30.6 | | |
| | comp=Z,264nm,21.5s,baz=194,slow=36 | | | | | | | |
| **C39A** | **Grand Marais** | **27.65** | **28** | P | **P** | **15 43 46.5** | **-2.9** | |
| | baz=28 | | | | | | | |
| **EDM** | **Edmonton** | **28.69** | **355** | *eP* | **P** | **15 43 58.3** | **-0.3** | |
| | 35nm,1.1s | | | | | | | |
| **DLBC** | **Dease Lake** | **36.84** | **342** | P | **P** | **15 45 11.2** | **+1.5** | |
| | 4.6nm,0.7s,baz=169,slow=6.8,SNR=15 | | | | | | | |
| DLBC | | | | LR | LR | 16 00 32.0 | | |
| | comp=Z,81nm,19.5s,baz=141,slow=37 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **38.00** | **356** | P | **P** | **15 45 18.9** | **-0.4** | |
| | 5.1nm,0.9s,baz=166,slow=7.9,SNR=10.0 | | | | | | | |
| **OTAV** | **Otavalo** | **38.45** | **125** | *eP* | P | 15 45 28.7 | +4.4 | |
| | 12nm,1.2s | | | | | | | |
| **ROSC** | **El Rosal** | **38.91** | **115** | LR | LR | 16 04 09.5 | | |
| | comp=Z,99nm,20.4s,baz=5.0,slow=40 | | | | | | | |
| **SJG** | **San Juan** | **40.55** | **91** | P | **P** | **15 45 42.6** | **+1.3** | |
| | 42nm,0.2s,baz=327,slow=17,SNR=10 | | | | | | | |
| **SJG** | **San Juan** | **40.55** | **91** | *eP* | **P** | **15 45 40.5** | **-0.8** | |
| | 45nm,0.3s | | | | | | | |
| **SCHQ** | **Schefferville** | **43.37** | **35** | P | **P** | **15 46 03.0** | **-0.9** | |
| | 5.5nm,0.8s,baz=237,slow=13,SNR=3.0 | | | | | | | |
| SCHQ | | | | LR | LR | 16 05 21.5 | | |
| | comp=Z,286nm,19.8s,baz=257,slow=38 | | | | | | | |
| **ATAH** | **Atahualpa** | **43.63** | **132** | LR | LR | 16 00 24.0 | | |
| | comp=Z,135nm,21.2s,baz=310,slow=31 | | | | | | | |
| **DAWY** | **Dawson** | **44.06** | **341** | *eP* | **P** | **15 46 09.7** | **+0.4** | |
| | 8.7nm,1.0s | | | | | | | |
| **EGAK** | **Eagle** | **45.10** | **341** | *eP* | **P** | **15 46 18.5** | **+0.9** | |
| **KDAK** | **Kodiak Island** | **45.17** | **329** | LR | LR | 16 02 28.9 | | |
| | comp=Z,126nm,19.2s,baz=146,slow=33 | | | | | | | |
| **DOT** | **Dot Lake** | **45.19** | **339** | *eP* | **P** | **15 46 19.1** | **+0.7** | |
| | 144nm,2.4s | | | | | | | |
| **INK** | **Inuvik** | **46.09** | **348** | LR | LR | 16 07 13.9 | | |
| | comp=Z,234nm,18.2s,baz=134,slow=38 | | | | | | | |
| **IL1** | **Eielson Array** | **46.87** | **339** | *eP* | **P** | **15 46 32.0** | **+0.5** | |
| **ILAR** | **Eielson Array** | **46.87** | **339** | P | **P** | **15 46 32.1** | **+0.6** | |
| | 7.5nm,1.0s,baz=150,slow=6.4,SNR=35 | | | | | | | |
| **MCK** | **McKinley** | **46.91** | **337** | *eP* | **P** | **15 46 32.2** | **+0.3** | |
| | 17nm,1.1s | | | | | | | |
| **TRF** | **Thorofare Moun** | **47.23** | **336** | *eP* | **P** | **15 46 35.5** | **+0.9** | |
| | 24nm,0.8s | | | | | | | |
| **BWN** | **Browne** | **47.36** | **337** | *eP* | **P** | **15 46 36.5** | **+1.1** | |
| | 56nm,1.2s | | | | | | | |
| **KTH** | **Kantishna Hill** | **47.52** | **336** | *eP* | **P** | **15 46 36.9** | **+0.2** | |
| | 16nm,0.9s | | | | | | | |
| **PPLA** | **Purkeypile** | **47.63** | **335** | *eP* | **P** | **15 46 37.2** | **-0.5** | |
| | 117nm,1.6s | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **47.86** | **337** | *eP* | **P** | **15 46 39.3** | **0.0** | |
| | 3.4nm,1.1s | | | | | | | |
| **PTGA** | **Pitinga** | **53.98** | **110** | *eP* | **P** | **15 47 28.0** | **+1.9** | |
| | 8.5nm,1.0s | | | | | | | |
| **SAML** | **Samuel** | **55.98** | **121** | *eP* | **P** | **15 47 40.3** | **-0.2** | |
| | 6.0nm,1.0s | | | | | | | |
| **LPAZ** | **La Paz** | **57.15** | **131** | P | **P** | **15 47 52.2** | **+2.8** | |
| | 0.4nm,0.3s,baz=5.7,slow=10,SNR=2.4 | | | | | | | |
| LPAZ | | | | LR | LR | 16 10 31.4 | | |
| | comp=Z,90nm,18.2s,baz=300,slow=34 | | | | | | | |
| **PPT2** | **Papeete2** | **57.51** | **227** | *eLR* | LR | 16 04 19.4 | | |
| | 65nm,23.2s | | | | | | | |
| **RAR** | **Rarotonga** | **67.00** | **231** | LR | LR | 16 09 54.5 | | |
| | comp=Z,57nm,21.4s,baz=126,slow=29 | | | | | | | |
| **CPUP** | **Villa Florida** | **71.31** | **132** | P | **P** | **15 49 22.9** | **+1.4** | |
| | 4.0nm,0.8s,baz=319,slow=5.0,SNR=8.9 | | | | | | | |
| CPUP | | | | LR | LR | 16 17 59.9 | | |
| | comp=Z,34nm,20.2s,baz=302,slow=34 | | | | | | | |
| **BDFB** | **Brasilia** | **71.91** | **117** | P | **P** | **15 49 25.4** | **-0.1** | |
| | 2.0nm,0.6s,baz=333,slow=4.5,SNR=2.0 | | | | | | | |
| BDFB | | | | LR | LR | 16 23 51.0 | | |
| | comp=Z,73nm,18.8s,baz=241,slow=38 | | | | | | | |
| **SEY** | **Seymchan** | **72.03** | **332** | P | **P** | **15 49 25.5** | **+0.1** | |
| | 4.5nm,0.7s,baz=95,slow=7.9,SNR=13 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.45** | **321** | LR | LR | 16 15 06.5 | | |
| | comp=Z,31nm,21.9s,baz=69,slow=31 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.62** | **15** | P | **P** | **15 50 13.8** | **-0.3** | |
| | 2.7nm,0.6s,baz=318,slow=3.3,SNR=10 | | | | | | | |
| ARCES | | | | LR | LR | 16 28 13.6 | | |
| | comp=Z,65nm,18.5s,baz=350,slow=37 | | | | | | | |
| **YAK** | **Yakutsk** | **81.69** | **336** | *eP* | **P** | **15 50 19.7** | **-0.1** | |
| | 16nm,0.8s | | | | | | | |
| **MTE** | **Manteigas** | **82.72** | **49** | *eP* | **P** | **15 50 24.8** | **-1.1** | |
| | 14nm,0.9s | | | | | | | |
| **ESDC** | **Sonseca Array** | **85.50** | **48** | P | **P** | **15 50 39.6** | **-0.3** | |
| | 0.2nm,0.3s,baz=310,slow=5.6,SNR=4.5 | | | | | | | |
| **FINES** | **FINESS Array B** | **86.97** | **20** | P | **P** | **15 50 46.1** | **-0.5** | |
| | 2.4nm,0.7s,baz=20,slow=4.4,SNR=6.7 | | | | | | | |
| FINES | | | | LR | LR | 16 29 56.2 | | |
| | comp=Z,91nm,19.9s,baz=347,slow=36 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **91.52** | **321** | P | **P** | **15 51 08.1** | **-0.3** | |
| | 2.3nm,1.0s,baz=90,slow=4.3,SNR=4.8 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **91.99** | **312** | LR | LR | 16 27 32.7 | | |
| | comp=Z,43nm,19.5s,baz=240,slow=32 | | | | | | | |
| **DZM** | **Mont Dzumac** | **94.07** | **248** | *eLR* | LR | 16 21 07.9 | | |
| | 113nm,25.4s | | | | | | | |
| **PMSA** | **Palmer Station** | **95.75** | **162** | *eP* | P | 15 51 32.0 | +4.9 | |
| **AKASG** | **Malin Array Be** | **96.50** | **25** | LR | LR | 16 34 50.3 | | |
| | comp=Z,97nm,20.4s,baz=310,slow=35 | | | | | | | |
| **KEST** | **Kesra** | **96.51** | **46** | LR | LR | 16 32 55.6 | | |
| | comp=Z,56nm,19.8s,baz=288,slow=34 | | | | | | | |
| **GUMO** | **Guam** | **98.34** | **289** | LR | LR | 16 25 14.2 | | |
| | comp=Z,51nm,20.6s,baz=110,slow=29 | | | | | | | |
| **JNU** | **Nakatsue** | **98.89** | **313** | LR | LR | 16 27 23.4 | | |
| | comp=Z,48nm,19.9s,baz=117,slow=30 | | | | | | | |
| **LZH** | **Lanzhou** | **111.97** | **332** | *ePKP* | **PKiKP** | **15 56 39.5** | **+1.9** | |
| LZH | | | | LN | | | | |
| | 140nm,18.5s | | | | | | | |
| LZH | | | | LE | | | | |
| | 140nm,18.2s | | | | | | | |
| LZH | | | | LZ | | | | |
| | 160nm,20.3s | | | | | | | |
| **KSH** | **Kashi** | **115.97** | **355** | *ePKP* | **PKPdf** | **15 56 46.3** | **+1.2** | |
| **CD2** | **Chengdu** | **116.34** | **328** | PKP | **PKPdf** | **15 56 46.5** | **+0.6** | |
| **WRA** | **Warramunga Arr** | **121.41** | **261** | PKP | **PKPdf** | **15 56 55.3** | **-0.5** | |
| | 0.4nm,1.0s,baz=71,slow=2.5,SNR=3.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **122.83** | **257** | PKP | **PKPdf** | **15 56 57.9** | **-0.6** | |
| | 0.4nm,0.8s,baz=78,slow=2.5,SNR=5.9 | | | | | | | |

**KRSC 21 15:38:47.2±1.0, 54.07°N×161.58°E, h54km±13km, ML3.6, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKZ** | **Mys Kozlova** | **0.49** | **10** | *i* P | Pn | 15 38 59.4 | +0.8 |
| MKZ | | | | *eS* | Sn | 15 39 07.3 | +0.5 |
| **KII** | **Karymskiy** | **1.26** | **269** | *eP* | Pn | 15 39 10.2 | +1.7 |
| KII | | | | *eS* | Sn | 15 39 26.0 | +1.5 |
| **KZV** | **Kizimen** | **1.28** | **325** | *eP* | Pn | 15 39 10.8 | +1.8 |
| KZV | | | | *eS* | Sn | 15 39 26.6 | +1.3 |
| **SPN** | **Mys Shipunski** | **1.35** | **224** | *eP* | Pn | 15 39 10.7 | +1.1 |
| SPN | | | | *eS* | Sn | 15 39 27.0 | +0.6 |
| **TUMR** | **Tumrok** | **1.47** | **326** | *eP* | Pn | 15 39 13.7 | +2.2 |
| **NLC** | **Nalytchevo** | **1.61** | **237** | *eP* | Pn | 15 39 14.8 | +1.7 |
| NLC | | | | *eS* | Sn | 15 39 34.3 | +1.6 |
| **SDLR** | **Sedlovina** | **1.79** | **245** | *eP* | Pn | 15 39 18.1 | +2.3 |
| SDLR | | | | *eS* | Sn | 15 39 39.7 | +2.2 |
| **SMAR** | **Somma** | **1.84** | **245** | *eP* | Pn | 15 39 18.9 | +2.3 |
| SMAR | | | | *eS* | Sn | 15 39 41.6 | +2.6 |
| **UGLR** | **Uglovaya** | **1.85** | **243** | *eP* | Pn | 15 39 19.2 | +2.5 |
| UGLR | | | | *eS* | Sn | 15 39 41.9 | +2.8 |
| **KMNR** | **Kamenistaya** | **1.86** | **336** | *eP* | Pn | 15 39 20.3 | +3.6 |
| **AVH** | **Avacha** | **1.87** | **246** | *eP* | Pn | 15 39 19.8 | +2.9 |
| AVH | | | | *eS* | Sn | 15 39 43.2 | +3.7 |
| **KRX** | **Arik** | **1.88** | **249** | *eP* | Pn | 15 39 19.6 | +2.5 |
| **KOK** | **Koryaka** | **1.92** | **247** | *i* P | Pn | 15 39 20.2 | +2.7 |
| **PET** | **Petropavlovsk** | **2.04** | **240** | *i* P | Pn | 15 39 21.4 | +2.4 |
| PET | | | | *i* S | Sn | 15 39 45.4 | +2.2 |
| **GNL** | **Ganaly** | **2.19** | **262** | *eP* | Pn | 15 39 24.2 | +3.0 |
| GNL | | | | *eS* | Sn | 15 39 50.1 | +2.9 |
| **KBTR** | **Krutoberegovo** | **2.26** | **18** | *eP* | Pn | 15 39 24.3 | +2.3 |
| KBTR | | | | *eS* | Sn | 15 39 50.0 | +1.4 |
| **RUS** | **Russkaya** | **2.47** | **230** | *eP* | Pn | 15 39 27.1 | +2.2 |
| RUS | | | | *eS* | Sn | 15 39 55.3 | +1.5 |
| **ESO** | **Esso** | **2.49** | **319** | *eP* | Pn | 15 39 28.0 | +2.7 |
| ESO | | | | *eS* | Sn | 15 39 56.1 | +1.6 |
| **MTVR** | **Mutnovka** | **2.59** | **233** | *eP* | Pn | 15 39 29.6 | +2.9 |
| MTVR | | | | *eS* | Sn | 15 39 59.4 | +2.3 |
| **ASAK** | **Asacha** | **2.78** | **234** | *eP* | Pn | 15 39 33.1 | +3.7 |
| **APC** | **Apacha** | **2.88** | **248** | *eP* | Pn | 15 39 33.9 | +3.4 |
| APC | | | | *eS* | Sn | 15 40 06.9 | +3.0 |

**IDC 21 15:39:06.2±10.0, 16.07°S×167.76°E, h191km±106km, mb3.2/3, mb1 3.6/4, mb1mx3.1/39, mbtmp3.8/4, Error ellipse: s-maj=108.2km s-min=26.5km az=167.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **6.10** | **192** | P | Pn | 15 40 34.9 | +0.1 |
| | 3.9nm,0.3s,baz=337,slow=1.4,SNR=44 | | | | | | |
| DZM | | | | S | Sn | 15 41 44.9 | +0.1 |
| | 0.1nm,0.3s,baz=181,slow=22,SNR=1.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.98** | **258** | P | P | 15 45 14.3 | -0.5 |
| | 0.8nm,1.1s,baz=82,slow=7.7,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **32.66** | **251** | P | P | 15 45 20.9 | +0.2 |
| | 1.4nm,0.5s,baz=79,slow=8.9,SNR=6.9 | | | | | | |
| ASAR | | | | pP | pP | 15 46 01.6 | +1.6 |
| | 0.6nm,0.8s,baz=72,slow=8.7,SNR=3.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.78** | **49** | P | P | 15 51 34.1 | -0.1 |
| | 0.1nm,0.3s,baz=263,slow=6.3,SNR=2.2 | | | | | | |

*NIED **21** 15:39:00.3, 31.40°N×137.90°E, h35km, Mw3.7 Best double couple: M0=4.34000×10^14 NP1:ϕs=27.00000°, δ=26.00000°, λ=80.00000°. NP2:ϕs=218.00000°, δ=65.00000°, λ=95.00000°.*
*JMA **21** 15:39:09.1±0.4, 31.44°N×137.88°E, h48km, M4.1*
*IDC **21** 15:39:09.4±1.2, 31.51°N×137.72°E, h0km, mb3.7/3, mb1 3.8/5, mb1mx3.5/47, mbtmp3.7/5, ML3.3/2, MS3.2/2, Ms1 3.2/2, ms1mx2.6/41, Error ellipse: s-maj=37.8km s-min=20.2km az=79.0*
*ISCJB **21** 15:39:11.9±0.8, 31.56°N±0.04°×137.68°E±0.06°, h35km, mb3.8/3, MS3.8/1, Error ellipse: s-maj=7.6km s-min=5.5km az=20.5*

**ISC 21 15:39:14.5±1.2, 31.60°N±0.08°×137.66°E±0.07°, h35km, n25, σ1s05/30, mb3.8/3, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TTO1** | **TONANKAI O.B.S** | **2.15** | **340** | P | **Pn** | **15 39 46.7** | **-0.9** |
| TTO1 | | | | *eS* | **Sn** | **15 40 14.4** | **+1.5** |
| **TK01** | **Tokai 1** | **2.16** | **358** | P | **Pn** | **15 39 46.1** | **-1.7** |
| TK01 | | | | *eS* | **Sn** | **15 40 12.8** | **-0.3** |
| **TTO2** | **TONANKAI O.B.S** | **2.19** | **346** | P | **Pn** | **15 39 47.2** | **-1.1** |
| TTO2 | | | | *eS* | **Sn** | **15 40 15.2** | **+1.2** |
| **TTO3** | **TONANKAI O.B.S** | **2.27** | **354** | P | **Pn** | **15 39 48.1** | **-1.3** |
| **TK02** | **Tokai 2** | **2.34** | **2** | P | **Pn** | **15 39 49.0** | **-1.3** |
| TK02 | | | | *eS* | **Sn** | **15 40 18.5** | **+0.8** |
| **TTO4** | **TONANKAI O.B.S** | **2.40** | **358** | P | **Pn** | **15 39 49.8** | **-1.3** |
| TTO4 | | | | *eS* | **Sn** | **15 40 18.8** | **-0.4** |
| **JWZ** | **Kozaga** | **2.53** | **320** | P | **Pn** | **15 39 51.8** | **-1.4** |
| JWZ | | | | *eS* | **Sn** | **15 40 22.1** | **-0.7** |
| **JIE** | **Ise** | **2.90** | **344** | P | **Pn** | **15 39 56.7** | **-1.5** |
| JIE | | | | *eS* | **Sn** | **15 40 31.5** | **-0.3** |
| **JWY** | **Kouya** | **3.14** | **327** | P | **Pn** | **15 40 00.9** | **-0.7** |
| **JAI** | **Aioi** | **3.48** | **310** | P | **Pn** | **15 40 05.5** | **-0.7** |
| JAI | | | | *eS* | **Sn** | **15 40 45.9** | **-0.3** |
| **JTO** | **Tosashimizu** | **4.31** | **288** | P | **Pn** | **15 40 15.9** | **-0.7** |
| **JRY** | **Ryogami san** | **4.52** | **13** | P | **Pn** | **15 40 21.2** | **+0.6** |
| JRY | | | | *eS* | **Sn** | **15 41 12.6** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **4.95** | **5** | Pn | **Pn** | **15 40 26.5** | **+0.1** |
| | 2.1nm,0.3s,baz=180,slow=13,SNR=32 | | | | | | |
| MJAR | | | | Sn | **Sn** | **15 41 24.1** | **+1.6** |
| | 1.9nm,0.3s,baz=185,slow=30,SNR=10 | | | | | | |
| MJAR | | | | LR | LR | 15 42 26.6 | |
| | comp=Z,62nm,19.2s,baz=200,slow=39 | | | | | | |
| **MAT** | **Matsushiro** | **4.95** | **5** | P | **Pn** | **15 40 26.3** | **-0.1** |
| MAT | | | | S | **Sn** | **15 41 23.3** | **+0.8** |
| **JNU** | **Nakatsue** | **5.94** | **287** | Pn | **Pn** | **15 40 40.4** | **+0.4** |
| | 0.5nm,0.3s,baz=166,slow=19,SNR=6.3 | | | | | | |
| JNU | | | | Sn | **Sn** | **15 41 48.5** | **+1.6** |
| | 0.5nm,0.3s,baz=14,slow=19,SNR=1.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.79** | **107** | T | T | 16 15 29.3 | |
| | baz=302 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.79** | **107** | T | T | 16 15 27.2 | |
| | baz=302,slow=74,SNR=2.3 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.80** | **107** | T | T | 16 15 32.4 | |
| | baz=302,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.25** | **110** | T | T | 16 16 05.2 | |
| | baz=300,SNR=4.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.25** | **110** | T | T | 16 16 05.2 | |
| | baz=300 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.27** | **110** | T | T | 16 16 05.3 | |
| | baz=300 | | | | | | |
| **WRA** | **Warramunga Arr** | **51.35** | **184** | P | **P** | **15 48 14.7** | **-0.9** |
| | 1.0nm,0.9s,baz=360,slow=7.7,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **55.07** | **184** | P | **P** | **15 48 42.5** | **-0.5** |
| | 0.4nm,0.6s,baz=12,slow=13,SNR=15 | | | | | | |
| **AKTO** | **Aktyubinsk** | **60.07** | **313** | LR | LR | 16 14 37.3 | |
| | comp=Z,76nm,20.5s,slow=35 | | | | | | |
| **FINES** | **FINESS Array B** | **72.15** | **332** | P | **P** | **15 50 36.4** | **+1.1** |
| | 1.1nm,0.7s,baz=40,slow=7.4,SNR=4.2 | | | | | | |

**IDC 21 15:48:19.7±1.7, 24.64°N×109.54°W, h0km, mb3.1/1, mb1 3.6/3, mb1mx3.4/47, mbtmp3.1/3, ML3.2/2, Error ellipse: s-maj=35.4km s-min=10.0km az=135.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **0.88** | **233** | Pg | Pg | 15 48 35.8 | -0.8 |
| | 64nm,0.3s,baz=47,slow=13,SNR=14 | | | | | | |
| LPIG | | | | Lg | Lg | 15 48 49.8 | |
| | 55nm,0.3s,baz=16,slow=20,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **7.02** | **47** | Pn | Pn | 15 50 04.6 | +0.6 |
| | 0.1nm,0.3s,baz=226,slow=15,SNR=3.9 | | | | | | |
| TXAR | | | | Pg | Pb | 15 50 22.1 | -0.6 |
| | 0.3nm,0.3s,baz=222,slow=15,SNR=7.1 | | | | | | |
| TXAR | | | | Lg | Lg | 15 52 00.4 | |
| | 0.7nm,0.3s,baz=233,slow=29,SNR=5.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.64** | **334** | Pn | P | 15 52 06.5 | +0.5 |
| | 0.1nm,0.3s,baz=161,slow=9.5,SNR=6.4 | | | | | | |
| **ILAR** | **Eielson Array** | **46.80** | **339** | P | P | 15 56 50.4 | -0.4 |
| | 0.3nm,0.9s,baz=146,slow=8.2,SNR=3.3 | | | | | | |

**IDC 21 15:49:01.2±0.8, 24.59°N×109.42°W, h0km, mb3.8/2, mb1 4.2/3, mb1mx3.7/44, mbtmp3.8/3, ML3.0/1, MS3.4/1, Ms1 3.4/1, ms1mx2.8/30, Error ellipse: s-maj=14.8km s-min=3.3km az=139.0, Gulf of California**

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

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **0.94** | **239** | Pg | Pg | 15 49 19.4 | 0.0 | |
| | 73nm,0.3s,baz=221,slow=16,SNR=7.5 | | | | | | | |
| LPIG | | | | Lg | Lg | 15 49 32.3 | | |
| | 75nm,0.3s,baz=227,slow=11,SNR=8.1 | | | | | | | |
| LPIG | | | | LR | LR | 15 49 34.0 | | |
| | comp=Z,293nm,18.9s,baz=89,slow=35 | | | | | | | |
| **TXAR** | **Lajitas Array** | **6.98** | **46** | Pg | Pb | 15 51 07.8 | +4.3 | |
| | 0.5nm,0.3s,baz=225,slow=15,SNR=8.0 | | | | | | | |
| TXAR | | | | Lg | Lg | 15 52 37.6 | | |
| | 1.9nm,0.3s,baz=240,slow=30,SNR=5.4 | | | | | | | |
| **ANMO** | **Albuquerque** | **10.64** | **13** | Lg | Lg | 15 54 35.2 | | |
| | 0.1nm,0.3s,baz=278,slow=20,SNR=2.3 | | | | | | | |
| **CMIG** | **Matias Romero** | **15.49** | **116** | LR | LR | 15 58 01.9 | | |
| | comp=Z,128nm,19.6s,baz=142,slow=35 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.73** | **333** | Pn | Pn | 15 52 43.4 | -1.1 | |
| | 0.1nm,0.3s,baz=160,slow=14,SNR=6.7 | | | | | | | |
| **NEW** | **Newport** | **24.41** | **347** | P | P | 15 54 23.2 | +1.8 | |
| | 4.7nm,0.9s,baz=144,slow=9.6,SNR=5.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **46.88** | **339** | P | P | 15 57 34.3 | +1.4 | |
| | 0.9nm,1.1s,baz=148,slow=8.6,SNR=5.9 | | | | | | | |

*IDC **21** 16:05:15.6±9.2, 52.61°N×174.25°W, h103km±85km, mb3.4/5, mb1 3.7/7, mb1mx3.2/50, mbtmp3.8/7, ML4.2/2, Error ellipse: s-maj=53.5km s-min=31.4km az=165.0*
*NEIC **21** 16:05:19.7, 52.43°N×173.87°W, h151km, mb3.4/1, After AEIC.*
*ISCJB **21** 16:05:20.1±0.4, 52.4°N±0.1°×173.84°W±0.07°, h152km±4km, mb3.4/6, Error ellipse: s-maj=25.3km s-min=3.7km az=165.3*

**ISC 21 16:05:20.7±0.8, 52.5°N±0.2°×173.90°W±0.06°, h148km±7km, n40, σ0s90/51, mb3.5/6, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KONE** | **Korovin Northe** | **0.17** | **230** | P | **Pn** | **16 05 41.2** | **+0.5** |
| **KOSE** | **Korovin Southe** | **0.18** | **210** | P | **Pn** | **16 05 41.1** | **+0.3** |
| **KOWE** | **Korovin West** | **0.26** | **237** | P | **Pn** | **16 05 41.3** | **+0.4** |
| **KOKL** | **Mount Kliuchef** | **0.26** | **225** | P | **Pn** | **16 05 41.4** | **+0.5** |
| **KOFP** | **Korovin Flat P** | **0.26** | **208** | P | **Pn** | **16 05 41.3** | **+0.4** |
| **ATKA** | **Atka Island** | **0.35** | **211** | P | **Pn** | **16 05 40.7** | **-0.5** |
| ATKA | | | | S | **Sn** | **16 05 56.8** | **+0.1** |
| **GSTR** | **Great Sitkin T** | **1.39** | **254** | *ePn* | **Pn** | **16 05 48.3** | **-0.6** |
| **GSMY** | **Great Sitkin M** | **1.40** | **252** | P | **Pn** | **16 05 49.1** | **0.0** |
| **GSTD** | **Great Sitkin T** | **1.45** | **253** | P | **Pn** | **16 05 49.5** | **-0.1** |
| GSTD | | | | S | **Sn** | **16 06 12.0** | **+0.3** |
| **ETKA** | **Kagalaska Isla** | **1.67** | **248** | P | **Pn** | **16 05 52.1** | **+0.2** |
| ETKA | | | | S | **Sn** | **16 06 16.7** | **+0.9** |
| **ADAG** | **Mount Adagdak** | **1.74** | **254** | P | **Pn** | **16 05 53.3** | **+0.6** |
| **KIRH** | **Kanaga Island** | **2.06** | **254** | P | **Pn** | **16 05 56.7** | **+0.4** |
| **KIKV** | **Kanaga Island** | **2.11** | **254** | P | **Pn** | **16 05 57.6** | **+0.6** |
| KIKV | | | | S | **Sn** | **16 06 25.1** | **+0.3** |
| **TAPA** | **Tanaga Point A** | **2.51** | **256** | P | **Pn** | **16 06 02.2** | **+0.4** |
| **TAFL** | **Tanaga Flats** | **2.57** | **255** | P | **Pn** | **16 06 03.4** | **+0.8** |
| **TAFP** | **Tanaga Falls P** | **2.58** | **258** | P | **Pn** | **16 06 03.0** | **+0.2** |
| TAFP | | | | S | **Sn** | **16 06 36.4** | **+1.3** |
| **GAEA** | **Gareloi East** | **3.07** | **258** | P | **Pn** | **16 06 09.8** | **+1.0** |
| **GANE** | **Gareloi Northe** | **3.08** | **259** | P | **Pn** | **16 06 09.8** | **+0.9** |
| **GALAA** | **Gareloi Lava P** | **3.09** | **258** | P | **Pn** | **16 06 10.1** | **+1.0** |
| **NIKH** | **Nikolski High** | **3.10** | **79** | P | **Pn** | **16 06 08.9** | **-0.3** |
| NIKH | | | | S | **Sn** | **16 06 46.1** | **-0.7** |
| **OKWR** | **Okmok West Rim** | **3.57** | **73** | P | **Pn** | **16 06 16.8** | **+1.5** |
| **OKSO** | **Okmok South** | **3.58** | **74** | P | **Pn** | **16 06 15.6** | **+0.3** |
| OKSO | | | | S | **Sn** | **16 06 59.0** | **+1.3** |
| **OKTU** | **Okmok Mt. Tuli** | **3.65** | **74** | P | **Pn** | **16 06 17.5** | **+1.2** |
| **CERAA** | **Semis' Rag'd T** | **3.99** | **264** | P | **Pn** | **16 06 21.5** | **+0.8** |
| **CERB** | **Semis' Cerberu** | **4.02** | **264** | P | **Pn** | **16 06 22.3** | **+1.3** |
| CERB | | | | S | **Sn** | **16 07 09.1** | **+1.1** |
| **CESW** | **Semis' Southwe** | **4.07** | **264** | P | **Pn** | **16 06 22.4** | **+0.7** |
| **AMKA** | **Amchitka** | **4.35** | **258** | P | **Pn** | **16 06 25.3** | **-0.1** |
| AMKA | | | | S | **Sn** | **16 07 14.6** | **-1.2** |
| **UNV** | **Unalaska Valle** | **4.65** | **70** | P | **Pn** | **16 06 29.0** | **+0.2** |
| UNV | | | | S | **Sn** | **16 07 23.6** | **+0.8** |
| **LSPA** | **Little Sitkin** | **4.66** | **266** | P | **Pn** | **16 06 31.3** | **+1.8** |
| **LSSA** | **Little Sitkin** | **4.70** | **266** | P | **Pn** | **16 06 30.1** | **+0.1** |
| **ZRO** | **Akutan Zero** | **5.01** | **68** | P | **Pn** | **16 06 35.3** | **+1.1** |
| **WESP** | **Westdahl Peak** | **5.83** | **66** | P | **Pn** | **16 06 45.8** | **+0.8** |
| **KDAK** | **Kodiak Island** | **13.26** | **58** | P |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MAW** | **Mawson** | **83.43** | **200** | P | **P** | **16 31 14.0** | **+1.0** |
| | 0.7nm,0.6s,baz=131,slow=11,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.28** | **58** | P | **P** | **16 31 28.0** | **+0.4** |
| | 1.5nm,0.8s,baz=222,slow=6.2,SNR=14 | | | | | | |
| **ILAR** | **Eielson Array** | **86.32** | **13** | P | **P** | **16 31 25.5** | **-1.3** |
| | 0.6nm,0.6s,baz=223,slow=5.5,SNR=6.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.03** | **314** | PKP | **PKPab** | **16 38 18.8** | **-1.3** |
| | 1.0nm,0.8s,baz=120,slow=2.8,SNR=5.5 | | | | | | |
| **GERES** | **GERESS Array B** | **148.01** | **345** | PKPbc | **PKPbc** | **16 38 26.5** | **+0.1** |
| | 1.3nm,0.8s,baz=20,slow=4.3,SNR=7.0 | | | | | | |

*JMA **21** 16:21:43.7,23.62N×121.62E,h28km±1km,M3.3*
*ISCJB **21** 16:21:44.3±0.3,23.63N±0.02×121.65E±0.02,h23km±3km, Error ellipse: s-maj=4.0km s-min=2.5km az=42.8*
*TAP **21** 16:21:44.8,23.65N×121.56E,h28km,ML3.8,C*
**ISC 21 16:21:44.7±0.9,23.64N±0.02×121.60E±0.03,h28km±6km, n61,σ0.985/89,7C-11D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEGC** | **Jichi Village** | **0.09** | **325** | *e*P | **Pb** | **16 21 50.8** | **+1.0** |
| | baz=345 | | | | | | |
| **ESL** | **Shilin** | **0.23** | **320** | ⇑*i*P | **Pb** | **16 21 50.8** | **-0.3** |
| | baz=319 | | | | | | |
| ESL | | | | *e*S | **Sb** | **16 21 54.4** | **-1.1** |
| | baz=319 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.25** | **341** | *e*P | **Pn** | **16 21 52.0** | **-0.4** |
| | baz=341 | | | | | | |
| **EHY** | **Hungye** | **0.28** | **243** | ⇓P | **Pb** | **16 21 51.5** | **-0.3** |
| | baz=246 | | | | | | |
| **HWA** | **Hwalien** | **0.34** | **2** | *i* P | **Pb** | **16 21 52.8** | **+0.2** |
| | baz=15 | | | | | | |
| **TWF1** | **Yuli** | **0.39** | **224** | ⇓*i*P | **Pb** | **16 21 53.2** | **-0.1** |
| | baz=232 | | | | | | |
| **TWD** | **Chiawan** | **0.44** | **0** | ⇑*i*P | **Pb** | **16 21 54.0** | **-0.1** |
| | baz=355 | | | | | | |
| TWD | | | | S | **Sn** | **16 22 01.7** | **-0.5** |
| | baz=355 | | | | | | |
| **CHKT** | **Chengkung** | **0.57** | **202** | *e*P | **Pb** | **16 21 56.3** | **+0.1** |
| | baz=185 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **16 22 05.0** | **-0.4** |
| | baz=185 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.59** | **329** | ⇑*i*P | **Pb** | **16 21 55.9** | **-1.0** |
| | baz=332 | | | | | | |
| WHF | | | | S | **Sb** | **16 22 04.2** | **-0.9** |
| | baz=332 | | | | | | |
| **YUS** | **Yu-Shan** | **0.61** | **256** | ⇓*i*P | **Pb** | **16 21 57.1** | **0.0** |
| | baz=255 | | | | | | |
| YUS | | | | *i* S | **Sb** | **16 22 05.0** | **-0.6** |
| | baz=255 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.68** | **291** | ⇑*i*P | **Pb** | **16 21 57.6** | **-0.6** |
| | baz=292 | | | | | | |
| **ELDTW** | **Lidau** | **0.69** | **230** | ⇓P | **Pb** | **16 21 57.3** | **-1.0** |
| | baz=229 | | | | | | |
| **TWT** | **Tachien** | **0.72** | **328** | ⇑P | **Pb** | **16 21 58.5** | **-0.4** |
| | baz=329 | | | | | | |
| TWT | | | | *i* S | **Sb** | **16 22 07.5** | **-1.0** |
| | baz=329 | | | | | | |
| **TYC** | **Yuchr** | **0.73** | **292** | ⇑P | **Pb** | **16 21 58.1** | **-0.6** |
| | baz=297 | | | | | | |
| TYC | | | | *i* S | **Sb** | **16 22 08.5** | **+0.1** |
| | baz=297 | | | | | | |
| **ALS** | **Alishan** | **0.74** | **260** | ⇓*i*P | **Pn** | **16 21 59.2** | **-0.3** |
| | baz=260 | | | | | | |
| ALS | | | | S | **Sb** | **16 22 08.8** | **-0.2** |
| | baz=260 | | | | | | |
| **ENA** | **Nanau** | **0.80** | **10** | *e*P | **Pn** | **16 21 59.0** | **-1.1** |
| | baz=22 | | | | | | |
| **NNS** | **Nan Shan** | **0.83** | **346** | *e*P | **Pn** | **16 21 59.6** | **-0.9** |
| | baz=357 | | | | | | |
| **CHN5** | **Tsauling** | **0.84** | **268** | ⇓*i*P | **Pb** | **16 22 01.0** | **+0.2** |
| | baz=262 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **16 22 12.8** | **+0.6** |
| | baz=262 | | | | | | |
| **WNT** | **Mingjian** | **0.87** | **286** | ⇓*i*P | **Pb** | **16 22 01.5** | **+0.4** |
| | baz=287 | | | | | | |
| WNT | | | | *e*S | **Sb** | **16 22 13.6** | **+1.2** |
| | baz=287 | | | | | | |
| **STYT** | **Tauyuan** | **0.90** | **239** | ⇓*i*P | **Pn** | **16 22 01.4** | **-0.1** |
| | baz=232 | | | | | | |
| STYT | | | | *e*S | **Sb** | **16 22 13.9** | **+0.5** |
| | baz=232 | | | | | | |
| **TWG** | **Pinlang** | **0.94** | **211** | *e*P | **Pn** | **16 22 00.7** | **-1.4** |
| | baz=197 | | | | | | |
| **WGK** | **Gukeng** | **0.95** | **273** | *e*P | **Pb** | **16 22 02.3** | **-0.2** |
| | baz=273 | | | | | | |
| WGK | | | | *e*S | **Sb** | **16 22 15.2** | **+0.5** |
| | baz=273 | | | | | | |
| **CHN4** | **Tsaushan** | **0.96** | **253** | ⇓*i*P | **Pb** | **16 22 02.8** | **+0.1** |
| | baz=253 | | | | | | |
| CHN4 | | | | *e*S | **Sb** | **16 22 16.3** | **+1.2** |
| | baz=253 | | | | | | |
| **TTN** | **Taitung** | **0.97** | **205** | *e*P | **Pn** | **16 22 00.9** | **-1.5** |
| | baz=205 | | | | | | |
| **WTP** | **Ta-pu** | **0.98** | **247** | ⇓*i*P | **Pb** | **16 22 03.1** | **0.0** |
| | baz=247 | | | | | | |
| WTP | | | | *e*S | **Sb** | **16 22 16.2** | **+0.5** |
| | baz=247 | | | | | | |
| **TCU** | **Taichung** | **0.98** | **301** | *e*P | **Pb** | **16 22 03.5** | **+0.4** |
| | baz=302 | | | | | | |
| **TWC** | **Suao** | **1.00** | **13** | *e*P | **Pn** | **16 22 02.9** | **+0.1** |
| | baz=26 | | | | | | |
| TWC | | | | *e*S | **Sb** | **16 22 17.1** | **+1.0** |
| | baz=26 | | | | | | |
| **ENTT** | **Nioudou** | **1.00** | **358** | *e*P | **Pn** | **16 22 02.0** | **-0.9** |
| **CHN2** | **Minshiung** | **1.03** | **264** | P | **Pb** | **16 22 04.5** | **+0.6** |
| | baz=265 | | | | | | |
| CHN2 | | | | *e*S | **Sb** | **16 22 18.6** | **+1.5** |
| | baz=265 | | | | | | |
| **TWQ1** | **Liyutan** | **1.03** | **313** | ⇓*i*P | **Pb** | **16 22 04.4** | **+0.5** |
| | baz=323 | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **16 22 18.2** | **+1.0** |
| | baz=323 | | | | | | |
| **NSK** | **Sanguang** | **1.06** | **348** | ⇑P | **Pn** | **16 22 03.4** | **-0.3** |
| | baz=1.0 | | | | | | |
| NSK | | | | S | **Sn** | **16 22 16.1** | **-1.4** |
| | baz=1.0 | | | | | | |
| **CHN1** | **Nanshi** | **1.08** | **246** | P | **Pb** | **16 22 04.9** | **+0.2** |
| | baz=246 | | | | | | |
| CHN1 | | | | S | **Sb** | **16 22 20.0** | **+1.5** |
| | baz=246 | | | | | | |
| **SGST** | **Jiashian** | **1.08** | **240** | *e*P | **Pb** | **16 22 04.8** | **0.0** |
| | baz=240 | | | | | | |
| SGST | | | | *e*S | **Sb** | **16 22 20.3** | **+1.8** |
| | baz=240 | | | | | | |
| **TWK** | **Hsinying** | **1.08** | **250** | *e*P | **Pb** | **16 22 04.7** | **-0.1** |
| | baz=250 | | | | | | |
| **TWE** | **Neicheng** | **1.08** | **3** | *e*P | **Pn** | **16 22 03.5** | **-0.5** |
| | baz=5.0 | | | | | | |
| **CHY** | **Chiayi** | **1.08** | **263** | *e*P | **Pb** | **16 22 04.9** | **+0.1** |
| | baz=263 | | | | | | |
| **NSY** | **Sanyi** | **1.09** | **316** | *e*P | **Pb** | **16 22 05.0** | **+0.1** |
| | baz=317 | | | | | | |
| NSY | | | | *e*S | **Sb** | **16 22 20.1** | **+1.4** |
| | baz=317 | | | | | | |
| **NSTT** | **Nanjuang** | **1.13** | **331** | *e*P | **Pb** | **16 22 05.1** | **-0.5** |
| | baz=345 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **16 22 18.2** | **-1.0** |
| | baz=345 | | | | | | |
| **ILA** | **Ilan** | **1.13** | **7** | *e*P | **Pn** | **16 22 04.7** | **0.0** |
| | baz=358 | | | | | | |
| **ECL** | **Taimali** | **1.19** | **210** | *e*P | **Pn** | **16 22 04.0** | **-1.4** |
| | baz=199 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.23** | **281** | *e*P | **Pb** | **16 22 06.7** | **-0.5** |
| | baz=281 | | | | | | |
| **SSD** | **Sandimen** | **1.25** | **225** | *e*P | **Pn** | **16 22 06.8** | **+0.5** |
| | baz=225 | | | | | | |
| SSD | | | | *e*S | **Sb** | **16 22 24.0** | **+0.6** |
| | baz=225 | | | | | | |
| **WSF** | **Szhu** | **1.26** | **270** | *e*P | **Pn** | **16 22 06.8** | **+0.5** |
| | baz=271 | | | | | | |
| WSF | | | | *e*S | **Sb** | **16 22 23.4** | **-0.2** |
| | baz=271 | | | | | | |
| **CHN3** | **Shinhua** | **1.26** | **244** | *e*P | **Pb** | **16 22 08.2** | **+0.4** |
| | baz=246 | | | | | | |
| CHN3 | | | | *e*S | **Sb** | **16 22 25.7** | **+2.0** |
| | baz=246 | | | | | | |
| **HSN** | **Hsinchu** | **1.29** | **334** | *e*P | **Pb** | **16 22 10.6** | **+2.2** |
| | baz=321 | | | | | | |
| **TWA** | **Mucha** | **1.34** | **360** | *e*P | **Pb** | **16 22 09.9** | **+0.8** |
| | baz=10.0 | | | | | | |
| **TWM1** | **Shoushan** | **1.35** | **233** | *e*P | **Pb** | **16 22 10.2** | **+0.9** |
| | baz=235 | | | | | | |
| **SGLT** | **Jiouru** | **1.36** | **228** | *e*P | **Pb** | **16 22 10.5** | **+1.0** |
| | baz=219 | | | | | | |
| **NCU** | **National Centr** | **1.38** | **344** | *e*P | **Pb** | **16 22 10.5** | **+0.7** |
| | baz=345 | | | | | | |
| **TAP1** | **Taipei** | **1.40** | **357** | *e*P | **Pb** | **16 22 09.4** | **-0.8** |
| | baz=358 | | | | | | |
| **EAST** | **Anshuo** | **1.43** | **209** | *e*P | **Pn** | **16 22 08.5** | **-0.2** |
| | baz=200 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.47** | **354** | *e*P | **Pb** | **16 22 10.7** | **-0.6** |
| | baz=11 | | | | | | |
| **SCZT** | **Fangliau** | **1.55** | **216** | *e*P | **Pb** | **16 22 11.7** | **-0.9** |
| | baz=206 | | | | | | |
| **LAY** | **Lan-yu** | **1.59** | **181** | *e*P | **Pn** | **16 22 08.6** | **-2.3** |
| | baz=168 | | | | | | |
| **PNG** | **Penghu** | **1.87** | **268** | *e*P | **Pn** | **16 22 14.9** | **+0.1** |
| | baz=269 | | | | | | |
| **HATJ** | **Hateruma jima** | **2.07** | **78** | P | **Pn** | **16 22 17.3** | **-0.2** |
| **IRIF** | **Iriomote-Funau** | **2.07** | **70** | P | **Pn** | **16 22 18.1** | **+0.6** |
| **JKRS** | **Kuro-shima** | **2.29** | **74** | P | **Pn** | **16 22 20.9** | **+0.4** |
| JKRS | | | | S | **Sn** | **16 22 48.7** | **+0.9** |
| **JIJ** | **Ishigaki jima** | **2.44** | **72** | P | **Pn** | **16 22 22.6** | **0.0** |
| JIJ | | | | S | **Sn** | **16 22 50.9** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **2.66** | **69** | P | **Pn** | **16 22 25.6** | **0.0** |
| JISG | | | | S | **Sn** | **16 22 55.9** | **-0.9** |
| **JTJ** | **Tarama** | **3.01** | **70** | S | **Sn** | **16 23 06.7** | **+1.1** |

**IDC 21 16:25:10.2±1.7,6.06N×121.54E,h0km,mb4.1/3, mb1 4.3/3,mb1mx3.5/35,mbtmp4.1/3,MS3.2/1,Ms1 3.2/1, ms1mx2.4/40,Error ellipse: s-maj=214.6km s-min=24.4km az=62.0,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAY** | **Jayapura** | **20.94** | **113** | LR | LR | 16 36 06.8 | |
| | comp=Z,68nm,21.6s,baz=86,slow=31 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.74** | **154** | P | P | 16 31 09.0 | -0.6 |
| | 1.1nm,0.5s,baz=331,slow=10,SNR=29 | | | | | | |
| **ASAR** | **Alice Springs** | **31.91** | **158** | P | P | 16 31 38.3 | +0.6 |
| | 1.2nm,0.3s,baz=339,slow=7.6,SNR=79 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.75** | **327** | P | P | 16 34 26.9 | -0.1 |
| | 0.8nm,0.5s,baz=126,slow=8.5,SNR=9.8 | | | | | | |

*IDC **21** 16:55:42.8±1.3,4.79S×134.90E,h0km,mb4.5/2, mb1 3.8/6,mb1mx3.5/29,mbtmp3.8/6,ML3.0/4, Error ellipse: s-maj=33.4km s-min=24.4km az=46.0*
*ISCJB **21** 16:55:44.6±0.9,4.75S±0.10×134.9E±0.1,h33km,mb4.4/2, Error ellipse: s-maj=16.6km s-min=14.1km az=161.6*
**ISC 21 16:55:47.0±1.1,4.8S±0.1×134.9E±0.1,h35km,n6,σ1.939/6, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.28** | **317** | Pn | **Pn** | **16 57 02.2** | **-1.2** |
| | 0.5nm,0.3s,baz=277,slow=22,SNR=3.3 | | | | | | |
| SIJI | | | | Sn | Sn | 16 57 54.4 | -8.8 |
| | 0.7nm,0.3s,baz=239,slow=19,SNR=5.3 | | | | | | |
| **JAY** | **Jayapura** | **6.25** | **69** | Pn | **Pn** | **16 57 16.6** | **-0.2** |
| | 0.5nm,0.3s,baz=241,slow=13,SNR=8.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.09** | **182** | Pn | **Pn** | **16 59 17.6** | **-0.1** |
| | 0.1nm,0.3s,baz=359,slow=13,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **18.81** | **183** | P | **Pn** | **17 00 03.9** | **-0.5** |
| | 0.1nm,0.3s,baz=6.4,slow=11,SNR=10.0 | | | | | | |
| **HNR** | **Honiara** | **25.32** | **102** | P | **P** | **17 01 10.4** | **-0.3** |
| | 38nm,0.5s,baz=117,slow=9.4,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.14** | **324** | P | **P** | **17 06 51.8** | **+2.0** |
| | 0.8nm,0.9s,baz=136,slow=5.4,SNR=2.6 | | | | | | |

*ISCJB **21** 17:27:59.8±0.6,36.72N±0.03×10.93W±0.04,h10km, Error ellipse: s-maj=4.7km s-min=4.0km az=167.9*
*MDD **21** 17:28:01.5±1.0,36.61N×11.28W,h30km,mb4.1/29, Error ellipse: s-maj=9.4km s-min=6.5km az=85.0,PRXIMO*
*CSEM **21** 17:28:02.1±0.2,36.65N×11.13W,h31km,ML3.8/8, Error ellipse: s-maj=5.3km s-min=3.2km az=86.0*
*INMG **21** 17:28:02.6±2.2,36.59N×11.27W,h31km±13km,MD3.2, ML2.8, Error ellipse: s-maj=8.3km s-min=4.5km az=70.0*
*LDG **21** 17:28:02.4±0.2,36.70N×11.17W,h10km,Ml3.4/4, Error ellipse: s-maj=4.0km s-min=3.4km az=154.0*
*IGIL **21** 17:28:03.1,36.64N×11.19W,h26km,ML2.9*
*CNRM **21** 17:28:04.6,36.24N×11.08W,h11km,MD3.4*
**ISC 21 17:27:59.1±2.4,36.70N±0.07×11.1W±0.1,h10km,n166, σ1.966/259,14C-3D,Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PFVI** | **Vila Bisbo** | **1.88** | **76** | *i*Pn | **Pn** | **17 28 33.3** | **+2.0** |
| PFVI | | | | *e*Sn | **Sn** | **17 28 55.1** | **0.0** |
| PFVI | | | | A | A | 17 28 56.4 | |
| | 107nm,0.1s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.88** | **76** | *i*Pn | **Pn** | **17 28 33.3** | **+2.0** |
| PFVI | | | | *e*Sn | **Sn** | **17 28 55.1** | **0.0** |
| | 107nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **2.06** | **72** | *e*P | **Pn** | **17 28 35.8** | **+2.0** |
| MORF | | | | *e*S | **Sn** | **17 28 59.7** | **0.0** |
| MORF | | | | AML | AML | 17 29 00.9 | |
| | comp=N,101nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **2.06** | **72** | ⇑*e*Pn | **Pn** | **17 28 35.8** | **+2.0** |
| MORF | | | | *e*Sn | **Sn** | **17 28 59.8** | **+0.1** |
| MORF | | | | A | A | 17 29 04.8 | |
| | comp=N,83nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **2.06** | **72** | P | **Pn** | **17 28 35.8** | **+2.0** |
| MORF | | | | S | **Sn** | **17 28 59.8** | **+0.1** |
| | comp=N,83nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **2.06** | **72** | P | **Pn** | **17 28 35.8** | **+2.0** |
| MORF | | | | S | **Sn** | **17 28 59.8** | **+0.1** |
| | comp=N,83nm,0.1s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.09** | **65** | ⇑*e*Pn | **Pn** | **17 28 36.3** | **+2.2** |
| PTEO | | | | *e*Sn | **Sn** | **17 29 00.6** | **+0.4** |
| PTEO | | | | A | A | 17 29 03.8 | |
| | comp=N,46nm,0.4s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.09** | **65** | P | **Pn** | **17 28 36.3** | **+2.2** |
| PTEO | | | | S | **Sn** | **17 29 00.6** | **+0.4** |
| | comp=N,23nm,0.4s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.09** | **65** | P | **Pn** | **17 28 36.3** | **+2.2** |
| PTEO | | | | S | **Sn** | **17 29 00.6** | **+0.4** |
| | comp=N,23nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.50** | **55** | ⇑*e*Pn | **Pn** | **17 28 41.9** | **+2.2** |
| PNCL | | | | *e*Sn | **Sn** | **17 29 10.5** | **+0.3** |
| PNCL | | | | A | A | 17 29 13.8 | |
| | comp=N,36nm,0.6s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.50** | **55** | ⇑*e*Pn | **Pn** | **17 28 41.9** | **+2.2** |
| PNCL | | | | *e*Sn | **Sn** | **17 29 10.5** | **+0.3** |
| | comp=N,36nm,0.6s | | | | | | |
| **PMST** | **Lisbon--Monsan** | **2.55** | **36** | *e*Pn | **Pn** | **17 28 42.6** | **+2.2** |
| PMST | | | | *e*Sn | **Sn** | **17 29 12.1** | **+0.6** |
| PMST | | | | A | A | 17 29 15.4 | |
| | comp=N,25nm,0.4s | | | | | | |
| **PMST** | **Lisbon--Monsan** | **2.55** | **36** | *e*Pn | **Pn** | **17 28 42.6** | **+2.2** |
| PMST | | | | *e*Sn | **Sn** | **17 29 12.1** | **+0.6** |
| | comp=N,25nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **2.58** | **63** | *e*P | **Pn** | **17 28 42.8** | **+2.0** |
| MESJ | | | | *e*S | **Sn** | **17 29 11.8** | **-0.4** |
| MESJ | | | | AML | AML | 17 29 13.6 | |
| | comp=N,42nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.58** | **63** | *e*Pn | **Pn** | **17 28 42.8** | **+2.0** |
| MESJ | | | | *e*Sn | **Sn** | **17 29 12.5** | **+0.3** |
| MESJ | | | | A | A | 17 29 15.7 | |
| | comp=N,22nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.58** | **63** | P | **Pn** | **17 28 42.8** | **+2.0** |
| MESJ | | | | S | **Sn** | **17 29 12.5** | **+0.3** |
| | comp=N,22nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.58** | **63** | P | **Pn** | **17 28 42.8** | **+2.0** |
| MESJ | | | | S | **Sn** | **17 29 12.5** | **+0.3** |
| | comp=N,22nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.61** | **77** | *e*Pn | **Pn** | **17 28 43.6** | **+2.3** |
| PBDV | | | | *e*Sn | **Sn** | **17 29 13.7** | **+0.7** |
| PBDV | | | | A | A | 17 29 18.9 | |
| | comp=N,23nm,0.3s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.61** | **77** | P | **Pn** | **17 28 43.6** | **+2.3** |
| PBDV | | | | S | **Sn** | **17 29 13.7** | **+0.7** |
| | comp=N,23nm,0.3s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.61** | **77** | P | **Pn** | **17 28 43.6** | **+2.3** |
| PBDV | | | | S | **Sn** | **17 29 13.7** | **+0.7** |
| | comp=N,23nm,0.3s | | | | | | |
| **PCVE** | **Castro Verde** | **2.63** | **68** | ⇑*i*Pn | **Pn** | **17 28 43.7** | **+2.1** |
| PCVE | | | | *e*Sn | **Sn** | **17 29 13.5** | **0.0** |
| PCVE | | | | A | A | 17 29 17.0 | |
| | comp=N,32nm,0.3s | | | | | | |
| **PCVE** | **Castro Verde** | **2.63** | **68** | P | **Pn** | **17 28 43.7** | **+2.1** |
| PCVE | | | | S | **Sn** | **17 29 13.5** | **0.0** |
| | comp=N,32nm,0.3s | | | | | | |
| **PCVE** | **Castro Verde** | **2.63** | **68** | P | **Pn** | **17 28 43.7** | **+2.1** |
| PCVE | | | | S | **Sn** | **17 29 13.5** | **0.0** |
| | comp=N,32nm,0.3s | | | | | | |
| **PMAFR** | **Mafra** | **2.68** | **32** | ⇑*e*Pn | **Pn** | **17 28 44.0** | **+1.7** |
| PMAFR | | | | *e*Sn | **Sn** | **17 29 15.2** | **+0.4** |
| PMAFR | | | | A | A | 17 29 19.2 | |
| | comp=N,56nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **2.68** | **32** | ⇑P | **Pn** | **17 28 43.9** | **+1.7** |
| | comp=N,10nm,0.1s,SNR=18 | | | | | | |
| PMAFR | | | | S | **Sn** | **17 29 14.6** | **-0.2** |
| | comp=N,58nm,0.2s,SNR=7.6 | | | | | | |
| **PMAFR** | **Mafra** | **2.68** | **32** | P | **Pn** | **17 28 43.9** | **+1.7** |
| | comp=N,10nm,0.1s,SNR=18 | | | | | | |
| PMAFR | | | | S | **Sn** | **17 29 14.6** | **-0.2** |
| | comp=N,58nm,0.2s,SNR=7.6 | | | | | | |
| PMAFR | | | | *e*Sn | **Sn** | **17 29 15.2** | **+0.4** |
| | comp=N,56nm,0.2s | | | | | | |
| **PACT** | **Alcochete** | **2.75** | **41** | *e*Pn | Pn | 17 28 40.5 | -2.6 |
| PACT | | | | *e*Sn | **Sn** | **17 29 13.2** | **-3.2** |
| PACT | | | | A | A | 17 29 14.7 | |
| | comp=N,35nm,0.6s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.81** | **74** | *e*Pn | **Pn** | **17 28 46.3** | **+2.3** |
| PVAQ | | | | *e*Sn | **Sn** | **17 29 17.8** | **-0.1** |
| PVAQ | | | | A | A | 17 29 23.6 | |
| | comp=N,30nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.81** | **74** | P | **Pn** | **17 28 46.3** | **+2.3** |
| PVAQ | | | | S | **Sn** | **17 29 17.8** | **-0.1** |
| | comp=N,30nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.81** | **74** | P | **Pn** | **17 28 46.3** | **+2.3** |
| PVAQ | | | | S | **Sn** | **17 29 17.8** | **-0.1** |
| | comp=N,30nm,0.1s | | | | | | |
| **PBEJ** | **Beja** | **2.91** | **62** | *e*Pn | **Pn** | **17 28 47.3** | **+1.9** |
| PBEJ | | | | *e*Sn | **Sn** | **17 29 20.0** | **-0.4** |
| PBEJ | | | | A | A | 17 29 21.4 | |
| | comp=N,18nm,0.1s | | | | | | |
| **PBEJ** | **Beja** | **2.91** | **62** | P | **Pn** | **17 28 47.3** | **+1.9** |
| PBEJ | | | | S | **Sn** | **17 29 20.0** | **-0.4** |
| | comp=N,9.0nm,0.1s | | | | | | |
| **PBEJ** | **Beja** | **2.91** | **62** | P | **Pn** | **17 28 47.3** | **+1.9** |
| PBEJ | | | | S | **Sn** | **17 29 20.0** | **-0.4** |
| | comp=N,9.0nm,0.1s | | | | | | |
| **EVOP** | **Sao Brissos** | **3.00** | **52** | *e*Pn | **Pn** | **17 28 48.2** | **+1.6** |
| EVOP | | | | *e*Sn | **Sn** | **17 29 22.5** | **-0.1** |
| | comp=N,13nm,0.2s | | | | | | |
| **EGRO** | **El Granado** | **3.02** | **73** | P | **Pn** | **17 28 49.1** | **+2.1** |
| | comp=N,1.8nm,0.1s,SNR=30 | | | | | | |
| EGRO | | | | S | **Sn** | **17 29 22.5** | **-0.7** |
| | comp=N,15nm,0.1s,SNR=12 | | | | | | |
| **EGRO** | **El Granado** | **3.02** | **73** | P | **Pn** | **17 28 49.1** | **+2.1** |
| | comp=N,1.8nm,0.1s,SNR=30 | | | | | | |
| EGRO | | | | S | **Sn** | **17 29 22.5** | **-0.7** |
| | comp=N,15nm,0.1s,SNR=12 | | | | | | |
| **EVO** | **Evora** | **3.07** | **52** | *e*Pn | **Pn** | **17 28 48.2** | **+0.6** |
| EVO | | | | *e*Sn | **Sn** | **17 29 22.5** | **-1.9** |
| | comp=N,27nm,0.2s | | | | | | |
| **EVO** | **Evora** | **3.07** | **52** | *e*Pn | **Pn** | **17 28 49.5** | **+1.9** |
| EVO | | | | *e*Sn | **Sn** | **17 29 23.9** | **-0.5** |
| EVO | | | | A | A | 17 29 26.6 | |
| | comp=N,46nm,0.1s | | | | | | |
| **EVO** | **Evora** | **3.07** | **52** | P | **Pn** | **17 28 49.5** | **+1.9** |
| EVO | | | | S | **Sn** | **17 29 23.9** | **-0.5** |
| | comp=N,46nm,0.1s | | | | | | |
| **EVO** | **Evora** | **3.07** | **52** | P | **Pn** | **17 28 49.5** | **+1.9** |
| EVO | | | | *e*Sn | **Sn** | **17 29 23.9** | **-0.5** |
| | comp=N,46nm,0.1s | | | | | | |
| **PMTG** | **Montargil** | **3.29** | **43** | ⇑*e*Pn | **Pn** | **17 28 52.2** | **+1.6** |
| PMTG | | | | *e*Sn | **Sn** | **17 29 30.0** | **+0.2** |
| PMTG | | | | A | A | 17 29 34.0 | |
| | comp=N,12nm,0.2s | | | | | | |
| **PMTG** | **Montargil** | **3.29** | **43** | ⇑*e*Pn | **Pn** | **17 28 52.2** | **+1.6** |
| PMTG | | | | *e*Sn | **Sn** | **17 29 30.0** | **+0.2** |
| | comp=N,12nm,0.2s | | | | | | |
| **PBAR** | **Barrancos** | **3.56** | **64** | *e*Pn | **Pn** | **17 28 56.4** | **+2.0** |
| PBAR | | | | *e*Sn | **Sn** | **17 29 35.9** | **-0.7** |
| PBAR | | | | A | A | 17 29 37.6 | |
| | comp=N,36nm,0.3s | | | | | | |
| **PBAR** | **Barrancos** | **3.56** | **64** | P | **Pn** | **17 28 56.4** | **+2.0** |
| PBAR | | | | S | **Sn** | **17 29 35.9** | **-0.7** |
| | comp=N,36nm,0.3s | | | | | | |
| **PBAR** | **Barrancos** | **3.56** | **64** | P | **Pn** | **17 28 56.4** | **+2.0** |
| PBAR | | | | S | **Sn** | **17 29 35.9** | **-0.7** |
| | comp=N,36nm,0.3s | | | | | | |
| **PTOM** | **Tomar** | **3.61** | **35** | *e*Pn | **Pn** | **17 28 57.1** | **+2.1** |
| PTOM | | | | *e*Sn | **Sn** | **17 29 38.1** | **+0.4** |
| PTOM | | | | A | A | 17 30 02.6 | |
| | comp=N,34nm,0.4s | | | | | | |
| **PTOM** | **Tomar** | **3.61** | **35** | P | **Pn** | **17 28 57.1** | **+2.1** |
| PTOM | | | | S | **Sn** | **17 29 38.1** | **+0.4** |
| | comp=N,17nm,0.4s | | | | | | |
| **PTOM** | **Tomar** | **3.61** | **35** | P | **Pn** | **17 28 57.1** | **+2.1** |
| PTOM | | | | S | **Sn** | **17 29 38.1** | **+0.4** |
| | comp=N,17nm,0.4s | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.70** | **72** | ⇓P | **Pn** | **17 28 58.1** | **+1.8** |
| | comp=N,2.4nm,0.1s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sn** | **17 29 38.7** | **-1.3** |
| | comp=N,11nm,0.1s,SNR=18 | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.70** | **72** | P | **Pn** | **17 28 58.1** | **+1.8** |
| | comp=N,2.4nm,0.1s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sn** | **17 29 38.7** | **-1.3** |
| | comp=N,11nm,0.1s,SNR=18 | | | | | | |
| **EBAD** | **Badajoz** | **3.84** | **57** | P | **Pn** | **17 28 60.0** | **+1.7** |
| | comp=N,2.2nm,0.1s,SNR=22 | | | | | | |
| EBAD | | | | S | **Sn** | **17 29 42.3** | **-1.3** |
| | comp=N,24nm,0.2s,SNR=9.8 | | | | | | |
| **EBAD** | **Badajoz** | **3.84** | **57** | P | **Pn** | **17 29 00.0** | **+1.7** |
| | comp=N,2.2nm,0.1s,SNR=22 | | | | | | |
| EBAD | | | | S | **Sn** | **17 29 42.3** | **-1.3** |
| | comp=N,24nm,0.2s,SNR=9.8 | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.93** | **31** | *e*Pn | **Pn** | **17 29 01.2** | **+1.8** |
| PCAS | | | | *e*Sn | **Sn** | **17 29 45.2** | **-0.4** |
| PCAS | | | | A | A | 17 29 50.1 | |
| | comp=N,4.4nm,0.3s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.93** | **31** | *e*Pn | **Pn** | **17 29 01.2** | **+1.8** |
| PCAS | | | | *e*Sn | **Sn** | **17 29 45.2** | **-0.4** |
| | comp=N,4.4nm,0.3s | | | | | | |
| **PMRV** | **Marv??o** | **4.01** | **46** | ⇑*e*Pn | **Pn** | **17 29 02.0** | **+1.5** |
| PMRV | | | | *e*Sn | **Sn** | **17 29 45.9** | **-1.6** |
| PMRV | | | | A | A | 17 29 48.6 | |
| | comp=N,12nm,0.2s | | | | | | |
| **PMRV** | **Marv??o** | **4.01** | **46** | P | **Pn** | **17 29 02.0** | **+1.5** |
| PMRV | | | | S | **Sn** | **17 29 45.9** | **-1.6** |
| | comp=N,12nm,0.2s | | | | | | |
| **PMRV** | **Marv??o** | **4.01** | **46** | P | **Pn** | **17 29 02.0** | **+1.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=N,10nm,0.1s,SNR=10.0 | | | | | | | | | |
| **EMIJ** | **Mijas** | **5.10** | **90** | P | | **Pn** | **17 29 17.7** | **+2.1** | | |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | | | | |
| EMIJ | | | | S | | **Sn** | **17 30 12.7** | **-1.9** | | |
| | comp=N,3.6nm,0.2s,SNR=5.6 | | | | | | | | | |
| **EMIJ** | **Mijas** | **5.10** | **90** | P | | **Pn** | **17 29 17.7** | **+2.1** | | |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | | | | |
| EMIJ | | | | S | | **Sn** | **17 30 12.7** | **-1.9** | | |
| | comp=N,3.6nm,0.2s,SNR=5.6 | | | | | | | | | |
| **EPLA** | **Plasencia** | **5.19** | **48** | P | | **Pn** | **17 29 18.5** | **+1.7** | | |
| | comp=N,2.5nm,0.1s,SNR=16 | | | | | | | | | |
| EPLA | | | | S | | **Sn** | **17 30 15.3** | **-1.4** | | |
| | comp=N,4.2nm,0.1s,SNR=6.1 | | | | | | | | | |
| **EPLA** | **Plasencia** | **5.19** | **48** | P | | **Pn** | **17 29 18.5** | **+1.7** | | |
| | comp=N,2.5nm,0.1s,SNR=16 | | | | | | | | | |
| EPLA | | | | S | | **Sn** | **17 30 15.3** | **-1.4** | | |
| | comp=N,4.2nm,0.1s,SNR=6.1 | | | | | | | | | |
| **POLO** | **Lamas de Olo** | **5.33** | **28** | *e*Pn | | **Pn** | **17 29 20.1** | **+1.2** | | |
| POLO | | | | *e*Sn | | Sn | 17 30 17.1 | -3.3 | | |
| POLO | | | | A | | A | 17 30 19.8 | | | |
| | comp=N,2.0nm,0.2s | | | | | | | | | |
| **POLO** | **Lamas de Olo** | **5.33** | **28** | *e*Pn | | **Pn** | **17 29 20.1** | **+1.2** | | |
| POLO | | | | *e*Sn | | Sn | 17 30 17.1 | -3.3 | | |
| | comp=N,2.0nm,0.2s | | | | | | | | | |
| **EADA** | **Adamuz** | **5.41** | **72** | ⇓P | | **Pn** | **17 29 21.9** | **+2.1** | | |
| | comp=N,1.6nm,0.1s,SNR=18 | | | | | | | | | |
| EADA | | | | S | | **Sn** | **17 30 20.6** | **-1.5** | | |
| | comp=N,12nm,0.2s,SNR=10 | | | | | | | | | |
| **EADA** | **Adamuz** | **5.41** | **72** | P | | **Pn** | **17 29 21.9** | **+2.1** | | |
| | comp=N,1.6nm,0.1s,SNR=18 | | | | | | | | | |
| EADA | | | | S | | **Sn** | **17 30 20.6** | **-1.5** | | |
| | comp=N,12nm,0.2s,SNR=10 | | | | | | | | | |
| **MVO** | **Moncorvo** | **5.48** | **34** | *e*Pn | | **Pn** | **17 29 22.2** | **+1.4** | | |
| MVO | | | | *e*Sn | | **Sn** | **17 30 21.7** | **-2.2** | | |
| MVO | | | | A | | A | 17 30 25.8 | | | |
| | comp=N,7.2nm,0.6s | | | | | | | | | |
| **MVO** | **Moncorvo** | **5.48** | **34** | ⇓P | | **Pn** | **17 29 22.2** | **+1.4** | | |
| | comp=N,5.0nm,0.1s,SNR=18 | | | | | | | | | |
| MVO | | | | S | | **Sn** | **17 30 21.8** | **-2.1** | | |
| | comp=N,5.2nm,0.1s | | | | | | | | | |
| **MVO** | **Moncorvo** | **5.48** | **34** | P | | **Pn** | **17 29 22.2** | **+1.4** | | |
| | comp=N,5.0nm,0.1s,SNR=18 | | | | | | | | | |
| MVO | | | | S | | **Sn** | **17 30 21.8** | **-2.1** | | |
| | comp=N,5.2nm,0.1s | | | | | | | | | |
| **CIA** | **Chichaoua** | **5.48** | **158** | P | | Pn | 17 29 19.0 | -1.8 | | |
| **CIA** | **Chichaoua** | **5.48** | **158** | P | | Pn | 17 29 19.0 | -1.8 | | |
| **PCAB** | **Cabril** | **5.55** | **25** | *e*Pn | | **Pn** | **17 29 22.8** | **+1.1** | | |
| PCAB | | | | *e*Sn | | **Sn** | **17 30 23.2** | **-2.4** | | |
| PCAB | | | | A | | A | 17 30 26.0 | | | |
| | comp=N,5.0nm,0.2s | | | | | | | | | |
| **PCAB** | **Cabril** | **5.55** | **25** | P | | **Pn** | **17 29 22.8** | **+1.1** | | |
| PCAB | | | | S | | **Sn** | **17 30 23.2** | **-2.4** | | |
| | comp=N,2.5nm,0.2s | | | | | | | | | |
| **PCAB** | **Cabril** | **5.55** | **25** | P | | **Pn** | **17 29 22.8** | **+1.1** | | |
| PCAB | | | | S | | **Sn** | **17 30 23.2** | **-2.4** | | |
| | comp=N,2.5nm,0.2s | | | | | | | | | |
| **ELOB** | **Lobios** | **5.68** | **24** | P | | **Pn** | **17 29 24.5** | **+1.0** | | |
| | comp=N,4.4nm,0.1s,SNR=18 | | | | | | | | | |
| ELOB | | | | S | | **Sn** | **17 30 25.9** | **-2.9** | | |
| | comp=N,4.1nm,0.1s,SNR=7.9 | | | | | | | | | |
| **ELOB** | **Lobios** | **5.68** | **24** | P | | **Pn** | **17 29 24.5** | **+1.0** | | |
| | comp=N,4.4nm,0.1s,SNR=18 | | | | | | | | | |
| ELOB | | | | S | | **Sn** | **17 30 25.9** | **-2.9** | | |
| | comp=N,4.1nm,0.1s,SNR=7.9 | | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **5.70** | **22** | *e*Pn | | **Pn** | **17 29 25.0** | **+1.1** | | |
| PGAV | | | | *e*Sn | | **Sn** | **17 30 26.4** | **-3.0** | | |
| PGAV | | | | A | | A | 17 30 31.7 | | | |
| | comp=N,5.4nm,0.2s | | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **5.70** | **22** | *e*Pn | | **Pn** | **17 29 25.0** | **+1.1** | | |
| PGAV | | | | *e*Sn | | **Sn** | **17 30 26.4** | **-3.0** | | |
| | comp=N,5.4nm,0.2s | | | | | | | | | |
| **MIF** | **Mishlifen** | **5.84** | **122** | P | | **Pn** | **17 29 27.0** | **+1.1** | | |
| MIF | | | | S | | Sn | 17 30 28.0 | -5.0 | | |
| **MIF** | **Mishlifen** | **5.84** | **122** | *i* P | | **Pn** | **17 29 27.0** | **+1.1** | | |
| MIF | | | | S | | Sn | 17 30 28.0 | -5.0 | | |
| **KIB** | **El Ksiba** | **5.87** | **133** | P | | **Pn** | **17 29 26.0** | **-0.2** | | |
| KIB | | | | S | | Sn | 17 30 27.0 | -6.5 | | |
| **KIB** | **El Ksiba** | **5.87** | **133** | P | | **Pn** | **17 29 26.0** | **-0.2** | | |
| KIB | | | | S | | Sn | 17 30 27.0 | -6.5 | | |
| **TZC** | **Tazercounte** | **5.93** | **139** | P | | Pn | 17 29 26.0 | -1.2 | | |
| **TZC** | **Tazercounte** | **5.93** | **139** | P | | Pn | 17 29 26.0 | -1.2 | | |
| **EGUA** | **Guajares** | **6.06** | **86** | P | | **Pn** | **17 29 30.0** | **+1.2** | | |
| | comp=N,1.7nm,0.3s,SNR=7.9 | | | | | | | | | |
| EGUA | | | | S | | **Sn** | **17 30 35.7** | **-2.5** | | |
| | comp=N,0.9nm,0.1s,SNR=7.9 | | | | | | | | | |
| **EGUA** | **Guajares** | **6.06** | **86** | P | | **Pn** | **17 29 30.0** | **+1.2** | | |
| | comp=N,1.7nm,0.3s,SNR=7.9 | | | | | | | | | |
| EGUA | | | | S | | **Sn** | **17 30 35.7** | **-2.5** | | |
| | comp=N,0.9nm,0.1s,SNR=7.9 | | | | | | | | | |
| **ECOG** | **Cogollos-Vega** | **6.07** | **82** | S | | **Sn** | **17 30 35.7** | **-2.9** | | |
| | comp=N,5.7nm,1.2s,SNR=7.9 | | | | | | | | | |
| **ECOG** | **Cogollos-Vega** | **6.07** | **82** | S | | **Sn** | **17 30 35.7** | **-2.9** | | |
| | comp=N,5.7nm,1.2s,SNR=7.9 | | | | | | | | | |
| **OUK** | **Oukaimeden** | **6.11** | **153** | P | | **Pn** | **17 29 29.0** | **-0.7** | | |
| **OUK** | **Oukaimeden** | **6.11** | **153** | P | | **Pn** | **17 29 29.0** | **-0.7** | | |
| **PBRG** | **Braganca** | **6.12** | **32** | *e*Pn | | **Pn** | **17 29 31.1** | **+1.5** | | |
| PBRG | | | | *e*Sn | | **Sn** | **17 30 37.0** | **-2.8** | | |
| PBRG | | | | A | | A | 17 30 40.9 | | | |
| | comp=N,3.7nm,0.3s | | | | | | | | | |
| **PBRG** | **Braganca** | **6.12** | **32** | P | | **Pn** | **17 29 31.1** | **+1.5** | | |
| PBRG | | | | S | | **Sn** | **17 30 37.0** | **-2.8** | | |
| | comp=N,1.9nm,0.3s | | | | | | | | | |
| **PBRG** | **Braganca** | **6.12** | **32** | P | | **Pn** | **17 29 31.1** | **+1.5** | | |
| PBRG | | | | S | | **Sn** | **17 30 37.0** | **-2.8** | | |
| | comp=N,1.9nm,0.3s | | | | | | | | | |
| **EQUE** | **Quentar** | **6.17** | **83** | S | | **Sn** | **17 30 38.3** | **-2.6** | | |
| | comp=N,3.4nm,1.2s,SNR=7.9 | | | | | | | | | |
| **EQUE** | **Quentar** | **6.17** | **83** | S | | **Sn** | **17 30 38.3** | **-2.6** | | |
| | comp=N,3.4nm,1.2s,SNR=7.9 | | | | | | | | | |
| **CZD** | **Col de Zad** | **6.19** | **124** | P | | **Pn** | **17 29 32.0** | **+1.3** | | |
| CZD | | | | S | | Sn | 17 30 35.0 | -6.7 | | |
| **CZD** | **Col de Zad** | **6.19** | **124** | *i* P | | **Pn** | **17 29 32.0** | **+1.3** | | |
| CZD | | | | S | | Sn | 17 30 35.0 | -6.7 | | |
| **ECAL** | **Calabor** | **6.24** | **32** | P | | **Pn** | **17 29 32.2** | **+1.0** | | |
| | comp=N,2.4nm,0.1s,SNR=9.6 | | | | | | | | | |
| ECAL | | | | S | | Sn | 17 30 39.3 | -3.3 | | |
| | comp=N,3.9nm,0.2s,SNR=7.9 | | | | | | | | | |
| **ECAL** | **Calabor** | **6.24** | **32** | P | | **Pn** | **17 29 32.2** | **+1.0** | | |
| | comp=N,2.4nm,0.1s,SNR=9.6 | | | | | | | | | |
| ECAL | | | | S | | Sn | 17 30 39.3 | -3.3 | | |
| | comp=N,3.9nm,0.2s,SNR=7.9 | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **6.37** | **60** | P | | **Pn** | **17 29 34.8** | **+1.8** | | |
| | comp=N,8.4nm,0.1s,baz=246,slow=13,SNR=15 | | | | | | | | | |
| ESDC | | | | S | | **Sn** | **17 30 43.3** | **-2.5** | | |
| | comp=N,2.3nm,0.3s,baz=245,slow=23,SNR=18 | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **6.37** | **60** | P | | **Pn** | **17 29 34.8** | **+1.8** | | |
| | comp=N,8.4nm,0.1s,SNR=15 | | | | | | | | | |
| ESDC | | | | S | | **Sn** | **17 30 43.3** | **-2.5** | | |
| | comp=N,2.3nm,0.3s,SNR=18 | | | | | | | | | |
| **EMAZ** | **Mazaricos** | **6.46** | **14** | P | | **Pn** | **17 29 35.0** | **+0.9** | | |
| | comp=N,1.6nm,0.1s,SNR=7.9 | | | | | | | | | |
| EMAZ | | | | S | | Sn | 17 30 42.6 | -5.3 | | |
| | comp=N,4.0nm,0.1s,SNR=6.6 | | | | | | | | | |
| **EMAZ** | **Mazaricos** | **6.46** | **14** | P | | **Pn** | **17 29 35.0** | **+0.9** | | |
| | comp=N,1.6nm,0.1s,SNR=7.9 | | | | | | | | | |
| EMAZ | | | | S | | Sn | 17 30 42.6 | -5.3 | | |
| | comp=N,4.0nm,0.1s,SNR=6.6 | | | | | | | | | |
| **EQES** | **Quesada** | **6.51** | **78** | P | | **Pn** | **17 29 36.4** | **+1.4** | | |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | | | |
| EQES | | | | S | | **Sn** | **17 30 45.9** | **-3.5** | | |
| | comp=N,3.7nm,0.2s,SNR=9.4 | | | | | | | | | |
| **EQES** | **Quesada** | **6.51** | **78** | P | | **Pn** | **17 29 36.4** | **+1.4** | | |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | | | |
| EQES | | | | S | | **Sn** | **17 30 45.9** | **-3.5** | | |
| | comp=N,3.7nm,0.2s,SNR=9.4 | | | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.53** | **20** | P | | **Pn** | **17 29 36.3** | **+1.2** | | |
| | comp=N,1.6nm,0.1s,SNR=7.9 | | | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.53** | **20** | P | | **Pn** | **17 29 36.3** | **+1.2** | | |
| | comp=N,1.6nm,0.1s,SNR=7.9 | | | | | | | | | |
| **EBER** | **Berja** | **6.60** | **86** | S | | **Sn** | **17 30 48.5** | **-3.3** | | |
| | comp=N,1.8nm,0.2s,SNR=7.9 | | | | | | | | | |
| **EBER** | **Berja** | **6.60** | **86** | S | | **Sn** | **17 30 48.5** | **-3.3** | | |
| | comp=N,1.8nm,0.2s,SNR=7.9 | | | | | | | | | |
| **GUD** | **Guadarrama** | **6.72** | **52** | P | | **Pn** | **17 29 39.2** | **+1.3** | | |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | | | | |
| GUD | | | | S | | **Sn** | **17 30 51.5** | **-3.1** | | |
| | comp=N,2.0nm,0.2s,SNR=7.9 | | | | | | | | | |
| **GUD** | **Guadarrama** | **6.72** | **52** | P | | **Pn** | **17 29 39.2** | **+1.3** | | |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | | | | |
| GUD | | | | S | | **Sn** | **17 30 51.5** | **-3.1** | | |
| | comp=N,2.0nm,0.2s,SNR=7.9 | | | | | | | | | |
| **EHUE** | **Huescar** | **6.89** | **78** | P | | **Pn** | **17 29 41.3** | **+1.1** | | |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | | |
| EHUE | | | | S | | **Sn** | **17 30 55.9** | **-2.8** | | |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | | | | |
| **EHUE** | **Huescar** | **6.89** | **78** | P | | **Pn** | **17 29 41.3** | **+1.1** | | |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | | |
| EHUE | | | | S | | **Sn** | **17 30 55.9** | **-2.8** | | |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | | | | |
| **SESP** | **Santiago Espad** | **6.97** | **76** | S | | **Sn** | **17 30 58.0** | **-2.7** | | |
| | comp=N,4.2nm,0.1s,SNR=7.9 | | | | | | | | | |
| **SESP** | **Santiago Espad** | **6.97** | **76** | S | | **Sn** | **17 30 58.0** | **-2.7** | | |
| | comp=N,4.2nm,0.1s,SNR=7.9 | | | | | | | | | |
| **ZFT** | **Errachidia** | **7.27** | **128** | P | | **Pn** | **17 29 46.0** | **+0.4** | | |
| ZFT | | | | S | | Sn | 17 31 02.0 | -6.4 | | |
| **ZFT** | **Errachidia** | **7.27** | **128** | *i* P | | **Pn** | **17 29 46.0** | **+0.4** | | |
| ZFT | | | | S | | Sn | 17 31 02.0 | -6.4 | | |
| **EPON** | **Pontenova** | **7.28** | **23** | P | | **Pn** | **17 29 46.7** | **+1.1** | | |
| | comp=N,3.3nm,0.2s,SNR=7.1 | | | | | | | | | |
| **EPON** | **Pontenova** | **7.28** | **23** | P | | **Pn** | **17 29 46.7** | **+1.1** | | |
| | comp=N,3.3nm,0.2s,SNR=7.1 | | | | | | | | | |
| **ETOB** | **Tobarra** | **7.83** | **73** | P | | **Pn** | **17 29 53.8** | **+0.7** | | |
| | comp=N,0.1nm,0.1s,SNR=5.9 | | | | | | | | | |
| ETOB | | | | S | | Sn | 17 31 18.0 | -3.9 | | |
| | comp=N,1.6nm,0.2s,SNR=7.9 | | | | | | | | | |
| **ETOB** | **Tobarra** | **7.83** | **73** | P | | **Pn** | **17 29 53.8** | **+0.7** | | |
| | comp=N,0.1nm,0.1s,SNR=5.9 | | | | | | | | | |
| ETOB | | | | S | | Sn | 17 31 18.0 | -3.9 | | |
| | comp=N,1.6nm,0.2s,SNR=7.9 | | | | | | | | | |
| **EARI** | **Arriondas** | **8.00** | **33** | P | | **Pn** | **17 29 57.4** | **+2.0** | | |
| | comp=N,0.4nm,0.2s,SNR=7.9 | | | | | | | | | |
| EARI | | | | S | | Sn | 17 31 21.2 | -4.7 | | |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | | | | |
| **EARI** | **Arriondas** | **8.00** | **33** | P | | **Pn** | **17 29 57.4** | **+2.0** | | |
| | comp=N,0.4nm,0.2s,SNR=7.9 | | | | | | | | | |
| EARI | | | | S | | Sn | 17 31 21.2 | -4.7 | | |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | | | | |
| **ETOR** | **Torete** | **8.19** | **57** | P | | **Pn** | **17 29 59.6** | **+1.6** | | |
| | comp=N,11nm,0.2s,SNR=16 | | | | | | | | | |
| ETOR | | | | S | | Sn | 17 31 26.3 | -4.3 | | |
| | comp=N,15nm,0.2s,SNR=7.9 | | | | | | | | | |
| **ETOR** | **Torete** | **8.19** | **57** | P | | **Pn** | **17 29 59.6** | **+1.6** | | |
| | comp=N,11nm,0.2s,SNR=16 | | | | | | | | | |
| ETOR | | | | S | | Sn | 17 31 26.3 | -4.3 | | |
| | comp=N,15nm,0.2s,SNR=7.9 | | | | | | | | | |
| **ELAN** | **Lanestosa** | **8.79** | **40** | P | | **Pn** | **17 30 07.8** | **+1.6** | | |
| | comp=N,2.6nm,1.7s,SNR=7.9 | | | | | | | | | |
| **ELAN** | **Lanestosa** | **8.79** | **40** | P | | **Pn** | **17 30 07.8** | **+1.6** | | |
| | comp=N,2.6nm,1.7s,SNR=7.9 | | | | | | | | | |
| **EMOS** | **Mosqueruela** | **9.11** | **63** | P | | **Pn** | **17 30 11.7** | **+1.0** | | |
| | comp=N,2.0nm,2.3s,SNR=7.9 | | | | | | | | | |
| EMOS | | | | S | | Sn | 17 31 48.8 | -4.5 | | |
| | comp=N,1.9nm,0.3s,SNR=7.9 | | | | | | | | | |
| **EMOS** | **Mosqueruela** | **9.11** | **63** | P | | **Pn** | **17 30 11.7** | **+1.0** | | |
| | comp=N,2.0nm,2.3s,SNR=7.9 | | | | | | | | | |
| EMOS | | | | S | | Sn | 17 31 48.8 | -4.5 | | |
| | comp=N,1.9nm,0.3s,SNR=7.9 | | | | | | | | | |
| **YSOS** | **Sos del Rey Ca** | **9.60** | **50** | P | | **Pn** | **17 30 18.8** | **+1.4** | | |
| | comp=N,3.1nm,1.8s,SNR=7.9 | | | | | | | | | |
| **YSOS** | **Sos del Rey Ca** | **9.60** | **50** | P | | **Pn** | **17 30 18.8** | **+1.4** | | |
| | comp=N,3.1nm,1.8s,SNR=7.9 | | | | | | | | | |
| **ESAC** | **San Caprasio** | **9.66** | **55** | S | | Sn | 17 32 01.7 | -5.1 | | |
| | comp=N,4.0nm,1.9s,SNR=7.9 | | | | | | | | | |
| **ESAC** | **San Caprasio** | **9.66** | **55** | S | | Sn | 17 32 01.7 | -5.1 | | |
| | comp=N,4.0nm,1.9s,SNR=7.9 | | | | | | | | | |
| **YASP** | **Aspurt** | **9.74** | **49** | P | | **Pn** | **17 30 21.2** | **+1.9** | | |
| | comp=N,0.3nm,0.5s,SNR=7.9 | | | | | | | | | |
| **YASP** | **Aspurt** | **9.74** | **49** | P | | **Pn** | **17 30 21.2** | **+1.9** | | |
| | comp=N,0.3nm,0.5s,SNR=7.9 | | | | | | | | | |
| **IELO** | **Elcoad** | **9.77** | **48** | P | | **Pn** | **17 30 20.7** | **+1.1** | | |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | | |
| **IELO** | **Elcoad** | **9.77** | **48** | P | | **Pn** | **17 30 20.7** | **+1.1** | | |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | | |
| **ELIZ** | **Elizondo** | **9.79** | **46** | P | | **Pn** | **17 30 21.1** | **+1.2** | | |
| | comp=N,4.3nm,2.3s,SNR=7.9 | | | | | | | | | |
| **ELIZ** | **Elizondo** | **9.79** | **46** | P | | **Pn** | **17 30 21.1** | **+1.2** | | |
| | comp=N,4.3nm,2.3s,SNR=7.9 | | | | | | | | | |
| **SJPF** | **Ste Jean** | **9.93** | **47** | *e*Pn | | **Pn** | **17 30 23.1** | **+1.2** | | |
| SJPF | | | | *e*Sn | | Sn | 17 32 08.7 | -4.7 | | |
| | comp=N,1.8nm,0.5s | | | | | | | | | |
| **SJPF** | **Ste Jean** | **9.93** | **47** | P | | **Pn** | **17 30 23.1** | **+1.2** | | |
| SJPF | | | | S | | Sn | 17 32 08.7 | -4.7 | | |
| | comp=N,0.9nm,0.5s | | | | | | | | | |
| **SJPF** | **Ste Jean** | **9.93** | **47** | P | | **Pn** | **17 30 23.1** | **+1.2** | | |
| SJPF | | | | S | | Sn | 17 32 08.7 | -4.7 | | |
| | comp=N,0.9nm,0.5s | | | | | | | | | |
| **ETSF** | **Etsaut** | **10.21** | **49** | *e*Pn | | **Pn** | **17 30 27.0** | **+1.3** | | |
| ETSF | | | | *e*Sn | | Sn | 17 32 15.3 | -4.9 | | |
| | comp=N,0.8nm,0.3s | | | | | | | | | |
| **ETSF** | **Etsaut** | **10.21** | **49** | P | | **Pn** | **17 30 27.0** | **+1.3** | | |
| ETSF | | | | S | | Sn | 17 32 15.3 | -4.9 | | |
| | comp=N,0.4nm,0.3s | | | | | | | | | |
| **ETSF** | **Etsaut** | **10.21** | **49** | P | | **Pn** | **17 30 27.0** | **+1.3** | | |
| ETSF | | | | S | | Sn | 17 32 15.3 | -4.9 | | |
| | comp=N,0.4nm,0.3s | | | | | | | | | |
| **ATE** | **Arette** | **10.23** | **48** | P | | **Pn** | **17 30 27.3** | **+1.4** | | |
| | comp=N,0.5nm,0.6s,SNR=7.9 | | | | | | | | | |
| **ATE** | **Arette** | **10.23** | **48** | P | | **Pn** | **17 30 27.3** | **+1.4** | | |
| | comp=N,0.5nm,0.6s,SNR=7.9 | | | | | | | | | |
| **EPF** | **Esparros** | **10.83** | **51** | *e*Pn | | **Pn** | **17 30 35.5** | **+1.3** | | |
| EPF | | | | *e*Sn | | Sn | 17 32 30.2 | -5.3 | | |
| | comp=N,2.9nm,0.7s | | | | | | | | | |
| **EPF** | **Esparros** | **10.83** | **51** | P | | **Pn** | **17 30 35.5** | **+1.3** | | |
| EPF | | | | S | | Sn | 17 32 30.2 | -5.3 | | |
| | comp=N,1.4nm,0.7s | | | | | | | | | |
| **EPF** | **Esparros** | **10.83** | **51** | P | | **Pn** | **17 30 35.5** | **+1.3** | | |
| EPF | | | | S | | Sn | 17 32 30.2 | -5.3 | | |
| | comp=N,1.4nm,0.7s | | | | | | | | | |
| **CSOR** | **Sort** | **11.02** | **55** | P | | **Pn** | **17 30 38.4** | **+1.5** | | |
| | comp=N,0.5nm,3.6s,SNR=7.9 | | | | | | | | | |
| **CSOR** | **Sort** | **11.02** | **55** | P | | **Pn** | **17 30 38.4** | **+1.5** | | |
| | comp=N,0.5nm,3.6s,SNR=7.9 | | | | | | | | | |
| **CLLI** | **Llivia** | **11.63** | **56** | P | | **Pn** | **17 30 46.7** | **+1.5** | | |
| | comp=N,1.2nm,1.8s,SNR=7.9 | | | | | | | | | |
| **CLLI** | **Llivia** | **11.63** | **56** | P | | **Pn** | **17 30 46.7** | **+1.5** | | |
| | comp=N,1.2nm,1.8s,SNR=7.9 | | | | | | | | | |

*ISCJB **21** 17:33:03.8±0.4,36°.73N±0°.03×7°.03W±0°.02,h10km,Error ellipse: s-maj=4.5km s-min=1.9km az=25.7*
*CSEM **21** 17:33:04.4±0.2,36°.56N×7°.16W,h20km,ML3.5/6,Error ellipse: s-maj=4.6km s-min=2.3km az=28.0*
*IGIL **21** 17:33:05.8,36°.50N×7°.19W,h27km,ML2.7*
*SFS **21** 17:33:05.0,36°.59N×7°.16W,h0km,ML2.8*
*CNRM **21** 17:33:05.6,36°.37N×7°.37W,h30km,MD3.1*
*MDD **21** 17:33:05.7±0.5,36°.49N×7°.24W,h54km±16km,mb4.0/41, Error ellipse: s-maj=5.1km s-min=3.0km az=36.0,PRXIMO*
*INMG **21** 17:33:06.5±1.6,36°.55N×7°.20W,h23km±5km,MD2.9, ML2.7,Error ellipse: s-maj=3.1km s-min=2.6km az=47.0*
*LDG **21** 17:33:06.5±0.5,36°.64N×7°.31W,h10km,Ml3.4/4, Error ellipse: s-maj=9.6km s-min=4.3km az=177.0*

**ISC 21 17:33:03.0±0.9,36°.55N±0°.03×7°.16W±0°.02,h10km,n183,**
σ1§74/290,**8C-20D,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PBDV** | **Barranco-do-Ve** | **0.92** | **318** | ⇓*e*P | **Pb** | **17 33 22.2** | **+1.1** |
| PBDV | | | | *e*S | **Sg** | **17 33 34.0** | **+1.2** |
| PBDV | | | | A | A | 17 33 37.3 | |
| | 70nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.92** | **318** | P | **Pb** | **17 33 22.2** | **+1.1** |
| PBDV | | | | S | **Sg** | **17 33 34.0** | **+1.2** |
| | 70nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.92** | **318** | ⇓*e*P | **Pb** | **17 33 22.2** | **+1.1** |
| PBDV | | | | S | **Sg** | **17 33 34.0** | **+1.2** |
| | 70nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.96** | **333** | ⇓*i*P | **Pb** | **17 33 23.0** | **+1.3** |
| PVAQ | | | | *e*S | **Sg** | **17 33 35.2** | **+1.3** |
| PVAQ | | | | A | A | 17 33 36.6 | |
| | 172nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.96** | **333** | P | **Pb** | **17 33 23.0** | **+1.3** |
| PVAQ | | | | S | **Sg** | **17 33 35.2** | **+1.3** |
| | 172nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **0.96** | **333** | ⇓*i*P | **Pb** | **17 33 23.0** | **+1.3** |
| PVAQ | | | | S | **Sg** | **17 33 35.2** | **+1.3** |
| | 172nm,0.2s | | | | | | |
| **GIBL** | **Gibalbin** | **1.00** | **74** | S | **Sg** | **17 33 36.2** | **+1.0** |
| **GIBL** | **Gibalbin** | **1.00** | **74** | S | **Sg** | **17 33 36.2** | **+1.0** |
| **EGRO** | **El Granado** | **1.01** | **345** | ⇓P | **Pg** | **17 33 23.9** | **+1.5** |
| | 49nm,0.1s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sg** | **17 33 36.9** | **+1.3** |
| | 65nm,0.1s,SNR=9.7 | | | | | | |
| **EGRO** | **El Granado** | **1.01** | **345** | P | **Pg** | **17 33 23.9** | **+1.5** |
| | 49nm,0.1s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sg** | **17 33 36.9** | **+1.3** |
| | 65nm,0.1s,SNR=9.7 | | | | | | |
| **ESPR** | **Espera** | **1.09** | **73** | ⇑P | **Pb** | **17 33 24.8** | **+0.8** |
| | 48nm,0.1s,SNR=18 | | | | | | |
| ESPR | | | | S | **Sb** | **17 33 38.9** | **+0.6** |
| | 218nm,0.2s,SNR=18 | | | | | | |
| **ESPR** | **Espera** | **1.09** | **73** | P | **Pb** | **17 33 24.8** | **+0.8** |
| | 48nm,0.1s,SNR=18 | | | | | | |
| ESPR | | | | S | **Sb** | **17 33 38.9** | **+0.6** |
| | 218nm,0.2s,SNR=18 | | | | | | |
| **ALJ** | **Aljibe** | **1.22** | **91** | P | **Pb** | **17 33 27.4** | **+1.3** |
| **ALJ** | **Aljibe** | **1.22** | **91** | P | **Pb** | **17 33 27.4** | **+1.3** |
| **EMIN** | **Mina Concepcio** | **1.27** | **18** | ⇑P | **Pn** | **17 33 27.4** | **+0.5** |
| | 1.2nm,0.1s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sb** | **17 33 42.8** | **-0.7** |
| | 35nm,0.1s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **1.27** | **18** | P | **Pn** | **17 33 27.4** | **+0.5** |
| | 1.2nm,0.1s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sb** | **17 33 42.8** | **-0.7** |
| | 35nm,0.1s,SNR=7.9 | | | | | | |
| **PCVE** | **Castro Verde** | **1.28** | **327** | *e*P | **Pn** | **17 33 27.3** | **+0.3** |
| PCVE | | | | *e*S | **Sb** | **17 33 43.5** | **-0.3** |
| PCVE | | | | A | A | 17 33 44.2 | |
| | 71nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **1.28** | **327** | P | **Pn** | **17 33 27.3** | **+0.3** |
| PCVE | | | | S | **Sb** | **17 33 43.5** | **-0.3** |
| | 71nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **1.28** | **327** | *e*P | **Pn** | **17 33 27.3** | **+0.3** |
| PCVE | | | | S | **Sb** | **17 33 43.5** | **-0.3** |
| | 71nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **1.41** | **303** | *e*P | **Pn** | **17 33 28.2** | **-0.5** |
| MORF | | | | *e*S | **Sn** | **17 33 45.0** | **-2.4** |
| MORF | | | | AML | AML | 17 33 46.7 | |
| | comp=N,87nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **1.41** | **303** | *e*P | **Pn** | **17 33 28.3** | **-0.5** |
| MORF | | | | *e*S | **Sn** | **17 33 45.7** | **-1.7** |
| MORF | | | | A | A | 17 33 46.5 | |
| | comp=N,58nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **1.41** | **303** | P | **Pn** | **17 33 28.2** | **-0.5** |
| MORF | | | | S | **Sn** | **17 33 45.0** | **-2.4** |
| | comp=N,87nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **1.41** | **303** | *e*P | **Pn** | **17 33 28.3** | **-0.5** |
| MORF | | | | *e*S | **Sn** | **17 33 45.7** | **-1.7** |
| | comp=N,58nm,0.2s | | | | | | |
| **LIJA** | **Lijar** | **1.46** | **75** | P | **Pn** | **17 33 30.3** | **+0.9** |
| **LIJA** | **Lijar** | **1.46** | **75** | P | **Pn** | **17 33 30.3** | **+0.9** |
| LIJA | | | | *e*S | **Sn** | **17 33 45.3** | **-3.3** |
| **PFVI** | **Vila Bisbo** | **1.46** | **294** | *e*P | **Pn** | **17 33 28.8** | **-0.5** |
| PFVI | | | | *e*S | **Sn** | **17 33 45.6** | **-2.9** |
| PFVI | | | | A | A | 17 33 47.7 | |
| | comp=N,42nm,0.1s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.46** | **294** | *e*P | **Pn** | **17 33 28.8** | **-0.5** |
| PFVI | | | | *e*S | **Sn** | **17 33 45.6** | **-2.9** |
| | comp=N,42nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **1.54** | **327** | *e*P | **Pn** | **17 33 30.8** | **+0.4** |
| MESJ | | | | *e*S | **Sn** | **17 33 48.6** | **-1.9** |
| MESJ | | | | AML | AML | 17 33 50.7 | |
| | comp=N,81nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **1.54** | **327** | ⇓*e*P | **Pn** | **17 33 30.8** | **+0.4** |
| MESJ | | | | *e*S | **Sn** | **17 33 48.8** | **-1.7** |
| MESJ | | | | A | A | 17 33 51.6 | |
| | comp=N,47nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **1.54** | **327** | P | **Pn** | **17 33 30.8** | **+0.4** |
| MESJ | | | | S | **Sn** | **17 33 48.6** | **-1.9** |
| | comp=N,81nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **1.54** | **327** | ⇓*e*P | **Pn** | **17 33 30.8** | **+0.4** |
| MESJ | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=N,13nm,0.2s | | | | | | | | |
| **SELV** | **Sierra Elvira** | **2.84** | **75** | ⇑P | | **Pn** | **17 33 49.1** | **+0.7** | |
| | comp=N,2.6nm,0.2s,SNR=18 | | | | | | | | |
| SELV | | | | S | | **Sn** | **17 34 21.1** | **-1.5** | |
| | comp=N,1.0nm,0.1s,SNR=7.9 | | | | | | | | |
| **SELV** | **Sierra Elvira** | **2.84** | **75** | P | | **Pn** | **17 33 49.1** | **+0.7** | |
| | comp=N,2.6nm,0.2s,SNR=18 | | | | | | | | |
| SELV | | | | S | | **Sn** | **17 34 21.1** | **-1.5** | |
| | comp=N,1.0nm,0.1s,SNR=7.9 | | | | | | | | |
| **PMRV** | **Marv??o** | **2.88** | **356** | *e*Pn | | **Pn** | **17 33 49.5** | **+0.6** | |
| PMRV | | | | *e*Sn | | **Sn** | **17 34 21.1** | **-2.5** | |
| PMRV | | | | A | | A | 17 34 23.9 | | |
| | comp=N,27nm,0.2s | | | | | | | | |
| **PMRV** | **Marv??o** | **2.88** | **356** | P | | **Pn** | **17 33 49.5** | **+0.6** | |
| PMRV | | | | S | | **Sn** | **17 34 21.1** | **-2.5** | |
| | comp=N,27nm,0.2s | | | | | | | | |
| **PMRV** | **Marv??o** | **2.88** | **356** | P | | **Pn** | **17 33 49.5** | **+0.6** | |
| PMRV | | | | *e*Sn | | **Sn** | **17 34 21.1** | **-2.5** | |
| | comp=N,27nm,0.2s | | | | | | | | |
| **EGUA** | **Guajares** | **2.90** | **83** | P | | **Pn** | **17 33 49.6** | **+0.3** | |
| | comp=N,1.4nm,0.2s,SNR=7.9 | | | | | | | | |
| EGUA | | | | S | | **Sn** | **17 34 21.9** | **-2.3** | |
| | comp=N,3.1nm,0.2s,SNR=7.9 | | | | | | | | |
| **EGUA** | **Guajares** | **2.90** | **83** | P | | **Pn** | **17 33 49.6** | **+0.3** | |
| | comp=N,1.4nm,0.2s,SNR=7.9 | | | | | | | | |
| EGUA | | | | S | | **Sn** | **17 34 21.9** | **-2.3** | |
| | comp=N,3.1nm,0.2s,SNR=7.9 | | | | | | | | |
| **PMAFR** | **Mafra** | **2.93** | **326** | *e*Pn | | **Pn** | **17 33 50.2** | **+0.6** | |
| PMAFR | | | | *e*Sn | | **Sn** | **17 34 22.6** | **-2.2** | |
| PMAFR | | | | A | | A | 17 34 30.6 | | |
| | comp=N,25nm,0.5s | | | | | | | | |
| **PMAFR** | **Mafra** | **2.93** | **326** | ⇓P | | **Pn** | **17 33 50.2** | **+0.6** | |
| | comp=N,11nm,0.1s,SNR=18 | | | | | | | | |
| PMAFR | | | | S | | **Sn** | **17 34 22.2** | **-2.7** | |
| | comp=N,13nm,0.2s | | | | | | | | |
| **PMAFR** | **Mafra** | **2.93** | **326** | P | | **Pn** | **17 33 50.2** | **+0.6** | |
| | comp=N,11nm,0.1s,SNR=18 | | | | | | | | |
| PMAFR | | | | S | | **Sn** | **17 34 22.2** | **-2.7** | |
| | comp=N,13nm,0.2s | | | | | | | | |
| PMAFR | | | | *e*Sn | | **Sn** | **17 34 22.6** | **-2.2** | |
| | comp=N,25nm,0.5s | | | | | | | | |
| **ECOG** | **Cogollos-Vega** | **2.97** | **75** | P | | **Pn** | **17 33 51.1** | **+0.8** | |
| | comp=N,35nm,1.8s,SNR=7.9 | | | | | | | | |
| ECOG | | | | S | | **Sn** | **17 34 24.0** | **-2.0** | |
| | comp=N,5.4nm,1.2s,SNR=7.9 | | | | | | | | |
| **ECOG** | **Cogollos-Vega** | **2.97** | **75** | P | | **Pn** | **17 33 51.1** | **+0.8** | |
| | comp=N,35nm,1.8s,SNR=7.9 | | | | | | | | |
| ECOG | | | | S | | **Sn** | **17 34 24.0** | **-2.0** | |
| | comp=N,5.4nm,1.2s,SNR=7.9 | | | | | | | | |
| **EQUE** | **Quentar** | **3.05** | **77** | P | | **Pn** | **17 33 52.5** | **+1.1** | |
| | comp=N,2.7nm,0.1s,SNR=14 | | | | | | | | |
| EQUE | | | | S | | **Sn** | **17 34 26.7** | **-1.4** | |
| | comp=N,3.0nm,0.1s,SNR=6.4 | | | | | | | | |
| **EQUE** | **Quentar** | **3.05** | **77** | P | | **Pn** | **17 33 52.5** | **+1.1** | |
| | comp=N,2.7nm,0.1s,SNR=14 | | | | | | | | |
| EQUE | | | | S | | **Sn** | **17 34 26.7** | **-1.4** | |
| | comp=N,3.0nm,0.1s,SNR=6.4 | | | | | | | | |
| **PTOM** | **Tomar** | **3.21** | **343** | ⇓*e*Pn | | **Pn** | **17 33 54.2** | **+0.7** | |
| PTOM | | | | *e*Sn | | **Sn** | **17 34 29.1** | **-2.8** | |
| PTOM | | | | A | | A | 17 34 32.4 | | |
| | comp=N,18nm,0.2s | | | | | | | | |
| **PTOM** | **Tomar** | **3.21** | **343** | P | | **Pn** | **17 33 54.2** | **+0.7** | |
| PTOM | | | | S | | **Sn** | **17 34 29.1** | **-2.8** | |
| | comp=N,9.0nm,0.2s | | | | | | | | |
| **PTOM** | **Tomar** | **3.21** | **343** | P | | **Pn** | **17 33 54.2** | **+0.7** | |
| PTOM | | | | S | | **Sn** | **17 34 29.1** | **-2.8** | |
| | comp=N,9.0nm,0.2s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **3.29** | **356** | *e*Pn | | **Pn** | **17 33 55.2** | **+0.6** | |
| PCBR | | | | *e*Sn | | **Sn** | **17 34 30.7** | **-3.1** | |
| PCBR | | | | A | | A | 17 34 33.1 | | |
| | comp=N,28nm,0.2s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **3.29** | **356** | P | | **Pn** | **17 33 55.2** | **+0.6** | |
| PCBR | | | | S | | **Sn** | **17 34 30.7** | **-3.1** | |
| | comp=N,14nm,0.2s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **3.29** | **356** | P | | **Pn** | **17 33 55.2** | **+0.6** | |
| PCBR | | | | S | | **Sn** | **17 34 30.7** | **-3.1** | |
| | comp=N,14nm,0.2s | | | | | | | | |
| **EALB** | **Alboran** | **3.39** | **99** | S | | **Sn** | **17 34 33.3** | **-2.9** | |
| | comp=N,1.7nm,0.1s,SNR=7.9 | | | | | | | | |
| **EALB** | **Alboran** | **3.39** | **99** | S | | **Sn** | **17 34 33.3** | **-2.9** | |
| | comp=N,1.7nm,0.1s,SNR=7.9 | | | | | | | | |
| **EBER** | **Berja** | **3.45** | **83** | P | | **Pn** | **17 33 57.4** | **+0.5** | |
| | comp=N,0.5nm,0.2s,SNR=9.6 | | | | | | | | |
| EBER | | | | S | | **Sn** | **17 34 35.8** | **-2.2** | |
| | comp=N,1.0nm,0.1s,SNR=7.9 | | | | | | | | |
| **EBER** | **Berja** | **3.45** | **83** | P | | **Pn** | **17 33 57.4** | **+0.5** | |
| | comp=N,0.5nm,0.2s,SNR=9.6 | | | | | | | | |
| EBER | | | | S | | **Sn** | **17 34 35.8** | **-2.2** | |
| | comp=N,1.0nm,0.1s,SNR=7.9 | | | | | | | | |
| **EQES** | **Quesada** | **3.50** | **68** | ⇓P | | **Pn** | **17 33 57.6** | **+0.1** | |
| | comp=N,1.6nm,0.1s,SNR=18 | | | | | | | | |
| EQES | | | | S | | **Sn** | **17 34 37.4** | **-1.6** | |
| | comp=N,1.5nm,0.1s,SNR=4.7 | | | | | | | | |
| **EPLA** | **Plasencia** | **3.61** | **13** | P | | **Pn** | **17 33 59.6** | **+0.6** | |
| | comp=N,4.4nm,0.1s,SNR=29 | | | | | | | | |
| EPLA | | | | S | | **Sn** | **17 34 39.3** | **-2.3** | |
| | comp=N,13nm,0.2s,SNR=7.9 | | | | | | | | |
| **EPLA** | **Plasencia** | **3.61** | **13** | P | | **Pn** | **17 33 59.6** | **+0.6** | |
| | comp=N,4.4nm,0.1s,SNR=29 | | | | | | | | |
| EPLA | | | | S | | **Sn** | **17 34 39.3** | **-2.3** | |
| | comp=N,13nm,0.2s,SNR=7.9 | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.65** | **344** | *e*Pn | | **Pn** | **17 34 00.1** | **+0.6** | |
| PCAS | | | | *e*Sn | | **Sn** | **17 34 39.7** | **-2.9** | |
| PCAS | | | | A | | A | 17 35 05.2 | | |
| | comp=N,8.2nm,0.5s | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **3.65** | **344** | *e*Pn | | **Pn** | **17 34 00.1** | **+0.6** | |
| PCAS | | | | *e*Sn | | **Sn** | **17 34 39.7** | **-2.9** | |
| | comp=N,8.2nm,0.5s | | | | | | | | |
| **MTE** | **Manteigas** | **3.85** | **356** | *e*Pn | | **Pn** | **17 34 02.9** | **+0.5** | |
| MTE | | | | *e*Sn | | **Sn** | **17 34 44.7** | **-3.0** | |
| MTE | | | | A | | A | 17 34 49.2 | | |
| | comp=N,30nm,0.6s | | | | | | | | |
| **MTE** | **Manteigas** | **3.85** | **356** | P | | **Pn** | **17 34 02.9** | **+0.5** | |
| MTE | | | | S | | **Sn** | **17 34 44.7** | **-3.0** | |
| | comp=N,15nm,0.6s | | | | | | | | |
| **MTE** | **Manteigas** | **3.85** | **356** | P | | **Pn** | **17 34 02.9** | **+0.5** | |
| MTE | | | | S | | **Sn** | **17 34 44.7** | **-3.0** | |
| | comp=N,15nm,0.6s | | | | | | | | |
| **EHUE** | **Huescar** | **3.86** | **70** | ⇑P | | **Pn** | **17 34 02.4** | **-0.1** | |
| | comp=N,1.3nm,0.1s,SNR=18 | | | | | | | | |
| EHUE | | | | S | | **Sn** | **17 34 45.3** | **-2.6** | |
| | comp=N,1.5nm,0.2s,SNR=7.9 | | | | | | | | |
| **EHUE** | **Huescar** | **3.86** | **70** | P | | **Pn** | **17 34 02.4** | **-0.1** | |
| | comp=N,1.3nm,0.1s,SNR=18 | | | | | | | | |
| EHUE | | | | S | | **Sn** | **17 34 45.3** | **-2.6** | |
| | comp=N,1.5nm,0.2s,SNR=7.9 | | | | | | | | |
| **CZD** | **Col de Zad** | **3.92** | **153** | P | | **Pn** | **17 34 02.0** | **-1.5** | |
| CZD | | | | S | | Sn | 17 34 44.0 | -5.7 | |
| **CZD** | **Col de Zad** | **3.92** | **153** | P | | **Pn** | **17 34 02.0** | **-1.5** | |
| CZD | | | | *i* S | | Sn | 17 34 44.0 | -5.7 | |
| **SESP** | **Santiago Espad** | **4.00** | **66** | P | | **Pn** | **17 34 04.4** | **0.0** | |
| | comp=N,3.7nm,0.1s,SNR=7.9 | | | | | | | | |
| SESP | | | | S | | **Sn** | **17 34 47.9** | **-3.6** | |
| | comp=N,3.7nm,0.1s,SNR=7.9 | | | | | | | | |
| **SESP** | **Santiago Espad** | **4.00** | **66** | P | | **Pn** | **17 34 04.4** | **0.0** | |
| | comp=N,3.7nm,0.1s,SNR=7.9 | | | | | | | | |
| SESP | | | | S | | **Sn** | **17 34 47.9** | **-3.6** | |
| | comp=N,3.7nm,0.1s,SNR=7.9 | | | | | | | | |
| **ENIJ** | **Nijar** | **4.00** | **83** | P | | **Pn** | **17 34 04.0** | **-0.3** | |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | | | |
| ENIJ | | | | S | | **Sn** | **17 34 47.5** | **-3.8** | |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | | | |
| **ENIJ** | **Nijar** | **4.00** | **83** | P | | **Pn** | **17 34 04.0** | **-0.3** | |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | | | |
| ENIJ | | | | S | | **Sn** | **17 34 47.5** | **-3.8** | |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.01** | **38** | ⇑P | | **Pn** | **17 34 05.0** | **+0.5** | |
| | comp=N,2.2nm,0.1s,baz=222,slow=13,SNR=18 | | | | | | | | |
| ESDC | | | | S | | **Sn** | **17 34 48.1** | **-3.4** | |
| | comp=N,5.9nm,0.1s,baz=223,slow=24,SNR=9.1 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **4.01** | **38** | P | | **Pn** | **17 34 05.0** | **+0.5** | |
| | comp=N,2.2nm,0.1s,SNR=18 | | | | | | | | |
| ESDC | | | | S | | **Sn** | **17 34 48.1** | **-3.4** | |
| | comp=N,5.9nm,0.1s,SNR=9.1 | | | | | | | | |
| **KIB** | **El Ksiba** | **4.07** | **167** | P | | **Pn** | **17 34 03.0** | **-2.4** | |
| KIB | | | | S | | Sn | 17 34 46.0 | -7.2 | |
| **KIB** | **El Ksiba** | **4.07** | **167** | P | | **Pn** | **17 34 03.0** | **-2.4** | |
| KIB | | | | *i* S | | Sn | 17 34 46.0 | -7.2 | |
| **PVIS** | **Viseu** | **4.20** | **352** | *e*Pn | | **Pn** | **17 34 07.5** | **+0.4** | |
| PVIS | | | | *e*Sn | | **Sn** | **17 34 52.7** | **-3.5** | |
| PVIS | | | | A | | A | 17 34 55.3 | | |
| | comp=N,12nm,0.3s | | | | | | | | |
| **PVIS** | **Viseu** | **4.20** | **352** | P | | **Pn** | **17 34 07.5** | **+0.4** | |
| PVIS | | | | S | | **Sn** | **17 34 52.7** | **-3.5** | |
| | comp=N,6.0nm,0.3s | | | | | | | | |
| **PVIS** | **Viseu** | **4.20** | **352** | P | | **Pn** | **17 34 07.5** | **+0.4** | |
| PVIS | | | | S | | **Sn** | **17 34 52.7** | **-3.5** | |
| | comp=N,6.0nm,0.3s | | | | | | | | |
| **TZC** | **Tazercounte** | **4.43** | **173** | P | | **Pn** | **17 34 08.0** | **-2.4** | |
| TZC | | | | S | | Sn | 17 34 54.0 | -8.1 | |
| **TZC** | **Tazercounte** | **4.43** | **173** | P | | **Pn** | **17 34 08.0** | **-2.4** | |
| TZC | | | | *i* S | | Sn | 17 34 54.0 | -8.1 | |
| **MVO** | **Moncorvo** | **4.61** | **1** | *e*Pn | | **Pn** | **17 34 13.3** | **+0.6** | |
| MVO | | | | *e*Sn | | **Sn** | **17 35 02.4** | **-3.9** | |
| MVO | | | | A | | A | 17 35 05.3 | | |
| | comp=N,25nm,0.3s | | | | | | | | |
| **MVO** | **Moncorvo** | **4.61** | **1** | P | | **Pn** | **17 34 13.3** | **+0.6** | |
| | comp=N,7.0nm,0.1s,SNR=18 | | | | | | | | |
| MVO | | | | S | | **Sn** | **17 35 02.8** | **-3.5** | |
| | comp=N,22nm,0.2s,SNR=11 | | | | | | | | |
| **MVO** | **Moncorvo** | **4.61** | **1** | P | | **Pn** | **17 34 13.3** | **+0.6** | |
| | comp=N,7.0nm,0.1s,SNR=18 | | | | | | | | |
| MVO | | | | *e*Sn | | **Sn** | **17 35 02.4** | **-3.9** | |
| | comp=N,25nm,0.3s | | | | | | | | |
| MVO | | | | S | | **Sn** | **17 35 02.8** | **-3.5** | |
| | comp=N,22nm,0.2s,SNR=11 | | | | | | | | |
| **GUD** | **Guadarrama** | **4.71** | **29** | ⇓P | | **Pn** | **17 34 15.4** | **+1.1** | |
| | comp=N,3.1nm,0.1s,SNR=18 | | | | | | | | |
| GUD | | | | S | | **Sn** | **17 35 05.8** | **-3.3** | |
| | comp=N,1.7nm,0.1s,SNR=6.8 | | | | | | | | |
| **GUD** | **Guadarrama** | **4.71** | **29** | P | | **Pn** | **17 34 15.4** | **+1.1** | |
| | comp=N,3.1nm,0.1s,SNR=18 | | | | | | | | |
| GUD | | | | S | | **Sn** | **17 35 05.8** | **-3.3** | |
| | comp=N,1.7nm,0.1s,SNR=6.8 | | | | | | | | |
| **PVRL** | **Vila Real** | **4.74** | **355** | *e*Sn | | **Sn** | **17 35 06.5** | **-3.0** | |
| PVRL | | | | A | | A | 17 35 08.2 | | |
| | comp=N,20nm,0.5s | | | | | | | | |
| **PVRL** | **Vila Real** | **4.74** | **355** | S | | **Sn** | **17 35 06.5** | **-3.0** | |
| | comp=N,10nm,0.5s | | | | | | | | |
| **PVRL** | **Vila Real** | **4.74** | **355** | S | | **Sn** | **17 35 06.5** | **-3.0** | |
| | comp=N,10nm,0.5s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **4.84** | **354** | *e*Pn | | **Pn** | **17 34 16.3** | **+0.4** | |
| POLO | | | | *e*Sn | | **Sn** | **17 35 07.9** | **-4.2** | |
| POLO | | | | A | | A | 17 35 11.3 | | |
| | comp=N,7.3nm,0.4s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **4.84** | **354** | *e*Pn | | **Pn** | **17 34 16.3** | **+0.4** | |
| POLO | | | | *e*Sn | | **Sn** | **17 35 07.9** | **-4.2** | |
| | comp=N,7.3nm,0.4s | | | | | | | | |
| **EMUR** | **La Murta** | **4.90** | **73** | P | | **Pn** | **17 34 17.1** | **+0.4** | |
| | comp=N,1.8nm,2.3s,SNR=7.9 | | | | | | | | |
| EMUR | | | | S | | **Sn** | **17 35 09.4** | **-4.1** | |
| | comp=N,8.9nm,0.6s,SNR=7.9 | | | | | | | | |
| **EMUR** | **La Murta** | **4.90** | **73** | P | | **Pn** | **17 34 17.1** | **+0.4** | |
| | comp=N,1.8nm,2.3s,SNR=7.9 | | | | | | | | |
| EMUR | | | | S | | **Sn** | **17 35 09.4** | **-4.1** | |
| | comp=N,8.9nm,0.6s,SNR=7.9 | | | | | | | | |
| **ETOB** | **Tobarra** | **4.92** | **63** | ⇑P | | **Pn** | **17 34 16.0** | **-1.1** | |
| | comp=N,3.7nm,0.1s,SNR=18 | | | | | | | | |
| ETOB | | | | S | | Sn | 17 35 09.7 | -4.4 | |
| | comp=N,2.8nm,0.1s,SNR=7.9 | | | | | | | | |
| **ETOB** | **Tobarra** | **4.92** | **63** | P | | **Pn** | **17 34 16.0** | **-1.1** | |
| | comp=N,3.7nm,0.1s,SNR=18 | | | | | | | | |
| ETOB | | | | S | | Sn | 17 35 09.7 | -4.4 | |
| | comp=N,2.8nm,0.1s,SNR=7.9 | | | | | | | | |
| **ZFT** | **Errachidia** | **5.07** | **152** | P | | **Pn** | **17 34 18.0** | **-1.3** | |
| ZFT | | | | S | | Sn | 17 35 11.0 | -7.0 | |
| **ZFT** | **Errachidia** | **5.07** | **152** | P | | **Pn** | **17 34 18.0** | **-1.3** | |
| ZFT | | | | *i* S | | Sn | 17 35 11.0 | -7.0 | |
| **PCAB** | **Cabril** | **5.19** | **353** | *e*Sn | | Sn | 17 35 16.2 | -4.5 | |
| PCAB | | | | A | | A | 17 35 19.5 | | |
| | comp=N,4.0nm,0.3s | | | | | | | | |
| **PCAB** | **Cabril** | **5.19** | **353** | S | | Sn | 17 35 16.2 | -4.5 | |
| | comp=N,2.0nm,0.3s | | | | | | | | |
| **PCAB** | **Cabril** | **5.19** | **353** | S | | Sn | 17 35 16.2 | -4.5 | |
| | comp=N,2.0nm,0.3s | | | | | | | | |
| **PBRG** | **Braganca** | **5.25** | **3** | *e*Pn | | **Pn** | **17 34 22.3** | **+0.7** | |
| **PBRG** | **Braganca** | **5.25** | **3** | P | | **Pn** | **17 34 22.3** | **+0.7** | |
| **PBRG** | **Braganca** | **5.25** | **3** | *e*Pn | | **Pn** | **17 34 22.3** | **+0.7** | |
| **ELOB** | **Lobios** | **5.35** | **353** | P | | **Pn** | **17 34 23.2** | **+0.2** | |
| | comp=N,0.6nm,0.1s,SNR=4.6 | | | | | | | | |
| ELOB | | | | S | | **Sn** | **17 35 20.4** | **-4.3** | |
| | comp=N,2.0nm,0.1s,SNR=13 | | | | | | | | |
| **ELOB** | **Lobios** | **5.35** | **353** | P | | **Pn** | **17 34 23.2** | **+0.2** | |
| | comp=N,0.6nm,0.1s,SNR=4.6 | | | | | | | | |
| ELOB | | | | S | | **Sn** | **17 35 20.4** | **-4.3** | |
| | comp=N,2.0nm,0.1s,SNR=13 | | | | | | | | |
| **ECAL** | **Calabor** | **5.39** | **3** | P | | **Pn** | **17 34 24.1** | **+0.6** | |
| | comp=N,3.0nm,0.2s,SNR=15 | | | | | | | | |
| ECAL | | | | S | | Sn | 17 35 21.3 | -4.4 | |
| | comp=N,0.1nm,0.1s,SNR=11 | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **5.47** | **351** | *e*Pn | | **Pn** | **17 34 25.0** | **+0.4** | |
| PGAV | | | | *e*Sn | | Sn | 17 35 23.2 | -4.5 | |
| PGAV | | | | A | | A | 17 35 26.9 | | |
| | comp=N,5.4nm,0.3s | | | | | | | | |
| **PGAV** | **Gavieira, Arco** | **5.47** | **351** | *e*Pn | | **Pn** | **17 34 25.0** | **+0.4** | |
| PGAV | | | | *e*Sn | | Sn | 17 35 23.2 | -4.5 | |
| | comp=N,5.4nm,0.3s | | | | | | | | |
| **ETOR** | **Torete** | **5.84** | **42** | ⇓P | | **Pn** | **17 34 30.6** | **+0.9** | |
| | comp=N,50nm,0.1s,SNR=18 | | | | | | | | |
| ETOR | | | | S | | Sn | 17 35 32.1 | -4.6 | |
| | comp=N,5.2nm,0.1s,SNR=7.3 | | | | | | | | |
| **ETOR** | **Torete** | **5.84** | **42** | P | | **Pn** | **17 34 30.6** | **+0.9** | |
| | comp=N,50nm,0.1s,SNR=18 | | | | | | | | |
| **EBEN** | **Beniarda** | **5.91** | **67** | P | | **Pn** | **17 34 29.8** | **-0.8** | |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | | |
| EBEN | | | | S | | Sn | 17 35 33.5 | -4.9 | |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | | | |
| **EBEN** | **Beniarda** | **5.91** | **67** | P | | **Pn** | **17 34 29.8** | **-0.8** | |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | | |
| **EAGO** | **Agolada(Pontev** | **6.28** | **354** | P | | **Pn** | **17 34 35.8** | **+0.1** | |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | | | |
| EAGO | | | | S | | Sn | 17 35 42.5 | -5.0 | |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | |
| **EMOS** | **Mosqueruela** | **6.48** | **52** | P | | **Pn** | **17 34 39.3** | **+0.7** | |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | | | |
| EMOS | | | | S | | Sn | 17 35 48.4 | -4.3 | |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | | | |
| **EMOS** | **Mosqueruela** | **6.48** | **52** | P | | **Pn** | **17 34 39.3** | **+0.7** | |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | | | |
| EMOS | | | | S | | Sn | 17 35 48.4 | -4.3 | |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | | | |
| **EMAZ** | **Mazaricos** | **6.54** | **348** | P | | **Pn** | **17 34 39.3** | **+0.1** | |
| | comp=N,0.7nm,0.1s,SNR=7.9 | | | | | | | | |
| EMAZ | | | | S | | Sn | 17 35 48.3 | -5.5 | |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | | | |
| **EARI** | **Arriondas** | **6.90** | **12** | P | | **Pn** | **17 34 43.4** | **-0.8** | |
| | comp=N,0.1nm,3.8s,SNR=7.9 | | | | | | | | |
| EARI | | | | S | | Sn | 17 35 56.7 | -6.1 | |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | | | |
| **EARI** | **Arriondas** | **6.90** | **12** | P | | **Pn** | **17 34 43.4** | **-0.8** | |
| | comp=N,0.1nm,3.8s,SNR=7.9 | | | | | | | | |
| **EIBI** | **Ibiza** | **7.17** | **67** | P | | **Pn** | **17 34 47.6** | **-0.3** | |
| | comp=N,2.8nm,3.8s,SNR=7.9 | | | | | | | | |
| EIBI | | | | S | | Sn | 17 36 03.0 | -6.5 | |
| | comp=N,7.8nm,6.8s,SNR=7.9 | | | | | | | | |
| **EIBI** | **Ibiza** | **7.17** | **67** | P | | **Pn** | **17 34 47.6** | **-0.3** | |
| | comp=N,2.8nm,3.8s,SNR=7.9 | | | | | | | | |
| **ELAN** | **Lanestosa** | **7.26** | **22** | P | | **Pn** | **17 34 49.1** | **+0.1** | |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | | | |
| ELAN | | | | S | | Sn | 17 36 05.5 | -6.0 | |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | | | |
| **ELAN** | **Lanestosa** | **7.26** | **22** | P | | **Pn** | **17 34 49.1** | **+0.1** | |
| | comp=N,0.5nm,0.1s,SNR=7.9 | | | | | | | | |
| **ESAC** | **San Caprasio** | **7.33** | **43** | P | | **Pn** | **17 34 51.1** | **+1.0** | |
| | comp=N,2.0nm,2.4s,SNR=7.9 | | | | | | | | |
| ESAC | | | | S | | Sn | 17 36 08.0 | -5.2 | |
| | comp=N,22nm,3.1s,SNR=7.9 | | | | | | | | |
| **ESAC** | **San Caprasio** | **7.33** | **43** | P | | **Pn** | **17 34 51.1** | **+1.0** | |
| | comp=N,2.0nm,2.4s,SNR=7.9 | | | | | | | | |
| **YSOS** | **Sos del Rey Ca** | **7.51** | **36** | P | | **Pn** | **17 34 53.8** | **+1.3** | |
| | comp=N,11nm,3.8s,SNR=7.9 | | | | | | | | |
| YSOS | | | | S | | Sn | 17 36 11.9 | -5.8 | |
| | comp=N,9.2nm,1.5s,SNR=7.9 | | | | | | | | |
| **YSOS** | **Sos del Rey Ca** | **7.51** | **36** | P | | **Pn** | **17 34 53.8** | **+1.3** | |
| | comp=N,11nm,3.8s,SNR=7.9 | | | | | | | | |
| **YASP** | **Aspurt** | **7.71** | **35** | P | | **Pn** | **17 34 56.6** | **+1.3** | |
| | comp=N,16nm,1.5s,SNR=7.9 | | | | | | | | |
| YASP | | | | S | | Sn | 17 36 15.9 | -6.8 | |
| | comp=N,3.6nm,0.8s,SNR=7.9 | | | | | | | | |
| **YASP** | **Aspurt** | **7.71** | **35** | P | | **Pn** | **17 34 56.6** | **+1.3** | |
| | comp=N,16nm,1.5s,SNR=7.9 | | | | | | | | |
| **YBER** | **Berdun** | **7.71** | **37** | P | | **Pn** | **17 34 55.1** | **-0.2** | |
| | comp=N,23nm,1.5s,SNR=7.9 | | | | | | | | |
| YBER | | | | S | | Sn | 17 36 17.4 | -5.3 | |
| | comp=N,39nm,2.2s,SNR=7.9 | | | | | | | | |
| **YBER** | **Berdun** | **7.71** | **37** | P | | **Pn** | **17 34 55.1** | **-0.2** | |
| | comp=N,23nm,1.5s,SNR=7.9 | | | | | | | | |
| **YSIG** | **Sigues** | **7.72** | **36** | P | | **Pn** | **17 34 56.8** | **+1.3** | |
| | comp=N,8.8nm,4.5s,SNR=7.9 | | | | | | | | |
| **YSIG** | **Sigues** | **7.72** | **36** | P | | **Pn** | **17 34 56.8** | **+1.3** | |
| | comp=N,8.8nm,4.5s,SNR=7.9 | | | | | | | | |
| **IELO** | **Elcoad** | **7.76** | **34** | P | | **Pn** | **17 34 56.7** | **+0.6** | |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | |
| IELO | | | | S | | Sn | 17 36 18.4 | -5.7 | |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | |
| **IELO** | **Elcoad** | **7.76** | **34** | P | | **Pn** | **17 34 56.7** | **+0.6** | |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | |
| **ELIZ** | **Elizondo** | **7.89** | **32** | P | | **Pn** | **17 34 58.6** | **+0.8** | |
| | comp=N,0.8nm,0.2s,SNR=7.9 | | | | | | | | |
| **ELIZ** | **Elizondo** | **7.89** | **32** | P | | **Pn** | **17 34 58.6** | **+0.8** | |
| | comp=N,0.8nm,0.2s,SNR=7.9 | | | | | | | | |
| **EALK** | **Alkurruntz** | **7.95** | **31** | P | | **Pn** | **17 34 59.7** | **+1.2** | |
| | comp=N,2.7nm,0.2s,SNR=9.2 | | | | | | | | |
| EALK | | | | S | | Sn | 17 36 22.5 | -5.9 | |
| | comp=N,0.4nm,0.1s,SNR=6.9 | | | | | | | | |
| **EALK** | **Alkurruntz** | **7.95** | **31** | P | | **Pn** | **17 34 59.7** | **+1.2** | |
| | comp=N,2.7nm,0.2s,SNR=9.2 | | | | | | | | |
| **SJPF** | **Ste Jean** | **7.98** | **33** | *e*Pn | | **Pn** | **17 35 00.3** | **+1.3** | |
| SJPF | | | | *e*Sn | | Sn | 17 36 24.2 | -5.2 | |
| | comp=N,2.9nm,0.3s | | | | | | | | |
| **SJPF** | **Ste Jean** | **7.98** | **33** | P | | **Pn** | **17 35 00.3** | **+1.3** | |
| SJPF | | | | S | | Sn | 17 36 24.2 | -5.2 | |
| | comp=N,1.4nm,0.3s | | | | | | | | |
| **SJPF** | **Ste Jean** | **7.98** | **33** | P | | **Pn** | **17 35 00.3** | **+1.3** | |
| **EPOB** | **Poblet** | **8.01** | **51** | P | | **Pn** | **17 34 59.6** | **+0.2** | |
| | comp=N,2.3nm,3.8s,SNR=7.9 | | | | | | | | |
| **EPOB** | **Poblet** | **8.01** | **51** | P | | **Pn** | **17 34 59.6** | **+0.2** | |
| | comp=N,2.3nm,3.8s,SNR=7.9 | | | | | | | | |
| **ETSF** | **Etsaut** | **8.12** | **37** | *e*Pn | | **Pn** | **17 35 01.5** | **+0.5** | |
| ETSF | | | | *e*Sn | | **Sn** | **17 36 29.2** | **-3.7** | |
| | comp=N,5.4nm,0.5s | | | | | | | | |
| **ETSF** | **Etsaut** | **8.12** | **37** | P | | **Pn** | **17 35 01.5** | **+0.5** | |
| **ETSF** | **Etsaut** | **8.12** | **37** | P | | **Pn** | **17 35 01.5** | **+0.5** | |
| ETSF | | | | *e*Sn | | Sn | **17 36 29.2** | **-3.7** | |
| | comp=N,2.7nm,0.5s | | | | | | | | |
| **ATE** | **Arette** | **8.20** | **35** | P | | **Pn** | **17 35 02.6** | **+0.6** | |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | | | |
| ATE | | | | S | | Sn | 17 36 28.2 | -6.5 | |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | | |
| **ATE** | **Arette** | **8.20** | **35** | P | | **Pn** | **17 35 02.6** | **+0.6** | |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | | | |
| **CSOR** | **Sort** | **8.65** | **45** | P | | **Pn** | **17 35 08.8** | **+0.5** | |
| | comp=N,0.6nm,0.1s,SNR=6.7 | | | | | | | | |
| CSOR | | | | S | | Sn | 17 36 39.9 | -6.1 | |
| | comp=N,3.0nm,5.3s,SNR=7.9 | | | | | | | | |
| **CSOR** | **Sort** | **8.65** | **45** | P | | **Pn** | **17 35 08.8** | **+0.5** | |
| | comp=N,0.6nm,0.1s,SNR=6.7 | | | | | | | | |
| **EPF** | **Esparros** | **8.67** | **39** | *e*Pn | | **Pn** | **17 35 09.4** | **+0.9** | |
| EPF | | | | *e*Sn | | Sn | 17 36 41.6 | -4.7 | |
| | comp=N,1.7nm,0.3s | | | | | | | | |
| **EPF** | **Esparros** | **8.67** | **39** | P | | **Pn** | **17 35 09.4** | **+0.9** | |
| **EPF** | **Esparros** | **8.67** | **39** | P | | **Pn** | **17 35 09.4** | **+0.9** | |

**IDC 21 17:33:03.0±9.9, 33°.16N×89°.73E, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.4/52, mbtmp3.8/3, Error ellipse: s-maj=588.9km s-min=30.3km az=69.0, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZALV** | **Zalesovo Beam** | **21.07** | **352** | P | P | 17 37 48.6 | 0.0 |
| | 1.7nm,0.5s,baz=172,slow=11,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **67.84** | **134** | P | P | 17 44 03.1 | -0.1 |
| | 0.7nm,0.6s,baz=324,slow=5.8,SNR=9.9

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.24** | **237** | Pg | Pn | 17 53 31.4 | -5.3 |
| | 1µm,0.3s,baz=43,slow=1.7,SNR=462 | | | | | | |
| **LPIG** | **La Paz** | **1.24** | **237** | Pg | Pn | 17 53 31.4 | -5.3 |
| **SLBS** | **Sierra La Lagu** | **1.30** | **213** | *e*Pn | Pn | 17 53 32.8 | -4.9 |
| **MAIG** | **Mazatlaan** | **2.98** | **122** | *e*P | **Pn** | **17 53 57.5** | **-3.1** |
| MAIG | | | | *e*S | **Sn** | **17 54 34.5** | **-1.6** |
| **MAIG** | **Mazatlaan** | **2.98** | **122** | *e*P | **Pn** | **17 53 57.5** | **-3.1** |
| MAIG | | | | *e*S | **Sn** | **17 54 34.5** | **-1.6** |
| **SRIG** | **Santa Rosalia** | **3.74** | **313** | *e*P | Pn | 17 54 06.5 | -4.6 |
| SRIG | | | | *e*S | Sn | 17 54 48.5 | -6.4 |
| **SRIG** | **Santa Rosalia** | **3.74** | **313** | *e*P | Pn | 17 54 06.5 | -4.6 |
| SRIG | | | | *e*S | Sn | 17 54 48.5 | -6.4 |
| **HPIG** | | **3.82** | **55** | *e*P | **Pn** | **17 54 11.5** | **-0.9** |
| HPIG | | | | *e*S | **Sn** | **17 54 59.1** | **+1.9** |
| **HPIG** | | **3.82** | **55** | *e*P | **Pn** | **17 54 11.5** | **-0.9** |
| HPIG | | | | *e*S | **Sn** | **17 54 59.1** | **+1.9** |
| **HSIG** | | **4.50** | **340** | *e*P | Pn | 17 54 18.5 | -3.1 |
| HSIG | | | | *e*S | **Sn** | **17 55 09.9** | **-3.9** |
| **HSIG** | | **4.50** | **340** | *e*P | Pn | 17 54 18.5 | -3.1 |
| HSIG | | | | *e*S | **Sn** | **17 55 09.9** | **-3.9** |
| **ANIG** | **Ahuacatlan** | **5.67** | **130** | *e*P | **Pn** | **17 54 36.1** | **-1.8** |
| ANIG | | | | *e*S | **Sn** | **17 55 39.5** | **-3.4** |
| **ANIG** | **Ahuacatlan** | **5.67** | **130** | *e*P | **Pn** | **17 54 36.1** | **-1.8** |
| ANIG | | | | *e*S | **Sn** | **17 55 39.5** | **-3.4** |
| **ZAIG** | **Zacatecas** | **6.38** | **107** | *i* P | **Pn** | **17 54 46.7** | **-0.9** |
| ZAIG | | | | *e*S | **Sn** | **17 56 00.2** | **-0.2** |
| **ZAIG** | **Zacatecas** | **6.38** | **107** | *i* P | **Pn** | **17 54 46.7** | **-0.9** |
| ZAIG | | | | *e*S | **Sn** | **17 56 00.2** | **-0.2** |
| **CJM** | **Chamela** | **6.51** | **143** | *e*P | **Pn** | **17 54 47.0** | **-2.2** |
| CJM | | | | *e*S | **Sn** | **17 56 01.2** | **-2.0** |
| **CJM** | **Chamela** | **6.51** | **143** | *e*P | **Pn** | **17 54 47.0** | **-2.2** |
| CJM | | | | *e*S | **Sn** | **17 56 01.2** | **-2.0** |
| **TXAR** | **Lajitas Array** | **6.68** | **46** | Pn | **Pn** | **17 54 49.5** | **-2.1** |
| | 2.4nm,0.3s,baz=225,slow=14,SNR=24 | | | | | | |
| TXAR | | | | Pg | **Pg** | **17 55 20.2** | **-1.5** |
| | 25nm,0.3s,baz=228,slow=14,SNR=12 | | | | | | |
| TXAR | | | | Lg | Lg | 17 56 35.5 | |
| | baz=221,slow=32,SNR=2.7 | | | | | | |
| TXAR | | | | LR | LR | 17 57 18.6 | |
| | comp=Z,331µm,20.0s,baz=0.0,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.68** | **46** | Pn | **Pn** | **17 54 49.5** | **-2.1** |
| TXAR | | | | Pg | **Pg** | **17 55 20.2** | **-1.5** |
| TXAR | | | | Lg | Lg | 17 56 35.5 | |
| **TUC** | **Tucson** | **7.63** | **350** | P | **Pn** | **17 55 03.2** | **-1.4** |
| TUC | | | | pmax | pmax | | |
| | comp=Z,370nm,0.8s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.65** | **25** | P | **Pn** | **17 55 03.6** | **-1.3** |
| | baz=7.8,SNR=138 | | | | | | |
| **121A** | **Cookes Peak, D** | **7.81** | **9** | P | **Pn** | **17 55 06.2** | **-1.0** |
| | baz=7.9,SNR=267 | | | | | | |
| **121A** | **Cookes Peak, D** | **7.81** | **9** | *e*Pn | **Pn** | **17 55 05.5** | **-1.7** |
| | comp=Z,65nm,3.6s | | | | | | |
| **214A** | **Organ Pipe Nat** | **7.83** | **337** | P | **Pn** | **17 55 05.9** | **-1.4** |
| | baz=7.9,SNR=194 | | | | | | |
| **214A** | **Organ Pipe Nat** | **7.83** | **337** | *e*Pn | **Pn** | **17 55 05.3** | **-2.0** |
| | comp=Z,82nm,3.6s | | | | | | |
| **529A** | **Stev Forest Ra** | **8.15** | **48** | P | **Pn** | **17 55 11.6** | **-0.1** |
| | baz=8.2,SNR=52 | | | | | | |
| **IGIG** | **Irapuato, Guan** | **8.28** | **117** | *i* P | **Pn** | **17 55 13.2** | **-0.5** |
| IGIG | | | | *e*S | **Sn** | **17 56 49.7** | **+2.6** |
| **SPIG** | **San Pedro Mart** | **8.36** | **320** | *e*P | **Pn** | **17 55 14.8** | **0.0** |
| SPIG | | | | *e*S | **Sn** | **17 56 46.1** | **-3.1** |
| **SPIG** | **San Pedro Mart** | **8.36** | **320** | *e*P | **Pn** | **17 55 14.8** | **0.0** |
| SPIG | | | | *e*S | **Sn** | **17 56 46.1** | **-3.1** |
| **GDL2** | **Guadalupe Moun** | **8.51** | **29** | *e*Pn | **Pn** | **17 55 17.0** | **+0.2** |
| | comp=Z,5µm,0.8s | | | | | | |
| **429A** | **Davenport Ranc** | **8.68** | **46** | P | **Pn** | **17 55 19.3** | **+0.2** |
| | baz=8.7,SNR=128 | | | | | | |
| **530A** | **J-C Ranch, Com** | **8.77** | **51** | P | **Pn** | **17 55 20.2** | **-0.1** |
| | baz=8.8,SNR=27 | | | | | | |
| **CLNB** | **Carlsbad** | **8.78** | **31** | *e*Pn | **Pn** | **17 55 21.2** | **+0.8** |
| | comp=Z,1µm,1.5s | | | | | | |
| **LNIG** | **Linares** | **8.82** | **87** | *i* P | **Pn** | **17 55 20.5** | **-0.5** |
| LNIG | | | | *e*S | **Sn** | **17 57 02.5** | **+2.3** |
| **LNIG** | **Linares** | **8.82** | **87** | *i* P | **Pn** | **17 55 20.5** | **-0.5** |
| LNIG | | | | *e*S | **Sn** | **17 57 02.5** | **+2.3** |
| **631A** | **Perdido Creek** | **8.94** | **57** | P | **Pn** | **17 55 22.2** | **-0.3** |
| | baz=9.0,SNR=52 | | | | | | |
| **832A** | **Faith Ranch, C** | **8.94** | **65** | P | **Pn** | **17 55 22.1** | **-0.6** |
| | baz=9.0,SNR=20 | | | | | | |
| **MOIG** | **Morelia** | **8.97** | **123** | *e*P | **Pn** | **17 55 22.9** | **-0.4** |
| MOIG | | | | *e*S | **Sn** | **17 57 03.7** | **-0.6** |
| **MOIG** | **Morelia** | **8.97** | **123** | *e*P | **Pn** | **17 55 22.9** | **-0.4** |
| MOIG | | | | *e*S | **Sn** | **17 57 03.7** | **-0.6** |
| **732A** | **Laxson Ranch,** | **9.11** | **62** | P | **Pn** | **17 55 24.5** | **-0.4** |
| | baz=9.1,SNR=24 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **9.21** | **42** | P | **Pn** | **17 55 27.5** | **+1.2** |
| | baz=9.3,SNR=7.0 | | | | | | |
| **430A** | **Baggett Ranch,** | **9.22** | **48** | P | **Pn** | **17 55 27.5** | **+1.0** |
| | baz=9.3,SNR=31 | | | | | | |
| **228A** | **UT Block 9, Go** | **9.32** | **37** | P | **Pn** | **17 55 26.3** | **-1.5** |
| | baz=9.4,SNR=6.1 | | | | | | |
| **933A** | **Laredo** | **9.32** | **70** | P | **Pn** | **17 55 26.8** | **-1.0** |
| | baz=9.3,SNR=42 | | | | | | |
| **531A** | **Rocksprings** | **9.35** | **53** | P | **Pn** | **17 55 29.2** | **+1.0** |
| | baz=9.4,SNR=32 | | | | | | |
| **CPRX** | **Cap Rock** | **9.44** | **28** | *e*Pn | **Pn** | **17 55 29.9** | **+0.4** |
| | comp=Z,14nm,0.2s | | | | | | |
| **833A** | **Chaparral WMA,** | **9.44** | **66** | P | **Pn** | **17 55 28.7** | **-0.7** |
| | baz=9.5,SNR=20 | | | | | | |
| **Y22D** | **iRIS PASSCAL I** | **9.46** | **11** | P | **Pn** | **17 55 30.6** | **+0.8** |
| | baz=9.6,SNR=55 | | | | | | |
| **BNM** | **Barren Site** | **9.59** | **13** | *e*Pn | **Pn** | **17 55 32.1** | **+0.5** |
| **632A** | **Uvalde** | **9.59** | **59** | P | **Pn** | **17 55 31.9** | **+0.4** |
| | baz=9.6,SNR=32 | | | | | | |
| **431A** | **Sonora** | **9.59** | **50** | P | **Pn** | **17 55 33.3** | **+1.7** |
| | baz=9.7,SNR=33 | | | | | | |
| **GLA** | **Glamis** | **9.61** | **330** | P | **Pn** | **17 55 32.0** | **+0.3** |
| GLA | | | | pmax | pmax | | |
| | comp=Z,430nm,0.9s | | | | | | |
| **GLA** | **Glamis** | **9.61** | **330** | P | **Pn** | **17 55 31.3** | **-0.4** |
| | baz=9.7,SNR=140 | | | | | | |
| **229A** | **Bryant Ranch,** | **9.65** | **41** | P | **Pn** | **17 55 33.6** | **+1.2** |
| | baz=9.7 | | | | | | |
| **330A** | **Mertzon** | **9.66** | **45** | P | **Pn** | **17 55 34.1** | **+1.6** |
| | baz=9.7,SNR=26 | | | | | | |
| **733A** | **Divot King Ran** | **9.66** | **64** | P | **Pn** | **17 55 32.5** | **+0.1** |
| | baz=9.7,SNR=11 | | | | | | |
| **034A** | **Hebbronville** | **9.71** | **74** | P | **Pn** | **17 55 33.5** | **+0.4** |
| | baz=9.7,SNR=70 | | | | | | |
| **128A** | **Castleberry Fa** | **9.76** | **35** | P | **Pn** | **17 55 33.4** | **-0.5** |
| | baz=9.9,SNR=46 | | | | | | |
| **532A** | **Rocksprings** | **9.80** | **55** | P | **Pn** | **17 55 35.5** | **+1.1** |
| | baz=9.8,SNR=22 | | | | | | |
| **YUH** | **Yuha Desert** | **9.82** | **324** | *e*Pn | **Pn** | **17 55 37.1** | **+2.6** |
| **IBP** | **Imperial Bould** | **9.92** | **324** | P | **Pn** | **17 55 37.3** | **+1.3** |
| | baz=10.0,SNR=136 | | | | | | |
| **934A** | **Benavides** | **9.97** | **71** | P | **Pn** | **17 55 36.2** | **-0.5** |
| | baz=10.0,SNR=14 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **9.98** | **326** | P | **Pn** | **17 55 36.9** | **+0.1** |
| | baz=10,SNR=67 | | | | | | |
| **230A** | **Sterling City** | **10.02** | **43** | P | **Pn** | **17 55 39.2** | **+1.7** |
| | baz=10,SNR=15 | | | | | | |
| **CRR** | **Carrizo Plain** | **10.03** | **325** | *e*Pn | **Pn** | **17 55 40.5** | **+3.1** |
| **633A** | **Saathoff Ranch** | **10.05** | **60** | P | **Pn** | **17 55 38.4** | **+0.7** |
| | baz=10,SNR=15 | | | | | | |
| **JCT** | **Junction City** | **10.06** | **54** | P | **Pn** | **17 55 40.1** | **+2.2** |
| JCT | | | | pmax | pmax | | |
| | comp=Z,2µm,1.5s | | | | | | |
| **JCT** | **Junction City** | **10.06** | **54** | P | **Pn** | **17 55 38.9** | **+1.0** |
| | baz=10,SNR=19 | | | | | | |
| **Y12C** | **Blythe** | **10.08** | **334** | P | **Pn** | **17 55 37.8** | **-0.3** |
| | baz=10,SNR=246 | | | | | | |
| **834A** | **Tilden** | **10.08** | **68** | P | **Pn** | **17 55 37.3** | **-0.9** |
| | baz=10,SNR=29 | | | | | | |
| **331A** | **San Angelo** | **10.09** | **48** | P | **Pn** | **17 55 39.5** | **+1.1** |
| | baz=10,SNR=56 | | | | | | |
| **129A** | **Stewart Farms,** | **10.11** | **38** | P | **Pn** | **17 55 38.0** | **-0.6** |
| | baz=10 | | | | | | |
| **ZIIG** | **Zihuatanejo** | **10.13** | **133** | *i* P | **Pn** | **17 55 39.9** | **+1.0** |
| ZIIG | | | | *e*S | **Sn** | **17 57 31.5** | **-1.0** |
| **ZIIG** | **Zihuatanejo** | **10.13** | **133** | *i* P | **Pn** | **17 55 39.9** | **+1.0** |
| ZIIG | | | | *e*S | **Sn** | **17 57 31.5** | **-1.0** |
| **035Z** | **Hargill** | **10.16** | **78** | P | **Pn** | **17 55 39.9** | **+0.6** |
| | baz=10 | | | | | | |
| **035A** | **Encino** | **10.20** | **76** | P | **Pn** | **17 55 40.2** | **+0.4** |
| | baz=10,SNR=16 | | | | | | |
| **432A** | **Menard** | **10.28** | **52** | P | **Pn** | **17 55 42.2** | **+1.2** |
| | baz=10,SNR=30 | | | | | | |
| **W18A** | **Petrified Fore** | **10.31** | **357** | *e*Pn | **Pn** | **17 55 43.7** | **+2.2** |
| | comp=Z,113nm,0.6s | | | | | | |
| **734A** | **La Parita Cree** | **10.31** | **65** | P | **Pn** | **17 55 41.3** | **+0.1** |
| | baz=10,SNR=12 | | | | | | |
| **Z28A** | **Tucker Farm, M** | **10.34** | **33** | P | **Pn** | **17 55 41.8** | **-0.1** |
| | baz=10,SNR=28 | | | | | | |
| **ANMO** | **Albuquerque** | **10.39** | **12** | Pn | **Pn** | **17 55 42.5** | **-0.2** |
| | comp=Z,3.1nm,0.3s,baz=196,slow=13,SNR=286 | | | | | | |
| ANMO | | | | Lg | Lg | 17 58 35.0 | |
| | comp=Z,2.2nm,0.3s,baz=320,slow=14,SNR=3.0 | | | | | | |
| ANMO | | | | LR | LR | 17 59 39.3 | |
| | comp=Z,639µm,18.1s,baz=192,slow=38 | | | | | | |
| **ANMO** | **Albuquerque** | **10.39** | **12** | Pn | **Pn** | **17 55 42.5** | **-0.2** |
| ANMO | | | | Lg | Lg | 17 58 35.0 | |
| **BC3** | **Big Chuckawall** | **10.40** | **330** | P | **Pn** | **17 55 43.5** | **+0.9** |
| | baz=10,SNR=146 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **10.42** | **337** | P | **Pn** | **17 55 43.0** | **+0.3** |
| | baz=10,SNR=145 | | | | | | |
| **533A** | **Kerrville** | **10.43** | **57** | P | **Pn** | **17 55 43.7** | **+0.7** |
| | baz=10,SNR=17 | | | | | | |
| **ARIG** | **Puente Sto Nin** | **10.46** | **127** | *i* P | **Pn** | **17 55 46.0** | **+2.6** |
| ARIG | | | | *e*S | **Sn** | **17 57 42.9** | **+2.4** |
| **231A** | **Bronte** | **10.56** | **46** | P | **Pn** | **17 55 46.2** | **+1.4** |
| | baz=11,SNR=39 | | | | | | |
| **130A** | **Snyder** | **10.60** | **41** | P | **Pn** | **17 55 47.4** | **+2.0** |
| | baz=11,SNR=29 | | | | | | |
| **332A** | **Millersview** | **10.60** | **50** | P | **Pn** | **17 55 46.9** | **+1.5** |
| | baz=11,SNR=24 | | | | | | |
| **109C** | **Camp Elliot, M** | **10.65** | **321** | P | **Pn** | **17 55 47.3** | **+1.4** |
| | baz=11,SNR=17 | | | | | | |
| 109C | | | | S | **Sn** | **17 57 49.2** | **+4.2** |
| | baz=11 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **10.67** | **36** | P | **Pn** | **17 55 47.0** | **+0.6** |
| | baz=11,SNR=25 | | | | | | |
| **634A** | **China Grove, S** | **10.67** | **62** | P | **Pn** | **17 55 46.5** | **+0.2** |
| | baz=11 | | | | | | |
| **IRM** | **Iron Mountain** | **10.69** | **332** | P | **Pn** | **17 55 47.0** | **+0.5** |
| | baz=11,SNR=313 | | | | | | |
| **433A** | **Art** | **10.72** | **54** | P | **Pn** | **17 55 47.9** | **+0.9** |
| | baz=11,SNR=37 | | | | | | |
| **835A** | **Beeville** | **10.74** | **69** | P | **Pn** | **17 55 46.3** | **-0.9** |
| | baz=11 | | | | | | |
| **UNM** | **Universidad Na** | **10.74** | **118** | *e*P | Pn | 17 55 51.4 | +3.9 |
| **UNM** | **Universidad Na** | **10.74** | **118** | *e*P | Pn | 17 55 51.4 | +3.9 |
| **UNM** | **Universidad Na** | **10.74** | **118** | *e*P | Pn | 17 55 51.4 | +3.9 |
| **534A** | **Blanco** | **10.84** | **59** | P | **Pn** | **17 55 49.4** | **+0.7** |
| | baz=11,SNR=30 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.85** | **326** | Pn | **Pn** | **17 55 50.0** | **+1.3** |
| | comp=Z,2.6nm,0.3s,baz=142,slow=14,SNR=246 | | | | | | |
| PFO | | | | Sn | **Sn** | **17 57 50.3** | **+0.2** |
| | baz=184,slow=19,SNR=1.4 | | | | | | |
| PFO | | | | Lg | Lg | 17 59 06.8 | |
| | comp=Z,0.1nm,0.3s,baz=72,slow=19,SNR=2.6 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.85** | **326** | Pn | **Pn** | **17 55 51.5** | **+2.7** |
| | comp=Z,5µm,1.8s | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.85** | **326** | Pn | **Pn** | **17 55 50.0** | **+1.3** |
| PFO | | | | Sn | **Sn** | **17 57 50.3** | **+0.2** |
| PFO | | | | Lg | Lg | 17 59 06.8 | |
| **WUAZ** | **Wupatki** | **10.86** | **350** | P | **Pn** | **17 55 51.1** | **+2.1** |
| | baz=11,SNR=278 | | | | | | |
| **Y28A** | **McKinney Farm,** | **10.91** | **32** | P | **Pn** | **17 55 50.2** | **+0.6** |
| | baz=11,SNR=56 | | | | | | |
| **735A** | **Keedy** | **10.93** | **66** | P | **Pn** | **17 55 50.1** | **+0.3** |
| | baz=11,SNR=14 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **10.94** | **329** | P | **Pn** | **17 55 51.4** | **+1.4** |
| | baz=11,SNR=215 | | | | | | |
| **232A** | **Coleman** | **10.97** | **48** | P | **Pn** | **17 55 51.5** | **+1.1** |
| | baz=11,SNR=37 | | | | | | |
| **936A** | **North Padre Is** | **10.98** | **74** | P | **Pn** | **17 55 50.8** | **+0.3** |
| | baz=11 | | | | | | |
| **131A** | **Roby** | **11.00** | **42** | P | **Pn** | **17 55 51.5** | **+0.6** |
| | baz=11,SNR=20 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **11.01** | **38** | P | **Pn** | **17 55 50.8** | **-0.2** |
| | baz=11,SNR=24 | | | | | | |
| **PLIG** | **Platanillo** | **11.02** | **123** | *e*P | **Pn** | **17 55 54.3** | **+3.1** |
| PLIG | | | | *e*S | **Sn** | **17 57 55.8** | **+1.5** |
| **PLIG** | **Platanillo** | **11.02** | **123** | *e*P | **Pn** | **17 55 54.3** | **+3.1** |
| PLIG | | | | *e*S | **Sn** | **17 57 55.8** | **+1.5** |
| **YAIG** | **Yautepec** | **11.08** | **120** | *e*P | **Pn** | **17 55 55.1** | **+3.0** |
| YAIG | | | | *e*S | **Sn** | **17 57 50.2** | **-5.8** |
| **YAIG** | **Yautepec** | **11.08** | **120** | *e*P | **Pn** | **17 55 55.1** | **+3.0** |
| YAIG | | | | *e*S | **Sn** | **17 57 50.2** | **-5.8** |
| **333A** | **Richland Sprin** | **11.11** | **52** | P | **Pn** | **17 55 52.5** | **+0.3** |
| | baz=11,SNR=40 | | | | | | |
| **635A** | **Leesville** | **11.14** | **63** | P | **Pn** | **17 55 53.1** | **+0.4** |
| | baz=11,SNR=15 | | | | | | |
| **Y29A** | **Porterfield Fa** | **11.16** | **34** | P | **Pn** | **17 55 52.8** | **-0.2** |
| | baz=11,SNR=11 | | | | | | |
| **MEIG** | **Mezcala** | **11.22** | **126** | *i* P | **Pn** | **17 55 56.3** | **+2.5** |
| MEIG | | | | *e*S | Sn | 17 58 06.9 | +7.8 |
| **MEIG** | **Mezcala** | **11.22** | **126** | *i* P | **Pn** | **17 55 56.3** | **+2.5** |
| MEIG | | | | *e*S | Sn | 17 58 06.9 | +7.8 |
| **MURC** | **Murrieta** | **11.23** | **323** | P | **Pn** | **17 55 56.0** | **+2.1** |
| | baz=11,SNR=84 | | | | | | |
| **PPM** | **Popocatepetl** | **11.32** | **118** | *i* P | Pn | 17 55 59.4 | +3.7 |
| PPM | | | | *e*S | **Sn** | **17 58 07.4** | **+5.0** |
| **PPM** | **Popocatepetl** | **11.32** | **118** | *i* P | Pn | 17 55 59.4 | +3.7 |
| PPM | | | | *e*S | **Sn** | **17 58 07.3** | **+5.0** |
| **PPM** | **Popocatepetl** | **11.32** | **118** | *i* P | Pn | 17 55 59.4 | +3.7 |
| PPM | | | | *e*S | **Sn** | **17 58 07.3** | **+5.0** |
| **CAIG** | **El Cayaco** | **11.34** | **131** | *i* P | **Pn** | **17 55 56.2** | **+0.8** |
| CAIG | | | | *e*S | **Sn** | **17 58 03.2** | **+1.2** |
| **CAIG** | **El Cayaco** | **11.34** | **131** | *i* P | **Pn** | **17 55 56.2** | **+0.8** |
| CAIG | | | | *e*S | **Sn** | **17 58 03.2** | **+1.2** |
| **434A** | **Burnet** | **11.37** | **56** | P | **Pn** | **17 55 56.4** | **+0.6** |
| | baz=11,SNR=17 | | | | | | |
| **HDB** | **Hidalgo Marine** | **11.40** | **329** | *e*Pn | **Pn** | **17 55 54.1** | **-2.2** |
| **X28A** | **Dimmitt** | **11.43** | **30** | P | **Pn** | **17 55 56.6** | **-0.2** |
| | baz=12 | | | | | | |
| **GMRC** | **Granite Mounta** | **11.44** | **332** | P | **Pn** | **17 55 57.7** | **+0.9** |
| | baz=12,SNR=184 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **11.44** | **45** | P | **Pn** | **17 55 57.4** | **+0.7** |
| | baz=12,SNR=39 | | | | | | |
| **535A** | **Dale** | **11.55** | **61** | P | **Pn** | **17 55 59.2** | **+0.9** |
| | baz=12,SNR=14 | | | | | | |
| **233A** | **Rising Star** | **11.56** | **49** | P | **Pn** | **17 55 58.8** | **+0.4** |
| | baz=12,SNR=22 | | | | | | |
| **SCI** | **San Clemente I** | **11.57** | **317** | P | **Pn** | **17 55 59.2** | **+0.6** |
| | baz=12,SNR=23 | | | | | | |
| **736A** | **C Diamond** | **11.58** | **66** | P | **Pn** | **17 55 59.0** | **+0.3** |
| | baz=12,SNR=26 | | | | | | |
| **Y30A** | **Stafford Cattl** | **11.58** | **37** | P | **Pn** | **17 55 59.0** | **+0.3** |
| | baz=12,SNR=12 | | | | | | |
| **BBRC** | **Big Bear Solar** | **11.60** | **326** | P | **Pn** | **17 56 01.9** | **+2.7** |
| | baz=12,SNR=94 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **11.60** | **41** | P | **Pn** | **17 55 59.7** | **+0.7** |
| | baz=12,SNR=31 | | | | | | |
| **X29A** | **Tulia** | **11.61** | **32** | P | **Pn** | **17 55 59.6** | **+0.4** |
| | baz=12,SNR=36 | | | | | | |
| **334A** | **Lometa** | **11.65** | **54** | P | **Pn** | **17 56 00.2** | **+0.5** |
| | baz=12,SNR=22 | | | | | | |
| **636A** | **Smothers Creek** | **11.76** | **64** | P | **Pn** | **17 56 01.8** | **+0.7** |
| | baz=12,SNR=40 | | | | | | |
| **HEC** | **Hector,Ludlow** | **11.77** | **330** | P | **Pn** | **17 56 02.8** | **+1.4** |
| | baz=12,SNR=87 | | | | | | |
| **CIS** | **Catalina Islan** | **11.78** | **319** | P | **Pn** | **17 56 02.1** | **+0.7** |
| | baz=12,SNR=24 | | | | | | |
| **435B** | **Jarrell** | **11.87** | **57** | P | **Pn** | **17 56 03.4** | **+0.8** |
| | baz=12,SNR=12 | | | | | | |
| **133A** | **Hamilton Ranch** | **11.90** | **47** | P | **Pn** | **17 56 03.2** | **+0.1** |
| | baz=12,SNR=31 | | | | | | |
| **FMP** | **Fort Macarthur** | **11.93** | **320** | P | **Pn** | **17 56 04.4** | **+0.9** |
| | baz=12 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **11.96** | **324** | P | **Pn** | **17 56 05.7** | **+1.7** |
| | baz=12,SNR=85 | | | | | | |
| **536A** | **Bastrop** | **11.97** | **61** | P | **Pn** | **17 56 04.9** | **+0.8** |
| | baz=12 | | | | | | |
| **AMTX** | **Amarillo** | **11.97** | **31** | P | **Pn** | **17 56 04.2** | **+0.1** |
| | baz=12 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **11.99** | **38** | P | **Pn** | **17 56 05.6** | **+1.2** |
| | baz=12,SNR=43 | | | | | | |
| **Z32A** | **Haskell** | **11.99** | **43** | P | **Pn** | **17 56 05.3** | **+0.9** |
| | baz=12,SNR=62 | | | | | | |
| **X30A** | **Coker Ranch, T** | **12.03** | **35** | P | **Pn** | **17 56 05.4** | **+0.6** |
| | baz=12,SNR=39 | | | | | | |
| **737A** | **Port Lavaca** | **12.04** | **68** | P | **Pn** | **17 56 04.0** | **-1.1** |
| | baz=12 | | | | | | |
| **W28A** | **Vega** | **12.05** | **28** | P | **Pn** | **17 56 05.1** | **-0.1** |
| | baz=12 | | | | | | |
| **234A** | **Clairette** | **12.08** | **51** | P | **Pn** | **17 56 05.6** | **0.0** |
| | baz=12,SNR=34 | | | | | | |
| **TUQ** | **Turquoise Moun** | **12.11** | **333** | P | **Pn** | **17 56 07.9** | **+1.8** |
| | baz=12,SNR=160 | | | | | | |
| **RRX** | **Edison Barstow** | **12.13** | **328** | P | **Pn** | **17 56 08.7** | **+2.5** |
| | baz=12,SNR=33 | | | | | | |
| **MWC** | **Mount Wilson** | **12.17** | **323** | P | **Pn** | **17 56 09.0** | **+2.1** |
| MWC | | | | pmax | pmax | | |
| | comp=Z,3µm,1.8s | | | | | | |
| **MWC** | **Mount Wilson** | **12.17** | **323** | *e*Pn | **Pn** | **17 56 08.5** | **+1.6** |
| | comp=Z,67nm,3.6s | | | | | | |
| **W29A** | **Amarillo** | **12.19** | **31** | P | **Pn** | **17 56 07.0** | **-0.1** |
| | baz=12,SNR=17 | | | | | | |
| **PASC** | **Pasadena Art C** | **12.20** | **322** | *e*Pn | **Pn** | **17 56 08.6** | **+1.3** |
| **335A** | **Moody** | **12.22** | **55** | P | **Pn** | **17 56 08.0** | **+0.5** |
| | baz=12,SNR=18 | | | | | | |
| **V27A** | **Dan Oppiter Fa** | **12.22** | **25** | P | **Pn** | **17 56 08.7** | **+1.1** |
| | baz=12,SNR=58 | | | | | | |
| **TLIG** | **Tlapa** | **12.23** | **124** | *i* P | Pn | 17 56 11.2 | +3.5 |
| TLIG | | | | *i* S | **Sn** | **17 58 28.0** | **+4.0** |
| **637A** | **Eagle Lake** | **12.34** | **65** | P | **Pn** | **17 56 09.5** | **+0.4** |
| | baz=12,SNR=15 | | | | | | |
| **DECC** | **Green Verdugo** | **12.34** | **322** | P | **Pn** | **17 56 11.4** | **+2.3** |
| | baz=12,SNR=11 | | | | | | |
| **SNCC** | **San Nicolas Is** | **12.37** | **315** | *e*Pn | **Pn** | **17 56 09.8** | **+0.3** |
| | comp=Z,1µm,1.3s | | | | | | |
| **GSC** | **Goldstone** | **12.38** | **330** | P | **Pn** | **17 56 12.0** | **+2.2** |
| GSC | | | | pmax | pmax | | |
| | comp=Z,990nm,1.3s | | | | | | |
| **GSC** | **Goldstone** | **12.38** | **330** | P | **Pn** | **17 56 11.6** | **+1.9** |
| | baz=12,SNR=320 | | | | | | |
| **MVCO** | **Mesa Verde** | **12.40** | **3** | P | **Pn** | **17 56 11.9** | **+1.8** |
| | baz=12,SNR=81 | | | | | | |
| **MVCO** | **Mesa Verde** | **12.40** | **3** | *e*P | **Pn** | **17 56 11.4** | **+1.4** |
| **Z33A** | **Whitaker Ranch** | **12.43** | **45** | P | **Pn** | **17 56 10.9** | **+0.5** |
| | baz=12,SNR=45 | | | | | | |
| **134A** | **White-Moore Ra** | **12.44** | **49** | P | **Pn** | **17 56 10.3** | **-0.2** |
| | baz=12,SNR=20 | | | | | | |
| **V28A** | **Channing** | **12.46** | **27** | P | **Pn** | **17 56 11.9** | **+1.1** |
| | baz=13,SNR=16 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **12.47** | **59** | P | **Pn** | **17 56 10.9** | **0.0** |
| | baz=12 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **12.49** | **40** | P | **Pn** | **17 56 11.7** | **+0.4** |
| | baz=13,SNR=12 | | | | | | |
| **WHTX** | **Lake Whitney** | **12.56** | **53** | P | **Pn** | **17 56 12.4** | **+0.3** |
| | baz=13,SNR=24 | | | | | | |
| **WHTX** | **Lake Whitney** | **12.56** | **53** | *e*Pn | **Pn** | **17 56 11.4** | **-0.8** |
| **EKU** | **East Kanab** | **12.57** | **348** | *e*Pn | **Pn** | **17 56 14.5** | **+2.1** |
| **537A** | **Green Hill Far** | **12.57** | **62** | P | **Pn** | **17 56 13.0** | **+0.6** |
| | baz=13,SNR=8.7 | | | | | | |
| **X31A** | **McDonald Ranch** | **12.64** | **37** | P | **Pn** | **17 56 13.1** | **-0.2** |
| | baz=13,SNR=34 | | | | | | |
| **SHOC** | **Shoshone** | **12.65** | **333** | P | **Pn** | **17 56 15.7** | **+2.3** |
| | baz=13,SNR=202 | | | | | | |
| **BLG** | **Laguna Peak** | **12.66** | **319** | P | **Pn** | **17 56 14.6** | **+1.1** |
| | baz=13,SNR=6.0 | | | | | | |
| **TPIG** | **Tehuac#an** | **12.68** | **118** | *i* P | Pn | 17 56 18.2 | +4.2 |
| TPIG | | | | *e*S | **Sn** | **17 58 40.0** | **+4.9** |
| **TPIG** | **Tehuac#an** | **12.68** | **118** | *i* P | Pn | 17 56 18.2 | +4.2 |
| TPIG | | | | *e*S | **Sn** | **17 58 40.0** | **+4.9** |
| **336A** | **Riesel** | **12.71** | **56** | P | **Pn** | **17 56 14.6** | **+0.4** |
| | baz=13,SNR=18 | | | | | | |
| **738A** | **Farr-Stevens R** | **12.73** | **69** | P | **Pn** | **17 56 14.0** | **-0.5** |
| | baz=13 | | | | | | |
| **W30A** | **Crocket Farms** | **12.75** | **34** | P | **Pn** | **17 56 14.6** | **-0.2** |
| | baz=13 | | | | | | |
| **U27A** | **Thompson Grove** | **12.81** | **24** | P | **Pn** | **17 56 17.0** | **+1.3** |
| | baz=13,SNR=125 | | | | | | |
| **OSI** | **Osito Adit** | **12.83** | **322** | P | **Pn** | **17 56 18.1** | **+2.3** |
| | baz=13,SNR=25 | | | | | | |
| **LVIG** | **Laguna Verde** | **12.84** | **111** | *i* P | **Pn** | **17 56 15.1** | **-0.9** |
| LVIG | | | | *i* S | **Sn** | **17 58 44.1** | **+5.3** |
| **LVIG** | **Laguna Verde** | **12.84** | **111** | *i* P | **Pn** | **17 56 15.1** | **-0.9** |
| LVIG | | | | *i* S | **Sn** | **17 58 44.1** | **+5.3** |
| **V29A** | **Stinnett** | **12.87** | **29** | P | **Pn** | **17 56 16.6** | **+0.2** |
| | baz=13 | | | | | | |
| **X32A** | **Elmer** | **12.88** | **40** | P | **Pn** | **17 56 17.0** | **+0.5** |
| | baz=13,SNR=33 | | | | | | |
| **135A** | **Vickery Place,** | **12.90** | **50** | P | **Pn** | **17 56 15.9** | **-0.8** |
| | baz=13 | | | | | | |
| **HKT** | **Hockley** | **12.92** | **64** | P | **Pn** | **17 56 16.5** | **-0.5** |
| HKT | | | | pmax | pmax | | |
| | comp=Z,3µm,2.1s | | | | | | |
| **BSC** | **Santa Cruz Isl** | **12.93** | **318** | P | **Pn** | **17 56 18.4** | **+1.3** |
| | baz=13,SNR=20 | | | | | | |
| **LRMC** | **Laurel Mountai** | **12.95** | **327** | P | **Pn** | **17 56 19.8** | **+2.3** |
| | baz=13,SNR=1000 | | | | | | |
| **T25A** | **Trinidad** | **12.97** | **17** | P

baz=14
**CWC Cottonwood Cre** 13.91 329 P Pn 17 56 33.4 +2.8
baz=14,SNR=200
**MSU Marysvale** 13.92 350 P Pn 17 56 32.9 +2.0
MSU pmax pmax
comp=Z,1µm,1.5s
**S27A Las Animas** 13.93 21 P Pn 17 56 32.6 +1.7
baz=14,SNR=44
**VES Vestal, Richgr** 13.94 325 P Pn 17 56 33.0 +2.1
baz=14,SNR=84
**Y35A Marietta** 13.94 47 P Pn 17 56 29.9 -1.1
baz=14,SNR=14
**V32A Arapaho** 13.97 36 P Pn 17 56 32.3 +1.0
baz=14,SNR=30
**Z36A Blue Ridge** 13.98 50 P Pn 17 56 30.9 -0.6
baz=14,SNR=20
**GRAC Grapevine Rang** 14.05 332 P Pn 17 56 35.3 +2.8
baz=14,SNR=509
**U31A Nine Bar Ranch** 14.05 33 P Pn 17 56 32.4 -0.1
baz=14
**T29A Hugoton** 14.05 27 P Pn 17 56 32.9 +0.4
baz=14,SNR=18
**SMMC Simmler** 14.05 321 P Pn 17 56 33.9 +1.4
baz=14,SNR=63
**439A Center Grove,** 14.08 62 P Pn 17 56 31.8 -1.1
baz=14
**137A Heron Place, G** 14.11 53 P Pn 17 56 32.5 -0.7
baz=14,SNR=12
**S28A Manter** 14.19 24 P Pn 17 56 35.5 +1.0
baz=14,SNR=10
**X35A Drake** 14.29 45 P Pn 17 56 34.1 -1.6
baz=14,SNR=31
**T30A Plains** 14.29 29 P Pn 17 56 34.4 -1.4
baz=14
**238A Jacksonville** 14.30 57 P Pn 17 56 34.5 -1.4
baz=14
**SRU San Rafael** 14.33 356 P Pn 17 56 37.4 +1.0
SRU pmax pmax
comp=Z,2µm,1.7s
**W34A Bridge Creek,** 14.34 41 P Pn 17 56 36.0 -0.5
baz=14,SNR=9.1
**RCTC Rector, Farmer** 14.38 325 P Pn 17 56 39.0 +2.0
baz=14,SNR=8.0
**Y36A Durant** 14.44 48 P Pn 17 56 36.9 -0.9
baz=14,SNR=8.4
**339A Huntington** 14.45 60 P Pn 17 56 36.8 -1.2
baz=14
**V33A Lossen Ranch,** 14.46 38 P Pn 17 56 37.9 -0.2
baz=14,SNR=11
**TIN Tinemaha** 14.48 330 P Pn 17 56 41.2 +2.8
baz=15,SNR=48
**U32A Winter Ranch,** 14.49 35 P Pn 17 56 39.7 +1.2
baz=15,SNR=24
**SGU Sterling** 14.50 352 *e*Pn Pn 17 56 40.4 +1.5
**R27A Eads** 14.51 20 P Pn 17 56 40.5 +1.7
baz=15,SNR=304
**Z37A Pogue Cattle C** 14.51 52 P Pn 17 56 37.4 -1.4
baz=15
**540A Vidor** 14.52 65 P Pn 17 56 37.4 -1.5
baz=14
**S29A Ulysses** 14.52 26 P Pn 17 56 39.0 0.0
baz=15,SNR=11
**Q24A Divide** 14.54 13 P Pn 17 56 41.1 +1.7
baz=15,SNR=138
**Q24A Divide** 14.54 13 *e*Pn Pn 17 56 41.4 +1.9
**NATX Nacogdoches** 14.54 58 P Pn 17 56 38.7 -0.5
baz=15
**TMUT Trail Mountain** 14.57 354 *e*Pn Pn 17 56 41.4 +1.6
comp=Z,5µm,0.8s
**R11A Troy Canyon, C** 14.57 340 P Pn 17 56 41.9 +2.1
baz=15,SNR=408
**SNO Snow College** 14.62 353 *e*Pn Pn 17 56 42.3 +1.8
**138A Matatall Enter** 14.63 54 P Pn 17 56 39.2 -1.2
baz=15,SNR=5.9
**P17A Butcher Ranch,** 14.70 355 *e*Pn Pn 17 56 42.9 +1.4
**440A Kirbyville** 14.71 63 P Pn 17 56 40.1 -1.4
baz=15
**T31A Randall Ranch,** 14.72 31 P Pn 17 56 40.5 -1.1
baz=15,SNR=8.1
**FLU Fool Peak** 14.77 351 *e*Pn Pn 17 56 44.1 +1.7
**X36A Centrahoma** 14.79 46 P Pn 17 56 41.1 -1.5
baz=15,SNR=27
**239A Gary** 14.80 58 P Pn 17 56 40.9 -1.8
baz=15
**S30A Montezuma** 14.81 28 P Pn 17 56 42.5 -0.4
baz=15,SNR=24
**P18A Preston Nutter** 14.82 357 *e*Pn Pn 17 56 44.5 +1.1
**W35A Tecumseh** 14.83 43 P Pn 17 56 41.9 -1.2
baz=15,SNR=36
**LEVU Levan** 14.84 352 *e*Pn Pn 17 56 45.4 +1.9
**MTUM Tungsten Hills** 14.87 330 *e*Pn Pn 17 56 46.1 +2.2
**R28A Tribune** 14.89 23 P Pn 17 56 44.5 +0.5
baz=15,SNR=46
**V34A Guthrie** 14.90 40 P Pn 17 56 43.2 -0.9
baz=15,SNR=12
**V34A Guthrie** 14.90 40 *e*Pn Pn 17 56 44.5 +0.4
comp=Z,143nm,0.6s
**Y37A Hugo** 14.94 49 P Pn 17 56 43.2 -1.3
baz=15,SNR=12
**Z38A Mt. Pleasant** 14.99 53 P Pn 17 56 43.5 -1.9
baz=15
**U33A Lingo Farm, Me** 15.00 37 P Pn 17 56 45.4 0.0
baz=15,SNR=15
**340A Bronson** 15.01 60 P Pn 17 56 44.1 -1.5
baz=15
**T32A Huddler Ranch,** 15.15 33 P Pn 17 56 46.9 -0.5
baz=15,SNR=20
**139A Bunkhouse Ranc** 15.15 55 P Pn 17 56 46.0 -1.5
baz=15
**HUIG Huatulco** 15.18 124 *i* P Pn 17 56 50.0 +2.1
HUIG *e*S Sn 17 59 37.8 +1.9
**HUIG Huatulco** 15.18 124 *i* P Pn 17 56 50.0 +2.1
HUIG *e*S Sn 17 59 37.8 +1.9
**R29A Marienthal** 15.21 25 P Pn 17 56 48.1 -0.2
baz=15,SNR=38
**KSCO Kaye Shedlock'** 15.22 20 P Pn 17 56 49.9 +1.4
baz=15,SNR=30
**KSCO Kaye Shedlock'** 15.22 20 *e*P Pn 17 56 49.1 +0.6
**MLAC Mammoth Lakes** 15.22 330 P P 17 56 51.4 -2.2
baz=15,SNR=113
**W36A Wetumka** 15.23 44 P Pn 17 56 46.5 -1.9
baz=15,SNR=37
**S31A Mullinville** 15.23 31 P Pn 17 56 48.0 -0.5
baz=15,SNR=20
**V35A Meyer Ranch, C** 15.26 41 P Pn 17 56 47.4 -1.4
baz=15,SNR=23
**ISCO Idaho Springs** 15.27 10 *e*P Pn 17 56 50.9 +1.7
ISCO pmax pmax
comp=Z,3µm,1.6s
**ISCO Idaho Springs** 15.27 10 P Pn 17 56 50.8 +1.6
baz=15
**ISCO Idaho Springs** 15.27 10 *e*Pn Pn 17 56 50.9 +1.7
comp=Z,3µm,1.6s
**FSU Fish Springs** 15.31 348 *e*Pn Pn 17 56 51.4 +1.7
**U34A Anderson Ranch** 15.32 38 P Pn 17 56 48.8 -0.9
baz=15,SNR=11
**MPU Maple Canyon** 15.32 353 *e*Pn Pn 17 56 51.6 +1.7
comp=Z,2µm,1.7s
**O20A White River Ci** 15.32 3 P Pn 17 56 51.2 +1.3
baz=16,SNR=32
**CMIG Matias Romero** 15.38 117 Pn Pn 17 56 50.9 +0.3
comp=Z,0.9nm,0.3s,baz=297,slow=10,SNR=104
CMIG Lg Lg 18 01 34.2
comp=Z,0.1nm,0.3s,baz=230,slow=10,SNR=3.4
**CMIG Matias Romero** 15.38 117 Pn Pn 17 56 50.9 +0.3
CMIG Lg Lg 18 01 34.2
**WMUT West Mountain** 15.41 352 *e*Pn Pn 17 56 52.8 +1.9
**T33A Patterson Ranc** 15.41 35 P Pn 17 56 51.8 +0.9
baz=16,SNR=24
**LRV Little Rabbit** 15.43 322 *e*Pn Pn 17 56 51.5 +0.4
**R30A Dighton** 15.43 27 P Pn 17 56 50.8 -0.3
baz=16,SNR=57
**X37A Clayton** 15.45 48 P Pn 17 56 49.8 -1.6
baz=16,SNR=30
**Y38A Idabel** 15.53 51 P Pn 17 56 50.3 -2.1
baz=16,SNR=9.5
**Q28A Sharon Springs** 15.53 22 P Pn 17 56 53.2 +0.8
baz=16,SNR=62
**S32A Newby Ranch, P** 15.55 32 P Pn 17 56 51.7 -1.0
baz=16
**Z39A Irene McRaven,** 15.57 54 P Pn 17 56 51.6 -1.3
baz=16,SNR=9.7
**NVAR Mina Array Bea** 15.65 332 Pn Pn 17 56 56.1 +2.0
comp=Z,1.5nm,0.3s,baz=152,slow=8.3,SNR=540
NVAR LR LR 18 02 40.3
comp=Z,338µm,19.6s,baz=153,slow=37
**NVAR Mina Array Bea** 15.65 332 Pn Pn 17 56 56.1 +2.0

**DUG Dugway** 15.66 350 P Pn 17 56 55.7 +1.4
DUG pmax pmax
comp=Z,4µm,1.8s
**DUG Dugway** 15.66 350 P P 17 56 56.5 -1.9
baz=16,SNR=277
**Q29A Oakley** 15.68 24 P Pn 17 56 54.7 +0.3
baz=16,SNR=64
**U35A Pawnee** 15.73 40 P Pn 17 56 53.4 -1.6
baz=16,SNR=24
**W37A Quinton** 15.74 46 P Pn 17 56 53.6 -1.5
baz=16,SNR=37
**R31A Burdett** 15.76 29 P Pn 17 56 54.7 -0.7
baz=16,SNR=35
**V36A Jenks** 15.82 43 P Pn 17 56 54.4 -1.8
baz=16,SNR=21
**X38A Whitesboro** 15.87 48 P Pn 17 56 55.2 -1.5
baz=16,SNR=32
**HLJ Hailstone** 15.89 354 *e*Pn Pn 17 56 58.5 +1.3
**KLJ Keetly** 15.91 354 *e*Pn Pn 17 56 58.8 +1.3
**SAO San Andreas Ge** 15.91 321 *e*P Pn 17 56 57.6 +0.3
SAO pmax pmax
comp=Z,4µm,2.4s
**SAO San Andreas Ge** 15.91 321 *e*Pn Pn 17 56 57.6 +0.3
comp=Z,4µm,2.4s
**S33A Kaszmaul Farm,** 15.93 34 P Pn 17 56 58.3 +0.7
baz=16,SNR=32
**T34A McClaskey Farm** 15.94 37 P Pn 17 56 57.0 -0.6
baz=16,SNR=28
**HTU Hoyt Peak** 15.94 354 *e*Pn Pn 17 56 59.4 +1.5
**MHD Mile High Driv** 15.98 353 *e*Pn Pn 17 56 59.8 +1.5
**Y39A Lockesburg** 15.98 52 P Pn 17 56 57.0 -1.3
baz=16,SNR=24
**TUL1 Tulsa** 15.99 43 P Pn 17 56 56.6 -1.7
baz=16,SNR=13
**NOQ North Oquirrh** 16.01 352 *e*Pn Pn 17 57 00.1 +1.4
**P28A Saint Francis** 16.01 21 P Pn 17 56 59.6 +0.8
baz=16,SNR=104
**Q30A Quinter** 16.05 26 P Pn 17 56 59.6 +0.5
baz=16,SNR=65
**RBU Red Butte Cany** 16.10 353 *e*Pn Pn 17 57 00.7 +0.8
**CBKS Cedar Bluff** 16.11 28 P Pn 17 56 59.8 -0.1
CBKS pmax pmax
comp=Z,5µm,1.8s
**CBKS Cedar Bluff** 16.11 28 P Pn 17 56 59.5 -0.4
baz=16,SNR=51
**SAIU Southern Antel** 16.22 352 *e*Pn Pn 17 57 02.3 +0.9
**R32A Long Quarter,** 16.24 31 P Pn 17 57 00.6 -0.9
baz=16,SNR=23
**T35A Sooner Cattle** 16.24 39 P Pn 17 57 00.4 -1.1
baz=16,SNR=13
**N23A Red Feather La** 16.29 9 P Pn 17 57 03.8 +1.4
baz=16,SNR=186
**CMB Columbia Colle** 16.29 327 P Pn 17 57 03.3 +1.1
CMB pmax pmax
comp=Z,1µm,1.7s
**SNUT Stansbury Nort** 16.29 351 *e*Pn P 17 57 04.1 -1.3
**W38A Poteau** 16.30 48 P Pn 17 57 01.1 -1.3
baz=16,SNR=125
**P29A Atwood** 16.32 23 P Pn 17 57 03.4 +0.7
baz=16,SNR=37
**U36A Oologah** 16.34 42 P Pn 17 57 01.4 -1.5
baz=16,SNR=23
**FPU Francis Peak** 16.35 353 *e*Pn Pn 17 57 04.5 +1.4
**V37A Hulbert** 16.38 44 P Pn 17 57 01.7 -1.6
baz=16,SNR=70
**NAIU Northern Antel** 16.38 352 *e*Pn Pn 17 57 04.8 +1.3
**TCUT Toone Canyon** 16.39 354 *e*P Pn 17 57 04.8 +1.1
comp=Z,263nm,1.3s
**Q31A Ellis** 16.41 28 P Pn 17 57 03.4 -0.4
baz=16,SNR=32
**BGU Big Grassy Mou** 16.41 350 *e*Pn Pn 17 57 05.3 +1.4
**S34A Willow Spring** 16.48 36 P Pn 17 57 05.2 +0.7
baz=17,SNR=18
**R33A Olander Ranch,** 16.49 33 P Pn 17 57 04.6 -0.2
baz=17,SNR=28
**O28A Krutsinger Ran** 16.51 20 P Pn 17 57 05.8 +0.7
baz=17,SNR=52
**P30A Selden** 16.53 25 P Pn 17 57 05.5 +0.2
baz=17,SNR=121
**MIAR Mount Ida** 16.67 51 *e*P Pn 17 57 04.8 -2.2
MIAR pmax pmax
comp=Z,2µm,1.7s
**MIAR Mount Ida** 16.67 51 P Pn 17 57 05.0 -2.0
baz=17
**MIAR Mount Ida** 16.67 51 *e*Pn Pn 17 57 04.8 -2.2
comp=Z,2µm,1.7s
**ELK Elko** 16.70 344 P Pn 17 57 08.8 +1.2
ELK pmax pmax
comp=Z,2µm,1.6s
**T36A Boggs Farm, Ca** 16.70 40 P Pn 17 57 06.2 -1.2
baz=17,SNR=56
**U37A Salina** 16.73 43 P Pn 17 57 06.4 -1.4
baz=17,SNR=60
**MCU Monte Cristo P** 16.74 354 *e*Pn P 17 57 09.7 -0.7
**GZU Grizzly Peak** 16.76 353 *e*Pn P 17 57 09.9 -0.7
**Q32A Meitler Ranch,** 16.77 30 P Pn 17 57 07.5 -0.8
baz=17,SNR=54
**EPU East Promontor** 16.78 352 *e*Pn P 17 57 10.0 -0.6
**JRSC Jasper Ridge** 16.81 322 *e*Pn Pn 17 57 08.7 0.0
**O29A 4D Ranch, Culb** 16.83 23 P Pn 17 57 09.6 +0.5
baz=17,SNR=140
**V38A Canehill** 16.84 46 P Pn 17 57 07.7 -1.5
baz=17,SNR=86
**P31A Stockton** 16.85 27 P Pn 17 57 09.2 -0.1
baz=17,SNR=47
**R34A Isabella, Hill** 16.86 34 P Pn 17 57 09.4 +0.1
baz=17,SNR=51
**S35A Otter Creek Ra** 16.89 37 P Pn 17 57 09.2 -0.6
baz=17,SNR=59
**RSUT Red Spur Mount** 16.91 354 *e*Pn P 17 57 11.8 -0.5
**HONU Honeyville** 16.93 353 *e*Pn P 17 57 12.4 +0.1
**WVUT Wellsville** 16.94 353 *e*Pn P 17 57 12.1 -0.4
**TGIG** 16.98 115 *i* P P 17 57 12.3 -0.7
TGIG *e*S S 18 00 25.5 -4.3
**TGIG** 16.98 115 *i* P P 17 57 12.3 -0.7
TGIG *e*S S 18 00 25.5 -4.3
**BMN Battle Mountai** 17.00 339 P P 17 57 12.7 -0.4
BMN pmax pmax
comp=Z,5µm,1.5s
**BDM Black Diamond** 17.00 324 *e*Pn P 17 57 12.3 -0.7
**SAC San Andreas** 17.04 322 P Pn 17 57 12.7 +1.1
SAC pmax pmax
comp=Z,3µm,1.9s
**N28A Pribbenow Ranch** 17.09 20 P Pn 17 57 12.8 +0.4
baz=17,SNR=24
**MTUT Morton Thiokol** 17.09 352 *e*Pn Pn 17 57 13.4 +0.9
**HDU Hyde Park** 17.11 353 *e*Pn P 17 57 14.3 -0.1
**Q33A Connelly Farm,** 17.11 31 P Pn 17 57 11.8 -0.8
baz=17,SNR=64
**BKS Berkeley--Byer** 17.14 323 *e*Pn Pn 17 57 13.7 +0.7
**O30A MW Ranch, Wils** 17.15 24 P Pn 17 57 13.3 +0.3
baz=17,SNR=21
**OGNE Ogallala** 17.18 19 P Pn 17 57 14.2 +0.6
baz=17,SNR=124
**U38A Gravette** 17.21 44 P Pn 17 57 12.3 -1.5
baz=17,SNR=28
**BMUT Black Mountain** 17.21 355 *e*Pn P 17 57 15.0 -0.6
**P32A Huiting Farm,** 17.27 29 P Pn 17 57 13.6 -0.9
baz=17,SNR=92
**PTU Portage** 17.30 352 *e*Pn P 17 57 16.6 +0.1
**T37A Cheneyville 18** 17.32 41 P Pn 17 57 13.6 -1.5
baz=17,SNR=37
**S36A Lake Cedric, C** 17.33 39 P Pn 17 57 14.4 -0.8
baz=17,SNR=81
**MLI Malad Range** 17.37 353 *e*Pn Pn 17 57 16.3 +0.4
**O31A Woolen Ranch,** 17.41 26 P Pn 17 57 16.3 0.0
baz=18,SNR=29
**R35A Emporia Munici** 17.42 36 P P 17 57 17.8 +0.1
baz=18,SNR=47
**PCIG** 17.47 118 *i* P P 17 57 18.8 +0.5
PCIG *e*S S 18 00 37.2 -2.5
**PCIG** 17.47 118 *i* P P 17 57 18.8 +0.5
PCIG *e*S S 18 00 37.2 -2.5
**Q34A Chapman** 17.48 33 P Pn 17 57 17.1 -0.2
baz=18,SNR=32
**N29A Votaw Ranch, W** 17.51 22 P Pn 17 57 18.0 +0.4
baz=18,SNR=29
**P33A Williams Farm,** 17.52 31 P Pn 17 57 16.3 -1.4
baz=18,SNR=20
**NPI North Pocatell** 17.53 352 *e*Pn P 17 57 19.2 +0.1
**SCIG Sabancuy** 17.67 106 *e*P Pn 17 57 19.5 -0.1
**SCIG Sabancuy** 17.67 106 *e*P Pn 17 57 19.5 -0.1
**N30A Hueftle Ranch,** 17.67 23 P P 17 57 20.6 +0.1
baz=18,SNR=51
**KSU1 Kansas State U** 17.79 34 P Pn 17 57 21.2 +0.2
baz=18,SNR=25

**M28A Bar X Bar Ranc** 17.79 20 P P 17 57 21.6 -0.2
baz=18,SNR=31
**S37A Fort Scott** 17.79 40 P Pn 17 57 20.5 -0.6
baz=18,SNR=64
**R36A Gordon, Harris** 17.80 37 P Pn 17 57 20.6 -0.6
baz=18,SNR=59
**NSHM Saint Helena R** 17.81 323 *e*Pn Pn 17 57 21.6 +0.4
**OHCM Honcut** 17.84 327 *e*Pn P 17 57 23.1 +0.8
**Q35A Mercer Eighty,** 17.90 35 P P 17 57 22.7 -0.3
baz=18,SNR=89
**O32A Brockman Farm,** 17.93 28 P Pn 17 57 22.3 -0.5
baz=18,SNR=30
**K22A Casper** 17.95 6 P P 17 57 24.2 +0.5
baz=18,SNR=156
**K22A Casper** 17.95 6 *e*Pn P 17 57 24.0 +0.3
comp=Z,5µm,2.0s
**VBMS Vicksburg** 17.98 61 P Pn 17 57 22.4 -0.9
baz=18
**ORV Oroville** 18.02 328 *e*P P 17 57 27.0 +2.8
**ORV Oroville** 18.02 328 *e*Pn P 17 57 27.0 +2.8
**P34A Walnut Farm, R** 18.02 32 P Pn 17 57 24.0 +0.1
baz=18,SNR=83
**CCIG Comitan** 18.05 115 *i* P P 17 57 26.3 +1.4
CCIG *e*S Sn 18 00 45.8 0.0
**CCIG Comitan** 18.05 115 *i* P P 17 57 26.3 +1.4
CCIG *e*S Sn 18 00 45.8 0.0
**M29A Burnside Ranch** 18.05 21 P P 17 57 24.9 +0.3
baz=18,SNR=51
**O33A Hebron** 18.09 30 P Pn 17 57 24.0 -0.6
baz=18,SNR=108
**N31A Bailey Ranch,** 18.13 26 P P 17 57 25.7 +0.2
baz=18,SNR=9.9
**R37A Teagarden Farm** 18.17 39 P Pn 17 57 25.5 -0.2
baz=18,SNR=83
**Q36A Arnold C. Orve** 18.28 36 P P 17 57 27.1 0.0
baz=18,SNR=41
**L28A Connealy Angus** 18.31 18 P P 17 57 27.7 +0.2
baz=18,SNR=42
**N32A Stulken Farm,** 18.34 27 P P 17 57 27.9 0.0
baz=18
**HOPS Hopland** 18.40 324 *e*Pn Pn 17 57 29.5 +1.0
comp=Z,936nm,1.4s
**M30A Dale-Ortello V** 18.41 23 P Pn 17 57 29.3 +0.7
baz=18,SNR=6.1
**P35A Duane Minner,** 18.41 34 P Pn 17 57 29.3 +0.7
baz=18,SNR=105
**M31A Lambtecht Ranc** 18.57 25 P Pn 17 57 31.7 +1.1
baz=19,SNR=28
**O34A Beatrice** 18.58 31 P P 17 57 29.9 -0.6
baz=19,SNR=29
**L29A Maesberg Ranch** 18.68 21 P Pn 17 57 32.3 +0.4
baz=19,SNR=16
**N33A J Bar K, Exete** 18.68 29 P Pn 17 57 32.0 +0.1
baz=19,SNR=13
**GASB Alder Springs** 18.70 326 *e*P Pn 17 57 33.8 +1.5
**O03D Paynes Creek** 18.74 329 P Pn 17 57 34.5 +1.8
baz=19,SNR=115
**Q37A Longview Farm,** 18.77 38 P Pn 17 57 33.4 +0.4
baz=19,SNR=15
**L30A Spencer Herefo** 18.83 22 P Pn 17 57 34.2 +0.4
baz=19,SNR=27
**FXWY Fox Creek** 18.86 356 *e*P P 17 57 34.0 +0.2
comp=Z,6µm,2.5s
**P36A Good Intent, A** 18.90 35 P Pn 17 57 34.7 +0.2
baz=19,SNR=25
**BGNE Belgrade** 18.95 26 P Pn 17 57 35.9 +0.8
baz=19,SNR=35
**LBCM Butte Creek Ri** 18.96 330 P Pn 17 57 36.9 +1.4
**K28A Ten Mile Ranch** 19.00 18 P Pn 17 57 36.1 +0.2
baz=19,SNR=95
**O35A Humboldt** 19.02 33 P Pn 17 57 36.0 -0.1
baz=19,SNR=31
**J25A Sunshine Ranch** 19.07 12 P Pn 17 57 36.7 -0.1
baz=19,SNR=142
**J26A Sides Ranch, S** 19.15 14 P Pn 17 57 37.6 0.0
baz=19,SNR=150
**N34A Lincoln** 19.19 30 P P 17 57 37.1 -0.1
baz=19,SNR=11
**KIPM Iron Peak** 19.21 325 *e*P Pn 17 57 39.0 +0.5
comp=Z,2µm,1.7s
**HLID Hailey** 19.21 348 P Pn 17 57 38.8 +0.3
baz=19
**HLID Hailey** 19.21 348 *e*P Pn 17 57 38.8 +0.3
comp=Z,1µm,1.4s
**WVOR Wild Horse Val** 19.26 338 *e*P Pn 17 57 39.4 +0.4
WVOR pmax pmax
comp=Z,2µm,1.5s
**WDC Whiskeytown Da** 19.32 328 P Pn 17 57 39.4 -0.2
WDC pmax pmax
comp=Z,1µm,1.7s
**J27A Elkhorn Farm,** 19.34 16 P Pn 17 57 40.4 +0.5
baz=20,SNR=55
**L31A Butterfield Fa** 19.34 24 P Pn 17 57 40.0 +0.1
baz=20,SNR=17
**K29A Lazy Trails An** 19.36 20 P Pn 17 57 40.5 +0.4
baz=20,SNR=21
**MFID Camas Ranch** 19.37 345 *e*P Pn 17 57 40.2 -0.1
comp=Z,2µm,1.5s
**O36A Bolckow** 19.40 35 P P 17 57 39.8 +0.4
baz=20
**MOD Modoc** 19.41 334 *e*P Pn 17 57 41.1 +0.3
comp=Z,2µm,1.6s
**MCID Moose Creek** 19.43 356 *e*P Pn 17 57 41.6 +0.5
**M33A Taylor Creek F** 19.48 28 P P 17 57 40.9 +0.6
baz=20,SNR=16
**K30A Basset** 19.51 22 P Pn 17 57 42.4 +0.5
baz=20,SNR=64
**L32A Elgin** 19.51 26 P Pn 17 57 41.7 -0.2
baz=20
**MET Memphis--Engin** 19.56 54 *e*P Pn 17 57 43.0 +0.5
comp=Z,2µm,1.3s
**YTP The Promontory** 19.58 358 *e*P Pn 17 57 43.1 +0.1
**H17A Grant Village** 19.59 357 P Pn 17 57 43.5 +0.4
baz=20
**N35A Tabor** 19.61 32 P Pn 17 57 42.9 -0.2
baz=20,SNR=5.8
**KMRM Mail Ridge** 19.63 325 *e*P Pn 17 57 44.1 +0.7
comp=Z,4µm,1.6s
**YFT Old Faithful** 19.66 356 *e*P Pn 17 57 45.8 +1.8
comp=Z,2µm,1.6s
**M34A Aspy Farms, Fr** 19.69 29 P P 17 57 43.1 +0.6
baz=20,SNR=7.5
**OXF Oxford** 19.69 56 *e*P P 17 57 42.4 -0.2
OXF pmax pmax
comp=Z,9µm,3.0s
**OXF Oxford** 19.69 56 *e*P P 17 57 42.4 -0.2
comp=Z,9µm,3.0s
**I25A Rochford** 19.69 12 P Pn 17 57 43.7 -0.5
baz=20,SNR=147
**J28A Allard Ranch,** 19.70 17 P Pn 17 57 44.4 +0.2
baz=20,SNR=173
**N02D Trinity Center** 19.70 328 P P 17 57 42.9 +0.1
baz=20,SNR=9.1
**RSSD Black Hills** 19.74 11 P P 17 57 43.3 0.0
RSSD pmax pmax
comp=Z,1µm,1.7s
**LKWY Lake** 19.76 357 P Pn 17 57 45.8 +0.7
LKWY pmax pmax
comp=Z,720nm,1.1s
**K31A O'Neill** 19.76 23 P Pn 17 57 44.7 -0.2
baz=20,SNR=17
**TEIG Tepich** 19.83 99 LR LR 18 07 25.2
comp=Z,5µm,19.4s,baz=269,slow=43
**YPM Purple Mountai** 19.87 356 *e*P Pn 17 57 47.4 +1.0
**I26A New Underwood** 19.88 13 P Pn 17 57 46.2 -0.1
baz=20,SNR=160
**YMR Madison River** 19.89 356 *e*P Pn 17 57 47.3 +0.7
comp=Z,2µm,0.9s
**GNAR Gosnell** 19.89 51 *e*P Pn 17 57 46.1 -0.4
**YNR Norris Junctio** 19.92 357 *e*P Pn 17 57 47.8 +0.8
comp=Z,2µm,1.5s
**YMP Mirror Lake Pl** 19.92 358 *e*P Pn 17 57 48.3 +1.3
**L33A Hoskins** 19.94 27 P P 17 57 45.9 +0.6
baz=20
**J29A Okreek** 19.94 19 P Pn 17 57 47.2 +0.2
baz=20,SNR=58
**M04C Macdoel** 19.95 331 P Pn 17 57 47.2 0.0
baz=20,SNR=355
**YMC Maple Creek** 19.98 356 *e*P Pn 17 57 49.2 +1.5
**YHB Horse Butte** 19.98 356 *e*P Pn 17 57 49.5 +1.8
**TPMT Tepee Creek** 20.00 355 *e*P Pn 17 57 50.9 +3.0
**YHH Holmes Hill** 20.00 357 *e*P Pn 17 57 49.3 +1.3
**PBMO Poplar Bluff** 20.01 49 *e*P P 17 57 46.9 +0.8
comp=Z,2µm,1.8s
**M35A Neola** 20.06 31 P P 17 57 47.3 +0.7
baz=20
**K32A Verdigre** 20.08 25 P Pn 17 57 47.8 -0.8

baz=20
**M02C Callahan** 20.09 329 P **P** 17 57 46.9 -0.2
baz=20,SNR=17
**I27A Quinn** 20.10 15 P Pn 17 57 48.5 -0.5
baz=20,SNR=283
**KHMM Horse Mountain** 20.13 326 eP **P** **17 57 48.1 +0.6**
**J30A Dallas** 20.13 21 P Pn 17 57 48.4 -0.9
baz=20
**L34A Svendsen Farm,** 20.15 29 P **P** **17 57 47.4 -0.3**
baz=20
**YMV Mammoth Vault** 20.18 357 eP Pn 17 57 51.8 +1.8
**CCM Cathedral Cave** 20.18 45 P **P** **17 57 48.5 +0.6**
CCM pmax pmax
comp=Z,880nm,1.5s
**I28A Midland** 20.25 17 P Pn 17 57 50.0 -0.7
baz=20
**RLMT Red Lodge** 20.29 360 P **P** **17 57 50.0 +0.7**
baz=20
**RLMT Red Lodge** 20.29 360 PFAKE 17 58 00.0 +8.6
RLMT LR LR
comp=Z,334µm,19.0s
**YBH Yreka Blue Hor** 20.30 330 P **P** **17 57 48.7 -0.5**
comp=Z,20nm,0.8s,baz=148,slow=8.1,SNR=14
YBH Lg Lg 18 04 17.1
comp=Z,5.4nm,0.7s,baz=45,slow=14,SNR=2.9
YBH LR LR 18 05 37.8
comp=Z,56µm,20.1s,baz=164,slow=37
**YBH Yreka Blue Hor** 20.30 330 P **P** **17 57 48.8 -0.5**
YBH pmax pmax
comp=Z,240nm,1.4s
**YBH Yreka Blue Hor** 20.30 330 eP **P** **17 57 47.8 -1.5**
YBH Lg Lg 18 04 17.1
**H25A Fruitdale** 20.30 12 P Pn 17 57 50.5 -0.9
baz=20
**K05A Summer Lake** 20.34 334 P Pn 17 57 52.0 +0.1
**J31A Geddes** 20.35 22 P **P** **17 57 50.7 +0.9**
baz=20
**HALT Halls** 20.35 52 eP **P** **17 57 50.3 +0.5**
**K33A Hardington** 20.41 27 P **P** **17 57 51.3 +0.9**
baz=20
**PARMO Parma** 20.42 50 eP Pn 17 57 52.5 -0.2
**H26A Fairpoint** 20.46 13 P Pn 17 57 52.5 -0.6
baz=21
**BRAL Brewton** 20.49 67 PFAKE 17 58 00.0 +6.4
BRAL LR LR
comp=Z,246µm,21.0s
**I29A Vivian Onida** 20.51 19 P **P** **17 57 52.6 +1.0**
baz=21
**BGMT Barton Gulch** 20.53 354 eP Pn 17 57 59.0 +4.7
**K04D Chiloquin, OR** 20.60 333 P **P** **17 57 53.8 +1.3**
baz=21
**H27A Howes** 20.62 15 P Pn 17 57 54.2 -0.9
baz=21
**L35A Bielow Farm, R** 20.64 30 P **P** **17 57 53.2 +0.3**
baz=21
**I30A Oacoma** 20.68 20 P **P** **17 57 54.2 +0.9**
baz=21
**DLMT Dillon** 20.71 353 eP Pn 17 57 55.4 -0.9
comp=Z,856nm,1.9s
**J32A Parkston** 20.74 24 P **P** **17 57 54.0 0.0**
baz=21
**BZMT Bozeman Pass** 20.86 357 eP Pn 17 58 01.4 +3.4
**K34A Le Mars** 20.86 28 P **P** **17 57 55.5 +0.2**
baz=21
**G25A Newell** 20.89 11 P Pn 17 57 57.2 -1.0
baz=21
**BOZ Bozeman (W)** 20.91 355 eP **P** **17 57 57.0 +1.1**
BOZ pmax pmax
comp=Z,3µm,2.3s
BOZ MLR MLR
comp=Z,477µm,21.0s
**BOZ Bozeman (W)** 20.91 355 P **P** **17 57 57.1 +1.1**
baz=21
**BOZ Bozeman (W)** 20.91 355 eP **P** **17 57 57.0 +1.1**
comp=Z,3µm,2.3s
BOZ LR LR
comp=Z,477µm,21.0s
**H28A Mission Ridge** 20.92 16 P **P** **17 57 57.3 +1.3**
baz=21
**J05D Fort Rock, OR** 20.94 335 P **P** **17 57 57.8 +1.5**
baz=21
**I07A Izee** 21.02 339 eP **P** **17 57 57.8 +0.7**
comp=Z,2µm,1.4s
**J33A Davis** 21.03 25 P **P** **17 57 58.2 +1.1**
baz=21
**L02D Cave Junction,** 21.04 329 P **P** **17 57 57.6 +0.3**
baz=21
**LRAL Lakeview Retre** 21.05 62 eP **P** **17 57 57.2 -0.3**
comp=Z,4µm,2.3s
**I31A Royce, Wessing** 21.07 22 P **P** **17 57 58.9 +1.3**
baz=21
**H29A Onida** 21.09 18 P **P** **17 57 58.9 +1.1**
baz=21
**LCCM Lewis and Clar** 21.12 355 eP **P** **17 57 59.7 +1.5**
**G26A Maurine** 21.14 13 P **P** **17 57 59.7 +1.3**
baz=21
**SLM Saint Louis** 21.16 45 P **P** **17 58 00.4 +1.8**
SLM pmax pmax
comp=Z,4µm,1.9s
**SLM Saint Louis** 21.16 45 eP **P** **17 57 58.5 0.0**
comp=Z,781nm,1.2s
**J04D Umpqua Nationa** 21.25 333 P **P** **17 58 01.1 +1.3**
baz=21
**K35A Storm Lake** 21.26 29 P **P** **17 58 00.4 +0.7**
baz=21
**SUSD South Dakota S** 21.30 20 P **P** **17 58 01.2 +1.2**
baz=21
**G28A Parade** 21.32 16 P **P** **17 58 01.4 +1.2**
baz=21
**SIUC Southern Illin** 21.33 48 eP **P** **17 58 01.0 +0.7**
comp=Z,6µm,2.1s
**G27A Dupree** 21.36 14 P **P** **17 58 01.6 +0.8**
baz=22
**KBO Bosley Butte** 21.38 328 eP **P** **17 58 01.6 +0.6**
comp=Z,10µm,2.2s
**J34A George** 21.41 27 P **P** **17 58 01.9 +0.7**
baz=22
**I32A Karley and Nic** 21.45 24 P **P** **17 58 02.5 +0.9**
baz=22
**H31A Wolsey** 21.49 21 P **P** **17 58 02.9 +0.8**
baz=22
**ECSD EROS Data Cent** 21.52 25 P **P** **17 58 03.0 +0.6**
baz=22
**ECSD EROS Data Cent** 21.52 25 PFAKE 17 58 10.0 +7.6
ECSD LR LR
comp=Z,38µm,20.0s
**WVT Waverly** 21.55 53 eP **P** **17 58 02.8 +0.1**
WVT pmax pmax
comp=Z,634nm,1.1s
**WVT Waverly** 21.55 53 eP **P** **17 58 02.8 +0.1**
comp=Z,634nm,1.1s
**F25A Bowman** 21.59 11 P **P** **17 58 04.1 +1.0**
baz=22
**SCIA State Center** 21.60 34 PFAKE 17 58 10.0 +6.7
SCIA LR LR
comp=Z,209µm,21.0s
**F26A Lodgepole** 21.66 12 P **P** **17 58 04.8 +0.8**
baz=22
**G29A Hoven** 21.69 18 P **P** **17 58 04.6 +0.3**
baz=22
**I33A Coleman** 21.71 25 P **P** **17 58 04.6 +0.1**
baz=22
**J35A Milford** 21.79 28 P **P** **17 58 05.8 +0.5**
baz=22
**F27A Lemmon** 21.81 14 P **P** **17 58 06.3 +0.7**
baz=22
**WIFE Three Sisters-** 21.82 335 eP **P** **17 58 06.8 +1.0**
**I04A Tendick Farm,** 21.84 334 P **P** **17 58 06.1 +0.2**
baz=22
**G30A Faulkton** 21.86 19 P **P** **17 58 05.9 -0.2**
baz=22
**H32A Carlson Farm,** 21.87 23 P **P** **17 58 06.7 +0.5**
baz=22
**I05D Terrebonne, OR** 21.88 336 P **P** **17 58 07.2 +0.9**
baz=22
**G08A Pilot Rock** 21.94 341 eP **P** **17 58 07.4 +0.4**
comp=Z,2µm,1.7s
**KEBM Edson Butte** 21.94 329 eP **P** **17 58 07.5 +0.5**
comp=Z,3µm,1.3s
**IRO Indian Ridge** 21.95 334 eP **P** **17 58 07.6 +0.5**
**LAO LASA Array** 21.98 5 P **P** **17 58 07.8 +0.4**
baz=22
**LAO LASA Array** 21.98 5 eP **P** **17 58 07.6 +0.2**
comp=Z,9µm,2.4s
LAO LR LR
comp=Z,228µm,22.0s
**K37A Belmond** 22.03 32 P **P** **17 58 08.4 +0.4**
baz=22
**I34A Hadley** 22.07 26 P **P** **17 58 08.9 +0.6**
baz=22
**F28A McLaughlin** 22.07 16 P **P** **17 58 08.9 +0.6**
baz=22
**F10A Beach Ranch, E** 22.11 345 eP **P** **17 58 08.7 -0.2**
comp=Z,3µm,1.5s
**J36A Seneca 1, Swea** 22.14 30 P **P** **17 58 09.3 +0.2**
baz=22
**I03D Drain, OR** 22.15 332 P **P** **17 58 09.3 +0.2**
baz=22
**E25A Miller Ranch,** 22.16 11 P **P** **17 58 09.4 +0.2**
baz=22
**G31A Conde** 22.24 21 P **P** **17 58 10.2 +0.1**
baz=22
**H33A Prehn Over Nor** 22.27 24 P **P** **17 58 10.8 +0.4**
baz=22
**LNOR Lincton Mounta** 22.28 343 eP **P** **17 58 11.1 +0.5**
**LNOR Lincton Mounta** 22.28 343 eP **P** **17 58 11.1 +0.5**
**I35A Creekview Farm** 22.28 28 P **P** **17 58 11.0 +0.5**
baz=22
**E26A Carlson Angus** 22.30 12 P **P** **17 58 11.2 +0.4**
baz=22
**TCBU Trout Butte** 22.31 334 eP **P** **17 58 07.4 -3.6**
**F29A Eureka** 22.31 17 P **P** **17 58 10.9 +0.1**
baz=22
**MSO Missoula** 22.32 351 P **P** **17 58 11.9 +0.8**
baz=22
**MSO Missoula** 22.32 351 eP **P** **17 58 11.8 +0.8**
comp=Z,2µm,1.4s
**VTHM Trough** 22.34 338 P **P** **17 58 11.4 +0.2**
**K38A Parkersburg** 22.37 33 P **P** **17 58 12.0 +0.5**
baz=22
**G06A Carlson Farm,** 22.41 338 P **P** **17 58 12.2 +0.2**
**E27A Carson** 22.44 14 P **P** **17 58 13.1 +0.8**
baz=23
**J37A Redenius Farm,** 22.49 31 P **P** **17 58 13.3 +0.5**
baz=23
**H04A Detroit Lake** 22.49 335 P **P** **17 58 12.5 -0.3**
**G32A Webster** 22.50 22 P **P** **17 58 12.9 0.0**
baz=23
**USIN University of** 22.51 49 eP **P** **17 58 13.6 +0.5**
comp=Z,1µm,1.1s
**F30A Leola** 22.54 19 P **P** **17 58 13.2 -0.1**
baz=23
**VBEM Beaver Butte** 22.59 337 P **P** **17 58 14.1 +0.1**
**H34A Spellman Lake,** 22.63 25 P **P** **17 58 14.7 +0.5**
baz=23
**G05D Wamic, OR** 22.65 337 P **P** **17 58 14.7 +0.1**
baz=23
**VGB Gordon Butte** 22.71 339 P **P** **17 58 15.2 +0.1**
**VGB Gordon Butte** 22.71 339 P **P** **17 58 15.2 +0.1**
**F07A Phinny Hill Vi** 22.77 340 P **P** **17 58 15.9 +0.2**
**E28A Huff** 22.78 15 P **P** **17 58 15.9 +0.1**
baz=23
**F31A Hecla** 22.79 20 P **P** **17 58 15.5 -0.5**
baz=23
**D25A Fairfield** 22.80 10 P **P** **17 58 16.4 +0.3**
baz=23
**G33A Ortonville** 22.82 24 P **P** **17 58 16.4 +0.1**
baz=23
**I36A Fitzsimmons Fa** 22.83 29 P **P** **17 58 16.9 +0.5**
baz=23
**D26A Manning** 22.84 12 P **P** **17 58 17.1 +0.6**
baz=23
**HOOD Mount Hood Mea** 22.84 337 P **P** **17 58 16.3 -0.3**
**COR Corvallis** 22.85 333 P **P** **17 58 17.1 +0.5**
COR pmax pmax
comp=Z,2µm,1.6s
**COR Corvallis** 22.85 333 eP **P** **17 58 16.3 -0.3**
comp=Z,2µm,1.5s
**HDIL Hopedale** 22.88 42 P **P** **17 58 17.3 +0.3**
baz=23
**HDIL Hopedale** 22.88 42 eP **P** **17 58 17.1 +0.1**
comp=Z,9µm,2.3s
HDIL LR LR
comp=Z,147µm,22.0s
**J38A Wedel Dairy, R** 23.01 32 P **P** **17 58 17.9 -0.4**
baz=23
**H35A Sunnyside Ranc** 23.03 27 P **P** **17 58 19.0 +0.5**
baz=23
**E29A Napoleon** 23.04 17 P **P** **17 58 18.8 +0.2**
baz=23
**G04A Mulino** 23.04 335 eP **P** **17 58 18.2 -0.3**
**D27A Center** 23.09 13 P **P** **17 58 19.4 +0.3**
baz=23
**HAWA Hanford** 23.11 342 PFAKE 17 58 30.0 +11
HAWA LR LR
comp=Z,228µm,19.0s
**I37A Lemond, Waseca** 23.11 30 P **P** **17 58 19.6 +0.4**
baz=23
**G34A Benson** 23.16 25 P **P** **17 58 19.9 +0.1**
baz=23
**E30A Jud** 23.18 18 P **P** **17 58 19.6 -0.4**
baz=23
**EGMT Eagleton** 23.20 359 P **P** **17 58 20.6 +0.4**
baz=23
**EGMT Eagleton** 23.20 359 PFAKE 17 58 30.0 +10
EGMT LR LR
comp=Z,242µm,20.0s
**TGUH Tegucigalpa,Un** 23.21 113 eP **P** **17 58 23.6 +3.1**
comp=Z,5µm,2.3s
**JTMT Jette** 23.27 351 eP **P** **17 58 20.6 -0.4**
**H36A Jessenland, He** 23.31 28 P **P** **17 58 22.2 +0.9**
baz=23
**G03D McMinnville, O** 23.35 334 P **P** **17 58 22.0 +0.3**
baz=24
**C25A Freed Ranch, W** 23.36 10 P **P** **17 58 22.2 +0.4**
baz=24
**D28A Regan** 23.39 15 P **P** **17 58 22.3 +0.2**
baz=24
**F33A 5 Mile Ranch,** 23.43 23 P **P** **17 58 22.6 +0.1**
baz=24
**TIGA Tifton** 23.49 68 P **P** **17 58 22.8 -0.4**
baz=24
**TIGA Tifton** 23.49 68 eP **P** **17 58 22.4 -0.8**
comp=Z,1µm,1.6s
**D29A Pettibone, Tap** 23.50 17 P **P** **17 58 23.1 -0.2**
baz=24
**E31A Nome** 23.53 20 P **P** **17 58 23.3 -0.2**
baz=24
**ASR Mount Adams--S** 23.54 338 eP **P** **17 58 22.5 -1.2**
**D08A Wollman Farm,** 23.55 343 eP **P** **17 58 22.5 -1.2**
comp=Z,2µm,1.8s
**WCI Wyandotte Cave** 23.59 50 P **P** **17 58 24.5 +0.3**
WCI pmax pmax
comp=Z,9µm,1.7s
**WCI Wyandotte Cave** 23.59 50 eP **P** **17 58 24.5 +0.3**
comp=Z,9µm,1.8s
**G35A Watkins** 23.60 27 P **P** **17 58 24.3 +0.1**
baz=24
**I38A Scanlan Farm,** 23.62 31 P **P** **17 58 24.2 -0.2**
baz=24
**F04A Amboy** 23.64 336 eP **P** **17 58 24.3 -0.2**
comp=Z,3µm,1.8s
**C26A Wahner Farm, P** 23.67 12 P **P** **17 58 25.3 +0.4**
baz=24
**C27A Sayler Ranch,** 23.68 13 P **P** **17 58 25.5 +0.5**
baz=24
**LVP Lakeview Peak** 23.75 337 P **P** **17 58 25.3 -0.4**
**H37A Dierke Farm, C** 23.76 30 P **P** **17 58 26.1 +0.3**
baz=24
**F34A Alexandria** 23.77 25 P **P** **17 58 26.0 +0.2**
baz=24
**D30A Buchanan** 23.77 18 P **P** **17 58 25.1 -0.8**
baz=24
**KMOR Kings Mountain** 23.79 335 P **P** **17 58 26.6 +0.5**
**OD2 Odessa Site #2** 23.80 344 eP **P** **17 58 25.2 -0.9**
**E32A Braaten, Kindr** 23.82 21 P **P** **17 58 25.7 -0.5**
baz=24
**JFWS Jewell Farm** 23.86 36 P **P** **17 58 28.6 +1.9**
JFWS pmax pmax
comp=Z,360nm,1.0s
**JFWS Jewell Farm** 23.86 36 PFAKE 17 58 40.0 +13
JFWS LR LR
comp=Z,44µm,19.0s
**EBG Ellensburg** 23.88 340 P **P** **17 58 27.3 +0.4**
**BLO Bloomington** 23.89 48 P **P** **17 58 28.7 +1.7**
BLO pmax pmax
comp=Z,520nm,1.3s
**BLO Bloomington** 23.89 48 eP **P** **17 58 26.9 -0.1**
comp=Z,489nm,1.3s
**B25A Knox Farm, Ray** 23.91 10 P **P** **17 58 27.5 +0.3**
baz=24
**G36A St. Michael** 23.91 28 P **P** **17 58 27.3 +0.1**
baz=24
**C28A Hausauer Farms** 23.92 15 P **P** **17 58 27.4 +0.2**
baz=24
**DGMT Dagmar** 23.96 8 P **P** **17 58 27.8 +0.1**
baz=24
**DGMT Dagmar** 23.96 8 eP **P** **17 58 28.7 +1.1**
comp=Z,5µm,1.8s
DGMT LR LR
comp=Z,657µm,21.0s
**F04D Rainier, OR** 23.98 336 P **P** **17 58 28.2 +0.4**
baz=24
**GOGA Godfrey** 24.00 63 P **P** **17 58 27.5 -0.7**
GOGA pmax pmax
comp=Z,850nm,1.4s
**GOGA Godfrey** 24.00 63 PFAKE 17 58 40.0 +12
GOGA LR LR
comp=Z,114µm,19.0s
**D31A Mcclaflin, Tow** 24.02 19 P **P** **17 58 27.8 -0.4**
baz=24
**F03A Seaside** 24.07 335 eP **P** **17 58 30.9 +2.3**
comp=Z,6µm,1.9s
**C09A Chrisman Ranch** 24.07 345 eP **P** **17 58 28.2 -0.5**
comp=Z,2µm,1.7s
**F35A Swanville** 24.09 26 P **P** **17 58 28.6 -0.2**
baz=24
**E33A Westby DABS, E** 24.10 23 P **P** **17 58 29.0 +0.1**
baz=24
**LON Longmire** 24.13 338 P **P** **17 58 29.3 0.0**
LON pmax pmax
comp=Z,4µm,1.7s
**SFIN Scholer Farm** 24.15 45 P **P** **17 58 29.3 -0.1**
baz=24
**B26A Jensen Ranch,** 24.17 11 P **P** **17 58 29.4 -0.3**
baz=24
**LTY Liberty** 24.22 341 eP **P** **17 58 30.0 -0.1**
comp=Z,5µm,2.0s
**MDND Maddock** 24.23 16 P **P** **17 58 29.9 -0.3**
baz=24
**NEW Newport** 24.26 347 P **P** **17 58 30.1 -0.4**
comp=Z,2µm,1.3s,baz=161,slow=11,SNR=266
NEW S **S** **18 02 50.8 +2.1**
comp=Z,7.0nm,0.9s,baz=149,slow=19,SNR=1.6
NEW Lg Lg 18 06 15.8
comp=Z,2.4nm,0.8s,baz=261,slow=21,SNR=4.9
NEW LR LR 18 08 37.5
comp=Z,189µm,18.3s,baz=169,slow=38
**NEW Newport** 24.26 347 eP **P** **17 58 30.0 -0.4**
NEW S **S** **18 02 50.8 +2.1**
NEW pmax pmax
comp=Z,4µm,1.5s
**NEW Newport** 24.26 347 P **P** **17 58 30.3 -0.1**
baz=24
**NEW Newport** 24.26 347 eP **P** **17 58 30.0 -0.4**
comp=Z,4µm,1.5s
NEW S **S** **18 02 50.8 +2.1**
NEW Lg Lg 18 06 15.8
**SPMN St. Paul** 24.32 29 P **P** **17 58 30.7 -0.2**
baz=24
**SPMN St. Paul** 24.32 29 eP **P** **17 58 30.6 -0.4**
**D32A Dogwood Acres,** 24.32 20 P **P** **17 58 30.5 -0.4**
baz=24
**B27A Peters Farms,** 24.39 13 P **P** **17 58 32.1 +0.5**
baz=24
**C30A Mose, Pekin** 24.39 18 P **P** **17 58 31.6 0.0**
baz=24
**TKL Tuckaleechee C** 24.41 58 P **P** **17 58 30.3 -1.6**
comp=Z,133nm,1.1s,baz=226,slow=8.2,SNR=45
TKL S **S** **18 02 51.3 0.0**
comp=Z,10nm,0.9s,baz=90,slow=19,SNR=1.7
TKL Lg Lg 18 06 14.4
comp=Z,22nm,1.2s,baz=338,slow=19,SNR=2.8
TKL LR LR 18 09 02.9
comp=Z,381µm,19.5s,baz=255,slow=39
**TKL Tuckaleechee C** 24.41 58 P **P** **17 58 30.3 -1.6**
TKL S **S** **18 02 51.3 0.0**
TKL Lg Lg 18 06 14.4
**E34A Wadena** 24.41 24 P **P** **17 58 32.0 +0.2**
baz=24
**WALA Waterton Lakes** 24.51 352 eP **P** **17 58 33.0 +0.1**
comp=Z,2µm,1.4s
**F36A Milaca** 24.51 27 P **P** **17 58 32.6 -0.1**
baz=25
**A25A Svangstu Ranch** 24.57 10 P **P** **17 58 33.7 +0.4**
baz=25
**E03A Lebam** 24.58 336 eP **P** **17 58 34.7 +1.4**
comp=Z,4µm,1.8s
**B28A Dugan Ranch, T** 24.62 14 P **P** **17 58 34.2 +0.5**
baz=25
**C31A Landman Farms,** 24.69 19 P **P** **17 58 34.1 -0.1**
baz=25
**D33A AnnSam, Waubun** 24.71 22 P **P** **17 58 34.6 +0.1**
baz=25
**A26A Wade Farm, Ken** 24.71 11 P **P** **17 58 34.6 +0.2**
baz=25
**E35A Pequot Lakes** 24.73 25 P **P** **17 58 35.0 +0.3**
baz=25
**B29A Wagenman Farm,** 24.87 16 P **P** **17 58 35.8 -0.1**
baz=25
**C06D Leavenworth** 24.89 341 P **P** **17 58 37.0 +0.9**
baz=25
**D34A Park Rapids** 24.89 23 P **P** **17 58 35.8 -0.3**
baz=25
**A27A Ledoux Ranch,** 24.91 12 P **P** **17 58 36.6 +0.3**
baz=25
**C05A Tolt Reservoir** 24.93 340 eP **P** **17 58 36.3 -0.2**
**DWPF Disney** 25.04 76 eP **P** **17 58 36.6 -1.0**
comp=Z,2µm,1.1s
**A28A Rude Farm, Bot** 25.07 14 P **P** **17 58 38.3 +0.5**
baz=25
**B30A Myrvik Farm, E** 25.12 17 P **P** **17 58 38.2 0.0**
baz=25
**C33A Trail** 25.27 21 P **P** **17 58 39.2 -0.4**
baz=25
**B31A Greenbush Farm** 25.28 18 P **P** **17 58 39.8 +0.2**
baz=25
**D35A Remer** 25.30 25 P **P** **17 58 40.0 +0.1**
baz=25
**A29A Manning Farm,** 25.32 15 P **P** **17 58 40.0 -0.1**
baz=26
**B05A Bryant** 25.56 340 P **P** **17 58 41.7 -0.4**
baz=26
**A30A Hoffart Farm,** 25.57 17 P **P** **17 58 42.4 0.0**
baz=26
**B32A Ashes, Strandq** 25.59 20 P **P** **17 58 41.8 -0.6**
baz=26
**BLN Blyn Mountain** 25.62 338 eP **P** **17 58 43.1 +0.4**
**AGMN Agassiz Nation** 25.71 21 P **P** **17 58 43.3 -0.2**
baz=26
**AGMN Agassiz Nation** 25.71 21 PFAKE 17 58 50.0 +6.5
AGMN LR LR
comp=Z,278µm,20.0s
**D36A Goodland** 25.73 26 P **P** **17 58 43.2 -0.5**
baz=26
**PNT Penticton** 25.81 344 eP **P** **17 58 44.7 +0.2**
**PNT Penticton** 25.81 344 eP **P** **17 58 44.7 +0.2**
**C35A Jirik Farms, M** 25.85 24 P **P** **17 58 44.8 0.0**
baz=26
**A31A Linda, St. Vin** 25.87 18 P **P** **17 58 44.3 -0.7**
baz=26
**D37A Cotton** 26.01 27 P **P** **17 58 45.1 -1.2**
baz=26
**A04D Lummi Island** 26.15 339 P **P** **17 58 47.4 0.0**
baz=26
**KMSC Kings Mountain** 26.16 60 P **P** **17 58 47.4 -0.3**
baz=26
**KMSC Kings Mountain** 26.16 60 eP **P** **17 58 47.3 -0.4**
comp=Z,434nm,1.2s
**B34A Aery, Baudette** 26.28 22 P **P** **17 58 48.5 -0.1**
baz=26
**C36A Pine Crest Far** 26.33 25 P **P** **17 58 49.1 -0.1**
baz=26
**PGC Sidney** 26.33 338 eP **P** **17 58 49.1 -0.1**
**A33A Warroad** 26.42 21 P **P** **17 58 49.6 -0.4**
baz=26
**C37A Embarrass** 26.56 26 P **P** **17 58 50.1 -1.2**
baz=27
**RGRS Roger Stewart** 26.58 66 eP **P** **17 58 53.1 +1.5**
**NHSC New Hope** 26.63 65 eP **P** **17 58 51.8 -0.2**
comp=Z,1µm,1.5s
NHSC LR LR
comp=Z,424µm,20.0s
**COWI Conover** 26.67 32 eP **P** **17 58 51.3 -1.0**
comp=Z,865nm,1.6s
COWI LR LR
comp=Z,25µm,21.0s
**CSU Charleston Sou** 26.70 65 eP **P** **17 58 51.9 -0.7**
**ACSO Alum Creek Sta** 26.79 49 PFAKE 17 59 00.0 +6.6
ACSO LR LR
comp=Z,174µm,20.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **C38A** | **Sawbill Land.** | **26.93** | **27** | P | | **P** | | **17 58 54.0** | **-0.6** |
| | baz=27 | | | | | | | | |
| **EYMN** | **Ely** | **27.02** | **27** | P | | **P** | | **17 58 55.0** | **-0.4** |
| | baz=27 | | | | | | | | |
| **EYMN** | **Ely** | **27.02** | **27** | *e*P | | **P** | | **17 58 54.3** | **-1.1** |
| EYMN | comp=Z,565nm,1.4s | | | LR | | LR | | | |
| | comp=Z,334µm,20.0s | | | | | | | | |
| **JTS** | **JuntasAbangare** | **27.16** | **118** | P | | **P** | | **17 58 56.7** | **-0.2** |
| | comp=Z,45nm,1.0s,baz=318,slow=8.9,SNR=22 | | | | | | | | |
| JTS | | | | LR | | LR | | 18 08 52.9 | |
| | comp=Z,58µm,18.6s,baz=310,slow=35 | | | | | | | | |
| **JTS** | **JuntasAbangare** | **27.16** | **118** | *c i*P | | **P** | | **17 58 57.3** | **+0.4** |
| JTS | | | | MLR | | MLR | | | |
| | comp=Z,377µm,24.0s | | | | | | | | |
| **JTS** | **JuntasAbangare** | **27.16** | **118** | P | | **P** | | **17 58 58.0** | **+1.1** |
| | comp=Z,767nm,1.9s,SNR=30 | | | | | | | | |
| **JTS** | **JuntasAbangare** | **27.16** | **118** | P | | **P** | | **17 58 56.7** | **-0.2** |
| **AAM** | **Ann Arbor** | **27.36** | **44** | P | | **P** | | **17 58 58.1** | **-0.4** |
| AAM | | | | pmax | | pmax | | | |
| | comp=Z,806nm,1.9s | | | | | | | | |
| AAM | | | | MLR | | MLR | | | |
| | comp=Z,386µm,19.0s | | | | | | | | |
| **AAM** | **Ann Arbor** | **27.36** | **44** | P | | **P** | | **17 58 58.1** | **-0.4** |
| | comp=Z,806nm,1.9s | | | | | | | | |
| AAM | | | | LR | | LR | | | |
| | comp=Z,386µm,19.0s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **27.43** | **19** | P | | **P** | | **17 58 57.8** | **-1.3** |
| | comp=Z,51nm,1.1s,baz=210,slow=9.4,SNR=40 | | | | | | | | |
| ULM | | | | Lg | | Lg | | 18 07 25.4 | |
| | comp=Z,20nm,1.1s,baz=314,slow=9.9,SNR=4.1 | | | | | | | | |
| ULM | | | | LR | | LR | | 18 09 29.2 | |
| | comp=Z,166µm,19.6s,baz=206,slow=36 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **27.43** | **19** | P | | **P** | | **17 58 57.8** | **-1.3** |
| ULM | | | | Lg | | Lg | | 18 07 25.4 | |
| **BLA** | **Blacksburg** | **27.47** | **56** | P | | **P** | | **17 59 01.6** | **+2.0** |
| BLA | | | | pmax | | pmax | | | |
| | comp=Z,490nm,1.3s | | | | | | | | |
| **BLA** | **Blacksburg** | **27.47** | **56** | PFAKE | | | | 17 59 10.0 | +10 |
| BLA | | | | LR | | LR | | | |
| | comp=Z,325µm,21.0s | | | | | | | | |
| **C39A** | **Grand Marais** | **27.49** | **28** | P | | **P** | | **17 58 59.0** | **-0.6** |
| | baz=28 | | | | | | | | |
| **EDM** | **Edmonton** | **28.57** | **355** | P | | **P** | | **17 59 09.0** | **-0.2** |
| EDM | | | | pmax | | pmax | | | |
| | comp=Z,3µm,1.6s | | | | | | | | |
| **MCWV** | **Mont Chateau** | **28.75** | **52** | *e*P | | **P** | | **17 59 12.6** | **+1.7** |
| | comp=Z,198nm,1.4s | | | | | | | | |
| **CNNC** | **Cliffs of the** | **28.91** | **62** | *e*P | | **P** | | **17 59 12.7** | **+0.3** |
| | comp=Z,314nm,1.2s | | | | | | | | |
| CNNC | | | | LR | | LR | | | |
| | comp=Z,433µm,19.0s | | | | | | | | |
| **ERPA** | **Erie** | **29.66** | **47** | *e*P | | P | | 17 59 24.5 | +5.5 |
| | comp=Z,1µm,2.6s | | | | | | | | |
| **URVA** | **University of** | **29.77** | **57** | *e*P | | **P** | | **17 59 22.1** | **+2.1** |
| **CBN** | **Corbin** | **30.07** | **56** | *e*P | | **P** | | **17 59 21.9** | **-0.8** |
| | comp=Z,186nm,1.0s | | | | | | | | |
| CBN | | | | LR | | LR | | | |
| | comp=Z,255µm,20.0s | | | | | | | | |
| **MTDJ** | **Mount Denham** | **30.11** | **96** | *e*P | | **P** | | **17 59 22.5** | **-0.8** |
| | comp=Z,1µm,2.3s | | | | | | | | |
| MTDJ | | | | LR | | LR | | | |
| | comp=Z,107µm,21.0s | | | | | | | | |
| **FFC** | **Flin Flon** | **30.38** | **8** | P | | **P** | | **17 59 25.5** | **+0.3** |
| FFC | | | | pmax | | pmax | | | |
| | comp=Z,1µm,1.8s | | | | | | | | |
| **FFC** | **Flin Flon** | **30.38** | **8** | P | | **P** | | **17 59 24.3** | **-0.9** |
| | comp=Z,1µm,1.9s,SNR=41 | | | | | | | | |
| **FFC** | **Flin Flon** | **30.38** | **8** | *e*P | | **P** | | **17 59 24.3** | **-0.9** |
| | comp=Z,1µm,1.7s | | | | | | | | |
| FFC | | | | LR | | LR | | | |
| | comp=Z,63µm,20.0s | | | | | | | | |
| **SSPA** | **Standing Stone** | **30.50** | **51** | *e*P | | **P** | | **17 59 25.5** | **-1.0** |
| | comp=Z,501nm,1.0s | | | | | | | | |
| **BBB** | **Bella Bella** | **30.92** | **337** | P | | **P** | | **17 59 30.4** | **+0.5** |
| | comp=Z,23nm,0.8s,baz=165,slow=10,SNR=9.0 | | | | | | | | |
| BBB | | | | LR | | LR | | 18 12 13.2 | |
| | comp=Z,172µm,19.8s,baz=164,slow=37 | | | | | | | | |
| **BBB** | **Bella Bella** | **30.92** | **337** | P | | **P** | | **17 59 30.4** | **+0.5** |
| **PAYG** | **Puerto Ayora** | **31.23** | **141** | *e*P | | P | | 17 59 25.4 | -7.7 |
| | comp=Z,94nm,1.1s | | | | | | | | |
| PAYG | | | | LR | | LR | | | |
| | comp=Z,27µm,19.0s | | | | | | | | |
| **SADO** | **Sadowa** | **31.44** | **43** | P | | **P** | | **17 59 33.2** | **-1.5** |
| | comp=Z,12nm,0.8s,baz=261,slow=10,SNR=5.8 | | | | | | | | |
| SADO | | | | Lg | | Lg | | 18 09 58.4 | |
| | comp=Z,48nm,1.3s,baz=347,slow=19,SNR=6.9 | | | | | | | | |
| SADO | | | | LR | | LR | | 18 12 59.9 | |
| | comp=Z,252µm,18.6s,baz=249,slow=38 | | | | | | | | |
| **SADO** | **Sadowa** | **31.44** | **43** | *e*P | | **P** | | **17 59 37.2** | **+2.5** |
| SADO | | | | Lg | | Lg | | 18 09 58.4 | |
| **GTBY** | **Guantanamo Bay** | **31.82** | **92** | *e*P | | **P** | | **17 59 38.8** | **+0.5** |
| | comp=Z,208nm,1.3s | | | | | | | | |
| GTBY | | | | LR | | LR | | | |
| | comp=Z,118µm,21.0s | | | | | | | | |
| **BCIP** | **Isla Barro Col** | **31.97** | **114** | *e*P | | **P** | | **17 59 39.5** | **-0.1** |
| | comp=Z,257nm,1.5s | | | | | | | | |
| BCIP | | | | LR | | LR | | | |
| | comp=Z,82µm,19.0s | | | | | | | | |
| **LUPA** | **Lehigh Univers** | **32.29** | **52** | *e*P | | **P** | | **17 59 43.9** | **+1.7** |
| | comp=Z,91nm,1.2s | | | | | | | | |
| **KSPA** | **Keystone Colle** | **32.33** | **51** | *e*P | | **P** | | **17 59 43.8** | **+1.2** |
| | comp=Z,1µm,2.5s | | | | | | | | |
| **BINY** | **Binghamton** | **32.41** | **49** | *e*P | | **P** | | **17 59 43.8** | **+0.5** |
| | comp=Z,150nm,1.0s | | | | | | | | |
| **BRNJ** | **Basking Ridge** | **32.90** | **53** | *e*P | | **P** | | **17 59 49.5** | **+2.0** |
| | comp=Z,2µm,2.7s | | | | | | | | |
| **PAL** | **Palisades** | **33.47** | **52** | *e*P | | **P** | | **17 59 52.1** | **-0.4** |
| PAL | | | | pmax | | pmax | | | |
| | comp=Z,85nm,1.0s | | | | | | | | |
| **PAL** | **Palisades** | **33.47** | **52** | *e*P | | **P** | | **17 59 52.1** | **-0.4** |
| | comp=Z,85nm,1.0s | | | | | | | | |
| **TRY** | **Troy** | **34.20** | **50** | *e*P | | **P** | | **17 59 58.2** | **-0.6** |
| | comp=Z,1µm,2.3s | | | | | | | | |
| **NCB** | **Newcomb** | **34.27** | **47** | PFAKE | | | | 18 00 10.0 | +10 |
| NCB | | | | LR | | LR | | | |
| | comp=Z,148µm,20.0s | | | | | | | | |
| **LONY** | **Lake Ozonia** | **34.29** | **46** | *e*P | | **P** | | **17 59 58.7** | **-1.0** |
| | comp=Z,141nm,1.3s | | | | | | | | |
| LONY | | | | LR | | LR | | | |
| | comp=Z,311µm,20.0s | | | | | | | | |
| **ACCN** | **Adirondack Com** | **34.43** | **48** | *e*P | | **P** | | **17 59 59.8** | **-1.0** |
| | comp=Z,123nm,1.4s | | | | | | | | |
| **MDV** | **Middlebury** | **34.98** | **48** | *e*P | | **P** | | **18 00 06.1** | **+0.5** |
| **FRNY** | **Flat Rock** | **35.02** | **46** | *e*P | | **P** | | **18 00 06.8** | **+0.8** |
| | comp=Z,74nm,1.1s | | | | | | | | |
| **GRTK** | **Grand Turk** | **35.06** | **87** | PFAKE | | | | 18 00 20.0 | +14 |
| GRTK | | | | LR | | LR | | | |
| | comp=Z,122µm,22.0s | | | | | | | | |
| **BRYW** | **Bryant College** | **35.44** | **52** | *e*P | | **P** | | **18 00 06.7** | **-2.9** |
| | comp=Z,71nm,0.9s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **35.55** | **92** | *e*P | | **P** | | **18 00 11.4** | **+0.6** |
| | comp=Z,1µm,2.4s | | | | | | | | |
| SDDR | | | | LR | | LR | | | |
| | comp=Z,58µm,20.0s | | | | | | | | |
| **FCC** | **Fort Churchill** | **35.59** | **13** | P | | **P** | | **18 00 10.9** | **+0.3** |
| FCC | | | | pmax | | pmax | | | |
| | comp=Z,690nm,1.4s | | | | | | | | |
| **FCC** | **Fort Churchill** | **35.59** | **13** | *e*P | | **P** | | **18 00 09.6** | **-1.0** |
| | comp=Z,693nm,1.4s | | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **35.60** | **51** | P | | **P** | | **18 00 12.8** | **+1.9** |
| HRV | | | | pmax | | pmax | | | |
| | comp=Z,190nm,1.3s | | | | | | | | |
| **HRV** | **Adam Dziewonsk** | **35.60** | **51** | *e*P | | **P** | | **18 00 10.3** | **-0.7** |
| **WRAK** | **Wrangell Islan** | **35.81** | **338** | *e*P | | **P** | | **18 00 13.2** | **+0.7** |
| | comp=Z,566nm,1.7s | | | | | | | | |
| WRAK | | | | LR | | LR | | | |
| | comp=Z,180µm,19.0s | | | | | | | | |
| **LBNH** | **Lisbon** | **35.91** | **48** | *e*P | | **P** | | **18 00 15.8** | **+2.2** |
| LBNH | | | | pmax | | pmax | | | |
| | comp=Z,1µm,2.5s | | | | | | | | |
| **LBNH** | **Lisbon** | **35.91** | **48** | *e*P | | **P** | | **18 00 15.8** | **+2.2** |
| | comp=Z,1µm,2.5s | | | | | | | | |
| **BANI** | **BANI** | **36.56** | **92** | *e*P | | **P** | | **18 00 22.2** | **+2.7** |
| **DLBC** | **Dease Lake** | **36.74** | **342** | P | | **P** | | **18 00 21.1** | **+0.5** |
| | comp=Z,80nm,0.8s,baz=151,slow=7.7,SNR=81 | | | | | | | | |
| DLBC | | | | PcP | | **PcP** | | **18 02 43.7** | **+1.0** |
| | comp=Z,13nm,0.9s,baz=151,slow=10,SNR=2.3 | | | | | | | | |
| DLBC | | | | LR | | LR | | 18 16 12.6 | |
| | comp=Z,207µm,19.3s,baz=155,slow=38 | | | | | | | | |
| **DLBC** | **Dease Lake** | **36.74** | **342** | *e*P | | **P** | | **18 00 21.6** | **+1.1** |
| | comp=Z,386nm,1.2s | | | | | | | | |
| DLBC | | | | PcP | | **PcP** | | **18 02 43.8** | **+1.0** |
| **SMN1** | **Samana, DR** | **37.32** | **91** | *e*P | | **P** | | **18 00 26.2** | **+0.2** |
| **WVL** | **Waterville** | **37.55** | **48** | *e*P | | **P** | | **18 00 26.7** | **-0.8** |
| | comp=Z,485nm,1.9s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **37.87** | **356** | P | | **P** | | **18 00 29.4** | **-0.6** |
| | comp=Z,46nm,1.1s,baz=170,slow=7.9,SNR=56 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **37.87** | **356** | P | | **P** | | **18 00 29.4** | **-0.6** |
| **PKME** | **Peaks-Kenny Pk** | **38.02** | **47** | PFAKE | | | | 18 00 40.0 | +8.5 |
| PKME | | | | LR | | LR | | | |
| | comp=Z,234µm,21.0s | | | | | | | | |
| **BESE** | **Bessie Mountai** | **38.35** | **339** | *e*P | | **P** | | **18 00 36.1** | **+2.0** |
| | comp=Z,507nm,1.8s | | | | | | | | |
| **OTAV** | **Otavalo** | **38.46** | **125** | *e*P | | **P** | | **18 00 38.0** | **+1.9** |
| | comp=Z,579nm,1.6s | | | | | | | | |
| OTAV | | | | LR | | LR | | | |
| | comp=Z,24µm,22.0s | | | | | | | | |
| **ROSC** | **El Rosal** | **38.89** | **115** | P | | **P** | | **18 00 40.6** | **+1.0** |
| | comp=Z,108nm,1.1s,baz=291,slow=5.9,SNR=61 | | | | | | | | |
| **ROSC** | **El Rosal** | **38.89** | **115** | P | | **P** | | **18 00 40.6** | **+1.0** |
| **EMMW** | **East Machias** | **39.09** | **49** | P | | **P** | | **18 00 40.1** | **-0.4** |
| | comp=Z,723nm,1.8s | | | | | | | | |
| **AGP** | **Aguadilla** | **39.48** | **91** | *e*P | | **P** | | **18 00 46.1** | **+2.0** |
| | comp=Z,348nm,0.9s | | | | | | | | |
| **BBSR** | **BB Station** | **39.56** | **69** | *e*P | | **P** | | **18 00 44.2** | **-0.3** |
| | comp=Z,2µm,2.1s | | | | | | | | |
| BBSR | | | | LR | | LR | | | |
| | comp=Z,58µm,19.0s | | | | | | | | |
| **LSP** | **Las Mesas** | **39.60** | **91** | *e*P | | **P** | | **18 00 46.6** | **+1.5** |
| **CRPR** | **Cabo Rojo, PR** | **39.62** | **91** | *e*P | | **P** | | **18 00 44.6** | **-0.6** |
| | comp=Z,483nm,1.1s | | | | | | | | |
| **AOPR** | **Arecibo Observ** | **39.85** | **91** | *e*P | | **P** | | **18 00 47.7** | **+0.5** |
| | comp=Z,3µm,3.0s | | | | | | | | |
| **DHAK** | **Deception Hill** | **39.89** | **337** | *e*P | | **P** | | **18 00 50.2** | **+3.2** |
| | comp=Z,325nm,1.3s | | | | | | | | |
| **SDV** | **Santo Domingo** | **39.96** | **107** | *e*P | | **P** | | **18 00 48.8** | **+0.5** |
| | comp=Z,385nm,1.4s | | | | | | | | |
| SDV | | | | LR | | LR | | | |
| | comp=Z,83µm,22.0s | | | | | | | | |
| **OBIP** | **Obispado Ponce** | **40.07** | **91** | *e*P | | **P** | | **18 00 48.6** | **-0.4** |
| | comp=Z,186nm,0.9s | | | | | | | | |
| **CELP** | **Cerrillos** | **40.09** | **91** | *e*P | | **P** | | **18 00 48.7** | **-0.4** |
| **ICMP** | **Isla Caja de M** | **40.19** | **91** | *e*P | | P | | 18 00 43.7 | -6.3 |
| **SJG** | **San Juan** | **40.47** | **91** | *e*P | | **P** | | **18 00 51.8** | **-0.4** |
| SJG | | | | pmax | | pmax | | | |
| | comp=Z,286nm,0.9s | | | | | | | | |
| SJG | | | | MLR | | MLR | | | |
| | comp=Z,107µm,22.0s | | | | | | | | |
| **SJG** | **San Juan** | **40.47** | **91** | *e*P | | **P** | | **18 00 51.8** | **-0.4** |
| | comp=Z,286nm,0.9s | | | | | | | | |
| SJG | | | | LR | | LR | | | |
| | comp=Z,107µm,22.0s | | | | | | | | |
| **CPD** | **Cerro la Pandu** | **40.70** | **91** | *e*P | | **P** | | **18 00 54.6** | **+0.4** |
| CPD | | | | pmax | | pmax | | | |
| | comp=Z,963nm,1.1s | | | | | | | | |
| **CPD** | **Cerro la Pandu** | **40.70** | **91** | *e*P | | **P** | | **18 00 54.6** | **+0.4** |
| | comp=Z,963nm,1.1s | | | | | | | | |
| **HUMP** | **Col San Antoni** | **40.73** | **91** | *e*P | | **P** | | **18 00 55.3** | **+0.9** |
| | comp=Z,3µm,2.8s | | | | | | | | |
| **STVI** | **Saint Thomas** | **41.48** | **90** | *e*P | | **P** | | **18 01 00.1** | **-0.5** |
| | comp=Z,964nm,2.0s | | | | | | | | |
| **POHA** | **Pohakuloa** | **43.04** | **273** | PFAKE | | | | 18 01 20.0 | +6.4 |
| POHA | | | | LR | | LR | | | |
| | comp=Z,144µm,20.0s | | | | | | | | |
| **SCHQ** | **Schefferville** | **43.22** | **35** | P | | **P** | | **18 01 12.8** | **-1.5** |
| | comp=Z,76nm,1.0s,baz=250,slow=7.1,SNR=20 | | | | | | | | |
| SCHQ | | | | LR | | LR | | 18 19 28.0 | |
| | comp=Z,96µm,19.1s,baz=246,slow=37 | | | | | | | | |
| **SCHQ** | **Schefferville** | **43.22** | **35** | P | | **P** | | **18 01 12.8** | **-1.5** |
| **SABA** | **Saba** | **43.25** | **90**⇑ | *i*P | | **P** | | **18 01 14.8** | **-0.3** |
| **SABA** | **Saba** | **43.25** | **90** | *e*P | | **P** | | **18 01 16.8** | **+1.7** |
| | comp=Z,1µm,1.9s | | | | | | | | |
| **SMRT** | **St. Maarten** | **43.28** | **90**⇑ | *i*P | | **P** | | **18 01 14.3** | **-1.0** |
| **SMRT** | **St. Maarten** | **43.28** | **90** | *e*P | | **P** | | **18 01 15.2** | **-0.1** |
| | comp=Z,222nm,1.1s | | | | | | | | |
| **BMRM** | **Bremner River** | **43.51** | **336** | *e*P | | **P** | | **18 01 18.1** | **+1.5** |
| | comp=Z,654nm,1.7s | | | | | | | | |
| **SEUS** | **St. Eustatius** | **43.53** | **90** | *e*P | | **P** | | **18 01 16.9** | **-0.4** |
| **EYAK** | **Cordova Ski Ar** | **43.68** | **335** | *e*P | | **P** | | **18 01 20.5** | **+2.5** |
| | comp=Z,753nm,1.8s | | | | | | | | |
| **SKI** | **Saint Kitts** | **43.80** | **90** | *e*P | | **P** | | **18 01 18.9** | **-0.6** |
| **DAWY** | **Dawson** | **43.96** | **341** | *e*P | | **P** | | **18 01 20.8** | **+0.5** |
| | comp=Z,631nm,1.3s | | | | | | | | |
| **DIV** | **Divide** | **44.05** | **335** | *e*P | | **P** | | **18 01 22.0** | **+1.0** |
| | comp=Z,192nm,1.3s | | | | | | | | |
| **KLU** | **Klutina** | **44.34** | **336** | *e*P | | **P** | | **18 01 25.1** | **+1.8** |
| | comp=Z,525nm,1.7s | | | | | | | | |
| **MBWH** | | **44.48** | **91**⇑ | *i*P | | **P** | | **18 01 24.2** | **-0.8** |
| **ANWB** | **Willy Bob** | **44.56** | **90**⇑ | *i*P | | **P** | | **18 01 23.9** | **-1.7** |
| **ANWB** | **Willy Bob** | **44.56** | **90** | *e*P | | **P** | | **18 01 23.7** | **-1.9** |
| | comp=Z,200nm,1.0s | | | | | | | | |
| ANWB | | | | LR | | LR | | | |
| | comp=Z,45µm,20.0s | | | | | | | | |
| **HARP** | **HAARP** | **44.65** | **337** | *e*P | | **P** | | **18 01 28.1** | **+2.4** |
| | comp=Z,412nm,1.2s | | | | | | | | |
| **KIP** | **Kipapa** | **44.86** | **276** | *c i*P | | **P** | | **18 01 29.6** | **+1.6** |
| KIP | | | | pmax | | pmax | | | |
| | comp=Z,5µm,2.5s | | | | | | | | |
| KIP | | | | MLR | | MLR | | | |
| | comp=Z,234µm,9.0s | | | | | | | | |
| **KIP** | **Kipapa** | **44.86** | **276** | *e*P | | **P** | | **18 01 29.9** | **+1.9** |
| | comp=Z,11µm,1.9s | | | | | | | | |
| KIP | | | | LR | | LR | | | |
| | comp=Z,171µm,20.0s | | | | | | | | |
| **HON** | **Honolulu** | **44.88** | **276** | P | | **P** | | **18 01 27.6** | **-0.4** |
| **HON** | **Honolulu** | **44.88** | **276** | P | | **P** | | **18 01 27.6** | **-0.4** |
| **SEW** | **Seward** | **44.91** | **333** | *e*P | | **P** | | **18 01 28.5** | **+0.8** |
| | comp=Z,168nm,1.1s | | | | | | | | |
| **EGAK** | **Eagle** | **45.00** | **341** | *e*P | | **P** | | **18 01 29.1** | **+0.6** |
| | comp=Z,262nm,1.1s | | | | | | | | |
| EGAK | | | | LR | | LR | | | |
| | comp=Z,144µm,19.0s | | | | | | | | |
| **TAOE** | **Nuku Hiva Isla** | **45.06** | **226** | *e*T | | T | | 18 47 41.4 | |
| | comp=Z,119nm,0.3s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **45.08** | **336** | *e*P | | **P** | | **18 01 30.9** | **+1.7** |
| SCM | | | | pmax | | pmax | | | |
| | comp=Z,682nm,1.6s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **45.08** | **336** | *e*P | | **P** | | **18 01 30.9** | **+1.7** |
| | comp=Z,682nm,1.6s | | | | | | | | |
| **DOT** | **Dot Lake** | **45.10** | **339** | *e*P | | **P** | | **18 01 29.8** | **+0.4** |
| | comp=Z,576nm,1.3s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **45.11** | **329** | P | | **P** | | **18 01 30.0** | **+0.6** |
| | comp=Z,92nm,0.9s,baz=134,slow=3.6,SNR=16 | | | | | | | | |
| KDAK | | | | LR | | LR | | 18 18 10.9 | |
| | comp=Z,98µm,19.0s,baz=132,slow=33 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **45.11** | **329** | P | | **P** | | **18 01 31.4** | **+2.0** |
| KDAK | | | | pmax | | pmax | | | |
| | comp=Z,810nm,1.6s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **45.11** | **329** | P | | **P** | | **18 01 31.3** | **+1.9** |
| | comp=Z,1µm,1.2s,SNR=5.2 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **45.11** | **329** | *e*P | | **P** | | **18 01 31.1** | **+1.7** |
| | comp=Z,810nm,1.6s | | | | | | | | |
| **PAX** | **Paxson** | **45.12** | **338** | P | | **P** | | **18 01 30.3** | **+0.7** |
| PAX | | | | pmax | | pmax | | | |
| | comp=Z,230nm,1.4s | | | | | | | | |
| **PAX** | **Paxson** | **45.12** | **338** | *e*P | | **P** | | **18 01 30.0** | **+0.4** |
| | comp=Z,230nm,1.5s | | | | | | | | |
| **MLG** | **Mont-d'or** | **45.13** | **92**⇑ | *i*P | | **P** | | **18 01 30.1** | **-0.2** |
| **SSG** | **Sans Toucher** | **45.15** | **92** | *e*P | | **P** | | **18 01 29.4** | **-1.1** |
| **LKG** | **Breislack** | **45.19** | **92**⇑ | *i*P | | **P** | | **18 01 30.0** | **-0.8** |
| **ECG** | **Echelle** | **45.19** | **92** | *e*P | | **P** | | **18 01 30.6** | **-0.3** |
| **PHG** | **Guadaloupe-2** | **45.21** | **92** | *e*P | | **P** | | **18 01 31.5** | **+0.6** |
| **DOG** | **Dongo Capester** | **45.23** | **92** | *e*P | | **P** | | **18 01 31.2** | **+0.2** |
| **TBG** | **Guadaloupe-3** | **45.26** | **92** | *e*P | | **P** | | **18 01 31.1** | **-0.1** |
| **BRLK** | **Bradley Lake** | **45.33** | **332** | *e*P | | **P** | | **18 01 32.9** | **+1.7** |
| | comp=Z,1µm,1.8s | | | | | | | | |
| **RIDG** | **Independ'e Rid** | **45.42** | **339** | *e*P | | **P** | | **18 01 33.9** | **+2.0** |
| | comp=Z,943nm,1.8s | | | | | | | | |
| **BBL** | **Barber's Block** | **45.53** | **92** | *e*P | | **P** | | **18 01 32.8** | **-0.6** |
| **RC01** | **Rabbit Creek A** | **45.58** | **334** | *e*P | | **P** | | **18 01 33.2** | **+0.1** |
| | comp=Z,578nm,1.6s | | | | | | | | |
| **DEG** | **La Desirade** | **45.64** | **91** | *e*P | | **P** | | **18 01 32.5** | **-1.8** |
| **DLPL** | **La Plaine** | **45.80** | **92** | *e*P | | **P** | | **18 01 35.6** | **+0.1** |
| **INK** | **Inuvik** | **45.98** | **348** | P | | **P** | | **18 01 36.1** | **0.0** |
| | comp=Z,28nm,1.1s,baz=142,slow=10,SNR=44 | | | | | | | | |
| INK | | | | LR | | LR | | 18 20 58.4 | |
| | comp=Z,192µm,19.9s,baz=150,slow=36 | | | | | | | | |
| **INK** | **Inuvik** | **45.98** | **348** | P | | **P** | | **18 01 36.4** | **+0.3** |
| INK | | | | pmax | | pmax | | | |
| | comp=Z,1µm,1.9s | | | | | | | | |
| **INK** | **Inuvik** | **45.98** | **348** | *e*P | | **P** | | **18 01 36.0** | **-0.1** |
| | comp=Z,1µm,2.0s | | | | | | | | |
| **FDF** | **Fort de France** | **46.09** | **93** | P | | P | | 18 01 41.7 | +3.9 |
| FDF | | | | pmax | | pmax | | | |
| | comp=Z,280nm,1.0s | | | | | | | | |
| **FDF** | **Fort de France** | **46.09** | **93**⇑ | *i*P | | **P** | | **18 01 36.9** | **-0.9** |
| **FDF** | **Fort de France** | **46.09** | **93** | *e*P | | **P** | | **18 01 36.4** | **-1.4** |
| | comp=Z,279nm,1.0s | | | | | | | | |
| FDF | | | | LR | | LR | | | |
| | comp=Z,43µm,21.0s | | | | | | | | |
| **SUA** | **Susitna One** | **46.19** | **334** | *e*P | | **P** | | **18 01 39.8** | **+1.7** |
| | comp=Z,1µm,1.8s | | | | | | | | |
| **RSO** | **Redoubt South** | **46.49** | **332** | *e*P | | **P** | | **18 01 41.0** | **+0.4** |
| | comp=Z,476nm,0.9s | | | | | | | | |
| **SVB** | **Belmont** | **46.52** | **95**⇑ | *i*P | | **P** | | **18 01 40.1** | **-1.1** |
| **SPU** | **Mount Spurr** | **46.57** | **333** | *e*P | | **P** | | **18 01 41.5** | **+0.5** |
| **GRGR** | **Grenville** | **46.58** | **97**⇑ | *i*P | | **P** | | **18 01 41.2** | **-0.4** |
| **GRGR** | **Grenville** | **46.58** | **97** | *e*P | | **P** | | **18 01 40.1** | **-1.6** |
| | comp=Z,1µm,1.3s | | | | | | | | |
| GRGR | | | | LR | | LR | | | |
| | comp=Z,54µm,22.0s | | | | | | | | |
| **RND** | **Reindeer** | **46.59** | **337** | *e*P | | **P** | | **18 01 42.5** | **+1.3** |
| RND | | | | pmax | | pmax | | | |
| | comp=Z,856nm,1.8s | | | | | | | | |
| **RND** | **Reindeer** | **46.59** | **337** | *e*P | | **P** | | **18 01 42.5** | **+1.3** |
| | comp=Z,856nm,1.8s | | | | | | | | |
| **MCLT** | **Moule a Chique** | **46.64** | **94**⇑ | *i*P | | **P** | | **18 01 41.0** | **-1.1** |
| **ILAR** | **Eielson Array** | **46.77** | **339** | P | | **P** | | **18 01 42.1** | **-0.4** |
| | comp=Z,110nm,1.1s,baz=151,slow=5.8,SNR=109 | | | | | | | | |
| ILAR | | | | LR | | LR | | 18 22 44.1 | |
| | comp=Z,111µm,18.7s,baz=140,slow=38 | | | | | | | | |
| **ILAR** | **Eielson Array** | **46.77** | **339** | P | | **P** | | **18 01 42.1** | **-0.4** |
| **MCK** | **McKinley** | **46.82** | **337** | *e*P | | **P** | | **18 01 44.0** | **+1.1** |
| MCK | | | | pmax | | pmax | | | |
| | comp=Z,330nm,1.3s | | | | | | | | |
| **MCK** | **McKinley** | **46.82** | **337** | *e*P | | **P** | | **18 01 44.0** | **+1.1** |
| | comp=Z,330nm,1.3s | | | | | | | | |
| **WRH** | **Wood River Hil** | **46.98** | **338** | *e*P | | **P** | | **18 01 45.2** | **+1.1** |
| | comp=Z,422nm,1.5s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **47.00** | **338** | *e*P | | **P** | | **18 01 44.0** | **-0.2** |
| | comp=Z,479nm,1.8s | | | | | | | | |
| **FRB** | **Frobisher Bay** | **47.14** | **23** | P | | **P** | | **18 01 45.0** | **-0.3** |
| | comp=Z,26nm,0.9s,baz=234,slow=8.8,SNR=3.9 | | | | | | | | |
| **FRB** | **Frobisher Bay** | **47.14** | **23** | P | | **P** | | **18 01 45.0** | **-0.3** |
| **FRB** | **Frobisher Bay** | **47.14** | **23** | P | | **P** | | **18 01 45.0** | **-0.3** |
| **TRF** | **Thorofare Moun** | **47.14** | **336** | *e*P | | **P** | | **18 01 45.5** | **0.0** |
| | comp=Z,1µm,1.3s | | | | | | | | |
| **COLA** | **College** | **47.16** | **339** | P | | **P** | | **18 01 45.6** | **+0.2** |
| COLA | | | | pmax | | pmax | | | |
| | comp=Z,440nm,1.5s | | | | | | | | |
| **COLA** | **College** | **47.16** | **339** | *e*P | | **P** | | **18 01 45.6** | **+0.2** |
| | comp=Z,441nm,1.5s | | | | | | | | |
| COLA | | | | LR | | LR | | | |
| | comp=Z,124µm,19.0s | | | | | | | | |
| **BWN** | **Browne** | **47.27** | **337** | *e*P | | **P** | | **18 01 43.4** | **-3.0** |
| | comp=Z,1µm,1.3s | | | | | | | | |
| **FYU** | **Fort Yukon** | **47.47** | **341** | *e*P | | **P** | | **18 01 47.7** | **-0.1** |
| | comp=Z,920nm,1.5s | | | | | | | | |
| **PPLA** | **Purkeypile** | **47.54** | **335** | *e*P | | **P** | | **18 01 48.7** | **0.0** |
| | comp=Z,2µm,1.5s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **47.77** | **337** | *e*P | | **P** | | **18 01 49.8** | **-0.4** |
| | comp=Z,117nm,1.3s | | | | | | | | |
| **TOSP** | **Speyside** | **47.91** | **97** | *e*P | | P | | 18 01 48.8 | -3.2 |
| **BBGH** | **Gun Hill** | **48.10** | **94** | PFAKE | | | | 18 02 00.0 | +6.6 |
| BBGH | | | | LR | | LR | | | |
| | comp=Z,100µm,22.0s | | | | | | | | |
| **MLY** | **Manley** | **48.23** | **338** | *e*P | | **P** | | **18 01 54.4** | **+0.5** |
| | comp=Z,1µm,2.0s | | | | | | | | |
| **NNA** | **Nana** | **48.28** | **135** | *ce*P | | **P** | | **18 01 56.6** | **+1.7** |
| NNA | | | | pmax | | pmax | | | |
| | comp=Z,360nm,2.5s | | | | | | | | |
| **NNA** | **Nana** | **48.28** | **135** | P | | **P** | | **18 01 55.1** | **+0.2** |
| | comp=Z,495nm,1.3s,SNR=9.7 | | | | | | | | |
| **NNA** | **Nana** | **48.28** | **135** | *e*P | | **P** | | **18 01 52.5** | **-2.3** |
| | comp=Z,286nm,1.5s | | | | | | | | |
| NNA | | | | LR | | LR | | | |
| | comp=Z,23µm,22.0s | | | | | | | | |
| **COLD** | **Coldfoot** | **49.38** | **340** | *e*P | | **P** | | **18 02 03.5** | **+0.9** |
| | comp=Z,387nm,1.6s | | | | | | | | |
| **RES** | **Resolute Bay** | **50.50** | **5** | P | | **P** | | **18 02 10.4** | **-0.6** |
| | comp=Z,20nm,1.1s,baz=213,slow=7.1,SNR=21 | | | | | | | | |
| RES | | | | LR | | LR | | 18 24 45.0 | |
| | comp=Z,147µm,18.8s,baz=196,slow=38 | | | | | | | | |
| **RES** | **Resolute Bay** | **50.50** | **5** | *e*P | | **P** | | **18 02 09.6** | **-1.4** |
| RES | | | | pmax | | pmax | | | |
| | comp=Z,1µm,2.4s | | | | | | | | |
| **RES** | **Resolute Bay** | **50.50** | **5** | *e*P | | **P** | | **18 02 09.6** | **-1.4** |
| | comp=Z,1µm,2.4s | | | | | | | | |
| **UNV** | **Unalaska Valle** | **51.20** | **320** | *e*P | | **P** | | **18 02 14.8** | **-1.7** |
| | comp=Z,646nm,1.5s | | | | | | | | |
| **NIKH** | **Hokolski High** | **52.44** | **319** | *e*P | | **P** | | **18 02 25.7** | **-0.1** |
| | comp=Z,820nm,1.3s | | | | | | | | |
| **PTCN** | **Pitcairn Islan** | **53.54** | **204** | PFAKE | | | | 18 02 40.0 | +5.8 |
| PTCN | | | | LR | | LR | |

comp=Z,10µm,20.0s
**TBI Tubuai 61.77 222** *e*S S 18 12 03.0 +7.9
comp=Z,23µm,26.8s
TBI *e*LQ LQ 18 19 17.1
comp=Z,87µm,37.2s
TBI *e*LR LR 18 21 42.5
comp=Z,65µm,30.0s,baz=34
**LCO Las Campanas 65.03 143** *e*P **P 18 03 55.2 +1.2**
comp=Z,600nm,1.9s
LCO LR LR
comp=Z,12µm,20.0s
**BILL Bilibino 65.24 336** *d* iP **P 18 03 54.6 0.0**
BILL *e**PP **pP 18 03 58.9 -0.2**
BILL *e**SP **sP 18 04 00.7 -0.1**
BILL 18 04 26.0
BILL 18 06 22.0
BILL PPP PPP 18 07 52.0
BILL *i* S **S 18 12 39.8 +2.5**
BILL *e*SS **SS 18 16 52.5 +3.0**
BILL pmax pmax
comp=Z,949nm,2.2s
BILL pmax pmax
comp=Z,260nm,1.7s
BILL MLR MLR
comp=Z,54µm,16.0s
**BILL Bilibino 65.24 336** *e*P **P 18 03 54.1 -0.5**
comp=Z,147nm,1.1s
BILL LR LR
comp=Z,48µm,21.0s
**DAG Danmarks Havn 66.18 15**⇓ *i*P **P 18 03 59.5 -1.0**
DAG pmax pmax
comp=Z,380nm,1.3s
DAG MLR MLR
comp=Z,200µm,16.0s
**DAG Danmarks Havn 66.18 15**⇓ *i*P **P 18 03 59.5 -1.0**
comp=Z,196nm,1.3s
comp=Z,200µm,16.0s
**BORG Borgarnes 66.97 28** *e*P P 18 04 14.8 +9.1
BORG pmax pmax
comp=Z,451nm,1.7s
BORG MLR MLR
comp=Z,56µm,21.0s
**BORG Borgarnes 66.97 28** *e*P P 18 04 14.8 +9.1
comp=Z,451nm,1.7s
BORG LR LR
comp=Z,56µm,21.0s
**RAR Rarotonga 67.15 231** P **P 18 04 10.3 +2.9**
comp=Z,12nm,0.9s,baz=229,slow=20,SNR=3.0
**RAR Rarotonga 67.15 231** P **P 18 04 10.3 +2.9**
**CPUP Villa Florida 71.34 132** P **P 18 04 33.1 -0.2**
comp=Z,52nm,1.0s,baz=325,slow=7.0,SNR=46
CPUP LR LR 18 35 26.2
comp=Z,10µm,21.2s,baz=334,slow=36
**CPUP Villa Florida 71.34 132** P **P 18 04 33.1 -0.2**
**KBS Kingsbay 71.44 10** *e*P **P 18 04 34.0 +0.8**
KBS IAmb IAmb 18 04 45.8
comp=Z,972nm,2.2s
KBS IVMs_BB IVMs_BB 18 37 06.5
comp=Z,113µm,16.8s
**KBS Kingsbay 71.44 10** *e*P **P 18 04 32.5 -0.7**
KBS pmax pmax
comp=Z,1µm,2.5s
KBS MLR MLR
comp=Z,205µm,20.0s
**KBS Kingsbay 71.44 10** *e*P **P 18 04 32.5 -0.7**
comp=Z,1µm,2.5s
KBS LR LR
comp=Z,205µm,20.0s
**PET Petropavlovsk 71.85 321** *d* iP **P 18 04 35.4 -0.7**
PET *e* 18 04 58.0
PET *e*S **S 18 13 50.7 -5.6**
PET *e*SS **SS 18 18 29.4 -2.6**
PET pmax pmax
comp=Z,3µm,9.6s
PET pmax pmax
comp=Z,5µm,5.7s
PET pmax pmax
comp=Z,131nm,1.2s
PET MLR MLR
comp=Z,17µm,20.0s
PET MLR MLR
comp=Z,13µm,17.0s
**PET Petropavlovsk 71.85 321** *e*P **P 18 04 34.9 -1.3**
comp=Z,136nm,1.1s
PET LR LR
comp=Z,16µm,20.0s
**BDFB Brasilia 71.90 117** P **P 18 04 37.5 +0.5**
comp=Z,51nm,1.1s,baz=308,slow=8.3,SNR=20
BDFB LR LR 18 38 57.7
comp=Z,20µm,19.6s,baz=298,slow=38
**BDFB Brasilia 71.90 117** P **P 18 04 37.5 +0.5**
**SEY Seymchan 71.96 332** P **P 18 04 35.8 -0.7**
comp=Z,35nm,0.7s,baz=78,slow=8.2,SNR=5.8
**SEY Seymchan 71.96 332**⇑ *i*P **P 18 04 36.9 +0.3**
**SEY Seymchan 71.96 332** P **P 18 04 35.8 -0.7**
**AFI Afiamalu 72.15 245** P **P 18 04 40.5 +2.0**
comp=Z,9.6nm,0.6s,baz=59,slow=12,SNR=3.9
**AFI Afiamalu 72.15 245** P **P 18 04 39.3 +0.8**
AFI pmax pmax
comp=Z,383nm,1.7s
AFI MLR MLR
comp=Z,54µm,21.0s
**AFI Afiamalu 72.15 245** P **P 18 04 39.3 +0.8**
comp=Z,383nm,1.7s
AFI LR LR
comp=Z,54µm,21.0s
**PETK Petropavlovsk- 72.38 321** P **P 18 04 39.4 +0.1**
comp=Z,49nm,1.0s,baz=94,slow=9.2,SNR=23
PETK LR LR 18 33 23.4
comp=Z,4µm,21.9s,baz=66,slow=33
**PETK Petropavlovsk- 72.38 321** P **P 18 04 39.4 +0.1**
**HSPB Hornsund (broa 73.20 11** *e*P **P 18 04 42.7 -1.1**
HSPB IAMs_20 IAMs_20 18 37 26.2
comp=Z,165µm,18.8s
HSPB IVMs_BB IVMs_BB 18 37 39.5
comp=Z,56µm,16.8s
**MA2 Magadan 73.85 329** *i* P **P 18 04 47.6 -0.3**
**SKR Severo-Kuril's 74.08 319** *e*P P 18 04 40.0 -9.4
SKR *e* 18 07 45.0
SKR *e*S **SKiKP 18 14 16.0 -1.2**
SKR *e*PS **PnS 18 14 56.0 +0.8**
SKR *e*PS **PnS 18 14 56.0 +0.8**
SKR pmax pmax
comp=Z,5µm,8.0s
SKR pmax pmax
comp=N,2µm,6.0s
SKR pmax pmax
comp=E,2µm,6.0s
SKR pmax pmax
comp=Z,180nm,1.0s
SKR smax smax
comp=N,22µm,14.0s
SKR smax smax
comp=E,5µm,14.0s
SKR MLR MLR
comp=N,15µm,20.0s
SKR MLR MLR
comp=Z,18µm,20.0s
**HOPEN Hopen 75.13 10** *e*P **P 18 04 52.9 -2.1**
**BJO Bjornoya 75.53 13** *e*P **P 18 04 57.7 +0.4**
**VAL Valentia 76.11 39** *e*P **P 18 05 04.1 +3.1**
**VAL Valentia 76.11 39** *i*S **S 18 14 40.3 -3.9**
**VAL Valentia 76.11 39**⇓ *i*SS SS 18 19 47.8 +11
**KPL Plockton 76.40 33** *e*P P 18 04 58.9 -3.7
**TRQA Tornquist 76.61 143** *e*P **P 18 05 04.2 +0.2**
comp=Z,94nm,1.0s
TRQA LR LR
comp=Z,15µm,21.0s
**LPA La Plata 76.70 139** *ce*P **P 18 05 04.0 -0.5**
LPA PP **PP 18 07 58.0 +0.6**
LPA PKIKS 18 14 28.0
LPA S **S 18 14 53.0 +2.0**
LPA PS **PnS 18 15 36.0 +6.2**
LPA SKIKS 18 17 56.0
**WAKE Wake Island 77.05 285** PFAKE 18 05 20.0 +13
WAKE LR LR
comp=Z,46µm,20.0s
**LRW Lerwick 77.27 29** *e*P P 18 05 03.1 -4.3
LRW AMS AMS 18 36 11.5
comp=Z,62µm,19.0s
**RCBR Riachuelo 77.40 102** *e*P **P 18 05 07.8 -1.2**
comp=Z,435nm,2.5s
RCBR LR LR
comp=Z,36µm,22.0s
**PGBU Glenifferbraes 77.64 34** *e*P P 18 05 05.1 -4.5
PGBU AMS AMS 18 36 28.6
comp=Z,41µm,16.4s
**DSB Dublin 77.75 37** *e*P **P 18 05 10.9 +0.7**
comp=Z,57nm,1.0s
**DRUM Mains of Drumt 78.14 32** *e*P P 18 05 08.2 -4.2
DRUM AMS AMS 18 37 00.8
comp=Z,63µm,18.6s
**EDI Edinburgh 78.25 34** *e*P P 18 05 08.1 -4.9
EDI AMS AMS 18 36 00.6
comp=Z,49µm,18.8s
**LOF Lofoten 78.31 19** *e*P P 18 05 19.2 +6.1
**TARA Tarawa 78.45 266** P **P 18 05 13.9 -0.9**
comp=Z,401nm,1.4s
TARA LR LR
comp=Z,97µm,19.0s
**ESK Eskdalemuir 78.51 34** *e*P P 18 05 09.8 -4.6
ESK AMS AMS 18 38 57.6
comp=Z,66µm,16.2s
**ESK Eskdalemuir 78.51 34** *e*P **P 18 05 15.5 +1.0**
ESK pmax pmax
comp=Z,130nm,1.1s
ESK MLR MLR
comp=Z,55µm,20.0s
**ESK Eskdalemuir 78.51 34** *e*P **P 18 05 15.5 +1.0**
comp=Z,130nm,1.1s
ESK LR LR
comp=Z,55µm,20.0s
**PMOZ Porto Moniz, M 78.55 59** *e*P **P 18 05 16.6 +1.3**
comp=Z,337nm,1.2s
**PMOZ Porto Moniz, M 78.55 59** *e*S **S 18 15 17.6 +5.9**
**PMOZ Porto Moniz, M 78.55 59** *e*LR LR 18 30 40.1
comp=Z,39µm,22.0s
**WLF1 Llynfaes 78.80 36** *e*P P 18 05 11.4 -4.6
WLF1 AMS AMS 18 38 52.7
comp=Z,77µm,16.8s
**TRO Tromso 78.80 16** *e*P **P 18 05 14.4 -1.3**
TRO IVMs_BB IVMs_BB 18 40 57.0
comp=Z,26µm,17.9s
**PMAR Madeira 78.81 59** *e*P **P 18 05 18.5 +1.7**
comp=Z,280nm,1.5s
**PMAR Madeira 78.81 59** *e*PcP **PcP 18 05 27.2 +1.6**
**KESW Keswick, Cumbr 78.89 35** *e*P P 18 05 12.3 -4.2
KESW AMS AMS 18 39 23.4
comp=Z,69µm,15.2s
**PMPST Porto Santo, M 79.12 59** *e*P **P 18 05 19.7 +1.4**
comp=Z,284nm,1.6s
**PMPST Porto Santo, M 79.12 59** *e*PcP **PcP 18 05 27.7 +1.0**
**PMPS Porto Santo 79.13 59** *e*P **P 18 05 19.7 +1.4**
comp=Z,287nm,1.7s
**FOO Floro 79.17 26** *e*P P 18 05 31.3 +13
FOO IVMs_BB IVMs_BB 18 41 36.4
comp=N,33µm,16.9s
**KONS Konsvik 79.21 20** *e*P P 18 05 25.8 +7.7
**STOK Stokkvaagen 79.28 20** *e* P 18 05 31.9 +13
**SUE Sulen 79.34 27** *e*P P 18 05 33.0 +14
SUE IVMs_BB IVMs_BB 18 39 12.5
comp=Z,35µm,14.3s
**LPW Lampeter 79.50 37** *e*P P 18 05 15.8 -4.2
LPW AMS AMS 18 39 27.9
comp=Z,104µm,16.3s
**MOL Molde 79.61 25** *e*P P 18 05 28.4 +8.1
MOL IVMs_BB IVMs_BB 18 39 10.3
comp=Z,24µm,16.1s
**CCA1 Carnmenellis 79.71 39** *e*P P 18 05 16.9 -4.2
CCA1 AMS AMS 18 35 47.8
comp=Z,80µm,19.7s
**HTL Hartland 79.78 38** *e*P P 18 05 18.0 -3.4
HTL AMS AMS 18 38 10.2
comp=Z,112µm,18.8s
**ASK Askoy 79.83 27** *e*P P 18 05 32.2 +11
ASK IVMs_BB IVMs_BB 18 40 30.5
comp=Z,34µm,13.2s
**HYA Hoyanger 79.87 26** *e*P P 18 05 34.5 +13
**BER Bergen 79.94 27** *e*P P 18 05 36.5 +14
BER IVMs_BB IVMs_BB 18 40 34.9
comp=Z,39µm,16.4s
**HPK Haverah Park 79.96 35** *e*P P 18 05 18.7 -3.7
HPK AMS AMS 18 39 29.2
comp=Z,70µm,18.8s
**NSS Namsos 80.06 22** *e*P P 18 05 29.0 +6.3
NSS IAmb IAmb 18 05 34.1
comp=Z,79nm,0.8s
**STNC Stoke 80.06 36** *e*P P 18 05 19.1 -3.8
STNC AMS AMS 18 38 47.2
comp=Z,79µm,17.3s
**MCH1 Michaelchurch 80.14 37** *e*P P 18 05 19.7 -3.8
MCH1 AMS AMS 18 39 48.0
comp=Z,100µm,17.4s
**TBLU Trondheim 80.23 24** *e*P **P 18 05 25.1 +1.4**
TBLU IVMs_BB IVMs_BB 18 39 43.2
comp=Z,23µm,25.4s
**KWAJ Kwajalein Atol 80.24 275** *e*P **P 18 05 24.7 +0.1**
**KWAJ Kwajalein Atol 80.24 275** *e*P **P 18 05 24.7 +0.1**
**KTK1 Kautokeino 80.32 16** *e*P **P 18 05 25.1 +1.0**
**MONM Monmouth 80.33 37** *e*P P 18 05 20.6 -3.8
MONM AMS AMS 18 39 54.0
comp=Z,97µm,17.4s
**DYA Yadsworthy 80.34 39** *e*P P 18 05 20.3 -4.3
DYA AMS AMS 18 38 33.7
comp=Z,73µm,18.2s
**ARCES ARCESS Array B 80.47 15** P **P 18 05 23.3 -1.6**
comp=Z,16nm,0.7s,baz=331,slow=3.7,SNR=24
ARCES LR LR 18 42 54.1
comp=Z,70µm,18.7s,baz=333,slow=37
**ARCES ARCESS Array B 80.47 15** P **P 18 05 23.3 -1.6**
**ARE0 ARCESS Array S 80.47 15** *e*P **P 18 05 23.8 -1.1**
ARE0 IAmb IAmb 18 05 36.0
comp=Z,180nm,1.1s
ARE0 IAMs_20 IAMs_20 18 41 11.5
comp=Z,68µm,20.3s
**KMY Karmoy 80.55 28** *e*P P 18 05 36.2 +11
**OLDB Oldbury-Upon-S 80.55 37** *e*P P 18 05 20.6 -4.9
OLDB AMS AMS 18 40 09.6
comp=Z,104µm,17.3s
**KEV Kevo 80.64 14** *e*P **P 18 05 24.9 -0.8**
KEV pmax pmax
comp=Z,180nm,1.3s
KEV MLR MLR
comp=Z,77µm,22.0s
**KEV Kevo 80.64 14** *e*P **P 18 05 24.9 -0.8**
comp=Z,180nm,1.3s
KEV LR LR
comp=Z,77µm,22.0s
**STRD Stroud 80.71 37** *e*P P 18 05 23.2 -3.2
STRD AMS AMS 18 40 05.9
comp=Z,99µm,17.1s
**CWF Charnwood Fore 80.71 36** *e*P P 18 05 22.1 -4.4
CWF AMS AMS 18 39 05.9
comp=Z,83µm,17.6s
**ODD1 Odda 80.75 27** *e*P P 18 05 38.5 +12
**BATH Bath 80.77 37** *e*P P 18 05 22.1 -4.7
BATH AMS AMS 18 40 17.0
comp=Z,89µm,17.1s
**LMK Market Rasen 80.88 35** *e*P P 18 05 24.0 -3.3
LMK AMS AMS 18 40 15.0
comp=Z,69µm,18.1s
**BLS5 Blasjo 80.95 28** *e*P **P 18 05 27.9 +0.3**
BLS5 IVMs_BB IVMs_BB 18 38 52.4
comp=Z,33µm,16.2s
**SWN1 Swindon 81.03 37** *e*P P 18 05 24.2 -4.0
SWN1 AMS AMS 18 39 35.4
comp=Z,84µm,18.4s
**KUR Kuril'sk 81.31 316** *d* iP **P 18 05 27.8 -2.0**
KUR *i* 18 05 34.3
KUR *i* 18 08 44.1
KUR *i* PPP PPP 18 10 25.4
KUR *i* S **S 18 15 41.8 +1.6**
KUR pmax pmax
comp=N,60nm,1.9s
KUR pmax pmax
comp=E,45nm,1.9s
KUR pmax pmax
comp=Z,111nm,1.9s
KUR pmax pmax
comp=Z,2µm,7.4s
**PGAV Gavieira, Arco 81.40 48** *e*P **P 18 05 32.1 +1.6**
comp=Z,165nm,1.3s
**PGAV Gavieira, Arco 81.40 48** *e*S **S 18 15 43.2 +1.7**
**PGAV Gavieira, Arco 81.40 48** *e*LQ LQ 18 26 56.2
PGAV *e*LR LR 18 29 18.7
comp=Z,86µm,22.0s
**WOL Wolverton 81.44 37** *e*P P 18 05 25.8 -4.6
WOL AMS AMS 18 40 47.5
comp=Z,74µm,17.0s
**YAK Yakutsk 81.60 336** *d* iP **P 18 05 29.9 -1.1**
YAK *e* 18 05 35.6
YAK *e* 18 08 35.8
YAK *e*PPP PPP 18 10 27.2
YAK *i* S **S 18 15 39.8 -2.7**
YAK *e* 18 15 54.0
YAK *e*SS **SS 18 20 57.4 -1.2**
YAK *e*SSS SSS 18 24 25.0
YAK pmax pmax
comp=N,26nm,1.4s
YAK pmax pmax
comp=E,70nm,1.3s
YAK pmax pmax
comp=Z,182nm,1.0s
YAK pmax pmax
comp=N,1µm,7.8s
YAK pmax pmax
comp=Z,1µm,5.1s
YAK pmax pmax
comp=E,806nm,6.3s
YAK smax smax
comp=N,6µm,12.9s
YAK smax smax
comp=E,1µm,7.8s
**YAK Yakutsk 81.60 336** *e*P **P 18 05 29.9 -1.1**
comp=E,444nm,1.2s
YAK LR LR
comp=Z,47µm,20.0s
**PCAB Cabril 81.67 48** *e*P **P 18 05 33.6 +1.7**
comp=Z,295nm,1.1s
**NKL Nikolayevsk 81.70 325** *i* P **P 18 05 29.0 -2.7**
NKL *e* 18 05 38.0
NKL *i* S **S 18 15 45.0 +1.1**
NKL pmax pmax
comp=E,290nm,2.0s
NKL pmax pmax
comp=Z,580nm,2.0s
NKL pmax pmax
comp=E,900nm,8.0s
NKL pmax pmax
comp=Z,4µm,8.0s
NKL pmax pmax
comp=N,500nm,6.0s
NKL smax smax
comp=N,12µm,15.0s
NKL smax smax
comp=E,6µm,15.0s
NKL MLR MLR
comp=E,46µm,14.0s
NKL MLR MLR
comp=Z,39µm,14.0s
NKL MLR MLR
comp=N,17µm,21.0s
**TYV Tymovskoe 81.78 323** *e*P **P 18 05 32.2 0.0**
TYV *e* 18 15 41.0
TYV pmax pmax
comp=E,92nm,1.4s
TYV pmax pmax
comp=Z,249nm,1.4s
TYV pmax pmax
comp=Z,4µm,7.0s
**SNART Snartemo 81.88 29** *e*P P 18 05 42.8 +10
**NB2 NORSAR Subarra 81.93 25** P **P 18 05 33.3 +0.5**
comp=Z,505nm,1.7s,baz=309,slow=5.1
**NB2 NORSAR Subarra 81.93 25** P **P 18 05 33.3 +0.5**
baz=309,slow=5.1
**NOA NORSAR Array B 81.93 25** P **P 18 05 32.0 -0.8**
comp=Z,5.2nm,0.9s,baz=304,slow=4.2,SNR=22
NOA LR LR 18 40 32.6
comp=Z,39µm,21.5s,baz=325,slow=35
**NOA NORSAR Array B 81.93 25** P **P 18 05 32.0 -0.8**
**JSA Saint Aubin 81.94 39** *e*P P 18 05 28.5 -4.5
JSA AMS AMS 18 37 13.6
comp=Z,88µm,19.9s
**POLO Lamas de Olo 81.98 48** *e*P **P 18 05 34.2 +0.6**
comp=Z,166nm,1.1s
**PMAFR Mafra 81.99 51** *e*P **P 18 05 34.5 +0.9**
comp=Z,376nm,1.0s
**PCAS Casmilo, Conde 82.07 50** *e*P **P 18 05 35.4 +1.4**
comp=Z,209nm,1.4s
**PVRL Vila Real 82.07 48** *e*P **P 18 05 34.1 +0.1**
comp=Z,262nm,1.3s
**KONO Kongsberg 82.12 27** *e*P **P 18 05 36.6 +2.8**
KONO IVMs_BB IVMs_BB 18 43 20.0
comp=Z,23µm,20.6s
**KONO Kongsberg 82.12 27** *e*P **P 18 05 34.0 +0.2**
KONO pmax pmax
comp=Z,662nm,1.3s
KONO MLR MLR
comp=Z,59µm,20.0s
**KONO Kongsberg 82.12 27** *e*P **P 18 05 34.0 +0.2**
comp=Z,662nm,1.3s
KONO LR LR
comp=Z,59µm,20.0s
**PMST Lisbon--Monsan 82.16 51** *e*P **P 18 05 36.1 +1.7**
comp=Z,380nm,1.1s
**LIS Lisbon 82.19 51** *e*P **P 18 05 36.1 +1.6**
LIS *e*S **S 18 15 51.4 +1.9**
LIS AMS AMS 18 40 20.2
comp=Z,107µm,18.8s
**LIS Lisbon 82.19 51** *e*P **P 18 05 36.7 +2.1**
comp=Z,342nm,1.1s
**LIS Lisbon 82.19 51** *e*P **P 18 05 36.1 +1.6**
LIS *e*S **S 18 15 51.4 +1.9**
**PVIS Viseu 82.20 49** *e*P **P 18 05 34.7 0.0**
comp=Z,270nm,1.0s
**NC602 NORSAR Array S 82.24 25** *e*P **P 18 05 37.1 +2.7**
**PTOM Tomar 82.32 50** *e*P **P 18 05 36.4 +1.2**
comp=Z,370nm,1.1s
**PACT Alcochete 82.39 51** *e*P P 18 05 30.9 -4.7
comp=Z,389nm,1.2s
**OSL Oslo 82.41 26** *e*P **P 18 05 37.1 +1.9**
OSL IAmb IAmb 18 05 47.5
comp=Z,187nm,0.8s
**HOMB Homborsund 82.48 28** *e*P P 18 05 48.5 +13
**PBRG Braganca 82.50 47** *e*P **P 18 05 38.9 +2.7**
comp=Z,111nm,1.6s
**MSVF Nonsavu 82.51 247** P P 18 05 43.0 +6.4
comp=Z,325nm,2.7s,SNR=5.4
**MSVF Nonsavu 82.51 247** PFAKE 18 05 50.0 +13
MSVF LR LR
comp=Z,89µm,20.0s
**HMNX Herstmonceux 82.52 37** *e*P P 18 05 30.9 -5.1
HMNX AMS AMS 18 41 32.0
comp=Z,99µm,16.4s
**MTE Manteigas 82.57 49** *e*P **P 18 05 35.7 -1.0**
comp=Z,417nm,1.0s
**MTE Manteigas 82.57 49** *e*S **S 18 15 54.6 +1.0**
**MTE Manteigas 82.57 49** *e*LQ LQ 18 27 19.0
MTE *e*LR LR 18 32 42.9
comp=Z,101µm,20.0s
**MTE Manteigas 82.57 49** *e*P **P 18 05 35.3 -1.4**
comp=Z,301nm,0.9s
MTE LR LR
comp=Z,116µm,21.0s
**MVO Moncorvo 82.59 48** *e*P **P 18 05 37.0 +0.3**
comp=Z,246nm,1.3s
**MVO Moncorvo 82.59 48** *e*S **S 18 15 56.8 +3.1**
**MVO Moncorvo 82.59 48** *e*LQ LQ 18 27 31.2
MVO *e*LR LR 18 31 34.0
comp=Z,72µm,20.0s
**PMTG Montargil 82.69 50** *e*P **P 18 05 37.5 +0.3**
comp=Z,214nm,1.2s
**ELSH Elham, Standar 82.81 37** *e*P **P 18 05 34.6 -3.0**
**PCBR Castelo Branco 82.87 49** *e*P **P 18 05 36.6 -1.5**
comp=Z,160nm,1.1s
**PNCL Nicolau / Gran 82.89 51** *e*P **P 18 05 38.0 -0.2**
comp=Z,142nm,1.3s
**PTEO Sao Teotonio 82.99 52** *e*P **P 18 05 40.9 +2.1**
comp=Z,311nm,2.3s
**EVO Evora 83.07 51** *e*P **P 18 05 38.3 -0.9**
comp=Z,221nm,1.6s
**PMRV Marv??o 83.11 50** *e*P **P 18 05 39.6 +0.2**
comp=Z,251nm,1.3s
**PMRV Marv??o 83.11 50** *e*S **S 18 16 02.0 +3.1**
**PMRV Marv??o 83.11 50** *e*LQ LQ 18 27 30.4
PMRV *e*LR LR 18 33 06.8
comp=Z,96µm,18.0s
**YUK Yuzh-Kuril'sk 83.14 315** *d* iP **P 18 05 38.3 -1.1**
YUK *i* 18 05 44.1
YUK *i* 18 08 47.4
YUK *i* S **S 18 15 59.6 +0.7**
YUK *i* SS SS 18 21 29.9 +7.6
YUK *i* SSS SSS 18 24 52.0
YUK pmax pmax
comp=N,28nm,1.6s
YUK pmax pmax
comp=E,79nm,1.6s

YUK pmax pmax
comp=Z,228nm,1.6s
YUK pmax pmax
comp=Z,1μm,7.4s
**MORF Marmelete 83.15 52** *e*P **P 18 05 41.1 +1.3**
MORF *e*S **S 18 16 01.4 +1.9**
MORF AMS AMS 18 36 43.9
comp=N,95μm,22.2s
**MORF Marmelete 83.15 52** *e*P **P 18 05 41.0 +1.3**
comp=N,171nm,1.3s
**MORF Marmelete 83.15 52** *e*P **P 18 05 41.0 +1.3**
MORF *e*S **S 18 16 01.4 +1.9**
**MESJ Messejana 83.23 52** *e*P **P 18 05 41.2 +1.2**
MESJ *e*S **S 18 16 02.1 +1.9**
MESJ AMS AMS 18 42 58.4
comp=Z,86μm,17.1s
**MESJ Messejana 83.23 52** *e*P **P 18 05 39.8 -0.2**
comp=Z,184nm,1.3s
**MESJ Messejana 83.23 52** *e*P **P 18 05 41.2 +1.2**
MESJ *e*S **S 18 16 02.0 +1.9**
**PBEJ Beja 83.39 51** *e*P **P 18 05 41.0 +0.1**
comp=Z,143nm,1.5s
**PCVE Castro Verde 83.45 52** *e*P **P 18 05 42.1 +0.9**
comp=Z,241nm,1.4s
**YSS Yuzh-Sakhalins 83.65 319** ⇓*i*P **P 18 05 40.9 -1.1**
YSS *e**SP **sP 18 05 46.0 -2.2**
YSS *e* 18 08 56.0
YSS *e*PPP PPP 18 10 52.0
YSS *i* S **S 18 16 00.0 -4.0**
YSS *e*PPS PPS 18 16 56.0
YSS *e*SS **SS 18 21 32.0 +2.2**
YSS smax smax
comp=N,15μm,13.0s
YSS smax smax
comp=E,6μm,13.0s
**YSS Yuzh-Sakhalins 83.65 319** *e*P **P 18 05 41.6 -0.4**
comp=E,127nm,1.1s
YSS LR LR
comp=Z,8μm,20.0s
**PBDV Barranco-do-Ve 83.69 52** *e*P **P 18 05 42.5 0.0**
comp=Z,344nm,1.3s
**PVAQ Vaqueiros 83.78 52** *e*P **P 18 05 43.7 +0.9**
comp=Z,269nm,1.3s
**PVAQ Vaqueiros 83.78 52** *e*S **S 18 16 06.5 +0.8**
**PVAQ Vaqueiros 83.78 52** *e*LQ LQ 18 27 47.1
PVAQ *e*LR LR 18 34 00.0
comp=Z,75μm,16.0s
**LVZ Lovozero 83.78 13** *e*P **P 18 05 43.1 +0.8**
LVZ pmax pmax
comp=Z,136nm,1.3s
LVZ MLR MLR
comp=Z,61μm,15.0s
**LVZ Lovozero 83.78 13** P **P 18 05 44.1 +1.8**
comp=Z,1μm,1.4s,SNR=5.2
**LVZ Lovozero 83.78 13** *e*P **P 18 05 41.7 -0.6**
comp=Z,449nm,1.4s
LVZ LR LR
comp=Z,62μm,19.0s
**MUD Monsted U'grnd 83.85 29** *e*P P 18 05 47.0 +4.2
MUD MLR MLR
comp=Z,59μm,15.0s
**MUD Monsted U'grnd 83.85 29** *i* P P 18 05 47.0 +4.2
comp=Z,59μm,15.0s
**PBAR Barrancos 83.91 51** *e*P **P 18 05 42.8 -0.7**
comp=Z,455nm,1.4s
**UCC Uccle 84.73 36** E P 18 05 54.7 +7.3
**SNF Seneffe 84.84 36** P P 18 05 51.5 +3.5
**RAO Raoul Island 85.11 235** PFAKE 18 06 00.0 +10
RAO LR LR
comp=Z,26μm,19.0s
**PAB San Pablo 85.15 49** *e*P **P 18 05 49.9 0.0**
PAB pmax pmax
comp=Z,116nm,1.0s
PAB MLR MLR
comp=Z,68μm,20.0s
**PAB San Pablo 85.15 49** *e*P **P 18 05 49.9 0.0**
comp=Z,116nm,1.0s
PAB LR LR
comp=Z,68μm,20.0s
**ASAJ Asahikawa 85.16 317** P **P 18 05 49.0 -0.7**
comp=Z,24nm,0.9s,baz=48,slow=3.9,SNR=18
**ASAJ Asahikawa 85.16 317** *e*P **P 18 05 49.5 -0.2**
comp=Z,143nm,1.3s
**DOU Dourbes 85.24 36** P **P 18 05 51.1 +1.1**
comp=Z,44nm,1.4s
**WTSB Winterswijk 85.34 34** *e*P P 18 05 59.6 +9.2
comp=Z,162nm,1.1s
**ESDC Sonseca Array 85.35 48** P **P 18 05 49.9 -1.0**
comp=Z,14nm,0.9s,baz=309,slow=5.0,SNR=28
ESDC PP **PP 18 09 08.9 +0.5**
comp=Z,1.0nm,0.8s,baz=228,slow=44,SNR=2.4
ESDC LR LR 18 41 03.9
comp=Z,74μm,20.9s,baz=300,slow=34
**ESDC Sonseca Array 85.35 48** P **P 18 05 49.9 -1.0**
ESDC PP **PP 18 09 08.9 +0.5**
**BEBN Eben Emael 85.42 35** E P 18 06 00.2 +9.3
**BCLA Clavier 85.44 36** P **P 18 05 51.6 +0.7**
comp=Z,55nm,1.6s
**HGN Heimansgroeve 85.58 35** *e*P P 18 06 00.8 +9.2
comp=Z,243nm,1.4s
**HGN Heimansgroeve 85.58 35** *e*S **S 18 16 26.6 +3.5**
HGN *e*SS SS 18 21 14.5 -43
**IBBN Ibbenburen 85.62 33** *e*P **P 18 05 53.7 +1.8**
comp=Z,171nm,1.4s,baz=309,slow=4.8
**MEM Membach 85.70 35** P **P 18 05 55.3 +3.0**
comp=Z,55nm,1.5s
**ERM Erimo 85.84 315** *ce*P **P 18 05 52.6 -0.5**
ERM pmax pmax
comp=Z,173nm,1.4s
ERM MLR MLR
comp=Z,11μm,19.0s
**ERM Erimo 85.84 315** *e*P **P 18 05 53.2 +0.1**
comp=Z,378nm,1.5s
ERM LR LR
comp=Z,17μm,20.0s
**BSEG Bad Segeberg 85.89 31** *e*P **P 18 05 53.9 +0.8**
comp=Z,288nm,1.3s,baz=309,slow=4.8
**RTC Rabat Centre 85.94 54** PFAKE 18 06 00.0 +6.2
RTC LR LR
comp=Z,19μm,22.0s
**WLF Walferdange 86.31 36** P **P 18 05 55.9 +0.5**
comp=Z,53nm,1.4s
**WLF Walferdange 86.31 36** *e*P **P 18 05 54.1 -1.3**
WLF pmax pmax
comp=Z,95nm,1.2s
WLF MLR MLR
comp=Z,85μm,22.0s
**WLF Walferdange 86.31 36** *e*P **P 18 05 56.2 +0.8**
comp=Z,111nm,1.3s,baz=309,slow=4.8
**WLF Walferdange 86.31 36** *e*P **P 18 05 54.1 -1.3**
comp=Z,95nm,1.2s
WLF LR LR
comp=Z,85μm,22.0s
**FINES FINESS Array B 86.82 20** P **P 18 05 55.9 -1.7**
comp=Z,24nm,0.8s,baz=333,slow=2.1,SNR=23
FINES PP **PP 18 09 20.0 +0.6**
comp=Z,7.7nm,1.1s,baz=185,slow=34,SNR=3.7
FINES LR LR 18 43 05.2
comp=Z,80μm,19.2s,baz=331,slow=35
**FINES FINESS Array B 86.82 20** P **P 18 05 55.9 -1.7**
FINES PP **PP 18 09 20.0 +0.6**
**CLNS Chul'man 86.84 334** *e*P **P 18 05 56.4 -1.4**
CLNS *e* 18 06 03.6
CLNS *e* 18 09 16.7
CLNS *e*S **SKSac 18 16 19.6 -4.8**
CLNS *e* 18 17 31.8
CLNS *e*SS **SS 18 22 16.8 +0.7**
CLNS pmax pmax
comp=Z,20nm,0.9s
CLNS pmax pmax
comp=E,14nm,1.2s
CLNS pmax pmax
comp=N,6.0nm,0.7s
CLNS pmax pmax
comp=E,6.0nm,1.0s
CLNS pmax pmax
comp=Z,4.0nm,0.7s
CLNS pmax pmax
comp=N,10.0nm,1.1s
CLNS smax smax
comp=N,2μm,11.8s
CLNS smax smax
comp=E,3μm,15.2s
CLNS MLR MLR
comp=Z,19μm,14.0s
CLNS MLR MLR
comp=E,17μm,15.0s
**TNS Taunus Mts 87.20 35** *e*P **P 18 06 00.9 +1.2**
comp=E,75nm,1.2s,baz=309,slow=4.8
**HABR Khabarovsk 87.24 323** *d i*P **P 18 05 58.7 -1.1**
HABR *e**PP **PcP 18 06 01.6 -0.3**
HABR *e**SP **sP 18 06 03.1 -3.0**
HABR *e* 18 09 22.0
HABR *e*PPP PPP 18 11 16.6
HABR *e*S **SKSac 18 16 25.4 -1.6**
HABR *e**SS **SKKSac 18 16 31.2 -4.8**
HABR *e*SS **SS 18 22 23.3 +1.0**
HABR *e*SSS SSS 18 25 56.6
HABR pmax pmax
comp=Z,17nm,1.5s
HABR pmax pmax
comp=E,5.0nm,0.8s
HABR pmax pmax
comp=N,12nm,1.6s
HABR pmax pmax
comp=Z,3μm,6.8s
HABR MLR MLR
comp=E,28μm,16.0s
HABR MLR MLR
comp=N,15μm,16.0s
HABR MLR MLR
comp=Z,21μm,23.0s
**TMCR Tamitsa 87.71 14** *e*P **P 18 06 00.7 -1.1**
TMCR *e*S **SKSac 18 16 29.7 +0.4**
TMCR pmax pmax
comp=Z,41nm,1.4s
**SSB Saint Sauveur 87.87 40** *e*P **P 18 06 03.9 +0.8**
SSB pmax pmax
comp=Z,33nm,1.3s
SSB MLR MLR
comp=Z,59μm,19.0s
**SSB Saint Sauveur 87.87 40** *e*P **P 18 06 03.9 +0.8**
comp=Z,33nm,1.3s
SSB LR LR
comp=Z,59μm,19.0s
**BFO Black Forest 88.26 36** *e*P **P 18 06 05.4 +0.6**
BFO pmax pmax
comp=Z,21nm,1.3s
BFO MLR MLR
comp=Z,50μm,22.0s
**BFO Black Forest 88.26 36** *e*P **P 18 06 05.3 +0.6**
comp=Z,67nm,2.0s,baz=309,slow=4.8
**BFO Black Forest 88.26 36** *e*P **P 18 06 05.4 +0.6**
comp=Z,21nm,1.3s
BFO LR LR
comp=Z,50μm,22.0s
**EFI East Falkland 88.33 151** *i* P **P 18 06 02.9 -1.8**
EFI pmax pmax
comp=Z,66nm,1.2s
EFI MLR MLR
comp=Z,13μm,16.0s
**EFI East Falkland 88.33 151** PFAKE 18 06 10.0 +5.3
EFI LR LR
comp=Z,18μm,22.0s
**KLR Kul'dur 88.55 325** *e*P P 18 06 01.6 -4.5
KLR *e*S **SKSac 18 16 34.5 -0.5**
KLR pmax pmax
comp=Z,190nm,2.0s
**MOX Moxa 88.55 33** *e*P **P 18 06 07.0 +0.9**
comp=Z,46nm,1.1s,baz=309,slow=4.8
MOX *e*PP **PP 18 09 33.9 +0.2**
MOX *e*L L 18 42 45.2
comp=Z,61μm,20.6s
**CLL Collm 88.81 32** *e*P **P 18 06 06.0 -1.3**
CLL *i* 18 06 13.6
CLL *e* 18 16 43.0
CLL MLR MLR
comp=Z,75μm,18.0s
**CLL Collm 88.81 32** *e*P **P 18 06 07.9 +0.6**
comp=Z,48nm,1.2s,baz=309,slow=4.8
CLL *e*PP **PP 18 09 35.4 -0.3**
**CLL Collm 88.81 32** *e*P **P 18 06 06.0 -1.3**
CLL *i* sP **sP 18 06 13.6 0.0**
comp=Z,48nm,1.2s
CLL *i* 18 06 35.6
CLL *e*PP **PP 18 09 34.0 -1.7**
CLL *i* 18 09 46.0
CLL *e*PPP PPP 18 11 30.0
CLL *e*(SKKSac) 18 16 43.0
CLL *e*S **S 18 16 57.0 +2.7**
comp=N,8μm,28.5s
CLL *e*S **S 18 16 57.0 +2.7**
comp=E,4μm,27.6s
CLL *e*PS **PS 18 17 59.0 -0.3**
CLL *e*SS **SS 18 22 45.0 -0.1**
CLL *e*SSS SSS 18 26 18.0
CLL *e*SSSS 18 29 28.0
CLL LmV 18 47 18.0
comp=Z,75μm,18.0s
CLL *e*Lmax 18 47 22.0
**CLL Collm 88.81 32** *e*P **P 18 06 09.2 +1.9**
comp=Z,57nm,1.2s
**GRF Grafenberg Arr 88.95 34** *e*P **P 18 06 09.6 +1.6**
comp=Z,111nm,1.2s,baz=309,slow=4.8
GRF *e*PP PP 18 09 18.9 -18
GRF *e*L L 18 43 12.6
comp=Z,95μm,21.5s
**GRFO Grafenberg 88.95 34** *e*P **P 18 06 09.4 +1.4**
GRFO pmax pmax
comp=Z,69nm,1.0s
**GRFO Grafenberg 88.95 34** *e*P **P 18 06 09.4 +1.4**
comp=Z,69nm,1.0s
**TANN Tannenbergstha 89.11 33** *e*P **P 18 06 09.7 +0.8**
comp=Z,56nm,1.1s,baz=309,slow=4.8
TANN *e*PP **PP 18 09 38.9 +0.6**
**NKC Novy Kostel 89.22 33** *e*P **P 18 06 09.9 +0.6**
NKC *e**PP **pP 18 06 15.5 +1.5**
NKC *e* 18 06 17.2
NKC *e* 18 09 37.1
**NKC Novy Kostel 89.22 33** *e*P **P 18 06 09.9 +0.6**
NKC *e*pP **pP 18 06 15.5 +1.5**
NKC *e*x x 18 06 17.2
NKC *e*x x 18 07 32.4
NKC *e*PP **PP 18 09 37.1 -2.0**
NKC *e*SKS **SKSac 18 16 41.6 +2.6**
NKC *e*S **ScS 18 17 03.7 +0.5**
NKC AMS AMS 18 47 30.0
comp=Z,79μm,17.1s
**BNI Bardonecchia 89.25 40** *e*P P 18 06 16.0 +6.3
BNI pmax pmax
comp=Z,104nm,1.8s
BNI MLR MLR
comp=Z,119μm,19.0s
**BNI Bardonecchia 89.25 40** *e*P P 18 06 16.0 +6.3
comp=Z,104nm,1.8s
BNI LR LR
comp=Z,119μm,19.0s
**VSU Vasula 89.34 21** *e*P **P 18 06 10.5 +0.9**
VSU pmax pmax
comp=Z,29nm,0.8s
VSU MLR MLR
comp=Z,161μm,16.0s
**ROTZ Rotzenmuhle 89.40 34** *e*P **P 18 06 11.3 +1.1**
comp=Z,56nm,1.4s,baz=309,slow=4.8
ROTZ *e*PP **PP 18 09 41.4 +0.9**
**GKP Gorka Klasztor 89.47 29** *e*P P 18 06 16.4 +6.1
GKP *e*PP **PP 18 09 43.3 +2.4**
GKP *e*S **S 18 16 56.7 -3.6**
GKP LMZ LR 18 44 15.6
**GKP Gorka Klasztor 89.47 29** *e*P P 18 06 16.4 +6.1
GKP *e* 18 09 43.4
GKP *e*S **S 18 16 56.7 -3.6**
GKP MLR MLR
comp=Z,97μm,21.9s
**BRG Berggiesshubel 89.55 32** *e*P **P 18 06 11.2 +0.4**
comp=Z,52nm,2.0s
BRG *i* 18 06 17.3
comp=Z,45nm,1.1s
BRG PP PP 18 09 50.0 +8.4
BRG SKS **SKSac 18 16 44.0 +3.2**
BRG S **ScS 18 17 08.0 +2.2**
BRG SP **SP 18 18 08.0 +2.7**
BRG SS **SS 18 23 00.0 +4.2**
comp=N,42μm,19.5s
comp=E,34μm,15.4s
comp=Z,63μm,16.2s
**BRG Berggiesshubel 89.55 32** *e*P **P 18 06 11.2 +0.4**
BRG *i* 18 06 17.3
BRG 18 09 50.0
BRG 18 16 44.0
BRG S **ScS 18 17 08.0 +2.2**
BRG pmax pmax
comp=Z,52nm,2.0s
BRG MLR MLR
comp=N,42μm,19.5s
BRG MLR MLR
comp=E,34μm,15.4s
BRG MLR MLR
comp=Z,63μm,16.2s
**BRG Berggiesshubel 89.55 32** *e*P **P 18 06 11.6 +0.8**
comp=Z,46nm,1.2s,baz=309,slow=4.8
**DAVA Damuels 89.72 37** ⇑*i*PcP **P 18 06 11.9 0.0**
comp=Z,15nm,1.1s
**KLNR Kaliningrad 89.80 27** *e*P **P 18 06 12.3 +0.5**
KLNR pmax pmax
comp=Z,123nm,1.0s
**TUE Stuetta 89.92 37** *e*P P 18 06 19.7 +6.8
comp=Z,228nm,2.7s
TUE LR LR
comp=Z,87μm,20.0s
**PVCC Panska Ves 90.07 32** *e*P **P 18 06 14.7 +1.5**
PVCC *e**PP **pP 18 06 20.0 +2.1**
PVCC *e* 18 09 46.0
PVCC MLR MLR
comp=Z,66μm,16.5s
**PVCC Panska Ves 90.07 32** *e*P **P 18 06 14.7 +1.5**
PVCC *e*pP **pP 18 06 20.0 +2.1**
PVCC *e*x x 18 07 35.6
PVCC *e*PP **PP 18 09 46.0 +0.2**
PVCC AMS AMS 18 45 30.0
comp=Z,66μm,16.5s
**WET Wettzell 90.13 34** *e*P **P 18 06 14.7 +1.1**
comp=Z,90nm,1.9s,baz=309,slow=4.8
**BOD Bodaibo 90.14 339** *e*P P 18 06 10.3 -3.1
BOD pmax pmax
comp=Z,76nm,1.4s
**PRA Prague 90.31 32** *e*P **P 18 06 15.5 +1.2**
PRA *e**PP **pP 18 06 19.8 +0.8**
PRA *e* 18 09 54.8
PRA *e* 18 16 44.6
PRA *e*S **ScS 18 17 12.0 -0.1**
PRA MLR MLR
comp=Z,91μm,19.7s
**PRA Prague 90.31 32** *e*P **P 18 06 15.5 +1.2**
PRA *e*pP **pP 18 06 19.8 +0.8**
PRA *e*x x 18 07 38.5
PRA *e*PP PP 18 09 54.8 +7.1
PRA *e*SKS **SKSac 18 16 44.6 -0.6**
PRA *e*S **ScS 18 17 12.0 -0.1**
PRA *e*x x 18 22 19.8
PRA AMS AMS 18 45 30.0
comp=Z,91μm,19.7s
**FETA Feichten 90.34 36** ⇑*i*PcP **PcP 18 06 15.5 -0.4**
comp=Z,26nm,1.2s
**PRU Pruhonice 90.41 32** *e*P **P 18 06 16.2 +1.4**
PRU *e**PP **pP 18 06 20.6 +1.1**
PRU *e* 18 09 50.4
PRU *e* 18 16 48.6
PRU *e*S **ScS 18 17 12.5 -0.5**
PRU MLR MLR
comp=Z,96μm,19.9s
**PRU Pruhonice 90.41 32** *e*P **P 18 06 16.2 +1.4**
PRU *e*pP **pP 18 06 20.6 +1.1**
PRU *e*x x 18 07 41.9
PRU *e*PP **PP 18 09 50.4 +1.9**
PRU *e*SKS **SKSac 18 16 48.6 +2.7**
PRU *e*S **ScS 18 17 12.5 -0.5**
PRU *e*x x 18 22 21.6
PRU AMS AMS 18 45 30.0
comp=Z,96μm,19.9s
**KHC Kasperske Hory 90.49 34** *e*P **P 18 06 16.4 +1.1**
KHC pmax pmax
comp=Z,26nm,2.1s
**KHC Kasperske Hory 90.49 34** *e*P **P 18 06 16.0 +0.7**
KHC *e*pP **pP 18 06 21.1 +1.2**
KHC *e*x x 18 07 38.5
KHC *e*PP **PP 18 09 53.2 +3.9**
KHC *e*SKS **SKSac 18 16 49.1 +2.6**
KHC *e*S **ScS 18 17 13.5 -0.3**
KHC *e*x x 18 22 22.4
KHC AMS AMS 18 48 00.0
comp=Z,70μm,16.8s
**KHC Kasperske Hory 90.49 34** *e*P **P 18 06 16.4 +1.1**
comp=Z,26nm,2.1s
**GOPC GO Pecny, Ondr 90.58 32** *e*pP **pP 18 06 21.7 +1.4**
GOPC *e*x x 18 07 41.0
GOPC *e*PP PP 18 09 55.6 +5.7
GOPC *e*SKS **SKSac 18 16 48.9 +2.0**
GOPC *e*S **ScS 18 17 13.6 -0.9**
GOPC AMS AMS 18 45 40.0
comp=Z,99μm,19.7s
**KSP Ksiaz 90.68 31** *e*P P 18 06 22.0 +6.0
KSP *e*S S 18 17 19.8 +8.1
KSP LMZ LR 18 46 15.1
**KSP Ksiaz 90.68 31** *e*P P 18 06 22.1 +6.0
KSP MLR MLR
comp=Z,81μm,20.9s
**GEC2 GERESS Array S 90.74 34** *e*P **P 18 06 17.1 +0.5**
comp=Z,124nm,2.3s,baz=309,slow=4.8
**GERES GERESS Array B 90.74 34** P **P 18 06 15.0 -1.5**
comp=Z,2.6nm,0.8s,baz=316,slow=3.7,SNR=16
GERES PP **PP 18 09 49.9 -1.3**
comp=Z,0.5nm,0.7s,baz=128,slow=38,SNR=2.3
GERES PKKPbc **PKKPbc 18 23 41.8 -1.1**
comp=Z,0.7nm,0.8s,baz=45,slow=1.5,SNR=3.8
GERES LR LR 18 47 10.3
comp=Z,66μm,19.2s,baz=308,slow=36
**GERES GERESS Array B 90.74 34** P **P 18 06 15.1 -1.5**
GERES PP **PP 18 09 50.0 -1.3**
GERES PKKPbc **PKKPbc 18 23 41.8 -1.1**
**UPC Upice 90.78 31** *e*P **P 18 06 18.0 +1.5**
UPC *e**PP **pP 18 06 23.5 +2.3**
UPC *e* 18 09 49.8
**UPC Upice 90.78 31** *e*P **P 18 06 18.0 +1.5**
UPC *e*pP **pP 18 06 23.5 +2.3**
UPC *e*x x 18 07 38.7
UPC *e*PP **PP 18 09 49.8 -1.6**
UPC *e*SKS **SKSac 18 16 50.7 +2.7**
UPC *e*S **ScS 18 17 15.6 -0.5**
UPC AMS AMS 18 48 50.0
comp=Z,69μm,15.4s
**KLMR Klimovskoe 90.95 15** *e*P **P 18 06 15.8 -1.3**
KLMR *e* 18 09 53.3
KLMR SSS SSS 18 26 59.8
KLMR pmax pmax
comp=Z,260nm,1.3s
**RJOB Jochberg 90.99 35** *e*P **P 18 06 19.0 +1.3**
comp=Z,27nm,1.7s,baz=309,slow=4.8
**DPC Dobruska-Polom 91.03 31** *e*P **P 18 06 19.3 +1.5**
DPC *e**PP **pP 18 06 23.1 +0.7**
DPC *e* 18 09 52.2
DPC *e* 18 16 48.8
DPC *e*S **ScS 18 17 16.9 -1.4**
DPC MLR MLR
comp=Z,72μm,15.4s
**DPC Dobruska-Polom 91.03 31** *e*P **P 18 06 19.3 +1.5**
DPC *e*pP **pP 18 06 23.1 +0.7**
DPC *e*x x 18 07 42.8
DPC *e*PP **PP 18 09 52.2 -1.3**
DPC *e*SKS **SKSac 18 16 48.8 -0.7**
DPC *e*S **ScS 18 17 16.9 -1.4**
DPC AMS AMS 18 49 00.0
comp=Z,72μm,15.4s
**IZAR Zarasai 91.27 23** *e*P **P 18 06 19.0 +0.3**
IZAR IAmb IAmb 18 06 28.2
comp=Z,19nm,1.0s
**TREC Trest 91.33 33** *e*PP PP 18 09 58.7 +2.8
TREC *e*SKS **SKSac 18 16 51.2 -0.1**
TREC AMS AMS 18 46 00.0
comp=Z,92μm,19.5s
**ISAL Salakas 91.36 24** *e*P **P 18 06 19.4 +0.3**
ISAL IAmb IAmb 18 06 28.6
comp=Z,17nm,1.0s
**SUW Suwalki 91.42 26** *e*P P 18 06 25.2 +5.8
SUW *e*PP **PP 18 09 55.1 -1.2**
SUW *e*S **SKSac 18 16 49.4 -2.1**
SUW LMZ LR 18 43 12.4
**SUW Suwalki 91.42 26** *e*P P 18 06 25.3 +5.8
SUW *e* 18 09 55.2
SUW *e*S **SKSac 18 16 49.4 -2.1**
SUW MLR MLR
comp=Z,53μm,26.2s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ABTA | **Abfaltersbach** | **91.47** | **36** | ⇓*i*PcP | **P** | | **18 06 19.8** | **-0.1** |
| | comp=Z,16nm,1.1s | | | | | | | | |
| USRK | **Ussuriysk Ar.** | **91.47** | **321** | P | **P** | | **18 06 19.3** | **-0.5** |
| | comp=Z,14nm,0.8s,baz=46,slow=5.5,SNR=27 | | | | | | | | |
| IIGN | **Ignalina** | **91.57** | **24** | *e*P | **P** | | **18 06 20.3** | **+0.3** |
| IIGN | | | | IAmb | IAmb | | 18 06 29.4 | | |
| | comp=Z,16nm,0.8s | | | | | | | | |
| MOA | **Molln** | **91.67** | **34** | ⇓*i*PcP | **P** | | **18 06 20.8** | **0.0** |
| | comp=Z,28nm,1.2s | | | | | | | | |
| KBA | **Koelnbreinsper** | **91.69** | **35** | ⇑*i*pP | **P** | | **18 06 22.4** | **+1.3** |
| | comp=Z,17nm,1.2s | | | | | | | | |
| VRAC | **Vranov** | **91.86** | **32** | ⇓P | P | | 18 06 30.2 | +8.6 |
| VRAC | **Vranov** | **91.86** | **32** | ⇓*i*P | P | | 18 06 30.2 | +8.6 |
| VLC | **Villacollemand** | **91.91** | **39** | PFAKE | | | 18 06 30.0 | +8.0 |
| VLC | | | | LR | LR | | | | |
| | comp=Z,41µm,19.0s | | | | | | | | |
| MJAR | **Matsushiro Arr** | **91.97** | **312** | P | **P** | | **18 06 22.2** | **-0.2** |
| | comp=Z,8.5nm,0.9s,baz=57,slow=3.0,SNR=16 | | | | | | | | |
| MJAR | | | | PP | PP | | 18 09 56.1 | -5.3 | |
| | comp=Z,0.4nm,0.3s,baz=52,slow=7.9,SNR=4.4 | | | | | | | | |
| MJAR | | | | LR | LR | | 18 41 54.9 | | |
| | comp=Z,25µm,20.1s,baz=50,slow=32 | | | | | | | | |
| MJAR | **Matsushiro Arr** | **91.97** | **312** | P | **P** | | **18 06 22.2** | **-0.2** |
| MJAR | | | | PP | PP | | 18 09 56.0 | -5.3 | |
| MAJO | **Matsushiro** | **91.97** | **312** | *e*P | **P** | | **18 06 21.7** | **-0.7** |
| MAJO | | | | pmax | pmax | | | | |
| | comp=Z,227nm,1.0s | | | | | | | | |
| MAJO | | | | MLR | MLR | | | | |
| | comp=Z,60µm,19.0s | | | | | | | | |
| MAJO | **Matsushiro** | **91.97** | **312** | *e*P | **P** | | **18 06 21.5** | **-0.9** |
| | comp=Z,608nm,2.8s | | | | | | | | |
| MAJO | | | | LR | LR | | | | |
| | comp=Z,32µm,20.0s | | | | | | | | |
| MAT | **Matsushiro** | **91.97** | **312** | P | **P** | | **18 06 21.0** | **-1.4** |
| MAT | | | | S | S | | 18 17 17.6 | -6.4 | |
| MORC | **Moravsky Berou** | **92.00** | **31** | *e*P | **P** | | **18 06 23.7** | **+1.4** |
| MORC | | | | pmax | pmax | | | | |
| | comp=Z,107nm,1.4s | | | | | | | | |
| MORC | **Moravsky Berou** | **92.00** | **31** | ⇓*i*P | P | | 18 06 28.2 | +5.9 | |
| MORC | **Moravsky Berou** | **92.00** | **31** | *e*P | **P** | | **18 06 23.7** | **+1.4** |
| | comp=Z,107nm,1.4s | | | | | | | | |
| BEL | **Belsk** | **92.02** | **28** | *e*P | P | | 18 06 31.2 | +9.0 | |
| BEL | | | | *e*S | **S** | | **18 17 26.2** | **+2.4** | |
| BEL | | | | LMZ | LR | | 18 46 10.5 | | |
| BEL | **Belsk** | **92.02** | **28** | *e*P | P | | 18 06 31.2 | +9.0 | |
| BEL | | | | *e*S | **S** | | **18 17 26.2** | **+2.4** | |
| BEL | | | | MLR | MLR | | | | |
| | comp=Z,91µm,21.1s | | | | | | | | |
| RAC | **Raciborz** | **92.09** | **31** | *e*P | **P** | | **18 06 23.9** | **+1.3** | |
| RAC | | | | *e* | | | 18 16 56.7 | | |
| RAC | | | | *e*S | **S** | | **18 17 25.2** | **+0.7** | |
| RAC | | | | MLR | MLR | | | | |
| | comp=N,100µm,21.0s | | | | | | | | |
| RAC | | | | MLR | MLR | | | | |
| | comp=Z,106µm,19.6s | | | | | | | | |
| RAC | | | | MLR | MLR | | | | |
| | comp=E,95µm,20.5s | | | | | | | | |
| NACGM | **Naroch** | **92.12** | **24** | *e*P | P | | 18 06 29.0 | +6.4 | |
| VLA | **Vladivostok** | **92.18** | **320** | κ *i*P | **P** | | **18 06 22.2** | **-1.0** | |
| VLA | | | | *e* | | | 18 06 23.0 | | |
| VLA | | | | *i* | | | 18 10 02.2 | | |
| VLA | | | | S | **SKSac** | | **18 16 55.5** | **-0.7** | |
| VLA | | | | MLR | MLR | | | | |
| | comp=E,335µm,16.0s | | | | | | | | |
| OKC | **Ostrava-Krasne** | **92.24** | **31** | *e*pP | **pP** | | **18 06 28.9** | **+1.0** | |
| OKC | | | | *ex* | x | | 18 07 48.8 | | |
| OKC | | | | *e*PP | PP | | 18 09 57.6 | -5.3 | |
| OKC | | | | *e*SKS | **SKSac** | | **18 16 58.3** | **+2.0** | |
| OKC | | | | *e*S | **ScS** | | **18 17 29.7** | **+1.5** | |
| OKC | | | | AMS | AMS | | 18 47 00.0 | | |
| | comp=E,83µm,17.4s | | | | | | | | |
| CONA | **Conrad Observa** | **92.43** | **33** | ⇑*i*PcP | **P** | | **18 06 24.1** | **-0.3** | |
| | comp=E,25nm,1.1s | | | | | | | | |
| CADS | **Cadrg** | **92.45** | **36** | *e*P | **P** | | **18 06 23.2** | **-1.2** | |
| CADS | | | | *e* | | | 18 06 31.0 | | |
| CADS | | | | *e*SKSac | **SKSac** | | **18 16 54.1** | **-3.6** | |
| CADS | | | | *e*S | **ScS** | | **18 17 34.1** | **+3.9** | |
| MDJ | **Mudanjiang** | **92.56** | **322** | P | **P** | | **18 06 24.5** | **-0.4** | |
| MDJ | | | | pP | **pP** | | **18 06 27.8** | **-1.8** | |
| MDJ | | | | sP | **sP** | | **18 06 29.3** | **-1.9** | |
| MDJ | | | | PP | **PP** | | **18 10 04.1** | **-1.6** | |
| MDJ | | | | S | **S** | | **18 17 28.6** | **-0.4** | |
| MDJ | | | | sS | **ScS** | | **18 17 32.8** | **+1.7** | |
| MDJ | | | | PMZ | | | | | |
| | comp=E,680nm,6.5s | | | | | | | | |
| MDJ | | | | LN | | | | | |
| | comp=E,10µm,15.6s | | | | | | | | |
| MDJ | | | | LE | | | | | |
| | comp=E,29µm,19.2s | | | | | | | | |
| MDJ | | | | LZ | | | | | |
| | comp=E,25µm,16.5s | | | | | | | | |
| MDJ | **Mudanjiang** | **92.56** | **322** | *e*P | **P** | | **18 06 24.7** | **-0.2** | |
| | comp=E,45nm,1.4s | | | | | | | | |
| MDJ | | | | LR | LR | | | | |
| | comp=Z,24µm,19.0s | | | | | | | | |
| OJC | **Ojcow** | **92.73** | **30** | *e*P | P | | 18 06 31.2 | +5.6 | |
| OJC | | | | *e*PP | **PP** | | **18 10 11.7** | **+4.9** | |
| OJC | | | | *e*S | S | | 18 17 36.8 | +6.5 | |
| OJC | | | | LMZ | LR | | 18 44 04.0 | | |
| OJC | **Ojcow** | **92.73** | **30** | *e*P | P | | 18 06 31.2 | +5.6 | |
| OJC | | | | *e* | | | 18 10 11.8 | | |
| OJC | | | | *e*S | S | | 18 17 36.8 | +6.5 | |
| OJC | | | | MLR | MLR | | | | |
| | comp=Z,48µm,22.3s | | | | | | | | |
| MNK | **Minsk** | **92.82** | **23** | *e*P | P | | 18 06 31.0 | +5.1 | |
| MNK | | | | *e*PP | **PP** | | **18 10 10.0** | **+2.8** | |
| MNK | | | | *e*SKS | **SKSac** | | **18 16 56.0** | **-3.3** | |
| MNK | | | | *e*S | **ScS** | | **18 17 36.0** | **+3.2** | |
| MNK | | | | *e*SS | **SS** | | **18 23 40.0** | **-2.5** | |
| MNK | | | | pmax | pmax | | | | |
| | comp=Z,190nm,1.0s | | | | | | | | |
| MICGM | **Minsk** | **92.83** | **23** | ⇓*e*P | P | | 18 06 31.0 | +5.1 | |
| SOKA | **Soboth** | **92.83** | **35** | ⇓*i*P | **P** | | **18 06 24.7** | **-1.5** | |
| | comp=Z,31nm,1.1s | | | | | | | | |
| PERS | **Pernice** | **92.91** | **35** | *e*P | **P** | | **18 06 25.9** | **-0.6** | |
| PERS | | | | *e* | | | 18 06 33.1 | | |
| PERS | | | | *e*PP | PP | | 18 09 59.8 | -8.6 | |
| PERS | | | | *e* | | | 18 16 47.0 | | |
| PERS | | | | *e*SKSac | **SKSac** | | **18 16 56.2** | **-4.1** | |
| PERS | | | | *e* | | | 18 30 50.6 | | |
| MSHR | **Mys Shultsa** | **92.94** | **320** | *d*P | **P** | | **18 06 25.8** | **-0.9** | |
| LJU | **Ljubljana** | **92.99** | **35** | *e*P | **P** | | **18 06 26.5** | **-0.4** | |
| URZ | **Urewera** | **93.24** | **229** | P | P | | 18 06 31.3 | +3.3 | |
| | comp=Z,6.4nm,0.8s,baz=342,slow=20,SNR=3.3 | | | | | | | | |
| URZ | **Urewera** | **93.24** | **229** | P | P | | 18 06 31.3 | +3.3 | |
| LANS | **Liptovska Anna** | **93.34** | **31** | *e*P | P | | 18 06 35.8 | +7.3 | |
| LANS | **Liptovska Anna** | **93.34** | **31** | *e* | P | | 18 06 35.8 | +7.3 | |
| SET | **Setif** | **93.47** | **47** | P | P | | 18 06 38.0 | +8.6 | |
| VYHS | **Vyhne** | **93.50** | **32** | *e*P | **P** | | **18 06 29.9** | **+0.7** | |
| VYHS | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.9s | | | | | | | | |
| VYHS | **Vyhne** | **93.50** | **32** | *e*P | **P** | | **18 06 29.9** | **+0.7** | |
| VYHS | | | | *e* | | | 18 10 18.8 | | |
| VYHS | | | | *e*S | **S** | | **18 17 36.0** | **-1.1** | |
| VYHS | | | | *e*SS | **SS** | | **18 23 50.2** | **-2.5** | |
| NIE | **Niedzica** | **93.53** | **30** | *e*P | P | | 18 06 37.8 | +8.5 | |
| NIE | | | | *e*S | **S** | | **18 17 40.5** | **+3.1** | |
| NIE | | | | LMZ | LR | | 18 47 57.0 | | |
| NIE | **Niedzica** | **93.53** | **30** | *e*P | P | | 18 06 37.8 | +8.5 | |
| NIE | | | | *e*S | **S** | | **18 17 40.6** | **+3.1** | |
| NIE | | | | MLR | MLR | | | | |
| | comp=Z,46µm,19.7s | | | | | | | | |
| DFRA | **Djebel Bou Aff** | **93.60** | **47** | P | P | | 18 06 37.4 | +7.4 | |
| CKHR | **Kef el Ahmar** | **93.65** | **48** | P | P | | 18 06 38.0 | +7.7 | |
| BOJS | **Bojanci** | **93.72** | **36** | *e*P | **P** | | **18 06 30.4** | **+0.1** | |
| BOJS | | | | *e* | | | 18 16 54.3 | | |
| STHS | **Stebnicka Huta** | **93.96** | **30** | *e*P | **P** | | **18 06 31.2** | **-0.1** | |
| STHS | | | | *e* | | | 18 06 37.6 | | |
| STHS | | | | pmax | pmax | | | | |
| | comp=Z,17nm,1.2s | | | | | | | | |
| STHS | **Stebnicka Huta** | **93.96** | **30** | *e*P | **P** | | **18 06 31.2** | **-0.1** | |
| STHS | | | | *e* | | | 18 06 37.6 | | |
| VSL | **Villasalto** | **94.13** | **43** | PFAKE | | | 18 06 40.0 | +7.7 | |
| VSL | | | | LR | LR | | | | |
| | comp=Z,46µm,19.0s | | | | | | | | |
| CASM | **Ain Smara** | **94.17** | **47** | P | P | | 18 06 39.3 | +6.7 | |
| DZM | **Mont Dzumac** | **94.20** | **248** | *e*S | **S** | | **18 17 49.7** | **+5.5** | |
| | comp=Z,19µm,26.6s | | | | | | | | |
| DZM | | | | *e*SS | SS | | 18 24 13.2 | +7.6 | |
| | comp=Z,23µm,26.8s | | | | | | | | |
| DZM | | | | *e*LQ | LQ | | 18 33 03.2 | | |
| | comp=Z,27µm,25.8s | | | | | | | | |
| DZM | | | | *e*LR | LR | | 18 37 04.4 | | |
| | comp=Z,118µm,24.1s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| DZM | **Mont Dzumac** | **94.20** | **248** | P | **P** | | **18 06 35.3** | **+2.4** | |
| | comp=Z,15nm,0.9s,baz=180,slow=8.7,SNR=3.1 | | | | | | | | |
| DZM | **Mont Dzumac** | **94.20** | **248** | P | **P** | | **18 06 35.3** | **+2.4** | |
| CTEI | **Djebel Teioual** | **94.22** | **47** | P | P | | 18 06 41.0 | +8.1 | |
| CKFL | **Kef-Lekhel** | **94.24** | **47** | P | P | | 18 06 41.0 | +8.0 | |
| HIA | **Hailar** | **94.37** | **330** | *e*P | **P** | | **18 06 33.1** | **-0.1** | |
| HIA | | | | MLR | MLR | | | | |
| | comp=Z,30µm,22.0s | | | | | | | | |
| HIA | **Hailar** | **94.37** | **330** | *e*P | **P** | | **18 06 33.1** | **-0.1** | |
| HIA | | | | LR | LR | | | | |
| | comp=Z,30µm,22.0s | | | | | | | | |
| PSZ | **Piszkesteto** | **94.41** | **32** | *e*P | **P** | | **18 06 33.2** | **-0.2** | |
| PSZ | | | | *e* | | | 18 10 18.9 | | |
| PSZ | | | | pmax | pmax | | | | |
| | comp=Z,27nm,1.2s | | | | | | | | |
| PSZ | | | | MLR | MLR | | | | |
| | comp=Z,82µm,19.0s | | | | | | | | |
| PSZ | **Piszkesteto** | **94.41** | **32** | ⇑*i*P | P | | 18 06 42.0 | +8.6 | |
| PSZ | **Piszkesteto** | **94.41** | **32** | *e*P | **P** | | **18 06 33.2** | **-0.2** | |
| | comp=Z,27nm,1.2s | | | | | | | | |
| PSZ | | | | *e*PP | **PP** | | **18 10 18.9** | **-1.1** | |
| PSZ | | | | LR | LR | | | | |
| | comp=Z,82µm,19.0s | | | | | | | | |
| KWP | **Kalwaria Pacla** | **94.46** | **29** | *e*P | **P** | | **18 06 33.1** | **-0.5** | |
| KWP | | | | *e*PP | **PP** | | **18 10 23.9** | **+3.6** | |
| KWP | | | | *e*S | **S** | | **18 17 46.3** | **+0.8** | |
| KWP | | | | LMZ | LR | | 18 48 15.3 | | |
| KWP | **Kalwaria Pacla** | **94.46** | **29** | *e*P | **P** | | **18 06 33.2** | **-0.4** | |
| KWP | | | | *e* | | | 18 10 23.9 | | |
| KWP | | | | *e*S | **S** | | **18 17 46.4** | **+0.9** | |
| KWP | | | | MLR | MLR | | | | |
| | comp=Z,60µm,20.6s | | | | | | | | |
| HNR | **Honiara** | **94.68** | **262** | P | **P** | | **18 06 37.3** | **+2.2** | |
| | comp=Z,26nm,0.7s,baz=74,slow=15,SNR=2.0 | | | | | | | | |
| HNR | **Honiara** | **94.68** | **262** | P | **P** | | **18 06 37.3** | **+2.2** | |
| HNR | | | | MLR | MLR | | | | |
| | comp=Z,94µm,22.0s | | | | | | | | |
| HNR | **Honiara** | **94.68** | **262** | P | **P** | | **18 06 37.3** | **+2.2** | |
| HNR | | | | LR | LR | | | | |
| | comp=Z,94µm,22.0s | | | | | | | | |
| KOLS | **Kolonicke sedl** | **94.78** | **30** | *e*P | **P** | | **18 06 34.2** | **-0.8** | |
| KOLS | | | | *e* | | | 18 06 41.7 | | |
| KOLS | | | | *e*S | **S** | | **18 17 47.5** | **-0.8** | |
| KOLS | | | | pmax | pmax | | | | |
| | comp=Z,151nm,2.9s | | | | | | | | |
| KOLS | | | | MLR | MLR | | | | |
| | comp=Z,22µm,20.4s | | | | | | | | |
| KOLS | **Kolonicke sedl** | **94.78** | **30** | *e*P | **P** | | **18 06 34.2** | **-0.8** | |
| KOLS | | | | *e* | | | 18 06 41.7 | | |
| KOLS | **Kolonicke sedl** | **94.78** | **30** | *e*S | **S** | | **18 17 47.5** | **-0.8** | |
| KOLS | | | | *e*SS | SS | | 18 24 03.7 | -7.2 | |
| ABSA | **Djebel Ababsia** | **94.81** | **46** | P | P | | 18 06 42.5 | +6.9 | |
| CIT | **Chita** | **94.86** | **335** | *e*P | P | | 18 06 42.7 | +7.3 | |
| CIT | | | | *e* | | | 18 10 28.0 | | |
| CIT | | | | pmax | pmax | | | | |
| | comp=Z,134nm,2.6s | | | | | | | | |
| LVV | **L'vov** | **94.90** | **28** | *e*P | P | | 18 06 40.7 | +5.1 | |
| LVV | | | | *i* | | | 18 10 29.1 | | |
| LVV | | | | *e* | | | 18 17 13.5 | | |
| LVV | | | | *e*SS | SS | | 18 24 11.3 | -1.2 | |
| LVV | | | | MLR | MLR | | | | |
| | comp=Z,39µm,18.0s | | | | | | | | |
| LVV | | | | MLR | MLR | | | | |
| | comp=N,20µm,17.0s | | | | | | | | |
| LVV | | | | MLR | MLR | | | | |
| | comp=E,40µm,17.0s | | | | | | | | |
| MOS | **Moscow** | **94.95** | **18** | *e*P | **P** | | **18 06 34.5** | **-1.1** | |
| MOS | | | | *e* | | | 18 10 24.7 | | |
| MOS | | | | *e*S | **SKSac** | | **18 17 09.8** | **-1.0** | |
| MOS | | | | *e*PS | **PS** | | **18 19 06.8** | **-0.1** | |
| MOS | | | | *e*SS | **SS** | | **18 24 07.7** | **-5.0** | |
| MOS | | | | pmax | pmax | | | | |
| | comp=Z,500nm,3.3s | | | | | | | | |
| MOS | | | | pmax | pmax | | | | |
| | comp=Z,74nm,1.4s | | | | | | | | |
| MOS | | | | MLR | MLR | | | | |
| | comp=Z,64µm,18.0s | | | | | | | | |
| MOS | | | | MLR | MLR | | | | |
| | comp=E,34µm,16.0s | | | | | | | | |
| MOS | | | | MLR | MLR | | | | |
| | comp=N,42µm,17.0s | | | | | | | | |
| UZH | **Uzhgorod** | **95.01** | **30** | *e*P | **P** | | **18 06 38.0** | **+1.9** | |
| UZH | | | | *e*S | **S** | | **18 17 45.0** | **-5.3** | |
| UZH | | | | MLR | MLR | | | | |
| | comp=Z,65µm,21.0s | | | | | | | | |
| SOKR | **Solikamsk** | **95.14** | **7** | ⇑*i*P | P | | 18 06 44.2 | +7.8 | |
| SOKR | | | | | | | 18 10 34.5 | | |
| SOKR | | | | S | **SKSac** | | **18 17 13.9** | **+2.3** | |
| SOKR | | | | PS | **PS** | | **18 19 17.9** | **+9.2** | |
| SOKR | | | | SS | SS | | 18 24 24.6 | +10 | |
| SOKR | | | | pmax | pmax | | | | |
| | comp=Z,40nm,1.3s | | | | | | | | |
| OBN | **Obninsk** | **95.18** | **19** | P | **P** | | **18 06 37.0** | **+0.3** | |
| OBN | | | | *PP | **pP** | | **18 06 41.6** | **+0.3** | |
| OBN | | | | *i* *SP | **sP** | | **18 06 42.7** | **-0.3** | |
| OBN | | | | *e* | | | 18 10 29.9 | | |
| OBN | | | | *e*S | **SKSac** | | **18 17 08.3** | **-3.8** | |
| OBN | | | | *e*PS | **PS** | | **18 19 11.7** | **+2.3** | |
| OBN | | | | *e*SS | **SS** | | **18 24 18.3** | **+2.2** | |
| OBN | | | | *e*SSS | SSS | | 18 28 02.0 | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,66nm,2.2s | | | | | | | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,294nm,3.0s | | | | | | | | |
| OBN | | | | MLR | MLR | | | | |
| | comp=Z,44µm,17.0s | | | | | | | | |
| OBN | **Obninsk** | **95.18** | **19** | *e*P | **P** | | **18 06 37.0** | **+0.3** | |
| | comp=Z,58nm,1.2s | | | | | | | | |
| OBN | | | | LR | LR | | | | |
| | comp=Z,54µm,21.0s | | | | | | | | |
| CN2 | **Changchun** | **95.36** | **324** | *e*P | P | | 18 06 47.9 | +10 | |
| CN2 | | | | *e*PP | **PP** | | **18 10 32.6** | **+5.1** | |
| CN2 | **Changchun** | **95.36** | **324** | *e*S | **S** | | **18 17 51.4** | **-2.1** | |
| CN2 | **Changchun** | **95.36** | **324** | *e*SS | SS | | 18 24 26.8 | +7.3 | |
| CN2 | | | | pmax | pmax | | | | |
| | comp=Z,20nm,1.9s | | | | | | | | |
| CN2 | | | | pmax | pmax | | | | |
| | comp=Z,500nm,6.0s | | | | | | | | |
| CN2 | | | | LR | LR | | | | |
| | comp=N,8µm,17.0s | | | | | | | | |
| CN2 | | | | LR | LR | | | | |
| | comp=E,20µm,17.0s | | | | | | | | |
| CN2 | | | | LR | LR | | | | |
| | comp=Z,10µm,20.0s | | | | | | | | |
| TRPA | **Tarpa** | **95.49** | **30** | ⇑*i*P | **P** | | **18 06 38.2** | **0.0** | |
| PMSA | **Palmer Station** | **95.85** | **162** | PFAKE | | | 18 06 50.0 | +11 | |
| PMSA | | | | LR | LR | | | | |
| | comp=Z,12µm,20.0s | | | | | | | | |
| SNZO | **South Karori** | **96.31** | **227** | PFAKE | | | 18 06 50.0 | +8.1 | |
| SNZO | | | | LR | LR | | | | |
| | comp=Z,29µm,22.0s | | | | | | | | |
| KIEV | **Kiev** | **96.34** | **25** | *e*P | **P** | | **18 06 41.8** | **-0.3** | |
| KIEV | | | | pmax | pmax | | | | |
| | comp=Z,29nm,1.2s | | | | | | | | |
| KIEV | | | | MLR | MLR | | | | |
| | comp=Z,45µm,16.0s | | | | | | | | |
| KIEV | **Kiev** | **96.34** | **25** | PFAKE | | | 18 06 50.0 | +7.9 | |
| KIEV | | | | LR | LR | | | | |
| | comp=Z,60µm,20.0s | | | | | | | | |
| AKASG | **Malin Array Be** | **96.34** | **25** | P | **P** | | **18 06 40.2** | **-1.8** | |
| | comp=Z,0.3nm,0.3s,baz=312,slow=3.7,SNR=6.0 | | | | | | | | |
| AKASG | | | | PP | PP | | 18 10 29.4 | -5.4 | |
| | comp=Z,1.2nm,0.6s,baz=317,slow=6.5,SNR=5.0 | | | | | | | | |
| AKASG | | | | PKKPbc | **PKKPbc** | | **18 23 29.5** | **+1.2** | |
| | comp=Z,0.3nm,0.3s,baz=113,slow=2.2,SNR=2.5 | | | | | | | | |
| AKASG | | | | LR | LR | | 18 50 21.7 | | |
| | comp=Z,51µm,19.0s,baz=315,slow=36 | | | | | | | | |
| AKASG | **Malin Array Be** | **96.34** | **25** | *i* P | **P** | | **18 06 42.0** | **-0.1** | |
| AKASG | **Malin Array Be** | **96.34** | **25** | P | **P** | | **18 06 40.2** | **-1.8** | |
| AKASG | | | | PP | PP | | 18 10 29.4 | -5.4 | |
| AKASG | | | | PKKPbc | **PKKPbc** | | **18 23 29.5** | **+1.2** | |
| KEST | **Kesra** | **96.36** | **46** | P | **P** | | **18 06 42.4** | **-0.2** | |
| | comp=Z,4.0nm,0.9s,baz=249,slow=5.4,SNR=4.7 | | | | | | | | |
| KEST | | | | PP | **PP** | | **18 10 37.8** | **+2.1** | |
| | comp=Z,17nm,1.2s,baz=309,slow=3.7,SNR=4.0 | | | | | | | | |
| KEST | | | | LR | LR | | 18 49 57.2 | | |
| | comp=Z,50µm,18.6s,baz=260,slow=35 | | | | | | | | |
| KEST | **Kesra** | **96.36** | **46** | P | **P** | | **18 06 42.4** | **-0.2** | |
| KEST | | | | PP | **PP** | | **18 10 37.8** | **+2.1** | |
| DRGR | | **96.55** | **31** | ⇑P | P | | 18 06 51.3 | +8.1 | |
| DRGR | | **96.55** | **31** | ⇑*i*P | P | | 18 06 51.3 | +8.1 | |
| BZS | **Buzias** | **96.88** | **32** | ⇓P | P | | 18 06 52.3 | +7.7 | |
| BZS | **Buzias** | **96.88** | **32** | ⇓*i*P | P | | 18 06 52.3 | +7.7 | |
| BURAR | **Bucovina Array** | **97.08** | **29** | ⇓P | Pdif | | 18 06 54.4 | +8.7 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BURAR | **Bucovina Array** | **97.08** | **29** | ⇓*i*P | Pdif | | 18 06 54.4 | +8.7 | |
| DIVS | **Divibare** | **97.15** | **34** | ⇑*i*P | Pdif | | 18 06 50.7 | +4.6 | |
| KRAR | **Krasnoyarsk** | **97.36** | **348** | *e*P | Pdif | | 18 06 47.9 | +1.3 | |
| KRAR | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| GZR | **Gura Zlata** | **97.60** | **32** | ⇑P | Pdif | | 18 06 51.8 | +3.7 | |
| GZR | **Gura Zlata** | **97.60** | **32** | ⇑*i*P | Pdif | | 18 06 51.8 | +3.7 | |
| ASCN | **Ascension** | **97.63** | **95** | PFAKE | | | 18 07 00.0 | +11 | |
| ASCN | | | | LR | LR | | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| CUC | **Castrocucco** | **97.67** | **39** | PFAKE | | | 18 07 00.0 | +12 | |
| CUC | | | | LR | LR | | | | |
| | comp=Z,38µm,19.0s | | | | | | | | |
| CLTB | **Caltabellotta** | **97.68** | **43** | PFAKE | | | 18 07 00.0 | +11 | |
| CLTB | | | | LR | LR | | | | |
| | comp=Z,22µm,21.0s | | | | | | | | |
| SNY | **Shenyang** | **97.71** | **323** | ⇑P | Pdif | | 18 06 53.0 | +4.5 | |
| SNY | | | | SKS | **SKSac** | | **18 17 27.0** | **+1.2** | |
| SNY | | | | S | **ScS** | | **18 18 16.8** | **+2.8** | |
| SNY | | | | PMZ | | | | | |
| | comp=Z,22nm,2.3s | | | | | | | | |
| SNY | | | | PMZ | | | | | |
| | comp=Z,740nm,5.5s | | | | | | | | |
| SNY | | | | LN | | | | | |
| | comp=Z,21µm,19.8s | | | | | | | | |
| SNY | | | | LE | | | | | |
| | comp=Z,22µm,16.1s | | | | | | | | |
| SNY | | | | LZ | | | | | |
| | comp=Z,27µm,20.2s | | | | | | | | |
| IRK | **Irkutsk** | **97.91** | **340** | *e*P | **P** | | **18 06 48.0** | **-1.2** | |
| IRK | | | | *e* | | | 18 10 43.5 | | |
| IRK | | | | pmax | pmax | | | | |
| | comp=Z,122nm,2.2s | | | | | | | | |
| SIBR | **Sibiu** | **97.96** | **31** | ⇑*i*P | P | | 18 06 42.2 | -7.3 | |
| LPSR | **Galich'ya Gora** | **98.06** | **19** | *e*P | **P** | | **18 06 48.9** | **-0.9** | |
| LPSR | | | | *e* | | | 18 10 45.7 | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=N,7.0nm,1.4s | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=E,4.0nm,0.7s | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=Z,80nm,1.5s | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=N,40nm,2.0s | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=E,80nm,2.1s | | | | | | | | |
| KSRS | **Korea Array** | **98.07** | **318** | P | Pdif | | 18 06 51.7 | +1.4 | |
| | comp=E,5.0nm,1.0s,baz=61,slow=4.2,SNR=7.4 | | | | | | | | |
| KSRS | | | | PP | **PP** | | **18 10 46.1** | **-2.5** | |
| | comp=E,4.7nm,1.2s,baz=59,slow=8.0,SNR=4.6 | | | | | | | | |
| KSAR | **Wonju Array Be** | **98.11** | **318** | P | Pdif | | 18 06 51.7 | +1.3 | |
| KSAR | | | | | | | 18 10 46.1 | | |
| KSAR | **Wonju Array Be** | **98.11** | **318** | P | Pdif | | 18 06 51.7 | +1.3 | |
| KSAR | | | | PP | **PP** | | **18 10 46.1** | **-2.8** | |
| SVE | **Sverdlovsk** | **98.25** | **6** | *e*P | **P** | | **18 06 49.6** | **-1.0** | |
| SVE | | | | *e*S | **SKSac** | | **18 17 25.2** | **-2.8** | |
| SVE | | | | *e* | | | 18 19 42.7 | | |
| SVE | | | | *e* | | | 18 19 44.6 | | |
| SVE | | | | *e*SS | **SS** | | **18 24 58.3** | **-0.9** | |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,49nm,1.6s | | | | | | | | |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,220nm,8.3s | | | | | | | | |
| SVE | | | | MLR | MLR | | | | |
| | comp=Z,114µm,20.0s | | | | | | | | |
| SVE | | | | MLR | MLR | | | | |
| | comp=N,68µm,20.0s | | | | | | | | |
| SVE | | | | MLR | MLR | | | | |
| | comp=E,66µm,19.0s | | | | | | | | |
| DOPR | **Dopca** | **98.40** | **30** | ⇓*i*P | Pdif | | 18 07 00.0 | +8.4 | |
| ARU | **Arti** | **98.44** | **7** | P | **P** | | **18 06 50.6** | **-0.8** | |
| ARU | | | | | | | 18 10 50.6 | | |
| ARU | | | | S | **SKSac** | | **18 17 28.5** | **-0.5** | |
| ARU | | | | PS | **PS** | | **18 19 45.7** | **+0.9** | |
| ARU | **Arti** | **98.44** | **7** | P | **P** | | **18 06 50.0** | **-1.4** | |
| | comp=E,159nm,1.2s,SNR=5.7 | | | | | | | | |
| ARU | **Arti** | **98.44** | **7** | *e*P | **P** | | **18 06 49.5** | **-1.9** | |
| | comp=E,91nm,1.6s | | | | | | | | |
| ARU | | | | LR | LR | | | | |
| | comp=Z,70µm,19.0s | | | | | | | | |
| ARR | **Arges** | **98.50** | **31** | ⇓*i*P | Pdif | | 18 06 59.9 | +7.8 | |
| TLY | **Talaya** | **98.59** | **340** | *i* P | **P** | | **18 06 50.0** | **-2.2** | |
| TLY | | | | *e* | | | 18 10 50.3 | | |
| TLY | | | | *e*S | SKSac | | 18 17 21.7 | -8.3 | |
| TLY | | | | *e*SSS | SSS | | 18 28 47.0 | | |
| TLY | | | | pmax | pmax | | | | |
| | comp=Z,53nm,1.9s | | | | | | | | |
| TLY | **Talaya** | **98.59** | **340** | P | Pdif | | 18 06 53.1 | +0.8 | |
| | comp=Z,106nm,1.3s,SNR=6.6 | | | | | | | | |
| TLY | **Talaya** | **98.59** | **340** | *e*P | **P** | | **18 06 50.8** | **-1.4** | |
| | comp=Z,31nm,1.2s | | | | | | | | |
| TLY | | | | LR | LR | | | | |
| | comp=Z,26µm,20.0s | | | | | | | | |
| VOIR | | **98.64** | **31** | ⇓P | Pdif | | 18 06 59.6 | +6.9 | |
| VOIR | | **98.64** | **31** | ⇓*i*P | Pdif | | 18 06 59.6 | +6.9 | |
| TIP | **Timpagrande** | **98.76** | **40** | PFAKE | | | 18 07 00.0 | +6.6 | |
| TIP | | | | LR | LR | | | | |
| | comp=Z,48µm,22.0s | | | | | | | | |
| INCN | **Inchon** | **98.84** | **318** | PFAKE | | | 18 07 00.0 | +6.3 | |
| INCN | | | | LR | LR | | | | |
| | comp=Z,21µm,19.0s | | | | | | | | |
| VORR | **Voronezh** | **98.96** | **19** | P | Pdif | | 18 06 55.0 | +1.1 | |
| VORR | | | | pmax | pmax | | | | |
| | comp=Z,250nm,0.8s | | | | | | | | |
| TIR | **Tirane** | **99.01** | **36** | PFAKE | | | 18 07 00.0 | +5.7 | |
| TIR | | | | LR | LR | | | | |
| | comp=Z,74µm,22.0s | | | | | | | | |
| TJN | **Taejon** | **99.11** | **317** | *e*P | **Pdif** | | **18 06 55.9** | **+1.1** | |
| KIS | **Kishinev** | **99.11** | **28** | *e*P | **Pdif** | | **18 07 00.0** | **+5.4** | |
| KIS | **Kishinev** | **99.11** | **28** | *e*PP | PP | | 18 11 08.0 | +12 | |
| | comp=Z,1µm,8.0s | | | | | | | | |
| KIS | **Kishinev** | **99.11** | **28** | *e*PSP | PSP | | 18 11 54.0 | | |
| KIS | **Kishinev** | **99.11** | **28** | *e*PPP | PPP | | 18 13 19.0 | | |
| KIS | | | | *e*SKS | **SKSac** | | **18 17 26.0** | **-6.7** | |
| KIS | | | | *e*SKKS | SKKSac | | 18 17 44.0 | -20 | |
| KIS | | | | *e*S | S | | 18 18 02.0 | -23 | |
| KIS | **Kishinev** | **99.11** | **28** | *e*PS | PS | | 18 19 54.0 | +1.5 | |
| KIS | **Kishinev** | **99.11** | **28** | *e*PPS | PPS | | 18 20 34.0 | | |
| KIS | | | | *e*SS | SS | | 18 25 30.0 | +18 | |
| KIS | | | | *e*SSS | SSS | | 18 28 46.

**VRH Novokhopyorsk 100.11 18** *e*P **Pdif** 18 06 58.2 **-0.8**
VRH *e* 18 11 01.6
VRH pmax pmax
comp=N,10.0nm,0.8s
VRH pmax pmax
comp=Z,10.0nm,0.8s
VRH pmax pmax
comp=E,10.0nm,0.6s
VRH pmax pmax
comp=Z,100nm,2.0s
VRH pmax pmax
comp=N,110nm,1.8s
VRH pmax pmax
comp=E,40nm,1.7s
**HOPE Hope Point 100.32 145** PFAKE 18 07 10.0 +10
HOPE LR LR
comp=Z,14µm,19.0s
**KKB Krupnik 100.33 34** *e*P **Pdif** **18 07 07.3 +7.1**
**PGB Panagyurishte 100.37 33** *e*P **Pdif** **18 07 07.0 +6.5**
**ZALV Zalesovo Beam 100.66 352** P **Pdif** **18 07 01.4 0.0**
ZALV PP **PP** **18 11 08.2 +0.7**
comp=Z,2.7nm,0.8s,baz=9.8,slow=4.4,SNR=8.6
ZALV PP **PP** **18 11 08.2 +0.7**
comp=Z,4.3nm,1.0s,baz=345,slow=4.6,SNR=5.7
**ZALV Zalesovo Beam 100.66 352** P **Pdif** **18 07 01.4 0.0**
ZALV PP **PP** **18 11 08.2 +0.7**
**SZH Strazhica 100.70 32** *e*P **Pdif** **18 07 08.1 +6.3**
**DL2 Dalian 100.80 322** P **Pdif** **18 07 08.3 +6.0**
DL2 PP PP 18 11 17.3 +8.1
**DL2 Dalian 100.80 322** SS SS 18 25 51.3 +15
DL2 AMB AMB
comp=Z,820nm,5.3s
DL2 LR LR
comp=E,11µm,15.2s
DL2 LR LR
comp=Z,10µm,17.2s
**MMB Musomiste 100.86 34** *e*P **Pdif** **18 07 09.3 +6.7**
**TAM Tamanrasset 100.95 59** PFAKE 18 07 10.0 +6.5
TAM LR LR
comp=Z,51µm,21.0s
**SONM Songino Array 100.95 336** P **Pdif** **18 07 03.7 +0.7**
comp=Z,2.7nm,0.8s,baz=335,slow=2.0,SNR=15
SONM PP **PP** **18 11 11.1 +0.9**
comp=Z,7.3nm,1.1s,baz=41,slow=3.4,SNR=8.3
SONM PKKPbc **PKKPbc** **18 23 17.6 +1.9**
comp=Z,0.8nm,0.6s,baz=144,slow=2.7,SNR=3.6
**SONM Songino Array 100.95 336** P **Pdif** **18 07 03.7 +0.7**
SONM PP **PP** **18 11 11.1 +0.9**
SONM PKKPbc **PKKPbc** **18 23 17.6 +1.9**
**PLD Plovdiv 100.97 33** *e*P **Pdif** **18 07 09.9 +6.9**
**RZN Rozhen 101.29 33** *e*P **Pdif** **18 07 12.6 +7.9**
**HVS Khovu-Aksy 101.76 346** *e*P **Pdif** **18 07 07.6 +1.1**
HVS pmax pmax
comp=Z,15nm,1.0s
HVS MLR MLR
comp=Z,41µm,15.0s
**RDO Rodhopi 102.10 33** *e*Pdif **Pdif** **18 07 09.4 +1.3**
**BRVK Borovoye 102.48 0** *e*P **Pdif** **18 07 09.5 0.0**
BRVK MLR MLR
comp=Z,124µm,20.0s
**BRVK Borovoye 102.48 0** *e*Pdif **Pdif** **18 07 09.5 0.0**
BRVK LR LR
comp=Z,124µm,20.0s
**TORD Torodi Ar. Bea 102.78 69** P **Pdif** **18 07 10.9 -0.7**
comp=Z,1.6nm,1.1s,baz=278,slow=4.2,SNR=5.4
TORD PP PP 18 11 14.4 -11
comp=Z,2.9nm,1.2s,baz=312,slow=3.9,SNR=4.2
TORD PKKPbc **PKKPbc** **18 23 11.0 +1.7**
comp=Z,0.7nm,0.9s,baz=69,slow=2.6,SNR=3.2
**TORD Torodi Ar. Bea 102.78 69** P **Pdif** **18 07 10.9 -0.7**
TORD PP PP 18 11 14.4 -11
TORD PKKPbc **PKKPbc** **18 23 11.0 +1.7**
**BJI Beijing 102.90 326** P **Pdif** **18 07 15.3 +3.7**
BJI PP **PP** **18 11 26.0 +1.1**
BJI LN
comp=Z,21µm,21.1s
BJI LE
comp=Z,23µm,16.6s
BJI LZ
comp=Z,21µm,25.9s
**BJT Baijiatuau 102.92 326** PFAKE 18 07 20.0 +8.3
BJT LR LR
comp=Z,25µm,19.0s
**SIM Simferopol' 102.94 26** *e*P Pdif 18 07 25.0 +13
SIM *e*PP **PKiKP** **18 11 31.0 -0.9**
SIM *e*SKS 18 17 51.0
SIM *e*PS **PS** **18 20 35.0 +1.7**
SIM MLR MLR
comp=Z,26µm,14.0s
**BALY Balya 104.20 33** P **Pdif** **18 07 12.6 -4.9**
**AKTO Aktyubinsk 104.26 8** Pdiff **Pdif** **18 07 17.2 -0.2**
comp=Z,0.4nm,0.3s,baz=17,slow=2.1,SNR=4.0
AKTO PP PKiKP 18 11 25.7 -8.4
comp=Z,2.8nm,0.9s,baz=360,slow=9.9,SNR=4.6
**AKTO Aktyubinsk 104.26 8** Pdif **Pdif** **18 07 17.2 -0.2**
AKTO PP PKiKP 18 11 25.7 -8.4
**ANN Anapa 104.33 24** P **Pdif** **18 07 15.7 -2.2**
ANN *e* 18 11 40.3
ANN *e* 18 17 53.1
ANN *e*SSS SSS 18 30 20.4
ANN MLR MLR
comp=Z,88µm,21.0s
ANN MLR MLR
comp=N,48µm,21.0s
ANN MLR MLR
comp=E,5µm,10.0s
**KURK Kurchatov 104.52 355** PKKPbc PKKPbc 18 23 05.8 +0.7
KURK LR LR
comp=Z,124µm,19.0s
**KURBB Kurchatov Arra 104.61 355** PKKPbc PKKPbc 18 23 05.8 +1.0
comp=Z,0.5nm,0.3s,baz=200,slow=2.6,SNR=3.7
**SANT Santorini 105.62 37** PFAKE 18 11 50.0
SANT LR LR
comp=Z,31µm,19.0s
**ABKAR Akbulak array 105.66 7** *e*Pdif **Pdif** **18 07 23.8 0.0**
**SOC Sochi 106.21 23** *e*P **Pdif** **18 07 35.4 +9.1**
SOC *e* 18 11 50.3
SOC *e*PPP PPP 18 14 05.2
SOC *e*PS **PS** **18 21 07.4 0.0**
SOC *e*SS SS 18 26 50.1 +0.4
SOC *e*SSS SSS 18 30 52.3
SOC MLR MLR
comp=Z,71µm,17.0s
**PMG Port Moresby 106.24 267** PFAKE 18 11 50.0
PMG LR LR
comp=Z,66µm,20.0s
**SSE Sheshan 106.45 316** Pdif **Pdif** **18 07 27.3 -0.3**
SSE PP **PP** **18 11 49.9 -1.7**
SSE SKS **SKSac** **18 18 08.3 +0.5**
SSE PPMZ
comp=Z,2µm,6.5s
SSE LN
comp=Z,11µm,19.3s
SSE LE
comp=Z,23µm,19.5s
SSE LZ
comp=Z,19µm,18.2s
**ANTO Ankara 106.55 30** PFAKE 18 11 50.0
ANTO LR LR
comp=Z,36µm,20.0s
**KIV Kislovodsk 106.89 21** *e*P **Pdif** **18 07 28.8 -0.6**
KIV *e* 18 11 56.6
KIV *e*PS **PS** **18 21 12.7 -1.9**
KIV *e*SS SS 18 27 02.4 +3.3
KIV *e*SSS SSS 18 31 01.0
KIV MLR MLR
comp=Z,55µm,20.0s
**KIV Kislovodsk 106.89 21** PFAKE 18 11 50.0
KIV LR LR
comp=Z,59µm,21.0s
**BRTR Keskin Array B 107.04 29** PKiKP **PKiKP** **18 11 37.6 -2.1**
comp=Z,1.6nm,1.0s,baz=318,slow=1.9,SNR=5.0
BRTR PP PP 18 11 48.9 -6.8
comp=Z,2.9nm,1.1s,baz=311,slow=4.7,SNR=5.9
BRTR PKKPbc **PKKPbc** **18 22 58.5 +1.1**
comp=Z,3.1nm,0.9s,baz=199,slow=6.0,SNR=6.5
**BRTR Keskin Array B 107.04 29** PKiKP **PKiKP** **18 11 37.6 -2.1**
BRTR PP PP 18 11 48.9 -6.8
BRTR PKKPbc **PKKPbc** **18 22 58.5 +1.1**
**ISP Isparta 107.12 32** PFAKE 18 11 50.0
ISP LR LR
comp=Z,64µm,20.0s
**KBZ Khabaz 107.16 21** Pdiff **Pdif** **18 07 38.4 +7.9**
comp=Z,2.9nm,1.0s,baz=346,slow=4.6,SNR=3.8
**KBZ Khabaz 107.16 21** Pdif **Pdif** **18 07 38.4 +7.9**
**NJ2 Nanjing 107.22 319** *e*Pdif **Pdif** **18 07 32.4 +1.4**
NJ2 S **Sdif** **18 19 34.5 +0.8**
NJ2 SS **SS** **18 27 05.0 +0.6**
NJ2 LN
comp=Z,39µm,27.2s
NJ2 LE
comp=Z,24µm,25.5s
NJ2 LZ
comp=Z,100µm,26.5s
**MKAR Makanchi Array 108.00 352** Pdiff **Pdif** **18 07 35.5 +1.2**
comp=Z,1.8nm,0.9s,baz=343,slow=3.8,SNR=3.9
MKAR PKiKP **PKiKP** **18 11 40.2 -1.1**
comp=Z,2.2nm,0.9s,baz=44,slow=4.4,SNR=2.8
MKAR PP **PP** **18 12 00.3 -1.9**
comp=Z,1.1nm,0.7s,baz=15,slow=5.0,SNR=3.7
MKAR PKKPbc **PKKPbc** **18 22 55.8 +1.4**
comp=Z,1.3nm,0.8s,baz=114,slow=3.5,SNR=4.2
**MKAR Makanchi Array 108.00 352** Pdif **Pdif** **18 07 35.5 +1.2**
MKAR PKiKP **PKiKP** **18 11 40.2 -1.1**
MKAR PP **PP** **18 12 00.3 -1.9**
MKAR PKKPbc **PKKPbc** **18 22 55.9 +1.4**
**SHEL Horse Pasture 108.48 99** PFAKE 18 11 50.0
SHEL LR LR
comp=Z,6µm,22.0s
**MAK Makhachkala 109.25 18** *i*P **Pdif** **18 07 44.1 +4.3**
MAK *e* 18 12 17.1
MAK *e* 18 18 18.5
MAK *e*PS **PS** **18 21 38.3 -0.2**
MAK *e*SS SS 18 27 29.8 -0.8
**TRIS Tristan da Cun 109.70 122** PFAKE 18 11 50.0
TRIS LR LR
comp=Z,7µm,20.0s
**WMQ Urumqi 109.99 347** Pdif **Pdif** **18 07 44.0 +0.7**
WMQ PP PP 18 12 23.0 +6.2
WMQ SKS **SKSdf** **18 18 52.0 -5.0**
WMQ S **Sdif** **18 19 50.0 -6.7**
WMQ SS **SS** **18 27 44.0 +3.3**
WMQ PPMZ
comp=Z,2µm,8.0s
WMQ LN
comp=Z,20µm,20.0s
WMQ LE
comp=Z,18µm,19.0s
WMQ LZ
comp=Z,21µm,18.0s
**TATO Taipei 110.36 312** PFAKE 18 12 00.0
TATO LR LR
comp=Z,26µm,22.0s
**GTA Gaotai 110.63 336** SS SS 18 28 01.4 +12
GTA AMB AMB
comp=Z,4µm,6.9s
GTA LR LR
comp=N,24µm,16.6s
GTA LR LR
comp=E,25µm,18.8s
GTA LR LR
comp=Z,40µm,17.3s
**YHNB Yeheng 110.63 311** PFAKE 18 12 00.0
YHNB LR LR
comp=Z,23µm,19.0s
**CSS Prodhromos 110.76 32** PFAKE 18 12 00.0
CSS LR LR
comp=Z,6µm,19.0s
**CTAO Charters Tower 110.93 257** PFAKE 18 12 00.0
CTAO LR LR
comp=Z,27µm,20.0s
**WHN Wuhan 110.96 320** PKP **PKiKP** **18 11 43.5 -3.7**
WHN LN
comp=Z,46µm,17.5s
WHN LE
comp=Z,45µm,16.2s
WHN LZ
comp=Z,35µm,15.9s
**GNI Garni 110.97 21** PFAKE 18 12 00.0
GNI LR LR
comp=Z,49µm,20.0s
**LZH Lanzhou 111.89 332** *e*PKP **PKiKP** **18 11 47.1 -1.9**
LZH sPKP 18 11 51.6
LZH PP **PP** **18 12 34.0 +3.1**
LZH SKS **SKSdf** **18 18 56.0 -5.1**
LZH SKKS SKKSac 18 19 27.0 -7.6
LZH SS **SS** **18 28 07.1 +0.2**
LZH PPMZ
comp=Z,2µm,5.4s
LZH LN
comp=Z,28µm,18.9s
LZH LE
comp=Z,26µm,19.2s
LZH LZ
comp=Z,49µm,20.5s
**TKM2 Tokmak 2 112.49 356** PFAKE 18 12 00.0
TKM2 LR LR
comp=Z,70µm,19.0s
**SBA Scott Base 112.81 193** PFAKE 18 12 00.0
SBA LR LR
comp=Z,17µm,21.0s
**AAK Ala-Archa 112.83 357** PKKPbc PKKPbc 18 22 46.1 +7.2
comp=Z,3.8nm,0.9s,baz=194,slow=16,SNR=5.1
**AAK Ala-Archa 112.83 357** PKKPbc PKKPbc 18 22 46.1 +7.2
AAK LR LR
comp=Z,113µm,20.0s
**EKS2 Erkin-Say 112.83 358** PFAKE 18 12 00.0
EKS2 LR LR
comp=Z,108µm,19.0s
**CAN Canberra 113.10 240** PFAKE 18 12 00.0
CAN LR LR
comp=Z,30µm,21.0s
**VNDA Vanda 113.79 194** PKP 18 11 52.2
comp=Z,0.8nm,0.9s,baz=326,slow=3.3,SNR=2.1
VNDA PKKPbc **PKKPbc** **18 22 33.5 -2.6**
comp=Z,1.1nm,0.8s,baz=90,slow=2.0,SNR=4.8
**VNDA Vanda 113.79 194** PKP **PKiKP** **18 11 52.2 +1.1**
VNDA PKKPbc **PKKPbc** **18 22 33.5 -2.6**
**ENH Enshi 113.88 324** PFAKE 18 12 00.0
ENH LR LR
comp=Z,16µm,20.0s
**QSPA South Pole Qui 114.66 180** *e*PKiKP **PKiKP** **18 11 52.1 -1.0**
QSPA LR LR
comp=Z,19µm,21.0s
**ASF Jabal al Asfar 114.75 31** PP **PP** **18 12 51.2 0.0**
comp=Z,5.0nm,1.2s,baz=280,slow=2.6,SNR=5.4
ASF PKKPbc **PKKPab** **18 22 39.7 -0.5**
comp=Z,3.6nm,0.8s,baz=98,slow=4.1,SNR=4.2
**ASF Jabal al Asfar 114.75 31** PP **PP** **18 12 51.2 0.0**
ASF PKKPbc **PKKPab** **18 22 39.7 -0.5**
**EIL Elat 115.83 35** PP **PP** **18 12 56.0 -2.9**
comp=Z,2.0nm,0.5s,baz=20,slow=7.6,SNR=4.0
**EIL Elat 115.83 35** PP **PP** **18 12 56.0 -2.9**
**KSH Kashi 115.85 356** *e*PKP **PKPdf** **18 12 00.0 +3.5**
KSH PP PP 18 13 08.6 +10
KSH PKS **PKSdf** **18 15 34.4 +1.1**
KSH SKS **SKSdf** **18 19 11.0 +2.5**
KSH SKKS **SKKSac** **18 20 01.0 -0.1**
KSH SS SS 18 29 09.9 +11
KSH PPMZ
comp=Z,2µm,6.7s
KSH LN
comp=Z,64µm,15.0s
KSH LE
comp=Z,60µm,16.5s
KSH LZ
comp=Z,104µm,17.4s
**TAU Tasmania Unive 116.03 233** PFAKE 18 12 10.0 +14
TAU LR LR
comp=Z,20µm,21.0s
**CD2 Chengdu 116.27 329** PKP **PKPdf** **18 11 56.4 -1.0**
CD2 sPKP 18 12 01.1
CD2 PP **PP** **18 13 00.5 -1.4**
CD2 SKS **SKSdf** **18 19 08.6 -0.9**
CD2 SKKS **SKKSac** **18 20 00.3 -3.8**
CD2 SS **SS** **18 29 04.0 -0.7**
CD2 PPMZ
comp=Z,4µm,6.0s
CD2 LN
comp=Z,29µm,18.6s
CD2 LE
comp=Z,36µm,20.6s
CD2 LZ
comp=Z,36µm,19.6s
**GEYT Alibeck 116.48 11** PKP **PKPdf** **18 11 58.2 +0.6**
comp=Z,2.9nm,0.8s,baz=240,slow=2.9,SNR=5.0
GEYT PP **PP** **18 12 58.1 -4.8**
comp=Z,2.3nm,0.8s,baz=305,slow=5.1,SNR=2.7
GEYT PKKPbc **PKKPab** **18 22 33.4 +0.6**
comp=Z,3.6nm,0.9s,baz=132,slow=2.1,SNR=5.9
**SIJI Sorong 117.04 282** PKP **PKPdf** **18 12 01.4 +2.2**
comp=Z,2.0nm,0.5s,baz=130,slow=16,SNR=2.7
SIJI PP **PP** **18 13 12.5 +3.7**
comp=Z,12nm,1.2s,baz=57,slow=2.9,SNR=5.8
**DAV Davao City (W) 118.01 293** PFAKE 18 12 10.0 +8.9
DAV LR LR
comp=Z,41µm,22.0s
**GYA Guiyang 118.41 323** Pdif **Pdif** **18 08 21.0 -0.1**
GYA PKP **PKPdf** **18 12 01.8 +0.1**
GYA PP **PP** **18 13 21.6 +4.5**
GYA PKS **PKSdf** **18 15 37.3 -1.4**
GYA SKKS 18 20 13.6
GYA SS **SS** **18 29 33.0 0.0**
GYA PPMZ
comp=Z,240nm,8.2s
**SNAA Sanae 118.45 160** *e*PKIKP **PKPdf** **18 12 02.4 +2.1**
**SNAA Sanae 118.45 160** *e*PKPdf **PKPdf** **18 12 02.4 +2.1**
**DRV Dumont d'Urvil 120.74 206** PP PP 18 13 21.0 -12
DRV SKKS 18 21 16.0
DRV SP SP 18 23 10.0 -11
DRV SS **SS** **18 30 02.0 -0.9**
DRV L L 18 43 00.0
DRV R R 18 48 00.0
**WRAB Tennant Creek 121.50 261** *e*PKIKP **PKPdf** **18 12 06.7 -0.9**
WRAB MLR MLR
comp=Z,38µm,20.0s
**WRAB Tennant Creek 121.50 261** *e*PKPdf **PKPdf** **18 12 06.7 -0.9**
WRAB LR LR
comp=Z,38µm,20.0s
**WRA Warramunga Arr 121.52 261** PKhKP PKPpre 18 12 05.5
comp=Z,3.4nm,0.9s,baz=73,slow=2.5,SNR=16
WRA PP **PP** **18 13 37.1 -2.6**
comp=Z,2.8nm,1.2s,baz=69,slow=3.8,SNR=7.0
WRA PKKPbc **PKKPab** **18 22 10.3 +2.4**
comp=Z,3.3nm,1.1s,baz=246,slow=2.3,SNR=6.3
**WRA Warramunga Arr 121.52 261** PKPpre PKPpre 18 12 05.5
WRA PP **PP** **18 13 37.1 -2.6**
WRA PKKPbc **PKKPab** **18 22 10.3 +2.4**
**KMI Kunming 121.56 326** ‖Pdif **Pdif** **18 08 36.3 +1.1**
KMI PKP **PKPdf** **18 12 07.3 -0.6**
KMI PP **PP** **18 13 42.9 +4.1**
KMI SKS **SKSdf** **18 19 13.3 -6.8**
KMI SS **SS** **18 30 17.8 +4.2**
KMI LN
comp=Z,17µm,19.2s
KMI LE
comp=Z,25µm,18.0s
KMI LZ
comp=Z,25µm,17.1s
**QIZ Qiongzhong 122.20 315** PKP **PKPdf** **18 12 08.3 -0.7**
QIZ sPKP 18 12 15.3
QIZ PP **PP** **18 13 44.1 +0.8**
QIZ SS SS 18 30 23.0 +0.9
QIZ LN
comp=Z,14µm,16.0s
QIZ LZ
comp=Z,20µm,27.4s
**QIZ Qiongzhong 122.20 315** PFAKE 18 12 20.0 +11
QIZ LR LR
comp=Z,18µm,19.0s
**LSA Lhasa 122.42 339** PKP **PKPdf** **18 12 08.3 -1.5**
LSA PP PP 18 13 51.9 +7.4
LSA LN
comp=Z,14µm,23.4s
LSA LE
comp=Z,27µm,24.1s
LSA LZ
comp=Z,23µm,26.5s
**LSA Lhasa 122.42 339** *e*PKIKP **PKPdf** **18 12 08.1 -1.7**
LSA *e* 18 13 49.0
LSA MLR MLR
comp=Z,26µm,21.0s
**LSA Lhasa 122.42 339** *e*PKPdf **PKPdf** **18 12 08.1 -1.7**
LSA *e*PP **PP** **18 13 49.0 +4.4**
LSA LR LR
comp=Z,26µm,21.0s
**ASAR Alice Springs 122.94 257** PKhKP PKPpre 18 12 03.9
comp=Z,0.6nm,0.8s,baz=71,slow=2.3,SNR=5.9
ASAR PKP **PKPdf** **18 12 10.3 0.0**
comp=Z,2.9nm,0.9s,baz=98,slow=2.1,SNR=14
ASAR PKKPbc **PKKPab** **18 22 01.2 -0.5**
comp=Z,2.7nm,1.0s,baz=245,slow=3.3,SNR=9.1
**ASAR Alice Springs 122.94 257** PKPpre PKPpre 18 12 03.9
ASAR PKP **PKPdf** **18 12 10.3 0.0**
ASAR PKKPbc **PKKPab** **18 22 01.2 -0.5**
**DHRM DHARAMSHALA 123.04 354** *e*P **PKPdf** **18 12 11.0 +0.3**
**SMLA Simla 124.07 353** *e*P **PKPdf** **18 12 11.5 -0.8**
**DDI Dehra Dun 124.77 352** *e*P **PKPdf** **18 12 11.3 -2.5**
**GUN Gumba 125.64 344** *e*P **PKPdf** **18 12 16.0 +0.1**
comp=Z,55nm,1.0s
**TAPN Taplejung 125.67 341** *e*P **PKPdf** **18 12 16.4 +0.5**
comp=Z,96nm,1.0s
**GKN Gorkha 125.85 345** *e*P **PKPdf** **18 12 15.8 -0.2**
comp=Z,25nm,0.9s
**KKN Kakani 125.90 344** *e*P **PKPdf** **18 12 16.7 +0.5**
comp=Z,29nm,0.7s
**SHL Shillong 125.96 336** *e*P **PKPdf** **18 12 15.4 -0.9**
**RAYN Ar Rayn 126.06 29** *e*PKPdf **PKPdf** **18 12 15.1 -1.3**
RAYN LR LR
comp=Z,18µm,19.0s
**PKIN Phulchoki 126.08 344** *e*P **PKPdf** **18 12 16.8 +0.2**
comp=Z,8.7nm,0.7s
**PKI Pulchoki 126.08 344** *e*P **PKPdf** **18 12 16.8 +0.1**
comp=Z,17nm,0.7s
**DMN Daman 126.12 344** *e*P **PKPdf** **18 12 16.3 -0.4**
comp=Z,26nm,0.8s
**ODAN Odare 126.22 342** *e*P **PKPdf** **18 12 16.9 0.0**
comp=Z,34nm,0.9s
**KKM Kota Kinabalu 126.24 299** PFAKE 18 12 30.0 +13
KKM LR LR
comp=Z,13µm,20.0s
**KOLN Koldanda 126.32 346** *e*P **PKPdf** **18 12 17.0 0.0**
comp=Z,16nm,0.9s
**RAMN Ramite 126.36 342** *e*P **PKPdf** **18 12 17.2 +0.1**
comp=Z,68nm,1.1s
**NDI New Delhi 126.48 353** *e*P **PKPdf** **18 12 16.0 -1.0**
NDI *ex* x 18 14 10.0
**BATI Baumata 127.87 276** PKP **PKPdf** **18 12 21.2 +1.3**
comp=Z,9.3nm,0.9s,baz=156,slow=20,SNR=1.6
**BATI Baumata 127.87 276** PKP **PKPdf** **18 12 21.2 +1.3**
**UOSS Wadi Hilu 128.57 17** *e*PKPdf **PKPdf** **18 12 21.9 +0.8**
**CHTO Chiang Mai 128.73 325** *e*PKIKP **PKPdf** **18 12 23.0 +1.4**
CHTO *e* 18 14 30.7
CHTO MLR MLR
comp=Z,18µm,20.0s
**CHTO Chiang Mai 128.73 325** *e*PKPdf **PKPdf** **18 12 23.0 +1.4**
CHTO *e*PP **PP** **18 14 30.7 +4.1**
CHTO LR LR
comp=Z,18µm,20.0s
**CMAR Chiang Mai Arr 129.03 325** PKP **PKPdf** **18 12 23.5 +1.4**
comp=Z,2.1nm,0.8s,baz=340,slow=2.2,SNR=12
CMAR PP PP 18 14 21.7 -6.8
comp=Z,1.2nm,0.8s,baz=12,slow=4.6,SNR=2.9
**CMAR Chiang Mai Arr 129.03 325** PKP **PKPdf** **18 12 23.5 +1.4**
CMAR PP PP 18 14 21.7 -6.8
**KAPI Kappang 129.13 284** PKP **PKPdf** **18 12 23.5 +1.2**
comp=Z,1.7nm,0.5s,baz=173,slow=12,SNR=2.3
**KAPI Kappang 129.13 284** PKP **PKPdf** **18 12 23.5 +1.2**
KAPI LR LR
comp=Z,12µm,19.0s
**BOK Bokaro 129.55 342** *e*P **PKPdf** **18 12 22.1 -0.9**
BOK AMS AMS 19 00 04.2
comp=Z,6µm,28.5s
**TSUM Tsumeb 130.57 95** PKPdf **PKPdf** **18 12 24.4 -0.7**
TSUM LR LR
comp=Z,19µm,19.0s
**CASY Casey 131.62 200** *e*PKPdf **PKPdf** **18 12 25.7 +0.3**
CASY LR LR
comp=Z,12µm,19.0s
**BHPL Bhopal 131.83 352** *e*P **PKPdf** **18 12 25.7 -1.7**
BHPL AMS AMS 18 57 45.5
comp=Z,6µm,43.1s
**SYO Syowa Base 131.99 165**‖ *e*P PKPpre 18 12 06.4
**BHJ Bhuj 132.23 1** *e*P **PKPdf** **18 12 27.4 -0.7**
**NGP Nagpur 133.64 349** *e*P **PKPdf** **18 12 30.1 -0.7**
NGP *ex* x 18 28 06.5
NGP AMS AMS 19 35 31.5
comp=Z,7µm,17.8s
**KSM Kuching 133.68 298** PFAKE 18 12 40.0 +9.0
KSM LR LR
comp=Z,15µm,21.0s
**MBAR Mbarara 134.40 64** PFAKE 18 12 40.0 +7.4
MBAR LR LR
comp=Z,921nm,20.0s
**MBWA Marble Bar 135.01 264** PFAKE 18 12 40.0 +6.8
MBWA LR LR

comp=Z,51µm,22.0s
**CHLP Challavanipeta 135.08 342** *e*PKPdf **PKPdf** **18 12 33.0 -0.5**
CHLP *e*PP **PP** **18 15 06.3 -0.6**
CHLP IVMs_BB IVMs_BB 19 21 43.1
comp=Z,10µm,15.4s
**SUR Sutherland 135.76 112** PFAKE 18 12 40.0 +5.4
SUR LR LR
comp=Z,17µm,21.0s
**RPR Rampur 135.84 348** *e*PKPdf **PKPdf** **18 12 34.2 -0.7**
RPR *e*PP **PP** **18 15 09.8 -1.8**
RPR IVMs_BB IVMs_BB 19 22 02.8
comp=Z,12µm,15.5s
**SRSP Sriramsagar 135.94 350** *e*PKPdf **PKPdf** **18 12 34.4 -0.8**
SRSP IVMs_BB IVMs_BB 19 17 52.0
comp=Z,10µm,23.4s
**VIS Vishakhapatnam 136.03 343** *e*P **PKPdf** **18 12 33.3 -2.0**
VIS AMS AMS 19 03 27.5
comp=Z,5µm,20.8s
**DGPR DIGLIPUR 136.53 328** *e*P **PKPdf** **18 12 36.0 -0.3**
DGPR AMS AMS 19 03 16.8
comp=Z,10µm,26.7s
**POO Poona 136.84 356** *e*P **PKPdf** **18 12 34.9 -1.9**
**MAW Mawson 136.89 176** PKhKP PKPpre 18 12 27.4
comp=Z,1.3nm,0.7s,baz=267,slow=13,SNR=3.9
MAW PKP **PKPdf** **18 12 36.0 +0.7**
comp=Z,8.5nm,0.9s,baz=177,slow=2.2,SNR=18
**MAW Mawson 136.89 176** PKPpre PKPpre 18 12 27.4
MAW PKP **PKPdf** **18 12 36.0 +0.7**
**PVM Polavaram 136.91 345** *e*PKPdf **PKPdf** **18 12 36.4 -0.5**
PVM *e*PP **PP** **18 15 17.6 -0.8**
PVM IVMs_BB IVMs_BB 19 22 15.3
comp=Z,10µm,15.5s
**KLRI Killari 137.03 352** *e*PKPdf **PKPdf** **18 12 36.5 -0.7**
KLRI *e*PP **PP** **18 15 17.7 -1.4**
KLRI IVMs_BB IVMs_BB 19 21 45.0
comp=Z,14µm,18.8s
**HYBB Hyderabad (bro 137.38 349** *e*P **PKPdf** **18 12 39.7 +1.9**
HYBB *e*PP **PP** **18 15 21.8 +0.5**
HYBB IVMs_BB IVMs_BB 19 19 00.8
comp=Z,8µm,19.6s
**HYB Hyderabad 137.38 349** *i* PKP PKPdf 18 12 45.0 +7.1
HYB *e*PP PP 18 15 28.0 +6.7
HYB *e*SS SS 18 33 32.0 +4.6
**HYB Hyderabad 137.38 349** *e*P **PKPdf** **18 12 38.9 +1.0**
**PBA Port Blair 137.94 327** *e*P PKPdf 18 12 38.2 -0.6
PBA AMS AMS 19 02 12.9
comp=Z,7µm,22.0s
**NJS Nagarjunasagar 138.09 348** *e*P **PKPdf** **18 12 40.1 +0.9**
NJS *e*PP **PP** **18 15 28.3 +2.7**
NJS IVMs_BB IVMs_BB 19 23 25.2
comp=Z,12µm,16.9s
**KULM Kulim 138.34 312** *e*PKPdf **PKPdf** **18 12 37.2 -2.4**
KULM LR LR
comp=Z,22µm,20.0s
**SRLM Srisailam 138.61 348** *e*P **PKPdf** **18 12 41.4 +1.3**
SRLM *e*PP **PP** **18 15 30.1 +1.2**
SRLM IVMs_BB IVMs_BB 19 19 48.4
comp=Z,10µm,19.0s
**ADKI Addanki 138.64 347** *e*PKPdf **PKPdf** **18 12 38.7 -1.5**
ADKI *e*PP **PP** **18 15 28.4 -0.7**
ADKI IVMs_BB IVMs_BB 19 23 51.2
comp=Z,12µm,16.0s
**IPM Ipoh 138.66 311** *e*PKPdf **PKPdf** **18 12 40.8 +0.5**
**NWAO Narrogin (SRO) 138.82 248** PFAKE 18 12 50.0 +10
NWAO LR LR
comp=Z,49µm,21.0s
**LSZ Lusaka 138.98 85** *e*PKHKP PKPpre 18 12 33.0
LSZ MLR MLR
comp=Z,23µm,19.0s
**LSZ Lusaka 138.98 85** *e*PKPpre PKPpre 18 12 33.0
LSZ LR LR
comp=Z,23µm,19.0s
**RCLA Racherla 139.22 348** *e*P **PKPdf** **18 12 41.5 +0.3**
RCLA *e*PP **PP** **18 15 33.5 +0.8**
RCLA IVMs_BB IVMs_BB 19 21 04.1
comp=Z,13µm,19.3s
**BOSA Boshof 139.29 106** PKhKP PKPpre 18 12 33.4
comp=Z,1.8nm,0.7s,baz=358,slow=3.2,SNR=4.3
**BOSA Boshof 139.29 106** PKPpre PKPpre 18 12 33.5
**GOA Goa 139.86 356** *e*P **PKPdf** **18 12 39.5 -2.9**
GOA AMS AMS 19 04 28.4
comp=Z,10µm,45.9s
**KMBO Kilima Mbogo 139.93 59** PKhKP **PKPdf** **18 12 39.7 -3.2**
comp=Z,3.5nm,0.9s,baz=348,slow=5.7,SNR=8.1
**KMBO Kilima Mbogo 139.93 59** PKIKP **PKPdf** **18 12 39.7 -3.2**
KMBO *e* 18 12 40.3
KMBO MLR MLR
comp=Z,26µm,20.0s
**KMBO Kilima Mbogo 139.93 59** PKPpre PKPpre 18 12 39.7
KMBO *e*PKPdf **PKPdf** **18 12 40.3 -2.6**
KMBO LR LR
comp=Z,26µm,20.0s
**URV Uravakonda 140.01 350** *e*PKPdf **PKPdf** **18 12 40.3 -2.4**
URV *e*PP **PP** **18 15 38.8 +1.3**
URV IVMs_BB IVMs_BB 19 19 49.8
comp=Z,10µm,20.5s
**LEM Lembang 140.54 291** PKP **PKPdf** **18 12 44.9 +1.0**
comp=Z,6.1nm,0.6s,baz=127,slow=20,SNR=1.9
**LEM Lembang 140.54 291** PKP **PKPdf** **18 12 44.9 +1.0**
**SKHT Srikalahasti 140.74 346** *e*P **PKPdf** **18 12 44.1 +0.1**
SKHT *e*PP **PP** **18 15 41.6 -0.5**
SKHT IVMs_BB IVMs_BB 19 24 24.7
comp=Z,10µm,17.3s
**CMBY CAMPBELL BAY 141.20 322** *ex* **PKPdf** **18 12 40.5 -4.4**
**MDRS Chennai 141.27 345** *e*P **PKPdf** **18 12 42.8 -2.2**
**PSI Prapat 141.32 311** PKP **PKPdf** **18 12 45.0 -0.3**
comp=Z,12nm,0.8s,baz=203,slow=5.3,SNR=8.6
**PSI Prapat 141.32 311** *e*PKIKP **PKPdf** **18 12 44.7 -0.6**
PSI 18 12 45.0
**PSI Prapat 141.32 311** *e*PKPdf **PKPdf** **18 12 44.7 -0.6**
PSI PKP **PKPdf** **18 12 45.0 -0.3**
**DODT Dodoma, Tanzan 141.65 67** *i* P **PKPdf** **18 12 41.8 -4.1**
**GSI Gunungsitoli 143.32 311** *e*PKPpre PKPpre 18 12 45.7
**TRD Trivandrum 146.37 349** *e*P **PKPdf** **18 12 52.4 -1.5**
TRD AMB AMB 18 13 04.6
comp=Z,183nm,3.0s
**PALK Pallekele 146.71 342** *e*PKP2 **PKPbc** **18 12 56.4 +0.3**
**PALK Pallekele 146.71 342** *e*PKPdf **PKPbc** **18 12 56.4 +0.3**
**COCO West Island 152.40 292** PFAKE 18 13 10.0 -0.3
COCO LR LR
comp=Z,18µm,22.0s
**PAF Port-aux-Franc 155.48 179** PFAKE 18 13 20.0 -12
PAF LR LR
comp=Z,15µm,19.0s
**ABPO Ambohimpanom 157.38 80** *e*PKIKP **PKPdf** **18 13 11.5 +1.1**
ABPO MLR MLR
comp=Z,10µm,20.0s
**ABPO Ambohimpanom 157.38 80** *e*PKPdf **PKPdf** **18 13 11.5 +1.1**
ABPO LR LR
comp=Z,10µm,20.0s
**DGAR Diego Garcia 162.65 355** PFAKE 18 13 30.0 +14
DGAR LR LR
comp=Z,24µm,20.0s
**RER Riviere de l'E 165.65 78** PFAKE 18 13 30.0 +11
RER LR LR
comp=Z,40µm,21.0s

*IDC **21** 17:58:59.0±0.6,24°.85N×109°.26W,h0km,mb4.7/22, mb1 4.9/24,mb1mx4.7/49,mbtmp4.7/24,ML3.8/2,Error ellipse: s-maj=14.3km s-min=13.3km az=89.0*
*ISCJB **21** 17:59:00.4±0.4,24°.69N±0°.05×109°.24W±0°.05,h17km, mb4.8/38,Error ellipse: s-maj=7.2km s-min=6.7km az=36.4*
*NEIC **21** 17:59:00.6±0.5,24°.75N×109°.26W,h10km,mb5.3/2,Error ellipse: s-maj=11.0km s-min=9.6km az=215.0*
**ISC 21 17:59:01.7±0.5,24°.78N±0°.08×109°.29W±0°.07,h17km, n113,σ1°16/106,mb4.9/38,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.15** | **234** | Pg | | **Pn** | **17 59 20.6** | **-2.4** |
| | 174nm,0.3s,baz=27,slow=2.3,SNR=3.1 | | | | | | | |
| LPIG | | | | LR | | LR | 17 59 27.7 | |
| | comp=Z,66µm,18.4s,baz=198,slow=24 | | | | | | | |
| **TXAR** | **Lajitas Array** | **6.76** | **47** | Pn | | **Pn** | **18 00 37.9** | **-2.3** |
| | 2.0nm,0.3s,baz=229,slow=14,SNR=2.9 | | | | | | | |
| TXAR | | | | Lg | | Lg | 18 02 30.6 | |
| | 6.9nm,0.3s,baz=227,slow=29,SNR=2.8 | | | | | | | |
| **S30A** | **Montezuma** | **14.87** | **28** | P | | **P** | **18 02 37.1** | **+0.2** |
| | baz=15 | | | | | | | |
| **340A** | **Bronson** | **15.11** | **61** | P | | **P** | **18 02 39.0** | **-0.5** |
| | baz=15 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.61** | **333** | Pn | | **P** | **18 02 44.8** | **-0.5** |
| | 0.1nm,0.3s,baz=164,slow=12,SNR=3.2 | | | | | | | |
| **P35A** | **Duane Minner,** | **18.47** | **34** | P | | **P** | **18 03 16.8** | **0.0** |
| | baz=18 | | | | | | | |
| **N33A** | **J Bar K, Exete** | **18.74** | **29** | P | | **Pn** | **18 03 20.7** | **+0.5** |
| | baz=19 | | | | | | | |
| **BGNE** | **Belgrade** | **19.00** | **27** | P | | **Pn** | **18 03 24.4** | **+1.1** |
| | baz=19 | | | | | | | |
| **O35A** | **Humboldt** | **19.09** | **33** | P | | **P** | **18 03 23.8** | **+0.3** |
| | baz=19 | | | | | | | |
| **J25A** | **Sunshine Ranch** | **19.10** | **12** | P | | **Pn** | **18 03 24.8** | **+0.2** |
| | baz=19 | | | | | | | |
| **WVOR** | **Wild Horse Val** | **19.23** | **339** | P | | **P** | **18 03 24.1** | **-1.1** |
| **K30A** | **Basset** | **19.55** | **22** | P | | **Pn** | **18 03 29.9** | **0.0** |
| | baz=20 | | | | | | | |
| **M04C** | **Macdoel** | **19.90** | **331** | P | | **Pn** | **18 03 35.1** | **+0.9** |
| | baz=20 | | | | | | | |
| **KHMM** | **Horse Mountain** | **20.08** | **327** | *e*P | | Pn | 18 03 37.4 | +1.0 |
| **RLMT** | **Red Lodge** | **20.30** | **0** | P | | Pn | 18 03 39.5 | +0.5 |
| | baz=20 | | | | | | | |
| **H27A** | **Howes** | **20.66** | **15** | P | | Pn | 18 03 42.9 | -0.1 |
| | baz=21 | | | | | | | |
| **J32A** | **Parkston** | **20.79** | **24** | P | | Pn | 18 03 45.1 | +0.7 |
| | baz=21 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **20.91** | **335** | P | | Pn | 18 03 46.8 | +0.8 |
| | baz=21 | | | | | | | |
| **BOZ** | **Bozeman (W)** | **20.91** | **355** | P | | Pn | 18 03 46.3 | +0.3 |
| | baz=21 | | | | | | | |
| **G25A** | **Newell** | **20.91** | **12** | P | | Pn | 18 03 46.4 | +0.4 |
| | baz=21 | | | | | | | |
| **J04D** | **Umpqua Nationa** | **21.21** | **333** | P | | **P** | **18 03 49.0** | **+2.2** |
| | baz=21 | | | | | | | |
| **K35A** | **Storm Lake** | **21.32** | **29** | P | | **P** | **18 03 49.4** | **+1.6** |
| | baz=21 | | | | | | | |
| **F25A** | **Bowman** | **21.62** | **11** | P | | **P** | **18 03 52.4** | **+1.5** |
| | baz=22 | | | | | | | |
| **F26A** | **Lodgepole** | **21.69** | **13** | P | | **P** | **18 03 52.7** | **+1.0** |
| | baz=22 | | | | | | | |
| **G29A** | **Hoven** | **21.73** | **18** | P | | **P** | **18 03 52.3** | **+0.2** |
| | baz=22 | | | | | | | |
| **I04A** | **Tendick Farm,** | **21.80** | **334** | P | | **P** | **18 03 53.5** | **+0.6** |
| | baz=22 | | | | | | | |
| **I05D** | **Terrebonne, OR** | **21.84** | **336** | P | | **P** | **18 03 53.0** | **-0.4** |
| | baz=22 | | | | | | | |
| **F27A** | **Lemmon** | **21.85** | **14** | P | | **P** | **18 03 55.1** | **+1.7** |
| | baz=22 | | | | | | | |
| **K37A** | **Belmond** | **22.10** | **32** | P | | **P** | **18 03 56.4** | **+0.3** |
| | baz=22 | | | | | | | |
| **E25A** | **Miller Ranch,** | **22.18** | **11** | P | | **P** | **18 03 58.8** | **+1.8** |
| | baz=22 | | | | | | | |
| **MSO** | **Missoula** | **22.32** | **352** | P | | **P** | **18 04 01.7** | **+3.2** |
| | baz=22 | | | | | | | |
| **H33A** | **Prehn Over Nor** | **22.32** | **24** | P | | **P** | **18 03 59.7** | **+1.2** |
| | baz=22 | | | | | | | |
| **E26A** | **Carlson Angus** | **22.33** | **12** | P | | **P** | **18 03 59.7** | **+1.2** |
| | baz=22 | | | | | | | |
| **H34A** | **Spellman Lake,** | **22.68** | **26** | P | | **P** | **18 04 02.9** | **+0.7** |
| | baz=23 | | | | | | | |
| **D26A** | **Manning** | **22.87** | **12** | P | | **P** | **18 04 03.7** | **-0.6** |
| | baz=23 | | | | | | | |
| **EGMT** | **Eagleton** | **23.20** | **359** | P | | **P** | **18 04 09.6** | **+1.9** |
| | baz=23 | | | | | | | |
| **G03D** | **McMinnville, O** | **23.31** | **334** | P | | **P** | **18 04 10.7** | **+1.9** |
| | baz=23 | | | | | | | |
| **YBMT** | **Yellow Bay** | **23.34** | **352** | *e*P | | **P** | **18 04 09.9** | **+0.7** |
| **I38A** | **Scanlan Farm,** | **23.68** | **32** | P | | **P** | **18 04 13.4** | **+1.0** |
| | baz=24 | | | | | | | |
| **C26A** | **Wahner Farm, P** | **23.70** | **12** | P | | **P** | **18 04 13.1** | **+0.5** |
| | baz=24 | | | | | | | |
| **C27A** | **Sayler Ranch,** | **23.71** | **13** | P | | **P** | **18 04 14.0** | **+1.3** |
| | baz=24 | | | | | | | |
| **DGMT** | **Dagmar** | **23.98** | **8** | P | | **P** | **18 04 16.5** | **+1.2** |
| | baz=24 | | | | | | | |
| **LON** | **Longmire** | **24.10** | **339** | *e*P | | **P** | **18 04 18.6** | **+2.2** |
| **SFIN** | **Scholer Farm** | **24.23** | **45** | P | | **P** | **18 04 18.5** | **+0.9** |
| | baz=24 | | | | | | | |
| **SFIN** | **Scholer Farm** | **24.23** | **45** | *e*P | | **P** | **18 04 18.6** | **+0.9** |
| **NEW** | **Newport** | **24.24** | **347** | P | | **P** | **18 04 17.8** | **0.0** |
| | 46nm,1.0s,baz=158,slow=12,SNR=7.2 | | | | | | | |
| **NEW** | **Newport** | **24.24** | **347** | P | | **P** | **18 04 19.3** | **+1.6** |
| | baz=24 | | | | | | | |
| **B27A** | **Peters Farms,** | **24.42** | **13** | P | | **P** | **18 04 20.1** | **+0.8** |
| | baz=24 | | | | | | | |
| **B28A** | **Dugan Ranch, T** | **24.65** | **14** | P | | **P** | **18 04 23.1** | **+1.7** |
| | baz=25 | | | | | | | |
| **C31A** | **Landman Farms,** | **24.73** | **19** | P | | **P** | **18 04 23.2** | **+1.1** |
| | baz=25 | | | | | | | |
| **A26A** | **Wade Farm, Ken** | **24.74** | **11** | P | | **P** | **18 04 23.8** | **+1.6** |
| | baz=25 | | | | | | | |
| **D33A** | **AnnSam, Waubun** | **24.75** | **22** | P | | **P** | **18 04 24.0** | **+1.7** |
| | baz=25 | | | | | | | |
| **E35A** | **Pequot Lakes** | **24.79** | **25** | P | | **P** | **18 04 24.2** | **+1.6** |
| | baz=25 | | | | | | | |
| **A27A** | **Ledoux Ranch,** | **24.94** | **13** | P | | **P** | **18 04 25.2** | **+1.1** |
| | baz=25 | | | | | | | |
| **B30A** | **Myrvik Farm, E** | **25.16** | **17** | P | | **P** | **18 04 27.6** | **+1.6** |
| | baz=25 | | | | | | | |
| **E36A** | **McGregor** | **25.21** | **27** | P | | **P** | **18 04 26.0** | **-0.5** |
| | baz=25 | | | | | | | |
| **A29A** | **Manning Farm,** | **25.36** | **16** | P | | **P** | **18 04 28.2** | **+0.4** |
| | baz=25 | | | | | | | |
| **A30A** | **Hoffart Farm,** | **25.61** | **17** | P | | **P** | **18 04 32.7** | **+2.6** |
| | baz=25 | | | | | | | |
| **A04D** | **Lummi Island** | **26.12** | **340** | P | | **P** | **18 04 36.1** | **+1.4** |
| | baz=26 | | | | | | | |
| **KMSC** | **Kings Mountain** | **26.25** | **60** | P | | **P** | **18 04 36.0** | **0.0** |
| | baz=26 | | | | | | | |
| **PGC** | **Sidney** | **26.30** | **339** | *e*P | | **P** | **18 04 37.3** | **+1.0** |
| **A33A** | **Warroad** | **26.47** | **21** | P | | **P** | **18 04 38.3** | **+0.5** |
| | baz=26 | | | | | | | |
| **C38A** | **Sawbill Land.** | **26.98** | **27** | P | | **P** | **18 04 42.3** | **-0.2** |
| | baz=27 | | | | | | | |
| **EYMN** | **Ely** | **27.07** | **27** | P | | **P** | **18 04 42.7** | **-0.6** |
| | baz=27 | | | | | | | |
| **JTS** | **JuntasAbangare** | **27.25** | **118** | P | | **P** | **18 04 45.7** | **+0.5** |
| | 3.8nm,0.5s,baz=328,slow=15,SNR=3.5 | | | | | | | |
| **C39A** | **Grand Marais** | **27.55** | **29** | P | | **P** | **18 04 46.6** | **-0.9** |
| | baz=28 | | | | | | | |
| **DLBC** | **Dease Lake** | **36.71** | **342** | P | | **P** | **18 06 07.3** | **-0.5** |
| | 18nm,1.1s,baz=145,slow=4.4,SNR=4.2 | | | | | | | |
| DLBC | | | | PcP | | **PcP** | **18 08 30.5** | **+0.4** |
| | 4.0nm,0.8s,baz=158,slow=7.0,SNR=3.9 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **37.87** | **356** | P | | **P** | **18 06 15.7** | **-1.7** |
| | 11nm,1.0s,baz=168,slow=7.8,SNR=8.6 | | | | | | | |
| **OBIP** | **Obispado Ponce** | **40.17** | **91** | *e*P | | **P** | **18 06 38.0** | **+0.7** |
| **SJG** | **San Juan** | **40.57** | **91** | *e*P | | **P** | **18 06 40.8** | **+0.3** |
| | 40nm,0.9s | | | | | | | |
| **SCHQ** | **Schefferville** | **43.28** | **35** | P | | **P** | **18 07 01.5** | **-0.8** |
| | 12nm,0.9s,baz=251,slow=12,SNR=2.9 | | | | | | | |
| **ATAH** | **Atahualpa** | **43.73** | **133** | P | | **P** | **18 07 08.3** | **+1.5** |
| | 7.7nm,0.8s,baz=308,slow=14,SNR=3.6 | | | | | | | |
| **DOT** | **Dot Lake** | **45.07** | **339** | *e*P | | **P** | **18 07 18.8** | **+2.2** |
| **INK** | **Inuvik** | **45.96** | **348** | P | | **P** | **18 07 23.6** | **+0.2** |
| | 4.0nm,0.9s,baz=331,slow=19,SNR=3.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **46.74** | **339** | P | | **P** | **18 07 29.9** | **+0.3** |
| | 14nm,1.0s,baz=147,slow=6.5,SNR=14 | | | | | | | |
| **MCK** | **McKinley** | **46.79** | **337** | *e*P | | **P** | **18 07 32.1** | **+2.0** |
| **TRF** | **Thorofare Moun** | **47.11** | **336** | *e*P | | **P** | **18 07 34.5** | **+1.8** |
| **PPLA** | **Purkeypile** | **47.51** | **335** | *e*P | | **P** | **18 07 37.8** | **+2.0** |
| **BPAW** | **Bear Paw Mtn.** | **47.74** | **337** | *e*P | | **P** | **18 07 38.9** | **+1.5** |
| **RES** | **Resolute Bay** | **50.52** | **5** | P | | **P** | **18 07 57.6** | **-1.0** |
| | 4.8nm,0.9s,baz=241,slow=4.9,SNR=2.2 | | | | | | | |
| **CPUP** | **Villa Florida** | **71.41** | **132** | P | | **P** | **18 10 21.6** | **+0.5** |
| | 12nm,0.8s,baz=320,slow=7.6,SNR=12 | | | | | | | |
| **SEY** | **Seymchan** | **71.92** | **332** | P | | **P** | **18 10 23.9** | **+0.2** |
| | 8.3nm,0.7s,baz=121,slow=7.2,SNR=8.2 | | | | | | | |
| **BDFB** | **Brasilia** | **71.99** | **117** | P | | **P** | **18 10 25.6** | **+0.5** |
| | 6.2nm,0.8s,baz=251,slow=1.0,SNR=3.9 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.32** | **321** | P | | **P** | **18 10 26.8** | **+0.5** |
| | 14nm,0.9s,baz=67,slow=12,SNR=7.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.51** | **15** | P | | **P** | **18 11 11.3** | **-1.2** |
| | 6.7nm,0.7s,baz=339,slow=5.7,SNR=8.5 | | | | | | | |
| **YAK** | **Yakutsk** | **81.56** | **336** | *e*P | | **P** | **18 11 17.9** | **-0.3** |
| | 41nm,0.9s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **81.98** | **25** | P | | **P** | **18 11 20.8** | **+0.3** |
| | comp=Z,6.5nm,1.0s,baz=306,slow=4.4 | | | | | | | |
| **NOA** | **NORSAR Array B** | **81.98** | **25** | P | | **P** | **18 11 20.3** | **-0.2** |
| | comp=Z,4.5nm,0.9s,baz=304,slow=4.4,SNR=5.2 | | | | | | | |
| **POLO** | **Lamas de Olo** | **82.06** | **48** | *e*P | | **P** | **18 11 21.8** | **+0.4** |
| | comp=Z,17nm,1.2s | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **82.15** | **50** | *e*P | | **P** | **18 11 22.9** | **+1.1** |
| | comp=Z,21nm,2.1s | | | | | | | |
| **PACT** | **Alcochete** | **82.47** | **51** | *e*P | | P | 18 11 17.4 | -6.1 |
| | comp=Z,69nm,1.5s | | | | | | | |
| **MTE** | **Manteigas** | **82.66** | **49** | *e*P | | **P** | **18 11 24.7** | **+0.2** |
| | comp=Z,47nm,1.0s | | | | | | | |
| **MTE** | **Manteigas** | **82.66** | **49** | *e*P | | **P** | **18 11 24.7** | **+0.2** |
| **MVO** | **Moncorvo** | **82.67** | **48** | *e*P | | **P** | **18 11 25.0** | **+0.4** |
| | comp=Z,26nm,1.2s | | | | | | | |
| **PMTG** | **Montargil** | **82.77** | **50** | *e*P | | **P** | **18 11 25.6** | **+0.6** |
| | comp=Z,20nm,1.1s | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **82.97** | **51** | *e*P | | **P** | **18 11 26.1** | **0.0** |
| | comp=Z,14nm,2.3s | | | | | | | |
| **EVO** | **Evora** | **83.16** | **51** | *e*P | | **P** | **18 11 27.6** | **+0.6** |
| | comp=Z,25nm,1.6s | | | | | | | |
| **PMRV** | **Marv??o** | **83.19** | **50** | *e*P | | **P** | **18 11 27.5** | **+0.3** |
| | comp=Z,36nm,1.3s | | | | | | | |
| **MORF** | **Marmelete** | **83.24** | **52** | *e*P | | **P** | **18 11 27.9** | **+0.3** |
| | comp=Z,23nm,1.5s | | | | | | | |
| **MESJ** | **Messejana** | **83.31** | **51** | *e*P | | **P** | **18 11 28.0** | **+0.2** |
| | comp=Z,22nm,2.0s | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **83.59** | **319** | *e*P | | **P** | **18 11 29.6** | **+0.5** |
| **PBDV** | **Barranco-do-Ve** | **83.78** | **52** | *e*P | | **P** | **18 11 29.9** | **-0.4** |
| | comp=Z,40nm,1.3s | | | | | | | |
| **PVAQ** | **Vaqueiros** | **83.86** | **52** | *e*P | | **P** | **18 11 31.4** | **+0.7** |
| | comp=Z,22nm,1.5s | | | | | | | |
| **PBAR** | **Barrancos** | **84.00** | **51** | *e*P | | **P** | **18 11 31.7** | **+0.3** |
| | comp=Z,35nm,1.7s | | | | | | | |
| **ASAJ** | **Asahikawa** | **85.09** | **317** | P | | **P** | **18 11 36.5** | **-0.2** |
| | comp=Z,3.9nm,0.8s,baz=336,slow=2.7,SNR=4.9 | | | | | | | |
| **ESDC** | **Sonseca Array** | **85.43** | **48** | P | | **P** | **18 11 37.4** | **-1.3** |
| | comp=Z,4.1nm,0.8s,baz=307,slow=5.0,SNR=11 | | | | | | | |
| **FINES** | **FINESS Array B** | **86.86** | **20** | P | | **P** | **18 11 44.5** | **-0.6** |
| | comp=Z,10nm,0.6s,baz=336,slow=4.2,SNR=9.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **90.81** | **34** | P | | **P** | **18 12 02.1** | **-2.1** |
| | comp=Z,0.6nm,0.6s,baz=4.8,slow=5.9,SNR=3.7 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **91.41** | **321** | P | | **P** | **18 12 07.1** | **+0.1** |
| | comp=Z,4.7nm,0.9s,baz=62,slow=6.8,SNR=7.5 | | | | | | | |
| **MJAR** | **Matsushiro Ar** | **91.89** | **312** | P | | **P** | **18 12 09.6** | **+0.2** |
| | comp=Z,3.7nm,1.0s,baz=54,slow=3.6,SNR=5.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **96.39** | **25** | P | | **P** | **18 12 28.1** | **-1.6** |
| | comp=Z,0.3nm,0.3s,baz=316,slow=4.4,SNR=2.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **122.84** | **257** | PKP | | **PKPdf** | **18 17 57.1** | **-0.4** |
| | comp=Z,1.2nm,1.0s,baz=58,slow=2.4,SNR=4.1 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **126.98** | **325** | PKP | | **PKPdf** | **18 18 10.2** | **+0.8** |
| | comp=Z,0.8nm,0.7s,baz=1.9,slow=2.7,SNR=4.1 | | | | | | | |

*IDC **21** 18:00:55.7±1.2,20°.53S×172°.57E,h0km,mb4.0/4, mb1 4.4/6,mb1mx4.0/46,mbtmp4.1/6,ML3.8/2,MS3.9/2, Ms1 3.9/2,ms1mx3.7/30,Error ellipse: s-maj=43.6km s-min=24.2km az=153.0*
*ISCJB **21** 18:00:58.0±3.6,20°.6S±0°.1×172°.51E±0°.09,h25km±27km, mb4.5/9,Error ellipse: s-maj=22.5km s-min=12.2km az=158.2*
*NEIC **21** 18:01:01.3±1.4,20°.55S×172°.51E,h37km±15km,mb4.6/5, Error ellipse: s-maj=19.8km s-min=11.0km az=158.0*
**ISC 21 18:01:00.2±1.0,20°.5S±0°.1×172°.5E±0°.1,h27km±7km, h26km:pP-P,n23,σ1°44/29,mb4.4/9,2D,Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **5.88** | **253** | Pn | | **Pn** | **18 02 26.5** | **+0.9** |
| | 1.6nm,0.3s,baz=0.2,slow=16,SNR=12 | | | | | | | |
| DZM | | | | LR | | LR | 18 04 00.0 | |
| | comp=Z,246nm,20.8s,baz=348,slow=31 | | | | | | | |
| **MSVF** | **Nonsavu** | **5.91** | **63** | *e*P | | **Pn** | **18 02 26.6** | **+0.6** |
| | 48nm,0.8s | | | | | | | |
| **HNR** | **Honiara** | **16.36** | **310** | LR | | LR | 18 10 58.3 | |
| | comp=Z,1µm,18.4s,baz=187,slow=37 | | | | | | | |
| **URZ** | **Urewera** | **18.16** | **168** | P | | **Pn** | **18 05 08.2** | **-2.1** |
| | 0.5nm,0.3s,baz=9.0,slow=8.1,SNR=6.1 | | | | | | | |
| **EIDS** | **Eidsvold** | **20.32** | **252** | *e*P | | **P** | **18 05 35.2** | **+0.8** |
| | 36nm,1.2s | | | | | | | |
| **ARMA** | **Armidale** | **21.26** | **238** | *e*P | | **P** | **18 05 47.3** | **+2.7** |
| | 39nm,1.3s | | | | | | | |
| **WRAB** | **Tennant Creek** | **35.77** | **264** | *e*P | | **P** | **18 07 56.1** | **-1.1** |
| | 5.6nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.77** | **264** | P | | **P** | **18 07 56.9** | **-0.4** |
| | 1.4nm,1.0s,baz=96,slow=8.4,SNR=11 | | | | | | | |
| **ASAR** | **Alice Springs** | **35.85** | **258** | P | | **P** | **18 07 57.4** | **-0.5** |
| | 1.1nm,0.8s,baz=92,slow=8.7,SNR=11 | | | | | | | |
| **MBWA** | **Marble Bar** | **49.15** | **259** | P | | **P** | **18 09 44.1** | **-1.9** |
| | 9.8nm,1.1s | | | | | | | |
| **SBA** | **Scott Base** | **57.48** | **181** | *e*P | | **P** | **18 10 47.6** | **+1.2** |
| | 4.7nm,0.9s | | | | | | | |
| **ISA** | **Isabella** | **85.90** | **50** | *e*P | | **P** | **18 13 38.7** | **+0.8** |
| | 176nm,2.6s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.34** | **47** | P | | **P** | **18 13 46.1** | **+1.0** |
| | 1.7nm,0.9s,baz=223,slow=7.7,SNR=7.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **90.53** | **16** | P | | **P** | **18 13 57.8** | **-1.4** |
| | 0.9nm,0.7s,baz=225,slow=4.5,SNR=9.0 | | | | | | | |
| **DPC** | **Dobruska-Polom** | **144.75** | **333** | *e*PKP | | **PKPdf** | **18 20 34.3** | **-0.2** |
| DPC | | | | *ex* | | x | 18 20 38.2 | |
| DPC | | | | *ep*PKP | | **pPKPdf** | **18 20 41.4** | **-2.0** |
| **UPC** | **Upice** | **144.76** | **334** | *e*PKP | | **PKPdf** | **18 20 34.1** | **-0.3** |
| UPC | | | | *ex* | | x | 18 20 38.1 | |
| UPC | | | | *ep*PKP | | **pPKPdf** | **18 20 41.3** | **-2.1** |
| **CLL** | **Collm** | **145.29** | **337** | ⇓*i* PKPdf | | **PKPab** | **18 20 35.1** | **-0.1** |
| | comp=Z,13nm,0.9s | | | | | | | |
| CLL | | | | *i* PKiKP | | **PKiKP** | **18 20 39.1** | **-0.1** |
| | comp=Z,12nm,0.9s | | | | | | | |
| CLL | | | | ⇓*i* | | | 18 20 42.7 | |
| | comp=Z,20nm,0.8s | | | | | | | |
| CLL | | | | *i* pPKPdf | | **pPKPdf** | **18 20 48.3** | **+4.0** |
| **PVCC** | **Panska Ves** | **145.33** | **335** | *e*PKP | | **PKPdf** | **18 20 36.0** | **+0.6** |
| PVCC | | | | *ex* | | x | 18 20 40.0 | |
| PVCC | | | | *ep*PKP | | **pPKPdf** | **18 20 43.2** | **-1.2** |
| **GOPC** | **GO Pecny, Ondr** | **145.72** | **334** | *e*PKP | | **PKPab** | **18 20 37.0** | **+0.1** |
| **PRU** | **Pruhonice** | **145.76** | **335** | *e*PKP | | **PKPab** | **18 20 36.9** | **-0.1** |
| **NKC** | **Novy Kostel** | **146.38** | **337** | *e*PKP | | **PKPbc** | **18 20 38.5** | **0.0** |
| NKC | | | | *ep*PKP | | **pPKPdf** | **18 20 45.6** | **-0.6** |
| **KHC** | **Kasperske Hory** | **146.82** | **334** | *e*PKP | | **PKPbc** | **18 20 40.4** | **+0.5** |
| KHC | | | | *ex* | | x | 18 20 44.2 | |
| KHC | | | | *ep*PKP | | **pPKPdf** | **18 20 47.8** | **+0.8** |
| **GERES** | **GERESS Array B** | **147.00** | **334** | PKPbc | | **PKPbc** | **18 20 40.4** | **-0.1** |
| | comp=Z,2.7nm,0.8s,baz=35,slow=3.3,SNR=18 | | | | | | | |

*CSEM **21** 18:05:54.3,38°.89N×26°.02E,h22km,MD2.6,After ATH*
**ATH 21 18:05:54.2,38°.89N×26°.01E,h23km±1km,MD2.6/4, Aegean Sea**

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

**California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **0.97** | **214** | Pg | Pg | 18 39 09.4 | -0.9 |
| | 60nm,0.3s,baz=67,slow=1.8,SNR=14 | | | | | | |
| LPIG | | | | Lg | Lg | 18 39 24.9 | |
| | 251nm,0.3s,baz=342,slow=20,SNR=14 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.96** | **49** | Pn | Pn | 18 40 35.7 | +0.4 |
| | 0.5nm,0.3s,baz=228,slow=13,SNR=4.5 | | | | | | |
| TXAR | | | | Lg | Lg | 18 42 25.5 | |
| | 1.2nm,0.3s,baz=236,slow=27,SNR=3.9 | | | | | | |
| **ANMO** | **Albuquerque** | **10.40** | **15** | Pn | Pn | 18 41 24.0 | +1.5 |
| | 0.2nm,0.3s,baz=172,slow=14,SNR=2.6 | | | | | | |
| ANMO | | | | Lg | Lg | 18 44 23.5 | |
| | 0.1nm,0.3s,baz=322,slow=19,SNR=3.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.33** | **334** | Pn | Pn | 18 42 32.1 | +2.3 |
| | 0.0nm,0.3s,baz=159,slow=10,SNR=5.2 | | | | | | |
| **ILAR** | **Eielson Array** | **46.49** | **339** | P | P | 18 47 20.5 | 0.0 |
| | 0.7nm,0.6s,baz=139,slow=5.5,SNR=6.3 | | | | | | |

*CSEM* ***21*** *18:58:28.7, 39.60N×29.63W, h14km, ML3.0, After PDA*
**PDA 21 18:58:28.7±1.2, 39.60N×29.63W, h14km±17km, MD3.8, ML3.0, Error ellipse: s-maj=9.9km s-min=6.6km az=34.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H07N1** | **FLORES T-PHASE** | **1.16** | **275** | *e*S | Sb | 18 58 59.1 | -6.4 |
| **PCED** | **Cedros** | **1.20** | **143** | *e*P | Pn | 18 58 46.5 | -4.7 |
| PCED | | | | *e*S | Sb | 18 58 59.9 | -6.8 |
| PCED | | | | A | A | 18 59 03.0 | |
| | 69nm,0.4s | | | | | | |
| **PCED** | **Cedros** | **1.20** | **143** | *e*P | Pn | 18 58 46.5 | -4.7 |
| PCED | | | | *e*S | Sb | 18 58 59.9 | -6.8 |
| **CALA** | **Caldeira** | **1.24** | **144** | *e*S | Sb | 18 59 01.3 | -6.7 |
| **CALA** | **Caldeira** | **1.24** | **144** | *e*S | Sb | 18 59 01.3 | -6.7 |
| **H07S1** | **FLORES T-PHASE** | **1.24** | **260** | *e*P | Pn | 18 58 41.2 | -11 |
| H07S1 | | | | *e*S | Sb | 18 58 55.6 | -12 |
| **HOR** | **Horta** | **1.32** | **144** | *e*S | Sb | 18 59 02.5 | -7.5 |
| **HOR** | **Horta** | **1.32** | **144** | *e*S | Sb | 18 59 02.5 | -7.5 |
| **ROSA** | **Rosais** | **1.39** | **129** | *e*P | Pn | 18 58 49.2 | -4.5 |
| ROSA | | | | *e*S | Sn | 18 59 05.1 | -6.8 |
| ROSA | | | | A | A | 18 59 06.2 | |
| | 37nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **1.39** | **129** | *e*P | Pn | 18 58 49.2 | -4.5 |
| ROSA | | | | *e*S | Sn | 18 59 05.1 | -6.8 |
| **PGRA** | **Graciosa** | **1.40** | **113** | *e*S | Sn | 18 59 04.6 | -7.4 |
| PGRA | | | | A | A | 18 59 05.5 | |
| | 66nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.40** | **113** | *e*S | Sn | 18 59 04.6 | -7.4 |
| **PCAN** | **Candelaria** | **1.44** | **141** | *e*P | Pn | 18 58 49.7 | -4.7 |
| PCAN | | | | *e*S | Sn | 18 59 06.1 | -7.0 |
| PCAN | | | | A | A | 18 59 08.9 | |
| | 170nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.44** | **141** | *e*P | Pn | 18 58 49.7 | -4.7 |
| PCAN | | | | *e*S | Sn | 18 59 06.1 | -7.0 |
| **PICO** | **Pico** | **1.44** | **139** | *e*P | Pn | 18 58 50.3 | -4.2 |
| PICO | | | | *e*S | Sn | 18 59 06.2 | -7.1 |
| **PICO** | **Pico** | **1.44** | **139** | *e*P | Pn | 18 58 50.3 | -4.2 |
| PICO | | | | *e*S | Sn | 18 59 06.2 | -7.1 |
| **PMAN** | **Manadas** | **1.53** | **128** | *e*S | Sn | 18 59 07.9 | -7.5 |
| PMAN | | | | A | A | 18 59 10.7 | |
| | 41nm,0.1s | | | | | | |
| **PMAN** | **Manadas** | **1.53** | **128** | *e*S | Sn | 18 59 07.9 | -7.5 |

**IDC 21 19:18:08.3±2.4, 24.72N×109.29W, h0km, mb3.6/1, mb1 4.0/3, mb1mx3.6/33, mbtmp3.5/3, ML3.0/2, Error ellipse: s-maj=51.1km s-min=11.9km az=136.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.12** | **237** | Pg | Pg | 19 18 28.6 | -1.2 |
| | 35nm,0.3s,baz=193,slow=14,SNR=12 | | | | | | |
| LPIG | | | | Lg | Lg | 19 18 46.3 | |
| | 70nm,0.3s,baz=0.0,slow=20,SNR=11 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.80** | **46** | Pn | Pn | 19 19 51.0 | +1.4 |
| | 0.1nm,0.3s,baz=225,slow=16,SNR=2.6 | | | | | | |
| TXAR | | | | Pg | Pb | 19 20 07.3 | -0.3 |
| | 0.2nm,0.3s,baz=222,slow=13,SNR=3.4 | | | | | | |
| TXAR | | | | Lg | Lg | 19 21 34.9 | |
| | 1.6nm,0.3s,baz=222,slow=30,SNR=7.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.67** | **333** | Pn | P | 19 21 53.7 | -1.3 |
| | 0.1nm,0.3s,baz=159,slow=13,SNR=7.9 | | | | | | |
| **ILAR** | **Eielson Array** | **46.80** | **339** | P | P | 19 26 39.3 | -0.1 |
| | 0.6nm,0.7s,baz=153,slow=8.0,SNR=7.1 | | | | | | |

*NEIC* ***21*** *19:21:57.4±4.2, 24.56N×109.20W, h6km±27km, mb4.4/27, Error ellipse: s-maj=12.0km s-min=10.9km az=213.0*
*ISCJB* ***21*** *19:21:58.5±0.7, 24.79N±0.06×109.19W±0.03, h10km, mb4.4/16, Error ellipse: s-maj=9.3km s-min=4.0km az=9.5*
*IDC* ***21*** *19:21:58.5±0.8, 24.73N×109.45W, h0km, mb4.3/4, mb1 4.5/9, mb1mx4.2/32, mbtmp4.2/9, ML3.6/5, Error ellipse: s-maj=17.3km s-min=10.4km az=132.0*
**ISC 21 19:21:58.1±0.7, 24.59N±0.08×109.28W±0.08, h10km, n166, σ1§11/157, mb4.5/18, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.06** | **243** | Pg | **Pb** | **19 22 17.2** | **-1.2** |
| | 147nm,0.3s,baz=60,slow=8.5,SNR=9.9 | | | | | | |
| LPIG | | | | Lg | Lg | 19 22 32.4 | |
| | 319nm,0.3s,baz=214,slow=11,SNR=15 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.88** | **45** | Pn | Pn | 19 23 43.4 | +4.2 |
| | 0.8nm,0.3s,baz=242,slow=13,SNR=4.8 | | | | | | |
| TXAR | | | | Lg | Lg | 19 25 25.1 | |
| | 6.8nm,0.3s,baz=226,slow=28,SNR=8.3 | | | | | | |
| **TUC** | **Tucson** | **7.81** | **351** | *e*P | **Pn** | **19 23 51.3** | **-0.6** |
| | 15nm,1.3s | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.87** | **25** | *e*P | Pn | 19 23 46.5 | -6.2 |
| | 35nm,0.9s | | | | | | |
| **214A** | **Organ Pipe Nat** | **7.97** | **338** | P | **Pn** | **19 23 54.5** | **+0.4** |
| | baz=8.1 | | | | | | |
| **121A** | **Cookes Peak, D** | **8.02** | **9** | P | **Pn** | **19 23 53.2** | **-1.7** |
| | baz=8.1 | | | | | | |
| **631A** | **Perdido Creek** | **9.13** | **56** | P | **Pn** | **19 24 12.0** | **+2.2** |
| | baz=9.1 | | | | | | |
| **228A** | **UT Block 9, Go** | **9.53** | **37** | P | **Pn** | **19 24 16.2** | **+0.7** |
| | baz=9.5 | | | | | | |
| **GLA** | **Glamis** | **9.73** | **331** | P | **Pn** | **19 24 19.9** | **+1.6** |
| | baz=9.8 | | | | | | |
| **034A** | **Hebbronville** | **9.86** | **73** | P | Pn | 19 24 24.5 | +4.6 |
| | baz=9.8 | | | | | | |
| **LAZ** | **Ladron** | **9.96** | **10** | *e*P | **Pn** | **19 24 22.2** | **+0.8** |
| | 19nm,1.1s | | | | | | |
| **LPM** | **Los Pinos Moun** | **9.96** | **13** | *e*P | **Pn** | **19 24 20.5** | **-0.9** |
| | 24nm,1.5s | | | | | | |
| **IBP** | **Imperial Bould** | **10.02** | **325** | P | **Pn** | **19 24 24.6** | **+2.3** |
| | baz=10 | | | | | | |
| **834A** | **Tilden** | **10.24** | **68** | P | Pn | 19 24 29.6 | +4.4 |
| | baz=10 | | | | | | |
| **331A** | **San Angelo** | **10.29** | **47** | P | **Pn** | **19 24 27.0** | **+1.0** |
| | baz=10 | | | | | | |
| **432A** | **Menard** | **10.47** | **51** | P | **Pn** | **19 24 30.1** | **+1.7** |
| | baz=10 | | | | | | |
| **BC3** | **Big Chuckawall** | **10.52** | **331** | P | **Pn** | **19 24 30.8** | **+1.7** |
| | baz=11,SNR=6.8 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **10.56** | **337** | P | **Pn** | **19 24 31.6** | **+2.1** |
| | baz=11 | | | | | | |
| **ANMO** | **Albuquerque** | **10.61** | **13** | Pn | **Pn** | **19 24 30.2** | **-0.1** |
| | 0.1nm,0.3s,baz=202,slow=13,SNR=16 | | | | | | |
| ANMO | | | | Lg | Lg | 19 27 26.9 | |
| | 0.2nm,0.3s,baz=139,slow=20,SNR=3.9 | | | | | | |
| **IRM** | **Iron Mountain** | **10.82** | **333** | P | **Pn** | **19 24 34.9** | **+1.7** |
| | baz=11 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.96** | **327** | Pn | **Pn** | **19 24 37.2** | **+2.1** |
| | 0.1nm,0.3s,baz=145,slow=14,SNR=12 | | | | | | |
| **WUAZ** | **Wupatki** | **11.04** | **351** | *e*P | **Pn** | **19 24 37.9** | **+1.7** |
| | 7.4nm,1.0s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **11.06** | **330** | P | **Pn** | **19 24 38.5** | **+2.1** |
| | baz=11 | | | | | | |
| **GMRC** | **Granite Mounta** | **11.57** | **333** | P | **Pn** | **19 24 44.7** | **+1.3** |
| | baz=12 | | | | | | |
| **SCI** | **San Clemente I** | **11.66** | **318** | P | Pn | 19 24 48.6 | +4.1 |
| | baz=12 | | | | | | |
| **Y30A** | **Stafford Cattl** | **11.79** | **36** | P | **Pn** | **19 24 46.2** | **-0.2** |
| | baz=12 | | | | | | |
| **334A** | **Lometa** | **11.84** | **53** | P | **Pn** | **19 24 49.5** | **+2.4** |
| | baz=12 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **12.07** | **325** | P | **Pn** | **19 24 50.8** | **+0.5** |
| | baz=12 | | | | | | |
| **Z32A** | **Haskell** | **12.20** | **42** | P | **Pn** | **19 24 51.3** | **-0.7** |
| | baz=12 | | | | | | |
| **GSC** | **Goldstone** | **12.51** | **330** | P | **Pn** | **19 24 58.4** | **+2.1** |
| | baz=13 | | | | | | |
| **MVCO** | **Mesa Verde** | **12.60** | **3** | *e*P | **Pn** | **19 24 57.5** | **-0.1** |
| | 50nm,1.4s | | | | | | |
| **Z33A** | **Whitaker Ranch** | **12.64** | **44** | P | **Pn** | **19 24 57.1** | **-0.8** |
| | baz=13 | | | | | | |
| **SHPR** | **Sheep Range** | **12.91** | **338** | *e*Pn | **Pn** | **19 25 03.2** | **+1.4** |
| | 27nm,1.3s | | | | | | |
| **U27A** | **Thompson Grove** | **13.03** | **24** | P | **Pn** | **19 25 02.2** | **-1.2** |
| | baz=13 | | | | | | |
| **LRMC** | **Laurel Mountai** | **13.06** | **328** | P | **Pn** | **19 25 05.8** | **+1.9** |
| | baz=13,SNR=18 | | | | | | |
| **HKT** | **Hockley** | **13.09** | **63** | *e*Pn | **Pn** | **19 25 02.4** | **-1.7** |
| | 4.5nm,1.0s | | | | | | |
| **T25A** | **Trinidad** | **13.19** | **17** | P | **Pn** | **19 25 03.5** | **-2.1** |
| | baz=13 | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **13.20** | **42** | P | **Pn** | **19 25 07.4** | **+1.8** |
| | baz=13 | | | | | | |
| **U28A** | **Mallet** | **13.23** | **26** | P | **Pn** | **19 25 05.8** | **-0.3** |
| | baz=13 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **13.28** | **8** | P | **Pn** | **19 25 07.4** | **+0.4** |
| | baz=13,SNR=6.3 | | | | | | |
| **ARVC** | **Arvin** | **13.37** | **324** | P | **Pn** | **19 25 10.6** | **+2.7** |
| | baz=14 | | | | | | |
| **MPMC** | **Manual Prospec** | **13.45** | **330** | P | **Pn** | **19 25 11.0** | **+1.9** |
| | baz=14,SNR=20 | | | | | | |
| **T26A** | **Comanche Natio** | **13.46** | **20** | P | **Pn** | **19 25 08.6** | **-0.7** |
| | baz=14,SNR=6.1 | | | | | | |
| **ISA** | **Isabella** | **13.60** | **326** | P | **Pn** | **19 25 12.4** | **+1.3** |
| | baz=14,SNR=5.2 | | | | | | |
| **WMOK** | **Wichita Mounta** | **13.61** | **40** | *e*Pn | Pn | 19 25 05.3 | -5.9 |
| | 7.9nm,1.0s | | | | | | |
| **S26A** | **Kim** | **13.91** | **20** | P | **Pn** | **19 25 14.3** | **-1.1** |
| | baz=14,SNR=7.4 | | | | | | |
| **T28A** | **Walsh** | **13.92** | **24** | P | **Pn** | **19 25 14.8** | **-0.7** |
| | baz=14 | | | | | | |
| **237A** | **Washetta, Mont** | **13.97** | **55** | P | **Pn** | **19 25 18.2** | **+2.1** |
| | baz=14 | | | | | | |
| **CWC** | **Cottonwood Cre** | **14.03** | **329** | P | **Pn** | **19 25 19.1** | **+2.1** |
| | baz=14,SNR=10.0 | | | | | | |
| **VES** | **Vestal, Richgr** | **14.05** | **325** | P | **Pn** | **19 25 19.5** | **+2.3** |
| | baz=14 | | | | | | |
| **SMMC** | **Simmler** | **14.15** | **322** | P | **Pn** | **19 25 20.4** | **+1.8** |
| | baz=14 | | | | | | |
| **R27A** | **Eads** | **14.72** | **20** | P | **Pn** | **19 25 26.0** | **-0.6** |
| | baz=15 | | | | | | |
| **R11A** | **Troy Canyon, C** | **14.73** | **340** | P | **Pn** | **19 25 28.0** | **+1.3** |
| | baz=15,SNR=13 | | | | | | |
| **W35A** | **Tecumseh** | **15.04** | **43** | P | **Pn** | **19 25 31.3** | **+0.6** |
| | baz=15 | | | | | | |
| **T32A** | **Huddler Ranch,** | **15.36** | **33** | P | **Pn** | **19 25 35.1** | **+0.1** |
| | baz=15 | | | | | | |
| **CMIG** | **Matias Romero** | **15.38** | **116** | Pn | **P** | **19 25 41.2** | **+1.2** |
| | 0.2nm,0.3s,baz=293,slow=12,SNR=4.1 | | | | | | |
| **R29A** | **Marienthal** | **15.43** | **25** | P | **Pn** | **19 25 35.2** | **-0.7** |
| | baz=16 | | | | | | |
| **W36A** | **Wetumka** | **15.44** | **44** | P | **Pn** | **19 25 37.5** | **+1.5** |
| | baz=15 | | | | | | |
| **S31A** | **Mullinville** | **15.45** | **30** | P | **Pn** | **19 25 36.7** | **+0.5** |
| | baz=16 | | | | | | |
| **ISCO** | **Idaho Springs** | **15.48** | **11** | *e*P | **Pn** | **19 25 36.9** | **+0.1** |
| | 45nm,5s | | | | | | |
| **MPU** | **Maple Canyon** | **15.51** | **353** | *e*P | **Pn** | **19 25 37.5** | **+0.4** |
| | 30nm,1.0s | | | | | | |
| **R30A** | **Dighton** | **15.65** | **27** | P | **Pn** | **19 25 38.1** | **-0.7** |
| | baz=16,SNR=7.0 | | | | | | |
| **X37A** | **Clayton** | **15.66** | **47** | P | **Pn** | **19 25 39.5** | **+0.7** |
| | baz=16 | | | | | | |
| **S32A** | **Newby Ranch, P** | **15.77** | **32** | P | **Pn** | **19 25 40.1** | **-0.2** |
| | baz=16 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.79** | **333** | Pn | **P** | **19 25 43.6** | **-1.1** |
| | 0.3nm,0.3s,baz=149,slow=13,SNR=38 | | | | | | |
| **Q29A** | **Oakley** | **15.90** | **24** | P | **Pn** | **19 25 41.7** | **-0.3** |
| | baz=16 | | | | | | |
| **W37A** | **Quinton** | **15.95** | **46** | P | **Pn** | **19 25 43.7** | **+1.1** |
| | baz=16,SNR=9.9 | | | | | | |
| **R31A** | **Burdett** | **15.98** | **29** | P | **Pn** | **19 25 42.0** | **-1.0** |
| | baz=16 | | | | | | |
| **V36A** | **Jenks** | **16.03** | **43** | P | **Pn** | **19 25 44.2** | **+0.5** |
| | baz=16 | | | | | | |
| **X38A** | **Whitesboro** | **16.07** | **48** | P | **Pn** | **19 25 45.0** | **+0.9** |
| | baz=16 | | | | | | |
| **S33A** | **Kaszmaul Farm,** | **16.15** | **34** | P | **Pn** | **19 25 45.2** | **0.0** |
| | baz=16 | | | | | | |
| **T34A** | **McClaskey Farm** | **16.15** | **37** | P | **Pn** | **19 25 44.6** | **-0.6** |
| | baz=16 | | | | | | |
| **Q30A** | **Quinter** | **16.27** | **26** | P | **Pn** | **19 25 45.5** | **-1.2** |
| | baz=16 | | | | | | |
| **CBKS** | **Cedar Bluff** | **16.32** | **27** | *e*P | **Pn** | **19 25 45.7** | **-1.8** |
| | 42nm,1.0s | | | | | | |
| **N23A** | **Red Feather La** | **16.50** | **9** | P | **Pn** | **19 25 48.7** | **-1.2** |
| | baz=17 | | | | | | |
| **W38A** | **Poteau** | **16.51** | **47** | P | **P** | **19 25 51.0** | **-1.4** |
| | baz=16,SNR=9.5 | | | | | | |
| **V37A** | **Hulbert** | **16.59** | **44** | P | **Pn** | **19 25 51.2** | **+0.4** |
| | baz=17 | | | | | | |
| **Q31A** | **Ellis** | **16.63** | **28** | P | **Pn** | **19 25 51.0** | **-0.4** |
| | baz=17 | | | | | | |
| **R33A** | **Olander Ranch,** | **16.71** | **32** | P | **Pn** | **19 25 52.7** | **+0.3** |
| | baz=17 | | | | | | |
| **O28A** | **Krutsinger Ran** | **16.73** | **20** | P | **Pn** | **19 25 51.5** | **-1.1** |
| | baz=17 | | | | | | |
| **P30A** | **Selden** | **16.75** | **25** | P | **Pn** | **19 25 52.3** | **-0.5** |
| | baz=17 | | | | | | |
| **MIAR** | **Mount Ida** | **16.87** | **50** | *e*P | **Pn** | **19 25 55.1** | **+0.8** |
| | 20nm,1.1s | | | | | | |
| **U37A** | **Salina** | **16.94** | **43** | P | **Pn** | **19 25 55.0** | **-0.2** |
| | baz=17 | | | | | | |
| **Q32A** | **Meitler Ranch,** | **16.98** | **30** | P | **Pn** | **19 25 55.3** | **-0.5** |
| | baz=17 | | | | | | |
| **V38A** | **Canehill** | **17.05** | **45** | P | **Pn** | **19 25 56.7** | **+0.1** |
| | baz=17 | | | | | | |
| **P31A** | **Stockton** | **17.07** | **27** | P | **Pn** | **19 25 56.0** | **-0.9** |
| | baz=17 | | | | | | |
| **R34A** | **Isabella, Hill** | **17.07** | **34** | P | **Pn** | **19 25 56.5** | **-0.4** |
| | baz=17 | | | | | | |
| **HWUT** | **Haare Ranch** | **17.08** | **354** | *e*P | **Pn** | **19 25 57.4** | **+0.3** |
| | 42nm,1.7s | | | | | | |
| **S35A** | **Otter Creek Ra** | **17.11** | **37** | P | **Pn** | **19 25 56.5** | **-0.8** |
| | baz=17 | | | | | | |
| **U38A** | **Gravette** | **17.41** | **44** | P | **Pn** | **19 26 01.1** | **-0.1** |
| | baz=17 | | | | | | |
| **P32A** | **Huiting Farm,** | **17.48** | **28** | P | **Pn** | **19 26 01.6** | **-0.4** |
| | baz=18 | | | | | | |
| **T37A** | **Cheneyville 18** | **17.53** | **41** | P | **Pn** | **19 26 02.5** | **-0.1** |
| | baz=18 | | | | | | |
| **R35A** | **Emporia Munici** | **17.64** | **36** | P | **Pn** | **19 26 03.9** | **0.0** |
| | baz=18 | | | | | | |
| **Q34A** | **Chapman** | **17.70** | **33** | P | **Pn** | **19 26 04.2** | **-0.5** |
| | baz=18 | | | | | | |
| **N30A** | **Hueftle Ranch,** | **17.89** | **23** | P | **Pn** | **19 26 05.7** | **-1.5** |
| | baz=18 | | | | | | |
| **R36A** | **Gordon, Harris** | **18.01** | **37** | P | **Pn** | **19 26 07.3** | **-1.3** |
| | baz=18 | | | | | | |
| **Q35A** | **Mercer Eighty,** | **18.11** | **35** | P | **Pn** | **19 26 09.2** | **-0.7** |
| | baz=18 | | | | | | |
| **BW06** | **Boulder Array** | **18.13** | **359** | *e*P | **Pn** | **19 26 07.6** | **-2.7** |
| | 27nm,1.7s | | | | | | |
| **O32A** | **Brockman Farm,** | **18.15** | **28** | P | **Pn** | **19 26 09.0** | **-1.3** |
| | baz=18 | | | | | | |
| **K22A** | **Casper** | **18.16** | **7** | P | **Pn** | **19 26 09.9** | **-0.6** |
| | baz=18,SNR=7.4 | | | | | | |
| **P34A** | **Walnut Farm, R** | **18.24** | **32** | P | **Pn** | **19 26 10.3** | **-1.1** |
| | baz=18 | | | | | | |
| **O33A** | **Hebron** | **18.30** | **30** | P | **Pn** | **19 26 11.8** | **-0.3** |
| | baz=18 | | | | | | |
| **R37A** | **Teagarden Farm** | **18.38** | **38** | P | **Pn** | **19 26 11.7** | **-1.5** |
| | baz=18 | | | | | | |
| **Q36A** | **Arnold C. Orve** | **18.50** | **36** | P | **P** | **19 26 13.7** | **-0.6** |
| | baz=18 | | | | | | |
| **P35A** | **Duane Minner,** | **18.63** | **34** | P | **P** | **19 26 14.4** | **-1.5** |
| | baz=19 | | | | | | |
| **M31A** | **Lambtecht Ranc** | **18.79** | **25** | P | **P** | **19 26 17.3** | **-0.3** |
| | baz=19 | | | | | | |
| **O03D** | **Paynes Creek** | **18.86** | **329** | P | **Pn** | **19 26 19.9** | **+0.9** |
| | baz=19 | | | | | | |
| **P36A** | **Good Intent, A** | **19.11** | **35** | P | **P** | **19 26 20.6** | **-0.5** |
| | baz=19 | | | | | | |
| **BGNE** | **Belgrade** | **19.16** | **26** | P | **P** | **19 26 21.8** | **0.0** |
| | baz=19 | | | | | | |
| **J25A** | **Sunshine Ranch** | **19.29** | **12** | P | **P** | **19 26 22.9** | **-0.3** |
| | baz=19 | | | | | | |
| **J26A** | **Sides Ranch, S** | **19.36** | **14** | P | **P** | **19 26 23.2** | **-0.7** |
| | baz=19 | | | | | | |
| **HLID** | **Hailey** | **19.39** | **349** | *e*P | **Pn** | **19 26 25.9** | **+0.4** |
| | 20nm,1.3s | | | | | | |
| **WVOR** | **Wild Horse Val** | **19.41** | **339** | *e*P | **Pn** | **19 26 25.6** | **0.0** |
| | 25nm,1.4s | | | | | | |
| **FLWY** | **Flagg Ranch** | **19.48** | **357** | *e*P | **P** | **19 26 24.4** | **-1.0** |
| | 28nm,1.3s | | | | | | |
| **H17A** | **Grant Village** | **19.79** | **357** | P | **P** | **19 26 28.8** | **+0.1** |
| | baz=20 | | | | | | |
| **H17A** | **Grant Village** | **19.79** | **357** | *e*P | **Pn** | **19 26 29.8** | **-0.4** |
| | 24nm,1.4s | | | | | | |
| **YFT** | **Old Faithful** | **19.86** | **357** | *e*P | **P** | **19 26 30.5** | **+1.0** |
| | 18nm,1.1s | | | | | | |
| **I25A** | **Rochford** | **19.91** | **12** | P | **P** | **19 26 30.2** | **+0.2** |
| | baz=20 | | | | | | |
| **J28A** | **Allard Ranch,** | **19.92** | **17** | P | **P** | **19 26 30.1** | **+0.2** |
| | baz=20 | | | | | | |
| **LKWY** | **Lake** | **19.95** | **358** | *e*P | **Pn** | **19 26 32.4** | **+0.2** |
| | 6.8nm,0.8s | | | | | | |
| **M04C** | **Macdoel** | **20.07** | **332** | P | **P** | **19 26 33.1** | **+1.3** |
| | baz=20 | | | | | | |
| **QLMT** | **Earthquake Lak** | **20.27** | **356** | *e*P | Pn | 19 26 36.5 | +0.5 |
| | 4.7nm,1.5s | | | | | | |
| **I27A** | **Quinn** | **20.31** | **15** | P | **P** | **19 26 34.1** | **-0.2** |
| | baz=20 | | | | | | |
| **MCMT** | **McKenzie Canyo** | **20.40** | **353** | *e*P | **P** | **19 26 36.3** | **+0.9** |
| | 4.3nm,0.9s | | | | | | |
| **I28A** | **Midland** | **20.47** | **17** | P | **P** | **19 26 36.1** | **+0.1** |
| | baz=20 | | | | | | |
| **RLMT** | **Red Lodge** | **20.49** | **0** | *e*P | **P** | **19 26 35.9** | **-0.4** |
| | 13nm,1.2s | | | | | | |
| **H26A** | **Fairpoint** | **20.67** | **13** | P | **P** | **19 26 38.0** | **-0.1** |
| | baz=21 | | | | | | |
| **H27A** | **Howes** | **20.84** | **15** | P | **P** | **19 26 40.0** | **0.0** |
| | baz=21 | | | | | | |
| **BOZ** | **Bozeman (W)** | **21.10** | **355** | *e*P | **P** | **19 26 42.8** | **-0.1** |
| | 16nm,1.3s | | | | | | |
| **H28A** | **Mission Ridge** | **21.14** | **17** | P | **P** | **19 26 43.3** | **+0.2** |
| | baz=21 | | | | | | |
| **GCMT** | **Greyclift** | **21.16** | **359** | *e*P | **P** | **19 26 43.0** | **-0.5** |
| | 6.5nm,1.0s | | | | | | |
| **G26A** | **Maurine** | **21.36** | **13** | P | **P** | **19 26 45.5** | **0.0** |
| | baz=21 | | | | | | |
| **J04D** | **Umpqua Nationa** | **21.39** | **334** | P | **P** | **19 26 47.6** | **+1.5** |
| | baz=22 | | | | | | |
| **G27A** | **Dupree** | **21.58** | **14** | P | **P** | **19 26 48.1** | **+0.2** |
| | baz=22 | | | | | | |
| **F27A** | **Lemmon** | **22.03** | **14** | P | **P** | **19 26 52.3** | **-0.4** |
| | baz=22 | | | | | | |
| **G30A** | **Faulkton** | **22.08** | **19** | P | **P** | **19 26 52.6** | **-0.6** |
| | baz=22 | | | | | | |
| **H32A** | **Carlson Farm,** | **22.09** | **23** | P | **P** | **19 26 53.0** | **-0.3** |
| | baz=22 | | | | | | |
| **LAO** | **LASA Array** | **22.19** | **6** | *e*P | **P** | **19 26 53.4** | **-1.1** |
| | 30nm,1.4s | | | | | | |
| **K37A** | **Belmond** | **22.25** | **32** | P | **P** | **19 26 55.2** | **+0.1** |
| | baz=22 | | | | | | |
| **CHMT** | **Chamberlain Mo** | **22.50** | **353** | *e*P | **P** | **19 26 57.4** | **-0.6** |
| | 16nm,1.4s | | | | | | |
| **SLMT** | **Seeley Lake** | **22.86** | **353** | *e*P | **P** | **19 27 01.9** | **+0.2** |
| | 75nm,1.5s | | | | | | |
| **E28A** | **Huff** | **22.99** | **15** | P | **P** | **19 27 01.9** | **-1.1** |
| | baz=23 | | | | | | |
| **D26A** | **Manning** | **23.05** | **12** | P | **P** | **19 27 02.7** | **-0.9** |
| | baz=23 | | | | | | |
| **SWMT** | **Swartz Lake** | **23.18** | **352** | *e*P | **P** | **19 27 04.7** | **-0.3** |
| | 37nm,1.3s | | | | | | |
| **JTMT** | **Jette** | **23.45** | **351** | *e*P | **P** | **19 27 06.6** | **-1.1** |
| | 35nm,1.9s | | | | | | |
| **YBMT** | **Yellow Bay** | **23.53** | **352** | *e*P | **P** | **19 27 07.5** | **-1.0** |
| | 32nm,1.5s | | | | | | |
| **SFIN** | **Scholer Farm** | **24.36** | **44** | P | **P** | **19 27 15.9** | **-0.3** |
| | baz=24 | | | | | | |
| **NEW** | **Newport** | **24.43** | **347** | P | **P** | **19 27 16.1** | **-0.8** |
| | 20nm,1.1s,baz=157,slow=15,SNR=19 | | | | | | |
| **NEW** | **Newport** | **24.43** | **347** | *e*P | **P** | **19 27 16.0** | **-0.9** |
| | 40nm,1.3s | | | | | | |
| **F36A** | **Milaca** | **24.73** | **27** | P | **P** | **19 27 18.9** | **-0.7** |
| | baz=25 | | | | | | |
| **B28A** | **Dugan Ranch, T** | **24.83** | **14** | P | **P** | **19 27 20.3** | **-0.2** |
| | baz=25 | | | | | | |
| **E35A** | **Pequot Lakes** | **24.95** | **25** | P | **P** | **19 27 21.3** | **-0.3** |
| | baz=25 | | | | | | |
| **A28A** | **Rude Farm, Bot** | **25.29** | **14** | P | **P** | **19 27 24.5** | **-0.1** |
| | baz=25 | | | | | | |
| **A29A** | **Manning Farm,** | **25.54** | **15** | P | **P** | **19 27 26.7** | **-0.2** |
| | baz=26 | | | | | | |
| **C35A** | **Jirik Farms, M** | **26.07** | **24** | P | **P** | **19 27 30.7** | **-1.0** |
| | baz=26 | | | | | | |
| **C37A** | **Embarrass** | **26.78** | **26** | P | **P** | **19 27 37.1** | **-1.0** |
| | baz=27 | | | | | | |
| **SDV** | **Santo Domingo** | **39.99** | **106** | *e*P | **P** | **19 29 34.4** | **+0.9** |
| | 11nm,1.0s | | | | | | |
| **ILAR** | **Eielson Array** | **46.93** | **339** | P | **P** | **19 30 28.6** | **0.0** |
| | 3.5nm,1.0s,baz=148,slow=6.5,SNR=18 | | | | | | |
| **KTH** | **Kantishna Hill** | **47.58** | **336** | *e*P | **P** | **19 30 33.5** | **-0.2** |
| | 8.7nm,1.0s | | | | | | |
| **SAML** | **Samuel** | **55.96** | **121** | *e*P | **P** | **19 31 35.4** | **-1.6** |
| | 10nm,1.3s | | | | | | |
| **LPAZ** | **La Paz** | **57.11** | **131** | P | P | 19 31 50.8 | +5.1 |
| | 1.3nm,0.8s,baz=311,slow=4.2,SNR=5.7 | | | | | | |
| **CPUP** | **Villa Florida** | **71.28** | **132** | P | **P** | **19 33 19.4** | **+1.5** |
| | 1.9nm,0.7s,baz=341,slow=7.1,SNR=5.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.69** | **15** | P | P | 19 34 17.2 | +6.2 |
| | 1.9nm,0.6s,baz=340,slow=3.2,SNR=6.7 | | | | | | |
| **ESDC** | **Sonseca Array** | **85.55** | **48** | P | **P** | **19 34 35.3** | **-1.5** |
| | 0.3nm,0.4s,baz=306,slow=4.6,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **87.04** | **20** | P | **P** | **19 34 42.2** | **-1.3** |
| | 2.1nm,0.8s,baz=2.6,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **121.39** | **261** | PKP | **PKPdf** | **19 40 54.6** | **+2.2** |
| | 0.4nm,0.8s,baz=62,slow=3.6,SNR=3.2 | | | | | | |

**WEL 21 19:38:01.6±0.2, 37.78S×177.31E, h78km±1km, ML3.5/6, 10C-7D, Error ellipse: s-maj=1.2km s-min=1.1km az=0.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WIZ** | **White Island** | **0.27** | **340** | P* | Pn | 19 38 13.3 | -0.2 |
| **HAZ** | **Te Kaha** | **0.38** | **87** | ⇑P* | Pn | 19 38 13.8 | -0.4 |
| HAZ | | | | S* | Sn | 19 38 23.3 | -0.2 |
| **URZ** | **Urewera** | **0.51** | **198** | ⇑P* | Pn | 19 38 14.8 | -0.4 |
| URZ | | | | S* | Sn | 19 38 25.1 | -0.2 |
| URZ | | | | A

| | | | | | |
|---|---|---|---|---|---|
| **WHVZ** | **Whangaehu Hut** | **2.02 221** | ⇓PN | Pn | 19 38 33.9 -0.2 |
| **MOVZ** | **Moawhango** | **2.03 216** | ⇓PN | Pn | 19 38 33.3 -0.7 |
| **KAHZ** | **Kahuranaki** | **2.04 189** | PN | Pn | 19 38 33.4 -0.7 |
| **WNVZ** | **Wahianoa** | **2.05 220** | ⇓PN | Pn | 19 38 34.1 -0.3 |
| **PKVZ** | **Pokaka** | **2.15 225** | PN | Pn | 19 38 35.8 +0.2 |
| **PNHZ** | **Pukenui** | **2.30 202** | PN | Pn | 19 38 35.5 -2.1 |
| **WPHZ** | **Waipukurau** | **2.38 196** | PN | Pn | 19 38 36.8 -1.8 |
| **VRZ** | **Vera Road** | **2.41 235** | ⇓PN | Pn | 19 38 39.9 +0.9 |
| **TSZ** | **Takapari Road** | **2.51 204** | PN | Pn | 19 38 38.1 -2.3 |
| **DVHZ** | **Dannevirke** | **2.67 199** | PN | Pn | 19 38 39.5 -3.0 |
| **WAZ** | **Wanganui** | **2.68 222** | PN | Pn | 19 38 42.6 0.0 |
| **BFZ** | **Birch Farm** | **3.01 196** | PN | Pn | 19 38 44.0 -3.2 |
| **MRZ** | **Mangatainoka R** | **3.18 204** | PN | Pn | 19 38 46.0 -3.4 |
| **TIWZ** | **Tintock** | **3.19 200** | PN | Pn | 19 38 46.8 -2.8 |
| **HOWZ** | **Holdsworth Sta** | **3.41 203** | PN | Pn | 19 38 48.7 -3.8 |
| **OGWZ** | **Otaki Gorge** | **3.46 208** | PN | Pn | 19 38 50.2 -2.9 |
| **KIW** | **Kapiti Island** | **3.60 210** | PN | Pn | 19 38 51.7 -3.3 |
| **CAW** | **Cannon Point** | **3.75 207** | PN | Pn | 19 38 53.6 -3.5 |
| **MSWZ** | **Moikau Station** | **3.96 203** | PN | Pn | 19 38 55.8 -4.3 |
| **TCW** | **Tory Channel** | **4.15 213** | PN | Pn | 19 38 58.6 -4.0 |
| **QRZ** | **Quartz Range** | **4.79 229** | PN | Pn | 19 39 07.9 -3.4 |
| **THZ** | **Tophouse** | **5.23 219** | PN | Pn | 19 39 12.9 -4.4 |
| **LTZ** | **Lake Taylor** | **6.31 216** | PN | Pn | 19 39 26.4 -5.7 |
| **MQZ** | **McQueen's Vall** | **6.89 209** | PN | Pn | 19 39 33.4 -6.6 |

*AUST **21** 19:40:58.5, 3°.35S×146°.54E, h100km*
*ISCJB **21** 19:41:13.8±2.4, 4°.8S±0°.2×145°.6E±0°.2, h100km, mb3.0/1, Error ellipse: s-maj=38.3km s-min=7.4km az=138.2*
*IDC **21** 19:41:17.4±3.5, 5°.06S×145°.32E, h90km±26km, mb2.8/1, mb1 3.6/3, mb1mx3.2/34, mbtmp3.8/3, Error ellipse: s-maj=62.9km s-min=12.0km az=49.0*

**ISC 21 19:41:16.7±1.7, 4°.9S±0°.1×145°.5E±0°.2, h100km, n12, σ1ᵠ22/14, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.75** | **159** | P | **Pn** | **19 42 26.1** | **0.0** |
| | 7.2nm,0.3s,baz=328,slow=9.5,SNR=24 | | | | | | |
| PMG | | | | S | **Sn** | **19 43 19.3** | **-0.7** |
| | 10nm,0.3s,baz=162,slow=20,SNR=16 | | | | | | |
| **PMG** | **Port Moresby** | **4.75** | **159** | P | **Pn** | **19 42 26.8** | **+0.7** |
| | baz=6.1,SNR=6.6 | | | | | | |
| **JAY** | **Jayapura** | **5.31** | **297** | P | **Pn** | **19 42 33.5** | **-0.3** |
| | baz=353,slow=0.0,SNR=8.0 | | | | | | |
| JAY | | | | S | **Sn** | **19 43 33.8** | **+0.1** |
| | baz=233,slow=0.1,SNR=2.0 | | | | | | |
| **COEN** | **Coen** | **9.24** | **194** | P | **Pn** | **19 43 28.4** | **+1.3** |
| | baz=11,SNR=13 | | | | | | |
| **MTSU** | **Mount Surprise** | **13.16** | **185** | P | **Pn** | **19 44 21.7** | **+1.9** |
| | baz=15,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.42** | **215** | P | **Pn** | **19 45 24.1** | **-1.6** |
| | 0.2nm,0.3s,baz=33,slow=11,SNR=21 | | | | | | |
| **KNRA** | **Kununurra** | **19.56** | **236** | P | **Pn** | **19 45 38.0** | **-1.0** |
| | baz=21,SNR=7.5 | | | | | | |
| **ASAR** | **Alice Springs** | **21.69** | **210** | P | **P** | **19 45 59.3** | **-0.4** |
| | 0.5nm,0.6s,baz=36,slow=12,SNR=6.8 | | | | | | |
| **WRKA** | **Warakurna** | **25.89** | **218** | P | **P** | **19 46 40.3** | **+0.7** |
| | baz=28,SNR=4.0 | | | | | | |
| **ARMA** | **Armidale** | **26.00** | **168** | P | **P** | **19 46 38.4** | **-2.1** |
| | baz=28,SNR=21 | | | | | | |
| **MEEK** | **Meekatharra** | **33.50** | **227** | P | **P** | **19 47 47.6** | **+0.8** |
| | baz=35,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **143.33** | **285** | PKP | **PKPdf** | **20 00 41.4** | **+1.0** |
| | 0.1nm,0.4s,baz=71,slow=3.0,SNR=2.4 | | | | | | |

*IDC **21** 19:50:18.9±1.8, 6°.03S×152°.00E, h0km, mb3.9/4, mb1 4.1/5, mb1mx3.7/35, mbtmp3.9/5, ML2.1/1, Error ellipse: s-maj=79.0km s-min=22.2km az=127.0*
*ISCJB **21** 19:50:22.7±1.6, 6°.1S±0°.3×152°.0E±0°.3, h37km, mb3.8/4, Error ellipse: s-maj=64.8km s-min=12.8km az=136.2*

**ISC 21 19:50:24.0±1.9, 6°.2S±0°.4×152°.1E±0°.4, h37km, n6, σ0ᵠ72/7, mb3.8/4, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.89** | **236** | Pn | **Pn** | **19 51 48.7** | **0.0** |
| | 3.4nm,0.3s,baz=69,slow=12,SNR=10 | | | | | | |
| PMG | | | | Sn | **Sn** | **19 52 55.8** | **+0.7** |
| | 7.1nm,0.3s,baz=119,slow=20,SNR=8.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.06** | **230** | P | **P** | **19 55 14.8** | **-1.1** |
| | 1.8nm,0.6s,baz=55,slow=10,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **24.71** | **223** | P | **P** | **19 55 42.0** | **+0.1** |
| | 1.9nm,0.6s,baz=56,slow=8.7,SNR=21 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.90** | **327** | P | **P** | **20 02 39.2** | **-0.4** |
| | 0.5nm,0.5s,baz=127,slow=3.8,SNR=2.8 | | | | | | |
| **ILAR** | **Eielson Array** | **83.66** | **22** | P | **P** | **20 02 49.0** | **+0.5** |
| | 1.3nm,0.9s,baz=247,slow=5.5,SNR=7.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.06** | **286** | PKPbc | **PKPbc** | **20 10 11.9** | **+0.1** |
| | 1.0nm,0.9s,baz=80,slow=3.0,SNR=5.6 | | | | | | |

**MAN 21 20:05:29, 15°.26N×122°.53E, h13km, mb5.0, ML3.9, MS4.0, 1C-1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BALP** | **Baler** | **1.03** | **298** | *e*P | Pb | 20 05 47.4 | -1.4 |
| BALP | | | | *e*S | Sn | 20 06 05.0 | +1.5 |
| **GQP** | **Guinayangan** | **1.35** | **183** | ⇑*i*P | Pn | 20 05 52.5 | -1.1 |
| GQP | | | | *i* S | Sn | 20 06 09.6 | -1.8 |
| **CAUP** | **Cauayan** | **1.80** | **338** | *e*P | Pn | 20 06 00.6 | +0.8 |
| CAUP | | | | *e*S | Sn | 20 06 22.3 | -0.2 |
| **AUQP** | **San Andres** | **1.93** | **176** | *e*P | Pb | 20 06 04.5 | +0.4 |
| **PVCP** | **Virac** | **2.29** | **136** | ⇓*i*P | Pn | 20 06 07.7 | +1.2 |
| PVCP | | | | *e*S | Sg | 20 06 42.3 | -0.3 |
| **APYP** | **Conner** | **2.86** | **335** | *e*P | Pn | 20 06 15.9 | +1.5 |
| **OTRP** | **Odiongan** | **2.92** | **190** | *e*P | Pb | 20 06 19.6 | -1.4 |
| **SJMP** | **San Jose** | **3.10** | **206** | *e*P | Pn | 20 06 20.2 | +2.5 |
| **CNP** | **Catarman** | **3.44** | **143** | *e*P | Pn | 20 06 24.2 | +1.9 |

**IDC 21 20:06:11.3±3.9, 24°.37N×109°.05W, h0km, mb3.2/1, mb1 3.7/4, mb1mx3.5/29, mbtmp3.3/4, ML3.1/3, Error ellipse: s-maj=65.3km s-min=12.1km az=149.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.18** | **257** | Pg | Pb | 20 06 34.5 | -0.1 |
| | 38nm,0.3s,baz=31,slow=3.3,SNR=18 | | | | | | |
| LPIG | | | | Lg | Lg | 20 06 49.0 | |
| | 74nm,0.3s,baz=3.5,slow=19,SNR=17 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.89** | **43** | Pn | Pn | 20 07 54.1 | +0.2 |
| | 0.1nm,0.3s,baz=223,slow=13,SNR=3.1 | | | | | | |
| TXAR | | | | Pg | Pg | 20 08 23.4 | -0.2 |
| | 0.4nm,0.3s,baz=226,slow=16,SNR=12 | | | | | | |
| TXAR | | | | Lg | Lg | 20 09 46.5 | |
| | 0.8nm,0.3s,baz=221,slow=29,SNR=4.2 | | | | | | |
| **ANMO** | **Albuquerque** | **10.78** | **11** | Pn | Pn | 20 08 47.4 | +0.2 |
| | 0.1nm,0.3s,baz=200,slow=12,SNR=2.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.07** | **333** | Pn | P | 20 10 02.5 | -0.1 |
| | 0.1nm,0.3s,baz=157,slow=12,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **47.20** | **339** | P | P | 20 14 46.1 | +0.5 |
| | 0.4nm,1.0s,baz=153,slow=6.6,SNR=3.2 | | | | | | |

*ISCJB **21** 20:07:07.4±0.3, 14°.17N±0°.05×92°.90E±0°.03, h32km, mb4.1/23, Error ellipse: s-maj=6.7km s-min=3.7km az=8.7*
*NEIC **21** 20:07:08.8±3.1, 14°.14N×92°.94E, h29km±23km, mb4.6/4, Error ellipse: s-maj=12.7km s-min=10.2km az=81.0*
*IDC **21** 20:07:08.5±0.6, 14°.03N×92°.97E, h28km±3km, mb4.0/20, mb1 4.1/22, mb1mx3.9/42, mbtmp4.1/22, ML3.7/2, Error ellipse: s-maj=18.7km s-min=13.0km az=63.0*
*BJI **21** 20:07:21.7, 14°.83N×93°.45E, h32km, mb4.1/8, mB5.0/2, Ms4.7/2, MS7 4.5/2*

**ISC 21 20:07:09.4±0.4, 14°.19N±0°.07×92°.96E±0°.05, h32km, n62, σ1ᵠ37/82, mb4.2/23, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **7.14** | **53** | Pn | **Pn** | **20 08 54.0** | **+2.2** |
| | 0.2nm,0.3s,baz=241,slow=14,SNR=7.4 | | | | | | |
| CMAR | | | | Sn | **Sn** | **20 10 10.2** | **-1.7** |
| | 0.4nm,0.3s,baz=240,slow=27,SNR=5.9 | | | | | | |
| **CHTO** | **Chiang Mai** | **7.36** | **51** | *e*P | **Pn** | **20 08 51.7** | **-2.9** |
| | 16nm,1.0s | | | | | | |
| **CHLP** | **Challavanipeta** | **9.56** | **298** | *e*Pn | **Pn** | **20 09 24.2** | **-0.7** |
| CHLP | | | | IAmb | IAmb | 20 09 25.1 | |
| | comp=Z,25nm,0.6s | | | | | | |
| CHLP | | | | *e* | | 20 11 00.1 | |
| CHLP | | | | *e*Sn | **Sn** | **20 11 11.5** | **+0.2** |
| **PVM** | **Polavaram** | **11.33** | **287** | *e*Pn | **Pn** | **20 09 49.2** | **0.0** |
| PVM | | | | IAmb | IAmb | 20 09 52.6 | |
| | comp=Z,7.6nm,0.7s | | | | | | |
| PVM | | | | *e* | | 20 11 44.8 | |
| PVM | | | | *e*Sn | **Sn** | **20 11 55.3** | **+0.6** |
| **ADKI** | **Addanki** | **12.66** | **279** | *e*Pn | **Pn** | **20 10 07.7** | **+0.4** |
| ADKI | | | | IAmb | IAmb | 20 10 09.2 | |
| | comp=Z,5.5nm,0.5s | | | | | | |
| ADKI | | | | *e* | | 20 12 14.7 | |
| ADKI | | | | *e*Sn | **Sn** | **20 12 27.5** | **+0.3** |
| **PSI** | **Prapat** | **12.76** | **152** | Pn | **Pn** | **20 10 11.9** | **+3.1** |
| | comp=Z,0.7nm,0.3s,baz=322,slow=11,SNR=6.0 | | | | | | |
| **SKHT** | **Srikalahasti** | **12.87** | **270** | *e*Pn | **Pn** | **20 10 10.7** | **+0.4** |
| SKHT | | | | *e* | | 20 12 18.8 | |
| SKHT | | | | *e*Sn | **Sn** | **20 12 31.7** | **-0.7** |
| **NJS** | **Nagarjunasagar** | **13.37** | **282** | *e*Pn | **Pn** | **20 10 17.4** | **+0.2** |
| NJS | | | | IAmb | IAmb | 20 10 18.4 | |
| | comp=Z,3.9nm,0.7s | | | | | | |
| NJS | | | | *e* | | 20 12 32.5 | |
| NJS | | | | *e*Sn | **Sn** | **20 12 44.8** | **0.0** |
| **RCLA** | **Racherla** | **13.60** | **277** | *e*Pn | **Pn** | **20 10 18.6** | **-1.7** |
| RCLA | | | | IAmb | IAmb | 20 10 19.3 | |
| | comp=Z,6.2nm,1.1s | | | | | | |
| RCLA | | | | *e* | | 20 12 37.7 | |
| RCLA | | | | *e*Sn | **Sn** | **20 12 48.1** | **-2.1** |
| **ODAN** | **Odare** | **13.64** | **338** | *e*P | **Pn** | **20 10 18.1** | **-2.8** |
| | comp=Z,10nm,0.2s | | | | | | |
| **SRLM** | **Srisailam** | **13.71** | **280** | *e*Pn | **Pn** | **20 10 21.9** | **+0.1** |
| SRLM | | | | IAmb | IAmb | 20 10 29.8 | |
| | comp=Z,11nm,0.9s | | | | | | |
| SRLM | | | | *e* | | 20 12 39.8 | |
| SRLM | | | | *e*Sn | **Sn** | **20 12 53.2** | **0.0** |
| **PALK** | **Pallekele** | **13.86** | **242** | Pn | **Pn** | **20 10 21.4** | **-2.5** |
| | comp=Z,0.6nm,0.3s,baz=114,slow=8.6,SNR=5.3 | | | | | | |
| PALK | | | | Sn | Sn | 20 12 42.9 | -14 |
| | comp=Z,2.5nm,0.3s,baz=297,slow=16,SNR=11 | | | | | | |
| **TAPN** | **Taplejung** | **13.98** | **340** | *e*P | **Pn** | **20 10 23.6** | **-2.0** |
| | comp=Z,14nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **14.02** | **336** | *e*P | **Pn** | **20 10 23.0** | **-3.1** |
| | comp=Z,24nm,0.4s | | | | | | |
| **HYB** | **Hyderabad** | **14.23** | **285** | *i* P | **P** | **20 10 37.0** | **+1.2** |
| HYB | | | | *e* | | 20 12 54.0 | |
| HYB | | | | *e*S | **Sn** | **20 13 07.0** | **+1.3** |
| **HYBB** | **Hyderabad (bro** | **14.23** | **285** | *e*Pn | **Pn** | **20 10 29.6** | **+0.7** |
| HYBB | | | | *e* | | 20 12 55.1 | |
| HYBB | | | | *e*Sn | **Sn** | **20 13 05.9** | **+0.2** |
| **SRSP** | **Sriramsagar** | **14.78** | **291** | *e*Pn | **Pn** | **20 10 35.7** | **-0.6** |
| SRSP | | | | IAmb | IAmb | 20 10 43.1 | |
| | comp=Z,11nm,1.1s | | | | | | |
| SRSP | | | | *e* | | 20 13 06.6 | |
| SRSP | | | | *e*Sn | **Sn** | **20 13 19.1** | **+0.1** |
| **PKI** | **Pulchoki** | **15.06** | **333** | *e*P | **Pn** | **20 10 37.9** | **-2.4** |
| | comp=Z,10nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **15.07** | **333** | *e*P | **Pn** | **20 10 37.9** | **-2.5** |
| **URV** | **Uravakonda** | **15.21** | **275** | *e*Pn | **Pn** | **20 10 42.4** | **+0.2** |
| URV | | | | IAmb | IAmb | 20 10 49.2 | |
| | comp=Z,8.8nm,0.8s | | | | | | |
| URV | | | | *e* | | 20 13 14.4 | |
| URV | | | | *e*Sn | **Sn** | **20 13 28.6** | **-1.2** |
| **DMN** | **Daman** | **15.22** | **333** | *e*P | **Pn** | **20 10 41.1** | **-1.3** |
| | comp=Z,28nm,0.7s | | | | | | |
| **KKN** | **Kakani** | **15.30** | **333** | *e*P | **Pn** | **20 10 41.0** | **-2.4** |
| | comp=Z,9.9nm,0.4s | | | | | | |
| **LSA** | **Lhasa** | **15.53** | **354** | *e*P | **Pn** | **20 10 46.3** | **-0.3** |
| | comp=Z,7.5nm,0.8s | | | | | | |
| **GKN** | **Gorkha** | **15.77** | **332** | *e*P | **Pn** | **20 10 48.2** | **-1.3** |
| **KOLN** | **Koldanda** | **16.08** | **329** | *e*P | **Pn** | **20 10 53.3** | **-0.1** |
| | comp=Z,7.5nm,0.3s | | | | | | |
| **KLRI** | **Killari** | **16.18** | **286** | *e*Pn | **Pn** | **20 10 54.2** | **-0.5** |
| KLRI | | | | *e* | | 20 13 40.7 | |
| KLRI | | | | *e*Sn | **Sn** | **20 13 52.7** | **-0.6** |
| **GTA** | **Gaotai** | **25.84** | **12** | *e*P | **P** | **20 12 41.9** | **+3.8** |
| GTA | | | | PMZ | | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.71** | **224** | T | T | 20 44 15.4 | |
| | baz=42,slow=75,SNR=20 | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.71** | **224** | T | T | 20 44 27.8 | |
| | baz=42,slow=75,SNR=26 | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.73** | **224** | T | T | 20 44 22.9 | |
| | baz=42,slow=75,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **33.71** | **347** | P | **P** | **20 13 49.8** | **+2.0** |
| | comp=Z,1.7nm,0.8s,baz=165,slow=8.6,SNR=6.2 | | | | | | |
| **SONM** | **Songino Array** | **35.35** | **16** | P | **P** | **20 14 03.8** | **+1.7** |
| | comp=Z,0.5nm,0.4s,baz=199,slow=7.0,SNR=2.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.18** | **345** | P | **P** | **20 14 27.1** | **+1.2** |
| | comp=Z,2.0nm,0.8s,baz=162,slow=7.8,SNR=15 | | | | | | |
| **KURK** | **Kurchatov** | **38.24** | **345** | *e*P | **P** | **20 14 26.8** | **+0.4** |
| **GEYT** | **Alibeck** | **38.87** | **314** | P | **P** | **20 14 33.8** | **+1.8** |
| | comp=Z,3.3nm,0.6s,baz=134,slow=8.5,SNR=7.8 | | | | | | |
| **SOEI** | **Soe** | **39.12** | **126** | P | **P** | **20 14 33.7** | **-0.8** |
| | baz=35,SNR=3.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.18** | **353** | P | **P** | **20 14 43.3** | **+0.7** |
| | comp=Z,1.6nm,0.7s,baz=170,slow=9.2,SNR=7.6 | | | | | | |
| ZALV | | | | pP | **pP** | **20 14 52.4** | **+0.3** |
| | comp=Z,2.3nm,0.6s,baz=176,slow=9.2,SNR=8.1 | | | | | | |
| **IDMV** | **Damavand** | **42.40** | **308** | *e*P | **P** | **20 15 03.4** | **+1.9** |
| **BVAR** | **Borovoye Array** | **42.68** | **340** | P | **P** | **20 15 03.8** | **+0.6** |
| | comp=Z,0.6nm,0.6s,baz=307,slow=35,SNR=2.7 | | | | | | |
| BVAR | | | | pP | **pP** | **20 15 13.0** | **+0.3** |
| | comp=Z,1.8nm,0.9s,baz=153,slow=10.0,SNR=3.8 | | | | | | |
| **BRVK** | **Borovoye** | **42.74** | **340** | P | P | 20 14 58.0 | -5.7 |
| **ABKAR** | **Akbulak array** | **44.20** | **329** | *e*P | **P** | **20 15 16.9** | **+1.5** |
| | comp=Z,16nm,1.0s | | | | | | |
| **IDHR** | **Dehrash** | **46.58** | **305** | *e*P | **P** | **20 15 34.9** | **+0.1** |
| **KIV** | **Kislovodsk** | **51.96** | **315** | *e*P | **P** | **20 16 17.0** | **+1.3** |
| | comp=Z,8.4nm,1.0s | | | | | | |
| **WRKA** | **Warakurna** | **52.04** | **138** | P | **P** | **20 16 14.8** | **-1.5** |
| | baz=46,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.99** | **129** | P | **P** | **20 16 21.4** | **-2.0** |
| | comp=Z,1.3nm,0.7s,baz=309,slow=7.9,SNR=16 | | | | | | |
| WRA | | | | PcP | **PcP** | **20 17 30.8** | **-1.2** |
| | comp=Z,0.6nm,0.5s,baz=326,slow=3.0,SNR=7.6 | | | | | | |
| **WRAB** | **Tennant Creek** | **52.99** | **129** | *e*P | **P** | **20 16 23.1** | **-0.4** |
| **ASAR** | **Alice Springs** | **54.94** | **133** | P | **P** | **20 16 36.1** | **-1.6** |
| | comp=Z,0.8nm,0.4s,baz=308,slow=6.6,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | **20 17 38.4** | **-1.0** |
| | comp=Z,0.4nm,0.7s,baz=316,slow=4.6,SNR=4.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **57.54** | **308** | P | **P** | **20 16 56.1** | **-0.1** |
| | comp=Z,2.7nm,0.8s,baz=122,slow=7.8,SNR=18 | | | | | | |
| BRTR | | | | pP | **pP** | **20 17 04.7** | **-1.3** |
| | comp=Z,4.9nm,0.8s,baz=119,slow=7.2,SNR=20 | | | | | | |
| **AKASG** | **Malin Array Be** | **62.55** | **320** | P | **P** | **20 17 29.5** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=89,slow=5.2,SNR=5.5 | | | | | | |
| AKASG | | | | pP | **pP** | **20 17 38.5** | **-1.6** |
| | comp=Z,0.3nm,0.2s,baz=85,slow=5.3,SNR=1.6 | | | | | | |
| **FINES** | **FINESS Array B** | **66.63** | **331** | P | **P** | **20 17 56.6** | **0.0** |
| | comp=Z,7.3nm,1.1s,baz=122,slow=7.1,SNR=13 | | | | | | |
| FINES | | | | pP | **pP** | **20 18 06.1** | **-0.5** |
| | comp=Z,4.0nm,0.7s,baz=110,slow=8.0,SNR=3.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **68.00** | **133** | P | **P** | **20 18 05.6** | **-0.1** |
| | baz=63,SNR=4.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **68.97** | **340** | P | **P** | **20 18 11.1** | **-0.2** |
| | comp=Z,1.5nm,0.7s,baz=81,slow=6.6,SNR=3.1 | | | | | | |
| ARCES | | | | pP | **pP** | **20 18 20.9** | **-0.4** |
| | comp=Z,5.2nm,0.9s,baz=97,slow=7.4,SNR=3.4 | | | | | | |
| **GERES** | **GERESS Array B** | **72.40** | **317** | P | **P** | **20 18 33.2** | **+0.5** |
| | comp=Z,1.9nm,0.7s,baz=83,slow=5.5,SNR=16 | | | | | | |
| GERES | | | | pP | **pP** | **20 18 42.4** | **-0.3** |
| | comp=Z,3.8nm,0.8s,baz=83,slow=5.5,SNR=16 | | | | | | |
| **NOA** | **NORSAR Array B** | **73.70** | **330** | P | **P** | **20 18 39.8** | **-0.2** |
| | comp=Z,0.9nm,0.6s,baz=94,slow=5.6,SNR=4.7 | | | | | | |
| NOA | | | | pP | **pP** | **20 18 49.1** | **-1.0** |
| | comp=Z,1.2nm,0.7s,baz=88,slow=6.1,SNR=3.1 | | | | | | |
| **KEST** | **Kesra** | **76.74** | **304** | P | **P** | **20 18 57.7** | **-0.4** |
| | comp=Z,3.5nm,0.9s,baz=190,slow=8.1,SNR=3.6 | | | | | | |
| **BNI** | **Bardonecchia** | **77.50** | **314** | *e*P | **P** | **20 19 00.5** | **-1.7** |
| | comp=Z,4.1nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **78.03** | **236** | P | **P** | **20 19 05.8** | **+0.4** |
| | comp=Z,6.8nm,0.7s,baz=70,slow=2.8,SNR=19 | | | | | | |
| **BOSA** | **Boshof** | **78.03** | **236** | P | **P** | **20 19 06.0** | **+0.6** |
| | baz=72,SNR=8.0 | | | | | | |
| **MAW** | **Mawson** | **84.46** | **191** | P | **P** | **20 19 38.4** | **0.0** |
| | comp=Z,1.3nm,0.6s,baz=225,slow=1.4,SNR=6.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **86.29** | **310** | P | **P** | **20 19 48.0** | **-0.5** |
| | comp=Z,0.1nm,0.3s,baz=62,slow=5.1,SNR=6.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **88.04** | **283** | P | **P** | **20 19 57.6** | **+0.2** |
| | comp=Z,2.4nm,0.9s,baz=83,slow=4.6,SNR=16 | | | | | | |
| TORD | | | | pP | **pP** | **20 20 06.6** | **-1.0** |
| | comp=Z,1.6nm,0.9s,baz=86,slow=4.7,SNR=8.0 | | | | | | |
| **ILAR** | **Eielson Array** | **89.35** | **22** | P | **P** | **20 20 02.2** | **-0.4** |
| | comp=Z,0.1nm,0.5s,baz=292,slow=4.4,SNR=4.3 | | | | | | |

*NNC **21** 20:08:02.4±4.6, 36°.95N×70°.28E, h209km±43km, mb2.4, mpv3.6, Error ellipse: s-maj=47.9km s-min=26.6km az=156.0*

**ISC 21 20:08:03.1±3.4, 37°.0N±0°.2×70°.26E±0°.10, h200km, n12, σ1ᵠ41/17, 6C-4D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.16** | **329** | ⇓P | **Pn** | **20 08 43.2** | **-0.2** |
| | 7.5nm,0.4s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **20 09 16.2** | **+1.2** |
| | 121nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.97** | **39** | ⇑P | **Pn** | **20 09 03.9** | **-0.8** |
| | 3.1nm,0.3s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **20 09 54.2** | **+1.0** |
| | 24nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **5.79** | **17** | ⇓P | **Pn** | **20 09 27.8** | **+0.1** |
| | 1.2nm,0.3s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **20 10 37.0** | **+2.4** |
| | 11nm,0.4s | | | | | | |
| **AML** | **Almayashu** | **5.81** | **26** | P | **Pn** | **20 09 27.8** | **-0.4** |
| | SNR=44 | | | | | | |
| **KK31** | **Karatay Array** | **6.14** | **2** | P | **Pn** | **20 09 32.4** | **+0.2** |
| | 1.6nm,0.3s,baz=174,slow=13,SNR=84 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **20 10 38.9** | **-3.8** |
| | 1.7nm,0.4s,baz=174,slow=24,SNR=4.0 | | | | | | |
| **UCH** | **Uchtor** | **6.20** | **31** | P | **Pn** | **20 09 32.7** | **-0.6** |
| | SNR=13 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.31** | **24** | P | **Pn** | **20 09 34.5** | **+0.1** |
| | SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **6.54** | **29** | ⇑P | **Pn** | **20 09 37.2** | **-0.2** |
| | 4.0nm,0.5s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **20 10 53.5** | **+1.3** |
| | 3.5nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **6.54** | **29** | P | **Pn** | **20 09 37.9** | **+0.5** |
| | SNR=6.2 | | | | | | |
| **USP** | **Ospenovka** | **7.09** | **26** | P | **Pn** | **20 09 44.0** | **-0.5** |
| | SNR=6.9 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.23** | **33** | ⇓P | **Pn** | **20 09 45.4** | **-1.1** |
| | 5.6nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.23** | **33** | P | **Pn** | **20 09 45.6** | **-0.8** |
| | SNR=6.7 | | | | | | |

*ISCJB **21** 20:09:23.5±1.9, 24°.5N±0°.2×109°.1W±0°.2, h10km, mb3.9/2, Error ellipse: s-maj=39.6km s-min=12.7km az=146.1*
*IDC **21** 20:09:24.7±2.2, 24°.60N×109°.23W, h0km, mb3.9/2, mb1 3.9/5, mb1mx3.6/28, mbtmp3.6/5, ML3.2/3, Error ellipse: s-maj=49.4km s-min=10.5km az=142.0*

**ISC 21 20:09:25.8±1.6, 24°.6N±0°.2×109°.2W±0°.2, h10km, n6, σ0ᵠ83/6, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.10** | **243** | Pg | **Pb** | **20 09 46.5** | **-0.4** |
| | 83nm,0.3s,baz=211,slow=4.7,SNR=18 | | | | | | |
| LPIG | | | | Lg | Lg | 20 09 59.9 | |
| | 140nm,0.3s,baz=108,slow=19,SNR=24 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.84** | **45** | Pn | **Pn** | **20 11 05.7** | **-0.7** |
| | 0.2nm,0.3s,baz=225,slow=13,SNR=5.5 | | | | | | |
| TXAR | | | | Lg | Lg | 20 13 01.8 | |
| | 0.3nm,0.3s,baz=230,slow=28,SNR=5.4 | | | | | | |
| **ANMO** | **Albuquerque** | **10.59** | **13** | Pn | **Pn** | **20 11 57.1** | **-0.6** |
| | 0.1nm,0.3s,baz=197,slow=11,SNR=4.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.79** | **333** | Pn | **P** | **20 13 12.7** | **+0.2** |
| | 0.1nm,0.3s,baz=142,slow=10,SNR=8.5 | | | | | | |
| **ILAR** | **Eielson Array** | **46.93** | **339** | P | **P** | **20 17 56.5** | **+0.2** |
| | 0.4nm,0.7s,baz=153,slow=6.6,SNR=9.1 | | | | | | |
| **AKASG** | **Malin Array Be** | **96.53** | **25** | P | **P** | **20 22 56.5** | **+0.9** |
| | 0.4nm,0.3s,baz=325,slow=6.1,SNR=3.3 | | | | | | |

*ISCJB **21** 20:28:47.9±0.5, 50°.10N±0°.03×18°.36E±0°.03, h0km, Error ellipse: s-maj=4.6km s-min=2.5km az=13.4*
*CSEM **21** 20:28:48.6±0.2, 50°.10N×18°.39E, h1km, ML2.8/11, Error ellipse: s-maj=5.8km s-min=3.2km az=13.0*
*IPEC **21** 20:28:49.0±0.2, 50°.07N×18°.47E, h1km±2km, ML1.8/3, Error ellipse: s-maj=2.1km s-min=1.1km az=160.0*
*VIE **21** 20:28:49.7±0.6, 49°.67N×18°.53E, h0km, mb2.1/2, ml2.5/3, Error ellipse: s-maj=3.8km s-min=2.4km az=116.0, Suspected Mining induced.*
*PRU **21** 20:28:50.2, 50°.09N×18°.35E, h0km*

**ISC 21 20:28:49.0±0.8, 50°.09N±0°.03×18°.42E±0°.02, h0km, n37, σ0ᵠ96/67, 1C, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAC** | **Raciborz** | **0.14** | **266** | *e*Pg | **Pg** | **20 28 53.2** | **+1.4** |
| R

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KHC** | **Kasperske Hory** | **3.29 255** | *e*PN | **Pn** | **20 29 40.9** | **-0.9** |
| KHC | | | *e*PG | **Pb** | **20 29 50.0** | **+1.7** |
| KHC | | | *e*SG | **Sg** | **20 30 33.0** | **-1.7** |
| | comp=Z,5.1nm,0.4s | | | | | |
| **KHC** | **Kasperske Hory** | **3.29 255** | Pn | **Pn** | **20 29 40.9** | **-0.9** |
| **MOA** | **Molln** | **3.54 232** | ⇑*i*Sg | **Sg** | **20 30 40.6** | **-2.0** |
| | 6.1nm,0.8s | | | | | |
| **MOA** | **Molln** | **3.54 232** | Sg | **Sg** | **20 30 40.6** | **-2.0** |
| | 6.1nm,0.8s | | | | | |

*ISCJB* ***21*** *20:29:56.6±0.6, 49°.80N±0°.04×18°.48E±0°.04, h0km, Error ellipse: s-maj=6.6km s-min=2.8km az=20.2*
*IPEC* ***21*** *20:29:56.8±0.2, 49°.83N×18°.56E, h0km±3km, ML1.4/2, Error ellipse: s-maj=2.1km s-min=1.1km az=161.0*
*CSEM* ***21*** *20:29:57.4±0.3, 49°.80N×18°.45E, h1km, ML2.7/6, Error ellipse: s-maj=6.9km s-min=2.9km az=21.0*
*PRU* ***21*** *20:29:57.9, 49°.84N×18°.46E, h0km*

**ISC 21 20:29:57.2±0.9, 49°.83N±0°.05×18°.48E±0°.03, h0km, n27, σ0s74/44, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKC** | **Ostrava-Krasne** | **0.22** | **273** | *e*PG | **Pg** | **20 30 02.3** | **+1.0** |
| OKC | | | | *e*SG | **Sg** | **20 30 06.1** | **+2.0** |
| | comp=Z,23nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.22** | **273** | Pg | **Pg** | **20 30 02.3** | **+1.0** |
| OKC | | | | Sg | **Sg** | **20 30 06.1** | **+2.0** |
| | 23nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.61** | **266** | *e*Pg | **Pg** | **20 30 09.7** | **+0.9** |
| MORC | | | | *e*Sg | **Sg** | **20 30 17.5** | **+0.8** |
| | 8.9nm,0.2s,baz=85 | | | | | | |
| **LANS** | **Liptovska Anna** | **0.93** | **136** | *e*PG | **Pg** | **20 30 15.1** | **+0.1** |
| LANS | | | | *e*SG | **Sg** | **20 30 28.3** | **+1.2** |
| **LANS** | **Liptovska Anna** | **0.93** | **136** | *e*Pg | **Pg** | **20 30 15.1** | **+0.1** |
| LANS | | | | *e*Sg | **Sg** | **20 30 28.3** | **+1.2** |
| **KRLC** | **Kraliky** | **1.13** | **283** | *e*PG | **Pg** | **20 30 18.4** | **-0.3** |
| KRLC | | | | *e*SG | **Sb** | **20 30 34.0** | **-0.7** |
| **KRLC** | **Kraliky** | **1.13** | **283** | Pg | **Pg** | **20 30 18.4** | **-0.3** |
| KRLC | | | | Sg | **Sb** | **20 30 34.0** | **-0.7** |
| **VRAC** | **Vranov** | **1.33** | **248** | *e*Pg | **Pg** | **20 30 22.6** | **-0.1** |
| VRAC | | | | *e*Sg | **Sg** | **20 30 40.1** | **+0.1** |
| **VYHS** | **Vyhne** | **1.35** | **170** | *e*PN | **Pg** | **20 30 22.5** | **-0.6** |
| VYHS | | | | *e*SN | **Sg** | **20 30 40.9** | **+0.3** |
| **VYHS** | **Vyhne** | **1.35** | **170** | *e*Pn | **Sg** | **20 30 22.5** | **-0.6** |
| VYHS | | | | *e*Sn | **Sg** | **20 30 40.9** | **+0.3** |
| **DPC** | **Dobruska-Polom** | **1.49** | **291** | *e*PG | **Pn** | **20 30 24.7** | **-0.5** |
| DPC | | | | *e*SG | **Sn** | **20 30 45.1** | **-0.2** |
| | comp=Z,6.1nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.49** | **291** | Pg | **Pn** | **20 30 24.7** | **-0.5** |
| DPC | | | | Sg | **Sn** | **20 30 45.1** | **-0.2** |
| | 6.1nm,0.2s | | | | | | |
| **KRUC** | **Moravsky** | **1.56** | **241** | *e*Pg | **Pn** | **20 30 25.9** | **-0.3** |
| | baz=61 | | | | | | |
| KRUC | | | | *e*Sg | **Sb** | **20 30 47.2** | **0.0** |
| | 3.5nm,0.2s,baz=61 | | | | | | |
| **UPC** | **Upice** | **1.73** | **294** | *e*PG | **Pb** | **20 30 29.2** | **-0.6** |
| UPC | | | | *e*SG | **Sg** | **20 30 52.9** | **+0.3** |
| | comp=Z,5.2nm,0.2s | | | | | | |
| **UPC** | **Upice** | **1.73** | **294** | Pg | **Pb** | **20 30 29.2** | **-0.6** |
| UPC | | | | Sg | **Sg** | **20 30 52.9** | **+0.3** |
| | 5.2nm,0.2s | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.84** | **102** | *e*PN | **Pb** | **20 30 31.2** | **-0.5** |
| STHS | | | | *e*SN | **Sn** | **20 30 54.8** | **+0.7** |
| **STHS** | **Stebnicka Huta** | **1.84** | **102** | *e*Pn | **Pb** | **20 30 31.3** | **-0.5** |
| STHS | | | | *e*Sn | **Sn** | **20 30 54.8** | **+0.7** |
| **TREC** | **Trest** | **2.02** | **256** | *e*SG | **Sb** | **20 31 01.0** | **+0.5** |
| | comp=Z,4.3nm,0.3s | | | | | | |
| **TREC** | **Trest** | **2.02** | **256** | Sg | **Sb** | **20 31 01.0** | **+0.5** |
| | 4.3nm,0.3s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.39** | **274** | *e*SG | **Sb** | **20 31 12.0** | **+0.9** |
| **GOPC** | **GO Pecny, Ondr** | **2.39** | **274** | Sg | **Sb** | **20 31 12.0** | **+0.9** |
| **PRU** | **Pruhonice** | **2.55** | **275** | *e*SG | **Sg** | **20 31 18.5** | **-0.6** |
| **PRU** | **Pruhonice** | **2.55** | **275** | Sg | **Sg** | **20 31 18.5** | **-0.6** |
| **PVCC** | **Panska Ves** | **2.61** | **287** | *e*SG | **Sg** | **20 31 20.9** | **-0.1** |
| | comp=Z,6.5nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **2.61** | **287** | Sg | **Sg** | **20 31 20.9** | **-0.1** |
| | 6.5nm,0.2s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.27** | **260** | *e*SG | **Sg** | **20 31 42.1** | **-0.1** |
| **KHC** | **Kasperske Hory** | **3.27** | **260** | Sg | **Sg** | **20 31 42.1** | **-0.1** |

*MOS* ***21*** *21:08:54.1±1.9, 50°.54N×157°.62E, h40km, mb4.1/1, Error ellipse: s-maj=27.0km s-min=8.1km az=83.4*

**KRSC 21 21:08:54.2±1.3, 50°.54N×157°.62E, h40km±16km, ML3.8, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **0.97** | **279** | *e*P | Pn | 21 09 12.2 | +0.9 |
| SKR | | | | *e*S | Sn | 21 09 24.2 | +0.4 |
| **SKR** | **Severo-Kuril's** | **0.97** | **279** | *e*Pn | Pn | 21 09 12.2 | +0.9 |
| SKR | | | | *e*S | Sn | 21 09 24.1 | +0.3 |
| **PAU** | **Pauzhetka** | **1.06** | **331** | *e*P | Pn | 21 09 14.5 | +2.0 |
| PAU | | | | *e*S | Sn | 21 09 28.1 | +2.0 |
| **PAU** | **Pauzhetka** | **1.06** | **331** | *e*PN | Pn | 21 09 14.2 | +1.7 |
| PAU | | | | *e*S | Sn | 21 09 27.5 | +1.4 |
| **ASAK** | **Asacha** | **1.85** | **5** | *e*P | Pn | 21 09 25.2 | +1.7 |
| **RUS** | **Russkaya** | **1.98** | **16** | *e*P | Pn | 21 09 26.5 | +1.4 |
| RUS | | | | *e*S | Sn | 21 09 49.9 | +1.3 |
| **RUS** | **Russkaya** | **1.98** | **16** | PN | Pn | 21 09 26.5 | +1.4 |
| RUS | | | | S | Sn | 21 09 49.9 | +1.3 |
| **MTVR** | **Mutnovka** | **1.98** | **10** | *e*P | Pn | 21 09 27.7 | +2.4 |
| MTVR | | | | *e*S | Sn | 21 09 51.2 | +2.2 |
| **APC** | **Apacha** | **2.41** | **353** | *e*P | Pn | 21 09 34.2 | +3.2 |
| **APC** | **Apacha** | **2.41** | **353** | PN | Pn | 21 09 34.2 | +3.2 |
| **PET** | **Petropavlovsk** | **2.57** | **14** | *e*PN | Pn | 21 09 34.5 | +1.3 |
| PET | | | | *e*S | Sn | 21 10 05.0 | +1.8 |
| **UGLR** | **Uglovaya** | **2.77** | **15** | *e*P | Pn | 21 09 39.7 | +3.5 |
| **AVH** | **Avacha** | **2.81** | **14** | *e*P | Pn | 21 09 40.9 | +4.2 |
| **AVH** | **Avacha** | **2.81** | **14** | PN | Pn | 21 09 40.9 | +4.2 |
| **SMAR** | **Somma** | **2.82** | **15** | *e*P | Pn | 21 09 40.9 | +3.9 |
| **SMAR** | **Somma** | **2.82** | **15** | PN | Pn | 21 09 40.9 | +3.9 |
| **KOK** | **Koryaka** | **2.83** | **12** | *e*P | Pn | 21 09 40.8 | +3.9 |
| **KOK** | **Koryaka** | **2.83** | **12** | PN | Pn | 21 09 40.8 | +3.9 |
| **SDLR** | **Sedlovina** | **2.85** | **15** | *e*P | Pn | 21 09 39.6 | +2.3 |
| **SDLR** | **Sedlovina** | **2.85** | **15** | PN | Pn | 21 09 39.6 | +2.3 |
| **KRX** | **Arik** | **2.89** | **12** | *e*P | Pn | 21 09 41.7 | +3.8 |
| **SPN** | **Mys Shipunski** | **2.96** | **29** | P | Pn | 21 09 41.5 | +2.9 |
| **SPN** | **Mys Shipunski** | **2.96** | **29** | PN | Pn | 21 09 41.5 | +2.9 |
| **GNL** | **Ganaly** | **3.17** | **3** | *e*P | Pn | 21 09 44.6 | +3.0 |
| **GNL** | **Ganaly** | **3.17** | **3** | PN | Pn | 21 09 44.6 | +3.0 |
| **YSS** | **Yuzh-Sakhalins** | **10.45** | **256** | *e*PN | Pn | 21 11 23.8 | +2.5 |

*IDC* ***21*** *21:23:13.1±2.6, 19°.17S×171°.82E, h0km, mb3.7/4, mb1 4.1/5, mb1mx3.8/22, mbtmp3.7/5, ML3.3/1, MS4.2/4, Ms1 4.2/4, ms1mx3.6/37, Error ellipse: s-maj=136.7km s-min=25.2km az=149.0*

**ISC 21 21:23:16.7±2.2, 19°.7S±0°.7×172°.2E±0°.4, h35km, n16, σ0s72/12, mb3.8/4, MS4.2/4, 1D, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **5.82** | **246** | Pn | **Pn** | **21 24 41.3** | **+0.7** |
| | 0.9nm,0.3s,baz=1.2,slow=14,SNR=7.1 | | | | | | |
| **RAR** | **Rarotonga** | **26.33** | **98** | LR | LR | 21 39 39.6 | |
| | comp=Z,291nm,18.2s,baz=103,slow=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.52** | **263** | P | **P** | **21 30 10.0** | **-0.5** |
| | 0.6nm,1.0s,baz=90,slow=7.3,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **35.68** | **257** | P | **P** | **21 30 10.8** | **-1.1** |
| | 1.5nm,1.0s,baz=79,slow=8.2,SNR=7.6 | | | | | | |
| **SIJI** | **Sorong** | **44.18** | **290** | LR | LR | 21 49 21.7 | |
| | comp=Z,304nm,22.0s,slow=36 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **60.98** | **329** | LR | LR | 21 57 47.4 | |
| | comp=Z,304nm,18.7s,baz=296,slow=34 | | | | | | |
| **RPN** | **Rapa Nui** | **71.37** | **113** | LR | LR | 21 59 13.6 | |
| | comp=Z,115nm,19.3s,baz=264,slow=30 | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.09** | **47** | P | **P** | **21 35 59.3** | **0.0** |
| | 0.2nm,0.3s,baz=236,slow=6.4,SNR=4.4 | | | | | | |
| **ILAR** | **Eielson Array** | **89.91** | **16** | P | **P** | **21 36 11.8** | **+0.2** |
| | 0.5nm,0.8s,baz=237,slow=6.5,SNR=5.5 | | | | | | |
| **DPC** | **Dobruska-Polom** | **143.93** | **334** | *e*PKP | **PKPdf** | **21 42 47.7** | **-0.7** |
| DPC | | | | *ex* | x | 21 42 54.9 | |
| DPC | | | | *ex* | x | 21 42 59.3 | |
| **UPC** | **Upice** | **143.94** | **334** | *e*PKP | **PKPdf** | **21 42 47.5** | **-0.8** |
| UPC | | | | *ex* | x | 21 42 54.3 | |
| **BRG** | **Berggiesshubel** | **144.48** | **336** | *e*P | **PKPdf** | **21 42 48.4** | **-0.8** |
| | 10nm,1.0s | | | | | | |
| **PVCC** | **Panska Ves** | **144.51** | **335** | *e*PKP | **PKPdf** | **21 42 49.5** | **+0.2** |
| **KHC** | **Kasperske Hory** | **146.01** | **335** | *e*PKP | **PKPab** | **21 42 53.8** | **+0.5** |
| **GERES** | **GERESS Array B** | **146.18** | **334** | PKPbc | **PKPab** | **21 42 54.0** | **0.0** |
| | 2.0nm,0.8s,baz=29,slow=3.0,SNR=15 | | | | | | |
| **DAVA** | **Damuels** | **148.95** | **336** | ⇓*i*PKPbc | **PKPbc** | **21 43 02.0** | **+0.9** |
| | 5.6nm,1.1s | | | | | | |

*ISCJB* ***21*** *21:25:38.4±0.9, 31°.55S±0°.05×70°.64W±0°.07, h95km±19km, Error ellipse: s-maj=12.2km s-min=4.8km az=39.5*
*SJA* ***21*** *21:25:38.7±0.7, 31°.54S×70°.56W, h81km±8km, ML2.9, MW3.2*
*GUC* ***21*** *21:25:39.4±0.5, 31°.76S×71°.31W, h92km±33km, ML3.1*

**ISC 21 21:25:38.7±1.8, 31°.58S±0°.06×70°.63W±0°.07, h99km±26km, n17, σ0s92/32, 1D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RTLS** | **Leoncito** | **1.16** | **101** | *e*P | **Pn** | **21 26 01.5** | **+0.4** |
| RTLS | | | | *e*S | **Sn** | **21 26 17.2** | **-0.7** |
| **AUSP** | **Uspallata** | **1.24** | **122** | *e*P | **Pn** | **21 26 02.1** | **+0.1** |
| AUSP | | | | *e*S | **Sn** | **21 26 19.6** | **-0.1** |
| **ROC1** | **El Roble** | **1.43** | **193** | *e*P | **Pn** | **21 26 05.1** | **+0.8** |
| ROC1 | | | | *e*S | **Sn** | **21 26 25.1** | **+1.4** |
| **PEL** | **Peldehue** | **1.56** | **182** | ⇓*i*P | **Pn** | **21 26 05.6** | **-0.1** |
| PEL | | | | *i*S | **Sn** | **21 26 25.9** | **-0.4** |
| PEL | | | | AML | AML | 21 26 27.0 | |
| | comp=E,455nm,0.3s | | | | | | |
| **RTCV** | **Cerro Valdivia** | **1.80** | **100** | *e*P | **Pn** | **21 26 09.0** | **+0.2** |
| RTCV | | | | *e*S | **Sn** | **21 26 31.0** | **-0.7** |
| **CLCH** | **Cerro Calan** | **1.82** | **178** | *e*P | **Pn** | **21 26 09.5** | **+0.5** |
| CLCH | | | | *i*S | **Sn** | **21 26 32.3** | **+0.4** |
| CLCH | | | | AML | AML | 21 26 38.8 | |
| | comp=E,223nm,0.3s | | | | | | |
| **ASAL** | **Salagasta** | **1.83** | **124** | *e*P | **Pn** | **21 26 09.4** | **+0.3** |
| ASAL | | | | *e*S | **Sn** | **21 26 32.5** | **+0.2** |
| **RTLL** | **Cerro Villicun** | **1.86** | **83** | *e*P | **Pn** | **21 26 09.5** | **0.0** |
| RTLL | | | | *e*S | **Sn** | **21 26 32.1** | **-0.8** |
| **RCDM** | **Rinconada Maip** | **1.91** | **184** | *e*P | **Pn** | **21 26 10.2** | **0.0** |
| RCDM | | | | *i*S | **Sn** | **21 26 33.4** | **-0.7** |
| **ARCO** | **CERRO ARCO** | **1.92** | **132** | *e*P | **Pn** | **21 26 11.5** | **+1.2** |
| ARCO | | | | *e*S | **Sn** | **21 26 34.5** | **+0.1** |
| ARCO | | | | IAML | | 21 26 37.2 | |
| | comp=Z,135nm,0.2s | | | | | | |
| **AMOG** | **MOGNA** | **1.94** | **71** | *e*P | **Pn** | **21 26 10.8** | **+0.3** |
| AMOG | | | | *e*S | **Sn** | **21 26 33.7** | **-1.1** |
| **ANTU** | **Antumapu** | **1.99** | **180** | *i*S | **Sn** | **21 26 35.2** | **-0.6** |
| **CFAA** | **Coronel Fontan** | **2.04** | **91** | *e*P | **Pn** | **21 26 11.7** | **-0.2** |
| CFAA | | | | *e*S | **Sn** | **21 26 36.5** | **-0.6** |
| **TACH** | **Talagante** | **2.09** | **187** | *e*P | **Pn** | **21 26 11.8** | **-0.6** |
| TACH | | | | *i*S | **Sn** | **21 26 35.4** | **-2.7** |
| **AAGR** | **Agrelo** | **2.14** | **135** | *e*P | **Pn** | **21 26 14.0** | **+0.8** |
| AAGR | | | | *e*S | **Sn** | **21 26 40.3** | **+0.7** |
| **AGUA** | **GUANDACOL** | **2.78** | **42** | *e*P | **Pn** | **21 26 23.4** | **+1.8** |
| **VCA** | **Vinchina** | **3.52** | **37** | *e*P | **Pn** | **21 26 32.3** | **+0.7** |
| VCA | | | | *e*S | **Sn** | **21 27 11.0** | **-1.5** |
| VCA | | | | IAML | | 21 27 22.4 | |
| | comp=Z,15nm,0.3s | | | | | | |

*NIED* ***21*** *21:43:00, 23°.90N×122°.50E, h20km, Mw4.2 Best double couple: M0 2.30000×10^15 NP1:φ=267.00000°, δ=10.00000°, λ=113.00000°. NP2:φ=63.00000°, δ=80.00000°, λ=86.00000°.*
*IDC* ***21*** *21:43:13.9±1.1, 23°.91N×122°.28E, h0km, mb3.8/8, mb1 3.9/9, mb1mx3.7/35, mbtmp3.9/9, ML4.1/1, Error ellipse: s-maj=58.2km s-min=18.0km az=66.0*
*ISCJB* ***21*** *21:43:16.1±0.7, 23°.87N±0°.02×122°.57E±0°.02, h12km±4km, mb3.7/8, Error ellipse: s-maj=3.0km s-min=2.2km az=151.5*
*JMA* ***21*** *21:43:16.8±0.3, 23°.93N×122°.52E, h20km±5km, M3.6*
*TAP* ***21*** *21:43:17.2, 23°.96N×122°.52E, h22km, ML4.1, C*

**ISC 21 21:43:15.8±1.1, 23°.87N±0°.02×122°.55E±0°.02, h16km±7km, n74, σ0s74/132, mb3.8/8, 1C-6D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonagunijimaku** | **0.68** | **32** | P | **Pb** | **21 43 29.3** | **0.0** |
| JYNG | | | | *e*S | **Sg** | **21 43 37.2** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **0.72** | **36** | P | **Pb** | **21 43 30.2** | **+0.1** |
| YOJ | | | | *e*S | **Sg** | **21 43 38.6** | **-1.0** |
| **HWA** | **Hwalien** | **0.87** | **277** | *e*P | **Pn** | **21 43 33.1** | **-0.2** |
| | baz=257 | | | | | | |
| HWA | | | | *e*S | **Sg** | **21 43 44.8** | **+0.7** |
| | baz=257 | | | | | | |
| **TWD** | **Chiawan** | **0.89** | **283** | *e*P | **Pb** | **21 43 32.9** | **0.0** |
| | baz=263 | | | | | | |
| TWD | | | | *e*S | **Sb** | **21 43 44.7** | **+0.1** |
| | baz=263 | | | | | | |
| **ENA** | **Nanau** | **0.92** | **307** | *e*P | **Pb** | **21 43 33.5** | **+0.1** |
| | baz=303 | | | | | | |
| ENA | | | | *e*S | **Sg** | **21 43 46.2** | **+0.5** |
| | baz=303 | | | | | | |
| **TWC** | **Suao** | **0.97** | **319** | ⇑*i*P | **Pb** | **21 43 33.9** | **-0.4** |
| | baz=317 | | | | | | |
| TWC | | | | *e*S | **Sb** | **21 43 46.7** | **-0.2** |
| | baz=317 | | | | | | |
| **ESL** | **Shilin** | **1.02** | **267** | *e*P | **Pb** | **21 43 34.6** | **-0.5** |
| | baz=261 | | | | | | |
| ESL | | | | *e*S | **Sb** | **21 43 47.9** | **-0.4** |
| | baz=261 | | | | | | |
| **ILA** | **Ilan** | **1.15** | **321** | P | **Pb** | **21 43 37.7** | **+0.4** |
| | baz=309 | | | | | | |
| ILA | | | | *e*S | **Sg** | **21 43 52.9** | **-0.1** |
| | baz=309 | | | | | | |
| **TWE** | **Neicheng** | **1.16** | **317** | ⇓P | **Pn** | **21 43 37.5** | **0.0** |
| | baz=314 | | | | | | |
| TWE | | | | *e*S | **Sg** | **21 43 53.5** | **0.0** |
| | baz=314 | | | | | | |
| **HATJ** | **Hateruma jima** | **1.17** | **81** | P | **Pg** | **21 43 38.3** | **-0.1** |
| HATJ | | | | *e*S | **Sg** | **21 43 54.0** | **+0.4** |
| **ENTT** | **Nioudou** | **1.18** | **311** | *e*P | **Pb** | **21 43 37.8** | **+0.1** |
| | baz=291 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **21 43 53.2** | **-0.1** |
| | baz=291 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.18** | **67** | P | **Pg** | **21 43 38.8** | **+0.3** |
| IRIF | | | | S | **Sg** | **21 43 53.8** | **-0.1** |
| **EHY** | **Hungye** | **1.18** | **252** | P | **Pn** | **21 43 37.8** | **+0.1** |
| | baz=247 | | | | | | |
| EHY | | | | *e*S | **Sb** | **21 43 53.0** | **+0.2** |
| | baz=247 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.20** | **283** | P | **Pn** | **21 43 38.2** | **-0.2** |
| | baz=265 | | | | | | |
| WHF | | | | *e*S | **Sb** | **21 43 54.1** | **+0.1** |
| | baz=265 | | | | | | |
| **NNS** | **Nan Shan** | **1.21** | **298** | P | **Pn** | **21 43 38.3** | **0.0** |
| | baz=280 | | | | | | |
| NNS | | | | *e*S | **Sb** | **21 43 53.2** | **-0.7** |
| | baz=280 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.24** | **336** | *e*P | **Pn** | **21 43 38.2** | **-0.3** |
| | baz=353 | | | | | | |
| TWB1 | | | | *e*S | **Sb** | **21 43 54.3** | **-0.3** |
| | baz=353 | | | | | | |
| **TWF1** | **Yuli** | **1.26** | **246** | P | **Pb** | **21 43 39.3** | **+0.2** |
| | baz=241 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **21 43 55.1** | **0.0** |
| | baz=241 | | | | | | |
| **TWT** | **Tachien** | **1.31** | **287** | P | **Pb** | **21 43 40.1** | **0.0** |
| | baz=271 | | | | | | |
| **CHKT** | **Chengkung** | **1.33** | **235** | *e*P | **Pb** | **21 43 40.4** | **0.0** |
| | baz=217 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **21 43 55.6** | **-1.5** |
| | baz=217 | | | | | | |
| **NSK** | **Sanguang** | **1.35** | **307** | ⇓*i*P | **Pn** | **21 43 40.1** | **+0.1** |
| | baz=289 | | | | | | |
| NSK | | | | *e*S | **Sn** | **21 43 56.9** | **-0.7** |
| | baz=289 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.38** | **330** | *e*P | **Pn** | **21 43 40.8** | **+0.2** |
| | baz=329 | | | | | | |
| NWF | | | | *e*S | **Sb** | **21 43 59.2** | **+0.4** |
| | baz=329 | | | | | | |
| **TWA** | **Mucha** | **1.41** | **322** | P | **Pb** | **21 43 42.0** | **+0.2** |
| | baz=320 | | | | | | |
| TWA | | | | *e*S | **Sg** | **21 44 01.3** | **0.0** |
| | baz=320 | | | | | | |
| **TAP1** | **Taipei** | **1.49** | **321** | *e*P | **Pb** | **21 43 42.6** | **-0.5** |
| | baz=320 | | | | | | |
| TAP1 | | | | *e*S | **Sb** | **21 44 02.4** | **+0.7** |
| | baz=320 | | | | | | |
| **TAP** | **Taipei** | **1.50** | **321** | *e*P | **Pb** | **21 43 43.1** | **-0.1** |
| | baz=320 | | | | | | |
| TAP | | | | *e*S | **Sg** | **21 44 03.2** | **-0.9** |
| | baz=320 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.51** | **271** | ⇓P | **Pn** | **21 43 43.0** | **+0.7** |
| | baz=266 | | | | | | |
| SMLT | | | | *e*S | **Sb** | **21 44 02.5** | **+0.1** |
| | baz=266 | | | | | | |
| **YUS** | **Yu-Shan** | **1.51** | **256** | P | **Pn** | **21 43 43.4** | **+0.8** |
| | baz=251 | | | | | | |
| YUS | | | | *e*S | **Sn** | **21 44 01.5** | **-0.7** |
| | baz=251 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.54** | **71** | P | **Pb** | **21 43 43.6** | **-0.4** |
| JIJ | | | | S | **Sn** | **21 44 02.6** | **+0.3** |
| **TYC** | **Yuchr** | **1.54** | **271** | *e*P | **Pn** | **21 43 43.4** | **+0.7** |
| | baz=267 | | | | | | |
| **ELDTW** | **Lidau** | **1.56** | **244** | *e*P | **Pn** | **21 43 43.2** | **+0.2** |
| | baz=240 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.60** | **320** | *e*P | **Pb** | **21 43 44.4** | **-0.5** |
| | baz=338 | | | | | | |
| TWS1 | | | | *e*S | **Sg** | **21 44 06.7** | **-0.6** |
| | baz=338 | | | | | | |
| **NSTT** | **Nanjuang** | **1.60** | **298** | ⇓P | **Pb** | **21 43 44.8** | **-0.2** |
| | baz=282 | | | | | | |
| NSTT | | | | *e*S | **Sb** | **21 44 04.5** | **-0.5** |
| | baz=282 | | | | | | |
| **ALS** | **Alishan** | **1.64** | **258** | ⇓*i*P | **Pb** | **21 43 45.5** | **-0.3** |
| | baz=253 | | | | | | |
| ALS | | | | S | **Sn** | **21 44 05.9** | **+0.8** |
| | baz=253 | | | | | | |
| **TWY** | **Chenhua** | **1.64** | **329** | *e*P | **Pb** | **21 43 46.1** | **+0.4** |
| | baz=328 | | | | | | |
| TWY | | | | *e*S | **Sg** | **21 44 07.7** | **-1.0** |
| | baz=328 | | | | | | |
| **NCU** | **National Centr** | **1.65** | **312** | *e*P | **Pb** | **21 43 45.3** | **-0.5** |
| | baz=310 | | | | | | |
| NCU | | | | *e*S | **Sg** | **21 44 07.9** | **-1.2** |
| | baz=310 | | | | | | |
| **TWQ1** | **Liyutan** | **1.69** | **287** | ⇓*i*P | **Pb** | **21 43 46.6** | **+0.1** |
| | baz=283 | | | | | | |
| TWQ1 | | | | *e*S | **Sb** | **21 44 07.9** | **+0.4** |
| | baz=283 | | | | | | |
| **WNT** | **Mingjian** | **1.70** | **271** | *e*P | **Pb** | **21 43 46.6** | **-0.2** |
| | baz=266 | | | | | | |
| WNT | | | | *e*S | **Sb** | **21 44 08.4** | **+0.4** |
| | baz=266 | | | | | | |
| **HSN** | **Hsinchu** | **1.71** | **303** | *e*P | **Pn** | **21 43 46.0** | **+1.0** |
| | baz=301 | | | | | | |
| **TWG** | **Pinlang** | **1.71** | **233** | *e*P | **Pn** | **21 43 45.4** | **+0.4** |
| | baz=219 | | | | | | |
| TWG | | | | *e*S | **Sn** | **21 44 06.2** | **-0.4** |
| | baz=219 | | | | | | |
| **NSY** | **Sanyi** | **1.72** | **289** | *e*P | **Pb** | **21 43 47.0** | **-0.1** |
| | baz=285 | | | | | | |
| NSY | | | | *e*S | **Sb** | **21 44 09.1** | **+0.7** |
| | baz=285 | | | | | | |
| **TCU** | **Taichung** | **1.73** | **279** | *e*P | **Pb** | **21 43 47.3** | **+0.1** |
| | baz=276 | | | | | | |
| TCU | | | | *e*S | **Sb** | **21 44 09.8** | **+1.0** |
| | baz=276 | | | | | | |
| **CHN5** | **Tsauling** | **1.73** | **261** | *e*P | **Pb** | **21 43 47.3** | **-0.1** |
| | baz=257 | | | | | | |
| CHN5 | | | | *e*S | **Sb** | **21 44 09.6** | **+0.7** |
| | baz=257 | | | | | | |
| **JISG** | **Ishigakijimahi** | **1.76** | **66** | P | **Pn** | **21 43 46.4** | **+0.7** |
| JISG | | | | S | **Sn** | **21 44 07.7** | **-0.1** |
| **STYT** | **Tauyuan** | **1.79** | **247** | *e*P | **Pb** | **21 43 47.6** | **-0.6** |
| | baz=232 | | | | | | |
| STYT | | | | *e*S | **Sn** | **21 44 09.3** | **+0.8** |
| | baz=232 | | | | | | |
| **WGK** | **Gukeng** | **1.83** | **265** | *e*P | **Pb** | **21 43 48.2** | **-0.6** |
| | baz=260 | | | | | | |
| WGK | | | | *e*S | **Sb** | **21 44 12.7** | **+1.2** |
| | baz=260 | | | | | | |
| **CHN4** | **Tsaushan** | **1.86** | **254** | *e*P | **Pb** | **21 43 49.3** | **-0.3** |
| | baz=250 | | | | | | |
| CHN4 | | | | *e*S | **Sb** | **21 44 13.1** | **+0.4** |
| | baz=250 | | | | | | |
| **WTP** | **Ta-pu** | **1.88** | **251** | *e*P | **Pb** | **21 43 49.5** | **-0.3** |
| | baz=236 | | | | | | |
| WTP | | | | *e*S | **Sb** | **21 44 12.8** | **-0.3** |
| | baz=236 | | | | | | |
| **CHN2** | **Minshiung** | **1.93** | **260** | *e*P | **Pb** | **21 43 50.6** | **0.0** |
| | baz=256 | | | | | | |
| CHN2 | | | | *e*S | **Sb** | **21 44 14.8** | **+0.4** |
| | baz=256 | | | | | | |
| **ECL** | **Taimali** | **1.94** | **229** | *e*P | **Pn** | **21 43 49.0** | **+0.8** |
| | baz=225 | | | | | | |
| ECL | | | | *e*S | **Sn** | **21 44 11.4** | **-0.8** |
| | baz=225 | | | | | | |
| **SGST** | **Jiashian** | **1.97** | **247** | *e*P | **Pb** | **21 43 51.5** | **+0.3** |
| | baz=243 | | | | | | |
| SGST | | | | *e*S | **Sb** | **21 44 15.6** | **0.0** |
| | baz=243 | | | | | | |
| **CHN1** | **Nanshi** | **1.97** | **250** | *e*P | **Pb** | **21 43 51.1** | **-0.3** |
| | baz=246 | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **21 44 16.2** | **+0.4** |
| | baz=246 | | | | | | |
| **CHY** | **Chiayi** | **1.98** | **260** | *e*P | **Pb** | **21 43 50.5** | **-1.0** |
| | baz=255 | | | | | | |
| CHY | | | | *e*S | **Sb** | **21 44 16.6** | **+0.6** |
| | baz=255 | | | | | | |
| **TWK** | **Hsinying** | **1.98** | **253** | *e*P | **Pn** | **21 43 49.9** | **+1.1** |
| | baz=248 | | | | | | |
| TWK | | | | *e*S | **Sb** | **21 44 15.3** | **-0.8** |
| | baz=248 | | | | | | |
| **LAY** | **Lan-yu** | **2.04** | **207** | *e*P | **Pn** | **21 43 50.0** | **+0.5** |
| | baz=204 | | | | | | |
| LAY | | | | *e*S | **Sn** | **21 44 13.6** | **-1.2** |
| | baz=204 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **2.07** | **270** | *e*P | **Pb** | **21 43 51.7** | **-1.4** |
| | baz=266 | | | | | | |
| WTCT | | | | *e*S | **Sb** | **21 44 18.1** | **-0.5** |
| | baz=266 | | | | | | |
| **SSD** | **Sandimen** | **2.09** | **238** | *e*P | **Pb** | **21 43 52.5** | **-0.8** |
| | baz=227 | | | | | | |
| SSD | | | | *e*S | **Sb** | **21 44 17.9** | **-1.1** |
| | baz=227 | | | | | | |
| **JTJ** | **Tarama** | **2.11** | **68** | P | **Pb** | **21 43 52.8** | **-0.9** |
| JTJ | | | | *e*S | **Sn** | **21 44 17.3** | **+0.9** |
| **WSF** | **Szhu** | **2.14** | **264** | *e*P | **Pb** | **21 43 53.2** | **-1.0** |
| | baz=260 | | | | | | |
| **CHN3** | **Shinhua** | **2.15** | **249** | *e*P | **Pb** | **21 43 55.0** | **+0.5** |
| | baz=245 | | | | | | |
| CHN3 | | | | *e*S | **Sb** | **21 44 22.6** | **+1.7** |
| | baz=245 | | |

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JYNG** | **Yonagunijimaku** | **0.67** | **35** | P | **Pb** | **21 47 11.7** | **-0.1** |
| **YOJ** | **Yonaguni jima** | **0.72** | **38** | P | **Pb** | **21 47 12.7** | **+0.1** |
| YOJ | | | | *e*S | **Sg** | **21 47 21.5** | **-0.2** |
| **HWA** | **Hwalien** baz=258 | **0.84** | **276** | *e*P | **Pg** | **21 47 13.5** | **-1.1** |
| **TWD** | **Chiawan** baz=279 | **0.87** | **282** | *e*P | **Pb** | **21 47 15.2** | **+0.1** |
| TWD | | | | *e*S | **Sn** | **21 47 27.7** | **-0.9** |
| **ENA** | **Nanau** baz=304 | **0.89** | **307** | *e*P | **Pg** | **21 47 15.6** | **+0.1** |
| ENA | | | | *e*S | **Sn** | **21 47 28.7** | **-0.5** |
| **TWC** | **Suao** baz=308 | **0.94** | **319** | *i* P | **Pb** | **21 47 16.2** | **-0.2** |
| TWC | | | | *e*S | **Sg** | **21 47 28.8** | **+0.1** |
| **ESL** | **Shilin** baz=262 | **1.00** | **266** | *e*P | **Pb** | **21 47 17.3** | **-0.1** |
| **ILA** | **Ilan** baz=309 | **1.12** | **321** | *e*P | **Pg** | **21 47 19.8** | **0.0** |
| ILA | | | | S | **Sn** | **21 47 35.2** | **+0.4** |
| **TWE** | **Neicheng** baz=315 | **1.13** | **317** | *e*P | **Pn** | **21 47 19.8** | **0.0** |
| TWE | | | | *e*S | **Sn** | **21 47 35.5** | **+0.3** |
| **ENTT** | **Nioudou** baz=292 | **1.15** | **311** | *e*P | **Pn** | **21 47 20.1** | **+0.1** |
| ENTT | | | | *e*S | **Sn** | **21 47 35.4** | **-0.1** |
| **EHY** | **Hungye** baz=248 | **1.17** | **251** | *e*P | **Pn** | **21 47 19.9** | **-0.3** |
| EHY | | | | *e*S | **Sn** | **21 47 35.8** | **-0.2** |
| **WHF** | **Hehuan Shan** baz=267 | **1.18** | **282** | *e*P | **Pn** | **21 47 20.4** | **-0.3** |
| WHF | | | | *e*S | **Sn** | **21 47 36.5** | **-0.4** |
| **NNS** | **Nan Shan** baz=282 | **1.18** | **298** | ⇑P | **Pb** | **21 47 20.7** | **+0.1** |
| NNS | | | | *e*S | **Sb** | **21 47 35.5** | **-0.3** |
| **HATJ** | **Hateruma jima** | **1.18** | **82** | *e*S | **Sg** | **21 47 36.1** | **-0.3** |
| **IRIF** | **Iriomote-Funau** | **1.19** | **68** | P | **Pg** | **21 47 21.5** | **+0.4** |
| IRIF | | | | *e*S | **Sg** | **21 47 36.5** | **0.0** |
| **TWF1** | **Yuli** baz=242 | **1.25** | **245** | *e*P | **Pb** | **21 47 21.8** | **+0.2** |
| TWF1 | | | | *e*S | **Sb** | **21 47 37.7** | **+0.1** |
| **TWT** | **Tachien** baz=271 | **1.28** | **286** | *e*P | **Pb** | **21 47 22.4** | **+0.1** |
| TWT | | | | *e*S | **Sn** | **21 47 39.4** | **+0.3** |
| **NSK** | **Sanguang** baz=290 | **1.32** | **306** | ⇑P | **Pb** | **21 47 22.7** | **-0.1** |
| NSK | | | | *e*S | **Sb** | **21 47 39.6** | **-0.1** |
| **CHKT** | **Chengkung** baz=231 | **1.33** | **234** | *e*P | **Pg** | **21 47 24.3** | **+0.6** |
| **NWF** | **Wu-fen Shan** baz=329 | **1.35** | **330** | *e*P | **Pn** | **21 47 22.9** | **0.0** |
| NWF | | | | S | **Sg** | **21 47 41.9** | **+0.1** |
| **TWA** | **Mucha** baz=321 | **1.38** | **322** | *e*P | **Pg** | **21 47 24.5** | **-0.2** |
| TWA | | | | *e*S | **Sg** | **21 47 43.0** | **+0.4** |
| **SMLT** | **Sun Moon Lake** baz=268 | **1.49** | **270** | *e*P | **Pb** | **21 47 26.2** | **+0.5** |
| SMLT | | | | *e*S | **Sb** | **21 47 45.4** | **+0.8** |
| **YUS** | **Yu-Shan** baz=253 | **1.50** | **255** | *e*P | **Pn** | **21 47 25.3** | **+0.1** |
| YUS | | | | *e*S | **Sn** | **21 47 44.6** | **-0.2** |
| **TYC** | **Yuchr** baz=268 | **1.52** | **271** | *e*P | **Pb** | **21 47 26.8** | **+0.5** |
| **JIJ** | **Ishigaki jima** | **1.55** | **72** | P | **Pn** | **21 47 25.8** | **+0.3** |
| JIJ | | | | S | **Sn** | **21 47 45.1** | **-0.4** |
| **TWS1** | **Kuangyinshan** baz=336 | **1.57** | **320** | *e*P | **Pb** | **21 47 26.8** | **-0.3** |
| **NSTT** | **Nanjuang** baz=283 | **1.57** | **298** | *e*P | **Pb** | **21 47 27.4** | **+0.2** |
| NSTT | | | | *e*S | **Sb** | **21 47 47.0** | **+0.1** |
| **ALS** | **Alishan** baz=255 | **1.62** | **257** | *e*P | **Pb** | **21 47 27.8** | **-0.4** |
| ALS | | | | *e*S | **Sn** | **21 47 48.3** | **+0.6** |
| **TWQ1** | **Liyutan** baz=284 | **1.66** | **286** | *e*P | **Pb** | **21 47 28.8** | **+0.2** |
| TWQ1 | | | | *e*S | **Sb** | **21 47 50.2** | **+0.7** |
| **NSY** | **Sanyi** baz=287 | **1.69** | **288** | *e*P | **Pb** | **21 47 28.9** | **-0.3** |
| NSY | | | | *e*S | **Sb** | **21 47 50.5** | **+0.1** |
| **TCU** | **Taichung** baz=277 | **1.71** | **279** | *e*P | **Pb** | **21 47 29.7** | **+0.3** |
| TCU | | | | *e*S | **Sb** | **21 47 51.7** | **+0.9** |
| **TWG** | **Pinlang** baz=242 | **1.71** | **232** | *e*P | **Pn** | **21 47 28.0** | **+0.3** |
| **CHN5** | **Tsauling** baz=258 | **1.72** | **260** | *e*P | **Pb** | **21 47 29.3** | **-0.4** |
| CHN5 | | | | *e*S | **Sb** | **21 47 52.3** | **+1.1** |
| **JISG** | **Ishigakijimahi** | **1.77** | **67** | P | **Pn** | **21 47 28.7** | **+0.2** |
| JISG | | | | *e*S | **Sn** | **21 47 50.0** | **-0.9** |
| **STYT** | **Tauyuan** baz=234 | **1.78** | **246** | *e*P | **Pb** | **21 47 30.3** | **-0.4** |
| STYT | | | | *e*S | **Sb** | **21 47 52.6** | **-0.3** |
| **CHN4** | **Tsaushan** baz=241 | **1.85** | **253** | *e*P | **Pb** | **21 47 31.9** | **0.0** |
| CHN4 | | | | *e*S | **Sb** | **21 47 55.0** | **0.0** |
| **WTP** | **Ta-pu** baz=238 | **1.87** | **250** | *e*P | **Pb** | **21 47 32.4** | **+0.2** |
| WTP | | | | *e*S | **Sb** | **21 47 55.1** | **-0.4** |
| **SGST** | **Jiashian** baz=244 | **1.96** | **246** | *e*P | **Pb** | **21 47 32.9** | **-0.8** |
| SGST | | | | *e*S | **Sb** | **21 47 57.5** | **-0.5** |
| **CHN1** | **Nanshi** baz=248 | **1.96** | **249** | *e*P | **Pb** | **21 47 34.0** | **+0.1** |
| CHN1 | | | | *e*S | **Sb** | **21 47 58.4** | **+0.2** |
| **SSD** | **Sandimen** baz=227 | **2.08** | **237** | *e*P | **Pb** | **21 47 35.9** | **0.0** |

*ISCJB **21** 21:51:59.5±0.8,24°.75N±0°.09×109°.14W±0°.09,h16km, mb4.2/5,MS3.5/1,Error ellipse: s-maj=15.6km s-min=7.0km az=140.9*

*IDC **21** 21:51:59.1±1.2,24°.83N×109°.16W,h0km,mb4.2/5, mb1 4.4/8,mb1mx4.0/34,mbtmp4.1/8,ML3.7/3,MS3.6/1, Ms1 3.6/1,ms1mx2.9/33,Error ellipse: s-maj=29.7km s-min=22.2km az=50.0*

**ISC 21 21:52:00.9±0.9,24°.7N±0°.1×109°.21W±0°.10,h16km,n11, σ1§47/13,mb4.2/5,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** 273nm,0.3s,baz=36,slow=4.8,SNR=77 | **1.16** | **240** | Pn | **Pn** | **21 52 19.9** | **-2.6** |
| LPIG | | | | Sn | **Sb** | **21 52 38.5** | **+1.0** |
| **TXAR** | **Lajitas Array** 254nm,0.3s,baz=173,slow=22,SNR=5.2 | **6.77** | **46** | Pn | **Pn** | **21 53 38.4** | **-1.4** |
| TXAR | 1.0nm,0.3s,baz=229,slow=13,SNR=18 | | | Sn | **Sn** | **21 54 54.6** | **-2.0** |
| TXAR | 1.4nm,0.3s,baz=243,slow=23,SNR=4.2 | | | Lg | Lg | 21 55 33.8 | |
| **ANMO** | **Albuquerque** 2.1nm,0.3s,baz=232,slow=30,SNR=5.2 | **10.49** | **13** | Pn | **Pn** | **21 54 31.7** | **+0.8** |
| **PFO** | **Pinyon Flat Ob** 0.2nm,0.3s,baz=202,slow=13,SNR=9.5 | **10.91** | **326** | Pn | **Pn** | **21 54 37.0** | **+0.5** |
| **NVAR** | **Mina Array Bea** 0.2nm,0.3s,baz=137,slow=17,SNR=4.0 | **15.72** | **333** | Pn | **Pn** | **21 55 42.9** | **+0.9** |
| **NEW** | **Newport** 0.1nm,0.3s,baz=144,slow=12,SNR=11 | **24.34** | **347** | P | **P** | **21 57 18.4** | **+0.4** |
| NEW | 6.9nm,0.6s,baz=150,slow=10,SNR=13 | | | LR | LR | 22 06 13.8 | |
| | comp=Z,149nm,20.4s,baz=24,slow=35 | | | | | | |
| **ILAR** | **Eielson Array** 2.3nm,1.0s,baz=153,slow=7.0,SNR=19 | **46.85** | **339** | P | **P** | **22 00 30.6** | **+0.6** |
| **CPUP** | **Villa Florida** 1.1nm,0.6s,baz=204,slow=18,SNR=3.7 | **71.30** | **132** | P | **P** | **22 03 22.0** | **+2.1** |
| **ESDC** | **Sonseca Array** 1.0nm,0.7s,baz=304,slow=5.1,SNR=6.8 | **85.44** | **48** | P | **P** | **22 04 38.4** | **+0.3** |
| **FINES** | **FINESS Array B** 2.0nm,0.7s,baz=129,slow=1.2,SNR=4.2 | **86.92** | **20** | P | **P** | **22 04 44.0** | **-0.8** |
| **WRA** | **Warramunga Arr** 0.3nm,0.6s,baz=74,slow=3.3,SNR=3.9 | **121.47** | **261** | PKP | **PKPdf** | **22 10 53.7** | **-0.6** |

*ISCJB **21** 21:58:36.8±0.4,43°.03N±0°.04×141°.66E±0°.06, h144km±3km,mb3.5/9,Error ellipse: s-maj=8.4km s-min=5.2km az=37.9*

*JMA **21** 21:58:37.9±0.1,43°.04N×141°.64E,h140km±1km,M3.1*

*IDC **21** 21:58:37.7±1.0,43°.06N×141°.66E,h138km±8km,mb3.3/8, mb1 3.4/9,mb1mx3.2/29,mbtmp3.6/9,Error ellipse: s-maj=24.9km s-min=15.4km az=128.0*

**ISC 21 21:58:37.8±0.7,43°.03N±0°.05×141°.66E±0°.05,h141km±6km, n27,σ0§43/41,mb3.6/9,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JEW** | **Eniwo** | **0.24** | **220** | P | **Pn** | **21 58 57.4** | **+0.3** |
| JEW | | | | *e*S | **Sn** | **21 59 11.5** | **-0.2** |
| **JBT2** | **Biratori 2** | **0.57** | **115** | P | **Pn** | **21 58 58.4** | **-0.1** |
| JBT2 | | | | *e*S | **Sn** | **21 59 14.6** | **+0.3** |
| **JAB** | **Ashibetsu** | **0.63** | **41** | P | **Pn** | **21 58 59.3** | **+0.4** |
| JAB | | | | *e*S | **Sn** | **21 59 15.0** | **0.0** |
| **JFR** | **Furan** | **0.70** | **78** | P | **Pn** | **21 58 59.3** | **-0.1** |
| JFR | | | | *e*S | **Sn** | **21 59 15.7** | **-0.1** |
| **JNB** | **Noboribetsu** | **0.72** | **220** | P | **Pn** | **21 58 59.6** | **+0.1** |
| JNB | | | | *e*S | **Sn** | **21 59 16.1** | **+0.2** |
| **JHR** | **Hokuryu** | **0.72** | **4** | P | **Pn** | **21 58 59.9** | **+0.4** |
| JHR | | | | *e*S | **Sn** | **21 59 16.5** | **+0.5** |
| **JSK** | **Shakotan** | **0.92** | **291** | P | **Pn** | **21 59 00.8** | **-0.2** |
| JSK | | | | *e*S | **Sn** | **21 59 18.0** | **-0.7** |
| **JNBK** | **Urakawa-nobuka** | **1.10** | **132** | P | **Pn** | **21 59 03.3** | **+0.7** |
| **JKK2** | **Kamakawa 2** | **1.16** | **43** | P | **Pn** | **21 59 03.3** | **+0.1** |
| JKK2 | | | | *e*S | **Sn** | **21 59 22.1** | **-0.6** |
| **JKB** | **Kayabe** | **1.23** | **202** | P | **Pn** | **21 59 04.1** | **+0.2** |
| JKB | | | | *e*S | **Sn** | **21 59 23.5** | **-0.2** |
| **ASAJ** | **Asahikawa** 11nm,0.3s,baz=227,slow=12,SNR=61 | **1.29** | **32** | P | **Pn** | **21 59 04.5** | **+0.1** |
| ASAJ | 16nm,0.3s,baz=30,slow=31,SNR=58 | | | S | **Sn** | **21 59 23.6** | **-1.2** |
| **JCH** | **Churui** | **1.32** | **108** | P | **Pn** | **21 59 04.2** | **-0.6** |
| JCH | | | | *e*S | **Sn** | **21 59 24.3** | **-1.0** |
| **JAR** | **Ashorobuto** | **1.57** | **79** | P | **Pn** | **21 59 07.5** | **+0.1** |
| JAR | | | | *e*S | **Sn** | **21 59 30.5** | **+0.4** |
| **JOT** | **Ohata** | **1.70** | **196** | P | **Pn** | **21 59 08.9** | **0.0** |
| JOT | | | | *e*S | **Sn** | **21 59 32.8** | **+0.1** |
| **JOSM** | **Okushiri--Mats** | **1.87** | **240** | P | **Pn** | **21 59 10.9** | **+0.1** |
| **JTKR** | **Abashiri--Toko** | **1.89** | **59** | P | **Pn** | **21 59 11.6** | **+0.5** |
| JTKR | | | | *e*S | **Sn** | **21 59 36.7** | **+0.1** |
| **JSE** | **Soyaes** | **2.05** | **19** | P | **Pn** | **21 59 13.1** | **+0.2** |
| JSE | | | | *e*S | **Sn** | **21 59 40.2** | **+0.3** |
| **MJAR** | **Matsushiro Arr** 0.7nm,0.3s,baz=21,slow=13,SNR=5.1 | **7.00** | **203** | P | **Pn** | **22 00 18.0** | **+0.2** |
| **SONM** | **Songino Array** 0.5nm,0.4s,baz=91,slow=7.2,SNR=2.8 | **25.07** | **293** | P | **P** | **22 03 49.1** | **0.0** |
| **ZALV** | **Zalesovo Beam** 0.5nm,0.4s,baz=95,slow=7.6,SNR=3.1 | **38.23** | **307** | P | **P** | **22 05 43.5** | **-0.2** |
| **MKAR** | **Makanchi Array** 0.7nm,0.5s,baz=81,slow=10,SNR=14 | **41.35** | **297** | P | **P** | **22 06 09.3** | **-0.2** |
| **CMAR** | **Chiang Mai Arr** 0.4nm,0.6s,baz=40,slow=7.1,SNR=3.3 | **43.50** | **249** | P | **P** | **22 06 28.0** | **+0.8** |
| **ILAR** | **Eielson Array** 0.7nm,0.9s,baz=251,slow=6.0,SNR=5.0 | **44.42** | **35** | P | **P** | **22 06 34.3** | **+0.3** |
| **INK** | **Inuvik** 1.5nm,0.5s,baz=298,slow=6.5,SNR=11 | **49.02** | **29** | P | **P** | **22 07 09.6** | **-0.1** |
| **WRA** | **Warramunga Arr** 0.4nm,0.9s,baz=3.0,slow=6.5,SNR=2.1 | **63.01** | **188** | P | **P** | **22 08 49.3** | **-0.3** |
| **FINES** | **FINESS Array B** 0.7nm,0.6s,baz=180,slow=27,SNR=4.1 | **63.63** | **331** | P | **P** | **22 08 52.8** | **-0.4** |
| **GERES** | **GERESS Array B** 1.0nm,0.8s,baz=33,slow=3.2,SNR=5.8 | **77.73** | **328** | P | P | 22 10 26.9 | +8.0 |

*IDC **21** 22:28:41.2±1.4,24°.27N×127°.65E,h0km,mb3.5/3, mb1 3.7/3,mb1mx3.4/41,mbtmp3.5/3,Error ellipse: s-maj=64.3km s-min=24.3km az=80.0*

*ISCJB **21** 22:28:43.5±0.7,24°.40N±0°.05×127°.33E±0°.04,h47km, mb3.5/3,Error ellipse: s-maj=7.6km s-min=3.9km az=145.4*

*JMA **21** 22:28:43.7±0.4,24°.37N×127°.35E,h60km,M3.6*

**ISC 21 22:28:44.6±1.2,24°.36N±0°.07×127°.37E±0°.05,h47km,n18, σ1§56/29,mb3.5/3,Southeast of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JJT2** | **Tamagusuku 2** | **1.81** | **11** | P | **Pn** | **22 29 13.4** | **+0.2** |
| JJT2 | | | | *e*S | **Sn** | **22 29 35.3** | **+0.4** |
| **JIKM** | **Ikemajima** | **2.01** | **287** | *e*S | **Sn** | **22 29 39.1** | **-0.9** |
| **JKE** | **Kume jima 2** | **2.03** | **345** | P | **Pn** | **22 29 16.5** | **+0.2** |
| JKE | | | | *e*S | **Sn** | **22 29 40.9** | **+0.4** |
| **JIRB** | **Irabujima** | **2.06** | **284** | P | **Pn** | **22 29 16.2** | **-0.4** |
| JIRB | | | | S | **Sn** | **22 29 39.5** | **-1.6** |
| **JAGN** | **Aguni-jima** | **2.23** | **357** | P | **Pn** | **22 29 19.3** | **+0.3** |
| JAGN | | | | *e*S | **Sn** | **22 29 45.1** | **-0.1** |
| **JNTH** | **Nagotoyohara** | **2.23** | **15** | P | **Pn** | **22 29 18.4** | **-0.7** |
| JNTH | | | | S | **Sn** | **22 29 44.2** | **-1.2** |
| **JTJ** | **Tarama** | **2.45** | **277** | P | **Pn** | **22 29 22.0** | **0.0** |
| JTJ | | | | *e*S | **Sn** | **22 29 49.1** | **-1.6** |
| **JOW** | **Kunigami** | **2.59** | **18** | P | **Pn** | **22 29 23.9** | **-0.2** |
| JOW | | | | S | **Sn** | **22 29 52.4** | **-2.0** |
| **JOW** | **Kunigami** | **2.59** | **18** | Pn | **Pn** | **22 29 24.3** | **+0.2** |
| JOW | | | | Sn | **Sn** | **22 29 52.6** | **-1.8** |
| **JISG** | **Ishigakijimahi** 2.7nm,0.3s,baz=0.2,slow=30,SNR=4.0 | **2.80** | **275** | P | **Pn** | **22 29 26.3** | **-0.5** |
| JISG | | | | *e*S | **Sn** | **22 29 57.2** | **-2.2** |
| **JIJ** | **Ishigaki jima** | **2.94** | **271** | *e*S | **Sn** | **22 30 00.6** | **-2.4** |
| **JOKE** | **Okinoerabujima** | **3.18** | **20** | P | **Pn** | **22 29 32.7** | **+0.6** |
| JOKE | | | | *e*S | **Sn** | **22 30 06.8** | **-2.0** |
| **JTK** | **Tokunoshima** | **3.70** | **22** | P | **Pn** | **22 29 39.4** | **+0.2** |
| JTK | | | | *e*S | **Sn** | **22 30 19.0** | **-2.5** |
| **JMZ** | **Minamidaito 2** | **3.78** | **67** | P | Pn | 22 29 38.1 | -2.2 |
| JMZ | | | | *e*S | **Sn** | **22 30 19.6** | **-4.0** |
| **JAMN** | **Amaminishikomi** | **4.19** | **22** | P | **Pn** | **22 29 46.4** | **+0.4** |
| JAMN | | | | S | **Sn** | **22 30 32.3** | **-1.4** |
| **MKAR** | **Makanchi Array** 0.2nm,0.4s,baz=92,slow=8.4,SNR=4.2 | **42.23** | **314** | P | P | 22 36 38.2 | +5.2 |
| **WRA** | **Warramunga Arr** 1.1nm,0.6s,baz=349,slow=8.6,SNR=6.5 | **44.55** | **171** | P | **P** | **22 36 53.5** | **+1.6** |
| **ASAR** | **Alice Springs** 0.4nm,0.7s,baz=354,slow=8.5,SNR=2.9 | **48.16** | **172** | P | **P** | **22 37 22.6** | **+2.4** |

*IDC **21** 22:31:33.0±1.6,24°.83N×109°.81W,h0km,mb3.7/2, mb1 4.0/5,mb1mx3.7/39,mbtmp3.7/5,ML3.7/2,MS3.2/1, Ms1 3.2/1,ms1mx2.7/26,Error ellipse: s-maj=42.6km s-min=14.3km az=112.0*

**ISC 21 22:31:34.9±1.1,24°.92N±0°.09×109°.9W±0°.2,h10km,n6, σ0§74/7,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** 18nm,0.3s,baz=46,slow=1.5,SNR=37 | **0.88** | **203** | Pn | **Pb** | **22 31 52.4** | **0.0** |
| LPIG | 132nm,0.3s,baz=233,slow=16,SNR=8.4 | | | Sn | **Sn** | **22 32 06.0** | **-0.3** |
| **TXAR** | **Lajitas Array** 0.4nm,0.3s,baz=229,slow=13,SNR=6.7 | **7.10** | **50** | Pn | **Pn** | **22 33 18.9** | **-0.2** |
| TXAR | 1.3nm,0.3s,baz=192,slow=21,SNR=11 | | | Sn | Sn | 22 34 27.3 | -13 |
| TXAR | 0.8nm,0.3s,baz=216,slow=23,SNR=5.4 | | | Lg | Lg | 22 35 04.2 | |
| **ANMO** | **Albuquerque** baz=197,slow=13,SNR=7.8 | **10.44** | **16** | Pn | **Pn** | **22 34 04.5** | **-0.4** |
| ANMO | comp=Z,129nm,18.4s,baz=174,slow=36 | | | LR | LR | 22 37 53.5 | |
| **NVAR** | **Mina Array Bea** 0.2nm,0.3s,baz=154,slow=15,SNR=6.5 | **15.23** | **334** | Pn | **P** | **22 35 14.3** | **-1.0** |
| **NEW** | **Newport** 2.9nm,0.7s,baz=155,slow=16,SNR=3.7 | **23.98** | **348** | P | **P** | **22 36 49.9** | **+0.3** |
| **ILAR** | **Eielson Array** 0.8nm,1.0s,baz=130,slow=5.4,SNR=4.2 | **46.41** | **339** | P | **P** | **22 40 02.4** | **+1.0** |

*ISCJB **21** 22:38:23.1±0.8,23°.87N±0°.03×122°.54E±0°.02,h5km±5km, Error ellipse: s-maj=4.9km s-min=2.7km az=171.0*

*TAP **21** 22:38:24.4,23°.94N×122°.54E,h20km,ML3.6,C*

*JMA **21** 22:38:24.5±0.2,23°.94N×122°.51E,h16km,M3.1*

**ISC 21 22:38:24.1±1.2,23°.91N±0°.04×122°.53E±0°.02,h17km±9km, n36,σ0§53/61,1C-1D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JYNG** | **Yonagunijimaku** | **0.66** | **35** | P | **Pb** | **22 38 36.6** | **-0.6** |
| JYNG | | | | S | **Sb** | **22 38 45.5** | **-0.6** |
| **YOJ** | **Yonaguni jima** | **0.70** | **39** | P | **Pg** | **22 38 38.1** | **+0.2** |
| YOJ | | | | S | **Sb** | **22 38 46.4** | **-0.9** |
| **YOJ** | **Yonaguni jima** baz=49 | **0.70** | **39** | *e*P | **Pb** | **22 38 36.9** | **-1.1** |
| YOJ | | | | S | **Sg** | **22 38 47.3** | **0.0** |
| **TWD** | **Chiawan** baz=264 | **0.87** | **281** | *e*P | **Pb** | **22 38 40.6** | **-0.1** |
| **ENA** | **Nanau** baz=303 | **0.88** | **306** | *e*P | **Pb** | **22 38 41.2** | **+0.2** |
| ENA | | | | *e*S | **Sn** | **22 38 54.5** | **+0.3** |
| **TWC** | **Suao** baz=305 | **0.93** | **318** | P | **Pb** | **22 38 41.7** | **-0.1** |
| TWC | | | | S | **Sg** | **22 38 54.5** | **+0.1** |
| **ESL** | **Shilin** baz=263 | **1.01** | **265** | *e*P | **Pb** | **22 38 42.3** | **-0.8** |
| **ILA** | **Ilan** baz=308 | **1.11** | **320** | *e*P | **Pn** | **22 38 45.1** | **+0.2** |
| ILA | | | | *e*S | **Sg** | **22 39 01.2** | **+1.2** |
| **TWE** | **Neicheng** baz=314 | **1.12** | **316** | ⇓P | **Pb** | **22 38 45.4** | **+0.3** |
| TWE | | | | *e*S | **Sg** | **22 39 01.7** | **+1.1** |
| **ENTT** | **Nioudou** baz=292 | **1.14** | **310** | *e*P | **Pn** | **22 38 45.2** | **-0.1** |
| ENTT | | | | *e*S | **Sg** | **22 39 00.6** | **-0.4** |
| **EHY** | **Hungye** baz=248 | **1.18** | **250** | *e*P | **Pn** | **22 38 45.5** | **-0.3** |
| EHY | | | | *e*S | **Sb** | **22 39 00.6** | **-0.4** |
| **IRIF** | **Iriomote-Funau** | **1.18** | **69** | P | **Pb** | **22 38 46.6** | **+0.6** |
| IRIF | | | | *e*S | **Sg** | **22 39 01.9** | **-0.3** |
| **HATJ** | **Hateruma jima** | **1.18** | **83** | P | **Pb** | **22 38 46.3** | **+0.3** |
| HATJ | | | | S | **Sn** | **22 39 02.0** | **+0.5** |
| **WHF** | **Hehuan Shan** baz=265 | **1.18** | **282** | ⇑*i*P | **Pn** | **22 38 45.9** | **-0.3** |
| WHF | | | | *e*S | **Sb** | **22 39 00.3** | **-1.1** |
| **NNS** | **Nan Shan** baz=281 | **1.18** | **297** | P | **Pn** | **22 38 46.0** | **0.0** |
| NNS | | | | *e*S | **Sn** | **22 39 01.3** | **-0.4** |
| **TWB1** | **Santiao Chiao** baz=335 | **1.20** | **336** | *e*P | **Pg** | **22 38 46.7** | **-0.5** |
| **TWF1** | **Yuli** baz=242 | **1.26** | **244** | *e*P | **Pn** | **22 38 46.9** | **0.0** |
| TWF1 | | | | *e*S | **Sb** | **22 39 03.1** | **-0.2** |
| **TWT** | **Tachien** baz=271 | **1.28** | **286** | *e*P | **Pn** | **22 38 47.7** | **+0.3** |
| TWT | | | | *e*S | **Sn** | **22 39 03.7** | **-0.6** |
| **NSK** | **Sanguang** baz=304 | **1.31** | **306** | P | **Pn** | **22 38 47.7** | **0.0** |
| **NWF** | **Wu-fen Shan** baz=329 | **1.34** | **330** | *e*P | **Pb** | **22 38 48.9** | **+0.1** |
| NWF | | | | S | **Sg** | **22 39 07.1** | **-0.4** |
| **TWA** | **Mucha** baz=320 | **1.37** | **321** | *e*P | **Pb** | **22 38 49.4** | **+0.2** |
| TWA | | | | S | **Sg** | **22 39 08.7** | **+0.4** |
| **SMLT** | **Sun Moon Lake** baz=267 | **1.49** | **269** | *e*P | **Pn** | **22 38 50.5** | **+0.3** |
| SMLT | | | | *e*S | **Sn** | **22 39 09.7** | **+0.3** |
| **YUS** | **Yu-Shan** baz=252 | **1.50** | **254** | *e*P | **Pn** | **22 38 51.0** | **+0.2** |
| **TYC** | **Yuchr** baz=268 | **1.53** | **270** | *e*P | **Pn** | **22 38 51.0** | **+0.4** |
| **JIJ** | **Ishigaki jima** | **1.54** | **73** | P | **Pn** | **22 38 51.1** | **+0.3** |
| JIJ | | | | S | **Sn** | **22 39 10.6** | **+0.1** |
| **TWS1** | **Kuangyinshan** baz=337 | **1.56** | **320** | *e*P | **Pb** | **22 38 52.0** | **-0.4** |
| **ELDTW** | **Lidau** baz=241 | **1.56** | **243** | *e*P | **Pn** | **22 38 50.8** | **-0.4** |
| **NSTT** | **Nanjuang** baz=282 | **1.57** | **298** | P | **Pb** | **22 38 52.6** | **-0.1** |
| NSTT | | | | S | **Sb** | **22 39 12.2** | **0.0** |
| **ALS** | **Alishan** baz=254 | **1.63** | **256** | *e*P | **Pn** | **22 38 53.1** | **+0.8** |
| ALS | | | | *e*S | **Sn** | **22 39 13.3** | **+0.3** |
| **TWQ1** | **Liyutan** baz=284 | **1.66** | **286** | *e*P | **Pb** | **22 38 54.2** | **0.0** |
| TWQ1 | | | | *e*S | **Sb** | **22 39 15.7** | **+0.8** |
| **NSY** | **Sanyi** baz=285 | **1.69** | **288** | *e*P | **Pb** | **22 38 54.6** | **-0.2** |
| **TCU** | **Taichung** baz=276 | **1.71** | **278** | *e*P | **Pb** | **22 38 55.1** | **+0.1** |
| TCU | | | | *e*S | **Sb** | **22 39 17.6** | **+1.3** |
| **CHN5** | **Tsauling** baz=258 | **1.72** | **260** | *e*P | **Pb** | **22 38 55.0** | **-0.3** |
| **JISG** | **Ishigakijimahi** | **1.76** | **67** | P | **Pn** | **22 38 54.4** | **+0.6** |
| JISG | | | | *e*S | **Sb** | **22 39 16.9** | **-0.9** |
| **CHN4** | **Tsaushan** baz=239 | **1.86** | **253** | *e*P | **Pb** | **22 38 57.0** | **-0.6** |
| CHN4 | | | | *e*S | **Sb** | **22 39 20.6** | **0.0** |
| **JTJ** | **Tarama** | **2.11** | **69** | *e*S | **Sn** | **22 39 25.2** | **+0.6** |

*IDC **21** 22:38:33.5±0.9,24°.78N×109°.53W,h0km,mb4.3/9, mb1 4.5/12,mb1mx4.1/39,mbtmp4.2/12,ML3.3/3,MS3.4/6, Ms1 3.5/6,ms1mx3.2/26,Error ellipse: s-maj=21.8km s-min=14.2km az=115.0*

*ISCJB **21** 22:38:34.2±0.3,24°.79N±0°.02×109°.44W±0°.03,h10km, mb4.2/20,MS3.6/3,Error ellipse: s-maj=3.6km s-min=3.3km az=167.1*

*NEIC **21** 22:38:36.0±0.5,24°.77N×109°.51W,h10km,mb4.1/39, MD4.1(MEX),Error ellipse: s-maj=9.2km s-min=6.9km az=60.0*

*MEX **21** 22:38:40.1±1.1,24°.66N×109°.51W,h10km,MD4.1*

**ISC 21 22:38:35.5±0.5,24°.78N±0°.04×109°.49W±0°.04,h10km, n184,σ1§22/177,mb4.3/20,MS3.6/3,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** 216nm,0.3s,baz=28,slow=3.6,SNR=59 | **1.00** | **228** | Pn | **Pg** | **22 38 54.5** | **-0.4** |
| LPIG | 394nm,0.3s,baz=278,slow=17,SNR=7.8 | | | Sn | **Sn** | **22 39 09.5** | **-0.3** |
| **LPIG** | **La Paz** | **1.00** | **228** | *i* P | **Pg** | **22 38 54.4** | **-0.4** |
| LPIG | | | | *i* S | **Sg** | **22 39 07.8** | **0.0** |
| **SLBS** | **Sierra La Lagu** | **1.16** | **201** | *e*Pn | **Pb** | **22 38 55.8** | **-1.9** |
| SLBS | | | | *e*Pg | **Pg** | **22 38 57.4** | **-0.5** |
| **MAIG** | **Mazatlaan** | **3.22** | **119** | *e*P | **Pn** | **22 39 28.3** | **+2.2** |
| MAIG | | | | *e*S | **Sn** | **22 40 04.5** | **+0.1** |
| **MAIG** | **Mazatlaan** | **3.22** | **119** | *e*P | **Pn** | **22 39 28.3** | **+2.2** |
| MAIG | | | | *e*S | **Sn** | **22 40 04.5** | **+0.1** |
| **SRIG** | **Santa Rosalia** | **3.54** | **316** | *e*P | Pn | 22 39 34.4 | +3.8 |
| SRIG | | | | *e*S | **Sn** | **22 40 14.8** | **+2.3** |
| **SRIG** | **Santa Rosalia** | **3.54** | **316** | *e*P | Pn | 22 39 34.4 | +3.8 |
| SRIG | | | | *e*S | **Sn** | **22 40 14.8** | **+2.3** |
| **ANIG** | **Ahuacatlan** | **5.89** | **128** | *e*P | Pn | 22 40 07.1 | +4.1 |
| ANIG | | | | *e*S | **Sn** | **22 41 11.1** | **+0.5** |
| **ANIG** | **Ahuacatlan** | **5.89** | **128** | *e*P | Pn | 22 40 07.1 | +4.1 |
| ANIG | | | | *e*S | **Sn** | **22 41 11.1** | **+0.5** |
| **TX31** | **Lajitas Ar. Si** | **6.89** | **48** | *e*Pn | Pn | 22 40 21.0 | +4.3 |
| **TXAR** | **Lajitas Array** 0.6nm,0.3s,baz=229,slow=14,SNR=10 | **6.89** | **48** | Pn | Pn | 22 40 13.7 | -3.1 |
| TXAR | 3.2nm,0.3s,baz=304,slow=31,SNR=11 | | | Sn | Sn | 22 41 28.4 | -6.9 |
| TXAR | 2.6nm,0.3s,baz=230,slow=27,SNR=5.7 | | | Lg | Lg | 22 42 03.5 | |
| TXAR | comp=Z,368nm,21.9s,baz=0.0,slow=40 | | | LR | LR | 22 43 12.8 | |
| **TUC** | **Tucson** | **7.59** | **352** | Pn | Pn | 22 40 23.2 | -3.1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TUC | | | | Pg | | Pg | 22 40 58.6 | -2.3 |
| TUC | | | | eSg | | Sg | 22 42 31.7 | -7.5 |
| **214A** | **Organ Pipe Nat** | **7.73** | **338** | P | | **Pn** | **22 40 25.9** | **-2.2** |
| | baz=7.8 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.79** | **27** | *e*Pn | | Pn | 22 40 25.6 | -3.4 |
| MNTX | | | | *e*S | | **Sb** | **22 42 23.8** | **+0.2** |
| **121A** | **Cookes Peak, D** | **7.87** | **11** | P | | **Pn** | **22 40 27.8** | **-2.4** |
| | baz=7.9 | | | | | | | |
| **121A** | **Cookes Peak, D** | **7.87** | **11** | *e*Pn | | Pn | 22 40 26.9 | -3.3 |
| | 7.4nm,1.1s | | | | | | | |
| **529A** | **Stev Forest Ra** | **8.37** | **49** | P | | Pn | 22 40 34.1 | -2.8 |
| | baz=8.4 | | | | | | | |
| **BNM** | **Barren Site** | **9.67** | **14** | *e*Pn | | **Pn** | **22 40 53.6** | **-1.3** |
| **LAZ** | **Ladron** | **9.81** | **11** | *e*Pn | | **Pn** | **22 40 55.8** | **-1.0** |
| **431A** | **Sonora** | **9.82** | **51** | P | | **Pn** | **22 40 57.6** | **+0.7** |
| | baz=9.8 | | | | | | | |
| **LPM** | **Los Pinos Moun** | **9.82** | **14** | *e*Pn | | **Pn** | **22 40 57.7** | **+0.7** |
| **532A** | **Rocksprings** | **10.04** | **56** | P | | **Pn** | **22 41 00.4** | **+0.6** |
| | baz=10 | | | | | | | |
| **BC3** | **Big Chuckawall** | **10.27** | **331** | P | | **Pn** | **22 41 03.2** | **+0.2** |
| | baz=10 | | | | | | | |
| **331A** | **San Angelo** | **10.31** | **49** | P | | **Pn** | **22 41 03.6** | **0.0** |
| | baz=10 | | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **10.32** | **338** | P | | **Pn** | **22 41 04.9** | **+1.3** |
| | baz=10 | | | | | | | |
| **ANMO** | **Albuquerque** | **10.47** | **14** | Pn | | **Pn** | **22 41 06.5** | **+0.6** |
| | 0.2nm,0.3s,baz=202,slow=12,SNR=18 | | | | | | | |
| ANMO | | | | Lg | | Lg | 22 43 59.0 | |
| | 0.1nm,0.3s,baz=294,slow=16,SNR=3.1 | | | | | | | |
| **IRM** | **Iron Mountain** | **10.57** | **334** | P | | **Pn** | **22 41 07.8** | **+0.7** |
| | baz=11 | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.70** | **327** | Pn | | **Pn** | **22 41 10.4** | **+1.4** |
| | 0.1nm,0.3s,baz=154,slow=12,SNR=6.5 | | | | | | | |
| PFO | | | | LR | | LR | 22 45 04.9 | |
| | comp=Z,120nm,20.1s,baz=60,slow=37 | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.70** | **327** | *e*Pn | | **Pn** | **22 41 11.2** | **+2.3** |
| **BELC** | **Belle Mtn. Jos** | **10.80** | **330** | P | | **Pn** | **22 41 11.3** | **+0.9** |
| | baz=11 | | | | | | | |
| **GMRC** | **Granite Mounta** | **11.32** | **333** | P | | **Pn** | **22 41 19.1** | **+1.7** |
| | baz=11 | | | | | | | |
| **TUQ** | **Turquoise Moun** | **11.99** | **334** | P | | **Pn** | **22 41 28.9** | **+2.3** |
| | baz=12 | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **12.18** | **39** | P | | **Pn** | **22 41 28.7** | **-0.4** |
| | baz=12 | | | | | | | |
| **Z32A** | **Haskell** | **12.20** | **44** | P | | **Pn** | **22 41 28.5** | **-0.8** |
| | baz=12 | | | | | | | |
| **GSC** | **Goldstone** | **12.25** | **331** | P | | **Pn** | **22 41 31.9** | **+1.7** |
| | baz=12 | | | | | | | |
| **GSC** | **Goldstone** | **12.25** | **331** | *e*Pn | | **Pn** | **22 41 33.1** | **+2.9** |
| **V27A** | **Dan Oppiter Fa** | **12.36** | **26** | P | | **Pn** | **22 41 31.9** | **+0.3** |
| | baz=12 | | | | | | | |
| **MVCO** | **Mesa Verde** | **12.42** | **4** | *e*Pn | | Pn | 22 41 44.0 | +11 |
| **SHOC** | **Shoshone** | **12.54** | **334** | P | | **Pn** | **22 41 36.5** | **+2.5** |
| | baz=13 | | | | | | | |
| **SHPR** | **Sheep Range** | **12.67** | **339** | Pn | | **Pn** | **22 41 37.3** | **+1.5** |
| | 5.1nm,1.3s | | | | | | | |
| **LRMC** | **Laurel Mountai** | **12.80** | **328** | P | | **Pn** | **22 41 38.9** | **+1.2** |
| | baz=13,SNR=13 | | | | | | | |
| **U27A** | **Thompson Grove** | **12.94** | **25** | P | | **Pn** | **22 41 40.5** | **+0.9** |
| | baz=13 | | | | | | | |
| **T25A** | **Trinidad** | **13.07** | **18** | P | | **Pn** | **22 41 43.0** | **+1.6** |
| | baz=13 | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **13.13** | **9** | P | | **Pn** | **22 41 43.5** | **+1.2** |
| | baz=13 | | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **13.13** | **9** | *e*Pn | | **Pn** | **22 41 44.6** | **+2.3** |
| **CCUT** | **Cedar City** | **13.16** | **346** | *e*Pn | | **Pn** | **22 41 45.4** | **+2.8** |
| **MPMC** | **Manual Prospec** | **13.19** | **330** | P | | **Pn** | **22 41 44.4** | **+1.4** |
| | baz=13,SNR=8.7 | | | | | | | |
| **FURC** | **Furnace Creek,** | **13.27** | **333** | P | | **Pn** | **22 41 44.6** | **+0.7** |
| | baz=13 | | | | | | | |
| **ISA** | **Isabella** | **13.34** | **327** | P | | **Pn** | **22 41 44.6** | **-0.3** |
| | baz=13 | | | | | | | |
| **ISA** | **Isabella** | **13.34** | **327** | *e*Pn | | **Pn** | **22 41 46.5** | **+1.5** |
| **T26A** | **Comanche Natio** | **13.35** | **21** | P | | **Pn** | **22 41 45.9** | **+0.7** |
| | baz=13 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **13.37** | **14** | Pn | | **Pn** | **22 41 46.6** | **+1.0** |
| **DAC** | **Darwin (Calif)** | **13.42** | **331** | Pn | | **Pn** | **22 41 48.1** | **+1.9** |
| | 29nm,1.3s | | | | | | | |
| **CWC** | **Cottonwood Cre** | **13.77** | **330** | P | | **Pn** | **22 41 52.4** | **+1.4** |
| | baz=14,SNR=14 | | | | | | | |
| **S26A** | **Kim** | **13.80** | **20** | P | | **Pn** | **22 41 51.8** | **+0.5** |
| | baz=14 | | | | | | | |
| **MSU** | **Marysvale** | **13.88** | **351** | *e*Pn | | **Pn** | **22 41 53.3** | **+0.8** |
| **GRAC** | **Grapevine Rang** | **13.93** | **333** | P | | **Pn** | **22 41 54.7** | **+1.7** |
| | baz=14 | | | | | | | |
| **Z36A** | **Blue Ridge** | **14.20** | **50** | P | | **Pn** | **22 41 57.0** | **+0.2** |
| | baz=14 | | | | | | | |
| **S28A** | **Manter** | **14.32** | **25** | P | | **Pn** | **22 42 00.1** | **+1.7** |
| | baz=14 | | | | | | | |
| **R11A** | **Troy Canyon, C** | **14.49** | **340** | P | | **Pn** | **22 42 01.6** | **+0.8** |
| | baz=14 | | | | | | | |
| **R11A** | **Troy Canyon, C** | **14.49** | **340** | *e*Pn | | **Pn** | **22 42 02.1** | **+1.3** |
| **R27A** | **Eads** | **14.62** | **21** | P | | **Pn** | **22 42 01.8** | **-0.8** |
| | baz=15,SNR=5.8 | | | | | | | |
| **MTUM** | **Tungsten Hills** | **14.74** | **330** | *e*Pn | | **Pn** | **22 42 06.5** | **+2.2** |
| **P18A** | **Preston Nutter** | **14.82** | **358** | *e*Pn | | **Pn** | **22 42 07.0** | **+1.6** |
| **R28A** | **Tribune** | **15.02** | **24** | P | | **Pn** | **22 42 10.7** | **+2.8** |
| | baz=15,SNR=7.9 | | | | | | | |
| **NLU** | **North Lily Min** | **15.29** | **352** | *e*Pn | | **P** | **22 42 18.7** | **+2.1** |
| | 11nm,1.4s | | | | | | | |
| **ISCO** | **Idaho Springs** | **15.33** | **11** | Pn | | **Pn** | **22 42 13.9** | **+1.7** |
| | 11nm,1.1s | | | | | | | |
| **W36A** | **Wetumka** | **15.44** | **45** | P | | **Pn** | **22 42 14.4** | **+1.1** |
| | baz=16 | | | | | | | |
| **U34A** | **Anderson Ranch** | **15.51** | **39** | P | | **Pn** | **22 42 16.4** | **+2.1** |
| | baz=16 | | | | | | | |
| **NV01** | **Mina Array Sit** | **15.53** | **333** | *e*Pn | | **Pn** | **22 42 16.0** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **15.53** | **333** | Pn | | **Pn** | **22 42 14.8** | **0.0** |
| | 0.1nm,0.3s,baz=148,slow=12,SNR=17 | | | | | | | |
| **R30A** | **Dighton** | **15.57** | **28** | P | | **P** | **22 42 18.8** | **-0.7** |
| | baz=16 | | | | | | | |
| **DUG** | **Dugway** | **15.63** | **351** | *e*Pn | | **P** | **22 42 19.1** | **-1.1** |
| | 10nm,1.2s | | | | | | | |
| **CMIG** | **Matias Romero** | **15.63** | **116** | LR | | LR | 22 48 21.4 | |
| | comp=Z,121nm,21.0s,baz=260,slow=38 | | | | | | | |
| **X37A** | **Clayton** | **15.67** | **48** | P | | **Pn** | **22 42 17.3** | **+0.9** |
| | baz=16,SNR=6.0 | | | | | | | |
| **W37A** | **Quinton** | **15.96** | **46** | P | | **Pn** | **22 42 21.3** | **+1.2** |
| | baz=16 | | | | | | | |
| **X38A** | **Whitesboro** | **16.09** | **49** | P | | **P** | **22 42 24.4** | **-0.8** |
| | baz=16 | | | | | | | |
| **T34A** | **McClaskey Farm** | **16.12** | **38** | P | | **Pn** | **22 42 22.6** | **+0.4** |
| | baz=16 | | | | | | | |
| **N23A** | **Red Feather La** | **16.34** | **10** | P | | **Pn** | **22 42 25.7** | **+0.4** |
| | baz=16 | | | | | | | |
| **W38A** | **Poteau** | **16.52** | **48** | P | | **P** | **22 42 29.9** | **0.0** |
| | baz=16,SNR=9.7 | | | | | | | |
| **Q31A** | **Ellis** | **16.56** | **29** | P | | **Pn** | **22 42 28.8** | **+1.0** |
| | baz=17 | | | | | | | |
| **V37A** | **Hulbert** | **16.59** | **45** | P | | **Pn** | **22 42 28.3** | **+0.1** |
| | baz=17 | | | | | | | |
| **ELK** | **Elko** | **16.64** | **345** | Pn | | **Pn** | **22 42 29.4** | **+0.4** |
| | 12nm,1.3s | | | | | | | |
| **P30A** | **Selden** | **16.66** | **26** | P | | **P** | **22 42 31.7** | **+0.2** |
| | baz=17 | | | | | | | |
| **SPUT** | **South Promonto** | **16.67** | **352** | *e*Pn | | **Pn** | **22 42 30.5** | **+1.2** |
| | 16nm,1.3s | | | | | | | |
| **PHWY** | **Pilot Hill** | **16.82** | **11** | Pn | | **Pn** | **22 42 32.7** | **+1.3** |
| | 9.8nm,1.1s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **16.88** | **355** | Pn | | **Pn** | **22 42 32.1** | **+0.2** |
| | 18nm,1.3s | | | | | | | |
| **MIAR** | **Mount Ida** | **16.89** | **51** | *e*Pn | | **P** | **22 42 35.3** | **+1.2** |
| | 40nm,1.9s | | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **16.90** | **40** | P | | **Pn** | **22 42 31.0** | **-1.1** |
| | baz=17 | | | | | | | |
| **BMN** | **Battle Mountai** | **16.90** | **339** | Pn | | **Pn** | **22 42 33.0** | **+0.6** |
| | 26nm,1.4s | | | | | | | |
| **U37A** | **Salina** | **16.93** | **43** | P | | **Pn** | **22 42 31.9** | **-0.7** |
| | baz=17 | | | | | | | |
| **V38A** | **Canehill** | **17.05** | **46** | P | | **Pn** | **22 42 32.8** | **-1.3** |
| | baz=17 | | | | | | | |
| **S35A** | **Otter Creek Ra** | **17.07** | **38** | P | | **Pn** | **22 42 34.1** | **-0.3** |
| | baz=17 | | | | | | | |
| **U38A** | **Gravette** | **17.41** | **45** | P | | **Pn** | **22 42 37.9** | **-0.7** |
| | baz=17 | | | | | | | |
| **T37A** | **Cheneyville 18** | **17.51** | **42** | P | | **Pn** | **22 42 38.7** | **-1.1** |
| | baz=18 | | | | | | | |
| **S36A** | **Lake Cedric, C** | **17.52** | **39** | P | | **Pn** | **22 42 38.7** | **-1.2** |
| | baz=18 | | | | | | | |
| **Q34A** | **Chapman** | **17.65** | **34** | P | | **Pn** | **22 42 41.6** | **+0.1** |
| | baz=18 | | | | | | | |
| **BW06** | **Boulder Array** | **17.95** | **360** | *e*Pn | | **Pn** | **22 42 43.6** | **-1.8** |
| **R36A** | **Gordon, Harris** | **17.98** | **38** | P | | **Pn** | **22 42 44.8** | **-0.8** |
| | baz=18 | | | | | | | |
| **S37A** | **Fort Scott** | **17.98** | **41** | P | | **Pn** | **22 42 44.4** | **-1.2** |
| | baz=18 | | | | | | | |
| **AHID** | **Auburn Hatcher** | **17.99** | **356** | *e*Pn | | **Pn** | **22 42 46.1** | **+0.2** |
| | 16nm,1.4s | | | | | | | |
| **K22A** | **Casper** | **18.00** | **7** | P | | **Pn** | **22 42 46.4** | **+0.5** |
| | baz=18 | | | | | | | |
| **K22A** | **Casper** | **18.00** | **7** | *e*Pn | | **P** | **22 42 50.0** | **+3.6** |
| | 11nm,1.2s | | | | | | | |
| **Q35A** | **Mercer Eighty,** | **18.07** | **36** | P | | **Pn** | **22 42 47.0** | **+0.3** |
| | baz=18 | | | | | | | |
| **P34A** | **Walnut Farm, R** | **18.18** | **33** | P | | **Pn** | **22 42 48.2** | **+0.1** |
| | baz=18 | | | | | | | |
| **O33A** | **Hebron** | **18.24** | **30** | P | | **Pn** | **22 42 48.4** | **-0.4** |
| | baz=18 | | | | | | | |
| **R37A** | **Teagarden Farm** | **18.36** | **39** | P | | **Pn** | **22 42 49.3** | **-0.9** |
| | baz=18 | | | | | | | |
| **REDW** | **Red Top Meadow** | **18.57** | **357** | P | | **P** | **22 42 52.5** | **-0.3** |
| | 10nm,1.3s | | | | | | | |
| **O03D** | **Paynes Creek** | **18.60** | **329** | P | | **Pn** | **22 42 54.5** | **+1.2** |
| | baz=19 | | | | | | | |
| **TPAW** | **Teton Pass** | **18.71** | **357** | *e*P | | **P** | **22 42 53.6** | **-0.7** |
| | 6.8nm,1.0s | | | | | | | |
| **O34A** | **Beatrice** | **18.74** | **32** | P | | **P** | **22 42 53.3** | **-1.2** |
| | baz=19 | | | | | | | |
| **LOHW** | **Long Hollow** | **18.81** | **357** | *e*P | | **P** | **22 42 55.0** | **-0.5** |
| | 14nm,1.7s | | | | | | | |
| **FXWY** | **Fox Creek** | **18.86** | **357** | *e*P | | **P** | **22 42 55.9** | **-0.1** |
| | 41nm,2.3s | | | | | | | |
| **MOOW** | **Moose Ponds** | **18.95** | **357** | *e*P | | **P** | **22 42 56.8** | **-0.2** |
| | 4.0nm,1.0s | | | | | | | |
| **IMW** | **Indian Meadow** | **19.11** | **357** | *e*P | | **P** | **22 42 59.5** | **+0.7** |
| | 68nm,2.5s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **19.17** | **339** | *e*P | | **P** | **22 43 00.1** | **+0.9** |
| | 18nm,1.5s | | | | | | | |
| **HLID** | **Hailey** | **19.17** | **349** | *e*P | | **Pn** | **22 43 01.0** | **+0.8** |
| | 4.5nm,0.8s | | | | | | | |
| **J26A** | **Sides Ranch, S** | **19.23** | **14** | P | | **P** | **22 43 00.3** | **+0.4** |
| | baz=19 | | | | | | | |
| **FLWY** | **Flagg Ranch** | **19.29** | **357** | *e*P | | **P** | **22 43 01.6** | **+1.0** |
| | 4.9nm,0.8s | | | | | | | |
| **MFID** | **Camas Ranch** | **19.31** | **346** | *e*P | | **Pn** | **22 43 03.0** | **+1.2** |
| | 9.8nm,1.4s | | | | | | | |
| **H17A** | **Grant Village** | **19.59** | **358** | P | | **Pn** | **22 43 05.5** | **+0.2** |
| | baz=20 | | | | | | | |
| **H17A** | **Grant Village** | **19.59** | **358** | *e*P | | Pn | 22 43 10.2 | +4.9 |
| | 27nm,2.0s | | | | | | | |
| **I25A** | **Rochford** | **19.77** | **12** | P | | **P** | **22 43 06.4** | **+0.6** |
| | baz=20 | | | | | | | |
| **M04C** | **Macdoel** | **19.82** | **332** | P | | **P** | **22 43 06.5** | **+0.1** |
| | baz=20 | | | | | | | |
| **J08A** | **Circle Bar Ran** | **19.95** | **340** | *e*P | | **P** | **22 43 03.6** | **-4.2** |
| | 150nm,2.5s | | | | | | | |
| **I26A** | **New Underwood** | **19.96** | **14** | P | | **P** | **22 43 08.5** | **+0.7** |
| | baz=20 | | | | | | | |
| **QLMT** | **Earthquake Lak** | **20.07** | **356** | *e*P | | Pn | 22 43 11.5 | +0.4 |
| **I27A** | **Quinn** | **20.18** | **16** | P | | **P** | **22 43 10.5** | **+0.3** |
| | baz=20 | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **20.19** | **353** | *e*P | | **P** | **22 43 11.8** | **+1.3** |
| **K05A** | **Summer Lake** | **20.23** | **335** | *e*P | | Pn | 22 43 12.5 | -0.3 |
| **RLMT** | **Red Lodge** | **20.30** | **0** | *e*P | | **P** | **22 43 11.9** | **+0.2** |
| | 59nm,2.5s | | | | | | | |
| **I28A** | **Midland** | **20.35** | **17** | P | | Pn | 22 43 13.8 | -0.3 |
| | baz=20 | | | | | | | |
| **CCM** | **Cathedral Cave** | **20.39** | **45** | *e*P | | **P** | **22 43 13.7** | **+1.2** |
| **DLMT** | **Dillon** | **20.69** | **354** | *e*P | | **P** | **22 43 16.6** | **+0.7** |
| | 12nm,1.3s | | | | | | | |
| **H27A** | **Howes** | **20.71** | **15** | P | | **P** | **22 43 16.0** | **+0.1** |
| | baz=21 | | | | | | | |
| **BRAL** | **Brewton** | **20.76** | **68** | *e*P | | **P** | **22 43 17.8** | **+1.2** |
| **J05D** | **Fort Rock, OR** | **20.83** | **335** | P | | **P** | **22 43 17.8** | **+0.4** |
| | baz=21,SNR=9.7 | | | | | | | |
| **BOZ** | **Bozeman (W)** | **20.90** | **356** | *e*P | | **P** | **22 43 18.2** | **+0.1** |
| | 10nm,1.3s | | | | | | | |
| **I07A** | **Izee** | **20.93** | **339** | *e*P | | **P** | **22 43 18.6** | **+0.2** |
| | 24nm,1.4s | | | | | | | |
| **LRM** | **Limekiln Ridge** | **21.14** | **354** | *e*P | | **P** | **22 43 22.7** | **+1.9** |
| **H29A** | **Onida** | **21.19** | **19** | P | | **P** | **22 43 21.1** | **-0.1** |
| | baz=21 | | | | | | | |
| **G26A** | **Maurine** | **21.22** | **14** | P | | **P** | **22 43 21.6** | **+0.2** |
| | baz=21 | | | | | | | |
| **LRAL** | **Lakeview Retre** | **21.31** | **62** | *e*P | | **P** | **22 43 24.7** | **+2.2** |
| | 13nm,1.1s | | | | | | | |
| **ECSD** | **EROS Data Cent** | **21.65** | **26** | *e*P | | **P** | **22 43 27.2** | **+1.2** |
| | 40nm,1.7s | | | | | | | |
| **I04A** | **Tendick Farm,** | **21.72** | **334** | P | | **P** | **22 43 26.3** | **-0.5** |
| | baz=22 | | | | | | | |
| **WVT** | **Waverly** | **21.78** | **54** | P | | **P** | **22 43 27.3** | **-0.2** |
| | 10.0nm,0.9s | | | | | | | |
| **G08A** | **Pilot Rock** | **21.86** | **342** | *e*P | | **P** | **22 43 29.0** | **+0.6** |
| | 8.5nm,1.3s | | | | | | | |
| **F27A** | **Lemmon** | **21.89** | **14** | P | | **P** | **22 43 28.0** | **-0.7** |
| | baz=22 | | | | | | | |
| **HRY** | **Holter Researc** | **21.97** | **356** | *e*P | | **P** | **22 43 30.6** | **+1.1** |
| **H32A** | **Carlson Farm,** | **21.99** | **24** | P | | **P** | **22 43 28.9** | **-0.8** |
| | baz=22,SNR=6.5 | | | | | | | |
| **LAO** | **LIA A Array** | **22.02** | **6** | *e*P | | **P** | **22 43 30.6** | **+0.5** |
| | 12nm,0.9s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **22.05** | **346** | *e*P | | **P** | **22 43 29.9** | **-0.5** |
| | 15nm,1.2s | | | | | | | |
| **K37A** | **Belmond** | **22.20** | **32** | P | | **P** | **22 43 33.3** | **+1.4** |
| | baz=22 | | | | | | | |
| **MSO** | **Missoula** | **22.29** | **352** | *e*P | | **P** | **22 43 34.1** | **+1.1** |
| | 16nm,1.1s | | | | | | | |
| **CHMT** | **Chamberlain Mo** | **22.30** | **353** | *e*P | | **P** | **22 43 32.5** | **-0.7** |
| **G05D** | **Wamic, OR** | **22.55** | **338** | P | | **P** | **22 43 34.8** | **-1.0** |
| | baz=23 | | | | | | | |
| **SLMT** | **Seeley Lake** | **22.65** | **353** | *e*P | | **P** | **22 43 36.9** | **+0.1** |
| **SWMT** | **Swartz Lake** | **22.97** | **352** | *e*P | | **P** | **22 43 39.9** | **-0.3** |
| **EGMT** | **Eagleton** | **23.20** | **360** | *e*P | | **P** | **22 43 43.1** | **+0.5** |
| | 44nm,1.6s | | | | | | | |
| **JTMT** | **Jette** | **23.24** | **352** | *e*P | | **P** | **22 43 42.1** | **-0.9** |
| **YBMT** | **Yellow Bay** | **23.32** | **352** | *e*P | | **P** | **22 43 43.6** | **-0.2** |
| **BSMT** | **Bassoo Peak** | **23.41** | **351** | *e*P | | **P** | **22 43 43.8** | **-1.0** |
| | 3.0nm,1.0s | | | | | | | |
| **LON** | **Longmire** | **24.04** | **339** | *e*P | | **P** | **22 43 51.0** | **+0.3** |
| | 20nm,1.4s | | | | | | | |
| **G36A** | **St. Michael** | **24.06** | **28** | P | | **P** | **22 43 50.5** | **-0.3** |
| | baz=24 | | | | | | | |
| **NEW** | **Newport** | **24.21** | **347** | P | | **P** | **22 43 51.6** | **-0.6** |
| | 12nm,0.6s,baz=150,slow=9.0,SNR=16 | | | | | | | |
| **NEW** | **Newport** | **24.21** | **347** | *e*P | | **P** | **22 43 51.9** | **-0.4** |
| | 14nm,0.8s | | | | | | | |
| **WALA** | **Waterton Lakes** | **24.49** | **353** | *e*P | | **P** | **22 43 55.3** | **+0.4** |
| | 12nm,1.0s | | | | | | | |
| **F36A** | **Milaca** | **24.66** | **27** | P | | **P** | **22 43 57.1** | **+0.8** |
| | baz=25 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.66** | **58** | P | | **P** | **22 43 56.4** | **0.0** |
| | 6.9nm,1.1s,baz=286,slow=5.0,SNR=4.2 | | | | | | | |
| TKL | | | | LR | | LR | 22 53 50.4 | |
| | comp=Z,180nm,20.1s,baz=276,slow=37 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.66** | **58** | *e*P | | **P** | **22 43 57.5** | **+1.1** |
| **A28A** | **Rude Farm, Bot** | **25.16** | **14** | P | | **P** | **22 44 01.2** | **+0.3** |
| | baz=25 | | | | | | | |
| **KMSC** | **Kings Mountain** | **26.41** | **60** | P | | **P** | **22 44 12.0** | **-0.3** |
| | baz=26 | | | | | | | |
| **DLBC** | **Dease Lake** | **36.66** | **342** | P | | **P** | **22 45 43.2** | **+1.0** |
| | 4.4nm,0.7s,baz=161,slow=6.5,SNR=13 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **37.86** | **356** | P | | **P** | **22 45 50.9** | **-1.3** |
| | 4.7nm,0.9s,baz=171,slow=7.9,SNR=10 | | | | | | | |
| **SCHQ** | **Schefferville** | **43.39** | **35** | P | | **P** | **22 46 36.7** | **-1.3** |
| | 4.9nm,0.9s,baz=276,slow=9.2,SNR=3.9 | | | | | | | |
| **DAWY** | **Dawson** | **43.88** | **342** | *e*P | | **P** | **22 46 42.8** | **+0.8** |
| **INK** | **Inuvik** | **45.93** | **348** | P | | **P** | **22 46 58.2** | **+0.2** |
| | 1.6nm,0.8s,baz=139,slow=5.9,SNR=3.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **46.68** | **339** | P | | **P** | **22 47 04.0** | **-0.1** |
| | 3.3nm,0.7s,baz=149,slow=6.5,SNR=38 | | | | | | | |
| **CPUP** | **Villa Florida** | **71.54** | **132** | P | | **P** | **22 49 58.0** | **+1.2** |
| | 1.2nm,0.9s,baz=69,slow=18,SNR=3.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **80.56** | **15** | P | | **P** | **22 50 46.4** | **-1.4** |
| | 3.9nm,0.8s,baz=343,slow=3.8,SNR=5.8 | | | | | | | |
| **NOA** | **NORSAR Array B** | **82.06** | **25** | LR | | LR | 23 27 37.4 | |
| | comp=Z,20nm,18.9s,baz=315,slow=36 | | | | | | | |
| **FINES** | **FINESS Array B** | **86.93** | **20** | LR | | LR | 23 28 42.7 | |
| | comp=Z,34nm,21.4s,baz=296,slow=35 | | | | | | | |
| **ASCN** | **Ascension** | **97.91** | **95** | *e*P | | **P** | **22 52 12.2** | **-0.1** |
| **ASAR** | **Alice Springs** | **122.66** | **257** | PKP | | **PKPdf** | **22 57 30.8** | **-1.3** |
| | 0.3nm,0.6s,baz=90,slow=1.9,SNR=4.4 | | | | | | | |

**DJA 21 22:38:37.3±0.6, 2°N±4°×12°E±°, h84km±11km, M4.2/11, mb4.4/4, mB4.8/2, MLv4.1/11, Mw(mB)4.0/2, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.97** | **163** | P | | Pn | 22 38 57.4 | +1.2 |
| **LBMI** | **Labuha** | **2.36** | **170** | P | | Pn | 22 39 13.8 | -0.4 |
| LBMI | | | | S | | Sn | 22 39 43.5 | +1.1 |
| **SGSI** | **Sangihe** | **2.51** | **322** | P | | Pn | 22 39 15.7 | -0.4 |
| **KMSI** | **Cibinong** | **3.29** | **250** | P | | Pn | 22 39 26.3 | -0.4 |
| KMSI | | | | S | | Sn | 22 40 06.3 | +1.4 |
| **SANI** | **Sanana** | **3.88** | **196** | P | | Pn | 22 39 33.1 | -1.6 |
| SANI | | | | S | | Sn | 22 40 15.2 | -4.0 |
| **GTOI** | **Gorontalo** | **4.20** | **255** | P | | Pn | 22 39 40.6 | +1.5 |
| GTOI | | | | S | | Sn | 22 40 29.3 | +2.3 |
| **NLAI** | **Namlea** | **4.91** | **180** | P | | Pn | 22 39 47.4 | -1.2 |
| **MRSI** | **Marisa** | **5.28** | **257** | P | | Pn | 22 39 53.3 | -0.4 |
| | 31nm,0.6s,956nm0.1nm | | | | | | | |
| **APSI** | **Ampana** | **6.02** | **245** | P | | Pn | 22 40 04.5 | +0.7 |
| | 30nm,0.8s,813nm0.3nm | | | | | | | |
| **SPSI** | **Sidrap Palu** | **9.22** | **232** | P | | Pn | 22 40 47.7 | +0.2 |

**IDC 21 22:39:44.7±3.4, 14°04N×125°12E, h0km, mb3.7/4, mb1 3.8/4, mb1mx3.5/34, mbtmp3.7/4, Error ellipse: s-maj=218.2km s-min=23.6km az=62.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **34.97** | **165** | P | | P | 22 46 38.8 | 0.0 |
| | 0.5nm,0.6s,baz=346,slow=8.8,SNR=4.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.45** | **167** | P | | P | 22 47 08.2 | -0.3 |
| | 0.4nm,0.5s,baz=344,slow=6.7,SNR=5.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.38** | **321** | P | | P | 22 48 27.9 | -0.6 |
| | 0.9nm,0.5s,baz=123,slow=8.0,SNR=9.2 | | | | | | | |
| **GEYT** | **Alibeck** | **63.42** | **306** | P | | P | 22 50 17.3 | +0.7 |
| | 0.9nm,0.5s,baz=101,slow=12,SNR=2.7 | | | | | | | |

**IDC 21 22:45:45.6±2.2, 24°65N×109°21W, h0km, mb3.2/1, mb1 3.7/4, mb1mx3.5/29, mbtmp3.4/4, ML3.3/3, MS3.1/1, Ms1 3.1/1, ms1mx2.6/13, Error ellipse: s-maj=44.7km s-min=15.4km az=138.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.14** | **242** | Pn | Pb | 22 46 08.6 | +0.3 |
| | 80nm,0.3s,baz=206,slow=2.9,SNR=31 | | | | | | | |
| LPIG | | | | Sn | Sg | 22 46 21.8 | -0.6 |
| | 150nm,0.3s,baz=205,slow=13,SNR=12 | | | | | | | |
| **TXAR** | **Lajitas Array** | **6.79** | **45** | Pn | Pn | 22 47 27.7 | +0.9 |
| | 0.3nm,0.3s,baz=224,slow=14,SNR=10 | | | | | | | |
| TXAR | | | | Sn | Sn | 22 48 43.5 | -1.4 |
| | 1.3nm,0.3s,baz=238,slow=20,SNR=14 | | | | | | | |
| TXAR | | | | Lg | Lg | 22 49 18.4 | |
| | 0.3nm,0.3s,baz=225,slow=30,SNR=3.9 | | | | | | | |
| **ANMO** | **Albuquerque** | **10.53** | **12** | Pn | Pn | 22 48 19.5 | +1.4 |
| | 0.1nm,0.3s,baz=204,slow=13,SNR=4.5 | | | | | | | |
| ANMO | | | | Lg | Lg | 22 51 21.9 | |
| | 0.0nm,0.3s,baz=4.0,slow=18,SNR=1.6 | | | | | | | |
| ANMO | | | | LR | LR | 22 52 10.5 | |
| | comp=Z,105nm,20.1s,baz=212,slow=36 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.76** | **333** | Pn | Pn | 22 49 30.5 | +1.2 |
| | 0.1nm,0.3s,baz=151,slow=10,SNR=5.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **46.89** | **339** | P | P | 22 54 18.2 | +0.8 |
| | 0.3nm,0.6s,baz=152,slow=6.0,SNR=4.4 | | | | | | | |

**IDC 21 23:01:31.9±3.7, 24°39N×109°05W, h0km, mb3.4/1, mb1 3.6/3, mb1mx3.5/25, mbtmp3.1/3, ML2.7/1, Error ellipse: s-maj=71.1km s-min=25.0km az=144.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.18** | **256** | Pn | Pb | 23 01 55.3 | +0.2 |
| | 6.9nm,0.3s,baz=238,slow=4.8,SNR=8.3 | | | | | | | |
| LPIG | | | | Sn | Sg | 23 02 08.2 | -1.6 |
| | 23nm,0.3s,baz=187,slow=20,SNR=11 | | | | | | | |
| LPIG | | | | LR | LR | 23 02 22.5 | |
| | comp=Z,181nm,19.2s,baz=295,slow=43 | | | | | | | |
| **TXAR** | **Lajitas Array** | **6.89** | **43** | Pn | Pn | 23 03 14.3 | +0.1 |
| | 0.0nm,0.3s,baz=222,slow=13,SNR=2.8 | | | | | | | |
| TXAR | | | | Sn | Sn | 23 04 27.9 | -5.5 |
| | 0.1nm,0.3s,baz=223,slow=25,SNR=2.4 | | | | | | | |
| TXAR | | | | Lg | Lg | 23 05 02.5 | |
| | 0.2nm,0.3s,baz=226,slow=28,SNR=3.0 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.06** | **333** | Pn | P | 23 05 21.5 | -1.5 |
| | baz=158,slow=11,SNR=4.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **47.19** | **339** | P | P | 23 10 06.8 | +0.8 |
| | 0.5nm,0.8s,baz=135,slow=4.9,SNR=5.5 | | | | | | | |

*NIED **21** 23:45:00.44°.10N×148°.10E, h56km, Mw3.6 Best double couple: M₀3.22000×10¹⁴ NP1:φ₁287.00000°, δ32.00000°, λ-164.00000°. NP2:φ₂183.00000°, δ82.00000°, λ-59.00000°.*

*JMA **21** 23:45:23.0±0.4, 44°.06N×148°

BNDI S **Sn** **00 05 20.3 0.0**
**SAUI Saumlaki 2.38 151** P **Pn** **00 05 06.3 +1.7**
**SAUI Saumlaki 2.38 151** *e*Pn Pn 00 05 09.0 +4.3
**MSAI Masohi 2.80 335** P **Pn** **00 05 08.2 -1.2**
MSAI S **Sn** **00 05 42.4 -4.0**
**AAI Ambon 2.92 319** P Pn 00 05 16.4 +5.7
baz=2.9,SNR=5.1
**AAI Ambon 2.92 319** P **Pn** **00 05 10.6 -0.1**
**FAKI Fak Fak 3.64 36** P **Pn** **00 05 18.2 -1.3**
baz=3.8,SNR=753
**FAKI Fak Fak 3.64 36** P **Pn** **00 05 18.5 -1.0**
**FAKI Fak Fak 3.64 36** *e*Pn **Pn** **00 05 18.4 -1.0**
FAKI *e*S Sn 00 05 54.9 -10
**NLAI Namlea 4.00 311** P **Pn** **00 05 24.5 +0.6**
NLAI S **Sn** **00 06 13.0 +0.5**
**KMPI Kaimana, Papua 4.21 58** P **Pn** **00 05 27.0 +0.5**
KMPI S **Sn** **00 06 14.4 -2.7**
**SIJI Sorong 5.13 13** P **Pn** **00 05 36.4 -1.7**
30nm,0.3s,baz=192,slow=22,SNR=51
SIJI S Sn 00 06 30.6 -7.6
154nm,0.3s,baz=253,slow=19,SNR=46
**SWI Sorong 5.13 13** P **Pn** **00 05 36.5 -1.7**
baz=5.3,SNR=29
**SWI Sorong 5.13 13** P **Pn** **00 05 36.3 -1.9**
124nm,0.4s,18µm5.5nm
**SANI Sanana 5.62 313** P **Pn** **00 05 44.5 0.0**
477nm,0.8s,4µm1.6nm
**LBMI Labuha 5.84 333** P **Pn** **00 05 46.2 -1.1**
128nm,0.7s,4µm1.6nm
**RKPI Ransiki, Papua 5.95 43** P **Pn** **00 05 48.7 0.0**
774nm,0.6s,35µm16nm
**SOEI Soe 6.95 236** P **Pn** **00 06 02.2 +0.4**
baz=6.8,SNR=15
**SOEI Soe 6.95 236** P **Pn** **00 06 02.6 +0.8**
128nm,0.7s,5µm3.8nm
**SOEI Soe 6.95 236** *e*Pn **Pn** **00 06 01.9 +0.1**
SOEI *e*S Sn 00 07 14.8 -6.1
**MTN Manton Dam 6.97 172** P **Pn** **00 06 01.8 -0.2**
baz=6.9,SNR=157
**MTN Manton Dam 6.97 172** *e*Pn **Pn** **00 06 01.1 -0.9**
MTN *e*S Sn 00 07 14.5 -6.8
**KDU Kakadu 7.13 161** P **Pn** **00 06 04.0 0.0**
baz=7.1,SNR=151
**BBSI Bau Bau 7.52 273** P **Pn** **00 06 11.0 +1.8**
98nm,1.1s,1µm0.3nm
**BATI Baumata 7.69 236** P **Pn** **00 06 10.8 -0.5**
39nm,0.3s,baz=53,slow=0.9,SNR=26
BATI S **Sn** **00 07 34.1 -4.3**
138nm,0.3s,baz=110,slow=19,SNR=13
**BATI Baumata 7.69 236** P **Pn** **00 06 11.6 +0.2**
139nm,0.7s,4µm1.5nm
**KDI Kendari 7.72 284** P Pn 00 06 15.3 +3.6
**MMRI Maumere 8.28 250** S **Sn** **00 07 53.7 +1.5**
**LUWI Luwuk 8.78 303** *e*Pn **Pn** **00 06 24.8 -0.7**
52nm,0.8s
**APSI Ampana 9.80 300** P **Pn** **00 06 39.1 +0.3**
161nm,1.0s,1µm
**KNRA Kununurra 9.81 188** P **Pn** **00 06 37.9 -1.0**
baz=9.8,SNR=58
**BKSI Bulukumba 9.97 273** P Pn 00 06 49.6 +8.7
**MRSI Marisa 10.33 308** P **Pn** **00 06 44.7 -1.0**
309nm,0.8s,2µm
**KAPI Kappang 10.36 274** P **Pn** **00 06 45.1 -0.9**
0.8nm,0.3s,baz=108,slow=7.6,SNR=2.2
**KAPI Kappang 10.36 274** *e*Pn **Pn** **00 06 46.7 +0.7**
**BASI Baing, Sumba 10.38 245** P **Pn** **00 06 45.6 -0.6**
170nm,1.0s,3µm
**SPSI Sidrap Palu 10.49 280** P **Pn** **00 06 48.2 +0.5**
38nm,0.8s
**TTSI Tana Toraja 10.65 285** P P 00 06 52.9 -3.8
**PCI Palu 11.40 295** P **Pn** **00 07 00.3 +0.9**
95nm,0.8s
**MPSI Mapaga 11.94 301** P **Pn** **00 07 06.1 -0.1**
19nm,0.6s
**TWSI Taliwang, Sumb 13.43 257** P **Pn** **00 07 23.7 -1.3**
38nm,0.5s
**PALU Palau 13.85 18** P **P** **00 07 33.1 +0.7**
baz=14,SNR=5.7
**KBKI Kotabaru 14.14 280** P **P** **00 07 35.4 -0.2**
52nm,1.1s,3µm
**WRAB Tennant Creek 14.54 164** *e*Pn **Pn** **00 07 38.5 -0.3**
17nm,0.6s
WRAB *e*S S 00 10 13.4 -7.2
**WRA Warramunga Arr 14.55 164** P **Pn** **00 07 37.0 -1.9**
2.7nm,0.3s,baz=338,slow=12,SNR=27
WRA S S 00 10 11.9 -8.8
9.7nm,0.3s,baz=340,slow=22,SNR=11
**SRBI Singaraja 14.95 261** P **Pn** **00 07 42.6 -1.2**
96nm,1.1s
**COEN Coen 15.14 123** P **P** **00 07 48.6 +2.0**
baz=15,SNR=16
**COEN Coen 15.14 123** *e*Pn **P** **00 07 48.6 +2.0**
20nm,0.6s
COEN *e*S **S** **00 10 30.6 -3.8**
**ABJI Asem Bagus 15.88 262** P **P** **00 07 54.4 -0.4**
78nm,0.9s
MYLDM **Lahad Datu 15.99 313** ⇓P **Pn** **00 07 58.2 +1.8**
MYLDM **Lahad Datu 15.99 313** *e*P **Pn** **00 07 57.3 +0.9**
35nm,0.8s
**JAGI Jajag, Banyuwa 16.05 260** P **P** **00 07 54.6 -2.1**
baz=16,SNR=15
**JAGI Jajag, Banyuwa 16.05 260** P **P** **00 07 54.7 -1.9**
81nm,0.5s,2µm
**JAGI Jajag, Banyuwa 16.05 260** *e*Pn **P** **00 07 54.4 -2.3**
81nm,1.1s
JAGI *e*S S 00 10 44.7 -10
**KMMI Kalianget 16.09 265** P **Pn** **00 07 59.4 +1.8**
316nm,0.8s,2µm
**QIS Mount Isa 17.24 149** P **Pn** **00 08 11.8 +0.6**
baz=17,SNR=20
**PMG Port Moresby 17.24 103** P **Pn** **00 08 12.4 +1.1**
1.4nm,0.3s,baz=299,slow=6.9,SNR=9.7
**PMG Port Moresby 17.24 103** P **Pn** **00 08 14.5 +3.2**
baz=17,SNR=4.5
**PMG Port Moresby 17.24 103** *e*Pn **Pn** **00 08 12.6 +1.3**
37nm,0.9s
**SDKM Sandakan 17.26 311** ⇑P **Pn** **00 08 11.5 -0.1**
**ASAR Alice Springs 18.04 169** P **P** **00 08 19.9 +1.5**
5.3nm,0.3s,baz=351,slow=11,SNR=301
ASAR S **S** **00 11 32.3 -2.6**
1.5nm,0.3s,baz=347,slow=25,SNR=7.4
ASAR ScP **ScP** **00 15 58.7 -1.5**
baz=7.6,slow=2.8,SNR=5.9
**AS01 Alice Springs 18.05 169** *e*P **P** **00 08 19.9 +1.5**
**MBWA Marble Bar 18.21 213** *e*P **P** **00 08 20.6 +0.4**
26nm,0.8s
MBWA *e*S **S** **00 11 35.8 -2.4**
**KKM Kota Kinabalu 18.26 310** P **P** **00 08 21.0 0.0**
baz=18,SNR=16
**KKM Kota Kinabalu 18.26 310** *e*P **P** **00 08 20.3 -0.6**
95nm,0.7s
**KDM Kudat 18.38 314** ⇑P **Pn** **00 08 23.4 -1.2**
**MTSU Mount Surprise 18.44 132** P **Pn** **00 08 25.2 -0.2**
baz=18,SNR=33
**PCJI Pacitan 18.94 262** P **P** **00 08 26.1 -2.1**
**WRKA Warakurna 19.11 185** P **P** **00 08 31.3 +1.3**
baz=19,SNR=37
**UGM Wanagama 19.56 263** P **P** **00 08 34.4 -0.5**
baz=20,SNR=4.7
**CTA Charters Tower 21.09 133** P **P** **00 08 52.0 +0.9**
3.4nm,0.6s,baz=310,slow=15,SNR=3.4
**KSM Kuching 21.09 290** *e*P **P** **00 08 51.7 +0.4**
26nm,1.0s
**CMJI Cimerak 21.60 264** P **P** **00 08 54.0 -2.4**
110nm,1.1s
**CISI Cisompet, Garu 22.21 264** P **P** **00 09 00.9 -1.6**
baz=22,SNR=5.4
**CISI Cisompet, Garu 22.21 264** P **P** **00 09 03.2 +0.7**
144nm,0.7s,6µm
**CISI Cisompet, Garu 22.21 264** *e*P **P** **00 09 00.9 -1.6**
111nm,0.9s
**LEM Lembang 22.38 266** P **P** **00 09 03.7 -0.5**
46nm,0.6s,baz=66,slow=3.9,SNR=10
**LEM Lembang 22.38 266** P **P** **00 09 05.1 +0.9**
642nm,0.8s
**TPI Tanjungpandan 22.61 277** P **P** **00 09 07.7 +1.5**
19nm,0.9s
**GIRL Giralia 22.63 221** P **P** **00 09 07.3 +1.1**
baz=23,SNR=5.2
**CNJI Cibinong 22.88 265** P **P** **00 09 10.0 +1.5**
137nm,0.7s
**MEEK Meekatharra 23.36 207** P **P** **00 09 12.5 -0.3**
baz=23,SNR=15
**PPBI Pangkal Pinang 24.20 278** P **P** **00 09 22.4 +1.8**
**GUMO Guam 24.28 37** P **P** **00 09 19.3 -1.8**
64nm,0.7s,baz=210,slow=20,SNR=3.1
**KMBL Kambalda 26.49 196** P **P** **00 09 41.5 +0.5**
baz=26,SNR=24
**MORW Morawa 26.61 208** P **P** **00 09 42.2 0.0**
baz=27,SNR=5.2
**BBOO Buckleboo 27.34 169** P **P** **00 09 49.3 +0.7**
baz=27,SNR=16
**BLDU Ballidu 27.63 206** P **P** **00 09 51.4 +0.2**
baz=28,SNR=20
**KLBR Kellerberrin 28.06 203** P **P** **00 09 55.4 +0.4**
baz=28,SNR=31
**NWAO Narrogin (SRO) 29.45 202** P **P** **00 10 07.2 0.0**
4.0nm,0.3s,baz=87,slow=0.2,SNR=13
**NWAO Narrogin (SRO) 29.45 202** P **P** **00 10 07.8 +0.6**
baz=30,SNR=9.9
**NWAO Narrogin (SRO) 29.45 202** *e*P **P** **00 10 07.5 +0.3**
**RKGY Rocky Gully 31.05 201** P **P** **00 10 22.9 +1.7**
baz=31,SNR=11
**KULM Kulim 31.45 290** *e*P **P** **00 10 23.0 -2.0**
9.2nm,0.7s
**QIZ Qiongzhong 31.82 322** P **P** **00 10 29.1 +0.9**
QIZ S **S** **00 15 23.8 -0.1**
QIZ PMZ
35nm,2.0s
**PSI Prapat 32.33 285** *e*P P 00 10 36.0 +3.1
11nm,0.7s
**KHON Khomkaen 34.89 310** P **P** **00 10 54.2 -0.6**
24nm,0.8s,1µm
**UTTA Uttaradit 37.47 309** P **P** **00 11 16.0 -0.6**
10nm,0.8s
**DZM Mont Dzumac 38.60 118** P **P** **00 11 27.2 +1.0**
6.6nm,0.8s,baz=270,slow=20,SNR=3.5
**LAMP Lampang 38.63 310** P **P** **00 11 26.2 -0.2**
6.3nm,0.7s
**CM01 Chiang Mai Arr 39.09 309** *e*P **P** **00 11 29.5 -0.7**
**CMAR Chiang Mai Arr 39.13 309** P **P** **00 11 30.1 -0.4**
9.1nm,0.7s,baz=136,slow=7.5,SNR=45
CMAR ScP **ScP** **00 17 04.8 -0.8**
0.6nm,0.8s,baz=153,slow=3.0,SNR=4.6
**NJ2 Nanjing 39.24 345** *e*P **P** **00 11 30.1 -1.0**
NJ2 PMZ
20nm,0.7s
**CHTO Chiang Mai 39.33 309** P **P** **00 11 31.6 -0.5**
112nm,0.8s
**CHTO Chiang Mai 39.33 309** *e*P **P** **00 11 31.6 -0.5**
17nm,0.8s
**GYA Guiyang 39.39 326** *e*P **P** **00 11 33.6 +0.9**
GYA pP **pP** **00 12 18.8 +3.9**
GYA sP sP 00 12 44.3 +6.6
GYA PP **PnPn** **00 13 12.0 -0.6**
GYA PcP **PcP** **00 13 38.4 +1.5**
GYA S **S** **00 17 19.6 +0.3**
GYA sS sS 00 18 39.3 +5.4
GYA PMZ
10.0nm,0.8s
GYA PMZ
90nm,4.8s
**CMAI Chiengmai2 39.91 311** P **P** **00 11 38.4 +1.3**
**MAJO Matsushiro 42.89 10** *e*P **P** **00 11 59.4 -1.5**
20nm,0.8s
**MAT Matsushiro 42.89 10** P **P** **00 11 59.5 -1.4**
MAT *e*S S 00 18 20.8 +10
**MJAR Matsushiro Arr 42.89 10** P **P** **00 11 58.8 -2.1**
12nm,0.7s,baz=187,slow=9.7,SNR=30
**KSAR Wonju Array Be 43.17 357** P **P** **00 12 02.4 -0.7**
**KSRS Korea Array 43.18 357** P **P** **00 12 02.4 -0.7**
2.0nm,0.5s,baz=175,slow=9.0,SNR=7.9
**CD2 Chengdu 44.45 327** *e*P **P** **00 12 14.0 +0.6**
CD2 pP **pP** **00 13 00.1 +3.5**
CD2 sP sP 00 13 24.5 +5.4
CD2 PcS **PcS** **00 17 47.3 +0.1**
CD2 S **S** **00 18 33.0 -0.2**
CD2 sS sS 00 19 54.8 +5.7
CD2 PMZ
20nm,0.5s
CD2 PMZ
160nm,5.0s
**LZH Lanzhou 48.50 331** *e*P **P** **00 12 47.1 +2.1**
LZH pP pP 00 13 35.0 +6.1
LZH sP sP 00 13 57.5 +6.3
LZH PP **PP** **00 14 42.3 +2.5**
LZH PMZ
22nm,1.3s
LZH PMZ
85nm,6.7s
LZH LN
380nm,14.0s
LZH LE
400nm,14.2s
LZH LZ
500nm,18.5s
**HHC Hu-ho-hao-te 49.54 342** *e*P **P** **00 12 54.4 +1.7**
HHC sP **sP** **00 14 03.3 +4.2**
HHC S **S** **00 19 42.3 -2.9**
HHC PMZ
19nm,1.0s
HHC PMZ
150nm,6.3s
**USRK Ussuriysk Ar. 49.90 2** P **P** **00 12 54.9 -0.3**
6.7nm,0.5s,baz=197,slow=7.4,SNR=17
**MDJ Mudanjiang 50.29 360** P **P** **00 12 57.8 -0.3**
MDJ pP **pP** **00 13 43.3 +0.9**
MDJ S **S** **00 19 53.3 -1.8**
MDJ sS **sS** **00 21 14.4 +1.9**
MDJ PMZ
11nm,0.9s
MDJ PMZ
94nm,4.5s
**ODAN Odare 52.63 310** *e*P **P** **00 13 15.3 -0.9**
26nm,0.5s
**TAPN Taplejung 52.65 311** *e*P **P** **00 13 15.6 -0.8**
32nm,0.3s
**GTA Gaotai 53.07 331** *e*P P 00 13 25.8 +6.8
GTA pP PcP 00 14 13.6 -11
GTA sP sP 00 14 37.4 +12
GTA pmax pmax
comp=Z,4.0nm,0.7s
**RAMN Ramite 53.28 310** *e*P **P** **00 13 20.4 -0.5**
comp=Z,74nm,0.4s
**GUN Gumba 54.33 311** *e*P **P** **00 13 27.8 -0.8**
comp=Z,42nm,0.4s
**PKIN Phulchoki 54.52 310** *e*P **P** **00 13 29.0 -0.9**
comp=Z,4.6nm,0.3s
**KKN Kakani 54.72 310** *e*P **P** **00 13 30.4 -0.9**
comp=Z,13nm,0.3s
**DMN Daman 54.76 310** *e*P **P** **00 13 30.9 -0.7**
comp=Z,11nm,0.3s
**GKN Gorkha 55.32 310** *e*P **P** **00 13 34.6 -0.9**
comp=Z,35nm,0.3s
**KOLN Koldanda 56.00 309** *e*P **P** **00 13 39.7 -0.7**
comp=Z,23nm,0.6s
**PETK Petropavlovsk- 63.25 18** P **P** **00 14 29.6 +0.5**
comp=Z,13nm,0.6s,baz=191,slow=7.8,SNR=7.8
**KSH Kashi 67.29 317** *e*P **P** **00 14 54.1 -1.5**
KSH *e*pP **pP** **00 15 46.1 +3.7**
KSH *e*sP sP 00 16 09.8 +5.9
KSH *e*ScP 00 19 01.1
KSH S S 00 23 26.8 -7.9
KSH sS **sS** **00 24 58.4 +2.1**
KSH PMZ
comp=Z,130nm,5.4s
KSH LN
comp=Z,1µm,14.8s
KSH LE
comp=Z,320nm,8.5s
KSH LZ
comp=Z,300nm,5.4s
**MK01 Makanchi Array 67.36 327** *e*P **P** **00 14 55.6 -0.1**
**MKAR Makanchi Array 67.38 327** P **P** **00 14 55.7 -0.1**
comp=Z,5.2nm,0.6s,baz=113,slow=8.2,SNR=47
**MKAR Makanchi Array 67.38 327** *e*P **P** **00 14 55.9 +0.1**
**YAK Yakutsk 67.73 360** *e*P **P** **00 14 56.5 -1.1**
**TKM2 Tokmak 2 69.22 320** *e*P **P** **00 15 07.7 +0.2**
comp=Z,4.3nm,0.7s
**ZALV Zalesovo Beam 70.66 334** P **P** **00 15 14.9 -0.8**
comp=Z,2.7nm,0.6s,baz=128,slow=4.9,SNR=9.1
**KURK Kurchatov 71.65 328** *e*P **P** **00 15 21.4 -0.3**
comp=Z,10nm,0.9s
**KKAR Karatay Array 72.60 319** *e*P **P** **00 15 27.4 -0.3**
comp=Z,1.3nm,0.7s
**VNDA Vanda 73.52 173** P **P** **00 15 32.8 +0.4**
comp=Z,0.6nm,0.5s,baz=313,slow=7.1,SNR=11
**MAW Mawson 76.01 201** P **P** **00 15 47.5 +0.7**
comp=Z,4.4nm,0.5s,baz=77,slow=5.1,SNR=30
**MAW Mawson 76.01 201** P **P** **00 15 47.7 +0.8**
baz=76,SNR=15
**GEYT Alibeck 79.60 310** P **P** **00 16 07.3 +0.1**
comp=Z,1.5nm,0.5s,baz=153,slow=4.3,SNR=4.4
**ABKAR Akbulak array 81.72 321** *e*P **P** **00 16 17.2 -1.0**
**SYO Syowa Base 84.72 201**⇑*e*P **P** **00 16 32.4 -0.8**
**ARU Arti 84.84 328** *e*P **P** **00 16 33.4 -0.5**
**RAYN Ar Rayn 87.41 294** *e*P **P** **00 16 46.7 -0.6**
comp=Z,7.3nm,0.8s
**ILAR Eielson Array 92.31 25** P **P** **00 17 07.0 -2.2**
comp=Z,2.1nm,0.7s,baz=252,slow=4.7,SNR=22
**KMBO Kilima Mbogo 92.74 269** P P 00 17 05.5 -7.2
baz=93,SNR=4.3
**GERES GERESS Array B 111.66 320** PKiKP **PKiKP** **00 22 32.2 -0.8**
comp=Z,0.2nm,0.5s,baz=28,slow=4.4,SNR=2.7
**TXAR Lajitas Array 124.26 58** PKP **PKPdf** **00 22 58.3 +0.5**
comp=Z,0.3nm,0.7s,baz=263,slow=1.0,SNR=5.4
**TORD Torodi Ar. Bea 128.71 282** PKP **PKPdf** **00 23 06.0 -0.5**
comp=Z,0.3nm,0.5s,baz=87,slow=2.3,SNR=9.6
TORD SKPbc SKiKP 00 26 05.7 -19
comp=Z,2.3nm,1.0s,baz=77,slow=3.6,SNR=11
**SCHQ Schefferville 129.33 13** SKPbc SKPab 00 26 08.0 -1.0
comp=Z,2.9nm,0.7s,baz=24,slow=6.5,SNR=3.9
**DBIC Dimbokro 135.25 274** SKPbc **SKPbc** **00 26 29.4 -1.7**
comp=Z,0.8nm,0.5s,baz=104,slow=4.2,SNR=3.4
**CPUP Villa Florida 147.16 168** PKPbc **PKPbc** **00 23 42.9 +0.6**
comp=Z,3.3nm,0.9s,baz=110,slow=4.9,SNR=5.4
CPUP SKPbc **SKPbc** **00 27 00.6 -1.2**
comp=Z,1.7nm,0.9s,baz=168,slow=3.3,SNR=3.3
**LPAZ La Paz 151.50 141** PKPbc **PKPbc** **00 23 54.7 +0.6**
comp=Z,1.1nm,0.4s,baz=152,slow=1.0,SNR=5.2

**MEX 22 00:08:23.6±0.3, 15°32N×92°80W, h155km±7km, MD4.2, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.56** | **314** | *e*P | Pn | 00 08 44.3 | -1.5 |
| PCIG | | | | *e*S | Sn | 00 09 00.6 | -2.2 |
| **CCIG** | **Comitan** | **1.15** | **34** | *e*P | Pn | 00 08 49.0 | -1.3 |
| CCIG | | | | *i* S | Sn | 00 09 08.3 | -2.6 |
| **TGIG** | | **1.49** | **348** | *i* P | Pn | 00 08 52.4 | -1.1 |
| TGIG | | | | *e*S | Sn | 00 09 14.3 | -2.2 |
| **HUIG** | **Huatulco** | **3.22** | **278** | *e*P | Pn | 00 09 12.3 | -1.6 |
| HUIG | | | | *i* S | Sn | 00 09 51.4 | -1.6 |

*IDC **22** 00:08:26.6±1.1, 33°22S×178°50W, h0km, mb4.3/3, mb1 4.6/4, mb1mx4.1/25, mbtmp4.3/4, ML3.8/1, MS3.7/3, Ms1 3.7/3, ms1mx3.2/28, Error ellipse: s-maj=43.1km s-min=29.7km az=144.0*
*ISCJB **22** 00:08:31.4±0.8, 33°14S±0°10'×178°8'W±0°2, h35km, mb4.1/4, MS3.5/2, Error ellipse: s-maj=24.8km s-min=10.5km az=23.1*
*NEIC **22** 00:08:32.4±0.6, 33°12S×178°69W, h35km, mb4.3/1, Error ellipse: s-maj=23.0km s-min=10.8km az=110.0*
**ISC 22 00:08:32.5±0.7, 33°02S±0°09×178°8W±0°2, h35km, n25, σ1s55/24, mb4.3/4, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **3.84** | **12** | Sn | **Sn** | **00 10 09.8** | **-3.2** |
| | 49nm,0.3s,baz=270,slow=20,SNR=2.7 | | | | | | |
| **RAO** | **Raoul Island** | **3.84** | **12** | Pn | **Pn** | **00 09 30.1** | **+1.0** |
| RAO | | | | Sn | **Sn** | **00 10 09.8** | **-3.2** |
| **URZ** | **Urewera** | **6.18** | **211** | Pn | **Pn** | **00 09 58.7** | **-2.5** |
| | 2.2nm,0.3s,baz=237,slow=3.2,SNR=50 | | | | | | |
| URZ | | | | Sn | **Sn** | **00 11 08.1** | **-2.5** |
| | 3.7nm,0.3s,baz=162,slow=19,SNR=9.8 | | | | | | |
| **URZ** | **Urewera** | **6.18** | **211** | *e*Pn | **Pn** | **00 09 59.5** | **-1.7** |
| | 68nm,1.1s | | | | | | |
| URZ | | | | *e*S | **Sn** | **00 11 10.1** | **-0.4** |
| **DZM** | **Mont Dzumac** | **16.99** | **306** | *e*LR | LR | 00 16 38.4 | |
| | 362nm,26.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.99** | **306** | LR | LR | 00 18 19.2 | |
| | comp=Z,349nm,18.6s,baz=200,slow=34 | | | | | | |
| **PPT2** | **Papeete2** | **30.46** | **67** | *e*LR | LR | 00 22 52.4 | |
| | 69nm,21.5s | | | | | | |
| **PPT** | **Papeete** | **30.47** | **67** | LR | LR | 00 26 38.6 | |
| | comp=Z,86nm,18.2s,baz=192,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **42.33** | **270** | P | **P** | **00 16 24.9** | **+1.7** |
| | 6.8nm,0.7s,baz=112,slow=7.3,SNR=8.2 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 18 16.7** | **+0.3** |
| | 1.4nm,0.8s,baz=133,slow=4.1,SNR=4.2 | | | | | | |
| ASAR | | | | LR | LR | 00 32 31.5 | |
| | comp=Z,72nm,18.7s,baz=115,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.55** | **275** | P | **P** | **00 16 34.7** | **+1.5** |
| | 4.8nm,0.8s,baz=118,slow=7.0,SNR=5.1 | | | | | | |
| **CASY** | **Casey** | **52.50** | **209** | *e*P | **P** | **00 17 41.7** | **+0.1** |
| **QSPA** | **South Pole Qui** | **57.09** | **180** | *e*P | **P** | **00 18 16.4** | **+1.3** |
| | 3.7nm,1.2s | | | | | | |
| **SNAA** | **Sanae** | **75.56** | **179** | P | P | 00 20 21.6 | +8.5 |
| **VNA3** | **Neumayer Olymp** | **75.74** | **176** | P | P | 00 20 21.8 | +7.7 |
| **VNA2** | **Neumayer--Watz** | **76.17** | **177** | P | P | 00 20 21.5 | +5.0 |
| | baz=166,slow=4.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **76.40** | **177** | P | **P** | **00 20 18.6** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **90.64** | **43** | P | **P** | **00 21 31.5** | **0.0** |
| | 0.1nm,0.3s,baz=230,slow=7.0,SNR=3.6 | | | | | | |
| **KBZ** | **Khabaz** | **145.90** | **301** | PKPbc | **PKPbc** | **00 28 08.4** | **+0.4** |
| | 3.3nm,0.9s,baz=27,slow=2.3,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **147.33** | **338** | PKPbc | **PKPbc** | **00 28 11.3** | **-0.3** |
| | 3.8nm,0.8s,baz=38,slow=9.6,SNR=9.8 | | | | | | |
| **NB2** | **NORSAR Subarra** | **151.22** | **350** | PKP | **PKPab** | **00 28 30.2** | **+0.8** |
| | comp=Z,4.3nm,1.1s,baz=17,slow=2.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **151.22** | **350** | PKPab | **PKPab** | **00 28 28.8** | **-0.6** |
| | comp=Z,2.8nm,0.9s,baz=19,slow=2.8,SNR=4.0 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **151.36** | **279** | PKPbc | **PKPbc** | **00 28 23.0** | **+0.4** |
| | comp=Z,7.7nm,0.9s,baz=43,slow=3.8,SNR=6.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **152.88** | **319** | PKPbc | **PKPbc** | **00 28 25.6** | **+0.2** |
| | comp=Z,0.6nm,0.5s,baz=54,slow=1.8,SNR=3.3 | | | | | | |
| AKASG | | | | PKPab | **PKPab** | **00 28 37.5** | **+0.9** |
| | comp=Z,0.2nm,0.3s,baz=89,slow=1.2,SNR=3.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **153.11** | **294** | PKPbc | **PKPbc** | **00 28 26.9** | **+0.4** |
| | comp=Z,1.8nm,0.8s,baz=142,slow=4.5,SNR=11 | | | | | | |
| BRTR | | | | PKPab | **PKPab** | **00 28 38.5** | **+0.4** |
| | comp=Z,1.0nm,0.7s,baz=142,slow=2.9,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **160.21** | **182** | PKPab | **PKPab** | **00 29 07.4** | **-1.5** |
| | comp=Z,0.7nm,0.9s,baz=204,slow=4.2,SNR=3.7 | | | | | | |

*IDC **22** 00:29:33.5±0.9, 10°17S×79°33W, h0km, mb4.0/8, mb1 4.2/11, mb1mx4.0/38, mbtmp4.1/11, ML4.3/3, MS3.6/6, Ms1 3.6/6, ms1mx3.3/28, Error ellipse: s-maj=34.1km s-min=17.7km az=45.0*
*ISCJB **22** 00:29:37.4±0.7, 10°15S±0°06×79°16W±0°10, h33km, mb3.9/11, MS3.5/3, Error ellipse: s-maj=15.1km s-min=5.9km az=151.0*
*NEIC **22** 00:29:39.2±1.3, 10°24S×79°30W, h39km±11km, mb4.2/3, Error ellipse: s-maj=17.3km s-min=7.3km az=65.0*
**ISC 22 00:29:38.8±0.8, 10°31S±0°07×79°3W±0°1, h35km, n30, σ1s26/24, mb4.0/11, MS3.4/3, Off coast of Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NNA** | **Nana** | **2.93** | **125** | Pn | **Pn** | **00 30 22.2** | **-0.8** |
| | 23nm,0.3s,baz=315,slow=3.9,SNR=48 | | | | | | |
| NNA | | | | Sn | **Sn** | **00 30 57.0** | **0.0** |
| | 56nm,0.3s,baz=259,slow=16,SNR=7.0 | | | | | | |
| **NNA** | **Nana** | **2.93** | **125** | *e*Pn | **Pn** | **00 30 22.0** | **-1.0** |
| NNA | | | | *e*S | **Sn** | **00 30 54.7** | **-2.4** |
| **ATAH** | **Atahualpa** | **3.28** | **16** | Pn | **Pn** | **00 30 29.1** | **+1.0** |
| | 3.6nm,0.3s,baz=180,slow=3.8,SNR=26 | | | | | | |
| ATAH | | | | Sn | **Sn** | **00 31 08.1** | **+1.9** |
| | 21nm,0.3s,baz=27,slow=14,SNR=3.7 | | | | | | |
| ATAH | | | | LR | LR | 00 31 44.9 | |
| | comp=Z,596nm,20.7s,baz=209,slow=42 | | | | | | |
| **OTAV** | **Otavalo** | **10.51** | **5** | *e*Pn | **Pn** | **00 32 07.6** | **+0.1** |
| | 13nm,0.7s | | | | | | |
| OTAV | | | | *e*S | **Sn** | **00 34 01.8** | **-2.6** |
| **LPAZ** | **La Paz** | **12.38** | **120** | Pn | **Pn** | **00 32 36.1** | **+2.8** |
| | 0.1nm,0.3s,baz=304,slow=11,SNR=2.9 | | | | | | |
| LPAZ | | | | LR | LR | 00 38 01.4 | |
| | comp=Z,320nm,19.9s,baz=276,slow=41 | | | | | | |
| **LVC** | **Limon Verde** | **15.77** | **142** | Pn | **Pn** | **00 33 19.3** | **+0.8** |
| | 10nm,0.3s,baz=293,slow=11,SNR=3.4 | | | | | | |
| **ROSC** | **El Rosal** | **15.86** | **18** | LR | LR | 00 40 50.3 | |
| | comp=Z,438nm,18.1s,baz=188,slow=43 | | | | | | |
| **SAML** | **Samuel** | **15.95** | **87** | *e*Pn | Pn | 00 33 15.3 | -5.5 |
| | 2.8nm,0.6s | | | | | | |
| **SIV** | **San Ignacio** | **18.62** | **110** | P | **Pn** | **00 33 53.9** | **-0.1** |
| | 0.3nm,0.3s,baz=298,slow=11,SNR=8.1 | | | | | | |
| **JTS** | **JuntasAbangare** | **21.23** | **344** | LR | LR | 00 41 29.4 | |
| | comp=Z,120nm,18.2s,baz=171,slow=34 | | | | | | |
| **PTGA** | **Pitinga** | **21.45** | **65** | P | **P** | **00 34 23.0** | **-1.2** |
| | 0.7nm,0.3s,baz=294,slow=20,SNR=3.0 | | | | | | |
| **CFAA** | **Coronel Fontan** | **23.54** | **156** | P | **P** | **00 34 47.0** | **+0.9** |
| | 0.2nm,0.8s,baz=326,slow=9.2,SNR=2.8 | | | | | | |
| **CPUP** | **Villa Florida** | **26.18** | **130** | P | **P** | **00 35 11.2** | **+1.0** |

1.7nm,0.8s,baz=293,slow=12,SNR=4.3
**BDFB Brasilia 30.92 103** P **P 00 35 52.9 +0.1**
1.2nm,0.4s,baz=323,slow=7.2,SNR=3.5
BDFB LR LR 00 49 46.2
comp=Z,86nm,19.1s,baz=218,slow=39
**NVAR Mina Array Bea 60.62 325** P **P 00 39 46.1 -0.5**
0.5nm,0.6s,baz=131,slow=6.5,SNR=4.4
**DBIC Dimbokro 76.02 80** P **P 00 41 23.9 +0.7**
2.7nm,0.8s,baz=227,slow=5.0,SNR=4.5
**SNAA Sanae 76.02 162** *eP* P 00 41 16.1 -6.1
4.6nm,1.4s
**YKA Yellowknife Ar 77.56 344** P **P 00 41 30.5 -0.3**
0.8nm,0.5s,baz=143,slow=5.9,SNR=4.8
**QSPA South Pole Qui 79.81 180** *eP* **P 00 41 44.2 +0.8**
4.4nm,1.0s
**TORD Torodi Ar. Bea 83.69 75** P **P 00 42 04.6 -0.1**
1.4nm,0.8s,baz=279,slow=4.6,SNR=9.0
**ILAR Eielson Array 89.99 337** P **P 00 42 33.3 -1.0**
0.8nm,0.8s,baz=153,slow=4.9,SNR=6.9
ILAR LR LR 01 26 04.3
comp=Z,35nm,18.4s,baz=284,slow=38
**H11N3 WAKE ISLAND Hy 15.70 287** T T 02 54 15.4
baz=92,slow=74,SNR=4.3
**H11N2 WAKE ISLAND Hy 15.71 287** T T 02 54 16.5
baz=92,slow=74,SNR=7.1
**H11N1 WAKE ISLAND Hy 15.71 287** T T 02 54 15.0
baz=92,slow=74,SNR=4.8
**H11S2 WAKE ISLAND Hy 15.84 286** T T 02 54 26.5
baz=94,slow=74,SNR=4.7
**H11S1 WAKE ISLAND Hy 15.84 286** T T 02 54 26.3
baz=94,slow=74,SNR=4.7
**H11S3 WAKE ISLAND Hy 15.86 286** T T 02 54 26.9
baz=94,slow=74,SNR=5.0
**ASAR Alice Springs 133.16 223** PKP **PKPdf 00 48 51.5 -0.3**
0.6nm,0.7s,baz=116,slow=1.8,SNR=6.0
**ZALV Zalesovo Beam 134.66 13** PKP **PKPdf 00 48 53.6 0.0**
0.5nm,0.4s,baz=333,slow=4.1,SNR=3.5
**WRA Warramunga Arr 135.27 228** PKP **PKPdf 00 48 55.6 -0.2**
1.4nm,0.8s,baz=130,slow=1.8,SNR=6.1

*IDC **22** 00:34:45.6±0.8, 13°.45N×92°.89E, h0km, mb3.7/11, mb1 3.9/12, mb1mx3.7/46, mbtmp3.7/12, ML4.1/1, MS3.1/4, Ms1 3.1/4, ms1mx2.8/41, Error ellipse: s-maj=29.9km s-min=17.2km az=50.0*
**ISC 22 00:34:49.3±0.9, 13°.5N±0°.1×92°.69E±0°.10, h29km, n23, σ1s68/20, mb3.6/11, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **7.80** | **50** | Pn | | **Pn** | **00 36 40.1** | **-0.8** |
| | 0.8nm,0.3s,baz=238,slow=16,SNR=16 | | | | | | | |
| CMAR | | | | Sn | | Sn | 00 37 58.3 | -10 |
| | baz=237,slow=30,SNR=2.8 | | | | | | | |
| CMAR | | | | LR | | LR | 00 40 20.9 | |
| | comp=Z,135nm,18.2s,baz=290,slow=44 | | | | | | | |
| **PALK** | **Pallekele** | **13.30** | **244** | Pn | | P | 00 38 01.2 | -4.5 |
| | 0.3nm,0.3s,baz=115,slow=19,SNR=2.4 | | | | | | | |
| PALK | | | | Sn | | **Sn** | **00 40 22.0** | **-1.4** |
| | 1.2nm,0.3s,baz=126,slow=16,SNR=5.5 | | | | | | | |
| PALK | | | | LR | | LR | 00 42 59.3 | |
| | comp=Z,44nm,19.6s,baz=116,slow=37 | | | | | | | |
| **ODAN** | **Odare** | **14.23** | **340** | *eP* | | **Pn** | **00 38 07.3** | **-1.8** |
| | 4.4nm,0.3s | | | | | | | |
| **RAMN** | **Ramite** | **14.58** | **338** | *eP* | | **Pn** | **00 38 12.3** | **-1.7** |
| | 12nm,0.5s | | | | | | | |
| **TAPN** | **Taplejung** | **14.58** | **342** | *eP* | | **Pn** | **00 38 12.8** | **-1.3** |
| | 5.2nm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **15.60** | **335** | *eP* | | **Pn** | **00 38 24.9** | **-2.7** |
| | 5.0nm,0.3s | | | | | | | |
| **PKIN** | **Phulchoki** | **15.61** | **335** | *eP* | | **Pn** | **00 38 25.0** | **-2.7** |
| | 8.0nm,0.5s | | | | | | | |
| **GKN** | **Gorkha** | **16.30** | **334** | *eP* | | **Pn** | **00 38 34.0** | **-2.4** |
| | 4.4nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **16.57** | **331** | *eP* | | **Pn** | **00 38 37.7** | **-2.2** |
| | 10nm,0.7s | | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.01** | **225** | T | | T | 01 10 53.8 | |
| | baz=43,slow=75,SNR=9.5 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.02** | **225** | T | | T | 01 10 53.8 | |
| | baz=43,slow=75,SNR=12 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.03** | **225** | T | | T | 01 10 50.7 | |
| | baz=43,slow=75,SNR=4.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **34.36** | **347** | P | | **P** | **00 41 34.7** | **+1.0** |
| | 0.4nm,0.5s,baz=155,slow=7.9,SNR=4.2 | | | | | | | |
| MKAR | | | | LR | | LR | 00 57 40.5 | |
| | comp=Z,18nm,20.5s,baz=168,slow=40 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **38.82** | **346** | P | | **P** | **00 42 11.8** | **+0.3** |
| | 0.9nm,0.3s,baz=161,slow=7.6,SNR=5.1 | | | | | | | |
| **KSRS** | **Korea Array** | **39.42** | **46** | P | | **P** | **00 42 17.2** | **+0.4** |
| | 1.4nm,0.7s,baz=240,slow=8.7,SNR=4.2 | | | | | | | |
| KSRS | | | | LR | | LR | 01 01 10.5 | |
| | comp=Z,60nm,19.9s,baz=258,slow=40 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.87** | **353** | P | | **P** | **00 42 28.4** | **-0.2** |
| | 0.5nm,0.5s,baz=171,slow=7.2,SNR=3.7 | | | | | | | |
| **BVAR** | **Borovoye Array** | **43.28** | **340** | P | | **P** | **00 42 48.8** | **+0.5** |
| | 0.2nm,0.4s,baz=139,slow=9.0,SNR=2.9 | | | | | | | |
| **WRA** | **Warramunga Arr** | **52.73** | **128** | P | | **P** | **00 44 01.0** | **-0.9** |
| | 1.0nm,0.9s,baz=308,slow=8.2,SNR=5.4 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **00 45 11.8** | **+0.5** |
| | 0.3nm,0.5s,baz=320,slow=3.3,SNR=3.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **54.64** | **132** | P | | **P** | **00 44 14.7** | **-1.2** |
| | 0.5nm,0.4s,baz=306,slow=6.8,SNR=8.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **57.79** | **309** | P | | **P** | **00 44 39.9** | **+1.6** |
| | 0.2nm,0.3s,baz=116,slow=6.6,SNR=3.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **67.15** | **331** | P | | **P** | **00 45 41.0** | **+0.8** |
| | 4.2nm,1.1s,baz=118,slow=8.0,SNR=3.0 | | | | | | | |
| **GERES** | **GERESS Array B** | **72.76** | **317** | P | | **P** | **00 46 17.3** | **+2.2** |
| | 0.3nm,0.5s,baz=90,slow=2.7,SNR=3.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **87.95** | **283** | P | | P | 00 47 40.9 | +3.6 |
| | 0.2nm,1.0s,baz=35,slow=3.9,SNR=3.2 | | | | | | | |

*NIED **22** 00:36:00, 37°.30N×140°.00E, h5km, Mw3.9 Best double couple: M0 8.06000×10^14 NP1:ϕs349.00000°, δ37.00000°, λ97.00000°. NP2:ϕs161.00000°, δ53.00000°, λ85.00000°.*
*ISCJB **22** 00:36:01.3±0.6, 37°.28N±0°.06×140°.01E±0°.04, h15km, mb3.4/4, Error ellipse: s-maj=8.5km s-min=4.4km az=171.6*
*JMA **22** 00:36:01.7, 37°.28N×140°.02E, h7km±2km, M3.1*
*IDC **22** 00:36:01.0±1.3, 37°.39N×140°.10E, h0km, mb3.5/4, mb1 3.6/4, mb1mx3.4/48, mbtmp3.5/4, Error ellipse: s-maj=30.3km s-min=14.3km az=140.0*
**ISC 22 00:36:02.3±0.8, 37°.30N±0°.05×140°.01E±0°.03, h15km, n11, σ1s05/15, mb3.4/4, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **JFY** | **Yanaizu** | **0.26** | **293** | P | | **Pg** | **00 36 07.1** | **-0.9** |
| JFY | | | | S | | **Sg** | **00 36 11.3** | **-0.6** |
| **JFT** | **Otama** | **0.34** | **50** | P | | **Pg** | **00 36 08.7** | **-0.7** |
| JFT | | | | S | | **Sg** | **00 36 13.4** | **-0.7** |
| **JSB** | **Shiboa** | **0.34** | **192** | P | | **Pg** | **00 36 08.7** | **-0.7** |
| **JFK** | **Kawauchi** | **0.69** | **84** | P | | **Pg** | **00 36 14.7** | **-1.2** |
| JFK | | | | S | | **Sg** | **00 36 23.8** | **-1.3** |
| **JNS** | **Sasagawa** | **0.75** | **313** | P | | **Pg** | **00 36 16.4** | **-0.6** |
| **JHK** | **Hiroka** | **0.79** | **266** | P | | **Pg** | **00 36 16.7** | **-1.1** |
| JHK | | | | S | | **Sg** | **00 36 27.1** | **-1.1** |
| **MJAR** | **Matsushiro Arr** | **1.63** | **243** | Pg | | **Pb** | **00 36 31.5** | **-0.6** |
| | 9.4nm,0.3s,baz=45,slow=13,SNR=105 | | | | | | | |
| MJAR | | | | Lg | | Lg | 00 36 56.8 | |
| | 2.2nm,0.3s,baz=79,slow=27,SNR=7.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.90** | **312** | P | | **P** | **00 43 44.9** | **+1.2** |
| | 0.4nm,0.5s,baz=89,slow=6.3,SNR=2.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.95** | **308** | P | | **P** | **00 44 16.6** | **0.0** |
| | 1.2nm,0.9s,baz=85,slow=8.2,SNR=7.6 | | | | | | | |
| **ILAR** | **Eielson Array** | **49.87** | **32** | P | | **P** | **00 44 55.4** | **+0.7** |
| | 0.3nm,0.8s,baz=273,slow=5.2,SNR=3.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.19** | **186** | P | | **P** | **00 45 50.2** | **+1.5** |
| | 0.2nm,0.7s,baz=0.6,slow=7.6,SNR=2.9 | | | | | | | |

*IDC **22** 00:36:36.2±0.8, 37°.28N×140°.12E, h0km, mb4.0/12, mb1 4.1/13, mb1mx3.9/49, mbtmp4.0/13, ML3.4/1, Error ellipse: s-maj=19.6km s-min=11.7km az=145.0*
*ISCJB **22** 00:36:37.1±0.4, 37°.27N±0°.05×140°.01E±0°.04, h15km, mb4.0/12, Error ellipse: s-maj=7.2km s-min=4.5km az=165.4*
*JMA **22** 00:36:37.7, 37°.28N×140°.02E, h7km±1km, M3.7 Broadband fault plane solution: P waves. NP1: ϕs333.00000°, δ53.00000°, λ66.00000°. NP2: ϕs190.00000°, δ43.00000°, λ119.00000°. Principal axes: T Plg70.0000°, Azm184.0000°; N Plg19.0000°, Azm348.0000°; P Plg5.0000°, Azm80.0000°;*

*JMA Felt II J1.*
**ISC 22 00:36:38.4±0.6, 37°.29N±0°.05×140°.04E±0°.03, h15km, n29, σ1s02/27, mb3.9/12, 4D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **JFY** | **Yanaizu** | **0.29** | **294** | ⇓P | | **Pg** | **00 36 43.4** | **-1.2** |
| JFY | | | | S | | **Sg** | **00 36 47.3** | **-1.5** |
| **JFT** | **Otama** | **0.33** | **46** | ⇓P | | **Pg** | **00 36 44.7** | **-0.6** |
| JFT | | | | S | | **Sg** | **00 36 49.5** | **-0.4** |
| **JSB** | **Shiboa** | **0.33** | **196** | ⇓P | | **Pg** | **00 36 44.6** | **-0.7** |
| **JFK** | **Kawauchi** | **0.67** | **83** | ⇓P | | **Pg** | **00 36 50.8** | **-0.8** |
| JFK | | | | S | | **Sb** | **00 36 59.8** | **-1.2** |
| **JNS** | **Sasagawa** | **0.78** | **313** | P | | **Pg** | **00 36 52.6** | **-1.0** |
| **JKT** | **Katashina** | **0.82** | **231** | P | | **Pb** | **00 36 53.0** | **-1.4** |
| **MJAR** | **Matsushiro Arr** | **1.65** | **244** | Pg | | **Pb** | **00 37 07.5** | **-1.0** |
| | 29nm,0.3s,baz=44,slow=13,SNR=34 | | | | | | | |
| MJAR | | | | Lg | | Lg | 00 37 31.4 | |
| | 17nm,0.3s,baz=28,slow=24,SNR=9.7 | | | | | | | |
| MJAR | | | | LR | | LR | 00 38 04.1 | |
| | comp=Z,409nm,18.5s,baz=70,slow=52 | | | | | | | |
| **MAT** | **Matsushiro** | **1.65** | **244** | P | | **Pb** | **00 37 07.7** | **-0.8** |
| MAT | | | | S | | **Sg** | **00 37 32.4** | **+1.0** |
| **USRK** | **Ussuriysk Ar.** | **9.21** | **321** | Pn | | Pn | 00 38 58.1 | +7.4 |
| | 0.3nm,0.3s,baz=134,slow=14,SNR=4.9 | | | | | | | |
| **KSRS** | **Korea Array** | **9.65** | **275** | Pn | | **Pn** | **00 38 59.3** | **+2.7** |
| | 0.3nm,0.3s,baz=92,slow=13,SNR=3.5 | | | | | | | |
| **SEY** | **Seymchan** | **26.77** | **13** | P | | **P** | **00 42 18.5** | **+1.2** |
| | 1.8nm,0.6s,baz=192,slow=20,SNR=4.3 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.23** | **119** | T | | T | 01 12 39.3 | |
| | baz=313,slow=75,SNR=57 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.23** | **119** | T | | T | 01 12 39.8 | |
| | baz=313,slow=75,SNR=41 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.25** | **119** | T | | T | 01 12 40.6 | |
| | baz=313,slow=75,SNR=34 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.93** | **121** | T | | T | 01 13 30.5 | |
| | baz=314,slow=75,SNR=43 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.93** | **121** | T | | T | 01 13 33.0 | |
| | baz=314,slow=75,SNR=49 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.94** | **121** | T | | T | 01 13 32.4 | |
| | baz=314,slow=75,SNR=26 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.93** | **312** | P | | **P** | **00 44 19.9** | **-0.1** |
| | 1.7nm,0.8s,baz=93,slow=7.4,SNR=6.0 | | | | | | | |
| ZALV | | | | PcP | | **PcP** | **00 46 19.8** | **-0.4** |
| | 0.4nm,0.5s,baz=116,slow=3.4,SNR=3.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.05** | **302** | P | | **P** | **00 44 37.6** | **+0.1** |
| | 1.3nm,0.7s,baz=94,slow=9.8,SNR=7.5 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.98** | **308** | P | | **P** | **00 44 52.6** | **-0.2** |
| | 5.8nm,0.8s,baz=84,slow=8.2,SNR=33 | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.59** | **312** | P | | **P** | **00 45 28.4** | **-0.3** |
| | 0.4nm,0.6s,baz=108,slow=7.7,SNR=3.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **49.87** | **32** | P | | **P** | **00 45 31.7** | **+1.0** |
| | 1.4nm,0.8s,baz=274,slow=6.1,SNR=12 | | | | | | | |
| **INK** | **Inuvik** | **54.66** | **27** | P | | **P** | **00 46 07.4** | **+1.2** |
| | 3.2nm,0.8s,baz=291,slow=8.2,SNR=5.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **57.18** | **186** | P | | **P** | **00 46 24.2** | **-0.6** |
| | 1.2nm,0.7s,baz=6.5,slow=7.5,SNR=7.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **60.91** | **186** | P | | **P** | **00 46 50.1** | **-0.5** |
| | 0.4nm,0.6s,baz=14,slow=7.8,SNR=4.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **68.07** | **332** | P | | **P** | **00 47 37.3** | **+0.2** |
| | 3.7nm,0.9s,baz=92,slow=12,SNR=3.7 | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.42** | **322** | P | | **P** | **00 48 09.2** | **-0.5** |
| | 0.4nm,0.4s,baz=48,slow=6.1,SNR=4.0 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.71** | **53** | P | | **P** | **00 48 23.6** | **0.0** |
| | 0.7nm,0.6s,baz=279,slow=6.0,SNR=5.1 | | | | | | | |
| **LPAZ** | **La Paz** | **147.50** | **58** | PKPbc | | **PKPbc** | **00 56 23.5** | **+0.4** |
| | 0.4nm,0.3s,baz=297,slow=2.3,SNR=3.6 | | | | | | | |

**IDC 22 00:39:48.9±4.8, 22°.00S×173°.18E, h0km, mb3.6/2, mb1 4.0/3, mb1mx3.7/21, mbtmp3.7/3, ML3.5/1, MS3.3/2, Ms1 3.3/2, ms1mx2.8/17, Error ellipse: s-maj=285.5km s-min=32.4km az=164.0, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **6.25** | **268** | Pn | | Pn | 00 41 22.5 | -0.1 |
| | 1.2nm,0.3s,baz=0.0,slow=19,SNR=10 | | | | | | | |
| **HNR** | **Honiara** | **17.83** | **312** | LR | | LR | 00 49 08.6 | |
| | comp=Z,78nm,19.1s,baz=136,slow=31 | | | | | | | |
| **PPT** | **Papeete** | **35.26** | **90** | LR | | LR | 00 57 40.8 | |
| | comp=Z,48nm,19.9s,baz=206,slow=30 | | | | | | | |
| **WRA** | **Warramunga Arr** | **36.27** | **266** | P | | P | 00 46 54.5 | +0.3 |
| | 0.5nm,0.9s,baz=102,slow=8.6,SNR=2.4 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **67.91** | **47** | P | | P | 00 52 41.6 | +0.7 |
| | 0.7nm,0.9s,baz=241,slow=7.1,SNR=4.4 | | | | | | | |
| **GERES** | **GERESS Array B** | **148.63** | **334** | PKPbc | | PKPbc | 00 59 36.5 | -1.6 |
| | 1.4nm,0.8s,baz=29,slow=3.0,SNR=8.6 | | | | | | | |

**IDC 22 00:40:20.4±3.4, 24°.49N×109°.07W, h0km, mb3.3/1, mb1 3.6/3, mb1mx3.4/32, mbtmp3.1/3, ML3.0/1, Error ellipse: s-maj=65.1km s-min=12.2km az=146.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.19** | **251** | Pg | | Pg | 00 40 43.3 | +0.1 |
| | 20nm,0.3s,baz=39,slow=2.5,SNR=11 | | | | | | | |
| LPIG | | | | Lg | | Lg | 00 40 58.1 | |
| | 45nm,0.3s,baz=306,slow=19,SNR=11 | | | | | | | |
| **TXAR** | **Lajitas Array** | **6.82** | **44** | Pn | | Pn | 00 42 02.2 | +0.3 |
| | 0.1nm,0.3s,baz=223,slow=14,SNR=3.0 | | | | | | | |
| TXAR | | | | Lg | | Lg | 00 43 51.9 | |
| | 0.5nm,0.3s,baz=226,slow=28,SNR=2.2 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.96** | **333** | Pn | | P | 00 44 09.4 | -0.9 |
| | baz=156,slow=11,SNR=5.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **47.08** | **339** | P | | P | 00 48 55.2 | +1.5 |
| | 0.2nm,0.5s,baz=143,slow=6.8,SNR=4.9 | | | | | | | |

**IDC 22 00:51:11.7±2.5, 6°.22S×130°.04E, h0km, mb3.4/1, mb1 3.8/3, mb1mx3.5/19, mbtmp3.6/3, ML3.9/2, Error ellipse: s-maj=164.5km s-min=31.5km az=70.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **MTN** | **Manton Dam** | **6.67** | **171** | P | | Pn | 00 52 57.3 | +6.2 |
| | baz=12,SNR=25 | | | | | | | |
| **KDU** | **Kakadu** | **6.86** | **160** | P | | Pn | 00 52 58.0 | +4.3 |
| | baz=12,SNR=27 | | | | | | | |
| **KNRA** | **Kununurra** | **9.48** | **187** | P | | Pn | 00 53 40.1 | +10 |
| | baz=15,SNR=3.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.27** | **163** | Pn | | Pn | 00 54 33.5 | -1.7 |
| | 0.6nm,0.3s,baz=346,slow=13,SNR=9.5 | | | | | | | |
| WRA | | | | Sn | | Sn | 00 57 00.1 | -14 |
| | 1.0nm,0.3s,baz=339,slow=21,SNR=8.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.74** | **168** | P | | P | 00 55 21.3 | 0.0 |
| | 0.3nm,0.3s,baz=346,slow=11,SNR=19 | | | | | | | |
| ASAR | | | | S | | Sn | 00 58 24.1 | -15 |
| | 0.2nm,0.3s,baz=351,slow=27,SNR=6.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.60** | **327** | P | | P | 01 02 10.3 | 0.0 |
| | 0.2nm,0.4s,baz=113,slow=7.2,SNR=5.5 | | | | | | | |

*ISCJB **22** 01:06:53.2±0.5, 40°.45N±0°.03×21°.45E±0°.04, h6km±8km, Error ellipse: s-maj=5.9km s-min=4.4km az=29.2*
*CSEM **22** 01:06:53.2±0.2, 40°.44N×21°.45E, h2km, ML2.0, Error ellipse: s-maj=3.7km s-min=3.4km az=18.0*
*THE **22** 01:06:53.4, 40°.43N×21°.44E, h3km±2km, ML2.0/5, Error ellipse: s-maj=2.9km s-min=0.7km az=30.0*
*SKO **22** 01:06:53.6, 40°.43N×21°.42E, h2km*
*ATH **22** 01:06:54.3, 40°.49N×21°.40E, h4km, MD2.8/6*
**ISC 22 01:06:53.5±1.0, 40°.43N±0°.03×21°.44E±0°.02, h5km±11km, n30, σ0s66/44, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **KZN** | **Kozani** | **0.28** | **116** | P | | **Pg** | **01 06 58.7** | **-0.2** |
| KZN | | | | S | | **Sg** | **01 07 03.2** | **+0.7** |
| **KZN** | **Kozani** | **0.28** | **116** | P | | **Pg** | **01 06 58.7** | **-0.2** |
| KZN | | | | S | | **Sg** | **01 07 03.2** | **+0.7** |
| **NEST** | **Nestorio** | **0.30** | **268** | *e*PG | | **Pg** | **01 06 59.2** | **-0.2** |
| NEST | | | | *e*SG | | **Sg** | **01 07 03.7** | **+0.3** |
| **NEST** | **Nestorio** | **0.30** | **268** | P | | **Pg** | **01 06 59.0** | **-0.4** |
| NEST | | | | S | | **Sg** | **01 07 03.9** | **+0.5** |
| **NEST** | **Nestorio** | **0.30** | **268** | *e*Pg | | **Pg** | **01 06 59.2** | **-0.2** |
| NEST | | | | S | | **Sg** | **01 07 03.9** | **+0.5** |
| **FNA** | **Florina** | **0.36** | **352** | *e*PG | | **Pg** | **01 07 00.0** | **-0.5** |
| FNA | | | | *e*SG | | **Sg** | **01 07 05.0** | **-0.2** |
| **FNA** | **Florina** | **0.36** | **352** | P | | **Pg** | **01 07 00.0** | **-0.5** |
| FNA | | | | S | | **Sg** | **01 07 05.2** | **0.0** |
| **FNA** | **Florina** | **0.36** | **352** | P | | **Pg** | **01 07 00.0** | **-0.5** |
| FNA | | | | S | | **Sg** | **01 07 05.2** | **0.0** |
| **OHR** | **Ohrid** | **0.84** | **325** | *i* Pg | | **Pg** | **01 07 08.4** | **-1.2** |
| OHR | | | | *e*Sg | | **Sg** | **01 07 21.0** | **+0.4** |
| **OHR** | **Ohrid** | **0.84** | **325** | *i* Pg | | **Pg** | **01 07 08.4** | **-1.2** |
| OHR | | | | *e*Sg | | **Sg** | **01 07 20.9** | **+0.4** |
| **LIT** | **Litokhoron** | **0.86** | **112** | P | | **Pg** | **01 07 09.7** | **-0.3** |
| LIT | | | | S | | **Sb** | **01 07 23.1** | **+0.3** |
| **LIT** | **Litokhoron** | **0.86** | **112** | P | | **Pg** | **01 07 09.7** | **-0.3** |
| LIT | | | | S | | **Sb** | **01 07 23.1** | **+0.3** |
| **GRG** | **Griva** | **0.90** | **54** | *e*PG | | **Pg** | **01 07 11.3** | **-0.3** |
| **GRG** | **Griva** | **0.90** | **54** | P | | **Pg** | **01 07 10.7** | **0.0** |
| **GRG** | **Griva** | **0.90** | **54** | P | | **Pg** | **01 07 10.7** | **0.0** |
| **GRG** | **Griva** | **0.90** | **54** | *e*Pb | | **Pb** | **01 07 11.3** | **-0.3** |
| **THL** | **Klokotos Trika** | **0.97** | **153** | P | | **Pg** | **01 07 10.5** | **-1.5** |
| THL | | | | S | | **Sb** | **01 07 25.6** | **-0.1** |
| **THL** | **Klokotos Trika** | **0.97** | **153** | P | | **Pg** | **01 07 10.5** | **-1.5** |
| THL | | | | S | | **Sb** | **01 07 25.6** | **-0.1** |
| **IGT** | **Igoumenitsa** | **1.24** | **224** | *e*PB | | **Pn** | **01 07 18.5** | **+1.1** |
| **IGT** | **Igoumenitsa** | **1.24** | **224** | *e*Pb | | **Pn** | **01 07 18.5** | **+1.1** |
| **HORT** | **Hortiatis** | **1.27** | **82** | *e*PB | | **Pn** | **01 07 18.6** | **+0.6** |
| **HORT** | **Hortiatis** | **1.27** | **82** | P | | **Pg** | **01 07 17.1** | **-0.8** |
| **HORT** | **Hortiatis** | **1.27** | **82** | P | | **Pg** | **01 07 17.1** | **-0.8** |
| **HORT** | **Hortiatis** | **1.27** | **82** | *e*Pb | | **Pn** | **01 07 18.6** | **+0.6** |
| **DSL** | **Palaion Diasel** | **1.32** | **192** | P | | **Pn** | **01 07 18.1** | **-0.4** |
| **DSL** | **Palaion Diasel** | **1.32** | **192** | P | | **Pn** | **01 07 18.1** | **-0.4** |
| **KNT** | **Kendrikon** | **1.33** | **56** | *e*PG | | **Pb** | **01 07 18.9** | **+0.1** |
| **KNT** | **Kendrikon** | **1.33** | **56** | P | | **Pg** | **01 07 17.9** | **-1.0** |
| **KNT** | **Kendrikon** | **1.33** | **56** | P | | **Pg** | **01 07 17.9** | **-1.0** |
| **KNT** | **Kendrikon** | **1.33** | **56** | *e*Pb | | **Pb** | **01 07 18.9** | **+0.1** |

*IDC **22** 01:13:09.9±1.3, 33°.16S×178°.49W, h0km, mb4.1/2, mb1 4.3/3, mb1mx3.8/20, mbtmp4.1/3, ML4.0/1, MS3.0/3, Ms1 3.0/3, ms1mx2.7/33, Error ellipse: s-maj=41.3km s-min=31.0km az=131.0*
*ISCJB **22** 01:13:11.8±4.2, 33°.2S±0°.1×178°.4W±0°.6, h32km, mb4.0/3, MS2.9/3, Error ellipse: s-maj=67.4km s-min=12.4km az=8.8*
*NEIC **22** 01:13:15.3±0.9, 33°.19S×178°.63W, h35km, mb4.2/1, Error ellipse: s-maj=20.4km s-min=15.6km az=83.0*
**ISC 22 01:13:14.7±1.6, 33°.1S±0°.1×178°.6W±0°.2, h32km, n12, σ0s81/10, mb4.0/3, MS2.8/3, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **6.20** | **213** | Pn | | **Pn** | **01 14 42.7** | **-1.3** |
| | 3.2nm,0.3s,baz=288,slow=3.7,SNR=11 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **01 15 54.9** | **+1.1** |
| | 5.8nm,0.3s,baz=340,slow=22,SNR=9.3 | | | | | | | |
| **DZM** | **Mont Dzumac** | **17.23** | **306** | *e*Pn | | **Pn** | **01 17 12.6** | **-0.5** |
| **AFI** | **Afiamalu** | **20.11** | **20** | LR | | LR | 01 26 17.4 | |
| | comp=Z,34nm,18.0s,baz=68,slow=39 | | | | | | | |
| **PPT** | **Papeete** | **30.31** | **66** | LR | | LR | 01 30 08.6 | |
| | comp=Z,20nm,19.8s,baz=198,slow=34 | | | | | | | |
| **HNR** | **Honiara** | **30.80** | **315** | LR | | LR | 01 29 17.1 | |
| | comp=Z,54nm,18.1s,baz=84,slow=31 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.55** | **270** | P | | **P** | **01 21 08.2** | **+0.6** |
| | 1.7nm,0.7s,baz=111,slow=7.5,SNR=18 | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.78** | **275** | *e*P | | **P** | **01 21 17.8** | **+0.2** |
| | 3.4nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.79** | **275** | P | | **P** | **01 21 18.1** | **+0.5** |
| | 1.9nm,0.7s,baz=116,slow=7.7,SNR=14 | | | | | | | |
| **FINES** | **FINESS Array B** | **147.52** | **338** | PKPbc | | **PKPbc** | **01 32 54.1** | **-0.6** |
| | 4.8nm,1.0s,baz=57,slow=5.1,SNR=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **151.36** | **350** | PKPbc | | **PKPbc** | **01 33 04.7** | **+0.4** |
| | 0.6nm,0.7s,baz=16,slow=4.1,SNR=3.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **153.36** | **294** | PKPbc | | **PKPbc** | **01 33 10.3** | **+0.6** |
| | 0.5nm,0.8s,baz=150,slow=3.9,SNR=2.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **160.10** | **181** | PKPab | | **PKPab** | **01 33 51.3** | **+0.3** |
| | 0.2nm,0.7s,baz=180,slow=5.7,SNR=2.5 | | | | | | | |

*DDA **22** 01:24:49.8, 36°.74N×27°.37E, h7km, Md2.8*
*ISCJB **22** 01:24:50.7±0.4, 36°.74N±0°.03×27°.31E±0°.04, h20km±5km, Error ellipse: s-maj=6.2km s-min=4.4km az=32.2*
*CSEM **22** 01:24:50.6±0.3, 36°.71N×27°.31E, h20km, MD2.8, Error ellipse: s-maj=8.1km s-min=5.9km az=133.0*
*ATH **22** 01:24:50.0, 36°.75N×27°.31E, h25km±1km, MD2.8/5*
*ISK **22** 01:24:50.3, 36°.78N×27°.36E, h8km, MD3.0*
**ISC 22 01:24:50.5±1.0, 36°.77N±0°.03×27°.37E±0°.03, h19km±2km, n34, σ0s60/49, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **NIS1** | **Nisyros Isl.** | **0.23** | **223** | *e*PG | | **Pb** | **01 24 55.4** | **-0.4** |
| **NIS1** | **Nisyros Isl.** | **0.23** | **223** | *e*PB | | **Pb** | **01 24 55.6** | **-0.2** |
| NIS1 | | | | *e*SB | | **Sb** | **01 24 59.4** | **+0.1** |
| **NIS1** | **Nisyros Isl.** | **0.23** | **223** | *e*Pg | | **Pb** | **01 24 55.4** | **-0.4** |
| NIS1 | | | | *e*Sb | | **Sb** | **01 24 59.4** | **+0.1** |
| **NISR** | **Nisiros** | **0.25** | **231** | *e*PB | | **Pg** | **01 24 56.1** | **-0.2** |
| NISR | | | | *e*SB | | **Sb** | **01 25 00.0** | **-0.2** |
| **NISR** | **Nisiros** | **0.25** | **231** | *e*Pb | | **Pg** | **01 24 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | SNR=10 | | | | | | | |
| **KK31** | **Karatay Array** | **6.35** | **357** | P | | **Pn** | **01 32 38.2** | **-0.6** |
| | 2.6nm,0.3s,baz=177,slow=12,SNR=161 | | | | | | | |
| KK31 | | | | ⇑S | | **Sn** | **01 33 48.7** | **-1.4** |
| | 1.6nm,0.4s,baz=189,slow=25,SNR=6.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.49** | **24** | ⇑P | | **Pn** | **01 32 39.7** | **-1.1** |
| | 4.2nm,0.4s | | | | | | | |
| AAK | | | | ⇓S | | **Sn** | **01 33 55.0** | **+1.3** |
| | 7.1nm,1.0s | | | | | | | |
| **AAK** | **Ala-Archa** | **6.49** | **24** | P | | **Pn** | **01 32 40.0** | **-0.8** |
| | SNR=8.1 | | | | | | | |
| **USP** | **Ospenovka** | **7.06** | **22** | P | | **Pn** | **01 32 47.5** | **-1.1** |
| | SNR=6.8 | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.13** | **29** | ⇑P | | **Pn** | **01 32 47.8** | **-1.9** |
| | 3.5nm,0.8s | | | | | | | |
| **AB31** | **Akbulak array** | **14.83** | **331** | ⇑P | | Pn | 01 34 29.8 | -4.9 |
| | 0.2nm,0.4s,baz=285,slow=11,SNR=8.4 | | | | | | | |

*IDC* ***22*** *01:44:29.9±1.1, 48°.11N×154°.72E, h0km, mb3.7/4, mb1 3.9/6, mb1mx3.6/41, mbtmp3.7/6, ML2.4/2, MS3.1/3, Ms1 3.2/3, ms1mx2.7/44, Error ellipse: s-maj=46.9km s-min=23.7km az=137.0*

*ISCJB* ***22*** *01:44:33.8±0.7, 48°.09N±0°.09×154°.8E±0°.2, h33km, mb3.6/4, MS3.5/2, Error ellipse: s-maj=19.9km s-min=5.8km az=35.6*

*MOS* ***22*** *01:44:37.1±2.6, 48°.16N×156°.02E, h39km, mb4.5/1, Error ellipse: s-maj=88.7km s-min=8.3km az=78.9*

*KRSC* ***22*** *01:44:37.2±2.4, 48°.16N×156°.02E, h39km±41km, ML4.5*

**ISC 22 01:44:34.3±0.7, 48°.06N±0°.08×155°.0E±0°.1, h35km, n40, σ1§85/29, mb3.7/4, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **2.73** | **15** | *e*P | **Pn** | **01 45 17.8** | **+2.2** |
| SKR | | | | *e*S | **Sn** | **01 45 47.0** | **-0.4** |
| **SKR** | **Severo-Kuril's** | **2.73** | **15** | *e*PN | Pn | 01 45 08.6 | -7.0 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,60nm,0.5s | | | | | | |
| **PAU** | **Pauzhetka** | **3.62** | **19** | *e*P | Pn | 01 45 31.2 | +3.4 |
| PAU | | | | *e*S | **Sn** | **01 46 09.9** | **+0.7** |
| **PAU** | **Pauzhetka** | **3.62** | **19** | PN | Pn | 01 45 31.2 | +3.4 |
| PAU | | | | S | **Sn** | **01 46 09.9** | **+0.7** |
| **MIPR** | **Malaya Ipel'ka** | **4.38** | **15** | *e*P | **Pn** | **01 45 40.8** | **+2.6** |
| **ASAK** | **Asacha** | **4.72** | **22** | *e*P | **Pn** | **01 45 45.7** | **+2.7** |
| **RUS** | **Russkaya** | **4.93** | **26** | *e*P | **Pn** | **01 45 46.8** | **+0.9** |
| RUS | | | | *e*S | **Sn** | **01 46 39.3** | **-2.3** |
| **RUS** | **Russkaya** | **4.93** | **26** | PN | **Pn** | **01 45 46.8** | **+0.9** |
| RUS | | | | S | **Sn** | **01 46 39.3** | **-2.3** |
| **PETK** | **Petropavlovsk-** | **5.35** | **18** | Pn | **Pn** | **01 45 50.6** | **-1.0** |
| | comp=Z,0.9nm,0.3s,baz=210,slow=15,SNR=4.6 | | | | | | |
| PETK | | | | Sn | Sn | 01 47 00.3 | +8.5 |
| | baz=228,slow=20,SNR=1.6 | | | | | | |
| PETK | | | | LR | LR | 01 48 00.8 | |
| | comp=Z,56nm,20.9s,baz=206,slow=39 | | | | | | |
| **PETK** | **Petropavlovsk-** | **5.35** | **18** | PN | **Pn** | **01 45 50.6** | **-1.0** |
| PETK | | | | | | 01 47 00.3 | |
| PETK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,56nm,20.9s | | | | | | |
| **UGLR** | **Uglovaya** | **5.71** | **24** | *e*P | Pn | 01 45 59.8 | +3.2 |
| **KOK** | **Koryaka** | **5.73** | **23** | *e*P | Pn | 01 46 01.1 | +4.1 |
| **KOK** | **Koryaka** | **5.73** | **23** | PN | Pn | 01 46 01.1 | +4.1 |
| **SMAR** | **Somma** | **5.75** | **24** | *e*P | Pn | 01 46 01.2 | +3.9 |
| **SMAR** | **Somma** | **5.75** | **24** | PN | Pn | 01 46 01.2 | +3.9 |
| **SDLR** | **Sedlovina** | **5.79** | **24** | *e*P | **Pn** | **01 45 59.9** | **+2.2** |
| **SDLR** | **Sedlovina** | **5.79** | **24** | PN | **Pn** | **01 45 59.9** | **+2.2** |
| **KRX** | **Arik** | **5.80** | **22** | *e*P | **Pn** | **01 46 00.8** | **+2.9** |
| **GNL** | **Ganaly** | **5.95** | **17** | *e*P | Pn | 01 46 04.0 | +4.1 |
| **GNL** | **Ganaly** | **5.95** | **17** | PN | Pn | 01 46 04.0 | +4.1 |
| **SPN** | **Mys Shipunski** | **5.98** | **31** | *e*P | **Pn** | **01 46 02.6** | **+2.3** |
| SPN | | | | *e*S | **Sn** | **01 47 07.2** | **-0.3** |
| **SPN** | **Mys Shipunski** | **5.98** | **31** | PN | **Pn** | **01 46 02.6** | **+2.3** |
| SPN | | | | S | **Sn** | **01 47 07.2** | **-0.3** |
| **MKZ** | **Mys Kozlova** | **7.76** | **30** | *e*P | **Pn** | **01 46 25.4** | **+0.8** |
| **MKZ** | **Mys Kozlova** | **7.76** | **30** | PN | **Pn** | **01 46 25.4** | **+0.8** |
| **ASAJ** | **Asahikawa** | **9.46** | **250** | Pn | **Pn** | **01 46 50.1** | **+2.2** |
| | comp=Z,1.3nm,0.3s,baz=80,slow=17,SNR=6.0 | | | | | | |
| **KBTR** | **Krutoberegovo** | **9.47** | **28** | *e*P | **Pn** | **01 46 50.2** | **+2.1** |
| **KBTR** | **Krutoberegovo** | **9.47** | **28** | PN | **Pn** | **01 46 50.2** | **+2.1** |
| **USRK** | **Ussuriysk Ar.** | **16.38** | **265** | Pn | **Pn** | **01 48 19.4** | **-1.9** |
| | comp=Z,0.1nm,0.3s,baz=80,slow=9.7,SNR=6.6 | | | | | | |
| **KSRS** | **Korea Array** | **22.40** | **252** | P | **P** | **01 49 28.4** | **-1.1** |
| | comp=Z,1.6nm,0.7s,baz=51,slow=11,SNR=4.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.86** | **157** | T | T | 02 22 24.4 | |
| | baz=345,slow=76,SNR=53 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.88** | **157** | T | T | 02 22 21.7 | |
| | baz=345,slow=76,SNR=89 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.88** | **157** | T | T | 02 22 22.2 | |
| | baz=345,slow=76,SNR=40 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.99** | **158** | T | T | 02 23 52.0 | |
| | baz=344,slow=76,SNR=345 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.00** | **158** | T | T | 02 23 41.2 | |
| | baz=344,slow=76,SNR=283 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.00** | **158** | T | T | 02 23 47.0 | |
| | baz=344,slow=76,SNR=218 | | | | | | |
| **ILAR** | **Eielson Array** | **34.74** | **40** | LR | LR | 02 06 31.0 | |
| | comp=Z,25nm,18.1s,baz=292,slow=38 | | | | | | |
| **GEYT** | **Alibeck** | **67.01** | **301** | LR | LR | 02 26 45.4 | |
| | comp=Z,72nm,19.2s,baz=185,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **70.17** | **201** | P | **P** | **01 55 43.5** | **+0.3** |
| | comp=Z,1.3nm,0.8s,baz=15,slow=6.7,SNR=6.8 | | | | | | |
| **ASAR** | **Alice Springs** | **73.86** | **200** | P | **P** | **01 56 06.9** | **+1.6** |
| | comp=Z,0.5nm,0.6s,baz=12,slow=4.8,SNR=3.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **75.75** | **62** | P | **P** | **01 56 18.4** | **+1.8** |
| | comp=Z,0.2nm,0.6s,baz=286,slow=6.5,SNR=3.0 | | | | | | |

*IDC* ***22*** *01:46:43.9±2.0, 24°.45N×109°.05W, h0km, mb3.8/3, mb1 3.9/7, mb1mx3.7/37, mbtmp3.6/7, ML3.3/4, MS3.1/6, Ms1 3.1/6, ms1mx2.8/41, Error ellipse: s-maj=37.2km s-min=18.7km az=147.0*

*ISCJB* ***22*** *01:46:45.0±1.1, 24°.6N±0°.1×108°.80W±0°.10, h10km, mb3.8/3, MS3.1/3, Error ellipse: s-maj=14.9km s-min=12.5km az=170.5*

**ISC 22 01:46:46.4±1.5, 24°.5N±0°.1×108°.9W±0°.1, h10km, n13, σ0§47/8, mb3.8/3, MS3.1/3, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.39** | **252** | Pg | Pn | 01 47 06.2 | -5.6 |
| | 59nm,0.3s,baz=67,slow=15,SNR=51 | | | | | | |
| LPIG | | | | Lg | Lg | 01 47 20.2 | |
| | 99nm,0.3s,baz=315,slow=20,SNR=18 | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **6.04** | **199** | T | T | 01 53 35.7 | |
| | SNR=11 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.66** | **43** | Pn | **Pn** | **01 48 24.7** | **+0.3** |
| | 0.2nm,0.3s,baz=218,slow=13,SNR=9.7 | | | | | | |
| TXAR | | | | Sn | **Sn** | **01 49 40.0** | **-0.3** |
| | 1.0nm,0.3s,baz=219,slow=18,SNR=5.1 | | | | | | |
| TXAR | | | | Lg | Lg | 01 50 13.2 | |
| | 1.0nm,0.3s,baz=230,slow=29,SNR=3.7 | | | | | | |
| TXAR | | | | LR | LR | 01 51 14.3 | |
| | comp=Z,124nm,18.2s,baz=0.0,slow=40 | | | | | | |
| **ANMO** | **Albuquerque** | **10.58** | **11** | Pn | **Pn** | **01 49 18.7** | **+0.4** |
| | 0.1nm,0.3s,baz=183,slow=14,SNR=2.7 | | | | | | |
| ANMO | | | | Lg | Lg | 01 52 17.7 | |
| | 0.1nm,0.3s,baz=302,slow=19,SNR=4.0 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **11.22** | **325** | LR | LR | 01 53 14.8 | |
| | comp=Z,72nm,21.7s,baz=142,slow=35 | | | | | | |
| **CMIG** | **Matias Romero** | **15.01** | **117** | Pn | **Pn** | **01 50 18.8** | **+0.1** |
| | 0.3nm,0.3s,baz=331,slow=19,SNR=3.3 | | | | | | |
| CMIG | | | | LR | LR | 01 56 32.5 | |
| | comp=Z,47nm,21.6s,baz=268,slow=39 | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.01** | **332** | Pn | **Pn** | **01 50 32.4** | **+0.4** |
| | 0.1nm,0.3s,baz=155,slow=11,SNR=11 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **20.66** | **329** | LR | LR | 01 58 47.2 | |
| | comp=Z,59nm,18.2s,baz=237,slow=35 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.30** | **57** | LR | LR | 02 02 32.2 | |
| | comp=Z,79nm,18.1s,baz=206,slow=39 | | | | | | |
| **NEW** | **Newport** | **24.57** | **347** | P | **P** | **01 52 05.9** | **-0.6** |
| | 2.0nm,0.9s,baz=180,slow=7.7,SNR=3.7 | | | | | | |
| **JTS** | **JuntasAbangare** | **26.78** | **118** | LR | LR | 02 03 28.2 | |
| | comp=Z,52nm,18.6s,baz=314,slow=37 | | | | | | |
| **ILAR** | **Eielson Array** | **47.12** | **339** | P | **P** | **01 55 17.9** | **-0.4** |
| | 0.4nm,0.9s,baz=137,slow=6.6,SNR=4.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **72.76** | **321** | P | **P** | **01 58 14.9** | **+0.1** |
| | 1.7nm,0.4s,baz=70,slow=4.7,SNR=3.4 | | | | | | |

**CSEM 22 01:53:38.6, 42°.53N×13°.18E, h9km, MD0.8/4, After ROM, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RM29** | **Verrico (Monte** | **0.03** | **36** | Pg | Pg | 01 53 40.7 | +0.1 |
| RM29 | | | | Sg | Sg | 01 53 42.1 | +0.1 |
| | 42nm,0.2s | | | | | | |
| **RM33** | **Pellescritta (** | **0.04** | **129** | Pg | Pg | 01 53 40.8 | +0.3 |
| RM33 | | | | Sg | Sg | 01 53 42.1 | +0.2 |
| | 108nm,0.1s | | | | | | |
| **RM32** | **Poggio Cancell** | **0.10** | **67** | Pg | Pg | 01 53 41.5 | +0.2 |
| RM32 | | | | Sg | Sg | 01 53 43.6 | +0.5 |
| | 11nm,0.4s | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.15** | **50** | Pg | Pg | 01 53 42.5 | +0.4 |
| SMA1 | | | | Sg | Sg | 01 53 45.3 | +0.7 |
| | 18nm,0.2s | | | | | | |

*GEN* ***22*** *01:54:50.8, 44°.60N×7°.24E, h13km, ML0.9*

*LDG* ***22*** *01:54:51.0±0.1, 44°.63N×7°.24E, h2km, Md1.8/3, Ml1.8/7, Error ellipse: s-maj=2.9km s-min=1.4km az=75.0*

**CSEM 22 01:54:50.5±0.1, 44°.61N×7°.24E, h8km, ML1.6/8, Error ellipse: s-maj=3.0km s-min=1.4km az=70.0, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PZZ** | **Stroppo** | **0.13** | **221** | P | Pg | 01 54 54.3 | +0.7 |
| PZZ | | | | S | Sg | 01 54 56.7 | +0.9 |
| **BHB** | **Bricherasio** | **0.23** | **4** | P | Pg | 01 54 55.9 | +0.6 |
| BHB | | | | S | Sg | 01 54 59.3 | +0.8 |
| **MBDF** | **Montbardon** | **0.35** | **290** | *e*Pg | Pg | 01 54 58.1 | +0.4 |
| MBDF | | | | *e*Sg | Sg | 01 55 02.3 | -0.3 |
| | 15nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** | **0.35** | **290** | *e*Pg | Pg | 01 54 58.1 | +0.4 |
| MBDF | | | | *e*Sg | Sg | 01 55 02.3 | -0.3 |
| | 7.7nm,0.2s | | | | | | |
| **STV** | **Sant Anna di V** | **0.37** | **170** | P | Pg | 01 54 57.9 | +0.1 |
| **RRL** | **Rocca Remolon** | **0.45** | **315** | P | Pg | 01 54 59.8 | +0.2 |
| **MVIF** | **Mont Vial** | **0.71** | **185** | Pg | Pg | 01 55 04.2 | -0.3 |
| MVIF | | | | Sg | Sg | 01 55 13.6 | -0.3 |
| **MVIF** | **Mont Vial** | **0.71** | **185** | Pg | Pg | 01 55 04.2 | -0.3 |
| MVIF | | | | Sg | Sg | 01 55 13.6 | -0.3 |
| **LUCF** | **Luceram** | **0.72** | **174** | Pg | Pg | 01 55 04.0 | -0.5 |
| LUCF | | | | Sg | Sg | 01 55 14.1 | +0.1 |
| **LUCF** | **Luceram** | **0.72** | **174** | Pg | Pg | 01 55 04.0 | -0.5 |
| LUCF | | | | Sg | Sg | 01 55 14.1 | +0.1 |
| **SBF** | **Sospel** | **0.76** | **169** | *e*Pg | Pg | 01 55 05.6 | +0.4 |
| SBF | | | | *e*Sg | Sg | 01 55 15.3 | +0.1 |
| | 3.3nm,0.2s | | | | | | |
| **SBF** | **Sospel** | **0.76** | **169** | *e*Pg | Pg | 01 55 05.6 | +0.4 |
| SBF | | | | *e*Sg | Sg | 01 55 15.3 | +0.1 |
| | 1.6nm,0.2s | | | | | | |
| **LPG** | **La Plagne** | **0.95** | **339** | *e*Pg | Pg | 01 55 09.0 | -0.3 |
| LPG | | | | *e*Sg | Sg | 01 55 21.1 | -0.9 |
| | 2.1nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.98** | **339** | *e*Pg | Pg | 01 55 09.2 | -0.4 |
| LPL | | | | *e*Sg | Sg | 01 55 20.8 | -1.8 |
| | 2.2nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **288** | *e*Pg | Pb | 01 55 10.4 | -0.1 |
| ORIF | | | | *e*Sg | Sg | 01 55 22.4 | -1.1 |
| | 1.9nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **288** | *e*Pg | Pb | 01 55 10.4 | -0.1 |
| ORIF | | | | *e*Sg | Sg | 01 55 22.4 | -1.1 |
| | 0.9nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.13** | **202** | *e*Pg | Pb | 01 55 12.3 | 0.0 |
| FRF | | | | *e*Sg | Sg | 01 55 26.9 | 0.0 |
| | 6.3nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.13** | **202** | *e*Pg | Pb | 01 55 12.3 | 0.0 |
| FRF | | | | *e*Sg | Sg | 01 55 26.9 | 0.0 |
| | 3.2nm,0.3s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.35** | **243** | *e*Pg | Pg | 01 55 16.6 | +0.1 |
| SMRF | | | | *e*Sg | Sg | 01 55 34.3 | +0.2 |
| | 0.5nm,0.3s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.35** | **243** | *e*Sg | Sg | 01 55 34.3 | +0.2 |
| | 0.2nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pn | Pn | 01 55 16.1 | +0.1 |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pg | Pg | 01 55 16.8 | -0.2 |
| LMR | | | | *e*Sg | Sn | 01 55 34.5 | +0.1 |
| | 4.1nm,0.2s | | | | | | |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pn | Pn | 01 55 16.1 | +0.1 |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pg | Pg | 01 55 16.8 | -0.2 |
| LMR | | | | *e*Sg | Sn | 01 55 34.5 | +0.1 |
| | 2.0nm,0.2s | | | | | | |

*ISCJB* ***22*** *01:59:04.7±0.6, 39°.10N±0°.03×28°.59E±0°.04, h3km±7km, Error ellipse: s-maj=5.7km s-min=4.5km az=31.2*

*DDA* ***22*** *01:59:04.5, 39°.08N×28°.62E, h10km, Md3.0*

*CSEM* ***22*** *01:59:04.8±0.1, 39°.10N×28°.59E, h2km, MD3.0, Error ellipse: s-maj=2.9km s-min=2.6km az=90.0*

*ISK* ***22*** *01:59:04.4, 39°.12N×28°.57E, h2km, MD2.8*

**ISC 22 01:59:04.5±0.9, 39°.11N±0°.02×28°.60E±0°.02, h8km±8km, n41, σ0§41/52, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DEMI** | **Demirci** | **0.11** | **126** | *i* P | **Pg** | **01 59 07.2** | **0.0** |
| DEMI | | | | *i* S | **Sg** | **01 59 09.0** | **0.0** |
| **DEMI** | **Demirci** | **0.11** | **126** | P | **Pg** | **01 59 07.2** | **0.0** |
| DEMI | | | | S | **Sg** | **01 59 09.0** | **0.0** |
| **MANT** | **Manisa** | **0.62** | **183** | *i* P | **Pg** | **01 59 16.3** | **-0.2** |
| MANT | | | | *i* S | **Sg** | **01 59 24.3** | **-0.3** |
| **MANT** | **Manisa** | **0.62** | **183** | P | **Pg** | **01 59 16.3** | **-0.2** |
| MANT | | | | S | **Sg** | **01 59 24.2** | **-0.3** |
| **AKHS** | **Akhisar** | **0.66** | **250** | *i* P | **Pg** | **01 59 17.4** | **+0.3** |
| AKHS | | | | *i* S | **Sg** | **01 59 26.1** | **+0.4** |
| **AKHS** | **Akhisar** | **0.66** | **250** | P | **Pg** | **01 59 17.4** | **+0.3** |
| AKHS | | | | S | **Sg** | **01 59 26.1** | **+0.4** |
| **AKS** | **Akhisar** | **0.66** | **250** | PG | **Pg** | **01 59 17.2** | **0.0** |
| AKS | | | | *e*SG | **Sb** | **01 59 27.1** | **-0.4** |
| **AKS** | **Akhisar** | **0.66** | **250** | *i* Pg | **Pg** | **01 59 17.2** | **0.0** |
| AKS | | | | *e*Sg | **Sb** | **01 59 27.1** | **-0.4** |
| **BALB** | **Balikesir** | **0.77** | **314** | *e*PG | **Pg** | **01 59 19.7** | **+0.3** |
| **BALB** | **Balikesir** | **0.77** | **314** | *e*Pg | **Pg** | **01 59 19.7** | **+0.3** |
| **KHAL** | **Karahalli** | **1.01** | **136** | *i* P | **Pn** | **01 59 25.2** | **+0.1** |
| KHAL | | | | *i* S | **Sg** | **01 59 37.4** | **+0.2** |
| **KHAL** | **Karahalli** | **1.01** | **136** | P | **Pn** | **01 59 25.2** | **+0.1** |
| KHAL | | | | S | **Sg** | **01 59 37.4** | **+0.2** |
| **KHL** | **Karahalli** | **1.06** | **137** | *e*PN | **Pn** | **01 59 26.4** | **+0.6** |
| **KHL** | **Karahalli** | **1.06** | **137** | *e*Pn | **Pn** | **01 59 26.4** | **+0.6** |
| **KCTX** | **Karacabey (Bur** | **1.17** | **351** | *e*PN | **Pn** | **01 59 27.3** | **+0.1** |
| **KCTX** | **Karacabey (Bur** | **1.17** | **351** | *e*Pn | **Pn** | **01 59 27.3** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.17** | **323** | *e*PN | **Pb** | **01 59 27.2** | **+0.2** |
| **GONE** | **Gonen-Balikesi** | **1.17** | **323** | *e*Pn | **Pb** | **01 59 27.2** | **+0.2** |
| **IGD** | **Bursa** | **1.24** | **22** | P | **Pn** | **01 59 27.9** | **-0.3** |
| IGD | | | | S | **Sb** | **01 59 44.4** | **-0.1** |
| **MDNY** | **Mudanya-Bursa** | **1.28** | **10** | *e*PN | **Pg** | **01 59 29.5** | **+0.5** |
| **MDNY** | **Mudanya-Bursa** | **1.28** | **10** | *e*Pn | **Pg** | **01 59 29.5** | **+0.5** |
| **EDC** | **Edincik** | **1.36** | **336** | *e*PN | **Pg** | **01 59 30.9** | **+0.3** |
| **EDC** | **Edincik** | **1.36** | **336** | *e*Pn | **Pg** | **01 59 30.9** | **+0.3** |
| **GEMT** | **Gemlik** | **1.40** | **19** | *e*PN | **Pg** | **01 59 31.6** | **+0.2** |
| **GEMT** | **Gemlik** | **1.40** | **19** | *e*Pn | **Pg** | **01 59 31.6** | **+0.2** |
| **BLCB** | **Balcova** | **1.42** | **240** | *e*PN | **Pg** | **01 59 31.9** | **+0.2** |
| **BLCB** | **Balcova** | **1.42** | **240** | *e*Pn | **Pg** | **01 59 31.9** | **+0.2** |
| **CAVI** | **Cavuskoy** | **1.45** | **41** | *e*PN | **Pb** | **01 59 32.2** | **+0.4** |
| **CAVI** | **Cavuskoy** | **1.45** | **41** | *e*Pn | **Pb** | **01 59 32.2** | **+0.4** |
| **ARMT** | **Armutlu** | **1.47** | **8** | *e*PN | **Pg** | **01 59 32.7** | **0.0** |
| **ARMT** | **Armutlu** | **1.47** | **8** | *e*Pn | **Pg** | **01 59 32.7** | **0.0** |
| **ADVT** | **Abdulvahap** | **1.59** | **33** | *e*PN | **Pb** | **01 59 34.5** | **+0.4** |
| **ADVT** | **Abdulvahap** | **1.59** | **33** | *e*Pn | **Pb** | **01 59 34.5** | **+0.4** |
| **SHUT** | **Suhut-Afyon** | **1.62** | **109** | *e*PN | **Pb** | **01 59 34.9** | **+0.2** |
| **SHUT** | **Suhut-Afyon** | **1.62** | **109** | *e*Pn | **Pb** | **01 59 34.9** | **+0.2** |
| **MRMT** | **Marmara Adasi** | **1.68** | **333** | *e*PN | **Pb** | **01 59 35.5** | **-0.2** |
| **MRMT** | **Marmara Adasi** | **1.68** | **333** | *e*Pn | **Pb** | **01 59 35.5** | **-0.2** |
| **GULT** | **Gulveren** | **1.98** | **48** | *e*PN | **Pb** | **01 59 40.1** | **-0.8** |
| **GULT** | **Gulveren** | **1.98** | **48** | *e*Pn | **Pb** | **01 59 40.1** | **-0.8** |
| **CTKS** | **Kestanelik-??a** | **2.13** | **358** | *e*PN | **Pb** | **01 59 42.0** | **-1.3** |
| **CTKS** | **Kestanelik-??a** | **2.13** | **358** | *e*Pn | **Pb** | **01 59 42.0** | **-1.3** |

*ISCJB* ***22*** *02:08:39.7±0.3, 8°.71N±0°.05×40°.37W±0°.04, h10km, mb4.5/64, MS3.8/14, Error ellipse: s-maj=7.9km s-min=6.3km az=172.9*

*IDC* ***22*** *02:08:39.4±0.5, 8°.81N×40°.46W, h0km, mb4.3/18, mb1 4.4/19, mb1mx4.2/40, mbtmp4.3/19, ML4.7/1, MS3.8/15, Ms1 3.8/15, ms1mx3.5/35, Error ellipse: s-maj=17.3km s-min=12.0km az=132.0*

*BJI* ***22*** *02:08:41.7, 8°.70N×40°.40W, h10km, Ms5.3/2, Ms7 4.8/2*

*NEIC* ***22*** *02:08:41.5±0.2, 8°.71N×40°.39W, h10km, mb4.7/48, Error ellipse: s-maj=7.5km s-min=6.2km az=184.0*

**ISC 22 02:08:41.0±0.4, 8°.61N±0°.06×40°.35W±0°.07, h10km, n110, σ1§69/98, mb4.6/64, MS3.8/14, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCBR** | **Riachuelo** | **15.01** | **163** | Pn | **Pn** | **02 12 14.8** | **+1.4** |
| | 2.8nm,0.3s,baz=335,slow=15,SNR=18 | | | | | | |
| RCBR | | | | Sn | **Sn** | **02 14 53.3** | **-6.5** |
| | 0.3nm,0.3s,baz=54,slow=19,SNR=3.5 | | | | | | |
| RCBR | | | | LR | LR | 02 16 36.0 | |
| | comp=Z,539nm,20.5s,baz=347,slow=31 | | | | | | |
| **RCBR** | **Riachuelo** | **15.01** | **163** | *e*Pn | **Pn** | **02 12 14.9** | **+1.6** |
| | 32nm,0.9s | | | | | | |
| RCBR | | | | Sn | **Sn** | **02 14 53.3** | **-6.5** |
| **H05S1** | **Guadeloupe/Mar** | **20.89** | **288** | T | T | 02 34 48.0 | |
| | SNR=185 | | | | | | |
| **H05N1** | **Guadeloupe/Mar** | **21.61** | **293** | T | T | 02 35 38.9 | |
| | SNR=18 | | | | | | |
| **PTGA** | **Pitinga** | **21.64** | **246** | P | **P** | **02 13 31.0** | **-0.7** |
| | 37nm,0.9s,baz=64,slow=11,SNR=39 | | | | | | |
| PTGA | | | | LR | LR | 02 21 51.1 | |
| | comp=Z,344nm,20.4s,baz=62,slow=37 | | | | | | |
| **BDFB** | **Brasilia** | **25.26** | **198** | P | **P** | **02 14 08.8** | **+1.1** |
| | 3.7nm,0.5s,baz=32,slow=10.0,SNR=8.7 | | | | | | |
| **BDFB** | **Brasilia** | **25.26** | **198** | *e*P | **P** | **02 14 09.3** | **+1.7** |
| | 9.9nm,0.7s | | | | | | |
| **CELP** | **Cerrillos** | **27.17** | **293** | *e*P | **P** | **02 14 24.3** | **-0.6** |
| **SAML** | **Samuel** | **28.66** | **233** | *e*P | **P** | **02 14 39.3** | **+1.0** |
| | 24nm,1.6s | | | | | | |
| **SDV** | **Santo Domingo** | **29.93** | **273** | *e*P | **P** | **02 14 49.0** | **-0.8** |
| | 3.9nm,0.9s | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **30.50** | **122** | T | T | 02 47 11.4 | |
| | baz=302,slow=75,SNR=471 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **30.51** | **122** | T | T | 02 47 11.8 | |
| | baz=302,slow=75,SNR=462 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **30.52** | **122** | T | T | 02 47 12.9 | |
| | baz=302,slow=75,SNR=658 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **30.96** | **124** | T | T | 02 47 42.6 | |
| | baz=304,slow=74,SNR=494 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **30.97** | **124** | T | T | 02 47 45.1 | |
| | baz=304,slow=74,SNR=640 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **30.98** | **124** | T | T | 02 47 45.7 | |
| | baz=304,slow=74,SNR=516 | | | | | | |
| **SDDR** | **Presa de Saban** | **31.71** | **292** | *e*P | **P** | **02 15 04.6** | **-0.7** |
| **ROSC** | **El Rosal** | **33.95** | **266** | LR | LR | 02 29 54.3 | |
| | comp=Z,208nm,18.2s,baz=125,slow=38 | | | | | | |
| **DBIC** | **Dimbokro** | **35.22** | **91** | P | **P** | **02 15 35.2** | **-0.6** |
| | 4.5nm,0.6s,baz=265,slow=9.2,SNR=9.8 | | | | | | |
| DBIC | | | | LR | LR | 02 27 35.3 | |
| | comp=Z,64nm,18.2s,baz=244,slow=32 | | | | | | |
| **DBIC** | **Dimbokro** | **35.22** | **91** | *e*P | **P** | **02 15 35.8** | **-0.1** |
| | 49nm,1.8s | | | | | | |
| **LPAZ** | **La Paz** | **36.99** | **228** | P | **P** | **02 15 52.6** | **+1.0** |
| | 3.6nm,0.8s,baz=29,slow=4.9,SNR=17 | | | | | | |
| LPAZ | | | | LR | LR | 02 31 19.1 | |
| | comp=Z,91nm,18.4s,baz=56,slow=37 | | | | | | |
| **LPAZ** | **La Paz** | **36.99** | **228** | *e*P | **P** | **02 15 52.9** | **+1.3** |
| | 5.8nm,0.8s | | | | | | |
| **CPUP** | **Villa Florida** | **38.45** | **205** | LR | LR | 02 32 04.1 | |
| | comp=Z,215nm,18.1s,baz=26,slow=36 | | | | | | |
| **OTAV** | **Otavalo** | **38.85** | **260** | *e*P | **P** | **02 16 08.2** | **+0.8** |
| | 13nm,1.4s | | | | | | |
| **BCIP** | **Isla Barro Col** | **39.01** | **274** | *e*P | **P** | **02 16 08.2** | **+0.1** |
| | 13nm,0.8s | | | | | | |
| **MDT** | **Midelt** | **40.88** | **49** | P | **P** | **02 16 24.0** | **+0.5** |
| | 2.3nm,0.8s,baz=257,slow=7.4,SNR=9.3 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **41.49** | **80** | *e*P | **P** | **02 16 28.1** | **-0.6** |
| **TORD** | **Torodi Ar. Bea** | **41.49** | **80** | P | **P** | **02 16 28.3** | **-0.4** |
| | 7.6nm,0.8s,baz=275,slow=9.2,SNR=81 | | | | | | |
| TORD | | | | LR | LR | 02 32 09.4 | |
| | comp=Z,166nm,18.8s,baz=250,slow=34 | | | | | | |
| **NNA** | **Nana** | **41.65** | **241** | *e*P | **P** | **02 16 31.3** | **+1.2** |
| | 99nm,1.6s | | | | | | |
| **LVC** | **Limon Verde** | **41.78** | **222** | P | **P** | **02 16 30.7** | **-0.5** |
| | 4.4nm,0.4s,baz=18,slow=6.4,SNR=3.2 | | | | | | |
| **ESDC** | **Sonseca Array** | **44.85** | **40** | P | **P** | **02 16 54.4** | **-1.2** |
| | 0.5nm,0.8s,baz=249,slow=7.2,SNR=3.9 | | | | | | |
| ESDC | | | | LR | LR | 02 32 15.7 | |
| | comp=Z,124nm,20.5s,baz=255,slow=32 | | | | | | |
| **TAM** | **Tamanrasset** | **46.16** | **67** | *e*P |

comp=Z,2.8nm,1.0s
**FINES FINESS Array B 71.31 28** P **P** **02 19 59.7 -0.9**
comp=Z,1.9nm,0.9s,baz=243,slow=9.2,SNR=2.8
FINES LR LR 02 50 20.2
comp=Z,47nm,18.0s,baz=220,slow=35
**CCUT Cedar City 71.35 307** *eP* **P** **02 20 03.5 +1.9**
comp=Z,50nm,2.7s
**DLMT Dillon 71.46 315** *eP* **P** **02 20 04.0 +2.0**
comp=Z,16nm,1.3s
**BR231 Keskin MP Arra 71.58 51** *eP* **P** **02 20 05.7 +2.8**
**BRTR Keskin Array B 72.24 51** P **P** **02 20 06.5 -0.4**
comp=Z,1.0nm,0.8s,baz=266,slow=6.1,SNR=5.0
**SLMT Seeley Lake 72.29 317** *eP* **P** **02 20 07.2 +0.1**
**HLID Hailey 72.58 313** *eP* **P** **02 20 08.1 -0.7**
comp=Z,7.7nm,1.3s
**SWMT Swartz Lake 72.66 317** *eP* **P** **02 20 07.7 -1.5**
**EDM Edmonton 72.99 323** *eP* **P** **02 20 09.5 -1.4**
comp=Z,19nm,1.1s
**ELK Elko 72.99 310** *eP* **P** **02 20 11.9 +0.4**
comp=Z,4.7nm,1.2s
**BOSA Boshof 73.24 123** P **P** **02 20 14.4 +1.4**
comp=Z,7.0nm,1.1s,baz=270,slow=14,SNR=3.2
BOSA LR LR 02 44 49.5
comp=Z,64nm,21.1s,baz=287,slow=30
**ARCES ARCESS Array B 73.65 20** P **P** **02 20 14.6 +0.1**
comp=Z,4.0nm,0.9s,baz=263,slow=3.5,SNR=5.6
ARCES LR LR 02 48 12.5
comp=Z,31nm,19.6s,baz=224,slow=32
**NEW Newport 74.83 318** *eP* **P** **02 20 20.7 -1.1**
comp=Z,5.5nm,1.2s
**NVAR Mina Array Bea 75.28 307** P P 02 20 29.4 +4.5
comp=Z,0.9nm,0.9s,baz=97,slow=6.0,SNR=5.0
**WVOR Wild Horse Val 75.61 312** *eP* **P** **02 20 25.7 -0.8**
comp=Z,5.1nm,1.3s
**MOD Modoc 76.84 311** *eP* **P** **02 20 33.7 +0.1**
comp=Z,14nm,1.5s
**KBZ Khabaz 79.24 47** P **P** **02 20 47.1 +0.5**
comp=Z,1.9nm,0.8s,baz=270,slow=2.0,SNR=3.3
**VNA1 Neumayer--Stat 82.00 170** P **P** **02 21 01.2 +0.5**
**VNA3 Neumayer Olymp 82.27 170** P P 02 20 53.4 -8.9
**VNA2 Neumayer--Watz 82.39 170** P P 02 20 55.4 -7.4
baz=179,slow=2.9
**INK Inuvik 83.24 338** *eP* **P** **02 21 07.1 -0.3**
comp=Z,10nm,1.0s
**SNAA Sanae 83.85 169** P **P** **02 21 12.6 +2.2**
**SNAA Sanae 83.85 169** P **P** **02 21 11.6 +1.1**
baz=325,slow=4.8
**SNAA Sanae 83.85 169** *eP* **P** **02 21 11.2 +0.7**
comp=Z,2.6nm,1.1s
**DAWY Dawson 86.26 334** *eP* **P** **02 21 24.3 +1.5**
comp=Z,10nm,1.3s
**ARU Arti 87.79 33** *eP* **P** **02 21 30.3 0.0**
comp=Z,5.2nm,1.0s
**IL1 Eielson Array 89.22 336** *eP* P 02 21 40.1 +3.2
**ILAR Eielson Array 89.22 336** P **P** **02 21 36.8 -0.2**
comp=Z,1.0nm,0.9s,baz=63,slow=3.2,SNR=4.0
**ABKAR Akbulak array 90.19 40** *eP* **P** **02 21 42.8 +1.0**
**LZH Lanzhou 124.22 35** *e*PKP **PKPdf** **02 27 40.6 -0.2**
LZH sPKP 02 27 45.3
LZH LN
comp=Z,150nm,18.1s
LZH LE
comp=Z,140nm,18.0s
LZH LZ
comp=Z,180nm,20.0s
**HHC Hu-ho-hao-te 124.40 26** *e*PKP **PKPdf** **02 27 45.1 +4.2**
HHC PP PP 02 29 33.6 +8.1
HHC LN
comp=Z,320nm,19.1s
HHC LE
comp=Z,260nm,19.1s
HHC LZ
comp=Z,230nm,20.0s
**SNY Shenyang 127.69 15** PKP **PKPdf** **02 27 42.8 -4.2**
**CD2 Chengdu 127.77 40** PKP **PKPdf** **02 27 46.0 -1.6**
CD2 sPKP 02 27 50.8
CD2 SKS **SKSdf** **02 34 57.8 -2.1**
CD2 SKKS **SKKSac** **02 36 43.3 -4.0**
CD2 SS **SS** **02 46 59.6 -0.9**
**ASAR Alice Springs 164.04 160** PKPab **PKPab** **02 29 40.5 +2.0**
comp=Z,0.3nm,0.8s,baz=188,slow=5.6,SNR=3.5
**WRA Warramunga Arr 167.61 156** PKPab **PKPab** **02 29 55.9 +1.7**
comp=Z,0.2nm,0.7s,baz=198,slow=3.6,SNR=3.1

*IDC **22** 02:09:35.5±0.7,38.7°S×46.7°E,h0km,mb3.9/9, mb1 4.1/9,mb1mx3.8/43,mbtmp3.9/9,MS3.1/4,Ms1 3.1/4, ms1mx2.9/28,Error ellipse: s-maj=28.7km s-min=18.7km az=36.0*
*ISCJB **22** 02:09:36.8±0.6,38.9°S±0.1×46.7°E±0.1,h18km,mb3.9/12, MS3.0/4,Error ellipse: s-maj=19.0km s-min=13.3km az=41.9*
*NEIC **22** 02:09:37.1±0.5,38.86°S×46.71°E,h10km,mb4.2/4,Error ellipse: s-maj=17.9km s-min=12.4km az=220.0*

**ISC 22 02:09:38.4±0.7,38.9°S±0.1×46.7°E±0.2,h18km,n28, σ0.86/18,mb4.1/12,MS3.1/4,Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **OPO** | **Ambohidratompo** | **20.22** | **1** | | | LR | LR | 02 20 28.3 | |
| | comp=Z,94nm,20.2s,baz=170,slow=32 | | | | | | | | |
| **BOSA** | **Boshof** | **20.48** | **294** | P | | Pn | | 02 14 17.1 | -0.6 |
| | 7.8nm,1.0s,baz=131,slow=9.2,SNR=4.8 | | | | | | | | |
| BOSA | | | | | | LR | LR | 02 21 06.3 | |
| | comp=Z,24nm,19.2s,baz=152,slow=34 | | | | | | | | |
| **LBTB** | **Lobatse** | **22.52** | **302** | P | | **P** | **P** | **02 14 37.1** | **-0.2** |
| | 7.1nm,1.1s,baz=136,slow=6.1,SNR=4.7 | | | | | | | | |
| LBTB | | | | | | LR | LR | 02 22 23.8 | |
| | comp=Z,90nm,21.4s,baz=122,slow=34 | | | | | | | | |
| **MATP** | **Matopo** | **24.14** | **314** | P | | **P** | **P** | **02 14 52.0** | **-1.5** |
| | 2.9nm,1.1s,baz=143,slow=12,SNR=5.0 | | | | | | | | |
| **MAW** | **Mawson** | **30.18** | **168** | LR | | LR | LR | 02 24 50.2 | |
| | comp=Z,37nm,19.8s,baz=50,slow=30 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **38.81** | **44** | T | | T | T | 02 57 59.8 | |
| | baz=203 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **38.82** | **44** | T | | T | T | 02 58 04.1 | |
| | baz=203 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **38.83** | **44** | T | | T | T | 02 58 03.6 | |
| | baz=203 | | | | | | | | |
| **H08N3** | **Diego Garcia H** | **39.13** | **40** | T | | T | T | 02 58 31.8 | |
| | baz=214 | | | | | | | | |
| **H08N1** | **Diego Garcia H** | **39.15** | **40** | T | | T | T | 02 58 37.1 | |
| | baz=214 | | | | | | | | |
| **H08N2** | **Diego Garcia H** | **39.15** | **40** | T | | T | T | 02 58 36.5 | |
| | baz=214 | | | | | | | | |
| **SNAA** | **Sanae** | **41.13** | **201** | P | | **P** | **P** | **02 17 21.6** | **+0.5** |
| | 0.4nm,0.8s,baz=36,slow=9.7,SNR=4.8 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **51.34** | **190** | P | | **P** | **P** | **02 18 40.6** | **-0.9** |
| | 0.8nm,0.5s,baz=277,slow=4.5,SNR=3.6 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **53.00** | **108** | T | | T | T | 03 15 49.2 | |
| | baz=244,slow=75,SNR=13 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **53.01** | **108** | T | | T | T | 03 15 49.9 | |
| | baz=244,slow=75,SNR=14 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **53.02** | **108** | T | | T | T | 03 15 51.6 | |
| | baz=244,slow=75,SNR=13 | | | | | | | | |
| **RAYN** | **Ar Rayn** | **62.07** | **359** | *eP* | | **P** | **P** | **02 19 58.5** | **+0.5** |
| | 1.0nm,0.6s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.62** | **311** | P | | **P** | **P** | **02 20 28.1** | **+0.3** |
| | 1.0nm,1.1s,baz=220,slow=1.2,SNR=3.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **73.51** | **107** | P | | **P** | **P** | **02 21 09.9** | **-0.3** |
| | 1.1nm,0.7s,baz=235,slow=5.5,SNR=9.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **76.02** | **104** | P | | **P** | **P** | **02 21 25.1** | **+0.3** |
| | 2.3nm,0.9s,baz=228,slow=5.2,SNR=14 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **76.03** | **104** | *eP* | | **P** | **P** | **02 21 25.1** | **+0.2** |
| | 3.7nm,0.8s | | | | | | | | |
| **KKAR** | **Karatay Array** | **84.40** | **17** | *eP* | | **P** | **P** | **02 22 10.5** | **+1.2** |
| | 0.5nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **93.40** | **20** | P | | **P** | **P** | **02 22 51.8** | **-0.2** |
| | 0.3nm,0.3s,baz=218,slow=4.4,SNR=4.1 | | | | | | | | |
| **KURK** | **Kurchatov** | **93.51** | **20** | P | | **P** | **P** | **02 22 51.8** | **-0.7** |
| **BRVK** | **Borovoye** | **93.81** | **14** | *eP* | | **P** | **P** | **02 22 53.5** | **-0.3** |
| | 0.6nm,0.6s | | | | | | | | |
| **OXF** | **Oxford** | **144.76** | **277** | *e*PKPdf | | **PKPab** | **PKPab** | **02 29 12.4** | **-0.5** |
| **ILAR** | **Eielson Array** | **152.86** | **13** | PKPbc | | **PKPbc** | **PKPbc** | **02 29 32.4** | **-1.0** |
| | 1.1nm,1.1s,baz=300,slow=3.8,SNR=5.3 | | | | | | | | |
| ILAR | | | | PKPab | | **PKPab** | **PKPab** | **02 29 43.4** | **-1.1** |
| | 0.5nm,0.7s,baz=330,slow=3.8,SNR=4.4 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **153.75** | **258** | PKPbc | | **PKPbc** | **PKPbc** | **02 29 38.0** | **+1.5** |
| | 1.0nm,0.9s,baz=141,slow=8.1,SNR=9.3 | | | | | | | | |
| TXAR | | | | PKPab | | **PKPab** | **PKPab** | **02 29 50.1** | **+0.7** |
| | 0.6nm,0.8s,baz=106,slow=4.0,SNR=4.0 | | | | | | | | |

*ISK **22** 02:14:13.8,39.0°N×29.6°E,h12km,MD2.5*
*ISCJB **22** 02:14:14.0±0.7,39.0°N±0.0°×29.6°E±0.0°,h9km±7km,*

*Error ellipse: s-maj=5.3km s-min=5.3km az=18.0*
*CSEM **22** 02:14:14.3±0.1,39.01°N×29.67°E,h12km,MD2.7,Error ellipse: s-maj=2.6km s-min=2.3km az=80.0*
*DDA **22** 02:14:15.1,38.99°N×29.60°E,h7km,Md2.7*

**ISC 22 02:14:14.3±1.1,39.02°N±0.04°×29.67°E±0.03,h11km±11km, n30,σ0.37/42,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KHAL** | **Karahalli** | **0.67** | **192** | *i* | P | | **Pg** | **02 14 27.4** | **+0.2** |
| KHAL | | | | *i* | S | | **Sg** | **02 14 36.4** | **+0.4** |
| **KHAL** | **Karahalli** | **0.67** | **192** | P | | | **Pg** | **02 14 27.4** | **+0.2** |
| KHAL | | | | S | | | **Sg** | **02 14 36.4** | **+0.4** |
| **KHL** | **Karahalli** | **0.71** | **189** | *e*PG | | | **Pg** | **02 14 27.9** | **-0.1** |
| KHL | | | | *e*SG | | | **Sb** | **02 14 38.1** | **-0.3** |
| **KHL** | **Karahalli** | **0.71** | **189** | *e*Pg | | | **Pg** | **02 14 27.9** | **-0.1** |
| KHL | | | | *e*Sg | | | **Sb** | **02 14 38.1** | **-0.3** |
| **DEMI** | **Demirci** | **0.74** | **272** | *i* | P | | **Pg** | **02 14 28.5** | **-0.1** |
| DEMI | | | | *i* | S | | **Sg** | **02 14 38.4** | **+0.1** |
| **DEMI** | **Demirci** | **0.74** | **272** | P | | | **Pg** | **02 14 28.5** | **-0.1** |
| DEMI | | | | S | | | **Sg** | **02 14 38.4** | **+0.1** |
| **SHUT** | **Suhut-Afyon** | **0.83** | **124** | *e*PG | | | **Pg** | **02 14 30.1** | **-0.3** |
| SHUT | | | | *e*SG | | | **Sb** | **02 14 42.0** | **-0.1** |
| **SHUT** | **Suhut-Afyon** | **0.83** | **124** | *e*Pg | | | **Pg** | **02 14 30.1** | **-0.3** |
| SHUT | | | | *e*Sg | | | **Sb** | **02 14 42.0** | **-0.1** |
| **DST** | **Dursunbey** | **1.00** | **306** | *e*PG | | | **Pb** | **02 14 33.7** | **+0.1** |
| DST | | | | *e*SG | | | **Sn** | **02 14 48.2** | **-0.1** |
| **DST** | **Dursunbey** | **1.00** | **306** | *e*Pg | | | **Pb** | **02 14 33.7** | **+0.1** |
| DST | | | | *e*Sg | | | **Sn** | **02 14 48.2** | **-0.1** |
| **MANT** | **Manisa** | **1.02** | **239** | *i* | P | | **Pg** | **02 14 32.7** | **-1.2** |
| MANT | | | | *i* | S | | **Sb** | **02 14 47.3** | **-0.1** |
| **MANT** | **Manisa** | **1.02** | **239** | P | | | **Pg** | **02 14 32.7** | **-1.2** |
| MANT | | | | S | | | **Sb** | **02 14 47.3** | **-0.1** |
| **CAVI** | **Cavuskoy** | **1.19** | **6** | *e*PN | | | **Pb** | **02 14 36.9** | **+0.1** |
| **CAVI** | **Cavuskoy** | **1.19** | **6** | *e*Pn | | | **Pb** | **02 14 36.9** | **+0.1** |
| **ADVT** | **Abdulvahap** | **1.41** | **2** | *e*PN | | | **Pn** | **02 14 40.0** | **+0.2** |
| **ADVT** | **Abdulvahap** | **1.41** | **2** | *e*Pn | | | **Pn** | **02 14 40.0** | **+0.2** |
| **MDNY** | **Mudanya-Bursa** | **1.47** | **336** | *e*PN | | | **Pn** | **02 14 41.0** | **+0.4** |
| **MDNY** | **Mudanya-Bursa** | **1.47** | **336** | *e*Pn | | | **Pn** | **02 14 41.1** | **+0.4** |
| **SVRH** | **Sivrihisar-ESK** | **1.50** | **73** | *e*PN | | | **Pn** | **02 14 41.0** | **-0.2** |
| **SVRH** | **Sivrihisar-ESK** | **1.50** | **73** | *e*Pn | | | **Pn** | **02 14 41.0** | **-0.2** |
| **BALB** | **Balikesir** | **1.52** | **295** | *e*PN | | | **Pn** | **02 14 41.7** | **+0.4** |
| **BALB** | **Balikesir** | **1.52** | **295** | *e*Pn | | | **Pn** | **02 14 41.7** | **+0.4** |
| **GULT** | **Gulveren** | **1.55** | **25** | *e*PN | | | **Pn** | **02 14 41.9** | **0.0** |
| **GULT** | **Gulveren** | **1.55** | **25** | *e*Pn | | | **Pn** | **02 14 41.9** | **0.0** |
| **KCTX** | **Karacabey (Bur** | **1.60** | **321** | *e*PN | | | **Pn** | **02 14 43.0** | **+0.5** |
| **KCTX** | **Karacabey (Bur** | **1.60** | **321** | *e*Pn | | | **Pn** | **02 14 43.0** | **+0.5** |
| **ARMT** | **Armutlu** | **1.66** | **338** | *e*PN | | | **Pn** | **02 14 43.5** | **+0.2** |
| **ARMT** | **Armutlu** | **1.66** | **338** | *e*Pn | | | **Pn** | **02 14 43.5** | **+0.2** |
| **MDUB** | **Mudurnu** | **1.87** | **39** | *e*PN | | | **Pn** | **02 14 46.5** | **+0.3** |
| **MDUB** | **Mudurnu** | **1.87** | **39** | *e*Pn | | | **Pn** | **02 14 46.5** | **+0.3** |

*ISCJB **22** 02:24:44.4±1.1,20.9°S±0.2°×172.6°E±0.1,h33km,mb3.6/4, MS3.6/1,Error ellipse: s-maj=34.6km s-min=19.8km az=177.8*
*IDC **22** 02:24:47.0±2.0,19.30°S×171.58°E,h0km,mb3.6/4, mb1 3.9/5,mb1mx3.6/39,mbtmp3.5/5,ML3.3/1,MS3.5/2, Ms1 3.5/2,ms1mx3.0/23,Error ellipse: s-maj=106.6km s-min=25.3km az=151.0*

**ISC 22 02:24:46.3±1.2,21.05°S±0.3°×172.7°E±0.2,h35km,n12, σ0.93/9,mb3.7/4,Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **5.87** | **259** | Pn | | | **Pn** | **02 26 11.4** | **+0.5** |
| | 0.9nm,0.3s,baz=360,slow=14,SNR=8.6 | | | | | | | | |
| **HNR** | **Honiara** | **16.81** | **311** | LR | | LR | LR | 02 33 56.7 | |
| | comp=Z,110nm,18.1s,baz=107,slow=37 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.85** | **265** | P | | **P** | **P** | **02 31 41.6** | **-1.4** |
| | 0.3nm,0.5s,baz=93,slow=8.4,SNR=6.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **35.86** | **258** | P | | **P** | **P** | **02 31 43.1** | **0.0** |
| | 0.9nm,0.8s,baz=85,slow=9.7,SNR=7.0 | | | | | | | | |
| ASAR | | | | LR | | LR | LR | 02 45 46.4 | |
| | comp=Z,94nm,18.4s,baz=94,slow=36 | | | | | | | | |
| **SNAA** | **Sanae** | **87.49** | **181** | P | | **P** | **P** | **02 37 30.4** | **+0.3** |
| **VNA3** | **Neumayer Olymp** | **87.96** | **179** | P | | **P** | **P** | **02 37 32.9** | **+0.6** |
| **VNA2** | **Neumayer--Watz** | **88.30** | **180** | P | | P | P | 02 37 27.9 | -6.0 |
| **VNA1** | **Neumayer--Stat** | **88.57** | **180** | P | | **P** | **P** | **02 37 33.9** | **-1.1** |
| **ILAR** | **Eielson Array** | **91.01** | **16** | P | | **P** | **P** | **02 37 46.0** | **-0.4** |
| | 0.3nm,0.7s,baz=231,slow=5.7,SNR=3.7 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **94.82** | **61** | P | | P | P | 02 38 11.1 | +6.2 |
| | 0.2nm,0.7s,baz=236,slow=6.4,SNR=2.3 | | | | | | | | |
| **BRG** | **Berggiesshubel** | **145.84** | **336** | *e*P | | | **PKPab** | **02 44 23.1** | **+1.0** |
| | 8.7nm,1.1s | | | | | | | | |
| BRG | | | | *e* | | | | 02 44 27.2 | |
| | 3.3nm,0.6s | | | | | | | | |
| **GERES** | **GERESS Array B** | **147.54** | **334** | PKPbc | | | **PKPbc** | **02 44 27.3** | **+0.5** |
| | 1.3nm,0.6s,baz=46,slow=3.9,SNR=11 | | | | | | | | |

**GUC 22 02:27:40.5±0.3,36.99S×72.85W,h37km±1km,ML3.5, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CCHI** | **Chillan** | **0.73** | **58** | *e*P | | | Pn | 02 27 54.2 | 0.0 |
| CCHI | | | | *e*S | | | Sn | 02 28 04.8 | +0.7 |
| CCHI | | | | AML | | AML | AML | 02 28 07.4 | |
| | comp=N,2μm,0.3s | | | | | | | | |
| **COCH** | **Cobquecura** | **0.86** | **3** | *e*P | | | Pn | 02 27 56.2 | +0.2 |
| COCH | | | | *e*S | | | Sn | 02 28 08.3 | +0.9 |
| COCH | | | | AML | | AML | AML | 02 28 11.8 | |
| | comp=E,2μm,0.3s | | | | | | | | |
| **TALC** | **Talca** | **1.87** | **32** | *e*P | | | Pn | 02 28 11.2 | +1.4 |
| TALC | | | | *e*S | | | Sn | 02 28 34.6 | +2.4 |
| **NICH** | **Los Niches** | **2.38** | **34** | AML | | AML | AML | 02 29 09.3 | |
| | comp=E,355nm,0.3s | | | | | | | | |
| **PEL** | **Peldehue** | **4.23** | **25** | *e*P | | | Pn | 02 28 43.8 | +1.4 |
| PEL | | | | *e*S | | | Sn | 02 29 31.7 | +1.1 |
| **ROCH** | **El Roble** | **4.28** | **21** | *e*P | | | Pn | 02 28 45.0 | +1.6 |
| ROCH | | | | *e*S | | | Sn | 02 29 33.8 | +1.5 |
| ROCH | | | | AML | | AML | AML | 02 30 00.3 | |
| | comp=N,70nm,0.6s | | | | | | | | |

**JMA 22 02:28:14.2±0.1,35.80N×139.02E,h126km±1km,M2.2, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JHU** | **Hanno** | **0.22** | **76** | P | | | Pn | 02 28 32.0 | +0.4 |
| JHU | | | | S | | | Sn | 02 28 45.6 | +0.9 |
| **JRY** | **Ryogami san** | **0.24** | **336** | P | | | Pn | 02 28 32.0 | +0.3 |
| JRY | | | | *e*S | | | Sn | 02 28 45.4 | +0.5 |
| **JYN** | **Shimob** | **0.49** | **232** | P | | | Pn | 02 28 32.9 | 0.0 |
| JYN | | | | S | | | Sn | 02 28 47.6 | +0.7 |
| **JOD2** | **Odawara 2** | **0.54** | **174** | P | | | Pn | 02 28 33.4 | +0.3 |
| JOD2 | | | | S | | | Sn | 02 28 47.9 | +0.6 |
| **JAG** | **Ashikaga** | **0.72** | **29** | P | | | Pn | 02 28 34.3 | 0.0 |
| **MAT** | **Matsushiro** | **0.99** | **319** | P | | | Pn | 02 28 36.1 | -0.6 |
| MAT | | | | S | | | Sn | 02 28 53.2 | -0.5 |
| **MAT** | **Matsushiro** | **0.99** | **319** | P | | | Pn | 02 28 36.2 | -0.5 |
| MAT | | | | S | | | Sn | 02 28 52.9 | -0.8 |

*AUST **22** 02:52:46.2±0.4,20.28S×173.34W,h0km,Error ellipse: s-maj=13.1km s-min=6.6km az=138.0*
*IDC **22** 02:52:48.7±0.4,20.35S×173.84W,h0km,mb4.6/21, mb1 4.7/22,mb1mx4.7/39,mbtmp4.6/22,ML4.8/1,MS4.6/19, Ms1 4.7/19,ms1mx4.6/25,Error ellipse: s-maj=16.0km s-min=13.5km az=121.0*
*ISCJB **22** 02:52:53.0±0.1,20.42S±0.05×173.84W±0.04,h38km, mb5.0/83,MS4.8/26,Error ellipse: s-maj=7.5km s-min=3.6km az=149.7*
*MOS **22** 02:52:54.8±3.0,20.31S×173.84W,h33km,mb5.2/24, MS4.9/8,Error ellipse: s-maj=10.5km s-min=9.4km az=143.0*
*GCMT **22** 02:52:54.3±0.2,20.52S×173.12W,h12km,MW5.1/93, Moment Tensor Solution. s42,c62; s93,c155; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$5.09±.19; $M_{\theta\theta}$-0.76±.13; $M_{\phi\phi}$-4.34±.13; $M_{r\theta}$1.65±.41; $M_{\theta\phi}$-2.65±.10; $M_{\phi r}$2.56±.35; Best double couple: $M_o$6.21700×$10^{16}$ NP1:ϕs205.00000°,δ30.00000°,λ85.00000°. Principal axes: T 5.8940, Plg75.0000°, Azm309.0000°; N 0.6400, Plg2.0000°, Azm209.0000°; P -6.5400, Plg15.0000°, Azm119.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **22** 02:52:54.3±0.2,20.38S×173.84W,mb5.1/65 Error ellipse: s-maj=8.5km s-min=4.5km az=148.0*
*BJI **22** 02:52:56.9,20.17S×174.26W,h43km,mb5.1/24, mB5.5/17,Ms5.4/11,Ms7 4.9/15*

**ISC 22 02:52:55.2±0.4,20.51S±0.05×173.76W±0.05,h43km±2km, h42km:pP-P,n419,σ1.31/461,mb5.0/82,MS4.9/26, 22C-26D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **3.88** | **69** | P | | | Pn | 02 53 40.1 | -12 |
| | baz=3.4,SNR=25 | | | | | | | | |
| **AFI** | **Afiamalu** | **6.83** | **16** | Pn | | | Pn | 02 54 23.3 | -10 |
| | 10nm,0.3s,baz=96,slow=1.7,SNR=8.8 | | | | | | | | |
| AFI | | | | Sn | | | Sn | 02 55 32.0 | -18 |
| | 12nm,0.3s,baz=264,slow=19,SNR=2.7 | | | | | | | | |
| **MSVF** | **Nonsavu** | **8.21** | **288** | *e*P | | | Pn | 02 54 56.0 | +4.0 |
| **MSVF** | **Nonsavu** | **8.21** | **288** | Pn | | | Pn | 02 54 57.8 | +5.8 |
| | 580nm,1.1s,SNR=6.5 | | | | | | | | |
| **MSVF** | **Nonsavu** | **8.21** | **288** | *e*Pn | | | Pn | 02 54 56.0 | +4.0 |
| **RAO** | **Raoul Island** | **9.49** | **203** | Sn | | | **Sn** | **02 56 48.9** | **-5.7** |
| | 36nm,0.3s,baz=107,slow=19,SNR=4.1 | | | | | | | | |
| **RAR** | **Rarotonga** | **13.10** | **96** | Pn | | | Pn | 02 55 46.8 | -12 |
| | 6.8nm,0.3s,baz=263,slow=7.1,SNR=15 | | | | | | | | |
| RAR | | | | Sn | | | Sn | 02 57 57.6 | -26 |
| | 1.2nm,0.3s,baz=102,slow=19,SNR=2.5 | | | | | | | | |
| RAR | | | | LR | | | LR | 03 00 40.6 | |
| | comp=Z,2μm,18.6s,baz=274,slow=36 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.51** | **262** | *e*P | | | **Pn** | **02 57 10.0** | **+1.4** |
| | 175nm,1.6s | | | | | | | | |
| DZM | | | | *e*LR | | | LR | 03 01 23.5 | |
| | 3μm,22.7s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **18.51** | **262** | P | | | **Pn** | **02 57 09.1** | **+0.5** |
| | 1.8nm,0.3s,baz=358,slow=21,SNR=12 | | | | | | | | |
| DZM | | | | LR | | | LR | 03 03 29.2 | |
| | comp=Z,3μm,18.9s,baz=172,slow=35 | | | | | | | | |
| **URZ** | **Urewera** | **19.38** | **202** | P | | | **Pn** | **02 57 18.4** | **-0.4** |
| | 3.1nm,0.3s,baz=359,slow=3.1,SNR=21 | | | | | | | | |
| URZ | | | | S | | | S | 03 00 41.2 | -13 |
| | 0.7nm,0.3s,baz=121,slow=19,SNR=3.5 | | | | | | | | |
| **URZ** | **Urewera** | **19.38** | **202** | *e*P | | | **Pn** | **02 57 19.1** | **+0.4** |
| | 64nm,0.9s | | | | | | | | |
| URZ | | | | S | | | S | 03 00 41.2 | -13 |
| **TBI** | **Tubuai** | **22.72** | **102** | *e*LQ | | | LQ | 03 02 07.8 | |
| | 1μm,30.0s | | | | | | | | |
| TBI | | | | *e*LR | | | LR | 03 02 48.8 | |
| | 3μm,29.8s,baz=268 | | | | | | | | |
| **PPT2** | **Papeete2** | **23.04** | **87** | *e*LQ | | | LQ | 03 02 09.2 | |
| | 3μm,26.8s | | | | | | | | |
| PPT2 | | | | *e*LR | | | LR | 03 03 09.9 | |
| | 2μm,21.5s,baz=254 | | | | | | | | |
| **PPT** | **Papeete** | **23.05** | **87** | LR | | | LR | 03 05 06.0 | |
| | comp=Z,2μm,18.8s,baz=252,slow=32 | | | | | | | | |
| **OXZ** | **Oxford** | **25.67** | **204** | *e*P | | | **P** | **02 58 21.0** | **-0.1** |
| | 48nm,0.8s | | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.39** | **205** | P | | | **P** | **02 58 27.2** | **-0.3** |
| | 28nm,0.8s,baz=5.1,slow=2.3,SNR=7.1 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **26.39** | **205** | *e*P | | | **P** | **02 58 28.6** | **+1.0** |
| | 28nm,0.8s | | | | | | | | |
| **HNR** | **Honiara** | **27.63** | **290** | LR | | | LR | 03 08 56.7 | |
| | comp=Z,1μm,19.5s,baz=128,slow=35 | | | | | | | | |
| **ARMA** | **Armidale** | **32.66** | **245** | P | | | **P** | **02 59 23.7** | **+0.2** |
| | baz=33,SNR=4.4 | | | | | | | | |
| **ARMA** | **Armidale** | **32.66** | **245** | *e*P | | | **P** | **02 59 23.0** | **-0.4** |
| | 12nm,1.1s | | | | | | | | |
| **MGCD** | **Mangrove Creek** | **33.63** | **241** | P | | | **P** | **02 59 32.5** | **+0.7** |
| | baz=34,SNR=4.7 | | | | | | | | |
| **RMQ** | **Roma** | **34.80** | **253** | P | | | **P** | **02 59 42.1** | **+0.1** |
| | baz=35,SNR=9.9 | | | | | | | | |
| **CNB** | **Canberra Magne** | **35.54** | **238** | P | | | **P** | **02 59 48.9** | **+0.5** |
| | baz=36,SNR=7.6 | | | | | | | | |
| **CAN** | **Canberra** | **35.83** | **238** | *e*P | | | **P** | **02 59 51.1** | **+0.2** |
| CAN | | | | | | pmax | pmax | | |
| | comp=Z,33nm,1.1s | | | | | | | | |
| **CAN** | **Canberra** | **35.83** | **238** | *e*P | | | **P** | **02 59 51.1** | **+0.2** |
| | comp=Z,33nm,1.1s | | | | | | | | |
| **RKT** | **Rikitea** | **36.04** | **101** | *e*S | | | S | 03 05 16.7 | -12 |
| | comp=Z,247nm,29.8s | | | | | | | | |
| RKT | | | | *e*LR | | | LR | 03 08 57.5 | |
| | comp=Z,2μm,29.5s,baz=269 | | | | | | | | |
| **YNG** | **Young** | **36.08** | **240** | P | | | **P** | **02 59 53.1** | **+0.1** |
| | baz=36,SNR=6.5 | | | | | | | | |
| **CTA** | **Charters Tower** | **37.44** | **263** | P | | | **P** | **03 00 03.5** | **-1.1** |
| | comp=Z,5.8nm,0.4s,baz=84,slow=10,SNR=12 | | | | | | | | |
| **CTAO** | **Charters Tower** | **37.44** | **263** | *e*P | | | **P** | **03 00 03.6** | **-1.1** |
| CTAO | | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **CTAO** | **Charters Tower** | **37.44** | **263** | *e*P | | | **P** | **03 00 03.6** | **-1.1** |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **37.86** | **245** | P | | | **P** | **03 00 07.2** | **-0.9** |
| | baz=38,SNR=37 | | | | | | | | |
| **QLP** | **Quilpie** | **38.85** | **253** | P | | | **P** | **03 00 15.5** | **-0.9** |
| | baz=39,SNR=17 | | | | | | | | |
| **TOO** | **Toolangi** | **39.13** | **235** | P | | | **P** | **03 00 18.9** | **+0.2** |
| | baz=40,SNR=3.7 | | | | | | | | |
| **PMG** | **Port Moresby** | **39.23** | **280** | P | | | **P** | **03 00 18.1** | **-1.7** |
| | comp=Z,35nm,0.9s,baz=97,slow=5.3,SNR=8.6 | | | | | | | | |
| **PMG** | **Port Moresby** | **39.23** | **280** | *e*P | | | **P** | **03 00 18.9** | **-0.9** |
| PMG | | | | | | pmax | pmax | | |
| | comp=Z,154nm,1.0s | | | | | | | | |
| **PMG** | **Port Moresby** | **39.23** | **280** | P | | | **P** | **03 00 18.5** | **-1.3** |
| | baz=40,SNR=4.5 | | | | | | | | |
| **PMG** | **Port Moresby** | **39.23** | **280** | *e*P | | | **P** | **03 00 18.4** | **-1.3** |
| | comp=Z,41nm,0.9s | | | | | | | | |
| **MOO** | **Moorlands** | **39.37** | **227** | P | | | **P** | **03 00 22.6** | **+2.0** |
| | baz=40,SNR=3.6 | | | | | | | | |
| **MTSU** | **Mount Surprise** | **39.55** | **266** | P | | | **P** | **03 00 21.5** | **-1.0** |
| | baz=40,SNR=16 | | | | | | | | |
| **COEN** | **Coen** | **41.55** | **272** | P | | | **P** | **03 00 38.2** | **-0.8** |

SOEI **Soe** 60.47 270 P P 03 03 01.4 0.0
baz=61,SNR=8.9
SOEI **Soe** 60.47 270 *eP* P 03 03 02.0 +0.7
comp=Z,96nm,0.9s
TNTI **Ternate** 61.32 283 *eP* P 03 03 06.3 -0.6
comp=Z,96nm,1.0s
KLBR **Kellerberrin** 61.64 244 P P 03 03 09.2 +0.3
baz=62,SNR=9.4
MEEK **Meekatharra** 61.66 250 P P 03 03 08.4 -0.8
baz=62,SNR=6.7
MBWA **Marble Bar** 61.72 256 *eP* P 03 03 08.8 -0.8
comp=Z,17nm,1.0s
NWAO **Narrogin (SRO)** 61.91 243 *eP* P 03 03 11.2 +0.5
NWAO pmax pmax
comp=Z,22nm,1.0s
NWAO **Narrogin (SRO)** 61.91 243 P P 03 03 11.8 +1.1
baz=62,SNR=5.2
NWAO **Narrogin (SRO)** 61.91 243 *eP* P 03 03 11.2 +0.5
comp=Z,22nm,1.0s
BLDU **Ballidu** 62.67 245 P P 03 03 15.3 -0.6
baz=63,SNR=8.4
MORW **Morawa** 63.49 247 P P 03 03 21.5 +0.2
baz=64,SNR=3.1
LUWI **Luwuk** 64.85 279 *eP* P 03 03 30.5 +0.2
CASY **Casey** 65.66 205 *eP* P 03 03 36.0 +1.2
comp=Z,8.5nm,0.8s
KAPI **Kappang** 66.24 274 *eP* P 03 03 37.7 -1.7
comp=Z,20nm,1.3s
QSPA **South Pole Qui** 69.57 180 P P 03 04 00.5 +0.9
comp=Z,5.2nm,0.7s,baz=40,slow=2.4
MJAR **Matsushiro Arr** 72.64 321 P P 03 04 17.7 -0.8
comp=Z,9.2nm,0.8s,baz=158,slow=5.9,SNR=13
MJAR LR LR 03 31 49.9
comp=Z,169nm,21.0s,baz=110,slow=32
MAJO **Matsushiro** 72.64 321 *eP* P 03 04 17.9 -0.5
MAJO pmax pmax
comp=Z,15nm,0.8s
MAJO **Matsushiro** 72.64 321 *eP* P 03 04 17.9 -0.5
comp=Z,15nm,0.8s
MAT **Matsushiro** 72.64 321 P P 03 04 17.7 -0.7
MAT *eS* **S** 03 13 36.8 -3.6
KKM **Kota Kinabalu** 73.61 283 *eP* P 03 04 25.2 +0.4
comp=Z,22nm,0.8s
CIS **Catalina Islan** 75.23 45 P P 03 04 33.9 +0.2
baz=75
MONP **Monument Peak** 76.27 47 P P 03 04 40.1 +0.2
baz=76
VES **Vestal, Richgr** 76.27 43 P P 03 04 39.7 +0.2
baz=76
ISA **Isabella** 76.55 43 *eP* P 03 04 40.2 -1.0
ISA *e*PP **PcP** 03 04 51.8 -0.9
ISA **Isabella** 76.55 43 P P 03 04 41.2 0.0
baz=77
ISA **Isabella** 76.55 43 *eP* P 03 04 40.2 -1.0
ISA *ep*P **PcP** 03 04 51.8 -0.9
PFO **Pinyon Flat Ob** 76.66 46 P P 03 04 41.5 -0.4
comp=Z,5.1nm,1.0s,baz=185,slow=4.1,SNR=4.7
PFO **Pinyon Flat Ob** 76.66 46 *eP* P 03 04 43.0 +1.0
PFO *e*PP **PcP** 03 04 52.7 -0.6
PFO **Pinyon Flat Ob** 76.66 46 *eP* P 03 04 43.0 +1.0
PFO *ep*P **PcP** 03 04 52.7 -0.6
SWSC **Sam W. Stewart** 76.72 47 P P 03 04 42.9 +0.7
baz=77
CMB **Columbia Colle** 76.83 41 *eP* P 03 04 41.7 -1.0
CMB pmax pmax
comp=Z,8.0nm,1.0s
CMB **Columbia Colle** 76.83 41 *eP* P 03 04 41.7 -1.0
comp=Z,7.7nm,1.0s
LRMC **Laurel Mountai** 76.95 44 P P 03 04 43.2 -0.3
baz=77
PET **Petropavlovsk** 77.03 343 *eP* P 03 04 50.0 +6.6
PET *eS* S 03 14 35.0 +6.4
PET *ePS* **PnS** 03 15 19.4 +7.1
PET MLR MLR
comp=Z,300nm,18.0s
PET MLR MLR
comp=Z,400nm,19.0s
BELC **Belle Mtn. Jos** 77.20 46 P P 03 04 43.9 -1.1
baz=77
WDC **Whiskeytown Da** 77.20 38 *eP* P 03 04 43.3 -1.4
WDC pmax pmax
comp=Z,15nm,1.3s
WDC **Whiskeytown Da** 77.20 38 *eP* P 03 04 43.3 -1.4
comp=Z,15nm,1.3s
CWC **Cottonwood Cre** 77.28 43 P P 03 04 45.0 -0.4
baz=77
BC3 **Big Chuckawall** 77.37 47 P P 03 04 45.3 -0.6
baz=78
PEA0 **Petropavlovsk-** 77.37 343 *eP* P 03 04 45.9 +0.6
PETK **Petropavlovsk-** 77.37 343 P P 03 04 44.5 -0.8
comp=Z,11nm,0.9s,baz=122,slow=11,SNR=5.3
PETK LR LR 03 34 50.3
comp=Z,110nm,20.3s,baz=178,slow=33
GSC **Goldstone** 77.42 45 *eP* P 03 04 47.2 +1.0
GSC **Goldstone** 77.42 45 P P 03 04 46.1 -0.1
baz=78
GSC **Goldstone** 77.42 45 *eP* P 03 04 47.2 +1.0
MPMC **Manual Prospec** 77.43 44 P P 03 04 45.8 -0.5
baz=78
O03D **Paynes Creek** 77.44 38 P P 03 04 46.6 +0.5
baz=78
GLA **Glamis** 77.46 47 *eP* P 03 04 47.1 +0.8
GLA pmax pmax
comp=Z,10.0nm,1.2s
GLA **Glamis** 77.46 47 *eP* P 03 04 47.1 +0.8
comp=Z,10nm,1.2s
HEC **Hector,Ludlow** 77.46 45 P P 03 04 45.7 -0.7
baz=78
MTUM **Tungsten Hills** 77.53 42 *eP* P 03 04 46.3 -0.6
MTUM *ep*P **PcP** 03 04 57.4 +0.3
YSS **Yuzh-Sakhalins** 77.75 331 *eP* P 03 04 48.0 +0.5
YSS *eS* S 03 14 40.0 +3.4
YSS pmax pmax
comp=Z,30nm,1.0s
YSS MLR MLR
comp=Z,300nm,16.0s
YSS MLR MLR
comp=N,300nm,18.0s
YSS **Yuzh-Sakhalins** 77.75 331 *eP* P 03 04 48.8 +1.2
comp=N,20nm,0.8s
IRM **Iron Mountain** 77.87 46 P P 03 04 48.2 -0.4
baz=78
YBH **Yreka Blue Hor** 77.87 37 P P 03 04 47.5 -1.0
comp=N,3.5nm,0.9s,baz=52,slow=7.2,SNR=4.6
Y12C **Blythe** 78.06 47 P P 03 04 49.7 +0.1
baz=78
GRAC **Grapevine Rang** 78.07 43 P P 03 04 49.6 -0.1
baz=78
TUQ **Turquoise Moun** 78.08 45 P P 03 04 50.4 +0.5
baz=78
NVAR **Mina Array Bea** 78.35 41 P P 03 04 50.3 -1.1
comp=N,10nm,0.9s,baz=225,slow=8.6,SNR=34
NVAR LR LR 03 34 57.1
comp=N,960nm,18.0s,baz=233,slow=32
M04C **Macdoel** 78.39 37 P P 03 04 51.1 -0.4
baz=79
PDMCI **Parker Dam,Lak** 78.63 47 P P 03 04 52.5 -0.2
baz=79
SHPR **Sheep Range** 79.21 44 *eP* P 03 04 55.7 -0.4
SHPR *ep*P **pP** 03 05 06.9 -2.0
MOD **Modoc** 79.34 38 *eP* P 03 04 55.8 -0.9
K05A **Summer Lake** 79.54 37 *eP* P 03 04 56.7 -1.1
comp=N,111nm,2.3s
KSRS **Korea Array** 79.57 316 P P 03 04 58.6 +0.8
comp=N,8.5nm,1.0s,baz=138,slow=5.9,SNR=9.4
KSRS LR LR 03 35 46.4
comp=N,291nm,20.4s,baz=124,slow=32
KSAR **Wonju Array Be** 79.59 316 P P 03 04 58.6 +0.7
KSAR **Wonju Array Be** 79.59 316 P P 03 04 58.6 +0.7
KS01 **Wonju Array Si** 79.61 316 *eP* P 03 04 59.0 +1.0
J05D **Fort Rock, OR** 79.72 36 P P 03 04 58.6 -0.1
baz=80
R11A **Troy Canyon, C** 80.01 43 P P 03 04 59.9 -0.6
baz=80
R11A **Troy Canyon, C** 80.01 43 *eP* P 03 04 59.7 -0.8
comp=N,6.2nm,1.1s
BMN **Battle Mountai** 80.24 40 *eP* P 03 05 00.9 -0.7
BMN pmax pmax
comp=Z,14nm,1.1s
BMN **Battle Mountai** 80.24 40 *eP* P 03 05 00.9 -0.7
comp=Z,14nm,1.1s
WVOR **Wild Horse Val** 80.64 38 *eP* P 03 05 02.0 -1.7
WVOR pmax pmax
comp=Z,8.0nm,0.9s
WVOR **Wild Horse Val** 80.64 38 *eP* P 03 05 02.0 -1.7
comp=Z,7.7nm,0.9s

TYV **Tymovskoe** 80.74 334 *eP* P 03 05 03.8 0.0
TYV pmax pmax
comp=Z,13nm,0.8s
CCUT **Cedar City** 80.99 44 *eP* P 03 05 05.5 -0.2
CCUT *epP* **pP** 03 05 17.2 -1.3
I07A **Izee** 81.19 36 *eP* P 03 05 06.7 +0.1
comp=Z,88nm,2.5s
USRK **Ussuriysk Ar.** 81.26 324 P P 03 05 05.5 -1.2
comp=Z,2.3nm,0.7s,baz=165,slow=6.0,SNR=3.8
USRK LR LR 03 37 29.4
comp=Z,840nm,19.4s,baz=127,slow=33
J08A **Circle Bar Ran** 81.31 37 *eP* P 03 05 06.8 -0.4
J08A *epP* **pP** 03 05 18.0 -2.0
ELK **Elko** 81.64 41 *eP* P 03 05 08.6 -0.5
ELK *e*PP **pP** 03 05 19.9 -2.0
ELK pmax pmax
comp=Z,82nm,2.5s
ELK **Elko** 81.64 41 *eP* P 03 05 08.6 -0.5
comp=Z,82nm,2.5s
ELK *epP* **pP** 03 05 19.9 -2.0
MNAI **Manna** 82.20 268 *eP* P 03 05 12.0 -0.5
G08A **Pilot Rock** 82.26 36 *eP* P 03 05 10.8 -1.4
comp=Z,88nm,2.5s
MSU **Marysvale** 82.30 44 *eP* P 03 05 13.0 +0.3
MSU pmax pmax
comp=Z,13nm,1.0s
MSU **Marysvale** 82.30 44 *eP* P 03 05 13.0 +0.3
comp=Z,13nm,1.0s
BBB **Bella Bella** 82.59 26 LR LR 03 34 20.7
comp=Z,234nm,21.0s,baz=240,slow=30
E07A **Sunnyside** 82.59 34 *eP* P 03 05 14.8 +1.1
comp=Z,68nm,2.1s
HAWA **Hanford** 82.65 34 *eP* P 03 05 14.9 +0.9
comp=Z,85nm,2.5s
MDJ **Mudanjiang** 82.86 323 P P 03 05 16.0 +0.9
MDJ pP **pP** 03 05 28.3 +0.4
MDJ sP **sP** 03 05 32.9 +0.2
MDJ S **S** 03 15 31.6 +1.2
MDJ sS **sS** 03 15 52.6 +0.8
MDJ PMZ
comp=Z,10.0nm,0.8s
MDJ PMZ
comp=Z,190nm,4.9s
MDJ LN
comp=Z,350nm,16.7s
MDJ LE
comp=Z,370nm,16.1s
MDJ LZ
comp=Z,490nm,18.3s
MFID **Camas Ranch** 82.87 38 *eP* P 03 05 16.2 +0.8
MFID *epP* **pP** 03 05 26.6 -1.5
MAW **Mawson** 82.87 199 P P 03 05 15.8 +0.9
comp=Z,4.9nm,0.9s,baz=125,slow=5.0,SNR=8.2
MAW LR LR 03 41 50.8
comp=Z,740nm,18.7s,baz=72,slow=36
MAW **Mawson** 82.87 199 *eP* P 03 05 16.4 +1.5
MAW **Mawson** 82.87 199 *eP* P 03 05 16.4 +1.5
NJ2 **Nanjing** 82.98 308 *eP* P 03 05 16.8 +0.8
NJ2 PMZ
comp=Z,60nm,0.8s
TMUT **Trail Mountain** 83.36 44 *eP* P 03 05 18.3 +0.1
comp=Z,63nm,1.0s
D08A **Wollman Farm,** 83.40 34 *eP* P 03 05 17.6 -0.3
comp=Z,10nm,1.0s
MNTX **Cornudas Mount** 83.55 53 P P 03 05 18.5 -0.5
baz=84
F10A **Beach Ranch, E** 83.63 36 *eP* P 03 05 17.8 -1.4
comp=Z,10.0nm,0.9s
SPUT **South Promonto** 83.69 42 *eP* P 03 05 16.1 -3.6
comp=Z,19nm,1.5s
SRU **San Rafael** 83.71 44 *eP* P 03 05 20.0 +0.1
SRU *e*PP **pP** 03 05 31.1 -1.6
SRU pmax pmax
comp=Z,22nm,1.0s
SRU **San Rafael** 83.71 44 *eP* P 03 05 20.0 +0.1
comp=Z,22nm,1.0s
SRU *epP* **pP** 03 05 31.1 -1.6
TXAR **Lajitas Array** 83.75 56 LR LR 03 35 48.5
comp=Z,482nm,19.8s,baz=0.0,slow=31
P17A **Butcher Ranch,** 83.76 44 *eP* P 03 05 20.6 +0.5
comp=Z,54nm,1.6s
CTU **Camp Tracy** 83.78 42 *eP* P 03 05 21.6 +1.3
comp=Z,12nm,1.0s
HLID **Hailey** 83.78 39 P P 03 05 19.8 -0.4
baz=84
HLID **Hailey** 83.78 39 *eP* P 03 05 19.7 -0.5
comp=Z,11nm,0.9s
HLID *epP* **pP** 03 05 31.1 -1.9
P18A **Preston Nutter** 84.17 44 *eP* P 03 05 22.2 -0.2
comp=Z,30nm,0.8s
TCUT **Toone Canyon** 84.23 42 *eP* P 03 05 22.2 -0.4
comp=Z,40nm,1.0s
ANMO **Albuquerque** 84.35 50 P P 03 05 24.0 +0.8
comp=Z,4.4nm,1.0s,baz=245,slow=4.6,SNR=8.3
ANMO **Albuquerque** 84.35 50 *eP* P 03 05 23.7 +0.4
ANMO pmax pmax
comp=Z,27nm,1.5s
ANMO **Albuquerque** 84.35 50 *eP* P 03 05 23.7 +0.4
comp=Z,27nm,1.5s
HWUT **Hardware Ranch** 84.40 42 *eP* P 03 05 23.4 0.0
comp=Z,6.2nm,0.8s
QIZ **Qiongzhong** 84.50 293 P P 03 05 21.0 -3.1
QIZ S S 03 15 39.6 -8.5
QIZ PMZ
comp=Z,32nm,2.6s
KLR **Kul'dur** 84.61 328 *eP* P 03 05 24.6 +0.7
CN2 **Changchun** 84.78 321 *eP* P 03 05 25.8 +0.9
NEW **Newport** 85.10 34 P P 03 05 24.9 -1.6
comp=Z,1.4nm,0.8s,baz=185,slow=3.8,SNR=3.9
NEW **Newport** 85.10 34 P P 03 05 25.0 -1.6
AHID **Auburn Hatcher** 85.33 41 *eP* P 03 05 27.8 -0.3
comp=Z,12nm,0.9s
MCMT **McKenzie Canyo** 85.44 39 *eP* P 03 05 27.9 -0.6
S22A **4UR Ranch, Cre** 85.48 47 P P 03 05 28.9 -0.1
baz=86
WHN **Wuhan** 85.68 305 P P 03 05 32.0 +2.3
TRF **Thorofare Moun** 85.68 10 *eP* P 03 05 27.7 -1.6
comp=Z,141nm,2.2s
429A **Davenport Ranc** 85.70 55 P P 03 05 29.8 -0.2
baz=86
REDW **Red Top Meadow** 85.81 41 *eP* P 03 05 29.2 -1.2
comp=Z,14nm,1.4s
TPAW **Teton Pass** 85.82 40 *eP* P 03 05 29.8 -0.7
comp=Z,13nm,1.4s
228A **UT Block 9, Go** 85.84 54 P P 03 05 31.0 +0.4
baz=86
FXWY **Fox Creek** 85.86 40 *eP* P 03 05 31.3 +0.6
DLMT **Dillon** 85.89 38 *eP* P 03 05 29.9 -0.8
comp=Z,14nm,1.2s
SNOW **Snow King Moun** 85.92 41 *eP* P 03 05 29.4 -1.6
SNOW *epP* **pP** 03 05 42.5 -1.4
IMW **Indian Meadow** 86.05 40 *eP* P 03 05 31.4 -0.3
comp=Z,7.6nm,0.9s
MOOW **Moose Ponds** 86.09 40 *eP* P 03 05 31.0 -0.7
comp=Z,62nm,2.7s
MOOW **Moose Ponds** 86.09 40 *eP* P 03 05 31.4 -0.4
comp=Z,3.3nm,1.0s
LOHW **Long Hollow** 86.10 41 *eP* P 03 05 32.1 +0.3
comp=Z,4.9nm,1.0s
BSMT **Bassoo Peak** 86.10 35 *eP* P 03 05 30.8 -0.9
comp=Z,13nm,1.7s
128A **Castleberry Fa** 86.15 53 P P 03 05 31.6 -0.6
baz=86
MCK **McKinley** 86.18 11 *eP* P 03 05 30.1 -1.4
MCK pmax pmax
comp=Z,20nm,0.9s
MCK **McKinley** 86.18 11 *eP* P 03 05 30.1 -1.4
comp=Z,20nm,0.9s
QLMT **Earthquake Lak** 86.27 39 *eP* P 03 05 32.7 0.0
FLWY **Flagg Ranch** 86.30 40 *eP* P 03 05 33.0 +0.2
229A **Bryant Ranch,** 86.37 54 P P 03 05 33.0 -0.2
baz=86
SDCO **Great Sand Dun** 86.39 48 P P 03 05 34.4 +0.9
baz=86
SDCO **Great Sand Dun** 86.39 48 *eP* P 03 05 34.9 +1.4
comp=Z,76nm,2.7s
933A **Laredo** 86.45 59 P P 03 05 34.3 +0.6
baz=87
Z28A **Tucker Farm, M** 86.53 53 P P 03 05 35.0 +1.0
baz=87
531A **Rocksprings** 86.54 56 P P 03 05 35.1 +1.0
baz=87
330A **Mertzon** 86.60 55 P P 03 05 34.2 -0.2
baz=87
BOZ **Bozeman (W)** 86.61 38 *eP* P 03 05 33.8 -0.4
BOZ *e*PP **pP** 03 05 44.8 -2.3

BOZ pmax pmax
comp=Z,7.0nm,1.0s
BOZ **Bozeman (W)** 86.61 38 P P 03 05 33.8 -0.4
baz=87
BOZ **Bozeman (W)** 86.61 38 *eP* P 03 05 33.8 -0.4
comp=Z,7.3nm,1.0s
BOZ *epP* **pP** 03 05 44.8 -2.3
129A **Stewart Farms,** 86.62 53 P P 03 05 34.0 -0.5
baz=87
833A **Chaparral WMA,** 86.66 58 P P 03 05 34.0 -0.7
baz=87
034A **Hebbronville** 86.70 60 P P 03 05 35.4 +0.5
baz=87
230A **Sterling City** 86.86 54 P P 03 05 34.4 -1.3
baz=87
Y28A **McKinney Farm,** 86.92 52 P P 03 05 35.4 -0.5
baz=87
Z29A **Hungry Hill Ra** 87.03 53 P P 03 05 35.4 -1.0
baz=87
IPM **Ipoh** 87.08 276 *eP* P 03 05 37.0 0.0
X28A **Dimmitt** 87.23 52 P P 03 05 36.0 -1.5
baz=87
834A **Tilden** 87.25 59 P P 03 05 35.8 -1.8
baz=87
130A **Snyder** 87.29 54 P P 03 05 37.1 -0.6
baz=87
Y29A **Porterfield Fa** 87.32 52 P P 03 05 36.9 -1.0
baz=88
SEY **Seymchan** 87.34 345 *eP* P 03 05 37.1 0.0
COLA **College** 87.42 11 *eP* P 03 05 36.8 -0.6
COLA pmax pmax
comp=Z,13nm,0.8s
COLA **College** 87.42 11 *eP* P 03 05 36.8 -0.6
comp=Z,13nm,0.8s
MDM **Murphy Dome** 87.43 11 *eP* P 03 05 36.3 -1.3
Z30A **Sanderson Ranc** 87.47 53 P P 03 05 37.6 -1.0
baz=88
231A **Bronte** 87.49 55 P P 03 05 37.5 -1.2
baz=88
IL1 **Eielson Array** 87.49 11 *eP* P 03 05 35.5 -2.3
ILAR **Eielson Array** 87.49 11 P P 03 05 36.1 -1.8
comp=Z,1.9nm,0.7s,baz=214,slow=4.9,SNR=23
SYO **Syowa Base** 87.55 191 *eP* P 03 05 35.6 -2.7
U27A **Thompson Grove** 87.65 50 P P 03 05 38.7 -0.7
baz=88
533A **Kerrville** 87.68 57 P P 03 05 38.6 -1.0
baz=88
332A **Millersview** 87.69 55 P P 03 05 39.5 -0.2
baz=88
KULM **Kulim** 87.71 276 *eP* P 03 05 39.7 -0.4
comp=Z,22nm,1.2s
131A **Roby** 87.76 54 P P 03 05 39.5 -0.5
baz=88
AMTX **Amarillo** 87.78 52 P P 03 05 40.3 +0.2
baz=88
VNA3 **Neumayer Olymp** 87.83 175 P P 03 05 40.1 +0.5
SNAA **Sanae** 87.85 177 P P 03 05 39.2 -0.6
SNAA **Sanae** 87.85 177 P P 03 05 38.8 -1.0
comp=Z,0.7nm,0.8s,baz=223,slow=2.9,SNR=10.0
SNAA **Sanae** 87.85 177 *eP* P 03 05 39.2 -0.6
SNAA pmax pmax
comp=Z,3.0nm,2.3s
SNAA **Sanae** 87.85 177 *eP* P 03 05 39.1 -0.6
comp=Z,2.6nm,1.1s
433A **Art** 87.93 56 P P 03 05 39.8 -1.0
baz=88
232A **Coleman** 87.98 55 P P 03 05 40.1 -0.9
baz=88
534A **Blanco** 88.11 57 P P 03 05 40.7 -0.9
baz=88
333A **Richland Sprin** 88.25 56 P P 03 05 41.5 -0.9
baz=88
VNA2 **Neumayer--Watz** 88.32 176 P P 03 05 42.4 +0.5
baz=231,slow=1.1
DAWY **Dawson** 88.43 14 *eP* P 03 05 42.1 -0.3
comp=Z,7.6nm,0.9s
T28A **Walsh** 88.47 49 P P 03 05 42.5 -0.8
baz=89
VNA1 **Neumayer--Stat** 88.52 175 P P 03 05 43.6 +0.7
434A **Burnet** 88.60 56 P P 03 05 42.8 -1.1
baz=89
Z32A **Haskell** 88.72 54 P P 03 05 44.6 +0.1
baz=89
BJI **Beijing** 88.72 314 P P 03 05 44.0 -0.2
BJI S **S** 03 16 28.5 +0.4
BJI SS **SS** 03 22 19.1 -1.9
BJI PMZ
comp=Z,16nm,2.6s
BJI LZ
comp=Z,100nm,19.8s
334A **Lometa** 88.84 56 P P 03 05 44.5 -0.6
baz=89
R28A **Tribune** 89.24 48 P P 03 05 46.4 -0.5
baz=89
BILL **Bilibino** 89.50 353 *eP* P 03 05 49.2 +2.0
BILL pmax pmax
comp=Z,5.0nm,1.0s
W32A **Sentinel** 89.68 52 P P 03 05 48.7 -0.2
baz=90
537A **Green Hill Far** 89.83 58 P P 03 05 50.4 +0.7
baz=90
738A **Farr-Stevens R** 89.87 59 P P 03 05 51.4 +1.5
baz=90
X33A **Lawton** 89.98 53 P P 03 05 51.0 +0.7
baz=90
GYA **Guiyang** 90.13 298 *eP* P 03 05 52.0 +0.7
GYA pP **pP** 03 06 05.3 +1.0
GYA sP **sP** 03 06 10.6 +1.6
GYA PP **PP** 03 09 28.0 +2.5
GYA SKS **SKSac** 03 16 17.4 -2.0
GYA S **S** 03 16 40.8 -1.3
GYA sS **sS** 03 17 01.3 -2.4
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.8s
HKT **Hockley** 90.16 58 *eP* P 03 05 51.6 +0.4
HKT **Hockley** 90.16 58 *eP* P 03 05 51.6 +0.4
W33A **Caddo, Fort Co** 90.26 52 P P 03 05 51.5 -0.1
baz=90
RSSD **Black Hills** 90.44 43 *eP* P 03 05 51.1 -1.4
RSSD *e*PP **pP** 03 06 01.9 -3.5
RSSD pmax pmax
comp=Z,9.0nm,1.2s
RSSD **Black Hills** 90.44 43 *eP* P 03 05 51.1 -1.4
comp=Z,8.8nm,1.2s
RSSD *ep*P **pP** 03 06 01.9 -3.5
I25A **Rochford** 90.58 43 P P 03 05 52.4 -0.8
baz=91
Q30A **Quinter** 90.64 48 P P 03 05 53.4 +0.1
baz=91
Y36A **Durant** 91.39 54 P P 03 05 56.9 0.0
baz=92
CFAA **Coronel Fontan** 91.86 125 P P 03 05 59.4 0.0
comp=Z,0.3nm,0.5s,baz=282,slow=2.4,SNR=4.8
R33A **Olander Ranch,** 91.94 50 P P 03 05 59.4 0.0
baz=92
HHC **Hu-ho-hao-te** 92.23 313 *eP* P 03 06 03.5 +2.8
HHC pP **pP** 03 06 15.9 +2.2
HHC S **S** 03 17 03.8 +3.2
HHC sS **sS** 03 17 23.5 +1.2
HHC PMZ
comp=Z,18nm,1.1s
HHC PMZ
comp=Z,280nm,5.4s
HHC LN
comp=Z,530nm,17.3s
HHC LE
comp=Z,580nm,17.5s
HHC LZ
comp=Z,330nm,16.0s
Q33A **Connelly Farm,** 92.33 49 P P 03 06 00.9 -0.2
baz=92
DGMT **Dagmar** 92.42 39 P P 03 06 01.5 +0.2
baz=92
DGMT **Dagmar** 92.42 39 *eP* P 03 06 03.1 +1.8
DGMT *ep*P **pP** 03 06 13.8 -0.5
T35A **Sooner Cattle** 92.44 51 P P 03 06 01.1 -0.6
baz=93
X38A **Whitesboro** 92.80 54 P P 03 06 03.0 -0.4
baz=93
S35A **Otter Creek Ra** 92.88 51 P P 03 06 03.2 -0.5
baz=93
KMI **Kunming** 92.91 296 P P 03 06 05.6 +1.2
KMI PMZ
comp=Z,10.0nm,1.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| T36A | Boggs Farm, Ca | 92.96 | 52 | P | | P | 03 06 04.9 | +0.9 | |
| | baz=93 | | | | | | | | |
| J30A | Dallas | 93.02 | 45 | P | | P | 03 06 03.7 | -0.5 | |
| | baz=93 | | | | | | | | |
| E27A | Carson | 93.05 | 41 | P | | P | 03 06 03.8 | -0.5 | |
| | baz=93 | | | | | | | | |
| K31A | O'Neill | 93.21 | 46 | P | | P | 03 06 05.8 | +0.7 | |
| | baz=93 | | | | | | | | |
| A25A | Svangstu Ranch | 93.27 | 39 | P | | P | 03 06 06.4 | +1.1 | |
| | baz=93 | | | | | | | | |
| S36A | Lake Cedric, C | 93.43 | 51 | P | | P | 03 06 05.6 | -0.6 | |
| | baz=94 | | | | | | | | |
| TRQA | Tornquist | 93.49 | 133 | *e*P | | P | 03 06 06.7 | 0.0 | |
| | comp=Z,17nm,1.5s | | | | | | | | |
| YAK | Yakutsk | 93.64 | 337 | *e*P | | P | 03 06 05.1 | -1.4 | |
| YAK | | | | pmax | | pmax | | | |
| | comp=Z,36nm,0.5s | | | | | | | | |
| YAK | Yakutsk | 93.64 | 337 | *e*P | | P | 03 06 05.1 | -1.4 | |
| | comp=Z,36nm,0.5s | | | | | | | | |
| T37A | Cheneyville 18 | 93.69 | 52 | P | | P | 03 06 06.7 | -0.7 | |
| | baz=94 | | | | | | | | |
| CMAR | Chiang Mai Arr | 93.87 | 288 | P | | P | 03 06 10.7 | +2.0 | |
| | comp=Z,4.6nm,1.0s,baz=107,slow=2.8,SNR=15 | | | | | | | | |
| CMAR | | | | LR | | LR | 03 46 15.6 | | |
| | comp=Z,120nm,20.1s,baz=131,slow=34 | | | | | | | | |
| CMAR | Chiang Mai Arr | 93.87 | 288 | *c*eP | | P | 03 06 10.6 | +1.9 | |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| A26A | Wade Farm, Ken | 93.88 | 39 | P | | P | 03 06 08.1 | +0.1 | |
| | baz=94 | | | | | | | | |
| CHTO | Chiang Mai | 94.00 | 288 | *e*P | | P | 03 06 08.5 | -0.7 | |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| CHTO | Chiang Mai | 94.00 | 288 | *e*P | | P | 03 06 08.5 | -0.7 | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| S37A | Fort Scott | 94.00 | 51 | P | | P | 03 06 09.1 | +0.3 | |
| | baz=94 | | | | | | | | |
| CD2 | Chengdu | 94.16 | 301 | *e*P | | P | 03 06 09.3 | -0.5 | |
| CD2 | | | | pP | | pP | 03 06 22.0 | -0.8 | |
| CD2 | | | | PP | | PP | 03 09 55.6 | -1.5 | |
| CD2 | | | | SKS | | SKSac | 03 16 40.1 | -1.6 | |
| CD2 | | | | S | | S | 03 17 16.5 | -1.4 | |
| CD2 | | | | sS | | sS | 03 17 38.8 | -0.9 | |
| CD2 | | | | SS | | SS | 03 23 38.8 | -1.0 | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,120nm,5.4s | | | | | | | | |
| R37A | Teagarden Farm | 94.21 | 51 | P | | P | 03 06 09.7 | -0.1 | |
| | baz=94 | | | | | | | | |
| OTAV | Otavalo | 95.06 | 92 | *e*P | | P | 03 06 14.7 | -0.1 | |
| D30A | Buchanan | 95.09 | 41 | P | | P | 03 06 12.4 | -1.2 | |
| | baz=95 | | | | | | | | |
| ECSD | EROS Data Cent | 95.09 | 45 | *e*P | | P | 03 06 13.4 | -0.3 | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| ECSD | | | | *e*pP | | pP | 03 06 24.1 | -2.6 | |
| C30A | Mose, Pekin | 95.51 | 41 | P | | P | 03 06 14.9 | -0.6 | |
| | baz=96 | | | | | | | | |
| A29A | Manning Farm, | 95.56 | 40 | P | | P | 03 06 14.8 | -1.0 | |
| | baz=96 | | | | | | | | |
| LZH | Lanzhou | 95.95 | 306 | *e*P | | P | 03 06 22.1 | +4.1 | |
| LZH | | | | pP | | pP | 03 06 35.0 | +4.0 | |
| LZH | | | | sP | | sP | 03 06 39.8 | +4.0 | |
| LZH | | | | SKS | | SKSac | 03 16 53.0 | +1.7 | |
| LZH | | | | *e*S | | S | 03 17 33.0 | -0.6 | |
| LZH | | | | sS | | sS | 03 17 54.9 | -0.4 | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,18nm,1.6s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,100nm,9.4s | | | | | | | | |
| A30A | Hoffart Farm, | 96.12 | 40 | P | | P | 03 06 17.9 | -0.4 | |
| | baz=96 | | | | | | | | |
| BCIP | Isla Barro Col | 96.81 | 83 | *e*P | | P | 03 06 21.8 | -0.4 | |
| B32A | Ashes, Strandq | 96.98 | 41 | P | | P | 03 06 21.0 | -1.2 | |
| | baz=97 | | | | | | | | |
| I38A | Scanlan Farm, | 98.08 | 46 | P | | P | 03 06 25.6 | -1.7 | |
| | baz=98 | | | | | | | | |
| ULM | Lac du Bonnet | 98.09 | 39 | LR | | LR | 03 47 20.1 | | |
| | comp=Z,445nm,18.6s,baz=276,slow=33 | | | | | | | | |
| B34A | Aery, Baudette | 98.17 | 41 | P | | P | 03 06 25.9 | -1.6 | |
| | baz=98 | | | | | | | | |
| C35A | Jirik Farms, M | 98.31 | 42 | P | | P | 03 06 26.4 | -1.8 | |
| | baz=98 | | | | | | | | |
| LPAZ | La Paz | 98.37 | 111 | LR | | LR | 03 42 10.1 | | |
| | comp=Z,384nm,20.0s,baz=268,slow=30 | | | | | | | | |
| SONM | Songino Array | 98.39 | 318 | P | | Pdif | 03 06 29.7 | +0.9 | |
| | comp=Z,1.3nm,1.0s,baz=160,slow=4.6,SNR=2.9 | | | | | | | | |
| SONM | | | | PP | | PP | 03 10 30.5 | +1.0 | |
| | comp=Z,0.7nm,0.6s,baz=117,slow=5.6,SNR=4.0 | | | | | | | | |
| SONM | | | | LR | | LR | 03 48 58.1 | | |
| | comp=Z,166nm,18.5s,baz=50,slow=34 | | | | | | | | |
| GTA | Gaotai | 100.07 | 308 | *e*P | | Pdif | 03 06 39.8 | +3.4 | |
| GTA | | | | pP | | pP | 03 06 53.1 | +3.7 | |
| GTA | | | | sP | | sP | 03 06 58.4 | +4.2 | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | | |
| WMQ | Urumqi | 109.94 | 310 | Pdif | | Pdif | 03 07 21.0 | +0.9 | |
| WMQ | | | | PP | | PP | 03 12 00.0 | +4.5 | |
| WMQ | | | | S | | Sdif | 03 19 30.0 | -0.4 | |
| WMQ | | | | SS | | SS | 03 27 06.0 | -12 | |
| WMQ | | | | PPMZ | | | | | |
| | comp=Z,56nm,8.8s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,100nm,22.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,200nm,23.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,180nm,20.0s | | | | | | | | |
| ZALV | Zalesovo Beam | 112.99 | 321 | PKiKP | | PKiKP | 03 11 26.3 | -1.1 | |
| | comp=Z,1.3nm,0.6s,baz=42,slow=2.7,SNR=4.3 | | | | | | | | |
| MKAR | Makanchi Array | 114.09 | 313 | PKiKP | | PKdf | 03 11 28.9 | -0.9 | |
| | comp=Z,0.7nm,0.7s,baz=183,slow=2.4,SNR=3.8 | | | | | | | | |
| MKAR | Makanchi Array | 114.09 | 313 | *c i* PKiKP | | PKiKP | 03 11 32.7 | +2.9 | |
| MKAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| KSH | Kashi | 118.15 | 305 | *e*PKP | | PKPdf | 03 11 39.8 | +1.8 | |
| KSH | | | | *es*PKP | | | 03 11 54.5 | | |
| KSH | | | | *e*PP | | PP | 03 13 00.1 | +6.3 | |
| KSH | | | | SKS | | SKSdf | 03 18 47.6 | +0.8 | |
| KSH | | | | SKKS | | SKKSac | 03 19 46.1 | -4.7 | |
| KSH | | | | PPMZ | | | | | |
| | comp=Z,180nm,7.0s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,320nm,7.6s | | | | | | | | |
| TKM2 | Tokmak 2 | 118.62 | 308 | *e*PKIKP | | PKPdf | 03 11 39.2 | +0.3 | |
| TKM2 | Tokmak 2 | 118.62 | 308 | *e*PKPdf | | PKPdf | 03 11 39.1 | +0.3 | |
| ARU | Arti | 127.43 | 326 | *i* PKIKP | | PKPdf | 03 11 55.3 | +0.3 | |
| ARU | | | | | | | 03 13 56.6 | | |
| ARU | | | | SS | | SS | 03 30 56.8 | -5.8 | |
| ARU | | | | MLR | | MLR | | | |
| | comp=Z,463nm,20.0s | | | | | | | | |
| ARCES | ARCESS Array B | 129.58 | 351 | PKP | | PKPdf | 03 11 58.6 | -0.2 | |
| | comp=Z,3.8nm,0.9s,baz=15,slow=5.0,SNR=5.7 | | | | | | | | |
| FINES | FINESS Array B | 136.81 | 346 | PKhKP | | PKPpre | 03 12 03.7 | | |
| | comp=Z,5.3nm,1.2s,baz=128,slow=2.3,SNR=2.2 | | | | | | | | |
| LSZ | Lusaka | 138.41 | 213 | *e*PKIKP | | PKPdf | 03 12 17.8 | +0.7 | |
| LSZ | Lusaka | 138.41 | 213 | *e*PKPdf | | PKPdf | 03 12 17.8 | +0.7 | |
| SHEL | Horse Pasture | 141.90 | 161 | *i* PKIKP | | PKPdf | 03 12 26.4 | +3.1 | |
| KMBO | Kilima Mbogo | 142.79 | 238 | PKP | | PKPdf | 03 12 23.6 | -1.7 | |
| | comp=Z,2.1nm,0.8s,baz=80,slow=4.0,SNR=7.6 | | | | | | | | |
| KMBO | Kilima Mbogo | 142.79 | 238 | *c i* PKIKP | | PKPdf | 03 12 24.7 | -0.6 | |
| KMBO | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| AKASG | Malin Array Be | 144.84 | 334 | PKP | | PKPab | 03 12 25.4 | -1.0 | |
| | comp=Z,8.0nm,0.8s,baz=39,slow=4.3,SNR=47 | | | | | | | | |
| KIEV | Kiev | 144.85 | 334 | *e*PKPdf | | PKPab | 03 12 25.5 | -1.0 | |
| SIM | Simferopol' | 146.47 | 323 | *e*PKP2 | | PKPab | 03 12 34.2 | +1.5 | |
| SIM | | | | pmax | | pmax | | | |
| | comp=Z,68nm,8.9s | | | | | | | | |
| MALT | Malatya | 147.04 | 310 | ⇓PKP2 | | PKPab | 03 12 35.0 | -0.4 | |
| MALT | Malatya | 147.04 | 310 | ⇓*i*P | | PKPab | 03 12 35.0 | -0.4 | |
| SORM | Soroca | 147.17 | 332 | ⇑PKP2 | | PKPbc | 03 12 34.1 | +0.5 | |
| SORM | Soroca | 147.17 | 332 | ⇑*i*P | | PKPbc | 03 12 34.1 | +0.5 | |
| LVV | L'vov | 147.51 | 338 | *e*PKP2 | | PKPbc | 03 12 34.8 | +0.3 | |
| OJC | Ojcow | 148.46 | 343 | *e*PKP | | PKPab | 03 12 40.0 | -0.4 | |
| OJC | Ojcow | 148.46 | 343 | *e*PKP2 | | PKPab | 03 12 40.1 | -0.4 | |
| KSP | Ksiaz | 148.70 | 348 | *e*PKP | | PKPbc | 03 12 38.5 | +0.9 | |
| KSP | Ksiaz | 148.70 | 348 | *e*PKP2 | | PKPbc | 03 12 38.6 | +0.9 | |
| STHS | Stebnicka Huta | 148.76 | 341 | *e*PKP2 | | PKPab | 03 12 40.9 | -0.8 | |
| STHS | Stebnicka Huta | 148.76 | 341 | *e*PKP | | PKPab | 03 12 40.8 | -0.9 | |
| CLL | Collm | 148.80 | 352 | ⇓ePKP2 | | PKPbc | 03 12 38.0 | +0.1 | |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| CLL | | | | MLR | | MLR | | | |
| | comp=Z,300nm,18.7s | | | | | | | | |
| CLL | Collm | 148.80 | 352 | *e*PKPbc | | PKPbc | 03 12 38.0 | +0.1 | |
| | comp=Z,11nm,1.1s | | | | | | | | |
| CLL | | | | ⇓*i*PKPab | | PKPab | 03 12 42.7 | +1.0 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| CLL | | | | *i* pPKPbc | | pPKPbc | 03 12 48.3 | -2.9 | |
| CLL | | | | *i* sPKPbc | | sPKPbc | 03 12 52.5 | -3.4 | |
| CLL | | | | *e* | | | 03 13 03.0 | | |
| CLL | | | | *e*PP | | PP | 03 16 12.0 | +4.4 | |
| CLL | | | | LmV | | | 04 24 00.0 | | |
| | comp=Z,300nm,18.7s | | | | | | | | |
| KOLS | Kolonicke sedl | 148.86 | 339 | *e*PKIKP | | PKPbc | 03 12 38.0 | -0.2 | |
| KOLS | | | | *e* | | | 03 12 41.0 | | |
| KOLS | Kolonicke sedl | 148.86 | 339 | *e*PKP | | PKPbc | 03 12 38.0 | -0.2 | |
| KOLS | | | | *e* | | | 03 12 41.0 | | |
| BURAR | Bucovina Array | 148.89 | 335 | ⇑PKP2 | | PKPbc | 03 12 39.0 | +0.6 | |
| BURAR | Bucovina Array | 148.89 | 335 | ⇑*i*P | | PKPbc | 03 12 39.0 | +0.6 | |
| NIE | Niedzica | 149.04 | 342 | *e*PKP | | PKPbc | 03 12 39.0 | +0.4 | |
| NIE | Niedzica | 149.04 | 342 | *e*PKP2 | | PKPbc | 03 12 39.0 | +0.4 | |
| UPC | Upice | 149.08 | 348 | *e*PKP2 | | PKPab | 03 12 42.4 | -0.5 | |
| UPC | Upice | 149.08 | 348 | *e*PKPAB | | PKPab | 03 12 42.4 | -0.5 | |
| BRG | Berggiesshubel | 149.09 | 350 | *e*PKP | | PKPbc | 03 12 38.0 | -0.6 | |
| | comp=Z,4.5nm,0.9s | | | | | | | | |
| BRG | | | | *e* | | | 03 12 42.2 | | |
| | comp=Z,22nm,1.3s | | | | | | | | |
| | comp=N,380nm,18.4s | | | | | | | | |
| | comp=E,210nm,17.2s | | | | | | | | |
| | comp=Z,191nm,20.9s | | | | | | | | |
| BRG | Berggiesshubel | 149.09 | 350 | *e*PKIKP | | PKPbc | 03 12 38.0 | -0.6 | |
| BRG | | | | *e* | | | 03 12 42.2 | | |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,22nm,1.3s | | | | | | | | |
| BRG | | | | MLR | | MLR | | | |
| | comp=N,380nm,18.4s | | | | | | | | |
| BRG | | | | MLR | | MLR | | | |
| | comp=E,210nm,17.2s | | | | | | | | |
| BRG | | | | MLR | | MLR | | | |
| | comp=Z,191nm,20.9s | | | | | | | | |
| UZH | Uzhgorod | 149.11 | 339 | *e*PKP2 | | PKPbc | 03 12 38.9 | +0.1 | |
| TLCR | | 149.13 | 328 | ⇓PKIKP | | PKPbc | 03 12 38.9 | 0.0 | |
| TLCR | | 149.13 | 328 | ⇓*i*P | | PKPbc | 03 12 38.9 | 0.0 | |
| TESR | Tescani | 149.16 | 332 | ⇓*i*P | | PKPab | 03 12 41.4 | -2.0 | |
| DPC | Dobruska-Polom | 149.16 | 347 | *e*PKP2 | | PKPab | 03 12 41.6 | -1.7 | |
| DPC | Dobruska-Polom | 149.16 | 347 | *e*PKPAB | | PKPab | 03 12 41.6 | -1.7 | |
| OKC | Ostrava-Krasne | 149.24 | 345 | AMS | | AMS | 04 26 10.0 | | |
| | comp=Z,200nm,19.6s | | | | | | | | |
| PVCC | Panska Ves | 149.32 | 350 | *e*PKP2 | | PKPab | 03 12 41.9 | -2.0 | |
| PVCC | Panska Ves | 149.32 | 350 | *e*PKPAB | | PKPab | 03 12 41.9 | -2.0 | |
| MORC | Moravsky Berou | 149.44 | 346 | ⇓*i*P | | PKPbc | 03 12 41.1 | +1.5 | |
| MORC | Moravsky Berou | 149.44 | 346 | *e*PKPbc | | PKPbc | 03 12 39.4 | -0.3 | |
| TRPA | Tarpa | 149.46 | 338 | ⇓*i*P | | PKPbc | 03 12 40.2 | +0.6 | |
| BMR | Baia Mare | 149.50 | 337 | ⇑*i*P | | PKPbc | 03 12 39.5 | -0.3 | |
| LANS | Liptovska Anna | 149.52 | 343 | *e*PKP2 | | PKPbc | 03 12 41.2 | +1.4 | |
| LANS | Liptovska Anna | 149.52 | 343 | *e*PKP | | PKPbc | 03 12 41.2 | +1.4 | |
| VRI | Vrincioaia | 149.62 | 331 | ⇓PKP2 | | PKPbc | 03 12 41.3 | +1.1 | |
| VRI | Vrincioaia | 149.62 | 331 | ⇓*i*P | | PKPbc | 03 12 41.3 | +1.1 | |
| ARCR | ARCALIA | 149.66 | 335 | ⇓*i*P | | PKPbc | 03 12 41.8 | +1.6 | |
| PLOR | Plostina | 149.66 | 331 | ⇓*i*P | | PKPbc | 03 12 40.3 | 0.0 | |
| BRTR | Keskin Array B | 149.71 | 315 | PKP | | PKPdf | 03 12 35.6 | -0.5 | |
| | comp=Z,1.5nm,1.0s,baz=133,slow=2.1,SNR=3.1 | | | | | | | | |
| BRTR | | | | PKPbc | | PKPbc | 03 12 40.0 | -0.8 | |
| | comp=Z,3.0nm,0.9s,baz=135,slow=2.5,SNR=12 | | | | | | | | |
| PRU | Pruhonice | 149.85 | 349 | *e*PKP2 | | PKPab | 03 12 44.1 | -1.9 | |
| PRU | | | | MLR | | MLR | | | |
| | comp=Z,500nm,17.8s | | | | | | | | |
| PRU | Pruhonice | 149.85 | 349 | *e*PKPAB | | PKPab | 03 12 44.1 | -1.9 | |
| PRU | | | | *ep*PKP | | pPKPdf | 03 12 52.9 | +3.8 | |
| PRU | | | | AMS | | AMS | 04 26 50.0 | | |
| | comp=Z,500nm,17.8s | | | | | | | | |
| GOPC | GO Pecny, Ondr | 149.88 | 349 | *e*PKP2 | | PKPbc | 03 12 41.2 | +0.5 | |
| GOPC | | | | MLR | | MLR | | | |
| | comp=Z,300nm,20.5s | | | | | | | | |
| GOPC | GO Pecny, Ondr | 149.88 | 349 | ⇑*e*PKP | | PKPbc | 03 12 41.2 | +0.5 | |
| GOPC | | | | *ep*PKP | | pPKPdf | 03 12 52.5 | +3.3 | |
| GOPC | | | | AMS | | AMS | 04 26 20.0 | | |
| | comp=Z,300nm,20.5s | | | | | | | | |
| HARR | Harsova | 149.92 | 328 | ⇑PKP2 | | PKPbc | 03 12 41.6 | +0.7 | |
| HARR | Harsova | 149.92 | 328 | ⇑*i*P | | PKPbc | 03 12 41.6 | +0.7 | |
| NKC | Novy Kostel | 149.93 | 352 | *e*PKP2 | | PKPab | 03 12 44.4 | -2.0 | |
| NKC | Novy Kostel | 149.93 | 352 | *e*PKPAB | | PKPab | 03 12 44.4 | -2.0 | |
| VRAC | Vranov | 150.09 | 346 | ⇑*i*P | | PKPbc | 03 12 41.7 | +0.5 | |
| DOPR | Dopca | 150.13 | 333 | ⇓*i*P | | PKPbc | 03 12 42.5 | +1.1 | |
| BCLA | Clavier | 150.14 | 1 | PKPab | | PKPab | 03 12 46.5 | -0.7 | |
| MLR | Muntele Rosu | 150.26 | 331 | ⇑PKIKP | | PKPbc | 03 12 42.3 | +0.4 | |
| MLR | Muntele Rosu | 150.26 | 331 | ⇑*i*P | | PKPbc | 03 12 42.3 | +0.4 | |
| ISR | Istrita | 150.27 | 330 | ⇓PKIKP | | PKPbc | 03 12 39.6 | -2.3 | |
| ISR | Istrita | 150.27 | 330 | ⇓*i*P | | PKPbc | 03 12 39.5 | -2.3 | |
| VYHS | Vyhne | 150.29 | 343 | *e*PKIKP | | PKPbc | 03 12 41.8 | +0.1 | |
| VYHS | Vyhne | 150.29 | 343 | *e*PKP | | PKPbc | 03 12 41.8 | +0.1 | |
| PSZ | Piszkesteto | 150.51 | 341 | *e*PKIKP | | PKPdf | 03 12 36.1 | -0.8 | |
| PSZ | | | | *e* | | | 03 12 42.6 | | |
| PSZ | Piszkesteto | 150.51 | 341 | *e*PKPdf | | PKPdf | 03 12 36.1 | -0.8 | |
| PSZ | | | | *e*PKPbc | | PKPbc | 03 12 42.6 | +0.3 | |
| DRGR | | 150.53 | 337 | ⇑PKIKP | | PKPbc | 03 12 42.0 | -0.4 | |
| DRGR | | 150.53 | 337 | ⇑*i*P | | PKPbc | 03 12 42.0 | -0.4 | |
| VOIR | | 150.70 | 332 | ⇓PKIKP | | PKPbc | 03 12 43.5 | +0.7 | |
| VOIR | | 150.70 | 332 | ⇓*i*P | | PKPbc | 03 12 43.5 | +0.7 | |
| KHC | Kasperske Hory | 150.84 | 350 | *e*PKIKP | | PKPdf | 03 12 34.5 | -2.9 | |
| KHC | | | | *e* | | | 03 12 43.2 | | |
| KHC | | | | *e* | | | 03 12 53.4 | | |
| KHC | | | | MLR | | MLR | | | |
| | comp=Z,400nm,18.8s | | | | | | | | |
| KHC | Kasperske Hory | 150.84 | 350 | *e*PKPDF | | PKPdf | 03 12 34.5 | -2.9 | |
| KHC | | | | ⇑*i*PKP | | PKPbc | 03 12 43.2 | +0.2 | |
| KHC | | | | *ep*PKP | | pPKPdf | 03 12 53.4 | +2.7 | |
| KHC | | | | AMS | | AMS | 04 27 20.0 | | |
| | comp=Z,400nm,18.8s | | | | | | | | |
| KHC | Kasperske Hory | 150.84 | 350 | *e*PKPbc | | PKPbc | 03 12 42.9 | -0.1 | |
| WLF | Walferdange | 150.91 | 0 | PKPbc | | PKPbc | 03 12 42.6 | -0.5 | |
| ARR | Arges | 150.93 | 333 | ⇓*i*P | | PKPbc | 03 12 44.1 | +0.7 | |
| GERES | GERESS Array B | 151.10 | 350 | PKPbc | | PKPbc | 03 12 41.9 | -1.8 | |
| | comp=Z,1.9nm,0.8s,baz=38,slow=2.4,SNR=11 | | | | | | | | |
| LOT | Lotru | 151.23 | 334 | ⇓*i*P | | PKPdf | 03 12 39.7 | +1.5 | |
| SIRR | Siria | 151.37 | 337 | ⇓*i*P | | PKPbc | 03 12 44.2 | -0.1 | |
| CONA | Conrad Observa | 151.56 | 346 | ⇑*i*PKiKP | | PKPbc | 03 12 44.8 | +0.1 | |
| | comp=Z,16nm,1.2s | | | | | | | | |
| GZR | Gura Zlata | 151.68 | 335 | ⇑PKIKP | | PKPbc | 03 12 45.2 | +0.1 | |
| GZR | Gura Zlata | 151.68 | 335 | ⇑*i*P | | PKPbc | 03 12 45.2 | +0.1 | |
| BZS | Buzias | 151.94 | 337 | ⇓PKIKP | | PKPbc | 03 12 45.4 | -0.2 | |
| BZS | Buzias | 151.94 | 337 | ⇓*i*P | | PKPbc | 03 12 45.4 | -0.2 | |
| SOKA | Soboth | 152.92 | 347 | ⇓*i*PKPbc | | PKPbc | 03 12 45.5 | -2.4 | |
| | comp=Z,6.6nm,1.1s | | | | | | | | |
| WTTA | Wattenberg | 152.95 | 352 | ⇑*i*PKiKP | | PKPbc | 03 12 48.1 | 0.0 | |
| | comp=Z,6.9nm,0.8s | | | | | | | | |
| DIVS | Divibare | 153.83 | 337 | ⇑*i*P | | PKPbc | 03 12 50.5 | +0.5 | |
| ESDC | Sonseca Array | 158.98 | 22 | PKPab | | PKPab | 03 13 26.1 | +0.9 | |
| | comp=Z,0.3nm,0.6s,baz=329,slow=2.6,SNR=3.5 | | | | | | | | |
| TORD | Torodi Ar. Bea | 171.49 | 149 | PKP | | PKPdf | 03 12 57.8 | -2.2 | |
| | comp=Z,1.4nm,0.9s,baz=301,slow=0.5,SNR=8.7 | | | | | | | | |
| TORD | | | | PKPab | | PKPab | 03 14 19.9 | -0.8 | |
| | comp=Z,0.5nm,0.8s,baz=220,slow=2.7,SNR=3.2 | | | | | | | | |
| TAM | Tamanrasset | 177.63 | 16 | *e*PKIKP | | PKPdf | 03 13 02.4 | +0.5 | |
| TAM | | | | *e* | | | 03 14 47.9 | | |
| TAM | Tamanrasset | 177.63 | 16 | *e*PKPdf | | PKPdf | 03 13 02.4 | +0.5 | |
| TAM | | | | *e*PKPab | | PKPab | 03 14 47.9 | 0.0 | |

**MAN 22 02:55:39.13±75.75N×120.50E, h94km, mb4.5, ML3.3, MS3.2, 1C, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TGY | Tagaytay City | 0.55 | 50 | *i* P | Pn | 02 55 56.3 | +1.6 |
| TGY | | | | *i* S | Sn | 02 56 09.2 | +2.9 |
| SJMP | San Jose | 1.41 | 155 | *e*P | Pn | 02 56 05.2 | +1.3 |
| BUSP | Coron | 1.76 | 190 | *e*P | Pn | 02 56 09.1 | +0.8 |
| ENPP | El Nido | 2.74 | 203 | *e*P | Pn | 02 56 22.4 | +1.3 |
| CUYO | Cuyo Island | 2.92 | 170 | *e*P | Pn | 02 56 24.1 | +0.4 |
| PVCP | Virac | 3.55 | 92 | *e*P | Pn | 02 56 33.6 | +1.5 |

**IDC 22 02:57:31.8±412.0, 0.14N×97.95E, h0km, Error ellipse: s-maj=1176.0km s-min=10.3km az=25.0, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H08S2 | Diego Garcia H | 26.54 | 252 | H | H | 03 30 34.0 | |
| | baz=73,slow=76 | | | | | | |
| H08S3 | Diego Garcia H | 26.54 | 253 | H | H | 03 30 35.1 | |
| | baz=73,slow=76 | | | | | | |
| H08S1 | Diego Carcia H | 26.55 | 253 | H | H | 03 30 35.4 | |
| | baz=73,slow=76 | | | | | | |
| H01W3 | Cape Leeuwin H | 37.99 | 158 | H | H | 03 44 53.1 | |
| | baz=333,slow=75 | | | | | | |
| H01W2 | Cape Leeuwin H | 38.00 | 158 | H | H | 03 44 54.0 | |
| | baz=333,slow=75 | | | | | | |
| H01W1 | Cape Leeuwin H | 38.00 | 158 | H | H | 03 44 54.4 | |
| | baz=333,slow=75 | | | | | | |

*IDC* ***22*** *03:01:04.8±3.0, 24°.45N×108°.98W, h0km, mb4.0/3, mb1 4.1/6, mb1mx3.8/39, mbtmp3.8/6, ML3.4/3, MS3.3/3, Ms1 3.3/3, ms1mx2.9/38, Error ellipse: s-maj=54.1km s-min=11.6km az=147.0*

*ISCJB* ***22*** *03:01:07.8±0.4, 24°.59N±0°.04×109°.26W±0°.03, h10km, mb4.2/10, MS3.3/1, Error ellipse: s-maj=5.9km s-min=3.8km az=169.4*

*NEIC* ***22*** *03:01:08.7±0.6, 24°.49N×109°.24W, h10km, mb4.0/14, MD4.2(MEX), Error ellipse: s-maj=8.3km s-min=6.5km az=43.0*

*MEX* ***22*** *03:01:11.2±0.3, 24°.52N×109°.18W, h10km, MD4.2*

**ISC 22 03:01:08.6±0.7, 24°.59N±0°.07×109°.24W±0°.06, h10km, n125, σ1°$48/122, mb4.2/10, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPIG | La Paz | 1.09 | 244 | Pg | Pb | 03 01 28.9 | -0.7 |
| | 213nm,0.3s,baz=43,slow=6.9,SNR=117 | | | | | | |
| LPIG | | | | Lg | Lg | 03 01 45.9 | |
| | 161nm,0.3s,baz=246,slow=20,SNR=6.7 | | | | | | |
| LPIG | La Paz | 1.09 | 244 | *i* P | Pb | 03 01 29.0 | -0.6 |
| LPIG | | | | *i* S | Sg | 03 01 42.8 | -1.0 |
| LPIG | La Paz | 1.09 | 244 | Pg | Pb | 03 01 28.9 | -0.7 |
| LPIG | | | | *i* S | Sg | 03 01 42.8 | -1.0 |
| LPIG | | | | Lg | Lg | 03 01 45.9 | |
| MAIG | Mazatlaan | 2.93 | 118 | *i* P | Pn | 03 01 53.8 | -1.4 |
| MAIG | Mazatlaan | 2.93 | 118 | *i* P | Pn | 03 01 53.8 | -1.4 |
| ANIG | Ahuacatlan | 5.60 | 128 | *e*P | Pn | 03 02 32.2 | +0.2 |
| ANIG | Ahuacatlan | 5.60 | 128 | *e*P | Pn | 03 02 32.2 | +0.2 |
| TXAR | Lajitas Array | 6.85 | 45 | Pn | Pn | 03 02 47.5 | -1.8 |
| | 0.5nm,0.3s,baz=217,slow=13,SNR=15 | | | | | | |
| TXAR | | | | Sn | Sn | 03 04 02.5 | -4.9 |
| | 1.2nm,0.3s,baz=224,slow=24,SNR=4.1 | | | | | | |
| TXAR | | | | Lg | Lg | 03 04 38.6 | |
| | 1.8nm,0.3s,baz=224,slow=26,SNR=6.6 | | | | | | |
| TUC | Tucson | 7.81 | 350 | *e*Pn | Pn | 03 02 59.4 | -3.0 |
| | 4.2nm,0.7s | | | | | | |
| MNTX | Cornudas Mount | 7.85 | 25 | P | Pn | 03 03 00.6 | -2.4 |
| | baz=8.0,SNR=6.3 | | | | | | |
| MNTX | Cornudas Mount | 7.85 | 25 | *e*Pn | Pn | 03 03 00.3 | -2.6 |
| | 13nm,0.9s | | | | | | |
| MNTX | | | | *e*Lg | Lg | 03 04 59.7 | |
| 214A | Organ Pipe Nat | 7.98 | 338 | P | Pn | 03 03 02.8 | -1.9 |
| | baz=8.1 | | | | | | |
| 214A | Organ Pipe Nat | 7.98 | 338 | *e*Pn | Pn | 03 03 02.9 | -1.8 |
| | 13nm,0.9s | | | | | | |
| 214A | | | | *e*Lg | Lg | 03 05 37.7 | |
| 121A | Cookes Peak, D | 8.01 | 9 | P | Pn | 03 03 02.8 | -2.5 |
| | baz=8.1,SNR=14 | | | | | | |
| 121A | Cookes Peak, D | 8.01 | 9 | *e*Pn | Pn | 03 03 02.7 | -2.6 |
| | 13nm,0.7s | | | | | | |
| 529A | Stev Forest Ra | 8.32 | 47 | P | Pn | 03 03 09.0 | -0.4 |
| | baz=8.4 | | | | | | |
| 429A | Davenport Ranc | 8.86 | 46 | P | Pn | 03 03 18.0 | +1.2 |
| | baz=8.9 | | | | | | |
| 430A | Baggett Ranch, | 9.40 | 47 | P | Pn | 03 03 27.3 | +3.1 |
| | baz=9.5 | | | | | | |
| 531A | Rocksprings | 9.51 | 52 | P | Pn | 03 03 29.3 | +3.6 |
| | baz=9.6 | | | | | | |
| GLA | Glamis | 9.75 | 331 | P | Pn | 03 03 30.0 | +1.0 |
| | baz=9.9 | | | | | | |
| GLA | Glamis | 9.75 | 331 | *e*Pn | Pn | 03 03 29.0 | +0.1 |
| | 6.5nm,1.1s | | | | | | |
| 431A | Sonora | 9.76 | 50 | P | Pn | 03 03 32.4 | +3.2 |
| | baz=9.8 | | | | | | |
| LAZ | Ladron | 9.95 | 10 | *e*Pn | Pn | 03 03 30.2 | -1.5 |
| | 16nm,1.4s | | | | | | |
| 128A | Castleberry Fa | 9.96 | 35 | P | Pn | 03 03 31.6 | -0.2 |
| | baz=10 | | | | | | |
| IBP | Imperial Bould | 10.04 | 325 | P | Pn | 03 03 34.1 | +1.1 |
| | baz=10 | | | | | | |
| JCT | Junction City | 10.22 | 53 | P | Pn | 03 03 38.1 | +2.7 |
| | baz=10 | | | | | | |
| JCT | Junction City | 10.22 | 53 | *e*Pn | Pn | 03 03 36.1 | +0.7 |
| Y12C | Blythe | 10.23 | 334 | P | Pn | 03 03 36.8 | +1.4 |
| | baz=10,SNR=5.7 | | | | | | |
| W18A | Petrified Fore | 10.50 | 358 | P | Pn | 03 03 40.0 | +0.7 |
| | baz=11,SNR=6.6 | | | | | | |
| W18A | Petrified Fore | 10.50 | 358 | *e*Pn | Pn | 03 03 40.5 | +1.1 |
| | 30nm,1.1s | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| X38A | Whitesboro | 16.04 | 48 | P | | P | 03 04 56.8 | -0.9 |
| | baz=16 | | | | | | | |
| T34A | McClaskey Farm | 16.12 | 37 | P | | P | 03 04 57.8 | -0.8 |
| | baz=16 | | | | | | | |
| Y39A | Lockesburg | 16.15 | 51 | P | | P | 03 04 59.6 | +0.6 |
| | baz=16 | | | | | | | |
| Q30A | Quinter | 16.25 | 26 | P | | P | 03 04 59.7 | -0.3 |
| | baz=16 | | | | | | | |
| CBKS | Cedar Bluff | 16.30 | 27 | *e*Pn | | P | 03 05 00.0 | -0.7 |
| | 23nm,1.3s | | | | | | | |
| T35A | Sooner Cattle | 16.43 | 39 | P | | Pn | 03 05 00.6 | +1.4 |
| | baz=16 | | | | | | | |
| R32A | Long Quarter, | 16.43 | 30 | P | | P | 03 05 00.8 | -1.3 |
| | baz=17 | | | | | | | |
| W38A | Poteau | 16.48 | 47 | P | | P | 03 05 03.5 | +0.9 |
| | baz=17,SNR=9.9 | | | | | | | |
| MIAR | Mount Ida | 16.83 | 50 | P | | P | 03 05 07.8 | +1.3 |
| | baz=17 | | | | | | | |
| T36A | Boggs Farm, Ca | 16.89 | 39 | P | | P | 03 05 06.4 | -0.7 |
| | baz=17 | | | | | | | |
| U37A | Salina | 16.91 | 43 | P | | P | 03 05 06.8 | -0.6 |
| | baz=17 | | | | | | | |
| Q32A | Meitler Ranch, | 16.96 | 30 | P | | P | 03 05 08.4 | +0.5 |
| | baz=17 | | | | | | | |
| V38A | Canehill | 17.02 | 45 | P | | P | 03 05 08.5 | 0.0 |
| | baz=17 | | | | | | | |
| P31A | Stockton | 17.05 | 27 | P | | Pn | 03 05 06.8 | -0.4 |
| | baz=17 | | | | | | | |
| S35A | Otter Creek Ra | 17.08 | 37 | P | | P | 03 05 09.3 | +0.1 |
| | baz=17 | | | | | | | |
| HWUT | Hardware Ranch | 17.08 | 354 | *e*Pn | | Pn | 03 05 08.0 | +0.3 |
| BMN | Battle Mountai | 17.16 | 339 | *e*Pn | | P | 03 05 09.8 | -0.5 |
| | 5.8nm,0.9s | | | | | | | |
| Q33A | Connelly Farm, | 17.30 | 31 | P | | P | 03 05 12.1 | +0.4 |
| | baz=17 | | | | | | | |
| HVU | Hansel Valley | 17.39 | 351 | *e*Pn | | P | 03 05 12.8 | -0.1 |
| | 8.7nm,0.9s | | | | | | | |
| P32A | Huiting Farm, | 17.46 | 28 | P | | P | 03 05 14.0 | +0.5 |
| | baz=18 | | | | | | | |
| S36A | Lake Cedric, C | 17.51 | 38 | P | | Pn | 03 05 13.3 | +0.4 |
| | baz=18 | | | | | | | |
| Q34A | Chapman | 17.68 | 33 | P | | P | 03 05 16.3 | +0.4 |
| | baz=18 | | | | | | | |
| S37A | Fort Scott | 17.98 | 40 | P | | Pn | 03 05 18.5 | -0.1 |
| | baz=18 | | | | | | | |
| KSU1 | Kansas State U | 17.98 | 33 | P | | P | 03 05 19.5 | +0.3 |
| | baz=18 | | | | | | | |
| Q35A | Mercer Eighty, | 18.09 | 35 | P | | P | 03 05 21.2 | +0.8 |
| | baz=18 | | | | | | | |
| BW06 | Boulder Array | 18.13 | 359 | *e*P | | P | 03 05 24.0 | +3.0 |
| | 4.7nm,1.0s | | | | | | | |
| K22A | Casper | 18.15 | 6 | P | | P | 03 05 21.9 | +0.7 |
| | baz=18 | | | | | | | |
| P34A | Walnut Farm, R | 18.22 | 32 | P | | P | 03 05 23.2 | +1.4 |
| | baz=18 | | | | | | | |
| O33A | Hebron | 18.28 | 30 | P | | P | 03 05 23.4 | +0.9 |
| | baz=18 | | | | | | | |
| J28A | Allard Ranch, | 19.90 | 17 | P | | Pn | 03 05 42.2 | +0.2 |
| | baz=20 | | | | | | | |
| M04C | Macdoel | 20.09 | 332 | P | | Pn | 03 05 44.5 | +0.2 |
| | baz=20 | | | | | | | |
| I27A | Quinn | 20.30 | 15 | P | | P | 03 05 45.2 | +0.6 |
| | baz=20 | | | | | | | |
| I28A | Midland | 20.45 | 17 | P | | P | 03 05 46.1 | -0.2 |
| | baz=21 | | | | | | | |
| RLMT | Red Lodge | 20.48 | 360 | P | | P | 03 05 47.4 | +0.6 |
| | baz=21 | | | | | | | |
| H25A | Fruitdale | 20.50 | 12 | P | | Pn | 03 05 48.7 | -0.3 |
| | baz=21 | | | | | | | |
| K04D | Chiloquin, OR | 20.75 | 333 | P | | Pn | 03 05 51.5 | -0.5 |
| | baz=21 | | | | | | | |
| H27A | Howes | 20.83 | 14 | P | | P | 03 05 51.0 | +0.7 |
| | baz=21 | | | | | | | |
| BOZ | Bozeman (W) | 21.10 | 355 | *e*P | | P | 03 05 56.5 | +3.2 |
| | 6.9nm,1.2s | | | | | | | |
| G27A | Dupree | 21.57 | 14 | P | | P | 03 05 59.2 | +0.9 |
| | baz=22 | | | | | | | |
| WVT | Waverly | 21.71 | 53 | *e*P | | P | 03 06 01.7 | +1.9 |
| | 4.1nm,0.8s | | | | | | | |
| ECSD | EROS Data Cent | 21.72 | 25 | P | | P | 03 05 59.9 | +0.1 |
| | baz=22 | | | | | | | |
| ECSD | EROS Data Cent | 21.72 | 25 | *e*P | | P | 03 05 59.5 | -0.3 |
| | 19nm,1.2s | | | | | | | |
| F27A | Lemmon | 22.02 | 14 | P | | P | 03 06 02.2 | -1.0 |
| | baz=22 | | | | | | | |
| K37A | Belmond | 22.23 | 32 | P | | P | 03 06 07.4 | +2.0 |
| | baz=22 | | | | | | | |
| I03D | Drain, OR | 22.29 | 332 | P | | P | 03 06 09.2 | +3.2 |
| | baz=22 | | | | | | | |
| E26A | Carlson Angus | 22.50 | 12 | P | | P | 03 06 08.0 | -0.2 |
| | baz=23 | | | | | | | |
| MSO | Missoula | 22.51 | 352 | P | | P | 03 06 09.7 | +1.3 |
| | baz=23 | | | | | | | |
| J37A | Redenius Farm, | 22.69 | 31 | P | | P | 03 06 12.7 | +2.5 |
| | baz=23 | | | | | | | |
| SLMT | Seeley Lake | 22.86 | 353 | *e*P | | P | 03 06 13.0 | +0.8 |
| | 31nm,1.8s | | | | | | | |
| D26A | Manning | 23.04 | 12 | P | | P | 03 06 14.7 | +0.7 |
| | baz=23 | | | | | | | |
| SWMT | Swartz Lake | 23.18 | 352 | *e*P | | P | 03 06 16.4 | +0.9 |
| | 4.2nm,1.0s | | | | | | | |
| WCI | Wyandotte Cave | 23.76 | 50 | *e*P | | P | 03 06 21.8 | +0.6 |
| | 13nm,0.4s | | | | | | | |
| SFIN | Scholer Farm | 24.33 | 44 | P | | P | 03 06 27.3 | +0.8 |
| | baz=24 | | | | | | | |
| NEW | Newport | 24.44 | 347 | P | | P | 03 06 27.1 | -0.3 |
| | 5.5nm,0.6s,baz=154,slow=9.9,SNR=15 | | | | | | | |
| NEW | Newport | 24.44 | 347 | P | | P | 03 06 27.4 | -0.1 |
| | baz=25,SNR=6.1 | | | | | | | |
| NEW | Newport | 24.44 | 347 | *e*P | | P | 03 06 27.5 | 0.0 |
| | 5.5nm,0.6s | | | | | | | |
| TKL | Tuckaleechee C | 24.56 | 57 | LR | | LR | 03 16 55.4 | |
| | comp=Z,91nm,19.1s,baz=76,slow=39 | | | | | | | |
| BCIP | Isla Barro Col | 31.94 | 114 | *e*P | | P | 03 07 35.2 | +0.5 |
| | 14nm,0.9s | | | | | | | |
| YKA | Yellowknife Ar | 38.06 | 356 | P | | P | 03 08 24.7 | -2.3 |
| | 0.8nm,0.6s,baz=165,slow=7.9,SNR=3.0 | | | | | | | |
| ILAR | Eielson Array | 46.94 | 339 | P | | P | 03 09 39.4 | +0.2 |
| | 1.3nm,1.0s,baz=150,slow=6.3,SNR=9.5 | | | | | | | |

*DDA* ***22*** *03:43:04.8,37.˚11N×27.˚93E,h7km,Md3.0*
*ISCJB* ***22*** *03:43:05.2±0.8,37.˚1N±0.˚1×27.˚92E±0.˚04,h12km,Error ellipse: s-maj=15.2km s-min=4.5km az=6.2*
*CSEM* ***22*** *03:43:05.8±0.1,37.˚11N×27.˚93E,h5km,MD2.5,Error ellipse: s-maj=3.0km s-min=1.3km az=4.0*
*ISK* ***22*** *03:43:06.4,37.˚09N×28.˚00E,h7km,MD2.5*
**ISC 22 03:43:05.1±1.1,37.˚1N±0.˚1×27.˚94E±0.˚03,h12km,n12,σ1§34/18,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| YER | Yerkesik | 0.27 | 87 | *e*PG | | Pb | 03 43 11.4 | -0.5 |
| YER | | | | *e*SG | | Sg | 03 43 15.3 | +0.7 |
| YER | Yerkesik | 0.27 | 87 | *e*Pg | | Pb | 03 43 11.5 | -0.5 |
| YER | | | | *e*Sg | | Sg | 03 43 15.3 | +0.7 |
| BDRM | Kayabasi | 0.40 | 262 | *i* S | | Sg | 03 43 18.7 | +0.2 |
| BDRM | Kayabasi | 0.40 | 262 | P | | Pg | 03 43 12.7 | -0.4 |
| BDRM | | | | S | | Sg | 03 43 18.7 | +0.2 |
| TURN | Turunc | 0.58 | 115 | *i* P | | Pg | 03 43 13.1 | -3.4 |
| TURN | Turunc | 0.58 | 115 | P | | Pg | 03 43 13.1 | -3.4 |
| TURN | | | | S | | Sg | 03 43 19.6 | -4.6 |
| DALY | Dalyan (Mu˘la | 0.65 | 118 | *e*PG | | Pb | 03 43 18.3 | 0.0 |
| DALY | | | | *e*SG | | Sg | 03 43 27.0 | +0.9 |
| DALY | Dalyan (Mu˘la | 0.65 | 118 | *e*Pg | | Pb | 03 43 18.3 | 0.0 |
| DALY | | | | *e*Sg | | Sg | 03 43 27.0 | +0.9 |
| FETY | Fethiye | 1.03 | 117 | *e*PG | | Pn | 03 43 25.6 | +0.2 |
| FETY | | | | *e*SG | | Sg | 03 43 39.5 | +1.0 |
| FETY | Fethiye | 1.03 | 117 | *e*Pg | | Pn | 03 43 25.7 | +0.2 |
| FETY | | | | *e*Sg | | Sg | 03 43 39.5 | +1.0 |
| ELL | Elmali | 1.62 | 103 | *e*PN | | Pb | 03 43 35.3 | +0.3 |
| ELL | Elmali | 1.62 | 103 | *e*Pn | | Pb | 03 43 35.3 | +0.3 |

**CSEM 22 04:05:17.8,42.˚54N×13.˚16E,h12km,MD1.5/5,After ROM, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| RM29 | Verrico (Monte | 0.04 | 57 | Pg | | Pg | 04 05 20.6 | +0.4 |
| RM29 | | | | Sg | | Sg | 04 05 22.1 | +0.2 |
| | 142nm,0.2s | | | | | | | |
| RM33 | Pellescritta ( | 0.05 | 123 | Pg | | Pg | 04 05 20.6 | +0.4 |
| RM33 | | | | Sg | | Sg | 04 05 22.0 | 0.0 |
| LNSS | Leonessa | 0.11 | 307 | Pg | | Pg | 04 05 21.4 | +0.5 |
| LNSS | | | | Sg | | Sg | 04 05 23.6 | +0.5 |
| | 32nm,0.2s | | | | | | | |
| SMA1 | SAN MARTINO | 0.16 | 55 | Pg | | Pb | 04 05 22.4 | -0.6 |
| SMA1 | | | | Sg | | Sg | 04 05 25.3 | +0.9 |
| NRCA | Norcia | 0.30 | 354 | Pg | | Pg | 04 05 24.4 | +0.4 |
| NRCA | | | | Sg | | Sg | 04 05 28.7 | +0.5 |

*IDC* ***22*** *04:10:13.8±3.2,24.˚46N×109.˚11W,h0km,mb3.9/2, mb1 4.1/6,mb1mx3.8/38,mbtmp3.8/6,ML3.3/4,MS3.3/4, Ms1 3.3/4,ms1mx3.0/39,Error ellipse: s-maj=51.3km s-min=12.4km az=144.0*
*ISCJB* ***22*** *04:10:15.5±0.4,24.˚53N±0.˚03×109.˚13W±0.˚04,h10km, mb4.3/10,MS3.1/1,Error ellipse: s-maj=5.6km s-min=3.9km az=44.3*
*NEIC* ***22*** *04:10:16.7±0.7,24.˚49N×109.˚09W,h10km,mb4.1/24, MD4.1(MEX),Error ellipse: s-maj=8.9km s-min=7.7km az=160.0*
*MEX* ***22*** *04:10:19.9±0.3,24.˚44N×109.˚18W,h13km±5km,MD4.1*
**ISC 22 04:10:16.3±0.7,24.˚48N±0.˚06×109.˚18W±0.˚05,h10km,n68,σ1§33/71,mb4.3/10,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| SLBS | Sierra La Lagu | 1.06 | 222 | *e*P | | Pn | 04 10 38.4 | +1.2 |
| SLBS | | | | *i* S | | Sb | 04 10 51.0 | +0.3 |
| SLBS | Sierra La Lagu | 1.06 | 222 | *e*Pn | | Pn | 04 10 38.5 | +1.2 |
| LPIG | La Paz | 1.10 | 250 | LR | | LR | 04 10 35.1 | |
| | comp=Z,80nm,20.3s,baz=152,slow=18 | | | | | | | |
| LPIG | | | | Pg | | Pb | 04 10 37.0 | -0.4 |
| | 66nm,0.3s,baz=58,slow=14,SNR=47 | | | | | | | |
| LPIG | | | | Lg | | Lg | 04 10 50.2 | |
| | 236nm,0.3s,baz=327,slow=17,SNR=41 | | | | | | | |
| LPIG | La Paz | 1.10 | 250 | *i* P | | Pb | 04 10 37.0 | -0.4 |
| LPIG | | | | *e*S | | Sg | 04 10 50.4 | -1.2 |
| LPIG | La Paz | 1.10 | 250 | *i* P | | Pb | 04 10 37.0 | -0.4 |
| LPIG | | | | Lg | | Lg | 04 10 50.2 | |
| LPIG | | | | *e*S | | Sg | 04 10 50.4 | -1.2 |
| MAIG | Mazatlaan | 2.83 | 117 | *i* P | | Pn | 04 11 02.1 | +0.5 |
| MAIG | | | | *e*S | | Sn | 04 11 34.6 | -1.1 |
| MAIG | Mazatlaan | 2.83 | 117 | *i* P | | Pn | 04 11 02.1 | +0.5 |
| MAIG | | | | *e*S | | Sn | 04 11 34.6 | -1.1 |
| HPIG | | 4.00 | 52 | *e*P | | Pn | 04 11 18.6 | +0.8 |
| HPIG | | | | *e*S | | Sn | 04 12 05.1 | +0.2 |
| HPIG | | 4.00 | 52 | *e*P | | Pn | 04 11 18.6 | +0.8 |
| HPIG | | | | *e*S | | Sn | 04 12 05.1 | +0.2 |
| TX31 | Lajitas Ar. Si | 6.89 | 44 | *e*Pn | | Pn | 04 11 58.3 | +0.8 |
| TXAR | Lajitas Array | 6.89 | 44 | Pn | | Pn | 04 11 55.1 | -2.5 |
| | 0.2nm,0.3s,baz=221,slow=14,SNR=8.6 | | | | | | | |
| TXAR | | | | Sn | | Sn | 04 13 11.2 | -5.0 |
| | 1.5nm,0.3s,baz=256,slow=18,SNR=7.0 | | | | | | | |
| TXAR | | | | Lg | | Lg | 04 13 46.8 | |
| | 1.4nm,0.3s,baz=234,slow=29,SNR=4.3 | | | | | | | |
| TUC | Tucson | 7.92 | 350 | *e*Pn | | Pn | 04 12 09.1 | -2.6 |
| MNTX | Cornudas Mount | 7.93 | 24 | *e*Pn | | Pn | 04 12 09.2 | -2.5 |
| MNTX | | | | *e*Lg | | Lg | 04 14 15.0 | |
| 121A | Cookes Peak, D | 8.11 | 8 | *e*Pn | | Pn | 04 12 11.3 | -3.0 |
| | 13nm,0.8s | | | | | | | |
| 121A | | | | *e*Lg | | Lg | 04 14 20.7 | |
| BNM | Barren Site | 9.89 | 12 | *e*Pn | | Pn | 04 12 39.6 | +0.9 |
| LAZ | Ladron | 10.04 | 10 | *e*Pn | | Pn | 04 12 39.5 | -1.3 |
| W18A | Petrified Fore | 10.61 | 358 | *e*Pn | | Pn | 04 12 49.9 | +1.3 |
| ANMO | Albuquerque | 10.69 | 12 | Pn | | Pn | 04 12 49.8 | +0.1 |
| | 0.1nm,0.3s,baz=194,slow=12,SNR=10 | | | | | | | |
| ANMO | | | | Lg | | Lg | 04 15 41.8 | |
| | baz=322,slow=19,SNR=2.3 | | | | | | | |
| ANMO | | | | LR | | LR | 04 16 40.5 | |
| | comp=Z,144nm,21.9s,baz=212,slow=36 | | | | | | | |
| ANMO | Albuquerque | 10.69 | 12 | *e*Pn | | Pn | 04 12 49.4 | -0.3 |
| ANMO | | | | Lg | | Lg | 04 15 41.8 | |
| PFO | Pinyon Flat Ob | 11.10 | 327 | Pn | | Pn | 04 12 56.6 | +1.4 |
| | 0.2nm,0.3s,baz=139,slow=11,SNR=3.0 | | | | | | | |
| PFO | | | | LR | | LR | 04 17 03.1 | |
| | comp=Z,109nm,18.2s,baz=297,slow=37 | | | | | | | |
| MVCO | Mesa Verde | 12.70 | 2 | *e*Pn | | Pn | 04 13 28.9 | +12 |
| SHPR | Sheep Range | 13.04 | 338 | *e*Pn | | Pn | 04 13 21.1 | -0.6 |
| S22A | 4UR Ranch, Cre | 13.37 | 8 | *e*Pn | | P | 04 13 37.2 | +1.1 |
| CCUT | Cedar City | 13.51 | 346 | *e*Pn | | Pn | 04 13 31.3 | +3.1 |
| ISA | Isabella | 13.73 | 326 | *e*Pn | | Pn | 04 13 33.8 | +2.6 |
| DAC | Darwin (Calif) | 13.81 | 330 | *e*Pn | | Pn | 04 13 34.3 | +2.0 |
| DAC | | | | *e*Sn | | Sn | 04 15 59.5 | -6.4 |
| MSU | Marysvale | 14.22 | 350 | *e*Pn | | Pn | 04 13 38.3 | +0.4 |
| | 3.7nm,1.1s | | | | | | | |
| SMCO | Snowmass | 14.77 | 7 | *e*Pn | | Pn | 04 13 45.3 | -0.3 |
| | 7.8nm,1.0s | | | | | | | |
| CMIG | Matias Romero | 15.25 | 116 | LR | | LR | 04 19 45.3 | |
| | comp=Z,149nm,19.2s,baz=275,slow=38 | | | | | | | |
| ISCO | Idaho Springs | 15.56 | 10 | *e*Pn | | P | 04 14 00.9 | +0.4 |
| | 4.1nm,1.1s | | | | | | | |
| O20A | White River Ci | 15.63 | 3 | *e*Pn | | Pn | 04 13 57.5 | +0.7 |
| | 16nm,1.1s | | | | | | | |
| NV01 | Mina Array Sit | 15.92 | 333 | *e*Pn | | Pn | 04 14 01.6 | +0.9 |
| NVAR | Mina Array Bea | 15.92 | 333 | Pn | | Pn | 04 14 01.6 | +1.0 |
| | 0.1nm,0.3s,baz=152,slow=12,SNR=14 | | | | | | | |
| DUG | Dugway | 15.96 | 350 | *e*Pn | | Pn | 04 14 01.3 | +0.2 |
| | 8.5nm,1.3s | | | | | | | |
| MIAR | Mount Ida | 16.86 | 50 | *e*Pn | | Pn | 04 14 11.1 | -1.4 |
| SPUT | South Promonto | 17.00 | 352 | *e*Pn | | Pn | 04 14 14.3 | 0.0 |
| | 22nm,1.8s | | | | | | | |
| HWUT | Hardware Ranch | 17.19 | 354 | *e*Pn | | Pn | 04 14 17.3 | +0.5 |
| | 6.2nm,1.0s | | | | | | | |
| BMN | Battle Mountai | 17.28 | 339 | *e*Pn | | P | 04 14 19.5 | +0.3 |
| | 16nm,1.4s | | | | | | | |
| HVU | Hansel Valley | 17.51 | 351 | *e*Pn | | P | 04 14 21.4 | -0.4 |
| | 7.1nm,0.9s | | | | | | | |
| BW06 | Boulder Array | 18.24 | 359 | *e*Pn | | Pn | 04 14 28.7 | -1.1 |
| | 48nm,2.5s | | | | | | | |
| SNOW | Snow King Moun | 18.98 | 356 | *e*P | | Pn | 04 14 38.5 | -0.2 |
| | 50nm,2.5s | | | | | | | |
| TPAW | Teton Pass | 19.02 | 356 | *e*P | | P | 04 14 38.5 | 0.0 |
| | 61nm,2.6s | | | | | | | |
| LOHW | Long Hollow | 19.12 | 357 | *e*P | | P | 04 14 38.7 | -0.9 |
| | 2.9nm,1.0s | | | | | | | |
| FXWY | Fox Creek | 19.17 | 356 | *e*P | | P | 04 14 40.3 | +0.2 |
| MOOW | Moose Ponds | 19.26 | 357 | *e*P | | Pn | 04 14 41.9 | -0.3 |
| | 30nm,2.5s | | | | | | | |
| IMW | Indian Meadow | 19.42 | 356 | *e*P | | P | 04 14 42.9 | -0.1 |
| HLID | Hailey | 19.51 | 349 | *e*P | | Pn | 04 14 46.4 | +1.3 |
| | 29nm,2.3s | | | | | | | |
| WVOR | Wild Horse Val | 19.54 | 339 | *e*P | | Pn | 04 14 46.4 | +1.0 |
| | 10nm,1.4s | | | | | | | |
| WVOR | | | | *e*sP | | sP | 04 14 57.8 | +9.5 |
| FLWY | Flagg Ranch | 19.59 | 357 | *e*P | | Pn | 04 14 45.6 | -0.5 |
| MFID | Camas Ranch | 19.66 | 345 | *e*P | | Pn | 04 14 47.9 | +1.1 |
| | 6.1nm,1.3s | | | | | | | |
| J08A | Circle Bar Ran | 20.32 | 340 | *e*P | | Pn | 04 14 53.8 | -0.8 |
| | 8.2nm,1.2s | | | | | | | |
| MCMT | McKenzie Canyo | 20.52 | 353 | *e*P | | Pn | 04 14 56.3 | -0.8 |
| DLMT | Dillon | 21.02 | 353 | *e*P | | P | 04 14 59.9 | -0.3 |
| BOZ | Bozeman (W) | 21.21 | 355 | *e*P | | P | 04 15 02.5 | +0.3 |
| | 7.8nm,1.5s | | | | | | | |
| I07A | Izee | 21.30 | 339 | *e*P | | P | 04 15 03.9 | +0.7 |
| | 10nm,1.3s | | | | | | | |
| LRM | Limekiln Ridge | 21.45 | 354 | *e*P | | P | 04 15 04.7 | -0.3 |
| | 40nm,1.1s | | | | | | | |
| WVT | Waverly | 21.73 | 53 | *e*P | | P | 04 15 08.7 | +0.9 |
| | 49nm,2.2s | | | | | | | |
| ECSD | EROS Data Cent | 21.79 | 25 | *e*P | | P | 04 15 11.9 | +3.5 |
| | 102nm,2.7s | | | | | | | |
| HRY | Holter Researc | 22.28 | 355 | *e*P | | P | 04 15 14.9 | +1.2 |
| F10A | Beach Ranch, E | 22.40 | 345 | *e*P | | P | 04 15 14.8 | -0.2 |
| | 91nm,2.7s | | | | | | | |
| MSO | Missoula | 22.62 | 351 | *e*P | | P | 04 15 18.2 | +0.9 |
| | 9.5nm,1.2s | | | | | | | |
| SLMT | Seeley Lake | 22.97 | 352 | *e*P | | P | 04 15 21.5 | +0.4 |
| SWMT | Swartz Lake | 23.30 | 352 | *e*P | | P | 04 15 24.7 | +0.3 |
| YBMT | Yellow Bay | 23.65 | 352 | *e*P | | P | 04 15 28.1 | +0.3 |
| NEW | Newport | 24.55 | 347 | P | | P | 04 15 35.4 | -0.8 |
| | 5.9nm,0.9s,baz=151,slow=9.9,SNR=10 | | | | | | | |
| WALA | Waterton Lakes | 24.81 | 353 | *e*P | | P | 04 15 39.1 | +0.5 |
| | 8.6nm,1.0s | | | | | | | |
| JTS | JuntasAbangare | 27.02 | 117 | LR | | LR | 04 26 55.3 | |
| | comp=Z,56nm,21.4s,baz=306,slow=37 | | | | | | | |
| ILAR | Eielson Array | 47.06 | 339 | P | | P | 04 18 47.8 | 0.0 |
| | 0.6nm,0.7s,baz=151,slow=7.2,SNR=8.1 | | | | | | | |

*BJI* ***22*** *04:18:56.7,5.˚41S×147.˚21E,h287km,mb4.5/41,mB4.9/27*
*ISCJB* ***22*** *04:18:56.6±0.6,5.˚31S±0.˚03×146.˚90E±0.˚03,h269km±5km, mb4.7/123,Error ellipse: s-maj=5.1km s-min=4.3km az=28.8*
*MOS* ***22*** *04:18:57.3±0.9,5.˚30S×146.˚89E,h278km,mb4.8/41,Error ellipse: s-maj=8.9km s-min=6.1km az=97.4*

*IDC* ***22*** *04:18:58.4±0.6,5.˚34S×146.˚94E,h278km±5km,mb4.4/25, mb1 4.5/29,mb1mx4.5/31,mbtmp5.1/29,Error ellipse: s-maj=9.4km s-min=7.1km az=66.0*
*DJA* ***22*** *04:18:59.0±0.5,5.˚S±4.˚×14.˚7E±.˚,h289km±6km,M5.1/30, mb5.2/30,mB5.5/17,MLv5.7/2,Mw(mB)4.9/17,Mwp5.2/1*
*NEIC* ***22*** *04:19:01.8±0.8,5.˚36S×146.˚82E,h312km±8km,mb4.9/69, Error ellipse: s-maj=5.0km s-min=4.1km az=45.0*
**ISC 22 04:18:58.8±0.3,5.˚39S±0.˚04×146.˚93E±0.˚04,h283km±2km, h283km:pP-P,n371,σ1§30/442,mb4.7/119,10C-2D, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 3.99 | 177 | P | | Pn | 04 20 03.3 | -0.8 |
| | 131nm,0.3s,baz=16,slow=5.5,SNR=133 | | | | | | | |
| PMG | | | | S | | S | 04 20 52.8 | -3.5 |
| | 67nm,0.3s,baz=234,slow=17,SNR=10 | | | | | | | |
| GENI | Genyem | 7.30 | 292 | P | | Pn | 04 20 41.8 | -1.9 |
| | 1µm,1.1s,12µm5µm4.1nm | | | | | | | |
| SMPI | Sarmi | 8.88 | 292 | P | | Pn | 04 21 01.9 | -1.3 |
| | 202nm,1.3s | | | | | | | |
| COEN | Coen | 9.28 | 203 | *e*Pn | | Pn | 04 21 10.2 | +2.0 |
| RKPI | Ransiki, Papua | 13.30 | 286 | P | | P | 04 21 58.5 | +0.3 |
| | 399nm,0.9s,13µm | | | | | | | |
| HNR | Honiara | 13.51 | 108 | P | | Pn | 04 21 59.3 | -0.8 |
| | 22nm,0.3s,baz=233,slow=3.6,SNR=22 | | | | | | | |
| HNR | | | | S | | S | 04 24 31.0 | +1.2 |
| | baz=143,slow=20,SNR=3.6 | | | | | | | |
| HNR | Honiara | 13.51 | 108 | P | | Pn | 04 21 59.3 | -0.8 |
| HNR | | | | S | | S | 04 24 31.0 | +1.2 |
| HNR | | | | pmax | | pmax | | |
| | comp=Z,22nm,0.3s | | | | | | | |
| HNR | Honiara | 13.51 | 108 | *e*P | | Pn | 04 21 48.0 | -12 |
| HNR | | | | *e*S | | S | 04 24 30.0 | +0.2 |
| HNR | Honiara | 13.51 | 108 | *e*Pn | | Pn | 04 21 58.8 | -1.4 |
| | comp=Z,1µm,1.0s | | | | | | | |
| HNR | | | | S | | S | 04 24 31.0 | +1.2 |
| CTA | Charters Tower | 14.62 | 183 | P | | Pn | 04 22 15.3 | +1.9 |
| | comp=Z,2.8nm,0.3s,baz=1.9,slow=11,SNR=16 | | | | | | | |
| CTAO | Charters Tower | 14.62 | 183 | *e*P | | Pn | 04 22 15.5 | +2.1 |
| CTAO | Charters Tower | 14.62 | 183 | *e*P | | Pn | 04 22 15.5 | +2.1 |
| FAKI | Fak Fak | 14.85 | 279 | P | | P | 04 22 14.3 | -1.0 |
| | comp=Z,243nm,0.9s,comp=Z,3µm | | | | | | | |
| FAKI | Fak Fak | 14.85 | 279 | *e*P | | P | 04 22 15.1 | -0.2 |
| SAUI | Saumlaki | 15.74 | 260 | P | | Pn | 04 22 26.2 | -0.5 |
| | comp=Z,317nm,0.8s | | | | | | | |
| SIJI | Sorong | 16.27 | 286 | P | | P | 04 22 30.6 | -0.4 |
| | comp=Z,20nm,0.3s,baz=89,slow=9.4,SNR=54 | | | | | | | |
| SWI | Sorong | 16.28 | 286 | P | | P | 04 22 31.2 | +0.2 |
| | comp=Z,784nm,1.0s,comp=Z,7µm | | | | | | | |
| BNDI | Bandanaira | 16.99 | 272 | P | | P | 04 22 37.4 | -1.3 |
| | comp=Z,1µm,1.1s,comp=Z,12µm | | | | | | | |
| MTN | Manton Dam | 17.26 | 244 | *e*P | | P | 04 22 42.0 | +0.4 |
| | comp=Z,241nm,0.6s | | | | | | | |
| MSAI | Masohi | 18.07 | 276 | P | | Pn | 04 22 55.4 | +1.6 |
| | comp=Z,53nm,0.8s | | | | | | | |
| WRAB | Tennant Creek | 18.94 | 219 | *e*P | | P | 04 23 00.1 | +0.5 |
| WRAB | | | | *e*S | | S | 04 26 18.5 | -1.1 |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,140nm,0.6s | | | | | | | |
| WRAB | Tennant Creek | 18.94 | 219 | *e*P | | P | 04 23 00.1 | +0.5 |
| | comp=Z,140nm,0.6s | | | | | | | |
| WRAB | | | | *e*S | | S | 04 26 18.5 | -1.1 |
| WRA | Warramunga Arr | 18.95 | 219 | P | | P | 04 23 00.4 | +0.6 |
| | comp=Z,21nm,0.3s,baz=41,slow=11,SNR=689 | | | | | | | |
| WRA | | | | S | | S | 04 26 19.2 | -0.7 |
| | comp=Z,2.5nm,0.3s,baz=39,slow=19,SNR=27 | | | | | | | |
| WRA | | | | ScP | | ScP | 04 30 20.6 | -0.3 |
| | baz=38,slow=2.5,SNR=4.9 | | | | | | | |
| NLAI | Namlea | 19.89 | 275 | P | | P | 04 23 09.8 | 0.0 |
| | comp=Z,74nm,0.8s | | | | | | | |
| LBMI | Labuha | 19.97 | 283 | P | | P | 04 23 11.7 | +1.1 |
| | comp=Z,110nm,1.2s,comp=Z,1µm | | | | | | | |
| EIDS | Eidsvold | 20.26 | 169 | *e*P | | P | 04 23 14.7 | +1.2 |
| | comp=Z,140nm,1.6s | | | | | | | |
| TNTI | Ternate | 20.48 | 287 | P | | Pn | 04 23 27.7 | +6.0 |
| SANI | Sanana | 21.16 | 278 | P | | P | 04 23 22.2 | -0.5 |
| | comp=Z,107nm,0.8s,comp=Z,1µm | | | | | | | |
| AS01 | Alice Springs | 22.05 | 213 | *e*P | | P | 04 23 32.0 | +1.2 |
| ASAR | Alice Springs | 22.08 | 213 | P | | P | 04 23 32.5 | +1.5 |
| | comp=Z,104nm,0.5s,baz=39,slow=7.5,SNR=1480 | | | | | | | |
| ASAR | | | | S | | S | 04 27 15.0 | +1.3 |
| | comp=Z,9.5nm,0.9s,baz=36,slow=14,SNR=8.0 | | | | | | | |
| ASAR | | | | ScP | | ScP | 04 30 28.4 | 0.0 |
| | comp=Z,1.6nm,0.6s,baz=38,slow=3.1,SNR=5.1 | | | | | | | |
| SOEI | Soe | 22.88 | 259 | P | | P | 04 23 38.7 | +0.2 |
| | comp=Z,264nm,0.9s,comp=Z,2µm | | | | | | | |
| SOEI | Soe | 22.88 | 258 | *e*P | | P | 04 23 39.0 | +0.5 |
| | comp=Z,212nm,0.9s | | | | | | | |
| SOEI | | | | *e*S | | S | 04 27 34.8 | +7.8 |
| SGSI | Sangihe | 23.20 | 292 | P | | P | 04 23 42.2 | +0.9 |
| BATI | Baumata | 23.54 | 257 | P | | P | 04 23 45.5 | +1.0 |
| | comp=Z,619nm,0.7s,baz=134,slow=1.3,SNR=61 | | | | | | | |
| BATI | Baumata | 23.54 | 257 | P | | P | 04 23 45.4 | +1.0 |
| | comp=Z,484nm,0.8s,comp=Z,3µm | | | | | | | |
| KMSI | Cibinong | 23.68 | 284 | P | | P | 04 23 45.8 | +0.2 |
| | comp=Z,358nm,0.6s,comp=Z,5µm | | | | | | | |
| BBSI | Bau Bau | 24.25 | 269 | P | | P | 04 23 54.4 | +3.5 |
| | comp=Z,91nm,1.0s,comp=Z,1µm | | | | | | | |
| KDI | Kendari | 24.27 | 272 | P | | P | 04 23 51.9 | +0.9 |
| LUWI | Luwuk | 24.50 | 279 | P | | P | 04 23 53.3 | +0.2 |
| LUWI | Luwuk | 24.50 | 279 | *e*P | | P | 04 23 52.8 | -0.3 |
| MMRI | Maumere | 24.72 | 261 | P | | P | 04 23 53.9 | -1.1 |
| | comp=Z,133nm,0.8s | | | | | | | |
| MMRI | Maumere | 24.72 | 261 | *e*P | | P | 04 23 54.0 | -1.1 |
| | comp=Z,86nm,0.7s | | | | | | | |
| DZM | Mont Dzumac | 25.12 | 133 | P | | P | 04 23 58.5 | -0.2 |
| | comp=Z,12nm,0.6s,baz=270,slow=20,SNR=8.0 | | | | | | | |
| DZM | | | | pP | | pP | 04 24 51.0 | +0.3 |
| | comp=Z,14nm,0.9s,baz=0.4,slow=2.5,SNR=2.9 | | | | | | | |
| EDFI | Ende, Flores | 25.27 | 261 | P | | P | 04 24 00.9 

comp=Z,45nm,0.9s
**LEM Lembang 39.11 266** P **P** **04 25 59.5 -0.3**
comp=Z,27nm,0.6s,baz=157,slow=21,SNR=7.4
**QZH Quanzhou 40.86 319**⇑ *i*P **P** **04 26 15.8 +2.0**
**JNU Nakatsue 41.22 339** P **P** **04 26 16.6 0.0**
comp=Z,16nm,0.8s,baz=67,slow=8.2,SNR=7.1
**AFI Afiamalu 41.52 105** P **P** **04 26 18.5 -0.9**
comp=Z,12nm,0.5s,baz=246,slow=18,SNR=3.7
**DLV T Lat 41.94 294** *e*P **P** **04 26 22.4 -0.5**
**MJAR Matsushiro Arr 42.51 350** P **P** **04 26 25.7 -1.3**
comp=Z,3.9nm,0.6s,baz=176,slow=10,SNR=11
MJAR pP **pP** **04 27 22.3 -2.7**
comp=Z,0.8nm,0.3s,baz=169,slow=5.3,SNR=4.9
MJAR PcP **PcP** **04 28 13.5 -0.4**
comp=Z,3.7nm,0.8s,baz=179,slow=3.6,SNR=4.4
MJAR ScP **ScP** **04 31 36.7 -0.7**
comp=Z,2.5nm,0.8s,baz=179,slow=5.2,SNR=6.3
**MAJO Matsushiro 42.51 350** *e*P **P** **04 26 26.6 -0.3**
MAJO pmax pmax
comp=Z,45nm,1.5s
**MAJO Matsushiro 42.51 350** *e*P **P** **04 26 26.6 -0.3**
comp=Z,45nm,1.5s
**MAT Matsushiro 42.51 350** P **P** **04 26 26.3 -0.6**
MAT S **S** **04 32 26.6 -0.8**
**URZ Urewera 42.68 144** P **P** **04 26 29.1 +0.8**
comp=Z,9.7nm,0.3s,baz=248,slow=5.0,SNR=14
**URZ Urewera 42.68 144** *e*P **P** **04 26 29.4 +1.2**
comp=Z,39nm,1.0s
**BKZ Black Stump Fm 42.95 146** *e*P **P** **04 26 32.2 +1.7**
comp=Z,38nm,0.9s
**DCZ Deep Cove 43.64 159** *e*P **P** **04 26 37.9 +2.1**
comp=Z,68nm,1.2s
**RPZ Rata Peaks 43.68 155** P **P** **04 26 36.9 +0.7**
comp=Z,49nm,0.8s,baz=355,slow=3.5,SNR=12
**RPZ Rata Peaks 43.68 155** *e*P **P** **04 26 37.4 +1.2**
**OXZ Oxford 43.80 153** *e*P **P** **04 26 38.3 +1.2**
comp=Z,22nm,0.9s
**QIZ Qiongzhong 43.86 305** P **P** **04 26 37.1 -0.8**
QIZ pP **pP** **04 27 36.6 +0.3**
QIZ sP **sP** **04 28 08.3 0.0**
QIZ S **S** **04 32 48.5 +1.1**
QIZ PMZ
comp=Z,27nm,1.6s
**WHZ Wether Hill Ro 44.28 159** *e*P **P** **04 26 41.9 +1.0**
comp=Z,29nm,0.8s
**NJ2 Nanjing 45.84 326** *e*P **P** **04 26 52.6 -0.7**
NJ2 PMZ
comp=Z,10.0nm,0.8s
**KSRS Korea Array 46.17 339** P **P** **04 26 56.1 +0.4**
comp=Z,4.4nm,0.7s,baz=154,slow=8.9,SNR=13
KSRS pP **pP** **04 27 53.1 -1.5**
KSRS PcP **PcP** **04 28 26.7 +0.2**
comp=Z,2.0nm,0.6s,baz=162,slow=4.5,SNR=4.2
**KSRS Korea Array 46.17 339** P **P** **04 26 56.1 +0.4**
KSRS *PP **pP** **04 27 53.2 -1.5**
KSRS 04 28 26.7
KSRS pmax pmax
comp=Z,4.0nm,0.7s
KSRS pmax pmax
comp=Z,12nm,1.0s
KSRS pmax pmax
comp=Z,2.0nm,0.6s
**KSAR Wonju Array Be 46.17 339** P **P** **04 26 56.1 +0.4**
KSAR *PP **pP** **04 27 53.2 -1.6**
KSAR 04 28 26.7
**KSAR Wonju Array Be 46.17 339** P **P** **04 26 56.1 +0.4**
KSAR pP **pP** **04 27 53.1 -1.6**
KSAR PcP **PcP** **04 28 26.7 +0.2**
**IPM Ipoh 46.89 281** *e*P **P** **04 27 00.8 -0.9**
comp=Z,12nm,0.9s
**KULM Kulim 47.42 282** *e*P **P** **04 27 04.2 -1.6**
comp=Z,13nm,0.7s
**SKNT Sakolnakorn 47.91 299** P **P** **04 27 09.9 +0.4**
comp=Z,79nm,0.9s
**PSI Prapat 48.64 278** P **P** **04 27 13.3 -1.9**
comp=Z,8.4nm,0.5s,baz=81,slow=5.7,SNR=11
**PSI Prapat 48.64 278** *e*P **P** **04 27 13.6 -1.7**
PSI pmax pmax
comp=Z,11nm,0.7s
**PSI Prapat 48.64 278** *e*P **P** **04 27 13.6 -1.7**
comp=Z,11nm,0.7s
**NAYO Nakonayok 49.30 294** P **P** **04 27 20.6 +0.6**
comp=Z,18nm,1.4s
**ASAJ Asahikawa 49.44 356** *e*P **P** **04 27 21.4 +0.9**
comp=Z,3.8nm,0.6s
**KRAB Krabi 49.49 286** P **P** **04 27 23.0 +1.5**
comp=Z,18nm,0.7s,comp=Z,1μm
**GSI Gunungsitoli 49.74 276** *e*P **P** **04 27 22.1 -1.3**
comp=Z,26nm,0.6s
**GYA Guiyang 50.24 311** *e*P **P** **04 27 29.3 +2.3**
GYA PMZ
comp=Z,10.0nm,1.0s
**KUR Kuril'sk 50.41 1** *i* P **P** **04 27 29.7 +2.0**
**PBKT Sadao Pong 50.41 297** P P 04 27 33.3 +5.0
**LOEI Loei 50.51 298** P **P** **04 27 26.7 -2.3**
comp=Z,24nm,1.0s
**USRK Ussuriysk Ar. 51.17 346** P **P** **04 27 33.8 +0.3**
comp=Z,3.0nm,0.5s,baz=167,slow=7.7,SNR=14
USRK ScP **ScP** **04 32 12.8 -0.8**
comp=Z,2.8nm,0.8s,baz=201,slow=3.8,SNR=6.8
**UTTA Uttaradit 51.22 298** P **P** **04 27 34.8 +0.5**
comp=Z,10nm,0.7s,comp=Z,71nm
**NANT Nan 51.50 299** P **P** **04 27 36.8 +0.4**
comp=Z,11nm,0.6s
**MDJ Mudanjiang 52.17 344** P **P** **04 27 41.4 +0.6**
MDJ pP **pP** **04 28 39.9 -1.5**
MDJ S **S** **04 34 44.3 +1.5**
MDJ sS **sS** **04 36 29.4 -0.8**
MDJ PMZ
comp=Z,6.0nm,1.1s
MDJ PMZ
comp=Z,140nm,6.3s
**UMPA Umpang Tak 52.17 295** P **P** **04 27 44.4 +3.0**
comp=Z,8.5nm,0.9s,comp=Z,1μm
**YSS Yuzh-Sakhalins 52.25 356** *i* P **P** **04 27 41.9 +0.6**
YSS pmax pmax
comp=Z,22nm,1.1s
**LAMP Lampang 52.33 298** P **P** **04 27 44.5 +2.0**
comp=Z,5.2nm,0.7s
**CRAI Chiangrai 52.35 301** P P 04 27 35.6 -7.0
**KMI Kunming 52.58 307** ⇓P **P** **04 27 45.5 +1.0**
KMI PMZ
comp=Z,19nm,1.1s
KMI PMZ
comp=Z,600nm,5.3s
**CM01 Chiang Mai Arr 52.88 298** *e*P **P** **04 27 47.0 +0.5**
CM01 *e*pP **PcP** **04 28 50.2 -1.4**
**CMAR Chiang Mai Arr 52.91 298** P **P** **04 27 47.4 +0.7**
comp=Z,5.6nm,0.7s,baz=122,slow=5.7,SNR=19
**CHTO Chiang Mai 53.04 298** P **P** **04 27 49.0 +1.3**
comp=Z,68nm,0.9s
**CHTO Chiang Mai 53.04 298** *e*P **P** **04 27 48.4 +0.7**
CHTO pmax pmax
comp=Z,29nm,1.5s
**CHTO Chiang Mai 53.04 298** *e*P **P** **04 27 48.4 +0.7**
comp=Z,29nm,1.5s
**BJI Beijing 53.34 331** P **P** **04 27 51.3 +1.9**
BJI S **S** **04 35 03.6 +4.8**
BJI SS **SS** **04 38 39.5 -3.9**
BJI PMZ
comp=Z,8.0nm,1.4s
BJI LZ
comp=Z,110nm,20.0s
**HABR Khabarovsk 54.64 350** *e*P **P** **04 27 57.6 -1.0**
HABR *e* 04 28 56.7
HABR *e**PP **PcP** **04 28 58.1 +0.5**
HABR *e**SP **sP** **04 29 29.2 -1.8**
HABR *e*PPP PPP 04 31 20.5
HABR *e*S **S** **04 35 15.4 -0.5**
HABR *e**SS **sS** **04 37 03.4 -0.8**
HABR *e* 04 37 17.3
HABR *e*SS **SS** **04 39 03.6 +0.1**
HABR pmax pmax
comp=Z,43nm,1.6s
HABR MLR MLR
comp=Z,73nm,19.0s
**CD2 Chengdu 54.81 314** *e*P **P** **04 28 00.6 +0.4**
CD2 pP **pP** **04 29 01.8 +0.3**
CD2 PP **PP** **04 30 06.8 +0.3**
CD2 PcS **PcS** **04 32 59.1 0.0**
CD2 S **S** **04 35 19.6 +0.7**
CD2 sS **sS** **04 37 08.6 +1.4**
CD2 SS **SS** **04 39 08.8 +1.9**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**KLR Kul'dur 55.99 348** *e*P **P** **04 28 05.3 -2.9**
KLR *e* 04 28 58.8
KLR pmax pmax
comp=Z,50nm,1.6s
**TYV Tymovskoe 56.15 357** *e*P **P** **04 28 09.5 +0.2**
TYV pmax pmax
comp=Z,14nm,0.6s
**HHC Hu-ho-hao-te 56.29 328** *e*P **P** **04 28 12.8 +2.2**
HHC pP **pP** **04 29 16.6 +4.4**
HHC S **S** **04 35 39.3 +1.2**
HHC PMZ
comp=Z,27nm,0.9s
HHC PMZ
comp=Z,220nm,6.0s
**LZH Lanzhou 57.71 319** *e*P **P** **04 28 21.5 +0.8**
LZH PMZ
comp=Z,21nm,1.3s
LZH PMZ
comp=Z,73nm,7.0s
**PEA0 Petropavlovsk- 58.99 8** *e*P **P** **04 28 29.6 +0.6**
**PETK Petropavlovsk- 58.99 8** P **P** **04 28 29.6 +0.7**
comp=Z,27nm,0.7s,baz=172,slow=7.8,SNR=26
**GTA Gaotai 62.24 320** *e*P **P** **04 28 52.3 +1.1**
GTA PcP **PcP** **04 29 29.4 +1.1**
GTA pP **pP** **04 29 56.4 +2.2**
GTA sP **sP** **04 30 27.5 +2.6**
GTA S **S** **04 36 55.0 +0.7**
GTA sS **SKiKP** **04 38 47.3 +1.6**
GTA PMZ
comp=Z,15nm,1.0s
GTA PMZ
comp=Z,260nm,5.9s
**PPT Papeete 63.13 107** P **P** **04 28 59.2 +1.8**
comp=Z,48nm,0.8s,baz=195,slow=1.8,SNR=5.1
**ULN Ulaanbaatar 63.55 331** *e*P **P** **04 29 00.2 +0.5**
ULN *e**PP **pP** **04 30 04.4 +1.5**
ULN pmax pmax
comp=Z,3.0nm,0.8s
**ULN Ulaanbaatar 63.55 331** *e*P **P** **04 29 00.2 +0.5**
comp=Z,3.5nm,0.8s
ULN *e*pP **pP** **04 30 04.4 +1.5**
**SONM Songino Array 63.85 331** P **P** **04 29 02.2 +0.6**
comp=Z,2.4nm,0.7s,baz=131,slow=3.1,SNR=8.1
SONM PKP2bc 04 57 58.8
comp=Z,1.2nm,0.9s,baz=336,slow=3.3,SNR=4.8
**SONA1 Songino Array 63.85 331** *e*P **P** **04 29 02.2 +0.6**
SONA1 *e*pP **pP** **04 30 05.8 +0.9**
**MA2 Magadan 64.84 2** *i* P **P** **04 29 08.2 +0.6**
**TAPN Taplejung 65.77 303** *e*P **P** **04 29 14.7 +0.1**
comp=Z,11nm,0.6s
**ODAN Odare 65.87 302** *e*P **P** **04 29 15.1 0.0**
comp=Z,11nm,0.2s
**RAMN Ramite 66.56 302** *e*P **P** **04 29 19.3 -0.2**
comp=Z,5.3nm,0.4s
**ZAK Zakamensk 67.08 331** *e*P **P** **04 29 22.5 +0.4**
ZAK *e* 04 30 24.4
ZAK pmax pmax
comp=Z,8.0nm,1.1s
ZAK pmax pmax
comp=Z,14nm,1.2s
**GUN Gumba 67.48 303** *e*P **P** **04 29 25.4 0.0**
comp=Z,20nm,0.5s
**PKI Pulchoki 67.77 303** *e*P **P** **04 29 26.8 -0.4**
comp=Z,7.0nm,0.6s
**TLY Talaya 67.78 333** *e*P **P** **04 29 26.4 0.0**
TLY pmax pmax
comp=Z,6.0nm,0.9s
**DMN Daman 68.03 302** *e*P **P** **04 29 28.8 +0.1**
comp=Z,20nm,0.6s
**SEY Seymchan 68.26 3** *e*P **P** **04 29 29.4 +0.4**
**BOD Bodaibo 68.39 342** *e*P **P** **04 29 29.2 -0.7**
BOD *e* 04 30 30.2
BOD pmax pmax
comp=Z,12nm,1.0s
**YAK Yakutsk 68.54 351** *e*P **P** **04 29 30.9 +0.2**
YAK pmax pmax
comp=Z,21nm,0.9s
YAK pmax pmax
comp=N,14nm,1.3s
YAK pmax pmax
comp=E,4.0nm,1.0s
**GKN Gorkha 68.55 303** *e*P **P** **04 29 31.7 -0.1**
comp=E,9.4nm,0.4s
**MOY Mondy 69.01 331** *e*P **P** **04 29 35.2 +1.1**
**KOLN Koldanda 69.35 302** *e*P **P** **04 29 36.4 -0.4**
comp=E,15nm,0.7s
**MIR Mirnyy 71.32 200**⇑ *e*P P 04 29 58.0 +10
MIR pmax pmax
comp=Z,40nm,1.0s
**WMQ Urumqi 72.29 319** *e*P **P** **04 29 55.0 +1.1**
**HVS Khovu-Aksy 72.36 328** *e*P **P** **04 29 55.1 +0.9**
HVS pmax pmax
comp=Z,15nm,1.0s
**VNDA Vanda 72.52 177** P **P** **04 29 54.9 +0.3**
comp=Z,19nm,0.9s,baz=326,slow=6.3,SNR=104
**VNDA Vanda 72.52 177** P **P** **04 29 54.9 +0.3**
VNDA pmax pmax
comp=Z,19nm,0.9s
**VNDA Vanda 72.52 177** *e*P **P** **04 29 55.2 +0.6**
comp=Z,24nm,0.9s
**SBA Scott Base 73.16 176** *e*P **P** **04 30 00.2 +1.9**
SBA pmax pmax
comp=Z,14nm,1.0s
**SBA Scott Base 73.16 176** *e*P **P** **04 30 00.2 +1.9**
comp=Z,14nm,1.0s
**SDPT Sand Point 74.41 28** *e*P **P** **04 30 05.3 -0.5**
comp=Z,126nm,1.0s
**BILL Bilibino 74.52 7**⇑ *i*P **P** **04 30 06.9 +0.7**
BILL pmax pmax
comp=Z,44nm,1.3s
**BILL Bilibino 74.52 7** *e*P **P** **04 30 07.1 +0.9**
comp=Z,14nm,0.6s
**MK01 Makanchi Array 76.98 320** *e*P **P** **04 30 20.6 0.0**
MK01 *e*pP **pP** **04 31 25.0 -1.3**
**MK31 Makanchi Array 76.99 320** *e*P **P** **04 30 20.6 -0.1**
MK31 pmax pmax
comp=Z,4.0nm,0.4s
**MKAR Makanchi Array 76.99 320** P **P** **04 30 20.7 +0.1**
comp=Z,4.2nm,0.4s,baz=99,slow=8.1,SNR=30
MKAR pP **pP** **04 31 24.9 -1.6**
comp=Z,10nm,0.9s,baz=102,slow=9.2,SNR=9.4
**MKAR Makanchi Array 76.99 320** P **P** **04 30 20.7 +0.1**
MKAR *PP **pP** **04 31 24.9 -1.6**
MKAR pmax pmax
comp=Z,4.0nm,0.4s
MKAR pmax pmax
comp=Z,11nm,1.0s
**MKAR Makanchi Array 76.99 320** *e*P **P** **04 30 21.0 +0.3**
MKAR *e*pP **pP** **04 31 27.3 +0.8**
**MAKZ Makanchi 77.20 320** *e*P **P** **04 30 22.0 +0.2**
MAKZ *e*pP **pP** **04 31 26.7 -0.9**
**ZALV Zalesovo Beam 78.47 328** P **P** **04 30 27.5 -1.0**
comp=Z,10nm,0.6s,baz=113,slow=5.5,SNR=41
**ZALV Zalesovo Beam 78.47 328** *i* P **P** **04 30 27.8 -0.7**
ZALV pmax pmax
comp=Z,10.0nm,0.6s
**KSH Kashi 78.93 312** *e*P **P** **04 30 33.9 +2.3**
KSH *e*pP **pP** **04 31 41.3 +3.6**
KSH *e*PP **PP** **04 33 39.3 +4.5**
KSH S **S** **04 40 05.9 -0.4**
KSH SKS **SKSac** **04 40 16.8 -3.2**
KSH PMZ
comp=Z,160nm,5.3s
KSH LN
comp=Z,1μm,10.7s
KSH LE
comp=Z,570nm,11.3s
KSH LZ
comp=Z,170nm,7.0s
**KDAK Kodiak Island 79.40 28** *i* P **P** **04 30 35.9 +2.4**
**SVW2 Sparrevohn 79.72 25** *e*P **P** **04 30 36.2 +1.0**
comp=Z,42nm,1.4s
**TKM2 Tokmak 2 80.17 315** *e*P **P** **04 30 37.9 -0.4**
TKM2 pmax pmax
comp=Z,7.0nm,0.6s
**TKM2 Tokmak 2 80.17 315** *e*P **P** **04 30 37.9 -0.4**
comp=Z,7.1nm,0.6s
**KURK Kurchatov 80.69 323** *e*P **P** **04 30 40.7 +0.2**
KURK *e*PP **pP** **04 31 45.1 -1.8**
KURK pmax pmax
comp=Z,22nm,1.1s
**KURK Kurchatov 80.69 323** *e*P **P** **04 30 40.7 +0.2**
comp=Z,22nm,1.1s
KURK *e*pP **pP** **04 31 45.1 -1.8**
**AAK Ala-Archa 80.87 315***c* *i*P **P** **04 30 42.7 +0.8**
AAK pmax pmax
comp=Z,13nm,0.9s
**AAK Ala-Archa 80.87 315** *e*P **P** **04 30 42.5 +0.6**
comp=Z,7.6nm,0.8s
**SFK Sufi-Kurgan 80.89 312** P **P** **04 30 40.3 -1.9**
SFK pmax pmax
comp=Z,8.0nm,0.8s
**EKS2 Erkin-Say 81.39 314** *e*P **P** **04 30 45.0 +0.4**
EKS2 pmax pmax
comp=Z,11nm,0.8s
**EKS2 Erkin-Say 81.39 314** *e*P **P** **04 30 45.0 +0.4**
comp=Z,11nm,0.8s
**RC01 Rabbit Creek A 82.21 26** *e*P **P** **04 30 48.1 -0.2**
comp=Z,186nm,2.3s
**MNAS Manas 82.25 314** P **P** **04 30 48.1 -1.0**
MNAS pmax pmax
comp=Z,16nm,1.0s
**CAST Castle Rocks 82.31 23** *e*P **P** **04 30 48.5 -0.3**
CAST *e*pP **pP** **04 31 56.6 +1.2**
**PMR Palmer 82.69 26** *e*P **P** **04 30 50.3 -0.4**
PMR pmax pmax
comp=Z,14nm,0.9s
**PMR Palmer 82.69 26** *e*P **P** **04 30 50.3 -0.4**
comp=Z,14nm,0.9s
**MAW Mawson 82.78 203** P **P** **04 30 50.6 -0.5**
comp=Z,4.2nm,0.5s,baz=88,slow=6.1,SNR=12
MAW PKKPbc **PKKPbc** **04 49 12.4 -3.9**
comp=Z,2.1nm,0.6s,baz=295,slow=6.2,SNR=9.1
**MAW Mawson 82.78 203** P **P** **04 30 50.6 -0.5**
MAW pmax pmax
comp=Z,4.0nm,0.5s
MAW pmax pmax
comp=Z,2.0nm,0.6s
**MAW Mawson 82.78 203** *e*P **P** **04 30 51.1 0.0**
MAW PKKPbc **PKKPbc** **04 49 12.4 -3.9**
**KTH Kantishna Hill 82.83 24** *e*P **P** **04 30 50.1 -1.4**
comp=Z,27nm,1.2s
KTH *e*pP **pP** **04 31 58.3 0.0**
**BPAW Bear Paw Mtn. 83.06 23** *e*P **P** **04 30 51.4 -1.2**
comp=Z,3.1nm,1.1s
BPAW *e*pP **pP** **04 31 59.7 +0.3**
**SCM Sheep Creek Mo 83.57 26** *e*P **P** **04 30 55.4 +0.1**
SCM pmax pmax
comp=Z,31nm,1.0s
**SCM Sheep Creek Mo 83.57 26** *e*P **P** **04 30 55.4 +0.1**
comp=Z,31nm,1.0s
**MLY Manley 83.59 22** *e*P **P** **04 30 55.6 +0.3**
MLY *e*pP **pP** **04 32 03.3 +1.1**
**RND Reindeer 83.59 24** *e*P **P** **04 30 54.8 -0.6**
**RND Reindeer 83.59 24** *e*P **P** **04 30 54.8 -0.6**
**MCK McKinley 83.70 24** *e*P **P** **04 30 54.6 -1.3**
MCK *e**PP **pP** **04 32 02.8 0.0**
MCK pmax pmax
comp=Z,41nm,1.1s
**MCK McKinley 83.70 24** *e*P **P** **04 30 54.6 -1.3**
comp=Z,41nm,1.1s
MCK *e*pP **pP** **04 32 02.8 0.0**
**KK31 Karatay Array 83.82 314** *i* P **P** **04 30 56.5 -0.4**
KK31 pmax pmax
comp=Z,28nm,1.3s
**KKAR Karatay Array 83.82 314** *e*P **P** **04 30 57.0 +0.1**
KKAR *e**PP **pP** **04 32 05.0 +1.1**
KKAR pmax pmax
comp=Z,10.0nm,0.9s
**KKAR Karatay Array 83.82 314** *e*P **P** **04 30 57.0 +0.1**
comp=Z,9.7nm,0.9s
KKAR *e*pP **pP** **04 32 05.0 +1.1**
**OTUK Ortayu 83.84 320** P **P** **04 30 56.8 -0.1**
OTUK pmax pmax
comp=Z,24nm,0.8s
**DIV Divide 83.98 27** *e*P **P** **04 30 57.9 +0.5**
**KLU Klutina 84.06 26** *e*P **P** **04 30 58.3 +0.6**
**WRH Wood River Hil 84.36 23** *e*P **P** **04 30 58.3 -0.8**
comp=Z,27nm,1.1s
**MDM Murphy Dome 84.51 23** *e*P **P** **04 30 58.9 -1.0**
**QSPA South Pole Qui 84.57 180** *e*P **P** **04 31 00.2 -0.2**
comp=Z,41nm,0.9s
**COLA College 84.62 23** *e*P **P** **04 30 59.0 -1.4**
COLA *e**PP **pP** **04 32 06.7 -0.7**
COLA pmax pmax
comp=Z,35nm,1.0s
**COLA College 84.62 23** *e*P **P** **04 30 59.0 -1.4**
comp=Z,35nm,1.0s
COLA *e*pP **pP** **04 32 06.7 -0.7**
**COLD Coldfoot 84.79 20** *e*P **P** **04 31 01.4 +0.2**
comp=Z,12nm,0.9s
COLD *e*pP **pP** **04 32 09.7 +1.4**
**PAX Paxson 84.82 25** *e*P **P** **04 31 00.8 -0.7**
PAX pmax pmax
comp=Z,5.0nm,0.7s
**PAX Paxson 84.82 25** *e*P **P** **04 31 00.8 -0.7**
comp=Z,4.8nm,0.7s
**ILAR Eielson Array 84.95 23** P **P** **04 31 00.6 -1.5**
comp=Z,19nm,0.7s,baz=252,slow=5.0,SNR=291
**DOT Dot Lake 85.66 25** *e*P **P** **04 31 05.0 -0.7**
comp=Z,63nm,1.1s
DOT *e*pP **pP** **04 32 13.2 +0.3**
**VOSK Vostochnaya 85.82 324** P P 04 31 02.1 -4.5
VOSK pmax pmax
comp=Z,2.0nm,0.8s
**PCA Pinnacle 86.18 29** *e*P **P** **04 31 08.9 +0.7**
comp=Z,32nm,0.9s
**BVA0 Borovoye Array 86.24 324** *i* P **P** **04 31 07.3 -1.3**
BVA0 pmax pmax
comp=Z,4.0nm,0.6s
**CHKZ Chkalovo 86.27 325** P **P** **04 31 06.5 -2.2**
CHKZ pmax pmax
comp=Z,3.0nm,0.5s
**BRVK Borovoye 86.31 324***ce*P **P** **04 31 08.4 -0.5**
BRVK pmax pmax
comp=Z,10.0nm,1.2s
**BRVK Borovoye 86.31 324** *e*P **P** **04 31 08.5 -0.5**
BRVK *e*pP **pP** **04 32 15.6 -0.7**
**ZRNK Zerenda 87.04 324** P **P** **04 31 10.4 -2.1**
ZRNK pmax pmax
comp=Z,3.0nm,0.5s
**EGAK Eagle 87.24 24** *e*P **P** **04 31 13.6 +0.4**
comp=Z,21nm,0.9s
EGAK *e*pP **pP** **04 32 17.6 -3.0**
**SKAG Skagway 88.41 30** *e*P **P** **04 31 19.2 +0.4**
comp=Z,23nm,1.3s
**INK Inuvik 91.12 21** *e*P **P** **04 31 30.7 -0.4**
INK pmax pmax
comp=Z,11nm,1.0s
**INK Inuvik 91.12 21** *e*P **P** **04 31 30.7 -0.4**
comp=Z,12nm,1.0s
**SYO Syowa Base 91.14 200**⇓ *e*P **P** **04 31 30.0 -1.3**
**AB31 Akbulak array 92.08 319** *i* P **P** **04 31 34.6 -1.5**
AB31 pmax pmax
comp=Z,6.0nm,0.8s
**ABKAR Akbulak array 92.08 319** *e*P **P** **04 31 34.8 -1.2**
ABKAR *e*pP **pP** **04 32 40.4 -3.6**
**GEYT Alibeck 92.34 308** P **P** **04 31 36.9 -0.7**
comp=Z,1.7nm,0.5s,baz=22,slow=8.0,SNR=3.4
**KMRM Mail Ridge 92.95 50** *e*P **P** **04 31 42.8 +2.4**
comp=Z,51nm,1.1s
**KHMM Horse Mountain 92.99 49** *e*P **P** **04 31 41.9 +1.2**
comp=Z,36nm,1.0s
**KCPM Cahto Peak 93.01 51** *e*P **P** **04 31 41.7 +0.9**
comp=Z,19nm,0.9s
**ARU Arti 93.55 326***c* *i*P **P** **04 31 41.7 -1.0**
ARU 04 35 29.6
ARU S **SKSac** **04 41 48.0 -1.3**
ARU SS **SS** **04 48 52.5 +1.9**
ARU pmax pmax
comp=Z,5.0nm,1.2s
**NSHM Saint Helena R 93.68 52** *e*P **P** **04 31 45.5 +1.8**
**YBH Yreka Blue Hor 93.82 49** *e*P **P** **04 31 46.1 +1.8**
**YBH Yreka Blue Hor 93.82 49** *e*P **P** **04 31 46.1 +1.8**
**WDC Whiskeytown Da 93.87 50** *e*P **P** **04 31 44.7 +0.2**
WDC pmax pmax
comp=Z,15nm,0.9s
**WDC Whiskeytown Da 93.87 50** *e*P **P** **04 31 44.7 +0.2**
comp=Z,15nm,0.9s
**OHCM Honcut 94.60 51** *e*P **P** **04 31 49.0 +1.1**
**CMB Columbia Colle 95.40 52** *e*P **P** **04 31 52.2 +0.6**
**CMB Columbia Colle 95.40 52** *e*P **P** **04 31 52.2 +0.6**
**MOD Modoc 95.62 49** *e*P **P** **04 31 52.2 -0.4**
comp=Z,9.1nm,1.1s
**E07A Sunnyside 96.09 44** *e*P **P** **04 31 55.1 +0.6**
**I07A Izee 96.28 46** *e*P **P** **04 31 56.1 +0.6**
**HAWA Hanford 96.31 44** *e*P **P** **04 31 56.0 +0.5**

comp=Z,7.8nm,0.8s
**G08A Pilot Rock 96.69 45** *e*P **P 04 31 58.7 +1.3**
**D08A Wollman Farm, 96.74 43** *e*P **P 04 31 58.1 +0.7**
**MTUM Tungsten Hills 96.82 53** *e*P **P 04 31 59.5 +1.2**
**ISA Isabella 96.84 55** *e*P **P 04 31 59.1 +0.9**
**ISA Isabella 96.84 55** *e*P **P 04 31 59.1 +0.9**
**WVOR Wild Horse Val 96.88 48** *e*P **P 04 31 58.2 -0.1**
WVOR pmax pmax
comp=Z,7.0nm,0.9s
**WVOR Wild Horse Val 96.88 48** *e*P **P 04 31 58.2 -0.1**
comp=Z,7.4nm,0.9s
**J08A Circle Bar Ran 97.01 47** *e*P Pdif 04 31 59.7 +0.8
**NV01 Mina Array Sit 97.05 52** *e*P Pdif 04 31 59.7 +0.3
**NVAR Mina Array Bea 97.05 52** P Pdif 04 31 59.7 +0.3
comp=Z,7.6nm,0.8s,baz=256,slow=6.4,SNR=53
NVAR PP **PP 04 35 57.2 -2.0**
comp=Z,0.9nm,0.9s,baz=269,slow=8.9,SNR=5.1
**MWC Mount Wilson 97.14 56** *e*P **P 04 31 59.4 -0.4**
MWC pmax pmax
comp=Z,20nm,1.1s
**MWC Mount Wilson 97.14 56** *e*P **P 04 31 59.4 -0.4**
comp=Z,20nm,1.1s
**C09A Chrisman Ranch 97.18 43** *e*P Pdif 04 31 59.9 +0.5
**DAC Darwin (Calif) 97.57 54** *e*P **P 04 32 00.1 -1.6**
**DAC Darwin (Calif) 97.57 54** *e*P **P 04 32 00.1 -1.6**
**F10A Beach Ranch, E 97.91 44** *e*P Pdif 04 32 03.2 +0.3
**NEW Newport 97.95 42** *e*P Pdif 04 32 03.0 +0.1
NEW pmax pmax
comp=Z,9.0nm,0.9s
**NEW Newport 97.95 42** *e*P Pdif 04 32 03.0 +0.1
comp=Z,8.9nm,0.9s
**PFO Pinyon Flat Ob 98.46 57** *e*P **P 04 32 06.9 +1.3**
**PFO Pinyon Flat Ob 98.46 57** *e*P **P 04 32 06.9 +1.3**
**YKA Yellowknife Ar 98.67 28** P Pdif 04 32 05.3 -0.3
comp=Z,1.8nm,0.7s,baz=278,slow=3.8,SNR=3.4
**MFID Camas Ranch 98.94 47** *e*Pdif **P 04 32 08.8 +1.2**
**ELK Elko 99.42 50** *e*P **Pdif 04 32 10.8 +0.9**
**ELK Elko 99.42 50** *e*Pdif **Pdif 04 32 10.8 +0.9**
**SHPR Sheep Range 99.53 54** *e*Pdif **Pdif 04 32 11.7 +1.3**
comp=Z,1.8nm,0.7s
**HLID Hailey 99.96 47** *e*Pdif **Pdif 04 32 13.2 +1.1**
**SNAA Sanae 100.58 189** P **Pdif 04 32 13.8 -0.4**
**SNAA Sanae 100.58 189** *e*P **Pdif 04 32 13.9 -0.3**
**CCUT Cedar City 100.95 53** *e*Pdif **Pdif 04 32 18.5 +1.7**
**SPUT South Promonto 101.51 49** *e*Pdif **Pdif 04 32 19.9 +0.8**
**NLU North Lily Min 101.87 50** *e*Pdif **Pdif 04 32 21.7 +0.9**
**SRU San Rafael 103.11 51** *e*P **Pdif 04 32 27.3 +1.0**
**SRU San Rafael 103.11 51** *e*Pdif **Pdif 04 32 27.3 +1.0**
**BW06 Boulder Array 103.56 47** *e*Pdif **Pdif 04 32 28.1 -0.1**
**O20A White River Ci 104.79 50** *e*Pdif **Pdif 04 32 35.3 +1.6**
**ARCES ARCESS Array B 105.66 342** Pdiff **Pdif 04 32 36.2 -0.5**
comp=Z,3.9nm,0.8s,baz=51,slow=7.4,SNR=4.2
ARCES PKiKP **PKiKP 04 36 46.6 -1.4**
comp=Z,4.6nm,1.0s,baz=75,slow=1.4,SNR=6.5
ARCES PKKPbc **PKKPbc 04 48 11.0 -5.1**
comp=Z,4.4nm,1.0s,baz=242,slow=4.2,SNR=7.9
**ANMO Albuquerque 106.68 55** PKiKP **PKiKP 04 36 51.1 -0.1**
comp=Z,0.4nm,0.3s,baz=199,slow=3.8,SNR=6.5
**FINES FINESS Array B 109.10 334** Pdiff **Pdif 04 32 50.0 -2.1**
comp=Z,2.9nm,0.9s,baz=88,slow=5.5,SNR=3.3
**KMBO Kilima Mbogo 109.48 267** Pdiff **Pdif 04 32 54.9 -0.3**
comp=Z,0.8nm,0.3s,baz=119,slow=19,SNR=11
**KMBO Kilima Mbogo 109.48 267** P **Pdif 04 32 54.9 -0.3**
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**KMBO Kilima Mbogo 109.48 267** *e*Pdif **Pdif 04 32 55.4 +0.2**
**TXAR Lajitas Array 109.53 61** Pdiff **Pdif 04 32 58.2 +3.4**
comp=Z,0.2nm,0.8s,baz=285,slow=3.5,SNR=2.8
TXAR PKiKP **PKiKP 04 36 56.1 -0.4**
comp=Z,0.9nm,0.8s,baz=226,slow=1.4,SNR=11
TXAR PKKP **PKKPab 04 48 14.9 +0.3**
comp=Z,0.4nm,0.8s,baz=111,slow=6.9,SNR=4.1
**ULM Lac du Bonnet 111.33 38** PKiKP **PKiKP 04 36 57.4 -1.8**
comp=Z,3.1nm,0.6s,baz=242,slow=2.1,SNR=4.3
**AKASG Malin Array Be 111.50 323** PKiKP **PKiKP 04 36 58.1 -1.3**
comp=Z,0.3nm,0.3s,baz=50,slow=2.4,SNR=3.9
**AKASG Malin Array Be 111.50 323** *i* PKiKP **PKiKP 04 37 03.2 +3.7**
**JCT Junction City 112.74 59** *e*PKiKP **PKiKP 04 37 01.9 -0.7**
**JCT Junction City 112.74 59** *e*PKP **PKiKP 04 37 01.9 -0.7**
**KOLS Kolonicke sedl 116.33 323** *e*P **Pdif 04 33 26.2 +1.6**
KOLS *e* 04 37 08.5
**KOLS Kolonicke sedl 116.33 323** PDIF **Pdif 04 33 26.2 +1.6**
**KOLS Kolonicke sedl 116.33 323** *e*PKP **PKPdf 04 37 08.4 -0.5**
**UALR University of 118.15 53** *e*PKPdf **PKPdf 04 37 12.3 -0.4**
**CCM Cathedral Cave 118.15 50** *e*PKIKP **PKPdf 04 37 11.3 -1.4**
**CCM Cathedral Cave 118.15 50** *e*PKPdf **PKPdf 04 37 11.3 -1.4**
**VYHS Vyhne 118.58 323** *e*PKIKP **PKPdf 04 37 15.1 +1.9**
**VYHS Vyhne 118.58 323** *e*PKP **PKPdf 04 37 15.1 +1.9**
**BRG Berggiesshubel 120.16 328** *i* PKP **PKPdf 04 37 15.4 -0.7**
comp=Z,11nm,1.1s
**BRG Berggiesshubel 120.16 328** *i* PKIKP **PKPdf 04 37 15.4 -0.7**
BRG pmax pmax
comp=Z,11nm,1.1s
**CLL Collm 120.42 328** *i* PKIKP **PKPdf 04 37 15.5 -1.1**
CLL pmax pmax
comp=Z,7.0nm,1.0s
**CLL Collm 120.42 328** *i* PKiKP **PKPdf 04 37 15.5 -1.1**
comp=Z,7.0nm,1.0s
**OXF Oxford 120.55 53** *e*PKIKP **PKPdf 04 37 16.1 -1.3**
**OXF Oxford 120.55 53** *e*PKPdf **PKPdf 04 37 16.1 -1.3**
**BLO Bloomington 121.30 47** *e*PKIKP **PKPdf 04 37 17.8 -0.9**
**BLO Bloomington 121.30 47** *e*PKPdf **PKPdf 04 37 17.8 -0.9**
**GERES GERESS Array B 121.37 326** PKP **PKPdf 04 37 17.8 -0.9**
comp=Z,1.9nm,0.5s,baz=89,slow=1.5,SNR=17
GERES PKKPbc **PKKPab 04 47 20.2 -1.8**
comp=Z,0.2nm,0.4s,baz=196,slow=3.9,SNR=4.6
**WCI Wyandotte Cave 121.80 48** *e*PKIKP **PKPdf 04 37 18.8 -1.0**
**WCI Wyandotte Cave 121.80 48** *e*PKPdf **PKPdf 04 37 18.8 -1.0**
**LRAL Lakeview Retre 122.89 54** *e*PKPdf **PKPdf 04 37 20.6 -1.3**
**SWET Sewanee 123.08 51** *e*PKPdf **PKPdf 04 37 20.5 -1.8**
**MOTA Moosalm 123.65 325**⇑ *i*PKPdf **PKPdf 04 37 22.0 -1.2**
comp=Z,14nm,1.2s
**SCHQ Schefferville 123.71 23** PKP **PKPdf 04 37 21.8 -1.1**
comp=Z,6.8nm,0.7s,baz=19,slow=2.2,SNR=10.0
**STU Stuttgart 123.88 328** *e*PKIKP **PKPdf 04 37 23.2 -0.2**
**STU Stuttgart 123.88 328** *e*PKPdf **PKPdf 04 37 23.2 -0.2**
**SADO Sadowa 123.88 38** PKP **PKPdf 04 37 22.2 -1.3**
comp=Z,9.4nm,0.7s,baz=328,slow=4.7,SNR=5.0
**FETA Feichten 124.04 325**⇑ *i*PKiKP **PKPdf 04 37 23.4 -0.6**
comp=Z,7.4nm,1.1s
**DAVA Damuels 124.37 326**⇑ *i*PKPdf **PKPdf 04 37 21.1 -3.5**
comp=Z,8.1nm,0.8s
**TSUM Tsumeb 124.48 242** *e*PKPdf **PKPdf 04 37 25.8 +0.3**
**TKL Tuckaleechee C 124.59 50** PKP **PKPdf 04 37 24.4 -0.7**
comp=Z,17nm,0.9s,baz=241,slow=2.8,SNR=17
**BFO Black Forest 124.61 328***e*PKIKP **PKPdf 04 37 24.7 -0.1**
**GOGA Godfrey 125.59 52** *e*PKIKP **PKPdf 04 37 26.4 -0.7**
**GOGA Godfrey 125.59 52** *e*PKPdf **PKPdf 04 37 26.4 -0.7**
**TIGA Tifton 126.12 55** *e*PKPdf **PKPdf 04 37 27.6 -0.5**
**BLA Blacksburg 126.49 47** *e*PKIKP **PKPdf 04 37 27.2 -1.6**
**BLA Blacksburg 126.49 47** *e*PKPdf **PKPdf 04 37 27.1 -1.6**
**KMSC Kings Mountain 126.63 50** *e*PKPdf **PKPdf 04 37 27.4 -1.7**
**BNI Bardonecchia 127.48 325** *e*PKIKP **PKPdf 04 37 30.1 -0.4**
**BNI Bardonecchia 127.48 325** *e*PKPdf **PKPdf 04 37 30.1 -0.4**
**LCO Las Campanas 130.21 136** *e*PKPdf **PKPdf 04 37 38.0 +1.6**
**BCIP Isla Barro Col 133.48 83** *e*PKPdf **PKPdf 04 37 42.0 -0.6**
**OTAV Otavalo 134.40 95** *e*PKPdf **PKPdf 04 37 44.7 -0.2**
**ESDC Sonseca Array 136.95 327** SKPbc **SKPbc 04 40 52.3 -2.1**
comp=Z,0.2nm,0.3s,baz=21,slow=2.4,SNR=4.5
**ROSC El Rosal 138.90 89** PKhKP PKPpre 04 37 41.9
comp=Z,2.4nm,0.6s,baz=262,slow=19,SNR=2.9
ROSC PKP **PKPdf 04 37 53.3 +0.1**
comp=Z,14nm,0.5s,baz=321,slow=12,SNR=15
**LPAZ La Paz 139.17 122** PKhKP PKPpre 04 37 43.8
comp=Z,1.0nm,0.5s,baz=273,slow=6.2,SNR=6.1
LPAZ PKP **PKiKP 04 37 55.1 -1.1**
comp=Z,4.4nm,0.5s,baz=268,slow=2.0,SNR=16
LPAZ SKP 04 41 03.4
comp=Z,2.2nm,0.9s,baz=288,slow=2.9,SNR=4.3
**CPUP Villa Florida 140.66 144** PKhKP PKPpre 04 37 47.5
comp=Z,2.7nm,0.7s,baz=256,slow=4.6,SNR=9.6
CPUP PKP **PKPdf 04 37 56.7 +1.1**
comp=Z,7.4nm,0.8s,baz=243,slow=2.2,SNR=4.6
**SMN1 Samana, DR 142.17 66** *e*PKPpre PKPpre 04 37 53.4
**SDV Santo Domingo 142.58 82** *e*PKPpre PKPpre 04 37 54.8
**CRPR Cabo Rojo, PR 144.47 66** *e*PKPdf **PKPab 04 38 00.0 -1.6**
**LRS Lares 144.63 66** *e*PKPdf PKPbc 04 38 01.1 -1.1
**TOA0 Torodi Ar. Sit 144.87 285** *e*P PKPbc 04 38 01.9 -1.2
**TORD Torodi Ar. Bea 144.87 285** PKP PKPbc 04 38 02.4 -0.7
comp=Z,12nm,0.6s,baz=69,slow=3.2,SNR=256
TORD pPKP pPKPdf 04 39 13.1 -1.7
comp=Z,9.5nm,0.8s,baz=72,slow=2.9,SNR=6.1
TORD SKPbc **SKPbc 04 41 13.9 -1.6**
comp=Z,4.1nm,0.9s,baz=66,slow=1.6,SNR=6.1
TORD SKKPbc **SKKPab 04 49 18.6 +2.4**
comp=Z,0.7nm,0.7s,baz=272,slow=4.3,SNR=4.7
**OBIP Obispado Ponce 144.91 66** *e*PKPdf PKPbc 04 38 01.8 -1.3
**CELP Cerrillos 144.93 66** *e*PKPdf PKPbc 04 38 02.1 -1.1
**SJG San Juan 145.31 66** *e*PKIKP **PKPdf 04 38 03.3 -0.6**
**SJG San Juan 145.31 66** *e*PKPbc **PKPdf 04 38 03.3 -0.6**
**SAML Samuel 146.77 115** *e*PKPdf **PKPdf 04 38 06.2 -0.3**
SAML *e*PKPbc **PKPbc 04 38 08.8 +0.1**
**SMRT St. Maarten 148.10 64** *e*P **PKPbc 04 38 11.0 -1.2**
**SKI Saint Kitts 148.64 65** *e*P **PKPbc 04 38 13.0 -0.6**
**MBWH 149.32 66** *e*P **PKPbc 04 38 14.0 -1.3**
**LZG Guadaloupe-1 149.89 67** *e*P **PKPbc 04 38 15.6 -1.0**
**HMG Houelmont 150.00 67** *e*P **PKPbc 04 38 16.0 -1.1**
**ECG Echelle 150.03 67** *e*P **PKPbc 04 38 16.9 -0.3**
**PHG Guadaloupe-2 150.05 67** *e*P **PKPbc 04 38 16.9 -0.2**
**MGG Marie-Galante 150.38 67** *e*P **PKPbc 04 38 17.0 -0.7**
**DEG La Desirade 150.49 66** *e*P **PKPbc 04 38 17.2 -0.9**
**BAMF Morne Balai 150.85 69** *e*P **PKPbc 04 38 19.6 +0.6**
**FDF Fort de France 150.87 69** *e*P **PKPbc 04 38 19.0 0.0**
**ZAM Aeronautique 151.02 70** *e*P **PKPbc 04 38 19.9 +0.6**
**KIC Kosan Boka 151.81 273** *e*P **PKPbc 04 38 19.7 -1.5**
comp=Z,37nm,1.3s
**DBIC Dimbokro 151.92 274** PKPbc **PKPbc 04 38 20.8 -0.6**
comp=Z,5.9nm,0.7s,baz=70,slow=4.3,SNR=11
**TIC Toumodi 152.08 274** *e*P **PKPbc 04 38 21.8 0.0**
**BDFB Brasilia 154.39 145** PKP **PKPdf 04 38 18.6 +0.3**
comp=Z,4.9nm,0.8s,baz=222,slow=3.4,SNR=11
BDFB PKPbc **PKiKP 04 38 27.3 +0.4**
comp=Z,3.8nm,0.5s,baz=244,slow=4.9,SNR=6.5
BDFB PKPab **PKPab 04 38 41.8 -0.3**
comp=Z,12nm,0.9s,baz=144,slow=3.6,SNR=11

**DJA 22 04:33:11.1±0.2, 1°N±2°×10°0E±°, h10km, M4.2/25, mb4.2/6, mB5.9/3, MLv4.0/25, Mw(mB)5.5/3, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MNSI** | **Mandailing Nat** | **0.25** | **303** | P | P | Pg | 04 33 16.3 | +0.1 |
| MNSI | | | | S | S | Sg | 04 33 20.6 | +1.0 |
| **PPI** | **Padang Panjang** | **1.27** | **151** | P | P | Pn | 04 33 33.8 | -1.0 |
| PPI | | | | S | S | Sb | 04 33 50.8 | -0.6 |
| **BKNI** | **Bangkinang** | **1.29** | **105** | P | P | Pn | 04 33 33.1 | -2.1 |
| BKNI | | | | S | S | Sb | 04 33 50.2 | -2.0 |
| **SISI** | **Saibi** | **2.09** | **200** | P | P | Pn | 04 33 46.8 | +0.5 |
| **SDSI** | **Sungai Dareh** | **2.28** | **134** | P | P | Pn | 04 33 49.4 | +0.6 |
| **GSI** | **Gunungsitoli** | **2.31** | **286** | P | P | Pn | 04 33 49.2 | 0.0 |
| **TSI** | **Tuntungan** | **3.08** | **337** | P | P | Pn | 04 33 58.6 | -1.2 |
| **PPSI** | **Pulau Pagai** | **3.41** | **176** | P | P | Pn | 04 34 05.0 | +0.7 |
| **KCSI** | **Kotacane, Aceh** | **3.49** | **325** | P | P | Pn | 04 34 06.0 | +0.5 |
| **SNSI** | **Sinabang, Aceh** | **3.87** | **297** | P | P | Pn | 04 34 11.1 | +0.3 |
| **TPRI** | **Tanjung Pinang** | **4.74** | **87** | P | P | Pn | 04 34 22.6 | -0.1 |
| **MLSI** | **Meulaboh, Aceh** | **4.93** | **317** | P | P | Pn | 04 34 24.7 | -0.6 |
| **MNAI** | **Manna** | **5.91** | **148** | P | P | Pn | 04 34 37.3 | -1.4 |
| | 117nm,1.8s,0.8nm | | | | | | | |
| **MDSI** | **Maura Dua** | **6.73** | **139** | P | P | Pn | 04 34 49.4 | -0.7 |
| | 6.5nm,3.1s,0.0nm | | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.94** | **114** | P | P | Pn | 04 34 52.7 | -0.2 |
| | 8.5nm,1.8s,27µm1.7nm | | | | | | | |
| **LWLI** | **Liwa** | **7.07** | **143** | P | P | Pn | 04 34 54.0 | -0.9 |

**CSEM 22 04:34:39.1, 42°54N×13°16E, h9km, MD1.3/5, After ROM, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RM29** | **Verrico (Monte** | **0.04** | **65** | Pg | Pg | Pg | 04 34 41.2 | +0.2 |
| RM29 | | | | Sg | Sg | Sg | 04 34 42.7 | +0.4 |
| | 199nm,0.2s | | | | | | | |
| **RM33** | **Pellescritta (** | **0.06** | **128** | Pg | Pg | Pg | 04 34 41.6 | +0.5 |
| RM33 | | | | Sg | Sg | Sg | 04 34 42.6 | 0.0 |
| | 131nm,0.3s | | | | | | | |
| **LNSS** | **Leonessa** | **0.10** | **305** | Pg | Pg | Pg | 04 34 42.0 | +0.2 |
| LNSS | | | | Sg | Sg | Sg | 04 34 44.1 | +0.5 |
| | 36nm,0.1s | | | | | | | |
| **RM32** | **Poggio Cancell** | **0.10** | **76** | Pg | Pg | Pg | 04 34 42.0 | +0.2 |
| RM32 | | | | Sg | Sg | Sg | 04 34 44.2 | +0.5 |
| | 93nm,0.3s | | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.16** | **57** | Pg | Pg | Pg | 04 34 43.0 | +0.3 |
| SMA1 | | | | Sg | Sg | Sg | 04 34 46.0 | +0.9 |
| | 146nm,0.2s | | | | | | | |

**CSEM 22 04:35:08.3, 42°52N×13°18E, h10km, MD2.1/10, After ROM, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RM33** | **Pellescritta (** | **0.03** | **114** | Pg | Pg | Pg | 04 35 10.8 | +0.5 |
| RM33 | | | | Sg | Sg | Sg | 04 35 12.2 | +0.5 |
| **RM29** | **Verrico (Monte** | **0.04** | **21** | Pg | Pg | Pg | 04 35 10.7 | +0.2 |
| RM29 | | | | Sg | Sg | Sg | 04 35 12.3 | +0.3 |
| **RM32** | **Poggio Cancell** | **0.10** | **59** | Pg | Pg | Pg | 04 35 11.5 | +0.4 |
| RM32 | | | | Sg | Sg | Sg | 04 35 13.6 | +0.5 |
| **LNSS** | **Leonessa** | **0.13** | **309** | Pg | Pg | Pg | 04 35 11.6 | 0.0 |
| LNSS | | | | Sg | Sg | Sg | 04 35 13.9 | 0.0 |
| **SMA1** | **SAN MARTINO** | **0.16** | **46** | Pg | Pg | Pg | 04 35 12.5 | +0.5 |
| SMA1 | | | | Sg | Sg | Sg | 04 35 15.4 | +0.8 |
| **FIAM** | **Fiamignano** | **0.26** | **191** | Pg | Pg | Pg | 04 35 14.3 | +0.6 |
| FIAM | | | | Sg | Sg | Sb | 04 35 18.7 | -1.1 |
| | 42nm,0.4s | | | | | | | |
| **NRCA** | **Norcia** | **0.32** | **351** | Pg | Pg | Pg | 04 35 14.6 | -0.2 |
| **TERO** | **Teramo** | **0.33** | **72** | Pg | Pg | Pg | 04 35 15.1 | +0.1 |
| TERO | | | | Sg | Sg | Sg | 04 35 20.3 | +0.9 |
| **FAGN** | **Fagnano** | **0.39** | **130** | Pg | Pg | Pg | 04 35 16.2 | +0.1 |
| FAGN | | | | Sg | Sg | Sg | 04 35 22.1 | +0.7 |
| | 34nm,0.5s | | | | | | | |
| **CESX** | **Cesi** | **0.45** | **282** | Pg | Pg | Pb | 04 35 18.3 | -0.1 |
| CESX | | | | Sg | Sg | Sb | 04 35 24.6 | -0.7 |
| | 26nm,0.4s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.50** | **104** | Pg | Pg | Pb | 04 35 19.3 | -0.1 |
| VCEL | | | | Sg | Sg | Sb | 04 35 26.4 | -0.5 |
| **CESI** | **CESI - Serrava** | **0.53** | **337** | Pg | Pg | Pg | 04 35 18.4 | -0.3 |
| CESI | | | | Sg | Sg | Sg | 04 35 26.3 | +0.6 |
| | 9.0nm,0.4s | | | | | | | |
| **SNTG** | **Esanatoglia** | **0.76** | **347** | Pg | Pg | Pg | 04 35 22.6 | -0.4 |
| SNTG | | | | Sg | Sg | Sb | 04 35 33.9 | -0.2 |
| **GUMA** | **Gualdo di Mace** | **0.78** | **45** | Pg | Pg | Pg | 04 35 19.3 | -4.1 |
| GUMA | | | | Sg | Sg | Sg | 04 35 28.2 | -5.4 |
| | 56nm,0.3s | | | | | | | |
| **MURB** | **Monte Urbino** | **0.89** | **327** | Pg | Pg | Pb | 04 35 25.8 | -0.1 |

*IDC **22** 04:38:10.9±1.0, 33°.14S×178°.53W, h0km, mb4.3/3, mb1 4.5/4, mb1mx4.0/28, mbtmp4.3/4, ML4.0/1, MS3.5/2, Ms1 3.5/2, ms1mx2.9/24, Error ellipse: s-maj=34.4km s-min=29.0km az=78.0*
*ISCJB **22** 04:38:14.2±1.3, 33°.21S±0°.09×178°.7W±0°.2, h32km, mb4.4/7, MS3.3/1, Error ellipse: s-maj=26.2km s-min=12.3km az=12.4*
*NEIC **22** 04:38:16.0±0.6, 33°.19S×178°.64W, h35km, mb4.4/5, Error ellipse: s-maj=17.4km s-min=13.9km az=77.0*

**ISC 22 04:38:15.8±1.0, 33°.2S±0°.1×178°.7W±0°.2, h32km, n21, σ0.88/17, mb4.4/7, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **6.13** | **213** | Pn | **Pn** | **Pn** | **04 39 43.3** | **-0.9** |
| | 3.6nm,0.3s,baz=13,slow=1.7,SNR=20 | | | | | | | |
| URZ | | | | Sn | **Sn** | **Sn** | **04 40 53.9** | **+0.7** |
| | 5.1nm,0.3s,baz=133,slow=21,SNR=8.6 | | | | | | | |
| **DZM** | **Mont Dzumac** | **17.18** | **306** | LR | LR | LR | 04 47 44.3 | |
| | comp=Z,207nm,18.5s,baz=236,slow=33 | | | | | | | |
| **PPT** | **Papeete** | **30.40** | **66** | LR | LR | LR | 04 56 40.9 | |
| | comp=Z,62nm,18.2s,baz=248,slow=37 | | | | | | | |
| **CTAO** | **Charters Tower** | **33.78** | **284** | *e*P | **P** | **P** | **04 44 54.4** | **-0.5** |
| | 12nm,0.8s | | | | | | | |
| **ASAR** | **Alice Springs** | **42.47** | **270** | P | **P** | **P** | **04 46 08.8** | **+0.7** |
| | 5.9nm,0.6s,baz=108,slow=7.5,SNR=60 | | | | | | | |
| **WRAB** | **Tennant Creek** | **43.70** | **275** | *e*P | **P** | **P** | **04 46 18.5** | **+0.5** |
| | 2.6nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.71** | **275** | P | **P** | **P** | **04 46 18.8** | **+0.7** |
| | 3.2nm,0.7s,baz=118,slow=7.7,SNR=33 | | | | | | | |
| **QSPA** | **South Pole Qui** | **56.95** | **180** | P | **P** | **P** | **04 47 58.8** | **+1.0** |
| | 4.3nm,1.2s,baz=70,slow=2.9,SNR=6.7 | | | | | | | |
| **QSPA** | **South Pole Qui** | **56.95** | **180** | *e*P | **P** | **P** | **04 47 58.5** | **+0.7** |
| | 2.8nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **75.41** | **179** | P | P | P | 04 50 05.8 | +10 |
| **SNAA** | **Sanae** | **75.41** | **179** | *e*P | **P** | **P** | **04 49 55.4** | **-0.6** |
| | 1.6nm,1.0s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **75.59** | **176** | P | P | P | 04 50 06.5 | +10 |
| **VNA2** | **Neumayer--Watz** | **76.02** | **177** | P | P | P | 04 50 10.4 | +11 |
| | baz=169,slow=4.9 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **76.25** | **177** | P | P | P | 04 50 11.0 | +10 |
| **SLVN** | **Son La** | **91.53** | **294** | *e*P | **P** | **P** | **04 51 18.4** | **-1.2** |
| | 1.3nm,0.4s | | | | | | | |
| **FINES** | **FINESS Array B** | **147.51** | **338** | PKPbc | **PKPbc** | **PKPbc** | **04 57 55.2** | **-0.7** |
| | 6.0nm,0.9s,baz=66,slow=2.3,SNR=7.6 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **151.38** | **350** | PKP | **PKPbc** | **PKPbc** | **04 58 06.1** | **+0.6** |
| | comp=Z,15nm,1.7s,baz=17,slow=2.6 | | | | | | | |
| **NOA** | **NORSAR Array B** | **151.38** | **350** | PKPbc | **PKPbc** | **PKPbc** | **04 58 05.2** | **-0.3** |
| | comp=Z,0.5nm,0.7s,baz=21,slow=3.8,SNR=3.5 | | | | | | | |
| **AKASG** | **Malin Array Be** | **153.08** | **319** | PKPbc | **PKPbc** | **PKPbc** | **04 58 09.5** | **-0.1** |
| | comp=Z,0.4nm,0.4s,baz=51,slow=3.0,SNR=3.3 | | | | | | | |
| AKASG | | | | PKPab | **PKPab** | **PKPab** | **04 58 23.1** | **+1.9** |
| | comp=Z,0.4nm,0.5s,baz=57,slow=3.2,SNR=3.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **153.29** | **293** | PKPbc | **PKPbc** | **PKPbc** | **04 58 11.1** | **+0.4** |
| | comp=Z,1.6nm,0.6s,baz=150,slow=3.9,SNR=7.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **160.07** | **181** | PKPab | **PKPab** | **PKPab** | **04 58 51.5** | **-0.6** |
| | comp=Z,1.2nm,1.2s,baz=174,slow=4.3,SNR=3.1 | | | | | | | |

**IDC 22 04:39:44.8±2.5, 33°.08S×178°.39W, h0km, mb4.2/2, mb1 4.5/3, mb1mx3.9/22, mbtmp4.2/3, ML4.0/1, Error ellipse: s-maj=67.3km s-min=44.1km az=132.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **6.33** | **214** | P | Pn | Pn | 04 41 19.1 | -0.3 |
| | 3.2nm,0.3s,baz=54,slow=19,SNR=6.3 | | | | | | | |
| URZ | | | | Sn | Sn | Sn | 04 42 27.9 | -4.5 |
| | 4.2nm,0.3s,baz=139,slow=19,SNR=6.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.70** | **270** | P | P | P | 04 47 43.9 | +0.1 |
| | 3.3nm,0.6s,baz=108,slow=7.4,SNR=9.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.94** | **275** | P | P | P | 04 47 53.4 | -0.3 |
| | 2.0nm,0.8s,baz=116,slow=8.1,SNR=8.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **147.53** | **338** | PKPbc | PKPbc | PKPbc | 04 59 29.9 | -0.2 |
| | 0.8nm,0.4s,baz=64,slow=4.4,SNR=4.3 | | | | | | | |
| **BRTR** | **Keskin Array B** | **153.48** | **294** | PKPbc | PKPbc | PKPbc | 04 59 44.7 | -0.6 |
| | 0.8nm,0.6s,baz=114,slow=2.4,SNR=4.2 | | | | | | | |

**CSEM 22 04:41:17.8, 42°.54N×13°.17E, h11km, MD1.9/10, After ROM, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RM29** | **Verrico (Monte** | **0.04** | **47** | Pg | Pg | Pg | 04 41 20.4 | +0.4 |
| RM29 | | | | Sg | Sg | Sg | 04 41 21.9 | +0.3 |
| | 380nm,0.2s | | | | | | | |
| **RM33** | **Pellescritta (** | **0.04** | **129** | Pg | Pg | Pg | 04 41 20.4 | +0.4 |
| RM33 | | | | Sg | Sg | Sg | 04 41 21.8 | +0.2 |
| | 734nm,0.2s | | | | | | | |
| **RM32** | **Poggio Cancell** | **0.10** | **70** | Pg | Pg | Pg | 04 41 21.2 | +0.5 |
| RM32 | | | | Sg | Sg | Sg | 04 41 22.4 | -0.4 |
| | 154nm,0.2s | | | | | | | |
| **LNSS** | **Leonessa** | **0.12** | **305** | Pg | Pg | Pg | 04 41 21.2 | +0.3 |
| LNSS | | | | Sg | Sg | Sg | 04 41 23.1 | +0.4 |
| **SMA1** | **SAN MARTINO** | **0.15** | **53** | Pg | Pg | Pg | 04 41 22.2 | +0.7 |
| SMA1 | | | | Sg | Sg | Sg | 04 41 25.2 | +1.1 |
| **FIAM** | **Fiamignano** | **0.27** | **188** | Pg | Pg | Pg | 04 41 23.9 | +0.4 |
| FIAM | | | | Sg | Sg | Sg | 04 41 28.4 | +1.1 |
| | 23nm,0.4s | | | | | | | |
| **NRCA** | **Norcia** | **0.30** | **352** | Pg | Pg | Pg | 04 41 24.3 | +0.3 |
| NRCA | | | | Sg | Sg | Sg | 04 41 29.1 | +0.9 |
| | 66nm,0.1s | | | | | | | |
| **TERO** | **Teramo** | **0.33** | **75** | Pg | Pg | Pg | 04 41 24.9 | +0.3 |
| TERO | | | | Sg | Sg | Sg | 04 41 30.0 | +0.9 |
| **FAGN** | **Fagnano** | **0.41** | **131** | Pg | Pg | Pg | 04 41 25.9 | -0.1 |
| FAGN | | | | Sg | Sb | Sg | 04 41 33.0 | -0.5 |
| **CESI** | **CESI - Serrava** | **0.51** | **338** | Pg | Pg | Pg | 04 41 27.9 | +0.1 |
| CESI | | | | Sg | Sb | Sg | 04 41 35.8 | -0.6 |

**AUST 22 04:45:41.2±0.0, 33°.36S×149°.50E, h0km, Error ellipse: s-maj=0.1km s-min=0.1km az=2.0, New South Wales**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **YNG** | **Young** | **1.31** | **224** | P | Pn | Pn | 04 46 07.6 | +0.8 |
| | baz=1.3 | | | | | | | |
| **YNG** | **Young** | **1.31** | **224** | P | Pn | Pn | 04 46 07.7 | +0.8 |
| | baz=1.2,SNR=86 | | | | | | | |
| **MGCD** | **Mangrove Creek** | **1.36** | **84** | P | Pg | Pg | 04 46 06.6 | -0.7 |
| | baz=1.4 | | | | | | | |
| **MGCD** | **Mangrove Creek** | **1.36** | **84** | P | Pg | Pg | 04 46 06.6 | -0.7 |
| | baz=1.4,SNR=341 | | | | | | | |
| **RIV** | **Riverview** | **1.46** | **109** | P | Pn | Pn | 04 46 08.5 | -0.4 |
| | baz=1.5 | | | | | | | |
| **CNB** | **Canberra Magne** | **1.95** | **183** | P | Pn | Pn | 04 46 15.6 | -0.2 |
| | baz=2.0 | | | | | | | |
| **CAN** | **Canberra** | **2.00** | **192** | P | Pn | Pn | 04 46 16.5 | +0.1 |
| | baz=2.0 | | | | | | | |
| **ARMA** | **Armidale** | **3.45** | **32** | P | Pn | Pn | 04 46 36.0 | -0.3 |
| | baz=3.5 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **3.70** | **298** | P | Pn | Pn | 04 46 40.7 | +1.0 |
| | baz=3.7 | | | | | | | |
| **MILA** | **Mila** | **3.70** | **184** | P | Pn | Pn | 04 46 40.9 | +1.2 |
| | baz=3.7

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NKME | | | | *e*Sg | | **Sn** | 05 08 51.0 | +1.1 |
| **HCY** | **Herceg Novi** | **0.92** | **157** | ⇓*i*Pg | | **Pb** | 05 08 36.9 | -1.2 |
| HCY | | | | *e*Sg | | **Sn** | 05 08 50.5 | -0.5 |
| **HCY** | **Herceg Novi** | **0.92** | **157** | ⇓*i*Pg | | **Pb** | 05 08 36.9 | -1.2 |
| HCY | | | | *e*Sg | | **Sn** | 05 08 50.5 | -0.5 |
| **PLE** | **Pljevlja** | **1.01** | **87** | ⇑*i*Pg | | **Pn** | 05 08 41.3 | +1.4 |
| PLE | | | | *e*Sg | | **Sn** | 05 08 56.0 | +2.5 |
| **PLE** | **Pljevlja** | **1.01** | **87** | ⇑*i*Pg | | **Pn** | 05 08 41.3 | +1.4 |
| PLE | | | | *e*Sg | | **Sn** | 05 08 56.0 | +2.5 |
| **BBLS** | **Lazići** | **1.17** | **60** | *e*Pg | | **Pn** | 05 08 42.0 | 0.0 |
| BBLS | | | | *e*Sg | | **Sn** | 05 08 58.2 | +0.8 |
| **BBLS** | **Lazići** | **1.17** | **60** | *e*Pg | | **Pn** | 05 08 42.0 | 0.0 |
| BBLS | | | | *e*Sg | | **Sn** | 05 08 58.2 | +0.8 |
| **BUM** | **Brajici-Budva** | **1.19** | **146** | ⇓*i*Pg | | **Pn** | 05 08 41.7 | -0.5 |
| BUM | | | | *e*Sg | | **Sn** | 05 08 58.9 | +1.2 |
| **BUM** | **Brajici-Budva** | **1.19** | **146** | ⇓*i*Pg | | **Pn** | 05 08 41.7 | -0.5 |
| BUM | | | | *e*Sg | | **Sn** | 05 08 58.9 | +1.2 |
| **PDG** | **Podgorica** | **1.26** | **133** | ⇓*i*Pg | | **Pn** | 05 08 43.1 | -0.1 |
| PDG | | | | *e*Sg | | **Sb** | 05 08 59.9 | +0.2 |
| **PDG** | **Podgorica** | **1.26** | **133** | ⇓*i*Pg | | **Pn** | 05 08 43.1 | -0.1 |
| PDG | | | | *e*Sg | | **Sb** | 05 09 01.3 | +1.6 |
| **TTG** | **Podgorica** | **1.26** | **133** | ⇑*i*Pg | | **Pn** | 05 08 42.9 | -0.3 |
| TTG | | | | *e*Sg | | **Sb** | 05 09 01.3 | +1.6 |
| **DRME** | **Dracevica, Mon** | **1.40** | **141** | ⇓*i*Pg | | **Pn** | 05 08 45.6 | +0.4 |
| DRME | | | | *e*Sg | | **Sb** | 05 09 04.5 | +0.6 |
| **DRME** | **Dracevica, Mon** | **1.40** | **141** | ⇓*i*Pg | | **Pn** | 05 08 45.6 | +0.4 |
| DRME | | | | *e*Sg | | **Sb** | 05 09 04.5 | +0.6 |
| **SJES** | **Sjenica** | **1.44** | **90** | ⇑*i*Pg | | **Pb** | 05 08 46.8 | -0.3 |
| SJES | | | | *e*Sg | | **Sb** | 05 09 05.6 | +0.6 |
| **BEY** | **Berane** | **1.45** | **106** | ⇑*i*Pg | | **Pb** | 05 08 47.2 | 0.0 |
| BEY | | | | *e*Sg | | **Sb** | 05 09 07.0 | +1.8 |
| **IVA** | **Berane** | **1.45** | **106** | ⇑*i*Pg | | **Pb** | 05 08 47.2 | 0.0 |
| IVA | | | | *e*Sg | | **Sb** | 05 09 07.0 | +1.8 |
| **BLY** | **Banja Luka** | **1.57** | **338** | *e*Pg | | **Pb** | 05 08 48.9 | -0.4 |
| BLY | | | | *e*Sg | | **Sn** | 05 09 07.6 | +0.4 |
| **BLY** | **Banja Luka** | **1.57** | **338** | *e*Pg | | **Pb** | 05 08 48.9 | -0.4 |
| BLY | | | | *e*Sg | | **Sn** | 05 09 07.6 | +0.4 |
| **IVAS** | **Ivanjica** | **1.59** | **79** | ⇑*i*Pg | | **Pn** | 05 08 48.5 | +0.7 |
| IVAS | | | | *e*Sg | | **Sb** | 05 09 08.8 | -0.6 |
| **IVAS** | **Ivanjica** | **1.59** | **79** | ⇑*i*Pg | | **Pn** | 05 08 48.5 | +0.7 |
| IVAS | | | | *e*Sg | | **Sb** | 05 09 08.8 | -0.6 |
| **PVY** | **Plav** | **1.60** | **115** | ⇑*i*Pn | | **Pb** | 05 08 49.4 | -0.3 |
| PVY | | | | *e*Sn | | **Sb** | 05 09 09.9 | +0.4 |
| **PVY** | **Plav** | **1.60** | **115** | ⇑*i*Pn | | **Pb** | 05 08 49.4 | -0.3 |
| PVY | | | | *e*Sn | | **Sb** | 05 09 09.9 | +0.4 |
| **ULC** | **Ulcinj** | **1.61** | **145** | ⇓*i*Pn | | **Pn** | 05 08 48.0 | 0.0 |
| ULC | | | | *e*Sn | | **Sb** | 05 09 09.2 | -0.6 |
| **ULC** | **Ulcinj** | **1.61** | **145** | ⇓*i*Pn | | **Pn** | 05 08 48.0 | 0.0 |
| ULC | | | | *e*Sn | | **Sb** | 05 09 09.2 | -0.6 |
| **DIVS** | **Divibare** | **1.65** | **60** | *e*Pn | | **Pn** | 05 08 48.6 | -0.1 |
| DIVS | | | | *e*Sn | | **Sn** | 05 09 09.8 | +0.5 |
| **DIVS** | **Divibare** | **1.65** | **60** | ⇑*i*P | | **Pn** | 05 08 48.7 | 0.0 |
| DIVS | | | | S | | **Sn** | 05 09 10.0 | +0.7 |
| **DIVS** | **Divibare** | **1.65** | **60** | *e*Pn | | **Pn** | 05 08 48.6 | -0.1 |
| DIVS | | | | *e*Sn | | **Sn** | 05 09 09.8 | +0.5 |
| **TRUS** | **Trudelj** | **1.98** | **61** | *e*Pn | | **Pn** | 05 08 52.0 | -1.1 |
| TRUS | | | | *e*Sn | | **Sn** | 05 09 15.4 | -1.8 |
| **TRUS** | **Trudelj** | **1.98** | **61** | *e*Pn | | **Pn** | 05 08 52.0 | -1.1 |
| TRUS | | | | *e*Sn | | **Sn** | 05 09 15.4 | -1.8 |
| **GRUS** | **Gruza** | **2.06** | **72** | *e*Pn | | **Pn** | 05 08 53.8 | -0.4 |
| **GRUS** | **Gruza** | **2.06** | **72** | *e*Pn | | **Pn** | 05 08 53.8 | -0.4 |
| **MS1** | **Monte Sant'Ang** | **2.20** | **225** | *e*Pn | | **Pn** | 05 08 57.8 | +1.7 |
| **FGSL** | **Fruska Gora** | **2.27** | **34** | *e*Pn | | **Pn** | 05 08 56.4 | -0.8 |
| FGSL | | | | *e*Sn | | **Sn** | 05 09 24.5 | -0.1 |
| **FRGS** | **Fruska Gora** | **2.28** | **34** | *e*Pn | | **Pn** | 05 08 56.4 | -0.8 |
| FRGS | | | | *e*Sn | | **Sn** | 05 09 24.5 | -0.1 |
| **SELS** | **Selova** | **2.28** | **91** | ⇑*i*Pn | | **Pn** | 05 08 57.2 | 0.0 |
| **SELS** | **Selova** | **2.28** | **91** | ⇑*i*Pn | | **Pn** | 05 08 57.2 | 0.0 |
| **SG1** | **Sgolgore (BA)** | **2.64** | **202** | *e*Pn | | **Pn** | 05 08 59.9 | -2.3 |
| **BARS** | **Barje** | **2.83** | **98** | *e*Pn | | **Pn** | 05 09 05.3 | +0.5 |
| BARS | | | | *e*Sn | | **Sn** | 05 09 39.0 | +0.7 |
| **BARS** | **Barje** | **2.83** | **98** | *e*Pn | | **Pn** | 05 09 05.3 | +0.5 |
| BARS | | | | *e*Sn | | **Sn** | 05 09 39.0 | +0.7 |
| **BOJS** | **Bojanci** | **2.96** | **319** | *i*Pn | | **Pn** | 05 09 07.9 | +1.3 |
| BOJS | | | | *i*Sn | | **Sn** | 05 09 42.6 | +1.1 |
| **BOJS** | **Bojanci** | **2.96** | **319** | *i*Pn | | **Pn** | 05 09 07.9 | +1.3 |
| BOJS | | | | *i*Sn | | **Sn** | 05 09 42.6 | +1.1 |
| **CRES** | **Cresnjev** | **3.12** | **325** | *i*Pn | | **Pn** | 05 09 09.7 | +0.9 |
| CRES | | | | *i*Sn | | **Sn** | 05 09 45.4 | 0.0 |
| **CRES** | **Cresnjev** | **3.12** | **325** | *i*Pn | | **Pn** | 05 09 09.7 | +0.9 |
| CRES | | | | *i*Sn | | **Sn** | 05 09 45.4 | 0.0 |
| **ZAPS** | **Zavoj** | **3.38** | **89** | *e*Pn | | **Pn** | 05 09 13.0 | +0.6 |
| ZAPS | | | | *e*Sn | | **Sn** | 05 09 50.6 | -1.3 |
| **BZS** | **Buzias** | **3.48** | **47** | *e*Pn | | **Pn** | 05 09 13.6 | -0.1 |
| BZS | | | | *e*Sn | | **Sn** | 05 09 52.0 | -2.2 |
| **BZS** | **Buzias** | **3.48** | **47** | ⇓*i*P | | **Pn** | 05 09 13.5 | -0.1 |
| **BZS** | **Buzias** | **3.48** | **47** | S | | **Sn** | 05 09 52.1 | -2.2 |
| **BZS** | **Buzias** | **3.48** | **47** | *e*Pn | | **Pn** | 05 09 13.6 | -0.1 |
| BZS | | | | S | | **Sn** | 05 09 52.1 | -2.2 |
| **SKDS** | **Skadanscina** | **3.64** | **310** | *i*Pn | | **Pn** | 05 09 16.8 | +0.8 |
| SKDS | | | | *i*Sn | | **Sn** | 05 09 58.6 | +0.4 |
| **SKDS** | **Skadanscina** | **3.64** | **310** | *i*Pn | | **Pn** | 05 09 16.8 | +0.8 |
| SKDS | | | | *i*Sn | | **Sn** | 05 09 58.6 | +0.4 |
| **SIRR** | **Siria** | **3.96** | **40** | ⇑*i*P | | **Pn** | 05 09 20.5 | +0.2 |
| **SIRR** | **Siria** | **3.96** | **40** | S | | **Sn** | 05 10 03.8 | -2.2 |
| **SIRR** | **Siria** | **3.96** | **40** | ⇑*i*P | | **Pn** | 05 09 20.5 | +0.2 |
| SIRR | | | | S | | **Sn** | 05 10 03.8 | -2.2 |
| **GZR** | **Gura Zlata** | **4.02** | **57** | *e*Pn | | **Pn** | 05 09 21.1 | -0.1 |
| **GZR** | **Gura Zlata** | **4.02** | **57** | ⇑*i*P | | **Pn** | 05 09 21.3 | +0.1 |
| **GZR** | **Gura Zlata** | **4.02** | **57** | S | | **Sn** | 05 10 06.9 | -0.7 |
| **GZR** | **Gura Zlata** | **4.02** | **57** | *e*Pn | | **Pn** | 05 09 21.1 | -0.1 |
| GZR | | | | S | | **Sn** | 05 10 06.9 | -0.7 |
| **DRGR** | | **4.84** | **42** | S | | **Sn** | 05 10 26.1 | -1.7 |
| **DRGR** | | **4.84** | **42** | S | | **Sn** | 05 10 26.1 | -1.7 |
| **KOLS** | **Kolonicke sedl** | **6.38** | **26** | *e*PN | | Pn | 05 09 46.6 | -6.9 |

*IDC **22** 05:37:36.1±2.5, 12°.21N×125°.91E, h0km, mb3.5/4, mb1 3.7/4, mb1mx3.5/32, mbtmp3.5/4, Error ellipse: s-maj=99.6km s-min=24.1km az=56.0*

**ISC 22 05:37:40.2±1.5, 12°.3N±0°.1×126°.0E±0°.2, h32km, n6, σ1§01/6, mb3.5/4, 2D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLP** | **Palo** | **1.51** | **223** | ⇓*e*P | **Pb** | **05 38 07.1** | **-0.6** |
| PLP | | | | *e*S | **Sb** | **05 38 27.0** | **+0.6** |
| **RCP** | **Roxas** | **3.29** | **258** | ⇓*e*P | Pn | 05 38 32.9 | +3.4 |
| **CMAR** | **Chiang Mai Arr** | **26.81** | **287** | P | **P** | **05 43 17.8** | **-0.1** |
| | 1.1nm,0.8s,baz=97,slow=7.4,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.05** | **166** | P | **P** | **05 44 12.1** | **-1.0** |
| | 0.2nm,0.5s,baz=342,slow=9.6,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **36.55** | **168** | P | **P** | **05 44 44.5** | **+1.2** |
| | 0.3nm,0.4s,baz=349,slow=7.9,SNR=5.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.30** | **322** | P | **P** | **05 46 34.0** | **+0.1** |
| | 0.8nm,0.7s,baz=108,slow=9.3,SNR=3.6 | | | | | | |

*ISCJB **22** 06:13:37.2±0.8, 55°.9S±0°.1×27°.6W±0°.3, h150km, mb3.9/8, Error ellipse: s-maj=24.9km s-min=12.2km az=141.1*
*NEIC **22** 06:13:38.0±1.9, 55°.90S×27°.56W, h145km±17km, mb4.0/3, Error ellipse: s-maj=24.6km s-min=9.6km az=61.0*
*IDC **22** 06:13:38.3±5.3, 55°.95S×27°.71W, h145km±47km, mb3.8/7, mb1 3.8/8, mb1mx3.6/18, mbtmp4.1/8, Error ellipse: s-maj=27.6km s-min=15.1km az=63.0*

**ISC 22 06:13:38.6±0.7, 55°.9S±0°.1×27.7W±0°.2, h150km, n18, σ0§75/19, mb4.0/7, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **5.34** | **284** | *e*Pn | **Pn** | **06 14 56.4** | **+0.1** |
| **SNAA** | **Sanae** | **18.96** | **156** | P | **P** | **06 17 47.1** | **-0.8** |
| | 0.8nm,0.3s,baz=195,slow=21,SNR=50 | | | | | | |
| **SNAA** | **Sanae** | **18.96** | **156** | *e*P | **P** | **06 17 46.5** | **-1.4** |
| | 1.8nm,0.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **34.32** | **180** | P | **P** | **06 20 10.5** | **+0.1** |
| | 1.8nm,0.6s,baz=191,slow=2.1,SNR=24 | | | | | | |
| QSPA | | | | PcP | **PcP** | **06 22 42.1** | **-0.6** |
| | 0.7nm,0.8s,baz=233,slow=2.9,SNR=3.0 | | | | | | |
| **CPUP** | **Villa Florida** | **36.54** | **312** | P | **P** | **06 20 28.7** | **-0.9** |
| | 0.9nm,0.5s,baz=274,slow=16,SNR=4.0 | | | | | | |
| **MAW** | **Mawson** | **40.40** | **144** | P | **P** | **06 21 01.3** | **0.0** |
| | 1.8nm,0.6s,baz=234,slow=8.2,SNR=8.7 | | | | | | |
| **SBA** | **Scott Base** | **46.18** | **184** | *e*P | **P** | **06 21 49.2** | **+1.7** |
| | 7.5nm,1.8s | | | | | | |
| **VNDA** | **Vanda** | **46.68** | **183** | P | **P** | **06 21 52.0** | **+0.6** |
| | 1.1nm,0.6s,baz=184,slow=6.2,SNR=18 | | | | | | |
| **LPAZ** | **La Paz** | **50.10** | **306** | P | **P** | **06 22 19.2** | **+0.2** |
| | 2.1nm,0.7s,baz=122,slow=4.8,SNR=14 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.08** | **30** | P | **P** | **06 24 53.0** | **+0.9** |
| | 4.6nm,0.5s,baz=201,slow=6.5,SNR=77 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **99.18** | **163** | P | | **Pdif** | **06 27 02.2** | **-0.8** |
| | 0.4nm,0.8s,baz=187,slow=3.4,SNR=3.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **102.90** | **163** | Pdiff | | **Pdif** | **06 27 19.4** | **-0.1** |
| | 0.3nm,0.8s,baz=210,slow=4.8,SNR=3.2 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **121.11** | **293** | PKP | | **PKPdf** | **06 32 12.7** | **-0.2** |
| | 0.2nm,0.6s,baz=88,slow=5.5,SNR=2.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **124.40** | **28** | PKP | | **PKPdf** | **06 32 17.6** | **-0.5** |
| | 1.8nm,0.8s,baz=178,slow=7.1,SNR=3.7 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.93** | **22** | PKP | | **PKPdf** | **06 32 30.2** | **-0.2** |
| | 2.9nm,1.0s,baz=182,slow=33,SNR=4.4 | | | | | | | |
| **ILAR** | **Eielson Array** | **149.84** | **312** | PKPbc | | **PKPbc** | **06 33 09.4** | **+0.1** |
| | 4.3nm,0.8s,baz=116,slow=1.7,SNR=53 | | | | | | | |
| **SONM** | **Songino Array** | **150.98** | **87** | PKPbc | | **PKPbc** | **06 33 12.7** | **0.0** |
| | 2.2nm,0.4s,baz=221,slow=3.3,SNR=17 | | | | | | | |
| **KTH** | **Kantishna Hill** | **151.32** | **309** | *e*PKPbc | | **PKPbc** | **06 33 13.0** | **+0.1** |

*ISK **22** 06:15:55.4, 37°.28N×28°.29E, h5km, MD2.7*
*ISCJB **22** 06:15:56.9±0.7, 37°.26N±0°.05×28°.30E±0°.10, h0km, Error ellipse: s-maj=12.5km s-min=4.3km az=151.1*
*DDA **22** 06:15:56.6, 37°.24N×28°.20E, h7km, Md2.3*
*CSEM **22** 06:15:57.2±0.4, 37°.24N×28°.25E, h2km, MD2.3, Error ellipse: s-maj=28.0km s-min=6.3km az=58.0, Mining explosion.*

**ISC 22 06:15:56.0±1.0, 37°.28N±0°.06×28°.26E±0°.08, h0km, n14, σ0§94/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.14** | **172** | *e*PG | **Pg** | **06 15 59.0** | **+0.2** |
| YER | | | | *e*SG | **Sg** | **06 16 01.4** | **+0.8** |
| **YER** | **Yerkesik** | **0.14** | **172** | *e*Pg | **Pg** | **06 15 59.0** | **+0.2** |
| YER | | | | *e*Sg | **Sg** | **06 16 01.4** | **+0.8** |
| **AYDN** | **Tasoluk** | **0.49** | **322** | *i*P | **Pb** | **06 16 07.9** | **+0.3** |
| AYDN | | | | *i*S | **Sb** | **06 16 14.5** | **-0.8** |
| **AYDN** | **Tasoluk** | **0.49** | **322** | P | **Pb** | **06 16 07.9** | **+0.3** |
| AYDN | | | | S | **Sb** | **06 16 14.5** | **-0.8** |
| **TURN** | **Turunc** | **0.49** | **145** | *i*P | **Pg** | **06 16 04.8** | **-0.6** |
| TURN | | | | *i*S | **Sg** | **06 16 12.5** | **+0.8** |
| **TURN** | **Turunc** | **0.49** | **145** | P | **Pg** | **06 16 04.8** | **-0.6** |
| TURN | | | | S | **Sg** | **06 16 12.5** | **+0.8** |
| **DALY** | **Dalyan (Mu¨la** | **0.56** | **145** | *e*PG | **Pb** | **06 16 07.7** | **-0.9** |
| **DALY** | **Dalyan (Mu¨la** | **0.56** | **145** | *e*Pg | **Pb** | **06 16 07.7** | **-0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.73** | **337** | *e*PG | **Pb** | **06 16 10.8** | **-1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.73** | **337** | *e*Pg | **Pb** | **06 16 10.8** | **-1.0** |
| **FETY** | **Fethiye** | **0.92** | **134** | *e*PG | **Pb** | **06 16 14.1** | **-0.8** |
| **FETY** | **Fethiye** | **0.92** | **134** | *e*Pg | **Pb** | **06 16 14.1** | **-0.8** |
| **AKAS** | **Kas** | **1.50** | **134** | *i*P | **Pg** | **06 16 26.5** | **+1.7** |
| **AKAS** | **Kas** | **1.50** | **134** | P | **Pg** | **06 16 26.4** | **+1.7** |
| AKAS | | | | S | Sn | 06 16 50.3 | +5.6 |

*ISCJB **22** 06:23:27.3±0.8, 59°.67N±0°.03×136°.59W±0°.06, h5km±7km, Error ellipse: s-maj=5.7km s-min=4.4km az=42.2*
*PGC **22** 06:23:28.7±0.7, 59°.66N×136°.61W, h1km, ML2.9/4, 99km Wnw of Haines, Ak Southeastern Alaska*
*NEIC **22** 06:23:29.1, 59°.62N×136°.55W, h6km, ML2.6(AEIC), ML2.9(OTT), After AEIC.*

**ISC 22 06:23:27.5±1.0, 59°.68N±0°.03×136°.59W±0°.03, h10km±9km, n20, σ1§06/34, Southeastern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PLBC** | **Pleasant Camp** | **0.25** | **153** | P | **Pg** | **06 23 33.1** | **+0.5** |
| PLBC | | | | S | **Sg** | **06 23 36.2** | **+0.2** |
| **PLBC** | **Pleasant Camp** | **0.25** | **153** | P | **Pg** | **06 23 33.0** | **+0.5** |
| PLBC | | | | S | **Sg** | **06 23 36.3** | **+0.3** |
| **SKAG** | **Skagway** | **0.68** | **108** | P | **Pg** | **06 23 40.7** | **+0.2** |
| SKAG | | | | S | **Sg** | **06 23 49.6** | **+0.2** |
| **DHAK** | **Deception Hill** | **1.02** | **235** | P | **Pg** | **06 23 46.4** | **-0.6** |
| DHAK | | | | S | **Sg** | **06 24 00.4** | **+0.1** |
| **YUK7** | **Dusty Glacier** | **1.15** | **318** | P | **Pg** | **06 23 49.4** | **-0.2** |
| **HYT** | **Haines Junctio** | **1.24** | **339** | P | **Pb** | **06 23 50.5** | **-0.5** |
| **HYT** | **Haines Junctio** | **1.24** | **339** | P | **Pb** | **06 23 50.5** | **-0.5** |
| **WHY** | **Whitehorse** | **1.30** | **40** | P | **Pg** | **06 23 52.4** | **0.0** |
| WHY | | | | S | **Sn** | **06 24 10.6** | **+1.3** |
| **WHY** | **Whitehorse** | **1.30** | **40** | P | **Pg** | **06 23 52.4** | **0.0** |
| WHY | | | | S | **Sn** | **06 24 10.2** | **+1.0** |
| **BESE** | **Bessie Mountai** | **1.42** | **140** | P | **Pn** | **06 23 52.9** | **-0.5** |
| BESE | | | | S | **Sb** | **06 24 11.2** | **-1.0** |
| **PNL** | **Peninsula** | **1.43** | **271** | P | **Pn** | **06 23 53.9** | **+0.5** |
| PNL | | | | S | **Sb** | **06 24 13.0** | **+0.7** |
| **YUK5** | **Granite Creek** | **1.59** | **337** | Pn | **Pn** | **06 23 56.6** | **+0.9** |
| **PCA** | **Pinnacle** | **1.90** | **284** | P | **Pn** | **06 24 00.9** | **+1.0** |
| **YUK4** | **Talbot Arm** | **1.96** | **330** | Sg | **Sg** | **06 24 31.9** | **+1.7** |
| **SAMH** | **Samovar Hills** | **2.16** | **284** | P | **Pb** | **06 24 05.7** | **-1.0** |
| **YUK2** | **White River** | **2.97** | **317** | Sg | **Sg** | **06 25 02.5** | **-0.3** |
| **DLBC** | **Dease Lake** | **3.61** | **107** | Pn | **Pn** | **06 24 23.5** | **+0.1** |
| DLBC | | | | Sg | **Sg** | **06 25 21.2** | **-2.0** |
| **DLBC** | **Dease Lake** | **3.61** | **107** | *e*Pn | **Pn** | **06 24 24.2** | **+0.7** |
| DLBC | | | | *e*Sg | **Sg** | **06 25 23.1** | **-0.2** |
| **DAWY** | **Dawson** | **4.60** | **344** | Pn | **Pn** | **06 24 39.0** | **+2.0** |
| DAWY | | | | Pg | **Pg** | **06 24 53.7** | **-1.7** |
| DAWY | | | | Sg | **Sg** | **06 25 53.5** | **-1.3** |
| **DAWY** | **Dawson** | **4.60** | **344** | Pn | **Pn** | **06 24 39.0** | **+2.0** |
| DAWY | | | | Pg | **Pg** | **06 24 53.7** | **-1.7** |
| DAWY | | | | Sg | **Sg** | **06 25 53.5** | **-1.3** |

**IDC 22 06:31:24.1±2.3, 24°.66N×109°.24W, h0km, mb3.0/1, mb1 3.4/3, mb1mx3.3/25, mbtmp2.9/3, ML3.4/2, Error ellipse: s-maj=50.4km s-min=14.3km az=140.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.12** | **241** | Pn | Pn | 06 31 47.3 | +0.3 |
| | 13nm,0.3s,baz=49,slow=20,SNR=13 | | | | | | |
| LPIG | | | | Sn | Sn | 06 32 03.7 | +0.6 |
| | 81nm,0.3s,baz=345,slow=20,SNR=15 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.81** | **46** | Pn | Pn | 06 33 06.3 | +0.8 |
| | 0.2nm,0.3s,baz=224,slow=13,SNR=13 | | | | | | |
| TXAR | | | | Pg | Pg | 06 33 33.8 | -1.0 |
| | 0.2nm,0.3s,baz=228,slow=14,SNR=9.2 | | | | | | |
| TXAR | | | | Sn | Sn | 06 34 21.4 | -2.4 |
| | 0.2nm,0.3s,baz=229,slow=28,SNR=2.9 | | | | | | |
| TXAR | | | | Lg | | 06 34 59.9 | |
| | 0.4nm,0.3s,baz=228,slow=21,SNR=6.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.74** | **333** | Pn | P | 06 35 11.6 | 0.0 |
| | 0.1nm,0.3s,baz=159,slow=13,SNR=3.2 | | | | | | |
| **ILAR** | **Eielson Array** | **46.87** | **339** | P | P | 06 39 55.2 | -0.6 |
| | 0.2nm,0.9s,baz=153,slow=6.8,SNR=2.7 | | | | | | |

*DDA **22** 06:38:19.8, 39°.75N×40°.49E, h7km, Md3.0*
*ISK **22** 06:38:19.4, 39°.79N×40°.50E, h5km, MD2.9*
*ISCJB **22** 06:38:20.3±0.4, 39°.73N±0°.04×40°.51E±0°.04, h11km, Error ellipse: s-maj=5.7km s-min=3.9km az=172.3*
*CSEM **22** 06:38:20.0±0.2, 39°.73N×40°.46E, h2km, MD3.0, Error ellipse: s-maj=6.2km s-min=4.5km az=7.0*

**ISC 22 06:38:20.1±0.8, 39°.76N±0°.03×40°.50E±0°.02, h11km, n31, σ1§02/39, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KOPT** | **Kop Dagi** | **0.26** | **360** | *i*P | **Pg** | **06 38 26.0** | **+0.4** |
| **KOPT** | **Kop Dagi** | **0.26** | **360** | P | **Pg** | **06 38 26.0** | **+0.4** |
| **ERZN** | **Erzincan** | **0.62** | **255** | *e*PG | **Pg** | **06 38 32.2** | **0.0** |
| ERZN | | | | *e*SG | **Sb** | **06 38 41.4** | **-0.5** |
| **EZM** | **Erzurum** | **0.68** | **77** | *e*PG | **Pg** | **06 38 32.8** | **-0.6** |
| **ERZM** | **Erzurum** | **0.68** | **77** | *i*P | **Pg** | **06 38 33.5** | **+0.2** |
| **ERZM** | **Erzurum** | **0.68** | **77** | P | **Pg** | **06 38 33.5** | **+0.2** |
| ERZM | | | | S | **Sg** | **06 38 40.5** | **-1.9** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **0.69** | **337** | *e*PG | **Pg** | **06 38 32.6** | **-1.0** |
| **BNGB** | **Bing¨l** | **0.78** | **170** | *e*PG | **Pb** | **06 38 35.4** | **-0.2** |
| **BINT** | **Bingol** | **0.88** | **181** | *e*Pg | **Pg** | **06 38 35.4** | **-1.6** |
| **EZC** | **Erzincan** | **0.88** | **270** | *e*Pg | Pg | 06 38 32.2 | -4.9 |
| **KELT** | **Kelkit** | **1.03** | **293** | *i*P | **Pn** | **06 38 40.5** | **-0.2** |
| KELT | | | | *i*S | **Sb** | **06 38 53.6** | **-0.2** |
| **KELT** | **Kelkit** | **1.03** | **293** | P | **Pn** | **06 38 40.5** | **-0.2** |
| KELT | | | | S | **Sb** | **06 38 53.6** | **-0.2** |
| **GUMT** | **Gumushane** | **1.05** | **312** | *e*PG | **Pb** | **06 38 39.6** | **-0.8** |
| **GUMT** | **Gumushane** | **1.05** | **312** | *e*Pg | **Pb** | **06 38 39.6** | **-0.8** |
| **HOMI** | **Horasan** | **1.12** | **75** | P | **Pb** | **06 38 39.2** | **-2.4** |
| **PTK** | **Pertek** | **1.22** | **225** | *e*PN | **Pg** | **06 38 43.6** | **+0.1** |
| **PTK** | **Pertek** | **1.22** | **225** | *e*Pn | **Pg** | **06 38 43.6** | **+0.1** |
| **EKAR** | **Karacoban** | **1.31** | **112** | *i*P | **Pg** | **06 38 45.4** | **+0.2** |
| **EKAR** | **Karacoban** | **1.31** | **112** | P | **Pg** | **06 38 45.4** | **+0.2** |
| EKAR | | | | S | **Sg** | **06 39 06.6** | **+4.3** |
| **KTUT** | **Trabzon** | **1.35** | **336** | *e*PN | **Pn** | **06 38 44.9** | **0.0** |
| **KTUT** | **Trabzon** | **1.35** | **336** | *e*Pn | **Pn** | **06 38 44.9** | **0.0** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILIC** | **ilic-Erzincan** | **1.52** | **259** | *e*PN | | **Pb** | **06 38 48.6** | **+0.2** |
| **ILIC** | **ilic-Erzincan** | **1.52** | **259** | *e*Pn | | **Pb** | **06 38 48.6** | **+0.2** |
| **DBAD** | **Bademkaya** | **1.56** | **36** | *i*P | | **Pb** | **06 38 49.4** | **+0.4** |
| DBAD | | | | *i*S | | **Sg** | **06 39 11.3** | **+1.1** |
| **DBAD** | **Bademkaya** | **1.56** | **36** | P | | **Pb** | **06 38 49.4** | **+0.4** |
| DBAD | | | | S | | **Sg** | **06 39 11.3** | **+1.1** |
| **ARTV** | **Artvin** | **1.80** | **37** | *i*P | | **Pb** | **06 38 52.6** | **-0.5** |
| **ARTV** | **Artvin** | **1.80** | **37** | P | | **Pb** | **06 38 52.6** | **-0.5** |
| **SUSE** | **Susehri** | **1.82** | **285** | *i*P | | **Pb** | **06 38 53.6** | **+0.1** |
| **SUSE** | **Susehri** | **1.82** | **285** | P | | **Pb** | **06 38 53.6** | **+0.1** |
| **TUTA** | **Tutak** | **1.82** | **100** | *i*P | | **Pb** | **06 38 53.6** | **0.0** |
| TUTA | | | | *i*S | | **Sg** | **06 39 19.0** | **+0.3** |
| **TUTA** | **Tutak** | **1.82** | **100** | P | | **Pb** | **06 38 53.6** | **0.0** |
| TUTA | | | | S | | **Sg** | **06 39 19.0** | **+0.3** |

*IDC **22** 06:49:31.4±1.2, 33°.35S×178°.36W, h0km, mb4.2/3, mb1 4.5/4, mb1mx3.9/20, mbtmp4.2/4, ML4.0/1, Error ellipse: s-maj=43.1km s-min=27.8km az=143.0*
*ISCJB **22** 06:49:35.2±1.5, 33°.5S±0°.2×178°.3W±0°.3, h41km, mb4.1/3, Error ellipse: s-maj=40.4km s-min=12.9km az=30.4*

**ISC 22 06:49:37.1±1.2, 33°.4S±0°.2×178°.4W±0°.3, h41km, n7, σ1§21/10, mb4.1/3, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **6.07** | **216** | Pn | **Pn** | **06 51 02.9** | **-1.4** |
| | 3.6nm,0.3s,baz=283,slow=4.7,SNR=20 | | | | | | |
| URZ | | | | Sn | **Sn** | **06 52 13.6** | **+1.1** |
| | 4.1nm,0.3s,baz=253,slow=23,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **42.71** | **270** | P | **P** | **06 57 30.6** | **+0.3** |
| | 2.9nm,0.6s,baz=112,slow=7.3,SNR=44 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 59 22.2** | **+0.7** |
| | 0.6nm,0.9s,baz=123,slow=3.6,SNR=4.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.97** | **275** | P | **P** | **06 57 40.5** | **0.0** |
| | 2.6nm,0.7s,baz=115,slow=7.9,SNR=32 | | | | | | |
| WRA | | | | PcP | **PcP** | **06 59 26.2** | **+0.4** |
| | 0.7nm,0.9s,baz=123,slow=3.0,SNR=3.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.66** | **43** | P | **P** | **07 02 35.2** | **-0.2** |
| | 0.7nm,0.8s,baz=214,slow=4.4,SNR=5.5 | | | | | | |
| **GEYT** | **Alibeck** | **134.46** | **292** | PKP | **PKPdf** | **07 08 48.9** | **-1.9** |
| | 5.3nm,0.4s,baz=101,slow=0.7,SNR=4.0 | | | | | | |
| **FINES** | **FINESS Array B** | **147.82** | **338** | PKPbc | **PKPbc** | **07 09 17.6** | **+0.8** |
| | 2.0nm,0.8s,baz=29,

*ISCJB **22** 07:33:55.3±0.9,51.51N±0.04×16.11E±0.04,h0km, Error ellipse: s-maj=6.6km s-min=3.3km az=15.5*
*CSEM **22** 07:33:57.1±0.5,51.50N×16.09E,h2km,ML3.3/7, Error ellipse: s-maj=8.7km s-min=4.5km az=3.0*
*PRU **22** 07:33:58.1,51.49N×16.10E,h0km*
**ISC 22 07:33:57.8**±1.2,**51.49N**±0.06×**16.11E**±0.03,**h0**km,**n26,** σ0**s71**/43,**Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.66** | **170** | *e*Pg | | **Pg** | **07 34 10.8** | **+0.4** |
| KSP | | | | eSg | | **Sg** | **07 34 20.2** | **+1.3** |
| **KSP** | **Ksiaz** | **0.66** | **170** | *e*Pg | | **Pg** | **07 34 10.8** | **+0.4** |
| KSP | | | | eSg | | **Sg** | **07 34 20.2** | **+1.3** |
| **UPC** | **Upice** | **0.98** | **183** | *e*PG | | **Pg** | **07 34 16.8** | **+0.1** |
| UPC | | | | eSG | | **Sg** | **07 34 30.2** | **+0.8** |
| | comp=Z,51nm,0.3s | | | | | | | |
| **UPC** | **Upice** | **0.98** | **183** | Pg | | **Pg** | **07 34 16.8** | **+0.1** |
| UPC | | | | Sg | | **Sg** | **07 34 30.2** | **+0.8** |
| | 51nm,0.3s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.15** | **173** | *e*SG | | **Sg** | **07 34 33.8** | **-0.9** |
| | comp=Z,15nm,0.3s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.15** | **173** | Sg | | **Sg** | **07 34 33.8** | **-0.9** |
| | 15nm,0.3s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.37** | **226** | *e*PG | | **Pn** | **07 34 24.1** | **-0.1** |
| PVCC | | | | eSG | | **Sg** | **07 34 41.7** | **0.0** |
| | comp=Z,90nm,0.2s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.37** | **226** | Pg | | **Pn** | **07 34 24.1** | **-0.1** |
| PVCC | | | | Sg | | **Sg** | **07 34 41.7** | **0.0** |
| | 90nm,0.2s | | | | | | | |
| **KRLC** | **Kraliky** | **1.48** | **163** | *e*PG | | **Pn** | **07 34 25.6** | **-0.2** |
| **KRLC** | **Kraliky** | **1.48** | **163** | Pg | | **Pn** | **07 34 25.6** | **-0.2** |
| **BRG** | **Berggiesshubel** | **1.49** | **246** | PG | | **Pn** | **07 34 25.8** | **-0.1** |
| BRG | | | | SG | | **Sn** | **07 34 45.9** | **-0.2** |
| | 51nm,0.3s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.79** | **209** | *e*PG | | **Pb** | **07 34 31.0** | **-0.4** |
| **GOPC** | **GO Pecny, Ondr** | **1.79** | **209** | Pg | | **Pb** | **07 34 31.0** | **-0.4** |
| **PRU** | **Pruhonice** | **1.80** | **214** | *e*PG | | **Pb** | **07 34 31.3** | **-0.4** |
| PRU | | | | eSG | | **Sb** | **07 34 55.0** | **+0.2** |
| | comp=Z,15nm,0.3s | | | | | | | |
| **PRU** | **Pruhonice** | **1.80** | **214** | Pg | | **Pb** | **07 34 31.3** | **-0.4** |
| PRU | | | | Sg | | **Sb** | **07 34 55.0** | **+0.2** |
| | 15nm,0.3s | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.94** | **151** | *e*Pn | | **Pn** | **07 34 31.0** | **-1.1** |
| MORC | | | | eSg | | **Sb** | **07 34 59.4** | **+0.5** |
| **CLL** | **Collm** | **1.95** | **266** | *e*Pg | | **Pn** | **07 34 33.0** | **+0.8** |
| CLL | | | | *e* | | | 07 34 37.0 | |
| CLL | | | | eSg | | **Sb** | **07 34 59.0** | **-0.1** |
| | comp=Z,12nm,0.6s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.10** | **141** | *e*SG | | **Sb** | **07 35 04.2** | **+0.7** |
| | comp=Z,14nm,0.5s | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.10** | **141** | Sg | | **Sb** | **07 35 04.2** | **+0.7** |
| | comp=Z,14nm,0.5s | | | | | | | |
| **VRAC** | **Vranov** | **2.21** | **172** | *e*Sg | | **Sg** | **07 35 07.8** | **-0.8** |
| **NKC** | **Novy Kostel** | **2.64** | **243** | *e*PG | | **Pg** | **07 34 47.5** | **-0.8** |
| NKC | | | | eSG | | **Sg** | **07 35 24.0** | **+1.5** |
| | comp=Z,32nm,0.3s | | | | | | | |
| **NKC** | **Novy Kostel** | **2.64** | **243** | Pg | | **Pg** | **07 34 47.5** | **-0.8** |
| NKC | | | | Sg | | **Sg** | **07 35 24.0** | **+1.5** |
| | comp=Z,32nm,0.3s | | | | | | | |
| **OJC** | **Ojcow** | **2.66** | **117** | *e*Pg | | **Pg** | **07 34 48.5** | **-0.4** |
| OJC | | | | eSg | | **Sg** | **07 35 23.7** | **+0.4** |
| **OJC** | **Ojcow** | **2.66** | **117** | *e*Pg | | **Pg** | **07 34 48.5** | **-0.4** |
| OJC | | | | eSg | | **Sg** | **07 35 23.7** | **+0.4** |
| **KHC** | **Kasperske Hory** | **2.86** | **215** | *e*PN | | **Pn** | **07 34 44.7** | **-0.1** |
| KHC | | | | *e*PG | | **Pb** | **07 34 50.4** | **+0.6** |
| KHC | | | | eSG | | **Sg** | **07 35 28.3** | **-1.5** |
| | comp=Z,5.8nm,0.4s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.86** | **215** | Pn | | **Pn** | **07 34 44.7** | **-0.1** |

*IDC **22** 07:39:10.7±0.9,22.29N×121.04E,h0km,mb3.7/9, mb1 3.8/9,mb1mx3.7/42,mbtmp3.7/9,MS3.6/3,Ms1 3.7/3, ms1mx2.8/45, Error ellipse: s-maj=41.6km s-min=16.8km az=65.0*
*ISCJB **22** 07:39:13.9±0.5,22.52N±0.03×121.37E±0.04,h21km±4km, mb3.6/8,MS3.7/2, Error ellipse: s-maj=6.0km s-min=4.5km az=14.7*
*TAP **22** 07:39:14.5,22.57N×121.31E,h21km,ML4.0,B*
*NEIC **22** 07:39:15.4±2.0,22.76N×121.41E,h10km,ML4.5(TAP), Error ellipse: s-maj=19.3km s-min=9.5km az=159.0*
*NEIC Recorded [3 TAP] in T'ai-tung.*
**ISC 22 07:39:13.1**±3.0,**22.52N**±0.03×**121.40E**±0.03,**h15**km±20km, **n78,** σ0**s94**/79,**mb3.7**/8,**11C-1D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TTN** | **Taitung** | **0.33** | **315** | *e*P | | **Pb** | **07 39 20.6** | **0.0** |
| | baz=322 | | | | | | | |
| **ECL** | **Taimali** | **0.42** | **280** | ⇑*i*P | | **Pb** | **07 39 21.7** | **-0.4** |
| | baz=274 | | | | | | | |
| **TWG** | **Pinlang** | **0.42** | **315** | ⇑*i*P | | **Pb** | **07 39 22.1** | **-0.2** |
| | baz=306 | | | | | | | |
| TWG | | | | S | | **Sb** | **07 39 27.8** | **-0.7** |
| | baz=306 | | | | | | | |
| **TWG** | **Pinlang** | **0.42** | **315** | *e*Pg | | **Pb** | **07 39 21.6** | **-0.7** |
| **TAW** | **Tawu** | **0.49** | **250** | ⇑*i*P | | **Pb** | **07 39 23.4** | **0.0** |
| | baz=247 | | | | | | | |
| TAW | | | | S | | **Sb** | **07 39 29.6** | **-0.8** |
| | baz=247 | | | | | | | |
| **LAY** | **Lan-yu** | **0.50** | **164** | *e*P | | **Pb** | **07 39 24.8** | **+1.1** |
| | baz=156 | | | | | | | |
| LAY | | | | *e*S | | **Sn** | **07 39 33.6** | **-0.6** |
| | baz=156 | | | | | | | |
| **EAST** | **Anshuo** | **0.53** | **255** | ⇑*i*P | | **Pb** | **07 39 23.9** | **-0.1** |
| | baz=247 | | | | | | | |
| EAST | | | | S | | **Sb** | **07 39 30.3** | **-1.2** |
| | baz=247 | | | | | | | |
| **CHKT** | **Chengkung** | **0.57** | **357** | *e*P | | **Pb** | **07 39 24.5** | **-0.4** |
| | baz=13 | | | | | | | |
| **SCZT** | **Fangliau** | **0.73** | **258** | *e*P | | **Pb** | **07 39 27.1** | **-0.5** |
| | baz=252 | | | | | | | |
| **SSD** | **Sandimen** | **0.74** | **288** | ⇑*i*P | | **Pb** | **07 39 26.8** | **-0.9** |
| | baz=285 | | | | | | | |
| **ELDTW** | **Lidau** | **0.75** | **332** | *e*P | | **Pb** | **07 39 26.2** | **-1.7** |
| | baz=337 | | | | | | | |
| **TWK1** | **Hengchun** | **0.80** | **224** | *e*P | | **Pb** | **07 39 27.6** | **-1.0** |
| | baz=206 | | | | | | | |
| **TWF1** | **Yuli** | **0.83** | **354** | *e*P | | **Pb** | **07 39 28.6** | **-0.6** |
| | baz=347 | | | | | | | |
| **SGLT** | **Jiouru** | **0.86** | **284** | *e*P | | **Pb** | **07 39 29.8** | **+0.1** |
| | baz=285 | | | | | | | |
| **STYT** | **Tauyuan** | **0.87** | **317** | ⇑*i*P | | **Pb** | **07 39 29.1** | **-0.9** |
| | baz=328 | | | | | | | |
| **YULB** | **Yu-li** | **0.87** | **354** | *e*Pg | | **Pb** | **07 39 28.6** | **-1.3** |
| **SGST** | **Jiashian** | **0.94** | **307** | ⇑*i*P | | **Pb** | **07 39 31.2** | **+0.2** |
| | baz=307 | | | | | | | |
| **TWM1** | **Shoushan** | **0.95** | **288** | ⇑*i*P | | **Pn** | **07 39 32.1** | **+0.2** |
| | baz=290 | | | | | | | |
| **EHY** | **Hungye** | **0.98** | **356** | *e*P | | **Pb** | **07 39 30.8** | **-1.0** |
| **KAU** | **Kaohsiung** | **1.01** | **273** | *e*P | | **Pn** | **07 39 34.4** | **+1.7** |
| | baz=270 | | | | | | | |
| **WTP** | **Ta-pu** | **1.02** | **315** | ⇑*i*P | | **Pb** | **07 39 32.4** | **-0.1** |
| | baz=325 | | | | | | | |
| **CHN1** | **Nanshi** | **1.04** | **310** | ⇑*i*P | | **Pn** | **07 39 33.2** | **+0.1** |
| | baz=319 | | | | | | | |
| CHN1 | | | | *e*S | | **Sn** | **07 39 47.2** | **-0.2** |
| | baz=319 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.04** | **337** | *e*P | | **Pb** | **07 39 32.2** | **-1.0** |
| | baz=340 | | | | | | | |
| **TPUB** | **Ta-pu** | **1.05** | **318** | *e*Pg | | **Pb** | **07 39 32.5** | **-0.5** |
| **CHN3** | **Shinhua** | **1.10** | **300** | ⇓*e*P | | **Pb** | **07 39 36.0** | **+2.2** |
| | baz=299 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.11** | **318** | ⇑*i*P | | **Pn** | **07 39 34.0** | **-0.1** |
| | baz=319 | | | | | | | |
| **TWK** | **Hsinying** | **1.12** | **312** | *e*P | | **Pb** | **07 39 35.1** | **+0.9** |
| | baz=323 | | | | | | | |
| **ALS** | **Alishan** | **1.12** | **331** | *e*P | | **Pn** | **07 39 33.5** | **-1.1** |
| | baz=333 | | | | | | | |
| **WDT** | **Danda** | **1.25** | **349** | *e*P | | **Pn** | **07 39 35.5** | **-0.8** |
| | baz=2.0 | | | | | | | |
| **CHN5** | **Tsauling** | **1.26** | **328** | *e*P | | **Pn** | **07 39 36.4** | **+0.1** |
| | baz=329 | | | | | | | |
| **ESL** | **Shilin** | **1.28** | **1** | *e*P | | **Pn** | **07 39 36.9** | **+0.4** |
| | baz=355 | | | | | | | |
| **SCLT** | **Jiali** | **1.29** | **301** | *e*P | | **Pn** | **07 39 35.9** | **-0.6** |
| | baz=299 | | | | | | | |
| **CHN2** | **Minshiung** | **1.31** | **320** | *e*P | | **Pn** | **07 39 37.1** | **+0.2** |
| | baz=318 | | | | | | | |
| CHN2 | | | | *e*S | | **Sb** | **07 39 56.8** | **+2.7** |
| | baz=318 | | | | | | | |
| **CHY** | **Chiayi** | **1.32** | **317** | *e*P | | **Pb** | **07 39 37.9** | **+0.3** |
| | baz=316 | | | | | | | |
| **SSLB** | **Suanglung** | **1.32** | **342** | *e*Pg | | **Pn** | **07 39 37.3** | **+0.2** |
| **WGK** | **Gukeng** | **1.39** | **327** | *e*P | | **Pb** | **07 39 39.7** | **+0.9** |
| | baz=325 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.43** | **341** | *e*P | | **Pb** | **07 39 40.1** | **+0.6** |
| | baz=353 | | | | | | | |
| **HWA** | **Hwalien** | **1.46** | **7** | *e*P | | **Pb** | **07 39 40.5** | **+0.5** |
| | baz=356 | | | | | | | |
| **TYC** | **Yuchr** | **1.46** | **340** | *e*P | | **Pb** | **07 39 40.2** | **+0.2** |
| | baz=351 | | | | | | | |
| **WNT** | **Mingjian** | **1.50** | **334** | *e*P | | **Pb** | **07 39 40.5** | **-0.2** |
| | baz=333 | | | | | | | |
| **WSF** | **Szhu** | **1.55** | **316** | *e*P | | **Pb** | **07 39 41.4** | **-0.1** |
| | baz=314 | | | | | | | |
| **TWD** | **Chiawan** | **1.56** | **7** | *e*P | | **Pn** | **07 39 40.1** | **-0.2** |
| | baz=356 | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.62** | **356** | *e*P | | **Pn** | **07 39 42.6** | **+1.1** |
| | baz=11 | | | | | | | |
| **NACB** | **Ninganchiao** | **1.65** | **6** | *e*Pn | | **Pn** | **07 39 41.6** | **+0.1** |
| NACB | | | | eSg | | **Sn** | **07 40 02.3** | **-0.2** |
| **TWT** | **Tachien** | **1.73** | **353** | *e*P | | **Pn** | **07 39 41.4** | **-1.4** |
| | baz=5.0 | | | | | | | |
| **WDGT** | **Dungji** | **1.76** | **295** | *e*P | | **Pn** | **07 39 43.1** | **0.0** |
| | baz=293 | | | | | | | |
| **TWQ1** | **Liyutan** | **1.90** | **343** | *e*P | | **Pn** | **07 39 46.4** | **+1.4** |
| | baz=340 | | | | | | | |
| **ENA** | **Nanau** | **1.92** | **9** | *e*P | | **Pn** | **07 39 46.8** | **+1.5** |
| | baz=357 | | | | | | | |
| **NSY** | **Sanyi** | **1.97** | **343** | *e*P | | **Pb** | **07 39 48.4** | **-0.4** |
| | baz=340 | | | | | | | |
| **ENTT** | **Nioudou** | **2.11** | **4** | *e*P | | **Pb** | **07 39 50.9** | **-0.3** |
| | baz=3.0 | | | | | | | |
| **TWC** | **Suao** | **2.12** | **11** | *e*P | | **Pn** | **07 39 47.8** | **-0.1** |
| | baz=358 | | | | | | | |
| **NSTT** | **Nanjuang** | **2.13** | **350** | *e*P | | **Pb** | **07 39 50.5** | **-0.8** |
| | baz=348 | | | | | | | |
| **YHNB** | **Yeheng** | **2.14** | **359** | *e*Pg | | **Pb** | **07 39 50.6** | **-0.9** |
| YHNB | | | | *e*S | | **Sn** | **07 40 14.8** | **+0.3** |
| **NSK** | **Sanguang** | **2.14** | **359** | *e*P | | **Pn** | **07 39 49.8** | **+1.4** |
| | baz=13 | | | | | | | |
| **TWE** | **Neicheng** | **2.20** | **6** | *e*P | | **Pn** | **07 39 50.2** | **+1.1** |
| | baz=6.0 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **2.43** | **37** | *e*Pn | | **Pn** | **07 39 52.7** | **+0.4** |
| YOJ | | | | *e*Sn | | **Sn** | **07 40 23.0** | **+1.3** |
| **TATO** | **Taipei** | **2.44** | **2** | *e*Pg | | **Pb** | **07 39 57.5** | **+0.7** |
| TATO | | | | *e*Sg | | **Sb** | **07 40 27.5** | **+0.9** |
| **TWA** | **Mucha** | **2.45** | **4** | *e*P | | **Pb** | **07 39 55.9** | **-1.0** |
| | baz=17 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **2.56** | **8** | *e*P | | **Pb** | **07 39 57.1** | **-1.7** |
| | baz=5.0 | | | | | | | |
| **KNM** | **Kinmen** | **3.31** | **305** | *e*P | | **Pn** | **07 40 05.9** | **+1.6** |
| | baz=301 | | | | | | | |
| **DAV** | **Davao City (W)** | **15.88** | **165** | LR | | LR | 07 48 31.4 | |
| | comp=Z,130nm,19.6s,baz=108,slow=36 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **20.18** | **42** | P | | Pn | 07 43 51.2 | +2.1 |
| | 0.9nm,0.4s,baz=217,slow=11,SNR=4.3 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.41** | **263** | LR | | LR | 07 53 57.0 | |
| | comp=Z,120nm,18.6s,baz=98,slow=42 | | | | | | | |
| **SONM** | **Songino Array** | **27.97** | **338** | P | | **P** | **07 45 05.0** | **+1.8** |
| | 0.7nm,0.5s,baz=145,slow=8.6,SNR=4.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **39.67** | **317** | P | | **P** | **07 46 43.5** | **-1.0** |
| | 0.3nm,0.5s,baz=111,slow=9.0,SNR=3.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.74** | **328** | P | | **P** | **07 47 00.1** | **-1.4** |
| | 0.7nm,0.3s,baz=131,slow=7.9,SNR=3.4 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 42.41** | **85** | | T | | T | 08 32 24.4 | |
| | baz=282,slow=75,SNR=36 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 42.41** | **85** | | T | | T | 08 32 25.3 | |
| | baz=282,slow=75,SNR=74 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 42.43** | **85** | | T | | T | 08 32 25.1 | |
| | baz=282,slow=75,SNR=47 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 42.49** | **87** | | T | | T | 08 32 30.1 | |
| | baz=284,slow=75,SNR=88 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 42.50** | **87** | | T | | T | 08 32 30.1 | |
| | baz=284,slow=75,SNR=74 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 42.51** | **87** | | T | | T | 08 32 31.2 | |
| | baz=284,slow=75,SNR=102 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **43.51** | **321** | P | | **P** | **07 47 15.7** | **-0.2** |
| | 0.4nm,0.3s,baz=119,slow=7.4,SNR=3.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.06** | **162** | P | | **P** | **07 47 19.1** | **-1.5** |
| | 0.3nm,0.4s,baz=345,slow=8.8,SNR=11 | | | | | | | |
| **ASAR** | **Alice Springs** | **47.50** | **164** | P | | **P** | **07 47 47.0** | **-0.8** |
| | 0.2nm,0.3s,baz=339,slow=6.5,SNR=7.3 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **07 49 17.3** | **-0.6** |
| | 0.5nm,0.8s,baz=304,slow=1.8,SNR=4.4 | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.08** | **322** | P | | **P** | **07 47 59.8** | **+0.1** |
| | 0.4nm,0.5s,baz=114,slow=9.6,SNR=2.6 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **56.10** | **316** | LR | | LR | 08 16 20.5 | |
| | comp=Z,146nm,20.3s,slow=40 | | | | | | | |
| **GERES** | **GERESS Array B** | **84.25** | **321** | P | | **P** | **07 51 45.2** | **+0.9** |
| | 0.5nm,0.6s,baz=54,slow=5.0,SNR=3.6 | | | | | | | |

*BJI **22** 08:00:32.3,38.12N×48.40E,h15km,mb4.7/21,mB5.2/15, Ms4.7/10,Ms7 4.3/10*
*IDC **22** 08:00:34.2±0.7,37.90N×48.96E,h0km,mb4.2/21, mb1 4.3/32,mb1mx4.2/49,mbtmp4.2/32,ML3.9/9,MS3.8/26, Ms1 3.8/26,ms1mx3.6/55,Error ellipse: s-maj=14.0km s-min=8.9km az=174.0*
*ISCJB **22** 08:00:36.1±0.2,38.00N±0.02×49.12E±0.02,h10km, mb4.4/58,MS3.7/17,Error ellipse: s-maj=2.8km s-min=2.0km az=38.2*
*NEIC **22** 08:00:37.6,37.96N×49.09E,h15km,mb4.6/21, ML4.6(THR),MN4.9(TEH),After THR.*
*MOS **22** 08:00:37.0±1.6,38.25N×49.14E,h13km,mb4.7/34,Error ellipse: s-maj=6.8km s-min=4.6km az=115.1*
*TEH **22** 08:00:37.9,37.91N×49.06E,h5km,ML4.9*
*CSEM **22** 08:00:37.4±0.1,37.97N×49.06E,h10km,mb4.6/50,Error ellipse: s-maj=4.5km s-min=3.5km az=46.0*
*THR **22** 08:00:37.6±0.6,37.96N×49.09E,h15km±7km,ML4.5*
*AZER **22** 08:00:38.6±0.0,38.01N×48.96E,h28km±1km,Error ellipse: s-maj=3.2km s-min=2.2km az=41.0*
*NNC **22** 08:00:44.0±2.2,38.65N×49.73E,h0km,mb4.7,Error ellipse: s-maj=38.2km s-min=15.4km az=89.0*
*ISN **22** 08:01:04.1±1.7,37.38N×46.33E,h0km±5km,ML4.7*
**ISC 22 08:00:37.5**±0.3,**37.98N**±0.02×**49.04E**±0.02,**h10**km,**n464,** σ1**s47**/445,**mb4.5**/58,**MS3.7**/17,**52C-44D,Caspian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LKRN** | **Lenkeran, Azer** | **0.76** | **344** | ⇓P | | **Pb** | **08 00 53.6** | **+0.8** |
| | SNR=277 | | | | | | | |
| LKRN | | | | ⇑S | | **Sn** | **08 01 05.3** | **-0.5** |
| **LKRN** | **Lenkeran, Azer** | **0.76** | **344** | P | | **Pb** | **08 00 53.6** | **+0.8** |
| | SNR=277 | | | | | | | |
| LKRN | | | | S | | **Sn** | **08 01 05.3** | **-0.5** |
| **LRK** | **Lerik** | **0.86** | **321** | ⇓P | | **Pg** | **08 00 55.0** | **+0.9** |
| | SNR=2009 | | | | | | | |
| LRK | | | | ⇓S | | **Sb** | **08 01 07.7** | **+1.4** |
| **LRK** | **Lerik** | **0.86** | **321** | P | | **Pg** | **08 00 55.0** | **+0.9** |
| | SNR=1000 | | | | | | | |
| LRK | | | | S | | **Sb** | **08 01 07.7** | **+1.4** |
| **ISRB** | **Sarab** | **1.10** | **262** | *e*Pg | | **Pb** | **08 00 58.4** | **-0.3** |
| ISRB | | | | *e* | | | 08 01 14.1 | |
| | comp=Z,58μm,0.2s | | | | | | | |
| **ISRB** | **Sarab** | **1.10** | **262** | Pn | | **Pb** | **08 00 58.4** | **-0.3** |
| **ISRB** | **Sarab** | **1.10** | **262** | *e*Pg | | **Pb** | **08 00 58.4** | **-0.3** |
| **ZNJK** | **Zanjan** | **1.33** | **192** | *e*Pg | | **Pn** | **08 01 02.0** | **-0.4** |
| ZNJK | | | | AML | | AML | 08 01 21.1 | |
| | comp=E,8μm,0.7s | | | | | | | |
| **ZNJK** | **Zanjan** | **1.33** | **192** | Pg | | **Pn** | **08 01 02.0** | **-0.4** |
| **ZNJK** | **Zanjan** | **1.33** | **192** | *e*Pg | | **Pn** | **08 01 02.0** | **-0.4** |
| **GLBA** | **Clilabad** | **1.36** | **338** | ⇓P | | **Pn** | **08 01 02.7** | **+0.2** |
| | SNR=19 | | | | | | | |
| GLBA | | | | ⇓S | | **Sn** | **08 01 21.1** | **+0.5** |
| **GLBA** | **Clilabad** | **1.36** | **338** | P | | **Pn** | **08 01 02.7** | **+0.2** |
| | SNR=19 | | | | | | | |
| GLBA | | | | S | | **Sn** | **08 01 21.1** | **+0.5** |
| **IHRS** | **Heris** | **1.61** | **283** | *e*Sg | | **Sb** | **08 01 28.9** | **+0.9** |
| IHRS | | | | *e*Pg | | **Pn** | **08 01 06.8** | **+0.5** |
| IHRS | | | | *e* | | | 08 01 31.2 | |
| | comp=Z,29μm,0.1s | | | | | | | |
| **IHRS** | **Heris** | **1.61** | **283** | Pn | | **Pn** | **08 01 06.7** | **+0.5** |
| IHRS | | | | Sg | | **Sb** | **08 01 28.9** | **+0.9** |
| **IHRS** | **Heris** | **1.61** | **283** | Pn | | **Pn** | **08 01 06.7** | **+0.5** |
| IHRS | | | | *e*Sg | | **Sb** | **08 01 28.9** | **+0.9** |
| **IBST** | **Bostanabad** | **1.72** | **261** | *e* | | | 08 01 32.7 | |
| | comp=Z,12μm,0.3s | | | | | | | |
| IBST | | | | *e*Pn | | **Pn** | **08 01 08.0** | **+0.3** |
| **IBST** | **Bostanabad** | **1.72** | **261** | *e*Pn | | **Pn** | **08 01 08.0** | **+0.3** |
| **IGZV** | **Ghazvin** | **1.84** | **149** | *e* | | | 08 01 38.0 | |
| | comp=Z,58μm,0.2s | | | | | | | |
| IGZV | | | | ⇓*e*Pn | | **Pn** | **08 01 09.1** | **-0.3** |
| **SAAT** | **Saatly** | **1.94** | **346** | ⇓P | | **Pn** | **08 01 11.8** | **+1.3** |
| | SNR=3.0 | | | | | | | |
| SAAT | | | | ⇑S | | **Sb** | **08 01 37.4** | **+0.2** |
| **SAAT** | **Saatly** | **1.94** | **346** | P | | **Pn** | **08 01 11.8** | **+1.3** |
| | SNR=3.0 | | | | | | | |
| SAAT | | | | S | | **Sb** | **08 01 37.4** | **+0.2** |
| **ALIB** | **Äli-Bayra** | **1.98** | **359** | ⇓P | | **Pn** | **08 01 12.2** | **+1.2** |
| | SNR=9.1 | | | | | | | |
| ALIB | | | | ⇑S | | **Sb** | **08 01 39.2** | **+0.9** |
| **ALIB** | **Äli-Bayra** | **1.98** | **359** | P | | **Pn** | **08 01 12.2** | **+1.2** |
| | SNR=9.1 | | | | | | | |
| **ITBZ** | **Tabriz** | **2.30** | **277** | *e*Pn | | **Pn** | **08 01 16.7** | **+1.1** |
| ITBZ | | | | *e* | | | 08 01 54.1 | |
| | comp=Z,38μm,0.2s | | | | | | | |
| **ITBZ** | **Tabriz** | **2.30** | **277** | Pn | | **Pn** | **08 01 16.7** | **+1.1** |
| **ITBZ** | **Tabriz** | **2.30** | **277** | *e*Pn | | **Pn** | **08 01 16.7** | **+1.1** |
| **IAZR** | **Azarshahr** | **2.44** | **264** | *e*Pn | | **Pn** | **08 01 19.1** | **+1.5** |
| IAZR | | | | *e* | | | 08 02 02.5 | |
| | comp=Z,87μm,0.3s | | | | | | | |
| **IAZR** | **Azarshahr** | **2.44** | **264** | Pn | | **Pn** | **08 01 19.1** | **+1.5** |
| **IAZR** | **Azarshahr** | **2.44** | **264** | *e*Pn | | **Pn** | **08 01 19.1** | **+1.5** |
| **GOBA** | **Gobu** | **2.48** | **12** | ⇓P | | **Pn** | **08 01 18.8** | **+0.9** |
| GOBA | | | | ⇓S | | **Sb** | **08 01 52.3** | **-0.4** |
| **GOBA** | **Gobu** | **2.48** | **12** | P | | **Pn** | **08 01 18.8** | **+0.9** |
| **KDMR** | **Kurdemir** | **2.49** | **345** | ⇑P | | **Pn** | **08 01 19.3** | **+1.3** |
| | SNR=14 | | | | | | | |
| KDMR | | | | ⇑S | | **Sn** | **08 01 47.9** | **-0.5** |
| **KDMR** | **Kurdemir** | **2.49** | **345** | P | | **Pn** | **08 01 19.3** | **+1.3** |
| | SNR=14 | | | | | | | |
| KDMR | | | | S | | **Sn** | **08 01 47.9** | **-0.5** |
| **IMHD** | **Mahdasht** | **2.63** | **150** | *e*Pn | | **Pn** | **08 01 20.6** | **+0.5** |
| IMHD | | | | *e* | | | 08 01 54.8 | |
| | comp=N,47μm,0.1s | | | | | | | |
| **IMHD** | **Mahdasht** | **2.63** | **150** | Pn | | **Pn** | **08 01 20.6** | **+0.5** |
| **IMHD** | **Mahdasht** | **2.63** | **150** | *e*Pn | | **Pn** | **08 01 20.6** | **+0.5** |
| **CHTH** | **Charan** | **2.66** | **140** | *e*Pn | | **Pn** | **08 01 21.7** | **+1.1** |
| **CHTH** | **Charan** | **2.66** | **140** | Pn | | **Pn** | **08 01 21.0** | **+0.4** |
| **CHTH** | **Charan** | **2.66** | **140** | Pn | | **Pn** | **08 01 21.0** | **+0.4** |
| **IRAZ** | **Razeghan** | **2.66** | **164** | *e*Pn | | **Pn** | **08 01 20.4** | **-0.2** |
| IRAZ | | | | *e* | | | 08 02 06.2 | |
| | comp=Z,42μm,0.4s | | | | | | | |
| **IRAZ** | **Razeghan** | **2.66** | **164** | Pn | | **Pn** | **08 01 20.4** | **-0.2** |
| **IRAZ** | **Razeghan** | **2.66** | **164** | *e*Pn | | **Pn** | **08 01 20.4** | **-0.2** |
| **NDR** | **Nardaran** | **2.70** | **15** | ⇑P | | **Pn** | **08 01 23.5** | **+2.6** |
| | SNR=3.5 | | | | | | | |
| NDR | | | | ⇓S | | **Sb** | **08 01 58.3** | **-0.8** |
| **NDR** | **Nardaran** | **2.70** | **15** | P | | **Pn** | **08 01 23.5** | **+2.6** |
| | SNR=3.5 | | | | | | | |
| **BRDA** | **Brd** | **2.70** | **328** | ⇑P | | **Pn** | **08 01 22.7** | **+1.7** |
| | SNR=7.7 | | | | | | | |
| BRDA | | | | ⇓S | | **Sn** | **08 01 55.3** | **+1.6** |
| **BRDA** | **Brd** | **2.70** | **328** | P | | **Pn** | **08 01 22.7** | **+1.7** |
| | SNR=7.7 | | | | | | | |
| BRDA | | | | S | | **Sn** | **08 01 55.3** | **+1.6** |
| **ISHB** | **Shabestar** | **2.72** | **278** | *e*Pn | | **Pn** | **08 01 22.8** | **+1.4** |
| ISHB | | | | *e* | | | 08 02 11.3 | |
| | comp=Z,36μm,0.3s | | | | | | | |
| **ISHB** | **Shabestar** | **2.72** | **278** | Pn | | **Pn** | **08 01 22.8** | **+1.4** |
| **ISHB** | **Shabestar** | **2.72** | **278** | Pn | | **Pn** | **08 01 22.8** | **+1.4** |
| **IMRD** | **Marand** | **2.73** | **287** | *e*Pn | | **Pn** | **08 01 23.3** | **+1.8** |
| IMRD | | | | *e* | | | 08 02 11.4 | |
| | comp=Z,21μm,0.3s | | | | | | | |
| **IMRD** | **Marand** | **2.73** | **287** | Pn | | **Pn** | **08 01 23.2** | **+1.8** |
| **IMRD** | **Marand** | **2.73** | **287** | Pn | | **Pn** | **08 01 23.2** | **+1.8** |
| **PQL** | **Pirkuli** | **2.83** | **353** | ⇓P | | **Pn** | **08 01 23.9** | **+1.0** |
| | SNR=9.0 | | | | | | | |
| PQL | | | | ⇓S | | **Sn** | **08 01 58.1** | **+1.0** |
| **PQL** | **Pirkuli** | **2.83** | **353** | P | | **Pn** | **08 01 23.9** | **+1.0** |
| | SNR=9.0 | | | | | | | |
| PQL | | | | S | | **Sn** | **08 01 58.1** | **+1.0** |
| **ATGJ** | **Altiaghaj** | **2.88** | **358** | ⇑P | | **Pn** | **08 01 27.2** | **+3.7** |
| | SNR=4.2 | | | | | | | |
| ATGJ | | | | ⇑S | | **Sn** | **08 02 00.9** | **+2.6** |
| **ATGJ** | **Altiaghaj** | **2.88** | **358** | P | | **Pn** | **08 01 27.2** | **+3.7** |
| | SNR=4.2 | | | | | | | |
| ATGJ | | | | S | | **Sn** | **08 02 00.9** | **+2.6** |
| **IML** | **Ismayilli** | **2.89** | **347** | ⇓P | | **Pn** | **08 01 24.4** | **+0.8** |
| | SNR=10.0 | | | | | | | |
| IML | | | | ⇓S | | **Sn** | **08 01 59.7** | **+1.2** |
| **IML** | **Ismayilli** | **2.89** | **347** | P | | **Pn** | **08 01 24.4** | **+0.8** |
| | SNR=10.0 | | | | | | | |
| IML | | | | S | | **Sn** | **08 01 59.7** | **+1.2** |
| **IR3** | **Iran Long-Peri** | **2.96** | **147** | *e*Pn | | **Pn** | **08 01 25.1** | **+0.5** |
| **IR3** | **Iran Long-Peri** | **2.96** | **147** | *e*Pn | | **Pn** | **08 01 25.1** | **+0.5** |
| **IAFJ** | **Afjeh** | **3.01** | **134** | *e* | | **Sn** | **08 02 05.2** | **+3.4** |
| | comp=Z,20μm,0.3s | | | | | | | |
| **NAX** | **Nakhchivan** | **3.03** | **294** | ⇓P | |

SNR=17
**QZX Qazax, Azerbai 4.19 318** P **Pn** **08 01 42.6 +1.2**
SNR=17
**HKR Hakkari 4.22 266** *e*P Pn 08 01 45.5 +3.5
**HKR Hakkari 4.22 266** *e*P Pn 08 01 45.5 +3.5
**HAKT HAKKARI 4.25 266** *i* P Pn 08 01 46.0 +3.6
**HAKT HAKKARI 4.25 266** P Pn 08 01 46.0 +3.6
HAKT S **Sg** **08 02 52.7 -1.2**
**KHMZ Khomeyn 4.29 170** *e*Pn **Pn** **08 01 44.5 +1.5**
**KHMZ Khomeyn 4.29 170** *e*Pn **Pn** **08 01 44.5 +1.5**
**CUKT Cukurca 4.38 262** *e*P **Pn** **08 01 46.2 +2.1**
**CUKT Cukurca 4.38 262** *e*P **Pn** **08 01 46.2 +2.1**
**TVAN Van 4.47 279** *i* P **Pn** **08 01 48.3 +2.8**
**TVAN Van 4.47 279** P **Pn** **08 01 48.3 +2.8**
**DGRG David-gareji 4.48 322** P **Pn** **08 01 47.5 +2.0**
**DGRG David-gareji 4.48 322** PN **Pn** **08 01 47.4 +2.0**
**DGRG David-gareji 4.48 322** Pn **Pn** **08 01 47.4 +2.0**
**IKRK Kirkuk 4.57 237** *e*Pg x 08 02 00.4
IKRK *e*SG x 08 02 39.4
**QAM Ghamsar 4.64 154** *e*Pn **Pn** **08 01 48.4 +0.7**
QAM *e* 08 02 43.2
comp=Z,6µm,0.2s
**QAM Ghamsar 4.64 154** *e*Pn **Pn** **08 01 48.4 +0.7**
**AGRB Hanur-Agry 4.99 291** *e*P Pn 08 01 58.1 +5.5
**AGRB Hanur-Agry 4.99 291** *e*P Pn 08 01 58.1 +5.5
**MSL Mosul 4.99 253** *e*Pn x 08 01 49.6
MSL *e*SN x 08 02 22.6
**SEAG Tbilisi Sea 4.99 321** P **Pb** **08 02 03.1 -1.9**
**TBLG Delisi 5.00 320** *e*P Pb 08 02 00.9 -4.2
**TBLG Delisi 5.00 320** P Pb 08 02 02.0 -3.1
**TBLG Delisi 5.00 320** PN Pb 08 02 02.0 -3.1
**EAK Akyaka 5.01 304** P **Pb** **08 02 04.0 -1.3**
EAK S **Sg** **08 03 16.8 -1.4**
**DIGO Kars 5.03 301** *i* P Pn 08 01 58.5 +5.3
**DIGO Kars 5.03 301** P Pn 08 01 58.5 +5.3
**TUTA Tutak 5.08 288** *i* P **Pn** **08 01 56.6 +2.8**
**TUTA Tutak 5.08 288** P **Pn** **08 01 56.6 +2.8**
TUTA S **Sg** **08 03 20.4 -0.1**
**MAK Makhachkala 5.12 347** *e*PN Pn 08 01 51.8 -2.3
MAK *e* 08 02 54.5
MAK smax smax
comp=N,615nm,0.5s
MAK MLR MLR
comp=Z,847nm,18.0s
**MAK Makhachkala 5.12 347** *e*Pn Pn 08 01 51.8 -2.3
comp=Z,615nm,0.5s
MAK *e*Sn **Sn** **08 02 54.5 +1.4**
comp=Z,847nm,18.0s
**SIRT Sirnak 5.25 267** *e*P Pn 08 02 00.5 +4.4
**SIRT Sirnak 5.25 267** *e*P Pn 08 02 00.5 +4.4
**SIRN S¨–rnak 5.28 267** *i* P **Pn** **08 01 58.4 +2.0**
**SIRN S¨–rnak 5.28 267** P **Pn** **08 01 58.4 +2.0**
**KARS Kars 5.33 302** *e*P Pn 08 02 03.3 +6.1
**IBDR Badra 5.48 209** *e*PN x 08 02 10.7
IBDR *e*SN x 08 02 56.9
**AKH Akhalkalaki 5.48 310** *e*P Pn 08 02 06.2 +6.9
**AKH Akhalkalaki 5.48 310** P **Pb** **08 02 12.3 -1.1**
**AKH Akhalkalaki 5.48 310** PN **Pb** **08 02 12.3 -1.1**
**AKH Akhalkalaki 5.48 310**⇑ *i*P Pb 08 02 18.6 +5.2
**IPIR Pirpir 5.49 163** *e*Pn **Pn** **08 02 01.7 +2.0**
IPIR *e* 08 03 50.6
comp=Z,2µm,0.6s
**IPIR Pirpir 5.49 163** Pn **Pn** **08 02 01.6 +2.0**
**IPIR Pirpir 5.49 163** Pn **Pn** **08 02 01.6 +2.0**
**EKAR Karacoban 5.61 285** P Pn 08 02 06.7 +5.5
**NASN Na'in 6.01 148** *e*Pn **Pn** **08 02 07.7 +1.0**
**NASN Na'in 6.01 148** Pn **Pn** **08 02 07.0 +0.2**
**NASN Na'in 6.01 148** Pn **Pn** **08 02 07.0 +0.2**
**BHD Baghdad 6.04 220** *e*PN x 08 02 12.6
BHD *e*SN x 08 03 01.8
**VRTB Varto-Mus 6.06 284** *e*P Pn 08 02 11.9 +4.6
**SVAN Silvan-Diyarba 6.19 274** *e*P Pn 08 02 14.5 +5.6
**ONI Oni 6.28 319** P Pb 08 02 30.6 +3.7
**EZM Erzurum 6.29 290** *e*P Pn 08 02 16.0 +5.5
**BNGB Bing¨ll 6.64 281** *e*P Pn 08 02 20.0 +4.9
**BCA Borcka 6.69 304** *e*P Pn 08 02 21.4 +5.7
**BINT Bingol 6.78 280** *e*P **Pn** **08 02 20.0 +3.0**
**MAZI Mazidag 6.83 268** *e*P Pn 08 02 22.0 +4.2
**NCK Nalchik 6.89 325** *e*P **Pn** **08 02 18.7 +0.2**
**NCK Nalchik 6.89 325** *e*P **Pn** **08 02 18.7 +0.2**
**CHVG Ch'k'valeri 7.12 314** P **Pn** **08 02 24.7 +3.1**
**CHVG Ch'k'valeri 7.12 314** P **Pn** **08 02 24.7 +3.1**
**NEY Neytrino 7.13 320** *e*P **Pn** **08 02 22.0 +0.1**
**GEYT Alibeck 7.17 88** Pn Pn 08 02 21.1 -1.3
comp=Z,19nm,0.3s,baz=283,slow=13,SNR=58
GEYT Sn Sn 08 03 38.5 -5.4
comp=Z,6.0nm,0.3s,baz=265,slow=17,SNR=2.7
GEYT LR LR 08 06 33.2
comp=Z,378nm,20.7s,baz=270,slow=50
**BAYT Ayd¨–ntepe-Bay 7.32 292** *e*P Pn 08 02 29.3 +4.7
**NSR Nassriya 7.35 200** *e*PN x 08 02 41.1
NSR *e*SN x 08 03 48.3
**KBZ Khabaz 7.39 323** Pn **Pn** **08 02 24.1 -1.2**
comp=Z,0.1nm,0.3s,baz=73,slow=17,SNR=1.7
KBZ Sn **Sn** **08 03 49.8 +0.6**
comp=Z,0.9nm,0.3s,baz=156,slow=10.0,SNR=2.3
KBZ Lg Lg 08 04 30.8
comp=Z,1.0nm,0.3s,baz=135,slow=2.9,SNR=2.1
KBZ LR LR 08 05 30.0
comp=Z,370nm,18.5s,baz=144,slow=40
**PTK Pertek 7.63 280** *e*P Pn 08 02 32.9 +4.1
**KIV Kislovodsk 7.67 323** *i* P **Pn** **08 02 28.3 -0.9**
KIV *e*S **Sn** **08 03 51.6 -4.5**
KIV pmax pmax
comp=Z,11nm,0.7s
**KIV Kislovodsk 7.67 323** *i* P **Pn** **08 02 28.3 -0.9**
comp=Z,11nm,0.7s
**GUMT Gumushane 7.83 291** *e*P Pn 08 02 36.3 +4.9
**MALT Malatya 8.37 276**⇑ *i*P **Pn** **08 02 41.0 +2.1**
**ESPY Espiye-Giresun 8.50 293** *e*P **Pn** **08 02 41.2 +0.6**
**ESPY Espiye-Giresun 8.50 293** *e*P **Pn** **08 02 41.2 +0.6**
**RTB Rutbah 8.66 238** *e*PN x 08 02 42.8
RTB *e*SN x 08 03 53.3
**SVSK Karacayir 9.58 285** *e*P Pn 08 02 46.8 -8.5
**ANN Anapa 11.06 312** *e*P Pn 08 03 13.5 -2.1
ANN *e*S **Sn** **08 05 17.6 -1.7**
ANN pmax pmax
comp=Z,48nm,1.1s
**ASF Jabal al Asfar 11.51 243** Pn Pn 08 03 17.9 -4.0
comp=Z,0.1nm,0.3s,baz=39,slow=12,SNR=1.8
ASF Sn Sn 08 05 25.4 -5.1
comp=Z,0.1nm,0.3s,baz=7.4,slow=18,SNR=2.2
ASF Lg Lg 08 06 35.6
comp=Z,0.2nm,0.3s,baz=36,slow=19,SNR=2.3
ASF LR LR 08 08 22.7
comp=Z,635nm,21.0s,baz=360,slow=41
**BRTR Keskin Array B 12.14 283** Pn **Pn** **08 03 33.0 +2.4**
comp=Z,3.6nm,0.3s,baz=102,slow=12,SNR=2.6
BRTR LR LR 08 09 00.3
comp=Z,1µm,19.0s,baz=88,slow=42
**BRTR Keskin Array B 12.14 283** P **Pn** **08 03 33.0 +2.4**
BRTR pmax pmax
comp=Z,4.0nm,0.3s
BRTR MLR MLR
comp=Z,1µm,19.0s
**BRTR Keskin Array B 12.14 283** P **Pn** **08 03 33.0 +2.4**
comp=Z,1µm,19.0s
**MMAI Mount Meron Ar 12.16 250** Pn Pn 08 03 28.3 -2.5
comp=Z,0.7nm,0.3s,baz=57,slow=16,SNR=2.5
MMAI LR LR 08 08 52.7
comp=Z,534nm,18.8s,baz=50,slow=4
**AB31 Akbulak array 13.75 31** ⇓Pn Pn 08 03 47.7 -4.6
comp=Z,7.9nm,0.8s,baz=210,slow=14,SNR=73
AB31 Sn Sn 08 06 13.6 -11
comp=Z,4.8nm,0.4s,baz=219,slow=23,SNR=11
**AB31 Akbulak array 13.75 31** P Pn 08 03 48.0 -4.3
AB31 08 06 13.6
AB31 pmax pmax
comp=Z,3.0nm,0.4s
AB31 smax smax
comp=N,8.0nm,0.4s
**ABKAR Akbulak array 13.75 31** *e*Pn Pn 08 03 47.7 -4.6
ABKAR *e*Sn Sn 08 06 14.0 -11
**AKTO Aktyubinsk 14.00 24** ⇓Pn Pn 08 03 51.6 -4.3
comp=N,19nm,0.9s
AKTO ⇑Sn Sn 08 06 19.7 -12
comp=N,15nm,0.5s
**AKTO Aktyubinsk 14.00 24** Pn Pn 08 03 51.9 -4.0
comp=N,3.5nm,0.3s,baz=212,slow=9.3,SNR=46
AKTO Sn Sn 08 06 16.4 -15
comp=N,4.4nm,0.3s,baz=0.0,slow=20,SNR=9.9
**VRH Novokhopyorsk 14.20 341** *e*P **P** **08 04 05.0 -1.0**
VRH pmax pmax
comp=N,40nm,0.8s
VRH pmax pmax
comp=E,40nm,0.8s
VRH pmax pmax
comp=Z,60nm,0.8s
**VRH Novokhopyorsk 14.20 341** *e*P **P** **08 04 05.0 -1.0**
**EIL Elat 14.33 239** Pn Pn 08 03 56.5 -3.9
comp=Z,0.2nm,0.3s,baz=47,slow=19,SNR=1.8
EIL Lg Lg 08 08 07.8
comp=Z,0.6nm,0.3s,baz=78,slow=19,SNR=2.5
EIL LR LR 08 10 22.1
comp=Z,762nm,18.1s,baz=58,slow=41
**UOSS Wadi Hilu 14.35 153** *e*Pn **Pn** **08 04 00.8 +0.1**
**UOSS Wadi Hilu 14.35 153** *e*Pn **Pn** **08 04 00.8 +0.1**
**ISP Isparta 14.63 275** *e*P **P** **08 04 11.4 +0.5**
**ISP Isparta 14.63 275** *e*P **P** **08 04 11.4 +0.5**
**VSR Storozhevoye 14.97 335** *e*P Pn 08 04 12.6 +3.6
VSR pmax pmax
comp=N,9.0nm,0.8s
VSR pmax pmax
comp=E,10.0nm,0.8s
VSR pmax pmax
comp=Z,10.0nm,0.8s
**VSR Storozhevoye 14.97 335** *e*P Pn 08 04 12.6 +3.6
**LPSR Galich'ya Gora 16.24 337** *e*P Pn 08 04 21.7 -3.8
LPSR pmax pmax
comp=Z,30nm,0.8s
LPSR pmax pmax
comp=N,9.0nm,0.6s
LPSR pmax pmax
comp=E,10.0nm,0.8s
**KBL Kabul 16.49 96** *e*P **Pn** **08 04 29.7 +0.6**
KBL pmax pmax
comp=Z,84nm,1.6s
**KBL Kabul 16.49 96** *e*Pn **Pn** **08 04 29.7 +0.6**
comp=Z,84nm,1.6s
**TLCR 16.74 302**⇑ *i*P **Pn** **08 04 33.7 +1.8**
**TLCR 16.74 302**⇑ *i*P **Pn** **08 04 33.7 +1.8**
**TIRR Tirgusor 16.80 299** *e*P **Pn** **08 04 34.4 +1.8**
TIRR pmax pmax
comp=Z,33nm,1.1s
**TIRR Tirgusor 16.80 299**⇑ *i*P **Pn** **08 04 34.7 +2.1**
**TIRR Tirgusor 16.80 299** *e*P **Pn** **08 04 34.4 +1.8**
comp=Z,33nm,1.1s
**TIRR Tirgusor 16.80 299** *e*P **Pn** **08 04 34.4 +1.8**
comp=Z,33nm,1.1s
**KK31 Karatay Array 17.09 66** ⇓P **Pn** **08 04 34.5 -1.9**
comp=Z,33nm,0.8s,baz=243,slow=14,SNR=148
KK31 Karatay Array 17.09 66 *i* P **Pn** **08 04 34.5 -1.9**
KK31 pmax pmax
comp=Z,39nm,0.9s
**KKAR Karatay Array 17.09 66** *e*P **Pn** **08 04 34.4 -2.0**
**KKAR Karatay Array 17.09 66** *e*P **Pn** **08 04 34.4 -2.0**
**KIS Kishinev 17.39 308** *e*P **P** **08 04 42.0 +0.6**
**KIS Kishinev 17.39 308** *e*P **P** **08 04 42.0 +0.6**
**KIS Kishinev 17.39 308** *e*P **P** **08 04 42.0 +0.6**
**VRI Vrincioaia 18.34 303**⇑ *i*P **Pn** **08 04 52.4 +0.5**
**VRI Vrincioaia 18.34 303**⇑ *i*P **Pn** **08 04 52.4 +0.5**
**PLOR Plostina 18.39 302**⇑ *i*P **Pn** **08 04 52.3 -0.2**
**PLOR Plostina 18.39 302**⇑ *i*P **Pn** **08 04 52.3 -0.2**
**TESR Tescani 18.60 304**⇑ *i*P **P** **08 04 55.2 +0.5**
**TESR Tescani 18.60 304**⇑ *i*P **P** **08 04 55.2 +0.5**
**MLR Muntele Rosu 18.76 301** P **P** **08 04 54.1 -2.5**
comp=Z,0.1nm,0.3s,baz=197,slow=5.0,SNR=16
**MLR Muntele Rosu 18.76 301**⇑ *i*P **Pn** **08 04 58.2 +1.1**
**MLR Muntele Rosu 18.76 301**⇑ *i*P **Pn** **08 04 58.2 +1.1**
**AKASG Malin Array Be 18.97 318** P **P** **08 04 56.7 -2.1**
comp=Z,1.9nm,0.3s,baz=127,slow=11,SNR=14
AKASG S **Sn** **08 08 25.1 -6.6**
comp=Z,0.4nm,0.3s,baz=142,slow=4.7,SNR=2.4
AKASG LR LR 08 12 58.7
comp=Z,116nm,18.1s,baz=110,slow=39
**AKASG Malin Array Be 18.97 318** P **P** **08 04 56.7 -2.1**
AKASG S **Sn** **08 08 25.1 -6.6**
AKASG pmax pmax
comp=Z,2.0nm,0.3s
AKASG MLR MLR
comp=Z,116nm,18.1s
**KIEV Kiev 18.98 318** *e*P **P** **08 04 58.7 -0.1**
**KIEV Kiev 18.98 318** *e*P **P** **08 04 58.3 -0.5**
comp=Z,28nm,1.2s
**KIEV Kiev 18.98 318** *e*P **P** **08 04 58.7 -0.1**
**AK11 Malin Array Si 18.99 318** *e*P **P** **08 04 58.4 -0.6**
**AK11 Malin Array Si 18.99 318** *e*P **P** **08 04 58.3 -0.6**
**OBN Obninsk 19.12 338** LR LR 08 13 27.3
comp=Z,184nm,18.5s,baz=214,slow=40
**OBN Obninsk 19.12 338***c**e*P **P** **08 04 56.7 -3.6**
OBN pmax pmax
comp=Z,27nm,0.8s
OBN MLR MLR
comp=Z,57nm,18.0s
**DOPR Dopca 19.27 302**⇓ *i*P **P** **08 05 03.3 +1.2**
**DOPR Dopca 19.27 302**⇓ *i*P **P** **08 05 03.3 +1.2**
**VOIR 19.36 300**⇑ *i*P **P** **08 05 04.6 +1.5**
**VOIR 19.36 300**⇑ *i*P **P** **08 05 04.6 +1.5**
**MOS Moscow 19.36 340** *e*P **P** **08 05 01.6 -1.4**
MOS pmax pmax
comp=Z,77nm,1.3s
**MOS Moscow 19.36 340** *e*P **P** **08 05 01.6 -1.4**
comp=Z,77nm,1.3s
**ARU Arti 19.53 16** P **P** **08 05 02.7 -2.1**
comp=Z,0.0nm,0.3s,baz=158,slow=19,SNR=3.6
ARU S Sn 08 08 25.8 -19
baz=90,slow=20,SNR=4.6
**ARU Arti 19.53 16***c* *i*P **P** **08 05 02.7 -2.1**
ARU S **Sn** **08 08 39.5 -5.5**
ARU pmax pmax
comp=Z,15nm,0.8s
**ARU Arti 19.53 16** *e*P **P** **08 05 03.1 -1.6**
comp=Z,19nm,1.0s
ARU S Sn 08 08 25.8 -19
ARU *e*S **S** **08 08 39.8 -5.4**
**ARU Arti 19.53 16** *e*P **P** **08 05 03.2 -1.6**
comp=Z,19nm,1.0s
**IDI Anoyia 19.56 269** P **P** **08 05 02.1 -3.2**
comp=Z,1.2nm,0.3s,baz=46,slow=21,SNR=8.4
**IDI Anoyia 19.56 269** *e*P **P** **08 05 04.4 -1.0**
comp=Z,37nm,1.2s
**IDI Anoyia 19.56 269** *e*P **P** **08 05 04.4 -1.0**
comp=Z,37nm,1.2s
**ARR Arges 19.62 300**⇓ *i*P **P** **08 05 07.4 +1.3**
**ARR Arges 19.62 300**⇓ *i*P **P** **08 05 07.4 +1.3**
**BURAR Bucovina Array 19.89 307**⇑ *i*P **P** **08 05 09.9 +0.9**
**BURAR Bucovina Array 19.89 307**⇑ *i*P **P** **08 05 09.9 +0.9**
**BUR04 Bucovina Ar. S 19.90 307** *e*P **P** **08 05 08.1 -0.9**
**BUR04 Bucovina Ar. S 19.90 307** *e*P **P** **08 05 08.1 -0.9**
**AAK Ala-Archa 19.93 68** ⇑P **P** **08 05 10.3 +0.8**
comp=Z,20nm,1.2s
**AAK Ala-Archa 19.93 68** P **P** **08 05 09.5 0.0**
comp=Z,9.8nm,0.9s,baz=248,slow=16,SNR=10.0
AAK LR LR 08 15 11.6
comp=Z,429nm,19.1s,baz=264,slow=44
**AAK Ala-Archa 19.93 68** *e*P **P** **08 05 10.1 +0.5**
AAK pmax pmax
comp=Z,25nm,1.3s
**AAK Ala-Archa 19.93 68** *e*P **P** **08 05 10.1 +0.5**
comp=Z,25nm,1.3s
**AAK Ala-Archa 19.93 68** *e*P **P** **08 05 10.1 +0.5**
comp=Z,25nm,1.3s
**LOT Lotru 20.23 300**⇑ *i*P **P** **08 05 13.2 +0.4**
**LOT Lotru 20.23 300**⇑ *i*P **P** **08 05 13.2 +0.4**
**SVE Sverdlovsk 20.37 19**⇓ *i*P **P** **08 05 15.1 +1.1**
SVE pmax pmax
comp=Z,38nm,1.2s
**SVE Sverdlovsk 20.37 19** *i* P **P** **08 05 15.1 +1.1**
comp=Z,38nm,1.2s
**ZRNK Zerenda 20.40 36** ⇓P **P** **08 05 13.7 -0.6**
comp=Z,42nm,1.1s
**ZRNK Zerenda 20.40 36** P **P** **08 05 13.7 -0.6**
ZRNK pmax pmax
comp=Z,42nm,1.1s
**ZRNK Zerenda 20.40 36** P **P** **08 05 13.7 -0.6**
comp=Z,42nm,1.1s
**GZR Gura Zlata 20.91 299**⇓ *i*P **P** **08 05 19.8 -0.2**
**GZR Gura Zlata 20.91 299**⇓ *i*P **P** **08 05 19.8 -0.2**
**KSH Kashi 21.04 77** P **P** **08 05 19.3 -2.2**
KSH *e*pP **pP** **08 05 26.1 +1.7**
KSH S S 08 09 02.5 -13
KSH *e*PcP **PcP** **08 09 28.3 +0.1**
KSH PMZ
comp=Z,23nm,0.8s
KSH PMZ
comp=Z,180nm,5.5s
KSH LN
comp=Z,230nm,7.4s
KSH LE
comp=Z,220nm,6.4s
KSH LZ
comp=Z,140nm,12.6s
**BRVK Borovoye 21.07 37**⇑P **P** **08 05 20.9 -0.7**
comp=Z,95nm,1.0s
**BRVK Borovoye 21.07 37** P **P** **08 05 20.9 -0.7**
BRVK pmax pmax
comp=Z,95nm,1.0s
**BRVK Borovoye 21.07 37** *e*P **P** **08 05 21.1 -0.5**
comp=Z,86nm,1.2s
**BRVK Borovoye 21.07 37** *e*P **P** **08 05 21.1 -0.5**
comp=Z,86nm,1.2s
**BVAR Borovoye Array 21.10 38** P **P** **08 05 21.4 -0.5**
comp=Z,24nm,0.6s,baz=226,slow=8.1,SNR=119
BVAR S S 08 09 04.7 -12
comp=Z,0.8nm,0.4s,baz=233,slow=26,SNR=2.8
**BVAR Borovoye Array 21.10 38** P **P** **08 05 21.4 -0.5**
BVAR S S 08 09 04.7 -12
BVAR pmax pmax
comp=Z,24nm,0.6s
BVAR smax smax
comp=N,1.0nm,0.4s
**VOSK Vostochnaya 21.21 39**⇓P **P** **08 05 21.8 -1.4**
comp=N,28nm,1.1s
**VOSK Vostochnaya 21.21 39** P **P** **08 05 21.7 -1.4**
VOSK pmax pmax
comp=Z,28nm,1.1s
**VOSK Vostochnaya 21.21 39** P **P** **08 05 21.7 -1.4**
comp=Z,28nm,1.1s
**BARS Barje 21.25 292** *e*P **P** **08 05 23.7 +0.1**
**DRGR 21.27 303**⇑ *i*P **P** **08 05 24.6 +0.7**
**DRGR 21.27 303**⇑ *i*P **P** **08 05 24.6 +0.7**
**BOVS Bovan 21.40 294** *e*P **P** **08 05 25.5 +0.3**
**LVV L'vov 21.45 312**⇑ *i*P **P** **08 05 24.4 -1.3**
**LVV L'vov 21.45 312** *i* P **P** **08 05 24.4 -1.3**
**KUBS Kucevo 21.51 296** *e*P **P** **08 05 26.0 -0.5**
**CHKZ Chkalovo 21.61 36**⇑P **P** **08 05 25.7 -1.7**
comp=Z,31nm,1.1s
**CHKZ Chkalovo 21.61 36** P **P** **08 05 26.1 -1.2**
CHKZ pmax pmax
comp=Z,31nm,1.1s
**CHKZ Chkalovo 21.61 36** P **P** **08 05 26.1 -1.2**
comp=Z,31nm,1.1s
**TRPA Tarpa 21.76 306**⇓ *i*P **P** **08 05 30.2 +1.1**
**TRPA Tarpa 21.76 306**⇓ *i*P **P** **08 05 30.2 +1.1**
**SELS Selova 21.79 293** *e*P **P** **08 05 29.0 -0.4**
**SIRR Siria 21.85 301**⇑ *i*P **P** **08 05 30.5 +0.4**
**SIRR Siria 21.85 301**⇑ *i*P **P** **08 05 30.5 +0.4**
**UZH Uzhgorod 22.08 307** *e*P **P** **08 05 30.0 -2.5**
UZH *i* 08 05 53.8
**UZH Uzhgorod 22.08 307** *e*P **P** **08 05 30.0 -2.5**
**KWP Kalwaria Pacla 22.17 310** *e*P **P** **08 05 34.4 +1.0**
**KWP Kalwaria Pacla 22.17 310** *e*P **P** **08 05 34.5 +1.0**
**KWP Kalwaria Pacla 22.17 310** *e*P **P** **08 05 34.5 +1.0**
**KOLS Kolonicke sedl 22.19 308** *e*P **P** **08 05 35.2 +1.5**
KOLS pmax pmax
comp=Z,21nm,1.1s
**KOLS Kolonicke sedl 22.19 308** *e*P **P** **08 05 35.2 +1.5**
**KOLS Kolonicke sedl 22.19 308** *e*P **P** **08 05 35.2 +1.5**
comp=Z,21nm,1.1s
**SOKR Solikamsk 22.20 10***d* *i*P **P** **08 05 36.6 +3.0**
SOKR S S 08 09 19.6 -18
SOKR pmax pmax
comp=Z,20nm,0.9s
**TRUS Trudelj 22.39 295** *e*P **P** **08 05 33.9 -2.0**
**IVAS Ivanjica 22.52 294** *e*P **P** **08 05 37.0 -0.3**
**DIVS Divibare 22.68 295**⇓ *i*P **P** **08 05 38.8 -0.3**
**DIVS Divibare 22.68 295** *e*P **P** **08 05 38.4 -0.7**
**FGSL Fruska Gora 22.93 298** *e*P **P** **08 05 39.5 -2.1**
**STHS Stebnicka Huta 22.99 309** *e*P **P** **08 05 42.4 +0.2**
**STHS Stebnicka Huta 22.99 309** *e*P **P** **08 05 42.4 +0.2**
**STHS Stebnicka Huta 22.99 309** *e*P **P** **08 05 42.4 +0.2**
**BBLS Lazi?i 23.08 294** *e*P **P** **08 05 42.8 -0.4**
**PSZ Piszkesteto 23.41 304** *e*P **P** **08 05 47.6 +1.0**
PSZ pmax pmax
comp=Z,28nm,1.3s
**PSZ Piszkesteto 23.41 304** *e*P **P** **08 05 47.5 +1.0**
comp=Z,28nm,1.3s
**PSZ Piszkesteto 23.41 304** *e*P **P** **08 05 47.5 +1.0**
comp=Z,28nm,1.3s
**NIE Niedzica 23.57 308** *e*P **P** **08 05 47.7 -0.4**
**NIE Niedzica 23.57 308** *e*P **P** **08 05 47.7 -0.4**
**NIE Niedzica 23.57 308** *e*P **P** **08 05 47.7 -0.4**
**KLMR Klimovskoe 23.67 348** *e*P **P** **08 05 45.7 -3.2**
KLMR *e*S **S** **08 09 57.7 -5.7**
KLMR pmax pmax
comp=Z,38nm,1.0s
**OJC Ojcow 24.14 310** *e*P **P** **08 05 53.2 -0.2**
**OJC Ojcow 24.14 310** *e*P **P** **08 05 53.1 -0.3**
OJC pmax pmax
comp=Z,10.0nm,0.9s
**OJC Ojcow 24.14 310** *e*P **P** **08 05 53.1 -0.3**
comp=Z,10nm,0.9s
**OJC Ojcow 24.14 310** *e*P **P** **08 05 53.1 -0.3**
comp=Z,10nm,0.9s
**VYHS Vyhne 24.24 305** *e*P **P** **08 05 54.1 -0.3**
VYHS pmax pmax
comp=Z,50nm,2.4s
**VYHS Vyhne 24.24 305** *e*P **P** **08 05 54.0 -0.3**
**VYHS Vyhne 24.24 305** *e*P **P** **08 05 54.1 -0.3**
comp=Z,50nm,2.4s
**KURBB Kurchatov Arra 24.42 49**⇓P **P** **08 05 56.2 +0.2**
comp=Z,20nm,1.1s
**KURBB Kurchatov Arra 24.42 49** P **P** **08 05 54.5 -1.5**
comp=Z,13nm,0.8s,baz=256,slow=9.4,SNR=34
**KURBB Kurchatov Arra 24.42 49** P **P** **08 05 56.2 +0.2**
comp=Z,20nm,1.1s
**KURK Kurchatov 24.50 49**⇓P **P** **08 05 56.8 0.0**
comp=Z,56nm,1.3s
**KURK Kurchatov 24.50 49** *e*P **P** **08 05 57.0 +0.2**
KURK pmax pmax
comp=Z,47nm,1.0s
**KURK Kurchatov 24.50 49** *e*P **P** **08 05 57.0 +0.2**
comp=Z,47nm,1.0s
**KURK Kurchatov 24.50 49** P **P** **08 05 56.8 0.0**
comp=Z,56nm,1.3s
**VSU Vasula 25.10 332** *e*P **P** **08 06 02.0 0.0**
VSU pmax pmax
comp=Z,95nm,0.9s
**VSU Vasula 25.10 332** *e*P **P** **08 06 02.0 0.0**
comp=Z,95nm,0.9s
**MORC Moravsky Berou 25.39 308** *e*P **P** **08 06 06.3 +1.4**
MORC pmax pmax
comp=Z,32nm,1.3s
**MORC Moravsky Berou 25.39 308** *e*P **P** **08 06 06.2 +1.4**
comp=Z,32nm,1.3s
**MORC Moravsky Berou 25.39 308** *e*P **P** **08 06 06.2 +1.4**
comp=Z,32nm,1.3s
**MAKZ Makanchi 25.72 59** *e*P **P** **08 06 08.3 +0.4**
**CUC Castrocucco 25.82 285** *e*P **P** **08 06 09.1 +0.2**
comp=Z,12nm,1.0s
**CUC Castrocucco 25.82 285** *e*P **P** **08 06 09.1 +0.2**
comp=Z,12nm,1.0s
**VRAC Vranov 25.87 306** P **P** **08 06 08.1 -1.1**
comp=Z,2.1nm,0.4s,baz=102,slow=14,SNR=3.8
VRAC LR LR 08 18 19.9
comp=Z,125nm,18.4s,baz=88,slow=41
**VRAC Vranov 25.87 306** P **P** **08 06 08.1 -1.1**
VRAC pmax pmax
comp=Z,2.0nm,0.4s
VRAC MLR MLR
comp=Z,125nm,18.4s
**MK31 Makanchi Array 25.93 59**⇓P **P** **08 06 09.8 0.0**
comp=Z,24nm,1.1s,baz=257,slow=8.1,SNR=38
**MK31 Makanchi Array 25.93 59** *i* P **P** **08 06 09.7 0.0**
MK31 pmax pmax
comp=Z,15nm,0.8s
**MK31 Makanchi Array 25.93 59** P **P** **08 06 09.8 0.0**
comp=Z,24nm,1.1s,SNR=38
**MKAR Makanchi Array 25.93 59** P **P** **08 06 09.7 -0.1**
comp=Z,10nm,0.9s,baz=258,slow=8.6,SNR=23
**MKAR Makanchi Array 25.93 59** P **P** **08 06 09.7 -0.1**
MKAR pmax pmax
comp=Z,10.0nm,0.9s
**MK01 Makanchi Array 25.93 60** *e*P **P** **08 06 09.8 -0.1**
**CONA Conrad Observa 26.06 303**⇓ *i*P **P** **08 06 10.6 -0.4**
comp=Z,7.3nm,0.9s
**CONA Conrad Observa 26.06 303** P **P** **08 06 10.6 -0.4**
comp=Z,7.3nm,0.9s
**ARSA Arzberg 26.18 301** *i* P **P** **08 06 12.3 +0.3**
comp=Z,11nm,0.9s,SNR=5.3
**ARSA Arzberg 26.18 301** P **P** **08 06 12.3 +0.3**
comp=Z,11nm,0.9s,SNR=5.3
**DPC Dobruska-Polom 26.30 309** *e*P **P** **08 06 12.8 -0.3**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DPC | Dobruska-Polom | 26.30 | 309 | *e*P | | P | 08 06 12.8 | -0.3 |
| DPC | Dobruska-Polom | 26.30 | 309 | *e*P | | P | 08 06 12.8 | -0.3 |
| SOKA | Soboth | 26.44 | 300⇑ | *i*P | | P | 08 06 14.0 | -0.4 |
| | comp=Z,23nm,1.0s,SNR=13 | | | | | | | |
| SOKA | Soboth | 26.44 | 300 | P | | P | 08 06 14.0 | -0.4 |
| | comp=Z,23nm,1.0s,SNR=13 | | | | | | | |
| OBKA | Obir | 26.75 | 300⇑ | *i*P | | P | 08 06 16.9 | -0.4 |
| | comp=Z,8.6nm,1.0s | | | | | | | |
| OBKA | Obir | 26.75 | 300 | P | | P | 08 06 16.9 | -0.4 |
| | comp=Z,8.6nm,1.0s | | | | | | | |
| ATD | Arta Tunnel | 26.91 | 194 | LR | | LR | 08 18 02.7 | |
| | comp=Z,90nm,20.5s,baz=84,slow=39 | | | | | | | |
| TMCR | Tamitsa | 27.04 | 349 | *e*P | | P | 08 06 21.1 | +1.6 |
| TMCR | | | | *e*S | | S | 08 10 58.4 | +1.5 |
| TMCR | | | | pmax | | pmax | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| TMCR | Tamitsa | 27.04 | 349 | *e*P | | P | 08 06 21.1 | +1.6 |
| | comp=Z,25nm,0.9s | | | | | | | |
| VAE | Valguarnera | 27.30 | 280 | LR | | LR | 08 19 30.5 | |
| | comp=Z,69nm,18.8s,baz=82,slow=42 | | | | | | | |
| FINES | FINESS Array B | 27.50 | 336 | P | | P | 08 06 23.4 | -0.3 |
| | comp=Z,1.9nm,0.5s,baz=148,slow=12,SNR=9.4 | | | | | | | |
| FINES | | | | LR | | LR | 08 18 56.7 | |
| | comp=Z,128nm,21.2s,baz=146,slow=40 | | | | | | | |
| FINES | FINESS Array B | 27.50 | 336 | P | | P | 08 06 23.4 | -0.3 |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| FINES | | | | MLR | | MLR | | |
| | comp=Z,128nm,21.2s | | | | | | | |
| KBA | Koelnbreinsper | 27.63 | 301⇑ | *i*P | | P | 08 06 24.9 | -0.4 |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| KBA | Koelnbreinsper | 27.63 | 301 | P | | P | 08 06 24.9 | -0.4 |
| | comp=Z,8.8nm,1.1s | | | | | | | |
| GEC2 | GERESS Array S | 27.64 | 305 | *e*P | | P | 08 06 24.9 | -0.3 |
| GEC2 | GERESS Array S | 27.64 | 305 | *e*P | | P | 08 06 24.9 | -0.3 |
| GEC2 | GERESS Array S | 27.64 | 305 | *e*P | | P | 08 06 24.9 | -0.3 |
| GERES | GERESS Array B | 27.64 | 305 | P | | P | 08 06 24.4 | -0.9 |
| | comp=Z,5.9nm,0.9s,baz=106,slow=9.8,SNR=24 | | | | | | | |
| GERES | GERESS Array B | 27.64 | 305 | P | | P | 08 06 24.4 | -0.9 |
| GERES | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| CLL | Collm | 28.58 | 309 | *e*P | | P | 08 06 33.1 | -0.4 |
| CLL | | | | pmax | | pmax | | |
| | comp=Z,22nm,1.0s | | | | | | | |
| CLL | Collm | 28.58 | 309⇑ | *i*P | | P | 08 06 33.1 | -0.4 |
| | comp=Z,21nm,1.1s | | | | | | | |
| CLL | | | | *e*S | | S | 08 11 24.0 | +2.5 |
| CLL | Collm | 28.58 | 309 | *e*P | | P | 08 06 33.1 | -0.4 |
| | comp=Z,22nm,1.0s | | | | | | | |
| CLL | Collm | 28.58 | 309 | *e*P | | P | 08 06 33.1 | -0.4 |
| | comp=Z,22nm,1.0s | | | | | | | |
| WTTA | Wattenberg | 28.81 | 301⇑ | *i*P | | P | 08 06 34.6 | -1.2 |
| | comp=Z,30nm,1.1s,SNR=6.7 | | | | | | | |
| WTTA | Wattenberg | 28.81 | 301 | P | | P | 08 06 34.6 | -1.2 |
| | comp=Z,30nm,1.1s,SNR=6.7 | | | | | | | |
| WATA | Walderalm | 28.86 | 301⇑ | *i*P | | P | 08 06 34.8 | -1.4 |
| | comp=Z,6.5nm,0.7s | | | | | | | |
| WATA | Walderalm | 28.86 | 301 | P | | P | 08 06 34.8 | -1.4 |
| | comp=Z,6.5nm,0.7s | | | | | | | |
| ZALV | Zalesovo Beam | 29.16 | 45 | P | | P | 08 06 38.2 | -0.4 |
| | comp=Z,2.2nm,0.6s,baz=254,slow=9.1,SNR=8.1 | | | | | | | |
| ZALV | | | | LR | | LR | 08 21 01.0 | |
| | comp=Z,280nm,18.3s,baz=250,slow=42 | | | | | | | |
| ZALV | Zalesovo Beam | 29.16 | 45 | P | | P | 08 06 38.2 | -0.4 |
| ZALV | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| ZALV | | | | MLR | | MLR | | |
| | comp=Z,280nm,18.3s | | | | | | | |
| MOTA | Moosalm | 29.18 | 301⇓ | *i*P | | P | 08 06 37.3 | -1.7 |
| | comp=Z,4.7nm,0.5s | | | | | | | |
| MOTA | Moosalm | 29.18 | 301 | P | | P | 08 06 37.3 | -1.7 |
| | comp=Z,4.7nm,0.5s | | | | | | | |
| FETA | Feichten | 29.41 | 300⇑ | *i*P | | P | 08 06 40.0 | -1.1 |
| | comp=Z,16nm,0.8s,SNR=6.4 | | | | | | | |
| FETA | Feichten | 29.41 | 300 | P | | P | 08 06 40.0 | -1.1 |
| | comp=Z,16nm,0.8s,SNR=6.4 | | | | | | | |
| RETA | Reutte | 29.42 | 301⇑ | *i*P | | P | 08 06 39.7 | -1.4 |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| RETA | Reutte | 29.42 | 301 | P | | P | 08 06 39.7 | -1.4 |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| WMQ | Urumqi | 29.60 | 66 | P | | P | 08 06 44.0 | +1.3 |
| WMQ | | | | sP | | sP | 08 06 55.0 | +8.0 |
| WMQ | | | | PP | | PnPn | 08 07 41.0 | +3.8 |
| WMQ | | | | S | | S | 08 11 37.0 | -0.8 |
| WMQ | | | | SS | | SnSn | 08 13 12.0 | +6.2 |
| WMQ | | | | PMZ | | | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| WMQ | | | | PMZ | | | | |
| | comp=Z,22nm,4.0s | | | | | | | |
| WMQ | | | | LN | | | | |
| | comp=Z,200nm,12.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | comp=Z,150nm,10.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | comp=Z,160nm,10.0s | | | | | | | |
| FUORN | Ofenpass-Fuorn | 29.70 | 299 | *e*P | | P | 08 06 43.5 | -0.3 |
| | comp=Z,12nm,0.8s | | | | | | | |
| FUORN | Ofenpass-Fuorn | 29.70 | 299 | *e*P | | P | 08 06 43.5 | -0.3 |
| | comp=Z,12nm,0.8s | | | | | | | |
| DAVA | Damuels | 30.00 | 301 | *i*P | | P | 08 06 44.9 | -1.4 |
| | comp=Z,34nm,1.1s,SNR=9.0 | | | | | | | |
| DAVA | Damuels | 30.00 | 301 | P | | P | 08 06 44.9 | -1.4 |
| | comp=Z,34nm,1.1s,SNR=9.0 | | | | | | | |
| TUE | Stuetta | 30.33 | 299 | *e*P | | P | 08 06 48.4 | -0.9 |
| | comp=Z,11nm,0.9s | | | | | | | |
| TUE | Stuetta | 30.33 | 299 | *e*P | | P | 08 06 48.4 | -0.9 |
| | comp=Z,11nm,0.9s | | | | | | | |
| KOLN | Koldanda | 30.61 | 99 | *e*P | | P | 08 06 51.8 | -0.1 |
| | comp=Z,26nm,1.0s | | | | | | | |
| VSL | Villasalto | 30.81 | 285 | *e*P | | P | 08 06 52.6 | -0.8 |
| | comp=Z,12nm,0.8s | | | | | | | |
| VSL | Villasalto | 30.81 | 285 | *e*P | | P | 08 06 52.6 | -0.8 |
| | comp=Z,12nm,0.8s | | | | | | | |
| APA | Apatity | 30.92 | 348 | *e*P | | P | 08 06 47.0 | -7.0 |
| GKN | Gorkha | 31.31 | 98 | *e*P | | P | 08 06 58.0 | 0.0 |
| | comp=Z,8.2nm,0.5s | | | | | | | |
| HFS | Hagfors | 31.45 | 326 | P | | P | 08 06 57.8 | -0.9 |
| | comp=Z,6.5nm,0.8s,baz=130,slow=10,SNR=15 | | | | | | | |
| HFS | | | | LR | | LR | 08 20 38.8 | |
| | comp=Z,184nm,18.1s,baz=86,slow=38 | | | | | | | |
| HFS | Hagfors | 31.45 | 326 | P | | P | 08 06 57.8 | -0.9 |
| HFS | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| HFS | | | | MLR | | MLR | | |
| | comp=Z,184nm,18.1s | | | | | | | |
| KEST | Kesra | 31.68 | 278 | P | | P | 08 07 00.6 | -0.5 |
| | comp=Z,5.7nm,0.9s,baz=349,slow=15,SNR=6.0 | | | | | | | |
| KEST | | | | LR | | LR | 08 22 10.4 | |
| | comp=Z,185nm,21.3s,baz=352,slow=41 | | | | | | | |
| KEST | Kesra | 31.68 | 278 | *e*P | | P | 08 07 01.6 | +0.4 |
| KEST | Kesra | 31.68 | 278 | *e*P | | P | 08 07 01.6 | +0.4 |
| SENIN | Lac Senin/Sane | 31.75 | 299 | *e*P | | P | 08 07 00.4 | -1.4 |
| | comp=Z,52nm,2.0s | | | | | | | |
| SENIN | Lac Senin/Sane | 31.75 | 299 | *e*P | | P | 08 07 00.4 | -1.4 |
| | comp=Z,52nm,2.0s | | | | | | | |
| DMN | Daman | 31.86 | 98 | *e*P | | P | 08 07 03.1 | +0.1 |
| | comp=Z,65nm,1.1s | | | | | | | |
| PKI | Pulchoki | 32.11 | 98 | *e*P | | P | 08 07 05.1 | -0.2 |
| | comp=Z,46nm,1.2s | | | | | | | |
| BNI | Bardonecchia | 32.21 | 296 | *e*P | | P | 08 07 04.0 | -1.8 |
| BNI | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| BNI | Bardonecchia | 32.21 | 296 | *e*P | | P | 08 07 04.0 | -1.8 |
| | comp=Z,10nm,1.0s | | | | | | | |
| BNI | Bardonecchia | 32.21 | 296 | *e*P | | P | 08 07 04.0 | -1.8 |
| | comp=Z,10nm,1.0s | | | | | | | |
| GUN | Gumba | 32.32 | 97 | *e*P | | P | 08 07 07.2 | 0.0 |
| | comp=Z,51nm,1.0s | | | | | | | |
| NB2 | NORSAR Subarra | 32.95 | 327 | P | | P | 08 07 10.3 | -1.7 |
| | comp=Z,3.1nm,1.0s,baz=120,slow=8.6 | | | | | | | |
| NB2 | NORSAR Subarra | 32.95 | 327 | P | | P | 08 07 10.3 | -1.7 |
| | comp=Z,3.1nm,1.0s,SNR=5.7 | | | | | | | |
| NOA | NORSAR Array B | 32.95 | 327 | P | | P | 08 07 10.9 | -1.0 |
| | comp=Z,2.5nm,0.7s,baz=120,slow=8.4,SNR=6.3 | | | | | | | |
| NOA | | | | LR | | LR | 08 21 36.3 | |
| | comp=Z,146nm,20.1s,baz=85,slow=38 | | | | | | | |
| NOA | NORSAR Array B | 32.95 | 327 | P | | P | 08 07 11.0 | -1.0 |
| NOA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| NOA | | | | MLR | | MLR | | |
| | comp=Z,147nm,20.1s | | | | | | | |
| NOA | NORSAR Array B | 32.95 | 327 | P | | P | 08 07 11.0 | -1.0 |
| | comp=Z,147nm,20.1s | | | | | | | |
| RAMN | Ramite | 33.34 | 98 | *e*P | | P | 08 07 15.7 | -0.3 |
| | comp=Z,44nm,0.8s | | | | | | | |
| ODAN | Odare | 34.00 | 98 | *e*P | | P | 08 07 22.2 | +0.5 |
| | comp=Z,48nm,0.6s | | | | | | | |
| TAPN | Taplejung | 34.02 | 97 | *e*P | | P | 08 07 22.0 | 0.0 |
| | comp=Z,18nm,0.7s | | | | | | | |
| GTA | Gaotai | 39.23 | 72 | *e*P | | P | 08 08 07.1 | +1.0 |
| GTA | | | | pP | | pP | 08 08 14.4 | +5.2 |
| GTA | | | | sP | | sP | 08 08 17.9 | +7.5 |
| GTA | | | | PcP | | PcP | 08 10 16.3 | +1.2 |
| GTA | | | | PMZ | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| TAM | Tamanrasset | 40.10 | 261 | *e*P | | P | 08 08 12.7 | -0.9 |
| TAM | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| TAM | Tamanrasset | 40.10 | 261 | *e*P | | P | 08 08 12.7 | -0.9 |
| | comp=Z,3.6nm,0.9s | | | | | | | |
| TAM | Tamanrasset | 40.10 | 261 | *e*P | | P | 08 08 12.6 | -0.9 |
| | comp=Z,3.6nm,0.9s | | | | | | | |
| ESDC | Sonseca Array | 40.83 | 289 | P | | P | 08 08 16.9 | -2.3 |
| | comp=Z,0.5nm,0.4s,baz=65,slow=8.3,SNR=11 | | | | | | | |
| SONM | Songino Array | 42.27 | 58 | P | | P | 08 08 30.4 | -0.6 |
| | comp=Z,0.8nm,0.7s,baz=268,slow=10,SNR=3.8 | | | | | | | |
| SONM | | | | LR | | LR | 08 28 42.6 | |
| | comp=Z,123nm,19.3s,baz=258,slow=40 | | | | | | | |
| SONM | Songino Array | 42.27 | 58 | P | | P | 08 08 30.4 | -0.6 |
| SONM | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| SONM | | | | MLR | | MLR | | |
| | comp=Z,123nm,19.3s | | | | | | | |
| SPITS | Spitsbergen Ar | 42.54 | 351 | P | | P | 08 08 30.6 | -2.2 |
| | comp=Z,21nm,1.0s,baz=161,slow=14,SNR=4.8 | | | | | | | |
| SPITS | Spitsbergen Ar | 42.54 | 351 | P | | P | 08 08 30.6 | -2.2 |
| SPITS | | | | pmax | | pmax | | |
| | comp=Z,21nm,1.0s | | | | | | | |
| ULN | Ulaanbaatar | 42.70 | 57 | *i* P | | P | 08 08 33.8 | -0.8 |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| ULN | Ulaanbaatar | 42.70 | 57 | *i* P | | P | 08 08 33.8 | -0.8 |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| LZH | Lanzhou | 43.26 | 75 | *e*P | | P | 08 08 39.3 | 0.0 |
| LZH | | | | pP | | pP | 08 08 47.0 | +4.6 |
| LZH | | | | sP | | sP | 08 08 50.5 | +6.9 |
| LZH | | | | PP | | PP | 08 10 21.5 | +1.9 |
| LZH | | | | PMZ | | | | |
| | comp=Z,21nm,1.2s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,65nm,5.7s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,360nm,13.2s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,330nm,13.7s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,400nm,17.0s | | | | | | | |
| MDT | Midelt | 43.54 | 280 | P | | P | 08 08 37.4 | -4.2 |
| | comp=Z,1.7nm,0.8s,baz=96,slow=8.8,SNR=4.4 | | | | | | | |
| BOD | Bodaibo | 45.84 | 43 | *e*P | | P | 08 08 57.1 | -2.3 |
| BOD | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.3s | | | | | | | |
| BOD | Bodaibo | 45.84 | 43 | *e*P | | P | 08 08 57.1 | -2.3 |
| | comp=Z,4.0nm,1.3s | | | | | | | |
| KMI | Kunming | 46.93 | 90 | P | | P | 08 09 09.0 | +0.3 |
| KMI | | | | PMZ | | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,750nm,5.4s | | | | | | | |
| CMAR | Chiang Mai Arr | 47.47 | 100 | P | | P | 08 09 11.0 | -1.7 |
| | comp=Z,3.6nm,0.7s,baz=301,slow=8.5,SNR=17 | | | | | | | |
| CMAR | Chiang Mai Arr | 47.47 | 100 | P | | P | 08 09 11.0 | -1.7 |
| CMAR | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| HHC | Hu-ho-hao-te | 47.48 | 66 | *e*P | | P | 08 09 12.5 | -0.1 |
| HHC | | | | sP | | sP | 08 09 26.8 | +10 |
| HHC | | | | S | | S | 08 16 05.3 | -2.0 |
| HHC | | | | PMZ | | | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,340nm,5.6s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,200nm,18.8s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,370nm,15.7s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,120nm,15.9s | | | | | | | |
| TORD | Torodi Ar. Bea | 48.69 | 253 | P | | P | 08 09 19.4 | -2.7 |
| | comp=Z,1.2nm,0.8s,baz=59,slow=7.7,SNR=11 | | | | | | | |
| TORD | | | | LR | | LR | 08 33 24.4 | |
| | comp=Z,44nm,19.0s,baz=335,slow=40 | | | | | | | |
| HIA | Hailar | 50.65 | 53 | *e*P | | P | 08 09 36.9 | +0.2 |
| HIA | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| HIA | Hailar | 50.65 | 53 | *e*P | | P | 08 09 36.9 | +0.2 |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| WHN | Wuhan | 53.51 | 77 | P | | P | 08 09 55.8 | -2.4 |
| NJ2 | Nanjing | 56.27 | 73 | *e*P | | P | 08 10 19.0 | +0.8 |
| DBIC | Dimbokro | 57.78 | 252 | P | | P | 08 10 26.2 | -2.8 |
| | comp=Z,2.3nm,0.6s,baz=67,slow=12,SNR=3.6 | | | | | | | |
| DBIC | | | | LR | | LR | 08 41 00.7 | |
| | comp=Z,50nm,18.0s,baz=38,slow=42 | | | | | | | |
| KLR | Kul'dur | 58.10 | 50 | *e*P | | P | 08 10 25.4 | -5.4 |
| USRK | Ussuriysk Ar. | 60.30 | 55 | P | | P | 08 10 44.5 | -1.6 |
| | comp=Z,1.9nm,0.7s,baz=297,slow=4.4,SNR=5.6 | | | | | | | |
| USRK | | | | LR | | LR | 08 40 55.2 | |
| | comp=Z,175nm,18.5s,baz=283,slow=40 | | | | | | | |
| KSAR | Wonju Array Be | 60.48 | 64 | P | | P | 08 10 46.4 | -1.1 |
| KSAR | Wonju Array Be | 60.48 | 64 | P | | P | 08 10 46.4 | -1.1 |
| KSAR | Wonju Array Be | 60.48 | 64 | P | | P | 08 10 46.4 | -1.1 |
| KSRS | Korea Array | 60.51 | 64 | P | | P | 08 10 46.4 | -1.3 |
| | comp=Z,1.1nm,0.6s,baz=281,slow=7.3,SNR=5.1 | | | | | | | |
| KSRS | | | | LR | | LR | 08 42 12.5 | |
| | comp=Z,39nm,18.8s,baz=244,slow=41 | | | | | | | |
| KSRS | Korea Array | 60.51 | 64 | P | | P | 08 10 46.4 | -1.3 |
| KSRS | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| KSRS | | | | MLR | | MLR | | |
| | comp=Z,39nm,18.8s | | | | | | | |
| SEY | Seymchan | 62.52 | 30 | *e*P | | P | 08 11 01.4 | +0.6 |
| SEY | Seymchan | 62.52 | 30 | *e*P | | P | 08 11 01.4 | +0.6 |
| JNU | Nakatsue | 64.70 | 67 | LR | | LR | 08 41 55.3 | |
| | comp=Z,76nm,18.5s,baz=304,slow=38 | | | | | | | |
| MJAR | Matsushiro Arr | 68.13 | 60 | LR | | LR | 08 45 38.2 | |
| | comp=Z,58nm,18.9s,baz=270,slow=40 | | | | | | | |
| BOSA | Boshof | 69.89 | 202 | LR | | LR | 08 44 46.0 | |
| | comp=Z,110nm,18.2s,baz=358,slow=38 | | | | | | | |
| LEM | Lembang | 70.32 | 116 | LR | | LR | 08 44 55.9 | |
| | comp=Z,43nm,19.1s,baz=220,slow=38 | | | | | | | |
| COLA | College | 76.63 | 7 | *e*P | | P | 08 12 28.8 | +0.9 |
| COLA | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| COLA | College | 76.63 | 7 | *e*P | | P | 08 12 28.8 | +0.9 |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| COLA | College | 76.63 | 7 | *e*P | | P | 08 12 28.8 | +0.9 |
| | comp=Z,6.2nm,1.0s | | | | | | | |
| ILAR | Eielson Array | 76.82 | 7 | P | | P | 08 12 28.1 | -0.9 |
| | comp=Z,0.7nm,0.9s,baz=326,slow=4.4,SNR=5.4 | | | | | | | |
| ILAR | Eielson Array | 76.82 | 7 | P | | P | 08 12 28.1 | -0.9 |
| ILAR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| RSSD | Black Hills | 94.72 | 341 | *e*P | | P | 08 14 01.0 | +1.7 |
| RSSD | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| RSSD | Black Hills | 94.72 | 341 | *e*P | | P | 08 14 01.0 | +1.7 |
| | comp=Z,1.7nm,0.8s | | | | | | | |

*IDC* **22** *08:26:18.6*$_S$*0.6, 18°.31S×71°.19W, h0km, mb4.5/12, mb1 4.5/15, mb1mx4.3/34, mbtmp4.4/15, ML3.5/4, MS3.8/4, Ms1 3.9/4, ms1mx3.3/23, Error ellipse: s-maj=20.2km s-min=14.8km az=43.0*

*ISCJB* **22** *08:26:21.9*$_S$*0.3, 18°.43S*$_L$*0°.03×71°.18W*$_L$*0°.07, h34km, mb4.4/33, MS4.0/2, Error ellipse: s-maj=9.6km s-min=3.7km az=157.9*

*NEIC* **22** *08:26:23.6*$_S$*1.6, 18°.38S×71°.22W, h31km*$\pm$*11km, mb4.4/27, ML4.5(GUC), Error ellipse: s-maj=8.1km s-min=5.0km az=65.0*

*GUC* **22** *08:26:25.5*$_S$*0.4, 19°.01S×71°.44W, h20km*$\pm$*18km, ML4.5*

*BJI* **22** *08:26:26.6, 18°.30S×71°.20W, h45km, Ms5.1/1, Ms7 4.9/1*

**ISC 22 08:26:23.7**$_S$0.4**, 18°.46S**$_L$0°.04×**71°.24W**$_L$0°.07**, h34km, n85,** $\sigma$**1$^s$29/84, mb4.5/33, 1C, Off coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | Res | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | h | m | s | ISC |
| MNMC | Minimini | 1.69 | 113 | *e*P | Pn | 08 | 26 | 52.6 | +1.5 |
| MNMC | | | | *e*S | Sb | 08 | 27 | 15.5 | 0.0 |
| ARE | Arequipa | 2.00 | 353⇑ | *i*P | Pn | 08 | 26 | 55.1 | -0.3 |
| ARE | | | | *i* S | Sn | 08 | 27 | 17.5 | -2.0 |
| PB01 | IPOC Station P | 3.05 | 148 | *e*P | Pn | 08 | 27 | 10.4 | +0.7 |
| PB01 | | | | *e*S | Sn | 08 | 27 | 44.7 | -0.3 |
| PB01 | | | | AML | AML | 08 | 27 | 47.1 | |
| | comp=E,1μm,0.9s | | | | | | | | |
| PB07 | IPOC Station P | 3.49 | 159 | *e*P | Pn | 08 | 27 | 15.8 | 0.0 |
| PB07 | | | | *e*S | Sn | 08 | 27 | 53.6 | -2.3 |
| PB07 | | | | AML | AML | 08 | 28 | 25.3 | |
| | comp=E,1μm,0.5s | | | | | | | | |
| LPAZ | La Paz | 3.67 | 54 | Pn | Pn | 08 | 27 | 23.0 | +4.3 |
| | comp=E,6.5nm,0.3s,baz=250,slow=9.3,SNR=134 | | | | | | | | |
| LPAZ | | | | LR | LR | 08 | 29 | 09.9 | |
| | comp=E,1μm,19.7s,baz=243,slow=48 | | | | | | | | |
| PB04 | IPOC Station P | 3.98 | 165 | *e*P | Pn | 08 | 27 | 21.8 | -0.8 |
| PB04 | | | | *e*S | Sn | 08 | 28 | 04.3 | -3.9 |
| PB06 | IPOC Station P | 4.50 | 160 | *e*P | Pn | 08 | 27 | 29.1 | -0.6 |
| PB06 | | | | *e*S | Sn | 08 | 28 | 17.8 | -3.1 |
| PB06 | | | | AML | AML | 08 | 28 | 23.8 | |
| | comp=N,389nm,0.8s | | | | | | | | |
| LVC | Limon Verde | 4.67 | 153 | Pn | Pn | 08 | 27 | 33.5 | +1.4 |
| | comp=N,839nm,0.3s,baz=348,slow=10,SNR=114 | | | | | | | | |
| LVC | | | | Sn | Sn | 08 | 28 | 24.9 | -0.3 |
| | comp=N,1μm,0.3s,baz=166,slow=13,SNR=6.3 | | | | | | | | |
| LVC | | | | Lg | Lg | 08 | 28 | 44.6 | |
| | comp=N,794nm,0.3s,baz=166,slow=21,SNR=4.2 | | | | | | | | |
| NNA | Nana | 8.41 | 319 | Pn | Pn | 08 | 28 | 22.0 | -1.2 |
| | comp=N,1.7nm,0.3s,baz=153,slow=18,SNR=2.2 | | | | | | | | |
| NNA | | | | Sn | Sn | 08 | 29 | 47.3 | -10 |
| | comp=N,2.9nm,0.3s,baz=236,slow=15,SNR=3.1 | | | | | | | | |
| SIV | San Ignacio | 10.02 | 77 | Pn | Pn | 08 | 28 | 44.2 | -1.2 |
| | comp=N,0.3nm,0.3s,baz=255,slow=5.3,SNR=3.2 | | | | | | | | |
| SIV | | | | Sn | Sn | 08 | 30 | 29.5 | -7.2 |
| | baz=305,slow=16,SNR=1.3 | | | | | | | | |
| SIV | | | | Lg | Lg | 08 | 31 | 33.3 | |
| | baz=210,slow=20,SNR=2.0 | | | | | | | | |
| SIV | | | | LR | LR | 08 | 33 | 03.0 | |
| | comp=N,554nm,20.0s,baz=215,slow=41 | | | | | | | | |
| SAML | Samuel | 12.27 | 41 | *e*Pn | Pn | 08 | 29 | 16.8 | +0.6 |
| CFAA | Coronel Fontan | 13.36 | 169 | Pn | Pn | 08 | 29 | 30.1 | -1.0 |
| | comp=N,0.0nm,0.3s,baz=352,slow=14,SNR=2.4 | | | | | | | | |
| CFAA | | | | Sn | Sn | 08 | 31 | 46.1 | -12 |
| | comp=N,0.0nm,0.3s,baz=293,slow=13,SNR=2.0 | | | | | | | | |
| CPUP | Villa Florida | 15.05 | 124 | Pn | Pn | 08 | 29 | 51.9 | -2.0 |
| | comp=N,0.2nm,0.3s,baz=294,slow=13,SNR=5.8 | | | | | | | | |
| CPUP | Villa Florida | 15.05 | 124 | *e*Pn | P | 08 | 29 | 58.3 | -0.6 |
| OTAV | Otavalo | 19.89 | 338 | *e*P | P | 08 | 30 | 52.7 | -0.1 |
| | comp=N,6.3nm,0.8s | | | | | | | | |
| PTGA | Pitinga | 20.81 | 33 | P | P | 08 | 31 | 00.7 | -1.6 |
| | comp=N,14nm,0.3s,baz=218,slow=13,SNR=52 | | | | | | | | |
| PTGA | Pitinga | 20.81 | 33 | *e*P | P | 08 | 31 | 01.6 | -0.8 |
| | comp=N,23nm,0.6s | | | | | | | | |
| TRQA | Tornquist | 21.13 | 159 | *e*P | P | 08 | 31 | 06.9 | +1.2 |
| | comp=N,9.6nm,0.8s | | | | | | | | |
| PLCA | Paso Flores | 22.20 | 179 | *e*P | P | 08 | 31 | 20.2 | +3.0 |
| | comp=N,30nm,1.5s | | | | | | | | |
| BDFB | Brasilia | 22.38 | 86 | P | P | 08 | 31 | 19.1 | -0.3 |
| | comp=N,14nm,0.6s,baz=262,slow=12,SNR=19 | | | | | | | | |
| BDFB | Brasilia | 22.38 | 86 | *e*P | P | 08 | 31 | 19.8 | +0.4 |
| | comp=N,24nm,0.6s | | | | | | | | |
| RCBR | Riachuelo | 36.67 | 74 | *e*P | P | 08 | 33 | 27.7 | +0.1 |
| | comp=N,20nm,1.0s | | | | | | | | |
| MIAR | Mount Ida | 56.84 | 338 | *e*P | P | 08 | 36 | 04.3 | -0.6 |
| | comp=N,4.3nm,0.9s | | | | | | | | |
| TXAR | Lajitas Array | 56.90 | 326 | P | P | 08 | 36 | 04.2 | -1.4 |
| | comp=N,0.3nm,0.7s,baz=144,slow=6.7,SNR=4.4 | | | | | | | | |
| SIUC | Southern Illin | 58.38 | 343 | *e*P | P | 08 | 36 | 14.6 | -1.1 |
| | comp=N,11nm,0.6s | | | | | | | | |
| ANMO | Albuquerque | 62.77 | 328 | *e*P | P | 08 | 36 | 46.0 | 0.0 |
| | comp=N,0.8nm,0.7s | | | | | | | | |
| VNA3 | Neumayer Olymp | 63.64 | 161 | P | P | 08 | 36 | 47.4 | -3.7 |
| VNA1 | Neumayer--Stat | 63.86 | 161 | P | P | 08 | 36 | 54.3 | +1.8 |
| VNA2 | Neumayer--Watz | 64.23 | 161 | P | P | 08 | 36 | 55.7 | +0.8 |
| | baz=307,slow=5.7 | | | | | | | | |
| SDCO | Great Sand Dun | 64.53 | 330 | *e*P | P | 08 | 36 | 57.8 | +0.1 |
| | comp=N,4.2nm,1.0s | | | | | | | | |
| SNAA | Sanae | 65.85 | 161 | P | P | 08 | 37 | 06.5 | +1.0 |
| SNAA | Sanae | 65.85 | 161 | P | P | 08 | 37 | 06.7 | +1.2 |
| | comp=N,1.8nm,0.9s,baz=284,slow=3.7,SNR=12 | | | | | | | | |
| SNAA | Sanae | 65.85 | 161 | *e*P | P | 08 | 37 | 06.1 | +0.6 |
| | comp=N,2.1nm,1.0s | | | | | | | | |
| ECSD | EROS Data Cent | 66.12 | 340 | *e*P | P | 08 | 37 | 06.6 | -0.9 |
| | comp=N,4.2nm,1.0s | | | | | | | | |
| ISCO | Idaho Springs | 66.24 | 332 | *e*P | P | 08 | 37 | 08.6 | -0.1 |
| | comp=N,30nm,2.4s | | | | | | | | |
| SMCO | Snowmass | 66.37 | 330 | *e*P | P | 08 | 37 | 10.2 | +0.5 |
| | comp=N,2.0nm,0.9s | | | | | | | | |
| CCUT | Cedar City | 68.38 | 325 | *e*P | P | 08 | 37 | 23.7 | +1.5 |
| | comp=N,3.1nm,1.0s | | | | | | | | |
| MSU | Marysvale | 68.45 | 326 | *e*P | P | 08 | 37 | 23.4 | +0.7 |
| TIC | Toumodi | 69.88 | 75 | *e*P | P | 08 | 37 | 29.9 | -1.9 |
| KIC | Kosan Boka | 70.03 | 76 | *e*P | P | 08 | 37 | 31.3 | -1.4 |
| | comp=N,11nm,0.6s | | | | | | | | |
| DUG | Dugway | 70.03 | 327 | *e*P | P | 08 | 37 | 33.2 | +0.9 |
| | comp=N,2.4nm,1.0s | | | | | | | | |
| DBIC | Dimbokro | 70.04 | 76 | P | P | 08 | 37 | 32.0 | -0.7 |
| | comp=N,6.8nm,0.6s,baz=224,slow=5.1,SNR=9.1 | | | | | | | | |
| DBIC | Dimbokro | 70.04 | 76 | *e*P | P | 08 | 37 | 32.2 | -0.5 |
| | comp=N,7.1nm,0.6s | | | | | | | | |
| HWUT | Hardware Ranch | 70.46 | 329 | *e*P | P | 08 | 37 | 34.0 | -1.0 |
| | comp=N,3.2nm,1.0s | | | | | | | | |
| SPUT | South Prominto | 70.67 | 328 | *e*P | P | 08 | 37 | 36.5 | +0.3 |
| | comp=N,2.9nm,1.3s | | | | | | | | |
| QSPA | South Pole Qui | 71.71 | 180 | *e*P | P | 08 | 37 | 43.6 | +1.5 |
| | comp=N,3.8nm,0.7s | | | | | | | | |
| NVAR | Mina Array Bea | 71.76 | 323 | P | P | 08 | 37 | 42.7 | -0.2 |
| | comp=N,0.7nm,0.8s,baz=125,slow=5.6,SNR=5.6 | | | | | | | | |
| ULM | Lac du Bonnet | 71.79 | 344 | P | P | 08 | 37 | 41.5 | -1.1 |
| | comp=N,2.3nm,0.5s,baz=156,slow=6.3,SNR=3.1 | | | | | | | | |
| IMW | Indian Meadow | 71.91 | 331 | *e*P | P | 08 | 37 | 44.4 | +0.5 |

comp=N,2.8nm,0.8s,baz=99,slow=1.4,SNR=6.7
**WMQ Urumqi 149.13 30** *e*PKPbc **PKPdf 08 46 06.0 +1.5**
**SONM Songino Array 150.64 3** PKPbc **PKPbc 08 46 12.9 +0.5**
comp=N,3.5nm,0.8s,baz=314,slow=2.3,SNR=13
**HHC Hu-ho-hao-te 157.56 354** *e*PKP **PKPdf 08 46 18.4 +1.6**
**LZH Lanzhou 161.91 13** *e*PKP **PKPdf 08 46 22.5 +0.5**
LZH pPKP **pPKPdf 08 46 38.3 +5.1**
LZH sPKP 08 46 44.0
LZH LN
comp=N,130nm,18.2s
LZH LE
comp=N,130nm,18.1s
LZH LZ
comp=N,160nm,20.0s
**CMAR Chiang Mai Arr 170.68 88** PKPab **PKPab 08 47 47.5 +0.4**
comp=N,0.4nm,0.3s,baz=258,slow=4.2,SNR=4.2
**KMI Kunming 171.33 39** PKP **PKPdf 08 46 29.0 -0.6**

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*ISCJB* ***22*** *08:34:01.9±0.6,39.94N±0.03×38.14E±0.04,h8km±6km, Error ellipse: s-maj=5.7km s-min=4.6km az=24.0*
*DDA* ***22*** *08:34:01.8,39.90N×38.10E,h7km,Md2.7*
*ISK* ***22*** *08:34:01.2,39.97N×38.18E,h7km,MD2.8*
**ISC 22 08:34:01.7±1.1,39.92N±0.03×38.14E±0.03,h10km±10km, n12,σ0s71/21,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **CUZAR** | **Zara_SIVAS** | **0.28** | **264** | P | | **Pg** | **08 34 07.2** | **-0.3** |
| CUZAR | | | | S | | **Sg** | **08 34 11.3** | **0.0** |
| **SUSE** | **Susehri** | **0.29** | **10** | P | | **Pb** | **08 34 08.8** | **-0.4** |
| SUSE | | | | S | | **Sb** | **08 34 15.2** | **+1.0** |
| **ILIC** | **ilic-Erzincan** | **0.57** | **144** | *e*PG | | **Pg** | **08 34 12.8** | **-0.1** |
| ILIC | | | | *e*SG | | **Sb** | **08 34 22.3** | **+0.1** |
| **KEMA** | **Kemaliye** | **0.71** | **157** | P | | **Pg** | **08 34 15.0** | **-0.4** |
| KEMA | | | | S | | **Sb** | **08 34 26.2** | **+0.2** |
| **RSDY** | **Resadiye-TOKAT** | **0.78** | **308** | *e*PG | | **Pg** | **08 34 16.6** | **-0.2** |
| RSDY | | | | *e*SG | | **Sb** | **08 34 28.1** | **-0.1** |
| **CUKAN** | **kangal_SIVAS** | **0.79** | **221** | P | | **Pg** | **08 34 16.1** | **-1.0** |
| CUKAN | | | | S | | **Sn** | **08 34 30.6** | **-0.6** |
| **SVSK** | **Karacayir** | **0.88** | **270** | *e*PG | | **Pb** | **08 34 19.1** | **+0.1** |
| SVSK | | | | *e*SG | | **Sn** | **08 34 32.3** | **-0.6** |
| **KELT** | **Kelkit** | **0.89** | **75** | P | | **Pg** | **08 34 19.0** | **+0.1** |
| KELT | | | | S | | **Sg** | **08 34 31.6** | **+1.1** |
| **GUMT** | **Gumushane** | **1.16** | **62** | *e*PN | | **Pb** | **08 34 22.9** | **-1.1** |
| **PTK** | **Pertek** | **1.42** | **136** | *e*PN | | **Pn** | **08 34 28.2** | **+0.4** |
| PTK | | | | *e*SN | | **Sg** | **08 34 47.8** | **+0.6** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **1.61** | **72** | *e*PN | | **Pn** | **08 34 30.0** | **-0.4** |
| **SARI** | **SarD1z-Kayseri** | **2.02** | **222** | *e*PN | | **Pn** | **08 34 37.5** | **+1.5** |

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*IDC* ***22*** *08:34:20.8±0.6,37.86N×48.97E,h0km,mb4.2/21, mb1 4.3/31,mb1mx4.1/67,mbtmp4.2/31,ML3.7/7,MS3.5/19, Ms1 3.5/19,ms1mx3.3/50,Error ellipse: s-maj=12.8km s-min=8.2km az=5.0*
*MOS* ***22*** *08:34:20.5±1.3,37.71N×49.10E,h14km,mb4.6/26,Error ellipse: s-maj=7.3km s-min=4.8km az=121.8*
*BJI* ***22*** *08:34:23.4,37.97N×48.38E,h45km,mb4.8/15,mB5.2/7, Ms4.4/4,Ms7 4.0/4*
*THR* ***22*** *08:34:24.1±0.8,37.95N×49.10E,h15km±9km,ML4.4*
*NEIC* ***22*** *08:34:24.1,37.95N×49.10E,h15km,mb4.6/18, ML4.4(THR),MN4.4(TEH),After THR.*
*TEH* ***22*** *08:34:24.1,38.00N×49.10E,h4km,ML4.4*
*CSEM* ***22*** *08:34:25.3±0.1,37.97N×49.09E,h20km,mb4.5/42,Error ellipse: s-maj=4.1km s-min=3.2km az=34.0*
*AZER* ***22*** *08:34:26.8±2.6,38.12N×48.88E,h22km,Error ellipse: s-maj=3.7km s-min=2.4km az=315.0*
*NNC* ***22*** *08:34:32.0±3.1,38.73N×49.91E,h0km,mb4.6,Error ellipse: s-maj=51.1km s-min=21.9km az=87.0*
*ISN* ***22*** *08:34:46.3±1.3,36.99N×47.22E,h0km±4km,ML4.6*
**ISC 22 08:34:24.9±0.7,37.93N±0.02×49.07E±0.02,h17km±4km, n430,σ1s26/410,mb4.5/52,MS3.5/12,50C-29D,Caspian Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res |
|---|---|---|---|---|---|---|---|---|
| **LKRN** | **Lenkeran, Azer** | **0.81** | **344** | ⇓P | | **Pg** | **08 34 40.1** | **-0.7** |
| LKRN | SNR=235 | | | ⇓S | | **Sg** | **08 34 50.7** | **-0.9** |
| **LKRN** | **Lenkeran, Azer** | **0.81** | **344** | P | | **Pg** | **08 34 40.1** | **-0.7** |
| LKRN | SNR=235 | | | S | | **Sg** | **08 34 50.7** | **-0.9** |
| **LRK** | **Lerik** | **0.92** | **321** | ⇑P | | **Pg** | **08 34 41.4** | **-1.4** |
| LRK | SNR=1359 | | | ⇓S | | **Sg** | **08 34 53.8** | **-1.1** |
| **LRK** | **Lerik** | **0.92** | **321** | P | | **Pg** | **08 34 41.4** | **-1.4** |
| LRK | SNR=1000 | | | S | | **Sg** | **08 34 53.8** | **-1.1** |
| **ISRB** | **Sarab** | **1.11** | **265** | *e*Pg | | **Pb** | **08 34 44.7** | **-1.1** |
| ISRB | | | | *e*Sg | | **Sg** | **08 34 59.8** | **-1.3** |
| ISRB | comp=Z,32μm,0.2s | | | *e* | | | 08 35 00.4 | |
| **ISRB** | **Sarab** | **1.11** | **265** | Pg | | **Pb** | **08 34 44.6** | **-1.1** |
| ISRB | | | | Sg | | **Sg** | **08 34 58.7** | **-2.4** |
| **ISRB** | **Sarab** | **1.11** | **265** | *e*Pg | | **Pb** | **08 34 44.7** | **-1.1** |
| ISRB | | | | *e*Sg | | **Sg** | **08 34 59.8** | **-1.3** |
| **ZNJK** | **Zanjan** | **1.29** | **194** | *e*Pg | | **Pn** | **08 34 48.4** | **0.0** |
| ZNJK | comp=N,6μm,0.3s | | | AML | | AML | 08 35 08.2 | |
| **ZNJK** | **Zanjan** | **1.29** | **194** | Pg | | **Pn** | **08 34 48.0** | **-0.3** |
| **ZNJK** | **Zanjan** | **1.29** | **194** | *e*Pg | | **Pn** | **08 34 48.3** | **0.0** |
| **GLBA** | **Clilabad** | **1.42** | **338** | P | | **Pn** | **08 34 49.2** | **-0.6** |
| GLBA | SNR=73 | | | ⇓S | | **Sn** | **08 35 07.4** | **-0.7** |
| **GLBA** | **Clilabad** | **1.42** | **338** | P | | **Pn** | **08 34 49.2** | **-0.6** |
| GLBA | SNR=73 | | | S | | **Sn** | **08 35 07.4** | **-0.7** |
| **IHRS** | **Heris** | **1.65** | **284** | *e*Pn | | **Pn** | **08 34 53.3** | **0.0** |
| IHRS | | | | *e* | | | 08 35 17.2 | |
| **IHRS** | comp=Z,80μm,0.2s **Heris** | **1.65** | **284** | Pn | | **Pn** | **08 34 53.2** | **0.0** |
| **IHRS** | **Heris** | **1.65** | **284** | *e*Pn | | **Pn** | **08 34 53.3** | **0.0** |
| **IBST** | **Bostanabad** | **1.74** | **263** | *e*Pn | | **Pn** | **08 34 54.3** | **-0.2** |
| IBST | | | | *e* | | | 08 35 18.8 | |
| **IBST** | comp=Z,67μm,0.2s **Bostanabad** | **1.74** | **263** | Pn | | **Pn** | **08 34 55.5** | **+1.0** |
| **IBST** | **Bostanabad** | **1.74** | **263** | Pn | | **Pn** | **08 34 55.5** | **+1.0** |
| **IGZV** | **Ghazvin** | **1.79** | **149** | *e*Pn | | **Pn** | **08 34 55.4** | **+0.2** |
| IGZV | | | | *e* | | | 08 35 25.2 | |
| **IGZV** | comp=Z,28μm,0.1s **Ghazvin** | **1.79** | **149** | Pn | | **Pn** | **08 34 55.3** | **+0.1** |
| **IGZV** | **Ghazvin** | **1.79** | **149** | *e*Pn | | **Pn** | **08 34 55.4** | **+0.2** |
| **SAAT** | **Saatly** | **2.00** | **346** | ⇑P | | **Pb** | **08 34 59.9** | **-0.8** |
| SAAT | SNR=6.5 | | | ⇑S | | **Sn** | **08 35 23.8** | **+1.5** |
| **SAAT** | **Saatly** | **2.00** | **346** | P | | **Pb** | **08 34 59.9** | **-0.8** |
| SAAT | SNR=6.5 | | | S | | **Sn** | **08 35 23.8** | **+1.5** |
| **ALIB** | **Äli-Bayra** | **2.03** | **359** | P | | **Pn** | **08 35 00.0** | **+1.8** |
| **ALIB** | SNR=5.5 **Äli-Bayra** | **2.03** | **359** | P | | **Pn** | **08 35 00.0** | **+1.8** |
| **ITBZ** | SNR=5.5 **Tabriz** | **2.33** | **278** | *e*Pn | | **Pn** | **08 35 03.1** | **+0.6** |
| ITBZ | | | | *e* | | | 08 35 39.8 | |
| **ITBZ** | comp=Z,23μm,0.2s **Tabriz** | **2.33** | **278** | Pn | | **Pn** | **08 35 00.0** | **-2.5** |
| **ITBZ** | **Tabriz** | **2.33** | **278** | *e*Pn | | **Pn** | **08 35 03.1** | **+0.6** |
| **IAZR** | **Azarshahr** | **2.46** | **265** | *e* | | | 08 35 47.2 | |
| IAZR | comp=Z,72μm,0.3s | | | *e*Pn | | **Pn** | **08 35 05.6** | **+1.2** |
| **GOBA** | **Gobu** | **2.52** | **12** | ⇑P | | Pn | 08 35 08.0 | +2.9 |
| GOBA | | | | ⇑S | | **Sb** | **08 35 39.8** | **-0.7** |
| **GOBA** | **Gobu** | **2.52** | **12** | P | | Pn | 08 35 08.0 | +2.9 |
| GOBA | | | | S | | **Sb** | **08 35 39.8** | **-0.7** |
| **KDMR** | **Kurdemir** | **2.54** | **345** | P | | **Pn** | **08 35 05.4** | **+0.1** |
| KDMR | SNR=6.0 | | | ⇓S | | **Sn** | **08 35 36.0** | **+0.2** |
| **KDMR** | **Kurdemir** | **2.54** | **345** | P | | **Pn** | **08 35 05.4** | **+0.1** |
| KDMR | SNR=6.0 | | | S | | **Sn** | **08 35 36.0** | **+0.2** |
| **IMHD** | **Mahdasht** | **2.58** | **150** | *e* | | | 08 35 51.0 | |
| IMHD | comp=N,24μm,0.1s | | | *e*Pn | | **Pn** | **08 35 07.0** | **+1.1** |
| **IMHD** | **Mahdasht** | **2.58** | **150** | *e*Pn | | **Pn** | **08 35 07.0** | **+1.1** |
| **CHTH** | **Charan** | **2.60** | **140** | *e*Pn | | **Pn** | **08 35 08.1** | **+1.6** |
| **CHTH** | **Charan** | **2.60** | **140** | Pn | | **Pn** | **08 35 08.0** | **+1.6** |
| **CHTH** | **Charan** | **2.60** | **140** | Pn | | **Pn** | **08 35 08.0** | **+1.6** |
| **IRAZ** | **Razeghan** | **2.61** | **164** | *e* | | | 08 35 50.0 | |
| IRAZ | comp=Z,16μm,0.3s | | | *e*Pn | | **Pn** | **08 35 06.8** | **+0.3** |
| **GALA** | **Gala** | **2.62** | **18** | ⇓S | | **Sb** | **08 35 42.3** | **-0.9** |
| **GALA** | **Gala** | **2.62** | **18** | S | | **Sb** | **08 35 42.3** | **-0.9** |
| **NDR** | **Nardaran** | **2.75** | **15** | ⇓P | | **Pn** | **08 35 09.7** | **+1.6** |
| NDR | SNR=13 | | | ⇓S | | **Sn** | **08 35 43.7** | **+2.9** |
| **NDR** | **Nardaran** | **2.75** | **15** | P | | **Pn** | **08 35 09.7** | **+1.6** |
| NDR | SNR=13 | | | S | | **Sn** | **08 35 43.7** | **+2.9** |
| **BRDA** | **Brd** | **2.76** | **328** | P | | **Pn** | **08 35 09.3** | **+1.0** |
| BRDA | SNR=43 | | | ⇑S | | **Sn** | **08 35 43.7** | **+2.6** |
| **BRDA** | **Brd** | **2.76** | **328** | P | | **Pn** | **08 35 09.3** | **+1.0** |
| BRDA | SNR=43 | | | S | | **Sn** | **08 35 43.7** | **+2.6** |
| **IMRD** | **Marand** | **2.76** | **288** | *e* | | | 08 35 57.7 | |
| IMRD | comp=Z,73μm,0.3s | | | *e*Pn | | **Pn** | **08 35 09.6** | **+1.1** |
| **PQL** | **Pirkuli** | **2.88** | **353** | ⇑P | | **Pn** | **08 35 12.5** | **+2.3** |
| PQL | SNR=4.3 | | | ⇑S | | **Sn** | **08 35 44.6** | **+0.1** |
| **PQL** | **Pirkuli** | **2.88** | **353** | P | | **Pn** | **08 35 12.5** | **+2.3** |
| PQL | SNR=4.3 | | | S | | **Sn** | **08 35 44.6** | **+0.1** |
| **IR3** | **Iran Long-Peri** | **2.91** | **147** | *e*Pn | | **Pn** | **08 35 11.7** | **+1.3** |
| **IR3** | **Iran Long-Peri** | **2.91** | **147** | *e*Pn | | **Pn** | **08 35 11.7** | **+1.3** |
| **ATGJ** | **Altiaghaj** | **2.93** | **358** | ⇓S | | **Sn** | **08 35 47.2** | **+1.6** |
| **ATGJ** | **Altiaghaj** | **2.93** | **358** | S | | **Sn** | **08 35 47.2** | **+1.6** |
| **IML** | **Ismayilli** | **2.94** | **347** | ⇑P | | **Pn** | **08 35 11.9** | **+1.0** |
| IML | SNR=6.2 | | | ⇓S | | **Sn** | **08 35 47.2** | **+1.3** |
| **IML** | **Ismayilli** | **2.94** | **347** | P | | **Pn** | **08 35 11.9** | **+1.0** |
| IML | SNR=6.2 | | | S | | **Sn** | **08 35 47.2** | **+1.3** |
| **IAFJ** | **Afjeh** | **2.96** | **133** | *e*Pn | | **Pn** | **08 35 13.3** | **+1.9** |
| IAFJ | comp=Z,12μm,0.2s | | | *e* | | | 08 35 51.9 | |
| **IAFJ** | **Afjeh** | **2.96** | **133** | Pn | | **Pn** | **08 35 12.3** | **+0.9** |
| **IAFJ** | **Afjeh** | **2.96** | **133** | Pn | | **Pn** | **08 35 12.3** | **+0.9** |
| **IR5** | **Iran Long-Peri** | **2.97** | **155** | *e*Pn | | **Pn** | **08 35 12.0** | **+0.7** |
| IR5 | comp=Z,99nm,0.2s | | | *e* | | | 08 36 06.9 | |
| **IR5** | **Iran Long-Peri** | **2.97** | **155** | *e*Pn | | **Pn** | **08 35 12.0** | **+0.7** |
| **NAX** | **Nakhchivan** | **3.07** | **295** | P | | **Pn** | **08 35 14.2** | **+1.6** |
| **NAX** | SNR=68 **Nakhchivan** | **3.07** | **295** | P | | **Pn** | **08 35 14.2** | **+1.6** |
| **IPRN** | SNR=68 **Peran** | **3.11** | **122** | *e*Pn | | **Pn** | **08 35 13.6** | **+0.3** |
| IPRN | comp=Z,62μm,0.1s | | | *e* | | | 08 35 51.8 | |
| **IPRN** | **Peran** | **3.11** | **122** | Pn | | **Pn** | **08 35 13.5** | **+0.3** |
| **SIZA** | **Siyzn** | **3.15** | **358** | ⇓P | | **Pn** | **08 35 14.3** | **+0.6** |
| SIZA | SNR=3.2 | | | ⇑S | | **Sn** | **08 35 53.5** | **+2.6** |
| **SIZA** | **Siyzn** | **3.15** | **358** | P | | **Pn** | **08 35 14.3** | **+0.6** |
| SIZA | SNR=3.2 | | | S | | **Sn** | **08 35 53.5** | **+2.6** |
| **SNGE** | **Sanandaj** | **3.15** | **207** | *e*Pn | | **Pn** | **08 35 16.1** | **+2.2** |
| SNGE | | | | AML | | AML | 08 36 10.3 | |
| **SNGE** | comp=E,731nm,0.6s **Sanandaj** | **3.15** | **207** | Pn | | **Pn** | **08 35 16.0** | **+2.2** |
| **SNGE** | **Sanandaj** | **3.15** | **207** | Pn | | **Pn** | **08 35 16.0** | **+2.2** |
| **MNGR** | **Mingechevir, A** | **3.23** | **332** | ⇓P | | **Pn** | **08 35 15.2** | **+0.4** |
| MNGR | SNR=5.9 | | | ⇑S | | **Sn** | **08 35 52.8** | **-0.1** |
| **MNGR** | **Mingechevir, A** | **3.23** | **332** | P | | **Pn** | **08 35 15.2** | **+0.4** |
| MNGR | SNR=5.9 | | | S | | **Sn** | **08 35 52.8** | **-0.1** |
| **IDMV** | **Damavand** | **3.34** | **134** | *e*Pn | | **Pn** | **08 35 18.7** | **+2.1** |
| IDMV | | | | *e* | | | 08 36 02.5 | |
| **IDMV** | comp=Z,3μm,0.2s **Damavand** | **3.34** | **134** | Pn | | **Pn** | **08 35 18.7** | **+2.1** |
| **IDMV** | **Damavand** | **3.34** | **134** | *e*Pn | | **Pn** | **08 35 18.7** | **+2.1** |
| **GANJ** | **Ganja** | **3.45** | **323** | P | | **Pn** | **08 35 17.2** | **-0.7** |
| GANJ | SNR=20 | | | ⇓S | | **Sn** | **08 35 57.0** | **-1.4** |
| **GANJ** | **Ganja** | **3.45** | **323** | P | | **Pn** | **08 35 17.2** | **-0.7** |
| GANJ | SNR=20 | | | S | | **Sn** | **08 35 57.0** | **-1.4** |
| **QUBA** | **Quba, Azerbaij** | **3.45** | **353** | ⇑P | | **Pn** | **08 35 19.4** | **+1.5** |
| QUBA | | | | ⇓S | | **Sn** | **08 35 59.1** | **+0.7** |
| **QUBA** | **Quba, Azerbaij** | **3.45** | **353** | P | | **Pn** | **08 35 19.4** | **+1.5** |
| QUBA | | | | S | | **Sn** | **08 35 59.1** | **+0.7** |
| **IALA** | **Alasht** | **3.51** | **120** | *e*Pn | | **Pn** | **08 35 19.6** | **+0.7** |
| IALA | comp=Z,15μm,0.2s | | | *e* | | | 08 36 05.5 | |
| **IALA** | **Alasht** | **3.51** | **120** | Pn | | **Pn** | **08 35 19.5** | **+0.5** |
| **IALA** | **Alasht** | **3.51** | **120** | *e*Pn | | **Pn** | **08 35 19.6** | **+0.7** |
| **SEKA** | **Sheki** | **3.58** | **337** | P | | **Pn** | **08 35 19.5** | **-0.2** |
| SEKA | SNR=25 | | | ⇓S | | **Sn** | **08 36 00.9** | **-0.7** |
| **SEKA** | **Sheki** | **3.58** | **337** | P | | **Pn** | **08 35 19.5** | **-0.2** |
| SEKA | SNR=25 | | | S | | **Sn** | **08 36 00.9** | **-0.7** |
| **MAKU** | **Maku** | **3.72** | **294** | *e*Pn | | **Pn** | **08 35 23.3** | **+1.7** |
| **MAKU** | **Maku** | **3.72** | **294** | Pn | | **Pn** | **08 35 23.0** | **+1.3** |
| **MAKU** | **Maku** | **3.72** | **294** | *e*Pn | | **Pn** | **08 35 23.3** | **+1.7** |
| **IFIR** | **Firoozkooh** | **3.73** | **127** | *e*Pn | | **Pn** | **08 35 24.5** | **+2.5** |
| IFIR | comp=Z,5μm,0.1s | | | *e* | | | 08 36 11.7 | |
| **IFIR** | **Firoozkooh** | **3.73** | **127** | Pn | | **Pn** | **08 35 24.5** | **+2.5** |
| **IFIR** | **Firoozkooh** | **3.73** | **127** | *e*Pn | | **Pn** | **08 35 24.5** | **+2.5** |
| **IDHR** | **Dehrash** | **3.88** | **215** | *e*Pn | | Pn | 08 35 26.8 | +2.9 |
| IDHR | comp=Z,7μm,0.5s | | | *e* | | | 08 36 34.2 | |
| **IDHR** | **Dehrash** | **3.88** | **215** | Pn | | **Pn** | **08 35 25.1** | **+1.2** |
| **IDHR** | **Dehrash** | **3.88** | **215** | Pn | | **Pn** | **08 35 25.1** | **+1.2** |
| **GNI** | **Garni** | **4.04** | **305** | Pg | | **Pb** | **08 35 34.2** | **-1.3** |
| GNI | | | | Lg | | Lg | 08 36 29.6 | |
| **GNI** | **Garni** | **4.04** | **305** | *e*P | | Pn | 08 35 29.2 | +3.2 |
| **GNI** | **Garni** | **4.04** | **305** | *e*Pn | | Pn | 08 35 29.2 | +3.2 |
| GNI | | | | Pg | | **Pb** | **08 35 34.2** | **-1.3** |
| GNI | | | | Lg | | Lg | 08 36 29.6 | |
| **GNI** | **Garni** | **4.04** | **305** | *e*P | | Pn | 08 35 29.2 | +3.2 |
| **IGLO** | **Ghaloghah** | **4.06** | **109** | *e*Pn | | **Pn** | **08 35 26.5** | **+0.1** |
| IGLO | comp=Z,11μm,0.2s | | | *e* | | | 08 36 23.2 | |
| **IGLO** | **Ghaloghah** | **4.06** | **109** | Pn | | **Pn** | **08 35 26.4** | **+0.1** |
| **IKIA** | **Kiasar** | **4.07** | **114** | *e*Pn | | **Pn** | **08 35 27.5** | **+1.0** |
| IKIA | comp=Z,5μm,0.1s | | | *e* | | | 08 36 20.0 | |
| **IKIA** | **Kiasar** | **4.07** | **114** | Pn | | **Pn** | **08 35 27.5** | **+1.0** |
| **IKIA** | **Kiasar** | **4.07** | **114** | *e*Pn | | **Pn** | **08 35 27.5** | **+1.0** |
| **IGHG** | **Ghaleghazi** | **4.12** | **210** | *e*Pn | | Pn | 08 35 30.0 | +2.8 |
| IGHG | comp=Z,6μm,0.4s | | | *e* | | | 08 36 44.5 | |
| **IGHG** | **Ghaleghazi** | **4.12** | **210** | Pn | | Pn | 08 35 30.0 | +2.8 |
| **IGHG** | **Ghaleghazi** | **4.12** | **210** | *e*Pn | | Pn | 08 35 30.0 | +2.8 |
| **ZKTA** | **Zakatala** | **4.16** | **334** | P | | **Pn** | **08 35 28.1** | **+0.5** |
| ZKTA | SNR=16 | | | ⇑S | | **Sn** | **08 36 15.6** | **-0.2** |
| **CLDR** | **Caldiran** | **4.22** | **288** | *e*P | | **Pn** | **08 35 29.5** | **+0.9** |
| **CLDR** | **Caldiran** | **4.22** | **288** | *e*P | | **Pn** | **08 35 29.5** | **+0.9** |
| **HKR** | **Hakkari** | **4.24** | **267** | *e*P | | **Pn** | **08 35 30.4** | **+1.6** |
| **HKR** | **Hakkari** | **4.24** | **267** | *e*P | | **Pn** | **08 35 30.4** | **+1.6** |
| **QZX** | **Qazax, Azerbai** | **4.24** | **319** | P | | **Pn** | **08 35 29.1** | **+0.5** |
| QZX | SNR=14 | | | ⇑S | | **Sn** | **08 36 18.5** | **+0.8** |
| **QZX** | **Qazax, Azerbai** | **4.24** | **319** | P | | **Pn** | **08 35 29.1** | **+0.5** |
| QZX | SNR=14 | | | S | | **Sn** | **08 36 18.5** | **+0.8** |
| **KHMZ** | **Khomeyn** | **4.24** | **170** | *e*Pn | | **Pn** | **08 35 31.1** | **+2.2** |
| **KHMZ** | **Khomeyn** | **4.24** | **170** | *e*Pn | | **Pn** | **08 35 31.1** | **+2.2** |
| **HAKT** | **HAKKARI** | **4.27** | **267** | *i* P | | Pn | 08 35 31.7 | +2.5 |
| **HAKT** | **HAKKARI** | **4.27** | **267** | P | | Pn | 08 35 31.7 | +2.5 |
| **CUKT** | **Cukurca** | **4.39** | **263** | *e*P | | **Pn** | **08 35 32.6** | **+1.8** |
| **CUKT** | **Cukurca** | **4.39** | **263** | *e*P | | **Pn** | **08 35 32.6** | **+1.8** |
| **DGRG** | **David-gareji** | **4.53** | **322** | P | | **Pn** | **08 35 33.8** | **+1.1** |
| **DGRG** | **David-gareji** | **4.53** | **322** | P | | **Pn** | **08 35 33.7** | **+1.1** |
| **DGRG** | **David-gareji** | **4.53** | **322** | P | | **Pn** | **08 35 33.7** | **+1.1** |
| **IKRK** | **Kirkuk** | **4.56** | **238** | *e*PG | | x | 08 35 49.5 | |
| IKRK | | | | *e*SG | | x | 08 36 32.0 | |
| **QAM** | **Ghamsar** | **4.58** | **154** | *e*Pn | | **Pn** | **08 35 34.8** | **+1.3** |
| QAM | comp=Z,2μm,0.2s | | | *e* | | | 08 36 29.8 | |
| **QAM** | **Ghamsar** | **4.58** | **154** | *e*Pn | | **Pn** | **08 35 34.8** | **+1.3** |
| **MSL** | **Mosul** | **5.00** | **254** | *e*PN | | x | 08 35 40.1 | |
| MSL | | | | *e*SN | | x | 08 36 19.2 | |
| **AGRB** | **Hanur-Agry** | **5.03** | **291** | *e*P | | **Pn** | **08 35 41.3** | **+1.6** |
| **AGRB** | **Hanur-Agry** | **5.03** | **291** | *e*P | | **Pn** | **08 35 41.3** | **+1.6** |
| **SEAG** | **Tbilisi Sea** | **5.05** | **321** | P | | **Pg** | **08 36 01.4** | **-0.1** |
| **TBLG** | **Delisi** | **5.05** | **320** | *e*P | | **Pb** | **08 35 50.9** | **-2.0** |
| **TBLG** | **Delisi** | **5.05** | **320** | P | | **Pb** | **08 35 50.0** | **-2.8** |
| **TBLG** | **Delisi** | **5.05** | **320** | P | | **Pb** | **08 35 50.0** | **-2.8** |
| **DIGO** | **Kars** | **5.08** | **301** | P | | **Pb** | **08 35 52.4** | **-0.9** |
| **TUTA** | **Tutak** | **5.11** | **289** | *i* P | | **Pn** | **08 35 42.2** | **+1.3** |
| **TUTA** | **Tutak** | **5.11** | **289** | P | | **Pn** | **08 35 42.2** | **+1.3** |
| **MAK** | **Makhachkala** | **5.17** | **347** | *e*P | | Pn | 08 35 44.3 | +2.9 |
| MAK | | | | *e* | | | 08 36 40.6 | |
| MAK | | | | | smax | smax | | |
| MAK | comp=N,962nm,0.8s | | | | MLR | MLR | | |
| **MAK** | comp=Z,100nm,3.0s **Makhachkala** | **5.17** | **347** | *e*P | | Pn | 08 35 44.3 | +2.9 |
| **SIRT** | comp=Z,962nm,0.8s **Sirnak** | **5.27** | **267** | *e*P | | **Pn** | **08 35 44.5** | **+1.5** |
| **SIRT** | **Sirnak** | **5.27** | **267** | *e*P | | **Pn** | **08 35 44.5** | **+1.5** |
| **KARS** | **Kars** | **5.37** | **302** | *e*P | | Pn | 08 35 48.3 | +3.9 |
| **KARS** | **Kars** | **5.37** | **302** | *e*P | | Pn | 08 35 48.3 | +3.9 |
| **IPIR** | **Pirpir** | **5.44** | **164** | *e*Pn | | Pn | 08 35 48.3 | +2.8 |
| IPIR | | | | *e* | | | 08 37 36.9 | |
| **IPIR** | comp=Z,1μm,0.5s **Pirpir** | **5.44** | **164** | Pn | | Pn | 08 35 48.2 | +2.8 |
| **IPIR** | **Pirpir** | **5.44** | **164** | Pn | | Pn | 08 35 48.2 | +2.8 |
| **IBDR** | **Badra** | **5.45** | **209** | *e*PN | | x | 08 35 49.3 | |
| IBDR | | | | *e*SN | | x | 08 36 34.3 | |
| **AKH** | **Akhalkalaki** | **5.53** | **311** | *e*P | | Pn | 08 35 54.0 | +7.4 |
| **AKH** | **Akhalkalaki** | **5.53** | **311** | P | | Pb | 08 36 03.7 | +2.6 |
| **AKH** | **Akhalkalaki** | **5.53** | **311** | P | | Pb | 08 36 03.6 | +2.6 |
| **MRVT** | **Maraveh tapeh** | **5.57** | **91** | AML | | AML | 08 36 50.6 | |
| MRVT | comp=E,383nm,0.1s | | | AML | | AML | 08 36 51.4 | |
| **EKAR** | comp=N,340nm,0.3s **Karacoban** | **5.65** | **286** | *i* P | | Pn | 08 35 51.6 | +3.4 |
| **EKAR** | **Karacoban** | **5.65** | **286** | P | | Pn | 08 35 51.6 | +3.4 |
| **SHRO** | **Shahrood** | **5.88** | **107** | *e*Pn | | **Pn** | **08 35 52.5** | **+1.1** |
| SHRO | comp=E,76nm,0.4s | | | AML | | AML | 08 37 14.5 | |
| **SHRO** | **Shahrood** | **5.88** | **107** | *e*Pn | | **Pn** | **08 35 52.5** | **+1.1** |
| **BHD** | **Baghdad** | **6.01** | **221** | *e*PN | | x | 08 35 54.1 | |
| BHD | | | | *e*SN | | x | 08 36 42.6 | |
| **EZM** | **Erzurum** | **6.33** | **291** | *e*P | | **Pn** | **08 35 59.5** | **+2.0** |
| **ONI** | **Oni** | **6.34** | **319** | P | | Pn | 08 36 00.8 | +3.3 |
| **ONI** | **Oni** | **6.34** | **319** | P | | Pn | 08 36 00.8 | +3.3 |
| **ONI** | **Oni** | **6.34** | **319** | P | | Pn | 08 36 00.8 | +3.3 |
| **DBAD** | **Bademkaya** | **6.49** | **301** | *i* P | | Pn | 08 36 02.8 | +3.2 |
| **DBAD** | **Bademkaya** | **6.49** | **301** | P | | Pn | 08 36 02.8 | +3.2 |
| **MARD** | **Mardin** | **6.61** | **267** | P | | **Pn** | **08 36 01.1** | **-0.2** |
| **BNGB** | **Bing¨¶l** | **6.67** | **282** | *e*P | | **Pn** | **08 36 03.6** | **+1.5** |
| **BCA** | **Borcka** | **6.73** | **304** | *e*P | | Pn | 08 36 07.1 | +4.2 |
| **BINT** | **Bingol** | **6.80** | **281** | *e*P | | **Pn** | **08 36 03.6** | **-0.4** |
| **MAZI** | **Mazidag** | **6.85** | **269** | *e*P | | **Pn** | **08 36 06.8** | **+2.1** |
| **MAZI** | **Mazidag** | **6.85** | **269** | *e*P | | **Pn** | **08 36 06.8** | **+2.1** |
| **NCK** | **Nalchik** | **6.94** | **325** | *e*P | | **Pn** | **08 36 07.6** | **+1.8** |
| **NCK** | **Nalchik** | **6.94** | **325** | *e*P | | **Pn** | **08 36 07.6** | **+1.8** |
| **GEYT** | **Alibeck** | **7.15** | **87** | Pn | | **Pn** | **08 36 07.8** | **-0.9** |
| GEYT | comp=E,34nm,0.3s,baz=281,slow=15,SNR=81 | | | Sn | | Sn | 08 37 23.1 | -6.5 |
| GEYT | baz=284,slow=15,SNR=1.4 | | | LR | | LR | 08 40 20.5 | |
| **NEY** | comp=E,200nm,20.4s,baz=260,slow=50 **Neytrino** | **7.18** | **320** | *e*P | | Pn | 08 36 12.1 | +2.9 |
| **NEY** | **Neytrino** | **7.18** | **320** | *e*P | | Pn | 08 36 12.1 | +2.9 |
| **NSR** | **Nassriya** | **7.31** | **200** | *e*PN | | x | 08 36 18.3 | |
| NSR | | | | *e*SN | | x | 08 37 21.8 | |
| **BAYT** | **Ayd¯–ntepe-Bay** | **7.36** | **292** | *e*P | | Pn | 08 36 14.4 | +2.7 |
| **BAYT** | **Ayd¯–ntepe-Bay** | **7.36** | **292** | *e*P | | Pn | 08 36 14.4 | +2.7 |
| **KBZ** | **Khabaz** | **7.45** | **323** | Pn | | **Pn** | **08 36 11.9** | **-0.8** |
| KBZ | comp=E,0.1nm,0.3s,baz=293,slow=20,SNR=2.1 | | | Sn | | **Sn** | **08 37 38.8** | **+2.1** |
| KBZ | comp=E,0.5nm,0.3s,baz=115,slow=9.1,SNR=2.5 | | | Lg | | Lg | 08 38 19.6 | |
| KBZ | comp=E,0.8nm,0.3s,baz=26,slow=3.2,SNR=2.5 | | | LR | | LR | 08 39 46.1 | |
| **ERZN** | comp=E,176nm,18.2s,baz=149,slow=44 **Erzincan** | **7.49** | **286** | *e*P | | **Pn** | **08 36 15.6** | **+2.2** |
| **PTK** | **Pertek** | **7.66** | **280** | *e*P | | **Pn** | **08 36 17.6** | **+1.8** |
| **PTK** | **Pertek** | **7.66** | **280** | *e*P | | **Pn** | **08 36 17.6** | **+1.8** |
| **SVRC** | **Sivrice-ELAZID** | **7.71** | **276** | *e*P | | **Pn** | **08 36 18.1** | **+1.7** |
| **SVRC** | **Sivrice-ELAZID** | **7.71** | **276** | *e*P | | **Pn** | **08 36 18.1** | **+1.7** |
| **KIV** | **Kislovodsk** | **7.72** | **323** | *i* P | | **Pn** | **08 36 17.4** | **+0.9** |
| KIV | comp=Z,11nm,0.7s | | | pmax | | pmax | | |
| **KIV** | **Kislovodsk** | **7.72** | **323** | *i* P | | **Pn** | **08 36 17.4** | **+0.9** |
| **MALT** | comp=Z,11nm,0.7s **Malatya** | **8.40** | **276** | *e*P | | **Pn** | **08 36 28.2** | **+2.3** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| VRI | Vrincioaia | 18.39 | 303 | P | | Pn | 08 38 38.1 | -0.8 | |
| PLOR | Plostina | 18.43 | 303 | ⇑P | | P | 08 38 38.7 | -0.7 | |
| PLOR | Plostina | 18.43 | 303 | ⇑*i*P | | P | 08 38 38.7 | -0.7 | |
| PLOR | Plostina | 18.43 | 303 | P | | P | 08 38 38.7 | -0.7 | |
| MLR | Muntele Rosu | 18.80 | 301 | P | | P | 08 38 42.4 | -1.1 | |
| | comp=Z,0.1nm,0.3s,baz=151,slow=5.3,SNR=9.0 | | | | | | | | |
| MLR | Muntele Rosu | 18.80 | 301 | ⇑P | | Pn | 08 38 44.4 | +0.3 | |
| MLR | Muntele Rosu | 18.80 | 301 | ⇑*i*P | | Pn | 08 38 44.4 | +0.3 | |
| AKASG | Malin Array Be | 19.02 | 319 | P | | P | 08 38 44.0 | -1.7 | |
| | comp=Z,1.9nm,0.3s,baz=126,slow=11,SNR=11 | | | | | | | | |
| AKASG | Malin Array Be | 19.02 | 319 | P | | P | 08 38 44.0 | -1.7 | |
| AKASG | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | | |
| AKASG | Malin Array Be | 19.02 | 319 | P | | P | 08 38 44.0 | -1.7 | |
| | comp=Z,2.0nm,0.3s | | | | | | | | |
| KIEV | Kiev | 19.03 | 318 | *e*P | | P | 08 38 45.5 | -0.3 | |
| KIEV | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| KIEV | Kiev | 19.03 | 318 | *e*P | | P | 08 38 44.4 | -1.4 | |
| | comp=Z,7.1nm,0.7s | | | | | | | | |
| KIEV | Kiev | 19.03 | 318 | *e*P | | P | 08 38 45.5 | -0.3 | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| AK11 | Malin Array Si | 19.04 | 318 | *e*P | | P | 08 38 45.0 | -0.9 | |
| AK11 | Malin Array Si | 19.04 | 318 | *e*P | | P | 08 38 45.0 | -0.9 | |
| OBN | Obninsk | 19.17 | 338 | LR | | LR | 08 46 39.4 | | |
| | comp=Z,88nm,20.0s,baz=256,slow=38 | | | | | | | | |
| OBN | Obninsk | 19.17 | 338 | *e*P | | P | 08 38 47.8 | +0.5 | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | | |
| OBN | Obninsk | 19.17 | 338 | *e*P | | P | 08 38 47.8 | +0.5 | |
| | comp=Z,3.0nm,0.4s | | | | | | | | |
| DOPR | Dopca | 19.31 | 302 | ⇑*i*P | | P | 08 38 48.4 | -0.6 | |
| DOPR | Dopca | 19.31 | 302 | ⇑*i*P | | P | 08 38 48.4 | -0.6 | |
| ARU | Arti | 19.57 | 16 | S | | S | 08 42 11.2 | -21 | |
| | comp=Z,0.0nm,0.3s,baz=130,slow=23,SNR=4.5 | | | | | | | | |
| IDI | Anoyia | 19.58 | 270 | P | | P | 08 38 49.4 | -2.6 | |
| | comp=Z,1.6nm,0.3s,baz=36,slow=17,SNR=8.5 | | | | | | | | |
| IDI | Anoyia | 19.58 | 270 | *e*P | | P | 08 38 51.0 | -1.0 | |
| | comp=Z,50nm,1.7s | | | | | | | | |
| IDI | Anoyia | 19.58 | 270 | *e*P | | P | 08 38 51.0 | -1.0 | |
| | comp=Z,50nm,1.7s | | | | | | | | |
| ARR | Arges | 19.67 | 300 | ⇑*i*P | | P | 08 38 53.7 | +0.8 | |
| ARR | Arges | 19.67 | 300 | ⇑*i*P | | P | 08 38 53.7 | +0.8 | |
| AAK | Ala-Archa | 19.93 | 68 | ⇓P | | P | 08 38 56.9 | +0.9 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| AAK | Ala-Archa | 19.93 | 68 | P | | P | 08 38 56.4 | +0.5 | |
| | comp=Z,3.2nm,0.5s,baz=235,slow=15,SNR=10 | | | | | | | | |
| AAK | | | | LR | | LR | 08 48 47.8 | | |
| | comp=Z,266nm,19.1s,baz=262,slow=43 | | | | | | | | |
| AAK | Ala-Archa | 19.93 | 68 | *e*P | | P | 08 38 56.9 | +0.9 | |
| AAK | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| AAK | Ala-Archa | 19.93 | 68 | *e*P | | P | 08 38 56.9 | +0.9 | |
| | comp=Z,9.7nm,0.8s | | | | | | | | |
| AAK | Ala-Archa | 19.93 | 68 | *e*P | | P | 08 38 56.8 | +0.9 | |
| | comp=Z,9.7nm,0.8s | | | | | | | | |
| BURAR | Bucovina Array | 19.94 | 307 | ⇑P | | P | 08 38 56.3 | +0.4 | |
| BURAR | Bucovina Array | 19.94 | 307 | ⇑*i*P | | P | 08 38 56.3 | +0.4 | |
| BURAR | Bucovina Array | 19.94 | 307 | ⇑*i*P | | P | 08 38 56.3 | +0.4 | |
| BUR04 | Bucovina Ar. S | 19.94 | 307 | *e*P | | P | 08 38 54.9 | -1.1 | |
| BUR04 | Bucovina Ar. S | 19.94 | 307 | *e*P | | P | 08 38 54.9 | -1.1 | |
| SVE | Sverdlovsk | 20.41 | 18 | ⇓*i*P | | P | 08 39 01.5 | +0.6 | |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.1s | | | | | | | | |
| SVE | Sverdlovsk | 20.41 | 18 | *i* P | | P | 08 39 01.5 | +0.6 | |
| | comp=Z,26nm,1.1s | | | | | | | | |
| ZRNK | Zerenda | 20.42 | 36 | ⇓P | | P | 08 38 60.0 | -1.1 | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| ZRNK | Zerenda | 20.42 | 36 | P | | P | 08 38 59.9 | -1.1 | |
| ZRNK | | | | pmax | pmax | | | | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| ZRNK | Zerenda | 20.42 | 36 | P | | P | 08 39 00.0 | -1.1 | |
| | comp=Z,22nm,0.7s | | | | | | | | |
| SRE | Strehaia | 20.52 | 297 | ⇓P | | P | 08 39 02.8 | +0.7 | |
| SRE | Strehaia | 20.52 | 297 | ⇓*i*P | | P | 08 39 02.8 | +0.7 | |
| SRE | Strehaia | 20.52 | 297 | P | | P | 08 39 02.8 | +0.7 | |
| GZR | Gura Zlata | 20.95 | 299 | ⇑*i*P | | P | 08 39 06.1 | -0.8 | |
| GZR | Gura Zlata | 20.95 | 299 | ⇑*i*P | | P | 08 39 06.1 | -0.8 | |
| KSH | Kashi | 21.03 | 77 | P | | P | 08 39 05.5 | -2.3 | |
| KSH | | | | *e*pP | | pP | 08 39 18.8 | +6.1 | |
| KSH | | | | S | | S | 08 42 46.6 | -15 | |
| KSH | | | | *e*PcP | | PcP | 08 43 14.3 | -0.1 | |
| KSH | | | | PMZ | | | | | |
| | comp=Z,51nm,1.8s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,420nm,8.0s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,210nm,7.0s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,140nm,6.9s | | | | | | | | |
| BRVK | Borovoye | 21.10 | 37 | ⇓P | | P | 08 39 07.4 | -0.9 | |
| | comp=Z,104nm,1.3s | | | | | | | | |
| BRVK | Borovoye | 21.10 | 37 | P | | P | 08 39 07.3 | -0.9 | |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,104nm,1.3s | | | | | | | | |
| BRVK | Borovoye | 21.10 | 37 | *e*P | | P | 08 39 07.5 | -0.8 | |
| | comp=Z,85nm,1.3s | | | | | | | | |
| BRVK | Borovoye | 21.10 | 37 | P | | P | 08 39 07.4 | -0.9 | |
| | comp=Z,104nm,1.3s | | | | | | | | |
| BVA0 | Borovoye Array | 21.13 | 38 | P | | P | 08 39 07.8 | -0.8 | |
| | comp=Z,38nm,0.8s,baz=231,slow=8.9,SNR=140 | | | | | | | | |
| BVA0 | Borovoye Array | 21.13 | 38 | P | | P | 08 39 07.8 | -0.8 | |
| | comp=Z,38nm,0.8s,SNR=140 | | | | | | | | |
| BVAR | Borovoye Array | 21.13 | 38 | P | | P | 08 39 07.9 | -0.7 | |
| | comp=Z,26nm,0.6s,baz=229,slow=9.0,SNR=124 | | | | | | | | |
| BVAR | | | | S | | S | 08 42 51.1 | -12 | |
| | comp=Z,1.0nm,0.7s,baz=241,slow=20,SNR=2.5 | | | | | | | | |
| BVAR | Borovoye Array | 21.13 | 38 | P | | P | 08 39 07.9 | -0.7 | |
| BVAR | | | | S | | S | 08 42 51.1 | -12 | |
| BVAR | | | | pmax | pmax | | | | |
| | comp=Z,26nm,0.6s | | | | | | | | |
| BVAR | | | | smax | smax | | | | |
| | comp=N,1.0nm,0.7s | | | | | | | | |
| VOSK | Vostochnaya | 21.24 | 39 | ⇑P | | P | 08 39 08.0 | -1.9 | |
| | comp=N,10nm,0.5s | | | | | | | | |
| VOSK | Vostochnaya | 21.24 | 39 | P | | P | 08 39 08.5 | -1.3 | |
| VOSK | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| VOSK | Vostochnaya | 21.24 | 39 | P | | P | 08 39 08.5 | -1.3 | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| DRGR | | 21.32 | 303 | ⇑P | | P | 08 39 11.2 | +0.4 | |
| DRGR | | 21.32 | 303 | ⇑*i*P | | P | 08 39 11.2 | +0.4 | |
| DRGR | | 21.32 | 303 | P | | P | 08 39 11.2 | +0.4 | |
| BOVS | Bovan | 21.44 | 294 | *e*P | | P | 08 39 12.3 | +0.2 | |
| LVV | L'vov | 21.50 | 312 | *e*P | | P | 08 39 10.8 | -1.9 | |
| LVV | L'vov | 21.50 | 312 | *e*P | | P | 08 39 10.8 | -1.9 | |
| CHKZ | Chkalovo | 21.63 | 36 | ⇓P | | P | 08 39 12.5 | -1.5 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| CHKZ | Chkalovo | 21.63 | 36 | P | | P | 08 39 12.5 | -1.5 | |
| CHKZ | | | | pmax | pmax | | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| CHKZ | Chkalovo | 21.63 | 36 | P | | P | 08 39 12.5 | -1.5 | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| TRPA | Tarpa | 21.81 | 306 | ⇑*i*P | | P | 08 39 15.9 | -0.1 | |
| TRPA | Tarpa | 21.81 | 306 | ⇑*i*P | | P | 08 39 15.9 | -0.1 | |
| SELS | Selova | 21.83 | 293 | *e*P | | P | 08 39 15.8 | -0.5 | |
| SIRR | Siria | 21.90 | 301 | ⇑*i*P | | P | 08 39 17.5 | +0.5 | |
| SIRR | Siria | 21.90 | 301 | ⇑*i*P | | P | 08 39 17.5 | +0.5 | |
| UZH | Uzhgorod | 22.13 | 307 | *e*P | | P | 08 39 17.8 | -1.6 | |
| UZH | | | | *e* | | | 08 39 39.8 | | |
| UZH | Uzhgorod | 22.13 | 307 | *e*P | | P | 08 39 17.8 | -1.6 | |
| GRUS | Gruza | 22.18 | 295 | *e*P | | P | 08 39 20.3 | +0.3 | |
| KOLS | Kolonicke sedl | 22.24 | 308 | *e*P | | P | 08 39 21.6 | +1.0 | |
| KOLS | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| KOLS | Kolonicke sedl | 22.24 | 308 | *e*P | | P | 08 39 21.6 | +1.0 | |
| KOLS | Kolonicke sedl | 22.24 | 308 | *e*P | | P | 08 39 21.6 | +1.0 | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| SOKR | Solikamsk | 22.25 | 10 | *d i*P | | P | 08 39 22.8 | +2.3 | |
| SOKR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| IVAS | Ivanjica | 22.56 | 294 | *e*P | | P | 08 39 23.2 | -0.9 | |
| DIVS | Divibare | 22.72 | 295 | ⇑*i*P | | P | 08 39 24.2 | -1.7 | |
| DIVS | Divibare | 22.72 | 295 | ⇑*i*P | | P | 08 39 24.2 | -1.7 | |
| STHS | Stebnicka Huta | 23.04 | 309 | *e*P | | P | 08 39 29.3 | +0.2 | |
| STHS | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| STHS | Stebnicka Huta | 23.04 | 309 | *e*P | | P | 08 39 29.3 | +0.2 | |
| STHS | Stebnicka Huta | 23.04 | 309 | *e*P | | P | 08 39 29.3 | +0.2 | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| PSZ | Piszkesteto | 23.46 | 305 | *e*P | | P | 08 39 34.0 | +0.7 | |
| PSZ | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| PSZ | Piszkesteto | 23.46 | 305 | *e*P | | P | 08 39 34.0 | +0.7 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| PSZ | Piszkesteto | 23.46 | 305 | *e*P | | P | 08 39 34.0 | +0.7 | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| KLMR | Klimovskoe | 23.73 | 348 | *e*P | | P | 08 39 33.2 | -2.5 | |
| KLMR | | | | *e*S | | S | 08 43 48.0 | -1.9 | |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,26nm,1.2s | | | | | | | | |
| KLMR | Klimovskoe | 23.73 | 348 | *e*P | | P | 08 39 33.2 | -2.5 | |
| | comp=Z,26nm,1.2s | | | | | | | | |
| KLMR | | | | *e*S | | S | 08 43 48.0 | -1.9 | |
| VYHS | Vyhne | 24.29 | 305 | *e*P | | P | 08 39 40.7 | -0.5 | |
| VYHS | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| VYHS | Vyhne | 24.29 | 305 | *e*P | | P | 08 39 40.7 | -0.5 | |
| VYHS | Vyhne | 24.29 | 305 | *e*P | | P | 08 39 40.7 | -0.5 | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| KURBB | Kurchatov Arra | 24.44 | 49 | ⇑P | | P | 08 39 42.5 | 0.0 | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| KURBB | Kurchatov Arra | 24.44 | 49 | P | | P | 08 39 42.8 | +0.3 | |
| | comp=Z,12nm,0.8s,baz=256,slow=9.5,SNR=48 | | | | | | | | |
| KURBB | Kurchatov Arra | 24.44 | 49 | P | | P | 08 39 42.5 | 0.0 | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| KURK | Kurchatov | 24.52 | 49 | *e*P | | P | 08 39 43.5 | +0.2 | |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| KURK | Kurchatov | 24.52 | 49 | *e*P | | P | 08 39 43.5 | +0.2 | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| KURK | Kurchatov | 24.52 | 49 | *e*P | | P | 08 39 43.5 | +0.2 | |
| | comp=Z,30nm,0.9s | | | | | | | | |
| PE1 | Pezze di Greco | 24.57 | 287 | *e*P | | P | 08 39 42.9 | -0.8 | |
| VSU | Vasula | 25.15 | 332 | *e*P | | P | 08 39 48.9 | +0.1 | |
| VSU | | | | pmax | pmax | | | | |
| | comp=Z,53nm,0.9s | | | | | | | | |
| VSU | Vasula | 25.15 | 332 | *e*P | | P | 08 39 48.9 | +0.1 | |
| | comp=Z,53nm,0.9s | | | | | | | | |
| TIP | Timpagrande | 25.23 | 283 | *e*P | | P | 08 39 49.2 | -0.7 | |
| | comp=Z,4.7nm,0.8s | | | | | | | | |
| TIP | Timpagrande | 25.23 | 283 | *e*P | | P | 08 39 49.2 | -0.7 | |
| | comp=Z,4.7nm,0.8s | | | | | | | | |
| MAKZ | Makanchi | 25.73 | 59 | *e*P | | P | 08 39 54.7 | +0.5 | |
| MAKZ | Makanchi | 25.73 | 59 | *e*P | | P | 08 39 54.7 | +0.5 | |
| VRAC | Vranov | 25.92 | 306 | LR | | LR | 08 51 42.9 | | |
| | comp=Z,59nm,19.8s,baz=88,slow=40 | | | | | | | | |
| MK31 | Makanchi Array | 25.94 | 59 | ⇑P | | P | 08 39 55.8 | -0.4 | |
| | comp=Z,9.0nm,0.7s,baz=81,slow=50,SNR=34 | | | | | | | | |
| MK31 | Makanchi Array | 25.94 | 59 | P | | P | 08 39 56.2 | 0.0 | |
| MK31 | | | | pmax | pmax | | | | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| MK31 | Makanchi Array | 25.94 | 59 | P | | P | 08 39 55.8 | -0.4 | |
| | comp=Z,9.0nm,0.7s,SNR=34 | | | | | | | | |
| MKAR | Makanchi Array | 25.94 | 59 | P | | P | 08 39 56.5 | +0.3 | |
| | comp=Z,7.3nm,0.8s,baz=255,slow=9.2,SNR=18 | | | | | | | | |
| MKAR | Makanchi Array | 25.94 | 59 | P | | P | 08 39 56.5 | +0.3 | |
| MKAR | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| MK01 | Makanchi Array | 25.94 | 59 | *e*P | | P | 08 39 56.1 | 0.0 | |
| MK01 | Makanchi Array | 25.94 | 59 | *e*P | | P | 08 39 56.2 | 0.0 | |
| SOKA | Soboth | 26.48 | 300 | ⇑*i*P | | P | 08 40 00.7 | -0.4 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| SOKA | Soboth | 26.48 | 300 | P | | P | 08 40 00.7 | -0.4 | |
| | comp=Z,13nm,0.9s | | | | | | | | |
| VAE | Valguarnera | 27.33 | 280 | LR | | LR | 08 52 22.2 | | |
| | comp=Z,63nm,20.1s,baz=348,slow=40 | | | | | | | | |
| FINES | FINESS Array B | 27.55 | 336 | P | | P | 08 40 09.1 | -1.4 | |
| | comp=Z,1.1nm,0.3s,baz=148,slow=12,SNR=9.7 | | | | | | | | |
| FINES | | | | LR | | LR | 08 52 32.4 | | |
| | comp=Z,135nm,18.0s,baz=186,slow=40 | | | | | | | | |
| FINES | FINESS Array B | 27.55 | 336 | P | | P | 08 40 09.1 | -1.4 | |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| FINES | | | | MLR | MLR | | | | |
| | comp=Z,135nm,18.0s | | | | | | | | |
| KBA | Koelnbreinsper | 27.68 | 301 | ⇑*i*P | | P | 08 40 11.0 | -1.0 | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| KBA | Koelnbreinsper | 27.68 | 301 | P | | P | 08 40 11.0 | -1.0 | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| GEC2 | GERESS Array S | 27.69 | 305 | *e*P | | P | 08 40 11.3 | -0.7 | |
| GEC2 | GERESS Array S | 27.69 | 305 | *e*P | | P | 08 40 11.3 | -0.7 | |
| GEC2 | GERESS Array S | 27.69 | 305 | *e*P | | P | 08 40 11.3 | -0.7 | |
| GERES | GERESS Array B | 27.69 | 305 | P | | P | 08 40 10.5 | -1.5 | |
| | comp=Z,3.5nm,0.7s,baz=108,slow=8.6,SNR=22 | | | | | | | | |
| GERES | GERESS Array B | 27.69 | 305 | P | | P | 08 40 10.5 | -1.5 | |
| GERES | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| CLL | Collm | 28.63 | 310 | *e*P | | P | 08 40 19.8 | -0.4 | |
| CLL | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| CLL | Collm | 28.63 | 310 | *e*P | | P | 08 40 19.0 | -1.2 | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| CLL | Collm | 28.63 | 310 | *e*P | | P | 08 40 19.8 | -0.4 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| CLL | Collm | 28.63 | 310 | *e*P | | P | 08 40 19.8 | -0.4 | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| WTTA | Wattenberg | 28.85 | 301 | ⇑*i*P | | P | 08 40 20.9 | -1.6 | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| WTTA | Wattenberg | 28.85 | 301 | P | | P | 08 40 20.9 | -1.6 | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| ZAA0 | Zalesovo Array | 29.18 | 45 | *e*P | | P | 08 40 24.1 | -1.0 | |
| ZAA0 | Zalesovo Array | 29.18 | 45 | *e*P | | P | 08 40 24.1 | -1.0 | |
| ZALV | Zalesovo Beam | 29.18 | 45 | P | | P | 08 40 23.4 | -1.7 | |
| | comp=Z,2.0nm,0.4s,baz=248,slow=10,SNR=8.1 | | | | | | | | |
| ZALV | | | | LR | | LR | 08 54 37.3 | | |
| | comp=Z,126nm,19.5s,baz=250,slow=42 | | | | | | | | |
| ZALV | Zalesovo Beam | 29.18 | 45 | P | | P | 08 40 23.4 | -1.7 | |
| ZALV | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| ZALV | | | | MLR | MLR | | | | |
| | comp=Z,126nm,19.5s | | | | | | | | |
| MOTA | Moosalm | 29.22 | 301 | ⇓*i*P | | P | 08 40 23.9 | -1.8 | |
| | comp=Z,6.8nm,0.6s | | | | | | | | |
| MOTA | Moosalm | 29.22 | 301 | P | | P | 08 40 23.9 | -1.8 | |
| | comp=Z,6.8nm,0.6s | | | | | | | | |
| FETA | Feichten | 29.45 | 300 | ⇑*i*P | | P | 08 40 26.2 | -1.6 | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| FETA | Feichten | 29.45 | 300 | P | | P | 08 40 26.2 | -1.6 | |
| | comp=Z,19nm,0.9s | | | | | | | | |
| WMQ | Urumqi | 29.60 | 66 | P | | P | 08 40 30.0 | +1.0 | |
| WMQ | | | | pP | | pP | 08 40 45.0 | +11 | |
| WMQ | | | | sP | | sP | 08 40 52.0 | +16 | |
| WMQ | | | | PP | | PP | 08 41 35.0 | -0.8 | |
| WMQ | | | | S | | S | 08 45 20.0 | -3.4 | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,65nm,4.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,200nm,10.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,150nm,9.9s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,160nm,9.5s | | | | | | | | |
| FUORN | Ofenpass-Fuorn | 29.75 | 299 | *e*P | | P | 08 40 30.4 | -0.1 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| FUORN | Ofenpass-Fuorn | 29.75 | 299 | *e*P | | P | 08 40 30.4 | -0.1 | |
| | comp=Z,10nm,0.8s | | | | | | | | |
| DAVOX | Davos/Dischmat | 30.02 | 300 | P | | P | 08 40 31.7 | -1.1 | |
| | comp=Z,14nm,0.6s,baz=110,slow=7.7,SNR=18 | | | | | | | | |
| DAVOX | Davos/Dischmat | 30.02 | 300 | P | | P | 08 40 31.7 | -1.1 | |
| DAVOX | | | | pmax | pmax | | | | |
| | comp=Z,14nm,0.6s | | | | | | | | |
| DAVA | Damuels | 30.05 | 301 | ⇑*i*P | | P | 08 40 31.4 | -1.7 | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| DAVA | Damuels | 30.05 | 301 | P | | P | 08 40 31.4 | -1.7 | |
| | comp=Z,28nm,1.0s | | | | | | | | |
| TUE | Stuetta | 30.37 | 299 | *e*P | | P | 08 40 34.5 | -1.5 | |
| | comp=Z,6.6nm,0.8s | | | | | | | | |
| TUE | Stuetta | 30.37 | 299 | *e*P | | P | 08 40 34.5 | -1.5 | |
| | comp=Z,6.6nm,0.8s | | | | | | | | |
| KOLN | Koldanda | 30.57 | 99 | *e*P | | P | 08 40 38.3 | +0.3 | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| VSL | Villasalto | 30.84 | 285 | *e*P | | P | 08 40 39.0 | -1.0 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| VSL | Villasalto | 30.84 | 285 | *e*P | | P | 08 40 39.0 | -1.0 | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| GKN | Gorkha | 31.28 | 98 | *e*P | | P | 08 40 44.3 | +0.2 | |
| | comp=Z,15nm,0.6s | | | | | | | | |
| HFS | Hagfors | 31.50 | 326 | P | | P | 08 40 44.5 | -1.0 | |
| | comp=Z,4.5nm,0.7s,baz=123,slow=11,SNR=7.4 | | | | | | | | |
| HFS | Hagfors | 31.50 | 326 | P | | P | 08 40 44.5 | -1.0 | |
| HFS | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| KEST | Kesra | 31.71 | 278 | P | | P | 08 40 47.3 | -0.4 | |
| | comp=Z,5.7nm,1.0s,baz=347,slow=12,SNR=4.2 | | | | | | | | |
| KEST | | | | LR | | LR | 08 56 07.4 | | |
| | comp=Z,102nm,21.0s,baz=211,slow=41 | | | | | | | | |
| SENIN | Lac Senin/Sane | 31.79 | 299 | *e*P | | P | 08 40 47.1 | -1.4 | |
| | comp=Z,5.9nm,0.8s | | | | | | | | |
| SENIN | Lac Senin/Sane | 31.79 | 299 | *e*P | | P | 08 40 47.1 | -1.4 | |
| | comp=Z,5.9nm,0.8s | | | | | | | | |
| DMN | Daman | 31.83 | 98 | *e*P | | P | 08 40 49.5 | +0.4 | |
| | comp=Z,38nm,1.0s | | | | | | | | |
| PKI | Pulchoki | 32.08 | 98 | *e*P | | P | 08 40 51.7 | +0.3 | |
| BNI | Bardonecchia | 32.25 | 296 | *e*P | | P | 08 40 51.0 | -1.4 | |
| BNI | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| BNI | Bardonecchia | 32.25 | 296 | *e*P | | P | 08 40 51.0 | -1.4 | |
| | comp=Z,7.3nm,1.0s | | | | | | | | |
| BNI | Bardonecchia | 32.25 | 296 | *e*P | | P | 08 40 51.0 | -1.4 | |
| | comp=Z,7.3nm,1.0s | | | | | | | | |
| GUN | Gumba | 32.29 | 97 | *e*P | | P | 08 40 53.9 | +0.6 | |
| | comp=Z,32nm,1.0s | | | | | | | | |
| MEM | Membach | 32.87 | 307 | P | | P | 08 40 58.1 | +0.4 | |
| NB2 | NORSAR Subarra | 33.01 | 327 | P | | P | 08 40 57.2 | -1.6 | |
| | comp=Z,0.7nm,0.5s,baz=120,slow=8.6 | | | | | | | | |
| NOA | NORSAR Array B | 33.01 | 327 | P | | P | 08 40 57.2 | -1.6 | |
| | comp=Z,1.5nm,0.7s,baz=118,slow=8.2,SNR=4.9 | | | | | | | | |
| NOA | | | | LR | | LR | 08 55 21.8 | | |
| | comp=Z,66nm,21.4s,baz=115,slow=38 | | | | | | | | |
| NOA | NORSAR Array B | 33.01 | 327 | P | | P | 08 40 57.2 | -1.6 | |
| NOA | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| NOA | | | | MLR | MLR | | | | |
| | comp=Z,66nm,21.4s | | | | | | | | |
| RAMN | Ramite | 33.31 | 98 | *e*P | | P | 08 41 02.3 | +0.3 | |
| | comp=Z,35nm,0.7s | | | | | | | | |
| TAPN | Taplejung | 33.99 | 97 | *e*P | | P | 08 41 07.6 | -0.4 | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| ARCES | ARCESS Array B | 34.12 | 345 | LR | | LR | 08 56 28.6 | | |
| | comp=Z,40nm,20.0s,baz=154,slow=39 | | | | | | | | |
| EKA | Eskdalemuir Ar | 38.82 | 314 | P | | P | 08 41 46.8 | -1.8 | |
| | comp=Z,2.9nm,0.6s,baz=102,slow=9.3,SNR=5.9 | | | | | | | | |
| EKA | Eskdalemuir Ar | 38.82 | 314 | P | | P | 08 41 46.8 | -1.8 | |
| EKA | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| ESK | Eskdalemuir | 38.85 | 314 | *e*P | | P | 08 41 47.1 | -1.7 | |
| ESK | | | | pmax | pmax | | | | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| ESK | Eskdalemuir | 38.85 | 314 | *e*P | | P | 08 41 47.1 | -1.7 | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| ESK | Eskdalemuir | 38.85 | 314 | *e*P | | P | 08 41 47.1 | -1.7 | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| GTA | Gaotai | 39.22 | 72 | *e*P | | P | 08 41 53.3 | +1.0 | |
| GTA | | | | pP | pP | | 08 42 08.8 | +11 | |
| GTA | | | | sP | sP | | 08 42 16.0 | +16 | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| TLY | Talaya | 40.15 | 52 | LR | | LR | 09 00 51.5 | | |
| | comp=Z,125nm,19.9s,baz=278,slow=40 | | | | | | | | |
| KMBO | Kilima Mbogo | 40.37 | 198 | LR | | LR | 08 59 36.1 | | |
| | comp=Z,75nm,18.9s,baz=86,slow=38 | | | | | | | | |
| ESDC | Sonseca Array | 40.87 | 290 | P | | P | 08 42 02.0 | -3.9 | |
| | comp=Z,0.3nm,0.3s,baz=65,slow=8.9,SNR=7.9 | | | | | | | | |
| ESDC | Sonseca Array | 40.87 | 290 | P | | P | 08 42 02.0 | -3.9 | |
| SONM | Songino Array | 42.27 | 57 | P | | P | 08 42 17.4 | 0.0 | |
| | comp=Z,0.8nm,0.7s,baz=265,slow=8.0,SNR=3.8 | | | | | | | | |
| SONM | | | | LR | | LR | 09 02 19.1 | | |
| | comp=Z,101nm,19.9s,baz=250,slow=40 | | | | | | | | |
| SONM | Songino Array | 42.27 | 57 | P | | P | 08 42 17.4 | 0.0 | |
| SONM | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| SONM | | | | MLR | MLR | | | | |
| | comp=Z,101nm,19.9s | | | | | | | | |
| ULN | Ulaanbaatar | 42.71 | 57 | *d i*P | | P | 08 42 21.1 | +0.1 | |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.7s | | | | | | | | |
| ULN | Ulaanbaatar | 42.71 | 57 | *i* P | | P | 08 42 21.1 | +0.1 | |
| | comp=Z,10.0nm,1.7s | | | | | | | | |
| LZH | Lanzhou | 43.25 | 75 | *e*P | | P | 08 42 25.1 | -0.4 | |
| LZH | | | | pP | pP | | 08 42 40.0 | +9.1 | |
| LZH | | | | sP | sP | | 08 42 46.8 | +14 | |
| LZH | | | | *e*PP | | PP | 08 44 08.5 | +2.6 | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,19nm,1.3s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,48nm,5.4s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | comp=Z,220nm,13.5s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | comp=Z,220nm,14.0s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | comp=Z,310nm,17.6s | | | | | | | | |
| MDT | Midelt | 43.57 | 280 | LR | | LR | 09 04 32.8 | | |
| | comp=Z,27nm,18.6s,slow=42 | | | | | | | | |
| BOD | Bodaibo | 45.87 | 42 | *e*P | | P | 08 42 44.4 | -1.5 | |
| BOD | Bodaibo | 45.87 | 42 | *e*P | | P | 08 42 44.4 | -1.5 | |
| KMI | Kunming | 46.91 | 90 | P | | P | 08 42 55.5 | +0.7 | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,17nm,1.0s | | | | | | | | |
| CMAR | Chiang Mai Arr | 47.44 | 100 | P | | P | 08 42 58.0 | -0.7 | |
| | comp=Z,2.5nm,0.7s,baz=302,slow=8.5,SNR=12 | | | | | | | | |
| CMAR | Chiang Mai Arr | 47.44 | 100 | P | | P | 08 42 58.0 | -0.7 | |
| CMAR | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ASAK | | | | *i* S | | Sn | 08 35 17.4 | +1.7 |
| **PET** | **Petropavlovsk** | **0.94** | **350** | *i* P | | Pn | 08 35 09.2 | +1.1 |
| PET | | | | *i* S | | Sn | 08 35 21.6 | +0.7 |
| **PET** | **Petropavlovsk** | **0.94** | **350** | PN | | Pn | 08 35 09.2 | +1.1 |
| PET | | | | S | | Sn | 08 35 21.6 | +0.7 |
| **NLC** | **Nalytchevo** | **1.10** | **13** | *eP* | | Pn | 08 35 10.6 | +0.4 |
| NLC | | | | *eS* | | Sn | 08 35 24.1 | -0.5 |
| **NLC** | **Nalytchevo** | **1.10** | **13** | PN | | Pn | 08 35 10.6 | +0.4 |
| NLC | | | | S | | Sn | 08 35 24.1 | -0.5 |
| **UGLR** | **Uglovaya** | **1.11** | **357** | *i* P | | Pn | 08 35 11.9 | +1.3 |
| **SMAR** | **Somma** | **1.16** | **356** | *eP* | | Pn | 08 35 12.3 | +0.9 |
| **SMAR** | **Somma** | **1.16** | **356** | PN | | Pn | 08 35 12.3 | +0.9 |
| **AVH** | **Avacha** | **1.17** | **354** | *i* P | | Pn | 08 35 12.9 | +1.6 |
| AVH | | | | *eS* | | Sn | 08 35 28.3 | +1.8 |
| **AVH** | **Avacha** | **1.17** | **354** | PN | | Pn | 08 35 12.9 | +1.6 |
| AVH | | | | S | | Sn | 08 35 28.3 | +1.8 |
| **SDLR** | **Sedlovina** | **1.18** | **359** | *i* P | | Pn | 08 35 12.3 | +0.8 |
| **SDLR** | **Sedlovina** | **1.18** | **359** | PN | | Pn | 08 35 12.3 | +0.8 |
| **SPN** | **Mys Shipunski** | **1.20** | **33** | *i* P | | Pn | 08 35 13.6 | +2.0 |
| SPN | | | | *i* S | | Sn | 08 35 30.1 | +3.1 |
| **SPN** | **Mys Shipunski** | **1.20** | **33** | PN | | Pn | 08 35 13.6 | +2.0 |
| SPN | | | | S | | Sn | 08 35 30.1 | +3.1 |
| **KOK** | **Koryaka** | **1.20** | **352** | *i* P | | Pn | 08 35 13.5 | +1.7 |
| KOK | | | | *i* S | | Sn | 08 35 29.4 | +2.1 |
| **KOK** | **Koryaka** | **1.20** | **352** | PN | | Pn | 08 35 13.5 | +1.7 |
| KOK | | | | S | | Sn | 08 35 29.4 | +2.1 |
| **KRX** | **Arik** | **1.27** | **352** | *i* P | | Pn | 08 35 14.1 | +1.4 |
| **MIPR** | **Malaya Ipel'ka** | **1.35** | **278** | *eP* | | Pn | 08 35 15.3 | +1.7 |
| **APC** | **Apacha** | **1.36** | **308** | *eP* | | Pn | 08 35 15.3 | +1.6 |
| APC | | | | *eS* | | Sn | 08 35 31.9 | +1.1 |
| **APC** | **Apacha** | **1.36** | **308** | PN | | Pn | 08 35 15.3 | +1.6 |
| APC | | | | S | | Sn | 08 35 31.9 | +1.1 |
| **PAU** | **Pauzhetka** | **1.46** | **245** | *i* P | | Pn | 08 35 17.0 | +1.9 |
| PAU | | | | *eS* | | Sn | 08 35 35.5 | +2.2 |
| **PAU** | **Pauzhetka** | **1.46** | **245** | PN | | Pn | 08 35 17.0 | +1.9 |
| PAU | | | | S | | Sn | 08 35 35.5 | +2.2 |
| **GNL** | **Ganaly** | **1.70** | **340** | *i* P | | Pn | 08 35 20.1 | +1.6 |
| GNL | | | | *i* S | | Sn | 08 35 40.7 | +1.4 |
| **GNL** | **Ganaly** | **1.70** | **340** | PN | | Pn | 08 35 20.1 | +1.6 |
| GNL | | | | S | | Sn | 08 35 40.7 | +1.4 |
| **KII** | **Karymskiy** | **1.96** | **9** | *eP* | | Pn | 08 35 24.2 | +2.2 |
| KII | | | | *eS* | | Sn | 08 35 48.7 | +3.2 |
| **KII** | **Karymskiy** | **1.96** | **9** | PN | | Pn | 08 35 24.2 | +2.2 |
| KII | | | | S | | Sn | 08 35 48.7 | +3.2 |
| **SKR** | **Severo-Kuril's** | **2.27** | **232** | *i* P | | Pn | 08 35 27.5 | +1.5 |
| SKR | | | | *eS* | | Sn | 08 35 54.0 | +1.3 |
| **SKR** | **Severo-Kuril's** | **2.27** | **232** | *e*PN | | Pn | 08 35 19.0 | -7.0 |
| SKR | comp=Z,60nm,0.5s | | | pmax | pmax | | | |
| **MKZ** | **Mys Kozlova** | **2.98** | **33** | *eP* | | Pn | 08 35 37.6 | +2.0 |
| MKZ | | | | *eS* | | Sn | 08 36 12.9 | +2.9 |
| **MKZ** | **Mys Kozlova** | **2.98** | **33** | PN | | Pn | 08 35 37.6 | +2.0 |
| MKZ | | | | S | | Sn | 08 36 12.9 | +2.9 |
| **KZV** | **Kizimen** | **3.12** | **15** | *eP* | | Pn | 08 35 41.9 | +4.0 |
| **TUMR** | **Tumrok** | **3.27** | **12** | *eP* | | Pn | 08 35 43.8 | +4.0 |
| **TUMR** | **Tumrok** | **3.27** | **12** | PN | | Pn | 08 35 43.8 | +4.0 |
| **KBTR** | **Krutoberegovo** | **4.70** | **28** | *eP* | | Pn | 08 36 02.0 | +2.7 |
| KBTR | | | | *eS* | | Sn | 08 36 56.7 | +4.2 |
| **KBTR** | **Krutoberegovo** | **4.70** | **28** | PN | | Pn | 08 36 02.0 | +2.7 |
| KBTR | | | | S | | Sn | 08 36 56.7 | +4.2 |

*IDC **22** 08:49:30.6±1.0, 6°.39N×124°.70E, h0km, mb3.7/5, mb1 3.8/5, mb1mx3.5/41, mbtmpb3.7/5, MS3.0/4, Ms1 3.0/4, ms1mx2.7/41, Error ellipse: s-maj=22.4km s-min=19.1km az=92.0*

*ISCJB **22** 08:49:31.7±0.8, 6°.55N±0°.06×124°.56E±0°.04, h10km, mb3.7/5, MS3.2/3, Error ellipse: s-maj=9.5km s-min=5.2km az=21.7*

*MAN **22** 08:49:31, 6°.59N×124°.60E, h6km, mb4.7, ML3.6, MS3.6*

**ISC 22 08:49:31.1±0.9, 6°.56N±0°.06×124°.60E±0°.04, h10km, n18, σ1§72/18, mb3.8/5, MS3.0/3, 2C, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSPH** | **General Santos** | **0.58** | **143** | *eP* | **Pn** | **08 49 46.1** | **+0.6** |
| **KCP** | **Kidapawan** | **0.66** | **47** | *iP* | **Pb** | **08 49 44.9** | **+0.1** |
| **CTBH** | **Cotabato--PC H** | **0.75** | **332** | *eP* | **Pg** | **08 49 45.7** | **+0.1** |
| CTBH | | | | *i* S | **Sb** | **08 49 57.0** | **+0.5** |
| **DMPH** | **Davao City--Mi** | **1.04** | **60** | *eP* | **Pn** | **08 49 53.9** | **+2.2** |
| DMPH | | | | *eS* | Sn | 08 50 16.4 | +10 |
| **DAV** | **Davao City (W)** | **1.10** | **62** | Pn | **Pn** | **08 49 53.3** | **+0.7** |
| DAV | 291nm,0.3s,baz=69,slow=1.8,SNR=11 | | | Sn | **Sn** | **08 50 10.1** | **+2.3** |
| **BUKP** | **Musuan** | **1.39** | **19** | *eP* | **Pb** | **08 49 56.5** | **-0.7** |
| BUKP | | | | *eS* | **Sb** | **08 50 11.4** | **-3.6** |
| **MATI** | **Mati** | **1.69** | **77** | *eP* | **Pg** | **08 50 02.5** | **-1.0** |
| MATI | | | | *eS* | **Sg** | **08 50 23.4** | **-2.0** |
| **PAGZ** | **Pagadian** | **1.77** | **317** | *eP* | **Pb** | **08 50 02.5** | **-1.0** |
| PAGZ | | | | *eS* | **Sn** | **08 50 23.7** | **-0.6** |
| **IPIL** | **Ipil** | **2.36** | **301** | *eP* | **Pb** | **08 50 12.1** | **-1.6** |
| **SIJI** | **Sorong** | **9.93** | **138** | LR | LR | 08 56 03.1 | |
| | comp=Z,31nm,19.7s,baz=341,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **27.51** | **125** | LR | LR | 09 06 48.4 | |
| | comp=Z,35nm,18.4s,baz=256,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.02** | **160** | P | **P** | **08 55 21.2** | **-1.4** |
| | 0.7nm,0.6s,baz=337,slow=10.0,SNR=8.5 | | | | | | |
| **ASAR** | **Alice Springs** | **31.38** | **163** | P | **P** | **08 55 52.6** | **+0.2** |
| | 0.3nm,0.6s,baz=336,slow=7.3,SNR=6.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **32.34** | **21** | LR | LR | 09 06 35.5 | |
| | comp=Z,29nm,21.7s,baz=280,slow=32 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.04** | **325** | P | P | 08 58 59.1 | +3.4 |
| | 0.3nm,0.3s,baz=137,slow=7.2,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.13** | **333** | P | **P** | **08 59 19.7** | **+1.9** |
| | 0.4nm,0.3s,baz=141,slow=5.5,SNR=2.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.23** | **327** | P | **P** | **08 59 27.7** | **+2.1** |
| | 1.5nm,0.7s,baz=123,slow=6.9,SNR=2.9 | | | | | | |
| **MAW** | **Mawson** | **85.67** | **200** | LR | LR | 09 36 57.0 | |
| | comp=Z,23nm,18.4s,baz=241,slow=33 | | | | | | |

*DDA **22** 08:51:57.1, 35°.91N×27°.15E, h24km, Md3.0*

*ISCJB **22** 08:51:58.1±1.0, 36°.25N±0°.06×27°.07E±0°.06, h122km±11km, Error ellipse: s-maj=12.0km s-min=6.1km az=147.9*

*CSEM **22** 08:51:58.7±0.7, 36°.26N×27°.04E, h117km±8km, MD3.0, Error ellipse: s-maj=11.5km s-min=6.1km az=143.0*

*ATH **22** 08:51:58.4, 36°.31N×26°.99E, h115km±3km*

**ISC 22 08:51:57.8±1.7, 36°.25N±0°.05×27°.07E±0°.04, h128km±13km, n26, σ1§21/37, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KARP** | **Karpathos** | **0.71** | **174** | *eP* | **Pn** | **08 52 18.6** | **+0.5** |
| KARP | | | | *eS* | **Sn** | **08 52 33.2** | **-0.2** |
| **KARP** | **Karpathos** | **0.71** | **174** | *eP* | **Pn** | **08 52 18.6** | **+0.5** |
| KARP | | | | *eS* | **Sn** | **08 52 33.2** | **-0.2** |
| **ARG** | **Arkhangelos** | **0.86** | **92** | *eP* | **Pn** | **08 52 20.3** | **+1.1** |
| ARG | | | | *eS* | **Sn** | **08 52 35.2** | **-0.2** |
| **ARG** | **Arkhangelos** | **0.86** | **92** | *eP* | **Pn** | **08 52 20.3** | **+1.1** |
| ARG | | | | *eS* | **Sn** | **08 52 35.2** | **-0.2** |
| **BDRM** | **Kayabasi** | **0.86** | **20** | *i* P | **Pn** | **08 52 19.2** | **-0.1** |
| **BDRM** | **Kayabasi** | **0.86** | **20** | P | **Pn** | **08 52 19.2** | **-0.1** |
| **TURN** | **Turunc** | **1.38** | **63** | *i* P | **Pn** | **08 52 21.5** | **-2.9** |
| **TURN** | **Turunc** | **1.38** | **63** | P | **Pn** | **08 52 21.5** | **-2.9** |
| TURN | | | | S | Sn | 08 52 37.9 | -6.7 |
| **SMG** | **Samos** | **1.46** | **353** | *eP* | **Pn** | **08 52 25.1** | **-0.2** |
| **SMG** | **Samos** | **1.46** | **353** | *eP* | **Pn** | **08 52 25.1** | **-0.2** |
| **NPS** | **Neapolis** | **1.54** | **231** | *eP* | **Pn** | **08 52 26.7** | **+0.5** |
| **NPS** | **Neapolis** | **1.54** | **231** | *eP* | **Pn** | **08 52 26.7** | **+0.5** |
| **AYDN** | **Tasoluk** | **1.55** | **25** | *i* P | **Pn** | **08 52 28.7** | **+2.4** |
| AYDN | | | | *i* S | **Sn** | **08 52 49.0** | **+0.9** |
| **AYDN** | **Tasoluk** | **1.55** | **25** | P | **Pn** | **08 52 28.7** | **+2.4** |
| AYDN | | | | S | **Sn** | **08 52 49.0** | **+0.9** |
| **LAST** | **Lasithi** | **1.69** | **230** | *eP* | **Pn** | **08 52 28.8** | **+0.8** |
| LAST | | | | *eS* | **Sn** | **08 52 50.2** | **-0.9** |
| **LAST** | **Lasithi** | **1.69** | **230** | *eP* | **Pn** | **08 52 28.8** | **+0.8** |
| LAST | | | | *eS* | **Sn** | **08 52 50.2** | **-0.9** |
| **IDI** | **Anoyia** | **2.02** | **242** | *eP* | **Pn** | **08 52 32.1** | **+0.2** |
| **IDI** | **Anoyia** | **2.02** | **242** | *eP* | **Pn** | **08 52 32.1** | **+0.2** |
| **KSL** | **Kastellorizon** | **2.04** | **92** | *eP* | **Pn** | **08 52 33.5** | **+1.5** |
| **KSL** | **Kastellorizon** | **2.04** | **92** | *eP* | **Pn** | **08 52 33.5** | **+1.5** |
| **AKAS** | **Kas** | **2.05** | **90** | *i* S | **Sn** | **08 52 57.8** | **-1.0** |
| **AKAS** | **Kas** | **2.05** | **90** | P | **Pn** | **08 52 33.4** | **+1.0** |
| AKAS | | | | S | **Sn** | **08 52 57.8** | **-1.0** |
| **GOLH** | **Golhisar** | **2.23** | **63** | *i* P | **Pn** | **08 52 35.2** | **+0.7** |
| GOLH | | | | *i* S | **Sn** | **08 53 01.3** | **-1.5** |
| **GOLH** | **Golhisar** | **2.23** | **63** | P | **Pn** | **08 52 35.2** | **+0.7** |
| GOLH | | | | S | **Sn** | **08 53 01.3** | **-1.5** |
| **IMMV** | **Iera Moni Meta** | **2.63** | **253** | *eP* | **Pn** | **08 52 39.4** | **-0.1** |
| **IMMV** | **Iera Moni Meta** | **2.63** | **253** | *eP* | **Pn** | **08 52 39.4** | **-0.1** |

**DJA 22 08:54:44.8±0.2, 3°.5S±2°.×12°.8E±°, h84km±3km, M4.3/23, mb4.3/19, mB5.3/7, MLv4.1/23, Mw(mB)4.7/7, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **0.33** | **223** | P | Pn | 08 54 59.1 | +1.4 |
| **MSAI** | **Masohi** | **0.52** | **80** | P | Pn | 08 55 00.5 | +1.4 |
| MSAI | | | | S | Sn | 08 55 12.1 | +2.4 |
| **NLAI** | **Namlea** | **1.33** | **279** | P | Pn | 08 55 08.5 | +0.4 |
| NLAI | | | | S | Sn | 08 55 27.4 | +1.6 |
| **BNDI** | **Bandanaira** | **1.83** | **126** | P | Pn | 08 55 15.2 | +0.6 |
| **SANI** | **Sanana** | **2.79** | **300** | P | Pn | 08 55 26.8 | -0.7 |
| **LBMI** | **Labuha** | **2.93** | **342** | P | Pn | 08 55 30.3 | +1.0 |
| LBMI | | | | S | Sn | 08 56 03.8 | +0.2 |
| **SWI** | **Sorong** | **3.82** | **48** | P | Pn | 08 55 40.9 | -0.5 |
| **FAKI** | **Fak Fak** | **3.86** | **82** | P | Pn | 08 55 42.0 | +0.1 |
| **SAUI** | **Saumlaki** | **5.34** | **148** | P | Pn | 08 56 01.8 | -0.3 |
| | 72nm,0.9s,0.3nm | | | | | | |
| **KDI** | **Kendari** | **5.81** | **265** | P | Pn | 08 56 08.8 | +0.3 |
| | 29nm,0.7s,0.2nm | | | | | | |
| **LUWI** | **Luwuk** | **6.13** | **293** | P | Pn | 08 56 11.9 | -0.9 |
| | 32nm,1.0s,5μm0.3nm | | | | | | |
| **BBSI** | **Bau Bau** | **6.18** | **251** | P | Pn | 08 56 13.0 | -0.5 |
| | 52nm,0.9s,0.2nm | | | | | | |
| **GTOI** | **Gorontalo** | **6.75** | **307** | P | Pn | 08 56 23.2 | +1.8 |
| | 21nm,0.7s,528nm0.1nm | | | | | | |
| **APSI** | **Ampana** | **7.22** | **290** | P | Pn | 08 56 27.6 | -0.1 |
| | 18nm,1.1s,0.2nm | | | | | | |
| **SOEI** | **Soe** | **7.51** | **213** | P | Pn | 08 56 31.2 | -0.6 |
| | 23nm,1.1s,0.2nm | | | | | | |
| **MRSI** | **Marisa** | **7.55** | **301** | P | Pn | 08 56 32.3 | 0.0 |
| | 31nm,0.7s,806nm0.1nm | | | | | | |
| **SGSI** | **Sangihe** | **7.64** | **338** | P | Pn | 08 56 33.6 | +0.1 |
| | 256nm,1.1s,2.5nm | | | | | | |
| **MMRI** | **Maumere** | **8.03** | **230** | P | Pn | 08 56 38.6 | -0.1 |
| | 44nm,0.9s,7μm | | | | | | |
| **BATI** | **Baumata** | **8.21** | **215** | P | Pn | 08 56 40.5 | -0.8 |
| | 21nm,1.4s | | | | | | |
| **BKSI** | **Bulukumba** | **8.48** | **257** | P | Pn | 08 56 44.3 | -0.6 |
| | 7.3nm,1.1s | | | | | | |
| **EDFI** | **Ende, Flores** | **8.52** | **231** | P | Pn | 08 56 44.2 | -1.4 |
| | 123nm,0.7s,10μm | | | | | | |
| **TTSI** | **Tana Toraja** | **8.60** | **272** | P | Pn | 08 56 44.9 | -1.6 |
| | 11nm,1.6s,2μm | | | | | | |
| **SPSI** | **Sidrap Palu** | **8.65** | **266** | P | Pn | 08 56 45.8 | -1.4 |
| | 11nm,0.9s,719nm | | | | | | |

*ISCJB **22** 08:55:16.3±0.5, 7°.70S±0°.09×13°.59W±0°.07, h10km, mb4.0/11, MS3.5/9, Error ellipse: s-maj=14.3km s-min=7.9km az=146.8*

*IDC **22** 08:55:18.1±1.0, 7°.66S×13°.18W, h0km, mb4.1/11, mb1 4.1/11, mb1mx3.9/44, mbtmp4.0/11, MS3.5/9, Ms1 3.6/9, ms1mx3.2/33, Error ellipse: s-maj=35.6km s-min=19.6km az=87.0*

**ISC 22 08:55:17.9±0.7, 7.7S±0.1×13.7W±0.1, h10km, n25, σ0§87/16, mb4.1/11, MS3.6/9, Ascension Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N1** | **ASCENSION HYDR** | **0.83** | **261** | Pn | **Pn** | **08 55 34.8** | **-0.6** |
| | baz=92,slow=14 | | | | | | |
| H10N1 | | | | T | T | 08 56 51.1 | |
| | baz=78 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **0.83** | **263** | Pn | **Pn** | **08 55 34.9** | **-0.5** |
| | baz=92,slow=14,SNR=9554 | | | | | | |
| H10N2 | | | | T | T | 08 56 48.6 | |
| | baz=78 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **0.85** | **262** | Pn | **Pn** | **08 55 35.1** | **-0.5** |
| | baz=92,slow=14,SNR=9631 | | | | | | |
| H10N3 | | | | T | T | 08 56 50.7 | |
| | baz=78 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **1.56** | **219** | Pn | **Pn** | **08 55 44.8** | **-0.7** |
| | baz=38,slow=15,SNR=1405 | | | | | | |
| H10S1 | | | | T | T | 08 57 31.7 | |
| | baz=50 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **1.57** | **218** | Pn | **Pn** | **08 55 45.0** | **-0.7** |
| | baz=38,slow=15,SNR=1413 | | | | | | |
| H10S2 | | | | T | T | 08 57 33.3 | |
| | baz=50 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **1.58** | **219** | Pn | **Pn** | **08 55 44.8** | **-0.9** |
| | baz=38,slow=15,SNR=1315 | | | | | | |
| H10S3 | | | | T | T | 08 57 32.7 | |
| | baz=50 | | | | | | |
| **RCBR** | **Riachuelo** | **22.17** | **273** | LR | LR | 09 07 15.6 | |
| | comp=Z,107nm,18.7s,baz=102,slow=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **25.74** | **36** | P | **P** | **09 00 47.9** | **-0.9** |
| | 3.5nm,0.8s,baz=215,slow=11,SNR=19 | | | | | | |
| **BDFB** | **Brasilia** | **34.52** | **254** | LR | LR | 09 13 16.9 | |
| | comp=Z,116nm,21.5s,baz=48,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **42.13** | **125** | P | **P** | **09 03 09.8** | **-1.0** |
| | 4.8nm,0.8s,baz=299,slow=10,SNR=7.0 | | | | | | |
| **MATP** | **Matopo** | **42.66** | **112** | P | **P** | **09 03 14.4** | **-0.9** |
| | 2.7nm,0.8s,baz=289,slow=7.5,SNR=4.8 | | | | | | |
| **CPUP** | **Villa Florida** | **45.40** | **241** | LR | LR | 09 21 24.5 | |
| | comp=Z,48nm,18.5s,baz=52,slow=34 | | | | | | |
| **SIV** | **San Ignacio** | **47.04** | **255** | LR | LR | 09 21 20.5 | |
| | comp=Z,68nm,21.3s,baz=23,slow=33 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **51.14** | **85** | LR | LR | 09 23 38.5 | |
| | comp=Z,66nm,21.4s,baz=66,slow=34 | | | | | | |
| **LPAZ** | **La Paz** | **53.83** | **256** | LR | LR | 09 25 10.6 | |
| | comp=Z,61nm,21.8s,baz=84,slow=33 | | | | | | |
| **SJG** | **San Juan** | **57.82** | **297** | LR | LR | 09 25 40.6 | |
| | comp=Z,31nm,19.3s,baz=340,slow=31 | | | | | | |
| **GERES** | **GERESS Array B** | **61.23** | **20** | P | **P** | **09 05 32.8** | **-0.4** |
| | 1.0nm,0.7s,baz=195,slow=7.1,SNR=7.8 | | | | | | |
| GERES | | | | LR | LR | 09 32 52.1 | |
| | comp=Z,29nm,19.0s,baz=146,slow=37 | | | | | | |
| **SNAA** | **Sanae** | **64.24** | **176** | P | **P** | **09 05 54.5** | **+1.6** |
| | 0.4nm,0.7s,baz=329,slow=8.6,SNR=3.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **64.31** | **39** | P | **P** | **09 05 54.5** | **+0.5** |
| | 0.9nm,0.8s,baz=241,slow=4.5,SNR=3.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.97** | **28** | P | **P** | **09 06 22.7** | **-0.6** |
| | 1.2nm,0.6s,baz=228,slow=6.9,SNR=8.9 | | | | | | |
| **FINES** | **FINESS Array B** | **75.57** | **18** | P | **P** | **09 07 03.3** | **+0.8** |
| | 4.7nm,1.0s,baz=193,slow=5.7,SNR=4.7 | | | | | | |
| **MAW** | **Mawson** | **77.77** | **158** | P | **P** | **09 07 15.6** | **+0.7** |
| | 0.6nm,0.6s,baz=310,slow=6.5,SNR=3.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **84.45** | **38** | P | **P** | **09 07 51.3** | **+0.5** |
| | 1.4nm,0.7s,baz=247,slow=10,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **93.74** | **299** | P | P | 09 08 40.6 | +4.9 |
| | 0.5nm,0.9s,baz=132,slow=5.0,SNR=3.4 | | | | | | |
| **VNDA** | **Vanda** | **94.86** | **179** | LR | LR | 09 45 12.0 | |
| | comp=Z,28nm,19.5s,baz=172,slow=32 | | | | | | |

*IDC **22** 09:02:45.1±0.8, 32°.40N×141°.43E, h0km, mb3.8/11, mb1 3.9/14, mb1mx3.8/70, mbtmp3.8/14, ML3.5/2, MS3.0/1, Ms1 3.0/1, ms1mx2.4/32, Error ellipse: s-maj=21.0km s-min=16.0km az=56.0*

*NEIC **22** 09:02:46.7±0.6, 32°.39N×141°.39E, h10km, mb4.2/1, Error ellipse: s-maj=15.4km s-min=10.2km az=72.0*

*ISCJB **22** 09:02:47.6±0.6, 32°.42N±0°.05×141°.45E±0°.08, h31km, mb3.9/12, Error ellipse: s-maj=10.1km s-min=6.0km az=148.6*

*JMA **22** 09:02:48.3±0.6, 32°.44N×141°.39E, h65km, M3.4*

**ISC 22 09:02:49.5±0.9, 32°.37N±0°.08×141°.40E±0°.07, h31km, n26, σ1§36/32, mb3.9/12, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHCJ** | **Hachijojimakas** | **1.52** | **298** | P | **Pn** | **09 03 13.2** | **-1.4** |
| JHCJ | | | | S | **Sn** | **09 03 31.6** | **-1.7** |
| **JHJ2** | **Mitsune** | **1.52** | **299** | P | **Pn** | **09 03 12.9** | **-1.7** |
| **JHJ2** | **Mitsune** | **1.52** | **299** | *e*Pn | **Pn** | **09 03 14.3** | **-0.3** |
| JHJ2 | | | | *e*Sn | **Sb** | **09 03 39.6** | **+3.5** |
| **JHJ** | **Hachijo jima 2** | **1.55** | **299** | Pn | **Pn** | **09 03 13.7** | **-1.4** |
| | 32nm,0.3s,baz=327,slow=21,SNR=8.4 | | | | | | |
| JHJ | | | | Sn | **Sb** | **09 03 36.5** | **-0.5** |
| | 84nm,0.3s,baz=333,slow=2.3,SNR=4.9 | | | | | | |
| **BSO1** | **Boso 1** | **2.31** | **351** | P | **Pn** | **09 03 24.2** | **-0.7** |
| BSO1 | | | | S | **Sn** | **09 03 49.9** | **-2.0** |
| **JOD2** | **Odawara 2** | **3.47** | **327** | P | **Pn** | **09 03 40.9** | **-0.5** |
| JOD2 | | | | *e*S | **Sn** | **09 04 19.3** | **-2.1** |
| **JYN** | **Shimob** | **3.92** | **324** | P | **Pn** | **09 03 48.2** | **+0.6** |
| **MJAR** | **Matsushiro Arr** | **4.93** | **329** | Pn | **Pn** | **09 04 01.0** | **-0.4** |
| | 1.1nm,0.3s,baz=157,slow=12,SNR=10 | | | | | | |
| MJAR | | | | Sn | **Sn** | **09 04 58.8** | **+1.4** |
| | 0.9nm,0.3s,baz=189,slow=16,SNR=4.8 | | | | | | |
| **MAJO** | **Matsushiro** | **4.93** | **329** | *e*Pn | **Pn** | **09 04 00.4** | **-1.0** |
| MAJO | | | | *e*Sn | **Sn** | **09 04 58.5** | **+1.1** |
| **ASAJ** | **Asahikawa** | **11.77** | **4** | Pn | **Pn** | **09 05 33.4** | **-1.7** |
| | 0.5nm,0.3s,baz=261,slow=11,SNR=4.1 | | | | | | |
| **KSRS** | **Korea Array** | **12.17** | **298** | LR | LR | 09 10 14.5 | |
| | comp=Z,69nm,19.0s,baz=105,slow=37 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **13.92** | **331** | Pn | **Pn** | **09 06 05.1** | **+0.6** |
| | 0.1nm,0.3s,baz=134,slow=14,SNR=3.3 | | | | | | |
| **SONM** | **Songino Array** | **30.60** | **311** | P | **P** | **09 09 01.4** | **+0.6** |
| | 0.7nm,0.7s,baz=116,slow=6.6,SNR=3.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.15** | **316** | P | **P** | **09 11 04.7** | **+1.7** |
| | 2.7nm,0.5s,baz=101,slow=22,SNR=6.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.71** | **306** | P | **P** | **09 11 14.6** | **-0.9** |
| | 1.8nm,0.8s,baz=84,slow=12,SNR=5.5 | | | | | | |
| **KURK** | **Kurchatov** | **48.90** | **311** | P | **P** | **09 11 32.4** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **48.96** | **311** | P | **P** | **09 11 32.4** | **-0.4** |
| | 0.5nm,0.4s,baz=89,slow=7.0,SNR=5.3 | | | | | | |
| **WRAB** | **Tennant Creek** | **52.44** | **188** | *eP* | **P** | **09 11 59.1** | **-0.2** |
| | 2.4nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **52.45** | **188** | P | **P** | **09 11 59.1** | **-0.3** |
| | 1.0nm,0.5s,baz=5.0,slow=7.5,SNR=10 | | | | | | |
| **ILAR** | **Eielson Array** | **53.47** | **30** | P | **P** | **09 12 07.3** | **+0.8** |
| | 0.6nm,1.0s,baz=268,slow=6.8,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **56.18** | **188** | P | **P** | **09 12 28.4** | **+1.9** |
| | 0.5nm,0.6s,baz=16,slow=13,SNR=8.0 | | | | | | |
| **INK** | **Inuvik** | **58.56** | **26** | P | **P** | **09 12 42.9** | **+0.2** |
| | 1.3nm,0.5s,baz=300,slow=23,SNR=5.3 | | | | | | |
| **INK** | **Inuvik** | **58.56** | **26** | *eP* | **P** | **09 12 44.4** | **+1.6** |
| **NVAR** | **Mina Array Bea** | **77.82** | **52** | P | **P** | **09 14 44.4** | **+0.1** |
| | 0.4nm,0.8s,baz=286,slow=6.5,SNR=3.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **78.48** | **338** | P | **P** | **09 14 46.4** | **-0.9** |
| | 0.9nm,1.0s,baz=18,slow=9.9,SNR=2.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **81.95** | **312** | P | **P** | **09 15 05.3** | **-1.2** |
| | 0.9nm,0.8s,baz=64,slow=3.4,SNR=3.9 | | | | | | |

**IDC 22 09:04:59.7±1.3, 3°.07N×128°.01E, h0km, mb3.7/4, mb1 3.9/5, mb1mx3.5/55, mbtmp3.7/5, ML3.7/1, Error ellipse: s-maj=94.0km s-min=19.2km az=64.0, North of Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **5.09** | **140** | Pn | Pn | 09 06 17.4 | 0.0 |
| | 2.8nm,0.3s,baz=253,slow=23,SNR=5.6 | | | | | | |
| SIJI | | | | Sn | Sn | 09 07 09.7 | -7.3 |
| | 1.2nm,0.3s,baz=233,slow=20,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.70** | **165** | P | P | 09 10 13.7 | +0.2 |
| | 2.4nm,0.7s,baz=345,slow=11,SNR=31 | | | | | | |
| **ASAR** | **Alice Springs** | **27.19** | **168** | P | P | 09 10 45.0 | -0.3 |
| | 0.2nm,0.4s,baz=350,slow=7.3,SNR=7.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.82** | **325** | P | P | 09 15 00.8 | +0.7 |
| | 0.9nm,0.6s,baz=142,slow=7.3,SNR=2.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.98** | **327** | P | P | 09 15 27.5 | -0.7 |
| | 0.4nm,0.5s,baz=125,slow=6.8,SNR=2.2 | | | | | | |

*IDC **22** 09:08:22.8±0.9, 37°.91N×48°.95E, h0km, mb4.1/18, mb1 4.2/24, mb1mx4.1/54, mbtmp4.1/24, ML4.3/6, MS3.3/9, Ms1 3.3/9, ms1mx3.0/37, Error ellipse: s-maj=22.8km s-min=11.3km az=177.0*

*ISCJB **22** 09:08:24.5±0.2, 38°.12N±0°.03×49°.08E±0°.02, h10km, mb4.2/33, MS3.2/5, Error ellipse: s-maj=4.2km s-min=2.6km az=14.9*

*MOS **22** 09:08:25.0±1.5, 38°.19N×49°.17E, h10km, mb4.4/22, Error ellipse: s-maj=6.7km s-min=6.0km az=112.1*

*CSEM **22** 09:08:25.8±0.1, 38°.05N×49°.05E, h10km, mb4.3/26, Error ellipse: s-maj=5.2km s-min=3.8km az=18.0*

*BJI **22** 09:08:26.7, 38°.30N×49°.10E, h26km, mb4.7/26, mB5.2/19, Ms4.8/13, Ms7 4.4/13*

*THR **22** 09:08:26.4±0.7, 37°.95N×49°.06E, h15km±9km, ML4.4*

*TEH **22** 09:08:26.9, 37°.92N×49°.05E, h8km, ML4.6*

*NEIC **22** 09:08:26.4, 37°.95N×49°.06E, h15km, mb4.4/9, ML4.4(THR), MN4.6(TEH), After THR.*

*NEIC Felt [II] at Hashtpar. Also felt at Ardabil and Europus. Felt at Astara, Baku, Celilabad and Lenkeran, Azerbaijan.*

*NNC **22** 09:08:36.6±5.2, 38°.73N×49°.60E, h31km±40km, mb4.4, Error ellipse: s-maj=40.2km s-min=18.0km az=86.0*

*ISN **22** 09:09:00.5±1.4, 36°.04N×46°.69E, h0km±4km, ML4.5*

**ISC 22 09:08:25.6±0.3, 38°.01N±0°.04×49°.08E±0°.02, h10km, n263, σ1§56/261, mb4.3/35, MS3.3/5, 33C-15D, Caspian Sea**

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

GNI eSn **Sn** 09 10 12.7 -1.3
**IGLO Ghaloghah 4.08 110** ePn **Pn** 09 09 28.6 +0.5
IGLO e 09 10 21.3
comp=Z,9µm,0.3s
**IKIA Kiasar 4.09 115** ePn **Pn** 09 09 29.6 +1.2
IKIA e 09 10 22.3
comp=Z,2µm,0.2s
**IKIA Kiasar 4.09 115** ePn **Pn** 09 09 29.6 +1.2
**KHMZ Khomeyn 4.32 170** ePn **Pn** 09 09 33.1 +1.6
**KHMZ Khomeyn 4.32 170** ePn **Pn** 09 09 33.1 +1.6
**DGRG David-gareji 4.47 321** P **Pn** 09 09 35.6 +2.2
**DGRG David-gareji 4.47 321** PN **Pn** 09 09 35.6 +2.2
**DGRG David-gareji 4.47 321** P **Pn** 09 09 35.6 +2.2
**IKRK Kirkuk 4.61 237** ePG x 09 09 44.7
IKRK eSg x 09 10 16.0
**TBLG Delisi 5.00 319** P **Pb** 09 09 53.4 +0.3
**TBLG Delisi 5.00 319** PN **Pb** 09 09 53.4 +0.3
**MSL Mosul 5.03 253** ePn x 09 09 47.9
MSL eSn x 09 10 22.9
**IPIR Pirpir 5.51 164** ePn **Pn** 09 09 50.4 +2.4
IPIR e 09 11 29.4
comp=Z,520nm,0.3s
**IPIR Pirpir 5.51 164** ePn **Pn** 09 09 50.4 +2.4
**IBDR Badra 5.52 209** ePn x 09 09 49.2
IBDR eSN x 09 10 23.9
**MRVT Maraveh tapeh 5.56 91** AML AML 09 10 51.5
comp=E,264nm,0.8s
MRVT AML AML 09 10 52.6
comp=N,254nm,0.2s
**BHD Baghdad 6.08 220** ePN x 09 09 54.1
BHD eSN x 09 10 33.1
**NEY Neytrino 7.12 319** eP Pn 09 10 15.8 +5.8
**GEYT Alibeck 7.14 88** Pn **Pn** 09 10 09.6 -0.5
comp=N,17nm,0.3s,baz=285,slow=16,SNR=28
GEYT Sn **Sn** 09 11 27.9 -3.4
comp=N,1.9nm,0.3s,baz=289,slow=14,SNR=2.7
**ABKT Ailbek 7.14 88** Pn **Pn** 09 10 09.8 -0.3
comp=N,571nm,0.4s,SNR=14
**KBZ Khabaz 7.39 323** Sn **Sn** 09 11 35.2 -2.0
comp=N,0.5nm,0.3s,baz=332,slow=9.3,SNR=4.4
KBZ LR LR 09 13 48.9
comp=N,116nm,19.6s,baz=146,slow=44
**NSR Nassriya 7.39 200** ePN x 09 10 18.7
NSR eSn x 09 11 12.1
**KIV Kislovodsk 7.66 323** P Pn 09 10 20.7 +3.5
KIV pmax pmax
comp=Z,2.0nm,0.9s
**RTB Rutbah 8.70 238** ePN x 09 10 33.5
RTB eSN x 09 11 38.3
**BRTR Keskin Array B 12.16 283** Pn **Pn** 09 11 16.6 -2.4
comp=Z,0.0nm,0.3s,baz=111,slow=13,SNR=2.4
BRTR LR LR 09 16 49.0
comp=Z,383nm,18.5s,baz=88,slow=42
**BRTR Keskin Array B 12.16 283** *ce*P Pn 09 11 24.5 +5.6
BRTR pmax pmax
comp=Z,3.0nm,0.9s
**MMAI Mount Meron Ar 12.20 250** Pn **Pn** 09 11 17.3 -2.2
comp=Z,1.3nm,0.3s,baz=144,slow=25,SNR=2.4
**BR231 Keskin MP Arra 12.83 283** ePn **Pn** 09 11 25.9 -2.2
BR231 eSn Sn 09 13 45.1 -5.9
**AB31 Akbulak array 13.71 31** ⇓Pn Pn 09 11 36.2 -3.6
comp=Z,4.2nm,0.6s,baz=213,slow=14,SNR=67
AB31 ⇑Sn Sn 09 14 00.6 -12
comp=Z,2.3nm,0.5s,baz=206,slow=20,SNR=5.2
**AB31 Akbulak array 13.71 31** P Pn 09 11 36.6 -3.2
AB31 pmax pmax
comp=Z,3.0nm,0.4s
**ABKAR Akbulak array 13.71 31** ePn Pn 09 11 36.0 -3.8
ABKAR eSn Sn 09 14 00.4 -12
**AKTO Aktyubinsk 13.96 24** ⇓Pn Pn 09 11 40.1 -3.2
comp=Z,14nm,0.7s
AKTO ⇑Sn Sn 09 14 05.9 -13
comp=Z,13nm,0.6s
**AKTO Aktyubinsk 13.96 24** Pn Pn 09 11 40.2 -3.2
comp=Z,3.8nm,0.3s,baz=195,slow=12,SNR=31
AKTO Sn Sn 09 14 08.5 -10
comp=Z,1.3nm,0.3s,baz=0.8,slow=22,SNR=8.0
**AKTO Aktyubinsk 13.96 24** P Pn 09 11 40.2 -3.2
AKTO 09 14 08.5
AKTO pmax pmax
comp=Z,4.0nm,0.3s
AKTO smax smax
comp=N,1.0nm,0.3s
**RAYN Ar Rayn 14.76 193** Pn Pn 09 11 50.0 -4.5
comp=N,53nm,0.5s,SNR=5.8
**RAYN Ar Rayn 14.76 193** ePn Pn 09 11 50.7 -3.7
comp=N,4.6nm,0.6s
**KBL Kabul 16.46 96** eP **Pn** 09 12 18.3 +1.4
KBL pmax pmax
comp=Z,27nm,1.5s
**KBL Kabul 16.46 96** ePn **Pn** 09 12 18.3 +1.4
comp=Z,27nm,1.5s
**KBL Kabul 16.46 96** eP **Pn** 09 12 18.3 +1.4
comp=Z,27nm,1.5s
**HARR Harsova 16.68 307** ⇑*i*P P 09 13 12.5 +15
**TIRR Tirgusor 16.81 299** ⇑P **Pn** 09 12 21.0 +0.1
**TIRR Tirgusor 16.81 299** ⇑*i*P **Pn** 09 12 21.0 +0.1
**TIRR Tirgusor 16.81 299** P **Pn** 09 12 21.0 +0.1
**KK31 Karatay Array 17.05 66** ⇓P **Pn** 09 12 22.9 -1.2
comp=Z,15nm,0.8s,baz=183,slow=66,SNR=70
**KK31 Karatay Array 17.05 66** P **Pn** 09 12 22.8 -1.2
KK31 pmax pmax
comp=Z,19nm,0.8s
**KKAR Karatay Array 17.05 66** eP **Pn** 09 12 23.2 -0.8
KKAR *e* 09 15 27.9
**KKAR Karatay Array 17.05 66** ePn **Pn** 09 12 23.2 -0.8
KKAR eSn Sn 09 15 27.9 -5.6
**KKAR Karatay Array 17.05 66** ePn **Pn** 09 12 23.2 -0.8
**CFR Carcaliu 17.20 301** ⇑P **Pn** 09 12 26.1 +0.3
**CFR Carcaliu 17.20 301** ⇑*i*P **Pn** 09 12 26.1 +0.3
**CFR Carcaliu 17.20 301** P **Pn** 09 12 26.1 +0.3
**VRI Vrincioaia 18.35 302** ⇑P **Pn** 09 12 39.3 -0.8
**VRI Vrincioaia 18.35 302** ⇑*i*P **Pn** 09 12 39.3 -0.8
**VRI Vrincioaia 18.35 302** P **Pn** 09 12 39.3 -0.8
**PLOR Plostina 18.40 302** ⇑P **P** 09 12 41.5 +0.8
**PLOR Plostina 18.40 302** ⇑*i*P **P** 09 12 41.5 +0.8
**PLOR Plostina 18.40 302** P **P** 09 12 41.5 +0.8
**MLR Muntele Rosu 18.77 301** P **P** 09 12 44.0 -0.9
comp=Z,0.1nm,0.3s,baz=168,slow=4.6,SNR=6.3
**MLR Muntele Rosu 18.77 301** ⇑P **Pn** 09 12 47.1 +1.8
**MLR Muntele Rosu 18.77 301** ⇑*i*P **Pn** 09 12 47.1 +1.8
**MLR Muntele Rosu 18.77 301** P **P** 09 12 44.0 -0.9
**AKASG Malin Array Be 18.97 318** P **P** 09 12 46.2 -0.6
comp=Z,0.8nm,0.3s,baz=127,slow=11,SNR=6.8
AKASG S **S** 09 16 27.1 +5.0
comp=Z,1.1nm,0.3s,baz=128,slow=19,SNR=4.8
**KIEV Kiev 18.97 318** eP **Pn** 09 12 50.3 +2.8
**OBN Obninsk 19.10 338** LR LR 09 21 05.6
comp=Z,64nm,18.2s,baz=106,slow=40
**OBN Obninsk 19.10 338** eP **P** 09 12 49.7 +1.5
OBN pmax pmax
comp=Z,7.0nm,0.3s
**OBN Obninsk 19.10 338** eP **P** 09 12 49.7 +1.5
comp=Z,7.0nm,0.3s
**LAST Lasithi 19.16 269** eP **P** 09 12 49.7 +0.6
**LAST Lasithi 19.16 269** eP **P** 09 12 49.7 +0.6
**DOPR Dopca 19.27 302** ⇑*i*P P 09 12 43.4 -6.9
**VOIR 19.37 300** ⇑P **Pn** 09 12 53.4 +0.9
**VOIR 19.37 300** ⇑*i*P **Pn** 09 12 53.4 +0.9
**EKS2 Erkin-Say 19.37 68** eP **P** 09 12 52.4 +0.9
EKS2 eS **Sn** 09 16 30.6 +0.8
EKS2 pmax pmax
comp=Z,21nm,0.7s
**EKS2 Erkin-Say 19.37 68** eP **P** 09 12 52.4 +0.9
comp=Z,21nm,0.7s
EKS2 eS **Sn** 09 16 30.6 +0.8
**EKS2 Erkin-Say 19.37 68** eP **P** 09 12 52.4 +0.9
comp=Z,21nm,0.7s
EKS2 eS **Sn** 09 16 30.6 +0.8
**ARU Arti 19.49 16** P **P** 09 12 50.4 -2.1
comp=Z,0.0nm,0.3s,baz=28,slow=22,SNR=5.8
**ARU Arti 19.49 16** *d*iP **P** 09 12 52.2 -0.3
ARU S **Sn** 09 16 29.0 -3.2
ARU pmax pmax
comp=Z,6.0nm,0.5s
**ARU Arti 19.49 16** P **P** 09 12 52.6 +0.1
comp=Z,120nm,0.5s,SNR=5.3
**ARU Arti 19.49 16** *i*P **P** 09 12 52.2 -0.3
comp=Z,6.0nm,0.5s
ARU S **Sn** 09 16 29.0 -3.2
**IDI Anoyia 19.59 269** P **P** 09 12 52.4 -1.4
comp=Z,0.6nm,0.3s,baz=104,slow=17,SNR=2.6
**ARR Arges 19.64 300** ⇑*i*P **P** 09 12 55.0 +0.7
**ARR Arges 19.64 300** ⇑*i*P **P** 09 12 55.0 +0.7

**AAK Ala-Archa 19.89 69** ⇓P **P** 09 12 59.1 +1.8
comp=Z,5.8nm,0.8s
**AAK Ala-Archa 19.89 69** P **P** 09 12 58.6 +1.4
comp=Z,3.9nm,0.7s,baz=236,slow=6.0,SNR=6.0
AAK LR LR 09 22 59.7
comp=Z,136nm,19.4s,baz=259,slow=44
**AAK Ala-Archa 19.89 69** eP **P** 09 12 58.3 +1.1
AAK eS **S** 09 16 38.9 -2.3
AAK pmax pmax
comp=Z,5.0nm,0.8s
**AAK Ala-Archa 19.89 69** eP **P** 09 12 58.3 +1.1
comp=Z,4.9nm,0.8s
AAK eS **S** 09 16 38.9 -2.3
**AAK Ala-Archa 19.89 69** eP **P** 09 12 58.3 +1.1
comp=Z,4.9nm,0.8s
AAK eS **S** 09 16 38.9 -2.3
**BURAR Bucovina Array 19.90 306** ⇑P **P** 09 12 58.4 +1.2
**BURAR Bucovina Array 19.90 306** ⇑*i*P **P** 09 12 58.4 +1.2
**BURAR Bucovina Array 19.90 306** ⇑*i*P **P** 09 12 58.4 +1.2
**BUR04 Bucovina Ar. S 19.90 306** eP **P** 09 12 57.6 +0.4
**BUR04 Bucovina Ar. S 19.90 306** eP **P** 09 12 57.6 +0.4
**LOT Lotru 20.25 300** ⇑*i*P **P** 09 12 57.5 -3.5
**SVE Sverdlovsk 20.34 18** eP **P** 09 13 03.3 +1.6
SVE pmax pmax
comp=Z,25nm,1.3s
**SVE Sverdlovsk 20.34 18** eP **P** 09 13 03.3 +1.6
comp=Z,25nm,1.3s
**ZRNK Zerenda 20.35 36** ⇓P **P** 09 13 02.2 +0.2
comp=Z,18nm,0.7s
**ZRNK Zerenda 20.35 36** P **P** 09 13 02.1 +0.2
ZRNK pmax pmax
comp=Z,18nm,0.7s
**ZRNK Zerenda 20.35 36** P **P** 09 13 02.2 +0.2
comp=Z,18nm,0.7s
**SRE Strehaia 20.48 297** ⇑P **P** 09 13 05.5 +2.0
**SRE Strehaia 20.48 297** ⇑*i*P **P** 09 13 05.5 +2.0
**TKM2 Tokmak 2 20.73 68** ⇓P **P** 09 13 08.4 +2.0
comp=Z,15nm,0.9s
**TKM2 Tokmak 2 20.73 68** eP **P** 09 13 07.6 +1.3
TKM2 pmax pmax
comp=Z,7.0nm,0.6s
**TKM2 Tokmak 2 20.73 68** eP **P** 09 13 07.6 +1.3
comp=Z,7.5nm,0.6s
**TKM2 Tokmak 2 20.73 68** eP **P** 09 13 07.6 +1.3
comp=Z,7.5nm,0.6s
**GZR Gura Zlata 20.92 299** ⇑*i*P **P** 09 13 09.2 +1.0
**GZR Gura Zlata 20.92 299** ⇑*i*P **P** 09 13 09.2 +1.0
**KSH Kashi 21.00 77** P **P** 09 13 07.8 -1.5
KSH *es*P **sP** 09 13 18.3 +4.9
KSH S S 09 16 49.1 -14
KSH *e*PcP **PcP** 09 17 17.4 +1.2
KSH PMZ
comp=Z,17nm,1.1s
KSH PMZ
comp=Z,120nm,5.4s
KSH LN
comp=Z,2µm,17.5s
KSH LE
comp=Z,710nm,13.3s
KSH LZ
comp=Z,180nm,6.0s
**BRVK Borovoye 21.03 37** ⇓P **P** 09 13 09.5 +0.3
comp=Z,60nm,0.9s
**BRVK Borovoye 21.03 37** eP **P** 09 13 09.6 +0.3
BRVK eS **S** 09 17 01.9 -1.3
BRVK pmax pmax
comp=Z,38nm,1.0s
**BRVK Borovoye 21.03 37** P **P** 09 13 09.7 +0.4
comp=Z,240nm,0.8s,SNR=17
**BRVK Borovoye 21.03 37** eP **P** 09 13 09.6 +0.3
comp=Z,38nm,1.0s
BRVK eS **S** 09 17 01.9 -1.3
**BRVK Borovoye 21.03 37** eP **P** 09 13 09.6 +0.3
comp=Z,38nm,1.0s
BRVK eS **S** 09 17 01.9 -1.3
**BVAR Borovoye Array 21.06 38** P **P** 09 13 10.0 +0.4
comp=Z,22nm,0.6s,baz=229,slow=9.0,SNR=112
BVAR S S 09 16 56.2 -7.7
comp=Z,1.0nm,0.7s,baz=232,slow=27,SNR=2.8
**BVAR Borovoye Array 21.06 38** P **P** 09 13 10.0 +0.4
BVAR S S 09 16 56.2 -7.7
BVAR pmax pmax
comp=Z,22nm,0.6s
BVAR smax smax
comp=N,1.0nm,0.7s
**BVAR Borovoye Array 21.06 38** P **P** 09 13 10.0 +0.4
comp=N,22nm,0.6s
**VOSK Vostochnaya 21.17 39** ⇓P **P** 09 13 10.4 -0.4
comp=N,8.4nm,0.6s
**VOSK Vostochnaya 21.17 39** P **P** 09 13 10.4 -0.4
VOSK pmax pmax
comp=Z,8.0nm,0.6s
**VOSK Vostochnaya 21.17 39** P **P** 09 13 10.4 -0.4
comp=Z,8.0nm,0.6s
**DRGR 21.28 303** ⇑P **P** 09 13 13.3 +1.2
**DRGR 21.28 303** ⇑*i*P **P** 09 13 13.3 +1.2
**DRGR 21.28 303** P **P** 09 13 13.3 +1.2
**BOVS Bovan 21.41 294** eP **P** 09 13 13.9 +0.4
**CHKZ Chkalovo 21.56 36** ⇑P **P** 09 13 14.4 -0.6
comp=Z,13nm,0.8s
**CHKZ Chkalovo 21.56 36** P **P** 09 13 14.0 -1.0
CHKZ pmax pmax
comp=Z,13nm,0.8s
**CHKZ Chkalovo 21.56 36** P **P** 09 13 14.4 -0.6
comp=Z,13nm,0.8s
**SELS Selova 21.80 293** eP **P** 09 13 16.6 -1.1
**SIRR Siria 21.86 301** ⇑*i*P P 09 13 11.7 -6.6
**SOKR Solikamsk 22.16 10** *d*iP **P** 09 13 24.9 +3.6
SOKR pmax pmax
comp=Z,30nm,1.5s
**KOLS Kolonicke sedl 22.20 308** eP **P** 09 13 24.3 +2.4
KOLS pmax pmax
comp=Z,7.0nm,0.9s
**KOLS Kolonicke sedl 22.20 308** eP **P** 09 13 24.3 +2.4
**IVAS Ivanjica 22.53 293** eP **P** 09 13 25.6 0.0
**DIVS Divibare 22.69 295** ⇑*i*P **P** 09 13 26.8 -0.5
**DIVS Divibare 22.69 295** eP **P** 09 13 26.4 -0.9
**OJC Ojcow 24.04 314** ePg P 09 14 47.1 +30
OJC eSg 09 14 55.7
**VYHS Vyhne 24.25 305** eP **P** 09 13 42.8 +0.2
VYHS pmax pmax
comp=Z,4.0nm,1.3s
**VYHS Vyhne 24.25 305** eP **P** 09 13 42.8 +0.2
**VYHS Vyhne 24.25 305** eP **P** 09 13 42.8 +0.2
comp=Z,4.0nm,1.3s
**KURBB Kurchatov Arra 24.38 49** ⇓P **P** 09 13 44.4 +0.7
comp=Z,7.0nm,0.7s
**KURBB Kurchatov Arra 24.38 49** P **P** 09 13 45.0 +1.3
comp=Z,9.0nm,0.8s,baz=256,slow=9.5,SNR=32
**KURBB Kurchatov Arra 24.38 49** P **P** 09 13 44.4 +0.7
comp=Z,7.0nm,0.7s
**KURK Kurchatov 24.46 49** ⇓P **P** 09 13 45.7 +1.2
comp=Z,30nm,0.9s
**KURK Kurchatov 24.46 49** P **P** 09 13 45.7 +1.2
KURK pmax pmax
comp=Z,30nm,0.9s
**KURK Kurchatov 24.46 49** P **P** 09 13 45.7 +1.2
comp=Z,94nm,0.8s,SNR=9.4
**KURK Kurchatov 24.46 49** eP **P** 09 13 45.8 +1.2
comp=Z,29nm,0.9s
**KURK Kurchatov 24.46 49** P **P** 09 13 45.7 +1.2
comp=Z,30nm,0.9s
**TIP Timpagrande 25.22 283** eP **P** 09 13 51.4 -0.2
comp=Z,2.0nm,0.5s
**TIP Timpagrande 25.22 283** eP **P** 09 13 51.3 -0.2
comp=Z,2.0nm,0.5s
**MAKZ Makanchi 25.68 59** eP **P** 09 13 56.8 +1.2
**MAKZ Makanchi 25.68 59** eP **P** 09 13 56.8 +1.2
**VRAC Vranov 25.88 306** LR LR 09 26 51.0
comp=Z,33nm,19.0s,baz=284,slow=43
**MK31 Makanchi Array 25.89 60** ⇓P **P** 09 13 58.4 +0.9
comp=Z,6.3nm,0.8s
**MK31 Makanchi Array 25.89 60** P **P** 09 13 58.4 +0.9
MK31 pmax pmax
comp=Z,9.0nm,0.8s
**MK31 Makanchi Array 25.89 60** P **P** 09 13 58.4 +0.9
comp=Z,6.3nm,0.8s
**MKAR Makanchi Array 25.89 60** P **P** 09 13 58.4 +0.9
comp=Z,7.0nm,0.9s,baz=257,slow=9.1,SNR=13
**MKAR Makanchi Array 25.89 60** P **P** 09 13 58.4 +0.9
MKAR pmax pmax
comp=Z,7.0nm,0.9s
**MKAR Makanchi Array 25.89 60** eP **P** 09 13 58.8 +1.2
**MK01 Makanchi Array 25.89 60** eP **P** 09 13 58.3 +0.7
**MK01 Makanchi Array 25.89 60** eP **P** 09 13 58.3 +0.7

**SOKA Soboth 26.45 300** ⇓*i*P **P** 09 14 02.5 -0.1
comp=Z,7.4nm,0.9s
**SOKA Soboth 26.45 300** P **P** 09 14 02.5 -0.1
comp=Z,7.4nm,0.9s
**FINES FINESS Array B 27.48 336** P **P** 09 14 11.5 -0.2
comp=Z,2.8nm,0.9s,baz=137,slow=17,SNR=2.6
FINES LR LR 09 26 35.0
comp=Z,66nm,19.9s,baz=335,slow=40
**FINES FINESS Array B 27.48 336** P **P** 09 14 11.5 -0.2
FINES pmax pmax
comp=Z,3.0nm,0.9s
FINES MLR MLR
comp=Z,66nm,20.0s
**GERES GERESS Array B 27.65 304** P **P** 09 14 11.6 -1.8
comp=Z,1.2nm,0.6s,baz=116,slow=9.1,SNR=8.4
**GERES GERESS Array B 27.65 304** P **P** 09 14 11.6 -1.8
GERES pmax pmax
comp=Z,1.0nm,0.6s
**ZAA0 Zalesovo Array 29.12 45** eP **P** 09 14 26.8 +0.5
**ZAA0 Zalesovo Array 29.12 45** eP **P** 09 14 26.8 +0.5
**ZALV Zalesovo Beam 29.12 45** P **P** 09 14 25.6 -0.7
comp=Z,2.0nm,0.6s,baz=267,slow=10,SNR=5.2
ZALV LR LR 09 28 49.0
comp=Z,78nm,18.4s,baz=248,slow=42
**ZALV Zalesovo Beam 29.12 45** P **P** 09 14 25.6 -0.7
ZALV pmax pmax
comp=Z,2.0nm,0.6s
ZALV MLR MLR
comp=Z,78nm,18.4s
**MOTA Moosalm 29.19 301** ⇑*i*P **P** 09 14 25.9 -1.3
comp=Z,3.5nm,0.5s
**MOTA Moosalm 29.19 301** P **P** 09 14 25.9 -1.3
comp=Z,3.5nm,0.5s
**FETA Feichten 29.42 300** ⇓*i*P **P** 09 14 28.5 -0.8
comp=Z,5.1nm,0.7s
**FETA Feichten 29.42 300** P **P** 09 14 28.5 -0.8
comp=Z,5.1nm,0.7s
**WMQ Urumqi 29.56 66** eP **P** 09 14 33.0 +2.5
WMQ sP sP 09 14 44.0 +9.2
WMQ PP **PnPn** 09 15 30.0 +5.2
WMQ S **S** 09 19 25.0 -0.3
WMQ SS **SnSn** 09 20 57.0 +4.0
WMQ PMZ
comp=Z,12nm,0.8s
WMQ PMZ
comp=Z,22nm,4.0s
WMQ LN
comp=Z,140nm,11.0s
WMQ LE
comp=Z,120nm,11.0s
WMQ LZ
comp=Z,88nm,10.0s
**DAVOX Davos/Dischmat 29.99 300** P **P** 09 14 32.8 -1.6
comp=Z,7.7nm,0.6s,baz=98,slow=6.3,SNR=11
**DAVOX Davos/Dischmat 29.99 300** P **P** 09 14 32.8 -1.6
DAVOX pmax pmax
comp=Z,8.0nm,0.6s
**VSL Villasalto 30.83 285** eP **P** 09 14 41.6 -0.1
comp=Z,6.3nm,0.7s
**VSL Villasalto 30.83 285** eP **P** 09 14 41.6 -0.1
comp=Z,6.3nm,0.7s
**HFS Hagfors 31.44 326** P **P** 09 14 45.7 -1.1
comp=Z,2.0nm,0.7s,baz=128,slow=9.3,SNR=3.9
**HFS Hagfors 31.44 326** P **P** 09 14 45.7 -1.1
HFS pmax pmax
comp=Z,2.0nm,0.7s
**EKA Eskdalemuir Ar 38.77 314** P **P** 09 15 48.9 -1.1
comp=Z,1.4nm,0.5s,baz=102,slow=9.4,SNR=7.8
**EKA Eskdalemuir Ar 38.77 314** P **P** 09 15 48.9 -1.1
EKA pmax pmax
comp=Z,1.0nm,0.5s
**ESDC Sonseca Array 40.85 289** P **P** 09 16 05.5 -2.0
comp=Z,0.3nm,0.3s,baz=63,slow=10,SNR=4.3
**SONM Songino Array 42.22 58** P **P** 09 16 19.0 +0.2
comp=Z,0.5nm,0.5s,baz=255,slow=7.1,SNR=3.0
**SONM Songino Array 42.22 58** P **P** 09 16 19.0 +0.2
SONM pmax pmax
comp=Z,1.0nm,0.5s
**SONM Songino Array 42.22 58** P **P** 09 16 19.0 +0.2
comp=Z,1.0nm,0.5s
**SPITS Spitsbergen Ar 42.52 351** P **P** 09 16 20.4 -0.3
comp=Z,9.6nm,0.9s,baz=136,slow=11,SNR=4.5
**SPITS Spitsbergen Ar 42.52 351** P **P** 09 16 20.4 -0.3
SPITS pmax pmax
comp=Z,10.0nm,0.9s
**ULN Ulaanbaatar 42.66 57** *i*P **P** 09 16 23.4 +1.0
ULN pmax pmax
comp=Z,6.0nm,1.7s
**ULN Ulaanbaatar 42.66 57** *i*P **P** 09 16 23.4 +1.0
comp=Z,6.0nm,1.7s
**LZH Lanzhou 43.22 75** eP P 09 16 31.5 +4.4
LZH pP pP 09 16 39.3 +9.1
LZH sP sP 09 16 42.8 +11
LZH *e*PP **PcP** 09 18 14.3 -2.0
LZH *e*S **S** 09 22 55.0 +0.9
LZH sS sS 09 23 07.5 +8.3
LZH *e*SS **SS** 09 26 01.6 -5.2
LZH PMZ
comp=Z,37nm,1.2s
LZH PMZ
comp=Z,230nm,6.0s
LZH LN
comp=Z,560nm,13.5s
LZH LE
comp=Z,530nm,13.8s
LZH LZ
comp=Z,790nm,16.7s
**CD2 Chengdu 45.09 82** eP **P** 09 16 42.0 0.0
CD2 pP **pP** 09 16 49.9 +4.8
CD2 PP **PP** 09 18 27.3 0.0
CD2 PcS **PcS** 09 22 16.8 +0.3
CD2 S **S** 09 23 19.3 -1.9
CD2 sS sS 09 23 32.8 +6.4
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,160nm,5.0s
**BOD Bodaibo 45.80 43** eP **P** 09 16 46.5 -0.7
BOD pmax pmax
comp=Z,2.0nm,1.0s
**BOD Bodaibo 45.80 43** eP **P** 09 16 46.5 -0.7
comp=Z,2.0nm,1.0s
**KMI Kunming 46.90 90** P **P** 09 16 57.3 +0.7
KMI PMZ
comp=Z,11nm,0.7s
**HHC Hu-ho-hao-te 47.44 66** eP **P** 09 17 01.9 +1.5
HHC S **S** 09 23 53.1 -1.7
HHC PMZ
comp=Z,25nm,0.9s
HHC PMZ
comp=Z,250nm,5.5s
HHC LN
comp=Z,340nm,15.3s
HHC LE
comp=Z,200nm,15.5s
HHC LZ
comp=Z,170nm,16.2s
**CMAR Chiang Mai Arr 47.45 100** P **P** 09 17 00.5 -0.1
comp=Z,1.9nm,0.6s,baz=302,slow=8.6,SNR=12
CMAR LR LR 09 42 17.3
comp=Z,37nm,21.6s,baz=290,slow=43
**TORD Torodi Ar. Bea 48.73 253** P P 09 17 07.2 -3.4
comp=Z,0.5nm,0.8s,baz=63,slow=6.5,SNR=3.9
TORD LR LR 09 42 31.6
comp=Z,26nm,18.0s,baz=345,slow=42
**GYA Guiyang 49.36 86** P **P** 09 17 18.0 +2.6
GYA pP pP 09 17 25.8 +7.2
GYA PP **PP** 09 19 12.0 +2.7
GYA ScP **ScP** 09 22 31.4 -1.8
GYA S **S** 09 24 21.6 -0.7
GYA sS sS 09 24 34.0 +6.5
GYA SS **SS** 09 27 48.3 -5.4
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,130nm,5.2s
GYA LN
comp=Z,540nm,18.6s
GYA LE
comp=Z,460nm,19.0s
GYA LZ
comp=Z,490nm,18.8s
**HIA Hailar 50.60 53** eP **P** 09 17 25.7 +1.2
HIA pmax pmax
comp=Z,2.0nm,0.7s
**HIA Hailar 50.60 53** eP **P** 09 17 25.7 +1.2

comp=Z,2.0nm,0.7s
**WHN Wuhan 53.48 77** P P 09 17 50.3 +4.3
**QIZ Qiongzhong 55.69 92** P P 09 17 59.0 -3.3
QIZ pP pP 09 18 11.1 +5.7
QIZ sP sP 09 18 13.0 +6.3
QIZ S **S** **09 25 45.3 -3.5**
QIZ PMZ
comp=Z,21nm,2.5s
**NJ2 Nanjing 56.24 73** *e*P **P** **09 18 08.1 +2.1**
NJ2 PMZ
comp=Z,50nm,0.7s
**MDJ Mudanjiang 58.52 56** P P 09 18 19.5 -2.5
MDJ PMZ
comp=Z,6.0nm,0.9s
MDJ PMZ
comp=Z,160nm,4.5s
**USRK Ussuriysk Ar. 60.26 55** P **P** **09 18 32.6 -1.3**
comp=Z,1.7nm,0.6s,baz=270,slow=5.8,SNR=5.9
**KSAR Wonju Array Be 60.44 64** P **P** **09 18 34.2 -1.2**
**KSAR Wonju Array Be 60.44 64** P **P** **09 18 34.2 -1.2**
**KSAR Wonju Array Be 60.44 64** P **P** **09 18 34.2 -1.2**
**KSRS Korea Array 60.47 64** P **P** **09 18 34.2 -1.3**
comp=Z,1.3nm,0.6s,baz=294,slow=6.3,SNR=5.7
**KSRS Korea Array 60.47 64** P **P** **09 18 34.2 -1.3**
KSRS pmax pmax
comp=Z,1.0nm,0.6s
**SEY Seymchan 62.48 30** *i* P **P** **09 18 49.8 +1.1**
**SEY Seymchan 62.48 30** *i* P **P** **09 18 49.8 +1.1**
**ILAR Eielson Array 76.79 7** P **P** **09 20 15.1 -1.8**
comp=Z,0.8nm,0.9s,baz=329,slow=4.6,SNR=6.5
**ILAR Eielson Array 76.79 7** P **P** **09 20 15.1 -1.8**
ILAR pmax pmax
comp=Z,1.0nm,0.9s
**CAST Castle Rocks 77.51 10** *e*P **P** **09 20 21.8 +0.8**
comp=Z,62nm,2.2s
**CAST Castle Rocks 77.51 10** *e*P **P** **09 20 21.8 +0.8**
comp=Z,62nm,2.2s
**JCW Jim Creek 93.80 354** *e*P **P** **09 21 43.2 +0.4**
**JCW Jim Creek 93.80 354** *e*P **P** **09 21 43.2 +0.4**
**BLN Blyn Mountain 94.07 355** *e*P **P** **09 21 43.6 -0.4**
**BLN Blyn Mountain 94.07 355** *e*P **P** **09 21 43.6 -0.4**
**ETW Entiat 94.24 353** *e*P P 09 21 41.5 -3.5
**E07A Sunnyside 95.23 352** *e*P P 09 21 44.0 -5.4
comp=Z,19nm,0.6s
**I07A Izee 97.64 352** *e*P Pdif 09 22 05.4 +4.8
comp=Z,132nm,3.0s

**CSEM 22 09:10:29.7, 40.69N×16.70E, h6km, MD1.8/4, After ROM, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATE** | **Matera** | **0.04** | **173** | Pg | Pg | 09 10 31.1 | +0.2 |
| MATE | | | | Sg | Sg | 09 10 32.2 | +0.4 |
| **MIGL** | **Miglionico** | **0.21** | **248** | Pg | Pg | 09 10 34.3 | +0.3 |
| MIGL | | | | Sg | Sg | 09 10 38.5 | +1.7 |
| | 551nm,1.1s | | | | | | |
| **AMUR** | **Altamura** | **0.23** | **342** | Pg | Pg | 09 10 35.0 | +0.6 |
| AMUR | | | | Sg | Sg | 09 10 38.9 | +1.4 |
| | 54nm,0.7s | | | | | | |
| **NOCI** | **Noci** | **0.30** | **70** | Pg | Pb | 09 10 36.6 | -0.9 |
| | 118nm,0.9s | | | | | | |

**HLW 22 09:11:11.8, 30.94N×34.97E, h6km±7km, Md2.9, Ml3.0, Dead Sea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSH** | | **1.07** | **272** | P | Pg | 09 11 31.2 | -1.2 |
| | baz=272 | | | | | | |
| **HNKL** | **Nakhl** | **1.31** | **221** | P | Pn | 09 11 34.4 | -2.4 |
| | baz=221 | | | | | | |
| HNKL | | | | S | Sb | 09 11 52.3 | -1.9 |
| | baz=221 | | | | | | |
| **AMAG** | **Maghara** | **1.54** | **260** | P | Pn | 09 11 37.9 | -2.1 |
| | baz=260 | | | | | | |
| **HBST** | **Basata** | **1.73** | **187** | P | Pn | 09 11 40.7 | -1.7 |
| | baz=187 | | | | | | |
| HBST | | | | AMP | | 09 12 00.0 | |
| | comp=E,180μm,0.3s,logA/T=5.7,baz=187 | | | | | | |
| **NUB** | | **1.92** | **188** | P | Pn | 09 11 43.4 | -1.7 |
| | baz=189 | | | | | | |
| **TR2** | | **2.76** | **203** | P | Pn | 09 11 54.9 | -1.8 |
| | baz=204 | | | | | | |
| **TR1** | | **3.05** | **197** | P | Pn | 09 11 58.5 | -2.2 |
| | baz=198 | | | | | | |

*ISCJB **22** 09:11:38.5±0.5, 13.10N±0.05×89.74W±0.04, h43km, mb3.9/3, Error ellipse: s-maj=8.1km s-min=3.4km az=38.1*
*CASC **22** 09:11:39.7±2.4, 13.22N×89.71W, h36km±378km, MD3.9, ML4.2*
*IDC **22** 09:11:40.6±2.4, 13.49N×89.41W, h60km±34km, mb3.5/4, mb1 3.9/6, mb1mx3.4/44, mbtmp3.8/6, ML3.6/2, Error ellipse: s-maj=58.9km s-min=16.8km az=35.0*
**ISC 22 09:11:38.5±0.9, 13.16N±0.06×89.72W±0.05, h43km, n33, σ1§57/46, mb3.8/3, 4C-4D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SBLS** | **San Blas** | **0.69** | **8** | *e*P | **Pn** | **09 11 52.2** | **+0.2** |
| SBLS | | | | *e*P | **Pn** | **09 11 52.4** | **+0.2** |
| **SNET** | **Serv Nac Est T** | **0.71** | **42** | *e*P | **Pn** | **09 11 52.8** | **+0.5** |
| SNET | | | | ⇓*e*P | **Pn** | **09 11 52.9** | **+0.5** |
| SNET | | | | *e*S | **Sn** | **09 12 03.3** | **+1.1** |
| SNET | | | | AML | AML | 09 12 07.7 | |
| | comp=Z,6μm,0.3s | | | | | | |
| **SNJE** | **San Jose** | **0.72** | **9** | ⇓*i*P | **Pn** | **09 11 52.8** | **+0.3** |
| **BOQS** | **Boqueron** | **0.72** | **37** | *e*P | **Pn** | **09 11 53.2** | **+0.7** |
| BOQS | | | | ⇑*e*P | **Pn** | **09 11 53.3** | **+0.7** |
| **RTR** | **El Retiro** | **0.74** | **6** | ⇓*i*P | **Pn** | **09 11 53.2** | **+0.4** |
| **LFRS** | **El Faro** | **0.79** | **54** | *e*P | **Pn** | **09 11 54.2** | **+0.8** |
| **LFU** | **La Fuente** | **0.84** | **45** | ⇑*i*P | **Pn** | **09 11 55.0** | **+1.0** |
| **LBRS** | **Las Brisas** | **0.88** | **49** | ⇑*i*P | **Pn** | **09 11 55.6** | **+1.1** |
| **RBDL** | **Robledal** | **0.95** | **2** | ⇑*i*P | **Pn** | **09 11 56.1** | **+0.5** |
| **VSM** | **San Miguel** | **1.44** | **79** | *e*P | **Pn** | **09 12 03.6** | **+1.2** |
| VSM | | | | *e*P | **Pn** | **09 12 04.0** | **+1.7** |
| **PCG** | **Pacaya** | **1.50** | **325** | *e*P | **Pn** | **09 12 04.0** | **+0.8** |
| PCG | | | | *e*S | **Sn** | **09 12 23.2** | **+1.5** |
| **NBG** | **Las Nubes** | **1.54** | **337** | *e*P | **Pn** | **09 12 05.4** | **+1.5** |
| NBG | | | | *e*S | **Sn** | **09 12 26.0** | **+3.2** |
| **CAHU** | **Cacacuatique** | **1.59** | **67** | *e*P | **Pn** | **09 12 05.4** | **+0.9** |
| CAHU | | | | ⇓*e*P | **Pn** | **09 12 05.7** | **+1.3** |
| **FUG** | **Fuego 3** | **1.68** | **320** | *e*P | **Pn** | **09 12 06.3** | **+0.6** |
| **CNCH** | **Conchagua** | **1.84** | **86** | *e*P | **Pn** | **09 12 08.9** | **+1.1** |
| CNCH | | | | *e*P | **Pn** | **09 12 09.6** | **+1.7** |
| **JAT** | **Jato** | **2.19** | **302** | *e*P | **Pn** | **09 12 13.9** | **+1.5** |
| JAT | | | | *e*S | **Sn** | **09 12 39.5** | **+1.2** |
| **TEL3** | **Telica 3** | **2.87** | **101** | *e*P | **Pn** | **09 12 22.8** | **+1.0** |
| **CNGN** | **Cerro Negro** | **3.02** | **102** | *e*P | **Pn** | **09 12 24.4** | **+0.4** |
| **MOMN** | **Momotombo** | **3.19** | **103** | *e*P | **Pn** | **09 12 26.6** | **+0.2** |
| **COPN** | **Copaltepe** | **3.21** | **107** | *e*P | **Pn** | **09 12 26.8** | **+0.3** |
| **APYN** | **Apoyeque** | **3.42** | **105** | *e*P | **Pn** | **09 12 30.5** | **+1.2** |
| APYN | | | | *e*S | **Sn** | **09 13 08.6** | **-0.1** |
| **XAVN** | **Gruta Xavier** | **3.46** | **106** | *e*P | **Pn** | **09 12 31.3** | **+1.3** |
| **CRUN** | **El Crucero** | **3.54** | **109** | *e*P | **Pn** | **09 12 34.0** | **+2.9** |
| **JTS** | **JuntasAbangare** | **5.47** | **121** | P | **Pn** | **09 12 58.9** | **+1.3** |
| | comp=Z,1.5nm,0.3s,baz=304,slow=21,SNR=14 | | | | | | |
| JTS | | | | S | **Sn** | **09 14 00.4** | **+1.1** |
| | comp=Z,0.8nm,0.3s,baz=319,slow=20,SNR=1.9 | | | | | | |
| **JCR** | **Jicaral** | **5.59** | **126** | *e*P | **Pn** | **09 13 02.3** | **+3.0** |
| JCR | | | | *e*S | **Sn** | **09 14 01.2** | **-1.1** |
| **CGA2** | **Cerro Gallo 2** | **6.02** | **121** | *e*P | Pn | 09 13 09.2 | +3.9 |
| CGA2 | | | | *e*S | **Sn** | **09 14 16.7** | **+3.6** |
| **CMIG** | **Matias Romero** | **6.33** | **309** | P | **Pn** | **09 13 10.2** | **+0.8** |
| | comp=Z,1.4nm,0.3s,baz=147,slow=12,SNR=24 | | | | | | |
| CMIG | | | | S | **Sn** | **09 14 16.4** | **-4.1** |
| | comp=Z,0.7nm,0.3s,baz=105,slow=12,SNR=2.4 | | | | | | |
| **BUS** | **Buena Vista** | **6.86** | **121** | *e*P | Pn | 09 13 21.8 | +4.8 |
| BUS | | | | *e*S | **Sn** | **09 14 33.0** | **-1.0** |
| **TXAR** | **Lajitas Array** | **20.65** | **323** | P | **P** | **09 16 16.0** | **+1.2** |
| | comp=Z,0.9nm,0.5s,baz=142,slow=9.7,SNR=18 | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.73** | **320** | P | **P** | **09 18 34.7** | **+1.2** |
| | comp=Z,0.7nm,0.6s,baz=139,slow=8.6,SNR=11 | | | | | | |
| **SCHQ** | **Schefferville** | **45.28** | **18** | P | **P** | **09 19 49.0** | **-2.8** |
| | comp=Z,4.2nm,0.9s,baz=223,slow=8.4,SNR=5.1 | | | | | | |
| **YKA** | **Yellowknife Ar** | **52.37** | **346** | P | P | 09 20 43.0 | -3.1 |
| | comp=Z,0.8nm,0.8s,baz=145,slow=7.6,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **137.32** | **255** | PKP | **PKPdf** | **09 30 56.8** | **-1.4** |
| | comp=Z,0.3nm,0.8s,baz=15,slow=0.8,SNR=3.1 | | | | | | |

*ISCJB **22** 09:42:59.6±0.9, 35.26N±0.03×92.25W±0.03, h9km±6km, Error ellipse: s-maj=5.5km s-min=3.7km az=160.0*
*NEIC **22** 09:42:59.4, 35.30N×92.31W, h6km, MD2.6(CERI), After CERI.*
*NEIC Felt [II] at Greenbrier. Also felt at Quitman.*
**ISC 22 09:42:59.4±3.3, 35.22N±0.04×92.28W±0.03, h5km±25km, n26, σ0§73/44, Arkansas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UALR** | **University of** | **0.45** | **187** | *e*Pg | **Pb** | **09 43 09.9** | **+0.2** |
| UALR | | | | *e*Sg | **Sb** | **09 43 17.2** | **+0.5** |
| **MIAR** | **Mount Ida** | **1.26** | **238** | P | **Pn** | **09 43 23.0** | **-0.6** |
| | baz=1.3,SNR=20 | | | | | | |
| MIAR | | | | S | **Sb** | **09 43 40.2** | **+0.1** |
| | baz=1.3 | | | | | | |
| **MIAR** | **Mount Ida** | **1.26** | **238** | *e*Pn | **Pn** | **09 43 23.0** | **-0.6** |
| MIAR | | | | *e*Sn | **Sb** | **09 43 40.2** | **+0.1** |
| **HBAR** | **Harrisburg** | **1.36** | **75** | *e*Pn | **Pn** | **09 43 24.5** | **-0.5** |
| HBAR | | | | *e*Sn | **Sb** | **09 43 43.4** | **+0.3** |
| **W38A** | **Poteau** | **1.84** | **266** | P | **Pn** | **09 43 32.0** | **+0.4** |
| | baz=1.8,SNR=12 | | | | | | |
| W38A | | | | S | **Sb** | **09 43 56.2** | **-0.7** |
| | baz=1.8 | | | | | | |
| **V38A** | **Canehill** | **1.85** | **291** | P | **Pn** | **09 43 31.2** | **-0.6** |
| | baz=1.8,SNR=12 | | | | | | |
| V38A | | | | S | **Sn** | **09 43 55.3** | **-0.3** |
| | baz=1.8 | | | | | | |
| **Y39A** | **Lockesburg** | **1.97** | **230** | P | **Pn** | **09 43 34.0** | **+0.6** |
| | baz=2.0,SNR=5.9 | | | | | | |
| Y39A | | | | S | **Sb** | **09 44 00.5** | **-0.1** |
| | baz=2.0 | | | | | | |
| **GNAR** | **Gosnell** | **1.98** | **67** | *e*Pn | **Pn** | **09 43 34.5** | **+1.0** |
| GNAR | | | | *e*Sn | **Sn** | **09 43 57.3** | **-1.5** |
| **U38A** | **Gravette** | **2.10** | **306** | P | **Pn** | **09 43 35.0** | **-0.2** |
| | baz=2.0 | | | | | | |
| U38A | | | | S | **Sn** | **09 44 01.8** | **+0.1** |
| | baz=2.0 | | | | | | |
| **X38A** | **Whitesboro** | **2.17** | **256** | Pb | **Pb** | **09 43 38.5** | **-0.6** |
| | baz=2.2,SNR=9.7 | | | | | | |
| X38A | | | | Sb | **Sb** | **09 44 07.3** | **+1.1** |
| | baz=2.2 | | | | | | |
| **V37A** | **Hulbert** | **2.43** | **287** | P | **Pn** | **09 43 39.4** | **-0.2** |
| | baz=2.4,SNR=5.6 | | | | | | |
| **W37A** | **Quinton** | **2.58** | **269** | Pb | **Pb** | **09 43 45.9** | **-0.2** |
| | baz=2.5,SNR=9.8 | | | | | | |
| W37A | | | | Sb | **Sb** | **09 44 19.2** | **+1.1** |
| | baz=2.5 | | | | | | |
| **U37A** | **Salina** | **2.59** | **298** | P | **Pn** | **09 43 41.4** | **-0.5** |
| | baz=2.5 | | | | | | |
| **X37A** | **Clayton** | **2.62** | **257** | Pb | **Pb** | **09 43 46.9** | **+0.1** |
| | baz=2.6,SNR=14 | | | | | | |
| X37A | | | | Sb | **Sb** | **09 44 20.7** | **+1.4** |
| | baz=2.6 | | | | | | |
| **T37A** | **Cheneyville 18** | **2.86** | **312** | P | **Pn** | **09 43 45.5** | **-0.1** |
| | baz=2.8 | | | | | | |
| **CCM** | **Cathedral Cave** | **2.95** | **16** | *e*Pn | **Pn** | **09 43 48.1** | **+1.3** |
| CCM | | | | *e*Sn | **Sn** | **09 44 22.4** | **-0.2** |
| **TUL1** | **Tulsa** | **2.95** | **284** | P | **Pn** | **09 43 46.8** | **0.0** |
| | baz=2.9 | | | | | | |
| TUL1 | | | | Sb | **Sb** | **09 44 29.2** | **+0.5** |
| | baz=2.9 | | | | | | |
| **Y37A** | **Hugo** | **3.02** | **247** | Pb | **Pb** | **09 43 53.5** | **-0.2** |
| | baz=3.0,SNR=9.6 | | | | | | |
| **U36A** | **Oologah** | **3.04** | **294** | Sb | **Sb** | **09 44 32.0** | **+0.6** |
| | baz=3.0 | | | | | | |
| **V36A** | **Jenks** | **3.04** | **282** | P | **Pn** | **09 43 48.2** | **0.0** |
| | baz=3.0 | | | | | | |
| V36A | | | | Sb | **Sb** | **09 44 32.3** | **+0.9** |
| | baz=3.0 | | | | | | |
| **W36A** | **Wetumka** | **3.24** | **270** | Pb | **Pb** | **09 43 56.7** | **-0.6** |
| | baz=3.2 | | | | | | |
| W36A | | | | Sb | **Sb** | **09 44 37.8** | **+0.8** |
| | baz=3.2 | | | | | | |
| **S37A** | **Fort Scott** | **3.26** | **322** | Pb | **Pb** | **09 43 56.7** | **-1.1** |
| | baz=3.2 | | | | | | |
| S37A | | | | Sb | **Sb** | **09 44 38.5** | **+0.8** |
| | baz=3.2 | | | | | | |
| **X36A** | **Centrahoma** | **3.41** | **260** | Pb | **Pb** | **09 43 59.7** | **-0.6** |
| | baz=3.4 | | | | | | |
| X36A | | | | Sb | **Sb** | **09 44 43.7** | **+1.7** |
| | baz=3.4 | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **3.44** | **303** | Sb | **Sb** | **09 44 43.9** | **+1.0** |
| | baz=3.4 | | | | | | |
| **Y36A** | **Durant** | **3.56** | **249** | Pb | **Pb** | **09 44 02.5** | **-0.3** |
| | baz=3.6 | | | | | | |
| **R37A** | **Teagarden Farm** | **3.70** | **327** | S | **Sn** | **09 44 41.0** | **-0.2** |
| | baz=3.6 | | | | | | |

*ISCJB **22** 09:48:31.1±0.5, 36.77N±0.04×71.44E±0.08, h106km, mb3.7/7, Error ellipse: s-maj=9.8km s-min=5.3km az=160.9*
*IDC **22** 09:48:34.7±3.4, 36.91N×71.48E, h120km±30km, mb3.4/7, mb1 3.6/13, mb1mx3.4/35, mbtmp4.0/13, Error ellipse: s-maj=24.7km s-min=17.6km az=6.0*
*NNC **22** 09:48:35.5±1.8, 37.34N×71.18E, h0km, mb4.8, mpv4.4, Error ellipse: s-maj=16.0km s-min=13.4km az=62.0*
**ISC 22 09:48:32.8±0.8, 36.84N±0.07×71.43E±0.09, h106km, n32, σ1§63/32, mb3.7/7, 2C-3D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AML** | **Almayashu** | **5.57** | **18** | P | **Pn** | **09 49 54.1** | **+0.6** |
| | SNR=59 | | | | | | |
| **UCH** | **Uchtor** | **5.88** | **23** | P | **Pn** | **09 49 59.3** | **+1.4** |
| | SNR=24 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.09** | **17** | P | **Pn** | **09 50 01.6** | **+1.2** |
| | SNR=31 | | | | | | |
| **AAK** | **Ala-Archa** | **6.25** | **21** | ⇓P | **Pn** | **09 50 04.0** | **+1.5** |
| | 23nm,0.4s | | | | | | |
| AAK | | | | ⇓S | **Sn** | **09 51 13.0** | **+0.4** |
| | 14nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **6.25** | **21** | P | **Pn** | **09 50 03.6** | **+1.0** |
| | 12nm,0.3s,baz=176,slow=5.9,SNR=113 | | | | | | |
| AAK | | | | S | **Sn** | **09 51 12.2** | **-0.4** |
| | 0.9nm,0.3s,baz=152,slow=17,SNR=4.2 | | | | | | |
| **AAK** | **Ala-Archa** | **6.25** | **21** | P | **Pn** | **09 50 04.2** | **+1.6** |
| | SNR=30 | | | | | | |
| **KK31** | **Karatay Array** | **6.29** | **354** | ⇓P | **Pn** | **09 50 02.4** | **-0.7** |
| | 11nm,0.3s,baz=178,slow=15,SNR=128 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **09 51 10.6** | **-2.9** |
| | 8.0nm,0.5s,baz=168,slow=20,SNR=4.1 | | | | | | |
| **KBK** | **Karagaybulak** | **6.41** | **24** | P | **Pn** | **09 50 07.3** | **+2.6** |
| | SNR=8.7 | | | | | | |
| **CHMS** | **Chumysh** | **6.66** | **22** | P | **Pn** | **09 50 09.3** | **+1.3** |
| | SNR=28 | | | | | | |
| **USP** | **Ospenovka** | **6.84** | **19** | P | **Pn** | **09 50 11.0** | **+0.6** |
| | SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.87** | **27** | ⇑P | **Pn** | **09 50 12.6** | **+1.6** |
| | 22nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.87** | **27** | P | **Pn** | **09 50 12.8** | **+1.8** |
| | SNR=8.1 | | | | | | |
| **SMLA** | **Simla** | **7.43** | **138** | *i* P | **Pn** | **09 50 19.9** | **+1.4** |
| SMLA | | | | *i* S | **Sn** | **09 51 40.4** | **-0.7** |
| SMLA | | | | AML | AML | 09 51 43.9 | |
| | comp=E,822nm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 09 51 44.1 | |
| | comp=N,778nm,0.3s | | | | | | |
| **GEYT** | **Alibeck** | **10.65** | **280** | P | Pn | 09 51 05.8 | +3.6 |
| | comp=N,1.2nm,0.3s,baz=120,slow=14,SNR=3.2 | | | | | | |
| GEYT | | | | S | Sn | 09 52 49.0 | -10 |
| | comp=N,1.0nm,0.3s,baz=78,slow=21,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.81** | **36** | P | **Pn** | **09 51 31.8** | **+0.9** |
| | comp=N,0.4nm,0.3s,baz=227,slow=15,SNR=16 | | | | | | |
| **KOLN** | **Koldanda** | **13.69** | **128** | *e*P | **Pn** | **09 51 41.5** | **-1.2** |
| **GKN** | **Gorkha** | **14.20** | **125** | *e*P | Pn | 09 51 45.8 | -3.4 |
| **KURBB** | **Kurchatov Array** | **14.69** | **18** | P | **Pn** | **09 51 53.1** | **-2.0** |
| | comp=N,0.0nm,0.3s,baz=216,slow=12,SNR=6.2 | | | | | | |
| **PKI** | **Pulchoki** | **15.00** | **124** | *e*P | **Pn** | **09 51 56.3** | **-3.3** |
| **GUN** | **Gumba** | **15.10** | **122** | *e*P | **Pn** | **09 51 56.4** | **-4.4** |
| **BVAR** | **Borovoye Array** | **16.20** | **358** | P | **Pn** | **09 52 13.0** | **-1.0** |
| | comp=N,0.6nm,0.3s,baz=172,slow=11,SNR=6.7 | | | | | | |
| **RAMN** | **Ramite** | **16.20** | **123** | *e*P | Pn | 09 52 09.5 | -5.0 |
| **AKTO** | **Aktyubinsk** | **16.66** | **329** | P | **P** | **09 52 20.4** | **+0.1** |
| | comp=N,1.8nm,0.3s,baz=135,slow=11,SNR=24 | | | | | | |
| **TAPN** | **Taplejung** | **16.71** | **120** | *e*P | Pn | 09 52 12.5 | -8.3 |
| **ZALV** | **Zarnsovo Beam** | **19.46** | **24** | P | **P** | **09 52 51.5** | **+0.5** |
| | comp=N,1.2nm,0.3s,baz=224,slow=10,0,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **37.40** | **326** | P | **P** | **09 55 34.7** | **-0.3** |
| | comp=N,1.9nm,0.8s,baz=114,slow=17,SNR=3.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.96** | **337** | P | **P** | **09 56 06.2** | **+1.5** |
| | comp=N,2.8nm,0.8s,baz=121,slow=9.3,SNR=6.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.32** | **323** | P | **P** | **09 56 32.1** | **+0.2** |
| | comp=N,1.0nm,0.8s,baz=97,slow=7.7,SNR=2.5 | | | | | | |
| **KEST** | **Kesra** | **49.26** | **288** | P | **P** | **09 57 10.0** | **-0.7** |
| | comp=N,1.8nm,0.5s,baz=35,slow=4.3,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.07** | **269** | P | **P** | **09 59 09.0** | **+0.4** |
| | comp=N,0.4nm,0.9s,baz=54,slow=5.0,SNR=2.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **81.88** | **122** | P | **P** | **10 00 40.9** | **+0.3** |
| | comp=N,0.3nm,0.8s,baz=324,slow=5.0,SNR=7.0 | | | | | | |
| **ASAR** | **Alice Springs** | **84.17** | **125** | P | **P** | **10 00 52.7** | **+0.4** |
| | comp=N,0.2nm,0.6s,baz=308,slow=6.5,SNR=5.0 | | | | | | |

*CSEM **22** 09:48:33.1±0.4, 37.29N×42.59E, h8km, MD3.0, Error ellipse: s-maj=15.4km s-min=5.6km az=3.0*
*DDA **22** 09:48:34.1, 37.52N×42.60E, h7km, Md3.0*
**ISC 22 09:48:33.8±1.6, 37.32N±0.10×42.63E±0.04, h6km±12km, n12, σ0§92/18, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIRT** | **Sirnak** | **0.24** | **321** | *e*PG | **Pg** | **09 48 38.2** | **-0.3** |
| **SIRT** | **Sirnak** | **0.24** | **321** | *e*Pg | **Pg** | **09 48 38.3** | **-0.3** |
| **SIRN** | **S¨¨-rnak** | **0.25** | **316** | *i* P | **Pg** | **09 48 38.1** | **-0.7** |
| SIRN | | | | *i* S | **Sg** | **09 48 43.0** | **+0.9** |
| **SIRN** | **S¨¨-rnak** | **0.25** | **316** | P | **Pg** | **09 48 38.0** | **-0.7** |
| SIRN | | | | S | **Sg** | **09 48 43.0** | **+0.9** |
| **HAKT** | **HAKKARI** | **0.89** | **74** | *i* P | **Pg** | **09 48 51.0** | **0.0** |
| HAKT | | | | *i* S | **Sb** | **09 49 04.1** | **-0.1** |
| **HAKT** | **HAKKARI** | **0.89** | **74** | P | **Pg** | **09 48 51.0** | **0.0** |
| HAKT | | | | S | **Sb** | **09 49 04.1** | **-0.1** |
| **BEST** | **Besiri** | **1.22** | **298** | P | **Pn** | **09 48 57.6** | **0.0** |
| BEST | | | | S | **Sn** | **09 49 16.2** | **+1.8** |
| **MARD** | **Mardin** | **1.48** | **270** | P | **Pb** | **09 49 01.6** | **-0.2** |
| MARD | | | | S | **Sg** | **09 49 22.4** | **+1.2** |
| **MAZI** | **Mazidag** | **1.74** | **275** | *e*PN | **Pn** | **09 49 03.9** | **-0.9** |
| **MAZI** | **Mazidag** | **1.74** | **275** | *e*Pn | **Pn** | **09 49 03.9** | **-0.9** |
| **BNGB** | **Bing¶ll** | **2.27** | **318** | *e*PN | **Pn** | **09 49 11.0** | **-1.0** |
| **BINT** | **Bingol** | **2.30** | **313** | *e*Pn | **Pn** | **09 49 11.0** | **-1.4** |

*DDA **22** 09:50:47.0, 38.83N×35.80E, h5km, Md2.9*
*CSEM **22** 09:50:48.6±0.3, 38.70N×35.78E, h2km, MD2.9, Error ellipse: s-maj=10.6km s-min=6.9km az=13.0*
*ISK **22** 09:50:49.2, 38.68N×35.75E, h6km, MD2.7*
**ISC 22 09:50:48.6±1.3, 38.80N±0.03×35.77E±0.03, h2km±14km, n25, σ0§82/34, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PINB** | **Pinarbasi** | **0.51** | **104** | *i* P | **Pg** | **09 50 57.6** | **-0.7** |
| PINB | | | | *i* S | **Sg** | **09 51 06.3** | **+1.4** |
| **PINB** | **Pinarbasi** | **0.51** | **104** | P | **Pg** | **09 50 57.6** | **-0.7** |
| PINB | | | | S | **Sg** | **09 51 06.3** | **+1.4** |
| **SARI** | **SarD1z-Kayseri** | **0.64** | **128** | *e*PG | **Pg** | **09 51 01.1** | **+0.2** |
| SARI | | | | *e*SG | **Sg** | **09 51 09.8** | **+0.7** |
| **CUSAR** | **Sarkisla-SIVAS** | **0.72** | **31** | P | **Pg** | **09 51 01.0** | **-1.3** |
| CUSAR | | | | S | **Sg** | **09 51 11.8** | **+0.1** |
| **CUALT** | **Altinyayla-SIV** | **0.90** | **58** | P | **Pg** | **09 51 03.8** | **-2.1** |
| CUALT | | | | S | **Sg** | **09 51 18.1** | **+0.5** |
| **YOZ** | **Yozgat** | **0.91** | **337** | *e*PG | **Pn** | **09 51 09.1** | **+0.6** |
| **YOZ** | **Yozgat** | **0.91** | **337** | *e*Pg | **Pn** | **09 51 09.1** | **+0.6** |
| **NIG** | **Nigde** | **1.15** | **233** | *e*PG | **Pg** | **09 51 09.9** | **-0.5** |
| **NIG** | **Nigde** | **1.15** | **233** | *e*Pg | **Pg** | **09 51 10.0** | **-0.5** |
| **DARE** | **Darende-Malaty** | **1.36** | **99** | *e*PN | **Pb** | **09 51 15.4** | **+0.6** |
| **DARE** | **Darende-Malaty** | **1.36** | **99** | *e*Pn | **Pb** | **09 51 15.4** | **+0.6** |
| **CDAG** | **Cicekdag** | **1.36** | **307** | *i* P | **Pn** | **09 51 14.0** | **-0.7** |
| CDAG | | | | *i* S | **Sb** | **09 51 33.0** | **+0.2** |
| **CDAG** | **Cicekdag** | **1.36** | **307** | P | **Pn** | **09 51 14.1** | **-0.7** |
| CDAG | | | | S | **Sb** | **09 51 33.0** | **+0.2** |
| **CUKAN** | **kangal_SIVAS** | **1.42** | **68** | P | **Pn** | **09 51 15.8** | **+0.3** |
| CUKAN | | | | S | **Sg** | **09 51 34.5** | **+0.4** |
| **YAYX** | **Yaylak** | **1.54** | **276** | *e*PN | **Pg** | **09 51 18.2** | **+0.2** |
| **KMRS** | **Kahramanmaras** | **1.57** | **145** | *e*PN | **Pn** | **09 51 16.9** | **-0.6** |
| **KMRS** | **Kahramanmaras** | **1.57** | **145** | *e*Pn | **Pn** | **09 51 16.9** | **-0.6** |
| **CORM** | **Corum** | **1.64** | **328** | *e*PN | **Pg** | **09 51 19.9** | **0.0** |
| **CORM** | **Corum** | **1.64** | **328** | *e*Pn | **Pg** | **09 51 19.9** | **0.0** |
| **KARA** | **Karaisali** | **1.64** | **200** | *e*PN | **Pn** | **09 51 17.3** | **-1.1** |
| **KARA** | **Karaisali** | **1.64** | **200** | *e*Pn | **Pn** | **09 51 17.3** | **-1.1** |
| **KEMA** | **Kemaliye** | **2.17** | **77** | *i* P | **Pn** | **09 51 26.2** | **+0.4** |
| **KEMA** | **Kemaliye** | **2.17** | **77** | P | **Pn** | **09 51 26.2** | **+0.4** |
| KEMA | | | | S | **Sb** | **09 51 56.9** | **+0.9** |
| **ILIC** | **ilic-Erzincan** | **2.27** | **72** | *e*PN | **Pb** | **09 51 29.7** | **-0.6** |
| **ILIC** | **ilic-Erzincan** | **2.27** | **72** | *e*Pn | **Pb** | **09 51 29.7** | **-0.6** |

*DDA **22** 09:55:16.8, 39.50N×28.13E, h7km, Md2.6*
*ISK **22** 09:55:16.6, 39.49N×28.19E, h15km, MD2.5*
*ISCJB **22** 09:55:17.1±0.5, 39.51N±0.03×28.17E±0.06, h10km±5km, Error ellipse: s-maj=7.7km s-min=4.3km az=152.4*
*CSEM **22** 09:55:17.1±0.1, 39.50N×28.17E, h12km, MD2.5, Error ellipse: s-maj=4.5km s-min=2.9km az=59.0*
**ISC 22 09:55:16.5±1.3, 39.48N±0.03×28.14E±0.03, h9km±11km, n26, σ0§48/38, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BALB** | **Balikesir** | **0.25** | **308** | *e*PG | **Pb** | **09 55 23.1** | **-0.2** |
| BALB | | | | *e*SG | **Sb** | **09 55 27.8** | **0.0** |
| **BALB** | **Balikesir** | **0.25** | **308** | *e*Pg | **Pb** | **09 55 23.1** | **-0.2** |
| BALB | | | | *e*Sg | **Sb** | **09 55 27.8** | **0.0** |
| **DURS** | **Dursunbey** | **0.28** | **66** | *i* P | **Pg** | **09 55 22.5** | **+0.2** |
| **DURS** | **Dursunbey** | **0.28** | **66** | P | **Pg** | **09 55 22.5** | **+0.2** |
| **BALY** | **Balya** | **0.48** | **303** | *i* P | **Pg** | **09 55 25.6** | **-0.2** |
| **BALY** | **Balya** | **0.48** | **303** | P | **Pg** | **09 55 25.6** | **-0.2** |
| **DEMI** | **Demirci** | **0.63** | **134** | *i* P | **Pg** | **09 55 28.8** | **+0.1** |
| DEMI | | | | *i* S | **Sb** | **09 55 38.6** | **-0.1** |
| **DEMI**

*AUST **22** 10:32:07.8±0.5, 5°30.5S×151°25.E, h58km, Error ellipse: s-maj=1.5km s-min=0.9km az=327.0*
*ISCJB **22** 10:32:11.3±0.5, 5°31.5S±0°06×150°32.8E±0°07, h43km, mb4.3/15, MS3.8/19, Error ellipse: s-maj=10.9km s-min=7.0km az=28.3*
*NEIC **22** 10:32:14.7±2.0, 5°38.8S×150°38.3E, h60km±19km, mb4.5/2, Error ellipse: s-maj=14.8km s-min=10.3km az=72.0*
*IDC **22** 10:32:14.2±4.1, 5°37.5×150°38.8E, h56km±38km, mb4.0/13, mb1 4.2/14, mb1mx3.9/38, mbtmp4.3/14, ML2.4/1, MS3.7/21, Ms1 3.7/21, ms1mx3.7/26, Error ellipse: s-maj=24.5km s-min=15.1km az=69.0*

**ISC 22 10:32:13.0±0.6, 5°80S±0°08×150°90E±0°10, h43km, n50, σ1§01/38, mb4.3/15, MS3.7/19, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** baz=5.1,SNR=5.2 | **5.13** | **317** | P | Pn | 10 33 34.0 | +6.6 |
| **PMG** | **Port Moresby** 10nm,0.3s,baz=44,slow=5.2,SNR=36 | **5.15** | **226** | P | **Pn** | **10 33 27.8** | **+0.2** |
| PMG | 22nm,0.3s,baz=95,slow=17,SNR=5.9 | | | S | **Sn** | **10 34 24.2** | **-1.6** |
| **PMG** | **Port Moresby** baz=5.8,SNR=14 | **5.15** | **226** | P | **Pn** | **10 33 29.3** | **+1.7** |
| **PMG** | **Port Moresby** | **5.15** | **226** | *e*Pn | **Pn** | **10 33 27.9** | **+0.2** |
| PMG | | | | *e*Sn | **Sn** | **10 34 27.7** | **+1.8** |
| **HNR** | **Honiara** comp=Z,393nm,21.8s,baz=274,slow=35 | **9.67** | **112** | LR | LR | 10 37 49.1 | |
| **JAY** | **Jayapura** comp=Z,327nm,20.0s,baz=306,slow=34 | **10.68** | **287** | LR | LR | 10 38 23.2 | |
| **COEN** | **Coen** baz=12,SNR=6.0 | **11.11** | **223** | P | **Pn** | **10 34 49.4** | **+0.1** |
| **MTSU** | **Mount Surprise** baz=14,SNR=9.0 | **13.84** | **207** | P | **Pn** | **10 35 27.1** | **+0.4** |
| **CTA** | **Charters Tower** 1.0nm,0.3s,baz=17,slow=12,SNR=9.7 | **14.90** | **197** | P | **P** | **10 35 46.5** | **+0.6** |
| **CTAO** | **Charters Tower** | **14.90** | **197** | *e*Pn | **P** | **10 35 47.2** | **+1.4** |
| **QIS** | **Mount Isa** baz=19,SNR=6.3 | **18.31** | **216** | P | **Pn** | **10 36 24.4** | **+0.5** |
| **KDU** | **Kakadu** baz=20,SNR=8.3 | **19.42** | **248** | P | **P** | **10 36 34.6** | **-1.2** |
| **EIDS** | **Eidsvold** baz=20,SNR=4.2 | **19.46** | **179** | P | **Pn** | **10 36 37.2** | **-0.4** |
| **SIJI** | **Sorong** 11nm,0.5s,baz=224,slow=23,SNR=4.5 | **20.20** | **283** | P | P | 10 36 39.1 | -5.2 |
| **RMQ** | **Roma** baz=21,SNR=16 | **20.67** | **185** | P | **P** | **10 36 50.4** | **+1.1** |
| **MTN** | **Manton Dam** baz=21,SNR=6.8 | **20.71** | **249** | P | **P** | **10 36 48.6** | **-1.2** |
| **WRAB** | **Tennant Creek** 12nm,0.4s | **21.36** | **227** | *e*P | **P** | **10 36 55.9** | **-0.9** |
| **WRA** | **Warramunga Arr** 10nm,0.4s,baz=52,slow=10,SNR=214 | **21.37** | **227** | P | **P** | **10 36 55.6** | **-1.4** |
| WRA | comp=Z,129nm,19.9s,baz=65,slow=38 | | | LR | LR | 10 45 36.5 | |
| **QLP** | **Quilpie** baz=22,SNR=20 | **21.62** | **196** | P | **P** | **10 36 59.6** | **+0.1** |
| **DZM** | **Mont Dzumac** 8.9nm,0.6s,baz=148,slow=1.4,SNR=14 | **22.08** | **139** | P | **P** | **10 37 04.2** | **-0.4** |
| DZM | comp=Z,461nm,20.4s,baz=3.0,slow=34 | | | LR | LR | 10 44 33.7 | |
| **DZM** | **Mont Dzumac** | **22.08** | **139** | *e*P | **P** | **10 37 04.9** | **+0.3** |
| **KNRA** | **Kununurra** baz=24,SNR=12 | **23.83** | **244** | P | **P** | **10 37 20.8** | **-1.5** |
| **ASAR** | **Alice Springs** 3.7nm,0.4s,baz=55,slow=8.9,SNR=98 | **24.15** | **221** | P | **P** | **10 37 24.5** | **-0.7** |
| ASAR | comp=Z,113nm,18.9s,baz=58,slow=37 | | | LR | LR | 10 47 00.8 | |
| **CMSA** | **Cobar Meteorol** baz=27,SNR=11 | **26.06** | **190** | P | **P** | **10 37 43.3** | **+0.8** |
| **WRKA** | **Warakurna** baz=30,SNR=28 | **28.90** | **226** | P | **P** | **10 38 06.8** | **-1.3** |
| **MEEK** | **Meekatharra** baz=38,SNR=9.9 | **37.09** | **232** | P | **P** | **10 39 18.5** | **-1.0** |
| **RAO** | **Raoul Island** comp=Z,124nm,21.8s,baz=38,slow=29 | **37.57** | **132** | LR | LR | 10 50 19.0 | |
| **URZ** | **Urewera** 11nm,0.9s,baz=234,slow=5.0,SNR=7.5 | **40.13** | **147** | P | **P** | **10 39 44.6** | **-0.1** |
| **KLBR** | **Kellerberrin** baz=41,SNR=5.3 | **40.25** | **226** | P | **P** | **10 39 45.7** | **-0.2** |
| **RPZ** | **Rata Peaks** 4.9nm,0.8s,baz=320,slow=7.9,SNR=2.9 | **41.72** | **158** | P | **P** | **10 39 58.2** | **+0.4** |
| **JNU** | **Nakatsue** 15nm,0.8s,baz=94,slow=6.0,SNR=6.6 | **43.12** | **335** | P | **P** | **10 40 10.6** | **+1.3** |
| **MJAR** | **Matsushiro Arr** comp=Z,62nm,19.2s,baz=200,slow=35 | **43.77** | **345** | LR | LR | 10 58 05.1 | |
| **KSRS** | **Korea Array** 1.5nm,0.8s,baz=158,slow=8.1,SNR=4.9 | **48.07** | **335** | P | **P** | **10 40 49.7** | **+1.4** |
| KSRS | comp=Z,79nm,21.8s,baz=168,slow=34 | | | LR | LR | 10 59 15.2 | |
| **KSAR** | **Wonju Array Be** | **48.08** | **335** | P | **P** | **10 40 49.7** | **+1.4** |
| **CMAR** | **Chiang Mai Arr** comp=Z,23nm,19.1s,baz=130,slow=36 | **56.60** | **296** | LR | LR | 11 05 51.5 | |
| **PETK** | **Petropavlovsk-** 1.5nm,0.6s,baz=182,slow=9.4,SNR=4.5 | **58.97** | **5** | P | **P** | **10 42 08.2** | **+0.2** |
| PETK | comp=Z,70nm,21.8s,baz=184,slow=31 | | | LR | LR | 11 02 33.8 | |
| **SONM** | **Songino Array** 1.0nm,0.5s,baz=141,slow=4.9,SNR=6.8 | **66.18** | **329** | P | **P** | **10 42 56.8** | **+0.4** |
| SONM | comp=Z,75nm,22.0s,baz=96,slow=35 | | | LR | LR | 11 10 53.3 | |
| **VNDA** | **Vanda** 1.2nm,0.8s,baz=297,slow=7.0,SNR=7.3 | **71.91** | **178** | P | **P** | **10 43 30.8** | **-0.4** |
| VNDA | comp=Z,46nm,20.5s,baz=344,slow=32 | | | LR | LR | 11 10 13.5 | |
| **KDAK** | **Kodiak Island** comp=Z,68nm,21.3s,baz=277,slow=30 | **77.92** | **27** | LR | LR | 11 10 45.3 | |
| **MKAR** | **Makanchi Array** comp=Z,38nm,18.7s,baz=100,slow=36 | **79.84** | **319** | LR | LR | 11 20 21.8 | |
| **ZALV** | **Zalesovo Beam** comp=Z,31nm,18.8s,baz=70,slow=37 | **80.94** | **327** | LR | LR | 11 22 08.2 | |
| **ILAR** | **Eielson Array** 1.1nm,0.8s,baz=271,slow=4.9,SNR=8.1 | **83.80** | **22** | P | **P** | **10 44 35.6** | **-1.8** |
| ILAR | comp=Z,47nm,20.6s,baz=276,slow=33 | | | LR | LR | 11 17 47.2 | |
| **MAW** | **Mawson** comp=Z,90nm,21.7s,baz=63,slow=33 | **83.92** | **203** | LR | LR | 11 18 44.3 | |
| **QSPA** | **South Pole Qui** 4.2nm,1.0s | **84.17** | **180** | *e*P | **P** | **10 44 39.6** | **0.0** |
| **INK** | **Inuvik** 4.6nm,1.2s,baz=181,slow=1.7,SNR=3.1 | **90.06** | **21** | P | **P** | **10 45 07.1** | **-0.7** |
| **YBH** | **Yreka Blue Hor** comp=Z,118nm,21.3s,baz=68,slow=29 | **91.13** | **48** | LR | LR | 11 16 24.0 | |
| **NVAR** | **Mina Array Bea** 0.4nm,0.8s,baz=248,slow=6.4,SNR=3.1 | **94.19** | **52** | P | **P** | **10 45 28.3** | **+0.4** |
| NVAR | comp=Z,72nm,21.3s,baz=242,slow=30 | | | LR | LR | 11 19 51.8 | |
| **PFO** | **Pinyon Flat Ob** comp=Z,52nm,18.8s,baz=312,slow=32 | **95.38** | **57** | LR | LR | 11 22 37.6 | |
| **GEYT** | **Alibeck** comp=Z,24nm,18.6s,baz=40,slow=37 | **95.72** | **307** | LR | LR | 11 31 35.6 | |
| **TORD** | **Torodi Ar. Bea** 2.0nm,0.5s,baz=43,slow=3.0,SNR=37 | **148.78** | **286** | PKPbc | **PKPbc** | **10 51 56.0** | **-0.9** |

*ISCJB **22** 10:37:04.7±0.5, 22°61S±0°06×179°56W±0°09, h526km, mb3.7/10, Error ellipse: s-maj=11.5km s-min=7.4km az=179.1*
*IDC **22** 10:37:06.2±5.2, 22°58S×179°68W, h534km±59km, mb3.3/10, mb1 3.6/11, mb1mx3.4/26, mbtmp4.2/11, Error ellipse: s-maj=23.0km s-min=18.6km az=78.0*
*AUST **22** 10:37:14.4±1.7, 22°93S×179°91W, h604km, Error ellipse: s-maj=1.8km s-min=1.3km az=299.0*

**ISC 22 10:37:05.3±0.7, 22°77S±0°09×179°5W±0°1, h526km, n40, σ1§76/42, mb3.7/10, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WMGZ** | **Waiomatatini S** | **15.11** | **186** | PN | **P** | **10 40 18.4** | **+2.3** |
| **HAZ** | **Te Kaha** | **15.12** | **188** | *e*PN | **P** | **10 40 19.1** | **+2.9** |
| HAZ | | | | SN | **S** | **10 42 51.4** | **-2.2** |
| **URZ** | **Urewera** 2.5nm,0.3s,baz=314,slow=3.7,SNR=18 | **15.71** | **190** | P | **P** | **10 40 23.1** | **+0.8** |
| URZ | 1.4nm,0.3s,baz=142,slow=22,SNR=11 | | | S | **S** | **10 43 00.4** | **-3.8** |
| **URZ** | **Urewera** | **15.71** | **190** | *e*PN | **P** | **10 40 22.7** | **+0.3** |
| URZ | | | | *e*SN | **S** | **10 42 59.2** | **-5.1** |
| **MWZ** | **Matawai** | **15.72** | **189** | PN | **P** | **10 40 23.9** | **+1.4** |
| MWZ | | | | SN | **S** | **10 43 03.0** | **-1.6** |
| **BKZ** | **Black Stump Fm** | **16.70** | **191** | PN | **P** | **10 40 32.1** | **-0.1** |
| **NNZ** | **Nelson** | **19.35** | **196** | PN | **P** | **10 40 57.6** | **+1.1** |
| **TUWZ** | **Tuamarina** | **19.41** | **195** | *e*PN | **P** | **10 40 59.4** | **+2.4** |
| **THZ** | **Tophouse** | **19.98** | **197** | PN | **P** | **10 41 03.8** | **+1.5** |
| **LTZ** | **Lake Taylor** | **21.10** | **197** | PN | **P** | **10 41 12.5** | **+0.1** |
| **JCZ** | **Jackson Bay** | **23.35** | **202** | PN | **P** | **10 41 33.8** | **+1.1** |
| **ARMA** | **Armidale** baz=26,SNR=9.2 | **26.87** | **247** | P | **P** | **10 42 06.3** | **+2.3** |
| **EIDS** | **Eidsvold** baz=26,SNR=5.2 | **26.97** | **259** | P | **P** | **10 42 05.9** | **+1.1** |
| **MGCD** | **Mangrove Creek** baz=27,SNR=7.1 | **27.88** | **242** | P | **P** | **10 42 15.2** | **+2.5** |
| **RMQ** | **Roma** baz=29,SNR=5.3 | **29.06** | **256** | P | **P** | **10 42 25.6** | **+2.6** |
| **CNB** | **Canberra Magne** baz=29,SNR=17 | **29.83** | **238** | P | **P** | **10 42 31.9** | **+2.2** |
| **MILA** | **Mila** baz=30,SNR=6.2 | **30.52** | **235** | P | **P** | **10 42 37.6** | **+1.9** |
| **CMSA** | **Cobar Meteorol** baz=32,SNR=8.8 | **32.08** | **247** | P | **P** | **10 42 50.1** | **+1.1** |
| **QLP** | **Quilpie** baz=33,SNR=8.7 | **33.11** | **256** | P | **P** | **10 42 58.4** | **+0.6** |
| **TOO** | **Toolangi** baz=33,SNR=32 | **33.46** | **236** | P | **P** | **10 43 02.2** | **+1.5** |
| **ARPS** | **Mount Arapiles** baz=36,SNR=4.8 | **36.10** | **238** | P | **P** | **10 43 23.6** | **+0.9** |
| **PATS** | **Pohnpei** baz=37,SNR=3.4 | **36.57** | **321** | P | P | 10 43 31.2 | +4.4 |
| **HTT** | **Hallett** baz=38,SNR=5.6 | **37.97** | **244** | P | P | 10 43 33.5 | -4.6 |
| **BBOO** | **Buckleboo** baz=40,SNR=20 | **40.32** | **246** | P | **P** | **10 43 57.0** | **-0.1** |
| **ASAR** | **Alice Springs** 5.8nm,0.7s,baz=94,slow=6.9,SNR=60 | **42.69** | **259** | P | **P** | **10 44 15.3** | **-0.7** |
| **WRA** | **Warramunga Arr** 2.1nm,0.3s,baz=97,slow=8.1,SNR=134 | **42.96** | **265** | P | **P** | **10 44 16.7** | **-1.5** |
| **KDU** | **Kakadu** baz=46,SNR=3.4 | **46.66** | **274** | P | **P** | **10 44 45.7** | **-1.0** |
| **WRKA** | **Warakurna** baz=47,SNR=81 | **47.55** | **256** | P | **P** | **10 44 52.6** | **-0.7** |
| **KNRA** | **Kununurra** baz=49,SNR=7.6 | **49.17** | **269** | P | **P** | **10 45 04.7** | **-0.6** |
| **VNDA** | **Vanda** 2.9nm,0.7s,baz=360,slow=8.5,SNR=19 | **55.54** | **185** | P | **P** | **10 45 52.3** | **+2.2** |
| **MEEK** | **Meekatharra** baz=55,SNR=3.8 | **55.89** | **252** | P | **P** | **10 45 52.3** | **-1.1** |
| **PETK** | **Petropavlovsk-** 2.2nm,0.6s,baz=144,slow=10.0,SNR=3.4 | **78.12** | **346** | P | **P** | **10 48 08.1** | **-1.4** |
| **MAW** | **Mawson** 2.1nm,0.6s,baz=145,slow=7.5,SNR=13 | **78.97** | **200** | P | **P** | **10 48 13.8** | **-0.2** |
| **MAW** | **Mawson** baz=78,SNR=12 | **78.97** | **200** | P | **P** | **10 48 14.4** | **+0.4** |
| **YBH** | **Yreka Blue Hor** 1.5nm,0.8s,baz=253,slow=2.0,SNR=3.9 | **82.92** | **39** | P | **P** | **10 48 34.7** | **-0.2** |
| **NVAR** | **Mina Array Bea** 1.2nm,1.0s,baz=232,slow=7.7,SNR=6.7 | **83.62** | **44** | P | **P** | **10 48 38.5** | **-0.2** |
| **TXAR** | **Lajitas Array** 0.6nm,0.9s,baz=240,slow=4.2,SNR=4.7 | **89.44** | **58** | P | **P** | **10 49 06.8** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** 0.9nm,0.6s,baz=125,slow=3.7,SNR=5.0 | **89.57** | **290** | P | **P** | **10 49 07.2** | **0.0** |
| **ILAR** | **Eielson Array** 0.2nm,0.5s,baz=245,slow=5.5,SNR=5.5 | **90.83** | **13** | P | **P** | **10 49 11.4** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** 0.8nm,0.7s,baz=177,slow=3.8,SNR=6.0 | **170.36** | **187** | PKPab | **PKPab** | **10 57 33.2** | **-0.3** |

*ISCJB **22** 10:41:19.9±0.8, 51°73N±0°07×75°50E±0°09, h10km, Error ellipse: s-maj=11.0km s-min=6.7km az=32.5*
*NNC **22** 10:41:21.1±0.6, 51°59N×75°37E, h0km, mb3.5, mpv3.1, Error ellipse: s-maj=30.8km s-min=4.0km az=27.0*
*IDC **22** 10:41:23.0±0.9, 51°70N×75°52E, h0km, mb1 2.9/4, mb1mx2.9/41, mbtmp2.9/4, ML2.7/4, Error ellipse: s-maj=24.1km s-min=7.9km az=30.0*

**ISC 22 10:41:23.2±1.0, 51°73N±0°09×75°51E±0°06, h10km, n14, σ1§16/16, 9C-8D, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KURBB** | **Kurchatov Arra** 7.0nm,0.3s | **2.21** | **119** | ↑Pg | **Pb** | **10 42 02.3** | **-0.8** |
| KURBB | 72nm,0.6s | | | ↑Lg | Lg | 10 42 31.2 | |
| **KURBB** | **Kurchatov Arra** 1.0nm,0.3s,baz=305,slow=18,SNR=53 | **2.21** | **119** | Pn | **Pn** | **10 42 00.3** | **+0.5** |
| KURBB | 1.7nm,0.3s,baz=304,slow=31,SNR=19 | | | Lg | Lg | 10 42 30.4 | |
| **KURK** | **Kurchatov** 8.7nm,0.5s | **2.21** | **116** | ↑Pg | **Pn** | **10 42 00.8** | **+0.9** |
| KURK | 59nm,0.6s | | | ↓Lg | Lg | 10 42 30.9 | |
| **VOSK** | **Vostochnaya** 4.5nm,0.5s | **2.95** | **291** | ↓Pg | **Pb** | **10 42 15.4** | **-0.5** |
| VOSK | 36nm,0.8s | | | ↑Lg | Lg | 10 42 53.1 | |
| **BVA0** | **Borovoye Array** 3.3nm,0.6s,baz=111,slow=19,SNR=17 | **3.39** | **294** | ↓Pg | **Pb** | **10 42 20.9** | **-2.5** |
| BVA0 | 13nm,0.6s,baz=116,slow=28,SNR=9.6 | | | ↓Lg | Lg | 10 43 07.7 | |
| **BVAR** | **Borovoye Array** 1.3nm,0.3s,baz=108,slow=16,SNR=12 | **3.39** | **294** | Pn | **Pn** | **10 42 17.6** | **+1.5** |
| BVAR | 1.6nm,0.3s,baz=121,slow=23,SNR=4.9 | | | Sn | **Sn** | **10 42 56.5** | **+0.1** |
| BVAR | 4.1nm,0.3s,baz=117,slow=27,SNR=8.8 | | | Lg | Lg | 10 43 07.0 | |
| **BRVK** | **Borovoye** 6.2nm,0.6s | **3.46** | **295** | ↑Pg | **Pb** | **10 42 22.8** | **-1.8** |
| BRVK | 38nm,0.7s | | | ↑Lg | Lg | 10 43 08.9 | |
| **CHKZ** | **Chkalovo** 2.2nm,0.5s | **3.56** | **305** | ↓Pg | **Pn** | **10 42 19.5** | **+1.2** |
| CHKZ | 17nm,0.7s | | | ↑Lg | Lg | 10 43 14.6 | |
| **ZRNK** | **Zerenda** 3.8nm,0.8s | **4.17** | **290** | ↑Pg | **Pb** | **10 42 37.1** | **+0.5** |
| ZRNK | 41nm,1.1s | | | ↓Lg | Lg | 10 43 33.1 | |
| **I46RU** | **ZALESOVO INFRA** baz=249,slow=324,SNR=1.5 | **6.07** | **65** | *i* | | 11 19 00.0 | |
| **ZALV** | **Zalesovo Beam** 0.7nm,0.3s,baz=257,slow=14,SNR=7.4 | **6.07** | **65** | Pn | **Pn** | **10 42 54.1** | **+1.3** |
| ZALV | 0.3nm,0.3s,baz=252,slow=27,SNR=3.9 | | | Sn | **Sn** | **10 44 01.5** | **-0.7** |
| ZALV | 0.4nm,0.3s,baz=256,slow=27,SNR=2.9 | | | Lg | Lg | 10 44 37.5 | |
| **MK31** | **Makanchi Array** 0.4nm,0.4s,baz=311,slow=12,SNR=3.8 | **6.64** | **135** | ↑Pn | **Pn** | **10 43 01.2** | **+0.4** |
| MK31 | 1.8nm,0.5s | | | ↓Sn | **Sn** | **10 44 16.5** | **0.0** |
| MK31 | 5.3nm,0.6s,baz=322,slow=27,SNR=8.1 | | | ↓Lg | Lg | 10 44 49.9 | |
| **MKAR** | **Makanchi Array** 0.2nm,0.3s,baz=313,slow=12,SNR=4.4 | **6.64** | **135** | Pn | **Pn** | **10 43 01.1** | **+0.3** |
| MKAR | 0.5nm,0.3s,baz=326,slow=25,SNR=5.2 | | | Sn | **Sn** | **10 44 16.4** | **-0.2** |
| MKAR | 0.7nm,0.3s,baz=318,slow=26,SNR=11 | | | Lg | Lg | 10 44 50.9 | |
| **AAK** | **Ala-Archa** 0.2nm,0.3s,baz=49,slow=19,SNR=5.1 | **9.13** | **185** | Lg | Lg | 10 46 10.2 | |

*CSEM **22** 10:46:24.0, 63°53N×22°51E, h0km, ML1.4, Mining explosion. After HEL*

**HEL 22 10:46:24.0±0.1, 63°53N×22°51E, h0km, ML1.4, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VAF** | **Ylistaro** | **0.50** | **171** | PG | Pg | 10 46 32.7 | -0.8 |
| VAF | | | | SG | Sg | 10 46 39.5 | -0.4 |
| **VAF** | **Ylistaro** | **0.50** | **171** | Pg | Pg | 10 46 32.7 | -0.8 |
| VAF | | | | Sg | Sg | 10 46 39.5 | -0.5 |
| **UMAU** | **Umeaa** | **0.89** | **294** | PB | Pg | 10 46 40.4 | -0.6 |
| UMAU | | | | SB | Sg | 10 46 52.7 | +0.3 |
| **UMAU** | **Umeaa** | **0.89** | **294** | Pb | Pg | 10 46 40.4 | -0.6 |
| UMAU | | | | Sb | Sg | 10 46 52.7 | +0.3 |
| **KEF** | **Keuruu** | **1.75** | **141** | PG | Pn | 10 46 53.9 | -1.7 |
| KEF | comp=Z,1.5nm,0.2s | | | MSG | | 10 47 16.1 | |
| KEF | | | | SN | Sn | 10 47 18.4 | -0.1 |
| **KEF** | **Keuruu** | **1.75** | **141** | Pg | Pn | 10 46 53.8 | -1.8 |
| KEF | | | | Sn | Sn | 10 47 18.4 | -0.1 |
| **SUF** | **Sumiainen** baz=295 | **1.85** | **115** | PG | Pn | 10 46 57.2 | +0.3 |
| SUF | comp=Z,2.1nm,0.2s | | | MSG | | 10 47 18.9 | |
| SUF | | | | SG | Sn | 10 47 20.7 | -0.2 |
| **SUF** | **Sumiainen** | **1.85** | **115** | Pg | Pn | 10 46 57.2 | +0.3 |
| SUF | | | | Sg | Sn | 10 47 20.7 | -0.2 |
| **OUL** | **Oulu** | **2.15** | **42** | SG | Sb | 10 47 29.7 | -1.1 |
| **OUL** | **Oulu** | **2.15** | **42** | Sg | Sb | 10 47 29.7 | -1.1 |
| **KAF** | **Kangasniemi** | **2.25** | **128** | PG | Pn | 10 47 03.7 | +1.3 |
| KAF | comp=Z,1.9nm,0.2s | | | MSG | | 10 47 30.9 | |
| KAF | | | | SG | Sb | 10 47 32.9 | -1.0 |
| **KAF** | **Kangasniemi** | **2.25** | **128** | Pg | Pn | 10 47 03.7 | +1.2 |
| KAF | | | | Sg | Sb | 10 47 32.9 | -1.0 |
| **FIA0** | **FINESS Array S** baz=327 | **2.67** | **140** | PB | Pn | 10 47 09.7 | +1.5 |
| FIA0 | | | | SB | Sb | 10 47 44.2 | -1.8 |
| **FIA0** | **FINESS Array S** | **2.67** | **140** | Pb | Pn | 10 47 09.7 | +1.5 |
| FIA0 | | | | Sb | Sb | 10 47 44.2 | -1.8 |
| **ERTU** | **Ertsjaerv** | **3.04** | **358** | PN | Pn | 10 47 13.4 | +0.2 |
| **ERTU** | **Ertsjaerv** | **3.04** | **358** | Pn | Pn | 10 47 13.4 | +0.2 |
| **MSF** | **Maaselka** | **3.68** | **47** | SG | Sb | 10 48 14.7 | -0.3 |
| **MSF** | **Maaselka** | **3.68** | **47** | Sg | Sb | 10 48 14.7 | -0.3 |

*CSEM **22** 10:47:15.1, 63°98N×28°04E, h0km, ML1.3, Mining explosion. After HEL*

**HEL 22 10:47:15.1±0.1, 63°98N×28°04E, h0km, ML1.3, Explosion, Finland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KJN** | **Kajaani** | **0.18** | **308** | *e*P | Pg | 10 47 18.1 | -0.4 |
| KJN | | | | *e*S | Sg | 10 47 21.0 | +0.1 |
| **KJN** | **Kajaani** | **0.18** | **308** | P | Pg | 10 47 18.1 | -0.5 |
| KJN | | | | S | Sg | 10 47 21.0 | +0.1 |
| **OUL** | **Oulu** | **1.45** | **321** | *e*P | Pn | 10 47 41.3 | -1.2 |
| **OUL** | **Oulu** | **1.45** | **321** | P | Pn | 10 47 41.3 | -1.2 |
| **JOF** | **Joensuu** | **1.81** | **124** | SN | Sn | 10 48 10.8 | -0.4 |
| **JOF** | **Joensuu** | **1.81** | **124** | *e*P | Pn | 10 47 47.1 | -0.4 |
| JOF | | | | *e*S | Sn | 10 48 10.5 | -0.7 |
| **JOF** | **Joensuu** | **1.81** | **124** | P | Pn | 10 47 47.1 | -0.4 |
| JOF | | | | S | Sn | 10 48 10.5 | -0.7 |
| **JOF** | **Joensuu** | **1.81** | **124** | Sn | Sn | 10 48 10.8 | -0.4 |
| **MSF** | **Maaselka** | **1.99** | **12** | *e*S | Sn | 10 48 15.3 | -0.3 |
| **MSF** | **Maaselka** | **1.99** | **12** | S | Sn | 10 48 15.3 | -0.3 |
| **KU6** | **Riekki** | **2.21** | **20** | SB | Sn | 10 48 20.9 | 0.0 |
| **KU6** | **Riekki** | **2.21** | **20** | *e*P | Pn | 10 47 52.7 | -0.2 |
| KU6 | | | | *e*S | Sn | 10 48 21.0 | +0.1 |
| KU6 | comp=Z,1.2nm,0.1s | | | MSG | | 10 48 26.4 | |
| **KU6** | **Riekki** | **2.21** | **20** | P | Pn | 10 47 52.7 | -0.2 |
| KU6 | | | | S | Sn | 10 48 20.9 | 0.0 |
| **KU6** | **Riekki** | **2.21** | **20** | Sb | Sn | 10 48 20.9 | 0.0 |
| **RNF** | **Rovaniemi** | **2.78** | **343** | *e*S | Sn | 10 48 33.7 | -1.2 |
| **RNF** | **Rovaniemi** | **2.78** | **343** | S | Sn | 10 48 33.7 | -1.3 |

**GUC 22 10:51:36.3±0.5, 20°55S×69°64W, h81km±5km, ML3.8, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB01** | **IPOC Station P** | **0.51** | **164** | *e*P | Pn | 10 51 50.5 | 0.0 |
| PB01 | | | | *e*S | Sn | 10 52 01.5 | +0.6 |
| PB01 | comp=E,8μm,1.6s | | | AML | AML | 10 52 02.9 | |
| **PB07** | **IPOC Station P** | **1.20** | **191** | *e*P | Pn | 10 51 58.6 | +0.5 |
| PB07 | | | | *e*S | Sn | 10 52 15.6 | +1.2 |
| PB07 | comp=E,998nm,0.3s | | | AML | AML | 10 52 18.9 | |
| **MNMC** | **Minimini** | **1.41** | **2** | *e*P | Pn | 10 52 01.1 | +0.2 |
| MNMC | | | | *e*S | Sn | 10 52 20.7 | +1.2 |
| MNMC | comp=N,3μm,0.2s | | | AML | AML | 10 52 25.8 | |
| **ARCH** | **Arica** | **2.14** | **343** | *e*S | Sn | 10 52 37.0 | +1.1 |
| **PB06** | **IPOC Station P** comp=E,417nm,0.9s | **2.15** | **178** | AML | AML | 10 52 41.1 | |
| **PB13** | **IPOC Station P** | **2.20** | **3** | *e*P | Pn | 10 52 13.3 | +1.5 |
| PB13 | | | | *e*S | Sn | 10 52 41.4 | +2.5 |
| PB13 | comp=N,3μm,0.6s | | | AML | AML | 10 52 44.5 | |

*AUST **22** 11:02:29.3±0.0, 5°25S×146°21E, h117km, Error ellipse: s-maj=1.0km s-min=0.8km az=232.0*
*ISCJB **22** 11:02:30.4±0.4, 5°22S±0°04×146°21E±0°06, h150km, mb4.0/12, Error ellipse: s-maj=8.3km s-min=6.2km az=0.4*
*NEIC **22** 11:02:30.6±0.9, 5°19S×146°31E, h141km±9km, mb4.7/3, Error ellipse: s-maj=10.2km s-min=8.5km az=53.0*
*IDC **22** 11:02:31.2±1.6, 5°22S×146°27E, h148km±15km, mb3.8/11, mb1 4.0/16, mb1mx3.8/33, mbtmp4.4/16, Error ellipse: s-maj=14.7km s-min=9.8km az=103.0*

**ISC 22 11:02:31.7±0.5, 5°26S±0°06×146°29E±0°07, h150km, n49, σ1§28/48, mb4.0/12, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** baz=3.4,SNR=5.6 | **3.37** | **19** | P | **Pn** | **11 03 25.5** | **+1.8** |
| **PMG** | **Port Moresby** 5.8nm,0.3s,baz=9.5,slow=3.3,SNR=17 | **4.21** | **168** | P | **Pn** | **11 03 32.9** | **-1.9** |
| PMG | 28nm,0.3s,baz=158,slow=20,SNR=40 | | | S | **Sn** | **11 04 20.9** | **-2.9** |
| **PMG** | **Port Moresby** baz=4.3,SNR=12 | **4.21** | **168** | P | **Pn** | **11 03 33.2** | **-1.5** |
| **RABL** | **Rabaul** baz=6.0,SNR=5.0 | **5.94** | **80** | P | Pn | 11 04 01.8 | +4.1 |
| **JAY** | **Jayapura** 20nm,0.3s,baz=141,slow=5.8,SNR=79 | **6.21** | **296** | P | **Pn** | **11 03 59.8** | **-1.4** |
| **JAY** | **Jayapura** baz=6.1,SNR=4.9 | **6.21** | **296** | P | **Pn** | **11 04 00.9** | **-0.3** |
| **COEN** | **Coen** baz=9.2,SNR=14 | **9.18** | **199** | P | **Pn** | **11 04 41.8** | **+1.0** |
| **COEN** | **Coen** 17nm,0.9s | **9.18** | **199** | *e*Pn | **Pn** | **11 04 42.0** | **+1.1** |
| COEN | | | | *e*Sn | **Sn** | **11 06 22.2** | **-0.5** |
| **MTSU** | **Mount Surprise** baz=13,SNR=38 | **12.95** | **188** | P | P | 11 05 38.5 | +3.3 |
| **HNR** | **Honiara** 3.8nm,0.3s,baz=214,slow=2.9,SNR=4.2 | **14.16** | **108** | P | **Pn** | **11 05 46.6** | **+0.9** |
| **HNR** | **Honiara** | **14.16** | **108** | *e*Pn | **Pn** | **11 05 45.1** | **-0.6** |
| **FAKI** | **Fak Fak** baz=14,SNR=7.5 | **14.20** | **279** | P | **Pn** | **11 05 44.5** | **-1.8** |
| **CTA** | **Charters Tower** 0.5nm,0.3s,baz=0.2,slow=13,SNR=7.7 | **14.74** | **180** | P | **P** | **11 05 57.0** | **+1.8** |
| **KDU** | **Kakadu** baz=16,SNR=19 | **15.51** | **241** | P | **Pn** | **11 06 01.6** | **-0.9** |
| **SIJI** | **Sorong** 3.0nm,0.3s,baz=55,slow=8.3,SNR=7.4 | **15.62** | **286** | P | **Pn** | **11 06 02.6** | **-1.3** |
| **SWI** | **Sorong** baz=16,SNR=4.2 | **15.63** | **286** | P | **P** | **11 06 07.7** | **+2.7** |
| **QIS** | **Mount Isa** baz=17,SNR=11 | **16.54** | **203** | P | **Pn** | **11 06 15.0** | **-0.1** |
| **WRAB** | **Tennant Creek** 38nm,0.7s | **18.65** | **217** | *e*P | **P** | **11 06 38.4** | **+0.2** |
| **WRA** | **Warramunga Arr** 6.7nm,0.3s,baz=39,slow=10,SNR=218 | **18.67** | **218** | P | **P** | **11 06 38.5** | **+0.2** |
| WRA | baz=42,slow=21,SNR=2.3 | | | S | **S** | **11 10 04.1** | **+0.8** |
| **KNRA** | **Kununurra** baz=20,SNR=47 | **20.09** | **238** | P | **P** | **11 06 52.9** | **-0.8** |
| **EIDS** | **Eidsvold** baz=21,SNR=4.6 | **20.52** | **168** | P | Pn | 11 07 00.5 | -1.7 |
| **RMQ** | **Roma** baz=21,SNR=4.9 | **21.24** | **174** | P | **P** | **11 07 10.0** | **+4.0** |
| **QLP** | **Quilpie** baz=21,SNR=32 | **21.30** | **185** | P | **P** | **11 07 07.9** | **+1.3** |
| **ASAR** | **Alice Springs** 22nm,0.6s,baz=44,slow=7.7,SNR=502 | **21.86** | **212** | P | **P** | **11 07 13.1** | **+0.5** |
| 

baz=38,SNR=14
KSRS **Korea Array** 45.81 340 P P 11 10 38.9 +0.4
0.7nm,0.5s,baz=153,slow=9.3,SNR=3.9
KSAR **Wonju Array Be** 45.81 339 P P 11 10 38.9 +0.4
USRK **Ussuriysk Ar.** 50.89 347 P P 11 11 17.2 0.0
1.4nm,0.5s,baz=155,slow=5.9,SNR=4.8
CMAR **Chiang Mai Arr** 52.28 298 P P 11 11 27.3 -0.8
0.8nm,0.6s,baz=125,slow=5.3,SNR=5.1
PETK **Petropavlovsk-** 58.94 8 P P 11 12 15.1 +0.1
1.3nm,0.6s,baz=160,slow=6.0,SNR=4.6
VNDA **Vanda** 72.69 176 P P 11 13 42.9 +0.2
1.6nm,0.6s,baz=339,slow=7.1,SNR=21
MKAR **Makanchi Array** 76.48 321 P P 11 14 03.0 -2.1
0.2nm,0.4s,baz=100,slow=3.2,SNR=2.4
MAW **Mawson** 82.66 203 P P 11 14 37.7 -0.2
0.9nm,0.4s,baz=78,slow=5.9,SNR=16
MAW **Mawson** 82.66 203 P P 11 14 38.4 +0.4
baz=83,SNR=12
QSPA **South Pole Qui** 84.71 180 *eP* P 11 14 48.6 0.0
2.4nm,0.6s
ILAR **Eielson Array** 85.08 23 P P 11 14 49.5 -0.8
2.0nm,0.6s,baz=253,slow=5.1,SNR=31
JCT **Junction City** 113.22 59 *e*PKPdf PKiKP 11 20 52.7 +0.5
TORD **Torodi Ar. Bea** 144.22 285 PKP PKPab 11 21 47.5 -1.5
0.8nm,0.7s,baz=76,slow=2.8,SNR=5.8

*ISK **22** 11:16:43.9,40.°19N×36.°46E,h5km,MD2.6*
*CSEM **22** 11:16:44.8±0.2,40.°22N×36.°45E,h5km,MD2.6,Error ellipse: s-maj=5.4km s-min=3.9km az=5.0*
*ISCJB **22** 11:16:45.0±0.6,40.°23N±0.°06×36.°49E±0.°07,h9km±9km, Error ellipse: s-maj=12.1km s-min=6.0km az=33.9*
*DDA **22** 11:16:45.2,40.°23N×36.°53E,h6km,Md2.3*
**ISC 22 11:16:44.8±0.9,40.°21N±0.°05×36.°46E±0.°03,h9km±10km, n16,σ0s65/24,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TOKA** | **Tokat** | **0.11** | **6** | *i* P | | **Pg** | **11 16 47.5** | **-0.1** |
| TOKA | | | | *i* S | | **Sg** | **11 16 49.8** | **+0.3** |
| **TOKA** | **Tokat** | **0.11** | **6** | P | | **Pg** | **11 16 47.5** | **-0.1** |
| TOKA | | | | S | | **Sg** | **11 16 49.8** | **+0.3** |
| **TOKT** | **Tokat** | **0.12** | **30** | *e*PG | | **Pg** | **11 16 47.3** | **-0.5** |
| **TOKT** | **Tokat** | **0.12** | **30** | *e*Pg | | **Pg** | **11 16 47.3** | **-0.5** |
| **SVSK** | **Karacayir** | **0.51** | **126** | *e*PG | | **Pg** | **11 16 54.5** | **-0.2** |
| SVSK | | | | *e*SG | | **Sg** | **11 17 02.2** | **+1.0** |
| **SVSK** | **Karacayir** | **0.51** | **126** | *e*Pg | | **Pg** | **11 16 54.5** | **-0.2** |
| SVSK | | | | *e*Sg | | **Sg** | **11 17 02.3** | **+1.0** |
| **SCER** | **sogukcermik** | **0.62** | **124** | *i* P | | **Pg** | **11 16 56.5** | **-0.3** |
| SCER | | | | *i* S | | **Sb** | **11 17 06.8** | **+0.1** |
| **SCER** | **sogukcermik** | **0.62** | **124** | P | | **Pg** | **11 16 56.5** | **-0.3** |
| SCER | | | | S | | **Sb** | **11 17 06.8** | **+0.1** |
| **RSDY** | **Resadiye-TOKAT** | **0.69** | **74** | *e*PG | | **Pg** | **11 16 58.5** | **+0.4** |
| **RSDY** | **Resadiye-TOKAT** | **0.69** | **74** | *e*Pg | | **Pg** | **11 16 58.5** | **+0.4** |
| **CUSAR** | **Sarkisla-SIVAS** | **0.81** | **192** | P | | **Pn** | **11 17 02.2** | **-0.3** |
| CUSAR | | | | S | | **Sb** | **11 17 13.1** | **+0.8** |
| **YOZ** | **Yozgat** | **1.05** | **237** | *e*PG | | **Pg** | **11 17 04.9** | **-0.1** |
| **YOZ** | **Yozgat** | **1.05** | **237** | *e*Pg | | **Pg** | **11 17 04.9** | **-0.1** |
| **CUKAN** | **kangal_SIVAS** | **1.18** | **139** | P | | **Pb** | **11 17 07.5** | **0.0** |
| CUKAN | | | | S | | **Sb** | **11 17 20.9** | **-2.1** |
| **CORM** | **Corum** | **1.41** | **269** | *e*PN | | **Pb** | **11 17 11.5** | **+0.2** |
| **CORM** | **Corum** | **1.41** | **269** | *e*Pn | | **Pb** | **11 17 11.5** | **+0.2** |

**DJA 22 11:21:04.8±0.7,8.°S±11.°×10.°9E±.°,h43km±12km,M3.9/18, mb4.0/1,MLv3.8/18,Jawa**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMJI** | **Cimerak** | **0.59** | **334** | P | | Pn | 11 21 18.1 | +1.2 |
| CMJI | | | | S | | Sn | 11 21 27.3 | +1.8 |
| **CISI** | **Cisompet, Garu** | **1.17** | **311** | P | | Pn | 11 21 25.5 | +0.7 |
| CISI | | | | S | | Sn | 11 21 41.1 | +1.5 |
| **LEM** | **Lembang** | **1.84** | **324** | P | | Pn | 11 21 24.4 | -1.0 |
| **UGM** | **Wanagama** | **1.84** | **77** | P | | Pn | 11 21 33.4 | -0.6 |
| **CNJI** | **Cibinong** | **1.86** | **303** | P | | Pn | 11 21 34.1 | -0.1 |
| **SMRI** | **Semarang** | **2.13** | **54** | P | | Pn | 11 21 38.0 | +0.1 |
| **WOJI** | **Wonogiri, Jawa** | **2.24** | **78** | P | | Pn | 11 21 38.9 | -0.6 |
| **PCJI** | **Pacitan** | **2.44** | **87** | P | | Pn | 11 21 42.0 | -0.2 |
| **SKJI** | **Sukabumi** | **2.50** | **301** | P | | Pn | 11 21 42.8 | -0.2 |
| **PWJI** | **Pagerwojo** | **3.08** | **85** | P | | Pn | 11 21 51.2 | +0.3 |
| **SBJI** | **Serang** | **3.37** | **310** | P | | Pn | 11 21 55.5 | +0.6 |
| **CGJI** | **Cibinong** | **3.44** | **299** | P | | Pn | 11 21 55.3 | -0.6 |
| **TBJI** | **Tambak Boyo** | **3.45** | **65** | P | | Pn | 11 21 55.9 | -0.2 |
| **BWJI** | **Bawean** | **4.62** | **58** | P | | Pn | 11 22 10.3 | -1.9 |
| **KASI** | **Kota Agung** | **5.02** | **303** | P | | Pn | 11 22 15.8 | -1.9 |

**JMA 22 11:28:24.9,26.°63N×130.°13E,h46km,M3.7,Southeast of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JMZ** | **Minamidaito 2** | **1.27** | **129** | P | | Pn | 11 28 46.6 | +0.4 |
| JMZ | | | | S | | Sn | 11 29 02.4 | +0.3 |
| **JTK** | **Tokunoshima** | **1.56** | **318** | P | | Pn | 11 28 51.1 | +0.9 |
| JTK | | | | S | | Sn | 11 29 09.2 | 0.0 |
| **JOKE** | **Okinoerabujima** | **1.57** | **298** | P | | Pn | 11 28 51.4 | +1.0 |
| JOKE | | | | S | | Sn | 11 29 09.7 | +0.2 |
| **JOW** | **Kunigami** | **1.67** | **277** | P | | Pn | 11 28 52.7 | +1.0 |
| JOW | | | | S | | Sn | 11 29 11.7 | -0.3 |
| **JAMN** | **Amaminishikomi** | **1.82** | **332** | P | | Pn | 11 28 54.4 | +0.7 |
| JAMN | | | | S | | Sn | 11 29 15.2 | -0.3 |
| **JAM** | **Amami Oshima** | **1.83** | **345** | P | | Pn | 11 28 55.0 | +1.1 |
| JAM | | | | S | | Sn | 11 29 15.5 | -0.5 |
| **JNTH** | **Nagotoyohara** | **1.89** | **267** | P | | Pn | 11 28 55.5 | +0.8 |
| JNTH | | | | S | | Sn | 11 29 16.7 | -0.7 |
| **JIH** | **Iheya** | **1.97** | **282** | P | | Pn | 11 28 57.1 | +1.2 |
| JIH | | | | S | | Sn | 11 29 20.0 | +0.6 |
| **JJT2** | **Tamagusuku 2** | **2.19** | **258** | P | | Pn | 11 29 00.1 | +1.2 |
| JJT2 | | | | S | | Sn | 11 29 25.6 | +0.8 |
| **JAGN** | **Aguni-jima** | **2.59** | **270** | P | | Pn | 11 29 04.5 | +0.3 |
| JAGN | | | | S | | Sn | 11 29 34.2 | -0.2 |
| **JKE** | **Kume jima 2** | **3.01** | **265** | P | | Pn | 11 29 10.6 | +0.5 |
| JKE | | | | S | | Sn | 11 29 43.7 | -1.3 |

*CSEM **22** 11:42:45.6,37.°58N×20.°77E,h7km,MD3.2,After ATH*
**ATH 22 11:42:45.7,37.°60N×20.°77E,h7km±4km,MD3.2/14, Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RLS** | **Riolos of Patr** | **0.72** | **50** | *e*PB | | Pg | 11 42 59.5 | 0.0 |
| RLS | | | | *e*SB | | Sg | 11 43 08.8 | 0.0 |
| **RLS** | **Riolos of Patr** | **0.72** | **50** | *e*Pb | | Pg | 11 42 59.5 | 0.0 |
| RLS | | | | *e*Sb | | Sg | 11 43 08.8 | 0.0 |
| **DRO** | **Drossia** | **0.82** | **64** | *e*PG | | Pg | 11 43 01.3 | -0.3 |
| DRO | | | | *e*SB | | Sg | 11 43 12.9 | +0.5 |
| **DRO** | **Drossia** | **0.82** | **64** | *e*Pb | | Pg | 11 43 01.3 | -0.3 |
| DRO | | | | *e*Sb | | Sg | 11 43 12.9 | +0.5 |
| **ITM** | **Ithomi** | **1.01** | **114** | *e*PN | | Pg | 11 43 05.1 | -0.1 |
| ITM | | | | *e*SB | | Sg | 11 43 18.5 | +0.1 |
| **ITM** | **Ithomi** | **1.01** | **114** | *e*Pn | | Pg | 11 43 05.1 | -0.1 |
| ITM | | | | *e*Sb | | Sg | 11 43 18.5 | +0.1 |
| **PDO** | **Prodromos** | **1.05** | **18** | *e*PN | | Pg | 11 43 05.8 | -0.1 |
| PDO | | | | *e*SB | | Sb | 11 43 20.9 | +0.7 |
| **PDO** | **Prodromos** | **1.05** | **18** | *e*Pb | | Pg | 11 43 05.8 | -0.1 |
| PDO | | | | *e*Sb | | Sb | 11 43 20.9 | +0.7 |
| **LAKA** | **Lakka** | **1.15** | **56** | *e*PG | | Pg | 11 43 06.7 | -1.1 |
| LAKA | | | | *e*SB | | Sg | 11 43 22.5 | -0.3 |
| **LAKA** | **Lakka** | **1.15** | **56** | *e*Pg | | Pg | 11 43 06.7 | -1.1 |
| LAKA | | | | *e*Sb | | Sg | 11 43 22.5 | -0.3 |
| **KLV** | **Kalavryta, Ach** | **1.18** | **68** | *e*PN | | Pg | 11 43 07.2 | -1.3 |
| KLV | | | | *e*SB | | Sb | 11 43 24.6 | +0.5 |
| **KLV** | **Kalavryta, Ach** | **1.18** | **68** | *e*Pn | | Pg | 11 43 07.2 | -1.3 |
| KLV | | | | *e*Sb | | Sb | 11 43 24.6 | +0.5 |
| **KALE** | **Kalithea** | **1.34** | **53** | *e*PN | | Pn | 11 43 09.9 | -1.0 |
| KALE | | | | *e*SB | | Sn | 11 43 29.7 | +0.6 |
| **KALE** | **Kalithea** | **1.34** | **53** | *e*Pn | | Pn | 11 43 09.9 | -1.0 |
| KALE | | | | *e*Sb | | Sn | 11 43 29.7 | +0.6 |
| **EVR** | **Evrytania** | **1.55** | **32** | *e*PB | | Pg | 11 43 15.9 | +0.3 |
| **EVR** | **Evrytania** | **1.55** | **32** | *e*Pb | | Pg | 11 43 15.9 | +0.3 |
| **DSL** | **Palaion Diasel** | **1.55** | **9** | *e*PG | | Pb | 11 43 14.6 | -0.3 |
| **DSL** | **Palaion Diasel** | **1.55** | **9** | *e*Pg | | Pb | 11 43 14.6 | -0.3 |
| **DESF** | **Desfina** | **1.61** | **59** | *e*PB | | Pg | 11 43 16.4 | -0.3 |
| **DESF** | **Desfina** | **1.61** | **59** | *e*Pb | | Pg | 11 43 16.4 | -0.3 |
| **MAKR** | **Makrakomi, Fth** | **1.77** | **37** | *e*PN | | Pg | 11 43 19.5 | -0.3 |
| **MAKR** | **Makrakomi, Fth** | **1.77** | **37** | *e*Pn | | Pg | 11 43 19.5 | -0.3 |
| **AXAR** | **Agios Charalam** | **1.89** | **51** | *e*PG | | Pb | 11 43 21.1 | +0.5 |
| **AXAR** | **Agios Charalam** | **1.89** | **51** | *e*Pg | | Pb | 11 43 21.1 | +0.5 |
| **MRKA** | **Markates** | **2.48** | **63** | *e*PB | | Pn | 11 43 27.6 | +1.0 |
| **MRKA** | **Markates** | **2.48** | **63** | *e*Pb | | Pn | 11 43 27.6 | +1.0 |

**CASC 22 11:44:17.2±1.9,14.°06N×90.°90W,h90km±12km,MD3.7,2D, Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FUG** | **Fuego 3** | **0.39** | **8** | *e*P | | Pn | 11 44 31.5 | +0.1 |
| **PCG** | **Pacaya** | **0.43** | **40** | *e*P | | Pn | 11 44 32.1 | +0.3 |
| PCG | | | | *e*S | | Sn | 11 44 44.1 | +1.5 |
| **NBG** | **Las Nubes** | **0.75** | **46** | *e*P | | Pn | 11 44 36.0 | +1.5 |
| NBG | | | | *e*S | | Sn | 11 44 47.5 | 0.0 |
| **JAT** | **Jato** | **0.76** | **290** | *e*P | | Pn | 11 44 34.3 | 0.0 |
| JAT | | | | *e*S | | Sn | 11 44 47.8 | +0.7 |
| **RBDL** | **Robledal** | **1.18** | **87** | *i* P | | Pn | 11 44 39.0 | -0.1 |
| **RTR** | **El Retiro** | **1.23** | **98** | *e*P | | Pn | 11 44 39.7 | -0.1 |
| RTR | | | | *e*S | | Sn | 11 44 58.0 | +1.2 |
| **SBLS** | **San Blas** | **1.26** | **100** | *e*P | | Pn | 11 44 40.0 | -0.2 |
| SBLS | | | | *e*S | | Sn | 11 44 58.6 | +1.0 |
| **SNJE** | **San Jose** | **1.27** | **99** | *e*P | | Pn | 11 44 40.1 | -0.2 |
| **BOQS** | **Boqueron** | **1.60** | **101** | *e*P | | Pn | 11 44 44.4 | -0.2 |
| BOQS | | | | *e*S | | Sn | 11 45 08.1 | +2.8 |
| **LFU** | **La Fuente** | **1.76** | **100** | *e*P | | Pn | 11 44 46.3 | -0.1 |
| **LFRS** | **El Faro** | **1.84** | **104** | *e*P | | Pn | 11 44 47.6 | +0.2 |

*ISCJB **22** 11:52:56.6±0.6,38.°88N±0.°02×25.°95E±0.°03,h1km±5km, Error ellipse: s-maj=4.2km s-min=2.6km az=155.8*
*DDA **22** 11:52:57.1,38.°86N×26.°01E,h18km,Md3.3*
*ATH **22** 11:52:57.4,38.°86N×26.°04E,h23km±1km,MD3.1/9*
*CSEM **22** 11:52:58.3±0.1,38.°90N×26.°00E,h5km,ML3.6,Error ellipse: s-maj=4.0km s-min=2.8km az=52.0*
*ISK **22** 11:52:59.0,38.°95N×26.°08E,h10km,ML3.6*
**ISC 22 11:52:58.0±0.9,38.°87N±0.°02×26.°03E±0.°02,h13km±9km, n147,σ1s12/177,27C-2D,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SIGR** | **SIGRI** | **0.37** | **339** | *e*PG | | **Pg** | **11 53 05.9** | **+0.4** |
| SIGR | | | | *e*SG | | **Sg** | **11 53 10.9** | **+0.4** |
| **SIGR** | **SIGRI** | **0.37** | **339** | *e*PB | | **Pg** | **11 53 05.8** | **+0.3** |
| SIGR | | | | *e*SB | | **Sb** | **11 53 11.4** | **-0.7** |
| **SIGR** | **SIGRI** | **0.37** | **339** | *e*Pb | | **Pg** | **11 53 05.8** | **+0.3** |
| SIGR | | | | *e*Sg | | **Sg** | **11 53 10.9** | **+0.4** |
| SIGR | | | | *e*Sb | | **Sb** | **11 53 11.4** | **-0.7** |
| **PRK** | **Paraskevi** | **0.42** | **26** | *e*PB | | **Pg** | **11 53 06.3** | **-0.2** |
| PRK | | | | *e*SB | | **Sg** | **11 53 12.7** | **+0.5** |
| **PRK** | **Paraskevi** | **0.42** | **26** | *e*Pb | | **Pg** | **11 53 06.3** | **-0.2** |
| PRK | | | | *e*Sb | | **Sg** | **11 53 12.7** | **+0.5** |
| **CHOS** | **Chios island** | **0.48** | **178** | *e*PB | | **Pg** | **11 53 07.8** | **+0.3** |
| CHOS | | | | *e*SB | | **Sg** | **11 53 13.9** | **0.0** |
| **CHOS** | **Chios island** | **0.48** | **178** | *e*Pb | | **Pg** | **11 53 07.8** | **+0.3** |
| CHOS | | | | *e*Sb | | **Sg** | **11 53 13.9** | **0.0** |
| **AYVA** | **Ayvalik** | **0.68** | **49** | *i* P | | **Pg** | **11 53 10.8** | **-0.4** |
| AYVA | | | | *i* S | | **Sg** | **11 53 20.2** | **0.0** |
| **AYVA** | **Ayvalik** | **0.68** | **49** | P | | **Pg** | **11 53 10.8** | **-0.4** |
| AYVA | | | | S | | **Sg** | **11 53 20.2** | **0.0** |
| **DKL** | **Dikili** | **0.71** | **73** | *e*PG | | **Pg** | **11 53 11.7** | **-0.2** |
| DKL | | | | *e*SG | | **Sb** | **11 53 22.1** | **+0.1** |
| **DKL** | **Dikili** | **0.71** | **73** | *e*Pg | | **Pg** | **11 53 11.7** | **-0.2** |
| DKL | | | | *e*Sg | | **Sb** | **11 53 22.1** | **+0.1** |
| **ZEY** | **˜zmir** | **0.73** | **149** | P | | **Pg** | **11 53 11.2** | **-0.9** |
| ZEY | | | | S | | **Sg** | **11 53 21.4** | **-0.3** |
| **BOZC** | **Bozcaada** | **0.97** | **1** | P | | **Pg** | **11 53 16.2** | **-0.7** |
| BOZC | | | | S | | **Sb** | **11 53 29.8** | **+0.3** |
| **EZN** | **Ezine** | **0.98** | **13** | *e*PG | | **Pb** | **11 53 16.4** | **-0.5** |
| EZN | | | | *e*SG | | **Sg** | **11 53 29.7** | **-0.2** |
| **EZN** | **Ezine** | **0.98** | **13** | *e*Pg | | **Pb** | **11 53 16.4** | **-0.5** |
| EZN | | | | *e*Sg | | **Sg** | **11 53 29.7** | **-0.2** |
| **LIA** | **Limnos Island** | **1.22** | **328** | *e*PN | | **Pb** | **11 53 21.1** | **+0.1** |
| LIA | | | | *e*SN | | **Sg** | **11 53 37.8** | **+0.4** |
| **LIA** | **Limnos Island** | **1.22** | **328** | *e*Pn | | **Pb** | **11 53 21.1** | **+0.1** |
| LIA | | | | *e*Sn | | **Sg** | **11 53 37.8** | **+0.4** |
| **SMG** | **Samos** | **1.32** | **151** | *e*PN | | **Pb** | **11 53 22.7** | **+0.1** |
| SMG | | | | *e*SN | | **Sg** | **11 53 40.4** | **-0.2** |
| **SMG** | **Samos** | **1.32** | **151** | *e*Pn | | **Pb** | **11 53 22.7** | **+0.1** |
| SMG | | | | *e*Sn | | **Sg** | **11 53 40.4** | **-0.2** |
| **GADA** | **Gvkgeada** | **1.33** | **356** | *e*PN | | **Pb** | **11 53 22.9** | **+0.1** |
| GADA | | | | *e*SN | | **Sg** | **11 53 40.5** | **-0.3** |
| **GADA** | **Gvkgeada** | **1.33** | **356** | *e*Pn | | **Pb** | **11 53 22.9** | **+0.1** |
| GADA | | | | *e*Sn | | **Sg** | **11 53 40.5** | **-0.3** |
| **AKS** | **Akhisar** | **1.39** | **89** | *e*PN | | **Pg** | **11 53 24.5** | **-0.3** |
| **AKS** | **Akhisar** | **1.39** | **89** | *e*Pn | | **Pg** | **11 53 24.5** | **-0.3** |
| **AKHS** | **Akhisar** | **1.39** | **89** | *i* P | | **Pb** | **11 53 23.8** | **-0.1** |
| AKHS | | | | *i* S | | **Sg** | **11 53 43.1** | **+0.2** |
| **AKHS** | **Akhisar** | **1.39** | **89** | P | | **Pb** | **11 53 23.8** | **-0.1** |
| AKHS | | | | S | | **Sg** | **11 53 43.1** | **+0.2** |
| **GCAM** | **G?zelcaml?** | **1.50** | **140** | *i* P | | **Pb** | **11 53 25.7** | **0.0** |
| GCAM | | | | *i* S | | **Sg** | **11 53 46.6** | **+0.3** |
| **GCAM** | **G?zelcaml?** | **1.50** | **140** | P | | **Pb** | **11 53 25.7** | **0.0** |
| GCAM | | | | S | | **Sg** | **11 53 46.6** | **+0.3** |
| **BALY** | **Balya** | **1.51** | **54** | *i* P | | **Pn** | **11 53 24.6** | **-0.2** |
| BALY | | | | *i* S | | **Sg** | **11 53 48.0** | **+1.3** |
| **BALY** | **Balya** | **1.51** | **54** | P | | **Pn** | **11 53 24.6** | **-0.2** |
| BALY | | | | S | | **Sg** | **11 53 48.0** | **+1.3** |
| **GELI** | **Tayfur-Gelibol** | **1.57** | **13** | *e*PN | | **Pb** | **11 53 26.4** | **-0.5** |
| **GELI** | **Tayfur-Gelibol** | **1.57** | **13** | *e*Pn | | **Pb** | **11 53 26.4** | **-0.5** |
| **LPK** | **Lapseki** | **1.61** | **20** | *e*PN | | **Pn** | **11 53 26.9** | **+0.8** |
| **LPK** | **Lapseki** | **1.61** | **20** | *e*Pn | | **Pn** | **11 53 26.9** | **+0.8** |
| **BALB** | **Balikesir** | **1.63** | **61** | *e*PN | | **Pn** | **11 53 26.6** | **+0.2** |
| **BALB** | **Balikesir** | **1.63** | **61** | *e*Pn | | **Pn** | **11 53 26.6** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **1.65** | **347** | *e*PB | | **Pn** | **11 53 26.5** | **-0.2** |
| **SMTH** | **Samothraki Isl** | **1.65** | **347** | *e*Pb | | **Pn** | **11 53 26.5** | **-0.2** |
| **AOS** | **Alonnisos** | **1.70** | **281** | *e*PN | | **Pb** | **11 53 28.5** | **-0.7** |
| **AOS** | **Alonnisos** | **1.70** | **281** | *e*Pn | | **Pb** | **11 53 28.5** | **-0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.73** | **122** | *e*PN | | **Pb** | **11 53 30.2** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.73** | **122** | *e*Pn | | **Pb** | **11 53 30.2** | **+0.5** |
| **GONE** | **Gonen-Balikesi** | **1.74** | **47** | *e*PN | | **Pn** | **11 53 29.0** | **+1.0** |
| **GONE** | **Gonen-Balikesi** | **1.74** | **47** | *e*Pn | | **Pn** | **11 53 29.0** | **+1.0** |
| **KRBG** | **Karabiga-Canak** | **1.81** | **32** | *e*PN | | **Pn** | **11 53 29.9** | **+1.0** |
| **KRBG** | **Karabiga-Canak** | **1.81** | **32** | *e*Pn | | **Pn** | **11 53 29.9** | **+1.0** |
| **APE** | **Apeiranthos** | **1.84** | **193** | *i* P | | **Pn** | **11 53 29.3** | **0.0** |
| **APE** | **Apeiranthos** | **1.84** | **193** | *e*PB | | **Pn** | **11 53 28.5** | **-0.8** |
| **APE** | **Apeiranthos** | **1.84** | **193** | *e*Pb | | **Pn** | **11 53 28.5** | **-0.8** |
| **APE** | **Apeiranthos** | **1.84** | **193** | P | | **Pn** | **11 53 29.3** | **0.0** |
| **ERIK** | **Erikli-Kesan** | **1.84** | **12** | *e*PN | | **Pn** | **11 53 30.2** | **+0.9** |
| **ERIK** | **Erikli-Kesan** | **1.84** | **12** | *e*Pn | | **Pn** | **11 53 30.2** | **+0.9** |
| **AYDN** | **Tasoluk** | **1.89** | **129** | *i* P | | **Pg** | **11 53 34.0** | **-0.3** |
| AYDN | | | | *i* S | | **Sg** | **11 54 01.4** | **+2.6** |
| **AYDN** | **Tasoluk** | **1.89** | **129** | P | | **Pg** | **11 53 34.0** | **-0.3** |
| AYDN | | | | S | | **Sg** | **11 54 01.4** | **+2.6** |
| **RKY** | **Sarkoy-Tekirda** | **2.02** | **26** | *e*PN | | **Pn** | **11 53 32.9** | **+1.0** |
| **RKY** | **Sarkoy-Tekirda** | **2.02** | **26** | *e*Pn | | **Pn** | **11 53 32.9** | **+1.0** |
| **ALN** | **Alexandroupoli** | **2.03** | **0** | *e*PN | | **Pn** | **11 53 32.0** | **+0.1** |
| **ALN** | **Alexandroupoli** | **2.03** | **0** | *e*PB | | **Pn** | **11 53 32.0** | **+0.1** |
| **ALN** | **Alexandroupoli** | **2.03** | **0** | *e*Pn | | **Pn** | **11 53 32.0** | **+0.1** |
| **EDC** | **Edincik** | **2.05** | **43** | *e*PN | | **Pn** | **11 53 33.4** | **+1.3** |
| **EDC** | **Edincik** | **2.05** | **43** | *e*Pn | | **Pn** | **11 53 33.4** | **+1.3** |
| **BNT** | **Bandirma** | **2.08** | **44** | *e*PN | | **Pn** | **11 53 33.5** | **+0.8** |
| **BNT** | **Bandirma** | **2.08** | **44** | *e*Pn | | **Pn** | **11 53 33.5** | **+0.8** |
| **KULA** | **Kula-Manisa** | **2.09** | **99** | *e*PN | | **Pb** | **11 53 34.9** | **-0.9** |
| **KULA** | **Kula-Manisa** | **2.09** | **99** | *e*Pn | | **Pb** | **11 53 34.9** | **-0.9** |
| **MRMT** | **Marmara Adasi** | **2.11** | **34** | *e*PN | | **Pn** | **11 53 34.2** | **+1.1** |
| **MRMT** | **Marmara Adasi** | **2.11** | **34** | *e*Pn | | **Pn** | **11 53 34.2** | **+1.1** |
| **BDRM** | **Kayabasi** | **2.12** | **148** | *i* P | | **Pb** | **11 53 35.1** | **-1.2** |
| **BDRM** | **Kayabasi** | **2.12** | **148** | P | | **Pb** | **11 53 35.1** | **-1.2** |
| BDRM | | | | S | | **Sg** | **11 54 07.5** | **+1.4** |
| **OUR** | **Ouranopolis** | **2.16** | **313** | *e*PN | | **Pb** | **11 53 35.5** | **-1.4** |
| **OUR** | **Ouranopolis** | **2.16** | **313** | *e*Pn | | **Pb** | **11 53 35.5** | **-1.4** |
| **KCTX** | **Karacabey (Bur** | **2.28** | **51** | *e*PN | | **Pn** | **11 53 35.5** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **2.28** | **51** | *e*Pn | | **Pn** | **11 53 35.5** | **+0.2** |
| **YER** | **Yerkesik** | **2.48** | **133** | *e*PN | | **Pb** | **11 53 41.1** | **-1.4** |
| **YER** | **Yerkesik** | **2.48** | **133** | *e*Pn | | **Pb** | **11 53 41.1** | **-1.4** |
| **DENT** | **Denizli** | **2.61** | **114** | *e*PN | | **Pb** | **11 53 42.6** | **-2.1** |
| **DENT** | **Denizli** | **2.61** | **114** | *e*Pn | | **Pb** | **11 53 42.6** | **-2.1** |
| **ARMT** | **Armutlu** | **2.77** | **51** | *e*PN | | **Pn** | **11 53 43.7** | **+1.7** |
| **ARMT** | **Armutlu** | **2.77** | **51** | *e*Pn | | **Pn** | **11 53 43.7** | **+1.7** |
| **KHL** | **Karahalli** | **2.79** | **100** | *e*PN | | **Pb** | **11 53 45.3** | **-2.5** |
| **KHL** | **Karahalli** | **2.79** | **100** | *e*Pn | | **Pb** | **11 53 45.3** | **-2.5** |
| **KDZ** | **Kurdzhali** | **2.82** | **351** | *i* P | | **Pn** | **11 53 43.0** | **+0.2** |
| **KDZ** | **Kurdzhali** | **2.82** | **351** | *i* P | | **Pn** | **11 53 43.0** | **+0.2** |
| **DALY** | **Dalyan (Mu˘la** | **2.92** | **134** | *e*PN | | **Pb** | **11 53 47.4** | **-2.4** |
| **DALY** | **Dalyan (Mu˘la** | **2.92** | **134** | *e*Pn | | **Pb** | **11 53 47.4** | **-2.4** |
| **RZN** | **Rozhen** | **2.99** | **341** | *i* P | | **Pn** | **11 53 46.5** | **+1.2** |
| **RZN** | **Rozhen** | **2.99** | **341** | *i* P | | **Pn** | **11 53 46.5** | **+1.2** |
| **EDRB** | **Edirne** | **3.03** | **10** | *e*PN | | **Pn** | **11 53 47.1** | **+1.5** |
| **EDRB** | **Edirne** | **3.03** | **10** | *e*Pn | | **Pn** | **11 53 47.1** | **+1.5** |
| **CTKS** | **Kestanelik-??a** | **3.04** | **38** | *e*PN | | **Pn** | **11 53 47.5** | **+1.8** |
| **CTKS** | **Kestanelik-??a** | **3.04** | **38** | *e*Pn | | **Pn** | **11 53 47.5** | **+1.8** |
| **BGKT** | **Bogazkoy** | **3.13** | **41** | *e*PN | | **Pn** | **11 53 48.8** | **+1.8** |
| **BGKT** | **Bogazkoy** | **3.13** | **41** | *e*Pn | | **Pn** | **11 53 48.8** | **+1.8** |
| **CTYL** | **Yal??k??y-??at** | **3.13** | **33** | *e*PN | | **Pn** | **11 53 48.7** | **+1.7** |
| **CTYL** | **Yal??k??y-??at** | **3.13** | **33** | *e*Pn | | **Pn** | **11 53 48.7** | **+1.7** |
| **ISK** | **Istanbul-Kandi** | **3.20** | **46** | *e*PN | | **Pn** | **11 53 49.8** | **+1.8** |
| **ISK** | **Istanbul-Kandi** | **3.20** | **46** | *e*Pn | | **Pn** | **11 53 49.8** | **+1.8** |
| **CAVI** | **Cavuskoy** | **3.24** | **64** | *e*PN | | **Pn** | **11 53 50.4** | **+1.9** |
| **CAVI** | **Cavuskoy** | **3.24** | **64** | *e*Pn | | **Pn** | **11 53 50.4** | **+1.9** |
| **MMB** | **Musomiste** | **3.24** | **328** | *i* P | | **Pn** | **11 53 50.0** | **+1.4** |
| **MMB** | **Musomiste** | **3.24** | **328** | *i* P | | **Pn** | **11 53 50.0** | **+1.4** |
| **ADVT** | **Abdulvahap** | **3.26** | **60** | *e*PN | | **Pn** | **11 53 50.8** | **+2.0** |
| **ADVT** | **Abdulvahap** | **3.26** | **60** | *e*Pn | | **Pn** | **11 53 50.8** | **+2.0** |
| **KLYT** | **Kilyos** | **3.32** | **43** | *e*PN | | **Pn** | **11 53 51.4** | **+1.8** |
| **KLYT** | **Kilyos** | **3.32** | **43** | *e*Pn | | **Pn** | **11 53 51.4** | **+1.8** |
| **HRT** | **Hereke** | **3.41** | **54** | *e*PN | | **Pn** | **11 53 53.0** | **+2.0** |
| **HRT** | **Hereke** | **3.41** | **54** | *e*Pn | | **Pn** | **11 53 53.0** | **+2.0** |
| **GULT** | **Gulveren** | **3.80** | **64** | *e*PN | | **Pn** | **11 53 58.6** | **+2.3** |
| **GULT** | **Gulveren** | **3.80** | **64** | *e*Pn | | **Pn** | **11 53 58.6** | **+2.3** |
| **VTS** | **Vitosha** | **4.29** | **331** | *i* P | | **Pn** | **11 54 05.7** | **+2.5** |
| **VTS** | **Vitosha** | **4.29** | **331** | *i* P | | **Pn** | **11 54 05.7** | **+2.5** |
| **PRD** | **Provadia** | **4.45** | **13** | *i* P | | **Pn** | **11 54 05.2** | **0.0** |
| **PRD** | **Provadia** | **4.45** | **13** | *i* P | | **Pn** | **11 54 05.2** | **0.0** |
| **MPEP** | **Malo Peshtene** | **4.81** | **340** | *i* P | | **Pn** | **11 54 11.1** | **+1.0** |
| **MPEP** | **Malo Peshtene** | **4.81** | **340** | *i* P | | **Pn** | **11 54 11.1** | **+1.0** |
| **BARS** | **Barje** | **5.08** | **322** | *e*Pn | | **Pn** | **11 54 15.5** | **+1.7** |
| **BOVS** | **Bovan** | **5.77** | **327** | *e*Pn | | **Pn** | **11 54 25.2** | **+1.9** |
| **BOLS** | **Boljevac** | **5.83** | **330** | *e*Pn | | **Pn** | **11 54 22.8** | **-1.3** |
| **TIRR** | **Tirgusor** | **5.87** | **17** | *i* P | | **Pn** | **11 54 24.8** | **+0.2** |
| **TIRR** | **Tirgusor** | **5.87** | **17** | *i* P | | **Pn** | **11 54 24.8** | **+0.2** |
| **GRUS** | **Gruza** | **6.41** | **323** | *e*Pn | | **Pn** | **11 54 34.4** | **+2.3** |
| **KUBS** | **Kucevo** | **6.43** | **331** | *e*Pn | | **Pn** | **11 54 33.9**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | | **7.41** | **52** | *e*P | | **P** | **12 10 45.5** | **+1.0** |
| | 127nm,0.6s | | | | | | | | |
| **DZM** | **Mont Dzumac** | | **15.21** | **254** | P | | **P** | **12 12 01.9** | **+1.1** |
| | 1.6nm,0.3s,baz=359,slow=16,SNR=16 | | | | | | | | |
| **DZM** | **Mont Dzumac** | | **15.21** | **254** | *e*P | | **P** | **12 12 03.0** | **+2.1** |
| **RAR** | **Rarotonga** | | **17.10** | **102** | P | | **P** | **12 12 16.7** | **-1.3** |
| | 0.7nm,0.3s,baz=276,slow=5.9,SNR=6.8 | | | | | | | | |
| **RAR** | **Rarotonga** | | **17.10** | **102** | *e*P | | **P** | **12 12 17.6** | **-0.4** |
| | 162nm,1.8s | | | | | | | | |
| **OUZ** | **Omahuta** | | **18.23** | **203** | *e*P | | **P** | **12 12 29.6** | **+1.6** |
| | 10nm,0.5s | | | | | | | | |
| **URZ** | **Urewera** | | **20.07** | **192** | P | | **P** | **12 12 40.6** | **-4.1** |
| | 3.2nm,0.3s,baz=278,slow=3.7,SNR=23 | | | | | | | | |
| **PPT** | **Papeete** | | **26.79** | **92** | P | | **P** | **12 13 44.1** | **-0.6** |
| | 34nm,0.8s,baz=180,slow=5.9,SNR=7.3 | | | | | | | | |
| **EIDS** | **Eidsvold** | | **29.62** | **251** | *e*P | | **P** | **12 14 09.4** | **+0.3** |
| | 21nm,0.9s | | | | | | | | |
| **ARMA** | **Armidale** | | **30.13** | **241** | *e*P | | **P** | **12 14 14.6** | **+1.0** |
| | 17nm,0.6s | | | | | | | | |
| **CAN** | **Canberra** | | **33.77** | **234** | *e*P | | **P** | **12 14 44.5** | **+0.3** |
| | 40nm,0.8s | | | | | | | | |
| **CTA** | **Charters Tower** | | **33.95** | **262** | P | | **P** | **12 14 46.8** | **+0.9** |
| | 43nm,0.7s,baz=96,slow=10,SNR=52 | | | | | | | | |
| **CTAO** | **Charters Tower** | | **33.95** | **262** | *e*P | | **P** | **12 14 46.8** | **+0.9** |
| | 51nm,0.7s | | | | | | | | |
| **PMG** | **Port Moresby** | | **35.20** | **280** | P | | **P** | **12 14 57.2** | **+0.9** |
| | 40nm,0.8s,baz=80,slow=3.8,SNR=10 | | | | | | | | |
| **PMG** | **Port Moresby** | | **35.20** | **280** | *e*P | | **P** | **12 14 58.7** | **+2.4** |
| | 42nm,0.8s | | | | | | | | |
| **COEN** | **Coen** | | **37.74** | **271** | *e*P | | **P** | **12 15 18.8** | **+1.7** |
| | 60nm,0.8s | | | | | | | | |
| **BBOO** | **Buckleboo** | | **43.61** | **242** | *e*P | | **P** | **12 16 03.4** | **0.0** |
| | 24nm,0.7s | | | | | | | | |
| **JAY** | **Jayapura** | | **43.70** | **286** | P | | **P** | **12 16 05.9** | **+1.5** |
| | 8.9nm,0.5s,baz=130,slow=3.7,SNR=10 | | | | | | | | |
| **WRAB** | **Tennant Creek** | | **45.11** | **260** | *e*P | | **P** | **12 16 14.8** | **-0.3** |
| | 21nm,1.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | | **45.12** | **260** | P | | **P** | **12 16 14.8** | **-0.3** |
| | 14nm,0.5s,baz=97,slow=7.8,SNR=152 | | | | | | | | |
| **AS01** | **Alice Springs** | | **45.16** | **255** | *e*P | | **P** | **12 16 15.2** | **-0.2** |
| **ASAR** | **Alice Springs** | | **45.20** | **255** | P | | **P** | **12 16 15.8** | **+0.1** |
| | 24nm,0.7s,baz=89,slow=8.0,SNR=308 | | | | | | | | |
| ASAR | | | | | S | | **S** | **12 22 11.4** | **-1.8** |
| | 2.8nm,0.9s,baz=88,slow=15,SNR=5.1 | | | | | | | | |
| **MTN** | **Manton Dam** | | **49.41** | **269** | *e*P | | **P** | **12 16 47.3** | **+0.1** |
| | 12nm,0.8s | | | | | | | | |
| **SOEI** | **Soe** | | **56.70** | **270** | *e*P | | **P** | **12 17 37.5** | **-1.5** |
| | 31nm,0.8s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | | **68.85** | **323** | P | | **P** | **12 18 56.9** | **+0.6** |
| | 4.8nm,0.7s,baz=156,slow=6.3,SNR=12 | | | | | | | | |
| **MAT** | **Matsushiro** | | **68.85** | **323** | P | | **P** | **12 18 57.0** | **+0.7** |
| MAT | | | | | *e*S | | **S** | **12 27 09.4** | **-4.5** |
| **PETK** | **Petropavlovsk-** | | **74.53** | **345** | P | | **P** | **12 19 29.3** | **+0.5** |
| | 7.2nm,0.7s,baz=128,slow=7.5,SNR=9.8 | | | | | | | | |
| **KSRS** | **Korea Array** | | **75.65** | **318** | P | | **P** | **12 19 36.1** | **+0.7** |
| | 1.4nm,0.8s,baz=157,slow=4.1,SNR=4.4 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | | **77.56** | **326** | P | | **P** | **12 19 47.5** | **+1.9** |
| | 4.1nm,0.9s,baz=150,slow=3.5,SNR=8.1 | | | | | | | | |
| **NJ2** | **Nanjing** | | **78.87** | **309** | *e*P | | **P** | **12 19 53.8** | **+0.9** |
| NJ2 | | | | | PMZ | | | | |
| | 20nm,0.7s | | | | | | | | |
| **MDJ** | **Mudanjiang** | | **79.13** | **325** | P | | **P** | **12 19 55.9** | **+1.9** |
| MDJ | | | | | S | | **S** | **12 29 04.9** | **-0.4** |
| MDJ | | | | | PMZ | | | | |
| | 12nm,0.9s | | | | | | | | |
| MDJ | | | | | PMZ | | | | |
| | 70nm,4.9s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | | **79.51** | **43** | P | | **P** | **12 19 57.5** | **+1.0** |
| | 0.4nm,0.5s,baz=222,slow=9.0,SNR=5.0 | | | | | | | | |
| **WHN** | **Wuhan** | | **81.53** | **306** | P | | P | 12 20 14.6 | +7.8 |
| **DIV** | **Divide** | | **83.52** | **15** | *e*P | | **P** | **12 20 14.0** | **-2.1** |
| **SCM** | **Sheep Creek Mo** | | **83.77** | **14** | *e*P | | **P** | **12 20 17.7** | **+0.3** |
| **CAST** | **Castle Rocks** | | **84.20** | **11** | *e*P | | **P** | **12 20 18.4** | **-1.0** |
| **TRF** | **Thorofare Moun** | | **84.58** | **12** | *e*P | | **P** | **12 20 21.1** | **-0.4** |
| **SEY** | **Seymchan** | | **84.61** | **347** | P | | **P** | **12 20 21.1** | **-0.3** |
| | 6.9nm,0.8s,baz=139,slow=5.1,SNR=10 | | | | | | | | |
| **BJI** | **Beijing** | | **84.73** | **315** | P | | **P** | **12 20 23.3** | **+0.8** |
| BJI | | | | | S | | **S** | **12 29 59.9** | **-1.3** |
| BJI | | | | | PMZ | | | | |
| | 7.0nm,1.0s | | | | | | | | |
| BJI | | | | | PMZ | | | | |
| | 310nm,5.1s | | | | | | | | |
| **RND** | **Reindeer** | | **84.83** | **13** | *e*P | | **P** | **12 20 22.2** | **-0.3** |
| **TXAR** | **Lajitas Array** | | **85.85** | **57** | P | | **P** | **12 20 29.8** | **+1.5** |
| | 0.8nm,0.8s,baz=226,slow=6.7,SNR=8.7 | | | | | | | | |
| **GYA** | **Guiyang** | | **85.93** | **299** | *e*P | | **P** | **12 20 30.4** | **+1.7** |
| GYA | | | | | PP | | PP | 12 24 06.0 | +5.7 |
| GYA | | | | | SKS | | **SKSac** | **12 29 52.8** | **-5.5** |
| GYA | | | | | S | | **S** | **12 30 11.8** | **-1.8** |
| GYA | | | | | PMZ | | | | |
| | 10.0nm,1.0s | | | | | | | | |
| **MDM** | **Murphy Dome** | | **86.33** | **12** | *e*P | | **P** | **12 20 29.1** | **-0.5** |
| **COLA** | **College** | | **86.33** | **12** | *e*P | | **P** | **12 20 29.3** | **-0.2** |
| **ILAR** | **Eielson Array** | | **86.44** | **13** | P | | **P** | **12 20 29.4** | **-0.6** |
| | 1.7nm,0.7s,baz=225,slow=4.0,SNR=17 | | | | | | | | |
| **IL1** | **Eielson Array** | | **86.44** | **13** | *e*P | | **P** | **12 20 29.2** | **-0.9** |
| **BW06** | **Boulder Array** | | **87.44** | **43** | *e*P | | **P** | **12 20 35.8** | **+0.2** |
| **DAWY** | **Dawson** | | **87.60** | **16** | *e*P | | **P** | **12 20 36.3** | **+0.7** |
| **EGAK** | **Eagle** | | **87.74** | **15** | *e*P | | **P** | **12 20 36.5** | **+0.3** |
| **COLD** | **Coldfoot** | | **88.00** | **10** | *e*P | | **P** | **12 20 38.2** | **+0.9** |
| | 8.4nm,0.7s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | | **88.22** | **314** | *e*P | | **P** | **12 20 40.0** | **+0.9** |
| HHC | | | | | PMZ | | | | |
| | 11nm,1.0s | | | | | | | | |
| HHC | | | | | PMZ | | | | |
| | 160nm,4.9s | | | | | | | | |
| **KMI** | **Kunming** | | **88.71** | **297** | P | | **P** | **12 20 43.0** | **+1.1** |
| KMI | | | | | PMZ | | | | |
| | 10.0nm,1.1s | | | | | | | | |
| KMI | | | | | PMZ | | | | |
| | 610nm,5.0s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | | **89.71** | **289** | P | | **P** | **12 20 46.5** | **+0.2** |
| | 0.7nm,0.4s,baz=127,slow=3.7,SNR=6.1 | | | | | | | | |
| **CD2** | **Chengdu** | | **89.98** | **303** | P | | **P** | **12 20 47.0** | **-0.4** |
| CD2 | | | | | SKS | | **SKSac** | **12 30 15.5** | **-6.3** |
| CD2 | | | | | S | | **S** | **12 30 46.9** | **-3.6** |
| CD2 | | | | | sS | | sS | 12 34 58.8 | +17 |
| CD2 | | | | | SS | | **SS** | **12 37 10.3** | **+2.2** |
| CD2 | | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | | |
| CD2 | | | | | PMZ | | | | |
| | 120nm,5.4s | | | | | | | | |
| **LZH** | **Lanzhou** | | **91.82** | **307** | ⇓P | | **P** | **12 20 57.5** | **+1.6** |
| LZH | | | | | PP | | PP | 12 24 54.3 | +8.0 |
| LZH | | | | | PMZ | | | | |
| | 20nm,1.4s | | | | | | | | |
| LZH | | | | | PMZ | | | | |
| | 78nm,9.2s | | | | | | | | |
| **MKAR** | **Makanchi Array** | | **110.08** | **314** | PKiKP | | **PKiKP** | **12 26 13.1** | **-1.8** |
| | 0.3nm,0.4s,baz=157,slow=1.6,SNR=3.1 | | | | | | | | |
| **KSH** | **Kashi** | | **114.00** | **306** | *e*PKP | | PKPdf | 12 26 22.8 | 0.0 |
| KSH | | | | | *e*PP | | PP | 12 27 41.8 | +13 |
| KSH | | | | | *es*PKP | | | 12 29 55.5 | |
| KSH | | | | | PKS | | **PKSdf** | **12 29 59.5** | **-0.1** |
| KSH | | | | | SS | | SS | 12 42 45.9 | +11 |
| **ARCES** | **ARCESS Array B** | | **127.13** | **350** | PKP | | **PKPdf** | **12 26 45.6** | **-1.3** |
| | 1.7nm,0.7s,baz=350,slow=1.4,SNR=7.0 | | | | | | | | |
| **FINES** | **FINESS Array B** | | **134.04** | **344** | PKP | | **PKPdf** | **12 27 00.4** | **+0.2** |
| | 2.6nm,0.8s,baz=51,slow=2.2,SNR=3.6 | | | | | | | | |
| **AKASG** | **Malin Array Be** | | **141.48** | **332** | PKhKP | | PKPpre | 12 27 08.7 | |
| | 0.8nm,0.4s,baz=40,slow=4.0,SNR=5.9 | | | | | | | | |
| **BRTR** | **Keskin Array B** | | **145.73** | **314** | PKPbc | | **PKPbc** | **12 27 23.4** | **-0.4** |
| | 1.7nm,0.7s,baz=147,slow=4.8,SNR=7.8 | | | | | | | | |
| **BR231** | **Keskin MP Arra** | | **146.25** | **315** | *e*PKPbc | | **PKPbc** | **12 27 24.3** | **-1.0** |
| **CLL** | **Collm** | | **146.29** | **348** | ⇑*i*PKPbc | | **PKPbc** | **12 27 24.7** | **-0.1** |
| | comp=Z,15nm,1.3s | | | | | | | | |
| **KHC** | **Kasperske Hory** | | **148.22** | **346** | *e*PKPbc | | **PKPbc** | **12 27 30.2** | **+0.3** |
| **GEC2** | **GERESS Array S** | | **148.46** | **345** | *e*PKPbc | | **PKPbc** | **12 27 30.9** | **+0.2** |
| **GERES** | **GERESS Array B** | | **148.46** | **345** | PKPbc | | **PKPbc** | **12 27 30.3** | **-0.3** |
| | comp=Z,2.3nm,0.7s,baz=41,slow=2.5,SNR=14 | | | | | | | | |
| **PERS** | **Pernice** | | **150.12** | **342** | *e*PKPbc | | **PKPbc** | **12 27 33.8** | **-0.9** |
| **PDKS** | **Podkum** | | **150.67** | **342** | *i* PKPbc | | **PKPbc** | **12 27 35.2** | **-0.7** |
| **JAVS** | **Javornik** | | **151.10** | **343** | *i* PKPbc | | **PKPbc** | **12 27 36.3** | **-0.6** |
| JAVS | | | | | *e* | | | 12 27 47.1 | |
| **BOJS** | **Bojanci** | | **151.10** | **341** | *i* PKPbc | | **PKPbc** | **12 27 36.6** | **-0.2** |

*SZGRF* ***22*** *12:10:35.2, 19.°68S×176.°84W, h300km*
*ISCJB* ***22*** *12:11:07.9±0.2, 18.°84S±0.°04×177.°71W±0.°04, h600km, mb4.6/84, Error ellipse: s-maj=6.1km s-min=3.9km az=149.3*
*MOS* ***22*** *12:11:10.2±1.6, 18.°62S×177.°73W, h616km, mb4.5/19, Error ellipse: s-maj=10.0km s-min=9.8km az=150.8*
*BJI* ***22*** *12:11:10.4, 18.°70S×177.°70W, h612km, mb4.8/17,*
*mB5.0/12*
*IDC* ***22*** *12:11:10.1±1.2, 18.°77S×177.°68W, h612km±14km, mb4.0/22, mb1 4.1/24, mb1mx4.0/30, mbtmp5.0/24, Error ellipse: s-maj=12.0km s-min=9.2km az=171.0*
*NEIC* ***22*** *12:11:10.3±0.5, 18.°80S×177.°70W, h615km±6km, mb4.6/52, Error ellipse: s-maj=8.3km s-min=5.0km az=152.0*
*AUST* ***22*** *12:11:12.7±1.4, 18.°76S×177.°65W, h646km±14km, Error ellipse: s-maj=9.4km s-min=5.9km az=70.0*

**ISC 22 12:11:08.3±0.3, 18.89S±0.06×177.65W±0.05, h600km, n276, σ1$38/267, mb4.7/84, 38C-9D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.25** | **285** | *e*P | P | 12 12 39.6 | +4.0 |
| MSVF | | | | *e*S | S | 12 13 56.7 | +10 |
| **MSVF** | **Nonsavu** | **4.25** | **285** | *e*P | P | 12 12 39.6 | +4.0 |
| MSVF | | | | *e*S | S | 12 13 56.7 | +10 |
| **AFI** | **Afiamalu** | **7.50** | **50** | *e*P | **P** | **12 13 03.9** | **+0.8** |
| AFI | | | | *e*S | **S** | **12 14 38.5** | **+1.5** |
| AFI | | | | pmax | pmax | | |
| | comp=Z,87nm,0.5s | | | | | | |
| **AFI** | **Afiamalu** | **7.50** | **50** | *e*P | **P** | **12 13 03.9** | **+0.8** |
| | comp=Z,87nm,0.5s | | | | | | |
| AFI | | | | *e*S | **S** | **12 14 38.5** | **+1.5** |
| **DZM** | **Mont Dzumac** | **15.24** | **255** | *e*P | **P** | **12 14 21.6** | **+2.8** |
| | comp=Z,3.5nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **15.24** | **255** | P | **P** | **12 14 20.1** | **+1.3** |
| | comp=Z,2.9nm,0.3s,baz=0.6,slow=15,SNR=16 | | | | | | |
| **DZM** | **Mont Dzumac** | **15.24** | **255** | *e*P | **P** | **12 14 21.0** | **+2.2** |
| | comp=Z,35nm,0.8s | | | | | | |
| **RAR** | **Rarotonga** | **16.95** | **101** | P | **P** | **12 14 35.8** | **+1.4** |
| | comp=Z,0.2nm,0.3s,baz=249,slow=4.2,SNR=9.4 | | | | | | |
| **RAR** | **Rarotonga** | **16.95** | **101** | *e*P | **P** | **12 14 35.7** | **+1.4** |
| RAR | | | | *e*S | **S** | **12 17 19.2** | **-2.9** |
| RAR | | | | pmax | pmax | | |
| | comp=Z,61nm,0.9s | | | | | | |
| **RAR** | **Rarotonga** | **16.95** | **101** | *e*P | **P** | **12 14 35.7** | **+1.4** |
| | comp=Z,61nm,0.9s | | | | | | |
| RAR | | | | *e*S | **S** | **12 17 19.2** | **-2.9** |
| **URZ** | **Urewera** | **19.83** | **192** | P | **P** | **12 14 59.2** | **-1.1** |
| | comp=Z,2.4nm,0.3s,baz=272,slow=3.1,SNR=19 | | | | | | |
| URZ | | | | S | **S** | **12 18 02.4** | **-5.5** |
| | comp=Z,0.9nm,0.3s,baz=258,slow=23,SNR=9.8 | | | | | | |
| **URZ** | **Urewera** | **19.83** | **192** | PN | **P** | **12 14 59.1** | **-1.2** |
| URZ | | | | SN | **S** | **12 18 01.6** | **-6.2** |
| **PXZ** | **Pawanui** | **21.59** | **192** | SN | **S** | **12 18 31.4** | **-4.2** |
| **TARA** | **Tarawa** | **22.15** | **334** | *e*P | **P** | **12 15 21.3** | **-0.1** |
| | comp=Z,273nm,1.3s | | | | | | |
| **NNZ** | **Nelson** | **23.54** | **197** | PN | **P** | **12 15 33.7** | **+0.3** |
| **THZ** | **Taghouse** | **24.18** | **197** | PN | **P** | **12 15 39.4** | **+0.3** |
| **KHZ** | **Kahutara** | **24.62** | **196** | PN | **P** | **12 15 43.2** | **+0.3** |
| **OXZ** | **Oxford** | **25.87** | **197** | PN | **P** | **12 15 53.3** | **-0.6** |
| **RPZ** | **Rata Peaks** | **26.51** | **199** | P | **P** | **12 16 01.4** | **+1.8** |
| | comp=Z,5.4nm,0.5s,baz=25,slow=4.5,SNR=4.5 | | | | | | |
| **PAE** | **Paea** | **26.67** | **92** | *e*P | **P** | **12 16 03.0** | **+1.7** |
| | comp=Z,13nm,0.9s | | | | | | |
| **PPT2** | **Papeete2** | **26.68** | **92** | *e*P | **P** | **12 16 03.6** | **+2.1** |
| | comp=Z,51nm,1.1s | | | | | | |
| **PPT** | **Papeete** | **26.68** | **92** | P | **P** | **12 16 02.9** | **+1.4** |
| | comp=Z,25nm,0.5s,baz=212,slow=0.4,SNR=14 | | | | | | |
| **TIAR** | **Tiarei** | **26.90** | **92** | *e*P | **P** | **12 16 05.1** | **+1.7** |
| | comp=Z,18nm,0.8s | | | | | | |
| **JCZ** | **Jackson Bay** | **27.58** | **201** | PN | **P** | **12 16 09.9** | **+0.9** |
| **PMOR** | **Pomariorio Ree** | **28.70** | **87** | *e*P | **P** | **12 16 19.8** | **+0.8** |
| | comp=Z,147nm,1.0s | | | | | | |
| **VAH** | **Vaihoa** | **28.91** | **87** | *e*P | **P** | **12 16 21.6** | **+0.8** |
| | comp=Z,79nm,1.0s | | | | | | |
| **EIDS** | **Eidsvold** | **29.63** | **252** | P | **P** | **12 16 27.8** | **+0.9** |
| | baz=30,SNR=13 | | | | | | |
| **EIDS** | **Eidsvold** | **29.63** | **252** | *e*P | **P** | **12 16 27.9** | **+0.9** |
| | comp=Z,31nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **30.09** | **242** | P | P | 12 16 33.2 | +2.2 |
| | baz=30,SNR=48 | | | | | | |
| **ARMA** | **Armidale** | **30.09** | **242** | *e*P | P | 12 16 33.1 | +2.2 |
| | comp=Z,43nm,0.9s | | | | | | |
| **MGCD** | **Mangrove Creek** | **31.34** | **237** | P | P | 12 16 43.9 | +2.4 |
| | baz=31,SNR=16 | | | | | | |
| **RMQ** | **Roma** | **31.84** | **250** | P | P | 12 16 47.8 | +2.1 |
| | baz=32,SNR=8.6 | | | | | | |
| **CNB** | **Canberra Magne** | **33.42** | **234** | P | P | 12 17 01.3 | +2.2 |
| | baz=34,SNR=79 | | | | | | |
| **YNG** | **Young** | **33.83** | **236** | P | P | 12 17 04.4 | +1.9 |
| | baz=34,SNR=16 | | | | | | |
| **CTA** | **Charters Tower** | **34.01** | **262** | P | **P** | **12 17 05.3** | **+1.2** |
| | comp=Z,96nm,0.7s,baz=92,slow=10,SNR=84 | | | | | | |
| **CTAO** | **Charters Tower** | **34.01** | **262** | *e*P | **P** | **12 17 04.8** | **+0.7** |
| **CTAO** | **Charters Tower** | **34.01** | **262** | *e*P | **P** | **12 17 04.8** | **+0.7** |
| **MILA** | **Mila** | **34.22** | **231** | P | **P** | **12 17 07.6** | **+1.9** |
| | baz=34,SNR=12 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.31** | **242** | P | **P** | **12 17 16.4** | **+1.7** |
| | baz=35,SNR=105 | | | | | | |
| **PMG** | **Port Moresby** | **35.34** | **281** | P | P | 12 17 16.8 | +1.7 |
| | comp=Z,114nm,0.8s,baz=75,slow=5.3,SNR=25 | | | | | | |
| **PMG** | **Port Moresby** | **35.34** | **281** | *e*P | P | 12 17 17.1 | +1.9 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,123nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **35.34** | **281** | P | P | 12 17 16.9 | +1.7 |
| | baz=35,SNR=16 | | | | | | |
| **PMG** | **Port Moresby** | **35.34** | **281** | *e*P | P | 12 17 17.1 | +1.9 |
| | comp=Z,123nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **35.88** | **251** | P | **P** | **12 17 20.8** | **+1.3** |
| | baz=36,SNR=154 | | | | | | |
| **TOO** | **Toolangi** | **37.13** | **232** | P | P | 12 17 31.6 | +2.0 |
| | baz=37,SNR=32 | | | | | | |
| **COEN** | **Coen** | **37.84** | **271** | P | P | 12 17 37.3 | +1.6 |
| | baz=38,SNR=158 | | | | | | |
| **COEN** | **Coen** | **37.84** | **271** | *e*P | P | 12 17 37.3 | +1.6 |
| | comp=Z,152nm,0.7s | | | | | | |
| **ARPS** | **Mount Arapiles** | **39.67** | **235** | P | **P** | **12 17 51.4** | **+1.4** |
| | baz=40,SNR=11 | | | | | | |
| **QIS** | **Mount Isa** | **40.19** | **260** | P | **P** | **12 17 54.9** | **+0.4** |
| | baz=40,SNR=11 | | | | | | |
| **BBOO** | **Buckleboo** | **43.58** | **242** | P | **P** | **12 18 21.8** | **+1.0** |
| | baz=44,SNR=10 | | | | | | |
| **BBOO** | **Buckleboo** | **43.58** | **242** | *e*P | **P** | **12 18 22.0** | **+1.2** |
| | comp=Z,55nm,0.7s | | | | | | |
| **JAY** | **Jayapura** | **43.88** | **287** | P | **P** | **12 18 24.6** | **+1.2** |
| | comp=Z,55nm,0.6s,baz=131,slow=4.5,SNR=43 | | | | | | |
| **KIP** | **Kipapa** | **44.44** | **27** | *e*P | **P** | **12 18 25.3** | **-2.2** |
| KIP | | | | pmax | pmax | | |
| | comp=Z,204nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.16** | **260** | *e*P | **P** | **12 18 33.4** | **+0.2** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,70nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **45.16** | **260** | *e*P | **P** | **12 18 33.4** | **+0.2** |
| | comp=Z,70nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **45.17** | **260** | P | **P** | **12 18 33.3** | **+0.1** |
| | comp=Z,41nm,0.5s,baz=96,slow=7.8,SNR=62 | | | | | | |
| WRA | | | | PcP | **PcP** | **12 20 01.0** | **+0.5** |
| | comp=Z,0.6nm,0.3s,baz=88,slow=3.5,SNR=2.3 | | | | | | |
| WRA | | | | S | **S** | **12 24 27.7** | **-2.9** |
| | comp=Z,4.4nm,0.9s,baz=94,slow=14,SNR=12 | | | | | | |
| **AS01** | **Alice Springs** | **45.19** | **255** | *e*P | **P** | **12 18 33.9** | **+0.5** |
| **ASAR** | **Alice Springs** | **45.23** | **255** | P | **P** | **12 18 34.5** | **+0.8** |
| | comp=Z,64nm,0.7s,baz=88,slow=8.1,SNR=129 | | | | | | |
| ASAR | | | | S | **S** | **12 24 29.5** | **-1.9** |
| | comp=Z,3.7nm,0.9s,baz=89,slow=15,SNR=11 | | | | | | |
| **KDU** | **Kakadu** | **48.27** | **270** | P | **P** | **12 18 56.6** | **+0.1** |
| | baz=48,SNR=13 | | | | | | |
| **MTN** | **Manton Dam** | **49.50** | **269** | P | **P** | **12 19 05.6** | **0.0** |
| | baz=50,SNR=17 | | | | | | |
| **MTN** | **Manton Dam** | **49.50** | **269** | *e*P | **P** | **12 19 05.3** | **-0.3** |
| | comp=Z,29nm,0.7s | | | | | | |
| **WRKA** | **Warakurna** | **50.24** | **253** | P | **P** | **12 19 11.5** | **+0.6** |
| | baz=50,SNR=43 | | | | | | |
| **KNRA** | **Kununurra** | **51.12** | **265** | P | **P** | **12 19 17.7** | **+0.4** |
| | baz=51,SNR=22 | | | | | | |
| **FAKI** | **Fak Fak** | **51.48** | **282** | P | **P** | **12 19 20.3** | **+0.4** |
| | baz=52,SNR=4.0 | | | | | | |
| **FAKI** | **Fak Fak** | **51.48** | **282** | *e*P | **P** | **12 19 20.4** | **+0.4** |
| | comp=Z,11nm,0.6s | | | | | | |
| **SIJI** | **Sorong** | **53.17** | **284** | P | **P** | **12 19 32.7** | **+0.7** |
| | comp=Z,45nm,0.5s,baz=104,slow=4.5,SNR=12 | | | | | | |
| **SWI** | **Sorong** | **53.17** | **284** | P | **P** | **12 19 32.9** | **+0.9** |
| | baz=53,SNR=5.0 | | | | | | |
| **SOEI** | **Soe** | **56.80** | **271** | *e*P | P | 12 19 59.1 | +1.7 |
| | comp=Z,81nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **58.54** | **256** | *e*P | **P** | **12 20 09.1** | **+0.1** |
| | comp=Z,52nm,1.4s | | | | | | |
| **MEEK** | **Meekatharra** | **58.77** | **250** | P | **P** | **12 20 10.3** | **-0.1** |
| | baz=59,SNR=22 | | | | | | |
| **KLBR** | **Kellerberrin** | **59.05** | **244** | P | **P** | **12 20 12.6** | **+0.4** |
| | baz=59,SNR=11 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.40** | **242** | P | **P** | **12 20 14.8** | **+0.3** |
| | comp=Z,8.7nm,0.7s,baz=272,slow=0.3,SNR=6.6 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **59.40** | **242** | P | **P** | **12 20 15.2** | **+0.7** |
| | baz=59,SNR=4.9 | | | | | | |
| **VNDA** | **Vanda** | **59.53** | **185** | P | P | 12 20 17.3 | +2.7 |
| | comp=Z,1.2nm,0.6s,baz=350,slow=6.3,SNR=13 | | | | | | |
| **BLDU** | **Ballidu** | **60.02** | **245** | P | **P** | **12 20 18.9** | **+0.3** |
| | baz=60,SNR=35 | | | | | | |
| **MORW** | **Morawa** | **60.76** | **247** | P | **P** | **12 20 23.8** | **+0.3** |
| | baz=61,SNR=6.2 | | | | | | |
| **LUWI** | **Luwuk** | **60.98** | **280** | *e*P | **P** | **12 20 26.0** | **+0.8** |
| | comp=Z,17nm,0.7s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **66.74** | **269** | P | P | **12 21 00.9** | **-0.8** |
| | baz=67,SNR=4.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.12** | **323** | P | **P** | **12 21 15.3** | **-0.3** |
| | comp=Z,9.9nm,0.7s,baz=156,slow=6.2,SNR=28 | | | | | | |
| **MAJO** | **Matsushiro** | **69.13** | **323** | *e*P | **P** | **12 21 15.8** | **+0.1** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **69.13** | **323** | *e*P | **P** | **12 21 15.8** | **+0.1** |
| | comp=Z,14nm,0.6s | | | | | | |
| **MAT** | **Matsushiro** | **69.13** | **323** | P | **P** | **12 21 15.5** | **-0.2** |
| MAT | | | | S | **S** | **12 29 31.2** | **-3.5** |
| **UGM** | **Wanagama** | **70.34** | **268** | P | **P** | **12 21 23.9** | **+0.5** |
| | baz=70,SNR=5.0 | | | | | | |
| **ERM** | **Erimo** | **70.60** | **330** | *e*P | P | 12 21 25.5 | +1.3 |
| ERM | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| **KUR** | **Kuril'sk** | **71.11** | **335** | *e*P | **P** | **12 21 27.7** | **+0.6** |
| **QSPA** | **South Pole Qui** | **71.17** | **180** | *e*P | **P** | **12 21 29.3** | **+1.9** |
| | comp=Z,15nm,1.2s | | | | | | |
| **ASAJ** | **Asahikawa** | **72.48** | **331** | *e*P | P | 12 21 36.8 | +1.7 |
| | comp=Z,25nm,0.8s | | | | | | |
| **CISI** | **Cisompet, Garu** | **73.01** | **268** | P | **P** | **12 21 38.4** | **-0.5** |
| | baz=73,SNR=3.7 | | | | | | |
| **SKR** | **Severo-Kuril's** | **73.03** | **343** | *e*P | **P** | **12 21 37.8** | **-0.2** |
| **YSS** | **Yuzh-Sakhalins** | **74.62** | **333** | ⇑*i*P | **P** | **12 21 47.7** | **+0.6** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| **PEA0** | **Petropavlovsk-** | **74.81** | **345** | *e*P | **P** | **12 21 47.8** | **-0.3** |
| **PETK** | **Petropavlovsk-** | **74.81** | **345** | P | **P** | **12 21 47.8** | **-0.3** |
| | comp=Z,1.6nm,0.6s,baz=134,slow=8.3,SNR=23 | | | | | | |
| **KSRS** | **Korea Array** | **75.91** | **318** | P | P | 12 21 55.8 | +1.3 |
| | comp=Z,3.3nm,1.0s,baz=146,slow=6.3,SNR=7.7 | | | | | | |
| **KSRS** | **Korea Array** | **75.91** | **318** | P | P | 12 21 55.8 | +1.3 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **KSAR** | **Wonju Array Be** | **75.93** | **318** | P | **P** | **12 21 55.8** | **+1.2** |
| **KSAR** | **Wonju Array Be** | **75.93** | **318** | P | **P** | **12 21 55.8** | **+1.2** |
| **KS01** | **Wonju Array Si** | **75.94** | **318** | *e*P | **P** | **12 21 55.6** | **+0.8** |
| **MSHR** | **Mys Shultsa** | **77.22** | **324** | *i* P | **P** | **12 22 00.9** | **-0.6** |
| **KMRM** | **Mail Ridge** | **77.31** | **39** | *e*P | P | 12 22 04.4 | +2.2 |
| | comp=Z,189nm,2.2s | | | | | | |
| **TYV** | **Tymovskoe** | **77.72** | **336** | *e*P | **P** | **12 22 05.0** | **+1.0** |
| TYV | | | | pmax | pmax | | |
| | comp=E,11nm,0.8s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,22nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.83** | **325** | P | **P** | **12 22 05.7** | **+0.9** |
| | comp=Z,6.8nm,0.9s,baz=141,slow=3.1,SNR=14 | | | | | | |
| **ISA** | **Isabella** | **77.98** | **46** | *e*P | **P** | **12 22 07.1** | **+1.2** |
| ISA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **ISA** | **Isabella** | **77.98** | **46** | *e*P | **P** | **12 22 07.1** | **+1.2** |
| | comp=Z,4.9nm,0.8s | | | | | | |
| **CMB** | **Columbia Colle** | **78.06** | **43** | *e*P | **P** | **12 22 07.4** | **+1.1** |
| CMB | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **CMB** | **Columbia Colle** | **78.06** | **43** | *e*P | **P** | **12 22 07.4** | **+1.1** |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.83** | **39** | P | P | 12 22 11.7 | +1.4 |
| | comp=Z,6.4nm,0.7s,baz=320,slow=0.2,SNR=7.8 | | | | | | |
| **NJ2** | **Nanjing** | **79.12** | **309** | *e*P | **P** | **12 22 12.9** | **+1.0** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,60nm,0.7s | | | | | | |
| **KDAK** | **Kodiak Island

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **RND** | **Reindeer** | **85.06** | **13** | *e*P | | **P** | **12 22 40.8** | **-0.6** |
| RND | | | | pmax | pmax | | | | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **RND** | **Reindeer** | **85.06** | **13** | *e*P | | **P** | **12 22 40.8** | **-0.6** |
| | comp=Z,26nm,0.8s | | | | | | | | |
| **SRU** | **San Rafael** | **85.17** | **46** | *e*P | | **P** | **12 22 43.6** | **+1.0** |
| SRU | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **SRU** | **San Rafael** | **85.17** | **46** | *e*P | | **P** | **12 22 43.6** | **+1.0** |
| | comp=Z,3.9nm,0.7s | | | | | | | | |
| **MCK** | **McKinley** | **85.34** | **12** | *e*P | | **P** | **12 22 42.1** | **-0.5** |
| **MCK** | **McKinley** | **85.34** | **12** | *e*P | | **P** | **12 22 42.1** | **-0.5** |
| **BWN** | **Browne** | **85.63** | **12** | *e*P | | **P** | **12 22 43.4** | **-0.5** |
| | comp=Z,36nm,1.2s | | | | | | | | |
| **NEW** | **Newport** | **85.88** | **36** | P | | **P** | **12 22 45.6** | **+0.1** |
| | comp=Z,1.5nm,0.6s,baz=190,slow=12,SNR=3.7 | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **85.91** | **57** | *e*P | | P | 12 22 47.8 | +1.5 |
| **TXAR** | **Lajitas Array** | **85.91** | **57** | P | | P | 12 22 48.0 | +1.8 |
| | comp=Z,3.0nm,0.6s,baz=218,slow=6.7,SNR=34 | | | | | | | | |
| **ANMO** | **Albuquerque** | **86.14** | **51** | *i* P | | **P** | **12 22 45.7** | **-1.6** |
| ANMO | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | |
| **GYA** | **Guiyang** | **86.15** | **299** | pP | | P | 12 22 48.9 | +1.4 |
| **WRH** | **Wood River Hil** | **86.17** | **12** | *e*P | | **P** | **12 22 46.2** | **-0.3** |
| | comp=Z,18nm,0.9s | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **86.52** | **40** | *e*P | | **P** | **12 22 50.1** | **+1.2** |
| **COLA** | **College** | **86.57** | **12***c* | *i*P | | **P** | **12 22 47.1** | **-1.2** |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **MDM** | **Murphy Dome** | **86.57** | **12** | *e*P | | **P** | **12 22 47.4** | **-1.0** |
| | comp=Z,13nm,0.8s | | | | | | | | |
| **IL1** | **Eielson Array** | **86.68** | **13** | *e*P | | **P** | **12 22 47.2** | **-1.7** |
| **ILAR** | **Eielson Array** | **86.68** | **13** | P | | **P** | **12 22 47.9** | **-1.0** |
| | comp=Z,6.7nm,0.9s,baz=229,slow=4.9,SNR=64 | | | | | | | | |
| ILAR | | | | PP | | **PP** | **12 26 21.0** | **-2.0** |
| | comp=Z,1.3nm,1.1s,baz=220,slow=5.6,SNR=4.3 | | | | | | | | |
| **DLMT** | **Dillon** | **86.94** | **40** | *e*P | | **P** | **12 22 51.8** | **+1.0** |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **REDW** | **Red Top Meadow** | **87.03** | **42** | *e*P | | **P** | **12 22 52.5** | **+1.2** |
| | comp=Z,5.6nm,1.0s | | | | | | | | |
| **FXWY** | **Fox Creek** | **87.05** | **42** | *e*P | | P | 12 22 53.9 | +2.5 |
| | comp=Z,10nm,1.8s | | | | | | | | |
| **SNOW** | **Snow King Moun** | **87.14** | **42** | *e*P | | P | 12 22 53.3 | +1.5 |
| | comp=Z,6.4nm,1.0s | | | | | | | | |
| **IMW** | **Indian Meadow** | **87.23** | **42** | *e*P | | **P** | **12 22 53.5** | **+1.2** |
| | comp=Z,5.5nm,0.9s | | | | | | | | |
| **LRM** | **Limekiln Ridge** | **87.27** | **39** | *e*P | | **P** | **12 22 52.9** | **+0.4** |
| **QLMT** | **Earthquake Lak** | **87.39** | **41** | *e*P | | P | 12 22 54.5 | +1.5 |
| **BW06** | **Boulder Array** | **87.57** | **43** | *e*P | | **P** | **12 22 53.9** | **0.0** |
| **HIA** | **Hailar** | **87.59** | **324** | *e*P | | **P** | **12 22 53.9** | **+0.4** |
| HIA | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.67** | **40** | *e*P | | **P** | **12 22 55.3** | **+1.1** |
| BOZ | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **87.67** | **40** | *e*P | | **P** | **12 22 55.2** | **+1.1** |
| | comp=Z,4.6nm,0.9s | | | | | | | | |
| **H17A** | **Grant Village** | **87.70** | **41** | *e*P | | **P** | **12 22 55.2** | **+0.7** |
| | comp=Z,4.8nm,0.9s | | | | | | | | |
| **DAWY** | **Dawson** | **87.83** | **16** | *e*P | | **P** | **12 22 54.4** | **+0.1** |
| **EGAK** | **Eagle** | **87.97** | **15** | *e*P | | **P** | **12 22 54.8** | **-0.2** |
| **COLD** | **Coldfoot** | **88.24** | **10** | *e*P | | **P** | **12 22 56.2** | **+0.1** |
| | comp=Z,8.4nm,0.7s | | | | | | | | |
| **SYO** | **Syowa Base** | **88.36** | **193**⇑ | *e*X | | **P** | **12 22 55.5** | **-1.3** |
| **HHC** | **Hu-ho-hao-te** | **88.47** | **314** | *e*P | | P | 12 23 01.5 | +3.5 |
| HHC | | | | PMZ | | | | | |
| | comp=Z,16nm,1.1s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,140nm,5.7s | | | | | | | | |
| **KMI** | **Kunming** | **88.92** | **297** | P | | P | 12 23 02.4 | +1.8 |
| KMI | | | | PMZ | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,370nm,4.1s | | | | | | | | |
| **SNAA** | **Sanae** | **89.60** | **178** | P | | **P** | **12 23 02.7** | **0.0** |
| **SNAA** | **Sanae** | **89.60** | **178** | *e*P | | **P** | **12 23 00.7** | **-2.0** |
| SNAA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.89** | **289** | P | | **P** | **12 23 05.1** | **+0.1** |
| | comp=Z,0.6nm,0.3s,baz=118,slow=3.2,SNR=5.3 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.89** | **289** | *i* P | | **P** | **12 23 05.4** | **+0.5** |
| CMAR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **90.16** | **177** | P | | **P** | **12 23 06.6** | **+1.4** |
| | baz=182,slow=4.1 | | | | | | | | |
| **CD2** | **Chengdu** | **90.21** | **303** | pP | | **P** | **12 23 07.4** | **+1.2** |
| **VNA1** | **Neumayer--Stat** | **90.39** | **176** | P | | **P** | **12 23 07.8** | **+1.6** |
| **YAK** | **Yakutsk** | **90.75** | **338** | *e*P | | **P** | **12 23 06.7** | **-1.1** |
| **LAO** | **LASA Array** | **91.48** | **41** | *e*P | | P | 12 23 13.1 | +1.4 |
| | comp=Z,7.1nm,0.9s | | | | | | | | |
| **LZH** | **Lanzhou** | **92.06** | **307** | ⇓P | | P | 12 23 17.8 | +3.0 |
| LZH | | | | pP | | pP | 12 25 32.5 | +7.8 |
| LZH | | | | PP | | PP | 12 27 13.5 | +7.6 |
| LZH | | | | PMZ | | | | | |
| | comp=Z,17nm,1.3s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,72nm,9.5s | | | | | | | | |
| **DGMT** | **Dagmar** | **93.48** | **40** | *e*P | | **P** | **12 23 21.9** | **+1.1** |
| | comp=Z,10nm,0.8s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **94.37** | **319** | *i* P | | **P** | **12 23 24.8** | **-0.2** |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **110.33** | **314** | PKiKP | | **PKiKP** | **12 28 32.1** | **-1.0** |
| | comp=Z,0.5nm,0.4s,baz=195,slow=0.6,SNR=6.2 | | | | | | | | |
| **KSH** | **Kashi** | **114.24** | **306** | *e*PKP | | PKPdf | 12 28 46.0 | +5.1 |
| KSH | | | | *es*PKP | | | 12 32 01.6 | | |
| **ARCES** | **ARCESS Array B** | **127.41** | **350** | PKP | | **PKPdf** | **12 29 04.2** | **-1.0** |
| | comp=Z,1.8nm,0.4s,baz=17,slow=1.7,SNR=18 | | | | | | | | |
| **FINES** | **FINESS Array B** | **134.33** | **344** | PKP | | **PKPdf** | **12 29 18.8** | **+0.4** |
| | comp=Z,2.2nm,0.7s,baz=153,slow=5.5,SNR=5.3 | | | | | | | | |
| FINES | | | | SKPbc | | **SKPbc** | **12 31 52.2** | **-0.5** |
| | comp=Z,3.4nm,0.5s,baz=94,slow=2.3,SNR=16 | | | | | | | | |
| **OBN** | **Obninsk** | **135.50** | **333** | *i* PKIKP | | **PKPdf** | **12 29 19.1** | **-1.7** |
| OBN | | | | *e* | | | 12 32 10.2 | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **137.43** | **354** | PKP | | **PKPdf** | **12 29 25.6** | **+1.4** |
| | comp=Z,0.7nm,0.6s,baz=18,slow=4.2,SNR=2.8 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **137.43** | **354** | PKIKP | | **PKPdf** | **12 29 25.6** | **+1.4** |
| NOA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **KIV** | **Kislovodsk** | **138.06** | **316** | *e*PKIKP | | **PKPdf** | **12 29 26.1** | **+0.1** |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **141.76** | **332** | PKhKP | | PKPpre | 12 29 27.4 | | |
| | comp=Z,3.1nm,0.4s,baz=42,slow=4.2,SNR=12 | | | | | | | | |
| **OJC** | **Ojcow** | **145.78** | **340** | *e*PKP | | **PKPab** | **12 29 41.0** | **-2.0** |
| **OJC** | **Ojcow** | **145.78** | **340** | *e*PKIKP | | **PKPab** | **12 29 41.1** | **-2.0** |
| **BURAR** | **Bucovina Array** | **145.82** | **332** | ⇑PKP2 | | **PKPab** | **12 29 43.1** | **-0.3** |
| **BURAR** | **Bucovina Array** | **145.82** | **332** | ⇑*i*P | | **PKPab** | **12 29 43.1** | **-0.3** |
| **STHS** | **Stebnicka Huta** | **145.97** | **338** | *e*PKP2 | | **PKPab** | **12 29 44.9** | **+1.0** |
| **STHS** | **Stebnicka Huta** | **145.97** | **338** | *e*PKP | | **PKPab** | **12 29 44.9** | **+1.0** |
| **BRTR** | **Keskin Array B** | **145.99** | **314** | PKPbc | | **PKPab** | **12 29 42.1** | **-2.3** |
| | comp=Z,3.8nm,0.9s,baz=143,slow=4.2,SNR=10 | | | | | | | | |
| BRTR | | | | SKPbc | | **SKPbc** | **12 32 22.6** | **-1.8** |
| | comp=Z,0.8nm,0.6s,baz=93,slow=2.7,SNR=3.8 | | | | | | | | |
| **KSP** | **Ksiaz** | **146.25** | **344** | *e*PKP | | **PKPab** | **12 29 42.8** | **-2.1** |
| **KSP** | **Ksiaz** | **146.25** | **344** | *e*PKP2 | | **PKPab** | **12 29 42.8** | **-2.1** |
| **NIE** | **Niedzica** | **146.30** | **339** | *e*PKP | | **PKPab** | **12 29 42.9** | **-2.3** |
| **NIE** | **Niedzica** | **146.30** | **339** | *e*PKP2 | | **PKPab** | **12 29 43.0** | **-2.3** |
| **VRI** | **Vrincioaia** | **146.39** | **329** | ⇑PKIKP | | **PKPab** | **12 29 42.8** | **-2.9** |
| **VRI** | **Vrincioaia** | **146.39** | **329** | ⇑*i*P | | **PKPab** | **12 29 42.8** | **-2.9** |
| **CLZ** | **Clausthal** | **146.52** | **351** | *e*PKPbc | | **PKPab** | **12 29 43.4** | **-2.6** |
| | baz=16,slow=2.5 | | | | | | | | |
| **CLL** | **Collm** | **146.57** | **348** | ⇑PKIKP | | **PKPab** | **12 29 43.3** | **-2.9** |
| CLL | | | | *i* | | | 12 29 45.9 | | |
| CLL | | | | pmax | pmax | | | | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| CLL | | | | pmax | pmax | | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **146.57** | **348** | *e*PKPbc | | **PKPab** | **12 29 43.3** | **-2.9** |
| | baz=16,slow=2.5 | | | | | | | | |
| CLL | | | | *e*PKPab | | **PKiKP** | **12 29 46.0** | **+0.6** |
| | baz=13,slow=4.3 | | | | | | | | |
| **CLL** | **Collm** | **146.57** | **348** | ⇑PKPbc | | **PKPab** | **12 29 43.3** | **-2.9** |
| | comp=Z,17nm,0.6s | | | | | | | | |
| CLL | | | | ⇓*i*PKPab | | **PKiKP** | **12 29 45.9** | **+0.6** |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **UPC** | **Upice** | **146.63** | **344** | *i* PKP2 | | **PKPab** | **12 29 44.0** | **-2.5** |
| **UPC** | **Upice** | **146.63** | **344** | ⇑*i*PKP | | **PKPab** | **12 29 44.0** | **-2.5** |
| UPC | | | | *e*PKPAB | | **PKiKP** | **12 29 46.8** | **+1.3** |
| **DPC** | **Dobruska-Polom** | **146.69** | **344** | *i* PKP2 | | **PKPab** | **12 29 44.2** | **-2.6** |
| **DPC** | **Dobruska-Polom** | **146.69** | **344** | ⇑*i*PKP | | **PKPab** | **12 29 44.2** | **-2.6** |
| DPC | | | | *e*PKPAB | | **PKiKP** | **12 29 47.5** | **+1.8** |
| **BRG** | **Berggiesshubel** | **146.79** | **347** | *i* PKP | | **PKPab** | **12 29 43.8** | **-3.3** |
| | comp=Z,7.4nm,0.7s | | | | | | | | |
| BRG | | | | *i* | | | 12 29 46.8 | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **146.79** | **347** | *i* PKIKP | | **PKPab** | **12 29 43.8** | **-3.3** |
| BRG | | | | *i* | | | 12 29 46.8 | | |
| BRG | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| BRG | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **146.79** | **347** | *e*PKPbc | | **PKPab** | **12 29 43.9** | **-3.2** |
| | baz=16,slow=2.5 | | | | | | | | |
| BRG | | | | *e*PKPab | | **PKiKP** | **12 29 46.9** | **+1.1** |
| | baz=13,slow=4.3 | | | | | | | | |
| **MORC** | **Moravsky Berou** | **146.87** | **342** | ⇑PKP2 | | **PKPab** | **12 29 47.4** | **-0.1** |
| **MORC** | **Moravsky Berou** | **146.87** | **342** | ⇑*i*P | | **PKPab** | **12 29 47.4** | **-0.1** |
| **DOPR** | **Dopca** | **146.97** | **330** | ⇑*i*P | | **PKPab** | **12 29 45.2** | **-2.8** |
| **ISR** | **Istrita** | **147.01** | **328** | ⇑PKIKP | | **PKPbc** | **12 29 43.6** | **-1.1** |
| **ISR** | **Istrita** | **147.01** | **328** | ⇑*i*P | | **PKPbc** | **12 29 43.6** | **-1.1** |
| **MLR** | **Muntele Rosu** | **147.04** | **329** | ⇑PKIKP | | **PKPbc** | **12 29 44.8** | **-0.1** |
| **MLR** | **Muntele Rosu** | **147.04** | **329** | ⇑*i*P | | **PKPbc** | **12 29 44.8** | **-0.1** |
| **PRU** | **Pruhonice** | **147.48** | **345** | *e*PKP2 | | **PKPbc** | **12 29 45.8** | **+0.1** |
| **PRU** | **Pruhonice** | **147.48** | **345** | *e*PKP | | **PKPbc** | **12 29 45.8** | **+0.1** |
| **GOPC** | **GO Pecny, Ondr** | **147.49** | **345** | *i* PKP2 | | **PKPab** | **12 29 46.3** | **-3.7** |
| **GOPC** | **GO Pecny, Ondr** | **147.49** | **345** | ⇑*i*PKP | | **PKPab** | **12 29 46.3** | **-3.7** |
| GOPC | | | | *e*PKPAB | | **PKiKP** | **12 29 50.2** | **+2.9** |
| **VOIR** | | **147.52** | **330** | ⇑PKIKP | | **PKPbc** | **12 29 45.0** | **-1.1** |
| **VOIR** | | **147.52** | **330** | ⇑*i*P | | **PKPbc** | **12 29 45.0** | **-1.1** |
| **TANN** | **Tannenbergstha** | **147.53** | **348** | *e*PKPab | | **PKPab** | **12 29 50.0** | **-0.2** |
| | baz=13,slow=4.3 | | | | | | | | |
| **DRGR** | | **147.54** | **334** | ⇑PKIKP | | **PKPbc** | **12 29 46.0** | **-0.1** |
| **DRGR** | | **147.54** | **334** | ⇑*i*P | | **PKPbc** | **12 29 46.0** | **-0.1** |
| **VRAC** | **Vranov** | **147.56** | **343** | ⇓PKP2 | | **PKPab** | **12 29 51.1** | **+0.8** |
| **VRAC** | **Vranov** | **147.56** | **343** | ⇓*i*P | | **PKPab** | **12 29 51.1** | **+0.8** |
| **VYHS** | **Vyhne** | **147.59** | **339** | *e*PKP2 | | **PKPbc** | **12 29 46.4** | **+0.3** |
| **VYHS** | **Vyhne** | **147.59** | **339** | *e*PKP | | **PKPbc** | **12 29 46.4** | **+0.3** |
| **ARR** | **Arges** | **147.77** | **330** | ⇑*i*P | | **PKPbc** | **12 29 46.8** | **+0.1** |
| **ROTZ** | **Rotzenmuhle** | **148.20** | **348** | *e*PKPbc | | **PKPbc** | **12 29 47.6** | **0.0** |
| | baz=16,slow=2.5 | | | | | | | | |
| **TNS** | **Taunus Mts** | **148.36** | **353** | *e*PKPbc | | **PKPbc** | **12 29 48.3** | **+0.3** |
| | baz=16,slow=2.5 | | | | | | | | |
| TNS | | | | *e*PKPab | | **PKPab** | **12 29 53.3** | **-0.3** |
| | baz=13,slow=4.3 | | | | | | | | |
| **SIRR** | **Siria** | **148.39** | **334** | ⇑*i*P | | **PKPbc** | **12 29 48.4** | **+0.2** |
| **GRF** | **Grafenberg Arr** | **148.46** | **349** | *e*PKPbc | | **PKPbc** | **12 29 48.0** | **-0.2** |
| | baz=16,slow=2.5 | | | | | | | | |
| **KHC** | **Kasperske Hory** | **148.50** | **346** | ⇑*i*PKP | | **PKPbc** | **12 29 48.6** | **+0.2** |
| KHC | | | | *e*PKPAB | | **PKPab** | **12 29 54.6** | **+0.4** |
| **KHC** | **Kasperske Hory** | **148.50** | **346** | *e*PKPbc | | **PKPab** | **12 29 48.6** | **+0.2** |
| KHC | | | | *e*PKPab | | **PKPab** | **12 29 54.8** | **+0.6** |
| **GZR** | **Gura Zlata** | **148.60** | **332** | ⇑*i*P | | **PKPbc** | **12 29 48.5** | **-0.3** |
| **WET** | **Wettzell** | **148.65** | **347** | *e*PKPbc | | **PKPbc** | **12 29 48.8** | **+0.1** |
| | baz=16,slow=2.5 | | | | | | | | |
| WET | | | | *e*PKPab | | **PKPab** | **12 29 54.7** | **0.0** |
| | baz=13,slow=4.3 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **148.74** | **345** | *e*PKPbc | | **PKPbc** | **12 29 49.0** | **0.0** |
| | baz=16,slow=2.5 | | | | | | | | |
| GEC2 | | | | *e*PKPab | | **PKPab** | **12 29 55.6** | **+0.3** |
| | baz=13,slow=4.3 | | | | | | | | |
| **GERES** | **GERESS Array B** | **148.74** | **345** | PKPbc | | **PKPbc** | **12 29 49.0** | **0.0** |
| | comp=Z,4.0nm,0.7s,baz=38,slow=2.4,SNR=21 | | | | | | | | |
| **BZS** | **Buzias** | **148.93** | **333** | ⇑*i*P | | **PKPbc** | **12 29 49.4** | **-0.1** |
| **CONA** | **Conrad Observa** | **149.02** | **342** | ⇑*i*PKiKP | | **PKiKP** | **12 29 50.1** | **-0.5** |
| | comp=Z,7.8nm,0.7s | | | | | | | | |
| **MOA** | **Molln** | **149.53** | **344** | ⇓*i*PKPbc | | **PKPbc** | **12 29 50.6** | **-0.3** |
| | comp=Z,3.3nm,0.6s | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **149.91** | **348** | *e*PKPbc | | **PKPbc** | **12 29 52.0** | **+0.2** |
| | baz=16,slow=2.5 | | | | | | | | |
| **RJOB** | **Jochberg** | **149.99** | **346** | *e*PKPbc | | **PKPbc** | **12 29 51.9** | **-0.1** |
| | baz=16,slow=2.5 | | | | | | | | |
| RJOB | | | | *e*PKPab | | **PKPab** | **12 30 01.2** | **+0.8** |
| | baz=13,slow=4.3 | | | | | | | | |
| **BFO** | **Black Forest** | **150.24** | **352** | *e*PKPbc | | **PKPbc** | **12 29 52.4** | **-0.2** |
| | baz=16,slow=2.5 | | | | | | | | |
| BFO | | | | *e*PKPab | | **PKPab** | **12 30 01.1** | **-0.3** |
| | baz=13,slow=4.3 | | | | | | | | |
| **SOKA** | **Soboth** | **150.39** | **342** | ⇓*i*PKPbc | | **PKPbc** | **12 29 52.2** | **-0.8** |
| | comp=Z,6.8nm,0.9s | | | | | | | | |
| **PERS** | **Pernice** | **150.40** | **342** | *e*PKPbc | | **PKPbc** | **12 29 52.1** | **-0.9** |
| PERS | | | | *i* | | | 12 30 02.1 | | |
| **KBA** | **Koelnbreinsper** | **150.48** | **345** | ⇑*i*PKPbc | | **PKPbc** | **12 29 52.4** | **-0.9** |
| | comp=Z,7.5nm,0.5s | | | | | | | | |
| **WATA** | **Walderalm** | **150.64** | **347** | ⇑*i*PKPbc | | **PKPbc** | **12 29 53.2** | **-0.5** |
| | comp=Z,8.6nm,0.4s | | | | | | | | |
| **RETA** | **Reutte** | **150.66** | **348** | ⇑*i*PKPbc | | **PKPbc** | **12 29 52.6** | **-1.0** |
| | comp=Z,3.8nm,0.5s | | | | | | | | |
| **WTTA** | **Wattenberg** | **150.70** | **347** | ⇑*i*PKPbc | | **PKPbc** | **12 29 53.5** | **-0.3** |
| | comp=Z,18nm,0.5s | | | | | | | | |
| **MYKA** | **Terra Mystica** | **150.82** | **344** | ⇓*i*PKPbc | | **PKPbc** | **12 29 52.9** | **-1.1** |
| | comp=Z,7.8nm,0.5s | | | | | | | | |
| **DIVS** | **Divibare** | **150.84** | **333** | ⇓*i*P | | **PKPbc** | **12 29 54.5** | **+0.4** |
| **PDKS** | **Podkum** | **150.96** | **342** | *i* PKPbc | | **PKPbc** | **12 29 53.7** | **-0.5** |
| PDKS | | | | *i* | | | 12 30 04.5 | | |
| **ABTA** | **Abfaltersbach** | **150.99** | **346** | ⇑*i*PKPbc | | **PKPbc** | **12 29 53.7** | **-0.7** |
| | comp=Z,16nm,0.5s | | | | | | | | |
| **DAVA** | **Damuels** | **151.02** | **349** | ⇑*i*PKiKP | | **PKiKP** | **12 29 54.6** | **-0.2** |
| | comp=Z,5.9nm,0.5s | | | | | | | | |
| **FETA** | **Feichten** | **151.12** | **348** | ⇑*i*PKPbc | | **PKPbc** | **12 29 54.7** | **0.0** |
| | comp=Z,5.4nm,0.6s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **158.58** | **13** | PKP | | **PKPdf** | **12 29 58.6** | **+0.2** |
| | comp=Z,0.2nm,0.4s,baz=63,slow=1.6,SNR=3.2 | | | | | | | | |
| ESDC | | | | PKPab | | **PKPab** | **12 30 36.7** | **-0.7** |
| | comp=Z,0.6nm,0.5s,baz=342,slow=4.1,SNR=7.1 | | | | | | | | |
| **KEST** | **Kesra** | **162.12** | **341** | PKPab | | **PKPab** | **12 30 53.1** | **0.0** |
| | comp=Z,5.2nm,0.8s,baz=313,slow=4.5,SNR=5.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **174.25** | **174** | PKPab | | **PKPab** | **12 31 47.6** | **+0.5** |
| | comp=Z,0.6nm,0.7s,baz=173,slow=3.9,SNR=4.6 | | | | | | | | |

*BYKL* ***22*** *12:29:51.4±0.2, 52°.34N×106°.02E*
*MOS* ***22*** *12:29:51.6±1.1, 52°.36N×106°.03E, h10km, mb4.2/1, Error ellipse: s-maj=20.7km s-min=12.7km az=57.9*
**ISC 22 12:29:50.7**±0.7**, 52°.39N**±0°.02×**106°.06E**±0°.02**, h10**km**, n31,**
σ1§**88**/66**, 10C-6D, Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TRG** | **Tyrgan** | **0.41** | **25** | *e*PG | | **Pb** | | **12 30 00.1** | **0.0** |
| TRG | | | | *e* | | | | 12 30 06.7 | |
| TRG | | | | pmax | pmax | | | | |
| | comp=Z,108nm,0.1s | | | | | | | | |
| TRG | | | | smax | smax | | | | |
| | comp=E,2μm,0.1s | | | | | | | | |
| **TRG** | **Tyrgan** | **0.41** | **25** | ⇓*i*Pg | | **Pb** | | **12 30 00.1** | **0.0** |
| TRG | | | | *e*Sg | | **Sb** | | **12 30 06.6** | **+0.1** |
| TRG | | | | Pmax | | | | | |
| | comp=E,105nm,0.1s | | | | | | | | |
| TRG | | | | Smax | | | | | |
| | comp=E,2μm,0.1s | | | | | | | | |
| **KAB** | **Kabansk** | **0.50** | **133** | ⇑*i*PG | | **Pg** | | **12 30 00.3** | **-0.1** |
| KAB | | | | *i* | | | | 12 30 07.3 | |
| KAB | | | | pmax | pmax | | | | |
| | comp=Z,1μm,0.2s | | | | | | | | |
| KAB | | | | smax | smax | | | | |
| | comp=N,6μm,0.5s | | | | | | | | |
| **KAB** | **Kabansk** | **0.50** | **133** | ⇑*i*Pg | | **Pg** | | **12 30 00.3** | **-0.1** |
| KAB | | | | *i* Sg | | **Sg** | | **12 30 07.3** | **+0.4** |
| KAB | | | | Pmax | | | | | |
| | comp=N,1μm,0.2s | | | | | | | | |
| KAB | | | | Smax | | | | | |
| | comp=N,3μm,0.3s | | | | | | | | |
| **ZRHB** | **Zarechye** | **0.69** | **76** | ⇑*i*Pg | | **Pb** | | **12 30 04.6** | **-0.2** |
| ZRHB | | | | *e*Sg | | **Sb** | | **12 30 14.5** | **+0.2** |
| ZRHB | | | | *e*Sb | | **Sn** | | **12 30 19.9** | **+2.6** |
| ZRHB | | | | Pmax | | | | | |
| | comp=N,181nm,0.8s | | | | | | | | |
| ZRHB | | | | max | | | | | |
| | comp=N,988nm,0.4s | | | | | | | | |
| **LSTR** | **Listvyanka** | **0.92** | **236** | *e*PG | | **Pg** | | **12 30 07.7** | **-0.7** |
| LSTR | | | | *e* | | | | 12 30 19.0 | |
| LSTR | | | | pmax | pmax | | | | |
| | comp=Z,49nm,0.2s | | | | | | | | |
| LSTR | | | | smax | smax | | | | |
| | comp=E,234nm,0.2s | | | | | | | | |
| **LSTR** | **Listvyanka** | **0.92** | **236** | ⇑*i*Pg | | **Pg** | | **12 30 06.6** | **-1.8** |
| LSTR | | | | *e*Pb | | **Pn** | | **12 30 09.5** | **-0.2** |
| LSTR | | | | *e*Sg | | **Sg** | | **12 30 19.0** | **-1.4** |
| LSTR | | | | *e*Sb | | **Sn** | | **12 30 22.6** | **-0.4** |
| LSTR | | | | max | | | | | |
| | comp=E,24nm,0.2s | | | | | | | | |
| LSTR | | | | max | | | | | |
| | comp=E,234nm,0.2s | | | | | | | | |
| **IRK** | **Irkutsk** | **1.11** | **263** | *e*PG | | **Pn** | | **12 30 12.1** | **-0.2** |
| IRK | | | | *e* | | | | 12 30 26.2 | |
| IRK | | | | pmax | pmax | | | | |
| | comp=Z,164nm,0.3s | | | | | | | | |
| IRK | | | | smax | smax | | | | |
| | comp=N,2μm,0.4s | | | | | | | | |
| **IRK** | **Irkutsk** | **1.11** | **263** | *e*Pg | | **Pb** | | **12 30 11.0** | **-1.0** |
| IRK | | | | *i* Sg | | **Sb** | | **12 30 26.2** | **-0.3** |
| IRK | | | | *e*Sb | | **Sn** | | **12 30 28.7** | **+1.1** |
| IRK | | | | Pmax | | | | | |
| | comp=N,163nm,0.3s | | | | | | | | |
| IRK | | | | max | | | | | |
| | comp=N,2μm,0.4s | | | | | | | | |
| **UUDB** | **Ulan-Yde** | **1.12** | **117** | ⇓*i*Pg | | **Pb** | | **12 30 11.0** | **-1.1** |
| | comp=N,58nm,0.5s | | | | | | | | |
| UUDB | | | | ⇑*i*Pg | | **Pb** | | **12 30 11.0** | **-1.1** |
| | comp=N,111nm,0.5s | | | | | | | | |
| UUDB | | | | ⇑*i*Pg | | **Pb** | | **12 30 11.0** | **-1.1** |
| | comp=N,130nm,0.5s | | | | | | | | |
| UUDB | | | | *e*Sg | | **Sb** | | **12 30 25.6** | **-1.1** |
| UUDB | | | | Pmax | | | | | |
| | comp=N,216nm,0.5s | | | | | | | | |
| UUDB | | | | Smax | | | | | |
| | comp=N,380nm,0.6s | | | | | | | | |
| **OGRR** | **Ongureny** | **1.56** | **36** | *e*PN | | **Pg** | | **12 30 20.0** | **-0.7** |
| OGRR | | | | *e* | | | | 12 30 40.5 | |
| OGRR | | | | pmax | pmax | | | | |
| | comp=Z,24nm,0.3s | | | | | | | | |
| OGRR | | | | smax | smax | | | | |
| | comp=E,199nm,0.6s | | | | | | | | |
| **OGRR** | **Ongureny** | **1.56** | **36** | ⇓*i*Pg | | **Pg** | | **12 30 19.9** | **-0.7** |
| OGRR | | | | *e*Pb | | **Pb** | | **12 30 20.9** | **+1.2** |
| OGRR | | | | *e*Sg | | **Sg** | | **12 30 41.1** | **+0.2** |
| OGRR | | | | *e*Sb | | **Sb** | | **12 30 42.3** | **+2.8** |
| OGRR | | | | max | | | | | |
| | comp=E,25nm,0.3s | | | | | | | | |
| OGRR | | | | max | | | | | |
| | comp=E,199nm,0.4s | | | | | | | | |
| **TLY** | **Talaya** | **1.65** | **246** | *e*PN | | **Pb** | | **12 30 21.1** | **-0.2** |
| TLY | | | | *e* | | | | 12 30 42.0 | |
| TLY | | | | pmax | pmax | | | | |
| | comp=Z,24nm,0.2s | | | | | | | | |
| TLY | | | | smax | smax | | | | |
| | comp=N,274nm,0.3s | | | | | | | | |
| **TLY** | **Talaya** | **1.65** | **246** | *e*Pg | | **Pb** | | **12 30 20.6** | **-0.7** |
| TLY | | | | *i* Sg | | **Sb** | | **12 30 41.5** | **-0.6** |
| TLY | | | | *e*Sb | | **Sg** | | **12 30 43.3** | **-0.5** |
| TLY | | | | Pmax | | | | | |
| | comp=N,19nm,0.3s | | | | | | | | |
| TLY | | | | max | | | | | |
| | comp=N,214nm,0.3s | | | | | | | | |
| **ARS** | **Arshan** | **2.29** | **260** | *e*PN | | **Pb** | | **12 30 30.6** | **-1.5** |
| ARS | | | | *e* | | | | 12 31 00.4 | |
| ARS | | | | pmax | pmax | | | | |
| | comp=Z,26nm,0.3s | | | | | | | | |
| ARS | | | | smax | smax | | | | |
| | comp=E,516nm,0.4s | | | | | | | | |
| **ARS** | **Arshan** | **2.29** | **260** | *e*Pg | | **Pb** | | **12 30 30.8** | **-1.3** |
| ARS | | | | *e*Sg | | **Sb** | | **12 31 00.7** | **+0.2** |
| ARS | | | | Pmax | | | | | |
| | comp=E,31nm,0.5s | | | | | | | | |
| ARS | | | | Smax | | | | | |
| | comp=E,578nm,0.4s | | | | | | | | |
| **ZAK** | **Zakamensk** | **2.66** | **222** | ⇑*i*Pg | | **Pb** | | **12 30 38.8** | **+0.4** |
| ZAK | | | | *e*Sg | | **Sb** | | **12 31 13.0** | **+1.8** |
| ZAK | | | | *e* | | | | 12 31 16.2 | |
| ZAK | | | | Pmax | | | | | |
| | comp=E,5.0nm,0.3s | | | | | | | | |
| ZAK | | | | Smax | | | | | |
| | comp=E,41nm,0.6s | | | | | | | | |
| **SYVR** | **Suvo** | **2.70** | **60** | 

*DJA* ***22*** *12:42:24.5±0.3,2°S±8'×13°6E±°, h91km±17km, M4.0/9, mb3.8/2, mB4.8/1, MLv4.1/9, Mw(mB)4.1/1*

**ISC 22 12:42:25.7±0.9, 2.0S±0.1×135.81E±0.04, h35km, n9, σ1s42/15, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RKPI** | **Ransiki, Papua** | **1.71** | **287** | P | **Pn** | **12 42 52.9** | **-0.1** |
| RKPI | | | | S | **Sn** | **12 43 15.5** | **+1.9** |
| **SMPI** | **Sarmi** | **2.90** | **89** | P | **Pn** | **12 43 09.1** | **-0.3** |
| SMPI | | | | S | **Sn** | **12 43 43.9** | **+0.8** |
| **FAKI** | **Fak Fak** | **3.66** | **256** | P | **Pn** | **12 43 18.8** | **-1.1** |
| FAKI | | | | S | **Sn** | **12 44 01.5** | **-0.5** |
| **GENI** | **Genyem** | **4.39** | **97** | P | **Pn** | **12 43 29.4** | **-0.6** |
| GENI | | | | S | **Sn** | **12 44 20.8** | **+0.8** |
| **SWI** | **Sorong** | **4.69** | **284** | P | **Pn** | **12 43 32.7** | **-1.3** |
| SWI | | | | S | **Sn** | **12 44 27.3** | **+0.1** |
| **MSAI** | **Masohi** 4.9nm,0.4s,1μm0.1nm | **6.99** | **259** | P | **Pn** | **12 44 04.0** | **-1.7** |
| MSAI | | | | S | **Sn** | **12 45 24.5** | **+0.4** |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=9.1,slow=13,SNR=5.6 | **17.87** | **185** | P | **P** | **12 46 32.5** | **+0.4** |
| **ASAR** | **Alice Springs** 1.5nm,0.5s,baz=11,slow=11,SNR=18 | **21.59** | **185** | P | **P** | **12 47 16.1** | **+3.5** |
| **MKAR** | **Makanchi Array** 0.4nm,0.5s,baz=114,slow=7.3,SNR=4.8 | **67.49** | **323** | P | **P** | **12 53 17.7** | **-0.6** |

*ISK* ***22*** *12:54:57.5, 35°13N×27°26E, h9km, ML4.1*

*IDC* ***22*** *12:55:01.4±0.6, 35°45N×27°23E, h0km, mb4.1/19, mb1 4.1/25, mb1mx4.0/40, mbtmp4.0/25, ML3.3/5, MS3.0/4, Ms1 3.0/4, ms1mx2.6/47, Error ellipse: s-maj=15.5km s-min=9.5km az=162.0*

*ATH* ***22*** *12:55:01.8, 35°43N×27°42E, h18km±1km, MD3.3/8*

*ISCJB* ***22*** *12:55:01.5±0.6, 35°35N±0°02'×27°42E±0°02, h16km±5km, mb4.1/24, MS3.0/4, Error ellipse: s-maj=3.3km s-min=2.6km az=179.9*

*THE* ***22*** *12:55:02.4, 35°44N×27°42E, h8km±1km, ML3.8/5, Error ellipse: s-maj=1.9km s-min=1.0km az=149.0*

*CSEM* ***22*** *12:55:02.2±0.1, 35°37N×27°37E, h10km, mb4.1/13*

*MOS* ***22*** *12:55:02.9±1.1, 35°42N×27°35E, h23km, mb4.3/14, Error ellipse: s-maj=12.6km s-min=7.2km az=82.9*

*HLW* ***22*** *12:55:03.6, 35°61N×27°47E, h33km±14km, Md3.7, Ml3.3*

*NIC* ***22*** *12:55:03.4, 35°88N×27°49E, h25km, mb4.5, ML4.1*

*DDA* ***22*** *12:55:09.2, 35°85N×27°77E, h27km, Md3.8*

**ISC 22 12:55:02.5±0.8, 35°43N±0°03×27°42E±0°02, h12km±5km, n228, σ1s25/251, mb4.2/24, MS3.1/4, 1C, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KARP** | **Karpathos** | **0.24** | **300** | *e*PB | **Pg** | **12 55 07.0** | **-0.6** |
| KARP | | | | *e*SB | **Sg** | **12 55 11.2** | **+0.1** |
| **KAAP** | **Karpathos** | **0.24** | **300** | P | **Pg** | **12 55 07.0** | **-0.6** |
| KARP | | | | S | **Sg** | **12 55 11.1** | **0.0** |
| **KARP** | **Karpathos** | **0.24** | **300** | P | **Sg** | **12 55 07.0** | **-0.6** |
| KARP | | | | *e*Sb | **Sg** | **12 55 11.2** | **+0.1** |
| **ARG** | **Arkhangelos** | **0.97** | **36** | *e*PN | **Pb** | **12 55 20.3** | **-1.0** |
| ARG | | | | *e*SN | **Sn** | **12 55 34.4** | **-1.4** |
| **ARG** | **Arkhangelos** | **0.97** | **36** | P | **Pb** | **12 55 19.8** | **-1.5** |
| ARG | | | | S | **Sg** | **12 55 33.5** | **-0.5** |
| **ARG** | **Arkhangelos** | **0.97** | **36** | P | **Pb** | **12 55 19.8** | **-1.5** |
| **ARG** | **Arkhangelos** | **0.97** | **36** | *e*Pn | **Pb** | **12 55 20.3** | **-1.0** |
| ARG | | | | S | **Sg** | **12 55 33.5** | **-0.5** |
| ARG | | | | *e*Sn | **Sn** | **12 55 34.4** | **-1.4** |
| **ZKR** | **Zakros** | **1.03** | **253** | *e*PN | **Pb** | **12 55 21.3** | **-1.0** |
| ZKR | | | | *e*SN | **Sn** | **12 55 36.1** | **-1.1** |
| **ZKR** | **Zakros** | **1.03** | **253** | P | **Pb** | **12 55 21.0** | **-1.3** |
| ZKR | | | | S | **Sn** | **12 55 35.9** | **-1.3** |
| **ZKR** | **Zakros** | **1.03** | **253** | P | **Pb** | **12 55 21.0** | **-1.3** |
| **ZKR** | **Zakros** | **1.03** | **253** | *e*Pn | **Pb** | **12 55 21.3** | **-1.0** |
| ZKR | | | | *e*Sn | **Sn** | **12 55 36.1** | **-1.1** |
| **NIS1** | **Nisyros Isl.** | **1.19** | **351** | *e*PN | **Pg** | **12 55 24.9** | **-0.4** |
| **NIS1** | **Nisyros Isl.** | **1.19** | **351** | *e*PN | **Pb** | **12 55 24.1** | **-0.9** |
| NIS1 | | | | *e*SN | **Sg** | **12 55 41.2** | **+0.4** |
| **NIS1** | **Nisyros Isl.** | **1.19** | **351** | P | **Pn** | **12 55 24.1** | **-0.9** |
| NIS1 | | | | S | **Sn** | **12 55 40.1** | **-1.0** |
| **NIS1** | **Nisyros Isl.** | **1.19** | **351** | P | **Pn** | **12 55 24.1** | **-0.9** |
| **NIS1** | **Nisyros Isl.** | **1.19** | **351** | *e*Pn | **Pg** | **12 55 25.0** | **-0.4** |
| NIS1 | | | | S | **Sn** | **12 55 40.1** | **-1.0** |
| NIS1 | | | | *e*Sn | **Sg** | **12 55 41.2** | **+0.4** |
| **NISR** | **Nisiros** | **1.21** | **349** | *e*PN | **Pb** | **12 55 24.6** | **-0.6** |
| NISR | | | | *e*SN | **Sg** | **12 55 40.9** | **-0.5** |
| **NISR** | **Nisiros** | **1.21** | **349** | *e*Pn | **Pb** | **12 55 24.6** | **-0.6** |
| NISR | | | | *e*Sn | **Sg** | **12 55 40.9** | **-0.5** |
| **NPS** | **Neapolis** | **1.49** | **264** | *e*PN | **Pb** | **12 55 29.8** | **-0.3** |
| **NPS** | **Neapolis** | **1.49** | **264** | *e*Pn | **Pb** | **12 55 29.8** | **-0.3** |
| **LAST** | **Lasithi** | **1.61** | **261** | *e*PN | **Pb** | **12 55 31.8** | **-0.4** |
| **LAST** | **Lasithi** | **1.61** | **261** | *e*Pn | **Pb** | **12 55 31.8** | **-0.4** |
| **BDRM** | **Kayabasi** | **1.63** | **1** | *i* P | **Pb** | **12 55 31.3** | **-1.3** |
| **BDRM** | **Kayabasi** | **1.63** | **1** | P | **Pb** | **12 55 31.3** | **-1.3** |
| **DALY** | **Dalyan (Mu˘la** | **1.71** | **35** | *e*PN | **Pb** | **12 55 32.8** | **-1.0** |
| DALY | | | | *e*SN | **Sg** | **12 55 58.5** | **+1.0** |
| **DALY** | **Dalyan (Mu˘la** | **1.71** | **35** | *e*Pn | **Pb** | **12 55 32.8** | **-1.0** |
| DALY | | | | *e*Sn | **Sg** | **12 55 58.5** | **+1.0** |
| **TURN** | **Turunc** | **1.73** | **33** | *i* P | Pn | 12 55 29.3 | -3.1 |
| TURN | | | | *i* S | **Sn** | **12 55 52.2** | **-2.2** |
| **TURN** | **Turunc** | **1.73** | **33** | P | Pn | 12 55 29.3 | -3.1 |
| TURN | | | | S | **Sn** | **12 55 52.2** | **-2.2** |
| **FETY** | **Fethiye** | **1.81** | **48** | *e*PN | **Pb** | **12 55 34.0** | **-1.6** |
| **FETY** | **Fethiye** | **1.81** | **48** | *e*Pn | **Pb** | **12 55 34.0** | **-1.6** |
| **YER** | **Yerkesik** | **1.84** | **22** | *e*PN | **Pb** | **12 55 34.7** | **-1.4** |
| **YER** | **Yerkesik** | **1.84** | **22** | *e*Pn | **Pb** | **12 55 34.7** | **-1.4** |
| **THR6** | **Thira Island,** | **1.89** | **300** | P | **Pn** | **12 55 33.6** | **-0.9** |
| **THR6** | **Thira Island,** | **1.89** | **300** | P | **Pn** | **12 55 33.6** | **-0.9** |
| **KSL** | **Kastellorizon** | **1.90** | **67** | *e*PN | **Pb** | **12 55 35.6** | **-1.5** |
| KSL | | | | *e*SN | **Sb** | **12 55 59.3** | **-1.5** |
| **KSL** | **Kastellorizon** | **1.90** | **67** | *e*Pn | **Pb** | **12 55 35.6** | **-1.5** |
| KSL | | | | *e*Sn | **Sb** | **12 55 59.3** | **-1.5** |
| **THR3** | **Thira Island,** | **1.91** | **301** | P | **Pn** | **12 55 33.8** | **-1.0** |
| **THR3** | **Thira Island,** | **1.91** | **301** | P | **Pn** | **12 55 33.8** | **-1.0** |
| **AKAS** | **Kas** | **1.95** | **65** | *i* P | **Pb** | **12 55 36.6** | **-1.5** |
| **AKAS** | **Kas** | **1.95** | **65** | P | **Pb** | **12 55 36.6** | **-1.5** |
| **THR5** | **Thira Island,** | **1.95** | **301** | P | **Pn** | **12 55 34.5** | **-0.9** |
| **THR5** | **Thira Island,** | **1.95** | **301** | P | **Pn** | **12 55 34.5** | **-0.9** |
| **IDI** | **Anoyia** 8.0nm,0.3s,baz=49,slow=2.3,SNR=45 | **2.07** | **267** | Pn | **Pn** | **12 55 36.1** | **-1.1** |
| IDI | | | | Lg | Lg | 12 56 01.9 | |
| IDI | 39nm,0.3s,baz=150,slow=17,SNR=6.0 | | | LR | LR | 12 56 14.5 | |
| **IDI** | comp=Z,111nm,21.8s,baz=69,slow=38 **Anoyia** | **2.07** | **267** | *e*PB | **Pn** | **12 55 37.4** | **+0.2** |
| **IDI** | **Anoyia** | **2.07** | **267** | P | **Pn** | **12 55 36.6** | **-0.6** |
| IDI | | | | S | **Sn** | **12 56 01.5** | **-1.4** |
| **IDI** | **Anoyia** | **2.07** | **267** | P | **Pn** | **12 55 36.6** | **-0.6** |
| **IDI** | **Anoyia** | **2.07** | **267** | *e*Pb | **Pn** | **12 55 37.4** | **+0.2** |
| IDI | | | | S | **Sn** | **12 56 01.5** | **-1.4** |
| **APE** | **Apeiranthos** | **2.24** | **318** | *e*PN | **Pn** | **12 55 38.1** | **-1.3** |
| **APE** | **Apeiranthos** | **2.24** | **318** | *e*P | **Pn** | **12 55 38.6** | **-0.8** |
| **APE** | **Apeiranthos** | **2.24** | **318** | P | **Pn** | **12 55 38.8** | **-0.6** |
| APE | | | | S | **Sn** | **12 56 05.5** | **-1.6** |
| **APE** | **Apeiranthos** | **2.24** | **318** | *e*Pn | **Pn** | **12 55 38.1** | **-1.3** |
| **APE** | **Apeiranthos** | **2.24** | **318** | P | **Pn** | **12 55 38.8** | **-0.6** |
| APE | | | | S | **Sn** | **12 56 05.5** | **-1.6** |
| **AYDN** | **Tasoluk** | **2.26** | **9** | *i* P | **Pb** | **12 55 42.6** | **-0.7** |
| **AYDN** | **Tasoluk** | **2.26** | **9** | P | **Pb** | **12 55 42.6** | **-0.7** |
| **GCAM** | **G?zelcaml?** | **2.27** | **356** | *i* P | **Pb** | **12 55 41.0** | **-2.5** |
| **GCAM** | **G?zelcaml?** | **2.27** | **356** | P | **Pb** | **12 55 41.0** | **-2.5** |
| **SMG** | **Samos** | **2.32** | **349** | P | **Pn** | **12 55 39.8** | **-0.8** |
| SMG | | | | S | **Sn** | **12 56 08.1** | **-1.0** |
| **SMG** | **Samos** | **2.32** | **349** | P | **Pn** | **12 55 39.8** | **-0.8** |
| SMG | | | | S | **Sn** | **12 56 08.1** | **-1.0** |
| **ELL** | **Elmali** | **2.41** | **56** | *e*PN | **Pn** | **12 55 42.3** | **+0.5** |
| **ELL** | **Elmali** | **2.41** | **56** | *e*Pn | **Pn** | **12 55 42.3** | **+0.5** |
| **GOLH** | **Golhisar** | **2.50** | **43** | *i* P | **Pb** | **12 55 45.2** | **-2.2** |
| **GOLH** | **Golhisar** | **2.50** | **43** | P | **Pb** | **12 55 45.1** | **-2.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.54** | **8** | *e*PN | **Pn** | **12 55 44.5** | **+0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.54** | **8** | *e*Pn | **Pn** | **12 55 44.5** | **+0.8** |
| **DNZL** | **Cakiroluk** | **2.61** | **30** | *i* P | Pb | 12 55 46.3 | -3.0 |
| **DNZL** | **Cakiroluk** | **2.61** | **30** | P | Pb | 12 55 46.3 | -3.0 |
| **DENT** | **Denizli** | **2.66** | **29** | *e*PN | **Pn** | **12 55 46.4** | **+1.2** |
| **DENT** | **Denizli** | **2.66** | **29** | *e*Pn | **Pn** | **12 55 46.4** | **+1.2** |
| **KORT** | **Korkueli** | **2.84** | **56** | *i* P | **Pb** | **12 55 51.4** | **-1.9** |
| **KORT** | **Korkueli** | **2.84** | **56** | P | **Pb** | **12 55 51.4** | **-1.9** |
| **BLCB** | **Balcova** | **2.97** | **354** | *e*PN | **Pn** | **12 55 50.0** | **+0.6** |
| **BLCB** | **Balcova** | **2.97** | **354** | *e*Pn | **Pn** | **12 55 50.0** | **+0.6** |
| **ANTB** | **Antalya** | **3.00** | **60** | *e*PN | **Pn** | **12 55 50.5** | **+0.7** |
| **ANTB** | **Antalya** | **3.00** | **60** | *e*Pn | **Pn** | **12 55 50.5** | **+0.7** |
| **MANT** | **Manisa** | **3.19** | **16** | *i* P | Pb | 12 55 55.4 | -3.8 |
| **MANT** | **Manisa** | **3.19** | **16** | P | Pb | 12 55 55.4 | -3.8 |
| **KULA** | **Kula-Manisa** | **3.24** | **18** | *e*PN | **Pn** | **12 55 54.9** | **+1.7** |
| **KULA** | **Kula-Manisa** | **3.24** | **18** | *e*Pn | **Pn** | **12 55 54.9** | **+1.7** |
| **BCK** | **Bucak** | **3.26** | **51** | *e*PN | **Pn** | **12 55 54.7** | **+1.1** |
| **BCK** | **Bucak** | **3.26** | **51** | *e*Pn | **Pn** | **12 55 54.7** | **+1.1** |
| **KHL** | **Karahalli** | **3.35** | **30** | *e*PN | **Pn** | **12 55 56.2** | **+1.6** |
| **KHL** | **Karahalli** | **3.35** | **30** | *e*Pn | **Pn** | **12 55 56.3** | **+1.6** |
| **KHAL** | **Karahalli** | **3.37** | **29** | *i* P | **Pn** | **12 55 56.0** | **+0.9** |
| **KHAL** | **Karahalli** | **3.37** | **29** | P | **Pn** | **12 55 56.0** | **+0.9** |
| **ISP** | **Isparta** | **3.46** | **45** | *e*PN | **Pn** | **12 55 57.9** | **+1.7** |
| **ISP** | **Isparta** | **3.46** | **45** | *e*P | **Pn** | **12 55 56.9** | **+0.7** |
| **ISP** | **Isparta** | **3.46** | **45** | *e*P | **Pn** | **12 55 56.9** | **+0.7** |
| **ISP** | **Isparta** | **3.46** | **45** | *e*Pn | **Pn** | **12 55 57.9** | **+1.7** |
| **AKHS** | **Akhisar** | **3.46** | **5** | *i* P | **Pn** | **12 55 57.0** | **+0.8** |
| **AKHS** | **Akhisar** | **3.46** | **5** | P | **Pn** | **12 55 57.0** | **+0.8** |
| **AKS** | **Akhisar** | **3.46** | **5** | *e*PN | **Pn** | **12 55 57.4** | **+1.2** |
| **AKS** | **Akhisar** | **3.46** | **5** | *e*Pn | **Pn** | **12 55 57.4** | **+1.2** |
| **SUTC** | **Sutluce-Ispart** | **3.54** | **54** | *e*PN | **Pn** | **12 55 58.5** | **+1.1** |
| **SUTC** | **Sutluce-Ispart** | **3.54** | **54** | *e*Pn | **Pn** | **12 55 58.5** | **+1.1** |
| **BAGO** | **Egridir - ISPA** | **3.72** | **46** | P | **Pn** | **12 56 00.9** | **+1.0** |
| **DEMI** | **Demirci** | **3.75** | **16** | *i* P | **Pn** | **12 56 01.0** | **+0.7** |
| **DEMI** | **Demirci** | **3.75** | **16** | P | **Pn** | **12 56 00.9** | **+0.7** |
| **VLI** | **Veliai** | **3.85** | **291** | P | **Pn** | **12 56 00.9** | **-0.7** |
| VLI | | | | S | **Sn** | **12 56 46.1** | **-0.7** |
| **VLI** | **Veliai** | **3.85** | **291** | P | **Pn** | **12 56 00.9** | **-0.7** |
| VLI | | | | S | **Sn** | **12 56 46.1** | **-0.7** |
| **SIGR** | **SIGRI** | **3.98** | **342** | *e*PN | **Pn** | **12 56 04.1** | **+0.8** |
| **SIGR** | **SIGRI** | **3.98** | **342** | *e*Pn | **Pn** | **12 56 04.1** | **+0.8** |
| **SHUT** | **Suhut-Afyon** | **4.00** | **38** | *e*PN | **Pn** | **12 56 05.2** | **+1.4** |
| **SHUT** | **Suhut-Afyon** | **4.00** | **38** | *e*Pn | **Pn** | **12 56 05.2** | **+1.4** |
| **AKMC** | **Akamas** baz=283 | **4.04** | **94** | P | **Pn** | **12 56 03.5** | **-0.7** |
| **AKMC** | **Akamas** | **4.04** | **94** | P | **Pn** | **12 56 03.5** | **-0.7** |
| **GAZI** | **Gazipasa** | **4.06** | **77** | *i* P | **Pn** | **12 56 04.2** | **-0.2** |
| **GAZI** | **Gazipasa** | **4.06** | **77** | P | **Pn** | **12 56 04.2** | **-0.2** |
| **PPCY** | **Paphos** baz=285 | **4.07** | **96** | P | **Pn** | **12 56 04.9** | **+0.3** |
| **PPCY** | **Paphos** | **4.07** | **96** | P | **Pn** | **12 56 04.9** | **+0.3** |
| **BALB** | **Balikesir** | **4.22** | **5** | *e*PN | **Pn** | **12 56 08.4** | **+1.8** |
| **BALB** | **Balikesir** | **4.22** | **5** | *e*Pn | **Pn** | **12 56 08.4** | **+1.8** |
| **ALFC** | **Alevga** baz=281 | **4.25** | **92** | P | **Pn** | **12 56 06.6** | **-0.4** |
| ALFC | | | | S | **Sn** | **12 56 56.1** | **-0.4** |
| **ALFC** | **Alevga** | **4.25** | **92** | P | **Pn** | **12 56 06.6** | **-0.4** |
| ALFC | | | | S | **Sn** | **12 56 56.1** | **-0.4** |
| **BOLV** | **Bolvadin** | **4.33** | **40** | *i* P | **Pn** | **12 56 10.0** | **+1.7** |
| **BOLV** | **Bolvadin** | **4.33** | **40** | P | **Pn** | **12 56 10.0** | **+1.7** |
| **SLUM** | **SLUM** baz=206 | **4.34** | **206** | P | **Pn** | **12 56 08.6** | **+0.4** |
| SLUM | comp=N,70μm,0.6s,logA/T=5.0,baz=206 | | | AMP | | 12 56 00.0 | |
| **SLUM** | | **4.34** | **206** | P | **Pn** | **12 56 08.6** | **+0.4** |
| **HDMB** | **Hadim** | **4.38** | **68** | *e*PN | **Pn** | **12 56 09.8** | **+0.8** |
| **HDMB** | **Hadim** | **4.38** | **68** | *e*Pn | **Pn** | **12 56 09.8** | **+0.8** |
| **LTBQ** | **Tobruq** SNR=23 | **4.45** | **222** | *i* P | Pn | 12 56 12.4 | +2.6 |
| LTBQ | SNR=23 | | | *e*S | **Sn** | **12 57 04.1** | **+2.6** |
| **LEF** | **Lefka** | **4.49** | **92** | *e*PN | **Pn** | **12 56 08.9** | **-1.3** |
| **LEF** | **Lefka** | **4.49** | **92** | *e*Pn | **Pn** | **12 56 09.0** | **-1.3** |
| **SZAC** | **Souni-Zanaja** baz=285 | **4.53** | **97** | P | **Pn** | **12 56 10.5** | **-0.4** |
| SZAC | | | | S | **Sn** | **12 57 03.6** | **0.0** |
| **SZAC** | **Souni-Zanaja** | **4.53** | **97** | P | **Pn** | **12 56 10.5** | **-0.4** |
| SZAC | | | | S | **Sn** | **12 57 03.6** | **0.0** |
| **AKDN** | **Akdeniz- K¯–br** | **4.54** | **90** | *e*PN | **Pn** | **12 56 09.9** | **-1.0** |
| **AKDN** | **Akdeniz- K¯–br** | **4.54** | **90** | *e*Pn | **Pn** | **12 56 09.9** | **-1.0** |
| **ERMK** | **Ermenek** | **4.61** | **73** | *i* P | **Pn** | **12 56 14.5** | **+2.2** |
| **ERMK** | **Ermenek** | **4.61** | **73** | P | **Pn** | **12 56 14.5** | **+2.2** |
| **GONE** | **Gonen-Balikesi** | **4.62** | **3** | *e*PN | **Pn** | **12 56 13.4** | **+1.3** |
| **GONE** | **Gonen-Balikesi** | **4.62** | **3** | *e*Pn | **Pn** | **12 56 13.4** | **+1.3** |
| **KONT** | **Konya--Tatoy** | **4.70** | **56** | *e*PN | **Pn** | **12 56 15.2** | **+1.9** |
| **KONT** | **Konya--Tatoy** | **4.70** | **56** | *e*Pn | **Pn** | **12 56 15.2** | **+1.9** |
| **MAMC** | **Mammari** baz=280 | **4.75** | **91** | P | **Pn** | **12 56 12.9** | **-1.0** |
| **MAMC** | **Mammari** | **4.75** | **91** | P | **Pn** | **12 56 12.9** | **-1.0** |
| **ORLT** | **Orhaneli** | **4.76** | **14** | *e*PN | Pn | 12 56 16.4 | +2.4 |
| **ORLT** | **Orhaneli** | **4.76** | **14** | *e*Pn | Pn | 12 56 16.4 | +2.4 |
| **CSS** | **Prodhromos** baz=282 | **4.86** | **94** | P | **Pn** | **12 56 15.2** | **-0.3** |
| CSS | | | | S | **Sn** | **12 57 11.4** | **-0.3** |
| **CSS** | **Prodhromos** | **4.86** | **94** | P | **Pn** | **12 56 15.2** | **-0.3** |
| CSS | | | | S | **Sn** | **12 57 11.4** | **-0.3** |
| **EDC** | **Edincik** | **4.92** | **4** | *e*PN | **Pn** | **12 56 18.3** | **+2.0** |
| **EDC** | **Edincik** | **4.92** | **4** | *e*Pn | **Pn** | **12 56 18.3** | **+2.0** |
| **BNT** | **Bandirma** | **4.94** | **4** | *e*PN | **Pn** | **12 56 18.6** | **+2.1** |
| **BNT** | **Bandirma** | **4.94** | **4** | *e*Pn | **Pn** | **12 56 18.6** | **+2.1** |
| **KIZT** | **Kizilcal** | **4.96** | **45** | *e*PN | **Pn** | **12 56 18.2** | **+1.3** |
| **KIZT** | **Kizilcal** | **4.96** | **45** | *e*Pn | **Pn** | **12 56 18.2** | **+1.3** |
| **CHBY** | **Cihanbeyli** | **5.39** | **53** | *e*PN | **Pn** | **12 56 24.9** | **+2.1** |
| **CHBY** | **Cihanbeyli** | **5.39** | **53** | *e*Pn | **Pn** | **12 56 24.9** | **+2.1** |
| **KIZK** | **Mersin** | **5.55** | **77** | *i* P | **Pn** | **12 56 26.2** | **+1.2** |
| **KIZK** | **Mersin** | **5.55** | **77** | P | **Pn** | **12 56 26.2** | **+1.2** |
| **GULT** | **Gulveren** | **5.56** | **25** | *e*PN | Pn | 12 56 27.7 | +2.6 |
| **GULT** | **Gulveren** | **5.56** | **25** | *e*Pn | Pn | 12 56 27.7 | +2.6 |
| **SWA2** | **SWA2** baz=196 | **6.39** | **196** | P | **Pn** | **12 56 36.7** | **+0.3** |
| **SWA2** | | **6.39** | **196** | P | **Pn** | **12 56 36.7** | **+0.3** |
| **BRTR** | **Keskin Array B** comp=N,0.9nm,0.3s,baz=219,slow=14,SNR=13 | **6.54** | **47** | Pn | **Pn** | **12 56 40.3** | **+1.6** |
| BRTR | comp=N,0.3nm,0.3s,baz=222,slow=20,SNR=3.4 | | | Sn | **Sn** | **12 57 54.4** | **+1.1** |
| **BRTR** | **Keskin Array B** | **6.54** | **47** | P | **Pn** | **12 56 40.3** | **+1.6** |
| BRTR | | | | | | 12 57 54.4 | |
| BRTR | comp=Z,1.0nm,0.3s | | | pmax | pmax | | |
| **AMAG** | **Maghara** baz=134 | **6.81** | **133** | P | **Pn** | **12 56 41.5** | **-0.8** |
| **AMAG** | **Maghara** | **6.81** | **133** | P | **Pn** | **12 56 41.5** | **-0.8** |
| **GLL** | **Jalalah** baz=148 | **6.87** | **147** | P | **Pn** | **12 56 42.7** | **-0.3** |
| **GLL** | **Jalalah** | **6.87** | **147** | P | **Pn** | **12 56 42.7** | **-0.3** |
| **RSH** | **RSH** baz=129 | **6.91** | **128** | P | **Pn** | **12 56 42.5** | **-1.1** |
| **RSH** | | **6.91** | **128** | P | **Pn** | **12 56 42.5** | **-1.1** |
| **MMAI** | **Mount Meron Ar** comp=Z,4.8nm,0.3s,baz=309,slow=12,SNR=9.0 | **7.04** | **108** | Pn | **Pn** | **12 56 44.2** | **-1.2** |
| MMAI | comp=Z,27nm,0.3s,baz=297,slow=24,SNR=16 | | | Sn | **Sn** | **12 58 05.7** | **+0.3** |
| **YAYL** | **Yayladag** | **7.09** | **83** | *i* P | **Pn** | **12 56 44.9** | **-1.3** |
| **YAYL** | **Yayladag** | **7.09** | **83** | P | **Pn** | **12 56 44.9** | **-1.3** |
| **HWQ** | **Hawqa** | **7.10** | **97** | *e*P | **Pn** | **12 56 46.0** | **-0.4** |
| **HWQ** | **Hawqa** | **7.10** | **97** | *e*P | **Pn** | **12 56 46.0** | **-0.4** |
| **RCY** | **Rachaya** | **7.21** | **103** | *e*P | **Pn** | **12 56 46.6** | **-1.3** |
| **RCY** | **Rachaya** | **7.21** | **103** | *e*P | **Pn** | **12 56 46.6** | **-1.3** |
| **LJBD** | **Adjabya** SNR=22 | **7.54** | **235** | *i* P | **Pn** | **12 56 52.3** | **0.0** |
| LJBD | SNR=22 | | | *e*S | **Sn** | **12 58 12.4** | **-5.3** |
| **HNKL** | **Nakhl** baz=134 | **7.79** | **133** | P | **Pn** | **12 56 54.8** | **-0.9** |
| **HNKL** | **Nakhl** | **7.79** | **133** | P | **Pn** | **12 56 54.8** | **-0.9** |
| **AYKD** | **Aykdinkavak** | **7.82** | **73** | P | **Pn** | **12 56 55.4** | **-0.8** |
| **ASF** | **Jabal al Asfar** comp=Z,0.4nm,0.3s,baz=281,slow=15,SNR=3.1 | **8.53** | **110** | Pn | **Pn** | **12 57 07.0** | **+1.1** |
| ASF | comp=Z,1.6nm,0.3s,baz=78,slow=20,SNR=3.5 | | | Sn | **Sn** | **12 58 46.6** | **+4.4** |
| **ASF** | **Jabal al Asfar** | **8.53** | **110** | P | **Pn** | **12 57 07.0** | **+1.1** |
| ASF | | | | | | 12 58 46.6 | |
| ASF | comp=N,2.0nm,0.3s | | | smax | smax | | |
| **EIL** | **Elat** comp=N,1.1nm,0.3s,baz=319,slow=4.1,SNR=12 | **8.56** | **130** | Pn | **Pn** | **12 57 05.2** | **-1.1** |
| EIL | comp=N,3.3nm,0.3s,baz=5.8,slow=19,SNR=7.2 | | | Sn | **Sn** | **12 58 40.0** | **-2.9** |
| **MLR** | **Muntele Rosu** comp=N,0.0nm,0.3s,baz=320,slow=16,SNR=2.6 | **10.12** | **354** | Pn | Pn | 12 57 29.9 | +2.3 |
| **KIV** | **Kislovodsk** | **14.50** | **49** | *e*P | **Pn** | **12 58 29.6** | **+2.1** |
| **KBZ** | **Khabaz** comp=N,0.5nm,0.3s,baz=336,slow=4.8,SNR=5.8 | **14.52** | **51** | Pn | **P** | **12 58 33.5** | **-0.7** |
| KBZ | comp=N,41nm,18.3s,baz=242,slow=45 | | | LR | LR | 13 05 58.6 | |
| **KBZ** | **Khabaz** | **14.52** | **51** | P | **P** | **12 58 33.6** | **-0.7** |
| KBZ | comp=Z,1.0nm,0.3s | | | pmax | pmax | | |
| KBZ | comp=Z,41nm,18.3s | | | MLR | MLR | | |
| **KEST** | **Kesra** comp=Z,0.6nm,0.3s,baz=241,slow=4.2,SNR=5.8 | **14.71** | **276** | Pn | **P** | **12 58 37.2** | **+0.5** |
| **KIEV** | **Kiev** | **15.31** | **4** | *e*P | **Pn** | **12 58 38.7** | **+0.3** |
| **AKASG** | **Malin Array Be** comp=Z,0.2nm,0.3s,baz=196,slow=11,SNR=2.0 | **15.32** | **4** | Pn | **Pn** | **12 58 38.4** | **0.0** |
| **GERES** | **GERESS Array B** baz=149,slow=11,SNR=2.4 | **16.79** | **327** | Pn | **P** | **12 58 58.3** | **-1.4** |
| **DPC** | **Dobruska-Polom** | **16.96** | **335** | *e*P | P | 12 59 06.5 | +5.1 |
| **DPC** | **Dobruska-Polom** | **16.96** | **335** | *e*P | P | 12 59 06.5 | +5.1 |
| DPC | | | | *ex* | x | 12 59 11.2 | |
| **KHC** | **Kasperske Hory** | **17.06** | **328** | *e*P | **P** | **12 59 03.2** | **+0.6** |
| **KHC** | **Kasperske Hory** | **17.06** | **328** | *e*P | **P** | **12 59 03.2** | **+0.6** |
| KHC | | | | *e*pP | **pP** | **12 59 06.1** | **+0.2** |
| **KHC** | **Kasperske Hory** | **17.06** | **328** | *e*P | **P** | **12 59 03.2** | **+0.6** |
| **OBN** | **Obninsk** | **20.68** | **15** | *e*P | Pn | 12 59 42.7 | -1.7 |
| OBN | | | | *e* | | 13 00 01.3 | |
| OBN | comp=Z,5.0nm,0.8s | | | pmax | pmax | | |
| OBN | comp=Z,60nm,16.0s | | | MLR | MLR | | |
| **OBN** | **Obninsk** comp=Z,5.0nm,0.8s | **20.68** | **15** | *e*P | Pn | 12 59 42.7 | -1.7 |
| **GEYT** | **Alibeck** comp=Z,1.1nm,0.3s,baz=298,slow=3.1,SNR=3.5 | **24.69** | **75** | P | **P** | **13 00 25.6** | **+2.2** |
| **ESDC** | **Sonseca Array** comp=Z,1.6nm,0.6s,baz=79,slow=9.0,SNR=15 | **25.17** | **289** | P | **P** | **13 00 27.1** | **-0.6** |
| **FINES** | **FINESS Array B** comp=Z,2.3nm,0.7s,baz=165,slow=12,SNR=6.1 | **26.05** | **359** | P | **P** | **13 00 35.3** | **-0.1** |
| FINES | comp=Z,2.0nm,0.7s | | | pmax | pmax | | |
| **HFS** | **Hagfors** comp=Z,4.3nm,0.6s,baz=153,slow=10.0,SNR=11 | **26.27** | **344** | P | **P** | **13 00 37.0** | **-0.5** |
| **HFS** | **Hagfors** | **26.27** | **344** | P | **P** | **13 00 37.0** | **-0.5** |
| HFS | comp=Z,4.0nm,0.6s | | | pmax | pmax | | |
| **MDT** | **Midelt** comp=Z,0.8nm,0.5s,baz=101,slow=14,SNR=4.5 | **26.59** | **274** | P | **P** | **13 00 40.7** | **0.0** |
| **KLMR** | **Klimovskoe** | **26.60** | **13** | *e*P | **P** | **13 00 41.1** | **+0.7** |
| KLMR | comp=Z,23nm,1.9s | | | pmax | pmax | | |
| **KLMR** | **Klimovskoe** comp=Z,23nm,1.9s | **26.60** | **13** | *e*P | **P** | **13 00 41.1** | **+0.7** |
| **AKTK** | **Aktyubinsk** comp=Z,2.0nm,0.5s | **26.72** | **46** | P | **P** | **13 00 43.4** | **+1.8** |
| **AKTO** | **Aktyubinsk** comp=Z,2.3nm,0.5s,baz=257,slow=10,SNR=6.3 | **26.72** | **46** | P | **P** | **13 00 43.4** | **+1.8** |
| **AKTO** | **Aktyubinsk** | **26.72** | **46** | P | **P** | **13 00 43.4** | **+1.8** |
| AKTO | comp=Z,2.0nm,0.5s | | | pmax | pmax | | |
| **NOA** | **NORSAR Array B** comp=Z,0.7nm,0.6s,baz=155,slow=8.1,SNR=3.3 | **27.65** | **343** | P | **P** | **13 00 50.2** | **+0.4** |
| NOA | comp=Z,20nm,18.8s,baz=305,slow=42 | | | LR | LR | 13 14 10.7 | |
| **NOA** | **NORSAR Array B** | **27.65** | **343** | P | **P** | **13 00 50.3** | **+0.4** |
| NOA | comp=Z,1.0nm,0.6s | | | pmax | pmax | | |
| NOA | comp=Z,20nm,18.8s | | | MLR | MLR | | |
| **TOA0** | **Torodi Ar.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=123,slow=28 | | | | | | | |
| ARA0 | | | | | Lg | Lg | 13 16 59.6 | |
| | baz=114,slow=37 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.47** | **305** | | Pn | **Pn** | **13 16 02.3** | **+0.6** |
| | baz=123,slow=16 | | | | | | | |
| ARA0 | | | | | Sn | **Sn** | **13 16 46.0** | **+2.6** |
| | baz=123,slow=28 | | | | | | | |
| ARA0 | | | | | Lg | Lg | 13 16 59.6 | |
| | baz=114,slow=37 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.47** | **305** | | Pn | **Pn** | **13 16 02.3** | **+0.6** |
| | SNR=235 | | | | | | | |
| ARA0 | | | | | Sn | **Sn** | **13 16 46.0** | **+2.6** |
| | SNR=7.7 | | | | | | | |
| ARA0 | | | | | Lg | Lg | 13 16 59.6 | |
| | SNR=50 | | | | | | | |
| **ARE0** | **ARCESS Array S** | **3.47** | **305** | | PN | **Pn** | **13 16 02.3** | **+0.6** |
| | baz=125 | | | | | | | |
| ARE0 | | | | | SB | **Sb** | **13 16 48.6** | **-2.8** |
| **ARE0** | **ARCESS Array S** | **3.47** | **305** | | Pn | **Pn** | **13 16 02.3** | **+0.6** |
| ARE0 | | | | | Sb | **Sb** | **13 16 48.6** | **-2.8** |
| **HEF** | **Hetta** | **3.79** | **285** | | PB | Pn | 13 16 09.4 | +3.4 |
| | baz=99 | | | | | | | |
| **HEF** | **Hetta** | **3.79** | **285** | | Pb | Pn | 13 16 09.4 | +3.4 |
| **LANU** | **Lannavaara** | **4.40** | **280** | | PN | **Pn** | **13 16 15.8** | **+1.4** |
| **LANU** | **Lannavaara** | **4.40** | **280** | | Pn | **Pn** | **13 16 15.8** | **+1.4** |
| **ERTU** | **Ertsjaerv** | **4.60** | **260** | | PN | **Pn** | **13 16 18.5** | **+1.2** |
| | baz=68 | | | | | | | |
| ERTU | | | | | SN | **Sn** | **13 17 13.9** | **+2.7** |
| **ERTU** | **Ertsjaerv** | **4.60** | **260** | | Pn | **Pn** | **13 16 18.4** | **+1.2** |
| **FIA0** | **FINESS Array S** | **7.09** | **211** | | Lg | Lg | 13 18 45.1 | |
| | baz=21,slow=28 | | | | | | | |
| **FIA0** | **FINESS Array S** | **7.09** | **211** | | Lg | Lg | 13 18 45.1 | |
| | baz=21,slow=28 | | | | | | | |

*DDA* ***22*** *13:16:58.5, 40.˚50N×39.˚51E, h7km, Md2.7*
*CSEM* ***22*** *13:16:59.9±0.4, 40.˚33N×39.˚59E, h12km, MD2.7, Error ellipse: s-maj=16.4km s-min=6.9km az=173.0*
*ISCJB* ***22*** *13:17:00.1±0.6, 40.˚40N±0.˚06×39.˚56E±0.˚04, h11km, Error ellipse: s-maj=8.5km s-min=3.8km az=168.4*
*ISK* ***22*** *13:17:00.3, 40.˚44N×39.˚70E, h21km, MD2.7*

**ISC 22 13:16:59.5±0.9, 40.˚43N±0.˚06×39.˚56E±0.˚03, h11km, n18, σ0.˚75/28, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KELT** | **Kelkit** | **0.37** | **219** | *i* P | **Pg** | **13 17 06.7** | **-0.2** |
| KELT | | | | *i* S | **Sg** | **13 17 12.1** | **+0.3** |
| **KELT** | **Kelkit** | **0.37** | **219** | P | **Pg** | **13 17 06.7** | **-0.2** |
| KELT | | | | S | **Sg** | **13 17 12.1** | **+0.3** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **0.45** | **95** | *e*PG | **Pg** | **13 17 07.9** | **-0.5** |
| BAYT | | | | *e*SG | **Sg** | **13 17 14.0** | **-0.4** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **0.45** | **95** | *e*Pg | **Pg** | **13 17 07.9** | **-0.5** |
| BAYT | | | | *e*Sg | **Sg** | **13 17 14.0** | **-0.4** |
| **ESPY** | **Espiye-Giresun** | **0.79** | **308** | *e*PG | **Pn** | **13 17 17.9** | **+1.2** |
| **ESPY** | **Espiye-Giresun** | **0.79** | **308** | *e*Pg | **Pn** | **13 17 17.9** | **+1.2** |
| **KOPT** | **Kop Dagi** | **0.83** | **120** | *i* P | **Pg** | **13 17 15.8** | **+0.2** |
| **KOPT** | **Kop Dagi** | **0.83** | **120** | P | **Pg** | **13 17 15.8** | **+0.2** |
| KOPT | | | | S | **Sb** | **13 17 28.7** | **+1.2** |
| **SUSE** | **Susehri** | **1.06** | **258** | *i* P | **Pb** | **13 17 18.4** | **-1.6** |
| SUSE | | | | *i* S | **Sg** | **13 17 33.2** | **-0.5** |
| **SUSE** | **Susehri** | **1.06** | **258** | P | **Pb** | **13 17 18.4** | **-1.6** |
| SUSE | | | | S | **Sg** | **13 17 33.2** | **-0.5** |
| **RSDY** | **Resadiye-TOKAT** | **1.70** | **269** | *e*PN | **Pb** | **13 17 31.2** | **+0.4** |
| **RSDY** | **Resadiye-TOKAT** | **1.70** | **269** | *e*Pn | **Pb** | **13 17 31.2** | **+0.4** |
| **DBAD** | **Bademkaya** | **1.73** | **70** | *i* P | **Pn** | **13 17 30.1** | **+0.5** |
| DBAD | | | | *i* S | **Sb** | **13 17 53.2** | **+0.1** |
| **DBAD** | **Bademkaya** | **1.73** | **70** | P | **Pn** | **13 17 30.1** | **+0.5** |
| DBAD | | | | S | **Sb** | **13 17 53.2** | **+0.1** |
| **DDEM** | **Demirkent** | **1.73** | **74** | *i* P | **Pb** | **13 17 31.3** | **-0.1** |
| **DDEM** | **Demirkent** | **1.73** | **74** | P | **Pb** | **13 17 31.3** | **-0.1** |
| DDEM | | | | S | **Sg** | **13 17 56.1** | **+0.8** |
| **BCA** | **Borcka** | **1.86** | **57** | *e*PN | **Pn** | **13 17 30.5** | **-0.9** |
| **BCA** | **Borcka** | **1.86** | **57** | *e*Pn | **Pn** | **13 17 30.5** | **-0.9** |

**ISK 22 13:18:18.1, 38.˚51N×39.˚86E, h12km, MD2.5, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVRC** | **Sivrice-ELAZID** | **0.45** | **253** | *e*PG | Pg | 13 18 27.3 | 0.0 |
| SVRC | | | | *e*SG | Sg | 13 18 34.3 | +0.8 |
| **PTK** | **Pertek** | **0.53** | **317** | *e*PG | Pg | 13 18 28.8 | +0.1 |
| PTK | | | | *e*SG | Sb | 13 18 36.8 | -0.5 |
| **MAZI** | **Mazidag** | **1.15** | **156** | *e*PN | Pg | 13 18 40.5 | +0.1 |
| MAZI | | | | *e*SN | Sn | 13 18 57.1 | +1.2 |

*NIED* ***22*** *13:27:00, 32.˚40N×141.˚50E, h5km, Mw3.8 Best double couple: M0 6.54000×10^14 NP1:φs196.00000°, δ17.00000°, λ89.00000°. NP2:φs18.00000°, δ73.00000°, λ90.00000°.*
*ISCJB* ***22*** *13:27:22.7±0.8, 32.˚37N±0.˚05×141.˚5E±0.˚1, h10km, mb3.6/5, MS2.8/1, Error ellipse: s-maj=13.6km s-min=5.6km az=163.0*
*JMA* ***22*** *13:27:22.7±0.3, 32.˚41N×141.˚48E, h8km, M3.7*
*IDC* ***22*** *13:27:25.9±1.1, 32.˚00N×140.˚55E, h0km, mb3.6/5, mb1 3.8/6, mb1mx3.6/26, mbtmp3.6/6, ML3.4/1, MS2.9/2, Ms1 2.9/2, ms1mx2.4/32, Error ellipse: s-maj=38.6km s-min=15.6km az=73.0*

**ISC 22 13:27:23.1±1.0, 32.˚38N±0.˚06×141.˚5E±0.˚1, h10km, n20, σ1§67/23, mb3.6/5, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHCJ** | **Hachijoimakas** | **1.59** | **296** | P | **Pn** | **13 27 51.1** | **-0.2** |
| **JHJ** | **Hachijo jima 2** | **1.62** | **297** | Pn | **Pn** | **13 27 51.6** | **-0.1** |
| | 53nm,0.3s,baz=88,slow=23,SNR=8.8 | | | | | | |
| JHJ | | | | Sn | **Sn** | **13 28 11.1** | **-1.6** |
| | 104nm,0.3s,baz=66,slow=20,SNR=4.7 | | | | | | |
| **BSO1** | **Boso 1** | **2.31** | **349** | P | **Pb** | **13 28 01.5** | **-3.0** |
| BSO1 | | | | S | **Sb** | **13 28 30.0** | **-2.9** |
| **BSO3** | **Boso 3** | **2.55** | **341** | P | **Pn** | **13 28 05.2** | **+0.9** |
| BSO3 | | | | S | **Sn** | **13 28 36.1** | **+0.8** |
| **JOD2** | **Odawara 2** | **3.51** | **326** | P | **Pn** | **13 28 18.5** | **+0.8** |
| **JHU** | **Hanno** | **3.92** | **333** | P | **Pn** | **13 28 24.3** | **+0.9** |
| **JYN** | **Shimob** | **3.96** | **323** | P | Pn | 13 28 26.8 | +2.8 |
| **JRY** | **Ryogami san** | **4.22** | **330** | P | **Pn** | **13 28 28.9** | **+1.4** |
| JRY | | | | S | **Sn** | **13 29 17.2** | **+0.4** |
| **JAG** | **Ashikaga** | **4.38** | **338** | P | **Pn** | **13 28 30.9** | **+1.3** |
| JAG | | | | S | **Sn** | **13 29 20.6** | **0.0** |
| **MJAR** | **Matsushiro Arr** | **4.96** | **328** | Pn | **Pn** | **13 28 39.8** | **+2.1** |
| | 1.4nm,0.3s,baz=156,slow=12,SNR=19 | | | | | | |
| MJAR | | | | Sn | **Sn** | **13 29 37.1** | **+2.0** |
| | 1.3nm,0.3s,baz=352,slow=15,SNR=5.2 | | | | | | |
| **MAT** | **Matsushiro** | **4.96** | **328** | P | **Pn** | **13 28 39.3** | **+1.6** |
| MAT | | | | S | **Sn** | **13 29 37.0** | **+1.8** |
| **MAT** | **Matsushiro** | **4.96** | **328** | P | Pn | 13 28 40.2 | +2.5 |
| **CBIJ** | **Chichi jima** | **5.30** | **173** | P | **Pn** | **13 28 43.7** | **+1.4** |
| CBIJ | | | | S | **Sn** | **13 29 40.7** | **-2.8** |
| **KSRS** | **Korea Array** | **12.23** | **298** | LR | LR | 13 34 39.4 | |
| | comp=Z,67nm,18.1s,baz=110,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **30.66** | **311** | P | **P** | **13 33 39.2** | **+1.4** |
| | 0.4nm,0.7s,baz=124,slow=7.2,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.20** | **316** | LR | LR | 13 52 44.1 | |
| | comp=Z,11nm,20.3s,baz=74,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.77** | **306** | P | **P** | **13 35 53.0** | **+0.4** |
| | 1.1nm,0.8s,baz=84,slow=9.6,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.48** | **189** | P | **P** | **13 36 36.5** | **+0.2** |
| | 1.0nm,0.6s,baz=5.1,slow=7.6,SNR=21 | | | | | | |
| **ILAR** | **Eielson Array** | **53.42** | **30** | P | P | 13 36 52.5 | +10 |
| | 0.3nm,0.6s,baz=258,slow=6.0,SNR=7.1 | | | | | | |
| **ASAR** | **Alice Springs** | **56.20** | **188** | P | **P** | **13 37 05.1** | **+1.7** |
| | 0.4nm,0.6s,baz=14,slow=14,SNR=7.4 | | | | | | |

*DDA* ***22*** *13:32:35.8, 37.˚67N×44.˚01E, h2km, Md3.2*
*CSEM* ***22*** *13:32:37.6±0.3, 37.˚60N×43.˚95E, h2km, MD3.0, Error ellipse: s-maj=8.0km s-min=4.7km az=86.0*
*ISK* ***22*** *13:32:37.1, 37.˚61N×43.˚90E, h5km, MD3.0*
*ISN* ***22*** *13:32:40.6±1.5, 37.˚25N×43.˚92E, h0km±6km, ML3.2*

**ISC 22 13:32:37.1±1.3, 37.˚65N±0.˚02×43.˚97E±0.˚05, h8km±9km, n41, σ1§42/55, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HKR** | **Hakkari** | **0.19** | **247** | PG | **Pg** | **13 32 40.0** | **-1.1** |
| **HKR** | **Hakkari** | **0.19** | **247** | *i* Pg | **Pg** | **13 32 40.0** | **-1.1** |
| **HAKT** | **HAKKARI** | **0.23** | **245** | *i* P | **Pg** | **13 32 41.4** | **-0.3** |
| HAKT | | | | *i* S | **Sg** | **13 32 45.2** | **+0.3** |
| **HAKT** | **HAKKARI** | **0.23** | **245** | P | **Pg** | **13 32 41.4** | **-0.3** |
| HAKT | | | | S | **Sg** | **13 32 45.2** | **+0.3** |
| **CUKT** | **Cukurca** | **0.50** | **215** | *e*PG | **Pg** | **13 32 46.6** | **-0.1** |
| CUKT | | | | *e*SG | **Sg** | **13 32 53.9** | **+0.7** |
| **CUKT** | **Cukurca** | **0.50** | **215** | *e*Pg | **Pg** | **13 32 46.6** | **-0.1** |
| CUKT | | | | *e*Sg | **Sg** | **13 32 53.9** | **+0.7** |
| **GEVA** | **Gevas** | **0.97** | **313** | *i* P | **Pg** | **13 32 53.2** | **-2.6** |
| GEVA | | | | *i* S | **Sg** | **13 33 08.0** | **-0.5** |
| **GEVA** | **Gevas** | **0.97** | **313** | P | **Pg** | **13 32 53.2** | **-2.6** |
| GEVA | | | | S | **Sg** | **13 33 08.0** | **-0.5** |
| **TVAN** | **Van** | **0.98** | **333** | *i* P | **Pg** | **13 32 54.2** | **-1.8** |
| TVAN | | | | *i* S | **Sg** | **13 33 08.2** | **-0.5** |
| **TVAN** | **Van** | **0.98** | **333** | P | **Pg** | **13 32 54.2** | **-1.8** |
| TVAN | | | | S | **Sg** | **13 33 08.2** | **-0.5** |
| **SIRT** | **Sirnak** | **1.22** | **263** | *e*PN | **Pb** | **13 33 00.7** | **+0.1** |
| **SIRT** | **Sirnak** | **1.22** | **263** | *e*Pn | **Pb** | **13 33 00.7** | **+0.1** |
| **SIRN** | **S¨–rnak** | **1.24** | **263** | *i* P | **Pb** | **13 33 01.1** | **+0.2** |
| SIRN | | | | *i* S | **Sb** | **13 33 16.4** | **-0.8** |
| **SIRN** | **S¨–rnak** | **1.24** | **263** | P | **Pb** | **13 33 01.1** | **+0.2** |
| SIRN | | | | S | **Sb** | **13 33 16.4** | **-0.8** |
| **MSL** | **Mosul** | **1.43** | **209** | *e*PG | x | 13 33 04.8 | |
| MSL | | | | *e*SG | x | 13 33 19.9 | |
| **MSL** | **Mosul** | **1.43** | **209** | *e*Pg | **Pg** | **13 33 04.8** | **+0.3** |
| | SNR=90 | | | | | | |
| MSL | | | | *e*Sg | **Sn** | **13 33 19.9** | **-2.4** |
| | SNR=90 | | | | | | |
| **CLDR** | **Caldiran** | **1.49** | **359** | *e*PN | **Pg** | **13 33 06.9** | **+1.2** |
| **CLDR** | **Caldiran** | **1.49** | **359** | *e*Pn | **Pg** | **13 33 06.9** | **+1.2** |
| **TATV** | **Tatvan** | **1.59** | **303** | *i* P | **Pb** | **13 33 07.5** | **+0.6** |
| TATV | | | | *i* S | **Sg** | **13 33 30.7** | **+2.5** |
| **TATV** | **Tatvan** | **1.59** | **303** | P | **Pb** | **13 33 07.5** | **+0.6** |
| TATV | | | | S | **Sg** | **13 33 30.7** | **+2.5** |
| **TUTA** | **Tutak** | **1.97** | **333** | *i* P | **Pb** | **13 33 12.7** | **-0.7** |
| TUTA | | | | *i* S | **Sg** | **13 33 40.5** | **+0.1** |
| **TUTA** | **Tutak** | **1.97** | **333** | P | **Pb** | **13 33 12.7** | **-0.7** |
| TUTA | | | | S | **Sg** | **13 33 40.5** | **+0.1** |
| **BTMT** | **Batman** | **2.03** | **286** | *e*PN | **Pb** | **13 33 13.3** | **-1.1** |
| **BTMT** | **Batman** | **2.03** | **286** | *e*Pn | **Pb** | **13 33 13.3** | **-1.1** |
| **AGRB** | **Hanur-Agry** | **2.07** | **339** | *e*PN | **Pb** | **13 33 14.8** | **-0.2** |
| **AGRB** | **Hanur-Agry** | **2.07** | **339** | *e*Pn | **Pb** | **13 33 14.8** | **-0.2** |
| **BEST** | **Besiri** | **2.15** | **277** | P | **Pn** | **13 33 14.3** | **+0.9** |
| BEST | | | | S | **Sg** | **13 33 46.4** | **+0.2** |
| **EKAR** | **Karacoban** | **2.19** | **318** | *i* P | **Pn** | **13 33 15.3** | **+1.2** |
| **EKAR** | **Karacoban** | **2.19** | **318** | P | **Pn** | **13 33 15.3** | **+1.2** |
| EKAR | | | | S | **Sg** | **13 33 49.5** | **+2.0** |
| **SVAN** | **Silvan-Diyarba** | **2.25** | **284** | *e*PN | **Pb** | **13 33 16.3** | **-1.7** |
| **SVAN** | **Silvan-Diyarba** | **2.25** | **284** | *e*Pn | **Pb** | **13 33 16.3** | **-1.7** |
| **IKRK** | **Kirkuk** | **2.27** | **172** | *e*PN | x | 13 33 13.2 | |
| IKRK | | | | *e*SN | x | 13 33 37.4 | |
| **MARD** | **Mardin** | **2.56** | **263** | P | **Pn** | **13 33 20.3** | **+1.3** |
| MARD | | | | S | **Sb** | **13 33 55.2** | **+0.1** |
| **BNGL** | **BINGOL** | **2.57** | **301** | P | **Pb** | **13 33 25.3** | **+1.7** |
| BNGL | | | | S | **Sg** | **13 34 04.1** | **+4.5** |
| **MAZI** | **Mazidag** | **2.80** | **267** | *e*PN | **Pn** | **13 33 24.7** | **+2.3** |
| **MAZI** | **Mazidag** | **2.80** | **267** | *e*Pn | **Pn** | **13 33 24.7** | **+2.3** |
| **BHD** | **Baghdad** | **4.39** | **175** | *e*PN | x | 13 33 43.0 | |
| BHD | | | | *e*SN | x | 13 34 27.9 | |
| **BHD** | **Baghdad** | **4.39** | **175** | *e*Pn | **Pn** | **13 33 43.0** | **-1.1** |
| | SNR=39 | | | | | | |
| **IBDR** | **Badra** | **4.81** | **160** | *e*PN | x | 13 33 49.7 | |
| IBDR | | | | *e*SN | x | 13 34 39.4 | |
| **RTB** | **Rutbah** | **5.50** | **214** | *e*Pn | x | 13 34 00.6 | |
| RTB | | | | *e*SN | x | 13 34 56.3 | |
| **RTB** | **Rutbah** | **5.50** | **214** | *e*Pn | **Pn** | **13 34 00.6** | **+1.2** |
| | SNR=39 | | | | | | |

*JMA* ***22*** *13:34:00.2±0.1, 23.˚65N×121.˚51E, h41km±2km, M3.3*
*ISCJB* ***22*** *13:34:01.5±0.2, 23.˚65N±0.˚02×121.˚59E±0.˚02, h36km±5km, Error ellipse: s-maj=3.4km s-min=2.1km az=144.1*
*TAP* ***22*** *13:34:01.4, 23.˚66N×121.˚53E, h38km, ML3.7, B*

**ISC 22 13:34:01.7±1.0, 23.˚65N±0.˚02×121.˚56E±0.˚02, h33km±2km, n65, σ0.˚86/110, 4C-13D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TEGC** | **Jichi Village** | **0.06** | **342** | *e*P | **Pb** | **13 34 08.7** | **+1.3** |
| | baz=14 | | | | | | |
| TEGC | | | | *e*S | **Sb** | **13 34 14.3** | **+3.1** |
| | baz=14 | | | | | | |
| **ESL** | **Shilin** | **0.20** | **324** | ⇑*i*P | **Pn** | **13 34 08.1** | **+0.5** |
| | baz=325 | | | | | | |
| ESL | | | | *e*S | **Sb** | **13 34 12.3** | **-0.6** |
| | baz=325 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.22** | **347** | *e*P | **Pb** | **13 34 09.3** | **+0.7** |
| | baz=341 | | | | | | |
| ESF | | | | *e*S | **Sb** | **13 34 14.2** | **+0.9** |
| | baz=341 | | | | | | |
| **EHY** | **Hungye** | **0.26** | **237** | ⇓*i*P | **Pb** | **13 34 08.7** | **-0.4** |
| | baz=237 | | | | | | |
| EHY | | | | *i* S | **Sn** | **13 34 13.4** | **+0.3** |
| | baz=237 | | | | | | |
| **HWA** | **Hwalien** | **0.33** | **7** | P | **Pb** | **13 34 10.1** | **+0.3** |
| | baz=18 | | | | | | |
| HWA | | | | S | **Sn** | **13 34 16.4** | **+1.0** |
| | baz=18 | | | | | | |
| **TWF1** | **Yuli** | **0.38** | **219** | ⇓*i*P | **Pb** | **13 34 10.0** | **-0.6** |
| | baz=223 | | | | | | |
| TWF1 | | | | S | **Sb** | **13 34 15.8** | **-0.9** |
| | baz=223 | | | | | | |
| **WDT** | **Danda** | **0.41** | **285** | P | **Pb** | **13 34 11.0** | **-0.2** |
| | baz=290 | | | | | | |
| WDT | | | | S | **Sb** | **13 34 17.7** | **0.0** |
| | baz=290 | | | | | | |
| **TWD** | **Chiawan** | **0.43** | **4** | ⇓*i*P | **Pb** | **13 34 10.7** | **-0.6** |
| | baz=359 | | | | | | |
| TWD | | | | *i* S | **Sb** | **13 34 17.2** | **-0.6** |
| | baz=359 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.56** | **331** | *e*P | **Pb** | **13 34 12.8** | **-0.9** |
| | baz=334 | | | | | | |
| WHF | | | | *e*S | **Sb** | **13 34 20.2** | **-1.6** |
| | baz=334 | | | | | | |
| **CHKT** | **Chengkung** | **0.58** | **198** | P | **Pb** | **13 34 13.1** | **-0.5** |
| | baz=185 | | | | | | |
| CHKT | | | | *e*S | **Sb** | **13 34 21.9** | **+0.2** |
| | baz=185 | | | | | | |
| **YUS** | **Yu-Shan** | **0.58** | **254** | ⇓*i*P | **Pb** | **13 34 13.9** | **-0.1** |
| | baz=253 | | | | | | |
| YUS | | | | S | **Sb** | **13 34 21.6** | **-0.8** |
| | baz=253 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.65** | **291** | ⇓P | Pn | **13 34 14.3** | **-0.3** |
| | baz=295 | | | | | | |
| SMLT | | | | *e*S | **Sb** | **13 34 23.2** | **-0.5** |
| | baz=295 | | | | | | |
| **ELDTW** | **Lidau** | **0.68** | **227** | P | Pn | **13 34 14.0** | **-1.1** |
| | baz=224 | | | | | | |
| ELDTW | | | | *e*S | **Sb** | **13 34 22.9** | **-1.6** |
| | baz=224 | | | | | | |
| **TYC** | **Yuchr** | **0.69** | **292** | *e*P | Pn | **13 34 14.5** | **-0.6** |
| | baz=295 | | | | | | |
| TYC | | | | *e*S | **Sb** | **13 34 23.6** | **-1.1** |
| | baz=295 | | | | | | |
| **TWT** | **Tachien** | **0.69** | **330** | ⇓*i*P | Pn | **13 34 15.3** | **-0.1** |
| | baz=332 | | | | | | |
| TWT | | | | S | **Sb** | **13 34 23.8** | **-1.4** |
| | baz=332 | | | | | | |
| **ALS** | **Alishan** | **0.71** | **259** | ⇑*i*P | Pn | **13 34 15.7** | **+0.1** |
| | baz=265 | | | | | | |
| ALS | | | | *e*S | **Sn** | **13 34 24.6** | **-1.0** |
| | baz=265 | | | | | | |
| **ENA** | **Nanau** | **0.79** | **12** | ⇓*e*P | Pn | **13 34 15.5** | **-1.1** |
| | baz=4.0 | | | | | | |
| **NNS** | **Nan Shan** | **0.80** | **348** | *e*P | Pn | **13 34 16.1** | **-0.7** |
| | baz=356 | | | | | | |
| NNS | | | | S | **Sn** | **13 34 26.2** | **-1.5** |
| | baz=356 | | | | | | |
| **CHN5** | **Tsauling** | **0.81** | **266** | ⇑P | Pn | **13 34 17.1** | **+0.3** |
| | baz=267 | | | | | | |
| CHN5 | | | | S | **Sn** | **13 34 28.0** | **+0.2** |
| | baz=267 | | | | | | |
| **WNT** | **Mingjian** | **0.83** | **286** | *e*P | Pn | **13 34 17.5** | **+0.4** |
| | baz=286 | | | | | | |
| **STYT** | **Tauyuan** | **0.88** | **237** | ⇓*i*P | Pn | **13 34 17.9** | **+0.1** |
| | baz=231 | | | | | | |
| STYT | | | | *e*S | **Sn** | **13 34 29.4** | **-0.2** |
| | baz=231 | | | | | | |
| **WGK** | **Gukeng** | **0.92** | **272** | *e*P | Pn | **13 34 18.2** | **-0.1** |
| | baz=272 | | | | | | |
| **CHN4** | **Tsaushan** | **0.94** | **252** | *e*P | Pb | **13 34 19.4** | **-0.1** |
| | baz=252 | | | | | | |
| CHN4 | | | | *e*S | **Sn** | **13 34 31.5** | **+0.7** |
| | baz=252 | | | | | | |
| **TWG** | **Pinlang** | **0.94** | **209** | *e*P | Pn | **13 34 16.5** | **-2.1** |
| | baz=197 | | | | | | |
| **TCU** | **Taichung** | **0.95** | **302** | *e*P | Pb | **13 34 19.6** | **-0.1** |
| | baz=302 | | | | | | |
| **WTP** | **Ta-pu** | **0.96** | **245** | ⇓*i*P | Pn | **13 34 19.4** | **+0.5** |
| | baz=245 | | | | | | |
| WTP | | | | *e*S | **Sn** | **13 34 31.7** | **+0.3** |
| | baz=245 | | | | | | |
| **ENTT** | **Nioudou** | **0.98** | **0** | *e*P | Pn | **13 34 18.1** | **-1.1** |
| | baz=10.0 | | | | | | |
| **TWC** | **Suao** | **0.99** | **15** | *e*P | Pn | **13 34 18.7** | **-0.6** |
| | baz=5.0 | | | | | | |
| TWC | | | | *e*S | **Sn** | **13 34 31.6** | **-0.5** |
| | baz=5.0 | | | | | | |
| **TWQ1** | **Liyutan** | **1.00** | **314** | ⇓P | **Pb** | **13 34 20.2** | **-0.4** |
| | baz=315 | | | | | | |
| TWQ1 | | | | *i* S | **Sb** | **13 34 33.8** | **+0.3** |
| | baz=315 | | | | | | |
| **CHN2** | **Minshiung** | **1.00** | **263** | *e*P | Pn | **13 34 20.2** | **+0.8** |
| | baz=264 | | | | | | |
| CHN2 | | | | *e*S | **Sb** | **13 34 34.0** | **+0.4** |
| | baz=264 | | | | | | |
| **NSK** | **Sanguang** | **1.04** | **350** | ⇓*i*P | Pn | **13 34 19.8** | **-0.2** |
| | baz=350 | | | | | | |
| NSK | | | | S | **Sn** | **13 34 32.4** | **-1.0** |
| | baz=350 | | | | | | |
| **CHY** | **Chiayi** | **1.05** | **262** | *e*P | Pn | **13 34 20.4** | **+0.3** |
| | baz=262 | | | | | | |
| **NSY** | **Sanyi** | **1.05** | **316** | *e*P | Pn | **13 34 20.8** | **+0.5** |
| | baz=329 | | | | | | |
| NSY | | | | *e*S | **Sb** | **13 34 35.5** | **+0.4** |
| | baz=329 | | | | | | |
| **CHN1** | **Nanshi** | **1.06** | **244** | *e*P | Pn | **13 34 20.9** | **+0.6** |
| | baz=245 | | | | | | |
| CHN1 | | | | *e*S | **Sb** | **13 34 35.2** | **+0.1** |
| | baz=245 | | | | | | |
| **TWK** | **Hsinying** | **1.06** | **249** | *e*P | Pn | **13 34 21.2** | **+1.0** |
| | baz=248 | | | | | | |
| **SGST** | **Jiashian** | **1.06** | **238** | ⇑P | Pn | **13 34 21.2** | **+1.0** |
| | baz=238 | | | | | | |
| SGST | | | | S | **Sb** | **13 34 35.7** | **+0.4** |
| | baz=238 | | | | | | |
| **TWE** | **Neicheng** | **1.07** | **5** | ⇓*i*P | Pn | **13 34 19.6** | **-0.8** |
| | baz=6.0 | | | | | | |
| **NSTT** | **Nanjuang** | **1.10** | **332** | ⇓P | Pn | **13 34 21.4** | **+0.6** |
| | baz=342 | | | | | | |
| NSTT | | | | S | **Sn** | **13 34 35.1** | **+0.2** |
| | baz=342 | | | | | | |
| **ECL** | **Taimali** | **1.19** | **208** | *e*P | Pn | **13 34 19.2** | **-2.8** |
| | baz=200 | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.19** | **281** | *e*P | Pn | **13 34 22.5** | **+0.5** |
| | baz=281 | | | | | | |
| **WSF** | **Szhu** | **1.23** | **270** | *e*P | Pn | **13 34 22.6** | **+0.1** |
| | baz=271 | | | | | | |
| WSF | | | | *e*S | **Sn** | **13 34 38.5** | **+0.5** |
| | baz=271 | | | | | | |
| **EGS** | | **1.24** | **16** | *e*P | Pn | **13 34 23.7** | **+1.0** |
| | baz=7.0 | | | | | | |
| **SSD** | **Sandimen** | **1.24** | **224** | *e*P | Pn | **13 34 22.4** | **-0.4** |
| | baz=224 | | | | | | |
| SSD | | | | *e*S | **Sn** | **13 34 39.4** | **+1.1** |
| | baz=224 | | | | | | |
| **CHN8** | **Yiju** | **1.27** | **256** | *e*P | Pn | **13 34 23.2** | **0.0** |
| | baz=257 | | | | | | |
| CHN8 | | | | *e*S | **Sn** | **13 34 40.4** | **+1.3** |
| | baz=257 | | | | | | |
| **TWA** | **Mucha** | **1.32** | **1** | *e*P | Pn | **13 34 23.9** | **0.0** |
| | baz=8.0 | | | | | | |
| TWA | | | | *e*S | **Sn** | **13 34 40.4** | **0.0** |
| | baz=8.0 | | | | | | |
| **TWM1** | **Shoushan** | **1.33** | **232** | *e*P | Pn | **13 34 25.1** | **+1.1** |
| | baz=244 | | | | | | |
| TWM1 | | | | *e*S | **Sb** | **13 34 44.6** | **+1.7** |
| | baz=244 | | | | | | |
| **SCLT** | **Jiali** | **1.34** | **250** | *e*P | Pn | **13 34 24.9** | **+0.8** |
| | baz=249 | | | | | | |
| **SGLT** | **Jiouru** | **1.35** | **227** | *e*P | Pb | **13 34 26.2** | **-0.2** |
| | baz=217 | | | | | | |
| **NCU** | **National Centr** | **1.36** | **346** | *e*P | Pn | **13 34 25.2** | **+0.9** |
| | baz=345 | | | | | | |
| **TWB1** | **Santiao Chiao** | **1.41** | **16** | *e*P | Pn | **13 34 25.6** | **+0.6** |
| | baz=5.0 | | | | | | |
| **EAST** | **Anshuo** | **1.42** | **208** | *e*P | Pn | **13 34 23.5** | **-1.7** |
| | baz=201 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.43** | **8** | *e*P | Pn | **13 34 25.6** | **+0.2** |
| | baz=7.0 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.45** | **355** | *e*P | Pn | **13 34 25.8** | **+0.1** |
| | baz=7.0 | | | | | | |
| TWS1 | | | | *e*S | **Sb** | **13 34 45.2** | **-1.1** |
| | baz=7.0 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.50** | **58** | P | Pn | **13 34 26.5** | **+0.3** |
| JYNG | | | | S | **Sn** | **13 34 44.7** | **+0.1** |
| **SCZT** | **Fangliau** | **1.54** | **214** | *e*P | Pn | **13 34 27.7** | **+0.9** |
| | baz=215 | | | | | | |
| SCZT | | | | *e*S | **Sn** | **13 34 47.5** | **+1.8** |
| | baz=215 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.55** | **58** | P | Pn | **13 34 27.3** | **+0.3** |
| YOJ | | | | S | **Sn** | **13 34 46.2** | **+0.2** |
| **YOJ** | **Yonaguni jima** | **1.55** | **58** | *e*P | Pn | **13 34 27.4** | **+0.3** |
| | baz=58 | | | | | | |
| **HATJ** | **Hateruma jima** | **2.10** | **78** | P | Pn | **13 34 34.6** | **+0.1** |
| HATJ | | | | S | **Sn** | **13 34 59.9** | **+0.5** |
| **IRIF** | **Iriomote-Funau** | **2.10** | **71** | P | Pn | **13 34 35.3** | **+0.8** |
| IRIF | | | | S | **Sn** | **13 34 59.9** | **+0.4** |
| **JKRS** | **Kuro-shima** | **2.31** | **75** | P | Pn | **13 34 38.2** | **+0.7** |
| JKRS | | | | S | **Sn** | **13 35 06.0** | **+1.2** |
| **JIJ** | **Ishigaki jima** | **2.47** | **73** | P | Pn | **13 34 39.6** | **0.0** |
| JIJ | | | | S | **Sn** | **13 35 07.7** | **-0.9** |
| **JISG** | **Ishigakijimahi** | **2.68** | **69** | P | Pn | **13 34 42.5** | **0.0** |
| JISG | | | | S | **Sn** | **13 35 12.8** | **-1.0** |
| **JTJ** | **Tarama** | **3.04** | **70** | P | Pn | **13 34 47.9** | **+0.5** |
| JTJ | | | | S | **Sn** | **13 35 22.6** | **0.0** |
| **JIRB** | **Irabujima** | **3.50** | **70** | P | Pn | **13 34 54.2** | **+0.4** |
| JIRB | | | | S | **Sn** | **13 35 33.7

σ1§00/12, **mb3.8/6, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **5.22** | **35** | *e*Pn | Pn | 13 45 53.1 | -15 |
| **URZ** | **Urewera** | **21.16** | **198** | P | **P** | **13 49 17.1** | **-1.0** |
| | 3.7nm,0.4s,baz=279,slow=3.7,SNR=8.5 | | | | | | |
| URZ | | | | S | **S** | **13 52 58.7** | **0.0** |
| | 4.1nm,0.8s,baz=288,slow=19,SNR=2.5 | | | | | | |
| **SNZO** | **South Karori** | **24.69** | **199** | *e*P | **P** | **13 49 50.1** | **-0.5** |
| **CTAO** | **Charters Tower** | **36.71** | **261** | *e*P | **P** | **13 51 35.4** | **-0.8** |
| **WRAB** | **Tennant Creek** | **47.87** | **259** | *e*P | **P** | **13 53 06.0** | **0.0** |
| | 1.0nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **47.88** | **259** | P | **P** | **13 53 05.5** | **-0.6** |
| | 2.4nm,0.4s,baz=98,slow=7.0,SNR=115 | | | | | | |
| **ASAR** | **Alice Springs** | **47.94** | **254** | P | **P** | **13 53 06.8** | **+0.2** |
| | 13nm,0.7s,baz=89,slow=8.7,SNR=291 | | | | | | |
| ASAR | | | | S | **S** | **13 59 47.7** | **+0.9** |
| | 0.3nm,0.7s,baz=89,slow=13,SNR=5.4 | | | | | | |
| **MAW** | **Mawson** | **84.68** | **199** | P | **P** | **13 56 59.2** | **+0.8** |
| | 0.9nm,0.6s,baz=149,slow=9.8,SNR=6.3 | | | | | | |
| **ILAR** | **Eielson Array** | **85.47** | **12** | P | **P** | **13 57 00.9** | **-1.2** |
| | 1.1nm,0.9s,baz=218,slow=6.1,SNR=11 | | | | | | |
| **CLL** | **Collm** | **146.40** | **351** | *e*PKPbc | **PKPbc** | **14 04 05.0** | **+0.6** |
| CLL | | | | *e*PKiKP | **PKiKP** | **14 04 09.0** | **+1.8** |

*IDC **22** 14:32:59.5±0.8,30.1°N×99.5°E, h0km, mb4.0/14, mb1 4.0/15, mb1mx3.8/49, mbtmp4.0/15, ML3.6/1, MS3.0/3, Ms1 3.0/3, ms1mx2.7/31, Error ellipse: s-maj=28.4km s-min=14.9km az=45.0*

*ISCJB **22** 14:33:00.2±0.6,30.0°N±0.0°×99.4°E±0.0°,6, h18km, mb4.0/16, MS2.8/2, Error ellipse: s-maj=12.6km s-min=6.8km az=162.7*

*NEIC **22** 14:33:02.7±0.6,30.1°N×99.5°E, h20km, mb4.6/1, Error ellipse: s-maj=15.8km s-min=11.9km az=208.0*

**ISC 22 14:33:02.4±0.9, 30.1°N±0.1°×99.5°E±0.0°,9, h18km, n29,** σ1§10/28, **mb4.0**/16, **Sichuan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSA** | **Lhasa** | **7.31** | **269** | Pn | **Pn** | **14 34 48.1** | **-0.6** |
| | 5.2nm,0.5s | | | | | | |
| LSA | | | | *e*Sn | **Sn** | **14 36 11.1** | **-0.3** |
| **TAPN** | **Taplejung** | **10.76** | **258** | *e*P | **Pn** | **14 35 36.7** | **+0.8** |
| | 6.4nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **11.18** | **256** | *e*P | **Pn** | **14 35 42.1** | **+0.4** |
| | 8.5nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **11.82** | **258** | *e*P | **Pn** | **14 35 50.2** | **-0.2** |
| | 8.5nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **12.17** | **263** | *e*P | **Pn** | **14 35 54.1** | **-1.2** |
| | 5.4nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **12.66** | **262** | *e*P | **Pn** | **14 36 00.3** | **-1.6** |
| | 6.9nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **12.67** | **262** | *e*P | **Pn** | **14 36 00.3** | **-1.7** |
| | 6.5nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **12.71** | **263** | *e*P | **Pn** | **14 36 00.7** | **-1.9** |
| | 10nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **13.22** | **264** | *e*P | Pn | 14 36 06.1 | -3.3 |
| | 6.8nm,0.4s | | | | | | |
| **SONM** | **Songino Array** | **18.46** | **15** | P | **P** | **14 37 16.0** | **-1.2** |
| | 0.2nm,0.3s,baz=201,slow=12,SNR=7.8 | | | | | | |
| SONM | | | | LR | LR | 14 45 13.5 | |
| | comp=Z,54nm,20.0s,baz=184,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **21.37** | **326** | P | **P** | **14 37 49.2** | **+0.4** |
| | 1.4nm,0.6s,baz=131,slow=11,SNR=15 | | | | | | |
| MKAR | | | | LR | LR | 14 47 21.3 | |
| | comp=Z,46nm,18.2s,baz=142,slow=40 | | | | | | |
| **TLY** | **Talaya** | **21.75** | **7** | LR | LR | 14 46 53.1 | |
| | comp=Z,36nm,20.7s,baz=154,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **23.63** | **309** | P | **P** | **14 38 14.0** | **+1.2** |
| | 1.6nm,0.6s,baz=105,slow=8.2,SNR=4.6 | | | | | | |
| **KSAR** | **Wonju Array Be** | **24.59** | **65** | P | **P** | **14 38 21.9** | **+0.3** |
| **KSRS** | **Korea Array** | **24.62** | **65** | P | **P** | **14 38 21.9** | **0.0** |
| | 11nm,0.7s,baz=260,slow=10,SNR=42 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **25.83** | **328** | P | **P** | **14 38 32.8** | **+0.2** |
| | 1.3nm,0.7s,baz=137,slow=10,SNR=8.5 | | | | | | |
| **KURK** | **Kurchatov** | **25.86** | **329** | *e*P | **P** | **14 38 32.0** | **-0.8** |
| | 14nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.10** | **340** | P | **P** | **14 38 34.6** | **-0.4** |
| | 4.0nm,0.7s,baz=149,slow=11,SNR=18 | | | | | | |
| **KKAR** | **Karatay Array** | **26.52** | **307** | P | **P** | **14 38 39.6** | **+0.6** |
| **GEYT** | **Alibeck** | **34.99** | **294** | P | **P** | **14 39 55.2** | **+1.4** |
| | 2.7nm,0.7s,baz=92,slow=4.5,SNR=5.2 | | | | | | |
| **AKTO** | **Aktyubinsk** | **37.00** | **315** | P | **P** | **14 40 12.2** | **+1.4** |
| | 1.0nm,0.6s,baz=93,slow=12,SNR=3.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **53.80** | **299** | P | **P** | **14 42 22.9** | **-1.3** |
| | 1.1nm,0.8s,baz=84,slow=5.9,SNR=3.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **55.19** | **313** | P | **P** | **14 42 33.3** | **-0.7** |
| | 0.6nm,0.4s,baz=70,slow=7.1,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **56.20** | **326** | P | **P** | **14 42 40.5** | **-0.5** |
| | 0.9nm,0.4s,baz=101,slow=8.0,SNR=7.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.55** | **336** | P | **P** | **14 42 43.1** | **-0.4** |
| | 4.3nm,0.9s,baz=89,slow=6.8,SNR=8.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **59.99** | **142** | P | **P** | **14 43 07.7** | **-0.4** |
| | 1.0nm,0.6s,baz=328,slow=7.8,SNR=27 | | | | | | |
| **ASAR** | **Alice Springs** | **62.84** | **144** | P | **P** | **14 43 27.1** | **-0.2** |
| | 0.3nm,0.6s,baz=331,slow=7.0,SNR=7.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **63.36** | **327** | P | **P** | **14 43 33.0** | **+2.6** |
| | 1.1nm,0.9s,baz=2,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **90.15** | **285** | P | **P** | **14 46 02.4** | **+0.3** |
| | 0.3nm,0.7s,baz=67,slow=4.3,SNR=3.8 | | | | | | |

**IDC 22 14:55:24.5±1.4, 38.95°N×97.12°E, h0km, mb3.3/3, mb1 3.5/6, mb1mx3.3/32, mbtmp3.3/6, ML2.7/3, MS3.5/1, Ms1 3.5/1, ms1mx2.4/27, Error ellipse: s-maj=52.1km s-min=24.7km az=72.0, Qinghai**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **11.14** | **34** | Pn | Pn | 14 58 04.1 | -1.1 |
| | 0.2nm,0.3s,baz=218,slow=16,SNR=5.1 | | | | | | |
| SONM | | | | Lg | Lg | 15 01 10.5 | |
| | 0.3nm,0.3s,baz=227,slow=30,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.19** | **335** | P | P | 14 59 27.9 | +0.3 |
| | 0.1nm,0.3s,baz=152,slow=9.8,SNR=3.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **17.55** | **318** | P | Pn | 14 59 28.7 | -1.7 |
| | 0.0nm,0.3s,baz=122,slow=12,SNR=3.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.48** | **175** | P | P | 15 00 03.1 | -0.8 |
| | 0.3nm,0.3s,baz=359,slow=9.4,SNR=2.8 | | | | | | |
| **SIJI** | **Sorong** | **50.52** | **133** | LR | LR | 15 27 24.9 | |
| | comp=Z,42nm,18.6s,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **68.17** | **142** | P | P | 15 06 26.7 | +0.1 |
| | 0.2nm,0.7s,baz=339,slow=7.9,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **71.18** | **145** | P | P | 15 06 45.7 | +0.5 |
| | 0.3nm,0.6s,baz=330,slow=5.9,SNR=6.7 | | | | | | |

*NEIC **22** 15:19:21.3,51.62°N×176.41°E, h40km, ML3.5(AEIC), After AEIC.*

*ISCJB **22** 15:19:22.2±0.9,51.7°N±0.1°×176.46°E±0.0°,8, h60km±8km, mb3.6/10, Error ellipse: s-maj=20.7km s-min=6.4km az=13.6*

*IDC **22** 15:19:24.2±4.8,51.80°N×176.46°E, h59km±42km, mb3.4/10, mb1 3.5/11, mb1mx3.4/41, mbtmp3.7/11, ML2.5/1, MS2.7/2, Ms1 2.7/2, ms1mx2.4/33, Error ellipse: s-maj=25.7km s-min=20.3km az=168.0*

**ISC 22 15:19:23.4±1.3, 51.7°N±0.1°×176.47°E±0.0°,5, h53km±12km, n25,** σ0§77/24, **mb3.6**/10, **Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSSA** | **Little Sitkin** | **1.29** | **79** | P | **Pn** | **15 19 44.4** | **-0.7** |
| LSSA | | | | S | **Sn** | **15 20 01.8** | **+0.5** |
| **LSPA** | **Little Sitkin** | **1.33** | **79** | P | **Pn** | **15 19 45.4** | **-0.1** |
| LSPA | | | | S | **Sn** | **15 20 02.9** | **+0.8** |
| **SMY** | **Shemya** | **1.77** | **305** | P | **Pn** | **15 19 50.4** | **-1.1** |
| SMY | | | | S | **Sn** | **15 20 13.2** | **+0.4** |
| **AMKA** | **Amchitka** | **1.81** | **100** | P | **Pn** | **15 19 51.0** | **-1.0** |
| AMKA | | | | S | **Sn** | **15 20 12.2** | **-1.5** |
| **CETU** | **Semis' Tuman** | **1.89** | **82** | P | **Pn** | **15 19 53.1** | **-0.1** |
| **CESW** | **Semis' Southwe** | **1.93** | **84** | P | **Pn** | **15 19 53.3** | **-0.4** |
| CESW | | | | S | **Sn** | **15 20 17.0** | **+0.1** |
| **CERAA** | **Semis' Rag'd T** | **2.00** | **84** | P | **Pn** | **15 19 54.4** | **-0.3** |
| **TASE** | **Tanaga Southea** | **3.42** | **86** | P | **Pn** | **15 20 14.6** | **+0.5** |
| **PETK** | **Petropavlovsk-** | **11.54** | **284** | P | **Pn** | **15 22 06.4** | **+1.2** |
| | 0.1nm,0.3s,baz=100,slow=17,SNR=4.0 | | | | | | |
| PETK | | | | LR | LR | 15 26 38.5 | |
| | comp=Z,12nm,20.9s,baz=69,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **22.87** | **41** | P | **P** | **15 24 20.8** | **-1.2** |
| | 0.3nm,0.6s,baz=242,slow=8.1,SNR=4.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **32.80** | **197** | T | T | 16 00 51.2 | |
| | baz=11,slow=76,SNR=121 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **32.82** | **197** | T | T | 16 00 47.2 | |
| | baz=11,slow=76,SNR=93 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **32.82** | **197** | T | T | 16 00 48.6 | |
| | baz=11,slow=76,SNR=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **34.03** | **197** | T | T | 16 02 30.1 | |
| | baz=11,slow=76,SNR=39 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **34.05** | **197** | T | T | 16 02 34.8 | |
| | baz=11,slow=76,SNR=28 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **34.05** | **197** | T | T | 16 02 31.4 | |
| | baz=11,slow=76,SNR=20 | | | | | | |
| **SONM** | **Songino Array** | **43.82** | **294** | P | **P** | **15 27 24.0** | **+0.1** |
| | 0.6nm,0.5s,baz=56,slow=9.0,SNR=3.0 | | | | | | |
| SONM | | | | LR | LR | 15 45 59.7 | |
| | comp=Z,32nm,18.6s,baz=247,slow=36 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.70** | **311** | P | **P** | **15 29 01.1** | **+0.1** |
| | 2.0nm,0.5s,baz=42,slow=6.9,SNR=16 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.19** | **348** | P | **P** | **15 29 03.7** | **-0.6** |
| | 1.4nm,0.7s,baz=24,slow=8.9,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.46** | **306** | P | **P** | **15 29 05.9** | **-0.6** |
| | 0.2nm,0.3s,baz=48,slow=7.4,SNR=3.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **58.67** | **317** | P | **P** | **15 29 14.9** | **+0.1** |
| | 1.4nm,0.4s,baz=51,slow=7.8,SNR=8.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **61.50** | **78** | P | **P** | **15 29 35.6** | **+1.0** |
| | 0.1nm,0.5s,baz=316,slow=5.0,SNR=3.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **74.23** | **339** | P | **P** | **15 30 53.9** | **-0.3** |
| | 0.2nm,0.3s,baz=25,slow=5.9,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.30** | **220** | P | **P** | **15 31 28.1** | **-0.3** |
| | 0.1nm,0.4s,baz=30,slow=5.9,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **83.83** | **219** | P | **P** | **15 31 47.6** | **+0.7** |
| | 0.2nm,0.7s,baz=27,slow=8.5,SNR=3.2 | | | | | | |

**IDC 22 15:20:50.4±1.8, 6.47°S×129.57°E, h0km, mb3.9/1, mb1 3.6/4, mb1mx3.3/32, mbtmp3.5/4, ML3.1/3, Error ellipse: s-maj=67.2km s-min=28.6km az=80.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.82** | **17** | Pn | Pn | 15 22 19.3 | +1.2 |
| | 1.3nm,0.3s,baz=222,slow=23,SNR=18 | | | | | | |
| SIJI | | | | Sn | Sn | 15 23 14.4 | -11 |
| | 1.9nm,0.3s,baz=200,slow=22,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.17** | **161** | Pn | Pn | 15 24 13.2 | +0.6 |
| | 0.1nm,0.3s,baz=346,slow=14,SNR=8.1 | | | | | | |
| WRA | | | | Sn | Sn | 15 26 42.2 | -8.6 |
| | 0.3nm,0.3s,baz=343,slow=22,SNR=8.9 | | | | | | |
| **ASAR** | **Alice Springs** | **17.60** | **167** | P | Pn | 15 24 57.2 | -0.1 |
| | 0.0nm,0.3s,baz=351,slow=12,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.55** | **327** | P | P | 15 31 48.4 | -0.3 |
| | 0.5nm,0.4s,baz=121,slow=7.4,SNR=7.6 | | | | | | |

*ISCJB **22** 15:31:28.6±0.5,30.38°N±0.04°×138.60°E±0.07,h450km, mb3.5/13, Error ellipse: s-maj=9.2km s-min=4.9km az=26.6*

*JMA **22** 15:31:28.5±0.2,30.46°N×139.04°E, h475km, M3.8*

*IDC **22** 15:31:29.9±0.8,30.41°N×138.52°E, h444km±8km, mb3.2/13, mb1 3.3/19, mb1mx3.2/49, mbtmp4.1/19, Error ellipse: s-maj=15.6km s-min=11.5km az=85.0*

**ISC 22 15:31:30.1±0.7, 30.48°N±0.08°×138.6°E±0.1°, h450km, n44,** σ1§36/50, **mb3.5**/13, **Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHCJ** | **Hachijojimakas** | **2.77** | **21** | P | **P** | **15 32 35.9** | **+0.6** |
| JHCJ | | | | S | **S** | **15 33 27.7** | **-0.8** |
| **JHJ** | **Hachijo jima 2** | **2.81** | **20** | P | **P** | **15 32 36.4** | **+0.8** |
| | 51nm,0.3s,baz=71,slow=22,SNR=14 | | | | | | |
| JHJ | | | | S | **S** | **15 33 29.4** | **+0.4** |
| | 28nm,0.3s,baz=233,slow=20,SNR=3.4 | | | | | | |
| **JHJ2** | **Mitsune** | **2.81** | **21** | P | **P** | **15 32 37.2** | **+1.6** |
| JHJ2 | | | | *e*S | **S** | **15 33 30.1** | **+1.1** |
| **JIE** | **Ise** | **4.22** | **338** | P | P | 15 32 49.6 | +2.5 |
| JIE | | | | S | **S** | **15 33 49.6** | **-0.3** |
| **BSO3** | **Boso 3** | **4.59** | **20** | S | **S** | **15 33 55.3** | **-0.3** |
| **CBIJ** | **Chichi jima** | **4.60** | **136** | P | **P** | **15 32 47.8** | **-2.9** |
| **BSO1** | **Boso 1** | **4.61** | **25** | *e*S | **S** | **15 33 55.6** | **+0.2** |
| **BSO4** | **Boso 4** | **4.72** | **17** | S | **S** | **15 33 58.5** | **+0.4** |
| **JOD2** | **Odawara 2** | **4.79** | **5** | *e*S | **S** | **15 34 00.2** | **+0.8** |
| **JNY** | **Yasuok** | **4.91** | **353** | P | **P** | **15 32 55.3** | **+1.8** |
| JNY | | | | S | **S** | **15 34 01.9** | **+0.3** |
| **JHU** | **Hanno** | **5.39** | **6** | P | **P** | **15 32 57.9** | **-0.2** |
| **JRY** | **Ryogami san** | **5.53** | **2** | P | **P** | **15 33 00.2** | **+0.7** |
| JRY | | | | S | **S** | **15 34 12.5** | **-0.1** |
| **JYT** | **Yasato** | **5.88** | **12** | S | **S** | **15 34 14.6** | **-4.4** |
| **JAG** | **Ashikaga** | **5.97** | **6** | P | **P** | **15 33 03.4** | **-0.5** |
| JAG | | | | S | **S** | **15 34 16.5** | **-4.2** |
| **MJAR** | **Matsushiro Arr** | **6.06** | **357** | P | **P** | **15 33 04.8** | **0.0** |
| | 1.0nm,0.3s,baz=173,slow=12,SNR=19 | | | | | | |
| MJAR | | | | S | **S** | **15 34 21.1** | **-1.2** |
| | 0.3nm,0.3s,baz=354,slow=23,SNR=4.0 | | | | | | |
| **MAT** | **Matsushiro** | **6.06** | **357** | P | **P** | **15 33 05.0** | **+0.1** |
| MAT | | | | S | **S** | **15 34 20.9** | **-1.5** |
| **JHO** | **Hitachi** | **6.33** | **14** | S | **S** | **15 34 24.9** | **-2.5** |
| **JNU** | **Nakatsue** | **7.10** | **294** | P | P | 15 33 16.7 | +0.9 |
| | 0.8nm,0.3s,baz=33,slow=7.2,SNR=10 | | | | | | |
| **JMK** | **Ichinoseki** | **8.72** | **13** | P | **P** | **15 33 33.7** | **+0.6** |
| JMK | | | | S | **S** | **15 35 11.8** | **-2.4** |
| **KSRS** | **Korea Array** | **11.28** | **311** | P | P | 15 34 01.8 | +0.8 |
| | 0.6nm,0.3s,baz=126,slow=9.9,SNR=15 | | | | | | |
| **ASAJ** | **Asahikawa** | **13.97** | **12** | P | **P** | **15 34 31.1** | **+1.2** |
| | 0.7nm,0.3s,baz=204,slow=9.2,SNR=10 | | | | | | |
| **USRK** | **Usurijsk Ar.** | **14.67** | **341** | P | **P** | **15 34 38.1** | **+0.7** |
| | 0.9nm,0.3s,baz=164,slow=11,SNR=33 | | | | | | |
| **SONM** | **Songino Array** | **30.12** | **314** | P | **P** | **15 37 01.1** | **-0.4** |
| | 0.5nm,0.4s,baz=123,slow=8.3,SNR=6.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.86** | **261** | P | P | 15 38 06.7 | -0.5 |
| | 2.5nm,0.7s,baz=58,slow=6.2,SNR=17 | | | | | | |
| **TAPN** | **Taplejung** | **44.37** | **279** | *e*P | **P** | **15 38 58.9** | **-0.6** |
| | 6.0nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **44.79** | **279** | *e*P | **P** | **15 39 02.0** | **-0.7** |
| **ZALV** | **Zalesovo Beam** | **44.89** | **317** | P | **P** | **15 39 02.6** | **-0.2** |
| | 0.4nm,0.3s,baz=120,slow=8.0,SNR=3.2 | | | | | | |
| **RAMN** | **Ramite** | **45.44** | **279** | *e*P | **P** | **15 39 07.1** | **-0.6** |
| | 14nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **45.77** | **281** | *e*P | **P** | **15 39 10.2** | **-0.2** |
| | 27nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **45.93** | **307** | P | **P** | **15 39 10.6** | **-0.3** |
| | 1.0nm,0.7s,baz=92,slow=9.4,SNR=7.4 | | | | | | |
| **PKI** | **Pulchoki** | **46.27** | **280** | *e*P | **P** | **15 39 13.3** | **-0.9** |
| **PKIN** | **Phulchoki** | **46.28** | **280** | *e*P | **P** | **15 39 13.1** | **-1.1** |
| **KKN** | **Kakani** | **46.31** | **281** | *e*P | **P** | **15 39 13.9** | **-0.5** |
| | 17nm,0.9s | | | | | | |
| **GKN** | **Gorkha** | **46.80** | **281** | *e*P | **P** | **15 39 17.4** | **-0.6** |
| | 17nm,1.0s | | | | | | |
| **KOLN** | **Koldanda** | **47.74** | **281** | *e*P | **P** | **15 39 25.0** | **-0.2** |
| | 13nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **48.45** | **312** | P | **P** | **15 39 29.8** | **-0.2** |
| | 1.4nm,0.5s,baz=93,slow=7.3,SNR=29 | | | | | | |
| **WRA** | **Warramunga Arr** | **50.30** | **185** | P | **P** | **15 39 43.0** | **-1.0** |
| | 3.0nm,0.5s,baz=2.1,slow=7.7,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **54.03** | **185** | P | **P** | **15 40 10.6** | **-0.3** |
| | 1.0nm,0.6s,baz=13,slow=12,SNR=8.3 | | | | | | |
| **ILAR** | **Eielson Array** | **56.29** | **30** | P | **P** | **15 40 27.4** | **+1.1** |
| | 0.4nm,0.6s,baz=253,slow=5.0,SNR=9.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **69.31** | **340** | P | **P** | **15 41 51.2** | **+0.5** |
| | 3.4nm,0.8s,baz=67,slow=9.3,SNR=8.2 | | | | | | |
| **FINES** | **FINESS Array B** | **73.53** | **332** | P | **P** | **15 42 15.7** | **+0.2** |
| | 2.0nm,0.8s,baz=83,slow=5.6,SNR=7.4 | | | | | | |
| **HFS** | **Hagfors** | **79.07** | **335** | P | **P** | **15 42 46.4** | **+0.1** |
| | 0.5nm,0.3s,baz=109,slow=8.1,SNR=6.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **80.85** | **51** | P | **P** | **15 42 58.7** | **+2.3** |
| | 0.3nm,0.6s,baz=290,slow=6.4,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **81.42** | **311** | P | **P** | **15 42 59.4** | **+0.1** |
| | 1.2nm,0.8s,baz=129,slow=4.9,SNR=5.2 | | | | | | |

*IDC **22** 15:34:29.4±2.6,7.21°S×128.58°E, h0km, mb4.0/1, mb1 4.0/3, mb1mx3.6/21, mbtmp3.9/3, ML3.9/2, Error ellipse: s-maj=293.6km s-min=30.7km az=66.0*

*ISCJB **22** 15:34:40.4±0.8,6.79°S±0.06°×130.52°E±0.08,h150km, mb3.7/1, Error ellipse: s-maj=11.0km s-min=8.2km az=172.3*

*DJA **22** 15:34:46.8±0.5,6°S±3°×13°0E±°, h57km±18km, M4.0/13, mb4.0/6, mB5.1/2, MLv4.0/13, Mw(mB)4.4/2*

**ISC 22 15:34:44.3±1.3, 6.58S±0.07°×130.49E±0.08, h150km, n12,** σ1§40/14, **Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.61** | **150** | P | **Pn** | **15 35 13.9** | **-1.2** |
| **BNDI** | **Bandanaira** | **2.13** | **344** | P | **Pn** | **15 35 18.8** | **-2.2** |
| **MSAI** | **Masohi** | **3.57** | **334** | P | **Pn** | **15 35 37.8** | **-1.2** |
| **AAI** | **Ambon** | **3.67** | **321** | P | **Pn** | **15 35 39.2** | **-1.1** |
| AAI | | | | S | **Sn** | **15 36 22.0** | **-1.8** |
| **FAKI** | **Fak Fak** | **4.04** | **26** | P | **Pn** | **15 35 45.9** | **+0.8** |
| FAKI | | | | S | **Sn** | **15 36 32.6** | **+0.2** |
| **SWI** | **Sorong** | **5.73** | **8** | P | **Pn** | **15 36 08.1** | **+0.6** |
| | 12nm,0.8s,1µm0.1nm | | | | | | |
| SWI | | | | S | **Sn** | **15 37 14.0** | **+1.4** |
| | 12nm,0.8s,1µm0.1nm | | | | | | |
| **SANI** | **Sanana** | **6.36** | **315** | P | **Pn** | **15 36 16.1** | **+0.3** |
| | 5.0nm,0.9s,0.1nm | | | | | | |
| SANI | | | | S | **Sn** | **15 37 29.1** | **+1.6** |
| | 5.0nm,0.9s,0.1nm | | | | | | |
| **LBMI** | **Labuha** | **6.61** | **333** | P | **Pn** | **15 36 19.3** | **0.0** |
| | 24nm,0.9s,1.4nm | | | | | | |
| **SOEI** | **Soe** | **6.92** | **242** | P | **Pn** | **15 36 25.3** | **+1.9** |
| **WRA** | **Warramunga Arr** | **13.80** | **165** | Pn | Pn | 15 37 45.1 | -8.7 |
| | 0.6nm,0.3s,baz=334,slow=13,SNR=37 | | | | | | |
| WRA | | | | Sn | Sn | 15 40 08.9 | -18 |
| | 2.5nm,0.3s,baz=332,slow=23,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **17.30** | **169** | P | P | 15 38 32.1 | -3.9 |
| | 0.4nm,0.3s,baz=336,slow=8.9,SNR=41 | | | | | | |
| ASAR | | | | S | S | 15 41 30.6 | -18 |
| | 0.4nm,0.3s,baz=350,slow=24,SNR=7.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.14** | **327** | P | **P** | **15 45 28.3** | **+0.1** |
| | 0.7nm,0.4s,baz=114,slow=8.1,SNR=12 | | | | | | |

*ISCJB **22** 15:38:11.4±0.1,55.47°N±0.04°×35.26°W±0.03,h10km, mb4.6/120, MS4.2/35, Error ellipse: s-maj=5.2km s-min=2.3km az=178.7*

*BJI **22** 15:38:11.2,55.40N×35.20W, h17km, mb4.7/18, mB5.3/14, Ms5.0/5, Ms7 4.6/7*

*IDC **22** 15:38:11.2±0.4,55.35N×35.28W, h0km, mb4.4/30, mb1 4.5/32, mb1mx4.3/53, mbtmp4.4/32, ML3.9/2, MS4.1/28, Ms1 4.1/28, ms1mx3.9/46, Error ellipse: s-maj=15.0km s-min=9.7km az=172.0*

*MOS **22** 15:38:12.0±1.0,55.49N×35.20W, h14km, mb4.8/43, MS4.2/4, Error ellipse: s-maj=9.2km s-min=6.9km az=65.7*

*CSEM **22** 15:38:12.7±0.1,55.45N×35.19W, h10km, mb4.8/61, Error ellipse: s-maj=8.1km s-min=4.4km az=3.0*

*NEIC **22** 15:38:12.8±0.2,55.40N×35.17W, h10km, mb4.8/57, Error ellipse: s-maj=7.1km s-min=4.1km az=183.0*

*SZGRF **22** 15:38:15.6,55.18N×35.35W, h33km, mb4.7/1(BGR)*

**ISC 22 15:38:13.0±0.3, 55.40N±0.06°×35.30W±0.04, h10km, n499,** σ1§15/497, **mb4.7**/120, **MS4.1**/35, **2C-4D, Reykjanes Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BORG** | **Borgarnes** | **11.65** | **31** | Pn | Pn | 15 41 03.5 | +4.4 |
| | 1.0nm,0.3s,baz=323,slow=10,SNR=3.9 | | | | | | |
| BORG | | | | LR | LR | 15 44 17.7 | |
| | comp=Z,1µm,18.3s,baz=295,slow=31 | | | | | | |
| **BORG** | **Borgarnes** | **11.65** | **31** | *e*P | **Pn** | **15 40 57.6** | **-1.5** |
| **BORG** | **Borgarnes** | **11.65** | **31** | *e*Pn | **Pn** | **15 40 57.6** | **-1.5** |
| **BORG** | **Borgarnes** | **11.65** | **31** | *e*P | **Pn** | **15 40 57.6** | **-1.5** |
| **SFJD** | **Kangerlussuaq** | **13.72** | **334** | Pn | **P** | **15 41 34.2** | **-1.8** |
| | 0.6nm,0.3s,baz=149,slow=12,SNR=4.7 | | | | | | |
| SFJD | | | | LR | LR | 15 45 51.2 | |
| | comp=Z,896nm,20.1s,baz=141,slow=33 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **13.72** | **334** | *e*P | **Pn** | **15 41 26.0** | **-1.3** |
| **SFJD** | **Kangerlussuaq** | **13.72** | **334** | *i* P | **P** | **15 41 36.5** | **+0.5** |
| | 21nm,1.1s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **13.72** | **334** | *e*Pn | **Pn** | **15 41 26.0** | **-1.3** |
| **SFJD** | **Kangerlussuaq** | **13.72** | **334** | *e*P | **Pn** | **15 41 26.0** | **-1.3** |
| **VAL** | **Valentia** | **15.22** | **93** | *e*S | S | 15 45 42.8 | +50 |
| **SUMG** | **Summit** | **17.30** | **357** | *e*P | **Pn** | **15 42 12.8** | **-1.8** |
| SUMG | | | | pmax | pmax | | |
| | comp=Z,24nm,1.0s | | | | | | |
| **SUMG** | **Summit** | **17.30** | **357** | *i* P | **Pn** | **15 42 12.1** | **-2.5** |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **SUMG** | **Summit** | **17.30** | **357** | *e*Pn | **Pn** | **15 42 12.8** | **-1.8** |
| | comp=Z,24nm,1.0s | | | | | | |
| **SUMG** | **Summit** | **17.30** | **357** | *e*P | **Pn** | **15 42 12.8** | **-1.8** |
| | comp=Z,24nm,1.0s | | | | | | |
| **SCHQ** | **Schefferville** | **17.97** | **281** | P | **Pn** | **15 42 22.6** | **-0.1** |
| | comp=Z,1.0nm,0.3s,baz=89,slow=9.2,SNR=9.4 | | | | | | |
| SCHQ | | | | LR | LR | 15 47 57.3 | |
| | comp=Z,799nm,21.0s,baz=72,slow=33 | | | | | | |
| **SCHQ** | **Schefferville** | **17.97** | **281** | *e*Pn | **Pn** | **15 42 22.4** | **-0.3** |
| | comp=Z,171nm,2.0s | | | | | | |
| **SCHQ** | **Schefferville** | **17.97** | **281** | *

PAB pmax pmax
comp=Z,12nm,1.4s
**PAB San Pablo 25.96 115** *e*P **P 15 43 43.6 -1.9**
comp=Z,12nm,1.4s
**PAB San Pablo 25.96 115** *e*P **P 15 43 43.7 -1.9**
comp=Z,12nm,1.4s
**HFS Hagfors 26.05 59** P **P 15 43 46.1 0.0**
comp=Z,5.3nm,0.7s,baz=282,slow=7.4,SNR=7.2
HFS LR LR 15 52 27.1
comp=Z,433nm,19.2s,baz=266,slow=33
**ESDC Sonseca Array 26.06 114** P **P 15 43 45.3 -1.2**
comp=Z,1.9nm,0.6s,baz=313,slow=9.1,SNR=18
ESDC LR LR 15 52 14.4
comp=Z,563nm,18.1s,baz=310,slow=32
**ES19 SONSECA Array 26.08 114** *e*P **P 15 43 43.8 -2.8**
**ES19 SONSECA Array 26.08 114** *e*P **P 15 43 43.8 -2.8**
**BFO Black Forest 27.47 87** *i* P **P 15 43 59.6 +0.5**
**BFO Black Forest 27.47 87** *i* P **P 15 43 59.6 +0.5**
**GRF Grafenberg Arr 28.42 82** *e*P **P 15 44 07.1 -0.4**
comp=Z,13nm,1.1s,baz=296,slow=8.4
**CLL Collm 28.65 78** *e*P **P 15 44 09.0 -0.5**
CLL *e* 15 44 18.0
CLL *e*S **S 15 49 01.0 +3.1**
CLL pmax pmax
comp=Z,6.0nm,0.8s
CLL MLR MLR
comp=Z,400nm,20.8s
**CLL Collm 28.65 78** *e*P **P 15 44 09.0 -0.5**
comp=Z,6.0nm,0.8s
CLL *e* 15 44 18.0
CLL *e*S **S 15 49 01.0 +3.1**
CLL Lm MLR 15 54 00.0
comp=Z,400nm,20.8s
**CLL Collm 28.65 78** *e*P **P 15 44 09.0 -0.5**
comp=Z,6.0nm,0.8s
**NKC Novy Kostel 28.85 80** *e*P **P 15 44 11.9 +0.6**
NKC MLR MLR
comp=Z,700nm,16.4s
**NKC Novy Kostel 28.85 80** *e*P **P 15 44 11.9 +0.6**
NKC AMS AMS 15 56 00.0
comp=Z,700nm,16.4s
**DAVOX Davos/Dischmat 29.19 88** P **P 15 44 14.6 0.0**
comp=Z,2.6nm,0.7s,baz=331,slow=16,SNR=4.0
DAVOX LR LR 15 55 26.4
comp=Z,1µm,18.4s,baz=292,slow=36
**SADO Sadowa 29.59 267** P **P 15 44 17.6 -0.4**
comp=Z,12nm,0.8s,baz=77,slow=4.5,SNR=5.6
**RES Resolute Bay 29.71 332** LR LR 15 55 28.3
comp=Z,271nm,18.5s,baz=90,slow=35
**PVCC Panska Ves 29.89 78** AMS AMS 15 57 10.0
comp=Z,500nm,11.6s
**ARCES ARCESS Array B 29.92 38** P **P 15 44 20.2 -0.4**
comp=Z,10nm,0.8s,baz=265,slow=9.6,SNR=32
ARCES LR LR 15 54 02.0
comp=Z,179nm,18.2s,baz=264,slow=32
**KHC Kasperske Hory 30.03 81** *e*P **P 15 44 21.9 +0.1**
KHC MLR MLR
comp=Z,400nm,18.2s
**KHC Kasperske Hory 30.03 81** *e*P **P 15 44 21.9 +0.1**
KHC AMS AMS 15 57 00.0
comp=Z,400nm,18.2s
**PRA Prague 30.04 79** AMS AMS 15 58 00.0
comp=Z,600nm,14.7s
**PRU Pruhonice 30.14 79** AMS AMS 15 58 00.0
comp=Z,600nm,14.9s
**GEC2 GERESS Array S 30.25 82** *e*P **P 15 44 21.5 -2.3**
**GEC2 GERESS Array S 30.25 82** *e*P **P 15 44 21.5 -2.3**
**GEC2 GERESS Array S 30.25 82** *e*P **P 15 44 21.5 -2.3**
**GERES GERESS Array B 30.25 82** P **P 15 44 24.1 +0.2**
comp=Z,1.7nm,0.7s,baz=302,slow=7.7,SNR=11
GERES LR LR 15 56 02.4
comp=Z,417nm,18.1s,baz=300,slow=35
**GOPC GO Pecny, Ondr 30.32 79** AMS AMS 15 56 20.0
comp=Z,600nm,18.7s
**KSP Ksiaz 30.70 77** *e*P **P 15 44 27.9 +0.3**
**KSP Ksiaz 30.70 77** *e*P **P 15 44 28.0 +0.3**
**KSP Ksiaz 30.70 77** *e*P **P 15 44 28.0 +0.3**
**UPC Upice 30.71 77** AMS AMS 15 57 40.0
comp=Z,700nm,15.1s
**DPC Dobruska-Polom 30.96 78** *e*P **P 15 44 29.4 -0.6**
DPC MLR MLR
comp=Z,700nm,15.5s
**DPC Dobruska-Polom 30.96 78** *e*P **P 15 44 29.4 -0.6**
DPC AMS AMS 15 57 50.0
comp=Z,700nm,15.5s
**TREC Trest 31.02 80** AMS AMS 15 57 10.0
comp=Z,500nm,14.8s
**KRLC Kraliky 31.35 78**‖ *e*P **P 15 44 33.5 0.0**
**KRLC Kraliky 31.35 78** *e*P **P 15 44 33.5 0.0**
**FINES FINESS Array B 31.61 54** P **P 15 44 35.5 0.0**
comp=Z,8.4nm,0.8s,baz=270,slow=5.7,SNR=10
FINES LR LR 15 57 28.1
comp=Z,85nm,19.0s,baz=268,slow=37
**OKC Ostrava-Krasne 32.23 77** AMS AMS 15 58 40.0
comp=Z,700nm,13.6s
**OJC Ojcow 32.95 76** *e*P **P 15 44 46.9 -0.6**
OJC pmax pmax
comp=Z,11nm,1.0s
**OJC Ojcow 32.95 76** *e*P **P 15 44 46.9 -0.6**
comp=Z,11nm,1.0s
**OJC Ojcow 32.95 76** *e*P **P 15 44 46.8 -0.6**
comp=Z,11nm,1.0s
**VYHS Vyhne 33.32 79** *e*P **P 15 44 50.2 -0.5**
VYHS pmax pmax
comp=Z,7.0nm,1.6s
**VYHS Vyhne 33.32 79** *e*P **P 15 44 50.2 -0.5**
**VYHS Vyhne 33.32 79** *e*P **P 15 44 50.2 -0.5**
comp=Z,6.7nm,1.6s
**C39A Grand Marais 34.08 281** P **P 15 44 57.5 +0.1**
baz=34
**STHS Stebnicka Huta 34.17 76** *e*P **P 15 44 57.2 -0.9**
**STHS Stebnicka Huta 34.17 76** *e*P **P 15 44 57.2 -0.9**
**STHS Stebnicka Huta 34.17 76** *e*P **P 15 44 57.2 -0.9**
**EYMN Ely 34.78 282** P **P 15 45 03.4 +0.1**
baz=35
**KOLS Kolonicke sedl 35.00 76** *e*P **P 15 45 04.9 -0.3**
**KOLS Kolonicke sedl 35.00 76** *e*P **P 15 45 04.9 -0.3**
**KOLS Kolonicke sedl 35.00 76** *e*P **P 15 45 04.9 -0.3**
**C37A Embarrass 35.28 282** P **P 15 45 07.8 +0.1**
baz=35
**C36A Pine Crest Far 35.63 282** P **P 15 45 10.2 -0.4**
baz=36
**D37A Cotton 35.74 281** P **P 15 45 11.6 -0.1**
baz=36
**ULM Lac du Bonnet 35.94 288** P **P 15 45 13.2 0.0**
comp=Z,6.4nm,0.7s,baz=49,slow=12,SNR=5.1
ULM LR LR 15 58 38.1
comp=Z,966nm,19.0s,baz=76,slow=34
**KEST Kesra 36.12 104** P **P 15 45 15.3 +0.2**
comp=Z,7.4nm,0.8s,baz=294,slow=2.8,SNR=9.1
KEST LR LR 15 58 09.1
comp=Z,356nm,19.5s,baz=270,slow=33
**KEST Kesra 36.12 104** *e*P **P 15 45 15.0 -0.1**
**KEST Kesra 36.12 104** *e*P **P 15 45 15.0 -0.1**
**B34A Aery, Baudette 36.23 284** P **P 15 45 16.1 +0.3**
baz=36
**C35A Jirik Farms, M 36.30 283** P **P 15 45 16.4 0.0**
baz=36
**FFC Flin Flon 36.87 297** *e*P **P 15 45 21.9 +0.7**
FFC pmax pmax
comp=Z,9.0nm,0.8s
**FFC Flin Flon 36.87 297** *e*P **P 15 45 21.9 +0.7**
comp=Z,9.4nm,0.8s
**FFC Flin Flon 36.87 297** *e*P **P 15 45 21.9 +0.7**
comp=Z,9.4nm,0.8s
**F36A Milaca 37.11 280** P **P 15 45 23.4 0.0**
baz=37
**D34A Park Rapids 37.33 283** P **P 15 45 25.2 0.0**
baz=37
**BUR04 Bucovina Ar. S 37.36 76** *e*P **P 15 45 26.1 +0.5**
**BUR04 Bucovina Ar. S 37.36 76** *e*P **P 15 45 26.1 +0.5**
**TZTN Tazewell 37.55 260** *e*P **P 15 45 30.2 +3.0**
comp=Z,20nm,1.1s
**TZTN Tazewell 37.55 260** *e*P **P 15 45 30.2 +3.0**
comp=Z,20nm,1.1s
**AK11 Malin Array Si 37.80 69** *e*P **P 15 45 26.5 -2.6**
**AK11 Malin Array Si 37.80 69** *e*P **P 15 45 26.5 -2.6**
**KIEV Kiev 37.82 69** *e*P **P 15 45 28.0 -1.2**
KIEV pmax pmax
comp=Z,12nm,0.9s
**KIEV Kiev 37.82 69** *e*P **P 15 45 27.2 -2.0**
comp=Z,12nm,0.9s
**KIEV Kiev 37.82 69** *e*P **P 15 45 27.2 -2.0**
comp=Z,12nm,0.9s
**AKASG Malin Array Be 37.82 69** P **P 15 45 28.1 -1.1**
comp=Z,7.0nm,0.7s,baz=304,slow=8.4,SNR=22
AKASG LR LR 16 02 24.8
comp=Z,313nm,18.6s,baz=285,slow=38
**AKASG Malin Array Be 37.82 69** *i* P **P 15 45 28.7 -0.6**
AKASG pmax pmax
comp=Z,7.0nm,0.7s
**KLMR Klimovskoe 37.88 50** *e*P **P 15 45 27.3 -2.3**
KLMR pmax pmax
comp=Z,59nm,1.3s
**YKA Yellowknife Ar 39.05 314** P **P 15 45 39.5 0.0**
comp=Z,4.2nm,0.9s,baz=57,slow=9.5,SNR=5.6
**K37A Belmond 39.09 276** P **P 15 45 40.6 +0.5**
baz=39
**OBN Obninsk 39.26 60** *i* P **P 15 45 39.7 -1.6**
OBN *e* 15 47 09.4
OBN *e* 15 47 49.6
OBN pmax pmax
comp=Z,26nm,1.7s
**J35A Milford 39.60 278** P **P 15 45 44.0 -0.3**
baz=40
**GOGA Godfrey 39.79 257** *e*P **P 15 45 45.7 -0.3**
GOGA pmax pmax
comp=Z,11nm,1.0s
**GOGA Godfrey 39.79 257** *e*P **P 15 45 45.7 -0.3**
comp=Z,11nm,1.0s
**GOGA Godfrey 39.79 257** *e*P **P 15 45 45.7 -0.3**
comp=Z,11nm,1.0s
**ECSD EROS Data Cent 40.16 280** P **P 15 45 49.2 +0.2**
baz=40
**ECSD EROS Data Cent 40.16 280** *e*P **P 15 45 48.5 -0.4**
comp=Z,7.2nm,0.8s
**ECSD EROS Data Cent 40.16 280** *e*P **P 15 45 48.5 -0.4**
comp=Z,7.2nm,0.8s
**WVT Waverly 40.26 264** *e*P **P 15 45 51.1 +1.2**
WVT pmax pmax
comp=Z,7.0nm,1.1s
**WVT Waverly 40.26 264** *e*P **P 15 45 51.1 +1.2**
comp=Z,7.4nm,1.1s
**WVT Waverly 40.26 264** *e*P **P 15 45 51.1 +1.2**
comp=Z,7.4nm,1.1s
**CCM Cathedral Cave 40.86 269** *e*P **P 15 45 55.2 +0.5**
CCM pmax pmax
comp=Z,8.0nm,0.9s
**CCM Cathedral Cave 40.86 269** *e*P **P 15 45 55.2 +0.5**
comp=Z,8.0nm,0.9s
**CCM Cathedral Cave 40.86 269** *e*P **P 15 45 55.2 +0.5**
comp=Z,8.0nm,0.9s
**D26A Manning 41.35 287** P **P 15 45 59.1 +0.3**
baz=41
**LPSR Galich'ya Gora 41.80 62** *e*P **P 15 46 01.3 -1.0**
LPSR pmax pmax
comp=Z,10.0nm,0.7s
LPSR pmax pmax
comp=N,10.0nm,1.4s
LPSR pmax pmax
comp=E,7.0nm,0.6s
**F27A Lemmon 41.83 286** P **P 15 46 02.8 +0.1**
baz=42
**LRAL Lakeview Retre 42.04 260** *e*P **P 15 46 06.5 +2.0**
comp=E,8.0nm,1.0s
**LRAL Lakeview Retre 42.04 260** *e*P **P 15 46 06.5 +2.0**
comp=E,8.0nm,1.0s
**P36A Good Intent, A 42.05 274** P **P 15 46 04.6 0.0**
baz=42
**G27A Dupree 42.09 285** P **P 15 46 05.5 +0.7**
baz=42,SNR=5.2
**P35A Duane Minner, 42.57 274** P **P 15 46 08.3 -0.5**
baz=42
**VSR Storozhevoye 42.72 63** *e*P **P 15 46 08.2 -1.7**
VSR pmax pmax
comp=Z,10.0nm,0.8s
VSR pmax pmax
comp=N,10.0nm,0.9s
VSR pmax pmax
comp=E,20nm,1.4s
**INK Inuvik 42.93 327** *e*P **P 15 46 11.0 -0.3**
INK pmax pmax
comp=Z,11nm,1.3s
**INK Inuvik 42.93 327** *e*P **P 15 46 11.0 -0.3**
comp=Z,11nm,1.3s
**INK Inuvik 42.93 327** *e*P **P 15 46 11.0 -0.3**
comp=Z,11nm,1.3s
**VORD Divnogorie 42.94 64** *e*P **P 15 46 10.6 -1.0**
VORD pmax pmax
comp=Z,20nm,0.9s
VORD pmax pmax
comp=N,20nm,0.8s
VORD pmax pmax
comp=E,40nm,0.9s
**I27A Quinn 42.98 284** P **P 15 46 13.1 +0.9**
baz=43
**P34A Walnut Farm, R 43.02 275** P **P 15 46 13.1 +0.6**
baz=43
**Q35A Mercer Eighty, 43.04 274** P **P 15 46 13.4 +0.8**
baz=43
**R36A Gordon, Harris 43.10 273** P **P 15 46 12.9 -0.2**
baz=43
**S37A Fort Scott 43.10 271** P **P 15 46 13.3 +0.2**
baz=43,SNR=7.2
**R35A Emporia Munici 43.50 273** P **P 15 46 16.6 +0.3**
baz=43
**Q34A Chapman 43.51 274** P **P 15 46 17.2 +0.8**
baz=43
**S36A Lake Cedric, C 43.56 272** P **P 15 46 17.4 +0.6**
baz=44
**T37A Cheneyville 18 43.60 271** P **P 15 46 17.5 +0.4**
baz=44,SNR=5.7
**LAO LASA Array 43.61 289** P **P 15 46 18.2 +1.0**
baz=44,SNR=8.6
**LAO LASA Array 43.61 289** P **P 15 46 16.8 -0.4**
comp=E,25nm,0.9s
**LAO LASA Array 43.61 289** P **P 15 46 16.8 -0.4**
comp=E,25nm,0.9s
**U38A Gravette 43.78 270** P **P 15 46 18.7 +0.1**
baz=44
**I25A Rexford 43.94 285** P **P 15 46 20.0 0.0**
baz=44
**Q33A Connelly Farm, 43.96 275** P **P 15 46 20.4 +0.4**
baz=44
**S35A Otter Creek Ra 44.01 273** P **P 15 46 21.1 +0.7**
baz=44
**VRH Novokhopyorsk 44.02 62** *e*P **P 15 46 19.7 -0.6**
VRH pmax pmax
comp=Z,10.0nm,0.7s
VRH pmax pmax
comp=N,20nm,0.6s
VRH pmax pmax
comp=E,40nm,1.4s
**R34A Isabella, Hill 44.11 274** P **P 15 46 21.6 +0.4**
baz=44
**T36A Boggs Farm, Ca 44.19 272** P **P 15 46 22.3 +0.5**
baz=44
**V38A Canehill 44.20 269** P **P 15 46 22.2 +0.2**
baz=44
**U37A Salina 44.22 270** P **P 15 46 22.1 0.0**
baz=44
**TAM Tamanrasset 44.38 120** *e*P **P 15 46 23.5 -0.2**
TAM pmax pmax
comp=Z,9.0nm,1.0s
**TAM Tamanrasset 44.38 120** *e*P **P 15 46 23.5 -0.2**
comp=Z,9.4nm,1.0s
**TAM Tamanrasset 44.38 120** *e*P **P 15 46 23.5 -0.2**
comp=Z,9.4nm,1.0s
**J25A Sunshine Ranch 44.39 284** P **P 15 46 23.5 0.0**
baz=44
**P31A Stockton 44.48 277** P **P 15 46 24.0 -0.2**
baz=44
**U36A Oologah 44.58 271** P **P 15 46 25.1 +0.1**
baz=44
**V37A Hulbert 44.60 270** P **P 15 46 25.3 +0.1**
baz=44
**EGMT Eagleton 44.65 293** P **P 15 46 25.4 -0.1**
baz=44,SNR=6.1
**EGMT Eagleton 44.65 293** *e*P **P 15 46 25.3 -0.2**
comp=Z,19nm,0.9s
**EGMT Eagleton 44.65 293** *e*P **P 15 46 25.3 -0.2**
comp=Z,19nm,0.9s
**T35A Sooner Cattle 44.65 272** P **P 15 46 25.4 -0.2**
baz=45
**MIAR Mount Ida 44.66 267** *e*P **P 15 46 25.0 -0.7**
MIAR pmax pmax
comp=Z,15nm,0.9s
**MIAR Mount Ida 44.66 267** P **P 15 46 25.4 -0.3**
baz=45,SNR=9.1
**MIAR Mount Ida 44.66 267** *e*P **P 15 46 25.0 -0.7**
comp=Z,15nm,0.9s
**MIAR Mount Ida 44.66 267** *e*P **P 15 46 25.0 -0.7**
comp=Z,15nm,0.9s
**W38A Poteau 44.83 268** P **P 15 46 26.7 -0.2**
baz=45
**TUL1 Tulsa 44.95 270** P **P 15 46 28.1 +0.1**
baz=45
**P30A Selden 44.96 278** P **P 15 46 28.1 0.0**
baz=45
**T34A McClaskey Farm 44.96 273** P **P 15 46 27.6 -0.5**
baz=45
**S33A Kaszmaul Farm, 45.03 274** P **P 15 46 28.5 -0.1**
baz=45
**V36A Jenks 45.13 270** P **P 15 46 29.2 -0.1**
baz=45
**X38A Whitesboro 45.29 268** P **P 15 46 30.8 +0.1**
baz=45
**W37A Quinton 45.30 269** P **P 15 46 30.3 -0.4**
baz=45
**SDDR Presa de Saban 45.39 231** *e*P **P 15 46 30.2 -1.4**
comp=Z,23nm,0.9s
**SDDR Presa de Saban 45.39 231** *e*P **P 15 46 30.2 -1.4**
comp=Z,23nm,0.9s
**V35A Meyer Ranch, C 45.65 271** P **P 15 46 33.1 -0.4**
baz=46
**Q29A Oakley 45.82 277** P **P 15 46 34.2 -0.8**
baz=46
**R30A Dighton 45.84 276** P **P 15 46 34.7 -0.3**
baz=46
**SOKR Solikamsk 45.85 45***c* *i* P **P 15 46 35.5 +0.8**
SOKR pmax pmax
comp=Z,20nm,1.0s
**S31A Mullinville 45.85 275** P **P 15 46 35.0 -0.2**
baz=46
**U33A Lingo Farm, Me 45.91 273** P **P 15 46 35.5 -0.1**
baz=46
**V34A Guthrie 45.99 272** P **P 15 46 36.1 -0.1**
baz=46
**W35A Tecumseh 46.11 271** P **P 15 46 37.1 0.0**
baz=46
**WALA Waterton Lakes 46.15 297** *e*P **P 15 46 39.0 +1.5**
comp=Z,8.5nm,0.9s
**WALA Waterton Lakes 46.15 297** *e*P **P 15 46 39.0 +1.5**
comp=Z,8.5nm,0.9s
**Q28A Sharon Springs 46.18 278** P **P 15 46 37.6 -0.2**
baz=46
**X36A Centrahoma 46.23 270** P **P 15 46 38.5 +0.4**
baz=46
**R29A Marienthal 46.23 277** P **P 15 46 38.3 +0.1**
baz=46
**RLMT Red Lodge 46.24 290** P **P 15 46 35.9 -2.5**
comp=Z,14nm,1.4s
**RLMT Red Lodge 46.24 290** P **P 15 46 35.9 -2.5**
comp=Z,14nm,1.4s
**K22A Casper 46.38 285** P **P 15 46 39.6 +0.2**
baz=46
**V33A Lossen Ranch, 46.44 272** P **P 15 46 39.9 +0.2**
baz=46
**W34A Bridge Creek, 46.56 271** P **P 15 46 40.1 -0.6**
baz=46,SNR=5.7
**W34A Bridge Creek, 46.56 271** *e*P **P 15 46 39.0 -1.7**
comp=Z,32nm,0.8s
**W34A Bridge Creek, 46.56 271** *e*P **P 15 46 39.0 -1.7**
comp=Z,32nm,0.8s
**R28A Tribune 46.67 278** P **P 15 46 41.3 -0.3**
baz=47
**Y36A Durant 46.68 269** P **P 15 46 41.7 +0.1**
baz=47
**X35A Drake 46.71 270** P **P 15 46 42.1 +0.2**
baz=47
**V32A Arapaho 46.94 273** P **P 15 46 44.1 +0.4**
baz=47
**YBMT Yellow Bay 46.97 295** *e*P **P 15 46 43.2 -0.7**
**YBMT Yellow Bay 46.97 295** *e*P **P 15 46 43.2 -0.7**
**W33A Caddo, Fort Co 47.02 272** P **P 15 46 45.1 +0.8**
baz=47
**BLMT Blacktail Moun 47.05 296** *e*P **P 15 46 43.5 -1.2**
**BLMT Blacktail Moun 47.05 296** *e*P **P 15 46 43.5 -1.2**
**BRTR Keskin Array B 47.08 79** P **P 15 46 45.7 +0.8**
comp=Z,10nm,0.7s,baz=312,slow=5.5,SNR=41
BRTR LR LR 16 07 57.9
comp=Z,185nm,19.8s,baz=295,slow=38
**BRTR Keskin Array B 47.08 79** *i* P **P 15 46 46.0 +1.1**
BRTR pmax pmax
comp=Z,11nm,0.7s
**Y35A Marietta 47.10 269** P **P 15 46 45.2 +0.2**
baz=47
**BOZ Bozeman (W) 47.16 292** *e*P **P 15 46 46.7 +1.2**
BOZ pmax pmax
comp=Z,9.0nm,0.9s
**BOZ Bozeman (W) 47.16 292** P **P 15 46 45.4 -0.1**
baz=47,SNR=15
**BOZ Bozeman (W) 47.16 292** *e*P **P 15 46 46.7 +1.2**
comp=Z,9.3nm,0.9s
**BOZ Bozeman (W) 47.16 292** *e*P **P 15 46 46.7 +1.2**
comp=Z,9.3nm,0.9s
**JTMT Jette 47.18 295** *e*P **P 15 46 45.9 +0.3**
**JTMT Jette 47.18 295** *e*P **P 15 46 45.9 +0.3**
**SWMT Swartz Lake 47.19 295** *e*P **P 15 46 44.6 -1.0**
**SWMT Swartz Lake 47.19 295** *e*P **P 15 46 44.6 -1.0**
**N23A Red Feather La 47.24 283** P **P 15 46 46.5 +0.3**
baz=47
**N23A Red Feather La 47.24 283** *e*P **P 15 46 46.9 +0.7**
comp=Z,17nm,1.5s
**N23A Red Feather La 47.24 283** *e*P **P 15 46 46.9 +0.7**
comp=Z,17nm,1.5s
**R27A Eads 47.27 278** P **P 15 46 46.2 -0.1**
baz=47
**U30A WK&E Inc. Balk 47.28 275** P **P 15 46 46.2 -0.2**
baz=47
**DAWY Dawson 47.42 325** *e*P **P 15 46 47.1 0.0**
comp=Z,10nm,1.1s
**DAWY Dawson 47.42 325** *e*P **P 15 46 47.1 0.0**
comp=Z,10nm,1.1s
**LRM Limekiln Ridge 47.48 292** *e*P **P 15 46 47.7 -0.4**
**LRM Limekiln Ridge 47.48 292** *e*P **P 15 46 47.7 -0.4**
**WMOK Wichita Mounta 47.49 272** *e*P **P 15 46 48.5 +0.5**
WMOK pmax pmax
comp=Z,8.0nm,1.0s
**WMOK Wichita Mounta 47.49 272** *e*P **P 15 46 48.5 +0.5**
comp=Z,8.4nm,1.0s
**WMOK Wichita Mounta 47.49 272** *e*P **P 15 46 48.5 +0.5**
comp=Z,8.4nm,1.0s
**EGAK Eagle 47.52 326** *e*P **P 15 46 48.2 +0.4**
**EGAK Eagle 47.52 326** *e*P **P 15 46 48.2 +0.4**
**MSO Missoula 47.60 294** P **P 15 46 49.3 +0.5**
baz=48
**ISCO Idaho Springs 47.80 282** *e*P **P 15 46 51.2 +0.5**
ISCO pmax pmax
comp=Z,4.0nm,0.8s
**ISCO Idaho Springs 47.80 282** P **P 15 46 51.3 +0.6**
baz=48
**ISCO Idaho Springs 47.80 282** *e*P **P 15 46 51.2 +0.5**
comp=Z,3.6nm,0.8s
**ISCO Idaho Springs 47.80 282** *e*P **P 15 46 51.2 +0.5**
comp=Z,3.6nm,0.8s
**W31A Holland Ranch, 47.84 273** P **P 15 46 51.4 +0.7**
baz=48
**DLMT Dillon 47.86 292** *e*P **P 15 46 52.0 +1.1**
comp=Z,5.5nm,0.9s
**DLMT Dillon 47.86 292** *e*P **P 15 46 52.0 +1.1**
comp=Z,5.5nm,0.9s
**Y33A Hilltop Ranch, 47.93 271** P **P 15 46 52.0 +0.6**
baz=48
**BW06 Boulder Array 47.96 287** *e*P **P 15 46 51.2 -0.6**
**BW06 Boulder Array 47.96 287** *e*P **P 15 46 51.2 -0.6**
**Z34A Collier Ranch, 47.99 270** P **P 15 46 52.2 +0.3**
baz=48
**X32A Elmer 48.01 272** P **P 15 46 52.7 +0.7**
baz=48
**FXWY Fox Creek 48.17 289** *e*P **P 15 46 55.0 +1.6**
comp=Z,19nm,2.2s
**FXWY Fox Creek 48.17 289** *e*P **P 15 46 55.0 +1.6**
comp=Z,19nm,2.2s
**TPAW Teton Pass 48.23 289** *e*P **P 15 46 54.8 +0.9**
comp=Z,36nm,2.1s
**TPAW Teton Pass 48.23 289** *e*P **P 15 46 54.8 +0.9**
comp=Z,36nm,2.1s
**X31A McDonald Ranch 48.26 273** P **P 15 46 54.1 +0.1**
baz=48
**NEW Newport 48.30 298** P **P 15 46 54.0 -0.1**
baz=48
**MCMT McKenzie Canyo 48.35 292** *e*P **P 15 46 55.5 +0.7**
**MCMT McKenzie Canyo 48.35 292** *e*P **P 15 46 55.5 +0.7**
**Y32A R-V Farms, Ver 48.40 272** P **P 15 46 55.2 +0.2**
baz=48
**COLD Coldfoot 48.47 332** *e*P **P 15 46 55.0 -0.1**
comp=Z,72nm,2.5s
**COLD Coldfoot 48.47 332** *e*P **P 15 46 55.0 -0.1**
comp=Z,72nm,2.5s
**438A Sam Houston St 48.54 265** P **P 15 46 57.2 +1.1**

baz=48
**ARU Arti 48.58 48** *d i* P **P 15 46 56.2 +0.1**
ARU S **S 15 53 56.6 -0.7**
ARU SS **SS 15 57 27.0 +0.4**
ARU pmax pmax
comp=Z,25nm,1.0s
**U27A Thompson Grove 48.59 276** P **P 15 46 57.4 +0.8**
baz=48
**V28A Channing 48.73 275** P **P 15 46 58.5 +0.8**
baz=49
**WHTX Lake Whitney 48.74 268** P **P 15 46 58.2 +0.5**
baz=49
**W29A Amraillo 48.85 274** P **P 15 46 59.1 +0.5**
baz=49
**X30A Coker Ranch, T 48.90 273** P **P 15 46 59.6 +0.7**
baz=49
**Y31A Rekieta Farm, 48.90 272** P **P 15 46 59.4 +0.5**
baz=49
**Z32A Haskell 48.93 271** P **P 15 46 59.3 +0.2**
baz=49
**T25A Trinidad 48.98 278** P **P 15 47 00.6 +0.9**
baz=49
**AMTX Amarillo 49.04 274** P **P 15 47 00.7 +0.6**
baz=49
**AMTX Amarillo 49.04 274** *e*P **P 15 47 00.9 +0.9**
comp=Z,21nm,0.8s
**AMTX Amarillo 49.04 274** *e*P **P 15 47 00.9 +0.9**
comp=Z,21nm,0.8s
**KIV Kislovodsk 49.17 69** *e*P **P 15 47 00.3 -0.6**
KIV *e* 15 48 27.2
KIV *e* 15 48 53.5
KIV pmax pmax
comp=Z,9.0nm,1.1s
**SDCO Great Sand Dun 49.17 280** P **P 15 47 01.8 +0.5**
baz=49
**SVE Sverdlovsk 49.18 46** ⇓ *i* P **P 15 47 00.9 +0.2**
SVE pmax pmax
comp=Z,12nm,1.1s
**335A Moody 49.25 267** P **P 15 47 02.6 +1.0**
baz=49
**436A Wall Ranch, Ga 49.27 266** P **P 15 47 02.1 +0.3**
baz=49
**IL1 Eielson Array 49.30 328** *e*P **P 15 47 01.6 +0.1**
**IL1 Eielson Array 49.30 328** *e*P **P 15 47 01.6 +0.1**
**ILAR Eielson Array 49.30 328** P **P 15 47 02.0 +0.6**
comp=Z,3.9nm,0.9s,baz=41,slow=6.1,SNR=40
ILAR PcP **PcP 15 48 23.8 -0.3**
comp=Z,0.8nm,0.8s,baz=11,slow=1.9,SNR=3.1
ILAR LR LR 16 07 40.5
comp=Z,420nm,19.5s,baz=66,slow=36
**Z31A Sharp Cattle R 49.30 271** P **P 15 47 02.4 +0.4**
baz=49
**Y30A Stafford Cattl 49.33 273** P **P 15 47 03.0 +0.8**
baz=49
**HKT Hockley 49.34 265** *e*P P 15 47 06.1 +3.9
HKT pmax pmax
comp=Z,4.0nm,1.0s
**X29A Tulia 49.37 274** P **P 15 47 03.1 +0.5**
baz=49
**KBZ Khabaz 49.43 69** P **P 15 47 03.5 +0.8**
comp=Z,4.5nm,0.9s,baz=312,slow=11,SNR=7.0
KBZ LR LR 16 07 44.8
comp=Z,164nm,20.3s,baz=312,slow=36
**COLA College 49.51 329** *e*P **P 15 47 03.8 +0.7**
COLA pmax pmax
comp=Z,5.0nm,0.8s
**COLA College 49.51 329** *e*P **P 15 47 03.6 +0.5**
comp=Z,7.7nm,1.0s
**COLA College 49.51 329** *e*P **P 15 47 03.6 +0.5**
comp=Z,7.7nm,1.0s
**537A Green Hill Far 49.52 265** P **P 15 47 04.8 +1.2**
baz=50
**MDM Murphy Dome 49.56 329** *e*P **P 15 47 01.8 -1.8**
comp=Z,47nm,1.8s
**MDM Murphy Dome 49.56 329** *e*P **P 15 47 01.8 -1.8**
comp=Z,47nm,1.8s
**X28A Dimmitt 49.60 274** P **P 15 47 04.8 +0.5**
baz=50
**CCB Clear Creek Bu 49.66 329** *e*P **P 15 47 03.9 -0.3**
comp=Z,36nm,2.1s
**CCB Clear Creek Bu 49.66 329** *e*P **P 15 47 03.9 -0.3**
comp=Z,36nm,2.1s
**334A Lometa 49.68 268** P **P 15 47 05.0 +0.1**
baz=50
**Y29A Porterfield Fa 49.78 273** P **P 15 47 06.3 +0.7**
baz=50
**HWUT Hardware Ranch 49.84 288** *e*P **P 15 47 05.9 -0.3**
comp=Z,7.5nm,0.9s
**HWUT Hardware Ranch 49.84 288** *e*P **P 15 47 05.9 -0.3**
comp=Z,7.5nm,0.9s
**F10A Beach Ranch, E 49.87 295** *e*P **P 15 47 07.3 +1.1**
comp=Z,98nm,2.8s
**F10A Beach Ranch, E 49.87 295** *e*P **P 15 47 07.3 +1.1**
comp=Z,98nm,2.8s
**Z30A Sanderson Ranc 49.89 272** P **P 15 47 07.0 +0.5**
baz=50
**131A Roby 49.91 271** P **P 15 47 07.1 +0.4**
baz=50
**NCK Nalchik 49.96 69** *e*P **P 15 47 07.7 +0.8**
**HLID Hailey 50.03 291** P **P 15 47 07.0 -0.7**
baz=50,SNR=7.1
**HLID Hailey 50.03 291** *e*P **P 15 47 09.2 +1.6**
comp=Z,5.3nm,1.0s
**HLID Hailey 50.03 291** *e*P **P 15 47 09.2 +1.6**
comp=Z,5.3nm,1.0s
**232A Coleman 50.07 270** P **P 15 47 08.0 +0.2**
baz=50
**434A Burnet 50.08 268** P **P 15 47 07.7 -0.2**
baz=50,SNR=6.9
**Z29A Hungry Hill Ra 50.23 273** P **P 15 47 09.2 +0.1**
baz=50
**130A Snyder 50.30 272** P **P 15 47 10.5 +0.9**
baz=50
**BWN Browne 50.50 329** *e*P **P 15 47 09.6 -1.0**
comp=Z,36nm,1.0s
**BWN Browne 50.50 329** *e*P **P 15 47 09.6 -1.0**
comp=Z,36nm,1.0s
**Z28A Tucker Farm, M 50.60 273** P **P 15 47 12.1 +0.2**
baz=50
**MCK McKinley 50.67 328** *e*P **P 15 47 10.0 -2.0**
MCK pmax pmax
comp=Z,28nm,1.3s
**MCK McKinley 50.67 328** *e*P **P 15 47 10.0 -2.0**
comp=Z,28nm,1.3s
**MCK McKinley 50.67 328** *e*P **P 15 47 10.0 -2.0**
comp=Z,28nm,1.3s
**A04D Lummi Island 50.76 301** P **P 15 47 12.6 -0.1**
baz=51
**534A Blanco 50.79 267** P **P 15 47 13.7 +0.4**
baz=51
**MFID Camas Ranch 50.88 292** *e*P **P 15 47 16.5 +2.5**
comp=Z,4.0nm,0.8s
**MFID Camas Ranch 50.88 292** *e*P **P 15 47 16.5 +2.5**
comp=Z,4.0nm,0.8s
**230A Sterling City 50.91 271** P **P 15 47 14.2 0.0**
baz=51
**TOA0 Torodi Ar. Sit 50.99 131** *e*P **P 15 47 13.4 -1.5**
**TOA0 Torodi Ar. Sit 50.99 131** *e*P **P 15 47 13.4 -1.5**
**TORD Torodi Ar. Bea 50.99 131** P **P 15 47 12.8 -2.1**
comp=Z,2.4nm,0.8s,baz=331,slow=6.2,SNR=14
TORD LR LR 16 06 32.2
comp=Z,162nm,21.7s,baz=330,slow=33
**533A Kerrville 51.07 268** P **P 15 47 14.8 -0.6**
baz=51
**128A Castleberry Fa 51.15 273** P **P 15 47 16.1 +0.1**
baz=51
**G08A Pilot Rock 51.23 296** *e*P **P 15 47 16.9 +0.4**
comp=Z,5.2nm,1.1s
**G08A Pilot Rock 51.23 296** *e*P **P 15 47 16.9 +0.4**
comp=Z,5.2nm,1.1s
**TRF Thorofare Moun 51.28 329** *e*P **P 15 47 17.8 +1.0**
comp=Z,133nm,2.6s
**TRF Thorofare Moun 51.28 329** *e*P **P 15 47 17.8 +1.0**
comp=Z,133nm,2.6s
**330A Mertzon 51.30 271** P **P 15 47 17.6 +0.4**
baz=51
**KTH Kantishna Hill 51.40 329** P **P 15 47 16.7 -0.8**
comp=Z,26nm,1.4s
**KTH Kantishna Hill 51.40 329** P **P 15 47 16.7 -0.8**
comp=Z,26nm,1.4s
**DUG Dugway 51.50 287** P **P 15 47 18.6 0.0**
baz=51
**431A Sonora 51.51 270** P **P 15 47 18.8 +0.1**
baz=52
**532A Rocksprings 51.53 269** P **P 15 47 19.6 +0.7**
baz=52
**633A Saathoff Ranch 51.62 267** P **P 15 47 19.8 +0.3**
baz=52

**329A Wagon Wheel Ra 51.70 271** P **P 15 47 20.8 +0.6**
baz=52
**ANMO Albuquerque 51.71 278** ⇑ *i* P **P 15 47 22.3 +2.0**
ANMO pmax pmax
comp=Z,4.0nm,1.0s
**430A Baggett Ranch, 51.79 270** P **P 15 47 21.2 +0.3**
baz=52
**CAST Castle Rocks 51.84 329** *e*P **P 15 47 21.0 +0.3**
comp=Z,14nm,1.1s
**CAST Castle Rocks 51.84 329** *e*P **P 15 47 21.0 +0.3**
comp=Z,14nm,1.1s
**531A Rocksprings 51.87 269** P **P 15 47 21.7 +0.3**
baz=52
**632A Uvalde 51.93 268** P **P 15 47 22.1 +0.3**
baz=52
**834A Tilden 52.27 266** P **P 15 47 24.6 +0.3**
baz=52
**429A Davenport Ranc 52.29 271** P **P 15 47 23.9 -0.7**
baz=52,SNR=5.4
**J08A Circle Bar Ran 52.31 294** *e*P **P 15 47 25.8 +1.2**
comp=Z,13nm,0.9s
**J08A Circle Bar Ran 52.31 294** *e*P **P 15 47 25.8 +1.2**
comp=Z,13nm,0.9s
**530A J-C Ranch, Com 52.33 270** P **P 15 47 25.4 +0.6**
baz=52
**ELK Elko 52.43 289** *e*P **P 15 47 28.6 +2.9**
ELK pmax pmax
comp=Z,3.0nm,1.1s
**ELK Elko 52.43 289** *e*P **P 15 47 28.6 +2.9**
comp=Z,3.3nm,1.1s
**ELK Elko 52.43 289** *e*P **P 15 47 28.6 +2.9**
comp=Z,3.3nm,1.1s
**732A Laxson Ranch, 52.62 267** P **P 15 47 26.9 0.0**
baz=53
**529A Stev Forest Ra 52.85 270** P **P 15 47 28.2 -0.5**
baz=53,SNR=7.5
**GNI Garni 52.91 71** *d i* P **P 15 47 30.5 +1.4**
GNI pmax pmax
comp=Z,268nm,1.7s
**GNI Garni 52.91 71** *e*P **P 15 47 27.2 -1.9**
comp=Z,124nm,0.9s
**GNI Garni 52.91 71** *e*P **P 15 47 27.2 -1.9**
comp=Z,124nm,0.9s
**832A Faith Ranch, C 52.96 267** P **P 15 47 29.6 +0.1**
baz=53
**WVOR Wild Horse Val 53.05 293** *e*P **P 15 47 31.5 +1.4**
WVOR pmax pmax
comp=Z,8.0nm,0.9s
**WVOR Wild Horse Val 53.05 293** *e*P **P 15 47 31.5 +1.4**
comp=Z,8.0nm,0.9s
**WVOR Wild Horse Val 53.05 293** *e*P **P 15 47 31.5 +1.4**
comp=Z,8.0nm,0.9s
**933A Laredo 53.07 266** P **P 15 47 29.8 -0.5**
baz=53
**MNTX Cornudas Mount 53.48 274** P **P 15 47 33.3 0.0**
baz=53,SNR=8.1
**MNTX Cornudas Mount 53.48 274** *e*P **P 15 47 34.1 +0.8**
comp=Z,3.6nm,0.8s
**MNTX Cornudas Mount 53.48 274** *e*P **P 15 47 34.1 +0.8**
comp=Z,3.6nm,0.8s
**J05D Fort Rock, OR 53.80 295** P **P 15 47 35.9 +0.3**
baz=54
**K05A Summer Lake 54.02 295** *e*P **P 15 47 39.7 +2.4**
comp=Z,18nm,1.0s
**K05A Summer Lake 54.02 295** *e*P **P 15 47 39.7 +2.4**
comp=Z,18nm,1.0s
**ABKAR Akbulak array 54.10 54** *e*P **P 15 47 38.0 +0.4**
**ABKAR Akbulak array 54.10 54** *e*P **P 15 47 38.0 +0.4**
**121A Cookes Peak, D 54.23 277** P **P 15 47 39.3 +0.4**
baz=54
**TX31 Lajitas Ar. Si 54.27 271** *e*P **P 15 47 40.2 +1.0**
**TX31 Lajitas Ar. Si 54.27 271** *e*P **P 15 47 40.2 +1.0**
**TXAR Lajitas Array 54.27 271** P **P 15 47 39.8 +0.6**
comp=Z,1.2nm,0.8s,baz=70,slow=4.7,SNR=11
TXAR LR LR 16 10 16.5
comp=Z,464nm,19.4s,baz=0.0,slow=36
**J04D Umpqua Nationa 54.28 296** P **P 15 47 39.2 0.0**
baz=54
**MOD Modoc 54.30 294** *e*P **P 15 47 41.4 +2.1**
comp=Z,5.4nm,0.8s
**MOD Modoc 54.30 294** *e*P **P 15 47 41.4 +2.1**
comp=Z,5.4nm,0.8s
**DBIC Dimbokro 54.32 142** P **P 15 47 38.4 -1.1**
comp=Z,2.3nm,0.7s,baz=12,slow=2.7,SNR=3.6
DBIC LR LR 16 08 27.5
comp=Z,312nm,18.8s,baz=329,slow=34
**R11A Troy Canyon, C 54.33 287** P **P 15 47 39.5 -0.1**
baz=54
**R11A Troy Canyon, C 54.33 287** *e*P **P 15 47 41.5 +1.9**
comp=Z,13nm,2.0s
**R11A Troy Canyon, C 54.33 287** *e*P **P 15 47 41.5 +1.9**
comp=Z,13nm,2.0s
**ISHB Shabestar 54.72 72** *e*Pn **P 15 47 42.6 +0.1**
**M04C Macdoel 55.18 295** P **P 15 47 45.5 -0.2**
baz=55
**YBH Yreka Blue Hor 55.67 295** P **P 15 47 48.0 -1.2**
comp=Z,2.8nm,0.9s,baz=74,slow=4.1,SNR=4.4
**YBH Yreka Blue Hor 55.67 295** P **P 15 47 48.0 -1.2**
**YBH Yreka Blue Hor 55.67 295** P **P 15 47 48.0 -1.2**
**NVAR Mina Array Bea 55.74 289** P **P 15 47 49.7 -0.1**
comp=Z,0.7nm,0.6s,baz=49,slow=6.1,SNR=7.6
NVAR LR LR 16 10 55.9
comp=Z,840nm,18.7s,baz=40,slow=35
**BRVK Borovoye 55.78 45** *e*P **P 15 47 50.4 +0.7**
BRVK pmax pmax
comp=Z,11nm,1.3s
**BRVK Borovoye 55.78 45** *e*P **P 15 47 50.4 +0.7**
comp=Z,11nm,1.3s
**BRVK Borovoye 55.78 45** *e*P **P 15 47 50.4 +0.7**
comp=Z,11nm,1.3s
**M02C Callahan 55.99 295** P **P 15 47 51.2 -0.2**
baz=56
**ISRB Sarab 56.16 71** *e*Pn **P 15 47 52.6 -0.3**
**ISRB Sarab 56.16 71** *e*Pn **P 15 47 52.6 -0.3**
**N02D Trinity Center 56.22 294** P **P 15 47 52.9 -0.2**
baz=56
**GRAC Grapevine Rang 56.28 288** P **P 15 47 53.3 -0.2**
baz=56,SNR=8.4
**PDMCI Parker Dam,Lak 56.49 283** P **P 15 47 56.1 +1.1**
baz=56
**OHCM Honcut 56.77 292** *e*P **P 15 47 58.0 +1.1**
**OHCM Honcut 56.77 292** *e*P **P 15 47 58.0 +1.1**
**MPMC Manual Prospec 57.03 287** P **P 15 47 59.4 +0.3**
baz=57
**Y12C Blythe 57.11 283** P **P 15 48 00.4 +1.0**
baz=57
**GSC Goldstone 57.22 286** P **P 15 48 01.5 +1.2**
baz=57
**214A Organ Pipe Nat 57.49 280** P **P 15 48 03.2 +1.0**
baz=57
**LRMC Laurel Mountai 57.57 287** P **P 15 48 03.3 +0.5**
baz=58
**BC3 Big Chuckawall 57.70 284** P **P 15 48 04.7 +1.0**
baz=58
**BELC Belle Mtn. Jos 57.74 284** P **P 15 48 04.7 +0.7**
baz=58
**GLA Glamis 57.80 283** P **P 15 48 05.1 +0.8**
baz=58
**PFO Pinyon Flat Ob 58.28 284** P **P 15 48 09.9 +2.0**
comp=Z,4.4nm,0.7s,baz=68,slow=5.7,SNR=6.1
**SWSC Sam W. Stewart 58.42 283** P **P 15 48 09.2 +0.6**
baz=58
**MONP Monument Peak 58.80 284** P **P 15 48 11.4 -0.1**
**ROSC El Rosal 59.30 227** P **P 15 48 16.0 +0.7**
comp=Z,12nm,0.7s,baz=43,slow=2.3,SNR=11
ROSC LR LR 16 13 49.0
comp=Z,34nm,19.1s,baz=168,slow=36
**ROSC El Rosal 59.30 227** *e*P **P 15 48 17.3 +2.0**
**ROSC El Rosal 59.30 227** *e*P **P 15 48 17.3 +2.0**
**PTGA Pitinga 59.47 209** P **P 15 48 15.1 -0.9**
comp=Z,2.4nm,0.6s,baz=9.2,slow=11,SNR=6.1
**PTGA Pitinga 59.47 209** *e*P **P 15 48 15.4 -0.7**
comp=Z,51nm,2.7s
**PTGA Pitinga 59.47 209** *e*P **P 15 48 15.4 -0.7**
comp=Z,51nm,2.7s
**CIS Catalina Islan 59.51 285** P **P 15 48 17.1 +0.9**
baz=59
**ZALV Zalesovo Beam 60.44 36** P **P 15 48 22.6 +0.4**
comp=Z,0.3nm,0.3s,baz=325,slow=7.0,SNR=2.5
**KURK Kurchatov 60.86 42** *e*P **P 15 48 23.3 -1.8**
KURK pmax pmax
comp=Z,5.0nm,0.8s
**KURK Kurchatov 60.86 42** *e*P **P 15 48 23.3 -1.8**
comp=Z,5.1nm,0.8s
**KURK Kurchatov 60.86 42** *e*P **P 15 48 23.3 -1.8**
comp=Z,5.1nm,0.8s

**GEYT Alibeck 61.58 64** P **P 15 48 30.7 +0.4**
comp=Z,5.0nm,0.9s,baz=294,slow=11,SNR=9.9
GEYT LR LR 16 16 06.5
comp=Z,135nm,19.3s,baz=340,slow=37
**SEY Seymchan 61.85 356** *e*P **P 15 48 32.0 +0.3**
**YAK Yakutsk 62.32 8** *e*P **P 15 48 32.8 -2.0**
YAK pmax pmax
comp=Z,10.0nm,0.8s
YAK pmax pmax
comp=N,9.0nm,1.3s
**IRAM Ramesheh 63.23 72** *e*Pn **P 15 48 40.0 -1.7**
**IRAM Ramesheh 63.23 72** *e*Pn **P 15 48 40.0 -1.7**
**IKAZ Kazeroun 64.49 74** *e*Pn **P 15 48 49.5 -0.7**
**IKAZ Kazeroun 64.49 74** *e*Pn **P 15 48 49.5 -0.7**
**MAKZ Makanchi 65.33 42** *e*P **P 15 48 55.1 +0.1**
**MAKZ Makanchi 65.33 42** *e*P **P 15 48 55.1 +0.1**
**EKS2 Erkin-Say 65.35 50** *e*P **P 15 48 56.6 +1.3**
EKS2 pmax pmax
comp=Z,12nm,0.9s
**EKS2 Erkin-Say 65.35 50** *e*P **P 15 48 56.6 +1.3**
comp=Z,12nm,0.9s
**EKS2 Erkin-Say 65.35 50** *e*P **P 15 48 56.6 +1.3**
comp=Z,12nm,0.9s
**MKAR Makanchi Array 65.46 42** P **P 15 48 55.7 -0.1**
comp=Z,2.5nm,0.7s,baz=342,slow=6.0,SNR=15
**MKAR Makanchi Array 65.46 42** P **P 15 48 55.7 -0.1**
MKAR pmax pmax
comp=Z,3.0nm,0.7s
**MKAR Makanchi Array 65.46 42** *e*P **P 15 48 56.1 +0.3**
**MKAR Makanchi Array 65.46 42** *e*P **P 15 48 56.1 +0.3**
**MK01 Makanchi Array 65.49 42** *e*P **P 15 48 55.4 -0.6**
**MK01 Makanchi Array 65.49 42** *e*P **P 15 48 55.4 -0.6**
**AAK Ala-Archa 65.69 50** *e*P **P 15 48 58.1 +0.6**
AAK pmax pmax
comp=Z,13nm,1.1s
**HVS Khovu-Aksy 65.69 32** *i* P **P 15 48 57.2 -0.1**
HVS pmax pmax
comp=Z,15nm,0.9s
**SAML Samuel 68.21 210** *e*P **P 15 49 12.0 -1.5**
comp=Z,4.4nm,1.2s
**SAML Samuel 68.21 210** *e*P **P 15 49 12.0 -1.5**
comp=Z,4.4nm,1.2s
**KSH Kashi 68.87 51** P **P 15 49 20.1 +2.4**
KSH *es*P **sP 15 49 26.9 +4.7**
KSH *e*PP **PP 15 51 54.3 +5.1**
KSH PcS 15 53 47.3
KSH S **S 15 58 20.1 -1.6**
KSH PMZ
comp=Z,130nm,6.9s
KSH LZ
comp=Z,200nm,8.3s
**WMQ Urumqi 70.01 40** *e*P **P 15 49 27.0 +2.4**
**PETK Petropavlovsk- 71.33 352** LR LR 16 21 31.1
comp=Z,61nm,19.7s,baz=18,slow=36
**SONA1 Songino Array 72.21 26** *e*P **P 15 49 37.6 -0.4**
**SONA1 Songino Array 72.21 26** *e*P **P 15 49 37.6 -0.4**
**SONM Songino Array 72.22 26** P **P 15 49 37.7 -0.3**
comp=Z,1.7nm,0.9s,baz=328,slow=6.6,SNR=7.3
**ULN Ulaanbaatar 72.36 26** *i* P **P 15 49 37.8 -1.0**
ULN pmax pmax
comp=Z,14nm,2.5s
**LPAZ La Paz 76.62 212** P **P 15 50 03.9 -0.5**
comp=Z,2.1nm,1.1s,baz=16,slow=11,SNR=6.3
**GTA Gaotai 78.10 34** *e*P **P 15 50 12.0 0.0**
GTA pP **pP 15 50 17.0 +1.7**
GTA sP **sP 15 50 20.0 +3.5**
GTA S **S 16 00 03.8 -2.2**
GTA SKS **SKSac 16 00 20.8 -5.4**
GTA SS **SS 16 05 08.4 +2.2**
GTA PMZ
comp=Z,5.0nm,1.0s
GTA PMZ
comp=Z,110nm,6.2s
GTA LN
comp=Z,240nm,15.9s
GTA LE
comp=Z,200nm,15.0s
GTA LZ
comp=Z,270nm,18.0s
**MDJ Mudanjiang 79.54 11** P **P 15 50 17.8 -1.8**
MDJ PMZ
comp=Z,5.0nm,1.5s
MDJ PMZ
comp=Z,29nm,3.2s
**HHC Hu-ho-hao-te 80.05 25** *e*P **P 15 50 22.8 +0.2**
HHC sP sP 15 50 34.6 +7.5
HHC S **S 16 00 26.8 +0.1**
HHC sS **sS 16 00 34.8 +2.6**
HHC PMZ
comp=Z,15nm,1.0s
HHC PMZ
comp=Z,110nm,5.7s
HHC LN
comp=Z,250nm,15.5s
HHC LE
comp=Z,140nm,16.3s
HHC LZ
comp=Z,170nm,16.7s
**BJI Beijing 81.86 22** P **P 15 50 32.0 -0.1**
BJI S **S 16 00 45.6 +0.3**
BJI PMZ
comp=Z,11nm,0.8s
BJI LZ
comp=Z,50nm,30.6s
**LZH Lanzhou 82.40 32** *e*P **P 15 50 35.1 -0.2**
LZH pP **PcP 15 50 40.3 -0.2**
LZH sP **sP 15 50 42.5 +2.7**
LZH *e*PP **PP 15 53 45.3 +1.9**
LZH PMZ
comp=Z,17nm,1.4s
LZH PMZ
comp=Z,65nm,9.3s
LZH LN
comp=Z,190nm,15.6s
LZH LE
comp=Z,190nm,16.0s
LZH LZ
comp=Z,220nm,19.7s
**LVC Limon Verde 82.82 211** P **P 15 50 37.8 +0.4**
comp=Z,6.2nm,0.4s,baz=360,slow=3.8,SNR=3.7
**CPUP Villa Florida 83.56 200** LR LR 16 25 31.4
comp=Z,30nm,21.9s,baz=20,slow=34
**KSRS Korea Array 86.40 13** P **P 15 50 54.2 -1.0**
comp=Z,1.2nm,0.6s,baz=356,slow=6.1,SNR=6.0
KSRS LR LR 16 33 06.2
comp=Z,16nm,18.7s,baz=340,slow=38
**KSRS Korea Array 86.40 13** P **P 15 50 54.3 -1.0**
KSRS pmax pmax
comp=Z,1.0nm,0.6s
KSRS MLR MLR
comp=Z,16nm,18.7s
**KSAR Wonju Array Be 86.41 13** P **P 15 50 54.3 -1.1**
**KSAR Wonju Array Be 86.41 13** P **P 15 50 54.2 -1.1**
**KSAR Wonju Array Be 86.41 13** P **P 15 50 54.2 -1.1**
**CD2 Chengdu 87.16 34** *e*P **P 15 50 57.8 -1.4**
**NJ2 Nanjing 90.12 22** *e*P **P 15 51 14.5 +1.4**
**KMI Kunming 92.16 37** P **P 15 51 22.3 -0.7**
KMI PMZ
comp=Z,10.0nm,1.0s
KMI PMZ
comp=Z,450nm,4.1s
**GYA Guiyang 92.22 34** *e*P **P 15 51 22.3 -0.8**
GYA PMZ
comp=Z,10.0nm,1.0s
**CMAR Chiang Mai Arr 96.85 43** P **P 15 51 43.8 -0.6**
comp=Z,1.0nm,0.8s,baz=321,slow=5.3,SNR=5.8
**CMAR Chiang Mai Arr 96.85 43** *i* P **P 15 51 43.7 -0.6**
CMAR pmax pmax
comp=Z,1.0nm,0.8s
**BOSA Boshof 98.32 129** LR LR 16 35 13.9
comp=Z,109nm,19.0s,baz=338,slow=35
**PPT2 Papeete2 118.06 280** *e*LR LR 16 32 56.4
comp=Z,135nm,22.5s
**TBI Tubuai 122.57 276** *e*LR LR 16 35 01.7
comp=Z,162nm,34.8s
**DZM Mont Dzumac 142.97 325** *e*LR LR 16 44 34.6
comp=Z,147nm,25.9s
**WRA Warramunga Arr 143.74 17** PKP PKPab 15 57 45.1 +0.2
comp=Z,1.6nm,1.0s,baz=353,slow=3.0,SNR=14
**QSPA South Pole Qui 145.29 180** *e*PKPdf **PKPbc 15 57 47.4 -1.9**
**ASAR Alice Springs 147.31 19** PKPbc **PKPdf 15 57 55.9 +1.7**
comp=Z,15nm,0.7s,baz=348,slow=2.6,SNR=188

*CSEM **22** 15:41:04.3, 38°51N×29°44W, h2km, ML3.7, After PDA*

**PDA 22 15:41:04.3±1.0, 38°51N×29°44W, h2km±10km, MD3.8, ML3.7, Error ellipse: s-maj=9.1km s-min=5.9km az=100.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CALA** | **Caldeira** | **0.58** | **83** | *e*P | Pg | 15 41 14.6 | -1.0 |
| CALA | | | | *e*S | Sg | 15 41 22.1 | -1.1 |
| **CALA** | **Caldeira** | **0.58** | **83** | *e*P | Pg | 15 41 14.6 | -1.0 |
| CALA | | | | *e*S | Sg | 15 41 22.1 | -1.1 |
| **PCED** | **Cedros** | **0.59** | **78** | *e*P | Pg | 15 41 14.4 | -1.2 |
| PCED | | | | *e*S | Sg | 15 41 21.9 | -1.3 |
| PCED | | | | A | A | 15 41 29.1 | |
| | 1µm,0.3s | | | | | | |
| **PCED** | **Cedros** | **0.59** | **78** | *e*P | Pg | 15 41 14.4 | -1.2 |
| PCED | | | | *e*S | Sg | 15 41 21.9 | -1.3 |
| **HOR** | **Horta** | **0.63** | **89** | *e*P | Pg | 15 41 15.4 | -1.0 |
| HOR | | | | *e*S | Sg | 15 41 23.2 | -1.4 |
| **HOR** | **Horta** | **0.63** | **89** | *e*P | Pg | 15 41 15.4 | -1.0 |
| HOR | | | | *e*S | Sg | 15 41 23.2 | -1.4 |
| **PCAN** | **Candelaria** | **0.75** | **93** | *i* P | Pg | 15 41 16.3 | -2.4 |
| PCAN | | | | *e*S | Sg | 15 41 26.2 | -2.2 |
| PCAN | | | | A | A | 15 41 29.4 | |
| | 1µm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **0.75** | **93** | *i* P | Pg | 15 41 16.3 | -2.4 |
| PCAN | | | | *e*S | Sg | 15 41 26.2 | -2.2 |
| **PICO** | **Pico** | **0.79** | **91** | *e*P | Pg | 15 41 17.9 | -1.7 |
| PICO | | | | *e*S | Sg | 15 41 27.6 | -2.4 |
| **PICO** | **Pico** | **0.79** | **91** | *e*P | Pg | 15 41 17.9 | -1.7 |
| PICO | | | | *e*S | Sg | 15 41 27.6 | -2.4 |
| **PPNO** | **Prainha do Nor** | **0.92** | **92** | *i* P | Pg | 15 41 19.4 | -2.7 |
| PPNO | | | | *e*S | Sg | 15 41 30.7 | -3.4 |
| PPNO | | | | A | A | 15 41 33.6 | |
| | 1µm,0.5s | | | | | | |
| **PPNO** | **Prainha do Nor** | **0.92** | **92** | *i* P | Pg | 15 41 19.4 | -2.7 |
| PPNO | | | | *e*S | Sg | 15 41 30.7 | -3.4 |
| **ROSA** | **Rosais** | **0.96** | **77** | *e*P | Pg | 15 41 19.9 | -2.8 |
| ROSA | | | | *e*S | Sg | 15 41 31.3 | -3.9 |
| ROSA | | | | A | A | 15 41 32.1 | |
| | 629nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **0.96** | **77** | *e*P | Pg | 15 41 19.9 | -2.8 |
| ROSA | | | | *e*S | Sg | 15 41 31.3 | -3.9 |
| **PGRA** | **Graciosa** | **1.25** | **65** | *e*P | Pg | 15 41 23.8 | -4.5 |
| PGRA | | | | *e*S | Sg | 15 41 38.1 | -6.4 |
| PGRA | | | | A | A | 15 41 43.2 | |
| | 288nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.25** | **65** | *e*P | Pg | 15 41 23.8 | -4.5 |
| PGRA | | | | *e*S | Sg | 15 41 38.1 | -6.4 |
| **ADH** | **Angra Heroismo** | **1.73** | **85** | *e*S | Sn | 15 41 50.5 | -7.4 |
| ADH | | | | A | A | 15 41 53.0 | |
| | 292nm,0.3s | | | | | | |
| **ADH** | **Angra Heroismo** | **1.73** | **85** | *e*S | Sn | 15 41 50.5 | -7.4 |
| **PSET** | **Sete Cidades** | **3.01** | **102** | *e*P | Pn | 15 41 48.5 | -4.5 |
| PSET | | | | *e*S | Sn | 15 42 21.3 | -8.3 |
| PSET | | | | A | A | 15 42 25.2 | |
| | 62nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **3.01** | **102** | *e*P | Pn | 15 41 48.5 | -4.5 |
| PSET | | | | *e*S | Sn | 15 42 21.3 | -8.3 |
| **PDA** | **Ponta Delgada** | **3.07** | **103** | *e*P | Pn | 15 41 49.3 | -4.5 |
| **PDA** | **Ponta Delgada** | **3.07** | **103** | *e*P | Pn | 15 41 49.3 | -4.5 |
| **GRON** | **Grota Negra** | **3.17** | **102** | *e*P | Pn | 15 41 52.4 | -2.7 |
| **BART** | **Pico Bartolome** | **3.44** | **101** | *e*P | Pn | 15 41 54.5 | -4.5 |
| **BART** | **Pico Bartolome** | **3.44** | **101** | *e*P | Pn | 15 41 54.5 | -4.5 |
| **PSMA** | **Santa Maria** | **3.73** | **113** | *e*P | Pn | 15 41 58.0 | -4.9 |
| **PSMN** | **Pico do Norte,** | **3.78** | **112** | *e*P | Pn | 15 41 58.3 | -5.2 |
| **PSMN** | **Pico do Norte,** | **3.78** | **112** | *e*P | Pn | 15 41 58.3 | -5.2 |

*ISCJB **22** 15:56:24.5±0.4, 50°10N±0°03×18°35E±0°03, h0km, Error ellipse: s-maj=4.5km s-min=2.5km az=15.4*
*CSEM **22** 15:56:25.7±0.3, 50°06N×18°38E, h1km, ML3.1/10, Error ellipse: s-maj=6.7km s-min=3.8km az=15.0*
*IPEC **22** 15:56:26.1±0.2, 50°06N×18°45E, h0km±3km, ML2.3/3, Error ellipse: s-maj=2.0km s-min=1.1km az=160.0*

**ISC 22 15:56:26.1±0.8, 50°09N±0°03×18°40E±0°02, h0km, n36, σ0s87/66, 10D, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAC** | **Raciborz** | **0.13** | **268** | *i*P*g* | **Pg** | **15 56 30.3** | **+1.7** |
| RAC | | | | *e*S*g* | **Sg** | **15 56 33.3** | **+3.0** |
| **OKC** | **Ostrava-Krasne** | **0.30** | **213** | *i*P*g* | **Pg** | **15 56 32.5** | **+0.7** |
| OKC | | | | *e*S*G* | **Sg** | **15 56 36.8** | **+1.1** |
| | comp=Z,246nm,0.5s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.30** | **213** | Pg | **Pg** | **15 56 32.5** | **+0.7** |
| OKC | | | | Sg | **Sg** | **15 56 36.8** | **+1.1** |
| | 246nm,0.5s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.64** | **241** | *e*P*g* | **Pg** | **15 56 38.5** | **+0.2** |
| MORC | | | | *e*S*g* | **Sg** | **15 56 46.6** | **+0.1** |
| | 45nm,0.3s,baz=64 | | | | | | |
| **OJC** | **Ojcow** | **0.91** | **81** | *e*P*g* | **Pg** | **15 56 43.3** | **-0.3** |
| OJC | | | | *e*S*g* | **Sg** | **15 56 55.6** | **+0.3** |
| **OJC** | **Ojcow** | **0.91** | **81** | *e*P*g* | **Pg** | **15 56 43.3** | **-0.3** |
| OJC | | | | *e*S*g* | **Sg** | **15 56 55.6** | **+0.3** |
| **KRLC** | **Kraliky** | **1.04** | **270** | *i*P*G* | **Pg** | **15 56 45.5** | **-0.6** |
| KRLC | | | | *e*S*G* | **Sg** | **15 56 59.6** | **0.0** |
| **KRLC** | **Kraliky** | **1.04** | **270** | Pg | **Pg** | **15 56 45.5** | **-0.6** |
| KRLC | | | | Sg | **Sg** | **15 56 59.6** | **0.0** |
| **LANS** | **Liptovska Anna** | **1.17** | **143** | *e*P*G* | **Pg** | **15 56 48.4** | **-0.1** |
| LANS | | | | *e*S*G* | **Sb** | **15 57 05.0** | **+0.1** |
| **LANS** | **Liptovska Anna** | **1.17** | **143** | *e*P*g* | **Pg** | **15 56 48.4** | **-0.1** |
| LANS | | | | *e*S*g* | **Sb** | **15 57 05.0** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **1.36** | **282** | *i*P*G* | **Pg** | **15 56 51.8** | **-0.4** |
| DPC | | | | *e*S*G* | **Sb** | **15 57 10.5** | **+0.1** |
| | comp=Z,90nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.36** | **282** | Pg | **Pg** | **15 56 51.8** | **-0.4** |
| DPC | | | | Sg | **Sb** | **15 57 10.5** | **+0.1** |
| | 90nm,0.4s | | | | | | |
| **NIE** | **Niedzica** | **1.40** | **118** | *e*P*g* | **Pn** | **15 56 52.8** | **-0.2** |
| NIE | | | | *e*S*g* | **Sn** | **15 57 12.1** | **-0.1** |
| **NIE** | **Niedzica** | **1.40** | **118** | *e*P*g* | **Pn** | **15 56 52.8** | **-0.2** |
| NIE | | | | *e*S*g* | **Sn** | **15 57 12.1** | **-0.1** |
| **VRAC** | **Vranov** | **1.41** | **237** | *e*P*g* | **Pn** | **15 56 52.3** | **-0.7** |
| | baz=57 | | | | | | |
| VRAC | | | | *e*S*g* | **Sg** | **15 57 10.7** | **-0.6** |
| | 37nm,0.4s,baz=57 | | | | | | |
| **KSP** | **Ksiaz** | **1.54** | **300** | *e*Pn | **Pn** | **15 56 54.3** | **-0.6** |
| KSP | | | | *e*P*g* | **Pg** | **15 56 56.7** | **+1.0** |
| KSP | | | | *e*S*g* | **Sg** | **15 57 16.9** | **+1.2** |
| **KSP** | **Ksiaz** | **1.54** | **300** | *e*Pn | **Pn** | **15 56 54.3** | **-0.6** |
| **UPC** | **Upice** | **1.59** | **286** | *i*P*G* | **Pg** | **15 56 55.7** | **+0.2** |
| UPC | | | | *e*S*G* | **Sg** | **15 57 17.8** | **+0.7** |
| | comp=Z,25nm,0.5s | | | | | | |
| **UPC** | **Upice** | **1.59** | **286** | Pg | **Pg** | **15 56 55.7** | **+0.2** |
| UPC | | | | Sg | **Sg** | **15 57 17.8** | **+0.7** |
| | 25nm,0.5s | | | | | | |
| **VYHS** | **Vyhne** | **1.62** | **170** | *e*P*G* | **Pn** | **15 56 55.2** | **-0.8** |
| **VYHS** | **Vyhne** | **1.62** | **170** | *e*P*g* | **Pn** | **15 56 55.2** | **-0.8** |
| **KRUC** | **Moravsky** | **1.66** | **233** | *e*P*g* | **Pn** | **15 56 56.2** | **-0.3** |
| | baz=52 | | | | | | |
| KRUC | | | | *e*S*g* | **Sn** | **15 57 18.4** | **-0.1** |
| | 35nm,0.5s,baz=52 | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.96** | **109** | *e*PN | **Pg** | **15 57 03.9** | **+0.2** |
| STHS | | | | *e*SN | **Sg** | **15 57 30.8** | **+1.6** |
| **TREC** | **Trest** | **2.05** | **248** | *i*P*G* | **Sb** | **15 57 30.1** | **-0.2** |
| | comp=Z,13nm,0.3s | | | | | | |
| **TREC** | **Trest** | **2.05** | **248** | Sg | **Sb** | **15 57 30.1** | **-0.2** |
| | 13nm,0.3s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.34** | **267** | *i*P*G* | **Pb** | **15 57 08.1** | **-1.0** |
| **GOPC** | **GO Pecny, Ondr** | **2.34** | **267** | Pg | **Pb** | **15 57 08.1** | **-1.0** |
| **PRU** | **Pruhonice** | **2.49** | **269** | *i*P*G* | **Pb** | **15 57 11.1** | **-0.6** |
| PRU | | | | *e*S*G* | **Sb** | **15 57 44.3** | **+1.4** |
| | comp=Z,9.5nm,0.5s | | | | | | |
| **PRU** | **Pruhonice** | **2.49** | **269** | Pg | **Pb** | **15 57 11.1** | **-0.6** |
| PRU | | | | Sg | **Sb** | **15 57 44.3** | **+1.4** |
| | 9.5nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **2.50** | **282** | *i*P*G* | **Pb** | **15 57 12.7** | **+0.9** |
| PVCC | | | | *e*S*G* | **Sg** | **15 57 46.2** | **0.0** |
| | comp=Z,28nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **2.50** | **282** | Pg | **Pb** | **15 57 12.7** | **+0.9** |
| PVCC | | | | Sg | **Sg** | **15 57 46.2** | **0.0** |
| | 28nm,0.4s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **2.78** | **113** | *e*PN | **Pb** | **15 57 16.9** | **+0.3** |
| **BRG** | **Berggiesshubel** | **2.95** | **287** | PN | **Pb** | **15 57 19.2** | **-0.4** |
| BRG | | | | PG | **Pg** | **15 57 21.6** | **-1.1** |
| BRG | | | | SG | **Sg** | **15 57 59.6** | **-1.3** |
| | 14nm,0.8s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.28** | **255** | *i*P*G* | **Pn** | **15 57 17.2** | **-1.6** |
| KHC | | | | *e*P*G* | **Pb** | **15 57 26.6** | **+1.4** |
| KHC | | | | *e*S*G* | **Sg** | **15 58 09.5** | **-1.9** |
| | comp=Z,12nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.28** | **255** | Pn | **Pn** | **15 57 17.2** | **-1.6** |
| **CLL** | **Collm** | **3.64** | **292** | *e*P*g* | **Pg** | **15 57 36.0** | **+0.1** |
| CLL | | | | *e*S*g* | **Sg** | **15 58 23.0** | **-0.1** |
| | comp=Z,11nm,0.6s | | | | | | |

**IDC 22 15:58:22.8±6.9, 17°92N×144°21E, h121km±56km, mb3.3/4, mb1 3.7/5, mb1mx3.3/30, mbtmp3.8/5, Error ellipse: s-maj=134.8km s-min=21.7km az=115.0, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **4.35** | **172** | P | Pn | 15 59 26.8 | -0.3 |
| GUMO | | | | S | Sn | 16 00 09.9 | -7.1 |
| **WRA** | **Warramunga Arr** | **38.85** | **195** | P | P | 16 05 36.1 | -0.3 |
| | 1.2nm,0.8s,baz=12,slow=8.7,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **42.54** | **194** | P | P | 16 06 07.1 | +0.5 |
| | 0.2nm,0.5s,baz=13,slow=8.7,SNR=4.3 | | | | | | |
| **ILAR** | **Eielson Array** | **64.97** | **26** | P | P | 16 08 50.2 | +0.8 |
| | 0.4nm,0.4s,baz=251,slow=6.0,SNR=8.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.73** | **51** | P | P | 16 10 42.8 | -1.1 |
| | 0.9nm,0.5s,baz=264,slow=5.7,SNR=9.2 | | | | | | |

*ISCJB **22** 16:01:08.8±0.4, 33°80N±0°02×35°73E±0°06, h13km±5km, Error ellipse: s-maj=9.2km s-min=3.4km az=164.1*
*NSSC **22** 16:01:08.7±2.0, 33°80N×35°76E, h8km±7km, ML1.8*
*CSEM **22** 16:01:08.7±0.2, 33°79N×35°73E, h12km, ML2.9, Error ellipse: s-maj=6.5km s-min=3.3km az=84.0*
*GRAL **22** 16:01:10.0±0.3, 33°79N×35°75E, h0km±30km, MD2.9*

**ISC 22 16:01:08.6±0.8, 33°79N±0°02×35°73E±0°03, h15km±6km, n39, σ0s64/70, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BHL** | **Bhannes** | **0.13** | **330** | *e*P | **Pg** | **16 01 12.6** | **+0.2** |
| **BHL** | **Bhannes** | **0.13** | **330** | *e*P | **Pg** | **16 01 12.6** | **+0.2** |
| **DQRL** | **Deir Qamar** | **0.16** | **238** | *e*P | **Pb** | **16 01 13.2** | **-0.1** |
| DQRL | | | | *e*S | **Sg** | **16 01 15.4** | **-0.1** |
| **DQRL** | **Deir Qamar** | **0.16** | **238** | *e*P | **Pb** | **16 01 13.2** | **-0.1** |
| DQRL | | | | *e*S | **Sg** | **16 01 15.4** | **-0.1** |
| **BEYL** | **Beirut** | **0.21** | **292** | *e*P | **Pb** | **16 01 14.2** | **0.0** |
| **BEYL** | **Beirut** | **0.21** | **292** | *e*P | **Pb** | **16 01 14.2** | **0.0** |
| **RCY** | **Rachaya** | **0.31** | **164** | *e*P | **Pg** | **16 01 15.4** | **+0.3** |
| RCY | | | | *e*S | **Sg** | **16 01 19.3** | **-0.2** |
| **RCY** | **Rachaya** | **0.31** | **164** | *e*P | **Pg** | **16 01 15.4** | **+0.3** |
| RCY | | | | *e*S | **Sg** | **16 01 19.3** | **-0.2** |
| **BRBR** | **Barbar** | **0.42** | **154** | *e*P | **Pg** | **16 01 17.1** | **0.0** |
| BRBR | | | | *e*S | **Sg** | **16 01 23.4** | **+0.5** |
| BRBR | | | | AML | AML | 16 01 29.4 | |
| | comp=N,87nm,0.4s | | | | | | |
| BRBR | | | | AML | AML | 16 01 29.5 | |
| | comp=E,121nm,0.4s | | | | | | |
| **BRBR** | **Barbar** | **0.42** | **154** | *e*P | **Pg** | **16 01 17.5** | **+0.4** |
| BRBR | | | | *e*S | **Sg** | **16 01 22.7** | **-0.2** |
| BRBR | | | | AML | AML | 16 01 29.4 | |
| | comp=N,87nm,0.4s | | | | | | |
| BRBR | | | | AML | AML | 16 01 29.5 | |
| | comp=E,121nm,0.4s | | | | | | |
| **BRBR** | **Barbar** | **0.42** | **154** | *e*P | **Pg** | **16 01 17.5** | **+0.4** |
| BRBR | | | | *e*S | **Sg** | **16 01 22.7** | **-0.2** |
| **HWQ** | **Hawqa** | **0.52** | **20** | *e*P | **Pg** | **16 01 19.3** | **+0.4** |
| **HWQ** | **Hawqa** | **0.52** | **20** | *e*P | **Pg** | **16 01 19.3** | **+0.4** |
| **TOTH** | **TOTAH** | **0.72** | **126** | *e*P | **Pg** | **16 01 22.9** | **+0.2** |
| TOTH | | | | *e*S | **Sb** | **16 01 32.8** | **+0.2** |
| **TOTH** | **TOTAH** | **0.72** | **126** | *e*P | **Pg** | **16 01 22.9** | **+0.2** |
| TOTH | | | | *e*S | **Sb** | **16 01 32.8** | **+0.2** |
| **FKH** | **Fakeheh** | **0.72** | **51** | *e*P | **Pg** | **16 01 22.7** | **0.0** |
| **FKH** | **Fakeheh** | **0.72** | **51** | *e*P | **Pg** | **16 01 22.7** | **0.0** |
| **HAWK** | **Haweek** | **0.92** | **37** | *e*P | **Pn** | **16 01 26.9** | **-0.1** |
| HAWK | | | | *e*S | **Sn** | **16 01 40.5** | **+0.5** |
| HAWK | | | | AML | AML | 16 01 46.0 | |
| | comp=E,14nm,0.4s | | | | | | |
| HAWK | | | | AML | AML | 16 01 48.5 | |
| | comp=N,29nm,0.6s | | | | | | |
| **HAWK** | **Haweek** | **0.92** | **37** | *e*P | **Pb** | **16 01 26.2** | **-0.1** |
| HAWK | | | | *e*S | **Sb** | **16 01 38.1** | **-0.2** |
| HAWK | | | | AML | AML | 16 01 46.0 | |
| | comp=E,14nm,0.4s | | | | | | |
| HAWK | | | | AML | AML | 16 01 48.5 | |
| | comp=N,29nm,0.6s | | | | | | |
| **HAWK** | **Haweek** | **0.92** | **37** | *e*P | **Pb** | **16 01 26.2** | **-0.1** |
| HAWK | | | | *e*S | **Sb** | **16 01 38.1** | **-0.2** |
| **TCHB** | **Talchebab** | **1.14** | **170** | *e*P | **Pn** | **16 01 29.7** | **-0.3** |
| TCHB | | | | *e*S | **Sn** | **16 01 45.1** | **-0.2** |
| TCHB | | | | AML | AML | 16 01 56.4 | |
| | comp=N,20nm,0.7s | | | | | | |
| TCHB | | | | AML | AML | 16 02 00.2 | |
| | comp=E,39nm,0.4s | | | | | | |
| **TCHB** | **Talchebab** | **1.14** | **170** | *e*P | **Pn** | **16 01 29.7** | **-0.3** |
| TCHB | | | | *e*S | **Sn** | **16 01 45.1** | **-0.2** |
| **BIDA** | **Albida** | **1.31** | **22** | *e*P | **Pn** | **16 01 31.1** | **-1.5** |
| BIDA | | | | *e*S | **Sg** | **16 01 50.9** | **-0.1** |
| BIDA | | | | AML | AML | 16 01 52.0 | |
| | comp=N,54nm,0.7s | | | | | | |
| BIDA | | | | AML | AML | 16 01 54.0 | |
| | comp=E,58nm,0.6s | | | | | | |
| **BIDA** | **Albida** | **1.31** | **22** | *e*P | **Pn** | **16 01 31.0** | **-1.5** |
| BIDA | | | | *e*S | **Sb** | **16 01 49.7** | **0.0** |
| BIDA | | | | AML | AML | 16 01 52.0 | |
| | comp=N,54nm,0.7s | | | | | | |
| BIDA | | | | AML | AML | 16 01 54.0 | |
| | comp=E,58nm,0.6s | | | | | | |
| **BIDA** | **Albida** | **1.31** | **22** | *e*P | **Pn** | **16 01 31.0** | **-1.5** |
| BIDA | | | | *e*S | **Sb** | **16 01 49.7** | **0.0** |
| **SALA** | **Sala** | **1.36** | **142** | *e*P | **Pn** | **16 01 32.5** | **-0.7** |
| SALA | | | | *e*S | **Sn** | **16 01 50.9** | **-0.2** |
| SALA | | | | AML | AML | 16 01 57.6 | |
| | comp=E,1.6nm,0.4s | | | | | | |
| SALA | | | | AML | AML | 16 02 04.1 | |
| | comp=N,18nm,0.4s | | | | | | |
| **SALA** | **Sala** | **1.36** | **142** | *e*P | **Pn** | **16 01 32.5** | **-0.7** |
| SALA | | | | *e*S | **Sn** | **16 01 50.9** | **-0.2** |
| **ZALF** | **Zalf** | **1.60** | **122** | *e*P | **Pb** | **16 01 37.5** | **-0.3** |
| ZALF | | | | *e*S | **Sb** | **16 01 58.6** | **+0.9** |
| ZALF | | | | AML | AML | 16 02 02.9 | |
| | comp=E,15nm,0.3s | | | | | | |
| ZALF | | | | AML | AML | 16 02 07.1 | |
| | comp=N,16nm,0.5s | | | | | | |
| **ZALF** | **Zalf** | **1.60** | **122** | *e*P | **Pb** | **16 01 38.0** | **+0.2** |
| ZALF | | | | *e*S | **Sb** | **16 01 58.2** | **+0.4** |
| ZALF | | | | AML | AML | 16 02 02.9 | |
| | comp=E,15nm,0.3s | | | | | | |
| ZALF | | | | AML | AML | 16 02 07.1 | |
| | comp=N,16nm,0.5s | | | | | | |
| **ZALF** | **Zalf** | **1.60** | **122** | *e*P | **Pb** | **16 01 38.0** | **+0.2** |
| ZALF | | | | *e*S | **Sb** | **16 01 58.2** | **+0.4** |
| **WRDH** | **Warideh** | **1.80** | **18** | *e*P | **Pn** | **16 01 39.8** | **+0.6** |
| WRDH | | | | *e*S | **Sn** | **16 02 02.1** | **+0.3** |
| WRDH | | | | AML | AML | 16 02 14.0 | |
| | comp=N,13nm,0.5s | | | | | | |
| WRDH | | | | AML | AML | 16 02 16.8 | |
| | comp=Z,24nm,0.6s | | | | | | |
| **WRDH** | **Warideh** | **1.80** | **18** | *e*P | **Pn** | **16 01 39.8** | **+0.6** |
| WRDH | | | | *e*S | **Sn** | **16 02 02.1** | **+0.3** |
| **SLNF** | **Slenfeh** | **1.84** | **12** | *e*P | **Pn** | **16 01 37.7** | **-2.2** |
| SLNF | | | | *e*S | **Sn** | **16 02 03.8** | **+0.8** |
| SLNF | | | | AML | AML | 16 02 08.7 | |
| | comp=N,14nm,0.3s | | | | | | |
| SLNF | | | | AML | AML | 16 02 09.5 | |
| | comp=E,66nm,0.4s | | | | | | |
| **ARNB** | **Al Arnab** | **2.08** | **5** | *e*P | **Pb** | **16 01 45.5** | **-0.5** |
| ARNB | | | | *e*S | **Sn** | **16 02 09.3** | **+0.7** |
| ARNB | | | | AML | AML | 16 02 21.3 | |
| | comp=N,14nm,0.4s | | | | | | |
| ARNB | | | | AML | AML | 16 02 21.7 | |
| | comp=E,8.3nm,0.4s | | | | | | |
| **ARNB** | **Al Arnab** | **2.08** | **5** | *e*P | **Pb** | **16 01 45.2** | **-0.8** |
| ARNB | | | | *e*S | **Sn** | **16 02 09.0** | **+0.5** |
| ARNB | | | | AML | AML | 16 02 21.3 | |
| | comp=N,14nm,0.4s | | | | | | |
| ARNB | | | | AML | AML | 16 02 21.7 | |
| | comp=E,8.3nm,0.4s | | | | | | |
| **ARNB** | **Al Arnab** | **2.08** | **5** | *e*P | **Pb** | **16 01 45.2** | **-0.8** |
| ARNB | | | | *e*S | **Sn** | **16 02 09.0** | **+0.5** |
| **BTCH** | **Batrach** | **2.32** | **15** | *e*P | **Pn** | **16 01 48.1** | **+1.8** |
| BTCH | | | | *e*S | **Sn** | **16 02 14.6** | **0.0** |
| BTCH | | | | AML | AML | 16 02 27.2 | |
| | comp=N,18nm,0.4s | | | | | | |
| BTCH | | | | AML | AML | 16 02 28.1 | |
| | comp=E,19nm,0.4s | | | | | | |
| **BTCH** | **Batrach** | **2.32** | **15** | *e*P | **Pn** | **16 01 48.1** | **+1.8** |
| BTCH | | | | *e*S | **Sn** | **16 02 14.6** | **0.0** |

**TRN 22 16:05:09.9, 16°13N×60°92W, h37km, MD3.4, M3.5(FDF), 4C-8D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DEG** | **La Desirade** | **0.23** | **325** | *i*P | Pn | 16 05 18.1 | -0.7 |
| **MGG** | **Marie-Galante** | **0.43** | **241** | *e*P | Pn | 16 05 21.1 | +1.7 |
| **SEG** | **Port Louis** | **0.62** | **296** | *i*P | Pn | 16 05 23.3 | +1.0 |
| **BCG** | **Bois Riant Cap** | **0.67** | **266** | *i*P | Pn | 16 05 24.9 | +1.9 |
| **PHG** | **Guadaloupe-2** | **0.70** | **261** | *e*P | Pn | 16 05 25.3 | +1.8 |
| **LKG** | **Breislack** | **0.71** | **263** | *e*P | Pn | 16 05 25.6 | +1.9 |
| LKG | | | | *e*S | Sn | 16 05 35.9 | +2.4 |
| **SCG** | **Saint Claude** | **0.73** | **262** | *e*P | Pn | 16 05 25.5 | +1.7 |
| SCG | | | | *e*S | Sn | 16 05 36.5 | +2.6 |
| **TBG** | **Guadaloupe-3** | **0.75** | **249** | *e*P | Pn | 16 05 25.7 | +1.8 |
| TBG | | | | *e*S | Sn | 16 05 36.2 | +2.2 |
| **MLG** | **Mont-d'or** | **0.76** | **265** | *i*P | Pn | 16 05 25.8 | +1.6 |
| MLG | | | | *e*S | Sn | 16 05 36.4 | +1.9 |
| **HMG** | **Houelmont** | **0.76** | **259** | *e*P | Pn | 16 05 25.9 | +1.7 |
| HMG | | | | *e*S | Sn | 16 05 36.9 | +2.5 |
| **BBL** | **Barber's Block** | **0.80** | **221** | *i*P | Pn | 16 05 25.9 | +1.3 |
| BBL | | | | *e*S | Sn | 16 05 37.2 | +1.8 |
| **LZG** | **Guadaloupe-1** | **0.82** | **271** | *e*P | Pn | 16 05 26.2 | +1.3 |
| **DLPL** | **La Plaine** | **0.85** | **202** | *e*P | Pn | 16 05 26.5 | +1.2 |
| DLPL | | | | *e*S | Sn | 16 05 38.4 | +1.7 |
| **MDN** | **Morne-Daniel** | **0.92** | **209** | *e*P | Pn | 16 05 27.7 | +1.4 |
| MDN | | | | *e*S | Sn | 16 05 41.1 | +2.7 |
| **DBCT** | **Belle View Cho** | **0.94** | **206** | *e*P | Pn | 16 05 29.3 | +2.6 |
| DBCT | | | | *e*S | Sn | 16 05 41.9 | +2.8 |
| **DSTT** | **Stowe** | **0.95** | **203** | *e*P | Pn | 16 05 28.9 | +2.1 |
| DSTT | | | | *e*S | Sn | 16 05 42.0 | +3.0 |
| **DPMT** | **Pointe Michel** | **0.97** | **207** | *e*P | Pn | 16 05 28.1 | +1.1 |
| DPMT | | | | *e*S | Sn | 16 05 42.8 | +3.3 |
| **DSHT** | **Scott's Head** | **1.01** | **206** | *e*P | Pn | 16 05 28.7 | +1.2 |
| **BAMF** | **Morne Balai** | **1.32** | **189** | *e*P | Pn | 16 05 33.5 | +1.6 |
| **CXM** | **Morne La Croix** | **1.33** | **190** | *i*P | Pn | 16 05 33.4 | +1.3 |
| CXM | | | | *e*S | Sn | 16 05 50.6 | +1.9 |
| **PCM** | **Pelee Case Pet** | **1.33** | **192** | *e*P | Pn | 16 05 33.6 | +1.6 |
| **PCM** | **Pelee Case Pet** | **1.33** | **192** | *e*P | Pn | 16 05 33.7 | +1.7 |
| **GBMF** | **Grand Be** | **1.34** | **190** | *i*P | Pn | 16 05 33.9 | +1.6 |
| **MLYT** | **Lee's Yard** | **1.35** | **296** | *e*P | Pn | 16 05 34.0 | +1.7 |
| MLYT | | | | *e*S | Sn | 16 05 51.9 | +2.9 |
| **MBWH** | | **1.36** | **297** | *i*P | Pn | 16 05 33.5 | +1.2 |
| MBWH | | | | *e*S | Sn | 16 05 51.8 | +2.6 |
| **PML** | **Morne Lenard** | **1.36** | **191** | *e*P | Pn | 16 05 34.2 | +1.8 |
| **BVM** | **Bellevue** | **1.39** | **186** | *e*P | Pn | 16 05 34.7 | +1.8 |
| **FDF** | **Fort de France** | **1.40** | **189** | *i*P | Pn | 16 05 34.4 | +1.4 |
| FDF | | | | *e*S | Sn | 16 05 51.7 | +1.4 |
| **ZAM** | **Aeronautique** | **1.55** | **184** | *e*P | Pn | 16 05 36.6 | +1.7 |
| **TRMF** | **Trois Ilets** | **1.59** | **184** | *e*P | Pn | 16 05 37.5 | +2.1 |
| **BIM** | **Bigot** | **1.61** | **185** | *e*P | Pn | 16 05 37.0 | +1.2 |
| BIM | | | | *e*S | Sn | 16 05 58.1 | +2.8 |
| **ANWB** | **Willy Bob** | **1.74** | **332** | *e*P | Pn | 16 05 38.7 | +1.1 |
| ANWB | | | | *e*S | Sn | 16 06 00.5 | +2.0 |
| **SKI** | **Saint Kitts** | **2.11** | **305** | *e*P | Pn | 16 05 44.4 | +1.7 |
| SKI | | | | *e*S | Sn | 16 06 10.1 | +2.3 |
| **MCLT** | **Moule a Chique** | **2.40** | **180** | *e*P | Pn | 16 05 49.2 | +2.5 |
| MCLT | | | | *e*S | Sn | 16 06 17.2 | +2.2 |
| **SVV** | **Soufriere Volc** | **2.81** | **186** | *e*P | Pn | 16 05 53.3 | +1.0 |
| SVV | | | | *e*S | Sn | 16 06 26.5 | +1.6 |
| **SVB** | **Belmont** | **2.86** | **186** | *e*P | Pn | 16 05 54.9 | +1.9 |
| SVB | | | | *e*S | Sn | 16 06 27.4 | +1.2 |
| **FCV** | **Fort Charlotte** | **2.97** | **186** | *e*P | Pn | 16 05 56.1 | +1.6 |

*IDC **22** 16:30:43.2±0.9, 12°35N×143°42E, h0km, mb3.8/6, mb1 4.0/6, mb1mx3.6/39, mbtmp3.8/6, Error ellipse: s-maj=45.0km s-min=18.1km az=119.0*
*NEIC **22** 16:30:44.5±0.7, 12°26N×143°47E, h10km, mb4.1/1, Error ellipse: s-maj=40.2km s-min=13.9km az=117.0*
*ISCJB **22** 16:30:45.4±0.7, 12°2N±0°1×143°5E±0°2, h27km, mb3.8/7, Error ellipse: s-maj=34.4km s-min=9.2km az=35.8*

**ISC 22 16:30:46.8±1.1, 12°2N±0°2×143°6E±0°3, h27km, n11, σ0s93/8, mb3.9/7, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.81** | **42** | Pn | **Pn** | **16 31 16.6** | **+0.4** |
| | 51nm,0.3s,baz=356,slow=2.9,SNR=50 | | | | | | |
| GUMO | | | | Sn | **Sb** | **16 31 41.2** | **-0.2** |
| | 132nm,0.3s,baz=340,slow=23,SNR=39 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.54** | **69** | T | T | 17 00 32.3 | |
| | baz=255,slow=75,SNR=4.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.55** | **69** | T | T | 17 00 25.5 | |
| | baz=255,slow=75,SNR=3.1 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.56** | **69** | T | T | 17 00 31.1 | |
| | baz=255,slow=75,SNR=3.6 | | | | | | |
| **WRAB** | **Tennant Creek** | **33.24** | **196** | P | **P** | **16 37 20.4** | **-1.5** |
| | 2.1nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.26** | **196** | P | **P** | **16 37 22.0** | **0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **41.11** | **196** | P | P | 17 08 35.7 | -0.2 |
| | 0.4nm,0.7s,baz=13,slow=8.2,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **42.20** | **321** | P | P | 17 08 44.2 | -0.3 |
| | 0.3nm,0.5s,baz=133,slow=6.3,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **44.79** | **195** | P | P | 17 09 05.3 | -0.1 |
| | 0.2nm,0.7s,baz=8.7,slow=14,SNR=4.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.06** | **322** | P | P | 17 10 35.7 | -0.5 |
| | 0.7nm,0.6s,baz=106,slow=7.2,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.62** | **313** | P | P | 17 10 40.8 | +0.5 |
| | 0.7nm,0.4s,baz=86,slow=8.3,SNR=6.5 | | | | | | |
| **FINES** | **FINESS Array B** | **85.79** | **335** | P | P | 17 13 27.6 | +0.1 |
| | 2.2nm,0.8s,baz=95,slow=4.0,SNR=6.7 | | | | | | |

**MAN 22 17:07:13,18.74N×120.81E,h20km,mb5.2,ML4.2,MS4.4, Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **APYP** | **Conner** | **0.96** | **155** | *e*P | Pb | 17 07 30.5 | -0.5 |
| APYP | | | | *e*S | Sn | 17 07 45.2 | +0.8 |
| **ABRA** | **Dolores** | **1.09** | **185** | *e*P | Pn | 17 07 31.6 | -1.5 |
| ABRA | | | | *e*S | Sn | 17 07 47.3 | -0.2 |
| **SGCP** | **Mt. Cagua** | **1.27** | **113** | *e*P | Pn | 17 07 34.5 | -1.1 |
| SGCP | | | | *e*S | Sb | 17 07 52.7 | +0.6 |
| **CAUP** | **Cauayan** | **2.03** | **151** | *e*P | Pb | 17 07 47.7 | -1.5 |
| **PALP** | **Palanan** | **2.27** | **137** | *e*P | Pb | 17 07 53.3 | 0.0 |
| PALP | | | | *i* S | Sb | 17 08 24.7 | +3.8 |

*MOS **22** 17:15:10.2±1.3,34.70N×24.46E,h33km,mb4.2/14, Error ellipse: s-maj=12.1km s-min=6.6km az=78.2*
*ISCJB **22** 17:15:11.5±0.4,34.65N×0.03×24.55E±0.03,h47km±3km, mb3.9/20,MS3.2/3, Error ellipse: s-maj=5.5km s-min=3.6km az=12.3*
*NEIC **22** 17:15:11.5±1.6,34.76N×24.55E,h28km±11km,mb4.2/3, Error ellipse: s-maj=10.0km s-min=6.5km az=212.0*
*ATH **22** 17:15:12.3,34.81N×24.55E,h31km, MD3.8/25,ML3.7*
*IDC **22** 17:15:12.8±1.6,34.85N×24.54E,h35km±10km,mb3.8/15, mb1 4.0/21,mb1mx3.8/40,mbtmp4.0/21,ML4.1/4,MS3.0/5, Ms1 3.1/5,ms1mx2.7/35, Error ellipse: s-maj=16.0km s-min=15.0km az=168.0*
*CSEM **22** 17:15:12.2±0.2,34.65N×24.56E,h30km,mb4.1/13, Error ellipse: s-maj=5.5km s-min=3.9km az=16.0*
*THE **22** 17:15:12.4,34.79N×24.56E,h0km,ML3.4/4, Error ellipse: s-maj=1.7km s-min=0.7km az=199.0*

**ISC 22 17:15:11.3±0.8,34.67N±0.03×24.57E±0.02,h27km±6km, n269,σ1s43/289,mb4.0/20,MS2.9/3,1C,Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIVA** | **Sivas** | **0.40** | **29** | *e*PB | **Pb** | **17 15 19.9** | **0.0** |
| SIVA | | | | *e*SB | **Sb** | **17 15 25.8** | **0.0** |
| **SIVA** | **Sivas** | **0.40** | **29** | *e*Pb | **Pb** | 17 15 19.9 | 0.0 |
| SIVA | | | | *e*Sb | **Sb** | **17 15 25.8** | **0.0** |
| **GVD** | **Gavdhos** | **0.43** | **293** | *e*PB | **Pb** | **17 15 20.7** | **+0.2** |
| GVD | | | | *e*SB | **Sb** | **17 15 27.9** | **+1.1** |
| **GVD** | **Gavdhos** | **0.43** | **293** | *e*Pb | **Pb** | 17 15 20.7 | +0.2 |
| GVD | | | | *e*Sb | **Sb** | **17 15 27.9** | **+1.1** |
| **IDI** | **Anoyia** | **0.67** | **23** | Pg | **Pb** | **17 15 23.7** | **-0.7** |
| | 174nm,0.3s,baz=290,slow=16,SNR=670 | | | | | | |
| IDI | | | | Lg | Lg | 17 15 33.0 | |
| | 435nm,0.3s,baz=330,slow=16,SNR=26 | | | | | | |
| **IDI** | **Anoyia** | **0.67** | **23** | *e*PN | **Pb** | **17 15 23.8** | **-0.7** |
| **IDI** | **Anoyia** | **0.67** | **23** | P | **Pb** | **17 15 23.5** | **-1.0** |
| IDI | | | | S | **Sb** | **17 15 32.3** | **-1.1** |
| **IDI** | **Anoyia** | **0.67** | **23** | *e*Pn | **Pb** | **17 15 23.8** | **-0.7** |
| IDI | | | | S | **Sb** | **17 15 32.3** | **-1.1** |
| IDI | | | | Lg | Lg | 17 15 33.0 | |
| **IACM** | **Heraklion** | **0.75** | **33** | *e*PN | **Pb** | **17 15 25.6** | **-0.2** |
| **IACM** | **Heraklion** | **0.75** | **33** | *e*Pn | **Pb** | **17 15 25.6** | **-0.2** |
| **VAM** | **Vamos** | **0.80** | **337** | *e*PN | **Pb** | **17 15 26.1** | **-0.4** |
| VAM | | | | *e*SN | **Sb** | **17 15 35.8** | **-1.2** |
| **VAM** | **Vamos** | **0.80** | **337** | P | **Pb** | **17 15 25.8** | **-0.7** |
| VAM | | | | S | **Sb** | **17 15 36.2** | **-0.8** |
| **VAM** | **Vamos** | **0.80** | **337** | P | **Pb** | **17 15 25.8** | **-0.7** |
| **VAM** | **Vamos** | **0.80** | **337** | *e*Pn | **Pb** | **17 15 26.1** | **-0.4** |
| VAM | | | | *e*Sn | **Sb** | **17 15 35.8** | **-1.2** |
| VAM | | | | S | **Sb** | **17 15 36.2** | **-0.8** |
| **LAST** | **Lasithi** | **0.89** | **56** | *e*PN | **Pn** | **17 15 28.4** | **+0.3** |
| LAST | | | | *e*SN | **Sn** | **17 15 40.6** | **+0.4** |
| **LAST** | **Lasithi** | **0.89** | **56** | *e*Pn | **Pn** | **17 15 28.4** | **+0.3** |
| LAST | | | | *e*Sn | **Sn** | **17 15 40.6** | **+0.4** |
| **NPS** | **Neapolis** | **1.04** | **55** | *e*PN | **Pb** | **17 15 31.2** | **+0.6** |
| **NPS** | **Neapolis** | **1.04** | **55** | *e*Pn | **Pb** | **17 15 31.2** | **+0.6** |
| **ZKR** | **Zakros** | **1.42** | **71** | P | **Pb** | **17 15 38.0** | **+0.9** |
| ZKR | | | | S | **Sb** | **17 15 57.9** | **+3.1** |
| **ZKR** | **Zakros** | **1.42** | **71** | P | **Pb** | 17 15 38.0 | +0.9 |
| ZKR | | | | S | **Sb** | **17 15 57.9** | **+3.1** |
| **ANKY** | **Antikythira Is** | **1.58** | **319** | *e*PN | **Pb** | 17 15 39.2 | -0.7 |
| **ANKY** | **Antikythira Is** | **1.58** | **319** | P | **Pb** | 17 15 39.4 | -0.5 |
| ANKY | | | | S | **Sb** | 17 16 00.3 | +0.8 |
| **ANKY** | **Antikythira Is** | **1.58** | **319** | *e*Pn | **Pb** | 17 15 39.2 | -0.7 |
| ANKY | | | | S | **Sb** | 17 16 00.3 | +0.8 |
| **THR6** | **Thira Island,** | **1.81** | **22** | P | **Pn** | **17 15 42.1** | **+1.4** |
| **THR6** | **Thira Island,** | **1.81** | **22** | P | **Pn** | 17 15 42.1 | +1.4 |
| **SANT** | **Santorini** | **1.84** | **23** | *e*PN | **Pn** | **17 15 42.8** | **+1.6** |
| **SANT** | **Santorini** | **1.84** | **23** | *e*Pn | **Pn** | 17 15 39.3 | -1.9 |
| **SANT** | **Santorini** | **1.84** | **23** | *e*Pn | **Pn** | 17 15 42.8 | +1.6 |
| **THR5** | **Thira Island,** | **1.85** | **20** | P | **Pb** | 17 15 43.0 | -1.5 |
| **THR5** | **Thira Island,** | **1.85** | **20** | P | **Pb** | 17 15 43.0 | -1.5 |
| **THR3** | **Thira Island,** | **1.86** | **21** | P | **Pn** | **17 15 42.8** | **+1.4** |
| **THR3** | **Thira Island,** | **1.86** | **21** | P | **Pn** | 17 15 42.8 | +1.4 |
| **MHLO** | **Agia Marina, M** | **2.02** | **356** | P | **Pn** | **17 15 44.8** | **+1.2** |
| **MHLO** | **Agia Marina, M** | **2.02** | **356** | P | **Pn** | 17 15 44.8 | +1.2 |
| **KYTH** | **Kithira** | **2.04** | **322** | *e*PB | **Pn** | **17 15 45.8** | **+1.9** |
| **KYTH** | **Kithira** | **2.04** | **322** | *e*Pb | **Pn** | 17 15 45.8 | +1.9 |
| **KARP** | **Karpathos** | **2.29** | **67** | *e*PB | **Pb** | **17 15 50.6** | **-1.4** |
| **KARP** | **Karpathos** | **2.29** | **67** | P | **Pb** | 17 15 50.2 | -1.8 |
| KARP | | | | S | **Sb** | **17 16 18.9** | **-1.1** |
| **KARP** | **Karpathos** | **2.29** | **67** | P | **Pb** | 17 15 50.2 | -1.8 |
| **KARP** | **Karpathos** | **2.29** | **67** | *e*Pb | **Pb** | **17 15 50.6** | **-1.4** |
| KARP | | | | S | **Sb** | **17 16 18.9** | **-1.1** |
| **VLI** | **Veliai** | **2.44** | **327** | *e*PN | **Pn** | **17 15 50.8** | **+1.5** |
| **VLI** | **Veliai** | **2.44** | **327** | P | **Pn** | 17 15 50.9 | +1.6 |
| VLI | | | | S | **Sn** | **17 16 20.7** | **+2.4** |
| **VLI** | **Veliai** | **2.44** | **327** | *e*Pn | **Pn** | **17 15 50.8** | **+1.5** |
| VLI | | | | S | **Sn** | **17 16 20.7** | **+2.4** |
| **APE** | **Apeiranthos** | **2.52** | **18** | *e*P | **Pn** | **17 15 51.4** | **+0.9** |
| **APE** | **Apeiranthos** | **2.52** | **18** | ↑*i*P | **Pn** | **17 15 51.2** | **+0.8** |
| **APE** | **Apeiranthos** | **2.52** | **18** | *e*PN | **Pn** | **17 15 51.2** | **+0.8** |
| **APE** | **Apeiranthos** | **2.52** | **18** | *e*P | **Pn** | **17 15 51.4** | **+0.9** |
| **LTBQ** | **Tobruq** | **2.67** | **192** | *i* P | **Pn** | **17 15 54.1** | **+1.7** |
| | SNR=76 | | | | | | |
| LTBQ | | | | *e*S | **Sb** | **17 16 28.9** | **-1.7** |
| | SNR=76 | | | | | | |
| **DYR** | **Agios Nikonas** | **2.77** | **320** | *e*PN | **Pn** | **17 15 55.3** | **+1.4** |
| **DYR** | **Agios Nikonas** | **2.77** | **320** | *e*Pn | **Pn** | 17 15 55.3 | +1.4 |
| **NIS1** | **Nisyros Isl.** | **2.87** | **47** | *e*PN | **Pn** | **17 15 56.3** | **+1.1** |
| **NIS1** | **Nisyros Isl.** | **2.87** | **47** | *e*Pn | **Pn** | 17 15 56.3 | +1.1 |
| **KRND** | **KRANIDI** | **2.94** | **337** | *e*PN | **Pn** | **17 15 57.5** | **+1.3** |
| **KRND** | **KRANIDI** | **2.94** | **337** | *e*Pn | **Pn** | 17 15 57.5 | +1.3 |
| **DID** | **Didima** | **3.03** | **339** | *e*PN | **Pn** | **17 15 58.4** | **+0.9** |
| **DID** | **Didima** | **3.03** | **339** | P | **Pn** | **17 15 58.3** | **+0.8** |
| DID | | | | S | **Sn** | **17 16 36.1** | **+3.2** |
| **DID** | **Didima** | **3.03** | **339** | *e*Pn | **Pn** | **17 15 58.4** | **+0.9** |
| DID | | | | S | **Sn** | **17 16 36.1** | **+3.2** |
| **PYL** | **PYLOS** | **3.20** | **315** | *e*PN | **Pn** | **17 15 59.7** | **-0.1** |
| **PYL** | **PYLOS** | **3.20** | **315** | *e*Pn | **Pn** | 17 15 59.7 | -0.1 |
| **NAIG** | **Nisos Aigina** | **3.20** | **344** | *e*PN | **Pn** | **17 16 01.0** | **+1.2** |
| **NAIG** | **Nisos Aigina** | **3.20** | **344** | *e*Pn | **Pn** | 17 16 01.0 | +1.2 |
| **VLX** | **Vlachokerasia** | **3.23** | **327** | *e*PN | **Pn** | **17 16 02.6** | **+2.3** |
| **VLX** | **Vlachokerasia** | **3.23** | **327** | *e*Pn | **Pn** | 17 16 02.6 | +2.3 |
| **VLY** | **Voula,Athens** | **3.24** | **349** | *e*PN | **Pn** | **17 16 01.8** | **+1.5** |
| **VLY** | **Voula,Athens** | **3.24** | **349** | *e*Pn | **Pn** | 17 16 01.8 | +1.5 |
| **ARG** | **Arkhangelos** | **3.29** | **61** | *e*PN | **Pn** | **17 16 03.0** | **+2.0** |
| **ARG** | **Arkhangelos** | **3.29** | **61** | *e*Pn | **Pn** | 17 16 03.0 | +2.0 |
| **ITM** | **Ithomi** | **3.30** | **320** | *e*PN | **Pn** | **17 16 02.1** | **+0.9** |
| **ITM** | **Ithomi** | **3.30** | **320** | *e*Pn | **Pn** | 17 16 02.1 | +0.9 |
| **ATH** | **Athens Observa** | **3.37** | **348** | *e*PN | **Pn** | **17 16 03.4** | **+1.3** |
| **ATH** | **Athens Observa** | **3.37** | **348** | *e*Pn | **Pn** | 17 16 03.4 | +1.3 |
| **PTL** | **Penteli** | **3.42** | **351** | *e*PN | **Pn** | **17 16 04.2** | **+1.4** |
| **PTL** | **Penteli** | **3.42** | **351** | *e*Pn | **Pn** | 17 16 04.2 | +1.4 |
| **SMG** | **Samos** | **3.54** | **30** | *e*PN | **Pn** | **17 16 05.4** | **+0.9** |
| **SMG** | **Samos** | **3.54** | **30** | *e*Pn | **Pn** | 17 16 05.4 | +0.9 |
| **LTK** | **Loutraki** | **3.59** | **339** | *e*PN | **Pn** | **17 16 06.0** | **+0.9** |
| **LTK** | **Loutraki** | **3.59** | **339** | *e*Pn | **Pn** | 17 16 06.0 | +0.9 |
| **VILL** | **Villia** | **3.63** | **344** | *e*Pn | **Pn** | **17 16 06.8** | **+1.0** |
| **AMT** | **Artemida-Makis** | **3.68** | **322** | *e*PN | **Pn** | **17 16 07.8** | **+1.4** |
| **AMT** | **Artemida-Makis** | **3.68** | **322** | *e*Pn | **Pn** | 17 16 07.8 | +1.4 |
| **VIL2** | **Platees** | **3.69** | **344** | *e*PN | **Pn** | **17 16 06.8** | **+0.3** |
| **THAL** | **Thalero** | **3.70** | **336** | *e*PN | **Pn** | **17 16 08.2** | **+1.6** |
| **THAL** | **Thalero** | **3.70** | **336** | *e*Pn | **Pn** | 17 16 08.2 | +1.6 |
| **GUR** | **Goura** | **3.72** | **332** | *e*PN | **Pn** | **17 16 08.5** | **+1.4** |
| **GUR** | **Goura** | **3.72** | **332** | *e*Pn | **Pn** | 17 16 08.5 | +1.4 |
| **EREA** | **Eretria** | **3.78** | **352** | *e*PN | **Pn** | **17 16 09.4** | **+1.6** |
| **EREA** | **Eretria** | **3.78** | **352** | *e*Pn | **Pn** | 17 16 09.4 | +1.6 |
| **YER** | **Yerkesik** | **3.89** | **50** | *e*P | **Pn** | **17 16 11.5** | **+2.2** |
| **YER** | **Yerkesik** | **3.89** | **50** | *e*P | **Pn** | 17 16 11.5 | +2.2 |
| **KLV** | **Kalavryta, Ach** | **3.89** | **331** | *e*PN | **Pn** | **17 16 10.4** | **+1.0** |
| **KLV** | **Kalavryta, Ach** | **3.89** | **331** | *e*Pn | **Pn** | 17 16 10.4 | +1.0 |
| **CHOS** | **Chios island** | **3.90** | **17** | *e*PN | **Pn** | **17 16 11.7** | **+2.3** |
| **CHOS** | **Chios island** | **3.90** | **17** | *e*Pn | **Pn** | 17 16 11.7 | +2.3 |
| **DALY** | **Dalyan (Mu˘la** | **3.95** | **56** | *e*P | **Pn** | **17 16 12.4** | **+2.4** |
| **DALY** | **Dalyan (Mu˘la** | **3.95** | **56** | *e*P | **Pn** | 17 16 12.5 | +2.4 |
| **DRO** | **Drossia** | **4.01** | **326** | *e*PN | **Pn** | **17 16 12.7** | **+1.8** |
| **DRO** | **Drossia** | **4.01** | **326** | *e*Pn | **Pn** | 17 16 12.7 | +1.8 |
| **DESF** | **Desfina** | **4.08** | **337** | *e*PN | **Pn** | **17 16 13.2** | **+1.2** |
| **DESF** | **Desfina** | **4.08** | **337** | *e*Pn | **Pn** | 17 16 13.2 | +1.2 |
| **DSF** | **Desfina** | **4.08** | **337** | *e*PN | **Pn** | **17 16 12.6** | **+0.7** |
| **DSF** | **Desfina** | **4.08** | **337** | *e*Pn | **Pn** | 17 16 12.6 | +0.7 |
| **MRKA** | **Markates** | **4.10** | **349** | *e*PN | **Pn** | **17 16 13.8** | **+1.6** |
| **MRKA** | **Markates** | **4.10** | **349** | *e*Pn | **Pn** | 17 16 13.8 | +1.6 |
| **LAKA** | **Lakka** | **4.13** | **330** | *e*PN | **Pn** | **17 16 13.9** | **+1.3** |
| **LAKA** | **Lakka** | **4.13** | **330** | *e*Pn | **Pn** | 17 16 13.9 | +1.3 |
| **FETY** | **Fethiye** | **4.16** | **61** | *e*P | **Pn** | **17 16 14.4** | **+1.3** |
| **FETY** | **Fethiye** | **4.16** | **61** | *e*P | **Pn** | 17 16 14.4 | +1.3 |
| **LKR** | **Lokris** | **4.17** | **343** | *e*PN | **Pn** | **17 16 14.1** | **+1.0** |
| **LKR** | **Lokris** | **4.17** | **343** | *e*Pn | **Pn** | 17 16 14.1 | +1.0 |
| **KALE** | **Kalithea** | **4.20** | **333** | *e*PN | **Pn** | **17 16 14.6** | **+1.0** |
| **KALE** | **Kalithea** | **4.20** | **333** | *e*Pn | **Pn** | 17 16 14.6 | +1.0 |
| **TRIZ** | **Trizonia** | **4.20** | **332** | *e*PN | **Pn** | **17 16 14.6** | **+1.1** |
| **TRIZ** | **Trizonia** | **4.20** | **332** | *e*Pn | **Pn** | 17 16 14.6 | +1.1 |
| **RLS** | **Riolos of Patr** | **4.21** | **324** | *e*PN | **Pn** | **17 16 15.1** | **+1.5** |
| **RLS** | **Riolos of Patr** | **4.21** | **324** | *e*Pn | **Pn** | 17 16 15.1 | +1.5 |
| **AYDB** | **Zeytinkoy-Aydi** | **4.23** | **38** | *e*P | **Pn** | **17 16 15.8** | **+1.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **4.23** | **38** | *e*P | **Pn** | 17 16 15.8 | +1.8 |
| **EFP** | **Efpalio** | **4.32** | **331** | *e*PN | **Pn** | **17 16 17.3** | **+2.1** |
| **EFP** | **Efpalio** | **4.32** | **331** | *e*Pn | **Pn** | 17 16 17.3 | +2.1 |
| **SMIA** | **Simia** | **4.34** | **346** | *e*PN | **Pn** | **17 16 17.3** | **+1.8** |
| **SMIA** | **Simia** | **4.34** | **346** | *e*Pn | **Pn** | 17 16 17.3 | +1.8 |
| **AXAR** | **Agios Charalam** | **4.37** | **340** | *e*PN | **Pn** | **17 16 18.2** | **+2.3** |
| **AXAR** | **Agios Charalam** | **4.37** | **340** | *e*Pn | **Pn** | 17 16 18.2 | +2.3 |
| **AOS** | **Alonnisos** | **4.53** | **353** | *e*PN | **Pn** | **17 16 19.0** | **+1.0** |
| **AOS** | **Alonnisos** | **4.53** | **353** | *e*Pn | **Pn** | 17 16 19.0 | +1.0 |
| **SKIA** | **Skiathos** | **4.57** | **349** | *e*PN | **Pn** | **17 16 20.1** | **+1.4** |
| **SKIA** | **Skiathos** | **4.57** | **349** | *e*Pn | **Pn** | 17 16 20.1 | +1.4 |
| **AGG** | **Agios Georgios** | **4.70** | **338** | *e*PN | **Pn** | **17 16 22.1** | **+1.6** |
| **AGG** | **Agios Georgios** | **4.70** | **338** | *e*Pn | **Pn** | 17 16 22.1 | +1.6 |
| **VLS** | **Valsamata** | **4.75** | **319** | *e*PN | **Pn** | **17 16 23.5** | **+2.4** |
| **VLS** | **Valsamata** | **4.75** | **319** | *e*Pn | **Pn** | 17 16 23.5 | +2.4 |
| **NEO** | **Neokhori** | **4.75** | **347** | *e*PN | **Pn** | **17 16 22.6** | **+1.5** |
| **NEO** | **Neokhori** | **4.75** | **347** | *e*Pn | **Pn** | 17 16 22.6 | +1.5 |
| **MAKR** | **Makrakomi, Fth** | **4.76** | **336** | *e*PN | **Pn** | **17 16 22.9** | **+1.7** |
| **MAKR** | **Makrakomi, Fth** | **4.76** | **336** | *e*Pn | **Pn** | 17 16 22.9 | +1.7 |
| **PRK** | **Paraskevi** | **4.76** | **16** | *e*PN | **Pn** | **17 16 22.6** | **+1.3** |
| **PRK** | **Paraskevi** | **4.76** | **16** | *e*Pn | **Pn** | 17 16 22.6 | +1.3 |
| **PDO** | **Prodromos** | **4.78** | **326** | *e*PN | **Pn** | **17 16 23.6** | **+2.2** |
| **PDO** | **Prodromos** | **4.78** | **326** | *e*Pn | **Pn** | 17 16 23.6 | +2.2 |
| **EVR** | **Evrytania** | **4.78** | **333** | *e*PN | **Pn** | **17 16 24.8** | **+3.2** |
| **EVR** | **Evrytania** | **4.78** | **333** | *e*Pn | **Pn** | 17 16 24.8 | +3.2 |
| **ELL** | **Elmali** | **4.81** | **63** | *e*P | **Pn** | **17 16 23.8** | **+1.8** |
| **ELL** | **Elmali** | **4.81** | **63** | *e*P | **Pn** | 17 16 23.8 | +1.8 |
| **KULA** | **Kula-Manisa** | **5.05** | **39** | *e*P | **Pn** | **17 16 27.2** | **+1.9** |
| **KULA** | **Kula-Manisa** | **5.05** | **39** | *e*P | **Pn** | 17 16 27.2 | +1.9 |
| **LKD2** | **Lefkada island** | **5.17** | **324** | *e*PN | **Pn** | **17 16 29.1** | **+2.1** |
| **LKD2** | **Lefkada island** | **5.17** | **324** | *e*Pn | **Pn** | 17 16 29.1 | +2.1 |
| **DSL** | **Palaion Diasel** | **5.25** | **329** | *e*PN | **Pn** | **17 16 29.1** | **+1.1** |
| **DSL** | **Palaion Diasel** | **5.25** | **329** | *e*Pn | **Pn** | 17 16 29.1 | +1.1 |
| **LJBD** | **Adjabya** | **5.25** | **226** | *e*S | **Sn** | **17 17 27.3** | **-0.4** |
| | SNR=76 | | | | | | |
| **PAIG** | **Paliouri** | **5.29** | **353** | *e*PN | **Pn** | **17 16 29.6** | **+1.0** |
| **PAIG** | **Paliouri** | **5.29** | **353** | *e*Pn | **Pn** | 17 16 29.6 | +1.0 |
| **THL** | **Klokotos Trika** | **5.29** | **338** | *e*PN | **Pn** | **17 16 29.0** | **+0.4** |
| **THL** | **Klokotos Trika** | **5.29** | **338** | *e*Pn | **Pn** | 17 16 29.0 | +0.4 |
| **KHL** | **Karahalli** | **5.40** | **46** | *e*P | **Pn** | **17 16 32.2** | **+2.1** |
| **KHL** | **Karahalli** | **5.40** | **46** | *e*P | **Pn** | 17 16 32.2 | +2.1 |
| **LIT** | **Litokhoron** | **5.67** | **344** | *e*PN | **Pn** | **17 16 34.5** | **+0.8** |
| **LIT** | **Litokhoron** | **5.67** | **344** | *e*Pn | **Pn** | 17 16 34.5 | +0.8 |
| **OUR** | **Ouranopolis** | **5.67** | **355** | *e*PN | **Pn** | **17 16 35.2** | **+1.5** |
| **OUR** | **Ouranopolis** | **5.67** | **355** | *e*Pn | **Pn** | 17 16 35.2 | +1.5 |
| **PLG** | **Polygyros** | **5.76** | **351** | *e*PN | **Pn** | **17 16 36.1** | **+1.1** |
| **PLG** | **Polygyros** | **5.76** | **351** | *e*Pn | **Pn** | 17 16 36.1 | +1.1 |
| **SUTC** | **Sutluce-Ispart** | **5.91** | **60** | *e*P | **Pn** | **17 16 40.1** | **+3.0** |
| **SUTC** | **Sutluce-Ispart** | **5.91** | **60** | *e*P | **Pn** | 17 16 40.1 | +3.0 |
| **HORT** | **Hortiatis** | **6.03** | **349** | *e*PN | **Pn** | **17 16 41.0** | **+2.2** |
| **HORT** | **Hortiatis** | **6.03** | **349** | *e*Pn | **Pn** | 17 16 41.0 | +2.2 |
| **TVSB** | **Tavsanli** | **6.17** | **38** | *e*P | **Pn** | **17 16 43.1** | **+2.5** |
| **TVSB** | **Tavsanli** | **6.17** | **38** | *e*P | **Pn** | 17 16 43.1 | +2.5 |
| **SOH** | **Sokhos** | **6.22** | **351** | *e*PN | **Pn** | **17 16 42.4** | **+1.1** |
| **SOH** | **Sokhos** | **6.22** | **351** | *e*Pn | **Pn** | 17 16 42.4 | +1.1 |
| **KEK** | **Kerkira** | **6.31** | **324** | *e*PN | **Pn** | **17 16 43.7** | **+1.1** |
| **KEK** | **Kerkira** | **6.31** | **324** | *e*Pn | **Pn** | 17 16 43.7 | +1.1 |
| **GRG** | **Griva** | **6.51** | **345** | *e*PN | **Pn** | **17 16 45.8** | **+0.6** |
| **GRG** | **Griva** | **6.51** | **345** | *e*Pn | **Pn** | 17 16 45.8 | +0.6 |
| **FNA** | **Florina** | **6.61** | **338** | *e*PN | **Pn** | **17 16 48.3** | **+1.6** |
| **FNA** | **Florina** | **6.61** | **338** | *e*Pn | **Pn** | 17 16 48.3 | +1.6 |
| **KNT** | **Kendrikon** | **6.61** | **349** | *e*PN | **Pn** | **17 16 48.5** | **+1.8** |
| **KNT** | **Kendrikon** | **6.61** | **349** | *e*Pn | **Pn** | 17 16 48.5 | +1.8 |
| **CSS** | **Prodhromos** | **7.21** | **85** | *e*Pn | **Pn** | **17 16 53.3** | **-1.6** |
| | 1.9nm,0.6s | | | | | | |
| CSS | | | | *e*Sn | Sn | 17 18 08.7 | -7.2 |
| **TIP** | **Timpagrande** | **7.71** | **308** | *e*Pn | **Pn** | **17 17 00.4** | **-1.4** |
| TIP | | | | *e*Sn | Sn | 17 18 17.4 | -11 |
| **ANTO** | **Ankara** | **8.36** | **49** | P | Pn | 17 17 05.9 | -4.8 |
| **ANTO** | **Ankara** | **8.36** | **49** | Pn | Pn | 17 17 05.9 | -4.8 |
| **BARS** | **Barje** | **8.41** | **346** | *e*Pn | **Pn** | **17 17 12.2** | **+0.8** |
| **CUC** | **Castrocucco** | **8.77** | **310** | *e*Pn | **Pn** | **17 17 15.9** | **-0.4** |
| | 6.8nm,0.5s | | | | | | |
| CUC | | | | *e*Sn | Sn | 17 18 42.2 | -12 |
| **CUC** | **Castrocucco** | **8.77** | **310** | *e*Pn | **Pn** | **17 17 15.9** | **-0.4** |
| | 6.8nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **8.82** | **52** | Pn | **Pn** | **17 17 18.7** | **+1.7** |
| | 0.1nm,0.8s,baz=225,slow=15,SNR=5.0 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.16** | **97** | Pn | **Pn** | **17 17 21.2** | **-0.5** |
| | 2.1nm,0.3s,baz=292,slow=10,SNR=6.5 | | | | | | |
| MMAI | | | | Sn | **Sn** | **17 19 00.4** | **-3.5** |
| | 2.7nm,0.3s,baz=260,slow=14,SNR=5.3 | | | | | | |
| **DIVS** | **Divibare** | **10.06** | **341** | *e*Pn | **Pn** | **17 17 33.5** | **-0.5** |
| **EIL** | **Elat** | **10.11** | **117** | Pn | **Pn** | **17 17 33.9** | **-0.8** |
| | 1.4nm,0.3s,baz=33,slow=2.1,SNR=16 | | | | | | |
| EIL | | | | Sn | Sn | 17 19 22.3 | -4.8 |
| | 1.1nm,0.3s,baz=170,slow=11,SNR=4.4 | | | | | | |
| **ASF** | **Jabal al Asfar** | **10.60** | **100** | Pn | **Pn** | **17 17 43.0** | **+1.6** |
| | 0.4nm,0.3s,baz=242,slow=7.6,SNR=3.2 | | | | | | |
| ASF | | | | Sn | **Sn** | **17 19 38.7** | **-0.5** |
| | 0.3nm,0.3s,baz=74,slow=19,SNR=2.1 | | | | | | |
| **MLR** | **Muntele Rosu** | **10.86** | **5** | LR | LR | 17 21 38.5 | |
| | comp=Z,21nm,18.7s,baz=213,slow=36 | | | | | | |
| **MORC** | **Moravsky Berou** | **15.96** | **343** | P | **Pn** | **17 18 51.2** | **-2.6** |
| **MORC** | **Moravsky Berou** | **15.96** | **343** | Pn | **Pn** | **17 18 51.2** | **-2.6** |
| **GERES** | **GERESS Array B** | **16.30** | **334** | Pn | **Pn** | **17 18 58.2** | **0.0** |
| | 0.8nm,0.3s,baz=144,slow=12,SNR=41 | | | | | | |
| GERES | | | | LR | LR | 17 27 08.4 | |
| | comp=Z,39nm,20.1s,baz=129,slow=44 | | | | | | |
| **GERES** | **GERESS Array B** | **16.30** | **334** | P | **Pn** | **17 18 58.2** | **0.0** |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| GERES | | | | MLR | MLR | | |
| | comp=Z,39nm,20.1s | | | | | | |
| **KIEV** | **Kiev** | **16.37** | **11** | *e*P | **Pn** | **17 18 58.9** | **-0.1** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | **16.37** | **11** | *e*Pn | **Pn** | **17 18 58.9** | **-0.1** |
| | comp=Z,20nm,0.8s | | | | | | |
| **KIEV** | **Kiev** | **16.37** | **11** | *e*Pn | **Pn** | **17 18 58.8** | **-0.1** |
| | comp=Z,20nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **16.38** | **11** | Pn | **Pn** | **17 18 58.1** | **-1.0** |
| | comp=Z,6.9nm,0.3s,baz=200,slow=10,SNR=26 | | | | | | |
| **AKASG** | **Malin Array Be** | **16.38** | **11** | P | **Pn** | **17 18 58.1** | **-1.0** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.3s | | | | | | |
| **KRLC** | **Kraliky** | **16.42** | **342** | *e*P | **P** | **17 19 03.1** | **+0.8** |
| **KRLC** | **Kraliky** | **16.42** | **342** | *e*P | **P** | **17 19 03.1** | **+0.8** |
| **KRLC** | **Kraliky** | **16.42** | **342** | *e*P | **P** | **17 19 03.1** | **+0.8** |
| **NEY** | **Neytrino** | **16.49** | **53** | *e*P | **P** | **17 19 03.4** | **+0.2** |
| **NEY** | **Neytrino** | **16.49** | **53** | *e*P | **P** | **17 19 03.4** | **+0.2** |
| **KHC** | **Kasperske Hory** | **16.58** | **334** | *e*P | **P** | **17 19 04.8** | **+0.7** |
| **KHC** | **Kasperske Hory** | **16.58** | **334** | *e*P | **P** | **17 19 04.8** | **+0.7** |
| **KHC** | **Kasperske Hory** | **16.58** | **334** | *e*P | **P** | **17 19 04.8** | **+0.7** |
| **KIV** | **Kislovodsk** | **16.78** | **51** | *e*P | **Pn** | **17 19 04.7** | **+0.4** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **KIV** | **Kislovodsk** | **16.78** | **51** | *e*P | **Pn** | **17 19 04.7** | **+0.4** |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **DPC** | **Dobruska-Polom** | **16.79** | **341** | *e*P | **P** | **17 19 05.9** | **-0.5** |
| **DPC** | **Dobruska-Polom** | **16.79** | **341** | *e*P | **P** | **17 19 05.9** | **-0.5** |
| **DPC** | **Dobruska-Polom** | **16.79** | **341** | *e*P | **P** | **17 19 05.9** | **-0.5** |
| **KBZ** | **Khabaz** | **16.81** | **52** | Pn | **P** | **17 19 07.0** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=240,slow=9.7,SNR=8.7 | | | | | | |
| **CLL** | **Collm** | **18.62** | **337** | *e*P | **P** | **17 19 27.0** | **+0.5** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| **CLL** | **Collm** | **18.62** | **337** | *e*P | **P** | **17 19 27.0** | **+0.5** |
| | comp=Z,3.0nm,0.5s | | | | | | |
| CLL | | | | *e*pP | **pP** | **17 19 33.0** | **-0.8** |
| **CLL** | **Collm** | **18.62** | **337** | *e*P | **P** | **17 19 27.0** | **+0.5** |
| | comp=Z,3.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DCZ | | | | AML | AML | 17 27 27.8 | | |
| DCZ | | | | AML | AML | 17 27 30.4 | | |
| **DCZ** | **Deep Cove** | **2.22** | **36** | Pn | Pn | 17 26 47.0 | -0.6 | |
| **WHZ** | **Wether Hill Ro** | **2.30** | **54** | PN | Pn | 17 26 48.5 | -0.2 | |
| WHZ | | | | AML | AML | 17 27 18.7 | | |
| WHZ | | | | AML | AML | 17 27 21.4 | | |
| **WHZ** | **Wether Hill Ro** | **2.30** | **54** | Pn | Pn | 17 26 48.5 | -0.2 | |
| **SYZ** | **Scrubby Hill** | **2.74** | **76** | ⇓PN | Pn | 17 26 54.3 | -0.5 | |
| SYZ | | | | SN | Sn | 17 27 25.0 | -1.8 | |
| SYZ | | | | AML | AML | 17 27 30.2 | | |
| SYZ | | | | AML | AML | 17 27 30.3 | | |
| SYZ | | | | AML | AML | 17 27 32.2 | | |
| **SYZ** | **Scrubby Hill** | **2.74** | **76** | Pn | Pn | 17 26 54.1 | -0.7 | |
| **MLZ** | **Mavora Lakes** | **2.78** | **47** | PN | Pn | 17 26 55.4 | 0.0 | |
| MLZ | | | | AML | AML | 17 27 36.7 | | |
| MLZ | | | | AML | AML | 17 27 42.5 | | |
| **MLZ** | **Mavora Lakes** | **2.78** | **47** | Pn | Pn | 17 26 55.4 | +0.1 | |
| MLZ | | | | Sn | Sn | 17 27 28.4 | +0.6 | |
| **MSZ** | **Milford Sound** | **3.19** | **36** | PN | Pn | 17 27 02.8 | +1.9 | |
| MSZ | | | | AML | AML | 17 27 58.4 | | |
| MSZ | | | | AML | AML | 17 27 58.9 | | |
| **MSZ** | **Milford Sound** | **3.19** | **36** | Pn | Pn | 17 27 01.9 | +1.0 | |
| MSZ | | | | Sn | Sn | 17 27 40.0 | +2.2 | |
| **TUZ** | **Tuapeka** | **3.27** | **68** | PN | Pn | 17 27 01.5 | -0.5 | |
| TUZ | | | | AML | AML | 17 27 40.4 | | |
| TUZ | | | | AML | AML | 17 27 40.7 | | |
| **TUZ** | **Tuapeka** | **3.27** | **68** | Pn | Pn | 17 27 01.6 | -0.5 | |
| **EAZ** | **Earnscleugh** | **3.46** | **55** | PN | Pn | 17 27 04.2 | -0.5 | |
| EAZ | | | | AML | AML | 17 27 49.5 | | |
| EAZ | | | | AML | AML | 17 27 53.2 | | |
| **EAZ** | **Earnscleugh** | **3.46** | **55** | Pn | Pn | 17 27 04.2 | -0.4 | |
| **WKZ** | **Wanaka** | **3.57** | **48** | PN | Pn | 17 27 07.4 | +1.2 | |
| WKZ | | | | AML | AML | 17 27 53.9 | | |
| WKZ | | | | AML | AML | 17 28 01.7 | | |
| **WKZ** | **Wanaka** | **3.57** | **48** | Pn | Pn | 17 27 07.4 | +1.2 | |
| **JCZ** | **Jackson Bay** | **4.02** | **39** | PN | Pn | 17 27 14.0 | +1.5 | |
| JCZ | | | | AML | AML | 17 28 12.7 | | |
| **ODZ** | **Otahua Downs** | **4.34** | **61** | PN | Pn | 17 27 14.7 | -2.1 | |
| ODZ | | | | AML | AML | 17 28 30.0 | | |
| **ODZ** | **Otahua Downs** | **4.34** | **61** | Pn | Pn | 17 27 14.7 | -2.1 | |
| **LBZ** | **Lake Benmore** | **4.48** | **52** | PN | Pn | 17 27 16.8 | -1.9 | |
| LBZ | | | | AML | AML | 17 28 44.7 | | |
| **LBZ** | **Lake Benmore** | **4.48** | **52** | Pn | Pn | 17 27 17.5 | -1.2 | |
| **FOZ** | **Fox Glacier** | **4.83** | **41** | PN | Pn | 17 27 24.8 | +1.3 | |
| **FOZ** | **Fox Glacier** | **4.83** | **41** | Pn | Pn | 17 27 24.8 | +1.3 | |
| **DSZ** | **Denniston Nort** | **7.23** | **42** | PN | Pn | 17 27 55.5 | -1.0 | |
| **DSZ** | **Denniston Nort** | **7.23** | **42** | Pn | Pn | 17 27 55.7 | -0.8 | |
| **QRZ** | **Quartz Range** | **8.29** | **42** | PN | Pn | 17 28 11.2 | +0.2 | |
| **QRZ** | **Quartz Range** | **8.29** | **42** | Pn | Pn | 17 28 10.3 | -0.7 | |

*IDC* ***22*** *17:27:51.0±0.9,20°.14S×173°.94W, h0*km*, mb3.8/6, mb1 4.1/6, mb1mx3.9/22, mbtmp3.8/6, MS3.3/1, Ms1 3.3/1, ms1mx2.7/29, Error ellipse: s-maj=37.8km s-min=24.9km az=146.0*

**ISC 22 17:27:55.5±0.9,19°.8S±0°.1×173°.9W±0°.2, h31km, n12, σ1§66/10, mb3.9/6, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.25** | **20** | Pn | **Pn** | **17 29 24.1** | **-1.7** |
| | 2.1nm,0.3s,baz=333,slow=17,SNR=2.1 | | | | | | |
| AFI | | | | Sn | **Sn** | **17 30 35.5** | **-0.8** |
| | 1.5nm,0.3s,baz=54,slow=19,SNR=2.9 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.47** | **260** | eLR | LR | 17 37 01.8 | |
| | 140nm,24.3s | | | | | | |
| **TBI** | **Tubuai** | **23.01** | **103** | eLR | LR | 17 37 55.7 | |
| | 148nm,31.5s | | | | | | |
| **PPT2** | **Papeete2** | **23.17** | **88** | eLR | LR | 17 38 00.1 | |
| | 134nm,26.5s | | | | | | |
| **PPT** | **Papeete** | **23.17** | **88** | LR | LR | 17 40 34.0 | |
| | comp=Z,69nm,18.0s,baz=247,slow=33 | | | | | | |
| **ASAR** | **Alice Springs** | **48.39** | **256** | P | **P** | **17 36 33.6** | **-1.4** |
| | 1.1nm,0.8s,baz=85,slow=8.5,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 38 02.0** | **+0.7** |
| | 0.6nm,0.7s,baz=126,slow=3.9,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.48** | **261** | P | **P** | **17 36 34.3** | **-1.5** |
| | 0.8nm,0.8s,baz=93,slow=5.4,SNR=8.9 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 38 02.6** | **+0.9** |
| | 0.5nm,0.8s,baz=92,slow=3.3,SNR=3.0 | | | | | | |
| **VNDA** | **Vanda** | **58.93** | **186** | P | **P** | **17 37 50.0** | **-1.3** |
| | 0.8nm,0.9s,baz=359,slow=8.2,SNR=5.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **72.03** | **321** | P | **P** | **17 39 19.2** | **+2.6** |
| | 0.8nm,0.6s,baz=154,slow=6.7,SNR=3.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.96** | **42** | P | **P** | **17 39 52.2** | **+1.2** |
| | 1.5nm,0.9s,baz=228,slow=8.5,SNR=6.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **83.50** | **56** | P | **P** | **17 40 21.6** | **+0.8** |
| | 0.6nm,1.0s,baz=207,slow=8.0,SNR=4.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.18** | **335** | PKP | PKPbc | 17 47 27.0 | +0.7 |
| | 0.3nm,0.4s,baz=38,slow=4.1,SNR=7.8 | | | | | | |

*CSEM* ***22*** *17:52:04.1, 42°.51N×43°.57E, h0*km*, ML1.1, After TIF*

**TIF 22 17:52:04.1, 42°.51N×43°.57E, h15**km±1km**, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ONI** | **Oni** | **0.12** | **311** | P | Pg | 17 52 07.7 | 0.0 |
| ONI | | | | S | Sg | 17 52 10.2 | +0.1 |
| **DUS** | **Dusheti** | **0.94** | **116** | P | Pb | 17 52 21.9 | -0.3 |
| DUS | | | | S | Sn | 17 52 36.5 | +0.3 |
| **DUS** | **Dusheti** | **0.94** | **116** | P | Pb | 17 52 21.9 | -0.3 |
| DUS | | | | S | Sn | 17 52 36.5 | +0.4 |
| **AKH** | **Akhalkalaki** | **1.10** | **183** | P | Pb | 17 52 24.9 | -0.3 |
| AKH | | | | S | Sn | 17 52 40.7 | +0.3 |
| **AKH** | **Akhalkalaki** | **1.10** | **183** | P | Pb | 17 52 24.9 | -0.3 |
| AKH | | | | S | Sn | 17 52 40.7 | +0.3 |
| **DGRG** | **David-gareji** | **1.71** | **128** | P | Pg | 17 52 36.9 | -0.1 |
| DGRG | | | | S | Sg | 17 53 01.6 | +2.2 |
| **DGRG** | **David-gareji** | **1.71** | **128** | P | Pg | 17 52 36.9 | -0.2 |
| DGRG | | | | S | Sg | 17 53 01.6 | +2.2 |
| **ARTV** | **Artvin** | **1.81** | **223** | P | Pb | 17 52 37.0 | -0.3 |
| ARTV | | | | S | Sb | 17 53 01.1 | +1.2 |
| **DBAD** | **Bademkaya** | **2.05** | **224** | P | Pb | 17 52 41.3 | +0.1 |
| DBAD | | | | S | Sb | 17 53 08.0 | +1.4 |

*ISCJB* ***22*** *17:52:50.2±0.4, 0°.08S±0°.04×123°.18E±0°.03, h146*km*±4km, mb3.4/7, Error ellipse: s-maj=6.8km s-min=4.6km az=171.4*

*IDC* ***22*** *17:52:50.1±2.4, 0°.06N×123°.47E, h140*km*±22km, mb3.3/7, mb1 3.4/8, mb1mx3.2/34, mbtmp3.7/8, Error ellipse: s-maj=31.1km s-min=13.8km az=71.0*

*AUST* ***22*** *17:52:51.7±0.0, 0°.14S×123°.32E, h123km, Error ellipse: s-maj=2.1km s-min=1.1km az=40.0*

*DJA* ***22*** *17:52:52.6±0.3, 0°.S±2°×12°.3E±°, h111*km*±4km, M4.2/17, mb4.3/5, mB4.5/1, MLv4.2/17, Mw(mB)3.6/1*

**ISC 22 17:52:50.4±0.7, 0°.10S±0°.05×123°.20E±0°.04, h141**km**±6**km**, n30, σ1§50/44, mb3.5/7, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GTOI** | **Gorontalo** | **0.76** | **346** | P | **Pn** | **17 53 14.0** | **+1.6** |
| GTOI | | | | S | **Sn** | **17 53 30.5** | **+1.5** |
| **LUWI** | **Luwuk** | **1.03** | **204** | P | **Pn** | **17 53 14.4** | **-0.1** |
| | baz=1.1,SNR=262 | | | | | | |
| **LUWI** | **Luwuk** | **1.03** | **204** | P | **Pn** | **17 53 14.6** | **0.0** |
| LUWI | | | | S | **Sn** | **17 53 30.6** | **-2.3** |
| **KMSI** | **Cibinong** | **1.03** | **49** | P | **Pn** | **17 53 15.3** | **+0.7** |
| KMSI | | | | S | **Sn** | **17 53 33.1** | **+0.1** |
| **MRSI** | **Marisa** | **1.38** | **295** | P | **Pn** | **17 53 17.7** | **-0.3** |
| MRSI | | | | S | **Sn** | **17 53 38.7** | **-0.4** |
| **APSI** | **Ampana** | **1.74** | **243** | P | **Pn** | **17 53 22.5** | **+0.5** |
| APSI | | | | S | **Sn** | **17 53 45.3** | **-0.9** |
| **MPSI** | **Mapaga** | **3.33** | **278** | P | **Pn** | **17 53 42.8** | **+1.1** |
| MPSI | | | | S | **Sn** | **17 54 23.8** | **+2.5** |
| **SANI** | **Sanana** | **3.40** | **125** | P | **Pn** | **17 53 42.6** | **0.0** |
| SANI | | | | S | **Sn** | **17 54 19.9** | **-3.0** |
| **PCI** | **Palu** | **3.45** | **257** | P | **Pn** | **17 53 44.3** | **+1.0** |
| **TNTI** | **Ternate** | **4.26** | **78** | P | **Pn** | **17 53 55.1** | **+1.2** |
| TNTI | | | | S | **Sn** | **17 54 45.5** | **+2.3** |
| **LBMI** | **Labuha** | **4.34** | **97** | P | **Pn** | **17 53 56.6** | **+1.7** |
| **TTSI** | **Tana Toraja** | **4.47** | **229** | P | **Pn** | **17 53 58.0** | **+1.4** |
| TTSI | | | | S | **Sn** | **17 54 49.4** | **+1.3** |
| **NLAI** | **Namlea** | **4.99** | **129** | P | **Pn** | **17 54 04.8** | **+1.2** |
| NLAI | | | | S | **Sn** | **17 55 02.3** | **+1.7** |
| **SPSI** | **Sidrap Palu** | **5.14** | **222** | S | **Sn** | **17 55 05.9** | **+1.6** |
| **KAPI** | **Kappang** | **5.97** | **215** | P | **Pn** | **17 54 19.2** | **+2.5** |
| | 0.9nm,0.3s,baz=245,slow=19,SNR=2.9 | | | | | | |
| KAPI | | | | S | **Sn** | **17 55 23.2** | **-0.9** |
| | 0.1nm,0.3s,baz=210,slow=20,SNR=2.2 | | | | | | |
| **BKSI** | **Bulukumba** | **6.03** | **211** | P | **Pn** | **17 54 18.9** | **+1.5** |
| | 8.4nm,0.9s,0.1nm | | | | | | |
| **AAI** | **Ambon** | **6.13** | **126** | P | **Pn** | **17 54 20.6** | **+1.7** |
| | baz=6.0,SNR=6.3 | | | | | | |
| **AAI** | **Ambon** | **6.13** | **126** | P | **Pn** | **17 54 20.5** | **+1.7** |
| | 33nm,0.5s,0.1nm | | | | | | |
| AAI | | | | S | **Sn** | **17 55 30.0** | **+2.0** |
| | 33nm,0.5s,0.1nm | | | | | | |
| **KKM** | **Kota Kinabalu** | **9.27** | **311** | P | Pn | 17 55 06.4 | +5.4 |
| | baz=9.4,SNR=3.3 | | | | | | |
| **FAKI** | **Fak Fak** | **9.47** | **107** | P | **Pn** | **17 55 03.2** | **-0.4** |
| | baz=9.3,SNR=7.9 | | | | | | |
| **MTN** | **Manton Dam** | **14.90** | **148** | P | **P** | **17 56 15.8** | **-0.6** |
| | baz=15,SNR=3.6 | | | | | | |
| **KNRA** | **Kununurra** | **16.42** | **161** | P | **P** | **17 56 35.0** | **+1.9** |
| | baz=16,SNR=3.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.54** | **152** | P | **P** | **17 57 38.8** | **0.0** |
| | 2.0nm,0.5s,baz=331,slow=10,SNR=69 | | | | | | |
| WRA | | | | PcP | **PcP** | **18 01 27.2** | **-0.5** |
| | 0.4nm,0.9s,baz=340,slow=2.4,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **25.63** | **157** | P | **P** | **17 58 07.3** | **+0.2** |
| | 0.2nm,0.3s,baz=348,slow=14,SNR=12 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 01 34.1** | **-0.2** |
| | 0.5nm,0.5s,baz=348,slow=2.0,SNR=12 | | | | | | |
| ASAR | | | | ScP | **ScP** | **18 05 00.0** | **-0.8** |
| | 0.1nm,0.7s,baz=344,slow=3.0,SNR=3.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.13** | **309** | P | **P** | **17 58 49.6** | **+2.3** |
| | 0.6nm,0.6s,baz=134,slow=7.3,SNR=7.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **39.03** | **19** | P | **P** | **18 00 01.3** | **-2.2** |
| | 0.6nm,0.5s,baz=209,slow=13,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **49.93** | **345** | P | **P** | **18 01 28.1** | **-1.9** |
| | 0.5nm,0.6s,baz=132,slow=6.0,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.80** | **328** | P | **P** | **18 02 33.3** | **-0.8** |
| | 0.4nm,0.4s,baz=115,slow=9.0,SNR=7.5 | | | | | | |
| **VNDA** | **Vanda** | **80.12** | **172** | P | **P** | **18 04 44.8** | **+0.5** |
| | 0.5nm,0.9s,baz=320,slow=5.9,SNR=5.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.62** | **285** | PKP | **PKPdf** | **18 11 25.3** | **-1.4** |
| | 0.3nm,0.6s,baz=97,slow=37,SNR=2.7 | | | | | | |

*IDC* ***22*** *18:04:19.1±3.0, 35°.52S×178°.34E, h0*km*, mb3.6/2, mb1 3.8/3, mb1mx3.6/31, mbtmp3.6/3, ML3.5/1, Error ellipse: s-maj=62.7km s-min=40.9km az=87.0*

*ISCJB* ***22*** *18:04:35.3±1.0, 36°.91S±0°.08×177°.9E±0°.1, h161*km*±8km, mb3.3/2, Error ellipse: s-maj=17.8km s-min=13.1km az=180.0*

*WEL* ***22*** *18:04:35.0±0.5, 36°.53S×177°.83E, h121*km*±7km, ML3.9/6, Error ellipse: s-maj=9.2km s-min=5.6km az=90.0*

**ISC 22 18:04:36.0±1.3, 36.8S±0.09×177.9E±0°.1, h154**km**±9**km**, n40, σ1§17/46, 4C-2D, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **0.78** | **157** | PN | **Pn** | **18 04 58.1** | **-1.3** |
| MXZ | | | | SN | **Sn** | **18 05 15.4** | **-2.1** |
| MXZ | | | | AML | AML | 18 05 20.2 | |
| **PKGZ** | **Pakihiroa** | **1.02** | **173** | PN | **Pn** | **18 05 01.1** | **-0.4** |
| **WMGZ** | **Waiomatatini S** | **1.05** | **158** | ⇑PN | **Pn** | **18 05 00.9** | **-0.7** |
| WMGZ | | | | SN | **Sn** | **18 05 20.5** | **-0.7** |
| **PUZ** | **Puketiti** | **1.25** | **168** | PN | **Pn** | **18 05 03.0** | **-0.4** |
| PUZ | | | | AML | AML | 18 05 26.1 | |
| PUZ | | | | AML | AML | 18 05 33.0 | |
| **TWGZ** | **Tauwhareparae** | **1.33** | **178** | PN | **Pn** | **18 05 04.5** | **+0.3** |
| TWGZ | | | | SN | **Sn** | **18 05 26.2** | **+0.3** |
| **MWZ** | **Matawai** | **1.52** | **192** | PN | **Pn** | **18 05 06.0** | **-0.1** |
| MWZ | | | | AML | AML | 18 05 31.5 | |
| MWZ | | | | AML | AML | 18 05 31.9 | |
| MWZ | | | | AML | AML | 18 05 32.7 | |
| MWZ | | | | AML | AML | 18 05 36.0 | |
| **URZ** | **Urewera** | **1.55** | **204** | PN | **Pn** | **18 05 06.2** | **-0.2** |
| URZ | | | | AML | AML | 18 05 32.0 | |
| URZ | | | | AML | AML | 18 05 32.3 | |
| **URZ** | **Urewera** | **1.55** | **204** | Pn | **Pn** | **18 05 06.2** | **-0.2** |
| | 6.1nm,0.3s,baz=276,slow=4.5,SNR=94 | | | | | | |
| URZ | | | | Sn | **Sn** | **18 05 29.7** | **0.0** |
| | 16nm,0.3s,baz=243,slow=22,SNR=28 | | | | | | |
| **CNGZ** | **Carnagh Statio** | **1.65** | **172** | ⇑PN | **Pn** | **18 05 07.9** | **+0.4** |
| CNGZ | | | | SN | **Sn** | **18 05 34.4** | **+2.7** |
| **RAGZ** | **Rawiri** | **1.69** | **193** | PN | **Pn** | **18 05 08.5** | **+0.5** |
| **RIGZ** | **Rimuhau** | **1.86** | **184** | ⇑PN | **Pn** | **18 05 09.8** | **-0.1** |
| RIGZ | | | | SN | **Sn** | **18 05 36.2** | **+0.3** |
| **SNGZ** | **Shannon Statio** | **1.98** | **193** | PN | **Pn** | **18 05 11.4** | **+0.2** |
| **GRZ** | **Great Barrier** | **2.07** | **286** | ⇓PN | **Pn** | **18 05 11.5** | **-0.7** |
| **PRGZ** | **Paritu Road** | **2.07** | **181** | PN | **Pn** | **18 05 12.2** | **-0.1** |
| **RAHZ** | **Arahi** | **2.17** | **197** | PN | **Pn** | **18 05 13.6** | **+0.3** |
| **KNZ** | **Kokohu** | **2.18** | **185** | PN | **Pn** | **18 05 13.0** | **-0.4** |
| **WHHZ** | **Waihua** | **2.29** | **193** | PN | **Pn** | **18 05 14.9** | **+0.2** |
| **MHGZ** | **Mahia Peninsul** | **2.30** | **180** | PN | **Pn** | **18 05 14.9** | **0.0** |
| **NMHZ** | **Naumai** | **2.41** | **201** | ⇓PN | **Pn** | **18 05 16.9** | **+0.6** |
| **ARHZ** | **Aropaoanui** | **2.52** | **197** | PN | **Pn** | **18 05 17.6** | **+0.1** |
| **BKZ** | **Black Stump Fm** | **2.57** | **206** | PN | **Pn** | **18 05 18.4** | **+0.1** |
| **MCHZ** | **McNeill Hill** | **2.76** | **200** | PN | **Pn** | **18 05 20.6** | **0.0** |
| **BHHZ** | **Black Hill Sta** | **3.01** | **208** | PN | **Pn** | **18 05 24.0** | **+0.2** |
| **KRHZ** | **Kereru** | **3.04** | **203** | ⇑PN | **Pn** | **18 05 23.4** | **-0.7** |
| **KAHZ** | **Kahuranaki** | **3.05** | **195** | PN | **Pn** | **18 05 23.9** | **-0.3** |
| **WNVZ** | **Wahianoa** | **3.08** | **216** | PN | **Pn** | **18 05 25.0** | **+0.3** |
| **PXZ** | **Pawanui** | **3.28** | **194** | PN | **Pn** | **18 05 25.7** | **-1.4** |
| PXZ | | | | AML | AML | 18 06 07.2 | |
| PXZ | | | | AML | AML | 18 06 07.4 | |
| **PNHZ** | **Pukenui** | **3.34** | **203** | PN | **Pn** | **18 05 26.7** | **-1.2** |
| **PRHZ** | **Porangahau** | **3.56** | **196** | PN | **Pn** | **18 05 29.4** | **-1.2** |
| **BFZ** | **Birch Farm** | **4.04** | **198** | PN | **Pn** | **18 05 34.9** | **-2.1** |
| **MRZ** | **Mangatainoka R** | **4.22** | **205** | PN | **Pn** | **18 05 37.8** | **-1.5** |
| MRZ | | | | AML | AML | 18 06 27.3 | |
| MRZ | | | | AML | AML | 18 06 27.9 | |
| **HOWZ** | **Holdsworth Sta** | **4.46** | **204** | PN | **Pn** | **18 05 40.1** | **-2.2** |
| **TMWZ** | **Te Maipa** | **4.54** | **200** | PN | **Pn** | **18 05 41.0** | **-2.4** |
| **KIW** | **Kapiti Island** | **4.64** | **209** | PN | **Pn** | **18 05 43.1** | **-1.7** |
| **MTW** | **Mount Morrison** | **4.70** | **203** | PN | **Pn** | **18 05 43.3** | **-2.2** |
| **CAW** | **Cannon Point** | **4.80** | **207** | PN | **Pn** | **18 05 44.7** | **-2.1** |
| **TCW** | **Tory Channel** | **5.20** | **212** | PN | **Pn** | **18 05 49.9** | **-2.1** |
| **ASAR** | **Alice Springs** | **39.89** | **277** | P | **P** | **18 11 56.5** | **+1.5** |
| | 0.3nm,0.4s,baz=118,slow=8.1,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.48** | **282** | P | **P** | **18 12 08.6** | **+0.5** |
| | 0.3nm,0.3s,baz=120,slow=7.8,SNR=7.6 | | | | | | |
| **FINES** | **FINESS Array B** | **149.71** | **333** | PKPbc | **PKPbc** | **18 24 06.8** | **+0.2** |
| | 3.2nm,0.9s,baz=1.9,slow=4.2,SNR=3.6 | | | | | | |

**MAN 22 18:05:36, 10°.49N×125°.27E, h3**km**, mb4.9, ML3.8, MS3.9, 2C-2D, Leyte**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSLP** | **Maasin** | **0.54** | **229** | eP | Pb | 18 05 47.8 | -0.3 |
| MSLP | | | | eS | Sb | 18 05 57.9 | +1.7 |
| **SCPH** | **Surigao** | **0.73** | **163** | eP | Pb | 18 05 50.8 | -0.6 |
| SCPH | | | | *i* S | Sg | 18 05 59.6 | 0.0 |
| **PLP** | **Palo** | **0.73** | **337** | ⇓eP | Pb | 18 05 51.1 | -0.4 |
| PLP | | | | eS | Sb | 18 06 01.5 | -0.5 |
| **OCLP** | **Ormoc** | **0.86** | **311** | eP | Pb | 18 05 53.2 | -0.4 |
| OCLP | | | | eS | Sb | 18 06 06.1 | +0.5 |
| **LLP** | **Lapu-Lapu** | **1.29** | **263** | eP | Pg | 18 06 00.0 | -0.8 |
| LLP | | | | eS | Sn | 18 06 19.3 | +0.5 |
| **BUTP** | **Butuan** | **1.54** | **167** | eP | Pn | 18 06 04.3 | -0.2 |
| **TBP** | **Tagbilaran** | **1.60** | **240** | ⇓eP | Pn | 18 06 05.5 | +0.3 |
| TBP | | | | eS | Sn | 18 06 10.9 | -15 |
| **CNP** | **Catarman** | **2.10** | **344** | eP | Pn | 18 06 12.8 | +0.8 |
| **BIPH** | **Bislig** | **2.53** | **155** | ⇓eP | Pg | 18 06 23.9 | -0.6 |
| BIPH | | | | eS | Sg | 18 06 58.5 | +1.3 |
| **BUKP** | **Musuan** | **2.60** | **185** | eP | Pn | 18 06 19.8 | +0.8 |
| **GUIM** | **Jordan** | **2.64** | **273** | eP | Pn | 18 06 20.1 | +0.6 |
| **RCP** | **Roxas** | **2.70** | **294** | ⇑eP | Pn | 18 06 22.3 | +2.0 |
| **PAGZ** | **Pagadian** | **3.22** | **216** | eP | Pn | 18 06 30.3 | +2.8 |
| **IPIL** | **Ipil** | **3.78** | **225** | eP | Pn | 18 06 37.1 | +1.9 |

*IDC* ***22*** *18:13:37.7±3.1, 8°.52S×111°.84E, h0*km*, mb3.2/3, mb1 3.4/3, mb1mx3.2/37, mbtmp3.2/3, MS3.2/1, Ms1 3.2/1, ms1mx2.6/15, Error ellipse: s-maj=179.8km s-min=26.7km az=49.0*

*ISCJB* ***22*** *18:13:43.1±0.7, 9°.21S±0°.05×111°.52E±0°.03, h41*km*±16km, mb3.3/3, MS3.2/1, Error ellipse: s-maj=7.8km s-min=4.3km az=11.0*

*AUST* ***22*** *18:13:43.0, 9°.42S×111°.38E, h35*km

*DJA* ***22*** *18:13:44.9±0.6, 9°.S±2°×11°.2E±°, h38*km*±6km, M4.0/24, MLv4.0/24*

**ISC 22 18:13:45.0±1.3, 9°.11S±0°.07×111°.54E±0°.03, h58**km**±16**km**, n26, σ1§16/39, mb3.1/3, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCJI** | **Pacitan** | **0.98** | **339** | P | **Pn** | **18 14 01.5** | **-1.2** |
| PCJI | | | | S | **Sn** | **18 14 14.6** | **-1.2** |
| **WOJI** | **Wonogiri, Jawa** | **1.41** | **334** | P | **Pn** | **18 14 08.0** | **-0.4** |
| WOJI | | | | S | **Sn** | **18 14 25.1** | **-0.8** |
| **UGM** | **Wanagama** | **1.56** | **320** | P | **Pn** | **18 14 10.6** | **+0.1** |
| | baz=1.7,SNR=191 | | | | | | |
| **UGM** | **Wanagama** | **1.56** | **320** | P | **Pn** | **18 14 10.2** | **-0.3** |
| UGM | | | | S | **Sn** | **18 14 30.4** | **+0.7** |
| **NGJI** | **Ngawi** | **1.74** | **358** | P | **Pn** | **18 14 13.0** | **+0.1** |
| NGJI | | | | S | **Sn** | **18 14 34.8** | **+0.9** |
| **TBJI** | **Tambak Boyo** | **2.30** | **8** | P | **Pn** | **18 14 21.0** | **+0.4** |
| TBJI | | | | S | **Sn** | **18 14 48.9** | **+1.1** |
| **SMRI** | **Semarang** | **2.32** | **332** | P | **Pn** | **18 14 22.1** | **+1.2** |
| | baz=2.5,SNR=9.4 | | | | | | |
| **SMRI** | **Semarang** | **2.32** | **332** | P | **Pn** | **18 14 21.0** | **+0.2** |
| SMRI | | | | S | **Sn** | **18 14 50.0** | **+1.8** |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **76** | P | **Pn** | **18 14 25.1** | **-0.4** |
| | baz=2.9,SNR=35 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **2.66** | **76** | P | **Pn** | **18 14 25.3** | **-0.2** |
| JAGI | | | | S | **Sn** | **18 14 57.5** | **+0.8** |
| **UWJI** | **Ujung Watu** | **2.74** | **348** | P | **Pn** | **18 14 26.7** | **+0.1** |
| UWJI | | | | S | **Sn** | **18 15 00.7** | **+2.2** |
| **ABJI** | **Asem Bagus** | **2.97** | **64** | P | **Pn** | **18 14 30.1** | **+0.4** |
| ABJI | | | | S | **Sn** | **18 15 06.3** | **+2.1** |
| **CMJI** | **Cimerak** | **3.33** | **293** | P | **Pn** | **18 14 35.6** | **+1.0** |
| CMJI | | | | S | **Sn** | **18 15 14.1** | **+1.2** |
| **BWJI** | **Bawean** | **3.43** | **19** | P | **Pn** | **18 14 35.4** | **-0.6** |
| BWJI | | | | S | **Sn** | **18 15 17.3** | **+1.9** |
| **IGBI** | **Denpasar** | **3.58** | **86** | P | **Pn** | **18 14 37.1** | **-0.9** |
| IGBI | | | | S | **Sn** | **18 15 20.1** | **+1.0** |
| **DNP** | **Denpasar** | **3.66** | **83** | P | **Pn** | **18 14 39.5** | **+0.4** |
| **SRBI** | **Singaraja** | **3.78** | **75** | P | **Pn** | **18 14 40.6** | **-0.1** |
| **CISI** | **Cisompet, Garu** | **3.99** | **293** | P | **Pn** | **18 14 43.9** | **+0.1** |
| | baz=4.0,SNR=20 | | | | | | |
| **CISI** | **Cisompet, Garu** | **3.99** | **293** | P | **Pn** | **18 14 43.9** | **+0.1** |
| **LEM** | **Lembang** | **4.50** | **300** | P | **Pn** | **18 14 51.1** | **+0.3** |
| LEM | | | | S | **Sn** | **18 15 43.9** | **+2.0** |
| **CNJI** | **Cibinong** | **4.71** | **292** | P | **Pn** | **18 14 53.5** | **-0.1** |
| CNJI | | | | S | **Sn** | **18 15 48.8** | **+1.8** |
| **XMIS** | **Christmas Isla** | **5.96** | **256** | P | **Pn** | **18 15 09.4** | **-1.2** |
| | baz=5.7,SNR=8.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.52** | **119** | P | **P** | **18 18 59.0** | **-0.3** |
| | 0.4nm,0.8s,baz=292,slow=11,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **25.82** | **127** | P | **P** | **18 19 12.7** | **+1.6** |
| | 0.5nm,0.7s,baz=306,slow=9.5,SNR=12 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **51.88** | **27** | LR | LR | 18 43 08.9 | |
| | comp=Z,23nm,20.5s,baz=200,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.47** | **338** | P | **P** | **18 23 53.1** | **-2.4** |
| | 0.3nm,0.5s,baz=139,slow=7.0,SNR=6.5 | | | | | | |

**IDC 22 18:21:15.7±1.1, 19°.47N×139°.71E, h0**km**, mb3.7/6, mb1 3.8/6, mb1mx3.5/46, mbtmp3.7/6, Error ellipse: s-maj=44.9km s-min=21.3km az=84.0, West of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **39.52** | **188** | P | P | 18 28 47.8 | -0.6 |
| | 0.7nm,1.0s,baz=7.3,slow=9.4,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **43.25** | **188** | P | P | 18 29 19.4 | +0.4 |
| | 0.4nm,0.8s,baz=15,slow=9.5,SNR=6.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.85** | **314** | P | P | 18 30 40.9 | +0.4 |
| | 0.4nm,0.7s,baz=97,slow=12,SNR=2.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.97** | **318** | P | P | 18 31 02.2 | -0.6 |
| | 0.7nm,0.3s,baz=102,slow=7.2,SNR=5.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.27** | **320** | P | P | 18 31 39.3 | -0.1 |
| | 1.3nm,0.7s,baz=76,slow=6.1,SNR=6.6 | | | | | | |
| **ILAR** | **Eielson Array** | **65.48** | **27** | P | P | 18 32 00.4 | 0.0 |
| | 0.4nm,0.9s,baz=266,slow=5.0,SNR=3.2 | | | | | | |

**KRSC 22 18:22:24.4±1.2, 49°.69N×157°.74E, h41**km**±24**km**, ML3.5, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.44** | **314** | eP | Pn | 18 22 49.0 | +1.0 |
| SKR | | | | eS | Sn | 18 23 06.9 | +1.3 |
| **PAU** | **Pauzhetka** | **1.88** | **342** | eP | Pn | 18 22 56.3 | +2.3 

LLP **Lapu-Lapu** 3.87 317 ⇓ *e*P **Pn** 18 24 26.1 +2.4
LLP *e*S **Sn** 18 25 10.6 +1.5
SGSI **Sangihe** 3.94 197 P **Pn** 18 24 24.5 -0.1
SGSI S **Sn** 18 25 06.7 -4.0
PLP **Palo** 4.01 336 ⇓ *e*P **Pn** 18 24 27.2 +1.6
PLP *e*S **Sn** 18 25 11.3 -1.2
IPIL **Ipil** 4.06 275 ⇓ *i*P **Pn** 18 24 27.5 +1.3
RCP **Roxas** 5.59 317 ⇓ *e*P **Pn** 18 24 49.0 +2.5
PVCP **Virac** 6.55 338 ⇓ *e*P **Pn** 18 24 58.3 -1.1
TNTI **Ternate** 6.71 174 *e*Pn **Pn** 18 25 00.4 -1.0
201nm,0.6s
TNTI *e*Sn Sn 18 25 57.7 -19
KMSI **Cibinong** 7.36 201 P **Pn** 18 25 11.4 +1.2
546nm,0.9s,5μm2.5nm
KMSI S **Sn** 18 26 30.4 -2.2
546nm,0.9s,5μm2.5nm
PALU **Palau** 7.76 91 P **Pn** 18 25 15.7 +0.2
baz=7.8,SNR=11
LBMI **Labuha** 8.11 174 P **Pn** 18 25 20.9 +0.6
110nm,1.1s,2μm1.1nm
LBMI S **Sn** 18 26 46.6 -4.0
110nm,1.1s,2μm1.1nm
MRSI **Marisa** 8.40 214 P **Pn** 18 25 24.3 +0.2
168nm,0.7s,2μm1.5nm
MRSI S **Sn** 18 26 54.4 -3.1
168nm,0.7s,2μm1.5nm
MYLDM **Lahad Datu** 8.42 255 *e*Pn **Pn** 18 25 26.9 +2.5
LUWI **Luwuk** 9.31 205 P **Pn** 18 25 38.5 +2.2
baz=9.3,SNR=18
LUWI **Luwuk** 9.31 205 *e*Pn **Pn** 18 25 36.3 0.0
83nm,0.4s
LUWI *e*Sn **Sn** 18 27 21.2 +1.6
SWI **Sorong** 9.48 151 P **Pn** 18 25 40.5 +2.1
baz=9.5,SNR=17
SWI **Sorong** 9.48 151 P **Pn** 18 25 40.6 +2.1
70nm,1.6s,1μm
SIJI **Sorong** 9.49 151 P **Pn** 18 25 39.9 +1.3
12nm,0.3s,baz=125,slow=12,SNR=86
SIJI S **Sn** 18 27 20.1 -3.7
5.2nm,0.3s,baz=225,slow=22,SNR=9.5
SANI **Sanana** 9.49 184 P **Pn** 18 25 36.7 -2.0
93nm,0.7s,3μm
SANI S Sn 18 27 13.5 -10
93nm,0.7s,3μm
SDKM **Sandakan** 9.57 260 ⇑ P **Pn** 18 25 41.1 +1.2
APSI **Ampana** 9.72 211 P **Pn** 18 25 43.6 +1.9
120nm,0.9s,1μm
APSI S **Sn** 18 27 26.9 -2.5
120nm,0.9s,1μm
MPSI **Mapaga** 9.79 224 P **Pn** 18 25 45.2 +2.6
24nm,1.0s,639nm
MPSI S **Sn** 18 27 30.5 -0.5
24nm,1.0s,639nm
KKM **Kota Kinabalu** 10.46 263 *e*Pn **Pn** 18 25 51.8 +0.1
NLAI **Namlea** 10.66 178 P **Pn** 18 25 52.6 -1.6
77nm,0.7s,1μm
NLAI S Sn 18 27 42.6 -10
77nm,0.7s,1μm
AAI **Ambon** 11.20 172 P **Pn** 18 26 01.8 +0.5
baz=11,SNR=10
AAI **Ambon** 11.20 172 P **Pn** 18 26 02.6 +1.3
36nm,0.5s
AAI S **Sn** 18 28 02.8 -2.4
36nm,0.5s
FAKI **Fak Fak** 11.75 151 P Pn 18 26 11.8 +3.3
baz=12,SNR=9.0
FAKI **Fak Fak** 11.75 151 Pn **Pn** 18 26 08.8 +0.4
FAKI *e*Sn Sn 18 28 11.4 -6.9
TTSI **Tana Toraja** 12.49 213 P **Pn** 18 26 19.7 +1.6
57nm,1.6s,1μm
TTSI S **Sn** 18 28 34.9 -1.3
57nm,1.6s,1μm
SPSI **Sidrap Palu** 13.29 211 P **Pn** 18 26 29.3 +0.9
16nm,1.0s
KAPI **Kappang** 14.20 209 P **Pn** 18 26 38.7 -1.2
0.5nm,0.3s,baz=11,slow=5.7,SNR=6.5
KAPI **Kappang** 14.20 209 *e*Pn **Pn** 18 26 40.4 +0.5
KBKI **Kotabaru** 14.97 225 P **P** 18 26 54.1 +2.5
42nm,1.3s,610nm
SBUM **Sibu** 15.22 252 ⇓ P **P** 18 26 55.2 +0.9
SBUM **Sibu** 15.22 252 *e*Pn **P** 18 26 54.0 -0.4
125nm,1.0s
SMPI **Sarmi** 15.27 128 P **P** 18 26 57.2 +2.3
80nm,1.2s,7μm
BBKI **Banjar Baru** 16.04 228 P **P** 18 27 06.3 +2.9
MMRI **Maumere** 16.61 195 *e*P **Pn** 18 27 12.5 +2.7
33nm,0.9s
TPUB **Ta-pu** 16.76 340 *e*Pn **P** 18 27 08.3 -3.0
2μm,3.0s
SSLB **Suanglung** 17.11 342 *e*P **P** 18 27 14.4 -0.8
758nm,2.9s
JAY **Jayapura** 17.18 125 P **Pn** 18 27 17.9 +1.1
2.4nm,0.3s,baz=240,slow=11,SNR=18
JAY **Jayapura** 17.18 125 P **Pn** 18 27 18.4 +1.7
baz=17
SOEI **Soe** 17.29 188 P **Pn** 18 27 19.0 +0.9
baz=17,SNR=7.3
SOEI **Soe** 17.29 188 *e*P **Pn** 18 27 18.9 +0.9
SOEI *e*S **S** 18 30 30.4 +0.2
KSM **Kuching** 17.35 251 P **Pn** 18 27 19.4 +0.7
baz=17,SNR=8.4
KSM **Kuching** 17.35 251 ⇑ P **Pn** 18 27 19.8 +1.1
KSM **Kuching** 17.35 251 *e*Pn **Pn** 18 27 19.0 +0.2
31nm,1.0s
BATI **Baumata** 17.82 190 P **P** 18 27 23.5 +0.4
9.0nm,0.3s,baz=59,slow=2.0,SNR=20
DLV **T Lat** 18.44 285 *e*P **Pn** 18 27 32.2 +0.3
166nm,1.1s
JOW **Kunigami** 19.30 4 P **Pn** 18 27 41.5 -0.1
0.8nm,0.3s,baz=180,slow=30,SNR=7.5
QIZ **Qiongzhong** 19.96 307 P **P** 18 27 47.5 +1.2
QIZ PMZ
31nm,1.5s
QIZ **Qiongzhong** 19.96 307 *e*P **P** 18 27 46.1 -0.1
GZH **Guangzhou** 20.11 322 *e*P Pn 18 27 50.4 -0.7
GZH PMZ
77nm,1.1s
MTN **Manton Dam** 20.68 168 P **P** 18 27 54.7 +0.8
baz=21,SNR=26
MTN **Manton Dam** 20.68 168 *e*P **P** 18 27 55.1 +1.1
18nm,0.5s
KDU **Kakadu** 20.86 164 P **P** 18 27 57.0 +1.2
baz=21,SNR=8.0
UBPT **Khong Chiam** 22.15 292 P **P** 18 28 13.5 +4.0
KNRA **Kununurra** 23.11 175 P **P** 18 28 19.3 +0.8
baz=23,SNR=41
MYKOM **Kota Tinggi** 23.41 257 ⇓ P **P** 18 28 21.7 +0.3
LEM **Lembang** 23.72 234 LR LR 18 37 44.5
comp=Z,70nm,20.5s,baz=56,slow=36
KGM **Kluang** 23.87 258 ⇑ P **P** 18 28 26.5 +0.9
SKNT **Sakolnakorn** 24.06 295 P **P** 18 28 28.3 +1.1
31nm,1.3s
CBIJ **Chichi jima** 24.45 35 *e*P **P** 18 28 30.1 -0.6
270nm,0.5s
KHON **Khomkaen** 24.90 293 P **P** 18 28 35.4 +0.5
20nm,0.9s
NONG **Nongkai** 25.19 297 P **P** 18 28 37.4 -0.1
132nm,1.0s
NJ2 **Nanjing** 25.50 344 *e*P **P** 18 28 39.0 -1.1
NJ2 PMZ
20nm,0.7s
WHN **Wuhan** 25.68 335 P **P** 18 28 42.5 +0.8
JNU **Nakatsue** 25.81 8 P **P** 18 28 42.5 -0.4
19nm,0.9s,baz=259,slow=2.2,SNR=8.0
PMG **Port Moresby** 26.43 129 P **P** 18 28 48.8 0.0
4.2nm,0.5s,baz=146,slow=5.4,SNR=7.4
PMG **Port Moresby** 26.43 129 P **P** 18 28 49.5 +0.8
baz=26,SNR=3.8
PBKT **Sadao Pong** 26.66 292 P **P** 18 28 51.0 +0.2
40nm,1.0s
LOEI **Loei** 26.68 294 P **P** 18 28 47.7 -3.3
113nm,1.0s,7μm
GYA **Guiyang** 26.79 317 P **P** 18 28 52.8 +0.9
GYA pP **pP** 18 29 22.6 0.0
GYA sP **sP** 18 29 41.0 +1.4
GYA PcP **PcP** 18 32 14.4 +3.1
GYA S **S** 18 33 17.8 +0.4
GYA sS **sS** 18 34 10.6 -1.1
GYA SS **SnSn** 18 34 40.3 +0.7
GYA PMZ
20nm,1.0s
GYA PMZ
120nm,4.8s
GYA LN
580nm,14.6s
GYA LE
510nm,14.8s
GYA LZ
530nm,14.4s
COEN **Coen** 26.88 142 P **P** 18 28 53.6 +0.9
baz=27,SNR=29
COEN **Coen** 26.88 142 *e*P **P** 18 28 56.7 +3.9
27nm,0.6s
UTTA **Uttaradit** 27.40 294 P **P** 18 28 57.6 +0.3
4.0nm,0.9s
NANT **Nan** 27.62 297 P **P** 18 28 59.5 +0.2
3.7nm,0.8s
PSI **Prapat** 28.00 262 P **P** 18 29 01.0 -1.9
3.3nm,0.4s,baz=332,slow=23,SNR=5.8
PSI **Prapat** 28.00 262 *e*P **P** 18 29 03.5 +0.6
PSI pmax pmax
comp=Z,46nm,1.9s
PSI **Prapat** 28.00 262 *e*P **P** 18 29 03.5 +0.6
comp=Z,46nm,1.9s
WRAB **Tennant Creek** 28.28 165 *e*P P 18 29 01.6 -3.5
WRAB **Tennant Creek** 28.28 165 P **P** 18 29 06.0 +0.9
comp=Z,41nm,0.5s,SNR=6.1
WRA **Warramunga Arr** 28.28 165 P **P** 18 29 04.3 -0.9
comp=Z,0.7nm,0.4s,baz=348,slow=9.7,SNR=33
WRA pP **pP** 18 29 35.2 -0.8
comp=Z,2.1nm,0.4s,baz=343,slow=10,SNR=5.5
CRAI **Chiangrai** 28.43 299 P P 18 28 58.9 -7.6
LAMP **Lampang** 28.48 295 P **P** 18 29 08.5 +1.6
comp=Z,3.8nm,1.0s
KMI **Kunming** 28.80 310 ⇑ P **P** 18 29 10.9 +0.9
KMI S **S** 18 33 46.3 -3.0
KMI PMZ
comp=Z,23nm,0.9s
CM01 **Chiang Mai Arr** 29.05 295 *e*P **P** 18 29 11.6 -0.4
CM05 **Chiang Mai Arr** 29.06 295 P **P** 18 29 12.5 +0.5
baz=29
CM31 **Chiang Mai Arr** 29.08 295 P **P** 18 29 13.0 +0.8
baz=29,SNR=6.8
CMAR **Chiang Mai Arr** 29.08 295 P **P** 18 29 11.9 -0.4
comp=Z,4.2nm,0.4s,baz=84,slow=7.2,SNR=75
CMAR PcP **PcP** 18 32 17.2 +0.3
comp=Z,4.5nm,1.0s,baz=116,slow=0.7,SNR=14
CMAR ScP **ScP** 18 35 44.0 -1.1
comp=Z,0.8nm,0.9s,baz=132,slow=2.1,SNR=4.2
CMAR **Chiang Mai Arr** 29.08 295 *c e*P **P** 18 29 13.1 +0.8
CMAR pmax pmax
comp=Z,4.0nm,0.4s
CHTO **Chiang Mai** 29.19 295 P **P** 18 29 13.7 +0.4
comp=Z,47nm,0.9s
CHTO **Chiang Mai** 29.19 295 *e*P **P** 18 29 12.9 -0.4
CHTO *e* 18 32 17.1
CHTO pmax pmax
comp=Z,14nm,1.1s
CHTO **Chiang Mai** 29.19 295 *e*P **P** 18 29 12.8 -0.4
comp=Z,14nm,1.1s
CHTO *e*PcP **PcP** 18 32 17.1 -0.1
CMAI **Chiengmai2** 29.48 298 P **P** 18 29 16.2 +0.2
comp=Z,67nm,1.6s
GSI **Gunungsitoli** 29.62 259 P **P** 18 29 16.4 -0.7
baz=30
KSAR **Wonju Array Be** 29.84 2 P **P** 18 29 18.6 -0.2
KSAR 18 35 47.0
KSAR **Wonju Array Be** 29.84 2 P **P** 18 29 18.6 -0.2
KSAR ScP **ScP** 18 35 47.0 -0.1
KSRS **Korea Array** 29.86 2 P **P** 18 29 18.6 -0.3
comp=Z,1.6nm,0.4s,baz=183,slow=10,SNR=11
KSRS ScP **ScP** 18 35 47.0 -0.2
comp=Z,1.5nm,0.9s,baz=159,slow=3.8,SNR=5.1
TIA **Tai'an** 29.89 344 ⇓ P **P** 18 29 19.0 -0.2
TIA PMZ
comp=Z,30nm,0.8s
QIS **Mount Isa** 30.64 156 P **P** 18 29 26.6 +0.6
baz=31,SNR=21
MAJO **Matsushiro** 30.79 18 *c i*P **P** 18 29 25.5 -1.6
MAJO pmax pmax
comp=Z,54nm,1.0s
MAJO **Matsushiro** 30.79 18 *e*P **P** 18 29 24.8 -2.4
comp=Z,21nm,1.2s
MAT **Matsushiro** 30.79 18 P **P** 18 29 26.3 -0.8
MJAR **Matsushiro Arr** 30.79 18 P **P** 18 29 26.2 -0.9
comp=Z,5.4nm,0.8s,baz=283,slow=12,SNR=13
MJAR PP **PP** 18 30 39.4 -0.2
comp=Z,3.2nm,1.0s,baz=194,slow=11,SNR=4.2
XAN **Xi'an** 31.09 331 P **P** 18 29 29.1 -0.8
XAN pP **pP** 18 29 56.3 -4.7
XAN PMZ
comp=Z,29nm,0.8s
XAN PMZ
comp=Z,150nm,4.7s
DL2 **Dalian** 31.61 353 P **P** 18 29 34.9 +0.6
CD2 **Chengdu** 31.65 320 P **P** 18 29 35.0 +0.1
CD2 pP **pP** 18 30 05.4 -0.6
CD2 sP **sP** 18 30 22.0 -0.8
CD2 S **S** 18 34 34.0 +0.5
CD2 sS **sS** 18 35 28.0 -0.2
CD2 PMZ
comp=Z,120nm,0.6s
CD2 PMZ
comp=Z,220nm,5.4s
AS15 **Alice Springs** 31.73 167 P **P** 18 29 35.6 0.0
baz=32
ASAR **Alice Springs** 31.76 167 P **P** 18 29 34.1 -1.7
comp=Z,1.1nm,0.3s,baz=340,slow=7.7,SNR=56
ASAR pP **pP** 18 30 06.5 -0.4
comp=Z,1.8nm,0.5s,baz=340,slow=7.0,SNR=3.8
ASAR PcP **PcP** 18 32 24.0 +0.1
comp=Z,0.6nm,0.3s,baz=351,slow=2.1,SNR=4.3
ASAR ScP **ScP** 18 35 52.9 -0.8
comp=Z,0.8nm,0.7s,baz=353,slow=3.8,SNR=5.5
ASAR LR LR 18 43 39.1
comp=Z,67nm,18.2s,baz=331,slow=38
WRKA **Warakurna** 32.36 177 P **P** 18 29 41.5 +0.4
baz=32,SNR=20
BJT **Baijiatuau** 33.73 345 *e*P **P** 18 29 52.1 -0.7
BJT pmax pmax
comp=Z,51nm,0.8s
BJT **Baijiatuau** 33.73 345 *e*P **P** 18 29 52.1 -0.7
comp=Z,51nm,0.8s
BJI **Beijing** 33.75 345 P **P** 18 29 52.8 -0.1
BJI S **S** 18 35 04.4 -1.2
BJI PMZ
comp=Z,57nm,1.1s
BJI PMZ
comp=Z,340nm,6.2s
BJI LZ
comp=Z,60nm,14.7s
MEEK **Meekatharra** 34.80 193 P **P** 18 30 02.4 +0.2
baz=35,SNR=5.3
LZH **Lanzhou** 35.29 327 ⇑ P **P** 18 30 07.5 +1.1
LZH pP **pP** 18 30 38.6 +0.6
LZH sP **sP** 18 30 55.0 +0.3
LZH PP **PnPn** 18 31 31.8 +1.9
LZH PcP **PcP** 18 32 35.0 +1.1
LZH *e*S **S** 18 35 29.3 -0.4
LZH ScP **ScP** 18 36 07.0 +0.9
LZH sS **sS** 18 36 24.0 -0.9
LZH SS SnSn 18 37 55.0 -10
LZH PMZ
comp=Z,68nm,1.1s
LZH PMZ
comp=Z,280nm,5.0s
HHC **Hu-ho-hao-te** 35.85 340 *e*P **P** 18 30 11.8 +0.7
HHC pP **pP** 18 30 47.1 +4.4
HHC S **S** 18 35 40.6 +2.6
HHC sS **sS** 18 36 33.9 +0.6
HHC PMZ
comp=Z,51nm,1.2s
HHC PMZ
comp=Z,150nm,5.2s
USRK **Ussuriysk Ar.** 36.87 6 P **P** 18 30 20.1 +0.6
comp=Z,5.6nm,0.4s,baz=184,slow=8.2,SNR=21
MDJ **Mudanjiang** 37.08 3 P **P** 18 30 21.8 +0.5
MDJ pP **pP** 18 30 52.3 -0.8
MDJ sP **sP** 18 31 08.5 -1.2
MDJ S **S** 18 35 57.3 +0.9
MDJ PcS **PcS** 18 36 28.0 +0.9
MDJ PMZ
comp=Z,16nm,1.2s
MDJ PMZ
comp=Z,130nm,4.3s
MORW **Morawa** 37.75 195 P **P** 18 30 27.7 +0.6
baz=38,SNR=4.7
QLP **Quilpie** 37.92 154 P **P** 18 30 29.2 +0.6
baz=38,SNR=4.2
KMBL **Kambalda** 38.90 187 P **P** 18 30 37.2 +0.5
baz=39,SNR=8.2
ASAJ **Asahikawa** 39.06 18 P **P** 18 30 39.0 +1.1
comp=Z,8.2nm,0.4s,baz=230,slow=9.6,SNR=64
BLDU **Ballidu** 39.06 194 P **P** 18 30 38.4 +0.3
baz=39,SNR=7.0
KLBR **Kellerberrin** 39.77 192 P **P** 18 30 44.7 +0.7
baz=40,SNR=4.9
GTA **Gaotai** 39.89 327 ⇑ P **P** 18 30 46.0 +0.9
GTA pP **pP** 18 31 19.6 +2.4
GTA sP **sP** 18 31 35.3 +1.5
GTA PP **PnPn** 18 32 24.3 -0.3
GTA PcP **PcP** 18 32 49.0 +1.1
GTA ScP **ScP** 18 36 24.1 +0.7
GTA S **S** 18 36 40.8 +1.6
GTA sS **sS** 18 37 35.8 +0.7
GTA PMZ
comp=Z,42nm,1.2s
GTA PMZ
comp=Z,330nm,6.2s
GTA LN
comp=Z,190nm,15.0s
GTA LE
comp=Z,240nm,15.4s
GTA LZ
comp=Z,230nm,17.6s
LSA **Lhasa** 39.99 308 *e*P **P** 18 30 47.1 +0.6
LSA *e* 18 32 48.6
LSA pmax pmax
comp=Z,7.0nm,0.6s
LSA **Lhasa** 39.99 308 *e*P **P** 18 30 47.1 +0.6
comp=Z,6.9nm,0.6s
LSA *e*PcP **PcP** 18 32 48.6 -0.3
BBOO **Buckleboo** 41.06 168 P **P** 18 30 54.9 +0.4
baz=41,SNR=37
HABR **Khabarovsk** 41.46 8 *d e*P **P** 18 30 55.1 -2.5
HABR *e**PP **pP** 18 31 28.0 -1.9
HABR *e**SP **sP** 18 31 45.3 -1.1
HABR *e* 18 32 34.1
HABR *e* 18 32 49.1
HABR *e*S **S** 18 37 00.3 -1.6
HABR *e**SS **sS** 18 37 58.5 +0.4
HABR *e* 18 40 41.8
HABR pmax pmax
comp=N,40nm,2.0s
HABR pmax pmax
comp=Z,69nm,2.0s
HABR pmax pmax
comp=E,47nm,2.4s
HABR MLR MLR
comp=Z,71nm,19.0s
YSS **Yuzh-Sakhalins** 41.68 17 *i* P **P** 18 30 59.1 -0.3
YSS pmax pmax
comp=Z,13nm,1.3s
KLR **Kul'dur** 41.83 5 *e*P P 18 30 57.2 -3.4
KLR pmax pmax
comp=Z,38nm,1.4s
TAPN **Taplejung** 41.83 303 *e*P **P** 18 31 01.3 0.0
comp=Z,44nm,0.5s
ODAN **Odare** 41.93 302 *e*P **P** 18 31 01.8 -0.3
comp=Z,30nm,0.4s
HIA **Hailar** 42.05 353 *e*P **P** 18 31 02.3 -0.1
HIA pmax pmax
comp=Z,15nm,1.1s
HIA **Hailar** 42.05 353 *e*P **P** 18 31 02.0 -0.4
comp=Z,8.5nm,0.5s
RAMN **Ramite** 42.62 302 *e*P **P** 18 31 07.6 -0.1
comp=Z,138nm,1.1s
CHLP **Challavanipeta** 42.82 289 *e*P **P** 18 31 09.1 0.0
CHLP IAmb IAmb 18 31 09.9
comp=Z,24nm,1.0s
GUN **Gumba** 43.55 303 *e*P **P** 18 31 15.0 -0.3
comp=Z,89nm,0.8s
ULN **Ulaanbaatar** 43.56 341 *i* P **P** 18 31 14.7 0.0
ULN pmax pmax
comp=Z,24nm,1.0s
ULN **Ulaanbaatar** 43.56 341 *e*P **P** 18 31 14.8 0.0
ULN *e*PcP **PcP** 18 32 59.8 -0.1
SONM **Songino Array** 43.75 340 P **P** 18 31 16.0 -0.3
comp=Z,7.1nm,0.8s,baz=158,slow=8.1,SNR=42
SONM PcP **PcP** 18 32 59.5 -1.0
comp=Z,1.9nm,0.7s,baz=155,slow=3.6,SNR=5.7
SONA1 **Songino Array** 43.76 340 *e*P **P** 18 31 16.3 -0.1
PKI **Pulchoki** 43.83 302 *e*P **P** 18 31 16.6 -0.9
comp=Z,59nm,0.9s
PKIN **Phulchoki** 43.84 302 *e*P **P** 18 31 17.3 -0.2
comp=Z,17nm,0.6s
KKN **Kakani** 44.01 303 *e*P **P** 18 31 18.1 -0.7
comp=Z,73nm,1.0s
DMN **Daman** 44.09 302 *e*P **P** 18 31 18.8 -0.7
comp=Z,102nm,1.0s
GKN **Gorkha** 44.62 303 *e*P **P** 18 31 22.7 -0.8
comp=Z,61nm,1.0s
PVM **Polavaram** 44.94 287 *e*P **P** 18 31 25.7 -0.4
PVM IAmb IAmb 18 31 26.9
comp=Z,13nm,0.7s
KOLN **Koldanda** 45.41 302 *e*P **P** 18 31 29.6 -0.3
comp=Z,54nm,0.3s
DANN **Dangsing** 45.46 303 *e*P **P** 18 31 29.9 -0.5
comp=Z,14nm,0.7s
ARPS **Mount Arapiles** 46.27 163 P **P** 18 31 36.9 +0.8
baz=46,SNR=6.4
ADKI **Addanki** 46.38 285 *e*P **P** 18 31 37.6 +0.3
ADKI IAmb IAmb 18 31 38.4
comp=Z,12nm,0.8s
SKHT **Srikalahasti** 46.50 282 *e*P **P** 18 31 38.1 -0.2
SKHT IAmb IAmb 18 31 39.2
comp=Z,15nm,0.7s
ZAK **Zakamensk** 46.99 340 *e*P **P** 18 31 40.3 -1.4
ZAK *e* 18 33 09.0
ZAK pmax pmax
comp=Z,4.0nm,1.4s
ZAK pmax pmax
comp=Z,4.0nm,1.1s
NJS **Nagarjunasagar** 47.08 286 *e*P **P** 18 31 42.2 -0.6
NJS IAmb IAmb 18 31 43.3
comp=Z,22nm,0.8s
RCLA **Racherla** 47.33 284 *e*P **P** 18 31 44.0 -0.7
RCLA IAmb IAmb 18 31 45.1
comp=Z,22nm,0.7s
RPR **Rampur** 47.34 289 *e*P **P** 18 31 44.5 -0.2
RPR IAmb IAmb 18 31 45.4
comp=Z,27nm,0.9s
SRLM **Srisailam** 47.44 285 *e*P **P** 18 31 44.4 -1.2
SRLM IAmb IAmb 18 31 46.0
comp=Z,17nm,0.8s
HYB **Hyderabad** 47.88 287 *i* P **P** 18 31 48.0 -1.0
HYBB **Hyderabad (bro** 47.88 287 *e*P **P** 18 31 47.9 -1.1
HYBB IAmb IAmb 18 31 49.4
comp=Z,26nm,1.0s
TLY **Talaya** 47.97 341 P **P** 18 31 50.1 +0.9
comp=Z,8.0nm,0.6s,baz=171,slow=6.5,SNR=6.2
TLY **Talaya** 47.97 341 *i* P **P** 18 31 49.4 +0.2
TLY pmax pmax
comp=Z,16nm,1.0s
SRSP **Sriramsagar** 48.24 289 *e*P **P** 18 31 50.6 -1.1
SRSP IAmb IAmb 18 31 52.2
comp=Z,25nm,0.8s
DZM **Mont Dzumac** 48.82 128 P **P** 18 31 57.0 +0.8
comp=Z,6.3nm,0.5s,baz=106,slow=23,SNR=9.2
URV **Uravakonda** 48.93 283 *e*P **P** 18 31 56.0 -1.1
URV IAmb IAmb 18 31 57.2
comp=Z,18nm,1.0s
WMQ **Urumqi** 49.66 323 P **P** 18 32 03.0 +0.8
WMQ pP **pP** 18 32 35.0 -0.6
WMQ sP **sP** 18 32 52.0 +0.2
WMQ PP **PP** 18 34 00.0 +1.9
WMQ S **S** 18 38 58.0 -1.7
WMQ SS **SS** 18 42 28.0 -5.9
WMQ PMZ
comp=Z,46nm,1.0s
WMQ PMZ
comp=Z,18nm,5.0s
WMQ LN
comp=Z,95nm,16.0s
WMQ LE
comp=Z,78nm,16.0s
WMQ LZ
comp=Z,55nm,16.0s
KLRI **Killari** 49.80 287 *e*P **P** 18 32 02.6 -1.1
KLRI IAmb IAmb 18 32 03.8
comp=Z,43nm,0.6s
BOD **Bodaibo** 51.16 351 *e*P **P** 18 32 12.8 -0.4
BOD pmax pmax
comp=Z,15nm,1.2s
HVS **Khovu-Aksy** 51.34 334 *e*P **P** 18 32 13.6 -1.1
HVS pmax pmax
comp=Z,17nm,1.1s
PETK **Petropavlovsk-** 52.02 23 P **P** 18 32 20.8 +1.1

comp=Z,5.5nm,0.8s,baz=198,slow=3.4,SNR=16
**MK07 Makanchi Array 54.44 324** P **P** **18 32 37.9 +0.4**
baz=54
**MK31 Makanchi Array 54.47 324** P **P** **18 32 37.9 +0.2**
MK31 pmax pmax
comp=Z,21nm,0.5s
**MKAR Makanchi Array 54.47 324** P **P** **18 32 38.0 +0.2**
comp=Z,24nm,0.4s,baz=113,slow=7.3,SNR=560
MKAR PcP **PcP** **18 33 39.0 -0.4**
comp=Z,9.9nm,0.9s,baz=121,slow=4.5,SNR=6.8
**MKAR Makanchi Array 54.47 324***ce*P **P** **18 32 38.0 +0.2**
MKAR pmax pmax
comp=Z,24nm,0.4s
**YAK Yakutsk 54.48 2***c iP* **P** **18 32 37.1 -0.3**
YAK pmax pmax
comp=Z,32nm,0.9s
YAK pmax pmax
comp=N,14nm,1.3s
YAK pmax pmax
comp=E,3.0nm,0.9s
**KRAR Krasnoyarsk 55.26 338** *e*P **P** **18 32 42.8 -0.3**
KRAR pmax pmax
comp=Z,6.0nm,0.8s
**KSH Kashi 55.39 313** P **P** **18 32 46.1 +1.5**
KSH *es*P **sP** **18 33 34.8 +0.1**
KSH *e*PcP **PcP** **18 33 45.1 +1.9**
KSH *e*PP **PP** **18 34 53.1 +3.2**
KSH PcS **PcS** **18 37 43.3 -0.3**
KSH S **S** **18 40 15.8 -2.2**
KSH sS **sS** **18 41 13.6 -3.2**
KSH ScS **ScS** **18 42 21.3 +1.8**
KSH SS **SS** **18 44 00.8 -3.9**
KSH PMZ
comp=Z,38nm,1.2s
KSH PMZ
comp=Z,110nm,4.6s
KSH LN
comp=Z,130nm,6.9s
KSH LE
comp=Z,120nm,6.2s
KSH LZ
comp=Z,170nm,7.3s
**ZAB3 Zalesovo Array 57.23 332** P **P** **18 32 56.7 -0.5**
baz=57
**ZAA0 Zalesovo Array 57.24 332** P **P** **18 32 56.8 -0.5**
baz=57,SNR=7.7
**ZALV Zalesovo Beam 57.24 332** P **P** **18 32 56.6 -0.7**
comp=Z,6.5nm,0.3s,baz=124,slow=6.1,SNR=40
**ZALV Zalesovo Beam 57.24 332** *i* P **P** **18 32 56.5 -0.7**
ZALV pmax pmax
comp=Z,7.0nm,0.3s
**KBK Karagaybulak 57.27 317** P **P** **18 32 58.8 +0.9**
SNR=11
**UCH Uchtor 57.41 316** P **P** **18 32 59.7 +0.4**
SNR=18
**CHMS Chumysh 57.53 317** P **P** **18 33 00.1 +0.5**
SNR=7.0
**AAK Ala-Archa 57.57 316** P **P** **18 32 59.4 -0.7**
comp=Z,4.0nm,0.4s,baz=117,slow=5.1,SNR=18
AAK PcP **PcP** **18 33 51.7 -0.1**
comp=Z,1.4nm,0.5s,baz=347,slow=0.9,SNR=3.7
**AAK Ala-Archa 57.57 316** P **P** **18 33 00.1 +0.1**
AAK pmax pmax
comp=Z,6.0nm,0.7s
**AAK Ala-Archa 57.57 316** P **P** **18 33 00.5 +0.4**
SNR=5.3
**AAK Ala-Archa 57.57 316** *e*P **P** **18 32 59.8 -0.2**
AAK PcP **PcP** **18 33 51.7 -0.1**
**USP Ospenovka 57.81 317** P **P** **18 33 01.7 +0.2**
SNR=14
**AML Almayashu 57.94 316** P **P** **18 33 03.5 +0.6**
SNR=9.2
**EKS2 Erkin-Say 58.08 316** P **P** **18 33 04.0 +0.5**
SNR=7.7
**SEY Seymchan 58.42 13** P **P** **18 33 06.4 +1.1**
comp=Z,1.7nm,0.4s,baz=188,slow=7.1,SNR=15
SEY PcP **PcP** **18 33 54.9 +0.4**
comp=Z,2.0nm,0.7s,baz=45,slow=7.2,SNR=4.2
**NVS Novosibirsk 58.52 332** *i P* **P** **18 33 05.7 -0.5**
NVS pmax pmax
comp=Z,15nm,0.9s
NVS pmax pmax
comp=N,9.0nm,0.9s
NVS pmax pmax
comp=E,14nm,1.1s
**KURK Kurchatov 58.57 326** *e*P **P** **18 33 06.3 -0.3**
KURK *e* 18 35 17.2
KURK pmax pmax
comp=Z,99nm,0.8s
**KURK Kurchatov 58.57 326** P **P** **18 33 06.9 +0.3**
comp=Z,355nm,0.5s,SNR=29
**KURK Kurchatov 58.57 326** *e*P **P** **18 33 06.3 -0.3**
comp=Z,99nm,0.8s
KURK *e*PP **PP** **18 35 17.2 -0.6**
**KURBB Kurchatov Arra 58.58 326** P **P** **18 33 06.6 0.0**
comp=Z,14nm,0.4s,baz=125,slow=6.3,SNR=80
**KK31 Karatay Array 60.48 316** *i* P **P** **18 33 19.4 -0.5**
KK31 pmax pmax
comp=Z,7.0nm,0.5s
**KKAR Karatay Array 60.48 316** *e*P **P** **18 33 19.1 -0.8**
KKAR pmax pmax
comp=Z,15nm,0.7s
**KKAR Karatay Array 60.48 316** *e*P **P** **18 33 19.1 -0.8**
comp=Z,15nm,0.7s
**VOSK Vostochnaya 63.72 326** P **P** **18 33 40.4 -0.9**
VOSK pmax pmax
comp=Z,29nm,0.7s
**BVAR Borovoye Array 64.17 326** P **P** **18 33 43.9 -0.3**
comp=Z,13nm,0.5s,baz=111,slow=8.1,SNR=90
BVAR PcP **PcP** **18 34 17.2 -0.7**
comp=Z,2.0nm,0.6s,baz=96,slow=4.5,SNR=3.5
**BRVK Borovoye 64.24 326***c iP* **P** **18 33 44.4 -0.2**
BRVK pmax pmax
comp=Z,57nm,1.0s
**BRVK Borovoye 64.24 326** P **P** **18 33 44.2 -0.4**
comp=Z,250nm,0.7s,SNR=27
**BRVK Borovoye 64.24 326** *e*P **P** **18 33 44.2 -0.4**
comp=Z,53nm,1.0s
**CHKZ Chkalovo 64.31 327** P **P** **18 33 44.3 -0.7**
CHKZ pmax pmax
comp=Z,20nm,1.0s
**RPZ Rata Peaks 64.88 146** *e*P **P** **18 33 48.2 -0.7**
**ZRNK Zerenda 64.91 326** P **P** **18 33 48.6 -0.4**
ZRNK pmax pmax
comp=Z,21nm,0.6s
**IDAH Dahanechah 66.48 302** *e*P **P** **18 34 00.1 +0.3**
**IMYA Miami 66.74 306** *e*P **P** **18 34 00.4 -0.9**
**IKOO Kooshah 67.17 302** *e*P **P** **18 34 04.0 -0.2**
**ISRO Mashad 67.24 306** *e*P **P** **18 34 03.8 -0.6**
**IPAY Payeh 67.64 306** *e*P **P** **18 34 06.8 -0.3**
**IAKL Akhelmad 67.85 306** *e*P **P** **18 34 07.7 -0.7**
**IKRD Kardeh 68.06 307** *e*P P 18 34 04.4 -5.3
**ISFR Sfrayin 68.51 307** *e*P **P** **18 34 12.5 0.0**
**ABKT Ailbek 68.52 308** P **P** **18 34 12.8 +0.5**
comp=Z,148nm,1.0s,SNR=7.2
**GEYT Alibeck 68.52 308** P **P** **18 34 11.9 -0.4**
comp=Z,15nm,0.9s,baz=143,slow=3.2,SNR=32
GEYT PcP **PcP** **18 34 37.4 +0.9**
comp=Z,5.7nm,0.7s,baz=186,slow=4.0,SNR=6.5
**ISHV Shirvan 68.80 307** *e*P **P** **18 34 14.7 +0.5**
**AB31 Akbulak array 69.23 320** *i* P **P** **18 34 15.9 -0.4**
AB31 pmax pmax
comp=Z,35nm,1.0s
**ABKAR Akbulak array 69.23 320** P **P** **18 34 16.0 -0.3**
baz=69
**ABKAR Akbulak array 69.23 320** *e*P **P** **18 34 15.3 -1.0**
comp=Z,21nm,0.8s
**AKTO Aktyubinsk 70.70 321** P **P** **18 34 25.1 -0.3**
comp=Z,22nm,0.9s,baz=100,slow=6.6,SNR=63
**SVE Sverdlovsk 70.75 328** *i iP* **P** **18 34 25.3 -0.2**
SVE pmax pmax
comp=Z,104nm,1.2s
**IMEH Mehriz 70.82 301** *e*P **P** **18 34 24.9 -1.8**
**ICHK Chekchek 71.04 301** *e*P **P** **18 34 26.8 -1.3**
**ISAD Sadrabad 71.64 301** *e*P **P** **18 34 30.7 -1.0**
**ARU Arti 71.75 327** P **P** **18 34 30.6 -0.8**
comp=Z,2.7nm,0.3s,baz=274,slow=21,SNR=24
**ARU Arti 71.75 327***c iP* **P** **18 34 30.7 -0.8**
ARU *PP **pP** **18 35 03.5 -3.6**
ARU 18 37 12.9
ARU S **S** **18 43 39.8 +0.1**
ARU SS **SS** **18 48 16.1 -2.3**
ARU pmax pmax
comp=Z,63nm,1.0s
**ARU Arti 71.75 327** P **P** **18 34 30.9 -0.6**
comp=Z,485nm,0.5s,SNR=19

**IGLO Ghaloghah 71.79 306** *e*P **P** **18 34 32.3 -0.1**
**ISRV Sarvestan 72.04 298** *e*P **P** **18 34 33.4 -0.8**
**IPAR Pars 72.11 299** *e*P **P** **18 34 34.6 0.0**
**IFIR Firoozkooh 72.60 305** *e*P **P** **18 34 37.2 -0.1**
**IRAM Ramesheh 72.74 301** *e*P **P** **18 34 36.6 -1.6**
**IPRN Peran 72.97 306** *e*P **P** **18 34 39.0 -0.3**
**IKAZ Kazeroun 73.16 299** *e*P **P** **18 34 40.2 -0.6**
**IDMV Damavand 73.18 305** *e*P **P** **18 34 39.6 -1.2**
**SOKR Solikamsk 73.44 330** *ll iP* **P** **18 34 41.3 0.0**
SOKR pmax pmax
comp=Z,20nm,0.9s
**IKLH Kolahrood 73.47 302** *e*P **P** **18 34 42.3 -0.2**
**IPIR Pirpir 74.03 302** *e*P **P** **18 34 45.1 -0.7**
**IMHD Mahdasht 74.30 305** *e*P **P** **18 34 47.0 -0.1**
**IR5 Iran Long-Peri 74.35 304** *e*P **P** **18 34 47.2 -0.2**
**IGZV Ghazvin 74.69 306** *e*P **P** **18 34 48.5 -0.9**
**IRAZ Razeghan 74.89 305** *e*P **P** **18 34 50.4 -0.3**
**DGRG David-gareji 78.56 311** P **P** **18 35 10.9 0.0**
**DGRG David-gareji 78.56 311** P **P** **18 35 10.9 0.0**
**KDAK Kodiak Island 78.78 33** *e*P **P** **18 35 12.2 +0.6**
KDAK pmax pmax
comp=Z,10.0nm,0.5s
**KDAK Kodiak Island 78.78 33** P **P** **18 35 12.0 +0.4**
comp=Z,120nm,0.4s,SNR=8.1
**KDAK Kodiak Island 78.78 33** *e*P **P** **18 35 12.2 +0.6**
comp=Z,10.0nm,0.5s
**RAYN Ar Rayn 78.97 292** P **P** **18 35 13.0 -0.5**
comp=Z,358nm,0.7s,SNR=32
**RAYN Ar Rayn 78.97 292** *e*P **P** **18 35 12.0 -1.4**
comp=Z,46nm,0.8s
RAYN *ep*P **pP** **18 35 46.3 -3.4**
RAYN *es*P **sP** **18 36 04.4 -0.9**
**TBLG Delisi 79.04 311** P **P** **18 35 13.7 +0.2**
**TBLG Delisi 79.04 311** P **P** **18 35 13.6 +0.2**
**GNI Garni 79.05 309** *e*P **P** **18 35 14.0 +0.3**
GNI pmax pmax
comp=Z,162nm,1.0s
**GNI Garni 79.05 309** *e*P **P** **18 35 14.0 +0.3**
comp=Z,162nm,1.0s
**PPLA Purkeypile 79.35 27** *e*P **P** **18 35 14.4 -0.5**
comp=Z,81nm,1.7s
**NCK Nalchik 79.87 313** *e*P **P** **18 35 17.1 -0.8**
**KTH Kantishna Hill 79.97 27** *e*P **P** **18 35 18.9 +0.8**
comp=Z,13nm,1.2s
**AKH Akhalkalaki 79.97 311** P **P** **18 35 19.6 +0.9**
**AKH Akhalkalaki 79.97 311** P **P** **18 35 19.6 +0.9**
**ONI Oni 79.98 312** P **P** **18 35 19.7 +1.1**
**ONI Oni 79.98 312** P **P** **18 35 19.7 +1.1**
**TRF Thorofare Moun 80.25 27** *e*P **P** **18 35 19.3 -0.4**
comp=Z,4.3nm,0.7s
**KBZ Khabaz 80.37 313** P **P** **18 35 20.2 -0.3**
comp=Z,13nm,1.1s,baz=56,slow=3.7,SNR=9.5
**KIV Kislovodsk 80.52 313***c iP* **P** **18 35 20.7 -0.8**
KIV *e* 18 38 27.3
KIV pmax pmax
comp=Z,34nm,1.0s
**VRH Novokhopyorsk 81.04 321** *e*P **P** **18 35 23.0 -0.9**
VRH pmax pmax
comp=Z,40nm,1.0s
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=E,30nm,0.9s
**COLA College 81.36 26** *e*P **P** **18 35 24.9 -0.4**
COLA pmax pmax
comp=Z,5.0nm,0.9s
**ILAR Eielson Array 81.77 26** P **P** **18 35 26.9 -0.7**
comp=Z,2.2nm,0.5s,baz=249,slow=4.5,SNR=37
ILAR pP **pP** **18 36 03.3 -0.7**
comp=Z,1.0nm,0.8s,baz=274,slow=5.3,SNR=2.8
**KLMR Klimovskoe 82.12 330** *e*P **P** **18 35 28.9 -0.5**
KLMR *e* 18 38 38.6
KLMR pmax pmax
comp=Z,21nm,0.6s
**VORD Divnogorie 82.58 320** *e*P **P** **18 35 31.3 -0.7**
VORD pmax pmax
comp=Z,20nm,0.9s
VORD pmax pmax
comp=N,20nm,0.7s
VORD pmax pmax
comp=E,20nm,0.8s
**VSR Storozhevoye 82.65 321** *e*P **P** **18 35 31.7 -0.7**
VSR pmax pmax
comp=N,9.0nm,1.1s
VSR pmax pmax
comp=Z,30nm,1.1s
VSR pmax pmax
comp=E,9.0nm,1.0s
**LPSR Galich'ya Gora 82.73 322** *e*P **P** **18 35 32.0 -0.7**
LPSR pmax pmax
comp=Z,30nm,1.5s
LPSR pmax pmax
comp=N,4.0nm,0.8s
LPSR pmax pmax
comp=E,10.0nm,1.1s
**BMRM Bremner River 82.90 29** *e*P P 18 35 27.0 -6.6
**MOS Moscow 83.33 325** *e*P **P** **18 35 35.0 -0.7**
MOS pmax pmax
comp=Z,45nm,0.7s
**KSRV Kasrt alli 83.77 305** *e*P **P** **18 35 40.1 +1.6**
**OBN Obninsk 83.97 325** P **P** **18 35 38.1 -0.9**
comp=Z,20nm,0.4s,baz=146,slow=1.8,SNR=12
**OBN Obninsk 83.97 325***c iP* **P** **18 35 38.6 -0.4**
OBN pmax pmax
comp=Z,106nm,1.7s
**ANN Anapa 84.23 314** *e*P **P** **18 35 39.1 -1.5**
ANN pmax pmax
comp=Z,95nm,1.4s
**SLMH Al Salmeh 84.61 306** *e*P **P** **18 35 43.0 +0.2**
**ZALF Zalf 85.42 302** *e*P **P** **18 35 46.7 -0.2**
**BTCH Batrach 85.81 306** *e*P **P** **18 35 48.2 -0.6**
**ASF Jabal al Asfar 85.86 302** P **P** **18 35 48.5 -0.7**
comp=Z,22nm,1.0s,baz=48,slow=2.9
**HAWK Haweek 86.02 304** *e*P **P** **18 35 51.2 +1.4**
**BIDA Albida 86.03 305** *e*P **P** **18 35 50.6 +0.7**
**SLNF Slenfeh 86.05 305** *e*P **P** **18 35 51.0 +0.9**
**BRBR Barbar 86.52 303** *e*P **P** **18 35 52.5 +0.1**
**INK Inuvik 86.72 22** P **P** **18 35 50.9 -1.6**
comp=Z,0.8nm,0.4s,baz=296,slow=8.2,SNR=7.2
**SPITS Spitsbergen Ar 86.81 349** P **P** **18 35 51.3 -1.4**
comp=Z,2.6nm,0.5s,baz=58,slow=8.1,SNR=5.8
**ARCES ARCESS Array B 86.92 340** P **P** **18 35 52.5 -0.9**
comp=Z,7.6nm,0.9s,baz=77,slow=6.9,SNR=31
**VNDA Vanda 87.14 173** P **P** **18 35 53.3 -0.9**
comp=Z,0.7nm,0.3s,baz=309,slow=7.0,SNR=13
**BR102 Keskin Array S 87.58 310** P **P** **18 35 56.8 -0.5**
baz=88
**BR131 Keskin Array S 87.58 310** P **P** **18 35 57.0 -0.4**
baz=88,SNR=3.9
**BRTR Keskin Array B 87.58 310** P **P** **18 35 56.3 -1.1**
comp=Z,4.9nm,0.7s,baz=116,slow=4.4,SNR=21
BRTR PP **PP** **18 39 29.4 +4.9**
comp=Z,1.5nm,1.0s,baz=120,slow=7.3,SNR=5.0
BRTR LR LR 19 20 00.3
comp=Z,11nm,19.0s,baz=93,slow=39
**EIL Elat 87.82 299** P **P** **18 35 58.9 +0.4**
baz=88,SNR=7.3
**CSS Prodhromos 88.48 305** *e*P **P** **18 36 00.6 -0.9**
comp=Z,4.8nm,0.8s
**FINES FINESS Array B 88.51 332** P **P** **18 36 00.5 -0.5**
comp=Z,2.5nm,0.3s,baz=83,slow=4.2,SNR=32
**FINES FINESS Array B 88.51 332** *i* P **P** **18 36 00.5 -0.5**
FINES pmax pmax
comp=Z,3.0nm,0.3s
**VSU Vasula 88.84 329** *e*P **P** **18 36 01.3 -1.4**
VSU pmax pmax
comp=Z,71nm,1.1s
**AKASG Malin Array Be 88.95 321** P **P** **18 36 02.2 -1.2**
comp=Z,4.2nm,0.5s,baz=67,slow=3.9,SNR=22
**AKASG Malin Array Be 88.95 321***ce*P **P** **18 36 02.2 -1.2**
AKASG pmax pmax
comp=Z,5.0nm,0.5s
**KIEV Kiev 88.96 321***c iP* **P** **18 36 02.2 -1.2**
KIEV pmax pmax
comp=Z,13nm,1.0s
**KIEV Kiev 88.96 321** *e*P **P** **18 36 01.8 -1.6**
comp=Z,18nm,1.1s
**KMBO Kilima Mbogo 89.55 269** P **P** **18 36 06.1 -1.2**
comp=Z,2.3nm,0.9s,baz=40,slow=10.0,SNR=6.1
**KMBO Kilima Mbogo 89.55 269***ce*P **P** **18 36 07.4 +0.1**
KMBO pmax pmax
comp=Z,2.0nm,0.9s
**MLR Muntele Rosu 92.16 316** P **P** **18 36 18.3 -0.3**
comp=Z,0.8nm,0.9s,baz=115,slow=17,SNR=5.3
**HFS Hagfors 94.68 332** P **P** **18 36 28.0 -1.7**
comp=Z,3.2nm,0.8s,baz=120,slow=8.8,SNR=6.9
**NIE Niedzica 94.84 321** *e*P **P** **18 36 31.5 +0.8**
**NIE Niedzica 94.84 321** *e*P **P** **18 36 31.5 +0.8**
**OJC Ojcow 94.91 322** *e*P **P** **18 36 31.1 +0.1**
**OJC Ojcow 94.91 322** *e*P **P** **18 36 31.1 +0.1**
**NOA NORSAR Array B 95.41 334** LR LR 19 26 35.1
comp=Z,9.5nm,18.5s,baz=355,slow=40
**VYHS Vyhne 96.04 320** *e*P **P** **18 36 35.8 -0.4**
VYHS pmax pmax
comp=Z,17nm,2.5s
**VYHS Vyhne 96.04 320** *e*P **P** **18 36 35.8 -0.4**
**KSP Ksiaz 96.82 323** *e*P **P** **18 36 40.2 +0.6**
**KSP Ksiaz 96.82 323** *e*P **P** **18 36 40.3 +0.6**
**VRAC Vranov 97.17 322** P **P** **18 36 40.3 -1.0**
comp=Z,6.7nm,0.9s,baz=91,slow=2.8,SNR=6.0
**BRG Berggiesshubel 98.19 324** *e*P Pdif 18 36 46.9 +1.1
comp=Z,5.7nm,1.1s
**BRG Berggiesshubel 98.19 324** *e*P Pdif 18 36 46.9 +1.1
BRG pmax pmax
comp=Z,6.0nm,1.1s
**GERES GERESS Array B 99.11 322** P **Pdif** **18 36 49.4 -0.7**
comp=Z,2.9nm,0.9s,baz=64,slow=6.1,SNR=16
**ESDC Sonseca Array 114.58 320** PP **PP** **18 42 46.3 -0.8**
comp=Z,0.3nm,0.5s,baz=56,slow=6.2,SNR=5.1
**T26A Comanche Natio 115.38 43** P **PKPdf** **18 41 49.9 -0.6**
baz=115
**Z30A Sanderson Ranc 119.17 45** P **PKPdf** **18 41 57.5 -0.2**
baz=119
**TXAR Lajitas Array 119.33 50** PKP **PKPdf** **18 41 57.8 -0.3**
comp=Z,0.4nm,0.3s,baz=356,slow=0.7,SNR=13
**429A Davenport Ranc 120.02 48** P **PKPdf** **18 41 59.8 +0.4**
baz=120
**529A Stev Forest Ra 120.03 49** P **PKPdf** **18 41 59.7 +0.3**
baz=120
**Z32A Haskell 120.31 44** P **PKPdf** **18 41 59.4 -0.4**
baz=120
**430A Baggett Ranch, 120.42 48** P **PKPdf** **18 41 59.8 -0.3**
baz=120
**T36A Boggs Farm, Ca 120.46 39** P **PKPdf** **18 41 59.7 -0.2**
baz=120
**530A J-C Ranch, Com 120.67 48** P **PKPdf** **18 42 00.1 -0.5**
baz=120
**X34A Smith Ranch, M 120.69 42** P **PKPdf** **18 42 00.2 -0.3**
baz=120
**331A San Angelo 120.73 47** P **PKPdf** **18 42 00.5 -0.3**
baz=120
**431A Sonora 120.93 48** P **PKPdf** **18 42 01.1 0.0**
baz=121
**531A Rocksprings 121.25 48** P **PKPdf** **18 42 02.4 +0.7**
baz=121
**TOA0 Torodi Ar. Sit 121.62 290** *e*PKP1 **PKPdf** **18 42 01.8 -0.9**
**TORD Torodi Ar. Bea 121.62 290** PKP **PKPdf** **18 42 01.9 -0.8**
comp=Z,1.7nm,0.4s,baz=63,slow=1.7,SNR=40
TORD PP **PP** **18 43 38.5 +1.6**
comp=Z,1.4nm,0.9s,baz=60,slow=5.5,SNR=5.4
**631A Perdido Creek 121.62 49** P **PKPdf** **18 42 00.6 -1.8**
baz=121
**JCT Junction City 121.63 47** P **PKPdf** **18 42 02.2 -0.3**
baz=121
**333A Richland Sprin 121.76 46** P **PKPdf** **18 42 01.9 -0.8**
baz=122
**V38A Canehill 122.13 39** P **PKPdf** **18 42 02.8 -0.5**
baz=122
**334A Lometa 122.29 46** P **PKPdf** **18 42 03.3 -0.3**
baz=122
**X37A Clayton 122.32 41** P **PKPdf** **18 42 03.3 -0.3**
baz=122
**833A Chaparral WMA, 123.07 49** P **PKPdf** **18 42 04.5 -0.7**
baz=123
**MIAR Mount Ida 123.50 40** P **PKPdf** **18 42 05.2 -0.7**
baz=123
**933A Laredo 123.53 50** P **PKPdf** **18 42 05.6 -0.5**
baz=123
**KIC Kosan Boka 129.60 285** *e*PKP1 **PKPdf** **18 42 18.1 0.0**
comp=Z,23nm,1.0s
**DBIC Dimbokro 129.63 285** PKP **PKPdf** **18 42 18.4 +0.3**
comp=Z,2.9nm,0.8s,baz=113,slow=4.6,SNR=5.1
**TIC Toumodi 129.80 285** *e*PKP1 **PKPdf** **18 42 18.8 +0.4**
**LPAZ La Paz 163.10 123** PKP **PKPdf** **18 43 12.3 +0.3**
comp=Z,1.6nm,0.9s,baz=45,slow=2.0,SNR=6.2
LPAZ PKPab **PKPab** **18 44 05.5 +2.8**
comp=Z,0.8nm,0.7s,baz=228,slow=6.2,SNR=4.1

**IDC 22 18:35:00.8±999.0, 51.04N×48.63E, h0km, Error ellipse: s-maj=1076.0km s-min=127.0km az=90.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **6.01** | **92** | *i* | | 19 13 30.0 | |
| | baz=280,slow=320,SNR=1.8 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **22.07** | **68** | *i* | | 20 50 20.0 | |
| | baz=278,slow=324,SNR=2.0 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **36.90** | **72** | *i* | | 22 19 30.0 | |
| | baz=295,slow=331,SNR=0.9 | | | | | | |

*IDC **22** 18:36:49.5±0.7, 19.49N×139.63E, h0km, mb4.2/23, mb1 4.3/24, mb1mx4.2/55, mbtmp4.2/24, ML3.6/1, MS2.9/4, Ms1 3.0/4, ms1mx2.6/43, Error ellipse: s-maj=21.9km s-min=15.0km az=88.0*

*ISCJB **22** 18:36:52.5±0.5, 19.47N±0.06×139.7E±0.1, h33km, mb4.3/30, MS2.9/3, Error ellipse: s-maj=16.0km s-min=8.6km az=172.7*

*NEIC **22** 18:36:54.5±0.4, 19.49N×139.71E, h35km, mb4.5/9, Error ellipse: s-maj=13.1km s-min=7.2km az=85.0*

**ISC 22 18:36:54.6±0.6, 19.49N±0.08×139.7E±0.1, h35km, n44, σ0°87/38, mb4.4/30, MS3.0/3, West of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **17.04** | **356** | P | | **Pn** | **18 40 50.4** | **+0.3** |
| | 0.2nm,0.3s,baz=140,slow=9.6,SNR=3.3 | | | | | | | |
| **MAJO** | **Matsushiro** | **17.04** | **356** | Pn | | **Pn** | **18 40 47.1** | **-3.0** |
| | 4.6nm,0.7s | | | | | | | |
| **DAV** | **Davao City (W)** | **18.45** | **230** | LR | LR | | 18 47 39.5 | |
| | comp=Z,34nm,19.6s,baz=208,slow=35 | | | | | | | |
| **KSRS** | **Korea Array** | **20.64** | **333** | P | | Pn | 18 41 32.2 | -1.3 |
| | 3.6nm,0.9s,baz=167,slow=9.7,SNR=9.6 | | | | | | | |
| KSRS | | | | LR | LR | | 18 48 10.7 | |
| | comp=Z,10nm,19.9s,baz=165,slow=33 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **20.65** | **332** | P | | **P** | **18 41 32.2** | **+1.1** |
| **USRK** | **Ussuriysk Ar.** | **25.47** | **347** | P | | **P** | **18 42 18.6** | **-0.6** |
| | 4.1nm,0.8s,baz=166,slow=8.8,SNR=6.6 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **25.53** | **88** | T | | T | 19 09 10.8 | |
| | baz=276,slow=74,SNR=21 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **25.54** | **88** | T | | T | 19 09 07.5 | |
| | baz=276,slow=74,SNR=12 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **25.55** | **88** | T | | T | 19 09 07.2 | |
| | baz=276,slow=74,SNR=12 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **25.61** | **85** | T | | T | 19 09 10.2 | |
| | baz=274,slow=75,SNR=9.5 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **25.61** | **85** | T | | T | 19 09 12.4 | |
| | baz=274,slow=75,SNR=11 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **25.63** | **85** | T | | T | 19 09 11.2 | |
| | baz=274,slow=75,SNR=8.5 | | | | | | | |
| **PMG** | **Port Moresby** | **29.64** | **165** | P | | **P** | **18 42 55.9** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **38.49** | **275** | P | | **P** | **18 44 13.7** | **0.0** |
| | 2.1nm,1.0s,baz=69,slow=7.1,SNR=7.2 | | | | | | | |
| CMAR | | | | LR | LR | | 18 59 37.8 | |
| | comp=Z,23nm,18.9s,baz=85,slow=36 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **38.73** | **325** | *eP* | | **P** | **18 44 15.4** | **-0.2** |
| | 1.9nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **39.08** | **324** | P | | **P** | **18 44 18.7** | **+0.3** |
| | 1.9nm,0.7s,baz=141,slow=11,SNR=13 | | | | | | | |
| **WRAB** | **Tennant Creek** | **39.53** | **188** | *eP* | | **P** | **18 44 21.8** | **-0.5** |
| | 9.5nm,1.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **39.54** | **188** | P | | **P** | **18 44 22.2** | **-0.1** |
| | 1.5nm,0.9s,baz=5.4,slow=9.5,SNR=15 | | | | | | | |
| **KULM** | **Kulim** | **40.54** | **255** | P | | **P** | **18 44 32.9** | **+2.1** |
| | 10nm,1.2s | | | | | | | |
| **YAK** | **Yakutsk** | **43.07** | **353** | P | | **P** | **18 44 50.9** | **0.0** |
| | 2.0nm,0.3s,baz=97,slow=1.6,SNR=2.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **43.27** | **188** | P | | **P** | **18 44 52.9** | **0.0** |
| | 0.6nm,0.6s,baz=14,slow=9.3,SNR=12 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **18 46 43.0** | **+1.4** |
| | 0.5nm,0.8s,baz=30,slow=4.1,SNR=4.9 | | | | | | | |
| **SEY** | **Seymchan** | **44.28** | **8** | P | | **P** | **18 45 00.4** | **-0.1** |
| | 5.1nm,0.8s,baz=181,slow=6.5,SNR=13 | | | | | | | |
| **LSA** | **Lhasa** | **45.02** | **293** | P | | **P** | **18 45 06.4** | **-1.2** |
| | 5.4nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **53.83** | **314** | P | | **P** | **18 46 13.8** | **-0.3** |
| | 1.5nm,0.7s,baz=96,slow=9.1,SNR=13 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **18 47 19.9** | **+0.5** |
| | 0.8nm,0.8s,baz=72,slow=4.0,SNR=3.5 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **53.96** | **323** | P | **P** | **18 46 14.7** | **-0.1** |
| | 1.7nm,0.7s,baz=95,slow=8.0,SNR=6.9 | | | | | | |
| ZALV | | | | PcP | **PcP** | **18 47 19.9** | **+0.1** |
| | 1.1nm,0.6s,baz=116,slow=4.3,SNR=4.7 | | | | | | |
| **KURK** | **Kurchatov** | **56.90** | **318** | *e*P | **P** | **18 46 35.7** | **-0.3** |
| | 11nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.94** | **318** | P | **P** | **18 46 36.0** | **-0.3** |
| | 7.5nm,0.8s,baz=97,slow=7.5,SNR=52 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.25** | **320** | P | | **18 47 13.3** | **+0.5** |
| | 6.8nm,0.8s,baz=94,slow=7.7,SNR=32 | | | | | | |
| **BRVK** | **Borovoye** | **62.31** | **320** | *e*P | **P** | **18 47 13.5** | **+0.2** |
| | 15nm,1.1s | | | | | | |
| **TAU** | **Tasmania Unive** | **62.48** | **174** | P | **P** | **18 47 13.4** | **-0.9** |
| **ILAR** | **Eielson Array** | **65.48** | **27** | P | **P** | **18 47 34.2** | **+0.4** |
| | 0.9nm,0.6s,baz=256,slow=5.8,SNR=15 | | | | | | |
| **ABKAR** | **Akbulak array** | **68.87** | **316** | *e*P | **P** | **18 47 55.5** | **-0.1** |
| | 3.8nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **69.98** | **318** | P | **P** | **18 48 02.4** | **-0.1** |
| | 2.2nm,0.7s,baz=69,slow=5.1,SNR=11 | | | | | | |
| **GEYT** | **Alibeck** | **71.81** | **305** | P | **P** | **18 48 13.8** | **-0.1** |
| | 1.8nm,0.7s,baz=48,slow=2.2,SNR=4.9 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.91** | **27** | P | **P** | **18 48 59.8** | **+0.3** |
| | 2.0nm,0.7s,baz=295,slow=5.8,SNR=4.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **79.95** | **341** | P | **P** | **18 49 00.1** | **+0.3** |
| | 2.9nm,0.6s,baz=62,slow=8.4,SNR=11 | | | | | | |
| **RES** | **Resolute Bay** | **79.95** | **13** | P | **P** | **18 49 00.7** | **+1.1** |
| | 4.2nm,0.8s,baz=315,slow=3.8,SNR=3.8 | | | | | | |
| **KBZ** | **Khabaz** | **81.52** | **313** | P | **P** | **18 49 08.2** | **-0.4** |
| | 4.6nm,0.8s,baz=94,slow=4.4,SNR=6.8 | | | | | | |
| **FINES** | **FINESS Array B** | **83.73** | **334** | P | **P** | **18 49 19.6** | **-0.1** |
| | 5.3nm,0.7s,baz=55,slow=3.9,SNR=15 | | | | | | |
| **RAYN** | **Ar Rayn** | **86.08** | **293** | *e*P | **P** | **18 49 32.5** | **+0.1** |
| | 2.2nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **87.06** | **50** | P | **P** | **18 49 38.5** | **+1.3** |
| | 2.2nm,0.7s,baz=272,slow=5.8,SNR=17 | | | | | | |
| **AKASG** | **Malin Array Be** | **87.36** | **323** | P | **P** | **18 49 37.0** | **-1.0** |
| | 0.2nm,0.3s,baz=55,slow=5.1,SNR=4.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **89.44** | **312** | P | **P** | **18 49 47.8** | **-0.5** |
| | 1.9nm,0.8s,baz=106,slow=3.8,SNR=7.4 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **90.33** | **54** | LR | LR | 19 22 54.7 | |
| | comp=Z,21nm,20.4s,baz=306,slow=31 | | | | | | |

*ISCJB* ***22*** *18:55:08.5±0.6, 1°.31N±0°.04×120°.06E±0°.04, h28km, mb3.8/8, MS3.0/1, Error ellipse: s-maj=6.7km s-min=5.5km az=36.4*

*IDC* ***22*** *18:55:08.9±0.8, 1°.06N×120°.11E, h32km±5km, mb3.7/8, mb1 3.9/9, mb1mx3.7/39, mbtmp3.9/9, ML3.6/1, MS3.1/4, Ms1 3.1/4, ms1mx2.7/37, Error ellipse: s-maj=53.0km s-min=13.2km az=63.0*

*DJA* ***22*** *18:55:12.0±0.3, 1°.N±3°×12°.0E±°, h90km±24km, M4.2/14, mb4.1/4, MLv4.3/14*

**ISC 22 18:55:09.5±0.6, 1°.25N±0°.06×120°.13E±0°.05, h28km, n22, σ1$99/30, mb3.9/8, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MPSI** | **Mapaga** | **0.94** | **194** | P | Pn | 18 55 23.3 | -3.5 |
| **MRSI** | **Marisa** | **1.97** | **113** | P | **Pn** | **18 55 42.7** | **+1.7** |
| MRSI | | | | S | **Sb** | **18 56 08.5** | **-0.3** |
| **PCI** | **Palu** | **2.16** | **188** | P | **Pn** | **18 55 45.6** | **+1.9** |
| **APSI** | **Ampana** | **2.63** | **145** | P | **Pn** | **18 55 51.7** | **+1.6** |
| APSI | | | | S | **Sn** | **18 56 23.8** | **+2.7** |
| **LUWI** | **Luwuk** | **3.49** | **131** | P | **Pn** | **18 56 03.8** | **+1.9** |
| LUWI | | | | S | **Sn** | **18 56 44.6** | **+2.3** |
| **KMSI** | **Cibinong** | **3.91** | **100** | P | **Pn** | **18 56 09.7** | **+2.0** |
| KMSI | | | | S | **Sn** | **18 56 54.8** | **+2.1** |
| **BKB** | **Balikpapan** | **4.08** | **232** | P | **Pn** | **18 56 12.1** | **+2.0** |
| **TTSI** | **Tana Toraja** | **4.28** | **184** | P | **Pn** | **18 56 15.2** | **+2.4** |
| TTSI | | | | S | **Sn** | **18 57 04.3** | **+2.5** |
| **SPSI** | **Sidrap Palu** | **5.19** | **184** | P | **Pn** | **18 56 27.9** | **+2.5** |
| | 39nm,0.9s,0.1nm | | | | | | |
| **KBKI** | **Kotabaru** | **6.01** | **221** | P | **Pn** | **18 56 39.4** | **+2.8** |
| | 19nm,0.9s,0.1nm | | | | | | |
| **KAPI** | **Kappang** | **6.23** | **183** | Pn | **Pn** | **18 56 37.1** | **-2.6** |
| | 1.4nm,0.3s,baz=186,slow=9.2,SNR=2.9 | | | | | | |
| KAPI | | | | LR | LR | 18 58 38.3 | |
| | comp=Z,59nm,19.9s,baz=15,slow=35 | | | | | | |
| **BKSI** | **Bulukumba** | **6.53** | **180** | P | **Pn** | **18 56 44.8** | **+1.1** |
| BKSI | | | | S | **Sn** | **18 57 58.9** | **+1.6** |
| **BATI** | **Baumata** | **11.91** | **163** | LR | LR | 19 03 03.4 | |
| | comp=Z,197nm,20.7s,baz=10,slow=40 | | | | | | |
| **LEM** | **Lembang** | **14.84** | **237** | LR | LR | 19 05 56.1 | |
| | comp=Z,94nm,19.6s,baz=44,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **25.25** | **147** | P | **P** | **19 00 30.7** | **-2.8** |
| | 9.2nm,0.7s,baz=334,slow=9.6,SNR=198 | | | | | | |
| WRA | | | | pP | **pP** | **19 00 40.4** | **-1.2** |
| | 1.7nm,0.5s,baz=334,slow=9.6,SNR=4.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.92** | **311** | P | **P** | **19 00 49.3** | **+0.7** |
| | 0.5nm,0.8s,baz=135,slow=9.0,SNR=3.5 | | | | | | |
| CMAR | | | | LR | LR | 19 11 30.1 | |
| | comp=Z,37nm,18.7s,baz=160,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **28.16** | **152** | P | **P** | **19 00 57.2** | **-2.4** |
| | 2.4nm,0.5s,baz=337,slow=11,SNR=96 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 04 12.0** | **-1.4** |
| | 0.5nm,0.5s,baz=340,slow=2.5,SNR=8.4 | | | | | | |
| **SONM** | **Songino Array** | **47.91** | **348** | P | **P** | **19 03 46.3** | **+0.9** |
| | 1.0nm,0.8s,baz=169,slow=9.1,SNR=6.8 | | | | | | |
| SONM | | | | pP | **pP** | **19 03 55.6** | **+1.7** |
| | 0.5nm,0.7s,baz=165,slow=6.0,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.07** | **329** | P | **P** | **19 04 45.3** | **-0.8** |
| | 1.2nm,0.8s,baz=132,slow=9.0,SNR=8.8 | | | | | | |
| MKAR | | | | pP | **pP** | **19 04 56.6** | **+1.8** |
| | 0.9nm,0.9s,baz=143,slow=7.7,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.02** | **337** | P | **P** | **19 05 13.1** | **-0.5** |
| | 1.4nm,0.9s,baz=111,slow=6.5,SNR=4.5 | | | | | | |
| **VNDA** | **Vanda** | **81.88** | **172** | P | **P** | **19 07 23.5** | **-2.3** |
| | 0.3nm,0.5s,baz=304,slow=5.5,SNR=4.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **86.50** | **310** | P | **P** | **19 07 49.7** | **-0.6** |
| | 0.3nm,0.6s,baz=177,slow=2.9,SNR=2.7 | | | | | | |
| BRTR | | | | pP | **pP** | **19 07 58.3** | **-1.1** |
| | 0.7nm,0.8s,baz=160,slow=9.0,SNR=3.0 | | | | | | |

*JMA* ***22*** *19:03:58.5±0.1, 24°.58N×121°.90E, h69km±1km, M3.1*

*ISCJB* ***22*** *19:03:59.1±0.5, 24°.59N±0°.03×121°.94E±0°.02, h66km±5km, Error ellipse: s-maj=5.3km s-min=2.8km az=159.6*

*TAP* ***22*** *19:03:59.4, 24°.61N×121°.88E, h66km±1km, ML3.5, D*

**ISC 22 19:03:59.7±1.3, 24°.57N±0°.04×121°.94E±0°.03, h64km±7km, n49, σ0$95/86, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWC** | **Suao** | **0.09** | **295** | P | **Pn** | **19 04 09.4** | **+0.4** |
| | baz=267 | | | | | | |
| TWC | | | | *e*S | **Sn** | **19 04 16.8** | **+0.8** |
| | baz=267 | | | | | | |
| **ENA** | **Nanau** | **0.23** | **232** | P | **Pn** | **19 04 09.4** | **-0.2** |
| | baz=212 | | | | | | |
| ENA | | | | *e*S | **Sn** | **19 04 17.1** | **+0.2** |
| | baz=212 | | | | | | |
| **ILA** | **Ilan** | **0.26** | **318** | P | **Pn** | **19 04 10.2** | **+0.4** |
| | baz=324 | | | | | | |
| ILA | | | | *e*S | **Sn** | **19 04 18.7** | **+1.4** |
| | baz=324 | | | | | | |
| **EGS** | | **0.27** | **359** | *e*P | **Pn** | **19 04 10.2** | **+0.3** |
| | baz=14 | | | | | | |
| **TWE** | **Neicheng** | **0.29** | **301** | P | **Pn** | **19 04 10.3** | **+0.3** |
| | baz=301 | | | | | | |
| TWE | | | | *e*S | **Sn** | **19 04 17.3** | **-0.3** |
| | baz=301 | | | | | | |
| **ENTT** | **Nioudou** | **0.35** | **281** | P | **Pn** | **19 04 10.6** | **+0.1** |
| | baz=275 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **19 04 19.0** | **+0.6** |
| | baz=275 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.44** | **6** | *e*P | **Pn** | **19 04 11.0** | **-0.3** |
| | baz=15 | | | | | | |
| TWB1 | | | | *e*S | **Sn** | **19 04 19.4** | **-0.3** |
| | baz=15 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.52** | **344** | *e*P | **Pn** | **19 04 11.9** | **-0.3** |
| | baz=349 | | | | | | |
| NWF | | | | *e*S | **Sn** | **19 04 21.0** | **-0.3** |
| | baz=349 | | | | | | |
| **TWA** | **Mucha** | **0.52** | **322** | *e*P | **Pn** | **19 04 11.8** | **-0.3** |
| | baz=324 | | | | | | |
| TWA | | | | *e*S | **Sn** | **19 04 20.8** | **-0.4** |
| | baz=324 | | | | | | |
| **NNS** | **Nan Shan** | **0.53** | **256** | P | **Pn** | **19 04 12.2** | **-0.2** |
| | baz=249 | | | | | | |
| NNS | | | | *e*S | **Sn** | **19 04 21.6** | **0.0** |
| | baz=249 | | | | | | |
| **NSK** | **Sanguang** | **0.54** | **281** | *e*P | **Pn** | **19 04 11.7** | **-0.6** |
| | baz=277 | | | | | | |
| NSK | | | | *e*S | **Sn** | **19 04 20.7** | **-0.9** |
| | baz=277 | | | | | | |
| **TWD** | **Chiawan** | **0.58** | **213** | *e*P | **Pn** | **19 04 12.2** | **-0.5** |
| | baz=205 | | | | | | |
| TWD | | | | *e*S | **Sn** | **19 04 21.6** | **-0.8** |
| | baz=205 | | | | | | |
| **TAP** | **Taipei** | **0.61** | **320** | *e*P | **Pn** | **19 04 12.4** | **-0.7** |
| | baz=322 | | | | | | |
| TAP | | | | *e*S | **Sn** | **19 04 22.8** | **-0.1** |
| | baz=322 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.75** | **235** | *e*P | **Pn** | **19 04 15.7** | **+0.5** |
| | baz=230 | | | | | | |
| **TWT** | **Tachien** | **0.76** | **246** | *e*P | **Pn** | **19 04 15.3** | **+0.3** |
| | baz=241 | | | | | | |
| TWT | | | | *e*S | **Sn** | **19 04 26.3** | **-0.1** |
| | baz=241 | | | | | | |
| **TWY** | **Chenhua** | **0.77** | **336** | *e*S | **Sn** | **19 04 27.4** | **+1.3** |
| | baz=339 | | | | | | |
| **NCU** | **National Centr** | **0.79** | **300** | *e*P | **Pn** | **19 04 14.7** | **-0.5** |
| | baz=299 | | | | | | |
| NCU | | | | *e*S | **Sn** | **19 04 26.4** | **-0.2** |
| | baz=299 | | | | | | |
| **NSTT** | **Nanjuang** | **0.85** | **274** | *e*P | **Pn** | **19 04 14.9** | **-1.1** |
| | baz=271 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **19 04 27.0** | **-1.1** |
| | baz=271 | | | | | | |
| **ESL** | **Shilin** | **0.88** | **212** | *e*P | **Pn** | **19 04 14.3** | **-2.1** |
| | baz=206 | | | | | | |
| **HSN** | **Hsinchu** | **0.91** | **285** | *e*S | **Sn** | **19 04 27.8** | **-1.5** |
| | baz=285 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.93** | **97** | P | **Pn** | **19 04 16.7** | **-0.2** |
| JYNG | | | | S | **Sn** | **19 04 29.9** | **+0.3** |
| **YOJ** | **Yonaguni jima** | **0.98** | **96** | P | **Pn** | **19 04 17.5** | **-0.1** |
| YOJ | | | | S | **Sn** | **19 04 30.9** | **0.0** |
| **NSY** | **Sanyi** | **1.08** | **262** | *e*P | **Pn** | **19 04 18.7** | **-0.3** |
| | baz=259 | | | | | | |
| NSY | | | | *e*S | **Sn** | **19 04 33.3** | **0.0** |
| | baz=259 | | | | | | |
| **TWQ1** | **Liyutan** | **1.08** | **258** | *e*P | **Pn** | **19 04 18.2** | **-0.7** |
| | baz=255 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **19 04 31.5** | **-1.8** |
| | baz=255 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.17** | **234** | *e*P | **Pn** | **19 04 21.0** | **+0.8** |
| | baz=230 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **19 04 36.8** | **+1.3** |
| | baz=230 | | | | | | |
| **TYC** | **Yuchr** | **1.19** | **236** | *e*P | **Pn** | **19 04 20.8** | **+0.5** |
| | baz=232 | | | | | | |
| TYC | | | | *e*S | **Sn** | **19 04 35.3** | **-0.4** |
| | baz=232 | | | | | | |
| **EHY** | **Hungye** | **1.20** | **208** | *e*P | **Pn** | **19 04 18.6** | **-1.9** |
| | baz=204 | | | | | | |
| EHY | | | | *e*S | **Sn** | **19 04 33.6** | **-2.4** |
| | baz=204 | | | | | | |
| **WNT** | **Mingjian** | **1.34** | **239** | *e*P | **Pn** | **19 04 22.1** | **-0.1** |
| | baz=236 | | | | | | |
| WNT | | | | *e*S | **Sn** | **19 04 39.8** | **+0.6** |
| | baz=236 | | | | | | |
| **TWF1** | **Yuli** | **1.35** | **206** | *e*P | **Pn** | **19 04 20.8** | **-1.7** |
| | baz=202 | | | | | | |
| **YUS** | **Yu-Shan** | **1.41** | **220** | *e*P | **Pn** | **19 04 23.7** | **+0.1** |
| | baz=216 | | | | | | |
| YUS | | | | *e*S | **Sn** | **19 04 41.9** | **+0.4** |
| | baz=216 | | | | | | |
| **ALS** | **Alishan** | **1.48** | **225** | *e*P | **Pn** | **19 04 25.3** | **+0.9** |
| | baz=221 | | | | | | |
| ALS | | | | *e*S | **Sn** | **19 04 44.1** | **+1.1** |
| | baz=221 | | | | | | |
| **CHN5** | **Tsauling** | **1.51** | **230** | *e*P | **Pn** | **19 04 24.9** | **+0.3** |
| | baz=227 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **19 04 42.6** | **-0.8** |
| | baz=227 | | | | | | |
| **WGK** | **Gukeng** | **1.54** | **235** | *e*P | **Pn** | **19 04 25.1** | **+0.2** |
| | baz=232 | | | | | | |
| WGK | | | | *e*S | **Sn** | **19 04 44.5** | **+0.6** |
| | baz=232 | | | | | | |
| **ELDTW** | **Lidau** | **1.61** | **212** | *e*P | **Pn** | **19 04 26.1** | **0.0** |
| | baz=208 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.65** | **98** | P | **Pn** | **19 04 26.0** | **-0.4** |
| IRIF | | | | S | **Sn** | **19 04 46.4** | **-0.3** |
| **CHN2** | **Minshiung** | **1.69** | **233** | *e*S | **Sn** | **19 04 49.2** | **+1.6** |
| | baz=230 | | | | | | |
| **CHN4** | **Tsaushan** | **1.73** | **226** | *e*P | **Pn** | **19 04 28.6** | **+1.1** |
| | baz=223 | | | | | | |
| CHN4 | | | | *e*S | **Sn** | **19 04 49.1** | **+0.5** |
| | baz=223 | | | | | | |
| **STYT** | **Tauyuan** | **1.77** | **218** | *e*P | **Pn** | **19 04 28.7** | **+0.5** |
| | baz=215 | | | | | | |
| STYT | | | | *e*S | **Sn** | **19 04 50.7** | **+1.0** |
| | baz=215 | | | | | | |
| **WTP** | **Ta-pu** | **1.79** | **223** | *e*P | **Pn** | **19 04 28.9** | **+0.4** |
| | baz=220 | | | | | | |
| WTP | | | | *e*S | **Sn** | **19 04 51.4** | **+1.2** |
| | baz=220 | | | | | | |
| **TWK** | **Hsinying** | **1.86** | **226** | *e*S | **Sn** | **19 04 54.4** | **+2.6** |
| | baz=223 | | | | | | |
| **CHN1** | **Nanshi** | **1.89** | **223** | *e*P | **Pn** | **19 04 29.1** | **-0.6** |
| | baz=221 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **19 04 53.0** | **+0.5** |
| | baz=221 | | | | | | |
| **TWG** | **Pinlang** | **1.92** | **205** | *e*P | **Pn** | **19 04 28.9** | **-1.2** |
| | baz=202 | | | | | | |
| TWG | | | | *e*S | **Sn** | **19 04 50.0** | **-3.2** |
| | baz=202 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.92** | **100** | P | **Pn** | **19 04 29.9** | **-0.1** |
| JKRS | | | | S | **Sn** | **19 04 53.3** | **+0.2** |
| **SGST** | **Jiashian** | **1.93** | **220** | *e*P | **Pn** | **19 04 30.8** | **+0.5** |
| | baz=217 | | | | | | |
| SGST | | | | *e*S | **Sn** | **19 04 54.9** | **+1.3** |
| | baz=217 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.02** | **95** | P | **Pn** | **19 04 31.0** | **-0.4** |
| JIJ | | | | S | **Sn** | **19 04 55.0** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **2.16** | **89** | P | **Pn** | **19 04 33.2** | **-0.1** |
| JISG | | | | S | **Sn** | **19 04 59.6** | **+0.6** |
| **SSD** | **Sandimen** | **2.18** | **214** | *e*P | **Pn** | **19 04 35.0** | **+1.4** |
| | baz=211 | | | | | | |
| **EAST** | **Anshuo** | **2.40** | **205** | *e*P | **Pn** | **19 04 38.0** | **+1.4** |
| | baz=202 | | | | | | |
| **JTJ** | **Tarama** | **2.52** | **88** | P | **Pn** | **19 04 38.7** | **+0.5** |

*NEIC* ***22*** *19:05:10.4±3.2, 20°.76S×169°.85E, h140km±24km, mb4.1/7, Error ellipse: s-maj=35.6km s-min=27.3km az=187.0*

*IDC* ***22*** *19:05:10.6±3.8, 20°.75S×169°.75E, h134km±38km, mb3.8/4, mb1 4.0/5, mb1mx3.5/37, mbtmp4.2/5, Error ellipse: s-maj=142.0km s-min=30.5km az=163.0*

*ISCJB* ***22*** *19:05:11.3±1.0, 20°.6S±0°.1×169°.7E±0°.1, h150km, mb4.0/8, Error ellipse: s-maj=17.4km s-min=15.4km az=150.5*

*AUST* ***22*** *19:05:21.2, 21°.00S×169°.47E, h200km*

**ISC 22 19:05:11.9±1.0, 20°.7S±0°.2×169°.7E±0°.1, h150km, n27, σ1$81/26, mb4.0/8, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **3.33** | **246** | P | **Pn** | **19 06 02.5** | **-1.0** |
| | 12nm,0.3s,baz=187,slow=0.6,SNR=176 | | | | | | |
| DZM | | | | S | **Sn** | **19 06 41.8** | **-1.7** |
| | 67nm,0.3s,baz=180,slow=20,SNR=30 | | | | | | |
| **DZM** | **Mont Dzumac** | **3.33** | **246** | *e*Pn | **Pn** | **19 06 02.3** | **-1.2** |
| DZM | | | | *e*Sn | Sn | 19 06 28.3 | -15 |
| **NFK** | **Norfolk Island** | **8.44** | **191** | P | Pn | 19 07 12.7 | +1.6 |
| | baz=8.2,SNR=6.8 | | | | | | |
| **EIDS** | **Eidsvold** | **17.76** | **251** | P | **Pn** | **19 09 12.5** | **+2.6** |
| | baz=17,SNR=4.0 | | | | | | |
| **EIDS** | **Eidsvold** | **17.76** | **251** | *e*P | **Pn** | **19 09 11.6** | **+1.7** |
| | 11nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **18.93** | **236** | P | **Pn** | **19 09 25.8** | **+2.0** |
| | baz=19,SNR=17 | | | | | | |
| **ARMA** | **Armidale** | **18.93** | **236** | *e*P | **Pn** | **19 09 25.6** | **+1.8** |
| | 11nm,0.8s | | | | | | |
| **RMQ** | **Roma** | **20.03** | **249** | P | Pn | 19 09 37.3 | +0.6 |
| | baz=20,SNR=7.9 | | | | | | |
| **CTA** | **Charters Tower** | **22.00** | **268** | P | **P** | **19 09 54.6** | **+0.4** |
| | 3.3nm,0.4s,baz=88,slow=11,SNR=11 | | | | | | |
| **CTAO** | **Charters Tower** | **22.00** | **268** | *e*P | **P** | **19 09 55.5** | **+1.2** |
| | 9.0nm,0.9s | | | | | | |
| **CNB** | **Canberra Magne** | **23.04** | **227** | P | **P** | **19 10 07.2** | **+3.0** |
| | baz=23,SNR=7.9 | | | | | | |
| **QLP** | **Quilpie** | **24.04** | **251** | P | **P** | **19 10 15.2** | **+2.0** |
| | baz=24,SNR=8.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **24.05** | **239** | P | **P** | **19 10 15.7** | **+2.4** |
| | baz=24,SNR=7.4 | | | | | | |
| **HTT** | **Hallett** | **30.08** | **239** | P | **P** | **19 11 04.1** | **-3.2** |
| | baz=30,SNR=4.3 | | | | | | |
| **WRAB** | **Tennant Creek** | **33.13** | **265** | *e*P | **P** | **19 11 33.8** | **-0.3** |
| | 2.4nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.14** | **265** | P | **P** | **19 11 34.2** | **0.0** |
| | 1.7nm,0.6s,baz=93,slow=8.5,SNR=58 | | | | | | |
| **ASAR** | **Alice Springs** | **33.23** | **258** | P | **P** | **19 11 35.8** | **+0.8** |
| | 6.0nm,0.7s,baz=96,slow=9.0,SNR=130 | | | | | | |
| **MTN** | **Manton Dam** | **37.69** | **276** | P | **P** | **19 12 13.7** | **+0.7** |
| | baz=38,SNR=4.0 | | | | | | |
| **WRKA** | **Warakurna** | **38.30** | **256** | P | **P** | **19 12 19.2** | **+1.0** |
| | baz=38,SNR=24 | | | | | | |
| **KNRA** | **Kununurra** | **39.15** | **270** | P | **P** | **19 12 27.6** | **+2.3** |
| | baz=39,SNR=3.4 | | | | | | |
| **MBWA** | **Marble Bar** | **46.52** | **260** | P | **P** | **19 13 25.5** | **+0.9** |
| **MEEK** | **Meekatharra** | **46.92** | **252** | P | **P** | **19 13 28.6** | **+1.0** |
| | baz=47,SNR=5.0 | | | | | | |
| **CASY** | **Casey** | **58.95** | **204** | *e*P | **P** | **19 14 52.1** | **-3.0** |
| | 5.2nm,1.1s | | | | | | |
| **QSPA** | **South Pole Qui** | **69.33** | **180** | P | **P** | **19 16 04.0** | **+1.0** |
| | 2.0nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **79.67** | **295** | P | **P** | **19 17 01.8** | **-1.5** |
| | 2.9nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.45** | **48** | P | **P** | **19 17 52.4** | **+0.2** |
| | 0.4nm,0.7s,baz=232,slow=8.4,SNR=4.5 | | | | | | |
| **GERES** | **GERESS Array B** | **146.01** | **331** | PKPbc | **PKPab** | **19 24 34.2** | **-0.7** |
| | 0.7nm,0.6s,baz=28,slow=3.2,SNR=7.9 | | | | | | |

*ISCJB* ***22*** *19:31:33.7±0.3, 20°.81S±0°.02×68°.49W±0°.03, h109km±3km, mb5.5/256, Error ellipse: s-maj=4.6km s-min=3.5km az=151.7*

*BJI* ***22*** *19:31:34.3, 20°.10S×68°.91W, h103km, mB5.5/31*

*GUC* ***22*** *19:31:35.9±0.5, 21°.01S×68°.81W, h136km±4km, ML5.8*

*IDC* ***22*** *19:31:36.9±0.3, 21°.04S×68°.47W, h127km±2km, mb5.2/22, mb1 5.2/26, mb1mx5.1/36, mbtmp5.6/26, MS4.6/11, Ms1 4.6/11, ms1mx4.4/19, Error ellipse: s-maj=10.7km s-min=5.9km az=100.0*

*NEIC* ***22*** *19:31:37.6±0.1, 20°.88S×68°.37W, mb5.4/195, MW5.8, Error ellipse: s-maj=5.5km s-min=3.6km az=67.0, Moment Tensor Solution. s52 Moment tensor: Scale 10¹⁷Nm; Mrr-2.99; Mθθ4.78; Mϕϕ-1.78; Mrθ1.84; Mθϕ-1.34; Mϕr-4.81; Best double couple: M₀6.80000×10¹⁷ NP1:ϕs319.00000°, δ74.00000°, λ-56.00000°. NP2:ϕs71.00000°, δ38.00000°, λ-153.00000°. Principal axes: T 6.1400, Plg21.0000°, Azm23.0000°; N 1.1200, Plg33.0000°, Azm128.0000°; P -7.2500, Plg49.0000°, Azm266.0000°;*

*NEIC Felt [V] at Alto Hospicio; [IV] at Calama, Huara, Iquique, Maria Elena, Pica, Pozo Almonte and Tocopilla; [III] at Camina and Pisagua; [II] at Arica and Cuya, Chile.*

*GCMT* ***22*** *19:31:37.7±0.1, 21°.07S×68°.79W, h143km, MW5.8/119, Moment Tensor Solution. s113, c234; s119, c290; Duration: 1s9 Moment tensor: Scale 10¹⁷Nm; Mrr-3.37±.06; Mθθ3.20±.07; Mϕϕ0.16±.09; Mrθ2.52±.05; Mθϕ-0.24±.07; Mϕr-5.12±.06; Best double couple: M₀6.34700×10¹⁷ NP1:ϕs322.00000°, δ78.00000°, λ-74.00000°. NP2:ϕs89.00000°, δ20.00000°, λ-141.00000°. Principal axes: T 5.3210, Plg31.0000°, Azm39.0000°; N 2.0470, Plg16.0000°, Azm138.0000°; P -7.3730, Plg55.0000°, Azm252.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*MOS* ***22*** *19:31:38.5±1.1, 20°.68S×68°.61W, h143km, mb5.4/50, MS4.6/10 Error ellipse: s-maj=11.1km s-min=5.8km az=108.1*

**ISC 22 19:31:37.4±0.2, 20°.97S±0°.03×68°.57W±0°.04, h131km±1km, h131km:pP-P, n1187, σ1$36/1455, mb5.4/253, 33C-38D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB01** | **IPOC Station P** | **0.86** | **265** | ↓*i*P | **Pn** | **19 31 56.8** | **-2.5** |
| PB01 | | | | *i*S | **Sn** | **19 32 12.7** | **-3.1** |
| PB01 | | | | AML | AML | 19 32 15.1 | |
| | comp=E,235μm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **1.03** | **217** | ↑*i*P | **Pn** | **19 31 59.0** | **-1.9** |
| PB09 | | | | *i*S | **Sn** | **19 32 16.5** | **-2.3** |
| PB09 | | | | AML | AML | 19 32 18.9 | |
| | comp=E,576μm,0.5s | | | | | | |
| **PB07** | **IPOC Station P** | **1.44** | **238** | ↑*i*P | **Pn** | **19 32 02.6** | **-2.5** |
| PB07 | | | | *i*S | **Sn** | **19 32 22.4** | **-3.8** |
| PB07 | | | | AML | AML | 19 32 26.8 | |
| | comp=E,94μm,0.3s | | | | | | |
| **PB11** | **IPOC Station P** | **1.58** | **320** | ↑*i*P | **Pn** | **19 32 04.6** | **-2.0** |
| PB11 | | | | *i*S | **Sn** | **19 32 26.7** | **-2.2** |
| **MACH** | **Maria Elena** | **1.64** | **222** | ↑*i*P | **Pn** | **19 32 05.0** | **-2.5** |
| MACH | | | | *i*S | **Sn** | **19 32 26.6** | **-3.8** |
| **LVC** | **Limon Verde** | **1.66** | **191** | P | **Pn** | **19 32 06.3** | **-1.4** |
| | comp=E,109μm,0.3s,baz=12,slow=8.7 | | | | | | |
| LVC | | | | S | **Sn** | **19 32 28.1** | **-2.8** |
| | comp=E,149μm,0.3s,baz=290,slow=22,SNR=54 | | | | | | |
| **LVC** | **Limon Verde** | **1.66** | **191** | *e*Pn | **Pn** | **19 32 05.8** | **-1.9** |
| LVC | | | | *e*Sn | **Sn** | **19 32 28.9** | **-2.0** |
| **PB06** | **IPOC Station P** | **1.96** | **208** | ↑*i*P | **Pn** | **19 32 08.8** | **-2.4** |
| PB06 | | | | *i*S | **Sn** | **19 32 33.9** | **-3.0** |
| PB06 | | | | AML | AML | 19 32 36.4 | |
| | comp=E,85μm,0.4s | | | | | | |
| **PB04** | **IPOC Station P** | **2.00** | **227** | ↑*i*P | **Pn** | **19 32 08.9** | **-2.7** |
| PB04 | | | | *i*S | **Sn** | **19 32 33.8** | **-4.0** |
| PB04 | | | | AML | AML | 19 32 36.6 | |
| | comp=E,82μm,0.7s | | | | | | |
| **MNMC** | **Minimini** | **2.07** | **332** | ↑*i*P | **Pn** | **19 32 11.3** | **-1.3** |
| MNMC | | | | *i*S | **Sn** | **19 32 38.8** | **-0.8** |
| **PB13** | **IPOC Station P** | **2.77** | **341** | ↑*i*P | **Pn** | **19 32 21.5** | **-0.2** |
| **ARCH** | **Arica** | **2.96** | **326** | *e*P | **Pn** | **19 32 21.4** | **-2.2** |
| ARCH | | | | *e*S | **Sn** | **19 32 56.1** | **-3.0** |
| **LPAZ** | **La Paz** | **4.68** | **5** | P | **Pn** | **19 32 46.0** | **-0.9** |
| | comp=E,412nm,0.3s,baz=197,slow=5.7,SNR=1255 | | | | | | |
| LPAZ | | | | S | Sn | 19 33 30.6 | -11 |
| | comp=E,15nm,0.3s,baz=183,slow=7.1,SNR=4.1 | | | | | | |
| LPAZ | | | | LR | LR | 19 34 30.9 | |
| | comp=E,13μm,18.7s,baz=190,slow=37 | | | | | | |
| **LPAZ** | **La Paz** | **4.68** | **5** | P | **Pn** | **19 32 46.0** | **-0.9** |
| LPAZ | | | | S | Sn | 19 33 30.6 | -11 |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,412nm,0.3s | | | | | | |
| LPAZ | | | | smax | smax | | |
| | com

LPA SCS **ScS** 19 47 07.0 -0.2
**TRQA Tornquist** 17.96 163 *e*P **P** 19 35 34.8 -2.7
comp=N,277nm,1.0s
TRQA *e*S **S** 19 38 51.3 -5.8
**PLCA Paso Flores** 19.77 184 *e*P **P** 19 35 56.7 -0.6
PLCA pmax pmax
comp=Z,310nm,0.8s
**PLCA Paso Flores** 19.77 184 *e*P **P** 19 35 56.7 -0.6
comp=Z,313nm,0.8s
**BDFB Brasilia** 20.22 78 P **P** 19 36 00.0 -2.4
comp=Z,101nm,0.5s,baz=260,slow=12,SNR=78
BDFB LR LR 19 44 49.0
comp=Z,5µm,19.2s,baz=259,slow=39
**BDFB Brasilia** 20.22 78 P **P** 19 36 00.0 -2.4
BDFB pmax pmax
comp=Z,101nm,0.5s
BDFB MLR MLR
comp=Z,5µm,19.2s
**PTGA Pitinga** 21.80 24 P **P** 19 36 17.3 -2.0
comp=Z,213nm,0.4s,baz=202,slow=15,SNR=507
**OTAV Otavalo** 23.19 334 *e*P **P** 19 36 34.0 +0.7
comp=Z,476nm,1.2s
OTAV *e*PcP **PcP** 19 40 17.4 -0.3
OTAV *e*S **S** 19 40 36.1 +0.6
**ROSC El Rosal** 26.28 347 P **P** 19 37 00.9 -0.4
comp=Z,51nm,0.7s,baz=127,slow=4.1,SNR=22
**ROSC El Rosal** 26.28 347 *e*P **P** 19 37 01.8 +0.5
**SDV Santo Domingo** 29.74 356⇑*i*P **P** 19 37 29.9 -2.0
comp=Z,86nm,0.8s
**EFI East Falkland** 31.72 168 *e*P **P** 19 37 47.9 -0.7
EFI *e* 19 40 37.3
EFI pmax pmax
comp=Z,124nm,0.8s
**EFI East Falkland** 31.72 168 P **P** 19 37 48.0 -0.7
comp=Z,866nm,0.7s,SNR=7.2
**EFI East Falkland** 31.72 168 *e*P **P** 19 37 47.9 -0.7
comp=Z,124nm,0.8s
EFI *e*PcP **PcP** 19 40 37.3 +0.2
**BCIP Isla Barro Col** 31.93 339 *e*P **P** 19 37 51.9 +1.1
comp=Z,44nm,0.9s
**GRGR Grenville** 33.59 12 *e*P **P** 19 38 04.4 -1.0
**GRGR Grenville** 33.59 12 *e*P **P** 19 38 04.3 -1.0
comp=Z,386nm,0.9s
**USHA Ushuaia** 33.81 180 P **P** 19 38 05.4 -1.3
comp=Z,72nm,0.8s,baz=360,slow=4.3,SNR=25
**SVV Soufriere Volc** 34.83 13 *e* **P** 19 38 15.5 -0.5
**JTS JuntasAbangare** 34.99 331 *e*P **P** 19 38 19.1 +1.7
JTS pmax pmax
comp=Z,200nm,1.7s
**JTS JuntasAbangare** 34.99 331 P **P** 19 38 19.5 +2.0
comp=Z,297nm,1.0s,SNR=5.2
**JTS JuntasAbangare** 34.99 331 *e*P **P** 19 38 19.1 +1.7
comp=Z,200nm,1.7s
**RCBR Riachuelo** 35.06 69 P **P** 19 38 16.6 -1.5
comp=Z,216nm,0.7s,baz=239,slow=8.5,SNR=84
**RCBR Riachuelo** 35.06 69⇑*e*P **P** 19 38 17.1 -1.0
comp=Z,230nm,0.8s
**ZAM Aeronautique** 36.09 12 *e*P **P** 19 38 25.1 -1.6
**FDF Fort de France** 36.22 12 *e*P **P** 19 38 25.7 -2.2
FDF pmax pmax
comp=Z,330nm,0.5s
**FDF Fort de France** 36.22 12 *e*P **P** 19 38 25.8 -2.2
**FDF Fort de France** 36.22 12 *e*P **P** 19 38 26.1 -1.8
**FDF Fort de France** 36.22 12 *e*P **P** 19 38 25.5 -2.4
comp=Z,332nm,0.5s
**BVM Bellevue** 36.24 12 *e*P **P** 19 38 27.1 -1.0
**GBMF Grand Be** 36.28 12 *e*P **P** 19 38 27.2 -1.3
**BAMF Morne Balai** 36.30 12 *e*P **P** 19 38 27.4 -1.3
**BBL Barber's Block** 36.94 11 *e*P P 19 38 30.4 -3.6
**RPN Rapa Nui** 37.60 252 P **P** 19 38 40.1 +0.5
comp=Z,56nm,0.6s,baz=112,slow=5.1,SNR=6.9
**RPN Rapa Nui** 37.60 252 P **P** 19 38 40.1 +0.5
RPN pmax pmax
comp=Z,56nm,0.6s
**CRPR Cabo Rojo, PR** 38.76 2⇑*i*P **P** 19 38 46.9 -2.4
comp=Z,439nm,0.7s
CRPR *e*pP **pP** 19 39 16.9 -1.4
**OBIP Obispado Ponce** 38.82 3⇑*i*P **P** 19 38 47.2 -2.5
comp=Z,275nm,0.6s
OBIP *e*pP **pP** 19 39 18.8 +0.1
OBIP *e*sP **sP** 19 39 35.6 +2.0
**CELP Cerrillos** 38.85 3 *e*P **P** 19 38 47.2 -2.8
CELP *e*pP **pP** 19 39 18.8 -0.3
CELP *e*sP **sP** 19 39 35.0 +1.1
CELP *e*PP **PP** 19 40 20.4 -1.4
CELP *e*S **ScP** 19 44 35.1 +0.4
**SJG San Juan** 38.91 4 P **P** 19 38 48.3 -2.2
comp=Z,316nm,0.6s,baz=167,slow=4.0,SNR=117
**SJG San Juan** 38.91 4 P **P** 19 38 48.3 -2.2
SJG pmax pmax
comp=Z,317nm,0.6s
**SJG San Juan** 38.91 4 *e*P **P** 19 38 47.6 -2.9
comp=Z,330nm,0.6s
**LSP Las Mesas** 38.93 2 *e*P **P** 19 38 48.3 -2.4
LSP *e*pP **pP** 19 39 21.0 +1.2
LSP *e*sP **sP** 19 39 36.8 +2.2
LSP *e*PP **PP** 19 40 21.4 -1.3
**HUMP Col San Antoni** 38.96 4 *e*P P 19 38 47.6 -3.3
comp=Z,50nm,0.8s
**ANWB Willy Bob** 38.97 10 *e*P P 19 38 46.8 -4.2
**ANWB Willy Bob** 38.97 10 *e*P P 19 38 46.2 -4.8
comp=Z,197nm,0.4s
**AOPR Arecibo Observ** 39.12 3 *e*P **P** 19 38 49.6 -2.6
comp=Z,146nm,0.7s
**SMRT St. Maarten** 39.15 8 *e*P P 19 38 48.7 -3.8
comp=Z,96nm,0.6s
**BANI BANI** 39.16 357 *e*P **P** 19 38 52.1 -0.6
**AGPR Aguadilla, PR** 39.22 2 *e*P **P** 19 38 50.0 -3.0
comp=Z,128nm,0.8s
**STVI Saint Thomas** 39.24 5 *e*P **P** 19 38 50.9 -2.3
comp=Z,51nm,0.8s
**TGUH Tegucigalpa,Un** 39.36 331 *e*P **P** 19 38 54.3 +0.1
comp=Z,127nm,1.1s
**SDDR Presa de Saban** 39.80 356 *e*P **P** 19 38 57.9 0.0
comp=Z,36nm,0.8s
**SMN1 Samana, DR** 39.92 359 *e*P **P** 19 38 56.1 -2.8
**GTBY Guantanamo Bay** 41.15 351 *e*P **P** 19 39 06.7 -2.2
comp=Z,51nm,0.8s
GTBY *e*pP **pP** 19 39 37.9 -0.3
**HOPE Hope Point** 41.19 152 P **P** 19 39 10.6 +1.7
comp=Z,1µm,0.9s,SNR=6.5
**HOPE Hope Point** 41.19 152 *e*P **P** 19 39 10.0 +1.1
comp=Z,202nm,0.9s
**GRTK Grand Turk** 42.30 356 *e*P **P** 19 39 15.7 -2.5
comp=Z,364nm,1.4s
**PMSA Palmer Station** 43.88 177 *e*P **P** 19 39 30.9 +0.4
comp=Z,840nm,2.2s
**DWPF Disney** 50.35 345 *e*P **P** 19 40 20.8 -0.3
comp=Z,621nm,0.7s
DWPF *e*pP **pP** 19 40 49.6 -1.8
DWPF *e*sP **sP** 19 41 04.4 -1.6
**TRIS Tristan da Cun** 51.04 121 *e*P **P** 19 40 26.5 +0.2
comp=Z,254nm,0.8s
**BBSR BB Station** 53.17 4 *e*P **P** 19 40 40.3 -1.6
comp=Z,726nm,2.7s
BBSR *e*pP **pP** 19 41 11.6 -1.0
**ASCN Ascension** 53.83 84 *e*P **P** 19 40 47.7 +0.5
comp=Z,190nm,1.2s
**TIGA Tifton** 54.07 344 P **P** 19 40 48.0 -0.5
baz=54
**TIGA Tifton** 54.07 344 *e*P **P** 19 40 47.7 -0.8
TIGA *e*pP **pP** 19 41 19.5 +0.2
**BRAL Brewton** 54.65 341 *e*P **P** 19 40 53.8 +1.0
comp=Z,183nm,0.8s
**RGRS Roger Stewart** 54.72 348 *e*P **P** 19 40 52.9 -0.3
**NHSC New Hope** 54.91 348 *e*P **P** 19 40 52.8 -1.7
comp=Z,211nm,0.8s
**GOGA Godfrey** 55.92 345 *e*P **P** 19 41 01.1 -0.7
GOGA pmax pmax
comp=Z,56nm,1.4s
**GOGA Godfrey** 55.92 345 *e*P **P** 19 41 00.5 -1.3
comp=Z,56nm,1.4s
**034A Hebbronville** 55.95 327 P **P** 19 41 02.6 +0.5
baz=56
**738A Farr-Stevens R** 55.99 331 P **P** 19 41 02.1 -0.3
baz=56
**PTCN Pitcairn Islan** 56.36 253 *e*P **P** 19 41 08.1 +2.9
comp=Z,352nm,0.8s
**LRAL Lakeview Retre** 56.52 341 *e*P **P** 19 41 04.7 -1.3
comp=Z,34nm,0.9s
**835A Beeville** 56.54 329 P **P** 19 41 06.5 +0.2
baz=57
**933A Laredo** 56.70 327 P **P** 19 41 07.2 -0.3
baz=57
**736A Circle Diamond** 56.74 330 P **P** 19 41 07.9 +0.2
baz=57

**834A Tilden** 56.76 328 P **P** 19 41 07.8 -0.1
baz=57
**637A Eagle Lake** 56.81 331 P **P** 19 41 08.4 +0.2
baz=57
**VBMS Vicksburg** 56.91 338 P **P** 19 41 08.6 -0.2
baz=57
**440A Kirbyville** 56.91 334 P **P** 19 41 09.3 +0.4
baz=57
**HKT Hockley** 57.03 332 *e*P **P** 19 41 10.2 +0.6
HKT pmax pmax
comp=Z,39nm,1.1s
**HKT Hockley** 57.03 332 *e*P **P** 19 41 10.0 +0.4
comp=Z,38nm,1.1s
**KMSC Kings Mountain** 57.11 348 P **P** 19 41 10.5 +0.3
baz=57
**KMSC Kings Mountain** 57.11 348 *e*P **P** 19 41 09.5 -0.6
comp=Z,54nm,0.8s
KMSC *e*pP **pP** 19 41 41.5 +0.3
**538A Harpers Horsep** 57.11 332 P **P** 19 41 10.9 +0.6
baz=57
**636A Smothers Creek** 57.18 330 P **P** 19 41 11.0 +0.2
baz=57
**439A Center Grove,** 57.29 333 P **P** 19 41 12.2 +0.6
baz=58
**833A Chaparral WMA,** 57.34 328 P **P** 19 41 11.7 -0.2
baz=58
**537A Green Hill Far** 57.35 331 P **P** 19 41 12.5 +0.5
baz=58
**734A La Parita Cree** 57.36 329 P **P** 19 41 11.9 -0.2
baz=58
**635A Leesville** 57.44 330 P **P** 19 41 12.2 -0.4
baz=58
**340A Bronson** 57.47 334 P **P** 19 41 13.0 +0.2
baz=58
**438A Sam Houston St** 57.56 333 P **P** 19 41 13.3 -0.1
baz=58
**832A Faith Ranch, C** 57.60 327 P **P** 19 41 13.4 -0.4
baz=58
**733A Divot King Ran** 57.62 328 P **P** 19 41 13.6 -0.3
baz=58
**535A Dale** 57.88 330 P **P** 19 41 15.9 +0.2
baz=58
**437A Phantom Ranch,** 57.91 332 P **P** 19 41 15.8 -0.1
baz=58
**732A Laxson Ranch,** 57.97 327 P **P** 19 41 15.9 -0.5
baz=58
**338A Crockett** 58.01 333 P **P** 19 41 16.7 +0.1
baz=58
**NATX Nacogdoches** 58.09 334 P **P** 19 41 17.1 0.0
baz=58
**NATX Nacogdoches** 58.09 334 *e*P **P** 19 41 16.8 -0.3
comp=Z,39nm,0.8s
NATX *e*pP **pP** 19 41 49.2 +1.0
**TKL Tuckaleechee C** 58.13 345 *e*P **P** 19 41 16.3 -1.1
**TKL Tuckaleechee C** 58.13 345 *e*P **P** 19 41 16.3 -1.1
**436A Wall Ranch, Ga** 58.16 331 P **P** 19 41 17.5 -0.1
baz=58
**633A Saathoff Ranch** 58.17 328 P **P** 19 41 17.4 -0.3
baz=58
**337A Centerville** 58.22 332 P **P** 19 41 18.6 +0.5
baz=58
**239A Gary** 58.24 334 P **P** 19 41 18.1 -0.1
baz=58
**SWET Sewanee** 58.26 343 *e*P **P** 19 41 17.2 -1.1
comp=Z,122nm,0.7s
SWET *e*pP **pP** 19 41 49.2 -0.2
SWET *e*sP **sP** 19 42 04.1 +0.4
**534A Blanco** 58.30 329 P **P** 19 41 18.2 -0.5
baz=59
**238A Jacksonville** 58.49 334 P **P** 19 41 19.7 -0.2
baz=59
**632A Uvalde** 58.51 328 P **P** 19 41 19.8 -0.3
baz=59
**435B Jarrell** 58.52 331 P **P** 19 41 19.9 -0.3
baz=59
**533A Kerrville** 58.61 329 P **P** 19 41 20.5 -0.3
baz=59
**OXF Oxford** 58.63 340 *e*P **P** 19 41 20.3 -0.5
OXF pmax pmax
comp=Z,140nm,1.0s
**OXF Oxford** 58.63 340 *e*P **P** 19 41 19.6 -1.2
comp=Z,143nm,0.9s
**336A Riesel** 58.70 332 P **P** 19 41 21.1 -0.2
baz=59
**237A Washetta, Mont** 58.78 333 P **P** 19 41 22.1 +0.2
baz=59
**139A Bunkhouse Ranc** 58.78 335 P **P** 19 41 22.1 +0.2
baz=59
**631A Perdido Creek** 58.83 327 P **P** 19 41 21.9 -0.5
baz=59
**URVA University of** 58.84 352 *e*P **P** 19 41 21.9 -0.3
**434A Burnet** 58.87 330 P **P** 19 41 22.0 -0.5
baz=59
**335A Moody** 58.87 331 P **P** 19 41 22.1 -0.5
baz=59
**TZTN Tazewell** 58.93 346 *e*P **P** 19 41 21.9 -0.9
comp=Z,35nm,0.8s
**BLA Blacksburg** 58.94 349 *e*P **P** 19 41 23.1 +0.2
BLA pmax pmax
comp=Z,220nm,1.7s
**BLA Blacksburg** 58.94 349 *e*P **P** 19 41 23.1 +0.2
comp=Z,222nm,1.7s
**138A Matatall Enter** 59.05 334 P **P** 19 41 23.7 -0.1
baz=59
**532A Rocksprings** 59.08 328 P **P** 19 41 23.8 -0.2
baz=59
**236A Katherine and** 59.09 332 P **P** 19 41 24.0 -0.1
baz=59
**EBZ Ebenezer Churc** 59.19 340 *e*P **P** 19 41 25.7 +1.0
**Z39A Irene McRaven,** 59.20 335 P **P** 19 41 24.7 0.0
baz=60
**433A Art** 59.20 329 P **P** 19 41 24.6 -0.3
baz=60
**137A Heron Place, G** 59.27 333 P **P** 19 41 25.4 +0.1
baz=60
**334A Lometa** 59.29 330 P **P** 19 41 24.8 -0.6
baz=60
**JCT Junction City** 59.32 329 *e*P **P** 19 41 25.6 -0.1
JCT pmax pmax
comp=Z,37nm,1.0s
**JCT Junction City** 59.32 329 P **P** 19 41 25.5 -0.2
baz=60,SNR=12
**531A Rocksprings** 59.42 328 P **P** 19 41 26.1 -0.4
baz=60
**CBN Corbin** 59.44 352 *e*P **P** 19 41 26.1 -0.2
**SHEL Horse Pasture** 59.48 97 *e*P **P** 19 41 29.3 +2.1
SHEL pmax pmax
comp=Z,210nm,0.8s
**SHEL Horse Pasture** 59.48 97 *e*P **P** 19 41 29.3 +2.1
comp=Z,211nm,0.8s
**WHTX Lake Whitney** 59.49 332 P **P** 19 41 26.2 -0.6
baz=60
**WHTX Lake Whitney** 59.49 332 *e*P **P** 19 41 25.9 -0.9
comp=Z,48nm,0.9s
**136A Ennis** 59.50 333 P **P** 19 41 26.4 -0.4
baz=60
**Z38A Mt. Pleasant** 59.52 334 P **P** 19 41 26.8 -0.1
baz=60
**333A Richland Sprin** 59.63 330 P **P** 19 41 27.0 -0.8
baz=60
**432A Menard** 59.64 329 P **P** 19 41 27.0 -0.9
baz=60
**WVT Waverly** 59.65 342 *e*P **P** 19 41 25.7 -2.1
WVT *e**PP **pP** 19 41 58.1 -0.9
WVT pmax pmax
comp=Z,101nm,0.7s
**WVT Waverly** 59.65 342 *e*P **P** 19 41 25.7 -2.1
comp=Z,102nm,0.7s
WVT *e*pP **pP** 19 41 58.1 -0.9
**Z37A Pogue Cattle C** 59.74 334 P **P** 19 41 28.1 -0.4
baz=60
**Y39A Lockesburg** 59.77 336 P **P** 19 41 28.3 -0.4
baz=60
**234A Clairette** 59.80 331 P **P** 19 41 28.5 -0.5
baz=60
**530A J-C Ranch, Com** 59.81 327 P **P** 19 41 28.5 -0.6
baz=60
**UALR University of** 59.87 337 *e*P **P** 19 41 28.3 -1.0
comp=Z,89nm,1.1s
**431A Sonora** 59.88 328 P **P** 19 41 28.5 -1.1
baz=60
**SLBS Sierra La Lagu** 59.95 316 *e*P **P** 19 41 31.6 +1.4
comp=Z,73nm,1.4s
**135A Vickery Place,** 59.95 332 P **P** 19 41 29.5 -0.4
baz=60
**Y38A Idabel** 60.02 335 P **P** 19 41 29.8 -0.5
baz=60

**332A Millersview** 60.03 329 P **P** 19 41 30.1 -0.5
baz=60
**MIAR Mount Ida** 60.11 336 *e*P **P** 19 41 30.0 -1.0
MIAR pmax pmax
comp=Z,65nm,0.8s
**MIAR Mount Ida** 60.11 336 P **P** 19 41 29.9 -1.0
baz=60,SNR=49
**MIAR Mount Ida** 60.11 336 *e*P **P** 19 41 30.0 -1.0
comp=Z,65nm,0.8s
MIAR ⇑*e* 20 11 03.5
**Z36A Blue Ridge** 60.14 333 P **P** 19 41 30.8 -0.4
baz=60
**UTMT University of** 60.15 341 P **P** 19 41 32.2 +1.0
comp=Z,107nm,0.4s
**GNAR Gosnell** 60.16 340 P **P** 19 41 30.5 -0.8
**GLAT Glass** 60.21 341 *e*P **P** 19 41 31.4 -0.2
**529A Stev Forest Ra** 60.24 326 P **P** 19 41 31.7 -0.4
baz=60
**134A White-Moore Ra** 60.26 331 P **P** 19 41 31.5 -0.6
baz=60
**430A Baggett Ranch,** 60.27 328 P **P** 19 41 31.4 -0.8
baz=60
**331A San Angelo** 60.30 329 P **P** 19 41 31.9 -0.6
baz=61
**TXAR Lajitas Array** 60.38 325 P **P** 19 41 32.7 -0.4
comp=Z,4.9nm,0.8s,baz=147,slow=8.2,SNR=47
TXAR pP **pP** 19 42 03.6 -0.8
comp=Z,7.0nm,0.8s,baz=157,slow=7.7,SNR=5.3
TXAR PKP2bc 20 10 58.3
comp=Z,1.0nm,1.0s,baz=318,slow=1.7,SNR=5.1
**TXAR Lajitas Array** 60.38 325 P **P** 19 41 32.7 -0.4
TXAR *PP **pP** 19 42 03.6 -0.8
TXAR pmax pmax
comp=Z,5.0nm,0.8s
TXAR pmax pmax
comp=Z,7.0nm,0.9s
TXAR pmax pmax
comp=Z,1.0nm,1.0s
**TX31 Lajitas Ar. Si** 60.38 325 *e*P **P** 19 41 32.0 -1.1
**232A Coleman** 60.41 330 P **P** 19 41 32.5 -0.7
baz=61
**Y37A Hugo** 60.42 334 P **P** 19 41 33.2 +0.1
baz=61
**VNA3 Neumayer Olymp** 60.47 161 P **P** 19 41 33.3 +0.2
**429A Davenport Ranc** 60.48 327 P **P** 19 41 33.4 -0.2
baz=61
**Z35A Perchaven, San** 60.54 333 P **P** 19 41 33.5 -0.4
baz=61
**SDMD Soldier's Deli** 60.56 353 *e*PP PP 19 43 50.3 +1.1
**Y36A Durant** 60.62 334 P **P** 19 41 34.1 -0.4
baz=61
**133A Hamilton Ranch** 60.67 331 P **P** 19 41 34.5 -0.3
baz=61
**VNA1 Neumayer--Stat** 60.67 161 P **P** 19 41 34.9 +0.5
**X38A Whitesboro** 60.70 335 P **P** 19 41 34.9 -0.1
baz=61
**PARMO Parma** 60.72 341 *e*P **P** 19 41 34.9 -0.2
**330A Mertzon** 60.75 328 P **P** 19 41 34.9 -0.6
baz=61
**231A Bronte** 60.76 329 P **P** 19 41 34.8 -0.8
baz=61
**X37A Clayton** 60.85 335 P **P** 19 41 35.5 -0.5
baz=61
**Z34A Collier Ranch,** 60.86 332 P **P** 19 41 35.7 -0.4
baz=61
**W38A Poteau** 60.94 336 P **P** 19 41 36.7 +0.2
baz=61
**Y35A Marietta** 60.94 333 P **P** 19 41 36.0 -0.6
baz=61
**ABTX Abilene, Hawle** 61.02 330 P **P** 19 41 36.7 -0.5
baz=61
**ABTX Abilene, Hawle** 61.02 330 *e*P **P** 19 41 36.6 -0.5
comp=Z,78nm,1.1s
**PBMO Poplar Bluff** 61.04 340 *e*P **P** 19 41 36.0 -1.2
comp=Z,88nm,0.7s
**VNA2 Neumayer--Watz** 61.04 161 P **P** 19 41 37.1 +0.2
baz=293,slow=7.3
**MVL Millersville** 61.09 353 *e*P **P** 19 41 36.0 -1.4
**RKT Rikitea** 61.10 255 *e*P **P** 19 41 39.4 +1.4
comp=Z,56nm,0.8s
RKT *e*S **S** 19 49 50.5 +3.4
comp=Z,1µm,33.8s
**RKT Rikitea** 61.10 255 *e*LR LR 19 59 57.7
comp=Z,2µm,39.0s
**230A Sterling City** 61.11 328 P **P** 19 41 37.4 -0.6
baz=61
**Z33A Whitaker Ranch** 61.17 331 P **P** 19 41 37.7 -0.6
baz=61
**WCI Wyandotte Cave** 61.20 344 *e*P **P** 19 41 36.6 -1.7
WCI pmax pmax
comp=Z,257nm,0.6s
**WCI Wyandotte Cave** 61.20 344 *e*P **P** 19 41 36.5 -1.7
comp=Z,257nm,0.6s
**329A Wagon Wheel Ra** 61.22 328 P **P** 19 41 37.7 -1.0
baz=62
**MCWV Mont Chateau** 61.23 350 *e*P **P** 19 41 38.6 +0.2
comp=Z,48nm,0.7s
**X36A Centrahoma** 61.23 334 P **P** 19 41 37.8 -0.7
baz=62
**Y34A Reagan Ranch,** 61.29 332 P **P** 19 41 38.3 -0.8
baz=62
**USIN University of** 61.31 343 *e*P **P** 19 41 37.8 -1.2
comp=Z,146nm,1.4s
**X35A Drake** 61.34 333 P **P** 19 41 38.3 -1.0
baz=62
**W37A Quinton** 61.35 335 P **P** 19 41 39.0 -0.4
baz=62
**131A Roby** 61.41 330 P **P** 19 41 39.5 -0.4
baz=62
**Z32A Haskell** 61.51 331 P **P** 19 41 39.8 -0.7
baz=62
**229A Bryant Ranch,** 61.52 328 P **P** 19 41 39.9 -0.8
baz=62
**SIUC Southern Illin** 61.52 341 *e*P **P** 19 41 39.6 -0.8
comp=Z,133nm,0.8s
SIUC *e*pP **pP** 19 42 10.7 -1.3
**V38A Canehill** 61.59 336 P **P** 19 41 40.6 -0.5
baz=62
**130A Snyder** 61.62 329 P **P** 19 41 40.7 -0.6
baz=62
**W36A Wetumka** 61.67 334 P **P** 19 41 40.7 -0.8
baz=62
**Y33A Hilltop Ranch,** 61.72 332 P **P** 19 41 41.3 -0.5
baz=62
**Z31A Sharp Cattle R** 61.83 330 P **P** 19 41 42.1 -0.6
baz=62
**X34A Smith Ranch, M** 61.87 333 P **P** 19 41 42.3 -0.6
baz=62
**V37A Hulbert** 61.89 336 P **P** 19 41 42.7 -0.3
baz=62
**SSPA Standing Stone** 61.90 352 *e*P **P** 19 41 42.0 -0.9
comp=Z,212nm,1.3s
**W35A Tecumseh** 61.95 334 P **P** 19 41 42.3 -1.1
baz=62
**228A UT Block 9, Go** 62.03 327 P **P** 19 41 43.0 -1.1
baz=62
**Y32A R-V Farms, Ver** 62.08 331 P **P** 19 41 43.6 -0.7
baz=62
**129A Stewart Farms,** 62.08 328 P **P** 19 41 43.7 -0.8
baz=62
**U38A Gravette** 62.10 337 P **P** 19 41 43.4 -0.9
baz=62
**X33A Lawton** 62.11 332 P **P** 19 41 43.4 -1.1
baz=62
**V36A Jenks** 62.12 335 P **P** 19 41 44.1 -0.4
baz=62
**BLO Bloomington** 62.15 344 *e*P **P** 19 41 43.1 -1.5
BLO *PP **pP** 19 42 14.2 -1.9
BLO pmax pmax
comp=Z,88nm,0.6s
**BLO Bloomington** 62.15 344 *e*P **P** 19 41 43.1 -1.5
comp=Z,88nm,0.6s
BLO *e*pP **pP** 19 42 14.2 -1.9
**OLIL Olney** 62.15 343 *e*P **P** 19 41 43.1 -1.6
comp=Z,70nm,0.9s
OLIL *e*pP **pP** 19 42 13.8 -2.4
**TUL1 Tulsa** 62.17 335 P **P** 19 41 44.3 -0.6
baz=62
**TUL1 Tulsa** 62.17 335 *e*P **P** 19 41 44.6 -0.3
comp=Z,71nm,1.0s
**Z30A Sanderson Ranc** 62.26 329 P **P** 19 41 44.9 -0.7
baz=62
**U37A Salina** 62.34 336 P **P** 19 41 45.7 -0.3
baz=63
**ACSO Alum Creek Sta** 62.35 348 *e*P **P** 19 41 44.8 -1.2
ACSO *e*pP **pP** 19 42 16.6 -0.9
ACSO *e*sP **sP** 19 42 31.9 +0.2

X32A Elmer 62.36 332 P P 19 41 45.4 -0.8
baz=63
128A Castleberry Fa 62.38 328 P P 19 41 45.8 -0.7
baz=63
W34A Bridge Creek, 62.39 333 P P 19 41 45.1 -1.2
baz=63
W34A Bridge Creek, 62.39 333 eP P 19 41 47.9 +1.5
comp=Z,32nm,0.8s
WMOK Wichita Mounta 62.40 332 eP P 19 41 45.6 -0.9
WMOK pmax pmax
comp=Z,26nm,1.0s
WMOK Wichita Mounta 62.40 332 eP P 19 41 45.5 -0.9
comp=Z,26nm,1.0s
Y31A Rekieta Farm, 62.41 330 P P 19 41 45.6 -0.9
baz=63
V35A Meyer Ranch, C 62.46 334 P P 19 41 46.0 -0.8
baz=63
CCM Cathedral Cave 62.46 340 eP P 19 41 45.8 -0.9
CCM Cathedral Cave 62.46 340 eP P 19 41 45.8 -0.9
comp=Z,100nm,0.8s
Z29A Hungry Hill Ra 62.52 329 P P 19 41 46.3 -1.0
baz=63
KSPA Keystone Colle 62.57 354 eP P 19 41 47.6 +0.3
comp=Z,137nm,1.6s
U36A Oologah 62.57 335 P P 19 41 46.9 -0.5
baz=63
W33A Caddo, Fort Co 62.62 333 P P 19 41 47.5 -0.4
baz=63
BRYW Bryant College 62.63 358 eP P 19 41 47.9 +0.1
comp=Z,180nm,1.4s
Y30A Stafford Cattl 62.64 330 P P 19 41 47.4 -0.7
baz=63
SNAA Sanae 62.67 161 P P 19 41 47.3 -0.5
SNAA Sanae 62.67 161 P P 19 41 47.7 -0.1
comp=Z,36nm,0.8s,baz=292,slow=6.1,SNR=275
SNAA Sanae 62.67 161 P P 19 41 47.7 -0.1
SNAA pmax pmax
comp=Z,36nm,0.8s
SNAA Sanae 62.67 161 eP P 19 41 46.6 -1.3
comp=Z,47nm,0.9s
SNAA epP pP 19 42 21.0 +1.6
V34A Guthrie 62.80 334 P P 19 41 48.1 -1.0
baz=63
V34A Guthrie 62.80 334 eP P 19 41 47.9 -1.2
comp=Z,74nm,1.0s
X31A McDonald Ranch 62.84 331 P P 19 41 48.6 -0.8
baz=63
Z28A Tucker Farm, M 62.87 328 P P 19 41 48.8 -0.9
baz=63
T37A Cheneyville 18 62.90 337 P P 19 41 48.9 -0.8
baz=63
U35A Pawnee 62.94 335 P P 19 41 49.2 -0.8
baz=63
Y29A Porterfield Fa 62.99 329 P P 19 41 49.3 -1.1
baz=63
X30A Coker Ranch, T 63.10 330 P P 19 41 50.1 -1.1
baz=63
V33A Lossen Ranch, 63.11 333 P P 19 41 50.1 -1.0
baz=63
MNTX Cornudas Mount 63.15 325 P P 19 41 50.3 -1.1
baz=63,SNR=30
MNTX Cornudas Mount 63.15 325 eP P 19 41 49.9 -1.5
comp=Z,20nm,0.8s
MNTX epP pP 19 42 23.4 +0.3
MNTX esP sP 19 42 35.9 -1.3
MNTX ⇑e 20 10 54.2
T36A Boggs Farm, Ca 63.21 336 P P 19 41 51.1 -0.7
baz=64
HRV Adam Dziewonsk 63.22 358 eP P 19 41 50.7 -0.9
HRV e*PP pP 19 42 23.5 +0.3
HRV pmax pmax
comp=Z,309nm,1.9s
HRV Adam Dziewonsk 63.22 358 eP P 19 41 50.7 -0.9
comp=Z,308nm,1.9s
HRV epP pP 19 42 23.5 +0.3
BINY Binghamton 63.23 354 eP P 19 41 51.6 -0.2
comp=Z,65nm,0.6s
W31A Holland Ranch, 63.29 331 P P 19 41 51.2 -1.2
baz=64
Y28A McKinney Farm, 63.31 329 P P 19 41 51.6 -1.0
baz=64
U34A Anderson Ranch 63.32 334 P P 19 41 51.8 -0.7
baz=64
U34A Anderson Ranch 63.32 334 eP P 19 41 51.6 -0.9
comp=Z,68nm,0.9s
T35A Sooner Cattle 63.33 335 P P 19 41 52.1 -0.4
baz=64
V32A Arapaho 63.35 333 P P 19 41 52.6 -0.1
baz=64
SFIN Scholer Farm 63.43 344 P P 19 41 51.7 -1.4
baz=64
SFIN Scholer Farm 63.43 344 eP P 19 41 51.3 -1.8
comp=Z,80nm,0.6s
SFIN epP pP 19 42 23.0 -1.7
S37A Fort Scott 63.43 337 P P 19 41 52.8 -0.4
baz=64
X29A Tulia 63.48 330 P P 19 41 52.6 -1.1
baz=64
TRY Troy 63.56 356 eP P 19 41 51.6 -2.2
comp=Z,59nm,0.9s
TRY epP pP 19 42 25.4 -0.1
U33A Lingo Farm, Me 63.56 334 P P 19 41 53.2 -0.8
baz=64
W30A Crocket Farms 63.57 331 P P 19 41 53.3 -0.9
baz=64
ERPA Erie 63.65 351 eP P 19 41 54.2 -0.3
comp=Z,127nm,0.6s
S36A Lake Cedric, C 63.68 336 P P 19 41 53.9 -0.9
baz=64
T34A McClaskey Farm 63.69 335 P P 19 41 54.5 -0.4
baz=64
V31A Spring Creek L 63.74 332 P P 19 41 55.2 -0.1
baz=64
X28A Dimmitt 63.78 329 P P 19 41 55.2 -0.5
baz=64
AMTX Amarillo 63.83 330 P P 19 41 54.9 -1.1
baz=64
AMTX Amarillo 63.83 330 eP P 19 41 54.4 -1.6
comp=Z,37nm,0.9s
AMTX epP pP 19 42 27.4 -0.3
U32A Winter Ranch, 63.89 333 P P 19 41 55.5 -0.7
baz=64
R37A Teagarden Farm 63.92 337 P P 19 41 55.9 -0.5
baz=64
S35A Otter Creek Ra 63.92 336 P P 19 41 56.1 -0.3
baz=64
MMNY Mt. Morris Dam 63.97 352 eP P 19 41 56.5 0.0
comp=Z,105nm,1.2s
W29A Amraillo 64.01 330 P P 19 41 56.3 -0.9
baz=64
V30A Spur Ranch, Mi 64.11 331 P P 19 41 57.4 -0.3
baz=64
T33A Patterson Ranc 64.17 334 P P 19 41 57.0 -1.0
baz=64
R36A Gordon, Harris 64.18 337 P P 19 41 57.3 -0.8
baz=64
HDIL Hopedale 64.18 343 P P 19 41 57.2 -0.8
baz=64
HDIL Hopedale 64.18 343 eP P 19 41 55.3 -2.7
comp=Z,78nm,0.7s
ACCN Adirondack Com 64.21 356 P P 19 41 57.4 -0.7
U31A Nine Bar Ranch 64.24 332 P P 19 41 57.7 -0.9
baz=64
S34A Willow Spring 64.25 335 P P 19 41 58.0 -0.5
baz=64
Q37A Longview Farm, 64.29 338 P P 19 41 58.3 -0.5
baz=65
W28A Vega 64.39 330 P P 19 41 59.5 -0.1
baz=65
R35A Emporia Munici 64.44 336 P P 19 41 59.4 -0.4
baz=65
AAM Ann Arbor 64.48 348 P P 19 41 58.1 -1.8
AAM Ann Arbor 64.48 348 P P 19 41 58.1 -1.8
S33A Kaszmaul Farm, 64.51 334 P P 19 41 59.6 -0.7
baz=65
T32A Huddler Ranch, 64.53 333 P P 19 41 59.7 -0.7
baz=65
V29A Stinnett 64.58 331 P P 19 41 60.0 -0.8
baz=65
Q36A Arnold C. Orve 64.72 337 P P 19 42 00.7 -0.8
baz=65
T31A Randall Ranch, 64.78 333 P P 19 42 01.0 -1.1
baz=65
MDV Middlebury 64.79 356 eP P 19 42 01.4 -0.5
comp=Z,92µm,0.4s
MDV epP pP 19 42 33.8 +0.2
V28A Channing 64.80 330 P P 19 42 02.2 -0.1
baz=65
R34A Isabella, Hill 64.82 335 P P 19 42 01.7 -0.5
baz=65
Q35A Mercer Eighty, 64.84 337 P P 19 42 01.5 -0.9
baz=65
U29A Oasis Ranch, S 64.94 331 P P 19 42 02.6 -0.5
baz=65
LBNH Lisbon 64.97 357 eP P 19 42 04.5 +1.4
LBNH pmax pmax
comp=Z,700nm,2.8s
LBNH Lisbon 64.97 357 eP P 19 42 04.5 +1.4
comp=Z,697nm,2.8s
S32A Newby Ranch, P 64.98 334 P P 19 42 03.0 -0.3
baz=65
121A Cookes Peak, D 65.09 324 P P 19 42 05.0 +0.7
baz=65
121A Cookes Peak, D 65.09 324 eP P 19 42 05.1 +0.7
comp=Z,78nm,1.3s
121A epP pP 19 42 36.3 +0.2
V27A Dan Oppiter Fa 65.09 330 P P 19 42 03.8 -0.4
baz=65
T30A Plains 65.11 332 P P 19 42 03.9 -0.4
baz=65
R33A Olander Ranch, 65.11 335 P P 19 42 03.3 -0.9
baz=65
S31A Mullinville 65.14 333 P P 19 42 03.2 -1.2
baz=65
P36A Good Intent, A 65.21 338 P P 19 42 03.3 -1.5
baz=66
Q34A Chapman 65.24 336 P P 19 42 04.3 -0.6
baz=66
KSU1 Kansas State U 65.27 336 P P 19 42 04.0 -1.1
baz=66,SNR=5.4
KSU1 Kansas State U 65.27 336 eP P 19 42 04.2 -0.9
comp=Z,57nm,0.8s
U28A Mallet 65.31 331 P P 19 42 04.7 -1.0
baz=66
P35A Duane Minner, 65.43 337 P P 19 42 04.7 -1.5
baz=66
LONY Lake Ozonia 65.50 355 eP P 19 42 05.7 -0.9
comp=Z,169nm,1.8s
LONY epP pP 19 42 38.1 -0.2
R32A Long Quarter, 65.51 334 P P 19 42 06.0 -0.7
baz=66
T29A Hugoton 65.53 332 P P 19 42 06.0 -1.0
baz=66
S30A Montezuma 65.58 333 P P 19 42 06.5 -0.7
baz=66
O36A Bolckow 65.58 338 P P 19 42 05.6 -1.6
baz=66
U27A Thompson Grove 65.62 330 P P 19 42 06.8 -0.9
baz=66
Q33A Connelly Farm, 65.65 335 P P 19 42 07.1 -0.5
baz=66
BNM Barren Site 65.70 326 eP P 19 42 08.8 +0.4
R31A Burdett 65.73 334 P P 19 42 07.7 -0.4
baz=66
P34A Walnut Farm, R 65.74 336 P P 19 42 07.9 -0.2
baz=66
LPM Los Pinos Moun 65.83 326 eP P 19 42 09.2 +0.1
S29A Ulysses 65.84 332 P P 19 42 08.4 -0.5
baz=66
T28A Walsh 65.87 331 P P 19 42 08.4 -0.8
baz=66
Q32A Meitler Ranch, 65.93 335 P P 19 42 09.0 -0.4
baz=66
P33A Williams Farm, 65.98 336 P P 19 42 09.4 -0.2
baz=66
O35A Humboldt 66.04 337 P P 19 42 10.0 -0.1
baz=66
R30A Dighton 66.04 333 P P 19 42 09.7 -0.5
baz=66
T27A Campo 66.10 331 P P 19 42 10.5 -0.2
baz=66
SADO Sadowa 66.13 352 eP P 19 42 10.0 -0.5
comp=Z,227nm,1.9s
S28A Manter 66.16 332 P P 19 42 10.7 -0.3
baz=66
LAZ Ladron 66.17 326 eP P 19 42 12.1 +0.8
ANMO Albuquerque 66.23 327 d iP P 19 42 11.7 0.0
ANMO pmax pmax
comp=Z,47nm,1.7s
ANMO Albuquerque 66.23 327 eP P 19 42 12.0 +0.4
comp=Z,22nm,0.9s
O34A Beatrice 66.25 337 P P 19 42 10.9 -0.5
baz=66
CBKS Cedar Bluff 66.26 334 eP P 19 42 11.7 +0.1
CBKS pmax pmax
comp=Z,140nm,1.0s
CBKS Cedar Bluff 66.26 334 P P 19 42 11.6 +0.1
baz=66,SNR=16
CBKS Cedar Bluff 66.26 334 eP P 19 42 11.3 -0.3
comp=Z,142nm,1.0s
Q31A Ellis 66.28 334 P P 19 42 11.6 0.0
baz=67
N35A Tabor 66.47 338 P P 19 42 12.1 -0.7
baz=67
O33A Hebron 66.49 336 P P 19 42 12.3 -0.6
baz=67
P32A Huiting Farm, 66.49 335 P P 19 42 12.2 -0.7
baz=67
R29A Marienthal 66.52 333 P P 19 42 12.7 -0.6
baz=67
SCIA State Center 66.59 340 eP P 19 42 12.9 -0.7
comp=Z,82nm,0.9s
T26A Comanche Natio 66.60 330 P P 19 42 14.1 +0.2
baz=67
Q30A Quinter 66.60 334 P P 19 42 14.0 +0.3
baz=67
TUC Tucson 66.62 322 eP P 19 42 14.1 +0.1
TUC e*PP pP 19 42 44.6 -1.3
TUC pmax pmax
comp=Z,40nm,1.4s
TUC Tucson 66.62 322 eP P 19 42 14.1 +0.1
comp=Z,40nm,1.4s
TUC epP pP 19 42 44.6 -1.3
JFWS Jewell Farm 66.63 343 eP P 19 42 13.0 -0.8
JFWS pmax pmax
comp=Z,59nm,0.8s
JFWS Jewell Farm 66.63 343 eP P 19 42 12.5 -1.3
comp=Z,59nm,0.8s
S27A Las Animas 66.69 331 P P 19 42 13.8 -0.6
baz=67
P31A Stockton 66.71 334 P P 19 42 14.1 -0.3
baz=67
R28A Tribune 66.75 332 P P 19 42 14.6 -0.1
baz=67
N34A Lincoln 66.75 337 P P 19 42 13.6 -0.9
baz=67
Q29A Oakley 66.84 333 P P 19 42 14.9 -0.3
baz=67
S26A Kim 66.90 330 P P 19 42 15.6 -0.2
baz=67
O32A Brockman Farm, 66.91 336 P P 19 42 15.2 -0.5
baz=67
T25A Trinidad 66.95 329 P P 19 42 16.1 -0.1
baz=67
T25A Trinidad 66.95 329 eP P 19 42 16.6 +0.3
comp=Z,70nm,1.5s
N33A J Bar K, Exete 67.02 337 P P 19 42 15.7 -0.6
baz=67
M35A Neola 67.02 338 P P 19 42 15.8 -0.4
baz=67
P30A Selden 67.09 334 P P 19 42 16.2 -0.5
baz=67
K38A Parkersburg 67.12 341 P P 19 42 16.3 -0.6
baz=67
R27A Eads 67.14 331 P P 19 42 16.7 -0.5
baz=67
NVL N'lazarevskaya 67.21 159 ⇓ iP P 19 42 09.5 -7.6
NVL e 19 42 45.1
NVL e*PP pP 19 42 58.4 +9.4
NVL ePPP PPP 19 46 26.8
NVL pmax pmax
comp=Z,144nm,1.4s
Q28A Sharon Springs 67.35 332 P P 19 42 18.0 -0.5
baz=68
N32A Stulken Farm, 67.36 336 P P 19 42 18.3 -0.1
baz=68
M34A Aspy Farms, Fr 67.37 338 P P 19 42 17.8 -0.7
baz=68
P29A Atwood 67.42 333 P P 19 42 19.0 0.0
baz=68
K37A Belmond 67.50 340 P P 19 42 19.4 +0.1
baz=68
L35A Bielow Farm, R 67.54 339 P P 19 42 19.1 -0.4
baz=68
O30A MW Ranch, Wils 67.55 334 P P 19 42 19.3 -0.4
baz=68
214A Organ Pipe Nat 67.56 320 P P 19 42 20.6 +0.7
baz=68
214A Organ Pipe Nat 67.56 320 eP P 19 42 20.5 +0.7
comp=Z,236nm,1.0s
214A epP pP 19 42 53.3 +1.4
214A esP sP 19 43 07.2 +1.2
M33A Taylor Creek F 67.65 337 P P 19 42 19.7 -0.6
baz=68
KSCO Kaye Shedlock' 67.66 332 P P 19 42 19.8 -0.7
baz=68
KSCO Kaye Shedlock' 67.66 332 eP P 19 42 20.8 +0.3
comp=Z,121nm,1.3s
N31A Bailey Ranch, 67.66 335 P P 19 42 20.0 -0.4
baz=68
L34A Svendsen Farm, 67.70 338 P P 19 42 20.4 -0.2
baz=68
P28A Saint Francis 67.74 333 P P 19 42 20.9 -0.1
baz=68
O29A 4D Ranch, Culb 67.80 334 P P 19 42 21.4 +0.1
baz=68
BGNE Belgrade 67.86 336 P P 19 42 21.5 -0.1
baz=68
BGNE Belgrade 67.86 336 eP P 19 42 20.9 -0.7
comp=Z,392nm,0.8s
LIC Lamto 67.94 74 eP P 19 42 21.4 -1.2
comp=Z,124nm,0.9s
SDCO Great Sand Dun 67.96 329 P P 19 42 22.9 +0.3
baz=68,SNR=55
SDCO Great Sand Dun 67.96 329 eP P 19 42 22.7 +0.1
comp=Z,64nm,1.1s
SDCO epP pP 19 42 55.5 +0.9
SDCO esP sP 19 43 09.6 +0.8
J37A Redenius Farm, 67.97 341 P P 19 42 21.6 -0.6
baz=68
K35A Storm Lake 67.98 339 P P 19 42 22.4 +0.1
baz=68
N30A Hueftle Ranch, 68.09 335 P P 19 42 23.3 +0.2
baz=68
W18A Petrified Fore 68.10 324 P P 19 42 24.2 +0.7
baz=68
W18A Petrified Fore 68.10 324 eP P 19 42 24.3 +0.9
comp=Z,62nm,1.1s
W18A epP pP 19 42 56.2 +0.8
W18A esP sP 19 43 10.5 +0.9
M31A Lambtecht Ranc 68.12 336 P P 19 42 23.1 -0.1
baz=68
TIC Toumodi 68.12 73 eP P 19 42 23.5 -0.3
L33A Hoskins 68.19 337 P P 19 42 24.1 +0.4
baz=68
O28A Krutsinger Ran 68.21 333 P P 19 42 23.8 -0.1
baz=68
J36A Seneca 1, Swea 68.23 340 P P 19 42 23.1 -0.7
baz=68
K34A Le Mars 68.24 338 P P 19 42 23.1 -0.8
baz=68
KIC Kosan Boka 68.25 74 eP P 19 42 23.3 -1.3
comp=Z,514nm,0.9s
I38A Scanlan Farm, 68.26 342 P P 19 42 23.5 -0.5
baz=68
DBIC Dimbokro 68.28 73 P P 19 42 24.1 -0.7
comp=Z,297nm,0.8s,baz=217,slow=6.3,SNR=208
DBIC LR LR 20 09 42.6
comp=Z,487nm,21.5s,baz=231,slow=34
DBIC Dimbokro 68.28 73 P P 19 42 24.1 -0.7
DBIC pmax pmax
comp=Z,297nm,0.8s
DBIC MLR MLR
comp=Z,487nm,21.5s
DBIC Dimbokro 68.28 73 eP P 19 42 24.1 -0.7
comp=Z,311nm,0.8s
N29A Votaw Ranch, W 68.32 334 P P 19 42 24.2 -0.3
baz=69
L32A Elgin 68.32 337 P P 19 42 24.0 -0.4
baz=69
K33A Hardington 68.48 338 P P 19 42 25.0 -0.4
baz=69
J35A Milford 68.55 339 P P 19 42 25.0 -0.8
baz=69
I37A Lemond, Waseca 68.56 341 P P 19 42 25.0 -0.9
baz=69
N28A Pribbeno Ranch 68.58 334 P P 19 42 26.1 -0.1
baz=69
S22A 4UR Ranch, Cre 68.60 328 P P 19 42 26.8 +0.2
baz=69
S22A 4UR Ranch, Cre 68.60 328 eP P 19 42 27.1 +0.5
comp=Z,73nm,1.8s
M30A Dale-Ortello V 68.63 335 P P 19 42 25.9 -0.5
baz=69
J34A George 68.72 339 P P 19 42 26.4 -0.5
baz=69
Q24A Divide 68.76 330 P P 19 42 28.1 +0.5
baz=69
Q24A Divide 68.76 330 eP P 19 42 28.6 +0.9
comp=Z,74nm,1.0s
L31A Butterfield Fa 68.78 336 P P 19 42 27.1 -0.2
baz=69
M29A Burnside Ranch 68.87 335 P P 19 42 27.4 -0.5
baz=69
K32A Verdigre 68.88 337 P P 19 42 26.7 -1.2
baz=69
I35A Creekview Farm 68.91 340 P P 19 42 27.2 -0.9
baz=69
L30A Spencer Herefo 68.92 336 P P 19 42 27.6 -0.6
baz=69
H37A Dierke Farm, C 68.93 342 P P 19 42 27.4 -0.7
baz=69
OGNE Ogallala 69.00 333 P P 19 42 28.8 0.0
baz=69,SNR=5.3
OGNE Ogallala 69.00 333 eP P 19 42 28.8 0.0
comp=Z,58nm,0.8s
OGNE epP pP 19 42 59.7 -1.1
MVCO Mesa Verde 69.03 327 P P 19 42 29.8 +0.6
baz=69,SNR=16
MVCO Mesa Verde 69.03 327 eP P 19 42 29.9 +0.6
comp=Z,35nm,0.8s
J33A Davis 69.10 338 P P 19 42 28.4 -0.8
baz=69
M28A Bar X Bar Ranc 69.11 334 P P 19 42 29.0 -0.4
baz=69
K31A O'Neill 69.13 337 P P 19 42 29.4 -0.1
baz=69
QSPA South Pole Qui 69.22 180 eP P 19 42 30.5 +0.6
comp=Z,122nm,0.8s
H36A Jessenland, He 69.23 341 P P 19 42 30.1 +0.2
baz=70
WUAZ Wupatki 69.29 324 P P 19 42 31.6 +0.8
baz=70,SNR=33
WUAZ Wupatki 69.29 324 eP P 19 42 32.0 +1.2
comp=Z,61nm,1.0s
WUAZ pP pP 19 43 04.2 +1.3
WUAZ esP sP 19 43 18.8 +1.7
COWI Conover 69.31 345 eP P 19 42 29.6 -0.9
comp=Z,16nm,0.8s
L29A Maesberg Ranch 69.31 335 P P 19 42 30.4 -0.3
baz=70
ECSD EROS Data Cent 69.34 339 P P 19 42 29.7 -1.0
baz=70,SNR=25
ECSD EROS Data Cent 69.34 339 P P 19 42 29.7 -1.0
comp=Z,40nm,0.9s
I34A Hadley 69.36 339 P P 19 42 29.4 -1.4
baz=70
J32A Parkston 69.45 338 P P 19 42 30.6 -0.8
baz=70
H07S1 FLORES T-PHASE 69.46 30 eP P 19 42 31.4 -0.1
SPMN St. Paul 69.48 342 P P 19 42 30.9 -0.6
baz=70
SPMN St. Paul 69.48 342 eP P 19 42 30.5 -1.0
comp=Z,44nm,1.0s
K30A Basset 69.50 336 P P 19 42 31.0 -0.7
baz=70
GLA Glamis 69.54 320 eP P 19 42 33.7 +1.5
GLA pmax pmax
comp=Z,110nm,1.6s
GLA Glamis 69.54 320 P P 19 42 33.2 +1.0
baz=70,SNR=7.3
GLA Glamis 69.54 320 eP P 19 42 33.7 +1.5
comp=Z,113nm,1.6s
GLA ePcP PcP 19 42 54.4 -0.1
GLA epP pP 19 43 05.1 +0.8
H35A Sunnyside Ranc 69.62 340 P P 19 42 31.4 -1.0
baz=70
ISCO Idaho Springs 69.65 330 eP P 19 42 33.3 +0.3
ISCO pmax pmax
comp=Z,49nm,1.3s
ISCO Idaho Springs 69.65 330 P P 19 42 33.9 +0.9
baz=70,SNR=20
ISCO Idaho Springs 69.65 330 eP P 19 42 33.3 +0.3

comp=Z,49nm,1.4s
L28A Connealy Angus 69.68 334 P P 19 42 32.3 -0.7
baz=70
I33A Coleman 69.68 339 P P 19 42 32.4 -0.4
baz=70
J31A Geddes 69.71 337 P P 19 42 32.3 -0.7
baz=70
H07N1 FLORES T-PHASE 69.75 30 eP P 19 42 33.7 +0.4
G36A St. Michael 69.77 341 P P 19 42 32.6 -0.7
baz=70
Y12C Blythe 69.84 320 P P 19 42 34.8 +0.8
baz=70
K29A Lazy Trails An 69.84 336 P P 19 42 33.6 -0.2
baz=70
I32A Karley and Nic 69.89 338 P P 19 42 33.7 -0.4
baz=70
PDMCI Parker Dam,Lak 70.00 321 P P 19 42 35.8 +0.8
baz=70
J30A Dallas 70.01 336 P P 19 42 34.7 -0.2
baz=70
IBP Imperial Bould 70.05 319 P P 19 42 36.5 +1.1
baz=70
SWSC Sam W. Stewart 70.06 319 P P 19 42 36.2 +0.9
baz=70
PCAN Candelaria 70.07 33 eP P 19 42 35.5 +0.2
comp=Z,112nm,1.2s
PPNO Prainha do Nor 70.19 33 eP P 19 42 36.0 -0.1
comp=Z,148nm,1.0s
K28A Ten Mile Ranch 70.21 335 P P 19 42 36.8 +0.6
baz=70
H33A Prehn Over Nor 70.22 339 P P 19 42 35.1 -1.0
baz=70
F36A Milaca 70.27 342 P P 19 42 35.4 -0.9
baz=70
I31A Royce, Wessing 70.27 337 P P 19 42 35.6 -0.8
baz=70
H32A Carlson Farm, 70.30 338 P P 19 42 35.7 -0.9
baz=71
BC3 Big Chuckawall 70.34 320 P P 19 42 38.3 +1.1
baz=71,SNR=6.1
ROSA Rosais 70.39 33 eP P 19 42 39.8 +2.6
comp=Z,82nm,1.2s
ROSA Rosais 70.39 33 eP P 19 42 38.4 +1.2
comp=Z,1µm,2.6s
J29A Okreek 70.40 336 P P 19 42 37.0 -0.2
baz=71
PMAN Manadas 70.40 33 eP P 19 42 38.6 +1.4
comp=Z,118nm,1.2s
MONP Monument Peak 70.41 319 P P 19 42 38.8 +1.1
baz=71,SNR=9.1
BAR Barrett 70.42 318 eP P 19 42 38.4 +0.8
BAR epP pP 19 43 11.0 +1.2
BAR esP sP 19 43 25.3 +1.4
I30A Oacoma 70.50 337 P P 19 42 37.0 -0.8
baz=71
IRM Iron Mountain 70.50 320 P P 19 42 39.4 +1.3
baz=71,SNR=18
G33A Ortonville 70.58 339 P P 19 42 37.5 -0.7
baz=71
NEE2 Needles Airpor 70.61 321 P P 19 42 39.5 +0.8
baz=71
H31A Wolsey 70.64 338 P P 19 42 38.6 0.0
baz=71
N23A Red Feather La 70.67 331 P P 19 42 39.7 +0.4
baz=71
N23A Red Feather La 70.67 331 eP P 19 42 39.9 +0.7
comp=Z,39nm,1.0s
F34A Alexandria 70.73 341 P P 19 42 38.8 -0.3
baz=71
J28A Allard Ranch, 70.76 335 P P 19 42 39.5 0.0
baz=71
PSMN Pico do Norte, 70.77 36 eP P 19 42 38.3 -1.2
comp=Z,153nm,1.0s
PHWY Pilot Hill 70.78 331 eP P 19 42 40.0 +0.1
comp=Z,43nm,1.4s
SUSD South Dakota S 70.78 337 P P 19 42 39.1 -0.4
baz=71
BELC Belle Mtn. Jos 70.90 320 P P 19 42 41.6 +1.0
baz=71,SNR=11
I29A Vivian Onida 70.91 336 P P 19 42 40.3 0.0
baz=71
PFO Pinyon Flat Ob 70.91 319 eP P 19 42 41.6 +0.9
PFO e*PP pP 19 43 13.8 +0.9
PFO pmax pmax
comp=Z,32nm,1.0s
PFO Pinyon Flat Ob 70.91 319 P P 19 42 41.0 +0.3
comp=Z,161nm,1.1s,SNR=13
PFO Pinyon Flat Ob 70.91 319 P P 19 42 41.3 +0.6
comp=Z,161nm,1.1s,SNR=13
PFO Pinyon Flat Ob 70.91 319 eP P 19 42 41.6 +0.9
comp=Z,32nm,1.0s
PFO epP pP 19 43 13.8 +0.9
J27A Elkhorn Farm, 70.92 335 P P 19 42 40.8 +0.4
baz=71
G32A Webster 70.98 339 P P 19 42 39.8 -0.9
baz=71
PSET Sete Cidades 71.02 35 eP P 19 42 39.5 -1.6
comp=Z,350nm,1.2s
EKU East Kanab 71.05 324 eP P 19 42 43.2 +1.7
F33A 5 Mile Ranch, 71.10 340 P P 19 42 40.5 -0.8
baz=71
D37A Cotton 71.14 343 P P 19 42 41.3 -0.3
baz=71
O20A White River Ci 71.15 329 P P 19 42 42.3 +0.2
baz=71
O20A White River Ci 71.15 329 eP P 19 42 42.7 +0.7
comp=Z,68nm,1.0s
C39A Grand Marais 71.16 345 P P 19 42 40.9 -0.8
baz=71
E35A Pequot Lakes 71.16 341 P P 19 42 41.0 -0.7
baz=71
G31A Conde 71.20 338 P P 19 42 41.0 -1.0
baz=72
I28A Midland 71.22 336 P P 19 42 42.1 -0.1
baz=72
MMU Miners Mountai 71.23 326 eP P 19 42 43.7 +1.0
GMRC Granite Mounta 71.23 320 P P 19 42 43.7 +1.2
baz=72,SNR=34
E34A Wadena 71.35 341 P P 19 42 42.3 -0.6
baz=72
C38A Sawbill Land. 71.35 344 P P 19 42 41.9 -0.9
baz=72
D36A Goodland 71.36 343 P P 19 42 42.0 -0.9
baz=72
MURC Murrieta 71.36 319 P P 19 42 44.7 +1.4
baz=72
H29A Onida 71.40 337 P P 19 42 42.8 -0.4
baz=72
J26A Sides Ranch, S 71.40 334 P P 19 42 44.2 +0.9
baz=72
G30A Faulkton 71.44 338 P P 19 42 43.7 +0.3
baz=72
SRU San Rafael 71.51 327 ⇓iP P 19 42 44.4 +0.2
SRU e*PP pP 19 43 17.2 +0.7
SRU e*SP sP 19 43 31.9 +1.3
SRU pmax pmax
comp=Z,51nm,0.8s
SRU San Rafael 71.51 327 ⇓iP P 19 42 44.4 +0.2
comp=Z,52nm,0.8s
SRU epP pP 19 43 17.2 +0.7
SRU esP sP 19 43 31.9 +1.3
D35A Remer 71.53 342 P P 19 42 43.9 -0.1
baz=72
E33A Westby DABS, E 71.60 340 P P 19 42 43.5 -0.8
baz=72
C37A Embarrass 71.60 343 P P 19 42 43.8 -0.5
baz=72
EYMN Ely 71.62 344 P P 19 42 43.7 -0.8
baz=72,SNR=15
EYMN Ely 71.62 344 eP P 19 42 43.6 -0.9
comp=Z,55nm,1.2s
I27A Quinn 71.62 335 P P 19 42 45.0 +0.4
baz=72
BBRC Big Bear Solar 71.64 319 P P 19 42 46.0 +0.9
baz=72
HEC Hector,Ludlow 71.67 320 P P 19 42 46.2 +1.1
baz=72,SNR=14
H28A Mission Ridge 71.74 336 P P 19 42 45.4 +0.1
baz=72
P18A Preston Nutter 71.76 327 eP P 19 42 47.0 +1.1
comp=Z,48nm,0.8s
J25A Sunshine Ranch 71.77 334 P P 19 42 46.2 +0.7
baz=72
F31A Hecla 71.77 339 P P 19 42 45.4 0.0
baz=72
G29A Hoven 71.78 337 P P 19 42 45.0 -0.5
baz=72
SCI San Clemente I 71.80 317 P P 19 42 45.3 -0.5
baz=72
C36A Pine Crest Far 71.81 343 P P 19 42 45.3 -0.3
baz=72
TUQ Turquoise Moun 71.84 321 P P 19 42 47.5 +1.3
baz=72,SNR=9.3
CCUT Cedar City 71.87 324 ⇓iP P 19 42 47.5 +1.1
comp=Z,73nm,0.8s
CCUT epP pP 19 43 20.8 +2.1
CCUT esP sP 19 43 35.5 +2.7
D34A Park Rapids 71.87 341 P P 19 42 44.9 -1.1
baz=72
P17A Butcher Ranch, 71.89 327 eP P 19 42 47.5 +1.0
comp=Z,69nm,1.0s
I26A New Underwood 71.91 335 P P 19 42 46.4 0.0
baz=72
MSU Marysvale 71.93 325 eP P 19 42 47.3 +0.5
MSU e 19 43 05.3
MSU e*PP pP 19 43 20.9 +1.8
MSU e*SP sP 19 43 35.2 +2.1
MSU Marysvale 71.93 325 eP P 19 42 47.3 +0.5
MSU ePcP PcP 19 43 05.3 +0.6
MSU epP pP 19 43 20.9 +1.8
MSU esP sP 19 43 35.2 +2.1
TMUT Trail Mountain 72.00 326 ⇓iP P 19 42 47.6 +0.3
comp=Z,49nm,0.5s
TMUT epP pP 19 43 20.8 +1.2
TMUT esP sP 19 43 34.0 +0.3
F30A Leola 72.01 338 P P 19 42 46.1 -0.7
baz=72
G28A Parade 72.04 337 P P 19 42 47.0 0.0
baz=72
C35A Jirik Farms, M 72.07 342 P P 19 42 46.5 -0.7
baz=72
BFSC Mount Baldy Ra 72.08 319 P P 19 42 48.5 +0.9
baz=72,SNR=26
H27A Howes 72.11 336 P P 19 42 47.5 +0.1
baz=72
D33A AnnSam, Waubun 72.12 341 P P 19 42 47.9 +0.4
baz=72
SHPR Sheep Range 72.14 322 eP P 19 42 48.9 +0.9
SHPR epP pP 19 43 21.6 +1.2
SHPR esP sP 19 43 36.1 +1.7
I25A Rochford 72.25 334 P P 19 42 48.9 +0.4
baz=72
E31A Nome 72.26 339 P P 19 42 48.9 +0.7
baz=72
GSC Goldstone 72.28 320 eP P 19 42 49.4 +0.6
GSC e*PP pP 19 43 22.8 +1.7
GSC e*SP sP 19 43 36.8 +1.6
GSC pmax pmax
comp=Z,28nm,0.8s
GSC Goldstone 72.28 320 P P 19 42 49.9 +1.2
baz=72,SNR=13
GSC Goldstone 72.28 320 eP P 19 42 49.4 +0.6
comp=Z,28nm,0.8s
GSC epP pP 19 43 22.8 +1.7
GSC esP sP 19 43 36.8 +1.6
F29A Eureka 72.29 338 P P 19 42 48.7 +0.1
baz=73
MWC Mount Wilson 72.31 319 ⇓iP P 19 42 49.4 +0.3
MWC e*PP pP 19 43 21.7 +0.2
MWC e*SP sP 19 43 35.8 +0.3
MWC pmax pmax
comp=Z,54nm,1.2s
MWC Mount Wilson 72.31 319 ⇓iP P 19 42 49.4 +0.3
comp=Z,54nm,1.2s
MWC epP pP 19 43 21.7 +0.2
MWC esP sP 19 43 35.8 +0.3
K22A Casper 72.33 332 P P 19 42 49.5 +0.5
baz=73
K22A Casper 72.33 332 eP P 19 42 49.6 +0.5
comp=Z,87nm,1.6s
PASC Pasadena Art C 72.36 318 eP P 19 42 50.0 +0.9
comp=Z,57nm,1.0s
PASC epP pP 19 43 22.6 +1.1
PASC esP sP 19 43 37.4 +1.8
H26A Fairpoint 72.37 335 P P 19 42 49.0 -0.1
baz=73
SHOC Shoshone 72.37 321 P P 19 42 50.8 +1.5
baz=73
RSSD Black Hills 72.46 334 ⇓iP P 19 42 49.9 +0.1
RSSD e*PP pP 19 43 21.9 -0.3
RSSD pmax pmax
comp=Z,32nm,0.8s
RSSD Black Hills 72.46 334 ⇓iP P 19 42 49.9 +0.1
comp=Z,32nm,0.8s
RSSD epP pP 19 43 21.9 -0.3
DECC Green Verdugo 72.50 318 P P 19 42 50.9 +0.9
baz=73
E30A Jud 72.55 339 P P 19 42 49.7 -0.3
baz=73
PMOZ Porto Moniz, M 72.59 44 eS S 19 52 08.0 +3.0
D31A Mcclaflin, Tow 72.63 340 P P 19 42 50.8 +0.3
baz=73
C33A Trail 72.65 341 P P 19 42 50.6 +0.1
baz=73
F28A McLaughlin 72.66 337 P P 19 42 50.8 +0.1
baz=73
G27A Dupree 72.68 336 P P 19 42 50.7 -0.2
baz=73
H25A Fruitdale 72.70 335 P P 19 42 51.2 +0.1
baz=73
MPU Maple Canyon 72.75 327 eP P 19 42 52.6 +1.0
comp=Z,127nm,0.9s
MPU epP pP 19 43 25.2 +1.2
MPU esP sP 19 43 40.0 +1.9
O16A Springville 72.83 327 eP P 19 42 46.6 -5.4
comp=Z,41nm,0.8s
E29A Napoleon 72.86 338 P P 19 42 51.5 -0.4
baz=73
BLG Laguna Peak 72.86 318 P P 19 42 52.8 +0.6
baz=73
G26A Maurine 72.86 336 P P 19 42 51.9 -0.1
baz=73
LRMC Laurel Mountai 72.92 320 P P 19 42 53.6 +1.0
baz=73,SNR=7.8
NLU North Lily Min 72.94 326 ⇓iP P 19 42 53.5 +0.8
comp=Z,30nm,1.0s
NLU epP pP 19 43 25.8 +0.6
NLU esP sP 19 43 40.8 +1.7
B34A Aery, Baudette 72.97 342 P P 19 42 52.4 0.0
baz=73
D30A Buchanan 73.03 339 P P 19 42 52.7 -0.1
baz=73
G25A Newell 73.10 335 P P 19 42 53.5 +0.2
baz=73
FURC Furnace Creek, 73.10 321 P P 19 42 54.7 +1.3
baz=73,SNR=11
F27A Lemmon 73.13 336 P P 19 42 53.7 +0.2
baz=73
RCJ Ross Creek 73.13 327 eP P 19 42 55.0 +1.1
BSC Santa Cruz Isl 73.14 318 P P 19 42 54.7 +0.9
baz=73
AGMN Agassiz Nation 73.16 341 P P 19 42 52.8 -0.8
baz=73,SNR=9.7
AGMN Agassiz Nation 73.16 341 ⇓iP P 19 42 52.7 -0.8
comp=Z,58nm,1.2s
MPMC Manual Prospec 73.20 320 P P 19 42 54.9 +0.6
baz=74,SNR=22
E28A Huff 73.24 337 P P 19 42 53.9 -0.2
baz=74
D29A Pettibone, Tap 73.27 338 P P 19 42 54.0 -0.2
baz=74
C31A Landman Farms, 73.29 340 P P 19 42 54.0 -0.3
baz=74
CTU Camp Tracy 73.32 327 eP P 19 42 54.9 +0.1
comp=Z,23nm,1.0s
CTU epP pP 19 43 27.3 0.0
F26A Lodgepole 73.36 336 P P 19 42 54.9 +0.1
baz=74
ARVC Arvin 73.39 319 P P 19 42 56.1 +0.9
baz=74
DAC Darwin (Calif) 73.41 320 ⇓eP P 19 42 55.9 +0.4
DAC e 19 43 11.2
DAC e*PP pP 19 43 29.3 +1.3
DAC e*SP sP 19 43 43.4 +1.4
DAC pmax pmax
comp=Z,25nm,0.8s
DAC Darwin (Calif) 73.41 320 ⇓eP P 19 42 55.9 +0.4
comp=Z,25nm,0.8s
DAC ePcP PcP 19 43 11.2 +0.1
DAC epP pP 19 43 29.3 +1.3
DAC esP sP 19 43 43.4 +1.4
E27A Carson 73.43 337 P P 19 42 55.1 -0.1
baz=74
B32A Ashes, Strandq 73.45 341 P P 19 42 54.7 -0.5
baz=74
C30A Mose, Pekin 73.45 339 P P 19 42 55.1 -0.2
baz=74
FSU Fish Springs 73.45 325 eP P 19 42 57.3 +1.6
SBC Santa Barbara 73.49 318 P P 19 42 56.8 +1.1
baz=74
DUG Dugway 73.50 326 ⇓iP P 19 42 56.6 +0.7
DUG e*PP pP 19 43 30.4 +2.0
DUG e*SP sP 19 43 43.4 +1.0
DUG pmax pmax
comp=Z,46nm,1.0s
DUG Dugway 73.50 326 P P 19 42 56.7 +0.7
baz=74,SNR=25
DUG Dugway 73.50 326 ⇓iP P 19 42 56.6 +0.7
comp=Z,46nm,1.0s
DUG epP pP 19 43 30.4 +2.0
DUG esP sP 19 43 43.4 +1.0
ISA Isabella 73.52 319 ⇓eP P 19 42 57.1 +1.0
ISA e*PP pP 19 43 30.1 +1.6
ISA e*SP sP 19 43 44.4 +1.8
ISA pmax pmax
comp=Z,50nm,1.0s
ISA Isabella 73.52 319 P P 19 42 57.0 +1.0
baz=74,SNR=25
ISA Isabella 73.52 319 ⇓eP P 19 42 57.1 +1.0
comp=Z,50nm,1.0s
ISA epP pP 19 43 30.1 +1.6
ISA esP sP 19 43 44.4 +1.8
A33A Warroad 73.59 342 P P 19 42 55.4 -0.6
baz=74
R11A Troy Canyon, C 73.67 323 P P 19 42 57.9 +0.9
baz=74
R11A Troy Canyon, C 73.67 323 ⇓iP P 19 42 58.1 +1.0
comp=Z,54nm,1.4s
R11A epP pP 19 43 30.9 +1.4
R11A esP sP 19 43 45.3 +1.8
F25A Bowman 73.72 335 P P 19 42 57.2 +0.2
baz=74
GRAC Grapevine Rang 73.76 321 P P 19 42 58.4 +1.0
baz=74,SNR=7.8
E26A Carlson Angus 73.80 336 P P 19 42 57.9 +0.5
baz=74
CWC Cottonwood Cre 73.81 320 P P 19 42 58.7 +0.9
baz=74,SNR=30
BW06 Boulder Array 73.81 330 ⇓eP P 19 42 57.6 -0.3
comp=Z,20nm,1.1s
HWUT Hardware Ranch 73.91 328 eP P 19 42 58.2 -0.1
comp=Z,44nm,0.7s
HWUT epP pP 19 43 29.7 -1.1
HWUT esP sP 19 43 44.3 -0.5
MDND Maddock 73.95 339 P P 19 42 58.4 +0.2
baz=74
MDND Maddock 73.95 339 eP P 19 42 58.2 -0.1
TBI Tubuai 73.97 251 eS S 19 52 23.3 +2.4
comp=Z,737nm,30.2s
TBI Tubuai 73.97 251 eLQ LQ 20 02 54.5
comp=Z,516nm,33.0s
TBI eLR LR 20 05 51.5
comp=Z,1µm,36.2s
D27A Center 73.99 337 P P 19 42 58.6 +0.1
baz=74
BMUT Black Mountain 74.00 328 eP P 19 42 59.2 +0.2
VES Vestal, Richgr 74.01 319 P P 19 42 58.9 +0.1
baz=74
B30A Myrvik Farm, E 74.06 340 P P 19 42 58.6 -0.2
baz=74
C28A Hausauer Farms 74.11 338 P P 19 42 59.2 0.0
baz=74
SPUT South Promonto 74.13 327 ⇓eP P 19 42 59.9 +0.3
comp=Z,52nm,0.9s
SPUT epP pP 19 43 32.5 +0.4
SPUT esP sP 19 43 47.3 +1.2
E25A Miller Ranch, 74.18 336 P P 19 42 60.0 +0.3
baz=74
SMMC Simmler 74.23 318 P P 19 43 01.8 +1.6
baz=74,SNR=13
D26A Manning 74.26 337 P P 19 43 00.0 0.0
baz=74
TIN Tinemaha 74.31 321 P P 19 43 01.9 +1.2
baz=75
B29A Wagenman Farm, 74.41 339 P P 19 43 00.7 -0.2
baz=75
RCTC Rector, Farmer 74.42 320 P P 19 43 02.1 +1.0
baz=75
A30A Hoffart Farm, 74.48 340 P P 19 43 01.5 +0.2
baz=75
MLI Malad Range 74.50 328 eP P 19 43 02.4 +0.7
C27A Sayler Ranch, 74.50 338 P P 19 43 01.8 +0.4
baz=75
PTU Portage 74.52 328 eP P 19 43 02.4 +0.5
AHID Auburn Hatcher 74.55 329 eP P 19 43 02.1 +0.1
AHID epP pP 19 43 36.0 +1.4
AHID esP sP 19 43 49.2 +0.6
D25A Fairfield 74.69 336 P P 19 43 03.2 +0.6
baz=75
MTUM Tungsten Hills 74.70 321 eP P 19 43 04.1 +1.0
B28A Dugan Ranch, T 74.73 339 P P 19 43 02.6 -0.1
baz=75
A29A Manning Farm, 74.76 340 P P 19 43 02.6 -0.3
baz=75
NPI North Pocatell 74.78 328 eP P 19 43 03.9 +0.5
C26A Wahner Farm, P 74.81 337 P P 19 43 03.3 +0.1
baz=75
REDW Red Top Meadow 74.88 329 eP P 19 43 04.2 +0.3
REDW epP pP 19 43 38.7 +2.2
REDW esP sP 19 43 51.4 +0.9
SNOW Snow King Moun 74.91 330 epP pP 19 43 35.1 -1.7
ULM Lac du Bonnet 74.91 342 P P 19 43 03.2 -0.5
comp=Z,24nm,0.5s,baz=156,slow=6.4,SNR=30
ULM LR LR 20 21 22.1
comp=Z,114nm,18.1s,baz=154,slow=40
ULM Lac du Bonnet 74.91 342 P P 19 43 03.2 -0.5
ULM pmax pmax
comp=Z,24nm,0.5s
ULM MLR MLR
comp=Z,114nm,18.1s
LOHW Long Hollow 74.95 330 eP P 19 43 04.7 +0.3
comp=Z,34nm,1.0s
LOHW epP pP 19 43 38.4 +1.5
PMOR Pomariorio Ree 75.00 259 eP P 19 43 05.9 +0.9
comp=Z,174nm,1.1s
B27A Peters Farms, 75.00 338 P P 19 43 03.6 -0.7
baz=75
TPAW Teton Pass 75.02 329 eP P 19 43 05.5 +0.7
comp=Z,59nm,1.2s
MLAC Mammoth Lakes 75.05 321 P P 19 43 06.0 +0.9
baz=75
MOOW Moose Ponds 75.12 330 eP P 19 43 05.4 0.0
comp=Z,66nm,1.7s
C25A Freed Ranch, W 75.14 337 P P 19 43 05.6 +0.5
baz=75
ELK Elko 75.17 325 eP P 19 43 05.9 +0.1
ELK e*PP pP 19 43 39.7 +1.4
ELK e*SP sP 19 43 53.0 +0.7
ELK pmax pmax
comp=Z,21nm,0.9s
ELK Elko 75.17 325 eP P 19 43 05.9 +0.1
comp=Z,20nm,0.9s
ELK epP pP 19 43 39.7 +1.4
ELK esP sP 19 43 53.0 +0.7
FXWY Fox Creek 75.17 330 eP P 19 43 06.1 +0.5
comp=Z,33nm,1.0s
NV01 Mina Array Sit 75.28 322 eP P 19 43 07.0 +0.6
NVAR Mina Array Bea 75.28 322 P P 19 43 06.5 +0.2
comp=Z,18nm,0.9s,baz=152,slow=6.5,SNR=78
NVAR pP pP 19 43 40.0 +1.1
comp=Z,4.4nm,0.8s,baz=111,slow=18,SNR=2.7
NVAR sP sP 19 43 53.8 +0.9
comp=Z,13nm,0.7s,baz=162,slow=9.1,SNR=5.4
IMW Indian Meadow 75.33 330 ⇓iP P 19 43 07.0 +0.3
IMW epP pP 19 43 39.9 +0.7
IMW esP sP 19 43 54.7 +1.5
FLWY Flagg Ranch 75.36 330 ⇓iP P 19 43 07.5 +0.8
comp=Z,108nm,1.0s
FLWY epP pP 19 43 40.9 +1.6
FLWY esP sP 19 43 55.2 +2.0
TVO Taravao 75.39 256 eP P 19 43 08.7 +1.4
comp=Z,47nm,1.3s
YTP The Promontory 75.40 330 eP P 19 43 08.3 +1.3
LAO LASA Array 75.45 334 P P 19 43 07.4 +0.4
baz=76,SNR=11
LAO LASA Array 75.45 334 ⇓iP P 19 43 07.0 +0.1
comp=Z,96nm,1.3s
LAO epP pP 19 43 39.8 +0.2
A27A Ledoux Ranch, 75.46 338 P P 19 43 06.8 -0.1
baz=76

RLMT **Red Lodge** 75.50 332 P P 19 43 08.3 +0.8
baz=76,SNR=39
RLMT **Red Lodge** 75.50 332 eP P 19 43 07.7 +0.2
RLMT epP pP 19 43 40.4 +0.3
RLMT esP sP 19 43 53.0 -1.1
SCHQ **Schefferville** 75.51 1 P P 19 43 06.8 -0.2
comp=Z,34nm,0.8s,baz=179,slow=4.2,SNR=21
SCHQ **Schefferville** 75.51 1 eP P 19 43 06.3 -0.7
comp=Z,66nm,1.0s
H17A **Grant Village** 75.54 330 P P 19 43 08.6 +0.9
baz=76
H17A **Grant Village** 75.54 330 eP P 19 43 09.1 +1.3
comp=Z,18nm,0.8s
B25A **Knox Farm, Ray** 75.57 337 P P 19 43 08.2 +0.6
baz=76
LRV **Little Rabbit** 75.58 319 eP P 19 43 09.9 +2.0
LKWY **Lake** 75.59 331 ⇓*i*P P 19 43 09.5 +1.5
LKWY e*PP pP 19 43 43.5 +2.9
LKWY pmax pmax
comp=Z,62nm,1.0s
LKWY **Lake** 75.59 331 ⇓*i*P P 19 43 09.5 +1.5
comp=Z,62nm,1.0s
LKWY epP pP 19 43 43.5 +2.9
A26A **Wade Farm, Ken** 75.69 338 P P 19 43 08.4 +0.2
baz=76
PAE **Paea** 75.73 256 eP P 19 43 10.3 +1.2
comp=Z,22nm,1.0s
PPT2 **Papeete2** 75.75 256 eP P 19 43 10.4 +1.0
comp=Z,64nm,1.1s
PPT2 eS S 19 52 41.5 +0.6
comp=Z,1µm,29.5s
PPT2 **Papeete2** 75.75 256 eLQ LQ 20 03 37.4
PPT2 eLR LR 20 06 54.0
comp=Z,2µm,40.2s
PPT **Papeete** 75.75 256 LR LR 20 10 21.5
comp=Z,168nm,20.0s,baz=112,slow=31
YHH **Holmes Hill** 75.96 330 eP P 19 43 11.6 +1.4
YMC **Maple Creek** 76.01 330 eP P 19 43 11.9 +1.5
BMN **Battle Mountai** 76.03 324 eP P 19 43 10.6 +0.1
BMN pmax pmax
comp=Z,18nm,1.3s
BMN **Battle Mountai** 76.03 324 eP P 19 43 10.6 +0.1
comp=Z,18nm,1.3s
SAO **San Andreas Ge** 76.06 319 eP P 19 43 11.8 +1.2
SAO pmax pmax
comp=Z,23nm,1.1s
SAO **San Andreas Ge** 76.06 319 eP P 19 43 11.0 +0.4
comp=Z,23nm,1.1s
A25A **Svangstu Ranch** 76.11 337 P P 19 43 11.2 +0.7
baz=76
DGMT **Dagmar** 76.12 336 P P 19 43 11.4 +0.8
baz=76,SNR=8.5
DGMT **Dagmar** 76.12 336 eP P 19 43 11.1 +0.4
comp=Z,82nm,0.8s
GCMT **Greycliff** 76.20 332 eP P 19 43 11.6 +0.3
GCMT epP pP 19 43 44.8 +0.8
GCMT esP sP 19 43 59.4 +1.5
CMB **Columbia Colle** 76.24 320 eP P 19 43 11.7 +0.1
CMB pmax pmax
comp=Z,25nm,1.2s
CMB **Columbia Colle** 76.24 320 eP P 19 43 11.7 +0.1
comp=Z,25nm,1.2s
QLMT **Earthquake Lak** 76.26 330 eP P 19 43 13.3 +1.5
SBA **Scott Base** 76.40 190 eP P 19 43 13.0 +1.1
SBA pmax pmax
comp=Z,76nm,1.4s
SBA **Scott Base** 76.40 190 eP P 19 43 13.0 +1.1
comp=Z,76nm,1.4s
HLID **Hailey** 76.77 328 P P 19 43 15.7 +1.0
baz=77,SNR=91
HLID **Hailey** 76.77 328 ⇓*i*P P 19 43 15.3 +0.7
comp=Z,40nm,0.8s
HLID epP pP 19 43 48.8 +1.4
HLID esP sP 19 44 02.7 +1.4
TOA0 **Torodi Ar. Sit** 76.88 70 eP P 19 43 12.9 -2.8
TORD **Torodi Ar. Bea** 76.88 70 P P 19 43 14.1 -1.6
comp=Z,277nm,0.8s,baz=249,slow=4.1,SNR=669
TORD S S 19 52 49.1 -4.1
comp=Z,2.7nm,1.0s,baz=247,slow=14,SNR=8.7
TORD PKKPbc PKKPbc 20 02 24.1 +0.6
comp=Z,0.3nm,0.7s,baz=44,slow=2.3,SNR=4.6
TORD LR LR 20 17 13.0
comp=Z,1µm,19.0s,baz=245,slow=36
SYO **Syowa Base** 76.88 159⇑*i*P P 19 43 13.4 -1.3
MCMT **McKenzie Canyo** 76.93 329 eP P 19 43 16.3 +0.7
MCMT epP pP 19 43 49.5 +1.2
BOZ **Bozeman (W)** 76.97 331 eP P 19 43 16.0 +0.3
BOZ pmax pmax
comp=Z,34nm,1.1s
BOZ **Bozeman (W)** 76.97 331 P P 19 43 16.1 +0.3
baz=77,SNR=24
BOZ **Bozeman (W)** 76.97 331 eP P 19 43 16.0 +0.3
comp=Z,34nm,1.1s
BOZ epP pP 19 43 47.5 -0.9
DLMT **Dillon** 77.21 330 eP P 19 43 18.3 +1.3
comp=Z,63nm,1.1s
DLMT epP pP 19 43 51.3 +1.6
MFID **Camas Ranch** 77.38 327 ⇓*i*P P 19 43 18.7 +0.7
comp=Z,77nm,1.3s
MFID epP pP 19 43 52.9 +2.2
MFID esP sP 19 44 06.2 +1.5
VNDA **Vanda** 77.42 190 P P 19 43 19.0 +1.4
comp=Z,14nm,0.9s,baz=134,slow=4.8,SNR=96
VNDA LR LR 20 16 44.8
comp=Z,360nm,20.0s,baz=133,slow=35
VNDA **Vanda** 77.42 190 P P 19 43 19.0 +1.4
VNDA pmax pmax
comp=Z,14nm,0.9s
VNDA MLR MLR
comp=Z,361nm,20.0s
VNDA **Vanda** 77.42 190 eP P 19 43 18.8 +1.1
LRM **Limekiln Ridge** 77.48 330 eP P 19 43 19.2 +0.5
LRM esP pP 19 43 51.8 +0.3
OHCM **Honcut** 77.74 321 eP P 19 43 20.6 +0.7
HRY **Holter Researc** 77.87 331 eP P 19 43 21.2 +0.6
HRY epP pP 19 43 53.7 +0.3
NSHM **Saint Helena R** 77.89 320 eP P 19 43 22.1 +1.3
EGMT **Eagleton** 77.97 333 P P 19 43 20.5 -0.6
baz=78,SNR=6.9
EGMT **Eagleton** 77.97 333⇓eP P 19 43 21.0 -0.1
comp=Z,77nm,1.1s
EGMT epP pP 19 43 54.2 +0.3
WVOR **Wild Horse Val** 78.18 325 eP P 19 43 22.9 +0.5
WVOR pmax pmax
comp=Z,21nm,1.2s
WVOR **Wild Horse Val** 78.18 325 eP P 19 43 22.7 +0.2
comp=Z,20nm,1.3s
O03D **Paynes Creek** 78.54 321 P P 19 43 24.2 -0.2
baz=79
SUR **Sutherland** 78.57 120 eP P 19 43 25.5 +0.4
comp=Z,616nm,2.3s
CHMT **Chamberlain Mo** 78.67 331 eP P 19 43 25.8 +0.7
CHMT epP pP 19 43 57.8 -0.1
J08A **Circle Bar Ran** 78.72 325 eP P 19 43 26.4 +1.0
comp=Z,49nm,1.4s
MSO **Missoula** 78.92 330 P P 19 43 27.3 +1.0
baz=79
MSO **Missoula** 78.92 330 eP P 19 43 27.4 +1.0
comp=Z,52nm,1.3s
SLMT **Seeley Lake** 79.02 331 eP P 19 43 27.1 +0.1
SLMT epP pP 19 43 59.9 0.0
SLMT esP sP 19 44 15.1 +1.3
WDC **Whiskeytown Da** 79.16 321 eP P 19 43 26.5 -1.2
WDC pmax pmax
comp=Z,27nm,0.7s
WDC **Whiskeytown Da** 79.16 321 eP P 19 43 26.5 -1.2
comp=Z,27nm,0.7s
KCPM **Cahto Peak** 79.21 320 eP P 19 43 29.3 +1.1
comp=Z,20nm,0.9s
KIPM **Iron Peak** 79.23 320 eP P 19 43 29.0 +0.8
KIPM esP sP 19 44 16.5 +1.4
SWMT **Swartz Lake** 79.45 331 eP P 19 43 30.1 +0.8
N02D **Trinity Center** 79.50 321 P P 19 43 29.5 -0.2
baz=80
M04C **Macdoel** 79.52 322 P P 19 43 30.4 +0.6
baz=80
K05A **Summer Lake** 79.61 324 eP P 19 43 31.5 +1.2
comp=Z,72nm,0.9s
KMRM **Mail Ridge** 79.62 320 eP P 19 43 32.0 +1.7
comp=Z,83nm,1.1s
YBMT **Yellow Bay** 79.72 331 eP P 19 43 31.5 +0.7
YBMT epP pP 19 44 04.4 +0.8
YBMT esP sP 19 44 19.1 +1.6
JTMT **Jette** 79.76 331 eP P 19 43 31.7 +0.7
JTMT epP pP 19 44 04.7 +0.8
I07A **Izee** 79.76 325 eP P 19 43 31.8 +0.7
comp=Z,20nm,0.8s
M02C **Callahan** 79.86 322 P P 19 43 32.1 +0.5
baz=80
TSUM **Tsumeb** 79.89 107 eP P 19 43 32.2 -0.2
comp=Z,62nm,0.8s
TSUM epP pP 19 44 03.1 -2.1
F10A **Beach Ranch, E** 79.89 328 eP P 19 43 32.3 +0.7
comp=Z,51nm,1.1s
BLMT **Blacktail Moun** 79.99 331 eP P 19 43 32.5 +0.3
BLMT epP pP 19 44 06.0 +0.8
BLMT esP sP 19 44 21.2 +2.1
YBH **Yreka Blue Hor** 79.99 322 eP P 19 43 31.4 -0.9
YBH pmax pmax
comp=Z,15nm,0.8s
YBH **Yreka Blue Hor** 79.99 322 eP P 19 43 31.4 -0.9
comp=Z,15nm,0.8s
KHMM **Horse Mountain** 80.04 321 eP P 19 43 33.7 +1.1
comp=Z,67nm,1.1s
BSMT **Bassoo Peak** 80.06 330 eP P 19 43 33.0 +0.3
BSMT epP pP 19 44 06.0 +0.3
BSMT esP sP 19 44 20.1 +0.5
J05D **Fort Rock, OR** 80.17 324 P P 19 43 34.4 +1.1
baz=80
G08A **Pilot Rock** 80.30 327 eP P 19 43 34.6 +0.7
comp=Z,74nm,1.7s
WALA **Waterton Lakes** 80.56 332 eP P 19 43 35.2 0.0
comp=Z,63nm,1.2s
WALA epP pP 19 44 08.3 +0.2
WALA esP sP 19 44 23.6 +1.6
J04D **Umpqua Nationa** 80.62 323 P P 19 43 36.8 +1.0
baz=81
FFC **Flin Flon** 80.64 341 eP P 19 43 34.3 -1.0
FFC e*PP pP 19 44 08.6 +0.3
FFC e*SP sP 19 44 22.8 +0.6
FFC pmax pmax
comp=Z,44nm,1.4s
FFC **Flin Flon** 80.64 341 eP P 19 43 34.3 -1.0
comp=Z,44nm,1.4s
FFC epP pP 19 44 08.6 +0.3
FFC esP sP 19 44 22.8 +0.6
PFVI **Vila Bisbo** 80.65 44 eP P 19 43 37.3 +1.5
comp=Z,91nm,1.7s
PFVI **Vila Bisbo** 80.65 44 eP P 19 43 37.1 +1.3
comp=Z,37nm,0.9s
L02D **Cave Junction,** 80.78 322 P P 19 43 37.5 +1.1
baz=81
MORF **Marmelete** 80.87 44 eP P 19 43 36.8 -0.3
MORF AMb AMB 19 43 39.8
comp=Z,74nm,1.1s
MORF eS S 19 53 37.3 +2.5
MORF **Marmelete** 80.87 44 eP P 19 43 37.6 +0.6
comp=Z,80nm,1.3s
MORF **Marmelete** 80.87 44 eP P 19 43 36.7 -0.3
MORF eS S 19 53 37.2 +2.5
MORF pmax pmax
comp=Z,75nm,1.1s
I05D **Terrebonne, OR** 80.92 325 P P 19 43 38.2 +1.1
baz=81
PTEO **Sao Teotonio** 80.95 44 eP P 19 43 38.6 +1.2
comp=Z,142nm,1.1s
G06A **Carlson Farm,** 81.13 326 eP P 19 43 39.5 +1.2
comp=Z,62nm,1.4s
I04A **Tendick Farm,** 81.15 324 P P 19 43 39.0 +0.6
baz=81
MDT **Midelt** 81.17 50 P P 19 43 39.8 +1.0
comp=Z,33nm,0.9s,baz=240,slow=4.4,SNR=94
MDT pP pP 19 44 12.3 +0.5
comp=Z,26nm,1.1s,baz=234,slow=6.6,SNR=3.7
PBDV **Barranco-do-Ve** 81.30 45 eP P 19 43 39.8 +0.5
comp=Z,81nm,1.5s
HAWA **Hanford** 81.34 327 eP P 19 43 39.6 +0.4
comp=Z,54nm,1.1s
HAWA epP pP 19 44 13.3 +1.0
HAWA esP sP 19 44 27.6 +1.4
LIS **Lisbon** 81.36 43 eP P 19 43 38.8 -0.7
LIS AMb AMB 19 43 41.4
comp=Z,64nm,1.3s
LIS eS S 19 53 42.3 +2.6
LIS **Lisbon** 81.36 43 eP P 19 43 38.7 -0.7
LIS eS S 19 53 42.2 +2.6
LIS pmax pmax
comp=Z,64nm,1.3s
PNCL **Nicolau / Gran** 81.41 44 eP P 19 43 39.7 -0.1
comp=Z,40nm,1.3s
PMAFR **Mafra** 81.41 43 eP P 19 43 40.6 +0.8
comp=Z,62nm,1.1s
MESJ **Messejana** 81.45 44 eP P 19 43 39.8 -0.3
MESJ AMb AMB 19 43 43.1
comp=Z,54nm,0.7s
MESJ eS S 19 53 43.5 +2.8
MESJ **Messejana** 81.45 44 eP P 19 43 40.3 +0.3
comp=Z,54nm,0.9s
MESJ **Messejana** 81.45 44 eP P 19 43 39.7 -0.3
MESJ eS S 19 53 43.4 +2.8
MESJ pmax pmax
comp=Z,54nm,0.7s
PCVE **Castro Verde** 81.45 44 eP P 19 43 40.5 +0.5
comp=Z,54nm,1.0s
NEW **Newport** 81.45 330 eP P 19 43 38.6 -1.2
NEW e*PP pP 19 44 12.9 0.0
NEW pmax pmax
comp=Z,34nm,1.2s
NEW **Newport** 81.45 330 P P 19 43 40.6 +0.7
baz=82
NEW **Newport** 81.45 330 eP P 19 43 38.6 -1.2
comp=Z,34nm,1.2s
NEW epP pP 19 44 12.9 0.0
D08A **Wollman Farm,** 81.49 328 eP P 19 43 40.8 +0.8
comp=Z,62nm,1.4s
G05D **Wamic, OR** 81.50 325 P P 19 43 42.1 +1.9
baz=82
PVAQ **Vaqueiros** 81.53 45 eP P 19 43 41.5 +1.0
comp=Z,57nm,1.7s
PVAQ **Vaqueiros** 81.53 45 eS S 19 53 45.6 +4.1
H04A **Detroit Lake** 81.60 325 eP P 19 43 40.9 +0.2
comp=Z,26nm,0.9s
I03D **Drain, OR** 81.61 323 P P 19 43 42.1 +1.4
baz=82
E07A **Sunnyside** 81.62 327 eP P 19 43 42.1 +1.4
E07A epP pP 19 44 16.1 +2.4
C09A **Chrisman Ranch** 81.68 329 eP P 19 43 41.8 +0.7
comp=Z,52nm,0.7s
PBEJ **Beja** 81.79 44 eP P 19 43 42.9 +1.1
comp=Z,48nm,1.1s
EVO **Evora** 81.98 44 eP P 19 43 43.0 +0.2
comp=Z,37nm,1.6s
PMTG **Montargil** 82.15 43 eP P 19 43 44.2 +0.6
comp=Z,82nm,1.0s
PTOM **Tomar** 82.35 43 eP P 19 43 45.1 +0.4
comp=Z,90nm,1.1s
PBAR **Barrancos** 82.41 44 eP P 19 43 45.6 +0.6
comp=Z,77nm,1.7s
LTY **Liberty** 82.50 327 eP P 19 43 45.8 +0.4
comp=Z,47nm,1.2s
PCAS **Casmilo, Conde** 82.54 42 eP P 19 43 46.1 +0.4
comp=Z,39nm,1.4s
LON **Longmire** 82.75 326 eP P 19 43 45.8 -0.9
LON pmax pmax
comp=Z,59nm,1.8s
LON **Longmire** 82.75 326 eP P 19 43 45.8 -0.9
comp=Z,59nm,1.8s
PMRV **Marv??o** 82.89 43 eP P 19 43 47.5 0.0
comp=Z,29nm,1.4s
PMRV **Marv??o** 82.89 43 eS S 19 53 58.7 +3.4
PCBR **Castelo Branco** 83.06 43 eP P 19 43 48.8 +0.4
comp=Z,30nm,1.3s
D05A **Enumclaw** 83.13 327 eP P 19 43 49.1 +0.6
comp=Z,72nm,1.0s
PVIS **Viseu** 83.30 42 eP P 19 43 50.4 +0.8
comp=Z,42nm,1.5s
MTE **Manteigas** 83.34 42 eP P 19 43 49.4 -0.5
comp=Z,77nm,1.2s
MTE **Manteigas** 83.34 42 eS S 19 54 04.0 +4.0
MTE **Manteigas** 83.34 42⇑eP P 19 43 49.2 -0.6
comp=Z,52nm,1.0s
BOSA **Boshof** 83.41 118 P P 19 43 50.6 -0.2
comp=Z,54nm,0.9s,baz=244,slow=4.2,SNR=44
BOSA LR LR 20 17 51.4
comp=Z,271nm,18.0s,baz=238,slow=33
BOSA **Boshof** 83.41 118 P P 19 43 50.6 -0.2
BOSA pmax pmax
comp=Z,55nm,0.9s
BOSA MLR MLR
comp=Z,271nm,18.0s
BOSA **Boshof** 83.41 118 eP P 19 43 50.3 -0.4
comp=Z,73nm,1.0s
EDM **Edmonton** 83.42 335 eP P 19 43 48.7 -1.3
EDM e*PP pP 19 44 22.6 -0.5
EDM pmax pmax
comp=Z,216nm,1.0s
EDM **Edmonton** 83.42 335 eP P 19 43 48.7 -1.3
comp=Z,216nm,1.0s
EDM epP pP 19 44 22.6 -0.5
RAR **Rarotonga** 83.70 250 P P 19 43 52.5 +0.3
comp=Z,23nm,0.7s,baz=225,slow=5.4,SNR=4.4
RAR **Rarotonga** 83.70 250 P P 19 43 52.5 +0.3
RAR pmax pmax
comp=Z,23nm,0.7s
RAR **Rarotonga** 83.70 250 P P 19 43 52.5 +0.3
RAR ePKKPbc PKKPbc 20 02 07.6 -0.2
PVRL **Vila Real** 83.73 41 eP P 19 43 52.4 +0.6
comp=Z,65nm,1.1s
POLO **Lamas de Olo** 83.74 41 eP P 19 43 51.7 -0.2
comp=Z,21nm,1.3s
PGAV **Gavieira, Arco** 83.78 41 eP P 19 43 51.8 -0.3
comp=Z,61nm,1.2s
PGAV **Gavieira, Arco** 83.78 41 eS S 19 54 05.5 +1.1
PCAB **Cabril** 83.79 41 eP P 19 43 52.0 -0.1
comp=Z,85nm,1.0s
B05A **Bryant** 83.89 327 P P 19 43 52.6 +0.3
baz=84
MVO **Moncorvo** 84.09 42 eP P 19 43 54.0 +0.3
comp=Z,103nm,1.0s
MVO **Moncorvo** 84.09 42 eS S 19 54 07.0 -0.5
TAM **Tamanrasset** 84.30 63 eP P 19 43 55.3 0.0
TAM **Tamanrasset** 84.30 63 eP P 19 43 55.3 0.0
comp=Z,82nm,1.2s
PBRG **Braganca** 84.63 41 eP P 19 43 56.4 0.0
comp=Z,84nm,1.3s
MAW **Mawson** 84.74 163 P P 19 43 56.8 +0.3
comp=Z,37nm,0.7s,baz=221,slow=5.9,SNR=156
MAW PKKPbc PKKPbc 20 02 04.9 -1.9
comp=Z,1.1nm,0.6s,baz=6.9,slow=2.5,SNR=7.8
MAW LR LR 20 24 48.1
comp=Z,216nm,18.1s,baz=233,slow=38
MAW **Mawson** 84.74 163 P P 19 43 56.8 +0.3
MAW pmax pmax
comp=Z,37nm,0.7s
MAW pmax pmax
comp=Z,1.0nm,0.6s
MAW MLR MLR
comp=Z,216nm,18.1s
MAW **Mawson** 84.74 163 eP P 19 43 56.7 +0.2
comp=Z,10nm,0.8s
MAW ePKKPbc PKKPbc 20 02 04.3 -2.5
PGC **Sidney** 84.82 327 eP P 19 43 57.6 +0.5
PGC epP pP 19 44 31.8 +1.5
PAB **San Pablo** 84.92 44 eP P 19 43 57.9 0.0
PAB e*PP pP 19 44 30.8 -0.4
PAB pmax pmax
comp=Z,75nm,0.9s
PAB **San Pablo** 84.92 44 eP P 19 43 57.9 0.0
comp=Z,75nm,0.9s
PAB epP pP 19 44 30.8 -0.4
LBTB **Lobatse** 84.95 115 eP P 19 43 58.3 -0.3
LBTB **Lobatse** 84.95 115 eP P 19 43 58.2 -0.3
comp=Z,11nm,1.0s
ESDC **Sonseca Array** 85.24 44 P P 19 43 59.0 -0.4
comp=Z,38nm,0.9s,baz=243,slow=5.0,SNR=143
ESDC LR LR 20 20 39.2
comp=Z,278nm,19.0s,baz=245,slow=34
ES19 **SONSECA Array** 85.29 44 eP P 19 43 59.0 -0.8
DRV **Dumont d'Urvil** 90.03 191 P P 19 44 22.0 +0.1
DRV PP PP 19 47 56.0 0.0
DRV SKS SKSac 19 54 48.0 +7.6
DRV SP SPn 19 56 13.0 +3.6
DRV SS SS 20 01 07.0 +3.5
DRV L L 20 10 00.0
LSZ **Lusaka** 90.74 107 eP P 19 44 27.9 +1.5
LSZ *e* 19 48 00.4
LSZ pmax pmax
comp=Z,33nm,1.3s
LSZ **Lusaka** 90.74 107 eP P 19 44 27.9 +1.5
comp=Z,33nm,1.3s
LSZ ePP PP 19 48 00.4 -3.2
YKA **Yellowknife Ar** 90.80 340 P P 19 44 24.9 -0.4
comp=Z,17nm,0.7s,baz=132,slow=4.5,SNR=51
YKA pP pP 19 44 59.3 +0.4
comp=Z,101nm,0.9s,baz=134,slow=4.8,SNR=14
YKA **Yellowknife Ar** 90.80 340 P P 19 44 24.9 -0.4
YKA *PP pP 19 44 59.3 +0.4
YKA pmax pmax
comp=Z,17nm,0.7s
YKA pmax pmax
comp=Z,101nm,0.9s
MIR **Mirnyy** 91.65 173⇑eP P 19 44 38.0 +8.6
MIR pmax pmax
comp=Z,40nm,1.5s
KEST **Kesra** 92.73 53 P P 19 44 35.4 +0.3
comp=Z,16nm,0.9s,baz=221,slow=2.1,SNR=15
KEST **Kesra** 92.73 53 eP P 19 44 36.2 +1.1
CASY **Casey** 93.02 180 eP P 19 44 36.4 +0.6
comp=Z,64nm,0.9s
CASY epP pP 19 45 11.0 +1.6
CASY esP sP 19 45 25.1 +2.0
SSB **Saint Sauveur** 93.46 43 eP P 19 44 37.3 -0.8
SSB pmax pmax
comp=Z,30nm,1.5s
SSB **Saint Sauveur** 93.46 43 eP P 19 44 37.3 -0.8
comp=Z,30nm,1.5s
DLBC **Dease Lake** 93.88 332 eP P 19 44 40.0 +0.2
comp=Z,49nm,1.0s
DLBC epP pP 19 45 14.1 +0.7
EKA **Eskdalemuir Ar** 94.00 31 P P 19 44 38.7 -1.6
comp=Z,11nm,1.0s,baz=245,slow=3.5,SNR=9.6
EKA **Eskdalemuir Ar** 94.00 31 P P 19 44 38.7 -1.6
EKA pmax pmax
comp=Z,11nm,1.0s
VSL **Villasalto** 94.27 49 eP P 19 44 42.1 +0.2
comp=Z,18nm,1.0s
BNI **Bardonecchia** 94.72 43 eP P 19 44 43.6 -0.4
BNI pmax pmax
comp=Z,12nm,1.2s
BNI **Bardonecchia** 94.72 43 eP P 19 44 43.6 -0.4
comp=Z,12nm,1.2s
OXZ **Oxford** 95.25 220 ePP PP 19 48 29.7 -7.9
SUMG **Summit** 95.49 9 eP P 19 44 47.3 0.0
SUMG pmax pmax
comp=Z,45nm,0.9s
SUMG **Summit** 95.49 9 *i*P P 19 44 47.4 +0.1
SUMG **Summit** 95.49 9 eP P 19 44 47.3 +0.1
comp=Z,45nm,0.9s
THZ **Tophouse** 95.61 221 eP P 19 44 50.4 +2.2
comp=Z,96nm,1.9s
DOU **Dourbes** 95.62 38 P P 19 44 47.6 -0.2
comp=Z,9.0nm,1.3s
WLF **Walferdange** 96.34 39 P P 19 44 51.5 +0.3
comp=Z,30nm,1.4s
WLF **Walferdange** 96.34 39 eP P 19 44 51.0 -0.1
WLF pmax pmax
comp=Z,42nm,1.1s
WLF **Walferdange** 96.34 39 ePdiff P 19 44 51.8 +0.7
WLF epP pP 19 45 14.8 -10
WLF esP sP 19 45 25.0 -14
WLF **Walferdange** 96.34 39 eP P 19 44 51.0 -0.1
comp=Z,42nm,1.1s
MEM **Membach** 96.66 38 P P 19 44 52.5 0.0
VLC **Villacollemand** 96.79 45 ePcP PcP 19 44 59.5 +6.0
TUE **Stuetta** 97.01 43 eP P 19 44 53.7 -0.8
comp=Z,10nm,1.0s
BFO **Black Forest** 97.10 41 *c*eP Pdif 19 44 55.4 +0.7
BFO **Black Forest** 97.10 41 ePdiff Pdif 19 44 55.5 +0.8
DAVOX **Davos/Dischmat** 97.46 43 P P 19 44 56.5 0.0
comp=Z,6.9nm,0.9s,baz=296,slow=5.2,SNR=7.2
DAVOX PKKPbc PKKPbc 20 01 33.3 -1.7
comp=Z,2.5nm,0.7s,baz=323,slow=8.9,SNR=3.7
DAVOX **Davos/Dischmat** 97.46 43 P P 19 44 56.5 0.0
DAVOX pmax pmax
comp=Z,7.0nm,0.9s
DAVOX pmax pmax
comp=Z,3.0nm,0.7s
FUORN **Ofenpass-Fuorn** 97.65 43 eP Pdif 19 44 57.7 +0.2
comp=Z,1nm,1.1s
DAVA **Damuels** 97.66 42⇑*i*PcP P 19 44 57.2 -0.2
comp=Z,11nm,1.1s
BUG **Bochum--Univer** 97.72 38 ePdiff P 19 44 57.3 0.0
STU **Stuttgart** 97.81 41 ePdiff Pdif 19 44 57.9 +0.1
TNS **Taunus Mts** 97.92 39 ePdiff Pdif 19 44 58.7 +0.3
FETA **Feichten** 98.09 43 ⇓*i*Pdiff P 19 44 58.7 -0.6

comp=Z,22nm,1.3s,SNR=11
**RETA Reutte 98.29 42⇓** *i*Pdiff **P** **19 44 59.8 -0.3**
comp=Z,8.6nm,1.0s
**IBBN Ibbenburen 98.35 37** *e*Pdiff Pdif 19 45 00.4 +0.3
**MOTA Moosalm 98.45 43⇓** *i*Pdiff **P** **19 45 00.4 -0.5**
comp=Z,9.6nm,0.9s,SNR=7.2
**WTTA Wattenberg 98.76 43⇑** *i*Pdiff Pdif 19 45 02.4 0.0
comp=Z,22nm,1.0s,SNR=7.6
**CUC Castrocucco 99.06 51** *e*P **Pdif** **19 45 01.1 -2.6**
comp=Z,14nm,1.3s
**ABTA Abfaltersbach 99.13 43** *i* Pdiff **Pdif** **19 45 04.2 +0.3**
comp=Z,17nm,1.2s,SNR=7.3
**CLZ Clausthal 99.66 38** *e*Pdiff **Pdif** **19 45 06.4 +0.4**
**NRDL Niedersach Rie 99.75 37** *e*Pdiff **Pdif** **19 45 07.1 +0.9**
**JAVS Javornik 99.85 45** *e*P **Pdif** **19 45 07.1 0.0**
**NKC Novy Kostel 100.31 40** *e*PP PP 19 49 14.7 -2.4
NKC *e*SKS 19 55 42.3
**OBKA Obir 100.37 44⇑** *i*Pdiff **Pdif** **19 45 09.4 0.0**
comp=Z,19nm,1.2s,SNR=7.7
**BOJS Bojanci 100.50 45** *i* P **Pdif** **19 45 11.5 +1.6**
**INK Inuvik 100.56 340** PKKPbc PKKPbc 20 01 23.9 -2.9
comp=Z,3.5nm,0.9s,baz=307,slow=6.1,SNR=5.7
**GEC2 GERESS Array S 100.61 42** *e*PP PP 19 49 17.4 -2.1
**GERES GERESS Array B 100.61 42** P **Pdif** **19 45 10.3 -0.1**
comp=Z,1.9nm,0.9s,baz=258,slow=2.5,SNR=11
GERES PP **PP** **19 49 18.2 -1.2**
comp=Z,1.3nm,0.8s,baz=242,slow=5.6,SNR=4.2
GERES PKKPbc **PKKPbc** **20 01 22.4 -3.7**
comp=Z,0.5nm,0.6s,baz=64,slow=3.1,SNR=6.4
**GERES GERESS Array B 100.61 42** P **Pdif** **19 45 10.3 -0.1**
GERES 19 49 18.2
GERES pmax pmax
comp=Z,2.0nm,0.9s
GERES pmax pmax
comp=Z,1.0nm,0.9s
GERES pmax pmax
comp=Z,1.0nm,0.6s
**KHC Kasperske Hory 100.63 41** *e*PP PP 19 49 20.5 +1.0
KHC *e*SKS **SKSac** **19 55 41.0 +4.0**
KHC *e*SP **SP** **19 58 08.8 +2.1**
KHC AMS AMS 20 26 30.0
comp=Z,400nm,21.8s
**SOKA Soboth 100.74 44⇑** *i*Pdiff **Pdif** **19 45 10.8 -0.2**
comp=Z,5.2nm,1.0s
**PERS Pernice 100.78 44** *i* P **Pdif** **19 45 11.0 -0.1**
**CLL Collm 101.01 39** *e*P **Pdif** **19 45 12.0 0.0**
CLL pmax pmax
comp=Z,6.0nm,1.0s
**CLL Collm 101.01 39** *e*Pdif **Pdif** **19 45 12.0 0.0**
comp=Z,6.0nm,1.0s
CLL *i* 19 45 17.5
comp=Z,9.0nm,1.2s
CLL *e*PPdif **pPdif** **19 45 43.0 -2.7**
CLL *e*PP PP 19 49 16.0 -6.3
CLL *e*PP 19 49 56.0
CLL *e*SKSac **SKSac** **19 55 45.0 +6.4**
CLL *e*Sdif **Sdif** **19 56 49.0 +10**
CLL *e*SP **SP** **19 58 08.0 -2.6**
CLL *e*PPS PPS 19 59 07.0
CLL *e*SS SS 20 03 30.0 -11
CLL *e*PKKSdf PKKSdf 20 05 00.0 -7.8
CLL *e* 20 05 54.0
CLL *e* 20 09 00.0
CLL LmV 20 26 00.0
comp=Z,400nm,20.4s
**ARSA Arzberg 101.24 44⇑** *i*Pdiff **Pdif** **19 45 12.8 -0.4**
comp=Z,6.1nm,1.1s
**BRG Berggiesshubel 101.43 40** *e*P **Pdif** **19 45 16.1 +2.2**
BRG SS SS 20 03 45.0 -2.2
BRG pmax pmax
comp=Z,9.0nm,1.4s
BRG pmax pmax
comp=Z,22nm,1.8s
BRG MLR MLR
comp=N,209nm,22.4s
BRG MLR MLR
comp=E,289nm,19.5s
BRG MLR MLR
comp=Z,373nm,16.0s
**BRG Berggiesshubel 101.43 40** *e*PDIFF **Pdif** **19 45 16.1 +2.2**
comp=Z,9.2nm,1.4s
BRG *e*PP PP 19 49 19.0 -6.4
comp=Z,22nm,1.8s
BRG SKS SKSac 19 55 48.0 +7.3
BRG SDIFF **Sdif** **19 56 51.0 +8.4**
BRG SS **SS** **20 03 45.0 -2.2**
comp=N,209nm,22.4s
comp=E,289nm,19.5s
comp=Z,373nm,16.0s
**PRA Prague 101.46 41** *e*SKS **SKSac** **19 55 45.9 +5.0**
PRA *e*SP **SP** **19 58 15.1 -0.4**
**PRU Pruhonice 101.50 41** *e*PP PP 19 49 20.4 -5.6
PRU *e*SKS **SKSac** **19 55 47.0 +5.9**
PRU *e*SP **SP** **19 58 17.7 +1.8**
PRU AMS AMS 20 27 00.0
comp=Z,400nm,22.6s
**GOPC GO Pecny, Ondr 101.63 41** *e*PP PP 19 49 21.7 -5.3
GOPC *e*SKS **SKSac** **19 55 46.7 +5.0**
GOPC *e*SP **SP** **19 58 17.9 +0.6**
GOPC AMS AMS 20 27 20.0
comp=Z,500nm,27.6s
**TREC Trest 101.87 42** *e*SKS **SKSac** **19 55 46.7 +3.8**
**VRAC Vranov 102.56 42** PP PP 19 49 31.9 -2.1
comp=Z,4.2nm,0.8s,baz=258,slow=12,SNR=4.8
**UPC Upice 102.56 41** *e*SKS **SKSac** **19 55 51.3 +5.2**
**DPC Dobruska-Polom 102.70 41** *e*PP PP 19 49 29.6 -5.5
DPC *e*SKS **SKSac** **19 55 52.1 +5.2**
DPC *e*SP **SP** **19 58 24.9 -3.8**
**KRLC Kraliky 102.91 41** *e*PP PP 19 49 36.3 -0.3
**NBO02 NORSAR Array S 103.15 29** *e*PP PP 19 49 36.5 -1.5
**NOA NORSAR Array B 103.31 29** PP PP 19 49 38.1 -1.1
comp=Z,11nm,1.1s,baz=247,slow=7.5,SNR=4.4
NOA PKKPbc **PKKPbc** **20 01 16.2 -2.3**
comp=Z,1.5nm,0.7s,baz=263,slow=2.9,SNR=3.8
**OKC Ostrava-Krasne 103.68 42** *e*SKS **SKSac** **19 55 56.4 +5.1**
**VYHS Vyhne 103.74 43** *e*P **Pdif** **19 45 22.9 -1.3**
**VYHS Vyhne 103.74 43** PDIF **Pdif** **19 45 22.9 -1.3**
**ILAR Eielson Array 103.91 334** Pdiff **Pdif** **19 45 27.9 +3.4**
comp=Z,0.2nm,0.6s,baz=126,slow=3.6,SNR=4.3
ILAR pPdiff **pPdif** **19 45 58.2 0.0**
comp=Z,1.5nm,1.1s,baz=161,slow=6.0,SNR=5.6
ILAR PP **PP** **19 49 44.2 +0.7**
comp=Z,1.3nm,0.8s,baz=112,slow=6.0,SNR=5.7
ILAR PKKPbc **PKKPbc** **20 01 13.7 -3.2**
comp=Z,1.2nm,0.9s,baz=302,slow=4.0,SNR=6.6
**ILAR Eielson Array 103.91 334** P **Pdif** **19 45 28.0 +3.4**
ILAR 19 49 44.3
ILAR pmax pmax
comp=Z,2.0nm,1.1s
ILAR pmax pmax
comp=Z,1.0nm,0.8s
ILAR pmax pmax
comp=Z,1.0nm,1.0s
**HFS Hagfors 104.19 31** PKiKP **PKiKP** **19 49 43.4 +1.3**
comp=Z,19nm,1.0s,baz=214,slow=4.9,SNR=9.6
**WRH Wood River Hil 104.30 334** *e*Pdif **Pdif** **19 45 34.4 +8.1**
**BUR04 Bucovina Ar. S 107.68 45** *e*PKKPdf PKKPdf 20 01 18.8 +0.6
**FINES FINESS Array B 110.39 31** PKKPbc PKKPbc 20 00 54.4 -2.0
comp=Z,4.5nm,0.7s,baz=107,slow=6.4,SNR=7.9
**KIEV Kiev 110.80 42** *i* PKiKP **PKiKP** **19 49 53.1 -1.6**
**AKASG Malin Array Be 110.81 42** PKiKP **PKiKP** **19 49 53.4 -1.3**
comp=Z,0.5nm,0.3s,baz=265,slow=3.7,SNR=6.2
AKASG PP **PP** **19 50 30.8 -3.5**
comp=Z,3.3nm,0.8s,baz=257,slow=6.9,SNR=7.3
AKASG PKKPbc **PKKPbc** **20 00 53.3 -1.4**
comp=Z,2.6nm,0.7s,baz=69,slow=3.8,SNR=8.8
**AKASG Malin Array Be 110.81 42** *i* PKiKP **PKiKP** **19 49 53.4 -1.3**
AKASG 19 50 30.8
AKASG 20 00 53.3
AKASG pmax pmax
comp=Z,1.0nm,0.3s
AKASG pmax pmax
comp=Z,3.0nm,0.8s
AKASG pmax pmax
comp=Z,3.0nm,0.7s
**ARCES ARCESS Array B 110.88 22** PKKPbc PKKPbc 20 00 52.6 -2.4
comp=Z,1.7nm,0.8s,baz=86,slow=1.6,SNR=5.0
**BR231 Keskin MP Arra 111.63 54** *e*PKiKP **PKiKP** **19 49 57.6 +0.8**
BR231 *e*PP PP 19 50 33.8 -7.0
**BRTR Keskin Array B 112.27 55** PKiKP **PKiKP** **19 49 57.8 -0.2**
comp=Z,2.6nm,0.9s,baz=190,slow=6.3,SNR=9.0
BRTR pPKiKP **pPKiKP** **19 50 32.3 -0.8**
comp=Z,2.8nm,0.9s,baz=242,slow=5.1,SNR=4.8
BRTR PP **PP** **19 50 44.4 -0.9**
comp=Z,4.8nm,0.9s,baz=232,slow=6.1,SNR=6.5
BRTR PKKPbc **PKKPab** **20 00 55.5 -1.2**
comp=Z,1.9nm,0.8s,baz=96,slow=4.0,SNR=7.6
**APA Apatity 113.77 24⇑** *i*PKIKP PKiKP 19 50 11.0 +11
APA *i* 19 50 47.0
APA *i* 19 56 30.0
**OBN Obninsk 115.56 38** PKP **PKPdf** **19 50 02.5 -1.1**
comp=Z,8.1nm,0.5s,baz=6.9,slow=6.0,SNR=4.6
OBN PP **PP** **19 51 06.1 -1.8**
comp=Z,11nm,0.7s,baz=261,slow=7.8,SNR=6.9
**OBN Obninsk 115.56 38** *i* PKIKP **PKPdf** **19 50 02.8 -0.8**
OBN pmax pmax
comp=Z,24nm,1.7s
**KLMR Klimovskoe 116.89 31** *e*PKIKP **PKPdf** **19 50 05.3 -0.7**
KLMR pmax pmax
comp=Z,43nm,2.0s
**LPSR Galich'ya Gora 116.96 41** *e*PKIKP **PKPdf** **19 50 06.1 -0.3**
LPSR pmax pmax
comp=Z,20nm,1.0s
LPSR pmax pmax
comp=N,10.0nm,1.3s
LPSR pmax pmax
comp=E,9.0nm,1.0s
**VSR Storozhevoye 117.11 42** *e*PKIKP **PKPdf** **19 50 05.7 -1.0**
VSR pmax pmax
comp=Z,10.0nm,1.0s
VSR pmax pmax
comp=N,4.0nm,0.6s
VSR pmax pmax
comp=E,6.0nm,0.7s
**VORD Divnogorie 117.19 43** *e*PKIKP **PKPdf** **19 50 05.5 -1.4**
VORD pmax pmax
comp=Z,5.0nm,0.3s
VORD pmax pmax
comp=N,130nm,0.8s
VORD pmax pmax
comp=E,10.0nm,0.4s
**SOC Sochi 117.23 51** *i* PKIKP **PKPdf** **19 50 10.7 +3.5**
SOC *e* 19 51 26.7
SOC *e*PPP PPP 19 53 55.4
SOC *e* 19 56 38.6
SOC *e*PS PKKPab 20 00 44.8 +10
SOC *e*SS SS 20 07 23.0 +3.5
**VRH Novokhopyorsk 118.72 42** *e*PKIKP **PKPdf** **19 50 09.2 -0.6**
VRH pmax pmax
comp=Z,10.0nm,0.7s
VRH pmax pmax
comp=N,10.0nm,0.4s
VRH pmax pmax
comp=E,10.0nm,0.6s
**KIV Kislovodsk 119.39 51** *i* PKIKP **PKPdf** **19 50 11.0 -0.5**
KIV *e* 19 51 34.1
KIV pmax pmax
comp=Z,22nm,1.0s
KIV MLR MLR
comp=Z,34nm,18.0s
**NEY Neytrino 119.40 51** *i* PKIKP **PKPdf** **19 50 11.0 -0.7**
**KBZ Khabaz 119.54 51** PKP **PKPdf** **19 50 12.1 +0.5**
comp=Z,20nm,0.9s,baz=224,slow=0.8,SNR=23
**KBZ Khabaz 119.54 51** PKIKP **PKPdf** **19 50 12.1 +0.5**
KBZ pmax pmax
comp=Z,20nm,0.9s
**NCK Nalchik 120.04 51** *i* PKIKP **PKPdf** **19 50 12.8 +0.1**
**GNI Garni 120.80 55** *i* PKIKP **PKPdf** **19 50 13.6 -0.8**
**BILL Bilibino 122.15 339** *i* PKIKP **PKPdf** **19 50 14.2 -1.8**
BILL pmax pmax
comp=Z,22nm,1.6s
**ISRB Sarab 122.99 58** *e*P **PKPdf** **19 50 17.7 -1.1**
**SOKR Solikamsk 125.55 31⇑** *i*PKIKP **PKPdf** **19 50 23.6 +0.9**
SOKR pmax pmax
comp=Z,10.0nm,0.9s
**NWAO Narrogin (SRO) 126.12 186** *e*PKIKP **PKPdf** **19 50 24.8 0.0**
**NWAO Narrogin (SRO) 126.12 186** *e*PKPdf **PKPdf** **19 50 24.8 0.0**
**IDMV Damavand 126.44 61** *e*P **PKPdf** **19 50 25.6 0.0**
**IRAM Ramesheh 126.58 65** *e*P **PKPdf** **19 50 23.5 -2.4**
**ISRV Sarvestan 127.02 68** *e*P **PKPdf** **19 50 27.1 +0.2**
**ARU Arti 127.54 34** PKP **PKPdf** **19 50 26.7 +0.1**
comp=Z,0.6nm,0.4s,baz=106,slow=2.2,SNR=5.3
**ARU Arti 127.54 34** *i* PKIKP **PKPdf** **19 50 26.8 +0.2**
ARU 19 52 29.1
ARU SS SS 20 09 22.6 -6.6
**IGLO Ghaloghah 127.90 60** *e*P **PKPdf** **19 50 26.0 -2.2**
**SVE Sverdlovsk 128.46 33** *e*PKIKP **PKPdf** **19 50 28.4 0.0**
SVE pmax pmax
comp=Z,19nm,1.2s
**AKTO Aktyubinsk 129.03 41** PKP **PKPdf** **19 50 30.0 +0.3**
comp=Z,12nm,0.9s,baz=301,slow=2.3,SNR=31
AKTO SKPbc SKPbc 19 53 38.5 -0.5
comp=Z,6.0nm,1.0s,baz=270,slow=6.3,SNR=4.6
**AKTO Aktyubinsk 129.03 41** PKIKP **PKPdf** **19 50 30.0 +0.3**
AKTO pmax pmax
comp=Z,12nm,0.9s
AKTO pmax pmax
comp=N,6.0nm,1.0s
**UOSS Wadi Hilu 129.28 74** *e*PKPdf **PKPdf** **19 50 30.5 -0.4**
UOSS *e*PP **PP** **19 52 38.7 -2.9**
**SEY Seymchan 129.74 337** PKP **PKPdf** **19 50 31.1 +0.5**
comp=N,22nm,0.9s,baz=112,slow=2.6,SNR=25
**SEY Seymchan 129.74 337** *i* PKIKP **PKPdf** **19 50 31.4 +0.8**
**ASAR Alice Springs 130.52 207** PKhKP PKPpre 19 50 18.2
comp=N,0.6nm,0.6s,baz=153,slow=2.2,SNR=8.7
ASAR PKP **PKPdf** **19 50 32.9 -0.6**
comp=N,16nm,0.8s,baz=141,slow=2.5,SNR=62
ASAR pPKP pPKPdf 19 51 08.7 +0.1
comp=N,7.9nm,0.9s,baz=146,slow=2.3,SNR=3.8
**ASAR Alice Springs 130.52 207** *i* PKHKP PKPpre 19 50 18.2
ASAR 19 50 32.9
ASAR 19 51 08.7
ASAR pmax pmax
comp=Z,1.0nm,0.6s
ASAR pmax pmax
comp=Z,16nm,0.8s
ASAR pmax pmax
comp=Z,8.0nm,0.9s
**AB31 Akbulak array 130.55 42** *i* PKIKP **PKPdf** **19 50 33.1 +0.5**
AB31 pmax pmax
comp=Z,19nm,0.8s
**ABKAR Akbulak array 130.55 42** *e*PKPdf **PKPdf** **19 50 33.1 +0.6**
ABKAR *e*pPKPdf **pPKPdf** **19 51 08.8 +1.1**
ABKAR *e*SKP 19 53 45.9
**GEYT Alibeck 131.25 58** PKP **PKPdf** **19 50 33.7 -0.7**
comp=Z,7.1nm,0.8s,baz=238,slow=5.1,SNR=13
GEYT PP **PP** **19 52 54.0 0.0**
comp=Z,3.6nm,0.9s,baz=297,slow=9.8,SNR=4.1
GEYT SKPbc **SKPab** **19 53 48.0 +0.3**
comp=Z,4.3nm,0.9s,baz=297,slow=4.7,SNR=6.6
**IKRD Kardeh 131.65 59** *e*P **PKPdf** **19 50 38.2 +2.8**
**IEMG Emamgholi 131.71 58** *e*P **PKPdf** **19 50 36.8 +1.2**
**PEA0 Petropavlovsk- 132.33 324** *e*PKPdf **PKPdf** **19 50 36.2 +0.4**
PEA0 *e*pPKPdf **pPKPdf** **19 51 11.8 +0.8**
**PETK Petropavlovsk- 132.33 324** PKP **PKPdf** **19 50 35.5 -0.3**
comp=Z,17nm,0.9s,baz=108,slow=4.8,SNR=11
PETK pPKP **pPKPdf** **19 51 11.2 +0.2**
comp=Z,15nm,1.0s,baz=102,slow=6.2,SNR=3.9
**PETK Petropavlovsk- 132.33 324** PKIKP **PKPdf** **19 50 35.5 -0.3**
PETK 19 51 11.2
PETK pmax pmax
comp=Z,17nm,1.0s
PETK pmax pmax
comp=Z,15nm,1.0s
**WRA Warramunga Arr 133.57 210** PKP **PKPdf** **19 50 38.9 -0.4**
comp=Z,19nm,0.7s,baz=162,slow=1.6,SNR=66
WRA SKPbc **SKPbc** **19 53 56.2 +0.3**
comp=Z,3.7nm,1.0s,baz=147,slow=3.0,SNR=6.7
WRA SKKPbc SKKPbc 20 02 59.7 -10
comp=Z,1.1nm,0.8s,baz=327,slow=5.2,SNR=4.5
**WRA Warramunga Arr 133.57 210** PKIKP **PKPdf** **19 50 38.9 -0.4**
WRA pmax pmax
comp=Z,19nm,0.7s
WRA pmax pmax
comp=N,4.0nm,1.0s
WRA pmax pmax
comp=N,1.0nm,0.8s
**WRAB Tennant Creek 133.57 210***d* PKIKP **PKPdf** **19 50 38.9 -0.4**
WRAB pmax pmax
comp=Z,152nm,1.7s
**PMG Port Moresby 133.69 233** *i* PKIKP **PKPdf** **19 50 37.2 -2.4**
**ZRNK Zerenda 134.48 35** PKIKP **PKPdf** **19 50 40.6 +0.7**
ZRNK pmax pmax
comp=Z,26nm,0.9s
**CHKZ Chkalovo 134.97 33** PKIKP **PKPdf** **19 50 40.7 0.0**
CHKZ pmax pmax
comp=Z,10.0nm,0.9s
**BRVK Borovoye 135.11 34***d* PKIKP **PKPdf** **19 50 41.8 +0.8**
BRVK pmax pmax
comp=Z,6.0nm,0.7s
BRVK PKPbc **PKKPab** **20 00 55.5 -1.2**
comp=Z,1.9nm,0.8s,baz=96,slow=4.0,SNR=7.6
**BRVK Borovoye 135.11 34** *e*PKPdf **PKPdf** **19 50 41.8 +0.8**
BRVK *e*pPKPdf **pPKPdf** **19 51 17.5 +1.3**
**BVA0 Borovoye Array 135.18 34** PKIKP **PKPdf** **19 50 41.3 +0.1**
BVA0 pmax pmax
comp=Z,27nm,1.1s
**VOSK Vostochnaya 135.64 34** PKIKP **PKPdf** **19 50 42.2 +0.1**
VOSK pmax pmax
comp=Z,16nm,0.8s
**YAK Yakutsk 137.07 347** *i* PKIKP **PKPdf** **19 50 44.3 -0.1**
YAK *e* 19 51 18.1
YAK pmax pmax
comp=Z,20nm,1.0s
YAK pmax pmax
comp=N,6.0nm,1.4s
YAK pmax pmax
comp=E,4.0nm,1.2s
**MBWA Marble Bar 137.35 191** *e*PKPdf **PKPdf** **19 50 46.2 -0.1**
**KK31 Karatay Array 139.42 48** *i* PKIKP **PKPdf** **19 50 49.5 +0.1**
KK31 pmax pmax
comp=Z,3.0nm,0.7s
**KKAR Karatay Array 139.42 48** *e*PKIKP **PKPdf** **19 50 48.6 -0.8**
**KKAR Karatay Array 139.42 48** *e*PKPdf **PKPdf** **19 50 48.6 -0.8**
**NVS Novosibirsk 140.06 25⇑** *i*PKIKP **PKPdf** **19 50 51.3 +1.2**
NVS *i* 19 51 27.9
NVS *i* 19 53 48.8
NVS pmax pmax
comp=Z,43nm,1.3s
NVS pmax pmax
comp=E,8.0nm,1.2s
**KBL Kabul 140.41 61** *e*PKIKP **PKPdf** **19 50 54.4 +2.7**
KBL *e* 19 53 52.6
**KBL Kabul 140.41 61** *e*PKPdf **PKPdf** **19 50 54.4 +2.7**
KBL *e*PP **PP** **19 53 52.6 +0.7**
**MTN Manton Dam 141.22 212** *e*PKPpre PKPpre 19 50 47.1
**ZAA0 Zalesovo Array 141.34 25** *e*PKPpre PKPpre 19 50 45.5
**ZALV Zalesovo Beam 141.34 25** PKHKP PKPpre 19 50 46.3
comp=E,6.7nm,0.8s,baz=317,slow=4.1,SNR=26
ZALV PKP **PKPdf** **19 50 52.3 -0.2**
comp=E,22nm,0.6s,baz=291,slow=2.4,SNR=54
ZALV SKPbc **SKPbc** **19 54 18.1 +0.7**
comp=E,18nm,1.0s,baz=292,slow=4.3,SNR=5.4
**ZALV Zalesovo Beam 141.34 25** *i* PKHKP PKPpre 19 50 46.3
ZALV 19 50 52.3
ZALV pmax pmax
comp=Z,7.0nm,0.8s
ZALV pmax pmax
comp=Z,22nm,0.6s
ZALV pmax pmax
comp=N,18nm,1.0s
**KUR Kuril'sk 141.54 318***d* PKHKP PKPpre 19 50 38.7
KUR *i* SS SS 20 12 19.2 +1.4
KUR *i* SSS SSS 20 17 27.8
KUR MLR MLR
comp=Z,150nm,20.0s
**EKS2 Erkin-Say 141.82 47** *e*PKIKP **PKPdf** **19 50 53.0 -0.8**
**EKS2 Erkin-Say 141.82 47** *e*PKPdf **PKPdf** **19 50 53.0 -0.8**
**AAK Ala-Archa 142.31 47** *i* PKIKP **PKPdf** **19 50 52.8 -2.0**
**AAK Ala-Archa 142.31 47** *e*PKPdf **PKPdf** **19 50 51.8 -3.0**
**KRAR Krasnoyarsk 142.37 17** *i* PKIKP **PKPdf** **19 50 52.8 -1.4**
**TKM2 Tokmak 2 142.94 46** *e*PKIKP **PKPdf** **19 50 53.6 -2.4**
**TKM2 Tokmak 2 142.94 46** *e*PKPdf **PKPdf** **19 50 53.6 -2.4**
**BOD Bodaibo 143.15 358** *e*PHKP PKPpre 19 50 50.8
BOD pmax pmax
comp=Z,16nm,1.2s
**YUK Yuzh-Kuril'sk 143.36 317***d* PKHKP PKPpre 19 50 44.4
YUK *i* 19 54 04.7
YUK *i* PPP PPP 19 57 18.5
**GENI Genyem 143.38 234** PKP PKPbc 19 50 55.6 +0.8
GENI PKP PKPbc 19 50 55.6 +0.8
**YSS Yuzh-Sakhalins 143.72 323** *i* PKIKP PKPbc 19 50 55.4 +0.6
**KSH Kashi 144.52 51** PKP PKPbc 19 50 57.8 +0.1
KSH *e*pPKP pPKPdf 19 51 24.3 -10
KSH *e*sPKP 19 51 35.1
KSH *e*PP **PP** **19 54 16.9 +0.7**
KSH PKS **PKSdf** **19 54 31.9 -2.5**
KSH SKS **SKSdf** **19 57 53.6 -2.6**
KSH SKKS **SKKSac** **20 00 56.3 +0.1**
KSH SS **SS** **20 12 53.3 +0.3**
KSH PPMZ
comp=Z,350nm,4.1s
KSH LN
comp=Z,170nm,5.9s
KSH LE
comp=Z,70nm,4.7s
KSH LZ
comp=Z,410nm,17.9s
**MAKZ Makanchi 144.84 36** *e*PKPdf PKPbc 19 50 58.6 +0.3
**SMPI Sarmi 144.87 233** PKP **PKPab** **19 50 59.2 -0.1**
SMPI PKP PKPbc 19 50 59.3 0.0
**MK31 Makanchi Array 145.02 36** *i* PKIKP **PKPdf** **19 50 59.1 -0.1**
MK31 pmax pmax
comp=Z,186nm,1.1s
**MKAR Makanchi Array 145.02 36** PKPbc **PKPdf** **19 50 59.2 0.0**
comp=Z,104nm,0.8s,baz=323,slow=1.8,SNR=290
MKAR pPKPbc pPKPbc 19 51 34.0 +0.4
comp=Z,33nm,0.9s,baz=336,slow=2.7,SNR=2.8
**MKAR Makanchi Array 145.02 36** PKIKP **PKPdf** **19 50 59.2 0.0**
MKAR 19 51 34.1
MKAR pmax pmax
comp=Z,104nm,0.8s
MKAR pmax pmax
comp=Z,33nm,0.9s
**MK01 Makanchi Array 145.04 36** *e*PKPbc **PKPbc** **19 50 58.2 -0.7**
**SAUI Saumlaki 145.23 216** PKP **PKPab** **19 51 02.6 +2.0**
SAUI PKP **PKiKP** **19 51 02.7 -1.8**
**SAUI Saumlaki 145.23 216** *e*PKPdf **PKPab** **19 51 02.3 +1.7**
**ASAJ Asahikawa 145.37 319** PKPbc **PKPbc** **19 50 59.9 -0.1**
baz=263,slow=4.9
**ASAJ Asahikawa 145.37 319** *e*PKPdf **PKPab** **19 51 00.3 0.0**
ASAJ *e*pPKPdf **pPKPdf** **19 51 35.4 +0.5**
ASAJ *e*sPKPdf **sPKPdf** **19 51 49.8 +1.4**
**ERM Erimo 146.06 315** *e*PKP2 **PKPab** **19 51 03.6 +0.6**
**ERM Erimo 146.06 315** *e*PKPdf **PKPab** **19 51 03.6 +0.6**
ERM *e*pPKPdf **pPKPdf** **19 51 38.6 +2.4**
ERM *e*sPKPdf **sPKPdf** **19 51 53.0 +3.4**
**HABR Khabarovsk 146.66 331***ce*PKIKP **PKPdf** **19 51 00.4 -1.5**
HABR *i* 19 51 05.6
HABR *e* 19 51 38.7
HABR *e* 19 54 27.0
HABR *e*PPP PPP 19 57 42.9
HABR *e* 19 58 00.0
HABR *e* 20 07 03.8
HABR *e*SS SS 20 13 18.9 +3.4
HABR *e*SSS SSS 20 18 50.5
**BATI Baumata 146.76 202** PKP **PKPab** **19 51 06.1 -0.3**
**HVS Khovu-Aksy 146.84 21** *i* PKIKP **PKPdf** **19 51 01.6 -0.7**
**SOEI Soe 146.96 204** PKP **PKPbc** **19 51 06.4 +0.7**
**SOEI Soe 146.96 204** *e*PKPdf **PKPbc** **19 51 04.7 -1.0**
**URV Uravakonda 146.99 95** *e*PKPdf **PKPdf** **19 51 01.6 -1.8**
URV *e*PKPbc **PKPbc** **19 51 03.3 -2.3**
**KLRI Killari 147.08 89** *e*PKPbc **PKPdf** **19 51 03.5 -0.1**
KLRI *e*PKPab **PKPbc** **19 51 05.4 -0.5**
**GUMO Guam 147.29 263** PKPbc **PKPbc** **19 51 06.0 -0.4**
comp=Z,239nm,1.0s,baz=184,slow=8.2,SNR=12
**GUMO Guam 147.29 263** PKP2 **PKPbc** **19 51 06.0 -0.4**
GUMO pmax pmax
comp=Z,239nm,1.0s
**PALK Pallekele 147.32 110***c* PKP2 **PKPab** **19 51 08.0 -0.8**
**KLR Kul'dur 147.48 335** *e*PKHKP PKPpre 19 51 00.0
KLR MLR MLR
comp=E,600nm,14.0s
**BASI Baing, Sumba 147.73 197** PKP **PKPbc** **19 51 08.0 +0.4**
**IRK Irkutsk 148.30 8** *e*PKIKP **PKPdf** **19 51 04.8 +0.3**
IRK *e* 19 51 42.9
IRK pmax pmax
comp=Z,154nm,1.7s
**MOY Mondy 148.30 12** *e*PKP2 **PKPbc** **19 51 09.3 +1.1**
MOY pmax pmax
comp=Z,105nm,1.3s
**WSI Waingapu 148.33 197** PKP **PKPbc** **19 51 09.7 +0.5**
**FAKI Fak Fak 148.69 223** PKP **PKPbc** **19 51 10.7 +0.4**
**FAKI Fak Fak 148.69 223** *e*PKPdf **PKPdf** **19 51 06.7 +0.3**
FAKI *e*PKPbc **PKPbc** **19 51 10.7 +0.4**
FAKI *e*pPKPdf **pPKPdf** **19 51 45.4 +3.9**
**RCLA Racherla 148.71 95** *e*PKPdf **PKPdf** **19 51 05.9 -0.3**
RCLA *e*PKiKP **PKPbc** **19 51 09.8 -0.4**
**MMRI Maumere 148.72 201** PKP **PKPbc** **19 51 10.6 +0.3**
**MMRI Maumere 148.72 201** *e*PKPdf **PKPdf** **19 51 05.9 -0.5**
MMRI *e*PKPbc **PKPbc** **19 51 10.0 -0.2**
MMRI *e*SKP 19 54 40.4
**TLY Talaya 148.75 9** PKPbc **PKPbc** **19 51 08.8 -0.5**
comp=Z,13nm,0.6s,baz=230,slow=1.9,SNR=9.8
**TLY Talaya 148.75 9** *e*PKIKP **PKPdf** **19 51 06.7 +1.4**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TLY | | | | | pmax | pmax | | |
| | comp=Z,59nm,1.4s | | | | | | | |
| TLY | | | | | MLR | MLR | | |
| | comp=Z,245nm,23.0s | | | | | | | |
| **HYBB** | **Hyderabad (bro** | **148.78** | **91** | *e*PKPdf | **PKPdf** | **19 51 05.5** | **-0.9** |
| HYBB | | | | *e*PKPbc | **PKPbc** | **19 51 08.3** | **-2.1** |
| **HYB** | **Hyderabad** | **148.78** | **91** | *i* PKP | **PKPdf** | **19 51 06.0** | **-0.4** |
| HYB | | | | *e* | | 19 51 09.0 | |
| HYB | | | | *e*PKPAB | **PKiKP** | **19 51 13.0** | **+1.3** |
| HYB | | | | *e* | | 19 51 48.0 | |
| **EDFI** | **Ende, Flores** | **148.79** | **200** | PKP | **PKPbc** | **19 51 10.5** | **-0.1** |
| **SRLM** | **Srisailam** | **148.81** | **93** | *e*PKPdf | **PKPdf** | **19 51 05.8** | **-0.6** |
| SRLM | | | | *e*PKiKP | **PKPbc** | **19 51 09.9** | **-0.5** |
| **SRSP** | **Sriramsagar** | **148.86** | **88** | *e*PKPdf | **PKPdf** | **19 51 05.5** | **-0.9** |
| SRSP | | | | *e*PKiKP | **PKPbc** | **19 51 10.4** | **-0.1** |
| **SKHT** | **Srikalahasti** | **148.92** | **98** | *e*PKPdf | **PKPdf** | **19 51 05.4** | **-1.1** |
| SKHT | | | | *e*PKiKP | **PKPbc** | **19 51 10.8** | **+0.1** |
| **CIT** | **Chita** | **148.97** | **357** | *e*PKIKP | **PKPdf** | **19 51 06.4** | **+0.7** |
| CIT | | | | *e* | | 19 51 45.6 | |
| CIT | | | | *e* | | 19 51 58.4 | |
| CIT | | | | pmax | pmax | | |
| | comp=Z,148nm,1.6s | | | | | | |
| **NJS** | **Nagarjunasagar** | **149.30** | **93** | *e*PKPdf | **PKPdf** | **19 51 07.0** | **-0.2** |
| NJS | | | | *e*PKiKP | **PKPbc** | **19 51 11.0** | **-0.6** |
| **RPR** | **Rampur** | **149.74** | **88** | *e*PKPdf | **PKPdf** | **19 51 06.7** | **-1.2** |
| RPR | | | | *e*PKiKP | **PKPbc** | **19 51 12.1** | **-0.6** |
| **ADKI** | **Addanki** | **149.75** | **94** | *e*PKPdf | **PKPdf** | **19 51 07.8** | **0.0** |
| **WMQ** | **Urumqi** | **149.85** | **35** | PKPbc | **PKPdf** | **19 51 07.0** | **-0.4** |
| WMQ | | | | PP | **PP** | **19 54 50.0** | **+3.2** |
| WMQ | | | | SKS | **SKSdf** | **19 58 03.0** | **-0.3** |
| WMQ | | | | SKKS | **SKKSac** | **20 01 26.0** | **+0.4** |
| WMQ | | | | SS | **SS** | **20 13 50.0** | **-2.0** |
| WMQ | | | | PPMZ | | | |
| | comp=Z,110nm,11.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,320nm,26.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,280nm,27.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,340nm,28.0s | | | | | | |
| **ZAK** | **Zakamensk** | **149.95** | **10** | *e*PKHKP | **PKPdf** | **19 51 07.0** | **-0.4** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,29nm,1.2s | | | | | | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,34nm,1.2s | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **149.99** | **191** | PKP | **PKPdf** | **19 51 08.9** | **+0.5** |
| TWSI | | | | PKP | **PKPbc** | **19 51 13.3** | **-0.1** |
| **IGBI** | **Denpasar** | **150.17** | **187** | PKP | **PKPbc** | **19 51 13.8** | **0.0** |
| **MSAI** | **Masohi** | **150.36** | **217** | PKP | **PKPbc** | **19 51 13.7** | **-0.6** |
| **AAI** | **Ambon** | **150.49** | **216** | PKP | **PKPbc** | **19 51 13.2** | **-1.4** |
| **SRBI** | **Singaraja** | **150.89** | **188** | PKP | **PKPbc** | **19 51 15.0** | **-0.5** |
| **SWI** | **Sorong** | **150.89** | **224** | PKP | **PKPbc** | **19 51 15.1** | **-0.5** |
| **HIA** | **Hailar** | **151.00** | **349** | *e*PKIKP | **PKPdf** | **19 51 08.8** | **-0.1** |
| HIA | | | | *e* | | 19 51 49.9 | |
| **HIA** | **Hailar** | **151.00** | **349** | *e*PKPdf | **PKPdf** | **19 51 08.8** | **-0.1** |
| HIA | | | | *e*PKPbc | **PKPbc** | **19 51 14.4** | **-0.4** |
| HIA | | | | *ep*PKPbc | **pPKPbc** | **19 51 49.9** | **+0.1** |
| **PCJI** | **Pacitan** | **151.01** | **179** | PKP | **PKPbc** | **19 51 14.5** | **-1.3** |
| **USRK** | **Ussuriysk Ar.** | **151.23** | **328** | PKP | **PKPdf** | **19 51 08.7** | **-0.7** |
| | comp=Z,4.7nm,0.9s,baz=326,slow=2.7,SNR=12 | | | | | | |
| USRK | | | | PKPbc | **PKPbc** | **19 51 15.0** | **-0.4** |
| | comp=Z,43nm,0.7s,baz=350,slow=0.7,SNR=78 | | | | | | |
| USRK | | | | pPKPbc | **pPKPbc** | **19 51 49.7** | **-0.7** |
| | comp=Z,39nm,1.0s,baz=29,slow=1.9,SNR=5.2 | | | | | | |
| **CMJI** | **Cimerak** | **151.27** | **174** | PKP | **PKPbc** | **19 51 15.7** | **-0.7** |
| **ABJI** | **Asem Bagus** | **151.28** | **186** | PKP | **PKPbc** | **19 51 15.1** | **-1.3** |
| **UGM** | **Wanagama** | **151.28** | **178** | PKP | **PKPbc** | **19 51 15.4** | **-1.1** |
| **WOJI** | **Wonogiri, Jawa** | **151.37** | **179** | PKP | **PKPbc** | **19 51 16.7** | **+0.1** |
| **CISI** | **Cisompet, Garu** | **151.43** | **172** | PKP | **PKPbc** | **19 51 17.5** | **+0.6** |
| **CISI** | **Cisompet, Garu** | **151.43** | **172** | *e*PKPdf | **PKPdf** | **19 51 10.5** | **-0.2** |
| CISI | | | | *e*PKPbc | **PKPbc** | **19 51 16.8** | **-0.1** |
| CISI | | | | *ep*PKPdf | **pPKPdf** | **19 51 52.7** | **+6.8** |
| **NLAI** | **Namlea** | **151.45** | **214** | PKP | **PKPbc** | **19 51 16.2** | **-0.7** |
| **BBSI** | **Bau Bau** | **151.52** | **204** | PKP | **PKPbc** | **19 51 15.9** | **-1.1** |
| **CNJI** | **Cibinong** | **151.58** | **171** | PKP | **PKPbc** | **19 51 16.3** | **-0.8** |
| **PVM** | **Polavaram** | **151.62** | **92** | *e*PKPdf | **PKPdf** | **19 51 10.0** | **-0.7** |
| **SKJI** | **Sukabumi** | **151.79** | **170** | PKP | **PKPbc** | **19 51 16.3** | **-1.3** |
| **NGJI** | **Ngawi** | **151.84** | **180** | PKP | **PKPbc** | **19 51 17.1** | **-0.6** |
| **MJAR** | **Matsushiro Arr** | **151.99** | **309** | PKPbc | **PKPbc** | **19 51 17.0** | **-0.5** |
| | comp=Z,33nm,0.9s,baz=100,slow=1.4,SNR=57 | | | | | | |
| MJAR | | | | pPKPbc | **pPKPbc** | **19 51 52.8** | **+0.3** |
| | comp=Z,18nm,1.0s,baz=85,slow=2.5,SNR=3.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **151.99** | **309** | PKIKP | **PKPbc** | **19 51 17.0** | **-0.5** |
| MJAR | | | | | | 19 51 52.8 | |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,33nm,0.9s | | | | | | |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **MAJO** | **Matsushiro** | **151.99** | **309** | *e*PKIKP | **PKPdf** | **19 51 10.1** | **-0.7** |
| **MAJO** | **Matsushiro** | **151.99** | **309** | *e*PKPdf | **PKPdf** | **19 51 10.1** | **-0.7** |
| MAJO | | | | *e*PKPbc | **PKPbc** | **19 51 17.2** | **-0.2** |
| **MAT** | **Matsushiro** | **151.99** | **309** | PKP | **PKPbc** | **19 51 17.0** | **-0.5** |
| **CGJI** | **Cibinong** | **152.01** | **168** | PKP | **PKPbc** | **19 51 17.7** | **-0.4** |
| **MDJ** | **Mudanjiang** | **152.04** | **332** | PKPbc | **PKPdf** | **19 51 09.9** | **-0.7** |
| MDJ | | | | PP | **PP** | **19 54 54.3** | **-4.6** |
| MDJ | | | | PPMZ | | | |
| | comp=Z,220nm,10.5s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,220nm,49.1s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,130nm,34.1s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,320nm,42.3s | | | | | | |
| **MDJ** | **Mudanjiang** | **152.04** | **332** | *e*PKPdf | **PKPdf** | **19 51 10.3** | **-0.3** |
| MDJ | | | | *e*PKPbc | **PKPbc** | **19 51 16.7** | **-0.5** |
| MDJ | | | | *e*PKPab | **PKPab** | **19 51 25.6** | **-1.5** |
| **LEM** | **Lembang** | **152.12** | **172** | PKP | **PKPbc** | **19 51 16.9** | **-1.7** |
| **SMRI** | **Semarang** | **152.14** | **178** | PKP | **PKPbc** | **19 51 16.6** | **-1.8** |
| SMRI | | | | PKP | **PKiKP** | **19 51 18.9** | **+0.2** |
| **SMRI** | **Semarang** | **152.14** | **178** | *e*PKPdf | **PKPdf** | **19 51 12.2** | **+0.5** |
| SMRI | | | | *e*PKPbc | **PKiKP** | **19 51 18.7** | **0.0** |
| SMRI | | | | *e*PKPab | **PKPab** | **19 51 29.3** | **+1.0** |
| **BKSI** | **Bulukumba** | **152.51** | **199** | PKP | **PKPbc** | **19 51 18.9** | **-0.3** |
| **KASI** | **Kota Agung** | **152.80** | **165** | PKP | **PKPbc** | **19 51 18.1** | **-1.8** |
| **SONA1** | **Songino Array** | **152.88** | **7** | *e*PKPdf | **PKPdf** | **19 51 12.4** | **+0.4** |
| **SONM** | **Songino Array** | **152.89** | **7** | PKP | **PKPdf** | **19 51 12.4** | **+0.4** |
| | comp=Z,11nm,0.9s,baz=333,slow=1.0,SNR=50 | | | | | | |
| SONM | | | | PKPbc | **PKPbc** | **19 51 18.6** | **-0.6** |
| | comp=Z,22nm,0.9s,baz=295,slow=0.4,SNR=28 | | | | | | |
| SONM | | | | PKPab | **PKPab** | **19 51 31.4** | **+0.6** |
| | comp=Z,12nm,0.8s,baz=332,slow=3.8,SNR=8.6 | | | | | | |
| **SONM** | **Songino Array** | **152.89** | **7** | PKIKP | **PKPdf** | **19 51 12.4** | **+0.4** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **KDI** | **Kendari** | **152.90** | **205** | PKP | **PKPbc** | **19 51 18.8** | **-1.3** |
| **KAPI** | **Kappang** | **152.91** | **198** | PKP | **PKPdf** | **19 51 12.8** | **0.0** |
| | comp=Z,13nm,1.0s,baz=289,slow=9.4,SNR=1.8 | | | | | | |
| KAPI | | | | PKPbc | **PKPbc** | **19 51 20.1** | **0.0** |
| | comp=Z,75nm,0.8s,baz=198,slow=3.7,SNR=8.9 | | | | | | |
| KAPI | | | | PKPab | **PKPab** | **19 51 32.1** | **+0.5** |
| | comp=Z,28nm,0.8s,baz=246,slow=4.3,SNR=3.8 | | | | | | |
| **KAPI** | **Kappang** | **152.91** | **198** | *e*PKPdf | **PKPdf** | **19 51 13.5** | **+0.7** |
| KAPI | | | | *e*PKPbc | **PKiKP** | **19 51 20.7** | **+0.3** |
| KAPI | | | | *e*PKPab | **PKPab** | **19 51 32.1** | **+0.5** |
| **SANI** | **Sanana** | **153.04** | **214** | PKP | **PKPdf** | **19 51 14.9** | **+1.9** |
| SANI | | | | PKP | **PKPbc** | **19 51 18.5** | **-1.9** |
| **LWLI** | **Liwa** | **153.18** | **164** | PKP | **PKPbc** | **19 51 18.7** | **-2.2** |
| **LBMI** | **Labuha** | **153.38** | **218** | PKP | **PKPbc** | **19 51 18.3** | **-2.9** |
| **KLI** | **Kotabumi** | **153.53** | **165** | PKP | **PKPbc** | **19 51 18.0** | **-3.5** |
| **MDSI** | **Maura Dua** | **153.72** | **163** | PKP | **PKPbc** | **19 51 18.5** | **-3.4** |
| **KOLN** | **Koldanda** | **153.80** | **70** | *e*P | **PKPdf** | **19 51 13.4** | **-0.6** |
| **DANN** | **Dangsing** | **153.84** | **68** | *e*P | **PKPdf** | **19 51 14.4** | **+0.3** |
| **SPSI** | **Sidrap Palu** | **153.90** | **199** | PKP | **PKPbc** | **19 51 21.2** | **-1.1** |
| **CHLP** | **Challavanipeta** | **154.13** | **91** | *e*PKPdf | **PKPdf** | **19 51 14.1** | **-0.3** |
| CHLP | | | | *e*PKPab | **PKPab** | **19 51 33.4** | **-3.4** |
| **CN2** | **Changchun** | **154.41** | **336** | *e*PKPbc | **PKPdf** | **19 51 14.9** | **+0.9** |
| **TNTI** | **Ternate** | **154.60** | **220** | PKP | **PKPdf** | **19 51 19.3** | **+4.1** |
| **GKN** | **Gorkha** | **154.67** | **69** | *e*P | **PKPdf** | **19 51 14.7** | **-0.4** |
| | comp=Z,25nm,1.0s | | | | | | |
| **TTSI** | **Tana Toraja** | **154.75** | **200** | PKP | **PKPbc** | **19 51 20.0** | **-4.1** |
| **DMN** | **Daman** | **155.14** | **69** | *e*P | **PKPdf** | **19 51 15.4** | **-0.5** |
| | comp=Z,22nm,1.3s | | | | | | |
| **KKN** | **Kakani** | **155.26** | **69** | *e*P | **PKPdf** | **19 51 15.3** | **-0.7** |
| | comp=Z,22nm,1.1s | | | | | | |
| **PKI** | **Pulchoki** | **155.41** | **69** | *e*P | **PKPdf** | **19 51 15.5** | **-0.9** |
| **LUWI** | **Luwuk** | **155.47** | **208** | PKP | **PKPdf** | **19 51 21.1** | **+4.7** |
| **LUWI** | **Luwuk** | **155.47** | **208** | *e*PKPdf | **PKPdf** | **19 51 16.8** | **+0.4** |
| **BBKI** | **Banjar Baru** | **155.49** | **188** | PKP | **PKPdf** | **19 51 21.4** | **+4.9** |
| **APSI** | **Ampana** | **156.06** | **206** | PKP | PKPdf | 19 51 23.3 | +6.1 |
| **GSI** | **Gunungsitoli** | **156.23** | **144** | PKP | **PKPdf** | **19 51 22.3** | **+4.9** |
| **GSI** | **Gunungsitoli** | **156.23** | **144** | *e*PKPab | **PKPab** | **19 51 47.1** | **+1.4** |
| **KMSI** | **Cibinong** | **156.31** | **213** | PKP | PKPdf | 19 51 22.9 | +5.4 |
| **RAMN** | **Ramite** | **156.56** | **70** | *e*P | **PKPdf** | **19 51 17.6** | **-0.2** |
| | comp=Z,38nm,1.0s | | | | | | |
| **GTOI** | **Gorontalo** | **156.84** | **211** | PKP | **PKPdf** | **19 51 23.1** | **+4.9** |
| **MNSI** | **Mandailing Nat** | **156.85** | **149** | PKP | **PKPdf** | **19 51 22.8** | **+4.6** |
| **MRSI** | **Marisa** | **157.19** | **208** | PKP | **PKPdf** | **19 51 23.7** | **+5.1** |
| **ODAN** | **Odare** | **157.27** | **70** | *e*P | **PKPdf** | **19 51 18.2** | **-0.5** |
| | comp=Z,35nm,0.9s | | | | | | |
| **TAPN** | **Taplejung** | **157.47** | **69** | *e*P | **PKPdf** | **19 51 18.6** | **-0.4** |
| | comp=Z,24nm,1.0s | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **157.88** | **137** | PKP | **PKPdf** | **19 51 18.7** | **-0.8** |
| **MPSI** | **Mapaga** | **157.88** | **203** | PKP | PKPdf | 19 51 25.1 | +5.6 |
| **PSI** | **Prapat** | **158.21** | **144** | *e*PKIKP | **PKPdf** | **19 51 19.3** | **-0.8** |
| PSI | | | | *e* | | 19 51 54.4 | |
| **PSI** | **Prapat** | **158.21** | **144** | *e*PKPdf | **PKPdf** | **19 51 19.3** | **-0.8** |
| PSI | | | | *e*PKPab | **PKPab** | **19 51 54.4** | **-0.1** |
| PSI | | | | *ep*PKPab | **pPKPab** | **19 52 30.6** | **+2.3** |
| **KSRS** | **Korea Array** | **158.22** | **322** | PKP | **PKPdf** | **19 51 18.9** | **-0.2** |
| | comp=Z,11nm,0.9s,baz=76,slow=1.0,SNR=34 | | | | | | |
| KSRS | | | | PKPab | **PKPab** | **19 51 54.2** | **+0.5** |
| | comp=Z,13nm,0.9s,baz=59,slow=4.5,SNR=17 | | | | | | |
| **KSRS** | **Korea Array** | **158.22** | **322** | PKIKP | **PKPdf** | **19 51 19.0** | **-0.2** |
| KSRS | | | | | | 19 51 54.3 | |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **KS01** | **Wonju Array Si** | **158.22** | **323** | *e*PKPdf | **PKPdf** | **19 51 18.4** | **-0.8** |
| **KSAR** | **Wonju Array Be** | **158.25** | **323** | PKIKP | **PKPdf** | **19 51 19.0** | **-0.3** |
| KSAR | | | | | | 19 51 54.3 | |
| **KSAR** | **Wonju Array Be** | **158.25** | **323** | PKP | **PKPdf** | **19 51 18.9** | **-0.3** |
| KSAR | | | | PKPab | **PKPab** | **19 51 54.2** | **+0.4** |
| **GTA** | **Gaotai** | **159.09** | **26** | ⇓PKP | **PKPdf** | **19 51 20.8** | **+0.4** |
| GTA | | | | pPKP | pPKPdf | 19 51 45.6 | -10 |
| GTA | | | | sPKP | | 19 51 56.4 | |
| GTA | | | | PKPab | **PKPab** | **19 52 01.8** | **+4.2** |
| GTA | | | | PP | **PP** | **19 55 41.8** | **+3.6** |
| GTA | | | | SKS | **SKSdf** | **19 58 15.1** | **+1.1** |
| GTA | | | | SKKS | **SKKSac** | **20 02 19.5** | **+4.1** |
| GTA | | | | PPMZ | | | |
| | comp=Z,250nm,6.6s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,300nm,22.8s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,390nm,23.7s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,360nm,21.4s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **159.55** | **158** | *e*PKPdf | **PKPdf** | **19 51 21.5** | **0.0** |
| **LSA** | **Lhasa** | **159.74** | **61** | *e*PKIKP | **PKPdf** | **19 51 22.4** | **+0.6** |
| LSA | | | | *e* | | 19 52 01.8 | |
| **LSA** | **Lhasa** | **159.74** | **61** | *e*PKPdf | **PKPdf** | **19 51 22.4** | **+0.6** |
| LSA | | | | *e*PKPab | **PKPab** | **19 52 01.8** | **+0.5** |
| **HHC** | **Hu-ho-hao-te** | **160.19** | **360** | *e*PKP | **PKPdf** | **19 51 22.8** | **+1.3** |
| HHC | | | | pPKP | **pPKPdf** | **19 51 54.1** | **-2.7** |
| HHC | | | | PP | **PP** | **19 55 41.3** | **-2.4** |
| HHC | | | | SS | SS | 20 15 42.8 | +0.5 |
| HHC | | | | PPMZ | | | |
| | comp=Z,110nm,8.1s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,300nm,20.4s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,290nm,21.4s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,280nm,20.3s | | | | | | |
| **BJI** | **Beijing** | **160.56** | **349** | PKP | **PKPdf** | **19 51 22.5** | **+0.7** |
| BJI | | | | SS | SS | 20 15 42.1 | -4.0 |
| BJI | | | | PPMZ | | | |
| | comp=Z,340nm,10.8s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,280nm,15.3s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,280nm,14.0s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,350nm,33.8s | | | | | | |
| **KSM** | **Kuching** | **160.59** | **177** | *e*PKPdf | **PKPdf** | **19 51 23.1** | **+0.4** |
| KSM | | | | *ep*PKPdf | **pPKPdf** | **19 51 59.2** | **+1.3** |
| **LZH** | **Lanzhou** | **163.54** | **22** | *e*PKP | **PKPdf** | **19 51 25.1** | **-0.1** |
| LZH | | | | pPKP | pPKPdf | 19 51 49.0 | -12 |
| LZH | | | | sPKP | | 19 51 59.8 | |
| LZH | | | | PP | **PP** | **19 56 05.0** | **+3.1** |
| LZH | | | | SKKS | | 20 02 42.3 | |
| LZH | | | | PPMZ | | | |
| | comp=Z,380nm,8.5s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,600nm,18.3s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,540nm,18.2s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,730nm,20.4s | | | | | | |
| **TIA** | **Tai'an** | **164.02** | **343** | PKP | **PKPdf** | **19 51 25.9** | **+0.5** |
| **SSE** | **Sheshan** | **166.65** | **321** | PKP | **PKPdf** | **19 51 28.3** | **+0.6** |
| SSE | | | | PPMZ | | | |
| | comp=Z,120nm,12.0s | | | | | | |
| SSE | | | | LN | | | |
| | comp=Z,100nm,30.7s | | | | | | |
| SSE | | | | LE | | | |
| | comp=Z,170nm,30.7s | | | | | | |
| SSE | | | | LZ | | | |
| | comp=Z,260nm,35.4s | | | | | | |
| **CD2** | **Chengdu** | **167.94** | **33** | PKP | **PKPdf** | **19 51 28.5** | **-0.3** |
| CD2 | | | | pPKP | pPKPdf | 19 51 53.3 | -11 |
| CD2 | | | | sPKP | | 19 52 02.8 | |
| CD2 | | | | PP | **PP** | **19 56 24.8** | **-0.1** |
| CD2 | | | | SKS | **SKSdf** | **19 58 24.3** | **+3.6** |
| CD2 | | | | SKKS | **SKKSac** | **20 03 03.1** | **+2.6** |
| CD2 | | | | PPMZ | | | |
| | comp=Z,280nm,5.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **167.98** | **100** | PKP | **PKPdf** | **19 51 28.4** | **-0.6** |
| | comp=Z,6.2nm,1.0s,baz=271,slow=1.9,SNR=28 | | | | | | |
| CMAR | | | | pPKP | **pPKPdf** | **19 52 04.0** | **-0.4** |
| | comp=Z,3.1nm,1.0s,baz=276,slow=2.2,SNR=3.8 | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **19 52 36.0** | **-1.2** |
| | comp=Z,5.4nm,0.8s,baz=256,slow=6.1,SNR=17 | | | | | | |
| CMAR | | | | PP | **PP** | **19 56 28.8** | **+2.2** |
| | comp=Z,4.6nm,1.0s,baz=255,slow=5.9,SNR=7.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **167.98** | **100** | PKIKP | **PKPdf** | **19 51 28.5** | **-0.6** |
| CMAR | | | | | | 19 52 04.1 | |
| CMAR | | | | | | 19 52 36.1 | |
| CMAR | | | | | | 19 56 28.8 | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **167.98** | **100** | *e*PKPdf | **PKPdf** | **19 51 28.6** | **-0.4** |
| CM01 | | | | *ep*PKPdf | **pPKPdf** | **19 52 04.3** | **-0.1** |
| CM01 | | | | *e*PP | **PP** | **19 56 24.9** | **-1.7** |
| **CHTO** | **Chiang Mai** | **168.06** | **98** | *e*PKIKP | **PKPdf** | **19 51 28.4** | **-0.7** |
| CHTO | | | | *e* | | 19 52 04.7 | |
| CHTO | | | | *e* | | 19 52 36.9 | |
| CHTO | | | | *e* | | 19 56 26.7 | |
| **CHTO** | **Chiang Mai** | **168.06** | **98** | *e*PKPdf | **PKPdf** | **19 51 28.4** | **-0.7** |
| CHTO | | | | *ep*PKPdf | **pPKPdf** | **19 52 04.7** | **+0.3** |
| CHTO | | | | *e*PKPab | **PKPab** | **19 52 36.9** | **-0.8** |
| CHTO | | | | *e*PP | **PP** | **19 56 26.7** | **-0.3** |
| **WHN** | **Wuhan** | **170.11** | **345** | PKP | **PKPdf** | **19 51 30.4** | **+0.4** |
| **KMI** | **Kunming** | **171.00** | **61** | ⇑PKP | **PKPdf** | **19 51 31.3** | **+0.3** |
| KMI | | | | LZ | | | |
| | comp=Z,150nm,18.6s | | | | | | |
| **GYA** | **Guiyang** | **173.01** | **38** | PKP | **PKPdf** | **19 51 31.0** | **-0.8** |
| GYA | | | | sPKP | | 19 52 05.3 | |
| GYA | | | | PKPab | **PKPab** | **19 52 59.8** | **+0.5** |
| GYA | | | | PKS | **PKSdf** | **19 55 02.0** | **-2.2** |
| GYA | | | | PP | **PP** | **19 56 51.6** | **+1.2** |
| GYA | | | | SKKS | | 20 03 28.8 | |
| GYA | | | | SS | **SS** | **20 17 54.0** | **+0.6** |
| GYA | | | | PPMZ | | | |
| | comp=Z,160nm,8.2s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,180nm,25.6s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,200nm,26.8s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,190nm,25.4s | | | | | | |
| **QIZ** | **Qiongzhong** | **177.56** | **142** | PKP | **PKPdf** | **19 51 33.5** | **+0.5** |
| QIZ | | | | PP | **PP** | **19 57 13.3** | **+1.3** |
| QIZ | | | | SS | SS | 20 18 43.0 | +6.4 |
| QIZ | | | | LZ | | | |
| | comp=Z,440nm,57.7s | | | | | | |

*ISCJB **22** 19:38:30.1±0.7,50.41N±0.05×18.80E±0.03,h0km, Error ellipse: s-maj=6.7km s-min=2.8km az=12.6*
*CSEM **22** 19:38:31.2±0.3,50.40N×18.84E,h2km,ML2.7/6, Error ellipse: s-maj=7.8km s-min=3.5km az=10.0*
*PRU **22** 19:38:32.0,50.37N×18.83E,h0km*

**ISC 22 19:38:31.1±0.9,50.40N±0.05×18.85E±0.02,h0km,n26, σ0.68/40,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHZP** | **Chorzow** | **0.14** | **141** | *e*Pg | **Pg** | **19 38 33.6** | **-0.2** |
| **OJC** | **Ojcow** | **0.63** | **106** | *e*Pg | **Pg** | **19 38 42.7** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **19 38 51.4** | **0.0** |
| **OJC** | **Ojcow** | **0.63** | **106** | *e*Pg | **Pg** | **19 38 42.7** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **19 38 51.4** | **0.0** |
| **OKC** | **Ostrava-Krasne** | **0.72** | **219** | *e*PG | **Pg** | **19 38 45.3** | **+0.3** |
| OKC | | | | *e*SG | **Sg** | **19 38 55.6** | **+1.2** |
| | comp=Z,17nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.72** | **219** | Pg | **Pg** | **19 38 45.3** | **+0.3** |
| OKC | | | | Sg | **Sg** | **19 38 55.6** | **+1.2** |
| | 17nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.05** | **234** | *e*Pg | **Pg** | **19 38 51.4** | **+0.2** |
| MORC | | | | *e*Sg | **Sg** | **19 39 05.3** | **+0.5** |
| **NIE** | **Niedzica** | **1.36** | **136** | *e*Pg | **Pb** | **19 38 57.7** | **+0.3** |
| NIE | | | | *e*Sg | **Sb** | **19 39 15.7** | **+0.4** |
| **NIE** | **Niedzica** | **1.36** | **136** | *e*Pg | **Pb** | **19 38 57.7** | **+0.3** |
| NIE | | | | *e*Sg | **Sb** | **19 39 15.7** | **+0.4** |
| **KRLC** | **Kraliky** | **1.37** | **257** | *e*PG | **Pg** | **19 38 56.9** | **-0.5** |
| KRLC | | | | *e*SG | **Sg** | **19 39 14.6** | **-0.5** |
| **KRLC** | **Kraliky** | **1.37** | **257** | Pg | **Pg** | **19 38 56.9** | **-0.5** |
| KRLC | | | | Sg | **Sg** | **19 39 14.6** | **-0.5** |
| **DPC** | **Dobruska-Polom** | **1.62** | **269** | *e*PG | **Pn** | **19 39 00.6** | **-0.4** |
| DPC | | | | *e*SG | **Sb** | **19 39 22.9** | **-0.1** |
| | comp=Z,13nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.62** | **269** | Pg | **Pn** | **19 39 00.6** | **-0.4** |
| DPC | | | | Sg | **Sb** | **19 39 22.9** | **-0.1** |
| | 13nm,0.4s | | | | | | |
| **KSP** | **Ksiaz** | **1.69** | **286** | *e*Pn | **Pn** | **19 39 02.3** | **+0.4** |
| KSP | | | | *e*Pg | **Pg** | **19 39 04.7** | **+1.2** |
| KSP | | | | *e*Sg | **Sg** | **19 39 26.7** | **+1.3** |
| **KSP** | **Ksiaz** | **1.69** | **286** | *e*Pn | **Pn** | **19 39 02.3** | **+0.4** |
| **UPC** | **Upice** | **1.82** | **274** | *e*SG | **Sg** | **19 39 29.4** | **-0.1** |
| | comp=Z,6.7nm,0.5s | | | | | | |
| **UPC** | **Upice** | **1.82** | **274** | Sg | **Sg** | **19 39 29.4** | **-0.1** |
| | 6.7nm,0.5s | | | | | | |
| **VRAC** | **Vranov** | **1.83** | **234** | *e*Pn | **Pb** | **19 39 04.8** | **-0.6** |
| VRAC | | | | *e*Sg | **Sb** | **19 39 28.8** | **0.0** |
| **GOPC** | **GO Pecny, Ondr** | **2.66** | **261** | *e*SG | **Sg** | **19 39 55.5** | **-1.1** |
| **GOPC** | **GO Pecny, Ondr** | **2.66** | **261** | Sg | **Sg** | **19 39 55.5** | **-1.1** |
| **PVCC** | **Panska Ves** | **2.74** | **274** | *e*SG | **Sg** | **19 39 59.6** | **+0.5** |
| | comp=Z,13nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **2.74** | **274** | Sg | **Sg** | **19 39 59.6** | **+0.5** |
| | 13nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **2.80** | **263** | *e*SG | **Sg** | **19 39 59.7** | **-1.4** |
| | comp=Z,4.4nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **2.80** | **263** | Sg | **Sg** | **19 39 59.7** | **-1.4** |
| | 4.4nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.16** | **280** | SG | **Sg** | **19 40 13.0** | **+0.3** |
| | 3.5nm,0.6s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.65** | **252** | *e*SG | **Sg** | **19 40 27.7** | **-0.6** |
| | comp=Z,5.4nm,0.7s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.65** | **252** | Sg | **Sg** | **19 40 27.7** | **-0.6** |
| | 5.4nm,0.7s | | | | | | |

**LJU 22 19:42:53.4,46.16N×14.34E,h14km,ML0.4,1C, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CRNS** | **Crni Vrh** | **0.09** | **215** | ⇑*i* | Pg | 19 42 56.1 | -0.4 |
| **MOZS** | **Mozjanca** | **0.15** | **28** | *i* Pg | Pg | 19 42 57.4 | 0.0 |
| MOZS | | | | *i* Sg | Sg | 19 43 00.5 | +0.4 |
| | comp=Z,4.0nm,0.1s | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **0.26** | **102** | *i* Pg | Pg | 19 42 59.1 | +0.1 |
| VNDS | | | | *i* Sg | Sg | 19 43 03.2 | +0.5 |
| | comp=Z,1.0nm,0.1s | | | | | | |
| **GORS** | **Gorjuse** | **0.29** | **304** | *i* Pg | Pg | 19 42 59.3 | -0.3 |
| | comp=Z,1.0nm,0.1s | | | | | | |
| **VOJS** | **Vojsko** | **0.34** | **249** | *i* Pg | Pg | 19 43 00.5 | 0.0 

*s-maj=0.0km s-min=0.0km az=0.0*
*LDG **22** 20:33:01.7±0.1,45°.48N×7°.10E,h2$^{km}$,Md2.9/3,Ml2.6/27,*
*Error ellipse: s-maj=1.8km s-min=1.3km az=99.0*
**ISC 22 20:33:01.1**±0.7,**45°.52N**±0°.01×**7°.09E**±0°.02,**h11**$^{km}$±5$^{km}$,
**n96**,σ1°**33**/164,**4C-4D**,**Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSD** | **Lago del Serru** | **0.07** | **151** | *i*Pg | **Pg** | **20 33 02.7** | **-1.0** |
| LSD | | | | *i* Sg | **Sg** | **20 33 03.7** | **-1.8** |
| **LPG** | **La Plagne** | **0.24** | **265** | *e*Pg | **Pg** | **20 33 05.4** | **-0.8** |
| LPG | | | | *e*Sg | **Sg** | **20 33 08.5** | **-1.1** |
| | 527nm,0.4s | | | | | | |
| **LPG** | **La Plagne** | **0.24** | **265** | *e*Pg | **Pg** | **20 33 05.4** | **-0.8** |
| LPG | | | | *e*Sg | **Sg** | **20 33 08.5** | **-1.1** |
| | 263nm,0.4s | | | | | | |
| **LPL** | **La Plagne** | **0.25** | **269** | *e*Pg | **Pg** | **20 33 05.8** | **-0.5** |
| LPL | | | | *e*Sg | **Sg** | **20 33 09.2** | **-0.7** |
| | 389nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.25** | **269** | *e*Pg | **Pg** | **20 33 05.8** | **-0.5** |
| LPL | | | | *e*Sg | **Sg** | **20 33 09.2** | **-0.7** |
| | 194nm,0.3s | | | | | | |
| **MRGE** | **Morge** | **0.25** | **356** | ⇑*i*Pg | **Pg** | **20 33 06.4** | **0.0** |
| | 765nm,0.4s | | | | | | |
| **MRGE** | **Morge** | **0.25** | **356** | ⇑*i*Pg | **Pg** | **20 33 06.4** | **0.0** |
| | 765nm,0.4s | | | | | | |
| MRGE | | | | Sg | **Sg** | **20 33 10.4** | **+0.5** |
| | 275nm,0.7s | | | | | | |
| **CIRO** | **Champorcher** | **0.35** | **76** | P | **Pg** | **20 33 07.9** | **-0.3** |
| CIRO | | | | S | **Sg** | **20 33 12.5** | **-0.4** |
| CIRO | | | | Sg | **Sb** | **20 33 13.0** | **-2.2** |
| | 69nm,0.3s | | | | | | |
| **RSP** | **Reno Superiore** | **0.39** | **161** | P | **Pg** | **20 33 08.4** | **-0.5** |
| RSP | | | | S | **Sg** | **20 33 13.4** | **-0.7** |
| RSP | | | | Sg | **Sb** | **20 33 13.8** | **-2.5** |
| | 218nm,0.2s | | | | | | |
| **TRAV** | **Traversella** | **0.46** | **91** | P | **Pg** | **20 33 10.1** | **-0.1** |
| TRAV | | | | S | **Sg** | **20 33 15.8** | **-0.6** |
| TRAV | | | | Sg | **Sb** | **20 33 16.4** | **-1.9** |
| | 104nm,0.2s | | | | | | |
| **BNI** | **Bardonecchia** | **0.55** | **212** | Pg | **Pg** | **20 33 11.3** | **-0.5** |
| BNI | | | | Sg | **Sg** | **20 33 18.7** | **-0.4** |
| | 72nm,0.3s | | | | | | |
| **EMV** | **Vieux Emosson** | **0.56** | **346** | ⇑*i*Pg | **Pg** | **20 33 11.3** | **-0.8** |
| | 62nm,0.5s | | | | | | |
| **EMV** | **Vieux Emosson** | **0.56** | **346** | Pg | **Pg** | **20 33 12.2** | **+0.1** |
| EMV | | | | Sg | **Sg** | **20 33 19.8** | **+0.3** |
| **DIX** | **Grande Dixence** | **0.60** | **22** | ⇓*i*Pg | **Pg** | **20 33 12.2** | **-0.7** |
| | 170nm,0.2s | | | | | | |
| **DIX** | **Grande Dixence** | **0.60** | **22** | Pg | **Pg** | **20 33 12.6** | **-0.3** |
| DIX | | | | Sg | **Sg** | **20 33 20.9** | **0.0** |
| **RRL** | **Rocca Remolon** | **0.63** | **199** | Pg | **Pg** | **20 33 12.9** | **-0.6** |
| RRL | | | | S | **Sg** | **20 33 21.1** | **-0.7** |
| RRL | | | | Sg | **Sb** | **20 33 21.6** | **-1.8** |
| | 82nm,0.4s | | | | | | |
| **SATI** | **Passo dei Sala** | **0.65** | **57** | Pg | **Pg** | **20 33 13.5** | **-0.4** |
| SATI | | | | S | **Sg** | **20 33 22.0** | **-0.5** |
| SATI | | | | Sg | **Sb** | **20 33 22.7** | **-1.3** |
| | 50nm,0.1s | | | | | | |
| **BHB** | **Bricherasio** | **0.69** | **170** | P | **Pg** | **20 33 14.1** | **-0.3** |
| BHB | | | | S | **Sg** | **20 33 22.5** | **-1.0** |
| BHB | | | | Sg | **Sb** | **20 33 23.3** | **-1.4** |
| | 63nm,0.3s | | | | | | |
| **GRYON** | **Gryon** | **0.73** | **1** | ⇓*i*Pg | **Pg** | **20 33 12.5** | **-2.8** |
| | 18nm,0.2s | | | | | | |
| **GRYON** | **Gryon** | **0.73** | **1** | ⇓*i*Pg | **Pg** | **20 33 12.5** | **-2.8** |
| | 18nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** | **0.82** | **196** | *e*Pg | **Pg** | **20 33 16.3** | **-0.7** |
| MBDF | | | | *e*Sg | **Sg** | **20 33 26.9** | **-0.9** |
| | 104nm,0.4s | | | | | | |
| **MBDF** | **Montbardon** | **0.82** | **196** | *e*Pg | **Pg** | **20 33 16.3** | **-0.7** |
| MBDF | | | | *e*Sg | **Sg** | **20 33 26.9** | **-0.9** |
| | 52nm,0.4s | | | | | | |
| **EMBD** | **Embd, Matterta** | **0.87** | **36** | *e*Pg | **Pg** | **20 33 15.5** | **-2.4** |
| | 65nm,0.5s | | | | | | |
| **EMBD** | **Embd, Matterta** | **0.87** | **36** | *e*Pg | **Pg** | **20 33 15.5** | **-2.4** |
| | 65nm,0.5s | | | | | | |
| **SIMPL** | **Simplonpass** | **0.97** | **42** | *e*Pg | **Pg** | **20 33 17.6** | **-2.2** |
| | 61nm,0.5s | | | | | | |
| **SIMPL** | **Simplonpass** | **0.97** | **42** | *e*Pg | **Pg** | **20 33 17.6** | **-2.2** |
| | 61nm,0.5s | | | | | | |
| **PZZ** | **Stroppo** | **1.01** | **179** | Pg | **Pg** | **20 33 19.7** | **-0.9** |
| PZZ | | | | Sg | **Sg** | **20 33 33.7** | **-0.1** |
| | 81nm,0.4s | | | | | | |
| **DOI** | **San Damiano** | **1.02** | **174** | Pg | **Pg** | **20 33 19.6** | **-1.2** |
| DOI | | | | Sg | **Sg** | **20 33 33.8** | **-0.3** |
| | 38nm,0.2s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.04** | **235** | *e*Pg | **Pb** | **20 33 20.7** | **-0.6** |
| ORIF | | | | *e*Sg | **Sg** | **20 33 34.1** | **-0.7** |
| | 57nm,0.5s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.04** | **235** | *e*Pg | **Pb** | **20 33 20.7** | **-0.6** |
| ORIF | | | | *e*Sg | **Sg** | **20 33 34.1** | **-0.7** |
| | 29nm,0.5s | | | | | | |
| **VARE** | **Varese** | **1.23** | **73** | *e*P | Pn | 20 33 19.1 | -5.3 |
| | 182nm,0.3s | | | | | | |
| **CABF** | **La Chapelle** | **1.29** | **328** | *e*Pg | **Pg** | **20 33 27.0** | **+1.0** |
| CABF | | | | *e*Sg | **Sg** | **20 33 44.1** | **+1.3** |
| | 38nm,0.5s | | | | | | |
| **CABF** | **La Chapelle** | **1.29** | **328** | *e*Pg | **Pg** | **20 33 27.0** | **+1.0** |
| CABF | | | | *e*Sg | **Sg** | **20 33 44.1** | **+1.3** |
| | 19nm,0.5s | | | | | | |
| **MUGIO** | **Muggio** | **1.43** | **73** | *e*P | Pn | 20 33 19.7 | -7.4 |
| | 40nm,0.5s | | | | | | |
| **MVIF** | **Mont Vial** | **1.62** | **178** | Pg | **Pg** | **20 33 34.5** | **+2.2** |
| MVIF | | | | Sg | Sg | 20 33 59.0 | +5.7 |
| **MVIF** | **Mont Vial** | **1.62** | **178** | Pg | **Pg** | **20 33 34.5** | **+2.2** |
| **LUCF** | **Luceram** | **1.64** | **173** | Pg | **Pg** | **20 33 34.3** | **+1.8** |
| LUCF | | | | Sg | Sg | 20 33 59.4 | +5.7 |
| **LUCF** | **Luceram** | **1.64** | **173** | Pg | **Pg** | **20 33 34.3** | **+1.8** |
| **SBF** | **Sospel** | **1.68** | **171** | *e*Pn | **Pg** | **20 33 32.8** | **-0.4** |
| SBF | | | | *e*Sg | **Sg** | **20 33 54.3** | **-0.6** |
| | 70nm,0.5s | | | | | | |
| **SBF** | **Sospel** | **1.68** | **171** | *e*Pn | **Pg** | **20 33 32.8** | **-0.4** |
| SBF | | | | *e*Sg | **Sg** | **20 33 54.3** | **-0.6** |
| | 35nm,0.5s | | | | | | |
| **CALN** | **Calern** | **1.77** | **185** | Pg | **Pg** | **20 33 36.4** | **+1.3** |
| CALN | | | | Sg | **Sg** | **20 34 01.8** | **+3.7** |
| **CALN** | **Calern** | **1.77** | **185** | Pg | **Pg** | **20 33 36.4** | **+1.3** |
| CALN | | | | Sg | **Sg** | **20 34 01.8** | **+3.7** |
| **REVF** | **Revere** | **1.79** | **173** | Pg | **Pg** | **20 33 37.6** | **+2.2** |
| REVF | | | | Sg | **Sg** | **20 34 03.4** | **+4.8** |
| **REVF** | **Revere** | **1.79** | **173** | Pg | **Pg** | **20 33 37.6** | **+2.2** |
| **VIVF** | **Saint-Julien-l** | **1.83** | **250** | *e*Pn | Pn | **20 33 32.4** | **-0.2** |
| **VIVF** | **Saint-Julien-l** | **1.83** | **250** | *e*Pg | **Pg** | **20 33 36.1** | **-0.1** |
| VIVF | | | | *e*Sn | **Sn** | **20 33 54.4** | **-1.4** |
| | 19nm,0.5s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.83** | **250** | *e*Pn | **Pn** | **20 33 32.4** | **-0.2** |
| **VIVF** | **Saint-Julien-l** | **1.83** | **250** | *e*Pg | **Pg** | **20 33 36.1** | **-0.1** |
| VIVF | | | | *e*Sn | **Sn** | **20 33 54.4** | **-1.4** |
| | 9.3nm,0.5s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.88** | **215** | *e*P | **Pb** | **20 33 35.3** | **-0.2** |
| SMRF | | | | *e*Sn | **Sn** | **20 33 55.7** | **-1.4** |
| | 5.8nm,0.3s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.88** | **215** | *e*P | **Pb** | **20 33 35.3** | **-0.2** |
| SMRF | | | | *e*Sn | **Sn** | **20 33 55.7** | **-1.4** |
| | 2.9nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.98** | **189** | *e*Pg | **Pb** | **20 33 37.8** | **+0.6** |
| FRF | | | | *e*Sn | **Sn** | **20 33 57.9** | **-1.6** |
| | 11nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.98** | **189** | *e*Pg | **Pb** | **20 33 37.8** | **+0.6** |
| FRF | | | | *e*Sn | **Sn** | **20 33 57.9** | **-1.6** |
| | 5.6nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **2.22** | **191** | *e*P | **Pb** | **20 33 39.8** | **-1.5** |
| LMR | | | | *e*Sn | **Sn** | **20 34 04.0** | **-1.4** |
| | 7.9nm,0.4s | | | | | | |
| **LMR** | **La Mourre** | **2.22** | **191** | *e*P | **Pb** | **20 33 39.8** | **-1.5** |
| LMR | | | | *e*Sn | **Sn** | **20 34 04.0** | **-1.4** |
| | 4.0nm,0.4s | | | | | | |
| **HINF** | **Hinteralfeld** | **2.30** | **356** | *e*Pn | **Pn** | **20 33 39.6** | **+0.5** |
| HINF | | | | *e*Sn | **Sn** | **20 34 07.4** | **-0.1** |
| | 8.4nm,0.5s | | | | | | |
| **HINF** | **Hinteralfeld** | **2.30** | **356** | *e*Pn | **Pn** | **20 33 39.6** | **+0.5** |
| HINF | | | | *e*Sn | **Sn** | **20 34 07.4** | **-0.1** |
| | 4.2nm,0.5s | | | | | | |
| **SMF** | **Signal de Mont** | **2.52** | **298** | *e*Pn | **Pn** | **20 33 42.4** | **+0.3** |
| SMF | | | | *e*Sg | **Sg** | **20 34 20.6** | **-1.6** |
| | 16nm,0.2s | | | | | | |
| **SMF** | **Signal de Mont** | **2.52** | **298** | *e*Pn | **Pn** | **20 33 42.4** | **+0.3** |
| SMF | | | | *e*Sg | **Sg** | **20 34 20.6** | **-1.6** |
| | 8.1nm,0.2s | | | | | | |
| **HAU** | **Haudompre** | **2.54** | **349** | *e*Pn | **Pn** | **20 33 42.8** | **+0.5** |
| HAU | | | | *e*Sn | **Sn** | **20 34 12.9** | **-0.4** |
| | 4.5nm,0.3s | | | | | | |
| **HAU** | **Haudompre** | **2.54** | **349** | *e*Pn | **Pn** | **20 33 42.8** | **+0.5** |
| HAU | | | | *e*Sn | **Sn** | **20 34 12.9** | **-0.4** |
| | 2.2nm,0.3s | | | | | | |
| **DAVA** | **Damuels** | **2.62** | **47** | ⇑*i*Pn | **Pb** | **20 33 48.8** | **+0.6** |
| **DAVA** | **Damuels** | **2.62** | **47** | Pn | **Pb** | **20 33 48.8** | **+0.6** |
| **LASF** | **Ste Croix** | **2.71** | **239** | *e*Pn | **Pn** | **20 33 44.5** | **-0.2** |
| LASF | | | | *e*Sn | **Sn** | **20 34 15.7** | **-1.9** |
| | 6.3nm,0.7s | | | | | | |
| **LASF** | **Ste Croix** | **2.71** | **239** | *e*Pn | **Pn** | **20 33 44.5** | **-0.2** |
| LASF | | | | *e*Sn | **Sn** | **20 34 15.7** | **-1.9** |
| | 3.2nm,0.7s | | | | | | |
| **LOR** | **Lormes** | **2.84** | **309** | *e*Pn | **Pn** | **20 33 48.3** | **+1.9** |
| **LOR** | **Lormes** | **2.84** | **309** | *e*Pg | **Pg** | **20 33 55.1** | **-0.4** |
| | baz=130 | | | | | | |
| LOR | | | | *e*Sg | **Sg** | **20 34 31.8** | **-0.4** |
| | 6.2nm,0.3s | | | | | | |
| **LOR** | **Lormes** | **2.84** | **309** | *e*Pn | **Pn** | **20 33 48.3** | **+1.9** |
| **LOR** | **Lormes** | **2.84** | **309** | *e*Pg | **Pg** | **20 33 55.1** | **-0.4** |
| LOR | | | | *e*Sg | **Sg** | **20 34 31.8** | **-0.4** |
| | 3.1nm,0.3s | | | | | | |
| **AVF** | **Avril sur Loir** | **2.89** | **297** | *e*Pn | **Pn** | **20 33 47.6** | **+0.5** |
| AVF | | | | *e*Sg | **Sg** | **20 34 33.0** | **-0.9** |
| | 8.7nm,0.4s | | | | | | |
| **AVF** | **Avril sur Loir** | **2.89** | **297** | *e*Pn | **Pn** | **20 33 47.6** | **+0.5** |
| AVF | | | | *e*Sg | **Sg** | **20 34 33.0** | **-0.9** |
| | 4.3nm,0.4s | | | | | | |
| **CDF** | **Champ du Feu** | **2.90** | **2** | *e*Pn | **Pn** | **20 33 48.0** | **+0.7** |
| CDF | | | | *e*Sn | **Sn** | **20 34 21.7** | **-0.5** |
| | 2.5nm,0.4s | | | | | | |
| **CDF** | **Champ du Feu** | **2.90** | **2** | *e*Pn | **Pn** | **20 33 48.0** | **+0.7** |
| CDF | | | | *e*Sn | **Sn** | **20 34 21.7** | **-0.5** |
| | 1.2nm,0.4s | | | | | | |
| **SSF** | **Saint Saulge** | **2.92** | **303** | *e*Pn | **Pn** | **20 33 48.3** | **+0.7** |
| **SSF** | **Saint Saulge** | **2.92** | **303** | *e*Pg | **Pg** | **20 33 56.7** | **-0.4** |
| SSF | | | | *e*Sg | **Sg** | **20 34 34.5** | **-0.5** |
| | 4.7nm,0.5s | | | | | | |
| **SSF** | **Saint Saulge** | **2.92** | **303** | *e*Pn | **Pn** | **20 33 48.3** | **+0.7** |
| **SSF** | **Saint Saulge** | **2.92** | **303** | *e*Pg | **Pg** | **20 33 56.7** | **-0.4** |
| SSF | | | | *e*Sg | **Sg** | **20 34 34.5** | **-0.5** |
| | 2.3nm,0.5s | | | | | | |
| **SFTF** | **Sexfontaines** | **3.03** | **333** | *e*Pn | **Pn** | **20 33 49.6** | **+0.5** |
| | baz=146 | | | | | | |
| SFTF | | | | *e*Sn | **Sn** | **20 34 24.1** | **-1.3** |
| | 2.0nm,0.3s | | | | | | |
| **SFTF** | **Sexfontaines** | **3.03** | **333** | *e*Pn | **Pn** | **20 33 49.6** | **+0.5** |
| SFTF | | | | *e*Sn | **Sn** | **20 34 24.1** | **-1.3** |
| | 1.0nm,0.3s | | | | | | |
| **BGF** | **Bois d'Agland** | **3.13** | **291** | *e*Pn | **Pn** | **20 33 50.7** | **+0.3** |
| BGF | | | | *e*Sg | **Sg** | **20 34 40.7** | **-0.9** |
| | 15nm,0.5s | | | | | | |
| **BGF** | **Bois d'Agland** | **3.13** | **291** | *e*Pn | **Pn** | **20 33 50.7** | **+0.3** |
| BGF | | | | *e*Sg | **Sg** | **20 34 40.7** | **-0.9** |
| | 7.4nm,0.5s | | | | | | |
| **PAGF** | **Fort de Pagny** | **3.18** | **343** | *e*Pn | **Pn** | **20 33 51.5** | **+0.4** |
| **PAGF** | **Fort de Pagny** | **3.18** | **343** | *e*Pn | **Pn** | **20 33 51.5** | **+0.4** |
| **MEZF** | **Maizieres J'vi** | **3.29** | **336** | *e*Pn | **Pn** | **20 33 52.9** | **+0.3** |
| MEZF | | | | *e*Sn | **Sn** | **20 34 30.5** | **-1.3** |
| | 3.7nm,0.4s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **3.29** | **336** | *e*Pn | **Pn** | **20 33 52.9** | **+0.3** |
| MEZF | | | | *e*Sn | **Sn** | **20 34 30.5** | **-1.3** |
| | 1.9nm,0.4s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.49** | **284** | *e*Pn | **Pn** | **20 33 56.0** | **+0.6** |
| **TCF** | **Toulx Ste Croi** | **3.49** | **284** | *e*Pg | **Pg** | **20 34 06.7** | **-1.3** |
| TCF | | | | *e*Sg | **Sb** | **20 34 48.8** | **+3.4** |
| | 3.7nm,0.4s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.49** | **284** | *e*Pn | **Pn** | **20 33 56.0** | **+0.6** |
| **TCF** | **Toulx Ste Croi** | **3.49** | **284** | *e*Pg | **Pg** | **20 34 06.7** | **-1.3** |
| TCF | | | | *e*Sg | **Sb** | **20 34 48.8** | **+3.4** |
| | 1.9nm,0.4s | | | | | | |
| **HYF** | **Humbligny** | **3.54** | **301** | *e*Pn | **Pn** | **20 33 57.1** | **+1.0** |
| **HYF** | **Humbligny** | **3.54** | **301** | *e*Pn | **Pn** | **20 33 57.1** | **+1.0** |
| **CAF** | **Calviac** | **3.60** | **262** | *e*Pn | **Pn** | **20 33 56.8** | **-0.1** |
| CAF | | | | *e*Sg | **Sg** | **20 34 55.1** | **-1.5** |
| | 1.4nm,0.4s | | | | | | |
| **CAF** | **Calviac** | **3.60** | **262** | *e*Pn | **Pn** | **20 33 56.8** | **-0.1** |
| CAF | | | | *e*Sg | **Sg** | **20 34 55.1** | **-1.5** |
| | 0.7nm,0.4s | | | | | | |
| **MTLF** | **Montolieu** | **4.11** | **240** | *e*Pn | **Pn** | **20 34 03.6** | **-0.3** |
| MTLF | | | | *e*Sn | **Sn** | **20 34 48.6** | **-3.4** |
| | 1.1nm,0.5s | | | | | | |
| **MTLF** | **Montolieu** | **4.11** | **240** | *e*Pn | **Pn** | **20 34 03.6** | **-0.3** |
| MTLF | | | | *e*Sn | **Sn** | **20 34 48.6** | **-3.4** |
| | 0.6nm,0.5s | | | | | | |
| **BAIF** | **Baives** | **4.94** | **338** | *e*Pn | **Pn** | **20 34 15.6** | **+0.4** |
| **BAIF** | **Baives** | **4.94** | **338** | *e*Pn | **Pn** | **20 34 15.6** | **+0.4** |

*IDC **22** 20:54:48.1±1.9,2°.47N×122°.71E,h0$^{km}$,mb3.8/3,*
*mb1 4.0/3,mb1mx3.5/38,mbtmp3.8/3,MS3.8/1,Ms1 3.8/1,*
*ms1mx2.7/33,Error ellipse: s-maj=315.2km s-min=24.6km*
*az=62.0*
*DJA **22** 20:54:49.0±0.8,1°.N±3°×12°.0E±°,h15$^{km}$±7$^{km}$,M3.9/9,*
*MLv3.9/9*
**ISC 22 20:54:45.0**±2.7,**1°.6N**±0°.1×**119°.7E**±0°.1,**h10**$^{km}$,**n12,**
σ1°**32**/17,**mb3.7**/3,**Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MPSI** | **Mapaga** | **1.23** | **170** | P | **Pg** | **20 55 07.1** | **-1.5** |
| **PCI** | **Palu** | **2.45** | **176** | P | **Pn** | **20 55 26.1** | **+1.1** |
| PCI | | | | S | **Sn** | **20 55 55.3** | **+0.3** |
| **MRSI** | **Marisa** | **2.49** | **115** | P | **Pn** | **20 55 27.1** | **+1.5** |
| MRSI | | | | S | **Sn** | **20 55 57.0** | **+0.8** |
| **APSI** | **Ampana** | **3.14** | **141** | P | **Pn** | **20 55 35.6** | **+1.1** |
| APSI | | | | S | **Sn** | **20 56 12.4** | **+0.4** |
| **GTOI** | **Gorontalo** | **3.45** | **105** | P | **Pn** | **20 55 38.4** | **-0.3** |
| GTOI | | | | S | **Sn** | **20 56 17.1** | **-2.6** |
| **LUWI** | **Luwuk** | **4.02** | **130** | P | **Pn** | **20 55 47.8** | **+1.2** |
| LUWI | | | | S | **Sn** | **20 56 34.0** | **+0.2** |
| **KMSI** | **Cibinong** | **4.40** | **103** | P | **Pn** | **20 55 53.5** | **+1.6** |
| KMSI | | | | S | **Sn** | **20 56 45.2** | **+1.9** |
| **TTSI** | **Tana Toraja** | **4.57** | **178** | P | **Pn** | **20 55 55.4** | **+1.2** |
| TTSI | | | | S | **Sn** | **20 56 47.8** | **+0.4** |
| **WRA** | **Warramunga Arr** | **25.75** | **147** | P | **P** | **21 00 15.1** | **-0.9** |
| | 2.6nm,0.7s,baz=335,slow=9.5,SNR=48 | | | | | | |
| **ASAR** | **Alice Springs** | **28.63** | **152** | P | **P** | **21 00 41.5** | **-0.4** |
| | 0.5nm,0.4s,baz=331,slow=8.7,SNR=19 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.58** | **330** | P | P | 21 04 31.1 | +10 |
| | 0.3nm,0.4s,baz=129,slow=7.9,SNR=3.7 | | | | | | |
| **YAK** | **Yakutsk** | **60.80** | **5** | LR | LR | 21 31 44.3 | |
| | comp=Z,75nm,19.0s,baz=236,slow=37 | | | | | | |

*AUST **22** 20:56:50.3,7°.50N×122°.00E,h300$^{km}$*
*ISCJB **22** 20:57:38.0±0.4,4°.27N±0°.06×122°.99E±0°.09,h573$^{km}$,*
*mb3.9/9,Error ellipse: s-maj=13.6km s-min=5.2km*
*az=150.0*
*DJA **22** 20:57:39.2±0.8,4°.N±8°×12°.3E±°,h572$^{km}$±10$^{km}$,M4.1/14,*
*mb4.3/14,mB4.5/8,MLv4.5/14,Mw(mB)3.6/8*
*IDC **22** 20:57:39.7±1.6,4°.14N×122°.99E,h587$^{km}$±18$^{km}$,mb3.3/9,*
*mb1 3.4/10,mb1mx3.0/38,mbtmp4.3/10,Error ellipse:*
*s-maj=32.9km s-min=8.4km az=63.0*
**ISC 22 20:57:39.2**±0.6,**4°.16N**±0°.08×**122°.91E**±0°.09,**h573**$^{km}$,**n49,**
σ1°**03**/53,**mb4.0**/9,**Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GTOI** | **Gorontalo** | **3.51** | **178** | P | **P** | **20 58 58.8** | **-0.5** |
| **KMSI** | **Cibinong** | **3.72** | **163** | P | **P** | **20 59 01.8** | **+1.0** |
| **MRSI** | **Marisa** | **3.79** | **195** | P | **P** | **20 59 01.9** | **+0.7** |
| **DAV** | **Davao City (W)** | **3.92** | **42** | S | **S** | **21 00 12.3** | **+2.6** |
| | 32nm,0.3s,baz=280,slow=23,SNR=8.7 | | | | | | |
| **MPSI** | **Mapaga** | **4.85** | **218** | P | **P** | **20 59 09.4** | **+0.2** |
| | 14nm,0.7s,532nm0.1nm | | | | | | |
| **LUWI** | **Luwuk** | **5.17** | **182** | P | **P** | **20 59 13.4** | **+1.5** |
| | 34nm,0.7s,0.6nm | | | | | | |
| **APSI** | **Ampana** | **5.20** | **194** | P | **P** | **20 59 13.8** | **+1.7** |
| | 43nm,0.5s,788nm0.2nm | | | | | | |
| **TNTI** | **Ternate** | **5.58** | **127** | P | **P** | **20 59 15.3** | **0.0** |
| | 147nm,1.1s,0.7nm | | | | | | |
| **PCI** | **Palu** | **5.90** | **211** | P | **P** | **20 59 17.7** | **-0.4** |
| | 46nm,0.6s,756nm0.2nm | | | | | | |
| **LBMI** | **Labuha** | **6.62** | **136** | P | **P** | **20 59 24.0** | **-0.6** |
| | 50nm,0.6s,827nm0.6nm | | | | | | |
| **SANI** | **Sanana** | **6.90** | **153** | P | **P** | **20 59 28.3** | **+1.2** |
| | 14nm,0.7s,0.4nm | | | | | | |
| **TTSI** | **Tana Toraja** | **7.80** | **203** | P | **P** | **20 59 37.2** | **+1.5** |
| | 41nm,0.9s,869nm0.2nm | | | | | | |
| **NLAI** | **Namlea** | **8.46** | **150** | P | **P** | **20 59 43.6** | **+1.4** |
| | 27nm,0.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **8.66** | **201** | P | **P** | **20 59 44.8** | **+0.7** |
| | 52nm,0.9s,477nm | | | | | | |
| **KAPI** | **Kappang** | **9.65** | **199** | P | **P** | **20 59 54.7** | **+0.7** |
| | 0.3nm,0.3s,baz=36,slow=9.9,SNR=4.1 | | | | | | |
| **SOEI** | **Soe** | **13.89** | **174** | P | **P** | **21 00 36.4** | **-1.0** |
| | baz=17,SNR=3.7 | | | | | | |
| **BATI** | **Baumata** | **14.30** | **177** | P | **P** | **21 00 41.3** | **-0.1** |
| | 23nm,0.3s,baz=18,slow=0.8,SNR=46 | | | | | | |
| **BATI** | **Baumata** | **14.30** | **177** | P | **P** | **21 00 41.3** | **-0.1** |
| **MTN** | **Manton Dam** | **18.77** | **154** | P | **P** | **21 01 23.0** | **-0.1** |
| | baz=22,SNR=19 | | | | | | |
| **KDU** | **Kakadu** | **19.25** | **151** | P | **P** | **21 01 27.4** | **0.0** |
| | baz=23,SNR=5.7 | | | | | | |
| **KNRA** | **Kununurra** | **20.55** | **164** | P | **P** | **21 01 39.6** | **+0.4** |
| | baz=24,SNR=9.2 | | | | | | |
| **PSI** | **Prapat** | **23.98** | **268** | P | **P** | **21 02 09.8** | **-0.2** |
| | 2.7nm,0.5s,baz=99,slow=6.5,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.46** | **155** | P | **P** | **21 02 31.2** | **-0.4** |
| | 5.7nm,0.4s,baz=335,slow=9.7,SNR=188 | | | | | | |
| WRA | | | | S | **S** | **21 06 22.2** | **-3.9** |
| | 0.6nm,0.6s,baz=333,slow=16,SNR=4.3 | | | | | | |
| WRA | | | | ScP | **ScP** | **21 08 22.2** | **-1.5** |
| | 0.5nm,0.6s,baz=340,slow=3.1,SNR=6.2 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.40** | **303** | P | **P** | **21 02 41.0** | **+1.0** |
| | 1.4nm,0.9s,baz=131,slow=8.0,SNR=7.7 | | | | | | |
| **WRKA** | **Warakurna** | **29.49** | **170** | P | **P** | **21 02 58.7** | **+0.7** |
| | baz=33,SNR=8.3 | | | | | | |
| **QIS** | **Mount Isa** | **29.53** | **147** | P | **P** | **21 02 59.0** | **+0.6** |
| | baz=33,SNR=9.8 | | | | | | |
| **ASAR** | **Alice Springs** | **29.67** | **159** | P | **P** | **21 03 00.1** | **+0.5** |
| | 4.0nm,0.4s,baz=340,slow=7.2,SNR=115 | | | | | | |
| ASAR | | | | S | **S** | **21 07 15.1** | **-0.8** |
| | 1.7nm,0.9s,baz=349,slow=21,SNR=12 | | | | | | |
| ASAR | | | | ScP | **ScP** | **21 08 32.2** | **-1.5** |
| | 0.6nm,0.4s,baz=342,slow=3.1,SNR=12 | | | | | | |
| **MEEK** | **Meekatharra** | **30.90** | **188** | P | **P** | **21 03 10.3** | **+0.1** |
| | baz=34,SNR=6.7 | | | | | | |
| **MORW** | **Morawa** | **33.70** | **191** | P | **P** | **21 03 34.2** | **+0.4** |
| | baz=37,SNR=7.5 | | | | | | |
| **KMBL** | **Kambalda** | **35.35** | **182** | P | **P** | **21 03 48.0** | **+0.6** |
| | baz=39,SNR=7.4 | | | | | | |
| **BBOO** | **Buckleboo** | **38.83** | **162** | P | **P** | **21 04 16.6** | **+0.7** |
| | baz=42,SNR=10 | | | | | | |
| **HTT** | **Hallett** | **40.34** | **159** | P | P | 21 04 24.1 | -4.0 |
| | baz=44,SNR=5.3 | | | | | | |
| **TAPN** | **Taplejung** | **40.72** | **308** | *e*P | **P** | **21 04 31.6** | **+0.1** |
| | 5.1nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **40.75** | **307** | *e*P | **P** | **21 04 32.1** | **+0.4** |
| | 14nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **41.42** | **307** | *e*P | **P** | **21 04 37.6** | **+0.6** |
| | 12nm,0.8s | | | | | | |
| **GUN** | **Gumba** | **42.42** | **308** | *e*P | **P** | **21 04 45.1** | **+0.1** |
| | 25nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **42.64** | **307** | *e*P | **P** | **21 04 46.6** | **-0.1** |
| | 4.4nm,0.5s | | | | | | |
| **PKIN** | **Phulchoki** | **42.65** | **307** | *e*P | **P** | **21 04 46.6** | **-0.1** |
| | 2.5nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **42.84** | **307** | *e*P | **P** | **21 04 48.2** | **+0.1** |
| **DMN** | **Daman** | **42.90** | **307** | *e*P | **P** | **21 04 48.7** | **+0.1** |
| | 12nm,1.0s | | | | | | |
| **GKN** | **Gorkha** | **43.44** | **307** | *e*P | **P** | **21 04 52.7** | **0.0** |
| | 14nm,0.9s | | | | | | |
| **KOLN** | **Koldanda** | **44.17** | **306** | *e*P | **P** | **21 04 59.1** | **+0.7** |
| **ARPS** | **Mount Arapiles** | **44.39** | **158** | P | **P** | **21 05 00.6** | **+1.0** |
| | baz=48,SNR=6.3 | | | | | | |
| **SONM** | **Songino Array** | **45.77** | **344** | P | **P** | **21 05 09.7** | **-0.4** |
| | 0.9nm,0.7s,baz=152,slow=8.0,SNR=7.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.07** | **327** | P | **P** | **21 06 18.0** | **+0.3** |
| | 2.9nm,0.3s,baz=123,slow=7.6,SNR=78 | | | | | | |
| MKAR | | | | PcP | **PcP** | **21 07 09.9** | **-0.4** |
| | 1.2nm,0.6s,baz=119,slow=4.3,SNR=6.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.52** | **335** | P | **P** | **21 06 39.5** | **-1.6** |
| | 0.5nm,0.3s,baz=150,slow=6.9,SNR=3.6 | | | | | | |
| **GEYT** | **Alibeck** | **67.66** | **309** | P | **P** | **21 07 40.1** | **0.0** |
| | 0.8nm,0.5s,baz=152,slow=6.7,SNR=3.7 | | | | | | |
| **FINES** | **FINESS Array B** | **89.64** | **332** | P | **P** | **21 09 35.1** | **-1.1** |
| | 3.6nm,1.0s,baz=134,slow=5.5,SNR=6.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.16** | **287** | PKP | **PKPdf** | **21 15 23.9** | **-0.8** |
| | 0.3nm,0.4s,baz=66,slow=1.7,SNR=12 | | | | | | |

**IDC 22 21:00:16.6**±7.1,**6°.42S**×**147°.52E**,**

**n78,σ1°24/81, mb4.2/25, MS3.5/7, 6C-4D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BUTP** | **Butuan** | **0.33** | **190** | *eP* | **Pg** | **21 20 20.8** | **-1.6** |
| **SCPH** | **Surigao** | **0.52** | **338** | *iP* | **Pg** | **21 20 26.1** | **+0.5** |
| SCPH | | | | *i* S | **Sn** | **21 20 35.2** | **-0.4** |
| **MSLP** | **Maasin** | **1.16** | **316** | *eP* | **Pn** | **21 20 36.0** | **-0.3** |
| MSLP | | | | *eS* | **Sg** | **21 20 54.4** | **+1.5** |
| **BIPH** | **Bislig** | **1.30** | **149** | *iP* | **Pg** | **21 20 39.9** | **-0.3** |
| BIPH | | | | *i* S | **Sb** | **21 20 55.7** | **+0.7** |
| **BUKP** | **Musuan** | **1.54** | **204** | *eP* | **Pn** | **21 20 41.4** | **-0.1** |
| BUKP | | | | *eS* | **Sg** | **21 21 05.5** | **+0.6** |
| **TBP** | **Tagbilaran** | **1.84** | **282** | *eP* | **Pn** | **21 20 44.6** | **-1.0** |
| TBP | | | | *eS* | **Sn** | **21 21 07.2** | **-1.1** |
| **LLP** | **Lapu-Lapu** | **1.97** | **301** | *eP* | **Pn** | **21 20 46.8** | **-0.7** |
| LLP | | | | *eS* | **Sn** | **21 21 12.4** | **+0.8** |
| **PLP** | **Palo** | **1.98** | **340** | *eP* | **Pb** | **21 20 50.1** | **-0.4** |
| PLP | | | | *eS* | **Sb** | **21 21 16.2** | **+1.5** |
| **OCLP** | **Ormoc** | **2.04** | **329** | *eP* | **Pb** | **21 20 50.2** | **-1.3** |
| **DMPH** | **Davao City--Mi** | **2.21** | **185** | *eP* | **Pb** | **21 20 54.8** | **+0.4** |
| **DAV** | **Davao City (W)** | **2.22** | **183** | Pn | **Pn** | **21 20 49.9** | **-1.0** |
| | 62nm,0.3s,baz=352,slow=7.7,SNR=4.1 | | | | | | |
| **KCP** | **Kidapawan** | **2.35** | **194** | *eP* | **Pn** | **21 20 51.8** | **-0.9** |
| **MATI** | **Mati** | **2.41** | **166** | *eP* | **Pb** | **21 20 56.0** | **-1.8** |
| **DCPH** | **Dipolog City** | **2.41** | **253** | *eP* | **Pn** | **21 20 53.0** | **-0.5** |
| DCPH | | | | *i* S | **Sn** | **21 21 21.6** | **-0.8** |
| **CTBH** | **Cotabato--PC H** | **2.51** | **215** | *eP* | **Pn** | **21 20 54.1** | **-0.7** |
| CTBH | | | | *i* S | **Sb** | **21 21 32.3** | **+2.3** |
| **PAGZ** | **Pagadian** | **2.69** | **238** | *eP* | **Pn** | **21 20 57.7** | **+0.4** |
| **GUIM** | **Jordan** | **3.32** | **294** | *eP* | **Pn** | **21 21 05.9** | **-0.1** |
| **IPIL** | **Ipil** | **3.42** | **244** | *eP* | **Pn** | **21 21 07.8** | **+0.4** |
| **RCP** | **Roxas** | **3.66** | **308** | *eP* | **Pn** | **21 21 12.4** | **+1.8** |
| **PVCP** | **Virac** | **4.53** | **341** | *eP* | **Pn** | **21 21 26.5** | **+3.9** |
| PVCP | | | | *eS* | **Sb** | **21 22 24.0** | **-4.1** |
| **TNTI** | **Ternate** | **8.64** | **169** | P | Pn | 21 22 23.7 | +4.6 |
| | 72nm,1.2s,24nm | | | | | | |
| **TNTI** | **Ternate** | **8.64** | **169** | *ePn* | **Pn** | **21 22 17.6** | **-1.4** |
| | 40nm,0.6s | | | | | | |
| **GTOI** | **Gorontalo** | **9.01** | **197** | P | **Pn** | **21 22 27.2** | **+3.0** |
| | 32nm,0.7s,339nm | | | | | | |
| **MRSI** | **Marisa** | **9.52** | **203** | P | Pn | 21 22 34.9 | +3.6 |
| | 20nm,1.3s | | | | | | |
| **LBMI** | **Labuha** | **10.04** | **170** | P | **Pn** | **21 22 40.6** | **+2.3** |
| | 47nm,1.2s | | | | | | |
| **LUWI** | **Luwuk** | **10.68** | **196** | P | Pn | 21 22 50.8 | +3.8 |
| | 55nm,0.9s | | | | | | |
| **LUWI** | **Luwuk** | **10.68** | **196** | *ePn* | **Pn** | **21 22 46.6** | **-0.4** |
| | 40nm,0.8s | | | | | | |
| **SANI** | **Sanana** | **11.28** | **178** | P | **Pn** | **21 22 53.9** | **-1.4** |
| | 32nm,0.8s | | | | | | |
| **SWI** | **Sorong** | **11.52** | **151** | P | **Pn** | **21 23 01.7** | **+3.0** |
| | 41nm,1.0s | | | | | | |
| **SIJI** | **Sorong** | **11.53** | **151** | Pn | **Pn** | **21 22 59.0** | **+0.2** |
| | 1.7nm,0.3s,baz=345,slow=13,SNR=10 | | | | | | |
| **NLAI** | **Namlea** | **12.54** | **173** | P | **Pn** | **21 23 15.2** | **+2.7** |
| | 29nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **13.79** | **151** | P | Pn | 21 23 33.9 | +4.2 |
| | 24nm,1.2s | | | | | | |
| **KAPI** | **Kappang** | **15.40** | **203** | Pn | **Pn** | **21 23 50.6** | **-0.9** |
| | 0.8nm,0.3s,baz=30,slow=6.1,SNR=4.5 | | | | | | |
| KAPI | | | | LR | LR | 21 30 35.2 | |
| | comp=Z,97nm,20.1s,baz=360,slow=41 | | | | | | |
| **BKSI** | **Bulukumba** | **15.55** | **201** | P | **Pn** | **21 23 55.3** | **+1.9** |
| | 12nm,1.1s | | | | | | |
| **KSM** | **Kuching** | **17.16** | **244** | *ePn* | **Pn** | **21 24 12.6** | **-1.3** |
| **SOEI** | **Soe** | **18.98** | **184** | *eP* | **Pn** | **21 24 36.5** | **+0.1** |
| | 28nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **19.48** | **186** | P | **P** | **21 24 39.5** | **-1.6** |
| | 2.6nm,0.3s,baz=342,slow=6.4,SNR=4.5 | | | | | | |
| **BATI** | **Baumata** | **19.48** | **186** | P | **P** | **21 24 41.0** | **-0.1** |
| | 39nm,0.9s | | | | | | |
| **LEM** | **Lembang** | **24.10** | **229** | P | **P** | **21 25 30.8** | **+0.9** |
| | 17nm,0.7s,baz=175,slow=10,SNR=4.1 | | | | | | |
| **JNU** | **Nakatsue** | **24.19** | **11** | LR | LR | 21 34 00.2 | |
| | comp=Z,44nm,19.2s,baz=273,slow=34 | | | | | | |
| **MDSI** | **Maura Dua** | **25.43** | **238** | P | **P** | **21 25 44.0** | **+2.1** |
| **PSI** | **Prapat** | **27.37** | **258** | P | **P** | **21 26 00.0** | **+0.5** |
| | 10nm,1.1s,baz=97,slow=11,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.48** | **292** | P | **P** | **21 25 59.6** | **-0.7** |
| | 2.5nm,1.1s,baz=114,slow=8.9,SNR=9.6 | | | | | | |
| CMAR | | | | LR | LR | 21 36 12.7 | |
| | comp=Z,74nm,20.6s,baz=98,slow=35 | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.09** | **4** | P | **P** | **21 26 06.0** | **+0.5** |
| **KSRS** | **Korea Array** | **28.10** | **4** | P | **P** | **21 26 06.0** | **+0.4** |
| | 0.8nm,0.7s,baz=178,slow=9.7,SNR=3.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **29.41** | **21** | P | **P** | **21 26 17.5** | **+0.1** |
| | 2.2nm,1.0s,baz=196,slow=10,SNR=3.2 | | | | | | |
| **WRAB** | **Tennant Creek** | **30.28** | **164** | *eP* | **P** | **21 26 24.2** | **-1.0** |
| **WRA** | **Warramunga Arr** | **30.28** | **164** | P | **P** | **21 26 24.1** | **-1.1** |
| | 1.3nm,1.0s,baz=345,slow=9.4,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **31.73** | **166** | P | **P** | **21 26 54.5** | **-1.0** |
| | 1.1nm,0.5s,baz=343,slow=7.4,SNR=19 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.20** | **8** | P | **P** | **21 27 08.0** | **+0.1** |
| | 2.1nm,0.6s,baz=190,slow=8.2,SNR=8.4 | | | | | | |
| USRK | | | | LR | LR | 21 40 36.8 | |
| | comp=Z,78nm,21.8s,baz=185,slow=35 | | | | | | |
| **LSA** | **Lhasa** | **38.13** | **307** | *eP* | **P** | **21 27 33.3** | **-0.5** |
| **TAPN** | **Taplejung** | **40.05** | **302** | *eP* | **P** | **21 27 50.8** | **+1.2** |
| | 7.8nm,0.7s | | | | | | |
| **ODAN** | **Odare** | **40.16** | **301** | *eP* | **P** | **21 27 52.2** | **+1.7** |
| | 22nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **40.86** | **301** | *eP* | **P** | **21 27 57.3** | **+1.0** |
| | 4.7nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **41.73** | **340** | P | **P** | **21 28 02.6** | **-0.3** |
| | 0.3nm,0.7s,baz=142,slow=7.3,SNR=3.2 | | | | | | |
| **GUN** | **Gumba** | **41.77** | **302** | *eP* | **P** | **21 28 04.7** | **+0.8** |
| **PKIN** | **Phulchoki** | **42.07** | **301** | *eP* | **P** | **21 28 06.7** | **+0.4** |
| **KOLN** | **Koldanda** | **43.65** | **301** | *eP* | **P** | **21 28 20.1** | **+1.1** |
| | 5.9nm,0.6s | | | | | | |
| **PETK** | **Petropavlovsk-** | **50.76** | **24** | P | **P** | **21 29 14.9** | **+1.2** |
| | 1.5nm,0.7s,baz=163,slow=10,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.45** | **323** | P | **P** | **21 29 27.1** | **+0.5** |
| | 2.5nm,0.6s,baz=124,slow=8.2,SNR=23 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.20** | **332** | P | **P** | **21 29 45.9** | **-0.6** |
| | 0.6nm,0.5s,baz=133,slow=9.7,SNR=3.5 | | | | | | |
| **EKS2** | **Erkin-Say** | **56.11** | **316** | *eP* | **P** | **21 29 53.2** | **-0.2** |
| **KURK** | **Kurchatov** | **56.54** | **326** | *eP* | **P** | **21 29 55.8** | **-0.3** |
| | 10nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.54** | **326** | P | **P** | **21 29 56.2** | **+0.1** |
| | 2.4nm,0.7s,baz=126,slow=6.7,SNR=28 | | | | | | |
| **KKAR** | **Karatay Array** | **58.52** | **315** | *eP* | **P** | **21 30 10.3** | **0.0** |
| | 1.0nm,0.5s | | | | | | |
| **BVAR** | **Borovoye Array** | **62.13** | **326** | P | **P** | **21 30 33.8** | **-1.0** |
| | 1.1nm,0.6s,baz=96,slow=4.5,SNR=6.8 | | | | | | |
| **GEYT** | **Alibeck** | **66.66** | **307** | P | **P** | **21 31 04.1** | **-0.7** |
| | 2.2nm,0.8s,baz=116,slow=3.4,SNR=5.5 | | | | | | |
| GEYT | | | | LR | LR | 22 04 12.8 | |
| | comp=Z,35nm,18.8s,baz=15,slow=40 | | | | | | |
| **ABKAR** | **Akbulak array** | **67.23** | **320** | *eP* | **P** | **21 31 07.8** | **-0.3** |
| | 1.5nm,0.7s | | | | | | |
| **RAYN** | **Ar Rayn** | **77.39** | **292** | *eP* | **P** | **21 32 09.5** | **0.0** |
| | 5.3nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **80.56** | **26** | P | **P** | **21 32 26.1** | **+0.2** |
| | 0.9nm,0.8s,baz=244,slow=4.8,SNR=7.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **84.90** | **340** | P | **P** | **21 32 50.0** | **+1.6** |
| | 10nm,1.2s,baz=76,slow=6.1,SNR=6.7 | | | | | | |
| ARCES | | | | LR | LR | 22 14 09.6 | |
| | comp=Z,35nm,18.3s,baz=44,slow=38 | | | | | | |
| **BRTR** | **Keskin Array B** | **85.70** | **309** | P | **P** | **21 32 51.8** | **-1.4** |
| | 0.2nm,0.3s,baz=100,slow=12,SNR=2.2 | | | | | | |
| BRTR | | | | LR | LR | 22 15 30.0 | |
| | comp=Z,21nm,19.4s,baz=52,slow=39 | | | | | | |
| **FINES** | **FINESS Array B** | **86.47** | **332** | P | **P** | **21 32 55.8** | **-0.5** |
| | 3.1nm,1.0s,baz=54,slow=3.3,SNR=9.5 | | | | | | |
| **VNDA** | **Vanda** | **89.05** | **173** | P | **P** | **21 33 09.4** | **+1.1** |
| | 0.5nm,0.6s,baz=307,slow=6.9,SNR=4.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **93.37** | **334** | LR | LR | 22 19 52.1 | |
| | comp=Z,24nm,16.5s,baz=60,slow=38 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.87** | **24** | P | **P** | **21 33 35.5** | **-0.2** |
| | 1.8nm,0.8s,baz=301,slow=5.2,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **118.89** | **49** | PKP | **PKPdf** | **21 39 02.4** | **-0.7** |
| | 0.2nm,0.3s,baz=190,slow=4.6,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.08** | **291** | PKP | **PKPdf** | **21 39 04.7** | **-0.9** |
| | 0.2nm,0.4s,baz=29,slow=1.7,SNR=3.7 | | | | | | |

*IDC **22** 21:24:34.1±1.0, 0.36N×126.16E, h0km, mb4.1/4, mb1 4.3/5, mb1mx3.7/32, mbtmp4.1/5, ML3.3/1, Error ellipse: s-maj=54.0km s-min=18.4km az=61.0*
*AUST **22** 21:24:35.8±0.0, 1.16N×126.70E, h35km, Error ellipse: s-maj=1.7km s-min=1.1km az=331.0*
*ISCJB **22** 21:24:39.8±0.5, 0.62N±0.05×126.70E±0.04, h47km, mb4.2/6, Error ellipse: s-maj=7.6km s-min=4.5km az=29.0*
*NEIC **22** 21:24:41.3±0.7, 0.47N×126.56E, h59km±8km, mb4.4/2,*

*Error ellipse: s-maj=11.0km s-min=7.6km az=217.0*
*DJA **22** 21:24:43.0±0.6, 0°N±2°×12°7E±°, h37km±8km, M4.2/17, mb4.5/6, mB5.1/3, MLv4.0/17, Mw(mB)4.4/3*

**ISC 22 21:24:41.9±0.7, 0.54N±0.05×126.68E±0.04, h47km, n37, σ1°77/43, mb4.4/6, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.73** | **71** | P | **Pn** | **21 24 57.3** | **+1.4** |
| TNTI | | | | S | **Sn** | **21 25 08.4** | **+2.3** |
| **TNTI** | **Ternate** | **0.73** | **71** | *ePn* | **Pn** | **21 24 57.3** | **+1.4** |
| TNTI | | | | *eSn* | **Sn** | **21 25 08.6** | **+2.5** |
| **LBMI** | **Labuha** | **1.43** | **145** | P | **Pn** | **21 25 06.4** | **+1.0** |
| LBMI | | | | S | **Sn** | **21 25 24.4** | **+1.3** |
| **SANI** | **Sanana** | **2.66** | **195** | P | **Pn** | **21 25 22.8** | **+0.5** |
| **KMSI** | **Cibinong** | **2.69** | **271** | P | **Pn** | **21 25 23.1** | **+0.3** |
| KMSI | | | | S | **Sn** | **21 25 56.0** | **+1.8** |
| **SGSI** | **Sangihe** | **3.33** | **340** | P | **Pn** | **21 25 33.4** | **+1.9** |
| **GTOI** | **Gorontalo** | **3.67** | **272** | P | **Pn** | **21 25 38.8** | **+2.7** |
| GTOI | | | | S | **Sn** | **21 26 23.4** | **+5.3** |
| **NLAI** | **Namlea** | **3.77** | **174** | P | **Pn** | **21 25 38.3** | **+0.7** |
| NLAI | | | | S | **Sn** | **21 26 21.9** | **+1.1** |
| **LUWI** | **Luwuk** | **4.21** | **248** | P | **Pn** | **21 25 42.4** | **-1.2** |
| | baz=4.5,SNR=4.9 | | | | | | |
| **LUWI** | **Luwuk** | **4.21** | **248** | P | **Pn** | **21 25 44.3** | **+0.8** |
| LUWI | | | | S | **Sn** | **21 26 33.0** | **+1.6** |
| **LUWI** | **Luwuk** | **4.21** | **248** | *ePn* | **Pn** | **21 25 41.1** | **-2.5** |
| **AAI** | **Ambon** | **4.46** | **160** | P | **Pn** | **21 25 48.3** | **+1.2** |
| **MSAI** | **Masohi** | **4.47** | **150** | P | **Pn** | **21 25 48.0** | **+0.9** |
| **MRSI** | **Marisa** | **4.73** | **269** | P | **Pn** | **21 25 52.2** | **+1.4** |
| **SIJI** | **Sorong** | **4.80** | **107** | Pn | **Pn** | **21 25 53.5** | **+1.9** |
| | 1.1nm,0.3s,baz=112,slow=24,SNR=7.4 | | | | | | |
| **APSI** | **Ampana** | **5.23** | **254** | P | **Pn** | **21 25 58.4** | **+0.8** |
| | 45nm,0.6s,2μm0.2nm | | | | | | |
| **FAKI** | **Fak Fak** | **6.54** | **122** | P | **Pn** | **21 26 17.2** | **+1.5** |
| | baz=6.9,SNR=3.0 | | | | | | |
| **FAKI** | **Fak Fak** | **6.54** | **122** | *ePn* | **Pn** | **21 26 15.9** | **+0.2** |
| **MPSI** | **Mapaga** | **6.78** | **268** | P | **Pn** | **21 26 20.8** | **+1.9** |
| | 9.3nm,0.7s,0.1nm | | | | | | |
| **TTSI** | **Tana Toraja** | **7.72** | **243** | P | **Pn** | **21 26 31.9** | **+0.1** |
| | 43nm,0.6s,2μm0.2nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **8.22** | **237** | P | **Pn** | **21 26 39.6** | **+0.9** |
| | 36nm,0.5s,644nm | | | | | | |
| **BKSI** | **Bulukumba** | **8.76** | **228** | P | **Pn** | **21 26 46.6** | **+0.6** |
| **PALU** | **Palau** | **10.30** | **49** | P | Pn | 21 26 57.9 | -9.4 |
| | baz=9.9,SNR=3.2 | | | | | | |
| **KKM** | **Kota Kinabalu** | **11.79** | **298** | *ePn* | **Pn** | **21 27 26.1** | **-1.5** |
| **MTN** | **Manton Dam** | **14.01** | **162** | P | **P** | **21 28 05.6** | **+1.1** |
| | baz=15,SNR=3.9 | | | | | | |
| **KNRA** | **Kununurra** | **16.24** | **173** | P | **Pn** | **21 28 28.3** | **+1.4** |
| | baz=17,SNR=3.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **21.69** | **160** | *eP* | **P** | **21 29 27.1** | **-1.8** |
| | 7.1nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **21.69** | **160** | P | **P** | **21 29 27.0** | **-2.0** |
| | 6.6nm,0.4s,baz=337,slow=10,SNR=70 | | | | | | |
| **QIS** | **Mount Isa** | **24.49** | **150** | P | **P** | **21 29 56.0** | **-0.9** |
| | baz=25,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **25.06** | **164** | P | **P** | **21 30 00.4** | **-1.7** |
| | 4.3nm,0.3s,baz=345,slow=11,SNR=60 | | | | | | |
| **WRKA** | **Warakurna** | **25.47** | **177** | P | **P** | **21 30 07.6** | **+1.8** |
| | baz=26,SNR=3.3 | | | | | | |
| **BBOO** | **Buckleboo** | **34.33** | **166** | P | **P** | **21 31 22.6** | **-1.6** |
| | baz=35,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **50.30** | **342** | P | **P** | **21 33 32.9** | **-1.0** |
| | 0.4nm,0.7s,baz=161,slow=8.9,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.15** | **326** | P | **P** | **21 34 42.0** | **-2.8** |
| | 0.7nm,0.4s,baz=121,slow=7.3,SNR=18 | | | | | | |
| **MCQ** | **Macquarie Isla** | **60.95** | **159** | P | **P** | **21 34 49.3** | **-0.7** |
| | baz=62,SNR=5.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **64.39** | **328** | P | **P** | **21 35 11.8** | **-1.3** |
| | baz=128,slow=6.2 | | | | | | |
| **KURK** | **Kurchatov** | **64.40** | **328** | *eP* | **P** | **21 35 11.3** | **-1.8** |
| | 2.2nm,0.6s | | | | | | |

**KRSC 22 21:39:55.6±0.9, 53°53N×159°31E, h138km±6km, ML3.6, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SDLR** | **Sedlovina** | **0.36** | **225** | *iP* | Pn | 21 40 16.3 | +1.2 |
| SDLR | | | | *i* S | Sn | 21 40 30.7 | +0.9 |
| **NLC** | **Nalytchevo** | **0.36** | **177** | *iP* | Pn | 21 40 16.2 | +1.3 |
| NLC | | | | *i* S | Sn | 21 40 31.0 | +1.6 |
| **SMAR** | **Somma** | **0.41** | **229** | *eP* | Pn | 21 40 16.7 | +1.3 |
| **KRX** | **Arik** | **0.43** | **247** | *iP* | Pn | 21 40 16.7 | +1.3 |
| KRX | | | | *i* S | Sn | 21 40 31.7 | +1.3 |
| **AVH** | **Avacha** | **0.43** | **232** | *iP* | Pn | 21 40 16.8 | +1.5 |
| **UGLR** | **Uglovaya** | **0.43** | **222** | *iP* | Pn | 21 40 16.8 | +1.4 |
| **KOK** | **Koryaka** | **0.47** | **240** | *iP* | Pn | 21 40 16.9 | +1.4 |
| **KII** | **Karymskiy** | **0.51** | **9** | *iP* | Pn | 21 40 17.2 | +1.5 |
| KII | | | | *i* S | Sn | 21 40 33.5 | +2.5 |
| **SPN** | **Mys Shipunski** | **0.61** | **135** | *iP* | Pn | 21 40 17.4 | +1.2 |
| SPN | | | | *i* S | Sn | 21 40 33.5 | +1.7 |
| **PET** | **Petropavlovsk** | **0.64** | **218** | *iP* | Pn | 21 40 17.4 | +1.0 |
| PET | | | | *i* S | Sn | 21 40 33.0 | +0.9 |
| **GNL** | **Ganaly** | **0.83** | **282** | *iP* | Pn | 21 40 18.7 | +0.8 |
| GNL | | | | *i* S | Sn | 21 40 35.0 | +0.1 |
| **RUS** | **Russkaya** | **1.20** | **204** | *iP* | Pn | 21 40 22.0 | +0.9 |
| RUS | | | | *i* S | Sn | 21 40 40.8 | +0.3 |
| **MTVR** | **Mutnovka** | **1.25** | **213** | *iP* | Pn | 21 40 23.5 | +1.7 |
| MTVR | | | | *i* S | Sn | 21 40 43.5 | +1.8 |
| **APC** | **Apacha** | **1.43** | **246** | *eP* | Pn | 21 40 24.8 | +1.4 |
| APC | | | | *eS* | Sn | 21 40 45.8 | +1.1 |
| **ASAK** | **Asacha** | **1.43** | **217** | *iP* | Pn | 21 40 25.2 | +1.6 |
| **KZV** | **Kizimen** | **1.69** | **20** | *iP* | Pn | 21 40 28.5 | +2.0 |
| **MKZ** | **Mys Kozlova** | **1.76** | **53** | *iP* | Pn | 21 40 29.0 | +2.0 |
| MKZ | | | | *i* S | Sn | 21 40 51.7 | +0.5 |
| **TUMR** | **Tumrok** | **1.82** | **15** | *iP* | Pn | 21 40 30.3 | +2.3 |
| **KBTR** | **Krutoberegovo** | **3.36** | **36** | *iP* | Pn | 21 40 49.1 | +2.0 |
| KBTR | | | | *i* S | Sn | 21 41 26.6 | -0.3 |

**CASC 22 21:49:24.6±2.2, 9.06N×82.96W, h12km±8km, MD3.6, 1C, Panama-Costa Rica border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BRU2** | **Volcan** | **0.38** | **134** | *iP* | Pb | 21 49 33.0 | -0.4 |
| BRU2 | | | | *eS* | Sb | 21 49 39.2 | -0.1 |
| **TBS2** | | **0.40** | **131** | *eP* | Pb | 21 49 33.4 | -0.4 |
| TBS2 | | | | *eS* | Sb | 21 49 39.6 | -0.4 |
| **BRU** | **Baru** | **0.47** | **122** | *eP* | Pg | 21 49 34.9 | +0.4 |
| BRU | | | | *eS* | Sb | 21 49 42.5 | -0.1 |
| **BUS** | **Buena Vista** | **0.93** | **302** | *eP* | Pg | 21 49 41.2 | -1.9 |
| BUS | | | | *eS* | Sg | 21 49 54.4 | -1.3 |
| **CGA2** | **Cerro Gallo 2** | **1.76** | **303** | *eP* | Pn | 21 49 54.7 | -0.4 |
| CGA2 | | | | *eS* | Sn | 21 50 17.4 | -0.2 |
| **JTS** | **JuntasAbangare** | **2.31** | **302** | *eP* | Pn | 21 50 04.4 | +1.9 |
| JTS | | | | *eS* | Sn | 21 50 31.7 | +0.8 |

**CASC 22 21:53:30.2±2.6, 8.98N×83.01W, h13km±15km, MD3.7, 1C, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BRU2** | **Volcan** | **0.37** | **121** | *iP* | Pb | 21 53 38.7 | -0.1 |
| BRU2 | | | | *eS* | Sb | 21 53 45.1 | +0.4 |
| **TBS2** | | **0.40** | **118** | *eP* | Pb | 21 53 39.1 | -0.2 |
| TBS2 | | | | *eS* | Sb | 21 53 45.0 | -0.5 |
| **BRU** | **Baru** | **0.48** | **112** | *eP* | Pb | 21 53 40.8 | -0.3 |
| BRU | | | | *eS* | Sb | 21 53 47.8 | -0.6 |
| **BUS** | **Buena Vista** | **0.93** | **308** | *eP* | Pg | 21 53 47.2 | -1.6 |
| BUS | | | | *eS* | Sg | 21 53 59.9 | -1.5 |
| **QCR** | **Quepos** | **1.22** | **291** | *eP* | Pn | 21 53 51.8 | -1.2 |
| QCR | | | | *eS* | Sb | 21 54 07.2 | -1.8 |
| **CGA2** | **Cerro Gallo 2** | **1.77** | **306** | *eP* | Pn | 21 54 00.5 | -0.3 |
| CGA2 | | | | *eS* | Sn | 21 54 23.0 | -0.2 |
| **JTS** | **JuntasAbangare** | **2.31** | **304** | *eP* | Pb | 21 54 10.2 | -1.8 |
| JTS | | | | *eS* | Sn | 21 54 37.8 | +1.2 |

*IDC **22** 21:56:22.1±2.3, 4.70S×102.47E, h0km, mb4.1/7, mb1 4.2/7, mb1mx3.8/40, mbtmp4.1/7, MS3.4/1, Ms1 3.4/1, ms1mx2.5/35, Error ellipse: s-maj=100.1km s-min=18.6km az=54.0*
*ISCJB **22** 21:56:29.4±1.1, 4.65S±0.1×102.71E±0.10, h71km±7km, mb4.2/12, Error ellipse: s-maj=23.2km s-min=6.4km az=42.2*
*NEIC **22** 21:56:29.8±2.1, 4.66S×102.54E, h58km±14km, mb4.3/4, Error ellipse: s-maj=37.7km s-min=8.5km az=51.0*

*DJA **22** 21:56:31.4±0.7, 5°S±5°×10°3E±°, h38km±4km, M4.0/8, MLv4.0/8*

**ISC 22 21:56:29.6±1.8, 4.75S±0.1×102.72E±0.1, h56km±12km, n26, σ0°71/29, mb4.3/12, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNAI** | **Manna** | **0.44** | **42** | P | **Pn** | **21 56 40.7** | **+0.1** |
| MNAI | | | | S | **Sn** | **21 56 47.5** | **-1.1** |
| **MNAI** | **Manna** | **0.44** | **42** | *ePn* | **Pn** | **21 56 41.8** | **+1.2** |
| MNAI | | | | *eSb* | **Sn** | **21 56 47.8** | **-0.8** |
| MNAI | | | | *eSn* | Sn | 21 56 50.2 | +1.6 |
| **KSI** | **Kapahiang** | **1.03** | **356** | P | **Pn** | **21 56 49.1** | **+1.1** |
| KSI | | | | S | **Sn** | **21 57 02.3** | **+0.7** |
| **LWLI** | **Liwa** | **1.43** | **103** | P | **Pn** | **21 56 54.1** | **+0.7** |
| LWLI | | | | S | **Sn** | **21 57 10.8** | **-0.4** |
| **MDSI** | **Maura Dua** | **1.52** | **82** | P | **Pn** | **21 56 55.1** | **+0.6** |
| MDSI | | | | S | **Sn** | **21 57 13.2** | **-0.1** |
| **KASI** | **Kota Agung** | **2.00** | **115** | P | **Pn** | **21 57 01.3** | **+0.2** |
| KASI | | | | S | **Sn** | **21 57 25.0** | **-0.1** |
| **KLI** | **Kotabumi** | **2.19** | **95** | P | **Pn** | **21 57 04.1** | **+0.4** |
| KLI | | | | S | **Sn** | **21 57 29.3** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** | **23.29** | **351** | P | **P** | **22 01 31.6** | **-1.1** |
| | 0.8nm,0.4s,baz=185,slow=9.0,SNR=7.7 | | | | | | |
| **QIZ** | **Qiongzhong** | **24.61** | **16** | *ePn* | P | 22 01 51.0 | +6.3 |
| **H01W3** | **Cape Leeuwin H** | **31.87** | **162** | T | T | 22 36 39.0 | |
| | baz=339,slow=76,SNR=14 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **31.88** | **162** | T | T | 22 36 47.2 | |
| | baz=339,slow=76,SNR=12 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **31.88** | **162** | T | T | 22 36 52.2 | |
| | baz=339,slow=76,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.36** | **119** | P | **P** | **22 03 11.9** | **+0.5** |
| | 0.6nm,0.6s,baz=289,slow=9.8,SNR=13 | | | | | | |
| **WRAB** | **Tennant Creek** | **34.37** | **119** | P | **P** | **22 03 12.5** | **+1.0** |
| **ASAR** | **Alice Springs** | **35.53** | **125** | P | **P** | **22 03 22.8** | **+1.2** |
| | 0.5nm,0.3s,baz=298,slow=8.0,SNR=17 | | | | | | |
| **PMG** | **Port Moresby** | **44.38** | **99** | LR | LR | 22 25 16.8 | |
| | comp=Z,38nm,18.4s,baz=316,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **52.40** | **3** | P | **P** | **22 05 36.5** | **+0.2** |
| | 2.8nm,0.6s,baz=184,slow=9.3,SNR=34 | | | | | | |
| SONM | | | | PcP | **PcP** | **22 06 46.8** | **+0.2** |
| | 0.4nm,0.5s,baz=184,slow=3.8,SNR=3.7 | | | | | | |
| **TKM2** | **Tokmak 2** | **53.35** | **335** | *eP* | **P** | **22 05 43.1** | **-0.5** |
| | 1.0nm,0.3s | | | | | | |
| **EKS2** | **Erkin-Say** | **53.92** | **334** | *eP* | **P** | **22 05 46.5** | **-1.1** |
| | 1.1nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **54.34** | **343** | P | **P** | **22 05 50.5** | **0.0** |
| | 1.1nm,0.4s,baz=155,slow=9.1,SNR=13 | | | | | | |
| **KURK** | **Kurchatov** | **58.94** | **342** | *eP* | **P** | **22 06 22.9** | **-0.1** |
| | 2.8nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.31** | **348** | P | **P** | **22 06 31.9** | **-0.5** |
| | 2.8nm,0.4s,baz=166,slow=4.5,SNR=16 | | | | | | |
| **BRVK** | **Borovoye** | **63.69** | **339** | *eP* | **P** | **22 06 54.7** | **-0.4** |
| | 1.0nm,0.4s | | | | | | |
| **SANT** | **Santorini** | **82.52** | **307** | *eP* | **P** | **22 08 46.0** | **-0.7** |
| | 16nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **87.71** | **332** | P | **P** | **22 09 12.1** | **0.0** |
| | 4.5nm,1.1s,baz=94,slow=5.7,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.04** | **43** | PKPbc | **PKPdf** | **22 16 01.7** | **+0.2** |
| | 0.8nm,0.6s,baz=265,slow=1.2,SNR=14 | | | | | | |

**IDC 22 22:20:20.5±2.3, 5.71S×150.88E, h0km, mb3.8/2, mb1 4.0/3, mb1mx3.5/28, mbtmp3.9/3, ML1.7/1, Error ellipse: s-maj=109.1km s-min=36.5km az=124.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.21** | **225** | Pn | Pn | 22 21 41.2 | +1.5 |
| | 1.9nm,0.3s,baz=27,slow=18,SNR=2.9 | | | | | | |
| PMG | | | | Sn | Sn | 22 22 34.2 | -6.2 |
| | 7.7nm,0.3s,baz=108,slow=19,SNR=8.8 | | | | | | |
| **WRA** | **Warramunga Ar

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MBDF** | **Montbardon** | **0.80** | **197** | *e*Pg | | **Pg** | **22 29 42.3** | **0.0** |
| MBDF | | | | *e*Sg | | **Sg** | **22 29 52.9** | **+0.1** |
| | 34nm,0.3s | | | | | | | |
| **PZZ** | **Stroppo** | **0.99** | **179** | Pg | | **Pg** | **22 29 45.8** | **0.0** |
| PZZ | | | | Sg | | **Sb** | **22 29 59.6** | **+0.4** |
| | 68nm,0.3s | | | | | | | |
| **DOI** | **San Damiano** | **1.00** | **174** | Pg | | **Pg** | **22 29 45.7** | **-0.3** |
| DOI | | | | Sg | | **Sb** | **22 30 00.1** | **+0.7** |
| | 36nm,0.2s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.04** | **237** | *e*Pg | | **Pg** | **22 29 46.7** | **0.0** |
| ORIF | | | | *e*Sg | | **Sg** | **22 29 58.5** | **-1.7** |
| | 29nm,0.2s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.04** | **237** | *e*Pg | | **Pg** | **22 29 46.7** | **0.0** |
| ORIF | | | | *e*Sg | | **Sg** | **22 29 58.5** | **-1.7** |
| | 14nm,0.2s | | | | | | | |
| **CABF** | **La Chapelle** | **1.32** | **328** | *e*Pg | | **Pg** | **22 29 53.0** | **+0.9** |
| | 17nm,0.3s | | | | | | | |
| CABF | | | | *e*Sg | | **Sn** | **22 30 10.1** | **+1.1** |
| | 17nm,0.3s | | | | | | | |
| **CABF** | **La Chapelle** | **1.32** | **328** | *e*Pg | | **Pg** | **22 29 53.0** | **+0.9** |
| | 8.3nm,0.3s | | | | | | | |
| CABF | | | | *e*Sg | | **Sn** | **22 30 10.1** | **+1.1** |
| | 8.3nm,0.3s | | | | | | | |
| **SBF** | **Sospel** | **1.65** | **171** | *e*Pn | | **Pg** | **22 29 58.5** | **+0.1** |
| SBF | | | | *e*Sg | | **Sg** | **22 30 20.3** | **+0.5** |
| | 49nm,0.5s | | | | | | | |
| **SBF** | **Sospel** | **1.65** | **171** | *e*Pn | | **Pg** | **22 29 58.5** | **+0.1** |
| SBF | | | | *e*Sg | | **Sg** | **22 30 20.3** | **+0.5** |
| | 24nm,0.5s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.83** | **250** | *e*Pn | | **Pn** | **22 29 58.3** | **0.0** |
| **VIVF** | **Saint-Julien-l** | **1.83** | **250** | *e*Pg | | **Pg** | **22 30 02.1** | **+0.2** |
| VIVF | | | | *e*Sn | | **Sn** | **22 30 20.6** | **-0.9** |
| | 12nm,0.4s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.83** | **250** | *e*Pn | | **Pn** | **22 29 58.3** | **0.0** |
| **VIVF** | **Saint-Julien-l** | **1.83** | **250** | *e*Pg | | **Pg** | **22 30 02.1** | **+0.2** |
| VIVF | | | | *e*Sn | | **Sn** | **22 30 20.6** | **-0.9** |
| | 5.9nm,0.4s | | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.87** | **216** | *e*P | | **Pb** | **22 30 01.3** | **+0.3** |
| SMRF | | | | *e*Sn | | **Sn** | **22 30 21.7** | **-0.8** |
| | 7.5nm,0.4s | | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.87** | **216** | *e*P | | **Pb** | **22 30 01.3** | **+0.3** |
| SMRF | | | | *e*Sn | | **Sn** | **22 30 21.7** | **-0.8** |
| | 3.8nm,0.4s | | | | | | | |
| **FRF** | **La Foret Royal** | **1.96** | **190** | *e*Pg | | **Pb** | **22 30 03.6** | **+1.0** |
| FRF | | | | *e*Sn | | **Sn** | **22 30 24.0** | **-0.7** |
| | 12nm,0.4s | | | | | | | |
| **FRF** | **La Foret Royal** | **1.96** | **190** | *e*Pg | | **Pb** | **22 30 03.6** | **+1.0** |
| FRF | | | | *e*Sn | | **Sn** | **22 30 24.0** | **-0.7** |
| | 5.8nm,0.4s | | | | | | | |
| **LMR** | **La Mourre** | **2.20** | **191** | *e*P | | **Pb** | **22 30 06.0** | **-0.7** |
| LMR | | | | *e*Sn | | **Sn** | **22 30 30.0** | **-0.6** |
| | 8.8nm,0.4s | | | | | | | |
| **LMR** | **La Mourre** | **2.20** | **191** | *e*P | | **Pb** | **22 30 06.0** | **-0.7** |
| LMR | | | | *e*Sn | | **Sn** | **22 30 30.0** | **-0.6** |
| | 4.4nm,0.4s | | | | | | | |
| **HINF** | **Hinteralfeld** | **2.33** | **356** | *e*Pn | | **Pn** | **22 30 05.6** | **+0.4** |
| HINF | | | | *e*Sn | | **Sn** | **22 30 33.3** | **-0.5** |
| | 7.9nm,0.5s | | | | | | | |
| **HINF** | **Hinteralfeld** | **2.33** | **356** | *e*Pn | | **Pn** | **22 30 05.6** | **+0.4** |
| HINF | | | | *e*Sn | | **Sn** | **22 30 33.3** | **-0.5** |
| | 4.0nm,0.5s | | | | | | | |
| **SMF** | **Signal de Mont** | **2.54** | **298** | *e*Pn | | **Pn** | **22 30 08.2** | **+0.1** |
| SMF | | | | *e*Sg | | **Sb** | **22 30 45.6** | **+1.8** |
| | 17nm,0.2s | | | | | | | |
| **SMF** | **Signal de Mont** | **2.54** | **298** | *e*Pn | | **Pn** | **22 30 08.2** | **+0.1** |
| SMF | | | | *e*Sg | | **Sb** | **22 30 45.6** | **+1.8** |
| | 8.5nm,0.2s | | | | | | | |
| **HAU** | **Haudompre** | **2.56** | **349** | *e*Pn | | **Pn** | **22 30 08.9** | **+0.5** |
| HAU | | | | *e*Sn | | **Sn** | **22 30 38.7** | **-0.9** |
| | 4.0nm,0.3s | | | | | | | |
| **HAU** | **Haudompre** | **2.56** | **349** | *e*Pn | | **Pn** | **22 30 08.9** | **+0.5** |
| HAU | | | | *e*Sn | | **Sn** | **22 30 38.7** | **-0.9** |
| | 2.0nm,0.3s | | | | | | | |
| **DAVA** | **Damuels** | **2.63** | **46** | ⇑*i*Pn | | **Pg** | **22 30 15.4** | **-1.7** |
| **LASF** | **Ste Croix** | **2.71** | **240** | *e*Pn | | **Pn** | **22 30 10.5** | **+0.1** |
| LASF | | | | *e*Sn | | **Sn** | **22 30 41.9** | **-1.3** |
| | 4.3nm,0.6s | | | | | | | |
| **LASF** | **Ste Croix** | **2.71** | **240** | *e*Pn | | **Pn** | **22 30 10.5** | **+0.1** |
| **LOR** | **Lormes** | **2.86** | **309** | *e*Pn | | **Pn** | **22 30 14.4** | **+2.0** |
| **LOR** | **Lormes** | **2.86** | **309** | *e*Pg | | **Pg** | **22 30 20.8** | **-0.7** |
| | baz=126 | | | | | | | |
| LOR | | | | *e*Sg | | **Sg** | **22 30 57.8** | **-0.7** |
| | 7.7nm,0.4s | | | | | | | |
| **LOR** | **Lormes** | **2.86** | **309** | *e*Pn | | **Pn** | **22 30 14.4** | **+2.0** |
| **LOR** | **Lormes** | **2.86** | **309** | *e*Pg | | **Pg** | **22 30 20.8** | **-0.7** |
| | baz=126 | | | | | | | |
| LOR | | | | *e*Sg | | **Sg** | **22 30 57.8** | **-0.7** |
| | 3.8nm,0.4s | | | | | | | |
| **AVF** | **Avril sur Loir** | **2.91** | **298** | *e*Pn | | **Pn** | **22 30 13.3** | **+0.2** |
| AVF | | | | *e*Sg | | **Sg** | **22 30 59.0** | **-1.1** |
| | 16nm,0.7s | | | | | | | |
| **AVF** | **Avril sur Loir** | **2.91** | **298** | *e*Pn | | **Pn** | **22 30 13.3** | **+0.2** |
| AVF | | | | *e*Sg | | **Sg** | **22 30 59.0** | **-1.1** |
| | 8.1nm,0.7s | | | | | | | |
| **SSF** | **Saint Saulge** | **2.94** | **303** | *e*Pn | | **Pn** | **22 30 13.9** | **+0.3** |
| **SSF** | **Saint Saulge** | **2.94** | **303** | *e*Pg | | **Pg** | **22 30 22.6** | **-0.5** |
| SSF | | | | *e*Sg | | **Sg** | **22 31 00.5** | **-0.7** |
| | 3.1nm,0.4s | | | | | | | |
| **SSF** | **Saint Saulge** | **2.94** | **303** | *e*Pn | | **Pn** | **22 30 13.9** | **+0.3** |
| **SSF** | **Saint Saulge** | **2.94** | **303** | *e*Pg | | **Pg** | **22 30 22.6** | **-0.5** |
| SSF | | | | *e*Sg | | **Sg** | **22 31 00.5** | **-0.7** |
| | 1.5nm,0.4s | | | | | | | |
| **BGF** | **Bois d'Agland** | **3.15** | **291** | *e*Pn | | **Pn** | **22 30 16.5** | **+0.1** |
| BGF | | | | *e*Sg | | **Sg** | **22 31 06.8** | **-1.0** |
| | 7.6nm,0.3s | | | | | | | |
| **BGF** | **Bois d'Agland** | **3.15** | **291** | *e*Pn | | **Pn** | **22 30 16.5** | **+0.1** |
| **TCF** | **Toulx Ste Croi** | **3.50** | **285** | *e*Pn | | **Pn** | **22 30 21.9** | **+0.6** |
| **TCF** | **Toulx Ste Croi** | **3.50** | **285** | *e*Pg | | **Pg** | **22 30 32.8** | **-1.1** |
| TCF | | | | *e*Sg | | **Sb** | **22 31 14.9** | **+3.4** |
| | 3.2nm,0.3s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.50** | **285** | *e*Pn | | **Pn** | **22 30 21.9** | **+0.6** |
| **TCF** | **Toulx Ste Croi** | **3.50** | **285** | *e*Pg | | **Pg** | **22 30 32.8** | **-1.1** |
| TCF | | | | *e*Sg | | **Sb** | **22 31 14.9** | **+3.4** |
| | 1.6nm,0.3s | | | | | | | |
| **HYF** | **Humbligny** | **3.56** | **301** | *e*Pn | | **Pn** | **22 30 23.2** | **+1.2** |
| **HYF** | **Humbligny** | **3.56** | **301** | *e*Pn | | **Pn** | **22 30 23.2** | **+1.2** |
| **CAF** | **Calviac** | **3.60** | **263** | *e*Pn | | **Pn** | **22 30 22.8** | **+0.1** |
| CAF | | | | *e*Sg | | **Sg** | **22 31 21.0** | **-1.4** |
| | 2.8nm,0.4s | | | | | | | |
| **CAF** | **Calviac** | **3.60** | **263** | *e*Pn | | **Pn** | **22 30 22.8** | **+0.1** |
| CAF | | | | *e*Sg | | **Sg** | **22 31 21.0** | **-1.4** |
| | 1.4nm,0.4s | | | | | | | |

*DDA **22** 22:44:03.1, 37.°07′N×28.°63′E, h7km, Md2.6*
*CSEM **22** 22:44:04.8±0.2, 37.°06′N×28.°54′E, h15km, MD2.6, Error ellipse: s-maj=8.1km s-min=3.8km az=52.0*
*ISK **22** 22:44:04.0, 37.°08′N×28.°56′E, h9km, MD2.6*

**ISC 22 22:44:04.3±1.3, 36°99′N±0.°07×28°48′E±0.°07, h21km±1km, n18, σ1§06/31, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TURN** | **Turunc** | **0.16** | **140** | *i* P | **Pb** | **22 44 11.5** | **+1.2** |
| **TURN** | **Turunc** | **0.16** | **140** | P | **Pb** | **22 44 11.4** | **+1.2** |
| TURN | | | | S | **Sb** | **22 44 17.8** | **+3.3** |
| **YER** | **Yerkesik** | **0.21** | **313** | *e*PG | **Pb** | **22 44 09.1** | **-1.2** |
| YER | | | | *e*SG | **Sb** | **22 44 12.7** | **-1.8** |
| **YER** | **Yerkesik** | **0.21** | **313** | *e*Pg | **Pb** | **22 44 09.1** | **-1.2** |
| YER | | | | *e*Sg | **Sb** | **22 44 12.7** | **-1.8** |
| **DALY** | **Dalyan (Mu˘la** | **0.23** | **141** | *e*PG | **Pb** | **22 44 09.8** | **-0.4** |
| DALY | | | | *e*SG | **Sb** | **22 44 14.3** | **0.0** |
| **DALY** | **Dalyan (Mu˘la** | **0.23** | **141** | *e*Pg | **Pb** | **22 44 09.8** | **-0.4** |
| DALY | | | | *e*Sg | **Sb** | **22 44 14.4** | **0.0** |
| **FETY** | **Fethiye** | **0.60** | **126** | *e*PG | **Pb** | **22 44 16.4** | **+0.2** |
| FETY | | | | *e*SG | **Sb** | **22 44 25.4** | **+1.0** |
| **FETY** | **Fethiye** | **0.60** | **126** | *e*Pg | **Pb** | **22 44 16.4** | **+0.2** |
| FETY | | | | *e*Sg | **Sb** | **22 44 25.4** | **+1.0** |
| **AYDN** | **Tasoluk** | **0.82** | **325** | *i* P | **Pn** | **22 44 21.4** | **+0.8** |
| AYDN | | | | *i* S | **Sn** | **22 44 31.7** | **-0.5** |
| **AYDN** | **Tasoluk** | **0.82** | **325** | P | **Pn** | **22 44 21.4** | **+0.8** |
| AYDN | | | | S | **Sn** | **22 44 31.7** | **-0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.06** | **334** | *e*PG | **Pn** | **22 44 23.9** | **-0.1** |
| AYDB | | | | *e*SG | **Sn** | **22 44 38.3** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.06** | **334** | *e*Pg | **Pn** | **22 44 23.9** | **-0.1** |
| AYDB | | | | *e*Sg | **Sn** | **22 44 38.3** | **+0.1** |
| **ELL** | **Elmali** | **1.17** | **102** | *e*PN | **Pn** | **22 44 26.3** | **+0.7** |
| **ELL** | **Elmali** | **1.17** | **102** | *e*Pn | **Pn** | **22 44 26.3** | **+0.7** |
| **KULA** | **Kula-Manisa** | **1.53** | **5** | *e*PN | **Pn** | **22 44 30.9** | **+0.5** |
| **KULA** | **Kula-Manisa** | **1.53** | **5** | *e*Pn | **Pn** | **22 44 30.9** | **+0.5** |
| **KHAL** | **Karahalli** | **1.59** | **30** | *i* P | **Pn** | **22 44 31.3** | **0.0** |
| KHAL | | | | *i* S | **Sn** | **22 44 50.6** | **-0.8** |
| **KHAL** | **Karahalli** | **1.59** | **30** | P | **Pn** | **22 44 31.3** | **0.0** |
| KHAL | | | | S | **Sn** | **22 44 50.6** | **-0.8** |

*ISCJB **22** 22:50:20.6±3.8, 23.°1′S±0.°5×13.°6′W±0.°6, h10km, mb4.0/8, MS3.5/12, Error ellipse: s-maj=100.0km s-min=24.4km az=140.3*
*IDC **22** 22:50:22.1±2.2, 22.°94′S×13.°41′W, h0km, mb4.1/8, mb1 4.1/8, mb1mx3.8/32, mbtmp4.1/8, MS3.5/12, Ms1 3.5/12, ms1mx3.3/25, Error ellipse: s-maj=61.4km s-min=30.5km az=49.0*

**ISC 22 22:50:23.6±2.6, 23°05′S±0.°3×13°4′W±0.°4, h10km, n25, σ0§53/9, mb4.0/8, MS3.5/12, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10S2** | **ASCENSION HYDR** | **13.99** | **355** | T | T | 23 07 46.8 | |
| | baz=175,slow=74,SNR=128 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **13.99** | **355** | T | T | 23 07 47.5 | |
| | baz=175,slow=74,SNR=107 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **14.00** | **355** | T | T | 23 07 48.1 | |
| | baz=175,slow=74,SNR=120 | | | | | | |
| **H09W1** | **TRISTAN DA CUN** | **14.11** | **176** | T | T | 23 08 24.4 | |
| **H10N1** | **ASCENSION HYDR** | **15.08** | **356** | T | T | 23 09 17.3 | |
| | baz=286,slow=14,SNR=3.8 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **15.08** | **356** | T | T | 23 09 18.5 | |
| | baz=286,slow=14,SNR=16 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **15.10** | **356** | T | T | 23 09 18.5 | |
| | baz=286,slow=14,SNR=5.3 | | | | | | |
| **RCBR** | **Riachuelo** | **27.57** | **305** | LR | LR | 23 04 17.0 | |
| | comp=Z,123nm,19.5s,baz=142,slow=30 | | | | | | |
| **TSUM** | **Tsumeb** | **29.15** | **88** | LR | LR | 23 05 41.9 | |
| | comp=Z,61nm,20.6s,baz=260,slow=32 | | | | | | |
| **DBIC** | **Dimbokro** | **30.63** | **17** | LR | LR | 23 05 51.2 | |
| | comp=Z,75nm,20.4s,baz=166,slow=30 | | | | | | |
| **BDFB** | **Brasilia** | **33.39** | **276** | LR | LR | 23 08 01.9 | |
| | comp=Z,140nm,22.0s,baz=92,slow=32 | | | | | | |
| **BOSA** | **Boshof** | **35.17** | **107** | P | **P** | **22 57 17.5** | **-0.5** |
| | 4.2nm,0.7s,baz=277,slow=6.8,SNR=6.5 | | | | | | |
| BOSA | | | | LR | LR | 23 09 16.9 | |
| | comp=Z,96nm,18.4s,baz=280,slow=32 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **38.83** | **24** | P | **P** | **22 57 48.8** | **-0.2** |
| | 4.7nm,0.5s,baz=201,slow=8.9,SNR=95 | | | | | | |
| TORD | | | | LR | LR | 23 10 27.6 | |
| | comp=Z,100nm,22.0s,baz=190,slow=31 | | | | | | |
| **LSZ** | **Lusaka** | **39.95** | **87** | P | **P** | **22 57 59.3** | **+0.7** |
| | 0.5nm,0.5s,baz=229,slow=20,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **51.72** | **267** | LR | LR | 23 21 20.4 | |
| | comp=Z,42nm,18.3s,baz=112,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **62.95** | **8** | P | **P** | **23 00 50.8** | **+0.5** |
| | 0.5nm,0.8s,baz=189,slow=8.4,SNR=4.9 | | | | | | |
| **MAW** | **Mawson** | **63.76** | **155** | LR | LR | 23 25 53.7 | |
| | comp=Z,26nm,18.1s,baz=240,slow=33 | | | | | | |
| **ROSC** | **El Rosal** | **65.55** | **287** | LR | LR | 23 28 18.4 | |
| | comp=Z,64nm,19.1s,baz=182,slow=35 | | | | | | |
| **DAVOX** | **Davos/Dischma** | **72.56** | **17** | P | **P** | **23 01 50.4** | **-0.5** |
| | 0.8nm,0.3s,baz=271,slow=6.5,SNR=3.5 | | | | | | |
| **GERES** | **GERESS Array B** | **75.49** | **18** | P | **P** | **23 02 07.4** | **-0.5** |
| | 0.8nm,0.8s,baz=224,slow=11,SNR=5.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.28** | **36** | P | **P** | **23 02 12.8** | **+0.1** |
| | 1.1nm,0.8s,baz=197,slow=4.3,SNR=3.1 | | | | | | |
| BRTR | | | | LR | LR | 23 35 55.7 | |
| | comp=Z,8.5nm,18.2s,baz=170,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **82.44** | **26** | P | **P** | **23 02 45.9** | **0.0** |
| | 1.0nm,0.7s,baz=218,slow=5,SNR=5.1 | | | | | | |
| **NOA** | **NORSAR Array B** | **86.06** | **12** | LR | LR | 23 40 46.9 | |
| | comp=Z,11nm,19.1s,baz=25,slow=35 | | | | | | |
| **SCHQ** | **Schefferville** | **89.93** | **332** | LR | LR | 23 36 17.7 | |
| | comp=Z,45nm,20.1s,baz=296,slow=31 | | | | | | |
| **ILAR** | **Eielson Array** | **128.49** | **337** | PKP | **PKPdf** | **23 09 30.4** | **+0.3** |
| | 0.2nm,0.6s,baz=90,slow=0.1,SNR=3.3 | | | | | | |

*IDC **22** 23:01:53.4±0.7, 31.°15′N×141.°83′E, h0km, mb3.9/12, mb1 4.1/13, mb1mx4.0/29, mbtmp3.9/13, ML3.8/1, MS3.1/3, Ms1 3.1/3, ms1mx2.6/33, Error ellipse: s-maj=23.5km s-min=18.3km az=76.0*
*ISCJB **22** 23:01:56.3±0.5, 31.°22′N±0.°05×141.°9′E±0.°1, h29km, mb4.0/17, MS3.6/1, Error ellipse: s-maj=14.0km s-min=5.8km az=158.5*
*NEIC **22** 23:01:59.1±1.5, 31.°18′N×141.°84′E, h38km±12km, mb4.4/5, Error ellipse: s-maj=12.8km s-min=11.9km az=106.0*
*JMA **22** 23:02:00.2±0.3, 31.°78′N×142.°74′E, h94km, M3.6*
*NIED **22** 23:02:00, 31.°80′N×142.°70′E, h5km, Mw4.0 Best double couple: Mo1.03000×10^15 NP1:φ=198.00000°, δ=19.00000°, λ=129.00000°. NP2:φ=337.00000°, δ=75.00000°, λ=78.00000°.*

**ISC 22 23:01:57.7±0.7, 31°31′N±0.°08×142°1′E±0.°1, h29km, n34, σ1§71/39, mb4.0/17, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BSO1** | **Boso 1** | **3.46** | **345** | P | **Pn** | **23 02 49.6** | **+0.4** |
| **BSO3** | **Boso 3** | **3.73** | **340** | P | **Pn** | **23 02 54.3** | **+1.2** |
| **BSO4** | **Boso 4** | **3.96** | **339** | S | **Sn** | **23 03 41.7** | **0.0** |
| **JOD2** | **Odawara 2** | **4.68** | **328** | P | **Pn** | **23 03 08.8** | **+2.4** |
| **JHU** | **Hanno** | **5.10** | **333** | P | **Pn** | **23 03 13.4** | **+1.2** |
| JHU | | | | S | **Sn** | **23 04 09.6** | **-0.5** |
| **JNY** | **Yasuok** | **5.37** | **320** | P | Pn | 23 03 19.7 | +3.7 |
| **JRY** | **Ryogami san** | **5.40** | **331** | P | **Pn** | **23 03 18.1** | **+1.8** |
| JRY | | | | S | **Sn** | **23 04 19.3** | **+1.8** |
| **JHO** | **Hitachi** | **5.44** | **347** | P | **Pn** | **23 03 16.5** | **-0.3** |
| JHO | | | | S | **Sn** | **23 04 14.5** | **-3.9** |
| **JAG** | **Ashikaga** | **5.55** | **337** | P | **Pn** | **23 03 19.6** | **+1.2** |
| JAG | | | | S | **Sn** | **23 04 19.1** | **-2.2** |
| **JFK** | **Kawauchi** | **6.13** | **351** | S | **Sn** | **23 04 29.9** | **-5.5** |
| **MJAR** | **Matsushiro Arr** | **6.14** | **329** | Pn | **Pn** | **23 03 27.1** | **+0.7** |
| | 2.4nm,0.3s,baz=157,slow=11,SNR=39 | | | | | | |
| MJAR | | | | Sn | **Sn** | **23 04 38.2** | **+2.5** |
| | 0.8nm,0.3s,baz=158,slow=20,SNR=4.4 | | | | | | |
| **MAJO** | **Matsushiro** | **6.14** | **329** | *e*Pn | **Pn** | **23 03 26.0** | **-0.5** |
| | 10nm,0.5s | | | | | | |
| **MAT** | **Matsushiro** | **6.14** | **329** | P | **Pn** | **23 03 27.2** | **+0.7** |
| MAT | | | | S | **Sn** | **23 04 37.0** | **+1.3** |
| **JNU** | **Nakatsue** | **9.67** | **284** | LR | LR | 23 07 28.1 | |
| | comp=Z,50nm,21.9s,baz=104,slow=35 | | | | | | |
| **KSRS** | **Korea Array** | **13.21** | **301** | Pn | **Pn** | **23 05 04.6** | **+1.4** |
| | 0.2nm,0.3s,baz=105,slow=14,SNR=4.5 | | | | | | |
| KSRS | | | | LR | LR | 23 09 53.6 | |
| | comp=Z,61nm,18.2s,baz=130,slow=37 | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.23** | **301** | Pn | **Pn** | **23 05 04.6** | **+1.0** |
| **SONM** | **Songino Array** | **31.74** | **312** | P | **P** | **23 08 18.6** | **-0.6** |
| | 2.4nm,0.8s,baz=120,slow=8.2,SNR=16 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.94** | **262** | P | **P** | **23 09 35.9** | **-2.0** |
| | 0.3nm,0.3s,baz=58,slow=8.6,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.32** | **317** | P | **P** | **23 10 20.3** | **-0.5** |
| | 0.9nm,0.4s,baz=110,slow=7.2,SNR=5.3 | | | | | | |
| ZALV | | | | PcP | **PcP** | **23 11 54.9** | **-0.7** |
| | 0.5nm,0.4s,baz=105,slow=3.4,SNR=3.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.82** | **307** | P | **P** | **23 10 32.1** | **-0.5** |
| | 1.0nm,0.6s,baz=90,slow=10.0,SNR=8.2 | | | | | | |
| **KURK** | **Kurchatov** | **50.05** | **312** | *e*P | **P** | **23 10 49.3** | **-0.3** |
| | 5.8nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **51.50** | **189** | P | **P** | **23 10 59.5** | **-1.3** |
| | 0.7nm,0.4s,baz=6.3,slow=7.6,SNR=19 | | | | | | |
| **ILAR** | **Eielson Array** | **54.09** | **30** | P | **P** | **23 11 21.9** | **+2.4** |
| | 0.7nm,0.7s,baz=258,slow=5.9,SNR=5.9 | | | | | | |
| **ASAR** | **Alice Springs** | **55.22** | **189** | P | **P** | **23 11 26.9** | **-1.2** |
| | 0.4nm,0.4s,baz=3.6,slow=5.9,SNR=5.6 | | | | | | |
| **KKAR** | **Karatay Array** | **56.62** | **304** | *e*P | **P** | **23 11 37.4** | **-0.7** |
| | 2.3nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **62.15** | **313** | *e*P | **P** | **23 12 15.5** | **-0.5** |
| | 2.5nm,0.7s | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.00** | **52** | P | **P** | **23 13 55.6** | **+1.8** |
| | 0.7nm,0.7s,baz=284,slow=6.2,SNR=5.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **79.19** | **323** | P | **P** | **23 13 59.4** | **-0.4** |
| | 0.6nm,0.5s,baz=52,slow=5.8,SNR=3.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **79.68** | **338** | P | **P** | **23 14 02.1** | **-0.3** |
| | 0.9nm,0.9s,baz=41,slow=5.3,SNR=2.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **83.10** | **313** | P | **P** | **23 14 21.9** | **+0.9** |
| | 0.8nm,0.8s,baz=82,slow=2.7,SNR=3.8 | | | | | | |
| **RAYN** | **Ar Rayn** | **83.39** | **293** | *e*P | **P** | **23 14 22.2** | **-0.5** |
| | 3.2nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **92.85** | **46** | *e*P | **P** | **23 15 09.2** | **+1.2** |
| | 0.7nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **93.14** | **53** | P | **P** | **23 15 11.5** | **+2.0** |
| | 0.7nm,0.7s,baz=298,slow=2.6,SNR=10 | | | | | | |
| TXAR | | | | LR | LR | 23 55 52.2 | |
| | comp=Z,21nm,18.7s,baz=0.0,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.71** | **313** | PKP | **PKPdf** | **23 20 48.9** | **-0.6** |
| | 0.2nm,0.5s,baz=44,slow=1.6,SNR=4.2 | | | | | | |

*IDC **22** 23:18:53.2±1.4, 8.°14′S×110.°58′E, h0km, mb3.8/3, mb1 4.1/4, mb1mx3.6/26, mbtmp3.8/4, ML3.9/1, MS3.0/3, Ms1 3.1/3, ms1mx2.7/34, Error ellipse: s-maj=74.3km s-min=21.4km az=40.0*

*ISCJB **22** 23:18:58.2±0.6, 8.°84′S±0.°06×109.°82′E±0.°02, h76km±10km, mb3.6/3, Error ellipse: s-maj=10.5km s-min=3.7km az=4.7*
*DJA **22** 23:19:00.0±0.3, 9.°3′S±3.°×11.°0E±.°, h56km±7km, M4.5/27, mb4.6/4, MLv4.4/27*

**ISC 22 23:18:59.2±1.3, 8°85′S±0.°09×109°84′E±0.°03, h62km±16km, n31, σ1§17/41, mb3.7/3, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **UGM** | **Wanagama** | **1.15** | **36** | P | **Pn** | **23 19 18.5** | **-0.9** |
| UGM | | | | S | **Sn** | **23 19 34.0** | **-0.4** |
| **WOJI** | **Wonogiri, Jawa** | **1.47** | **47** | P | **Pn** | **23 19 23.9** | **+0.3** |
| WOJI | | | | S | **Sn** | **23 19 42.2** | **+0.2** |
| **PCJI** | **Pacitan** | **1.48** | **64** | P | **Pn** | **23 19 23.6** | **-0.1** |
| PCJI | | | | S | **Sn** | **23 19 41.1** | **-1.0** |
| **CMJI** | **Cimerak** | **1.73** | **308** | P | **Pn** | **23 19 26.8** | **-0.3** |
| CMJI | | | | S | **Sn** | **23 19 47.4** | **-0.8** |
| **SMRI** | **Semarang** | **1.89** | **19** | P | **Pn** | **23 19 29.1** | **-0.1** |
| SMRI | | | | S | **Sn** | **23 19 52.6** | **+0.6** |
| **PWJI** | **Pagerwojo** | **2.11** | **67** | P | **Pn** | **23 19 32.0** | **-0.3** |
| PWJI | | | | S | **Sn** | **23 19 56.7** | **-0.8** |
| **NGJI** | **Ngawi** | **2.18** | **48** | P | **Pn** | **23 19 34.8** | **+1.6** |
| NGJI | | | | S | **Sn** | **23 20 00.0** | **+0.9** |
| **CISI** | **Cisompet, Garu** | **2.38** | **303** | P | **Pn** | **23 19 35.9** | **0.0** |
| CISI | | | | S | **Sn** | **23 20 04.3** | **+0.3** |
| **UWJI** | **Ujung Watu** | **2.65** | **25** | P | **Pn** | **23 19 40.4** | **+0.7** |
| UWJI | | | | S | **Sn** | **23 20 10.5** | **-0.2** |
| **TBJI** | **Tambak Boyo** | **2.84** | **45** | P | **Pn** | **23 19 42.9** | **+0.8** |
| TBJI | | | | S | **Sn** | **23 20 16.4** | **+1.2** |
| **LEM** | **Lembang** | **2.98** | **312** | Pn | **Pn** | **23 19 47.2** | **+3.0** |
| | 12nm,0.3s,baz=334,slow=4.8,SNR=7.0 | | | | | | |
| LEM | | | | Sn | **Sn** | **23 20 22.8** | **+4.0** |
| | 9.6nm,0.3s,baz=99,slow=12,SNR=5.3 | | | | | | |
| **LEM** | **Lembang** | **2.98** | **312** | P | **Pn** | **23 19 44.3** | **+0.1** |
| LEM | | | | S | **Sn** | **23 20 19.3** | **+0.5** |
| **CNJI** | **Cibinong** | **3.08** | **300** | P | **Pn** | **23 19 45.6** | **+0.1** |
| CNJI | | | | S | **Sn** | **23 20 21.8** | **+0.6** |
| **SKJI** | **Sukabumi** | **3.73** | **299** | P | **Pn** | **23 19 54.2** | **-0.1** |
| SKJI | | | | S | **Sn** | **23 20 38.2** | **+1.1** |
| **BWJI** | **Bawean** | **4.09** | **43** | P | **Pn** | **23 19 59.3** | **0.0** |
| BWJI | | | | S | **Sn** | **23 20 46.3** | **+0.4** |
| **JAGI** | **Jajag, Banyuwa** | **4.29** | **85** | P | **Pn** | **23 20 03.0** | **+1.0** |
| JAGI | | | | S | **Sn** | **23 20 52.8** | **+2.1** |
| **ABJI** | **Asem Bagus** | **4.48** | **77** | P | **Pn** | **23 20 04.9** | **+0.3** |
| **CGJI** | **Cibinong** | **4.67** | **298** | P | **Pn** | **23 20 06.7** | **-0.5** |
| CGJI | | | | S | **Sn** | **23 20 59.7** | **-0.4** |
| **IGBI** | **Denpasar** | **5.25** | **90** | P | **Pn** | **23 20 16.6** | **+1.5** |
| | 106nm,1.1s,0.6nm | | | | | | |
| **DNP** | **Denpasar** | **5.32** | **89** | P | **Pn** | **23 20 17.4** | **+1.3** |
| | 269nm,1.3s,2.9nm | | | | | | |
| **SRBI** | **Singaraja** | **5.37** | **82** | P | **Pn** | **23 20 18.2** | **+1.3** |
| | 46nm,1.1s,0.3nm | | | | | | |
| **KAPI** | **Kappang** | **10.55** | **69** | LR | LR | 23 25 32.5 | |
| | comp=Z,114nm,20.4s,baz=313,slow=42 | | | | | | |
| **PSI** | **Prapat** | **15.88** | **316** | LR | LR | 23 28 49.4 | |
| | comp=Z,3μm,20.2s,baz=181,slow=38 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.13** | **118** | P | **P** | **23 24 27.3** | **-0.4** |
| | 3.2nm,1.1s,baz=291,slow=11,SNR=21 | | | | | | |
| **ASAR** | **Alice Springs** | **27.34** | **125** | P | **P** | **23 24 38.1** | **-0.4** |
| | 1.4nm,0.7s,baz=303,slow=9.2,SNR=13 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.18** | **338** | LR | LR | 23 36 55.7 | |
| | comp=Z,52nm,20.0s,baz=140,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** | **36.97** | **269** | T | T | 

*IDC* ***22*** *23:42:02.3±1.1,55.99N×159.66E,h255km±11km, mb3.4/26,mb1 3.5/27,mb1mx3.4/50,mbtmp4.0/27,Error ellipse: s-maj=11.7km s-min=10.5km az=130.0*

**ISC 22 23:42:02.3**±0.6,**55.82N**±0.05×**159.99E**±0.05,**h267**km±5km, **n117,**σ1§**13**/149,**mb3.7**/27,**Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMNR** | **Kamenistaya** | **0.15** | **113** | *i* P | **Pn** | **23 42 37.5** | **+0.9** |
| **KMNR** | **Kamenistaya** | **0.15** | **113** | PN | **Pn** | **23 42 37.5** | **+0.9** |
| **KPT** | **Kopyto** | **0.20** | **41** | *i* P | **Pn** | **23 42 37.0** | **+0.4** |
| **KPT** | **Kopyto** | **0.20** | **41** | PN | **Pn** | **23 42 37.0** | **+0.4** |
| **KIRR** | **Kirishev** | **0.24** | **55** | *i* P | **Pn** | **23 42 37.2** | **+0.5** |
| **KOZ** | **Kozyrevsk** | **0.25** | **345** | *i* P | **Pn** | **23 42 37.0** | **+0.5** |
| **KOZ** | **Kozyrevsk** | **0.25** | **345** | PN | **Pn** | **23 42 37.0** | **+0.5** |
| **BZMR** | **Bezymyannaya** | **0.31** | **67** | *i* P | **Pn** | **23 42 37.4** | **+0.6** |
| **BZWR** | **Bezymyannyi-We** | **0.32** | **62** | *i* P | **Pn** | **23 42 37.4** | **+0.5** |
| **SRDR** | **Sredinnyy** | **0.53** | **343** | *i* P | **Pn** | **23 42 37.5** | **+0.3** |
| **SRDR** | **Sredinnyy** | **0.53** | **343** | PN | **Pn** | **23 42 37.5** | **+0.3** |
| **TUMR** | **Tumrok** | **0.54** | **170** | *i* P | **Pn** | **23 42 38.2** | **+0.8** |
| TUMR | | | | *i* S | **S** | **23 43 06.5** | **+1.4** |
| **TUMR** | **Tumrok** | **0.54** | **170** | PN | **Pn** | **23 42 38.2** | **+0.8** |
| TUMR | | | | S | **S** | **23 43 06.5** | **+1.4** |
| **KLY** | **Klyuchi** | **0.62** | **37** | *i* P | **Pn** | **23 42 38.3** | **+0.9** |
| KLY | | | | *i* S | **S** | **23 43 07.8** | **+2.7** |
| **KZV** | **Kizimen** | **0.73** | **166** | *i* P | **Pn** | **23 42 38.9** | **+0.8** |
| **ESO** | **Esso** | **0.73** | **279** | *i* P | **Pn** | **23 42 38.2** | **+0.3** |
| ESO | | | | *i* S | **S** | **23 43 05.9** | **-0.1** |
| **ESO** | **Esso** | **0.73** | **279** | PN | **Pn** | **23 42 38.2** | **+0.3** |
| ESO | | | | S | **S** | **23 43 05.9** | **-0.1** |
| **BDR** | **Baidarnaya** | **1.02** | **42** | *i* P | **Pn** | **23 42 39.4** | **+0.2** |
| **SRKR** | **Sorokina** | **1.07** | **38** | *i* P | **Pn** | **23 42 39.7** | **+0.2** |
| **SRKR** | **Sorokina** | **1.07** | **38** | PN | **Pn** | **23 42 39.7** | **+0.2** |
| **SMKR** | **Semkarok** | **1.13** | **47** | *eP* | **Pn** | **23 42 40.4** | **+0.6** |
| SMKR | | | | *eS* | **S** | **23 43 10.7** | **+1.2** |
| **SMKR** | **Semkarok** | **1.13** | **47** | PN | **Pn** | **23 42 40.4** | **+0.6** |
| SMKR | | | | S | **S** | **23 43 10.7** | **+1.2** |
| **KBG** | **Krutoberegovo** | **1.59** | **73** | *i* P | **Pn** | **23 42 42.6** | **-0.1** |
| KBG | | | | *i* S | **S** | **23 43 13.0** | **-1.8** |
| **MKZ** | **Mys Kozlova** | **1.61** | **141** | *i* P | **Pn** | **23 42 42.5** | **-0.5** |
| MKZ | | | | *eS* | **S** | **23 43 13.7** | **-1.5** |
| **MKZ** | **Mys Kozlova** | **1.61** | **141** | PN | **Pn** | **23 42 42.5** | **-0.5** |
| MKZ | | | | S | **S** | **23 43 13.7** | **-1.5** |
| **KBTR** | **Krutoberegovo** | **1.64** | **75** | *i* P | **Pn** | **23 42 42.9** | **-0.2** |
| KBTR | | | | *eS* | **S** | **23 43 13.9** | **-1.6** |
| **KBTR** | **Krutoberegovo** | **1.64** | **75** | PN | **Pn** | **23 42 42.9** | **-0.2** |
| KBTR | | | | S | **S** | **23 43 13.9** | **-1.6** |
| **KII** | **Karymskiy** | **1.81** | **190** | P | **Pn** | **23 42 45.4** | **+0.7** |
| KII | | | | *eS* | **S** | **23 43 19.1** | **+0.9** |
| **KII** | **Karymskiy** | **1.81** | **190** | PN | **Pn** | **23 42 45.4** | **+0.7** |
| KII | | | | S | **S** | **23 43 19.1** | **+0.9** |
| **GNL** | **Ganaly** | **2.43** | **210** | *eP* | **Pn** | **23 42 51.5** | **+1.2** |
| **GNL** | **Ganaly** | **2.43** | **210** | PN | **Pn** | **23 42 51.5** | **+1.2** |
| **KRX** | **Arik** | **2.58** | **198** | *eP* | **Pn** | **23 42 53.0** | **+1.2** |
| **SDLR** | **Sedlovina** | **2.62** | **195** | *i* P | **Pn** | **23 42 52.8** | **+0.7** |
| SDLR | | | | *i* S | **S** | **23 43 31.4** | **-0.2** |
| **SDLR** | **Sedlovina** | **2.62** | **195** | PN | **Pn** | **23 42 52.8** | **+0.7** |
| SDLR | | | | S | **S** | **23 43 31.4** | **-0.2** |
| **KOK** | **Koryaka** | **2.65** | **198** | *eP* | **Pn** | **23 42 53.4** | **+1.0** |
| **KOK** | **Koryaka** | **2.65** | **198** | PN | **Pn** | **23 42 53.4** | **+1.0** |
| **SMAR** | **Somma** | **2.65** | **196** | *eP* | **Pn** | **23 42 53.4** | **+0.9** |
| **SMAR** | **Somma** | **2.65** | **196** | PN | **Pn** | **23 42 53.4** | **+0.9** |
| **AVH** | **Avacha** | **2.66** | **196** | *i* P | **Pn** | **23 42 53.4** | **+1.0** |
| **AVH** | **Avacha** | **2.66** | **196** | PN | **Pn** | **23 42 53.4** | **+1.0** |
| **NLC** | **Nalytchevo** | **2.68** | **188** | *eS* | **S** | **23 43 31.5** | **-0.8** |
| **UGLR** | **Uglovaya** | **2.70** | **195** | *eP* | **Pn** | **23 42 53.8** | **+0.9** |
| **SPN** | **Mys Shipunski** | **2.72** | **180** | *i* P | **Pn** | **23 42 51.9** | **-1.1** |
| SPN | | | | *i* S | **S** | **23 43 30.2** | **-3.0** |
| **SPN** | **Mys Shipunski** | **2.72** | **180** | PN | **Pn** | **23 42 51.9** | **-1.1** |
| SPN | | | | S | **S** | **23 43 30.2** | **-3.0** |
| **PET** | **Petropavlovsk** | **2.90** | **196** | *eP* | **Pn** | **23 42 55.1** | **+0.3** |
| PET | | | | *eS* | **S** | **23 43 35.3** | **-1.2** |
| **PET** | **Petropavlovsk** | **2.90** | **196** | *ePN* | **Pn** | **23 42 55.5** | **+0.7** |
| PET | | | | *eS* | **S** | **23 43 34.8** | **-1.7** |
| PET | | | | pmax | pmax | | |
| | comp=Z,23nm,0.4s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,129nm,0.6s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,90nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.02** | **207** | P | **Pn** | **23 42 57.2** | **+1.1** |
| | comp=E,5.3nm,0.3s,baz=37,slow=9.3,SNR=98 | | | | | | |
| PETK | | | | S | **S** | **23 43 38.5** | **-0.3** |
| | comp=E,2.3nm,0.3s,baz=79,slow=20,SNR=4.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.02** | **207** | PN | **Pn** | **23 42 57.2** | **+1.1** |
| PETK | | | | S | **S** | **23 43 38.5** | **-0.3** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| PETK | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| **APC** | **Apacha** | **3.34** | **211** | *i* P | **Pn** | **23 43 01.0** | **+1.6** |
| APC | | | | *i* S | **S** | **23 43 45.7** | **+0.9** |
| **APC** | **Apacha** | **3.34** | **211** | PN | **Pn** | **23 43 01.0** | **+1.6** |
| APC | | | | S | **S** | **23 43 45.7** | **+0.9** |
| **RUS** | **Russkaya** | **3.50** | **195** | *i* P | **Pn** | **23 43 00.6** | **-0.6** |
| RUS | | | | *eS* | **S** | **23 43 45.7** | **-2.3** |
| **RUS** | **Russkaya** | **3.50** | **195** | PN | **Pn** | **23 43 00.6** | **-0.6** |
| RUS | | | | S | **S** | **23 43 45.7** | **-2.3** |
| **MTVR** | **Mutnovka** | **3.50** | **198** | *eP* | **Pn** | **23 43 02.5** | **+1.1** |
| MTVR | | | | *eS* | **S** | **23 43 49.4** | **+1.0** |
| **ASAK** | **Asacha** | **3.65** | **201** | *i* P | **Pn** | **23 43 03.9** | **+0.9** |
| **MIPR** | **Malaya Ipel'ka** | **4.03** | **210** | *eP* | **Pn** | **23 43 08.2** | **+1.0** |
| **SKR** | **Severo-Kuril's** | **5.64** | **206** | *i* P | **Pn** | **23 43 27.2** | **+0.9** |
| **SKR** | **Severo-Kuril's** | **5.64** | **206** | *ePN* | **Pn** | **23 43 27.3** | **+0.9** |
| **MA2** | **Magadan** | **6.21** | **311** | *ePN* | **Pn** | **23 43 31.2** | **-2.0** |
| **SEY** | **Seymchan** | **8.12** | **335** | *ePN* | **Pn** | **23 43 55.3** | **-1.6** |
| **NKL** | **Nikolayevsk** | **11.54** | **265** | *ePN* | **Pn** | **23 44 40.0** | **+0.4** |
| **UGL** | **Uglegorsk** | **12.82** | **246** | *ePN* | **Pn** | **23 44 53.5** | **-1.9** |
| UGL | | | | *eS* | **S** | **23 47 15.7** | **-2.1** |
| **YAK** | **Yakutsk** | **16.72** | **304** | *eP* | **P** | **23 45 37.6** | **-2.0** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **HABR** | **Khabarovsk** | **16.91** | **255** | *eP* | **P** | **23 45 40.4** | **-1.5** |
| HABR | | | | *eS* | **S** | **23 48 43.4** | **-0.9** |
| HABR | | | | pmax | pmax | | |
| | comp=N,23nm,2.2s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,18nm,1.1s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,24nm,2.3s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,29nm,17.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **21.26** | **249** | P | **P** | **23 46 28.8** | **+0.9** |
| | comp=Z,0.3nm,0.4s,baz=154,slow=14,SNR=5.3 | | | | | | |
| **MJA0** | **Matsu Arr-Jizo** | **24.27** | **227** | *eP* | **P** | **23 46 56.9** | **+1.4** |
| MJA0 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **MAJO** | **Matsushiro** | **24.29** | **227** | *eP* | **P** | **23 46 56.4** | **+0.8** |
| **MJAR** | **Matsushiro Arr** | **24.29** | **227** | P | **P** | **23 46 56.7** | **+1.1** |
| | comp=Z,1.7nm,0.5s,baz=26,slow=8.4,SNR=5.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.29** | **227** | P | **P** | **23 46 56.7** | **+1.1** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **27.00** | **49** | P | **P** | **23 47 20.5** | **+0.9** |
| | comp=Z,0.3nm,0.4s,baz=266,slow=8.1,SNR=9.4 | | | | | | |
| **KSRS** | **Korea Array** | **28.29** | **243** | P | **P** | **23 47 31.4** | **+0.2** |
| | comp=Z,1.1nm,0.4s,baz=43,slow=9.3,SNR=4.2 | | | | | | |
| **KSRS** | **Korea Array** | **28.29** | **243** | *eP* | **P** | **23 47 33.1** | **+1.9** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **33.31** | **279** | P | **P** | **23 48 15.1** | **-0.1** |
| | comp=Z,1.0nm,0.5s,baz=65,slow=7.6,SNR=19 | | | | | | |
| SONM | | | | PcP | **PcP** | **23 50 50.1** | **-0.1** |
| | comp=Z,0.9nm,0.6s,baz=85,slow=1.2,SNR=8.2 | | | | | | |
| **SONM** | **Songino Array** | **33.31** | **279** | P | **P** | **23 48 15.1** | **-0.1** |
| SONM | | | | | | 23 50 50.1 | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **36.40** | **169** | T | T | 00 26 47.3 | |
| | baz=355 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **36.42** | **169** | T | T | 00 26 50.1 | |
| | baz=355 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **36.42** | **169** | T | T | 00 26 53.5 | |
| | baz=355 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.30** | **300** | P | **P** | **23 49 20.3** | **-1.4** |
| | comp=Z,1.0nm,0.5s,baz=50,slow=9.8,SNR=3.6 | | | | | | |
| ZALV | | | | PcP | **PcP** | **23 51 14.6** | **+0.2** |
| | comp=Z,0.6nm,0.3s,baz=70,slow=4.7,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.30** | **300** | P | **P** | **23 49 20.3** | **-1.4** |
| ZALV | | | | | | 23 51 14.6 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **46.28** | **300** | P | **P** | **23 50 01.1** | **0.0** |
| KURK | | | | | | 23 51 31.5 | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| KURK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **46.39** | **300** | P | **P** | **23 50 01.1** | **-0.9** |
| | comp=Z,5.8nm,0.7s,baz=56,slow=8.0,SNR=36 | | | | | | |
| KURBB | | | | PcP | **PcP** | **23 51 31.5** | **-0.4** |
| | comp=Z,1.1nm,0.6s,baz=50,slow=3.6,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.97** | **293** | P | **P** | **23 50 05.2** | **-1.3** |
| | comp=Z,1.1nm,0.4s,baz=45,slow=6.4,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.97** | **293** | *eP* | **P** | **23 50 05.4** | **-1.1** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **BVAR** | **Borovoye Array** | **48.68** | **306** | P | **P** | **23 50 18.8** | **-0.7** |
| | comp=Z,6.0nm,0.6s,baz=58,slow=7.8,SNR=34 | | | | | | |
| BVAR | | | | PcP | **PcP** | **23 51 39.3** | **-0.9** |
| | comp=Z,0.6nm,0.4s,baz=31,slow=1.6,SNR=4.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **48.68** | **306** | P | **P** | **23 50 18.8** | **-0.7** |
| BVAR | | | | | | 23 51 39.3 | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **50.68** | **341** | P | **P** | **23 50 32.9** | **-1.3** |
| | comp=Z,3.7nm,1.0s,baz=22,slow=9.7,SNR=3.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **50.68** | **341** | P | **P** | **23 50 32.9** | **-1.3** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **ARU** | **Arti** | **51.37** | **316** | P | **P** | **23 50 38.9** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=107,slow=19,SNR=1.9 | | | | | | |
| **AAK** | **Ala-Archa** | **53.86** | **294** | P | **P** | **23 50 57.6** | **-0.5** |
| | comp=Z,1.7nm,0.8s,baz=64,slow=5.7,SNR=4.0 | | | | | | |
| AAK | | | | PcP | **PcP** | **23 51 59.7** | **-0.2** |
| | comp=Z,0.7nm,0.4s,baz=135,slow=2.9,SNR=3.2 | | | | | | |
| **AAK** | **Ala-Archa** | **53.86** | **294** | P | **P** | **23 50 57.6** | **-0.5** |
| AAK | | | | | | 23 51 59.7 | |
| AAK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| AAK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **NVAR** | **Mina Array Bea** | **54.91** | **72** | P | **P** | **23 51 08.3** | **+2.6** |
| | comp=Z,0.2nm,0.5s,baz=294,slow=7.6,SNR=3.4 | | | | | | |
| **AKTO** | **Aktyubinsk** | **55.96** | **311** | P | **P** | **23 51 11.3** | **-1.4** |
| | comp=Z,1.8nm,0.4s,baz=54,slow=7.3,SNR=7.8 | | | | | | |
| **AKTO** | **Aktyubinsk** | **55.96** | **311** | P | **P** | **23 51 11.3** | **-1.4** |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **FINES** | **FINESS Array B** | **57.60** | **336** | P | **P** | **23 51 23.4** | **-0.6** |
| | comp=Z,1.5nm,0.5s,baz=35,slow=6.7,SNR=16 | | | | | | |
| **FINES** | **FINESS Array B** | **57.60** | **336** | *eP* | **P** | **23 51 23.6** | **-0.4** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **TAPN** | **Taplejung** | **57.99** | **272** | *eP* | **P** | **23 51 27.3** | **-0.3** |
| | comp=Z,2.6nm,0.3s | | | | | | |
| **ODAN** | **Odare** | **58.55** | **272** | *eP* | **P** | **23 51 29.0** | **-2.4** |
| **GUN** | **Gumba** | **58.59** | **274** | *eP* | **P** | **23 51 31.6** | **-0.2** |
| | comp=Z,5.0nm,0.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.72** | **256** | P | **P** | **23 51 32.6** | **+0.3** |
| | comp=Z,0.6nm,0.5s,baz=22,slow=7.8,SNR=3.1 | | | | | | |
| CMAR | | | | PcP | **PcP** | **23 52 19.7** | **+0.6** |
| | comp=Z,0.3nm,0.3s,baz=27,slow=3.5,SNR=4.3 | | | | | | |
| **RAMN** | **Ramite** | **58.92** | **273** | *eP* | **P** | **23 51 33.1** | **-0.9** |
| | comp=Z,4.6nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **59.02** | **275** | *eP* | **P** | **23 51 34.7** | **+0.1** |
| | comp=Z,2.8nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **59.22** | **275** | *eP* | **P** | **23 51 36.3** | **+0.5** |
| | comp=Z,2.7nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **59.98** | **276** | *eP* | **P** | **23 51 40.7** | **-0.4** |
| **NOA** | **NORSAR Array B** | **60.91** | **343** | P | **P** | **23 51 45.7** | **-0.9** |
| | comp=Z,0.7nm,0.6s,baz=16,slow=9.6,SNR=3.6 | | | | | | |
| **SIJI** | **Sorong** | **61.15** | **213** | P | **P** | **23 51 50.8** | **+2.0** |
| | comp=Z,1.5nm,0.3s,baz=349,slow=19,SNR=4.3 | | | | | | |
| **GEYT** | **Ailbeck** | **65.58** | **302** | P | **P** | **23 52 16.9** | **-0.6** |
| | comp=Z,1.3nm,0.6s,baz=354,slow=1.4,SNR=4.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **66.25** | **328** | P | **P** | **23 52 21.2** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=30,slow=7.5,SNR=3.2 | | | | | | |
| **KBZ** | **Khabaz** | **67.53** | **316** | P | **P** | **23 52 29.7** | **+0.1** |
| | comp=Z,3.1nm,0.8s,baz=100,slow=3.5,SNR=5.8 | | | | | | |
| **KBZ** | **Khabaz** | **67.53** | **316** | P | **P** | **23 52 29.7** | **+0.1** |
| KBZ | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **69.64** | **68** | P | **P** | **23 52 45.5** | **+2.4** |
| | comp=Z,0.5nm,0.6s,baz=292,slow=5.5,SNR=7.0 | | | | | | |
| **CLL** | **Collm** | **69.79** | **339** | *eP* | **P** | **23 52 43.0** | **-0.4** |
| **BRTR** | **Keskin Array B** | **74.49** | **320** | P | **P** | **23 53 11.7** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=46,slow=3.0,SNR=4.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.49** | **320** | P | **P** | **23 53 11.7** | **+0.1** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **78.53** | **205** | P | **P** | **23 53 35.2** | **+1.2** |
| | comp=Z,2.3nm,0.6s,baz=19,slow=6.1,SNR=30 | | | | | | |
| **WRA** | **Warramunga Arr** | **78.53** | **205** | P | **P** | **23 53 35.2** | **+1.2** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **82.22** | **204** | P | **P** | **23 53 55.1** | **+1.6** |
| | comp=Z,0.7nm,0.3s,baz=13,slow=4.7,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **82.22** | **204** | P | **P** | **23 53 55.2** | **+1.6** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **ESDC** | **Sonseca Array** | **83.90** | **348** | P | **P** | **23 54 02.6** | **+0.4** |
| | comp=Z,0.1nm,0.3s,baz=357,slow=5.3,SNR=6.8 | | | | | | |

**JMA 23 00:10:27.7**±0.3,**25.39N**×**140.73E**,**h48**km,**M4.9,Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHHJ** | **Haha-jima-NKT** | **1.79** | **46** | P | Pn | 00 10 56.9 | +0.7 |
| JHHJ | | | | S | Sn | 00 11 18.8 | +1.0 |
| **CBIJ** | **Chichi jima** | **2.14** | **37** | P | Pn | 00 11 02.3 | +1.3 |
| CBIJ | | | | S | Sn | 00 11 27.0 | +0.6 |
| **BSO1** | **Boso 1** | **9.23** | **1** | P | Pn | 00 12 36.8 | -0.7 |
| **BSO3** | **Boso 3** | **9.38** | **359** | P | Pn | 00 12 38.5 | -1.4 |
| **JOD2** | **Odawara 2** | **9.94** | **352** | P | Pn | 00 12 48.4 | +0.4 |
| **JRY** | **Ryogami san** | **10.71** | **352** | P | Pn | 00 12 58.3 | -0.2 |
| **JAG** | **Ashikaga** | **11.05** | **355** | P | Pn | 00 13 00.2 | -2.9 |
| **JHO** | **Hitachi** | **11.19** | **359** | P | Pn | 00 13 01.3 | -3.6 |

*ISK* ***23*** *00:20:47.5,39.41N×26.23E,h8km,MD3.4*
*ATH* ***23*** *00:20:47.2,39.39N×26.35E,h22km,MD3.2/12*
*SOF* ***23*** *00:20:48.7,39.42N×26.38E,h20km,MD2.7*
*ISCJB* ***23*** *00:20:48.2±0.3,39.42N×0.01×26.26E±0.02,h10km±2km, Error ellipse: s-maj=2.6km s-min=2.2km az=166.2*
*DDA* ***23*** *00:20:48.6,39.42N×26.35E,h28km,Md3.4*
*CSEM* ***23*** *00:20:48.9±0.1,39.41N×26.28E,h10km,MD3.2, Error ellipse: s-maj=2.5km s-min=2.3km az=2.0*
*THE* ***23*** *00:20:49.5,39.38N×26.26E,h15km±1km,ML2.9/7, Error ellipse: s-maj=1.6km s-min=0.7km az=249.0*

**ISC 23 00:20:48.4**±0.8,**39.42N**±0.01×**26.34E**±0.02,**h15**km±5km, **n188,**σ1§**07**/228,**3C-8D,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRK** | **Paraskevi** | **0.18** | **196** | *ePB* | **Pg** | **00 20 52.7** | **0.0** |
| PRK | | | | *eSB* | **Sg** | **00 20 55.2** | **-0.4** |
| **PRK** | **Paraskevi** | **0.18** | **196** | P | **Pg** | **00 20 52.7** | **0.0** |
| PRK | | | | S | **Sg** | **00 20 55.5** | **-0.1** |
| **PRK** | **Paraskevi** | **0.18** | **196** | P | **Pg** | **00 20 52.7** | **0.0** |
| PRK | | | | *eSb* | **Sg** | **00 20 55.2** | **-0.4** |
| PRK | | | | S | **Sg** | **00 20 55.5** | **-0.1** |
| **EZN** | **Ezine** | **0.41** | **359** | *ePG* | **Pg** | **00 20 56.3** | **-0.3** |
| EZN | | | | *eSG* | **Sg** | **00 21 02.6** | **+0.4** |
| **EZN** | **Ezine** | **0.41** | **359** | *ePg* | **Pg** | **00 20 56.3** | **-0.3** |
| EZN | | | | *eSg* | **Sg** | **00 21 02.6** | **+0.4** |
| **SIGR** | **SIGRI** | **0.43** | **241** | P | **Pg** | **00 20 57.1** | **+0.2** |
| SIGR | | | | S | **Sg** | **00 21 03.0** | **+0.3** |
| **SIGR** | **SIGRI** | **0.43** | **241** | P | **Pg** | **00 20 57.1** | **+0.2** |
| SIGR | | | | S | **Sg** | **00 21 03.0** | **+0.3** |
| **BOZC** | **Bozcaada** | **0.48** | **333** | P | **Pg** | **00 20 58.0** | **+0.1** |
| BOZC | | | | S | **Sg** | **00 21 03.7** | **-0.6** |
| **DKL** | **Dikili** | **0.56** | **128** | *ePG* | **Pg** | **00 21 00.2** | **+0.3** |
| DKL | | | | *eSG* | **Sn** | **00 21 09.6** | **-1.3** |
| **DKL** | **Dikili** | **0.56** | **128** | *ePg* | **Pg** | **00 21 00.2** | **+0.3** |
| DKL | | | | *eSg* | **Sn** | **00 21 09.6** | **-1.3** |
| **GADA** | **Gvkgeada** | **0.84** | **337** | *ePG* | **Pg** | **00 21 03.7** | **-1.0** |
| GADA | | | | *eSG* | **Sg** | **00 21 15.4** | **-0.4** |
| **GADA** | **Gvkgeada** | **0.84** | **337** | *ePg* | **Pg** | **00 21 03.7** | **-1.0** |
| GADA | | | | | *eSg* | **Sg** | **00 21 15.4** | **-0.4** |
| **GELI** | **Tayfur-Gelibol** | **0.98** | **6** | *ePG* | **Pb** | **00 21 06.9** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.98** | **6** | *ePg* | **Pb** | **00 21 06.9** | **-0.2** |
| **LPK** | **Lapseki** | **1.01** | **19** | *ePG* | **Pb** | **00 21 07.5** | **0.0** |
| **LPK** | **Lapseki** | **1.01** | **19** | *ePg* | **Pb** | **00 21 07.6** | **0.0** |
| **LIA** | **Limnos Island** | **1.01** | **299** | *ePN* | **Pb** | **00 21 07.8** | **+0.2** |
| LIA | | | | *eSN* | **Sn** | **00 21 22.1** | **+0.2** |
| **LIA** | **Limnos Island** | **1.01** | **299** | P | **Pb** | **00 21 07.8** | **+0.2** |
| LIA | | | | S | **Sg** | **00 21 21.1** | **0.0** |
| **LIA** | **Limnos Island** | **1.01** | **299** | P | **Pb** | **00 21 07.8** | **+0.2** |
| LIA | | | | S | **Sg** | **00 21 21.1** | **0.0** |
| LIA | | | | *eSn* | **Sn** | **00 21 22.1** | **+0.2** |
| **BALY** | **Balya** | **1.04** | **72** | *i* P | **Pn** | **00 21 08.9** | **+0.4** |
| BALY | | | | *i* S | **Sg** | **00 21 22.2** | **0.0** |
| **BALY** | **Balya** | **1.04** | **72** | P | **Pn** | **00 21 08.9** | **+0.4** |
| BALY | | | | S | **Sg** | **00 21 22.2** | **0.0** |
| **CHOS** | **Chios island** | **1.05** | **192** | *ePG* | **Pb** | **00 21 08.3** | **0.0** |
| CHOS | | | | *eSG* | **Sg** | **00 21 22.6** | **0.0** |
| **CHOS** | **Chios island** | **1.05** | **192** | *ePN* | **Pb** | **00 21 07.9** | **-0.5** |
| **CHOS** | **Chios island** | **1.05** | **192** | P | **Pb** | **00 21 08.1** | **-0.3** |
| CHOS | | | | S | **Sg** | **00 21 22.5** | **0.0** |
| **CHOS** | **Chios island** | **1.05** | **192** | *ePg* | **Pb** | **00 21 08.3** | **0.0** |
| CHOS | | | | *eSg* | **Sg** | **00 21 22.6** | **0.0** |
| **BLCB** | **Balcova** | **1.17** | **152** | *ePN* | **Pg** | **00 21 10.9** | **-0.1** |
| **BLCB** | **Balcova** | **1.17** | **152** | *ePn* | **Pg** | **00 21 10.9** | **-0.1** |
| **ZEY** | **˙zmir** | **1.19** | **174** | P | **Pn** | **00 21 10.3** | **-0.1** |
| ZEY | | | | S | **Sg** | **00 21 27.5** | **+0.8** |
| **BALB** | **Balikesir** | **1.22** | **79** | *ePN* | **Pg** | **00 21 12.4** | **+0.6** |
| **BALB** | **Balikesir** | **1.22** | **79** | *ePn* | **Pg** | **00 21 12.4** | **+0.6** |
| **GONE** | **Gonen-Balikesi** | **1.22** | **59** | *ePN* | **Pg** | **00 21 11.6** | **-0.2** |
| **GONE** | **Gonen-Balikesi** | **1.22** | **59** | *ePn* | **Pg** | **00 21 11.6** | **-0.2** |
| **SMTH** | **Samothraki Isl** | **1.22** | **330** | *ePN* | **Pn** | **00 21 11.1** | **+0.2** |
| SMTH | | | | *eSN* | **Sg** | **00 21 27.9** | **+0.1** |
| **SMTH** | **Samothraki Isl** | **1.22** | **330** | P | **Pn** | **00 21 11.1** | **+0.2** |
| SMTH | | | | S | **Sb** | **00 21 27.1** | **+0.4** |
| **SMTH** | **Samothraki Isl** | **1.22** | **330** | P | **Pn** | **00 21 11.1** | **+0.2** |
| SMTH | | | | S | **Sb** | **00 21 27.1** | **+0.4** |
| SMTH | | | | *eSn* | **Sg** | **00 21 27.9** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **1.22** | **37** | *ePN* | **Pb** | **00 21 11.3** | **+0.1** |
| **KRBG** | **Karabiga-Canak** | **1.22** | **37** | *ePn* | **Pb** | **00 21 11.3** | **+0.1** |
| **ERIK** | **Erikli-Kesan** | **1.26** | **6** | *ePN* | **Pb** | **00 21 12.1** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **1.26** | **6** | *ePn* | **Pb** | **00 21 12.1** | **+0.3** |
| **AKS** | **Akhisar** | **1.27** | **115** | *ePN* | **Pb** | **00 21 12.2** | **+0.2** |
| **AKS** | **Akhisar** | **1.27** | **115** | *ePn* | **Pb** | **00 21 12.2** | **+0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.42** | **27** | *ePN* | **Pb** | **00 21 14.8** | **+0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.42** | **27** | *ePn* | **Pb** | **00 21 14.8** | **+0.2** |
| **ALN** | **Alexandroupoli** | **1.49** | **352** | *ePN* | **Pb** | **00 21 15.8** | **0.0** |
| **ALN** | **Alexandroupoli** | **1.49** | **352** | *ePN* | **Pn** | **00 21 15.2** | **+0.5** |
| ALN | | | | *eSN* | **Sg** | **00 21 35.9** | **-0.6** |
| **ALN** | **Alexandroupoli** | **1.49** | **352** | P | **Pn** | **00 21 15.1** | **+0.4** |
| ALN | | | | S | **Sg** | **00 21 35.9** | **-0.6** |
| **ALN** | **Alexandroupoli** | **1.49** | **352** | P | **Pn** | **00 21 15.1** | **+0.4** |
| **ALN** | **Alexandroupoli** | **1.49** | **352** | *ePn* | **Pb** | **00 21 15.8** | **0.0** |
| ALN | | | | S | **Sg** | **00 21 35.9** | **-0.6** |
| **EDC** | **Edincik** | **1.50** | **51** | *ePN* | **Pg** | **00 21 16.8** | **-0.4** |
| **EDC** | **Edincik** | **1.50** | **51** | *ePn* | **Pg** | **00

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KNT** | **Kendrikon** | **3.15** | **305** | *e*Pn | | **Pn** | **00 21 38.8** | **+1.3** |
| **BORA** | **Eskisehir** | **3.21** | **80** | *i* P | | **Pn** | **00 21 40.5** | **+2.1** |
| **BORA** | **Eskisehir** | **3.21** | **80** | P | | **Pn** | **00 21 40.5** | **+2.1** |
| BORA | | | | S | | **Sg** | **00 22 32.1** | **+0.6** |
| **MAKR** | **Makrakomi, Fth** | **3.29** | **264** | *e*PN | | **Pn** | **00 21 41.0** | **+1.6** |
| **MAKR** | **Makrakomi, Fth** | **3.29** | **264** | *e*Pn | | **Pn** | **00 21 41.0** | **+1.6** |
| **THL** | **Klokotos Trika** | **3.35** | **274** | *e*PN | | **Pn** | **00 21 41.2** | **+1.1** |
| **THL** | **Klokotos Trika** | **3.35** | **274** | *e*Pn | | **Pn** | **00 21 41.2** | **+1.1** |
| **GULT** | **Gulveren** | **3.37** | **71** | *e*PN | | Pn | 00 21 43.9 | +3.4 |
| **GULT** | **Gulveren** | **3.37** | **71** | *e*Pn | | Pn | 00 21 43.9 | +3.4 |
| **GRG** | **Griva** | **3.38** | **298** | *e*PN | | **Pn** | **00 21 42.7** | **+2.0** |
| **GRG** | **Griva** | **3.38** | **298** | *e*Pn | | **Pn** | **00 21 42.7** | **+2.0** |
| **GUR** | **Goura** | **3.46** | **246** | *e*PN | | **Pn** | **00 21 42.2** | **+0.4** |
| **GUR** | **Goura** | **3.46** | **246** | *e*Pn | | **Pn** | **00 21 42.2** | **+0.4** |
| **SERG** | **Sergoula** | **3.49** | **255** | *e*PN | | **Pn** | **00 21 42.8** | **+0.7** |
| **SERG** | **Sergoula** | **3.49** | **255** | *e*Pn | | **Pn** | **00 21 42.8** | **+0.7** |
| **TRIZ** | **Trizonia** | **3.49** | **254** | *e*PN | | **Pn** | **00 21 42.9** | **+0.8** |
| **TRIZ** | **Trizonia** | **3.49** | **254** | *e*Pn | | **Pn** | **00 21 42.9** | **+0.8** |
| **PGB** | **Panagyurishte** | **3.53** | **333** | P | | **Pn** | **00 21 43.6** | **+0.8** |
| **PGB** | **Panagyurishte** | **3.53** | **333** | P | | **Pn** | **00 21 43.6** | **+0.8** |
| **KLV** | **Kalavryta, Ach** | **3.55** | **249** | *e*PN | | **Pn** | **00 21 43.5** | **+0.5** |
| **KLV** | **Kalavryta, Ach** | **3.55** | **249** | *e*Pn | | **Pn** | **00 21 43.5** | **+0.5** |
| **LAKA** | **Lakka** | **3.60** | **252** | *e*PN | | **Pn** | **00 21 45.0** | **+1.3** |
| **LAKA** | **Lakka** | **3.60** | **252** | *e*Pn | | **Pn** | **00 21 45.0** | **+1.3** |
| **VLI** | **Veliai** | **3.80** | **226** | *e*PN | | **Pn** | **00 21 46.7** | **+0.3** |
| **VLI** | **Veliai** | **3.80** | **226** | *e*Pn | | **Pn** | **00 21 46.7** | **+0.3** |
| **SZH** | **Strazhica** | **3.86** | **356** | P | | **Pn** | **00 21 48.8** | **+1.6** |
| **SZH** | **Strazhica** | **3.86** | **356** | P | | **Pn** | **00 21 48.8** | **+1.6** |
| **VTS** | **Vitosha** | **3.96** | **324** | *i* P | | **Pn** | **00 21 50.2** | **+1.5** |
| **VTS** | **Vitosha** | **3.96** | **324** | *i* P | | Pn | 00 21 50.2 | +1.5 |
| **FNA** | **Florina** | **4.04** | **291** | *e*PN | | **Pn** | **00 21 51.5** | **+1.8** |
| **FNA** | **Florina** | **4.04** | **291** | *e*Pn | | **Pn** | **00 21 51.5** | **+1.8** |
| **MPEP** | **Malo Peshtene** | **4.39** | **334** | P | | **Pn** | **00 21 55.9** | **+1.4** |
| **BARS** | **Barje** | **4.81** | **316** | *e*Pn | | **Pn** | **00 22 01.5** | **+1.2** |
| **TLB** | **Topalu** | **5.32** | **13**⇑ | *i*P | | **Pg** | **00 22 30.3** | **+0.1** |
| **BOVS** | **Bovan** | **5.46** | **322** | *e*Pn | | **Pn** | **00 22 10.6** | **+1.4** |
| **BOLS** | **Boljevac** | **5.50** | **325** | *e*Pn | | **Pn** | **00 22 09.9** | **+0.2** |
| **MLR** | **Muntele Rosu** | **6.08** | **357**⇓ | *i*P | | Pn | 00 22 24.5 | +6.8 |
| **KUBS** | **Kucevo** | **6.08** | **327** | *e*Pn | | **Pn** | **00 22 16.5** | **-1.2** |
| **GRUS** | **Gruza** | **6.14** | **319** | *e*Pn | | **Pn** | **00 22 19.5** | **+1.0** |
| **PLOR** | **Plostina** | **6.43** | **2**⇓ | *i*P | | **Pn** | **00 22 25.0** | **+2.4** |
| **PLOR** | **Plostina** | **6.43** | **2**⇓ | *i*P | | **Pn** | **00 22 25.0** | **+2.4** |
| **GZR** | **Gura Zlata** | **6.53** | **337**⇓ | *i*P | | **Pn** | **00 22 24.2** | **+0.3** |
| **GZR** | **Gura Zlata** | **6.53** | **337**⇓ | *i*P | | **Pn** | **00 22 24.2** | **+0.3** |
| **TESR** | **Tescani** | **7.09** | **2**⇓ | *i*P | | **Pn** | **00 22 32.9** | **+1.3** |
| **TESR** | **Tescani** | **7.09** | **2**⇓ | *i*P | | **Pn** | **00 22 32.9** | **+1.3** |
| **BZS** | **Buzias** | **7.11** | **332**⇑ | *i*P | | **Pn** | **00 22 32.5** | **+0.7** |
| **BZS** | **Buzias** | **7.11** | **332**⇑ | *i*P | | **Pn** | **00 22 32.5** | **+0.7** |
| **DRGR** | | **7.83** | **341**⇓ | *i*P | | Pn | 00 22 51.1 | +9.3 |

**IDC 23 00:41:11.4±5.3, 22°37N×93°82E, h66km±52km, mb3.2/3, mb1 3.4/4, mb1mx3.0/58, mbtmp3.4/4, ML3.6/1, Error ellipse: s-maj=76.5km s-min=27.6km az=56.0, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **6.19** | **128** | P | Pn | 00 42 40.4 | +0.2 |
| | 0.4nm,0.3s,baz=303,slow=15,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **26.09** | **342** | P | P | 00 46 38.5 | -0.3 |
| | 0.7nm,0.8s,baz=144,slow=10,SNR=5.0 | | | | | | |
| MKAR | | | | pP | pP | 00 46 53.8 | -0.8 |
| | 0.6nm,0.8s,baz=157,slow=9.9,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.75** | **134** | P | P | 00 50 55.6 | -0.2 |
| | 0.5nm,0.9s,baz=318,slow=7.6,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **87.01** | **283** | P | P | 00 53 50.4 | +0.2 |
| | 0.2nm,0.9s,baz=73,slow=4.1,SNR=2.8 | | | | | | |

*ISCJB **23** 00:45:55.5±0.5, 51°59N×0°02×6°81E±0°05, h0km, Error ellipse: s-maj=5.1km s-min=3.0km az=20.3*
*CSEM **23** 00:45:55.6±0.3, 51°61N×6°81E, h1km, ML3.3/5, Error ellipse: s-maj=6.2km s-min=4.2km az=121.0*
*BUG **23** 00:45:56.1, 51°58N×6°88E, h1km, ML1.8*
*BNS **23** 00:45:56.9±0.8, 51°57N×6°81E, h1km, ML2.0*
*BGR **23** 00:45:57.9±1.0, 51°48N×6°88E, h1km, ML2.1/5, Error ellipse: s-maj=12.2km s-min=5.6km az=141.0*

**ISC 23 00:45:55.7±0.9, 51°61N±0°03×6°81E±0°03, h0km, n40, σ0§62/54, Germany**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BZER** | **Hlnxe** | **0.04** | **69** | Pg | **Pg** | **00 45 56.2** | **-0.3** |
| BZER | | | | Sg | **Sg** | **00 45 57.5** | **+0.4** |
| **BZER** | **Hlnxe** | **0.04** | **69** | Pg | **Pg** | **00 45 56.2** | **-0.3** |
| BZER | | | | Sg | **Sg** | **00 45 57.5** | **+0.4** |
| **LAUG** | **Laupendahl** | **0.27** | **161** | *e*Pg | **Pg** | **00 46 01.2** | **+0.3** |
| **LAUG** | **Laupendahl** | **0.27** | **161** | Pg | **Pg** | **00 46 01.2** | **+0.3** |
| **BUG** | **Bochum--Univer** | **0.33** | **119** | *e*Pg | **Pg** | **00 46 02.4** | **+0.3** |
| BUG | | | | Sg | **Sg** | **00 46 07.0** | **+0.6** |
| **WTSB** | **Winterswijk** | **0.36** | **359** | *e*Pg | **Pg** | **00 46 03.3** | **+0.6** |
| | 8.5nm,0.2s | | | | | | |
| WTSB | | | | *e*Sg | **Sg** | **00 46 08.5** | **+1.1** |
| **PLH** | **Pulheim** | **0.60** | **179** | *e*Pg | **Pg** | **00 46 07.8** | **+0.6** |
| PLH | | | | *e*Sg | **Sg** | **00 46 15.4** | **+0.4** |
| | 57nm,0.2s | | | | | | |
| **PLH** | **Pulheim** | **0.60** | **179** | Pg | **Pg** | **00 46 07.8** | **+0.6** |
| PLH | | | | Sg | **Sg** | **00 46 15.4** | **+0.4** |
| | 57nm,0.2s | | | | | | |
| **HOBG** | **Hohbusch** | **0.71** | **152** | *e*Pg | **Pg** | **00 46 09.8** | **+0.6** |
| **HOBG** | **Hohbusch** | **0.71** | **152** | Pg | **Pg** | **00 46 09.8** | **+0.6** |
| **WBS** | **Wahnbachtalspe** | **0.85** | **159** | *e*Sg | **Sg** | **00 46 23.1** | **-0.1** |
| | 39nm,0.2s | | | | | | |
| **GSH** | **Grosshau** | **0.91** | **197** | *e*Pg | **Pb** | **00 46 14.3** | **-0.1** |
| GSH | | | | *e*Sg | **Sg** | **00 46 26.0** | **+1.0** |
| | 26nm,0.1s | | | | | | |
| **GSH** | **Grosshau** | **0.91** | **197** | Pg | **Pb** | **00 46 14.3** | **-0.1** |
| GSH | | | | Sg | **Sg** | **00 46 26.0** | **+1.0** |
| | 26nm,0.1s | | | | | | |
| **HGN** | **Heimansgroeve** | **1.01** | **213** | *e*Pg | **Pg** | **00 46 14.9** | **-0.1** |
| | 15nm,0.2s | | | | | | |
| HGN | | | | *e*Sg | **Sb** | **00 46 29.7** | **-0.1** |
| **HGN** | **Heimansgroeve** | **1.01** | **213** | *e*Pg | **Pg** | **00 46 14.9** | **-0.1** |
| | 15nm,0.2s | | | | | | |
| HGN | | | | *e*Sg | **Sb** | **00 46 29.7** | **-0.1** |
| **KLL** | **Kalltalsperre** | **1.01** | **198** | *e*Pg | **Pg** | **00 46 15.2** | **+0.2** |
| **KLL** | **Kalltalsperre** | **1.01** | **198** | Pg | **Pg** | **00 46 15.2** | **+0.2** |
| **DREG** | **Dreilaegerbach** | **1.01** | **201** | *e*Pg | **Pg** | **00 46 15.4** | **+0.4** |
| **DREG** | **Dreilaegerbach** | **1.01** | **201** | Pg | **Pg** | **00 46 15.4** | **+0.4** |
| **STB** | **Steinbach** | **1.01** | **179** | *e*Pg | **Pb** | **00 46 15.9** | **-0.2** |
| STB | | | | *e*Sg | **Sg** | **00 46 29.1** | **+0.9** |
| | 63nm,0.4s | | | | | | |
| **STB** | **Steinbach** | **1.01** | **179** | Pg | **Pb** | **00 46 15.9** | **-0.2** |
| STB | | | | Sg | **Sg** | **00 46 29.1** | **+0.9** |
| | 63nm,0.4s | | | | | | |
| **TDN** | **Todenfeld** | **1.04** | **175** | *e*Sg | **Sg** | **00 46 29.2** | **+0.2** |
| | 34nm,0.1s | | | | | | |
| **TDN** | **Todenfeld** | **1.04** | **175** | Sg | **Sg** | **00 46 29.2** | **+0.2** |
| | 34nm,0.1s | | | | | | |
| **MEM** | **Membach** | **1.12** | **207** | P | **Pg** | **00 46 17.0** | **-0.1** |
| **OLFT** | **Oleftalsperre** | **1.14** | **192** | *e*Sg | **Sg** | **00 46 32.8** | **+0.5** |
| **OLFT** | **Oleftalsperre** | **1.14** | **192** | Sg | **Sg** | **00 46 32.8** | **+0.5** |
| **HILG** | **Hillesheim** | **1.32** | **184** | *e*Pg | **Pg** | **00 46 20.6** | **-0.4** |
| **HILG** | **Hillesheim** | **1.32** | **184** | Pg | **Pg** | **00 46 20.6** | **-0.4** |
| **BCLA** | **Clavier** | **1.52** | **219** | P | **Pn** | **00 46 23.0** | **-1.1** |
| **BCLA** | **Clavier** | **1.52** | **219** | P | **Pn** | **00 46 23.0** | **-1.1** |
| **TNS** | **Taunus Mts** | **1.73** | **142** | *e*Pg | **Pn** | **00 46 27.2** | **+0.1** |
| TNS | | | | *e*Sg | **Sn** | **00 46 48.4** | **-1.5** |
| **TNS** | **Taunus Mts** | **1.73** | **142** | Pg | **Pn** | **00 46 27.2** | **+0.1** |
| **WLF** | **Walferdange** | **1.99** | **192** | P | **Pg** | **00 46 34.9** | **+1.1** |
| **WLF** | **Walferdange** | **1.99** | **192** | *e*Pg | **Pg** | **00 46 33.4** | **-0.4** |
| WLF | | | | *e*Sg | **Sn** | **00 46 57.2** | **+1.1** |
| **WLF** | **Walferdange** | **1.99** | **192** | Pg | **Pg** | **00 46 33.4** | **-0.4** |
| **WLF** | **Walferdange** | **1.99** | **192** | P | **Pg** | **00 46 34.8** | **+1.1** |
| **DOU** | **Dourbes** | **2.06** | **224** | P | **Pn** | **00 46 30.9** | **-0.7** |
| **DOU** | **Dourbes** | **2.06** | **224** | P | **Pn** | **00 46 30.9** | **-0.7** |
| **CLZ** | **Clausthal** | **2.23** | **83** | *e*Pg | **Pg** | **00 46 39.0** | **+0.5** |
| **CLZ** | **Clausthal** | **2.23** | **83** | Pg | **Pg** | **00 46 39.0** | **+0.5** |

*NIED **23** 00:53:00, 31°30N×141°90E, h5km, Mw4.3 Best double couple: M₀3.39000×10¹⁵ NP1:φ§156.00000°, δ§38.00000°, λ31.00000°. NP2:φ§41.00000°, δ71.00000°, λ124.00000°.*
*IDC **23** 00:53:41.4±0.6, 31°21N×141°95E, h0km, mb4.4/25, mb1 4.5/31, mb1mx4.4/60, mbtmp4.4/31, ML3.6/6, MS3.6/6, Ms1 3.7/6, ms1mx3.3/38, Error ellipse: s-maj=16.4km s-min=13.9km az=13.0*
*BJI **23** 00:53:42.7, 31°22N×142°12E, h32km, mb4.7/41, mB4.9/29, Ms4.6/31, Ms7 4.2/31*

*ISCJB **23** 00:53:43.8±1.2, 31°27N±0°03×141°85E±0°04, h23km±8km, mb4.5/63, MS3.9/7, Error ellipse: s-maj=5.9km s-min=4.6km az=164.6*
*JMA **23** 00:53:44.4±0.2, 31°25N×141°92E, h43km, M4.4*
*NEIC **23** 00:53:45.9±1.6, 31°21N×141°90E, h27km±10km, mb4.7/21, MW4.3(NIED), Error ellipse: s-maj=5.6km s-min=5.0km az=166.0*
*MOS **23** 00:53:46.3±1.0, 31°47N×141°90E, h36km, mb4.8/42, Error ellipse: s-maj=11.0km s-min=5.7km az=114.9*

**ISC 23 00:53:46.1±0.5, 31°24N±0°04×141°92E±0°05, h30km±2km, h30km:pP-P, n179, σ1§28/209, mb4.6/63, MS4.0/7, 6C-3D, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ** | **Hachijo jima 2** | **2.61** | **316** | Pn | **Pn** | **00 54 25.6** | **-0.6** |
| | 30nm,0.3s,baz=252,slow=19,SNR=1.9 | | | | | | |
| JHJ | | | | Sn | **Sn** | **00 54 57.9** | **+1.1** |
| | 62nm,0.3s,baz=60,slow=20,SNR=4.1 | | | | | | |
| **BSO1** | **Boso 1** | **3.50** | **347** | P | **Pn** | **00 54 37.7** | **-0.2** |
| BSO1 | | | | *e*S | **Sn** | **00 55 17.2** | **-0.7** |
| **BSO3** | **Boso 3** | **3.74** | **342** | P | **Pn** | **00 54 41.0** | **-0.6** |
| **CBIJ** | **Chichi jima** | **4.14** | **177** | P | **Pn** | **00 54 46.9** | **-0.3** |
| **CBIJ** | **Chichi jima** | **4.14** | **177** | *e*Pn | **Pn** | **00 54 46.7** | **-0.5** |
| **JOD2** | **Odawara 2** | **4.66** | **330** | P | **Pn** | **00 54 55.6** | **+1.2** |
| **JHU** | **Hanno** | **5.10** | **335** | P | **Pn** | **00 55 00.8** | **+0.4** |
| JHU | | | | S | **Sn** | **00 55 58.0** | **-0.3** |
| **JYT** | **Yasato** | **5.18** | **344** | P | **Pn** | **00 55 03.2** | **+1.7** |
| JYT | | | | S | **Sn** | **00 56 00.0** | **-0.2** |
| **JNY** | **Yasuok** | **5.33** | **321** | P | Pn | 00 55 07.0 | +3.3 |
| **JRY** | **Ryogami san** | **5.39** | **333** | P | **Pn** | **00 55 05.3** | **+0.9** |
| JRY | | | | *e*S | **Sn** | **00 56 05.8** | **+0.4** |
| **JHO** | **Hitachi** | **5.47** | **349** | P | **Pn** | **00 55 05.1** | **-0.5** |
| JHO | | | | S | **Sn** | **00 56 03.5** | **-4.0** |
| **JAG** | **Ashikaga** | **5.56** | **339** | S | **Sn** | **00 56 08.3** | **-1.4** |
| **MJAR** | **Matsushiro Arr** | **6.12** | **331** | Pn | **Pn** | **00 55 15.2** | **+0.7** |
| | 5.3nm,0.3s,baz=154,slow=11,SNR=53 | | | | | | |
| MJAR | | | | Sn | **Sn** | **00 56 25.8** | **+2.2** |
| | 0.9nm,0.3s,baz=159,slow=18,SNR=2.9 | | | | | | |
| MJAR | | | | LR | LR | 00 57 54.0 | |
| | comp=Z,402nm,18.7s,baz=145,slow=41 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.12** | **331** | P | **Pn** | **00 55 15.2** | **+0.7** |
| MJAR | | | | | | 00 56 25.8 | |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| MJAR | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,402nm,18.7s | | | | | | |
| **MAJO** | **Matsushiro** | **6.12** | **331** | *e*P | **Pn** | **00 55 15.2** | **+0.7** |
| **MAJO** | **Matsushiro** | **6.12** | **331** | *e*Pn | **Pn** | **00 55 15.2** | **+0.7** |
| **MAT** | **Matsushiro** | **6.12** | **331** | P | **Pn** | **00 55 15.3** | **+0.8** |
| MAT | | | | S | **Sn** | **00 56 23.4** | **-0.1** |
| **JFK** | **Kawauchi** | **6.17** | **352** | S | Sn | 00 56 17.5 | -7.2 |
| **JNU** | **Nakatsue** | **9.55** | **284** | Pn | **Pn** | **00 56 00.8** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=76,slow=8.3,SNR=2.0 | | | | | | |
| JNU | | | | LR | LR | 00 59 45.9 | |
| | comp=Z,338nm,18.7s,baz=116,slow=38 | | | | | | |
| **ERM** | **Erimo** | **10.80** | **5** | *e*P | Pn | 00 56 14.3 | -4.3 |
| **ASAJ** | **Asahikawa** | **12.87** | **2** | Pn | **Pn** | **00 56 46.2** | **-0.6** |
| | comp=Z,1.4nm,0.3s,baz=244,slow=20,SNR=4.3 | | | | | | |
| **ASAJ** | **Asahikawa** | **12.87** | **2** | P | **Pn** | **00 56 46.2** | **-0.6** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **13.12** | **302** | Pn | **Pn** | **00 56 51.4** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=114,slow=13,SNR=13 | | | | | | |
| KSRS | | | | LR | LR | 01 01 50.4 | |
| | comp=Z,268nm,18.7s,baz=110,slow=37 | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.14** | **302** | P | **Pn** | **00 56 51.4** | **+0.8** |
| **KSAR** | **Wonju Array Be** | **13.14** | **302** | Pn | **Pn** | **00 56 51.4** | **+0.8** |
| **YUK** | **Yuzh-Kuril'sk** | **13.14** | **13** | P | **Pn** | **00 56 50.4** | **-0.2** |
| YUK | | | | *i* S | **Sn** | **00 59 17.7** | **+2.0** |
| YUK | | | | MLR | MLR | | |
| | comp=Z,302nm,11.0s | | | | | | |
| **KUR** | **Kuril'sk** | **14.72** | **17***c* | *i*P | **P** | **00 57 16.6** | **-1.3** |
| KUR | | | | MLR | MLR | | |
| | comp=Z,310nm,11.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.12** | **332** | Pn | **Pn** | **00 57 16.0** | **-1.5** |
| | comp=Z,0.3nm,0.3s,baz=162,slow=14,SNR=7.4 | | | | | | |
| USRK | | | | LR | LR | 01 03 06.1 | |
| | comp=Z,221nm,19.1s,baz=138,slow=37 | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **15.71** | **2**⇑ | *e*P | **Pn** | **00 57 22.0** | **-3.0** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,500nm,14.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,500nm,16.0s | | | | | | |
| **MDJ** | **Mudanjiang** | **16.49** | **328** | P | **P** | **00 57 36.6** | **-1.0** |
| MDJ | | | | pP | **pP** | **00 57 46.8** | **+1.2** |
| MDJ | | | | sP | **sP** | **00 57 51.4** | **+1.8** |
| MDJ | | | | S | **Sn** | **01 00 41.9** | **+4.7** |
| MDJ | | | | PMZ | | | |
| | comp=N,18nm,1.0s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=N,110nm,6.6s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=N,370nm,13.3s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=N,310nm,15.2s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=N,430nm,13.9s | | | | | | |
| **HABR** | **Khabarovsk** | **17.99** | **345** | *e*P | **Pn** | **00 57 50.1** | **-3.6** |
| HABR | | | | *e*S | **Sn** | **01 01 09.6** | **-3.7** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,117nm,2.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,187nm,16.0s | | | | | | |
| **CN2** | **Changchun** | **18.07** | **319** | *e*P | **P** | **00 57 58.6** | **+3.6** |
| CN2 | | | | *e*S | **Sn** | **01 01 17.3** | **+1.9** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,300nm,11.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,400nm,11.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,400nm,13.0s | | | | | | |
| **SNY** | **Shenyang** | **18.10** | **311** | ⇓P | **Pn** | **00 57 54.6** | **-0.5** |
| SNY | | | | S | **S** | **01 01 22.1** | **+1.0** |
| SNY | | | | PMZ | | | |
| | comp=Z,33nm,0.9s | | | | | | |
| SNY | | | | LN | | | |
| | comp=Z,270nm,11.1s | | | | | | |
| SNY | | | | LE | | | |
| | comp=Z,250nm,17.7s | | | | | | |
| SNY | | | | LZ | | | |
| | comp=Z,330nm,14.7s | | | | | | |
| **KLR** | **Kul'dur** | **19.54** | **340** | *e*P | **P** | **00 58 08.0** | **-3.1** |
| **NJ2** | **Nanjing** | **19.65** | **278** | *e*P | **P** | **00 58 12.9** | **+0.5** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,80nm,0.8s | | | | | | |
| **YULB** | **Yu-li** | **19.90** | **252** | *e*P | **P** | **00 58 15.6** | **+0.3** |
| | comp=Z,1μm,2.9s | | | | | | |
| **NKL** | **Nikolayevsk** | **21.91** | **358** | *e*P | **P** | **00 58 36.0** | **-0.6** |
| NKL | | | | *e*S | **S** | **01 02 38.0** | **+1.1** |
| NKL | | | | pmax | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | |
| NKL | | | | smax | smax | | |
| | comp=E,350nm,10.0s | | | | | | |
| NKL | | | | smax | smax | | |
| | comp=E,500nm,9.0s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=Z,400nm,13.0s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=N,400nm,14.0s | | | | | | |
| NKL | | | | MLR | MLR | | |
| | comp=E,400nm,14.0s | | | | | | |
| **BJI** | **Beijing** | **22.63** | **300** | P | **P** | **00 58 42.9** | **-1.6** |
| BJI | | | | sP | **sP** | **00 58 57.3** | **+0.7** |
| BJI | | | | S | **S** | **01 02 51.3** | **+0.9** |
| BJI | | | | PMZ | | | |
| | comp=E,23nm,1.4s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=E,210nm,5.6s | | | | | | |
| BJI | | | | LN | | | |
| | comp=E,250nm,16.1s | | | | | | |
| BJI | | | | LE | | | |
| | comp=E,460nm,18.8s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=E,250nm,18.1s | | | | | | |
| **HIA** | **Hailar** | **24.56** | **323** | *e*P | **P** | **00 59 03.6** | **+0.4** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,30nm,1.1s | | | | | | |
| **HIA** | **Hailar** | **24.56** | **323** | *e*P | **P** | **00 59 03.6** | **+0.4** |
| | comp=Z,30nm,1.1s | | | | | | |
| **PETK** | **Petropavlovsk-** | **24.68** | **23** | LR | LR | 01 09 18.7 | |
| | comp=Z,94nm,20.2s,baz=224,slow=38 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **25.23** | **111** | T | T | 01 25 36.8 | |
| | baz=310 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **25.23** | **111** | T | T | 01 25 50.3 | |
| | baz=310 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **25.25** | **111** | T | T | 01 25 54.5 | |
| | baz=310 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **25.73** | **114** | T | T | 01 26 25.9 | |
| | baz=302 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **25.74** | **114** | T | T | 01 26 37.0 | |
| | baz=302 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **25.75** | **114** | T | T | 01 26 39.0 | |
| | baz=302 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **26.24** | **300** | *e*P | **P** | **00 59 17.0** | **-1.6** |
| HHC | | | | pP | **pP** | **00 59 24.4** | **-3.0** |
| HHC | | | | sP | **sP** | **00 59 31.1** | **0.0** |
| HHC | | | | PcP | **PcP** | **01 02 43.1** | **-1.6** |
| HHC | | | | S | S | 01 03 42.0 | -7.1 |
| HHC | | | | PMZ | | | |
| | comp=Z,16nm,0.6s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,190nm,4.2s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,310nm,9.5s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,560nm,10.6s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,480nm,10.1s | | | | | | |
| **BTO** | **Baotou** | **27.35** | **299** | *e*P | **P** | **00 59 27.3** | **-1.2** |
| **GYA** | **Guiyang** | **31.16** | **270** | *e*P | **P** | **01 00 04.0** | **+1.4** |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **SONA1** | **Songino Array** | **31.68** | **312** | *e*P | **P** | **01 00 07.7** | **+0.8** |
| **SONM** | **Songino Array** | **31.68** | **312** | P | **P** | **01 00 07.7** | **+0.8** |
| | comp=Z,7.9nm,0.9s,baz=116,slow=8.8,SNR=45 | | | | | | |
| **SONM** | **Songino Array** | **31.68** | **312** | P | **P** | **01 00 07.7** | **+0.8** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **LZH** | **Lanzhou** | **31.92** | **289** | *e*P | **P** | **01 00 08.4** | **-0.8** |
| LZH | | | | pP | **pP** | **01 00 16.4** | **-1.7** |
| LZH | | | | sP | **sP** | **01 00 20.6** | **-1.2** |
| LZH | | | | PMZ | | | |
| | comp=Z,22nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,270nm,4.0s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,480nm,12.4s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,600nm,15.2s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,330nm,14.2s | | | | | | |
| **SEY** | **Seymchan** | **32.41** | **9** | P | **P** | **01 00 12.2** | **-0.7** |
| | comp=Z,3.3nm,0.6s,baz=221,slow=14,SNR=7.5 | | | | | | |
| **SEY** | **Seymchan** | **32.41** | **9** | *e*P | **P** | **01 00 10.7** | **-2.2** |
| **CD2** | **Chengdu** | **32.58** | **280** | P | **P** | **01 00 14.8** | **-0.1** |
| CD2 | | | | pP | **pP** | **01 00 23.8** | **0.0** |
| CD2 | | | | PP | **PP** | **01 01 28.3** | **-0.5** |
| CD2 | | | | S | **S** | **01 05 28.3** | **-0.4** |
| CD2 | | | | sS | **sS** | **01 05 43.9** | **+0.5** |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,140nm,5.0s | | | | | | |
| **BOD** | **Bodaibo** | **32.75** | **332** | *e*P | **P** | **01 00 13.4** | **-2.6** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **ZAK** | **Zakamensk** | **34.44** | **315** | *e*P | **P** | **01 00 31.5** | **+0.6** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,11nm,1.5s | | | | | | |
| **TLY** | **Talaya** | **34.66** | **317** | P | **P** | **01 00 33.0** | **+0.2** |
| | comp=Z,3.9nm,0.6s,baz=125,slow=18,SNR=3.6 | | | | | | |
| **TLY** | **Talaya** | **34.66** | **317** | *e*P | **P** | **01 00 34.7** | **+1.9** |
| TLY | | | | *e*PPP | PPP | 01 02 12.9 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,201nm,15.0s | | | | | | |
| **KMI** | **Kunming** | **34.94** | **270** | P | **P** | **01 00 36.3** | **+0.6** |
| KMI | | | | PMZ | | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| **GTA** | **Gaotai** | **35.05** | **295** | *e*P | **P** | **01 00 35.9** | **-0.5** |
| GTA | | | | pP | **pP** | **01 00 45.8** | **+0.5** |
| GTA | | | | sP | **sP** | **01 00 49.5** | **+0.5** |
| GTA | | | | S | **S** | **01 06 04.6** | **-2.3** |
| GTA | | | | sS | **sS** | **01 06 20.3** | **-1.4** |
| GTA | | | | SS | **SnSn** | **01 08 20.5** | **-3.5** |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,1.0s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,100nm,4.7s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,440nm,15.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,390nm,17.6s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,400nm,15.2s | | | | | | |
| **BILL** | **Bilibino** | **39.49** | **14**⇑ | *e*P | **P** | **01 01 13.1** | **-0.4** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,114nm,17.0s | | | | | | |
| **HVS** | **Khovu-Aksy** | **40.51** | **314** | *e*P | **P** | **01 01 22.9** | **+0.6** |
| HVS | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **40.62** | **263** | *e*P | **P** | **01 01 23.6** | **+0.1** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **40.62** | **263** | *e*P | **P** | **01 01 23.6** | **+0.1** |
| | comp=Z,4.3nm,0.8s |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **RAMN** | **Ramite** | | **48.11** | **280** | *e*P | | **P** | **01 02 22.7** | **-0.9** |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **GUN** | **Gumba** | | **48.42** | **281** | *e*P | | **P** | **01 02 25.8** | **-0.3** |
| | comp=Z,31nm,0.9s | | | | | | | | |
| **PKI** | **Pulchoki** | | **48.92** | **281** | *e*P | | **P** | **01 02 29.0** | **-0.9** |
| | comp=Z,6.1nm,0.7s | | | | | | | | |
| **KKN** | **Kakani** | | **48.96** | **281** | *e*P | | **P** | **01 02 29.3** | **-0.8** |
| **GKN** | **Gorkha** | | **49.43** | **282** | *e*P | | **P** | **01 02 33.0** | **-0.6** |
| **KOLN** | **Koldanda** | | **50.37** | **282** | *e*P | | **P** | **01 02 40.4** | **-0.5** |
| | comp=Z,9.3nm,0.8s | | | | | | | | |
| **KDAK** | **Kodiak Island** | | **51.24** | **39** | P | | **P** | **01 02 46.6** | **0.0** |
| | comp=Z,6.4nm,0.7s,baz=278,slow=7.3,SNR=4.3 | | | | | | | | |
| **KDAK** | **Kodiak Island** | | **51.24** | **39** | P | | **P** | **01 02 46.6** | **0.0** |
| KDAK | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | | |
| **WRAB** | **Tennant Creek** | | **51.40** | **189** | *i* P | | **P** | **01 02 48.2** | **0.0** |
| WRAB | | | | | pmax | pmax | | | |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **WRAB** | **Tennant Creek** | | **51.40** | **189** | P | | **P** | **01 02 48.0** | **-0.2** |
| | comp=Z,36nm,1.2s,SNR=10 | | | | | | | | |
| **WRA** | **Warramunga Arr** | | **51.41** | **189** | P | | **P** | **01 02 48.1** | **-0.1** |
| | comp=Z,3.2nm,0.5s,baz=6.7,slow=7.6,SNR=34 | | | | | | | | |
| **WRA** | **Warramunga Arr** | | **51.41** | **189** | P | | **P** | **01 02 48.2** | **-0.1** |
| WRA | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | |
| **TKM2** | **Tokmak 2** | | **52.93** | **303** | *e*P | | **P** | **01 03 01.0** | **+1.2** |
| TKM2 | | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | | **52.93** | **303** | *e*P | | **P** | **01 03 00.9** | **+1.2** |
| | comp=Z,29nm,1.6s | | | | | | | | |
| **KSH** | **Kashi** | | **53.34** | **298** | P | | P | 01 03 07.5 | +4.8 |
| KSH | | | | | *e*pP | | pP | 01 03 17.5 | +5.5 |
| KSH | | | | | *e*PP | | PP | 01 05 10.1 | +7.1 |
| KSH | | | | | S | | **S** | **01 10 35.8** | **+3.1** |
| KSH | | | | | SS | | **SS** | **01 14 13.4** | **+0.9** |
| KSH | | | | | PMZ | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| KSH | | | | | PMZ | | | | |
| | comp=Z,68nm,5.0s | | | | | | | | |
| KSH | | | | | LN | | | | |
| | comp=Z,94nm,4.9s | | | | | | | | |
| KSH | | | | | LE | | | | |
| | comp=Z,130nm,5.8s | | | | | | | | |
| KSH | | | | | LZ | | | | |
| | comp=Z,150nm,9.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | | **53.78** | **302** | *e*P | | **P** | **01 03 06.1** | **+0.1** |
| AAK | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **AAK** | **Ala-Archa** | | **53.78** | **302** | *e*P | | **P** | **01 03 06.1** | **+0.1** |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **IL1** | **Eielson Array** | | **54.22** | **30** | *e*P | | **P** | **01 03 10.1** | **+1.5** |
| **ILAR** | **Eielson Array** | | **54.22** | **30** | P | | **P** | **01 03 08.6** | **0.0** |
| | comp=Z,1.4nm,0.7s,baz=262,slow=5.7,SNR=14 | | | | | | | | |
| **ILAR** | **Eielson Array** | | **54.22** | **30** | P | | **P** | **01 03 08.6** | **0.0** |
| ILAR | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **EKS2** | **Erkin-Say** | | **54.29** | **303** | *e*P | | **P** | **01 03 09.7** | **+0.1** |
| EKS2 | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **EKS2** | **Erkin-Say** | | **54.29** | **303** | *e*P | | **P** | **01 03 09.7** | **+0.1** |
| | comp=Z,3.3nm,0.8s | | | | | | | | |
| **VOSK** | **Vostochnaya** | | **54.57** | **315** | P | | **P** | **01 03 11.0** | **-0.3** |
| VOSK | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.2s | | | | | | | | |
| **CHKZ** | **Chkalovo** | | **54.68** | **316** | P | | **P** | **01 03 11.4** | **-0.7** |
| CHKZ | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.3s | | | | | | | | |
| **BRVK** | **Borovoye** | | **54.95** | **316** | *e*P | | **P** | **01 03 14.5** | **+0.5** |
| BRVK | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **BRVK** | **Borovoye** | | **54.95** | **316** | *e*P | | **P** | **01 03 14.5** | **+0.5** |
| | comp=Z,5.4nm,0.9s | | | | | | | | |
| **ZRNK** | **Zerenda** | | **55.73** | **316** | P | | **P** | **01 03 19.4** | **-0.3** |
| ZRNK | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| **KK31** | **Karatay Array** | | **56.54** | **304** | *i* P | | **P** | **01 03 25.8** | **+0.1** |
| KK31 | | | | | pmax | pmax | | | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **SVE** | **Sverdlovsk** | | **59.84** | **321** | ⇑ *i*P | | **P** | **01 03 49.4** | **+0.9** |
| SVE | | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **ARU** | **Arti** | | **61.04** | **321** | *d i*P | | **P** | **01 03 57.3** | **+0.6** |
| ARU | | | | | | | | 01 06 15.7 | |
| ARU | | | | | S | | **S** | **01 12 17.4** | **+4.1** |
| ARU | | | | | SS | | **SS** | **01 16 16.2** | **+3.6** |
| ARU | | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| ARU | | | | | MLR | | MLR | | |
| | comp=Z,120nm,18.0s | | | | | | | | |
| **AB31** | **Akbulak array** | | **62.08** | **313** | *i* P | | **P** | **01 04 03.7** | **-0.1** |
| AB31 | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | | **62.08** | **313** | *e*P | | **P** | **01 04 04.0** | **+0.2** |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | | **62.94** | **314** | P | | **P** | **01 04 08.6** | **-1.0** |
| | comp=Z,2.7nm,0.7s,baz=64,slow=4.0,SNR=9.5 | | | | | | | | |
| **AKTO** | **Aktyubinsk** | | **62.94** | **314** | P | | **P** | **01 04 08.6** | **-1.0** |
| AKTO | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **GEYT** | **Alibeck** | | **67.11** | **301** | P | | **P** | **01 04 37.6** | **+0.7** |
| | comp=Z,4.8nm,0.9s,baz=90,slow=1.5,SNR=11 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | | **69.57** | **340** | P | | **P** | **01 04 50.9** | **-0.8** |
| | comp=Z,5.1nm,0.9s,baz=46,slow=5.2,SNR=5.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | | **69.57** | **340** | P | | **P** | **01 04 50.9** | **-0.8** |
| ARCES | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **OBN** | **Obninsk** | | **73.02** | **325** | ⇑ *e*P | | **P** | **01 05 13.3** | **+0.6** |
| OBN | | | | | *i* | | | 01 05 27.5 | |
| OBN | | | | | *e* | | | 01 07 59.1 | |
| OBN | | | | | *e*S | | **SKSac** | **01 15 18.4** | **+2.4** |
| OBN | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.5s | | | | | | | | |
| OBN | | | | | MLR | | MLR | | |
| | comp=Z,143nm,18.0s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | | **73.60** | **51** | P | | **P** | **01 05 17.3** | **+0.7** |
| | comp=Z,1.0nm,0.6s,baz=0.0,slow=9.1,SNR=2.8 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | | **73.60** | **51** | P | | **P** | **01 05 17.3** | **+0.7** |
| YBH | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **NEW** | **Newport** | | **74.03** | **43** | P | | **P** | **01 05 20.1** | **+1.2** |
| | comp=Z,1.7nm,0.7s,baz=333,slow=2.3,SNR=4.4 | | | | | | | | |
| **NEW** | **Newport** | | **74.03** | **43** | P | | **P** | **01 05 20.2** | **+1.2** |
| NEW | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **UOSS** | **Wadi Hilu** | | **74.07** | **290** | *e*P | | **P** | **01 05 19.7** | **+0.2** |
| | comp=Z,12nm,1.1s | | | | | | | | |
| **FINES** | **FINESS Array B** | | **74.15** | **333** | P | | **P** | **01 05 19.6** | **+0.3** |
| | comp=Z,2.9nm,0.7s,baz=64,slow=6.3,SNR=7.4 | | | | | | | | |
| **FINES** | **FINESS Array B** | | **74.15** | **333** | P | | **P** | **01 05 19.6** | **+0.3** |
| FINES | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **KBZ** | **Khabaz** | | **75.04** | **312** | P | | **P** | **01 05 26.4** | **+1.6** |
| | comp=Z,5.1nm,0.8s,baz=118,slow=2.0,SNR=8.5 | | | | | | | | |
| **KBZ** | **Khabaz** | | **75.04** | **312** | P | | **P** | **01 05 26.4** | **+1.6** |
| KBZ | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **WALA** | **Waterton Lakes** | | **75.47** | **41** | *e*P | | **P** | **01 05 28.5** | **+1.1** |
| | comp=Z,2.8nm,0.6s | | | | | | | | |
| **GNI** | **Garni** | | **75.56** | **308** | *e*P | | **P** | **01 05 29.7** | **+1.6** |
| GNI | | | | | pmax | pmax | | | |
| | comp=Z,49nm,1.2s | | | | | | | | |
| **JTMT** | **Jette** | | **75.94** | **43** | *e*P | | **P** | **01 05 30.7** | **+0.6** |
| | comp=Z,1.8nm,0.6s | | | | | | | | |
| **SWMT** | **Swartz Lake** | | **76.22** | **43** | *e*P | | **P** | **01 05 32.1** | **+0.4** |
| **SLMT** | **Seeley Lake** | | **76.66** | **43** | *e*P | | **P** | **01 05 34.4** | **+0.1** |
| **CMB** | **Columbia Colle** | | **76.93** | **53** | *e*P | | **P** | **01 05 36.1** | **+0.3** |
| CMB | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **CMB** | **Columbia Colle** | | **76.93** | **53** | *e*P | | **P** | **01 05 36.0** | **+0.3** |
| | comp=Z,2.3nm,0.7s | | | | | | | | |
| **LRM** | **Limekiln Ridge** | | **78.02** | **44** | *e*P | | **P** | **01 05 42.7** | **+0.7** |
| | comp=Z,42nm,0.7s | | | | | | | | |
| **NV01** | **Mina Array Sit** | | **78.16** | **52** | *e*P | | **P** | **01 05 43.8** | **+0.9** |
| **NVAR** | **Mina Array Bea** | | **78.16** | **52** | P | | **P** | **01 05 43.8** | **+1.0** |
| | comp=Z,2.6nm,0.6s,baz=285,slow=6.0,SNR=23 | | | | | | | | |
| **AKASG** | **Malin Array Be** | | **79.16** | **323** | P | | **P** | **01 05 47.1** | **-0.6** |
| | comp=Z,0.7nm,0.4s,baz=51,slow=6.3,SNR=7.1 | | | | | | | | |
| **AKASG** | **Malin Array Be** | | **79.16** | **323** | *ce*P | | **P** | **01 05 47.7** | **-0.1** |
| AKASG | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **KIEV** | **Kiev** | | **79.17** | **323** | *e*P | | **P** | **01 05 46.8** | **-1.1** |
| KIEV | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | | **79.69** | **338** | P | | **P** | **01 05 50.1** | **-0.5** |
| | comp=Z,9.1nm,1.1s,baz=41,slow=5.6 | | | | | | | | |
| **NOA** | **NORSAR Array B** | | **79.69** | **338** | P | | **P** | **01 05 50.3** | **-0.3** |
| | comp=Z,2.5nm,0.8s,baz=42,slow=5.3,SNR=5.6 | | | | | | | | |
| **NOA** | **NORSAR Array B** | | **79.69** | **338** | P | | **P** | **01 05 50.3** | **-0.3** |
| NOA | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **IMW** | **Indian Meadow** | | **79.97** | **45** | *e*P | | **P** | **01 05 53.3** | **+0.5** |
| | comp=Z,10nm,1.4s | | | | | | | | |
| **FXWY** | **Fox Creek** | | **80.06** | **45** | *e*P | | **P** | **01 05 54.3** | **+1.1** |
| | comp=Z,39nm,2.3s | | | | | | | | |
| **DUG** | **Dugway** | | **80.85** | **48** | *e*P | | **P** | **01 05 58.3** | **+0.9** |
| DUG | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **DUG** | **Dugway** | | **80.85** | **48** | *e*P | | **P** | **01 05 58.3** | **+0.9** |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **BW06** | **Boulder Array** | | **81.44** | **45** | *e*P | | **P** | **01 06 01.2** | **+0.6** |
| | comp=Z,0.9nm,0.7s | | | | | | | | |
| **NLU** | **North Lily Min** | | **81.45** | **48** | *e*P | | **P** | **01 06 01.4** | **+0.7** |
| | comp=Z,58nm,2.7s | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | | **81.61** | **5** | P | | **P** | **01 06 00.9** | **+0.3** |
| | comp=Z,5.1nm,0.6s,baz=45,slow=1.4,SNR=3.7 | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | | **81.61** | **5** | P | | **P** | **01 06 00.9** | **+0.3** |
| SFJD | | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | | **81.93** | **56** | P | | **P** | **01 06 03.3** | **+0.1** |
| | comp=Z,3.1nm,0.8s,baz=294,slow=6.6,SNR=4.7 | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | | **81.93** | **56** | P | | **P** | **01 06 03.3** | **+0.1** |
| PFO | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **P18A** | **Preston Nutter** | | **82.80** | **48** | *e*P | | **P** | **01 06 10.3** | **+2.4** |
| | comp=Z,12nm,0.9s | | | | | | | | |
| **SRU** | **San Rafael** | | **82.92** | **48** | *e*P | | **P** | **01 06 08.8** | **+0.5** |
| SRU | | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **SRU** | **San Rafael** | | **82.92** | **48** | *e*P | | **P** | **01 06 08.8** | **+0.5** |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **BRTR** | **Keskin Array B** | | **83.03** | **312** | P | | **P** | **01 06 09.9** | **+1.1** |
| | comp=Z,3.8nm,0.9s,baz=75,slow=3.9,SNR=13 | | | | | | | | |
| **BRTR** | **Keskin Array B** | | **83.03** | **312** | P | | **P** | **01 06 10.0** | **+1.1** |
| BRTR | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **RAYN** | **Ar Rayn** | | **83.28** | **293** | *e*P | | **P** | **01 06 11.0** | **+0.7** |
| | comp=Z,9.8nm,0.8s | | | | | | | | |
| **GLA** | **Glamis** | | **83.38** | **55** | *e*P | | **P** | **01 06 11.3** | **+0.6** |
| GLA | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **GLA** | **Glamis** | | **83.38** | **55** | *e*P | | **P** | **01 06 11.3** | **+0.6** |
| | comp=Z,6.8nm,0.9s | | | | | | | | |
| **BR231** | **Keskin MP Arra** | | **83.51** | **313** | *e*P | | **P** | **01 06 10.7** | **-0.6** |
| **KOLS** | **Kolonicke sedl** | | **83.77** | **325** | *e*P | | **P** | **01 06 15.0** | **+2.7** |
| **ULM** | **Lac du Bonnet** | | **84.11** | **33** | P | | **P** | **01 06 12.7** | **-1.3** |
| | comp=Z,1.5nm,0.6s,baz=333,slow=6.8,SNR=2.7 | | | | | | | | |
| **ULM** | **Lac du Bonnet** | | **84.11** | **33** | P | | **P** | **01 06 12.7** | **-1.3** |
| ULM | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **214A** | **Organ Pipe Nat** | | **85.41** | **55** | P | | **P** | **01 06 21.8** | **+0.9** |
| | baz=78 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | | **85.59** | **329** | *e*P | | **P** | **01 06 24.6** | **+3.1** |
| DPC | | | | | *e* | | | 01 06 36.0 | |
| **DPC** | **Dobruska-Polom** | | **85.59** | **329** | *e*P | | **P** | **01 06 24.6** | **+3.1** |
| DPC | | | | | *e*sP | | **sP** | **01 06 36.0** | **+1.2** |
| **VYHS** | **Vyhne** | | **85.74** | **326** | *e*P | | **P** | **01 06 22.6** | **+0.4** |
| **CLL** | **Collm** | | **86.33** | **331** | *e*P | | **P** | **01 06 25.0** | **-0.1** |
| CLL | | | | | *e* | | | 01 06 31.0 | |
| CLL | | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| **TXAR** | **Lajitas Array** | | **93.30** | **53** | P | | **P** | **01 06 58.6** | **+0.2** |
| | comp=Z,1.7nm,0.6s,baz=331,slow=3.3,SNR=20 | | | | | | | | |
| **TXAR** | **Lajitas Array** | | **93.30** | **53** | P | | **P** | **01 06 58.6** | **+0.2** |
| TXAR | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | | **121.64** | **313** | PKP | | **PKPdf** | **01 12 37.0** | **-0.5** |
| | comp=Z,0.4nm,0.8s,baz=16,slow=1.3,SNR=6.6 | | | | | | | | |
| **SAML** | **Samuel** | | **147.79** | **52** | *e*PKPbc | | **PKPbc** | **01 13 29.1** | **+0.4** |
| **LPAZ** | **La Paz** | | **148.85** | **68** | PKPbc | | **PKPbc** | **01 13 31.7** | **-0.4** |
| | comp=Z,0.5nm,0.5s,baz=270,slow=5.1,SNR=3.5 | | | | | | | | |
| **LPAZ** | **La Paz** | | **148.85** | **68** | PKP2 | | **PKPbc** | **01 13 31.7** | **-0.4** |
| LPAZ | | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |

*AUST* ***23*** *00:54:18.3±0.5,20.36S×173.19W,h0km,Error ellipse: s-maj=12.8km s-min=7.3km az=133.0*
*BJI* ***23*** *00:54:19.4,21.00S×173.20W,h10km,mb5.2/20, mB5.7/17,Ms5.3/14,Ms7 4.9/17*
*IDC* ***23*** *00:54:21.3±0.4,20.32S×173.68W,h0km,mb4.7/24, mb1 4.8/26,mb1mx4.7/41,mbtmp4.7/26,ML4.6/2,MS4.5/9, Ms1 4.5/9,ms1mx4.2/26,Error ellipse: s-maj=16.2km s-min=12.3km az=140.0*
*ISCJB* ***23*** *00:54:23.0±2.9,20.37S±0.05×173.72W±0.04, h15km±18km,mb4.8/83,MS4.5/7,Error ellipse: s-maj=9.1km s-min=5.2km az=144.6*
*NEIC* ***23*** *00:54:27.6±1.3,20.35S×173.75W,h42km±11km,mb4.9/68, Error ellipse: s-maj=6.6km s-min=4.6km az=126.0*
*GCMT* ***23*** *00:54:27.6±0.3,20.57S×173.07W,h17km±1km,MW5.1/77, Moment Tensor Solution. s39,c52; s77,c116; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr4.17±.25; Mθθ-0.01±.15; Mθφ-4.16±.17; Mrθ3.10±.54; Mθφ-0.90±.11; Mφf3.58±.41; Best double couple: M₀6.36000×10¹⁶ NP1:φs32.00000°,δ70.00000°,λ105.00000°. NP2: φs175.00000°,δ25.00000°,λ55.00000°. Principal axes: T 6.5690, Plg62.0000°, Azm325.0000°; N -0.4200, Plg14.0000°, Azm207.0000°; P -6.1520, Plg23.0000°, Azm111.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 23 00:54:24.2±1.1,20.35S±0.06×173.66W±0.06,h19km±4km, n293,σ1$37/297,mb4.9/84,MS4.4/7,22C-12D,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIUE** | **Niue** | **3.74** | **71** | P | Pn | 00 55 12.4 | -8.4 |
| | baz=3.3,SNR=70 | | | | | | |
| **AFI** | **Afiamalu** | **6.66** | **16** | Pn | Pn | 00 55 56.5 | -4.6 |
| | 16nm,0.3s,baz=296,slow=3.2,SNR=9.8 | | | | | | |
| AFI | | | | Sn | Sn | 00 57 05.1 | -11 |
| | 18nm,0.3s,baz=18,slow=20,SNR=2.4 | | | | | | |
| **AFI** | **Afiamalu** | **6.66** | **16** | *e*Pn | Pn | 00 55 57.2 | -3.9 |
| **MSVF** | **Nonsavu** | **8.27** | **287** | Pn | Pn | 00 56 30.0 | +6.8 |
| | 398nm,1.0s,SNR=5.9 | | | | | | |
| **MSVF** | **Nonsavu** | **8.27** | **287** | *e*Pn | **Pn** | **00 56 23.9** | **+0.7** |
| MSVF | | | | *ep*Pn | pPn | 00 56 30.9 | +3.1 |
| **RAO** | **Raoul Island** | **9.67** | **203** | Sn | Sn | 00 58 22.1 | -8.3 |
| | 5.0nm,0.3s,baz=252,slow=20,SNR=5.2 | | | | | | |
| **RAO** | **Raoul Island** | **9.67** | **203** | Sn | Sn | 00 58 22.1 | -8.3 |
| **RAR** | **Rarotonga** | **13.02** | **96** | Pn | Pn | 00 57 19.2 | -9.0 |
| | 12nm,0.3s,baz=246,slow=7.7,SNR=16 | | | | | | |
| RAR | | | | Sn | Sn | 00 59 44.8 | -7.7 |
| | 4.0nm,0.3s,baz=108,slow=20,SNR=2.5 | | | | | | |
| RAR | | | | LR | LR | 01 02 13.4 | |
| | comp=Z,2μm,18.6s,baz=271,slow=36 | | | | | | |
| **RAR** | **Rarotonga** | **13.02** | **96** | *e*Pn | Pn | 00 57 20.7 | -7.5 |
| **OUZ** | **Omahuta** | **18.59** | **215** | *e*P | **Pn** | **00 58 40.7** | **+0.2** |
| | 14nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.63** | **261** | *e*P | **Pn** | **00 58 42.6** | **+1.3** |
| | 70nm,1.1s | | | | | | |
| DZM | | | | *e*LR | LR | 01 03 10.4 | |
| | 3μm,22.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **18.63** | **261** | P | **Pn** | **00 58 41.7** | **+0.4** |
| | 1.5nm,0.3s,baz=358,slow=11,SNR=14 | | | | | | |
| DZM | | | | LR | LR | 01 05 02.1 | |
| | comp=Z,2μm,19.2s,baz=172,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.63** | **261** | *e*P | **Pn** | **00 58 41.7** | **+0.4** |
| | 26nm,0.8s | | | | | | |
| **URZ** | **Urewera** | **19.55** | **202** | P | **Pn** | **00 58 52.0** | **-0.1** |
| | 2.3nm,0.3s,baz=9.5,slow=5.6,SNR=25 | | | | | | |
| URZ | | | | S | S | 01 02 16.3 | -15 |
| | 0.5nm,0.3s,baz=345,slow=16,SNR=3.9 | | | | | | |
| **URZ** | **Urewera** | **19.55** | **202** | *e*P | **Pn** | **00 58 52.0** | **-0.1** |
| | 59nm,1.0s | | | | | | |
| **BKZ** | **Black Stump Fm** | **20.58** | **202** | *e*P | **P** | **00 59 01.4** | **-0.6** |
| | 26nm,0.8s | | | | | | |
| BKZ | | | | *e*S | **S** | **01 02 52.0** | **+0.5** |
| **HIZ** | **Hauiti** | **20.65** | **206** | *e*P | Pn | 00 59 04.6 | -0.4 |
| | 87nm,0.8s | | | | | | |
| **BFZ** | **Birch Farm** | **22.02** | **201** | *e*P | P | 00 59 22.0 | +4.5 |
| | 62nm,0.8s | | | | | | |
| **TBI** | **Tubuai** | **22.65** | **102** | *e*LQ | LQ | 01 03 50.6 | |
| | 407nm,22.8s | | | | | | |
| TBI | | | | *e*LR | LR | 01 04 22.9 | |
| | 2μm,30.0s,baz=270 | | | | | | |
| **PPT2** | **Papeete2** | **22.93** | **87** | *e*LQ | LQ | 01 03 41.0 | |
| | 1μm,30.5s | | | | | | |
| PPT2 | | | | *e*LR | LR | 01 04 42.6 | |
| | 1μm,21.8s,baz=252 | | | | | | |
| **PPT** | **Papeete** | **22.94** | **87** | LR | LR | 01 06 38.7 | |
| | comp=Z,2μm,18.9s,baz=224,slow=32 | | | | | | |
| **SNZO** | **South Karori** | **23.11** | **203** | *e*P | **P** | **00 59 29.6** | **+0.6** |
| | 9.2nm,0.6s | | | | | | |
| **THZ** | **Tophouse** | **24.19** | **205** | *e*P | **P** | **00 59 39.3** | **-0.2** |
| | 36nm,0.7s | | | | | | |
| THZ | | | | *e*S | **S** | **01 03 57.7** | **+0.8** |
| **KHZ** | **Kahutara** | **24.51** | **203** | *e*P | **P** | **00 59 43.0** | **+0.7** |
| | 36nm,0.7s | | | | | | |
| KHZ | | | | *e*S | **S** | **01 04 04.6** | **+2.8** |
| **OXZ** | **Oxford** | **25.85** | **204** | *e*P | **P** | **00 59 53.9** | **-0.6** |
| | 54nm,0.7s | | | | | | |
| OXZ | | | | *e*S | S | 01 04 30.9 | +7.6 |
| **RPZ** | **Rata Peaks** | **26.57** | **205** | P | **P** | **01 00 00.6** | **-0.5** |
| | 22nm,0.7s,baz=295,slow=1.9,SNR=14 | | | | | | |
| **RPZ** | **Rata Peaks** | **26.57** | **205** | *e*P | **P** | **01 00 00.8** | **-0.3** |
| | 36nm,0.6s | | | | | | |
| **HNR** | **Honiara** | **27.68** | **289** | LR | LR | 01 10 28.8 | |
| | comp=Z,683nm,18.9s,baz=151,slow=35 | | | | | | |
| **ODZ** | **Otahua Downs** | **27.84** | **204** | *e*P | **P** | **01 00 13.4** | **+1.0** |
| | 18nm,0.8s | | | | | | |
| **WKZ** | **Wanaka** | **28.32** | **207** | *e*P | P | 01 00 19.7 | +3.0 |
| | 546nm,2.6s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **29.62** | **206** | *e*P | **P** | **01 00 30.1** | **+1.8** |
| | 24nm,1.0s | | | | | | |
| **ARMA** | **Armidale** | **32.81** | **245** | P | **P** | **01 00 57.6** | **+0.9** |
| | baz=33,SNR=4.5 | | | | | | |
| **EIDS** | **Eidsvold** | **32.81** | **255** | P | **P** | **01 00 56.8** | **+0.2** |
| | baz=33,SNR=3.6 | | | | | | |
| **EIDS** | **Eidsvold** | **32.81** | **255** | *e*P | **P** | **01 00 56.0** | **-0.6** |
| | 3.8nm,0.7s | | | | | | |
| **MGCD** | **Mangrove Creek** | **33.80** | **240** | P | **P** | **01 01 05.5** | **+0.4** |
| | baz=34,SNR=4.6 | | | | | | |
| **CNB** | **Canberra Magne** | **35.71** | **237** | P | **P** | **01 01 22.7** | **+1.0** |
| | baz=36,SNR=7.5 | | | | | | |
| **RKT** | **Rikitea** | **35.97** | **102** | *e*LR | LR | 01 10 32.1 | |
| | 1μm,29.5s,baz=272 | | | | | | |
| **CAN** | **Canberra** | **36.00** | **238** | *e*P | **P** | **01 01 24.2** | **+0.1** |
| | 14nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **37.55** | **263** | P | **P** | **01 01 37.0** | **-0.6** |
| | 6.8nm,0.6s,baz=107,slow=12,SNR=12 | | | | | | |
| **CTA** | **Charters Tower** | **37.55** | **263** | P | **P** | **01 01 37.0** | **-0.6** |
| **CTAO** | **Charters Tower** | **37.55** | **263** | *e*P | **P** | **01 01 36.9** | **-0.7** |
| | 87nm,1.9s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **38.02** | **245** | P | **P** | **01 01 40.7** | **-0.6** |
| | baz=38,SNR=11 | | | | | | |
| **QLP** | **Quilpie** | **38.99** | **253** | P | **P** | **01 01 49.0** | **-0.6** |
| | baz=39,SNR=9.7 | | | | | | |
| **TOO** | **Toolangi** | **39.30** | **235** | P | **P** | **01 01 52.3** | **+0.3** |
| | baz=40,SNR=13 | | | | | | |
| **PMG** | **Port Moresby** | **39.30** | **280** | P | **P** | **01 01 52.0** | **-0.3** |
| | 14nm,0.7s,baz=91,slow=10,SNR=3.9 | | | | | | |
| **PMG** | **Port Moresby** | **39.30** | **280** | *e*P | **P** | **01 01 52.4** | **+0.1** |
| **COEN** | **Coen** | **41.64** | **272** | P | **P** | **01 02 11.5** | **-0.1** |
| | baz=42,SNR=4.7 | | | | | | |
| **JAY** | **Jayapura** | **47.89** | **286** | P | **P** | **01 03 01.4** | **-0.1** |
| | 380nm,0.3s,baz=321,slow=0.1,SNR=9.3 | | | | | | |
| **JAY** | **Jayapura** | **47.89** | **286** | P | **P** | **01 03 01.9** | **+0.3** |
| | baz=48,SNR=13 | | | | | | |
| **JAY** | **Jayapura** | **47.89** | **286** | P | **P** | **01 03 01.4** | **-0.1** |
| **AS01** | **Alice Springs** | **48.47** | **256** | *e*P | **P** | **01 03 04.1** | **-1.8** |
| **ASAR** | **Alice Springs** | **48.51** | **256** | P | **P** | **01 03 05.0** | **-1.3** |
| | 3.4nm,0.5s,baz=94,slow=8.0,SNR=38 | | | | | | |
| ASAR | | | | PcP | **PcP** | **01 04 31.4** | **-0.8** |
| | 5.7nm,0.8s,baz=98,slow=4.4,SNR=8.0 | | | | | | |
| ASAR | | | | S | **S** | **01 10 02.9** | **-4.1** |
| | 0.4nm,0.3s,baz=95,slow=16,SNR=4.5 | | | | | | |
| ASAR | | | | LR | LR | 01 22 53.7 | |
| | comp=Z,868nm,19.0s,baz=97,slow=35 | | | | | | |
| **ASAR** | **Alice Springs** | **48.51** | **256** | P | **P** | **01 03 05.0** | **-1.3** |
| ASAR | | | | PcP | **PcP** | **01 04 31.4** | **-0.8** |
| ASAR | | | | S | **S** | **01 10 02.9** | **-4.1** |
| **WRAB** | **Tennant Creek** | **48.64** | **261** | *e*P | **P** | **01 03 07.3** | **0.0** |
| | 2.1nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.65** | **261** | P | **P** | **01 03 06.1** | **-1.3** |
| | 6.1nm,0.8s,baz=94,slow=7.9,SNR=8.0 | | | | | | |
| WRA | | | | PcP | **PcP** | **01 04 34.3** | **+1.6** |
| | 4.5nm,0.9s,baz=93,slow=4.0,SNR=7.5 | | | | | | |
| WRA | | | | S | **S** | **01 10 06.4** | **-2.5** |
| | 0.2nm,0.3s,baz=106,slow=10.0,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.65** | **261** | P | **P** | **01 03 06.1** | **-1.3** |
| WRA | | | | PcP | **PcP** | **01 04 34.3** | **+1.6** |
| WRA | | | | S | **S** | **01 10 06.4** | **-2.5** |
| **MTN** | **Manton Dam** | **53.24** | **269** | P | **P** | **01 03 41.3** | **-0.6** |
| | baz=54,SNR=4.6 | | | | | | |
| **MTN** | **Manton Dam** | **53.24** | **269** | *e*P | **P** | **01 03 40.1** | **-1.8** |
| | 12nm,0.7s | | | | | | |
| **WRKA** |

baz=78
**214A Organ Pipe Nat** 78.08 49 *e*P P 01 06 22.4 +0.4
23nm,1.1s
**NVAR Mina Array Bea** 78.17 41 P P 01 06 23.2 +0.6
5.3nm,0.8s,baz=226,slow=9.4,SNR=20
**NVAR Mina Array Bea** 78.17 41 P P 01 06 23.2 +0.6
**PDMCI Parker Dam,Lak** 78.46 47 P P 01 06 25.1 +1.1
baz=79
**SHPR Sheep Range** 79.03 44 *e*P P 01 06 28.6 +1.2
18nm,1.5s
**KSRS Korea Array** 79.53 316 P P 01 06 30.9 +1.0
3.3nm,0.9s,baz=134,slow=5.6,SNR=7.3
KSRS LR LR 01 36 57.4
comp=Z,206nm,21.2s,baz=128,slow=32
**J05D Fort Rock, OR** 79.53 36 P P 01 06 30.8 +0.9
baz=80
**KSAR Wonju Array Be** 79.55 316 P P 01 06 30.9 +0.9
**KS01 Wonju Array Si** 79.56 316 *e*P P 01 06 32.8 +2.8
**TUC Tucson** 79.72 50 *e*P P 01 06 31.7 +0.6
5.4nm,1.0s
**R11A Troy Canyon, C** 79.83 43 *e*P P 01 06 32.1 +0.4
49nm,2.5s
**BMN Battle Mountai** 80.06 40 *e*P P 01 06 33.2 +0.4
4.4nm,0.8s
**WVOR Wild Horse Val** 80.46 38 *e*P P 01 06 35.8 +0.9
3.0nm,0.8s
**CCUT Cedar City** 80.81 44 *e*P P 01 06 38.1 +1.0
5.5nm,0.9s
**I07A Izee** 81.01 36 *e*P P 01 06 38.6 +0.8
57nm,2.3s
**USRK Ussuriysk Ar.** 81.19 324 P P 01 06 38.4 -0.2
1.2nm,0.7s,baz=54,slow=7.8,SNR=5.3
USRK LR LR 01 39 11.3
comp=Z,617nm,19.4s,baz=136,slow=33
**ELK Elko** 81.46 41 *e*P P 01 06 41.1 +0.7
0.3nm,1.0s
**G08A Pilot Rock** 82.08 36 *e*P P 01 06 44.2 +0.8
6.9nm,1.0s
**MSU Marysvale** 82.12 44 *e*P P 01 06 44.6 +0.6
6.7nm,0.9s
**MDJ Mudanjiang** 82.80 323 P P 01 06 50.3 +3.3
MDJ PMZ
6.0nm,0.9s
MDJ PMZ
190nm,6.2s
**NJ2 Nanjing** 82.97 308 *e*P P 01 06 49.8 +1.6
NJ2 PMZ
70nm,0.6s
**MAW Mawson** 83.05 199 P P 01 06 49.4 +1.4
6.4nm,0.8s,baz=126,slow=8.0,SNR=19
**MAW Mawson** 83.05 199 *e*P P 01 06 49.5 +1.4
1.6nm,0.9s
**TMUT Trail Mountain** 83.18 44 *e*P P 01 06 50.6 +1.0
39nm,0.9s
**D08A Wollman Farm,** 83.22 34 *e*P P 01 06 50.5 +1.3
75nm,2.2s
**MNTX Cornudas Mount** 83.38 53 *e*P P 01 06 51.0 +0.6
40nm,2.3s
**F10A Beach Ranch, E** 83.45 36 *e*P P 01 06 50.8 +0.2
7.7nm,0.6s
**O16A Springville** 83.49 43 *e*P P 01 06 52.2 +1.2
8.6nm,0.9s
**TX31 Lajitas Ar. Si** 83.58 56 *e*P P 01 06 52.1 +0.5
**TXAR Lajitas Array** 83.58 56 P P 01 06 51.5 -0.1
1.4nm,0.9s,baz=218,slow=7.9,SNR=16
**TXAR Lajitas Array** 83.58 56 P P 01 06 51.5 -0.1
**P17A Butcher Ranch,** 83.58 44 *e*P P 01 06 52.4 +0.9
16nm,1.2s
**HLID Hailey** 83.61 39 P P 01 06 52.8 +1.3
baz=84
**HLID Hailey** 83.61 39 *e*P P 01 06 52.3 +0.8
7.5nm,0.9s
**C09A Chrisman Ranch** 84.03 34 *e*P P 01 06 56.9 +3.5
31nm,0.3s
**TCUT Toone Canyon** 84.05 42 *e*P P 01 06 54.5 +0.5
22nm,0.8s
**ANMO Albuquerque** 84.17 50 *e*P P 01 06 54.2 -0.5
1.9nm,1.0s
**HWUT Hardware Ranch** 84.22 42 *e*P P 01 06 55.0 +0.3
55nm,2.3s
**QIZ Qiongzhong** 84.54 292 P P 01 06 58.1 +1.5
QIZ S S 01 17 27.0 +4.1
QIZ LZ
560nm,5.7s
**CN2 Changchun** 84.72 321 *e*P P 01 06 59.1 +2.2
CN2 PMZ
10.0nm,0.8s
**NEW Newport** 84.92 34 P P 01 06 57.8 -0.1
1.5nm,0.8s,baz=256,slow=8.3,SNR=3.1
**NEW Newport** 84.92 34 P P 01 06 57.8 -0.1
**MCMT McKenzie Canyo** 85.25 39 *e*P P 01 07 00.5 +0.5
1.0nm,0.7s
**S22A 4UR Ranch, Cre** 85.30 47 P P 01 07 01.1 +0.7
baz=86
**S22A 4UR Ranch, Cre** 85.30 47 *e*P P 01 07 00.7 +0.3
45nm,2.0s
**TRF Thorofare Moun** 85.52 10 P P 01 07 00.7 0.0
15nm,0.9s
**429A Davenport Ranc** 85.53 55 P P 01 07 01.2 -0.2
baz=86
**TPAW Teton Pass** 85.64 40 *e*P P 01 07 02.9 +1.0
2.3nm,0.8s
**WHN Wuhan** 85.67 305 *e*P P 01 07 05.8 +3.8
**RND Reindeer** 85.72 11 *e*P P 01 07 01.9 +0.3
12nm,0.8s
**530A J-C Ranch, Com** 85.75 56 P P 01 07 02.9 +0.4
baz=86
**CMIG Matias Romero** 85.77 70 P P 01 07 02.4 -0.3
2.0nm,0.7s,baz=153,slow=2.3,SNR=3.6
**CMIG Matias Romero** 85.77 70 P P 01 07 02.4 -0.3
**BSMT Bassoo Peak** 85.92 35 *e*P P 01 07 03.4 +0.3
1.9nm,0.9s
**128A Castleberry Fa** 85.98 53 P P 01 07 03.2 -0.5
baz=86
**MCK McKinley** 86.01 11 *e*P P 01 07 03.0 +0.1
18nm,0.8s
**832A Faith Ranch, C** 86.01 58 P P 01 07 04.0 +0.2
baz=86
**QLMT Earthquake Lak** 86.09 39 *e*P P 01 07 04.9 +0.9
0.9nm,1.0s
**BW06 Boulder Array** 86.11 42 *e*P P 01 07 04.2 0.0
**Z28A Tucker Farm, M** 86.36 53 P P 01 07 05.7 +0.2
baz=87
**531A Rocksprings** 86.38 56 P P 01 07 05.9 +0.3
baz=87
**BOZ Bozeman (W)** 86.43 38 P P 01 07 06.4 +0.8
baz=87
**BOZ Bozeman (W)** 86.43 38 *e*P P 01 07 06.4 +0.8
5.0nm,0.9s
**034A Hebbronville** 86.53 60 P P 01 07 06.2 -0.1
baz=87
**632A Uvalde** 86.69 57 P P 01 07 07.4 +0.4
baz=87
**WRH Wood River Hil** 86.84 11 *e*P P 01 07 07.1 +0.2
13nm,0.8s
**Z29A Hungry Hill Ra** 86.86 53 P P 01 07 08.1 +0.2
baz=87
**532A Rocksprings** 86.86 56 P P 01 07 08.3 +0.4
baz=87
**CCB Clear Creek Bu** 87.05 11 *e*P P 01 07 07.9 -0.1
8.8nm,0.8s
**633A Saathoff Ranch** 87.15 57 P P 01 07 09.3 0.0
baz=87
**Y29A Porterfield Fa** 87.15 52 P P 01 07 09.8 +0.5
baz=87
**COLA College** 87.25 11 *e*P P 01 07 08.8 -0.1
18nm,0.8s
**MDM Murphy Dome** 87.26 11 *e*P P 01 07 08.8 -0.2
85nm,2.3s
**432A Menard** 87.27 56 P P 01 07 09.8 -0.1
baz=88
**Z30A Sanderson Ranc** 87.30 53 P P 01 07 09.6 -0.4
baz=88
**231A Bronte** 87.32 55 P P 01 07 09.9 -0.3
baz=88
**ILAR Eielson Array** 87.33 11 P P 01 07 09.0 -0.3
2.6nm,0.8s,baz=216,slow=5.7,SNR=20
**ILAR Eielson Array** 87.33 11 P P 01 07 09.0 -0.3
**IL1 Eielson Array** 87.33 11 *e*P P 01 07 09.0 -0.3
**533A Kerrville** 87.52 57 P P 01 07 11.4 +0.3
baz=88
**131A Roby** 87.59 54 P P 01 07 11.6 +0.2
baz=88
**SYO Syowa Base** 87.72 191 *e*P P 01 07 10.0 -1.4
**433A Art** 87.76 56 P P 01 07 12.2 -0.1
baz=88
**232A Coleman** 87.82 55 P P 01 07 12.5 0.0
baz=88
**534A Blanco** 87.94 57 P P 01 07 13.4 +0.2
baz=88
**K22A Casper** 87.96 43 P P 01 07 13.7 +0.6
baz=88
**VNA3 Neumayer Olymp** 87.97 175 P P 01 07 14.1 +1.5
**SNAA Sanae** 88.00 177 P P 01 07 12.2 -0.6
**SNAA Sanae** 88.00 177 *e*P P 01 07 12.4 -0.3
1.3nm,0.8s
**ABTX Abilene, Hawle** 88.14 54 *e*P P 01 07 14.0 0.0
111nm,3.0s
**DAWY Dawson** 88.25 14 *e*P P 01 07 14.4 +0.5
4.8nm,0.9s
**434A Burnet** 88.43 56 P P 01 07 15.5 +0.1
baz=89
**EGAK Eagle** 88.47 13 *e*P P 01 07 16.1 +1.4
64nm,2.3s
**Z32A Haskell** 88.55 54 P P 01 07 16.2 +0.3
baz=89
**VNA1 Neumayer--Stat** 88.66 175 P P 01 07 17.3 +1.5
**BJI Beijing** 88.69 314 P P 01 07 20.6 +4.2
BJI S S 01 18 06.8 +4.5
BJI SS SS 01 24 02.6 +8.1
BJI PMZ
8.0nm,0.9s
BJI LZ
110nm,21.6s
**GYA Guiyang** 90.14 298 P P 01 07 25.0 +1.3
GYA PP PP 01 11 02.8 +5.2
GYA SKS **SKSac** 01 17 54.3 0.0
GYA S S 01 18 17.5 +0.7
GYA SS **SS** 01 24 20.0 +3.6
GYA PMZ
20nm,1.0s
GYA PMZ
120nm,6.2s
GYA LN
480nm,20.6s
GYA LE
390nm,21.0s
GYA LZ
420nm,20.4s
**HHC Hu-ho-hao-te** 92.20 313 *e*P P 01 07 34.6 +1.7
HHC SKS **SKSac** 01 18 02.6 -2.8
HHC S **S** 01 18 34.8 -0.1
HHC sS sS 01 18 45.6 +0.2
HHC PMZ
20nm,1.3s
HHC PMZ
190nm,8.1s
HHC LN
230nm,17.6s
HHC LE
310nm,17.4s
HHC LZ
200nm,17.7s
**JTS JuntasAbangare** 92.32 80 P P 01 07 34.4 +0.5
8.5nm,0.8s,baz=325,slow=7.6,SNR=6.5
**JTS JuntasAbangare** 92.32 80 P P 01 07 34.4 +0.5
**X38A Whitesboro** 92.63 54 P P 01 07 34.5 -0.4
baz=93
**KMI Kunming** 92.94 296 P P 01 07 37.8 +1.0
KMI PMZ
16nm,2.0s
**KSU1 Kansas State U** 93.07 49 P P 01 07 37.1 +0.2
baz=93
**T37A Cheneyville 18** 93.52 52 P P 01 07 39.0 +0.1
baz=94
**CM01 Chiang Mai Arr** 93.89 288 *e*P P 01 07 43.8 +2.8
**CMAR Chiang Mai Arr** 93.92 288 P P 01 07 40.4 -0.8
0.4nm,0.5s,baz=117,slow=3.1,SNR=2.8
**CMAR Chiang Mai Arr** 93.92 288 P P 01 07 40.4 -0.8
**CD2 Chengdu** 94.17 301 *e*P P 01 07 42.8 +0.7
CD2 pP **pP** 01 07 48.5 +0.1
CD2 PP **PP** 01 11 29.5 +0.4
CD2 SKS **SKSac** 01 18 16.8 +0.3
CD2 S **ScS** 01 18 53.5 -0.4
CD2 sS sS 01 19 03.4 +0.3
CD2 PMZ
10.0nm,0.5s
CD2 PMZ
120nm,5.2s
**MDND Maddock** 94.70 41 P P 01 07 44.7 +0.6
baz=95
**A29A Manning Farm,** 95.38 40 P P 01 07 47.4 +0.3
baz=96
**A30A Hoffart Farm,** 95.94 40 P P 01 07 51.0 +1.2
baz=96
**LZH Lanzhou** 95.94 306 *e*P P 01 07 52.3 +2.0
LZH pP 01 07 56.8 +0.2
LZH sP sP 01 07 59.3 +0.5
LZH PMZ
7.0nm,1.0s
LZH PMZ
170nm,4.7s
LZH LN
780nm,18.0s
LZH LE
640nm,15.2s
LZH LZ
350nm,16.9s
**B32A Ashes, Strandq** 96.80 41 P P 01 07 53.0 -0.6
baz=97
**F35A Swanville** 97.07 44 P Pdif 01 07 55.7 +0.6
baz=97
**A33A Warroad** 97.71 41 P Pdif 01 07 57.2 -0.6
baz=98
**F36A Milaca** 97.76 44 P Pdif 01 07 58.0 -0.1
baz=98
**B34A Aery, Baudette** 98.00 41 P Pdif 01 07 58.1 -0.9
baz=98
**C35A Jirik Farms, M** 98.13 42 P Pdif 01 07 59.0 -0.7
baz=98
**WMQ Urumqi** 109.92 310 *e*Pdif **Pdif** 01 08 54.0 +1.7
WMQ PP PP 01 13 32.0 +4.6
WMQ SKS **SKSdf** 01 20 02.0 -3.6
WMQ SS **SS** 01 28 55.0 +3.4
WMQ LN
65nm,22.0s
WMQ LE
71nm,22.0s
WMQ LZ
140nm,22.0s
**ZALV Zalesovo Beam** 112.94 321 PKiKP **PKiKP** 01 12 59.6 0.0
0.5nm,0.4s,baz=242,slow=3.1,SNR=4.3
**ZALV Zalesovo Beam** 112.94 321 PKiKP **PKiKP** 01 12 59.6 0.0
**MKAR Makanchi Array** 114.06 313 PKP PKPdf 01 13 02.3 +0.1
1.1nm,0.7s,baz=71,slow=2.7,SNR=8.4
**MKAR Makanchi Array** 114.06 313 *e*PKiKP **PKiKP** 01 13 02.4 +0.2
**KSH Kashi** 118.15 305 *e*PKP **PKPdf** 01 13 11.0 +0.6
KSH *e*PP PP 01 14 37.8 +12
KSH PKS **PKSdf** 01 16 45.1 -2.0
KSH SKS **SKSdf** 01 20 19.4 -2.3
KSH PPMZ
94nm,4.6s
KSH LN
100nm,4.9s
KSH LE
130nm,5.6s
KSH LZ
140nm,9.5s
**KKAR Karatay Array** 122.33 309 *e*PKPdf **PKPdf** 01 13 18.4 +0.2
**ARCES ARCESS Array B** 129.45 351 PKP **PKPdf** 01 13 31.3 +0.3
2.4nm,0.8s,baz=2.9,slow=1.8,SNR=3.3
**ARCES ARCESS Array B** 129.45 351 PKP **PKPdf** 01 13 31.3 +0.3
**GEYT Alibeck** 132.13 303 PKP **PKPdf** 01 13 36.7 -0.4
1.7nm,0.7s,baz=72,slow=4.7,SNR=3.6
**FINES FINESS Array B** 136.69 346 PKP **PKPdf** 01 13 44.3 -0.5
4.4nm,1.0s,baz=295,slow=17,SNR=2.3
**FINES FINESS Array B** 136.69 346 PKP **PKPdf** 01 13 44.3 -0.5
**KMBO Kilima Mbogo** 142.95 238 PKhKP PKPpre 01 13 54.3
3.2nm,0.8s,baz=162,slow=3.2,SNR=9.5
KMBO PKP **PKPdf** 01 13 56.5 -1.4
3.3nm,0.9s,baz=142,slow=0.9,SNR=10
**KMBO Kilima Mbogo** 142.95 238 *e*PKPdf **PKPdf** 01 13 56.4 -1.6
**DAMY Dhamar** 143.31 267 *e*PKPdf **PKPdf** 01 13 58.5 0.0
**AKASG Malin Array Be** 144.74 335 PKP **PKPdf** 01 13 58.5 -1.1
13nm,0.6s,baz=39,slow=4.3,SNR=52
**AKASG Malin Array Be** 144.74 335 PKP **PKPdf** 01 13 58.5 -1.1
**KIEV Kiev** 144.76 335 *e*PKPdf **PKPdf** 01 13 58.8 -0.8
**MALT Malatya** 147.02 310 *i*P **PKPab** 01 14 07.8 +0.2
**KSP Ksiaz** 148.58 348 *e*PKP **PKPab** 01 14 11.6 -1.6
**CLL Collm** 148.67 352 *i* PKPbc **PKPab** 01 14 10.6 -2.9
comp=Z,12nm,1.2s
CLL *i* PKPab PKiKP 01 14 15.5 +4.1
comp=Z,14nm,0.9s
CLL *i* pPKPbc pPKPbc 01 14 21.3 +4.9
CLL *e* 01 14 48.0
CLL LmV 02 26 00.0
comp=Z,200nm,20.5s
**KOLS Kolonicke sedl** 148.75 340 *e*PKP **PKPab** 01 14 13.2 -0.8
**BURAR Bucovina Array** 148.79 335 *i*P **PKPab** 01 14 12.1 -2.2
**NIE Niedzica** 148.93 342 *e*PKP **PKPab** 01 14 12.3 -2.4
**BRG Berggiesshubel** 148.96 351 *e*PKP **PKPab** 01 14 12.7 -2.0
comp=Z,6.5nm,0.9s
**DPC Dobruska-Polom** 149.04 348 *e*PKP **PKPbc** 01 14 10.2 -0.8
DPC *ep*PKP **PKPab** 01 14 18.5 +3.4
**TLCR** 149.05 328 *i*P **PKPab** 01 14 11.9 -3.4
**TESR Tescani** 149.07 332 *i*P **PKPab** 01 14 12.8 -2.6
**PVCC Panska Ves** 149.19 350 *e*PKP **PKPab** 01 14 14.8 -0.9
**MORC Moravsky Berou** 149.31 346 *i*P **PKPab** 01 14 15.2 -1.1
**TRPA Tarpa** 149.36 338 *i*P **PKPab** 01 14 13.1 -3.3
**CFR Carcaliu** 149.39 329 *i*P **PKPbc** 01 14 12.7 +0.8
**VRI Vrincioaia** 149.53 331 *i*P **PKPbc** 01 14 13.1 +0.8
**PLOR Plostina** 149.58 331 *i*P **PKPab** 01 14 13.6 -3.9
**BRTR Keskin Array B** 149.68 316 PKP **PKPdf** 01 14 07.0 -1.4
comp=Z,0.7nm,0.8s,baz=350,slow=7.9,SNR=2.7
BRTR PKPbc **PKiKP** 01 14 13.4 -0.6
comp=Z,3.2nm,0.9s,baz=126,slow=3.2,SNR=11
**BRTR Keskin Array B** 149.68 316 PKP **PKPdf** 01 14 07.0 -1.4
BRTR PKPbc **PKiKP** 01 14 13.4 -0.6
**PRU Pruhonice** 149.72 349 *e*PKP **PKPab** 01 14 14.2 -3.6
**GOPC GO Pecny, Ondr** 149.75 349 *e*PKP **PKPab** 01 14 14.1 -3.9
GOPC *ep*PKP PKiKP 01 14 25.1 +11
**TIRR Tirgusor** 149.77 328 *i*P **PKPab** 01 14 14.6 -3.6
**NKC Novy Kostel** 149.79 352 *e*PKPAB **PKPab** 01 14 15.9 -2.3
**TLB Topalu** 149.87 328 *i*P **PKPab** 01 14 14.8 -3.8
**VRAC Vranov** 149.97 347 *i*P **PKPbc** 01 14 13.3 0.0
**DOPR Dopca** 150.04 333 *i*P **PKPab** 01 14 15.7 -3.7
**CJR Cluj-Napoca** 150.17 336 *i*P **PKPab** 01 14 15.6 -4.3
**MLR Muntele Rosu** 150.17 332 *i*P **PKPab** 01 14 16.0 -4.1
**VYHS Vyhne** 150.18 343 *e*PKP **PKPbc** 01 14 14.0 +0.2
VYHS *e* 01 14 15.2
**TREC Trest** 150.21 348 *e*PKP **PKPab** 01 14 15.4 -4.5
**MSAB Monastry St. A** 150.33 328 *i*P **PKPbc** 01 14 15.8 +1.5
**VOIR** 150.61 333 *i*P **PKPbc** 01 14 16.0 +1.0
**SULR** 150.66 330 *i*P **PKPab** 01 14 17.2 -4.7
**KHC Kasperske Hory** 150.71 350 *e*PKPDF **PKPdf** 01 14 09.0 -0.6
KHC PKP **PKiKP** 01 14 14.1 -1.7
**KHC Kasperske Hory** 150.71 350 *e*PKPbc **PKPbc** 01 14 16.5 +1.4
**ARR Arges** 150.84 333 *i*P **PKPbc** 01 14 17.6 +2.0
**GERES GERESS Array B** 150.97 350 PKP **PKPdf** 01 14 10.3 +0.3
comp=Z,0.8nm,0.9s,baz=339,slow=4.4,SNR=4.1
GERES PKPbc **PKiKP** 01 14 16.3 -0.1
comp=Z,3.0nm,0.9s,baz=340,slow=3.5,SNR=6.7
**GERES GERESS Array B** 150.97 350 PKP **PKPdf** 01 14 10.3 +0.3
GERES PKPbc **PKiKP** 01 14 16.3 -0.1
**LOT Lotru** 151.14 334 *i*P **PKPbc** 01 14 17.3 +1.0
**SIRR Siria** 151.26 338 *i*P **PKPbc** 01 14 17.2 +0.7
**CONA Conrad Observa** 151.43 347 *i*PKiKP **PKiKP** 01 14 17.5 +0.2
comp=Z,8.1nm,1.0s
**GZR Gura Zlata** 151.58 335 *i*P **PKPbc** 01 14 17.9 +0.6
**BZS Buzias** 151.84 337 *i*P **PKPbc** 01 14 18.6 +0.8
**BFO Black Forest** 152.04 357 *e*PKPbc **PKPbc** 01 14 18.5 +0.3
**CSS Prodhromos** 152.13 307 *e*PKPbc **PKPbc** 01 14 19.8 +1.0
**FETA Feichten** 153.16 353 *i*PKiKP **PKiKP** 01 14 23.1 +2.0
comp=Z,5.3nm,1.0s
**ABTA Abfaltersbach** 153.19 351 *i*PKiKP **PKiKP** 01 14 21.1 +0.1
comp=Z,8.6nm,1.3s
**DAVOX Davos/Dischmat** 153.48 355 PKPbc **PKPbc** 01 14 22.3 +0.6
comp=Z,3.3nm,0.8s,baz=328,slow=15,SNR=3.2
**DAVOX Davos/Dischmat** 153.48 355 PKPbc **PKPbc** 01 14 22.3 +0.6
**DIVS Divibare** 153.73 337 *i*P **PKPbc** 01 14 22.0 -0.1
**BOJS Bojanci** 153.86 346 *e*PKPdf **PKPdf** 01 14 15.4 +1.1
BOJS *i* PKPbc **PKiKP** 01 14 23.7 +1.4
**BNI Bardonecchia** 155.37 359 *e*PKPab **PKPab** 01 14 42.3 +0.5
**ESDC Sonseca Array** 158.81 22 PKP **PKPdf** 01 14 21.7 +0.6
comp=Z,0.6nm,0.7s,baz=6.9,slow=2.8,SNR=5.4
ESDC PKPab **PKPab** 01 14 55.1 -1.6
comp=Z,0.4nm,0.7s,baz=306,slow=4.4,SNR=2.7
**ESDC Sonseca Array** 158.81 22 PKP **PKPdf** 01 14 21.7 +0.6
ESDC PKPab **PKPab** 01 14 55.1 -1.6
**MDT Midelt** 164.20 36 PKPab **PKPab** 01 15 21.5 +0.9
comp=Z,0.7nm,0.8s,baz=315,slow=5.8,SNR=3.9
**MDT Midelt** 164.20 36 PKPab **PKPab** 01 15 21.5 +0.9
**TORD Torodi Ar. Bea** 171.56 147 PKP **PKPdf** 01 14 31.2 -1.2
comp=Z,2.1nm,0.9s,baz=327,slow=1.2,SNR=11
TORD PKPab **PKPab** 01 15 53.2 -0.2
comp=Z,0.9nm,0.9s,baz=211,slow=3.6,SNR=4.2
**TORD Torodi Ar. Bea** 171.56 147 PKP **PKPdf** 01 14 31.2 -1.2
TORD PKPab **PKPab** 01 15 53.2 -0.2

**IDC 23 01:12:22.1±9.1, 33.80S×178.87W, h0km, mb3.8/2, mb1 4.0/2, mb1mx3.7/14, mbtmp3.8/2, Error ellipse: s-maj=448.8km s-min=62.0km az=163.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **42.31** | **271** | P | P | 01 20 18.1 | +0.2 |
| | 0.6nm,0.6s,baz=129,slow=7.0,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.61** | **276** | P | P | 01 20 27.9 | -0.5 |
| | 0.4nm,0.3s,baz=117,slow=7.8,SNR=12 | | | | | | |
| **FINES** | **FINESS Array B** | **148.04** | **337** | PKPbc | PKPbc | 01 32 08.1 | -0.7 |
| | 2.8nm,0.9s,baz=64,slow=3.2,SNR=3.6 | | | | | | |

**IDC 23 01:17:06.7±2.6, 60.68S×26.85W, h0km, mb4.2/4, mb1 4.2/4, mb1mx3.9/13, mbtmp4.2/4, Error ellipse: s-maj=78.2km s-min=36.9km az=9.0, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPUP** | **Villa Florida** | **40.12** | **315** | P | P | 01 24 42.9 | -1.0 |
| | 1.1nm,0.5s,baz=116,slow=11,SNR=6.3 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **52.41** | **15** | T | T | 02 23 24.6 | |
| | baz=187,slow=75,SNR=3.5 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **52.42** | **15** | T | T | 02 23 16.1 | |
| | baz=187,slow=75,SNR=3.9 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **52.43** | **15** | T | T | 02 23 22.0 | |
| | baz=187,slow=75,SNR=4.8 | | | | | | |
| **LPAZ** | **La Paz** | **53.29** | **308** | P | P | 01 26 28.9 | +1.0 |
| | 0.6nm,0.5s,baz=177,slow=4.5,SNR=2.8 | | | | | | |
| **DBIC** | **Dimbokro** | **69.33** | **23** | P | P | 01 28 15.1 | -0.6 |
| | 3.6nm,0.9s,baz=177,slow=9.5,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.03** | **29** | P | P | 01 29 01.9 | +0.8 |
| | 3.0nm,0.5s,baz=198,slow=6.2,SNR=101 | | | | | | |
| **SONM** | **Songino Array** | **150.51** | **94** | PKPbc | PKPbc | 01 36 58.4 | -0.8 |
| | 0.6nm,0.7s,baz=236,slow=1.6,SNR=2.0 | | | | | | |

*ISK **23** 01:24:52.9, 39.15N×29.12E, h3km, MD2.3*
*ISCJB **23** 01:24:54.6±0.7, 39.17N±0.04×29.12E±0.06, h9km, Error ellipse: s-maj=7.6km s-min=4.8km az=40.2*
*CSEM **23** 01:24:54.6±0.4, 39.18N×29.11E, h10km, MD2.3, Error ellipse: s-maj=11.2km s-min=7.8km az=121.0*
*DDA **23** 01:24:56.7, 39.09N×29.08E, h7km, Md2.6*

**ISC 23 01:24:54.1±0.9, 39.17N±0.04×29.09E±0.05, h9km, n10, σ0°46/18, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DEMI** | **Demirci** | **0.32** | **246** | *i* P | **Pb** | **01 25 02.5** | **+0.5** |
| DEMI | | | | *i* S | **Sb** | **01 25 07.2** | **-0.1** |
| **DEMI** | **Demirci** | **0.32** | **246** | P | **Pb** | **01 25 02.5** | **+0.5** |
| DEMI | | | | S | **Sb** | **01 25 07.2** | **-0.1** |
| **TVSB** | **Tavsanli** | **0.40** | **46** | *e*PG | **Pg** | **01 25 01.6** | **-0.5** |
| TVSB | | | | *e*SG | **Sg** | **01 25 07.9** | **+0.5** |
| **TVSB** | **Tavsanli** | **0.40** | **46** | *e*Pg | **Pg** | **01 25 01.6** | **-0.5** |
| TVSB | | | | *e*Sg | **Sg** | **01 25 07.9** | **+0.5** |
| **KULA** | **Kula-Manisa** | **0.74** | **207** | *e*PG | **Pg** | **01 25 07.7** | **-0.7** |
| KULA | | | | *e*SG | **Sg** | **01 25 18.6** | **+0.6** |
| **KULA** | **Kula-Manisa** | **0.74** | **207** | *e*Pg | **Pg** | **01 25 07.7** | **-0.7** |
| KULA | | | | *e*Sg | **Sg** | **01 25 18.6** | **+0.6** |
| **KHAL** | **Karahalli** | **0.86** | **158** | *i* P | **Pn** | **01 25 12.4** | **-0.2** |
| KHAL | | | | *i* S | **Sb** | **01 25 23.0** | **0.0** |
| **KHAL** | **Karahalli** | **0.86** | **158** | P | **Pn** | **01 25 12.4** | **-0.2** |
| KHAL | | | | S | **Sb** | **01 25 23.0** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **1.39** | **309** | *e*PN | **Pb** | **01 25 20.4** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.39** | **309** | *e*Pn | **Pb** | **01 25 20.4** | **+0.1** |

**MAN 23 01:27:49, 13.25N×121.69E, h24km, mb4.1, ML2.9, MS2.6, 1C, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OTRP** | **Odiongan** | **0.94** | **160** | *e*P | Pb | 01 28 06.5 | -0.1 |

OTRP eS Sn 01 28 20.2 +0.8
**SJMP San Jose 0.96 215** eP Pb 01 28 06.7 -0.2
SJMP eS Sn 01 28 23.1 +3.2
**AUQP San Andres 0.96 85** eP Pb 01 28 09.3 +2.3
**GQP Guinayangan 0.98 48⇑** eP Pn 01 28 06.8 -0.6
GQP eS Sn 01 28 23.7 +3.2
**BUSP Coron 1.91 230** eP Pn 01 28 21.1 +1.0

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*ISCJB **23** 01:38:14.0±0.3,29.°55S±0.°02×71.°05W±0.°03,h50km±3km, mb5.2/181,MS5.0/25,Error ellipse: s-maj=5.1km s-min=3.2km az=164.8*

*GUC **23** 01:38:14.0±0.4,29.°59S×71.°11W,h44km±1km,ML5.4*

*GCMT **23** 01:38:14.0±0.2,29.°58S×71.°39W,h53km,MW6.5/92, Moment Tensor Solution. s92,c164; s85,c148; Duration: 1ś5 Moment tensor: Scale 10^17^Nm; Mrr2.30±.04; Mθθ0.52±.04; Mφφ-2.82±.05; Mrθ-0.44±.04; Mrφ-0.91±.04; Mθφ-1.10±.06; Best double couple: Mo2.92700×10^17^ NP1:φs199.00000°,δ57.00000°, λ95.00000°. NP2:φs9.00000°,δ33.00000°,λ82.00000°. Principal axes: T 2.5580, Plg77.0000°, Azm126.0000°; N 0.7400, Plg5.0000°, Azm16.0000°; P -3.2960, Plg12.0000°, Azm285.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*MOS **23** 01:38:14.6±1.2,29.°47S×71.°05W,h53km,mb5.4/39, MS5.1/4 Error ellipse: s-maj=13.5km s-min=6.6km az=103.8*

*NEIC **23** 01:38:14.0,29.°59S×71.°11W,h44km,mb5.3/143,After GUC.*

*NEIC Felt [V] at La Herradura, La Higuera and La Serena; [IV] at Coquimbo, Monte Patria, Paihuano, Punitaqui and Rio Hurtado; [III] at Combarbala, Copiapo, Freirina, Huasco, Puchuncaví, Tierra Amarilla and Vicuna; [II] at Andacollo, Caldera, Ovalle, Rancagua, San Antonio, Santiago, Valparaiso, Villa Alemana and Vina del Mar. Also felt at San Felipe and Vallenar.*

*BJI **23** 01:38:16.0,29.°60S×71.°10W,h34km,mB5.4/16,Ms5.5/13, Ms7 5.4/13*

*IDC **23** 01:38:16.4±0.5,29.°51S×71.°21W,h64km±4km,mb4.7/22, mb1 4.7/28,mb1mx4.7/36,mbtmp4.9/28,MS4.8/23, Ms1 4.8/23,ms1mx4.8/25,Error ellipse: s-maj=13.3km s-min=9.7km az=77.0*

**ISC 23 01:38:15.6±0.3,29.°57S±0.°03×71.°17W±0.°04,h55km±2km, h54km:pP-P,n677,σ1ś22/740,mb5.2/182,MS5.1/25, 4C-10D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LSCH** | **La Serena** | **0.35** | **191** | *eP* | | **Pn** | **01 38 23.4** | **-2.2** |
| LSCH | | | | *eS* | | **Sn** | **01 38 30.1** | **-2.7** |
| **TLL** | **Tololo Astrono** | **0.68** | **152** | *eP* | | **Pn** | **01 38 28.0** | **-1.5** |
| TLL | | | | *eS* | | **Sn** | **01 38 38.6** | **-1.1** |
| TLL | | | | AML | | AML | 01 38 40.0 | |
| | comp=E,667μm,0.4s | | | | | | | |
| **LCO** | **Las Campanas** | **0.69** | **37** | *eP* | | **Pn** | **01 38 28.7** | **-1.0** |
| LCO | | | | *eS* | | **Sn** | **01 38 39.5** | **-0.4** |
| LCO | | | | AML | | AML | 01 38 43.7 | |
| | comp=N,102μm,0.2s | | | | | | | |
| **LCO** | **Las Campanas** | **0.69** | **37** | *e*Pn | | **Pn** | **01 38 29.3** | **-0.4** |
| LCO | | | | *e*Sn | | **Sn** | **01 38 39.9** | **0.0** |
| **VACH** | **Vallenar** | **1.05** | **20** | *eP* | | **Pn** | **01 38 34.0** | **-0.2** |
| VACH | | | | *eS* | | **Sn** | **01 38 48.9** | **+1.0** |
| VACH | | | | AML | | AML | 01 38 54.0 | |
| | comp=E,224μm,0.0s | | | | | | | |
| **CFAA** | **Coronel Fontan** | **3.25** | **130** | P | | **Pn** | **01 39 05.8** | **+1.7** |
| | comp=E,38nm,0.3s,baz=312,slow=12,SNR=649 | | | | | | | |
| CFAA | | | | S | | **Sn** | **01 39 46.7** | **+5.2** |
| | comp=E,72nm,0.3s,baz=306,slow=4.7,SNR=3.9 | | | | | | | |
| **ROCH** | **El Roble** | **3.40** | **178** | *eP* | | **Pn** | **01 39 05.7** | **-0.7** |
| ROCH | | | | *eS* | | **Sn** | **01 39 46.0** | **+0.4** |
| **ARCO** | **CERRO ARCO** | **3.79** | **150** | IAML | | | 02 10 25.6 | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **SAN** | **Santiago** | **3.90** | **174** | *eP* | | **Pn** | **01 39 12.9** | **-0.1** |
| SAN | | | | *eS* | | **Sn** | **01 39 57.9** | **+0.3** |
| **RCDM** | **Rinconada Maip** | **3.92** | **176** | *eP* | | **Pn** | **01 39 13.2** | **-0.1** |
| RCDM | | | | *eS* | | **Sn** | **01 39 58.6** | **+0.4** |
| **ANTU** | **Antumapu** | **4.02** | **174** | *eP* | | **Pn** | **01 39 14.8** | **+0.1** |
| ANTU | | | | *eS* | | **Sn** | **01 40 00.8** | **+0.3** |
| **LVC** | **Limon Verde** | **7.21** | **17** | P | | **Pn** | **01 39 57.0** | **-1.7** |
| | comp=Z,168nm,0.3s,baz=150,slow=9.5,SNR=28 | | | | | | | |
| LVC | | | | S | | **Sn** | **01 41 18.1** | **-1.3** |
| | comp=Z,1μm,0.3s,baz=200,slow=19,SNR=3.9 | | | | | | | |
| LVC | | | | LR | | LR | 01 42 46.1 | |
| | comp=Z,49μm,21.4s,baz=211,slow=38 | | | | | | | |
| **LVC** | **Limon Verde** | **7.21** | **17** | *e*Pn | | **Pn** | **01 39 57.1** | **-1.6** |
| LVC | | | | S | | **Sn** | **01 41 18.1** | **-1.3** |
| LVC | | | | *e*Lg | | Lg | 01 41 45.8 | |
| **PLCA** | **Paso Flores** | **11.15** | **178** | *eP* | | **Pn** | **01 40 50.4** | **-2.0** |
| **PLCA** | **Paso Flores** | **11.15** | **178** | *e*Pn | | **Pn** | **01 40 50.4** | **-2.0** |
| **TRQA** | **Tornquist** | **11.40** | **140** | *e*Pn | | **Pn** | **01 40 54.6** | **-1.1** |
| TRQA | | | | *e*Sn | | **Sn** | **01 43 00.0** | **-1.5** |
| **LPA** | **La Plata** | **12.41** | **119** | *eP* | | **Pn** | **01 41 10.0** | **+0.6** |
| LPA | | | | sP | | | 01 41 23.0 | |
| LPA | | | | S | | **Sn** | **01 43 24.0** | **-2.0** |
| **CPUP** | **Villa Florida** | **12.65** | **79** | P | | **Pn** | **01 41 12.3** | **-0.5** |
| | comp=Z,1.0nm,0.3s,baz=246,slow=13,SNR=22 | | | | | | | |
| CPUP | | | | S | | **Sn** | **01 43 30.6** | **-1.5** |
| | comp=Z,4.6nm,0.3s,baz=202,slow=18,SNR=1.7 | | | | | | | |
| CPUP | | | | LR | | LR | 01 46 42.1 | |
| | comp=Z,13μm,18.2s,baz=258,slow=40 | | | | | | | |
| **CPUP** | **Villa Florida** | **12.65** | **79** | *eP* | | **Pn** | **01 41 10.5** | **-2.3** |
| CPUP | | | | S | | **Sn** | **01 43 30.6** | **-1.5** |
| **CPUP** | **Villa Florida** | **12.65** | **79** | *e*Pn | | **Pn** | **01 41 10.5** | **-2.3** |
| CPUP | | | | S | | **Sn** | **01 43 30.6** | **-1.5** |
| **LPAZ** | **La Paz** | **13.51** | **13** | P | | **Pn** | **01 41 23.6** | **-1.5** |
| | comp=Z,0.8nm,0.3s,baz=186,slow=7.5,SNR=35 | | | | | | | |
| LPAZ | | | | LR | | LR | 01 46 57.7 | |
| | comp=Z,7μm,21.4s,baz=179,slow=39 | | | | | | | |
| **SIV** | **San Ignacio** | **16.39** | **37** | P | | **Pn** | **01 42 00.3** | **-1.8** |
| | comp=Z,5.5nm,0.3s,baz=224,slow=8.9,SNR=63 | | | | | | | |
| SIV | | | | LR | | LR | 01 47 35.3 | |
| | comp=Z,446nm,21.4s,baz=224,slow=34 | | | | | | | |
| **NNA** | **Nana** | **18.27** | **342** | P | | **P** | **01 42 23.6** | **-1.3** |
| | comp=Z,0.9nm,0.3s,baz=235,slow=12,SNR=1.8 | | | | | | | |
| NNA | | | | LR | | LR | 01 48 06.5 | |
| | comp=Z,3μm,21.1s,baz=170,slow=32 | | | | | | | |
| **NNA** | **Nana** | **18.27** | **342** | *eP* | | **Pn** | **01 42 27.7** | **+2.4** |
| NNA | | | | pmax | | pmax | | |
| | comp=Z,134nm,1.4s | | | | | | | |
| **NNA** | **Nana** | **18.27** | **342** | *eP* | | **Pn** | **01 42 27.7** | **+2.4** |
| | comp=Z,134nm,1.4s | | | | | | | |
| **SAML** | **Samuel** | **21.84** | **22** | *eP* | | **P** | **01 43 03.1** | **-0.3** |
| | comp=Z,54nm,0.8s | | | | | | | |
| **ATAH** | **Atahualpa** | **23.33** | **342** | P | | **P** | **01 43 18.2** | **-1.3** |
| | comp=Z,3.4nm,0.6s,baz=150,slow=20,SNR=2.2 | | | | | | | |
| ATAH | | | | LR | | LR | 01 50 54.0 | |
| | comp=Z,3μm,19.9s,baz=225,slow=33 | | | | | | | |
| **EFI** | **East Falkland** | **24.15** | **160** | *eP* | | **P** | **01 43 27.0** | **+0.7** |
| EFI | | | | pmax | | pmax | | |
| | comp=Z,306nm,1.1s | | | | | | | |
| **EFI** | **East Falkland** | **24.15** | **160** | P | | **P** | **01 43 26.9** | **+0.7** |
| | comp=Z,522nm,0.6s,SNR=8.8 | | | | | | | |
| **EFI** | **East Falkland** | **24.15** | **160** | *eP* | | **P** | **01 43 27.0** | **+0.7** |
| | comp=Z,306nm,1.1s | | | | | | | |
| **USHA** | **Ushuaia** | **25.33** | **176** | P | | **P** | **01 43 36.4** | **-0.5** |
| | comp=Z,62nm,0.6s,baz=343,slow=7.2,SNR=51 | | | | | | | |
| USHA | | | | pP | | **pP** | **01 43 54.2** | **+3.6** |
| | comp=Z,162nm,0.9s,baz=352,slow=5.9,SNR=11 | | | | | | | |
| USHA | | | | LR | | LR | 01 54 03.4 | |
| | comp=Z,5μm,18.1s,baz=337,slow=37 | | | | | | | |
| **BDFB** | **Brasilia** | **25.41** | **62** | P | | **P** | **01 43 38.0** | **-0.2** |
| | comp=Z,60nm,0.7s,baz=222,slow=8.4,SNR=73 | | | | | | | |
| BDFB | | | | pP | | **pP** | **01 43 55.1** | **+3.3** |
| | comp=Z,222nm,1.1s,baz=238,slow=7.3,SNR=20 | | | | | | | |
| BDFB | | | | LR | | LR | 01 55 38.5 | |
| | comp=Z,468nm,19.6s,baz=230,slow=41 | | | | | | | |
| **BDFB** | **Brasilia** | **25.41** | **62** | *eP* | | **P** | **01 43 33.7** | **-4.5** |
| BDFB | | | | *PP | | **pP** | **01 43 55.2** | **+3.3** |
| BDFB | | | | pmax | | pmax | | |
| | comp=Z,461nm,1.1s | | | | | | | |
| **BDFB** | **Brasilia** | **25.41** | **62** | *eP* | | **P** | **01 43 33.7** | **-4.5** |
| | comp=Z,461nm,1.1s | | | | | | | |
| BDFB | | | | pP | | **pP** | **01 43 55.1** | **+3.3** |
| **OTAV** | **Otavalo** | **30.44** | **346** | *eP* | | **P** | **01 44 25.1** | **+1.6** |
| | comp=Z,95nm,1.8s | | | | | | | |
| OTAV | | | | *e*PcP | | **PcP** | **01 47 23.6** | **+1.4** |
| **PTGA** | **Pitinga** | **30.60** | **22** | P | | **P** | **01 44 23.3** | **-1.1** |
| | comp=Z,29nm,1.0s,baz=208,slow=8.4,SNR=33 | | | | | | | |
| **PTGA** | **Pitinga** | **30.60** | **22** | *eP* | | **P** | **01 44 24.1** | **-0.4** |
| | comp=Z,29nm,1.0s | | | | | | | |
| **RPN** | **Rapa Nui** | **33.58** | **265** | LR | | LR | 01 54 46.7 | |
| | comp=Z,2μm,20.9s,baz=113,slow=30 | | | | | | | |
| **ROSC** | **El Rosal** | **34.36** | **354** | P | | **P** | **01 44 56.3** | **-1.5** |
| | comp=Z,2.5nm,0.3s,baz=98,slow=19,SNR=2.3 | | | | | | | |
| ROSC | | | | LR | | LR | 02 00 28.2 | |
| | comp=Z,1μm,18.8s,baz=193,slow=39 | | | | | | | |
| **ROSC** | **El Rosal** | **34.36** | **354** | *eP* | | P | 01 45 01.4 | +3.7 |
| **PMSA** | **Palmer Station** | **35.51** | **175** | *eP* | | **P** | **01 45 07.9** | **+1.1** |
| | comp=Z,119nm,1.2s | | | | | | | |
| **SDV** | **Santo Domingo** | **38.23** | **1** | *eP* | | **P** | **01 45 29.6** | **-1.0** |
| | comp=Z,23nm,1.0s | | | | | | | |
| **BCIP** | **Isla Barro Col** | **39.40** | **346** | *eP* | | **P** | **01 45 42.1** | **+1.9** |
| | comp=Z,76nm,1.2s | | | | | | | |
| **RCBR** | **Riachuelo** | **40.78** | **62** | P | | **P** | **01 45 51.6** | **-0.2** |
| | comp=Z,25nm,1.0s,baz=217,slow=13 | | | | | | | |
| **RCBR** | **Riachuelo** | **40.78** | **62** | *eP* | | **P** | **01 45 52.0** | **+0.3** |
| | comp=Z,151nm,1.5s | | | | | | | |
| **JTS** | **JuntasAbangare** | **41.79** | **339** | *eP* | | **P** | **01 46 01.9** | **+2.0** |
| JTS | | | | pmax | | pmax | | |
| | comp=Z,154nm,2.0s | | | | | | | |
| **JTS** | **JuntasAbangare** | **41.79** | **339** | *eP* | | **P** | **01 46 01.9** | **+2.0** |
| | comp=Z,154nm,2.0s | | | | | | | |
| **FDF** | **Fort de France** | **45.09** | **14** | *eP* | | **P** | **01 46 25.4** | **-1.1** |
| FDF | | | | pmax | | pmax | | |
| | comp=Z,142nm,1.3s | | | | | | | |
| **FDF** | **Fort de France** | **45.09** | **14** | *eP* | | **P** | **01 46 25.4** | **-1.1** |
| | comp=Z,142nm,1.3s | | | | | | | |
| **ICMP** | **Isla Caja de M** | **47.39** | **6** | *eP* | | P | 01 46 40.6 | -3.8 |
| **CRPR** | **Cabo Rojo, PR** | **47.46** | **5** | *eP* | | **P** | **01 46 43.6** | **-1.3** |
| | comp=Z,82nm,0.9s | | | | | | | |
| **OBIP** | **Obispado Ponce** | **47.53** | **6** | *eP* | | **P** | **01 46 45.0** | **-0.5** |
| | comp=Z,91nm,0.9s | | | | | | | |
| **CELP** | **Cerrillos** | **47.57** | **6** | *eP* | | **P** | **01 46 45.5** | **-0.4** |
| **LSP** | **Las Mesas** | **47.62** | **5** | *eP* | | **P** | **01 46 46.2** | **0.0** |
| **SJG** | **San Juan** | **47.65** | **6** | P | | **P** | **01 46 45.2** | **-1.2** |
| | comp=Z,29nm,0.9s,baz=194,slow=2.6,SNR=11 | | | | | | | |
| **SJG** | **San Juan** | **47.65** | **6** | *eP* | | **P** | **01 46 45.3** | **-1.1** |
| SJG | | | | pmax | | pmax | | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **SJG** | **San Juan** | **47.65** | **6** | *eP* | | **P** | **01 46 45.3** | **-1.1** |
| | comp=Z,28nm,0.9s | | | | | | | |
| **LRS** | **Lares** | **47.76** | **6** | *eP* | | **P** | **01 46 46.8** | **-0.5** |
| **AOPR** | **Arecibo Observ** | **47.82** | **6** | *eP* | | **P** | **01 46 49.1** | **+1.3** |
| | comp=Z,42nm,1.2s | | | | | | | |
| **SDDR** | **Presa de Saban** | **48.26** | **360** | *eP* | | **P** | **01 46 53.1** | **+1.9** |
| | comp=Z,20nm,0.9s | | | | | | | |
| **GTBY** | **Guantanamo Bay** | **49.35** | **355** | *eP* | | **P** | **01 46 59.5** | **0.0** |
| | comp=Z,23nm,0.8s | | | | | | | |
| **CMIG** | **Matias Romero** | **51.72** | **331** | P | | **P** | **01 47 15.9** | **-1.5** |
| | comp=Z,8.9nm,0.9s,baz=110,slow=3.8,SNR=12 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **53.20** | **159** | P | | **P** | **01 47 27.5** | **-0.4** |
| **VNA1** | **Neumayer--Stat** | **53.48** | **158** | P | | **P** | **01 47 30.3** | **+0.5** |
| **VNA2** | **Neumayer--Watz** | **53.83** | **159** | P | | **P** | **01 47 32.8** | **+0.4** |
| | baz=284,slow=8.4 | | | | | | | |
| **SNAA** | **Sanae** | **55.43** | **159** | P | | **P** | **01 47 43.6** | **-0.5** |
| **SNAA** | **Sanae** | **55.43** | **159** | *eP* | | **P** | **01 47 43.4** | **-0.6** |
| SNAA | | | | pmax | | pmax | | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **SNAA** | **Sanae** | **55.43** | **159** | *eP* | | **P** | **01 47 43.4** | **-0.6** |
| | comp=Z,35nm,0.8s | | | | | | | |
| **RKT** | **Rikitea** | **56.92** | **260** | *eS* | | **S** | **01 55 47.8** | **+2.3** |
| | comp=Z,854nm,35.2s | | | | | | | |
| RKT | | | | *e*LQ | | LQ | 02 02 11.5 | |
| | comp=Z,1μm,36.5s | | | | | | | |
| RKT | | | | *e*LR | | LR | 02 04 39.0 | |
| | comp=Z,2μm,28.2s,baz=116 | | | | | | | |
| **RKT** | **Rikitea** | **56.92** | **260** | *eT* | | T | 02 49 03.9 | |
| | comp=Z,16nm,0.2s | | | | | | | |
| **NVL** | **N'lazarevskaya** | **60.11** | **158⇓** | *i*P | | P | 01 48 07.5 | -9.3 |
| NVL | | | | *e*PPP | | PPP | 01 51 59.8 | |
| NVL | | | | pmax | | pmax | | |
| | comp=Z,44nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.66** | **180** | *eP* | | **P** | **01 48 20.7** | **-0.1** |
| | comp=Z,29nm,0.9s | | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **61.48** | **316** | T | | T | 02 55 36.2 | |
| | SNR=10 | | | | | | | |
| **NHSC** | **New Hope** | **62.91** | **352** | *eP* | | **P** | **01 48 36.8** | **+0.7** |
| | comp=Z,62nm,1.0s | | | | | | | |
| **834A** | **Tilden** | **63.06** | **333** | P | | **P** | **01 48 38.4** | **+1.3** |
| | baz=63,SNR=7.0 | | | | | | | |
| **736A** | **Circle Diamond** | **63.23** | **335** | P | | **P** | **01 48 39.2** | **+0.9** |
| | baz=64,SNR=6.8 | | | | | | | |
| **833A** | **Chaparral WMA,** | **63.57** | **332** | P | | **P** | **01 48 41.6** | **+1.1** |
| | baz=64,SNR=15 | | | | | | | |
| **HKT** | **Hockley** | **63.69** | **336** | *eP* | | **P** | **01 48 42.5** | **+1.4** |
| **HKT** | **Hockley** | **63.69** | **336** | *eP* | | **P** | **01 48 42.5** | **+1.4** |
| **636A** | **Smothers Creek** | **63.70** | **335** | P | | **P** | **01 48 42.6** | **+1.3** |
| | baz=64,SNR=9.1 | | | | | | | |
| **734A** | **La Parita Cree** | **63.70** | **333** | P | | **P** | **01 48 42.4** | **+1.0** |
| | baz=64,SNR=7.0 | | | | | | | |
| **GOGA** | **Godfrey** | **63.71** | **349** | *eP* | | **P** | **01 48 41.0** | **-0.3** |
| **GOGA** | **Godfrey** | **63.71** | **349** | *eP* | | **P** | **01 48 41.0** | **-0.3** |
| **832A** | **Faith Ranch, C** | **63.78** | **332** | P | | **P** | **01 48 43.0** | **+1.1** |
| | baz=64,SNR=24 | | | | | | | |
| **LRAL** | **Lakeview Retre** | **64.04** | **345** | *eP* | | **P** | **01 48 43.3** | **-0.2** |
| LRAL | | | | *ep*P | | **pP** | **01 48 57.7** | **-0.9** |
| **732A** | **Laxson Ranch,** | **64.17** | **332** | P | | **P** | **01 48 45.6** | **+1.1** |
| | baz=64,SNR=30 | | | | | | | |
| **633A** | **Saathoff Ranch** | **64.49** | **333** | P | | **P** | **01 48 47.7** | **+1.1** |
| | baz=65,SNR=29 | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **64.75** | **321** | *ep*P | | pP | 01 49 05.5 | +1.9 |
| **CNNC** | **Cliffs of the** | **64.77** | **354** | *eP* | | **P** | **01 48 49.0** | **+0.8** |
| | comp=Z,35nm,1.0s | | | | | | | |
| **632A** | **Uvalde** | **64.78** | **333** | P | | **P** | **01 48 49.5** | **+1.0** |
| | baz=65,SNR=24 | | | | | | | |
| **533A** | **Kerrville** | **64.98** | **333** | P | | **P** | **01 48 50.8** | **+1.0** |
| | baz=65,SNR=12 | | | | | | | |
| **631A** | **Perdido Creek** | **65.02** | **332** | P | | **P** | **01 48 51.3** | **+1.3** |
| | baz=65,SNR=5.9 | | | | | | | |
| **KMSC** | **Kings Mountain** | **65.07** | **351** | *eP* | | **P** | **01 48 50.0** | **-0.2** |
| | comp=Z,14nm,0.9s | | | | | | | |
| **434A** | **Burnet** | **65.35** | **334** | P | | **P** | **01 48 53.1** | **+0.9** |
| | baz=66,SNR=14 | | | | | | | |
| **532A** | **Rocksprings** | **65.38** | **333** | P | | **P** | **01 48 53.3** | **+0.9** |
| | baz=66,SNR=32 | | | | | | | |
| **335A** | **Moody** | **65.46** | **335** | P | | **P** | **01 48 53.4** | **+0.6** |
| | baz=66,SNR=6.2 | | | | | | | |
| **433A** | **Art** | **65.61** | **334** | P | | **P** | **01 48 54.5** | **+0.7** |
| | baz=66,SNR=38 | | | | | | | |
| **JCT** | **Junction City** | **65.64** | **333** | *eP* | | **P** | **01 48 54.8** | **+0.7** |
| JCT | | | | pmax | | pmax | | |
| | comp=Z,90nm,1.4s | | | | | | | |
| **JCT** | **Junction City** | **65.64** | **333** | P | | **P** | **01 48 55.1** | **+1.0** |
| | baz=66,SNR=11 | | | | | | | |
| **JCT** | **Junction City** | **65.64** | **333** | *eP* | | **P** | **01 48 54.8** | **+0.7** |
| | comp=Z,90nm,1.4s | | | | | | | |
| **531A** | **Rocksprings** | **65.67** | **332** | P | | **P** | **01 48 55.4** | **+1.2** |
| | baz=66,SNR=12 | | | | | | | |
| **334A** | **Lometa** | **65.81** | **335** | P | | **P** | **01 48 56.0** | **+0.9** |
| | baz=66,SNR=36 | | | | | | | |
| **SWET** | **Sewanee** | **65.92** | **347** | *eP* | | **P** | **01 48 55.5** | **-0.2** |
| | comp=Z,38nm,1.0s | | | | | | | |
| **TKL** | **Tuckaleechee C** | **65.95** | **349** | P | | **P** | **01 48 55.2** | **-0.7** |
| | comp=Z,13nm,0.8s,baz=161,slow=7.8,SNR=18 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **65.95** | **349** | *eP* | | **P** | **01 48 55.5** | **-0.4** |
| **TKL** | **Tuckaleechee C** | **65.95** | **349** | *eP* | | **P** | **01 48 55.5** | **-0.4** |
| **530A** | **J-C Ranch, Com** | **65.98** | **332** | P | | **P** | **01 48 57.2** | **+0.9** |
| | baz=66,SNR=16 | | | | | | | |
| **432A** | **Beard** | **65.99** | **333** | P | | **P** | **01 48 57.3** | **+0.9** |
| | baz=66,SNR=14 | | | | | | | |
| **OXF** | **Oxford** | **66.02** | **344** | *eP* | | **P** | **01 48 56.0** | **-0.3** |
| OXF | | | | pmax | | pmax | | |
| | comp=Z,59nm,0.9s | | | | | | | |
| **OXF** | **Oxford** | **66.02** | **344** | *eP* | | **P** | **01 48 56.0** | **-0.3** |
| | comp=Z,59nm,0.9s | | | | | | | |
| **137A** | **Heron Place, G** | **66.08** | **337** | P | | **P** | **01 48 58.1** | **+1.4** |
| | baz=66,SNR=5.4 | | | | | | | |
| **333A** | **Richland Sprin** | **66.08** | **334** | P | | **P** | **01 48 57.7** | **+0.9** |
| | baz=66,SNR=22 | | | | | | | |
| **WHTX** | **Lake Whitney** | **66.11** | **336** | *eP* | | **P** | **01 48 58.2** | **+1.2** |
| | comp=Z,204nm,1.8s | | | | | | | |
| **431A** | **Sonora** | **66.15** | **332** | P | | **P** | **01 48 58.3** | **+1.0** |
| | baz=66,SNR=16 | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.28** | **329** | P | | **P** | **01 48 58.2** | **0.0** |
| | comp=Z,5.7nm,0.8s,baz=149,slow=7.6,SNR=43 | | | | | | | |
| TXAR | | | | LR | | LR | 02 13 32.1 | |
| | comp=Z,680nm,20.9s,baz=0.0,slow=32 | | | | | | | |
| TXAR | | | | PKP2bc | | | 02 17 35.0 | |
| | comp=Z,0.4nm,0.8s,baz=289,slow=2.8,SNR=4.5 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **66.28** | **329** | *eP* | | **P** | **01 48 58.8** | **+0.6** |
| **529A** | **Stev Forest Ra** | **66.33** | **331** | P | | **P** | **01 48 59.2** | **+0.7** |
| | baz=67,SNR=28 | | | | | | | |
| **234A** | **Clairette** | **66.37** | **335** | P | | **P** | **01 48 59.6** | **+0.9** |
| | baz=67,SNR=21 | | | | | | | |
| **429A** | **Davenport Ranc** | **66.62** | **331** | P | | **P** | **01 49 01.3** | **+0.9** |
| | baz=67,SNR=16 | | | | | | | |
| **331A** | **San Angelo** | **66.63** | **333** | P | | **P** | **01 49 01.1** | **+0.7** |
| | baz=67,SNR=16 | | | | | | | |
| **TZTN** | **Tazewell** | **66.78** | **349** | *ep*P | | pP | 01 49 16.2 | -0.2 |
| **232A** | **Coleman** | **66.83** | **334** | P | | **P** | **01 49 02.6** | **+1.0** |
| | baz=67,SNR=26 | | | | | | | |
| **Z36A** | **Blue Ridge** | **66.92** | **337** | P | | **P** | **01 49 03.3** | **+1.2** |
| | baz=67,SNR=11 | | | | | | | |
| **330A** | **Mertzon** | **67.01** | **332** | P | | **P** | **01 49 03.6** | **+0.8** |
| | baz=67,SNR=12 | | | | | | | |
| **URVA** | **University of** | **67.05** | **355** | *eP* | | **P** | **01 49 03.5** | **+0.6** |
| **231A** | **Bronte** | **67.14** | **333** | P | | **P** | **01 49 04.5** | **+0.9** |
| | baz=68,SNR=13 | | | | | | | |
| **MIAR** | **Mount Ida** | **67.19** | **340** | *eP* | | **P** | **01 49 04.2** | **+0.4** |
| MIAR | | | | pmax | | pmax | | |
| | comp=Z,37nm,1.2s | | | | | | | |
| **MIAR** | **Mount Ida** | **67.19** | **340** | P | | **P** | **01 49 04.9** | **+1.1** |
| | baz=68,SNR=8.2 | | | | | | | |
| **MIAR** | **Mount Ida** | **67.19** | **340** | *eP* | | **P** | **01 49 04.2** | **+0.4** |
| | comp=Z,37nm,1.2s | | | | | | | |
| **WVT** | **Waverly** | **67.20** | **345** | *eP* | | **P** | **01 49 03.4** | **-0.4** |
| WVT | | | | pmax | | pmax | | |
| | comp=Z,28nm,1.0s | | | | | | | |
| **WVT** | **Waverly** | **67.20** | **345** | *eP* | | **P** | **01 49 03.4** | **-0.4** |
| | comp=Z,28nm,1.0s | | | | | | | |
| **133A** | **Hamilton Ranch** | **67.20** | **335** | P | | **P** | **01 49 05.3** | **+1.3** |
| | baz=68,SNR=5.2 | | | | | | | |
| **Z35A** | **Perchaven, San** | **67.25** | **336** | P | | **P** | **01 49 05.6** | **+1.3** |
| | baz=68,SNR=6.0 | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **67.41** | **332** | P | | **P** | **01 49 06.5** | **+1.1** |
| | baz=68,SNR=8.5 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **67.49** | **334** | P | | **P** | **01 49 07.2** | **+1.4** |
| | baz=68,SNR=10 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **67.49** | **334** | *eP* | | **P** | **01 49 06.3** | **+0.5** |
| | comp=Z,108nm,1.4s | | | | | | | |
| **Z34A** | **Collier Ranch,** | **67.53** | **336** | P | | **P** | **01 49 07.0** | **+1.0** |
| | baz=68,SNR=9.7 | | | | | | | |
| **GNAR** | **Gosnell** | **67.55** | **344** | *eP* | | **P** | **01 49 07.4** | **+1.3** |
| | comp=Z,1μm,1.0s | | | | | | | |
| GNAR | | | | *ep*P | | **pP** | **01 49 20.1** | **-1.2** |
| **SBA** | **Scott Base** | **67.56** | **191** | *eP* | | **P** | **01 49 06.4** | **+0.7** |
| SBA | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **SBA** | **Scott Base** | **67.56** | **191** | *eP* | | **P** | **01 49 06.4** | **+0.7** |
| | comp=Z,8.4nm,0.9s | | | | | | | |
| **CBN** | **Corbin** | **67.67** | **355** | *eP* | | **P** | **01 49 07.7** | **+1.0** |
| | comp=Z,17nm,0.7s | | | | | | | |
| **X38A** | **Whitesboro** | **67.68** | **339** | P | | **P** | **01 49 08.4** | **+1.5** |
| | baz=68,SNR=6.4 | | | | | | | |
| **Y35A** | **Marietta** | **67.70** | **337** | P | | **P** | **01 49 08.3** | **+1.3** |
| | baz=68,SNR=6.2 | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **67.75** | **335** | P | | **P** | **01 49 08.8** | **+1.4** |
| | baz=68,SNR=15 | | | | | | | |
| **131A** | **Roby** | **67.82** | **334** | P | | **P** | **01 49 08.9** | **+1.0** |
| | baz=68,SNR=9.2 | | | | | | | |
| **Y34A** | **Reagan Ranch,** | **68.00** | **336** | P | | **P** | **01 49 10.3** | **+1.4** |
| | baz=68,SNR=7.2 | | | | | | | |
| **Z32A** | **Haskell** | **68.04** | **335** | P | | **P** | **01 49 10.6** | **+1.4** |
| | baz=68,SNR=8.9 | | | | | | | |
| **X36A** | **Centrahoma** | **68.08** | **338** | P | | **P** | **01 49 10.5** | **+1.1** |
| | baz=68,SNR=7.6 | | | | | | | |
| **228A** | **UT Block 9, Go** | **68.22** | **332** | P | | **P** | **01 49 11.7** | **+1.2** |
| | baz=69,SNR=13 | | | | | | | |
| **W37A** | **Quinton** | **68.30** | **339** | P | | **P** | **01 49 12.3** | **+1.5** |
| | baz=69,SNR=8.0 | | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **68.35** | **336** | P | | **P** | **01 49 12.7** | **+1.5** |
| | baz=69,SNR=6.1 | | | | | | | |
| **arPBMO** | **Poplar Bluff** | **68.43** | **343** | *eP* | | **P** | **01 49 11.6** | **+0.1** |
| | comp=Z,47nm,0.8s | | | | | | | |
| **W36A** | **Wetumka** | **68.56** | **338** | P | | **P** | **01 49 13.4** | **+1.0** |
| | baz=69,SNR=5.5 | | | | | | | |
| **VNDA** | **Vanda** | **68.58** | **191** | P | | **P** | **01 49 11.6** | **-0.5** |
| | comp=Z,4.7nm,0.8s,baz=130,slow=6.5,SNR=22 | | | | | | | |
| VNDA | | | | LR | | LR | 02 16 46.8 | |
| | comp=Z,229nm,20.7s,baz=136,slow=34 | | | | | | | |
| VNDA | | | | PKPPKP | | P'P'df | 02 17 20.4 | -11 |
| | comp=Z,1.0nm,0.8s,baz=245,slow=4.5,SNR=5.7 | | | | | | | |
| **VNDA** | **Vanda** | **68.58** | **191** | *eP* | | **P** | **01 49 12.5** | **+0.4** |
| **VNDA** | **Vanda** | **68.58** | **191** | *eP* | | **P** | **01 49 12.4** | **+0.4** |
| VNDA | | | | P'P' | | | 02 17 20.4 | |
| **X34A** | **Smith Ranch, M** | **68.61** | **337** | P | | **P** | **01 49 14.0** | **+1.2** |
| | baz=69,SNR=11 | | | | | | | |
| **128A** | **Castleberry Fa** | **68.61** | **332** | P | | **P** | **01 49 13.7** | **+0.8** |
| | baz=69,SNR=6.0 | | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **68.64** | **335** | P | | **P** | **01 49 14.3** | **+1.3** |
| | baz=69,SNR=9.8 | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **68.65** | **333** | P | | **P** | **01 49 13.7** | **+0.7** |
| | baz=69,SNR=7.1 | | | | | | | |
| **SDMD** | **Soldier's Deli** | **68.83** | **355** | *eP* | | **P** | **01 49 15.4** | **+1.5** |
| | comp=Z,14nm,1.0s | | | | | | | |
| **WCI** | **Wyandotte

comp=Z,72nm,1.0s
U34A **Anderson Ranch** 70.17 338 eP P 01 49 23.2 +0.9
comp=Z,56nm,1.3s
MEH **Mehetia** 70.25 260 eT T 03 05 42.8
comp=Z,61nm,0.3s
AMTX **Amarillo** 70.27 334 eP P 01 49 24.3 +1.2
comp=Z,67nm,1.4s
ACSO **Alum Creek Sta** 70.30 350 eP P 01 49 23.1 0.0
comp=Z,28nm,0.9s
W29A **Amraillo** 70.47 334 P P 01 49 25.0 +0.7
baz=71,SNR=7.0
S37A **Fort Scott** 70.54 340 P P 01 49 25.6 +1.0
baz=71,SNR=9.4
T34A **McClaskey Farm** 70.59 338 P P 01 49 26.1 +1.2
baz=71,SNR=6.6
S36A **Lake Cedric, C** 70.74 340 P P 01 49 26.7 +1.0
baz=71,SNR=7.5
121A **Cookes Peak, D** 70.86 328 P P 01 49 27.8 +1.0
baz=71,SNR=13
121A **Cookes Peak, D** 70.86 328 eP P 01 49 28.2 +1.4
comp=Z,30nm,1.2s
S35A **Otter Creek Ra** 70.92 339 P P 01 49 28.0 +1.1
baz=71,SNR=6.9
SFIN **Scholer Farm** 71.14 347 eP P 01 49 27.4 -0.7
SFIN epP pP 01 49 41.6 -1.8
V28A **Channing** 71.24 334 P P 01 49 29.9 +0.8
baz=72,SNR=6.1
TVO **Taravao** 71.31 260 eT T 03 06 56.7
comp=Z,1.7nm,0.3s
V27A **Dan Oppiter Fa** 71.49 333 P P 01 49 31.8 +1.3
baz=72,SNR=11
TIAR **Tiarei** 71.49 260 eT T 03 07 15.4
comp=Z,19nm,0.2s
BINY **Binghamton** 71.55 356 eP P 01 49 31.9 +1.3
comp=Z,537nm,2.8s
PPT2 **Papeete2** 71.67 260 eS S 01 58 50.5 +2.5
comp=Z,778nm,31.5s
PPT2 eLQ LQ 02 08 27.7
comp=Z,1µm,29.2s
PPT2 eLR LR 02 11 25.6
comp=Z,2µm,23.8s,baz=114
PPT2 **Papeete2** 71.67 260 eT T 03 07 28.2
comp=Z,2.3nm,0.2s
PPT **Papeete** 71.68 260 LR LR 02 12 39.6
comp=Z,1µm,21.4s,baz=157,slow=29
BNM **Barren Site** 71.69 330 eP P 01 49 34.3 +2.4
BNM epP pP 01 49 46.3 -0.9
HDIL **Hopedale** 71.77 346 eP P 01 49 31.9 0.0
comp=Z,16nm,0.5s
HDIL epP pP 01 49 46.7 -0.5
R34A **Isabella, Hill** 71.78 339 P P 01 49 33.3 +1.3
baz=72,SNR=6.2
LPM **Los Pinos Moun** 71.83 330 eP P 01 49 34.8 +2.2
TRY **Troy** 71.98 358 eP P 01 49 33.8 +0.7
comp=Z,34nm,1.0s
TUC **Tucson** 72.11 325 eP P 01 49 36.4 +2.1
TUC pmax pmax
comp=Z,32nm,1.5s
TUC **Tucson** 72.11 325 eP P 01 49 36.4 +2.1
comp=Z,32nm,1.5s
LAZ **Ladron** 72.13 329 eP P 01 49 36.2 +1.7
MMNY **Mt. Morris Dam** 72.21 355 eP P 01 49 35.2 +0.7
comp=Z,29nm,1.1s
ANMO **Albuquerque** 72.28 330 P P 01 49 34.8 -0.7
comp=Z,3.9nm,0.9s,baz=163,slow=7.6,SNR=12
ANMO **Albuquerque** 72.28 330 eP P 01 49 35.8 +0.4
ANMO pmax pmax
comp=Z,5.0nm,1.0s
ANMO **Albuquerque** 72.28 330 eP P 01 49 36.4 +1.0
comp=Z,33nm,1.5s
KSU1 **Kansas State U** 72.31 339 eP P 01 49 36.0 +0.8
comp=Z,12nm,0.7s
T28A **Walsh** 72.41 334 P P 01 49 36.8 +0.8
baz=73,SNR=6.5
S29A **Ulysses** 72.48 335 P P 01 49 37.5 +1.1
baz=73,SNR=10
R31A **Burdett** 72.52 337 P P 01 49 37.8 +1.2
baz=73,SNR=6.6
LIC **Lamto** 72.69 72 eP P 01 49 38.0 -0.1
comp=Z,58nm,0.9s
S28A **Manter** 72.74 335 P P 01 49 38.7 +0.8
baz=73,SNR=15
R30A **Dighton** 72.77 336 P P 01 49 39.5 +1.4
baz=73,SNR=5.3
P34A **Walnut Farm, R** 72.79 339 P P 01 49 39.3 +1.2
baz=73,SNR=6.0
Q32A **Meitler Ranch,** 72.83 338 P P 01 49 39.4 +1.0
baz=73,SNR=5.6
214A **Organ Pipe Nat** 72.85 324 P P 01 49 39.4 +0.8
baz=73,SNR=14
214A **Organ Pipe Nat** 72.85 324 eP P 01 49 39.9 +1.3
comp=Z,329nm,1.4s
214A epP pP 01 49 54.7 +0.7
TIC **Toumodi** 72.93 72 eP P 01 49 39.3 -0.2
KIC **Kosan Boka** 73.01 72 eP P 01 49 39.9 -0.1
comp=Z,106nm,0.8s
T26A **Comanche Natio** 73.02 333 P P 01 49 40.4 +0.6
baz=73,SNR=6.6
CBKS **Cedar Bluff** 73.06 337 eP P 01 49 41.0 +1.2
CBKS pmax pmax
comp=Z,19nm,0.7s
CBKS **Cedar Bluff** 73.06 337 eP P 01 49 41.0 +1.2
comp=Z,19nm,0.7s
DBIC **Dimbokro** 73.08 72 P P 01 49 40.1 -0.3
comp=Z,55nm,0.8s,baz=211,slow=6.0,SNR=48
DBIC LR LR 02 20 16.0
comp=Z,969nm,19.5s,baz=218,slow=34
DBIC **Dimbokro** 73.08 72 eP P 01 49 40.5 +0.1
DBIC pmax pmax
comp=Z,65nm,0.9s
DBIC **Dimbokro** 73.08 72 eP P 01 49 40.5 +0.1
comp=Z,65nm,0.9s
Q31A **Ellis** 73.12 337 P P 01 49 41.0 +0.9
baz=74,SNR=7.5
T25A **Trinidad** 73.31 333 P P 01 49 42.4 +1.0
baz=74,SNR=15
T25A **Trinidad** 73.31 333 eP P 01 49 42.8 +1.3
comp=Z,87nm,1.7s
S26A **Kim** 73.36 334 P P 01 49 42.6 +1.0
baz=74,SNR=16
R28A **Tribune** 73.37 335 P P 01 49 43.2 +1.6
baz=74,SNR=6.5
Q30A **Quinter** 73.38 337 P P 01 49 42.5 +0.9
baz=74,SNR=16
P31A **Stockton** 73.58 338 P P 01 49 44.3 +1.5
baz=74,SNR=10
R27A **Eads** 73.69 335 P P 01 49 44.5 +1.0
baz=74,SNR=6.1
LONY **Lake Ozonia** 73.89 357 eP P 01 49 45.2 +0.8
comp=Z,286nm,2.8s
FRNY **Flat Rock** 74.08 358 eP P 01 49 45.6 +0.2
comp=Z,16nm,1.0s
JFWS **Jewell Farm** 74.23 346 eP P 01 49 45.6 -0.8
JFWS e*PP pP 01 50 02.0 +0.2
JFWS pmax pmax
comp=Z,8.0nm,0.6s
JFWS **Jewell Farm** 74.23 346 eP P 01 49 45.6 -0.8
comp=Z,8.3nm,0.6s
JFWS epP pP 01 50 02.0 +0.2
KSCO **Kaye Shedlock'** 74.26 335 eP P 01 49 47.6 +0.7
KSCO epP pP 01 50 02.9 +0.6
SDCO **Great Sand Dun** 74.27 332 P P 01 49 48.0 +0.9
baz=75,SNR=15
SDCO **Great Sand Dun** 74.27 332 eP P 01 49 48.2 +1.0
comp=Z,53nm,1.6s
SADO **Sadowa** 74.33 354 eP P 01 49 47.2 +0.2
comp=Z,33nm,1.1s
GLA **Glamis** 74.76 323 eP P 01 49 51.7 +1.9
GLA pmax pmax
comp=Z,32nm,1.3s
GLA **Glamis** 74.76 323 eP P 01 49 51.6 +1.9
comp=Z,32nm,1.3s
CER **Ceres** 74.76 120 eP P 01 49 50.3 +0.3
CER IAmb IAmb 01 49 52.8
comp=Z,61nm,0.8s
CER **Ceres** 74.76 120 P P 01 49 50.3 +0.3
comp=Z,61nm,0.8s
S22A **4UR Ranch, Cre** 74.82 331 P P 01 49 51.3 +1.0
baz=75,SNR=8.9
S22A **4UR Ranch, Cre** 74.82 331 eP P 01 49 51.8 +1.5
comp=Z,110nm,2.4s
BGNE **Belgrade** 74.90 339 eP P 01 49 51.1 +0.7
KOMG **Komaggas** 74.90 116 eP P 01 49 51.8 +1.0
KOMG **Komaggas** 74.90 116 P P 01 49 51.8 +1.0
WUAZ **Wupatki** 75.00 327 P P 01 49 52.3 +1.0
baz=75,SNR=9.7
WUAZ **Wupatki** 75.00 327 eP P 01 49 53.0 +1.7
comp=Z,67nm,1.5s
MVCO **Mesa Verde** 75.08 330 P P 01 49 52.7 +0.9
baz=75,SNR=18
MVCO **Mesa Verde** 75.08 330 eP P 01 49 53.0 +1.1
comp=Z,31nm,1.1s
Y12C **Blythe** 75.15 324 P P 01 49 53.1 +1.2
baz=76,SNR=8.0
Q24A **Divide** 75.18 333 P P 01 49 53.2 +0.8
baz=76,SNR=16
Q24A **Divide** 75.18 333 eP P 01 49 53.6 +1.2
comp=Z,25nm,0.8s
BAR **Barrett** 75.45 322 eP P 01 49 55.7 +1.9
comp=Z,37nm,1.4s
BC3 **Big Chuckawall** 75.56 323 P P 01 49 55.2 +0.7
baz=76,SNR=14
I38A **Scanlan Farm,** 75.77 344 P P 01 49 56.4 +1.1
baz=76,SNR=9.6
IRM **Iron Mountain** 75.79 324 P P 01 49 56.6 +1.0
baz=76,SNR=9.2
L31A **Butterfield Fa** 75.81 339 P P 01 49 56.9 +1.3
baz=76,SNR=7.4
CVNA **Calvinia** 75.94 118 eP P
CVNA IAmb IAmb 01 49 59.8
comp=Z,84nm,0.8s
CVNA **Calvinia** 75.94 118 P P 01 49 57.7 +0.8
comp=Z,84nm,0.8s
PFO **Pinyon Flat Ob** 76.05 322 eP P 01 49 59.1 +1.8
PFO pmax pmax
comp=Z,22nm,1.1s
PFO **Pinyon Flat Ob** 76.05 322 eP P 01 49 59.1 +1.8
comp=Z,22nm,1.1s
ISCO **Idaho Springs** 76.08 333 eP P 01 49 58.6 +1.0
ISCO pmax pmax
comp=Z,145nm,2.5s
ISCO **Idaho Springs** 76.08 333 P P 01 49 58.3 +0.7
baz=76,SNR=17
ISCO **Idaho Springs** 76.08 333 eP P 01 49 58.6 +1.0
comp=Z,145nm,2.5s
SMCO **Snowmass** 76.09 332 eP P 01 49 59.4 +1.6
comp=Z,25nm,0.8s
BELC **Belle Mtn. Jos** 76.11 323 P P 01 49 58.0 +0.4
baz=76,SNR=7.3
K31A **O'Neill** 76.19 339 P P 01 49 59.1 +1.3
baz=77,SNR=9.6
SUR **Sutherland** 76.34 120 P P 01 50 00.6 +1.3
comp=Z,453nm,0.8s,SNR=16
SUR **Sutherland** 76.34 120 eP P 01 50 00.8 +1.5
comp=Z,57nm,0.8s
K30A **Basset** 76.50 339 P P 01 50 00.8 +1.3
baz=77,SNR=6.1
GMRC **Granite Mounta** 76.54 324 P P 01 50 01.0 +1.0
baz=77,SNR=18
ECSD **EROS Data Cent** 76.58 341 P P 01 50 01.3 +1.4
baz=77,SNR=17
ECSD **EROS Data Cent** 76.58 341 eP P 01 50 00.2 +0.3
comp=Z,41nm,0.9s
SPMN **St. Paul** 77.00 344 eP P 01 50 02.1 -0.1
SPMN epP pP 01 50 17.4 -0.3
K28A **Ten Mile Ranch** 77.10 338 P P 01 50 04.5 +1.5
baz=78,SNR=9.1
MMU **Miners Mountai** 77.14 329 eP P 01 50 04.6 +1.1
N23A **Red Feather La** 77.15 334 P P 01 50 04.2 +0.7
baz=78,SNR=6.6
BFSC **Mount Baldy Ra** 77.17 322 P P 01 50 04.1 +0.5
baz=78,SNR=8.7
TUQ **Turquoise Moun** 77.18 324 P P 01 50 04.3 +0.6
baz=78,SNR=12
MAW **Mawson** 77.21 164 P P 01 50 03.2 0.0
comp=Z,33nm,0.7s,baz=208,slow=6.7,SNR=142
MAW LR LR 02 23 18.2
comp=Z,1µm,21.9s,baz=238,slow=35
MAW **Mawson** 77.21 164 eP P 01 50 03.3 0.0
MAW pmax pmax
comp=Z,9.0nm,0.8s
MAW **Mawson** 77.21 164 eP P 01 50 03.3 0.0
comp=Z,3.3nm,0.8s
PHWY **Pilot Hill** 77.32 334 eP P 01 50 05.7 +1.2
comp=Z,16nm,0.8s
MWC **Mount Wilson** 77.38 322 eP P 01 50 06.1 +1.2
MWC e*PP pP 01 50 20.7 +0.4
MWC pmax pmax
comp=Z,12nm,0.9s
MWC **Mount Wilson** 77.38 322 eP P 01 50 06.1 +1.2
comp=Z,12nm,0.9s
MWC epP pP 01 50 20.7 +0.4
J29A **Okreek** 77.39 339 P P 01 50 05.6 +1.1
baz=78,SNR=12
O20A **White River Ci** 77.42 332 P P 01 50 06.2 +1.1
baz=78,SNR=26
O20A **White River Ci** 77.42 332 eP P 01 50 06.1 +1.1
comp=Z,93nm,1.4s
H33A **Prehn Over Nor** 77.49 342 P P 01 50 06.5 +1.5
baz=78,SNR=6.2
GSC **Goldstone** 77.53 323 eP P 01 50 06.9 +1.3
GSC **Goldstone** 77.53 323 P P 01 50 06.4 +0.8
baz=78,SNR=9.2
GSC **Goldstone** 77.53 323 eP P 01 50 06.9 +1.3
SRU **San Rafael** 77.54 330 eP P 01 50 06.9 +1.2
SRU pmax pmax
comp=Z,22nm,0.9s
SRU **San Rafael** 77.54 330 eP P 01 50 06.9 +1.2
comp=Z,22nm,0.9s
CCUT **Cedar City** 77.58 327 eP P 01 50 07.8 +1.8
comp=Z,18nm,0.9s
SHPR **Sheep Range** 77.63 325 eP P 01 50 07.5 +1.3
J28A **Allard Ranch,** 77.70 338 P P 01 50 07.6 +1.3
baz=78,SNR=8.0
F36A **Milaca** 77.77 344 P P 01 50 08.1 +1.6
baz=78,SNR=8.4
MSU **Marysvale** 77.80 328 eP P 01 50 08.5 +1.4
MSU **Marysvale** 77.80 328 eP P 01 50 08.5 +1.4
EDW2 **Edwards Air Fo** 77.84 322 P P 01 50 07.8 +0.5
baz=78,SNR=11
P18A **Preston Nutter** 77.85 330 eP P 01 50 09.1 +1.6
comp=Z,40nm,1.1s
P17A **Butcher Ranch,** 77.94 330 eP P 01 50 09.1 +1.3
comp=Z,40nm,1.2s
TMUT **Trail Mountain** 78.00 329 eP P 01 50 09.3 +1.0
comp=Z,184nm,1.6s
FURC **Furnace Creek,** 78.46 324 P P 01 50 11.5 +0.9
baz=79
MPMC **Manual Prospec** 78.47 323 P P 01 50 11.6 +0.7
baz=79,SNR=9.4
UPI **Upington** 78.49 116 eP P 01 50 12.1 +0.9
UPI **Upington** 78.49 116 P P 01 50 12.1 +0.9
ISA **Isabella** 78.69 322 eP P 01 50 13.7 +1.8
ISA pmax pmax
comp=Z,17nm,0.9s
ISA **Isabella** 78.69 322 P P 01 50 13.0 +1.1
baz=79,SNR=15
ISA **Isabella** 78.69 322 eP P 01 50 13.7 +1.8
comp=Z,16nm,0.9s
DAC **Darwin (Calif)** 78.69 323 eP P 01 50 13.5 +1.4
DAC pmax pmax
comp=Z,16nm,0.9s
DAC **Darwin (Calif)** 78.69 323 eP P 01 50 13.5 +1.4
comp=Z,16nm,0.9s
H28A **Mission Ridge** 78.75 339 P P 01 50 13.5 +1.5
baz=79,SNR=7.9
O16A **Springville** 78.87 330 eP P 01 50 08.5 -4.5
comp=Z,31nm,1.1s
K22A **Casper** 78.88 334 P P 01 50 14.2 +1.3
baz=79,SNR=18
K22A **Casper** 78.88 334 eP P 01 50 14.0 +1.0
comp=Z,467nm,2.5s
NLU **North Lily Min** 78.92 329 eP P 01 50 14.8 +1.5
comp=Z,34nm,1.4s
I25A **Rochford** 79.06 337 P P 01 50 15.0 +1.1
baz=79,SNR=9.6
CWC **Cottonwood Cre** 79.07 323 P P 01 50 15.1 +0.9
baz=79,SNR=6.5
VES **Vestal, Richgr** 79.15 322 P P 01 50 15.5 +1.2
baz=80,SNR=8.1
SMMC **Simmler** 79.25 321 P P 01 50 15.9 +0.9
baz=80,SNR=8.2
RSSD **Black Hills** 79.25 337 eP P 01 50 14.9 -0.2
RSSD pmax pmax
comp=Z,12nm,0.8s
RSSD **Black Hills** 79.25 337 eP P 01 50 14.8 -0.2
comp=Z,12nm,0.8s
R11A **Troy Canyon, C** 79.28 326 P P 01 50 16.1 +0.8
baz=80,SNR=12
R11A **Troy Canyon, C** 79.28 326 eP P 01 50 16.7 +1.4
comp=Z,34nm,1.5s
CTU **Camp Tracy** 79.38 330 eP P 01 50 16.9 +1.2
comp=Z,9.9nm,0.7s
DUG **Dugway** 79.45 329 eP P 01 50 17.5 +1.4
DUG pmax pmax
comp=Z,22nm,1.0s
DUG **Dugway** 79.45 329 P P 01 50 17.1 +1.1
baz=80,SNR=14
DUG **Dugway** 79.45 329 eP P 01 50 17.5 +1.4
comp=Z,22nm,1.0s
TCUT **Toone Canyon** 79.58 330 eP P 01 50 18.1 +1.1
comp=Z,27nm,0.8s
C35A **Jirik Farms, M** 79.60 345 P P 01 50 17.7 +1.1
baz=80,SNR=5.5
G27A **Dupree** 79.67 339 P P 01 50 18.1 +1.1
baz=80,SNR=8.6
TSUM **Tsumeb** 79.72 106 eP P 01 50 19.2 +1.0
comp=Z,53nm,0.8s
SOE **Somerset East** 79.75 122 eP P 01 50 18.0 0.0
SOE **Somerset East** 79.75 122 P P 01 50 18.0 0.0
G26A **Maurine** 79.81 338 P P 01 50 19.1 +1.3
baz=80,SNR=8.5
G25A **Newell** 79.99 337 P P 01 50 19.6 +0.9
baz=80,SNR=13
MTUM **Tungsten Hills** 80.02 323 eP P 01 50 21.6 +2.3
MTUM epP pP 01 50 35.8 +0.9
HWUT **Hardware Ranch** 80.05 330 eP P 01 50 20.0 +0.7
comp=Z,49nm,1.1s
F27A **Lemmon** 80.13 339 P P 01 50 20.4 +0.9
baz=80,SNR=9.0
BW06 **Boulder Array** 80.17 332 eP P 01 50 20.5 +0.5
comp=Z,127nm,2.3s
SPUT **South Promnto** 80.19 330 eP P 01 50 21.1 +1.0
comp=Z,30nm,1.0s
D30A **Buchanan** 80.28 341 P P 01 50 21.4 +1.2
baz=81,SNR=9.3
F26A **Lodgepole** 80.32 338 P P 01 50 21.5 +0.9
baz=81,SNR=6.8
E28A **Huff** 80.35 340 P P 01 50 22.0 +1.3
baz=81,SNR=6.2
PMOZ **Porto Moniz, M** 80.41 44 eLR LR 02 19 37.6
comp=Z,674nm,20.0s
AGMN **Agassiz Nation** 80.61 344 eP P 01 50 22.4 +0.4
comp=Z,15nm,0.9s
LRV **Little Rabbit** 80.63 321 eP P 01 50 25.9 +3.5
LRV ePP PP 01 53 23.8 -3.3
F25A **Bowman** 80.64 338 P P 01 50 23.2 +0.9
baz=81,SNR=6.7
NV01 **Mina Array Sit** 80.70 324 eP P 01 50 23.4 +0.5
NVAR **Mina Array Bea** 80.70 324 P P 01 50 23.1 +0.2
comp=Z,4.3nm,0.8s,baz=154,slow=5.2,SNR=25
NVAR pP pP 01 50 38.9 +0.4
comp=Z,2.9nm,0.9s,baz=140,slow=4.8,SNR=4.8
NVAR PKKPbc PKKPbc 02 09 02.9 -0.9
comp=Z,1.0nm,0.7s,baz=302,slow=2.0,SNR=9.5
NVAR LR LR 02 19 58.9
comp=Z,642nm,21.7s,baz=148,slow=31
C30A **Mose, Pekin** 80.74 342 P P 01 50 24.0 +1.3
baz=81,SNR=12
AHID **Auburn Hatcher** 80.80 331 eP P 01 50 25.5 +2.1
comp=Z,62nm,1.4s
E26A **Carlson Angus** 80.81 339 P P 01 50 24.3 +1.2
baz=81,SNR=5.1
B32A **Ashes, Strandq** 80.87 343 P P 01 50 24.5 +1.1
baz=81,SNR=12
ELK **Elko** 81.00 328 eP P 01 50 25.5 +1.0
ELK pmax pmax
comp=Z,14nm,0.9s
ELK **Elko** 81.00 328 eP P 01 50 25.5 +1.0
comp=Z,14nm,0.9s
A33A **Warroad** 81.09 344 P P 01 50 25.6 +1.1
baz=82,SNR=8.3
DRV **Dumont d'Urvil** 81.18 192 P P 01 50 19.0 -5.9
DRV **Dumont d'Urvil** 81.18 192 S S 02 00 30.0 -0.3
DRV SS SS 02 05 47.0 +1.9
DRV L L 02 13 00.0
DRV R 02 15 00.0
MDND **Maddock** 81.19 341 P P 01 50 26.2 +1.1
baz=82,SNR=5.3
MDND **Maddock** 81.19 341 eP P 01 50 26.0 +0.9
comp=Z,94nm,1.1s
REDW **Red Top Meadow** 81.19 332 eP P 01 50 26.2 +0.7
comp=Z,22nm,1.1s
SNOW **Snow King Moun** 81.23 332 eP P 01 50 27.1 +1.4
comp=Z,28nm,1.4s
LOHW **Long Hollow** 81.30 332 eP P 01 50 26.8 +0.8
comp=Z,9.1nm,0.8s
TPAW **Teton Pass** 81.34 332 eP P 01 50 27.6 +1.3
comp=Z,14nm,1.0s
B30A **Myrvik Farm, E** 81.39 342 P P 01 50 27.1 +1.0
baz=82,SNR=16
MOOW **Moose Ponds** 81.47 332 eP P 01 50 27.4 +0.5
BOSA **Boshof** 81.48 118 eP P 01 50 27.3 -0.1
BOSA IAmb IAmb 01 50 29.1
comp=Z,62nm,0.8s
BOSA **Boshof** 81.48 118 P P 01 50 27.2 -0.2
comp=Z,58nm,0.8s,baz=253,slow=3.2,SNR=90
BOSA pP pP 01 50 45.9 +2.8
comp=Z,56nm,0.9s,baz=250,slow=3.7,SNR=8.1
BOSA LR LR 02 22 58.2
comp=Z,715nm,19.4s,baz=234,slow=33
FXWY **Fox Creek** 81.49 332 eP P 01 50 27.7 +0.7
C27A **Sayler Ranch,** 81.62 340 P P 01 50 28.6 +1.2
baz=82,SNR=5.3
IMW **Indian Meadow** 81.67 332 eP P 01 50 28.6 +0.5
comp=Z,21nm,1.2s
D25A **Fairfield** 81.68 338 P P 01 50 28.6 +0.9
baz=82,SNR=11
BMN **Battle Mountai** 81.70 326 eP P 01 50 30.1 +2.0
BMN pmax pmax
comp=Z,8.0nm,1.2s
BMN **Battle Mountai** 81.70 326 eP P 01 50 30.1 +2.0
comp=Z,7.9nm,1.2s
FLWY **Flagg Ranch** 81.72 332 eP P 01 50 28.5 +0.3
H17A **Grant Village** 81.93 333 eP P 01 50 30.7 +1.2
comp=Z,6.0nm,0.9s
LKWY **Lake** 82.00 333 eP P 01 50 32.4 +2.6
LKWY pmax pmax
comp=Z,9.0nm,0.8s
LKWY **Lake** 82.00 333 eP P 01 50 32.4 +2.6
comp=Z,9.2nm,0.8s
TOA0 **Torodi Ar. Sit** 82.00 70 eP P 01 50 28.8 -1.3
TOA0 **Torodi Ar. Sit** 82.00 70 eP P 01 50 30.0 -0.2
TORD **Torodi Ar. Bea** 82.00 70 P P 01 50 30.1 -0.1
comp=Z,34nm,0.8s,baz=251,slow=3.2,SNR=195
TORD pP pP 01 50 48.4 +2.7
comp=Z,19nm,0.7s,baz=263,slow=5.1,SNR=5.0
TORD LR LR 02 24 32.6
comp=Z,1µm,21.6s,baz=230,slow=34
RLMT **Red Lodge** 82.03 334 P P 01 50 31.0 +1.2
baz=82,SNR=7.2
RLMT **Red Lodge** 82.03 334 eP P 01 50 30.2 +0.4
comp=Z,132nm,2.3s
A29A **Manning Farm,** 82.06 342 P P 01 50 30.2 +0.5
baz=82,SNR=8.3
YFT **Old Faithful** 82.08 333 eP P 01 50 32.4 +2.2
comp=Z,27nm,1.1s
SWZ **Schweizer** 82.23 117 eP P 01 50 29.5 -1.9
SWZ **Schweizer** 82.23 117 P P 01 50 29.5 -1.9
YNR **Norris Junctio** 82.24 333 eP P 01 50 31.2 +0.2
comp=Z,19nm,1.1s
LAO **LASA Array** 82.25 336 P P 01 50 32.0 +1.2
baz=83,SNR=13
LAO **LASA Array** 82.25 336 eP P 01 50 31.5 +0.8
comp=Z,46nm,1.3s
ULM **Lac du Bonnet** 82.43 344 P P 01 50 30.7 -0.8
comp=Z,16nm,0.9s,baz=191,slow=4.0,SNR=3.1
ULM pP pP 01 50 46.8 -0.4
comp=Z,23nm,1.0s,baz=150,slow=5.1,SNR=7.4
ULM PKPPKP P'P'df 02 17 02.5 +3.8
comp=Z,4.0nm,0.8s,baz=344,slow=7.4,SNR=2.7
QLMT **Earthquake Lak** 82.64 332 eP P 01 50 34.3 +1.3
comp=Z,0.6nm,0.8s
QLMT epP pP 01 50 51.3 +2.7
GCMT **Greycliff** 82.74 334 eP P 01 50 34.1 +0.7
GCMT epP pP 01 50 49.1 0.0
HLID **Hailey** 82.86 330 P P 01 50 35.1 +0.9
baz=83,SNR=31
HLID **Hailey** 82.86 330 eP P 01 50 35.1 +0.9
comp=Z,13nm,0.8s
NSHM **Saint Helena R** 83.02 322 eP P 01 50 36.8 +1.9
OHCM **Honcut** 83.02 323 eP P 01 50 36.8 +2.0
OHCM epP pP 01 50 50.9 +0.4
DGMT **Dagmar** 83.12 339 P P 01 50 36.4 +1.2
baz=84,SNR=11
DGMT **Dagmar** 83.12 339 eP P 01 50 36.0 +0.8
comp=Z,86nm,1.1s
MFID **Camas Ranch** 83.37 329 eP P 01 50 36.9 +0.2
comp=Z,13nm,1.0s
BOZ **Bozeman (W)** 83.39 333 eP P 01 50 36.4 -0.4
BOZ pmax pmax

comp=Z,14nm,1.4s
**BOZ Bozeman (W) 83.39 333** *e*P P 01 50 36.4 -0.4
comp=Z,14nm,1.4s
**SEK Senekal 83.44 119** *e*P P 01 50 37.3 -0.4
**SEK Senekal 83.44 119** P P 01 50 37.3 -0.4
**LBTB Lobatse 83.50 115** *e*P P 01 50 38.1 +0.1
**LBTB Lobatse 83.50 115** *e*P P 01 50 38.0 +0.1
**LBTB Lobatse 83.50 115** *e*P P 01 50 38.0 +0.1
**BFSD Buffelsfontein 83.52 117** *e*P P 01 50 36.4 -1.7
**BFSD Buffelsfontein 83.52 117** P P 01 50 36.4 -1.7
**DLMT Dillon 83.55 332** *e*P P 01 50 37.9 +0.3
comp=Z,18nm,1.2s
**LRM Limekiln Ridge 83.86 332** *e*P P 01 50 40.7 +1.4
**WVOR Wild Horse Val 83.92 327** *e*P P 01 50 40.4 +0.9
WVOR pmax pmax
comp=Z,20nm,1.4s
**WVOR Wild Horse Val 83.92 327** *e*P P 01 50 40.4 +0.9
comp=Z,20nm,1.4s
**PRYS Parys 83.93 117** *e*P P 01 50 39.8 -0.4
**PRYS Parys 83.93 117** P P 01 50 39.8 -0.4
**KSR Koster 84.10 116** *e*P P 01 50 41.0 -0.2
**KSR Koster 84.10 116** P P 01 50 41.0 -0.2
**SCHQ Schefferville 84.13 3** P P 01 50 40.1 -0.1
comp=Z,12nm,0.9s,baz=184,slow=3.2,SNR=7.3
SCHQ LR LR 02 29 09.0
comp=Z,147nm,20.3s,baz=224,slow=36
**WDLM Western Deep L 84.23 117** *e*P P 01 50 42.2 +0.4
**MOD Modoc 84.32 325** *e*P P 01 50 42.8 +1.1
comp=Z,37nm,1.5s
**HRY Holter Researc 84.34 333** *e*P P 01 50 42.5 +0.9
**CASY Casey 84.45 181** *e*P P 01 50 41.9 0.0
comp=Z,30nm,0.8s
**WDC Whiskeytown Da 84.48 323** *e*P P 01 50 42.1 -0.2
WDC *e**PP pP 01 50 58.5 +0.5
**WDC Whiskeytown Da 84.48 323** *e*P P 01 50 42.1 -0.2
WDC *e*pP pP 01 50 58.5 +0.5
**J08A Circle Bar Ran 84.55 327** *e*P P 01 50 44.0 +1.2
comp=Z,38nm,1.2s
**EGMT Eagleton 84.65 335** *e*P P 01 50 44.2 +1.1
EGMT *e*pP pP 01 50 53.7 -5.0
**M04C Macdoel 85.00 324** P P 01 50 46.0 +0.9
baz=85,SNR=5.6
**CHMT Chamberlain Mo 85.07 333** *e*P P 01 50 46.4 +1.0
comp=Z,16nm,1.6s
CHMT *e*pP pP 01 51 02.3 +1.2
**K05A Summer Lake 85.23 326** *e*P P 01 50 47.8 +1.5
comp=Z,68nm,1.4s
**SLR Silverton 85.24 117** *e*P P 01 50 47.1 +0.3
**SLR Silverton 85.24 117** P P 01 50 47.1 +0.3
**SLR Silverton 85.24 117** P P 01 50 47.1 +0.3
**MSO Missoula 85.28 332** *e*pP pP 01 51 04.0 +1.9
**YBH Yreka Blue Hor 85.41 324** *e*P P 01 50 47.0 0.0
YBH *e**PP pP 01 51 03.6 +0.8
**YBH Yreka Blue Hor 85.41 324** *e*P P 01 50 47.0 0.0
YBH *e*pP pP 01 51 03.6 +0.8
**SLMT Seeley Lake 85.44 333** *e*P P 01 50 47.7 +0.6
**I07A Izee 85.58 327** *e*P P 01 50 48.7 +0.8
comp=Z,25nm,1.2s
**SWMT Swartz Lake 85.86 332** *e*P P 01 50 50.0 +0.8
**F10A Beach Ranch, E 86.00 330** *e*P P 01 50 52.1 +2.2
comp=Z,15nm,1.1s
**YBMT Yellow Bay 86.14 333** *e*P P 01 50 51.3 +0.7
**JTMT Jette 86.16 332** *e*P P 01 50 51.5 +0.8
**G08A Pilot Rock 86.25 328** *e*P P 01 50 51.8 +0.6
comp=Z,5.7nm,0.8s
**BLMT Blacktail Moun 86.40 333** *e*P P 01 50 52.6 +0.6
**BSMT Bassoo Peak 86.45 332** *e*P P 01 50 52.5 +0.3
**I05D Terrebonne, OR 86.65 326** P P 01 50 53.9 +0.9
baz=87,SNR=6.4
**WALA Waterton Lakes 87.07 333** *e*P P 01 50 55.7 +0.6
comp=Z,21nm,0.8s
**H04A Detroit Lake 87.31 326** *e*P P 01 50 56.4 +0.2
comp=Z,19nm,0.8s
**HAWA Hanford 87.34 329** *e*P P 01 50 57.2 +0.8
comp=Z,94nm,2.0s
HAWA *e*pP pP 01 51 13.0 +1.0
**D08A Wollman Farm, 87.58 330** *e*P P 01 50 58.4 +0.9
comp=Z,6.6nm,0.8s
**THZ Tophouse 87.66 222** *e*P P 01 51 00.1 +1.8
comp=Z,38nm,0.8s
**C09A Chrisman Ranch 87.87 330** *e*P P 01 50 59.8 +1.0
C09A *e*pP pP 01 51 16.1 +1.5
**FFC Flin Flon 88.04 343** *e*P P 01 50 59.9 +0.5
FFC pmax pmax
comp=Z,21nm,1.4s
**FFC Flin Flon 88.04 343** *e*P P 01 50 59.9 +0.5
comp=Z,21nm,1.4s
**MSNA Messina 88.34 115** *e*P P 01 51 02.8 +0.9
**MSNA Messina 88.34 115** P P 01 51 02.8 +0.9
**PFVI Vila Bisbo 88.39 45** *e*P P 01 51 02.8 +1.3
comp=Z,52nm,1.4s
**MDT Midelt 88.45 51** LR LR 02 30 30.4
comp=Z,496nm,20.6s,slow=35
**LTY Liberty 88.51 329** *e*P P 01 51 03.0 +1.1
comp=Z,54nm,1.8s
**MORF Marmelete 88.61 45** *e*P P 01 51 02.3 -0.3
MORF AMS AMS 02 31 09.6
comp=Z,1μm,20.3s
**MORF Marmelete 88.61 45** *e*P P 01 51 03.4 +0.8
comp=Z,32nm,1.9s
**MORF Marmelete 88.61 45** *e*P P 01 51 02.3 -0.3
**LON Longmire 88.65 328** *e*P P 01 51 02.7 +0.1
LON *e**PP pP 01 51 19.5 +1.1
LON pmax pmax
comp=Z,8.0nm,0.8s
**LON Longmire 88.65 328** *e*P P 01 51 02.7 +0.1
comp=Z,7.8nm,0.8s
LON *e*pP pP 01 51 19.5 +1.1
**PTEO Sao Teotonio 88.71 45** *e*P P 01 51 04.3 +1.3
comp=Z,52nm,0.9s
**PBDV Barranco-do-Ve 89.01 45** *e*P P 01 51 05.2 +0.7
comp=Z,45nm,2.4s
**PCVE Castro Verde 89.19 45** *e*P P 01 51 06.2 +0.9
comp=Z,21nm,2.3s
**PNCL Nicolau / Gran 89.19 44** *e*P P 01 51 05.9 +0.6
comp=Z,23nm,2.3s
**LIS Lisbon 89.20 44** *e*P P 01 51 05.3 0.0
LIS AMS AMS 02 29 45.0
comp=Z,991nm,18.4s
**LIS Lisbon 89.20 44** *e*P P 01 51 05.2 0.0
**MESJ Messejana 89.21 45** *e*P P 01 51 05.3 -0.1
MESJ AMS AMS 02 31 36.8
comp=Z,858nm,20.0s
**MESJ Messejana 89.21 45** *e*P P 01 51 06.5 +1.2
comp=Z,25nm,1.8s
**MESJ Messejana 89.21 45** *e*P P 01 51 05.2 -0.1
**PVAQ Vaqueiros 89.25 45** *e*P P 01 51 06.1 +0.6
comp=Z,27nm,1.6s
**PVAQ Vaqueiros 89.25 45** *e*LQ LQ 02 17 38.1
PVAQ *e*LR LR 02 20 52.0
comp=Z,809nm,18.0s
**PBEJ Beja 89.54 45** *e*P P 01 51 07.8 +0.9
comp=Z,15nm,2.2s
**EVO Evora 89.77 44** *e*P P 01 51 08.6 +0.6
comp=Z,16nm,2.1s
**PMTG Montargil 89.98 44** *e*P P 01 51 09.5 +0.6
comp=Z,22nm,2.1s
**PBAR Barrancos 90.15 45** *e*P P 01 51 10.2 +0.5
comp=Z,31nm,1.9s
**PTOM Tomar 90.22 43** *e*P P 01 51 11.1 +1.1
comp=Z,22nm,1.2s
**TAM Tamanrasset 90.23 64** *e*P P 01 51 11.1 +0.4
TAM *e**PP pP 01 51 26.7 +0.2
TAM pmax pmax
comp=Z,12nm,1.2s
**TAM Tamanrasset 90.23 64** *e*P P 01 51 11.1 +0.4
comp=Z,12nm,1.2s
TAM *e*pP pP 01 51 26.7 +0.2
**PCAS Casmilo, Conde 90.44 43** *e*P P 01 51 12.2 +1.1
comp=Z,19nm,1.4s
**LSZ Lusaka 90.47 108** *e*P P 01 51 13.7 +1.7
LSZ pmax pmax
comp=Z,27nm,1.2s
**LSZ Lusaka 90.47 108** *e*P P 01 51 13.7 +1.7
comp=Z,27nm,1.2s
**PMRV Marv??o 90.71 44** *e*P P 01 51 12.3 -0.1
comp=Z,12nm,1.9s
**PMRV Marv??o 90.71 44** *e*LR LR 02 16 41.0
comp=Z,717nm,20.0s
**PCBR Castelo Branco 90.92 44** *e*P P 01 51 13.3 0.0
comp=Z,11nm,1.3s
**MTE Manteigas 91.22 43** *e*P P 01 51 15.6 +0.8
comp=Z,15nm,1.4s
**MTE Manteigas 91.22 43** *e*SKS SKSac 02 01 47.2 +4.9
**MTE Manteigas 91.22 43** *e*LQ LQ 02 14 57.4
MTE *e*LR LR 02 19 29.2
comp=Z,1μm,22.0s
**PVRL Vila Real 91.67 42** *e*P P 01 51 18.1 +1.3
**POLO Lamas de Olo 91.69 42** *e*P P 01 51 21.3 +4.4
comp=Z,7.3nm,2.2s
**PCAB Cabril 91.76 42** *e*P P 01 51 19.5 +2.3
comp=Z,21nm,1.5s
**PGAV Gavieira, Arco 91.78 42** *e*LR LR 02 17 00.3
comp=Z,740nm,20.0s
**MVO Moncorvo 92.01 43** *e*P P 01 51 19.6 +1.2
comp=Z,12nm,1.7s
**MVO Moncorvo 92.01 43** *e*LR LR 02 18 08.0
comp=Z,661nm,18.0s
**PAB San Pablo 92.65 45** *e*P P 01 51 21.9 +0.5
PAB pmax pmax
comp=Z,4.0nm,0.8s
**PAB San Pablo 92.65 45** *e*P P 01 51 21.9 +0.5
comp=Z,3.7nm,0.8s
**ESDC Sonseca Array 92.96 45** P P 01 51 23.0 +0.1
comp=Z,3.1nm,0.9s,baz=253,slow=4.3,SNR=18
ESDC PP PP 01 55 05.9 -0.7
comp=Z,0.2nm,0.4s,baz=228,slow=5.3,SNR=4.0
ESDC LR LR 02 33 54.2
comp=Z,549nm,18.1s,baz=205,slow=36
**ES19 SONSECA Array 93.02 45** *e*P P 01 51 23.3 +0.2
**FRB Frobisher Bay 93.02 1** P P 01 51 20.8 -1.5
comp=Z,11nm,1.0s,baz=59,slow=12,SNR=2.1
**SFJD Kangerlussuaq 97.52 9** LR LR 02 37 25.1
comp=Z,180nm,19.2s,baz=140,slow=36
**YKA Yellowknife Ar 98.11 341** P P 01 51 44.8 -0.8
comp=Z,1.7nm,0.8s,baz=137,slow=4.9,SNR=4.4
**KEST Kesra 99.71 55** LR LR 02 39 53.2
comp=Z,1μm,18.6s,baz=183,slow=37
**SSB Saint Sauveur 101.29 44** *e*P Pdif P 01 52 01.6 +1.2
**SSB Saint Sauveur 101.29 44** *e*Pdif Pdif P 01 52 01.6 +1.2
**DZM Mont Dzumac 104.44 234** *e*SP SP 02 05 38.4 -2.5
comp=Z,164nm,24.4s
DZM *e*SS SS 02 11 17.2 -3.3
comp=Z,922nm,34.1s
**DZM Mont Dzumac 104.44 234** eLR LR 02 26 36.8
comp=Z,1μm,24.1s
**GERES GERESS Array B 108.49 44** Pdiff Pdif 01 52 32.1 -0.2
comp=Z,0.1nm,0.3s,baz=186,slow=2.9,SNR=2.6
GERES PKiKP PKiKP 01 56 37.4 -0.4
comp=Z,1.2nm,0.8s,baz=222,slow=1.8,SNR=8.4
**CLL Collm 109.06 41** *e*PS PS 02 06 31.0 -3.7
CLL *e*SS SS 02 12 24.0 +0.5
CLL *e*SSS SSS 02 16 48.0
CLL LmV 02 42 00.0
comp=Z,500nm,20.5s
**ILAR Eielson Array 110.57 334** Pdiff Pdif 01 52 40.1 -1.0
comp=Z,0.4nm,0.8s,baz=152,slow=2.2,SNR=4.2
ILAR PKiKP PKiKP 01 56 41.0 -0.2
comp=Z,0.7nm,0.8s,baz=124,slow=0.4,SNR=8.8
ILAR PKKPbc PKKPbc 02 07 40.0 -2.5
comp=Z,0.4nm,0.7s,baz=299,slow=3.4,SNR=4.2
**VYHS Vyhne 111.51 46** *i* PKiKP PKiKP 01 56 43.6 +0.2
**VYHS Vyhne 111.51 46** *e*PKP PKiKP 01 56 43.6 +0.2
**TRPA Targa 113.72 47** ||*i*P PKiKP 01 56 47.9 +0.3
**ARR Arges 114.22 50** ||*i*P PKPdf 01 56 48.8 0.0
**MLR Muntele Rosu 115.14 50** ||PKiKP **PKPdf 01 56 51.4 +0.8**
**MLR Muntele Rosu 115.14 50** ||*i*P **PKPdf 01 56 51.4 +0.8**
**CFR Carcaliu 116.53 51** ||PKiKP **PKPdf 01 56 53.1 0.0**
**CFR Carcaliu 116.53 51** ||*i*P **PKPdf 01 56 53.1 0.0**
**KIEV Kiev 118.60 45** *e*PKiKP **PKPdf 01 56 55.3 -1.6**
**KIEV Kiev 118.60 45** *e*PKPdf **PKPdf 01 56 55.3 -1.6**
**AKASG Malin Array Be 118.61 45** PKP **PKPdf 01 56 55.9 -1.0**
comp=Z,1.8nm,0.5s,baz=264,slow=2.8,SNR=11
**VSU Vasula 118.72 36** *i* PKiKP **PKPdf 01 56 55.5 -1.4**
**FINES FINESS Array B 118.90 33** PKP **PKPdf 01 56 56.9 -0.3**
comp=Z,3.9nm,0.9s,baz=172,slow=15,SNR=5.6
**BRTR Keskin Array B 119.06 58** PKP **PKPdf 01 56 58.0 -0.1**
comp=Z,3.3nm,0.8s,baz=205,slow=3.0,SNR=20
**ARCES ARCESS Array B 119.68 24** PKP **PKPdf 01 56 58.1 -0.4**
comp=Z,2.8nm,0.8s,baz=252,slow=2.8,SNR=8.6
ARCES PKKPbc **PKKPab 02 07 08.7 -0.2**
comp=Z,2.6nm,0.7s,baz=94,slow=3.8,SNR=6.8
**ASAR Alice Springs 121.84 207** PKP **PKPdf 01 57 02.7 -1.5**
comp=Z,2.4nm,0.8s,baz=140,slow=2.1,SNR=23
ASAR pPKP **pPKPdf 01 57 23.1 +2.5**
comp=Z,2.3nm,0.8s,baz=149,slow=2.5,SNR=5.2
ASAR PKKPbc **PKKPbc 02 07 02.1 +0.1**
comp=Z,1.4nm,0.7s,baz=337,slow=3.8,SNR=12
ASAR PKKP **PKKPdf 02 07 33.0 -3.5**
comp=Z,0.9nm,0.7s,baz=341,slow=3.7,SNR=4.9
**OBN Obninsk 123.66 41**|| *e*PKiKP **PKPdf 01 57 07.4 +1.0**
OBN *e* 01 58 48.5
OBN *e*PPP PPP 02 01 31.8
OBN *e* 02 04 02.2
OBN *e*SS SS 02 15 58.8 +25
OBN pmax pmax
comp=Z,6.0nm,0.6s
OBN MLR MLR
comp=Z,453nm,22.0s
**LPSR Galich'ya Gora 124.86 44** *e*PKiKP **PKPdf 01 57 08.6 -0.2**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
LPSR pmax pmax
comp=N,8.0nm,1.1s
LPSR pmax pmax
comp=E,10.0nm,1.1s
**VSR Storozhevoye 124.90 46** *e*PKiKP **PKPdf 01 57 08.5 -0.5**
VSR pmax pmax
comp=Z,6.0nm,0.6s
VSR pmax pmax
comp=N,10.0nm,1.4s
VSR pmax pmax
comp=E,6.0nm,0.8s
**VORD Divnogorie 124.95 46** *e*PKiKP **PKPdf 01 57 09.3 +0.2**
VORD pmax pmax
comp=Z,8.0nm,0.6s
VORD pmax pmax
comp=N,20nm,0.5s
VORD pmax pmax
comp=E,20nm,0.6s
**WRA Warramunga Arr 124.98 210** PKP **PKPdf 01 57 09.0 -1.2**
comp=E,6.4nm,0.7s,baz=154,slow=1.7,SNR=42
WRA pPKP **pPKPdf 01 57 29.3 +2.7**
comp=E,4.6nm,0.7s,baz=159,slow=1.8,SNR=7.7
WRA PKKPbc **PKKPbc 02 06 49.8 0.0**
comp=E,1.2nm,0.9s,baz=342,slow=3.8,SNR=8.4
**WRAB Tennant Creek 124.98 210** *e*PKiKP **PKPdf 01 57 08.8 -1.4**
**WRAB Tennant Creek 124.98 210** *e*PKPdf **PKPdf 01 57 08.8 -1.4**
**KLMR Klimovskoe 125.36 34** *e*PKiKP **PKPdf 01 57 09.0 -0.5**
KLMR pmax pmax
comp=Z,12nm,0.9s
**COEN Coen 125.50 222** *e*PKPdf **PKPdf 01 57 12.6 +1.3**
**NEY Neytrino 126.37 56** *i* PKiKP **PKPdf 01 57 12.1 -0.2**
**KIV Kislovodsk 126.44 55**|| *i*PKiKP **PKPdf 01 57 12.3 0.0**
KIV *e* 01 59 09.8
KIV *e* 02 04 13.0
KIV pmax pmax
comp=Z,12nm,0.9s
**H11S2 WAKE ISLAND Hyl 126.47 272** T T 04 16 20.9
baz=113
**H11S1 WAKE ISLAND Hyl 126.48 272** T T 04 16 31.8
baz=113
**H11S3 WAKE ISLAND Hyl 126.49 272** T T 04 16 32.8
baz=113
**VRH Novokhopyorsk 126.50 46** *e*PKiKP **PKPdf 01 57 11.8 -0.2**
VRH pmax pmax
comp=N,10.0nm,0.5s
VRH pmax pmax
comp=Z,6.0nm,0.5s
VRH pmax pmax
comp=E,10.0nm,0.6s
**KBZ Khabaz 126.56 55** PKP **PKPdf 01 57 12.4 0.0**
comp=E,5.9nm,0.8s,baz=147,slow=2.5,SNR=10
**H11N3 WAKE ISLAND Hyl 126.77 273** T T 04 16 43.9
baz=115
**H11N1 WAKE ISLAND Hyl 126.78 273** T T 04 16 50.6
baz=115
**H11N2 WAKE ISLAND Hyl 126.79 273** T T 04 16 56.2
baz=115
**GNI Garni 127.38 60** *i* PKiKP **PKPdf 01 57 14.4 0.0**
**GNI Garni 127.38 60** *e*PKPdf **PKPdf 01 57 14.3 0.0**
**MBWA Marble Bar 128.49 193** *e*PKPdf **PKPdf 01 57 16.5 -0.4**
**BILL Bilibino 129.14 336**|| *e*PKiKP **PKPdf 01 57 15.4 -1.2**
BILL *e* 01 59 24.3
BILL pmax pmax
comp=Z,14nm,1.1s
BILL MLR MLR
comp=Z,340nm,19.0s
**ARU Arti 135.85 38** *i* PKiKP **PKPdf 01 57 29.4 -0.2**
ARU 02 00 09.7
**SEY Seymchan 136.50 333** PKhKP PKPpre 01 57 22.2
comp=Z,1.0nm,0.4s,baz=17,slow=19,SNR=3.0
SEY PKP **PKPdf 01 57 30.1 -0.5**
comp=Z,15nm,0.8s,baz=77,slow=2.9,SNR=5.7
**SEY Seymchan 136.50 333** *i* PKiKP **PKPdf 01 57 30.4 -0.2**
**AKTO Aktyubinsk 136.84 46** PKhKP PKPpre 01 57 21.4
comp=Z,1.9nm,0.8s,baz=319,slow=3.3,SNR=5.1
AKTO PKP **PKPdf 01 57 31.0 -0.6**
comp=Z,3.9nm,0.8s,baz=324,slow=4.2,SNR=8.6
AKTO PP **PP 02 00 15.7 +0.3**
comp=Z,1.8nm,0.7s,baz=280,slow=7.3,SNR=3.7
**GEYT Alibeck 137.45 65** PKhKP PKPpre 01 57 28.9
comp=Z,3.4nm,0.7s,baz=256,slow=6.0,SNR=7.0
**PETK Petropavlovsk- 137.49 318** PKhKP PKPpre 01 57 19.4
comp=Z,4.9nm,1.0s,baz=76,slow=6.1,SNR=3.4
PETK PKP **PKPdf 01 57 31.9 -0.8**
comp=Z,5.9nm,0.8s,baz=129,slow=5.9,SNR=6.1
**AB31 Akbulak array 138.26 48** *i* PKHKP PKPpre 01 57 25.7
AB31 pmax pmax
comp=Z,8.0nm,0.7s
**ABKAR Akbulak array 138.26 48** *e*PKPpre PKPpre 01 57 25.8
**BRVK Borovoye 143.38 39** *e*PKiKP PKPbc 01 57 41.4 +0.7
**BRVK Borovoye 143.38 39** *e*PKPdf PKPbc 01 57 41.4 +0.7
**BVA0 Borovoye Array 143.46 39** *i* PKiKP PKPbc 01 57 41.9 +1.0
BVA0 pmax pmax
comp=Z,11nm,1.2s
**BVAR Borovoye Array 143.46 39** PKP PKPbc 01 57 41.5 +0.6
comp=Z,5.3nm,0.8s,baz=318,slow=2.0,SNR=15
**LEM Lembang 143.80 178** PKP PKPab 01 57 42.7 +0.2
comp=Z,46nm,0.7s,baz=300,slow=20,SNR=6.9
**KAPI Kappang 144.06 199** PKP **PKPab 01 57 43.3 +0.1**
comp=Z,66nm,0.7s,baz=199,slow=2.6
**KAPI Kappang 144.06 199** *e*PKPdf PKPbc 01 57 43.8 0.0
**YAK Yakutsk 144.76 343** PKP **PKPab 01 57 44.3 -0.1**
comp=Z,29nm,0.7s,baz=195,slow=6.1,SNR=11
**YAK Yakutsk 144.76 343** *e*PKiKP **PKPab 01 57 44.5 0.0**
YAK *e* 02 01 00.4
YAK *e* 02 13 38.8
YAK pmax pmax
comp=Z,315nm,0.9s
YAK pmax pmax
comp=N,21nm,0.9s
YAK pmax pmax
comp=E,36nm,1.4s
YAK pmax pmax
comp=Z,143nm,15.4s
YAK pmax pmax
comp=Z,71nm,10.6s
YAK pmax pmax
comp=E,42nm,11.5s
YAK pmax pmax
comp=N,82nm,16.0s
**PALK Pallekele 145.48 124** PKPbc **PKPdf 01 57 47.4 -0.9**
comp=N,11nm,0.8s,baz=222,slow=0.1,SNR=3.0
**PALK Pallekele 145.48 124** *e*PKiKP **PKPab 01 57 49.5 +0.8**
**PALK Pallekele 145.48 124** *e*PKPbc **PKPab 01 57 49.5 +0.8**
**KUR Kuril'sk 145.64 308** *c i*PKHKP PKPpre 01 57 40.7
KUR *i* SSS SSS 02 25 34.4
**KK31 Karatay Array 146.60 56** *i* PKP2 **PKPbc 01 57 50.9 0.0**
KK31 pmax pmax
comp=Z,22nm,0.7s
**KKAR Karatay Array 146.60 56** *e*PKP2 **PKPbc 01 57 50.6 -0.3**
**KKAR Karatay Array 146.60 56** *e*PKPbc **PKPbc 01 57 50.6 -0.3**
**NKL Nikolayevsk 146.89 324** *i* PKP2 **PKPbc 01 57 50.9 -0.4**
NKL pmax pmax
comp=E,10.0nm,0.9s
NKL pmax pmax
comp=Z,100nm,0.9s
NKL pmax pmax
comp=Z,600nm,6.0s
NKL MLR MLR
comp=Z,400nm,15.0s
**TYV Tymovskoe 146.97 320** *e*PKP2 **PKPab 01 57 52.8 -0.4**
TYV pmax pmax
comp=Z,70nm,1.0s
TYV pmax pmax
comp=E,9.0nm,0.8s
TYV MLR MLR
comp=Z,500nm,14.0s
**YUK Yuzh-Kuril'sk 147.32 306** *d i*PKIKP **PKPdf 01 57 48.8 -1.6**
YUK *i* 01 58 04.0
YUK *i* PPP PPP 02 04 40.4
**KLRI Killari 148.47 104** *e*PKPbc **PKPbc 01 57 56.7 -0.1**
**YSS Yuzh-Sakhalins 148.52 313**|| *e*PKP2 **PKPbc 01 57 55.2 -0.8**
YSS pmax pmax
comp=Z,40nm,0.9s
**NVS Novosibirsk 148.75 29** *e*PKiKP **PKPdf 01 57 53.9 +1.5**
NVS *i* 01 58 13.5
NVS pmax pmax
comp=Z,47nm,0.8s
NVS pmax pmax
comp=N,8.0nm,0.9s
NVS pmax pmax
comp=E,12nm,0.7s
**SKHT Srikalahasti 148.81 114** *e*PKPbc **PKPbc 01 57 57.8 +0.1**
**EKS2 Erkin-Say 149.04 55** *e*PKP2 **PKPbc 01 57 58.4 +0.8**
**EKS2 Erkin-Say 149.04 55** P **PKPbc 01 57 58.8 +1.2**
SNR=19
**EKS2 Erkin-Say 149.04 55** *e*PKPbc **PKPbc 01 57 58.4 +0.8**
**AML Almayashu 149.10 56** P **PKPbc 01 57 57.2 -0.9**
SNR=12
**RCLA Racherla 149.15 111** *e*PKPdf **PKPdf 01 57 55.3 +1.0**
RCLA *e*PKPbc **PKPbc 01 57 58.1 -0.3**
**USP Ospenovka 149.41 54** P **PKPbc 01 57 59.1 +0.7**
SNR=21
**SRLM Srisailam 149.43 109** *e*PKPbc **PKPbc 01 57 59.1 -0.1**
**AAK Ala-Archa 149.56 55** *e*PKP2 **PKPbc 01 58 00.0 +1.0**
**AAK Ala-Archa 149.56 55** P **PKPbc 01 58 00.4 +1.4**
SNR=42
**AAK Ala-Archa 149.56 55** *e*PKPbc **PKPbc 01 58 00.0 +1.0**
AAK *e*PKPab **PKPab 01 58 05.3 +1.1**
ASAJ *e*PKPab **PKPab 01 58 05.5 +1.7**
**ASAJ Asahikawa 149.56 308** PKP **PKPdf 01 57 53.7 -0.4**
comp=E,3.5nm,0.3s,baz=194,slow=8.3,SNR=1.9
ASAJ PKPbc **PKPbc 01 57 58.7 0.0**
comp=E,18nm,0.8s,baz=58,slow=1.6,SNR=11
**ASAJ Asahikawa 149.56 308** PKP **PKPdf 01 57 53.7 -0.4**
ASAJ *e*PKPbc **PKPbc 01 57 59.0 +0.4**
**FRU Bishkek 149.60 55** *i* PKP2 **PKPbc 01 57 58.0 -0.9**
FRU pmax pmax
comp=Z,70nm,1.7s
**CHMS Chumysh 149.65 54** P **PKPbc 01 58 00.1 +1.1**
SNR=30
**UCH Uchtor 149.67 56** P **PKPbc 01 58 01.2 +1.5**
SNR=37
**HYB Hyderabad 149.81 107** *i* PKP **PKPbc 01 57 59.0 -1.1**
HYB *e* 01 58 14.0
**HYBB Hyderabad (bro 149.81 107** *e*PKPbc **PKPbc 01 57 59.8 -0.3**
**KBK Karagaybulak 149.88 55** P **PKPbc 01 58 00.7 +0.9**
SNR=24
**GSI Gunungsitoli 149.92 157** *e*PKPbc **PKPbc 01 58 00.5 0.0**
**NJS Nagarjunasagar 150.00 109** *e*PKPbc **PKPbc 01 58 00.1 -0.5**
**ZALV Zalesovo Beam 150.04 29** PKP **PKPdf 01 57 54.0 -0.5**
comp=Z,8.6nm,0.8s,baz=298,slow=2.7,SNR=41
ZALV PKPbc **PKiKP 01 58 00.0 -0.4**
comp=Z,133nm,0.8s,baz=293,slow=3.2,SNR=129
**ADKI Addanki 150.18 111** *e*PKPdf **PKPdf 01 57 56.7 +0.9**
ADKI *e*PKPbc **PKPbc 01 58 01.0 0.0**
**TKM2 Tokmak 2 150.27 54** *e*PKiKP **PKPdf 01 57 56.6 +1.1**
TKM2 *e* 01 58 07.9
**TKM2 Tokmak 2 150.27 54** P **PKPbc 01 58 01.6 +0.8**
SNR=22
**TKM2 Tokmak 2 150.27 54** *e*PKPdf **PKPdf 01 57 56.6 +1.1**
TKM2 *e*PKPbc **PKiKP 01 58 01.1 -0.4**
TKM2 *e*PKPab **PKPab 01 58 07.9 +0.8**
**SRSP Sriramsagar 150.34 104** *e*PKPdf **PKPdf 01 57 57.4 +1.3**
SRSP *e*PKPbc **PKPbc 01 58 00.7 -0.6**
**CLNS Chul'man 150.49 342** *e*PKiKP **PKPbc 01 58 00.2 -0.4**
CLNS pmax pmax
comp=Z,40nm,0.8s
CLNS pmax pmax
comp=N,12nm,0.7s
**RPR Rampur 151.11 105** *e*PKPbc **PKPbc 01 58 02.7 -0.4**
**KSH Kashi 151.31 61** *e*PKPbc **PKPdf 01 57 58.4 +0.7**
KSH *es*PKP 01 58 12.1
KSH PKS **PKSdf 02 01 31.1 -0.8**
KSH *e*PP **PP 02 01 44.0 +1.3**
KSH SKS **SKSdf 02 05 02.6 +2.4**
KSH SS **SS 02 21 01.5 -1.3**
KSH PPMZ
comp=N,190nm,6.4s
KSH LN
comp=N,110nm,5.9s
KSH LE
comp=N,110nm,5.1s
KSH LZ

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=N,94nm,10.4s | | | | | | | |
| **BOD** | **Bodaibo** | **151.53** | **354** | *e*PKIKP | **PKPbc** | **01 58 02.1** | **-0.8** | |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.2s | | | | | | | |
| **PSI** | **Prapat** | **151.77** | **159** | PKPbc | **PKPbc** | **01 58 02.6** | **-2.4** | |
| | comp=Z,167nm,0.7s,baz=12,slow=0.4,SNR=4.3 | | | | | | | |
| **KSM** | **Kuching** | **152.03** | **183** | *e*PKPbc | **PKPbc** | **01 58 05.1** | **-0.4** | |
| **PVM** | **Polavaram** | **152.26** | **110** | *e*PKPbc | **PKPbc** | **01 58 06.2** | **+0.4** | |
| **MK31** | **Makanchi Array** | **153.15** | **43** | *i* PKIKP | **PKPdf** | **01 57 59.0** | **-0.5** | |
| MK31 | | | | pmax | pmax | | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **153.15** | **43** | PKPbc | **PKPdf** | **01 57 59.3** | **-0.2** | |
| | comp=Z,2.4nm,0.8s,baz=324,slow=1.7,SNR=15 | | | | | | | |
| MKAR | | | | PKPbc | **PKPbc** | **01 58 06.9** | **-0.1** | |
| | comp=Z,9.3nm,0.8s,baz=316,slow=2.1,SNR=34 | | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **01 58 19.6** | **+0.8** | |
| | comp=Z,17nm,0.8s,baz=306,slow=2.9,SNR=18 | | | | | | | |
| **KLR** | **Kul'dur** | **153.73** | **325** | *e*PKIKP | **PKPdf** | **01 58 02.2** | **+2.0** | |
| **IPM** | **Ipoh** | **153.98** | **162** | *e*PKPbc | **PKPbc** | **01 58 09.0** | **-0.8** | |
| **MJAR** | **Matsushiro Arr** | **154.48** | **294** | PKPab | **PKPab** | **01 58 25.0** | **+0.3** | |
| | comp=Z,7.5nm,0.8s,baz=121,slow=2.6,SNR=15 | | | | | | | |
| **MAJO** | **Matsushiro** | **154.48** | **294** | *e*PKIKP | **PKPbc** | **01 58 11.1** | **+1.0** | |
| MAJO | | | | *e* | | 01 58 25.4 | | |
| **MAJO** | **Matsushiro** | **154.48** | **294** | *e*PKPbc | **PKPbc** | **01 58 11.1** | **+1.0** | |
| MAJO | | | | *e*PKPab | **PKPab** | **01 58 25.4** | **+0.6** | |
| **KULM** | **Kulim** | **154.65** | **161** | *e*PKPbc | **PKPbc** | **01 58 10.3** | **-0.9** | |
| **CHLP** | **Challavanipeta** | **154.89** | **110** | *e*PKPdf | **PKPdf** | **01 58 04.1** | **+1.3** | |
| **USRK** | **Ussuriysk Ar.** | **156.52** | **315** | PKPab | **PKPab** | **01 58 32.4** | **-0.8** | |
| | comp=Z,5.2nm,0.9s,baz=82,slow=0.3,SNR=7.2 | | | | | | | |
| **KOLN** | **Koldanda** | **157.80** | **88** | *e*P | **PKPab** | **01 58 38.4** | **-1.2** | |
| | comp=Z,28nm,0.8s | | | | | | | |
| **WMQ** | **Urumqi** | **157.96** | **44** | *e*PKP | **PKPdf** | **01 58 07.0** | **+0.9** | |
| **GKN** | **Gorkha** | **158.74** | **88** | *e*P | **PKPab** | **01 58 42.7** | **-0.9** | |
| | comp=Z,40nm,0.8s | | | | | | | |
| **DMN** | **Daman** | **159.08** | **90** | *e*P | **PKPab** | **01 58 44.3** | **-0.9** | |
| | comp=Z,70nm,0.9s | | | | | | | |
| **KKN** | **Kakani** | **159.27** | **89** | *e*P | **PKPab** | **01 58 45.3** | **-0.6** | |
| | comp=Z,63nm,0.8s | | | | | | | |
| **PKI** | **Pulchoki** | **159.34** | **90** | *e*P | **PKPab** | **01 58 45.4** | **-1.0** | |
| | comp=Z,26nm,0.8s | | | | | | | |
| **GUN** | **Gumba** | **159.81** | **89** | *e*P | **PKPab** | **01 58 47.7** | **-0.8** | |
| | comp=Z,37nm,0.8s | | | | | | | |
| **RAMN** | **Ramite** | **160.25** | **92** | *e*P | **PKPab** | **01 58 50.3** | **0.0** | |
| | comp=Z,10nm,0.6s | | | | | | | |
| **CN2** | **Changchun** | **160.57** | **321** | *e*PKP | **PKPdf** | **01 58 10.0** | **+1.0** | |
| **TAPN** | **Taplejung** | **161.30** | **92** | *e*P | **PKPab** | **01 58 56.0** | **+1.1** | |
| **SONM** | **Songino Array** | **161.66** | **5** | PKP | **PKPdf** | **01 58 10.3** | **+0.1** | |
| | comp=Z,1.3nm,0.8s,baz=343,slow=1.4,SNR=9.5 | | | | | | | |
| SONM | | | | PKPab | **PKPab** | **01 58 56.6** | **+1.1** | |
| | comp=Z,4.7nm,0.8s,baz=323,slow=3.8,SNR=13 | | | | | | | |
| SONM | | | | PP | **PP** | **02 02 38.2** | **-0.3** | |
| | comp=Z,0.9nm,0.8s,baz=328,slow=5.1,SNR=4.0 | | | | | | | |
| **KSRS** | **Korea Array** | **162.26** | **301** | PKP | **PKPdf** | **01 58 09.6** | **-1.3** | |
| | comp=Z,0.5nm,0.3s,baz=184,slow=0.7,SNR=3.4 | | | | | | | |
| KSRS | | | | PKPab | **PKPab** | **01 58 59.0** | **+0.6** | |
| | comp=Z,0.6nm,0.4s,baz=77,slow=4.7,SNR=2.7 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **162.29** | **301** | PKIKP | **PKPdf** | **01 58 09.7** | **-1.4** | |
| KSAR | | | | | | 01 58 59.0 | | |
| **KSAR** | **Wonju Array Be** | **162.29** | **301** | PKP | **PKPdf** | **01 58 09.7** | **-1.4** | |
| KSAR | | | | PKPab | **PKPab** | **01 58 59.0** | **+0.4** | |
| **CMAR** | **Chiang Mai Arr** | **165.73** | **139** | PKP | **PKPdf** | **01 58 14.1** | **-0.6** | |
| | comp=Z,0.5nm,0.3s,baz=252,slow=2.8,SNR=4.2 | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **01 59 13.4** | **-0.5** | |
| | comp=Z,1.5nm,0.3s,baz=247,slow=5.7,SNR=9.2 | | | | | | | |
| **GTA** | **Gaotai** | **167.69** | **35** | *e*PKP | **PKPdf** | **01 58 16.3** | **+0.5** | |
| GTA | | | | pPKP | **pPKPdf** | **01 58 28.1** | **-4.2** | |
| GTA | | | | sPKP | | 01 58 32.4 | | |
| GTA | | | | PKPab | **PKPab** | **01 59 22.6** | **+0.3** | |
| GTA | | | | PP | **PP** | **02 03 13.1** | **+2.5** | |
| GTA | | | | SKS | **SKSdf** | **02 05 13.5** | **-1.6** | |
| GTA | | | | SKKS | **SKKSac** | **02 09 54.8** | **+1.2** | |
| GTA | | | | SS | **SS** | **02 23 54.3** | **+0.2** | |
| GTA | | | | PPMZ | | | | |
| | comp=Z,350nm,5.9s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,460nm,24.2s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,420nm,25.2s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,850nm,22.8s | | | | | | | |
| **BJI** | **Beijing** | **167.94** | **332** | PKP | **PKPdf** | **01 58 13.5** | **-2.2** | |
| BJI | | | | SS | SS | 02 24 06.3 | +10 | |
| BJI | | | | LN | | | | |
| | comp=Z,250nm,19.3s | | | | | | | |
| BJI | | | | LE | | | | |
| | comp=Z,430nm,20.1s | | | | | | | |
| BJI | | | | LZ | | | | |
| | comp=Z,340nm,30.6s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **168.52** | **350** | *e*PKP | **PKPdf** | **01 58 15.0** | **-1.3** | |
| HHC | | | | sPKP | | 01 58 30.3 | | |
| HHC | | | | PKS | **PKSdf** | **02 01 46.3** | **-2.6** | |
| HHC | | | | PP | PP | 02 03 22.5 | +8.3 | |
| HHC | | | | SKS | **SKSdf** | **02 05 12.8** | **-2.6** | |
| HHC | | | | PPMZ | | | | |
| | comp=Z,160nm,9.1s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,280nm,22.6s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,360nm,22.5s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,600nm,22.9s | | | | | | | |
| **NJ2** | **Nanjing** | **171.03** | **289** | *e*PKP | **PKPdf** | **01 58 17.1** | **-0.8** | |
| **LZH** | **Lanzhou** | **172.26** | **32** | *e*PKP | **PKPdf** | **01 58 16.3** | **-2.3** | |
| LZH | | | | pPKP | **pPKPdf** | **01 58 28.8** | **-6.2** | |
| LZH | | | | sPKP | | 01 58 34.1 | | |
| LZH | | | | PP | **PP** | **02 03 34.3** | **+0.8** | |
| LZH | | | | SKKS | | 02 10 17.3 | | |
| LZH | | | | PPMZ | | | | |
| | comp=Z,220nm,4.6s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,500nm,17.4s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,480nm,16.8s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,760nm,20.6s | | | | | | | |
| **CD2** | **Chengdu** | **175.41** | **72** | PKP | **PKPdf** | **01 58 18.8** | **-0.9** | |
| CD2 | | | | sPKP | | 01 58 37.6 | | |
| CD2 | | | | SKS | **SKSdf** | **02 05 18.1** | **-0.2** | |
| CD2 | | | | SKKS | **SKKSac** | **02 10 30.8** | **-0.7** | |
| CD2 | | | | SS | **SS** | **02 25 11.1** | **-0.8** | |
| CD2 | | | | PPMZ | | | | |
| | comp=Z,120nm,5.2s | | | | | | | |
| **GYA** | **Guiyang** | **176.36** | **148** | *e*PKP | **PKPdf** | **01 58 19.0** | **-1.1** | |
| GYA | | | | sPKP | | 01 58 37.4 | | |
| GYA | | | | PKPab | **PKPab** | **02 00 01.8** | **+0.8** | |
| GYA | | | | PKS | **PKSdf** | **02 01 49.3** | **-3.2** | |
| GYA | | | | PP | **PP** | **02 03 55.0** | **+1.8** | |
| GYA | | | | PPMZ | | | | |
| | comp=Z,120nm,8.0s | | | | | | | |

*CSEM **23** 01:41:39.2, 38°.51N×29°.40W, h3km, ML3.0, After PDA*

**PDA 23 01:41:39.2±0.8, 38°.51N×29°.40W, h3km±8km, MD3.6, ML3.0, Error ellipse: s-maj=7.4km s-min=5.2km az=101.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CALA** | **Caldeira** | **0.55** | **82** | *e*S | Sg | 01 41 56.2 | -1.1 |
| **CALA** | **Caldeira** | **0.55** | **82** | *e*S | Sg | 01 41 56.2 | -1.1 |
| **PCED** | **Cedros** | **0.56** | **77** | *e*P | Pg | 01 41 48.8 | -1.2 |
| PCED | | | | *e*S | Sg | 01 41 56.2 | -1.1 |
| PCED | | | | A | A | 01 42 03.5 | |
| | 372nm,0.3s | | | | | | |
| **PCED** | **Cedros** | **0.56** | **77** | *e*P | Pg | 01 41 48.8 | -1.2 |
| PCED | | | | *e*S | Sg | 01 41 56.2 | -1.1 |
| **HOR** | **Horta** | **0.61** | **88** | *e*P | Pg | 01 41 49.6 | -1.2 |
| HOR | | | | *e*S | Sg | 01 41 57.5 | -1.2 |
| **HOR** | **Horta** | **0.61** | **88** | *e*P | Pg | 01 41 49.6 | -1.2 |
| HOR | | | | *e*S | Sg | 01 41 57.5 | -1.2 |
| **PCAN** | **Candelaria** | **0.72** | **93** | *e*P | Pg | 01 41 50.9 | -2.2 |
| PCAN | | | | *e*S | Sg | 01 42 00.0 | -2.5 |
| PCAN | | | | A | A | 01 42 03.8 | |
| | 311nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **0.72** | **93** | *e*P | Pg | 01 41 50.9 | -2.2 |
| PCAN | | | | *e*S | Sg | 01 42 00.0 | -2.5 |
| **PICO** | **Pico** | **0.77** | **90** | *e*P | Pg | 01 41 52.2 | -1.8 |
| PICO | | | | *e*S | Sg | 01 42 01.6 | -2.4 |
| **PICO** | **Pico** | **0.77** | **90** | *e*P | Pg | 01 41 52.2 | -1.8 |
| PICO | | | | *e*S | Sg | 01 42 01.6 | -2.4 |
| **PPNO** | **Prainha do Nor** | **0.89** | **92** | *e*P | Pg | 01 41 53.9 | -2.6 |
| PPNO | | | | *e*S | Sg | 01 42 04.9 | -3.2 |
| PPNO | | | | A | A | 01 42 08.1 | |
| | 305nm,0.2s | | | | | | |
| **PPNO** | **Prainha do Nor** | **0.89** | **92** | *e*P | Pg | 01 41 53.9 | -2.6 |
| PPNO | | | | *e*S | Sg | 01 42 04.9 | -3.2 |
| **ROSA** | **Rosais** | **0.93** | **77** | *e*P | Pg | 01 41 54.5 | -2.6 |
| ROSA | | | | *e*S | Sg | 01 42 05.5 | -3.8 |
| ROSA | | | | A | A | 01 42 06.5 | |
| | 198nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **0.93** | **77** | *e*P | Pg | 01 41 54.5 | -2.6 |
| ROSA | | | | *e*S | Sg | 01 42 05.5 | -3.8 |
| **PID** | **Ribeirinha** | **1.01** | **93** | *e*S | Sg | 01 42 07.5 | -4.2 |
| **PID** | **Ribeirinha** | **1.01** | **93** | *e*S | Sg | 01 42 07.5 | -4.2 |
| **PMAN** | **Manadas** | **1.04** | **83** | *e*P | Pg | 01 41 55.7 | -3.4 |
| PMAN | | | | *e*S | Sg | 01 42 08.0 | -4.6 |
| PMAN | | | | A | A | 01 42 13.4 | |
| | 87nm,0.3s | | | | | | |
| **PMAN** | **Manadas** | **1.04** | **83** | *e*P | Pg | 01 41 55.7 | -3.4 |
| PMAN | | | | *e*S | Sg | 01 42 08.0 | -4.6 |
| **PGRA** | **Graciosa** | **1.23** | **64** | *e*S | Sg | 01 42 12.6 | -6.1 |
| PGRA | | | | A | A | 01 42 17.5 | |
| | 86nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.23** | **64** | *e*S | Sg | 01 42 12.6 | -6.1 |
| **ADH** | **Angra Heroismo** | **1.71** | **84** | *e*P | Pn | 01 42 05.0 | -4.8 |
| ADH | | | | *e*S | Sn | 01 42 24.4 | -7.7 |
| ADH | | | | A | A | 01 42 26.5 | |
| | 72nm,0.4s | | | | | | |
| **ADH** | **Angra Heroismo** | **1.71** | **84** | *e*P | Pn | 01 42 05.0 | -4.8 |
| ADH | | | | *e*S | Sn | 01 42 24.4 | -7.7 |
| **PSET** | **Sete Cidades** | **2.98** | **102** | *e*P | Pn | 01 42 23.1 | -4.3 |
| **PSET** | **Sete Cidades** | **2.98** | **102** | *e*P | Pn | 01 42 23.1 | -4.3 |
| **PDA** | **Ponta Delgada** | **3.04** | **103** | *e*P | Pn | 01 42 23.5 | -4.7 |
| **PDA** | **Ponta Delgada** | **3.04** | **103** | *e*P | Pn | 01 42 23.5 | -4.7 |
| **BART** | **Pico Bartolome** | **3.42** | **101** | *e*P | Pn | 01 42 28.9 | -4.6 |
| **BART** | **Pico Bartolome** | **3.42** | **101** | *e*P | Pn | 01 42 28.9 | -4.6 |
| **PSMA** | **Santa Maria** | **3.71** | **113** | *e*P | Pn | 01 42 32.4 | -5.0 |
| **PSMN** | **Pico do Norte,** | **3.75** | **112** | *e*P | Pn | 01 42 33.7 | -4.3 |
| **PSMN** | **Pico do Norte,** | **3.75** | **112** | *e*P | Pn | 01 42 33.7 | -4.3 |

*SJA **23** 01:52:59.0±0.5, 29°.12S×71°.64W, h89km±5km, ML3.5, MW3.4*
*ISCJB **23** 01:53:02.8±1.1, 29°.53S±0°.04×71°.58W±0°.08, h25km±6km, Error ellipse: s-maj=11.4km s-min=5.6km az=15.1*
*GUC **23** 01:53:05.8±0.5, 29°.62S×71°.14W, h40km±1km, ML4.0*

**ISC 23 01:53:02.4±3.3, 29°.52S±0°.04×71°.48W±0°.08, h8km±24km, n21, σ1°.74/35, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LSCH** | **La Serena** | **0.44** | **152** | *e*P | **Pb** | **01 53 14.1** | **+1.6** |
| LSCH | | | | *e*S | **Sb** | **01 53 20.3** | **+1.0** |
| **LCO** | **Las Campanas** | **0.85** | **54** | *e*P | **Pb** | **01 53 20.4** | **+0.8** |
| LCO | | | | *e*S | **Sb** | **01 53 31.4** | **+0.1** |
| **LCO** | **Las Campanas** | **0.85** | **54** | *e*P | **Pb** | **01 53 18.3** | **-1.4** |
| LCO | | | | *e*S | **Sb** | **01 53 31.8** | **+0.5** |
| **TLL** | **Tololo Astrono** | **0.88** | **138** | *e*P | **Pb** | **01 53 19.0** | **-1.1** |
| TLL | | | | *e*S | **Sb** | **01 53 28.8** | **-3.3** |
| TLL | | | | AML | AML | 01 53 29.8 | |
| | comp=E,9μm,0.3s | | | | | | |
| **VACH** | **Vallenar** | **1.13** | **34** | *e*P | **Pb** | **01 53 25.4** | **+1.1** |
| VACH | | | | *e*S | **Sn** | **01 53 40.0** | **-0.5** |
| **AGUA** | **GUANDACOL** | **2.61** | **90** | *e*P | **Pn** | **01 53 43.5** | **-1.6** |
| **AMOG** | **MOGNA** | **2.95** | **119** | *e*P | **Pn** | **01 53 50.1** | **+0.4** |
| **RTLS** | **Leoncito** | **2.95** | **141** | *e*P | **Pn** | **01 53 50.9** | **+0.9** |
| RTLS | | | | *e*S | **Sb** | **01 54 30.4** | **-1.5** |
| **RTLL** | **Cerro Villicun** | **3.16** | **126** | *e*P | **Pn** | **01 53 53.1** | **+0.4** |
| RTLL | | | | *e*S | **Sn** | **01 54 33.1** | **+2.4** |
| **AUSP** | **Uspallata** | **3.24** | **147** | *e*P | **Pn** | **01 53 54.8** | **+0.9** |
| **RTCV** | **Cerro Valdivia** | **3.45** | **133** | *e*P | **Pn** | **01 53 57.2** | **+0.7** |
| **ROCH** | **El Roble** | **3.47** | **173** | *e*P | **Pn** | **01 53 56.9** | **-0.1** |
| ROCH | | | | *e*S | **Sn** | **01 54 35.6** | **-2.7** |
| ROCH | | | | AML | AML | 01 54 49.7 | |
| | comp=E,232nm,0.3s | | | | | | |
| **ROC1** | **El Roble** | **3.47** | **173** | *e*P | **Pn** | **01 53 58.2** | **+1.1** |
| ROC1 | | | | *e*S | **Sn** | **01 54 42.2** | **+3.7** |
| **CFAA** | **Coronel Fontan** | **3.49** | **127** | *e*P | **Pn** | **01 53 57.0** | **0.0** |
| CFAA | | | | *e*S | **Sn** | **01 54 41.0** | **+2.3** |
| **AVFE** | **Valle Fertil** | **3.67** | **109** | *e*P | **Pn** | **01 53 58.9** | **-0.8** |
| AVFE | | | | *e*S | **Sn** | **01 54 43.2** | **0.0** |
| AVFE | | | | IAML | | 01 54 52.1 | |
| | comp=Z,77nm,0.4s | | | | | | |
| **ASAL** | **Salagasta** | **3.81** | **144** | *e*P | **Pn** | **01 54 02.7** | **+1.0** |
| **ARCO** | **CERRO ARCO** | **3.97** | **147** | *e*P | **Pn** | **01 54 05.0** | **+1.2** |
| ARCO | | | | *e*S | **Sn** | **01 54 53.6** | **+2.9** |
| ARCO | | | | IAML | | 01 55 02.9 | |
| | comp=Z,45nm,0.5s | | | | | | |
| **RCDM** | **Rinconada Maip** | **4.00** | **172** | *e*P | **Pn** | **01 54 03.8** | **-0.3** |
| RCDM | | | | *e*S | **Sn** | **01 54 48.3** | **-2.9** |
| RCDM | | | | AML | AML | 01 55 04.8 | |
| | comp=E,132nm,0.6s | | | | | | |
| **ANTU** | **Antumapu** | **4.10** | **170** | *e*P | **Pn** | **01 54 05.4** | **-0.2** |
| ANTU | | | | *e*S | **Sn** | **01 54 50.5** | **-3.3** |
| ANTU | | | | AML | AML | 01 55 04.8 | |
| | comp=N,181nm,0.2s | | | | | | |
| **AAGR** | **Agrelo** | **4.22** | **148** | *e*P | **Pn** | **01 54 08.4** | **+1.2** |
| **ACAN** | **Cantantal** | **4.60** | **128** | *e*P | **Pn** | **01 54 11.7** | **-0.7** |

**IDC 23 02:04:24.9±8.7, 6°.75S×150°.26E, h75km±63km, mb2.8/2, mb1 3.2/3, mb1mx3.0/33, mbtmp3.3/3, ML1.3/1, Error ellipse: s-maj=112.7km s-min=56.8km az=128.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.05** | **229** | P | Pn | 02 05 24.6 | +0.2 |
| | 1.3nm,0.3s,baz=22,slow=16,SNR=2.4 | | | | | | |
| PMG | | | | S | Sn | 02 06 11.9 | +1.3 |
| | 2.9nm,0.3s,baz=148,slow=18,SNR=6.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.27** | **228** | P | P | 02 08 53.2 | -1.3 |
| | 0.7nm,0.9s,baz=54,slow=11,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **23.02** | **221** | P | P | 02 09 23.2 | -0.6 |
| | 0.6nm,0.9s,baz=49,slow=6.3,SNR=1.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.41** | **284** | PKPbc | PKPbc | 02 24 04.0 | 0.0 |
| | 0.2nm,0.5s,baz=76,slow=1.9,SNR=5.5 | | | | | | |

*IDC **23** 02:05:19.9±1.2, 1°.81N×126°.45E, h0km, mb4.0/6, mb1 4.2/6, mb1mx3.8/35, mbtmp4.0/6, Error ellipse: s-maj=85.7km s-min=18.2km az=65.0*
*ISCJB **23** 02:05:24.0±0.4, 1°.98N±0°.04×126°.53E±0°.04, h47km, mb4.2/11, Error ellipse: s-maj=5.9km s-min=5.0km az=144.6*
*DJA **23** 02:05:26.0±0.4, 2°.N±3°×12°.6E±°, h55km±9km, M4.3/15, mb4.2/8, mB5.0/6, MLv4.3/15, Mw(mB)4.3/6*
*NEIC **23** 02:05:26.8±1.0, 1°.78N×126°.49E, h55km±10km, mb4.4/5, Error ellipse: s-maj=11.6km s-min=8.4km az=221.0*

**ISC 23 02:05:25.9±0.7, 2°.02N±0°.05×126°.49E±0°.05, h47km, n32, σ1°.96/40, mb4.1/11, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.52** | **145** | P | **Pn** | **02 05 50.5** | **-0.2** |
| TNTI | | | | S | **Sn** | **02 06 12.9** | **+3.7** |
| **TNTI** | **Ternate** | **1.52** | **145** | *e*Pn | **Pn** | **02 05 48.9** | **-1.8** |
| TNTI | | | | *e*Sn | **Sn** | **02 06 05.3** | **-4.0** |
| **SGSI** | **Sangihe** | **1.92** | **330** | P | **Pn** | **02 05 53.7** | **-2.4** |
| SGSI | | | | S | **Sn** | **02 06 19.4** | **+0.3** |
| **LBMI** | **Labuha** | **2.82** | **159** | P | **Pn** | **02 06 10.4** | **+1.8** |
| LBMI | | | | S | **Sn** | **02 06 45.2** | **+3.8** |
| **KMSI** | **Cibinong** | **2.88** | **240** | P | **Pn** | **02 06 09.3** | **-0.1** |
| **GTOI** | **Gorontalo** | **3.73** | **249** | P | **Pn** | **02 06 21.6** | **+0.5** |
| **SANI** | **Sanana** | **4.07** | **187** | P | **Pn** | **02 06 23.7** | **-2.0** |
| SANI | | | | S | **Sn** | **02 07 14.2** | **+2.1** |
| **MRSI** | **Marisa** | **4.79** | **251** | P | **Pn** | **02 06 35.6** | **-0.1** |
| MRSI | | | | S | **Sn** | **02 07 31.6** | **+1.6** |
| **LUWI** | **Luwuk** | **4.80** | **231** | P | **Pn** | **02 06 35.0** | **-0.7** |
| LUWI | | | | S | **Sn** | **02 07 33.1** | **+3.1** |
| **LUWI** | **Luwuk** | **4.80** | **231** | *e*Pn | **Pn** | **02 06 34.6** | **-1.1** |
| LUWI | | | | *e*Sn | **Sn** | **02 07 26.1** | **-4.0** |
| **SWI** | **Sorong** | **5.56** | **121** | P | **Pn** | **02 06 46.6** | **+0.4** |
| | 14nm,0.4s,777nm0.1nm | | | | | | |
| **APSI** | **Ampana** | **5.64** | **239** | P | **Pn** | **02 06 47.4** | **+0.1** |
| | 104nm,0.6s,2μm0.5nm | | | | | | |
| APSI | | | | S | **Sn** | **02 07 53.6** | **+2.7** |
| | 104nm,0.6s,2μm0.5nm | | | | | | |
| **MSAI** | **Masohi** | **5.86** | **155** | P | **Pn** | **02 06 52.0** | **+1.7** |
| | 9.9nm,0.8s,0.1nm | | | | | | |
| **MPSI** | **Mapaga** | **6.79** | **256** | P | **Pn** | **02 07 03.4** | **+0.3** |
| | 14nm,0.7s,999nm0.1nm | | | | | | |
| **FAKI** | **Fak Fak** | **7.56** | **130** | *e*Pn | **Pn** | **02 07 12.2** | **-1.5** |
| **TTSI** | **Tana Toraja** | **8.35** | **233** | P | **Pn** | **02 07 25.4** | **+1.0** |
| | 17nm,0.9s,2μm | | | | | | |
| **SPSI** | **Sidrap Palu** | **8.96** | **228** | P | **Pn** | **02 07 34.0** | **+1.1** |
| **KAPI** | **Kappang** | **9.70** | **224** | *e*Pn | **Pn** | **02 07 41.1** | **-1.8** |
| **SOEI** | **Soe** | **11.90** | **191** | *e*Pn | **Pn** | **02 08 11.3** | **-1.9** |
| **WRAB** | **Tennant Creek** | **23.14** | **161** | *e*P | **P** | **02 10 26.3** | **-2.0** |
| | 4.9nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.14** | **161** | P | **P** | **02 10 25.8** | **-2.5** |
| | 3.3nm,0.5s,baz=335,slow=10,SNR=36 | | | | | | |
| **MBWA** | **Marble Bar** | **23.96** | **196** | *e*P | **P** | **02 10 33.3** | **-2.7** |
| | 6.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **26.53** | **165** | P | **P** | **02 10 58.2** | **-1.2** |
| | 1.9nm,0.5s,baz=346,slow=8.0,SNR=29 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.56** | **303** | P | **P** | **02 11 45.2** | **+1.0** |
| | 0.8nm,0.6s,baz=113,slow=6.9,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **48.84** | **342** | P | **P** | **02 14 07.9** | **+1.0** |
| | 0.8nm,0.8s,baz=152,slow=6.5,SNR=5.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.82** | **326** | P | **P** | **02 15 20.6** | **+0.9** |
| | 2.7nm,0.7s,baz=120,slow=8.5,SNR=14 | | | | | | |
| **TKM2** | **Tokmak 2** | **60.87** | **319** | *e*P | **P** | **02 15 35.2** | **+1.1** |
| | 1.7nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **61.46** | **319** | *e*P | **P** | **02 15 39.4** | **+1.3** |
| | 6.9nm,1.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.00** | **334** | P | P | 02 15 44.8 | +3.6 |
| | 0.9nm,0.7s,baz=114,slow=9.6,SNR=4.5 | | | | | | |
| **KURK** | **Kurchatov** | **63.05** | **328** | *e*P | **P** | **02 15 49.1** | **+0.9** |
| | 12nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.32** | **321** | *e*P | **P** | **02 16 53.2** | **+0.6** |
| **TORD** | **Torodi Ar. Bea** | **123.20** | **287** | PKP | **PKPdf** | **02 24 18.2** | **-0.4** |
| | 0.4nm,0.8s,baz=93,slow=3.5,SNR=2.6 | | | | | | |

*ISK **23** 02:09:46.5, 39°.39N×26°.18E, h8km, MD3.0*
*DDA **23** 02:09:47.8, 39°.41N×26°.32E, h7km, Md3.3*
*ATH **23** 02:09:47.8, 39°.44N×26°.41E, h6km±4km, MD3.0/7*
*ISCJB **23** 02:09:48.1±0.4, 39°.43N±0°.02×26°.33E±0°.03, h4km±4km, Error ellipse: s-maj=4.5km s-min=2.9km az=161.5*
*CSEM **23** 02:09:48.4±0.2, 39°.43N×26°.31E, h8km, MD3.0, Error ellipse: s-maj=4.6km s-min=3.3km az=70.0*

**ISC 23 02:09:48.4±0.8, 39°.43N±0°.02×26°.32E±0°.02, h13km±6km, n74, σ0°.78/94, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PRK** | **Paraskevi** | **0.19** | **190** | *e*PG | **Pg** | **02 09 52.4** | **-0.3** |
| PRK | | | | *e*SG | **Sg** | **02 09 55.8** | **+0.2** |
| **PRK** | **Paraskevi** | **0.19** | **190** | *e*Pg | **Pg** | **02 09 52.4** | **-0.3** |
| PRK | | | | *e*Sg | **Sg** | **02 09 55.8** | **+0.2** |
| **AYVA** | **Ayvalik** | **0.32** | **113** | *i* P | **Pg** | **02 09 54.6** | **-0.2** |
| AYVA | | | | *i* S | **Sg** | **02 09 59.2** | **0.0** |
| **AYVA** | **Ayvalik** | **0.32** | **113** | P | **Pg** | **02 09 54.6** | **-0.2** |
| AYVA | | | | S | **Sg** | **02 09 59.2** | **0.0** |
| **EZN** | **Ezine** | **0.40** | **1** | *e*PG | **Pg** | **02 09 56.1** | **-0.2** |
| EZN | | | | *e*SG | **Sg** | **02 10 02.4** | **+0.7** |
| **EZN** | **Ezine** | **0.40** | **1** | *e*Pg | **Pg** | **02 09 56.1** | **-0.2** |
| EZN | | | | *e*Sg | **Sg** | **02 10 02.4** | **+0.7** |
| **BOZC** | **Bozcaada** | **0.46** | **334** | P | **Pg** | **02 09 57.7** | **+0.2** |
| BOZC | | | | P | **Pg** | **02 09 57.7** | **+0.2** |
| BOZC | | | | S | **Sg** | **02 10 03.5** | **-0.1** |
| **DKL** | **Dikili** | **0.58** | **128** | *e*PG | **Pg** | **02 09 59.8** | **0.0** |
| **DKL** | **Dikili** | **0.58** | **128** | *e*Pg | **Pg** | **02 09 59.8** | **0.0** |
| **GADA** | **Gvkgeada** | **0.82** | **337** | *e*PG | **Pg** | **02 10 03.0** | **-1.4** |
| GADA | | | | *e*SG | **Sg** | **02 10 15.0** | **-0.2** |
| **GADA** | **Gvkgeada** | **0.82** | **337** | *e*Pg | **Pg** | **02 10 03.0** | **-1.4** |
| GADA | | | | *e*Sg | **Sg** | **02 10 15.0** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.97** | **7** | *e*PG | **Pb** | **02 10 06.8** | **-0.3** |
| **GELI** | **Tayfur-Gelibol** | **0.97** | **7** | *e*Pg | **Pb** | **02 10 06.8** | **-0.3** |
| **LIA** | **Limnos Island** | **0.99** | **298** | *e*PG | **Pg** | **02 10 07.4** | **-0.1** |
| LIA | | | | *e*SB | **Sn** | **02 10 22.6** | **+0.8** |
| **LIA** | **Limnos Island** | **0.99** | **298** | *e*Pg | **Pg** | **02 10 07.4** | **-0.1** |
| **LPK** | **Lapseki** | **1.00** | **20** | *e*PN | **Pb** | **02 10 07.1** | **-0.5** |
| **LPK** | **Lapseki** | **1.00** | **20** | *e*Pn | **Pb** | **02 10 07.1** | **-0.5** |
| **BALY** | **Balya** | **1.05** | **73** | *i* P | **Pb** | **02 10 08.2** | **-0.3** |
| BALY | | | | *i* S | **Sn** | **02 10 23.2** | **-0.3** |
| **BALY** | **Balya** | **1.05** | **73** | P | **Pb** | **02 10 08.2** | **-0.3** |
| BALY | | | | S | **Sn** | **02 10 23.2** | **-0.3** |
| **CHOS** | **Chios island** | **1.06** | **191** | *e*PN | **Pb** | **02 10 08.6** | **-0.1** |
| CHOS | | | | *e*SB | **Sb** | **02 10 22.3** | **-0.2** |
| **CHOS** | **Chios island** | **1.06** | **191** | *e*Pb | **Pb** | **02 10 08.6** | **-0.1** |
| CHOS | | | | *e*Sb | **Sb** | **02 10 22.3** | **-0.2** |
| **BLCB** | **Balcova** | **1.19** | **151** | *e*PN | **Pn** | **02 10 10.0** | **-0.7** |
| **BLCB** | **Balcova** | **1.19** | **151** | *e*Pn | **Pn** | **02 10 10.0** | **-0.7** |
| **ZEY** | **˙zmir**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ARSB** | **Arslanbob** | **3.63** | **300** | ⇑*i*P | Pb | 02 18 39.2 | +0.6 |
| | baz=289 | | | | | | |
| ARSB | | | | ⇑*i*S | Sg | 02 19 28.1 | -2.3 |
| | baz=289 | | | | | | |
| **AAK** | **Ala-Archa** | **3.65** | **327** | ⇑Pg | Pb | 02 18 40.6 | +1.8 |
| | 7.1nm,0.8s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 02 19 28.6 | |
| | 10.0nm,0.4s | | | | | | |
| **EKS** | **Erkin-Say** | **4.00** | **321** | ⇑*e*P | Pb | 02 18 45.2 | +0.5 |
| | baz=310 | | | | | | |
| EKS | | | | ⇑*e*S | Sb | 02 19 34.9 | +1.2 |
| | baz=310 | | | | | | |
| **KK31** | **Karatay Array** | **6.12** | **307** | ⇑Pg | Pb | 02 19 24.8 | +4.2 |
| | 0.7nm,0.5s,baz=130,slow=16,SNR=7.7 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 02 20 45.8 | |
| | 0.9nm,0.5s,baz=118,slow=31,SNR=4.1 | | | | | | |

*AUST* ***23*** *02:16:49.2±99.0, 1°.87S×136°.06E, h5km±1km, Error ellipse: s-maj=2.8km s-min=1.1km az=350.0*
*IDC* ***23*** *02:17:35.1±2.7, 5°.01S×134°.18E, h0km, mb4.0/1, mb1 4.0/4, mb1mx3.6/34, mbtmp3.9/4, ML3.7/3, Error ellipse: s-maj=113.3km s-min=27.5km az=74.0*

**ISC 23 02:17:34.7±2.1, 5°.1S±0°.1×134°.4E±0°.4, h10km, n7, σ3§73/7, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.23** | **324** | Pn | **Pn** | **02 18 50.5** | **-2.6** |
| | 2.4nm,0.3s,baz=287,slow=23,SNR=8.0 | | | | | | |
| SIJI | | | | Sn | Sn | 02 19 41.4 | -12 |
| | 5.3nm,0.3s,baz=115,slow=23,SNR=8.8 | | | | | | |
| **KDU** | **Kakadu** | **7.75** | **194** | P | Pn | 02 19 31.8 | +4.2 |
| | baz=11,SNR=16 | | | | | | |
| **MTN** | **Manton Dam** | **8.31** | **202** | P | Pn | 02 19 41.2 | +5.8 |
| | baz=12,SNR=5.6 | | | | | | |
| **KNRA** | **Kununurra** | **11.84** | **207** | P | **Pn** | **02 20 26.3** | **+2.5** |
| | baz=16,SNR=3.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.73** | **180** | Pn | **Pn** | **02 21 05.2** | **+1.8** |
| | 0.4nm,0.3s,baz=0.9,slow=13,SNR=21 | | | | | | |
| WRA | | | | Sn | **Sn** | **02 23 43.1** | **-3.7** |
| | 0.2nm,0.3s,baz=0.8,slow=23,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **18.44** | **181** | P | **Pn** | **02 21 53.4** | **+2.7** |
| | 0.3nm,0.3s,baz=359,slow=9.9,SNR=12 | | | | | | |
| ASAR | | | | S | **Sn** | **02 25 12.8** | **-4.1** |
| | 0.1nm,0.3s,baz=2.6,slow=28,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.13** | **325** | P | **P** | **02 28 42.6** | **+1.3** |
| | 0.6nm,0.4s,baz=119,slow=8.1,SNR=6.9 | | | | | | |

**GUC 23 02:20:17.2±0.4, 29°.58S×71°.10W, h33km±3km, ML4.0, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSCH** | **La Serena** | **0.35** | **201** | *e*P | Pb | 02 20 25.7 | +0.1 |
| LSCH | | | | *e*S | Sn | 02 20 32.3 | +0.7 |
| **TLL** | **Tololo Astrono** | **0.64** | **156** | *e*P | Pb | 02 20 30.9 | +0.5 |
| TLL | | | | *e*S | Sn | 02 20 40.9 | +1.4 |
| TLL | | | | AML | AML | 02 20 43.3 | |
| | comp=E,4μm,0.7s | | | | | | |
| **LCO** | **Las Campanas** | **0.66** | **32** | *e*P | Pb | 02 20 31.3 | +0.4 |
| LCO | | | | *e*S | Sb | 02 20 41.8 | +1.7 |
| **VACH** | **Vallenar** | **1.04** | **17** | *e*S | Sb | 02 20 50.9 | +0.7 |
| VACH | | | | AML | AML | 02 21 04.0 | |
| | comp=E,9μm,0.0s | | | | | | |
| **CPCH** | **Copiapo** | **2.31** | **17** | *e*S | Sb | 02 21 25.1 | -1.3 |
| CPCH | | | | AML | AML | 02 21 41.0 | |
| | comp=E,3μm,0.0s | | | | | | |

**MEX 23 02:22:00.2±0.3, 15°.22N×93°.96W, h16km±6km, MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.86** | **56** | *i* P | Pb | 02 22 13.6 | -3.2 |
| PCIG | | | | *i* S | Sb | 02 22 24.3 | -3.8 |
| **HUIG** | **Huatulco** | **2.15** | **285** | *i* P | Pn | 02 22 36.1 | +0.7 |
| HUIG | | | | *e*S | Sn | 02 22 56.8 | -4.9 |

*IDC* ***23*** *02:23:53.8±1.0, 3°.68S×128°.41E, h0km, mb3.9/4, mb1 4.2/6, mb1mx3.8/49, mbtmp4.0/6, ML3.6/2, Error ellipse: s-maj=46.9km s-min=22.8km az=74.0*
*ISCJB* ***23*** *02:23:55.8±0.6, 3°.71S±0°.04×128°.50E±0°.03, h23km±5km, mb4.0/5, Error ellipse: s-maj=6.2km s-min=4.6km az=5.5*
*NEIC* ***23*** *02:23:55.1±0.4, 3°.70S×128°.38E, h10km, mb4.4/3, Error ellipse: s-maj=10.4km s-min=6.4km az=223.0*
*DJA* ***23*** *02:23:56.3±0.3, 4°S±2°×12°.8E±°, h13km, M4.1/12, MLv4.1/12*

**ISC 23 02:23:55.5±1.3, 3°.70S±0°.05×128°.48E±0°.03, h10km±9km, n25, σ1§13/37, mb4.2/5, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAI** | **Ambon** | **0.28** | **273** | P | **Pb** | **02 24 02.6** | **-0.1** |
| AAI | | | | S | **Sb** | **02 24 07.2** | **-0.2** |
| **MSAI** | **Masohi** | **0.58** | **52** | P | **Pg** | **02 24 06.7** | **0.0** |
| MSAI | | | | S | **Sg** | **02 24 14.4** | **+0.1** |
| **NLAI** | **Namlea** | **1.45** | **289** | P | **Pb** | **02 24 22.6** | **0.0** |
| NLAI | | | | S | **Sg** | **02 24 41.7** | **-0.5** |
| **BNDI** | **Bandanaira** | **1.64** | **120** | P | **Pn** | **02 24 24.0** | **-0.4** |
| BNDI | | | | S | **Sn** | **02 24 46.5** | **+0.9** |
| **SANI** | **Sanana** | **2.98** | **303** | P | **Pn** | **02 24 44.0** | **+1.2** |
| SANI | | | | S | **Sn** | **02 25 19.8** | **+1.2** |
| **LBMI** | **Labuha** | **3.20** | **342** | P | **Pn** | **02 24 46.8** | **+0.9** |
| LBMI | | | | S | **Sn** | **02 25 26.0** | **+1.9** |
| **FAKI** | **Fak Fak** | **3.85** | **78** | P | **Pn** | **02 24 55.0** | **+0.2** |
| FAKI | | | | S | **Sn** | **02 25 42.0** | **+1.9** |
| **FAKI** | **Fak Fak** | **3.85** | **78** | *e*Pn | **Pn** | **02 24 55.4** | **+0.6** |
| FAKI | | | | *e*Sn | **Sn** | **02 25 39.4** | **-0.7** |
| **SIJI** | **Sorong** | **3.96** | **45** | Pn | **Pn** | **02 24 56.2** | **-0.2** |
| | 17nm,0.3s,baz=185,slow=24,SNR=22 | | | | | | |
| SIJI | | | | Sn | **Sn** | **02 25 40.8** | **-2.1** |
| | baz=225,slow=20,SNR=1.1 | | | | | | |
| **SWI** | **Sorong** | **3.96** | **45** | P | **Pn** | **02 24 56.7** | **+0.3** |
| SWI | | | | S | **Sn** | **02 25 44.0** | **+1.1** |
| **TNTI** | **Ternate** | **4.58** | **346** | P | **Pn** | **02 25 04.8** | **-0.1** |
| TNTI | | | | S | **Sn** | **02 25 59.2** | **+1.0** |
| **LUWI** | **Luwuk** | **6.28** | **295** | *e*Pn | **Pn** | **02 25 25.9** | **-2.4** |
| | 26nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **8.79** | **261** | Pn | **Pn** | **02 26 05.7** | **+2.9** |
| | 0.7nm,0.3s,baz=136,slow=7.0,SNR=6.9 | | | | | | |
| **KAPI** | **Kappang** | **8.79** | **261** | *e*Pn | **Pn** | **02 26 01.4** | **-1.4** |
| **WRAB** | **Tennant Creek** | **17.12** | **161** | *e*Pn | **Pn** | **02 27 55.3** | **+0.3** |
| | 24nm,1.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.12** | **161** | Pn | **Pn** | **02 27 54.1** | **-1.0** |
| | 0.1nm,0.3s,baz=337,slow=13,SNR=5.4 | | | | | | |
| **COEN** | **Coen** | **17.73** | **126** | *e*Pn | **Pn** | **02 28 03.6** | **+1.0** |
| **ASAR** | **Alice Springs** | **20.53** | **166** | P | **P** | **02 28 35.2** | **+1.0** |
| | 15nm,0.9s,baz=344,slow=10,SNR=41 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 32 45.3** | **-0.5** |
| | 0.5nm,0.4s,baz=353,slow=2.0,SNR=6.1 | | | | | | |
| **SONM** | **Songino Array** | **54.86** | **342** | P | **P** | **02 33 26.0** | **-0.1** |
| | 0.6nm,0.8s,baz=134,slow=4.2,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.66** | **327** | P | **P** | **02 34 33.1** | **-0.5** |
| | 1.1nm,0.7s,baz=124,slow=7.2,SNR=11 | | | | | | |
| **TKM2** | **Tokmak 2** | **66.49** | **320** | *e*P | **P** | **02 34 45.0** | **-0.7** |
| | 0.9nm,0.3s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.97** | **334** | P | **P** | **02 34 54.1** | **-0.5** |
| | 0.5nm,0.4s,baz=130,slow=8.1,SNR=3.8 | | | | | | |
| **KURK** | **Kurchatov** | **68.93** | **329** | *e*P | **P** | **02 34 59.6** | **-1.1** |
| | 2.5nm,0.5s | | | | | | |
| **ABKAR** | **Akbulak array** | **79.00** | **322** | *e*P | **P** | **02 35 59.4** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **126.62** | **284** | PKP | **PKPdf** | **02 42 59.4** | **-0.8** |
| | 0.4nm,0.8s,baz=56,slow=2.1,SNR=3.0 | | | | | | |

*NIED* ***23*** *02:28:00, 42°.50N×145°.20E, h26km, Mw4.4 Best double couple: M0 4.55000×10^15 NP1:φs=258.00000°, δ29.00000°, λ146.00000°. NP2:φs 19.00000°, δ74.00000°, λ65.00000°.*
*BJI* ***23*** *02:28:33.0, 42°.66N×145°.45E, h20km, mb4.7/41, mB5.1/26, Ms4.4/21, MS7 4.0/21*
*ISCJB* ***23*** *02:28:37.0±0.5, 42°.38N±0°.03×145°.11E±0°.04, h38km±3km, mb4.6/81, MS4.0/5, Error ellipse: s-maj=6.1km s-min=3.4km az=141.3*
*JMA* ***23*** *02:28:37.8, 42°.44N×145°.15E, h40km±1km, M4.4*
*JMA Felt I J1.*
*MOS* ***23*** *02:28:37.5±1.1, 42°.39N×145°.02E, h45km, mb4.9/53, Error ellipse: s-maj=7.2km s-min=4.8km az=103.8*
*IDC* ***23*** *02:28:38.4±0.7, 42°.40N×145°.12E, h37km±4km, mb4.2/29, mb1 4.3/34, mb1mx4.2/59, mbtmp4.4/34, ML2.9/3, MS3.7/6, Ms1 3.7/6, ms1mx3.3/58, Error ellipse: s-maj=14.8km s-min=12.3km az=157.0*
*SKHL* ***23*** *02:28:38.2±0.7, 42°.36N×145°.21E, h53km±3km, mb4.6/10, Ms4.0/1*
*NEIC* ***23*** *02:28:40.2±0.6, 42°.36N×145°.01E, h52km±5km, mb4.8/27, MW4.4(NIED), Error ellipse: s-maj=6.1km s-min=4.5km az=153.0*
*NEIC Recorded [1 JMA] in eastern and southeastern Hokkaido.*
*SZGRF* ***23*** *02:28:42.5, 42°.84N×144°.35E, h33km, mb5.0/1(BGR)*

**ISC 23 02:28:38.1±0.4, 42°.41N±0°.04×145°.13E±0°.04, h32km±2km, h32km:pP-P, n300, σ1§22/332, mb4.7/81, MS3.9/5, 22C-15D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAK** | **Akkeshi** | **0.67** | **332** | P | **Pn** | **02 28 50.5** | **-0.8** |
| JAK | | | | *e*S | **Sn** | **02 29 00.4** | **-0.2** |
| **NEM2** | **Nemuro 2** | **1.05** | **25** | P | **Pn** | **02 28 55.8** | **-0.8** |
| NEM2 | | | | *e*S | **Sn** | **02 29 09.5** | **-0.7** |
| **JOB** | **Onbets** | **1.07** | **298** | P | **Pn** | **02 28 56.8** | **-0.1** |
| JOB | | | | *e*S | **Sb** | **02 29 11.9** | **0.0** |
| **JNK** | **Nakash** | **1.21** | **346** | P | **Pn** | **02 28 58.0** | **-0.8** |
| JNK | | | | *e*S | **Sn** | **02 29 13.7** | **-0.4** |
| **JCH** | **Churui** | **1.32** | **279** | P | **Pn** | **02 29 00.9** | **+0.6** |
| JCH | | | | *e*S | **Sb** | **02 29 19.0** | **+0.1** |
| **JAR** | **Ashorobuto** | **1.33** | **312** | P | **Pn** | **02 28 59.9** | **-0.6** |
| **MYR** | **Moyori** | **1.37** | **266** | *e*P | **Pn** | **02 29 01.9** | **+0.9** |
| **ERM** | **Erimo** | **1.52** | **255** | *e*PN | **Pb** | **02 29 04.8** | **-0.8** |
| ERM | | | | *e* | | 02 29 18.2 | |
| **ERM** | **Erimo** | **1.52** | **255** | *e*Pn | **Pb** | **02 29 04.8** | **-0.8** |
| ERM | | | | *e*Sn | **Sn** | **02 29 18.2** | **-3.4** |
| **JRA** | **Rausu** | **1.52** | **360** | P | **Pn** | **02 29 02.5** | **-0.6** |
| JRA | | | | *e*S | **Sn** | **02 29 21.8** | **0.0** |
| **YUK** | **Yuzh-Kuril'sk** | **1.71** | **18** | *c i*PN | **Pn** | **02 29 05.2** | **-0.4** |
| YUK | | | | *i* S | **Sn** | **02 29 25.6** | **-0.7** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,554nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,2μm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,3μm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.71** | **18** | *i* P | **Pn** | **02 29 05.2** | **-0.4** |
| YUK | | | | AMB | AMB | 02 29 06.0 | |
| | comp=E,142nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 02 29 06.0 | |
| | comp=E,42nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 02 29 06.0 | |
| | comp=E,554nm,0.3s | | | | | | |
| YUK | | | | *i* S | **Sn** | **02 29 25.7** | **-0.6** |
| YUK | | | | A | A | 02 29 26.8 | |
| | comp=E,2μm,0.6s | | | | | | |
| YUK | | | | A | A | 02 29 26.8 | |
| | comp=E,3μm,0.6s | | | | | | |
| **SHO** | **Shikotan** | **1.92** | **40** | *d i*PN | **Pn** | **02 29 08.1** | **-0.4** |
| SHO | | | | *i* S | **Sn** | **02 29 29.9** | **-1.6** |
| SHO | | | | pmax | pmax | | |
| | comp=N,24nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,25nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,46nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,560nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,1μm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **1.92** | **40** | *i* P | **Pn** | **02 29 08.1** | **-0.4** |
| SHO | | | | AMB | AMB | 02 29 13.3 | |
| | comp=E,24nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 02 29 13.3 | |
| | comp=E,25nm,0.3s | | | | | | |
| SHO | | | | AMB | AMB | 02 29 13.3 | |
| | comp=E,460nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sn** | **02 29 29.9** | **-1.6** |
| SHO | | | | A | A | 02 29 33.2 | |
| | comp=E,560nm,0.4s | | | | | | |
| SHO | | | | A | A | 02 29 33.2 | |
| | comp=E,1μm,0.4s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **2.51** | **314** | *e*P | **Pn** | **02 29 18.3** | **+1.6** |
| **ASAJ** | **Asahikawa** | **2.51** | **314** | Pn | **Pn** | **02 29 18.3** | **+1.6** |
| | comp=E,161nm,0.3s,baz=169,slow=11,SNR=230 | | | | | | |
| ASAJ | | | | Sn | **Sb** | **02 29 50.6** | **-2.5** |
| | comp=E,73nm,0.3s,baz=271,slow=17,SNR=8.3 | | | | | | |
| ASAJ | | | | LR | LR | 02 30 35.5 | |
| | comp=E,2μm,19.5s,baz=115,slow=46 | | | | | | |
| **ASAJ** | **Asahikawa** | **2.51** | **314** | PN | **Pn** | **02 29 18.3** | **+1.6** |
| ASAJ | | | | | | 02 29 50.6 | |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,161nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,73nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,2μm,19.5s | | | | | | |
| **KUR** | **Kuril'sk** | **3.45** | **34** | ⇑*i*PN | **Pn** | **02 29 30.5** | **+1.0** |
| KUR | | | | *i* S | **Sn** | **02 30 09.9** | **+0.7** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,16nm,0.1s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,31nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,41nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,190nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,122nm,0.5s | | | | | | |
| **KUR** | **Kuril'sk** | **3.45** | **34** | *e*P | **Pn** | **02 29 30.5** | **+1.0** |
| KUR | | | | AMB | AMB | 02 29 33.8 | |
| | comp=E,20nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 02 29 33.8 | |
| | comp=E,30nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 02 29 33.8 | |
| | comp=E,40nm,0.2s | | | | | | |
| KUR | | | | *i* S | **Sn** | **02 30 09.9** | **+0.7** |
| KUR | | | | A | A | 02 30 16.4 | |
| | comp=E,190nm,0.5s | | | | | | |
| KUR | | | | A | A | 02 30 16.4 | |
| | comp=E,122nm,0.5s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.85** | **340** | ⇑*e*PN | **Pn** | **02 29 50.0** | **+1.3** |
| YSS | | | | *e*S | **Sn** | **02 30 45.0** | **+1.3** |
| YSS | | | | smax | smax | | |
| | comp=E,70nm,1.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,1μm,15.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=E,1μm,14.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.85** | **340** | *e*P | **Pn** | **02 29 50.0** | **+1.3** |
| YSS | | | | AMB | AMB | 02 29 50.9 | |
| | comp=E,30nm,0.2s | | | | | | |
| YSS | | | | *e*S | **Sn** | **02 30 45.0** | **+1.3** |
| YSS | | | | A | A | 02 30 45.2 | |
| | comp=E,40nm,0.3s | | | | | | |
| YSS | | | | AMS | AMS | 02 31 58.0 | |
| | comp=E,600nm,15.0s | | | | | | |
| YSS | | | | AMS | AMS | 02 31 58.0 | |
| | comp=E,1μm,15.0s | | | | | | |
| YSS | | | | AMS | AMS | 02 31 58.0 | |
| | comp=E,1μm,15.0s | | | | | | |
| **TEY** | **Ternei** | **6.71** | **296** | *e*P | **Pn** | **02 30 16.0** | **+1.7** |
| TEY | | | | AMB | AMB | 02 30 19.0 | |
| | comp=E,8.0nm,0.5s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.93** | **225** | Pn | **Pn** | **02 30 31.4** | **+0.1** |
| | comp=E,6.0nm,0.3s,baz=29,slow=15,SNR=48 | | | | | | |
| MJAR | | | | Sn | **Sn** | **02 31 58.8** | **-1.1** |
| | comp=E,0.5nm,0.3s,baz=26,slow=18,SNR=2.7 | | | | | | |
| **MAJO** | **Matsushiro** | **7.94** | **225** | *e*PN | **Pn** | **02 30 31.5** | **+0.2** |
| **MAJO** | **Matsushiro** | **7.94** | **225** | *e*P | **Pn** | **02 30 31.4** | **+0.2** |
| **MAJO** | **Matsushiro** | **7.94** | **225** | *e*Pn | **Pn** | **02 30 31.5** | **+0.2** |
| **MAT** | **Matsushiro** | **7.94** | **225** | P | **Pn** | **02 30 31.1** | **-0.1** |
| MAT | | | | S | **Sn** | **02 31 58.6** | **-1.3** |
| **TYV** | **Tymovskoe** | **8.62** | **349** | *e*PN | **Pn** | **02 30 43.5** | **+3.0** |
| TYV | | | | pmax | pmax | | |
| | comp=E,22nm,1.0s | | | | | | |
| TYV | | | | pmax | pmax | | |
| | comp=Z,26nm,1.0s | | | | | | |
| **TYV** | **Tymovskoe** | **8.62** | **349** | *e*P | **Pn** | **02 30 43.5** | **+3.0** |
| TYV | | | | AMB | AMB | 02 30 44.5 | |
| | comp=Z,22nm,1.0s | | | | | | |
| TYV | | | | AMB | AMB | 02 30 44.5 | |
| | comp=Z,26nm,1.0s | | | | | | |
| **HABR** | **Khabarovsk** | **9.32** | **314** | *e*PN | Pn | 02 30 44.4 | -5.7 |
| HABR | | | | MLR | MLR | | |
| | comp=Z,503nm,15.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.74** | **285** | Pn | **Pn** | **02 30 57.8** | **+1.9** |
| | comp=Z,0.6nm,0.3s,baz=82,slow=14,SNR=7.2 | | | | | | |
| USRK | | | | LR | LR | 02 34 47.6 | |
| | comp=Z,267nm,20.2s,baz=160,slow=38 | | | | | | |
| **VLA** | **Vladivostok** | **9.77** | **279** | ⇓*e*PN | **Pn** | **02 30 57.1** | **+0.8** |
| VLA | | | | pmax | pmax | | |
| | comp=E,68nm,1.3s | | | | | | |
| **VLA** | **Vladivostok** | **9.77** | **279** | *e*P | **Pn** | **02 30 57.1** | **+0.8** |
| **GRNR** | **Gornyy** | **10.28** | **327** | *e*P | **Pn** | **02 31 05.5** | **+2.3** |
| **MSHR** | **Mys Shultsa** | **10.32** | **276** | *i* PN | **Pn** | **02 31 03.1** | **-0.8** |
| **MDJ** | **Mudanjiang** | **11.50** | **286** | P | Pn | 02 31 23.3 | +3.4 |
| MDJ | | | | PMZ | | | |
| | comp=E,8.0nm,1.0s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,92nm,6.6s | | | | | | |
| **KLR** | **Kul'dur** | **11.55** | **311** | *e*PN | **Pn** | **02 31 22.2** | **+1.6** |
| KLR | | | | MLR | MLR | | |
| | comp=E,700nm,13.0s | | | | | | |
| KLR | | | | MLR | MLR | | |
| | comp=E,900nm,13.0s | | | | | | |
| **KLR** | **Kul'dur** | **11.55** | **311** | *e*P | **Pn** | **02 31 22.2** | **+1.6** |
| KLR | | | | AMS | AMS | 02 36 23.0 | |
| | comp=Z,700nm,13.0s | | | | | | |
| KLR | | | | AMS | AMS | 02 36 23.0 | |
| | comp=Z,900nm,13.0s | | | | | | |
| **EKMR** | **Ekimchan** | **13.43** | **327** | *e*P | **Pn** | **02 31 46.0** | **-0.3** |
| EKMR | | | | AMB | AMB | 02 31 51.6 | |
| | comp=Z,11nm,1.0s | | | | | | |
| EKMR | | | | AMB | AMB | 02 31 51.6 | |
| | comp=Z,14nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **13.62** | **34** | Pn | **Pn** | **02 31 50.4** | **+1.6** |
| | comp=Z,0.2nm,0.3s,baz=196,slow=14,SNR=3.9 | | | | | | |
| **PET** | **Petropavlovsk** | **13.96** | **36** | *i* P | **Pn** | **02 31 56.5** | **+3.0** |
| PET | | | | pmax | pmax | | |
| | comp=E,33nm,1.7s | | | | | | |
| **KSRS** | **Korea Array** | **14.09** | **255** | Pn | **Pn** | **02 31 55.8** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=64,slow=13,SNR=7.4 | | | | | | |
| KSRS | | | | LR | LR | 02 37 29.0 | |
| | comp=Z,388nm,19.7s,baz=34,slow=38 | | | | | | |
| **KSAR** | **Wonju Array Be** | **14.13** | **255** | P | **Pn** | **02 31 55.8** | **-0.1** |
| **KSAR** | **Wonju Array Be** | **14.13** | **255** | Pn | **Pn** | **02 31 55.8** | **-0.1** |
| **CN2** | **Changchun** | **14.45** | **282** | *e*P | **Pn** | **02 32 01.5** | **+1.3** |
| CN2 | | | | *e*sP | | 02 32 11.3 | |
| CN2 | | | | PMZ | | | |
| | comp=Z,20nm,0.6s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,600nm,12.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,800nm,12.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,1μm,13.0s | | | | | | |
| **JNU** | **Nakatsue** | **14.58** | **235** | LR | LR | 02 37 36.7 | |
| | comp=Z,171nm,21.7s,baz=308,slow=37 | | | | | | |
| **BMKR** | **Bomnak** | **16.31** | **325** | *e*P | **Pn** | **02 32 22.5** | **-2.0** |
| BMKR | | | | AMB | AMB | 02 32 27.0 | |
| | comp=Z,8.0nm,1.0s | | | | | | |
| **ZEA** | **Zeya** | **16.41** | **320** | *e*P | **Pn** | **02 32 26.0** | **+0.2** |
| ZEA | | | | AMB | AMB | 02 32 29.3 | |
| | comp=Z,29nm,1.0s | | | | | | |
| **MA2** | **Magadan** | **17.54** | **10** | *e*P | **Pn** | **02 32 39.6** | **-0.3** |
| **MA2** | **Magadan** | **17.54** | **10** | *e*P | **Pn** | **02 32 39.5** | **-0.3** |
| **HIA** | **Hailar** | **18.91** | **300** | *e*P | **P** | **02 32 54.5** | **-1.5** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,16nm,0.9s | | | | | | |
| **CLNS** | **Chul'man** | **19.39** | **325** | *e*P | **P** | **02 32 59.6** | **-1.6** |
| CLNS | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| CLNS | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **21.70** | **340** | *e*P | P | 02 33 21.2 | -4.8 |
| YAK | | | | *e* | | 02 33 40.7 | |
| YAK | | | | *e*S | S | 02 37 13.6 | -11 |
| YAK | | | | *e* | | 02 37 28.6 | |
| YAK | | | | *e*SS | Sn | 02 37 35.4 | +1.3 |
| YAK | | | | *e* | | 02 44 38.1 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,1.0nm,0.7s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,2.0nm,0.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,3.0nm,0.5s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,2.0nm,0.4s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=N,40nm,1.8s | | | | | | |
| YAK | | | | smax | smax | | |
| | comp=E,13nm,1.3s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,258nm,20.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,38nm,20.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,224nm,18.0s | | | | | | |
| **BJI** | **Beijing** | **21.86** | **274** | P | **P** | **02 33 27.1** | **-0.8** |
| BJI | | | | S | **S** | **02 37 21.9** | **-5.8** |
| BJI | | | | PMZ | | | |
| | comp=N,13nm,1.1s | | | | | | |
| BJI | | | | LN | | | |
| | comp=N,230nm,13.2s | | | | | | |
| BJI | | | | LE | | | |
| | comp=N,400nm,12.0s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=N,270nm,24.0s | | | | | | |
| **TIA** | **Tai'an** | **22.48** | **263** | ⇓P | **P** | **02 33 36.8** | **+2.2** |
| TIA | | | | PMZ | | | |
| | comp=N,30nm,0.9s | | | | | | |
| **NJ2** | **Nanjing** | **23.25** | **252** | *e*P | **P** | **02 33 45.1** | **+2.5** |
| NJ2 | | | | PMZ | | | |
| | comp=N,20nm,0.5s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **25.05** | **278** | *e*P | **P** | **02 33 58.9** | **-0.5** |
| HHC | | | | S | **S** | **02 38 20.0** | **-1.6** |
| HHC | | | | PMZ | | | |
| | comp=N,38nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=N,200nm,4.6s | | | | | | |
| **WHN** | **Wuhan** | **27.29** | **254** | *e*P | **P** | **02 34 22.1** | **+2.5** |
| **SONA1** | **Songino Array** | **27.64** | **295** | *e*P | **P** | **02 34 22.4** | **-0.4** |
| **SONM** | **Songino Array** | **27.65** | **295** | P | **P** | **02 34 22.9** | **0.0** |
| | comp=N,16nm,0.8s,baz=85,slow=8.0,SNR=53 | | | | | | |
| **SONM** | **Songino Array** | **27.65** | **295** | P | **P** | **02 34 22.9** | **0.0** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.15** | **134** | T | T | 03 05 40.2 | |
| | baz=327,slow=75,SNR=516 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.16** | **134** | T | T | 03 05 47.2 | |
| | baz=327,slow=75,SNR=536 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.16** | **134** | T | T | 03 05 47.7 | |
| | baz=327,slow=75,SNR=382 | | | | | | |
| **TLY** | **Talaya** | **29.39** | **303** | P | **P** | **02 34 36.7** | **-1.5** |
| | comp=Z,3.6nm,0.8s,baz=90,slow=16,SNR=2.4 | | | | | | |
| **TLY** | **Talaya** | **29.39** | **303** | *e*P | **P** | **02 34 35.8** | **-2.4** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **ZAK** | **Zakamensk** | **29.61** | **300** | *e*P | **P** | **02 34 37.2** | **-3.1** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,14nm,1.3s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.06** | **136** | T | T | 03 06 57.6 | |
| | baz=328,slow=76,SNR=700 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.06** | **136** | T | T | 03 06 48.1 | |
| | baz=328,slow=76,SNR=437 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.07** | **136** | T | T | 03 06 53.0 | |
| | baz=328,slow=76,SNR=388 | | | | | | |
| **LZH** | **Lanzhou** | **32.35** | **273** | *e*P | **P** | **02 35 05.9** | **+1.3** |
| LZH | | | | pP | **pP** | **02 35 12.8** | **-1.2** |
| LZH | | | | sP | **sP** | **02 35 15.9** | **-2.0** |
| LZH | | | | PMZ | | | |
| | comp=Z,26nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,170nm,4.2s | | | | | | |
| LZH | | | |

GTA PMZ
comp=Z,75nm,5.5s
GTA LN
comp=Z,160nm,18.5s
GTA LE
comp=Z,200nm,16.2s
GTA LZ
comp=Z,160nm,14.7s
**CD2 Chengdu 34.80 264** *e*P **P** **02 35 26.8 +0.9**
CD2 pP **pP** **02 35 34.5 -0.8**
CD2 PP **PP** **02 36 45.6 +0.6**
CD2 S **S** **02 40 55.4 +1.0**
CD2 sS **sS** **02 41 08.6 -1.3**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.0s
**GYA Guiyang 35.15 256** *e*P **P** **02 35 32.0 +3.0**
GYA PMZ
comp=Z,10.0nm,0.8s
**HVS Khovu-Aksy 35.63 302** *e*P **P** **02 35 31.7 -1.2**
HVS pmax pmax
comp=Z,8.0nm,0.9s
**HVS Khovu-Aksy 35.63 302** *e*P **P** **02 35 31.7 -1.2**
**ZAA0 Zalesovo Array 40.64 308** *e*P **P** **02 36 13.9 -0.9**
**ZALV Zalesovo Beam 40.64 308** P **P** **02 36 14.4 -0.4**
comp=Z,5.1nm,0.4s,baz=88,slow=7.7,SNR=23
ZALV PcP **PcP** **02 38 15.9 -0.3**
comp=Z,3.3nm,0.7s,baz=104,slow=2.6,SNR=7.0
ZALV pPcP 02 38 28.1
comp=Z,5.8nm,0.7s,baz=76,slow=2.8,SNR=9.7
**ZALV Zalesovo Beam 40.64 308** P **P** **02 36 14.4 -0.4**
ZALV 02 38 15.9
ZALV pmax pmax
comp=Z,5.0nm,0.4s
ZALV pmax pmax
comp=Z,3.0nm,0.7s
ZALV pmax pmax
comp=Z,6.0nm,0.7s
**WMQ Urumqi 41.22 292** P **P** **02 36 20.0 +0.1**
WMQ S **S** **02 42 34.0 +2.6**
WMQ PMZ
comp=Z,12nm,0.9s
WMQ PMZ
comp=Z,36nm,5.0s
WMQ LN
comp=Z,250nm,18.0s
WMQ LE
comp=Z,210nm,18.0s
WMQ LZ
comp=Z,170nm,18.0s
**MCK McKinley 42.59 37** *e*P **P** **02 36 32.0 +1.2**
MCK pmax pmax
comp=Z,6.0nm,0.7s
**MCK McKinley 42.59 37** *e*P **P** **02 36 32.0 +1.2**
**MCK McKinley 42.59 37** *e*P **P** **02 36 32.0 +1.2**
comp=Z,6.1nm,0.7s
**MDM Murphy Dome 42.86 35** *e*P **P** **02 36 33.7 +0.8**
comp=Z,5.7nm,0.7s
**COLA College 43.02 35** *e*P **P** **02 36 36.3 +2.2**
COLA pmax pmax
comp=Z,10.0nm,0.8s
**COLA College 43.02 35** *e*P **P** **02 36 36.3 +2.2**
**COLA College 43.02 35** *e*P **P** **02 36 36.2 +2.1**
comp=Z,8.5nm,0.7s
**IL1 Eielson Array 43.44 35** *e*P **P** **02 36 37.6 +0.1**
**ILAR Eielson Array 43.44 35** P **P** **02 36 37.4 -0.2**
comp=Z,3.4nm,0.8s,baz=277,slow=11,SNR=42
**ILAR Eielson Array 43.44 35** P **P** **02 36 37.4 -0.2**
ILAR pmax pmax
comp=Z,3.0nm,0.8s
**MK01 Makanchi Array 43.90 298** *e*P **P** **02 36 41.0 -0.5**
**MK31 Makanchi Array 43.90 298** *i* P **P** **02 36 41.1 -0.5**
MK31 pmax pmax
comp=Z,5.0nm,0.6s
**MKAR Makanchi Array 43.90 298** P **P** **02 36 41.2 -0.4**
comp=Z,3.3nm,0.7s,baz=80,slow=9.4,SNR=20
MKAR PcP **PcP** **02 38 27.5 +0.3**
comp=Z,1.2nm,0.7s,baz=62,slow=3.4,SNR=2.9
**MKAR Makanchi Array 43.90 298** P **P** **02 36 41.2 -0.4**
MKAR 02 38 27.5
MKAR pmax pmax
comp=Z,3.0nm,0.7s
MKAR pmax pmax
comp=Z,1.0nm,0.7s
**MKAR Makanchi Array 43.90 298** *e*P **P** **02 36 41.1 -0.5**
**MKAR Makanchi Array 43.90 298** *e*P **P** **02 36 41.5 0.0**
MKAR PcP **PcP** **02 38 27.5 +0.3**
**FYU Fort Yukon 44.03 33** *e*P **P** **02 36 44.1 +1.8**
comp=Z,37nm,1.4s
**MAKZ Makanchi 44.10 298** *e*P **P** **02 36 42.9 -0.2**
**KURK Kurchatov 45.06 305** *e*P **P** **02 36 50.1 -0.6**
KURK pmax pmax
comp=Z,62nm,1.0s
**KURK Kurchatov 45.06 305** *e*P **P** **02 36 50.1 -0.6**
**KURK Kurchatov 45.06 305** *e*P **P** **02 36 50.1 -0.6**
comp=Z,62nm,1.0s
**CMAR Chiang Mai Arr 45.72 253** P **P** **02 36 55.8 -0.5**
comp=Z,0.8nm,0.3s,baz=45,slow=7.7,SNR=7.1
**CMAR Chiang Mai Arr 45.72 253***ce*P **P** **02 36 59.2 +2.9**
CMAR pmax pmax
comp=Z,1.0nm,0.3s
**EGAK Eagle 45.88 35** *e*P **P** **02 36 58.5 +1.5**
comp=Z,6.7nm,0.7s
**INK Inuvik 48.30 29** P **P** **02 37 15.2 -0.6**
comp=Z,6.6nm,0.7s,baz=292,slow=8.6,SNR=16
**INK Inuvik 48.30 29** P **P** **02 37 15.2 -0.6**
INK pmax pmax
comp=Z,7.0nm,0.7s
**INK Inuvik 48.30 29** *e*P **P** **02 37 16.3 +0.5**
comp=Z,6.1nm,0.6s
**TAPN Taplejung 48.56 271** *e*P **P** **02 37 19.5 +0.7**
comp=Z,19nm,1.0s
**CHKZ Chkalovo 48.87 310** P **P** **02 37 19.6 -0.8**
CHKZ pmax pmax
comp=Z,12nm,0.7s
**VOSK Vostochnaya 48.97 309** P **P** **02 37 20.8 -0.4**
VOSK pmax pmax
comp=Z,10.0nm,0.7s
**BRVK Borovoye 49.26 310** *e*P **P** **02 37 23.7 +0.3**
BRVK pmax pmax
comp=Z,11nm,0.9s
**BRVK Borovoye 49.26 310** *e*P **P** **02 37 23.1 -0.3**
**BRVK Borovoye 49.26 310** *e*P **P** **02 37 23.7 +0.3**
comp=Z,11nm,0.9s
**RAMN Ramite 49.60 272** *e*P **P** **02 37 27.0 +0.3**
comp=Z,26nm,0.8s
**GUN Gumba 49.61 273** *e*P **P** **02 37 27.3 +0.5**
comp=Z,14nm,0.4s
**TKM2 Tokmak 2 49.74 296** *e*P **P** **02 37 28.0 +0.5**
TKM2 pmax pmax
comp=Z,7.0nm,0.8s
**TKM2 Tokmak 2 49.74 296** *e*P **P** **02 37 28.0 +0.5**
comp=Z,6.5nm,0.8s
**ZRNK Zerenda 50.02 310** P **P** **02 37 29.0 -0.2**
ZRNK pmax pmax
comp=Z,14nm,0.7s
**KKN Kakani 50.12 273** *e*P **P** **02 37 31.0 +0.5**
comp=Z,18nm,0.8s
**GKN Gorkha 50.48 274** *e*P **P** **02 37 33.4 +0.2**
comp=Z,7.0nm,0.4s
**AAK Ala-Archa 50.60 296** *e*P **P** **02 37 32.5 -1.5**
**AAK Ala-Archa 50.60 296** *e*P **P** **02 37 32.5 -1.5**
**AAK Ala-Archa 50.60 296** *e*P **P** **02 37 32.5 -1.5**
**DANN Dangsing 50.93 275** *e*P **P** **02 37 37.7 +0.9**
comp=Z,13nm,0.7s
**KSH Kashi 50.97 291** *e*P **P** **02 37 39.8 +3.1**
KSH *e*pP **pP** **02 37 47.5 +1.1**
KSH PP **PP** **02 39 36.3 +3.2**
KSH PcS **PcS** **02 42 54.8 +4.5**
KSH S **S** **02 44 52.6 +1.1**
KSH ScS **ScS** **02 47 23.4 -1.6**
KSH PMZ
comp=Z,62nm,4.8s
KSH LN
comp=Z,91nm,5.6s
KSH LE
comp=Z,81nm,5.0s
KSH LZ
comp=Z,220nm,7.6s
**EKS2 Erkin-Say 51.07 296** *e*P **P** **02 37 37.0 -0.4**
EKS2 pmax pmax
comp=Z,3.0nm,0.7s
**EKS2 Erkin-Say 51.07 296** *e*P **P** **02 37 37.0 -0.4**
comp=Z,2.9nm,0.7s
**KOLN Koldanda 51.37 274** *e*P **P** **02 37 40.4 +0.4**
comp=Z,30nm,0.8s
**PMG Port Moresby 51.60 177** P **P** **02 37 39.7 -1.7**
comp=Z,12nm,0.9s,baz=338,slow=5.4,SNR=2.9
**PMG Port Moresby 51.60 177** P **P** **02 37 39.7 -1.7**
PMG pmax pmax
comp=Z,13nm,0.9s
**KK31 Karatay Array 53.03 298** *i* P **P** **02 37 51.3 -0.6**
KK31 pmax pmax
comp=Z,1.0nm,0.5s
**KKAR Karatay Array 53.03 298** *e*P **P** **02 37 51.3 -0.6**
KKAR pmax pmax
comp=Z,7.0nm,0.9s
**KKAR Karatay Array 53.03 298** *e*P **P** **02 37 51.3 -0.6**
comp=Z,7.2nm,0.9s
**SVE Sverdlovsk 53.10 317** *e*P **P** **02 37 51.8 -0.3**
SVE pmax pmax
comp=Z,22nm,0.8s
**SVE Sverdlovsk 53.10 317** *e*P **P** **02 37 51.8 -0.3**
**ARU Arti 54.31 317** *c i*P **P** **02 38 00.2 -0.8**
ARU S **S** **02 45 35.0 -1.4**
ARU SS **SS** **02 49 19.1 +1.1**
ARU pmax pmax
comp=Z,21nm,1.0s
**ARU Arti 54.31 317** *e*P **P** **02 38 00.2 -0.8**
**RES Resolute Bay 56.67 16** P **P** **02 38 16.9 -0.7**
comp=Z,5.6nm,0.6s,baz=309,slow=7.8,SNR=9.2
**RES Resolute Bay 56.67 16** P **P** **02 38 17.0 -0.7**
RES pmax pmax
comp=Z,6.0nm,0.6s
**RES Resolute Bay 56.67 16** *e*P **P** **02 38 16.8 -0.9**
comp=Z,7.5nm,0.7s
**AB31 Akbulak array 56.74 309** *i* P **P** **02 38 18.3 -0.3**
AB31 pmax pmax
comp=Z,5.0nm,0.5s
**ABKAR Akbulak array 56.74 309** *e*P **P** **02 38 18.4 -0.2**
**AKTO Aktyubinsk 57.28 311** P **P** **02 38 21.5 -0.9**
AKTO pmax pmax
comp=Z,7.0nm,1.4s
**YKA Yellowknife Ar 57.73 33** P **P** **02 38 25.6 +0.3**
comp=Z,3.3nm,0.7s,baz=304,slow=6.8,SNR=7.2
**YKA Yellowknife Ar 57.73 33** P **P** **02 38 25.6 +0.3**
YKA pmax pmax
comp=Z,3.0nm,0.7s
**KBL Kabul 58.24 290** *e*P **P** **02 38 28.9 -0.7**
**KBL Kabul 58.24 290** *e*P **P** **02 38 28.9 -0.7**
**ARCES ARCESS Array B 59.98 339** P **P** **02 38 40.2 -0.7**
comp=Z,3.8nm,1.0s,baz=38,slow=7.7,SNR=10.0
**ARCES ARCESS Array B 59.98 339** P **P** **02 38 40.2 -0.7**
ARCES pmax pmax
comp=Z,4.0nm,1.0s
**DAG Danmarks Havn 60.65 356** *e*P **P** **02 38 43.5 -1.8**
DAG pmax pmax
comp=Z,3.0nm,0.8s
**DAG Danmarks Havn 60.65 356** *i* P **P** **02 38 43.5 -1.8**
comp=Z,4.0nm,0.8s
**KLMR Klimovskoe 60.76 327** *e*P **P** **02 38 44.3 -2.0**
KLMR pmax pmax
comp=Z,34nm,1.8s
**CTA Charters Tower 62.19 179** P **P** **02 38 54.9 -1.5**
comp=Z,5.7nm,1.1s,baz=27,slow=11,SNR=2.2
**CTA Charters Tower 62.19 179** P **P** **02 38 54.9 -1.5**
CTA pmax pmax
comp=Z,6.0nm,1.1s
**CTAO Charters Tower 62.19 179** *e*P **P** **02 38 55.3 -1.1**
CTAO pmax pmax
comp=Z,18nm,1.4s
**CTAO Charters Tower 62.19 179** *e*P **P** **02 38 55.3 -1.1**
comp=Z,18nm,1.4s
**WRAB Tennant Creek 62.83 191** *e*P P 02 38 56.2 -4.4
WRAB pmax pmax
comp=Z,8.0nm,1.3s
**WRAB Tennant Creek 62.83 191** *e*P P 02 38 56.2 -4.4
comp=Z,7.8nm,1.3s
**WRA Warramunga Arr 62.84 191***ce*P P 02 39 08.3 +7.6
WRA pmax pmax
comp=Z,1.0nm,0.7s
**GEYT Alibeck 63.78 298** P **P** **02 39 07.0 +0.1**
comp=Z,7.8nm,0.8s,baz=17,slow=5.4,SNR=7.7
**SUMG Summit 65.29 1** *e*P **P** **02 39 16.9 +0.2**
SUMG pmax pmax
comp=Z,30nm,1.6s
**SUMG Summit 65.29 1** *i* P **P** **02 39 16.8 +0.1**
comp=Z,7.0nm,0.6s
**SUMG Summit 65.29 1** *e*P **P** **02 39 16.9 +0.2**
comp=Z,30nm,1.6s
**FINES FINESS Array B 65.38 332** P **P** **02 39 16.3 -0.7**
comp=Z,13nm,0.6s,baz=52,slow=6.7,SNR=79
FINES pP **pP** **02 39 27.3 +0.4**
comp=Z,4.3nm,0.5s,baz=55,slow=6.4,SNR=4.4
**FINES FINESS Array B 65.38 332** P **P** **02 39 16.3 -0.7**
FINES *PP **pP** **02 39 27.3 +0.4**
FINES pmax pmax
comp=Z,13nm,0.6s
FINES pmax pmax
comp=Z,4.0nm,0.5s
**FINES FINESS Array B 65.38 332** *e*P **P** **02 39 16.5 -0.5**
**OBN Obninsk 65.51 323** P **P** **02 39 17.2 -0.6**
comp=Z,5.4nm,0.3s,baz=61,slow=15,SNR=3.6
**OBN Obninsk 65.51 323***ce*P **P** **02 39 16.8 -1.0**
OBN *e* 02 39 51.3
OBN *e* 02 41 42.2
OBN pmax pmax
comp=Z,16nm,1.2s
OBN MLR MLR
comp=Z,78nm,19.0s
**OBN Obninsk 65.51 323** *e*P **P** **02 39 16.8 -1.0**
**VRH Novokhopyorsk 65.52 318** *e*P **P** **02 39 16.8 -1.2**
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=Z,10.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.7s
**LPSR Galich'ya Gora 66.02 320** *e*P **P** **02 39 20.3 -0.9**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=N,6.0nm,1.4s
LPSR pmax pmax
comp=E,10.0nm,0.9s
**AS01 Alice Springs 66.55 191** *e*P P 02 39 33.1 +8.3
**ASAR Alice Springs 66.56 191** P **P** **02 39 25.9 +1.0**
comp=E,0.3nm,0.2s,baz=14,slow=5.2,SNR=3.5
**VSR Storozhevoye 66.77 319** *e*P **P** **02 39 25.5 -0.6**
VSR pmax pmax
comp=Z,10.0nm,1.3s
VSR pmax pmax
comp=N,10.0nm,1.2s
VSR pmax pmax
comp=E,20nm,1.1s
**VORD Divnogorie 66.87 319** *e*P **P** **02 39 24.5 -2.2**
VORD pmax pmax
comp=N,20nm,0.6s
VORD pmax pmax
comp=Z,9.0nm,0.6s
VORD pmax pmax
comp=E,50nm,0.7s
**VSU Vasula 67.26 330** *e*P **P** **02 39 26.8 -2.2**
VSU pmax pmax
comp=Z,47nm,1.0s
**MBWA Marble Bar 67.46 206** *e*P P 02 39 26.7 -4.0
comp=Z,13nm,1.2s
**FFC Flin Flon 67.65 35** *e*P **P** **02 39 31.7 +0.1**
FFC pmax pmax
comp=Z,10.0nm,1.2s
**FFC Flin Flon 67.65 35** *e*P **P** **02 39 31.7 +0.1**
**FFC Flin Flon 67.65 35** *e*P **P** **02 39 31.7 +0.1**
comp=Z,10nm,1.2s
**HRY Holter Researc 68.12 46** *e*P **P** **02 39 35.3 +0.4**
**LRM Limekiln Ridge 68.35 47** *e*P **P** **02 39 37.1 +0.7**
comp=Z,31nm,1.0s
**BOZ Bozeman (W) 68.91 47** *e*P **P** **02 39 41.1 +1.3**
BOZ pmax pmax
comp=Z,48nm,2.6s
**BOZ Bozeman (W) 68.91 47** *e*P **P** **02 39 41.1 +1.3**
**BOZ Bozeman (W) 68.91 47** *e*P **P** **02 39 41.1 +1.3**
comp=Z,48nm,2.6s
**NCK Nalchik 69.32 310** *e*P **P** **02 39 41.6 -0.6**
**KIV Kislovodsk 69.54 311** *e*P **P** **02 39 42.5 -1.2**
KIV *e* 02 40 03.5
KIV *e* 02 42 14.8
KIV *e*S SKiKP 02 49 19.1 -10
KIV *e*SS **SS** **02 53 16.2 -0.2**
KIV pmax pmax
comp=Z,23nm,1.1s
KIV MLR MLR
comp=Z,152nm,18.0s
**KIV Kislovodsk 69.54 311** *e*P **P** **02 39 42.5 -1.2**
**NV01 Mina Array Sit 69.55 56** *e*P **P** **02 39 45.3 +1.3**
**NVAR Mina Array Bea 69.55 56** P **P** **02 39 43.9 -0.1**
comp=Z,0.8nm,0.7s,baz=300,slow=7.2,SNR=6.5
**KBZ Khabaz 69.56 311** P **P** **02 39 42.4 -1.3**
comp=Z,6.4nm,0.8s,baz=35,slow=3.2,SNR=11
**KBZ Khabaz 69.56 311** P **P** **02 39 42.4 -1.3**
KBZ pmax pmax
comp=Z,6.0nm,0.8s
**NB2 NORSAR Subarra 70.30 338** P **P** **02 39 47.3 -0.6**
comp=Z,2.6nm,0.6s,baz=34,slow=6.2
**NOA NORSAR Array B 70.30 338** P **P** **02 39 47.4 -0.6**
comp=Z,4.6nm,0.8s,baz=51,slow=7.1,SNR=17
NOA LR LR 03 15 44.4
comp=Z,63nm,18.0s,baz=130,slow=40
**NOA NORSAR Array B 70.30 338** P **P** **02 39 47.4 -0.6**
NOA pmax pmax
comp=Z,5.0nm,0.8s
NOA MLR MLR
comp=Z,63nm,18.0s
**HFS Hagfors 70.34 337** P **P** **02 39 47.6 -0.5**
comp=Z,6.5nm,0.6s,baz=40,slow=7.7,SNR=19
**HFS Hagfors 70.34 337** P **P** **02 39 47.6 -0.5**
HFS pmax pmax
comp=Z,7.0nm,0.6s
**FXWY Fox Creek 70.52 48** *e*P **P** **02 39 51.7 +1.8**
**TPAW Teton Pass 70.66 48** *e*P **P** **02 39 53.0 +2.2**
comp=Z,11nm,1.4s
**GNI Garni 70.78 307** *e*P **P** **02 39 51.3 -0.1**
GNI pmax pmax
comp=Z,53nm,1.0s
**GNI Garni 70.78 307** *e*P **P** **02 39 51.3 -0.1**
comp=Z,53nm,1.0s
**DAC Darwin (Calif) 71.33 58** *e*P P 02 40 00.1 +5.2
DAC pmax pmax
comp=Z,4.0nm,0.9s
**DAC Darwin (Calif) 71.33 58** *e*P P 02 40 00.1 +5.2
comp=Z,4.4nm,0.9s
**AKASG Malin Array Be 71.77 323** P **P** **02 39 56.3 -0.7**
comp=Z,1.9nm,0.5s,baz=40,slow=5.8,SNR=13
AKASG pP **pP** **02 40 07.5 +0.5**
comp=Z,3.1nm,0.5s,baz=42,slow=6.0,SNR=5.4
**AKASG Malin Array Be 71.77 323** P **P** **02 39 56.3 -0.7**
AKASG *PP **pP** **02 40 07.6 +0.5**
AKASG pmax pmax
comp=Z,2.0nm,0.5s
AKASG pmax pmax
comp=Z,3.0nm,0.5s
**KIEV Kiev 71.78 323** *e*P **P** **02 39 56.6 -0.4**
KIEV pmax pmax
comp=Z,7.0nm,0.8s
**KIEV Kiev 71.78 323** *e*P **P** **02 39 56.6 -0.4**
**KIEV Kiev 71.78 323** *e*P **P** **02 39 56.6 -0.4**
comp=Z,6.9nm,0.8s
**ANN Anapa 71.84 314** *e*P **P** **02 39 55.9 -1.6**
ANN pmax pmax
comp=Z,69nm,1.3s
**ANN Anapa 71.84 314** *e*P **P** **02 39 55.9 -1.6**
**BW06 Boulder Array 71.91 48** *e*P **P** **02 39 58.4 +0.1**
**UOSS Wadi Hilu 72.87 288** *e*P **P** **02 40 04.3 +0.2**
comp=Z,7.7nm,0.6s
**ULM Lac du Bonnet 73.46 36** P **P** **02 40 06.6 -0.4**
comp=Z,2.0nm,0.6s,baz=333,slow=6.8,SNR=2.3
**ULM Lac du Bonnet 73.46 36** P **P** **02 40 06.6 -0.4**
ULM pmax pmax
comp=Z,2.0nm,0.6s
**SRU San Rafael 73.78 52** *e*P **P** **02 40 10.1 +0.7**
SRU pmax pmax
comp=Z,3.0nm,0.8s
**SRU San Rafael 73.78 52** *e*P **P** **02 40 10.1 +0.7**
comp=Z,2.7nm,0.8s
**KIS Kishinev 74.62 320** *e*L L 02 40 46.0
KIS LRM MLR 02 52 24.0
comp=Z,500nm,18.0s
**KWP Kalwaria Pacla 75.38 325** *e*P **P** **02 40 18.1 -0.2**
**KWP Kalwaria Pacla 75.38 325** *e*P **P** **02 40 18.2 -0.1**
**MALT Malatya 75.67 309** ||P **P** **02 40 21.6 +1.3**
**MALT Malatya 75.67 309** ||*i*P **P** **02 40 21.6 +1.3**
**BUR04 Bucovina Ar. S 75.82 323** *e*P **P** **02 40 20.8 -0.1**
**BURAR Bucovina Array 75.82 323** ||P **P** **02 40 20.8 -0.1**
**BURAR Bucovina Array 75.82 323** ||*i*P **P** **02 40 20.8 -0.1**
**TESR Tescani 75.99 321** ||*i*P **P** **02 40 21.9 +0.1**
**KOLS Kolonicke sedl 76.10 325** *e*P **P** **02 40 22.4 0.0**
KOLS pmax pmax
comp=Z,3.0nm,0.9s
**KOLS Kolonicke sedl 76.10 325** *e*P **P** **02 40 22.4 0.0**
**OJC Ojcow 76.12 327** *e*P **P** **02 40 22.8 +0.3**
**OJC Ojcow 76.12 327** *e*P **P** **02 40 23.1 +0.6**
**OJC Ojcow 76.12 327** *e*P **P** **02 40 23.1 +0.6**
**CFR Carcaliu 76.27 320** ||P **P** **02 40 23.6 +0.2**
**CFR Carcaliu 76.27 320** ||*i*P **P** **02 40 23.5 +0.2**
**VRI Vrincioaia 76.43 321** ||P **P** **02 40 25.7 +1.4**
**VRI Vrincioaia 76.43 321** ||*i*P **P** **02 40 25.7 +1.4**
**TRPA Tarpa 76.60 325** ||*i*P **P** **02 40 26.0 +0.8**
**DOPR Dopca 76.98 322** ||*i*P **P** **02 40 28.4 +1.0**
**MLR Muntele Rosu 77.08 321** ||P **P** **02 40 28.8 +0.7**
**MLR Muntele Rosu 77.08 321** ||*i*P **P** **02 40 28.8 +0.7**
**MSAB Monastry St. A 77.22 319** ||*i*P **P** **02 40 29.0 +0.2**
**MORC Moravsky Berou 77.36 328** *e*P **P** **02 40 29.4 -0.1**
MORC pmax pmax
comp=Z,15nm,1.0s
**MORC Moravsky Berou 77.36 328** ||*i*P **P** **02 40 30.1 +0.6**
**MORC Moravsky Berou 77.36 328** *e*P **P** **02 40 29.4 -0.1**
comp=Z,15nm,1.0s
**DPC Dobruska-Polom 77.37 329** *e*P **P** **02 40 30.0 +0.4**
**DPC Dobruska-Polom 77.37 329** *e*P **P** **02 40 30.0 +0.4**
**BRTR Keskin Array B 77.38 313** P **P** **02 40 29.9 0.0**
comp=Z,2.0nm,0.8s,baz=66,slow=3.0,SNR=10
BRTR pP **pP** **02 40 42.0 +1.9**
comp=Z,1.2nm,0.7s,baz=53,slow=4.8,SNR=3.8
**BRTR Keskin Array B 77.38 313** P **P** **02 40 30.0 0.0**
BRTR *PP **pP** **02 40 42.0 +1.9**
BRTR pmax pmax
comp=Z,2.0nm,0.8s
BRTR pmax pmax
comp=Z,1.0nm,0.7s
**KRLC Kraliky 77.42 329** *e*P **P** **02 40 30.4 +0.6**
**KRLC Kraliky 77.42 329** *e*P **P** **02 40 30.4 +0.6**
**VOIR 77.53 321** ||P **P** **02 40 31.1 +0.5**
**VOIR 77.53 321** ||*i*P **P** **02 40 31.1 +0.5**
**BR231 Keskin MP Arra 77.76 313** *e*P **P** **02 40 30.7 -1.4**
**CLL Collm 77.80 332** *i* P **P** **02 40 31.2 -0.7**
CLL *i* 02 40 38.9
CLL pmax pmax
comp=Z,6.0nm,0.9s
**CLL Collm 77.80 332** *e*P **P** **02 40 31.2 -0.7**
**CLL Collm 77.80 332** *i* P **P** **02 40 31.2 -0.7**
comp=Z,6.0nm,0.9s
CLL *i* (PcP) **PcP** **02 40 38.9 -2.9**
CLL *e* 02 40 43.0
**CLL Collm 77.80 332** *e*P **P** **02 40 31.8 -0.1**
**VYHS Vyhne 77.87 327** *e*P **P** **02 40 30.9 -1.4**
VYHS pmax pmax
comp=Z,2.0nm,0.8s
**VYHS Vyhne 77.87 327** *e*P **P** **02 40 30.9 -1.4**
**VRAC Vranov 78.11 328** ||P **P** **02 40 34.6 +0.9**
**VRAC Vranov 78.11 328** ||*i*P **P** **02 40 34.6 +0.9**
**GOPC GO Pecny, Ondr 78.30 330** *e*P **P** **02 40 35.1 +0.4**
GOPC *e* 02 40 46.8
**GOPC GO Pecny, Ondr 78.30 330** *e*P **P** **02 40 35.1 +0.4**
GOPC *e*pP **pP** **02 40 46.8 +1.9**
**PRU Pruhonice 78.33 330** *e*P **P** **02 40 35.4 +0.5**
**PRU Pruhonice 78.33 330** *e*P **P** **02 40 35.4 +0.5**
**PRU Pruhonice 78.33 330** *e*P **P** **02 40 35.4 +0.5**
**GZR Gura Zlata 78.60 323** ||P **P** **02 40 36.7 +0.2**
**GZR Gura Zlata 78.60 323** ||*i*P **P** **02 40 36.7 +0.2**
**ANMO Albuquerque 78.99 53** *e*P P 02 40 42.6 +3.6
ANMO pmax pmax
comp=Z,1.0nm,1.0s
**KHC Kasperske Hory 79.39 330** *e*P **P** **02 40 41.0 +0.2**
KHC *e* 02 40 51.2
**KHC Kasperske Hory 79.39 330** *e*P **P** **02 40 41.0 +0.2**
KHC *ex* x 02 40 51.2
**KHC Kasperske Hory 79.39 330** *e*P **P** **02 40 41.0 +0.2**
**KHC Kasperske Hory 79.39 330** *e*P **P** **02 40 41.3 +0.5**
**GERES GERESS Array B 79.58 330** P **P** **02 40 41.4 -0.5**
comp=Z,0.6nm,0.5s,baz=38,slow=6.8,SNR=7.7
GERES LR LR 03 17 50.6
comp=Z,90nm,19.2s,baz=74,slow=37
**GERES GERESS Array B 79.58 330** P **P** **02 40 41.4 -0.5**
GERES pmax pmax
comp=Z,1.0nm,0.5s
GERES MLR MLR

comp=Z,90nm,19.2s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GRF** | **Grafenberg Arr** | **79.78** | **332** | *e*P | | **P** | **02 40 42.5** | **-0.4** |
| | comp=Z,24nm,1.5s,baz=30,slow=4.8 | | | | | | | |
| **GROS** | **Grobnik** | **80.85** | **327** | *i* P | | **P** | **02 40 48.5** | **-0.2** |
| **DIVS** | **Divibare** | **80.86** | **323** | *i*P | | **P** | **02 40 48.6** | **-0.2** |
| **SOKA** | **Soboth** | **80.86** | **328** | *i*P | | **P** | **02 40 49.0** | **+0.2** |
| | comp=Z,4.8nm,0.7s | | | | | | | |
| **PERS** | **Pernice** | **80.86** | **328** | *i* P | | **P** | **02 40 49.1** | **+0.4** |
| **MMAI** | **Mount Meron Ar** | **81.12** | **307** | P | | **P** | **02 40 51.1** | **+0.7** |
| | comp=Z,4.1nm,0.7s,baz=36,slow=7.2,SNR=8.3 | | | | | | | |
| **RAYN** | **Ar Rayn** | **81.20** | **294** | *e*P | | **P** | **02 40 50.8** | **-0.1** |
| | comp=Z,2.1nm,0.7s | | | | | | | |
| **LEGS** | **Legarje** | **81.34** | **327** | *i* P | | **P** | **02 40 50.9** | **-0.3** |
| **MOTA** | **Moosalm** | **81.80** | **330** | *i*P | | **P** | **02 40 53.8** | **0.0** |
| | comp=Z,2.7nm,0.6s | | | | | | | |
| **CEY** | **Cerknica** | **81.87** | **328** | *i* P | | **P** | **02 40 53.4** | **-0.7** |
| **FETA** | **Feichten** | **82.21** | **330** | *i*P | | **P** | **02 40 55.6** | **-0.4** |
| | comp=Z,4.8nm,1.1s | | | | | | | |
| **EIL** | **Elat** | **83.76** | **305** | P | | **P** | **02 41 04.5** | **+0.4** |
| | comp=Z,2.6nm,0.7s,baz=354,slow=9.2,SNR=3.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.63** | **55** | P | | **P** | **02 41 09.4** | **+0.7** |
| | comp=Z,0.4nm,0.7s,baz=301,slow=4.1,SNR=5.0 | | | | | | | |
| TXAR | | | | pP | | **pP** | **02 41 19.9** | **+1.0** |
| | comp=Z,1.2nm,0.7s,baz=306,slow=4.5,SNR=7.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.63** | **55** | P | | **P** | **02 41 09.4** | **+0.7** |
| TXAR | | | | *PP | | **pP** | **02 41 19.9** | **+1.0** |
| TXAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **KEST** | **Kesra** | **92.36** | **325** | P | | **P** | **02 41 45.2** | **-0.2** |
| | comp=Z,2.5nm,0.9s,baz=135,slow=4.3,SNR=2.6 | | | | | | | |
| **ESDC** | **Sonseca Array** | **93.62** | **337** | P | | **P** | **02 41 50.1** | **-1.1** |
| | comp=Z,0.6nm,0.7s,baz=17,slow=4.9,SNR=6.6 | | | | | | | |
| ESDC | | | | pP | | **pP** | **02 42 01.9** | **+0.4** |
| | comp=Z,0.5nm,0.7s,baz=3.7,slow=4.6,SNR=3.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.31** | **320** | PKP | | **PKPdf** | **02 47 15.9** | **-0.9** |
| | comp=Z,0.2nm,0.4s,baz=16,slow=2.1,SNR=13 | | | | | | | |
| TORD | | | | pPKP | PKiKP | | 02 47 27.7 | +11 |
| | comp=Z,0.3nm,0.5s,baz=20,slow=2.0,SNR=2.8 | | | | | | | |
| TORD | | | | PP | | **PP** | **02 48 13.4** | **-3.4** |
| | comp=Z,1.1nm,1.0s,baz=25,slow=6.6,SNR=5.2 | | | | | | | |
| **DBIC** | **Dimbokro** | **124.02** | **323** | PKP | | **PKPdf** | **02 47 32.8** | **-0.7** |
| | comp=Z,2.0nm,0.7s,baz=27,slow=2.3,SNR=4.2 | | | | | | | |
| **DBIC** | **Dimbokro** | **124.02** | **323** | PKIKP | | **PKPdf** | **02 47 32.8** | **-0.7** |
| DBIC | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **SYO** | **Syowa Base** | **134.29** | **209** | *e*P | | PKPdf | 02 48 02.0 | +11 |
| **SAML** | **Samuel** | **138.42** | **45** | *e*PKPdf | | **PKPdf** | **02 47 59.8** | **-0.9** |
| **LPAZ** | **La Paz** | **141.45** | **58** | PKP | | **PKPdf** | **02 48 04.6** | **-2.2** |
| | comp=Z,0.4nm,0.6s,baz=270,slow=8.1,SNR=2.5 | | | | | | | |
| **LVC** | **Limon Verde** | **145.48** | **66** | *e*PKPbc | | **PKPab** | **02 48 15.1** | **+1.4** |
| **SNAA** | **Sanae** | **146.73** | **198** | *e*PKP2 | | **PKPbc** | **02 48 15.0** | **-0.5** |
| **SNAA** | **Sanae** | **146.73** | **198** | *e*PKPbc | | **PKPbc** | **02 48 15.0** | **-0.5** |
| **BDFB** | **Brasilia** | **151.03** | **27** | PKPbc | | **PKPbc** | **02 48 27.7** | **-0.4** |
| | comp=Z,4.6nm,0.9s,baz=248,slow=5.4,SNR=6.8 | | | | | | | |
| **BDFB** | **Brasilia** | **151.03** | **27** | PKIKP | | **PKPbc** | **02 48 27.7** | **-0.4** |
| BDFB | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |

*IDC **23** 02:29:55.8±1.1,21˚.11S×176˚.22W, h0km, mb4.1/5, mb1 4.3/6, mb1mx3.9/34, mbtmp4.1/6, ML4.4/1, Error ellipse: s-maj=36.5km s-min=26.8km az=123.0*

*ISCJB **23** 02:29:57.1±1.5,21˚.1S±0˚.1×176˚.4W±0˚.3, h10km, mb4.1/5, Error ellipse: s-maj=35.3km s-min=21.3km az=4.3*

**ISC 23 02:29:57.4±1.2,21˚.2S±0˚.2×176˚.2W±0˚.2, h10km, n12, σ0§94/10, mb4.3/5, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **17.99** | **197** | P | **P** | **02 34 08.5** | **+0.4** |
| | 1.2nm,0.3s,baz=10,slow=1.4,SNR=6.8 | | | | | | |
| **RPZ** | **Rata Peaks** | **24.87** | **202** | P | **P** | **02 35 21.1** | **+0.9** |
| | 5.0nm,0.5s,baz=45,slow=2.9,SNR=6.1 | | | | | | |
| **CTA** | **Charters Tower** | **35.10** | **265** | P | **P** | **02 36 52.0** | **+0.8** |
| | 5.1nm,0.8s,baz=94,slow=14,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **46.01** | **257** | P | **P** | **02 38 21.1** | **-0.4** |
| | 2.4nm,0.7s,baz=91,slow=8.4,SNR=19 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.18** | **262** | P | **P** | **02 38 21.7** | **-1.0** |
| | 0.6nm,0.5s,baz=96,slow=8.2,SNR=20 | | | | | | |
| **ILAR** | **Eielson Array** | **88.59** | **12** | P | **P** | **02 42 51.1** | **+1.1** |
| | 0.2nm,0.6s,baz=216,slow=6.3,SNR=4.6 | | | | | | |
| **HFS** | **Hagfors** | **140.44** | **352** | PKhKP | PKPpre | 02 49 20.9 | |
| | 2.2nm,0.7s,baz=52,slow=9.3,SNR=5.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.40** | **332** | PKP | PKPbc | 02 49 31.1 | -1.1 |
| | 1.9nm,0.4s,baz=37,slow=3.6,SNR=5.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **148.53** | **313** | PKPbc | **PKPbc** | **02 49 44.0** | **-1.0** |
| | 0.9nm,0.4s,baz=135,slow=4.1,SNR=7.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **149.60** | **300** | PKPbc | **PKPbc** | **02 49 47.4** | **-0.3** |
| | 2.1nm,0.4s,baz=81,slow=6.8,SNR=14 | | | | | | |
| **GERES** | **GERESS Array B** | **151.26** | **346** | PKPbc | **PKPbc** | **02 49 50.6** | **-0.6** |
| | 0.2nm,0.3s,baz=16,slow=1.4,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **171.78** | **165** | PKPab | **PKPab** | **02 51 28.0** | **-0.9** |
| | 0.4nm,0.8s,baz=159,slow=4.5,SNR=2.8 | | | | | | |

*IDC **23** 02:34:50.4±1.1,3˚.51S×128˚.33E, h0km, mb3.7/3, mb1 4.0/5, mb1mx3.6/45, mbtmp3.8/5, ML3.5/2, Error ellipse: s-maj=36.0km s-min=24.8km az=85.0*

*ISCJB **23** 02:34:52.4±0.6,3˚.66S±0˚.05×128˚.51E±0˚.04, h10km, mb3.6/2, Error ellipse: s-maj=8.2km s-min=4.7km az=159.6*

*DJA **23** 02:34:53.4±0.4,4˚S±4˚×12˚8E±˚, h10km, M3.7/10, MLv3.7/10*

**ISC 23 02:34:53.0±0.8,3˚.64S±0˚.07×128˚.47E±0˚.04, h10km, n13, σ1§29/17, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AAI** | **Ambon** | **0.28** | **260** | P | **Pg** | **02 34 59.4** | **+0.7** |
| AAI | | | | S | **Sg** | **02 35 04.0** | **+1.5** |
| **MSAI** | **Masohi** | **0.54** | **58** | P | **Pg** | **02 35 03.7** | **+0.2** |
| MSAI | | | | S | **Sg** | **02 35 10.8** | **+0.1** |
| **NLAI** | **Namlea** | **1.43** | **286** | P | **Pn** | **02 35 19.2** | **+0.3** |
| **SANI** | **Sanana** | **2.94** | **302** | P | **Pn** | **02 35 38.2** | **-1.6** |
| **LBMI** | **Labuha** | **3.13** | **342** | P | **Pn** | **02 35 44.8** | **+2.3** |
| LBMI | | | | S | **Sn** | **02 36 21.2** | **+1.2** |
| **FAKI** | **Fak Fak** | **3.84** | **79** | P | **Pn** | **02 35 53.6** | **+1.4** |
| **SIJI** | **Sorong** | **3.92** | **45** | Pn | **Pn** | **02 35 53.6** | **+0.3** |
| | 9.0nm,0.3s,baz=46,slow=23,SNR=11 | | | | | | |
| SIJI | | | | Sn | **Sn** | **02 36 39.0** | **-0.4** |
| | 4.4nm,0.3s,baz=163,slow=19,SNR=1.7 | | | | | | |
| **SWI** | **Sorong** | **3.92** | **45** | P | **Pn** | **02 35 54.0** | **+0.7** |
| **WRA** | **Warramunga Arr** | **17.19** | **161** | Pn | **Pn** | **02 38 53.8** | **+0.4** |
| | 0.1nm,0.3s,baz=347,slow=13,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **20.59** | **166** | P | **P** | **02 39 33.3** | **+0.9** |
| | 5.9nm,0.8s,baz=345,slow=10,SNR=22 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 43 41.9** | **-1.5** |
| | 0.2nm,0.2s,baz=349,slow=1.9,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.60** | **327** | P | P | 02 45 28.0 | -2.7 |
| | 0.3nm,0.5s,baz=110,slow=6.5,SNR=2.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **68.87** | **328** | P | **P** | **02 45 56.2** | **-1.6** |
| | 0.6nm,0.6s,baz=123,slow=4.9,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **126.61** | **284** | PKP | **PKPdf** | **02 53 56.1** | **-1.6** |
| | 0.2nm,0.9s,baz=79,slow=1.3,SNR=1.7 | | | | | | |

**CSEM 23 02:55:21.0, 40˚.66N×16˚.36E, h22km, MD1.9/6, After ROM, Southern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MIGL** | **Miglionico** | **0.08** | **131** | Pg | Pb | 02 55 25.0 | -0.1 |
| MIGL | | | | Sg | Sb | 02 55 28.3 | +0.4 |
| | 221nm,0.3s | | | | | | |
| **MATE** | **Matera** | **0.26** | **92** | Pg | Pb | 02 55 27.2 | 0.0 |
| MATE | | | | Sg | Sb | 02 55 31.5 | 0.0 |
| | 22nm,0.2s | | | | | | |
| **CRAC** | **Craco** | **0.30** | **169** | Pg | Pb | 02 55 27.6 | -0.2 |
| CRAC | | | | Sg | Sb | 02 55 33.5 | +1.1 |
| | 38nm,0.2s | | | | | | |
| **AMUR** | **Altamura** | **0.31** | **36** | Pg | Pb | 02 55 27.9 | -0.1 |
| AMUR | | | | Sg | Sb | 02 55 33.2 | +0.5 |
| | 16nm,0.2s | | | | | | |
| **MRVN** | **Minervino Murg** | **0.42** | **343** | Pg | Pb | 02 55 30.4 | +0.6 |
| MRVN | | | | Sg | Sb | 02 55 36.2 | +0.3 |
| | 11nm,0.2s | | | | | | |
| **NOCI** | **Noci** | **0.55** | **76** | Pg | Pn | 02 55 32.9 | -0.7 |
| NOCI | | | | Sg | Sb | 02 55 40.3 | +0.7 |

**IDC 23 02:58:31.6±2.2, 5˚.40S×154˚.73E, h0km, mb3.5/4, mb1 3.7/4, mb1mx3.5/34, mbtmp3.5/4, Error ellipse: s-maj=101.8km s-min=28.2km az=124.0, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **24.55** | **232** | P | P | 03 03 54.2 | +0.9 |
| | 0.3nm,0.6s,baz=59,slow=9.3,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **27.06** | **226** | P | P | 03 04 15.4 | -0.7 |
| | 0.3nm,0.4s,baz=57,slow=8.8,SNR=6.2 | | | | | | |
| **ILAR** | **Eielson Array** | **82.00** | **22** | P | P | 03 10 53.4 | +0.2 |
| | 0.3nm,0.9s,baz=234,slow=5.3,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **82.04** | **319** | P | P | 03 10 53.6 | -0.3 |
| | 0.5nm,0.5s,baz=108,slow=5.4,SNR=4.5 | | | | | | |

*ISCJB **23** 03:09:12.6±0.5,56˚.74S±0˚.08×142˚.1W±0˚.2, h10km, mb4.4/15, MS5.1/147, Error ellipse: s-maj=12.2km s-min=10.9km az=12.7*

*IDC **23** 03:09:13.3±0.7,56˚.63S×141˚.94W, h0km, mb4.2/6, mb1 4.3/6, mb1mx4.1/23, mbtmp4.2/6, MS4.9/16, Ms1 4.9/16, ms1mx4.9/17, Error ellipse: s-maj=35.0km s-min=22.2km az=179.0*

*NEIC **23** 03:09:15.1±0.4,56˚.70S×141˚.95W, h10km, mb4.8/9, MS5.1/127, Error ellipse: s-maj=19.3km s-min=11.7km az=173.0*

*GCMT **23** 03:09:15.1±0.1,56˚.94S×141˚.67W, h22km, MW5.8/117, Moment Tensor Solution. s109,c203; s117,c331; Duration: 1§8 Moment tensor: Scale 10^17^Nm; Mrr=0.19±.05; Mθθ=4.17±.06; Mϕϕ=-3.98±.05; Mrθ=0.52±.10; Mθϕ=3.49±.05; Mϕr=0.22±.09; Best double couple: M=5.39300×10^17^ NP1:ϕ=25.00000°, δ=86.00000°, λ=176.00000°. NP2:ϕ=115.00000°, δ=86.00000°, λ=4.00000°. Principal axes: T 5.5160, Plg6.0000°, Azm340.0000°; N -0.2420, Plg84.0000°, Azm163.0000°; P -5.2700, Plg0.0000°, Azm70.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*BJI **23** 03:09:22.9, 56˚.90S×141˚.90W, h10km*

**ISC 23 03:09:14.6±0.5, 56˚.75S±0˚.09×142˚.28W±0˚.09, h10km, n200, σ1§77/39, mb4.6/15, MS5.1/147, 1C, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SBA** | **Scott Base** | **27.24** | **201** | PFAKE | | 03 15 10.0 | +12 |
| SBA | | | | LR | LR | | |
| | comp=Z,4μm,21.0s | | | | | | |
| **VNDA** | **Vanda** | **28.14** | **202** | P | P | 03 15 12.7 | +6.4 |
| | comp=Z,0.5nm,1.0s,baz=20,slow=6.6,SNR=2.3 | | | | | | |
| VNDA | | | | LR | LR | 03 22 58.6 | |
| | comp=Z,4μm,21.1s,baz=78,slow=29 | | | | | | |
| **SNZO** | **South Karori** | **31.54** | **281** | PFAKE | | 03 15 50.0 | +13 |
| SNZO | | | | LR | LR | | |
| | comp=Z,4μm,21.0s | | | | | | |
| **URZ** | **Urewera** | **32.45** | **287** | LR | LR | 03 26 01.4 | |
| | comp=Z,3μm,21.5s,baz=136,slow=31 | | | | | | |
| **PTCN** | **Pitcairn Islan** | **32.86** | **21** | PFAKE | | 03 16 00.0 | +12 |
| PTCN | | | | LR | LR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **33.41** | **180** | P | **P** | **03 15 54.9** | **+1.9** |
| | comp=Z,9.7nm,1.1s,baz=155,slow=5.7,SNR=3.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **33.41** | **180** | *e*P | **P** | **03 15 54.9** | **+1.9** |
| | comp=Z,36nm,1.4s | | | | | | |
| QSPA | | | | LR | LR | | |
| | comp=Z,6μm,21.0s | | | | | | |
| **TBI** | **Tubuai** | **33.77** | **348** | *e*S | **S** | **03 21 18.6** | **-1.2** |
| | comp=Z,1μm,30.2s | | | | | | |
| TBI | | | | *e*LR | LR | 03 24 44.0 | |
| | comp=Z,10μm,29.5s,baz=175 | | | | | | |
| **TBI** | **Tubuai** | **33.77** | **348** | *e*T | T | 03 50 43.3 | |
| | comp=Z,59nm,0.3s | | | | | | |
| **RKT** | **Rikitea** | **34.02** | **12** | *e*S | **S** | **03 21 27.6** | **+4.0** |
| | comp=Z,898nm,26.5s | | | | | | |
| RKT | | | | *e*LQ | LQ | 03 23 32.3 | |
| | comp=Z,7μm,30.5s | | | | | | |
| RKT | | | | *e*LR | LR | 03 24 57.4 | |
| | comp=Z,8μm,29.5s,baz=188 | | | | | | |
| **RKT** | **Rikitea** | **34.02** | **12** | *e*T | T | 03 51 31.0 | |
| | comp=Z,5.3nm,0.2s | | | | | | |
| **DRV** | **Dumont d'Urvil** | **35.69** | **222** | P | **P** | **03 16 10.0** | **-2.5** |
| DRV | | | | S | **S** | **03 21 47.0** | **-1.6** |
| DRV | | | | L | L | 03 24 00.0 | |
| DRV | | | | R | | 03 27 00.0 | |
| **PMSA** | **Palmer Station** | **36.66** | **135** | PFAKE | | 03 16 30.0 | +9.2 |
| PMSA | | | | LR | LR | | |
| | comp=Z,6μm,21.0s | | | | | | |
| **RAR** | **Rarotonga** | **37.77** | **333** | PFAKE | | 03 16 40.0 | +9.3 |
| RAR | | | | LR | LR | | |
| | comp=Z,2.0nm,21.0s | | | | | | |
| **MEH** | **Mehetia** | **39.05** | **351** | *e*T | T | 03 57 22.1 | |
| | comp=Z,22nm,0.2s | | | | | | |
| **PAE** | **Paea** | **39.41** | **349** | *e*T | T | 03 57 46.0 | |
| | comp=Z,2.2nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **39.48** | **349** | *e*S | **S** | **03 22 45.4** | **-1.7** |
| | comp=Z,2μm,27.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 03 27 19.0 | |
| | comp=Z,11μm,28.8s,baz=178 | | | | | | |
| **PPT2** | **Papeete2** | **39.48** | **349** | *e*T | T | 03 57 51.5 | |
| | comp=Z,4.2nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **39.50** | **349** | LR | LR | 03 28 38.1 | |
| | comp=Z,2μm,18.8s,baz=176,slow=30 | | | | | | |
| **VAH** | **Vaihoa** | **41.63** | **352** | *e*T | T | 04 00 36.4 | |
| | comp=Z,34nm,0.2s | | | | | | |
| **TAU** | **Tasmania Unive** | **45.42** | **256** | PFAKE | | 03 17 50.0 | +17 |
| TAU | | | | LR | LR | | |
| | comp=Z,2μm,21.0s | | | | | | |
| **CASY** | **Casey** | **45.78** | **213** | PFAKE | | 03 17 50.0 | +14 |
| CASY | | | | LR | LR | | |
| | comp=Z,2μm,19.0s | | | | | | |
| **EFI** | **East Falkland** | **46.56** | **121** | PFAKE | | 03 17 50.0 | +8.0 |
| EFI | | | | LR | LR | | |
| | comp=Z,2μm,19.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **48.01** | **161** | P | **P** | **03 17 52.3** | **-0.8** |
| **AFI** | **Afiamalu** | **48.32** | **320** | PFAKE | | 03 18 10.0 | +14 |
| AFI | | | | LR | LR | | |
| | comp=Z,1μm,22.0s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **48.67** | **162** | P | **P** | **03 17 58.0** | **-0.2** |
| | baz=212,slow=6.6 | | | | | | |
| **SNAA** | **Sanae** | **48.76** | **164** | P | **P** | **03 17 57.7** | **-1.2** |
| **SNAA** | **Sanae** | **48.76** | **164** | *e*P | **P** | **03 17 57.5** | **-1.4** |
| | comp=Z,8.0nm,1.2s | | | | | | |
| **VNA1** | **Neumayer--Stat** | **48.76** | **161** | P | **P** | **03 17 58.4** | **-0.4** |
| **MSVF** | **Nonsavu** | **48.94** | **306** | PFAKE | | 03 18 10.0 | +9.0 |
| MSVF | | | | LR | LR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| **CAN** | **Canberra** | **49.92** | **265** | PFAKE | | 03 18 20.0 | +12 |
| CAN | | | | LR | LR | | |
| | comp=Z,2μm,21.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **50.84** | **291** | *e*S | **S** | **03 25 26.7** | **-4.7** |
| | comp=Z,950nm,26.8s | | | | | | |
| DZM | | | | *e*LQ | LQ | 03 30 23.0 | |
| | comp=Z,5μm,25.9s | | | | | | |
| DZM | | | | *e*LR | LR | 03 32 24.0 | |
| | comp=Z,3μm,25.6s | | | | | | |
| **TRQA** | **Tornquist** | **54.16** | **106** | *e*P | **P** | **03 18 39.2** | **-0.6** |
| | comp=Z,13nm,1.1s | | | | | | |
| TRQA | | | | LR | LR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| **SYO** | **Syowa Base** | **54.54** | **181** | *e*P | **P** | **03 18 41.4** | **-0.6** |
| **MAW** | **Mawson** | **54.56** | **192** | P | **P** | **03 18 43.6** | **+1.4** |
| | comp=Z,2.3nm,0.9s,baz=170,slow=9.8,SNR=4.7 | | | | | | |
| MAW | | | | LR | LR | 03 39 11.5 | |
| | comp=Z,2μm,21.1s,baz=158,slow=33 | | | | | | |
| **LCO** | **Las Campanas** | **56.28** | **92** | PFAKE | | 03 19 10.0 | +15 |
| LCO | | | | LR | LR | | |
| | comp=Z,2μm,22.0s | | | | | | |
| **XMAS** | **Kiritimati** | **59.88** | **342** | PFAKE | | 03 19 30.0 | +10 |
| XMAS | | | | LR | LR | | |
| | comp=Z,5.0nm,21.0s | | | | | | |
| **LVC** | **Limon Verde** | **62.31** | **89** | *e*P | **P** | **03 19 36.9** | **-0.3** |
| | comp=Z,5.3nm,0.8s | | | | | | |
| **CTA** | **Charters Tower** | **63.28** | **274** | LR | LR | 03 43 59.5 | |
| | comp=Z,703nm,19.8s,baz=130,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **63.28** | **274** | PFAKE | | 03 20 00.0 | +17 |
| CTAO | | | | LR | LR | | |
| | comp=Z,873nm,19.0s | | | | | | |
| **HNR** | **Honiara** | **64.80** | **293** | PFAKE | | 03 20 10.0 | +17 |
| HNR | | | | LR | LR | | |
| | comp=Z,589nm,19.0s | | | | | | |
| **CPUP** | **Villa Florida** | **65.69** | **101** | P | **P** | **03 19 57.8** | **-1.3** |
| | comp=Z,3.2nm,1.0s,baz=204,slow=7.4,SNR=4.3 | | | | | | |
| **NNA** | **Nana** | **66.65** | **76** | *e*P | **P** | **03 20 06.0** | **+0.5** |
| | comp=Z,50nm,1.4s | | | | | | |
| NNA | | | | LR | LR | | |
| | comp=Z,2μm,22.0s | | | | | | |
| **ASAR** | **Alice Springs** | **67.20** | **261** | P | **P** | **03 20 09.9** | **+1.1** |
| | comp=Z,1.2nm,0.6s,baz=139,slow=6.4,SNR=12 | | | | | | |
| ASAR | | | | LR | LR | 03 45 14.3 | |
| | comp=Z,852nm,21.5s,baz=148,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **67.84** | **86** | P | **P** | **03 20 12.4** | **-1.2** |
| | comp=Z,2.2nm,0.8s,baz=85,slow=3.9,SNR=7.1 | | | | | | |
| LPAZ | | | | LR | LR | 03 44 09.0 | |
| | comp=Z,269nm,22.0s,baz=201,slow=31 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **68.34** | **239** | T | T | 04 36 05.3 | |
| | baz=145,slow=76,SNR=1019 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **68.35** | **239** | T | T | 04 35 48.2 | |
| | baz=145,slow=76,SNR=861 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **68.36** | **239** | T | T | 04 35 49.1 | |
| | baz=145,slow=76,SNR=876 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **68.46** | **243** | LR | LR | 03 42 31.5 | |
| | comp=Z,7.3nm,21.1s,slow=29 | | | | | | |
| **PAYG** | **Puerto Ayora** | **69.58** | **57** | PFAKE | | 03 20 40.0 | +16 |
| PAYG | | | | LR | LR | | |
| | comp=Z,2μm,21.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **69.96** | **264** | P | **P** | **03 20 27.4** | **+1.3** |
| | comp=Z,0.5nm,0.5s,baz=151,slow=5.5,SNR=7.9 | | | | | | |
| WRA | | | | LR | LR | 03 47 09.6 | |
| | comp=Z,1μm,21.1s,baz=135,slow=32 | | | | | | |
| **WRAB** | **Tennant Creek** | **69.96** | **264** | *e*P | **P** | **03 20 26.2** | **+0.1** |
| | comp=Z,2.5nm,0.7s | | | | | | |
| WRAB | | | | LR | LR | | |
| | comp=Z,1μm,20.0s | | | | | | |
| **PMG** | **Port Moresby** | **71.55** | **281** | LR | LR | 03 48 03.2 | |
| | comp=Z,821nm,20.1s,baz=160,slow=32 | | | | | | |
| **OTAV** | **Otavalo** | **76.14** | **68** | *e*P | **P** | **03 21 01.8** | **-1.5** |
| | comp=Z,7.2nm,1.4s | | | | | | |
| **SAML** | **Samuel** | **76.59** | **86** | *e*P | **P** | **03 21 04.3** | **-0.9** |
| | comp=Z,13nm,1.4s | | | | | | |
| SAML | | | | LR | LR | | |
| | comp=Z,294nm,21.0s | | | | | | |
| **MBWA** | **Marble Bar** | **76.82** | **252** | *e*P | **P** | **03 21 08.8** | **+2.3** |
| | comp=Z,10nm,1.0s | | | | | | |
| MBWA | | | | LR | LR | | |
| | comp=Z,1μm,22.0s | | | | | | |
| **BDFB** | **Brasilia** | **79.39** | **102** | LR | LR | 03 52 39.1 | |
| | comp=Z,2μm,19.4s,baz=202,slow=33 | | | | | | |
| **H06S1** | **SOCORRO T** | **79.66** | **30** | T | T | 04 49 08.4 | |
| | SNR=5.5 | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **79.71** | **30** | T | T | 04 49 08.8 | |
| | SNR=22 | | | | | | |
| **JTS** | **JuntasAbangare** | **81.69** | **57** | PFAKE | | 03 21 40.0 | +6.9 |
| JTS | | | | LR | LR | | |
| | comp=Z,2μm,22.0s | | | | | | |
| **ROSC** | **El Rosal** | **82.19** | **69** | LR | LR | 03 51 02.2 | |
| | comp=Z,461nm,21.3s,baz=206,slow=31 | | | | | | |
| **BCIP** | **Isla Barro Col** | **83.13** | **62** | PFAKE | | 03 21 50.0 | +9.4 |
| BCIP | | | | LR | LR | | |
| | comp=Z,1μm,21.0s | | | | | | |
| **BATI** | **Baumata** | **83.77** | **261** | LR | LR | 03 56 23.7 | |
| | comp=Z,1μm,20.3s,slow=34 | | | | | | |
| **SDV** | **Santo Domingo** | **87.52** | **70** | PFAKE | | 03 22 10.0 | +7.3 |
| SDV | | | | LR | LR | | |
| | comp=Z,675nm,20.0s | | | | | | |
| **TEIG** | **Tepich** | **89.01** | **49** | PFAKE | | 03 22 20.0 | +11 |
| TEIG | | | | LR | LR | | |
| | comp=Z,631nm,19.0s | | | | | | |
| **MIDW** | **Midway** | **89.70** | **330** | PFAKE | | 03 22 20.0 | +7.6 |
| MIDW | | | | LR | LR | | |
| | comp=Z,1μm,19.0s | | | | | | |
| **KAPI** | **Kappang** | **90.21** | **261** | PFAKE | | 03 22 30.0 | +15 |
| KAPI | | | | LR | LR | | |
| | comp=Z,1μm,21.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **91.77** | **33** | LR | LR | 03 55 07.3 | |
| | comp=Z,287nm,19.5s,baz=0.0,slow=30 | | | | | | |
| **MTDJ** | **Mount Denham** | **92.07** | **59** | PFAKE | | 03 22 30.0 | +6.2 |
| MTDJ | | | | LR | LR | | |
| | comp=Z,864nm,20.0s | | | | | | |
| **GUMO** | **Guam** | **92.11** | **292** | LR | LR | 03 56 41.6 | |
| | comp=Z,90nm,21.8s,baz=144,slow=31 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **92.64** | **21** | PFAKE | | 03 22 40.0 | +14 |
| PFO | | | | LR | LR | | |
| | comp=Z,1μm,22.0s | | | | | | |
| **TUC** | **Tucson** | **92.65** | **26** | PFAKE | | 03 22 40.0 | +14 |
| TUC | | | | LR | LR | | |
| | comp=Z,653nm,20.0s | | | | | | |
| **MNTX** | **Cornudas Mount** | **93.49** | **31** | PFAKE | | 03 22 40.0 | +10 |
| MNTX | | | | LR | LR | | |
| | comp=Z,829nm,21.0s | | | | | | |
| **RCBR** | **Riachuelo** | **94.04** | **107** | PFAKE | | 03 22 40.0 | +6.9 |
| RCBR | | | | LR | LR | | |
| | comp=Z,1μm,20.0s | | | | | | |
| **JCT** | **Junction City** | **94.04** | **36** | PFAKE | | 03 22 40.0 | +7.4 |
| JCT | | | | LR | LR | | |
| | comp=Z,404nm,21.0s | | | | | | |
| **BOSA** | **Boshof** | **94.32** | **169** | LR | LR | 04 03 25.5 | |
| | comp=Z,1μm,18.2s,baz=182,slow=34 | | | | | | |
| **GTBY** | **Guantanamo Bay** | **94.68** | **60** | PFAKE | | 03 22 50.0 | +14 |
| GTBY | | | | LR | LR | | |
| | comp=Z,731nm,20.0s | | | | | | |
| **GRGR** | **Grenville** | **94.96** | **76** | PFAKE | | 03 22 50.0 | +13 |
| GRGR | | | | LR | LR | | |
| | comp=Z,766nm,20.0s | | | | | | |
| **WUAZ** | **Wupatki** | **95.57** | **25** | PFAKE | | 03 22 50.0 | +10 |
| WUAZ | | | | LR | LR | | |
| | comp=Z,963nm,22.0s | | | | | | |
| **SDDR** | **Presa de Saban** | **95.74** | **64** | PFAKE | | 03 22 50.0 | +9.4 |
| SDDR | | | | LR | LR | | |
| | comp=Z,376nm,20.0s | | | | | | |
| **ANMO** | **Albuquerque** | **96.25** | **29** | PFAKE | | 03 22 50.0 | +7.2 |
| ANMO | | | | LR | LR | | |
| | comp=Z,803nm,20.0s | | | | | | |
| **BBGH** | **Gun Hill** | **96.93** | **77** | PFAKE | | 03 23 00.0 | +14 |
| BBGH | | | | LR | LR | | |
| | comp=Z,472nm,19.0s | | | | | | |
| **NATX** | **Nacogdoches** | **96.94** | **39** | PFAKE | | 03 23 00.0 | +14 |
| NATX | | | | LR | LR | | |
| | comp=Z,638nm,22.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **96.97** | **19** | LR | LR | 03 56 25.8 | |
| | comp=Z,1μm,22.0s,baz=198,slow=29 | | | | | | |
| **DAV** | **Davao City (W)** | **97.03** | **272** | PFAKE | | 03 23 00.0 | +13 |
| DAV | | | | LR | LR | | |
| | comp=Z,712nm,19.0s | | | | | | |
| **FDF** | **Fort de France** | **97.40** | **75** | PFAKE | | 03 23 00.0 | +12 |
| FDF | | | | LR | LR | | |
| | comp=Z,765nm,22.0s |

comp=Z,2µm,20.0s
**AHID Auburn Hatcher 102.56 23** PFAKE 03 23 20.0 +9.2
AHID LR LR
comp=Z,546nm,21.0s
**GOGA Godfrey 102.64 47** PFAKE 03 23 20.0 +8.9
GOGA LR LR
comp=Z,424nm,19.0s
**HLID Hailey 102.66 20** PFAKE 03 23 20.0 +8.8
HLID LR LR
comp=Z,1µm,20.0s
**ASCN Ascension 102.76 127** PFAKE 03 23 20.0 +7.7
ASCN LR LR
comp=Z,671nm,20.0s
**H10N3 ASCENSION HYDR 102.78 127** T T 05 18 22.7
baz=206,slow=75,SNR=14
**H10N1 ASCENSION HYDR 102.79 127** T T 05 18 11.1
baz=206,slow=75,SNR=15
**H10N2 ASCENSION HYDR 102.80 127** T T 05 18 22.5
baz=206,slow=75,SNR=10
**BW06 Boulder Array 102.91 24** PFAKE 03 23 20.0 +7.6
BW06 LR LR
comp=Z,943nm,20.0s
**KSU1 Kansas State U 102.98 35** PFAKE 03 23 20.0 +7.5
KSU1 LR LR
comp=Z,351nm,20.0s
**OGNE Ogallala 103.08 30** PFAKE 03 23 20.0 +7.0
OGNE LR LR
comp=Z,768nm,22.0s
**NHSC New Hope 103.73 50** PFAKE 03 23 30.0 +14
NHSC LR LR
comp=Z,399nm,19.0s
**ABPO Ambohimpanom 104.11 189** PFAKE 03 23 30.0 +12
ABPO LR LR
comp=Z,739nm,20.0s
**LKWY Lake 104.43 23** PFAKE 03 23 30.0 +11
LKWY LR LR
comp=Z,550nm,20.0s
**HAWA Hanford 104.52 16** PFAKE 03 23 30.0 +11
HAWA LR LR
comp=Z,818nm,21.0s
**NLWA Neilton Lookou 104.91 13** PFAKE 03 23 30.0 +9.1
NLWA LR LR
comp=Z,850nm,21.0s
**BOZ Bozeman (W) 105.21 22** PFAKE 03 27 50.0
BOZ LR LR
comp=Z,506nm,20.0s
**RLMT Red Lodge 105.21 24** PFAKE 03 27 50.0
RLMT LR LR
comp=Z,485nm,19.0s
**CNNC Cliffs of the 106.53 50** PFAKE 03 27 50.0
CNNC LR LR
comp=Z,567nm,19.0s
**SCIA State Center 106.61 36** PFAKE 03 27 50.0
SCIA LR LR
comp=Z,410nm,20.0s
**NEW Newport 106.72 17** PFAKE 03 27 50.0
NEW LR LR
comp=Z,563nm,21.0s
**HDIL Hopedale 106.73 39** PFAKE 03 27 50.0
HDIL LR LR
comp=Z,452nm,21.0s
**BLA Blacksburg 107.17 47** PFAKE 03 27 50.0
BLA LR LR
comp=Z,415nm,20.0s
**ECSD EROS Data Cent 107.21 33** PFAKE 03 27 50.0
ECSD LR LR
comp=Z,995nm,21.0s
**LAO LASA Array 107.38 25** PFAKE 03 27 50.0
LAO LR LR
comp=Z,666nm,19.0s
**LSZ Lusaka 107.81 170** PFAKE 03 27 50.0
LSZ LR LR
comp=Z,1µm,19.0s
**EGMT Eagleton 107.86 22** PFAKE 03 27 50.0
EGMT LR LR
comp=Z,314nm,20.0s
**JFWS Jewell Farm 108.50 38** PFAKE 03 27 50.0
JFWS LR LR
comp=Z,383nm,21.0s
**ACSO Alum Creek Sta 108.76 44** PFAKE 03 27 50.0
ACSO LR LR
comp=Z,468nm,22.0s
**KULM Kulim 109.03 250** PFAKE 03 28 00.0
KULM LR LR
comp=Z,374nm,20.0s
**CBN Corbin 109.27 49** PFAKE 03 28 00.0
CBN LR LR
comp=Z,697nm,19.0s
**DGMT Dagmar 109.53 26** PFAKE 03 28 00.0
DGMT LR LR
comp=Z,678nm,19.0s
**H02N1 VAN INLET T-PH 109.93 6** T T 05 27 30.7
SNR=14
**BBSR BB Station 110.15 62** PFAKE 03 28 00.0
BBSR LR LR
comp=Z,300nm,19.0s
**AAM Ann Arbor 110.29 42** PFAKE 03 28 00.0
AAM LR LR
comp=Z,385nm,20.0s
**AGMN Agassiz Nation 111.57 31** PFAKE 03 28 00.0
AGMN LR LR
comp=Z,696nm,21.0s
**COWI Conover 111.69 37** PFAKE 03 28 00.0
COWI LR LR
comp=Z,429nm,22.0s
**EYMN Ely 112.56 34** PFAKE 03 28 00.0
EYMN LR LR
comp=Z,813nm,21.0s
**WRAK Wrangell Islan 113.10 6** PFAKE 03 28 00.0
WRAK LR LR
comp=Z,729nm,20.0s
**MAJO Matsushiro 114.46 300** PFAKE 03 28 10.0 +16
MAJO LR LR
comp=Z,248nm,22.0s
**KDAK Kodiak Island 114.48 354** PFAKE 03 28 10.0 +17
KDAK LR LR
comp=Z,1µm,21.0s
**NCB Newcomb 115.39 48** PFAKE 03 28 10.0 +14
NCB LR LR
comp=Z,750nm,19.0s
**QIZ Qiongzhong 115.50 266** PFAKE 03 28 10.0 +13
QIZ LR LR
comp=Z,461nm,20.0s
**LONY Lake Ozonia 115.78 47** PFAKE 03 28 10.0 +14
LONY LR LR
comp=Z,646nm,22.0s
**FFC Flin Flon 115.86 25** PFAKE 03 28 10.0 +14
FFC LR LR
comp=Z,574nm,22.0s
**ERM Erimo 116.57 307** PFAKE 03 28 10.0 +12
ERM LR LR
comp=Z,372nm,21.0s
**PKME Peaks-Kenny Pk 118.49 50** PFAKE 03 28 10.0 +8.6
PKME LR LR
comp=Z,13µm,21.0s
**CMAR Chiang Mai Arr 120.95 256** PKP **PKPdf 03 28 09.6 +2.6**
comp=Z,1.1nm,0.3s,baz=160,slow=2.9,SNR=2.8
**EGAK Eagle 121.20 1** PFAKE 03 28 20.0 +14
EGAK LR LR
comp=Z,495nm,19.0s
**ILAR Eielson Array 121.25 358** PKP **PKPdf 03 28 06.8 +0.7**
comp=Z,1.1nm,0.9s,baz=268,slow=1.3,SNR=11
**CHTO Chiang Mai 121.25 256** PFAKE 03 28 20.0 +12
CHTO LR LR
comp=Z,441nm,21.0s
**COLA College 121.37 357** PFAKE 03 28 20.0 +14
COLA LR LR
comp=Z,577nm,19.0s
**KMBO Kilima Mbogo 122.31 179** PFAKE 03 28 20.0 +10
KMBO LR LR
comp=Z,1µm,20.0s
**MBAR Mbarara 122.55 172** PFAKE 03 28 20.0 +9.4
MBAR LR LR
comp=Z,925nm,21.0s
**MDJ Mudanjiang 124.84 300** PFAKE 03 28 30.0 +16
MDJ LR LR
comp=Z,375nm,22.0s
**INK Inuvik 124.91 4** *e*PKPdf **PKPdf 03 28 14.1 +1.0**
**BJT Baijiatuau 128.26 287** PFAKE 03 28 30.0 +10
BJT LR LR
comp=Z,504nm,22.0s
**TORD Torodi Ar. Bea 128.51 133** PKP **PKPdf 03 28 19.7 -1.9**
comp=Z,0.6nm,1.0s,baz=198,slow=4.1,SNR=2.3
**HIA Hailar 132.90 298** PFAKE 03 28 40.0 +11
HIA LR LR
comp=Z,285nm,22.0s

**LSA Lhasa 134.19 257** PFAKE 03 28 50.0 +17
LSA LR LR
comp=Z,293nm,21.0s
**ULN Ulaanbaatar 138.41 288** PFAKE 03 28 50.0 +11
ULN LR LR
comp=Z,235nm,22.0s
**TAM Tamanrasset 138.74 132** PFAKE 03 28 50.0 +9.2
TAM LR LR
comp=Z,363nm,20.0s
**SFJD Kangerlussuaq 140.69 38** PFAKE 03 28 50.0 +7.3
SFJD LR LR
comp=Z,749nm,21.0s
**RTC Rabat Centre 142.23 108** PFAKE 03 29 00.0 +13
RTC LR LR
comp=Z,12µm,20.0s
**RAYN Ar Rayn 146.33 193** *e*PKPbc **PKPab 03 28 57.7 +1.6**
**MTE Manteigas 146.61 100** PFAKE 03 29 10.0 +13
MTE LR LR
comp=Z,336nm,21.0s
**PAB San Pablo 147.72 104** PFAKE 03 29 10.0 +8.8
PAB LR LR
comp=Z,346nm,22.0s
**ESDC Sonseca Array 148.02 104** PKPbc **PKPbc 03 29 00.1 +0.5**
comp=Z,0.4nm,0.6s,baz=222,slow=1.8,SNR=3.0
**MKAR Makanchi Array 151.17 269** PKPbc **PKPbc 03 29 08.6 +1.5**
comp=Z,5.7nm,1.0s,baz=101,slow=2.5,SNR=11
**DAG Danmarks Havn 151.93 24** *i* P **PKPdf 03 28 58.5 -2.9**
**TKM2 Tokmak 2 152.34 256** *e*PKPbc **PKPbc 03 29 11.1 +1.0**
TKM2 LR LR
comp=Z,290nm,20.0s
**AAK Ala-Archa 152.73 255** *e*PKPab **PKPab 03 29 23.0 +1.1**
AAK LR LR
comp=Z,284nm,21.0s
**EKS2 Erkin-Say 153.13 254** *e*PKPbc **PKPbc 03 29 12.0 +0.3**
EKS2 LR LR
comp=Z,419nm,21.0s
**ZALV Zalesovo Beam 153.49 284** PKPab **PKPab 03 29 24.2 -0.2**
comp=Z,0.9nm,0.6s,baz=131,slow=4.2,SNR=3.1
**WDD Wield Dalam 153.91 133** PFAKE 03 29 20.0 +6.5
WDD LR LR
comp=Z,666nm,19.0s
**VSL Villasalto 154.67 121** PFAKE 03 29 20.0 +5.0
VSL LR LR
comp=Z,500nm,22.0s
**CLTB Caltabellotta 154.83 129** PFAKE 03 29 20.0 +4.5
CLTB LR LR
comp=Z,249nm,20.0s
**KURK Kurchatov 155.36 273** PFAKE 03 29 20.0 -13
KURK LR LR
comp=Z,714nm,22.0s
**KBS Kingsbay 156.17 12** PFAKE 03 29 20.0 +13
KBS LR LR
comp=Z,1µm,19.0s
**SSB Saint Sauveur 156.43 105** PFAKE 03 29 20.0 +11
SSB LR LR
comp=Z,458nm,20.0s
**BNI Bardonecchia 157.41 108** PFAKE 03 29 20.0 +10
BNI LR LR
comp=Z,611nm,21.0s
**TIP Timpagrande 157.66 133** PFAKE 03 29 20.0 +9.5
TIP LR LR
comp=Z,390nm,20.0s
**CUC Castrocucco 157.96 130** PFAKE 03 29 20.0 +9.2
CUC LR LR
comp=Z,327nm,21.0s
**CSS Prodhromos 158.01 170** PFAKE 03 29 20.0 +9.0
CSS LR LR
comp=Z,134nm,20.0s
**SANT Santorini 158.01 153** PFAKE 03 29 20.0 +9.0
SANT LR LR
comp=Z,471nm,22.0s
**VLC Villacollemand 158.69 115** PFAKE 03 29 20.0 +8.5
VLC LR LR
comp=Z,189nm,19.0s
**TUE Stuetta 159.75 108** PFAKE 03 29 20.0 +7.1
TUE LR LR
comp=Z,374nm,20.0s
**WLF Walferdange 159.95 97** PFAKE 03 29 20.0 +7.3
WLF LR LR
comp=Z,475nm,22.0s
**BFO Black Forest 160.37 103** PFAKE 03 29 20.0 +6.7
BFO LR LR
comp=Z,376nm,21.0s
**ISP Isparta 160.47 163** PFAKE 03 29 30.0 +16
ISP LR LR
comp=Z,474nm,21.0s
**TIR Tirane 160.74 136** PFAKE 03 29 30.0 +16
TIR LR LR
comp=Z,589nm,22.0s
**BRVK Borovoye 161.02 273** PFAKE 03 29 30.0 +16
BRVK LR LR
comp=Z,413nm,21.0s
**GNI Garni 162.76 198** PFAKE 03 29 30.0 +14
GNI LR LR
comp=Z,924nm,19.0s
**ANTO Ankara 162.80 167** PFAKE 03 29 30.0 +14
ANTO LR LR
comp=Z,458nm,22.0s
**ABKAR Akbulak array 164.71 250** *e*PKPab **PKPab 03 30 15.6 +2.3**
**KONO Kongsberg 164.95 67** PFAKE 03 29 30.0 +13
KONO LR LR
comp=Z,993nm,21.0s
**PSZ Piszkesteto 166.01 122** PFAKE 03 29 30.0 +11
PSZ LR LR
comp=Z,564nm,22.0s
**KIEV Kiev 172.11 137** PFAKE 03 29 30.0 +7.6
KIEV LR LR
comp=Z,650nm,22.0s

*CSEM **23** 03:11:10.3,38°.55N×29°.41W,h6km,ML2.4,After PDA*
**PDA 23 03:11:10.3±0.7,38°.55N×29°.41W,h6km±9km,MD3.5,**
**ML2.4,Error ellipse: s-maj=8.6km s-min=6.3km az=97.0,**
**Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CALA** | **Caldeira** | **0.56** | **86** | *e*S | Sg | 03 11 27.1 | -1.4 |
| CALA | | | | *e*S | Sg | 03 11 27.1 | -1.4 |
| **PCED** | **Cedros** | **0.56** | **82** | *e*P | Pg | 03 11 19.7 | -1.4 |
| PCED | | | | *e*S | Sg | 03 11 26.9 | -1.5 |
| PCED | | | | A | A | 03 11 28.3 | |
| | 57nm,0.2s | | | | | | |
| **PCED** | **Cedros** | **0.56** | **82** | *e*P | Pg | 03 11 19.7 | -1.4 |
| PCED | | | | *e*S | Sg | 03 11 26.9 | -1.5 |
| **HOR** | **Horta** | **0.61** | **92** | *e*P | Pg | 03 11 20.6 | -1.5 |
| HOR | | | | *e*S | Sg | 03 11 28.3 | -1.7 |
| **HOR** | **Horta** | **0.61** | **92** | *e*P | Pg | 03 11 20.6 | -1.5 |
| HOR | | | | *e*S | Sg | 03 11 28.3 | -1.7 |
| **PCAN** | **Candelaria** | **0.73** | **96** | *e*P | Pg | 03 11 21.7 | -2.7 |
| PCAN | | | | *e*S | Sg | 03 11 31.1 | -2.8 |
| PCAN | | | | A | A | 03 11 32.2 | |
| | 23nm,0.1s | | | | | | |
| **PCAN** | **Candelaria** | **0.73** | **96** | *e*P | Pg | 03 11 21.7 | -2.7 |
| PCAN | | | | *e*S | Sg | 03 11 31.1 | -2.8 |
| **PICO** | **Pico** | **0.77** | **93** | *e*P | Pg | 03 11 23.1 | -2.2 |
| PICO | | | | *e*S | Sg | 03 11 32.4 | -3.0 |
| **PICO** | **Pico** | **0.77** | **93** | *e*P | Pg | 03 11 23.1 | -2.2 |
| PICO | | | | *e*S | Sg | 03 11 32.4 | -3.0 |
| **PPNO** | **Prainha do Nor** | **0.90** | **95** | *e*P | Pg | 03 11 24.8 | -2.9 |
| PPNO | | | | *e*S | Sg | 03 11 35.5 | -4.0 |
| PPNO | | | | A | A | 03 11 38.4 | |
| | 66nm,0.2s | | | | | | |
| **PPNO** | **Prainha do Nor** | **0.90** | **95** | *e*P | Pg | 03 11 24.8 | -2.9 |
| PPNO | | | | *e*S | Sg | 03 11 35.5 | -4.0 |
| **ROSA** | **Rosais** | **0.93** | **79** | *e*P | Pg | 03 11 25.2 | -3.0 |
| ROSA | | | | *e*S | Sg | 03 11 36.0 | -4.3 |
| ROSA | | | | A | A | 03 11 37.7 | |
| | 50nm,0.1s | | | | | | |
| **ROSA** | **Rosais** | **0.93** | **79** | *e*P | Pg | 03 11 25.2 | -3.0 |
| ROSA | | | | *e*S | Sg | 03 11 36.0 | -4.3 |
| **PID** | **Ribeirinha** | **1.02** | **96** | *e*S | Sg | 03 11 38.4 | -4.8 |
| **PID** | **Ribeirinha** | **1.02** | **96** | *e*S | Sg | 03 11 38.4 | -4.8 |
| **PMAN** | **Manadas** | **1.04** | **85** | *e*S | Sg | 03 11 38.6 | -5.1 |
| PMAN | | | | A | A | 03 11 40.3 | |
| | 16nm,0.1s | | | | | | |
| **PMAN** | **Manadas** | **1.04** | **85** | *e*S | Sg | 03 11 38.6 | -5.1 |
| **PGRA** | **Graciosa** | **1.22** | **66** | *e*S | Sg | 03 11 42.9 | -6.5 |
| PGRA | | | | A | A | 03 11 44.5 | |
| | 23nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.22** | **66** | *e*S | Sg | 03 11 42.9 | -6.5 |

*ISK **23** 03:26:52.6,39°.46N×25°.87E,h2km,MD2.7*

*CSEM **23** 03:26:55.7±0.6,39°.48N×26°.15E,h2km,MD2.7,Error ellipse: s-maj=13.4km s-min=6.1km az=75.0*
*ISCJB **23** 03:26:57.5±0.8,39°.45N±0°.03×26°.30E±0°.06,h6km±6km, Error ellipse: s-maj=8.5km s-min=4.9km az=160.4*
*DDA **23** 03:26:57.2,39°.43N×26°.32E,h7km,Md3.0*
**ISC 23 03:26:55.6±1.6,39°.47N±0°.03×26°.19E±0°.06,h3km±13km,**
**n32,σ0s85/39,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EZN** | **Ezine** | **0.37** | **16** | *e*PG | Pg | **03 27 03.4** | **+0.8** |
| EZN | | | | *e*SG | Sb | **03 27 11.4** | **+0.6** |
| **EZN** | **Ezine** | **0.37** | **16** | *e*Pg | Pg | **03 27 03.4** | **+0.8** |
| **BOZC** | **Bozcaada** | **0.38** | **344** | P | Pn | **03 27 07.0** | **-1.1** |
| BOZC | | | | S | Sb | **03 27 13.6** | **+2.3** |
| **AYVA** | **Ayvalik** | **0.42** | **113** | *i* P | Pg | **03 27 03.8** | **+0.2** |
| AYVA | | | | *i* S | Sg | **03 27 08.2** | **-0.9** |
| **AYVA** | **Ayvalik** | **0.42** | **113** | P | Pg | **03 27 03.8** | **+0.2** |
| AYVA | | | | S | Sg | **03 27 08.2** | **-0.9** |
| **DKL** | **Dikili** | **0.68** | **126** | *e*PG | Pb | **03 27 10.6** | **+0.4** |
| **DKL** | **Dikili** | **0.68** | **126** | *e*Pg | Pb | **03 27 10.6** | **+0.5** |
| **GELI** | **Tayfur-Gelibol** | **0.95** | **13** | *e*PG | Pg | **03 27 13.6** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.95** | **13** | *e*Pg | Pg | **03 27 13.6** | **-0.2** |
| **LPK** | **Lapseki** | **1.00** | **26** | *e*PN | Pg | **03 27 15.3** | **+0.6** |
| **LPK** | **Lapseki** | **1.00** | **26** | *e*Pn | Pg | **03 27 15.3** | **+0.6** |
| **BALY** | **Balya** | **1.13** | **76** | *i* P | Pb | **03 27 17.8** | **-0.1** |
| BALY | | | | *i* S | Sb | **03 27 32.5** | **-0.5** |
| **BALY** | **Balya** | **1.13** | **76** | P | Pb | **03 27 17.8** | **-0.1** |
| BALY | | | | S | Sb | **03 27 32.5** | **-0.5** |
| **KRBG** | **Karabiga-Canak** | **1.25** | **42** | *e*PN | Pg | **03 27 20.4** | **+0.8** |
| **KRBG** | **Karabiga-Canak** | **1.25** | **42** | *e*Pn | Pg | **03 27 20.4** | **+0.8** |
| **ZEY** | **˙zmir** | **1.26** | **169** | P | Pn | **03 27 19.5** | **-0.5** |
| ZEY | | | | S | Sn | **03 27 37.3** | **-0.1** |
| **BLCB** | **Balcova** | **1.27** | **148** | *e*PN | Pg | **03 27 20.1** | **+0.1** |
| **BLCB** | **Balcova** | **1.27** | **148** | *e*Pn | Pg | **03 27 20.1** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.28** | **63** | *e*PN | Pb | **03 27 20.6** | **+0.2** |
| **GONE** | **Gonen-Balikesi** | **1.28** | **63** | *e*Pn | Pb | **03 27 20.6** | **+0.2** |
| **BALB** | **Balikesir** | **1.31** | **82** | *e*PN | Pg | **03 27 22.3** | **+1.5** |
| **BALB** | **Balikesir** | **1.31** | **82** | *e*Pn | Pg | **03 27 22.3** | **+1.5** |
| **AKS** | **Akhisar** | **1.39** | **115** | *e*PN | Pg | **03 27 23.0** | **+0.7** |
| **AKS** | **Akhisar** | **1.39** | **115** | *e*Pn | Pg | **03 27 23.0** | **+0.7** |
| **EDC** | **Edincik** | **1.55** | **55** | *e*PN | Pb | **03 27 25.2** | **+0.2** |
| **EDC** | **Edincik** | **1.55** | **55** | *e*Pn | Pb | **03 27 25.2** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **1.84** | **64** | *e*PN | Pb | **03 27 29.4** | **-0.6** |
| **KCTX** | **Karacabey (Bur** | **1.84** | **64** | *e*Pn | Pb | **03 27 29.4** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.02** | **138** | *e*PN | Pn | **03 27 31.2** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.02** | **138** | *e*Pn | Pn | **03 27 31.2** | **+0.5** |
| **ARMT** | **Armutlu** | **2.32** | **61** | *e*PN | Pb | **03 27 36.4** | **-1.7** |
| **ARMT** | **Armutlu** | **2.32** | **61** | *e*Pn | Pb | **03 27 36.4** | **-1.7** |

*CSEM **23** 03:36:55.7,38°.54N×29°.44W,h5km,ML3.2,After PDA*
**PDA 23 03:36:55.7±1.0,38°.54N×29°.44W,h5km±11km,MD3.6,**
**ML3.2,Error ellipse: s-maj=10.6km s-min=5.7km**
**az=99.0,Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CALA** | **Caldeira** | **0.58** | **86** | *e*P | Pg | 03 37 05.8 | -1.1 |
| CALA | | | | *e*S | Sg | 03 37 12.9 | -1.6 |
| **CALA** | **Caldeira** | **0.58** | **86** | *e*P | Pg | 03 37 05.8 | -1.1 |
| CALA | | | | *e*S | Sg | 03 37 12.9 | -1.6 |
| **PCED** | **Cedros** | **0.58** | **81** | *e*P | Pg | 03 37 05.5 | -1.4 |
| PCED | | | | *e*S | Sg | 03 37 12.9 | -1.6 |
| PCED | | | | A | A | 03 37 15.6 | |
| | 426nm,0.3s | | | | | | |
| **PCED** | **Cedros** | **0.58** | **81** | *e*P | Pg | 03 37 05.5 | -1.4 |
| PCED | | | | *e*S | Sg | 03 37 12.9 | -1.6 |
| **HOR** | **Horta** | **0.63** | **91** | *e*P | Pg | 03 37 06.4 | -1.4 |
| HOR | | | | *e*S | Sg | 03 37 14.3 | -1.8 |
| **HOR** | **Horta** | **0.63** | **91** | *e*P | Pg | 03 37 06.4 | -1.4 |
| HOR | | | | *e*S | Sg | 03 37 14.3 | -1.8 |
| **PCAN** | **Candelaria** | **0.75** | **96** | *e*P | Pg | 03 37 07.6 | -2.5 |
| PCAN | | | | *e*S | Sg | 03 37 17.0 | -2.9 |
| PCAN | | | | A | A | 03 37 20.6 | |
| | 383nm,0.2s | | | | | | |
| **PCAN** | **Candelaria** | **0.75** | **96** | *e*P | Pg | 03 37 07.6 | -2.5 |
| PCAN | | | | *e*S | Sg | 03 37 17.0 | -2.9 |
| **PICO** | **Pico** | **0.79** | **93** | *e*P | Pg | 03 37 08.9 | -2.1 |
| PICO | | | | *e*S | Sg | 03 37 18.5 | -2.9 |
| **PICO** | **Pico** | **0.79** | **93** | *e*P | Pg | 03 37 08.9 | -2.1 |
| PICO | | | | *e*S | Sg | 03 37 18.5 | -2.9 |
| **PPNO** | **Prainha do Nor** | **0.92** | **94** | *e*P | Pg | 03 37 10.7 | -2.8 |
| PPNO | | | | *e*S | Sg | 03 37 21.6 | -3.9 |
| PPNO | | | | A | A | 03 37 24.3 | |
| | 421nm,0.2s | | | | | | |
| **PPNO** | **Prainha do Nor** | **0.92** | **94** | *e*P | Pg | 03 37 10.7 | -2.8 |
| PPNO | | | | *e*S | Sg | 03 37 21.6 | -3.9 |
| **ROSA** | **Rosais** | **0.95** | **79** | *e*P | Pg | 03 37 11.0 | -3.0 |
| ROSA | | | | *e*S | Sg | 03 37 22.0 | -4.4 |
| ROSA | | | | A | A | 03 37 23.8 | |
| | 295nm,0.2s | | | | | | |
| **ROSA** | **Rosais** | **0.95** | **79** | *e*P | Pg | 03 37 11.0 | -3.0 |
| ROSA | | | | *e*S | Sg | 03 37 22.0 | -4.4 |
| **PID** | **Ribeirinha** | **1.04** | **95** | *e*P | Pg | 03 37 12.2 | -3.5 |
| PID | | | | *e*S | Sg | 03 37 24.1 | -5.1 |
| **PID** | **Ribeirinha** | **1.04** | **95** | *e*P | Pg | 03 37 12.2 | -3.5 |
| PID | | | | *e*S | Sg | 03 37 24.1 | -5.1 |
| **PMAN** | **Manadas** | **1.06** | **85** | *e*P | Pg | 03 37 12.5 | -3.5 |
| PMAN | | | | *e*S | Sg | 03 37 24.8 | -5.0 |
| PMAN | | | | A | A | 03 37 30.7 | |
| | 133nm,0.3s | | | | | | |
| **PMAN** | **Manadas** | **1.06** | **85** | *e*P | Pg | 03 37 12.5 | -3.5 |
| PMAN | | | | *e*S | Sg | 03 37 24.8 | -5.0 |
| **PGRA** | **Graciosa** | **1.24** | **66** | *e*P | Pg | 03 37 14.8 | -4.7 |
| PGRA | | | | *e*S | Sg | 03 37 28.7 | -6.8 |
| PGRA | | | | A | A | 03 37 34.3 | |
| | 153nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.24** | **66** | *e*P | Pg | 03 37 14.8 | -4.7 |
| PGRA | | | | *e*S | Sg | 03 37 28.7 | -6.8 |
| **ADH** | **Angra Heroismo** | **1.73** | **86** | *e*P | Pn | 03 37 21.8 | -4.5 |
| ADH | | | | *e*S | Sn | 03 37 41.3 | -7.4 |
| ADH | | | | A | A | 03 37 43.1 | |
| | 97nm,0.3s | | | | | | |
| **ADH** | **Angra Heroismo** | **1.73** | **86** | *e*P | Pn | 03 37 21.8 | -4.5 |
| ADH | | | | *e*S | Sn | 03 37 41.3 | -7.4 |
| **PSET** | **Sete Cidades** | **3.01** | **103** | *e*P | Pn | 03 37 39.4 | -4.7 |
| PSET | | | | *e*S | Sn | 03 38 12.7 | -7.9 |
| PSET | | | | A | A | 03 38 14.0 | |
| | 26nm,0.4s | | | | | | |
| **PSET** | **Sete Cidades** | **3.01** | **103** | *e*P | Pn | 03 37 39.4 | -4.7 |
| PSET | | | | *e*S | Sn | 03 38 12.7 | -7.9 |
| **PDA** | **Ponta Delgada** | **3.08** | **104** | *e*P | Pn | 03 37 40.6 | -4.3 |
| PDA | | | | *e*S | Sn | 03 38 13.9 | -8.1 |
| PDA | | | | A | A | 03 38 16.1 | |
| | 13nm,0.3s | | | | | | |
| **PDA** | **Ponta Delgada** | **3.08** | **104** | *e*P | Pn | 03 37 40.6 | -4.3 |
| PDA | | | | *e*S | Sn | 03 38 13.9 | -8.1 |
| **BART** | **Pico Bartolome** | **3.45** | **101** | *e*P | Pn | 03 37 45.8 | -4.3 |
| **BART** | **Pico Bartolome** | **3.45** | **101** | *e*P | Pn | 03 37 45.8 | -4.3 |
| **PSMA** | **Santa Maria** | **3.75** | **113** | *e*P | Pn | 03 37 49.2 | -4.9 |
| **PSMN** | **Pico do Norte,** | **3.79** | **113** | *e*P | Pn | 03 37 49.6 | -5.1 |
| **PSMN** | **Pico do Norte,** | **3.79** | **113** | *e*P | Pn | 03 37 49.6 | -5.1 |

*SJA **23** 03:45:02.2±0.5,29°.57S×71°.68W,h13km±26km,ML2.8, MW2.8*
*ISCJB **23** 03:45:06.6±1.3,29°.56S±0°.03×71°.32W±0°.10,h6km±6km, Error ellipse: s-maj=14.5km s-min=5.2km az=5.8*
*GUC **23** 03:45:06.8±0.4,29°.60S×71°.11W,h41km±4km,ML3.5*
**ISC 23 03:45:07.7±1.5,29°.56S±0°.03×71°.20W±0°.08,h4km±12km,**
**n13,σ1s23/24,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSCH** | **La Serena** | **0.35** | **186** | *e*P | Pb | **03 45 15.8** | **-0.8** |
| LSCH | | | | *e*S | Sb | **03 45 32.4** | **0.0** |
| **TLL** | **Tololo Astrono** | **0.70** | **150** | *e*P | Pg | **03 45 20.7** | **-0.4** |
| TLL | | | | *e*S | Sg | **03 45 30.7** | **+0.5** |
| **LCO** | **Las Campanas** | **0.70** | **39** | *e*P | Pg | **03 45 21.2** | **+0.1** |
| LCO | | | | *e*S | Sg | **03 45 32.7** | **+2.4** |
| **LCO** | **Las Campanas** | **0.70** | **39** | *e*P | Pg | **03 45 21.8** | **+0.6** |
| LCO | | | | *e*S | Sb | **03 45 32.8** | **0.0** |
| **VACH** | **Vallenar** | **1.05** | **22** | *e*P | Pb | **03 45 26.5** | **-2.1** |
| VACH | | | | *e*S | Sg | **03 45 41.7** | **+0.1** |
| VACH | | | | AML | AML | 03 45 45.1 | |
| | comp=N,2µm,0.8s | | | | | | |
| **AGUA** | **GUANDACOL** | **2.36** | **89** | *e*P | Pb | **03 45 49.3** | **-1.7** |
| **AMOG** | **MOGNA** | **2.72** | **121** | *e*P | Pn | **03 45 53.1** | **+0.9** |
| AMOG | | | | *e*S | Sb | **03 46 30.6** | **-0.1** |
| **VCA** | **Vinchina** | **2.75** | **73** | *e*P | Pn | **03 45 54.4** | **+1.7** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VCA | | | | IAML | | | 03 45 57.8 | |
| | comp=Z,38nm,0.2s | | | | | | | |
| VCA | | | | *e*S | | **Sb** | **03 46 30.3** | **-1.2** |
| **RTLS** | **Leoncito** | **2.77** | **144** | *e*P | | **Pn** | **03 45 53.4** | **+0.3** |
| RTLS | | | | *e*S | | **Sb** | **03 46 33.1** | **+0.7** |
| **RTLL** | **Cerro Villicun** | **2.94** | **128** | *e*P | | **Pn** | **03 45 55.1** | **-0.2** |
| **AUSP** | **Uspallata** | **3.08** | **150** | *e*P | | **Pn** | **03 45 56.9** | **-0.5** |
| AUSP | | | | *e*S | | **Sn** | **03 46 37.6** | **+2.8** |
| **AVFE** | **Valle Fertil** | **3.43** | **110** | *e*P | | **Pn** | **03 46 00.9** | **-1.1** |
| AVFE | | | | *e*S | | **Sn** | **03 46 43.6** | **+0.4** |
| AVFE | | | | IAML | | | 03 46 53.3 | |
| | comp=Z,8.1nm,0.3s | | | | | | | |
| **ASAL** | **Salagasta** | **3.64** | **147** | *e*P | | **Pn** | **03 46 05.4** | **+0.5** |
| ASAL | | | | *e*S | | **Sn** | **03 46 47.7** | **-0.8** |

*NIED* ***23*** *03:47:00.42˚.40N×145˚.20E.h32km.Mw3.9 Best double couple: M₀6.88000×10¹⁴ NP1:φ₀239.00000°,δ27.00000°, λ.118.00000°. NP2:φ₀27.00000°,δ66.00000°,λ.76.00000°.*
*ISCJB* ***23*** *03:47:57.7±0.8,42˚.36N±0˚.05×145˚.23E±0˚.06,h43km±7km, mb4.0/10,MS3.5/1,Error ellipse: s-maj=10.0km s-min=4.9km az=142.2*
*MOS* ***23*** *03:47:57.6±0.9,42˚.28N×145˚.28E,h50km,mb4.3/8,Error ellipse: s-maj=15.2km s-min=10.5km az=76.2*
*JMA* ***23*** *03:47:58.9,42˚.44N×145˚.15E,h41km±1km,M3.9*
*SKHL* ***23*** *03:47:59.3±0.3,42˚.37N×145˚.23E,h59km±3km,mb4.2/2*
*NEIC* ***23*** *03:48:00.5±1.4,42˚.34N×145˚.14E,h50km±11km,mb4.3/3, Error ellipse: s-maj=17.7km s-min=11.4km az=100.0*
*IDC* ***23*** *03:48:00.6±3.2,42˚.34N×145˚.14E,h50km±24km,mb3.7/7, mb1 3.8/9,mb1mx3.5/38,mbtmp3.9/9,ML4.1/2,MS3.2/2, Ms1 3.4/2,ms1mx2.8/33,Error ellipse: s-maj=28.5km s-min=24.2km az=73.0*

**ISC 23 03:47:59.4±1.2,42˚.40N±0˚.07×145˚.22E±0˚.05,h37km±2km, n53,σ0.91/59,mb4.0/10,3D,Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAK** | **Akkeshi** | **0.71** | **327** | P | **Pn** | **03 48 11.6** | **-1.3** |
| JAK | | | | *e*S | **Sn** | **03 48 21.5** | **-1.0** |
| **NEM2** | **Nemuro 2** | **1.04** | **22** | P | **Pn** | **03 48 16.8** | **-0.6** |
| NEM2 | | | | *e*S | **Sn** | **03 48 30.3** | **-0.3** |
| **JOB** | **Onbets** | **1.14** | **297** | P | **Pn** | **03 48 17.9** | **-0.8** |
| **JNK** | **Nakash** | **1.24** | **343** | P | **Pn** | **03 48 18.9** | **-1.3** |
| JNK | | | | *e*S | **Sn** | **03 48 34.5** | **-1.1** |
| **JCH** | **Churui** | **1.39** | **279** | P | **Pn** | **03 48 21.7** | **-0.5** |
| JCH | | | | *e*S | **Sn** | **03 48 39.4** | **+0.1** |
| **JAR** | **Ashorobuto** | **1.39** | **310** | P | **Pn** | **03 48 21.0** | **-1.3** |
| **MYR** | **Moyori** | **1.44** | **266** | *e*P | **Pn** | **03 48 22.9** | **0.0** |
| **JRA** | **Rausu** | **1.54** | **357** | P | **Pn** | **03 48 23.7** | **-0.5** |
| **ERM** | **Erimo** | **1.58** | **257** | *e*PN | **Pn** | **03 48 25.7** | **+0.9** |
| ERM | | | | *e* | | 03 48 41.0 | |
| **ERM** | **Erimo** | **1.58** | **257** | *e*P | **Pn** | **03 48 25.7** | **+0.9** |
| **ERM** | **Erimo** | **1.58** | **257** | *e*Pn | **Pn** | **03 48 25.7** | **+0.9** |
| ERM | | | | *e*Sn | **Sn** | **03 48 41.0** | **-3.0** |
| **YUK** | **Yuzh-Kuril'sk** | **1.70** | **16** | *d i*PN | **Pn** | **03 48 26.6** | **+0.1** |
| YUK | | | | *i* S | **Sn** | **03 48 47.0** | **+0.1** |
| YUK | | | | pmax | pmax | | |
| | comp=N,68nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,33nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,150nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,544nm,0.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,939nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.70** | **16** | *i* P | **Pn** | **03 48 26.6** | **+0.1** |
| YUK | | | | AMB | AMB | 03 48 26.9 | |
| | comp=E,68nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 03 48 26.9 | |
| | comp=E,33nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 03 48 26.9 | |
| | comp=E,150nm,0.3s | | | | | | |
| YUK | | | | *i* S | **Sn** | **03 48 47.0** | **+0.1** |
| YUK | | | | A | A | 03 48 47.8 | |
| | comp=E,544nm,0.5s | | | | | | |
| YUK | | | | A | A | 03 48 47.8 | |
| | comp=E,940nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.88** | **38** | *d i*PN | **Pn** | **03 48 28.8** | **-0.2** |
| SHO | | | | *i* S | **Sn** | **03 48 50.7** | **-0.7** |
| SHO | | | | smax | smax | | |
| | comp=N,196nm,0.5s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,226nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **1.88** | **38** | *e*P | **Pn** | **03 48 28.8** | **-0.2** |
| SHO | | | | *e*S | **Sn** | **03 48 50.7** | **-0.7** |
| SHO | | | | A | A | 03 48 56.7 | |
| | comp=E,540nm,0.5s | | | | | | |
| SHO | | | | A | A | 03 48 56.7 | |
| | comp=E,230nm,0.5s | | | | | | |
| **JKA** | **Kamikawa-asahi** | **2.57** | **313** | *e*P | **Pn** | **03 48 39.3** | **+0.9** |
| **ASAJ** | **Asahikawa** | **2.57** | **313** | P | **Pn** | **03 48 39.3** | **+0.8** |
| | comp=E,37nm,0.3s,baz=151,slow=15,SNR=86 | | | | | | |
| ASAJ | | | | S | **Sn** | **03 49 10.7** | **+2.2** |
| | comp=E,9.0nm,0.3s,baz=88,slow=27,SNR=9.6 | | | | | | |
| ASAJ | | | | LR | LR | 03 49 56.0 | |
| | comp=E,207nm,18.7s,baz=186,slow=45 | | | | | | |
| **ASAJ** | **Asahikawa** | **2.57** | **313** | PN | **Pn** | **03 48 39.3** | **+0.8** |
| ASAJ | | | | S | **Sn** | **03 49 10.7** | **+2.2** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,37nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,9.0nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,207nm,18.7s | | | | | | |
| **KUR** | **Kuril'sk** | **3.42** | **33** | ⇓*i*PN | **Pn** | **03 48 51.2** | **+1.1** |
| KUR | | | | *i* S | **Sn** | **03 49 30.2** | **+0.9** |
| KUR | | | | smax | smax | | |
| | comp=E,69nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,58nm,0.2s | | | | | | |
| **KUR** | **Kuril'sk** | **3.42** | **33** | *i* P | **Pn** | **03 48 51.2** | **+1.1** |
| KUR | | | | *i* S | **Sn** | **03 49 30.2** | **+0.9** |
| KUR | | | | A | A | 03 49 35.7 | |
| | comp=N,58nm,0.3s | | | | | | |
| KUR | | | | A | A | 03 49 35.7 | |
| | comp=N,69nm,0.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.88** | **340** | *e*P | **Pn** | **03 49 11.0** | **+0.9** |
| YSS | | | | AMB | AMB | 03 49 12.6 | |
| | comp=N,30nm,0.3s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.97** | **225** | P | **Pn** | **03 49 52.5** | **-0.2** |
| | comp=N,1.2nm,0.3s,baz=28,slow=15,SNR=13 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.97** | **225** | PN | **Pn** | **03 49 52.5** | **-0.2** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **MAJO** | **Matsushiro** | **7.98** | **225** | *e*PN | **Pn** | **03 49 52.3** | **-0.4** |
| **MAJO** | **Matsushiro** | **7.98** | **225** | *e*P | **Pn** | **03 49 52.7** | **0.0** |
| **MAJO** | **Matsushiro** | **7.98** | **225** | *e*Pn | **Pn** | **03 49 52.3** | **-0.4** |
| **SONM** | **Songino Array** | **27.72** | **295** | P | **P** | **03 53 44.5** | **+0.3** |
| | comp=Z,2.3nm,0.7s,baz=86,slow=8.7,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **27.72** | **295** | P | **P** | **03 53 44.5** | **+0.3** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.09** | **134** | T | T | 04 25 06.0 | |
| | baz=327,slow=76,SNR=99 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.10** | **134** | T | T | 04 25 06.9 | |
| | baz=327,slow=76,SNR=44 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.11** | **134** | T | T | 04 25 07.5 | |
| | baz=327,slow=76,SNR=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.00** | **136** | T | T | 04 26 16.3 | |
| | baz=328,slow=76,SNR=69 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.01** | **136** | T | T | 04 26 10.3 | |
| | baz=328,slow=76,SNR=37 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.02** | **136** | T | T | 04 26 17.5 | |
| | baz=328,slow=76,SNR=32 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.70** | **308** | P | **P** | **03 55 36.0** | **-0.1** |
| | comp=Z,1.2nm,0.5s,baz=86,slow=6.1,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.70** | **308** | P | **P** | **03 55 36.0** | **-0.1** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **ILAR** | **Eielson Array** | **43.41** | **35** | P | **P** | **03 55 59.1** | **+1.1** |
| | comp=Z,0.6nm,0.6s,baz=257,slow=5.7,SNR=8.3 | | | | | | |
| **ILAR** | **Eielson Array** | **43.41** | **35** | P | **P** | **03 55 59.1** | **+1.1** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.97** | **298** | P | **P** | **03 56 02.6** | **-0.2** |
| | comp=Z,0.4nm,0.4s,baz=60,slow=8.5,SNR=3.3 | | | | | | |
| **KURK** | **Kurchatov** | **45.12** | **305** | *e*P | **P** | **03 56 11.2** | **-0.7** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **KURK** | **Kurchatov** | **45.12** | **305** | *e*P | **P** | **03 56 11.2** | **-0.7** |
| **KURK** | **Kurchatov** | **45.12** | **305** | *e*P | **P** | **03 56 11.2** | **-0.7** |
| | comp=Z,2.3nm,0.3s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **45.78** | **253** | LR | LR | 04 15 01.3 | | |
| | comp=Z,63nm,20.6s,baz=165,slow=36 | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.27** | **310** | P | **P** | **03 56 44.1** | **-0.1** |
| | comp=Z,1.3nm,0.5s,baz=53,slow=9.7,SNR=7.4 | | | | | | | |
| **BVAR** | **Borovoye Array** | **49.27** | **310** | P | **P** | **03 56 44.1** | **-0.1** |
| BVAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **BRVK** | **Borovoye** | **49.32** | **310** | *e*P | **P** | **03 56 44.3** | **-0.3** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **BRVK** | **Borovoye** | **49.32** | **310** | *e*P | **P** | **03 56 44.3** | **-0.3** |
| **BRVK** | **Borovoye** | **49.32** | **310** | *e*P | **P** | **03 56 44.2** | **-0.3** |
| | comp=Z,1.1nm,0.3s | | | | | | | |
| **ABKAR** | **Akbulak array** | **56.80** | **309** | *e*P | **P** | **03 57 39.1** | **-0.7** |
| | comp=Z,0.6nm,0.3s | | | | | | | |
| **FINES** | **FINESS Array B** | **65.42** | **333** | P | **P** | **03 58 37.5** | **-0.4** |
| | comp=Z,1.6nm,0.5s,baz=63,slow=4.4,SNR=10 | | | | | | | |
| **FINES** | **FINESS Array B** | **65.42** | **333** | P | **P** | **03 58 37.5** | **-0.4** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.34** | **338** | P | **P** | **03 59 08.1** | **-0.8** |
| | comp=Z,0.9nm,0.7s,baz=15,slow=5.2,SNR=4.4 | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.34** | **338** | P | **P** | **03 59 08.1** | **-0.8** |
| NOA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |

**JMA 23 03:54:14.3±0.1,27˚.64N×141˚.12E,h188km,M3.9,Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CBIJ** | **Chichi jima** | **1.09** | **120** | P | Pn | 03 54 43.7 | +0.2 |
| CBIJ | | | | *e*S | Sn | 03 55 06.1 | +0.1 |
| **JHHJ** | **Haha-jima-NKT** | **1.38** | **137** | P | Pn | 03 54 45.9 | 0.0 |
| JHHJ | | | | S | Sn | 03 55 10.3 | 0.0 |
| **BSO1** | **Boso 1** | **6.99** | **359** | P | Pn | 03 55 54.1 | +0.5 |
| BSO1 | | | | *e*S | Sn | 03 57 09.1 | -3.2 |
| **BSO3** | **Boso 3** | **7.16** | **356** | P | Pn | 03 55 55.9 | -0.2 |
| **JHO** | **Hitachi** | **8.96** | **357** | P | Pn | 03 56 19.2 | -0.8 |

*MOS* ***23*** *04:15:13.8±2.4,53˚.83N×111˚.64E,h10km,mb4.3/1,Error ellipse: s-maj=27.3km s-min=11.5km az=92.4*

**BYKL 23 04:15:14.1±0.3,53˚.84N×111˚.60E,7C-4D,Lake Baikal region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SYVR** | **Suvo** | **0.97** | **260** | *e*PG | Pg | 04 15 31.8 | -0.9 |
| SYVR | | | | *e* | | 04 15 44.6 | |
| SYVR | | | | pmax | pmax | | |
| | comp=Z,70nm,0.1s | | | | | | |
| SYVR | | | | smax | smax | | |
| | comp=N,898nm,0.2s | | | | | | |
| **SYVR** | **Suvo** | **0.97** | **260** | *e*Pg | Pg | 04 15 31.8 | -0.9 |
| SYVR | | | | *e*Pb | Pb | 04 15 33.2 | -0.6 |
| SYVR | | | | *i* Sg | Sg | 04 15 44.9 | -0.4 |
| SYVR | | | | *e*Sb | Sn | 04 15 48.5 | -1.0 |
| SYVR | | | | Pmax | | | |
| | comp=N,67nm,0.1s | | | | | | |
| SYVR | | | | Smax | | | |
| | comp=N,888nm,0.2s | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.07** | **346** | ⇑*i*PG | Pg | 04 15 33.8 | -0.9 |
| YLYR | | | | *e* | | 04 15 47.5 | |
| YLYR | | | | pmax | pmax | | |
| | comp=Z,507nm,0.2s | | | | | | |
| YLYR | | | | smax | smax | | |
| | comp=E,976nm,0.5s | | | | | | |
| **YLYR** | **Ulyunkhan** | **1.07** | **346** | ⇑*i*Pg | Pg | 04 15 33.8 | -0.9 |
| | comp=E,521nm,0.3s | | | | | | |
| YLYR | | | | ⇓*i*Pg | Pg | 04 15 33.8 | -0.9 |
| YLYR | comp=E,103nm,0.3s | | | ⇑*i*Pg | Pg | 04 15 33.8 | -0.9 |
| | comp=E,603nm,0.3s | | | | | | |
| YLYR | | | | *e*Pb | Pb | 04 15 34.9 | -0.7 |
| YLYR | | | | *i* Sg | Sg | 04 15 48.0 | -0.6 |
| YLYR | | | | *e*Sb | Sb | 04 15 50.5 | +0.4 |
| YLYR | | | | Pmax | | | |
| | comp=E,503nm,0.2s | | | | | | |
| YLYR | | | | max | | | |
| | comp=E,967nm,0.7s | | | | | | |
| **UKT** | **Uakit** | **2.03** | **35** | *e*Pg | Pn | 04 15 49.7 | 0.0 |
| UKT | | | | ⇓*i* | | 04 15 57.2 | |
| UKT | | | | *i* Sg | Sb | 04 16 17.1 | -0.8 |
| UKT | | | | max | | | |
| | comp=E,88nm,0.5s | | | | | | |
| UKT | | | | Smax | | | |
| | comp=E,283nm,0.3s | | | | | | |
| **KMO** | **Kumora** | **2.06** | **354** | *e*PN | Pn | 04 15 50.1 | 0.0 |
| KMO | | | | *e* | | 04 16 15.9 | |
| KMO | | | | pmax | pmax | | |
| | comp=Z,95nm,0.3s | | | | | | |
| KMO | | | | smax | smax | | |
| | comp=N,412nm,1.0s | | | | | | |
| **KMO** | **Kumora** | **2.06** | **354** | *e* | Pn | 04 15 48.7 | -1.4 |
| KMO | | | | ⇓*i*Pg | Pb | 04 15 50.8 | -1.7 |
| KMO | | | | ⇓*i* | | 04 15 57.4 | |
| KMO | | | | *i* Sg | Sb | 04 16 18.3 | -0.4 |
| KMO | | | | Pmax | | | |
| | comp=N,96nm,0.3s | | | | | | |
| KMO | | | | Smax | | | |
| | comp=N,446nm,1.0s | | | | | | |
| **CIT** | **Chita** | **2.17** | **146** | *e*PN | Pb | 04 15 54.9 | +0.5 |
| CIT | | | | *e* | | 04 16 21.2 | |
| CIT | | | | pmax | pmax | | |
| | comp=Z,204nm,0.5s | | | | | | |
| CIT | | | | smax | smax | | |
| | comp=E,635nm,0.2s | | | | | | |
| **CIT** | **Chita** | **2.17** | **146** | *e*Pg | Pb | 04 15 53.0 | -1.4 |
| CIT | | | | *e* | | 04 15 59.0 | |
| CIT | | | | *e*Sg | Sb | 04 16 22.0 | +0.1 |
| CIT | | | | Pmax | | | |
| | comp=E,133nm,0.1s | | | | | | |
| CIT | | | | Smax | | | |
| | comp=E,635nm,0.2s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.28** | **329** | *e*PN | Pn | 04 15 54.5 | +1.5 |
| NIZ | | | | *e* | | 04 16 25.6 | |
| NIZ | | | | pmax | pmax | | |
| | comp=Z,85nm,0.5s | | | | | | |
| NIZ | | | | smax | smax | | |
| | comp=N,116nm,0.7s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.28** | **329** | *e*Pg | Pb | 04 15 54.7 | -1.4 |
| NIZ | | | | *e* | | 04 16 00.9 | |
| NIZ | | | | *e*Sg | Sb | 04 16 25.7 | +0.9 |
| NIZ | | | | Pmax | | | |
| | comp=N,45nm,0.2s | | | | | | |
| NIZ | | | | Smax | | | |
| | comp=N,90nm,0.4s | | | | | | |
| **YOA** | **Uoyan** | **2.30** | **2** | *e*Sg | Sb | 04 16 26.0 | +0.5 |
| YOA | | | | Smax | | | |
| | comp=N,1μm,0.4s | | | | | | |
| **OGRR** | **Ongureny** | **2.39** | **267** | *e*Pn | Pn | 04 15 52.3 | -2.2 |
| OGRR | | | | *e*Pg | Pb | 04 15 55.8 | -2.2 |
| OGRR | | | | *e*Sg | Sb | 04 16 26.4 | -1.6 |
| OGRR | | | | Pmax | | | |
| | comp=N,17nm,0.3s | | | | | | |
| OGRR | | | | Smax | | | |
| | comp=N,115nm,0.2s | | | | | | |
| **SVKR** | **Severomuysk** | **2.55** | **26** | *e*PN | Pb | 04 16 00.8 | +0.1 |
| SVKR | | | | *e* | | 04 16 34.5 | |
| SVKR | | | | pmax | pmax | | |
| | comp=Z,179nm,0.4s | | | | | | |
| SVKR | | | | smax | smax | | |
| | comp=E,600nm,0.6s | | | | | | |
| **SVKR** | **Severomuysk** | **2.55** | **26** | *e*Pn | Pn | 04 15 57.2 | +0.5 |
| SVKR | | | | *e*Pg | Pb | 04 16 01.2 | +0.5 |
| SVKR | | | | *e* | | 04 16 07.1 | |
| SVKR | | | | *i* Sg | Sg | 04 16 35.8 | -0.3 |
| SVKR | | | | Pmax | | | |
| | comp=E,39nm,0.2s | | | | | | |
| SVKR | | | | Smax | | | |
| | comp=E,601nm,0.7s | | | | | | |
| **ZRHB** | **Zarechye** | **2.97** | **246** | *e*Sg | Sb | 04 16 46.9 | +2.2 |
| ZRHB | | | | Smax | | | |
| | comp=E,440nm,0.7s | | | | | | |
| **UUDB** | **Ulan-Yde** | **3.10** | **232** | *e*Pg | Pb | 04 16 09.5 | -0.6 |
| UUDB | | | | *e* | | 04 16 14.8 | |
| UUDB | | | | *i* Sg | Sb | 04 16 50.3 | +1.8 |
| UUDB | | | | Pmax | | | |
| | comp=E,27nm,0.8s | | | | | | |
| UUDB | | | | Smax | | | |
| | comp=E,87nm,0.5s | | | | | | |
| **TRG** | **Tyrgan** | **3.33** | **253** | *e*Pn | Pn | 04 16 05.5 | -2.0 |
| TRG | | | | *e*Pg | Pb | 04 16 13.3 | -0.8 |
| TRG | | | | *e* | | 04 16 42.5 | |
| TRG | | | | *e*Sg | Sb | 04 16 57.4 | +2.2 |
| TRG | | | | Pmax | | | |
| | comp=E,9.0nm,0.2s | | | | | | |
| TRG | | | | Smax | | | |
| | comp=E,81nm,0.3s | | | | | | |
| **KAB** | **Kabansk** | **3.49** | **241** | *e*Sg | Sb | 04 17 02.2 | +2.5 |
| KAB | | | | Smax | | | |
| | comp=E,412nm,1.0s | | | | | | |
| **NLYR** | **Nelyaty** | **3.55** | **40** | ⇑*i*Pn | Pn | 04 16 09.1 | -1.4 |
| NLYR | | | | *e*Pg | Pb | 04 16 16.5 | -1.3 |
| NLYR | | | | *e* | | 04 16 24.0 | |
| NLYR | | | | *e*Sg | Sb | 04 17 03.8 | +2.4 |
| NLYR | | | | max | | | |
| | comp=E,20nm,0.6s | | | | | | |
| NLYR | | | | Smax | | | |
| | comp=E,98nm,0.9s | | | | | | |
| **HRMR** | **Khuramsha** | **3.59** | **234** | *e*Pn | Pn | 04 16 09.3 | -1.7 |
| HRMR | | | | *e*Pg | Pb | 04 16 19.0 | +0.5 |
| HRMR | | | | *e*PgPg | PbPb | 04 16 21.2 | -0.4 |
| HRMR | | | | *e* | | 04 16 24.6 | |
| HRMR | | | | *e*Sg | Sg | 04 17 06.4 | -3.1 |
| HRMR | | | | max | | | |
| | comp=E,30nm,0.2s | | | | | | |
| HRMR | | | | Smax | | | |
| | comp=E,349nm,0.6s | | | | | | |
| **KPC** | **Khapcheranga** | **4.17** | **173** | *e*PN | Pn | 04 16 16.6 | -2.5 |
| KPC | | | | *e* | | 04 16 27.3 | |
| KPC | | | | *e* | | 04 17 22.4 | |
| KPC | | | | pmax | pmax | | |
| | comp=Z,12nm,0.3s | | | | | | |
| KPC | | | | smax | smax | | |
| | comp=E,125nm,0.7s | | | | | | |
| **KPC** | **Khapcheranga** | **4.17** | **173** | *e*Pn | Pn | 04 16 16.5 | -2.6 |
| KPC | | | | *e*Pg | Pb | 04 16 27.8 | -0.6 |
| KPC | | | | *e*PgPg | PbPb | 04 16 29.5 | -2.1 |
| KPC | | | | *e*Sg | Sb | 04 17 22.5 | +3.1 |
| KPC | | | | *e*SgSg | SbSb | 04 17 24.8 | +0.3 |
| KPC | | | | max | | | |
| | comp=E,14nm,0.3s | | | | | | |
| KPC | | | | max | | | |
| | comp=E,126nm,0.6s | | | | | | |
| **BOD** | **Bodaibo** | **4.21** | **18** | *e*PN | Pb | 04 16 30.8 | +1.8 |
| BOD | | | | *e* | | 04 17 24.0 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.4s | | | | | | |
| BOD | | | | smax | smax | | |
| | comp=E,123nm,1.3s | | | | | | |
| **BOD** | **Bodaibo** | **4.21** | **18** | *e*Pn | Pn | 04 16 18.2 | -1.3 |
| BOD | | | | *e*Pg | Pb | 04 16 28.8 | -0.2 |
| BOD | | | | ⇑*i* | | 04 16 36.5 | |
| BOD | | | | *e*Sg | Sb | 04 17 23.8 | +3.4 |
| BOD | | | | Pmax | | | |
| | comp=E,3.0nm,0.3s | | | | | | |
| BOD | | | | Smax | | | |
| | comp=E,123nm,1.1s | | | | | | |
| **LSTR** | **Listvyanka** | **4.55** | **247** | *e* | Pg | 04 17 12.2 | +31 |
| LSTR | | | | *e*Sg | Sg | 04 17 36.1 | -4.3 |
| LSTR | | | | Smax | | | |
| | comp=E,28nm,0.9s | | | | | | |
| **CRS** | **Chara** | **4.88** | **48** | *e* | Pg | 04 17 29.2 | +41 |
| CRS | | | | *e*Sg | Sg | 04 17 47.0 | -4.1 |
| **TUP** | **Tupik** | **4.95** | **80** | *e*PN | Pn | 04 16 27.9 | -1.8 |
| TUP | | | | *e* | | 04 16 41.8 | |
| TUP | | | | *e*S | Sn | 04 17 24.6 | -3.0 |
| TUP | | | | *e* | | 04 17 46.2 | |
| TUP | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.4s | | | | | | |
| TUP | | | | smax | smax | | |
| | comp=N,121nm,0.7s | | | | | | |
| **TUP** | **Tupik** | **4.95** | **80** | ⇑*i*Pn | Pn | 04 16 27.9 | -1.8 |
| TUP | | | | ⇑*i* | | 04 16 36.1 | |
| TUP | | | | *e*Pg | Pb | 04 16 41.6 | 0.0 |
| TUP | | | | *e* | | 04 16 47.1 | |
| TUP | | | | *e*Sg | Sb | 04 17 47.0 | +5.3 |
| TUP | | | | max | | | |
| | comp=N,9.0nm,0.4s | | | | | | |
| TUP | | | | Smax | | | |
| | comp=N,121nm,0.8s | | | | | | |
| **TLY** | **Talaya** | **5.29** | **249** | *e*Pg | Pb | 04 16 47.9 | +0.4 |
| TLY | | | | *e*Sg | Sb | 04 17 56.6 | +5.0 |
| TLY | | | | Pmax | | | |
| | comp=N,3.0nm,0.1s | | | | | | |
| TLY | | | | Smax | | | |
| | comp=N,18nm,0.4s | | | | | | |
| **ARS** | **Arshan** | **5.88** | **255** | *e*Sg | Sb | 04 18 13.9 | +5.3 |
| ARS | | | | Smax | | | |
| | comp=N,50nm,1.0s | | | | | | |
| **ZAK** | **Zakamensk** | **6.18** | **239** | *e*Pn | Pn | 04 16 46.4 | -0.4 |
| ZAK | | | | *e*Pg | Pb | 04 17 05.7 | +2.9 |
| ZAK | | | | *e*Sg | Sg | 04 18 27.5 | -5.4 |
| ZAK | | | | Pmax | | | |
| | comp=N,4.0nm,0.4s | | | | | | |
| ZAK | | | | Smax | | | |
| | comp=N,11nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **6.64** | **208** | *e* | Pn | 04 17 01.5 | +8.4 |
| ULN | | | | *e*Pg | Pb | 04 17 13.5 | +2.9 |
| ULN | | | | *e*Sg | Sg | 04 18 40.5 | -7.1 |
| **MOY** | **Mondy** | **6.80** | **256** | *e* | | 04 18 26.1 | |
| MOY | | | | *e*Sg | Sg | 04 18 43.9 | -8.7 |
| MOY | | | | Smax | | | |
| | comp=N,22nm,1.2s | | | | | | |
| **ORL** | **Orlik** | **7.21** | **264** | *e* | Pn | 04 17 07.7 | +6.9 |
| ORL | | | | *e*Sg | Sg | 04 18 56.5 | -9.2 |
| ORL | | | | Smax | | | |
| | comp=N,20nm,1.7s | | | | | | |

*ECX* ***23*** *04:50:59.1±0.4,31˚.30N×117˚.74W,h10km,MD3.4,ML3.6*

**ISC 23 04:50:57.9±2.0,31˚.37N±0˚.08×117˚.77W±0˚.05, h10km±11km,n21,σ0.97/30,2D,Off west coast of Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PBX** | **Punta Banda** | **0.97** | **67** | *e*P | **Pg** | **04 51 16.5** | **-0.1** |
| PBX | | | | *e*S | **Sg** | **04 51 29.3** | **+0.1** |
| **ECNX** | **Esteban Cantu** | **1.04** | **74** | *e*P | **Pg** | **04 51 17.7** | **-0.4** |
| ECNX | | | | *e*S | **Sg** | **04 51 31.4** | **-0.2** |
| **ZAX** | **El Zacaton** | **1.29** | **83** | *e*P | **Pn** | **04 51 21.3** | **-0.8** |
| ZAX | | | | *e*S | **Sb** | **04 51 38.2** | **-0.8** |
| ZAX | | | | IAML | | 04 51 40.3 | |
| | comp=E,1μm,0.4s | | | | | | |
| ZAX | | | | *e* | | 04 51 40.3 | |
| **CBX** | **Cerro Bola** | **1.33** | **45** | *e*P | **Pn** | **04 51 22.7** | **-0.1** |
| CBX | | | | ⇓*e* | | 04 51 43.2 | |
| CBX | | | | IAML | | 04 51 43.2 | |
| | comp=E,1μm,0.4s | | | | | | |
| **SDRC** | **San Diego Road** | **1.54** | **27** | *e*P | **Pn** | **04 51 25.6** | **+0.2** |
| **BAR** | **Barrett** | **1.61** | **35** | *e*P | **Pn** | **04 51 26.9** | **+0.5** |
| **109C** | **Camp Elliot, M** | **1.62** | **20** | P | **Pn** | **04 51 26.9** | **+0.4** |
| | baz=1.3 | | | | | | |
| 109C | | | | S | **Sn** | **04 51 45.7** | **-1.8** |
| | baz=1.3 | | | | | | |
| **CPE** | **Camp Elliot** | **1.62** | **20** | *e*P | **Pn** | **04 51 27.0** | **+0.4** |
| **RDX** | **Rancho Dawling** | **1.66** | **70** | *e*P | **Pn** | **04 51 27.4** | **+0.2** |
| RDX | | | | *e*S | **Sb** | **04 51 49.8** | **+0.1** |
| RDX | | | | IAML | | 04 51 55.1 | |
| | comp=N,528nm,0.7s | | | | | | |
| RDX | | | | ⇓*e* | | 04 51 55.1 | |
| **SCI** | **San Clemente I** | **1.74** | **338** | P | **Pn** | **04 51 28.4** | **+0.2** |
| | baz=1.5 | | | | | | |
| **RMX** | **La Rumorosa** | **1.89** | **49** | *e*P | **Pn** | **04 51 31.3** | **+0.8** |
| RMX | | | | *e* | | 04 52 05.4 | |
| RMX | | | | IAML | | 04 52 05.4 | |
| | comp=N,428nm,0.4s | | | | | | |
| **MONP** | **Monument Peak** | **1.90** | **37** | P | **Pn** | **04 51 31.7** | **+1.1** |
| | baz=1.7 | | | | | | |
| MONP | | | | S | **Sn** | **04 51 53.9** | **-0.9** |
| | baz=1.7 | | | | | | |
| **IBP** | **Imperial Bould** | **1.92** | **47** | S | **Sn** | **04 51 55.9** | **+0.8** |
| | baz=1.7 | | | | | | |
| **SPIG** | **San Pedro Mart** | **2.00** | **99** | *e*P | **Pn** | **04 51 32.1** | **+0.1** |
| **SPX** | **San Pedro Mart** | **2.00** | **99** | *e*P | **Pn** | **04 51 32.6** | **+0.5** |
| SPX | | | | *e*S | **Sn** | **04 51 58.4** | **+1.0** |
| **CIS** | **Catalina Islan** | **2.10** | **345** | P | **Pn** | **04 51 33.3** | **0.0** |
| | baz=1.8 | | | | | | |
| **SNCC** | **San Nicolas Is** | **2.39** | **322** | P | **Pn** | **04 51 37.9** | **+0.7** |
| | baz=2.1 | | | | | | |
| S

baz=2.8
**GLA** **Glamis** 3.01 55 P Pn 04 51 47.4 +1.7
baz=2.9
**BELC** **Belle Mtn. Jos** 3.02 29 P Pn 04 51 47.9 +1.9
baz=2.8
**BSC** **Santa Cruz Isl** 3.06 330 P Pn 04 51 47.4 +1.1
baz=2.8

**IDC 23 05:01:26.6±2.1, 1°.44S×110°.10E, h0km, mb3.9/8, mb1 4.0/8, mb1mx3.7/35, mbtmp3.9/8, MS2.7/1, Ms1 2.7/1, ms1mx2.4/30, Error ellipse: s-maj=143.2km s-min=17.5km az=54.0, Borneo**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **10.27** | **110** | LR | LR | 05 07 33.9 | |
| | comp=Z,45nm,20.0s,baz=318,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.61** | **331** | P | P | 05 06 30.2 | +1.0 |
| | 3.7nm,0.7s,baz=163,slow=8.5,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.00** | **129** | P | P | 05 07 37.2 | -0.1 |
| | 0.9nm,0.8s,baz=310,slow=9.7,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **31.94** | **136** | P | P | 05 07 54.6 | +0.2 |
| | 1.0nm,0.6s,baz=309,slow=8.0,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **49.18** | **357** | P | P | 05 10 16.5 | -0.1 |
| | 0.4nm,0.4s,baz=175,slow=12,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.89** | **337** | P | P | 05 10 52.0 | +0.3 |
| | 1.0nm,0.6s,baz=139,slow=8.2,SNR=9.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.45** | **337** | P | P | 05 11 23.9 | -0.3 |
| | 0.8nm,0.8s,baz=150,slow=6.8,SNR=6.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.06** | **343** | P | P | 05 11 28.1 | -0.2 |
| | 2.6nm,0.6s,baz=148,slow=4.8,SNR=7.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **63.60** | **334** | P | P | 05 11 58.3 | -0.9 |
| | 0.9nm,0.6s,baz=111,slow=8.1,SNR=4.6 | | | | | | |

*ISCJB **23** 05:27:19.4±0.6, 32°.17N±0°.03×115°.17W±0°.03, h11km±5km, Error ellipse: s-maj=5.2km s-min=4.2km az=35.3*
*ECX **23** 05:27:21.9±0.4, 32°.18N×115°.27W, h8km, MD3.0, ML3.2*
*NEIC **23** 05:27:22.0, 32°.19N×115°.28W, h8km, ML3.0(ECX), ML3.1(PAS), After ECX.*

**ISC 23 05:27:20.5±1.1, 32°.16N±0°.03×115°.26W±0°.03, h9km±9km, n34, σ1§27/47, 3C-4D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.25** | **13** | *e*P | **Pg** | **05 27 26.5** | **+0.9** |
| **CPBX** | **Cerro Prieto** | **0.26** | **352** | *e*P | **Pg** | **05 27 26.3** | **+0.6** |
| CPBX | | | | *e*S | **Sg** | **05 27 30.0** | **+0.8** |
| **EMSC** | **East Mesa** | **0.62** | **22** | ⇓*i*P | **Pg** | **05 27 32.5** | **0.0** |
| **RDX** | **Rancho Dawling** | **0.62** | **248** | ⇑*e*P | **Pg** | **05 27 33.2** | **+0.6** |
| RDX | | | | *e*S | **Sg** | **05 27 41.9** | **+1.1** |
| RDX | | | | IAML | | 05 27 43.2 | |
| | comp=N,2μm,0.4s | | | | | | |
| **SGL** | **Mount Signal** | **0.62** | **321** | ⇓*i*P | **Pg** | **05 27 32.8** | **+0.3** |
| **DREC** | **Desert Rsrch C** | **0.66** | **346** | *e*P | **Pg** | **05 27 33.2** | **0.0** |
| **COA** | **Coachella** | **0.71** | **10** | ⇓*i*P | **Pg** | **05 27 33.8** | **-0.4** |
| **WESC** | **Westside Schoo** | **0.71** | **326** | *e*P | **Pg** | **05 27 34.1** | **-0.2** |
| **YUH** | **Yuha Desert** | **0.74** | **311** | ⇑*i*P | **Pg** | **05 27 34.7** | **-0.1** |
| **RMX** | **La Rumorosa** | **0.82** | **303** | IAML | | 05 27 47.4 | |
| | comp=N,689nm,0.4s | | | | | | |
| RMX | | | | ⇓*e* | | 05 27 47.4 | |
| **IBP** | **Imperial Bould** | **0.86** | **306** | P | **Pg** | **05 27 37.1** | **+0.1** |
| | baz=0.8 | | | | | | |
| IBP | | | | S | **Sg** | **05 27 48.4** | **+0.1** |
| | baz=0.8 | | | | | | |
| **IBP** | **Imperial Bould** | **0.86** | **306** | *e*P | **Pg** | **05 27 36.6** | **-0.5** |
| **GLA** | **Glamis** | **0.96** | **22** | P | **Pg** | **05 27 37.2** | **-1.8** |
| | baz=0.9 | | | | | | |
| GLA | | | | S | **Sg** | **05 27 48.9** | **-2.5** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.96** | **22** | *e*Pg | **Pg** | **05 27 37.2** | **-1.8** |
| GLA | | | | *e*Sg | **Sg** | **05 27 49.0** | **-2.5** |
| **ZAX** | **El Zacaton** | **1.08** | **233** | *e*P | **Pg** | **05 27 40.8** | **-0.4** |
| ZAX | | | | *e*S | **Sg** | **05 27 55.8** | **+0.7** |
| **SPIG** | **San Pedro Mart** | **1.13** | **189** | *e*P | **Pg** | **05 27 41.8** | **-0.3** |
| **SPX** | **San Pedro Mart** | **1.13** | **189** | *e*P | **Pg** | **05 27 41.8** | **-0.3** |
| **CBX** | **Cerro Bola** | **1.20** | **278** | *e*P | **Pb** | **05 27 42.6** | **-0.8** |
| CBX | | | | *e*S | **Sg** | **05 27 58.4** | **-0.6** |
| CBX | | | | IAML | | 05 28 04.8 | |
| | comp=E,398nm,0.3s | | | | | | |
| CBX | | | | *e* | | 05 28 04.8 | |
| **MONP** | **Monument Peak** | **1.22** | **307** | P | **Pb** | **05 27 42.1** | **-1.7** |
| | baz=1.2 | | | | | | |
| MONP | | | | S | **Sg** | **05 27 58.7** | **-1.0** |
| | baz=1.2 | | | | | | |
| **ECNX** | **Esteban Cantu** | **1.24** | **246** | *e*P | **Pn** | **05 27 43.5** | **-0.6** |
| ECNX | | | | *e*S | **Sb** | **05 28 00.3** | **-0.1** |
| **BAR** | **Barrett** | **1.30** | **294** | ⇑*e*P | **Pn** | **05 27 43.8** | **-1.1** |
| **BAR** | **Barrett** | **1.30** | **294** | *e*Pn | **Pn** | **05 27 43.7** | **-1.1** |
| BAR | | | | *e*Sg | **Sb** | **05 28 01.3** | **-0.6** |
| **PBX** | **Punta Banda** | **1.31** | **252** | *e*P | **Pn** | **05 27 44.3** | **-0.7** |
| PBX | | | | *e*S | **Sb** | **05 28 01.8** | **-0.5** |
| **109C** | **Camp Elliot, M** | **1.72** | **295** | P | **Pn** | **05 27 49.7** | **-0.8** |
| | baz=1.7 | | | | | | |
| 109C | | | | Sb | **Sn** | **05 28 13.8** | **+1.2** |
| | baz=1.7 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **1.76** | **326** | *e*Pn | Pn | 05 27 49.3 | -2.0 |
| PFO | | | | *e*Sn | **Sb** | **05 28 16.2** | **+1.0** |
| **214A** | **Organ Pipe Nat** | **2.09** | **95** | P | Pn | 05 27 53.3 | -2.4 |
| | baz=2.1 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.09** | **95** | *e*Pn | Pn | 05 27 53.2 | -2.6 |
| **MURC** | **Murrieta** | **2.17** | **312** | Sg | **Sb** | **05 28 28.4** | **+1.4** |
| | baz=2.1 | | | | | | |
| **CIS** | **Catalina Islan** | **2.92** | **296** | Sb | **Sb** | **05 28 50.2** | **+1.6** |
| | baz=2.9 | | | | | | |
| **MWC** | **Mount Wilson** | **3.12** | **312** | *e*Pg | **Pb** | **05 28 17.0** | **+0.8** |
| MWC | | | | *e*Sg | **Sg** | **05 28 59.3** | **-1.4** |
| **GSC** | **Goldstone** | **3.38** | **338** | *e*Pg | **Pg** | **05 28 27.1** | **+1.7** |
| **TUC** | **Tucson** | **3.80** | **87** | *e*Pg | **Pg** | **05 28 32.7** | **-0.6** |
| TUC | | | | *e*Sg | **Sb** | **05 29 18.5** | **+4.6** |
| **SHPR** | **Sheep Range** | **4.33** | **1** | *e*Pn | **Pn** | **05 28 27.0** | **+0.3** |
| SHPR | | | | *e*Pg | **Pg** | **05 28 43.5** | **0.0** |
| SHPR | | | | *e*Sg | Sg | 05 29 46.5 | +6.8 |
| **R11A** | **Troy Canyon, C** | **6.18** | **358** | *e*Pg | **Pg** | **05 29 18.7** | **-0.1** |
| | comp=E,1.1nm,0.5s | | | | | | |
| R11A | | | | *e*Sg | **Sg** | **05 30 40.2** | **+1.4** |

*ISCJB **23** 05:28:42.8±0.3, 24°.15N±0°.02×121°.87E±0°.02, h59km±4km, Error ellipse: s-maj=3.9km s-min=2.5km az=146.3*
*TAP **23** 05:28:42.9, 24°.17N×121°.80E, h59km, ML3.5, D*
*JMA **23** 05:28:42.0±0.1, 24°.12N×121°.78E, h63km±2km, M2.8*

**ISC 23 05:28:43.4±1.2, 24°.15N±0°.03×121°.86E±0°.03, h56km±6km, n53, σ0§88/94, 1C-1D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.19** | **326** | *e*P | **Pn** | **05 28 53.0** | **+0.6** |
| | baz=340 | | | | | | |
| EHP | | | | *e*S | **Sn** | **05 28 59.2** | **+0.3** |
| | baz=340 | | | | | | |
| **TWD** | **Chiawan** | **0.25** | **254** | *i* P | **Pn** | **05 28 52.5** | **-0.3** |
| | baz=244 | | | | | | |
| TWD | | | | *i* S | **Sn** | **05 28 59.4** | **0.0** |
| | baz=244 | | | | | | |
| **HWA** | **Hwalien** | **0.29** | **233** | *e*P | **Pn** | **05 28 53.0** | **0.0** |
| | baz=222 | | | | | | |
| HWA | | | | *e*S | **Sn** | **05 29 01.0** | **+1.1** |
| | baz=222 | | | | | | |
| **ENA** | **Nanau** | **0.30** | **339** | P | **Pn** | **05 28 52.9** | **-0.2** |
| | baz=349 | | | | | | |
| ENA | | | | *e*S | **Sn** | **05 29 00.8** | **+0.7** |
| | baz=349 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.42** | **229** | *e*P | **Pn** | **05 28 55.0** | **+0.7** |
| | baz=222 | | | | | | |
| ESF | | | | *e*S | **Sn** | **05 29 02.5** | **+0.4** |
| | baz=222 | | | | | | |
| **TWC** | **Suao** | **0.46** | **359** | *i* P | **Pn** | **05 28 54.6** | **0.0** |
| | baz=6.0 | | | | | | |
| TWC | | | | *i* S | **Sn** | **05 29 03.3** | **+0.6** |
| | baz=6.0 | | | | | | |
| **ESL** | **Shilin** | **0.51** | **229** | ⇑*i*P | **Pn** | **05 28 54.1** | **-1.2** |
| | baz=223 | | | | | | |
| ESL | | | | *e*S | **Sn** | **05 29 02.4** | **-1.5** |
| | baz=223 | | | | | | |
| **TEGC** | **Jichi Village** | **0.53** | **214** | *e*P | **Pn** | **05 28 56.2** | **+0.8** |
| | baz=207 | | | | | | |
| TEGC | | | | *e*S | **Sn** | **05 29 06.0** | **+1.9** |
| | baz=207 | | | | | | |
| **NNS** | **Nan Shan** | **0.53** | **303** | P | **Pn** | **05 28 54.7** | **-0.8** |
| | baz=305 | | | | | | |
| NNS | | | | *e*S | **Sn** | **05 29 03.5** | **-0.8** |
| | baz=305 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.54** | **269** | *e*P | **Pn** | **05 28 55.2** | **-0.8** |
| | baz=267 | | | | | | |
| WHF | | | | *e*S | **Sn** | **05 29 03.9** | **-1.2** |
| | baz=267 | | | | | | |
| **ENTT** | **Nioudou** | **0.56** | **331** | ⇓*i*P | **Pn** | **05 28 55.2** | **-0.6** |
| | baz=336 | | | | | | |
| **TWE** | **Neicheng** | **0.59** | **343** | *i* P | **Pn** | **05 28 56.0** | **-0.2** |
| | baz=348 | | | | | | |
| TWE | | | | *e*S | **Sn** | **05 29 05.7** | **+0.2** |
| | baz=348 | | | | | | |
| **TWT** | **Tachien** | **0.63** | **279** | *e*P | **Pn** | **05 28 56.7** | **-0.1** |
| | baz=278 | | | | | | |
| TWT | | | | S | **Sn** | **05 29 06.2** | **-0.4** |
| | baz=278 | | | | | | |
| **NSK** | **Sanguang** | **0.69** | **319** | *i* P | **Pn** | **05 28 56.8** | **-0.7** |
| | baz=321 | | | | | | |
| NSK | | | | *e*S | **Sn** | **05 29 06.3** | **-1.3** |
| | baz=321 | | | | | | |
| **EGS** | | **0.69** | **6** | *e*P | **Pn** | **05 28 58.0** | **+0.6** |
| | baz=10.0 | | | | | | |
| **WDT** | **Danda** | **0.77** | **239** | P | **Pn** | **05 28 57.8** | **-0.8** |
| | baz=235 | | | | | | |
| WDT | | | | *e*S | **Sn** | **05 29 08.5** | **-1.2** |
| | baz=235 | | | | | | |
| **EHY** | **Hungye** | **0.81** | **217** | *e*P | **Pn** | **05 28 57.1** | **-1.8** |
| | baz=213 | | | | | | |
| EHY | | | | *e*S | **Sn** | **05 29 08.1** | **-2.1** |
| | baz=213 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.86** | **8** | *e*S | **Sn** | **05 29 11.3** | **0.0** |
| | baz=11 | | | | | | |
| **TWA** | **Mucha** | **0.86** | **343** | *e*P | **Pn** | **05 28 59.2** | **-0.3** |
| | baz=346 | | | | | | |
| TWA | | | | *e*S | **Sn** | **05 29 11.3** | **-0.1** |
| | baz=346 | | | | | | |
| **NSTT** | **Nanjuang** | **0.92** | **302** | P | **Pn** | **05 29 00.5** | **+0.2** |
| | baz=302 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **05 29 12.4** | **-0.2** |
| | baz=302 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.92** | **253** | *e*P | **Pn** | **05 28 60.0** | **-0.4** |
| | baz=250 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **05 29 14.1** | **+1.3** |
| | baz=250 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.92** | **356** | *e*P | **Pn** | **05 29 00.5** | **+0.1** |
| | baz=358 | | | | | | |
| NWF | | | | *e*S | **Sn** | **05 29 13.6** | **+0.8** |
| | baz=358 | | | | | | |
| **TWF1** | **Yuli** | **0.95** | **213** | *e*P | **Pn** | **05 28 59.0** | **-1.7** |
| | baz=209 | | | | | | |
| **TYC** | **Yuchr** | **0.95** | **255** | P | **Pn** | **05 29 00.5** | **-0.2** |
| | baz=253 | | | | | | |
| TYC | | | | *e*S | **Sn** | **05 29 14.0** | **+0.7** |
| | baz=253 | | | | | | |
| **TWQ1** | **Liyutan** | **1.01** | **281** | *e*P | **Pn** | **05 29 01.3** | **-0.2** |
| | baz=280 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **05 29 14.0** | **-0.8** |
| | baz=280 | | | | | | |
| **NCU** | **National Centr** | **1.02** | **323** | *e*P | **Pn** | **05 29 01.3** | **-0.3** |
| | baz=325 | | | | | | |
| NCU | | | | *e*S | **Sn** | **05 29 14.4** | **-0.6** |
| | baz=325 | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.03** | **337** | P | **Pn** | **05 29 01.1** | **-0.5** |
| | baz=339 | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **05 29 14.5** | **-0.7** |
| | baz=339 | | | | | | |
| **NSY** | **Sanyi** | **1.03** | **285** | *e*S | **Sn** | **05 29 15.3** | **-0.1** |
| | baz=284 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.04** | **73** | P | **Pn** | **05 29 01.8** | **0.0** |
| JYNG | | | | S | **Sn** | **05 29 16.4** | **+1.0** |
| **YUS** | **Yu-Shan** | **1.06** | **232** | *e*P | **Pn** | **05 29 01.9** | **-0.7** |
| | baz=228 | | | | | | |
| YUS | | | | *e*S | **Sn** | **05 29 16.1** | **-0.5** |
| | baz=228 | | | | | | |
| **TCU** | **Taichung** | **1.08** | **270** | *e*P | **Pn** | **05 29 02.2** | **-0.2** |
| | baz=268 | | | | | | |
| TCU | | | | *e*S | **Sn** | **05 29 15.9** | **-0.6** |
| | baz=268 | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.10** | **73** | P | **Pn** | **05 29 02.7** | **+0.1** |
| YOJ | | | | S | **Sn** | **05 29 17.3** | **+0.5** |
| **WNT** | **Mingjian** | **1.11** | **256** | *e*P | **Pn** | **05 29 03.0** | **+0.2** |
| | baz=254 | | | | | | |
| WNT | | | | *e*S | **Sn** | **05 29 18.7** | **+1.6** |
| | baz=254 | | | | | | |
| **CHKT** | **Chengkung** | **1.14** | **203** | P | **Pn** | **05 29 02.0** | **-1.2** |
| | baz=200 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **05 29 16.0** | **-1.8** |
| | baz=200 | | | | | | |
| **ALS** | **Alishan** | **1.16** | **237** | P | **Pn** | **05 29 03.9** | **+0.3** |
| | baz=234 | | | | | | |
| ALS | | | | *e*S | **Sn** | **05 29 20.1** | **+1.4** |
| | baz=234 | | | | | | |
| **CHN5** | **Tsauling** | **1.21** | **243** | *e*P | **Pn** | **05 29 04.6** | **+0.3** |
| | baz=241 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **05 29 21.4** | **+1.7** |
| | baz=241 | | | | | | |
| **ELDTW** | **Lidau** | **1.23** | **219** | *e*P | **Pn** | **05 29 03.3** | **-1.2** |
| | baz=216 | | | | | | |
| **WGK** | **Gukeng** | **1.27** | **249** | *e*P | **Pn** | **05 29 05.2** | **+0.2** |
| | baz=246 | | | | | | |
| WGK | | | | *e*S | **Sn** | **05 29 23.1** | **+2.0** |
| | baz=246 | | | | | | |
| **CHN4** | **Tsaushan** | **1.41** | **236** | *e*P | **Pn** | **05 29 07.5** | **+0.7** |
| | baz=233 | | | | | | |
| CHN4 | | | | *e*S | **Sn** | **05 29 26.0** | **+1.7** |
| | baz=233 | | | | | | |
| **CHN2** | **Minshiung** | **1.41** | **244** | *e*P | **Pn** | **05 29 06.9** | **+0.1** |
| | baz=242 | | | | | | |
| CHN2 | | | | *e*S | **Sn** | **05 29 26.2** | **+1.9** |
| | baz=242 | | | | | | |
| **STYT** | **Tauyuan** | **1.41** | **226** | *e*P | **Pn** | **05 29 06.7** | **-0.2** |
| | baz=223 | | | | | | |
| **WTP** | **Ta-pu** | **1.45** | **232** | *e*P | **Pn** | **05 29 07.9** | **+0.4** |
| | baz=229 | | | | | | |
| **TWG** | **Pinlang** | **1.51** | **209** | *e*P | **Pn** | **05 29 06.9** | **-1.2** |
| | baz=206 | | | | | | |
| **TWK** | **Hsinying** | **1.53** | **235** | *e*P | **Pn** | **05 29 08.2** | **-0.3** |
| | baz=232 | | | | | | |
| TWK | | | | *e*S | **Sn** | **05 29 29.0** | **+1.6** |
| | baz=232 | | | | | | |
| **CHN1** | **Nanshi** | **1.55** | **232** | *e*P | **Pn** | **05 29 09.1** | **+0.3** |
| | baz=230 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **05 29 29.1** | **+1.2** |
| | baz=230 | | | | | | |
| **SGST** | **Jiashian** | **1.58** | **228** | *e*P | **Pn** | **05 29 09.4** | **+0.2** |
| | baz=225 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.72** | **84** | P | **Pn** | **05 29 10.7** | **-0.3** |
| IRIF | | | | S | **Sn** | **05 29 31.9** | **+0.1** |
| **SSD** | **Sandimen** | **1.79** | **219** | *e*P | **Pn** | **05 29 12.1** | **0.0** |
| | baz=217 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.97** | **87** | P | **Pn** | **05 29 14.9** | **+0.5** |
| JKRS | | | | S | **Sn** | **05 29 37.9** | **0.0** |
| **EAST** | **Anshuo** | **1.99** | **208** | *e*P | **Pn** | **05 29 14.9** | **+0.1** |
| | baz=206 | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.10** | **84** | P | **Pn** | **05 29 15.8** | **-0.3** |
| JIJ | | | | S | **Sn** | **05 29 40.7** | **-0.4** |
| **JISG** | **Ishigakijimahi** | **2.28** | **79** | P | **Pn** | **05 29 18.2** | **-0.4** |
| JISG | | | | S | **Sn** | **05 29 44.6** | **-0.9** |
| **JTJ** | **Tarama** | **2.64** | **79** | P | **Pn** | **05 29 23.8** | **+0.3** |
| JTJ | | | | S | **Sn** | **05 29 54.2** | **-0.2** |

*DDA **23** 05:39:55.3, 36°.98N×26°.54E, h5km, Md3.3*
*CSEM **23** 05:39:56.1±0.1, 36°.99N×26°.47E, h2km, MD3.3, Error ellipse: s-maj=3.7km s-min=2.8km az=168.0*
*ISCJB **23** 05:39:56.5±0.7, 36°.99N±0°.02×26°.46E±0°.02, h11km±5km, Error ellipse: s-maj=3.6km s-min=2.9km az=179.3*
*THE **23** 05:39:56.8, 37°.05N×26°.48E, h20km±3km, ML3.1/5, Error ellipse: s-maj=3.4km s-min=0.9km az=331.0*
*ATH **23** 05:39:56.2, 37°.04N×26°.63E, h40km±1km, MD3.3/18, ML3.5*
*ISK **23** 05:39:56.1, 37°.00N×26°.46E, h8km, ML2.9*

**ISC 23 05:39:56.3±1.0, 37°.01N±0°.02×26°.50E±0°.02, h15km±8km, n85, σ1§05/125, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NISR** | **Nisiros** | **0.64** | **128** | *e*P | **Pg** | **05 40 08.5** | **-0.4** |
| NISR | | | | *e*S | **Sb** | **05 40 18.5** | **+0.4** |
| **NISR** | **Nisiros** | **0.64** | **128** | P | **Pg** | **05 40 08.7** | **-0.2** |
| NISR | | | | S | **Sb** | **05 40 18.4** | **+0.4** |
| **NISR** | **Nisiros** | **0.64** | **128** | P | **Pg** | **05 40 08.7** | **-0.2** |
| NISR | | | | S | **Sb** | **05 40 18.4** | **+0.4** |
| **NIS1** | **Nisyros Isl.** | **0.68** | **127** | *e*PG | **Pb** | **05 40 09.8** | **-0.1** |
| NIS1 | | | | *e*SG | **Sn** | **05 40 21.1** | **-0.6** |
| **NIS1** | **Nisyros Isl.** | **0.68** | **127** | *e*P | **Pg** | **05 40 08.8** | **-0.8** |
| NIS1 | | | | *e*S | **Sg** | **05 40 18.6** | **0.0** |
| **NIS1** | **Nisyros Isl.** | **0.68** | **127** | P | **Pb** | **05 40 09.8** | **-0.1** |
| NIS1 | | | | S | **Sb** | **05 40 20.1** | **+1.0** |
| **NIS1** | **Nisyros Isl.** | **0.68** | **127** | P | **Pb** | **05 40 09.8** | **-0.1** |
| NIS1 | | | | *e*S | **Sg** | **05 40 18.6** | **0.0** |
| NIS1 | | | | *e*Sg | **Sn** | **05 40 21.2** | **-0.6** |
| **SMG** | **Samos** | **0.74** | **21** | *e*P | **Pg** | **05 40 10.2** | **-0.6** |
| SMG | | | | *e*S | **Sg** | **05 40 21.1** | **+0.5** |
| **SMG** | **Samos** | **0.74** | **21** | P | **Pg** | **05 40 10.1** | **-0.7** |
| SMG | | | | S | **Sg** | **05 40 20.2** | **-0.4** |
| **SMG** | **Samos** | **0.74** | **21** | *e*P | **Pg** | **05 40 10.2** | **-0.6** |
| SMG | | | | *e*S | **Sg** | **05 40 21.1** | **+0.5** |
| **BDRM** | **Kayabasi** | **0.76** | **86** | *i* P | **Pg** | **05 40 10.0** | **-1.0** |
| BDRM | | | | *i* S | **Sg** | **05 40 21.4** | **+0.4** |
| **BDRM** | **Kayabasi** | **0.76** | **86** | P | **Pg** | **05 40 10.0** | **-1.0** |
| BDRM | | | | S | **Sg** | **05 40 21.4** | **+0.4** |
| **APE** | **Apeiranthos** | **0.78** | **274** | *e*PG | **Pg** | **05 40 11.0** | **-0.4** |
| APE | | | | *e*SG | **Sb** | **05 40 21.8** | **-0.1** |
| **APE** | **Apeiranthos** | **0.78** | **274** | *e*P | **Pg** | **05 40 11.2** | **-0.2** |
| APE | | | | *e*S | **Sn** | **05 40 24.6** | **+0.4** |
| **APE** | **Apeiranthos** | **0.78** | **274** | P | **Pg** | **05 40 10.7** | **-0.7** |
| APE | | | | S | **Sg** | **05 40 21.3** | **-0.4** |
| **APE** | **Apeiranthos** | **0.78** | **274** | *e*Pg | **Pg** | **05 40 11.0** | **-0.4** |
| APE | | | | S | **Sg** | **05 40 21.3** | **-0.4** |
| APE | | | | *e*Sg | **Sb** | **05 40 21.8** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **0.90** | **40** | *i* P | **Pg** | **05 40 13.8** | **0.0** |
| GCAM | | | | *i* S | **Sb** | **05 40 26.2** | **+0.8** |
| **GCAM** | **G?zelcaml?** | **0.90** | **40** | P | **Pg** | **05 40 13.8** | **0.0** |
| GCAM | | | | S | **Sb** | **05 40 26.2** | **+0.8** |
| **THR2** | **Thira island,** | **1.02** | **237** | P | **Pb** | **05 40 15.2** | **-0.5** |
| **THR2** | **Thira island,** | **1.02** | **237** | P | **Pb** | **05 40 15.2** | **-0.5** |
| **SANT** | **Santorini** | **1.05** | **233** | *e*P | **Pn** | **05 40 16.8** | **+0.2** |
| SANT | | | | *e*S | **Sn** | **05 40 33.4** | **+2.4** |
| **SANT** | **Santorini** | **1.05** | **233** | *e*P | **Pn** | **05 40 16.8** | **+0.2** |
| **THR3** | **Thira Island,** | **1.07** | **236** | P | **Pb** | **05 40 14.8** | **-1.7** |
| **THR3** | **Thira Island,** | **1.07** | **236** | P | **Pb** | **05 40 14.8** | **-1.7** |
| **THR6** | **Thira Island,** | **1.10** | **234** | P | **Pb** | **05 40 16.7** | **-0.3** |
| **THR6** | **Thira Island,** | **1.10** | **234** | P | **Pb** | **05 40 16.7** | **-0.3** |
| **AYDN** | **Tasoluk** | **1.27** | **59** | *i* P | **Pg** | **05 40 21.1** | **+0.3** |
| AYDN | | | | *i* S | **Sg** | **05 40 40.4** | **+2.9** |
| **AYDN** | **Tasoluk** | **1.27** | **59** | P | **Pg** | **05 40 21.1** | **+0.3** |
| AYDN | | | | S | **Sg** | **05 40 40.4** | **+2.9** |
| **CHOS** | **Chios island** | **1.42** | **346** | *e*P | **Pn** | **05 40 20.7** | **-0.9** |
| CHOS | | | | *e*S | **Sn** | **05 40 38.8** | **-1.2** |
| **CHOS** | **Chios island** | **1.42** | **346** | P | **Pn** | **05 40 19.8** | **-1.8** |
| CHOS | | | | S | **Sn** | **05 40 37.5** | **-2.5** |
| **CHOS** | **Chios island** | **1.42** | **346** | *e*P | **Pn** | **05 40 20.7** | **-0.9** |
| CHOS | | | | S | **Sn** | **05 40 37.5** | **-2.5** |
| **YER** | **Yerkesik** | **1.43** | **85** | *e*PN | **Pg** | **05 40 23.5** | **-0.3** |
| **YER** | **Yerkesik** | **1.43** | **85** | *e*Pn | **Pg** | **05 40 23.5** | **-0.3** |
| **BLCB** | **Balcova** | **1.44** | **17** | *e*PN | **Pb** | **05 40 23.0** | **+0.3** |
| **BLCB** | **Balcova** | **1.44** | **17** | *e*Pn | **Pb** | **05 40 23.0** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.45** | **49** | *e*PN | **Pg** | **05 40 23.9** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.45** | **49** | *e*Pn | **Pg** | **05 40 24.0** | **-0.2** |
| **ARG** | **Arkhangelos** | **1.53** | **121** | *e*P | **Pn** | **05 40 22.2** | **-0.9** |
| ARG | | | | *e*S | **Sn** | **05 40 40.4** | **-2.3** |
| **ARG** | **Arkhangelos** | **1.53** | **121** | P | **Pn** | **05 40 22.8** | **-0.3** |
| ARG | | | | S | **Sn** | **05 40 42.2** | **-0.5** |
| **ARG** | **Arkhangelos** | **1.53** | **121** | P | **Pn** | **05 40 22.8** | **-0.3** |
| ARG | | | | S | **Sn** | **05 40 42.2** | **-0.5** |
| **KARP** | **Karpathos** | **1.56** | **160** | *e*P | **Pn** | **05 40 23.1** | **-0.4** |
| KARP | | | | *e*S | **Sn** | **05 40 42.0** | **-1.4** |
| **KARP** | **Karpathos** | **1.56** | **160** | P | **Pn** | **05 40 23.2** | **-0.3** |
| KARP | | | | S | **Sn** | **05 40 42.9** | **-0.5** |
| **KARP** | **Karpathos** | **1.56** | **160** | P | **Pn** | **05 40 23.2** | **-0.3** |
| KARP | | | | S | **Sn** | **05 40 42.9** | **-0.5** |
| **TURN** | **Turunc** | **1.69** | **94** | P | Pn | 05 40 20.7 | -4.6 |
| TURN | | | | S | Sn | 05 40 40.0 | -6.6 |
| **MHLO** | **Agia Marina, M** | **1.71** | **260** | *e*P | **Pb** | **05 40 27.3** | **-0.2** |
| MHLO | | | | *e*S | **Sb** | **05 40 48.6** | **-0.2** |
| **MHLO** | **Agia Marina, M** | **1.71** | **260** | *e*P | **Pb** | **05 40 27.3** | **-0.2** |
| MHLO | | | | *e*S | **Sb** | **05 40 48.6** | **-0.2** |
| **DALY** | **Dalyan (Mu¨la** | **1.74** | **96** | *e*PN | **Pb** | **05 40 27.8** | **-0.1** |
| **DALY** | **Dalyan (Mu¨la** | **1.74** | **96** | *e*Pn | **Pb** | **05 40 27.8** | **-0.1** |
| **NPS** | **Neapolis** | **1.89** | **203** | *e*P | **Pn** | **05 40 28.4** | **+0.4** |
| NPS | | | | *e*S | **Sn** | **05 40 51.7** | **+0.1** |
| **NPS** | **Neapolis** | **1.89** | **203** | *e*P | **Pn** | **05 40 28.4** | **+0.4** |
| NPS | | | | *e*S | **Sn** | **05 40 51.7** | **+0.1** |
| **ZKR** | **Zakros** | **1.91** | **187** | *e*P | **Pn** | **05 40 29.1** | **+0.8** |
| ZKR | | | | *e*S | **Sn** | **05 40 51.3** | **-0.8** |
| **ZKR** | **Zakros** | **1.91** | **187** | *e*P | **Pn** | **05 40 29.1** | **+0.8** |
| **LAST** | **Lasithi** | **2.02** | **204** | *e*P | **Pn** | **05 40 30.8** | **+0.8** |
| **LAST** | **Lasithi** | **2.02** | **204** | *e*P | **Pn** | **05 40 30.8** | **+0.8** |
| **FETY** | **Fethiye** | **2.11** | **100** | *e*PN | **Pb** | **05 40 33.1** | **-1.1** |
| **FETY** | **Fethiye** | **2.11** | **100** | *e*Pn | **Pb** | **05 40 33.1** | **-1.1** |
| **AKHS** | **Akhisar** | **2.13** | **29** | *i* P | **Pg** | **05 40 36.7** | **-0.5** |
| **AKHS** | **Akhisar** | **2.13** | **29** | P | **Pg** | **05 40 36.7** | **-0.5** |
| AKHS | | | | S | **Sg** | **05 41 06.6** | **+1.7** |
| **AKS** | **Akhisar** | **2.13** | **29** | *e*PN | **Pb** | **05 40 33.4** | **-1.2** |
| **AKS** | **Akhisar** | **2.13** | **29** | *e*Pn | **Pb** | **05 40 33.4** | **-1.2** |
| **IDI** | **Anoyia** | **2.16** | **218** | *e*P | **Pn** | **05 40 33.3** | **+1.5** |
| **IDI** | **Anoyia** | **2.16** | **218** | *e*P | **Pn** | **05 40 33.3** | **+1.5** |
| **MANT** | **Manisa** | **2.20** | **47** | *i* S | **Sb** | **05 41 03.6** | **+0.5** |
| **MANT** | **Manisa** | **2.20** | **47** | P | **Pg** | **05 40 39.8** | **+1.3** |
| MANT | | | | S | **Sb** | **05 41 03.6** | **+0.5** |
| **PRK** | **Paraskevi** | **2.24** | **355** | *e*P | **Pn** | **05 40 31.4** | **-1.4** |
| **KULA** | **Kula-Manisa** | **2.28** | **48** | *e*PN | **Pn** | **05 40 35.5** | **+2.1** |
| **KULA** | **Kula-Manisa** | **2.28** | **48** | *e*Pn | **Pn** | **05 40 35.5** | **+2.1** |
| **VLY** | **Voula,

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| NEM2 | | | | *e*S | **Sn** | 05 41 07.8 | **-1.4** |
| **JRA** | **Rausu** | **2.50** | **263** | P | **Pn** | 05 40 48.4 | **+2.0** |
| JRA | | | | *e*S | **Sn** | 05 41 16.5 | **+1.0** |
| **JNK** | **Nakash** | **2.86** | **257** | P | **Pn** | 05 40 53.0 | **+1.6** |
| **JAK** | **Akkeshi** | **3.09** | **246** | P | **Pn** | 05 40 55.8 | **+1.3** |
| JAK | | | | *e*S | **Sn** | 05 41 28.7 | **-1.5** |
| **JAR** | **Ashorobuto** | **3.60** | **255** | P | **Pn** | 05 41 04.2 | **+2.6** |
| JAR | | | | *e*S | **Sn** | 05 41 44.0 | **+1.1** |
| **JCH** | **Churui** | **4.14** | **248** | *e*S | **Sn** | 05 41 55.8 | **-0.3** |
| **JKK2** | **Kamakawa 2** | **4.20** | **266** | P | Pn | 05 41 14.2 | +4.4 |
| **JSE** | **Soyaes** | **4.31** | **281** | P | **Pn** | 05 41 12.7 | **+1.5** |
| **JNBK** | **Urakawa-nobuka** | **4.69** | **246** | P | **Pn** | 05 41 18.4 | **+1.8** |
| **YSS** | **Yuzh-Sakhalins** | **4.85** | **305** | *e*P | **Pn** | 05 41 19.6 | **+0.9** |
| YSS | | | | AMB | AMB | 05 41 20.0 | |
| | 16nm,0.2s | | | | | | |
| YSS | | | | *e*S | **Sn** | 05 42 11.2 | **-2.3** |
| YSS | | | | A | A | 05 42 12.2 | |
| | 29nm,0.3s | | | | | | |
| **JKB** | **Kayabe** | **6.01** | **249** | P | **Pn** | 05 41 36.9 | **+2.2** |
| JKB | | | | *e*S | **Sn** | 05 42 40.3 | **-1.9** |
| **JOT** | **Ohata** | **6.24** | **245** | P | **Pn** | 05 41 39.3 | **+1.5** |
| **JANG** | **Nango** | **6.53** | **235** | P | **Pn** | 05 41 42.8 | **+1.0** |
| JANG | | | | *e*S | **Sn** | 05 42 49.7 | **-5.3** |

*GUC* ***23*** *05:45:08.4±0.4, 29.°64S×71.°15W, h39*km*±4*km*, ML3.7*

**ISC 23 05:45:08.2±1.7, 29.°65S±0.°03×71.°13W±0.°05, h1**km**±13**km**, n20, σ1§48/34, 1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LSCH** | **La Serena** | **0.28** | **201** | *e*P | | **Pb** | **05 45 16.1** | **0.0** |
| LSCH | | | | *e*S | | **Sb** | **05 45 22.2** | **+1.0** |
| **TLL** | **Tololo Astrono** | **0.59** | **151** | *e*P | | **Pb** | **05 45 21.2** | **-0.4** |
| TLL | | | | *e*S | | **Sb** | **05 45 30.8** | **+0.3** |
| TLL | | | | AML | | AML | 05 45 31.6 | |
| | comp=E,7μm,0.6s | | | | | | | |
| **LCO** | **Las Campanas** | **0.73** | **31↓** | *e*P | | **Pg** | **05 45 23.2** | **+0.9** |
| LCO | | | | *e*S | | **Sb** | **05 45 34.3** | **-0.3** |
| **AGUA** | **GUANDACOL** | **2.31** | **87** | *e*P | | **Pb** | **05 45 48.9** | **-1.8** |
| AGUA | | | | *e*S | | **Sg** | **05 46 23.8** | **+1.5** |
| **CPCH** | **Copiapo** | **2.38** | **17** | *e*P | | **Pb** | **05 45 49.7** | **-2.2** |
| CPCH | | | | *e*S | | **Sn** | **05 46 18.5** | **+0.3** |
| **AMOG** | **MOGNA** | **2.62** | **120** | *e*P | | **Pb** | **05 45 53.6** | **-2.4** |
| AMOG | | | | *e*S | | **Sg** | **05 46 32.2** | **-0.3** |
| **RTLS** | **Leoncito** | **2.67** | **144** | *e*P | | **Pn** | **05 45 53.8** | **+1.3** |
| RTLS | | | | *e*S | | **Sg** | **05 46 33.0** | **-0.9** |
| **VCA** | **Vinchina** | **2.71** | **71** | *e*P | | **Pn** | **05 45 53.9** | **+0.8** |
| VCA | | | | IAML | | | 05 45 59.2 | |
| | comp=Z,164nm,0.4s | | | | | | | |
| VCA | | | | *e*S | | **Sb** | **05 46 32.4** | **+0.9** |
| **RTLL** | **Cerro Villicun** | **2.84** | **127** | *e*P | | **Pn** | **05 45 56.3** | **+1.5** |
| **SJA** | **San Juan** | **2.91** | **131** | *e*P | | **Pn** | **05 45 56.9** | **+1.3** |
| SJA | | | | IAML | | | 05 46 56.1 | |
| | comp=Z,89nm,0.8s | | | | | | | |
| **AUSP** | **Uspallata** | **2.98** | **150** | *e*P | | **Pn** | **05 45 57.5** | **+0.7** |
| AUSP | | | | *e*S | | **Sb** | **05 46 39.9** | **+0.7** |
| **RTCV** | **Cerro Valdivia** | **3.14** | **135** | *e*P | | **Pn** | **05 46 00.2** | **+1.3** |
| RTCV | | | | *e*S | | **Sb** | **05 46 44.3** | **+0.7** |
| **ROC1** | **El Roble** | **3.32** | **178** | *e*P | | **Pn** | **05 45 59.5** | **-2.0** |
| ROC1 | | | | *e*S | | **Sn** | **05 46 42.9** | **+1.1** |
| **AVFE** | **Valle Fertil** | **3.34** | **109** | *e*P | | **Pn** | **05 46 02.0** | **+0.4** |
| AVFE | | | | *e*S | | **Sb** | **05 46 50.2** | **+0.8** |
| AVFE | | | | IAML | | | 05 46 54.1 | |
| | comp=Z,49nm,0.3s | | | | | | | |
| **ASAL** | **Salagasta** | **3.54** | **147** | *e*P | | **Pn** | **05 46 05.4** | **+1.0** |
| **ARCO** | **CERRO ARCO** | **3.70** | **150** | *e*P | | **Pn** | **05 46 07.7** | **+1.1** |
| ARCO | | | | *e*S | | **Sb** | **05 46 56.9** | **-3.0** |
| ARCO | | | | IAML | | | 05 47 03.9 | |
| | comp=Z,97nm,0.6s | | | | | | | |
| **AAGR** | **Agrelo** | **3.96** | **151** | *e*P | | **Pn** | **05 46 11.2** | **+1.1** |
| AAGR | | | | *e*S | | **Sb** | **05 47 03.4** | **-3.7** |
| **ACAN** | **Cantantal** | **4.28** | **129** | *e*P | | **Pn** | **05 46 16.3** | **+1.7** |
| **CYA** | **Choya** | **4.82** | **77** | *e*P | | **Pn** | **05 46 22.8** | **+0.8** |
| CYA | | | | IAML | | | 05 46 25.7 | |
| | comp=Z,14nm,0.4s | | | | | | | |
| **TCA** | **Tanti** | **5.89** | **108** | *e*P | | **Pn** | **05 46 36.1** | **-0.6** |

*DDA* ***23*** *05:49:07.8, 36.°44N×35.°73E, h7*km*, Md3.4*
*ISCJB* ***23*** *05:49:08.7±0.5, 36.°41N±0.°02×35.°75E±0.°03, h9*km*±3*km*, Error ellipse: s-maj=3.8km s-min=2.8km az=151.4*
*CSEM* ***23*** *05:49:08.8±0.2, 36.°43N×35.°76E, h10*km*, MD3.0, Error ellipse: s-maj=5.1km s-min=3.2km az=56.0*
*ISK* ***23*** *05:49:08.1, 36.°47N×35.°80E, h3*km*, MD3.0*
*NSSC* ***23*** *05:49:11.1±1.0, 36.°33N×35.°83E, h15*km*±3*km*, ML2.8*

**ISC 23 05:49:08.2±0.9, 36.°42N±0.°02×35.°73E±0.°02, h14**km**±8**km**, n67, σ0§87/114, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KRTS** | **Karatas** | **0.33** | **299** | *e*PG | | **Pb** | **05 49 15.9** | **+0.2** |
| KRTS | | | | *e*SG | | **Sb** | **05 49 21.6** | **+0.8** |
| **KRTS** | **Karatas** | **0.33** | **299** | *e*Pg | | **Pb** | **05 49 15.9** | **+0.2** |
| KRTS | | | | *e*Sg | | **Sb** | **05 49 21.6** | **+0.8** |
| **TAHT** | **Tahtakopru-Hat** | **0.37** | **96** | *e*PG | | **Pg** | **05 49 15.4** | **-0.3** |
| TAHT | | | | *e*SG | | **Sg** | **05 49 20.7** | **-0.1** |
| **TAHT** | **Tahtakopru-Hat** | **0.37** | **96** | *e*Pg | | **Pg** | **05 49 15.4** | **-0.3** |
| TAHT | | | | *e*Sg | | **Sg** | **05 49 20.7** | **-0.1** |
| **YAYL** | **Yayladag** | **0.49** | **141** | *i* P | | **Pg** | **05 49 18.1** | **+0.2** |
| YAYL | | | | *i* S | | **Sb** | **05 49 25.8** | **+0.2** |
| **YAYL** | **Yayladag** | **0.49** | **141** | P | | **Pg** | **05 49 18.1** | **+0.2** |
| YAYL | | | | S | | **Sb** | **05 49 25.8** | **+0.2** |
| **ARNB** | **Al Arnab** | **0.59** | **160** | *e*P | | **Pb** | **05 49 21.3** | **+1.0** |
| ARNB | | | | *e*S | | **Sb** | **05 49 28.9** | **+0.5** |
| ARNB | | | | AML | AML | | 05 49 30.6 | |
| | comp=N,530nm,0.3s | | | | | | | |
| ARNB | | | | AML | AML | | 05 49 31.5 | |
| | comp=E,220nm,0.8s | | | | | | | |
| **ARNB** | **Al Arnab** | **0.59** | **160** | *e*P | | **Pb** | **05 49 20.7** | **+0.4** |
| ARNB | | | | *e*S | | **Sg** | **05 49 27.6** | **0.0** |
| ARNB | | | | AML | AML | | 05 49 30.6 | |
| | comp=N,530nm,0.3s | | | | | | | |
| ARNB | | | | AML | AML | | 05 49 31.6 | |
| | comp=E,220nm,0.8s | | | | | | | |
| **ARNB** | **Al Arnab** | **0.59** | **160** | *e*P | | **Pb** | **05 49 20.7** | **+0.4** |
| ARNB | | | | *e*S | | **Sg** | **05 49 27.6** | **0.0** |
| | comp=E,220nm,0.8s | | | | | | | |
| **CEYT** | **Ceyhan** | **0.59** | **2** | *e*PG | | **Pg** | **05 49 19.3** | **-0.5** |
| **CEYT** | **Ceyhan** | **0.59** | **2** | *e*Pg | | **Pg** | **05 49 19.3** | **-0.5** |
| **BTCH** | **Batrach** | **0.70** | **122** | *e*P | | **Pb** | **05 49 22.4** | **+0.2** |
| BTCH | | | | *e*S | | **Sb** | **05 49 32.2** | **+0.5** |
| BTCH | | | | AML | AML | | 05 49 33.7 | |
| | comp=N,952nm,0.4s | | | | | | | |
| BTCH | | | | AML | AML | | 05 49 34.4 | |
| | comp=E,773nm,0.3s | | | | | | | |
| **BTCH** | **Batrach** | **0.70** | **122** | *e*P | | **Pb** | **05 49 22.5** | **+0.3** |
| BTCH | | | | *e*S | | **Sg** | **05 49 31.6** | **+0.4** |
| **BTCH** | **Batrach** | **0.70** | **122** | *e*P | | **Pb** | **05 49 22.5** | **+0.3** |
| BTCH | | | | *e*S | | **Sg** | **05 49 31.5** | **+0.4** |
| **SLNF** | **Slenfeh** | **0.91** | **154** | *e*P | | **Pg** | **05 49 26.4** | **+0.6** |
| SLNF | | | | *e*S | | **Sb** | **05 49 38.8** | **+1.0** |
| SLNF | | | | AML | AML | | 05 49 40.6 | |
| | comp=N,370nm,0.2s | | | | | | | |
| SLNF | | | | AML | AML | | 05 49 45.1 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **SLNF** | **Slenfeh** | **0.91** | **154** | *e*P | | **Pg** | **05 49 26.3** | **+0.5** |
| SLNF | | | | *e*S | | **Sg** | **05 49 37.5** | **-0.3** |
| SLNF | | | | AML | AML | | 05 49 40.6 | |
| | comp=N,371nm,0.2s | | | | | | | |
| SLNF | | | | AML | AML | | 05 49 45.1 | |
| | comp=E,2μm,0.2s | | | | | | | |
| **SLNF** | **Slenfeh** | **0.91** | **154** | *e*P | | **Pg** | **05 49 26.3** | **+0.5** |
| SLNF | | | | *e*S | | **Sg** | **05 49 37.5** | **-0.3** |
| | comp=E,2μm,0.2s | | | | | | | |
| **KARA** | **Karaisali** | **1.00** | **328** | *e*PG | | **Pb** | **05 49 27.2** | **-0.1** |
| **KARA** | **Karaisali** | **1.00** | **328** | *e*Pg | | **Pb** | **05 49 27.2** | **-0.1** |
| **WRDH** | **Warideh** | **1.06** | **148** | *e*P | | **Pg** | **05 49 28.9** | **+0.1** |
| WRDH | | | | *e*S | | **Sg** | **05 49 43.0** | **+0.4** |
| WRDH | | | | AML | AML | | 05 49 44.9 | |
| | comp=Z,684nm,0.4s | | | | | | | |
| WRDH | | | | AML | AML | | 05 49 45.6 | |
| | comp=N,272nm,0.2s | | | | | | | |
| **WRDH** | **Warideh** | **1.06** | **148** | *e*P | | **Pg** | **05 49 28.8** | **+0.2** |
| WRDH | | | | *e*S | | **Sb** | **05 49 41.2** | **-0.9** |
| WRDH | | | | AML | AML | | 05 49 45.0 | |
| | comp=Z,683nm,0.4s | | | | | | | |
| WRDH | | | | AML | AML | | 05 49 45.6 | |
| | comp=N,272nm,0.2s | | | | | | | |
| **WRDH** | **Warideh** | **1.06** | **148** | *e*P | | **Pg** | **05 49 28.8** | **+0.1** |
| WRDH | | | | *e*S | | **Sb** | **05 49 41.2** | **-0.9** |
| | comp=N,272nm,0.2s | | | | | | | |
| **KAMA** | **Osmaniye** | **1.08** | **44** | P | | **Pb** | **05 49 27.7** | **-0.9** |
| KAMA | | | | S | | **Sb** | **05 49 42.4** | **-0.2** |
| **KUZU** | **Kuzuini** | **1.14** | **71** | *i* P | | **Pb** | **05 49 29.5** | **-0.2** |
| KUZU | | | | *i* S | | **Sn** | **05 49 45.4** | **+0.2** |
| **KUZU** | **Kuzuini** | **1.14** | **71** | P | | **Pb** | **05 49 29.5** | **-0.2** |
| KUZU | | | | S | | **Sn** | **05 49 45.4** | **+0.2** |
| **GULE** | **Gulek** | **1.16** | **319** | *i* P | | **Pn** | **05 49 29.4** | **-0.6** |
| GULE | | | | *i* S | | **Sn** | **05 49 46.6** | **+0.9** |
| **GULE** | **Gulek** | **1.16** | **319** | P | | **Pn** | **05 49 29.4** | **-0.6** |
| GULE | | | | S | | **Sn** | **05 49 46.6** | **+0.9** |
| **ANDN** | **Andirin** | **1.26** | **23** | *i* P | | **Pn** | **05 49 31.6** | **+0.1** |
| ANDN | | | | *i* S | | **Sg** | **05 49 49.0** | **0.0** |
| **ANDN** | **Andirin** | **1.26** | **23** | P | | **Pn** | **05 49 31.6** | **+0.1** |
| ANDN | | | | S | | **Sg** | **05 49 49.0** | **0.0** |
| **KIZK** | **Mersin** | **1.28** | **273** | *i* P | | **Pn** | **05 49 31.6** | **+0.1** |
| KIZK | | | | *i* S | | **Sg** | **05 49 49.9** | **+0.5** |
| **KIZK** | **Mersin** | **1.28** | **273** | P | | **Pn** | **05 49 31.6** | **+0.1** |
| KIZK | | | | S | | **Sg** | **05 49 49.9** | **+0.5** |
| **AYKD** | **Aykdinkavak** | **1.32** | **41** | P | | **Pn** | **05 49 32.3** | **+0.1** |
| AYKD | | | | S | | **Sn** | **05 49 49.7** | **+0.1** |
| **KMRS** | **Kahramanmaras** | **1.44** | **40** | *e*PN | | **Pb** | **05 49 34.7** | **0.0** |
| **KMRS** | **Kahramanmaras** | **1.44** | **40** | *e*Pn | | **Pb** | **05 49 34.7** | **0.0** |
| **BIDA** | **Albida** | **1.48** | **161** | *e*P | | **Pn** | **05 49 34.4** | **0.0** |
| BIDA | | | | *e*S | | **Sb** | **05 49 54.3** | **+0.2** |
| BIDA | | | | AML | AML | | 05 49 55.9 | |
| | comp=N,505nm,0.3s | | | | | | | |
| BIDA | | | | AML | AML | | 05 49 56.0 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **BIDA** | **Albida** | **1.48** | **161** | *e*P | | **Pn** | **05 49 34.3** | **-0.2** |
| BIDA | | | | *e*S | | **Sn** | **05 49 51.7** | **-1.9** |
| BIDA | | | | AML | AML | | 05 49 55.9 | |
| | comp=N,505nm,0.3s | | | | | | | |
| BIDA | | | | AML | AML | | 05 49 56.0 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **BIDA** | **Albida** | **1.48** | **161** | *e*P | | **Pn** | **05 49 34.3** | **-0.1** |
| BIDA | | | | *e*S | | **Sn** | **05 49 51.7** | **-1.9** |
| | comp=E,1μm,0.4s | | | | | | | |
| **KFRA** | **Kufra** | **1.48** | **144** | *e*P | | **Pb** | **05 49 35.7** | **+0.2** |
| KFRA | | | | *e*S | | **Sb** | **05 49 55.2** | **+1.0** |
| **KFRA** | **Kufra** | **1.48** | **144** | *e*P | | **Pb** | **05 49 35.2** | **-0.3** |
| KFRA | | | | *e*S | | **Sn** | **05 49 52.2** | **-1.4** |
| KFRA | | | | AML | AML | | 05 49 59.9 | |
| | comp=N,946nm,0.2s | | | | | | | |
| **KFRA** | **Kufra** | **1.48** | **144** | *e*P | | **Pb** | **05 49 35.2** | **-0.3** |
| KFRA | | | | *e*S | | **Sn** | **05 49 52.2** | **-1.4** |
| | comp=N,946nm,0.2s | | | | | | | |
| **GZT** | **Gaziantep** | **1.75** | **57** | P | | **Pb** | **05 49 40.8** | **+0.7** |
| GZT | | | | S | | **Sg** | **05 50 03.9** | **-0.5** |
| **NIG** | **Nigde** | **1.91** | **333** | *e*PN | | **Pn** | **05 49 42.2** | **+1.7** |
| **NIG** | **Nigde** | **1.91** | **333** | *e*Pn | | **Pn** | **05 49 42.2** | **+1.7** |
| **HAWK** | **Haweek** | **1.97** | **163** | *e*P | | **Pb** | **05 49 43.4** | **-0.5** |
| HAWK | | | | *e*S | | **Sb** | **05 50 08.1** | **-0.1** |
| HAWK | | | | AML | AML | | 05 50 12.3 | |
| | comp=E,67nm,0.3s | | | | | | | |
| HAWK | | | | AML | AML | | 05 50 13.3 | |
| | comp=N,122nm,0.9s | | | | | | | |
| **HAWK** | **Haweek** | **1.97** | **163** | *e*P | | **Pb** | **05 49 43.3** | **-0.6** |
| HAWK | | | | *e*S | | **Sn** | **05 50 05.5** | **-0.1** |
| HAWK | | | | AML | AML | | 05 50 12.3 | |
| | comp=E,67nm,0.3s | | | | | | | |
| HAWK | | | | AML | AML | | 05 50 13.3 | |
| | comp=N,122nm,0.9s | | | | | | | |
| **HAWK** | **Haweek** | **1.97** | **163** | *e*P | | **Pb** | **05 49 43.3** | **-0.5** |
| HAWK | | | | *e*S | | **Sn** | **05 50 05.6** | **-0.1** |
| | comp=N,122nm,0.9s | | | | | | | |
| **SARI** | **SarD1z-Kayseri** | **2.06** | **15** | *e*PN | | **Pn** | **05 49 43.8** | **+1.3** |
| **HWQ** | **Hawqa** | **2.14** | **175** | *e*P | | **Pb** | **05 49 46.0** | **-0.8** |
| **HWQ** | **Hawqa** | **2.14** | **175** | *e*P | | **Pb** | **05 49 46.0** | **-0.8** |
| **FKH** | **Fakeheh** | **2.24** | **165** | *e*P | | **Pb** | **05 49 48.4** | **0.0** |
| **FKH** | **Fakeheh** | **2.24** | **165** | *e*P | | **Pb** | **05 49 48.4** | **0.0** |
| **ATAB** | **Bozova** | **2.31** | **62** | *i* P | | **Pg** | **05 49 51.2** | **-1.3** |
| **ATAB** | **Bozova** | **2.31** | **62** | P | | **Pg** | **05 49 51.2** | **-1.3** |
| ATAB | | | | S | | **Sg** | **05 50 22.5** | **+0.1** |
| **RABH** | **Abou Rabah** | **2.31** | **148** | *e*P | | **Pn** | **05 49 47.8** | **+1.9** |
| RABH | | | | *e*S | | **Sn** | **05 50 13.1** | **-1.1** |
| RABH | | | | AML | AML | | 05 50 29.0 | |
| | comp=N,35nm,0.8s | | | | | | | |
| RABH | | | | AML | AML | | 05 50 29.7 | |
| | comp=E,45nm,0.5s | | | | | | | |
| **RABH** | **Abou Rabah** | **2.31** | **148** | *e*P | | **Pn** | **05 49 47.8** | **+1.9** |
| RABH | | | | *e*S | | **Sn** | **05 50 13.1** | **-1.1** |
| | comp=E,45nm,0.5s | | | | | | | |
| **AKCD** | **Akcadag** | **2.56** | **42** | P | | **Pg** | **05 49 56.9** | **-0.4** |
| AKCD | | | | S | | **Sb** | **05 50 27.1** | **+1.7** |
| **DARE** | **Darende-Malaty** | **2.56** | **32** | *e*PN | | **Pn** | **05 49 50.9** | **+1.5** |
| **DARE** | **Darende-Malaty** | **2.56** | **32** | *e*Pn | | **Pn** | **05 49 50.9** | **+1.5** |
| **ROOS** | **tl_alroos** | **2.58** | **150** | *e*P | | **Pn** | **05 49 51.0** | **+1.5** |
| ROOS | | | | *e*S | | **Sn** | **05 50 20.1** | **-0.6** |
| ROOS | | | | AML | AML | | 05 50 39.6 | |
| | comp=N,116nm,1.0s | | | | | | | |
| ROOS | | | | AML | AML | | 05 50 48.0 | |
| | comp=E,52nm,0.5s | | | | | | | |
| **ROOS** | **tl_alroos** | **2.58** | **150** | *e*P | | **Pn** | **05 49 51.0** | **+1.5** |
| ROOS | | | | *e*S | | **Sn** | **05 50 20.1** | **-0.6** |
| | comp=E,52nm,0.5s | | | | | | | |
| **HDMB** | **Hadim** | **2.66** | **283** | *e*PN | | **Pb** | **05 49 54.0** | **-1.8** |
| **HDMB** | **Hadim** | **2.66** | **283** | *e*Pn | | **Pb** | **05 49 54.0** | **-1.7** |
| **KSRV** | **Kasrt alli** | **2.71** | **101** | *e*P | | **Pb** | **05 49 56.7** | **+0.4** |
| KSRV | | | | *e*S | | **Sb** | **05 50 29.0** | **-0.4** |
| KSRV | | | | AML | AML | | 05 50 35.9 | |
| | comp=Z,50nm,0.3s | | | | | | | |
| **KSRV** | **Kasrt alli** | **2.71** | **101** | *e*P | | **Pb** | **05 49 55.5** | **-0.8** |
| KSRV | | | | *e*S | | **Sb** | **05 50 27.5** | **-1.9** |
| KSRV | | | | AML | AML | | 05 50 35.9 | |
| | comp=Z,50nm,0.3s | | | | | | | |
| **KSRV** | **Kasrt alli** | **2.71** | **101** | *e*P | | **Pb** | **05 49 55.5** | **-0.9** |
| KSRV | | | | *e*S | | **Sb** | **05 50 27.5** | **-1.9** |
| | comp=Z,50nm,0.3s | | | | | | | |
| **MALT** | **Malatya** | **2.87** | **48** | *e*PN | | **Pn** | **05 49 55.4** | **+1.9** |
| **MALT** | **Malatya** | **2.87** | **48** | *e*Pn | | **Pn** | **05 49 55.4** | **+1.9** |

**IDC 23 05:55:10.7±5.7, 24.°91S×69.°69W, h46**km**±43**km**, mb3.8/2, mb1 3.9/5, mb1mx3.5/25, mbtmp4.0/5, ML3.8/2, Error ellipse: s-maj=46.6km s-min=40.8km az=65.0, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LVC** | **Limon Verde** | **2.39** | **18** | P | | Pn | 05 55 48.3 | +0.6 |
| | 1μm,0.3s,baz=194,slow=6.7,SNR=258 | | | | | | | |
| LVC | | | | S | | Sn | 05 56 16.7 | +0.6 |
| | 12μm,0.3s,baz=36,slow=21,SNR=35 | | | | | | | |
| **LPAZ** | **La Paz** | **8.70** | **10** | P | | Pn | 05 57 13.1 | -1.7 |
| | 0.3nm,0.3s,baz=218,slow=6.1,SNR=13 | | | | | | | |
| **SIV** | **San Ignacio** | **11.99** | **44** | P | | Pn | 05 57 57.3 | -1.9 |
| | 0.9nm,0.3s,baz=261,slow=10,SNR=12 | | | | | | | |
| SIV | | | | S | | Sn | 06 00 07.7 | -4.0 |
| | 0.2nm,0.3s,baz=217,slow=13,SNR=2.1 | | | | | | | |
| **BDFB** | **Brasilia** | **22.30** | **70** | P | | P | 06 00 05.6 | +1.0 |
| | 2.0nm,0.6s,baz=252,slow=6.0,SNR=5.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **79.19** | **70** | P | | P | 06 07 11.6 | +0.3 |
| | 1.1nm,0.5s,baz=258,slow=5.0,SNR=27 | | | | | | | |
| TORD | | | | pP | | pP | 06 07 33.0 | +8.4 |
| | 1.3nm,0.6s,baz=247,slow=5.7,SNR=7.4 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **145.32** | **27** | PKPbc | | PKPbc | 06 14 41.5 | -1.4 |
| | 1.8nm,0.6s,baz=296,slow=4.4,SNR=6.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **148.77** | **38** | PKPbc | | PKPbc | 06 14 52.2 | -0.8 |
| | 0.2nm,0.3s,baz=297,slow=2.3,SNR=4.2 | | | | | | | |

*IDC* ***23*** *05:58:25.0±0.4, 37.°83S×73.°50W, h0*km*, mb5.3/17, mb1 5.3/21, mb1mx5.2/26, mbtmp5.3/21, ML4.5/3, MS5.1/16, Ms1 5.1/16, ms1mx5.0/22, Error ellipse: s-maj=18.1km s-min=11.7km az=93.0*

*GUC* ***23*** *05:58:26.4±0.4, 37.°79S×74.°09W, h46*km*±6*km*, ML5.8*

*NEIC* ***23*** *05:58:27.7±0.1, 37.°74S×73.°36W, h15*km*, mb5.7/159, MS5.1/297, MW5.5, ML5.8(GUC), Error ellipse: s-maj=5.6km s-min=3.5km az=71.0, Moment Tensor Solution. s51 Moment tensor: Scale 10*$^{17}$*Nm; Mrr1.16; Mθθ0.26; Mθφ-1.43; Mrθ-0.31; Mφφ-0.71; Mrφ-1.88; Best double couple: M*o*2.40000×10*$^{17}$ *NP1:ϕs190.00000°, δ72.00000°, λ81.00000°. NP2:ϕs37.00000°, δ20.00000°, λ116.00000°. Principal axes: T 2.1500, Plg62.0000°, Azm86.0000°; N 0.4700, Plg9.0000°, Azm192.0000°; P -2.6200, Plg27.0000°, Azm287.0000°;*

*NEIC Felt [V] at Arauco, Canete, Cobquecura, Concepcion, Contulmo, Curanilahue, Los Alamos, Parral and Santa Barbara; [IV] at Angol, Antuco, Bulnes, Cabrero, Cauquenes, Chiguayante, Chillan, Chillan Viejo, Coronel, La Laja, Lebu, Linares, Los Angeles, Lota, Mulchen, Ninhue, Pemuco, Penco, Quirihue, Renaico, San Carlos, San Fabian de Alico, San Rosendo, Santa Juana, Talcahuano, Temuco, Tirua, Tome, Yumbel and Yungay. Felt in much of central Chile as far as Talca and Valdivia.*

*GCMT* ***23*** *05:58:27.7±0.2, 37.°91S×73.°88W, h21*km*, MW5.5/90, Moment Tensor Solution. s78,c123; s90,c167; Duration: 1§4 Moment tensor: Scale 10*$^{17}$*Nm; Mrr1.08±.04; Mθθ0.12±.02; Mφφ-1.20±.03; Mrθ0.19±.05; Mθφ-0.31±.02; Mrφ-2.15±.11; Best double couple: M*o*2.46200×10*$^{17}$ *NP1:ϕs177.00000°, δ76.00000°, λ81.00000°. NP2:ϕs31.00000°, δ16.00000°, λ123.00000°. Principal axes: T 2.4190, Plg58.0000°, Azm75.0000°; N 0.0880, Plg9.0000°, Azm179.0000°; P -2.5040, Plg31.0000°, Azm274.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*MOS* ***23*** *05:58:28.9±1.0, 37.°71S×73.°50W, h29*km*, mb5.7/39, MS5.3/34 Error ellipse: s-maj=13.8km s-min=6.4km az=99.5*

*ISCJB* ***23*** *05:58:28.8±0.1, 37.°80S±0.°02×73.°41W±0.°04, h33*km*, mb5.6/190, MS5.2/410, Error ellipse: s-maj=4.1km s-min=2.7km az=177.8*

*BJI* ***23*** *05:58:29.8, 38.°30S×72.°43W, h30*km*, mB5.6/28, Ms5.6/34, Ms7 5.4/34*

**ISC 23 05:58:29.9±0.6, 37.°83S±0.°03×73.°49W±0.°05, h32**km**±3**km**, h31**km**:pP-P, n1257, σ1§20/1112, mb5.6/183, MS5.1/411, 38C-16D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CCHI** | **Chillan** | **1.67** | **43** | *e*P | | **Pn** | **05 58 57.7** | **+0.9** |
| CCHI | | | | *e*S | | **Sb** | **05 59 21.7** | **+1.2** |
| **COCH** | **Cobquecura** | **1.79** | **18** | *e*P | | **Pn** | **05 58 57.3** | **-1.2** |
| COCH | | | | *e*S | | **Sn** | **05 59 20.4** | **+0.3** |
| COCH | | | | AML | | AML | 05 59 33.9 | |
| | comp=E,121μm,0.7s | | | | | | | |
| **VLCH** | **Valdivia** | **1.98** | **175** | *e*P | | **Pn** | **05 58 59.4** | **-1.7** |
| VLCH | | | | *e*S | | **Sn** | **05 59 24.4** | **-0.4** |
| **LNCH** | **Linares** | **2.49** | **38** | *e*P | | **Pn** | **05 59 08.4** | **+0.2** |
| LNCH | | | | *e*S | | **Sb** | **05 59 41.0** | **-3.2** |
| **OSCH** | **Osorno** | **2.75** | **174** | *e*P | | **Pn** | **05 59 10.2** | **-1.6** |
| OSCH | | | | *e*S | | **Sn** | **05 59 43.0** | **-0.9** |
| **NICH** | **Los Niches** | **3.36** | **33** | *e*P | | **Pn** | **05 59 20.1** | **-0.1** |
| NICH | | | | *e*S | | **Sn** | **06 00 00.9** | **+1.9** |
| **CHPI** | **Pichilemu** | **3.64** | **20** | *e*P | | **Pn** | **05 59 22.8** | **-1.2** |
| CHPI | | | | *e*S | | **Sn** | **06 00 05.4** | **-0.4** |
| **PMCH** | **Puerto Montt** | **3.68** | **173** | *e*P | | **Pn** | **05 59 22.7** | **-1.8** |
| PMCH | | | | *e*S | | **Sn** | **06 00 05.6** | **-1.2** |
| **PLCA** | **Paso Flores** | **3.69** | **143** | *e*P | | **Pn** | **05 59 25.9** | **+1.2** |
| **PLCA** | **Paso Flores** | **3.69** | **143** | *e*P | | **Pn** | **05 59 25.8** | **+1.1** |
| PLCA | | | | *e*S | | **Sn** | **06 00 11.6** | **+4.5** |
| **PLCA** | **Paso Flores** | **3.69** | **143** | *e*Pn | | **Pn** | **05 59 25.9** | **+1.1** |
| **PUEL** | **Puelo Alto** | **3.94** | **167** | *e*P | | **Pn** | **05 59 26.7** | **-1.3** |
| **HOCH** | **HornopirØn** | **4.15** | **169** | *e*S | | **Sn** | **06 00 17.7** | **-0.8** |
| **SAN** | **Santiago** | **4.94** | **29** | *e*P | | **Pn** | **05 59 41.2** | **-0.7** |
| SAN | | | | *e*S | | **Sn** | **06 00 37.7** | **-0.2** |
| **PEL** | **Peldehue** | **5.21** | **27** | *e*P | | **Pn** | **05 59 44.8** | **-0.9** |
| PEL | | | | *e*S | | **Sn** | **06 00 44.4** | **-0.2** |
| **CFAA** | **Coronel Fontan** | **7.57** | **36** | Pn | | **Pn** | **06 00 16.6** | **-1.4** |
| | comp=E,6.5nm,0.3s,baz=210,slow=14,SNR=82 | | | | | | | |
| CFAA | | | | Sn | | **Sn** | **06 01 44.5** | **+1.8** |
| | comp=E,3.6nm,0.3s,baz=222,slow=16,SNR=3.7 | | | | | | | |
| CFAA | | | | LR | | LR | 06 03 31.3 | |
| | comp=E,3μm,18.6s,baz=226,slow=40 | | | | | | | |
| **TRQA** | **Tornquist** | **9.10** | **95** | *e*Pn | | **Pn** | **06 00 41.1** | **+2.2** |
| **LCO** | **Las Campanas** | **9.10** | **16** | *e*Pn | | **Pn** | **06 00 36.9** | **-2.4** |
| **LPA** | **La Plata** | **12.87** | **82** | *ce*P | | **Pn** | **06 01 32.0** | **+1.4** |
| LPA | | | | SSS | | SSS | 06 04 16.0 | |
| LPA | | | | SCS | | **ScS** | **06 14 11.0** | **-0.3** |
| **LVC** | **Limon Verde** | **15.67** | **16** | Pn | | **Pn** | **06 02 07.3** | **-1.3** |
| | comp=E,76nm,0.3s,baz=199,slow=8.1,SNR=12 | | | | | | | |
| LVC | | | | Sn | | **S** | **06 05 21.9** | **+6.1** |
| | comp=E,21nm,0.3s,baz=177,slow=18,SNR=2.7 | | | | | | | |
| LVC | | | | LR | | LR | 06 07 52.5 | |
| | comp=E,17μm,20.1s,baz=216,slow=36 | | | | | | | |
| **LVC** | **Limon Verde** | **15.67** | **16** | *e*Pn | | **Pn** | **06 02 04.9** | **-3.7** |
| | comp=E,84nm,0.8s | | | | | | | |
| LVC | | | | Sn | | **S** | **06 05 21.9** | **+6.1** |
| **USHA** | **Ushuaia** | **17.35** | **170** | P | | **P** | **06 02 30.5** | **0.0** |
| | comp=E,1.9nm,0.3s,baz=327,slow=9.7,SNR=20 | | | | | | | |
| USHA | | | | LR | | LR | 06 09 54.0 | |
| | comp=E,6μm,18.2s,baz=327,slow=

VNA3 **Neumayer Olymp** 46.29 156 P P 06 06 53.0 +1.0
SDV **Santo Domingo** 46.55 4 eP P 06 06 53.9 -1.0
comp=Z,57nm,0.8s
SDV LR LR
comp=Z,3µm,18.8s
VNA1 **Neumayer--Stat** 46.65 155 P P 06 06 56.1 +1.3
RCBR **Riachuelo** 46.70 56 P P 06 06 57.1 +1.2
comp=Z,62nm,0.9s,baz=205,slow=8.6,SNR=22
RCBR **Riachuelo** 46.70 56 eP P 06 06 57.1 +1.2
comp=Z,236nm,1.3s
RCBR LR LR
comp=Z,10µm,20.3s
VNA2 **Neumayer--Watz** 46.97 156 P P 06 06 58.3 +1.0
baz=286,slow=8.5
BCIP **Isla Barro Col** 47.13 351 eP P 06 06 59.5 +0.4
BCIP LR LR
comp=Z,1µm,20.5s
TRIS **Tristan da Cun** 47.78 109 eP P 06 07 06.2 +2.1
comp=Z,265nm,0.9s
SNAA **Sanae** 48.52 157 P P 06 07 09.8 +0.4
SNAA **Sanae** 48.52 157 P P 06 07 10.1 +0.8
comp=Z,40nm,0.8s,baz=278,slow=6.9,SNR=362
SNAA **Sanae** 48.52 157 eP P 06 07 09.8 +0.4
SNAA pmax pmax
comp=Z,110nm,1.2s
SNAA **Sanae** 48.52 157 eP P 06 07 09.8 +0.4
comp=Z,114nm,1.2s
SNAA LR LR
comp=Z,600nm,18.0s
JTS **JuntasAbangare** 49.06 345‖ eP P 06 07 14.2 +0.1
JTS pmax pmax
comp=Z,56nm,1.1s
JTS MLR MLR
comp=Z,2µm,15.0s
JTS **JuntasAbangare** 49.06 345 P P 06 07 15.0 +0.9
comp=Z,302nm,1.1s,SNR=5.3
JTS **JuntasAbangare** 49.06 345 eP P 06 07 14.5 +0.4
comp=Z,68nm,1.0s
JTS LR LR
comp=Z,700nm,21.1s
PTCN **Pitcairn Islan** 49.26 268 PFAKE 06 07 30.0 +14
PTCN LR LR
comp=Z,3µm,20.0s
GRGR **Grenville** 50.92 15 eP P 06 07 27.4 -0.8
comp=Z,558nm,0.8s
BBGH **Gun Hill** 52.37 17 PFAKE 06 07 50.0 +11
BBGH LR LR
comp=Z,2µm,20.5s
QSPA **South Pole Qui** 52.41 180 eP P 06 07 39.5 +0.5
comp=Z,55nm,0.9s
QSPA LR LR
comp=Z,800nm,20.3s
TGUH **Tegucigalpa,Un** 53.21 343 eP P 06 07 45.6 +0.4
comp=Z,78nm,0.9s
TGUH LR LR
comp=Z,500nm,19.0s
NVL **N'lazarevskaya** 53.30 156‖ iP P 06 07 37.9 -7.3
NVL e*PP pP 06 07 44.8 -10
NVL e 06 09 43.4
NVL ePPP PPP 06 10 51.5
NVL iS S 06 15 09.7 -4.5
NVL pmax pmax
comp=Z,106nm,1.0s
FDF **Fort de France** 53.56 15 eP P 06 07 46.8 -1.0
FDF pmax pmax
comp=Z,67nm,0.8s
FDF MLR MLR
comp=Z,3µm,20.0s
FDF **Fort de France** 53.56 15 eP P 06 07 46.8 -1.0
comp=Z,67nm,0.8s
FDF LR LR
comp=Z,3µm,20.0s
RKT **Rikitea** 54.09 267 eS S 06 15 26.8 +0.5
comp=Z,1µm,24.8s
RKT eLR LR 06 23 35.6
comp=Z,5µm,25.2s
RKT **Rikitea** 54.09 267 eT T 07 05 39.4
comp=Z,5.5nm,0.2s
CRPR **Cabo Rojo, PR** 55.86 7 eP P 06 08 03.0 -1.4
comp=Z,114nm,0.8s
CRPR LR LR
comp=Z,1µm,20.9s
MTDJ **Mount Denham** 55.89 355 eP P 06 08 04.5 -0.2
comp=Z,431nm,2.1s
MTDJ LR LR
comp=Z,700nm,19.6s
SEUS **St. Eustatius** 55.91 12 eP P 06 08 04.0 -0.7
comp=Z,177nm,0.8s
SEUS LR LR
comp=Z,2µm,20.4s
OBIP **Obispado Ponce** 55.95 8 eP P 06 08 03.6 -1.4
comp=Z,100nm,1.0s
OBIP LR LR
comp=Z,300nm,19.9s
CELP **Cerrillos** 55.99 8 eP P 06 08 04.3 -0.9
SABA **Saba** 55.99 12 eP P 06 08 04.8 -0.5
comp=Z,104nm,0.9s
SABA LR LR
comp=Z,1µm,20.5s
BANI **BANI** 56.00 4 eP P 06 08 05.1 -0.4
CPD **Cerro la Pandu** 56.03 9 eP P 06 08 03.8 -1.8
CPD pmax pmax
comp=Z,110nm,0.9s
CPD **Cerro la Pandu** 56.03 9 eP P 06 08 03.8 -1.8
comp=Z,112nm,0.9s
CPD LR LR
comp=Z,3µm,21.6s
LSP **Las Mesas** 56.03 7 eP P 06 08 04.3 -1.4
MPR **Mayaguez** 56.06 7 eP P 06 08 06.8 +1.0
comp=Z,24nm,0.8s
MPR LR LR
comp=Z,600nm,21.9s
SJG **San Juan** 56.07 8 eP P 06 08 03.5 -2.4
SJG pmax pmax
comp=Z,59nm,0.9s
SJG MLR MLR
comp=Z,900nm,19.6s
SJG **San Juan** 56.07 8 eP P 06 08 03.5 -2.4
comp=Z,59nm,0.9s
SJG LR LR
comp=Z,900nm,19.6s
SDD **Santo Domingo** 56.09 4 eP P 06 08 05.6 -0.4
comp=Z,264nm,0.8s
HUMP **Col San Antoni** 56.14 9 eP P 06 08 04.6 -1.7
comp=Z,52nm,1.3s
HUMP LR LR
comp=Z,900nm,18.3s
LRS **Lares** 56.17 8 eP P 06 08 04.5 -2.1
AOPR **Arecibo Observ** 56.24 8 eP P 06 08 04.9 -2.2
AOPR LR LR
comp=Z,2µm,19.1s
AGP **Aguadilla** 56.26 7 PFAKE 06 08 20.0 +13
AGP LR LR
comp=Z,1µm,19.8s
ANWB **Willy Bob** 56.29 13 eP P 06 08 05.5 -1.9
comp=Z,155nm,0.7s
ANWB LR LR
comp=Z,1µm,20.0s
SMRT **St. Maarten** 56.44 12 PFAKE 06 08 20.0 +11
SMRT LR LR
comp=Z,2µm,20.0s
STVI **Saint Thomas** 56.46 10 PFAKE 06 08 20.0 +11
STVI LR LR
comp=Z,1µm,20.3s
SDDR **Presa de Saban** 56.55 2 eP P 06 08 08.4 -0.9
comp=Z,55nm,1.1s
SDDR LR LR
comp=Z,900nm,19.0s
SMN1 **Samana, DR** 56.85 5 eP P 06 08 09.5 -2.0
GTBY **Guantanamo Bay** 57.47 358 eP P 06 08 15.6 -0.2
comp=Z,113nm,0.8s
GTBY LR LR
comp=Z,600nm,19.5s
CMIG **Matias Romero** 58.22 336 P P 06 08 21.1 0.0
comp=Z,8.2nm,0.9s,baz=129,slow=5.0,SNR=11
GRTK **Grand Turk** 59.07 3 eP P 06 08 26.6 -0.3
comp=Z,118nm,0.9s
GRTK LR LR
comp=Z,800nm,19.7s
SBA **Scott Base** 59.09 192 eP P 06 08 27.7 +1.2
SBA pmax pmax
comp=Z,42nm,1.2s
SBA **Scott Base** 59.09 192 eP P 06 08 27.7 +1.2
comp=Z,42nm,1.2s
SBA LR LR
comp=Z,900nm,20.0s
TEIG **Tepich** 59.40 344 PFAKE 06 08 40.0 +11
TEIG LR LR
comp=Z,3µm,22.0s
VNDA **Vanda** 60.12 192 P P 06 08 34.9 +1.3
comp=Z,4.9nm,0.8s,baz=140,slow=4.8,SNR=30
VNDA LR LR 06 31 33.8
comp=Z,838nm,18.4s,baz=127,slow=33
VNDA PKP2bc 06 38 05.1
comp=Z,2.7nm,1.0s,baz=274,slow=3.4,SNR=7.7
VNDA **Vanda** 60.12 192 eP P 06 08 35.0 +1.4
ASCN **Ascension** 60.91 77 PFAKE 06 08 50.0 +10
ASCN LR LR
comp=Z,2µm,20.0s
SYO **Syowa Base** 62.75 158‖ eP P 06 08 49.8 -1.6
TBI **Tubuai** 65.35 259 eS S 06 17 53.9 +2.6
comp=Z,2µm,28.2s
TBI eLQ LQ 06 26 01.9
comp=Z,666nm,27.8s
TBI eLR LR 06 28 46.9
comp=Z,4µm,25.0s,baz=127
TBI **Tubuai** 65.35 259 eT T 07 19 39.4
comp=Z,4.5nm,0.2s
DWPF **Disney** 66.02 352 PFAKE 06 09 30.0 +17
DWPF LR LR
comp=Z,3µm,20.3s
MEH **Mehetia** 67.24 265 eT T 07 22 04.5
comp=Z,45nm,0.3s
TVO **Taravao** 68.23 264 eT T 07 23 18.3
comp=Z,2.4nm,0.2s
VAH **Vaihoa** 68.38 267 eT T 07 23 30.4
comp=Z,3.8nm,0.2s
TIAR **Tiarei** 68.43 264 eT T 07 23 33.8
comp=Z,10nm,0.3s
035A **Encino** 68.44 336 P P 06 09 29.7 +1.1
baz=69
PAE **Paea** 68.55 264 eT T 07 23 43.2
comp=Z,1.6nm,0.2s
PPT2 **Papeete2** 68.59 264 eS S 06 18 29.7 -1.0
comp=Z,2µm,27.2s
PPT2 **Papeete2** 68.59 264 eLR LR 06 30 22.4
comp=Z,3µm,25.0s,baz=118
PPT2 **Papeete2** 68.59 264 eT T 07 23 45.1
comp=Z,3.1nm,0.3s
PPT **Papeete** 68.60 264 LR LR 06 31 45.5
comp=Z,2µm,19.4s,baz=106,slow=29
PMOR **Pomariorio Ree** 68.73 267 eT T 07 23 48.7
comp=Z,3.8nm,0.2s
034A **Hebbronville** 68.75 336 P P 06 09 32.0 +1.4
baz=69,SNR=5.2
KVTX **Kingsville** 68.95 337 PFAKE 06 09 40.0 +8.3
KVTX LR LR
comp=Z,900nm,18.0s
934A **Benavides** 69.19 336 P P 06 09 34.2 +0.9
baz=70
933A **Laredo** 69.45 336 P P 06 09 35.6 +0.7
baz=70,SNR=11
TIGA **Tifton** 69.56 351 P P 06 09 35.1 -0.3
baz=70
TIGA **Tifton** 69.56 351 eP P 06 09 34.4 -1.0
comp=Z,72nm,0.9s
TIGA LR LR
comp=Z,600nm,19.8s
835A **Beeville** 69.62 337 P P 06 09 36.1 +0.2
baz=70
BRAL **Brewton** 69.65 348 eP P 06 09 37.3 +1.3
comp=Z,104nm,1.2s
BRAL LR LR
comp=Z,500nm,22.0s
834A **Tilden** 69.69 336 P P 06 09 37.6 +1.3
baz=70,SNR=12
MAW **Mawson** 69.84 164 P P 06 09 37.2 +0.3
comp=Z,10nm,0.7s,baz=220,slow=7.1,SNR=29
MAW PKP2bc 06 37 40.6
comp=Z,1.8nm,0.9s,baz=294,slow=13,SNR=4.3
MAW LR LR 06 42 24.7
comp=Z,3µm,18.2s,baz=230,slow=38
736A **Circle Diamond** 70.01 338 P P 06 09 39.8 +1.5
baz=70,SNR=5.1
SLBS **Sierra La Lagu** 70.13 325 eP P 06 09 40.6 +1.3
comp=Z,21nm,0.8s
SLBS LR LR
comp=Z,2µm,18.5s
735A **Kenedy** 70.14 337 P P 06 09 40.0 +0.9
baz=70,SNR=6.9
833A **Chaparral WMA,** 70.15 336 P P 06 09 39.0 -0.1
baz=70,SNR=25
832A **Faith Ranch, C** 70.30 335 P P 06 09 40.2 +0.1
baz=71,SNR=15
BBSR **BB Station** 70.32 8 PFAKE 06 09 50.0 +10
BBSR LR LR
comp=Z,500nm,20.0s
734A **La Parita Cree** 70.37 337 P P 06 09 41.7 +1.2
baz=71,SNR=5.9
539A **Cross D Ranch,** 70.45 341 P P 06 09 42.0 +1.1
baz=71
733A **Divot King Ran** 70.48 336 P P 06 09 41.5 +0.4
baz=71
636A **Smothers Creek** 70.50 338 P P 06 09 42.6 +1.3
baz=71,SNR=8.7
HKT **Hockley** 70.60 340 eP P 06 09 43.3 +1.5
HKT **Hockley** 70.60 340 eP P 06 09 43.3 +1.5
HKT LR LR
comp=Z,21µm,20.0s
635A **Leesville** 70.63 338 P P 06 09 43.1 +1.1
baz=71
732A **Laxson Ranch,** 70.71 335 P P 06 09 42.7 +0.2
baz=71,SNR=37
538A **Harpers Horsep** 70.76 340 P P 06 09 43.9 +1.1
baz=71
634A **China Grove, S** 70.80 337 P P 06 09 44.2 +1.1
baz=71
NHSC **New Hope** 70.85 354 eP P 06 09 43.3 0.0
comp=Z,72nm,0.7s
NHSC LR LR
comp=Z,800nm,22.0s
537A **Green Hill Far** 70.86 339 P P 06 09 45.1 +1.6
baz=71
440A **Kirbyville** 70.86 341 P P 06 09 45.0 +1.6
baz=71
536A **Bastrop** 71.06 338 P P 06 09 46.4 +1.7
baz=71
439A **Center Grove,** 71.11 341 P P 06 09 46.6 +1.7
baz=71
633A **Saathoff Ranch** 71.13 336 P P 06 09 46.0 +0.8
baz=71,SNR=8.0
535A **Dale** 71.17 338 P P 06 09 46.0 +0.7
baz=72,SNR=8.4
438A **Sam Houston St** 71.26 340 P P 06 09 47.2 +1.4
baz=72
632A **Uvalde** 71.37 336 P P 06 09 47.1 +0.5
baz=72,SNR=17
534A **Blanco** 71.44 337 P P 06 09 47.6 +0.5
baz=72,SNR=8.0
340A **Bronson** 71.48 342 P P 06 09 48.2 +1.1
baz=72
VBMS **Vicksburg** 71.48 345 P P 06 09 48.5 +1.4
baz=72
VBMS **Vicksburg** 71.48 345 PFAKE 06 10 00.0 +13
VBMS LR LR
comp=Z,300nm,18.0s
GOGA **Godfrey** 71.49 351 eP P 06 09 46.5 -0.7
GOGA pmax pmax
comp=Z,35nm,0.8s
GOGA **Godfrey** 71.49 351 eP P 06 09 46.5 -0.7
comp=Z,36nm,0.8s
GOGA LR LR
comp=Z,600nm,20.7s
631A **Perdido Creek** 71.54 335 P P 06 09 47.5 -0.1
baz=72,SNR=20
339A **Huntington** 71.57 341 P P 06 09 48.1 +0.4
baz=72
LRAL **Lakeview Retre** 71.62 348 eP P 06 09 47.5 -0.4
comp=Z,67nm,1.0s
436A **Wall Ranch, Ga** 71.64 339 P P 06 09 49.5 +1.4
baz=72
533A **Kerrville** 71.66 337 P P 06 09 48.3 0.0
baz=72,SNR=26
338A **Crockett** 71.79 340 P P 06 09 49.8 +0.8
baz=72
435B **Jarrell** 71.88 338 P P 06 09 49.9 +0.2
baz=72
337A **Centerville** 71.90 340 P P 06 09 50.2 +0.5
baz=72
532A **Rocksprings** 71.98 336 P P 06 09 50.5 +0.2
baz=72,SNR=69
NATX **Nacogdoches** 72.00 341 PFAKE 06 10 00.0 +10
NATX LR LR
comp=Z,300nm,21.3s
434A **Burnet** 72.11 338 P P 06 09 50.9 -0.2
baz=72,SNR=26
239A **Gary** 72.20 341 P P 06 09 51.7 +0.2
baz=72
531A **Rocksprings** 72.22 336 P P 06 09 52.6 +0.9
baz=72,SNR=32
336A **Riesel** 72.23 339 P P 06 09 52.3 +0.6
baz=72,SNR=13
JCT **Junction City** 72.28 336 eP P 06 09 51.9 -0.2
JCT pmax pmax
comp=Z,72nm,1.1s
JCT **Junction City** 72.28 336 P P 06 09 52.7 +0.6
baz=73,SNR=31
JCT **Junction City** 72.28 336 eP P 06 09 51.9 -0.2
comp=Z,72nm,1.1s
JCT LR LR
comp=Z,200nm,21.8s
335A **Moody** 72.30 339 P P 06 09 52.5 +0.4
baz=73,SNR=12
433A **Art** 72.31 337 P P 06 09 52.1 -0.1
baz=73,SNR=34
530A **J-C Ranch, Com** 72.47 335 P P 06 09 53.7 +0.5
baz=73,SNR=50
237A **Washetta, Mont** 72.53 340 P P 06 09 54.3 +0.9
baz=73
TX31 **Lajitas Ar. Si** 72.55 333 eP P 06 09 53.4 -0.4
TXAR **Lajitas Array** 72.55 333 P P 06 09 53.8 +0.1
comp=Z,16nm,0.8s,baz=153,slow=8.5,SNR=136
TXAR LR LR 06 36 51.4
comp=Z,1µm,18.6s,baz=0.0,slow=32
334A **Lometa** 72.59 338 P P 06 09 53.9 0.0
baz=73,SNR=36
432A **Menard** 72.64 336 P P 06 09 54.0 -0.2
baz=73,SNR=18
DRV **Dumont d'Urvil** 72.71 193 PP PP 06 12 21.0 -14
DRV S S 06 19 16.0 -1.0
DRV SKS SKSac 06 19 55.0 -1.6
DRV SS SS 06 24 00.0 +4.4
DRV L L 06 29 00.0
DRV R 06 34 00.0
431A **Sonora** 72.72 336 P P 06 09 55.0 +0.3
baz=73
236A **Katherine and** 72.72 340 P P 06 09 55.1 +0.5
baz=73
529A **Stev Forest Ra** 72.75 334 P P 06 09 55.4 +0.4
baz=73,SNR=25
333A **Richland Sprin** 72.81 337 P P 06 09 55.0 -0.2
baz=73,SNR=21
CNNC **Cliffs of the** 72.82 356 eP P 06 09 54.9 -0.2
comp=Z,68nm,0.8s
CNNC LR LR
comp=Z,500nm,20.1s
138A **Matatall Enter** 72.97 341 P P 06 09 56.4 +0.3
baz=73
KMSC **Kings Mountain** 72.97 353 P P 06 09 55.5 -0.5
baz=73,SNR=25
KMSC **Kings Mountain** 72.97 353 eP P 06 09 54.9 -1.1
comp=Z,68nm,0.9s
KMSC LR LR
comp=Z,500nm,19.9s
WHTX **Lake Whitney** 72.98 339 P P 06 09 56.1 +0.1
baz=73,SNR=6.1
WHTX **Lake Whitney** 72.98 339 eP P 06 09 56.2 +0.1
WHTX LR LR
comp=Z,300nm,21.7s
430A **Baggett Ranch,** 73.03 335 P P 06 09 56.4 -0.1
baz=73,SNR=49
137A **Heron Place, G** 73.08 340 P P 06 09 57.4 +0.7
baz=73
332A **Millersview** 73.09 337 P P 06 09 56.7 -0.2
baz=73
429A **Davenport Ranc** 73.10 335 P P 06 09 57.5 +0.5
baz=73,SNR=46
136A **Ennis** 73.17 340 P P 06 09 57.3 0.0
baz=74
234A **Clairette** 73.19 338 P P 06 09 57.4 0.0
baz=74,SNR=14
331A **San Angelo** 73.24 336 P P 06 09 57.4 -0.4
baz=74,SNR=67
Z39A **Irene McRaven,** 73.29 342 P P 06 09 58.1 +0.2
baz=74
233A **Rising Star** 73.43 338 P P 06 09 59.1 +0.3
baz=74
OXF **Oxford** 73.48 346 eP P 06 09 58.1 -0.9
OXF pmax pmax
comp=Z,140nm,1.0s
OXF **Oxford** 73.48 346 eP P 06 09 58.1 -0.9
comp=Z,139nm,1.0s
OXF LR LR
comp=Z,500nm,18.1s
135A **Vickery Place,** 73.50 339 P P 06 09 59.9 +0.7
baz=74
Z38A **Mt. Pleasant** 73.50 341 P P 06 09 59.7 +0.5
baz=74
232A **Coleman** 73.53 337 P P 06 09 59.2 -0.3
baz=74,SNR=15
330A **Mertzon** 73.58 336 P P 06 09 59.3 -0.4
baz=74,SNR=22
SWET **Sewanee** 73.59 349 eP P 06 09 59.5 -0.3
comp=Z,235nm,0.9s
SWET LR LR
comp=Z,700nm,21.6s
Z37A **Pogue Cattle C** 73.61 341 P P 06 10 00.1 +0.2
baz=74
134A **White-Moore Ra** 73.70 339 P P 06 10 00.6 +0.2
baz=74
TKL **Tuckaleechee C** 73.74 351 eP P 06 09 59.6 -1.0
TKL **Tuckaleechee C** 73.74 351 eP P 06 09 59.6 -1.0
231A **Bronte** 73.79 336 P P 06 10 00.4 -0.6
baz=74,SNR=30
Z36A **Blue Ridge** 73.90 340 P P 06 10 01.5 0.0
baz=74,SNR=7.9
329A **Wagon Wheel Ra** 73.92 335 P P 06 10 01.7 -0.1
baz=74,SNR=36
Y39A **Lockesburg** 73.94 342 P P 06 10 01.4 -0.3
baz=74
133A **Hamilton Ranch** 73.98 338 P P 06 10 01.8 -0.2
baz=74,SNR=17
230A **Sterling City** 74.00 336 P P 06 10 02.4 +0.2
baz=74,SNR=16
SUR **Sutherland** 74.02 119 P P 06 10 04.9 +2.1
comp=Z,617nm,0.9s,SNR=7.4
SUR **Sutherland** 74.02 119 eP P 06 10 04.7 +1.9
comp=Z,89nm,0.9s
SUR LR LR
comp=Z,200nm,18.5s
Y38A **Idabel** 74.08 342 P P 06 10 02.6 0.0
baz=74
MET **Memphis--Engin** 74.18 346 eP P 06 10 03.1 0.0
MET LR LR
comp=Z,300nm,19.0s
Z35A **Perchaven, San** 74.18 339 P P 06 10 02.9 -0.2
baz=74,SNR=7.2
ABTX **Abilene, Hawle** 74.22 337 P P 06 10 03.3 -0.2
baz=74,SNR=14
ABTX **Abilene, Hawle** 74.22 337 eP P 06 10 03.2 -0.2
ABTX LR LR
comp=Z,300nm,20.4s
229A **Bryant Ranch,** 74.30 335 P P 06 10 04.3 +0.3
baz=75,SNR=16
UALR **University of** 74.33 344 eP P 06 10 03.7 -0.3
comp=Z,37nm,1.1s
UALR LR LR
comp=Z,300nm,20.0s
Y37A **Hugo** 74.35 341 P P 06 10 04.5 +0.3
baz=75,SNR=10
MIAR **Mount Ida** 74.39 343 eP P 06 10 03.8 -0.6
MIAR pmax pmax
comp=Z,78nm,1.6s
MIAR **Mount Ida** 74.39 343 P P 06 10 04.5 +0.1
baz=75
MIAR **Mount Ida** 74.39 343 eP P 06 10 03.8 -0.6
comp=Z,78nm,1.6s
MIAR LR LR
comp=Z,398nm,18.3s
Z34A **Collier Ranch,** 74.40 339 P P 06 10 04.4 -0.1
baz=75
Y36A **Durant** 74.45 340 P P 06 10 05.1 +0.3
baz=75,SNR=8.0
RAR **Rarotonga** 74.48 255 PFAKE 06 10 20.0 +15
RAR LR LR
comp=Z,1µm,18.8s
131A **Roby** 74.49 337 P P 06 10 05.2 +0.2
baz=75,SNR=18
Z33A **Whitaker Ranch** 74.57 338 P P 06 10 05.5 +0.1
baz=75,SNR=19
TZTN **Tazewell** 74.59 352 eP P 06 10 04.6 -0.9
comp=Z,79nm,1.0s
TZTN LR LR

comp=Z,700nm,20.2s
**130A Snyder** 74.60 336 P **P** 06 10 05.5 -0.2
baz=75,SNR=6.1
**Y35A Marietta** 74.66 340 P **P** 06 10 06.5 +0.6
baz=75
**228A UT Block 9, Go** 74.70 335 P **P** 06 10 06.2 -0.1
baz=75,SNR=20
**HBAR Harrisburg** 74.74 346 *e*P **P** 06 10 05.6 -0.7
**WVT Waverly** 74.78 348 *e*P **P** 06 10 05.7 -0.9
**WVT Waverly** 74.78 348 *e*P **P** 06 10 05.7 -0.9
WVT LR LR
comp=Z,400nm,20.0s
**Z32A Haskell** 74.80 338 P **P** 06 10 06.9 +0.1
baz=75,SNR=27
**X38A Whitesboro** 74.81 342 P **P** 06 10 06.6 -0.2
baz=75,SNR=14
**Y34A Reagan Ranch,** 74.91 339 P **P** 06 10 07.5 +0.1
baz=75,SNR=11
**129A Stewart Farms,** 74.93 335 P **P** 06 10 07.5 -0.2
baz=75,SNR=17
**BLA Blacksburg** 74.95 354 *e*P **P** 06 10 07.0 -0.6
BLA pmax pmax
comp=Z,34nm,0.8s
**BLA Blacksburg** 74.95 354 *e*P **P** 06 10 07.0 -0.6
comp=Z,34nm,0.8s
BLA LR LR
comp=Z,500nm,18.2s
**GNAR Gosnell** 75.01 346 *e*P **P** 06 10 08.1 +0.2
comp=Z,3μm,1.4s
**Z31A Sharp Cattle R** 75.01 337 P **P** 06 10 08.1 0.0
baz=75,SNR=36
**X36A Centrahoma** 75.11 341 P **P** 06 10 08.5 0.0
baz=75,SNR=16
**X35A Drake** 75.11 340 P **P** 06 10 08.8 +0.2
baz=75,SNR=14
**W38A Poteau** 75.12 342 P **P** 06 10 08.7 +0.2
baz=75
**128A Castleberry Fa** 75.12 335 P **P** 06 10 08.7 -0.1
baz=75,SNR=25
**UTMT University of** 75.17 347 *e*P **P** 06 10 08.8 0.0
comp=Z,166nm,0.8s
UTMT LR LR
comp=Z,499nm,19.7s
**GLAT Glass** 75.17 347 *e*P **P** 06 10 09.1 +0.3
**Y33A Hilltop Ranch,** 75.20 339 P **P** 06 10 08.6 -0.5
baz=76,SNR=14
**CLNB Carlsbad** 75.28 334 *e*P **P** 06 10 10.2 +0.6
**Z30A Sanderson Ranc** 75.29 336 P **P** 06 10 09.4 -0.3
baz=76,SNR=34
**MNTX Cornudas Mount** 75.31 332 *e*P **P** 06 10 08.2 -1.6
comp=Z,15nm,1.0s
MNTX LR LR
comp=Z,900nm,19.8s
**PVMO Portageville** 75.39 347 *e*P **P** 06 10 10.2 +0.1
PVMO LR LR
comp=Z,500nm,19.7s
**W37A Quinton** 75.41 342 P **P** 06 10 10.9 +0.7
baz=76,SNR=10
**MIR Mirnyy** 75.42 174⇑ *e*P P 06 10 18.0 +8.0
MIR pmax pmax
comp=Z,40nm,2.0s
**Y32A R-V Farms, Ver** 75.44 338 P **P** 06 10 10.4 0.0
baz=76,SNR=14
**Z29A Hungry Hill Ra** 75.45 336 P **P** 06 10 10.1 -0.5
baz=76
**X34A Smith Ranch, M** 75.53 339 P **P** 06 10 11.3 +0.3
baz=76,SNR=15
**W36A Wetumka** 75.61 341 P **P** 06 10 11.8 +0.4
baz=76,SNR=7.8
**PARMO Parma** 75.64 347 *e*P **P** 06 10 08.9 -2.6
**Y31A Rekieta Farm,** 75.65 337 P **P** 06 10 11.6 0.0
baz=76,SNR=19
**X33A Lawton** 75.67 339 P **P** 06 10 11.2 -0.5
baz=76,SNR=11
**Z28A Tucker Farm, M** 75.70 335 P **P** 06 10 11.7 -0.4
baz=76,SNR=12
**CBN Corbin** 75.75 357 *e*P **P** 06 10 12.0 -0.1
comp=Z,27nm,0.8s
CBN LR LR
comp=Z,700nm,20.5s
**Y30A Stafford Cattl** 75.77 337 P **P** 06 10 12.1 -0.3
baz=76
**X32A Elmer** 75.78 338 P **P** 06 10 12.6 +0.2
baz=76,SNR=13
**W35A Tecumseh** 75.79 340 P **P** 06 10 11.8 -0.7
baz=76,SNR=7.7
**V38A Canehill** 75.85 343 P **P** 06 10 13.0 +0.3
baz=76
**PBMO Poplar Bluff** 75.88 346 *e*P **P** 06 10 12.1 -0.8
PBMO LR LR
comp=Z,400nm,18.0s
**WMOK Wichita Mounta** 75.93 339 *e*P **P** 06 10 12.4 -0.9
WMOK pmax pmax
comp=Z,61nm,1.2s
**WMOK Wichita Mounta** 75.93 339 *e*P **P** 06 10 12.4 -0.9
comp=Z,61nm,1.2s
WMOK LR LR
comp=Z,300nm,21.0s
**CPRX Cap Rock** 75.97 334 *e*P **P** 06 10 14.0 +0.3
comp=Z,21nm,0.6s
**Y29A Porterfield Fa** 76.00 336 P **P** 06 10 13.4 -0.3
baz=76,SNR=28
**V37A Hulbert** 76.04 342 P **P** 06 10 13.6 -0.3
baz=76,SNR=15
**W34A Bridge Creek,** 76.11 340 P **P** 06 10 14.2 -0.1
baz=76,SNR=9.9
**W34A Bridge Creek,** 76.11 340 *e*P **P** 06 10 14.2 -0.1
W34A LR LR
comp=Z,300nm,18.0s
**V36A Jenks** 76.15 341 P **P** 06 10 14.3 -0.2
baz=76,SNR=39
**CASY Casey** 76.17 182 *e*P **P** 06 10 14.6 +0.3
comp=Z,67nm,1.2s
CASY LR LR
comp=Z,2μm,18.0s
**X31A McDonald Ranch** 76.18 338 P **P** 06 10 14.6 -0.1
baz=76,SNR=39
**Y28A McKinney Farm,** 76.23 336 P **P** 06 10 14.9 -0.2
baz=76,SNR=12
**W33A Caddo, Fort Co** 76.23 339 P **P** 06 10 15.4 +0.5
baz=76,SNR=36
**TUL1 Tulsa** 76.23 342 P **P** 06 10 14.5 -0.4
baz=76,SNR=28
**TUL1 Tulsa** 76.23 342 *e*P **P** 06 10 14.4 -0.5
comp=Z,211nm,1.2s
TUL1 LR LR
comp=Z,400nm,18.5s
**X30A Coker Ranch, T** 76.28 337 P **P** 06 10 15.9 +0.6
baz=77,SNR=23
**V35A Meyer Ranch, C** 76.36 341 P **P** 06 10 15.4 -0.3
baz=77,SNR=21
**U38A Gravette** 76.39 343 P **P** 06 10 15.8 0.0
baz=77,SNR=9.7
**W32A Sentinel** 76.42 339 P **P** 06 10 16.3 +0.3
baz=77,SNR=51
**U37A Salina** 76.53 342 P **P** 06 10 16.1 -0.5
baz=77,SNR=13
**X29A Tulia** 76.54 336 P **P** 06 10 16.9 0.0
baz=77,SNR=26
**USIN University of** 76.55 349 *e*P **P** 06 10 15.5 -1.2
comp=Z,160nm,1.3s
USIN LR LR
comp=Z,600nm,21.4s
**SIUC Southern Illin** 76.56 347 *e*P **P** 06 10 16.3 -0.5
comp=Z,64nm,1.0s
SIUC LR LR
comp=Z,500nm,19.6s
**WCI Wyandotte Cave** 76.60 350 *e*P **P** 06 10 15.5 -1.5
WCI pmax pmax
comp=Z,126nm,1.0s
WCI MLR MLR
comp=Z,600nm,21.0s
**WCI Wyandotte Cave** 76.60 350 *e*P **P** 06 10 15.5 -1.5
comp=Z,126nm,1.0s
WCI LR LR
comp=Z,600nm,21.0s
**V34A Guthrie** 76.61 340 P **P** 06 10 16.2 -0.9
baz=77,SNR=28
**V34A Guthrie** 76.61 340 *e*P **P** 06 10 16.5 -0.6
comp=Z,128nm,1.0s
V34A LR LR
comp=Z,400nm,19.6s
**U36A Oologah** 76.67 342 P **P** 06 10 17.0 -0.3
baz=77,SNR=11
**W31A Holland Ranch,** 76.69 338 P **P** 06 10 17.5 -0.1
baz=77,SNR=15
**X28A Dimmitt** 76.77 336 P **P** 06 10 18.3 +0.1
baz=77,SNR=14
**V33A Lossen Ranch,** 76.81 340 P **P** 06 10 18.6 +0.4
baz=77,SNR=21
**W30A Crocket Farms** 76.87 337 P **P** 06 10 19.0 +0.3
baz=77
**U35A Pawnee** 76.91 341 P **P** 06 10 18.4 -0.3
baz=77,SNR=19
**V32A Arapaho** 76.92 339 P **P** 06 10 19.6 +0.7
baz=77,SNR=14
**SDMD Soldier's Deli** 76.93 357 *e*P **P** 06 10 18.8 +0.1
comp=Z,14nm,0.8s
SDMD LR LR
comp=Z,200nm,19.5s
**AMTX Amarillo** 76.94 337 P **P** 06 10 19.2 +0.1
baz=77
**AMTX Amarillo** 76.94 337 *e*P **P** 06 10 19.0 -0.1
comp=Z,72nm,0.9s
AMTX LR LR
comp=Z,400nm,19.0s
**121A Cookes Peak, D** 76.96 331 P **P** 06 10 19.0 -0.4
baz=77
**121A Cookes Peak, D** 76.96 331 *e*P **P** 06 10 20.0 +0.6
comp=Z,47nm,1.3s
**LIC Lamto** 77.10 72 *e*P **P** 06 10 21.3 +0.9
comp=Z,377nm,1.1s
**W29A Amarillo** 77.15 337 P **P** 06 10 20.6 +0.3
baz=77,SNR=28
**T37A Cheneyville 18** 77.17 343 P **P** 06 10 19.8 -0.4
baz=78,SNR=18
**U34A Anderson Ranch** 77.18 340 P **P** 06 10 20.2 0.0
baz=78,SNR=6.3
**U34A Anderson Ranch** 77.18 340 *e*P **P** 06 10 20.3 0.0
comp=Z,200nm,1.5s
U34A LR LR
comp=Z,400nm,19.4s
**V31A Spring Creek L** 77.20 338 P **P** 06 10 21.6 +1.2
baz=78,SNR=8.2
**CCM Cathedral Cave** 77.27 346 *e*P **P** 06 10 20.4 -0.3
**CCM Cathedral Cave** 77.27 346 *e*P **P** 06 10 20.4 -0.3
comp=Z,111nm,0.9s
**U33A Lingo Farm, Me** 77.33 340 P **P** 06 10 21.5 +0.3
baz=78,SNR=11
**MCWV Mont Chateau** 77.34 355 *e*P **P** 06 10 20.9 -0.1
MCWV LR LR
comp=Z,400nm,18.9s
**T36A Boggs Farm, Ca** 77.34 342 P **P** 06 10 21.0 -0.2
baz=78,SNR=15
**T35A Sooner Cattle** 77.36 341 P **P** 06 10 21.6 +0.3
baz=78,SNR=21
**OLIL Olney** 77.37 348 *e*P **P** 06 10 20.3 -1.0
comp=Z,48nm,1.1s
OLIL LR LR
comp=Z,400nm,18.4s
**TIC Toumodi** 77.38 71 *e*P **P** 06 10 22.7 +0.7
**KIC Kosan Boka** 77.41 72 *e*P **P** 06 10 21.7 -0.4
comp=Z,481nm,0.9s
**V30A Spur Ranch, Mi** 77.45 338 P **P** 06 10 23.2 +1.3
baz=78
**W28A Vega** 77.45 336 P **P** 06 10 22.4 +0.4
baz=78
**MVL Millersville** 77.50 358 *e*P **P** 06 10 22.6 +0.6
**DBIC Dimbokro** 77.52 71 P **P** 06 10 24.0 +1.3
comp=Z,142nm,0.8s,baz=208,slow=7.1,SNR=148
DBIC LR LR 06 42 34.1
comp=Z,1μm,18.1s,baz=220,slow=34
**U32A Winter Ranch,** 77.53 339 P **P** 06 10 22.8 +0.6
baz=78,SNR=26
**BLO Bloomington** 77.56 350 *e*P **P** 06 10 21.4 -0.9
**BLO Bloomington** 77.56 350 *e*P **P** 06 10 21.4 -0.9
comp=Z,164nm,1.3s
BLO LR LR
comp=Z,600nm,19.7s
**MCQ Macquarie Isla** 77.61 208 PFAKE 06 10 40.0 +17
MCQ LR LR
comp=Z,1μm,20.6s
**T34A McClaskey Farm** 77.64 341 P **P** 06 10 23.2 +0.3
baz=78,SNR=19
**SLM Saint Louis** 77.64 347 *e*P **P** 06 10 21.8 -1.0
**SLM Saint Louis** 77.64 347 *e*P **P** 06 10 21.8 -1.0
comp=Z,96nm,0.8s
SLM LR LR
comp=Z,400nm,21.4s
**S37A Fort Scott** 77.76 343 P **P** 06 10 23.9 +0.5
baz=78,SNR=14
**U31A Nine Bar Ranch** 77.76 338 P **P** 06 10 24.2 +0.6
baz=78
**V29A Stinnett** 77.80 337 P **P** 06 10 24.1 +0.3
baz=78
**S36A Lake Cedric, C** 77.90 342 P **P** 06 10 24.0 -0.3
baz=78,SNR=21
**V28A Channing** 77.91 336 P **P** 06 10 25.1 +0.6
baz=78,SNR=22
**BNM Barren Site** 77.96 332 *e*P **P** 06 10 26.0 +1.0
**TUC Tucson** 77.97 328 *e*P **P** 06 10 25.9 +1.0
TUC pmax pmax
comp=Z,54nm,1.4s
**TUC Tucson** 77.97 328 *e*P **P** 06 10 25.9 +1.0
comp=Z,54nm,1.4s
TUC LR LR
comp=Z,800nm,19.7s
**T33A Patterson Ranc** 77.98 340 P **P** 06 10 25.3 +0.6
baz=78,SNR=12
**Y22D IRIS PASSCAL I** 78.00 332 P **P** 06 10 26.1 +1.0
baz=78
**Y22D IRIS PASSCAL I** 78.00 332 PFAKE 06 10 40.0 +15
Y22D LR LR
comp=Z,300nm,18.6s
**S35A Otter Creek Ra** 78.04 342 P **P** 06 10 24.8 -0.3
baz=78,SNR=14
**LUPA Lehigh Univers** 78.07 359 *e*P **P** 06 10 26.1 +1.0
LUPA LR LR
comp=Z,500nm,19.5s
**LPM Los Pinos Moun** 78.11 332 *e*P **P** 06 10 26.7 +1.0
**V27A Dan Oppiter Fa** 78.11 336 P **P** 06 10 26.0 +0.4
baz=78,SNR=12
**BRNJ Basking Ridge** 78.15 359 PFAKE 06 10 40.0 +14
BRNJ LR LR
comp=Z,800nm,19.0s
**U30A WK&E Inc. Balk** 78.15 338 P **P** 06 10 26.3 +0.6
baz=78,SNR=18
**ACSO Alum Creek Sta** 78.17 353 *e*P **P** 06 10 25.0 -0.7
comp=Z,130nm,1.0s
ACSO LR LR
comp=Z,700nm,21.8s
**SSPA Standing Stone** 78.20 357 *e*P **P** 06 10 25.4 -0.3
comp=Z,201nm,1.4s
SSPA LR LR
comp=Z,100nm,21.1s
**CPNY Central Park** 78.25 360 PFAKE 06 10 40.0 +14
CPNY LR LR
comp=Z,800nm,21.1s
**T32A Huddler Ranch,** 78.25 339 P **P** 06 10 26.9 +0.6
baz=79,SNR=6.9
**S34A Willow Spring** 78.26 341 P **P** 06 10 25.9 -0.4
baz=79,SNR=5.3
**U29A Oasis Ranch, S** 78.26 337 P **P** 06 10 26.9 +0.6
baz=79
**R37A Teagarden Farm** 78.28 343 P **P** 06 10 25.7 -0.7
baz=79,SNR=18
**LAZ Ladron** 78.38 332 *e*P **P** 06 10 28.1 +0.8
**T31A Randall Ranch,** 78.39 339 P **P** 06 10 27.7 +0.6
baz=79
**S33A Kaszmaul Farm,** 78.39 340 P **P** 06 10 27.5 +0.5
baz=79
**R36A Gordon, Harris** 78.45 342 P **P** 06 10 28.1 +0.8
baz=79
**PAL Palisades** 78.46 360 PFAKE 06 10 40.0 +13
PAL LR LR
comp=Z,600nm,22.0s
**U28A Mallet** 78.49 337 P **P** 06 10 28.3 +0.6
baz=79,SNR=7.9
**214A Organ Pipe Nat** 78.52 327 P **P** 06 10 29.5 +1.6
baz=79
**214A Organ Pipe Nat** 78.52 327 *e*P **P** 06 10 28.6 +0.7
comp=Z,290nm,1.3s
**T30A Plains** 78.59 338 P **P** 06 10 28.6 +0.4
baz=79
**ANMO Albuquerque** 78.61 333⇓ *i*P **P** 06 10 28.7 +0.2
ANMO pmax pmax
comp=Z,44nm,1.2s
**ANMO Albuquerque** 78.61 333 *e*P **P** 06 10 29.1 +0.6
comp=Z,44nm,1.1s
ANMO LR LR
comp=Z,1μm,22.0s
**R35A Emporia Munici** 78.62 342 P **P** 06 10 28.7 +0.5
baz=79,SNR=8.5
**U27A Thompson Grove** 78.72 336 P **P** 06 10 29.2 +0.2
baz=79,SNR=21
**Q37A Longview Farm,** 78.74 343 P **P** 06 10 27.9 -1.0
baz=79,SNR=9.9
**S32A Newby Ranch, P** 78.75 340 P **P** 06 10 29.0 0.0
baz=79,SNR=18
**YLE Yale** 78.77 0 *e*P **P** 06 10 29.8 +0.9
comp=Z,137nm,1.1s
YLE LR LR
comp=Z,800nm,19.8s
**S31A Mullinville** 78.82 339 P **P** 06 10 29.7 +0.3
baz=79
**SFIN Scholer Farm** 78.83 349 *e*P **P** 06 10 27.7 -1.6
SFIN LR LR
comp=Z,600nm,19.2s
**R34A Isabella, Hill** 78.86 341 P **P** 06 10 29.5 -0.1
baz=79,SNR=19
**T29A Hugoton** 78.92 338 P **P** 06 10 30.1 +0.1
baz=79,SNR=9.1
**KSPA Keystone Colle** 79.04 358 *e*P **P** 06 10 30.1 -0.3
KSPA LR LR
comp=Z,700nm,21.5s
**Q36A Arnold C. Orve** 79.05 343 P **P** 06 10 30.2 -0.3
baz=79
**R33A Olander Ranch,** 79.06 341 P **P** 06 10 30.5 -0.2
baz=79
**Q35A Mercer Eighty,** 79.09 342 P **P** 06 10 30.4 -0.5
baz=79,SNR=7.8
**S30A Montezuma** 79.12 338 P **P** 06 10 31.5 +0.4
baz=79,SNR=12
**T28A Walsh** 79.14 337 P **P** 06 10 31.3 +0.1
baz=79,SNR=45
**BFZ Birch Farm** 79.16 227 PFAKE 06 10 40.0 +8.5
BFZ LR LR
comp=Z,1μm,19.7s
**T27A Campo** 79.27 337 P **P** 06 10 32.2 +0.2
baz=80,SNR=12
**ODZ Otahua Downs** 79.29 220 PFAKE 06 10 40.0 +7.9
ODZ LR LR
comp=Z,1μm,19.6s
**S29A Ulysses** 79.30 338 P **P** 06 10 32.3 +0.3
baz=80,SNR=8.3
**TSUM Tsumeb** 79.30 106 *e*P **P** 06 10 33.8 +1.1
comp=Z,91nm,1.3s
TSUM LR LR
comp=Z,2μm,19.8s
**BOSA Boshof** 79.33 118 P **P** 06 10 33.0 +0.3
comp=Z,86nm,0.9s,baz=226,slow=5.1,SNR=87
BOSA LR LR 06 41 39.3
comp=Z,1μm,19.6s,baz=230,slow=33
**BOSA Boshof** 79.33 118 *e*P **P** 06 10 33.2 +0.4
**BOSA Boshof** 79.33 118 *e*P **P** 06 10 33.2 +0.4
**ALLY Alegheny Colle** 79.34 355 PFAKE 06 10 40.0 +7.9
ALLY LR LR
comp=Z,500nm,20.1s
**HDIL Hopedale** 79.35 348 P **P** 06 10 31.7 -0.4
baz=80
**HDIL Hopedale** 79.35 348 *e*P **P** 06 10 31.0 -1.1
comp=Z,143nm,1.1s
HDIL LR LR
comp=Z,600nm,20.1s
**R32A Long Quarter,** 79.36 340 P **P** 06 10 32.7 +0.4
baz=80,SNR=14
**Q34A Chapman** 79.37 342 P **P** 06 10 32.4 +0.1
baz=80
**BRYW Bryant College** 79.39 1 *e*P **P** 06 10 33.5 +1.1
comp=Z,124nm,1.4s
BRYW LR LR
comp=Z,800nm,21.7s
**KSU1 Kansas State U** 79.46 342 P **P** 06 10 32.6 -0.2
baz=80,SNR=7.4
**KSU1 Kansas State U** 79.46 342 *e*P **P** 06 10 32.6 -0.2
comp=Z,47nm,0.9s
KSU1 LR LR
comp=Z,400nm,18.0s
**R31A Burdett** 79.46 339 P **P** 06 10 33.2 +0.3
baz=80,SNR=14
**S28A Manter** 79.50 337 P **P** 06 10 33.5 +0.3
baz=80,SNR=32
**KHZ Kahutara** 79.53 224 PFAKE 06 10 50.0 +17
KHZ LR LR
comp=Z,700nm,19.6s
**P36A Good Intent, A** 79.62 343 P **P** 06 10 32.7 -1.0
baz=80,SNR=11
**SNZO South Karori** 79.62 225 PFAKE 06 10 50.0 +16
SNZO LR LR
comp=Z,1μm,19.0s
**T26A Comanche Natio** 79.65 336 P **P** 06 10 34.4 +0.3
baz=80,SNR=36
**R30A Dighton** 79.67 339 P **P** 06 10 34.1 +0.1
baz=80,SNR=8.6
**Q33A Connelly Farm,** 79.67 341 P **P** 06 10 34.3 +0.3
baz=80
**BINY Binghamton** 79.69 358 *e*P **P** 06 10 34.3 +0.3
BINY LR LR
comp=Z,800nm,20.8s
**P35A Duane Minner,** 79.72 342 P **P** 06 10 33.7 -0.5
baz=80,SNR=17
**ERPA Erie** 79.79 355 *e*P **P** 06 10 34.4 -0.2
ERPA LR LR
comp=Z,400nm,19.1s
**Q32A Meitler Ranch,** 79.85 340 P **P** 06 10 35.1 +0.1
baz=80,SNR=7.3
**T25A Trinidad** 79.89 335 P **P** 06 10 36.3 +0.8
baz=80,SNR=62
**T25A Trinidad** 79.89 335 *e*P **P** 06 10 36.3 +0.8
T25A LR LR
comp=Z,500nm,20.9s
**S27A Las Animas** 79.90 337 P **P** 06 10 36.2 +0.8
baz=80
**P34A Walnut Farm, R** 79.94 342 P **P** 06 10 35.3 -0.1
baz=80,SNR=11
**HRV Adam Dziewonsk** 79.98 1 *e*P **P** 06 10 36.7 +1.2
**HRV Adam Dziewonsk** 79.98 1 *e*P **P** 06 10 36.7 +1.2
comp=Z,112nm,1.3s
HRV LR LR
comp=Z,700nm,18.5s
**RPZ Rata Peaks** 79.99 222 PFAKE 06 10 50.0 +14
RPZ LR LR
comp=Z,2μm,20.3s
**W18A Petrified Fore** 80.00 331 P **P** 06 10 36.3 +0.2
baz=80
**W18A Petrified Fore** 80.00 331 *e*P **P** 06 10 35.5 -0.5
comp=Z,102nm,1.3s
W18A LR LR
comp=Z,1μm,18.7s
**CBKS Cedar Bluff** 80.01 339 *e*P **P** 06 10 36.4 +0.5
**CBKS Cedar Bluff** 80.01 339 P **P** 06 10 36.2 +0.4
baz=80,SNR=6.0
**CBKS Cedar Bluff** 80.01 339 *e*P **P** 06 10 36.4 +0.5
comp=Z,134nm,1.2s
CBKS LR LR
comp=Z,400nm,21.6s
**BKZ Black Stump Fm** 80.01 228 PFAKE 06 10 50.0 +14
BKZ LR LR
comp=Z,1μm,18.4s
**S26A Kim** 80.02 336 P **P** 06 10 36.5 +0.5
baz=80,SNR=72
**R29A Marienthal** 80.05 338 P **P** 06 10 36.7 +0.6
baz=80
**P33A Williams Farm,** 80.05 341 P **P** 06 10 36.0 0.0
baz=80
**O36A Bolckow** 80.05 343 P **P** 06 10 35.0 -1.0
baz=80,SNR=5.1
**WHZ Wether Hill Ro** 80.05 219 PFAKE 06 10 50.0 +14
WHZ LR LR
comp=Z,1μm,20.0s
**Q31A Ellis** 80.09 340 P **P** 06 10 36.6 +0.3
baz=80,SNR=7.7
**R28A Tribune** 80.17 338 P **P** 06 10 37.2 +0.3
baz=80,SNR=23
**TRY Troy** 80.19 360 *e*P **P** 06 10 37.6 +1.0
comp=Z,39nm,0.6s
TRY LR LR
comp=Z,400nm,18.8s
**URZ Urewera** 80.24 229 LR LR 06 38 23.5
comp=Z,1μm,19.9s,baz=181,slow=30
**MMNY Mt. Morris Dam** 80.29 357 *e*P **P** 06 10 37.4 +0.2
MMNY LR LR
comp=Z,500nm,21.3s
**AAM Ann Arbor** 80.29 352 *e*P **P** 06 10 36.7 -0.5
AAM pmax pmax
comp=Z,54nm,0.8s
AAM MLR MLR
comp=Z,600nm,19.8s
**AAM Ann Arbor** 80.29 352 *e*P **P** 06 10 36.6 -0.5
comp=Z,54nm,0.8s
AAM LR LR
comp=Z,600nm,19.8s

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|---|---|---|---|---|---|---|---|
| **Q30A** | **Quinter** | **80.30** | **339** | P | **P** | 06 10 37.8 | +0.3 |
| | baz=81,SNR=38 | | | | | | |
| **GLA** | **Glamis** | **80.34** | **326** | *e*P | **P** | 06 10 39.2 | +1.4 |
| **GLA** | **Glamis** | **80.34** | **326** | P | **P** | 06 10 38.2 | +0.4 |
| | baz=81 | | | | | | |
| **GLA** | **Glamis** | **80.34** | **326** | *e*P | **P** | 06 10 39.2 | +1.4 |
| | comp=Z,172nm,1.8s | | | | | | |
| GLA | | | | LR | LR | | |
| | comp=Z,600nm,19.4s | | | | | | |
| **O35A** | **Humboldt** | **80.40** | **343** | P | **P** | 06 10 38.2 | +0.4 |
| | baz=81,SNR=6.1 | | | | | | |
| **R27A** | **Eads** | **80.42** | **337** | P | **P** | 06 10 38.2 | 0.0 |
| | baz=81,SNR=67 | | | | | | |
| **Q29A** | **Oakley** | **80.43** | **339** | P | **P** | 06 10 38.4 | +0.2 |
| | baz=81,SNR=20 | | | | | | |
| **P32A** | **Huiting Farm,** | **80.46** | **341** | P | **P** | 06 10 38.5 | +0.3 |
| | baz=81,SNR=9.1 | | | | | | |
| **O34A** | **Beatrice** | **80.50** | **342** | P | **P** | 06 10 38.4 | -0.1 |
| | baz=81,SNR=8.5 | | | | | | |
| **P31A** | **Stockton** | **80.57** | **340** | P | **P** | 06 10 39.0 | +0.1 |
| | baz=81,SNR=11 | | | | | | |
| **O33A** | **Hebron** | **80.62** | **341** | P | **P** | 06 10 39.1 | 0.0 |
| | baz=81,SNR=26 | | | | | | |
| **DCZ** | **Deep Cove** | **80.74** | **218** | PFAKE | | 06 10 50.0 | +10 |
| DCZ | | | | LR | LR | | |
| | comp=Z,1µm,21.6s | | | | | | |
| **SDCO** | **Great Sand Dun** | **80.80** | **335** | P | **P** | 06 10 40.8 | +0.3 |
| | baz=81,SNR=43 | | | | | | |
| **SDCO** | **Great Sand Dun** | **80.80** | **335** | *e*P | **P** | 06 10 40.8 | +0.3 |
| | comp=Z,39nm,1.2s | | | | | | |
| SDCO | | | | LR | LR | | |
| | comp=Z,800nm,19.5s | | | | | | |
| **Y12C** | **Blythe** | **80.80** | **326** | P | **P** | 06 10 41.6 | +1.4 |
| | baz=81,SNR=22 | | | | | | |
| **P30A** | **Selden** | **80.83** | **339** | P | **P** | 06 10 40.6 | +0.3 |
| | baz=81,SNR=10.0 | | | | | | |
| **ACCN** | **Adirondack Com** | **80.84** | **360** | *e*P | **P** | 06 10 40.8 | +0.7 |
| | comp=Z,23nm,0.5s | | | | | | |
| ACCN | | | | LR | LR | | |
| | comp=Z,400nm,18.7s | | | | | | |
| **Q28A** | **Sharon Springs** | **80.84** | **338** | P | **P** | 06 10 41.0 | +0.6 |
| | baz=81,SNR=6.9 | | | | | | |
| **BAR** | **Barrett** | **80.87** | **324** | *e*P | **P** | 06 10 41.9 | +1.3 |
| | comp=Z,49nm,1.3s | | | | | | |
| BAR | | | | LR | LR | | |
| | comp=Z,1µm,19.3s | | | | | | |
| **N35A** | **Tabor** | **80.90** | **343** | P | **P** | 06 10 40.3 | -0.3 |
| | baz=81,SNR=13 | | | | | | |
| **O32A** | **Brockman Farm,** | **80.97** | **341** | P | **P** | 06 10 42.0 | +1.1 |
| | baz=81 | | | | | | |
| **WUAZ** | **Wupatki** | **80.99** | **330** | P | **P** | 06 10 42.4 | +1.0 |
| | baz=81 | | | | | | |
| **WUAZ** | **Wupatki** | **80.99** | **330** | *e*P | **P** | 06 10 42.4 | +1.0 |
| | comp=Z,122nm,1.6s | | | | | | |
| WUAZ | | | | LR | LR | | |
| | comp=Z,800nm,18.5s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **81.03** | **337** | P | **P** | 06 10 42.2 | +0.8 |
| | baz=81,SNR=8.4 | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **81.03** | **337** | *e*P | **P** | 06 10 41.8 | +0.3 |
| | comp=Z,161nm,1.4s | | | | | | |
| KSCO | | | | LR | LR | | |
| | comp=Z,600nm,18.1s | | | | | | |
| **P29A** | **Atwood** | **81.08** | **339** | P | **P** | 06 10 42.2 | +0.6 |
| | baz=81,SNR=21 | | | | | | |
| **N34A** | **Lincoln** | **81.08** | **343** | P | **P** | 06 10 41.0 | -0.5 |
| | baz=81,SNR=7.2 | | | | | | |
| **BC3** | **Big Chuckawall** | **81.13** | **326** | P | **P** | 06 10 43.0 | +0.9 |
| | baz=81,SNR=14 | | | | | | |
| **O31A** | **Woolen Ranch,** | **81.15** | **340** | P | **P** | 06 10 42.3 | +0.4 |
| | baz=81,SNR=6.0 | | | | | | |
| **N33A** | **J Bar K, Exete** | **81.22** | **342** | P | **P** | 06 10 42.3 | +0.1 |
| | baz=82 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **81.26** | **334** | P | **P** | 06 10 43.9 | +1.0 |
| | baz=82 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **81.26** | **334** | *e*P | **P** | 06 10 43.6 | +0.7 |
| S22A | | | | LR | LR | | |
| | comp=Z,800nm,21.2s | | | | | | |
| **P28A** | **Saint Francis** | **81.29** | **338** | P | **P** | 06 10 43.2 | +0.5 |
| | baz=82,SNR=11 | | | | | | |
| **O30A** | **MW Ranch, Wils** | **81.37** | **340** | P | **P** | 06 10 43.5 | +0.4 |
| | baz=82,SNR=12 | | | | | | |
| **MVCO** | **Mesa Verde** | **81.38** | **332** | P | **P** | 06 10 44.0 | +0.5 |
| | baz=82 | | | | | | |
| **MVCO** | **Mesa Verde** | **81.38** | **332** | *e*P | **P** | 06 10 44.0 | +0.5 |
| | comp=Z,72nm,1.3s | | | | | | |
| MVCO | | | | LR | LR | | |
| | comp=Z,2µm,21.4s | | | | | | |
| **SCIA** | **State Center** | **81.38** | **345** | *e*P | **P** | 06 10 43.1 | 0.0 |
| | comp=Z,51nm,1.0s | | | | | | |
| SCIA | | | | LR | LR | | |
| | comp=Z,300nm,19.2s | | | | | | |
| **IRM** | **Iron Mountain** | **81.42** | **326** | P | **P** | 06 10 44.6 | +1.0 |
| | baz=82,SNR=5.3 | | | | | | |
| **NCB** | **Newcomb** | **81.43** | **359** | *e*P | **P** | 06 10 43.5 | +0.2 |
| NCB | | | | LR | LR | | |
| | comp=Z,500nm,20.0s | | | | | | |
| **N32A** | **Stulken Farm,** | **81.45** | **341** | P | **P** | 06 10 43.7 | +0.2 |
| | baz=82 | | | | | | |
| **MDV** | **Middlebury** | **81.45** | **0** | *e*P | **P** | 06 10 43.5 | +0.2 |
| **PFO** | **Pinyon Flat Ob** | **81.55** | **325** | *e*P | **P** | 06 10 45.9 | +1.6 |
| **PFO** | **Pinyon Flat Ob** | **81.55** | **325** | P | **P** | 06 10 45.0 | +0.7 |
| | comp=Z,188nm,1.0s,SNR=19 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **81.55** | **325** | P | **P** | 06 10 45.9 | +1.6 |
| | comp=Z,188nm,1.0s,SNR=19 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **81.55** | **325** | *e*P | **P** | 06 10 45.9 | +1.6 |
| | comp=Z,42nm,1.1s | | | | | | |
| PFO | | | | LR | LR | | |
| | comp=Z,1µm,19.4s | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **81.67** | **325** | P | **P** | 06 10 46.1 | +1.2 |
| | baz=82,SNR=9.7 | | | | | | |
| **N31A** | **Bailey Ranch,** | **81.68** | **341** | P | **P** | 06 10 45.1 | +0.4 |
| | baz=82 | | | | | | |
| **LBNH** | **Lisbon** | **81.71** | **1** | *e*P | **P** | 06 10 45.2 | +0.5 |
| **LBNH** | **Lisbon** | **81.71** | **1** | *e*P | **P** | 06 10 45.2 | +0.5 |
| LBNH | | | | LR | LR | | |
| | comp=Z,700nm,19.2s | | | | | | |
| **M34A** | **Aspy Farms, Fr** | **81.73** | **343** | P | **P** | 06 10 44.7 | -0.2 |
| | baz=82,SNR=13 | | | | | | |
| **LBTB** | **Lobatse** | **81.75** | **115** | *e*P | **P** | 06 10 46.2 | +0.4 |
| **LBTB** | **Lobatse** | **81.75** | **115** | *e*P | **P** | 06 10 46.2 | +0.4 |
| LBTB | | | | LR | LR | | |
| | comp=Z,2µm,18.5s | | | | | | |
| **Q24A** | **Divide** | **81.78** | **336** | P | **P** | 06 10 46.2 | +0.5 |
| | baz=82,SNR=18 | | | | | | |
| **Q24A** | **Divide** | **81.78** | **336** | *e*P | **P** | 06 10 46.2 | +0.5 |
| Q24A | | | | LR | LR | | |
| | comp=Z,300nm,20.0s | | | | | | |
| **JFWS** | **Jewell Farm** | **81.80** | **348** | *e*P | **P** | 06 10 44.3 | -1.0 |
| **JFWS** | **Jewell Farm** | **81.80** | **348** | *e*P | **P** | 06 10 44.3 | -1.0 |
| | comp=Z,114nm,1.3s | | | | | | |
| JFWS | | | | LR | LR | | |
| | comp=Z,700nm,19.9s | | | | | | |
| **O28A** | **Krutsinger Ran** | **81.81** | **338** | P | **P** | 06 10 46.0 | +0.6 |
| | baz=82,SNR=14 | | | | | | |
| **MURC** | **Murrieta** | **81.88** | **324** | P | **P** | 06 10 47.2 | +1.3 |
| | baz=82,SNR=9.7 | | | | | | |
| **M33A** | **Taylor Creek F** | **81.94** | **342** | P | **P** | 06 10 47.3 | +1.3 |
| | baz=82 | | | | | | |
| **N30A** | **Hueftle Ranch,** | **81.96** | **340** | P | **P** | 06 10 46.8 | +0.6 |
| | baz=82 | | | | | | |
| **SCI** | **San Clemente I** | **82.00** | **323** | P | **P** | 06 10 48.2 | +1.6 |
| | baz=82 | | | | | | |
| **K38A** | **Parkersburg** | **82.00** | **346** | P | **P** | 06 10 46.2 | -0.1 |
| | baz=82 | | | | | | |
| **BGNE** | **Belgrade** | **82.02** | **342** | P | **P** | 06 10 46.3 | -0.2 |
| | baz=82,SNR=9.8 | | | | | | |
| **BGNE** | **Belgrade** | **82.02** | **342** | *e*P | **P** | 06 10 46.5 | 0.0 |
| | comp=Z,205nm,1.2s | | | | | | |
| BGNE | | | | LR | LR | | |
| | comp=Z,400nm,19.9s | | | | | | |
| **PTN** | **Potsdam (NY)** | **82.03** | **359** | *e*P | **P** | 06 10 46.5 | +0.1 |
| PTN | | | | pmax | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | |
| PTN | | | | MLR | MLR | | |
| | comp=Z,200nm,19.4s | | | | | | |
| **PTN** | **Potsdam (NY)** | **82.03** | **359** | *e*P | **P** | 06 10 46.5 | +0.1 |
| | comp=Z,14nm,1.0s | | | | | | |
| PTN | | | | LR | LR | | |
| | comp=Z,200nm,19.4s | | | | | | |
| **L35A** | **Bielow Farm, R** | **82.07** | **344** | P | **P** | 06 10 46.4 | -0.4 |
| | baz=82,SNR=16 | | | | | | |
| **LONY** | **Lake Ozonia** | **82.08** | **359** | *e*P | **P** | 06 10 46.7 | 0.0 |
| | comp=Z,71nm,1.0s | | | | | | |
| LONY | | | | LR | LR | | |
| | comp=Z,600nm,18.9s | | | | | | |
| **WVL** | **Waterville** | **82.09** | **3** | PFAKE | | 06 11 00.0 | +13 |
| WVL | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| **L34A** | **Svendsen Farm,** | **82.12** | **343** | P | **P** | 06 10 46.3 | -0.6 |
| | baz=82,SNR=8.4 | | | | | | |
| **N29A** | **Votaw Ranch, W** | **82.12** | **340** | P | **P** | 06 10 47.3 | +0.2 |
| | baz=82,SNR=8.2 | | | | | | |
| **GMRC** | **Granite Mounta** | **82.17** | **326** | P | **P** | 06 10 48.6 | +1.0 |
| | baz=82,SNR=21 | | | | | | |
| **M31A** | **Lambtecht Ranc** | **82.17** | **341** | P | **P** | 06 10 47.8 | +0.5 |
| | baz=82 | | | | | | |
| **N28A** | **Pribbeno Ranch** | **82.26** | **339** | P | **P** | 06 10 48.8 | +0.9 |
| | baz=83 | | | | | | |
| **CIS** | **Catalina Islan** | **82.28** | **323** | P | **P** | 06 10 48.9 | +0.8 |
| | baz=83 | | | | | | |
| **FRNY** | **Flat Rock** | **82.29** | **360** | *e*P | **P** | 06 10 48.2 | +0.5 |
| | comp=Z,40nm,0.8s | | | | | | |
| FRNY | | | | LR | LR | | |
| | comp=Z,500nm,19.1s | | | | | | |
| **K37A** | **Belmond** | **82.29** | **345** | P | **P** | 06 10 47.6 | -0.2 |
| | baz=83,SNR=6.3 | | | | | | |
| **BBRC** | **Big Bear Solar** | **82.30** | **325** | P | **P** | 06 10 49.7 | +1.3 |
| | baz=83 | | | | | | |
| **EMMW** | **East Machias** | **82.34** | **4** | *e*P | **P** | 06 10 49.3 | +1.3 |
| **SADO** | **Sadowa** | **82.38** | **356** | *e*P | **P** | 06 10 47.9 | -0.4 |
| | comp=Z,69nm,0.8s | | | | | | |
| SADO | | | | LR | LR | | |
| | comp=Z,600nm,19.5s | | | | | | |
| **HEC** | **Hector,Ludlow** | **82.51** | **326** | P | **P** | 06 10 50.8 | +1.5 |
| | baz=83,SNR=12 | | | | | | |
| **L33A** | **Hoskins** | **82.52** | **342** | P | **P** | 06 10 48.8 | -0.3 |
| | baz=83 | | | | | | |
| **L32A** | **Elgin** | **82.55** | **342** | P | **P** | 06 10 49.5 | +0.2 |
| | baz=83,SNR=7.1 | | | | | | |
| **K35A** | **Storm Lake** | **82.58** | **344** | P | **P** | 06 10 49.9 | +0.5 |
| | baz=83 | | | | | | |
| **M30A** | **Dale-Ortello V** | **82.59** | **340** | P | **P** | 06 10 49.9 | +0.4 |
| | baz=83 | | | | | | |
| **SMCO** | **Snowmass** | **82.59** | **334** | *e*P | **P** | 06 10 50.5 | +0.6 |
| | comp=Z,214nm,1.7s | | | | | | |
| SMCO | | | | LR | LR | | |
| | comp=Z,2µm,21.1s | | | | | | |
| **J38A** | **Wedel Dairy, R** | **82.59** | **346** | P | **P** | 06 10 48.8 | -0.6 |
| | baz=83 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **82.62** | **324** | P | **P** | 06 10 50.1 | +0.1 |
| | baz=83,SNR=18 | | | | | | |
| **OGNE** | **Ogallala** | **82.64** | **339** | P | **P** | 06 10 50.0 | +0.2 |
| | baz=83,SNR=5.1 | | | | | | |
| **OGNE** | **Ogallala** | **82.64** | **339** | *e*P | **P** | 06 10 50.5 | +0.6 |
| | comp=Z,166nm,1.6s | | | | | | |
| OGNE | | | | LR | LR | | |
| | comp=Z,300nm,18.5s | | | | | | |
| **ISCO** | **Idaho Springs** | **82.69** | **336** | *e*P | **P** | 06 10 50.8 | +0.4 |
| **ISCO** | **Idaho Springs** | **82.69** | **336** | P | **P** | 06 10 51.0 | +0.6 |
| | baz=83 | | | | | | |
| **ISCO** | **Idaho Springs** | **82.69** | **336** | *e*P | **P** | 06 10 50.8 | +0.4 |
| | comp=Z,86nm,1.6s | | | | | | |
| ISCO | | | | LR | LR | | |
| | comp=Z,400nm,19.0s | | | | | | |
| **M29A** | **Burnside Ranch** | **82.72** | **340** | P | **P** | 06 10 50.8 | +0.6 |
| | baz=83,SNR=5.3 | | | | | | |
| **K34A** | **Le Mars** | **82.74** | **343** | P | **P** | 06 10 50.1 | -0.1 |
| | baz=83,SNR=14 | | | | | | |
| **EKU** | **East Kanab** | **82.79** | **330** | *e*P | **P** | 06 10 52.1 | +1.3 |
| **MWC** | **Mount Wilson** | **82.79** | **324** | *e*P | **P** | 06 10 51.9 | +1.0 |
| MWC | | | | pmax | pmax | | |
| | comp=Z,56nm,1.3s | | | | | | |
| MWC | | | | MLR | MLR | | |
| | comp=Z,1µm,19.4s | | | | | | |
| **MWC** | **Mount Wilson** | **82.79** | **324** | *e*P | **P** | 06 10 51.9 | +1.0 |
| | comp=Z,56nm,1.3s | | | | | | |
| MWC | | | | LR | LR | | |
| | comp=Z,1µm,19.4s | | | | | | |
| **J37A** | **Redenius Farm,** | **82.80** | **345** | P | **P** | 06 10 50.2 | -0.2 |
| | baz=83,SNR=7.4 | | | | | | |
| **PKME** | **Peaks-Kenny Pk** | **82.81** | **3** | *e*P | **P** | 06 10 50.8 | +0.3 |
| | comp=Z,7nm,0.9s | | | | | | |
| **PASC** | **Pasadena Art C** | **82.81** | **324** | *e*P | **P** | 06 10 53.2 | +2.4 |
| | comp=Z,113nm,1.6s | | | | | | |
| PASC | | | | LR | LR | | |
| | comp=Z,1µm,19.6s | | | | | | |
| **TUQ** | **Turquoise Moun** | **82.84** | **326** | P | **P** | 06 10 52.3 | +1.3 |
| | baz=83,SNR=6.8 | | | | | | |
| **M28A** | **Bar X Bar Ranc** | **82.87** | **339** | P | **P** | 06 10 52.0 | +1.0 |
| | baz=83 | | | | | | |
| **K33A** | **Hardington** | **82.87** | **343** | P | **P** | 06 10 51.2 | +0.3 |
| | baz=83 | | | | | | |
| **L31A** | **Butterfield Fa** | **82.92** | **341** | P | **P** | 06 10 51.1 | -0.1 |
| | baz=83,SNR=15 | | | | | | |
| **L30A** | **Spencer Herefo** | **82.93** | **341** | P | **P** | 06 10 52.0 | +0.7 |
| | baz=83,SNR=8.6 | | | | | | |
| **J36A** | **Seneca 1, Swea** | **82.97** | **345** | P | **P** | 06 10 51.4 | 0.0 |
| | baz=83,SNR=9.9 | | | | | | |
| **GSC** | **Goldstone** | **83.12** | **326** | *e*P | **P** | 06 10 53.4 | +0.9 |
| **GSC** | **Goldstone** | **83.12** | **326** | P | **P** | 06 10 53.4 | +0.9 |
| | baz=83,SNR=13 | | | | | | |
| **GSC** | **Goldstone** | **83.12** | **326** | *e*P | **P** | 06 10 53.4 | +0.9 |
| | comp=Z,64nm,1.6s | | | | | | |
| GSC | | | | LR | LR | | |
| | comp=Z,800nm,20.5s | | | | | | |
| **J35A** | **Milford** | **83.19** | **344** | P | **P** | 06 10 53.5 | +1.0 |
| | baz=84 | | | | | | |
| **L29A** | **Maesberg Ranch** | **83.24** | **340** | P | **P** | 06 10 53.7 | +0.8 |
| | baz=84 | | | | | | |
| **I38A** | **Scanlan Farm,** | **83.26** | **346** | P | **P** | 06 10 52.5 | -0.4 |
| | baz=84,SNR=18 | | | | | | |
| **J34A** | **George** | **83.28** | **344** | P | **P** | 06 10 52.7 | -0.3 |
| | baz=84,SNR=19 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **83.31** | **325** | P | **P** | 06 10 53.9 | +0.5 |
| | baz=84,SNR=19 | | | | | | |
| **K31A** | **O'Neill** | **83.32** | **342** | P | **P** | 06 10 53.4 | +0.2 |
| | baz=84,SNR=48 | | | | | | |
| **SHPR** | **Sheep Range** | **83.41** | **327** | *e*P | **P** | 06 10 55.1 | +1.0 |
| | comp=Z,84nm,1.5s | | | | | | |
| **OSI** | **Osito Adit** | **83.43** | **324** | P | **P** | 06 10 55.3 | +1.3 |
| | baz=84 | | | | | | |
| **OSI** | **Osito Adit** | **83.43** | **324** | *e*P | **P** | 06 10 55.3 | +1.3 |
| OSI | | | | LR | LR | | |
| | comp=Z,1µm,18.8s | | | | | | |
| **I37A** | **Lemond, Waseca** | **83.44** | **346** | P | **P** | 06 10 54.3 | +0.5 |
| | baz=84,SNR=15 | | | | | | |
| **L28A** | **Connealy Angus** | **83.47** | **339** | P | **P** | 06 10 55.0 | +0.9 |
| | baz=84 | | | | | | |
| **J33A** | **Davis** | **83.54** | **343** | P | **P** | 06 10 54.3 | 0.0 |
| | baz=84,SNR=15 | | | | | | |
| **CCUT** | **Cedar City** | **83.55** | **329** | *e*P | **P** | 06 10 56.2 | +1.4 |
| | comp=Z,81nm,1.3s | | | | | | |
| CCUT | | | | LR | LR | | |
| | comp=Z,800nm,20.1s | | | | | | |
| **I36A** | **Fitzsimmons Fa** | **83.57** | **345** | P | **P** | 06 10 54.6 | +0.1 |
| | baz=84 | | | | | | |
| **K30A** | **Basset** | **83.58** | **341** | P | **P** | 06 10 55.0 | +0.4 |
| | baz=84,SNR=17 | | | | | | |
| **SBC** | **Santa Barbara** | **83.75** | **323** | P | **P** | 06 10 56.8 | +1.2 |
| | baz=84 | | | | | | |
| **N23A** | **Red Feather La** | **83.79** | **336** | P | **P** | 06 10 57.0 | +1.0 |
| | baz=84 | | | | | | |
| **N23A** | **Red Feather La** | **83.79** | **336** | PFAKE | | 06 11 10.0 | +14 |
| N23A | | | | LR | LR | | |
| | comp=Z,300nm,18.5s | | | | | | |
| **SRU** | **San Rafael** | **83.80** | **332** | *e*P | **P** | 06 10 56.3 | +0.3 |
| **SRU** | **San Rafael** | **83.80** | **332** | *e*P | **P** | 06 10 56.3 | +0.3 |
| SRU | | | | LR | LR | | |
| | comp=Z,700nm,21.1s | | | | | | |
| **K29A** | **Lazy Trails An** | **83.85** | **340** | P | **P** | 06 10 57.0 | +1.0 |
| | baz=84 | | | | | | |
| **ECSD** | **EROS Data Cent** | **83.85** | **343** | P | **P** | 06 10 55.8 | -0.1 |
| | baz=84,SNR=100 | | | | | | |
| **ECSD** | **EROS Data Cent** | **83.85** | **343** | *e*P | **P** | 06 10 55.7 | -0.2 |
| | comp=Z,273nm,1.2s | | | | | | |
| ECSD | | | | LR | LR | | |
| | comp=Z,400nm,18.5s | | | | | | |
| **O20A** | **White River Ci** | **83.88** | **334** | P | **P** | 06 10 57.2 | +0.8 |
| | baz=84 | | | | | | |
| **O20A** | **White River Ci** | **83.88** | **334** | *e*P | **P** | 06 10 56.7 | +0.3 |
| | comp=Z,170nm,1.8s | | | | | | |
| O20A | | | | LR | LR | | |
| | comp=Z,800nm,19.4s | | | | | | |
| **H37A** | **Dierke Farm, C** | **83.90** | **346** | P | **P** | 06 10 55.9 | -0.1 |
| | baz=84,SNR=6.4 | | | | | | |
| **MSU** | **Marysvale** | **83.91** | **330** | *e*P | **P** | 06 10 57.4 | +0.8 |
| **MSU** | **Marysvale** | **83.91** | **330** | *e*P | **P** | 06 10 57.4 | +0.8 |
| | comp=Z,344nm,1.0s | | | | | | |
| **J31A** | **Geddes** | **83.94** | **342** | P | **P** | 06 10 56.1 | -0.2 |
| | baz=84,SNR=18 | | | | | | |
| **I34A** | **Hadley** | **83.98** | **344** | P | **P** | 06 10 57.3 | +0.7 |
| | baz=84 | | | | | | |
| **PHWY** | **Pilot Hill** | **84.00** | **336** | *e*P | **P** | 06 10 57.1 | +0.1 |
| PHWY | | | | LR | LR | | |
| | comp=Z,300nm,18.7s | | | | | | |
| **MPMC** | **Manual Prospec** | **84.06** | **326** | P | **P** | 06 10 58.3 | +0.9 |
| | baz=84,SNR=10.0 | | | | | | |
| **K28A** | **Ten Mile Ranch** | **84.09** | **340** | P | **P** | 06 10 58.2 | +1.0 |
| | baz=84,SNR=11 | | | | | | |
| **H36A** | **Jessenland, He** | **84.09** | **345** | P | **P** | 06 10 57.9 | +0.9 |
| | baz=84,SNR=14 | | | | | | |
| **FURC** | **Furnace Creek,** | **84.12** | **326** | P | **P** | 06 10 58.8 | +1.4 |
| | baz=84,SNR=10 | | | | | | |
| **P18A** | **Preston Nutter** | **84.15** | **332** | *e*P | **P** | 06 10 58.6 | +0.7 |
| P18A | | | | LR | LR | | |
| | comp=Z,900nm,21.3s | | | | | | |
| **J30A** | **Dallas** | **84.16** | **341** | P | **P** | 06 10 57.9 | +0.4 |
| | baz=84,SNR=10 | | | | | | |
| **ISA** | **Isabella** | **84.17** | **325** | *e*P | **P** | 06 10 59.4 | +1.6 |
| **ISA** | **Isabella** | **84.17** | **325** | P | **P** | 06 10 59.1 | +1.3 |
| | baz=84,SNR=16 | | | | | | |
| **ISA** | **Isabella** | **84.17** | **325** | *e*P | **P** | 06 10 59.4 | +1.6 |
| | comp=Z,51nm,1.3s | | | | | | |
| ISA | | | | LR | LR | | |
| | comp=Z,900nm,18.6s | | | | | | |
| **I33A** | **Coleman** | **84.19** | **343** | P | **P** | 06 10 57.6 | 0.0 |
| | baz=84,SNR=11 | | | | | | |
| **P17A** | **Butcher Ranch,** | **84.20** | **332** | *e*P | **P** | 06 10 58.3 | +0.3 |
| P17A | | | | LR | LR | | |
| | comp=Z,600nm,21.4s | | | | | | |
| **TMUT** | **Trail Mountain** | **84.22** | **331** | *e*P | **P** | 06 10 58.6 | +0.3 |
| | comp=Z,85nm,0.8s | | | | | | |
| TMUT | | | | LR | LR | | |
| | comp=Z,2µm,21.8s | | | | | | |
| **DAC** | **Darwin (Calif)** | **84.28** | **326** | *e*P | **P** | 06 10 59.9 | +1.3 |
| **DAC** | **Darwin (Calif)** | **84.28** | **326** | *e*P | **P** | 06 10 59.9 | +1.3 |
| | comp=Z,73nm,1.5s | | | | | | |
| DAC | | | | LR | LR | | |
| | comp=Z,500nm,18.0s | | | | | | |
| **SGU** | **Sterling** | **84.29** | **331** | *e*P | **P** | 06 10 59.8 | +1.2 |
| **I32A** | **Karley and Nic** | **84.33** | **343** | P | **P** | 06 10 58.1 | -0.2 |
| | baz=85,SNR=14 | | | | | | |
| **OUZ** | **Omahuta** | **84.36** | **229** | PFAKE | | 06 11 10.0 | +11 |
| OUZ | | | | LR | LR | | |
| | comp=Z,2µm,18.9s | | | | | | |
| **H35A** | **Sunnyside Ranc** | **84.39** | **345** | P | **P** | 06 10 58.5 | -0.1 |
| | baz=85,SNR=7.5 | | | | | | |
| **J29A** | **Okreek** | **84.45** | **341** | P | **P** | 06 10 59.5 | +0.5 |
| | baz=85,SNR=20 | | | | | | |
| **SPMN** | **St. Paul** | **84.50** | **346** | P | **P** | 06 10 58.8 | -0.3 |
| | baz=85,SNR=12 | | | | | | |
| **SPMN** | **St. Paul** | **84.50** | **346** | *e*P | **P** | 06 10 58.1 | -1.0 |
| | comp=Z,187nm,1.5s | | | | | | |
| SPMN | | | | LR | LR | | |
| | comp=Z,500nm,20.5s | | | | | | |
| **H34A** | **Spellman Lake,** | **84.56** | **344** | P | **P** | 06 10 59.7 | +0.3 |
| | baz=85,SNR=16 | | | | | | |
| **I31A** | **Royce, Wessing** | **84.58** | **342** | P | **P** | 06 10 59.8 | +0.2 |
| | baz=85 | | | | | | |
| **SMMC** | **Simmler** | **84.59** | **323** | P | **P** | 06 11 00.9 | +0.9 |
| | baz=85 | | | | | | |
| **VES** | **Vestal, Richgr** | **84.60** | **324** | P | **P** | 06 11 01.1 | +1.2 |
| | baz=85 | | | | | | |
| **CWC** | **Cottonwood Cre** | **84.64** | **325** | P | **P** | 06 11 01.8 | +1.5 |
| | baz=85,SNR=10 | | | | | | |
| **G36A** | **St. Michael** | **84.69** | **346** | P | **P** | 06 11 00.3 | +0.2 |
| | baz=85,SNR=5.9 | | | | | | |
| **I30A** | **Oacoma** | **84.70** | **341** | P | **P** | 06 11 00.0 | -0.2 |
| | baz=85,SNR=14 | | | | | | |
| **J28A** | **Allard Ranch,** | **84.71** | **340** | P | **P** | 06 11 00.7 | +0.4 |
| | baz=85,SNR=12 | | | | | | |
| **COWI** | **Conover** | **84.73** | **349** | *e*P | **P** | 06 10 60.0 | -0.3 |
| | comp=Z,49nm,1.0s | | | | | | |
| COWI | | | | LR | LR | | |
| | comp=Z,500nm,19.9s | | | | | | |
| **J27A** | **Elkhorn Farm,** | **84.76** | **339** | P | **P** | 06 11 01.8 | +1.2 |
| | baz=85,SNR=13 | | | | | | |
| **H32A** | **Carlson Farm,** | **84.77** | **343** | P | **P** | 06 11 00.6 | 0.0 |
| | baz=85,SNR=13 | | | | | | |
| **H33A** | **Prehn Over Nor** | **84.78** | **344** | P | **P** | 06 11 00.8 | +0.2 |
| | baz=85,SNR=31 | | | | | | |
| **GRAC** | **Grapevine Rang** | **84.79** | **326** | P | **P** | 06 11 02.0 | +1.2 |
| | baz=85,SNR=17 | | | | | | |
| **G35A** | **Watkins** | **84.82** | **345** | P | **P** | 06 11 01.0 | +0.3 |
| | baz=85,SNR=11 | | | | | | |
| **H31A** | **Wolsey** | **84.99** | **342** | P | **P** | 06 11 01.4 | -0.2 |
| | baz=85,SNR=8.6 | | | | | | |
| **MPU** | **Maple Canyon** | **85.01** | **332** | *e*P | **P** | 06 11 02.2 | +0.1 |
| | comp=Z,221nm,1.2s | | | | | | |
| MPU | | | | LR | LR | | |
| | comp=Z,700nm,21.0s | | | | | | |
| **I29A** | **Vivian Onida** | **85.02** | **341** | P | **P** | 06 11 02.8 | +1.0 |
| | baz=85 | | | | | | |
| **G34A** | **Benson** | **85.08** | **344** | P | **P** | 06 11 02.2 | +0.2 |
| | baz=85,SNR=5.2 | | | | | | |
| **SUSD** | **South Dakota S** | **85.08** | **342** | P | **P** | 06 11 02.2 | +0.1 |
| | baz=85,SNR=6.1 | | | | | | |
| **J26A** | **Sides Ranch, S** | **85.12** | **339** | P | **P** | 06 11 02.9 | +0.5 |
| | baz=85,SNR=18 | | | | | | |
| **NLU** | **North Lily Min** | **85.12** | **331** | *e*P | **P** | 06 11 03.5 | +0.8 |
| | comp=Z,110nm,1.6s | | | | | | |
| NLU | | | | LR | LR | | |
| | comp=Z,1µm,18.3s | | | | | | |
| **O16A** | **Springville** | **85.12** | **332** | *e*P | P | 06 10 57.2 | -5.4 |
| O16A | | | | LR | LR | | |
| | comp=Z,800nm,18.3s | | | | | | |
| **R11A** | **Troy Canyon, C** | **85.15** | **328** | P | **P** | 06 11 03.7 | +0.9 |
| | baz=85,SNR=53 | | | | | | |
| **R11A** | **Troy Canyon, C** | **85.15** | **328** | *e*P | **P** | 06 11 03.8 | +0.9 |
| | comp=Z,57nm,1.3s | | | | | | |
| R11A | | | | LR | LR | | |
| | comp=Z,700nm,18.3s | | | | | | |
| **G33A** | **Ortonville** | **85.20** | **344** | P | **P** | 06 11 03.4 | +0.7 |
| | baz=86 | | | | | | |
| **TIN** | **Tinemaha** | **85.21** | **326** | P | **P** | 06 11 04.9 | +1.8 |
| | baz=86,SNR=6.3 | | | | | | |
| **I28A** | **Midland** | **85.23** | **340** | P | **P** | 06 11 02.6 | -0.3 |
| | baz=86,SNR=28 | | | | | | |
| **F36A** | **Milaca** | **85.25** | **346** | P | **P** | 06 11 02.6 | -0.2 |
| | baz=86,SNR=35 | | | | | | |
| **J25A** | **Sunshine Ranch** | **85.40** | **338** | P | **P** | 06 11 04.0 | +0.1 |
| | baz=86,SNR=25 | | | | | | |
| **HTU** | **Hoyt Peak** | **85.43** | **332** | *e*P | **P** | 06 11 04.9 | +0.6 |
| **F35A** | **Swanville** | **85.45** | **345** | P | **P** | 06 11 03.6 | -0.3 |
| | baz=86,SNR=17 | | | | | | |
| **G32A** | **Webster** | **85.50** | **343** | P | **P** | 06 11 03.6 | -0.6 |
| | baz=86 | | | | | | |
| **F34A** | **Alexandria** | **85.53** | **345** | P | **P** | 06 11 04.2 | -0.1 |
| | baz=86,SNR=12 | | | | | | |
| **I27A** | **Quinn** | **85.53** | **340** | P | **P** | 06 11 03.8 | -0.6 |
| | baz=86 | | | | | | |
| **H29A** | **Onida** | **85.56** | **341** | P | **P** | 06 11 04.4 | -0.1 |
| | baz=86 | | | | | | |
| **K22A** | **Casper** | **85.56** | **336** | P | **P** | 06 11 04.8 | +0.1 |
| | baz=86,SNR=22 | | | | | | |
| **K22A** | **Casper** | **85.56** | **336** | *e*P | **P** | 06 11 05.3 | +0.5 |
| | comp=Z,155nm,1.5s | | | | | | |
| K22A | | | | LR | LR | | |
| | comp=Z,300nm,20.3s | | | | | | |
| **MTUM** | **Tungsten Hills** | **85.61** | **326** | *e*P | **P** | 06 11 06.5 | +1.3 |
| **DUG** | **Dugway** | **85.61** | **331** | *e*P | **P** | 06 11 05.5 | +0.5 |
| **DUG** | **Dugway** | **85.61** | **331** | P | **P** | 06 11 04.9 | -0.1 |
| | baz=86,SNR=31 | | | | | | |
| **DUG** | **Dugway** | **85.61** | **331** | *e*P | **P** | 06 11 05.5 | +0.5 |
| | comp=Z,65nm,

RSSD **Black Hills** 86.14 338 eP P 06 11 07.4 -0.3
RSSD **Black Hills** 86.14 338 eP P 06 11 07.4 -0.3
comp=Z,42nm,0.9s
RSSD LR LR
comp=Z,300nm,18.9s
G28A **Parade** 86.16 341 P P 06 11 07.6 +0.1
baz=86,SNR=14
MCU **Monte Cristo P** 86.22 332 eP P 06 11 08.4 +0.2
H26A **Fairpoint** 86.23 340 P P 06 11 09.9 +2.0
baz=86
F31A **Hecla** 86.24 343 P P 06 11 07.7 -0.1
baz=86,SNR=5.6
D37A **Cotton** 86.29 347 P P 06 11 07.9 -0.2
baz=87,SNR=8.8
BGU **Big Grassy Mou** 86.33 331 eP P 06 11 08.2 -0.3
comp=Z,47nm,1.5s
BGU LR LR
comp=Z,600nm,18.6s
RSUT **Red Spur Mount** 86.34 333 eP P 06 11 08.9 +0.1
E33A **Westby DABS, E** 86.36 345 P P 06 11 08.2 -0.2
baz=87,SNR=8.0
GZU **Grizzly Peak** 86.36 332 eP P 06 11 09.0 +0.1
HWUT **Hardware Ranch** 86.37 332 eP P 06 11 08.8 0.0
comp=Z,181nm,1.4s
NV01 **Mina Array Sit** 86.38 326 eP P 06 11 09.7 +0.7
NVAR **Mina Array Bea** 86.38 326 P P 06 11 10.1 +1.1
comp=Z,12nm,0.8s,baz=157,slow=5.7,SNR=86
NVAR PKKP PKKPbc 06 29 07.1 +0.2
comp=Z,0.9nm,0.7s,baz=278,slow=1.3,SNR=6.9
NVAR LR LR 06 42 37.4
comp=Z,492nm,20.3s,baz=149,slow=31
F30A **Leola** 86.40 342 P P 06 11 08.7 +0.1
baz=87
SPUT **South Promonto** 86.44 332 eP P 06 11 09.4 +0.3
comp=Z,239nm,1.7s
SPUT LR LR
comp=Z,1μm,18.0s
D36A **Goodland** 86.44 347 P P 06 11 08.5 -0.3
baz=87
XMAS **Kiritimati** 86.47 275 PFAKE 06 11 20.0 +10
XMAS LR LR
comp=Z,2μm,18.5s
D35A **Remer** 86.52 346 P P 06 11 09.1 -0.1
baz=87,SNR=37
C39A **Grand Marais** 86.56 349 P P 06 11 08.8 -0.5
baz=87,SNR=8.9
F29A **Eureka** 86.59 342 P P 06 11 09.5 -0.1
baz=87,SNR=7.8
TOA0 **Torodi Ar. Sit** 86.61 71 eP P 06 11 08.6 -1.8
TORD **Torodi Ar. Bea** 86.61 71 P P 06 11 10.4 0.0
comp=Z,13nm,0.8s,baz=227,slow=4.2,SNR=93
TORD LR LR 06 49 20.2
comp=Z,876nm,18.1s,baz=250,slow=35
HDU **Hyde Park** 86.61 332 eP P 06 11 09.9 -0.1
C38A **Sawbill Land.** 86.64 348 P P 06 11 09.1 -0.6
baz=87,SNR=15
E32A **Braaten, Kindr** 86.67 344 P P 06 11 10.3 +0.5
baz=87
BW06 **Boulder Array** 86.67 334 eP P 06 11 10.2 -0.1
comp=Z,50nm,1.2s
BW06 LR LR
comp=Z,1μm,18.7s
G27A **Dupree** 86.71 340 P P 06 11 09.7 -0.5
baz=87,SNR=35
D34A **Park Rapids** 86.75 345 P P 06 11 09.9 -0.4
baz=87,SNR=15
C37A **Embarrass** 86.80 347 P P 06 11 10.2 -0.4
baz=87,SNR=8.0
G26A **Maurine** 86.81 340 P P 06 11 10.3 -0.4
baz=87,SNR=36
E31A **Nome** 86.82 343 P P 06 11 10.5 -0.1
baz=87,SNR=10
F28A **McLaughlin** 86.85 341 P P 06 11 10.8 0.0
baz=87,SNR=17
EYMN **Ely** 86.90 348 P P 06 11 10.7 -0.3
baz=87,SNR=8.3
EYMN **Ely** 86.90 348 eP P 06 11 10.7 -0.3
comp=Z,87nm,1.3s
EYMN LR LR
comp=Z,500nm,21.6s
D33A **AnnSam, Waubun** 86.93 345 P P 06 11 11.0 -0.2
baz=87,SNR=14
MLI **Malad Range** 86.94 332 eP P 06 11 11.5 -0.1
G25A **Newell** 86.94 339 P P 06 11 11.1 -0.3
baz=87,SNR=30
C36A **Pine Crest Far** 86.95 347 P P 06 11 10.7 -0.5
baz=87,SNR=12
CMB **Columbia Colle** 86.99 325 eP P 06 11 12.7 +0.9
CMB **Columbia Colle** 86.99 325 eP P 06 11 12.7 +0.9
comp=Z,27nm,1.3s
CMB LR LR
comp=Z,900nm,18.7s
E30A **Jud** 87.00 343 P P 06 11 11.5 -0.1
baz=87,SNR=5.3
ELK **Elko** 87.04 330 eP P 06 11 12.5 +0.3
ELK **Elko** 87.04 330 eP P 06 11 12.5 +0.3
comp=Z,53nm,1.3s
ELK LR LR
comp=Z,600nm,18.1s
C35A **Jirik Farms, M** 87.10 346 P P 06 11 11.6 -0.4
baz=87,SNR=21
NPI **North Pocatell** 87.19 332 eP P 06 11 12.2 -0.5
F27A **Lemmon** 87.19 340 P P 06 11 12.6 +0.1
baz=88,SNR=32
AHID **Auburn Hatcher** 87.21 333 eP P 06 11 12.7 -0.2
comp=Z,58nm,1.3s
AHID LR LR
comp=Z,1μm,22.0s
E29A **Napoleon** 87.24 342 P P 06 11 12.7 0.0
baz=88
D31A **Mcclaflin, Tow** 87.24 344 P P 06 11 12.7 +0.1
baz=88,SNR=8.0
F26A **Lodgepole** 87.34 340 P P 06 11 13.2 -0.1
baz=88,SNR=19
E28A **Huff** 87.50 342 P P 06 11 13.5 -0.5
baz=88,SNR=22
C33A **Trail** 87.50 345 P P 06 11 13.8 -0.1
baz=88,SNR=7.6
D30A **Buchanan** 87.54 343 P P 06 11 14.2 +0.1
baz=88,SNR=17
BMN **Battle Mountai** 87.58 328 eP P 06 11 14.9 +0.2
BMN **Battle Mountai** 87.58 328 eP P 06 11 14.9 +0.2
comp=Z,17nm,1.2s
BMN LR LR
comp=Z,800nm,20.6s
E27A **Carson** 87.59 341 P P 06 11 14.5 +0.1
baz=88,SNR=14
F25A **Bowman** 87.63 340 P P 06 11 14.8 +0.2
baz=88,SNR=12
REDW **Red Top Meadow** 87.64 334 eP P 06 11 14.8 -0.2
comp=Z,33nm,1.0s
REDW LR LR
comp=Z,800nm,20.5s
PMOZ **Porto Moniz, M** 87.68 45 eLR LR 06 41 48.6
comp=Z,2μm,18.0s
D29A **Pettibone, Tap** 87.69 342 P P 06 11 14.3 -0.6
baz=88
SNOW **Snow King Moun** 87.70 334 eP P 06 11 15.7 +0.4
comp=Z,36nm,1.0s
SNOW LR LR
comp=Z,900nm,20.1s
LOHW **Long Hollow** 87.78 334 eP P 06 11 15.3 -0.3
comp=Z,27nm,1.0s
LOHW LR LR
comp=Z,1μm,19.7s
TPAW **Teton Pass** 87.79 334 eP P 06 11 15.8 0.0
comp=Z,72nm,1.2s
TPAW LR LR
comp=Z,800nm,20.0s
E26A **Carlson Angus** 87.86 340 P P 06 11 15.8 +0.1
baz=88,SNR=27
DRLN **Deer Lake** 87.86 10 PFAKE 06 11 30.0 +14
DRLN LR LR
comp=Z,2μm,19.0s
MOOW **Moose Ponds** 87.95 334 eP P 06 11 16.0 -0.4
comp=Z,18nm,1.0s
MOOW LR LR
comp=Z,1μm,19.2s
FXWY **Fox Creek** 87.95 334 eP P 06 11 16.2 -0.2
FXWY LR LR
comp=Z,700nm,20.5s
C31A **Landman Farms,** 87.95 344 P P 06 11 16.0 -0.1
baz=88,SNR=16
B34A **Aery, Baudette** 87.98 346 P P 06 11 16.0 -0.2
baz=88,SNR=14
AFI **Afiamalu** 87.99 254 PFAKE 06 11 30.0 +13
AFI LR LR
comp=Z,2μm,20.0s

C30A **Mose, Pekin** 88.03 343 P P 06 11 16.5 0.0
baz=88,SNR=16
AGMN **Agassiz Nation** 88.04 345 P P 06 11 16.2 -0.2
baz=88,SNR=18
AGMN **Agassiz Nation** 88.04 345 eP P 06 11 16.1 -0.4
comp=Z,177nm,1.4s
AGMN LR LR
comp=Z,602nm,19.7s
D28A **Regan** 88.05 342 P P 06 11 17.1 +0.5
baz=88
E25A **Miller Ranch,** 88.14 340 P P 06 11 17.3 +0.2
baz=88,SNR=8.7
IMW **Indian Meadow** 88.14 334 eP P 06 11 17.4 0.0
comp=Z,42nm,1.2s
IMW LR LR
comp=Z,900nm,20.7s
D27A **Center** 88.21 341 P P 06 11 17.6 +0.3
baz=88
FLWY **Flagg Ranch** 88.22 334 eP P 06 11 18.1 +0.3
comp=Z,71nm,1.1s
FLWY LR LR
comp=Z,1μm,19.8s
B32A **Ashes, Strandq** 88.27 345 P P 06 11 17.4 -0.1
baz=89,SNR=16
D26A **Manning** 88.37 341 P P 06 11 18.2 +0.1
baz=89,SNR=19
NSHM **Saint Helena R** 88.41 324 eP P 06 11 19.4 +0.9
MDND **Maddock** 88.43 343 P P 06 11 18.6 +0.3
baz=89,SNR=6.6
MDND **Maddock** 88.43 343 eP P 06 11 18.7 +0.3
comp=Z,759nm,1.7s
MDND LR LR
comp=Z,300nm,18.5s
H17A **Grant Village** 88.46 334 P P 06 11 19.2 +0.3
baz=89
H17A **Grant Village** 88.46 334 eP P 06 11 20.3 +1.4
comp=Z,8.3nm,1.0s
H17A LR LR
comp=Z,2μm,20.9s
MCID **Moose Creek** 88.49 334 eP P 06 11 19.4 +0.4
C28A **Hausauer Farms** 88.49 342 P P 06 11 19.0 +0.3
baz=89
B31A **Greenbush Farm** 88.53 344 P P 06 11 18.3 -0.4
baz=89,SNR=7.1
LKWY **Lake** 88.55 335 eP P 06 11 21.5 +2.2
LKWY **Lake** 88.55 335 eP P 06 11 21.5 +2.2
LKWY LR LR
comp=Z,1μm,19.0s
A33A **Warroad** 88.56 346 P P 06 11 18.7 -0.1
baz=89,SNR=17
YFT **Old Faithful** 88.59 334 eP P 06 11 20.4 +0.9
comp=Z,37nm,1.1s
YFT LR LR
comp=Z,3μm,19.7s
RLMT **Red Lodge** 88.66 336 P P 06 11 19.3 -0.5
baz=89,SNR=15
RLMT **Red Lodge** 88.66 336 eP P 06 11 19.9 +0.1
comp=Z,52nm,1.4s
RLMT LR LR
comp=Z,600nm,18.3s
B30A **Myrvik Farm, E** 88.70 344 P P 06 11 19.6 0.0
baz=89,SNR=39
D25A **Fairfield** 88.72 340 P P 06 11 20.6 +0.8
baz=89
C27A **Sayler Ranch,** 88.77 342 P P 06 11 20.2 +0.2
baz=89,SNR=6.7
YMR **Madison River** 88.83 334 eP P 06 11 21.2 +0.6
comp=Z,51nm,0.9s
YMR LR LR
comp=Z,2μm,20.3s
A31A **Linda, St. Vin** 88.91 345 P P 06 11 21.0 +0.4
baz=89
B29A **Wagenman Farm,** 88.95 343 P P 06 11 20.8 0.0
baz=89,SNR=6.3
HOPS **Hopland** 89.01 324 PFAKE 06 11 30.0 +8.7
HOPS LR LR
comp=Z,1μm,20.7s
C26A **Wahner Farm, P** 89.02 341 P P 06 11 22.0 +0.9
baz=89
LAO **LASA Array** 89.11 338 P P 06 11 21.6 -0.1
baz=89
LAO **LASA Array** 89.11 338 eP P 06 11 21.4 -0.2
comp=Z,22nm,1.3s
LAO LR LR
comp=Z,400nm,18.0s
HLID **Hailey** 89.11 332 P P 06 11 21.9 0.0
baz=89,SNR=36
HLID **Hailey** 89.11 332 eP P 06 11 23.0 +1.1
comp=Z,90nm,1.6s
HLID LR LR
comp=Z,800nm,18.0s
QLMT **Earthquake Lak** 89.13 334 eP P 06 11 22.8 +0.8
comp=Z,2.6nm,1.0s
A30A **Hoffart Farm,** 89.16 344 P P 06 11 21.7 -0.1
baz=90,SNR=9.1
B28A **Dugan Ranch, T** 89.17 342 P P 06 11 22.3 +0.5
baz=90
A29A **Manning Farm,** 89.35 343 P P 06 11 22.6 0.0
baz=90,SNR=23
GCMT **Greycliff** 89.38 336 eP P 06 11 24.1 +1.0
O03D **Paynes Creek** 89.47 325 P P 06 11 24.2 +0.7
baz=90
MFID **Camas Ranch** 89.53 331 eP P 06 11 24.2 +0.4
comp=Z,53nm,1.5s
MFID LR LR
comp=Z,700nm,19.4s
B26A **Jensen Ranch,** 89.56 341 P P 06 11 23.8 +0.1
baz=90
A28A **Rude Farm, Bot** 89.58 343 P P 06 11 24.2 +0.5
baz=90
MCMT **McKenzie Canyo** 89.63 333 eP P 06 11 25.1 +0.8
LSZ **Lusaka** 89.70 109 eP P 06 11 27.2 +1.9
LSZ **Lusaka** 89.70 109 eP P 06 11 27.2 +1.9
comp=Z,53nm,0.9s
LSZ LR LR
comp=Z,2μm,20.9s
KCPM **Cahto Peak** 89.80 324 PFAKE 06 11 40.0 +15
KCPM LR LR
comp=Z,700nm,18.7s
WVOR **Wild Horse Val** 89.84 328 eP P 06 11 25.5 +0.2
WVOR pmax pmax
comp=Z,31nm,1.2s
WVOR MLR MLR
comp=Z,600nm,18.1s
WVOR **Wild Horse Val** 89.84 328 eP P 06 11 25.5 +0.2
comp=Z,31nm,1.2s
WVOR LR LR
comp=Z,600nm,18.1s
A27A **Ledoux Ranch,** 89.85 342 P P 06 11 26.2 +1.2
baz=90
ULM **Lac du Bonnet** 89.90 346 P P 06 11 25.0 -0.1
comp=Z,26nm,1.1s,baz=174,slow=3.8,SNR=16
ULM **Lac du Bonnet** 89.90 346 eP P 06 11 24.7 -0.4
ULM **Lac du Bonnet** 89.90 346 eP P 06 11 24.7 -0.4
ULM LR LR
comp=Z,700nm,18.8s
BOZ **Bozeman (W)** 89.91 334 eP P 06 11 25.2 -0.4
BOZ pmax pmax
comp=Z,8.0nm,1.0s
BOZ MLR MLR
comp=Z,800nm,21.0s
BOZ **Bozeman (W)** 89.91 334 P P 06 11 25.5 -0.1
baz=90
BOZ **Bozeman (W)** 89.91 334 eP P 06 11 25.1 -0.4
comp=Z,7.5nm,1.0s
BOZ LR LR
comp=Z,800nm,21.0s
DLMT **Dillon** 90.00 334 eP P 06 11 26.8 +0.8
comp=Z,42nm,1.3s
DLMT LR LR
comp=Z,900nm,20.5s
WDC **Whiskeytown Da** 90.03 325 eP P 06 11 27.1 +1.1
WDC **Whiskeytown Da** 90.03 325 eP P 06 11 27.1 +1.1
WDC epP pP 06 11 35.0 -1.2
WDC LR LR
comp=Z,500nm,18.9s
MOD **Modoc** 90.11 327 eP P 06 11 27.5 +1.0
comp=Z,20nm,1.1s
MOD LR LR
comp=Z,700nm,19.3s
DGMT **Dagmar** 90.16 340 P P 06 11 26.5 0.0
baz=90
DGMT **Dagmar** 90.16 340 eP P 06 11 26.3 -0.1
comp=Z,30nm,1.0s
DGMT LR LR
comp=Z,400nm,21.4s
KMRM **Mail Ridge** 90.28 324 eP P 06 11 29.3 +2.0

A25A **Svangstu Ranch** 90.31 341 P P 06 11 28.0 +0.9
baz=91
LRM **Limekiln Ridge** 90.35 334 eP P 06 11 28.3 +0.6
J08A **Circle Bar Ran** 90.54 329 eP P 06 11 29.8 +1.3
J08A LR LR
comp=Z,800nm,19.4s
M04C **Macdoel** 90.68 326 P P 06 11 30.0 +0.7
baz=91
KHMM **Horse Mountain** 90.81 324 PFAKE 06 11 40.0 +10
KHMM LR LR
comp=Z,700nm,18.6s
M02C **Callahan** 90.82 325 P P 06 11 30.8 +1.0
baz=91
HRY **Holter Researc** 90.91 335 eP P 06 11 32.9 +2.8
YBH **Yreka Blue Hor** 91.03 325 eP P 06 11 31.0 +0.2
YBH MLR MLR
comp=Z,500nm,19.0s
YBH **Yreka Blue Hor** 91.03 325 eP P 06 11 30.9 +0.2
YBH LR LR
comp=Z,500nm,19.0s
K05A **Summer Lake** 91.03 327 eP P 06 11 32.6 +1.8
K05A LR LR
comp=Z,900nm,18.1s
BMO **Blue Mountains** 91.32 330 PFAKE 06 11 40.0 +8.0
BMO LR LR
comp=Z,500nm,19.2s
K04D **Chiloquin, OR** 91.32 327 P P 06 11 33.4 +1.2
baz=92
EGMT **Eagleton** 91.38 337 P P 06 11 32.9 +0.7
baz=92
EGMT **Eagleton** 91.38 337 eP P 06 11 32.2 0.0
EGMT LR LR
comp=Z,300nm,18.9s
TAU **Tasmania Unive** 91.49 209 PFAKE 06 11 50.0 +17
TAU LR LR
comp=Z,700nm,18.0s
I07A **Izee** 91.56 329 eP P 06 11 34.2 +1.0
I07A LR LR
comp=Z,700nm,18.1s
CHMT **Chamberlain Mo** 91.57 334 eP P 06 11 34.1 +0.8
J05D **Fort Rock, OR** 91.63 327 P P 06 11 34.0 +0.4
baz=92
MSO **Missoula** 91.74 334 P P 06 11 34.5 +0.5
baz=92
MSO **Missoula** 91.74 334 eP P 06 11 34.7 +0.7
MSO LR LR
comp=Z,700nm,18.3s
SLMT **Seeley Lake** 91.94 334 eP P 06 11 35.2 +0.3
F10A **Beach Ranch, E** 92.22 331 eP P 06 11 36.3 +0.1
G08A **Pilot Rock** 92.33 330 eP P 06 11 37.5 +0.8
G08A LR LR
comp=Z,600nm,19.4s
SWMT **Swartz Lake** 92.34 334 eP P 06 11 37.1 +0.3
SCHQ **Schefferville** 92.47 4 PFAKE 06 11 50.0 +13
SCHQ LR LR
comp=Z,800nm,21.4s
JTMT **Jette** 92.65 334 eP P 06 11 38.6 +0.5
YBMT **Yellow Bay** 92.65 334 eP P 06 11 38.6 +0.4
KEBM **Edson Butte** 92.67 325 PFAKE 06 11 50.0 +12
KEBM LR LR
comp=Z,800nm,19.4s
BLMT **Blacktail Moun** 92.90 334 eP P 06 11 39.8 +0.4
BSMT **Bassoo Peak** 92.91 334 eP P 06 11 39.1 -0.4
G06A **Carlson Farm,** 92.97 329 PFAKE 06 11 50.0 +10
G06A LR LR
comp=Z,500nm,19.3s
MSVF **Nonsavu** 93.10 245 PFAKE 06 11 50.0 +8.9
MSVF LR LR
comp=Z,900nm,22.0s
H04A **Detroit Lake** 93.17 328 PFAKE 06 11 50.0 +9.5
H04A LR LR
comp=Z,500nm,19.4s
HAWA **Hanford** 93.47 330 eP P 06 11 42.6 +0.9
comp=Z,61nm,1.5s
HAWA LR LR
comp=Z,600nm,18.5s
COR **Corvallis** 93.57 327 PFAKE 06 11 50.0 +7.7
COR LR LR
comp=Z,800nm,18.4s
WALA **Waterton Lakes** 93.64 335 eP P 06 11 43.0 +0.2
comp=Z,15nm,0.9s
WALA LR LR
comp=Z,1μm,19.3s
E07A **Sunnyside** 93.73 330 eP P 06 11 44.3 +1.3
E07A LR LR
comp=Z,700nm,18.0s
D08A **Wollman Farm,** 93.78 331 eP P 06 11 43.7 +0.5
D08A LR LR
comp=Z,600nm,18.1s
NEW **Newport** 94.10 332 eP P 06 11 44.3 -0.5
NEW **Newport** 94.10 332 eP P 06 11 44.3 -0.5
comp=Z,46nm,1.8s
NEW LR LR
comp=Z,700nm,18.3s
C09A **Chrisman Ranch** 94.14 332 eP P 06 11 45.4 +0.5
C09A LR LR
comp=Z,600nm,18.9s
F04A **Amboy** 94.27 328 PFAKE 06 12 00.0 +15
F04A LR LR
comp=Z,600nm,20.4s
RTC **Rabat Centre** 94.53 50 PFAKE 06 12 00.0 +13
RTC LR LR
comp=Z,20μm,19.0s
LTY **Liberty** 94.62 330 PFAKE 06 12 00.0 +13
LTY LR LR
comp=Z,600nm,20.5s
LON **Longmire** 94.67 329 eP P 06 11 47.7 +0.3
LON **Longmire** 94.67 329 eP P 06 11 47.7 +0.3
LON LR LR
comp=Z,400nm,19.1s
D05A **Enumclaw** 95.10 329 eP P 06 11 49.9 +0.7
D05A LR LR
comp=Z,700nm,19.1s
E03A **Lebam** 95.24 328 PFAKE 06 12 00.0 +10
E03A LR LR
comp=Z,700nm,20.3s
LHI **Lord Howe Isla** 95.36 223 PFAKE 06 12 00.0 +8.9
LHI LR LR
comp=Z,1μm,18.4s
FFC **Flin Flon** 95.38 344 eP P 06 11 49.8 -0.6
FFC **Flin Flon** 95.38 344 eP P 06 11 49.8 -0.6
comp=Z,13nm,1.1s
FFC LR LR
comp=Z,500nm,19.3s
TAM **Tamanrasset** 95.51 66 eP P 06 11 52.7 +0.7
TAM **Tamanrasset** 95.51 66 eP P 06 11 52.7 +0.7
comp=Z,21nm,1.2s
TAM LR LR
comp=Z,1μm,20.0s
PFVI **Vila Bisbo** 95.53 47 PFAKE 06 12 00.0 +8.5
PFVI LR LR
comp=Z,2μm,20.4s
MORF **Marmelete** 95.75 46 eP P 06 11 53.2 +0.6
MORF AMS AMS 06 52 56.9
comp=E,2μm,21.3s
MORF **Marmelete** 95.75 46 eP P 06 11 53.1 +0.6
POHA **Pohakuloa** 95.86 290 PFAKE 06 12 10.0 +16
POHA LR LR
comp=Z,1μm,18.0s
PTEO **Sao Teotonio** 95.87 46 eP P 06 11 53.7 +0.7
comp=Z,55nm,1.7s
NLWA **Neilton Lookou** 96.03 328 PFAKE 06 12 10.0 +16
NLWA LR LR
comp=Z,600nm,21.0s
PBDV **Barranco-do-Ve** 96.12 47 eP P 06 11 53.9 -0.3
comp=Z,36nm,1.7s
PCVE **Castro Verde** 96.33 47 eP P 06 11 55.6 +0.5
comp=Z,25nm,1.8s
PVAQ **Vaqueiros** 96.35 47 eP P 06 11 54.8 -0.4
PVAQ **Vaqueiros** 96.35 47 eSKS SKSac 06 22 29.4 +0.1
PVAQ **Vaqueiros** 96.35 47 eLR LR 06 43 56.3
comp=Z,2μm,20.0s
MESJ **Messejana** 96.36 46 eP P 06 11 56.1 +0.8
MESJ AMS AMS 06 53 29.0
comp=Z,2μm,17.2s
MESJ **Messejana** 96.36 46 eP P 06 11 55.9 +0.6
comp=Z,18nm,2.0s
MESJ **Messejana** 96.36 46 eP P 06 11 56.0 +0.8
A05A **Maple Falls** 96.59 330 PFAKE 06 12 10.0 +14
A05A LR LR
comp=Z,100nm,18.9s
PBEJ **Beja** 96.69 46 eP P 06 11 57.2 +0.4
comp=Z,19nm,1.9s
PGC **Sidney** 96.86 329 PFAKE 06 12 10.0 +13
PGC LR LR

comp=Z,800nm,18.5s
**EVO Evora 96.96 46** *e*P **P 06 11 58.2 +0.2**
comp=Z,14nm,2.0s
**EDM Edmonton 97.04 337** PFAKE 06 12 10.0 +12
EDM LR LR
comp=Z,500nm,21.1s
**PMTG Montargil 97.21 45** *e*P Pdif 06 11 59.4 +0.2
comp=Z,22nm,2.3s
**CAN Canberra 97.23 214** PFAKE 06 12 10.0 +10
CAN LR LR
comp=Z,849nm,20.0s
**FCC Fort Churchill 97.76 349** PFAKE 06 12 10.0 +8.9
FCC LR LR
comp=Z,600nm,20.1s
**PMRV Marv??o 97.92 46** *e*P **P 06 12 02.1 -0.2**
comp=Z,14nm,2.3s
**PMRV Marv??o 97.92 46** *e*LR LR 06 47 19.5
comp=Z,1μm,18.0s
**DZM Mont Dzumac 98.04 234** *e*SP SP 06 24 52.9 +1.5
comp=Z,361nm,23.6s
**DZM Mont Dzumac 98.04 234** *e*LR LR 06 43 58.8
comp=Z,3μm,24.1s
**PCBR Castelo Branco 98.16 45** *e*P **P 06 12 03.3 0.0**
comp=Z,12nm,1.1s
**MTE Manteigas 98.50 45** *e*P Pdif 06 12 05.0 0.0
comp=Z,22nm,1.8s
**MTE Manteigas 98.50 45** *e*SKS SKSac 06 22 50.1 +10
**MTE Manteigas 98.50 45** *e*LR LR 06 47 06.0
comp=Z,2μm,20.0s
**MTE Manteigas 98.50 45** *e*P Pdif 06 12 05.0 0.0
MTE LR LR
comp=Z,2μm,19.1s
**PVRL Vila Real 99.00 44** *e*P **Pdif 06 12 07.3 +0.1**
comp=Z,19nm,1.2s
**POLO Lamas de Olo 99.03 44** *e*P **Pdif 06 12 07.2 -0.1**
comp=Z,9.5nm,1.5s
**PGAV Gavieira, Arco 99.17 43** *e*LR LR 06 46 51.5
comp=Z,2μm,20.0s
**MVO Moncorvo 99.31 45** *e*P **Pdif 06 12 08.7 +0.2**
comp=Z,17nm,1.8s
**MVO Moncorvo 99.31 45** *e*LR LR 06 44 28.5
comp=Z,2μm,20.0s
**PAB San Pablo 99.75 47** PFAKE 06 12 20.0 +9.4
PAB LR LR
comp=Z,2μm,18.0s
**PBRG Bragança 99.90 44** *e*P **Pdif 06 12 09.5 -1.6**
comp=Z,12nm,2.5s
**ESDC Sonseca Array 100.06 47** P **Pdif 06 12 11.6 -0.3**
comp=Z,3.1nm,0.9s,baz=250,slow=4.1,SNR=13
ESDC PP **PP 06 16 15.2 -2.8**
comp=Z,1.9nm,0.9s,baz=238,slow=6.7,SNR=5.2
**ARMA Armidale 100.08 218** PFAKE 06 12 20.0 +7.5
ARMA LR LR
comp=Z,700nm,19.5s
**ABPO Ambohimpanom 100.65 124** PFAKE 06 12 30.0 +15
ABPO LR LR
comp=Z,2μm,19.9s
**MBAR Mbarara 100.85 99** PFAKE 06 12 30.0 +14
MBAR LR LR
comp=Z,2μm,18.1s
**EIDS Eidsvold 104.48 221** PFAKE 06 12 40.0 +7.9
EIDS LR LR
comp=Z,900nm,18.1s
**BBOO Buckleboo 104.52 205** PFAKE 06 12 40.0 +7.9
BBOO LR LR
comp=Z,600nm,20.6s
**KMBO Kilima Mbogo 105.57 104** PFAKE 06 17 00.0
KMBO LR LR
comp=Z,2μm,22.0s
**SFJD Kangerlussuaq 105.96 9** PFAKE 06 17 00.0
SFJD LR LR
comp=Z,800nm,22.0s
**WRAK Wrangell Islan 106.28 330** PFAKE 06 17 00.0
WRAK LR LR
comp=Z,400nm,20.1s
**DLBC Dease Lake 106.85 333** PFAKE 06 17 00.0
DLBC LR LR
comp=Z,800nm,18.6s
**DSB Dublin 107.64 36** PFAKE 06 17 00.0
DSB LR LR
comp=Z,2μm,18.0s
**VSL Villasalto 108.11 54** PFAKE 06 17 10.0
VSL LR LR
comp=Z,2μm,18.5s
**SSB Saint Sauveur 108.46 47** PFAKE 06 17 10.0
SSB LR LR
comp=Z,1μm,22.0s
**NWAO Narrogin (SRO) 108.90 190** PFAKE 06 17 10.0
NWAO LR LR
comp=Z,600nm,19.2s
**TARA Tarawa 109.34 256** PFAKE 06 17 10.0
TARA LR LR
comp=Z,800nm,19.0s
**WDD Wield Dalam 109.51 59** PFAKE 06 17 10.0
WDD LR LR
comp=Z,5μm,19.5s
**SKAG Skagway 109.53 331** PFAKE 06 17 10.0
SKAG LR LR
comp=Z,500nm,18.0s
**CLTB Caltabellotta 109.56 57** PFAKE 06 17 10.0
CLTB LR LR
comp=Z,1μm,19.0s
**BNI Bardonecchia 109.57 48** PFAKE 06 17 10.0
BNI LR LR
comp=Z,1μm,20.0s
**CWF Charnwood Fore 109.73 38** PFAKE 06 17 10.0
CWF LR LR
comp=Z,1μm,18.2s
**ESK Eskdalemuir 110.39 35** PFAKE 06 17 10.0
ESK LR LR
comp=Z,2μm,18.0s
**DHAK Deception Hill 110.40 330** PFAKE 06 17 10.0
DHAK LR LR
comp=Z,500nm,20.3s
**SENIN Lac Senin/Sane 110.66 47** PFAKE 06 17 10.0
SENIN LR LR
comp=Z,2μm,18.1s
**YKU2 Yakutat 111.25 330** PFAKE 06 17 10.0
YKU2 LR LR
comp=Z,1μm,21.4s
**VLC Villacollemand 111.30 50** PFAKE 06 17 10.0
VLC LR LR
comp=Z,800nm,19.8s
**CTAO Charters Tower 111.33 220** PFAKE 06 17 10.0
CTAO LR LR
comp=Z,700nm,18.0s
**HNR Honiara 111.47 238** PFAKE 06 17 10.0
HNR LR LR
comp=Z,500nm,20.2s
**UCC Uccle 111.48 42** PFAKE 06 17 10.0
UCC LR LR
comp=Z,2μm,18.3s
**WLF Walferdange 111.82 44** PFAKE 06 17 10.0
WLF LR LR
comp=Z,2μm,20.6s
**PCA Pinnacle 111.84 330** *e*PKiKP **PKiKP 06 16 57.2 -3.5**
PCA LR LR
comp=Z,600nm,20.3s
**TUE Stuetta 111.91 48** PFAKE 06 17 10.0
TUE LR LR
comp=Z,1μm,20.6s
**BFO Black Forest 112.31 46** PFAKE 06 17 10.0
BFO LR LR
comp=Z,2μm,20.0s
**DAVOX Davos/Dischmat 112.39 48** PKiKP **PKiKP 06 17 02.6 +0.3**
comp=Z,3.6nm,0.7s,baz=344,slow=4.7,SNR=6.4
**FUORN Ofenpass-Fuorn 112.53 48** PFAKE 06 17 10.0
FUORN LR LR
comp=Z,2μm,19.8s
**CUC Castrocucco 112.56 56** PFAKE 06 17 10.0
CUC LR LR
comp=Z,2μm,19.4s
**TIP Timpagrande 112.76 57** PFAKE 06 17 10.0
TIP LR LR
comp=Z,2μm,21.1s
**SUMG Summit 112.77 11** PFAKE 06 17 10.0
SUMG LR LR
comp=Z,800nm,19.3s
**FURI Furi 112.89 97** PFAKE 06 17 20.0
FURI LR LR
comp=Z,1μm,20.3s
**STU Stuttgart 113.04 45** PFAKE 06 17 20.0
STU LR LR
comp=Z,1μm,19.4s
**RES Resolute Bay 113.14 354** PFAKE 06 17 10.0
RES LR LR
comp=Z,700nm,19.0s
**ASAR Alice Springs 113.63 207** PKiKP **PKiKP 06 17 04.1 -1.3**
comp=Z,1.0nm,0.7s,baz=140,slow=1.9,SNR=10.0
ASAR PKKPbc **PKKPbc 06 27 48.0 +0.2**
comp=Z,2.7nm,0.7s,baz=338,slow=2.7,SNR=24
**RAGM Ragged Mountai 113.79 329** PFAKE 06 17 20.0
RAGM LR LR
comp=Z,500nm,18.4s
**BMRM Bremner River 114.09 330** PFAKE 06 17 20.0 +15
BMRM LR LR
comp=Z,400nm,19.2s
**TRI Trieste 114.15 50** PFAKE 06 17 20.0 +15
TRI LR LR
comp=Z,1μm,19.3s
**EYAK Cordova Ski Ar 114.32 329** PFAKE 06 17 20.0 +15
EYAK LR LR
comp=Z,400nm,18.7s
**GRFO Grafenberg 114.65 45** PFAKE 06 17 20.0 +14
GRFO LR LR
comp=Z,1μm,18.6s
**DIV Divide 114.65 329** PFAKE 06 17 20.0 +14
DIV LR LR
comp=Z,400nm,21.0s
**KLU Klutina 114.91 330** PFAKE 06 17 20.0 +13
KLU LR LR
comp=Z,400nm,20.3s
**EGAK Eagle 115.02 334** PFAKE 06 17 20.0 +13
EGAK LR LR
comp=Z,500nm,19.3s
**HARP HAARP 115.12 331** PFAKE 06 17 20.0 +13
HARP LR LR
comp=Z,400nm,18.6s
**DOT Dot Lake 115.41 332** PFAKE 06 17 20.0 +13
DOT LR LR
comp=Z,9μm,21.8s
**MOA Molln 115.50 48**⇑ *i*PKPdf **PKPdf 06 17 07.6 -0.4**
comp=Z,6.9nm,0.8s
**NKC Novy Kostel 115.60 45** *e*PKIKP **PKPdf 06 17 08.5 +0.3**
**NKC Novy Kostel 115.60 45** *e*PKP **PKPdf 06 17 08.5 +0.3**
NKC *ex* x 06 24 46.0
**SEW Seward 115.62 327** PFAKE 06 17 20.0 +12
SEW LR LR
comp=Z,400nm,20.3s
**GEC2 GERESS Array S 115.65 47** *e*PKIKP **PKPdf 06 17 08.4 0.0**
**GEC2 GERESS Array S 115.65 47** *e*PKiKP **PKPdf 06 17 08.4 0.0**
**GERES GERESS Array B 115.65 47** PKP **PKPdf 06 17 08.3 0.0**
comp=Z,9.0nm,0.8s,baz=215,slow=1.6,SNR=48
**SCM Sheep Creek Mo 115.66 330** PFAKE 06 17 20.0 +12
SCM LR LR
comp=Z,400nm,18.1s
**KHC Kasperske Hory 115.72 47** *e*PKIKP **PKPdf 06 17 08.4 0.0**
KHC *e* 06 17 16.4
KHC MLR MLR
comp=Z,2μm,21.4s
**KHC Kasperske Hory 115.72 47** *e*PKP **PKPdf 06 17 08.4 0.0**
KHC *ep*PKP PKiKP 06 17 16.4 +8.0
KHC *e*SKS SKSdf 06 24 03.1 -15
KHC AMS AMS 07 06 00.0
comp=Z,2μm,21.4s
**KHC Kasperske Hory 115.72 47** *e*PKPdf **PKPdf 06 17 08.2 -0.2**
KHC LR LR
comp=Z,600nm,21.0s
**KDAK Kodiak Island 115.82 324** PFAKE 06 17 20.0 +12
KDAK LR LR
comp=Z,400nm,18.0s
**TIR Tirane 115.90 57** PFAKE 06 17 20.0 +11
TIR LR LR
comp=Z,3μm,19.0s
**BRLK Bradley Lake 116.06 327** PFAKE 06 17 20.0 +11
BRLK LR LR
comp=Z,400nm,18.2s
**CNPM China Poot 116.09 326** PFAKE 06 17 20.0 +11
CNPM LR LR
comp=Z,600nm,18.1s
**CLL Collm 116.43 44**⇓ *e*P **Pdif 06 13 18.0 -6.3**
CLL *i* 06 17 10.0
CLL *e* 06 17 19.0
CLL *e* 06 28 04.0
CLL pmax pmax
comp=Z,8.0nm,0.8s
CLL MLR MLR
comp=Z,1μm,20.5s
**CLL Collm 116.43 44**⇓ *i*PKiKP **PKiKP 06 17 10.0 +0.4**
comp=Z,8.0nm,0.8s
CLL *e*(sPKiKP) 06 17 19.0
CLL *e*PP **PP 06 18 19.0 +1.9**
CLL *e*PPP PPP 06 20 54.0
CLL *e*PS **PS 06 28 00.0 +0.8**
CLL *e*PKKPdf **PKKPdf 06 28 04.0 -1.2**
CLL *e*PPS PPS 06 29 18.0
CLL *e*SS SS 06 34 13.0 -6.7
CLL LmV 07 04 00.0
comp=Z,1μm,20.5s
CLL Lm MLR 07 09 00.0
comp=N,800nm,18.1s
CLL Lm MLR 07 09 00.0
comp=E,600nm,19.3s
**CLL Collm 116.43 44** *e*PKPdf **PKiKP 06 17 10.1 +0.4**
CLL LR LR
comp=Z,2μm,20.6s
**AGG Agios Georgios 116.46 60** PFAKE 06 17 20.0 +10
AGG LR LR
comp=Z,2μm,19.2s
**IDI Anoyia 116.46 65** PFAKE 06 17 20.0 +10
IDI LR LR
comp=Z,2μm,20.0s
**CONA Conrad Observa 116.48 49**⇑ *i*PKPdf **PKPdf 06 17 09.4 -0.6**
comp=Z,6.9nm,0.8s
**PRA Prague 116.65 46** AMS AMS 07 07 50.0
comp=Z,2μm,16.7s
**PRU Pruhonice 116.67 46** *e*SKS **SKSac 06 24 04.4 +5.6**
PRU AMS AMS 07 08 00.0
comp=Z,600nm,18.1s
**BRG Berggiesshubel 116.75 45** *e*P **PKPdf 06 17 10.2 -0.1**
comp=Z,9.0nm,1.1s
**BRG Berggiesshubel 116.75 45** *e*PKIKP **PKPdf 06 17 10.2 -0.1**
BRG pmax pmax
comp=Z,9.0nm,1.1s
**GOPC GO Pecny, Ondr 116.78 46** *e*SKS **SKSac 06 24 00.5 +1.3**
GOPC AMS AMS 07 08 10.0
comp=Z,1μm,17.0s
**WRA Warramunga Arr 116.85 209** PKP **PKPdf 06 17 10.3 -1.4**
comp=Z,2.1nm,0.8s,baz=167,slow=1.6,SNR=21
WRA PKKPbc **PKKPbc 06 27 36.3 -0.3**
comp=Z,1.2nm,0.8s,baz=343,slow=3.8,SNR=12
**WRAB Tennant Creek 116.86 210** *e*PKIKP **PKPdf 06 17 10.8 -0.8**
WRAB MLR MLR
comp=Z,1μm,21.4s
**WRAB Tennant Creek 116.86 210** *e*PKPdf **PKPdf 06 17 10.8 -0.8**
WRAB LR LR
comp=Z,1μm,21.4s
**SUA Susitna One 116.86 328** PFAKE 06 17 20.0 +10
SUA LR LR
comp=Z,500nm,19.1s
**HDA Harding Lake 116.89 332** PFAKE 06 17 20.0 +10
HDA LR LR
comp=Z,1μm,20.3s
**TREC Trest 116.90 47** *e*PKIKP **PKPdf 06 17 10.6 -0.1**
TREC MLR MLR
comp=Z,900nm,20.4s
**TREC Trest 116.90 47** *e*PKP **PKPdf 06 17 10.6 -0.1**
TREC *ex* x 06 23 51.1
TREC AMS AMS 07 07 10.0
comp=Z,900nm,20.4s
**PVCC Panska Ves 116.94 46** *e*PKIKP **PKPdf 06 17 11.3 +0.6**
PVCC MLR MLR
comp=Z,1μm,19.7s
**PVCC Panska Ves 116.94 46** *e*PKP **PKPdf 06 17 11.3 +0.6**
PVCC AMS AMS 07 07 20.0
comp=Z,1μm,19.7s
**ILAR Eielson Array 117.06 333** PKP **PKPdf 06 17 09.9 -0.6**
comp=Z,1.8nm,0.8s,baz=178,slow=1.5,SNR=19
ILAR PKKPbc **PKKPbc 06 27 34.6 -2.1**
comp=Z,0.9nm,0.9s,baz=282,slow=5.6,SNR=8.6
**RND Reindeer 117.09 331** PFAKE 06 17 20.0 +9.3
RND LR LR
comp=Z,400nm,21.3s
**DIVS Divibare 117.27 54**⇑ *i*P **PKPdf 06 17 11.8 +0.1**
**MCK McKinley 117.29 331** PFAKE 06 17 20.0 +9.0
MCK LR LR
comp=Z,500nm,18.6s
**CCB Clear Creek Bu 117.33 332** PFAKE 06 17 20.0 +9.0
CCB LR LR
comp=Z,500nm,19.8s
**WRH Wood River Hil 117.35 332** PFAKE 06 17 20.0 +9.0
WRH LR LR
comp=Z,400nm,19.9s
**SANT Santorini 117.39 64** PFAKE 06 17 20.0 +7.9
SANT LR LR
comp=Z,1μm,20.0s
**FYU Fort Yukon 117.43 335** PFAKE 06 17 20.0 +8.9
FYU LR LR
comp=Z,500nm,19.5s
**COLA College 117.47 332** PFAKE 06 17 20.0 +8.8
COLA LR LR
comp=Z,400nm,20.0s
**VRAC Vranov 117.55 48** PKP **PKPdf 06 17 11.6 -0.3**
comp=Z,7.2nm,0.9s,baz=287,slow=3.5,SNR=6.4
**VRAC Vranov 117.55 48**⇓ *i*P **PKPdf 06 17 12.1 +0.2**
**MDM Murphy Dome 117.65 332** PFAKE 06 17 20.0 +8.3
MDM LR LR
comp=Z,400nm,19.5s
**TRF Thorofare Moun 117.67 330** PFAKE 06 17 20.0 +8.1
TRF LR LR
comp=Z,400nm,19.5s
**BWN Browne 117.71 331** PFAKE 06 17 20.0 +8.2
BWN LR LR
comp=Z,600nm,19.8s
**UPC Upice 117.75 46** *e*PKIKP **PKPdf 06 17 12.6 +0.3**
UPC MLR MLR
comp=Z,1μm,19.6s
**UPC Upice 117.75 46** *e*PKP **PKPdf 06 17 12.6 +0.3**
UPC AMS AMS 07 08 40.0
comp=Z,1μm,19.6s
**DPC Dobruska-Polom 117.86 46** *e*PKIKP **PKPdf 06 17 12.5 0.0**
DPC *e* 06 17 19.9
DPC MLR MLR
comp=Z,1μm,19.0s
**DPC Dobruska-Polom 117.86 46** *e*PKP **PKPdf 06 17 12.5 0.0**
DPC *ep*PKP **pPKPdf 06 17 19.9 -3.1**
DPC AMS AMS 07 06 50.0
comp=Z,1μm,19.0s
**KTH Kantishna Hill 117.97 330** PFAKE 06 17 20.0 +7.6
KTH LR LR
comp=Z,400nm,18.1s
**KRLC Kraliky 118.00 47** *e*PKIKP **PKPdf 06 17 13.1 +0.3**
KRLC *e* 06 17 21.8
**KRLC Kraliky 118.00 47** *e*PKP **PKPdf 06 17 13.1 +0.3**
KRLC *ep*PKP **pPKPdf 06 17 21.8 -1.5**
**COEN Coen 118.05 221** PFAKE 06 17 30.0 +16
COEN LR LR
comp=Z,600nm,21.2s
**RGN Rugen 118.08 41** PFAKE 06 17 20.0 +7.3
RGN LR LR
comp=Z,1μm,18.1s
**KWAJ Kwajalein Atol 118.10 259** PFAKE 06 17 30.0 +16
KWAJ LR LR
comp=Z,400nm,18.8s
**PPLA Purkeypile 118.16 329** PFAKE 06 17 20.0 +7.2
PPLA LR LR
comp=Z,500nm,18.9s
**BPAW Bear Paw Mtn. 118.26 331** *e*PKPdf PKPdf 06 17 21.7 +8.8
BPAW LR LR
comp=Z,500nm,21.0s
**MORC Moravsky Berou 118.31 47** *e*PKIKP **PKPdf 06 17 13.9 +0.5**
MORC MLR MLR
comp=Z,3μm,18.0s
**MORC Moravsky Berou 118.31 47**⇑ *i*P **PKPdf 06 17 14.2 +0.8**
**MORC Moravsky Berou 118.31 47** *e*PKPdf **PKPdf 06 17 13.9 +0.5**
MORC LR LR
comp=Z,3μm,18.0s
**CAST Castle Rocks 118.36 330** *e*PKPdf **PKPdf 06 17 12.1 -1.0**
CAST LR LR
comp=Z,400nm,18.7s
**VYHS Vyhne 118.52 49** *i* PKIKP **PKPdf 06 17 13.7 -0.1**
**VYHS Vyhne 118.52 49** *e*PKP **PKPdf 06 17 13.7 -0.1**
**KONO Kongsberg 118.54 35** PFAKE 06 17 30.0 +17
KONO LR LR
comp=Z,900nm,19.7s
**MLY Manley 118.61 332** PFAKE 06 17 30.0 +16
MLY LR LR
comp=Z,500nm,18.6s
**OKC Ostrava-Krasne 118.69 48** *e*PKIKP **PKPdf 06 17 14.6 +0.5**
OKC *e* 06 17 23.4
OKC MLR MLR
comp=Z,800nm,17.2s
**OKC Ostrava-Krasne 118.69 48** *e*PKP **PKPdf 06 17 14.6 +0.5**
OKC *ep*PKP **pPKPdf 06 17 23.4 -1.2**
OKC AMS AMS 07 11 20.0
comp=Z,800nm,17.2s
**SVW2 Sparrevohn 118.75 327** PFAKE 06 17 30.0 +16
SVW2 LR LR
comp=Z,600nm,20.5s
**PSZ Piszkesteto 118.91 50** *e*PKIKP **PKPdf 06 17 14.8 +0.2**
PSZ MLR MLR
comp=Z,900nm,20.0s
**PSZ Piszkesteto 118.91 50**⇑ *i*P **PKPdf 06 17 15.1 +0.4**
**PSZ Piszkesteto 118.91 50** *e*PKPdf **PKPdf 06 17 14.8 +0.2**
PSZ LR LR
comp=Z,900nm,20.0s
**BZS Buzias 118.98 53**⇑ PKIKP **PKPdf 06 17 09.8 -5.0**
**BZS Buzias 118.98 53**⇑ *i*P **PKPdf 06 17 09.8 -5.0**
**LANS Liptovska Anna 119.18 49** *i* PKIKP **PKPdf 06 17 15.0 -0.1**
**LANS Liptovska Anna 119.18 49** *e*PKP **PKPdf 06 17 15.0 -0.1**
**COLD Coldfoot 119.46 334** PFAKE 06 17 30.0 +15
COLD LR LR
comp=Z,400nm,19.9s
**PMG Port Moresby 119.58 228** PFAKE 06 17 30.0 +13
PMG LR LR
comp=Z,900nm,20.4s
**GZR Gura Zlata 119.62 54**⇓ PKIKP **PKPdf 06 17 14.1 -2.0**
**GZR Gura Zlata 119.62 54**⇓ *i*P **PKPdf 06 17 14.1 -2.0**
**TTA Tatalina 119.73 329** PFAKE 06 17 30.0 +14
TTA LR LR
comp=Z,400nm,18.1s
**NIE Niedzica 119.78 49** *e*PKP **PKPdf 06 17 16.2 0.0**
**NIE Niedzica 119.78 49** *e*PKIKP **PKPdf 06 17 16.3 0.0**
**OJC Ojcow 119.82 48** *e*PKP **PKPdf 06 17 16.2 0.0**
**OJC Ojcow 119.82 48** *e*PKIKP **PKPdf 06 17 16.2 0.0**
OJC MLR MLR
comp=Z,900nm,18.0s
**OJC Ojcow 119.82 48** *e*PKPdf **PKPdf 06 17 16.2 0.0**
OJC LR LR
comp=Z,900nm,18.0s
**NB2 NORSAR Subarra 119.87 34** PKPdf **PKPdf 06 17 15.3 -0.8**
comp=Z,4.3nm,1.0s,baz=248,slow=1.9
**NB2 NORSAR Subarra 119.87 34** PKPdf **PKPdf 06 17 15.3 -0.8**
baz=248,slow=1.9
**NOA NORSAR Array B 119.87 34** PKP **PKPdf 06 17 16.1 0.0**
comp=Z,3.3nm,0.7s,baz=112,slow=1.0,SNR=11
**MBWA Marble Bar 120.02 194** *e*PKPdf **PKPdf 06 17 18.2 +0.6**
MBWA LR LR
comp=Z,500nm,20.4s
**DRGR 120.17 52**⇑ PKIKP **PKPdf 06 17 17.5 +0.4**
**DRGR 120.17 52**⇑ *i*P **PKPdf 06 17 17.5 +0.4**
**TRPA Tarpa 120.61 51**⇑ *i*P **PKPdf 06 17 18.0 +0.2**
**HFS Hagfors 120.62 36** PKP **PKPdf 06 17 16.1 -1.3**
comp=Z,10.0nm,0.8s,baz=191,slow=2.9,SNR=6.3
**UZH Uzhgorod 120.66 50**⇓ *i*PKIKP **PKPdf 06 17 18.1 +0.2**
UZH *e* 06 17 27.9
UZH *e* 06 18 44.1
**DAMY Dhamar 120.74 95** PFAKE 06 17 30.0 +11
DAMY LR LR
comp=Z,2μm,18.0s
**KOLS Kolonicke sedl 120.77 50** *i* PKIKP **PKPdf 06 17 18.0 -0.1**
**KOLS Kolonicke sedl 120.77 50** *e*PKP **PKPdf 06 17 18.0 -0.1**
**VOIR 121.10 54**⇓ PKIKP **PKPdf 06 17 18.2 -0.8**
**VOIR 121.10 54**⇓ *i*P **PKPdf 06 17 18.2 -0.8**
**EIL Elat 121.25 75** PKP **PKPdf 06 17 19.6 0.0**
comp=Z,11nm,0.8s,baz=338,slow=2.3,SNR=9.7
**KWP Kalwaria Pacla 121.31 49** *e*PKP **PKPdf 06 17 19.4 +0.3**
**KWP Kalwaria Pacla 121.31 49** *e*PKIKP **PKPdf 06 17 19.4 +0.3**
**DOPR Dopca 121.53 54**⇑ *i*P **PKPdf 06 17 19.7 0.0**
**ISP Isparta 121.65 65** PFAKE 06 17 30.0 +10
ISP LR LR
comp=Z,1μm,19.8s
**MLR Muntele Rosu 121.70 55** PKP **PKPdf 06 17 19.7 -0.5**
comp=Z,2.4nm,0.8s,baz=127,slow=1.9,SNR=15
**MLR Muntele Rosu 121.70 55**⇑ *i*P **PKPdf 06 17 19.5 -0.7**
**BURAR Bucovina Array 122.06 52**⇑ PKIKP **PKPdf 06 17 21.6 +0.8**
**BURAR Bucovina Array 122.06 52**⇑ *i*P **PKPdf 06 17 21.6 +0.8**
**NIKH Nikolski High 122.09 315** PFAKE 06 17 30.0 +10
NIKH LR LR
comp=Z,800nm,18.3s
**LVV L'vov 122.17 49** *i* PKIKP **PKPdf 06 17 19.2 -1.6**
**VRI Vrincioaia 122.35 54**⇑ PKIKP **PKPdf 06 17 20.9 -0.4**
**VRI Vrincioaia 122.35 54**⇑ *i*P **PKPdf 06 17 20.9 -0.4**
**CSS Prodhromos 122.45 69** *e*PKPdf **PKPdf 06 17 22.4 +0.6**

CSS LR LR
comp=Z,100nm,20.3s
**TLB Topalu 122.71 56** ⇑PKIKP **PKPdf 06 17 22.6 +0.7**
**TLB Topalu 122.71 56** ⇑*iP* **PKPdf 06 17 22.6 +0.7**
**TIRR Tirgusor 122.91 57** *e*PKIKP **PKPdf 06 17 22.0 -0.3**
TIRR MLR MLR
comp=Z,900nm,20.0s
**TIRR Tirgusor 122.91 57** ⇑*iP* **PKPdf 06 17 22.1 -0.3**
**TIRR Tirgusor 122.91 57** *e*PKPdf **PKPdf 06 17 22.0 -0.3**
TIRR LR LR
comp=Z,900nm,20.0s
**CFR Carcaliu 123.00 56** ⇓PKIKP **PKPdf 06 17 22.4 -0.1**
**CFR Carcaliu 123.00 56** ⇓*iP* **PKPdf 06 17 22.4 -0.1**
**BTAS Taskesti 123.13 62** P **PP 06 19 01.0 -2.6**
**MMAI Mount Meron Ar 123.13 72** PKP **PKPdf 06 17 23.4 +0.1**
comp=Z,11nm,0.8s,baz=0.0,slow=0.8,SNR=13
**SUW Suwalki 123.18 44** *e*PKP **PKPdf 06 17 22.2 -0.3**
**SUW Suwalki 123.18 44** *e*PKIKP **PKPdf 06 17 22.2 -0.3**
**ASF Jabal al Asfar 123.89 73** PKP **PKPdf 06 17 25.3 +0.5**
comp=Z,4.0nm,0.8s,baz=36,slow=1.3,SNR=7.2
**ANTO Ankara 124.11 63** *e*PKIKP **PKPdf 06 17 25.2 +0.3**
ANTO MLR MLR
comp=Z,1μm,19.9s
**ANTO Ankara 124.11 63** *e*PKPdf **PKPdf 06 17 25.2 +0.3**
ANTO LR LR
comp=Z,1μm,19.9s
**H11S2 WAKE ISLAND Hyl 24.48 267** T T 08 34 06.6
baz=127,slow=74,SNR=79
**H11S1 WAKE ISLAND Hyl 24.49 267** T T 08 34 03.7
baz=127,slow=74,SNR=22
**H11S3 WAKE ISLAND Hyl 24.49 267** T T 08 34 07.8
baz=127,slow=74,SNR=23
**MTN Manton Dam 124.55 210** *e*PKPdf **PKPdf 06 17 26.3 -0.2**
MTN LR LR
comp=Z,700nm,19.4s
**BRTR Keskin Array B 124.66 64** PKP **PKPdf 06 17 25.9 -0.2**
comp=Z,16nm,0.8s,baz=191,slow=3.0,SNR=63
**H11N3 WAKE ISLAND Hyl 24.98 269** T T 08 34 43.3
**H11N1 WAKE ISLAND Hyl 25.00 269** T T 08 34 48.0
SNR=2.3
**H11N2 WAKE ISLAND Hyl 25.00 269** T T 08 34 43.8
SNR=12
**MANU Manus Island 125.23 233** PFAKE 06 17 40.0 +12
MANU LR LR
comp=Z,200nm,18.6s
**TNA Tin City 125.51 329** PFAKE 06 17 40.0 +13
TNA LR LR
comp=Z,500nm,18.1s
**KIEV Kiev 125.59 50** *e*PKIKP **PKPdf 06 17 26.4 -0.9**
KIEV MLR MLR
comp=Z,800nm,20.1s
**KIEV Kiev 125.59 50** *e*PKPdf **PKPdf 06 17 26.4 -0.9**
KIEV LR LR
comp=Z,800nm,20.1s
**AKASG Malin Array Be 125.60 50** PKP **PKPdf 06 17 26.2 -1.1**
comp=Z,12nm,0.8s,baz=262,slow=2.6,SNR=33
AKASG PP **PP 06 19 16.3 -3.5**
comp=Z,6.4nm,1.0s,baz=256,slow=5.5,SNR=9.9
**VSU Vasula 126.40 40***c i*PKIKP **PKPdf 06 17 29.1 +0.5**
VSU pmax pmax
comp=Z,189nm,1.7s
**GAMB Gambell 126.69 327** PFAKE 06 17 40.0 +11
GAMB LR LR
comp=Z,500nm,21.3s
**FINES FINESS Array B 126.79 36** PKP **PKPdf 06 17 28.9 -0.3**
comp=Z,8.0nm,0.9s,baz=107,slow=2.0,SNR=8.4
**FINES FINESS Array B 126.79 36** PKIKP **PKPdf 06 17 29.0 -0.3**
**SIM Simferopol' 126.88 58** *e*PKIKP **PKPdf 06 17 29.9 -0.1**
SIM *e* 06 19 31.0
SIM pmax pmax
comp=Z,36nm,0.8s
SIM pmax pmax
comp=Z,180nm,15.7s
**MALT Malatya 127.56 67** ⇑PKIKP **PKPdf 06 17 32.4 +0.8**
**MALT Malatya 127.56 67** ⇑*iP* **PKPdf 06 17 32.4 +0.8**
**ARCES ARCESS Array B 127.97 26** PKP **PKPdf 06 17 30.8 -0.5**
comp=Z,7.1nm,0.8s,baz=298,slow=2.6,SNR=7.3
**SOEI Soe 129.83 203** PFAKE 06 17 50.0 +13
SOEI LR LR
comp=Z,1μm,19.5s
**SOC Sochi 130.26 61** *e*P **Pdif 06 14 20.1 -5.9**
SOC *i* 06 17 36.3
SOC *e*PPP PPP 06 22 38.8
SOC *e* 06 24 39.8
SOC *e*SS SS 06 37 16.0 +0.5
SOC pmax pmax
comp=Z,43nm,0.9s
SOC MLR MLR
comp=Z,252nm,17.0s
**APA Apatity 130.72 29** ⇑*i*PKIKP **PKPdf 06 17 37.0 +0.5**
APA MLR MLR
comp=Z,2μm,16.0s
**OBN Obninsk 130.99 46***d i*PKIKP **PKPdf 06 17 37.5 +0.1**
OBN *e* 06 19 52.8
OBN pmax pmax
comp=Z,88nm,2.5s
OBN MLR MLR
comp=Z,1μm,20.0s
**MMRI Maumere 131.49 201** PFAKE 06 17 50.0 +10
MMRI LR LR
comp=Z,400nm,20.1s
**VSR Storozhevoye 131.81 51** *e*PKIKP **PKPdf 06 17 39.0 -0.1**
VSR pmax pmax
comp=Z,10.0nm,0.6s
VSR pmax pmax
comp=N,6.0nm,0.5s
VSR pmax pmax
comp=E,10.0nm,1.0s
**VORD Divnogorie 131.84 51** *e*PKIKP **PKPdf 06 17 39.1 -0.1**
VORD pmax pmax
comp=Z,10.0nm,0.8s
VORD pmax pmax
comp=N,30nm,0.6s
VORD pmax pmax
comp=E,30nm,0.7s
**LPSR Galich'ya Gora 131.93 49** *e*PKIKP **PKPdf 06 17 39.8 +0.5**
LPSR pmax pmax
comp=Z,40nm,0.8s
LPSR pmax pmax
comp=N,8.0nm,0.9s
LPSR pmax pmax
comp=E,7.0nm,0.6s
**KIV Kislovodsk 132.43 61***d i*PKIKP **PKPdf 06 17 41.1 +0.4**
KIV *e* 06 20 07.9
KIV *e*PPP PPP 06 22 53.3
KIV pmax pmax
comp=Z,42nm,1.7s
**KBZ Khabaz 132.52 62** PKhKP PKPpre 06 17 30.9
comp=Z,3.9nm,0.9s,baz=135,slow=7.1,SNR=3.7
**TMCR Tamitsa 132.56 34** *e*PKIKP **PKPdf 06 17 38.2 -1.9**
TMCR *e* 06 20 03.6
TMCR pmax pmax
comp=Z,40nm,0.9s
**GNI Garni 132.79 67***c i*PKIKP **PKPdf 06 17 43.2 +1.6**
GNI pmax pmax
comp=Z,171nm,1.7s
**GNI Garni 132.79 67** PFAKE 06 17 50.0 +8.4
GNI LR LR
comp=Z,900nm,20.0s
**FAKI Fak Fak 132.96 216** PFAKE 06 17 50.0 +7.5
FAKI LR LR
comp=Z,300nm,18.4s
**KLMR Klimovskoe 133.16 38** *e*PKIKP **PKPdf 06 17 40.3 -1.1**
**JAGI Jajag, Banyuwa 133.39 190** PFAKE 06 18 00.0 +17
JAGI LR LR
comp=Z,400nm,18.6s
**VRH Novokhopyorsk 133.39 52** *e*PKIKP **PKPdf 06 17 42.2 +0.1**
VRH pmax pmax
comp=Z,30nm,1.0s
VRH pmax pmax
comp=N,4.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.8s
**ASUD Al Ashush, Dub 134.81 92** ⇑PKiKP **PKPdf 06 17 45.8 +0.2**
**CISI Cisompet, Garu 134.83 182** PFAKE 06 18 00.0 +14
CISI LR LR
comp=Z,400nm,21.0s
**FAQ Al Faqa, Dubai 135.08 92** ⇑*i*PKPdf **PKPdf 06 17 46.0 -0.1**
SNR=7.1
**ISRV Sarvestan 135.25 84** *eP* **PKPdf 06 17 46.8 0.0**
**NAZ Nazwa, Dubai 135.25 91** ⇑PKPdf **PKPdf 06 17 46.3 -0.1**
**ASHO Ashiyiah 135.42 92** ⇑PKPdf **PKPdf 06 17 46.1 -0.7**
**HATD Hatta, Dubai 135.55 92** ⇑PKPdf **PKPdf 06 17 46.3 -0.7**
**KAPI Kappang 135.63 199** PFAKE 06 18 00.0 +12
KAPI LR LR
comp=Z,500nm,20.3s
**UOSS Wadi Hilu 135.66 92** PFAKE 06 18 00.0 +13
UOSS LR LR
comp=Z,2μm,18.4s
**IBAF Bafgh 138.08 83** *eP* **PKPdf 06 17 49.8 -1.9**
**IBAF Bafgh 138.08 83** *eP* **PP 06 20 38.2 -2.7**
**TNTI Ternate 138.42 212** PFAKE 06 18 10.0 +17
TNTI LR LR
comp=Z,300nm,20.3s
**LUWI Luwuk 138.50 205** PFAKE 06 18 10.0 +17
LUWI LR LR
comp=Z,300nm,20.3s
**TRD Trivandrum 140.45 130**⇑*eP* PKPdf 06 18 07.6 +11
**IKOO Kooshah 141.10 83** *eP* **PP 06 20 56.9 -2.7**
**PALK Pallekele 141.62 136** PFAKE 06 18 10.0 +11
PALK LR LR
comp=Z,800nm,18.9s
**SOKR Solikamsk 141.84 39** ⇑*i*PKHKP PKPpre 06 17 51.5
SOKR pmax pmax
comp=Z,10.0nm,0.9s
**PETK Petropavlovsk- 141.86 310** PKhKP PKPpre 06 17 52.2
comp=Z,6.4nm,0.8s,baz=128,slow=6.6,SNR=5.3
PETK PKP **PKiKP 06 17 59.1 -1.4**
comp=Z,14nm,0.9s,baz=103,slow=6.5,SNR=9.9
**GEYT Alibeck 142.15 74** PKhKP PKPpre 06 17 53.9
comp=Z,19nm,0.8s,baz=264,slow=2.8,SNR=12
**BKNI Bangkinang 142.34 171** PFAKE 06 18 10.0 +10
BKNI LR LR
comp=Z,400nm,19.8s
**IPAY Payeh 142.42 77** *eP* **PKPdf 06 17 55.0 -4.5**
**GSI Gunungsitoli 142.73 165** PFAKE 06 18 10.0 +10
GSI LR LR
comp=Z,1μm,19.6s
**ISRO Mashad 142.74 78** *eP* **PKPdf 06 17 54.9 -5.0**
**SKR Severo-Kuril's 142.91 307** *e*PKIKP **PKPdf 06 18 04.7 +5.2**
**IMYA Miami 143.24 78** *eP* PKPbc 06 17 57.6 -0.4
**AKTO Aktyubinsk 143.62 54** PKP PKPbc 06 17 58.3 -0.1
comp=Z,28nm,0.9s,baz=252,slow=2.4,SNR=54
**AKTO Aktyubinsk 143.62 54** PKIKP PKPab 06 17 57.9 +0.4
AKTO pmax pmax
comp=Z,62nm,1.2s
**KSM Kuching 143.65 186** *e*PKPdf PKPbc 06 17 59.4 -0.1
KSM LR LR
comp=Z,600nm,20.0s
**MYKOM Kota Tinggi 144.05 175** *e*PKPdf **PKPab 06 18 00.3 +0.1**
MYKOM LR LR
comp=Z,500nm,18.0s
**SBUM Sibu 144.40 190** *e*PKPdf PKPbc 06 18 02.1 +0.3
SBUM LR LR
comp=Z,400nm,20.0s
**SVE Sverdlovsk 144.42 43** *e*PKIKP PKPbc 06 18 00.8 +0.2
SVE pmax pmax
comp=Z,75nm,1.8s
**PSI Prapat 144.45 167** *e*PKIKP **PKPab 06 18 00.8 -1.0**
PSI MLR MLR
comp=Z,1μm,20.1s
**PSI Prapat 144.45 167** *e*PKPdf **PKPab 06 18 00.8 -1.0**
PSI LR LR
comp=Z,1μm,20.1s
**DAV Davao City (W) 144.83 214** PFAKE 06 18 20.0 +16
DAV LR LR
comp=Z,300nm,18.0s
**AB31 Akbulak array 144.89 56** *i* PKIKP **PKPab 06 18 02.3 0.0**
AB31 pmax pmax
comp=Z,158nm,0.8s
**ABKAR Akbulak array 144.89 56** *e*PKPdf PKPbc 06 18 02.5 +0.1
**URV Uravakonda 145.52 123** *e*PKPab **PKPab 06 18 10.1 +4.5**
**POO Poona 145.63 115**⇑*iP* **PKPdf 06 18 01.0 -4.4**
comp=Z,722nm,2.0s
**MYLDM Lahad Datu 145.71 202** *e*PKPab **PKPab 06 18 09.8 +3.5**
MYLDM LR LR
comp=Z,400nm,20.4s
**SKHT Srikalahasti 146.19 128** *e*PKPab **PKPab 06 18 11.7 +3.6**
**LHMI Lhok Sumawe 146.40 163** *e*PKPdf **PKPbc 06 18 07.8 -0.2**
LHMI LR LR
comp=Z,600nm,20.3s
**IPM Ipoh 146.43 170** *e*PKPdf **PKPdf 06 18 06.8 -0.1**
IPM LR LR
comp=Z,600nm,19.3s
**RCLA Racherla 147.00 125** *e*PKPab **PKPab 06 18 14.2 +3.0**
**KKM Kota Kinabalu 147.15 198** PFAKE 06 18 20.0 +8.1
KKM LR LR
comp=Z,279nm,19.0s
**KULM Kulim 147.17 169** *e*PKPdf **PKPdf 06 18 08.1 0.0**
KULM LR LR
comp=Z,500nm,20.9s
**KLRI Killari 147.26 119** *e*PKPab **PKPab 06 18 16.1 +3.8**
**SRLM Srisailam 147.43 124** *e*PKPab **PKPab 06 18 16.1 +3.1**
**ADKI Addanki 147.94 126** *e*PKPab **PKPab 06 18 17.9 +3.0**
**NJS Nagarjunasagar 148.03 124** *e*PKPab **PKPab 06 18 20.0 +4.8**
**HYB Hyderabad 148.15 122** *i* PKP **PKPdf 06 18 09.0 -0.6**
HYB *e* 06 18 19.5
HYB *e* 06 18 48.5
**HYBB Hyderabad (bro 148.15 122** *e*PKPab **PKPab 06 18 19.9 +4.1**
**KUR Kuril'sk 148.45 297***c i*PKHKP PKPpre 06 18 02.4
KUR *i* 06 21 40.6
KUR *i* SS SS 06 40 44.9 -4.3
**SRSP Sriramsagar 149.06 120** *e*PKPab **PKPab 06 18 24.3 +4.9**
**RPR Rampur 149.66 121** *e*PKPab **PKPab 06 18 26.8 +5.0**
**KBL Kabul 149.71 85** PFAKE 06 18 20.0 -2.0
KBL LR LR
comp=Z,500nm,20.9s
**YUK Yuzh-Kuril'sk 149.85 294** *i* PKHKP PKPpre 06 18 15.2
YUK *i* PPP PPP 06 25 15.7
YUK *i* 06 34 47.0
YUK *i* SS SS 06 41 43.3 +38
YUK *i* SSS SSS 06 46 40.4
**ZRNK Zerenda 150.04 48** PKHKP PKPpre 06 18 11.5
ZRNK pmax pmax
comp=Z,97nm,0.8s
**PVM Polavaram 150.04 126** *e*PKPab **PKPab 06 18 27.5 +4.1**
**BRVK Borovoye 150.75 47** *e*PKIKP **PKPdf 06 18 12.6 0.0**
BRVK *e* 06 18 18.9
BRVK MLR MLR
comp=Z,800nm,19.9s
**BRVK Borovoye 150.75 47** *e*PKPdf **PKPdf 06 18 12.6 0.0**
BRVK *e*PKPbc **PKiKP 06 18 18.9 +0.1**
BRVK LR LR
comp=Z,800nm,19.9s
**CHKZ Chkalovo 150.75 46** PKIKP **PKPbc 06 18 18.6 +0.4**
CHKZ pmax pmax
comp=Z,133nm,0.8s
**BVA0 Borovoye Array 150.82 47** PKIKP **PKPbc 06 18 18.7 +0.3**
BVA0 pmax pmax
comp=Z,75nm,0.8s
**VOSK Vostochnaya 151.25 47** PKIKP **PKPbc 06 18 19.7 +0.3**
VOSK pmax pmax
comp=Z,112nm,0.8s
**VOSK Vostochnaya 151.25 47** PFAKE 06 18 20.0 +0.6
VOSK LR LR
comp=Z,700nm,18.6s
**TYV Tymovskoe 151.37 309** *e*PKIKP **PKPbc 06 18 20.0 +0.3**
TYV pmax pmax
comp=E,22nm,1.0s
TYV pmax pmax
comp=Z,44nm,1.0s
**ERM Erimo 151.73 290** PFAKE 06 18 30.0 +0.2
ERM LR LR
comp=Z,700nm,19.1s
**YAK Yakutsk 151.87 337***c i*PKIKP **PKPbc 06 18 19.6 -0.9**
YAK *e* 06 25 32.8
YAK pmax pmax
comp=Z,195nm,3.8s
YAK pmax pmax
comp=E,97nm,4.9s
YAK pmax pmax
comp=N,23nm,1.7s
**NKL Nikolayevsk 151.90 314** *i* PKIKP **PKPbc 06 18 20.0 -0.8**
NKL *i* 06 18 28.2
NKL pmax pmax
comp=Z,86nm,1.0s
**YSS Yuzh-Sakhalins 151.94 301** *e*PKIKP **PKPbc 06 18 20.0 -1.1**
YSS *e* 06 18 29.0
YSS pmax pmax
comp=Z,30nm,0.9s
**ASAJ Asahikawa 152.20 295** *e*PKPdf **PKPbc 06 18 21.6 -0.2**
ASAJ LR LR
comp=Z,200nm,20.0s
**KK31 Karatay Array 152.25 68** *i* PKIKP **PKPbc 06 18 21.0 -1.1**
KK31 pmax pmax
comp=Z,18nm,0.7s
**KKAR Karatay Array 152.25 68** *e*PKIKP **PKPdf 06 18 15.8 +0.5**
KKAR *e* 06 18 21.7
KKAR *e* 06 18 30.6
**KKAR Karatay Array 152.25 68** *e*PKPdf **PKPdf 06 18 15.8 +0.5**
KKAR *e*PKPbc **PKPbc 06 18 21.7 -0.4**
KKAR *e*PKPab **PKPab 06 18 30.6 -1.5**
**CHLP Challavanipeta 152.51 128** *e*PKPab PKPab 06 18 39.4 +5.8
**JHJ2 Mitsune 152.56 270** PFAKE 06 18 30.0 -3.6
JHJ2 LR LR
comp=Z,700nm,19.5s
**DLV T Lat 154.16 184** PFAKE 06 18 30.0 +2.7
DLV LR LR
comp=Z,800nm,19.0s
**AML Almayashu 154.58 70** P **PKPdf 06 18 20.2 +1.0**
SNR=5.5
**EKS2 Erkin-Say 154.65 69** *e*PKIKP **PKPdf 06 18 19.4 +0.5**
EKS2 MLR MLR
comp=Z,600nm,19.0s
**EKS2 Erkin-Say 154.65 69** P **PKPdf 06 18 19.7 +0.8**
SNR=11
**EKS2 Erkin-Say 154.65 69** *e*PKPdf **PKPdf 06 18 19.4 +0.5**
EKS2 LR LR
comp=Z,600nm,19.0s
**MJAR Matsushiro Arr 154.78 277** PKP **PKPdf 06 18 19.2 +0.1**
comp=Z,1.2nm,0.6s,baz=174,slow=2.4,SNR=3.7
MJAR PKPab **PKPab 06 18 43.7 +0.8**
comp=Z,5.0nm,0.9s,baz=148,slow=3.0,SNR=5.3
**MAJO Matsushiro 154.78 277** *e*PKP2 PKPab 06 18 49.7 +6.7
MAJO MLR MLR
comp=Z,500nm,19.3s
**MAJO Matsushiro 154.78 277** *e*PKPab PKPab 06 18 49.7 +6.7
MAJO LR LR
comp=Z,500nm,19.3s
**MAT Matsushiro 154.78 277** *e*PKP **PKPdf 06 18 19.5 +0.4**
**USP Ospenovka 155.17 67** P **PKPdf 06 18 19.9 +0.4**
SNR=11
**AAK Ala-Archa 155.18 69** PKP **PKPdf 06 18 20.2 +0.5**
comp=Z,10nm,0.8s,baz=177,slow=2.4,SNR=32
AAK PKPab **PKPab 06 18 45.3 +0.6**
comp=Z,40nm,0.8s,baz=208,slow=3.5,SNR=4.2
AAK PP **PP 06 22 21.7 +0.2**
comp=Z,7.4nm,1.1s,baz=285,slow=6.0,SNR=5.6
**AAK Ala-Archa 155.18 69** *e*PKIKP **PKPdf 06 18 20.1 +0.5**
AAK *e* 06 18 45.1
AAK 06 22 21.7
AAK MLR MLR
comp=Z,700nm,20.0s
**AAK Ala-Archa 155.18 69** P **PKPab 06 18 20.2 +0.5**
SNR=12
**AAK Ala-Archa 155.18 69** *e*PKPdf **PKPdf 06 18 20.1 +0.5**
AAK *e*PKPab **PKPab 06 18 45.1 +0.5**
AAK PP **PP 06 22 21.7 +0.2**
AAK LR LR
comp=Z,700nm,20.0s
**UCH Uchtor 155.19 70** P **PKPdf 06 18 21.0 +0.9**
SNR=18
**FRU Bishkek 155.27 68** *i* PKIKP **PKPdf 06 18 18.0 -1.6**
FRU *i* 06 18 42.0
FRU *i* 06 22 20.0
FRU pmax pmax
comp=Z,63nm,2.1s
**KBK Karagaybulak 155.51 69** P **PKPdf 06 18 20.8 +0.6**
SNR=7.0
**TKM2 Tokmak 2 155.98 68** *e*PKIKP **PKPdf 06 18 20.7 -0.1**
TKM2 MLR MLR
comp=Z,600nm,19.0s
**TKM2 Tokmak 2 155.98 68** P **PKPdf 06 18 21.0 +0.2**
SNR=13
**TKM2 Tokmak 2 155.98 68** *e*PKPdf **PKPdf 06 18 20.7 -0.1**
TKM2 LR LR
comp=Z,600nm,19.0s
**KSH Kashi 156.15 76** PKP **PKPdf 06 18 20.8 -0.2**
KSH *e*PKP **pPKPdf 06 18 31.4 -0.1**
KSH *e*SPKP 06 18 35.3
KSH PKS **PKSdf 06 21 54.4 -0.6**
KSH *e*PP **PP 06 22 27.9 +0.9**
KSH SKKS 06 29 08.8
KSH LN
comp=Z,510nm,16.0s
KSH LE
comp=Z,140nm,9.2s
KSH LZ
comp=Z,770nm,19.0s
**KURBB Kurchatov Arra 156.38 48** PP PP 06 22 30.3 +2.8
comp=Z,2.5nm,0.7s,baz=281,slow=6.2,SNR=6.9
**KURK Kurchatov 156.40 48** *e*PKIKP **PKPdf 06 18 20.0 -0.8**
KURK 06 22 30.3
KURK MLR MLR
comp=Z,1μm,20.0s
**KURK Kurchatov 156.40 48** *e*PKPdf **PKPdf 06 18 20.0 -0.8**
KURK PP **PP 06 22 30.3 +2.7**
KURK LR LR
comp=Z,1μm,20.0s
**NVS Novosibirsk 156.77 35**⇓*i*PKIKP **PKPdf 06 18 21.1 0.0**
NVS *e* 06 22 32.3
NVS pmax pmax
comp=Z,29nm,1.3s
NVS pmax pmax
comp=N,7.0nm,1.5s
NVS pmax pmax
comp=E,13nm,1.2s
**ZALV Zalesovo Beam 158.06 36** PKP **PKPdf 06 18 22.1 -0.6**
comp=E,11nm,0.8s,baz=282,slow=2.4,SNR=29
ZALV PKPab **PKPab 06 18 56.1 -0.3**
comp=E,27nm,0.8s,baz=318,slow=2.0,SNR=4.4
**KOLN Koldanda 158.33 111** *eP* **PKPdf 06 18 22.9 -1.3**
**KLR Kul'dur 158.55 310** *e*PKIKP **PKPdf 06 18 19.3 -4.2**
**JOW Kunigami 158.64 245** PFAKE 06 18 40.0 +16
JOW LR LR
comp=Z,2μm,19.6s
**GKN Gorkha 159.23 112** *eP* **PKPdf 06 18 24.0 -1.2**
**DMN Daman 159.35 113** *eP* **PKPdf 06 18 24.4 -1.1**
**BOD Bodaibo 159.40 349** *e*PKP2 PKPab 06 18 55.0 -7.1
BOD pmax pmax
comp=Z,38nm,1.0s
**PKIN Phulchoki 159.54 114** *eP* **PKPdf 06 18 24.7 -1.1**
**PKI Pulchoki 159.55 114** *eP* **PKPdf 06 18 24.8 -1.0**
**KKN Kakani 159.58 113** *eP* **PKPdf 06 18 24.6 -1.1**
**CMAR Chiang Mai Arr 159.59 159** PKP **PKPdf 06 18 25.9 +0.2**
comp=Z,2.4nm,0.8s,baz=253,slow=2.7,SNR=16
CMAR PKPab **PKPab 06 19 02.3 -1.6**
comp=Z,6.2nm,0.9s,baz=222,slow=4.5,SNR=6.2
**JNU Nakatsue 159.63 264** PFAKE 06 18 40.0 +15
JNU LR LR
comp=Z,299nm,20.0s
**CHTO Chiang Mai 159.93 159** *e*PKP2 **PKPab 06 19 04.7 -0.7**
CHTO MLR MLR
comp=Z,600nm,19.0s
**CHTO Chiang Mai 159.93 159** *e*PKPab **PKPab 06 19 04.7 -0.7**
CHTO LR LR
comp=Z,600nm,19.0s
**RAMN Ramite 160.03 117** *eP* **PKPdf 06 18 25.6 -0.7**
**MK31 Makanchi Array 160.04 56** PKIKP **PKPdf 06 18 24.9 -0.5**
MK31 pmax pmax
comp=Z,11nm,0.8s
**MKAR Makanchi Array 160.04 56** PKP **PKPdf 06 18 25.1 -0.2**
comp=Z,7.8nm,1.0s,baz=325,slow=1.9,SNR=26
MKAR PKPab **PKPab 06 19 05.4 +0.1**
comp=Z,23nm,0.8s,baz=289,slow=3.9,SNR=25
MKAR PP **PP 06 22 45.2 -2.6**
comp=Z,3.8nm,0.9s,baz=273,slow=6.9,SNR=4.2
**MKAR Makanchi Array 160.04 56** *e*PKIKP **PKPdf 06 18 25.5 +0.1**
MKAR 06 22 45.2
**MKAR Makanchi Array 160.04 56** *e*PKPdf **PKPdf 06 18 25.5 +0.1**
MKAR PKPab **PKPab 06 19 05.4 +0.1**
MKAR PP **PP 06 22 45.2 -2.6**
**GUN Gumba 160.08 114** *eP* **PKPdf 06 18 25.3 -1.2**
**QIZ Qiongzhong 161.04 190** PKP **PKPdf 06 18 27.9 +0.6**
QIZ PP **PP 06 22 54.0 +2.0**
QIZ LN
comp=Z,680nm,5.7s
QIZ LZ
comp=Z,690nm,17.9s
**QIZ Qiongzhong 161.04 190** PFAKE 06 18 40.0 +13
QIZ LR LR
comp=Z,630nm,20.0s
**TAPN Taplejung 161.05 118** *eP* **PKPdf 06 18 26.5 -1.0**
**MDJ Mudanjiang 161.40 299** PKP **PKPdf 06 18 28.8 +1.9**
MDJ PPMZ
comp=Z,2,200nm,7.9s
MDJ LN
comp=Z,83nm,25.1s
MDJ LE
comp=Z,380nm,22.6s
MDJ LZ
comp=Z,540nm,23.8s
**MDJ Mudanjiang 161.40 299** PFAKE 06 18 40.0 +13
MDJ LR LR

comp=Z,657nm,22.0s
**KSRS Korea Array 163.04 275** PKP **PKPdf** **06 18 27.3 -1.4**
comp=Z,3.6nm,1.0s,baz=187,slow=1.1,SNR=7.7
**KSAR Wonju Array Be 163.07 275** PKIKP **PKPdf** **06 18 27.3 -1.5**
**KSAR Wonju Array Be 163.07 275** PKP **PKPdf** **06 18 27.3 -1.5**
**CN2 Changchun 164.49 299** *e*PKP **PKPdf** **06 18 31.0 +1.1**
CN2 *e*pPKP **pPKPdf** **06 18 41.0 +0.6**
CN2 *e*PP **PP** **06 23 16.0 +4.5**
CN2 PPMZ
comp=Z,100nm,6.0s
CN2 LN
comp=Z,600nm,20.0s
CN2 LE
comp=Z,700nm,20.0s
CN2 LZ
comp=Z,1μm,22.0s
**WMQ Urumqi 164.56 61** PKP **PKPdf** **06 18 30.0 -0.1**
WMQ PP **PP** **06 23 13.0 +1.0**
WMQ SKS **SKSdf** **06 25 28.0 -4.0**
WMQ SKKS **SKKSac** **06 29 54.0 -3.0**
WMQ SS **SS** **06 43 40.0 -2.5**
WMQ PPMZ
comp=Z,200nm,11.0s
WMQ LN
comp=Z,470nm,25.0s
WMQ LE
comp=Z,720nm,24.0s
WMQ LZ
comp=Z,520nm,25.0s
**LSA Lhasa 164.88 118** *e*PKIKP **PKPdf** **06 18 31.9 +0.5**
LSA *e* 06 19 28.4
LSA MLR MLR
comp=Z,969nm,20.0s
**LSA Lhasa 164.88 118** *e*PKPdf **PKPdf** **06 18 31.9 +0.5**
LSA *e*PKPab **PKPab** **06 19 28.4 +0.8**
LSA LR LR
comp=Z,969nm,20.0s
**HIA Hailar 165.11 324** PFAKE 06 18 40.0 +10
HIA LR LR
comp=Z,813nm,20.0s
**TLY Talaya 166.01 7** *e*PKIKP PKPdf 06 18 37.0 +6.0
TLY *e* 06 23 14.3
TLY *e* 06 37 04.1
TLY *e*SS SS 06 43 52.6 -2.3
TLY pmax pmax
comp=Z,9.0nm,1.3s
**NJ2 Nanjing 168.35 244** *e*PKP **PKPdf** **06 18 35.6 +2.3**
**GYA Guiyang 168.66 181** PKP **PKPdf** **06 18 33.3 -0.5**
GYA sPKP 06 18 49.4
GYA PKPab **PKPab** **06 19 46.0 +2.3**
GYA PKS **PKSdf** **06 22 05.8 -0.8**
GYA PP **PP** **06 23 36.6 +4.7**
GYA SKKS 06 30 18.8
GYA SS **SS** **06 44 22.4 +0.7**
GYA PPMZ
comp=Z,160nm,8.0s
GYA LN
comp=Z,210nm,24.8s
GYA LE
comp=Z,190nm,25.0s
GYA LZ
comp=Z,170nm,24.4s
**ULN Ulaanbaatar 169.97 358** *e*PKPab **PKPab** **06 19 49.6 +0.6**
ULN LR LR
comp=Z,968nm,21.0s
**SONM Songino Array 170.00 0** PKP **PKPdf** **06 18 33.0 -1.0**
comp=Z,1.0nm,0.8s,baz=340,slow=1.5,SNR=6.7
SONM PKPab **PKPab** **06 19 48.8 -0.3**
comp=Z,10nm,0.9s,baz=333,slow=3.4,SNR=16
SONM PP **PP** **06 23 37.8 -1.0**
comp=Z,2.3nm,0.9s,baz=333,slow=4.3,SNR=4.8
**ENH Enshi 172.06 199** PFAKE 06 18 50.0 +15
ENH LR LR
comp=Z,638nm,22.0s
**BJI Beijing 172.15 289** PKP **PKPdf** **06 18 34.3 -0.8**
BJI SS SS 06 45 07.8 +9.1
BJI PPMZ
comp=Z,450nm,5.6s
BJI LN
comp=Z,230nm,21.0s
BJI LE
comp=Z,310nm,21.0s
BJI LZ
comp=Z,280nm,33.1s
**BJT Baijiatuau 172.16 289** PFAKE 06 18 50.0 +15
BJT LR LR
comp=Z,1μm,21.0s
**CD2 Chengdu 172.73 161** PKP **PKPdf** **06 18 35.0 -0.8**
CD2 pPKP **pPKPdf** **06 18 46.3 0.0**
CD2 sPKP 06 18 50.5
CD2 PP **PP** **06 23 52.9 +0.6**
CD2 SKS **SKSdf** **06 25 35.4 -1.3**
CD2 SKKS **SKKSac** **06 30 36.3 -0.9**
CD2 PPMZ
comp=Z,320nm,5.2s
**GTA Gaotai 174.52 71** ⇑PKP **PKPdf** **06 18 36.4 +0.1**
GTA pPKP **pPKPdf** **06 18 47.1 +0.3**
GTA sPKP 06 18 50.8
GTA PKPab **PKPab** **06 20 10.5 +0.8**
GTA PP **PP** **06 24 02.5 0.0**
GTA SKS **SKSdf** **06 25 34.0 -3.0**
GTA SKKS **SKKSac** **06 30 44.3 -1.9**
GTA SS **SS** **06 45 15.3 -6.8**
GTA PPMZ
comp=Z,500nm,8.1s
GTA LN
comp=Z,540nm,22.3s
GTA LE
comp=Z,620nm,21.4s
GTA LZ
comp=Z,800nm,22.8s
**HHC Hu-ho-hao-te 175.06 309** *e*PKP **PKPdf** **06 18 37.0 +0.6**
HHC PP **PP** **06 24 07.0 +2.4**
HHC SKS **SKSdf** **06 25 30.6 -6.4**
HHC SKKS **SKKSac** **06 30 50.0 +1.6**
HHC SS **SS** **06 45 30.8 +4.5**
HHC PPMZ
comp=Z,150nm,9.6s
HHC LN
comp=Z,350nm,22.2s
HHC LE
comp=Z,400nm,22.3s
HHC LZ
comp=Z,470nm,22.5s
**LZH Lanzhou 177.24 128** *e*PKP **PKPdf** **06 18 38.1 +1.0**
LZH pPKP **pPKPdf** **06 18 47.8 +0.2**
LZH sPKP 06 18 53.1
LZH PP **PP** **06 24 19.0 +4.0**
LZH PPMZ
comp=Z,540nm,4.0s
LZH LN
comp=Z,850nm,17.6s
LZH LE
comp=Z,860nm,16.4s
LZH LZ
comp=Z,900nm,18.6s

*DDA* ***23*** *06:02:23.1,40°.15N×29°.83E,h6km,Md2.6*
*ISK* ***23*** *06:02:23.6,40°.10N×29°.78E,h4km,MD2.4*
*CSEM* ***23*** *06:02:24.1±0.1,40°.10N×29°.81E,h8km,MD2.4, Error ellipse: s-maj=3.2km s-min=2.9km az=158.0*
**ISC 23 06:02:24.3±1.1, 40°.09N±0°.03×29°.79E±0°.02, h4km±10km, n18, σ0°960/34, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAVI** | **Cavuskoy** | **0.12** | **22** | *e*PG | **Pg** | **06 02 26.5** | **-0.3** |
| CAVI | | | | *e*SG | **Sg** | **06 02 28.5** | **+0.1** |
| **CAVI** | **Cavuskoy** | **0.12** | **22** | *e*Pg | **Pg** | **06 02 26.5** | **-0.3** |
| CAVI | | | | *e*Sg | **Sg** | **06 02 28.5** | **+0.1** |
| **ADVT** | **Abdulvahap** | **0.34** | **354** | *e*PG | **Pg** | **06 02 30.9** | **0.0** |
| ADVT | | | | *e*SG | **Sg** | **06 02 36.2** | **+0.7** |
| **ADVT** | **Abdulvahap** | **0.34** | **354** | *e*Pg | **Pg** | **06 02 31.0** | **0.0** |
| ADVT | | | | *e*Sg | **Sg** | **06 02 36.2** | **+0.7** |
| **IGD** | **Bursa** | **0.48** | **291** | P | **Pg** | **06 02 32.8** | **-0.7** |
| IGD | | | | S | **Sg** | **06 02 40.4** | **+0.7** |
| **ULDT** | **Uludag** | **0.50** | **276** | *i* P | **Pg** | **06 02 33.6** | **-0.3** |
| ULDT | | | | *i* S | **Sg** | **06 02 41.2** | **+0.8** |
| **ULDT** | **Uludag** | **0.50** | **276** | P | **Pg** | **06 02 33.6** | **-0.3** |
| ULDT | | | | S | **Sg** | **06 02 41.2** | **+0.8** |
| **BORA** | **Eskisehir** | **0.56** | **112** | *i* P | **Pg** | **06 02 34.5** | **-0.4** |
| BORA | | | | *i* S | **Sg** | **06 02 41.5** | **-0.7** |
| **BORA** | **Eskisehir** | **0.56** | **112** | P | **Pg** | **06 02 34.5** | **-0.4** |
| BORA | | | | S | **Sg** | **06 02 41.5** | **-0.7** |
| **GULT** | **Gulveren** | **0.66** | **58** | *e*PG | **Pg** | **06 02 36.9** | **0.0** |
| **GULT** | **Gulveren** | **0.66** | **58** | *e*Pg | **Pg** | **06 02 36.9** | **0.0** |
| **TVSB** | **Tavsanli** | **0.69** | **201** | *e*PG | **Pg** | **06 02 37.7** | **+0.2** |
| TVSB | | | | *e*SG | **Sb** | **06 02 47.9** | **-0.8** |
| **TVSB** | **Tavsanli** | **0.69** | **201** | *e*Pg | **Pg** | **06 02 37.7** | **+0.2** |
| TVSB | | | | *e*Sg | **Sb** | **06 02 47.9** | **-0.8** |
| **ARMT** | **Armutlu** | **0.85** | **304** | *e*PG | **Pg** | **06 02 40.5** | **-0.1** |
| ARMT | | | | *e*SG | **Sb** | **06 02 52.7** | **-0.7** |
| **ARMT** | **Armutlu** | **0.85** | **304** | *e*Pg | **Pg** | **06 02 40.5** | **-0.1** |
| ARMT | | | | *e*Sg | **Sb** | **06 02 52.7** | **-0.7** |
| **DURS** | **Dursunbey** | **1.12** | **245** | *i* P | **Pg** | **06 02 46.1** | **+0.3** |
| DURS | | | | *i* S | **Sn** | **06 03 02.8** | **+0.1** |
| **DURS** | **Dursunbey** | **1.12** | **245** | P | **Pg** | **06 02 46.1** | **+0.3** |
| DURS | | | | S | **Sn** | **06 03 02.8** | **+0.1** |
| **AUMIH** | **MIHALICIK** | **1.32** | **99** | P | **Pg** | **06 02 51.5** | **+1.8** |
| AUMIH | | | | S | **Sn** | **06 03 08.2** | **+0.5** |

*BJI* ***23*** *06:17:40.6,40°.23N×21°.47E,h11km,mb4.7/23,mB5.1/18, Ms4.9/16,Ms7 4.5/18*
*CSEM* ***23*** *06:17:41.4±0.1,39°.96N×21°.43E,h2km,mb4.7/27, Error ellipse: s-maj=2.2km s-min=1.7km az=61.0*
*ISCJB* ***23*** *06:17:41.0±0.4,39°.980N±0°.009×21°.41E±0°.01,h9km±2km, mb4.5/37,MS4.1/4, Error ellipse: s-maj=1.9km s-min=1.4km az=147.3*
*NEIC* ***23*** *06:17:41.2,39°.96N×21°.42E,h20km,mb4.9/16, ML4.4(THE),ML4.5(ATH),After ATH.*
*THE* ***23*** *06:17:41.3,39°.98N×21°.40E,h0km±2km,ML4.4/22, Error ellipse: s-maj=2.2km s-min=0.8km az=299.0*
*ATH* ***23*** *06:17:41.2,39°.96N×21°.42E,h20km, ML4.5*
*HLW* ***23*** *06:17:41.3,40°.21N×22°.14E,h26km±12km,Md4.7, Ml4.6*
*PDG* ***23*** *06:17:41.5±0.6,40°.00N×21°.44E,h8km±1km,ML4.1/11, Error ellipse: s-maj=0.5km s-min=0.8km az=0.0*
*SKO* ***23*** *06:17:42.0,40°.00N×21°.30E,h10km,M3.7,ML4.1*
*MOS* ***23*** *06:17:43.0±1.0,39°.98N×21°.44E,h29km,mb4.6/24, Error ellipse: s-maj=6.3km s-min=4.5km az=78.7*
*SOF* ***23*** *06:17:43.1,40°.14N×21°.46E,h2km,MD3.7*
*IDC* ***23*** *06:17:46.1±1.2,40°.06N×21°.44E,h47km±13km,mb4.1/23, mb1 4.1/32,mb1mx4.0/45,mbtmp4.2/32,ML3.9/9,MS3.4/4, Ms1 3.4/4,ms1mx3.1/44,Error ellipse: s-maj=11.7km s-min=9.6km az=85.0*
*PRU* ***23*** *06:17:46.0,40°.13N×21°.60E,h0km,M4.9*
**ISC 23 06:17:43.1±0.3, 39°.99N±0°.01×21°.38E±0°.01, h20km±2km, n708, σ1§40/800, mb4.6/38, MS4.0/4, 38C-13D, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PENT** | **Pentalofos** | **0.28** | **319** | *e*PB | **Pb** | **06 17 47.8** | **-1.8** |
| PENT | | | | *e*SB | **Sb** | **06 17 53.2** | **-0.9** |
| **KZN** | **Kozani** | **0.44** | **43** | P | **Pb** | **06 17 50.3** | **-1.8** |
| KZN | | | | S | **Sb** | **06 17 57.7** | **-0.6** |
| **KZN** | **Kozani** | **0.44** | **43** | *e*PB | **Pb** | **06 17 50.4** | **-1.7** |
| KZN | | | | *e*SB | **Sb** | **06 17 57.5** | **-0.8** |
| **KZN** | **Kozani** | **0.44** | **43** | P | **Pb** | **06 17 50.3** | **-1.8** |
| KZN | | | | S | **Sb** | **06 17 57.7** | **-0.6** |
| **KZN** | **Kozani** | **0.44** | **43** | P | **Pb** | **06 17 50.3** | **-1.8** |
| KZN | | | | S | **Sb** | **06 17 57.7** | **-0.6** |
| **KZN** | **Kozani** | **0.44** | **43** | P | **Pb** | **06 17 50.3** | **-1.8** |
| KZN | | | | *e*Sb | **Sb** | **06 17 57.5** | **-0.8** |
| **NEST** | **Nestorio** | **0.50** | **330** | *e*PN | **Pb** | **06 17 51.8** | **-1.4** |
| **NEST** | **Nestorio** | **0.50** | **330** | P | **Pb** | **06 17 51.1** | **-2.1** |
| NEST | | | | S | **Sb** | **06 17 58.3** | **-1.8** |
| **NEST** | **Nestorio** | **0.50** | **330** | P | **Pb** | **06 17 51.1** | **-2.1** |
| NEST | | | | S | **Sb** | **06 17 58.3** | **-1.8** |
| **JAN** | **Janina** | **0.52** | **231** | P | **Pb** | **06 17 50.5** | **-3.1** |
| JAN | | | | S | **Sb** | **06 17 59.8** | **-1.0** |
| **JAN** | **Janina** | **0.52** | **231** | *e*PN | **Pb** | **06 17 51.0** | **-2.6** |
| JAN | | | | *e*SN | **Sb** | **06 17 59.2** | **-1.6** |
| **JAN** | **Janina** | **0.52** | **231** | P | **Pb** | **06 17 50.5** | **-3.1** |
| JAN | | | | S | **Sb** | **06 17 59.8** | **-1.0** |
| **JAN** | **Janina** | **0.52** | **231** | P | **Pb** | **06 17 50.5** | **-3.1** |
| JAN | | | | S | **Sb** | **06 17 59.8** | **-1.0** |
| **JAN** | **Janina** | **0.52** | **231** | P | **Pb** | **06 17 50.5** | **-3.1** |
| JAN | | | | S | **Sb** | **06 17 59.8** | **-1.0** |
| **THL** | **Klokotos Trika** | **0.65** | **131** | *e*PN | **Pb** | **06 17 53.4** | **-2.3** |
| THL | | | | *e*SN | **Sb** | **06 18 02.3** | **-2.0** |
| **THL** | **Klokotos Trika** | **0.65** | **131** | P | **Pb** | **06 17 52.6** | **-3.1** |
| THL | | | | S | **Sb** | **06 18 02.4** | **-1.9** |
| **THL** | **Klokotos Trika** | **0.65** | **131** | P | **Pb** | **06 17 52.6** | **-3.1** |
| **THL** | **Klokotos Trika** | **0.65** | **131** | *e*Pn | **Pb** | **06 17 53.4** | **-2.3** |
| THL | | | | *e*Sn | **Sb** | **06 18 02.3** | **-2.0** |
| **FNA** | **Florina** | **0.80** | **360** | P | **Pb** | **06 17 56.3** | **-2.0** |
| **FNA** | **Florina** | **0.80** | **360** | *e*PN | **Pb** | **06 17 57.5** | **-0.8** |
| **FNA** | **Florina** | **0.80** | **360** | P | **Pb** | **06 17 56.3** | **-2.0** |
| FNA | | | | S | **Sb** | **06 18 09.4** | **+0.7** |
| **FNA** | **Florina** | **0.80** | **360** | P | **Pb** | **06 17 56.3** | **-2.0** |
| **FNA** | **Florina** | **0.80** | **360** | P | **Pb** | **06 17 56.3** | **-2.0** |
| FNA | | | | S | **Sb** | **06 18 09.4** | **+0.7** |
| **LIT** | **Litokhoron** | **0.86** | **82** | P | **Pb** | **06 17 56.9** | **-2.4** |
| LIT | | | | S | **Sb** | **06 18 10.2** | **-0.2** |
| **LIT** | **Litokhoron** | **0.86** | **82** | *e*PN | **Pb** | **06 17 57.4** | **-1.9** |
| LIT | | | | *e*SN | **Sb** | **06 18 08.9** | **-1.5** |
| **LIT** | **Litokhoron** | **0.86** | **82** | P | **Pb** | **06 17 56.9** | **-2.4** |
| LIT | | | | S | **Sb** | **06 18 10.2** | **-0.2** |
| **LIT** | **Litokhoron** | **0.86** | **82** | P | **Pb** | **06 17 56.9** | **-2.4** |
| LIT | | | | S | **Sb** | **06 18 10.2** | **-0.2** |
| **LIT** | **Litokhoron** | **0.86** | **82** | P | **Pb** | **06 17 56.9** | **-2.4** |
| **LIT** | **Litokhoron** | **0.86** | **82** | *e*Pn | **Pb** | **06 17 57.4** | **-1.9** |
| LIT | | | | *e*Sn | **Sb** | **06 18 08.9** | **-1.5** |
| LIT | | | | S | **Sb** | **06 18 10.2** | **-0.2** |
| **DSL** | **Palaion Diasel** | **0.88** | **194** | *e*PB | **Pb** | **06 17 57.1** | **-2.6** |
| DSL | | | | *e*SN | **Sb** | **06 18 09.7** | **-1.3** |
| **DSL** | **Palaion Diasel** | **0.88** | **194** | P | **Pb** | **06 17 56.8** | **-2.9** |
| DSL | | | | S | **Sb** | **06 18 09.7** | **-1.3** |
| **DSL** | **Palaion Diasel** | **0.88** | **194** | P | **Pb** | **06 17 56.8** | **-2.9** |
| **DSL** | **Palaion Diasel** | **0.88** | **194** | P | **Pb** | **06 17 56.8** | **-2.9** |
| DSL | | | | S | **Sb** | **06 18 09.7** | **-1.3** |
| **IGT** | **Igoumenitsa** | **0.93** | **241** | P | **Pb** | **06 17 57.9** | **-2.5** |
| IGT | | | | S | **Sb** | **06 18 12.2** | **-0.1** |
| **IGT** | **Igoumenitsa** | **0.93** | **241** | *e*PB | **Pb** | **06 17 58.6** | **-1.8** |
| IGT | | | | *e*SN | **Sb** | **06 18 12.7** | **+0.4** |
| **IGT** | **Igoumenitsa** | **0.93** | **241** | P | **Pb** | **06 17 57.9** | **-2.5** |
| IGT | | | | S | **Sb** | **06 18 12.2** | **-0.1** |
| **IGT** | **Igoumenitsa** | **0.93** | **241** | P | **Pb** | **06 17 57.9** | **-2.5** |
| IGT | | | | S | **Sb** | **06 18 12.2** | **-0.1** |
| **IGT** | **Igoumenitsa** | **0.93** | **241** | P | **Pb** | **06 17 57.9** | **-2.5** |
| IGT | | | | S | **Sb** | **06 18 12.2** | **-0.1** |
| **SGD** | **Sagiada** | **0.96** | **247** | *e*PN | **Pb** | **06 17 59.6** | **-1.4** |
| **SGD** | **Sagiada** | **0.96** | **247** | P | **Pb** | **06 17 58.5** | **-2.5** |
| **SGD** | **Sagiada** | **0.96** | **247** | P | **Pb** | **06 17 58.5** | **-2.5** |
| **EVR** | **Evrytania** | **1.12** | **163** | *e*PB | **Pn** | **06 18 01.2** | **-2.5** |
| **EVR** | **Evrytania** | **1.12** | **163** | P | **Pn** | **06 18 01.2** | **-2.5** |
| EVR | | | | S | **Sn** | **06 18 18.1** | **-0.4** |
| **EVR** | **Evrytania** | **1.12** | **163** | P | **Pn** | **06 18 01.2** | **-2.5** |
| EVR | | | | S | **Sn** | **06 18 18.1** | **-0.4** |
| **EVR** | **Evrytania** | **1.12** | **163** | P | **Pn** | **06 18 01.2** | **-2.5** |
| EVR | | | | S | **Sn** | **06 18 18.1** | **-0.4** |
| **MAKR** | **Makrakomi, Fth** | **1.13** | **149** | *e*PN | **Pn** | **06 18 02.5** | **-1.3** |
| **MAKR** | **Makrakomi, Fth** | **1.13** | **149** | P | **Pn** | **06 18 02.2** | **-1.6** |
| MAKR | | | | S | **Sn** | **06 18 19.1** | **+0.4** |
| **MAKR** | **Makrakomi, Fth** | **1.13** | **149** | P | **Pn** | **06 18 02.2** | **-1.6** |
| MAKR | | | | S | **Sn** | **06 18 19.1** | **+0.4** |
| **MAKR** | **Makrakomi, Fth** | **1.13** | **149** | P | **Pn** | **06 18 02.2** | **-1.6** |
| **MAKR** | **Makrakomi, Fth** | **1.13** | **149** | *e*Pn | **Pn** | **06 18 02.5** | **-1.3** |
| MAKR | | | | S | **Sn** | **06 18 19.1** | **+0.4** |
| **OHR** | **Ohrid** | **1.21** | **339** | *e*Pg | **Pn** | **06 18 04.1** | **-0.7** |
| OHR | | | | eLg | Lg | 06 18 25.5 | |
comp=E,3μm,0.7s
OHR eLg Lg 06 18 30.4
comp=N,4μm,0.8s
**OHR Ohrid 1.21 339** *e*Pg **Pn** **06 18 04.1 -0.7**
OHR eLg Lg 06 18 25.5
comp=N,3μm,0.7s
**AGG Agios Georgios 1.21 142** *e*P **Pn** **06 18 04.2 -0.7**
AGG S **Sn** **06 18 21.4 +0.7**
**AGG Agios Georgios 1.21 142** *e*PN **Pn** **06 18 04.2 -0.7**
AGG *e*SN **Sb** **06 18 20.0 -0.5**
**AGG Agios Georgios 1.21 142** P **Pn** **06 18 03.2 -1.7**
AGG S **Sn** **06 18 21.4 +0.7**
**AGG Agios Georgios 1.21 142** *e*Pn **Pn** **06 18 04.2 -0.7**
AGG S **Sn** **06 18 21.4 +0.7**
**AGG Agios Georgios 1.21 142** P **Pn** **06 18 03.2 -1.7**
**AGG Agios Georgios 1.21 142** *e*Pn **Pn** **06 18 04.2 -0.7**
AGG *e*Sn **Sb** **06 18 20.0 -0.5**
AGG S **Sn** **06 18 21.4 +0.7**
**GRG Griva 1.24 38** P **Pn** **06 18 04.5 -0.8**
**GRG Griva 1.24 38** *e*PN **Pn** **06 18 04.5 -0.8**
**GRG Griva 1.24 38** P **Pn** **06 18 04.5 -0.8**
**GRG Griva 1.24 38** P **Pn** **06 18 04.5 -0.8**
**GRG Griva 1.24 38** *e*Pn **Pn** **06 18 04.8 -0.5**
**KEK Kerkira 1.25 258** *e*PN **Pn** **06 18 05.5 +0.2**
KEK *e*SN **Sn** **06 18 23.2 +1.7**
**KEK Kerkira 1.25 258** P **Pn** **06 18 03.9 -1.4**
KEK S **Sn** **06 18 23.1 +1.6**
**KEK Kerkira 1.25 258** P **Pn** **06 18 03.9 -1.4**
KEK S **Sn** **06 18 23.1 +1.6**
**KEK Kerkira 1.25 258** P **Pn** **06 18 03.9 -1.4**
**KEK Kerkira 1.25 258** *e*Pn **Pn** **06 18 05.5 +0.2**
KEK S **Sn** **06 18 23.1 +1.6**
**LKD2 Lefkada island 1.32 205** *e*PN **Pn** **06 18 06.2 -0.2**
LKD2 *e*SN **Sb** **06 18 24.5 +0.9**
**LKD2 Lefkada island 1.32 205** *e*Pn **Pn** **06 18 06.2 -0.2**
LKD2 *e*Sn **Sb** **06 18 24.5 +0.9**
**FYTO Fytoko, Volos 1.33 115** P **Pn** **06 18 06.0 -0.5**
FYTO S **Sb** **06 18 26.1 +2.1**
**FYTO Fytoko, Volos 1.33 115** P **Pn** **06 18 06.0 -0.5**
FYTO S **Sb** **06 18 26.1 +2.1**
**FYTO Fytoko, Volos 1.33 115** P **Pn** **06 18 06.0 -0.5**
FYTO S **Sb** **06 18 26.1 +2.1**
**PVO Paravola 1.37 175** *e*PN **Pn** **06 18 06.5 -0.5**
**PVO Paravola 1.37 175** P **Pn** **06 18 06.6 -0.5**
**PVO Paravola 1.37 175** P **Pn** **06 18 06.6 -0.5**
**THE Thessaloniki 1.37 61** P **Pn** **06 18 06.5 -0.5**
**THE Thessaloniki 1.37 61** *e*PN **Pn** **06 18 06.6 -0.5**
**THE Thessaloniki 1.37 61** P **Pn** **06 18 06.5 -0.5**
**THE Thessaloniki 1.37 61** P **Pn** **06 18 06.5 -0.5**
**THE Thessaloniki 1.37 61** P **Pn** **06 18 06.5 -0.5**
**PDO Prodromos 1.39 186** *e*PN **Pn** **06 18 07.0 -0.4**
**PDO Prodromos 1.39 186** P **Pn** **06 18 06.8 -0.6**
**PDO Prodromos 1.39 186** P **Pn** **06 18 06.8 -0.6**
**HORT Hortiatis 1.45 65** *e*PN **Pn** **06 18 08.6 +0.4**
**HORT Hortiatis 1.45 65** P **Pn** **06 18 07.7 -0.5**
HORT S **Sb** **06 18 28.7 +1.2**
**HORT Hortiatis 1.45 65** P **Pn** **06 18 07.7 -0.5**
HORT S **Sb** **06 18 28.7 +1.2**
**HORT Hortiatis 1.45 65** P **Pn** **06 18 07.7 -0.5**
**HORT Hortiatis 1.45 65** *e*Pn **Pn** **06 18 08.6 +0.4**
HORT S **Sb** **06 18 28.7 +1.2**
**XOR Xorichti 1.53 113** *e*PN **Pn** **06 18 09.0 -0.2**
**XOR Xorichti 1.53 113** P **Pn** **06 18 08.3 -0.9**
**XOR Xorichti 1.53 113** P **Pn** **06 18 08.3 -0.9**
**XOR Xorichti 1.53 113** P **Pn** **06 18 08.3 -0.9**
**XOR Xorichti 1.53 113** *e*Pn **Pn** **06 18 09.0 -0.2**
**AXAR Agios Charalam 1.57 140** *e*PN **Pn** **06 18 09.6 -0.2**
**AXAR Agios Charalam 1.57 140** P **Pn** **06 18 09.4 -0.4**
AXAR S **Sb** **06 18 30.8 -0.1**
**AXAR Agios Charalam 1.57 140** P **Pn** **06 18 09.4 -0.4**
AXAR S **Sb** **06 18 30.8 -0.1**
**AXAR Agios Charalam 1.57 140** *e*Pn **Pn** **06 18 09.6 -0.2**
AXAR S **Sb** **06 18 30.8 -0.1**
**NEO Neokhori 1.58 115** *e*PN **Pn** **06 18 09.0 -0.9**
**NEO Neokhori 1.58 115** P **Pn** **06 18 09.0 -0.9**
NEO S **Sb** **06 18 31.3 +0.2**
**NEO Neokhori 1.58 115** P **Pn** **06 18 09.0 -0.9**
NEO S **Sb** **06 18 31.3 +0.2**
**NEO Neokhori 1.58 115** P **Pn** **06 18 09.0 -0.9**
NEO S **Sb** **06 18 31.3 +0.2**
**EFP Efpalio 1.61 165** *e*PN **Pn** **06 18 10.5 +0.2**
**EFP Efpalio 1.61 165** P **Pn** **06 18 10.5 +0.2**
EFP S **Sb** **06 18 32.0 +0.1**
**EFP Efpalio 1.61 165** P **Pn** **06 18 10.5 +0.2**
EFP S **Sb** **06 18 32.0 +0.1**
**VAY Valandovo 1.61 34** *i* Pn **Pn** **06 18 10.9 +0.5**
VAY eLg Lg 06 18 41.7
comp=N,1μm,0.7s
VAY eLg Lg 06 18 42.6
comp=E,2μm,0.9s
**VAY Valandovo 1.61 34** *i* Pn **Pn** **06 18 10.8 +0.5**
VAY eLg Lg 06 18 41.7
comp=E,1μm,0.7s
**PLG Polygyros 1.63 76** P **Pn** **06 18 09.8 -0.8**
**PLG Polygyros 1.63 76** *e*PN **Pn** **06 18 10.1 -0.5**
**PLG Polygyros 1.63 76** P **Pn** **06 18 09.8 -0.8**
**PLG Polygyros 1.63 76** P **Pn** **06 18 09.8 -0.8**
**PLG Polygyros 1.63 76** P **Pn** **06 18 09.8 -0.8**
**PLG Polygyros 1.63 76** *e*Pn **Pn** **06 18 10.1 -0.5**
**KNT Kendrikon 1.65 44** P **Pn** **06 18 10.6 -0.3**
**KNT Kendrikon 1.65 44** *e*PN **Pn** **06 18 11.5 +0.6**
**KNT Kendrikon 1.65 44** P **Pn** **06 18 10.6 -0.3**
**KNT Kendrikon 1.65 44** P **Pn** **06 18 10.6 -0.3**
**KNT Kendrikon 1.65 44** P **Pn** **06 18 10.6 -0.3**
**KNT Kendrikon 1.65 44** *e*Pn **Pn** **06 18 11.5 +0.6**
**SERG Sergoula 1.66 161** *e*PN **Pn** **06 18 11.0 0.0**
SERG *e*SN **Sb** **06 18 33.1 -0.2**
**SERG Sergoula 1.66 161** P **Pn** **06 18 11.2 +0.2**
**SERG Sergoula 1.66 161** *e*Pn **Pn** **06 18 11.0 0.0**
SERG *e*Sn **Sb** **06 18 33.1 -0.2**
**KALE Kalithea 1.70 159** *e*PN **Pn** **06 18 12.2 +0.6**
**KALE Kalithea 1.70 159** P **Pn** **06 18 11.5 -0.1**
KALE S **Sb** **06 18 36.1 +1.5**
**KALE Kalithea 1.70 159** P **Pn** **06 18 11.5 -0.1**
KALE S **Sb** **06 18 36.1 +1.5**
**KALE Kalithea 1.70 159** P **Pn** **06 18 11.5 -0.1**
**KALE Kalithea 1.70 159** *e*Pn **Pn** **06 18 12.2 +0.6**
KALE S **Sb** **06 18 36.1 +1.5**
**TRIZ Trizonia 1.71 161** *e*PN **Pb** **06 18 13.8 +0.1**
**TRIZ Trizonia 1.71 161** P **Pn** **06 18 12.1 +0.5**
**TRIZ Trizonia 1.71 161** P **Pn** **06 18 12.1 +0.5**
**TRIZ Trizonia 1.71 161** *e*Pn **Pb** **06 18 13.8 +0.1**
**SOH Sokhos 1.72 60** P **Pn** **06 18 12.6 +0.6**
SOH S **Sb** **06 18 35.9 +0.6**
**SOH Sokhos 1.72 60** *e*PN **Pn** **06 18 12.5 +0.6**
**SOH Sokhos 1.72 60** P **Pn** **06 18 12.6 +0.6**
SOH S **Sb** **06 18 35.9 +0.6**
**SOH Sokhos 1.72 60** P **Pn** **06 18 12.6 +0.6**
SOH S **Sb** **06 18 35.9 +0.6**
**SOH Sokhos 1.72 60** *e*Pn **Pn** **06 18 12.5 +0.6**
SOH S **Sb** **06 18 35.9 +0.6**
**UPR University Cam 1.73 169** *e*PN **Pb** **06 18 14.0 -0.1**
**UPR University Cam 1.73 169** P **Pn** **06 18 14.6 +0.5**
**UPR University Cam 1.73 169** *e*Pn **Pb** **06 18 14.0 -0.1**
**UPR University Cam 1.73 169** P **Pb** **06 18 14.6 +0.5**
**PAIG Paliouri 1.77 91** P **Pn** **06 18 11.6 -0.9**
**PAIG Paliouri 1.77 91** *e*PB **Pn** **06 18 11.7 -0.8**
**PAIG Paliouri 1.77 91** P **Pn** **06 18 11.6 -0.9**
**PAIG Paliouri 1.77 91** P **Pn** **06 18 11.6 -0.9**
**PAIG Paliouri 1.77 91** P **Pn** **06 18 11.6 -0.9**
**TIR Tirane 1.78 320** *e*P **Pb** **06 18 15.6 +0.6**
**TIR Tirane 1.78 320** *e*Pn **Pb** **06 18 15.6 +0.6**
**TIR Tirane 1.78 320** *e*P **Pb** **06 18 15.6 +0.6**
**SMIA Simia 1.80 127** *e*PN **Pn** **06 18 12.3 -0.6**
**SMIA Simia 1.80 127** P **Pn** **06 18 12.3 -0.6**
**SMIA Simia 1.80 127** P **Pn** **06 18 12.3 -0.6**
**LAKA Lakka 1.81 165** *e*PN **Pb** **06 18 14.4 -1.0**
**LAKA Lakka 1.81 165** P **Pb** **06 18 14.1 -1.3**
**LAKA Lakka 1.81 165** P **Pb** **06 18 14.1 -1.3**
**LAKA Lakka 1.81 165** P **Pb** **06 18 14.1 -1.3**
**LAKA Lakka 1.81 165** *e*Pn **Pb** **06 18 14.4 -1.0**
**DSF Desfina 1.81 150** *e*PN **Pn** **06 18 13.0 -0.1**
**DSF Desfina 1.81 150** P **Pn** **06 18 12.7 -0.4**
DSF S **Sn** **06 18 36.3 +0.9**
**DSF Desfina 1.81 150** P **Pn** **06 18 12.7 -0.4**
DSF S **Sn** **06 18 36.3 +0.9**
**DSF Desfina 1.81 150** P **Pn** **06 18 12.7 -0.4**
**DSF Desfina 1.81 150** *e*Pn **Pn** **06 18 13.0 -0.1**
DSF S **Sn** **06 18 36.3 +0.9**
**DESF Desfina 1.81 150** *e*PN **Pn** **06 18 13.0 -0.1**
**DESF Desfina 1.81 150** *e*Pn **Pn** **06 18 13.0 -0.1**
**SKIA Skiathos 1.81 116** *e*PN **Pn** **06 18 12.6 -0.5**
**SKIA Skiathos 1.81 116** P **Pn** **06 18 12.2 -0.9**
**SKIA Skiathos 1.81 116** P **Pn** **06 18 12.2 -0.9**
**SKIA Skiathos 1.81 116** *e*Pn **Pn** **06 18 12.6 -0.5**
**ATAL Atalanti 1.81 135** P **Pn** **06 18 12.8 -0.3**
ATAL S **Sb** **06 18 36.7 -1.1**
**ATAL Atalanti 1.81 135** P **Pn** **06 18 12.8 -0.3**
ATAL S **Sb** **06 18 36.7 -1.1**
**ATAL Atalanti 1.81 135** P **Pn** **06 18 12.8 -0.3**
ATAL S **Sb** **06 18 36.7 -1.1**
**LKR Lokris 1.83 136** *e*PN **Pn** **06 18 13.0 -0.4**
**LKR Lokris 1.83 136** P **Pn** **06 18 12.8 -0.6**
**LKR Lokris 1.83 136** P **Pn** **06 18 12.8 -0.6**
**LKR Lokris 1.83 136** *e*Pn **Pn** **06 18 13.0 -0.4**
**VLS Valsamata 1.91 199** P **Pn** **06 18 15.3 +0.9**
**VLS Valsamata 1.91 199** *e*PN **Pn** **06 18 15.1 +0.7**

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| VLS | Valsamata | 1.91 | 199 | | P | | Pn | 06 18 15.3 +0.9 | TAR1 | Taranto | 3.18 | 281 | | ePn | | Pn | 06 18 32.4 +0.5 | ISR | Istrita | 6.39 | 35 | ⇑ | iP | | Pn | 06 19 17.1 +1.0 |
| VLS | Valsamata | 1.91 | 199 | | P | | Pn | 06 18 15.3 +0.9 | SMTH | Samothraki Isl | 3.21 | 80 | | ePN | | Pn | 06 18 31.7 -0.7 | ISR | Istrita | 6.39 | 35 | ⇑ | iP | | Pn | 06 19 17.1 +1.0 |
| VLS | Valsamata | 1.91 | 199 | | eP | | Pn | 06 18 15.1 +0.7 | SMTH | Samothraki Isl | 3.21 | 80 | | ePN | | Pn | 06 18 31.7 -0.7 | DNZL | Cakiroluk | 6.41 | 109 | | P | | Pn | 06 19 19.2 +2.7 |
| RLS | Riolos of Patr | 1.93 | 178 | | eP | | Pb | 06 18 17.2 -0.3 | HCY | Herceg Novi | 3.28 | 319 | ⇑ | iPn | | Pn | 06 18 34.4 +1.1 | MLR | Muntele Rosu | 6.45 | 30 | | P | | Pn | 06 19 18.8 +2.0 |
| RLS | Riolos of Patr | 1.93 | 178 | | P | | Pb | 06 18 17.0 -0.5 | HCY | | | | | eSn | | Sn | 06 19 15.6 +3.8 | | comp=E,0.9nm,0.3s,baz=256,slow=6.6,SNR=14 | | | | | | | | |
| RLS | Riolos of Patr | 1.93 | 178 | | P | | Pb | 06 18 17.0 -0.5 | HCY | Herceg Novi | 3.28 | 319 | ⇑ | iPn | | Pn | 06 18 34.4 +1.1 | MLR | | | | | Lg | | Lg | 06 21 16.8 | |
| RLS | Riolos of Patr | 1.93 | 178 | | P | | Pb | 06 18 17.0 -0.5 | HCY | | | | | eSn | | Sn | 06 19 15.6 +3.8 | | baz=112,slow=16,SNR=2.5 | | | | | | | | |
| KFL | Anninata | 1.93 | 194 | | ePN | | Pb | 06 18 16.2 -1.3 | PLD | Plovdiv | 3.29 | 49 | | iP | | Pb | 06 18 39.5 -1.1 | MLR | | | | | LR | | LR | 06 21 48.9 | |
| KFL | Anninata | 1.93 | 194 | | P | | Pb | 06 18 16.2 -1.3 | DYR | Agios Nikonas | 3.31 | 167 | | ePB | | Pn | 06 18 36.3 +2.6 | | comp=E,70nm,22.0s,baz=182,slow=38 | | | | | | | | |
| KFL | Anninata | 1.93 | 194 | | P | | Pb | 06 18 16.2 -1.3 | DYR | Agios Nikonas | 3.31 | 167 | | P | | Pn | 06 18 35.8 +2.1 | MLR | Muntele Rosu | 6.45 | 30 | ⇑ | iP | | Pn | 06 19 17.1 +0.2 |
| SKO | Skopje | 1.98 | 1 | | iPn | | Pn | 06 18 16.7 +1.2 | DYR | Agios Nikonas | 3.31 | 167 | | P | | Pn | 06 18 35.8 +2.1 | TURN | Turunc | 6.47 | 116 | | iP | | Pn | 06 19 14.0 -3.1 |
| SKO | Skopje | 1.98 | 1 | | iPn | | Pn | 06 18 16.7 +1.2 | DYR | Agios Nikonas | 3.31 | 167 | | ePb | | Pn | 06 18 36.3 +2.6 | TURN | Turunc | 6.47 | 116 | | P | | Pn | 06 19 13.9 -3.1 |
| OUR | Ouranopolis | 2.02 | 79 | | P | | Pn | 06 18 16.1 +0.1 | NKME | Niksic | 3.32 | 327 | ⇓ | iPn | | Pn | 06 18 35.5 +1.6 | KHAL | Karahalli | 6.51 | 102 | | P | | Pn | 06 19 20.7 +2.9 |
| OUR | | | | | S | | Sn | 06 18 41.6 +0.9 | NKME | | | | | eSn | | Sn | 06 18 15.9 +3.1 | DOPR | Dopca | 6.66 | 25 | ⇑ | iP | | Pn | 06 19 19.3 -0.4 |
| OUR | Ouranopolis | 2.02 | 79 | | ePN | | Pn | 06 18 15.9 -0.1 | NKME | Niksic | 3.32 | 327 | ⇓ | iPn | | Pn | 06 18 35.5 +1.6 | DOPR | Dopca | 6.66 | 25 | ⇑ | iP | | Pn | 06 19 19.3 -0.4 |
| OUR | Ouranopolis | 2.02 | 79 | | P | | Pn | 06 18 16.1 +0.1 | NKME | | | | | eSn | | Sn | 06 19 15.9 +3.1 | TLB | Topalu | 6.75 | 45 | ⇑ | iP | | Pn | 06 19 21.3 +0.4 |
| OUR | | | | | S | | Sn | 06 18 41.6 +0.9 | NKY | Niksic | 3.35 | 328 | ⇓ | iPn | | Pn | 06 18 36.1 +1.8 | TLB | Topalu | 6.75 | 45 | ⇑ | iP | | Pn | 06 19 21.3 +0.4 |
| OUR | Ouranopolis | 2.02 | 79 | | P | | Pn | 06 18 16.1 +0.1 | NKY | | | | | eSn | | Sn | 06 19 16.7 +3.2 | WDD | Wield Dalam | 6.80 | 235 | | eP | | Pn | 06 19 21.5 -0.2 |
| OUR | | | | | S | | Sn | 06 18 41.6 +0.9 | NKY | Niksic | 3.35 | 328 | ⇓ | iPn | | Pn | 06 18 36.1 +1.8 | WDD | | | | | eSn | | Sn | 06 20 38.2 -0.3 |
| OUR | Ouranopolis | 2.02 | 79 | | P | | Pn | 06 18 16.1 +0.1 | NKY | | | | | eSn | | Sn | 06 19 16.7 +3.2 | WDD | Wield Dalam | 6.80 | 235 | | eP | | Pn | 06 19 21.5 -0.2 |
| OUR | | | | | S | | Sn | 06 18 41.6 +0.9 | RDO | Rodhopi | 3.37 | 69 | | ePn | | Pn | 06 18 34.5 0.0 | WDD | | | | | eSn | | Sn | 06 20 38.2 -0.3 |
| SRS | Serrai | 2.03 | 55 | | P | | Pn | 06 18 14.7 -1.4 | RDO | Rodhopi | 3.37 | 69 | | ePn | | Pn | 06 18 34.5 0.0 | TIRR | Tirgusor | 6.87 | 47 | | eP | | Pn | 06 19 23.8 +1.2 |
| SRS | Serrai | 2.03 | 55 | | ePB | | Pn | 06 18 15.9 -0.2 | SJES | Sjenica | 3.44 | 343 | | ePn | | Pb | 06 18 41.3 -2.0 | TIRR | Tirgusor | 6.87 | 47 | ⇓ | iP | | Pn | 06 19 22.0 -0.6 |
| SRS | Serrai | 2.03 | 55 | | P | | Pn | 06 18 14.7 -1.4 | GADA | Gvkgeada | 3.47 | 85 | | ePN | | Pn | 06 18 36.5 +0.6 | TIRR | Tirgusor | 6.87 | 47 | | ePn | | Pn | 06 19 23.8 +1.2 |
| SRS | Serrai | 2.03 | 55 | | P | | Pn | 06 18 14.7 -1.4 | GADA | Gvkgeada | 3.47 | 85 | | ePn | | Pn | 06 18 36.5 +0.6 | TIRR | Tirgusor | 6.87 | 47 | | eP | | Pn | 06 19 23.8 +1.2 |
| SRS | Serrai | 2.03 | 55 | | P | | Pn | 06 18 14.7 -1.4 | KDZ | Kurdzhali | 3.48 | 60 | | iP | | Pn | 06 18 35.6 -0.5 | FETY | Fethiye | 6.92 | 116 | | eP | | Pn | 06 19 25.4 +2.1 |
| SRS | Serrai | 2.03 | 55 | | ePb | | Pn | 06 18 15.9 -0.2 | KDZ | Kurdzhali | 3.48 | 60 | | iP | | Pn | 06 18 35.6 -0.5 | BORA | Eskisehir | 6.97 | 88 | | P | | Pn | 06 19 31.3 +7.1 |
| KLV | Kalavryta, Ach | 2.03 | 163 | | ePN | | Pn | 06 18 16.8 +0.6 | VLI | Veliai | 3.48 | 159 | | ePN | | Pn | 06 18 35.7 -0.3 | PLOR | Plostina | 7.02 | 32 | ⇑ | iP | | Pn | 06 19 24.3 -0.4 |
| KLV | Kalavryta, Ach | 2.03 | 163 | | P | | Pn | 06 18 16.6 +0.4 | VLI | Veliai | 3.48 | 159 | | P | | Pn | 06 18 35.8 -0.3 | VRI | Vrincioaia | 7.07 | 32 | ⇑ | iP | | Pn | 06 19 24.7 -0.6 |
| KLV | | | | | S | | Sb | 06 18 44.2 +0.1 | VLI | Veliai | 3.48 | 159 | | P | | Pn | 06 18 35.8 -0.3 | CFR | Carcaliu | 7.19 | 42 | ⇑ | iP | | Pn | 06 19 26.9 -0.1 |
| KLV | Kalavryta, Ach | 2.03 | 163 | | P | | Pn | 06 18 16.6 +0.4 | VLI | Veliai | 3.48 | 159 | | P | | Pn | 06 18 35.8 -0.3 | CFR | Carcaliu | 7.19 | 42 | ⇑ | iP | | Pn | 06 19 26.9 -0.1 |
| KLV | | | | | S | | Sb | 06 18 44.2 +0.1 | BOZC | Bozcaada | 3.61 | 91 | | P | | Pn | 06 18 38.6 +0.9 | BEHE | Becsehely | 7.30 | 334 | | epPn | | Pn | 06 19 31.5 +3.0 |
| KLV | Kalavryta, Ach | 2.03 | 163 | | P | | Pn | 06 18 16.6 +0.4 | BAI | Bari | 3.61 | 290 | | ePn | | Pn | 06 18 38.6 +0.9 | LEGS | Legarje | 7.43 | 325 | | iPn | | Pn | 06 19 34.5 +4.2 |
| KLV | | | | | S | | Sb | 06 18 44.2 +0.1 | BRY | Bratogost | 3.61 | 325 | ⇑ | iPn | | Pn | 06 18 39.7 +1.7 | LEGS | Legarje | 7.43 | 325 | | i Pn | | Pn | 06 19 34.5 +4.2 |
| DRO | Drossia | 2.05 | 173 | | ePN | | Pn | 06 18 16.7 +0.3 | BRY | | | | | eSn | | Sn | 06 19 23.3 +3.2 | ISP | Isparta | 7.45 | 104 | | eP | | Pn | 06 19 33.7 +3.0 |
| DRO | Drossia | 2.05 | 173 | | ePn | | Pn | 06 18 16.7 +0.3 | BRY | Bratogost | 3.61 | 325 | ⇑ | iPn | | Pn | 06 18 39.7 +1.7 | ISP | Isparta | 7.45 | 104 | | ePn | | Pn | 06 19 33.7 +3.0 |
| AOS | Alonnisos | 2.10 | 112 | | ePB | | Pn | 06 18 16.5 -0.5 | BRY | | | | | eSn | | Sn | 06 19 23.3 +3.2 | AKAS | Kas | 7.49 | 117 | | P | | Pn | 06 19 36.7 +5.5 |
| AOS | Alonnisos | 2.10 | 112 | | P | | Pn | 06 18 15.9 -1.1 | BOVS | Bovan | 3.65 | 4 | ⇓ | iPn | | Pn | 06 18 38.6 +0.2 | KSL | Kastellorizon | 7.52 | 118 | | ePB | | Pn | 06 19 36.2 +4.7 |
| AOS | | | | | S | | Sn | 06 18 43.0 +0.5 | PLE | Pljevlja | 3.66 | 337 | ⇓ | iPn | | Pn | 06 18 39.5 +0.9 | TESR | Tescani | 7.57 | 29 | ⇑ | iP | | Pn | 06 19 32.9 +0.7 |
| AOS | Alonnisos | 2.10 | 112 | | P | | Pn | 06 18 15.9 -1.1 | PLE | | | | | eSn | | Sn | 06 19 23.8 +2.6 | TESR | Tescani | 7.57 | 29 | ⇑ | iP | | Pn | 06 19 32.9 +0.7 |
| AOS | | | | | S | | Sn | 06 18 43.0 +0.5 | PLE | Pljevlja | 3.66 | 337 | ⇓ | iPn | | Pn | 06 18 39.5 +0.9 | PKST | T"s | 7.66 | 343 | | ePn | | Pn | 06 19 35.7 +2.2 |
| AOS | Alonnisos | 2.10 | 112 | | P | | Pn | 06 18 15.9 -1.1 | PLE | | | | | eSn | | Sn | 06 19 23.8 +2.6 | PKST | T"s | 7.66 | 343 | | eP | | Pn | 06 19 35.7 +2.2 |
| AOS | Alonnisos | 2.10 | 112 | | ePb | | Pn | 06 18 16.5 -0.5 | TIP | Timpagrande | 3.66 | 259 | | ePn | | Pn | 06 18 38.6 0.0 | LJU | Ljubljana | 7.86 | 323 | | ePn | | Pn | 06 19 42.6 +6.4 |
| AOS | | | | | S | | Sn | 06 18 43.0 +0.5 | TIP | Timpagrande | 3.66 | 259 | | ePn | | Pn | 06 18 38.6 0.0 | LJU | | | | | eSn | | Sn | 06 21 07.5 +3.0 |
| MRKA | Markates | 2.14 | 126 | | ePN | | Pn | 06 18 17.5 -0.1 | ALN | Alexandroupoli | 3.67 | 74 | | ePN | | Pn | 06 18 39.9 +1.2 | TRI | Trieste | 8.00 | 318 | | eP | | Pn | 06 19 42.7 +4.7 |
| MRKA | Markates | 2.14 | 126 | | ePn | | Pn | 06 18 17.5 -0.1 | ALN | Alexandroupoli | 3.67 | 74 | | P | | Pn | 06 18 38.6 -0.1 | TRI | Trieste | 8.00 | 318 | | ePn | | Pn | 06 19 42.7 +4.7 |
| GUR | Goura | 2.18 | 160 | | ePB | | Pn | 06 18 17.4 -0.9 | ALN | Alexandroupoli | 3.67 | 74 | | ePN | | Pn | 06 18 38.5 -0.1 | PSZ | Piszkesteto | 8.00 | 353 | | eP | | Pn | 06 19 38.9 +0.7 |
| GUR | Goura | 2.18 | 160 | | P | | Pn | 06 18 18.2 -0.1 | ALN | Alexandroupoli | 3.67 | 74 | | P | | Pn | 06 18 38.6 -0.1 | PSZ | Piszkesteto | 8.00 | 353 | ⇑ | ePn | | Pn | 06 19 39.1 +0.9 |
| GUR | Goura | 2.18 | 160 | | P | | Pn | 06 18 18.2 -0.1 | ALN | Alexandroupoli | 3.67 | 74 | | P | | Pn | 06 18 38.6 -0.1 | PSZ | Piszkesteto | 8.00 | 353 | | ePn | | Pn | 06 19 38.9 +0.7 |
| GUR | Goura | 2.18 | 160 | | ePb | | Pn | 06 18 17.4 -0.9 | ALN | Alexandroupoli | 3.67 | 74 | | P | | Pn | 06 18 38.6 -0.1 | PSZ | Piszkesteto | 8.00 | 353 | | eP | | Pn | 06 19 38.9 +0.7 |
| GUR | Goura | 2.18 | 160 | | P | | Pn | 06 18 18.2 -0.1 | SG1 | Sgolgore (BA) | 3.69 | 285 | | ePn | | Pn | 06 18 37.9 -1.0 | BURAR | Bucovina Array | 8.11 | 19 | ⇑ | iP | | Pn | 06 19 39.3 -0.4 |
| THAL | Thalero | 2.19 | 152 | | ePB | | Pn | 06 18 17.6 -0.7 | IVAS | Ivanjica | 3.70 | 346 | ⇑ | iPn | | Pn | 06 18 40.9 +1.7 | BURAR | Bucovina Array | 8.11 | 19 | ⇑ | iPn | | Pn | 06 19 39.3 -0.4 |
| THAL | Thalero | 2.19 | 152 | | P | | Pn | 06 18 17.6 -0.7 | UPM | Unac-Piva | 3.71 | 331 | | ePn | | Pn | 06 18 40.8 +1.4 | BUR04 | Bucovina Ar. S | 8.12 | 19 | | ePn | | Pn | 06 19 44.9 +5.1 |
| THAL | Thalero | 2.19 | 152 | | P | | Pn | 06 18 17.6 -0.7 | UPM | | | | | eSn | | Sn | 06 19 25.6 +3.0 | LTBQ | Tobruq | 8.18 | 165 | | iP | | Pn | 06 19 41.7 +1.1 |
| KKB | Krupnik | 2.28 | 34 | | iP | | Pn | 06 18 20.3 +0.7 | UPM | Unac-Piva | 3.71 | 331 | | ePn | | Pn | 06 18 40.8 +1.4 | | SNR=22 | | | | | | | | |
| KKB | Krupnik | 2.28 | 34 | | iP | | Pn | 06 18 20.3 +0.7 | UPM | | | | | eSn | | Sn | 06 19 25.6 +3.0 | OBKA | Obir | 8.20 | 325 | ⇑ | iPn | | Pn | 06 19 43.2 +2.2 |
| VIL2 | Platees | 2.30 | 140 | | ePN | | Pn | 06 18 20.4 +0.5 | MPEP | Malo Peshtene | 3.80 | 27 | | iP | | Pn | 06 18 41.5 +1.0 | OBKA | Obir | 8.20 | 325 | | Pn | | Pn | 06 19 43.2 +2.2 |
| LTK | Loutraki | 2.32 | 147 | | ePB | | Pn | 06 18 19.8 -0.3 | EZN | Ezine | 3.81 | 91 | | ePN | | Pn | 06 18 41.8 +1.3 | UZH | Uzhgorod | 8.67 | 4 | | eP | | Pn | 06 19 49.7 +2.5 |
| LTK | Loutraki | 2.32 | 147 | | P | | Pn | 06 18 19.0 -1.1 | EZN | Ezine | 3.81 | 91 | | ePn | | Pn | 06 18 41.8 +1.3 | UZH | Uzhgorod | 8.67 | 4 | | eP | | Pn | 06 19 49.7 +2.5 |
| LTK | Loutraki | 2.32 | 147 | | P | | Pn | 06 18 19.0 -1.1 | PRK | Paraskevi | 3.85 | 100 | | ePN | | Pn | 06 18 36.0 -5.1 | VYHS | Vyhne | 8.70 | 349 | | eP | | Pn | 06 19 49.8 +2.1 |
| LTK | Loutraki | 2.32 | 147 | | P | | Pn | 06 18 19.0 -1.1 | BOLS | Boljevac | 3.86 | 6 | ⇑ | iPn | | Pn | 06 18 40.2 -1.1 | VYHS | Vyhne | 8.70 | 349 | | ePN | | Pn | 06 19 49.8 +2.1 |
| LTK | Loutraki | 2.32 | 147 | | ePn | | Pn | 06 18 19.8 -0.3 | GELI | Tayfur-Gelibol | 3.92 | 82 | | ePN | | Pn | 06 18 43.5 +1.4 | VYHS | Vyhne | 8.70 | 349 | | eP | | Pn | 06 19 49.8 +2.1 |
| NVR | Nevrokopi | 2.33 | 53 | | ePN | | Pn | 06 18 20.4 +0.2 | GELI | Tayfur-Gelibol | 3.92 | 82 | | ePn | | Pn | 06 18 43.5 +1.4 | VSL | Villasalto | 9.26 | 271 | | ePn | | Pn | 06 19 56.5 +1.1 |
| NVR | Nevrokopi | 2.33 | 53 | | P | | Pn | 06 18 20.2 0.0 | KYTH | Kithira | 3.92 | 160 | | ePB | | Pn | 06 18 44.9 +2.7 | VSL | Villasalto | 9.26 | 271 | | ePn | | Pn | 06 19 56.5 +1.1 |
| NVR | Nevrokopi | 2.33 | 53 | | P | | Pn | 06 18 20.2 0.0 | KYTH | Kithira | 3.92 | 160 | | ePb | | Pn | 06 18 44.9 +2.7 | ABTA | Abfaltersbach | 9.34 | 319 | ⇑ | iPn | | Pn | 06 19 59.5 +2.9 |
| NVR | Nevrokopi | 2.33 | 53 | | ePn | | Pn | 06 18 20.4 +0.2 | GRUS | Gruza | 3.93 | 353 | ⇑ | iPn | | Pn | 06 18 42.6 +0.4 | ABTA | Abfaltersbach | 9.34 | 319 | | Pn | | Pn | 06 19 59.5 +2.9 |
| VILL | Villia | 2.36 | 140 | | P | | Pn | 06 18 20.5 -0.2 | CHOS | Chios island | 3.97 | 112 | | ePN | | Pn | 06 18 42.9 +0.1 | BRTR | Keskin Array B | 9.43 | 88 | | P | | Pn | 06 19 58.9 +1.0 |
| VILL | Villia | 2.36 | 140 | | P | | Pn | 06 18 20.5 -0.2 | CHOS | Chios island | 3.97 | 112 | | ePn | | Pn | 06 18 42.9 +0.1 | | comp=E,0.8nm,0.3s,baz=262,slow=11,SNR=14 | | | | | | | | |
| MMB | Musomiste | 2.40 | 47 | | iP | | Pn | 06 18 22.3 +1.1 | ERIK | Erikli-Kesan | 3.98 | 78 | | ePN | | Pn | 06 18 43.9 +1.0 | BRTR | | | | | LR | | LR | 06 23 49.9 | |
| MMB | Musomiste | 2.40 | 47 | | i P | | Pn | 06 18 22.3 +1.1 | ERIK | Erikli-Kesan | 3.98 | 78 | | ePn | | Pn | 06 18 43.9 +1.0 | | comp=E,139nm,18.2s,baz=317,slow=39 | | | | | | | | |
| AMT | Artemida-Makis | 2.46 | 174 | | ePB | | Pb | 06 18 25.4 -1.3 | CDT | Castel del Mon | 4.04 | 287 | | ePn | | Pn | 06 18 45.5 +1.7 | BRTR | Keskin Array B | 9.43 | 88 | | P | | Pn | 06 19 58.9 +1.0 |
| AMT | Artemida-Makis | 2.46 | 174 | | P | | Pb | 06 18 24.7 -2.0 | MHLO | Agia Marina, M | 4.06 | 143 | | ePB | | Pn | 06 18 47.7 +3.7 | BRTR | | | | | pmax | | pmax | | |
| AMT | Artemida-Makis | 2.46 | 174 | | P | | Pb | 06 18 24.7 -2.0 | MHLO | Agia Marina, M | 4.06 | 143 | | ePb | | Pn | 06 18 47.7 +3.7 | | comp=Z,1.0nm,0.3s | | | | | | | | |
| AMT | Artemida-Makis | 2.46 | 174 | | ePb | | Pb | 06 18 25.4 -1.3 | BBLS | Lazići | 4.15 | 340 | ⇑ | iPn | | Pn | 06 18 47.6 +2.3 | BRTR | | | | | MLR | | MLR | | |
| EREA | Eretria | 2.53 | 127 | | ePN | | Pn | 06 18 22.8 -0.1 | AYVA | Ayvalik | 4.16 | 98 | | iP | | Pn | 06 18 46.2 +0.9 | | comp=Z,139nm,18.2s | | | | | | | | |
| EREA | Eretria | 2.53 | 127 | | P | | Pn | 06 18 22.4 -0.5 | AYVA | Ayvalik | 4.16 | 98 | | P | | Pn | 06 18 46.2 +0.9 | NIE | Niedzica | 9.46 | 356 | | eP | | Pn | 06 20 01.1 +2.9 |
| EREA | Eretria | 2.53 | 127 | | P | | Pn | 06 18 22.4 -0.5 | DIVS | Divibare | 4.24 | 346 | ⇑ | iP | | Pn | 06 18 46.7 +0.2 | NIE | Niedzica | 9.46 | 356 | | eP | | Pn | 06 20 01.2 +3.0 |
| EREA | Eretria | 2.53 | 127 | | ePn | | Pn | 06 18 22.8 -0.1 | DIVS | Divibare | 4.24 | 346 | | ePn | | Pn | 06 18 46.8 +0.2 | NIE | Niedzica | 9.46 | 356 | | eP | | Pn | 06 20 01.2 +3.0 |
| ULC | Ulcinj | 2.55 | 321 | ⇑ | iPn | | Pn | 06 18 24.8 +1.5 | CUC | Castrocucco | 4.27 | 272 | | ePn | | Pn | 06 18 48.9 +1.9 | VRAC | Vranov | 9.92 | 342 | | P | | Pn | 06 20 06.7 +2.2 |
| ULC | | | | | eSn | | Sb | 06 18 57.8 -1.3 | CUC | Castrocucco | 4.27 | 272 | | ePn | | Pn | 06 18 48.9 +1.9 | | comp=Z,0.1nm,0.3s,baz=165,slow=14,SNR=3.8 | | | | | | | | |
| ULC | Ulcinj | 2.55 | 321 | ⇑ | iPn | | Pn | 06 18 24.8 +1.5 | TRUS | Trudelj | 4.30 | 351 | ⇑ | iPn | | Pn | 06 18 48.7 +1.5 | VRAC | Vranov | 9.92 | 342 | | ePn | | Pn | 06 20 06.5 +2.1 |
| ULC | | | | | eSn | | Sb | 06 18 57.8 -1.3 | ZEY | ¨zmir | 4.35 | 112 | | P | | Pn | 06 18 51.6 +3.6 | LVV | L'vov | 10.01 | 10 | | eP | | Pn | 06 20 11.0 +5.4 |
| KAVA | Kavala | 2.59 | 66 | | P | | Pn | 06 18 23.2 -0.6 | APE | Apeiranthos | 4.37 | 131 | | ePN | | Pn | 06 18 49.8 +1.5 | TREC | Trest | 10.21 | 338 | | AMS | | AMS | 06 24 30.0 | |
| KAVA | Kavala | 2.59 | 66 | | P | | Pn | 06 18 23.2 -0.6 | APE | Apeiranthos | 4.37 | 131 | ⇑ | iP | | Pn | 06 18 48.2 -0.1 | | comp=Z,800nm,8.1s | | | | | | | | |
| KAVA | Kavala | 2.59 | 66 | | P | | Pn | 06 18 23.2 -0.6 | APE | Apeiranthos | 4.37 | 131 | | ePN | | Pn | 06 18 48.2 -0.1 | GHAR | Gharyan | 10.32 | 223 | | i P | | Pn | 06 20 10.9 +0.9 |
| ATH | Athens Observa | 2.71 | 137 | | P | | Pn | 06 18 25.5 0.0 | APE | Apeiranthos | 4.37 | 131 | | P | | Pn | 06 18 48.2 -0.1 | | SNR=22 | | | | | | | | |
| ATH | Athens Observa | 2.71 | 137 | | ePN | | Pn | 06 18 25.6 0.0 | PVL | Pavlikeni | 4.38 | 41 | | iP | | Pn | 06 18 49.0 +0.6 | GERES | GERESS Array B | 10.41 | 331 | | P | | Pn | 06 20 14.1 +2.8 |
| ATH | | | | | eSN | | Sn | 06 18 57.1 -0.6 | PVL | Pavlikeni | 4.38 | 41 | | i P | | Pn | 06 18 49.0 +0.6 | | comp=Z,0.2nm,0.3s,baz=150,slow=14,SNR=4.6 | | | | | | | | |
| ATH | Athens Observa | 2.71 | 137 | | P | | Pn | 06 18 25.5 0.0 | ANKY | Antikythira Is | 4.38 | 159 | | ePB | | Pn | 06 18 52.0 +3.5 | GERES | GERESS Array B | 10.41 | 331 | | eP | | Pn | 06 20 16.4 +5.1 |
| ATH | Athens Observa | 2.71 | 137 | | P | | Pn | 06 18 25.5 0.0 | ANKY | Antikythira Is | 4.38 | 159 | | P | | Pn | 06 18 51.2 +2.7 | KEST | Kesra | 10.42 | 250 | | P | | Pn | 06 20 14.0 +2.7 |
| ATH | | | | | eSn | | Sn | 06 18 57.1 -0.6 | ANKY | | | | | S | | Sn | 06 19 40.2 +1.3 | | comp=Z,0.6nm,0.3s,baz=193,slow=0.6,SNR=7.8 | | | | | | | | |
| VLX | Vlachokerasia | 2.73 | 163 | | ePN | | Pn | 06 18 24.6 -1.2 | ANKY | Antikythira Is | 4.38 | 159 | | P | | Pn | 06 18 51.2 +2.7 | KEST | Kesra | 10.42 | 250 | | ePn | | Pn | 06 20 14.4 +3.1 |
| VLX | Vlachokerasia | 2.73 | 163 | | P | | Pn | 06 18 28.2 +2.4 | ANKY | | | | | S | | Sn | 06 19 40.2 +1.3 | KEST | Kesra | 10.42 | 250 | | eP | | Pn | 06 20 14.4 +3.1 |
| VLX | Vlachokerasia | 2.73 | 163 | | P | | Pn | 06 18 28.2 +2.4 | ANKY | Antikythira Is | 4.38 | 159 | | P | | Pn | 06 18 51.2 +2.7 | MOTA | Moosalm | 10.46 | 318 | ⇑ | iPn | | Pn | 06 20 12.5 +0.6 |
| VLX | Vlachokerasia | 2.73 | 163 | | ePn | | Pn | 06 18 24.6 -1.2 | ANKY | Antikythira Is | 4.38 | 159 | | ePb | | Pn | 06 18 52.0 +3.5 | MOTA | Moosalm | 10.46 | 318 | | Pn | | Pn | 06 20 12.5 +0.6 |
| VLX | Vlachokerasia | 2.73 | 163 | | P | | Pn | 06 18 28.2 +2.4 | ANKY | | | | | S | | Sn | 06 19 40.2 +1.3 | FUORN | Ofenpass-Fuorn | 10.46 | 313 | | ePn | | Pn | 06 20 14.4 +2.3 |
| PTL | Penteli | 2.74 | 134 | | ePN | | Pn | 06 18 26.0 +0.1 | MS1 | Monte Sant'Ang | 4.47 | 294 | | ePn | | Pn | 06 18 50.6 +0.9 | FUORN | Ofenpass-Fuorn | 10.46 | 313 | | eP | | Pn | 06 20 14.4 +2.3 |
| PTL | Penteli | 2.74 | 134 | | P | | Pn | 06 18 25.7 -0.2 | EDRB | Edirne | 4.47 | 64 | | ePN | | Pn | 06 18 51.0 +1.4 | SIM | Simferopol' | 10.63 | 58 | | eP | | Pn | 06 20 25.7 +12 |
| PTL | Penteli | 2.74 | 134 | | P | | Pn | 06 18 25.7 -0.2 | EDRB | Edirne | 4.47 | 64 | | ePn | | Pn | 06 18 51.0 +1.4 | SIM | | | | | MLR | | MLR | | |
| PTL | Penteli | 2.74 | 134 | | P | | Pn | 06 18 25.7 -0.2 | RKY | Sarkoy-Tekirda | 4.49 | 79 | | ePN | | Pn | 06 18 51.0 +1.1 | | comp=Z,90nm,15.0s | | | | | | | | |
| PTL | Penteli | 2.74 | 134 | | ePn | | Pn | 06 18 26.0 +0.1 | RKY | Sarkoy-Tekirda | 4.49 | 79 | | ePn | | Pn | 06 18 51.0 +1.1 | KHC | Kasperske Hory | 10.70 | 331 | | eP | | Pn | 06 20 18.0 +2.9 |
| SFD | Strofades | 2.75 | 186 | | ePB | | Pb | 06 18 28.9 -2.5 | SART | Tekirdag | 4.49 | 79 | | i P | | Pn | 06 18 49.1 -0.8 | KHC | | | | | MLR | | MLR | | |
| SFD | Strofades | 2.75 | 186 | | ePb | | Pb | 06 18 28.9 -2.5 | SART | Tekirdag | 4.49 | 79 | | P | | Pn | 06 18 49.1 -0.8 | | comp=Z,900nm,13.2s | | | | | | | | |
| ATHU | Athens Univers | 2.75 | 136 | | P | | Pn | 06 18 25.8 -0.3 | KRBG | Karabiga-Canak | 4.55 | 83 | | ePN | | Pn | 06 18 51.9 +1.1 | KHC | Kasperske Hory | 10.70 | 331 | | ePn | | Pn | 06 20 18.0 +2.9 |
| ATHU | Athens Univers | 2.75 | 136 | | P | | Pn | 06 18 25.8 -0.3 | KRBG | Karabiga-Canak | 4.55 | 83 | | ePn | | Pn | 06 18 51.9 +1.1 | KHC | | | | | ex | | x | 06 20 30.5 | |
| ATHU | Athens Univers | 2.75 | 136 | | P | | Pn | 06 18 25.8 -0.3 | THR5 | Thira Island, | 4.74 | 137 | | P | | Pn | 06 18 53.8 +0.5 | KHC | | | | | AMS | | AMS | 06 25 50.0 | |
| ATHU | Athens Univers | 2.75 | 136 | | P | | Pn | 06 18 25.8 -0.3 | THR5 | Thira Island, | 4.74 | 137 | | P | | Pn | 06 18 53.8 +0.5 | | comp=Z,900nm,13.2s | | | | | | | | |
| DRME | Dracevica, Mon | 2.75 | 324 | | ePn | | Pn | 06 18 28.0 +1.9 | TEKS | Tekeris | 4.76 | 344 | | ePn | | Pn | 06 18 54.9 +1.2 | KHC | Kasperske Hory | 10.70 | 331 | | ePn | | Pn | 06 20 17.8 +2.7 |
| DRME | | | | | eSn | | Sb | 06 19 02.8 -2.1 | MRMT | Marmara Adasi | 4.79 | 81 | | ePN | | Pn | 06 18 54.8 +0.6 | KHC | Kasperske Hory | 10.70 | 331 | | eP | | Pn | 06 20 17.8 +2.7 |
| NAIG | Nisos Aigina | 2.77 | 143 | | ePN | | Pn | 06 18 26.1 -0.1 | MRMT | Marmara Adasi | 4.79 | 81 | | ePn | | Pn | 06 18 54.8 +0.6 | DAVOX | Davos/Dischmat | 10.77 | 313 | | P | | Pn | 06 20 19.8 +3.6 |
| NAIG | Nisos Aigina | 2.77 | 143 | | ePn | | Pn | 06 18 26.1 -0.1 | BALY | Balya | 4.81 | 91 | | i P | | Pn | 06 18 54.4 0.0 | | comp=Z,0.9nm,0.3s,baz=138,slow=17,SNR=3.6 | | | | | | | | |
| PVY | Plav | 2.82 | 338 | | ePn | | Pn | 06 18 28.8 +1.8 | BALY | Balya | 4.81 | 91 | | P | | Pn | 06 18 54.4 0.0 | DAVOX | | | | | S | | Sn | 06 22 14.4 -1.8 | |
| PVY | | | | | eSn | | Sb | 06 19 03.8 -3.0 | SMG | Samos | 4.83 | 116 | | ePN | | Pn | 06 18 55.1 +0.5 | | comp=Z,2.0nm,0.3s,baz=259,slow=16,SNR=2.9 | | | | | | | | |
| PVY | Plav | 2.82 | 338 | | ePn | | Pn | 06 18 28.8 +1.8 | SMG | Samos | 4.83 | 116 | | ePn | | Pn | 06 18 55.1 +0.5 | DAVOX | Davos/Dischmat | 10.77 | 313 | | P | | Pn | 06 20 19.8 +3.6 |
| PVY | | | | | eSn | | Sb | 06 19 03.8 -3.0 | IMMV | Iera Moni Meta | 4.97 | 155 | | ePN | | Pn | 06 18 56.0 -0.5 | DAVOX | | | | | S | | Sn | 06 22 14.4 -1.8 | |
| ITM | Ithomi | 2.83 | 171 | | ePB | | Pb | 06 18 30.1 -2.9 | IMMV | Iera Moni Meta | 4.97 | 155 | | ePn | | Pn | 06 18 56.0 -0.5 | DAVOX | | | | | pmax | | pmax | | |
| ITM | Ithomi | 2.83 | 171 | | P | | Pn | 06 18 29.5 +2.3 | BALB | Balikesir | 5.02 | 92 | | ePN | | Pn | 06 18 58.1 +1.0 | | comp=Z,1.0nm,0.3s | | | | | | | | |
| ITM | Ithomi | 2.83 | 171 | | P | | Pn | 06 18 29.5 +2.3 | BALB | Balikesir | 5.02 | 92 | | ePn | | Pn | 06 18 58.1 +1.0 | TUE | Stuetta | 10.91 | 310 | | ePn | | Pn | 06 20 20.6 +2.5 |
| ITM | Ithomi | 2.83 | 171 | | P | | Pn | 06 18 29.5 +2.3 | VAM | Vamos | 5.09 | 153 | | ePN | | Pn | 06 18 59.8 +1.6 | TUE | | | | | eSn | | Sn | 06 22 18.7 -0.8 | |
| ITM | Ithomi | 2.83 | 171 | | P | | Pb | 06 18 30.1 -2.9 | VAM | Vamos | 5.09 | 153 | | ePn | | Pn | 06 18 59.8 +1.6 | TUE | Stuetta | 10.91 | 310 | | ePn | | Pn | 06 20 20.6 +2.5 |
| VLY | Voula,Athens | 2.84 | 138 | | ePN | | Pn | 06 18 27.2 -0.1 | AKHS | Akhisar | 5.10 | 100 | | P | | Pb | 06 19 08.8 -2.9 | DPC | Dobruska

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| HFRF | Wahat Farafira | 14.04 | 154 | P | | Pn | 06 20 56.9 | -3.9 | | |
| EIL | Elat | 15.15 | 129 | P | | Pn | 06 21 14.2 | -1.7 | | |
| | comp=Z,0.5nm,0.3s,baz=343,slow=14,SNR=4.3 | | | | | | | | | |
| EIL | | | | S | | Sn | 06 23 54.1 | -9.0 | | |
| | comp=Z,1.1nm,0.3s,baz=36,slow=15,SNR=5.3 | | | | | | | | | |
| LKFR | Kufra | 15.86 | 174 | *i* P | | Pn | 06 21 25.3 | +0.2 | | |
| | SNR=43 | | | | | | | | | |
| KIV | Kislovodsk | 16.33 | 69 | *ce*P | | Pn | 06 21 30.9 | -0.2 | | |
| KIV | | | | pmax | pmax | | | | | |
| | comp=Z,34nm,1.3s | | | | | | | | | |
| KBZ | Khabaz | 16.45 | 70 | P | | P | 06 21 37.1 | +2.0 | | |
| | comp=Z,0.1nm,0.3s,baz=276,slow=5.1,SNR=4.2 | | | | | | | | | |
| VORR | Voronezh | 17.00 | 41 | P | | P | 06 21 50.0 | +8.8 | | |
| VORR | | | | pmax | pmax | | | | | |
| | comp=Z,250nm,1.4s | | | | | | | | | |
| ES19 | SONSECA Array | 19.40 | 277 | *e*P | | Pn | 06 22 09.4 | +0.4 | | |
| ES19 | SONSECA Array | 19.40 | 277 | *e*P | | Pn | 06 22 09.4 | +0.4 | | |
| ESDC | Sonseca Array | 19.45 | 277 | P | | Pn | 06 22 09.3 | -0.3 | | |
| | comp=Z,0.3nm,0.3s,baz=74,slow=11,SNR=14 | | | | | | | | | |
| PAB | San Pablo | 19.77 | 277 | *e*P | | Pn | 06 22 14.4 | +1.0 | | |
| PAB | | | | pmax | pmax | | | | | |
| | comp=Z,18nm,1.2s | | | | | | | | | |
| PAB | San Pablo | 19.77 | 277 | *e*P | | Pn | 06 22 14.4 | +1.0 | | |
| | comp=Z,18nm,1.2s | | | | | | | | | |
| PAB | San Pablo | 19.77 | 277 | *e*P | | Pn | 06 22 14.4 | +1.0 | | |
| | comp=Z,18nm,1.2s | | | | | | | | | |
| HFS | Hagfors | 20.74 | 349 | P | | P | 06 22 19.8 | -2.3 | | |
| | comp=Z,4.2nm,0.6s,baz=151,slow=9.5,SNR=16 | | | | | | | | | |
| HFS | Hagfors | 20.74 | 349 | P | | P | 06 22 19.8 | -2.3 | | |
| HFS | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | | |
| KONO | Kongsberg | 21.04 | 343 | *e*P | | P | 06 22 26.8 | +1.5 | | |
| KONO | | | | pmax | pmax | | | | | |
| | comp=Z,452nm,3.0s | | | | | | | | | |
| KONO | Kongsberg | 21.04 | 343 | *e*P | | P | 06 22 26.8 | +1.5 | | |
| | comp=Z,452nm,3.0s | | | | | | | | | |
| KONO | Kongsberg | 21.04 | 343 | *e*P | | P | 06 22 26.8 | +1.5 | | |
| | comp=Z,452nm,3.0s | | | | | | | | | |
| FINES | FINESS Array B | 21.68 | 6 | P | | P | 06 22 32.1 | -0.1 | | |
| | comp=Z,9.1nm,0.9s,baz=171,slow=12,SNR=6.2 | | | | | | | | | |
| FINES | FINESS Array B | 21.68 | 6 | P | | P | 06 22 32.1 | -0.1 | | |
| FINES | | | | pmax | pmax | | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | | |
| TAM | Tamanrasset | 21.78 | 223 | *e*P | | P | 06 22 35.7 | +1.9 | | |
| TAM | | | | pmax | pmax | | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| TAM | Tamanrasset | 21.78 | 223 | *e*P | | P | 06 22 35.7 | +1.9 | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| TAM | Tamanrasset | 21.78 | 223 | *e*P | | P | 06 22 35.7 | +1.9 | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| NB2 | NORSAR Subarra | 22.00 | 347 | P | | P | 06 22 34.1 | -1.6 | | |
| | comp=Z,6.5nm,0.7s,baz=153,slow=10 | | | | | | | | | |
| NOA | NORSAR Array B | 22.00 | 347 | P | | P | 06 22 34.4 | -1.3 | | |
| | comp=Z,16nm,0.9s,baz=162,slow=10,SNR=15 | | | | | | | | | |
| NOA | NORSAR Array B | 22.00 | 347 | P | | P | 06 22 34.4 | -1.3 | | |
| NOA | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,0.9s | | | | | | | | | |
| MDT | Midelt | 22.06 | 259 | P | | P | 06 22 37.5 | +0.8 | | |
| | comp=Z,5.6nm,0.9s,baz=80,slow=9.4,SNR=12 | | | | | | | | | |
| EKA | Eskdalemuir Ar | 22.38 | 321 | P | | P | 06 22 39.5 | -0.4 | | |
| | comp=Z,24nm,0.9s,baz=116,slow=10.0,SNR=15 | | | | | | | | | |
| EKA | Eskdalemuir Ar | 22.38 | 321 | P | | P | 06 22 39.5 | -0.4 | | |
| EKA | | | | pmax | pmax | | | | | |
| | comp=Z,24nm,0.9s | | | | | | | | | |
| ESK | Eskdalemuir | 22.40 | 321 | *e*P | | P | 06 22 40.4 | +0.4 | | |
| ESK | | | | pmax | pmax | | | | | |
| | comp=Z,34nm,1.0s | | | | | | | | | |
| ESK | Eskdalemuir | 22.40 | 321 | *e*P | | P | 06 22 40.4 | +0.4 | | |
| | comp=Z,34nm,1.0s | | | | | | | | | |
| ESK | Eskdalemuir | 22.40 | 321 | *e*P | | P | 06 22 40.4 | +0.4 | | |
| | comp=Z,34nm,1.0s | | | | | | | | | |
| IRAZ | Razeghan | 23.00 | 92 | *e*P | | P | 06 22 47.6 | +0.8 | | |
| IRAZ | Razeghan | 23.00 | 92 | *e*P | | P | 06 22 47.6 | +0.8 | | |
| KLMR | Klimovskoe | 23.71 | 22 | *e*P | | P | 06 22 48.8 | -4.6 | | |
| KLMR | | | | pmax | pmax | | | | | |
| | comp=Z,24nm,1.3s | | | | | | | | | |
| KLMR | | | | MLR | MLR | | | | | |
| | comp=Z,352nm,15.0s | | | | | | | | | |
| IRAM | Ramesheh | 26.31 | 98 | *e*P | | P | 06 23 17.1 | -0.5 | | |
| IRAM | Ramesheh | 26.31 | 98 | *e*P | | P | 06 23 17.1 | -0.5 | | |
| AKTO | Aktyubinsk | 27.58 | 56 | LR | | LR | 06 36 25.0 | | | |
| | comp=Z,199nm,18.6s,baz=133,slow=41 | | | | | | | | | |
| APA | Apatity | 28.43 | 10 | ⇓ *i* P | | P | 06 23 39.0 | +3.1 | | |
| APA | | | | MLR | MLR | | | | | |
| | comp=Z,900nm,10.0s | | | | | | | | | |
| APA | Apatity | 28.43 | 10 | *i* P | | P | 06 23 39.0 | +3.1 | | |
| | comp=Z,900nm,10.0s | | | | | | | | | |
| ARCES | ARCESS Array B | 29.69 | 3 | P | | P | 06 23 45.6 | -1.6 | | |
| | comp=Z,1.9nm,0.6s,baz=202,slow=9.1,SNR=5.6 | | | | | | | | | |
| ARCES | ARCESS Array B | 29.69 | 3 | P | | P | 06 23 45.6 | -1.6 | | |
| ARCES | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | | |
| TOA0 | Torodi Ar. Sit | 31.86 | 218 | *e*P | | P | 06 24 06.0 | -0.8 | | |
| TOA0 | Torodi Ar. Sit | 31.86 | 218 | *e*P | | P | 06 24 06.8 | +0.1 | | |
| TOA0 | Torodi Ar. Sit | 31.86 | 218 | *e*P | | P | 06 24 06.8 | +0.1 | | |
| TORD | Torodi Ar. Bea | 31.86 | 218 | P | | P | 06 24 07.3 | +0.5 | | |
| | comp=Z,15nm,0.9s,baz=30,slow=9.6,SNR=68 | | | | | | | | | |
| EKS2 | Erkin-Say | 38.92 | 68 | *e*P | | P | 06 25 07.7 | +0.2 | | |
| EKS2 | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | | |
| EKS2 | Erkin-Say | 38.92 | 68 | *e*P | | P | 06 25 07.7 | +0.2 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | | | |
| EKS2 | Erkin-Say | 38.92 | 68 | *e*P | | P | 06 25 07.7 | +0.2 | | |
| | comp=Z,3.6nm,0.8s | | | | | | | | | |
| KURBB | Kurchatov Arra | 40.63 | 55 | P | | P | 06 25 21.2 | -0.2 | | |
| | comp=Z,3.3nm,0.9s,baz=280,slow=9.3,SNR=5.6 | | | | | | | | | |
| DBIC | Dimbokro | 40.67 | 222 | P | | P | 06 25 22.0 | -0.1 | | |
| | comp=Z,11nm,0.9s,baz=14,slow=9.0,SNR=7.1 | | | | | | | | | |
| DBIC | Dimbokro | 40.67 | 222 | *e*P | | P | 06 25 22.8 | +0.7 | | |
| DBIC | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,1.0s | | | | | | | | | |
| DBIC | Dimbokro | 40.67 | 222 | *e*P | | P | 06 25 22.8 | +0.7 | | |
| | comp=Z,16nm,1.0s | | | | | | | | | |
| DBIC | Dimbokro | 40.67 | 222 | *e*P | | P | 06 25 22.8 | +0.7 | | |
| | comp=Z,16nm,1.0s | | | | | | | | | |
| KURK | Kurchatov | 40.68 | 55 | P | | P | 06 25 21.3 | -0.5 | | |
| KURK | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| KURK | Kurchatov | 40.68 | 55 | P | | P | 06 25 21.2 | -0.5 | | |
| KURK | Kurchatov | 40.68 | 55 | P | | P | 06 25 21.3 | -0.5 | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| TIC | Toumodi | 40.78 | 223 | *e*P | | P | 06 25 22.9 | -0.1 | | |
| KIC | Kosan Boka | 40.88 | 222 | *e*P | | P | 06 25 24.1 | +0.3 | | |
| | comp=Z,30nm,0.9s | | | | | | | | | |
| LIC | Lamto | 41.14 | 222 | *e*P | | P | 06 25 26.3 | +0.4 | | |
| | comp=Z,32nm,0.7s | | | | | | | | | |
| KSH | Kashi | 41.41 | 72 | *e*P | | P | 06 25 28.3 | +0.2 | | |
| KSH | | | | *es*P | | sP | 06 25 38.6 | +1.6 | | |
| KSH | | | | *e*PP | | PP | 06 27 05.3 | +1.5 | | |
| KSH | | | | S | | S | 06 31 37.6 | -4.5 | | |
| KSH | | | | SS | | SS | 06 34 40.8 | -5.3 | | |
| KSH | | | | LN | | | | | | |
| | comp=Z,170nm,7.0s | | | | | | | | | |
| KSH | | | | LE | | | | | | |
| | comp=Z,140nm,4.8s | | | | | | | | | |
| KSH | | | | LZ | | | | | | |
| | comp=Z,160nm,6.9s | | | | | | | | | |
| KMBO | Kilima Mbogo | 43.42 | 157 | P | | P | 06 25 45.9 | +1.1 | | |
| | comp=Z,1.1nm,0.4s,baz=15,slow=6.7,SNR=3.9 | | | | | | | | | |
| KMBO | Kilima Mbogo | 43.42 | 157 | P | | P | 06 25 45.9 | +1.1 | | |
| KMBO | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | | |
| MKAR | Makanchi Array | 43.80 | 60 | P | | P | 06 25 47.0 | -0.3 | | |
| | comp=Z,4.9nm,0.8s,baz=280,slow=6.6,SNR=11 | | | | | | | | | |
| MKAR | Makanchi Array | 43.80 | 60 | P | | P | 06 25 47.1 | -0.3 | | |
| MKAR | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | | |
| MKAR | Makanchi Array | 43.80 | 60 | *e*P | | P | 06 25 47.4 | 0.0 | | |
| MKAR | Makanchi Array | 43.80 | 60 | *e*P | | P | 06 25 47.4 | 0.0 | | |
| MK01 | Makanchi Array | 43.82 | 60 | *e*P | | P | 06 25 47.1 | -0.4 | | |
| MK01 | Makanchi Array | 43.82 | 60 | *e*P | | P | 06 25 47.1 | -0.4 | | |
| ZAA0 | Zalesovo Array | 44.00 | 50 | *e*P | | P | 06 25 49.0 | +0.2 | | |
| ZAA0 | Zalesovo Array | 44.00 | 50 | *e*P | | P | 06 25 49.0 | +0.2 | | |
| ZALV | Zalesovo Beam | 44.00 | 50 | P | | P | 06 25 48.9 | +0.1 | | |
| | comp=Z,1.9nm,0.5s,baz=282,slow=7.6,SNR=4.4 | | | | | | | | | |
| ZALV | Zalesovo Beam | 44.00 | 50 | P | | P | 06 25 48.9 | +0.1 | | |
| ZALV | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | | |
| WMQ | Urumqi | 48.31 | 63 | P | | P | 06 26 26.0 | +3.0 | | |
| KOLN | Koldanda | 52.12 | 83 | *e*P | | P | 06 26 51.0 | -1.2 | | |
| | comp=Z,7.4nm,0.7s | | | | | | | | | |
| DMN | Daman | 53.35 | 83 | *e*P | | P | 06 27 00.3 | -1.1 | | |
| | comp=Z,25nm,1.0s | | | | | | | | | |
| PKI | Pulchoki | 53.60 | 83 | *e*P | | P | 06 27 02.0 | -1.3 | | |
| GUN | Gumba | 53.79 | 82 | *e*P | | P | 06 27 03.5 | -1.2 | | |
| | comp=Z,30nm,1.0s | | | | | | | | | |
| RAMN | Ramite | 54.83 | 82 | *e*P | | P | 06 27 10.5 | -1.7 | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| LSZ | Lusaka | 55.34 | 172 | P | | P | 06 27 17.1 | +1.5 | | |
| | comp=Z,1.8nm,0.5s,baz=12,slow=8.5,SNR=5.1 | | | | | | | | | |
| LSZ | Lusaka | 55.34 | 172 | P | | P | 06 27 17.1 | +1.5 | | |
| LSZ | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | | |
| TAPN | Taplejung | 55.47 | 81 | *e*P | | P | 06 27 15.6 | -1.2 | | |
| | comp=Z,31nm,1.2s | | | | | | | | | |
| ODAN | Odare | 55.48 | 82 | *e*P | | P | 06 27 15.5 | -1.3 | | |
| GTA | Gaotai | 58.40 | 63 | P | | P | 06 27 36.8 | -0.4 | | |
| GTA | | | | pP | | pP | 06 27 42.5 | -1.2 | | |
| GTA | | | | sP | | sP | 06 27 45.4 | -0.8 | | |
| GTA | | | | S | | S | 06 35 36.3 | -2.8 | | |
| GTA | | | | sS | | sS | 06 35 46.1 | -3.7 | | |
| GTA | | | | SS | | SS | 06 39 29.1 | -1.8 | | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,260nm,6.4s | | | | | | | | | |
| GTA | | | | LN | | | | | | |
| | comp=Z,270nm,20.0s | | | | | | | | | |
| GTA | | | | LE | | | | | | |
| | comp=Z,360nm,17.6s | | | | | | | | | |
| GTA | | | | LZ | | | | | | |
| | comp=Z,370nm,19.0s | | | | | | | | | |
| SONM | Songino Array | 58.80 | 52 | P | | P | 06 27 38.8 | -1.1 | | |
| | comp=Z,4.4nm,1.0s,baz=292,slow=7.8,SNR=9.7 | | | | | | | | | |
| SONM | Songino Array | 58.80 | 52 | P | | P | 06 27 38.8 | -1.1 | | |
| SONM | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | | |
| LZH | Lanzhou | 62.81 | 65 | *e*P | | P | 06 28 08.3 | +0.9 | | |
| LZH | | | | pP | | pP | 06 28 13.1 | -0.9 | | |
| LZH | | | | sP | | sP | 06 28 15.8 | -0.6 | | |
| LZH | | | | PMZ | | | | | | |
| | comp=Z,18nm,1.0s | | | | | | | | | |
| LZH | | | | PMZ | | | | | | |
| | comp=Z,120nm,4.0s | | | | | | | | | |
| LZH | | | | LN | | | | | | |
| | comp=Z,440nm,14.9s | | | | | | | | | |
| LZH | | | | LE | | | | | | |
| | comp=Z,760nm,16.5s | | | | | | | | | |
| LZH | | | | LZ | | | | | | |
| | comp=Z,520nm,18.3s | | | | | | | | | |
| YAK | Yakutsk | 63.21 | 30 | LR | | LR | 06 58 44.0 | | | |
| | comp=Z,117nm,19.3s,baz=320,slow=39 | | | | | | | | | |
| CD2 | Chengdu | 65.50 | 69 | *e*P | | P | 06 28 25.3 | +0.3 | | |
| CD2 | | | | pP | | pP | 06 28 32.5 | +0.9 | | |
| CD2 | | | | PP | | PP | 06 30 49.0 | +0.1 | | |
| CD2 | | | | S | | S | 06 37 08.5 | -0.4 | | |
| CD2 | | | | sS | | sS | 06 37 20.8 | +1.1 | | |
| CD2 | | | | SKS | | SKSac | 06 38 18.9 | -0.5 | | |
| CD2 | | | | SS | | SS | 06 41 22.8 | +0.7 | | |
| CD2 | | | | PMZ | | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | | |
| CD2 | | | | PMZ | | | | | | |
| | comp=Z,120nm,5.2s | | | | | | | | | |
| BOSA | Boshof | 68.34 | 176 | P | | P | 06 28 44.1 | +1.3 | | |
| | comp=Z,3.1nm,0.9s,baz=314,slow=5.1,SNR=3.8 | | | | | | | | | |
| BOSA | Boshof | 68.34 | 176 | P | | P | 06 28 44.2 | +1.3 | | |
| BOSA | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| BJI | Beijing | 68.85 | 55 | P | | P | 06 28 46.5 | +0.5 | | |
| BJI | | | | S | | S | 06 37 49.0 | +0.2 | | |
| BJI | | | | PMZ | | | | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| BJI | | | | LN | | | | | | |
| | comp=Z,330nm,11.5s | | | | | | | | | |
| BJI | | | | LE | | | | | | |
| | comp=Z,370nm,15.9s | | | | | | | | | |
| BJI | | | | LZ | | | | | | |
| | comp=Z,190nm,25.3s | | | | | | | | | |
| GYA | Guiyang | 70.11 | 72 | *e*P | | P | 06 28 56.0 | +1.8 | | |
| GYA | | | | sP | | sP | 06 29 06.0 | +2.7 | | |
| GYA | | | | PP | | PP | 06 31 32.8 | +3.7 | | |
| GYA | | | | S | | S | 06 38 04.3 | 0.0 | | |
| GYA | | | | SKS | | SKSac | 06 38 51.0 | -3.6 | | |
| GYA | | | | SS | | SS | 06 42 35.5 | +1.8 | | |
| GYA | | | | PMZ | | | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| GYA | | | | PMZ | | | | | | |
| | comp=Z,120nm,5.4s | | | | | | | | | |
| GYA | | | | LN | | | | | | |
| | comp=Z,520nm,19.8s | | | | | | | | | |
| GYA | | | | LE | | | | | | |
| | comp=Z,500nm,18.6s | | | | | | | | | |
| GYA | | | | LZ | | | | | | |
| | comp=Z,540nm,18.4s | | | | | | | | | |
| YKA | Yellowknife Ar | 71.92 | 340 | P | | P | 06 29 02.6 | -1.8 | | |
| | comp=Z,3.2nm,1.1s,baz=49,slow=5.9,SNR=3.3 | | | | | | | | | |
| YKA | Yellowknife Ar | 71.92 | 340 | P | | P | 06 29 02.6 | -1.8 | | |
| YKA | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | | |
| CN2 | Changchun | 72.17 | 48 | *e*P | | P | 06 29 08.1 | +1.9 | | |
| ULM | Lac du Bonnet | 74.64 | 324 | P | | P | 06 29 20.3 | -0.3 | | |
| | comp=Z,7.3nm,1.0s,baz=45,slow=7.1,SNR=4.4 | | | | | | | | | |
| ULM | Lac du Bonnet | 74.64 | 324 | *e*P | | P | 06 29 21.6 | +0.9 | | |
| ULM | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | | |
| ULM | Lac du Bonnet | 74.64 | 324 | *e*P | | P | 06 29 21.6 | +0.9 | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | | |
| ILAR | Eielson Array | 75.17 | 355 | P | | P | 06 29 22.8 | -0.7 | | |
| | comp=Z,0.4nm,0.7s,baz=356,slow=5.4,SNR=3.4 | | | | | | | | | |
| ILAR | Eielson Array | 75.17 | 355 | *e*P | | P | 06 29 29.2 | +5.7 | | |
| ILAR | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | | |
| NJ2 | Nanjing | 75.33 | 60 | *e*P | | P | 06 29 26.8 | +1.8 | | |
| NJ2 | | | | PMZ | | | | | | |
| | comp=Z,20nm,0.5s | | | | | | | | | |
| USRK | Ussuriysk Ar. | 75.51 | 44 | P | | P | 06 29 24.5 | -1.3 | | |
| | comp=Z,1.2nm,0.7s,baz=101,slow=3.9,SNR=4.8 | | | | | | | | | |
| QIZ | Qiongzhong | 76.88 | 76 | P | | P | 06 29 35.1 | +1.1 | | |
| QIZ | | | | S | | S | 06 39 21.6 | +0.7 | | |
| KSAR | Wonju Array Be | 77.66 | 51 | P | | P | 06 29 36.9 | -1.2 | | |
| KSAR | Wonju Array Be | 77.66 | 51 | P | | P | 06 29 36.9 | -1.2 | | |
| KSAR | Wonju Array Be | 77.66 | 51 | P | | P | 06 29 36.9 | -1.2 | | |
| KSRS | Korea Array | 77.67 | 51 | P | | P | 06 29 36.9 | -1.2 | | |
| | comp=Z,0.7nm,0.3s,baz=335,slow=5.5,SNR=4.6 | | | | | | | | | |
| KSRS | Korea Array | 77.67 | 51 | *e*P | | P | 06 29 37.8 | -0.3 | | |
| KSRS | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | | |
| KSRS | Korea Array | 77.67 | 51 | *e*P | | P | 06 29 37.8 | -0.3 | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | | |
| LRAL | Lakeview Retre | 81.73 | 306 | *e*P | | P | 06 30 00.8 | +0.5 | | |
| | comp=Z,108nm,3.0s | | | | | | | | | |
| LRAL | Lakeview Retre | 81.73 | 306 | *e*P | | P | 06 30 00.8 | +0.5 | | |
| | comp=Z,108nm,3.0s | | | | | | | | | |
| JTMT | Jette | 84.18 | 332 | *e*P | | P | 06 30 14.2 | +1.3 | | |
| JTMT | Jette | 84.18 | 332 | *e*P | | P | 06 30 14.1 | +1.3 | | |
| SWMT | Swartz Lake | 84.27 | 331 | *e*P | | P | 06 30 14.1 | +0.8 | | |
| SWMT | Swartz Lake | 84.27 | 331 | *e*P | | P | 06 30 14.1 | +0.8 | | |
| MIAR | Mount Ida | 84.62 | 311 | *e*P | | P | 06 30 15.8 | +0.6 | | |
| MIAR | | | | pmax | pmax | | | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | | |
| MIAR | Mount Ida | 84.62 | 311 | *e*P | | P | 06 30 15.8 | +0.6 | | |
| | comp=Z,7.9nm,1.1s | | | | | | | | | |
| MIAR | Mount Ida | 84.62 | 311 | *e*P | | P | 06 30 15.8 | +0.6 | | |
| | comp=Z,7.8nm,1.1s | | | | | | | | | |
| BDFB | Brasilia | 84.89 | 245 | P | | P | 06 30 18.0 | +1.2 | | |
| | comp=Z,5.2nm,1.0s,baz=1.2,slow=2.3,SNR=7.5 | | | | | | | | | |
| BDFB | Brasilia | 84.89 | 245 | *e*P | | P | 06 30 18.6 | +1.8 | | |
| BDFB | | | | pmax | pmax | | | | | |
| | comp=Z,89nm,2.2s | | | | | | | | | |
| BDFB | Brasilia | 84.89 | 245 | *e*P | | P | 06 30 18.6 | +1.8 | | |
| | comp=Z,89nm,2.2s | | | | | | | | | |
| BDFB | Brasilia | 84.89 | 245 | *e*P | | P | 06 30 18.6 | +1.8 | | |
| | comp=Z,89nm,2.2s | | | | | | | | | |
| TUL1 | Tulsa | 84.90 | 314 | *e*P | | P | 06 30 17.0 | +0.5 | | |
| | comp=Z,9.3nm,1.0s | | | | | | | | | |
| TUL1 | Tulsa | 84.90 | 314 | *e*P | | P | 06 30 17.0 | +0.5 | | |
| | comp=Z,9.3nm,1.0s | | | | | | | | | |
| BOZ | Bozeman (W) | 84.92 | 329 | *e*P | | P | 06 30 17.7 | +1.0 | | |
| BOZ | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,1.4s | | | | | | | | | |
| BOZ | Bozeman (W) | 84.92 | 329 | *e*P | | P | 06 30 17.7 | +1.0 | | |
| | comp=Z,5.3nm,1.4s | | | | | | | | | |
| BOZ | Bozeman (W) | 84.92 | 329 | *e*P | | P | 06 30 17.7 | +1.0 | | |
| | comp=Z,5.3nm,1.4s | | | | | | | | | |
| LRM | Limekiln Ridge | 85.10 | 330 | *e*P | | P | 06 30 18.8 | +1.1 | | |
| LRM | Limekiln Ridge | 85.10 | 330 | *e*P | | P | 06 30 18.8 | +1.1 | | |
| H17A | Grant Village | 85.53 | 328 | *e*P | | P | 06 30 23.1 | +3.3 | | |
| | comp=Z,17nm,1.8s | | | | | | | | | |
| H17A | Grant Village | 85.53 | 328 | *e*P | | P | 06 30 23.1 | +3.3 | | |
| | comp=Z,17nm,1.8s | | | | | | | | | |
| C09A | Chrisman Ranch | 85.53 | 334 | *e*P | | P | 06 30 20.9 | +1.4 | | |
| | comp=Z,7.4nm,0.8s | | | | | | | | | |
| C09A | Chrisman Ranch | 85.53 | 334 | *e*P | | P | 06 30 20.9 | +1.4 | | |
| | comp=Z,7.4nm,0.8s | | | | | | | | | |
| DLMT | Dillon | 85.54 | 329 | *e*P | | P | 06 30 17.1 | +1.5 | | |
| | comp=Z,6.6nm,1.1s | | | | | | | | | |
| DLMT | Dillon | 85.54 | 329 | *e*P | | P | 06 30 21.8 | +2.0 | | |
| | comp=Z,6.6nm,1.1s | | | | | | | | | |
| SDV | Santo Domingo | 85.90 | 278 | *e*P | | P | 06 30 22.0 | -0.1 | | |
| | comp=Z,8.5nm,1.0s | | | | | | | | | |
| SDV | Santo Domingo | 85.90 | 278 | *e*P | | P | 06 30 22.0 | -0.1 | | |
| | comp=Z,8.5nm,1.0s | | | | | | | | | |
| COCO | West Island | 86.88 | 109 | *i* P | | P | 06 30 31.5 | +5.0 | | |
| HAWA | Hanford | 87.18 | 334 | *e*P | | P | 06 30 28.6 | +1.0 | | |
| | comp=Z,84nm,2.7s | | | | | | | | | |
| HAWA | Hanford | 87.18 | 334 | *e*P | | P | 06 30 28.6 | +1.0 | | |
| | comp=Z,84nm,2.7s | | | | | | | | | |
| TX31 | Lajitas Ar. Si | 94.20 | 314 | *e*P | | P | 06 30 59.0 | -1.8 | | |
| TXAR | Lajitas Array | 94.20 | 314 | P | | P | 06 31 00.7 | -0.1 | | |
| | comp=Z,1.5nm,0.9s,baz=58,slow=4.2,SNR=10 | | | | | | | | | |
| TXAR | Lajitas Array | 94.20 | 314 | P | | P | 06 31 00.7 | -0.1 | | |
| TXAR | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | | |
| LPAZ | La Paz | 99.91 | 257 | P | | Pdif | 06 31 26.6 | -0.7 | | |
| | comp=Z,0.7nm,0.7s,baz=343,slow=5.2,SNR=3.7 | | | | | | | | | |
| LPAZ | La Paz | 99.91 | 257 | P | | Pdif | 06 31 26.7 | -0.7 | | |
| LPAZ | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | | |
| NWAO | Narrogin (SRO) | 114.34 | 113 | PKP | PKPdf | | 06 36 19.3 | -1.8 | | |
| | comp=Z,16nm,1.2s,baz=244,slow=0.1,SNR=3.2 | | | | | | | | | |
| NWAO | Narrogin (SRO) | 114.34 | 113 | PKIKP | PKPdf | | 06 36 19.3 | -1.8 | | |
| NWAO | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,1.2s | | | | | | | | | |
| WRA | Warramunga Arr | 119.93 | 92 | PKP | PKPdf | | 06 36 30.6 | -1.7 | | |
| | comp=Z,1.1nm,0.9s,baz=320,slow=1.7,SNR=8.8 | | | | | | | | | |
| WRA | Warramunga Arr | 119.93 | 92 | PKIKP | PKPdf | | 06 36 30.6 | -1.7 | | |
| WRA | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | | |
| ASAR | Alice Springs | 121.69 | 96 | PKP | PKPdf | | 06 36 34.0 | -1.7 | | |
| | comp=Z,2.2nm,0.9s,baz=319,slow=1.6,SNR=15 | | | | | | | | | |
| ASAR | Alice Springs | 121.69 | 96 | PKIKP | PKPdf | | 06 36 34.0 | -1.7 | | |
| ASAR | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | | |

*KRSC* ***23*** *06:39:37.0±0.6,53.15N×159.98E,h64km±4km,ML4.0*
*ISCJB* ***23*** *06:39:38.3±0.6,53.13N±0.04×159.97E±0.07,h62km±6km, Error ellipse: s-maj=8.1km s-min=3.8km az=41.9*
*MOS* ***23*** *06:39:38.6±0.6,53.17N×159.86E,h49km, mb4.2/1, Error ellipse: s-maj=13.5km s-min=7.8km az=80.4*

**ISC 23 06:39:39.5±1.3,53.14N±0.04×159.93E±0.04,h56km±7km, n47,σ0.73/82,1C,Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| SPN | Mys Shipunski | 0.07 | 128 | *i* P | | Pn | 06 39 48.0 | 0.0 |
| SPN | | | | *i* S | | Sn | 06 39 54.3 | +0.2 |
| SPN | Mys Shipunski | 0.07 | 128 | PN | | Pn | 06 39 48.0 | 0.0 |
| SPN | | | | S | | Sn | 06 39 54.3 | +0.2 |
| NLC | Nalytchevo | 0.35 | 275 | *i* P | | Pn | 06 39 49.4 | -0.3 |
| NLC | | | | *i* S | | Sn | 06 39 57.3 | +0.3 |
| NLC | Nalytchevo | 0.35 | 275 | PN | | Pn | 06 39 49.4 | -0.3 |
| NLC | | | | S | | Sn | 06 39 57.3 | +0.3 |
| SDLR | Sedlovina | 0.64 | 283 | *i* P | | Pn | 06 39 52.2 | -0.8 |
| SDLR | | | | *e*S | | Sn | 06 40 03.3 | +0.6 |
| SDLR | Sedlovina | 0.64 | 283 | PN | | Pn | 06 39 52.2 | -0.8 |
| SDLR | | | | S | | Sn | 06 40 03.3 | +0.6 |
| UGLR | Uglovaya | 0.67 | 276 | *i* P | | Pn | 06 39 52.9 | -0.4 |
| SMAR | Somma | 0.69 | 280 | *i* P | | Pn | 06 39 52.8 | -0.8 |
| SMAR | | | | *e*S | | Sn | 06 40 04.1 | +0.2 |
| SMAR | Somma | 0.69 | 280 | PN | | Pn | 06 39 52.8 | -0.8 |
| SMAR | | | | S | | Sn | 06 40 04.1 | +0.2 |
| AVH | Avacha | 0.72 | 280 | *e*P | | Pn | 06 39 53.5 | -0.5 |
| AVH | | | | *e*S | | Sn | 06 40 05.0 | +0.5 |
| AVH | Avacha | 0.72 | 280 | PN | | Pn | 06 39 53.5 | -0.5 |
| AVH | | | | S | | Sn | 06 40 05.0 | +0.5 |
| PET | Petropavlovsk | 0.78 | 262 | *i* P | | Pn | 06 39 53.7 | -0.8 |
| PET | | | | *i* S | | Sn | 06 40 05.6 | +0.1 |
| PET | Petropavlovsk | 0.78 | 262 | ⇑ *i* PN | | Pn | 06 39 53.6 | -0.9 |
| PET | | | | *e*S | | Sn | 06 40 05.3 | -0.2 |
| PET | | | | pmax | pmax | | | |
| | comp=Z,188nm,0.4s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=E,757nm,0.5s | | | | | | | |
| PET | | | | smax | smax | | | |
| | comp=N,954nm,0.6s | | | | | | | |
| KOK | Koryaka | 0.79 | 281 | *e*P | | Pn | 06 39 54.2 | -0.6 |
| KOK | | | | *e*S | | Sn | 06 40 05.7 | -0.2 |
| KOK | Koryaka | 0.79 | 281 | PN | | Pn | 06 39 54.2 | -0.6 |
| KOK | | | | S | | Sn | 06 40 05.7 | -0.2 |
| KRX | Arik | 0.80 | 286 | *i* P | | Pn | 06 39 54.0 | -0.9 |
| KRX | | | | *i* S | | Sn | 06 40 05.9 | -0.3 |
| KII | Karymskiy | 0.94 | 343 | *i* P | | Pn | 06 39 55.8 | -0.9 |
| KII | | | | *i* S | | Sn | 06 40 09.1 | -0.2 |
| KII | Karymski

0.2nm,0.4s,baz=219,slow=5.6,SNR=5.2
**TXAR Lajitas Array 85.90 58** P P 07 23 16.1 +0.2
0.6nm,0.7s,baz=219,slow=6.3,SNR=8.3

*ISCJB **23** 07:23:35.6±0.8, 4.73S±0.07×30.7E±0.1, h10km, mb4.0/4, Error ellipse: s-maj=14.8km s-min=10.4km az=10.5*
*IDC **23** 07:23:36.7±1.2, 4.53S×30.63E, h0km, mb4.1/4, mb1 4.2/5, mb1mx3.8/25, mbtmp4.2/5, ML4.7/1, Error ellipse: s-maj=36.0km s-min=22.3km az=157.0*
**ISC 23 07:23:37.8**±0.9, **4.63S**±0.07×**30.73E**±0.08, **h10**km, **n10**, σ1§**56**/12, **mb4.2/4, Lake Tanganyika region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ENT** | **Entebbe** | **4.97** | **21** | *i* P | **Pn** | **07 24 55.1** | **+2.3** |
| ENT | | | | *i* S | **Sg** | **07 26 15.8** | **-1.9** |
| **DODT** | **Dodoma, Tanzan** | **5.24** | **107** | *i* P | **Pn** | **07 24 56.1** | **-0.2** |
| DODT | | | | *i* S | **Sg** | **07 26 25.7** | **-0.4** |
| **KMBO** | **Kilima Mbogo** | **7.39** | **62** | Pn | **Pn** | **07 25 25.6** | **-0.4** |
| | 11nm,0.3s,baz=232,slow=16,SNR=41 | | | | | | |
| KMBO | | | | Sn | Sn | 07 26 42.2 | -7.9 |
| | 8.1nm,0.3s,baz=207,slow=16,SNR=3.9 | | | | | | |
| KMBO | | | | Lg | Lg | 07 27 30.7 | |
| | 49nm,0.3s,baz=333,slow=23,SNR=12 | | | | | | |
| **MZM** | **Mzuzu** | **7.50** | **154** | *i* P | **Pn** | **07 25 28.5** | **+1.2** |
| MZM | | | | *i* S | Sn | 07 26 40.7 | -12 |
| **ZOMB** | **Zomba** | **11.61** | **157** | *i* P | **Pn** | **07 26 21.9** | **-1.9** |
| ZOMB | | | | *i* S | Sn | 07 28 46.5 | +13 |
| **ITZ** | **Itezhi-Tezhi** | **11.98** | **202** | *i* P | **Pn** | **07 26 27.6** | **-1.3** |
| **BOSA** | **Boshof** | **24.41** | **192** | P | **P** | **07 28 57.8** | **+1.1** |
| | 1.9nm,0.6s,baz=356,slow=5.7,SNR=1.8 | | | | | | |
| BOSA | | | | Lg | Lg | 07 36 12.7 | |
| | 6.6nm,0.9s,baz=101,slow=20,SNR=2.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.81** | **302** | P | **P** | **07 30 19.0** | **-1.5** |
| | 2.8nm,0.8s,baz=110,slow=8.1,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.44** | **95** | P | **P** | **07 34 41.5** | **+1.4** |
| | 1.2nm,0.7s,baz=241,slow=4.9,SNR=9.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.98** | **69** | P | **P** | **07 34 57.1** | **+0.9** |
| | 0.8nm,0.3s,baz=256,slow=7.3,SNR=7.5 | | | | | | |

*ISCJB **23** 07:49:00.2±0.7, 34.73S±0.03×71.86W±0.08, h47km±8km, Error ellipse: s-maj=10.9km s-min=4.4km az=7.9*
*GUC **23** 07:49:00.7±0.5, 34.73S×71.83W, h43km±1km, ML3.6*
**ISC 23 07:48:59.6**±1.4, **34.78S**±0.03×**71.93W**±0.06, **h31**km±15km, **n24**, σ0§**92**/40, **5C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.39** | **351** | ⇑*i* P | **Pn** | **07 49 09.5** | **+0.4** |
| CHPI | | | | *i* S | **Sn** | **07 49 16.2** | **+0.7** |
| **NICH** | **Los Niches** | **0.61** | **112** | *i* P | **Pn** | **07 49 11.9** | **-0.3** |
| NICH | | | | *i* S | **Sn** | **07 49 20.7** | **-0.4** |
| **TALC** | **Talca** | **0.66** | **159** | ⇑*i* P | **Pn** | **07 49 14.0** | **+1.2** |
| TALC | | | | *i* S | **Sn** | **07 49 23.7** | **+1.4** |
| **LNCH** | **Linares** | **1.10** | **166** | ⇑*i* P | **Pn** | **07 49 18.4** | **-0.4** |
| LNCH | | | | *i* S | **Sb** | **07 49 33.1** | **-0.9** |
| **ANTU** | **Antumapu** | **1.61** | **42** | ⇓*i* P | **Pn** | **07 49 26.0** | **0.0** |
| ANTU | | | | *i* S | **Sn** | **07 49 45.2** | **-0.6** |
| **SAN** | **Santiago** | **1.69** | **39** | *i* P | **Pn** | **07 49 27.2** | **+0.2** |
| SAN | | | | *i* S | **Sn** | **07 49 46.9** | **-0.6** |
| **LACH** | **Col Las Americ** | **1.76** | **42** | *i* P | **Pn** | **07 49 27.6** | **-0.3** |
| LACH | | | | *i* S | **Sn** | **07 49 48.4** | **-0.9** |
| **CLCH** | **Cerro Calan** | **1.80** | **40** | ⇑*i* P | **Pn** | **07 49 28.4** | **-0.1** |
| CLCH | | | | *i* S | **Sn** | **07 49 49.5** | **-0.8** |
| CLCH | | | | IAML | | 07 49 53.8 | |
| | comp=E,904nm,0.4s | | | | | | |
| **CCHI** | **Chillan** | **1.82** | **184** | *i* P | **Pb** | **07 49 32.0** | **-0.3** |
| CCHI | | | | *i* S | **Sb** | **07 49 54.5** | **-0.2** |
| **PEL** | **Peldehue** | **1.93** | **33** | *e*P | **Pn** | **07 49 30.3** | **0.0** |
| PEL | | | | *i* S | **Sn** | **07 49 53.0** | **-0.6** |
| PEL | | | | IAML | | 07 49 59.5 | |
| | comp=N,1μm,0.4s | | | | | | |
| **ROC1** | **El Roble** | **1.95** | **23** | *e*P | **Pn** | **07 49 30.3** | **-0.5** |
| ROC1 | | | | *e*S | **Sb** | **07 50 01.3** | **+2.7** |
| **ROCH** | **El Roble** | **1.96** | **23** | ⇑*i* P | **Pn** | **07 49 30.8** | **0.0** |
| ROCH | | | | *i* S | **Sn** | **07 49 53.9** | **-0.6** |
| **AAGR** | **Agrelo** | **3.08** | **58** | *e*P | **Pn** | **07 49 47.6** | **+1.4** |
| **ARCO** | **CERRO ARCO** | **3.15** | **53** | *e*P | **Pn** | **07 49 48.6** | **+1.3** |
| ARCO | | | | *e*S | **Sb** | **07 50 33.9** | **+0.8** |
| ARCO | | | | IAML | | 07 50 38.0 | |
| | comp=Z,50nm,0.4s | | | | | | |
| **AUSP** | **Uspallata** | **3.31** | **40** | *e*P | **Pn** | **07 49 51.0** | **+1.3** |
| AUSP | | | | *e*S | **Sb** | **07 50 38.3** | **+0.5** |
| **ASAL** | **Salagasta** | **3.38** | **51** | *e*P | **Pn** | **07 49 51.6** | **+1.3** |
| ASAL | | | | *e*S | **Sb** | **07 50 39.2** | **-0.2** |
| **RTLS** | **Leoncito** | **3.70** | **37** | *e*P | **Pn** | **07 49 55.9** | **+1.1** |
| RTLS | | | | *e*S | **Sb** | **07 50 47.2** | **-1.6** |
| **CFAA** | **Coronel Fontan** | **4.42** | **45** | *e*P | **Pn** | **07 50 05.5** | **+0.9** |
| **RTLL** | **Cerro Villicun** | **4.50** | **41** | *e*P | **Pn** | **07 50 05.8** | **+0.2** |
| **AMOG** | **MOGNA** | **4.80** | **38** | *e*P | **Pn** | **07 50 10.0** | **+0.2** |
| AMOG | | | | *e*S | Sb | 07 51 12.0 | -8.2 |
| **AVFE** | **Valle Fertil** | **5.57** | **44** | *e*P | **Pn** | **07 50 20.1** | **-0.4** |
| AVFE | | | | *e*S | Sn | 07 51 30.3 | +6.8 |
| AVFE | | | | IAML | | 07 51 33.2 | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| **MRA** | **San Martin** | **5.69** | **67** | *e*P | **Pn** | **07 50 22.7** | **+0.6** |
| **AGUA** | **GUANDACOL** | **6.03** | **30** | *e*P | **Pn** | **07 50 26.0** | **-0.7** |
| **VCA** | **Vinchina** | **6.80** | **29** | *e*P | **Pn** | **07 50 36.7** | **-0.7** |
| VCA | | | | IAML | | 07 52 12.5 | |
| | comp=Z,19nm,0.5s | | | | | | |

**IDC 23 08:18:39.4**±5.6, **5.18S**×**133.55E, h0**km, **mb3.4**/1, **mb1 3.8**/4, **mb1mx3.5**/33, **mbtmp3.6**/4, **ML3.5**/3, **MS3.1**/2, **Ms1 3.1**/2, **ms1mx2.7**/19, **Error ellipse: s-maj=300.6km s-min=27.7km az=76.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.85** | **332** | Pn | Pn | 08 19 53.5 | -0.2 |
| | 2.1nm,0.3s,baz=212,slow=22,SNR=7.4 | | | | | | |
| SIJI | | | | Sn | Sn | 08 20 43.5 | -7.1 |
| | 3.1nm,0.3s,baz=262,slow=22,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.70** | **177** | Pn | Pn | 08 22 07.5 | -1.4 |
| | 0.2nm,0.3s,baz=356,slow=13,SNR=7.0 | | | | | | |
| WRA | | | | Sn | Sn | 08 24 42.8 | -10 |
| | 0.1nm,0.3s,baz=353,slow=24,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **18.39** | **179** | P | P | 08 22 56.3 | +0.2 |
| | 0.2nm,0.3s,baz=0.5,slow=11,SNR=26 | | | | | | |
| **LEM** | **Lembang** | **25.84** | **265** | LR | LR | 08 36 02.9 | |
| | comp=Z,58nm,18.7s,baz=236,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **42.73** | **353** | LR | LR | 08 43 31.1 | |
| | comp=Z,19nm,21.4s,baz=350,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.71** | **325** | P | P | 08 29 45.1 | +0.1 |
| | 0.2nm,0.5s,baz=116,slow=6.6,SNR=1.6 | | | | | | |

**IDC 23 08:35:09.2**±2.1, **7.08S**×**128.98E, h0**km, **mb3.5**/1, **mb1 4.0**/3, **mb1mx3.6**/25, **mbtmp3.7**/3, **ML4.1/2**, **MS3.1**/1, **Ms1 3.1**/1, **ms1mx2.5**/26, **Error ellipse: s-maj=107.0km s-min=32.7km az=67.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.81** | **158** | Pn | Pn | 08 38 25.6 | -0.8 |
| | 1.0nm,0.3s,baz=337,slow=13,SNR=43 | | | | | | |
| WRA | | | | Sn | Sn | 08 40 47.9 | -13 |
| | 1.9nm,0.3s,baz=336,slow=22,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **17.16** | **165** | P | Pn | 08 39 11.3 | +0.6 |
| | 0.6nm,0.3s,baz=337,slow=9.6,SNR=60 | | | | | | |
| ASAR | | | | S | Sn | 08 42 09.8 | -13 |
| | 0.7nm,0.3s,baz=350,slow=27,SNR=6.7 | | | | | | |
| **ASAJ** | **Asahikawa** | **52.42** | **12** | LR | LR | 09 06 10.6 | |
| | comp=Z,17nm,19.5s,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.74** | **327** | P | P | 08 46 08.7 | 0.0 |
| | 0.2nm,0.4s,baz=117,slow=8.3,SNR=3.7 | | | | | | |

*TIF **23** 08:50:14.7, 41.47N×44.49E, h18km*
*CSEM **23** 08:50:15.7±0.3, 41.44N×44.42E, h2km, ML2.1, Error ellipse: s-maj=6.3km s-min=4.4km az=131.0*
*DDA **23** 08:50:15.3, 41.40N×44.43E, h7km, Md3.2*
*MOS **23** 08:50:15.3±1.4, 41.37N×44.44E, h11km, mb3.8/1, Error ellipse: s-maj=12.5km s-min=5.2km az=93.1*
**ISC 23 08:50:15.9**±0.7, **41.44N**±0.02×**44.45E**±0.02, **h14**km±5km, **n62**, σ0§**63**/103, **7C-4D, Western Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KZR** | **Kazreti** | **0.07** | **202** | P | **Pg** | **08 50 19.1** | **+0.4** |
| KZR | | | | S | **Sg** | **08 50 21.4** | **+0.8** |
| **TBLG** | **Delisi** | **0.36** | **37** | P | **Pg** | **08 50 22.5** | **-0.7** |
| TBLG | | | | S | **Sg** | **08 50 27.8** | **-0.4** |
| **TBLG** | **Delisi** | **0.36** | **37** | PG | **Pg** | **08 50 22.5** | **-0.7** |
| **TBLG** | **Delisi** | **0.36** | **37** | P | **Pg** | **08 50 22.5** | **-0.7** |
| TBLG | | | | S | **Sg** | **08 50 27.8** | **-0.4** |
| **SEAG** | **Tbilisi Sea** | **0.42** | **40** | P | **Pg** | **08 50 23.9** | **-0.4** |
| SEAG | | | | S | **Sg** | **08 50 29.9** | **0.0** |
| **SEAG** | **Tbilisi Sea** | **0.42** | **40** | P | **Pg** | **08 50 23.9** | **-0.4** |
| SEAG | | | | S | **Sg** | **08 50 29.9** | **0.0** |
| **DUS** | **Dusheti** | **0.68** | **16** | P | **Pg** | **08 50 28.9** | **-0.3** |
| DUS | | | | S | **Sb** | **08 50 39.2** | **+0.3** |
| **DUS** | **Dusheti** | **0.68** | **16** | PG | **Pg** | **08 50 28.8** | **-0.3** |
| DUS | | | | S | **Sb** | **08 50 39.1** | **+0.3** |
| **DUS** | **Dusheti** | **0.68** | **16** | Pg | **Pg** | **08 50 28.8** | **-0.3** |
| DUS | | | | Sg | **Sb** | **08 50 39.1** | **+0.3** |
| **DGRG** | **David-gareji** | **0.70** | **89** | P | **Pg** | **08 50 29.1** | **-0.4** |
| DGRG | | | | S | **Sb** | **08 50 39.0** | **-0.4** |
| **DGRG** | **David-gareji** | **0.70** | **89** | *e*PG | **Pg** | **08 50 29.1** | **-0.4** |
| **DGRG** | **David-gareji** | **0.70** | **89** | *e*Pg | **Pg** | **08 50 29.1** | **-0.4** |
| DGRG | | | | *i* S | **Sb** | **08 50 38.9** | **-0.5** |
| **AKH** | **Akhalkalaki** | **0.72** | **268** | P | **Pg** | **08 50 29.3** | **-0.7** |
| AKH | | | | S | **Sg** | **08 50 39.2** | **-0.3** |
| **AKH** | **Akhalkalaki** | **0.72** | **268** | PG | **Pg** | **08 50 29.2** | **-0.7** |
| AKH | | | | S | **Sg** | **08 50 39.1** | **-0.3** |
| **AKH** | **Akhalkalaki** | **0.72** | **268** | P | **Pg** | **08 50 29.3** | **-0.6** |
| AKH | | | | S | **Sg** | **08 50 39.2** | **-0.2** |
| **EAK** | **Akyaka** | **0.99** | **220** | *i* P | Pg | 08 50 32.0 | -3.0 |
| EAK | | | | *i* S | **Sg** | **08 50 47.3** | **-0.6** |
| **EAK** | **Akyaka** | **0.99** | **220** | P | Pg | 08 50 32.0 | -3.0 |
| EAK | | | | S | **Sg** | **08 50 48.0** | **-0.6** |
| **DIGO** | **Kars** | **1.31** | **219** | *i* P | **Pn** | **08 50 40.0** | **0.0** |
| DIGO | | | | *i* S | **Sb** | **08 50 57.3** | **+0.1** |
| **DIGO** | **Kars** | **1.31** | **219** | P | **Pn** | **08 50 40.0** | **0.0** |
| DIGO | | | | S | **Sb** | **08 50 57.3** | **+0.1** |
| **GNI** | **Garni** | **1.31** | **170** | *d*PG | **Pn** | **08 50 40.1** | **+0.1** |
| **GNI** | **Garni** | **1.31** | **170** | *i* Pg | **Pn** | **08 50 40.1** | **+0.1** |
| **ONI** | **Oni** | **1.37** | **327** | P | **Pn** | **08 50 40.3** | **-0.3** |
| ONI | | | | S | **Sb** | **08 50 58.8** | **+0.1** |
| **ONI** | **Oni** | **1.37** | **327** | PG | **Pn** | **08 50 40.3** | **-0.3** |
| ONI | | | | S | **Sb** | **08 50 58.7** | **+0.1** |
| **ONI** | **Oni** | **1.37** | **327** | P | **Pn** | **08 50 40.3** | **-0.3** |
| ONI | | | | S | **Sb** | **08 50 58.8** | **+0.1** |
| **LACR** | **Lac** | **1.39** | **355** | ⇑*i* PG | **Pn** | **08 50 40.8** | **-0.2** |
| LACR | | | | *i* S | **Sb** | **08 50 59.3** | **-0.1** |
| **LACR** | **Lac** | **1.39** | **355** | *i* Pg | **Pn** | **08 50 40.8** | **-0.2** |
| LACR | | | | *i* Sg | **Sb** | **08 50 59.3** | **-0.1** |
| **ZEI** | **Tsey** | **1.41** | **343** | ⇑*i* PG | **Pn** | **08 50 41.0** | **-0.3** |
| ZEI | | | | *e*S | **Sn** | **08 50 59.6** | **-0.2** |
| **DIGR** | **Digorskoe uzhe** | **1.59** | **336** | ⇑*i* PN | **Pb** | **08 50 44.6** | **-0.6** |
| **DIGR** | **Digorskoe uzhe** | **1.59** | **336** | *i* Pn | **Pb** | **08 50 44.6** | **-0.6** |
| **VLKR** | **Vladikavkaz** | **1.61** | **6** | *e*PN | **Pb** | **08 50 44.8** | **-0.7** |
| **VLKR** | **Vladikavkaz** | **1.61** | **6** | *e*Pn | **Pb** | **08 50 44.8** | **-0.7** |
| **KMGR** | **Komgaron** | **1.64** | **11** | ⇑*i* PN | **Pb** | **08 50 45.9** | **-0.1** |
| KMGR | | | | *e*S | **Sg** | **08 51 07.6** | **-1.2** |
| **KMGR** | **Komgaron** | **1.64** | **11** | *i* Pn | **Pb** | **08 50 45.9** | **-0.1** |
| KMGR | | | | *e*Sg | **Sg** | **08 51 07.6** | **-1.2** |
| **KORR** | **Kora** | **1.67** | **350** | ⇑*i* PN | **Pb** | **08 50 46.2** | **-0.2** |
| **KORR** | **Kora** | **1.67** | **350** | *i* Pn | **Pb** | **08 50 46.2** | **-0.2** |
| **ARNR** | **Ardon** | **1.74** | **356** | ⇑*i* PN | **Pb** | **08 50 47.6** | **-0.1** |
| **LSNR** | **Lesken** | **1.89** | **346** | *e*PN | **Pb** | **08 50 50.5** | **+0.3** |
| **LSNR** | **Lesken** | **1.89** | **346** | *e*Pn | **Pb** | **08 50 50.5** | **+0.3** |
| **ARTV** | **Artvin** | **1.92** | **263** | *i* P | **Pb** | **08 50 50.5** | **-0.3** |
| ARTV | | | | *i* S | **Sb** | **08 51 15.2** | **+0.6** |
| **ARTV** | **Artvin** | **1.92** | **263** | P | **Pb** | **08 50 50.5** | **-0.3** |
| ARTV | | | | S | **Sb** | **08 51 15.2** | **+0.6** |
| **BTKR** | **Batakoyurt** | **1.93** | **2** | *e*PN | **Pg** | **08 50 53.5** | **+0.6** |
| BTKR | | | | *e*S | **Sg** | **08 51 18.5** | **+0.5** |
| **BTKR** | **Batakoyurt** | **1.93** | **2** | *e*Sg | **Sg** | **08 51 18.5** | **+0.5** |
| **DBOC** | **Borcka** | **2.09** | **268** | *i* P | **Pb** | **08 50 53.4** | **-0.3** |
| DBOC | | | | *i* S | **Sn** | **08 51 17.5** | **+1.0** |
| **DBOC** | **Borcka** | **2.09** | **268** | P | **Pb** | **08 50 53.4** | **-0.3** |
| DBOC | | | | S | **Sn** | **08 51 17.5** | **+1.0** |
| **GNBR** | **Gunib** | **2.10** | **62** | ⇓*i* PN | **Pn** | **08 50 52.2** | **+1.4** |
| GNBR | | | | *i* S | **Sb** | **08 51 19.9** | **0.0** |
| **GNBR** | **Gunib** | **2.10** | **62** | *i* Pn | **Pn** | **08 50 52.2** | **+1.4** |
| **DDEM** | **Demirkent** | **2.11** | **256** | *i* P | **Pb** | **08 50 54.1** | **+0.1** |
| DDEM | | | | *i* S | **Sb** | **08 51 21.5** | **+1.4** |
| **DDEM** | **Demirkent** | **2.11** | **256** | P | **Pb** | **08 50 54.1** | **+0.1** |
| DDEM | | | | S | **Sb** | **08 51 21.5** | **+1.4** |
| **DBAD** | **Bademkaya** | **2.12** | **259** | *i* P | **Pb** | **08 50 54.1** | **-0.1** |
| DBAD | | | | *i* S | **Sb** | **08 51 20.9** | **+0.5** |
| **DBAD** | **Bademkaya** | **2.12** | **259** | P | **Pb** | **08 50 54.1** | **-0.1** |
| DBAD | | | | S | **Sb** | **08 51 20.9** | **+0.5** |
| **BCA** | **Borcka** | **2.12** | **271** | *e*PG | **Pb** | **08 50 53.3** | **-0.9** |
| BCA | | | | *e*SG | **Sb** | **08 51 20.9** | **+0.5** |
| **BCA** | **Borcka** | **2.12** | **271** | *e*Pg | **Pb** | **08 50 53.3** | **-0.9** |
| BCA | | | | *e*Sg | **Sb** | **08 51 20.9** | **+0.5** |
| **NCK** | **Nalchik** | **2.15** | **343** | *i* PN | **Pb** | **08 50 55.0** | **+0.4** |
| **CHVG** | **Ch'k'valeri** | **2.17** | **307** | *e*PG | **Pb** | **08 50 54.7** | **-0.3** |
| **CHVG** | **Ch'k'valeri** | **2.17** | **307** | *e*Pg | **Pb** | **08 50 54.7** | **-0.3** |
| **NEY** | **Neytrino** | **2.21** | **325** | *i* PN | **Pb** | **08 50 55.2** | **-0.6** |
| NEY | | | | *i* S | **Sb** | **08 51 23.9** | **+0.8** |
| NEY | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **NEY** | **Neytrino** | **2.21** | **325** | *i* Pn | **Pb** | **08 50 55.2** | **-0.6** |
| | comp=Z,3.0nm,1.1s | | | | | | |
| NEY | | | | *i* Sn | **Sb** | **08 51 23.9** | **+0.8** |
| **DBC** | **Dubki** | **2.37** | **48** | ⇓*i* PN | **Pb** | **08 50 58.7** | **+0.3** |
| DBC | | | | *i* S | **Sg** | **08 51 30.4** | **-1.7** |
| **KIV** | **Kislovodsk** | **2.83** | **333** | ⇑*e*PN | **Pn** | **08 51 02.5** | **+1.7** |
| KIV | | | | *e*S | **Sb** | **08 51 40.6** | **-0.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,36nm,17.0s | | | | | | |
| **KIV** | **Kislovodsk** | **2.83** | **333** | *e*Pn | **Pn** | **08 51 02.5** | **+1.7** |
| | comp=Z,8.0nm,0.7s | | | | | | |
| **OBN** | **Obninsk** | **14.64** | **342** | ⇓*e*P | **Pn** | **08 53 43.4** | **+1.0** |
| OBN | | | | *e*S | **Sn** | **08 56 24.5** | **+0.3** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| OBN | | | | MLR | MLR | | |
| | comp=Z,33nm,14.0s | | | | | | |

**MEX 23 09:12:54.2**±0.7, **16.41N**×**99.34W, h17**km±10km, **MD3.6, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAIG** | **El Cayaco** | **1.10** | **306** | *e*P | Pb | 09 13 11.5 | -3.2 |
| CAIG | | | | *i* S | Sb | 09 13 23.8 | -5.0 |
| **PNIG** | **Pinotepa** | **1.16** | **91** | *e*P | Pn | 09 13 12.3 | -3.5 |
| PNIG | | | | *i* S | Sb | 09 13 26.1 | -4.6 |
| **TLIG** | **Tlapa** | **1.36** | **33** | *e*P | Pn | 09 13 14.5 | -4.2 |
| TLIG | | | | *i* S | Sn | 09 13 30.7 | -5.8 |
| **MEIG** | **Mezcala** | **1.53** | **350** | *e*P | Pn | 09 13 17.3 | -3.6 |
| MEIG | | | | *i* S | Sn | 09 13 36.0 | -4.6 |
| **PLIG** | **Platanillo** | **1.98** | **355** | *e*P | Pn | 09 13 24.7 | -2.4 |
| PLIG | | | | *e*S | Sn | 09 13 48.0 | -3.6 |
| **ARIG** | **Puente Sto Nin** | **2.10** | **333** | *e*P | Pn | 09 13 26.2 | -2.4 |
| ARIG | | | | *e*S | Sn | 09 13 50.1 | -4.3 |

*DDA **23** 09:23:03.2, 37.69N×34.63E, h7km, Md2.7*
*CSEM **23** 09:23:04.3±0.3, 37.67N×34.90E, h12km, MD2.7, Error ellipse: s-maj=11.3km s-min=6.8km az=94.0*
*ISK **23** 09:23:04.2, 37.65N×34.74E, h5km, MD2.7*
*ISCJB **23** 09:23:05.2±0.8, 37.63N±0.03×34.68E±0.06, h0km±8km, Error ellipse: s-maj=8.1km s-min=4.8km az=5.9*
**ISC 23 09:23:04.8**±1.1, **37.64N**±0.03×**34.71E**±0.04, **h11**km±13km, **n12**, σ0§**58**/22, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GULE** | **Gulek** | **0.36** | **171** | *i* P | **Pg** | **09 23 11.0** | **-1.1** |
| GULE | | | | *i* S | **Sg** | **09 23 17.7** | **+0.7** |
| **GULE** | **Gulek** | **0.36** | **171** | P | **Pg** | **09 23 11.0** | **-1.1** |
| GULE | | | | S | **Sg** | **09 23 17.7** | **+0.7** |
| **NIG** | **Nigde** | **0.47** | **351** | *e*PG | **Pg** | **09 23 13.9** | **-0.1** |
| NIG | | | | *e*SG | **Sb** | **09 23 22.2** | **-0.2** |
| **NIG** | **Nigde** | **0.47** | **351** | *e*Pg | **Pg** | **09 23 14.0** | **-0.1** |
| NIG | | | | *e*Sg | **Sb** | **09 23 22.2** | **-0.2** |
| **KARA** | **Karaisali** | **0.47** | **144** | *e*PG | **Pg** | **09 23 14.1** | **+0.1** |
| KARA | | | | *e*SG | **Sb** | **09 23 22.1** | **-0.1** |
| **KARA** | **Karaisali** | **0.47** | **144** | *e*Pg | **Pg** | **09 23 14.1** | **+0.1** |
| KARA | | | | *e*Sg | **Sb** | **09 23 22.1** | **-0.1** |
| **KIZK** | **Mersin** | **1.25** | **201** | *i* P | **Pg** | **09 23 29.1** | **+0.4** |
| KIZK | | | | *i* S | **Sg** | **09 23 45.0** | **+0.1** |
| **KIZK** | **Mersin** | **1.25** | **201** | P | **Pg** | **09 23 29.1** | **+0.4** |
| KIZK | | | | S | **Sg** | **09 23 45.0** | **+0.1** |
| **SARI** | **SarD1z-Kayseri** | **1.55** | **60** | *e*PN | **Pg** | **09 23 34.1** | **-0.4** |
| SARI | | | | *e*SN | **Sg** | **09 23 56.1** | **+1.4** |
| **PINB** | **Pinarbasi** | **1.69** | **52** | P | **Pb** | **09 23 35.8** | **-0.3** |
| PINB | | | | S | **Sg** | **09 23 59.1** | **0.0** |
| **HDMB** | **Hadim** | **1.90** | **250** | *e*PN | **Pb** | **09 23 39.5** | **-0.1** |
| **HDMB** | **Hadim** | **1.90** | **250** | *e*Pn | **Pb** | **09 23 39.5** | **-0.1** |

*NEIC **23** 09:23:47.1, 32.16N×115.23W, h10km, ML2.8(PAS), ML3.0(ECX), After ECX.*
**ECX 23 09:23:46.9**±0.4, **32.16N**×**115.22W, h8**km, **MD2.7, ML2.9, 4C-3D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPBX** | **Cerro Prieto** | **0.27** | **344** | *e*P | Pg | 09 23 52.1 | -0.1 |
| CPBX | | | | *e*S | Sg | 09 23 55.8 | -0.1 |
| CPBX | | | | IAML | | 09 23 57.4 | |
| | comp=N,7μm,0.2s | | | | | | |
| CPBX | | | | ⇑*e* | | 09 23 57.4 | |
| **EMSC** | **East Mesa** | **0.61** | **19** | *e*P | Pg | 09 23 57.7 | -1.0 |
| **SGL** | **Mount Signal** | **0.65** | **319** | *i* P | Pg | 09 23 58.5 | -1.0 |
| **RDX** | **Rancho Dawling** | **0.66** | **250** | ⇑*e*P | Pg | 09 23 58.8 | -1.0 |
| RDX | | | | *e*S | Sg | 09 24 07.8 | -0.8 |
| **YMD** | **Yuma Desert** | **0.69** | **55** | ⇑*i* P | Pg | 09 23 58.9 | -1.3 |
| **WESC** | **Westside Schoo** | **0.74** | **324** | *e*P | Pg | 09 24 00.2 | -1.0 |
| **YUH** | **Yuha Desert** | **0.77** | **309** | ⇓*i* P | Pg | 09 23 60.0 | -1.8 |
| **RMX** | **La Rumorosa** | **0.85** | **301** | *e*P | Pg | 09 24 01.6 | -2.0 |
| RMX | | | | *e*S | Sg | 09 24 12.4 | -2.4 |
| RMX | | | | IAML | | 09 24 13.8 | |
| | comp=N,483nm,0.1s | | | | | | |
| RMX | | | | ⇑*e* | | 09 24 13.8 | |
| **GLA** | **Glamis** | **0.95** | **20** | *e*Pg | Pg | 09 24 02.8 | -2.5 |
| GLA | | | | *e*Sg | Sg | 09 24 14.8 | -2.9 |
| **ZAX** | **El Zacaton** | **1.10** | **235** | *e*P | Pg | 09 24 05.9 | -2.4 |
| ZAX | | | | *e*S | Sg | 09 24 21.1 | -1.6 |
| **SPIG** | **San Pedro Mart** | **1.13** | **191** | *e*P | Pg | 09 24 06.7 | -2.4 |
| **SPX** | **San Pedro Mart** | **1.13** | **191** | *e*P | Pg | 09 24 06.8 | -2.3 |
| **CBX** | **Cerro Bola** | **1.23** | **278** | *e*P | Pn | 09 24 08.6 | -2.0 |
| CBX | | | | ⇓*e* | | 09 24 25.9 | |
| CBX | | | | IAML | | 09 24 25.9 | |
| | comp=N,293nm,0.5s | | | | | | |
| **BAR** | **Barrett** | **1.33** | **293** | *e*P | Pn | 09 24 09.8 | -2.1 |
| **BAR** | **Barrett** | **1.33** | **293** | Pn | Pn | 09 24 10.2 | -1.8 |
| BAR | | | | *e*S | Sb | 09 24 26.8 | -2.8 |
| **PBX** | **Punta Banda** | **1.35** | **252** | *e*P | Pn | 09 24 10.0 | -2.1 |
| **PFO** | **Pinyon Flat Ob** | **1.78** | **325** | *e*Pn | Pn | 09 24 14.4 | -3.8 |
| **214A** | **Organ Pipe Nat** | **2.05** | **95** | *e*Pn | Pn | 09 24 18.3 | -3.5 |

**IDC 23 09:30:30.2**±2.8, **23.61S**×**179.69E, h531**km±38km, **mb3.2**/5, **mb1 3.4**/5, **mb1mx3.0**/34, **mbtmp4.1**/5, **Error ellipse: s-maj=31.2km s-min=24.1km az=170.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **12.58** | **41** | P | P | 09 33 05.8 | -9.2 |
| | 2.3nm,0.3s,baz=143,slow=23,SNR=4.3 | | | | | | |
| **URZ** | **Urewera** | **14.77** | **188** | P | P | 09 33 32.5 | -4.9 |
| | 1.1nm,0.3s,baz=266,slow=4.5,SNR=7.9 | | | | | | |
| URZ | | | | S | S | 09 36 03.0 | -8.7 |
| | 0.2nm,0.3s,baz=134,slow=16,SNR=1.4 | | | | | | |
| **RPZ** | **Rata Peaks** | **21.28** | **197** | P | P | 09 34 38.2 | -0.4 |
| | 5.2nm,0.5s,baz=35,slow=16,SNR=10.0 | | | | | | |
| **CTA** | **Charters Tower** | **31.20** | **270** | P | P | 09 36 07.2 | +1.1 |
| | 5.2nm,0.3s,baz=94,slow=11,SNR=8.6 | | | | | | |
| **ASAR** | **Alice Springs** | **41.81** | **260** | P | P | 09 37 33.4 | -0.2 |
| | 0.8nm,0.4s,baz=93,slow=7.5,SNR=20 | | | | | | |
| ASAR | | | | S | S | 09 43 14.5 | +1.5 |
| | 0.2nm,0.7s,baz=96,slow=16,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.15** | **266** | P | P | 09 37 35.5 | -0.8 |
| | 2.0nm,0.5s,baz=93,slow=8.5,SNR=71 | | | | | | |
| WRA | | | | S | S | 09 43 17.1 | -0.9 |
| | 0.2nm,0.7s,baz=109,slow=14,SNR=1.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.74** | **44** | P | P | 09 42 08.9 | +0.3 |
| | 0.1nm,0.3s,baz=216,slow=4.5,SNR=2.1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **19.41** | **162** | LR | LR | 09 50 36.8 | | |
| | comp=Z,91nm,18.3s,baz=320,slow=35 | | | | | | | |
| **PMG** | **Port Moresby** | **19.41** | **162** | P | **Pn** | **09 43 35.5** | **-0.3** | |
| | 38nm,1.6s | | | | | | | |
| **JHJ** | **Hachijo jima 2** | **23.86** | **357** | LR | LR | 09 51 42.2 | | |
| | comp=Z,153nm,20.9s,baz=11,slow=32 | | | | | | | |
| **JNU** | **Nakatsue** | **25.64** | **340** | LR | LR | 09 53 10.2 | | |
| | comp=Z,80nm,21.1s,baz=121,slow=33 | | | | | | | |
| **HNR** | **Honiara** | **26.32** | **134** | LR | LR | 09 52 50.7 | | |
| | comp=Z,45nm,20.2s,baz=238,slow=31 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.46** | **67** | T | T | 10 12 28.0 | | |
| | baz=252,slow=75,SNR=1120 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.48** | **67** | T | T | 10 12 32.8 | | |
| | baz=252,slow=75,SNR=336 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.48** | **67** | T | T | 10 12 25.2 | | |
| | baz=252,slow=75,SNR=623 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.02** | **64** | T | T | 10 13 03.6 | | |
| | baz=250,slow=75,SNR=182 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.03** | **64** | T | T | 10 13 13.4 | | |
| | baz=250,slow=75,SNR=102 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.04** | **64** | T | T | 10 13 15.6 | | |
| | baz=250,slow=75,SNR=321 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **27.37** | **355** | LR | LR | 09 55 02.4 | | |
| | comp=Z,34nm,18.6s,baz=200,slow=35 | | | | | | | |
| **WRAB** | **Tennant Creek** | **29.68** | **193** | *e*P | **P** | **09 45 13.2** | **-0.7** | |
| | 9.7nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **29.70** | **193** | P | **P** | **09 45 14.3** | **+0.3** | |
| | 4.0nm,0.8s,baz=12,slow=9.8,SNR=31 | | | | | | | |
| **KSRS** | **Korea Array** | **30.58** | **339** | LR | LR | 09 56 22.7 | | |
| | comp=Z,78nm,20.2s,baz=148,slow=34 | | | | | | | |
| **ASAR** | **Alice Springs** | **33.39** | **192** | P | **P** | **09 45 47.5** | **+1.0** | |
| | 2.1nm,0.7s,baz=19,slow=12,SNR=32 | | | | | | | |
| **ASAJ** | **Asahikawa** | **34.83** | **2** | LR | LR | 09 58 03.9 | | |
| | comp=Z,35nm,20.7s,baz=154,slow=33 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.79** | **349** | LR | LR | 09 59 04.8 | | |
| | comp=Z,39nm,18.7s,baz=269,slow=34 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.90** | **287** | P | **P** | **09 46 59.9** | **+1.2** | |
| | 0.2nm,0.3s,baz=96,slow=6.5,SNR=2.9 | | | | | | | |
| CMAR | | | | LR | LR | 10 06 55.2 | | |
| | comp=Z,11nm,18.1s,baz=60,slow=40 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **45.82** | **14** | LR | LR | 10 02 49.2 | | |
| | comp=Z,24nm,21.3s,baz=216,slow=31 | | | | | | | |
| **SONM** | **Songino Array** | **48.41** | **329** | P | **P** | **09 47 48.7** | **-1.3** | |
| | 0.3nm,0.4s,baz=131,slow=5.9,SNR=2.9 | | | | | | | |
| SONM | | | | LR | LR | 10 08 41.0 | | |
| | comp=Z,42nm,20.0s,baz=76,slow=37 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.21** | **318** | P | **P** | **09 49 28.8** | **-0.7** | |
| | 0.1nm,0.3s,baz=100,slow=8.8,SNR=2.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.16** | **327** | P | **P** | **09 49 35.6** | **+0.1** | |
| | 0.5nm,0.3s,baz=104,slow=6.1,SNR=2.3 | | | | | | | |
| **KURK** | **Kurchatov** | **65.67** | **322** | P | **P** | **09 49 53.0** | **+1.0** | |
| **KURBB** | **Kurchatov Arra** | **65.69** | **322** | P | **P** | **09 49 53.0** | **+0.8** | |
| | 0.4nm,0.3s,baz=101,slow=6.8,SNR=2.7 | | | | | | | |
| **BVAR** | **Borovoye Array** | **71.16** | **323** | P | **P** | **09 50 28.0** | **+1.7** | |
| | 0.9nm,0.5s,baz=106,slow=11,SNR=4.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **74.10** | **25** | P | P | 09 50 46.7 | +3.1 | |
| | 1.0nm,0.8s,baz=235,slow=6.8,SNR=8.6 | | | | | | | |
| **VNDA** | **Vanda** | **87.35** | **176** | LR | LR | 10 29 53.2 | | |
| | comp=Z,26nm,18.2s,baz=50,slow=35 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **90.11** | **342** | LR | LR | 10 37 39.8 | | |
| | comp=Z,23nm,18.8s,baz=54,slow=39 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.53** | **51** | P | **P** | **09 52 22.0** | **+2.5** | |
| | 1.1nm,0.7s,baz=264,slow=5.6,SNR=12 | | | | | | | |

*CSEM* ***23*** *09:48:50.6±0.3, 37.94N×35.72E, h5km, MD2.6, Error ellipse: s-maj=7.6km s-min=5.0km az=144.0*
*DDA* ***23*** *09:48:50.8, 38.01N×35.63E, h7km, Md2.6*
*ISK* ***23*** *09:48:50.9, 37.88N×35.68E, h5km, MD2.7*
*ISCJB* ***23*** *09:48:51.2±0.6, 37.93N±0.04×35.67E±0.04, h8km±9km, Error ellipse: s-maj=8.1km s-min=4.7km az=147.5*

**ISC 23 09:48:51.1±1.1, 37.92N±0.04×35.71E±0.03, h9km±11km, n11, σ0s59/22, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANDN** | **Andirin** | **0.60** | **124** | *i* P | **Pg** | **09 49 03.0** | **+0.2** |
| ANDN | | | | *i* S | **Sn** | **09 49 15.3** | **-0.6** |
| **ANDN** | **Andirin** | **0.60** | **124** | P | **Pg** | **09 49 03.0** | **+0.2** |
| ANDN | | | | S | **Sn** | **09 49 15.3** | **-0.6** |
| **SARI** | **SarD1z-Kayseri** | **0.74** | **48** | *e*PG | **Pb** | **09 49 06.4** | **+0.1** |
| SARI | | | | *e*SG | **Sb** | **09 49 17.8** | **+1.2** |
| **KARA** | **Karaisali** | **0.84** | **219** | *e*PG | **Pg** | **09 49 06.5** | **-0.7** |
| KARA | | | | *e*SG | **Sg** | **09 49 18.1** | **-0.1** |
| **KARA** | **Karaisali** | **0.84** | **219** | *e*Pg | **Pg** | **09 49 06.6** | **-0.7** |
| KARA | | | | *e*Sg | **Sg** | **09 49 18.1** | **-0.1** |
| **NIG** | **Nigde** | **0.89** | **283** | *e*PG | **Pg** | **09 49 08.2** | **-0.1** |
| NIG | | | | *e*SG | **Sg** | **09 49 20.6** | **+0.6** |
| **NIG** | **Nigde** | **0.89** | **283** | *e*Pg | **Pg** | **09 49 08.2** | **-0.1** |
| NIG | | | | *e*Sg | **Sg** | **09 49 20.6** | **+0.6** |
| **PINB** | **Pinarbasi** | **0.93** | **35** | *i* P | **Pg** | **09 49 08.1** | **-1.0** |
| PINB | | | | *e*S | **Sg** | **09 49 21.5** | **+0.2** |
| **PINB** | **Pinarbasi** | **0.93** | **35** | P | **Pg** | **09 49 08.1** | **-1.0** |
| PINB | | | | S | **Sg** | **09 49 21.5** | **+0.2** |
| **GULE** | **Gulek** | **0.98** | **230** | *i* P | **Pg** | **09 49 09.5** | **-0.4** |
| GULE | | | | *i* S | **Sn** | **09 49 25.0** | **-0.2** |
| **GULE** | **Gulek** | **0.98** | **230** | P | **Pg** | **09 49 09.4** | **-0.4** |
| GULE | | | | S | **Sn** | **09 49 25.0** | **-0.2** |

*NNC* ***23*** *10:08:24.0±1.7, 39.71N×74.33E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=12.9km s-min=7.1km az=163.0*
*IDC* ***23*** *10:08:25.7±0.9, 39.59N×73.98E, h0km, mb3.7/7, mb1 3.8/13, mb1mx3.6/47, mbtmp3.6/13, ML3.3/6, MS2.4/2, Ms1 2.4/2, ms1mx2.2/39, Error ellipse: s-maj=15.8km s-min=15.0km az=118.0*
*KRNET* ***23*** *10:08:27.5±0.1, 39.75N×74.01E, mb3.6*
*MOS* ***23*** *10:08:28.9±2.0, 39.55N×73.66E, h33km, mb4.3/3, Error ellipse: s-maj=21.8km s-min=10.2km az=93.1*

**ISC 23 10:08:29.7±1.7, 39.70N±0.06×73.95E±0.04, h24km±12km, n48, σ1s89/60, mb3.7/7, 25C-9D, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSH** | **Kashi** | **1.57** | **96** | Pg | Pn | 10 08 51.0 | -5.3 |
| KSH | | | | Sg | Sn | 10 09 06.8 | -9.1 |
| KSH | | | | smax | smax | | |
| | comp=N,490nm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,440nm,0.7s | | | | | | |
| **ARLS** | **Aral** | **2.18** | **7** | ⇓*i*P | **Pn** | **10 09 06.1** | **+1.5** |
| | baz=6.0 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sb** | **10 09 35.0** | **-0.1** |
| | baz=6.0 | | | | | | |
| **NRN** | **Naryn** | **2.33** | **41** | ⇑*i*P | **Pn** | **10 09 08.0** | **+1.1** |
| | baz=41 | | | | | | |
| NRN | | | | ⇑*i*S | **Sb** | **10 09 39.0** | **-0.7** |
| | baz=41 | | | | | | |
| **AML** | **Almayashu** | **2.44** | **356** | ⇑*i*P | **Pn** | **10 09 09.1** | **+0.7** |
| | baz=354 | | | | | | |
| AML | | | | ⇑*i*S | **Sb** | **10 09 42.7** | **-0.1** |
| | baz=354 | | | | | | |
| **AML** | **Almayashu** | **2.44** | **356** | P | **Pn** | **10 09 09.8** | **+1.4** |
| | SNR=64 | | | | | | |
| **BTK** | **Batken** | **2.44** | **279** | ⇑*i*P | **Pb** | **10 09 12.1** | **-0.8** |
| | baz=278 | | | | | | |
| BTK | | | | ⇑*i*S | **Sb** | **10 09 44.9** | **+2.4** |
| | baz=278 | | | | | | |
| **UCH** | **Uchtor** | **2.56** | **9** | P | **Pn** | **10 09 12.1** | **+1.9** |
| | SNR=57 | | | | | | |
| **ARK** | **Arkit** | **2.58** | **325** | ⇑*i*P | **Pb** | **10 09 13.7** | **-1.7** |
| | baz=323 | | | | | | |
| ARK | | | | ⇑*i*S | **Sb** | **10 09 47.2** | **+0.5** |
| | baz=323 | | | | | | |
| **AAK** | **Ala-Archa** | **2.96** | **8** | ⇑Pg | **Pn** | **10 09 17.3** | **+2.0** |
| | comp=E,9.7nm,0.3s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 10 09 57.2 | |
| | comp=E,93nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **2.96** | **8** | Pn | **Pn** | **10 09 17.5** | **+2.1** |
| | comp=E,7.4nm,0.3s,baz=153,slow=6.4,SNR=36 | | | | | | |
| AAK | | | | Lg | Lg | 10 09 57.8 | |
| | comp=E,22nm,0.3s,baz=351,slow=18,SNR=15 | | | | | | |
| AAK | | | | LR | LR | 10 10 40.9 | |
| | comp=E,41nm,18.3s,baz=192,slow=44 | | | | | | |
| **AAK** | **Ala-Archa** | **2.96** | **8** | ⇑*i*P | **Pn** | **10 09 17.3** | **+2.0** |
| | baz=7.0 | | | | | | |
| AAK | | | | ⇑*i*S | **Sb** | **10 09 57.6** | **0.0** |
| | baz=7.0 | | | | | | |
| **AAK** | **Ala-Archa** | **2.96** | **8** | P | **Pn** | **10 09 17.6** | **+2.2** |
| | SNR=25 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.96** | **358** | P | **Pn** | **10 09 16.9** | **+1.6** |
| | SNR=14 | | | | | | |
| **EKS** | **Erkin-Say** | **2.97** | **358** | ⇑*i*P | **Pn** | **10 09 18.4** | **+3.0** |
| | baz=357 | | | | | | |
| EKS | | | | ⇑*i*S | **Sb** | **10 09 54.7** | **-3.1** |
| | baz=357 | | | | | | |
| **KBK** | **Karagaybulak** | **3.05** | **14** | ⇓*i*P | **Pn** | **10 09 18.9** | **+2.3** |
| | baz=13 | | | | | | |
| KBK | | | | ⇓*i*S | **Sb** | **10 10 00.7** | **+0.5** |
| | baz=13 | | | | | | |
| **KBK** | **Karagaybulak** | **3.05** | **14** | P | **Pn** | **10 09 19.2** | **+2.7** |
| | SNR=26 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.17** | **28** | ⇑*i*P | **Pn** | **10 09 20.4** | **+2.2** |
| | baz=27 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sn** | **10 09 59.4** | **+4.1** |
| | baz=27 | | | | | | |
| **CHMS** | **Chumysh** | **3.35** | **10** | ⇑*i*P | **Pn** | **10 09 22.5** | **+1.9** |
| | baz=9.0 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sb** | **10 10 07.4** | **-1.3** |
| | baz=9.0 | | | | | | |
| **CHMS** | **Chumysh** | **3.35** | **10** | P | **Sb** | **10 10 11.2** | **+2.5** |
| | SNR=5.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.45** | **21** | ⇓Pg | **Pn** | **10 09 24.9** | **+2.8** |
| | comp=E,9.3nm,0.3s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 10 10 11.1 | |
| | comp=E,73nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.45** | **21** | ⇑*i*P | **Pn** | **10 09 24.2** | **+2.1** |
| | baz=20 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sb** | **10 10 11.8** | **+0.1** |
| | baz=20 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.45** | **21** | P | **Pn** | **10 09 23.9** | **+1.8** |
| | SNR=25 | | | | | | |
| **USP** | **Ospenovka** | **3.59** | **6** | P | **Pb** | **10 09 30.6** | **-1.9** |
| | SNR=5.7 | | | | | | |
| **KNDC** | **Almaty** | **4.18** | **32** | ⇓Pg | Pn | 10 09 37.0 | +4.9 |
| | comp=E,13nm,0.4s | | | | | | |
| KNDC | | | | ⇓Lg | Lg | 10 10 33.7 | |
| | comp=E,454nm,0.8s | | | | | | |
| **AAA** | **Alma-Ata** | **4.22** | **31** | *e*PN | Pb | 10 09 39.3 | -3.9 |
| AAA | | | | *e*S | **Sb** | **10 10 36.4** | **+2.7** |
| AAA | | | | pmax | pmax | | |
| | comp=Z,59nm,0.3s | | | | | | |
| AAA | | | | smax | smax | | |
| | comp=E,359nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **4.27** | **324** | Pn | **Pn** | **10 09 33.7** | **+0.5** |
| | comp=E,2.1nm,0.3s,baz=124,slow=12,SNR=41 | | | | | | |
| KK31 | | | | ⇓Pg | **Pb** | **10 09 44.9** | **+0.9** |
| | comp=E,3.7nm,0.3s,baz=144,slow=18,SNR=7.1 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **10 10 26.4** | **+4.1** |
| | comp=E,18nm,0.5s,baz=144,slow=16,SNR=4.3 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 10 10 43.2 | |
| | comp=E,23nm,0.5s,baz=138,slow=29,SNR=3.4 | | | | | | |
| **KK31** | **Karatay Array** | **4.27** | **324** | PN | **Pn** | **10 09 34.8** | **+1.6** |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **CHCP** | **Chirah Chowk** | **6.06** | **185** | P | Pn | 10 10 03.6 | +5.8 |
| **MKAR** | **Makanchi Array** | **9.34** | **38** | Pn | **Pn** | **10 10 45.4** | **+2.6** |
| | comp=Z,0.1nm,0.3s,baz=214,slow=10,SNR=3.2 | | | | | | |
| MKAR | | | | Lg | Lg | 10 13 21.3 | |
| | comp=Z,0.2nm,0.3s,baz=231,slow=23,SNR=5.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **11.39** | **15** | Lg | Lg | 10 14 23.8 | |
| | comp=Z,0.1nm,0.3s,baz=199,slow=29,SNR=6.2 | | | | | | |
| **GEYT** | **Alibeck** | **12.48** | **267** | Pn | **Pn** | **10 11 27.0** | **+1.2** |
| | comp=Z,0.6nm,0.3s,baz=68,slow=12,SNR=2.6 | | | | | | |
| GEYT | | | | Sn | **Sn** | **10 13 44.7** | **+0.7** |
| | comp=Z,0.4nm,0.3s,baz=81,slow=13,SNR=3.0 | | | | | | |
| GEYT | | | | LR | LR | 10 16 48.1 | |
| | comp=Z,23nm,18.5s,baz=75,slow=40 | | | | | | |
| **BVAR** | **Borovoye Array** | **13.55** | **351** | Pn | **Pn** | **10 11 38.8** | **-1.4** |
| | comp=Z,0.2nm,0.3s,baz=156,slow=10,SNR=3.5 | | | | | | |
| BVAR | | | | Lg | Lg | 10 15 29.3 | |
| | comp=Z,0.3nm,0.3s,baz=168,slow=23,SNR=4.1 | | | | | | |
| **AB31** | **Akbulak array** | **13.81** | **318** | ⇑Pn | **Pn** | **10 11 41.8** | **-2.0** |
| | comp=Z,3.5nm,0.8s,baz=130,slow=12,SNR=24 | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **10 14 13.0** | **-3.3** |
| | comp=Z,0.6nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.52** | **319** | ⇑Pn | **Pn** | **10 12 06.1** | **-0.8** |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.52** | **319** | Pn | **Pn** | **10 12 06.2** | **-0.6** |
| | comp=Z,0.3nm,0.3s,baz=129,slow=14,SNR=3.5 | | | | | | |
| AKTO | | | | Sn | **Sn** | **10 14 54.0** | **-4.0** |
| | comp=Z,0.1nm,0.3s,baz=23,slow=21,SNR=2.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.05** | **24** | Pn | **Pn** | **10 12 13.7** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=224,slow=9.0,SNR=2.3 | | | | | | |
| **CD2** | **Chengdu** | **25.77** | **101** | *e*P | **P** | **10 13 56.6** | **-2.1** |
| **FINES** | **FINESS Array B** | **36.23** | **323** | P | **P** | **10 15 30.8** | **+0.4** |
| | comp=Z,3.0nm,0.9s,baz=134,slow=11,SNR=9.4 | | | | | | |
| **FINES** | **FINESS Array B** | **36.23** | **323** | P | **P** | **10 15 30.8** | **+0.4** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.14** | **335** | P | **P** | **10 15 55.4** | **+0.4** |
| | comp=Z,1.7nm,0.7s,baz=102,slow=8.4,SNR=4.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.14** | **335** | P | **P** | **10 15 55.4** | **+0.4** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **GERES** | **GERESS Array B** | **43.07** | **303** | P | **P** | **10 16 27.4** | **-0.2** |
| | comp=Z,0.2nm,0.4s,baz=71,slow=6.3,SNR=2.5 | | | | | | |
| **NB2** | **NORSAR Subarra** | **43.30** | **321** | P | **P** | **10 16 29.3** | **0.0** |
| | comp=Z,2.1nm,0.7s,baz=91,slow=8.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.30** | **321** | P | **P** | **10 16 29.2** | **0.0** |
| | comp=Z,1.0nm,0.6s,baz=91,slow=8.1,SNR=3.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.30** | **321** | P | **P** | **10 16 29.2** | **0.0** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.11** | **269** | P | **P** | **10 19 27.0** | **-0.9** |
| | comp=Z,0.3nm,0.5s,baz=49,slow=5.1,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **81.78** | **124** | P | **P** | **10 20 45.6** | **-1.1** |
| | comp=Z,2.0nm,0.7s,baz=327,slow=4.9,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **84.25** | **127** | P | **P** | **10 20 59.5** | **+0.1** |
| | comp=Z,0.2nm,0.6s,baz=307,slow=4.8,SNR=3.6 | | | | | | |

*CSEM* ***23*** *10:15:33.7±0.2, 34.04N×35.71E, h2km, ML2.8, Error ellipse: s-maj=5.6km s-min=2.5km az=103.0*
*GRAL* ***23*** *10:15:33.0±0.3, 34.09N×35.63E, h14km±1km, MD2.8*
*ISCJB* ***23*** *10:15:34.0±0.6, 34.04N±0.03×35.75E±0.06, h2km±6km, Error ellipse: s-maj=8.3km s-min=4.0km az=15.2*
*NSSC* ***23*** *10:15:34.2±1.2, 34.04N×35.78E, h0km±5km, MD1.3, ML1.9*

**ISC 23 10:15:34.1±1.1, 34.04N±0.02×35.76E±0.04, h3km±10km, n21, σ0s46/39, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BHL** | **Bhannes** | **0.16** | **212** | *e*P | **Pg** | **10 15 37.1** | **-0.1** |
| BHL | | | | *e*S | **Sg** | **10 15 40.2** | **+0.9** |
| **BHL** | **Bhannes** | **0.16** | **212** | *e*P | **Pg** | **10 15 37.1** | **-0.1** |
| BHL | | | | *e*S | **Sg** | **10 15 40.2** | **+0.9** |
| **HWQ** | **Hawqa** | **0.29** | **33** | *e*P | **Pg** | **10 15 39.2** | **-0.5** |
| HWQ | | | | *e*S | **Sg** | **10 15 43.8** | **+0.3** |
| **HWQ** | **Hawqa** | **0.29** | **33** | *e*P | **Pg** | **10 15 39.2** | **-0.5** |
| HWQ | | | | *e*S | **Sg** | **10 15 43.8** | **+0.3** |
| **DQRL** | **Deir Qamar** | **0.37** | **205** | *e*P | **Pg** | **10 15 40.3** | **-0.9** |
| **DQRL** | **Deir Qamar** | **0.37** | **205** | *e*P | **Pg** | **10 15 40.3** | **-0.9** |
| **RCY** | **Rachaya** | **0.54** | **173** | *e*P | **Pg** | **10 15 44.1** | **-0.4** |
| **BRBR** | **Barbar** | **0.65** | **165** | *e*P | **Pg** | **10 15 46.3** | **-0.2** |
| BRBR | | | | *e*S | **Sb** | **10 15 57.4** | **-0.2** |
| BRBR | | | | AML | AML | 10 16 03.1 | |
| | comp=E,68nm,0.6s | | | | | | |
| BRBR | | | | AML | AML | 10 16 04.4 | |
| | comp=N,60nm,0.7s | | | | | | |
| **BRBR** | **Barbar** | **0.65** | **165** | *e*P | **Pg** | **10 15 46.3** | **-0.2** |
| BRBR | | | | *e*S | **Sb** | **10 15 57.4** | **-0.2** |
| | comp=N,60nm,0.7s | | | | | | |
| **HAWK** | **Haweek** | **0.72** | **48** | *e*P | **Pg** | **10 15 48.2** | **+0.2** |
| HAWK | | | | *e*S | **Sb** | **10 15 58.7** | **-1.0** |
| HAWK | | | | AML | AML | 10 16 04.6 | |
| | comp=E,29nm,0.4s | | | | | | |
| HAWK | | | | AML | AML | 10 16 06.6 | |
| | comp=N,34nm,0.4s | | | | | | |
| **HAWK** | **Haweek** | **0.72** | **48** | *e*P | **Pg** | **10 15 48.2** | **+0.2** |
| HAWK | | | | *e*S | **Sb** | **10 15 58.7** | **-1.0** |
| | comp=N,34nm,0.4s | | | | | | |
| **BIDA** | **Albida** | **1.08** | **25** | *e*P | **Pg** | **10 15 54.5** | **-0.4** |
| BIDA | | | | *e*S | **Sb** | **10 16 10.2** | **+0.2** |
| BIDA | | | | AML | AML | 10 16 12.3 | |
| | comp=N,28nm,0.3s | | | | | | |
| BIDA | | | | AML | AML | 10 16 16.9 | |
| | comp=E,82nm,0.3s | | | | | | |
| **BIDA** | **Albida** | **1.08** | **25** | *e*P | **Pg** | **10 15 54.5** | **-0.4** |
| BIDA | | | | *e*S | **Sb** | **10 16 10.2** | **+0.2** |
| | comp=E,82nm,0.3s | | | | | | |
| **ROOS** | **tl_alroos** | **1.28** | **84** | *e*P | **Pg** | **10 15 58.7** | **+0.1** |
| ROOS | | | | *e*S | **Sg** | **10 16 15.2** | **0.0** |
| ROOS | | | | AML | AML | 10 16 20.3 | |
| | comp=E,33nm,0.6s | | | | | | |
| ROOS | | | | AML | AML | 10 16 26.5 | |
| | comp=N,46nm,0.5s | | | | | | |
| **ROOS** | **tl_alroos** | **1.28** | **84** | *e*P | **Pg** | **10 15 58.7** | **+0.1** |
| ROOS | | | | *e*S | **Sg** | **10 16 15.2** | **0.0** |
| | comp=N,46nm,0.5s | | | | | | |
| **WRDH** | **Warideh** | **1.56** | **20** | *e*P | **Pn** | **10 16 03.1** | **+0.2** |
| WRDH | | | | *e*S | **Sn** | **10 16 23.9** | **+0.3** |
| WRDH | | | | AML | AML | 10 16 29.4 | |
| | comp=N,24nm,0.5s | | | | | | |
| **WRDH** | **Warideh** | **1.56** | **20** | *e*P | **Pn** | **10 16 03.1** | **+0.2** |
| WRDH | | | | *e*S | **Sn** | **10 16 23.9** | **+0.3** |
| | comp=N,24nm,0.5s | | | | | | |
| **SLNF** | **Slenfeh** | **1.60** | **14** | *e*P | **Pn** | **10 16 03.3** | **-0.2** |
| SLNF | | | | *e*S | **Sn** | **10 16 25.0** | **+0.3** |
| **SLNF** | **Slenfeh** | **1.60** | **14** | *e*P | **Pn** | **10 16 03.3** | **-0.2** |
| SLNF | | | | *e*S | **Sn** | **10 16 25.0** | **+0.3** |
| **ZALF** | **Zalf** | **1.73** | **130** | *e*P | **Pn** | **10 16 05.2** | **+0.2** |
| ZALF | | | | *e*S | **Sn** | **10 16 27.6** | **0.0** |
| **ZALF** | **Zalf** | **1.73** | **130** | *e*P | **Pn** | **10 16 05.2** | **+0.2** |
| ZALF | | | | *e*S | **Sn** | **10 16 27.6** | **0.0** |

**IDC 23 10:22:35.2±2.5, 54.30N×86.12E, h0km, mb1 3.4/2, mb1mx3.1/45, mbtmp3.4/2, ML3.0/2, 4C-2D, Error ellipse: s-maj=18.7km s-min=11.9km az=52.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **0.84** | **246** | *i* | | 10 27 10.0 | |
| | baz=67,slow=333,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **0.84** | **246** | Pg | Pg | 10 22 49.5 | -1.9 |
| | 2.3nm,0.3s,baz=62,slow=16,SNR=13 | | | | | | |
| ZALV | | | | Lg | Lg | 10 23 04.0 | |
| | 4.3nm,0.3s,baz=62,slow=25,SNR=17 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.92** | **235** | ⇓Pn | Pn | 10 24 05.1 | +1.1 |
| | 0.7nm,0.2s | | | | | | |
| KURBB | | | | ⇑Sn | Sn | 10 25 14.8 | +2.2 |
| | 3.1nm,0.8s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 10 25 44.7 | |
| | 4.1nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **5.92** | **235** | Pn | Pn | 10 24 05.2 | +1.2 |
| | 0.2nm,0.3s,baz=50,slow=13,SNR=11 | | | | | | |
| KURBB | | | | Lg | Lg | 10 25 43.3 | |
| | 0.0nm,0.3s,baz=52,slow=32,SNR=4.1 | | | | | | |
| **MK31** | **Makanchi Array** | **7.90** | **200** | ⇑Pn | Pn | 10 24 31.4 | +0.2 |
| | 0.2nm,0.3s,baz=24,slow=14,SNR=9.1 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 10 25 58.0 | -3.3 |
| | 1.1nm,0.7s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 10 26 40.2 | |
| | 0.8nm,0.8s,baz=27,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **7.90** | **200** | Pn | Pn | 10 24 32.1 | +0.9 |
| | 0.4nm,0.3s,baz=23,slow=13,SNR=8.1 | | | | | | |
| MKAR | | | | Sn | Sn | 10 26 00.9 | -0.5 |
| | 0.1nm,0.3s,baz=24,slow=25,SNR=3.4 | | | | | | |
| MKAR | | | | Lg | Lg | 10 26 43.5 | |
| | 0.1nm,0.3s,baz=28,slow=31,SNR=4.2 | | | | | | |

*IDC* ***23*** *10:32:44.6±0.7, 38.69N×21.95E, h0km, mb3.9/13, mb1 4.0/19, mb1mx3.9/36, mbtmp3.8/19, ML3.7/6, MS2.8/7, Ms1 2.9/7, ms1mx2.6/46, Error ellipse: s-maj=15.8km s-min=13.1km az=109.0*
*ATH* ***23*** *10:32:45.6, 38.73N×21.99E, h22km, ML4.1*
*NEIC* ***23*** *10:32:46.4, 38.73N×22.02E, h1km, ML4.2(THE), After THE.*
*ISCJB* ***23*** *10:32:46.2±0.4, 38.729N±0.010×22.01E±0.02, h15km±3km, mb4.0/14, MS2.8/5, Error ellipse: s-maj=2.2km s-min=1.5km az=160.4*
*MOS* ***23*** *10:32:46.7±0.8, 38.75N×22.02E, h24km, mb4.4/9, Error ellipse: s-maj=8.9km s-min=3.9km az=82.0*
*PDG* ***23*** *10:32:46.4±0.7, 38.75N×22.04E, h10km, ML3.9/10, Error ellipse: s-maj=0.6km s-min=0.7km az=0.0*
*THE* ***23*** *10:32:46.4, 38.73N×22.02E, h1km±2km, ML4.2/14, Error ellipse: s-maj=2.3km s-min=0.6km az=273.0*
*CSEM* ***23*** *10:32:46.4±0.1, 38.71N×22.03E, h8km, mb4.1/10, Error ellipse: s-maj=2.0km s-min=1.5km az=74.0*

**ISC 23 10:32:46.8±0.8, 38.72N±0.01×22.01E±0.01, h14km±5km, n424, σ0s99/525, mb4.0/14, MS2.6/5, 32C-14D, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EVR** | **Evrytania** | **0.25** | **322** | *e*PB | **Pg** | **10 32 51.4** | **-0.9** |
| EVR | | | | *e*SB | **Sg** | **10 32 56.1** | **+0.1** |
| **EVR** | **Evrytania** | **0.25** | **322** | P | **Pg** | **10 32 51.4** | **-0.9** |
| EVR | | | | S | **Sg** | **10 32 55.6** | **-0.4** |
| **EVR** | **Evrytania** | **0.25** | **322** | P | **Pg** | **10 32 51.4** | **-0.9** |
| EVR | | | | S | **Sg** | **10 32 55.6** | **-0.4** |
| **EVR** | **Evrytania** | **0.25** | **322** | P | **Pg** | **10 32 51.4** | **-0.9** |
| EVR | | | | S | **Sg** | **10 32 55.7** | **-0.3** |
| EVR | | | | *e*Sb | Sb | 10 32 56.1 | -1.5 |
| **EFP** | **Efpalio** | **0.30** | **195** | *e*PB | **Pg** | **10 32 52.5** | **-0.6** |
| EFP | | | | *e*SB | **Sb** | **10 32 58.0** | **-0.8** |
| **EFP** | **Efpalio** | **0.30** | **195** | P | **Pg** | **10 32 52.5** | **-0.6** |
| EFP | | | | S | **Sg** | **10 32 57.7** | **+0.3** |
| **EFP** | **Efpalio** | **0.30** | **195** | P | **Pg** | **10 32 52.5** | **-0.6** |
| EFP | | | | S | **Sg** | **10 32 57.7** | **+0.3** |
| EFP | | | | *e*Sb | **Sb** | **10 32 58.0** | **-0.8** |
| **MAKR** | **Makrakomi, Fth** | **0.31** | **19** | *e*PB | **Pg** | **10

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DESF | | | | eSn | Sb | 10 33 04.7 | -0.3 | DID | Didima | 1.55 | 141 | P | Pn | 10 33 14.2 | +0.2 | HCY | Herceg Novi | 4.58 | 325 | ePn | Pn | 10 33 56.4 | +0.7 |
| PDO | Prodromos | 0.66 | 260 | ePN | Pg | 10 32 58.3 | -1.3 | DID | | | | eSn | Sg | 10 33 35.9 | -0.9 | HCY | | | | eSn | Sn | 10 34 50.8 | +2.1 |
| PDO | Prodromos | 0.66 | 260 | P | Pg | 10 32 58.0 | -1.6 | ATHU | Athens Univers | 1.59 | 118 | P | Pn | 10 33 14.8 | +0.3 | HCY | Herceg Novi | 4.58 | 325 | ePn | Pn | 10 33 56.4 | +0.7 |
| PDO | Prodromos | 0.66 | 260 | P | Pg | 10 32 58.0 | -1.6 | ATHU | Athens Univers | 1.59 | 118 | P | Pn | 10 33 14.8 | +0.3 | HCY | | | | eSn | Sn | 10 34 50.8 | +2.1 |
| KLV | Kalavryta, Ach | 0.69 | 170 | ePB | Pg | 10 32 58.8 | -1.4 | ATHU | Athens Univers | 1.59 | 118 | P | Pn | 10 33 14.8 | +0.3 | BAI | Bari | 4.61 | 303 | ePn | Pn | 10 33 57.1 | +1.2 |
| KLV | | | | eSN | Sg | 10 33 09.1 | -0.1 | KZN | Kozani | 1.59 | 354 | P | Pn | 10 33 15.0 | +0.4 | SG1 | Sgolgore (BA) | 4.62 | 299 | ePn | Pn | 10 33 57.3 | +1.1 |
| KLV | Kalavryta, Ach | 0.69 | 170 | P | Pg | 10 32 58.7 | -1.4 | KZN | Kozani | 1.59 | 354 | ePN | Pn | 10 33 15.1 | +0.4 | NKME | Niksic | 4.66 | 331 | ⇑iPn | Pn | 10 33 58.3 | +1.5 |
| KLV | | | | S | Sg | 10 33 08.4 | -0.8 | KZN | Kozani | 1.59 | 354 | P | Pn | 10 33 15.0 | +0.4 | NKME | | | | eSn | Sn | 10 34 52.5 | +1.9 |
| KLV | Kalavryta, Ach | 0.69 | 170 | P | Pg | 10 32 58.7 | -1.4 | KZN | Kozani | 1.59 | 354 | P | Pn | 10 33 15.0 | +0.4 | NKME | Niksic | 4.66 | 331 | ⇑iPn | Pn | 10 33 58.3 | +1.5 |
| KLV | Kalavryta, Ach | 0.69 | 170 | ePb | Pg | 10 32 58.8 | -1.4 | KZN | Kozani | 1.59 | 354 | P | Pn | 10 33 15.0 | +0.4 | NKME | | | | eSn | Sn | 10 34 52.5 | +1.9 |
| KLV | | | | S | Sg | 10 33 08.4 | -0.8 | PTL | Penteli | 1.61 | 114 | ePN | Pn | 10 33 15.2 | +0.4 | NKY | Niksic | 4.69 | 332 | ⇓iPn | Pn | 10 33 58.7 | +1.6 |
| KLV | | | | eSn | Sg | 10 33 09.1 | -0.1 | PTL | Penteli | 1.61 | 114 | P | Pn | 10 33 15.2 | +0.4 | NKY | | | | eSn | Sn | 10 34 53.1 | +1.8 |
| AXS | Araxos | 0.72 | 224 | P | Pg | 10 33 00.2 | -0.6 | PTL | Penteli | 1.61 | 114 | P | Pn | 10 33 15.2 | +0.4 | NKY | Niksic | 4.69 | 332 | ⇓iPn | Pn | 10 33 58.7 | +1.6 |
| AXS | Araxos | 0.72 | 224 | P | Pg | 10 33 00.2 | -0.6 | PTL | Penteli | 1.61 | 114 | P | Pn | 10 33 15.2 | +0.4 | NKY | | | | eSn | Sn | 10 34 53.1 | +1.8 |
| LKR | Lokris | 0.78 | 95 | ePN | Pg | 10 33 01.1 | -0.9 | KRND | KRANIDI | 1.61 | 146 | ePN | Pn | 10 33 15.3 | +0.5 | BOVS | Bovan | 4.92 | 357 | ⇑iPn | Pn | 10 34 00.5 | +0.3 |
| LKR | Lokris | 0.78 | 95 | P | Pg | 10 33 01.0 | -0.9 | KRND | KRANIDI | 1.61 | 146 | P | Pn | 10 33 15.3 | +0.5 | BRY | Bratogost | 4.94 | 329 | ePn | Pn | 10 34 01.7 | +1.1 |
| LKR | Lokris | 0.78 | 95 | P | Pg | 10 33 01.0 | -0.9 | KRND | KRANIDI | 1.61 | 146 | P | Pn | 10 33 15.3 | +0.5 | BRY | | | | eSn | Sn | 10 34 59.2 | +1.6 |
| LKR | Lokris | 0.78 | 95 | P | Pg | 10 33 01.0 | -0.9 | PENT | Pentalofos | 1.62 | 336 | ePN | Pn | 10 33 15.7 | +0.7 | BRY | Bratogost | 4.94 | 329 | ePn | Pn | 10 34 01.7 | +1.1 |
| RLS | Riolos of Patr | 0.79 | 213 | ePN | Pg | 10 33 01.2 | -0.8 | PENT | Pentalofos | 1.62 | 336 | ePn | Pn | 10 33 15.7 | +0.7 | BRY | | | | eSn | Sn | 10 34 59.2 | +1.6 |
| RLS | | | | eSN | Sg | 10 33 12.2 | -0.2 | SGD | Sagiada | 1.64 | 303 | ePN | Pn | 10 33 15.0 | -0.2 | CDT | Castel del Mon | 5.00 | 300 | ePn | Pn | 10 34 02.7 | +1.3 |
| RLS | Riolos of Patr | 0.79 | 213 | P | Pg | 10 33 01.1 | -0.9 | SGD | Sagiada | 1.64 | 303 | P | Pb | 10 33 16.4 | -0.4 | PLE | Pljevlja | 5.01 | 338 | ⇓iPn | Pn | 10 34 03.6 | +1.9 |
| RLS | | | | S | Sb | 10 33 13.4 | +0.7 | SGD | Sagiada | 1.64 | 303 | ePn | Pn | 10 33 15.0 | -0.2 | PLE | | | | eSn | Sn | 10 35 01.1 | +1.7 |
| RLS | Riolos of Patr | 0.79 | 213 | P | Pg | 10 33 01.1 | -0.9 | SGD | Sagiada | 1.64 | 303 | P | Pb | 10 33 16.4 | -0.4 | PLE | Pljevlja | 5.01 | 338 | ⇓iPn | Pn | 10 34 03.6 | +1.9 |
| RLS | | | | S | Sb | 10 33 13.4 | +0.7 | VLY | Voula,Athens | 1.65 | 121 | ePN | Pn | 10 33 15.9 | +0.5 | PLE | | | | eSn | Sn | 10 35 01.1 | +1.7 |
| RLS | Riolos of Patr | 0.79 | 213 | P | Pg | 10 33 01.1 | -0.9 | VLY | Voula,Athens | 1.65 | 121 | P | Pn | 10 33 15.7 | +0.3 | IVAS | Ivanjica | 5.05 | 345 | ePn | Pn | 10 34 02.9 | +0.8 |
| RLS | | | | eSn | Sg | 10 33 12.2 | -0.2 | VLY | Voula,Athens | 1.65 | 121 | P | Pn | 10 33 15.7 | +0.3 | UPM | Unac-Piva | 5.06 | 333 | ePn | Pn | 10 34 04.1 | +1.8 |
| RLS | | | | S | Sb | 10 33 13.4 | +0.7 | VLY | Voula,Athens | 1.65 | 121 | P | Pn | 10 33 15.7 | +0.3 | UPM | | | | eSn | Sn | 10 35 01.9 | +1.3 |
| ATAL | Atalanti | 0.80 | 92 | P | Pg | 10 33 01.6 | -0.6 | SFD | Strofades | 1.66 | 208 | ePN | Pn | 10 33 15.6 | +0.1 | UPM | Unac-Piva | 5.06 | 333 | ePn | Pn | 10 34 04.1 | +1.8 |
| ATAL | Atalanti | 0.80 | 92 | P | Pg | 10 33 01.6 | -0.6 | SFD | Strofades | 1.66 | 208 | ePn | Pn | 10 33 15.6 | +0.1 | UPM | | | | eSn | Sn | 10 35 01.9 | +1.3 |
| ATAL | Atalanti | 0.80 | 92 | P | Pg | 10 33 01.6 | -0.6 | PAIG | Paliouri | 1.77 | 47 | P | Pn | 10 33 16.4 | -0.6 | BOLS | Boljevac | 5.11 | 360 | ePn | Pn | 10 34 01.8 | -1.0 |
| DRO | Drossia | 0.80 | 197 | ePN | Pg | 10 33 00.9 | -1.5 | PAIG | Paliouri | 1.77 | 47 | ePB | Pn | 10 33 16.5 | -0.6 | GRUS | Gruza | 5.25 | 350 | ⇓iPn | Pn | 10 34 05.0 | +0.1 |
| DRO | Drossia | 0.80 | 197 | P | Pg | 10 33 00.9 | -1.5 | PAIG | Paliouri | 1.77 | 47 | P | Pn | 10 33 16.5 | -0.6 | DIVS | Divibare | 5.58 | 345 | ⇑iP | Pn | 10 34 09.8 | +0.3 |
| DRO | Drossia | 0.80 | 197 | P | Pg | 10 33 00.9 | -1.5 | PAIG | Paliouri | 1.77 | 47 | P | Pn | 10 33 16.4 | -0.6 | DIVS | Divibare | 5.58 | 345 | S | Sn | 10 35 19.5 | +2.1 |
| DRO | | | | S | Sb | 10 33 13.2 | 0.0 | PAIG | Paliouri | 1.77 | 47 | P | Pn | 10 33 16.4 | -0.6 | DIVS | Divibare | 5.58 | 345 | S | Sn | 10 35 15.5 | +2.1 |
| DSL | Palaion Diasel | 0.82 | 301 | ePN | Pg | 10 33 01.0 | -1.7 | PYL | PYLOS | 1.83 | 187 | ePN | Pn | 10 33 19.0 | +1.1 | VAE | Valguarnera | 6.12 | 261 | Pn | Pn | 10 34 20.0 | +3.2 |
| DSL | Palaion Diasel | 0.82 | 301 | P | Pg | 10 33 01.0 | -1.7 | PYL | PYLOS | 1.83 | 187 | P | Pb | 10 33 20.5 | +0.4 | | 0.3nm,0.3s,baz=153,slow=11,SNR=2.0 | | | | | | |
| DSL | Palaion Diasel | 0.82 | 301 | P | Pg | 10 33 01.0 | -1.7 | PYL | PYLOS | 1.83 | 187 | P | Pb | 10 33 20.5 | +0.4 | VAE | | | | Sn | Sn | 10 35 33.9 | +7.4 |
| DSL | Palaion Diasel | 0.82 | 301 | P | Pg | 10 33 01.1 | -1.7 | PYL | PYLOS | 1.83 | 187 | ePn | Pn | 10 33 19.0 | +1.1 | | 0.7nm,0.3s,baz=170,slow=16,SNR=3.1 | | | | | | |
| GUR | Goura | 0.83 | 161 | ePB | Pg | 10 33 01.3 | -1.6 | PYL | PYLOS | 1.83 | 187 | P | Pb | 10 33 20.5 | +0.4 | GZR | Gura Zlata | 6.69 | 5 | ⇑iP | Pn | 10 34 24.2 | -0.5 |
| GUR | | | | eSN | Sb | 10 33 14.1 | +0.1 | NEST | Nestorio | 1.85 | 337 | ePN | Pb | 10 33 19.6 | -0.8 | GZR | Gura Zlata | 6.69 | 5 | ⇑iP | Pn | 10 34 24.2 | -0.5 |
| GUR | Goura | 0.83 | 161 | P | Pg | 10 33 01.2 | -1.6 | NEST | Nestorio | 1.85 | 337 | P | Pn | 10 33 19.2 | +1.1 | GZR | Gura Zlata | 6.69 | 5 | P | Pn | 10 34 24.2 | -0.5 |
| GUR | | | | S | Sg | 10 33 13.6 | -0.1 | NEST | Nestorio | 1.85 | 337 | P | Pn | 10 33 19.2 | +1.1 | LOT | Lotru | 6.85 | 10 | ⇑iP | Pn | 10 34 27.4 | +0.5 |
| GUR | Goura | 0.83 | 161 | P | Pg | 10 33 01.2 | -1.6 | NEST | Nestorio | 1.85 | 337 | ePn | Pb | 10 33 19.6 | -0.8 | BZS | Buzias | 6.90 | 358 | ⇑iP | Pn | 10 34 27.1 | -0.3 |
| GUR | | | | S | Sg | 10 33 13.6 | -0.1 | DYR | Agios Nikonas | 1.97 | 172 | ePN | Pb | 10 33 21.4 | -1.1 | BZS | Buzias | 6.90 | 358 | ⇑iP | Pn | 10 34 27.1 | -0.3 |
| GUR | Goura | 0.83 | 161 | P | Pg | 10 33 01.3 | -1.6 | DYR | Agios Nikonas | 1.97 | 172 | P | Pb | 10 33 22.4 | -0.1 | BZS | Buzias | 6.90 | 358 | P | Pn | 10 34 27.1 | -0.3 |
| GUR | | | | S | Sg | 10 33 13.6 | -0.1 | DYR | Agios Nikonas | 1.97 | 172 | ePn | Pb | 10 33 21.4 | -1.1 | ARS | Arges | 6.92 | 16 | ⇑iP | Pn | 10 34 27.6 | -0.3 |
| GUR | | | | eSn | Sb | 10 33 14.1 | +0.1 | DYR | Agios Nikonas | 1.97 | 172 | P | Pb | 10 33 22.4 | -0.1 | VOIR | | 7.08 | 18 | ⇑iP | Pn | 10 34 31.6 | +1.5 |
| THL | Klokotos Trika | 0.84 | 0 | ePN | Pg | 10 33 01.8 | -1.4 | KEK | Kerkira | 1.98 | 301 | ePN | Pn | 10 33 21.5 | +1.6 | VOIR | | 7.08 | 18 | ⇑iP | Pn | 10 34 31.6 | +1.5 |
| THL | Klokotos Trika | 0.84 | 0 | P | Pg | 10 33 01.8 | -1.4 | KEK | Kerkira | 1.98 | 301 | P | Pb | 10 33 22.0 | -0.6 | VOIR | | 7.08 | 18 | ⇑iP | Pn | 10 34 31.6 | +1.5 |
| THL | Klokotos Trika | 0.84 | 0 | P | Pg | 10 33 01.8 | -1.4 | KEK | Kerkira | 1.98 | 301 | P | Pb | 10 33 22.0 | -0.6 | VOIR | | 7.08 | 18 | P | Pn | 10 34 31.6 | +1.5 |
| THAL | Thalero | 0.85 | 143 | ePN | Pg | 10 33 02.2 | -1.2 | KEK | Kerkira | 1.98 | 301 | ePn | Pn | 10 33 21.5 | +1.6 | ISR | Istrita | 7.23 | 26 | ⇑iP | Pn | 10 34 33.9 | +1.8 |
| THAL | | | | eSN | Sb | 10 33 15.1 | +0.4 | KEK | Kerkira | 1.98 | 301 | P | Pb | 10 33 22.0 | -0.6 | ISR | Istrita | 7.23 | 26 | ⇑iP | Pn | 10 34 33.9 | +1.8 |
| THAL | Thalero | 0.85 | 143 | P | Pg | 10 33 02.7 | -0.7 | PLG | Polygyros | 1.99 | 34 | P | Pn | 10 33 19.5 | -0.6 | ISR | Istrita | 7.23 | 26 | P | Pn | 10 34 33.9 | +1.8 |
| THAL | | | | S | Sb | 10 33 15.0 | +0.4 | PLG | Polygyros | 1.99 | 34 | ePN | Pn | 10 33 19.5 | -0.6 | MLR | Muntele Rosu | 7.37 | 22 | Pn | Pn | 10 34 35.7 | +1.7 |
| THAL | Thalero | 0.85 | 143 | ePn | Pg | 10 33 02.2 | -1.2 | PLG | Polygyros | 1.99 | 34 | P | Pn | 10 33 19.5 | -0.6 | | 0.9nm,0.3s,baz=208,slow=4.0,SNR=20 | | | | | | |
| THAL | Thalero | 0.85 | 143 | P | Pg | 10 33 02.7 | -0.7 | PLG | Polygyros | 1.99 | 34 | P | Pn | 10 33 19.5 | -0.6 | MLR | | | | LR | LR | 10 38 08.7 | |
| THAL | | | | eSn | Sb | 10 33 14.1 | +0.1 | KEK | Kerkira | 1.98 | 301 | ePN | Pn | 10 33 21.5 | +1.6 | | comp=Z,35nm,19.1s,baz=162,slow=44 | | | | | | |
| THL | Klokotos Trika | 0.84 | 0 | ePN | Pg | 10 33 01.8 | -1.4 | KEK | Kerkira | 1.98 | 301 | P | Pb | 10 33 22.0 | -0.6 | MLR | Muntele Rosu | 7.37 | 22 | P | Pn | 10 34 35.7 | +1.7 |
| THL | Klokotos Trika | 0.84 | 0 | P | Pg | 10 33 01.8 | -1.4 | KEK | Kerkira | 1.98 | 301 | P | Pb | 10 33 22.0 | -0.6 | MLR | | | | pmax | pmax | | |
| THL | Klokotos Trika | 0.84 | 0 | P | Pg | 10 33 01.8 | -1.4 | KEK | Kerkira | 1.98 | 301 | P | Pb | 10 33 22.0 | -0.6 | | comp=Z,1.0nm,0.3s | | | | | | |
| THAL | Thalero | 0.85 | 143 | ePN | Pg | 10 33 02.2 | -1.2 | KEK | Kerkira | 1.98 | 301 | ePn | Pn | 10 33 21.5 | +1.6 | MLR | | | | MLR | MLR | | |
| THAL | | | | eSN | Sb | 10 33 15.1 | +0.4 | KEK | Kerkira | 1.98 | 301 | P | Pb | 10 33 22.0 | -0.6 | | comp=Z,35nm,19.1s | | | | | | |
| THAL | Thalero | 0.85 | 143 | P | Pg | 10 33 02.7 | -0.7 | PLG | Polygyros | 1.99 | 34 | P | Pn | 10 33 19.5 | -0.6 | MLR | Muntele Rosu | 7.37 | 22 | ⇑iP | Pn | 10 34 35.6 | +1.5 |
| THAL | | | | S | Sb | 10 33 15.0 | +0.4 | PLG | Polygyros | 1.99 | 34 | ePN | Pn | 10 33 19.5 | -0.6 | TLB | Topalu | 7.40 | 36 | ⇑iP | Pn | 10 34 34.8 | +0.5 |
| THAL | Thalero | 0.85 | 143 | ePn | Pg | 10 33 02.2 | -1.2 | PLG | Polygyros | 1.99 | 34 | P | Pn | 10 33 19.5 | -0.6 | TLB | Topalu | 7.40 | 36 | ⇑iP | Pn | 10 34 34.8 | +0.5 |
| THAL | Thalero | 0.85 | 143 | P | Pg | 10 33 02.7 | -0.7 | PLG | Polygyros | 1.99 | 34 | P | Pn | 10 33 19.5 | -0.6 | TLB | Topalu | 7.40 | 36 | P | Pn | 10 34 34.8 | +0.5 |
| THAL | | | | eSn | Sb | 10 33 15.1 | +0.4 | THE | Thessaloniki | 2.05 | 21 | P | Pn | 10 33 20.1 | -0.7 | TIRR | Tirgusor | 7.48 | 38 | ⇓iP | Pn | 10 34 36.0 | +0.7 |
| SMIA | Simia | 0.95 | 80 | ePN | Pg | 10 33 03.7 | -1.6 | THE | Thessaloniki | 2.05 | 21 | ePB | Pn | 10 33 20.0 | -0.7 | TIRR | Tirgusor | 7.48 | 38 | ⇓iP | Pn | 10 34 36.0 | +0.7 |
| SMIA | Simia | 0.95 | 80 | P | Pg | 10 33 04.6 | -0.7 | THE | Thessaloniki | 2.05 | 21 | ePB | Pn | 10 33 20.0 | -0.7 | TIRR | Tirgusor | 7.48 | 38 | P | Pn | 10 34 36.0 | +0.7 |
| SMIA | Simia | 0.95 | 80 | ePn | Pg | 10 33 03.7 | -1.6 | THE | Thessaloniki | 2.05 | 21 | P | Pn | 10 33 20.1 | -0.7 | VRI | Vrincioaia | 7.95 | 25 | ⇓iP | Pn | 10 34 42.6 | +0.7 |
| SMIA | Simia | 0.95 | 80 | P | Pg | 10 33 04.6 | -0.7 | THE | Thessaloniki | 2.05 | 21 | P | Pn | 10 33 20.1 | -0.7 | VRI | Vrincioaia | 7.95 | 25 | ⇓iP | Pn | 10 34 42.6 | +0.7 |
| FYTO | Fytoko, Volos | 1.00 | 46 | P | Pg | 10 33 05.1 | -1.0 | THE | Thessaloniki | 2.05 | 21 | P | Pn | 10 33 20.1 | -0.7 | VRI | Vrincioaia | 7.95 | 25 | P | Pn | 10 34 42.6 | +0.7 |
| FYTO | Fytoko, Volos | 1.00 | 46 | P | Pg | 10 33 05.1 | -1.0 | HORT | Hortiatis | 2.06 | 24 | ePB | Pn | 10 33 20.2 | -0.7 | DRGR | | 8.08 | 3 | ⇑iP | Pn | 10 34 44.3 | +0.5 |
| FYTO | Fytoko, Volos | 1.00 | 46 | P | Pg | 10 33 05.1 | -1.0 | HORT | Hortiatis | 2.06 | 24 | P | Pn | 10 33 20.3 | -0.7 | DRGR | | 8.08 | 3 | ⇑iP | Pn | 10 34 44.3 | +0.5 |
| LTK | Loutraki | 1.03 | 132 | ePN | Pg | 10 33 05.3 | -1.3 | HORT | Hortiatis | 2.06 | 24 | P | Pn | 10 33 20.3 | -0.7 | DRGR | | 8.08 | 3 | P | Pn | 10 34 44.3 | +0.5 |
| LTK | | | | eSN | Sb | 10 33 20.2 | +0.5 | HORT | Hortiatis | 2.06 | 24 | P | Pn | 10 33 20.3 | -0.7 | TESR | Tescani | 8.50 | 22 | ⇑iP | Pn | 10 34 49.7 | +0.2 |
| LTK | Loutraki | 1.03 | 132 | P | Pb | 10 33 06.3 | -0.1 | FNA | Florina | 2.12 | 347 | P | Pn | 10 33 22.6 | +0.8 | BRTR | Keskin Array B | 9.09 | 80 | Pn | Pn | 10 35 00.1 | +2.5 |
| LTK | Loutraki | 1.03 | 132 | P | Pb | 10 33 06.3 | -0.1 | FNA | Florina | 2.12 | 347 | ePN | Pn | 10 33 22.4 | +0.6 | | comp=Z,1.1nm,0.3s,baz=257,slow=12,SNR=20 | | | | | | |
| LTK | Loutraki | 1.03 | 132 | ePn | Pg | 10 33 05.3 | -1.3 | FNA | Florina | 2.12 | 347 | P | Pn | 10 33 22.6 | +0.8 | BRTR | Keskin Array B | 9.09 | 80 | P | Pn | 10 35 00.1 | +2.5 |
| LTK | Loutraki | 1.03 | 132 | P | Pb | 10 33 06.3 | -0.1 | FNA | Florina | 2.12 | 347 | P | Pn | 10 33 22.6 | +0.8 | BRTR | | | | pmax | pmax | | |
| LTK | | | | S | Sb | 10 33 19.7 | 0.0 | FNA | Florina | 2.12 | 347 | ePn | Pn | 10 33 22.4 | +0.6 | | comp=Z,1.0nm,0.3s | | | | | | |
| LTK | | | | eSn | Sb | 10 33 20.2 | +0.5 | VLI | Veliai | 2.13 | 159 | ePB | Pn | 10 33 21.9 | 0.0 | GROS | Grobnik | 9.10 | 330 | *i* Pn | Pn | 10 34 58.3 | +0.6 |
| LKD2 | Lefkada island | 1.06 | 274 | ePN | Pg | 10 33 05.9 | -1.2 | VLI | Veliai | 2.13 | 159 | P | Pn | 10 33 22.0 | 0.0 | GROS | Grobnik | 9.10 | 330 | *i* Pn | Pn | 10 34 58.3 | +0.6 |
| LKD2 | Lefkada island | 1.06 | 274 | P | Pg | 10 33 06.0 | -1.2 | VLI | Veliai | 2.13 | 159 | P | Pn | 10 33 22.0 | 0.0 | BURAR | Bucovina Array | 9.19 | 14 | ⇑iP | Pn | 10 35 00.0 | +1.0 |
| LKD2 | Lefkada island | 1.06 | 274 | P | Pg | 10 33 06.0 | -1.2 | VLI | Veliai | 2.13 | 159 | P | Pn | 10 33 22.0 | 0.0 | BURAR | Bucovina Array | 9.19 | 14 | ⇑iP | Pn | 10 35 00.0 | +1.0 |
| LKD2 | Lefkada island | 1.06 | 274 | P | Pg | 10 33 06.0 | -1.2 | OUR | Ouranopolis | 2.22 | 43 | P | Pn | 10 33 23.0 | -0.2 | BURAR | Bucovina Array | 9.19 | 14 | ⇑iP | Pn | 10 35 00.0 | +1.0 |
| VIL2 | Platees | 1.11 | 117 | ePN | Pg | 10 33 07.6 | -0.7 | OUR | Ouranopolis | 2.22 | 43 | ePN | Pn | 10 33 23.0 | -0.2 | PSZ | Piszkesteto | 9.32 | 351 | ⇓iP | Pn | 10 35 01.1 | +0.4 |
| NEO | Neokhori | 1.11 | 58 | ePN | Pg | 10 33 07.3 | -1.0 | OUR | Ouranopolis | 2.22 | 43 | P | Pn | 10 33 23.0 | -0.2 | PSZ | Piszkesteto | 9.32 | 351 | ⇓iP | Pn | 10 35 01.1 | +0.4 |
| NEO | | | | eSN | Sb | 10 33 22.5 | +0.2 | OUR | Ouranopolis | 2.22 | 43 | P | Pn | 10 33 23.0 | -0.2 | PSZ | Piszkesteto | 9.32 | 351 | P | Pn | 10 35 01.1 | +0.4 |
| NEO | Neokhori | 1.11 | 58 | P | Pg | 10 33 07.8 | -0.5 | OUR | Ouranopolis | 2.22 | 43 | P | Pn | 10 33 23.0 | -0.2 | UZH | Uzhgorod | 9.91 | 1 | eP | Pn | 10 35 10.5 | +1.8 |
| NEO | Neokhori | 1.11 | 58 | P | Pg | 10 33 07.8 | -0.5 | GRG | Griva | 2.25 | 8 | P | Pn | 10 33 23.5 | -0.2 | UZH | Uzhgorod | 9.91 | 1 | eP | Pn | 10 35 10.5 | +1.8 |
| NEO | Neokhori | 1.11 | 58 | ePn | Pg | 10 33 07.3 | -1.0 | GRG | Griva | 2.25 | 8 | ePN | Pn | 10 33 23.5 | -0.2 | VYHS | Vyhne | 10.04 | 348 | eP | Pn | 10 35 12.3 | +1.8 |
| NEO | Neokhori | 1.11 | 58 | P | Pg | 10 33 07.8 | -0.5 | GRG | Griva | 2.25 | 8 | P | Pn | 10 33 23.5 | -0.2 | VYHS | | | | *e* | | 10 37 02.8 | |
| NEO | | | | eSn | Sb | 10 33 22.5 | +0.2 | GRG | Griva | 2.25 | 8 | P | Pn | 10 33 23.5 | -0.2 | VYHS | Vyhne | 10.04 | 348 | ePN | Pn | 10 35 12.3 | +1.8 |
| XOR | Xorichti | 1.13 | 55 | ePN | Pg | 10 33 07.4 | -1.1 | GRG | Griva | 2.25 | 8 | P | Pn | 10 33 23.5 | -0.2 | VYHS | | | | eSN | Sn | 10 37 02.8 | 0.0 |
| XOR | Xorichti | 1.13 | 55 | P | Pg | 10 33 08.0 | -0.5 | SOH | Sokhos | 2.34 | 26 | P | Pn | 10 33 25.1 | +0.2 | VYHS | Vyhne | 10.04 | 348 | eP | Pn | 10 35 12.3 | +1.8 |
| XOR | | | | S | Sb | 10 33 22.7 | +0.1 | SOH | Sokhos | 2.34 | 26 | ePN | Pn | 10 33 25.1 | +0.2 | VYHS | | | | eS | Sn | 10 37 02.8 | 0.0 |
| XOR | Xorichti | 1.13 | 55 | P | Pg | 10 33 08.0 | -0.5 | SOH | Sokhos | 2.34 | 26 | P | Pn | 10 33 25.1 | +0.2 | ABTA | Abfaltersbach | 10.63 | 322 | ⇑iPn | Pn | 10 35 16.9 | -1.7 |
| XOR | | | | S | Sb | 10 33 22.7 | +0.1 | SOH | Sokhos | 2.34 | 26 | P | Pn | 10 33 25.1 | +0.2 | ABTA | Abfaltersbach | 10.63 | 322 | Pn | Pn | 10 35 16.9 | -1.7 |
| XOR | Xorichti | 1.13 | 55 | ePn | Pg | 10 33 07.4 | -1.1 | SOH | Sokhos | 2.34 | 26 | P | Pn | 10 33 25.1 | +0.2 | VRAC | Vranov | 11.28 | 342 | LR | LR | 10 40 13.3 | |
| XOR | | | | S | Sb | 10 33 22.7 | +0.1 | KNT | Kendrikon | 2.53 | 15 | P | Pn | 10 33 27.9 | +0.4 | | comp=Z,33nm,20.4s,baz=116,slow=40 | | | | | | |
| KFL | Anninata | 1.13 | 238 | P | Pb | 10 33 07.6 | -0.6 | KNT | Kendrikon | 2.53 | 15 | P | Pn | 10 33 27.9 | +0.4 | GERES | GERESS Array B | 11.76 | 332 | Pn | Pn | 10 35 36.0 | +2.0 |
| KFL | Anninata | 1.13 | 238 | P | Pb | 10 33 07.6 | -0.6 | KNT | Kendrikon | 2.53 | 15 | P | Pn | 10 33 27.9 | +0.4 | | comp=Z,0.2nm,0.3s,baz=144,slow=12,SNR=6.4 | | | | | | |
| VILL | Villia | 1.17 | 118 | P | Pb | 10 33 07.8 | -1.0 | OHR | Ohrid | 2.56 | 339 | *i* Pn | Pn | 10 33 29.8 | +1.9 | DAVOX | Davos/Dischmat | 12.00 | 316 | Pn | Pn | 10 35 38.9 | +1.4 |
| VILL | Villia | 1.17 | 118 | P | Pb | 10 33 07.8 | -1.0 | OHR | Ohrid | 2.56 | 339 | *i* Pn | Pn | 10 33 29.8 | +1.9 | | comp=Z,0.2nm,0.3s,baz=131,slow=20,SNR=2.8 | | | | | | |
| AMT | Artemida-Makis | 1.21 | 191 | ePN | Pb | 10 33 09.0 | -0.5 | KYTH | Kithira | 2.57 | 161 | ePN | Pn | 10 33 28.9 | +0.9 | DAVOX | | | | Sn | Sn | 10 37 44.3 | -6.9 |
| AMT | Artemida-Makis | 1.21 | 191 | P | Pb | 10 33 08.7 | -0.8 | KYTH | Kithira | 2.57 | 161 | P | Pn | 10 33 29.3 | +1.3 | | comp=Z,0.2nm,0.3s,baz=310,slow=19,SNR=2.1 | | | | | | |
| AMT | Artemida-Makis | 1.21 | 191 | P | Pb | 10 33 08.7 | -0.8 | KYTH | Kithira | 2.57 | 161 | P | Pn | 10 33 29.3 | +1.3 | KHC | Kasperske Hory | 12.04 | 333 | eP | Pn | 10 35 38.3 | +0.4 |
| AMT | Artemida-Makis | 1.21 | 191 | ePn | Pb | 10 33 09.0 | -0.5 | KYTH | Kithira | 2.57 | 161 | ePn | Pn | 10 33 28.9 | +0.9 | KHC | Kasperske Hory | 12.04 | 333 | eP | Pn | 10 35 38.3 | +0.4 |
| SKIA | Skiathos | 1.22 | 68 | ePN | Pb | 10 33 08.8 | -0.9 | KYTH | Kithira | 2.57 | 161 | P | Pn | 10 33 29.3 | +1.3 | KHC | | | | *ex* | x | 10 35 40.8 | |
| SKIA | Skiathos | 1.22 | 68 | P | Pb | 10 33 08.9 | -0.8 | VAY | Valandovo | 2.63 | 9 | *i* Pn | Pn | 10 33 29.7 | +0.8 | KHC | Kasperske Hory | 12.04 | 333 | eP | Pn | 10 35 38.3 | +0.4 |
| SKIA | Skiathos | 1.22 | 68 | P | Pb | 10 33 08.9 | -0.8 | VAY | *i* | | | *i* Sn | Sn | 10 34 02.5 | +1.8 | KIEV | Kiev | 13.01 | 21 | *i* P | Pn | 10 35 52.5 | +1.4 |
| VLS | Valsamata | 1.24 | 244 | P | Pn | 10 33 08.5 | -1.2 | VAY | Valandovo | 2.63 | 9 | *i* Pn | Pn | 10 33 29.7 | +0.8 | KIEV | | | | pmax | pmax | | |
| VLS | Valsamata | 1.24 | 244 | ePB | Pn | 10 33 08.1 | -1.6 | VAY | *i* | | | *i* Sn | Sn | 10 34 02.4 | +1.8 | | comp=Z,4.0nm,1.0s | | | | | | |
| VLS | Valsamata | 1.24 | 244 | P | Pn | 10 33 08.5 | -1.2 | SRS | Serrai | 2.69 | 27 | P | Pn | 10 33 30.2 | +0.6 | KIEV | Kiev | 13.01 | 21 | *i* P | Pn | 10 35 52.5 | +1.4 |
| VLS | Valsamata | 1.24 | 244 | P | Pn | 10 33 08.5 | -1.2 | SRS | Serrai | 2.69 | 27 | ePN | Pn | 10 33 29.4 | -0.2 | | comp=Z,4.0nm,1.0s | | | | | | |
| VLS | Valsamata | 1.24 | 244 | ePb | Pn | 10 33 08.1 | -1.6 | SRS | Serrai | 2.69 | 27 | P | Pn | 10 33 30.2 | +0.6 | AKASG | Malin Array Be | 13.02 | 21 | Pn | Pn | 10 35 51.4 | +0.2 |
| VLS | Valsamata | 1.24 | 244 | P | Pn | 10 33 08.5 | -1.2 | SRS | Serrai | 2.69 | 27 | P | Pn | 10 33 30.2 | +0.6 | | comp=Z,0.3nm,0.3s,baz=209,slow=12,SNR=2.6 | | | | | | |
| MRKA | Markates | 1.24 | 90 | ePN | Pn | 10 33 09.5 | -0.2 | SRS | Serrai | 2.69 | 27 | ePn | Pn | 10 33 29.4 | -0.2 | CLL | Collm | 14.09 | 336 | eP | P | 10 36 13.0 | -0.5 |
| MRKA | Markates | 1.24 | 90 | P | Pn | 10 33 09.8 | +0.1 | SRS | Serrai | 2.69 | 27 | P | Pn | 10 33 30.2 | +0.6 | CLL | Collm | 14.09 | 336 | ePP | P | 10 36 13.0 | -0.5 |
| MRKA | Markates | 1.24 | 90 | ePn | Pn | 10 33 09.5 | -0.2 | LIA | Limnos Island | 2.73 | 63 | ePN | Pn | 10 33 30.0 | -0.2 | KBZ | Khabaz | 16.48 | 66 | Pn | P | 10 36 43.2 | +3.1 |
| MRKA | Markates | 1.24 | 90 | P | Pn | 10 33 09.8 | +0.1 | LIA | Limnos Island | 2.73 | 63 | ePn | Pn | 10 33 30.0 | -0.2 | | baz=212,slow=13,SNR=2.2 | | | | | | |
| JAN | Janina | 1.30 | 317 | P | Pn | 10 33 10.1 | -0.4 | KAVA | Kavala | 2.98 | 40 | P | Pn | 10 33 32.9 | -0.7 | ESDC | Sonseca Array | 20.13 | 281 | P | P | 10 37 19.0 | -1.4 |
| JAN | Janina | 1.30 | 317 | ePN | Pn | 10 33 10.2 | -0.3 | KAVA | Kavala | 2.98 | 40 | P | Pn | 10 33 32.9 | -0.7 | | comp=Z,0.4nm,0.5s,baz=77,slow=10,SNR=4.9 | | | | | | |
| JAN | Janina | 1.30 | 317 | P | Pn | 10 33 10.1 | -0.4 | KAVA | Kavala | 2.98 | 40 | P | Pn | 10 33 32.9 | -0.7 | ESDC | | | | LR | LR | 10 45 29.7 | |
| JAN | Janina | 1.30 | 317 | P | Pn | 10 33 10.1 | -0.4 | NVR | Nevrokopi | 2.99 | 28 | P | Pn | 10 33 33.8 | 0.0 | | comp=Z,27nm,20.5s,baz=125,slow=38 | | | | | | |
| JAN | Janina | 1.30 | 317 | ePn | Pn | 10 33 10.2 | -0.3 | NVR | Nevrokopi | 2.99 | 28 | P | Pn | 10 33 33.8 | 0.0 |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| KLMR | | | | pmax | pmax | | |
| | comp=Z,38nm,1.6s | | | | | | |
| KLMR | Klimovskoe | 24.71 | 21 | eP | P | 10 38 09.8 | +2.5 |
| | comp=Z,38nm,1.6s | | | | | | |
| AKTO | Aktyubinsk | 27.92 | 53 | LR | LR | 10 50 35.0 | |
| | comp=Z,17nm,19.9s,baz=301,slow=38 | | | | | | |
| ARCES | ARCESS Array B | 30.93 | 2 | P | P | 10 39 02.8 | 0.0 |
| | comp=Z,3.4nm,0.9s,baz=20,slow=3.9,SNR=5.9 | | | | | | |
| ARCES | | | | LR | LR | 10 52 39.0 | |
| | comp=Z,67nm,21.2s,baz=112,slow=39 | | | | | | |
| ARCES | ARCESS Array B | 30.93 | 2 | P | P | 10 39 02.8 | 0.0 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| ARCES | | | | MLR | MLR | | |
| | comp=Z,67nm,21.2s | | | | | | |
| TORD | Torodi Ar. Bea | 31.19 | 221 | P | P | 10 39 05.8 | +0.2 |
| | comp=Z,1.4nm,0.6s,baz=32,slow=9.3,SNR=14 | | | | | | |
| MKAR | Makanchi Array | 44.02 | 59 | P | P | 10 40 53.8 | 0.0 |
| | comp=Z,2.2nm,0.5s,baz=276,slow=6.6,SNR=14 | | | | | | |
| MKAR | Makanchi Array | 44.02 | 59 | P | P | 10 40 53.8 | 0.0 |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| ZALV | Zalesovo Beam | 44.46 | 49 | P | P | 10 40 56.6 | -0.5 |
| | comp=Z,3.5nm,0.7s,baz=287,slow=7.6,SNR=10 | | | | | | |
| ZALV | Zalesovo Beam | 44.46 | 49 | P | P | 10 40 56.7 | -0.5 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| BOSA | Boshof | 67.05 | 177 | P | P | 10 43 40.5 | +1.0 |
| | comp=Z,1.6nm,0.4s,baz=357,slow=7.2,SNR=4.8 | | | | | | |
| BOSA | Boshof | 67.05 | 177 | P | P | 10 43 40.5 | +1.0 |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| ILAR | Eielson Array | 76.47 | 355 | P | P | 10 44 36.5 | +0.8 |
| | comp=Z,0.1nm,0.5s,baz=354,slow=4.6,SNR=5.6 | | | | | | |
| ILAR | Eielson Array | 76.47 | 355 | eP | P | 10 44 39.9 | +4.2 |
| KSAR | Wonju Array Be | 78.07 | 51 | P | P | 10 44 42.9 | -2.2 |
| KSAR | Wonju Array Be | 78.07 | 51 | P | P | 10 44 42.9 | -2.2 |
| KSRS | Korea Array | 78.08 | 51 | P | P | 10 44 42.9 | -2.3 |
| | comp=Z,0.7nm,0.7s,baz=314,slow=6.6,SNR=2.7 | | | | | | |
| KSRS | Korea Array | 78.08 | 51 | P | P | 10 44 42.9 | -2.3 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| TXAR | Lajitas Array | 95.43 | 315 | P | P | 10 46 12.0 | +0.7 |
| | comp=Z,0.1nm,0.3s,baz=30,slow=6.2,SNR=2.1 | | | | | | |
| ASAR | Alice Springs | 121.08 | 97 | PKP | PKPdf | 10 51 38.1 | -1.2 |
| | comp=Z,0.5nm,0.8s,baz=308,slow=0.9,SNR=4.1 | | | | | | |
| ASAR | Alice Springs | 121.08 | 97 | PKIKP | PKPdf | 10 51 38.1 | -1.2 |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |

*NNC **23** 10:47:26.7±6.8, 36°.96N×70°.85E, h194$^{km}$±111$^{km}$, mb2.7, mpv3.7, Error ellipse: s-maj=64.3km s-min=37.4km az=18.0*

**ISC 23 10:47:24.0**±2.1**, 37°.0N**±0°.1×**71°.0E**±0°.2**, h300**$^{km}$**, n8,** σ**1$^s$31**/10**, 4C-3D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| KK31 | Karatay Array | 6.16 | 357 | P | Pn | 10 48 55.6 | +0.5 |
| | 4.0nm,0.3s,baz=178,slow=13,SNR=44 | | | | | | |
| KK31 | | | | ⇑S | S | 10 50 08.0 | -0.6 |
| | 3.9nm,0.6s,baz=182,slow=22,SNR=6.5 | | | | | | |
| AAK | Ala-Archa | 6.30 | 24 | ⇑P | Pn | 10 48 58.2 | +1.3 |
| | 3.7nm,0.6s | | | | | | |
| AAK | | | | ⇓S | S | 10 50 10.0 | -1.9 |
| | 5.6nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 6.95 | 29 | ⇑P | Pn | 10 49 06.8 | +1.9 |
| | 3.1nm,0.7s | | | | | | |
| TKM2 | | | | ⇓S | S | 10 50 25.5 | -0.8 |
| | 4.2nm,0.8s | | | | | | |
| KOLN | Koldanda | 14.05 | 127 | eP | P | 10 50 29.7 | -1.2 |
| | 4.6nm,0.3s | | | | | | |
| GKN | Gorkha | 14.57 | 124 | eP | P | 10 50 36.3 | -0.3 |
| | 10nm,0.4s | | | | | | |
| AB31 | Akbulak array | 14.68 | 330 | ⇓P | Pn | 10 50 45.4 | +6.9 |
| | 0.4nm,0.5s,baz=163,slow=10,SNR=12 | | | | | | |
| AB31 | | | | ⇑S | S | 10 53 25.9 | +8.0 |
| | 1.2nm,0.7s,baz=146,slow=25,SNR=5.5 | | | | | | |
| PKIN | Phulchoki | 15.36 | 123 | eP | P | 10 50 45.6 | +0.3 |
| | 5.0nm,0.4s | | | | | | |
| PKI | Pulchoki | 15.37 | 123 | eP | P | 10 50 45.8 | +0.3 |
| | 5.3nm,0.3s | | | | | | |

*IDC **23** 10:56:54.8±0.5, 36°.82S×73°.51W, h0$^{km}$, mb4.6/17, mb1 4.7/20, mb1mx4.6/30, mbtmp4.6/20, ML4.0/3, MS4.3/8, Ms1 4.3/8, ms1mx4.1/15, Error ellipse: s-maj=20.0km s-min=13.1km az=96.0*

*GUC **23** 10:56:55.1±0.3, 36°.96S×73°.77W, h37$^{km}$±2$^{km}$, ML5.4*

*ISCJB **23** 10:56:57.8±0.2, 36°.86S±0°.03×73°.51W±0°.05, h29$^{km}$, mb4.8/61, MS4.5/8, Error ellipse: s-maj=5.6km s-min=4.2km az=160.4*

*MOS **23** 10:56:58.6±1.2, 36°.73S×73°.32W, h31$^{km}$, mb5.0/26, MS4.5/5, Error ellipse: s-maj=18.5km s-min=9.3km az=97.5*

*BJI **23** 10:56:58.0, 36°.94S×73°.25W, h29$^{km}$, mB5.3/13, Ms5.4/9, Ms7 5.1/9*

*NEIC **23** 10:56:59.5±0.2, 36°.78S×73°.41W, mb5.1/36, ML5.4(GUC), Error ellipse: s-maj=6.8km s-min=5.0km az=74.0*

*NEIC Felt [IV] at Penco; [III] at Arauco, Cabrero, Chiguayante, Concepcion, Constitucion, Coronel, Hualpen, La Laja, Lebu, Los Angeles, San Rosendo and Talcahuano; [II] at Curanilahue, Puren, San Fernando, Temuco and Tirua. Also felt at Angol.*

*GCMT **23** 10:56:59.5±0.4, 36°.77S×73°.87W, h28$^{km}$±1$^{km}$, MW5.1/57, Moment Tensor Solution. s24,c34; s57,c72; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$3.89±.30; $M_{\theta\theta}$-0.18±.18; $M_{\phi\phi}$-3.71±.22; $M_{r\theta}$-0.06±.29; $M_{\theta\phi}$-1.42±.14; $M_{\phi r}$-2.97±.34; Best double couple: $M_0$5.02800×$10^{16}$ NP1:$\phi_s$188.00000°,δ63.00000°,λ79.00000°. NP2: $\phi_s$31.00000°,δ29.00000°,λ110.00000°. Principal axes: T 4.9470, Plg70.0000°, Azm76.0000°; N 0.1620, Plg10.0000°, Azm193.0000°; P -5.1100, Plg18.0000°, Azm286.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 23 10:56:59.6**±0.6**, 36°.86S**±0°.04×**73°.46W**±0°.05**, h32**$^{km}$±3$^{km}$**, h31**$^{km}$**:pP-P, n580,** σ**0$^s$98**/610**, mb4.9**/61**, MS4.5**/8**, 4C-6D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CCHI | Chillan | 1.14 | 77 | eP | Pb | 10 57 20.1 | -0.7 |
| CCHI | | | | eS | Sb | 10 57 39.0 | +3.7 |
| LNCH | Linares | 1.81 | 57 | i P | Pn | 10 57 29.8 | +1.2 |
| LNCH | | | | i S | Sb | 10 57 56.2 | +1.8 |
| LNCH | | | | AML | AML | 10 58 12.0 | |
| | comp=N,45µm,0.7s | | | | | | |
| PSCH | Puerto Saavedr | 1.94 | 178 | eP | Pn | 10 57 27.0 | -3.3 |
| PSCH | | | | eS | Sn | 10 57 50.7 | -2.8 |
| PSCH | | | | AML | AML | 10 58 11.1 | |
| | comp=N,53µm,0.4s | | | | | | |
| TALC | Talca | 2.08 | 46 | i P | Pn | 10 57 33.9 | +1.6 |
| TALC | | | | i S | Sb | 10 58 02.8 | +0.7 |
| NICH | Los Niches | 2.59 | 45 | i P | Pn | 10 57 40.6 | +1.3 |
| NICH | | | | i S | Sb | 10 58 15.0 | -1.8 |
| VLCH | Valdivia | 2.95 | 177 | eP | Pn | 10 57 41.1 | -3.1 |
| VLCH | | | | eS | Sn | 10 58 15.2 | -3.3 |
| VLCH | | | | AML | AML | 10 58 43.6 | |
| | comp=E,12µm,0.5s | | | | | | |
| CFAA | Coronel Fontan | 6.80 | 41 | Pn | Pn | 10 58 36.2 | -1.0 |
| | comp=E,1.7nm,0.3s,baz=217,slow=12,SNR=54 | | | | | | |
| CFAA | | | | Sn | Sn | 10 59 54.7 | +1.2 |
| | comp=E,1.1nm,0.3s,baz=191,slow=11,SNR=3.2 | | | | | | |
| CFAA | | | | LR | LR | 11 01 16.4 | |
| | comp=E,294nm,21.3s,baz=224,slow=39 | | | | | | |
| LCO | Las Campanas | 8.16 | 17 | ePn | Pn | 10 58 53.3 | -2.8 |
| TRQA | Tornquist | 9.21 | 101 | ePn | Pn | 10 59 12.5 | +2.2 |
| LVC | Limon Verde | 14.73 | 17 | Pn | Pn | 11 00 20.0 | -6.0 |
| | comp=E,15nm,0.3s,baz=217,slow=11,SNR=4.8 | | | | | | |
| LVC | Limon Verde | 14.73 | 17 | ePn | Pn | 11 00 24.6 | -1.4 |
| CPUP | Villa Florida | 17.27 | 57 | Pn | Pn | 11 00 55.4 | -2.9 |
| | comp=E,0.2nm,0.3s,baz=234,slow=10,SNR=21 | | | | | | |
| CPUP | | | | LR | LR | 11 08 15.3 | |
| | comp=E,2µm,18.7s,baz=236,slow=39 | | | | | | |
| USHA | Ushuaia | 18.30 | 171 | Pn | Pn | 11 01 11.9 | +1.1 |
| | comp=E,0.5nm,0.3s,baz=330,slow=8.2,SNR=3.5 | | | | | | |
| EFI | East Falkland | 18.41 | 148 | i P | P | 11 01 11.2 | -0.7 |
| EFI | | | | pmax | pmax | | |
| | comp=Z,218nm,3.0s | | | | | | |
| LPAZ | La Paz | 21.03 | 14 | P | P | 11 01 42.4 | +1.0 |
| | comp=Z,22nm,0.9s,baz=184,slow=7.7,SNR=67 | | | | | | |
| LPAZ | La Paz | 21.03 | 14 | P | P | 11 01 42.4 | +1.0 |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| SIV | San Ignacio | 23.52 | 31 | P | P | 11 02 06.2 | -0.8 |
| | comp=Z,8.1nm,0.7s,baz=239,slow=9.9,SNR=24 | | | | | | |
| SAML | Samuel | 29.31 | 21 | eP | P | 11 02 59.2 | -0.1 |
| | comp=Z,7.2nm,1.1s | | | | | | |
| BDFB | Brasilia | 30.93 | 54 | P | P | 11 03 13.3 | -0.5 |
| | comp=Z,7.9nm,0.8s,baz=198,slow=8.0,SNR=10 | | | | | | |
| BDFB | | | | LR | LR | 11 16 57.9 | |
| | comp=Z,2µm,18.9s,baz=223,slow=39 | | | | | | |
| BDFB | Brasilia | 30.93 | 54 | P | P | 11 03 13.3 | -0.5 |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| BDFB | | | | MLR | MLR | | |
| | comp=Z,2µm,18.9s | | | | | | |
| OTAV | Otavalo | 37.20 | 352 | eP | P | 11 04 09.8 | +1.2 |
| | comp=Z,26nm,1.4s | | | | | | |
| ROSC | El Rosal | 41.51 | 359 | P | P | 11 04 46.3 | +1.9 |
| | comp=Z,8.5nm,0.4s,baz=214,slow=3.5,SNR=7.8 | | | | | | |
| SDV | Santo Domingo | 45.58 | 4 | eP | P | 11 05 15.7 | -1.2 |
| | comp=Z,26nm,0.8s | | | | | | |
| RCBR | Riachuelo | 46.15 | 57 | eP | P | 11 05 23.2 | +1.8 |
| | comp=Z,22nm,1.0s | | | | | | |
| VNA3 | Neumayer Olymp | 47.18 | 157 | P | P | 11 05 29.5 | +0.7 |
| VNA1 | Neumayer--Stat | 47.53 | 156 | P | P | 11 05 32.8 | +1.4 |
| VNA2 | Neumayer--Watz | 47.85 | 156 | P | P | 11 05 36.5 | +2.6 |
| | baz=277,slow=11 | | | | | | |
| SNAA | Sanae | 49.40 | 157 | P | P | 11 05 46.0 | +0.1 |
| SNAA | Sanae | 49.40 | 157 | P | P | 11 05 46.4 | +0.5 |
| | comp=Z,13nm,1.2s,baz=276,slow=6.1,SNR=24 | | | | | | |
| SNAA | Sanae | 49.40 | 157 | P | P | 11 05 46.4 | +0.5 |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,13nm,1.2s | | | | | | |
| SNAA | Sanae | 49.40 | 157 | P | P | 11 05 46.4 | +0.5 |
| | comp=Z,0.5nm,1.3s | | | | | | |
| QSPA | South Pole Qui | 53.38 | 180 | P | P | 11 06 16.4 | +0.5 |
| | comp=Z,5.2nm,0.5s,baz=154,slow=5.8,SNR=40 | | | | | | |
| RKT | Rikitea | 54.17 | 266 | eS | S | 11 13 57.3 | +0.3 |
| | comp=Z,213nm,25.8s | | | | | | |
| RKT | | | | eLR | LR | 11 22 15.6 | |
| | comp=Z,422nm,30.5s,baz=130 | | | | | | |
| RKT | Rikitea | 54.17 | 266 | eT | T | 12 04 23.3 | |
| | comp=Z,3.4nm,0.2s | | | | | | |
| NVL | N'lazarevskaya | 54.17 | 156 | ⇓iP | P | 11 06 14.2 | -7.2 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| CRPR | Cabo Rojo, PR | 54.90 | 7 | eP | P | 11 06 25.6 | -1.5 |
| | comp=Z,46nm,0.8s | | | | | | |
| OBIP | Obispado Ponce | 54.99 | 8 | eP | P | 11 06 27.2 | -0.7 |
| | comp=Z,26nm,0.9s | | | | | | |
| SJG | San Juan | 55.11 | 8 | eP | P | 11 06 27.1 | -1.6 |
| SJG | | | | pmax | pmax | | |
| | comp=Z,29nm,1.1s | | | | | | |
| SJG | San Juan | 55.11 | 8 | eP | P | 11 06 27.1 | -1.6 |
| | comp=Z,29nm,1.1s | | | | | | |
| LRS | Lares | 55.21 | 8 | eP | P | 11 06 27.7 | -1.8 |
| TEIG | Tepich | 58.48 | 344 | eP | P | 11 06 51.9 | -0.7 |
| | comp=Z,19nm,0.8s | | | | | | |
| VNDA | Vanda | 61.07 | 192 | P | P | 11 07 11.4 | +1.6 |
| | comp=Z,1.1nm,0.9s,baz=160,slow=5.3,SNR=4.4 | | | | | | |
| VNDA | | | | LR | LR | 11 30 21.0 | |
| | comp=Z,142nm,18.9s,baz=126,slow=33 | | | | | | |
| TBI | Tubuai | 65.56 | 258 | eS | S | 11 16 27.4 | +3.8 |
| | comp=Z,404nm,27.8s | | | | | | |
| TBI | Tubuai | 65.56 | 258 | eLR | LR | 11 27 31.6 | |
| | comp=Z,394nm,27.2s,baz=127 | | | | | | |
| TBI | Tubuai | 65.56 | 258 | eT | T | 12 18 38.9 | |
| | comp=Z,3.1nm,0.3s | | | | | | |
| H06E1 | SOCORRO T-PHAS | 65.67 | 321 | T | T | 12 19 07.6 | |
| 035Z | Hargill | 67.11 | 336 | P | P | 11 07 50.9 | +0.9 |
| | baz=67 | | | | | | |
| MEH | Mehetia | 67.36 | 264 | eT | T | 12 20 52.2 | |
| | comp=Z,58nm,0.2s | | | | | | |
| 034A | Hebbronville | 67.87 | 336 | P | P | 11 07 55.6 | +0.8 |
| | baz=68 | | | | | | |
| 934A | Benavides | 68.31 | 336 | P | P | 11 07 58.6 | +1.0 |
| | baz=69 | | | | | | |
| TVO | Taravao | 68.35 | 264 | eT | T | 12 22 07.1 | |
| | comp=Z,1.3nm,0.2s | | | | | | |
| TIAR | Tiarei | 68.55 | 264 | eT | T | 12 22 21.9 | |
| | comp=Z,9.2nm,0.2s | | | | | | |
| 933A | Laredo | 68.57 | 335 | P | P | 11 08 00.4 | +1.2 |
| | baz=69 | | | | | | |
| PAE | Paea | 68.68 | 264 | eT | T | 12 22 31.3 | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| PPT2 | Papeete2 | 68.72 | 264 | eS | S | 11 17 04.7 | +2.8 |
| | comp=Z,191nm,23.2s | | | | | | |
| PPT2 | Papeete2 | 68.72 | 264 | eLR | LR | 11 28 55.3 | |
| | comp=Z,485nm,24.8s,baz=125 | | | | | | |
| PPT2 | Papeete2 | 68.72 | 264 | eT | T | 12 22 33.5 | |
| | comp=Z,1.5nm,0.2s | | | | | | |
| PPT | Papeete | 68.73 | 264 | LR | LR | 11 30 16.9 | |
| | comp=Z,337nm,18.9s,baz=110,slow=29 | | | | | | |
| 736A | Circle Diamond | 69.12 | 338 | P | P | 11 08 03.4 | +0.8 |
| | baz=69 | | | | | | |
| 735A | Kenedy | 69.25 | 337 | P | P | 11 08 04.0 | +0.6 |
| | baz=70 | | | | | | |
| 833A | Chaparral WMA, | 69.27 | 336 | P | P | 11 08 04.2 | +0.7 |
| | baz=70,SNR=5.2 | | | | | | |
| 637A | Eagle Lake | 69.36 | 339 | P | P | 11 08 05.2 | +1.2 |
| | baz=70 | | | | | | |
| 832A | Faith Ranch, C | 69.43 | 335 | P | P | 11 08 05.0 | +0.5 |
| | baz=70,SNR=5.3 | | | | | | |
| 734A | La Parita Cree | 69.48 | 337 | P | P | 11 08 05.4 | +0.6 |
| | baz=70 | | | | | | |
| 733A | Divot King Ran | 69.60 | 336 | P | P | 11 08 06.2 | +0.6 |
| | baz=70 | | | | | | |
| 636A | Smothers Creek | 69.61 | 338 | P | P | 11 08 06.7 | +1.2 |
| | baz=70 | | | | | | |
| 732A | Laxson Ranch, | 69.83 | 335 | P | P | 11 08 07.3 | +0.3 |
| | baz=70,SNR=8.3 | | | | | | |
| 440A | Kirbyville | 69.94 | 341 | P | P | 11 08 08.8 | +1.2 |
| | baz=70 | | | | | | |
| 537A | Green Hill Far | 69.95 | 339 | P | P | 11 08 08.7 | +1.0 |
| | baz=70 | | | | | | |
| 536A | Bastrop | 70.17 | 338 | P | P | 11 08 09.8 | +0.8 |
| | baz=70 | | | | | | |
| 633A | Saathoff Ranch | 70.25 | 336 | P | P | 11 08 10.3 | +0.8 |
| | baz=70,SNR=6.4 | | | | | | |
| 535A | Dale | 70.28 | 338 | P | P | 11 08 10.4 | +0.8 |
| | baz=70 | | | | | | |
| 632A | Uvalde | 70.49 | 336 | P | P | 11 08 11.4 | +0.3 |
| | baz=71,SNR=6.3 | | | | | | |
| GOGA | Godfrey | 70.53 | 351 | eP | P | 11 08 10.1 | -1.1 |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,20nm,1.1s | | | | | | |
| GOGA | Godfrey | 70.53 | 351 | eP | P | 11 08 10.1 | -1.1 |
| | comp=Z,20nm,1.1s | | | | | | |
| VBMS | Vicksburg | 70.55 | 345 | P | P | 11 08 12.0 | +0.8 |
| | baz=71 | | | | | | |
| 534A | Blanco | 70.55 | 337 | P | P | 11 08 11.4 | 0.0 |
| | baz=71 | | | | | | |
| 340A | Bronson | 70.56 | 342 | P | P | 11 08 12.0 | +0.6 |
| | baz=71 | | | | | | |
| 339A | Huntington | 70.66 | 341 | P | P | 11 08 13.0 | +1.0 |
| | baz=71 | | | | | | |
| 631A | Perdido Creek | 70.67 | 335 | P | P | 11 08 12.3 | +0.2 |
| | baz=71,SNR=6.1 | | | | | | |
| LRAL | Lakeview Retre | 70.67 | 348 | eP | P | 11 08 11.9 | -0.1 |
| | comp=Z,19nm,1.1s | | | | | | |
| 436A | Wall Ranch, Ga | 70.74 | 339 | P | P | 11 08 13.6 | +1.1 |
| | baz=71 | | | | | | |
| 533A | Kerrville | 70.77 | 337 | P | P | 11 08 13.2 | +0.5 |
| | baz=71,SNR=7.0 | | | | | | |
| MAW | Mawson | 70.77 | 164 | P | P | 11 08 13.1 | +0.8 |
| | comp=Z,6.9nm,1.0s,baz=218,slow=9.3,SNR=15 | | | | | | |
| MAW | | | | LR | LR | 11 39 01.7 | |
| | comp=Z,250nm,20.3s,baz=237,slow=36 | | | | | | |
| MAW | Mawson | 70.77 | 164 | P | P | 11 08 13.1 | +0.8 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| MAW | | | | MLR | MLR | | |
| | comp=Z,250nm,20.3s | | | | | | |
| 338A | Crockett | 70.88 | 340 | P | P | 11 08 13.9 | +0.6 |
| | baz=71 | | | | | | |
| 435B | Jarrell | 70.98 | 338 | P | P | 11 08 14.8 | +0.8 |
| | baz=71 | | | | | | |
| 337A | Centerville | 71.00 | 340 | P | P | 11 08 14.8 | +0.7 |
| | baz=71 | | | | | | |
| 532A | Rocksprings | 71.10 | 336 | P | P | 11 08 15.4 | +0.7 |
| | baz=71,SNR=9.9 | | | | | | |
| 434A | Burnet | 71.22 | 338 | P | P | 11 08 15.8 | +0.3 |
| | baz=72,SNR=10 | | | | | | |
| 336A | Riesel | 71.33 | 339 | P | P | 11 08 16.4 | +0.3 |
| | baz=72,SNR=8.4 | | | | | | |
| 531A | Rocksprings | 71.35 | 335 | P | P | 11 08 16.8 | +0.5 |
| | baz=72,SNR=7.3 | | | | | | |
| JCT | Junction City | 71.39 | 336 | eP | P | 11 08 16.1 | -0.4 |
| JCT | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| JCT | Junction City | 71.39 | 336 | P | P | 11 08 16.8 | +0.3 |
| | baz=72,SNR=9.2 | | | | | | |
| JCT | Junction City | 71.39 | 336 | eP | P | 11 08 16.1 | -0.4 |
| | comp=Z,20nm,1.0s | | | | | | |
| 335A | Moody | 71.41 | 338 | P | P | 11 08 16.9 | +0.4 |
| | baz=72 | | | | | | |
| 433A | Art | 71.42 | 337 | P | P | 11 08 16.8 | +0.1 |
| | baz=72,SNR=11 | | | | | | |
| 238A | Jacksonville | 71.44 | 341 | P | P | 11 08 17.0 | +0.3 |
| | baz=72 | | | | | | |
| 530A | J-C Ranch, Com | 71.60 | 335 | P | P | 11 08 18.0 | +0.2 |
| | baz=72,SNR=15 | | | | | | |
| 237A | Washetta, Mont | 71.62 | 340 | P | P | 11 08 18.2 | +0.4 |
| | baz=72 | | | | | | |
| TXAR | Lajitas Array | 71.69 | 332 | P | P | 11 08 18.4 | 0.0 |
| | comp=Z,6.7nm,1.0s,baz=150,slow=8.3,SNR=48 | | | | | | |
| TXAR | | | | LR | LR | 11 35 14.9 | |
| | comp=Z,221nm,18.2s,baz=0.0,slow=32 | | | | | | |
| 334A | Lometa | 71.69 | 338 | P | P | 11 08 18.3 | +0.1 |
| | baz=72,SNR=16 | | | | | | |
| 432A | Menard | 71.76 | 336 | P | P | 11 08 18.7 | 0.0 |
| | baz=72,SNR=6.7 | | | | | | |
| 236A | Katherine and | 71.82 | 339 | P | P | 11 08 19.5 | +0.5 |
| | baz=72 | | | | | | |
| 431A | Sonora | 71.84 | 336 | P | P | 11 08 19.7 | +0.5 |
| | baz=72,SNR=6.5 | | | | | | |
| 529A | Stev Forest Ra | 71.89 | 334 | P | P | 11 08 20.1 | +0.5 |
| | baz=72,SNR=8.6 | | | | | | |
| 139A | Bunkhouse Ranc | 71.89 | 342 | P | P | 11 08 19.9 | +0.5 |
| | baz=72 | | | | | | |
| 333A | Richland Sprin | 71.92 | 337 | P | P | 11 08 19.5 | -0.2 |
| | baz=72,SNR=8.0 | | | | | | |
| KMSC | Kings Mountain | 72.01 | 353 | P | P | 11 08 20.3 | +0.2 |
| | baz=72 | | | | | | |
| KMSC | Kings Mountain | 72.01 | 353 | eP | P | 11 08 19.2 | -0.8 |
| 138A | Matatall Enter | 72.05 | 341 | P | P | 11 08 20.7 | +0.3 |
| | baz=72 | | | | | | |
| WHTX | Lake Whitney | 72.08 | 339 | P | P | 11 08 21.0 | +0.4 |
| | baz=72 | | | | | | |
| WHTX | Lake Whitney | 72.08 | 339 | eP | P | 11 08 20.8 | +0.2 |
| 430A | Baggett Ranch, | 72.15 | 335 | P | P | 11 08 21.5 | +0.4 |
| | baz=72,SNR=12 | | | | | | |
| 137A | Heron Place, G | 72.17 | 340 | P | P | 11 08 21.7 | +0.7 |
| | baz=72 | | | | | | |
| 332A | Millersview | 72.21 | 337 | P | P | 11 08 21.6 | +0.2 |
| | baz=72 | | | | | | |
| 429A | Davenport Ranc | 72.23 | 334 | P | P | 11 08 22.2 | +0.6 |
| | baz=72,SNR=5.1 | | | | | | |
| 136A | Ennis | 72.27 | 340 | P | P | 11 08 22.1 | +0.4 |
| | baz=72 | | | | | | |
| 234A | Clairette | 72.29 | 338 | P | P | 11 08 22.0 | +0.2 |
| | baz=73,SNR=7.9 | | | | | | |
| 331A | San Angelo | 72.36 | 336 | P | P | 11 08 22.4 | +0.1 |
| | baz=73,SNR=14 | | | | | | |
| Z39A | Irene McRaven, | 72.37 | 342 | P | P | 11 08 22.9 | +0.7 |
| | baz=73 | | | | | | |
| 233A | Rising Star | 72.53 | 338 | P | P | 11 08 23.5 | +0.1 |
| | baz=73 | | | | | | |
| OXF | Oxford | 72.54 | 346 | eP | P | 11 08 22.7 | -0.6 |
| OXF | | | | pmax | pmax | | |
| | comp=Z,33nm,0.9s | | | | | | |
| OXF | Oxford | 72.54 | 346 | eP | P | 11 08 22.7 | -0.6 |
| | comp=Z,33nm,0.9s | | | | | | |
| Z38A | Mt. Pleasant | 72.58 | 341 | P | P | 11 08 24.4 | +0.9 |
| | baz=73 | | | | | | |
| SWET | Sewanee | 72.64 | 349 | eP | P | 11 08 23.4 | -0.5 |
| | comp=Z,20nm,1.0s | | | | | | |
| 232A | Coleman | 72.65 | 337 | P | P | 11 08 24.0 | 0.0 |
| | baz=73,SNR=8.7 | | | | | | |
| 330A | Mertzon | 72.70 | 335 | P | P | 11 08 24.8 | +0.4 |
| | baz=73 | | | | | | |
| Z37A | Pogue Cattle C | 72.70 | 341 | P | P | 11 08 24.9 | +0.7 |
| | baz=73 | | | | | | |
| 134A | White-Moore Ra | 72.80 | 338 | P | P | 11 08 25.1 | +0.2 |
| | baz=73 | | | | | | |
| 231A | Bronte | 72.90 | 336 | P | P | 11 08 25.5 | 0.0 |
| | baz=73,SNR=6.0 | | | | | | |
| Z36A | Blue Ridge | 72.99 | 340 | P | P | 11 08 26.3 | +0.3 |
| | baz=73,SNR=7.4 | | | | | | |
| Y39A | Lockesburg | 73.02 | 342 | P | P | 11 08 26.2 | +0.2 |
| | baz=73 | | | | | | |
| 329A | Wagon Wheel Ra | 73.04 | 335 | P | P | 11 08 26.4 | 0.0 |
| | baz=73 | | | | | | |
| 133A | Hamilton Ranch | 73.09 | 338 | P | P | 11 08 26.8 | +0.2 |
| | baz=73,SNR=7.5 | | | | | | |
| 230A | Sterling City | 73.12 | 336 | P | P | 11 08 26.5 | -0.3 |
| | baz=73 | | | | | | |
| Y38A | Idabel | 73.16 | 342 | P | P | 11 08 27.0 | 0.0 |
| | baz=73 | | | | | | |
| Z35A | Perchaven, San | 73.28 | 339 | P | P | 11 08 27.7 | 0.0 |
| | baz=74,SNR=5.8 | | | | | | |
| ABTX | Abilene, Hawle | 73.33 | 337 | P | P | 11 08 28.1 | +0.1 |
| | baz=74 | | | | | | |
| ABTX | Abilene, Hawle | 73.33 | 337 | eP | P | 11 08 27.7 | -0.3 |
| 229A | Bryant Ranch, | 73.43 | 335 | P | P | 11 08 28.9 | +0.3 |
| | baz=74 | | | | | | |
| Y37A | Hugo | 73.44 | 341 | P | P | 11 08 28.9 | +0.3 |
| | baz=74 | | | | | | |
| MIAR | Mount Ida | 73.47 | 343 | eP | P | 11 08 29.1 | +0.4 |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,74nm,2.5s | | | | | | |
| MIAR | Mount Ida | 73.47 | 343 | P | P | 11 08 28.4 | -0.3 |
| | baz=74 | | | | | | |
| MIAR | Mount Ida | 73.47 | 343 | eP | P | 11 08 29.1 | +0.4 |
| | comp=Z,74nm,2.5s | | | | | | |
| Z34A | Collier Ranch, | 73.50 | 339 | P | P | 11 08 28.7 | -0.2 |
| | baz=74 | | | | | | |
| Y36A | Durant | 73.54 | 340 | P | P | 11 08 29.1 | -0.1 |
| | baz=74 | | | | | | |
| 131A | Roby | 73.61 | 337 | P | P | 11 08 29.8 | +0.1 |
| | baz=74 | | | | | | |
| DRV | Dumont d'Urvil | 73.66 | 193 | S | SKiKP | 11 17 52.0 | -4.7 |
| DRV | | | | SS | SS | 11 22 41.0 | +1.1 |
| DRV | | | | R | | 11 32 00.0 | |
| Z33A | Whitaker Ranch | 73.67 | 338 | P | P | 11 08 30.0 | 0.0 |
| | baz=74,SNR=5.7 | | | | | | |
| 130A | Snyder | 73.72 | 336 | P | P | 11 08 30.2 | -0.1 |
| | baz=74 | | | | | | |
| Y35A | Marietta | 73.75 | 340 | P | P | 11 08 30.4 | 0.0 |
| | baz=74 | | | | | | |
| 228A | UT Block 9, Go | 73.83 | 335 | P | P | 11 08 30.9 | -0.1 |
| | baz=74,SNR=7.1 | | | | | | |
| WVT | Waverly | 73.84 | 348 | eP | P | 11 08 30.0 | -0.8 |
| WVT | Waverly | 73.84 | 348 | eP | P | 11 08 30.0 | -0.8 |
| X38A | Whitesboro | 73.89 | 342 | P | P | 11 08 31.3 | +0.1 |
| | baz=74 | | | | | | |
| Z32A | Haskell | 73.91 | 338 | P | P | 11 08 31.7 | +0.3 |
| | baz=74,SNR=6.5 | | | | | | |
| X37A | Clayton | 73.95 | 341 | P | P | 11 08 32.0 | +0.4 |
| | baz=74 | | | | | | |
| Y34A | Reagan Ranch, | 74.01 | 339 | P | P | 11 08 31.6 | -0.3 |
| | baz=74 | | | | | | |
| 129A | Stewart Farms, | 74.05 | 335 | P | P | 11 08 31.8 | -0.5 |
| | baz=74 | | | | | | |
| Z31A | Sharp Cattle R | 74.13 | 337 | P | P | 11 08 32.5 | -0.2 |
| | baz=74 | | | | | | |
| X36A | Centrahoma | 74.19 | 341 | P | P | 11 08 32.1 | -0.9 |
| | baz=74,SNR=8.7 | | | | | | |
| X35A | Drake | 74.20 | 340 | P | P | 11 08 32.5 | -0.5 |
| | baz=74,SNR=7.4 | | | | | | |
| 128A | Castleberry Fa | 74.25 | 335 | P | P | 11 08 32.8 | -0.7 |
| | baz=74,SNR=8.2 | | | | | | |
| Y33A | Hilltop Ranch, | 74.31 | 338 | P | P | 11 08 32.7 | -0.9 |
| | baz=75 | | | | | | |
| Z30A | Sanderson Ranc | 74.41 | 336 | P | P | 11 08 33.3 | -1.0 |
| | baz=75,SNR=7.3 | | | | | | |
| MNTX | Cornudas Mount | 74.46 | 332 | P | P | 11 08 33.6 | -1.0 |
| | baz=75,SNR=10 | | | | | | |
| MNTX | Cornudas Mount | 74.46 | 332 | eP | P | 11 08 33.7 | -1.0 |
| | comp=Z,6.1nm,1.0s | | | | | | |
| W37A | Quinton | 74.49 | 341 | P | P | 11 08 33.7 | -1.0 |
| | baz=75 | | | | | | |
| Y32A | R-V Farms, Ver | 74.55 | 338 | P | P | 11 08 34.6 | -0.5 |
| | baz=75 | | | | | | |
| Z29A | Hungry Hill Ra | 74.57 | 336 | P | P | 11 08 34.7 | -0.7 |
| | baz=75 | | | | | | |
| X34A | Smith Ranch, M | 74.63 | 339 | P | P | 11 08 35.1 | -0.5 |
| | baz=75 | | | | | | |
| W36A | Wetumka | 74.70 | 341 | P | P | 11 08 35.6 | -0.3 |
| | baz=75 | | | | | | |
| Y31A | Rekieta Farm, | 74.76 | 337 | P | P | 11 08 36.4 | 0.0 |
| | baz=75,SNR=5.4 | | | | | | |
| X33A | Lawton | 74.77 | 339 | P | P | 11 08 35.6 | -0.7 |
| | baz=75 | | | | | | |

**Z28A Tucker Farm, M** 74.83 335 P P 11 08 36.1 -0.8
baz=75
**W35A Tecumseh** 74.88 340 P P 11 08 36.6 -0.4
baz=75
**X32A Elmer** 74.89 338 P P 11 08 37.1 +0.1
baz=75
**PBMO Poplar Bluff** 74.94 346 eP P 11 08 36.7 -0.6
**WMOK Wichita Mounta** 75.03 339 eP P 11 08 37.2 -0.7
WMOK pmax pmax
comp=Z,9.0nm,1.3s
**WMOK Wichita Mounta** 75.03 339 eP P 11 08 37.2 -0.7
comp=Z,9.4nm,1.3s
**CPRX Cap Rock** 75.10 334 eP P 11 08 39.0 +0.5
comp=Z,4.1nm,0.8s
**Y29A Porterfield Fa** 75.11 336 P P 11 08 38.3 -0.2
baz=75
**V37A Hulbert** 75.12 342 P P 11 08 38.3 -0.1
baz=75
**W34A Bridge Creek,** 75.21 340 P P 11 08 38.9 0.0
baz=76
**V36A Jenks** 75.24 341 P P 11 08 39.0 0.0
baz=76,SNR=10
**X31A McDonald Ranch** 75.29 338 P P 11 08 39.6 +0.2
baz=76,SNR=8.2
**TUL1 Tulsa** 75.31 341 P P 11 08 39.5 0.0
baz=76,SNR=8.1
**TUL1 Tulsa** 75.31 341 eP P 11 08 38.4 -1.1
comp=Z,19nm,0.9s
**W33A Caddo, Fort Co** 75.33 339 P P 11 08 39.5 -0.1
baz=76,SNR=10
**Y28A McKinney Farm,** 75.35 336 P P 11 08 39.5 -0.3
baz=76
**X30A Coker Ranch, T** 75.40 337 P P 11 08 40.1 +0.1
baz=76
**V35A Meyer Ranch, C** 75.45 341 P P 11 08 39.8 -0.4
baz=76,SNR=5.9
**W32A Sentinel** 75.53 338 P P 11 08 41.0 +0.2
baz=76,SNR=14
**USIN University of** 75.60 348 eP P 11 08 40.1 -0.9
**U37A Salina** 75.61 342 P P 11 08 41.5 +0.3
baz=76
**X29A Tulia** 75.66 336 P P 11 08 41.3 -0.3
baz=76
**V34A Guthrie** 75.70 340 P P 11 08 41.7 0.0
baz=76
**U36A Oologah** 75.76 342 P P 11 08 42.0 +0.1
baz=76
**W31A Holland Ranch,** 75.79 338 P P 11 08 42.7 +0.4
baz=76
**X28A Dimmitt** 75.89 336 P P 11 08 42.9 0.0
baz=76
**V33A Lossen Ranch,** 75.90 339 P P 11 08 42.9 +0.1
baz=76,SNR=6.1
**U35A Pawnee** 75.99 341 P P 11 08 43.5 +0.1
baz=76,SNR=7.6
**V32A Arapaho** 76.02 339 P P 11 08 44.0 +0.4
baz=76
**AMTX Amarillo** 76.06 336 P P 11 08 44.0 +0.2
baz=76
**AMTX Amarillo** 76.06 336 eP P 11 08 44.1 +0.3
comp=Z,26nm,1.1s
**121A Cookes Peak, D** 76.12 331 P P 11 08 44.7 +0.3
baz=76
**121A Cookes Peak, D** 76.12 331 eP P 11 08 45.3 +0.9
comp=Z,9.4nm,0.9s
121A epP pP 11 08 53.8 -0.5
**T37A Cheneyville 18** 76.25 342 P P 11 08 45.1 +0.4
baz=76,SNR=8.5
**W29A Amraillo** 76.26 337 P P 11 08 44.7 -0.3
baz=76
**U34A Anderson Ranch** 76.27 340 P P 11 08 45.1 +0.2
baz=77
**CCM Cathedral Cave** 76.33 346 eP P 11 08 44.8 -0.4
**CCM Cathedral Cave** 76.33 346 eP P 11 08 44.8 -0.4
**T36A Boggs Farm, Ca** 76.43 342 P P 11 08 45.8 +0.1
baz=77,SNR=5.0
**U33A Lingo Farm, Me** 76.43 340 P P 11 08 46.4 +0.6
baz=77
**T35A Sooner Cattle** 76.45 341 P P 11 08 46.0 +0.1
baz=77,SNR=7.9
**BLO Bloomington** 76.61 350 eP P 11 08 45.9 -0.9
**BLO Bloomington** 76.61 350 eP P 11 08 45.9 -0.9
**U32A Winter Ranch,** 76.63 339 P P 11 08 47.3 +0.4
baz=77
**T34A McClaskey Farm** 76.73 341 P P 11 08 47.8 +0.3
baz=77,SNR=6.3
**LIC Lamto** 76.78 72 eP P 11 08 48.7 +0.4
comp=Z,36nm,0.9s
**S37A Fort Scott** 76.83 343 P P 11 08 48.2 +0.1
baz=77,SNR=5.4
**V29A Stinnett** 76.92 337 P P 11 08 49.2 +0.6
baz=77
**S36A Lake Cedric, C** 76.98 342 P P 11 08 48.5 -0.4
baz=77,SNR=8.9
**V28A Channing** 77.03 336 P P 11 08 49.7 +0.3
baz=77
**TIC Toumodi** 77.05 71 eP P 11 08 50.4 +0.5
**T33A Patterson Ranc** 77.07 340 P P 11 08 49.7 +0.3
baz=77
**KIC Kosan Boka** 77.08 72 eP P 11 08 50.6 +0.5
comp=Z,72nm,1.0s
**S35A Otter Creek Ra** 77.13 342 P P 11 08 49.4 -0.3
baz=77
**CASY Casey** 77.14 182 eP P 11 08 50.5 +0.9
**TUC Tucson** 77.15 328 eP P 11 08 51.1 +1.0
**TUC Tucson** 77.15 328 eP P 11 08 51.1 +1.0
**Y22D IRIS PASSCAL I** 77.15 332 P P 11 08 51.2 +1.1
baz=77
**DBIC Dimbokro** 77.19 72 P P 11 08 51.3 +0.6
comp=Z,23nm,1.0s,baz=218,slow=5.7,SNR=16
**DBIC Dimbokro** 77.19 72 P P 11 08 51.3 +0.6
DBIC pmax pmax
comp=Z,23nm,1.0s
**ACSO Alum Creek Sta** 77.21 353 eP P 11 08 49.4 -0.8
comp=Z,27nm,0.9s
**V27A Dan Oppiter Fa** 77.23 336 P P 11 08 51.0 +0.5
baz=78
**U30A WK&E Inc. Balk** 77.25 338 P P 11 08 50.7 +0.2
baz=78
**S34A Willow Spring** 77.35 341 P P 11 08 51.7 +0.7
baz=78
**T32A Huddler Ranch,** 77.35 339 P P 11 08 51.5 +0.5
baz=78
**R37A Teagarden Farm** 77.36 343 P P 11 08 50.5 -0.6
baz=78
**S33A Kaszmaul Farm,** 77.48 340 P P 11 08 52.0 +0.3
baz=78
**T31A Randall Ranch,** 77.49 339 P P 11 08 51.7 -0.1
baz=78
**LAZ Ladron** 77.53 332 eP P 11 08 53.0 +0.7
comp=Z,4.6nm,1.1s
**R36A Gordon, Harris** 77.53 342 P P 11 08 51.8 -0.2
baz=78
**U28A Mallet** 77.60 337 P P 11 08 52.4 -0.2
baz=78
**T30A Plains** 77.70 338 P P 11 08 53.3 +0.3
baz=78
**R35A Emporia Munici** 77.70 342 P P 11 08 53.1 +0.1
baz=78
**214A Organ Pipe Nat** 77.72 327 P P 11 08 53.0 -0.3
baz=78
**ANMO Albuquerque** 77.76 333 ⇓iP P 11 08 54.7 +1.1
ANMO pmax pmax
comp=Z,13nm,1.0s
**ANMO Albuquerque** 77.76 333 eP P 11 08 54.2 +0.6
**Q37A Longview Farm,** 77.81 343 P P 11 08 53.5 0.0
baz=78
**U27A Thompson Grove** 77.83 336 P P 11 08 54.1 +0.2
baz=78
**S32A Newby Ranch, P** 77.84 340 P P 11 08 54.6 +0.9
baz=78
**S31A Mullinville** 77.92 339 P P 11 08 54.9 +0.6
baz=78
**R34A Isabella, Hill** 77.95 341 P P 11 08 54.6 +0.3
baz=78,SNR=6.8
**T29A Hugoton** 78.03 338 P P 11 08 55.1 +0.3
baz=78
**R33A Olander Ranch,** 78.15 341 P P 11 08 55.2 -0.2
baz=78
**Q35A Mercer Eighty,** 78.17 342 P P 11 08 55.8 +0.2
baz=78
**S30A Montezuma** 78.22 338 P P 11 08 56.4 +0.5
baz=78
**T28A Walsh** 78.25 337 P P 11 08 56.1 -0.1
baz=78,SNR=13
**T27A Campo** 78.39 336 P P 11 08 57.3 +0.4
baz=79,SNR=5.4
**HDIL Hopedale** 78.40 348 P P 11 08 56.4 -0.3
baz=79
**S29A Ulysses** 78.40 338 P P 11 08 57.6 +0.7
baz=79
**R32A Long Quarter,** 78.45 340 P P 11 08 57.0 -0.1
baz=79,SNR=5.2
**Q34A Chapman** 78.45 342 P P 11 08 57.2 +0.1
baz=79,SNR=7.2
**KSU1 Kansas State U** 78.54 342 P P 11 08 57.5 0.0
baz=79
**KSU1 Kansas State U** 78.54 342 eP P 11 08 57.2 -0.4
comp=Z,13nm,1.0s
**R31A Burdett** 78.56 339 P P 11 08 58.0 +0.3
baz=79
**S28A Manter** 78.61 337 P P 11 08 58.3 +0.2
baz=79,SNR=9.1
**P36A Good Intent, A** 78.69 343 P P 11 08 57.6 -0.7
baz=79
**Q33A Connelly Farm,** 78.76 341 P P 11 08 58.6 -0.2
baz=79
**R30A Dighton** 78.77 339 P P 11 08 59.2 +0.3
baz=79
**T26A Comanche Natio** 78.77 336 P P 11 08 58.7 -0.4
baz=79,SNR=7.6
**P35A Duane Minner,** 78.80 342 P P 11 08 58.7 -0.3
baz=79
**Q32A Meitler Ranch,** 78.94 340 P P 11 09 00.1 +0.3
baz=79
**T25A Trinidad** 79.01 335 P P 11 09 00.9 +0.5
baz=79,SNR=17
**P34A Walnut Farm, R** 79.02 342 P P 11 09 00.1 -0.1
baz=79,SNR=5.3
**CBKS Cedar Bluff** 79.11 339 P P 11 09 01.3 +0.6
baz=79
**O36A Bolckow** 79.12 343 P P 11 09 00.3 -0.4
baz=79,SNR=5.6
**S26A Kim** 79.14 336 P P 11 09 01.1 0.0
baz=79,SNR=13
**R29A Marienthal** 79.15 338 P P 11 09 01.1 +0.1
baz=79
**W18A Petrified Fore** 79.16 330 P P 11 09 01.6 +0.3
baz=79
**Q31A Ellis** 79.19 340 P P 11 09 01.4 +0.2
baz=80
**R28A Tribune** 79.28 338 P P 11 09 02.0 +0.3
baz=80,SNR=9.5
**Q30A Quinter** 79.39 339 P P 11 09 02.6 +0.2
baz=80,SNR=6.0
**R27A Eads** 79.53 337 P P 11 09 03.5 +0.3
baz=80,SNR=8.9
**Q29A Oakley** 79.53 338 P P 11 09 03.5 +0.4
baz=80
**P32A Huiting Farm,** 79.55 341 P P 11 09 03.5 +0.4
baz=80
**TSUM Tsumeb** 79.55 106 eP P 11 09 04.4 +0.5
comp=Z,20nm,1.4s
**GLA Glamis** 79.55 326 P P 11 09 04.1 +0.8
baz=80
**O34A Beatrice** 79.58 342 P P 11 09 03.1 -0.2
baz=80
**P31A Stockton** 79.66 340 P P 11 09 03.5 -0.2
baz=80
**O33A Hebron** 79.71 341 P P 11 09 04.3 +0.3
baz=80,SNR=5.6
**BOSA Boshof** 79.77 118 P P 11 09 05.2 +0.3
comp=Z,14nm,1.0s,baz=159,slow=4.5,SNR=11
**BOSA Boshof** 79.77 118 P P 11 09 05.2 +0.3
BOSA pmax pmax
comp=Z,14nm,1.0s
**SWSC Sam W. Stewart** 79.90 325 P P 11 09 05.1 0.0
baz=80
**P30A Selden** 79.93 339 P P 11 09 05.5 +0.3
baz=80
**SDCO Great Sand Dun** 79.93 335 P P 11 09 05.4 -0.1
baz=80,SNR=9.8
**SDCO Great Sand Dun** 79.93 335 eP P 11 09 05.7 +0.1
comp=Z,7.0nm,1.1s
**Q28A Sharon Springs** 79.95 338 P P 11 09 05.6 +0.3
baz=80
**N35A Tabor** 79.98 343 P P 11 09 05.1 -0.2
baz=80,SNR=6.0
**Y12C Blythe** 80.00 326 P P 11 09 06.1 +0.4
baz=80
**O32A Brockman Farm,** 80.06 341 P P 11 09 06.4 +0.5
baz=80
**KSCO Kaye Shedlock'** 80.14 337 P P 11 09 07.1 +0.6
baz=80
**N34A Lincoln** 80.16 342 P P 11 09 06.3 -0.1
baz=80
**WUAZ Wupatki** 80.17 329 P P 11 09 07.2 +0.4
baz=80
**WUAZ Wupatki** 80.17 329 eP P 11 09 08.1 +1.4
**P29A Atwood** 80.18 339 P P 11 09 07.2 +0.6
baz=80,SNR=8.1
**O31A Woolen Ranch,** 80.24 340 P P 11 09 07.3 +0.5
baz=80
**N33A J Bar K, Exete** 80.30 342 P P 11 09 07.4 +0.3
baz=81
**S22A 4UR Ranch, Cre** 80.39 334 P P 11 09 09.0 +1.0
baz=81,SNR=8.3
**P28A Saint Francis** 80.39 338 P P 11 09 08.6 +0.9
baz=81,SNR=5.5
**SCIA State Center** 80.44 345 eP P 11 09 08.2 +0.4
**O30A MW Ranch, Wils** 80.47 340 P P 11 09 09.1 +1.1
baz=81,SNR=5.8
**MVCO Mesa Verde** 80.52 332 P P 11 09 09.1 +0.5
baz=81
**MVCO Mesa Verde** 80.52 332 eP P 11 09 09.2 +0.5
**N32A Stulken Farm,** 80.54 341 P P 11 09 09.4 +1.0
baz=81
**O29A 4D Ranch, Culb** 80.62 339 P P 11 09 10.0 +1.0
baz=81
**PFO Pinyon Flat Ob** 80.76 325 P P 11 09 10.1 +0.1
comp=Z,5.5nm,0.9s,baz=61,slow=3.6,SNR=6.9
**PFO Pinyon Flat Ob** 80.76 325 P P 11 09 10.1 +0.1
PFO pmax pmax
comp=Z,6.0nm,0.9s
**JFWS Jewell Farm** 80.86 348 eP P 11 09 09.6 -0.4
**JFWS Jewell Farm** 80.86 348 eP P 11 09 09.6 -0.4
**Q24A Divide** 80.91 336 P P 11 09 11.2 +0.4
baz=81
**O28A Krutsinger Ran** 80.91 338 P P 11 09 11.3 +0.8
baz=81,SNR=6.5
**K38A Parkersburg** 81.07 346 P P 11 09 11.0 -0.2
baz=81
**BGNE Belgrade** 81.11 341 P P 11 09 11.1 -0.3
baz=81
**BGNE Belgrade** 81.11 341 eP P 11 09 11.6 +0.2
**L35A Bielow Farm, R** 81.14 344 P P 11 09 11.2 -0.4
baz=81,SNR=6.7
**L34A Svendsen Farm,** 81.20 343 P P 11 09 11.8 -0.1
baz=82
**N29A Votaw Ranch, W** 81.22 339 P P 11 09 12.6 +0.5
baz=82
**M31A Lambtecht Ranc** 81.26 341 P P 11 09 12.7 +0.4
baz=82
**N28A Pribbeno Ranch** 81.36 339 P P 11 09 13.5 +0.6
baz=82
**GMRC Granite Mounta** 81.38 326 P P 11 09 14.0 +0.9
baz=82
**K36A Gilmore City** 81.40 344 P P 11 09 13.8 +0.9
baz=82
**BBRC Big Bear Solar** 81.52 325 P P 11 09 14.2 +0.1
baz=82
**L32A Elgin** 81.63 342 P P 11 09 14.8 +0.6
baz=82
**K35A Storm Lake** 81.65 344 P P 11 09 15.1 +0.8
baz=82
**M30A Dale-Ortello V** 81.68 340 P P 11 09 15.4 +0.9
baz=82
**HEC Hector,Ludlow** 81.72 326 P P 11 09 15.7 +0.8
baz=82
**SMCO Snowmass** 81.72 334 eP P 11 09 15.2 0.0
comp=Z,19nm,1.1s
**OGNE Ogallala** 81.74 339 P P 11 09 15.4 +0.5
baz=82
**K34A Le Mars** 81.81 343 P P 11 09 15.2 +0.1
baz=82
**ISCO Idaho Springs** 81.82 336 eP P 11 09 16.3 +0.7
**ISCO Idaho Springs** 81.82 336 P P 11 09 16.1 +0.5
baz=82,SNR=5.9
**ISCO Idaho Springs** 81.82 336 eP P 11 09 16.3 +0.7
**M29A Burnside Ranch** 81.82 340 P P 11 09 15.0 -0.3
baz=82
**BFSC Mount Baldy Ra** 81.84 324 P P 11 09 15.7 +0.1
baz=82
**J37A Redenius Farm,** 81.86 345 P P 11 09 15.2 -0.1
baz=82
**M28A Bar X Bar Ranc** 81.96 339 P P 11 09 16.8 +0.7
baz=82
**L31A Butterfield Fa** 82.00 341 P P 11 09 16.6 +0.4
baz=82,SNR=11
**L30A Spencer Herefo** 82.02 341 P P 11 09 16.7 +0.4
baz=82
**J36A Seneca 1, Swea** 82.04 345 P P 11 09 16.4 +0.1
baz=82,SNR=5.5
**K32A Verdigre** 82.24 342 P P 11 09 17.9 +0.6
baz=82
**I38A Scanlan Farm,** 82.32 346 P P 11 09 17.8 0.0
baz=83,SNR=9.1
**J34A George** 82.35 344 P P 11 09 18.1 +0.2
baz=83,SNR=6.7
**K31A O'Neill** 82.40 341 P P 11 09 18.4 +0.2
baz=83,SNR=22
**I37A Lemond, Waseca** 82.51 346 P P 11 09 18.9 +0.2
baz=83,SNR=5.7
**SHPR Sheep Range** 82.60 327 eP P 11 09 20.6 +1.0
**J33A Davis** 82.62 343 P P 11 09 19.9 +0.6
baz=83,SNR=6.3
**I36A Fitzsimmons Fa** 82.63 345 P P 11 09 19.7 +0.3
baz=83
**K30A Basset** 82.67 341 P P 11 09 20.7 +1.1
baz=83
**I35A Creekview Farm** 82.68 344 P P 11 09 19.6 0.0
baz=83
**J32A Parkston** 82.88 342 P P 11 09 21.1 +0.5
baz=83,SNR=6.0
**N23A Red Feather La** 82.91 336 P P 11 09 21.6 +0.3
baz=83,SNR=7.2
**ECSD EROS Data Cent** 82.93 343 P P 11 09 20.7 -0.2
baz=83,SNR=22
**ECSD EROS Data Cent** 82.93 343 eP P 11 09 20.6 -0.3
**K29A Lazy Trails An** 82.94 340 P P 11 09 21.4 +0.3
baz=83
**SRU San Rafael** 82.95 332 eP P 11 09 21.7 +0.3
**SRU San Rafael** 82.95 332 eP P 11 09 21.7 +0.3
**H37A Dierke Farm, C** 82.96 346 P P 11 09 21.6 +0.5
baz=83
**O20A White River Ci** 83.02 334 P P 11 09 21.9 +0.2
baz=83
**O20A White River Ci** 83.02 334 eP P 11 09 22.4 +0.6
**J31A Geddes** 83.02 342 P P 11 09 21.4 -0.1
baz=83,SNR=7.3
**I34A Hadley** 83.05 344 P P 11 09 21.9 +0.4
baz=83
**MSU Marysvale** 83.07 330 eP P 11 09 22.6 +0.5
MSU e*PP pP 11 09 31.7 -0.4
MSU pmax pmax
comp=Z,7.0nm,1.2s
**MSU Marysvale** 83.07 330 eP P 11 09 22.6 +0.5
comp=Z,6.8nm,1.2s
MSU epP pP 11 09 31.7 -0.4
**PHWY Pilot Hill** 83.12 336 eP P 11 09 22.5 +0.2
comp=Z,15nm,1.2s
**H36A Jessenland, He** 83.15 345 P P 11 09 22.4 +0.4
baz=83
**K28A Ten Mile Ranch** 83.18 340 P P 11 09 22.9 +0.6
baz=84,SNR=6.5
**J30A Dallas** 83.25 341 P P 11 09 22.8 +0.2
baz=84
**MPMC Manual Prospec** 83.27 325 P P 11 09 23.0 -0.1
baz=84
**I33A Coleman** 83.27 343 P P 11 09 23.1 +0.4
baz=84,SNR=6.2
**P18A Preston Nutter** 83.30 332 eP P 11 09 24.3 +1.0
**P17A Butcher Ranch,** 83.35 332 eP P 11 09 24.2 +0.7
**ISA Isabella** 83.39 325 eP P 11 09 25.2 +1.6
**ISA Isabella** 83.39 325 eP P 11 09 25.2 +1.6
**I32A Karley and Nic** 83.40 343 P P 11 09 23.6 +0.2
baz=84
**H35A Sunnyside Ranc** 83.45 345 P P 11 09 23.6 0.0
baz=84,SNR=7.5
**J29A Okreek** 83.54 341 P P 11 09 24.6 +0.5
baz=84,SNR=16
**SPMN St. Paul** 83.56 346 P P 11 09 24.2 +0.1
baz=84
**H34A Spellman Lake,** 83.63 344 P P 11 09 25.0 +0.5
baz=84
**I31A Royce, Wessing** 83.67 342 P P 11 09 24.9 +0.1
baz=84
**G36A St. Michael** 83.75 346 P P 11 09 25.3 +0.2
baz=84
**I30A Oacoma** 83.78 341 P P 11 09 25.3 0.0
baz=84,SNR=5.6
**J28A Allard Ranch,** 83.80 340 P P 11 09 26.2 +0.7
baz=84,SNR=5.5
**VES Vestal, Richgr** 83.82 324 P P 11 09 26.4 +0.7
baz=84
**SMMC Simmler** 83.83 323 P P 11 09 27.1 +1.3
baz=84
**H33A Prehn Over Nor** 83.86 344 P P 11 09 26.3 +0.6
baz=84
**J27A Elkhorn Farm,** 83.86 339 P P 11 09 26.9 +1.0
baz=84,SNR=8.3
**H31A Wolsey** 84.07 342 P P 11 09 26.8 0.0
baz=84
**I29A Vivian Onida** 84.11 341 P P 11 09 27.0 0.0
baz=84
**G34A Benson** 84.14 344 P P 11 09 26.8 -0.3
baz=84
**SUSD South Dakota S** 84.16 342 P P 11 09 27.1 -0.1
baz=84
**J26A Sides Ranch, S** 84.22 339 P P 11 09 28.1 +0.4
baz=84,SNR=8.6
**O16A Springville** 84.28 332 eP P 11 09 22.9 -5.3
**NLU North Lily Min** 84.28 331 eP P 11 09 29.3 +1.1
**F36A Milaca** 84.31 346 P P 11 09 28.1 +0.2
baz=85,SNR=6.1
**I28A Midland** 84.32 340 P P 11 09 28.3 +0.2
baz=85,SNR=10.0
**F35A Swanville** 84.51 345 P P 11 09 29.3 +0.3
baz=85
**G32A Webster** 84.57 343 P P 11 09 29.5 +0.2
baz=85
**F34A Alexandria** 84.59 345 P P 11 09 29.1 -0.2
baz=85
**I27A Quinn** 84.62 340 P P 11 09 29.6 -0.1
baz=85
**H29A Onida** 84.65 341 P P 11 09 29.6 -0.1
baz=85,SNR=5.4
**K22A Casper** 84.68 336 P P 11 09 30.3 +0.1
baz=85,SNR=7.8
**K22A Casper** 84.68 336 eP P 11 09 30.1 0.0
comp=Z,20nm,1.1s
**DUG Dugway** 84.77 331 eP P 11 09 31.6 +1.0
**DUG Dugway** 84.77 331 P P 11 09 30.6 0.0
baz=85
**DUG Dugway** 84.77 331 eP P 11 09 31.6 +1.0
**I26A New Underwood** 84.82 339 P P 11 09 30.3 -0.4
baz=85
**G30A Faulkton** 84.85 342 P P 11 09 30.4 -0.3
baz=85
**F33A 5 Mile Ranch,** 84.86 344 P P 11 09 30.4 -0.3
baz=85
**E36A McGregor** 84.89 346 P P 11 09 30.5 -0.4
baz=85
**H28A Mission Ridge** 84.91 341 P P 11 09 31.1 +0.1
baz=85
**I25A Rochford** 85.06 339 P P 11 09 32.1 +0.1
baz=85,SNR=11
**G29A Hoven** 85.10 342 P P 11 09 31.6 -0.4
baz=85
**H27A Howes** 85.15 340 P P 11 09 32.0 -0.2
baz=85,SNR=7.0
**RSSD Black Hills** 85.24 338 eP P 11 09 32.6 -0.4
RSSD pmax pmax
comp=Z,12nm,1.0s
**RSSD Black Hills** 85.24 338 eP P 11 09 32.5 -0.4
comp=Z,12nm,1.0s
**G28A Parade** 85.25 341 P P 11 09 32.8 +0.1
baz=86,SNR=6.0
**F31A Hecla** 85.32 343 P P 11 09 33.2 +0.1
baz=86
**H26A Fairpoint** 85.33 339 P P 11 09 33.4 +0.2
baz=86
**D37A Cotton** 85.35 347 P P 11 09 34.8 +1.7
baz=86
**F30A Leola** 85.48 342 P P 11 09 33.5 -0.4
baz=86
**HWUT Hardware Ranch** 85.52 332 eP P 11 09 34.7 +0.4
**H25A Fruitdale** 85.57 339 P P 11 09 34.6 +0.2
baz=86,SNR=7.6
**D35A Remer** 85.58 346 P P 11 09 34.4 +0.1
baz=86,SNR=5.2
**NVAR Mina Array Bea** 85.59 326 P P 11 09 35.5 +0.6
comp=Z,1.7nm,0.9s,baz=160,slow=6.2,SNR=13

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| NVAR | | | | | LR | LR | 11 41 52.8 | | | |
| | comp=Z,76nm,18.8s,baz=120,slow=32 | | | | | | | | | |
| **SPUT** | **South Promonto** | **85.59** | **332** | *e*P | **P** | | **11 09 34.5** | **-0.2** | | |
| | comp=Z,14nm,1.2s | | | | | | | | | |
| **F29A** | **Eureka** | **85.68** | **342** | P | **P** | | **11 09 35.1** | **+0.2** | | |
| | baz=86 | | | | | | | | | |
| **C38A** | **Sawbill Land.** | **85.69** | **348** | P | **P** | | **11 09 35.5** | **+0.6** | | |
| | baz=86 | | | | | | | | | |
| **G27A** | **Dupree** | **85.80** | **340** | P | **P** | | **11 09 35.8** | **+0.3** | | |
| | baz=86,SNR=7.7 | | | | | | | | | |
| **BW06** | **Boulder Array** | **85.80** | **334** | *e*P | **P** | | **11 09 35.7** | **-0.1** | | |
| **E31A** | **Nome** | **85.89** | **343** | P | **P** | | **11 09 36.3** | **+0.5** | | |
| | baz=86 | | | | | | | | | |
| **EYMN** | **Ely** | **85.95** | **348** | P | **P** | | **11 09 37.0** | **+0.9** | | |
| | baz=86 | | | | | | | | | |
| **D33A** | **AnnSam, Waubun** | **86.00** | **345** | P | **P** | | **11 09 36.3** | **0.0** | | |
| | baz=86 | | | | | | | | | |
| **G25A** | **Newell** | **86.04** | **339** | P | **P** | | **11 09 36.5** | **-0.2** | | |
| | baz=86,SNR=14 | | | | | | | | | |
| **E30A** | **Jud** | **86.08** | **343** | P | **P** | | **11 09 36.9** | **+0.1** | | |
| | baz=86 | | | | | | | | | |
| **C35A** | **Jirik Farms, M** | **86.16** | **346** | P | **P** | | **11 09 37.4** | **+0.3** | | |
| | baz=86 | | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **86.27** | **71** | *e*P | **P** | | **11 09 37.3** | **-1.2** | | |
| **TORD** | **Torodi Ar. Bea** | **86.27** | **71** | P | **P** | | **11 09 38.2** | **-0.2** | | |
| | comp=Z,7.9nm,1.0s,baz=224,slow=2.8,SNR=33 | | | | | | | | | |
| **F27A** | **Lemmon** | **86.28** | **340** | P | **P** | | **11 09 38.1** | **+0.3** | | |
| | baz=87,SNR=17 | | | | | | | | | |
| **D31A** | **Mcclaflin, Tow** | **86.32** | **344** | P | **P** | | **11 09 38.4** | **+0.5** | | |
| | baz=87 | | | | | | | | | |
| **E29A** | **Napoleon** | **86.32** | **342** | P | **P** | | **11 09 38.2** | **+0.2** | | |
| | baz=87 | | | | | | | | | |
| **F26A** | **Lodgepole** | **86.44** | **340** | P | **P** | | **11 09 38.5** | **-0.2** | | |
| | baz=87,SNR=7.9 | | | | | | | | | |
| **E28A** | **Huff** | **86.58** | **342** | P | **P** | | **11 09 40.5** | **+1.2** | | |
| | baz=87,SNR=5.9 | | | | | | | | | |
| **D30A** | **Buchanan** | **86.61** | **343** | P | **P** | | **11 09 40.6** | **+1.2** | | |
| | baz=87 | | | | | | | | | |
| **E27A** | **Carson** | **86.67** | **341** | P | **P** | | **11 09 40.6** | **+0.9** | | |
| | baz=87 | | | | | | | | | |
| **F25A** | **Bowman** | **86.72** | **340** | P | **P** | | **11 09 41.0** | **+0.9** | | |
| | baz=87,SNR=6.3 | | | | | | | | | |
| **B35A** | **Bob, Littlefor** | **86.75** | **347** | P | **P** | | **11 09 41.5** | **+1.5** | | |
| | baz=87 | | | | | | | | | |
| **D29A** | **Pettibone, Tap** | **86.77** | **342** | P | **P** | | **11 09 40.9** | **+0.7** | | |
| | baz=87 | | | | | | | | | |
| **REDW** | **Red Top Meadow** | **86.78** | **334** | *e*P | **P** | | **11 09 40.3** | **-0.3** | | |
| | comp=Z,7.1nm,1.1s | | | | | | | | | |
| **SNOW** | **Snow King Moun** | **86.83** | **334** | *e*P | **P** | | **11 09 41.0** | **+0.1** | | |
| | comp=Z,5.5nm,1.0s | | | | | | | | | |
| **LOHW** | **Long Hollow** | **86.91** | **334** | *e*P | **P** | | **11 09 41.0** | **-0.2** | | |
| | comp=Z,4.3nm,1.0s | | | | | | | | | |
| **TPAW** | **Teton Pass** | **86.93** | **334** | *e*P | **P** | | **11 09 41.7** | **+0.3** | | |
| **E26A** | **Carlson Angus** | **86.95** | **340** | P | **P** | | **11 09 41.3** | **+0.2** | | |
| | baz=87,SNR=10 | | | | | | | | | |
| **C31A** | **Landman Farms,** | **87.02** | **344** | P | **P** | | **11 09 41.7** | **+0.3** | | |
| | baz=87 | | | | | | | | | |
| **MATP** | **Matopo** | **87.06** | **113** | P | **P** | | **11 09 43.1** | **+0.5** | | |
| | comp=Z,1.9nm,0.8s,baz=200,slow=8.4,SNR=3.7 | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **87.10** | **345** | *e*P | **P** | | **11 09 41.6** | **-0.1** | | |
| **C30A** | **Mose, Pekin** | **87.11** | **343** | P | **P** | | **11 09 42.4** | **+0.6** | | |
| | baz=87 | | | | | | | | | |
| **D28A** | **Regan** | **87.13** | **342** | P | **P** | | **11 09 42.4** | **+0.5** | | |
| | baz=87 | | | | | | | | | |
| **E25A** | **Miller Ranch,** | **87.23** | **340** | P | **P** | | **11 09 42.8** | **+0.3** | | |
| | baz=88,SNR=8.8 | | | | | | | | | |
| **IMW** | **Indian Meadow** | **87.28** | **334** | *e*P | **P** | | **11 09 43.3** | **+0.2** | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| **D27A** | **Center** | **87.29** | **341** | P | **P** | | **11 09 43.2** | **+0.5** | | |
| | baz=88 | | | | | | | | | |
| **B32A** | **Ashes, Strandq** | **87.33** | **345** | P | **P** | | **11 09 43.5** | **+0.7** | | |
| | baz=88,SNR=10 | | | | | | | | | |
| **FLWY** | **Flagg Ranch** | **87.36** | **334** | *e*P | **P** | | **11 09 43.8** | **+0.4** | | |
| | comp=Z,7.9nm,1.0s | | | | | | | | | |
| **D26A** | **Manning** | **87.46** | **341** | P | **P** | | **11 09 43.7** | **+0.2** | | |
| | baz=88,SNR=8.3 | | | | | | | | | |
| **MDND** | **Maddock** | **87.50** | **343** | P | **P** | | **11 09 44.0** | **+0.3** | | |
| | baz=88 | | | | | | | | | |
| **MDND** | **Maddock** | **87.50** | **343** | *e*P | **P** | | **11 09 43.6** | **-0.1** | | |
| | comp=Z,38nm,1.1s | | | | | | | | | |
| **C28A** | **Hausauer Farms** | **87.57** | **342** | P | **P** | | **11 09 44.3** | **+0.3** | | |
| | baz=88 | | | | | | | | | |
| **A33A** | **Warroad** | **87.62** | **346** | P | **P** | | **11 09 44.6** | **+0.4** | | |
| | baz=88,SNR=5.1 | | | | | | | | | |
| **B30A** | **Myrvik Farm, E** | **87.78** | **344** | P | **P** | | **11 09 45.2** | **+0.2** | | |
| | baz=88,SNR=7.4 | | | | | | | | | |
| **C27A** | **Sayler Ranch,** | **87.85** | **341** | P | **P** | | **11 09 46.0** | **+0.6** | | |
| | baz=88 | | | | | | | | | |
| **YMR** | **Madison River** | **87.96** | **334** | *e*P | **P** | | **11 09 46.9** | **+0.6** | | |
| | comp=Z,14nm,1.2s | | | | | | | | | |
| YMR | | | | *e*pP | **pP** | | **11 09 57.0** | **+0.6** | | |
| **B29A** | **Wagenman Farm,** | **88.02** | **343** | P | **P** | | **11 09 46.4** | **+0.2** | | |
| | baz=88 | | | | | | | | | |
| **C26A** | **Wahner Farm, P** | **88.11** | **341** | P | **P** | | **11 09 47.6** | **+1.0** | | |
| | baz=88 | | | | | | | | | |
| **A30A** | **Hoffart Farm,** | **88.23** | **344** | P | **P** | | **11 09 48.4** | **+1.2** | | |
| | baz=88 | | | | | | | | | |
| **HLID** | **Hailey** | **88.27** | **332** | *e*P | **P** | | **11 09 48.8** | **+1.1** | | |
| **C25A** | **Freed Ranch, W** | **88.31** | **340** | P | **P** | | **11 09 48.1** | **+0.5** | | |
| | baz=89 | | | | | | | | | |
| **A29A** | **Manning Farm,** | **88.43** | **343** | P | **P** | | **11 09 47.8** | **-0.3** | | |
| | baz=89,SNR=8.3 | | | | | | | | | |
| **B27A** | **Peters Farms,** | **88.43** | **342** | P | **P** | | **11 09 48.8** | **+0.7** | | |
| | baz=89 | | | | | | | | | |
| **B26A** | **Jensen Ranch,** | **88.65** | **341** | P | **P** | | **11 09 49.9** | **+0.7** | | |
| | baz=89 | | | | | | | | | |
| **A28A** | **Rude Farm, Bot** | **88.66** | **343** | P | **P** | | **11 09 49.8** | **+0.6** | | |
| | baz=89 | | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **88.77** | **333** | *e*P | **P** | | **11 09 50.6** | **+0.5** | | |
| | comp=Z,3.6nm,1.2s | | | | | | | | | |
| MCMT | | | | *e*pP | **pP** | | **11 09 59.6** | **-0.6** | | |
| **A27A** | **Ledoux Ranch,** | **88.93** | **342** | P | **P** | | **11 09 51.1** | **+0.6** | | |
| | baz=89 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **88.97** | **346** | P | **P** | | **11 09 50.0** | **-0.6** | | |
| | comp=Z,3.5nm,0.8s,baz=165,slow=5.3,SNR=3.9 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **88.97** | **346** | P | **P** | | **11 09 50.0** | **-0.6** | | |
| ULM | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | | |
| **DGMT** | **Dagmar** | **89.25** | **340** | P | **P** | | **11 09 52.6** | **+0.5** | | |
| | baz=90 | | | | | | | | | |
| **LSZ** | **Lusaka** | **90.00** | **109** | P | **P** | | **11 09 58.3** | **+1.8** | | |
| | comp=Z,5.4nm,0.9s,baz=18,slow=13,SNR=8.2 | | | | | | | | | |
| **LSZ** | **Lusaka** | **90.00** | **109** | P | **P** | | **11 09 58.3** | **+1.8** | | |
| LSZ | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | | |
| **MSO** | **Missoula** | **90.88** | **334** | P | **P** | | **11 10 01.0** | **+1.2** | | |
| | baz=91 | | | | | | | | | |
| **MDT** | **Midelt** | **94.50** | **52** | P | **P** | | **11 10 16.9** | **0.0** | | |
| | comp=Z,2.7nm,0.7s,baz=226,slow=6.7,SNR=5.3 | | | | | | | | | |
| **TAM** | **Tamanrasset** | **95.09** | **65** | *e*P | **P** | | **11 10 21.0** | **+1.2** | | |
| TAM | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | | |
| **TAM** | **Tamanrasset** | **95.09** | **65** | *e*P | **P** | | **11 10 21.0** | **+1.2** | | |
| | comp=Z,4.2nm,0.9s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **98.62** | **234** | *e*LR | LR | | 11 42 58.7 | | | |
| | comp=Z,231nm,24.8s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **114.50** | **208** | PKP | PKPdf | | 11 15 35.9 | -1.0 | | |
| | comp=Z,0.3nm,0.9s,baz=217,slow=43,SNR=3.5 | | | | | | | | | |
| **GERES** | **GERESS Array B** | **114.97** | **47** | PKP | PKPdf | | 11 15 36.4 | -0.5 | | |
| | comp=Z,1.5nm,0.8s,baz=207,slow=2.7,SNR=7.9 | | | | | | | | | |
| **GERES** | **GERESS Array B** | **114.97** | **47** | PKIKP | PKPdf | | 11 15 36.4 | -0.5 | | |
| GERES | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | | |
| **ILAR** | **Eielson Array** | **116.20** | **333** | PKP | **PKPdf** | | **11 15 38.0** | **-0.6** | | |
| | comp=Z,0.7nm,1.0s,baz=197,slow=1.7,SNR=5.8 | | | | | | | | | |
| **ILAR** | **Eielson Array** | **116.20** | **333** | PKIKP | **PKPdf** | | **11 15 38.0** | **-0.6** | | |
| ILAR | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **117.70** | **210** | PKP | **PKPdf** | | **11 15 41.9** | **-1.1** | | |
| | comp=Z,0.3nm,0.5s,baz=161,slow=1.8,SNR=7.7 | | | | | | | | | |
| **VYHS** | **Vyhne** | **117.86** | **49** | *i* PKIKP | **PKPdf** | | **11 15 42.4** | **+0.1** | | |
| **VYHS** | **Vyhne** | **117.86** | **49** | *e*PKP | **PKPdf** | | **11 15 42.4** | **+0.1** | | |
| **ARR** | **Arges** | **120.22** | **54** | ⇑*i*P | PKPdf | | 11 15 53.8 | +6.7 | | |
| **VOIR** | | **120.51** | **54** | ⇑PKIKP | **PKPdf** | | **11 15 51.9** | **+4.3** | | |
| **VOIR** | | **120.51** | **54** | ⇑*i*P | **PKPdf** | | **11 15 51.9** | **+4.3** | | |
| **MLR** | **Muntele Rosu** | **121.11** | **54** | ⇓PKIKP | **PKPdf** | | **11 15 44.7** | **-4.2** | | |
| **MLR** | **Muntele Rosu** | **121.11** | **54** | ⇓*i*P | **PKPdf** | | **11 15 44.7** | **-4.2** | | |
| **PLOR** | **Plostina** | **121.71** | **54** | ⇓PKIKP | PKPdf | | 11 15 40.5 | -9.4 | | |
| **PLOR** | **Plostina** | **121.71** | **54** | ⇓*i*P | PKPdf | | 11 15 40.5 | -9.4 | | |
| **AKASG** | **Malin Array Be** | **124.96** | **49** | PKP | **PKPdf** | | **11 15 54.9** | **-1.0** | | |
| | comp=Z,0.7nm,0.4s,baz=267,slow=2.1,SNR=6.6 | | | | | | | | | |
| **AKASG** | **Malin Array Be** | **124.96** | **49** | PKIKP | **PKPdf** | | **11 15 54.9** | **-1.0** | | |
| AKASG | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.09** | **26** | PKP | **PKPdf** | | **11 15 58.1** | **-1.3** | | |
| | comp=Z,4.4nm,0.9s,baz=308,slow=5.9,SNR=3.5 | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.09** | **26** | PKIKP | **PKPdf** | | **11 15 58.1** | **-1.3** | | |
| ARCES | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | | |
| **OBN** | **Obninsk** | **130.29** | **45** | ⇑*i*PKIKP | **PKPdf** | | **11 16 06.5** | **+0.6** | | |
| OBN | | | | *e* | | | 11 18 19.4 | | | |
| OBN | | | | *e*PPP | PPP | | 11 21 09.7 | | | |
| OBN | | | | pmax | pmax | | | | | |
| | comp=Z,43nm,2.1s | | | | | | | | | |
| OBN | | | | MLR | MLR | | | | | |
| | comp=Z,117nm,18.0s | | | | | | | | | |
| **KLMR** | **Klimovskoe** | **132.38** | **38** | *e*PKIKP | **PKPdf** | | **11 16 07.8** | **-1.9** | | |
| KLMR | | | | pmax | pmax | | | | | |
| | comp=Z,34nm,1.6s | | | | | | | | | |
| **BILL** | **Bilibino** | **134.87** | **333** | *e*PKIKP | **PKPdf** | | **11 16 16.2** | **+2.0** | | |
| BILL | | | | *e* | | | 11 18 51.6 | | | |
| BILL | | | | pmax | pmax | | | | | |
| | comp=Z,12nm,1.6s | | | | | | | | | |
| BILL | | | | MLR | MLR | | | | | |
| | comp=Z,134nm,15.0s | | | | | | | | | |
| **PALK** | **Pallekele** | **142.30** | **135** | *i* PKIKP | **PKPdf** | | **11 16 31.9** | **+2.4** | | |
| **ARU** | **Arti** | **142.65** | **43** | PKIKP | **PKPdf** | | **11 16 25.1** | **-3.6** | | |
| **AB31** | **Akbulak array** | **144.32** | **55** | *i* PKIKP | **PKPab** | | **11 16 29.7** | **-0.3** | | |
| AB31 | | | | pmax | pmax | | | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | | | |
| **ABKAR** | **Akbulak array** | **144.32** | **55** | *e*PKPdf | PKPbc | | 11 16 30.3 | 0.0 | | |
| **KSM** | **Kuching** | **144.62** | **187** | *e*PKPdf | **PKPab** | | **11 16 32.0** | **-0.1** | | |
| **SKHT** | **Srikalahasti** | **146.77** | **127** | *e*PKPab | **PKPab** | | **11 16 39.6** | **-0.5** | | |
| **KLRI** | **Killari** | **147.70** | **117** | *e*PKPbc | **PKPbc** | | **11 16 40.9** | **-0.6** | | |
| **SRLM** | **Srisailam** | **147.95** | **123** | *e*PKPbc | **PKPbc** | | **11 16 42.1** | **-0.1** | | |
| SRLM | | | | *e*PKPbc | **PKiKP** | | **11 16 42.4** | **-1.7** | | |
| **ADKI** | **Addanki** | **148.49** | **125** | *e*PKiKP | **PKiKP** | | **11 16 44.6** | **-0.5** | | |
| **HYB** | **Hyderabad** | **148.64** | **121** | *i* PKP | **PKPbc** | | **11 16 43.0** | **-0.9** | | |
| **HYBB** | **Hyderabad (bro** | **148.64** | **121** | *e*PKiKP | **PKPbc** | | **11 16 44.3** | **+0.4** | | |
| **ZRNK** | **Zerenda** | **149.36** | **46** | PKIKP | **PKPdf** | | **11 16 40.4** | **+0.1** | | |
| ZRNK | | | | pmax | pmax | | | | | |
| | comp=Z,30nm,1.1s | | | | | | | | | |
| **SRSP** | **Sriramsagar** | **149.51** | **118** | *e*PKPbc | **PKPbc** | | **11 16 46.0** | **-0.1** | | |
| **CHKZ** | **Chkalovo** | **150.05** | **44** | PKP2 | **PKPbc** | | **11 16 46.1** | **-0.2** | | |
| CHKZ | | | | pmax | pmax | | | | | |
| | comp=Z,43nm,1.1s | | | | | | | | | |
| **BRVK** | **Borovoye** | **150.06** | **46** | *e*PKPdf | **PKPdf** | | **11 16 41.9** | **+0.6** | | |
| BRVK | | | | *e*PKPbc | **PKPbc** | | **11 16 46.7** | **+0.4** | | |
| BRVK | | | | *e*PKPab | **PKPab** | | **11 16 51.9** | **-0.4** | | |
| **RPR** | **Rampur** | **150.13** | **119** | *e*PKPbc | **PKPbc** | | **11 16 47.5** | **0.0** | | |
| **BVA0** | **Borovoye Array** | **150.13** | **46** | *i* PKP2 | **PKPbc** | | **11 16 46.8** | **+0.2** | | |
| BVA0 | | | | pmax | pmax | | | | | |
| | comp=Z,25nm,1.2s | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **150.13** | **46** | PKPbc | **PKPbc** | | **11 16 47.0** | **+0.4** | | |
| | comp=Z,14nm,0.9s,baz=290,slow=4.4,SNR=40 | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **150.13** | **46** | PKP2 | **PKPbc** | | **11 16 47.0** | **+0.4** | | |
| BVAR | | | | pmax | pmax | | | | | |
| | comp=Z,14nm,0.9s | | | | | | | | | |
| **VOSK** | **Vostochnaya** | **150.57** | **46** | PKIKP | **PKPbc** | | **11 16 47.5** | **-0.1** | | |
| VOSK | | | | pmax | pmax | | | | | |
| | comp=Z,29nm,0.9s | | | | | | | | | |
| **PVM** | **Polavaram** | **150.59** | **125** | *e*PKPbc | **PKPbc** | | **11 16 48.3** | **-0.4** | | |
| **YAK** | **Yakutsk** | **150.98** | **338** | *e*PKIKP | **PKPbc** | | **11 16 47.4** | **-0.8** | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=N,5.0nm,1.6s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=E,2.0nm,1.1s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=Z,31nm,1.1s | | | | | | | | | |
| **KK31** | **Karatay Array** | **151.85** | **66** | *i* PKIKP | **PKPbc** | | **11 16 50.8** | **-0.1** | | |
| KK31 | | | | pmax | pmax | | | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | | |
| **KKAR** | **Karatay Array** | **151.85** | **66** | *e*PKIKP | **PKPdf** | | **11 16 44.8** | **+0.3** | | |
| KKAR | | | | *e* | | | 11 16 59.8 | | | |
| **KKAR** | **Karatay Array** | **151.85** | **66** | *e*PKPdf | **PKPdf** | | **11 16 44.8** | **+0.3** | | |
| KKAR | | | | *e*PKPbc | **PKiKP** | | **11 16 51.3** | **0.0** | | |
| KKAR | | | | *e*PKPab | **PKPab** | | **11 16 59.8** | **-0.4** | | |
| **AAK** | **Ala-Archa** | **154.79** | **67** | PKP | **PKPdf** | | **11 16 48.9** | **0.0** | | |
| | comp=Z,0.7nm,0.2s,baz=66,slow=2.1,SNR=4.2 | | | | | | | | | |
| AAK | | | | PKPab | **PKPab** | | **11 17 12.9** | **+0.1** | | |
| | comp=Z,13nm,0.9s,baz=225,slow=5.0,SNR=18 | | | | | | | | | |
| **AAK** | **Ala-Archa** | **154.79** | **67** | PKIKP | **PKPdf** | | **11 16 48.9** | **0.0** | | |
| AAK | | | | | | | 11 17 12.9 | | | |
| AAK | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.2s | | | | | | | | | |
| AAK | | | | pmax | pmax | | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | | |
| **AAK** | **Ala-Archa** | **154.79** | **67** | PKP | **PKPdf** | | **11 16 48.9** | **0.0** | | |
| AAK | | | | *e*PKPdf | **PKPdf** | | **11 16 49.7** | **+0.8** | | |
| AAK | | | | *e*PKPbc | **PKiKP** | | **11 16 58.0** | **+0.4** | | |
| AAK | | | | *e*PKPab | **PKPab** | | **11 17 12.9** | **+0.1** | | |
| **FRU** | **Bishkek** | **154.87** | **66** | *i* PKP2 | **PKPab** | | **11 17 12.0** | **-1.0** | | |
| FRU | | | | *e* | | | 11 20 56.0 | | | |
| FRU | | | | pmax | pmax | | | | | |
| | comp=Z,50nm,1.8s | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **155.59** | **66** | *e*PKIKP | **PKPdf** | | **11 16 50.5** | **+0.4** | | |
| TKM2 | | | | *e* | | | 11 16 59.8 | | | |
| TKM2 | | | | *e* | | | 11 17 16.3 | | | |
| **TKM2** | **Tokmak 2** | **155.59** | **66** | *e*PKPdf | **PKPdf** | | **11 16 50.5** | **+0.4** | | |
| TKM2 | | | | *e*PKPbc | **pPKPdf** | | **11 16 59.8** | **-0.7** | | |
| TKM2 | | | | *e*PKPab | **PKPab** | | **11 17 16.3** | **0.0** | | |
| **KURBB** | **Kurchatov Arra** | **155.71** | **47** | PKP | **PKPdf** | | **11 16 49.0** | **-0.7** | | |
| | comp=Z,1.4nm,1.0s,baz=302,slow=2.2,SNR=4.2 | | | | | | | | | |
| **KURK** | **Kurchatov** | **155.73** | **46** | PKIKP | **PKPdf** | | **11 16 49.0** | **-0.7** | | |
| KURK | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | | |
| **KURK** | **Kurchatov** | **155.73** | **46** | PKP | **PKPdf** | | **11 16 49.0** | **-0.7** | | |
| **KSH** | **Kashi** | **155.89** | **74** | PKP | **PKPdf** | | **11 16 50.8** | **+0.3** | | |
| KSH | | | | *e*pPKP | **pPKPdf** | | **11 17 01.6** | **+0.7** | | |
| KSH | | | | *e*sPKP | | | 11 17 05.3 | | | |
| KSH | | | | SKS | **SKSdf** | | **11 23 51.8** | **-2.7** | | |
| KSH | | | | PPMZ | | | | | | |
| | comp=Z,54nm,5.5s | | | | | | | | | |
| KSH | | | | LN | | | | | | |
| | comp=Z,110nm,12.2s | | | | | | | | | |
| KSH | | | | LE | | | | | | |
| | comp=Z,170nm,4.9s | | | | | | | | | |
| KSH | | | | LZ | | | | | | |
| | comp=Z,170nm,6.2s | | | | | | | | | |
| **NVS** | **Novosibirsk** | **155.97** | **34** | *e*PKIKP | **PKPdf** | | **11 16 49.0** | **-0.8** | | |
| NVS | | | | pmax | pmax | | | | | |
| | comp=Z,16nm,1.1s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **157.25** | **34** | PKP | **PKPdf** | | **11 16 51.0** | **-0.6** | | |
| | comp=Z,5.4nm,0.9s,baz=276,slow=2.7,SNR=18 | | | | | | | | | |
| ZALV | | | | PKPab | **PKPab** | | **11 17 23.1** | **+0.4** | | |
| | comp=Z,9.1nm,0.9s,baz=305,slow=5.2,SNR=12 | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **157.25** | **34** | PKIKP | **PKPdf** | | **11 16 51.0** | **-0.6** | | |
| ZALV | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | | |
| ZALV | | | | pmax | pmax | | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | | |
| **BOD** | **Bodaibo** | **158.45** | **349** | *e*PKP2 | **PKPab** | | **11 17 26.1** | **-1.6** | | |
| BOD | | | | pmax | pmax | | | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **159.46** | **54** | PKP | **PKPdf** | | **11 16 54.4** | **-0.1** | | |
| | comp=Z,3.5nm,1.0s,baz=325,slow=1.9,SNR=13 | | | | | | | | | |
| MKAR | | | | PKPab | **PKPab** | | **11 17 32.5** | **-0.1** | | |
| | comp=Z,7.1nm,0.9s,baz=289,slow=3.7,SNR=16 | | | | | | | | | |
| MKAR | | | | PP | **PP** | | **11 21 14.5** | **+0.1** | | |
| | comp=Z,1.8nm,0.8s,baz=282,slow=5.7,SNR=4.7 | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **159.46** | **54** | PKIKP | **PKPdf** | | **11 16 54.4** | **-0.1** | | |
| MKAR | | | | | | | 11 21 14.5 | | | |
| MKAR | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | | |
| MKAR | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |
| MKAR | | | | pmax | pmax | | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **160.49** | **158** | PKP | **PKPdf** | | **11 16 56.4** | **-0.1** | | |
| | comp=Z,0.3nm,0.3s,baz=212,slow=1.3,SNR=5.5 | | | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | | **11 17 35.6** | **-1.9** | | |
| | comp=Z,0.4nm,0.4s,baz=209,slow=5.4,SNR=4.4 | | | | | | | | | |
| **CN2** | **Changchun** | **164.01** | **302** | *e*PKP | **PKPdf** | | **11 16 59.0** | **-0.3** | | |
| **WMQ** | **Urumqi** | **164.06** | **58** | PKP | **PKPdf** | | **11 16 58.0** | **-1.4** | | |
| WMQ | | | | PP | **PP** | | **11 21 44.0** | **+4.9** | | |
| WMQ | | | | SKS | **SKSdf** | | **11 23 59.0** | **-2.5** | | |
| WMQ | | | | SKKS | **SKKSac** | | **11 28 20.0** | **-4.3** | | |
| WMQ | | | | SS | **SS** | | **11 42 05.0** | **-2.1** | | |
| WMQ | | | | LN | | | | | | |
| | comp=Z,110nm,23.0s | | | | | | | | | |
| WMQ | | | | LE | | | | | | |
| | comp=Z,71nm,22.0s | | | | | | | | | |
| WMQ | | | | LZ | | | | | | |
| | comp=Z,77nm,22.0s | | | | | | | | | |
| **ZAK** | **Zakamensk** | **166.28** | **9** | *e*PKP2 | **PKPab** | | **11 18 02.1** | **-0.2** | | |
| ZAK | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,1.2s | | | | | | | | | |
| ZAK | | | | pmax | pmax | | | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | | |
| **NJ2** | **Nanjing** | **168.76** | **248** | *e*PKP | **PKPdf** | | **11 17 05.1** | **+1.8** | | |
| **SONM** | **Songino Array** | **169.03** | **0** | PKP | **PKPdf** | | **11 17 02.1** | **-1.1** | | |
| | comp=Z,0.6nm,0.8s,baz=207,slow=6.3,SNR=4.7 | | | | | | | | | |
| SONM | | | | PKPab | **PKPab** | | **11 18 14.7** | **+0.1** | | |
| | comp=Z,2.7nm,1.0s,baz=328,slow=4.3,SNR=8.0 | | | | | | | | | |
| **SONM** | **Songino Array** | **169.03** | **0** | PKIKP | **PKPdf** | | **11 17 02.1** | **-1.1** | | |
| SONM | | | | | | | 11 18 14.7 | | | |
| SONM | | | | pmax | pmax | | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | | |
| SONM | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | | |
| **GYA** | **Guiyang** | **169.63** | **181** | PKP | **PKPdf** | | **11 17 04.0** | **-0.2** | | |
| GYA | | | | sPKP | | | 11 17 16.3 | | | |
| GYA | | | | PKPab | **PKPab** | | **11 18 20.0** | **+2.3** | | |
| GYA | | | | PP | PP | | 11 22 11.8 | +5.2 | | |
| GYA | | | | PPMZ | | | | | | |
| | comp=Z,120nm,7.9s | | | | | | | | | |
| **CD2** | **Chengdu** | **173.63** | **158** | PKP | **PKPdf** | | **11 17 05.3** | **-0.6** | | |
| CD2 | | | | pPKP | **pPKPdf** | | **11 17 15.0** | **-1.4** | | |
| CD2 | | | | sPKP | | | 11 17 18.5 | | | |
| CD2 | | | | PP | **PP** | | **11 22 27.6** | **+1.1** | | |
| CD2 | | | | SKS | **SKSdf** | | **11 24 06.4** | **-0.4** | | |
| CD2 | | | | SKKS | **SKKSac** | | **11 29 11.5** | **+0.1** | | |
| CD2 | | | | SS | **SS** | | **11 43 43.9** | **+3.2** | | |
| CD2 | | | | PPMZ | | | | | | |
| | comp=Z,120nm,5.0s | | | | | | | | | |
| **GTA** | **Gaotai** | **174.12** | **62** | *e*PKP | **PKPdf** | | **11 17 06.4** | **+0.5** | | |
| GTA | | | | pPKP | **pPKPdf** | | **11 17 14.6** | **-1.8** | | |
| GTA | | | | sPKP | | | 11 17 18.6 | | | |
| GTA | | | | PKPab | **PKPab** | | **11 18 39.0** | **+1.3** | | |
| GTA | | | | PP | **PP** | | **11 22 32.8** | **+2.6** | | |
| GTA | | | | SKS | **SKSdf** | | **11 24 04.5** | **-2.3** | | |
| GTA | | | | SKKS | **SKKSac** | | **11 29 13.5** | **-0.5** | | |
| GTA | | | | SS | **SS** | | **11 43 44.6** | **-3.1** | | |
| GTA | | | | PPMZ | | | | | | |
| | comp=Z,170nm,6.4s | | | | | | | | | |
| GTA | | | | LN | | | | | | |
| | comp=Z,140nm,17.1s | | | | | | | | | |
| GTA | | | | LE | | | | | | |
| | comp=Z,180nm,17.6s | | | | | | | | | |
| GTA | | | | LZ | | | | | | |
| | comp=Z,130nm,19.5s | | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **174.41** | **317** | *e*PKP | **PKPdf** | | **11 17 06.0** | **0.0** | | |
| HHC | | | | PKS | **PKSdf** | | **11 20 39.1** | **+0.9** | | |
| HHC | | | | PP | **PP** | | **11 22 32.8** | **+1.8** | | |
| HHC | | | | SKS | SKSdf | | 11 23 59.1 | -7.6 | | |
| HHC | | | | SS | **SS** | | **11 43 52.3** | **+2.9** | | |
| HHC | | | | PPMZ | | | | | | |
| | comp=Z,77nm,10.1s | | | | | | | | | |
| HHC | | | | LN | | | | | | |
| | comp=Z,260nm,21.7s | | | | | | | | | |
| HHC | | | | LE | | | | | | |
| | comp=Z,280nm,21.8s | | | | | | | | | |
| HHC | | | | LZ | | | | | | |
| | comp=Z,160nm,21.9s | | | | | | | | | |
| **LZH** | **Lanzhou** | **177.70** | **109** | *e*PKP | **PKPdf** | | **11 17 07.6** | **+0.7** | | |
| LZH | | | | pPKP | **pPKPdf** | | **11 17 16.3** | **-1.1** | | |
| LZH | | | | sPKP | | | 11 17 20.8 | | | |
| LZH | | | | PP | **PP** | | **11 22 49.0** | **+1.5** | | |
| LZH | | | | *e*SKKS | | | 11 29 30.8 | | | |
| LZH | | | | *e*SS | **SS** | | **11 44 18.3** | **-4.0** | | |
| LZH | | | | PPMZ | | | | | | |
| | comp=Z,270nm,5.2s | | | | | | | | | |

*ISCJB **23** 11:00:19.1±0.6, 45°.23N±0'.03×13°.74E±0'.02, h5km±4km,*
*Error ellipse: s-maj=4.5km s-min=2.4km az=10.4*
*CSEM **23** 11:00:19.7±0.2, 45°.23N×13°.74E, h10km, ML2.2, Error*
*ellipse: s-maj=3.5km s-min=1.7km az=12.0*
*LJU **23** 11

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BOJS** | **Bojanci** | **1.07** | **79** | ⇓*i*Pg | **Pn** | **11 00 41.7** | **-0.2** |
| BOJS | | | | *i* Sg | **Sn** | **11 00 56.8** | **+0.3** |
| | comp=Z,26nm,0.1s | | | | | | |
| **BOJS** | **Bojanci** | **1.07** | **79** | ⇓*i*Pg | **Pn** | **11 00 41.7** | **-0.2** |
| BOJS | | | | *i* Sg | **Sn** | **11 00 56.8** | **+0.3** |
| | comp=Z,26nm,0.1s | | | | | | |
| **MPRI** | **Monte Prat** | **1.08** | **330** | ⇓*e*Pg | **Pn** | **11 00 42.1** | **-0.1** |
| MPRI | | | | *e*Sg | **Sn** | **11 00 57.8** | **+0.8** |
| **MPRI** | **Monte Prat** | **1.08** | **330** | ⇓*e*Pg | **Pn** | **11 00 42.1** | **-0.1** |
| MPRI | | | | *e*Sg | **Sn** | **11 00 57.8** | **+0.8** |
| **MOZS** | **Mozjanca** | **1.10** | **25** | *i* Pg | **Pg** | **11 00 42.6** | **0.0** |
| MOZS | | | | *i* Sg | **Sn** | **11 00 57.9** | **+0.5** |
| | comp=Z,33nm,0.2s | | | | | | |
| **MOZS** | **Mozjanca** | **1.10** | **25** | *i* Pg | **Pg** | **11 00 42.6** | **0.0** |
| MOZS | | | | *i* Sg | **Sn** | **11 00 57.9** | **+0.5** |
| | comp=Z,33nm,0.2s | | | | | | |
| **PTCC** | **Patocco-Chiusa** | **1.14** | **346** | ⇓*e*Pg | **Pb** | **11 00 42.5** | **-0.3** |
| PTCC | | | | *e*Sg | **Sn** | **11 00 58.8** | **+0.4** |
| **POLC** | **Polcenigo** | **1.14** | **310** | ⇑*e*Pg | **Pg** | **11 00 43.3** | **-0.1** |
| **POLC** | **Polcenigo** | **1.14** | **310** | ⇑*e*Pg | **Pg** | **11 00 43.3** | **-0.1** |
| POLC | | | | Sg | **Sn** | **11 00 59.9** | **+1.6** |
| | comp=Z,322nm,0.7s | | | | | | |
| **PDKS** | **Podkum** | **1.15** | **48** | *i* Pg | **Pg** | **11 00 43.6** | **0.0** |
| PDKS | | | | *i* Sg | **Sn** | **11 00 59.5** | **+0.9** |
| | comp=Z,21nm,0.1s | | | | | | |
| **PDKS** | **Podkum** | **1.15** | **48** | *i* Pg | **Pg** | **11 00 43.6** | **0.0** |
| PDKS | | | | *i* Sg | **Sn** | **11 00 59.5** | **+0.9** |
| | comp=Z,21nm,0.1s | | | | | | |
| **CAE** | **Caneva** | **1.17** | **308** | ⇓*e*Pg | **Pg** | **11 00 43.4** | **-0.5** |
| CAE | | | | *e*Sg | **Sn** | **11 00 59.7** | **+0.7** |
| **CAE** | **Caneva** | **1.17** | **308** | ⇓*e*Pg | **Pg** | **11 00 43.4** | **-0.5** |
| CAE | | | | *e*Sg | **Sn** | **11 00 59.7** | **+0.7** |
| **MLNI** | **Malnisio** | **1.17** | **317** | ⇓*e*Pg | **Pg** | **11 00 43.3** | **-0.6** |
| **MLNI** | **Malnisio** | **1.17** | **317** | ⇓*e*Pg | **Pg** | **11 00 43.3** | **-0.6** |
| **LSR** | **Lussari** | **1.19** | **352** | ⇓*e*Pg | **Pn** | **11 00 43.4** | **-0.3** |
| LSR | | | | *e*Sg | **Sn** | **11 01 00.5** | **+0.9** |
| **LSR** | **Lussari** | **1.19** | **352** | ⇓*e*Pg | **Pn** | **11 00 43.4** | **-0.3** |
| LSR | | | | *e*Sg | **Sn** | **11 01 00.5** | **+0.9** |
| **FUSE** | **Fusea** | **1.23** | **335** | ⇓*e*Pg | **Pn** | **11 00 44.0** | **-0.2** |
| **FUSE** | **Fusea** | **1.23** | **335** | ⇓*e*Pg | **Pn** | **11 00 44.0** | **-0.2** |
| **ACOM** | **Acomizza, Ital** | **1.26** | **352** | ⇑*e*Pg | **Pb** | **11 00 44.8** | **-0.1** |
| **ACOM** | **Acomizza, Ital** | **1.26** | **352** | Pg | **Pb** | **11 00 44.9** | **-0.1** |
| | comp=Z,93nm,0.4s | | | | | | |
| **LEGS** | **Legarje** | **1.27** | **59** | *i* Pg | **Pg** | **11 00 45.3** | **-0.5** |
| LEGS | | | | *i* Sg | **Sg** | **11 01 02.7** | **+0.4** |
| **LEGS** | **Legarje** | **1.27** | **59** | *i* Pg | **Pg** | **11 00 45.3** | **-0.5** |
| LEGS | | | | *i* Sg | **Sg** | **11 01 02.7** | **+0.4** |
| **MTLO** | **Montello** | **1.28** | **294** | *e*Pg | **Pb** | **11 00 45.0** | **-0.1** |
| MTLO | | | | *e*Sg | **Sg** | **11 01 03.0** | **+0.4** |
| **MTLO** | **Montello** | **1.28** | **294** | *e*Pg | **Pb** | **11 00 45.0** | **-0.1** |
| MTLO | | | | *e*Sg | **Sg** | **11 01 03.0** | **+0.4** |
| **CRES** | **Cresnjev** | **1.30** | **66** | *i* Pg | **Pb** | **11 00 45.6** | **0.0** |
| CRES | | | | *i* Sg | **Sg** | **11 01 04.0** | **+0.7** |
| | comp=Z,14nm,0.1s | | | | | | |
| **CRES** | **Cresnjev** | **1.30** | **66** | *i* Pg | **Pb** | **11 00 45.6** | **0.0** |
| CRES | | | | *i* Sg | **Sg** | **11 01 04.0** | **+0.7** |
| | comp=Z,14nm,0.1s | | | | | | |
| **PLRO** | **Paularo** | **1.32** | **341** | ⇓*e*Pg | **Pb** | **11 00 46.0** | **0.0** |
| PLRO | | | | *e*Sg | **Sg** | **11 01 04.0** | **0.0** |
| **PLRO** | **Paularo** | **1.32** | **341** | ⇓*e*Pg | **Pb** | **11 00 46.0** | **0.0** |
| PLRO | | | | *e*Sg | **Sg** | **11 01 04.0** | **0.0** |
| **OBKA** | **Obir** | **1.33** | **24** | *e*Pg | **Pb** | **11 00 46.1** | **0.0** |
| | SNR=11 | | | | | | |
| OBKA | | | | ⇑*i*Sg | **Sg** | **11 01 04.6** | **+0.5** |
| | comp=Z,24nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **1.33** | **24** | Pg | **Pb** | **11 00 46.1** | **0.0** |
| | SNR=11 | | | | | | |
| OBKA | | | | Sg | **Sg** | **11 01 04.6** | **+0.5** |
| | comp=Z,24nm,0.3s | | | | | | |
| **MYKA** | **Terra Mystica** | **1.33** | **356** | ⇑*e*Pg | **Pg** | **11 00 46.7** | **-0.3** |
| | SNR=11 | | | | | | |
| MYKA | | | | ⇓*i*Sg | **Sg** | **11 01 05.1** | **+0.8** |
| | comp=Z,34nm,0.3s | | | | | | |
| **MYKA** | **Terra Mystica** | **1.33** | **356** | Pg | **Pg** | **11 00 46.7** | **-0.3** |
| | SNR=11 | | | | | | |
| MYKA | | | | Sg | **Sg** | **11 01 05.1** | **+0.8** |
| | comp=Z,34nm,0.3s | | | | | | |
| **CIMO** | **Cimolais** | **1.37** | **318** | ⇑*e*Pg | **Pn** | **11 00 45.9** | **-0.1** |
| CIMO | | | | *e*Sg | **Sg** | **11 01 05.0** | **-0.5** |
| **CIMO** | **Cimolais** | **1.37** | **318** | ⇑*e*Pg | **Pn** | **11 00 45.9** | **-0.1** |
| CIMO | | | | *e*Sg | **Sg** | **11 01 05.0** | **-0.5** |
| **CESS** | **Cesta pri Krsk** | **1.37** | **60** | *i* Pg | **Pb** | **11 00 46.6** | **-0.1** |
| CESS | | | | *i* Sg | **Sg** | **11 01 05.9** | **+0.4** |
| | comp=Z,22nm,0.1s | | | | | | |
| **CESS** | **Cesta pri Krsk** | **1.37** | **60** | *i* Pg | **Pb** | **11 00 46.7** | **-0.1** |
| CESS | | | | *i* Sg | **Sg** | **11 01 05.9** | **+0.4** |
| | comp=Z,22nm,0.1s | | | | | | |
| **ZOU** | **Zoufplan** | **1.37** | **337** | ⇑*e*Pg | **Pb** | **11 00 46.6** | **-0.2** |
| **ZOU** | **Zoufplan** | **1.37** | **337** | ⇑*e*Pg | **Pb** | **11 00 46.6** | **-0.2** |
| ZOU | | | | *e*Sg | **Sg** | **11 01 05.8** | **+0.2** |
| **ZOU** | **Zoufplan** | **1.37** | **337** | ⇑*e*Pg | **Pb** | **11 00 46.6** | **-0.2** |
| ZOU | | | | *e*Sg | **Sg** | **11 01 05.8** | **+0.2** |
| **GCIS** | **Gornji Cirnik** | **1.43** | **66** | *i* Pg | **Pb** | **11 00 47.5** | **-0.2** |
| GCIS | | | | *i* Sg | **Sg** | **11 01 08.0** | **+0.7** |
| | comp=Z,7.0nm,0.1s | | | | | | |
| **GCIS** | **Gornji Cirnik** | **1.43** | **66** | *i* Pg | **Pb** | **11 00 47.5** | **-0.2** |
| GCIS | | | | *i* Sg | **Sg** | **11 01 08.0** | **+0.7** |
| | comp=Z,7.0nm,0.1s | | | | | | |
| **DOBS** | **Dobrina** | **1.47** | **54** | *i* Sg | **Sg** | **11 01 08.4** | **-0.2** |
| | comp=Z,12nm,0.1s | | | | | | |
| **DOBS** | **Dobrina** | **1.47** | **54** | *i* Sg | **Sg** | **11 01 08.4** | **-0.2** |
| | comp=Z,12nm,0.1s | | | | | | |
| **GOLS** | **Golise** | **1.49** | **61** | *i* Pg | **Pb** | **11 00 48.2** | **-0.5** |
| | comp=Z,13nm,0.2s | | | | | | |
| **GOLS** | **Golise** | **1.49** | **61** | *i* Pg | **Pb** | **11 00 48.2** | **-0.5** |
| | comp=Z,13nm,0.2s | | | | | | |
| **PERS** | **Pernice** | **1.63** | **35** | *i* Pn | **Pn** | **11 00 50.3** | **+0.6** |
| PERS | | | | *i* Sn | **Sg** | **11 01 12.8** | **-1.2** |
| | comp=Z,17nm,0.2s | | | | | | |
| **PERS** | **Pernice** | **1.63** | **35** | *i* Pn | **Pn** | **11 00 50.3** | **+0.6** |
| PERS | | | | *i* Sn | **Sg** | **11 01 12.8** | **-1.2** |
| | comp=Z,17nm,0.2s | | | | | | |
| **SOKA** | **Soboth** | **1.64** | **32** | ⇑*i*Pn | **Pn** | **11 00 49.3** | **-0.5** |
| **SOKA** | **Soboth** | **1.64** | **32** | Pn | **Pn** | **11 00 49.3** | **-0.5** |
| **GROS** | **Grobnik** | **1.68** | **46** | *i* Pn | **Pn** | **11 00 50.9** | **+0.5** |
| GROS | | | | *i* Sn | **Sb** | **11 01 13.2** | **+0.1** |
| | comp=Z,8.0nm,0.1s | | | | | | |
| **GROS** | **Grobnik** | **1.68** | **46** | *i* Pn | **Pn** | **11 00 50.8** | **+0.5** |
| GROS | | | | *i* Sn | **Sb** | **11 01 13.2** | **+0.1** |
| | comp=Z,8.0nm,0.1s | | | | | | |
| **ABTA** | **Abfaltersbach** | **1.69** | **329** | ⇑*i*Pn | **Pn** | **11 00 49.8** | **-0.7** |
| ABTA | | | | ⇓*i*Pg | **Pb** | **11 00 52.4** | **+0.2** |
| ABTA | | | | ⇓*i*Sn | **Sb** | **11 01 12.8** | **-0.5** |
| **ABTA** | **Abfaltersbach** | **1.69** | **329** | Pn | **Pn** | **11 00 49.8** | **-0.7** |
| **KBA** | **Koelnbreinsper** | **1.80** | **351** | ⇓*e*Pn | **Pn** | **11 00 51.7** | **-0.4** |
| | SNR=5.7 | | | | | | |
| KBA | | | | ⇓*i*Pg | **Pg** | **11 00 54.9** | **-1.0** |
| KBA | | | | ⇓*e*Sn | **Sb** | **11 01 15.8** | **-0.8** |
| | SNR=5.3 | | | | | | |
| **KBA** | **Koelnbreinsper** | **1.80** | **351** | Pn | **Pn** | **11 00 51.7** | **-0.4** |
| | SNR=5.7 | | | | | | |

*DDA **23** 11:03:55.7,36˚.30N×26˚.70E,h60km,Md3.2*
*ATH **23** 11:03:55.8,36˚.50N×26˚.80E,h119km±4km*
*ISCJB **23** 11:03:56.7±0.7,36˚.52N±0˚.04×26˚.80E±0˚.04,h106km±9km, Error ellipse: s-maj=7.2km s-min=4.3km az=154.3*
*CSEM **23** 11:03:57.7±0.2,36˚.52N×26˚.81E,h100km,MD3.2,Error ellipse: s-maj=6.6km s-min=4.1km az=153.0*
*ISK **23** 11:03:59.2,36˚.71N×26˚.91E,h21km,MD3.1*

**ISC 23 11:03:55.9±1.5,36˚.54N±0˚.04×26˚.85E±0˚.03,h116km±11km, n47,σ1ᵗ72/67,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BDRM** | **Kayabasi** | **0.71** | **42** | *i* P | **Pn** | **11 04 14.1** | **-0.9** |
| BDRM | | | | *i* S | **Sn** | **11 04 29.6** | **+0.2** |
| **BDRM** | **Kayabasi** | **0.71** | **42** | P | **Pn** | **11 04 14.1** | **-0.9** |
| BDRM | | | | S | **Sn** | **11 04 29.6** | **+0.2** |
| **KARP** | **Karpathos** | **1.02** | **166** | *e*P | **Pn** | **11 04 18.5** | **+0.5** |
| KARP | | | | *e*S | **Sn** | **11 04 34.5** | **-0.1** |
| **KARP** | **Karpathos** | **1.02** | **166** | *e*P | **Pn** | **11 04 18.5** | **+0.5** |
| KARP | | | | *e*S | **Sn** | **11 04 34.5** | **-0.1** |
| **ARG** | **Arkhangelos** | **1.08** | **107** | *e*P | **Pn** | **11 04 19.8** | **+1.3** |
| ARG | | | | *e*S | **Sn** | **11 04 37.1** | **+1.6** |
| **ARG** | **Arkhangelos** | **1.08** | **107** | *e*P | **Pn** | **11 04 19.8** | **+1.3** |
| ARG | | | | *e*S | **Sn** | **11 04 37.1** | **+1.6** |
| **SMG** | **Samos** | **1.16** | **360** | *e*P | **Pn** | **11 04 20.4** | **+1.0** |
| **SMG** | **Samos** | **1.16** | **360** | *e*P | **Pn** | **11 04 20.4** | **+1.0** |
| **APE** | **Apeiranthos** | **1.18** | **297** | *e*PN | **Pn** | **11 04 21.0** | **+1.4** |
| APE | | | | *e*SN | **Sn** | **11 04 36.5** | **-1.0** |
| **APE** | **Apeiranthos** | **1.18** | **297** | *e*P | **Pn** | **11 04 20.6** | **+1.0** |
| **APE** | **Apeiranthos** | **1.18** | **297** | *e*P | **Pn** | **11 04 20.6** | **+1.0** |
| **APE** | **Apeiranthos** | **1.18** | **297** | *e*Pn | **Pn** | **11 04 21.0** | **+1.4** |
| APE | | | | *e*Sn | **Sn** | **11 04 36.5** | **-1.0** |
| **YER** | **Yerkesik** | **1.29** | **62** | *e*PN | **Pn** | **11 04 21.3** | **+0.5** |
| **YER** | **Yerkesik** | **1.29** | **62** | *e*Pn | **Pn** | **11 04 21.3** | **+0.5** |
| **AYDN** | **Tasoluk** | **1.39** | **36** | *i* P | Pn | 11 04 25.2 | +3.3 |
| **AYDN** | **Tasoluk** | **1.39** | **36** | P | Pn | 11 04 25.2 | +3.3 |
| AYDN | | | | S | Sn | 11 04 50.0 | +8.4 |
| **TURN** | **Turunc** | **1.45** | **76** | P | **Pn** | **11 04 19.8** | **-2.7** |
| TURN | | | | S | **Sn** | **11 04 37.1** | **-5.5** |
| **DALY** | **Dalyan (Mu˘la** | **1.48** | **79** | *e*PN | **Pn** | **11 04 24.2** | **+1.4** |
| **DALY** | **Dalyan (Mu˘la** | **1.48** | **79** | *e*Pn | **Pn** | **11 04 24.2** | **+1.4** |
| **NPS** | **Neapolis** | **1.62** | **219** | *e*P | **Pn** | **11 04 24.9** | **+0.3** |
| NPS | | | | *e*S | **Sn** | **11 04 45.5** | **-1.0** |
| **NPS** | **Neapolis** | **1.62** | **219** | *e*P | **Pn** | **11 04 24.9** | **+0.3** |
| NPS | | | | *e*S | **Sn** | **11 04 45.5** | **-1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.63** | **30** | *e*PN | **Pn** | **11 04 25.4** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.63** | **30** | *e*Pn | **Pn** | **11 04 25.4** | **+0.6** |
| **LAST** | **Lasithi** | **1.77** | **219** | *e*P | **Pn** | **11 04 26.7** | **+0.2** |
| LAST | | | | *e*S | **Sn** | **11 04 48.7** | **-1.0** |
| **LAST** | **Lasithi** | **1.77** | **219** | *e*P | **Pn** | **11 04 26.7** | **+0.2** |
| LAST | | | | *e*S | **Sn** | **11 04 48.7** | **-1.0** |
| **FETY** | **Fethiye** | **1.80** | **86** | *e*PN | **Pn** | **11 04 29.0** | **+2.2** |
| FETY | | | | *e*SN | **Sn** | **11 04 51.0** | **+0.7** |
| **FETY** | **Fethiye** | **1.80** | **86** | *e*Pn | **Pn** | **11 04 29.0** | **+2.2** |
| FETY | | | | *e*Sn | **Sn** | **11 04 51.0** | **+0.7** |
| **DNZL** | **Cakiroluk** | **2.10** | **56** | *i* P | **Pn** | **11 04 32.2** | **+1.6** |
| DNZL | | | | *i* S | **Sn** | **11 04 58.1** | **+1.0** |
| **DNZL** | **Cakiroluk** | **2.10** | **56** | P | **Pn** | **11 04 32.2** | **+1.6** |
| DNZL | | | | S | **Sn** | **11 04 58.1** | **+1.0** |
| **KSL** | **Kastellorizon** | **2.24** | **99** | *e*P | **Pn** | **11 04 33.2** | **+0.9** |
| KSL | | | | *e*S | **Sn** | **11 04 59.9** | **-0.2** |
| **KSL** | **Kastellorizon** | **2.24** | **99** | *e*P | **Pn** | **11 04 33.2** | **+0.9** |
| KSL | | | | *e*S | **Sn** | **11 04 59.9** | **-0.2** |
| **MANT** | **Manisa** | **2.37** | **34** | *i* P | **Pn** | **11 04 34.4** | **+0.3** |
| **MANT** | **Manisa** | **2.37** | **34** | P | **Pn** | **11 04 34.4** | **+0.3** |
| MANT | | | | S | Sn | 11 04 57.2 | -6.2 |
| **VAM** | **Vamos** | **2.43** | **243** | *e*P | **Pn** | **11 04 35.2** | **+0.5** |
| VAM | | | | *e*S | **Sn** | **11 05 03.2** | **-1.2** |
| **VAM** | **Vamos** | **2.43** | **243** | *e*P | **Pn** | **11 04 35.2** | **+0.5** |
| VAM | | | | *e*S | **Sn** | **11 05 03.2** | **-1.2** |
| **KULA** | **Kula-Manisa** | **2.44** | **36** | *e*PN | **Pn** | **11 04 36.1** | **+1.3** |
| **KULA** | **Kula-Manisa** | **2.44** | **36** | *e*Pn | **Pn** | **11 04 36.2** | **+1.3** |
| **ELL** | **Elmali** | **2.47** | **84** | *e*PN | Pn | 11 04 38.5 | +3.2 |
| **ELL** | **Elmali** | **2.47** | **84** | *e*Pn | Pn | 11 04 38.5 | +3.2 |
| **GVD** | **Gavdhos** | **2.82** | **234** | *e*P | **Pn** | **11 04 40.8** | **+1.1** |
| **GVD** | **Gavdhos** | **2.82** | **234** | *e*P | **Pn** | **11 04 40.8** | **+1.1** |
| **KORT** | **Korkueli** | **2.85** | **80** | *i* P | **Pn** | **11 04 42.4** | **+2.2** |
| **KORT** | **Korkueli** | **2.85** | **80** | P | **Pn** | **11 04 42.4** | **+2.2** |
| KORT | | | | S | **Sn** | **11 05 09.3** | **-5.0** |

*IDC **23** 11:05:02.4±4.9,38˚.06N×74˚.17E,h129km±43km,mb3.5/6, mb1 3.5/12,mb1mx3.2/65,mbtmp3.9/12,MS3.1/2, Ms1 3.1/2,ms1mx2.5/36,Error ellipse: s-maj=43.6km s-min=21.0km az=36.0*
*ISCJB **23** 11:05:04.2±0.5,38˚.18N±0˚.04×74˚.27E±0˚.09,h158km, mb3.6/6,Error ellipse: s-maj=10.8km s-min=4.7km az=158.9*
*NNC **23** 11:05:13.6±8.7,38˚.87N×74˚.17E,h207km±96km,mb2.8, mpv3.5,Error ellipse: s-maj=96.5km s-min=49.3km az=176.0*

**ISC 23 11:05:04.3±0.7,38˚.16N±0˚.07×74˚.30E±0˚.09,h158km,n38, σ1ᵗ77/39,mb3.5/6,4C-7D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSH** | **Kashi** | **1.88** | **43** | ⇓*i*Pg | **Pn** | **11 05 36.3** | **-2.4** |
| KSH | | | | Sg | Sn | 11 05 57.8 | -7.4 |
| KSH | | | | smax | smax | | |
| | comp=N,910nm,0.5s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,640nm,0.6s | | | | | | |
| **AML** | **Almayashu** | **4.00** | **354** | P | **Pn** | **11 06 05.8** | **+0.8** |
| | SNR=67 | | | | | | |
| **UCH** | **Uchtor** | **4.07** | **2** | P | **Pn** | **11 06 07.2** | **+1.2** |
| | SNR=42 | | | | | | |
| **AAK** | **Ala-Archa** | **4.47** | **2** | ⇓P | **Pn** | **11 06 12.1** | **+1.1** |
| | comp=E,3.9nm,0.6s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **11 07 01.6** | **-1.5** |
| | comp=E,29nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **4.47** | **2** | P | **Pn** | **11 06 11.9** | **+0.8** |
| | comp=E,2.4nm,0.3s,baz=144,slow=7.4,SNR=19 | | | | | | |
| AAK | | | | S | **Sn** | **11 07 02.3** | **-0.8** |
| | comp=E,2.6nm,0.3s,baz=78,slow=20,SNR=5.1 | | | | | | |
| **AAK** | **Ala-Archa** | **4.47** | **2** | P | **Pn** | **11 06 12.5** | **+1.5** |
| | SNR=6.2 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.51** | **355** | P | **Pn** | **11 06 12.9** | **+1.4** |
| | SNR=9.6 | | | | | | |
| **KBK** | **Karagaybulak** | **4.52** | **6** | P | **Pn** | **11 06 13.6** | **+2.0** |
| | SNR=8.3 | | | | | | |
| **CHMS** | **Chumysh** | **4.85** | **4** | P | **Pn** | **11 06 17.5** | **+1.7** |
| | SNR=8.6 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.86** | **11** | ⇑P | **Pn** | **11 06 17.2** | **+1.1** |
| | comp=E,20nm,0.7s | | | | | | |
| TKM2 | | | | ⇓S | **Sn** | **11 07 10.4** | **-1.8** |
| | comp=E,34nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.86** | **11** | P | **Pn** | **11 06 17.8** | **+1.7** |
| | SNR=8.5 | | | | | | |
| **USP** | **Ospenovka** | **5.11** | **2** | P | **Pn** | **11 06 20.7** | **+1.5** |
| | SNR=6.4 | | | | | | |
| **KK31** | **Karatay Array** | **5.72** | **331** | ⇓P | **Pn** | **11 06 27.1** | **-0.2** |
| | comp=E,1.0nm,0.2s,baz=128,slow=14,SNR=6.5 | | | | | | |
| KK31 | | | | S | **Sn** | **11 07 26.6** | **-5.7** |
| | comp=E,21nm,0.3s,baz=137,slow=21,SNR=17 | | | | | | |
| **MK31** | **Makanchi Array** | **10.45** | **32** | ⇓P | **Pn** | **11 07 31.0** | **+1.1** |
| | comp=E,3.1nm,0.6s,baz=200,slow=12,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **10.45** | **32** | P | **Pn** | **11 07 30.3** | **+0.3** |
| | comp=E,0.3nm,0.3s,baz=198,slow=9,SNR=15 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.82** | **12** | P | **Pn** | **11 07 59.6** | **-1.1** |
| | comp=E,0.2nm,0.3s,baz=204,slow=11,SNR=4.6 | | | | | | |
| **KOLN** | **Koldanda** | **12.96** | **140** | *e*P | **Pn** | **11 08 03.2** | **+0.2** |
| | comp=E,11nm,0.4s | | | | | | |
| **GKN** | **Gorkha** | **13.32** | **136** | *e*P | **P** | **11 08 08.4** | **-3.1** |
| | comp=E,22nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **13.84** | **135** | *e*P | **P** | **11 08 14.9** | **-2.4** |
| | comp=E,5.1nm,0.3s | | | | | | |
| **PKIN** | **Phulchoki** | **14.07** | **135** | *e*P | **P** | **11 08 18.3** | **-1.6** |
| | comp=E,8.6nm,0.3s | | | | | | |
| **PKI** | **Pulchoki** | **14.08** | **135** | *e*P | **P** | **11 08 18.2** | **-1.9** |
| | comp=E,9.5nm,0.3s | | | | | | |
| **BVA0** | **Borovoye Array** | **15.11** | **351** | P | **P** | **11 08 30.6** | **-0.4** |
| | comp=E,2.5nm,0.6s,baz=159,slow=13,SNR=16 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.11** | **351** | P | **Pn** | **11 08 29.2** | **-0.4** |
| | baz=147,slow=8.1,SNR=2.2 | | | | | | |
| **BRVK** | **Borovoye** | **15.16** | **351** | ⇓P | **P** | **11 08 30.8** | **-0.7** |
| | comp=E,0.0nm,0.7s | | | | | | |
| **AB31** | **Akbulak array** | **15.16** | **322** | ⇓P | **P** | **11 08 31.4** | **-0.2** |
| | comp=E,0.5nm,0.5s,baz=130,slow=13,SNR=15 | | | | | | |
| AB31 | | | | ⇑S | Sn | 11 11 04.8 | -14 |
| | comp=E,1.4nm,0.6s,baz=131,slow=24,SNR=5.8 | | | | | | |
| **RAMN** | **Ramite** | **15.23** | **134** | *e*P | **P** | **11 08 31.2** | **-1.6** |
| | comp=E,16nm,0.6s | | | | | | |
| **ZRNK** | **Zerenda** | **15.24** | **348** | ⇑P | **P** | **11 08 31.7** | **-0.7** |
| | comp=E,4.4nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.88** | **322** | P | **Pn** | **11 08 50.5** | **-0.5** |
| | comp=E,0.3nm,0.3s,baz=120,slow=12,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **17.36** | **21** | P | **Pn** | **11 08 58.1** | **+1.3** |
| | comp=E,1.4nm,0.3s,baz=212,slow=11,SNR=32 | | | | | | |
| **ARU** | **Arti** | **21.07** | **335** | LR | LR | 11 17 41.1 | |
| | comp=E,40nm,18.8s,baz=191,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **25.23** | **57** | LR | LR | 11 19 49.5 | |
| | comp=E,40nm,18.5s,baz=228,slow=35 | | | | | | |
| **CD2** | **Chengdu** | **25.25** | **98** | *e*P | **P** | **11 10 19.0** | **+3.2** |
| **FINES** | **FINESS Array B** | **37.63** | **324** | P | **P** | **11 12 04.5** | **+1.0** |
| | comp=E,7.9nm,1.1s,baz=137,slow=23,SNR=4.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.66** | **336** | P | **P** | **11 12 30.3** | **+1.8** |
| | comp=E,6.0nm,1.0s,baz=98,slow=8.8,SNR=7.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **44.67** | **322** | P | **P** | **11 13 02.1** | **+1.1** |
| | comp=E,0.4nm,0.6s,baz=90,slow=8.7,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.37** | **270** | P | **P** | **11 15 49.1** | **+0.1** |
| | comp=E,1.2nm,1.0s,baz=49,slow=5.8,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **80.69** | **124** | P | P | 11 17 01.9 | +2.0 |
| | comp=E,0.3nm,0.7s,baz=327,slow=5.4,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **83.10** | **127** | P | **P** | **11 17 13.3** | **+0.9** |
| | comp=E,0.4nm,0.9s,baz=331,slow=5.5,SNR=3.5 | | | | | | |

**JMA 23 11:06:24.9±0.4,32˚.78N×142˚.08E,h0km,M3.8, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHJ2** | **Mitsune** | **1.93** | **280** | P | **Pn** | **11 06 59.5** | **+0.5** |
| **JHCJ** | **Hachijojimakas** | **1.94** | **279** | P | **Pn** | **11 06 59.7** | **+0.5** |
| JHCJ | | | | *e*S | Sn | 11 07 24.5 | +0.2 |
| **BSO1** | **Boso 1** | **2.08** | **334** | P | **Pb** | **11 07 02.1** | **-0.8** |
| **BSO3** | **Boso 3** | **2.40** | **327** | P | **Pn** | **11 07 06.8** | **+1.6** |
| **BSO4** | **Boso 4** | **2.64** | **327** | P | **Pn** | **11 07 10.7** | **+2.1** |
| **JOD2** | **Odawara 2** | **3.51** | **316** | P | **Pn** | **11 07 21.6** | **+0.9** |
| **JYT** | **Yasato** | **3.77** | **336** | P | **Pn** | **11 07 24.5** | **+0.1** |
| **JHU** | **Hanno** | **3.84** | **324** | P | **Pn** | **11 07 26.8** | **+1.5** |
| JHU | | | | *e*S | Sn | 11 08 13.9 | +2.7 |
| **JYN** | **Shimob** | **3.99** | **314** | P | **Pn** | **11 07 30.6** | **+3.1** |
| **JHO** | **Hitachi** | **4.02** | **342** | P | **Pn** | **11 07 28.2** | **+0.5** |
| JHO | | | | *e*S | Sn | 11 08 14.3 | -1.2 |
| **JRY** | **Ryogami san** | **4.16** | **322** | P | **Pn** | **11 07 31.9** | **+2.1** |
| **JAG** | **Ashikaga** | **4.23** | **330** | P | **Pn** | **11 07 31.9** | **+1.2** |
| **JNY** | **Yasuok** | **4.34** | **307** | P | **Pn** | **11 07 35.5** | **+3.2** |
| **MAT** | **Matsushiro** | **4.93** | **321** | P | **Pn** | **11 07 42.4** | **+2.2** |
| MAT | | | | *e*S | Sn | 11 08 39.5 | +1.5 |

*BJI **23** 11:08:18.0,5˚.06N×35˚.26E,h10km,mb4.9/33,mB5.2/24, Ms4.9/13,Ms7 4.6/13*
*IDC **23** 11:08:20.2±0.4,4˚.75N×36˚.17E,h0km,mb4.7/38, mb1 4.7/40,mb1mx4.6/57,mbtmp4.7/40,ML3.8/2,MS4.1/20, Ms1 4.1/20,ms1mx3.9/42,Error ellipse: s-maj=13.0km s-min=9.6km az=89.0*
*MOS **23** 11:08:20.0±0.9,4˚.77N×36˚.15E,h10km,mb5.3/25, MS4.2/4,Error ellipse: s-maj=12.5km s-min=5.2km az=91.8*
*NEIC **23** 11:08:21.8±0.2,4˚.73N×36˚.12E,h10km,mb4.8/8,Error ellipse: s-maj=8.1km s-min=5.5km az=85.0*
*GCMT **23** 11:08:21.8±0.3,4˚.82N×36˚.08E,h21km,MW5.0/84, Moment Tensor Solution. s36,c49; s84,c117; Duration: 0 Moment tensor: Scalar M0 16Nm; Mrr-4.07±.21; Mθθ 1.15±.14; Mϕϕ 2.92±.14; Mrθ-0.53±.25; Mθϕ 0.93±.08; Mϕr-1.24±.22; Best double couple: M0 3.93000×10 16 NP1:ϕs 23.00000°,δ55.00000°,λ-90.00000°. NP2: ϕs 203.00000°,δ35.00000°,λ-90.00000°. Principal axes: T 3.5530, Plg10.0000°, Azm113.0000°; N 0.7550, Plg0.0000°, Azm23.0000°; P -4.3080, Plg80.0000°, Azm293.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*ISCJB **23** 11:08:24.0±1.9,4˚.74N±0˚.03×36˚.05E±0˚.04,h33km±13km, mb4.9/119,MS4.1/22 Error ellipse: s-maj=6.7km s-min=5.4km az=156.0*
*SZGRF **23** 11:08:30.1,5˚.71N×35˚.99E,h19km,mb5.1/12(BGR)*

**ISC 23 11:08:22.9±0.5,4.77N±0˚.04×36˚.09E±0˚.06,h14km±2km, h14km:pP-P,n218,σ1ᵗ20/238,mb4.9/117,MS4.2/22, 18C-10D,Ethiopia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FURI** | **Furi** | **4.84** | **32** | *e*PN | **Pn** | **11 09 38.0** | **+2.4** |
| FURI | | | | *e*PG | **Pg** | **11 09 53.9** | **-1.8** |
| FURI | | | | *e*S | **Sg** | **11 10 53.2** | **-5.2** |
| **AAE** | **Adis Abeba** | **5.00** | **32** | *i* P | **Pn** | **11 09 39.6** | **+1.8** |
| AAE | | | | *i* S | **Sg** | **11 10 60.0** | **-3.5** |
| **KMBO** | **Kilima Mbogo** | **5.97** | **169** | Pn | **Pn** | **11 09 50.8** | **-0.4** |
| | 4.6nm,0.3s,baz=347,slow=14,SNR=76 | | | | | | |
| KMBO | | | | Lg | Lg | 11 11 21

KEST LR LR 11 34 09.9
comp=Z,682nm,19.1s,baz=130,slow=39
**KIV Kislovodsk 39.45 8** *de*P **P 11 15 53.4 +0.6**
KIV *e* 11 17 24.3
KIV *e*SS SS 11 25 19.4 +30
KIV pmax pmax
comp=Z,48nm,1.3s
KIV MLR MLR
comp=Z,172nm,14.0s
**CUC Castrocucco 39.55 335** *e*P **P 11 15 53.6 0.0**
comp=Z,11nm,0.9s
**ANN Anapa 39.88 1** *e*P **P 11 15 56.9 +0.7**
ANN pmax pmax
comp=Z,74nm,1.3s
ANN MLR MLR
comp=Z,265nm,12.0s
**SIM Simferopol' 40.05 358** *ce*P **P 11 15 58.6 +1.0**
SIM *e**PP **pP 11 16 04.0 +1.9**
SIM S **S 11 22 07.0 +3.9**
SIM pmax pmax
comp=Z,14nm,1.0s
**KIC Kosan Boka 40.66 274** *e*P **P 11 16 02.0 -1.1**
comp=Z,37nm,1.3s
**DBIC Dimbokro 40.77 275** P **P 11 16 03.7 -0.3**
comp=Z,11nm,0.9s,baz=87,slow=9.4,SNR=8.4
DBIC PcP **PcP 11 18 04.9 -0.4**
comp=Z,5.5nm,0.8s,baz=76,slow=4.6,SNR=4.2
DBIC LR LR 11 33 05.8
comp=Z,265nm,19.3s,baz=95,slow=36
**TIC Toumodi 40.94 275** *e*P **P 11 16 04.1 -1.3**
**LIC Lamto 40.94 274** *e*P **P 11 16 03.1 -2.4**
comp=Z,49nm,1.6s
**MLR Muntele Rosu 41.51 349** P **P 11 16 09.0 -0.8**
comp=Z,0.7nm,0.8s,baz=113,slow=5.7,SNR=4.5
**DIVS Divibare 41.65 343** ⇓ *i*P **P 11 16 11.5 +0.5**
**GZR Gura Zlata 42.10 346** ⇑P **P 11 16 11.5 -3.1**
**GZR Gura Zlata 42.10 346** ⇑ *i*P **P 11 16 11.5 -3.1**
**DRGR 43.43 347** ⇑P **P** 11 16 21.8 -3.6
**DRGR 43.43 347** ⇑ *i*P P 11 16 21.8 -3.6
**PALK Pallekele 44.43 85** P **P 11 16 30.8 -3.0**
comp=Z,17nm,1.0s,baz=131,slow=1.9,SNR=3.1
**CRES Cresnjev 44.56 339** *i*P **P 11 16 35.9 +0.7**
**DOBS Dobrina 44.94 340** *e*P **P 11 16 37.8 +0.4**
**PSZ Piszkesteto 45.18 345** *e*P **P 11 16 39.6 +0.3**
PSZ pmax pmax
comp=Z,9.0nm,0.9s
**PSZ Piszkesteto 45.18 345** *e*P **P 11 16 39.6 +0.3**
comp=Z,9.4nm,0.9s
**GROS Grobnik 45.20 340** *i*P **P 11 16 40.2 +0.7**
**JAVS Javornik 45.22 338** *i*P **P 11 16 39.9 +0.1**
**UZH Uzhgorod 45.26 347** *e*P **P 11 16 39.3 -0.6**
UZH *e* 11 16 42.5
**SOKA Soboth 45.55 340** *i*P **P 11 16 43.2 +0.9**
comp=Z,37nm,1.1s,SNR=14
**OBKA Obir 45.57 339** ⇓ *i*P **P 11 16 43.4 +0.8**
comp=Z,26nm,1.0s,SNR=9.3
**ARSA Arzberg 45.88 341** *i*P **P 11 16 45.8 +1.0**
comp=Z,12nm,0.9s,SNR=6.3
**VYHS Vyhne 45.99 344** *e*P **P 11 16 45.0 -0.7**
VYHS pmax pmax
comp=Z,5.0nm,1.1s
**VYHS Vyhne 45.99 344** *e*P **P 11 16 45.0 -0.7**
**VORD Divnogorie 46.12 3** *e*P **P 11 16 46.0 -0.6**
VORD pmax pmax
comp=Z,10.0nm,0.6s
VORD pmax pmax
comp=N,30nm,0.9s
VORD pmax pmax
comp=E,10.0nm,1.5s
**AKASG Malin Array Be 46.13 354** P **P 11 16 45.4 -1.3**
comp=E,4.3nm,0.7s,baz=172,slow=6.8,SNR=9.9
AKASG PcP **PcP 11 18 22.2 -0.5**
comp=E,2.0nm,0.6s,baz=178,slow=4.0,SNR=6.0
AKASG LR LR 11 37 07.3
comp=E,79nm,21.2s,baz=195,slow=37
**AKASG Malin Array Be 46.13 354** *ce*P **P 11 16 46.0 -0.7**
AKASG pmax pmax
comp=Z,4.0nm,0.7s
**VSR Storozhevoye 46.36 3** *e*P **P 11 16 47.8 -0.7**
VSR pmax pmax
comp=Z,10.0nm,0.7s
VSR pmax pmax
comp=N,30nm,1.1s
VSR pmax pmax
comp=E,8.0nm,1.3s
**CONA Conrad Observa 46.36 341** ⇑ *i*P **P 11 16 48.8 +0.1**
comp=E,12nm,1.2s
**KBA Koelnbreinsper 46.49 339** ⇓ *i*P **P 11 16 50.2 +0.4**
comp=E,18nm,1.2s,SNR=6.6
**VRH Novokhopyorsk 46.51 5** *e*P **P 11 16 49.2 -0.5**
VRH pmax pmax
comp=Z,50nm,1.1s
VRH pmax pmax
comp=N,60nm,1.0s
VRH pmax pmax
comp=E,10.0nm,0.6s
**ABTA Abfaltersbach 46.52 338** ⇑ *i*P **P 11 16 50.8 +0.9**
comp=E,13nm,1.1s
**MOA Molln 46.82 340** ⇑ *i*P **P 11 16 52.6 +0.4**
comp=E,19nm,0.9s,SNR=6.2
**MDT Midelt 47.09 311** P **P 11 16 54.9 +0.2**
comp=E,7.3nm,1.1s,baz=107,slow=8.9,SNR=14
**RJOB Jochberg 47.24 339** *e*P **P 11 16 55.1 -0.5**
comp=E,9.4nm,1.0s,baz=146,slow=7.7
**WTTA Wattenberg 47.28 337** ⇑ *i*P **P 11 16 56.5 +0.4**
comp=E,19nm,1.4s
**FUORN Ofenpass-Fuorn 47.30 336** *e*P **P 11 16 57.2 +0.9**
**VRAC Vranov 47.36 343** P **P 11 16 54.6 -1.9**
comp=E,4.7nm,0.9s,baz=166,slow=7.9,SNR=6.1
**FETA Feichten 47.44 337** *i*P **P 11 16 57.6 +0.3**
comp=E,16nm,0.9s,SNR=6.0
**MORC Moravsky Berou 47.51 344** *e*P **P 11 16 57.2 -0.4**
MORC pmax pmax
comp=Z,19nm,0.9s
**MORC Moravsky Berou 47.51 344** *e*P **P 11 16 57.2 -0.4**
comp=Z,19nm,0.9s
**TUE Stuetta 47.56 335** *e*P **P 11 16 57.6 -0.7**
comp=Z,16nm,1.0s
**DAVOX Davos/Dischmat 47.58 336** P **P 11 16 58.2 -0.2**
comp=Z,9.6nm,0.8s,baz=134,slow=13,SNR=12
DAVOX PcP **PcP 11 18 27.9 -0.3**
comp=Z,9.3nm,0.9s,baz=105,slow=18,SNR=5.5
**BNI Bardonecchia 47.65 332** *e*P **P 11 16 58.6 -0.3**
**BNI Bardonecchia 47.65 332** *e*P **P 11 16 58.6 -0.3**
**LPSR Galich'ya Gora 47.73 2** *e*P **P 11 16 58.8 -0.4**
LPSR pmax pmax
comp=Z,40nm,1.2s
LPSR pmax pmax
comp=N,30nm,1.7s
LPSR pmax pmax
comp=E,4.0nm,0.4s
**RETA Reutte 47.80 337** ⇓ *i*P **P 11 16 59.5 -0.5**
comp=E,15nm,1.0s
**GEC2 GERESS Array S 47.87 340** *e*P **P 11 17 00.4 -0.1**
comp=E,12nm,0.8s,baz=146,slow=7.7
**GERES GERESS Array B 47.87 340** P **P 11 17 00.4 -0.1**
comp=E,8.4nm,0.8s,baz=146,slow=8.1,SNR=50
**DAVA Damuels 47.99 336** *i*P **P 11 17 01.5 0.0**
comp=E,41nm,0.8s,SNR=16
**KRLC Kraliky 47.99 343** *e*P **P 11 17 01.5 +0.1**
**KRLC Kraliky 47.99 343** *e*P **P 11 17 01.5 +0.1**
**KHC Kasperske Hory 48.16 340** *i*P **P 11 17 01.9 -0.7**
KHC *e* 11 17 07.3
**KHC Kasperske Hory 48.16 340** *i*P **P 11 17 01.9 -0.7**
KHC *ep*P **pP 11 17 07.3 +0.1**
**KHC Kasperske Hory 48.16 340** *e*P **P 11 17 02.0 -0.7**
**SENIN Lac Senin/Sane 48.36 333** *e*P **P 11 17 03.4 -1.1**
**DPC Dobruska-Polom 48.37 343** *e*P **P 11 17 03.6 -0.7**
**DPC Dobruska-Polom 48.37 343** *e*P **P 11 17 03.6 -0.7**
**WET Wettzell 48.41 340** *e*P **P 11 17 03.9 -0.7**
comp=E,4.3nm,0.8s,baz=146,slow=7.7
**GRC3 Grafenberg Arr 48.65 339** *e*P **P 11 17 06.2 -0.3**
comp=E,31nm,0.7s,baz=146,slow=7.7
**GRC2 Grafenberg Arr 48.71 338** *e*P **P 11 17 06.6 -0.3**
comp=E,23nm,0.8s,baz=146,slow=7.7
**GRC1 Grafenberg Arr 48.76 339** *e*P **P 11 17 07.0 -0.3**
comp=E,36nm,0.7s,baz=146,slow=7.7
**GRB5 Grafenberg Arr 48.80 339** *e*P **P 11 17 07.4 -0.2**
comp=E,36nm,0.8s,baz=146,slow=7.7
**GRC4 Grafenberg Arr 48.84 339** *e*P **P 11 17 07.7 -0.1**
comp=E,29nm,0.7s,baz=146,slow=7.7
GRC4 *ep*P **pP 11 17 13.0 +0.6**
**GRB2 Grafenberg Arr 48.94 339** *e*P **P 11 17 08.2 -0.4**
comp=E,26nm,0.9s,baz=146,slow=7.7
**AKTO Aktyubinsk 49.10 18** P **P 11 17 10.3 +0.5**
comp=E,13nm,1.0s,baz=210,slow=7.5,SNR=12
**AKTO Aktyubinsk 49.10 18** P **P 11 17 09.7 -0.1**
AKTO pmax pmax
comp=Z,25nm,1.1s
**ROTZ Rotzenmuhle 49.17 340** *e*P **P 11 17 10.1 -0.3**
comp=Z,2.2nm,0.5s,baz=146,slow=7.7
**GRA2 Grafenberg Arr 49.37 339** *e*P **P 11 17 11.4 -0.6**
comp=Z,4.8nm,0.5s,baz=146,slow=7.7
**BFO Black Forest 49.45 336** *i*P **P 11 17 13.1 +0.5**
**KSH Kashi 49.92 40** P **P 11 17 16.8 +0.4**
KSH *es*P **sP 11 17 23.3 +0.6**
KSH *e*PcP **PcP 11 18 37.4 +0.7**
KSH *e*PP **PP 11 19 12.6 +1.2**
KSH PcS **PcS 11 22 33.5 -0.2**
KSH S **S 11 24 23.8 -2.7**
KSH SS SS 11 27 49.4 -10
KSH PMZ
comp=Z,23nm,1.1s
KSH PMZ
comp=Z,110nm,7.0s
KSH LN
comp=Z,130nm,6.0s
KSH LE
comp=Z,120nm,7.4s
KSH LZ
comp=Z,220nm,12.8s
**ESDC Sonseca Array 50.11 320** P **P 11 17 18.1 +0.3**
comp=Z,11nm,0.8s,baz=128,slow=7.4,SNR=61
ESDC LR LR 11 41 22.5
comp=Z,135nm,18.8s,baz=155,slow=40
**OBN Obninsk 50.19 0** P **P 11 17 17.1 -0.9**
comp=Z,15nm,0.3s,baz=80,slow=22,SNR=3.8
**OBN Obninsk 50.19 0** ⇑ *i*P **P 11 17 18.0 0.0**
OBN pmax pmax
comp=Z,28nm,1.1s
**CLL Collm 50.22 341** *i*P **P 11 17 16.8 -1.5**
CLL pmax pmax
comp=Z,15nm,1.5s
**CLL Collm 50.22 341** *i*P **P 11 17 16.8 -1.5**
comp=Z,15nm,1.5s
CLL LmV 12 02 00.0
comp=Z,100nm,21.3s
**PAB San Pablo 50.29 319** *e*P **P 11 17 18.6 -0.6**
PAB pmax pmax
comp=Z,20nm,1.3s
**PAB San Pablo 50.29 319** *e*P **P 11 17 18.6 -0.6**
comp=Z,20nm,1.3s
**MOS Moscow 50.83 1** *e*P **P 11 17 22.1 -0.8**
MOS pmax pmax
comp=Z,93nm,1.2s
MOS pmax pmax
comp=Z,200nm,1.7s
**TNS Taunus Mts 50.92 337** *e*P **P 11 17 23.7 0.0**
comp=Z,11nm,0.8s,baz=146,slow=7.7
**PBAR Barrancos 51.38 316** *e*P **P 11 17 27.3 0.0**
comp=Z,68nm,1.4s
**PCVE Castro Verde 51.81 315** *e*P **P 11 17 31.1 +0.5**
comp=Z,29nm,1.4s
**PBEJ Beja 51.88 316** *e*P **P 11 17 31.2 +0.1**
comp=Z,19nm,1.9s
**MESJ Messejana 52.04 315** *e*P **P 11 17 32.1 -0.1**
MESJ AMb AMB 11 17 44.8
comp=Z,19nm,1.3s
**MESJ Messejana 52.04 315** *e*P **P 11 17 32.7 +0.4**
comp=Z,32nm,1.8s
**MESJ Messejana 52.04 315** *e*P **P 11 17 32.1 -0.1**
MESJ pmax pmax
comp=Z,19nm,1.3s
**EVO Evora 52.22 316** *e*P **P 11 17 33.9 +0.3**
comp=Z,26nm,1.6s
**PMRV Marv??o 52.24 318** *e*P **P 11 17 34.0 +0.2**
comp=Z,43nm,1.5s
**PTEO Sao Teotonio 52.26 315** *e*P **P 11 17 34.8 +0.9**
comp=Z,40nm,1.6s
**BCLA Clavier 52.32 336** P **P 11 17 34.2 +0.1**
comp=Z,7.8nm,1.0s
**DOU Dourbes 52.37 335** P **P 11 17 34.3 -0.2**
**PNCL Nicolau / Gran 52.38 316** *e*P **P 11 17 35.4 +0.6**
comp=Z,27nm,0.9s
**PCBR Castelo Branco 52.50 318** *e*P **P 11 17 35.9 +0.2**
comp=Z,20nm,1.8s
**PMTG Montargil 52.63 317** *e*P **P 11 17 36.9 +0.3**
comp=Z,35nm,1.5s
**MTE Manteigas 52.83 319** *e*P **P 11 17 38.5 +0.3**
comp=Z,31nm,1.8s
**MVO Moncorvo 52.88 320** *e*P **P 11 17 39.3 +0.7**
comp=Z,27nm,1.6s
**PBRG Braganca 53.03 320** *e*P **P 11 17 39.9 +0.3**
comp=Z,21nm,1.5s
**PVIS Viseu 53.22 319** *e*P **P 11 17 41.5 +0.5**
comp=Z,28nm,1.6s
**PCAS Casmilo, Conde 53.29 318** *e*P **P 11 17 41.2 -0.3**
comp=Z,39nm,1.8s
**PVRL Vila Real 53.38 319** *e*P **P 11 17 43.1 +0.9**
comp=Z,29nm,1.3s
**POLO Lamas de Olo 53.48 320** *e*P **P 11 17 43.5 +0.5**
comp=Z,19nm,1.3s
**ARU Arti 54.53 15** P **P 11 17 49.9 -0.3**
comp=Z,0.6nm,0.5s,baz=25,slow=24,SNR=9.2
**ARU Arti 54.53 15** *d*i P **P 11 17 50.0 -0.2**
ARU 11 18 51.8
ARU 11 19 50.1
ARU S **S 11 25 30.3 +1.4**
ARU pmax pmax
comp=Z,92nm,1.2s
**SVE Sverdlovsk 55.43 16** ⇓ *i*P **P 11 17 56.8 0.0**
SVE pmax pmax
comp=Z,47nm,1.2s
**BRVK Borovoye 55.71 24** *ce*P **P 11 17 57.9 -0.9**
BRVK pmax pmax
comp=Z,9.0nm,1.2s
**BVAR Borovoye Array 55.73 24** P **P 11 17 58.1 -0.9**
comp=Z,4.0nm,0.7s,baz=226,slow=3.8,SNR=5.2
**KLMR Klimovskoe 56.01 2** *e*P P 11 17 57.6 -3.2
KLMR pmax pmax
comp=Z,87nm,1.4s
**SOKR Solikamsk 56.95 12** *d*i P **P 11 18 07.4 -0.1**
SOKR pmax pmax
comp=Z,50nm,1.3s
**FINES FINESS Array B 57.04 354** P **P 11 18 07.3 -0.9**
comp=Z,5.4nm,0.8s,baz=134,slow=8.2,SNR=6.2
**FINES FINESS Array B 57.04 354** *i*P **P 11 18 07.4 -0.7**
FINES pmax pmax
comp=Z,6.0nm,0.8s
**MK31 Makanchi Array 57.73 36** *i*P **P 11 18 12.6 -0.8**
MK31 pmax pmax
comp=Z,39nm,1.2s
**MKAR Makanchi Array 57.73 36** P **P 11 18 12.8 -0.6**
comp=Z,18nm,1.1s,baz=232,slow=7.2,SNR=18
MKAR LR LR 11 47 14.3
comp=Z,191nm,18.3s,baz=248,slow=40
**MKAR Makanchi Array 57.73 36** P **P 11 18 12.8 -0.6**
MKAR pmax pmax
comp=Z,18nm,1.1s
MKAR MLR MLR
comp=Z,191nm,18.3s
**MKAR Makanchi Array 57.73 36** *e*P **P 11 18 13.1 -0.2**
**HFS Hagfors 57.81 347** P **P 11 18 13.0 -0.6**
comp=Z,5.5nm,0.8s,baz=127,slow=3.9,SNR=6.1
**KURBB Kurchatov Arra 57.85 31** P **P 11 18 13.8 -0.3**
comp=Z,27nm,0.9s,baz=236,slow=7.3,SNR=51
**KURK Kurchatov 57.95 30** P **P 11 18 13.8 -1.0**
**KURK Kurchatov 57.95 30** P **P 11 18 13.8 -1.0**
**NOA NORSAR Array B 59.19 346** P **P 11 18 22.4 -0.8**
comp=Z,7.1nm,0.8s,baz=153,slow=6.7,SNR=12
NOA LR LR 11 48 35.6
comp=Z,40nm,18.3s,baz=255,slow=41
**TMCR Tamitsa 59.29 1** *e*P **P 11 18 23.3 -0.5**
TMCR pmax pmax
comp=Z,64nm,1.4s
**EKA Eskdalemuir Ar 59.41 335** P **P 11 18 24.1 -0.8**
comp=Z,4.8nm,0.8s,baz=133,slow=8.1,SNR=6.3
**WMQ Urumqi 59.67 41** *e*P **P 11 18 30.0 +3.0**
**CMAR Chiang Mai Arr 62.77 72** P **P 11 18 47.8 -0.6**
comp=Z,9.1nm,1.0s,baz=269,slow=7.7,SNR=28
CMAR LR LR 11 46 32.9
comp=Z,70nm,18.3s,baz=243,slow=37
**ZALV Zalesovo Beam 62.92 30** P **P 11 18 47.8 -0.9**
comp=Z,26nm,0.7s,baz=243,slow=7.4,SNR=38
ZALV LR LR 11 50 31.1
comp=Z,293nm,18.8s,baz=250,slow=40
**PHET Kaeng Krachan 63.18 78** P P 11 18 56.1 +5.0
comp=Z,7.9nm,0.9s
**LAMP Lampang 63.43 72** P **P 11 18 52.6 -0.1**
comp=Z,4.5nm,1.0s
**UTTA Uttaradit 64.25 73** P **P 11 18 58.0 -0.2**
comp=Z,4.9nm,1.0s,comp=Z,132nm
**PATY Pattaya 64.38 78** P P 11 19 06.3 +7.3
**PBKT Sadao Pong 64.59 74** P **P 11 19 00.8 +0.4**
comp=Z,11nm,1.7s
**LOEI Loei 64.92 73** P **P 11 19 04.1 +1.6**
comp=Z,10nm,2.1s,comp=Z,355nm
**CHBT CHBT 65.81 78** P **P 11 19 08.6 +0.3**
comp=Z,55nm,1.2s
**KHON Khomkaen 66.36 74** P **P 11 19 11.7 -0.1**
comp=Z,11nm,0.9s
**NONG Nongkai 66.73 72** P **P 11 19 13.3 -0.9**
comp=Z,29nm,1.3s,comp=Z,6μm
**GTA Gaotai 66.80 49** ⇑P **P 11 19 14.8 +0.3**
GTA pP **pP 11 19 19.3 +0.2**
GTA sP **sP 11 19 21.8 +1.0**
GTA PcP **PcP 11 19 44.3 +1.0**
GTA S **S 11 28 06.5 -0.2**
GTA SS **SS 11 32 26.1 +1.3**
GTA PMZ
comp=Z,12nm,1.3s
GTA PMZ
comp=Z,130nm,5.5s
GTA LN
comp=Z,200nm,16.6s
GTA LE
comp=Z,250nm,17.1s
GTA LZ
comp=Z,240nm,16.1s
**SKNT Sakolnakorn 67.49 74** P **P 11 19 18.7 -0.4**
comp=Z,24nm,1.1s
**CD2 Chengdu 68.43 59** *e*P **P 11 19 26.5 +1.7**
CD2 pP **pP 11 19 29.8 +0.3**
CD2 PP **PP 11 21 58.0 +2.1**
CD2 S **S 11 28 30.5 +4.1**
CD2 sS **sS 11 28 36.1 +2.0**
CD2 SKS **ScS 11 29 25.8 +1.2**
CD2 SS **SS 11 32 56.3 +6.1**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**MDSI Maura Dua 68.64 97** P **P 11 19 26.3 0.0**
**LZH Lanzhou 69.27 53** *e*P **P 11 19 30.0 -0.1**
LZH pP **pP 11 19 33.8 -0.9**
LZH sP **sP 11 19 35.4 -1.1**
LZH PMZ
comp=Z,34nm,1.4s
LZH PMZ
comp=Z,140nm,4.1s
LZH LN
comp=Z,360nm,15.0s
LZH LE
comp=Z,410nm,15.4s
LZH LZ
comp=Z,320nm,17.3s
**GYA Guiyang 70.51 64** *e*P P 11 19 41.3 +3.5
GYA PMZ
comp=Z,10.0nm,1.0s
**LEM Lembang 72.32 99** LR LR 11 47 31.3
comp=Z,197nm,19.7s,baz=230,slow=32
**TLY Talaya 72.45 37** LR LR 11 54 28.1
comp=Z,149nm,18.5s,baz=258,slow=38
**SONM Songino Array 73.30 41** P **P 11 19 54.2 -0.1**
comp=Z,4.6nm,1.1s,baz=246,slow=5.9,SNR=14
SONM LR LR 11 56 37.6
comp=Z,81nm,20.0s,baz=248,slow=40
**MAW Mawson 74.66 170** P **P 11 20 01.3 -0.2**
comp=Z,8.3nm,0.9s,baz=328,slow=6.5,SNR=19
**HHC Hu-ho-hao-te 75.91 49** *e*P **P 11 20 10.5 +1.0**
HHC PP **PP 11 22 57.8 -2.0**
HHC S **S 11 29 51.8 -0.3**
HHC sS **sS 11 30 01.1 +1.3**
HHC SS SS 11 34 54.1 +10
HHC PMZ
comp=Z,20nm,1.2s
HHC PMZ
comp=Z,110nm,6.8s
HHC LN
comp=Z,200nm,17.4s
HHC LE
comp=Z,290nm,16.5s
HHC LZ
comp=Z,140nm,17.6s
**BBKI Banjar Baru 79.10 94** P P 11 20 33.0 +5.3
**BJI Beijing 79.36 50** P **P 11 20 27.6 -1.0**
BJI PMZ
comp=Z,13nm,0.8s
BJI LZ
comp=Z,83nm,40.7s
**BOD Bodaibo 79.55 32** *e*P **P 11 20 27.1 -2.1**
BOD pmax pmax
comp=Z,16nm,1.4s
**SNAA Sanae 80.39 192** P **P 11 20 33.6 0.0**
**SNAA Sanae 80.39 192** *e*P **P 11 20 33.6 0.0**
SNAA pmax pmax
comp=Z,4.0nm,1.1s
**SNAA Sanae 80.39 192** *e*P **P 11 20 33.6 0.0**
comp=Z,3.7nm,1.1s
**VNA2 Neumayer--Watz 80.81 193** P P 11 20 28.5 -7.3
baz=233,slow=38
**VNA1 Neumayer--Stat 80.82 194** P **P 11 20 38.7 +2.9**
**SUMG Summit 80.86 343** *i*P **P 11 20 37.1 +0.5**
SUMG pmax pmax
comp=Z,32nm,1.5s
**SUMG Summit 80.86 343** *i*P **P 11 20 37.1 +0.5**
comp=Z,32nm,1.5s
**NJ2 Nanjing 81.36 58** *e*P **P 11 20 41.1 +1.5**
NJ2 PMZ
comp=Z,20nm,1.0s
**VNA3 Neumayer Olymp 81.56 194** P **P 11 20 40.1 +0.3**
**NWAO Narrogin (SRO) 85.17 123** P **P 11 20 57.9 -1.2**
comp=Z,10nm,0.9s,baz=33,slow=0.1,SNR=3.9
**BDFB Brasilia 85.61 254** LR LR 11 54 44.3
comp=Z,95nm,21.2s,baz=188,slow=32
**YAK Yakutsk 87.51 28** *e*P **P 11 21 09.0 -1.1**
YAK pmax pmax
comp=Z,19nm,0.9s
YAK pmax pmax
comp=N,1.0nm,0.7s
YAK pmax pmax
comp=E,11nm,1.4s
**BATI Baumata 88.46 100** P **P 11 21 15.3 -0.3**
comp=E,17nm,0.5s,baz=208,slow=3.3,SNR=5.3
**KSAR Wonju Array Be 88.56 53** P **P 11 21 14.9 -0.7**
**KSAR Wonju Array Be 88.56 53** P **P 11 21 14.9 -0.7**
**KSRS Korea Array 88.59 53** P **P 11 21 14.9 -0.8**
comp=E,0.6nm,0.6s,baz=276,slow=7.3,SNR=3.6
**KSRS Korea Array 88.59 53** P **P 11 21 14.9 -0.8**
KSRS pmax pmax
comp=Z,1.0nm,0.6s
**CPUP Villa Florida 95.15 244** LR LR 12 00 33.5
comp=Z,111nm,20.8s,baz=72,slow=33
**ASAR Alice Springs 99.05 113** P **Pdif 11 22 03.0 -1.2**
comp=Z,1.8nm,0.9s,baz=280,slow=4.4,SNR=17
**WRA Warramunga Arr 99.36 109** P **Pdif 11 22 04.3 -1.3**
comp=Z,0.8nm,0.9s,baz=278,slow=3.5,SNR=5.8
WRA LR LR 12 07 05.3
comp=Z,74nm,18.0s,baz=165,slow=36
**ILAR Eielson Array 110.60 1** PP PP 11 27 28.5 -1.8
comp=Z,1.5nm,1.2s,baz=354,slow=6.4,SNR=6.5
**YMR Madison River 122.60 333** *e*PKPdf **PKPdf 11 27 19.5 +0.8**
**DLMT Dillon 122.79 334** *e*PKPdf **PKPdf 11 27 19.0 0.0**
**IMW Indian Meadow 123.18 332** *e*PKPdf **PKPdf 11 27 19.7 -0.3**
**SMCO Snowmass 124.55 325** *e*PKPdf **PKPdf 11 27 23.1 +0.2**
**HWUT Hardware Ranch 125.22 331** *e*PKPdf **PKPdf 11 27 23.5 -0.3**
**MSU Marysvale 127.86 328** *e*PKIKP **PKPdf 11 27 29.2 +0.2**
**MSU Marysvale 127.86 328** *e*PKPdf **PKPdf 11 27 29.2 +0.2**
**MNTX Cornudas Mount 128.41 317** *e*PKPdf **PKPdf 11 27 29.8 -0.2**
**TXAR Lajitas Array 128.60 314** PKP **PKPdf 11 27 30.5 0.0**
comp=Z,2.0nm,1.0s,baz=84,slow=2.8,SNR=14
**121A Cookes Peak, D 129.47 320** *e*PKPdf **PKPdf 11 27 32.8 +0.7**
**NVAR Mina Array Bea 130.89 333** PKP **PKPdf 11 27 35.7 +0.9**
comp=Z,4.5nm,1.1s,baz=80,slow=0.8,SNR=18

**MEX 23 11:10:44.5 s 0.6, 14.19 N × 93.38 W, h20 km, MD 3.9, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.52** | **6** | *e*P | Pn | 11 11 07.2 | -3.4 |
| PCIG | | | | *e*S | Sn | 11 11 25.5 | -4.2 |
| **CCIG** | **Comitan** | **2.40** | **30** | *e*P | Pn | 11 11 22.9 | -0.1 |
| CCIG | | | | *e*S | Sn | 11 11 51.2 | -0.8 |
| **TGIG** | | **2.59** | **5** | *e*P | Pn | 11 11 23.9 | -1.5 |
| TGIG | | | | *e*S | Sn | 11 11 53.8 | -2.6 |

*ISCJB **23** 11:24:36.3±0.7, 36°.88S±0°.09×73°.83W±0°.08, h14km, mb3.8/10, Error ellipse: s-maj=13.4km s-min=9.3km az=163.0*
*IDC **23** 11:24:36.6±0.8, 36°.88S×73°.37W, h0km, mb3.9/10, mb1 3.9/12, mb1mx3.9/22, mbtmp3.8/12, ML3.5/2, MS3.3/2, Ms1 3.4/2, ms1mx3.1/20, Error ellipse: s-maj=29.2km s-min=17.0km az=97.0*
*GUC **23** 11:24:38.1±0.3, 37°.12S×73°.61W, h20km±12km, ML4.9*
*NEIC **23** 11:24:38.0, 37°.11S×73°.60W, h20km, ML4.9(GUC), After GUC.*
*NEIC Felt [III] at Concepcion and [II] at San Pedro.*

**ISC 23 11:24:38.3±0.7, 36°.86S±0°.07×73°.64W±0°.08, h14km, n24, σ1°15/24, mb3.9/10, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CCSP** | **San Pedro de C** | **0.42** | **88** | *i* P | | **Pb** | | **11 24 48.1** | **+0.6** |
| CCSP | | | | *i* S | | **Sb** | | **11 24 55.8** | **+1.9** |
| **TALC** | **Talca** | **2.18** | **49** | *i* P | | **Pb** | | **11 25 17.7** | **+0.2** |
| TALC | | | | *i* S | | **Sg** | | **11 25 48.3** | **-0.2** |
| TALC | comp=N,7μm,0.5s | | | AML | | AML | | 11 25 54.0 | |
| **NICH** | **Los Niches** | **2.69** | **47** | *e*P | | **Pb** | | **11 25 25.2** | **-1.1** |
| NICH | | | | *e*S | | **Sb** | | **11 26 01.0** | **+1.9** |
| NICH | comp=N,4μm,0.6s | | | AML | | AML | | 11 26 12.7 | |
| **CFAA** | **Coronel Fontan** | **6.89** | **42** | Pn | | **Pn** | | **11 26 18.2** | **-0.7** |
| CFAA | comp=N,0.3nm,0.3s,baz=218,slow=13,SNR=10 | | | Sn | | **Sn** | | **11 27 37.9** | **+0.8** |
| CFAA | comp=N,0.2nm,0.3s,baz=277,slow=16,SNR=2.2 | | | LR | | LR | | 11 29 07.3 | |
| **TRQA** | **Tornquist** | **9.35** | **101** | *e*Pn | | **Pn** | | **11 26 51.8** | **-0.8** |
| **CPUP** | **Villa Florida** | **17.39** | **57** | P | | **Pn** | | **11 28 38.2** | **-2.3** |
| CPUP | comp=N,0.1nm,0.3s,baz=230,slow=18,SNR=2.3 | | | LR | | LR | | 11 35 58.0 | |
| **LPAZ** | **La Paz** | **21.07** | **15** | P | | **P** | | **11 29 23.2** | **+0.5** |
| **SIV** | **San Ignacio** | **25.59** | **32** | P | | **P** | | **11 29 47.9** | **-0.8** |
| **SNAA** | **Sanae** | **49.45** | **157** | P | | **P** | | **11 33 27.9** | **+0.4** |
| **SNAA** | **Sanae** | **49.45** | **157** | *e*P | | **P** | | **11 33 27.4** | **-0.2** |
| **QSPA** | **South Pole Qui** | **53.38** | **180** | P | | **P** | | **11 33 56.9** | **-0.2** |
| **MAW** | **Mawson** | **70.81** | **164** | P | | **P** | | **11 35 54.1** | **+0.3** |
| **TXAR** | **Lajitas Array** | **71.63** | **333** | P | | **P** | | **11 36 00.1** | **+0.8** |
| **DBIC** | **Dimbokro** | **77.33** | **72** | P | | **P** | | **11 36 31.7** | **-1.0** |
| **BOSA** | **Boshof** | **79.89** | **118** | P | | **P** | | **11 36 47.3** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **85.51** | **326** | P | | **P** | | **11 37 18.4** | **+2.6** |
| **TORD** | **Torodi Ar. Bea** | **86.40** | **71** | P | | **P** | | **11 37 19.3** | **-1.2** |
| **GERES** | **GERESS Array B** | **115.08** | **47** | PKP | | **PKPdf** | | **11 43 17.8** | **-0.8** |
| **H11N3** | **WAKE ISLAND Hyl** | **124.88** | **269** | T | | T | | 14 01 01.2 | |
| **H11N1** | **WAKE ISLAND Hyl** | **124.89** | **269** | T | | T | | 14 00 54.3 | |
| **H11N2** | **WAKE ISLAND Hyl** | **124.89** | **269** | T | | T | | 14 00 52.3 | |
| **ABKAR** | **Akbulak array** | **144.44** | **55** | *e*PKPdf | | PKPbc | | 11 44 12.8 | +0.6 |
| **ZALV** | **Zalesovo Beam** | **157.33** | **34** | PKPab | | **PKPab** | | **11 45 03.9** | **-0.6** |
| **MKAR** | **Makanchi Array** | **159.57** | **53** | PKPab | | **PKPab** | | **11 45 14.8** | **+0.2** |

baz=111 — comp=N,0.4nm,0.6s,baz=330,slow=5.7,SNR=2.4
baz=111 — comp=N,0.8nm,0.5s,baz=298,slow=6.4,SNR=3.9
baz=111 — comp=N,0.4nm,0.3s,baz=274,slow=3.8,SNR=4.6

**WEL 23 11:24:48.9±0.4, 38°.41S×175°.82E, h176km±3km, ML3.5/12, 10C-1D, Error ellipse: s-maj=2.7km s-min=2.1km az=0.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TWVZ** | **Taurewa** | **0.73** | **204** | ⇑P | N | | Pn | 11 25 14.6 | +0.2 |
| **WPVZ** | **Whakapapa** | **0.82** | **195** | ⇑P | N | | Pn | 11 25 15.3 | +0.2 |
| **TUVZ** | **Tukino** | **0.87** | **189** | P | N | | Pn | 11 25 15.6 | +0.1 |
| **FWVZ** | **Far West T-bar** | **0.87** | **194** | ⇑P | N | | Pn | 11 25 15.6 | 0.0 |
| **WHVZ** | **Whangaehu Hut** | **0.89** | **192** | ⇑P | N | | Pn | 11 25 15.8 | +0.1 |
| **TRVZ** | **Turoa** | **0.92** | **193** | P | N | | Pn | 11 25 16.0 | +0.1 |
| **BKZ** | **Black Stump Fm** | **0.92** | **146** | ⇑P | N | | Pn | 11 25 15.6 | -0.1 |
| BKZ | | | | S | N | | Sn | 11 25 35.1 | -1.3 |
| BKZ | | | | AML | | | AML | 11 25 37.1 | |
| **WNVZ** | **Wahianoa** | **0.94** | **191** | P | N | | Pn | 11 25 15.9 | 0.0 |
| **PKVZ** | **Pokaka** | **0.96** | **203** | P | N | | Pn | 11 25 15.9 | 0.0 |
| **MOVZ** | **Moawhango** | **1.00** | **183** | P | N | | Pn | 11 25 15.9 | -0.4 |
| **URZ** | **Urewera** | **1.02** | **82** | ⇓P | N | | Pn | 11 25 16.0 | -0.3 |
| URZ | | | | S | N | | Sn | 11 25 36.3 | -1.2 |
| **NMHZ** | **Naumai** | **1.03** | **132** | P | N | | Pn | 11 25 17.3 | +0.8 |
| **BHHZ** | **Black Hill Sta** | **1.09** | **170** | ⇑P | N | | Pn | 11 25 16.7 | -0.3 |
| **VRZ** | **Vera Road** | **1.10** | **229** | P | N | | Pn | 11 25 17.0 | +0.1 |
| **RAHZ** | **Arahi** | **1.11** | **118** | P | N | | Pn | 11 25 17.7 | +0.7 |
| RAHZ | | | | S | N | | Sn | 11 25 38.8 | -0.1 |
| **MCHZ** | **McNeill Hill** | **1.24** | **147** | P | N | | Pn | 11 25 18.7 | +0.6 |
| **ARHZ** | **Aropaoanui** | **1.25** | **133** | P | N | | Pn | 11 25 18.7 | +0.5 |
| ARHZ | | | | S | N | | Sn | 11 25 40.5 | -0.4 |
| **WHHZ** | **Waihua** | **1.29** | **122** | P | N | | Pn | 11 25 19.2 | +0.6 |
| **KRHZ** | **Kereru** | **1.31** | **161** | ⇑P | N | | Pn | 11 25 18.5 | -0.2 |
| **MWZ** | **Matawai** | **1.34** | **87** | P | N | | Pn | 11 25 18.9 | -0.2 |
| **WAZ** | **Wanganui** | **1.50** | **206** | P | N | | Pn | 11 25 20.0 | -0.4 |
| **PNHZ** | **Pukenui** | **1.53** | **169** | P | N | | Pn | 11 25 20.3 | -0.6 |
| **RIGZ** | **Rimuhau** | **1.55** | **102** | P | N | | Pn | 11 25 21.1 | +0.1 |
| **KNZ** | **Kokohu** | **1.57** | **113** | P | N | | Pn | 11 25 21.1 | 0.0 |
| **CKHZ** | **Cape Kidnapper** | **1.59** | **142** | P | N | | Pn | 11 25 21.5 | +0.1 |
| **TKGZ** | **Te Karaka** | **1.59** | **92** | P | N | | Pn | 11 25 21.8 | +0.4 |
| **NEZ** | **North Egmont** | **1.60** | **237** | P | N | | Pn | 11 25 21.7 | +0.2 |
| **KAHZ** | **Kahuranaki** | **1.61** | **150** | P | N | | Pn | 11 25 21.6 | 0.0 |
| **TSZ** | **Takapari Road** | **1.65** | **176** | ⇑P | N | | Pn | 11 25 21.2 | -0.8 |
| **HAZ** | **Te Kaha** | **1.68** | **68** | P | N | | Pn | 11 25 21.5 | -0.7 |
| **PRGZ** | **Paritu Road** | **1.69** | **108** | P | N | | Pn | 11 25 22.3 | -0.1 |
| **WPHZ** | **Waipukurau** | **1.72** | **164** | P | N | | Pn | 11 25 22.0 | -0.7 |
| **MHGZ** | **Mahia Peninsul** | **1.79** | **115** | P | N | | Pn | 11 25 23.5 | +0.1 |
| **CNGZ** | **Carnagh Statio** | **1.87** | **93** | P | N | | Pn | 11 25 24.7 | +0.4 |
| **DVHZ** | **Dannevirke** | **1.91** | **172** | P | N | | Pn | 11 25 23.4 | -1.3 |
| **PRHZ** | **Porangahau** | **1.96** | **162** | P | N | | Pn | 11 25 23.9 | -1.4 |
| **POWZ** | **Post Office Ro** | **1.98** | **181** | P | N | | Pn | 11 25 24.0 | -1.4 |
| **ANWZ** | **Angora Road** | **2.11** | **166** | P | N | | Pn | 11 25 25.7 | -1.1 |
| **WMGZ** | **Waiomatatini S** | **2.13** | **75** | P | N | | Pn | 11 25 26.7 | -0.4 |
| **MXZ** | **Matakaoa Point** | **2.14** | **68** | P | N | | Pn | 11 25 26.9 | -0.3 |
| **PRWZ** | **Pori Road** | **2.15** | **177** | P | N | | Pn | 11 25 26.0 | -1.2 |
| **MRZ** | **Mangatainoka R** | **2.26** | **185** | ⇑P | N | | Pn | 11 25 26.7 | -1.9 |
| **BFZ** | **Birch Farm** | **2.29** | **172** | P | N | | Pn | 11 25 27.1 | -1.8 |
| **OGWZ** | **Otaki Gorge** | **2.46** | **192** | P | N | | Pn | 11 25 29.0 | -1.8 |
| **HOWZ** | **Holdsworth Sta** | **2.50** | **185** | P | N | | Pn | 11 25 29.0 | -2.3 |
| **KIW** | **Kapiti Island** | **2.55** | **196** | P | N | | Pn | 11 25 29.6 | -2.3 |
| **MTW** | **Mount Morrison** | **2.76** | **185** | P | N | | Pn | 11 25 31.6 | -2.7 |
| **CAW** | **Cannon Point** | **2.76** | **192** | P | N | | Pn | 11 25 32.0 | -2.4 |
| **WEL** | **Wellington** | **2.99** | **195** | P | N | | Pn | 11 25 34.6 | -2.5 |
| **TCW** | **Tory Channel** | **3.04** | **203** | P | N | | Pn | 11 25 35.3 | -2.5 |
| **PLWZ** | **Palliser** | **3.19** | **188** | P | N | | Pn | 11 25 36.4 | -3.3 |
| **TUWZ** | **Tuamarina** | **3.35** | **205** | P | N | | Pn | 11 25 38.6 | -2.9 |
| **NNZ** | **Nelson** | **3.38** | **213** | P | N | | Pn | 11 25 38.9 | -3.0 |
| **QRZ** | **Quartz Range** | **3.51** | **225** | P | N | | Pn | 11 25 39.9 | -3.7 |
| **THZ** | **Tophouse** | **4.03** | **213** | P | N | | Pn | 11 25 46.9 | -3.4 |
| **KHZ** | **Kahutara** | **4.37** | **203** | ⇑P | N | | Pn | 11 25 51.2 | -3.2 |
| **OXZ** | **Oxford** | **5.69** | **209** | P | N | | Pn | 11 26 06.5 | -5.2 |
| **MQZ** | **McQueen's Vall** | **5.81** | **203** | P | N | | Pn | 11 26 08.1 | -5.1 |
| **ODZ** | **Otahua Downs** | **7.68** | **209** | PN | | | Pn | 11 26 33.4 | -4.4 |

*ISCJB **23** 11:32:48.8±1.2, 29°.53S±0°.04×71°.3W±0°.1, h26km±6km, Error ellipse: s-maj=14.8km s-min=5.8km az=10.9*
*GUC **23** 11:32:49.0±0.5, 29°.59S×71°.13W, h40km±2km, ML3.5*

**ISC 23 11:32:48.9±1.6, 29°.53S±0°.04×71°.3W±0°.1, h27km±13km, n18, σ1°80/26, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LSCH** | **La Serena** | **0.39** | **168** | *e*P | | **Pb** | | **11 32 57.6** | **+0.2** |
| LSCH | | | | *e*S | | **Sb** | | **11 33 03.8** | **+0.6** |
| **LCO** | **Las Campanas** | **0.76** | **47** | *e*P | | **Pn** | | **11 33 03.0** | **-1.1** |
| LCO | | | | *e*S | | **Sn** | | **11 33 13.7** | **-1.1** |
| **LCO** | **Las Campanas** | **0.76** | **47** | *e*P | | **Pn** | | **11 33 02.8** | **-1.2** |
| LCO | | | | *e*S | | **Sn** | | **11 33 14.0** | **-0.8** |
| **TLL** | **Tololo Astrono** | **0.79** | **144** | *e*P | | **Pn** | | **11 33 02.4** | **-2.0** |
| TLL | | | | *e*S | | **Sn** | | **11 33 12.5** | **-3.0** |
| TLL | comp=E,5μm,0.3s | | | AML | | AML | | 11 33 13.5 | |
| **CPCH** | **Copiapo** | **2.33** | **22** | *e*P | | **Pn** | | **11 33 26.2** | **+0.7** |
| CPCH | | | | *e*S | | **Sn** | | **11 33 53.7** | **+0.5** |
| **AMOG** | **MOGNA** | **2.83** | **120** | *e*P | | **Pn** | | **11 33 34.5** | **+2.0** |
| **VCA** | **Vinchina** | **2.85** | **75** | *e*P | | Pn | | 11 33 35.8 | +3.0 |
| VCA | | | | *e*S | | **Sn** | | **11 34 10.4** | **+4.1** |
| VCA | comp=Z,564nm,0.5s | | | IAML | | | | 11 34 21.1 | |
| **RTLS** | **Leoncito** | **2.86** | **143** | *e*P | | **Pn** | | **11 33 35.1** | **+2.1** |
| **RTLL** | **Cerro Villicun** | **3.05** | **127** | *e*P | | **Pn** | | **11 33 37.3** | **+1.9** |
| **AUSP** | **Uspallata** | **3.17** | **149** | *e*P | | **Pn** | | **11 33 38.5** | **+1.3** |
| AUSP | | | | *e*S | | **Sb** | | **11 34 20.6** | **-2.3** |
| **RTCV** | **Cerro Valdivia** | **3.35** | **135** | *e*P | | **Pn** | | **11 33 41.0** | **+1.5** |
| RTCV | | | | *e*S | | **Sb** | | **11 34 25.5** | **-2.4** |
| **CFAA** | **Coronel Fontan** | **3.38** | **129** | *e*P | | **Pn** | | **11 33 41.6** | **+1.7** |
| **AVFE** | **Valle Fertil** | **3.55** | **109** | *e*P | | **Pn** | | **11 33 42.5** | **+0.3** |
| AVFE | comp=Z,100nm,0.4s | | | IAML | | | | 11 34 35.4 | |
| **ASAL** | **Salagasta** | **3.73** | **146** | *e*P | | **Pn** | | **11 33 45.9** | **+1.1** |
| **ARCO** | **CERRO ARCO** | **3.89** | **149** | *e*P | | **Pn** | | **11 33 47.9** | **+0.8** |
| ARCO | comp=Z,57nm,0.8s | | | IAML | | | | 11 34 59.4 | |
| **AAGR** | **Agrelo** | **4.14** | **149** | *e*P | | **Pn** | | **11 33 51.5** | **+1.0** |
| **APLL** | **PUNTA DE LOS L** | **4.26** | **103** | *e*P | | **Pn** | | **11 33 52.1** | **+0.1** |
| **CYA** | **Choya** | **4.97** | **79** | *e*P | | **Pn** | | **11 34 01.4** | **-0.4** |
| CYA | | | | *e*S | | **Sn** | | **11 35 00.1** | **+1.7** |
| CYA | comp=Z,43nm,0.6s | | | IAML | | | | 11 35 06.3 | |

**MEX 23 11:36:47.3±0.4, 14°.27N×92°.40W, h20km±50km, MD3.8, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.63** | **331** | *e*P | | Pn | | 11 37 12.1 | -2.8 |
| PCIG | | | | *e*S | | Sn | | 11 37 31.0 | -4.4 |
| **CCIG** | **Comitan** | **2.02** | **7** | *e*P | | Pn | | 11 37 17.9 | -2.6 |
| CCIG | | | | *e*S | | Sn | | 11 37 41.7 | -3.6 |
| **TGIG** | | **2.59** | **345** | *e*P | | Pn | | 11 37 25.7 | -2.5 |
| TGIG | | | | *e*S | | Sn | | 11 37 56.7 | -2.6 |

**IDC 23 11:37:14.2±1.7, 7°.94S×118°.87E, h0km, mb3.8/2, mb1 3.9/5, mb1mx3.6/32, mbtmp3.8/5, ML3.7/3, Error ellipse: s-maj=43.5km s-min=19.8km az=59.0, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **3.04** | **17** | Pn | | Pn | | 11 38 02.9 | -0.7 |
| KAPI | 4.6nm,0.3s,baz=213,slow=8.1,SNR=11 | | | Sn | | Sn | | 11 38 43.4 | +2.7 |
| **BATI** | **Baumata** | **5.25** | **116** | Pn | | Pn | | 11 38 34.4 | +0.4 |
| BATI | 17nm,0.3s,baz=62,slow=22,SNR=7.8 | | | Sn | | Sn | | 11 39 36.3 | +1.0 |
| **WRA** | **Warramunga Arr** | **19.16** | **130** | P | | P | | 11 41 38.8 | -0.7 |
| **ASAR** | **Alice Springs** | **21.27** | **139** | P | | P | | 11 42 02.9 | +0.4 |
| **MKAR** | **Makanchi Array** | **63.46** | **333** | P | | P | | 11 47 46.0 | 0.0 |

0.9nm,0.3s,baz=125,slow=12,SNR=1.8
0.4nm,0.3s,baz=308,slow=12,SNR=35
2.7nm,0.6s,baz=315,slow=9.2,SNR=31
0.4nm,0.4s,baz=142,slow=7.3,SNR=3.2

*ISCJB **23** 11:50:52.3±0.5, 32°.25N±0°.04×104°.89E±0°.08, h10km, mb3.8/10, Error ellipse: s-maj=9.6km s-min=5.5km az=12.5*
*IDC **23** 11:50:52.8±0.8, 32°.22N×104°.72E, h0km, mb3.8/10, mb1 4.0/13, mb1mx3.7/43, mbtmp3.8/13, ML3.7/2, Error ellipse: s-maj=36.1km s-min=15.6km az=56.0*
*BJI **23** 11:50:54.6, 32°.33N×104°.76E, h17km, ML3.8/17, Ms3.8/5, Ms7 3.5/4*

**ISC 23 11:50:55.0±0.6, 32°.33N±0°.04×104°.73E±0°.06, h10km, n19, σ1°86/24, mb3.9/10, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CD2** | **Chengdu** | **1.64** | **210** | Pg | | **Pb** | | **11 51 24.8** | **-0.6** |
| CD2 | | | | Sg | | **Sg** | | **11 51 48.0** | **+0.3** |
| CD2 | 4μm,0.7s | | | SMN | | | | | |
| CD2 | 3μm,0.6s | | | SME | | | | | |
| **LZH** | **Lanzhou** | **3.82** | **349** | Pg | | Pb | | 11 51 58.8 | -3.8 |
| LZH | | | | Sn | | **Sn** | | **11 52 43.5** | **+4.4** |
| LZH | | | | Sg | | **Sg** | | **11 52 54.6** | **-3.1** |
| LZH | 290nm,0.6s | | | SMN | | | | | |
| LZH | 460nm,0.8s | | | SME | | | | | |
| LZH | 790nm,4.7s | | | LN | | | | | |
| LZH | 480nm,5.2s | | | LZ | | | | | |
| **XAN** | **Xi'an** | **3.91** | **63** | Pn | | **Pn** | | **11 51 55.4** | **+0.2** |
| XAN | | | | Pg | | **Pb** | | **11 52 04.8** | **+0.7** |
| XAN | | | | Sg | | **Sb** | | **11 52 50.9** | **-0.6** |
| XAN | 180nm,0.9s | | | SMN | | | | | |
| XAN | 230nm,1.0s | | | SME | | | | | |
| **GYA** | **Guiyang** | **6.09** | **163** | *e*Pn | | Pn | | 11 52 28.3 | +3.0 |
| GYA | | | | Sn | | **Sn** | | **11 53 33.0** | **-2.1** |
| GYA | | | | Sg | | **Sb** | | **11 53 59.3** | **+5.0** |
| GYA | 110nm,0.6s | | | SMN | | | | | |
| GYA | 100nm,0.7s | | | SME | | | | | |
| **GTA** | **Gaotai** | **8.11** | **332** | *e*P | | **Pb** | | **11 53 17.1** | **+1.4** |
| GTA | | | | pP | | pP | | 11 53 24.3 | |
| GTA | | | | sP | | sP | | 11 53 27.3 | |
| GTA | comp=Z,6.0nm,0.9s | | | pmax | | pmax | | | |
| **CMAR** | **Chiang Mai Arr** | **14.76** | **202** | Pn | | **Pn** | | **11 54 22.5** | **-1.4** |
| **SONM** | **Songino Array** | **15.54** | **4** | Pn | | **Pn** | | **11 54 35.5** | **+1.2** |
| **KSRS** | **Korea Array** | **19.69** | **69** | P | | **P** | | **11 55 23.7** | **-0.6** |
| **MKAR** | **Makanchi Array** | **22.43** | **317** | P | | **P** | | **11 55 55.0** | **+1.0** |
| **ZALV** | **Zalesovo Beam** | **25.87** | **333** | P | | **P** | | **11 56 27.4** | **+0.7** |
| **KURBB** | **Kurchatov Arra** | **26.60** | **321** | P | | **P** | | **11 56 33.8** | **+0.4** |
| **ARCES** | **ARCESS Array B** | **56.36** | **335** | P | | **P** | | **12 00 36.2** | **+0.2** |
| **FINES** | **FINESS Array B** | **56.85** | **326** | P | | **P** | | **12 00 39.0** | **-0.5** |
| **AKASG** | **Malin Array Be** | **56.94** | **313** | P | | **P** | | **12 00 39.9** | **-0.4** |
| **WRA** | **Warramunga Arr** | **59.20** | **147** | P | | **P** | | **12 00 55.3** | **-1.2** |
| **ASAR** | **Alice Springs** | **62.27** | **150** | P | | **P** | | **12 01 16.0** | **-1.3** |
| **NB2** | **NORSAR Subarra** | **63.91** | **327** | P | | **P** | | **12 01 28.2** | **+0.3** |
| **NOA** | **NORSAR Array B** | **63.91** | **327** | P | | **P** | | **12 01 27.2** | **-0.7** |
| **GERES** | **GERESS Array B** | **67.07** | **314** | P | | **P** | | **12 01 47.3** | **-1.3** |

comp=Z,6.0nm,0.9s
comp=N,0.2nm,0.3s,baz=259,slow=10.0,SNR=5.7
comp=Z,0.7nm,0.7s,baz=102,slow=12,SNR=6.6
comp=Z,1.0nm,0.8s,baz=131,slow=8.9,SNR=10
comp=Z,4.8nm,1.0s,baz=97,slow=7.4,SNR=3.4
comp=Z,3.6nm,1.1s,baz=93,slow=6.7,SNR=10
comp=Z,0.4nm,0.5s,baz=67,slow=7.7,SNR=3.0
comp=Z,1.0nm,0.6s,baz=339,slow=7.2,SNR=15
comp=Z,0.3nm,0.3s,baz=336,slow=6.9,SNR=9.6
comp=Z,0.8nm,0.5s,baz=73,slow=6.9
comp=Z,0.6nm,0.5s,baz=74,slow=6.6,SNR=5.9
comp=Z,0.4nm,0.6s,baz=335,slow=18,SNR=3.0

*IDC **23** 11:53:04.6±2.5, 24°.46N×109°.12W, h0km, mb3.8/3, mb1 3.9/7, mb1mx3.7/31, mbtmp3.6/7, ML3.3/4, MS3.1/3, Ms1 3.0/3, ms1mx2.7/42, Error ellipse: s-maj=44.0km s-min=17.1km az=144.0*
*ISCJB **23** 11:53:08.4±0.5, 24°.87N±0°.03×109°.53W±0°.05, h17km, mb3.6/3, MS3.5/1, Error ellipse: s-maj=6.4km s-min=4.1km az=12.0*
*NEIC **23** 11:53:12.1, 24°.85N×109°.56W, h10km, MD4.1(MEX), After MEX.*
*MEX **23** 11:53:12.1±0.4, 24°.85N×109°.56W, h10km, MD4.1*

**ISC 23 11:53:10.1±0.8, 24°.81N±0°.04×109°.58W±0°.05, h17km, n23, σ0°99/27, mb3.9/3, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **0.97** | **223** | Pn | | **Pb** | | **11 53 27.5** | **-0.9** |
| LPIG | 30nm,0.3s,baz=34,slow=3.6,SNR=36 | | | Sn | | **Sg** | | **11 53 42.1** | **+0.4** |
| LPIG | 152nm,0.3s,baz=155,slow=19,SNR=22 | | | LR | | LR | | 11 53 44.5 | |
| LPIG | comp=Z,67nm,19.3s,baz=75,slow=35 | | | | | | | | |
| **LPIG** | **La Paz** | **0.97** | **223** | *i* P | | **Pb** | | **11 53 28.4** | **-0.1** |
| LPIG | | | | *e*S | | **Sb** | | **11 53 41.5** | **+0.6** |
| **LPIG** | **La Paz** | **0.97** | **223** | *i* P | | **Pb** | | **11 53 28.4** | **-0.1** |
| LPIG | | | | *e*S | | **Sb** | | **11 53 41.5** | **+0.6** |
| **SLBS** | **Sierra La Lagu** | **1.17** | **197** | *i* P | | **Pn** | | **11 53 30.2** | **-1.6** |
| SLBS | | | | *i* S | | **Sb** | | **11 53 45.2** | **-1.6** |
| **MAIG** | **Mazatlaan** | **3.31** | **119** | *e*P | | **Pn** | | **11 54 02.1** | **+1.1** |
| MAIG | | | | *e*S | | **Sn** | | **11 54 39.8** | **-0.2** |
| **MAIG** | **Mazatlaan** | **3.31** | **119** | *e*P | | **Pn** | | **11 54 02.1** | **+1.1** |
| MAIG | | | | *e*S | | **Sn** | | **11 54 39.8** | **-0.2** |
| **SRIG** | **Santa Rosalia** | **3.46** | **317** | *e*P | | **Pn** | | **11 54 03.5** | **+0.3** |
| SRIG | | | | *e*S | | **Sn** | | **11 54 43.3** | **-0.5** |
| **SRIG** | **Santa Rosalia** | **3.46** | **317** | *e*P | | **Pn** | | **11 54 03.5** | **+0.3** |
| SRIG | | | | *e*S | | **Sn** | | **11 54 43.3** | **-0.5** |
| **HSIG** | | **4.37** | **344** | *e*P | | Pn | | 11 54 11.5 | -4.2 |
| HSIG | | | | *e*S | | **Sn** | | **11 55 05.7** | **-0.5** |
| **HSIG** | | **4.37** | **344** | *e*P | | Pn | | 11 54 11.5 | -4.2 |
| HSIG | | | | *e*S | | **Sn** | | **11 55 05.7** | **-0.5** |
| **TXAR** | **Lajitas Array** | **6.93** | **48** | Pn | | Pn | | 11 54 46.7 | -4.3 |
| TXAR | 0.2nm,0.3s,baz=221,slow=13,SNR=21 | | | Pg | | Pg | | 11 55 16.7 | -6.2 |
| TXAR | 0.9nm,0.3s,baz=225,slow=15,SNR=10 | | | Lg | | Lg | | 11 56 40.4 | |
| TXAR | 1.2nm,0.3s,baz=227,slow=31,SNR=4.5 | | | LR | | LR | | 11 57 46.3 | |
| **TUC** | **Tucson** | **7.55** | **352** | *e*Pn | | **Pn** | | **11 54 60.0** | **+0.5** |
| TUC | 1.2nm,0.4s | | | *e*Sg | | Sb | | 11 57 12.6 | +22 |
| **MNTX** | **Cornudas Mount** | **7.80** | **27** | *e*Pn | | **Pn** | | **11 55 00.3** | **-2.5** |
| **121A** | **Cookes Peak, D** | **7.85** | **11** | *e*Pn | | **Pn** | | **11 55 02.5** | **-1.2** |
| **LAZ** | **Ladron** | **9.79** | **12** | *e*Pn | | **Pn** | | **11 55 29.5** | **-0.9** |
| **ANMO** | **Albuquerque** | **10.46** | **14** | Pn | | **Pn** | | **11 55 40.7** | **+1.2** |
| ANMO | 0.1nm,0.3s,baz=190,slow=14,SNR=8.5 | | | Lg | | Lg | | 11 58 38.5 | |
| **PFO** | **Pinyon Flat Ob** | **10.62** | **327** | Pn | | Pn | | 11 55 48.0 | +6.3 |
| **NVAR** | **Mina Array Bea** | **15.46** | **333** | Pn | | **P** | | **11 56 52.4** | **+0.3** |
| **CMIG** | **Matias Romero** | **15.72** | **116** | LR | | LR | | 12 02 49.8 | |
| **NEW** | **Newport** | **24.16** | **348** | P | | **P** | | **11 58 25.7** | **+0.4** |
| **ULM** | **Lac du Bonnet** | **27.53** | **19** | P | | **P** | | **11 58 55.0** | **-0.8** |
| **ILAR** | **Eielson Array** | **46.62** | **339** | P | | **P** | | **12 01 38.7** | **+1.5** |
| **RPN** | **Rapa Nui** | **51.64** | **180** | LR | | LR | | 12 19 33.0 | |

0.1nm,0.3s,baz=65,slow=14,SNR=2.9
0.1nm,0.3s,baz=117,slow=15,SNR=4.0
0.1nm,0.3s,baz=155,slow=11,SNR=16
comp=Z,97nm,21.5s,baz=264,slow=38
2.1nm,0.6s,baz=154,slow=10.0,SNR=5.4
1.9nm,0.5s,baz=198,slow=20,SNR=3.6
0.4nm,1.0s,baz=134,slow=6.4,SNR=3.7
comp=Z,46nm,19.6s,baz=118,slow=31

**IDC 23 12:19:10.8±4.6, 20°.08S×177°.61W, h522km±32km, mb3.0/4, mb1 3.3/5, mb1mx2.9/29, mbtmp4.0/5, Error ellipse: s-maj=157.5km s-min=20.0km az=148.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **8.30** | **43** | P | | P | | 12 21 11.3 | +0.3 |
| AFI | 1.3nm,0.3s,baz=61,slow=19,SNR=2.9 | | | S | | S | | 12 22 48.8 | -0.7 |
| **CTA** | **Charters Tower** | **33.89** | **264** | P | | P | | 12 25 10.6 | +0.3 |
| **ASAR** | **Alice Springs** | **44.97** | **256** | P | | P | | 12 26 39.5 | 0.0 |
| **WRA** | **Warramunga Arr** | **45.02** | **262** | P | | P | | 12 26 39.3 | -0.6 |
| **ILAR** | **Eielson Array** | **87.83** | **13** | P | | P | | 12 31 04.9 | +1.1 |
| **AKASG** | **Malin Array Be** | **142.82** | **332** | PKP | | PKPdf | | 12 37 42.2 | -2.3 |

1.6nm,0.3s,baz=41,slow=20,SNR=4.5
0.9nm,0.5s,baz=93,slow=7.6,SNR=14
0.6nm,0.3s,baz=96,slow=7.6,SNR=43
0.2nm,0.5s,baz=210,slow=5.2,SNR=4.5
0.8nm,0.4s,baz=42,slow=4.4,SNR=4.5

*CSEM **23** 12:29:12.7±0.1, 47°.35N×10°.86E, h16km±1km, ML2.4/13, Error ellipse: s-maj=2.6km s-min=2.1km az=156.0*
*VIE **23** 12:29:13.1±0.2, 47°.34N×10°.87E, h10km±3km, mb1.6/8, ml2.4/11, Error ellipse: s-maj=1.2km s-min=0.9km az=177.0, felt 3 ems98 at Ehrwald / Tyrol*
*LDG **23** 12:29:13.7±0.1, 47°.33N×10°.89E, h10km, Ml2.5/10, Error ellipse: s-maj=1.7km s-min=0.9km az=39.0*
*BGR **23** 12:29:14.1±0.3, 47°.38N×10°.87E, h10km, ML2.2/9, Error ellipse: s-maj=4.4km s-min=3.3km az=5.0*

**ISC 23 12:29:12.8±0.8, 47°.37N±0°.02×10°.84E±0°.02, h14km±5km, n64, σ1°15/118, 1C-9D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RETA** | **Reutte** | **0.13** | **335** | ⇓*e*Pg | | **Pg** | | **12 29 16.6** | **+0.1** |
| RETA | 10nm,0.1s,SNR=108 | | | ⇓*i*Sg | | **Sb** | | **12 29 19.6** | **-0.3** |
| **RETA** | **Reutte** | **0.13** | **335** | Pg | | **Pg** | | **12 29 16.6** | **+0.1** |
| RETA | 10nm,0.1s,SNR=108 | | | Sg | | **Sb** | | **12 29 19.6** | **-0.3** |
| **MOTA** | **Moosalm** | **0.18** | **98** | *e*Pg | | **Pg** | | **12 29 16.8** | **-0.4** |
| MOTA | 29nm,0.1s,SNR=193 | | | ⇑*i*Sg | | **Sg** | | **12 29 19.5** | **-0.7** |
| **MOTA** | **Moosalm** | **0.18** | **98** | Pg | | **Pg** | | **12 29 16.8** | **-0.4** |
| MOTA | 29nm,0.1s,SNR=193 | | | Sg | | **Sg** | | **12 29 19.5** | **-0.7** |
| **SQTA** | **Sankt Quirin** | **0.29** | **121** | ⇓*i*Pg | | **Pg** | | **12 29 18.8** | **-0.2** |
| **SQTA** | **Sankt Quirin** | **0.29** | **121** | Pg | | **Pg** | | **12 29 18.8** | **-0.2** |
| **FETA** | **Feichten** | **0.36** | **192** | ⇓*e*Pg | | **Pg** | | **12 29 20.2** | **+0.1** |
| FETA | 7.6nm,0.1s,SNR=75 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **RJOB** | **Jochberg** | **1.37** | **74** | Pg | | **Pg** | **12 29 39.7** | **+0.5** |
| RJOB | | | | Sg | | **Sg** | **12 29 59.2** | **+2.1** |
| **KBA** | **Koelnbreinsper** | **1.73** | **99** | *e*Pg | | **Pg** | **12 29 46.0** | **-0.1** |
| KBA | | | | *e*Sg | | **Sg** | **12 30 08.2** | **-0.3** |
| **KBA** | **Koelnbreinsper** | **1.73** | **99** | Pg | | **Pg** | **12 29 46.0** | **-0.1** |
| KBA | | | | Sg | | **Sg** | **12 30 08.2** | **-0.3** |
| **BFO** | **Black Forest** | **1.94** | **301** | *e*Pn | | **Pb** | **12 29 47.5** | **-0.5** |
| BFO | | | | *e*Pg | | **Pg** | **12 29 50.8** | **+0.7** |
| BFO | | | | *e*Sg | | **Sg** | **12 30 16.0** | **+0.7** |
| **BFO** | **Black Forest** | **1.94** | **301** | Pn | | **Pb** | **12 29 47.5** | **-0.5** |
| **WET** | **Wettzell** | **2.24** | **37** | *e*Pn | | **Pn** | **12 29 49.9** | **+0.6** |
| WET | | | | *e*Sn | | **Sn** | **12 30 15.6** | **-1.2** |
| WET | | | | *e*Sg | | **Sb** | **12 30 22.6** | **+2.1** |
| **WET** | **Wettzell** | **2.24** | **37** | Pn | | **Pn** | **12 29 49.9** | **+0.6** |
| WET | | | | Sn | | **Sn** | **12 30 15.6** | **-1.2** |
| WET | | | | Sg | | **Sb** | **12 30 22.6** | **+2.1** |
| **GRA1** | **Grafenberg Arr** | **2.34** | **6** | Pg | | **Pg** | **12 29 57.8** | **+0.2** |
| GRA1 | | | | Sg | | **Sg** | **12 30 27.1** | **-0.8** |
| **GRF** | **Grafenberg Arr** | **2.34** | **6** | *e*Pg | | **Pg** | **12 29 57.8** | **+0.2** |
| GRF | | | | *e*Sg | | **Sg** | **12 30 27.1** | **-0.8** |
| **MOA** | **Molln** | **2.37** | **77** | *e*Pg | | **Pg** | **12 29 57.4** | **-0.7** |
| MOA | | | | *e*Sg | | **Sg** | **12 30 28.1** | **-0.7** |
| **MOA** | **Molln** | **2.37** | **77** | Pg | | **Pg** | **12 29 57.4** | **-0.7** |
| MOA | | | | Sg | | **Sg** | **12 30 28.1** | **-0.7** |
| **GEC2** | **GERESS Array S** | **2.42** | **51** | *e*Pn | | **Pn** | **12 29 53.5** | **+1.6** |
| GEC2 | | | | *e*Sg | | **Sb** | **12 30 28.2** | **+2.5** |
| **GEC2** | **GERESS Array S** | **2.42** | **51** | Pn | | **Pn** | **12 29 53.5** | **+1.6** |
| GEC2 | | | | Sg | | **Sb** | **12 30 28.2** | **+2.5** |
| **CDF** | **Champ du Feu** | **2.62** | **295** | *e*Pn | | **Pn** | **12 29 55.1** | **+0.5** |
| **CDF** | **Champ du Feu** | **2.62** | **295** | *e*Pg | | **Pg** | **12 30 03.9** | **+1.0** |
| CDF | | | | *e*Sg | | **Sg** | **12 30 37.4** | **+0.6** |
| | 9.7nm,0.4s | | | | | | | |
| **CDF** | **Champ du Feu** | **2.62** | **295** | *e*Pn | | **Pn** | **12 29 55.1** | **+0.5** |
| **CDF** | **Champ du Feu** | **2.62** | **295** | *e*Pg | | **Pg** | **12 30 03.9** | **+1.0** |
| CDF | | | | *e*Sg | | **Sg** | **12 30 37.4** | **+0.6** |
| | 4.8nm,0.4s | | | | | | | |
| **HINF** | **Hinteralfeld** | **2.73** | **281** | *e*Pn | | **Pn** | **12 29 56.6** | **+0.4** |
| HINF | | | | *e*Sg | | **Sg** | **12 30 40.5** | **-0.1** |
| | 5.9nm,0.4s | | | | | | | |
| **HINF** | **Hinteralfeld** | **2.73** | **281** | *e*Pn | | **Pn** | **12 29 56.6** | **+0.4** |
| HINF | | | | *e*Sg | | **Sg** | **12 30 40.5** | **-0.1** |
| | 3.0nm,0.4s | | | | | | | |
| **HAU** | **Haudompre** | **3.10** | **283** | *e*Pn | | **Pn** | **12 30 01.4** | **+0.2** |
| HAU | | | | *e*Sg | | **Sg** | **12 30 52.2** | **-0.1** |
| | 6.6nm,0.3s | | | | | | | |
| **HAU** | **Haudompre** | **3.10** | **283** | *e*Pn | | **Pn** | **12 30 01.4** | **+0.2** |
| HAU | | | | *e*Sg | | **Sg** | **12 30 52.2** | **-0.1** |
| | 3.3nm,0.3s | | | | | | | |
| **TANN** | **Tannenbergstha** | **3.23** | **19** | *e*Sg | | **Sg** | **12 30 56.0** | **-0.5** |
| **TANN** | **Tannenbergstha** | **3.23** | **19** | Sg | | **Sg** | **12 30 56.0** | **-0.5** |
| **MOX** | **Moxa** | **3.32** | **9** | *e*Pg | | **Pg** | **12 30 17.4** | **+1.1** |
| MOX | | | | *e*Sn | | **Sn** | **12 30 42.3** | **-1.1** |
| MOX | | | | *e*Sg | | **Sg** | **12 30 57.8** | **-1.5** |
| **MOX** | **Moxa** | **3.32** | **9** | Pg | | **Pg** | **12 30 17.4** | **+1.1** |
| MOX | | | | Sn | | **Sn** | **12 30 42.3** | **-1.1** |
| MOX | | | | Sg | | **Sg** | **12 30 57.8** | **-1.5** |
| **LPG** | **La Plagne** | **3.39** | **238** | *e*Pn | | **Pn** | **12 30 05.1** | **-0.4** |
| LPG | | | | *e*Sn | | **Sn** | **12 30 43.3** | **-2.3** |
| | 0.4nm,0.3s | | | | | | | |
| **LPL** | **La Plagne** | **3.39** | **238** | *e*Pn | | **Pn** | **12 30 04.9** | **-0.5** |
| LPL | | | | *e*Sn | | **Sn** | **12 30 43.1** | **-2.4** |
| | 1.2nm,0.3s | | | | | | | |
| **LPL** | **La Plagne** | **3.39** | **238** | *e*Pn | | **Pn** | **12 30 04.9** | **-0.5** |
| LPL | | | | *e*Sn | | **Sn** | **12 30 43.1** | **-2.4** |
| | 0.6nm,0.3s | | | | | | | |
| **PAGF** | **Fort de Pagny** | **3.64** | **291** | *e*Pn | | **Pn** | **12 30 08.8** | **+0.2** |
| **PAGF** | **Fort de Pagny** | **3.64** | **291** | *e*Pn | | **Pn** | **12 30 08.8** | **+0.2** |
| **MBDF** | **Montbardon** | **3.88** | **228** | *e*P | | **Pn** | **12 30 15.1** | **+3.1** |
| MBDF | | | | *e*Sn | | **Sn** | **12 30 54.4** | **-2.9** |
| | 1.1nm,0.4s | | | | | | | |
| **MBDF** | **Montbardon** | **3.88** | **228** | *e*P | | **Pn** | **12 30 15.1** | **+3.1** |
| MBDF | | | | *e*Sn | | **Sn** | **12 30 54.4** | **-2.9** |
| | 0.6nm,0.4s | | | | | | | |
| **SFTF** | **Sexfontaines** | **4.00** | **284** | *e*Pn | | **Pn** | **12 30 13.8** | **+0.2** |
| SFTF | | | | *e*Sn | | **Sn** | **12 30 58.2** | **-2.0** |
| | 2.5nm,0.3s | | | | | | | |
| **SFTF** | **Sexfontaines** | **4.00** | **284** | *e*Pn | | **Pn** | **12 30 13.8** | **+0.2** |
| SFTF | | | | *e*Sn | | **Sn** | **12 30 58.2** | **-2.0** |
| | 1.2nm,0.3s | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **4.05** | **288** | *e*Pn | | **Pn** | **12 30 14.3** | **0.0** |
| MEZF | | | | *e*Sn | | **Sn** | **12 30 59.5** | **-2.0** |
| | 5.9nm,0.3s | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **4.05** | **288** | *e*Pn | | **Pn** | **12 30 14.3** | **0.0** |
| MEZF | | | | *e*Sn | | **Sn** | **12 30 59.5** | **-2.0** |
| | 3.0nm,0.3s | | | | | | | |
| **CLL** | **Collm** | **4.19** | **19** | *e*Sg | | **Sg** | **12 31 24.0** | **-3.1** |
| **VRAC** | **Vranov** | **4.30** | **61** | *e*Pn | | **Pn** | **12 30 16.5** | **-1.2** |

*IDC **23** 12:38:24.0±1.1, 10°.87S×162°.00E, h0km, mb3.8/9, mb1 4.1/11, mb1mx3.9/35, mbtmp3.9/11, ML4.3/2, MS3.5/12, Ms1 3.5/12, ms1mx3.3/27, Error ellipse: s-maj=28.6km s-min=21.5km az=78.0*

*ISCJB **23** 12:38:28.1±0.8, 10°.88S±0°.08×161°.9E±0°.1, h36km, mb3.8/10, MS3.4/9, Error ellipse: s-maj=17.2km s-min=8.1km az=150.1*

*NEIC **23** 12:38:30.9±2.9, 10°.87S×161°.82E, h44km±22km, mb4.0/2, Error ellipse: s-maj=28.6km s-min=13.9km az=106.0*

**ISC 23 12:38:29.8±0.9, 10°.8S±0°.1×161°.9E±0°.1, h36km, n31, σ1=9/89, mb3.8/10, MS3.4/9, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **HNR** | **Honiara** | **2.39** | **304** | Pn | | **Pn** | **12 39 07.1** | **+0.7** |
| | 75nm,0.3s,baz=172,slow=10,SNR=35 | | | | | | | |
| HNR | | | | Sn | | **Sn** | **12 39 38.0** | **+3.6** |
| | 200nm,0.3s,baz=101,slow=21,SNR=6.2 | | | | | | | |
| HNR | | | | LR | | LR | 12 40 10.8 | |
| | comp=Z,1μm,18.3s,baz=207,slow=43 | | | | | | | |
| **HNR** | **Honiara** | **2.39** | **304** | *i* P | | **Pn** | **12 39 05.5** | **-0.9** |
| HNR | | | | *i* S | | **Sn** | **12 39 30.0** | **-4.4** |
| **HNR** | **Honiara** | **2.39** | **304** | *e*Pn | | **Pn** | **12 39 06.5** | **+0.1** |
| HNR | | | | *e*Sn | | **Sn** | **12 39 34.5** | **+0.1** |
| **DZM** | **Mont Dzumac** | **12.01** | **160** | *e*Pn | | Pn | 12 41 22.5 | +3.9 |
| | 2.6nm,0.3s | | | | | | | |
| DZM | | | | *e*Sn | | **Sn** | **12 43 32.1** | **+0.7** |
| | 4.1nm,0.3s | | | | | | | |
| DZM | | | | *e*LR | | LR | 12 44 14.4 | |
| | 330nm,24.6s | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.01** | **160** | LR | | LR | 12 45 06.7 | |
| | comp=Z,240nm,20.7s,baz=359,slow=34 | | | | | | | |
| **PMG** | **Port Moresby** | **14.62** | **274** | LR | | LR | 12 47 05.0 | |
| | comp=Z,340nm,20.6s,baz=107,slow=36 | | | | | | | |
| **CTA** | **Charters Tower** | **17.70** | **237** | P | | **Pn** | **12 42 33.7** | **0.0** |
| | 0.5nm,0.3s,baz=72,slow=13,SNR=11 | | | | | | | |
| **COEN** | **Coen** | **18.59** | **258** | *e*P | | **Pn** | **12 42 48.3** | **+3.7** |
| | 5.2nm,0.7s | | | | | | | |
| **AFI** | **Afiamalu** | **25.85** | **100** | LR | | LR | 12 52 08.5 | |
| | comp=Z,181nm,21.0s,baz=82,slow=32 | | | | | | | |
| **WRAB** | **Tennant Creek** | **28.07** | **248** | *e*P | | **P** | **12 44 16.5** | **-1.8** |
| | 6.0nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.09** | **248** | P | | **P** | **12 44 17.7** | **-0.7** |
| | 1.1nm,0.8s,baz=76,slow=9.0,SNR=8.7 | | | | | | | |
| WRA | | | | LR | | LR | 12 55 30.8 | |
| | comp=Z,183nm,18.4s,baz=80,slow=36 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.48** | **9** | T | | T | 13 15 26.3 | |
| | baz=188,slow=76,SNR=54 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.48** | **9** | T | | T | 13 15 25.4 | |
| | baz=188,slow=76,SNR=41 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.50** | **9** | T | | T | 13 15 26.6 | |
| | baz=188,slow=76,SNR=44 | | | | | | | |
| **ASAR** | **Alice Springs** | **29.61** | **241** | P | | **P** | **12 44 30.5** | **-1.4** |
| | 0.7nm,0.7s,baz=66,slow=10,SNR=5.4 | | | | | | | |
| ASAR | | | | LR | | LR | 12 56 05.1 | |
| | comp=Z,156nm,18.5s,baz=65,slow=36 | | | | | | | |
| **URZ** | **Urewera** | **30.54** | **156** | LR | | LR | 12 55 59.3 | |
| | comp=Z,96nm,19.7s,baz=332,slow=35 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.71** | **9** | T | | T | 13 16 49.3 | |
| | baz=188,slow=76,SNR=36 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.72** | **9** | T | | T | 13 17 06.3 | |
| | baz=188,slow=76,SNR=11 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.73** | **9** | T | | T | 13 17 07.7 | |
| | baz=188,slow=76,SNR=42 | | | | | | | |
| **RPZ** | **Rata Peaks** | **33.74** | **168** | LR | | LR | 12 57 25.7 | |
| | comp=Z,43nm,18.2s,baz=318,slow=34 | | | | | | | |
| **PPT** | **Papeete** | **47.38** | **104** | LR | | LR | 13 02 26.8 | |
| | comp=Z,26nm,21.0s,baz=286,slow=30 | | | | | | | |
| **PPT2** | **Papeete2** | **47.38** | **104** | *e*LR | | LR | 13 00 45.5 | |
| | 140nm,29.5s | | | | | | | |
| **KSRS** | **Korea Array** | **57.63** | **328** | LR | | LR | 13 10 57.0 | |
| | comp=Z,19nm,20.8s,baz=156,slow=34 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **61.12** | **336** | P | | **P** | **12 48 39.5** | **-0.9** |
| | 1.2nm,0.7s,baz=95,slow=12,SNR=2.9 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **63.75** | **357** | LR | | LR | 13 14 40.6 | |
| | comp=Z,12nm,20.3s,baz=224,slow=34 | | | | | | | |
| **VNDA** | **Vanda** | **66.71** | **180** | P | | **P** | **12 49 16.5** | **-0.2** |
| | 2.0nm,0.8s,baz=333,slow=9.0,SNR=9.5 | | | | | | | |
| VNDA | | | | LR | | LR | 13 15 45.9 | |
| | comp=Z,21nm,18.2s,baz=18,slow=34 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **68.60** | **295** | P | | **P** | **12 49 30.4** | **+0.7** |
| | 0.3nm,0.4s,baz=92,slow=9.0,SNR=3.9 | | | | | | | |
| **SONM** | **Songino Array** | **76.29** | **325** | P | | **P** | **12 50 14.5** | **-0.6** |
| | 0.5nm,0.7s,baz=151,slow=6.3,SNR=3.1 | | | | | | | |
| **MAW** | **Mawson** | **83.54** | **202** | P | | **P** | **12 50 53.0** | **-0.8** |
| | 3.5nm,1.3s,baz=44,slow=8.3,SNR=3.7 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.50** | **20** | P | | **P** | **12 50 59.6** | **+0.9** |
| | 0.1nm,0.4s,baz=237,slow=5.1,SNR=4.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **90.80** | **317** | P | | **P** | **12 51 30.1** | **+0.7** |
| | 0.2nm,0.5s,baz=85,slow=7.5,SNR=3.0 | | | | | | | |

*CSEM **23** 12:40:27.3±0.1, 47°.40N×10°.86E, h8km, ML3.2/27, Error ellipse: s-maj=2.3km s-min=2.0km az=171.0*

*VIE **23** 12:40:27.6±0.2, 47°.35N×10°.89E, h13km±2km, mb2.6/12, ml3.2/15, Error ellipse: s-maj=1.1km s-min=0.9km az=161.0, felt 4 ems98 at Ehrwald / Tyrol*

*PRU **23** 12:40:28.9, 47°.58N×10°.77E, h6km*

*LDG **23** 12:40:28.1±0.1, 47°.42N×10°.93E, h2km, Ml3.1/19, Error ellipse: s-maj=2.2km s-min=1.6km az=22.0*

*BGR **23** 12:40:28.1±0.4, 47°.34N×10°.83E, h10km, ML3.1/15, Error ellipse: s-maj=5.6km s-min=3.3km az=13.0*

*BGR Felt V EMS.*

**ISC 23 12:40:27.6±0.8, 47°.40N±0°.02×10°.84E±0°.01, h17km±4km, n147, σ1=9°36/236, 12C-3D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **RETA** | **Reutte** | **0.11** | **329** | *i* Pg | | **Pg** | **12 40 31.4** | **+0.1** |
| | 106nm,0.1s,SNR=766 | | | | | | | |
| RETA | | | | ⇑*i* Sg | | **Sg** | **12 40 34.3** | **+0.5** |
| | 546nm,0.1s | | | | | | | |
| **RETA** | **Reutte** | **0.11** | **329** | Pg | | **Pg** | **12 40 31.4** | **+0.1** |
| | 106nm,0.1s,SNR=766 | | | | | | | |
| RETA | | | | Sg | | **Sg** | **12 40 34.3** | **+0.5** |
| | 546nm,0.1s | | | | | | | |
| **MOTA** | **Moosalm** | **0.18** | **106** | *i* Pg | | **Pg** | **12 40 31.7** | **-0.7** |
| | 156nm,0.1s,SNR=1352 | | | | | | | |
| MOTA | | | | ⇓*i* Sg | | **Sg** | **12 40 34.5** | **-1.0** |
| | 624nm,0.1s | | | | | | | |
| **MOTA** | **Moosalm** | **0.18** | **106** | Pg | | **Pg** | **12 40 31.7** | **-0.7** |
| | 156nm,0.1s,SNR=1000 | | | | | | | |
| MOTA | | | | Sg | | **Sg** | **12 40 34.5** | **-1.0** |
| | 624nm,0.1s | | | | | | | |
| **SQTA** | **Sankt Quirin** | **0.30** | **125** | ⇑*i* Pg | | **Pg** | **12 40 33.7** | **-0.5** |
| **SQTA** | **Sankt Quirin** | **0.30** | **125** | Pg | | **Pg** | **12 40 33.7** | **-0.5** |
| **FETA** | **Feichten** | **0.38** | **192** | ⇑*i* Pg | | **Pg** | **12 40 35.0** | **-0.6** |
| | 116nm,0.2s,SNR=374 | | | | | | | |
| FETA | | | | ⇓*i* Sg | | **Sg** | **12 40 40.0** | **-1.0** |
| | 114nm,0.2s | | | | | | | |
| **FETA** | **Feichten** | **0.38** | **192** | Pg | | **Pg** | **12 40 35.0** | **-0.6** |
| | 116nm,0.2s,SNR=374 | | | | | | | |
| FETA | | | | Sg | | **Sg** | **12 40 40.0** | **-1.0** |
| | 114nm,0.2s | | | | | | | |
| **WATA** | **Walderalm** | **0.50** | **97** | ⇑*e*Pg | | **Pg** | **12 40 36.9** | **-0.8** |
| | 24nm,0.1s,SNR=29 | | | | | | | |
| WATA | | | | ⇑*i* Sg | | **Sg** | **12 40 43.8** | **-0.7** |
| | 132nm,0.1s | | | | | | | |
| **WATA** | **Walderalm** | **0.50** | **97** | Pg | | **Pg** | **12 40 36.9** | **-0.8** |
| | 24nm,0.1s,SNR=29 | | | | | | | |
| WATA | | | | Sg | | **Sg** | **12 40 43.8** | **-0.7** |
| | 132nm,0.1s | | | | | | | |
| **WTTA** | **Wattenberg** | **0.56** | **104** | *e*Pg | | **Pg** | **12 40 37.9** | **-0.8** |
| **WTTA** | **Wattenberg** | **0.56** | **104** | ⇑*i* Pg | | **Pg** | **12 40 37.9** | **-0.8** |
| | 56nm,0.1s,SNR=87 | | | | | | | |
| WTTA | | | | ⇑*i* Sg | | **Sg** | **12 40 46.5** | **+0.3** |
| | 116nm,0.1s | | | | | | | |
| **WTTA** | **Wattenberg** | **0.56** | **104** | Pg | | **Pg** | **12 40 37.9** | **-0.8** |
| | 56nm,0.1s,SNR=87 | | | | | | | |
| WTTA | | | | Sg | | **Sg** | **12 40 46.5** | **+0.3** |
| | 116nm,0.1s | | | | | | | |
| **ROSI** | **Rosskopf** | **0.61** | **140** | Sg | | **Sg** | **12 40 47.0** | **-0.8** |
| | 411nm,0.4s | | | | | | | |
| **DAVA** | **Damuels** | **0.66** | **261** | *e*Pg | | **Pb** | **12 40 41.2** | **+0.3** |
| **DAVA** | **Damuels** | **0.66** | **261** | ⇓*e*Pg | | **Pb** | **12 40 41.1** | **+0.3** |
| | 24nm,0.2s,SNR=45 | | | | | | | |
| **DAVA** | **Damuels** | **0.66** | **261** | Pg | | **Pb** | **12 40 41.1** | **+0.3** |
| | 24nm,0.2s,SNR=45 | | | | | | | |
| **MOSI** | **Grossmontoni** | **0.81** | **195** | Sg | | **Sb** | **12 40 54.2** | **+0.3** |
| | 362nm,0.3s | | | | | | | |
| **FUR** | **Furstenfeldbru** | **0.82** | **21** | *e*Pg | | **Pn** | **12 40 44.7** | **+0.2** |
| FUR | | | | *e*Sg | | **Sn** | **12 40 56.8** | **+0.6** |
| **FUR** | **Furstenfeldbru** | **0.82** | **21** | Pg | | **Pn** | **12 40 44.7** | **+0.2** |
| FUR | | | | Sg | | **Sn** | **12 40 56.8** | **+0.6** |
| **FUORN** | **Ofenpass-Fuorn** | **0.87** | **207** | Sg | | **Sb** | **12 40 56.4** | **+0.5** |
| **DAVOX** | **Davos/Dischmat** | **0.90** | **227** | Pg | | **Pb** | **12 40 44.8** | **-0.1** |
| **APPI** | **Appiano** | **0.95** | **164** | Pg | | **Pb** | **12 40 45.6** | **-0.1** |
| | 209nm,0.3s | | | | | | | |
| **RISI** | **Rein** | **0.95** | **118** | Pg | | **Pb** | **12 40 45.3** | **-0.5** |
| RISI | | | | Sg | | **Sb** | **12 40 58.5** | **+0.3** |
| **BRMO** | **Bormio** | **0.97** | **199** | Pg | | **Pb** | **12 40 46.3** | **+0.2** |
| | 151nm,0.2s | | | | | | | |
| **KOSI** | **Kohlern** | **1.00** | **158** | Pg | | **Pb** | **12 40 46.4** | **-0.2** |
| KOSI | | | | Sg | | **Sb** | **12 41 00.2** | **+0.6** |
| | 166nm,0.3s | | | | | | | |
| **PLONS** | **Plons/SG** | **1.06** | **251** | Pg | | **Pg** | **12 40 48.6** | **+0.5** |
| | 155nm,0.5s | | | | | | | |
| **BERNI** | **Berninapass** | **1.13** | **210** | Pg | | **Pn** | **12 40 48.4** | **-0.5** |
| **ABTA** | **Abfaltersbach** | **1.31** | **119** | ⇑*e*Pg | | **Pb** | **12 40 52.0** | **+0.2** |
| | 21nm,0.1s,SNR=60 | | | | | | | |
| ABTA | | | | ⇑*i* Sg | | **Sb** | **12 41 09.4** | **+1.0** |
| | 86nm,0.3s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **1.31** | **119** | Pg | | **Pb** | **12 40 52.0** | **+0.2** |
| | 21nm,0.1s,SNR=60 | | | | | | | |
| ABTA | | | | Sg | | **Sb** | **12 41 09.4** | **+1.0** |
| | 86nm,0.3s | | | | | | | |
| **MABI** | **Malga Bissina** | **1.36** | **190** | Pg | | **Pb** | **12 40 52.7** | **0.0** |
| | 99nm,0.4s | | | | | | | |
| **RJOB** | **Jochberg** | **1.36** | **75** | *e*Pg | | **Pg** | **12 40 53.9** | **0.0** |
| RJOB | | | | *e*Sg | | **Sg** | **12 41 14.1** | **+2.4** |
| **RJOB** | **Jochberg** | **1.36** | **75** | Pg | | **Pg** | **12 40 53.9** | **0.0** |
| RJOB | | | | Sg | | **Sg** | **12 41 14.1** | **+2.4** |
| **FVI** | **Forni Avoltri** | **1.55** | **120** | Pg | | **Pb** | **12 40 56.2** | **+0.4** |
| | 115nm,0.6s | | | | | | | |
| **MAGA** | **Magasa** | **1.63** | **185** | Pg | | **Pb** | **12 40 57.9** | **+0.7** |
| | 274nm,0.4s | | | | | | | |
| **CGRP** | **Cima Grappa** | **1.65** | **156** | Pg | | **Pb** | **12 40 58.4** | **+0.7** |
| | 254nm,0.5s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **1.73** | **100** | *e*Pg | | **Pb** | **12 40 59.7** | **+0.6** |
| KBA | | | | *e*Sg | | **Sg** | **12 41 23.1** | **-0.4** |
| **KBA** | **Koelnbreinsper** | **1.73** | **100** | ⇑*i* Pg | | **Pb** | **12 41 00.2** | **+1.1** |
| | 37nm,0.2s | | | | | | | |
| **KBA** | **Koelnbreinsper** | **1.73** | **100** | Pg | | **Pb** | **12 41 00.2** | **+1.1** |
| | 37nm,0.2s | | | | | | | |
| KBA | | | | Sg | | **Sg** | **12 41 23.1** | **-0.4** |
| **POLC** | **Polcenigo** | **1.78** | **140** | Pg | | **Pg** | **12 41 01.7** | **-0.1** |
| | 653nm,0.6s | | | | | | | |
| **MDI** | **Monti di Nese** | **1.80** | **206** | Pg | | **Pg** | **12 41 01.8** | **-0.3** |
| | 25nm,0.4s | | | | | | | |
| **BFO** | **Black Forest** | **1.93** | **300** | *e*Pn | | **Pb** | **12 41 01.6** | **-0.8** |
| BFO | | | | *e*Pg | | **Pg** | **12 41 05.4** | **+0.7** |
| **BFO** | **Black Forest** | **1.93** | **300** | Pn | | **Pb** | **12 41 01.6** | **-0.8** |
| **ACOM** | **Acomizza, Ital** | **2.02** | **114** | Pg | | **Pb** | **12 41 04.7** | **+0.8** |
| | 130nm,0.4s | | | | | | | |
| **VINO** | **Villanova** | **2.02** | **123** | Pg | | **Pb** | **12 41 04.4** | **+0.5** |
| | 130nm,0.7s | | | | | | | |
| **MYKA** | **Terra Mystica** | **2.06** | **111** | ⇑*e*Pg | | **Pb** | **12 41 05.7** | **+1.1** |
| | 14nm,0.3s | | | | | | | |
| MYKA | | | | ⇑*i* Sg | | **Sg** | **12 41 33.6** | **-0.3** |
| | 30nm,0.4s | | | | | | | |
| **MYKA** | **Terra Mystica** | **2.06** | **111** | Pg | | **Pb** | **12 41 05.7** | **+1.1** |
| | 14nm,0.3s | | | | | | | |
| MYKA | | | | Sg | | **Sg** | **12 41 33.6** | **-0.3** |
| | 30nm,0.4s | | | | | | | |
| **ROBS** | **Robic** | **2.16** | **121** | *i* Pn | | **Pb** | **12 41 06.6** | **+0.3** |
| ROBS | | | | *i* Sn | | **Sg** | **12 41 36.1** | **-1.1** |
| **ROBS** | **Robic** | **2.16** | **121** | Pn | | **Pb** | **12 41 06.6** | **+0.3** |
| **WET** | **Wettzell** | **2.21** | **37** | *e*Pn | | **Pn** | **12 41 04.7** | **+1.1** |
| WET | | | | *e*Sn | | **Sn** | **12 41 30.6** | **0.0** |
| **WET** | **Wettzell** | **2.21** | **37** | Pn | | **Pn** | **12 41 04.7** | **+1.1** |
| WET | | | | Sn | | **Sn** | **12 41 30.6** | **0.0** |
| **GRA1** | **Grafenberg Arr** | **2.31** | **6** | Pg | | **Pg** | **12 41 12.3** | **+0.4** |
| GRA1 | | | | Sg | | **Sg** | **12 41 42.0** | **+0.1** |
| **GRF** | **Grafenberg Arr** | **2.31** | **6** | *e*Pn | | **Pn** | **12 41 05.0** | **+0.1** |
| GRF | | | | *e*Pg | | **Pg** | **12 41 12.3** | **+0.4** |
| GRF | | | | *e*Sg | | **Sg** | **12 41 42.0** | **+0.1** |
| **GEC2** | **GERESS Array S** | **2.40** | **52** | *e*Pn | | **Pn** | **12 41 08.1** | **+1.9** |
| GEC2 | | | | *e*Sn | | **Sn** | **12 41 37.2** | **+1.9** |
| **GEC2** | **GERESS Array S** | **2.40** | **52** | Pn | | **Pn** | **12 41 08.1** | **+1.9** |
| GEC2 | | | | Sn | | **Sn** | **12 41 37.2** | **+1.9** |
| **KHC** | **Kasperske Hory** | **2.52** | **45** | *e*PN | | **Pn** | **12 41 09.7** | **+1.9** |
| KHC | | | | *e*PG | | **Pb** | **12 41 14.0** | **+1.6** |
| KHC | | | | *e*SN | | **Sn** | **12 41 39.6** | **+1.5** |
| KHC | | | | *e*SG | | **Sg** | **12 41 46.5** | **-2.1** |
| | comp=Z,56nm,0.4s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.52** | **45** | Pn | | **Pn** | **12 41 09.7** | **+1.9** |
| **ROTZ** | **Rotzenmuhle** | **2.54** | **20** | *e*Pn | | **Pn** | **12 41 08.3** | **+0.3** |
| ROTZ | | | | *e*Pg | | **Pg** | **12 41 15.6** | **-0.6** |
| ROTZ | | | | *e*Sn | | **Sn** | **12 41 38.7** | **+0.2** |
| **ROTZ** | **Rotzenmuhle** | **2.54** | **20** | Pn | | **Pn** | **12 41 08.3** | **+0.3** |
| **CDF** | **Champ du Feu** | **2.61** | **294** | *e*Pn | | **Pn** | **12 41 10.3** | **+1.3** |
| **CDF** | **Champ du Feu** | **2.61** | **294** | *e*Pg | | **Pg** | **12 41 17.0** | **-0.6** |
| CDF | | | | *e*Sg | | **Sg** | **12 41 51.5** | **+0.1** |
| | 42nm,0.4s | | | | | | | |
| **CDF** | **Champ du Feu** | **2.61** | **294** | *e*Pn | | **Pn** | **12 41 10.3** | **+1.3** |
| **CDF** | **Champ du Feu** | **2.61** | **294** | *e*Pg | | **Pg** | **12 41 17.0** | **-0.6** |
| CDF | | | | *e*Sg | | **Sg** | **12 41 51.5** | **+0.1** |
| | 21nm,0.4s | | | | | | | |
| **JAVS** | **Javornik** | **2.68** | **123** | *i* Pn | | **Pb** | **12 41 12.8** | **-2.3** |
| JAVS | | | | *i* Sn | | **Sb** | **12 41 47.6** | **-0.1** |
| **JAVS** | **Javornik** | **2.68** | **123** | *i* Pn | | **Pb** | **12 41 12.8** | **-2.3** |
| **MOZS** | **Mozjanca** | **2.71** | **113** | *i* Pn | | **Pb** | **12 41 13.7** | **-1.9** |
| **MOZS** | **Mozjanca** | **2.71** | **113** | *i* Pn | | **Pb** | **12 41 13.7** | **-1.9** |
| **MANZ** | **Manzenberg** | **2.72** | **17** | *e*Pn | | **Pn** | **12 41 09.9** | **-0.7** |
| MANZ | | | | *e*Sn | | **Sn** | **12 41 43.0** | **-0.1** |
| **MANZ** | **Manzenberg** | **2.72** | **17** | Pn | | **Pn** | **12 41 09.9** | **-0.7** |
| MANZ | | | | Sn | | **Sn** | **12 41 43.0** | **-0.1** |
| **HINF** | **Hinteralfeld** | **2.73** | **280** | *e*Pn | | **Pn** | **12 41 11.8** | **+1.1** |
| **HINF** | **Hinteralfeld** | **2.73** | **280** | *e*Pg | | **Pg** | **12 41 19.7** | **-0.3** |
| HINF | | | | *e*Sg | | **Sg** | **12 41 55.5** | **+0.1** |
| | 30nm,0.4s | | | | | | | |
| **HINF** | **Hinteralfeld** | **2.73** | **280** | *e*Pn | | **Pn** | **12 41 11.8** | **+1.1** |
| HINF | | | | *e*Sg | | **Sg** | **12 41 55.5** | **+0.1** |
| | 15nm,0.4s | | | | | | | |
| **TRAV** | **Traversella** | **2.85** | **230** | P | | **Pn** | **12 41 15.2** | **+2.8** |
| **PERS** | **Pernice** | **3.02** | **103** | *i* Pn | | **Pn** | **12 41 16.8** | **+2.1** |
| PERS | | | | *i* Sn | | **Sg** | **12 42 02.0** | **-2.6** |
| **PERS** | **Pernice** | **3.02** | **103** | *i* Pn | | **Pn** | **12 41 16.8** | **+2.1** |
| **NKC** | **Novy Kostel** | **3.03** | **20** | *e*SN | | **Sn** | **12 41 50.6** | **-0.1** |
| **NKC** | **Novy Kostel** | **3.03** | **20** | Sn | | **Sn** | **12 41 50.6** | **-0.1** |
| **HAU** | **Haudompre** | **3.10** | **283** | *e*Pn | | **Pn** | **12 41 17.5** | **+1.8** |
| **HAU** | **Haudompre** | **3.10** | **283** | *e*Pg | | **Pg** | **12 41 26.1** | **-0.8** |
| HAU | | | | *e*Sg | | **Sg** | **12 42 06.7** | **-0.3** |
| | 30nm,0.3s | | | | | | | |
| **HAU** | **Haudompre** | **3.10** | **283** | *e*Pn | | **Pn** | **12 41 17.5** | **+1.8** |
| HAU | | | | *e*Sg | | **Sg** | **12 42 06.7** | **-0.3** |
| | 15nm,0.3s | | | | | | | |
| **TANN** | **Tannenbergstha** | **3.20** | **19** | *e*Pn | | **Pn** | **12 41 16.2** | **-1.0** |
| TANN | | | | *e*Sn | | **Sn** | **12 41 54.8** | **-0.2** |
| TANN | | | | *e*Sg | | **Sg** | **12 42 10.8** | **+0.3** |
| **TANN** | **Tannenbergstha** | **3.20** | **19** | Pn | | **Pn** | **12 41 16.2** | **-1.0** |
| TANN | | | | Sn | | **Sn** | **12 41 54.8** | **-0.2** |
| TANN | | | | Sg | | **Sg** | **12 42 10.8** | **+0.3** |
| **LSD** | **Lago del Serru** | **3.21** | **234** | P | | **Pn** | **12 41 20.0** | **+2.5** |
| LSD | | | | S | | **Sn

comp=Z,8.8nm,0.4s
**GIVF Givet 4.81 306** *e*Pn **Pn 12 41 39.9 +0.6**
**GIVF Givet 4.81 306** *e*Pg **Pg 12 41 58.0 -1.8**
GIVF *e*Sg **Sg 12 42 59.9 -2.2**
comp=Z,4.4nm,0.4s
**FRF La Foret Royal 4.84 219** *e*Pn **Pn 12 41 40.9 +1.3**
**FRF La Foret Royal 4.84 219** *e*Pn **Pn 12 41 40.9 +1.3**
**VIVF Saint-Julien-l 4.99 242** *e*Pn **Pn 12 41 42.8 +1.2**
VIVF *e*Sn **Sn 12 42 38.1 -0.8**
comp=Z,3.1nm,0.4s
**VIVF Saint-Julien-l 4.99 242** *e*Pn **Pn 12 41 42.8 +1.2**
VIVF *e*Sn **Sn 12 42 38.1 -0.8**
comp=Z,1.5nm,0.4s
**SSF Saint Saulge 5.01 269** *e*Pn **Pn 12 41 42.8 +0.8**
SSF *e*Sg **Sg 12 43 06.5 -1.8**
comp=Z,3.0nm,0.3s
**PGF Pioggiola 5.02 196** *e*Pn **Pn 12 41 42.6 +0.4**
**PGF Pioggiola 5.02 196** *e*Pn **Pn 12 41 42.6 +0.4**
**SMRF Simiane la Rot 5.03 229** *e*Pn **Pn 12 41 44.4 +2.1**
**SMRF Simiane la Rot 5.03 229** *e*Pn **Pn 12 41 44.4 +2.1**
**MORC Moravsky Berou 5.04 59** *e*Pn **Pn 12 41 42.9 +0.5**
MORC *e*Sg **Sg 12 43 05.5 -3.9**
**LMR La Mourre 5.08 219** *e*Pn **Pn 12 41 44.6 +1.7**
**LMR La Mourre 5.08 219** *e*Pn **Pn 12 41 44.6 +1.7**
**AVF Avril sur Loir 5.15 266** *e*Pn **Pn 12 41 45.0 +1.1**
**OKC Ostrava-Krasne 5.42 61** *e*SG **Sg 12 43 19.3 -2.3**
comp=Z,16nm,0.6s
**OKC Ostrava-Krasne 5.42 61** Sg **Sg 12 43 19.3 -2.3**
comp=Z,16nm,0.6s
**TCF Toulx Ste Croi 6.03 263** *e*Pn **Pn 12 41 56.9 +1.0**
TCF *e*Sg **Sg 12 43 38.3 -2.6**
comp=Z,3.5nm,0.5s
**TCF Toulx Ste Croi 6.03 263** *e*Pn **Pn 12 41 56.9 +1.0**

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*ISCJB **23** 12:40:56.1±1.5,31°.27S±0°.08×179°.7E±0°.3, h450km, mb3.4/3, Error ellipse: s-maj=30.3km s-min=9.4km az=169.0*
*IDC **23** 12:40:57.8±6.4,31°.35S×179°.88E, h470km±77km, mb3.0/3, mb1 3.3/4, mb1mx3.0/33, mbtmp4.1/4, Error ellipse: s-maj=81.6km s-min=34.8km az=17.0*
**ISC 23 12:40:57.4±2.1, 31°.3S±0°.1×179°.7E±0°.3, h450km, n28, σ1§13/34, mb3.5/3, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **6.33** | **190** | PN | **P** | | **P** | **12 42 34.8** | **-0.1** |
| MXZ | | | | SN | **S** | | **S** | **12 43 52.4** | **-2.4** |
| **WMGZ** | **Waiomatatini S** | **6.57** | **189** | PN | **P** | | **P** | **12 42 38.4** | **+1.0** |
| **HAZ** | **Te Kaha** | **6.61** | **193** | PN | **P** | | **P** | **12 42 38.4** | **+0.6** |
| HAZ | | | | SN | **S** | | **S** | **12 44 00.8** | **+0.7** |
| **PKGZ** | **Pakihiroa** | **6.66** | **191** | PN | **P** | | **P** | **12 42 39.0** | **+0.6** |
| **PUZ** | **Puketiti** | **6.84** | **190** | PN | **P** | | **P** | **12 42 40.3** | **0.0** |
| PUZ | | | | SN | **S** | | **S** | **12 44 03.2** | **-1.3** |
| **TWGZ** | **Tauwhareparae** | **6.98** | **191** | PN | **P** | | **P** | **12 42 44.8** | **+3.0** |
| **MWZ** | **Matawai** | **7.22** | **194** | PN | **P** | | **P** | **12 42 44.8** | **+0.5** |
| **URZ** | **Urewera** | **7.24** | **196** | P | **P** | | **P** | **12 42 46.1** | **+1.6** |
| | 16nm,0.3s,baz=270,slow=5.0,SNR=94 | | | | | | | | |
| URZ | | | | S | **S** | | **S** | **12 44 13.8** | **+1.5** |
| | 4.6nm,0.3s,baz=96,slow=20,SNR=14 | | | | | | | | |
| **URZ** | **Urewera** | **7.24** | **196** | PN | **P** | | **P** | **12 42 44.2** | **-0.3** |
| URZ | | | | SN | **S** | | **S** | **12 44 12.3** | **0.0** |
| **CNGZ** | **Carnagh Statio** | **7.25** | **189** | PN | **P** | | **P** | **12 42 45.7** | **+1.1** |
| **RIGZ** | **Rimuhau** | **7.54** | **192** | PN | **P** | | **P** | **12 42 48.0** | **+0.4** |
| **KNZ** | **Kokohu** | **7.86** | **192** | PN | **P** | | **P** | **12 42 52.5** | **+1.5** |
| **RAHZ** | **Arahi** | **7.87** | **195** | PN | **P** | | **P** | **12 42 51.8** | **+0.5** |
| **BKZ** | **Black Stump Fm** | **8.25** | **198** | PN | **P** | | **P** | **12 42 55.7** | **+0.3** |
| **MCHZ** | **McNeill Hill** | **8.46** | **196** | PN | **P** | | **P** | **12 42 59.0** | **+1.4** |
| **WNVZ** | **Wahianoa** | **8.66** | **202** | PN | **P** | | **P** | **12 43 00.9** | **+1.0** |
| **KAHZ** | **Kahuranaki** | **8.76** | **194** | PN | **P** | | **P** | **12 43 01.8** | **+0.9** |
| **PNHZ** | **Pukenui** | **9.03** | **197** | PN | **P** | | **P** | **12 43 04.0** | **+0.2** |
| **BFZ** | **Birch Farm** | **9.75** | **196** | PN | **P** | | **P** | **12 43 13.0** | **+1.5** |
| BFZ | | | | SN | **S** | | **S** | **12 45 00.6** | **-1.4** |
| **MRZ** | **Mangatainoka R** | **9.90** | **199** | PN | **P** | | **P** | **12 43 13.2** | **0.0** |
| **CAW** | **Cannon Point** | **10.46** | **200** | PN | **P** | | **P** | **12 43 19.5** | **+0.2** |
| **NNZ** | **Nelson** | **11.11** | **206** | PN | **P** | | **P** | **12 43 26.2** | **-0.1** |
| **THZ** | **Tophouse** | **11.76** | **206** | PN | **P** | | **P** | **12 43 32.7** | **-0.8** |
| **KHZ** | **Kahutara** | **12.12** | **202** | PN | **P** | | **P** | **12 43 38.3** | **+1.1** |
| **CTA** | **Charters Tower** | **32.03** | **282** | P | **P** | | **P** | **12 46 45.8** | **+0.4** |
| | 2.0nm,0.8s,baz=114,slow=15,SNR=2.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **41.10** | **269** | P | **P** | | **P** | **12 48 01.0** | **+0.3** |
| | 0.3nm,0.3s,baz=107,slow=7.3,SNR=8.1 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.17** | **274** | P | **P** | | **P** | **12 48 09.3** | **0.0** |
| | 0.7nm,0.4s,baz=111,slow=8.1,SNR=25 | | | | | | | | |
| **FINES** | **FINESS Array B** | **145.29** | **338** | PKPbc | **PKPdf** | | | **12 59 40.8** | **-1.4** |
| | 1.3nm,0.5s,baz=64,slow=3.2,SNR=10 | | | | | | | | |

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*CSEM **23** 12:41:43.6±0.1, 42°.54N×1°.23E, h10km, ML2.7/14, Error ellipse: s-maj=1.7km s-min=1.3km az=2.0*
*ISCJB **23** 12:41:43.1±0.2, 42°.57N±0°.02×1°.21E±0°.02, h11km±2km, Error ellipse: s-maj=2.6km s-min=2.0km az=17.4*
*LDG **23** 12:41:44.4±0.1, 42°.54N×1°.23E, h10km, Md2.7/3, Ml2.7/10, Error ellipse: s-maj=1.6km s-min=1.3km az=14.0*
*MRB **23** 12:41:44.3, 42°.55N×1°.23E, h10km, ML2.0/9*
*STR **23** 12:41:44.0±0.1, 42°.55N×1°.21E, h5km, Ml2.5, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*MDD **23** 12:41:44.7±0.2, 42°.55N×1°.23E, h5km±3km, mbLg2.3/25, Error ellipse: s-maj=1.6km s-min=1.3km az=123.0, PRXIMO*
**ISC 23 12:41:44.0±0.8, 42°.55N±0°.02×1°.24E±0°.01, h14km±4km, n117, σ0§90/178, 2C, Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CEST** | **Esterri de Car** | **0.05** | **14** | Pg | **Pg** | | **Pg** | **12 41 46.2** | **-0.7** |
| CEST | | | | Lg | Lg | | Lg | 12 41 48.0 | |
| **CEST** | **Esterri de Car** | **0.05** | **14** | P | **Pg** | | **Pg** | **12 41 46.3** | **-0.7** |
| CEST | | | | S | **Sg** | | **Sg** | **12 41 48.0** | **-0.9** |
| **CSOR** | **Sort** | **0.19** | **204** | ⇑Pg | **Pg** | | **Pg** | **12 41 48.2** | **-0.3** |
| | 39nm,0.1s,SNR=18 | | | | | | | | |
| CSOR | | | | Lg | Lg | | Lg | 12 41 51.1 | |
| | 244nm,0.1s,SNR=5.0 | | | | | | | | |
| **CSOR** | **Sort** | **0.19** | **204** | P | **Pg** | | **Pg** | **12 41 48.2** | **-0.3** |
| CSOR | | | | Lg | Lg | | Lg | 12 41 51.1 | |
| | 244nm,0.1s,SNR=5.0 | | | | | | | | |
| CSOR | | | | S | **Sg** | | **Sg** | **12 41 51.2** | **-0.4** |
| | 344nm,0.1s | | | | | | | | |
| **SALF** | **Salau** | **0.21** | **350** | Pg | **Pg** | | **Pg** | **12 41 48.8** | **-0.1** |
| SALF | | | | Sg | **Sg** | | **Sg** | **12 41 51.3** | **-0.8** |
| **SALF** | **Salau** | **0.21** | **350** | Pg | **Pg** | | **Pg** | **12 41 48.7** | **-0.1** |
| SALF | | | | Lg | Lg | | Lg | 12 41 51.5 | |
| **SALF** | **Salau** | **0.21** | **350** | Pg | **Pg** | | **Pg** | **12 41 48.7** | **-0.1** |
| SALF | | | | Sg | **Sg** | | **Sg** | **12 41 51.3** | **-0.8** |
| SALF | | | | Lg | Lg | | Lg | 12 41 51.5 | |
| **PAND** | **Andorre** | **0.23** | **97** | Pg | **Pg** | | **Pg** | **12 41 49.1** | **-0.1** |
| PAND | | | | Lg | Lg | | Lg | 12 41 52.4 | |
| **ARBS** | **La Rabassa** | **0.25** | **114** | P | **Pg** | | **Pg** | **12 41 49.3** | **-0.3** |
| ARBS | | | | S | **Sg** | | **Sg** | **12 41 52.9** | **-0.5** |
| | 216nm,0.1s | | | | | | | | |
| **CORG** | **Organya** | **0.33** | **170** | Pg | **Pg** | | **Pg** | **12 41 50.6** | **-0.1** |
| CORG | | | | Lg | Lg | | Lg | 12 41 55.5 | |
| **CORG** | **Organya** | **0.33** | **170** | P | **Pg** | | **Pg** | **12 41 50.7** | **0.0** |
| CORG | | | | S | **Sg** | | **Sg** | **12 41 55.5** | **+0.2** |
| **GRBF** | **Gourbit** | **0.36** | **37** | Pg | **Pg** | | **Pg** | **12 41 51.7** | **+0.3** |
| GRBF | | | | Lg | Lg | | Lg | 12 41 56.2 | |
| **GRBF** | **Gourbit** | **0.36** | **37** | Pg | **Pg** | | **Pg** | **12 41 51.7** | **+0.3** |
| GRBF | | | | Lg | Lg | | Lg | 12 41 56.2 | |
| **CTRE** | **Tremp** | **0.41** | **237** | Pg | **Pg** | | **Pg** | **12 41 52.0** | **-0.3** |
| CTRE | | | | Lg | Lg | | Lg | 12 41 57.9 | |
| | 92nm,0.2s | | | | | | | | |
| **CTRE** | **Tremp** | **0.41** | **237** | Pg | **Pg** | | **Pg** | **12 41 52.0** | **-0.3** |
| CTRE | | | | S | **Sg** | | **Sg** | **12 41 57.9** | **-0.1** |
| | 92nm,0.2s | | | | | | | | |
| **MLS** | **Moulis** | **0.42** | **345** | Pg | **Pg** | | **Pg** | **12 41 52.3** | **-0.1** |
| MLS | | | | Sg | **Sg** | | **Sg** | **12 41 57.9** | **-0.3** |
| **MLS** | **Moulis** | **0.42** | **345** | Pg | **Pg** | | **Pg** | **12 41 52.3** | **-0.1** |
| MLS | | | | Lg | Lg | | Lg | 12 41 57.8 | |
| **MLS** | **Moulis** | **0.42** | **345** | P | **Pg** | | **Pg** | **12 41 52.3** | **-0.1** |
| MLS | | | | Lg | Lg | | Lg | 12 41 57.8 | |
| MLS | | | | Sg | **Sg** | | **Sg** | **12 41 57.9** | **-0.3** |
| MLS | | | | S | **Sb** | | **Sb** | **12 41 58.2** | **-1.2** |
| **MELF** | **Melles** | **0.48** | **312** | Pg | **Pg** | | **Pg** | **12 41 53.1** | **-0.4** |
| MELF | | | | Sg | **Sg** | | **Sg** | **12 41 59.4** | **-0.6** |
| **MELF** | **Melles** | **0.48** | **312** | Pg | **Pg** | | **Pg** | **12 41 53.1** | **-0.4** |
| MELF | | | | Lg | Lg | | Lg | 12 41 59.2 | |
| **MELF** | **Melles** | **0.48** | **312** | Pg | **Pg** | | **Pg** | **12 41 53.1** | **-0.4** |
| MELF | | | | Lg | Lg | | Lg | 12 41 59.2 | |
| MELF | | | | Sg | **Sg** | | **Sg** | **12 41 59.4** | **-0.6** |
| **CLLI** | **Llivia** | **0.55** | **97** | ⇑Pg | **Pg** | | **Pg** | **12 41 54.6** | **-0.2** |
| | 2.1nm,0.1s,SNR=18 | | | | | | | | |
| CLLI | | | | Lg | Lg | | Lg | 12 42 02.1 | |
| | 25nm,0.2s,SNR=5.0 | | | | | | | | |
| **CLLI** | **Llivia** | **0.55** | **97** | Pg | **Pg** | | **Pg** | **12 41 54.6** | **-0.2** |
| | 2.1nm,0.1s,SNR=18 | | | | | | | | |
| CLLI | | | | Lg | Lg | | Lg | 12 42 02.1 | |
| | 25nm,0.2s,SNR=5.0 | | | | | | | | |
| CLLI | | | | S | **Sg** | | **Sg** | **12 42 02.9** | **+0.7** |
| | 36nm,0.1s | | | | | | | | |
| **VALF** | **Valcebollere** | **0.59** | **104** | Pg | **Pg** | | **Pg** | **12 41 55.7** | **0.0** |
| VALF | | | | Sg | **Sg** | | **Sg** | **12 42 04.1** | **+0.4** |
| **VALF** | **Valcebollere** | **0.59** | **104** | Pg | **Pg** | | **Pg** | **12 41 55.5** | **-0.2** |
| VALF | | | | Lg | Lg | | Lg | 12 42 03.8 | |
| **VALF** | **Valcebollere** | **0.59** | **104** | Pg | **Pg** | | **Pg** | **12 41 55.5** | **-0.2** |
| VALF | | | | Lg | Lg | | Lg | 12 42 03.8 | |
| VALF | | | | Sg | **Sg** | | **Sg** | **12 42 04.1** | **+0.4** |
| **LPEF** | **Le Peyrat** | **0.63** | **51** | Pg | **Pg** | | **Pg** | **12 41 56.9** | **+0.5** |
| LPEF | | | | Lg | Lg | | Lg | 12 42 05.6 | |
| **LPEF** | **Le Peyrat** | **0.63** | **51** | Pg | **Pg** | | **Pg** | **12 41 56.9** | **+0.5** |
| LPEF | | | | Lg | Lg | | Lg | 12 42 05.6 | |
| **CARF** | **Carcanieres** | **0.66** | **75** | Pg | **Pg** | | **Pg** | **12 41 56.8** | **-0.1** |
| CARF | | | | Lg | Lg | | Lg | 12 42 05.6 | |
| **CARF** | **Carcanieres** | **0.66** | **75** | Pg | **Pg** | | **Pg** | **12 41 56.8** | **-0.1** |
| CARF | | | | Lg | Lg | | Lg | 12 42 05.6 | |
| **FNEB** | **N^^bias** | **0.73** | **61** | Pg | **Pg** | | **Pg** | **12 41 58.1** | **-0.1** |
| FNEB | | | | Lg | Lg | | Lg | 12 42 07.7 | |
| **FNEB** | **N^^bias** | **0.73** | **61** | P | **Pg** | | **Pg** | **12 41 58.2** | **0.0** |
| FNEB | | | | S | **Sg** | | **Sg** | **12 42 07.7** | **-0.2** |
| **CBRU** | **Bruguera** | **0.75** | **111** | Pg | **Pg** | | **Pg** | **12 41 58.5** | **0.0** |
| CBRU | | | | Lg | Lg | | Lg | 12 42 08.5 | |
| | 19nm,0.1s | | | | | | | | |
| **CBRU** | **Bruguera** | **0.75** | **111** | P | **Pg** | | **Pg** | **12 41 58.5** | **0.0** |
| CBRU | | | | Lg | Lg | | Lg | 12 42 08.5 | |
| | 19nm,0.1s | | | | | | | | |
| CBRU | | | | S | **Sg** | | **Sg** | **12 42 08.6** | **+0.2** |
| | 39nm,0.1s | | | | | | | | |
| **FMON** | **Montouss^1** | **0.79** | **311** | P | **Pg** | | **Pg** | **12 41 58.8** | **-0.6** |
| FMON | | | | S | **Sg** | | **Sg** | **12 42 09.4** | **-0.5** |
| **EPF** | **Esparros** | **0.82** | **306** | *e*Pg | **Pg** | | **Pg** | **12 41 59.2** | **-0.7** |
| EPF | | | | *e*Sg | **Sg** | | **Sg** | **12 42 09.2** | **-1.4** |
| | 20nm,0.2s | | | | | | | | |
| **EPF** | **Esparros** | **0.82** | **306** | Pg | **Pg** | | **Pg** | **12 41 59.2** | **-0.7** |
| EPF | | | | Lg | Lg | | Lg | 12 42 09.2 | |
| | 9.8nm,0.2s | | | | | | | | |
| **EPF** | **Esparros** | **0.82** | **306** | *e*Pg | **Pg** | | **Pg** | **12 41 59.2** | **-0.7** |
| EPF | | | | *e*Sg | **Sg** | | **Sg** | **12 42 09.2** | **-1.4** |
| | 9.8nm,0.2s | | | | | | | | |
| **CORI** | **Orista** | **0.83** | **134** | Pg | **Pg** | | **Pg** | **12 41 59.5** | **-0.7** |
| CORI | | | | Lg | Lg | | Lg | 12 42 11.1 | |
| | 25nm,0.1s | | | | | | | | |
| **CORI** | **Orista** | **0.83** | **134** | P | **Pg** | | **Pg** | **12 41 59.5** | **-0.7** |
| CORI | | | | S | **Sg** | | **Sg** | **12 42 11.1** | **0.0** |
| | 25nm,0.1s | | | | | | | | |
| **VIEF** | **Viey** | **0.95** | **291** | Pg | **Pg** | | **Pg** | **12 42 01.6** | **-0.9** |
| VIEF | | | | Sg | **Sg** | | **Sg** | **12 42 14.7** | **-0.3** |
| **VIEF** | **Viey** | **0.95** | **291** | Pg | **Pg** | | **Pg** | **12 42 01.6** | **-0.9** |
| VIEF | | | | Lg | Lg | | Lg | 12 42 14.4 | |
| **VIEF** | **Viey** | **0.95** | **291** | Pg | **Pg** | | **Pg** | **12 42 01.6** | **-0.9** |
| VIEF | | | | Lg | Lg | | Lg | 12 42 14.4 | |
| VIEF | | | | Sg | **Sg** | | **Sg** | **12 42 14.7** | **-0.3** |
| **FILF** | **Fillols** | **0.98** | **89** | Pg | **Pg** | | **Pg** | **12 42 00.9** | **-2.0** |
| FILF | | | | Sg | **Sg** | | **Sg** | **12 42 13.0** | **-2.7** |
| **FILF** | **Fillols** | **0.98** | **89** | Pg | **Pg** | | **Pg** | **12 42 00.7** | **-2.2** |
| FILF | | | | Lg | Lg | | Lg | 12 42 12.3 | |
| **FILF** | **Fillols** | **0.98** | **89** | Pg | **Pg** | | **Pg** | **12 42 00.9** | **-2.0** |
| FILF | | | | Lg | Lg | | Lg | 12 42 12.3 | |
| **LABF** | **Labassere** | **0.99** | **300** | Pg | **Pg** | | **Pg** | **12 42 02.2** | **-1.0** |
| LABF | | | | Sg | **Sg** | | **Sg** | **12 42 15.2** | **-0.9** |
| **LABF** | **Labassere** | **0.99** | **300** | Pg | **Pg** | | **Pg** | **12 42 02.0** | **-1.1** |
| LABF | | | | Lg | Lg | | Lg | 12 42 15.1 | |
| **LABF** | **Labassere** | **0.99** | **300** | Pg | **Pg** | | **Pg** | **12 42 02.2** | **-1.0** |
| LABF | | | | Lg | Lg | | Lg | 12 42 15.1 | |
| LABF | | | | Sg | **Sg** | | **Sg** | **12 42 15.2** | **-0.9** |
| **LRDF** | **Laroque-de-Fa** | **1.03** | **68** | Pg | **Pg** | | **Pg** | **12 42 04.4** | **+0.5** |
| LRDF | | | | Sg | **Sb** | | **Sb** | **12 42 18.7** | **+1.7** |
| **LRDF** | **Laroque-de-Fa** | **1.03** | **68** | Pg | **Pg** | | **Pg** | **12 42 04.4** | **+0.5** |
| LRDF | | | | Sg | **Sb** | | **Sb** | **12 42 18.7** | **+1.7** |
| **MTLF** | **Montolieu** | **1.07** | **42** | *e*Pg | **Pg** | | **Pg** | **12 42 04.4** | **-0.2** |
| MTLF | | | | *e*Sg | **Sg** | | **Sg** | **12 42 18.6** | **0.0** |
| | 19nm,0.2s | | | | | | | | |
| **MTLF** | **Montolieu** | **1.07** | **42** | Pg | **Pg** | | **Pg** | **12 42 04.4** | **-0.2** |
| MTLF | | | | Lg | Lg | | Lg | 12 42 18.6 | |
| | 9.5nm,0.2s | | | | | | | | |
| **MTLF** | **Montolieu** | **1.07** | **42** | Pg | **Pg** | | **Pg** | **12 42 04.4** | **-0.2** |
| MTLF | | | | *e*Sg | **Sg** | | **Sg** | **12 42 18.6** | **0.0** |
| | 9.5nm,0.2s | | | | | | | | |
| **CBEU** | **Beuda** | **1.10** | **105** | Pg | **Pb** | | **Pb** | **12 42 04.6** | **-0.3** |
| CBEU | | | | Lg | Lg | | Lg | 12 42 19.1 | |
| | 92nm,0.2s | | | | | | | | |
| **CBEU** | **Beuda** | **1.10** | **105** | P | **Pb** | | **Pb** | **12 42 04.7** | **-0.2** |
| CBEU | | | | S | **Sg** | | **Sg** | **12 42 19.1** | **-0.7** |
| | 92nm,0.2s | | | | | | | | |
| **CFON** | **Fontmartina** | **1.19** | **131** | Pg | **Pb** | | **Pb** | **12 42 07.1** | **+0.8** |
| | 1.8nm,0.1s,SNR=24 | | | | | | | | |
| CFON | | | | Lg | Lg | | Lg | 12 42 23.2 | |
| | 48nm,0.1s,SNR=17 | | | | | | | | |
| **CFON** | **Fontmartina** | **1.19** | **131** | P | **Pb** | | **Pb** | **12 42 06.1** | **-0.2** |
| **CFON** | **Fontmartina** | **1.19** | **131** | Pg | **Pb** | | **Pb** | **12 42 07.1** | **+0.8** |
| | 1.8nm,0.1s,SNR=24 | | | | | | | | |
| CFON | | | | S | **Sb** | | **Sb** | **12 42 21.8** | **+0.2** |
| | 67nm,0.2s | | | | | | | | |
| CFON | | | | Lg | Lg | | Lg | 12 42 23.2 | |
| | 48nm,0.1s,SNR=17 | | | | | | | | |
| **EPOB** | **Poblet** | **1.20** | **186** | Pg | **Pb** | | **Pb** | **12 42 06.7** | **+0.2** |
| | 4.7nm,0.1s,SNR=61 | | | | | | | | |
| EPOB | | | | Lg | Lg | | Lg | 12 42 22.2 | |
| | 22nm,0.1s,SNR=17 | | | | | | | | |
| **EPOB** | **Poblet** | **1.20** | **186** | Pg | **Pb** | | **Pb** | **12 42 06.7** | **+0.2** |
| | 4.7nm,0.1s,SNR=61 | | | | | | | | |
| EPOB | | | | Lg | Lg | | Lg | 12 42 22.2 | |
| | 22nm,0.1s,SNR=17 | | | | | | | | |
| **SJAF** | **Saint Jean de** | **1.22** | **93** | Pg | **Pn** | | **Pn** | **12 42 07.1** | **+0.6** |
| | 0.4nm,0.2s,SNR=7.9 | | | | | | | | |
| SJAF | | | | Lg | Lg | | Lg | 12 42 23.9 | |
| | 8.2nm,0.1s,SNR=7.9 | | | | | | | | |
| **SJAF** | **Saint Jean de** | **1.22** | **93** | P | **Pn** | | **Pn** | **12 42 06.8** | **+0.2** |
| **SJAF** | **Saint Jean de** | **1.22** | **93** | Pg | **Pn** | | **Pn** | **12 42 07.1** | **+0.6** |
| | 0.4nm,0.2s,SNR=7.9 | | | | | | | | |
| SJAF | | | | S | **Sb** | | **Sb** | **12 42 22.7** | **+0.4** |
| SJAF | | | | Lg | Lg | | Lg | 12 42 23.9 | |
| | 8.2nm,0.1s,SNR=7.9 | | | | | | | | |
| **EJON** | **La Jonquera** | **1.23** | **94** | Pg | **Pn** | | **Pn** | **12 42 07.2** | **+0.5** |
| | 1.1nm,0.1s,SNR=13 | | | | | | | | |
| EJON | | | | Lg | Lg | | Lg | 12 42 24.5 | |
| | 6.5nm,0.1s,SNR=18 | | | | | | | | |
| **EJON** | **La Jonquera** | **1.23** | **94** | Pg | **Pn** | | **Pn** | **12 42 07.2** | **+0.5** |
| | 1.1nm,0.1s,SNR=13 | | | | | | | | |
| EJON | | | | Lg | Lg | | Lg | 12 42 24.5 | |
| | 6.5nm,0.1s,SNR=18 | | | | | | | | |
| **REYF** | **Montagne du Re** | **1.31** | **294** | Lg | Lg | | Lg | 12 42 25.3 | |
| **REYF** | **Montagne du Re** | **1.31** | **294** | Lg | Lg | | Lg | 12 42 25.3 | |
| **ETSF** | **Etsaut** | **1.37** | **285** | *e*Pn | **Pn** | | **Pn** | **12 42 09.0** | **+0.3** |
| **ETSF** | **Etsaut** | **1.37** | **285** | *e*Pg | **Pb** | | **Pb** | **12 42 10.2** | **+0.8** |
| ETSF | | | | *e*Sg | **Sb** | | **Sb** | **12 42 27.1** | **+0.3** |
| | 19nm,0.3s | | | | | | | | |
| **ETSF** | **Etsaut** | **1.37** | **285** | Pn | **Pn** | | **Pn** | **12 42 09.0** | **+0.3** |
| ETSF | | | | Pg | **Pb** | | **Pb** | **12 42 10.2** | **+0.8** |
| ETSF | | | | Lg | Lg | | Lg | 12 42 27.1 | |
| | 9.6nm,0.3s | | | | | | | | |
| **ETSF** | **Etsaut** | **1.37** | **285** | *e*Pn | **Pn** | | **Pn** | **12 42 09.0** | **+0.3** |
| **ETSF** | **Etsaut** | **1.37** | **285** | *e*Pg | **Pb** | | **Pb** | **12 42 10.2** | **+0.8** |
| ETSF | | | | *e*Sg | **Sb** | | **Sb** | **12 42 27.1** | **+0.3** |
| | 9.6nm,0.3s | | | | | | | | |
| **ESAC** | **San Caprasio** | **1.52** | **237** | Pn | **Pn** | | **Pn** | **12 42 11.8** | **+1.1** |
| | 1.0nm,0.1s,SNR=21 | | | | | | | | |
| ESAC | | | | Pg | **Pb** | | **Pb** | **12 42 12.8** | **+0.9** |
| | 7.4nm,0.1s,SNR=7.9 | | | | | | | | |
| ESAC | | | | Lg | Lg | | Lg | 12 42 33.0 | |
| | 73nm,0.2s,SNR=31 | | | | | | | | |
| **ESAC** | **San Caprasio** | **1.52** | **237** | Pn | **Pn** | | **Pn** | **12 42 11.8** | **+1.1** |
| | 1.0nm,0.1s,SNR=21 | | | | | | | | |
| **ATE** | **Arette** | **1.52** | **291** | Pn | **Pn** | | **Pn** | **12 42 12.1** | **+1.3** |
| | 0.3nm,0.2s,SNR=4.0 | | | | | | | | |
| ATE | | | | Pg | **Pg** | | **Pg** | **12 42 13.7** | **+0.4** |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | | | |
| ATE | | | | Lg | Lg | | Lg | 12 42 33.4 | |
| | 9.4nm,0.1s,SNR=7.9 | | | | | | | | |
| **ATE** | **Arette** | **1.52** | **291** | Pn | **Pn** | | **Pn** | **12 42 12.1** | **+1.3** |
| | 0.3nm,0.2s,SNR=4.0 | | | | | | | | |
| **ERTA** | **Horta de San J** | **1.73** | **203** | Pn | **Pn** | | **Pn** | **12 42 14.4** | **+0.8** |
| | 0.0nm,0.2s,SNR=4.0 | | | | | | | | |
| ERTA | | | | Pg | **Pb** | | **Pb** | **12 42 16.1** | **+0.6** |
| | 3.1nm,0.1s,SNR=22 | | | | | | | | |
| ERTA | | | | Lg | Lg | | Lg | 12 42 38.8 | |
| | 13nm,0.2s,SNR=16 | | | | | | | | |
| **ERTA** | **Horta de San J** | **1.73** | **203** | Pn | **Pn** | | **Pn** | **12 42 14.4** | **+0.8** |
| | SNR=4.0 | | | | | | | | |
| **SJPF** | **Ste Jean** | **1.90** | **288** | *e*Pg | **Pb** | | **Pb** | **12 42 19.0** | **+0.6** |
| SJPF | | | | *e*Sg | **Sb** | | **Sb** | **12 42 43.5** | **+1.6** |
| | 11nm,0.3s | | | | | | | | |
| **SJPF** | **Ste Jean** | **1.90** | **288** | Pg | **Pb** | | **Pb** | **12 42 19.0** | **+0.6** |
| SJPF | | | | Lg | Lg | | Lg | 12 42 43.5 | |
| | 5.3nm,0.3s | | | | | | | | |
| **SJPF** | **Ste Jean** | **1.90** | **288** | Pg | **Pb** | | **Pb** | **12 42 19.0** | **+0.6** |
| SJPF | | | | *e*Sg | **Sb** | | **Sb** | **12 42 43.5** | **+1.6** |
| | 5.3nm,0.3s | | | | | | | | |
| **ELIZ** | **Elizondo** | **2.12** | **288** | Pn | **Pn** | | **Pn** | **12 42 20.2** | **+1.2** |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | | | |
| ELIZ | | | | Pg | **Pg** | | **Pg** | **12 42 24.9** | **+0.1** |
| | 3.6nm,0.2s,SNR=7.9 | | | | | | | | |
| ELIZ | | | | Lg | Lg | | Lg | 12 42 52.3 | |
| | 4.8nm,0.2s,SNR=7.9 | | | | | | | | |
| **ELIZ** | **Elizondo** | **2.12** | **288** | Pn | **Pn** | | **Pn** | **12 42 20.2** | **+1.2** |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | | | |
| **EALK** | **Alkurruntz** | **2.13** | **289** | Pn | **Pn** | | **Pn** | **12 42 20.1** | **+1.1** |
| | 2.8nm,1.6s,SNR=7.9 | | | | | | | | |
| EALK | | | | Pg | **Pg** | | **Pg** | **12 42 24.2** | **-0.6** |
| | 1.0nm,0.2s,SNR=7.9 | | | | | | | | |
| EALK | | | | Lg | Lg | | Lg | 12 42 52.6 | |
| | 16nm,0.3s,SNR=7.6 | | | | | | | | |
| **EALK** | **Alkurruntz** | **2.13** | **289** | Pn | **Pn** | | **Pn** | **12 42 20.1** | **+1.1** |
| | 2.8nm,1.6s,SNR=7.9 | | | | | | | | |
| **LFF** | **La Frestale** | **2.42** | **352** | *e*Pn | **Pn** | | **Pn** | **12 42 23.4** | **+0.4** |
| **LFF** | **La Frestale** | **2.42** | **352** | *e*Pg | **Pg** | | **Pg** | **12 42 29.6** | **-0.7** |
| LFF | | | | *e*Sg | **Sg** | | **Sg** | **12 43 00.5** | **-1.1** |
| | 27nm,0.7s | | | | | | | | |
| **LFF** | **La Frestale** | **2.42** | **352** | Pn | **Pn** | | **Pn** | **12 42 23.4** | **+0.4** |
| LFF | | | | Pg | **Pg** | | **Pg** | **12 42 29.6** | **-0.7** |
| LFF | | | | Lg | Lg | | Lg | 12 43 00.5 | |
| | 14nm,0.7s | | | | | | | | |
| **LFF** | **La Frestale** | **2.42** | **352** | Pn | **Pn** | | **Pn** | **12 42 23.4** | **+0.4** |
| **LFF** | **La Frestale** | **2.42** | **352** | *e*Pg | **Pg** | | **Pg** | **12 42 29.6** | **-0.7** |
| LFF | | | | *e*Sg | **Sg** | | **Sg** | **12 43 00.5** | **-1.1** |
| | 14nm,0.7s | | | | | | | | |
| **LASF** | **Ste Croix** | **2.44** | **51** | *e*Pn | **Pn** | | **Pn** | **12 42 23.9** | **+0.5** |
| **LASF** | **Ste Croix** | **2.44** | **51** | *e*Pg | **Pg** | | **Pg** | **12 42 30.0** | **-0.9** |
| LASF | | | | *e*Sg | **Sg** | | **Sg** | **12 43 01.6** | **-1.0** |
| | 5.6nm,0.2s | | | | | | | | |
| **LASF** | **Ste Croix** | **2.44** | **51** | Pn | **Pn** | | **Pn** | **12 42 23.9** | **+0.5** |
| LASF | | | | Pg | **Pg** | | **Pg** | **12 42 30.0** | **-0.9** |
| LASF | | | | Lg | Lg | | Lg | 12 43 01.6 | |
| | 2.8nm,0.2s | | | | | | | | |
| **LASF** | **Ste Croix** | **2.44** | **51** | Pn | **Pn** | | **Pn** | **12 42 23.9** | **+0.5** |
| **LASF** | **Ste Croix** | **2.44** | **51** | Pg | **Pg** | | **Pg** | **12 42 30.0** | **-0.9** |
| LASF | | | | *e*Sg | **Sg** | | **Sg** | **12 43 01.6** | **-1.0** |
| | 2.8nm,0.2s | | | | | | | | |
| **CAF** | **Calviac** | **2.45** | **14** | *e*Pn | **Pn** | | **Pn** | **12 42 24.0** | **+0.5** |
| CAF | | | | *e*Sg | **Sg** | | **Sg** | **12 43 01.8** | **-0.9** |
| | 3.4nm,0.2s | | | | | | | | |
| **CAF** | **Calviac** | **2.45** | **14

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LVC | **Limon Verde** | **5.13** | **153** | P | **Pn** | **12 44 27.7** | **+1.1** |
| | comp=N,133nm,0.3s,baz=357,slow=7.9,SNR=31 | | | | | | | |
| LVC | | | | S | **Sn** | **12 45 27.2** | **+2.5** |
| | comp=N,1µm,0.3s,baz=164,slow=18,SNR=29 | | | | | | | |
| **LVC** | **Limon Verde** | **5.13** | **153** | *e*P | **Pn** | **12 44 27.8** | **+1.1** |
| **LVC** | **Limon Verde** | **5.13** | **153** | P | **Pn** | **12 44 27.7** | **+1.1** |
| LVC | | | | *e*Sn | **Sn** | **12 45 25.3** | **+0.5** |
| LVC | | | | S | | 12 45 27.2 | |
| **NNA** | **Nana** | **7.96** | **318** | S | Sn | 12 46 49.5 | +15 |
| | comp=N,2.6nm,0.3s,baz=252,slow=13,SNR=2.9 | | | | | | | |
| **NNA** | **Nana** | **7.96** | **318** | *e*Pn | Pn | 12 45 09.9 | +4.7 |
| NNA | | | | *e*Sn | **Sn** | **12 46 37.9** | **+3.8** |
| **SIV** | **San Ignacio** | **10.12** | **80** | P | **Pn** | **12 45 36.1** | **+1.3** |
| | comp=N,1.4nm,0.3s,baz=281,slow=17,SNR=24 | | | | | | | |
| SIV | | | | LR | LR | 12 50 01.3 | | |
| | comp=N,161nm,21.4s,baz=227,slow=42 | | | | | | | |
| **SAML** | **Samuel** | **12.07** | **43** | *e*Pn | **Pn** | **12 46 01.0** | **-0.5** |
| | comp=N,4.6nm,0.8s | | | | | | | |
| **CFAA** | **Coronel Fontan** | **13.82** | **169** | P | **Pn** | **12 46 26.8** | **+1.4** |
| | comp=N,0.0nm,0.3s,baz=290,slow=12,SNR=2.3 | | | | | | | |
| **CPUP** | **Villa Florida** | **15.44** | **125** | P | **Pn** | **12 46 45.8** | **-1.2** |
| | comp=N,0.1nm,0.3s,baz=233,slow=20,SNR=1.6 | | | | | | | |
| CPUP | | | | LR | LR | 12 53 34.6 | | |
| | comp=N,62nm,21.2s,baz=283,slow=41 | | | | | | | |
| **PTGA** | **Pitinga** | **20.56** | **34** | P | **P** | **12 47 46.1** | **-1.2** |
| | comp=N,11nm,0.5s,baz=211,slow=12,SNR=39 | | | | | | | |
| PTGA | | | | LR | LR | 12 55 06.3 | | |
| | comp=N,43nm,21.6s,baz=148,slow=35 | | | | | | | |
| **BDFB** | **Brasília** | **22.54** | **87** | P | **P** | **12 48 06.4** | **-2.3** |
| | comp=N,6.0nm,0.7s,baz=251,slow=14,SNR=8.8 | | | | | | | |
| BDFB | | | | LR | LR | 12 57 45.5 | | |
| | comp=N,73nm,20.1s,baz=52,slow=39 | | | | | | | |
| **DBIC** | **Dimbokro** | **70.11** | **76** | P | **P** | **12 54 19.4** | **-1.2** |
| | comp=N,2.4nm,0.8s,baz=200,slow=12,SNR=1.8 | | | | | | | |
| DBIC | | | | LR | LR | 13 22 35.5 | | |
| | comp=N,28nm,21.1s,baz=113,slow=34 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **71.33** | **344** | LR | LR | 13 28 52.8 | | |
| | comp=N,26nm,19.4s,baz=12,slow=38 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **78.49** | **72** | P | **P** | **12 55 08.3** | **-1.1** |
| | comp=N,1.6nm,0.6s,baz=252,slow=5.9,SNR=8.8 | | | | | | | |
| **ESDC** | **Sonseca Array** | **85.08** | **46** | P | **P** | **12 55 44.1** | **+0.4** |
| | comp=N,1.7nm,1.0s,baz=240,slow=6.3,SNR=6.2 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **25.00** | **282** | T | T | 15 19 36.5 | | |
| | baz=99,slow=74,SNR=21 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **25.00** | **280** | T | T | 15 19 37.2 | | |
| | baz=99,slow=74,SNR=113 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **25.01** | **280** | T | T | 15 19 37.7 | | |
| | baz=99,slow=74,SNR=66 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **25.02** | **282** | T | T | 15 19 36.6 | | |
| | baz=99,slow=74,SNR=22 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **25.02** | **282** | T | T | 15 19 41.7 | | |
| | baz=99,slow=74,SNR=14 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **25.02** | **280** | T | T | 15 19 38.5 | | |
| | baz=99,slow=74,SNR=77 | | | | | | | |
| **SONM** | **Songino Array** | **150.22** | **3** | PKPbc | **PKPbc** | **13 03 00.1** | **+1.4** |
| | comp=N,0.4nm,0.5s,baz=21,slow=2.6,SNR=2.9 | | | | | | | |

*CSEM* ***23*** *12:43:35.0, 47.36N×10.86E, h10km, ML1.7/4, After ZAMG*
**VIE 23 12:43:35.0±0.6, 47.36N×10.86E, h10km±5km, ml1.7/4, 5C-3D, Error ellipse: s-maj=1.9km s-min=1.2km az=27.0, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RETA** | **Reutte** | **0.15** | **332** | ⇑*i*Pg | Pg | 12 43 38.4 | -0.1 |
| | 3.6nm,0.1s | | | | | | |
| RETA | | | | ⇑*i*Sg | Sg | 12 43 41.2 | +0.2 |
| | 14nm,0.1s | | | | | | |
| **RETA** | **Reutte** | **0.15** | **332** | Pg | Pg | 12 43 38.4 | -0.1 |
| | 3.6nm,0.1s | | | | | | |
| RETA | | | | Sg | Sg | 12 43 41.2 | +0.3 |
| | 14nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **0.16** | **94** | ⇑*i*Pg | Pg | 12 43 38.7 | -0.2 |
| | 3.6nm,0.1s | | | | | | |
| MOTA | | | | ⇓*i*Sg | Sg | 12 43 41.5 | 0.0 |
| | 24nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **0.16** | **94** | Pg | Pg | 12 43 38.7 | -0.1 |
| | 3.6nm,0.1s | | | | | | |
| MOTA | | | | Sg | Sg | 12 43 41.5 | 0.0 |
| | 24nm,0.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **0.27** | **120** | ⇑*i*Pg | Pg | 12 43 40.7 | 0.0 |
| SQTA | | | | ⇓*i*Sg | Sg | 12 43 44.9 | +0.4 |
| **SQTA** | **Sankt Quirin** | **0.27** | **120** | Pg | Pg | 12 43 40.7 | 0.0 |
| SQTA | | | | Sg | Sg | 12 43 44.9 | +0.4 |
| **FETA** | **Feichten** | **0.35** | **195** | ⇓*i*Pg | Pg | 12 43 42.0 | -0.1 |
| | 0.9nm,0.1s | | | | | | |
| FETA | | | | ⇑*i*Sg | Sg | 12 43 47.2 | +0.2 |
| | 2.5nm,0.1s | | | | | | |
| **FETA** | **Feichten** | **0.35** | **195** | Pg | Pg | 12 43 42.0 | -0.1 |
| | 0.9nm,0.1s | | | | | | |
| FETA | | | | Sg | Sg | 12 43 47.2 | +0.2 |
| | 2.5nm,0.1s | | | | | | |

*ISCJB* ***23*** *12:43:39.4±0.3, 4.35S±0.04×152.86E±0.06, h55km, mb4.6/42, MS3.2/1, Error ellipse: s-maj=8.6km s-min=5.8km az=24.5*
*DJA* ***23*** *12:43:44.3±0.9, 5.5S±8.8×15.3E±1.0, h121km±10km, M5.0/17, mb4.9/17, mB5.4/10, MLv5.3/1, Mw(mB)4.9/10*
*IDC* ***23*** *12:43:45.0±0.8, 4.41S×152.82E, h93km±7km, mb4.1/23, mb1 4.2/25, mb1mx4.1/37, mbtmp4.4/25, MS3.3/1, Ms1 3.3/1, ms1mx2.6/23, Error ellipse: s-maj=15.3km s-min=11.0km az=87.0*
*NEIC* ***23*** *12:43:45.0±0.2, 4.36S×152.77E, mb4.7/11, Error ellipse: s-maj=7.1km s-min=5.3km az=107.0*
*AUST* ***23*** *12:43:46.5, 4.22S×152.57E, h100km*
**ISC 23 12:43:40.9±0.5, 4.34S±0.07×152.91E±0.08, h55km, n83, σ1§56/80, mb4.7/42, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **0.75** | **281** | P | Pn | 12 44 02.2 | +6.6 |
| | baz=0.4,SNR=59 | | | | | | |
| **PMG** | **Port Moresby** | **7.61** | **228** | P | Pn | 12 45 32.4 | +3.2 |
| | 3.3nm,0.3s,baz=54,slow=12,SNR=13 | | | | | | |
| PMG | | | | S | **Sn** | **12 46 52.5** | **-1.6** |
| | 20nm,0.3s,baz=120,slow=21,SNR=14 | | | | | | |
| **PMG** | **Port Moresby** | **7.61** | **228** | P | Pn | 12 45 33.4 | +4.3 |
| | baz=7.5,SNR=8.0 | | | | | | |
| **PMG** | **Port Moresby** | **7.61** | **228** | *e*Pn | **Pn** | **12 45 31.5** | **+2.3** |
| PMG | | | | S | **Sn** | **12 46 52.5** | **-1.6** |
| PMG | | | | *e*Sn | Sn | 12 46 54.9 | +0.8 |
| **HNR** | **Honiara** | **8.63** | **126** | *e*Pn | Pn | 12 45 48.7 | +5.5 |
| HNR | | | | *e*Sn | Sn | 12 47 28.8 | +10 |
| **COEN** | **Coen** | **13.54** | **224** | P | **P** | **12 46 59.4** | **+1.6** |
| | baz=13,SNR=7.0 | | | | | | |
| **COEN** | **Coen** | **13.54** | **224** | *e*Pn | **Pn** | **12 46 52.8** | **+2.4** |
| **SMPI** | **Sarmi** | **14.36** | **279** | P | P | 12 47 10.4 | +3.4 |
| | 140nm,0.8s,11µm | | | | | | |
| **MTSU** | **Mount Surprise** | **16.08** | **211** | P | **P** | **12 47 27.2** | **+1.1** |
| | baz=16,SNR=8.3 | | | | | | |
| **CTA** | **Charters Tower** | **16.94** | **202** | P | **P** | **12 47 35.1** | **-0.4** |
| | 0.2nm,0.3s,baz=37,slow=13,SNR=3.9 | | | | | | |
| **CTAO** | **Charters Tower** | **16.94** | **202** | *e*Pn | **P** | **12 47 37.4** | **+1.8** |
| | 19nm,1.2s | | | | | | |
| **FAKI** | **Fak Fak** | **20.66** | **273** | P | **P** | **12 48 17.5** | **+1.1** |
| | baz=20,SNR=5.1 | | | | | | |
| **QIS** | **Mount Isa** | **20.67** | **218** | P | **P** | **12 48 16.5** | **+0.1** |
| | baz=21,SNR=18 | | | | | | |
| **EIDS** | **Eidsvold** | **20.98** | **185** | *e*P | Pn | 12 48 21.9 | -0.9 |
| | 20nm,0.5s | | | | | | |
| **KDU** | **Kakadu** | **21.83** | **246** | P | **P** | **12 48 27.4** | **-1.4** |
| | baz=22,SNR=70 | | | | | | |
| **SIJI** | **Sorong** | **21.89** | **278** | P | **P** | **12 48 30.7** | **+1.1** |
| | 22nm,0.5s,baz=136,slow=7.3,SNR=20 | | | | | | |
| SIJI | | | | pP | pP | 12 48 49.2 | +7.2 |
| | 4.9nm,0.6s,baz=233,slow=20,SNR=2.1 | | | | | | |
| **SWI** | **Sorong** | **21.89** | **278** | P | **P** | **12 48 32.9** | **+3.2** |
| | baz=22,SNR=4.7 | | | | | | |
| **SWI** | **Sorong** | **21.89** | **278** | P | **P** | **12 48 32.0** | **+2.4** |
| | 48nm,0.8s,747nm | | | | | | |
| **DZM** | **Mont Dzumac** | **21.97** | **145** | P | **P** | **12 48 32.2** | **+1.7** |
| | 9.2nm,1.0s,baz=183,slow=2.1,SNR=8.2 | | | | | | |
| **RMQ** | **Roma** | **22.38** | **190** | P | **P** | **12 48 35.8** | **+1.1** |
| | baz=23,SNR=9.1 | | | | | | |
| **MTN** | **Manton Dam** | **23.11** | **247** | P | P | 12 48 36.2 | -6.1 |
| | baz=23,SNR=6.1 | | | | | | |
| **MTN** | **Manton Dam** | **23.11** | **247** | *e*P | **P** | **12 48 40.2** | **-2.1** |
| | 36nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **23.62** | **200** | P | **P** | **12 48 47.1** | **0.0** |
| | baz=24,SNR=10 | | | | | | |
| **WRAB** | **Tennant Creek** | **23.81** | **228** | *e*P | **P** | **12 48 48.0** | **-1.0** |
| | 61nm,1.2s | | | | | | |
| **WRA** | **Warramunga Arr** | **23.83** | **228** | P | **P** | **12 48 48.1** | **-1.0** |
| | 34nm,0.9s,baz=52,slow=9.5,SNR=130 | | | | | | |
| WRA | | | | pP | pP | 12 49 08.5 | +5.8 |
| | 15nm,0.9s,baz=52,slow=9.6,SNR=4.8 | | | | | | |
| WRA | | | | ScP | **ScP** | **12 56 00.1** | **-5.2** |
| | 2.8nm,0.7s,baz=52,slow=2.7,SNR=18 | | | | | | |
| **MSAI** | **Masohi** | **23.94** | **272** | P | **P** | **12 48 51.9** | **+1.6** |
| | 9.8nm,0.7s,536nm | | | | | | |
| **LBMI** | **Labuha** | **25.64** | **278** | P | **P** | **12 49 07.2** | **+1.5** |
| | 54nm,0.7s,1µm | | | | | | |
| **KNRA** | **Kununurra** | **26.27** | **243** | P | **P** | **12 49 09.9** | **-1.4** |
| | baz=26,SNR=81 | | | | | | |
| **ASAR** | **Alice Springs** | **26.56** | **222** | P | **P** | **12 49 12.7** | **-1.3** |
| | 2.5nm,0.6s,baz=55,slow=8.6,SNR=40 | | | | | | |
| ASAR | | | | pP | pP | 12 49 33.5 | +5.8 |
| | 7.3nm,0.7s,baz=53,slow=12,SNR=11 | | | | | | |
| ASAR | | | | S | **S** | **12 53 46.1** | **+1.4** |
| | 0.5nm,0.7s,baz=35,slow=18,SNR=3.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **12 56 08.3** | **-4.7** |
| | 2.1nm,0.8s,baz=48,slow=3.1,SNR=14 | | | | | | |
| **SANI** | **Sanana** | **26.97** | **274** | P | **P** | **12 49 21.3** | **+3.6** |
| | 17nm,0.8s | | | | | | |
| **KMSI** | **Cibinong** | **29.31** | **279** | P | **P** | **12 49 41.6** | **+3.0** |
| | 110nm,0.7s,3µm | | | | | | |
| **BATI** | **Baumata** | **29.57** | **257** | P | **P** | **12 49 40.7** | **-0.3** |
| | 13nm,0.6s,baz=83,slow=19,SNR=3.4 | | | | | | |
| **LUWI** | **Luwuk** | **30.27** | **275** | *e*P | **P** | **12 49 46.8** | **-0.3** |
| | 35nm,0.7s | | | | | | |
| **GTOI** | **Gorontalo** | **30.28** | **279** | P | **P** | **12 49 49.0** | **+1.9** |
| | 22nm,0.6s | | | | | | |
| **WRKA** | **Warakurna** | **31.35** | **227** | P | **P** | **12 49 54.9** | **-1.6** |
| | baz=31,SNR=23 | | | | | | |
| **SPSI** | **Sidrap Palu** | **33.05** | **269** | P | **P** | **12 50 10.5** | **-1.0** |
| | 20nm,0.9s,533nm | | | | | | |
| **PCI** | **Palu** | **33.20** | **275** | P | **P** | **12 50 15.6** | **+2.7** |
| | 52nm,0.9s | | | | | | |
| **MPSI** | **Mapaga** | **33.30** | **277** | P | **P** | **12 50 13.3** | **-0.4** |
| | 20nm,0.6s,588nm | | | | | | |
| **ARPS** | **Mount Arapiles** | **33.84** | **196** | P | **P** | **12 50 18.7** | **+0.6** |
| | baz=34,SNR=5.4 | | | | | | |
| **MBWA** | **Marble Bar** | **36.29** | **240** | *e*P | **P** | **12 50 37.4** | **-2.1** |
| | 14nm,0.9s | | | | | | |
| **BBKI** | **Banjar Baru** | **37.98** | **270** | P | **P** | **12 50 55.0** | **+1.1** |
| **MEEK** | **Meekatharra** | **39.56** | **232** | P | **P** | **12 51 05.6** | **-1.4** |
| | baz=39,SNR=50 | | | | | | |
| **KMBL** | **Kambalda** | **39.65** | **224** | P | **P** | **12 51 06.1** | **-1.6** |
| | baz=40,SNR=9.3 | | | | | | |
| **SBUM** | **Sibu** | **41.21** | **279** | *e*P | **P** | **12 51 20.5** | **-0.3** |
| | 6.8nm,0.8s | | | | | | |
| **GIRL** | **Giralia** | **41.58** | **240** | P | **P** | **12 51 23.7** | **0.0** |
| | baz=41,SNR=3.3 | | | | | | |
| **RPZ** | **Rata Peaks** | **42.37** | **160** | P | **P** | **12 51 30.2** | **+0.4** |
| | 13nm,0.8s,baz=26,slow=2.9,SNR=8.2 | | | | | | |
| **KLBR** | **Kellerberrin** | **42.70** | **226** | P | **P** | **12 51 30.7** | **-1.9** |
| | baz=43,SNR=6.5 | | | | | | |
| **JNU** | **Nakatsue** | **42.71** | **332** | LR | LR | 13 07 30.4 | | |
| | comp=Z,32nm,18.5s,baz=118,slow=33 | | | | | | | |
| **JNU** | **Nakatsue** | **42.71** | **332** | *e*P | **P** | **12 51 33.0** | **+0.3** |
| | 12nm,1.0s | | | | | | |
| **MORW** | **Morawa** | **42.71** | **231** | P | **P** | **12 51 31.9** | **-0.9** |
| | baz=43,SNR=5.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **42.93** | **343** | P | **P** | **12 51 34.4** | **0.0** |
| | 0.5nm,0.5s,baz=141,slow=7.1,SNR=3.6 | | | | | | |
| MJAR | | | | PcP | **PcP** | **12 53 23.6** | **-0.8** |
| | 0.6nm,0.6s,baz=154,slow=4.1,SNR=4.1 | | | | | | |
| **KSM** | **Kuching** | **42.95** | **277** | P | **P** | **12 51 34.6** | **-0.4** |
| | baz=43,SNR=4.1 | | | | | | |
| **BLDU** | **Ballidu** | **42.96** | **228** | P | **P** | **12 51 32.8** | **-2.0** |
| | baz=43,SNR=8.4 | | | | | | |
| **RKGY** | **Rocky Gully** | **44.88** | **223** | P | **P** | **12 51 49.4** | **-0.8** |
| | baz=45,SNR=5.8 | | | | | | |
| **KSRS** | **Korea Array** | **47.64** | **333** | P | **P** | **12 52 12.3** | **+0.6** |
| | 2.6nm,0.7s,baz=153,slow=7.9,SNR=13 | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.65** | **333** | P | **P** | **12 52 12.3** | **+0.5** |
| **USRK** | **Ussuriysk Ar.** | **51.85** | **341** | P | **P** | **12 52 43.9** | **+0.3** |
| | 4.3nm,0.8s,baz=167,slow=7.8,SNR=8.1 | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.38** | **3** | P | **P** | **12 53 24.5** | **+1.0** |
| | 10nm,0.5s,baz=170,slow=7.9,SNR=55 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.78** | **295** | P | **P** | **12 53 27.4** | **+0.4** |
| | 1.5nm,0.7s,baz=119,slow=5.5,SNR=9.8 | | | | | | |
| **SONM** | **Songino Array** | **66.00** | **328** | P | **P** | **12 54 22.4** | **+0.6** |
| | 1.1nm,0.5s,baz=147,slow=5.9,SNR=7.5 | | | | | | |
| **VNDA** | **Vanuk** | **73.28** | **178** | P | **P** | **12 55 05.4** | **-0.6** |
| | 0.7nm,0.6s,baz=331,slow=6.4,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.05** | **319** | P | **P** | **12 55 44.6** | **-0.2** |
| | 0.8nm,0.5s,baz=96,slow=7.7,SNR=13 | | | | | | |
| **MCK** | **McKinley** | **80.40** | **23** | *e*P | **P** | **12 55 45.5** | **-0.8** |
| | 18nm,0.9s | | | | | | |
| **KLU** | **Klutina** | **80.52** | **25** | *e*P | **P** | **12 55 47.8** | **+0.8** |
| | 9.4nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.83** | **326** | P | **P** | **12 55 47.4** | **-1.3** |
| | 1.2nm,0.5s,baz=118,slow=5.6,SNR=6.3 | | | | | | |
| **COLA** | **College** | **81.39** | **22** | *e*P | **P** | **12 55 50.9** | **-0.5** |
| | 10nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **81.70** | **22** | P | **P** | **12 55 52.0** | **-1.2** |
| | 5.7nm,0.8s,baz=245,slow=5.6,SNR=65 | | | | | | |
| **KURK** | **Kurchatov** | **83.47** | **322** | P | **P** | **12 56 02.4** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **83.50** | **322** | P | **P** | **12 56 02.4** | **-0.5** |
| | 1.0nm,0.2s,baz=107,slow=4.0,SNR=4.3 | | | | | | |
| **EGAK** | **Eagle** | **83.90** | **23** | *e*P | **P** | **12 56 05.1** | **+0.5** |
| | 2.5nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **84.43** | **313** | P | **P** | **12 56 08.2** | **+0.2** |
| | 2.1nm,0.6s,baz=150,slow=10 | | | | | | |
| **MAW** | **Mawson** | **86.03** | **203** | P | **P** | **12 56 14.1** | **-1.1** |
| | 2.0nm,0.6s,baz=92,slow=7.7,SNR=12 | | | | | | |
| **INK** | **Inuvik** | **87.99** | **21** | P | **P** | **12 56 24.3** | **-0.4** |
| | 2.7nm,0.5s,baz=271,slow=5.9,SNR=20 | | | | | | |
| **BVAR** | **Borovoye Array** | **88.94** | **323** | P | **P** | **12 56 28.1** | **-1.4** |
| | 3.2nm,0.7s,baz=100,slow=5.0,SNR=14 | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.72** | **52** | P | **P** | **12 56 43.0** | **-0.1** |
| | 0.7nm,0.8s,baz=254,slow=6.1,SNR=5.7 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.97** | **28** | P | **P** | **12 56 57.4** | **+0.2** |
| | 1.3nm,0.7s,baz=271,slow=4.9,SNR=5.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **114.19** | **325** | PKP | PKPdf | 13 02 12.4 | -1.8 |
| | 0.4nm,0.3s,baz=28,slow=1.9,SNR=4.4 | | | | | | |
| **GERES** | **GERESS Array B** | **123.72** | **329** | PKP | **PKPdf** | **13 02 32.2** | **-0.6** |
| | 0.6nm,0.5s,baz=93,slow=2.7,SNR=6.2 | | | | | | |
| **LPAZ** | **La Paz** | **134.54** | **118** | PKP | **PKPdf** | **13 02 55.8** | **+0.9** |
| | 1.6nm,0.6s,baz=241,slow=2.7,SNR=7.6 | | | | | | |
| **MDT** | **Midelt** | **144.73** | **326** | PKP | **PKPab** | **13 03 11.1** | **-0.1** |
| | 2.0nm,0.6s,baz=241,slow=2.7,SNR=5.8 | | | | | | |
| **PTGA** | **Pitinga** | **146.77** | **98** | PKPbc | **PKPdf** | **13 03 17.7** | **+1.5** |
| | 6.8nm,0.7s,baz=217,slow=3.5,SNR=17 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.26** | **289** | PKPbc | **PKPbc** | **13 03 25.7** | **-1.3** |
| | 6.3nm,1.0s,baz=66,slow=2.2,SNR=14 | | | | | | |
| TORD | | | | pPKPbc | pPKPbc | 13 03 51.8 | +8.5 |
| | 1.8nm,0.7s,baz=47,slow=2.4,SNR=3.3 | | | | | | |
| **BDFB** | **Brasília** | **151.31** | **134** | PKPbc | **PKPbc** | **13 03 29.0** | **-0.6** |
| | 5.3nm,0.9s,baz=198,slow=3.1,SNR=5.7 | | | | | | |

*ISCJB* ***23*** *12:43:44.3±0.3, 47.44N±0.02×10.85E±0.02, h12km±3km, Error ellipse: s-maj=2.9km s-min=2.3km az=173.5*
*CSEM* ***23*** *12:43:45.7±0.1, 47.38N×10.87E, h12km, ML2.7/14, Error ellipse: s-maj=1.7km s-min=1.6km az=13.0*
*VIE* ***23*** *12:43:46.1±0.1, 47.34N×10.88E, h7km±2km, mb1.9/10, ml2.6/12, Error ellipse: s-maj=1.1km s-min=0.8km az=66.0, felt 3 ems98 at Obsteig / Tyrol*
*LDG* ***23*** *12:43:46.9±0.1, 47.28N×10.86E, h10km, Ml2.7/8, Error ellipse: s-maj=2.9km s-min=1.2km az=33.0*
*PRU* ***23*** *12:43:46.8, 47.48N×10.77E, h14km*
*BGR* ***23*** *12:43:47.3±0.3, 47.40N×10.88E, h10km, ML2.3/8, Error ellipse: s-maj=4.4km s-min=3.3km az=5.0*
**ISC 23 12:43:45.9±0.8, 47.37N±0.02×10.85E±0.01, h13km±5km, n67, σ0§97/111, 4C-7D, Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RETA** | **Reutte** | **0.13** | **334** | ⇓*i*Pg | **Pg** | **12 43 49.5** | **0.0** |
| | 32nm,0.1s | | | | | | |
| RETA | | | | ⇓*i*Sg | **Sg** | **12 43 52.1** | **+0.2** |
| | 107nm,0.1s | | | | | | |
| **RETA** | **Reutte** | **0.13** | **334** | Pg | **Pg** | **12 43 49.5** | **0.0** |
| | 32nm,0.1s | | | | | | |
| RETA | | | | Sg | **Sg** | **12 43 52.1** | **+0.2** |
| | 107nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **0.18** | **98** | ⇑*i*Pg | **Pg** | **12 43 49.7** | **-0.5** |
| | 29nm,0.1s | | | | | | |
| MOTA | | | | ⇑*i*Sg | **Sg** | **12 43 51.9** | **-1.2** |
| | 174nm,0.1s | | | | | | |
| **MOTA** | **Moosalm** | **0.18** | **98** | Pg | **Pg** | **12 43 49.7** | **-0.5** |
| | 29nm,0.1s | | | | | | |
| MOTA | | | | Sg | **Sg** | **12 43 51.9** | **-1.2** |
| | 174nm,0.1s | | | | | | |
| **SQTA** | **Sankt Quirin** | **0.29** | **121** | ⇓*i*Pg | **Pg** | **12 43 51.7** | **-0.3** |
| SQTA | | | | ⇓*e*Sg | **Sg** | **12 43 55.9** | **-0.2** |
| **SQTA** | **Sankt Quirin** | **0.29** | **121** | Pg | **Pg** | **12 43 51.7** | **-0.3** |
| SQTA | | | | Sg | **Sg** | **12 43 55.9** | **-0.2** |
| **FETA** | **Feichten** | **0.36** | **193** | ⇓*i*Pg | **Pg** | **12 43 53.1** | **-0.2** |
| | 12nm,0.1s | | | | | | |
| FETA | | | | ⇓*i*Sg | **Sg** | **12 43 58.3** | **+0.1** |
| | 14nm,0.1s | | | | | | |
| **FETA** | **Feichten** | **0.36** | **193** | Pg | **Pg** | **12 43 53.1** | **-0.2** |
| | 12nm,0.1s | | | | | | |
| FETA | | | | Sg | **Sg** | **12 43 58.3** | **+0.1** |
| | 14nm,0.1s | | | | | | |
| **WTTA** | **Wattenberg** | **0.55** | **101** | *e*Pg | **Pg** | **12 43 56.9** | **+0.2** |
| WTTA | | | | *e*Sg | **Sg** | **12 44 04.5** | **+0.4** |
| **WTTA** | **Wattenberg** | **0.55** | **101** | ⇑*e*Sg | **Sg** | **12 44 04.0** | **0.0** |
| | 29nm,0.2s,SNR=9.5 | | | | | | |
| **WTTA** | **Wattenberg** | **0.55** | **101** | Pg | **Pg** | **12 43 56.6** | **-0.1** |
| WTTA | | | | Sg | **Sg** | **12 44 04.0** | **0.0** |
| | 29nm,0.2s,SNR=9.5 | | | | | | |
| **ROSI** | **Rosskopf** | **0.59** | **139** | Pg | **Pg** | **12 43 57.0** | **-0.5** |
| ROSI | | | | Sg | **Sg** | **12 44 04.9** | **-0.4** |
| **DAVA** | **Damuels** | **0.66** | **263** | *e*Pg | **Pb** | **12 43 59.7** | **+0.3** |
| DAVA | | | | *e*Sg | **Sn** | **12 44 10.5** | **-1.0** |
| **DAVA** | **Damuels** | **0.66** | **263** | Sg | **Sn** | **12 44 10.5** | **-1.0** |
| **DAVA** | **Damuels** | **0.66** | **263** | Pg | **Pb** | **12 43 59.7** | **+0.2** |
| **MOSI** | **Grossmontoni** | **0.78** | **195** | Pg | **Pg** | **12 44 00.9** | **-0.2** |
| MOSI | | | | Sg | **Sb** | **12 44 12.7** | **+0.6** |
| **FUR** | **Furstenfeldbru** | **0.85** | **20** | *e*Pg | **Pb** | **12 44 03.1** | **+0.6** |
| FUR | | | | *e*Sg | **Sb** | **12 44 14.9** | **+1.1** |
| **FUR** | **Furstenfeldbru** | **0.85** | **20** | Pg | **Pb** | **12 44 03.1** | **+0.6** |
| FUR | | | | Sg | **Sb** | **12 44 14.9** | **+1.1** |
| **FUORN** | **Ofenpass-Fuorn** | **0.85** | **208** | Pg | **Pg** | **12 44 01.9** | **-0.5** |
| FUORN | | | | Sg | **Sb** | **12 44 14.4** | **+0.3** |
| **DAVOX** | **Davos/Dischmat** | **0.89** | **229** | Pg | **Pg** | **12 44 03.0** | **-0.1** |
| DAVOX | | | | Sg | **Sb** | **12 44 15.7** | **+0.6** |
| **APPI** | **Appiano** | **0.93** | **164** | Pg | **Pg** | **12 44 03.8** | **-0.1** |
| | 45nm,0.2s | | | | | | |
| **BRMO** | **Bormio** | **0.95** | **200** | Pg | **Pn** | **12 44 05.1** | **0.0** |
| | 32nm,0.2s | | | | | | |
| **KOSI** | **Kohlern** | **0.98** | **158** | Pg | **Pb** | **12 44 04.7** | **-0.1** |
| KOSI | | | | Sg | **Sg** | **12 44 18.1** | **+0.5** |
| | 38nm,0.5s | | | | | | |
| **PLONS** | **Plons/SG** | **1.05** | **253** | Pg | **Pn** | **12 44 06.6** | **+0.2** |
| **BERNI** | **Berninapass** | **1.11** | **211** | Pg | **Pb** | **12 44 06.5** | **-0.7** |
| **ABTA** | **Abfaltersbach** | **1.30** | **118** | ⇓*e*Pn | **Pb** | **12 44 10.3** | **+0.1** |
| | SNR=7.1 | | | | | | |
| **ABTA** | **Abfaltersbach** | **1.30** | **118** | Pn | **Pb** | **12 44 10.3** | **+0.1** |
| | SNR=7.1 | | | | | | |
| **RJOB** | **Jochberg** | **1.37** | **74** | *e*Pg | **Pg** | **12 44 12.6** | **+0.3** |
| RJOB | | | | *e*Sg | **Sg** | **12 44 29.9** | **-0.2** |
| **RJOB** | **Jochberg** | **1.37** | **74** | Pg | **Pg** | **12 44 12.6** | **+0.3** |
| RJOB | | | | Sg | **Sg** | **12 44 29.9** | **-0.2** |
| **KBA** | **Koelnbreinsper** | **1.73** | **99** | *e*Pg | **Pg** | **12 44 18.8** | **-0.3** |
| KBA | | | | *e*Sg | **Sg** | **12 44 43.0** | **+1.5** |
| **KBA** | **Koelnbreinsper** | **1.73** | **99** | ⇑*e*Pg | **Pg** | **12 44 18.8** | **-0.3** |
| | 16nm,0.3s,SNR=20 | | | | | | |
| **KBA** | **Koelnbreinsper** | **1.73** | **99** | Pg | **Pg** | **12 44 18.8** | **-0.3** |
| KBA | | | | Sg | **Sg** | **12 44 43.0** | **+1.5** |
| **BFO** | **Black Forest** | **1.95** | **300** | *e*Pg | **Pg** | **12 44 23.6** | **+0.3** |
| BFO | | | | *e*Sg | **Sg** | **12 44 48.8** | **+0.2** |
| **BFO** | **Black Forest** | **1.95** | **300** | Pg | **Pg** | **12 44 23.6** | **+0.3** |
| BFO | | | | Sg | **Sg** | **12 44 48.8** | **+0.2** |
| **WET** | **Wettzell** | **2.23** | **37** | *e*Pn | **Pn** | **12 44 22.6** | **-0.1** |
| WET | | | | *e*Sg | **Sb** | **12 44 55.4** | **+1.7** |
| **WET** | **Wettzell** | **2.23** | **37** | Pn | **Pn** | **12 44 22.6** | **-0.1** |
| WET | | | | Sg | **Sb** | **12 44 55.4** | **+1.7** |
| **GRA1** | **Grafenberg Arr** | **2.34** | **6** | Pg | **Pg** | **12 44 30.6** | **-0.2** |
| GRA1 | | | | Sg | **Sg** | **12 45 00.1** | **-0.9** |
| **GRF** | **Grafenberg Arr** | **2.34** | **6** | *e*Pg | **Pg** | **12 44 30.6** | **-0.2** |
| GRF | | | | *e*Sg | **Sg** | **12 45 00.1** | **-0.9** |
| **MOA** | **Molln** | **2.36** | **77** | *e*Sg | **Sg** | **12 45 00.7** | **-1.1** |
| **MOA** | **Molln** | **2.36** | **77** | Sg | **Sg** | **12 45 00.7** | **-1.1** |
| **KHC** | **Kasperske Hory** | **2.54** | **45** | *e*PG | **Pg** | **12 44 33.4** | **-1.2** |
| KHC | | | | *e*SN | **Sn** | **12 44 56.8** | **-0.8** |
| KHC | | | | *e*SG | **Sb** | **12 45 04.7** | **+2.3** |
| | comp=Z,9.8nm,0.4s | | | | | | |
| **KHC** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BEST** | **Besiri** | **2.48** | **293** | P | **Pn** | **12 44 45.4** | **0.0** | |
| **MARD** | **Mardin** | **2.73** | **278** | P | Pn | 12 44 52.3 | +3.5 | |
| **MAZI** | **Mazidag** | **3.01** | **281** | *e*PN | **Pn** | **12 44 54.5** | **+1.8** | |
| **MAZI** | **Mazidag** | **3.01** | **281** | *e*Pn | **Pn** | **12 44 54.5** | **+1.8** | |
| **BHD** | **Baghdad** | **3.69** | **177** | *e*Pn | x | 12 45 02.9 | | |
| BHD | | | | *e*SN | x | 12 45 43.0 | | |
| **BHD** | **Baghdad** SNR=39 | **3.69** | **177** | *e*Pn | **Pn** | **12 45 02.9** | **+0.9** | |
| BHD | SNR=39 | | | *e*Sn | **Sn** | **12 45 43.0** | **-2.5** | |
| **IBDR** | **Badra** | **4.11** | **159** | *e*PN | x | 12 45 08.8 | | |
| IBDR | | | | *e*SN | x | 12 45 53.2 | | |
| **RTB** | **Rutbah** | **5.04** | **220** | *e*PN | x | 12 45 22.8 | | |
| RTB | | | | *e*SN | x | 12 46 17.5 | | |
| **RTB** | **Rutbah** SNR=39 | **5.04** | **220** | *e*Pn | **Pn** | **12 45 22.8** | **+2.2** | |
| RTB | SNR=39 | | | *e*Sn | **Sn** | **12 46 17.5** | **-1.4** | |

*LDG* ***23*** *12:44:22.7±0.1, 47.°31N×10.°93E, h2km, Ml2.8/7, Error ellipse: s-maj=5.0km s-min=2.0km az=19.0*
*CSEM* ***23*** *12:44:23.1±0.2, 47.°39N×10.°87E, h10km, ML2.6/10, Error ellipse: s-maj=3.9km s-min=3.0km az=175.0*
*VIE* ***23*** *12:44:23.6±0.6, 47.°35N×10.°85E, h9km±6km, mb1.3/1, ml2.5/4, Error ellipse: s-maj=2.0km s-min=1.3km az=26.0*
*PRU* ***23*** *12:44:23.6, 47.°40N×10.°90E, h0km*
*BGR* ***23*** *12:44:24.7±0.4, 47.°40N×10.°90E, h10km, ML2.3/6, Error ellipse: s-maj=5.6km s-min=3.3km az=166.0*

**ISC 23 12:44:23.0±0.8, 47.°39N±0.°03×10.°87E±0.°02, h17km±5km, n39, σ0°76/62, 3C-5D, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RETA** | **Reutte** | **0.12** | **322** | ⇑*i*Pg | **Pb** | **12 44 27.0** | **0.0** |
| RETA | 225nm,0.1s | | | ⇑*i*Sg | **Sg** | **12 44 29.6** | **+0.1** |
| **RETA** | **Reutte** | **0.12** | **322** | Pg | **Pb** | **12 44 27.0** | **0.0** |
| RETA | 225nm,0.1s | | | Sg | **Sg** | **12 44 29.6** | **+0.1** |
| **MOTA** | **Moosalm** | **0.17** | **106** | ⇑*i*Pg | **Pg** | **12 44 27.2** | **-0.3** |
| MOTA | 119nm,0.1s | | | ⇓*i*Sg | **Sg** | **12 44 30.1** | **-0.4** |
| **MOTA** | **Moosalm** | **0.17** | **106** | Pg | **Pg** | **12 44 27.2** | **-0.3** |
| MOTA | 119nm,0.1s | | | Sg | **Sg** | **12 44 30.1** | **-0.4** |
| **SQTA** | **Sankt Quirin** | **0.29** | **127** | ⇓*e*Pg | **Pg** | **12 44 29.2** | **-0.1** |
| SQTA | | | | ⇓*i*Sg | **Sg** | **12 44 33.6** | **0.0** |
| **SQTA** | **Sankt Quirin** | **0.29** | **127** | Pg | **Pg** | **12 44 29.2** | **-0.1** |
| SQTA | | | | Sg | **Sg** | **12 44 33.6** | **0.0** |
| **FETA** | **Feichten** 7.4nm,0.1s | **0.38** | **195** | ⇓*i*Pg | **Pg** | **12 44 30.5** | **-0.5** |
| FETA | 27nm,0.2s | | | ⇓*i*Sg | **Sg** | **12 44 35.5** | **-0.9** |
| **FETA** | **Feichten** 7.4nm,0.1s | **0.38** | **195** | Pg | **Pg** | **12 44 30.5** | **-0.5** |
| FETA | 27nm,0.2s | | | Sg | **Sg** | **12 44 35.5** | **-0.9** |
| **DAVA** | **Damuels** | **0.68** | **261** | *e*Pg | **Pb** | **12 44 37.5** | **+0.9** |
| DAVA | | | | *e*Sg | **Sn** | **12 44 48.0** | **-0.4** |
| **DAVA** | **Damuels** | **0.68** | **261** | Pg | **Pb** | **12 44 37.5** | **+0.9** |
| DAVA | | | | Sg | **Sn** | **12 44 48.0** | **-0.4** |
| **FUR** | **Furstenfeldbru** | **0.82** | **19** | *e*Pg | **Pn** | **12 44 40.6** | **+0.7** |
| FUR | | | | *e*Sg | **Sn** | **12 44 52.0** | **+0.3** |
| **FUR** | **Furstenfeldbru** | **0.82** | **19** | Pg | **Pn** | **12 44 40.6** | **+0.7** |
| FUR | | | | Sg | **Sn** | **12 44 52.0** | **+0.3** |
| **KBA** | **Koelnbreinsper** | **1.71** | **100** | *e*Pg | **Pg** | **12 44 56.5** | **+0.5** |
| KBA | | | | *e*Sg | **Sg** | **12 45 18.9** | **+0.6** |
| **BFO** | **Black Forest** | **1.95** | **300** | *e*Sg | **Sg** | **12 45 26.4** | **+0.5** |
| **BFO** | **Black Forest** | **1.95** | **300** | Sg | **Sg** | **12 45 26.4** | **+0.5** |
| **WET** | **Wettzell** | **2.21** | **37** | *e*Sg | **Sg** | **12 45 33.0** | **-1.0** |
| **WET** | **Wettzell** | **2.21** | **37** | Sg | **Sg** | **12 45 33.0** | **-1.0** |
| **GRA1** | **Grafenberg Arr** | **2.31** | **6** | Sg | **Sg** | **12 45 37.5** | **+0.1** |
| **GRF** | **Grafenberg Arr** | **2.31** | **6** | *e*Sg | **Sg** | **12 45 37.5** | **+0.1** |
| **GEC2** | **GERESS Array S** | **2.39** | **51** | *e*Sg | **Sg** | **12 45 39.1** | **-0.8** |
| **GEC2** | **GERESS Array S** | **2.39** | **51** | Sg | **Sg** | **12 45 39.1** | **-0.8** |
| **KHC** | **Kasperske Hory** comp=Z,6.5nm,0.2s | **2.51** | **45** | *e*SG | **Sg** | **12 45 42.8** | **-0.9** |
| **KHC** | **Kasperske Hory** 6.5nm,0.2s | **2.51** | **45** | Sg | **Sg** | **12 45 42.8** | **-0.9** |
| **CDF** | **Champ du Feu** 4.3nm,0.2s | **2.62** | **294** | *e*Pn | **Pn** | **12 45 05.6** | **+0.9** |
| CDF | | | | *e*Sg | **Sg** | **12 45 47.2** | **-0.2** |
| **CDF** | **Champ du Feu** 2.2nm,0.2s | **2.62** | **294** | *e*Pn | **Pn** | **12 45 05.6** | **+0.9** |
| CDF | | | | *e*Sg | **Sg** | **12 45 47.2** | **-0.2** |
| **HINF** | **Hinteralfeld** 6.0nm,0.3s | **2.75** | **280** | *e*Pn | **Pn** | **12 45 06.5** | **+0.1** |
| HINF | | | | *e*Sg | **Sg** | **12 45 51.0** | **-0.4** |
| **HINF** | **Hinteralfeld** 3.0nm,0.3s | **2.75** | **280** | *e*Pn | **Pn** | **12 45 06.5** | **+0.1** |
| HINF | | | | *e*Sg | **Sg** | **12 45 51.0** | **-0.4** |
| **NKC** | **Novy Kostel** comp=Z,8.4nm,0.4s | **3.03** | **20** | *e*SG | **Sg** | **12 45 59.7** | **-0.6** |
| **NKC** | **Novy Kostel** 8.4nm,0.4s | **3.03** | **20** | Sg | **Sg** | **12 45 59.7** | **-0.6** |
| **HAU** | **Haudompre** 9.2nm,0.4s | **3.12** | **283** | *e*Pn | **Pn** | **12 45 11.8** | **+0.4** |
| HAU | | | | *e*Sg | **Sg** | **12 46 02.5** | **-0.6** |
| **HAU** | **Haudompre** 4.6nm,0.4s | **3.12** | **283** | *e*Pn | **Pn** | **12 45 11.8** | **+0.4** |
| HAU | | | | *e*Sg | **Sg** | **12 46 02.5** | **-0.6** |
| **PRU** | **Pruhonice** | **3.56** | **42** | *e*SG | **Sg** | **12 46 15.2** | **-2.1** |
| **PRU** | **Pruhonice** | **3.56** | **42** | Sg | **Sg** | **12 46 15.2** | **-2.1** |
| **SFTF** | **Sexfontaines** 2.1nm,0.3s | **4.01** | **284** | *e*Pn | **Pn** | **12 45 24.0** | **+0.3** |
| SFTF | | | | *e*Sg | **Sg** | **12 46 30.5** | **-1.4** |
| **SFTF** | **Sexfontaines** 1.0nm,0.3s | **4.01** | **284** | *e*Pn | **Pn** | **12 45 24.0** | **+0.3** |
| SFTF | | | | *e*Sg | **Sg** | **12 46 30.5** | **-1.4** |
| **MEZF** | **Maizieres J'vi** 6.3nm,0.4s | **4.07** | **288** | *e*Pn | **Pn** | **12 45 24.7** | **+0.3** |
| MEZF | | | | *e*Sg | **Sg** | **12 46 32.4** | **-1.1** |
| **MEZF** | **Maizieres J'vi** 3.2nm,0.4s | **4.07** | **288** | *e*Pn | **Pn** | **12 45 24.7** | **+0.3** |
| MEZF | | | | *e*Sg | **Sg** | **12 46 32.4** | **-1.1** |
| **DPC** | **Dobruska-Polom** | **4.66** | **49** | *e*SG | **Sg** | **12 46 51.5** | **-1.0** |
| **DPC** | **Dobruska-Polom** | **4.66** | **49** | Sg | **Sg** | **12 46 51.5** | **-1.0** |

*DDA* ***23*** *12:46:56.6, 41.°83N×43.°80E, h7km, Md2.8*
*TIF* ***23*** *12:46:57.7, 41.°61N×43.°89E, h17km±1km*
*ISCJB* ***23*** *12:46:58.2±0.8, 41.°60N±0.°05×43.°86E±0.°04, h5km±7km, Error ellipse: s-maj=9.3km s-min=4.6km az=162.5*
*CSEM* ***23*** *12:46:58.3±0.1, 41.°60N×43.°88E, h8km, ML3.2, Error ellipse: s-maj=4.5km s-min=2.5km az=168.0*

**ISC 23 12:46:58.1±1.2, 41.°63N±0.°05×43.°86E±0.°03, h9km±10km, n13, σ0°40/24, Turkey-Georgia-Armenia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKH** | **Akhalkalaki** | **0.35** | **231** | P | **Pg** | **12 47 05.3** | **+0.1** |
| AKH | | | | S | **Sg** | **12 47 10.0** | **+0.1** |
| **AKH** | **Akhalkalaki** | **0.35** | **231** | P | **Pg** | **12 47 05.3** | **+0.1** |
| AKH | | | | S | **Sg** | **12 47 10.0** | **+0.1** |
| **TBLG** | **Delisi** | **0.67** | **81** | P | **Pg** | **12 47 10.9** | **0.0** |
| TBLG | | | | S | **Sb** | **12 47 20.7** | **-0.4** |
| **TBLG** | **Delisi** | **0.67** | **81** | *i* P | **Pg** | **12 47 10.9** | **0.0** |
| TBLG | | | | *i* S | **Sb** | **12 47 20.4** | **-0.8** |
| **DUS** | **Dusheti** | **0.78** | **54** | P | Pn | 12 47 24.6 | +9.4 |
| **ONI** | **Oni** | **1.00** | **343** | P | **Pb** | **12 47 17.6** | **-0.1** |
| ONI | | | | S | **Sn** | **12 47 32.7** | **+0.1** |
| **ONI** | **Oni** | **1.00** | **343** | P | **Pb** | **12 47 17.6** | **-0.1** |
| ONI | | | | S | **Sn** | **12 47 32.7** | **+0.1** |
| **DGRG** | **David-gareji** | **1.15** | **99** | P | **Pb** | **12 47 20.1** | **0.0** |
| DGRG | | | | S | **Sn** | **12 47 36.6** | **+0.4** |
| **DGRG** | **David-gareji** | **1.15** | **99** | *i* P | **Pb** | **12 47 20.0** | **-0.1** |
| DGRG | | | | *i* S | **Sb** | **12 47 35.0** | **-0.2** |
| **ARTV** | **Artvin** | **1.52** | **253** | *i* P | **Pn** | **12 47 26.0** | **+0.4** |
| ARTV | | | | *i* S | **Sn** | **12 47 45.4** | **-0.3** |
| **ARTV** | **Artvin** | **1.52** | **253** | P | **Pn** | **12 47 26.0** | **+0.4** |
| ARTV | | | | S | **Sn** | **12 47 45.4** | **-0.3** |
| **DBAD** | **Bademkaya** | **1.74** | **250** | *i* P | **Pb** | **12 47 29.6** | **-0.7** |
| DBAD | | | | *i* S | **Sn** | **12 47 51.6** | **+0.7** |
| **DBAD** | **Bademkaya** | **1.74** | **250** | P | **Pb** | **12 47 29.6** | **-0.7** |
| DBAD | | | | S | **Sn** | **12 47 51.6** | **+0.7** |

*NEIC* ***23*** *12:47:00.3, 27.°48N×111.°45W, h5km, MD4.0(MEX), After MEX.*

**MEX 23 12:47:00.3±0.5, 27.°48N×111.°45W, h5km, MD4.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRIG** | **Santa Rosalia** | **0.72** | **258** | *i* P | Pg | 12 47 12.9 | -1.2 |
| SRIG | | | | *e*S | Sg | 12 47 23.1 | -0.4 |
| **SRIG** | **Santa Rosalia** | **0.72** | **258** | *i* P | Pg | 12 47 12.9 | -1.2 |
| SRIG | | | | *e*S | Sg | 12 47 23.1 | -0.4 |
| **HSIG** | | **1.60** | **16** | *e*P | Pn | 12 47 25.9 | -3.4 |
| HSIG | | | | *e*S | Sn | 12 47 45.9 | -4.5 |
| **HSIG** | | **1.60** | **16** | *e*P | Pn | 12 47 25.9 | -3.4 |
| HSIG | | | | *e*S | Sn | 12 47 45.9 | -4.5 |
| **214A** | **Organ Pipe Nat** | **4.62** | **345** | *e*Pn | Pn | 12 48 07.3 | -3.5 |
| **TUC** | **Tucson** | **4.85** | **7** | *e*Pn | Pn | 12 48 11.1 | -3.0 |
| TUC | | | | *e*Sn | Sn | 12 49 09.2 | -1.6 |
| **ABTX** | **Abilene, Hawle** 6.0nm,0.6s | **11.44** | **61** | *e*Pn | Pn | 12 49 46.9 | +2.4 |

*KRNET* ***23*** *13:02:00.0±0.1, 43.°14N×80.°17E, mb3.8*
*NNC* ***23*** *13:02:05.0±1.5, 42.°67N×79.°88E, h0km, mb4.0, mpv3.6, Error ellipse: s-maj=17.0km s-min=5.2km az=150.0*

**ISC 23 13:02:08.5±2.1, 42.°8N±0.°1×79.°7E±0.°1, h10km, n11, σ2°05/18, 16C-8D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANVS** | **Anan'yevo** baz=260 | **1.52** | **269** | ⇑*i*P | **Pn** | **13 02 34.3** | **-1.5** |
| ANVS | baz=260 | | | ⇑*i*S | **Sg** | **13 02 58.8** | **+1.6** |
| **KNDC** | **Almaty** 68nm,0.5s | **2.06** | **282** | ⇑Pg | **Pb** | **13 02 44.7** | **-1.3** |
| KNDC | 123nm,0.5s | | | ⇑Lg | Lg | 13 03 17.1 | |
| **BOOM** | **Boomskoye usch** baz=260 | **2.81** | **264** | ⇑*i*P | **Pn** | **13 02 52.0** | **-1.7** |
| BOOM | baz=260 | | | ⇑*i*S | **Sb** | **13 03 30.7** | **-2.8** |
| **TKM2** | **Tokmak 2** 9.1nm,0.4s | **3.04** | **273** | ⇑Pn | **Pn** | **13 02 56.0** | **-0.7** |
| TKM2 | 46nm,0.4s | | | ⇓Lg | Lg | 13 03 44.0 | |
| **NRN** | **Naryn** baz=243 | **3.10** | **244** | ⇑*i*P | **Pn** | **13 02 57.8** | **0.0** |
| NRN | baz=243 | | | ⇑*i*S | **Sb** | **13 03 39.3** | **-2.7** |
| **AAK** | **Ala-Archa** 1.7nm,0.4s | **3.86** | **269** | ⇓Pn | **Pn** | **13 03 07.5** | **-0.5** |
| AAK | 11nm,0.4s | | | ⇑Pg | **Pb** | **13 03 17.4** | **+0.7** |
| AAK | 49nm,1.1s | | | ⇓Lg | Lg | 13 04 09.8 | |
| **ARLS** | **Aral** baz=256 | **4.12** | **258** | ⇑*e*P | **Pn** | **13 03 10.1** | **-1.5** |
| ARLS | baz=256 | | | ⇑*i*S | **Sn** | **13 04 03.7** | **+3.8** |
| **MK31** | **Makanchi Array** 2.3nm,0.2s,baz=201,slow=13,SNR=294 | **4.36** | **24** | ⇑Pn | **Pn** | **13 03 14.0** | **-0.8** |
| MK31 | 1.5nm,0.3s | | | ⇓Sn | **Sn** | **13 04 07.9** | **+2.3** |
| MK31 | 5.5nm,0.4s,baz=197,slow=28,SNR=3.8 | | | ⇓Lg | Lg | 13 04 26.0 | |
| **ARSB** | **Arslanbob** baz=254 | **5.24** | **256** | ⇓*e*P | **Pn** | **13 03 26.8** | **-0.2** |
| ARSB | baz=254 | | | ⇓*i*S | **Sn** | **13 04 29.5** | **+2.0** |
| **ARK** | **Arkit** baz=260 | **5.85** | **262** | ⇑*i*P | **Pn** | **13 03 34.3** | **-1.0** |
| ARK | baz=260 | | | ⇑*i*S | **Sn** | **13 04 45.7** | **+3.3** |
| **KK31** | **Karatay Array** 2.8nm,0.7s | **6.76** | **275** | ⇓Pg | Pb | 13 04 10.2 | +4.1 |
| KK31 | 4.1nm,0.6s,baz=78,slow=27,SNR=3.8 | | | ⇑Lg | Lg | 13 05 43.7 | |

*IDC* ***23*** *13:03:18.1±1.1, 35.°18N×139.°40E, h0km, mb3.2/3, mb1 3.4/3, mb1mx3.3/42, mbtmp3.2/3, Error ellipse: s-maj=15.6km s-min=9.0km az=12.0*
*ISCJB* ***23*** *13:03:21.3±0.6, 35.°52N±0.°05×139.°87E±0.°05, h63km±5km, mb3.2/3, Error ellipse: s-maj=8.4km s-min=5.5km az=31.4*
*JMA* ***23*** *13:03:22.1±0.1, 35.°61N×139.°87E, h50km±2km, M3.1 Broadband fault plane solution: P waves. NP1: ϕs195.00000°, δ85.00000°, λ-122.00000°. NP2: ϕs97.00000°, δ32.00000°, λ-9.00000°. Principal axes: T Plg33.0000°, Azm311.0000°; N Plg32.0000°, Azm197.0000°; P Plg41.0000°, Azm75.0000°;*
*JMA Felt I J1.*

**ISC 23 13:03:22.6±1.0, 35.°53N±0.°05×139.°86E±0.°04, h58km±8km, n19, σ0°93/25, mb3.2/3, 4C-3D, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCN** | **Nagara** | **0.30** | **111** | ⇑P | **Pn** | **13 03 31.9** | **-0.6** |
| JCN | | | | S | **Sn** | **13 03 40.0** | **+0.4** |
| **JYO** | **Yokosk** | **0.34** | **207** | ⇓P | **Pn** | **13 03 32.8** | **0.0** |
| JYO | | | | S | **Sn** | **13 03 40.9** | **+0.8** |
| **I30JP** | **ISUMI INFRASON** | **0.43** | **120** | Pg | **Pn** | **13 03 33.0** | **-0.6** |
| I30JP | | | | Lg | Lg | 13 03 42.8 | |
| **JOD2** | **Odawara 2** | **0.68** | **248** | ⇓P | **Pn** | **13 03 35.6** | **-0.8** |
| JOD2 | | | | S | **Sn** | **13 03 45.8** | **-0.8** |
| **JIM2** | **Oshima 3** | **0.88** | **203** | P | **Pn** | **13 03 37.7** | **-1.3** |
| JIM2 | | | | S | **Sn** | **13 03 50.0** | **-1.0** |
| **BSO3** | **Boso 3** | **0.90** | **143** | P | **Pn** | **13 03 38.1** | **-0.8** |
| BSO3 | | | | S | **Sn** | **13 03 51.7** | **+0.7** |
| **JRY** | **Ryogami san** | **0.92** | **303** | ⇑P | **Pn** | **13 03 38.8** | **-0.7** |
| **JAG** | **Ashikaga** | **0.95** | **340** | ⇑P | **Pn** | **13 03 38.5** | **-1.4** |
| **JYN** | **Shimob** | **1.07** | **269** | ⇓P | **Pn** | **13 03 40.8** | **-0.7** |
| JYN | | | | S | **Sn** | **13 03 55.1** | **-0.4** |
| **JIZS** | **Izushimoda** | **1.14** | **225** | P | **Pn** | **13 03 41.8** | **-0.5** |
| JIZS | | | | S | **Sn** | **13 03 56.5** | **-0.5** |
| **BSO1** | **Boso 1** | **1.27** | **133** | ⇑P | **Pn** | **13 03 42.0** | **-1.5** |
| BSO1 | | | | S | **Sn** | **13 03 58.2** | **-1.1** |
| **MJAR** | **Matsushiro Arr** 6.5nm,0.3s,baz=113,slow=12,SNR=58 | **1.68** | **308** | Pg | **Pn** | **13 03 48.5** | **-1.1** |
| MJAR | 14nm,0.3s,baz=125,slow=27,SNR=16 | | | Lg | Lg | 13 04 10.6 | |
| **MAT** | **Matsushiro** | **1.68** | **308** | P | **Pn** | **13 03 49.3** | **-0.3** |
| MAT | | | | S | **Sn** | **13 04 10.2** | **+0.1** |
| **H11N2** | **WAKE ISLAND Hy** baz=306 | **28.54** | **116** | T | T | 13 38 55.4 | |
| **H11N1** | **WAKE ISLAND Hy** baz=306,slow=74 | **28.54** | **116** | T | T | 13 38 58.1 | |
| **H11N3** | **WAKE ISLAND Hy** baz=306,slow=74 | **28.55** | **116** | T | T | 13 38 58.9 | |
| **MKAR** | **Makanchi Array** 0.2nm,0.5s,baz=76,slow=12,SNR=2.6 | **43.87** | **303** | P | **P** | **13 11 23.5** | **+0.4** |
| **WRA** | **Warramunga Arr** 0.2nm,0.4s,baz=1.3,slow=7.6,SNR=6.0 | **55.41** | **186** | P | **P** | **13 12 51.2** | **+0.3** |
| **ASAR** | **Alice Springs** 0.1nm,0.5s,baz=19,slow=12,SNR=3.2 | **59.14** | **186** | P | **P** | **13 13 19.0** | **+1.8** |

**DJA 23 13:05:36.9±3.6, 1.°N±9.°×12.°4E±*, h26km±48km, M3.5/3, MLv3.5/3, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MRSI** | **Marisa** | **2.29** | **253** | P | Pn | 13 06 13.5 | +0.4 |
| MRSI | | | | S | Sn | 13 06 42.1 | +1.6 |
| **LUWI** | **Luwuk** | **2.58** | **212** | P | Pn | 13 06 17.7 | +0.6 |
| LUWI | | | | S | Sn | 13 06 49.8 | +2.2 |
| **APSI** | **Ampana** | **3.23** | **230** | P | Pn | 13 06 25.9 | -0.1 |
| APSI | | | | S | Sn | 13 07 05.6 | +2.0 |
| **SANI** | **Sanana** | **3.70** | **150** | P | Pn | 13 06 31.9 | -0.5 |
| **LBMI** | **Labuha** | **3.82** | **118** | P | Pn | 13 06 34.7 | +0.6 |

*IDC* ***23*** *13:15:34.7±0.9, 11.°97N×144.°68E, h0km, mb3.8/8, mb1 4.1/8, mb1mx3.7/40, mbtmp3.8/8, MS2.8/2, Ms1 3.0/2, ms1mx2.5/34, Error ellipse: s-maj=34.2km s-min=16.5km az=104.0*
*ISCJB* ***23*** *13:15:37.5±0.8, 11.°94N±0.°08×144.°6E±0.°2, h29km, mb3.8/8, MS2.8/2, Error ellipse: s-maj=27.9km s-min=9.5km az=14.6*

**ISC 23 13:15:39.2±0.9, 12.°0N±0.°1×144.°6E±0.°2, h29km, n13, σ1°26/10, mb3.8/8, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUMO** | **Guam** | **1.56** | **8** | Pn | **Pn** | **13 16 05.0** | **-0.1** |
| GUMO | 114nm,0.3s,baz=191,slow=5.2,SNR=122 | | | Sn | **Sb** | **13 16 25.6** | **-1.2** |
| GUMO | 124nm,0.3s,baz=358,slow=24,SNR=22 | | | LR | LR | 13 16 51.7 | |
| **H11N1** | **WAKE ISLAND Hy** baz=255,slow=75,SNR=22 | **22.70** | **68** | T | T | 13 45 02.4 | |
| **H11N2** | **WAKE ISLAND Hy** baz=255,slow=75,SNR=16 | **22.71** | **68** | T | T | 13 45 04.1 | |
| **H11N3** | **WAKE ISLAND Hy** baz=255,slow=75,SNR=19 | **22.72** | **68** | T | T | 13 45 02.3 | |
| **JNU** | **Nakatsue** comp=Z,18nm,19.6s,baz=218,slow=32 | **24.48** | **331** | LR | LR | 13 28 27.6 | |
| **WRA** | **Warramunga Arr** 1.6nm,0.8s,baz=18,slow=9.5,SNR=8.5 | **33.36** | **198** | P | **P** | **13 22 13.2** | **-1.9** |
| **ASAR** | **Alice Springs** 1.2nm,1.0s,baz=21,slow=8.3,SNR=11 | **37.01** | **196** | P | **P** | **13 22 46.3** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** 0.4nm,0.5s,baz=97,slow=7.4,SNR=3.6 | **44.46** | **284** | P | **P** | **13 23 48.3** | **+0.1** |
| CMAR | comp=Z,15nm,19.0s,baz=175,slow=35 | | | LR | LR | 13 41 50.9 | |
| **MKAR** | **Makanchi Array** 0.2nm,0.4s,baz=87,slow=8.8,SNR=2.5 | **62.45** | **317** | P | **P** | **13 26 00.7** | **+0.8** |
| **ZALV** | **Zalesovo Beam** 0.4nm,0.4s,baz=98,slow=10,SNR=2.1 | **62.75** | **325** | P | **P** | **13 26 02.7** | **+0.9** |
| **ILAR** | **Eielson Array** 0.4nm,0.6s,baz=250,slow=6.1,SNR=8.4 | **70.06** | **25** | P | **P** | **13 26 47.1** | **-1.2** |
| **YKA** | **Yellowknife Ar** 0.6nm,0.4s,baz=285,slow=5.3,SNR=5.5 | **84.33** | **27** | P | **P** | **13 28 08.9** | **+0.5** |
| **NVAR** | **Mina Array Bea** 1.2nm,0.7s,baz=282,slow=5.1,SNR=12 | **88.06** | **51** | P | **P** | **13 28 29.2** | **+1.6** |

*ISCJB* ***23*** *13:20:11.2±0.5, 6.°28S±0.°05×152.°72E±0.°07, h35km, mb4.2/14, MS3.6/10, Error ellipse: s-maj=10.2km s-min=6.8km az=15.3*
*NEIC* ***23*** *13:20:14.3±1.7, 6.°29S×152.°65E, h48km±15km, mb4.1/1, Error ellipse: s-maj=12.6km s-min=9.3km az=84.0*
*IDC* ***23*** *13:20:14.2±3.3, 6.°27S×152.°68E, h45km±30km, mb4.0/14, mb1 4.2/15, mb1mx4.0/32, mbtmp4.3/15, ML2.9/1, MS3.6/12, Ms1 3.7/12, ms1mx3.4/27, Error ellipse: s-maj=22.4km s-min=16.0km az=89.0*
*AUST* ***23*** *13:20:14.8, 6.°13S×152.°64E, h60km*

**ISC 23 13:20:13.1±0.6, 6.°23S±0.°07×152.°71E±0.°10, h35km, n53, σ0°92/45, mb4.2/14, MS3.7/10, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** baz=2.0,SNR=35 | **2.10** | **345** | P | **Pn** | **13 20 45.6** | **-0.1** |
| **PMG** | **Port Moresby** 19nm,0.3s,baz=33,slow=5.3,SNR=31 | **6.34** | **240** | P | **Pn** | **13 21 44.5** | **+0.4** |
| PMG | 7.2nm,0.3s,baz=78,slow=20,SNR=8.0 | | | S | **Sn** | **13 22 57.1** | **+1.7** |
| PMG | comp=Z,629nm,20.1s,baz=62,slow=38 | | | LR | LR | 13 24 15.6 | |
| **PMG** | **Port Moresby** baz=6.3,SNR=41 | **6.34** | **240** | P | **Pn** | **13 21 44.6** | **+0.5** |
| **MTSU** | **Mount Surprise** baz=14,SNR=5.4 | **14.39** | **214** | P | **P** | **13 23 42.4** | **+1.5** |
| **CTA** | **Charters Tower** comp=Z,460nm,18.7s,baz=26,slow=34 | **15.14** | **204** | LR | LR | 13 28 53.1 | |
| **QIS** | **Mount Isa** baz=19,SNR=3.5 | **19.09** | **221** | P | **P** | **13 24 33.2** | **+0.2** |
| **EIDS** | **Eidsvold** baz=19,SNR=3.6 | **19.10** | **185** | P | **P** | **13 24 33.0** | **+0.1** |
| **RMQ** | **Roma** baz=21,SNR=13 | **20.50** | **190** | P | **P** | **13 24 48.8** | **+0.7** |
| **DZM** | **Mont Dzumac** 11nm,0.8s,baz=359,slow=8.1,SNR=7.0 | **20.59** | **141** | P | **P** | **13 24 49.4** | **+0.1** |
| **KDU** | **Kakadu** baz=21,SNR=12 | **20.96** | **251** | P | **P** | **13 24 52.8** | **-0.5** |
| **GUMO** | **Guam** 36nm,0.8s,baz=184,slow=19,SNR=3.2 | **21.17** | **338** | P | **P** | **13 24 55.9** | **+0.4** |
| **QLP** | **Quilpie** baz=22,SNR=23 | **21.80** | **201** | P | **P** | **13 25 01.9** | **-0.2** |
| **SIJI** | **Sorong** 3.3nm,0.6s,baz=127,slow=20,SNR=2.9 | **22.05** | **283** | P | **P** | **13 25 04.3** | **-0.7** |
| **MTN** | **Manton Dam** baz=22,SNR=13 | **22.26** | **251** | P | **P** | **13 25 07.5** | **+0.2** |
| **WRAB** | **Tennant Creek** 4.2nm,0.6s | **22.45** | **231** | *e*P | **P** | **13 25 08.0** | **-1.2** |
| **WRA** | **Warramunga Arr** 2.4nm,0.6s,baz=57,slow=10,SNR=22 | **22.46** | **231** | P | **P** | **13 25 08.1** | **-1.3** |
| WRA | 0.2nm,0.5s,baz=52,slow=2.4,SNR=2.6 | | | PcP | **PcP** | **13 29 03.5** | **+0.3** |
| WRA | 0.5nm,1.0s,baz=49,slow=16,SNR=3.7 | | | S | **S** | **13 29 10.9** | **-3.0** |
| WRA | comp=Z,299nm,20.4s,baz=55,slow=36 | | | LR | LR | 13 33 38.1 | |
| **ASAR** | **Alice Springs** 2.4nm,0.5s,baz=59,slow=9.3,SNR=56 | **25.06** | **224** | P | **P** | **13 25 33.3** | **-1.1** |
| ASAR | comp=Z,301nm,20.8s,baz=56,slow=35 | | | LR | LR | 13 34 58.2 | |
| **KNRA** | **Kununurra** baz=25,SNR=6.8 | **25.29** | **246** | P | **P** | **13 25 36.3** | **-0.2** |
| **MGCD** | **Mangrove Creek** baz=27,SNR=5.6 | **26.89** | **183** | P | **P** | **13 25 53.3** | **+2.5** |
| **H11S3** | **WAKE ISLAND Hy** baz=209,slow=76,SNR=6.7 | **28.17** | **29** | T | T | 13 55 52.1 | |
| **H11S2** | **WAKE ISLAND Hy** baz=209,slow=76,SNR=4.0 | **28.18** | **29** | T | T | 13 55 50.8 | |
| **H11S1** | **WAKE ISLAND Hy** baz=209,slow=76,SNR=5.2 | **28.19** | **29** | T | T | 13 55 47.0 | |
| **BATI** | **Baumata** comp=Z,179nm,19.6s,baz=118,slow=40 | **29.01** | **260** | LR | LR | 13 39 25.9 | |
| **WRKA** | **Warakurna** baz=30,SNR=5.1 | **29.94** | **229** | P | **P** | **13 26 16.5** | **-1.7** |
| **HTT** | **Hallett** baz=30,SNR=4.1 | **29.94** | **204** | P | P | 13 26 11.5 | -6.6 |
| **ARPS** | **Mount Arapiles** baz=32,SNR=4.6 | **31.98** | **197** | P | **P** | **13 26 34.9** | **-1.1** |
| **KAPI** | **Kappang** 5.8nm,0.7s,baz=101,slow=5.2,SNR=3.5 | **32.82** | **270** | P | **P** | **13 26 43.5** | **-0.1** |
| **MEEK** | **Meekatharra** baz=38,SNR=4.4 | **38.29** | **234** | P | **P** | **13 27 29.8** | **-0.6** |
| **RPZ** | **Rata Peaks** comp=Z,231nm,18.1s,baz=332,slow=36 | **40.67** | **160** | LR | LR | 13 44 23.8 | |
| **MJAR** | **Matsushiro Arr** comp=Z,27nm,21.6s,baz=165,slow=33 | **44.66** | **343** | LR | LR | 13 44 43.3 | |
| **LEM** | **Lembang** comp=Z,32nm,21.1s,baz=54,slow=39 | **44.79** | **267** | LR | LR | 13 49 06.6 | |
| **KSRS** | **Korea Array** comp=Z,22nm,21.2s,baz=164,slow=34 | **49.23** | **334** | LR | LR | 13 48 22.9 | |
| **CMAR** | **Chiang Mai Arr** 0.6nm,0.3s,baz=119,slow=5.3,SNR=6.7 | **58.41** | **296** | P | **P** | **13 30 06.3** | **+0.6** |
| **PETK** | **Petropavlovsk-** 3.7nm,0.5s,baz=166,slow=7.2,SNR=28 | **59.26** | **3** | P | **P** | **13 30 11.9** | **+1.0** |
| PETK | comp=Z,27nm,21.1s,baz=174,slow=32 | | | LR | LR | 13 52 03.2 | |
| **SONM** | **Songino Array** 2.2nm,0.6s,baz=142,slow=5.1,SNR=15 | **67.48** | **328** | P | **P** | **13 31 05.9** | **+0.3** |
| **TAPN** | **Taplejung** 21nm,1.1s | **71.07** | **302** | *e*P | **P** | **13 31 29.0** | **+0

2.7nm,0.7s,baz=67,slow=2.6,SNR=21

**GUC 23 13:31:24.5±0.5, 37.85S×73.78W, h41km±2km, ML4.2, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSCH** | **Puerto Saavedr** | **0.99** | **162** | *e*P | Pn | 13 31 42.0 | 0.0 |
| PSCH | | | | *e*S | Sn | 13 31 55.0 | +0.2 |
| PSCH | | | | AML | AML | 13 32 00.0 | |
| | comp=N,14μm,0.4s | | | | | | |
| **CCSP** | **San Pedro de C** | **1.14** | **28** | *e*P | Pn | 13 31 44.0 | 0.0 |
| CCSP | | | | *e*S | Sn | 13 31 59.3 | +0.9 |
| CCSP | | | | AML | AML | 13 32 03.0 | |
| | comp=N,5μm,0.4s | | | | | | |
| **CCHI** | **Chillan** | **1.85** | **48** | *e*P | Pn | 13 31 54.5 | +0.9 |
| CCHI | | | | *e*S | Sn | 13 32 16.8 | +0.9 |
| CCHI | | | | AML | AML | 13 32 24.1 | |
| | comp=N,3μm,0.3s | | | | | | |
| **VLCH** | **Valdivia** | **2.00** | **168** | *e*P | Pn | 13 31 56.2 | +0.5 |
| VLCH | | | | *e*S | Sn | 13 32 20.1 | +0.7 |
| VLCH | | | | AML | AML | 13 32 35.6 | |
| | comp=N,5μm,0.9s | | | | | | |

*DDA **23** 13:37:35.6, 37.68N×44.02E, h5km, Md2.8*
*ISN **23** 13:37:38.8±1.6, 37.37N×44.16E, h45km±999km, ML2.8*
*ISK **23** 13:37:38.2, 37.59N×43.92E, h5km, MD2.7*
*CSEM **23** 13:37:39.5±0.7, 37.68N×43.76E, h2km, MD2.8, Error ellipse: s-maj=22.2km s-min=9.8km az=90.0*

**ISC 23 13:37:39.3±1.3, 37.71N±0.02×43.76E±0.06, h0km±12km, n26, σ1§22/32, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HAKT** | **HAKKARI** | **0.15** | **194** | *i* P | **Pg** | **13 37 41.8** | **-0.5** |
| HAKT | | | | *i* S | **Sg** | **13 37 45.4** | **+1.1** |
| **HAKT** | **HAKKARI** | **0.15** | **194** | P | **Pg** | **13 37 41.8** | **-0.5** |
| HAKT | | | | S | **Sg** | **13 37 45.4** | **+1.1** |
| **CUKT** | **Cukurca** | **0.47** | **194** | *e*PG | **Pg** | **13 37 47.5** | **-0.9** |
| CUKT | | | | *e*SG | **Sg** | **13 37 54.9** | **+0.4** |
| **CUKT** | **Cukurca** | **0.47** | **194** | *e*Pg | **Pg** | **13 37 47.5** | **-0.9** |
| CUKT | | | | *e*Sg | **Sg** | **13 37 54.9** | **+0.4** |
| **GEVA** | **Gevas** | **0.82** | **318** | *i* P | **Pg** | **13 37 53.7** | **-1.2** |
| GEVA | | | | *i* S | **Sg** | **13 38 06.7** | **+1.2** |
| **GEVA** | **Gevas** | **0.82** | **318** | P | **Pg** | **13 37 53.7** | **-1.2** |
| GEVA | | | | S | **Sg** | **13 38 06.7** | **+1.2** |
| **TVAN** | **Van** | **0.86** | **342** | *i* P | **Pg** | **13 37 54.4** | **-1.4** |
| TVAN | | | | *i* S | **Sn** | **13 38 10.8** | **-1.5** |
| **TVAN** | **Van** | **0.86** | **342** | P | **Pg** | **13 37 54.4** | **-1.4** |
| TVAN | | | | S | **Sn** | **13 38 10.8** | **-1.5** |
| **SIRN** | **S¨¨rnak** | **1.09** | **259** | *i* P | **Pb** | **13 38 00.4** | **-0.6** |
| SIRN | | | | *i* S | **Sn** | **13 38 18.9** | **+1.4** |
| **SIRN** | **S¨¨rnak** | **1.09** | **259** | P | **Pb** | **13 38 00.4** | **-0.6** |
| SIRN | | | | S | **Sn** | **13 38 18.9** | **+1.4** |
| **MSL** | **Mosul** | **1.40** | **202** | *e*PG | x | 13 37 59.6 | |
| MSL | | | | *e*SG | x | 13 38 16.0 | |
| **MSL** | **Mosul** | **1.40** | **202** | *e*Pg | Pn | 13 37 59.6 | -6.4 |
| | SNR=96 | | | | | | |
| MSL | | | | *e*Sg | Sn | 13 38 16.0 | -9.2 |
| | SNR=9.0 | | | | | | |
| **CLDR** | **Caldiran** | **1.44** | **5** | *e*PN | **Pg** | **13 38 08.0** | **+1.2** |
| **CLDR** | **Caldiran** | **1.44** | **5** | *e*Pn | **Pg** | **13 38 08.0** | **+1.2** |
| **TUTA** | **Tutak** | **1.84** | **337** | *i* P | **Pb** | **13 38 12.9** | **-1.1** |
| TUTA | | | | *i* S | **Sb** | **13 38 38.2** | **+0.5** |
| **TUTA** | **Tutak** | **1.84** | **337** | P | **Pb** | **13 38 12.9** | **-1.1** |
| TUTA | | | | S | **Sb** | **13 38 38.2** | **+0.5** |
| **AGRB** | **Hanur-Agry** | **1.96** | **342** | *e*PN | **Pb** | **13 38 16.2** | **+0.3** |
| **AGRB** | **Hanur-Agry** | **1.96** | **342** | *e*Pn | **Pb** | **13 38 16.2** | **+0.3** |
| **IKRK** | **Kirkuk** | **2.35** | **168** | *e*PG | x | 13 38 09.9 | |
| IKRK | | | | *e*PG | x | 13 38 10.9 | |
| IKRK | | | | *e*SG | x | 13 38 31.5 | |
| **MARD** | **Mardin** | **2.40** | **261** | P | **Pg** | **13 38 26.4** | **+1.2** |
| MARD | | | | S | **Sb** | **13 38 54.9** | **+1.4** |
| **MAZI** | **Mazidag** | **2.64** | **266** | *e*PN | **Pb** | **13 38 25.3** | **-2.2** |
| **MAZI** | **Mazidag** | **2.64** | **266** | *e*Pn | **Pb** | **13 38 25.3** | **-2.2** |
| **BHD** | **Baghdad** | **4.46** | **173** | *e*PN | x | 13 38 23.2 | |
| BHD | | | | *e*SN | x | 13 39 00.7 | |
| **IBDR** | **Badra** | **4.92** | **158** | *e*PN | x | 13 38 33.7 | |
| IBDR | | | | *e*SN | x | 13 39 16.4 | |
| **RTB** | **Rutbah** | **5.45** | **212** | *e*Pn | x | 13 38 43.0 | |
| RTB | | | | *e*SN | x | 13 39 37.3 | |
| **RTB** | **Rutbah** | **5.45** | **212** | *e*Pn | Pn | 13 38 43.0 | -19 |

*BJI **23** 13:59:42.1, 16.80S×174.30W, h136km, mb4.9/5, mB5.2/5*
*ISCJB **23** 13:59:44.8±0.4, 16.86S±0.08×174.38W±0.07, h172km, mb4.2/15, Error ellipse: s-maj=11.5km s-min=8.3km az=151.5*
*NEIC **23** 13:59:44.6±1.0, 16.84S×174.37W, h158km±9km, mb4.8/3, Error ellipse: s-maj=13.1km s-min=9.2km az=151.0*
*IDC **23** 13:59:44.4±2.2, 16.88S×174.33W, h152km±20km, mb3.9/12, mb1 4.1/15, mb1mx4.0/23, mbtmp4.4/15, MS3.2/3, Ms1 3.2/3, ms1mx2.7/22, Error ellipse: s-maj=17.7km s-min=12.3km az=115.0*
*AUST **23** 13:59:46.0±3.0, 16.84S×174.08W, h180km, Error ellipse: s-maj=2.7km s-min=1.5km az=253.0*

**ISC 23 13:59:46.2±0.4, 16.88S±0.09×174.36W±0.07, h172km, n77, σ0§99/78, mb4.2/15, 20C-1D, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **3.86** | **41** | P | **Pn** | **14 00 42.5** | **-3.0** |
| | 82nm,0.3s,baz=191,slow=2.8,SNR=192 | | | | | | |
| AFI | | | | S | Sn | 14 01 22.4 | -9.2 |
| | 658nm,0.3s,baz=34,slow=23,SNR=29 | | | | | | |
| AFI | | | | LR | LR | 14 01 57.6 | |
| | comp=Z,165nm,20.4s,baz=42,slow=35 | | | | | | |
| **NIUE** | **Niue** | **4.75** | **118** | P | Pn | 14 00 52.6 | -4.2 |
| | baz=4.5,SNR=55 | | | | | | |
| **MSVF** | **Nonsavu** | **7.30** | **262** | *e*Pn | **Pn** | **14 01 28.4** | **-2.0** |
| | 29nm,0.8s | | | | | | |
| **RAR** | **Rarotonga** | **14.45** | **110** | P | **Pn** | **14 03 03.1** | **+0.2** |
| | 1.0nm,0.3s,baz=281,slow=7.8,SNR=6.8 | | | | | | |
| **DZM** | **Mont Dzumac** | **18.82** | **251** | P | **Pn** | **14 03 54.0** | **-1.4** |
| | 0.4nm,0.3s,baz=360,slow=14,SNR=4.0 | | | | | | |
| **URZ** | **Urewera** | **22.58** | **198** | P | **P** | **14 04 31.7** | **-0.4** |
| | 6.2nm,0.3s,baz=346,slow=8.3,SNR=19 | | | | | | |
| URZ | | | | S | **S** | **14 08 25.1** | **-1.3** |
| | 4.0nm,0.8s,baz=186,slow=19,SNR=5.9 | | | | | | |
| **RPZ** | **Rata Peaks** | **29.47** | **202** | P | **P** | **14 05 34.5** | **+0.5** |
| | 5.4nm,0.7s,baz=36,slow=8.7,SNR=5.5 | | | | | | |
| **ARMA** | **Armidale** | **33.80** | **240** | P | **P** | **14 06 12.6** | **+0.4** |
| | baz=34,SNR=13 | | | | | | |
| **RMQ** | **Roma** | **35.47** | **248** | P | **P** | **14 06 27.3** | **+0.9** |
| | baz=36,SNR=4.8 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **39.02** | **241** | P | **P** | **14 06 56.0** | **-0.1** |
| | baz=39,SNR=11 | | | | | | |
| **QLP** | **Quilpie** | **39.51** | **249** | P | **P** | **14 06 59.8** | **-0.5** |
| | baz=40,SNR=19 | | | | | | |
| **MANU** | **Manus Island** | **40.41** | **287** | P | **P** | **14 07 06.6** | **-1.3** |
| | baz=41,SNR=4.8 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.76** | **332** | T | T | 14 49 49.6 | |
| | baz=147,slow=75,SNR=4.5 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.76** | **332** | T | T | 14 49 49.3 | |
| | baz=147,slow=75,SNR=3.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.77** | **332** | T | T | 14 49 50.3 | |
| | baz=147,slow=75,SNR=3.7 | | | | | | |
| **COEN** | **Coen** | **40.98** | **268** | P | **P** | **14 07 14.5** | **+1.9** |
| | baz=41,SNR=5.7 | | | | | | |
| **HTT** | **Hallett** | **44.99** | **239** | P | P | 14 07 39.7 | -5.0 |
| | baz=45,SNR=4.1 | | | | | | |
| **WRAB** | **Tennant Creek** | **48.61** | **258** | *e*P | **P** | **14 08 11.8** | **-1.1** |
| | 4.3nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **48.62** | **258** | P | **P** | **14 08 11.8** | **-1.2** |
| | 3.2nm,0.6s,baz=95,slow=7.1,SNR=100 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 09 36.5** | **+0.6** |
| | 2.3nm,1.0s,baz=92,slow=3.6,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **48.79** | **253** | P | **P** | **14 08 13.9** | **-0.3** |
| | 75nm,0.6s,baz=88,slow=8.4,SNR=1353 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 09 36.6** | **+0.2** |
| | 2.7nm,0.8s,baz=98,slow=4.6,SNR=5.0 | | | | | | |
| ASAR | | | | S | **S** | **14 15 01.5** | **-2.8** |
| | 0.4nm,0.8s,baz=90,slow=15,SNR=3.6 | | | | | | |
| **MTN** | **Manton Dam** | **52.70** | **267** | P | **P** | **14 08 43.4** | **-0.1** |
| | baz=53,SNR=4.3 | | | | | | |
| **WRKA** | **Warakurna** | **53.83** | **251** | P | **P** | **14 08 51.4** | **-0.3** |
| | baz=54,SNR=34 | | | | | | |
| **KNRA** | **Kununurra** | **54.45** | **263** | P | **P** | **14 08 57.0** | **+0.8** |
| | baz=55,SNR=4.4 | | | | | | |
| **SWI** | **Sorong** | **55.81** | **281** | P | **P** | **14 09 07.5** | **+1.5** |
| | baz=56,SNR=5.5 | | | | | | |
| **SOEI** | **Soe** | **59.95** | **268** | P | **P** | **14 09 36.9** | **+2.0** |
| | baz=60,SNR=14 | | | | | | |
| **SOEI** | **Soe** | **59.95** | **268** | *e*P | **P** | **14 09 33.2** | **-1.7** |
| | 68nm,0.8s | | | | | | |
| **RPN** | **Rapa Nui** | **60.59** | **112** | LR | LR | 14 28 16.8 | |
| | comp=Z,52nm,21.9s,baz=261,slow=28 | | | | | | |
| **VNDA** | **Vanda** | **61.82** | **186** | P | **P** | **14 09 47.3** | **+0.9** |
| | 2.9nm,0.9s,baz=2.0,slow=6.4,SNR=16 | | | | | | |
| **MEEK** | **Meekatharra** | **62.41** | **248** | P | **P** | **14 09 50.8** | **-0.4** |
| | baz=63,SNR=5.3 | | | | | | |
| **KLBR** | **Kellerberrin** | **62.74** | **243** | P | **P** | **14 09 53.1** | **-0.2** |
| | baz=63,SNR=5.4 | | | | | | |
| **DAV** | **Davao City (W)** | **63.96** | **287** | LR | LR | 14 36 25.0 | |
| | comp=Z,14nm,19.9s,baz=200,slow=34 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **69.48** | **321** | P | **P** | **14 10 36.7** | **+0.7** |
| | 2.1nm,0.6s,baz=160,slow=6.2,SNR=7.8 | | | | | | |
| **UGM** | **Wanagama** | **73.55** | **267** | P | **P** | **14 11 01.8** | **+0.8** |
| | baz=74,SNR=3.8 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.75** | **343** | P | **P** | **14 11 01.4** | **+0.2** |
| | 8.6nm,0.7s,baz=131,slow=8.5,SNR=11 | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.04** | **42** | P | **P** | **14 11 15.5** | **+0.5** |
| | 0.8nm,0.8s,baz=230,slow=10,SNR=5.3 | | | | | | |
| NVAR | | | | pP | **pP** | **14 11 58.3** | **+1.5** |
| | 0.8nm,0.7s,baz=224,slow=9.4,SNR=4.2 | | | | | | |
| **KSRS** | **Korea Array** | **76.57** | **316** | P | **P** | **14 11 19.3** | **+1.7** |
| | 2.9nm,0.9s,baz=130,slow=5.7,SNR=9.2 | | | | | | |
| **KSAR** | **Wonju Array Be** | **76.59** | **316** | P | **P** | **14 11 19.3** | **+1.6** |
| **TXAR** | **Lajitas Array** | **82.20** | **56** | P | **P** | **14 11 47.7** | **-0.7** |
| | 0.2nm,0.7s,baz=216,slow=7.5,SNR=2.9 | | | | | | |
| **ILAR** | **Eielson Array** | **84.07** | **11** | P | **P** | **14 11 56.6** | **-0.5** |
| | 1.9nm,0.8s,baz=233,slow=6.3,SNR=27 | | | | | | |
| **MAW** | **Mawson** | **86.10** | **199** | P | **P** | **14 12 07.3** | **0.0** |
| | 2.7nm,0.7s,baz=115,slow=6.4,SNR=9.8 | | | | | | |
| **MAW** | **Mawson** | **86.10** | **199** | P | **P** | **14 12 07.5** | **+0.2** |
| | baz=86,SNR=5.9 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **89.35** | **313** | *e*P | **P** | **14 12 24.5** | **+1.1** |
| HHC | | | | S | **S** | **14 22 59.0** | **+0.2** |
| HHC | | | | PMZ | | | |
| | 30nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | 200nm,4.4s | | | | | | |
| HHC | | | | LN | | | |
| | 170nm,18.5s | | | | | | |
| HHC | | | | LE | | | |
| | 310nm,17.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.20** | **289** | P | **P** | **14 12 39.2** | **+2.2** |
| | 1.5nm,0.8s,baz=100,slow=2.1,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **109.81** | **322** | PKiKP | **PKiKP** | **14 17 56.0** | **-0.5** |
| | 0.6nm,0.4s,baz=124,slow=0.5,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **111.19** | **314** | PKiKP | **PKiKP** | **14 17 59.0** | **-0.5** |
| | 0.7nm,0.6s,baz=26,slow=1.4,SNR=7.9 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **144.06** | **243** | PKP | **PKPdf** | **14 19 02.1** | **-0.6** |
| | 9.4nm,0.8s,baz=326,slow=1.4,SNR=23 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **144.06** | **243** | *e*PKPdf | **PKPdf** | **14 19 01.8** | **-0.9** |
| KMBO | | | | PKP | PKPbc | 14 19 02.1 | +1.0 |
| **MALT** | **Malatya** | **144.23** | **313** | *i*P | **PKPdf** | **14 19 02.8** | **+0.8** |
| **CLL** | **Collm** | **145.15** | **352** | *i*PKPbc | **PKPab** | **14 19 03.0** | **-0.2** |
| | comp=Z,12nm,0.8s | | | | | | |
| CLL | | | | *i* PKiKP | **PKiKP** | **14 19 06.3** | **-0.7** |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **BURAR** | **Bucovina Array** | **145.37** | **336** | *i*P | **PKPab** | **14 19 04.6** | **+0.3** |
| **UPC** | **Upice** | **145.43** | **348** | *e*PKP | **PKPab** | **14 19 04.5** | **+0.2** |
| **BRG** | **Berggiesshubel** | **145.44** | **351** | *e*PKP | **PKPab** | **14 19 04.1** | **-0.2** |
| | comp=Z,6.7nm,0.9s | | | | | | |
| **DPC** | **Dobruska-Polom** | **145.52** | **348** | *e*PKP | **PKPab** | **14 19 04.6** | **-0.1** |
| **TESR** | **Tescani** | **145.69** | **334** | *i*P | **PKPab** | **14 19 05.3** | **-0.1** |
| **TLCR** | | **145.74** | **330** | *i*P | **PKPab** | **14 19 06.2** | **+0.6** |
| **MORC** | **Moravsky Berou** | **145.80** | **346** | *i*P | **PKPab** | **14 19 05.2** | **-0.6** |
| **VRI** | **Vrincioaia** | **146.16** | **333** | *i*P | **PKPab** | **14 19 07.4** | **+0.2** |
| **GOPC** | **GO Pecny, Ondr** | **146.23** | **349** | *e*PKP | **PKPdf** | **14 19 05.2** | **+0.2** |
| **NKC** | **Novy Kostel** | **146.28** | **352** | *e*PKP | **PKPab** | **14 19 08.1** | **+0.6** |
| **VRAC** | **Vranov** | **146.45** | **347** | *i*P | **PKPab** | **14 19 08.5** | **+0.3** |
| **TIRR** | **Tirgusor** | **146.47** | **330** | *i*P | **PKPab** | **14 19 08.4** | **0.0** |
| **TLB** | **Topalu** | **146.55** | **330** | *i*P | **PKPab** | **14 19 08.3** | **-0.4** |
| **DOPR** | **Dopca** | **146.65** | **335** | *i*P | **PKPab** | **14 19 08.9** | **-0.2** |
| **BRTR** | **Keskin Array B** | **146.68** | **319** | PKPbc | **PKPab** | **14 19 08.6** | **-1.1** |
| | comp=Z,5.2nm,0.8s,baz=127,slow=2.8,SNR=22 | | | | | | |
| **MLR** | **Muntele Rosu** | **146.80** | **334** | *i*P | **PKPab** | **14 19 09.5** | **-0.4** |
| **DRGR** | | **146.98** | **338** | *i*P | **PKPbc** | **14 19 08.9** | **+0.2** |
| **KHC** | **Kasperske Hory** | **147.19** | **350** | *e*PKP | **PKPbc** | **14 19 09.6** | **+0.5** |
| **VOIR** | | **147.22** | **334** | *i*P | **PKPab** | **14 19 10.3** | **-1.2** |
| **ARR** | **Arges** | **147.44** | **335** | *i*P | **PKPab** | **14 19 11.3** | **-1.1** |
| **GERES** | **GERESS Array B** | **147.44** | **350** | PKPbc | **PKPbc** | **14 19 10.3** | **+0.4** |
| | comp=Z,1.3nm,0.8s,baz=12,slow=1.9,SNR=9.1 | | | | | | |
| **CONA** | **Conrad Observa** | **147.91** | **347** | *i*PKPbc | **PKPbc** | **14 19 11.5** | **+0.3** |
| | comp=Z,9.5nm,1.6s | | | | | | |
| **GZR** | **Gura Zlata** | **148.15** | **337** | *i*P | **PKPbc** | **14 19 11.8** | **-0.1** |
| **KBA** | **Koelnbreinsper** | **149.22** | **350** | *i*PKPbc | **PKPbc** | **14 19 14.9** | **+0.3** |
| | comp=Z,3.9nm,1.1s | | | | | | |
| **FETA** | **Feichten** | **149.65** | **353** | *i*PKPbc | **PKPbc** | **14 19 15.6** | **-0.1** |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.67** | **351** | *i*PKPbc | **PKPbc** | **14 19 15.4** | **-0.3** |
| | comp=Z,14nm,1.2s | | | | | | |
| **DIVS** | **Divibare** | **150.27** | **339** | *i*P | **PKPbc** | **14 19 18.2** | **+1.0** |
| **TORD** | **Torodi Ar. Bea** | **174.68** | **134** | PKP | **PKPdf** | **14 19 35.1** | **-1.2** |
| | comp=Z,0.4nm,0.9s,baz=262,slow=4.5,SNR=4.4 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **14 21 10.8** | **-0.1** |
| | comp=Z,0.6nm,0.8s,baz=228,slow=1.7,SNR=3.2 | | | | | | |

*ISCJB **23** 14:23:36.2±0.4, 34.36N±0.04×139.71E±0.05, h125km±3km, mb3.9/10, Error ellipse: s-maj=7.1km s-min=5.7km az=149.5*
*JMA **23** 14:23:37.4±0.1, 34.35N×139.70E, h113km±1km, M3.4*
*IDC **23** 14:23:37.5±0.5, 34.30N×139.56E, h123km±5km, mb3.6/10, mb1 3.7/13, mb1mx3.5/36, mbtmp3.9/13, Error ellipse: s-maj=20.5km s-min=6.6km az=71.0*

**ISC 23 14:23:37.2±0.8, 34.36N±0.05×139.68E±0.05, h119km±6km, n38, σ0§82/46, mb4.8/10, Near south coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNIO** | **Niijimaoohara** | **0.33** | **269** | P | **Pn** | **14 23 53.9** | **-0.3** |
| **JIM2** | **Oshima 3** | **0.41** | **330** | P | **Pn** | **14 23 54.0** | **-0.6** |
| JIM2 | | | | *e*S | **Sn** | **14 24 07.2** | **-0.6** |
| **JIZS** | **Izushimoda** | **0.75** | **298** | P | **Pn** | **14 23 56.8** | **-0.1** |
| JIZS | | | | S | **Sn** | **14 24 11.3** | **-0.4** |
| **BSO3** | **Boso 3** | **0.81** | **57** | P | **Pn** | **14 23 57.5** | **+0.4** |
| **BSO4** | **Boso 4** | **0.83** | **41** | P | **Pn** | **14 23 58.1** | **+0.7** |
| **JOD2** | **Odawara 2** | **1.02** | **332** | P | **Pn** | **14 23 59.3** | **-0.1** |
| JOD2 | | | | S | **Sn** | **14 24 15.7** | **-0.5** |
| **I30JP** | **ISUMI INFRASON** | **1.08** | **29** | S | **Sn** | **14 24 17.8** | **+0.6** |
| | baz=322,slow=65 | | | | | | |
| **BSO1** | **Boso 1** | **1.11** | **75** | P | **Pn** | **14 23 59.9** | **+0.2** |
| BSO1 | | | | S | **Sn** | **14 24 17.8** | **+1.0** |
| **JHJ** | **Hachijo jima 2** | **1.24** | **176** | P | **Pn** | **14 24 02.0** | **+0.3** |
| | 84nm,0.3s,baz=300,slow=20,SNR=45 | | | | | | |
| JHJ | | | | S | **Sn** | **14 24 20.3** | **0.0** |
| | 261nm,0.3s,baz=258,slow=24,SNR=29 | | | | | | |
| **JHJ2** | **Mitsune** | **1.25** | **175** | P | **Pn** | **14 24 02.0** | **+0.2** |
| **SHZ3** | **Shizuoka 3** | **1.40** | **301** | P | **Pn** | **14 24 03.9** | **+0.4** |
| SHZ3 | | | | S | **Sn** | **14 24 25.3** | **+1.9** |
| **JYN** | **Shimob** | **1.47** | **321** | P | **Pn** | **14 24 04.7** | **+0.4** |
| **JHU** | **Hanno** | **1.52** | **348** | P | **Pn** | **14 24 05.0** | **+0.2** |
| JHU | | | | S | **Sn** | **14 24 25.1** | **-0.8** |
| **JHMK** | **Hamakita** | **1.65** | **286** | P | **Pn** | **14 24 06.3** | **+0.1** |
| **TK02** | **Tokai 2** | **1.65** | **256** | P | **Pn** | **14 24 07.0** | **+0.9** |
| **HMMJ** | **Hamamatsu 2** | **1.69** | **287** | P | **Pn** | **14 24 07.0** | **+0.2** |
| **JRY** | **Ryogami san** | **1.77** | **339** | P | **Pn** | **14 24 08.4** | **+0.6** |
| JRY | | | | S | **Sn** | **14 24 31.8** | **+0.6** |
| **JNY** | **Yasuok** | **1.79** | **304** | P | **Pn** | **14 24 09.0** | **+0.8** |
| JNY | | | | S | **Sn** | **14 24 33.2** | **+1.4** |
| **JYT** | **Yasato** | **1.91** | **13** | P | **Pn** | **14 24 08.8** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **2.48** | **332** | P | **Pn** | **14 24 16.9** | **+0.1** |
| | 8.4nm,0.3s,baz=194,slow=9.7,SNR=107 | | | | | | |
| MJAR | | | | S | **Sn** | **14 24 47.4** | **+0.3** |
| | 6.7nm,0.3s,baz=148,slow=20,SNR=7.8 | | | | | | |
| **MAT** | **Matsushiro** | **2.48** | **332** | P | **Pn** | **14 24 17.3** | **+0.5** |
| MAT | | | | S | **Sn** | **14 24 47.3** | **+0.1** |
| **JNU** | **Nakatsue** | **7.43** | **263** | P | **Pn** | **14 25 23.4** | **+0.3** |
| | 1.0nm,0.3s,baz=82,slow=2.7,SNR=10 | | | | | | |
| **ASAJ** | **Asahikawa** | **10.00** | **12** | P | **Pn** | **14 25 55.1** | **-2.5** |
| | 0.5nm,0.3s,baz=242,slow=11,SNR=10 | | | | | | |
| **KSRS** | **Korea Array** | **10.02** | **291** | P | **Pn** | **14 25 59.5** | **+1.6** |
| | 0.2nm,0.3s,baz=106,slow=15,SNR=6.1 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.17** | **114** | T | T | 14 58 32.7 | |
| | baz=306,slow=75,SNR=25 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.18** | **114** | T | T | 14 58 32.1 | |
| | baz=306,slow=75,SNR=19 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.19** | **114** | T | T | 14 58 33.3 | |
| | baz=306,slow=75,SNR=24 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.39** | **304** | P | **P** | **14 31 34.5** | **-1.3** |
| | 0.4nm,0.5s,baz=83,slow=10,SNR=5.1 | | | | | | |
| **ILAR** | **Eielson Array** | **52.50** | **31** | P | **P** | **14 32 38.4** | **+0.7** |
| | 0.5nm,0.7s,baz=279,slow=6.0,SNR=7.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **54.24** | **186** | P | **P** | **14 32 49.4** | **-1.4** |
| | 0.9nm,0.3s,baz=2.3,slow=7.6,SNR=29 | | | | | | |
| **INK** | **Inuvik** | **57.40** | **26** | P | **P** | **14 33 13.1** | **+0.4** |
| | 0.9nm,0.8s,baz=327,slow=6.1,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **57.97** | **186** | P | **P** | **14 33 16.2** | **-1.0** |
| | 0.3nm,0.5s,baz=4.2,slow=7.0,SNR=18 | | | | | | |
| **ARCES** | **ARCESS Array B** | **65.99** | **339** | P | **P** | **14 34 10.6** | **+0.3** |
| | 8.4nm,1.1s,baz=51,slow=7.9,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **70.51** | **332** | P | **P** | **14 34 38.6** | **0.0** |
| | 1.2nm,0.3s,baz=77,slow=6.9,SNR=15 | | | | | | |
| **NOA** | **NORSAR Array B** | **76.09** | **337** | P | **P** | **14 35 11.8** | **+0.3** |
| | 1.2nm,1.0s,baz=57,slow=7.9,SNR=4.3 | | | | | | |
| **GERES** | **GERESS Array B** | **84.22** | **327** | P | **P** | **14 35 55.5** | **+0.2** |
| | 0.5nm,0.5s,baz=32,slow=7.8,SNR=4.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **92.88** | **51** | P | **P** | **14 36 37.6** | **+0.6** |
| | 0.4nm,0.7s,baz=336,slow=5.5,SNR=4.6 | | | | | | |
| **LPAZ** | **La Paz** | **149.24** | **61** | PKPbc | **PKPbc** | **14 43 13.5** | **+0.4** |
| | 1.1nm,0.6s,baz=254,slow=3.1,SNR=5.6 | | | | | | |

*ISCJB **23** 14:25:53.2±0.7, 17.71S±0.07×66.09W±0.06, h33km, mb4.3/1, Error ellipse: s-maj=9.8km s-min=7.7km az=10.4*
*IDC **23** 14:25:55.2±1.5, 17.67S×66.16W, h50km±16km, mb4.2/1, mb1 3.8/6, mb1mx3.6/23, mbtmp3.9/6, ML4.2/5, Error ellipse: s-maj=19.5km s-min=9.9km az=19.0*

**ISC 23 14:25:54.4±0.8, 17.64S±0.08×66.17W±0.06, h35km, n9, σ1§61/11, Central Bolivia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPAZ** | **La Paz** | **2.31** | **305** | P | **Pn** | **14 26 30.5** | **-0.1** |
| | 128nm,0.3s,baz=123,slow=15,SNR=2930 | | | | | | |
| LPAZ | | | | S | **Sn** | **14 27 00.6** | **+2.5** |
| | 110nm,0.3s,baz=342,slow=11,SNR=13 | | | | | | |
| **SIV** | **San Ignacio** | **5.15** | **72** | P | **Pn** | **14 27 10.0** | **+0.9** |
| | 2.9nm,0.3s,baz=263,slow=14,SNR=61 | | | | | | |
| SIV | | | | S | **Sn** | **14 28 09.4** | **+2.0** |
| | 7.6nm,0.3s,baz=229,slow=18,SNR=8.6 | | | | | | |
| **LVC** | **Limon Verde** | **5.58** | **207** | P | **Pn** | **14 27 16.1** | **+0.9** |
| | 17nm,0.3s,baz=28,slow=11,SNR=7.9 | | | | | | |
| **CPUP** | **Villa Florida** | **11.91** | **138** | P | **Pn** | **14 28 40.6** | **-1.2** |
| | 0.2nm,0.3s,baz=317,slow=12,SNR=5.3 | | | | | | |
| **CFAA** | **Coronel Fontan** | **14.03** | **187** | P | **Pn** | **14 29 12.2** | **+1.4** |
| | 0.0nm,0.3s,baz=32,slow=9.5,SNR=2.3 | | | | | | |
| **PTGA** | **Pitinga** | **17.88** | **21** | P | **Pn** | **14 30 00.6** | **+0.1** |
| | 0.4nm,0.3s,baz=193,slow=13,SNR=4.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.62** | **70** | P | P | **14 37 23.4** | **-1.5** |
| | 3.3nm,0.8s,baz=252,slow=5.7,SNR=20 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **137.38** | **25** | PKP | **PKPdf** | **14 45 12.4** | **-1.7** |
| | 1.6nm,0.7s,baz=298,slow=3.2,SNR=5.3 | | | | | | |
| **SONM** | **Songino Array** | **149.27** | **10** | PKPbc | **PKPbc** | **14 45 38.9** | **-0.8** |
| | 2.1nm,0.7s,baz=329,slow=0.9,SNR=18 | | | | | | |

**IDC 23 14:56:31.9±1.9, 14.18S×166.68E, h0km, mb3.3/3, mb1 3.6/4, mb1mx3.4/30, mbtmp3.3/4, ML3.1/1, Error ellipse: s-maj=54.3km s-min=34.2km az=125.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **7.85** | **182** | Pn | Pn | 14 58 27.2 | -0.3 |
| | 0.3nm,0.3s,baz=360,slow=13,SNR=8.0 | | | | | | |
| DZM | | | | Sn | Sn | 14 59 49.6 | -7.8 |
| | 0.2nm,0.3s,baz=270,slow=20,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.41** | **255** | P | P | 15 02 54.9 | -0.2 |
| | 0.2nm,0.9s,baz=87,slow=9.3,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **32.34** | **248** | P | P | 15 03 03.4 | +0.2 |
| | 0.1nm,0.6s,baz=71,slow=9.5,SNR=4.2 | | | | | | |
| **ILAR** | **Eielson Array** | **86.18** | **18** | P | P | 15 09 14.7 | 0.0 |
| | 0.3nm,0.8s,baz=230,slow=5.6,SNR=5.1 | | | | | | |

*IDC **23** 15:07:32.2±0.8, 19.17N×122.10E, h0km, mb3.9/15

4.1nm,0.9s,baz=54,slow=7.2,SNR=2.9
AKASG **Malin Array Be 76.97 319** P **P** **15 19 28.9 +1.6**
0.3nm,0.4s,baz=62,slow=5.7,SNR=2.4
NOA **NORSAR Array B 82.83 333** P **P** **15 19 57.8 -1.2**
0.5nm,0.6s,baz=64,slow=5.0,SNR=2.5
NOA LR LR 16 00 52.9
comp=Z,37nm,18.5s,baz=10.0,slow=38
GERES **GERESS Array B 87.03 321** P **P** **15 20 20.3 -0.2**
0.2nm,0.5s,baz=59,slow=2.6,SNR=3.2
YKA **Yellowknife Ar 87.11 23** P **P** **15 20 19.6 -0.7**
2.5nm,0.9s,baz=306,slow=4.3,SNR=3.7

**GUC 23 15:22:22.6±0.3, 19.66S×69.72W, h107km±3km, ML3.8, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB11** | **IPOC Station P** | **0.12** | **151** | *i* P | Pn | 15 22 37.7 | +0.1 |
| PB11 | | | | *i* S | Sn | 15 22 49.5 | +0.6 |
| **MNMC** | **Minimini** | **0.53** | **12** | *i* P | Pn | 15 22 39.9 | +0.2 |
| MNMC | | | | *i* S | Sn | 15 22 53.1 | +0.6 |
| MNMC | | | | AML | AML | 15 22 54.0 | |
| | comp=N,7μm,0.2s | | | | | | |
| **PB01** | **IPOC Station P** | **1.40** | **171** | *i* P | Pn | 15 22 48.5 | +0.4 |
| PB01 | | | | *i* S | Sn | 15 23 08.0 | +0.5 |
| PB01 | | | | AML | AML | 15 23 09.0 | |
| | comp=E,2μm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **2.07** | **184** | *e*P | Pn | 15 22 57.0 | +0.5 |
| PB07 | | | | *e*S | Sn | 15 23 23.0 | +0.5 |
| PB07 | | | | AML | AML | 15 23 31.5 | |
| | comp=E,558nm,0.4s | | | | | | |
| **PB09** | **IPOC Station P** | **2.18** | **168** | *e*P | Pn | 15 22 58.6 | +0.7 |
| PB09 | | | | *e*S | Sn | 15 23 25.5 | +0.5 |
| **PB04** | **IPOC Station P** | **2.70** | **189** | *e*P | Pn | 15 23 05.2 | +0.5 |
| PB04 | | | | *e*S | Sn | 15 23 36.1 | -1.0 |
| PB04 | | | | AML | AML | 15 24 00.5 | |
| | comp=E,258nm,0.5s | | | | | | |

*IDC **23** 15:30:54.2±1.7, 33.32S×177.49W, h0km, mb3.7/3, mb1 4.0/4, mb1mx3.7/20, mbtmp3.7/4, ML2.9/1, MS3.7/1, Ms1 3.7/1, ms1mx2.6/23, Error ellipse: s-maj=70.2km s-min=29.7km az=151.0*
*ISCJB **23** 15:30:57.3±1.6, 33.6S±0.2×177.5W±0.3, h33km, mb3.7/3, MS3.7/1, Error ellipse: s-maj=46.0km s-min=13.3km az=35.9*
**ISC 23 15:30:59.1±1.5, 33.5S±0.3×177.5W±0.3, h35km, n7, σ0§60/7, mb3.7/3, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **6.45** | **221** | Pn | **Pn** | **15 32 31.8** | **+0.3** |
| | 0.2nm,0.3s,baz=294,slow=20,SNR=2.8 | | | | | | |
| URZ | | | | Sn | **Sn** | **15 33 43.3** | **-0.5** |
| | 2.3nm,0.3s,baz=295,slow=20,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **43.47** | **270** | P | **P** | **15 38 59.8** | **+0.8** |
| | 0.9nm,0.6s,baz=109,slow=7.3,SNR=17 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.73** | **275** | P | **P** | **15 39 08.5** | **-0.6** |
| | 0.4nm,0.5s,baz=116,slow=7.8,SNR=11 | | | | | | |
| **VNDA** | **Vanda** | **45.04** | **186** | LR | LR | 15 54 31.9 | |
| | comp=Z,87nm,20.2s,baz=128,slow=31 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.24** | **42** | P | **P** | **15 43 56.0** | **-0.1** |
| | 0.6nm,0.9s,baz=220,slow=5.4,SNR=4.0 | | | | | | |
| **FINES** | **FINESS Array B** | **148.22** | **339** | PKPbc | **PKPbc** | **15 50 40.4** | **-0.1** |
| | 2.5nm,0.6s,baz=66,slow=3.5,SNR=14 | | | | | | |
| **NOA** | **NORSAR Array B** | **151.90** | **351** | PKPbc | **PKPbc** | **15 50 49.6** | **+0.1** |
| | 0.7nm,0.9s,baz=14,slow=4.0,SNR=4.0 | | | | | | |

*IDC **23** 15:47:38.0±0.6, 36.88S×73.45W, h0km, mb4.4/14, mb1 4.5/15, mb1mx4.3/35, mbtmp4.4/15, ML3.6/2, MS3.8/13, Ms1 3.8/13, ms1mx3.7/23, Error ellipse: s-maj=22.8km s-min=13.3km az=104.0*
*ISCJB **23** 15:47:38.6±0.4, 36.75S±0.04×73.67W±0.05, h14km, mb4.6/25, MS3.9/11, Error ellipse: s-maj=6.7km s-min=5.7km az=141.4*
*GUC **23** 15:47:40.8±0.5, 36.61S×73.51W, h21km±21km, ML5.5*
*BJI **23** 15:47:40.2, 36.90S×71.90W, h35km, mB4.9/2*
*NEIC **23** 15:47:42.9±0.4, 36.84S×73.43W, h35km, mb4.7/11, ML5.5(GUC), Error ellipse: s-maj=12.2km s-min=9.1km az=102.0*
*NEIC Felt [IV] at Arauco; [III] at Canete, Chiguayante, Concepcion, Coronel, Hualpen, Lebu, Lota, Penco, San Pedro and Talcahuano; [II] at Curanilahue. Also felt at Temuco.*
**ISC 23 15:47:39.5±0.5, 36.88S±0.07×73.55W±0.07, h14km, n90, σ1§48/82, mb4.7/26, MS3.9/11, 3C-3D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CCSP** | **San Pedro de C** | **0.36** | **85** | *i* P | **Pn** | **15 47 49.6** | **-0.6** |
| CCSP | | | | *i* S | **Sn** | **15 47 56.0** | **-1.1** |
| **CCHI** | **Chillan** | **1.22** | **77** | *i* P | **Pg** | **15 48 03.5** | **+0.5** |
| **TALC** | **Talca** | **2.14** | **47** | *e*P | **Pn** | **15 48 14.8** | **0.0** |
| TALC | | | | AML | AML | 15 49 01.2 | |
| | comp=N,68μm,0.6s | | | | | | |
| **NICH** | **Los Niches** | **2.66** | **46** | AML | AML | 15 49 20.9 | |
| | comp=E,17μm,0.5s | | | | | | |
| **CHPI** | **Pichilemu** | **2.78** | **27** | *e*P | **Pn** | **15 48 22.7** | **-0.9** |
| **VLCH** | **Valdivia** | **2.93** | **175** | AML | AML | 15 49 33.2 | |
| | comp=N,12μm,0.8s | | | | | | |
| **TACH** | **Talagante** | **3.86** | **34** | *i* P | **Pn** | **15 48 38.7** | **+0.2** |
| **RCDM** | **Rinconada Maip** | **4.06** | **34** | *e*P | **Pn** | **15 48 41.2** | **-0.1** |
| **ANTU** | **Antumapu** | **4.07** | **37** | *e*P | **Pn** | **15 48 41.9** | **+0.4** |
| **PCH** | **Pirque** | **4.09** | **38** | *e*P | **Pn** | **15 48 41.8** | **+0.1** |
| **CLCH** | **Cerro Calan** | **4.26** | **36** | *i* P | **Pn** | **15 48 44.4** | **+0.3** |
| CLCH | | | | *i* S | **Sn** | **15 49 33.3** | **-0.3** |
| **PEL** | **Peldehue** | **4.41** | **33** | *i* P | **Pn** | **15 48 45.8** | **-0.2** |
| **CFAA** | **Coronel Fontan** | **6.86** | **41** | Pn | **Pn** | **15 49 19.5** | **-0.2** |
| | comp=N,0.5nm,0.3s,baz=215,slow=13,SNR=26 | | | | | | |
| CFAA | | | | Sn | **Sn** | **15 50 38.4** | **+0.8** |
| | comp=N,0.0nm,0.3s,baz=35,slow=12,SNR=1.8 | | | | | | |
| CFAA | | | | Lg | Lg | 15 51 14.7 | |
| | comp=N,0.9nm,0.3s,baz=288,slow=20,SNR=2.5 | | | | | | |
| CFAA | | | | LR | LR | 15 52 22.8 | |
| | comp=N,168nm,18.3s,baz=224,slow=42 | | | | | | |
| **LCO** | **Las Campanas** | **8.20** | **18** | *e*Pn | **Pn** | **15 49 37.3** | **-1.1** |
| **CPUP** | **Villa Florida** | **17.34** | **57** | P | **Pn** | **15 51 39.5** | **-1.6** |
| CPUP | | | | LR | LR | 15 59 00.7 | |
| | comp=N,672nm,18.8s,baz=234,slow=40 | | | | | | |
| **LPAZ** | **La Paz** | **21.06** | **15** | P | **P** | **15 52 25.8** | **+1.9** |
| | comp=N,6.5nm,0.7s,baz=176,slow=5.2,SNR=17 | | | | | | |
| **SIV** | **San Ignacio** | **23.57** | **31** | P | **P** | **15 52 49.6** | **-0.1** |
| | comp=N,3.1nm,0.8s,baz=234,slow=11,SNR=6.3 | | | | | | |
| SIV | | | | LR | LR | 16 03 52.6 | |
| | comp=N,442nm,19.6s,baz=96,slow=41 | | | | | | |
| **ATAH** | **Atahualpa** | **29.93** | **350** | LR | LR | 16 03 28.3 | |
| | comp=N,92nm,20.4s,baz=129,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **31.00** | **54** | P | **P** | **15 53 56.2** | **-0.6** |
| | comp=N,5.7nm,0.8s,baz=202,slow=8.7,SNR=5.6 | | | | | | |
| BDFB | | | | LR | LR | 16 08 05.4 | |
| | comp=N,442nm,18.6s,baz=231,slow=40 | | | | | | |
| **PTGA** | **Pitinga** | **38.10** | **22** | P | **P** | **15 54 57.7** | **-0.4** |
| | comp=N,4.3nm,0.6s,baz=211,slow=9.7,SNR=14 | | | | | | |
| **ROSC** | **El Rosal** | **41.52** | **359** | P | **P** | **15 55 29.2** | **+2.3** |
| | comp=N,9.7nm,0.4s,baz=69,slow=24,SNR=4.5 | | | | | | |
| **RCBR** | **Riachuelo** | **46.22** | **57** | P | **P** | **15 56 05.6** | **+1.3** |
| | comp=N,6.4nm,0.8s,baz=204,slow=10.0,SNR=3.4 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **47.19** | **157** | P | **P** | **15 56 12.7** | **+1.5** |
| **VNA2** | **Neumayer--Watz** | **47.87** | **156** | P | **P** | **15 56 18.5** | **+2.0** |
| | baz=287,slow=9.1 | | | | | | |
| **SNAA** | **Sanae** | **49.41** | **157** | P | **P** | **15 56 29.6** | **+1.2** |
| **SNAA** | **Sanae** | **49.41** | **157** | P | **P** | **15 56 29.3** | **+0.9** |
| | comp=N,6.2nm,1.2s,baz=287,slow=6.0,SNR=8.8 | | | | | | |
| **SNAA** | **Sanae** | **49.41** | **157** | *e*P | **P** | **15 56 28.2** | **-0.2** |
| | comp=N,7.6nm,1.3s | | | | | | |
| **QSPA** | **South Pole Qui** | **53.36** | **180** | P | **P** | **15 56 59.9** | **+1.7** |
| | comp=N,8.0nm,0.9s,baz=157,slow=7.2,SNR=26 | | | | | | |
| **RKT** | **Rikitea** | **54.10** | **266** | *e*LR | LR | 16 13 06.5 | |
| | comp=N,169nm,27.8s | | | | | | |
| **RKT** | **Rikitea** | **54.10** | **266** | *e*T | T | 16 55 13.7 | |
| | comp=N,3.1nm,0.2s | | | | | | |
| **CELP** | **Cerrillos** | **55.05** | **8** | *e*P | **P** | **15 57 10.7** | **-0.1** |
| **TEIG** | **Tepich** | **58.47** | **344** | LR | LR | 16 17 30.3 | |
| | comp=N,68nm,19.7s,baz=268,slow=31 | | | | | | |
| **VNDA** | **Vanda** | **61.04** | **192** | LR | LR | 16 20 57.8 | |
| | comp=N,49nm,19.2s,baz=139,slow=33 | | | | | | |
| **SYO** | **Syowa Base** | **63.65** | **158** | *e*X | **P** | **15 58 09.2** | **-0.5** |
| **TBI** | **Tubuai** | **65.49** | **258** | *e*LR | LR | 16 18 19.3 | |
| | comp=N,173nm,27.5s | | | | | | |
| **MEH** | **Mehetia** | **67.28** | **264** | *e*T | T | 17 11 41.9 | |
| | comp=N,39nm,0.2s | | | | | | |
| **TVO** | **Taravao** | **68.28** | **264** | *e*T | T | 17 12 56.2 | |
| | comp=N,1.0nm,0.3s | | | | | | |
| **TIAR** | **Tiarei** | **68.48** | **264** | *e*T | T | 17 13 11.1 | |
| | comp=N,5.0nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **68.64** | **264** | *e*S | S | 16 07 57.1 | +12 |
| | comp=N,88nm,24.8s | | | | | | |
| **PPT2** | **Papeete2** | **68.64** | **264** | *e*LR | LR | 16 19 42.2 | |
| | comp=N,245nm,25.8s | | | | | | |
| **PPT** | **Papeete** | **68.65** | **264** | LR | LR | 16 20 24.6 | |
| | comp=N,121nm,19.2s,baz=116,slow=29 | | | | | | |
| **MAW** | **Mawson** | **70.77** | **164** | P | **P** | **15 58 56.1** | **+1.3** |
| | comp=N,4.4nm,0.8s,baz=218,slow=5.4,SNR=16 | | | | | | |
| MAW | | | | LR | LR | 16 32 36.3 | |
| | comp=N,86nm,18.1s,baz=239,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.67** | **333** | P | **P** | **15 59 02.0** | **+1.2** |
| | comp=N,2.0nm,0.7s,baz=148,slow=8.9,SNR=22 | | | | | | |
| TXAR | | | | LR | LR | 16 25 24.6 | |
| | comp=N,76nm,19.5s,baz=0.0,slow=32 | | | | | | |
| **SWET** | **Sewanee** | **72.65** | **349** | *e*P | **P** | **15 59 06.1** | **-0.4** |
| | comp=N,7.2nm,0.9s | | | | | | |
| **WVT** | **Waverly** | **73.84** | **348** | *e*P | **P** | **15 59 13.7** | **+0.3** |
| | comp=N,9.9nm,1.0s | | | | | | |
| **GLAT** | **Glass** | **74.23** | **347** | *e*P | **P** | **15 59 15.0** | **-0.7** |
| **CCM** | **Cathedral Cave** | **76.33** | **346** | *e*P | **P** | **15 59 27.2** | **-0.6** |
| **LIC** | **Lamto** | **76.85** | **72** | *e*PKIKP | **P** | **15 59 31.9** | **+0.6** |
| | comp=N,44nm,1.3s | | | | | | |
| **TIC** | **Toumodi** | **77.12** | **71** | *e*PKIKP | **P** | **15 59 33.7** | **+0.8** |
| **KIC** | **Kosan Boka** | **77.16** | **72** | *e*PKIKP | **P** | **15 59 33.8** | **+0.8** |
| | comp=N,28nm,0.9s | | | | | | |
| **DBIC** | **Dimbokro** | **77.27** | **72** | P | **P** | **15 59 34.5** | **+0.9** |
| | comp=N,8.0nm,0.7s,baz=207,slow=4.5,SNR=9.0 | | | | | | |
| DBIC | | | | LR | LR | 16 30 49.6 | |
| | comp=N,56nm,18.9s,baz=214,slow=34 | | | | | | |
| **ANMO** | **Albuquerque** | **77.74** | **333** | *e*P | **P** | **15 59 37.4** | **+1.3** |
| | comp=N,5.1nm,1.0s | | | | | | |
| **BOSA** | **Boshof** | **79.82** | **118** | P | **P** | **15 59 48.0** | **+0.1** |
| | comp=N,7.2nm,1.0s,baz=231,slow=5.7,SNR=6.6 | | | | | | |
| BOSA | | | | LR | LR | 16 29 43.3 | |
| | comp=N,39nm,21.1s,baz=238,slow=32 | | | | | | |
| **SDCO** | **Great Sand Dun** | **79.92** | **335** | *e*P | **P** | **15 59 47.2** | **-0.9** |
| | comp=N,3.2nm,1.1s | | | | | | |
| **ECSD** | **EROS Data Cent** | **82.92** | **343** | *e*P | **P** | **16 00 02.1** | **-1.4** |
| | comp=N,13nm,0.9s | | | | | | |
| **SRU** | **San Rafael** | **82.94** | **332** | *e*P | **P** | **16 00 04.9** | **+1.0** |
| | comp=N,5.5nm,1.1s | | | | | | |
| **P18A** | **Preston Nutter** | **83.28** | **332** | *e*P | **P** | **16 00 07.0** | **+1.2** |
| | comp=N,6.0nm,0.9s | | | | | | |
| **P17A** | **Butcher Ranch,** | **83.33** | **332** | *e*P | **P** | **16 00 07.3** | **+1.4** |
| | comp=N,5.7nm,1.0s | | | | | | |
| **RSSD** | **Black Hills** | **85.23** | **338** | *e*P | **P** | **16 00 13.1** | **-2.4** |
| **HWUT** | **Hardware Ranch** | **85.50** | **332** | *e*P | **P** | **16 00 17.2** | **+0.4** |
| | comp=N,8.8nm,1.1s | | | | | | |
| **NVAR** | **Mina Array Bea** | **85.56** | **326** | P | **P** | **16 00 18.8** | **+1.4** |
| | comp=N,0.6nm,0.7s,baz=158,slow=5.7,SNR=4.9 | | | | | | |
| **BW06** | **Boulder Array** | **85.79** | **334** | *e*P | **P** | **16 00 18.8** | **+0.5** |
| | comp=N,16nm,2.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.34** | **71** | P | **P** | **16 00 21.6** | **+0.2** |
| | comp=N,2.4nm,0.7s,baz=220,slow=4.1,SNR=12 | | | | | | |
| TORD | | | | LR | LR | 16 37 26.4 | |
| | comp=N,66nm,18.7s,baz=285,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **98.55** | **234** | *e*LR | LR | 16 33 46.1 | |
| | comp=N,144nm,27.1s | | | | | | |
| **ASAR** | **Alice Springs** | **114.45** | **208** | PKP | PKPdf | 16 06 18.9 | -0.6 |
| | comp=N,0.4nm,1.0s,baz=160,slow=3.0,SNR=3.8 | | | | | | |
| **GERES** | **GERESS Array B** | **115.04** | **47** | PKP | **PKPdf** | **16 06 19.6** | **-0.1** |
| | comp=N,0.9nm,0.8s,baz=252,slow=2.0,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **117.65** | **210** | PKP | **PKPdf** | **16 06 25.1** | **-0.6** |
| | comp=N,0.3nm,0.8s,baz=158,slow=1.5,SNR=3.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **124.27** | **63** | PKP | **PKPdf** | **16 06 37.4** | **-0.4** |
| | comp=N,1.3nm,0.9s,baz=262,slow=3.7,SNR=5.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **125.02** | **49** | PKP | **PKPdf** | **16 06 37.8** | **-0.9** |
| | comp=N,0.3nm,0.3s,baz=264,slow=2.7,SNR=5.1 | | | | | | |
| **KSM** | **Kuching** | **144.59** | **187** | *e*PKPdf | PKPbc | 16 07 15.1 | +0.3 |
| **KSH** | **Kashi** | **155.96** | **74** | *e*PKPbc | **PKPdf** | **16 07 29.3** | **-4.0** |
| KSH | | | | *es*PKP | | 16 07 43.9 | |
| KSH | | | | PKS | **PKSdf** | **16 11 04.9** | **-2.4** |
| KSH | | | | *e*PP | PP | 16 11 31.3 | -7.0 |
| KSH | | | | PPMZ | | | |
| | comp=N,100nm,4.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **157.30** | **34** | PKP | **PKPdf** | **16 07 34.4** | **0.0** |
| | comp=N,2.7nm,0.8s,baz=300,slow=3.2,SNR=12 | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **16 08 06.2** | **+0.7** |
| | comp=N,3.9nm,0.8s,baz=305,slow=5.1,SNR=5.7 | | | | | | |
| **KOLN** | **Kolonanda** | **158.70** | **109** | *e*P | **PKPab** | **16 08 13.1** | **+0.4** |
| | comp=N,14nm,0.9s | | | | | | |
| **DANN** | **Dangsing** | **159.12** | **107** | *e*P | **PKPab** | **16 08 15.1** | **+0.5** |
| **MKAR** | **Makanchi Array** | **159.53** | **54** | PKP | **PKPdf** | **16 07 37.7** | **+0.4** |
| | comp=N,0.9nm,1.0s,baz=352,slow=2.2,SNR=2.6 | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **16 08 15.7** | **+0.2** |
| | comp=N,3.0nm,0.8s,baz=293,slow=4.3,SNR=7.9 | | | | | | |
| **GKN** | **Gorkha** | **159.61** | **109** | *e*P | **PKPab** | **16 08 16.8** | **+0.2** |
| | comp=N,24nm,1.2s | | | | | | |
| **DMN** | **Daman** | **159.76** | **111** | *e*P | **PKPab** | **16 08 17.8** | **+0.4** |
| | comp=N,10nm,0.8s | | | | | | |
| **PKIN** | **Phulchoki** | **159.96** | **112** | *e*P | **PKPab** | **16 08 18.3** | **+0.1** |
| | comp=N,5.3nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **159.96** | **112** | *e*P | **PKPab** | **16 08 18.4** | **+0.1** |
| **KKN** | **Kakani** | **159.98** | **111** | *e*P | **PKPab** | **16 08 18.7** | **+0.4** |
| | comp=N,13nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **160.49** | **115** | *e*P | **PKPab** | **16 08 20.9** | **+0.3** |
| | comp=N,9.3nm,0.8s | | | | | | |
| **GUN** | **Gumba** | **160.50** | **111** | *e*P | **PKPab** | **16 08 21.3** | **+0.6** |
| | comp=N,4.7nm,0.5s | | | | | | |
| **ODAN** | **Odare** | **161.01** | **116** | *e*P | **PKPab** | **16 08 23.1** | **+0.3** |
| | comp=N,9.5nm,0.7s | | | | | | |
| **TAPN** | **Taplejung** | **161.53** | **116** | *e*P | **PKPab** | **16 08 26.3** | **+1.2** |
| | comp=N,3.5nm,0.6s | | | | | | |
| **WMQ** | **Urumqi** | **164.13** | **58** | *e*PKP | **PKPdf** | **16 07 38.0** | **-4.2** |
| **NJ2** | **Nanjing** | **168.69** | **248** | *e*PKP | **PKPdf** | **16 07 44.9** | **-1.1** |
| **SONM** | **Songino Array** | **169.05** | **0** | PKP | **PKPdf** | **16 07 45.1** | **-0.8** |
| | comp=N,0.3nm,0.5s,baz=324,slow=0.3,SNR=3.6 | | | | | | |
| SONM | | | | PKPab | **PKPab** | **16 08 57.3** | **0.0** |
| | comp=N,1.2nm,1.0s,baz=0.0,slow=2.9,SNR=4.2 | | | | | | |
| **CD2** | **Chengdu** | **173.64** | **159** | PKP | **PKPdf** | **16 07 45.3** | **-3.3** |
| **GTA** | **Gaotai** | **174.19** | **62** | *e*PKP | **PKPdf** | **16 07 49.6** | **+0.9** |
| GTA | | | | pPKP | **pPKPdf** | **16 08 00.4** | **+6.9** |
| GTA | | | | sPKP | | 16 08 03.9 | |
| **HHC** | **Hu-ho-hao-te** | **174.37** | **316** | *e*PKP | **PKPdf** | **16 07 44.8** | **-3.9** |
| HHC | | | | PP | **PP** | **16 13 14.0** | **+0.6** |
| HHC | | | | SS | SS | 16 34 35.0 | +1.5 |
| HHC | | | | PPMZ | | | |
| | comp=N,44nm,9.4s | | | | | | |

*ISCJB **23** 15:48:08.3±1.0, 22.75S±0.1×66.02W±0.08, h251km, mb4.0/1, Error ellipse: s-maj=14.4km s-min=10.8km az=0.2*
*IDC **23** 15:48:08.4±1.6, 22.79S×65.98W, h235km±20km, mb3.8/1, mb1 3.4/4, mb1mx3.0/39, mbtmp4.0/4, Error ellipse: s-maj=31.5km s-min=20.3km az=130.0*
**ISC 23 15:48:09.7±1.2, 22.6S±0.1×66.09W±0.09, h251km, n7, σ1§11/9, Jujuy Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **2.61** | **270** | P | **Pn** | **15 48 58.8** | **+0.3** |
| | 1μm,0.3s,baz=92,slow=5.5,SNR=194 | | | | | | |
| LVC | | | | S | **S** | **15 49 35.6** | **-1.4** |
| | 294nm,0.3s,baz=251,slow=21,SNR=9.6 | | | | | | |
| **LPAZ** | **La Paz** | **6.60** | **343** | P | **Pn** | **15 49 47.3** | **+1.2** |
| | 0.4nm,0.3s,baz=144,slow=7.7,SNR=7.9 | | | | | | |
| LPAZ | | | | S | **S** | **15 51 01.8** | **-1.3** |
| | 0.2nm,0.3s,baz=11,slow=14,SNR=6.2 | | | | | | |
| **SIV** | **San Ignacio** | **8.12** | **36** | P | **Pn** | **15 50 04.8** | **0.0** |
| | 0.7nm,0.3s,baz=233,slow=12,SNR=11 | | | | | | |
| **BDFB** | **Brasilia** | **18.43** | **71** | P | **P** | **15 52 07.5** | **+0.4** |
| | 0.3nm,0.3s,baz=217,slow=11,SNR=4.2 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **75.29** | **69** | *e*PKIKP | **P** | **15 59 25.1** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **75.29** | **69** | P | **P** | **15 59 25.1** | **-0.7** |
| | 1.5nm,0.4s,baz=255,slow=5.9,SNR=26 | | | | | | |
| **MKAR** | **Makanchi Array** | **144.94** | **39** | PKPbc | **PKPab** | **16 07 17.9** | **+1.0** |
| | 1.3nm,0.7s,baz=306,slow=4.3,SNR=6.1 | | | | | | |

**MEX 23 16:02:52.6±0.3, 27.47N×111.44W, h16km±15km, MD3.7, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRIG** | **Santa Rosalia** | **0.73** | **259** | *i* P | Pg | 16 03 04.4 | -2.5 |
| SRIG | | | | *i* S | Sg | 16 03 13.3 | -3.2 |
| **HSIG** | | **1.60** | **15** | *e*P | Pn | 16 03 16.6 | -3.7 |
| HSIG | | | | *i* S | Sn | 16 03 35.8 | -4.9 |

*ISK **23** 16:05:49.6, 37.51N×36.13E, h3km, MD2.6*
*DDA **23** 16:05:50.3, 37.56N×36.16E, h5km, Md2.8*
*CSEM **23** 16:05:50.3±0.3, 37.55N×36.10E, h2km, MD2.8, Error ellipse: s-maj=7.0km s-min=5.9km az=171.0*
**ISC 23 16:05:50.8±1.1, 37.55N±0.03×36.14E±0.02, h5km±9km, n22, σ0§86/38, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANDN** | **Andirin** | **0.17** | **78** | *i* P | **Pg** | **16 05 53.8** | **-0.4** |
| ANDN | | | | *i* S | **Sg** | **16 05 57.1** | **+0.6** |
| **ANDN** | **Andirin** | **0.17** | **78** | P | **Pg** | **16 05 53.8** | **-0.4** |
| ANDN | | | | S | **Sg** | **16 05 57.1** | **+0.6** |
| **AYKD** | **Aykdinkavak** | **0.55** | **104** | P | **Pg** | **16 06 01.1** | **-0.2** |
| AYKD | | | | S | **Sb** | **16 06 10.2** | **-0.9** |
| **KAMA** | **Osmaniye** | **0.55** | **130** | P | **Pg** | **16 06 01.9** | **+0.4** |
| KAMA | | | | S | **Sg** | **16 06 09.8** | **+1.1** |
| **KMRS** | **Kahramanmaras** | **0.61** | **93** | *e*PG | **Pg** | **16 06 02.0** | **-0.5** |
| KMRS | | | | *e*SG | **Sb** | **16 06 11.7** | **-1.1** |
| **KMRS** | **Kahramanmaras** | **0.61** | **93** | *e*Pg | **Pg** | **16 06 02.0** | **-0.5** |
| KMRS | | | | *e*Sg | **Sb** | **16 06 11.7** | **-1.1** |
| **KARA** | **Karaisali** | **0.91** | **252** | *e*PG | **Pg** | **16 06 07.5** | **-0.8** |
| KARA | | | | *e*SG | **Sb** | **16 06 20.4** | **-1.0** |
| **KARA** | **Karaisali** | **0.91** | **252** | *e*Pg | **Pg** | **16 06 07.5** | **-0.8** |
| KARA | | | | *e*Sg | **Sb** | **16 06 20.5** | **-1.0** |
| **KUZU** | **Kuzuini** | **1.07** | **136** | *i* P | **Pn** | **16 06 12.5** | **-0.1** |
| KUZU | | | | *i* S | **Sn** | **16 06 27.6** | **-0.3** |
| **KUZU** | **Kuzuini** | **1.07** | **136** | P | **Pn** | **16 06 12.5** | **-0.1** |
| KUZU | | | | S | **Sn** | **16 06 27.6** | **-0.3** |
| **GULE** | **Gulek** | **1.12** | **257** | P | **Pn** | **16 06 14.3** | **+1.0** |
| GULE | | | | S | **Sn** | **16 06 31.6** | **+2.5** |
| **PINB** | **Pinarbasi** | **1.15** | **10** | *i* P | **Pg** | **16 06 12.1** | **-0.8** |
| PINB | | | | *i* S | **Sn** | **16 06 30.1** | **+0.1** |
| **PINB** | **Pinarbasi** | **1.15** | **10** | P | **Pg** | **16 06 12.1** | **-0.8** |
| PINB | | | | S | **Sn** | **16 06 30.1** | **+0.1** |
| **GZT** | **Gaziantep** | **1.15** | **99** | P | **Pn** | **16 06 15.0** | **+1.3** |
| GZT | | | | S | **Sn** | **16 06 30.5** | **+0.6** |
| **TAHT** | **Tahtakopru-Hat** | **1.17** | **178** | *e*PN | **Pg** | **16 06 12.2** | **-1.0** |
| **TAHT** | **Tahtakopru-Hat** | **1.17** | **178** | *e*Pn | **Pg** | **16 06 12.2** | **-1.0** |
| **NIG** | **Nigde** | **1.34** | **295** | *e*PN | **Pg** | **16 06 16.0** | **-0.5** |
| **NIG** | **Nigde** | **1.34** | **295** | *e*Pn | **Pg** | **16 06 16.0** | **-0.5** |
| **DARE** | **Darende-Malaty** | **1.48** | **46** | *e*PN | **Pb** | **16 06 18.5** | **-0.3** |
| **DARE** | **Darende-Malaty** | **1.48** | **46** | *e*Pn | **Pb** | **16 06 18.5** | **-0.3** |
| **AKCD** | **Akcadag** | **1.60** | **61** | *i* P | **Pn** | **16 06 20.2** | **+0.3** |
| AKCD | | | | *i* S | **Sg** | **16 06 43.1** | **+0.9** |
| **AKCD** | **Akcadag** | **1.60** | **61** | P | **Pn** | **16 06 20.2** | **+0.3** |
| AKCD | | | | S | **Sg** | **16 06 43.1** | **+0.9** |

**IDC 23 16:09:01.3±3.3, 24.36S×179.86E, h488km±33km, mb3.0/3, mb1 3.4/4, mb1mx3.0/20, mbtmp3.9/4, Error ellipse: s-maj=43.7km s-min=30.0km az=177.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URZ** | **Urewera** | **14.06** | **189** | P | P | 16 12 02.0 | +0.4 |
| | 0.8nm,0.3s,baz=43,slow=2.8,SNR=7.7 | | | | | | |
| URZ | | | | S | S | 16 14 29.3 | -1.0 |
| | 0.5nm,0.3s,baz=171,slow=22,SNR=7.1 | | | | | | |
| **ASAR** | **Alice Springs** | **41.84** | **261** | P | P | 16 16 08.0 | +0.1 |
| | 0.4nm,0.4s,baz=96,slow=7.2,SNR=37 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.25** | **267** | P | P | 16 16 10.8 | -0.4 |
| | 1.5nm,0.3s,baz=103,slow=8.3,SNR=85 | | | | | | |
| WRA | | | | ScP | ScP | 16 20 57.5 | -0.5 |
| | 0.5nm,1.0s,baz=110,slow=3.5,SNR=3.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **90.78** | **58** | P | P | 16 21 12.0 | -0.1 |
| | 0.2nm,0.6s,baz=223,slow=6.2,SNR=3.5 | | | | | | |

*IDC **23** 16:09:50.9±1.1, 7.55N×91.90E, h0km, mb3.7/5, mb1 3.9/7, mb1mx3.6/30, mbtmp3.8/7, ML4.0/2, MS2.8/2, Ms1 2.9/2, ms1mx2.5/43, Error ellipse: s-maj=37.6km s-min=20.8km az=62.0*
*ISCJB **23** 16:09:52.3±0.9, 7.76N±0.1×91.79E±0.1, h24km, mb3.7/5, Error ellipse: s-maj=17.6km s-min=16.0km az=175.9*
**ISC 23 16:09:54.5±1.0, 7.6N±0.1×91.9E±0.1, h24km, n10, σ0§39/9, mb3.6/5, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PALK** | **Pallekele** | **11.11** | **269** | Pn | **Pn** | **16 12 32.2** | **+0.1** |
| | 2.0nm,0.3s,baz=116,slow=12,SNR=15 | | | | | | |
| PALK | | | | Sn | Sn | 16 14 19.9 | -16 |
| | 1.9nm,0.3s,baz=115,slow=10,SNR=11 | | | | | | |
| PALK | | | | LR | LR | 16 15 46.0 | |
| | comp=Z,70nm,20.2s,baz=116,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **12.82** | **32** | Pn | **Pn** | **16 12 55.5** | **0.0** |
| | 0.2nm,0.3s,baz=229,slow=14,SNR=13 | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ODAN** | **Odare** | **10.04** | **254** | *e*P | **Pn** | **16 32 30.4** | **-1.1** |
| | comp=Z,15nm,0.6s | | | | | | | |
| **RAMN** | **Ramite** | **10.67** | **256** | *e*P | **Pn** | **16 32 39.4** | **-0.8** |
| | comp=Z,12nm,0.7s | | | | | | | |
| **GUN** | **Gumba** | **11.00** | **262** | *e*P | **Pn** | **16 32 44.4** | **-0.4** |
| | comp=Z,8.9nm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **11.49** | **261** | *e*P | **Pn** | **16 32 50.4** | **-1.1** |
| | comp=Z,15nm,0.7s | | | | | | | |
| **PKIN** | **Phulchoki** | **11.50** | **261** | *e*P | **Pn** | **16 32 51.0** | **-0.6** |
| | comp=Z,6.8nm,0.6s | | | | | | | |
| **KKN** | **Kakani** | **11.55** | **262** | *e*P | **Pn** | **16 32 51.6** | **-0.6** |
| | comp=Z,13nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **11.58** | **177** | Pn | **Pn** | **16 32 53.6** | **+1.1** |
| | comp=Z,0.2nm,0.3s,baz=347,slow=11,SNR=21 | | | | | | | |
| CMAR | | | | Lg | Lg | 16 36 12.6 | | |
| | baz=13,slow=32,SNR=2.6 | | | | | | | |
| CMAR | | | | LR | LR | 16 37 38.2 | | |
| | comp=Z,111nm,20.3s,baz=351,slow=39 | | | | | | | |
| **GKN** | **Gorkha** | **12.05** | **263** | *e*P | **Pn** | **16 32 57.9** | **-1.1** |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **KOLN** | **Koldanda** | **13.00** | **263** | *e*P | Pn | 16 33 09.8 | -2.2 |
| | comp=Z,14nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **18.83** | **17** | P | **P** | **16 34 27.4** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=208,slow=10,SNR=7.3 | | | | | | | |
| SONM | | | | LR | LR | 16 42 21.8 | | |
| | comp=Z,134nm,18.4s,baz=198,slow=39 | | | | | | | |
| **MKAR** | **Makanchi Array** | **20.77** | **328** | P | **P** | **16 34 48.0** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=136,slow=11,SNR=2.7 | | | | | | | |
| MKAR | | | | LR | LR | 16 43 52.0 | | |
| | comp=Z,48nm,19.4s,baz=140,slow=40 | | | | | | | |
| **TLY** | **Talaya** | **21.96** | **9** | LR | LR | 16 44 17.0 | | |
| | comp=Z,78nm,20.4s,baz=179,slow=39 | | | | | | | |
| **AAK** | **Ala-Archa** | **22.76** | **310** | P | **P** | **16 35 09.4** | **-0.1** |
| | comp=Z,1.0nm,0.5s,baz=104,slow=7.3,SNR=4.8 | | | | | | | |
| AAK | | | | LR | LR | 16 44 21.8 | | |
| | comp=Z,58nm,21.5s,baz=114,slow=38 | | | | | | | |
| **AAK** | **Ala-Archa** | **22.76** | **310** | *e*P | **P** | **16 35 08.7** | **-0.9** |
| | comp=Z,5.6nm,1.1s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **25.28** | **330** | P | **P** | **16 35 33.5** | **+0.2** |
| | comp=Z,1.4nm,0.7s,baz=143,slow=9.5,SNR=16 | | | | | | | |
| **KURK** | **Kurchatov** | **25.30** | **330** | *e*P | **P** | **16 35 33.4** | **-0.2** |
| | comp=Z,4.1nm,0.7s | | | | | | | |
| **KKAR** | **Karatay Array** | **25.63** | **308** | *e*P | **P** | **16 35 35.9** | **-0.8** |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **25.68** | **65** | P | **P** | **16 35 37.9** | **+0.8** |
| **KSRS** | **Korea Array** | **25.71** | **65** | P | **P** | **16 35 37.9** | **+0.6** |
| | comp=Z,2.9nm,0.7s,baz=260,slow=9.8,SNR=15 | | | | | | | |
| KSRS | | | | LR | LR | 16 44 57.2 | | |
| | comp=Z,19nm,21.2s,baz=95,slow=35 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **25.76** | **342** | P | **P** | **16 35 37.8** | **+0.2** |
| | comp=Z,2.1nm,0.8s,baz=153,slow=8.9,SNR=8.3 | | | | | | | |
| **GEYT** | **Alibeck** | **33.94** | **294** | P | **P** | **16 36 50.8** | **+0.3** |
| | comp=Z,1.8nm,0.7s,baz=121,slow=7.0,SNR=4.7 | | | | | | | |
| **WRAB** | **Tennant Creek** | **60.69** | **140** | *e*P | **P** | **16 40 18.4** | **-0.3** |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **60.69** | **140** | P | **P** | **16 40 18.3** | **-0.4** |
| | comp=Z,4.0nm,0.8s,baz=330,slow=7.5,SNR=26 | | | | | | | |
| **NOA** | **NORSAR Array B** | **62.76** | **327** | P | **P** | **16 40 31.9** | **-0.3** |
| | comp=Z,0.8nm,0.7s,baz=78,slow=7.3,SNR=3.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **63.48** | **143** | P | **P** | **16 40 37.3** | **-0.1** |
| | comp=Z,1.3nm,0.7s,baz=328,slow=6.8,SNR=18 | | | | | | | |
| **GERES** | **GERESS Array B** | **64.59** | **313** | P | **P** | **16 40 44.6** | **+0.1** |
| | comp=Z,0.5nm,0.6s,baz=94,slow=5.2,SNR=3.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **89.03** | **285** | P | **P** | **16 43 01.6** | **-1.2** |
| | comp=Z,1.1nm,0.8s,baz=58,slow=3.8,SNR=9.1 | | | | | | | |

**IDC 23 16:40:39.4±4.3, 14°41N×144°52E, h96km±37km, mb2.9/3, mb1 3.2/3, mb1mx2.9/38, mbtmp3.2/3, Error ellipse: s-maj=129.7km s-min=26.0km az=109.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **0.89** | **157** | P | Pn | 16 40 59.9 | +1.6 |
| | 130nm,0.3s,baz=27,slow=2.3,SNR=455 | | | | | | |
| GUMO | | | | S | Sn | 16 41 13.1 | +0.6 |
| | 406nm,0.3s,baz=343,slow=19,SNR=108 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.58** | **197** | P | P | 16 47 27.7 | 0.0 |
| | 0.3nm,0.9s,baz=18,slow=9.0,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **39.24** | **195** | P | P | 16 47 58.1 | -0.6 |
| | 0.2nm,0.7s,baz=18,slow=12,SNR=2.7 | | | | | | |
| **ILAR** | **Eielson Array** | **67.98** | **25** | P | P | 16 51 27.2 | -0.7 |
| | 0.2nm,0.5s,baz=247,slow=6.6,SNR=4.1 | | | | | | |

*ISCJB **23** 16:52:04.6±1.1, 30°.15S×0°.04×71°.30W×0°.09, h66km±8km, Error ellipse: s-maj=12.7km s-min=6.1km az=167.5*
*GUC **23** 16:52:04.6±0.3, 30°.14S×71°.07W, h67km±2km, ML2.8*
**ISC 23 16:52:05.9±1.8, 30°.14S±0°.04×71°.28W±0°.10, h56km±10km, n16, σ1°25/26, 2C, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSCH** | **La Serena** | **0.23** | **7** | ⇑*i*P | **Pn** | **16 52 15.2** | **0.0** |
| LSCH | | | | *i* S | **Sn** | **16 52 23.4** | **+1.7** |
| LSCH | | | | AML | AML | 16 52 23.8 | |
| | comp=N,483nm,0.3s | | | | | | |
| **TLL** | **Tololo Astrono** | **0.41** | **95** | ⇑*i*P | **Pn** | **16 52 15.8** | **-1.2** |
| TLL | | | | *i* S | **Sn** | **16 52 24.4** | **-0.6** |
| TLL | | | | AML | AML | 16 52 25.0 | |
| | comp=E,2μm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **1.23** | **24** | *e*P | **Pn** | **16 52 26.0** | **-1.1** |
| LCO | | | | *i* S | **Sn** | **16 52 42.2** | **-0.7** |
| LCO | | | | AML | AML | 16 52 43.6 | |
| | comp=E,507nm,0.4s | | | | | | |
| **VACH** | **Vallenar** | **1.62** | **16** | *e*P | **Pn** | **16 52 31.9** | **-0.3** |
| VACH | | | | *i* S | **Sn** | **16 52 51.8** | **-0.2** |
| **RTLS** | **Leoncito** | **2.38** | **135** | *e*P | **Pn** | **16 52 43.0** | **+0.3** |
| RTLS | | | | *e*S | **Sn** | **16 53 13.1** | **+2.3** |
| **AGUA** | **GUANDACOL** | **2.51** | **76** | *e*P | **Pn** | **16 52 45.2** | **+0.9** |
| AGUA | | | | *e*S | **Sn** | **16 53 16.1** | **+2.3** |
| **AMOG** | **MOGNA** | **2.53** | **109** | *e*P | **Pn** | **16 52 44.8** | **0.0** |
| **AUSP** | **Uspallata** | **2.64** | **143** | *e*P | **Pn** | **16 52 46.5** | **+0.2** |
| AUSP | | | | *e*S | **Sn** | **16 53 18.3** | **+1.0** |
| **RTLL** | **Cerro Villicun** | **2.69** | **117** | *e*P | **Pn** | **16 52 45.7** | **-1.1** |
| RTLL | | | | *e*S | **Sn** | **16 53 19.2** | **+0.9** |
| **ROC1** | **El Roble** | **2.84** | **176** | *e*P | Pn | 16 53 07.4 | +18 |
| **CFAA** | **Coronel Fontan** | **3.00** | **120** | *e*P | **Pn** | **16 52 50.0** | **-1.0** |
| CFAA | | | | *e*S | **Sn** | **16 53 25.2** | **-0.6** |
| **VCA** | **Vinchina** | **3.02** | **63** | *e*P | **Pn** | **16 52 52.4** | **+0.9** |
| **ASAL** | **Salagasta** | **3.22** | **140** | *e*P | **Pn** | **16 52 54.3** | **+0.2** |
| **AVFE** | **Valle Fertil** | **3.34** | **100** | *e*P | **Pn** | **16 52 54.4** | **-1.4** |
| AVFE | | | | *e*S | **Sn** | **16 53 33.4** | **-0.9** |
| AVFE | | | | IAML | | 16 53 33.5 | |
| | comp=Z,17nm,0.2s | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.36** | **144** | *e*P | **Pn** | **16 52 57.6** | **+1.5** |
| ARCO | | | | *e*S | **Sn** | **16 53 33.2** | **-1.6** |
| ARCO | | | | IAML | | 16 53 43.1 | |
| | comp=Z,25nm,0.5s | | | | | | |
| **AAGR** | **Agrelo** | **3.61** | **145** | *e*P | **Pn** | **16 52 57.5** | **-1.9** |

*IDC **23** 16:57:29.2±2.7, 33°.52S×178°.90W, h0km, mb3.5/2, mb1 3.7/3, mb1mx3.5/21, mbtmp3.5/3, ML3.5/1, MS3.1/1, Ms1 3.1/1, ms1mx2.4/21, Error ellipse: s-maj=66.7km s-min=35.9km az=117.0*
**ISC 23 16:57:34.8±2.2, 33°.65S±0°.2×178°.7W±0°.4, h48km, n12, σ1°70/15, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **4.66** | **210** | PN | **Pn** | **16 58 41.9** | **-0.7** |
| MXZ | | | | SN | **Sn** | **16 59 36.5** | **+1.2** |
| **WMGZ** | **Waiomatatini S** | **4.83** | **208** | *e*PN | **Pn** | **16 58 45.5** | **+0.5** |
| **HAZ** | **Te Kaha** | **5.05** | **213** | PN | **Pn** | **16 58 47.5** | **-0.4** |
| HAZ | | | | SN | **Sn** | **16 59 47.9** | **+3.0** |
| **PUZ** | **Puketiti** | **5.12** | **208** | PN | **Pn** | **16 58 46.1** | **-2.8** |
| PUZ | | | | SN | **Sn** | **16 59 48.1** | **+1.4** |
| **MWZ** | **Matawai** | **5.64** | **211** | *e*PN | **Pn** | **16 58 53.8** | **-2.2** |
| **URZ** | **Urewera** | **5.77** | **214** | Pn | **Pn** | **16 58 55.7** | **-2.1** |
| | 1.3nm,0.3s,baz=18,slow=16,SNR=11 | | | | | | |
| URZ | | | | Sn | **Sn** | **17 00 01.3** | **-1.4** |
| | 0.9nm,0.3s,baz=342,slow=20,SNR=4.8 | | | | | | |
| **URZ** | **Urewera** | **5.77** | **214** | PN | **Pn** | **16 58 56.7** | **-1.1** |
| **PXZ** | **Pawanui** | **7.36** | **207** | PN | Pn | 16 59 15.7 | -3.8 |
| **RAR** | **Rarotonga** | **20.82** | **59** | LR | LR | 17 09 13.3 | |
| | comp=Z,49nm,19.8s,baz=291,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **42.41** | **271** | P | **P** | **17 05 24.3** | **-0.5** |
| | 0.5nm,0.8s,baz=110,slow=7.3,SNR=7.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 07 17.8** | **+0.5** |
| | 0.3nm,1.0s,baz=116,slow=4.2,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.69** | **276** | P | **P** | **17 05 35.6** | **+0.4** |
| | 0.6nm,0.8s,baz=115,slow=8.2,SNR=7.7 | | | | | | |
| **FINES** | **FINESS Array B** | **147.86** | **338** | PKPbc | **PKPbc** | **17 17 14.6** | **+1.0** |

3.7nm,1.0s,baz=72,slow=4.5,SNR=5.4

**DJA 23 17:19:00.0±0.5, 3°S±3°×12°8E±°, h10km, M3.1/5, MLv3.1/5, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAI** | **Ambon** | **0.98** | **167** | P | Pg | 17 19 17.8 | -1.0 |
| AAI | | | | S | Sg | 17 19 31.5 | -0.1 |
| **NLAI** | **Namlea** | **1.00** | **240** | P | Pg | 17 19 17.7 | -1.7 |
| NLAI | | | | S | Sg | 17 19 31.7 | -0.8 |
| **MSAI** | **Masohi** | **1.14** | **123** | P | Pb | 17 19 18.8 | -3.0 |
| **LBMI** | **Labuha** | **2.13** | **347** | P | Pn | 17 19 36.0 | +0.3 |

*MOS **23** 17:19:47.5±1.5, 37°.77N×49°.10E, h13km, mb4.1/8, Error ellipse: s-maj=10.5km s-min=7.2km az=117.1*
*IDC **23** 17:19:48.4±1.4, 37°.94N×49°.07E, h0km, mb4.0/9, mb1 3.9/17, mb1mx3.7/48, mbtmp3.9/17, ML3.2/6, MS2.8/4, Ms1 2.8/4, ms1mx2.5/41, Error ellipse: s-maj=28.3km s-min=12.6km az=4.0*
*THR **23** 17:19:49.1±1.1, 38°.06N×49°.09E, h15km±14km, ML4.0*
*NEIC **23** 17:19:50.8, 38°.13N×49°.12E, h8km, mb4.0/5, MN4.1(TEH), After TEH.*
*TEH **23** 17:19:50.8, 38°.13N×49°.12E, h8km, ML4.1*
*CSEM **23** 17:19:51.1±0.1, 38°.00N×49°.14E, h10km, mb3.9/10, Error ellipse: s-maj=4.8km s-min=3.3km az=56.0*
*AZER **23** 17:19:53.6±8.0, 38°.13N×48°.96E, h32km±1km, Error ellipse: s-maj=6.2km s-min=2.0km az=29.0*
*ISN **23** 17:19:56.6±1.4, 38°.13N×46°.57E, h0km±5km, ML4.1*
*NNC **23** 17:20:00.8±1.7, 38°.80N×50°.21E, h0km, mb4.0, Error ellipse: s-maj=45.5km s-min=13.4km az=122.0*
**ISC 23 17:19:49.0±1.3, 38°.05N±0°.03×49°.16E±0°.03, h5km±8km, n242, σ1°64/244, mb3.9/14, 52C-26D, Caspian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LKRN** | **Lenkeran, Azer** | **0.73** | **336** | ⇓P | **Pn** | **17 20 06.9** | **+1.0** |
| | SNR=142 | | | | | | |
| LKRN | | | | ⇓S | **Sn** | **17 20 18.5** | **+1.0** |
| **LKRN** | **Lenkeran, Azer** | **0.73** | **336** | P | **Pn** | **17 20 06.9** | **+1.0** |
| | SNR=142 | | | | | | |
| LKRN | | | | S | **Sn** | **17 20 18.5** | **+1.0** |
| **LRK** | **Lerik** | **0.88** | **313** | ⇑P | **Pn** | **17 20 08.0** | **-0.2** |
| | SNR=2009 | | | | | | |
| LRK | | | | ⇑S | **Sb** | **17 20 20.3** | **+1.4** |
| **ISRB** | **Sarab** | **1.20** | **260** | *e*Pg | **Pg** | **17 20 11.5** | **-0.6** |
| ISRB | | | | *e* | | 17 20 27.1 | |
| | comp=Z,15μm,0.2s | | | | | | |
| **ISRB** | **Sarab** | **1.20** | **260** | Pg | **Pg** | **17 20 11.4** | **-0.6** |
| **ISRB** | **Sarab** | **1.20** | **260** | Pg | **Pg** | **17 20 11.4** | **-0.6** |
| **GLBA** | **Clilabad** | **1.34** | **334** | ⇓P | **Pb** | **17 20 15.8** | **+1.3** |
| | SNR=11 | | | | | | |
| GLBA | | | | ⇑S | **Sn** | **17 20 34.2** | **+1.7** |
| **GLBA** | **Clilabad** | **1.34** | **334** | P | **Pb** | **17 20 15.8** | **+1.3** |
| | SNR=11 | | | | | | |
| GLBA | | | | S | **Sn** | **17 20 34.2** | **+1.7** |
| **ZNJK** | **Zanjan** | **1.42** | **195** | *e*Pg | **Pn** | **17 20 15.0** | **-0.8** |
| ZNJK | | | | AML | AML | 17 20 35.5 | |
| | comp=E,2μm,0.2s | | | | | | |
| **ZNJK** | **Zanjan** | **1.42** | **195** | *e*Pg | **Pn** | **17 20 15.0** | **-0.8** |
| **IHRS** | **Heris** | **1.69** | **280** | *e*Pn | **Pn** | **17 20 20.1** | **+0.7** |
| IHRS | | | | *e*Sg | **Sb** | **17 20 42.6** | **+0.3** |
| IHRS | | | | *e* | | 17 20 44.0 | |
| | comp=Z,30μm,0.1s | | | | | | |
| **IHRS** | **Heris** | **1.69** | **280** | Pn | **Pn** | **17 20 20.1** | **+0.7** |
| **IHRS** | **Heris** | **1.69** | **280** | *e*Pn | **Pn** | **17 20 20.1** | **+0.7** |
| IHRS | | | | *e*Sg | **Sb** | **17 20 42.6** | **+0.3** |
| **IBST** | **Bostanabad** | **1.82** | **260** | *e*Pn | **Pn** | **17 20 21.1** | **-0.1** |
| IBST | | | | *e*Sn | **Sn** | **17 20 45.1** | **+0.3** |
| IBST | | | | *e* | | 17 20 45.8 | |
| | comp=Z,21μm,0.3s | | | | | | |
| **IBST** | **Bostanabad** | **1.82** | **260** | Pn | **Pn** | **17 20 21.1** | **-0.1** |
| **IBST** | **Bostanabad** | **1.82** | **260** | *e*Pn | **Pn** | **17 20 21.1** | **-0.1** |
| IBST | | | | *e*Sn | **Sn** | **17 20 45.1** | **+0.3** |
| **IGZV** | **Ghazvin** | **1.86** | **153** | *e*Pn | **Pn** | **17 20 22.3** | **+0.5** |
| IGZV | | | | *e* | | 17 20 54.9 | |
| | comp=Z,12μm,0.2s | | | | | | |
| **IGZV** | **Ghazvin** | **1.86** | **153** | *e*Pn | **Pn** | **17 20 22.3** | **+0.5** |
| **SAAT** | **Saatly** | **1.90** | **343** | ⇑P | **Pg** | **17 20 25.0** | **-0.4** |
| | SNR=4.0 | | | | | | |
| SAAT | | | | ⇓S | **Sg** | **17 20 50.5** | **+0.4** |
| **SAAT** | **Saatly** | **1.90** | **343** | P | **Pg** | **17 20 25.0** | **-0.4** |
| | SNR=4.0 | | | | | | |
| SAAT | | | | S | **Sg** | **17 20 50.5** | **+0.4** |
| **ALIB** | **Äli-Bayra** | **1.91** | **357** | ⇑P | **Pg** | **17 20 25.2** | **-0.5** |
| ALIB | | | | ⇓S | **Sg** | **17 20 51.6** | **+1.1** |
| **ALIB** | **Äli-Bayra** | **1.91** | **357** | P | **Pg** | **17 20 25.2** | **-0.5** |
| **ITBZ** | **Tabriz** | **2.38** | **275** | *e*Pn | **Pn** | **17 20 29.5** | **+0.7** |
| ITBZ | | | | *e* | | 17 21 08.9 | |
| | comp=Z,9μm,0.2s | | | | | | |
| **ITBZ** | **Tabriz** | **2.38** | **275** | *e*Pn | **Pn** | **17 20 29.5** | **+0.7** |
| **GOBA** | **Gobu** | **2.40** | **11** | ⇓P | **Pb** | **17 20 32.9** | **+0.3** |
| GOBA | | | | ⇓S | **Sg** | **17 21 04.3** | **-1.6** |
| **GOBA** | **Gobu** | **2.40** | **11** | P | **Pb** | **17 20 32.9** | **+0.3** |
| **KDMR** | **Kurdemir** | **2.45** | **342** | ⇓P | **Pb** | **17 20 32.6** | **-0.9** |
| KDMR | | | | ⇑S | **Sb** | **17 21 02.0** | **-1.9** |
| **KDMR** | **Kurdemir** | **2.45** | **342** | P | **Pb** | **17 20 32.6** | **-0.9** |
| KDMR | | | | S | **Sb** | **17 21 02.0** | **-1.9** |
| **GALA** | **Gala** | **2.49** | **18** | ⇓Sn | **Sb** | **17 21 05.4** | **+0.3** |
| **IAZR** | **Azarshahr** | **2.54** | **263** | *e*Pn | **Pn** | **17 20 32.3** | **+1.2** |
| IAZR | | | | *e* | | 17 20 40.2 | |
| | comp=Z,19μm,0.2s | | | | | | |
| **IAZR** | **Azarshahr** | **2.54** | **263** | *e*Pn | **Pn** | **17 20 32.3** | **+1.2** |
| **IMHD** | **Mahdasht** | **2.65** | **152** | *e*Pn | **Pn** | **17 20 33.6** | **+1.2** |
| IMHD | | | | *e* | | 17 21 20.4 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **IMHD** | **Mahdasht** | **2.65** | **152** | *e*Pn | **Pn** | **17 20 33.7** | **+1.2** |
| **CHTH** | **Charan** | **2.65** | **143** | *e*Pn | **Pn** | **17 20 34.5** | **+1.8** |
| **CHTH** | **Charan** | **2.65** | **143** | *e*Pn | **Pn** | **17 20 34.5** | **+1.8** |
| **BRDA** | **Brd** | **2.70** | **326** | ⇑P | **Pb** | **17 20 35.9** | **-1.8** |
| | SNR=23 | | | | | | |
| BRDA | | | | ⇑S | **Sn** | **17 21 08.1** | **+2.1** |
| **BRDA** | **Brd** | **2.70** | **326** | P | **Pb** | **17 20 35.9** | **-1.8** |
| | SNR=23 | | | | | | |
| BRDA | | | | S | **Sn** | **17 21 08.1** | **+2.1** |
| **IRAZ** | **Razeghan** | **2.71** | **166** | *e*Pn | **Pn** | **17 20 33.5** | **+0.1** |
| IRAZ | | | | *e* | | 17 21 19.6 | |
| | comp=Z,6μm,0.4s | | | | | | |
| **IRAZ** | **Razeghan** | **2.71** | **166** | *e*Pn | **Pn** | **17 20 33.5** | **+0.1** |
| **PQL** | **Pirkuli** | **2.77** | **351** | ⇓P | **Pb** | **17 20 36.9** | **-2.3** |
| | SNR=5.4 | | | | | | |
| PQL | | | | ⇑Sn | **Sb** | **17 21 11.2** | **-2.3** |
| **PQL** | **Pirkuli** | **2.77** | **351** | P | **Pb** | **17 20 36.9** | **-2.3** |
| | SNR=5.4 | | | | | | |
| PQL | | | | Sn | **Sb** | **17 21 11.2** | **-2.3** |
| **IMRD** | **Marand** | **2.79** | **285** | *e*Pn | **Pn** | **17 20 36.5** | **+1.9** |
| IMRD | | | | *e* | | 17 21 24.5 | |
| | comp=Z,26μm,0.2s | | | | | | |
| **IMRD** | **Marand** | **2.79** | **285** | Pn | **Pn** | **17 20 36.4** | **+1.9** |
| **IMRD** | **Marand** | **2.79** | **285** | *e*Pn | **Pn** | **17 20 36.5** | **+1.9** |
| **ISHB** | **Shabestar** | **2.80** | **276** | *e*Pn | **Pn** | **17 20 36.0** | **+1.3** |
| ISHB | | | | *e* | | 17 20 48.6 | |
| | comp=Z,9μm,0.2s | | | | | | |
| **ATGJ** | **Altiaghaj** | **2.82** | **357** | ⇓Pn | **Pb** | **17 20 38.1** | **-1.8** |
| | SNR=3.0 | | | | | | |
| **ATGJ** | **Altiaghaj** | **2.82** | **357** | Pn | **Pb** | **17 20 38.1** | **-1.8** |
| | SNR=3.0 | | | | | | |
| **IML** | **Ismayilli** | **2.85** | **345** | ⇑Pn | **Pn** | **17 20 37.4** | **+2.2** |
| | SNR=12 | | | | | | |
| IML | | | | ⇑Sn | **Sn** | **17 21 10.7** | **+0.9** |
| **IML** | **Ismayilli** | **2.85** | **345** | Pn | **Pn** | **17 20 37.4** | **+2.2** |
| | SNR=12 | | | | | | |
| IML | | | | Sn | **Sn** | **17 21 10.7** | **+0.9** |
| **IR3** | **Iran Long-Peri** | **2.97** | **149** | *e*Pn | **Pn** | **17 20 39.4** | **+2.5** |
| **IR3** | **Iran Long-Peri** | **2.97** | **149** | *e*Pn | **Pn** | **17 20 39.4** | **+2.5** |
| **IAFJ** | **Afjeh** | **3.00** | **136** | *e*Pn | **Pn** | **17 20 39.5** | **+2.0** |
| IAFJ | | | | *e* | | 17 21 18.3 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **IAFJ** | **Afjeh** | **3.00** | **136** | Pn | **Pn** | **17 20 39.4** | **+2.0** |
| **IAFJ** | **Afjeh** | **3.00** | **136** | *e*Pn | **Pn** | **17 20 39.5** | **+2.0** |
| **SIZA** | **Siyzn** | **3.03** | **356** | ⇓Pn | **Pb** | **17 20 41.5** | **-2.1** |
| | SNR=5.3 | | | | | | |
| SIZA | | | | ⇑Sn | **Sb** | **17 21 19.8** | **-1.1** |
| **SIZA** | **Siyzn** | **3.03** | **356** | Pn | **Pb** | **17 20 41.5** | **-2.1** |
| | SNR=5.3 | | | | | | |
| **IR5** | **Iran Long-Peri** | **3.05** | **157** | *e*Pn | **Pn** | **17 20 38.8** | **+0.8** |
| **IR5** | **Iran Long-Peri** | **3.05** | **157** | *e*Pn | **Pn** | **17 20 38.8** | **+0.8** |
| **NAX** | **Nakhchivan** | **3.08** | **293** | ⇓Pn | **Pn** | **17 20 41.5** | **+3.1** |
| | SNR=8.8 | | | | | | |
| **NAX** | **Nakhchivan** | **3.08** | **293** | Pn | **Pn** | **17 20 41.5** | **+3.1** |
| | SNR=8.8 | | | | | | |
| **IPRN** | **Peran** | **3.12** | **124** | *e*Pn | **Pn** | **17 20 40.4** | **+1.5** |
| IPRN | | | | *e* | | 17 21 18.6 | |
| | comp=Z,19μm,0.1s | | | | | | |
| **MNGR** | **Mingechevir, A** | **3.16** | **330** | ⇓Pn | **Pn** | **17 20 41.8** | **+2.4** |
| **MNGR** | **Mingechevir, A** | **3.16** | **330** | Pn | **Pn** | **17 20 41.8** | **+2.4** |
| **SNGE** | **Sanandaj** | **3.29** | **207** | *e*Pn | **Pn** | **17 20 42.5** | **+1.2** |
| **SNGE** | **Sanandaj** | **3.29** | **207** | *e*Pn | **Pn** | **17 20 42.5** | **+1.2** |
| **QUBA** | **Quba, Azerbaij** | **3.34** | **351** | ⇑Pn | **Pb** | **17 20 45.9** | **-2.9** |
| QUBA | | | | ⇑Sn | **Sb** | **17 21 26.0** | **-3.8** |
| **QUBA** | **Quba, Azerbaij** | **3.34** | **351** | Pn | **Pb** | **17 20 45.9** | **-2.9** |
| QUBA | | | | Sn | **Sb** | **17 21 26.0** | **-3.8** |
| **IDMV** | **Damavand** | **3.38** | **136** | *e*Pn | **Pn** | **17 20 45.0** | **+2.4** |
| IDMV | | | | *e* | | 17 20 46.7 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **IDMV** | **Damavand** | **3.38** | **136** | *e*Pn | **Pn** | **17 20 45.0** | **+2.4** |
| **GANJ** | **Ganja** | **3.40** | **321** | ⇑Pn | **Pn** | **17 20 43.9** | **+1.1** |
| | SNR=15 | | | | | | |
| GANJ | | | | ⇓Sn | **Sn** | **17 21 23.8** | **+0.3** |
| **GANJ** | **Ganja** | **3.40** | **321** | Pn | **Pn** | **17 20 43.9** | **+1.1** |
| | SNR=15 | | | | | | |
| GANJ | | | | Sn | **Sn** | **17 21 23.8** | **+0.3** |
| **SEKA** | **Sheki** | **3.50** | **335** | ⇓Pn | **Pn** | **17 20 46.1** | **+1.9** |
| | SNR=34 | | | | | | |
| SEKA | | | | ⇑Sn | **Sn** | **17 21 27.5** | **+1.5** |
| **SEKA** | **Sheki** | **3.50** | **335** | Pn | **Pn** | **17 20 46.1** | **+1.9** |
| | SNR=34 | | | | | | |
| SEKA | | | | Sn | **Sn** | **17 21 27.5** | **+1.5** |
| **IALA** | **Alasht** | **3.52** | **123** | *e*Pn | **Pn** | **17 20 46.4** | **+1.7** |
| IALA | | | | *e* | | 17 21 32.0 | |
| | comp=Z,5μm,0.2s | | | | | | |
| **IALA** | **Alasht** | **3.52** | **123** | Pn | **Pn** | **17 20 46.3** | **+1.7** |
| **IALA** | **Alasht** | **3.52** | **123** | *e*Pn | **Pn** | **17 20 46.3** | **+1.7** |
| **ILIN** | **Lien** | **3.59** | **210** | *e*Pn | **Pn** | **17 20 46.0** | **+0.5** |
| ILIN | | | | *e* | | 17 21 40.4 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **ILIN** | **Lien** | **3.59** | **210** | *e*Pn | **Pn** | **17 20 46.0** | **+0.5** |
| **IFIR** | **Firoozkooh** | **3.75** | **129** | *e*Pn | **Pn** | **17 20 50.8** | **+3.0** |
| IFIR | | | | *e* | | 17 20 52.8 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **IFIR** | **Firoozkooh** | **3.75** | **129** | *e*Pn | **Pn** | **17 20 50.8** | **+3.0** |
| **IVIS** | **Veis** | **3.98** | **209** | *e*Pn | **Pn** | **17 20 52.8** | **+2.1** |
| IVIS | | | | *e* | | 17 22 05.7 | |
| | comp=Z,1μm,0.5s | | | | | | |
| **IVIS** | **Veis** | **3.98** | **209** | *e*Pn | **Pn** | **17 20 52.8** | **+2.1** |
| **IDHR** | **Dehrash** | **4.02** | **215** | *e*Pn | **Pn** | **17 20 53.1** | **+1.7** |
| IDHR | | | | *e* | | 17 22 07.5 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **IDHR** | **Dehrash** | **4.02** | **215** | *e*Pn | **Pn** | **17 20 53.1** | **+1.7** |
| **GNI** | **Garni** | **4.03** | **303** | *i* P | Pn | 17 20 54.9 | +3.4 |
| **GNI** | **Garni** | **4.03** | **303** | *e*Pn | Pn | 17 20 54.8 | +3.3 |
| **GNI** | **Garni** | **4.03** | **303** | *e*Pn | Pn | 17 20 54.8 | +3.3 |
| **IGLO** | **Ghaloghah** | **4.03** | **111** | *e*Pn | **Pn** | **17 20 53.1** | **+1.5** |
| IGLO | | | | *e* | | 17 21 46.0 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **ZKTA** | **Zakatala** | **4.08** | **332** | ⇑Pn | **Pn** | **17 20 54.8** | **+2.7** |
| | SNR=37 | | | | | | |
| ZKTA | | | | ⇑Sn | **Sn** | **17 21 42.1** | **+1.8** |
| **QZX** | **Qazax, Azerbai** | **4.20** | **317** | ⇓Pn | **Pn** | **17 20 56.1** | **+2.4** |
| | SNR=4.9 | | | | | | |
| **QZX** | **Qazax, Azerbai** | **4.20** | **317** | Pn | **Pn** | **17 20 56.1** | **+2.4** |
| | SNR=4.9 | | | | | | |
| **IGHG** | **Ghaleghazi** | **4.26** | **210** | *e*Pn | **Pn** | **17 20 56.7** | **+1.9** |
| IGHG | | | | *e* | | 17 21 38.3 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **IGHG** | **Ghaleghazi** | **4.26** | **210** | Pn | **Pn** | **17 20 56.6** | **+1.9** |
| **IGHG** | **Ghaleghazi** | **4.26** | **210** | Pn | **Pn** | **17 20 56.6** | **+1.9** |
| **HAKT** | **HAKKARI** | **4.34** | **265** | *i* P | **Pn** | **17 20 59.0** | **+3.1** |
| **HAKT** | **HAKKARI** | **4.34** | **265** | P | **Pn** | **17 20 59.0** | **+3.1** |
| **KHMZ** | **Khomeyn** | **4.35** | **171** | *e*Pn | **Pn** | **17 20 57.5** | **+1.6** |
| **KHMZ** | **Khomeyn** | **4.35** | **171** | *e*Pn | **Pn** | **17 20 57.5** | **+1.6** |
| **DGRG** | **David-gareji** | **4.48** | **321** | P | **Pn** | **17 21 00.4

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LPSR | | | | | pmax | pmax | | | |
| | comp=N,7.0nm,0.8s | | | | | | | | |
| LPSR | | | | | pmax | pmax | | | |
| | comp=E,6.0nm,1.1s | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **16.21** | **337** | *eP* | **P** | | **17 23 40.2** | **-0.3** |
| | comp=E,7.0nm,0.8s | | | | | | | | |
| **KK31** | **Karatay Array** | **16.98** | **66** | P | **Pn** | | **17 23 48.5** | **+1.3** |
| KK31 | | | | S | Sn | | 17 26 43.7 | -13 |
| | comp=E,2.9nm,0.9s,baz=194,slow=32,SNR=5.2 | | | | | | | | |
| **KK31** | **Karatay Array** | **16.98** | **66** | P | **Pn** | | **17 23 48.5** | **+1.3** |
| **KKAR** | **Karatay Array** | **16.98** | **66** | *eP* | **Pn** | | **17 23 47.6** | **+0.4** |
| KKAR | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | |
| **KKAR** | **Karatay Array** | **16.98** | **66** | *e*Pn | **Pn** | | **17 23 47.6** | **+0.4** |
| | comp=Z,3.4nm,0.5s | | | | | | | | |
| **KKAR** | **Karatay Array** | **16.98** | **66** | *e*Pn | **Pn** | | **17 23 47.6** | **+0.4** |
| | comp=Z,3.4nm,0.5s | | | | | | | | |
| **TLB** | **Topalu** | **17.13** | **299** | ⇑*i*P | **P** | | **17 23 51.5** | **+0.7** |
| **TLB** | **Topalu** | **17.13** | **299** | ⇑*i*P | **P** | | **17 23 51.5** | **+0.7** |
| **CFR** | **Carcaliu** | **17.23** | **301** | ⇑*i*P | **P** | | **17 23 53.9** | **+2.0** |
| **CFR** | **Carcaliu** | **17.23** | **301** | ⇑*i*P | **P** | | **17 23 53.9** | **+2.0** |
| **VRI** | **Vrincioaia** | **18.38** | **302** | ⇑*i*P | **P** | | **17 24 07.9** | **+3.3** |
| **VRI** | **Vrincioaia** | **18.38** | **302** | ⇑*i*P | **P** | | **17 24 07.9** | **+3.3** |
| **PLOR** | **Plostina** | **18.43** | **302** | ⇑*i*P | **P** | | **17 24 07.8** | **+2.6** |
| **PLOR** | **Plostina** | **18.43** | **302** | ⇑*i*P | **P** | | **17 24 07.8** | **+2.6** |
| **MLR** | **Muntele Rosu** | **18.80** | **301** | P | **Pn** | | **17 24 10.9** | **+1.1** |
| | comp=Z,0.1nm,0.3s,baz=96,slow=9.2,SNR=6.2 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **18.80** | **301** | ⇑*i*P | **Pn** | | **17 24 11.3** | **+1.5** |
| **SANT** | **Santorini** | **18.94** | **272** | P | **Pn** | | **17 24 12.5** | **+1.0** |
| | comp=Z,60nm,1.0s | | | | | | | | |
| **SANT** | **Santorini** | **18.94** | **272** | P | **Pn** | | **17 24 12.5** | **+1.0** |
| | comp=Z,60nm,1.0s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **18.98** | **318** | P | **P** | | **17 24 10.3** | **-0.8** |
| | comp=Z,1.0nm,0.3s,baz=126,slow=11,SNR=8.6 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **18.98** | **318** | *eP* | **Pn** | | **17 24 12.2** | **+0.4** |
| AKASG | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **18.98** | **318** | *eP* | **Pn** | | **17 24 12.2** | **+0.4** |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **KIEV** | **Kiev** | **18.98** | **318** | *i* P | **Pn** | | **17 24 12.0** | **+0.2** |
| KIEV | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **KIEV** | **Kiev** | **18.98** | **318** | *i* P | **Pn** | | **17 24 12.0** | **+0.2** |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **19.30** | **68** | *eP* | **Pn** | | **17 24 17.6** | **+1.8** |
| EKS2 | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **19.30** | **68** | *eP* | **Pn** | | **17 24 17.6** | **+1.8** |
| | comp=Z,7.2nm,0.7s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **19.30** | **68** | *eP* | **Pn** | | **17 24 17.6** | **+1.8** |
| | comp=Z,7.2nm,0.7s | | | | | | | | |
| **DOPR** | **Dopca** | **19.31** | **302** | ⇑*i*P | **Pn** | | **17 24 16.9** | **+1.1** |
| **DOPR** | **Dopca** | **19.31** | **302** | ⇑*i*P | **Pn** | | **17 24 16.9** | **+1.1** |
| **VOIR** | | **19.40** | **300** | ⇑*i*P | **Pn** | | **17 24 17.8** | **+0.8** |
| **VOIR** | | **19.40** | **300** | ⇑*i*P | **Pn** | | **17 24 17.8** | **+0.8** |
| **ARU** | **Arti** | **19.44** | **16** | P | **P** | | **17 24 16.7** | **+0.7** |
| | comp=Z,0.0nm,0.3s,baz=31,slow=19,SNR=2.5 | | | | | | | | |
| **ARU** | **Arti** | **19.44** | **16** | P | **P** | | **17 24 16.8** | **+0.7** |
| ARU | | | | S | **Sn** | | **17 27 53.4** | **-2.0** |
| **ARR** | **Arges** | **19.67** | **300** | ⇓*i*P | **P** | | **17 24 19.7** | **+0.9** |
| **ARR** | **Arges** | **19.67** | **300** | ⇓*i*P | **P** | | **17 24 19.7** | **+0.9** |
| **AAK** | **Ala-Archa** | **19.82** | **69** | P | **P** | | **17 24 20.2** | **-0.4** |
| | comp=Z,0.1nm,0.3s,baz=186,slow=10,SNR=2.6 | | | | | | | | |
| AAK | | | | LR | LR | | 17 32 47.7 | | |
| | comp=Z,39nm,18.1s,baz=238,slow=39 | | | | | | | | |
| **AAK** | **Ala-Archa** | **19.82** | **69** | *eP* | **P** | | **17 24 19.7** | **-0.9** |
| **BURAR** | **Bucovina Array** | **19.92** | **306** | ⇓*i*P | **Pn** | | **17 24 23.2** | **0.0** |
| **BURAR** | **Bucovina Array** | **19.92** | **306** | ⇓*i*P | **Pn** | | **17 24 23.2** | **0.0** |
| **LOT** | **Lotru** | **20.28** | **299** | ⇑*i*P | Pn | | 17 24 26.9 | -0.6 |
| **LOT** | **Lotru** | **20.28** | **299** | ⇑*i*P | Pn | | 17 24 26.9 | -0.6 |
| **ZRNK** | **Zerenda** | **20.29** | **36** | ⇑P | Pn | | 17 24 26.7 | -0.7 |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| ZRNK | | | | ⇑S | S | | 17 28 01.7 | -11 |
| **ZRNK** | **Zerenda** | **20.29** | **36** | P | Pn | | 17 24 26.7 | -0.7 |
| | comp=Z,5.1nm,0.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **20.66** | **68** | *eP* | P | | 17 24 23.2 | -6.6 |
| **TKM2** | **Tokmak 2** | **20.66** | **68** | *eP* | P | | 17 24 23.2 | -6.6 |
| **GZR** | **Gura Zlata** | **20.95** | **299** | ⇑*i*P | **P** | | **17 24 32.8** | **0.0** |
| **GZR** | **Gura Zlata** | **20.95** | **299** | ⇑*i*P | **P** | | **17 24 32.8** | **0.0** |
| **BRVK** | **Borovoye** | **20.96** | **37** | ⇓P | **P** | | **17 24 33.4** | **+0.7** |
| | comp=Z,15nm,1.1s | | | | | | | | |
| BRVK | | | | ⇓S | **S** | | **17 28 19.9** | **-6.6** |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **BRVK** | **Borovoye** | **20.96** | **37** | *eP* | **P** | | **17 24 34.1** | **+1.4** |
| BRVK | | | | *e*S | S | | 17 28 16.6 | -10 |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **BRVK** | **Borovoye** | **20.96** | **37** | *eP* | **P** | | **17 24 34.1** | **+1.4** |
| | comp=Z,9.1nm,1.0s | | | | | | | | |
| BRVK | | | | *e*S | S | | 17 28 16.6 | -10 |
| **BRVK** | **Borovoye** | **20.96** | **37** | *eP* | **P** | | **17 24 34.1** | **+1.4** |
| | comp=Z,9.1nm,1.0s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **20.99** | **38** | ⇑P | **P** | | **17 24 33.9** | **+0.9** |
| | comp=Z,6.8nm,0.8s,baz=234,slow=9.1,SNR=46 | | | | | | | | |
| BVA0 | | | | ⇑S | S | | 17 28 19.5 | -7.6 |
| | comp=Z,2.3nm,1.1s,baz=231,slow=26,SNR=3.8 | | | | | | | | |
| **BVA0** | **Borovoye Array** | **20.99** | **38** | P | **P** | | **17 24 33.9** | **+0.9** |
| | comp=Z,6.8nm,0.8s,SNR=46 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **20.99** | **38** | P | Pn | | 17 24 34.8 | -0.9 |
| | comp=Z,4.4nm,0.4s,baz=229,slow=9.7,SNR=43 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **20.99** | **38** | P | Pn | | 17 24 34.8 | -0.8 |
| BVAR | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.4s | | | | | | | | |
| **VOSK** | **Vostochnaya** | **21.10** | **39** | ⇑P | **P** | | **17 24 34.9** | **+0.7** |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| VOSK | | | | ⇓S | S | | 17 28 20.4 | -8.9 |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **DRGR** | | **21.31** | **303** | ⇑*i*P | **P** | | **17 24 38.4** | **+1.8** |
| **DRGR** | | **21.31** | **303** | ⇑*i*P | **P** | | **17 24 38.4** | **+1.8** |
| **CHKZ** | **Chkalovo** | **21.50** | **36** | ⇑P | **P** | | **17 24 39.2** | **+0.8** |
| | comp=Z,4.8nm,0.9s | | | | | | | | |
| **CHKZ** | **Chkalovo** | **21.50** | **36** | P | **P** | | **17 24 39.2** | **+0.8** |
| | comp=Z,4.8nm,0.9s | | | | | | | | |
| **BZS** | **Buzias** | **21.80** | **299** | ⇑*i*P | **P** | | **17 24 42.3** | **+0.6** |
| **BZS** | **Buzias** | **21.80** | **299** | ⇑*i*P | **P** | | **17 24 42.3** | **+0.6** |
| **SIRR** | **Siria** | **21.89** | **301** | ⇑*i*P | **P** | | **17 24 43.7** | **+0.9** |
| **SIRR** | **Siria** | **21.89** | **301** | ⇑*i*P | **P** | | **17 24 43.7** | **+0.9** |
| **UZH** | **Uzhgorod** | **22.11** | **307** | *eP* | **P** | | **17 24 43.3** | **-1.8** |
| UZH | | | | *e* | | | 17 25 07.7 | | |
| **DIVS** | **Divibare** | **22.73** | **295** | ⇑*i*P | **P** | | **17 24 49.8** | **-2.1** |
| **KLMR** | **Klimovskoe** | **23.62** | **348** | *eP* | P | | 17 25 08.8 | +8.1 |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,46nm,2.0s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.31** | **49** | ⇑P | **P** | | **17 25 08.2** | **+0.9** |
| | comp=Z,5.4nm,1.1s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.31** | **49** | P | **P** | | **17 25 09.2** | **+1.9** |
| | comp=Z,2.3nm,0.8s,baz=255,slow=9.4,SNR=16 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.31** | **49** | P | **P** | | **17 25 08.2** | **+0.9** |
| | comp=Z,5.4nm,1.1s | | | | | | | | |
| **KURK** | **Kurchatov** | **24.39** | **49** | P | **P** | | **17 25 09.2** | **+1.1** |
| KURK | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **24.39** | **49** | P | **P** | | **17 25 09.2** | **+1.1** |
| **KURK** | **Kurchatov** | **24.39** | **49** | P | **P** | | **17 25 09.1** | **+1.0** |
| **MORC** | **Moravsky Berou** | **25.42** | **308** | *eP* | **P** | | **17 25 17.5** | **0.0** |
| **MORC** | **Moravsky Berou** | **25.42** | **308** | *eP* | **P** | | **17 25 17.5** | **0.0** |
| **MORC** | **Moravsky Berou** | **25.42** | **308** | *eP* | **P** | | **17 25 17.5** | **0.0** |
| **MKAR** | **Makanchi Array** | **25.82** | **60** | P | **P** | | **17 25 22.8** | **+1.7** |
| | comp=Z,2.0nm,0.8s,baz=253,slow=9.7,SNR=6.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **25.82** | **60** | P | **P** | | **17 25 22.8** | **+1.7** |
| MKAR | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **ATD** | **Arta Tunnel** | **27.00** | **194** | LR | LR | | 17 36 44.2 | | |
| | comp=Z,20nm,18.8s,baz=356,slow=38 | | | | | | | | |
| **FINES** | **FINESS Array B** | **27.47** | **336** | P | **P** | | **17 25 37.5** | **+1.8** |
| | comp=Z,3.2nm,0.9s,baz=148,slow=12,SNR=7.4 | | | | | | | | |
| FINES | | | | LR | LR | | 17 36 32.8 | | |
| | comp=Z,25nm,18.5s,baz=137,slow=36 | | | | | | | | |
| **FINES** | **FINESS Array B** | **27.47** | **336** | P | **P** | | **17 25 37.5** | **+1.8** |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| FINES | | | | MLR | MLR | | | | |
| | comp=Z,25nm,18.5s | | | | | | | | |
| **GERES** | **GERESS Array B** | **27.68** | **304** | P | **P** | | **17 25 37.7** | **-0.2** |
| | comp=Z,1.1nm,0.7s,baz=105,slow=9.8,SNR=8.4 | | | | | | | | |
| **GERES** | **GERESS Array B** | **27.68** | **304** | P | **P** | | **17 25 37.7** | **-0.2** |
| GERES | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **CLL** | **Collm** | **28.61** | **309** | *eP* | **P** | | **17 25 46.0** | **0.0** |
| **CLL** | **Collm** | **28.61** | **309** | *eP* | **P** | | **17 25 46.0** | **0.0** |
| **CLL** | **Collm** | **28.61** | **309** | *eP* | **P** | | **17 25 46.0** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **29.05** | **45** | P | **P** | | **17 25 51.1** | **+1.2** |
| | comp=Z,0.4nm,0.4s,baz=251,slow=8.4,SNR=3.1 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **30.02** | **300** | P | **P** | | **17 25 58.3** | **-0.5** |
| | comp=Z,4.2nm,0.6s,baz=96,slow=10,SNR=13 | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **30.02** | **300** | P | **P** | | **17 25 58.3** | **-0.5** |
| DAVOX | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **VSL** | **Villasalto** | **30.88** | **285** | *eP* | **P** | | **17 26 03.5** | **-2.8** |
| **NOA** | **NORSAR Array B** | **32.95** | **327** | P | **P** | | **17 26 24.2** | **-0.1** |
| | comp=Z,0.8nm,0.8s,baz=120,slow=8.5,SNR=3.1 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **32.95** | **327** | P | **P** | | **17 26 24.2** | **-0.1** |
| NOA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **LSA** | **Lhasa** | **35.60** | **91** | *eP* | **P** | | **17 26 46.9** | **-1.2** |
| **LSA** | **Lhasa** | **35.60** | **91** | *eP* | **P** | | **17 26 46.9** | **-1.2** |
| **LSA** | **Lhasa** | **35.60** | **91** | *eP* | **P** | | **17 26 46.9** | **-1.2** |
| **MBAR** | **Mbarara** | **42.04** | **208** | P | P | | 17 27 38.1 | -3.7 |
| **MBAR** | **Mbarara** | **42.04** | **208** | P | P | | 17 27 38.1 | -3.7 |
| **ULN** | **Ulaanbaatar** | **42.59** | **57** | P | **P** | | **17 27 46.8** | **+0.8** |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **42.59** | **57** | P | **P** | | **17 27 46.8** | **+0.8** |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **42.59** | **57** | P | **P** | | **17 27 46.8** | **+0.8** |
| | comp=Z,1.9nm,0.7s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **47.37** | **66** | *eP* | **P** | | **17 28 25.1** | **+1.0** |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,27nm,0.9s | | | | | | | | |
| HHC | | | | pmax | pmax | | | | |
| | comp=Z,120nm,4.2s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.39** | **100** | P | **P** | | **17 28 24.8** | **+0.4** |
| | comp=Z,0.1nm,0.4s,baz=295,slow=7.5,SNR=4.5 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.39** | **100** | *eP* | **P** | | **17 28 26.0** | **+1.6** |

**DJA 23 17:38:33.7±1.8, 9°S±5.5°×11°4E±°, h39km±22km, M3.6/12, MLv3.6/12, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ABJI** | **Asem Bagus** | **1.61** | **25** | P | Pn | 17 39 00.8 | +1.2 |
| ABJI | | | | S | Sn | 17 39 20.3 | +1.2 |
| **IGBI** | **Denpasar** | **1.65** | **75** | P | Pn | 17 38 59.8 | -0.3 |
| IGBI | | | | S | Sn | 17 39 20.7 | +0.7 |
| **DNP** | **Denpasar** | **1.75** | **71** | P | Pn | 17 39 01.8 | +0.3 |
| DNP | | | | S | Sn | 17 39 23.5 | +0.9 |
| **SRBI** | **Singaraja** | **2.02** | **55** | P | Pn | 17 39 05.0 | -0.3 |
| **PWJI** | **Pagerwojo** | **2.11** | **305** | P | Pn | 17 39 05.4 | -1.1 |
| PWJI | | | | S | Sn | 17 39 29.4 | -2.1 |
| **KMMI** | **Kalianget** | **2.24** | **11** | P | Pn | 17 39 08.3 | +0.1 |
| **PCJI** | **Pacitan** | **2.56** | **294** | P | Pn | 17 39 12.3 | -0.4 |
| **UGM** | **Wanagama** | **3.27** | **294** | P | Pn | 17 39 23.0 | +0.5 |
| **TWSI** | **Taliwang, Sumb** | **3.34** | **81** | P | Pn | 17 39 23.4 | -0.1 |

*ISCJB **23** 17:59:55.8±0.8, 51°.43N±0°.04×16°.08E±0°.04, h0km, Error ellipse: s-maj=5.4km s-min=3.2km az=14.9*
*CSEM **23** 17:59:57.3±0.4, 51°.43N×16°.07E, h2km, ML3.0/6, Error ellipse: s-maj=6.7km s-min=3.8km az=5.0*

**ISC 23 17:59:57.5±1.1, 51°.45N±0°.05×16°.05E±0°.03, h0km, n30, σ0s41/50, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.62** | **166** | *e*Pg | **Pg** | **18 00 09.4** | **0.0** |
| KSP | | | | *e*Sg | **Sg** | **18 00 18.1** | **+0.6** |
| **KSP** | **Ksiaz** | **0.62** | **166** | *e*Pg | **Pg** | **18 00 09.4** | **0.0** |
| KSP | | | | *e*Sg | **Sg** | **18 00 18.1** | **+0.6** |
| **UPC** | **Upice** | **0.94** | **182** | *e*PG | **Pg** | **18 00 15.5** | **0.0** |
| UPC | | | | *e*SG | **Sg** | **18 00 28.3** | **+0.6** |
| | comp=Z,43nm,0.5s | | | | | | |
| **UPC** | **Upice** | **0.94** | **182** | Pg | **Pg** | **18 00 15.5** | **0.0** |
| UPC | | | | Sg | **Sg** | **18 00 28.3** | **+0.6** |
| | 43nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.11** | **171** | *e*PG | **Pg** | **18 00 18.2** | **-0.6** |
| DPC | | | | *e*SG | **Sg** | **18 00 33.1** | **-0.1** |
| | comp=Z,19nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.11** | **171** | Pg | **Pg** | **18 00 18.2** | **-0.6** |
| DPC | | | | Sg | **Sg** | **18 00 33.1** | **-0.1** |
| | 19nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **1.31** | **226** | *e*PG | **Pn** | **18 00 23.1** | **0.0** |
| PVCC | | | | *e*SG | **Sb** | **18 00 40.4** | **0.0** |
| | comp=Z,66nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.31** | **226** | Pg | **Pn** | **18 00 23.1** | **0.0** |
| PVCC | | | | Sg | **Sb** | **18 00 40.4** | **0.0** |
| | 66nm,0.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.45** | **247** | PN | **Pn** | **18 00 24.7** | **-0.2** |
| BRG | | | | PG | **Pb** | **18 00 25.2** | **-0.1** |
| BRG | | | | SG | **Sn** | **18 00 45.1** | **+0.5** |
| | 31nm,0.3s | | | | | | |
| **KRLC** | **Kraliky** | **1.45** | **161** | *e*PG | **Pn** | **18 00 24.5** | **-0.5** |
| **KRLC** | **Kraliky** | **1.45** | **161** | Pg | **Pn** | **18 00 24.5** | **-0.5** |
| **PRA** | **Prague** | **1.72** | **217** | *e*SG | **Sg** | **18 00 52.9** | **+0.2** |
| | comp=Z,6.8nm,0.2s | | | | | | |
| **PRA** | **Prague** | **1.72** | **217** | Sg | **Sg** | **18 00 52.9** | **+0.2** |
| | 6.8nm,0.2s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.73** | **208** | *e*SG | **Sg** | **18 00 53.1** | **-0.1** |
| **GOPC** | **GO Pecny, Ondr** | **1.73** | **208** | Sg | **Sg** | **18 00 53.1** | **-0.1** |
| **PRU** | **Pruhonice** | **1.75** | **214** | *e*PG | **Pb** | **18 00 30.1** | **-0.3** |
| PRU | | | | *e*SG | **Sg** | **18 00 53.7** | **+0.1** |
| | comp=Z,3.1nm,0.2s | | | | | | |
| **PRU** | **Pruhonice** | **1.75** | **214** | Pg | **Pb** | **18 00 30.1** | **-0.3** |
| PRU | | | | Sg | **Sg** | **18 00 53.7** | **+0.1** |
| | 3.1nm,0.2s | | | | | | |
| **CLL** | **Collm** | **1.92** | **267** | *e*Pg | **Pb** | **18 00 33.0** | **-0.3** |
| CLL | | | | *e*Sg | **Sg** | **18 00 59.0** | **0.0** |
| CLL | | | | Lm | MLR | 19 38 00.0 | |
| | comp=N,100nm,18.9s | | | | | | |
| CLL | | | | Lm | MLR | 19 38 00.0 | |
| | comp=E,100nm,22.0s | | | | | | |
| CLL | | | | Lm | MLR | 19 38 00.0 | |
| | comp=Z,200nm,20.2s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.92** | **150** | *e*Pn | **Pn** | **18 00 30.2** | **-1.3** |
| MORC | | | | *e*Sg | **Sn** | **18 00 56.5** | **+0.1** |
| **OKC** | **Ostrava-Krasne** | **2.09** | **140** | *e*SG | **Sb** | **18 01 02.7** | **-0.1** |
| **OKC** | **Ostrava-Krasne** | **2.09** | **140** | Sg | **Sb** | **18 01 02.7** | **-0.1** |
| **VRAC** | **Vranov** | **2.17** | **171** | *e*Sg | **Sb** | **18 01 05.4** | **+0.4** |
| **TREC** | **Trest** | **2.19** | **190** | *e*SG | **Sg** | **18 01 07.8** | **+0.1** |
| **TREC** | **Trest** | **2.19** | **190** | Sg | **Sg** | **18 01 07.8** | **+0.1** |
| **NKC** | **Novy Kostel** | **2.59** | **243** | *e*PN | **Pn** | **18 00 40.9** | **+0.3** |
| NKC | | | | *e*PG | **Pg** | **18 00 46.6** | **-0.5** |
| NKC | | | | *e*SG | **Sg** | **18 01 21.3** | **+0.7** |
| | comp=Z,13nm,0.3s | | | | | | |
| **NKC** | **Novy Kostel** | **2.59** | **243** | Pn | **Pn** | **18 00 40.9** | **+0.3** |
| **OJC** | **Ojcow** | **2.67** | **116** | *e*Pg | **Pg** | **18 00 48.8** | **+0.1** |
| OJC | | | | *e*Sg | **Sg** | **18 01 23.7** | **+0.4** |
| **OJC** | **Ojcow** | **2.67** | **116** | *e*Pg | **Pg** | **18 00 48.8** | **+0.1** |
| OJC | | | | *e*Sg | **Sg** | **18 01 23.7** | **+0.4** |
| **KHC** | **Kasperske Hory** | **2.81** | **215** | *e*PN | **Pn** | **18 00 43.7** | **0.0** |
| KHC | | | | *e*PG | **Pb** | **18 00 49.4** | **+0.9** |
| KHC | | | | *e*SG | **Sg** | **18 01 26.8** | **-0.9** |
| **KHC** | **Kasperske Hory** | **2.81** | **215** | Pn | **Pn** | **18 00 43.7** | **0.0** |

*IDC **23** 18:03:58.2±1.5, 35°.92N×23°.37E, h0km, mb3.5/3, mb1 3.5/3, mb1mx3.2/39, mbtmp3.5/3, Error ellipse: s-maj=29.0km s-min=18.0km az=19.0*
*ISCJB **23** 18:03:59.9±1.0, 33°.88N±0°.06×25°.3E±0°.1, h20km, mb3.4/3, Error ellipse: s-maj=13.8km s-min=9.1km az=178.7*
*ATH **23** 18:04:02.8, 34°.04N×25°.11E, h38km, MD3.2/7*
*CSEM **23** 18:04:02.8, 34°.03N×25°.12E, h40km, MD3.2, After ATH*

**ISC 23 18:04:01.7±1.4, 33°.98N±0°.09×25°.18E±0°.08, h20km, n18, σ0s52/22, mb3.5/3, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIVA** | **Sivas** | **1.08** | **344** | *e*PB | **Pb** | **18 04 21.4** | **-0.3** |
| SIVA | | | | *e*SN | **Sn** | **18 04 36.6** | **+0.6** |
| **SIVA** | **Sivas** | **1.08** | **344** | *e*P | **Pb** | **18 04 21.4** | **-0.3** |
| SIVA | | | | *e*S | **Sn** | **18 04 36.6** | **+0.6** |
| **LAST** | **Lasithi** | **1.20** | **12** | *e*PN | **Pb** | **18 04 24.2** | **+0.3** |
| LAST | | | | *e*SN | **Sn** | **18 04 39.1** | **-0.2** |
| **LAST** | **Lasithi** | **1.20** | **12** | *e*P | **Pb** | **18 04 24.2** | **+0.3** |
| LAST | | | | *e*S | **Sn** | **18 04 39.1** | **-0.2** |
| **GVD** | **Gavdhos** | **1.24** | **314** | *e*PN | **Pb** | **18 04 24.1** | **-0.4** |
| **GVD** | **Gavdhos** | **1.24** | **314** | *e*P | **Pb** | **18 04 24.1** | **-0.4** |
| **IDI** | **Anoyia** | **1.32** | **350** | Pg | **Pn** | **18 04 24.7** | **-0.4** |
| | 8.5nm,0.3s,baz=168,slow=13,SNR=38 | | | | | | |
| IDI | | | | Lg | Lg | 18 04 42.4 | |
| | 8.9nm,0.3s,baz=217,slow=23,SNR=6.2 | | | | | | |
| **IDI** | **Anoyia** | **1.32** | **350** | *e*PB | **Pn** | **18 04 25.2** | **0.0** |
| **IDI** | **Anoyia** | **1.32** | **350** | *e*P | **Pn** | **18 04 25.2** | **0.0** |
| **NPS** | **Neapolis** | **1.33** | **15** | *e*PN | **Pb** | **18 04 26.2** | **+0.3** |
| **NPS** | **Neapolis** | **1.33** | **15** | *e*P | **Pb** | **18 04 26.2** | **+0.3** |
| **VAM** | **Vamos** | **1.64** | **331** | *e*PN | **Pn** | **18 04 29.9** | **+0.5** |
| **VAM** | **Vamos** | **1.64** | **331** | *e*P | **Pn** | **18 04 29.9** | **+0.5** |
| **IMMV** | **Iera Moni Meta** | **1.77** | **327** | *e*PN | **Pn** | **18 04 31.6** | **+0.3** |
| **IMMV** | **Iera Moni Meta** | **1.77** | **327** | *e*P | **Pn** | **18 04 31.6** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **29.76** | **231** | P | **P** | **18 10 07.8** | **+0.8** |
| | 0.2nm,0.4s,baz=33,slow=8.2,SNR=7.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.42** | **56** | P | **P** | **18 12 10.6** | **-0.5** |
| | 0.4nm,0.6s,baz=286,slow=7.2,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.81** | **45** | P | **P** | **18 12 20.6** | **-1.4** |
| | 0.4nm,0.4s,baz=265,slow=8.7,SNR=2.9 | | | | | | |

*IDC **23** 18:09:33.1±1.9, 10°.84S×120°.13E, h0km, mb3.8/3, mb1 3.9/6, mb1mx3.6/31, mbtmp3.8/6, ML3.7/3, MS4.0/2, Ms1 4.0/2, ms1mx2.8/29, Error ellipse: s-maj=64.2km s-min=24.9km az=41.0*
*ISCJB **23** 18:09:36.7±0.6, 10°.78S±0°.04×120°.35E±0°.05, h31km, mb4.2/5, MS4.6/1, Error ellipse: s-maj=6.7km s-min=5.6km az=170.2*
*NEIC **23** 18:09:38.4±0.8, 10°.67S×120°.32E, h35km, mb4.5/3, Error ellipse: s-maj=14.8km s-min=13.4km az=71.0*
*DJA **23** 18:09:39.6±0.7, 11°.5S±4°.×12°.1E±°, h13km±3km, M3.8/6, MLv3.8/6*
*AUST **23** 18:09:47.7, 11°.00S×120°.97E, h100km*

**ISC 23 18:09:39.4±0.7, 10°.66S±0°.05×120°.47E±0°.05, h31km, n26, σ2s12/30, mb4.1/5, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BASI** | **Baing, Sumba** | **0.45** | **14** | P | **Pb** | **18 09 47.9** | **-1.2** |
| BASI | | | | S | **Sb** | **18 09 53.1** | **-2.6** |
| **WSI** | **Waingapu** | **0.99** | **350** | P | **Pn** | **18 09 57.5** | **+0.3** |
| WSI | | | | S | **Sb** | **18 10 12.1** | **+1.2** |
| **MMRI** | **Maumere** | **2.66** | **41** | P | **Pn** | **18 10 20.0** | **-0.1** |
| MMRI | | | | S | **Sn** | **18 10 54.8** | **+3.4** |
| **MMRI** | **Maumere** | **2.66** | **41** | *e*Pn | **Pn** | **18 10 18.6** | **-1.5** |
| **BATI** | **Baumata** | **3.17** | **82** | Pn | **Pn** | **18 10 29.6** | **+2.3** |
| | 23nm,0.3s,baz=289,slow=2.3,SNR=65 | | | | | | |
| BATI | | | | Sn | **Sn** | **18 11 06.4** | **+2.3** |
| | 7.1nm,0.3s,baz=191,slow=14,SNR=8.3 | | | | | | |
| **BATI** | **Baumata** | **3.17** | **82** | P | **Pn** | **18 10 29.5** | **+2.3** |
| BATI | | | | S | **Sn** | **18 11 07.7** | **+3.6** |
| **SOEI** | **Soe** | **3.84** | **77** | P | **Pn** | **18 10 39.2** | **+2.7** |
| | baz=3.5,SNR=8.8 | | | | | | |
| **SOEI** | **Soe** | **3.84** | **77** | P | **Pn** | **18 10 38.8** | **+2.2** |
| SOEI | | | | S | **Sn** | **18 11 24.3** | **+3.5** |
| **SOEI** | **Soe** | **3.84** | **77** | *e*Pn | **Pn** | **18 10 38.5** | **+2.0** |
| **TWSI** | **Taliwang, Sumb** | **4.02** | **298** | P | **Pn** | **18 10 40.2** | **+1.4** |
| TWSI | | | | S | **Sn** | **18 11 29.1** | **+4.2** |
| **BBSI** | **Bau Bau** | **5.54** | **22** | P | **Pb** | **18 11 15.7** | **+0.3** |
| BBSI | | | | S | **Sn** | **18 12 05.5** | **+3.0** |
| **KAPI** | **Kappang** | **5.65** | **353** | LR | LR | 18 13 31.8 | |
| | comp=Z,214nm,18.7s,baz=219,slow=41 | | | | | | |
| **KNRA** | **Kununurra** | **9.49** | **123** | P | **Pn** | **18 11 54.5** | **+0.5** |
| | baz=8.9,SNR=14 | | | | | | |
| **MBWA** | **Marble Bar** | **10.47** | **184** | Pn | **Pn** | **18 12 07.0** | **-0.4** |
| MBWA | | | | *e*Sn | Sn | 18 13 51.1 | -13 |
| **MTN** | **Manton Dam** | **10.67** | **103** | P | **Pn** | **18 12 10.5** | **+0.4** |
| | baz=10,SNR=5.6 | | | | | | |
| **MEEK** | **Meekatharra** | **15.99** | **186** | P | **P** | **18 13 25.6** | **+0.2** |
| | baz=16,SNR

*ISCJB **23** 18:37:54.0±0.4, 9.33N±0.02×125.76E±0.03, h39km±3km, mb4.7/89, MS4.1/31, Error ellipse: s-maj=4.8km s-min=2.8km az=163.2*

*MAN **23** 18:37:55, 9.27N×125.50E, h53km, mb5.3, ML4.3, MS4.5*

*MAN INTENSITY V - JABONGA AGUSAN DEL NORTE.*

*GCMT **23** 18:37:56.2±0.2, 9.29N×125.55E, h28km±1km, MW5.1/84, Moment Tensor Solution. s24,c30; s84,c132; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$=0.85±.20; $M_{\theta\theta}$=1.21±.13; $M_{\phi\phi}$-2.06±.16; $M_{r\theta}$-2.70±.26; $M_{r\phi}$-3.46±.10; $M_{\theta\phi}$~1.55±.26; Best double couple: $M_o$=4.86900×$10^{16}$ NP1:$\phi_s$=346.00000°, $\delta$50.00000°, $\lambda$4.00000°. Principal axes: T 4.2430, Plg30.0000°, Azm202.0000°; N 1.2480, Plg50.0000°, Azm69.0000°; P -5.4940, Plg24.0000°, Azm307.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*IDC **23** 18:37:56.1±1.8, 9.28N×125.69E, h44km±17km, mb4.2/32, mb1 4.3/36, mb1mx4.3/40, mbtmp4.5/36, ML4.7/3, MS4.1/28, Ms1 4.1/28, ms1mx4.0/36 Error ellipse: s-maj=14.2km s-min=9.1km az=81.0*

*NEIC **23** 18:37:56.2±0.7, 9.27N×125.73E, h46km±7km, mb5.0/33, Error ellipse: s-maj=6.2km s-min=4.0km az=73.0*

*NEIC Felt [V PIVS] at Jabonga; [IV PIVS] at Butuan and Cabadbaran; [III PIVS] at Mainit and Placer; [II PIVS] at Surigao. Also felt at Cagayan de Oro and Gingoog.*

*KLM **23** 18:37:58.7, 9.19N×125.82E, h53km, mb5.0, MS6.0*

*AUST **23** 18:38:01.5±1.3, 8.92N×125.67E, h80km±9km, Error ellipse: s-maj=12.3km s-min=8.6km az=39.0*

*DJA **23** 18:38:06.6±0.5, 9°N±4'×12°6E±', h59km±5km, M4.8/51, mb5.0/51, mB5.3/36, MLv5.4/4, Mw(mB)4.7/36*

**ISC 23 18:37:54.0**±0.4, **9.34N**±0.02×**125.75E**±0.04, **h27**km±2km, **h26**km:**pP-P, n320,** σ1§**59**/346, **mb4.8**/90, **MS4.1**/31, **15C-17D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SCPH** | **Surigao** | **0.51** | **330** | ⇑*i* | *i* | P | **Pb** | **18 38 04.0** | **-0.5** |
| SCPH | | | | | *i* | S | **Sb** | **18 38 12.8** | **+1.2** |
| **MSLP** | **Maasin** | **1.18** | **312** | *e* | *e* | P | **Pn** | **18 38 14.0** | **-0.9** |
| MSLP | | | | | *e* | S | **Sn** | **18 38 27.9** | **-2.2** |
| **BIPH** | **Bislig** | **1.29** | **152** | ⇑*i* | *i* | P | **Pn** | **18 38 17.2** | **+0.8** |
| BIPH | | | | | *i* | S | **Sb** | **18 38 35.3** | **+1.3** |
| **BUKP** | **Musuan** | **1.60** | **205** | *e* | *e* | P | **Pn** | **18 38 19.8** | **-0.9** |
| BUKP | | | | | *e* | S | **Sn** | **18 38 41.2** | **+0.7** |
| **TBP** | **Tagbilaran** | **1.90** | **281** | ⇓*e* | *e* | P | **Pn** | **18 38 22.8** | **-1.8** |
| TBP | | | | | *e* | S | **Sn** | **18 38 42.8** | **-4.9** |
| **PLP** | **Palo** | **1.97** | **337** | ⇓*e* | *e* | P | **Pn** | **18 38 28.0** | **+2.4** |
| PLP | | | | | *e* | S | **Sb** | **18 38 56.6** | **+3.3** |
| **LLP** | **Lapu-Lapu** | **2.01** | **299** | ⇓*e* | *e* | P | **Pn** | **18 38 24.9** | **-1.3** |
| LLP | | | | | *e* | S | **Sn** | **18 38 50.5** | **0.0** |
| **OCLP** | **Ormoc** | **2.04** | **327** | *e* | *e* | P | **Pn** | **18 38 27.7** | **+1.0** |
| **DMPH** | **Davao City--Mi** | **2.25** | **186** | ⇓*e* | *e* | P | **Pb** | **18 38 33.7** | **-0.3** |
| DMPH | | | | | *e* | S | **Sb** | **18 39 05.7** | **+4.1** |
| **DAV** | **Davao City (W)** 198nm,0.3s,baz=349,slow=8.0,SNR=33 | **2.26** | **184** | P | | P | **Pn** | **18 38 30.5** | **+0.8** |
| DAV | | | | S | | S | **Sb** | **18 39 03.3** | **+1.6** |
| | 311nm,0.3s,baz=56,slow=22,SNR=8.5 | | | | | | | | |
| **DAV** | **Davao City (W)** | **2.26** | **184** | *e* | P | P | **Pn** | **18 38 29.7** | **0.0** |
| DAV | | | | | S | S | **Sb** | **18 39 03.3** | **+1.6** |
| **BESP** | **Borongan** | **2.27** | **352** | *e* | *e* | P | **Pb** | **18 38 34.0** | **-0.4** |
| **KCP** | **Kidapawan** | **2.40** | **196** | ⇑*i* | *i* | P | **Pn** | **18 38 30.9** | **-0.8** |
| KCP | | | | | *i* | S | **Sb** | **18 39 05.0** | **-0.9** |
| **MATI** | **Mati** | **2.43** | **168** | *e* | *e* | P | **Pn** | **18 38 33.3** | **+1.3** |
| **DCPH** | **Dipolog City** | **2.48** | **253** | ⇑*i* | *i* | P | **Pn** | **18 38 31.1** | **-1.6** |
| **PAGZ** | **Pagadian** | **2.77** | **238** | *e* | *e* | P | **Pn** | **18 38 35.8** | **-0.9** |
| **GSPH** | **General Santos** | **3.33** | **194** | *e* | *e* | P | **Pn** | **18 38 45.6** | **+1.1** |
| **IPIL** | **Ipil** | **3.50** | **244** | ⇑*e* | *e* | P | **Pn** | **18 38 46.0** | **-0.7** |
| **IPIL** | **Ipil** | **3.50** | **244** | *e* | *e* | P | **Pn** | **18 38 46.1** | **-0.7** |
| **RCP** | **Roxas** | **3.69** | **307** | ⇑*e* | *e* | P | **Pn** | **18 38 50.4** | **+1.0** |
| **PVCP** | **Virac** | **4.51** | **340** | *e* | *e* | P | **Pn** | **18 39 03.4** | **+2.8** |
| PVCP | | | | | *e* | S | **Sn** | **18 39 50.9** | **-1.4** |
| **PVCP** | **Virac** | **4.51** | **340** | ⇑*e* | *e* | P | **Pn** | **18 39 03.5** | **+2.8** |
| PVCP | | | | | *i* | S | **Sb** | **18 40 01.7** | **-4.8** |
| **SGSI** | **Sangihe** | **5.62** | **182** | P | | P | **Pn** | **18 39 16.2** | **+0.3** |
| **BALP** | **Baler** | **7.56** | **328** | *e* | *e* | P | **Pn** | **18 39 45.6** | **+3.1** |
| **PCPH** | **Palayan** | **7.68** | **324** | ⇓*e* | *e* | P | **Pn** | **18 39 46.7** | **+2.6** |
| PCPH | | | | | *e* | S | Sn | 18 41 17.9 | +7.6 |
| **MYLDM** | **Lahad Datu** | **8.29** | **241** | *e* | *e* | Pn | **Pn** | **18 39 54.5** | **+1.8** |
| **BCPH** | **Baguio City Da** | **8.62** | **325** | ⇓*i* | *i* | P | **Pn** | **18 40 00.4** | **+3.1** |
| **TNTI** | **Ternate** 380nm,0.8s,4μm | **8.66** | **169** | P | | P | **Pn** | **18 39 57.6** | **-0.1** |
| **TNTI** | **Ternate** | **8.66** | **169** | *e* | *e* | Pn | **Pn** | **18 39 57.2** | **-0.5** |
| **KMSI** | **Cibinong** 509nm,0.9s,4μm | **8.88** | **192** | P | | Pn | **Pn** | 18 40 05.3 | +4.6 |
| **I39PW** | **PALAU INFRASON** baz=280,slow=314,SNR=1.9 | **8.88** | **101** | *i* | | | | 19 34 00.0 | |
| **GTOI** | **Gorontalo** 133nm,0.7s,1μm | **9.06** | **198** | P | | P | **Pn** | **18 40 00.5** | **-2.7** |
| **TSM** | **Tawau** | **9.29** | **238** | ⇓P | | P | **Pn** | **18 40 09.3** | **+3.0** |
| **MRSI** | **Marisa** 84nm,0.8s,845nm | **9.58** | **204** | P | | P | **Pn** | **18 40 10.3** | **-0.1** |
| **KKM** | **Kota Kinabalu** | **10.00** | **252** | ⇑P | | P | Pn | 18 40 20.3 | +4.1 |
| **KKM** | **Kota Kinabalu** | **10.00** | **252** | *e* | *e* | Pn | **Pn** | **18 40 16.5** | **+0.3** |
| **LBMI** | **Labuha** 164nm,1.1s,2μm | **10.06** | **170** | P | | P | **Pn** | **18 40 18.3** | **+1.4** |
| **MPSI** | **Mapaga** 10nm,1.0s,300nm | **10.67** | **213** | P | | P | Pn | 18 40 29.2 | +3.9 |
| **LUWI** | **Luwuk** baz=10,SNR=6.4 | **10.73** | **196** | P | | P | **Pn** | **18 40 28.3** | **+2.3** |
| **LUWI** | **Luwuk** 242nm,1.2s,2μm | **10.73** | **196** | P | | P | **Pn** | **18 40 28.2** | **+2.1** |
| **LUWI** | **Luwuk** | **10.73** | **196** | *e* | *e* | Pn | **Pn** | **18 40 27.7** | **+1.6** |
| **APSI** | **Ampana** 138nm,1.0s,2μm | **10.97** | **202** | P | | Pn | **Pn** | 18 40 33.6 | +4.2 |
| **SANI** | **Sanana** 118nm,1.0s,1μm | **11.31** | **179** | P | | P | **Pn** | **18 40 31.8** | **-2.3** |
| **SWI** | **Sorong** baz=11,SNR=12 | **11.52** | **151** | P | | P | **Pn** | **18 40 39.5** | **+2.5** |
| **SWI** | **Sorong** 113nm,1.0s,1μm | **11.52** | **151** | P | | P | **Pn** | **18 40 38.0** | **+1.1** |
| **SIJI** | **Sorong** 5.4nm,0.3s,baz=360,slow=15,SNR=20 | **11.53** | **151** | P | | P | **Pn** | **18 40 38.0** | **+0.9** |
| SIJI | | | | S | | S | **Sn** | **18 42 42.5** | **-2.7** |
| | 1.5nm,0.3s,baz=172,slow=21,SNR=6.0 | | | | | | | | |
| **PCI** | **Palu** 60nm,1.0s,692nm | **11.76** | **210** | P | | P | **Pn** | **18 40 42.8** | **+2.6** |
| **NLAI** | **Namlea** 80nm,0.8s,890nm | **12.57** | **174** | P | | P | **Pn** | **18 40 48.7** | **-2.5** |
| **MSAI** | **Masohi** | **12.99** | **166** | P | | P | P | 18 41 10.5 | +3.3 |
| **AAI** | **Ambon** baz=13,SNR=3.9 | **13.17** | **169** | P | | P | **Pn** | **18 41 00.8** | **+1.4** |
| **AAI** | **Ambon** 55nm,0.9s | **13.17** | **169** | P | | P | **Pn** | **18 41 00.7** | **+1.3** |
| **TTSI** | **Tana Toraja** 97nm,1.1s,972nm | **13.65** | **206** | P | | P | **Pn** | **18 41 08.2** | **+2.2** |
| **FAKI** | **Fak Fak** 66nm,1.1s,844nm | **13.79** | **152** | P | | P | **P** | **18 41 13.5** | **-2.6** |
| **SPSI** | **Sidrap Palu** 64nm,1.0s,860nm | **14.50** | **205** | P | | P | **Pn** | **18 41 20.4** | **+2.8** |
| **TPUB** | **Ta-pu** 50nm,0.8s | **14.72** | **341** | *e* | *e* | Pn | **Pn** | **18 41 22.0** | **+1.3** |
| **SBUM** | **Sibu** 114nm,1.0s | **15.09** | **244** | *e* | *e* | Pn | **Pn** | **18 41 25.8** | **+0.1** |
| **KAPI** | **Kappang** baz=32,slow=13,SNR=14 | **15.46** | **203** | P | | P | **Pn** | **18 41 30.0** | **-0.5** |
| KAPI | | | | | | LR | LR | 18 48 34.7 | |
| | comp=Z,1μm,20.2s,baz=44,slow=42 | | | | | | | | |
| **KAPI** | **Kappang** 228nm,1.3s,SNR=6.3 | **15.46** | **203** | Pn | | Pn | **Pn** | **18 41 30.7** | **+0.3** |
| **BKSI** | **Bulukumba** | **15.61** | **201** | P | | P | **P** | **18 41 39.6** | **+3.3** |
| **KBKI** | **Kotabaru** 68nm,1.4s,862nm | **15.77** | **218** | P | | P | **P** | **18 41 39.2** | **+1.0** |
| **YHNB** | **Yeheng** | **15.81** | **345** | Pn | | P | **P** | **18 41 38.6** | **0.0** |
| **BBKI** | **Banjar Baru** 62nm,1.3s,1μm | **16.73** | **221** | P | | P | **P** | **18 41 50.6** | **+1.8** |
| **STKI** | **Sintang** 30nm,1.5s,2μm | **16.93** | **238** | P | | P | **P** | **18 41 52.8** | **+1.7** |
| **SMPI** | **Sarmi** 560nm,1.6s,40μm | **17.13** | **130** | P | | P | **P** | **18 41 56.4** | **+3.2** |
| **KSM** | **Kuching** | **17.23** | **244** | ⇓P | | P | **P** | **18 41 56.1** | **+1.7** |
| **KSM** | **Kuching** 43nm,1.0s | **17.23** | **244** | *e* | *e* | Pn | **P** | **18 41 54.4** | **0.0** |
| KSM | | | | | *e* | | | 18 42 07.7 | |
| **GZH** | **Guangzhou** | **18.11** | **320** | P | | P | P | 18 42 09.1 | +5.1 |
| GZH | | | | LN | | | | | |
| | 3μm,16.3s | | | | | | | | |
| GZH | | | | LE | | | | | |
| | 2μm,15.9s | | | | | | | | |
| GZH | | | | LZ | | | | | |
| | 3μm,17.1s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **18.17** | **304** | P | | P | **Pn** | **18 42 03.8** | **-0.8** |
| QIZ | | | | pP | | P | | **18 42 07.4** | **+2.7** |
| QIZ | | | | S | | Sn | | **18 45 27.8** | **+1.0** |
| QIZ | | | | sS | | sS | | 18 45 38.4 | -4.7 |
| QIZ | | | | LN | | | | | |
| | 760nm,13.8s | | | | | | | | |
| QIZ | | | | LE | | | | | |
| | 290nm,18.3s | | | | | | | | |
| QIZ | | | | LZ | | | | | |
| | 990nm,16.5s | | | | | | | | |
| **QIZ** | **Qiongzhong** 51nm,1.5s | **18.17** | **304** | *e* | *e* | Pn | **Pn** | **18 42 03.4** | **-1.2** |
| **MMRI** | **Maumere** | **18.19** | **191** | P | | P | P | 18 42 11.8 | +6.8 |
| **MMRI** | **Maumere** 149nm,1.2s | **18.19** | **191** | P | | Pn | **Pn** | **18 42 04.4** | **-0.5** |
| **PBKI** | **Pangkalan Bun** 107nm,1.1s | **18.44** | **230** | P | | P | **Pn** | **18 42 10.5** | **+2.6** |
| **GENI** | **Genyem** 119nm,1.3s,3μm | **18.62** | **129** | P | | P | Pn | 18 42 18.2 | +8.0 |
| **SOEI** | **Soe** baz=19,SNR=5.0 | **19.02** | **184** | P | | P | **P** | **18 42 13.2** | **-1.0** |
| **SOEI** | **Soe** 54nm,1.2s,2μm | **19.02** | **184** | P | | P | **Pn** | **18 42 19.1** | **+4.0** |
| **SOEI** | **Soe** 154nm,1.0s | **19.02** | **184** | *e* | *e* | Pn | **P** | **18 42 14.3** | **+0.1** |
| SOEI | | | | | *e* | Sn | **Sn** | **18 45 47.4** | **-0.2** |
| **BATI** | **Baumata** 2.2nm,0.3s,baz=21,slow=8.6,SNR=13 | **19.53** | **186** | P | | P | **P** | **18 42 19.3** | **-0.3** |
| BATI | | | | LR | | LR | LR | 18 50 40.5 | |
| | comp=Z,745nm,20.5s,baz=22,slow=39 | | | | | | | | |
| **BATI** | **Baumata** 80nm,1.0s,1μm | **19.53** | **186** | P | | P | **P** | **18 42 19.3** | **-0.3** |
| **TWSI** | **Taliwang, Sumb** 47nm,0.9s | **20.01** | **206** | P | | P | Pn | 18 42 26.9 | +0.2 |
| **KMMI** | **Kalianget** 75nm,1.5s,1μm | **20.07** | **216** | P | | P | Pn | 18 42 30.7 | +3.2 |
| **SRBI** | **Singaraja** 59nm,0.9s | **20.24** | **212** | P | | P | Pn | 18 42 33.0 | +3.5 |
| **TPI** | **Tanjungpandan** | **21.67** | **237** | P | | P | **P** | **18 42 42.8** | **0.0** |
| **NGJI** | **Ngawi** 180nm,1.0s | **21.86** | **221** | P | | P | **P** | **18 42 48.7** | **+3.8** |
| **SSE** | **Sheshan** | **22.06** | **350** | P | | P | **P** | **18 42 46.8** | **-0.1** |
| SSE | | | | S | | S | **S** | **18 46 50.0** | **+1.1** |
| SSE | | | | sS | | sS | **sS** | **18 47 03.9** | **+3.2** |
| SSE | | | | PMZ | | | | | |
| | 35nm,0.9s | | | | | | | | |
| SSE | | | | PMZ | | | | | |
| | 470nm,4.6s | | | | | | | | |
| SSE | | | | LN | | | | | |
| | 320nm,20.8s | | | | | | | | |
| SSE | | | | LE | | | | | |
| | 140nm,20.8s | | | | | | | | |
| SSE | | | | LZ | | | | | |
| | 390nm,20.7s | | | | | | | | |
| **SMRI** | **Semarang** baz=22,SNR=3.5 | **22.31** | **224** | P | | P | **P** | **18 42 51.7** | **+2.0** |
| **SMRI** | **Semarang** 113nm,0.9s | **22.31** | **224** | *e* | *e* | P | **P** | **18 42 50.9** | **+1.2** |
| **SKNT** | **Sakolnakorn** 40nm,1.3s | **22.50** | **292** | P | | P | **P** | **18 42 51.3** | **-0.5** |
| **WOJI** | **Wonogiri, Jawa** 94nm,1.7s,5μm | **22.57** | **221** | P | | P | **P** | **18 42 54.0** | **+1.5** |
| **PPBI** | **Pangkal Pinang** | **22.64** | **241** | P | | P | P | 18 42 48.4 | -4.8 |
| **MTN** | **Manton Dam** baz=22,SNR=25 | **22.68** | **166** | P | | P | **P** | **18 42 53.0** | **-0.6** |
| **MTN** | **Manton Dam** 61nm,0.8s | **22.68** | **166** | *e* | *e* | P | **P** | **18 42 51.0** | **-2.6** |
| **KDU** | **Kakadu** baz=23,SNR=9.6 | **22.88** | **163** | P | | P | **P** | **18 42 55.8** | **+0.1** |
| **CHBT** | **CHBT** | **23.23** | **281** | P | | P | P | 18 43 06.6 | +7.2 |
| **KHON** | **Khomkaen** 14nm,1.0s | **23.40** | **290** | P | | P | **P** | **18 43 00.1** | **-0.9** |
| **KGM** | **Kluang** | **23.46** | **253** | ⇓P | | P | **P** | **18 43 02.8** | **+1.1** |
| **NJ2** | **Nanjing** 30nm,0.6s | **23.49** | **345** | *e* | *e* | P | **P** | **18 43 01.8** | **+0.1** |
| NJ2 | | | | PMZ | | | | | |
| **NONG** | **Nongkai** 23nm,1.2s,6μm | **23.59** | **294** | P | | P | **P** | **18 43 02.8** | **-0.1** |
| **WHN** | **Wuhan** | **23.63** | **335** | *e* | *e* | P | P | 18 43 11.0 | +7.9 |
| WHN | | | | S | | S | **S** | **18 47 20.0** | **+3.9** |
| WHN | | | | LR | | LR | | | |
| | comp=Z,3μm,14.8s | | | | | | | | |
| **CHAI** | **Chaiyaphum** comp=Z,7.2nm,0.8s | **24.07** | **288** | P | | P | **P** | **18 43 06.4** | **-1.1** |
| **JNU** | **Nakatsue** comp=Z,6.3nm,0.8s,baz=192,slow=8.2,SNR=4.1 | **24.14** | **11** | P | | P | **P** | **18 43 08.5** | **+0.6** |
| JNU | | | | LR | | LR | LR | 18 51 58.8 | |
| | comp=Z,391nm,20.6s,baz=142,slow=35 | | | | | | | | |
| **SLVN** | **Son La** | **24.17** | **302** | *e* | *e* | P | **P** | **18 43 07.3** | **-1.1** |
| **LEM** | **Lembang** comp=Z,72nm,0.9s,baz=158,slow=12,SNR=11 | **24.17** | **229** | P | | P | **P** | **18 43 08.8** | **+0.2** |
| **LEM** | **Lembang** comp=Z,736nm,1.0s | **24.17** | **229** | P | | P | **P** | **18 43 09.8** | **+1.2** |
| **CBJI** | **Citeko** comp=Z,305nm,0.9s | **24.49** | **231** | P | | P | **P** | **18 43 13.4** | **+2.1** |
| **CISI** | **Cisompet, Garu** baz=24,SNR=5.4 | **24.51** | **227** | P | | P | **P** | **18 43 12.1** | **+0.5** |
| **CISI** | **Cisompet, Garu** comp=Z,156nm,1.0s,comp=Z,2μm | **24.51** | **227** | P | | P | **P** | **18 43 15.1** | **+3.5** |
| **CISI** | **Cisompet, Garu** comp=Z,169nm,1.1s | **24.51** | **227** | *e* | *e* | P | **P** | **18 43 11.4** | **-0.2** |
| **FRIM** | **Kepong** | **24.72** | **257** | ⇓P | | P | **P** | **18 43 13.8** | **+0.3** |
| **GYA** | **Guiyang** | **24.84** | **316** | P | | P | **P** | **18 43 15.8** | **+1.3** |
| GYA | | | | PP | | P | **PnPn** | **18 43 52.3** | **+4.8** |
| GYA | | | | S | | S | **S** | **18 47 35.4** | **-0.5** |
| GYA | | | | PMZ | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| GYA | | | | PMZ | | | | | |
| | comp=Z,120nm,4.9s | | | | | | | | |
| GYA | | | | LN | | | | | |
| | comp=Z,510nm,16.8s | | | | | | | | |
| GYA | | | | LE | | | | | |
| | comp=Z,480nm,17.6s | | | | | | | | |
| GYA | | | | LZ | | | | | |
| | comp=Z,490nm,17.4s | | | | | | | | |
| **CNJI** | **Cibinong** comp=Z,161nm,1.0s,comp=Z,1μm | **24.85** | **229** | P | | P | **P** | **18 43 16.7** | **+2.1** |
| **SBJI** | **Serang** | **24.86** | **233** | P | | P | P | 18 43 22.8 | +8.1 |
| **IPM** | **Ipoh** | **25.01** | **261** | ⇑P | | P | **P** | **18 43 16.5** | **+0.4** |
| **IPM** | **Ipoh** comp=Z,21nm,0.8s | **25.01** | **261** | *e* | *e* | P | **P** | **18 43 14.7** | **-1.3** |
| **KNRA** | **Kununurra** baz=25,SNR=34 | **25.03** | **173** | P | | P | **P** | **18 43 16.1** | **0.0** |
| **LOEI** | **Loei** comp=Z,30nm,1.4s | **25.14** | **291** | P | | P | **P** | **18 43 14.4** | **-2.8** |
| **PBKT** | **Sadao Pong** comp=Z,29nm,1.2s | **25.18** | **289** | P | | P | **P** | **18 43 18.1** | **+0.6** |
| **KULM** | **Kulim** | **25.21** | **263** | ⇓P | | P | **P** | **18 43 19.7** | **+1.8** |
| **KULM** | **Kulim** comp=Z,34nm,1.3s | **25.21** | **263** | *e* | *e* | P | **P** | **18 43 18.4** | **+0.5** |
| **CGJI** | **Cibinong** comp=Z,64nm,1.1s | **25.51** | **232** | P | | P | **P** | **18 43 22.7** | **+2.2** |
| **MDSI** | **Maura Dua** | **25.51** | **238** | P | | P | **P** | **18 43 20.4** | **-0.2** |
| **UTTA** | **Uttaradit** comp=Z,2.8nm,1.3s | **25.86** | **292** | P | | P | **P** | **18 43 24.9** | **+1.2** |
| **LWLI** | **Liwa** comp=Z,80nm,0.9s,comp=Z,2μm | **25.90** | **237** | P | | P | **P** | **18 43 25.7** | **+1.5** |
| **LAMP** | **Lampang** comp=Z,6.1nm,0.8s | **26.91** | **293** | P | | P | **P** | **18 43 36.3** | **+3.1** |
| **KMI** | **Kunming** | **26.94** | **309** | P | | P | **P** | **18 43 35.4** | **+1.8** |
| KMI | | | | S | | S | **S** | **18 48 07.3** | **-2.1** |
| KMI | | | | PMZ | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,170nm,4.6s | | | | | | | | |
| KMI | | | | LN | | | | | |
| | comp=Z,530nm,17.3s | | | | | | | | |
| KMI | | | | LE | | | | | |
| | comp=Z,520nm,15.7s | | | | | | | | |
| KMI | | | | LZ | | | | | |
| | comp=Z,550nm,19.6s | | | | | | | | |
| **JHJ** | **Hachijo jima 2** comp=Z,285nm,20.9s,baz=197,slow=31 | **26.98** | **27** | LR | | LR | LR | 18 51 58.8 | |
| **PSI** | **Prapat** comp=Z,5.9nm,0.9s,baz=157,slow=15,SNR=3.5 | **27.44** | **258** | P | | P | **P** | **18 43 37.5** | **-0.6** |
| PSI | | | | LR | | LR | LR | 18 56 44.3 | |
| | comp=Z,131nm,19.9s,baz=80,slow=41 | | | | | | | | |
| **PSI** | **Prapat** | **27.44** | **258** | *e* | P | P | **P** | **18 43 39.0** | **+0.8** |
| **PSI** | **Prapat** | **27.44** | **258** | *e* | *e* | P | **P** | **18 43 39.0** | **+0.8** |
| **CMAR** | **Chiang Mai Arr** comp=Z,3.7nm,0.8s,baz=114,slow=7.2,SNR=26 | **27.52** | **292** | P | | P | **P** | **18 43 38.5** | **-0.2** |
| CMAR | | | | PcP | | PcP | **PcP** | **18 46 55.9** | **-0.8** |
| | comp=Z,1.1nm,0.7s,baz=101,slow=1.1,SNR=5.8 | | | | | | | | |
| CMAR | | | | LR | | LR | LR | 18 55 07.9 | |
| | comp=Z,492nm,18.6s,baz=116,slow=38 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.52** | **292** | *i* | P | P | **P** | **18 43 39.0** | **+0.3** |
| CMAR | | | | pmax | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| **CHTO** | **Chiang Mai** comp=Z,42nm,1.3s | **27.62** | **293** | P | | P | **P** | **18 43 39.9** | **+0.3** |
| **CHTO** | **Chiang Mai** | **27.62** | **293** | *e* | P | P | **P** | **18 43 38.9** | **-0.7** |
| CHTO | | | | pmax | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| **CHTO** | **Chiang Mai** comp=Z,7.4nm,1.0s | **27.62** | **293** | *e* | P | P | **P** | **18 43 38.9** | **-0.7** |
| **CMAI** | **Chiengmai2** comp=Z,69nm,1.8s,comp=Z,6μm | **27.86** | **295** | P | | P | **P** | **18 43 42.6** | **+0.7** |
| **KSAR** | **Wonju Array Be** | **28.05** | **4** | P | | P | **P** | **18 43 43.9** | **+0.7** |
| **KSAR** | **Wonju Array Be** | **28.05** | **4** | P | | P | **P** | **18 43 43.9** | **+0.7** |
| **KSRS** | **Korea Array** comp=Z,2.6nm,0.7s,baz=183,slow=9.1,SNR=13 | **28.06** | **4** | P | | P | **P** | **18 43 43.9** | **+0.6** |
| KSRS | | | | LR | | LR | LR | 18 54 52.2 | |
| | comp=Z,464nm,21.2s,baz=194,slow=36 | | | | | | | | |
| **PMG** | **Port Moresby** comp=Z,19nm,0.8s,baz=287,slow=7.5,SNR=7.0 | **28.30** | **131** | P | | P | **P** | **18 43 44.1** | **-1.5** |
| PMG | | | | pmax | | pmax | pmax | | |
| | comp=Z,98nm,1.0s | | | | | | | | |
| **PMG** | **Port Moresby** baz=28,SNR=4.6 | **28.30** | **131** | P | | P | **P** | **18 43 44.5** | **-1.2** |
| **COEN** | **Coen** baz=29,SNR=9.1 | **28.89** | **143** | P | | P | **P** | **18 43 50.8** | **-0.1** |
| **COEN** | **Coen** comp=Z,33nm,0.8s | **28.89** | **143** | *e* | *e* | P | **P** | **18 43 50.1** | **-0.8** |
| **MAJO** | **Matsushiro** | **29.35** | **21** | *e* | *e* | P | **P** | **18 43 53.9** | **-0.9** |
| **MAJO** | **Matsushiro** | **29.35** | **21** | *e* | *e* | P | **P** | **18 43 53.9** | **-0.9** |
| **MAT** | **Matsushiro** | **29.35** | **21** | P | | P | **P** | **18 43 54.7** | **-0.1** |
| MAT | | | | S | | S | **S** | **18 48 45.0** | **-1.8** |
| **MJAR** | **Matsushiro Arr** comp=Z,4.4nm,1.1s,baz=194,slow=8.6,SNR=6.7 | **29.35** | **21** | P | | P | **P** | **18 43 54.9** | **+0.1** |
| MJAR | | | | LR | | LR | LR | 18 54 08.4 | |
| | comp=Z,433nm,21.2s,baz=210,slow=33 | | | | | | | | |
| **CD2** | **Chengdu** | **29.67** | **319** | *e* | P | P | **P** | **18 43 58.3** | **+0.6** |
| CD2 | | | | pP | | pP | P | 18 44 01.3 | -4.3 |
| CD2 | | | | S | | S | **S** | **18 48 55.0** | **+3.0** |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,20nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,180nm,5.0s | | | | | | | | |
| CD2 | | | | LN | | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | |
| CD2 | | | | LE | | | | | |
| | comp=Z,1μm,16.6s | | | | | | | | |
| CD2 | | | | LZ | | | | | |
| | comp=Z,980nm,17.6s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **30.29** | **164** | *e* | P | P | **P** | **18 44 02.7** | **-0.6** |
| WRAB | | | | pmax | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** comp=Z,58nm,0.8s,SNR=5.4 | **30.29** | **164** | P | | P | **P** | **18 44 02.2** | **-1.1** |
| **WRAB** | **Tennant Creek** comp=Z,9.7nm,0.8s | **30.29** | **164** | *e* | *e* | P | **P** | **18 44 02.7** | **-0.6** |
| **WRA** | **Warramunga Arr** comp=Z,2.6nm,0.8s,baz=343,slow=9.2,SNR=20 | **30.30** | **164** | P | | P | **P** | **18 44 02.7** | **-0.7** |
| WRA | | | | LR | | LR | LR | 18 58 33.1 | |
| | comp=Z,291nm,18.4s,baz=345,slow=41 | | | | | | | | |
| **BJT** | **Baijiatuan** | **31.73** | **346** | P | | P | **P** | **18 44 16.8** | **+1.1** |
| **BJT** | **Baijiatuan** | **31.73** | **346** | P | | P | **P** | **18 44 16.8** | **+1.1** |
| **BJI** | **Beijing** | **31.74** | **346** | P | | P | **P** | **18 44 16.6** | **+0.8** |
| BJI | | | | S | | S | **S** | **18 49 28.0** | **+3.9** |
| BJI | | | | PMZ | | | | | |
| | comp=Z,12nm,1.9s | | | | | | | | |
| BJI | | | | PMZ | | | | | |
| | comp=Z,320nm,4.6s | | | | | | | | |
| BJI | | | | LN | | | | | |
| | comp=Z,410nm,17.4s | | | | | | | | |
| BJI | | | | LE | | | | | |
| | comp=Z,420nm,20.1s | | | | | | | | |
| BJI | | | | LZ | | | | | |
| | comp=Z,240nm,21.2s | | | | | | | | |
| **SNY** | **Shenyang** | **32.42** | **357** | ⇑P | | P | **P** | **18 44 22.8** | **+1.1** |
| SNY | | | | S | | S | S | 18 49 47.1 | +13 |
| SNY | | | | PMZ | | | | | |
| | comp=Z,11nm,0.3s | | | | | | | | |
| SNY | | | | LN | | | | | |
| | comp=Z,380nm,16.8s | | | | | | | | |
| SNY | | | | LE | | | | | |
| | comp=Z,410nm,15.9s | | | | | | | | |
| SNY | | | | LZ | | | | | |
| | comp=Z,370nm,18.3s | | | | | | | | |
| **QIS** | **Mount Isa** baz=32,SNR=16 | **32.68** | **155** | P | | P | **P** | **18 44 23.5** | **-0.8** |
| **MTSU** | **Mount Surprise** baz=33,SNR=18 | **32.88** | **146** | P | | P | **P** | **18 44 26.7** | **+0.6** |
| **LZH** | **Lanzhou** | **33.26** | **327** | *e* | P | P | **P** | **18 44 31.5** | **+2.1** |
| LZH | | | | pP | | pP | **pP** | **18 44 34.3** | **-3.0** |
| LZH | | | | sP | | sP | **sP** | 18 44 36.0 | -4.6 |
| LZH | | | | PP | | PP | **PP** | **18 45 43.5** | **-1.4** |
| LZH | | | | *e*S | | S | S | 18 49 55.0 | +6.8 |
| LZH | | | | sS | | sS | **sS** | **18 50 02.4** | **+1.1** |
| LZH | | | | PMZ | | | | | |
| | comp=Z,11nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,68nm,4.5s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | comp=Z,870nm,14.0s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | comp=Z,1μm,17.9s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | comp=Z,1μm,18.8s | | | | | | | | |
| **AS12** | **Alice Springs** baz=34 | **33.76** | **166** | P | | P | **P** | **18 44 33.7** | **0.0** |
| **ASAR** | **Alice Springs** comp=Z,5.5nm,0.8s,baz=340,slow=6.7,SNR=38 | **33.76** | **166** | P | | P | **P** | **18 44 33.1** | **-0.6** |
| ASAR | | | | PcP | | PcP | **PcP** | **18 47 13.4** | **+0.5** |
| | comp=Z,1.2nm,0.5s,baz=346,slow=2.4,SNR=3.4 | | | | | | | | |
| ASAR | | | | ScP | | ScP | **ScP** | **18 50 54.1** | **-1.9** |
| | comp=Z,0.5nm,0.3s,baz=347,slow=2.5,SNR=4.9 | | | | | | | | |
| ASAR | | | | LR | | LR | LR | 19 00 56.1 | |
| | comp=Z,135nm,18.2s,baz=332,slow=41 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **33.81** | **340** | *e* | P | P | **P** | **18 44 34.3** | **+0.2** |
| HHC | | | | S | | S | S | 18 50

ASAJ LR LR 18 58 48.6
comp=Z,404nm,21.9s,baz=188,slow=33
**GTA Gaotai 37.86 326** *e*P **P** **18 45 09.4 +0.5**
GTA pP pP 18 45 13.1 -3.8
GTA sP sP 18 45 15.4 -4.8
GTA PcP **PcP** **18 47 21.4 -3.6**
GTA S **S** **18 50 59.8 +1.0**
GTA PMZ
comp=Z,3.0nm,1.2s
GTA PMZ
comp=Z,82nm,5.0s
GTA LN
comp=Z,600nm,19.5s
GTA LE
comp=Z,460nm,21.4s
GTA LZ
comp=Z,710nm,19.0s
**LSA Lhasa 38.16 307** P **P** **18 45 12.1 +0.1**
**LSA Lhasa 38.16 307** *e*P **P** **18 45 14.1 +2.1**
LSA pmax pmax
comp=Z,12nm,0.8s
**LSA Lhasa 38.16 307** *e*P **P** **18 45 14.1 +2.1**
comp=Z,12nm,0.8s
**YUK Yuzh-Kuril'sk 38.73 23***d i*P **P** **18 45 14.0 -1.9**
YUK *i* 18 47 25.4
YUK S **S** **18 51 10.3 -1.2**
YUK SS **SnSn** **18 53 56.0 -5.5**
YUK pmax pmax
comp=Z,382nm,2.3s
**MORW Morawa 39.31 193** P **P** **18 45 20.5 -0.5**
baz=39,SNR=9.3
**HABR Khabarovsk 39.78 10***d e*P **P** **18 45 23.2 -1.5**
HABR *e**PP **pP** **18 45 32.7 0.0**
HABR *e**SP **sP** **18 45 36.8 +0.8**
HABR *e* 18 46 55.0
HABR *e*PPP PPP 18 47 18.6
HABR *e* 18 47 28.2
HABR *e*S **S** **18 51 25.7 -1.4**
HABR *e**SS **sS** **18 51 42.2 +1.8**
HABR *e*SS **SS** **18 54 23.4 -0.3**
HABR *e*SSS SSS 18 54 45.5
HABR *e* 18 55 27.8
HABR pmax pmax
comp=E,38nm,1.8s
HABR pmax pmax
comp=N,31nm,1.8s
HABR pmax pmax
comp=Z,45nm,1.8s
HABR MLR MLR
comp=Z,150nm,20.0s
**QLP Quilpie 39.96 154** P **P** **18 45 26.6 +0.1**
baz=40,SNR=4.0
**KLR Kul'dur 40.08 6** *e*P **P** **18 45 28.8 +1.7**
**TAPN Taplejung 40.09 302** *e*P **P** **18 45 28.5 +0.6**
comp=Z,23nm,0.7s
**ODAN Odare 40.20 301** *e*P **P** **18 45 29.1 +0.3**
comp=Z,50nm,0.8s
**KUR Kuril'sk 40.53 24***d i*P P 18 45 26.0 -4.9
KUR *i* 18 47 01.2
KUR *i*S **S** **18 51 32.5 -5.8**
KUR *i* 18 55 13.3
KUR pmax pmax
comp=Z,262nm,3.0s
**KMBL Kambalda 40.64 185** P **P** **18 45 30.9 -1.0**
baz=40,SNR=8.0
**H11S3 WAKE ISLAND Hy 40.68 73** T T 19 28 39.0
baz=262,slow=75,SNR=137
**H11S1 WAKE ISLAND Hy 40.70 73** T T 19 28 35.2
baz=262,slow=75,SNR=102
**H11S2 WAKE ISLAND Hy 40.70 73** T T 19 28 38.4
baz=262,slow=75,SNR=146
**RAMN Ramite 40.90 301** *e*P **P** **18 45 35.0 +0.4**
comp=Z,23nm,0.7s
**H11N1 WAKE ISLAND Hy 41.04 71** T T 19 29 03.2
baz=265,slow=74,SNR=190
**H11N2 WAKE ISLAND Hy 41.05 71** T T 19 29 05.9
baz=265,slow=74,SNR=132
**H11N3 WAKE ISLAND Hy 41.06 71** T T 19 29 03.8
baz=265,slow=74,SNR=182
**CHLP Challavanipeta 41.39 287** *e*P **P** **18 45 38.8 +0.4**
**KLBR Kellerberrin 41.41 190** P **P** **18 45 37.7 -0.6**
baz=41,SNR=6.9
**ULN Ulaanbaatar 41.53 341**⇑ *e*P **P** **18 45 40.9 +1.6**
ULN pmax pmax
comp=Z,8.0nm,2.6s
**ULN Ulaanbaatar 41.53 341** *e*P **P** **18 45 38.3 -1.0**
comp=Z,4.0nm,0.6s
**SONM Songino Array 41.72 340** P **P** **18 45 42.1 +1.2**
comp=Z,0.5nm,0.5s,baz=149,slow=9.5,SNR=4.1
SONM LR LR 19 05 31.9
comp=Z,275nm,18.8s,baz=153,slow=40
**GUN Gumba 41.81 302** *e*P **P** **18 45 42.2 +0.1**
comp=Z,22nm,0.7s
**RMQ Roma 42.04 148** P **P** **18 45 42.9 -0.7**
baz=42,SNR=5.0
**PKI Pulchoki 42.10 301** *e*P **P** **18 45 44.1 -0.4**
comp=Z,8.0nm,0.6s
**PKIN Phulchoki 42.11 301** *e*P **P** **18 45 44.8 +0.3**
comp=Z,3.3nm,0.5s
**KKN Kakani 42.27 301** *e*P **P** **18 45 46.8 +1.0**
comp=Z,14nm,1.0s
**DMN Daman 42.37 301** *e*P **P** **18 45 47.5 +0.9**
comp=Z,14nm,0.9s
**NWAO Narrogin (SRO) 42.80 191** P **P** **18 45 49.3 -0.4**
comp=Z,11nm,0.4s,baz=110,slow=0.1,SNR=21
**NWAO Narrogin (SRO) 42.80 191** *e*P **P** **18 45 48.9 -0.8**
NWAO pmax pmax
comp=Z,25nm,0.9s
**NWAO Narrogin (SRO) 42.80 191** P **P** **18 45 49.4 -0.2**
baz=43,SNR=17
**NWAO Narrogin (SRO) 42.80 191** *e*P **P** **18 45 48.9 -0.8**
comp=Z,25nm,0.9s
**GKN Gorkha 42.88 301** *e*P **P** **18 45 51.3 +0.6**
comp=Z,8.4nm,0.7s
**BBOO Buckleboo 43.05 167** P **P** **18 45 51.6 0.0**
baz=43,SNR=46
**BBOO Buckleboo 43.05 167** *e*P **P** **18 45 51.0 -0.6**
comp=Z,54nm,1.1s
**PVM Polavaram 43.58 285** *e*P **P** **18 45 56.0 -0.2**
**KOLN Koldanda 43.69 301** *e*P **P** **18 45 57.2 -0.1**
comp=Z,34nm,0.9s
**RKGY Rocky Gully 44.49 190** P **P** **18 46 03.5 +0.3**
baz=44,SNR=8.8
**ADKI Addanki 45.07 283** *e*P **P** **18 46 07.8 -0.4**
**SKHT Srikalahasti 45.27 280** *e*P **P** **18 46 09.0 -0.8**
**RPR Rampur 45.92 287** *e*P **P** **18 46 15.4 +0.5**
**RCLA Racherla 46.03 282** *e*P **P** **18 46 15.7 -0.2**
**SRLM Srisailam 46.12 283** *e*P **P** **18 46 16.5 0.0**
**HYBB Hyderabad (bro 46.51 285** *e*P **P** **18 46 18.9 -0.8**
**ARMA Armidale 46.70 149** P **P** **18 46 22.4 +1.4**
baz=47,SNR=4.8
**SRSP Sriramsagar 46.82 287** *e*P **P** **18 46 22.3 +0.3**
**WMQ Urumqi 47.65 323** P **P** **18 46 28.0 -0.1**
WMQ sP sP 18 46 35.0 -4.5
WMQ PP **PP** **18 48 20.0 +0.1**
WMQ S **S** **18 53 22.0 -0.3**
WMQ PMZ
comp=Z,12nm,1.0s
WMQ PMZ
comp=Z,16nm,6.0s
WMQ LN
comp=Z,810nm,20.0s
WMQ LE
comp=Z,460nm,19.0s
WMQ LZ
comp=Z,550nm,18.0s
**URV Uravakonda 47.66 282** *e*P **P** **18 46 28.4 -0.2**
**ARPS Mount Arapiles 48.29 163** P **P** **18 46 33.0 0.0**
baz=48,SNR=5.1
**KLRI Killari 48.41 286** *e*P **P** **18 46 34.2 -0.2**
**BOD Bodaibo 49.21 352** *e*P P 18 46 47.4 +7.6
BOD pmax pmax
comp=Z,5.0nm,1.2s
**TOO Toolangi 50.19 160** P **P** **18 46 49.5 +1.9**
baz=50,SNR=4.3
**DZM Mont Dzumac 50.66 129** P **P** **18 46 52.0 +0.4**
comp=Z,8.3nm,0.5s,baz=1.1,slow=8.2,SNR=12
**PETK Petropavlovsk- 50.69 24** P **P** **18 46 51.7 +0.5**
comp=Z,3.6nm,0.6s,baz=208,slow=3.9,SNR=27
PETK LR LR 19 07 21.4
comp=Z,193nm,20.6s,baz=235,slow=35
**MK31 Makanchi Array 52.46 323** *e*P **P** **18 47 04.7 +0.1**
MK31 pmax pmax
comp=Z,7.0nm,0.6s
**MKAR Makanchi Array 52.46 323** P **P** **18 47 04.9 +0.3**
comp=Z,7.8nm,0.6s,baz=124,slow=8.2,SNR=59
**MKAR Makanchi Array 52.46 323** *i*P **P** **18 47 05.0 +0.4**
MKAR pmax pmax
comp=Z,8.0nm,0.6s
**YAK Yakutsk 52.67 2** *e*P **P** **18 47 08.3 +2.5**
YAK *e* 18 48 20.6
YAK *e*PPP PPP 18 50 09.0
YAK *e*S **S** **18 54 31.8 +0.2**
YAK *e*SS **SS** **18 58 03.5 -6.7**
YAK pmax pmax
comp=Z,14nm,0.9s
YAK pmax pmax
comp=N,2.0nm,1.3s
YAK pmax pmax
comp=E,2.0nm,0.9s
YAK pmax pmax
comp=Z,144nm,5.4s
YAK pmax pmax
comp=N,58nm,5.6s
YAK pmax pmax
comp=E,69nm,3.5s
YAK smax smax
comp=N,80nm,4.1s
YAK smax smax
comp=E,56nm,3.3s
YAK MLR MLR
comp=Z,262nm,24.0s
YAK MLR MLR
comp=E,105nm,26.0s
YAK MLR MLR
comp=N,158nm,21.0s
**KSH Kashi 53.48 313** P **P** **18 47 14.3 +2.0**
KSH *e*pP **pP** **18 47 18.8 -1.8**
KSH *e*sP **sP** **18 47 21.4 -2.4**
KSH *e*PcP **PcP** **18 48 20.9 +1.7**
KSH *e*ScP **ScP** **18 52 16.6 +1.2**
KSH S **S** **18 54 45.8 +2.2**
KSH PMZ
comp=N,15nm,1.3s
KSH PMZ
comp=N,130nm,5.7s
KSH LN
comp=N,200nm,5.5s
KSH LE
comp=N,200nm,11.2s
KSH LZ
comp=N,340nm,16.9s
**TKM2 Tokmak 2 54.98 316** *e*P **P** **18 47 23.4 +0.1**
TKM2 pmax pmax
comp=Z,6.0nm,0.8s
**TKM2 Tokmak 2 54.98 316** *e*P **P** **18 47 23.4 +0.1**
comp=Z,6.4nm,0.8s
**ZALV Zalesovo Beam 55.20 332** P **P** **18 47 23.7 -0.7**
comp=Z,2.2nm,0.8s,baz=124,slow=6.3,SNR=9.7
ZALV LR LR 19 12 15.3
comp=Z,223nm,20.1s,baz=72,slow=37
**KBK Karagaybulak 55.32 316** P **P** **18 47 26.6 +0.8**
SNR=13
**UCH Uchtor 55.47 315** P **P** **18 47 27.8 +0.6**
SNR=24
**CHMS Chmysh 55.58 316** P **P** **18 47 28.0 +0.6**
SNR=5.1
**AAK Ala-Archa 55.63 316***c e*P **P** **18 47 28.7 +0.8**
AAK pmax pmax
comp=Z,38nm,2.5s
**AAK Ala-Archa 55.63 316** *e*P **P** **18 47 28.9 +0.9**
**USP Ospenovka 55.85 316** P **P** **18 47 29.7 +0.3**
SNR=11
**AML Almayashu 56.00 315** P **P** **18 47 31.8 +0.8**
SNR=14
**EKS2 Erkin-Say 56.13 316** *e*P **P** **18 47 32.1 +0.6**
EKS2 pmax pmax
comp=Z,12nm,0.9s
**EKS2 Erkin-Say 56.13 316** P **P** **18 47 32.1 +0.6**
SNR=14
**EKS2 Erkin-Say 56.13 316** *e*P **P** **18 47 32.0 +0.6**
comp=Z,12nm,0.9s
**NVS Novosibirsk 56.48 332** *e*P **P** **18 47 32.0 -1.5**
NVS pmax pmax
comp=Z,7.0nm,0.9s
NVS pmax pmax
comp=N,4.0nm,1.0s
**KURK Kurchatov 56.55 326** *e*P **P** **18 47 33.7 -0.4**
KURK pmax pmax
comp=Z,33nm,0.9s
**KURK Kurchatov 56.55 326** P **P** **18 47 34.3 +0.2**
comp=Z,117nm,0.9s,SNR=14
**KURK Kurchatov 56.55 326** *e*P **P** **18 47 33.7 -0.4**
comp=Z,33nm,0.9s
**KK31 Karatay Array 58.54 315** P **P** **18 47 48.0 -0.4**
KK31 pmax pmax
comp=Z,7.0nm,0.8s
**KKAR Karatay Array 58.54 315** *e*P **P** **18 47 47.8 -0.6**
**KKAR Karatay Array 58.54 315** *e*P **P** **18 47 47.8 -0.6**
**BRVK Borovoye 62.21 326***c e*P **P** **18 48 12.8 -0.5**
BRVK pmax pmax
comp=Z,12nm,1.0s
**BRVK Borovoye 62.21 326** P **P** **18 48 12.9 -0.3**
comp=Z,64nm,0.9s,SNR=8.0
**BRVK Borovoye 62.21 326** *e*P **P** **18 48 12.7 -0.5**
comp=Z,17nm,1.1s
**OUZ Omahuta 63.27 137** *e*P **P** **18 48 23.5 +3.0**
comp=Z,57nm,1.8s
**BILL Bilibino 64.43 16***c e*P **P** **18 48 28.8 +1.1**
BILL *i* 18 49 02.2
BILL *e* 18 50 51.4
BILL *e*PPP PPP 18 52 23.1
BILL *e*S S 18 57 16.4 +12
BILL pmax pmax
comp=Z,20nm,1.6s
**IMYA Miami 64.93 306** *e*P **P** **18 48 32.5 +0.7**
**ITEG Tejag 65.70 302** *e*P **P** **18 48 37.8 +1.0**
**IPAY Payeh 65.83 306** *e*P **P** **18 48 37.9 +0.2**
**IEMG Emamgholi 66.21 307** *e*P **P** **18 48 40.0 -0.2**
**IKRD Kardeh 66.25 306** *e*P P 18 48 36.3 -4.1
**GEYT Alibeck 66.69 307** P **P** **18 48 43.4 +0.4**
comp=Z,5.5nm,0.8s,baz=134,slow=4.2,SNR=15
GEYT LR LR 19 21 24.5
comp=Z,221nm,20.5s,baz=50,slow=39
**RPZ Rata Peaks 66.90 146** *e*P **P** **18 48 45.0 +1.0**
comp=Z,30nm,1.1s
**AB31 Akbulak array 67.25 320** P **P** **18 48 45.5 -0.7**
AB31 pmax pmax
comp=Z,4.0nm,0.9s
**ABKAR Akbulak array 67.25 320** *e*P **P** **18 48 45.7 -0.4**
**BKZ Black Stump Fm 67.41 139** *e*P **P** **18 48 48.5 +1.1**
comp=Z,27nm,0.8s
**UOSS Wadi Hilu 67.62 293** *e*P **P** **18 48 48.0 -1.0**
comp=Z,5.8nm,0.9s
**SVE Sverdlovsk 68.72 328**⇓ *i*P **P** **18 48 55.1 -0.2**
SVE pmax pmax
comp=Z,15nm,1.1s
**ARU Arti 69.72 327***d i*P **P** **18 49 00.3 -1.2**
ARU 18 49 19.9
ARU S **S** **18 58 07.7 -0.9**
ARU pmax pmax
comp=Z,59nm,5.0s
ARU MLR MLR
comp=Z,364nm,21.0s
ARU MLR MLR
comp=Z,2μm,19.0s
**IGLO Ghaloghah 69.98 305** *e*P **P** **18 49 03.3 -0.5**
**IPAR Pars 70.44 298** *e*P **P** **18 49 06.2 -0.6**
**IRAM Ramesheh 71.03 300** *e*P **P** **18 49 09.2 -1.0**
**IKAZ Kazeroun 71.49 298** *e*P **P** **18 49 12.6 -0.6**
**IKLH Kolahrood 71.73 302** *e*P **P** **18 49 15.0 +0.5**
**IPIR Pirpir 72.30 301** *e*P **P** **18 49 18.2 +0.1**
**IVIS Veis 75.65 303** *e*P **P** **18 49 36.7 -0.6**
**CASY Casey 76.24 186** *e*P **P** **18 49 38.8 -0.9**
comp=Z,9.2nm,0.7s
**RAYN Ar Rayn 77.44 292** P **P** **18 49 47.6 0.0**
comp=Z,148nm,0.6s,SNR=15
**KDAK Kodiak Island 77.72 33** *i*P P 18 49 53.5 +5.2
**KBZ Khabaz 78.46 313** P **P** **18 49 52.5 -0.2**
comp=Z,1.9nm,1.0s,baz=81,slow=8.6,SNR=3.4
KBZ LR LR 19 29 37.2
comp=Z,263nm,18.2s,baz=68,slow=40
**BPAW Bear Paw Mtn. 78.72 26** *e*P **P** **18 49 55.4 +1.5**
comp=Z,5.3nm,1.2s
**TRF Thorofare Moun 79.01 27** *e*P **P** **18 49 56.4 +0.8**
**COLD Coldfoot 79.15 23** *e*P **P** **18 49 57.2 +1.1**
comp=Z,7.5nm,0.8s
**MCK McKinley 79.62 27** *e*P **P** **18 49 57.4 -1.4**
MCK pmax pmax
comp=Z,17nm,0.9s
**MCK McKinley 79.62 27** *e*P **P** **18 49 57.4 -1.4**
comp=Z,17nm,0.9s
**KLMR Klimovskoe 80.08 330** *e*P P 18 49 57.8 -3.5
KLMR pmax pmax
comp=Z,36nm,1.2s
**ILAR Eielson Array 80.50 26** P **P** **18 50 03.8 +0.3**
comp=Z,1.1nm,0.7s,baz=263,slow=4.1,SNR=20
ILAR LR LR 19 24 38.2
comp=Z,71nm,21.8s,baz=285,slow=35
**VORD Divnogorie 80.59 320** *e*P **P** **18 50 02.2 -2.0**
VORD pmax pmax
comp=N,10.0nm,0.6s
VORD pmax pmax
comp=E,10.0nm,0.6s
VORD pmax pmax
comp=Z,3.0nm,0.6s
**LPSR Galich'ya Gora 80.73 322** *e*P **P** **18 50 04.7 -0.2**
LPSR pmax pmax
comp=Z,8.0nm,0.9s
LPSR pmax pmax
comp=N,3.0nm,0.5s
LPSR pmax pmax
comp=E,9.0nm,0.8s
**DOT Dot Lake 81.79 27** *e*P **P** **18 50 11.3 +0.9**
comp=E,40nm,1.2s
**OBN Obninsk 81.95 325**⇑ *e*P **P** **18 50 13.8 +2.5**
OBN *e* 18 53 18.1
OBN *e*PPP PPP 18 55 12.7
OBN *e*S S 19 00 13.0 -11
OBN pmax pmax
comp=Z,7.0nm,0.9s
OBN MLR MLR
comp=Z,278nm,19.0s
**MENT Mentasta 82.00 28** *e*P **P** **18 50 11.8 +0.2**
**DAWY Dawson 83.80 26** *e*P **P** **18 50 21.6 +0.8**
comp=Z,33nm,1.3s
**ARCES ARCESS Array B 84.89 340** P **P** **18 50 25.3 -0.9**
comp=Z,4.5nm,0.9s,baz=87,slow=5.0,SNR=7.4
ARCES LR LR 19 32 43.3
comp=Z,150nm,18.2s,baz=80,slow=39
**INK Inuvik 85.33 22** P **P** **18 50 29.1 +0.6**
comp=Z,3.1nm,0.8s,baz=292,slow=5.1
**INK Inuvik 85.33 22** *e*P **P** **18 50 29.0 +0.6**
INK pmax pmax
comp=Z,17nm,1.2s
**INK Inuvik 85.33 22** *e*P **P** **18 50 29.0 +0.6**
comp=Z,17nm,1.2s
**BRTR Keskin Array B 85.72 309** P **P** **18 50 30.4 -0.9**
comp=Z,1.1nm,0.8s,baz=85,slow=4.0,SNR=5.8
BRTR LR LR 19 34 27.1
comp=Z,58nm,19.7s,baz=64,slow=40
**BRTR Keskin Array B 85.72 309** *i*P **P** **18 50 30.0 -1.2**
BRTR pmax pmax
comp=Z,1.0nm,0.8s
**FINES FINESS Array B 86.46 332** P **P** **18 50 33.1 -1.0**
comp=Z,1.8nm,0.5s,baz=76,slow=5.9,SNR=19
FINES LR LR 19 31 46.6
comp=Z,189nm,19.5s,baz=74,slow=37
**AKASG Malin Array Be 86.96 321** P **P** **18 50 35.6 -1.2**
comp=Z,0.3nm,0.4s,baz=63,slow=4.9,SNR=4.0
AKASG LR LR 19 33 05.7
comp=Z,78nm,18.3s,baz=85,slow=38
**AKASG Malin Array Be 86.96 321** *i*P **P** **18 50 36.5 -0.3**
AKASG pmax pmax
comp=Z,1.0nm,0.5s
**PPT Papeete 87.76 108** LR LR 19 24 54.1
comp=Z,19nm,18.3s,baz=246,slow=32
**PPT2 Papeete2 87.77 108** *e*S S 19 01 06.7 -16
comp=Z,82nm,26.0s
PPT2 *e*LR LR 19 18 28.1
comp=Z,163nm,31.5s
**MAW Mawson 88.65 200** P **P** **18 50 44.0 -0.4**
comp=Z,1.1nm,0.7s,baz=57,slow=4.1,SNR=4.0
MAW LR LR 19 26 49.5
comp=Z,32nm,21.0s,baz=60,slow=33
**KMBO Kilima Mbogo 88.70 269** P **P** **18 50 46.4 +0.2**
comp=Z,1.2nm,0.5s,baz=49,slow=11,SNR=3.6
**KMBO Kilima Mbogo 88.70 269** *i*P **P** **18 50 46.4 +0.2**
KMBO pmax pmax
comp=Z,1.0nm,0.5s
**VNDA Vanda 89.08 173** P **P** **18 50 45.8 -0.5**
comp=Z,1.8nm,0.6s,baz=306,slow=5.1,SNR=10
VNDA LR LR 19 31 44.3
comp=Z,62nm,18.9s,baz=339,slow=36
**UZH Uzhgorod 91.82 320** *e*P P 18 51 05.2 +5.5
**NOA NORSAR Array B 93.36 334** P **P** **18 51 06.5 -0.2**
comp=Z,0.6nm,0.7s,baz=64,slow=4.6,SNR=2.5
NOA LR LR 19 36 37.0
comp=Z,150nm,20.5s,baz=70,slow=38
**YKA Yellowknife Ar 94.81 24** P **P** **18 51 13.1 -0.1**
comp=Z,1.1nm,0.7s,baz=301,slow=4.3,SNR=3.7
**GERES GERESS Array B 97.11 322** P **P** **18 51 22.6 -1.5**
comp=Z,0.2nm,0.3s,baz=93,slow=5.3,SNR=4.2
GERES LR LR 19 38 46.6
comp=Z,115nm,20.1s,baz=82,slow=38
**SYO Syowa Base 97.27 201**⇓ *e*X pP 18 51 34.8 +1.9
**QSPA South Pole Qui 99.21 180** LR LR 19 36 17.0
comp=Z,84nm,21.7s,baz=5.5,slow=35
**VNA2 Neumayer--Watz 111.97 195** P **PKiKP** **18 56 26.2 0.0**
baz=21,slow=0.5
**VNA3 Neumayer Olymp 112.33 194** P **PKiKP** **18 56 26.7 -0.3**
**TXAR Lajitas Array 118.82 49** PKP **PKPdf** **18 56 41.1 +0.3**
comp=Z,0.6nm,0.8s,baz=236,slow=1.0,SNR=2.5
**TORD Torodi Ar. Bea 120.13 291** PKP **PKPdf** **18 56 42.1 -1.5**
comp=Z,1.2nm,0.6s,baz=67,slow=2.1,SNR=10

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*ISCJB* ***23*** *18:52:40.8±0.4, 7.°08S±0.°04×129.°24E±0.°05, h150km, mb3.3/1, Error ellipse: s-maj=6.7km s-min=4.9km az=174.2*
*IDC* ***23*** *18:52:40.8±2.1, 6.°97S×129.°34E, h165km±27km, mb3.2/1, mb1 3.9/5, mb1mx3.3/27, mbtmp4.3/5, Error ellipse: s-maj=35.4km s-min=21.9km az=96.0*
*DJA* ***23*** *18:52:41.2±0.3, 7.°5S±3.°×12.°9E±.°, h10km, M5.2/4, mb5.0/4, mB5.3/3, MLv5.4/1, Mw(mB)4.7/3*
*AUST* ***23*** *18:52:41.4, 6.°98S×129.°54E, h200km*
**ISC 23 18:52:40.5±0.7, 6.°99S±0.°06×129.°26E±0.°06, h150km, n30, σ2s14/32, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **2.25** | **116** | P | **Pn** | **18 53 19.7** | **+1.1** |
| SAUI | | | | S | **Sn** | **18 53 48.3** | **+0.4** |
| **BNDI** | **Bandanaira** | **2.53** | **15** | P | **Pn** | **18 53 23.7** | **+1.7** |
| **AAI** | **Ambon** | **3.45** | **342** | P | **Pn** | **18 53 36.8** | **+3.2** |
| baz=3.6,SNR=14 | | | | | | | |
| **AAI** | **Ambon** | **3.45** | **342** | P | **Pn** | **18 53 35.8** | **+2.2** |
| **MSAI** | **Masohi** | **3.63** | **355** | P | **Pn** | **18 53 38.0** | **+2.0** |
| **NLAI** | **Namlea** | **4.30** | **330** | P | **Pn** | **18 53 47.9** | **+3.2** |
| **FAKI** | **Fak Fak** | **5.02** | **37** | P | **Pn** | **18 53 56.0** | **+1.8** |
| baz=4.9,SNR=4.5 | | | | | | | |
| **FAKI** | **Fak Fak** | **5.02** | **37** | P | Pn | 18 53 57.8 | +3.6 |
| **SOEI** | **Soe** | **5.66** | **241** | P | **Pn** | **18 54 04.8** | **+2.0** |
| baz=5.9,SNR=16 | | | | | | | |
| **SOEI** | **Soe** | **5.66** | **241** | P | **Pn** | **18 54 04.6** | **+1.9** |
| 64nm,0.8s,1μm | | | | | | | |
| **MTN** | **Manton Dam** | **6.10** | **163** | P | **Pn** | **18 54 09.8** | **+1.2** |
| baz=6.1,SNR=242 | | | | | | | |
| **BATI** | **Baumata** | **6.39** | **240** | P | **Pn** | **18 54 14.1** | **+1.6** |
| 39nm,0.3s,baz=66,slow=4.1,SNR=83 | | | | | | | |
| BATI | | | | S | **Sn** | **18 55 23.0** | **-1.6** |
| 23nm,0.3s,baz=58,slow=16,SNR=7.9 | | | | | | | |
| **BATI** | **Baumata** | **6.39** | **240** | P | **Pn** | **18 54 13.7** | **+1.2** |
| 77nm,0.6s,1μm | | | | | | | |
| **SIJI** | **Sorong** | **6.40** | **18** | P | **Pn** | **18 54 12.7** | **+0.1** |
| 1.3nm,0.3s,baz=248,slow=22,SNR=21 | | | | | | | |
| SIJI | | | | S | **Sn** | **18 55 20.8** | **-3.9** |
| 7.0nm,0.3s,baz=268,slow=23,SNR=13 | | | | | | | |
| **SWI** | **Sorong** | **6.40** | **18** | P | **Pn** | **18 54 13.7** | **+1.1** |
| baz=6.4,SNR=5.6 | | | | | | | |
| **SWI** | **Sorong** | **6.40** | **18** | P | Pn | 18 54 15.7 | +3.1 |
| **KDU** | **Kakadu** | **6.49** | **151** | P | **Pn** | **18 54 14.6** | **+0.8** |
| baz=6.4,SNR=52 | | | | | | | |
| **LBMI** | **Labuha** | **6.55** | **344** | P | **Pn** | **18 54 17.2** | **+2.6** |
| **KNRA** | **Kununurra** | **8.65** | **183** | P | **Pn** | **18 54 42.2** | **-0.4** |
| baz=8.7,SNR=73 | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.79** | **160** | P | **Pn** | **18 55 47.5** | **-2.3** |
| 1.0nm,0.3s,baz=335,slow=12,SNR=44 | | | | | | | |
| WRA | | | | S | Sn | 18 58 11.8 | -11 |
| 3.4nm,0.3s,baz=331,slow=22,SNR=14 | | | | | | | |
| **COEN** | **Coen** | **15.33** | **118** | P | **P** | **18 56 12.6** | **+2.2** |
| baz=15,SNR=9.7 | | | | | | | |
| **QIS** | **Mount Isa** | **16.81** | **144** | P | **Pn** | **18 56 28.2** | **+1.0** |
| baz=17,SNR=15 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.17** | **165** | P | **Pn** | **18 56 31.6** | **+0.1** |
| 1.9nm,0.3s,baz=338,slow=9.6,SNR=97 | | | | | | | |
| ASAR | | | | S | **S** | **18 59 36.5** | **-5.8** |
| 0.9nm,0.3s,baz=350,slow=25,SNR=6.9 | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WRKA** | **Warakurna** | **17.97** | **183** | P | **P** | **18 56 40.8** | **+1.3** |
| | baz=18,SNR=53 | | | | | | |
| **MEEK** | **Meekatharra** | **22.01** | **206** | P | **P** | **18 57 23.6** | **+0.7** |
| | baz=22,SNR=6.1 | | | | | | |
| **MORW** | **Morawa** | **25.26** | **208** | P | **P** | **18 57 53.4** | **+0.5** |
| | baz=26,SNR=3.3 | | | | | | |
| **BBOO** | **Buckleboo** | **26.46** | **167** | P | **P** | **18 58 03.9** | **+0.3** |
| | baz=26,SNR=8.2 | | | | | | |
| **HTT** | **Hallett** | **27.80** | **162** | P | **P** | **18 58 13.3** | **-2.3** |
| | baz=28,SNR=3.5 | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.79** | **161** | P | **P** | **18 58 52.2** | **+1.5** |
| | baz=32,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.82** | **327** | P | **P** | **19 03 21.1** | **-1.3** |
| | 0.5nm,0.8s,baz=126,slow=6.5,SNR=3.5 | | | | | | |

*IDC* ***23*** *19:32:33.9±5.1,5°.01S×133°.78E, h0km, mb3.8/1, mb1 3.7/4, mb1mx3.4/37, mbtmp3.6/4, ML3.2/3, MS3.6/1, Ms1 3.6/1, ms1mx2.4/32, Error ellipse: s-maj=256.9km s-min=27.5km az=75.0*

*AUST* ***23*** *19:32:40.4, 4°.97S×131°.53E, h0km*

**ISC 23 19:32:37.3±1.3, 5°.3S±0°.1×132°.5E±0°.7, h10km, n8, σ2.9s34/7, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.41** | **355** | P | **Pn** | **19 33 17.4** | **+0.6** |
| | baz=2.2,SNR=14 | | | | | | |
| **SIJI** | **Sorong** | **4.60** | **345** | Pn | **Pn** | **19 33 48.1** | **+1.1** |
| | 0.6nm,0.3s,baz=242,slow=22,SNR=11 | | | | | | |
| SIJI | | | | Sn | **Sn** | **19 34 37.0** | **-3.4** |
| | 0.8nm,0.3s,baz=268,slow=2.6,SNR=3.7 | | | | | | |
| **KDU** | **Kakadu** | **7.30** | **180** | P | Pn | 19 34 31.7 | +7.6 |
| | baz=7.8,SNR=5.6 | | | | | | |
| **SOEI** | **Soe** | **9.24** | **241** | P | Pn | 19 34 47.1 | -3.7 |
| | baz=8.6,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.63** | **173** | Pn | **Pn** | **19 36 04.0** | **-0.5** |
| | 0.1nm,0.3s,baz=355,slow=13,SNR=12 | | | | | | |
| WRA | | | | Sn | **Sn** | **19 38 44.8** | **-2.1** |
| | 0.1nm,0.3s,baz=2.2,slow=24,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **18.27** | **176** | P | **P** | **19 36 52.9** | **+1.6** |
| | 0.2nm,0.3s,baz=5.9,slow=11,SNR=19 | | | | | | |
| **PALK** | **Pallekele** | **53.15** | **283** | LR | LR | 20 08 52.4 | |
| | comp=Z,51nm,18.3s,baz=116,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.22** | **325** | P | **P** | **19 43 39.4** | **+1.2** |
| | 0.8nm,0.9s,baz=115,slow=7.4,SNR=3.5 | | | | | | |

*IDC* ***23*** *19:32:43.4±1.3, 2°.01S×126°.60E, h0km, mb3.5/3, mb1 3.9/5, mb1mx3.6/45, mbtmp3.8/5, ML4.0/2, Error ellipse: s-maj=78.1km s-min=20.6km az=74.0*

*DJA* ***23*** *19:32:46.6±3.6, 2°.S±7°.×12°.6E±3°.4, h19km±7km, M3.5/8, MLv3.5/8*

*ISCJB* ***23*** *19:32:47.8±0.9, 2°.03S±0°.08×125°.9E±0°.1, h33km, mb3.5/3, Error ellipse: s-maj=15.3km s-min=10.7km az=171.4*

**ISC 23 19:32:49.4±1.1, 2°.08S±0°.09×126°.1E±0°.2, h35km, n11, σ2.9s08/10, mb3.5/3, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANI** | **Sanana** | **0.08** | **290** | P | Pn | 19 32 52.4 | -3.0 |
| **NLAI** | **Namlea** | **1.55** | **138** | P | **Pn** | **19 33 15.3** | **+0.8** |
| **LBMI** | **Labuha** | **2.03** | **45** | P | **Pn** | **19 33 21.3** | **+0.2** |
| **AAI** | **Ambon** | **2.66** | **127** | P | **Pn** | **19 33 31.7** | **+1.9** |
| **TNTI** | **Ternate** | **3.12** | **25** | P | **Pn** | **19 33 35.8** | **-0.3** |
| **MSAI** | **Masohi** | **3.12** | **114** | P | **Pn** | **19 33 38.4** | **+2.2** |
| **BATI** | **Baumata** | **8.42** | **196** | Pn | **Pn** | **19 34 50.8** | **+1.8** |
| | 2.3nm,0.3s,baz=53,slow=3.8,SNR=7.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.51** | **156** | P | **P** | **19 37 10.9** | **-2.9** |
| | 0.4nm,0.3s,baz=331,slow=12,SNR=19 | | | | | | |
| **ASAR** | **Alice Springs** | **22.76** | **161** | P | **P** | **19 37 46.0** | **-3.0** |
| | 0.9nm,0.6s,baz=332,slow=8.0,SNR=6.7 | | | | | | |
| **SONM** | **Songino Array** | **52.60** | **343** | P | **P** | **19 41 59.9** | **+0.1** |
| | 0.5nm,1.0s,baz=140,slow=7.2,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.99** | **327** | P | **P** | **19 43 06.8** | **+0.7** |
| | 0.4nm,0.6s,baz=126,slow=8.0,SNR=3.1 | | | | | | |

*ISCJB* ***23*** *19:34:04.8±1.6, 31°.0N±0°.3×41°.1W±0°.2, h10km, mb3.7/8, MS3.7/3, Error ellipse: s-maj=47.9km s-min=22.1km az=13.0*

*IDC* ***23*** *19:34:05.0±1.9, 31°.00N×41°.09W, h0km, mb3.7/8, mb1 3.9/8, mb1mx3.6/53, mbtmp3.7/8, MS3.7/3, Ms1 3.7/3, ms1mx2.9/42, Error ellipse: s-maj=59.0km s-min=25.5km az=12.0*

**ISC 23 19:34:06.6±1.8, 31°.0N±0°.4×41°.1W±0°.2, h10km, n16, σ0.9s46/8, mb3.9/8, MS3.9/3, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TORD** | **Torodi Ar. Bea** | **43.12** | **105** | P | **P** | **19 42 07.6** | **+0.2** |
| | 1.0nm,0.9s,baz=304,slow=6.8,SNR=6.2 | | | | | | |
| **GERES** | **GERESS Array B** | **44.62** | **50** | P | **P** | **19 42 19.0** | **-0.2** |
| | 0.2nm,0.4s,baz=207,slow=4.1,SNR=3.6 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **46.24** | **142** | T | T | 20 32 18.1 | |
| | baz=328,slow=75,SNR=60 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **46.25** | **142** | T | T | 20 32 18.7 | |
| | baz=328,slow=75,SNR=48 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **46.26** | **142** | T | T | 20 32 19.5 | |
| | baz=328,slow=75,SNR=73 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **47.10** | **143** | T | T | 20 33 23.3 | |
| | baz=329,slow=75,SNR=51 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **47.10** | **143** | T | T | 20 33 11.8 | |
| | baz=329,slow=75,SNR=51 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **47.12** | **143** | T | T | 20 33 09.8 | |
| | baz=329,slow=75,SNR=63 | | | | | | |
| **CMIG** | **Matias Romero** | **50.60** | **267** | LR | LR | 20 01 29.0 | |
| | comp=Z,119nm,19.9s,baz=150,slow=32 | | | | | | |
| **AKASG** | **Malin Array Be** | **54.59** | **47** | P | **P** | **19 43 34.9** | **-0.1** |
| | 0.3nm,0.4s,baz=275,slow=6.1,SNR=3.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **59.95** | **59** | P | **P** | **19 44 13.4** | **+0.1** |
| | 0.7nm,0.7s,baz=271,slow=5.0,SNR=3.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.21** | **300** | P | **P** | **19 44 28.3** | **-0.4** |
| | 0.3nm,0.3s,baz=77,slow=4.9,SNR=6.5 | | | | | | |
| NVAR | | | | LR | LR | 20 09 59.3 | |
| | comp=Z,102nm,19.6s,baz=69,slow=35 | | | | | | |
| **ILAR** | **Eielson Array** | **68.74** | **334** | P | **P** | **19 45 10.9** | **+0.7** |
| | 1.1nm,1.1s,baz=65,slow=5.0,SNR=6.1 | | | | | | |
| **TSUM** | **Tsumeb** | **75.25** | **123** | LR | LR | 20 14 12.3 | |
| | comp=Z,16nm,21.5s,baz=322,slow=32 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **82.84** | **34** | P | **P** | **19 46 30.5** | **-0.6** |
| | 1.0nm,0.9s,baz=312,slow=6.0,SNR=4.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **83.36** | **29** | P | **P** | **19 46 34.0** | **+0.2** |
| | 0.4nm,0.6s,baz=316,slow=6.0,SNR=3.7 | | | | | | |

**IDC 23 19:34:49.7±4.3, 15°.75S×173°.83W, h0km, mb3.7/3, mb1 4.0/4, mb1mx3.7/37, mbtmp3.7/4, ML3.7/1, Error ellipse: s-maj=214.6km s-min=24.5km az=144.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **2.70** | **48** | Pn | Pn | 19 35 34.2 | -0.2 |
| | 12nm,0.3s,baz=234,slow=14,SNR=7.6 | | | | | | |
| AFI | | | | Sn | Sn | 19 35 57.3 | -11 |
| | 28nm,0.3s,baz=198,slow=21,SNR=8.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.36** | **257** | P | P | 19 43 41.1 | -0.3 |
| | 0.2nm,0.5s,baz=94,slow=7.1,SNR=6.9 | | | | | | |
| **ASAR** | **Alice Springs** | **49.61** | **252** | P | P | 19 43 43.0 | -0.3 |
| | 1.5nm,0.6s,baz=90,slow=7.9,SNR=22 | | | | | | |
| **ILAR** | **Eielson Array** | **82.86** | **11** | P | P | 19 47 15.1 | -0.6 |
| | 0.6nm,0.8s,baz=224,slow=5.8,SNR=8.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **146.16** | **320** | PKPbc | PKPbc | 19 54 32.7 | +0.2 |
| | 1.6nm,0.8s,baz=90,slow=1.4,SNR=5.9 | | | | | | |
| **GERES** | **GERESS Array B** | **146.42** | **351** | PKPbc | PKPbc | 19 54 32.4 | -0.4 |
| | 0.5nm,0.7s,baz=354,slow=3.0,SNR=3.2 | | | | | | |

*IPEC* ***23*** *19:36:09.8±0.1, 47°.66N×13°.62E, h2km, ML2.3/7, Error ellipse: s-maj=1.2km s-min=0.6km az=107.0*

*CSEM* ***23*** *19:36:09.5±0.1, 47°.70N×13°.63E, h2km, ML2.7/19, Error ellipse: s-maj=3.2km s-min=2.6km az=137.0*

*VIE* ***23*** *19:36:09.1±0.1, 47°.68N×13°.63E, h5km±1km, mb2.0/11, ml2.4/15, Error ellipse: s-maj=0.7km s-min=0.5km az=173.0*

*PRU* ***23*** *19:36:10.8, 47°.70N×13°.55E, h0km*

*BGR* ***23*** *19:36:11.2±0.2, 47°.68N×13°.59E, h10km, ML2.0/9, Error ellipse: s-maj=4.4km s-min=3.3km az=61.0*

*BGR Felt IV EMS.*

**ISC 23 19:36:09.8±1.0, 47°.70N±0°.01×13°.64E±0°.01, h5km±10km, n68, σ0.9s97/119, 13C-12D, Austria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MOA** | **Molln** | **0.45** | **70** | *e*Pg | **Pb** | **19 36 19.1** | **-1.1** |
| MOA | | | | *e*Sg | **Sb** | **19 36 27.6** | **+0.4** |
| **MOA** | **Molln** | **0.45** | **70** | ⇑*e*Pg | **Pg** | **19 36 18.1** | **-0.3** |
| | 1.2nm,0.1s,SNR=29 | | | | | | |
| MOA | | | | ⇓*i*Sg | **Sg** | **19 36 24.0** | **-0.3** |
| | 18nm,0.3s | | | | | | |
| **MOA** | **Molln** | **0.45** | **70** | Pg | **Pg** | **19 36 18.1** | **-0.3** |
| | 1.2nm,0.1s,SNR=29 | | | | | | |
| MOA | | | | Sg | **Sg** | **19 36 24.0** | **-0.3** |
| | 18nm,0.3s | | | | | | |
| **RJOB** | **Jochberg** | **0.57** | **274** | *e*Pg | **Pg** | **19 36 20.1** | **-0.8** |
| **RJOB** | **Jochberg** | **0.57** | **274** | Pg | **Pg** | **19 36 20.1** | **-0.8** |
| **KBA** | **Koelnbreinsper** | **0.66** | **198** | *e*Pg | **Pg** | **19 36 21.6** | **-0.8** |
| KBA | | | | *e*Sg | **Sg** | **19 36 30.6** | **-0.4** |
| **KBA** | **Koelnbreinsper** | **0.66** | **198** | ⇓*i*Pg | **Pg** | **19 36 21.6** | **-0.8** |
| | 14nm,0.4s | | | | | | |
| KBA | | | | ⇓*i*Sg | **Sg** | **19 36 30.4** | **-0.5** |
| | 28nm,0.5s | | | | | | |
| **KBA** | **Koelnbreinsper** | **0.66** | **198** | Pg | **Pg** | **19 36 21.6** | **-0.8** |
| | 14nm,0.4s | | | | | | |
| KBA | | | | Sg | **Sg** | **19 36 30.4** | **-0.5** |
| | 28nm,0.5s | | | | | | |
| **GEC2** | **GERESS Array S** | **1.15** | **2** | *e*Pn | **Pn** | **19 36 31.8** | **-0.8** |
| GEC2 | | | | *e*Pg | **Pn** | **19 36 33.0** | **+0.4** |
| GEC2 | | | | *e*Sg | **Sn** | **19 36 49.2** | **+0.5** |
| **GEC2** | **GERESS Array S** | **1.15** | **2** | Pn | **Pn** | **19 36 31.8** | **-0.8** |
| **GEC2** | **GERESS Array S** | **1.15** | **2** | Pg | **Pn** | **19 36 33.0** | **+0.4** |
| GEC2 | | | | Sg | **Sn** | **19 36 49.2** | **+0.5** |
| **ACOM** | **Acomizza, Ital** | **1.16** | **184** | Pg | Pn | 19 36 35.5 | +2.7 |
| **ABTA** | **Abfaltersbach** | **1.23** | **219** | ⇑*i*Pg | **Pn** | **19 36 32.3** | **-1.4** |
| | 7.6nm,0.4s | | | | | | |
| ABTA | | | | ⇑*i*Sg | **Sg** | **19 36 49.2** | **0.0** |
| | 18nm,0.5s | | | | | | |
| **ABTA** | **Abfaltersbach** | **1.23** | **219** | Pg | **Pg** | **19 36 32.3** | **-1.4** |
| | 7.6nm,0.4s | | | | | | |
| ABTA | | | | Sg | **Sg** | **19 36 49.2** | **0.0** |
| | 18nm,0.5s | | | | | | |
| **RISI** | **Rein** | **1.30** | **235** | Pg | **Pg** | **19 36 36.5** | **+1.7** |
| RISI | | | | Sg | **Sg** | **19 36 55.2** | **+3.5** |
| | 90nm,0.5s | | | | | | |
| **PTCC** | **Patocco-Chiusa** | **1.31** | **189** | Pg | **Pg** | **19 36 37.2** | **+2.2** |
| | 24nm,0.6s | | | | | | |
| **OBKA** | **Obir** | **1.34** | **152** | *e*Pg | **Pg** | **19 36 37.5** | **+1.9** |
| OBKA | | | | *e*Sg | **Sg** | **19 36 54.7** | **+1.7** |
| **OBKA** | **Obir** | **1.34** | **152** | ⇑*e*Pg | **Pb** | **19 36 34.8** | **-0.7** |
| | 3.7nm,0.3s,SNR=6.5 | | | | | | |
| OBKA | | | | ⇑*i*Sg | **Sg** | **19 36 53.0** | **0.0** |
| | 7.1nm,0.3s | | | | | | |
| **OBKA** | **Obir** | **1.34** | **152** | Pg | **Pg** | **19 36 34.8** | **-0.7** |
| | 3.7nm,0.3s,SNR=6.5 | | | | | | |
| OBKA | | | | Sg | **Sg** | **19 36 53.0** | **0.0** |
| | 7.1nm,0.3s | | | | | | |
| **ARSA** | **Arzberg** | **1.35** | **109** | *e*Pg | **Pg** | **19 36 37.5** | **+1.7** |
| **ARSA** | **Arzberg** | **1.35** | **109** | ⇓*e*Pg | **Pb** | **19 36 35.1** | **-0.6** |
| | 2.1nm,0.2s,SNR=12 | | | | | | |
| ARSA | | | | ⇓*i*Sg | **Sg** | **19 36 53.9** | **+0.6** |
| | 16nm,0.5s | | | | | | |
| **ARSA** | **Arzberg** | **1.35** | **109** | Pg | **Pb** | **19 36 35.1** | **-0.6** |
| | 2.1nm,0.2s,SNR=12 | | | | | | |
| ARSA | | | | Sg | **Sg** | **19 36 53.9** | **+0.6** |
| | 16nm,0.5s | | | | | | |
| **SOKA** | **Soboth** | **1.40** | **137** | ⇑*i*Pn | **Pn** | **19 36 35.4** | **-0.6** |
| SOKA | | | | ⇓*i*Sg | **Sg** | **19 36 54.9** | **+0.3** |
| | 2.8nm,0.3s | | | | | | |
| **SOKA** | **Soboth** | **1.40** | **137** | Pn | **Pn** | **19 36 35.4** | **-0.6** |
| SOKA | | | | Sg | **Sg** | **19 36 54.9** | **+0.3** |
| | 2.8nm,0.3s | | | | | | |
| **WTTA** | **Wattenberg** | **1.43** | **253** | *e*Pg | **Pg** | **19 36 37.7** | **+0.4** |
| **WTTA** | **Wattenberg** | **1.43** | **253** | ⇓*e*Pg | **Pg** | **19 36 37.0** | **-0.2** |
| | 7.0nm,0.2s,SNR=17 | | | | | | |
| WTTA | | | | ⇓*i*Sg | **Sg** | **19 36 56.2** | **+0.4** |
| | 21nm,0.7s | | | | | | |
| **WTTA** | **Wattenberg** | **1.43** | **253** | Pg | **Pg** | **19 36 37.0** | **-0.2** |
| | 7.0nm,0.2s,SNR=17 | | | | | | |
| WTTA | | | | Sg | **Sg** | **19 36 56.2** | **+0.4** |
| | 21nm,0.7s | | | | | | |
| **KHC** | **Kasperske Hory** | **1.43** | **358** | *i* PG | **Pg** | **19 36 37.1** | **-0.2** |
| KHC | | | | *e*SG | **Sg** | **19 36 57.7** | **+1.9** |
| | comp=Z,33nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **1.43** | **358** | Pg | **Pg** | **19 36 37.1** | **-0.2** |
| KHC | | | | Sg | **Sg** | **19 36 57.7** | **+1.9** |
| | 33nm,0.4s | | | | | | |
| **WATA** | **Walderalm** | **1.45** | **256** | ⇑*e*Pg | **Pb** | **19 36 37.0** | **-0.3** |
| | 3.0nm,0.2s,SNR=4.2 | | | | | | |
| WATA | | | | ⇑*i*Sg | **Sg** | **19 36 56.9** | **+0.6** |
| | 8.0nm,0.3s | | | | | | |
| **WATA** | **Walderalm** | **1.45** | **256** | Pg | **Pb** | **19 36 37.0** | **-0.3** |
| | 3.0nm,0.2s,SNR=4.2 | | | | | | |
| WATA | | | | Sg | **Sg** | **19 36 56.9** | **+0.6** |
| | 8.0nm,0.3s | | | | | | |
| **ROBS** | **Robic** | **1.46** | **184** | *e*Pn | **Pg** | **19 36 38.0** | **+0.2** |
| ROBS | | | | *i* Sn | **Sg** | **19 36 58.6** | **+1.9** |
| **ROBS** | **Robic** | **1.46** | **184** | *e*Pn | **Pg** | **19 36 38.0** | **+0.2** |
| ROBS | | | | *i* Sn | **Sg** | **19 36 58.6** | **+1.9** |
| **PERS** | **Pernice** | **1.47** | **136** | *i* Pn | **Pb** | **19 36 37.0** | **-0.6** |
| PERS | | | | *i* Sn | **Sn** | **19 36 55.4** | **-1.1** |
| **PERS** | **Pernice** | **1.47** | **136** | *i* Pn | **Pb** | **19 36 37.0** | **-0.6** |
| PERS | | | | *i* Sn | **Sn** | **19 36 55.4** | **-1.1** |
| **CONA** | **Conrad Observa** | **1.51** | **81** | ⇓*e*Pg | **Pg** | **19 36 38.4** | **-0.4** |
| | 1.7nm,0.1s,SNR=15 | | | | | | |
| CONA | | | | ⇓*i*Sn | **Sg** | **19 36 58.1** | **-0.3** |
| CONA | | | | ⇑*i*Sg | **Sb** | **19 36 59.8** | **+1.9** |
| | 26nm,0.5s | | | | | | |
| **CONA** | **Conrad Observa** | **1.51** | **81** | Pg | **Pg** | **19 36 38.4** | **-0.4** |
| | 1.7nm,0.1s,SNR=15 | | | | | | |
| CONA | | | | Sn | **Sg** | **19 36 58.1** | **-0.3** |
| CONA | | | | Sg | **Sb** | **19 36 59.8** | **+1.9** |
| | 26nm,0.5s | | | | | | |
| **WET** | **Wettzell** | **1.53** | **341** | *e*Pg | **Pg** | **19 36 39.0** | **-0.2** |
| WET | | | | *e*Sg | **Sg** | **19 37 00.4** | **+1.4** |
| **WET** | **Wettzell** | **1.53** | **341** | Pg | **Pg** | **19 36 39.0** | **-0.2** |
| WET | | | | Sg | **Sg** | **19 37 00.4** | **+1.4** |
| **FUR** | **Furstenfeldbru** | **1.66** | **287** | *e*Pg | **Pg** | **19 36 41.4** | **-0.2** |
| FUR | | | | *e*Sg | **Sg** | **19 37 04.5** | **+1.4** |
| **FUR** | **Furstenfeldbru** | **1.66** | **287** | Pg | **Pg** | **19 36 41.4** | **-0.2** |
| **MOTA** | **Moosalm** | **1.76** | **259** | ⇑*e*Pg | **Pb** | **19 36 42.2** | **-0.4** |
| | 4.2nm,0.2s,SNR=21 | | | | | | |
| MOTA | | | | ⇓*i*Sg | **Sg** | **19 37 07.1** | **+0.8** |
| | 24nm,0.7s | | | | | | |
| **MOTA** | **Moosalm** | **1.76** | **259** | Pg | **Pb** | **19 36 42.2** | **-0.4** |
| | 4.2nm,0.2s,SNR=21 | | | | | | |
| MOTA | | | | Sg | **Sg** | **19 37 07.1** | **+0.8** |
| | 24nm,0.7s | | | | | | |
| **RETA** | **Reutte** | **1.96** | **265** | ⇓*e*Pg | **Pb** | **19 36 46.1** | **+0.1** |
| | 3.4nm,0.3s,SNR=10 | | | | | | |
| RETA | | | | ⇑*e*Sg | **Sg** | **19 37 13.1** | **+0.3** |
| | 13nm,0.3s,SNR=11 | | | | | | |
| **RETA** | **Reutte** | **1.96** | **265** | Pg | **Pb** | **19 36 46.1** | **+0.1** |
| | 3.4nm,0.3s,SNR=10 | | | | | | |
| RETA | | | | Sg | **Sg** | **19 37 13.1** | **+0.3** |
| | 13nm,0.3s,SNR=11 | | | | | | |
| **TREC** | **Trest** | **2.01** | **37** | *e*SG | **Sg** | **19 37 14.5** | **+0.1** |
| **TREC** | **Trest** | **2.01** | **37** | Sg | **Sg** | **19 37 14.5** | **+0.1** |
| **FETA** | **Feichten** | **2.09** | **252** | ⇑*e*Pg | **Pg** | **19 36 48.8** | **-1.1** |
| | 2.0nm,0.4s,SNR=8.8 | | | | | | |
| FETA | | | | ⇑*i*Sg | **Sg** | **19 37 17.9** | **+0.8** |
| | 3.2nm,0.5s | | | | | | |
| **FETA** | **Feichten** | **2.09** | **252** | Pg | **Pg** | **19 36 48.8** | **-1.1** |
| | 2.0nm,0.4s,SNR=8.8 | | | | | | |
| FETA | | | | Sg | **Sg** | **19 37 17.9** | **+0.8** |
| | 3.2nm,0.5s | | | | | | |
| **KRUC** | **Moravsky** | **2.28** | **52** | *e*Pn | **Pn** | **19 36 48.9** | **+0.7** |
| KRUC | | | | *e*Sn | **Sb** | **19 37 18.9** | **-1.1** |
| | 7.1nm,0.6s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.34** | **18** | *e*PG | **Pb** | **19 36 52.1** | **-0.4** |
| GOPC | | | | *e*SG | **Sg** | **19 37 24.0** | **-1.0** |
| **GOPC** | **GO Pecny, Ondr** | **2.34** | **18** | Pg | **Pb** | **19 36 52.1** | **-0.4** |
| GOPC | | | | Sg | **Sg** | **19 37 24.0** | **-1.0** |
| **PRU** | **Pruhonice** | **2.36** | **14** | *e*PG | **Pb** | **19 36 52.6** | **-0.3** |
| PRU | | | | *e*SG | **Sg** | **19 37 25.5** | **-0.2** |
| | comp=Z,1.9nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **2.36** | **14** | Pg | **Pb** | **19 36 52.6** | **-0.3** |
| PRU | | | | Sg | **Sg** | **19 37 25.5** | **-0.2** |
| | 1.9nm,0.4s | | | | | | |
| **VRAC** | **Vranov** | **2.54** | **50** | *e*Pn | **Pn** | **19 36 52.4** | **+0.8** |
| VRAC | | | | *e*Sn | **Sb** | **19 37 25.5** | **-1.8** |
| | 14nm,0.7s | | | | | | |
| **NKC** | **Novy Kostel** | **2.65** | **343** | *e*SG | **Sg** | **19 37 34.7** | **-0.3** |
| | comp=Z,10nm,0.5s | | | | | | |
| **NKC** | **Novy Kostel** | **2.65** | **343** | Sg | **Sg** | **19 37 34.7** | **-0.3** |
| | 10nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **2.89** | **12** | *e*SG | **Sg** | **19 37 44.7** | **+2.0** |
| | comp=Z,18nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **2.89** | **12** | Sg | **Sg** | **19 37 44.7** | **+2.0** |
| | 18nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.18** | **3** | SG | **Sg** | **19 37 51.1** | **-0.8** |
| | 5.8nm,0.6s | | | | | | |
| **DPC** | **Dobruska-Polom** | **3.18** | **33** | *e*SG | **Sg** | **19 37 53.7** | **+1.7** |
| | comp=Z,12nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **3.18** | **33** | Sg | **Sg** | **19 37 53.7** | **+1.7** |
| | 12nm,0.5s | | | | | | |
| **MOX** | **Moxa** | **3.23** | **336** | *e*Pn | **Pn** | **19 37 01.8** | **+0.6** |
| MOX | | | | *e*Sg | **Sg** | **19 37 53.3** | **-0.3** |
| **MOX** | **Moxa** | **3.23** | **336** | Pn | **Pn** | **19 37 01.8** | **+0.6** |
| MOX | | | | Sg | **Sg** | **19 37 53.3** | **-0.3** |
| **BFO** | **Black Forest** | **3.62** | **282** | *e*Pn | **Pn** | **19 37 07.1** | **+0.5** |
| BFO | | | | *e*Sg | **Sg** | **19 38 05.7** | **-0.4** |
| **BFO** | **Black Forest** | **3.62** | **282** | Pn | **Pn** | **19 37 07.1** | **+0.5** |
| BFO | | | | Sg | **Sg** | **19 38 05.7** | **-0.4** |
| **OKC** | **Ostrava-Krasne** | **3.67** | **53** | *e*SG | **Sg** | **19 38 07.8** | **+0.3** |
| **OKC** | **Ostrava-Krasne** | **3.67** | **53** | Sg | **Sg** | **19 38 07.8** | **+0.3** |

**MAN 23 19:41:35, 9°.24N×125°.58E, h5km, mb4.3, ML3.1, MS2.9, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BUTP** | **Butuan** | **0.28** | **170** | *e*P | Pg | 19 41 41.4 | +1.0 |
| **SCPH** | **Surigao** | **0.54** | **351** | *e*P | Pb | 19 41 46.7 | -0.3 |
| SCPH | | | | *e*S | Sb | 19 41 56.2 | +1.0 |
| **BUKP** | **Musuan** | **1.45** | **201** | *e*P | Pn | 19 42 01.8 | -0.2 |
| BUKP | | | | *e*S | Sb | 19 42 18.1 | -3.2 |
| **MATI** | **Mati** | **2.38** | **163** | *e*P | Pn | 19 42 15.9 | +1.2 |

*BJI* ***23*** *19:42:43.7, 3°.76N×95°.10E, h13km, mb4.8/20, mB5.0/11, Ms4.7/4, Ms7 4.3/3*

*AUST* ***23*** *19:42:50.7±4.6, 4°.36N×94°.53E, h7km, Error ellipse: s-maj=2.4km s-min=0.9km az=249.0*

*ISCJB* ***23*** *19:42:56.3±0.3, 4°.53N±0°.03×95°.05E±0°.03, h48km, mb4.4/29, MS3.5/5, Error ellipse: s-maj=5.4km s-min=2.6km az=42.5*

*IDC* ***23*** *19:42:59.5±2.7, 4°.81N×95°.29E, h57km±26km, mb4.0/21, mb1 4.1/23, mb1mx3.9/50, mbtmp4.3/23, ML4.2/2, MS3.1/6, Ms1 3.1/6, ms1mx2.8/46, Error ellipse: s-maj=21.6km s-min=12.5km az=41.0*

*NEIC* ***23*** *19:42:59.6±1.0, 4°.61N×95°.14E, h65km±9km, mb4.6/11, Error ellipse: s-maj=10.9km s-min=7.5km az=48.0*

*KLM* ***23*** *19:43:02.0, 4°.58N×95°.35E, h55km, mb4.6, ML4.2, MS6.0*

*DJA* ***23*** *19:43:03.6±0.5, 4°.N±2°.×9°.5E±°., h62km±7km, M4.9/10, mb5.0/10, mB5.5/7, MLv4.9/10, Mw(mB)4.9/7*

**ISC 23 19:42:58.2±0.4, 4°.66N±0°.05×95°.16E±0°.05, h48km, n144, σ1.9s43/138, mb4.4/29, MS3.2/5, 9C-2D, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLSI** | **Meulaboh, Aceh** | **1.30** | **108** | P | **Pn** | **19 43 20.9** | **+0.9** |
| MLSI | | | | S | **Sn** | **19 43 36.3** | **+0.1** |
| **LHMI** | **Lhok Sumawe** | **1.86** | **72** | P | **Pn** | **19 43 29.6** | **+1.9** |
| | baz=2.6,SNR=81 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **1.86** | **72** | P | **Pn** | **19 43 29.9** | **+2.2** |
| LHMI | | | | S | **Sn** | **19 43 53.0** | **+2.9** |
| **LHMI** | **Lhok Sumawe** | **1.86** | **72** | *e*Pn | **Pn** | **19 43 29.5** | **+1.8** |
| **CMBY** | **CAMPBELL BAY** | **2.64** | **332** | *e*P | **Pn** | **19 43 40.3** | **+1.9** |
| CMBY | | | | *e*S | **Sn** | **19 44 10.5** | **+1.3** |
| CMBY | | | | AML | AML | 19 44 27.3 | |
| | comp=N,28μm,1.0s | | | | | | |
| CMBY | | | | AML | AML | 19 44 28.2 | |
| | comp=E,22μm,0.6s | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **2.84** | **113** | P | **Pn** | **19 43 43.2** | **+2.1** |
| KCSI | | | | S | **Sn** | **19 44 14.5** | **+0.4** |
| **TSI** | **Tuntungan** | **3.58** | **109** | P | **Pn** | **19 43 53.3** | **+2.0** |
| TSI | | | | S | **Sn** | **19 44 32.1** | **-0.3** |
| **GSI** | **Gunungsitoli** | **4.11** | **144** | P | **Pn** | **19 43 58.9** | **+0.3** |
| GSI | | | | S | **Sn** | **19 44 45.5** | **0.0** |
| **GSI** | **Gunungsitoli** | **4.11** | **144** | *e*Pn | **Pn** | **19 43 58.8** | **+0.1** |
| **PSI** | **Prapat** | **4.18** | **116** | P | **Pn** | **19 44 01.3** | **+1.6** |
| | comp=E,33nm,0.3s,baz=316,slow=18,SNR=52 | | | | | | |
| PSI | | | | S | **Sn** | **19 44 49.4** | **+2.1** |
| | comp=E,36nm,0.3s,baz=258,slow=7.1,SNR=6.3 | | | | | | |
| **PSI** | **Prapat** | **4.18** | **116** | P | **Pn** | **19 44 02.3** | **+2.6** |
| | baz=4.7,SNR=46 | | | | | | |
| **PKDT** | **Phuket** | **4.50** | **44** | P | **Pn** | **19 44 05.4** | **+1.5** |
| **TRTT** | **Trang** | **5.50** | **55** | P | **Pn** | **19 44 18.7** | **+1.1** |
| | comp=E,196nm,0.8s,comp=E,2μmcomp=E,0.8nm | | | | | | |
| **KULM** | **Kulim** | **5.50** | **83** | *e*Pn | **Pn** | **19 44 18.6** | **+0.9** |
| KULM | | | | *e*Sn | **Sn** | **19 45 16.4** | **-3.2** |
| **IPM** | **Ipoh** | **5.84** | **92** | ⇓P | **Pn** | **19 44 22.8** | **+0.4** |
| **IPM** | **Ipoh** | **5.84** | **92** | *e*Pn | **Pn** | **19 44 23.3** | **+0.9** |
| IPM | | | | *e*Sn | Sn | 19 45 21.5 | -6.7 |
| **MNSI** | **Mandailing Nat

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| UBPT | Khong Chiam | 14.63 | 43 | P | | P | 19 46 26.9 | -0.9 |
| | comp=E,22nm,1.0s | | | | | | | |
| SKNT | Sakolnakorn | 14.98 | 35 | P | | P | 19 46 30.1 | -1.6 |
| | comp=E,56nm,0.8s | | | | | | | |
| DLV | T Lat | 15.03 | 60 | *e*Pn | | P | 19 46 32.1 | -0.3 |
| | comp=E,194nm,2.2s | | | | | | | |
| NONG | Nongkai | 15.44 | 30 | P | | P | 19 46 39.1 | +2.4 |
| | comp=E,13nm,1.1s,comp=E,4μm | | | | | | | |
| KSM | Kuching | 15.45 | 101 | P | | P | 19 46 39.9 | +3.0 |
| | baz=16,SNR=5.9 | | | | | | | |
| KSM | Kuching | 15.45 | 101 | ⇑P | | Pn | 19 46 33.8 | +0.6 |
| KSM | Kuching | 15.45 | 101 | *e*Pn | | Pn | 19 46 33.1 | 0.0 |
| | comp=E,20nm,0.9s | | | | | | | |
| CMAI | Chiengmai2 | 15.64 | 14 | P | | P | 19 46 39.5 | +0.3 |
| | comp=E,88nm,0.8s,comp=E,10μm | | | | | | | |
| SBUM | Sibu | 17.16 | 97 | ⇑P | | P | 19 46 55.8 | -0.1 |
| SBUM | Sibu | 17.16 | 97 | *e*P | | P | 19 46 57.6 | +1.7 |
| | comp=E,5.5nm,0.8s | | | | | | | |
| VIS | Vishakhapatnam | 17.40 | 319 | *e*P | | P | 19 46 59.1 | +0.7 |
| VIS | | | | AMB | | AMB | 19 47 03.7 | |
| | comp=Z,30nm,2.6s | | | | | | | |
| VIS | | | | *ex* | | x | 19 49 59.4 | |
| CISI | Cisompet, Garu | 17.51 | 134 | P | | Pn | 19 46 56.2 | -3.0 |
| | baz=18,SNR=3.6 | | | | | | | |
| BTM | Bintulu | 17.93 | 94 | ⇑P | | P | 19 47 05.2 | +0.8 |
| QIZ | Qiongzhong | 20.23 | 44 | P | | P | 19 47 30.6 | +1.1 |
| HYB | Hyderabad | 20.62 | 309 | *i* P | | P | 19 47 35.0 | +1.2 |
| HYB | Hyderabad | 20.62 | 309 | *ex* | | P | 19 47 29.9 | -3.9 |
| HYB | | | | AMB | | AMB | 19 47 37.4 | |
| | comp=Z,45nm,0.7s | | | | | | | |
| KKM | Kota Kinabalu | 21.00 | 85 | *e*P | | P | 19 47 39.9 | +1.9 |
| MYLDM | Lahad Datu | 23.25 | 88 | *e*P | | P | 19 48 03.1 | +1.4 |
| | comp=Z,14nm,0.9s | | | | | | | |
| ODAN | Odare | 23.29 | 342 | *e*P | | P | 19 48 02.0 | -0.2 |
| | comp=Z,6.9nm,0.6s | | | | | | | |
| RAMN | Ramite | 23.63 | 341 | *e*P | | P | 19 48 05.8 | +0.4 |
| | comp=Z,7.3nm,0.5s | | | | | | | |
| TAPN | Taplejung | 23.66 | 343 | *e*P | | P | 19 48 03.5 | -2.3 |
| PKI | Pulchoki | 24.61 | 339 | *e*P | | P | 19 48 13.8 | -0.7 |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| PKIN | Phulchoki | 24.62 | 339 | *e*P | | P | 19 48 13.4 | -1.1 |
| | comp=Z,1.0nm,0.2s | | | | | | | |
| DMN | Daman | 24.75 | 338 | *e*P | | P | 19 48 15.8 | 0.0 |
| | comp=Z,2.4nm,0.4s | | | | | | | |
| GUN | Gumba | 24.75 | 340 | *e*P | | P | 19 48 15.6 | -0.3 |
| | comp=Z,17nm,0.6s | | | | | | | |
| KKN | Kakani | 24.85 | 339 | *e*P | | P | 19 48 16.2 | -0.4 |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| LSA | Lhasa | 25.19 | 352 | *e*P | | P | 19 48 19.0 | -1.0 |
| | comp=Z,5.1nm,0.7s | | | | | | | |
| GKN | Gorkha | 25.28 | 338 | *e*P | | P | 19 48 20.9 | +0.4 |
| | comp=Z,5.4nm,0.3s | | | | | | | |
| KOLN | Koldanda | 25.48 | 336 | *e*P | | P | 19 48 21.8 | -0.5 |
| | comp=Z,17nm,0.6s | | | | | | | |
| H08S2 | Diego Garcia H | 25.71 | 242 | T | | T | 20 15 30.8 | |
| | baz=61,slow=75,SNR=292 | | | | | | | |
| H08S3 | Diego Garcia H | 25.71 | 242 | T | | T | 20 15 45.6 | |
| | baz=61,slow=75,SNR=364 | | | | | | | |
| H08S1 | Diego Garcia H | 25.73 | 242 | T | | T | 20 15 35.1 | |
| | baz=61,slow=75,SNR=282 | | | | | | | |
| LUWI | Luwuk | 28.16 | 101 | *e*P | | P | 19 48 49.9 | +3.6 |
| | comp=Z,18nm,0.7s | | | | | | | |
| XAN | Xi'an | 31.91 | 22 | P | | P | 19 49 17.8 | -1.5 |
| XAN | | | | pP | | pP | 19 49 22.3 | -10 |
| XAN | | | | PMZ | | | | |
| | comp=Z,13nm,0.8s | | | | | | | |
| XAN | | | | PMZ | | | | |
| | comp=Z,78nm,4.6s | | | | | | | |
| DHRM | DHARAMSHALA | 32.64 | 329 | *e*P | | P | 19 49 26.8 | +0.9 |
| GTA | Gaotai | 34.85 | 6 | *e*P | | P | 19 49 43.3 | -1.7 |
| GTA | | | | pP | | pP | 19 49 48.9 | -8.7 |
| GTA | | | | sP | | sP | 19 49 52.1 | -11 |
| GTA | | | | PMZ | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| MBWA | Marble Bar | 35.20 | 138 | P | | P | 19 49 46.3 | -1.7 |
| SWI | Sorong | 36.48 | 98 | P | | P | 19 50 02.2 | +3.1 |
| | baz=37,SNR=3.1 | | | | | | | |
| SIJI | Sorong | 36.48 | 98 | P | | P | 19 49 59.7 | +0.5 |
| | comp=Z,8.2nm,0.5s,baz=310,slow=9.2,SNR=9.3 | | | | | | | |
| FAKI | Fak Fak | 37.81 | 101 | P | | P | 19 50 12.3 | +1.8 |
| | baz=38,SNR=8.5 | | | | | | | |
| KSH | Kashi | 38.80 | 336 | P | | P | 19 50 17.4 | -1.2 |
| KSH | | | | LN | | | | |
| | comp=Z,97nm,4.1s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,86nm,6.5s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,140nm,6.2s | | | | | | | |
| KNRA | Kununurra | 38.92 | 122 | P | | P | 19 50 18.4 | -1.3 |
| | baz=39,SNR=4.5 | | | | | | | |
| HHC | Hu-ho-hao-te | 38.93 | 20 | *e*P | | P | 19 50 22.0 | +2.4 |
| HHC | | | | S | | S | 19 56 16.6 | +1.8 |
| HHC | | | | PMZ | | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,130nm,4.1s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,280nm,13.6s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,600nm,13.6s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,120nm,14.8s | | | | | | | |
| MTN | Manton Dam | 39.74 | 116 | P | | P | 19 50 30.3 | +3.7 |
| | baz=40,SNR=3.6 | | | | | | | |
| BJT | Baijiatuan | 39.98 | 25 | *e*P | | P | 19 50 28.5 | +0.3 |
| | comp=Z,20nm,0.6s | | | | | | | |
| UCH | Uchtor | 41.69 | 337 | P | | P | 19 50 43.6 | +0.8 |
| | SNR=13 | | | | | | | |
| KBK | Karagaybulak | 41.88 | 338 | P | | P | 19 50 45.3 | +1.2 |
| | SNR=13 | | | | | | | |
| AML | Almayashu | 41.93 | 336 | P | | P | 19 50 45.9 | +1.1 |
| | SNR=18 | | | | | | | |
| AAK | Ala-Archa | 42.04 | 337 | P | | P | 19 50 46.6 | +1.3 |
| | comp=Z,2.9nm,0.6s,baz=153,slow=7.3,SNR=8.7 | | | | | | | |
| AAK | Ala-Archa | 42.04 | 337 | P | | P | 19 50 47.4 | +2.1 |
| | SNR=6.8 | | | | | | | |
| EKS2 | Erkin-Say | 42.34 | 336 | P | | P | 19 50 49.2 | +1.4 |
| | SNR=8.0 | | | | | | | |
| EKS2 | Erkin-Say | 42.34 | 336 | *e*P | | P | 19 50 45.2 | -2.6 |
| | comp=Z,4.6nm,0.6s | | | | | | | |
| USP | Ospenovka | 42.58 | 338 | P | | P | 19 50 52.0 | +0.6 |
| | SNR=8.7 | | | | | | | |
| MKAR | Makanchi Array | 43.43 | 347 | P | | P | 19 50 55.5 | -0.9 |
| | comp=Z,6.6nm,0.6s,baz=166,slow=8.0,SNR=42 | | | | | | | |
| MKAR | | | | LR | | LR | 20 11 17.6 | |
| | comp=Z,15nm,21.5s,baz=184,slow=39 | | | | | | | |
| WRKA | Warakurna | 43.68 | 134 | P | | P | 19 50 58.8 | 0.0 |
| | baz=44,SNR=9.8 | | | | | | | |
| JNU | Nakatsue | 43.69 | 45 | P | | P | 19 50 57.5 | -1.3 |
| | comp=Z,5.5nm,0.8s,baz=247,slow=7.7,SNR=2.5 | | | | | | | |
| KKAR | Karatay Array | 44.07 | 334 | *e*P | | P | 19 51 02.2 | +0.6 |
| SONM | Songino Array | 44.08 | 11 | P | | P | 19 50 60.0 | -1.8 |
| | comp=Z,0.8nm,0.5s,baz=187,slow=9.9,SNR=6.6 | | | | | | | |
| SONM | | | | PcP | | PP | 19 52 45.6 | +0.4 |
| | comp=Z,1.6nm,0.7s,baz=185,slow=4.2,SNR=6.4 | | | | | | | |
| KSRS | Korea Array | 44.28 | 38 | LR | | LR | 20 09 44.8 | |
| | comp=Z,25nm,18.3s,baz=194,slow=36 | | | | | | | |
| WRA | Warramunga Arr | 45.61 | 124 | P | | P | 19 51 14.0 | -0.2 |
| | comp=Z,26nm,0.7s,baz=302,slow=9.2,SNR=272 | | | | | | | |
| WRAB | Tennant Creek | 45.61 | 124 | *e*P | | P | 19 51 14.0 | -0.2 |
| | comp=Z,30nm,0.7s | | | | | | | |
| ASAR | Alice Springs | 47.11 | 128 | P | | P | 19 51 25.9 | 0.0 |
| | comp=Z,10nm,0.6s,baz=298,slow=8.0,SNR=221 | | | | | | | |
| ASAR | | | | LR | | LR | 20 12 25.0 | |
| | comp=Z,32nm,18.7s,baz=18,slow=38 | | | | | | | |
| GEYT | Alibeck | 47.27 | 320 | P | | P | 19 51 28.0 | +1.0 |
| | comp=Z,1.3nm,0.6s,baz=126,slow=7.3,SNR=4.3 | | | | | | | |
| KURBB | Kurchatov Arra | 47.89 | 346 | P | | P | 19 51 30.9 | -0.6 |
| | comp=Z,3.3nm,0.6s,baz=161,slow=7.3,SNR=50 | | | | | | | |
| KURK | Kurchatov | 47.95 | 346 | P | | P | 19 51 30.9 | -1.1 |
| HIA | Hailar | 49.10 | 21 | P | | P | 19 51 40.1 | -0.8 |
| ZAA0 | Zalesovo Array | 49.86 | 352 | P | | P | 19 51 45.4 | -1.1 |
| | baz=50,SNR=5.5 | | | | | | | |
| ZALV | Zalesovo Beam | 49.86 | 352 | P | | P | 19 51 45.3 | -1.2 |
| | comp=Z,8.4nm,0.5s,baz=184,slow=7.3,SNR=47 | | | | | | | |
| MDJ | Mudanjiang | 49.93 | 32 | P | | P | 19 51 47.0 | -0.3 |
| QIS | Mount Isa | 50.31 | 121 | P | | P | 19 51 49.9 | -0.6 |
| | baz=51,SNR=10.0 | | | | | | | |
| MJAR | Matsushiro Arr | 50.62 | 45 | P | | P | 19 51 52.2 | -0.5 |
| | comp=Z,1.3nm,0.7s,baz=238,slow=7.5,SNR=8.6 | | | | | | | |
| MJAR | | | | LR | | LR | 20 13 32.2 | |
| | comp=Z,15nm,21.4s,baz=180,slow=36 | | | | | | | |
| USRK | Ussuriysk Ar. | 50.95 | 34 | P | | P | 19 51 53.5 | -1.5 |
| | comp=Z,4.1nm,0.8s,baz=227,slow=7.4,SNR=5.5 | | | | | | | |
| BVAR | Borovoye Array | 52.34 | 341 | P | | P | 19 52 04.1 | -1.1 |
| | comp=Z,3.3nm,0.8s,baz=140,slow=7.6,SNR=19 | | | | | | | |
| BRVK | Borovoye | 52.40 | 341 | *e*P | | P | 19 52 04.3 | -1.4 |
| | comp=Z,4.5nm,0.9s | | | | | | | |
| ABKAR | Akbulak array | 53.52 | 332 | *e*P | | P | 19 52 14.6 | +0.6 |
| PMG | Port Moresby | 53.67 | 105 | P | | P | 19 52 15.8 | +0.2 |
| | comp=Z,14nm,0.8s | | | | | | | |
| CMSA | Cobar Meteorol | 60.06 | 130 | P | | P | 19 53 01.5 | +0.8 |
| | baz=60,SNR=5.8 | | | | | | | |
| BRTR | Keskin Array B | 65.30 | 312 | P | | P | 19 53 35.5 | -0.1 |
| | comp=Z,13nm,0.5s,baz=136,slow=7.2,SNR=10 | | | | | | | |
| AKASG | Malin Array Be | 71.29 | 322 | P | | P | 19 54 12.7 | -0.1 |
| | comp=Z,0.4nm,0.4s,baz=90,slow=5.3,SNR=5.2 | | | | | | | |
| VRI | Vrincioaia | 71.72 | 317 | ⇑*i*P | | P | 19 54 18.5 | +3.1 |
| PLOR | Plostina | 71.77 | 317 | ⇑*i*P | | P | 19 54 17.9 | +2.1 |
| TESR | Tescani | 71.91 | 317 | ⇑*i*P | | P | 19 54 18.9 | +2.3 |
| BURAR | Bucovina Array | 73.10 | 318 | ⇑*i*P | | P | 19 54 22.8 | -1.0 |
| BOSA | Boshof | 74.78 | 239 | P | | P | 19 54 35.3 | +1.4 |
| | comp=Z,1.1nm,0.8s,baz=127,slow=2.2,SNR=3.8 | | | | | | | |
| TRPA | Tarpa | 74.97 | 319 | ⇑*i*P | | P | 19 54 34.4 | -0.1 |
| FINES | FINESS Array B | 76.01 | 332 | P | | P | 19 54 39.3 | -0.9 |
| | comp=Z,1.9nm,0.4s,baz=101,slow=5.7,SNR=19 | | | | | | | |
| ARCES | ARCESS Array B | 78.61 | 340 | P | | P | 19 54 54.8 | +0.2 |
| | comp=Z,1.8nm,0.5s,baz=90,slow=5.9,SNR=13 | | | | | | | |
| VAE | Valguarnera | 79.84 | 307 | LR | | LR | 20 35 09.9 | |
| | comp=Z,2μm,21.8s,baz=316,slow=39 | | | | | | | |
| GERES | GERESS Array B | 80.89 | 319 | P | | P | 19 55 08.6 | +1.1 |
| | comp=Z,1.5nm,0.8s,baz=90,slow=4.0,SNR=6.3 | | | | | | | |
| NOA | NORSAR Array B | 83.01 | 331 | P | | P | 19 55 18.9 | +0.6 |
| | comp=Z,0.6nm,0.6s,baz=99,slow=5.9,SNR=3.6 | | | | | | | |
| ILAR | Eielson Array | 97.31 | 22 | P | | P | 19 56 24.1 | -1.9 |
| | comp=Z,0.2nm,0.5s,baz=285,slow=3.9,SNR=4.8 | | | | | | | |
| TXAR | Lajitas Array | 141.66 | 27 | PKP | | PKPdf | 20 02 25.4 | +0.2 |
| | comp=Z,0.3nm,0.5s,baz=189,slow=1.0,SNR=4.3 | | | | | | | |

*IDC* ***23*** *19:48:48.8±1.1,1.1°15N×120.32E,h0km,mb3.9/4, mb1 4.2/4,mb1mx3.6/37,mbtmp3.9/4,MS3.0/2,Ms1 3.0/2, ms1mx2.5/44,Error ellipse: s-maj=158.7km s-min=21.0km az=63.0*

*DJA* ***23*** *19:48:54.3±0.7,1.1°N±3.1°×12.1°E±0.7,h12km±6km,M4.1/8, mb4.0/1,MLv4.1/8*

**ISC 23 19:48:51.4±2.0,1.1°13N±0.07°×120.12E±0.06,h16km±12km, n15,σ1s60/21,mb3.8/4,Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| MPSI | Mapaga | 0.82 | 196 | P | | P | Pb | 19 49 07.7 | +0.5 |
| MPSI | | | | S | | Sn | | 19 49 20.2 | +0.2 |
| MRSI | Marisa | 1.93 | 110 | P | | Pg | | 19 49 27.9 | -0.6 |
| MRSI | | | | S | | Sg | | 19 49 56.3 | +2.6 |
| PCI | Palu | 2.04 | 188 | P | | Pg | | 19 49 29.6 | -1.0 |
| PCI | | | | S | | Sb | | 19 49 53.6 | +0.3 |
| APSI | Ampana | 2.54 | 143 | P | | Pb | | 19 49 36.6 | 0.0 |
| APSI | | | | S | | Sb | | 19 50 09.7 | +2.1 |
| GTOI | Gorontalo | 2.93 | 100 | P | | Pb | | 19 49 42.9 | -0.4 |
| GTOI | | | | S | | Sb | | 19 50 18.2 | -0.8 |
| LUWI | Luwuk | 3.42 | 129 | P | | Pb | | 19 49 48.5 | -3.1 |
| LUWI | | | | S | | Sb | | 19 50 32.0 | -0.9 |
| KMSI | Cibinong | 3.90 | 98 | P | | Pb | | 19 49 59.0 | -0.8 |
| TTSI | Tana Toraja | 4.16 | 184 | P | | Pb | | 19 50 01.2 | -3.0 |
| SPSI | Sidrap Palu | 5.07 | 184 | P | | Pn | | 19 50 09.0 | +2.2 |
| KAPI | Kappang | 6.11 | 183 | LR | | LR | | 19 53 01.7 | |
| | comp=Z,114nm,19.6s,baz=326,slow=41 | | | | | | | | |
| BATI | Baumati | 11.80 | 163 | LR | | LR | | 19 56 21.7 | |
| | comp=Z,94nm,18.2s,baz=174,slow=38 | | | | | | | | |
| WRA | Warramunga Arr | 25.16 | 147 | P | | P | | 19 54 15.4 | -0.7 |
| | 5.5nm,0.7s,baz=329,slow=9.8,SNR=21 | | | | | | | | |
| WRA | | | | PcP | | PcP | | 19 57 48.7 | -1.5 |
| | 0.2nm,0.6s,baz=316,slow=2.2,SNR=3.5 | | | | | | | | |
| ASAR | Alice Springs | 28.05 | 152 | P | | P | | 19 54 42.0 | -0.4 |
| | 2.1nm,0.7s,baz=339,slow=9.9,SNR=16 | | | | | | | | |
| ASAR | | | | PcP | | PcP | | 19 57 56.1 | -0.9 |
| | 0.2nm,0.3s,baz=322,slow=2.1,SNR=5.5 | | | | | | | | |
| SONM | Songino Array | 48.02 | 348 | P | | P | | 19 57 30.1 | +0.1 |
| | 0.4nm,0.7s,baz=160,slow=9.1,SNR=3.3 | | | | | | | | |
| MKAR | Makanchi Array | 56.17 | 330 | P | | P | | 19 58 31.4 | +0.9 |
| | 0.3nm,0.4s,baz=126,slow=9.0,SNR=7.8 | | | | | | | | |

*JMA* ***23*** *19:52:55.8±0.1,24.22N×121.76E,h10km±3km,M2.6*
*ISCJB* ***23*** *19:52:56.2±0.4,24.21N±0.02×121.79E±0.02,h8km±3km, Error ellipse: s-maj=3.7km s-min=2.6km az=28.1*
*TAP* ***23*** *19:52:56.7,24.24N×121.73E,h12km,ML3.3,B*

**ISC 23 19:52:56.4±0.8,24.22N±0.02×121.77E±0.03,h17km±5km, n54,σ0s60/79,9C,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| EHP | Heping Village | 0.10 | 347 | *e*P | | P | Pg | 19 53 00.3 | +0.4 |
| | baz=17 | | | | | | | | |
| EHP | | | | *e*S | | S | Sg | 19 53 02.6 | +0.4 |
| | baz=17 | | | | | | | | |
| TWD | Chiawan | 0.20 | 229 | ⇑*i*P | | P | Pg | 19 53 01.1 | -0.1 |
| | baz=215 | | | | | | | | |
| TWD | | | | *i* S | | S | Sg | 19 53 04.7 | +0.1 |
| | baz=215 | | | | | | | | |
| ENA | Nanau | 0.21 | 354 | ⇑*i*P | | P | Pg | 19 53 01.1 | -0.3 |
| | baz=6.0 | | | | | | | | |
| ENA | | | | *i* S | | S | Sg | 19 53 04.1 | -0.8 |
| | baz=6.0 | | | | | | | | |
| HWA | Hwalien | 0.28 | 212 | *e*P | | P | Pg | 19 53 02.7 | +0.2 |
| | baz=202 | | | | | | | | |
| TWC | Suao | 0.40 | 11 | ⇑*i*P | | P | Pg | 19 53 04.6 | 0.0 |
| | baz=10.0 | | | | | | | | |
| TWC | | | | *i* S | | S | Sg | 19 53 10.1 | -0.1 |
| | baz=10.0 | | | | | | | | |
| NNS | Nan Shan | 0.42 | 302 | ⇑*i*P | | P | Pg | 19 53 04.7 | -0.4 |
| | baz=302 | | | | | | | | |
| NNS | | | | S | | S | Sg | 19 53 10.0 | -0.9 |
| | baz=302 | | | | | | | | |
| ENTT | Nioudou | 0.46 | 337 | ⇑*i*P | | P | Pg | 19 53 05.6 | -0.1 |
| | baz=340 | | | | | | | | |
| ENTT | | | | *i* S | | S | Sg | 19 53 11.6 | -0.4 |
| | baz=340 | | | | | | | | |
| WHF | Hehuan Shan | 0.46 | 261 | ⇑*i*P | | P | Pg | 19 53 05.5 | -0.3 |
| | baz=257 | | | | | | | | |
| WHF | | | | *i* S | | S | Sg | 19 53 11.4 | -0.8 |
| | baz=257 | | | | | | | | |
| ESL | Shilin | 0.50 | 217 | P | | P | Pg | 19 53 06.2 | -0.2 |
| | baz=221 | | | | | | | | |
| ESL | | | | *i* S | | S | Sb | 19 53 14.2 | +0.4 |
| | baz=221 | | | | | | | | |
| TWE | Neicheng | 0.51 | 350 | ⇑*i*P | | P | Pb | 19 53 06.6 | -0.3 |
| TWE | | | | *i* S | | S | Sg | 19 53 13.1 | -0.5 |
| TWT | Tachien | 0.54 | 274 | ⇑*i*P | | P | Pb | 19 53 07.3 | -0.2 |
| | baz=271 | | | | | | | | |
| TWT | | | | *i* S | | S | Sg | 19 53 14.1 | -0.4 |
| | baz=271 | | | | | | | | |
| NSK | Sanguang | 0.59 | 321 | ⇑*i*P | | P | Pg | 19 53 07.8 | -0.3 |
| | baz=322 | | | | | | | | |
| NSK | | | | S | | S | Sg | 19 53 15.2 | -0.8 |
| | baz=322 | | | | | | | | |
| WDT | Danda | 0.74 | 232 | P | | P | Pg | 19 53 10.6 | -0.3 |
| | baz=229 | | | | | | | | |
| WDT | | | | *e*S | | S | Sg | 19 53 20.1 | -0.7 |
| | baz=229 | | | | | | | | |
| TWA | Mucha | 0.78 | 348 | *e*P | | Pn | | 19 53 12.2 | -0.4 |
| | baz=350 | | | | | | | | |
| NSTT | Nanjuang | 0.81 | 301 | *e*P | | Pb | | 19 53 12.0 | 0.0 |
| | baz=301 | | | | | | | | |
| NSTT | | | | S | | Sb | | 19 53 22.4 | -0.3 |
| | baz=301 | | | | | | | | |
| EHY | Hungye | 0.81 | 210 | *e*P | | Pg | | 19 53 11.0 | -1.3 |
| | baz=210 | | | | | | | | |
| TWB1 | Santiao Chiao | 0.81 | 14 | *e*P | | Pb | | 19 53 12.4 | +0.3 |
| | baz=10.0 | | | | | | | | |
| TAP1 | Taipei | 0.85 | 345 | *e*P | | Pn | | 19 53 13.6 | 0.0 |
| | baz=335 | | | | | | | | |
| NWF | Wu-fen Shan | 0.85 | 1 | *e*P | | Pg | | 19 53 13.0 | 0.0 |
| | baz=3.0 | | | | | | | | |
| TAP | Taipei | 0.85 | 344 | *e*P | | Pg | | 19 53 12.9 | -0.1 |
| | baz=335 | | | | | | | | |
| SMLT | Sun Moon Lake | 0.86 | 247 | *i* P | | Pg | | 19 53 13.1 | +0.1 |
| | baz=236 | | | | | | | | |
| SMLT | | | | S | | Sg | | 19 53 24.0 | -0.5 |
| | baz=236 | | | | | | | | |
| TYC | Yuchr | 0.89 | 250 | *e*P | | Pb | | 19 53 13.4 | +0.1 |
| | baz=239 | | | | | | | | |
| TYC | | | | *e*S | | Sb | | 19 53 24.0 | -0.8 |
| | baz=239 | | | | | | | | |
| TWQ1 | Liyutan | 0.92 | 279 | *e*P | | Pn | | 19 53 14.8 | +0.3 |
| | baz=277 | | | | | | | | |
| TWQ1 | | | | *e*S | | Sg | | 19 53 26.1 | -0.1 |
| | baz=277 | | | | | | | | |
| NCU | National Centr | 0.92 | 325 | *e*P | | Pn | | 19 53 14.9 | +0.4 |
| | baz=326 | | | | | | | | |
| NCU | | | | *e*S | | Sn | | 19 53 27.1 | -0.2 |
| | baz=326 | | | | | | | | |
| TWS1 | Kuangyinshan | 0.94 | 340 | *e*P | | Pn | | 19 53 15.1 | +0.3 |
| | baz=350 | | | | | | | | |
| TWS1 | | | | *e*S | | Sn | | 19 53 27.9 | +0.2 |
| | baz=350 | | | | | | | | |
| NSY | Sanyi | 0.94 | 283 | *e*P | | Pn | | 19 53 15.8 | +1.0 |
| | baz=282 | | | | | | | | |
| NSY | | | | *e*S | | Sn | | 19 53 27.7 | -0.1 |
| | baz=282 | | | | | | | | |
| TWF1 | Yuli | 0.96 | 207 | *e*P | | Pb | | 19 53 12.7 | -1.9 |
| | baz=216 | | | | | | | | |
| TCU | Taichung | 1.00 | 266 | *e*P | | Pn | | 19 53 16.9 | +1.3 |
| | baz=265 | | | | | | | | |
| YUS | Yu-Shan | 1.04 | 226 | *e*P | | Pb | | 19 53 15.4 | -0.8 |
| | baz=234 | | | | | | | | |
| WNT | Mingjian | 1.04 | 251 | *e*P | | Pb | | 19 53 15.9 | -0.1 |
| | baz=247 | | | | | | | | |
| WNT | | | | *e*S | | Sn | | 19 53 31.4 | +1.0 |
| | baz=247 | | | | | | | | |
| JYNG | Yonaguni jima | 1.10 | 77 | P | | Pb | | 19 53 16.6 | -0.3 |
| ALS | Alishan | 1.12 | 232 | *e*P | | Pb | | 19 53 17.8 | +0.3 |
| | baz=229 | | | | | | | | |
| YOJ | Yonaguni jima | 1.16 | 78 | P | | Pn | | 19 53 18.4 | +0.5 |
| YOJ | Yonaguni jima | 1.16 | 78 | *e*P | | Pn | | 19 53 18.3 | +0.5 |
| | baz=68 | | | | | | | | |
| CHKT | Chengkung | 1.17 | 198 | *e*P | | Pn | | 19 53 17.1 | -0.8 |
| | baz=182 | | | | | | | | |
| CHN5 | Tsauling | 1.17 | 238 | *e*P | | Pb | | 19 53 18.4 | +0.3 |
| | baz=227 | | | | | | | | |
| CHN5 | | | | *e*S | | Sg | | 19 53 35.5 | +1.2 |
| | baz=227 | | | | | | | | |
| WGK | Gukeng | 1.22 | 245 | *e*P | | Pb | | 19 53 19.3 | +0.4 |
| | baz=243 | | | | | | | | |
| ELDTW | Lidau | 1.23 | 214 | *e*P | | Pn | | 19 53 18.6 | -0.3 |
| | baz=212 | | | | | | | | |
| CHN2 | Minshiung | 1.36 | 240 | *e*P | | Pg | | 19 53 22.7 | +0.1 |
| | baz=239 | | | | | | | | |
| CHN4 | Tsaushan | 1.38 | 232 | *e*P | | Pb | | 19 53 22.0 | +0.4 |
| | baz=232 | | | | | | | | |
| CHN4 | | | | *e*S | | Sg | | 19 53 42.2 | +1.3 |
| | baz=232 | | | | | | | | |
| STYT | Tauyuan | 1.40 | 222 | *e*P | | Pn | | 19 53 21.4 | +0.3 |
| | baz=222 | | | | | | | | |
| STYT | | | | *e*S | | Sg | | 19 53 40.9 | -0.7 |
| | baz=222 | | | | | | | | |
| CHY | Chiayi | 1.42 | 240 | *e*P | | Pg | | 19 53 23.8 | +0.1 |
| | baz=239 | | | | | | | | |
| WTP | Ta-pu | 1.43 | 228 | *e*P | | Pb | | 19 53 23.1 | +0.5 |
| | baz=217 | | | | | | | | |
| WTP | | | | *e*S | | Sg | | 19 53 43.5 | +1.0 |
| | baz=217 | | | | | | | | |
| WSF | Szhu | 1.52 | 248 | *e*P | | Pb | | 19 53 23.7 | -0.4 |
| | baz=247 | | | | | | | | |
| TWG | Pinlang | 1.53 | 205 | *e*P | | Pn | | 19 53 22.7 | -0.1 |
| | baz=188 | | | | | | | | |
| CHN1 | Nanshi | 1.53 | 228 | *e*P | | Pb | | 19 53 24.8 | +0.6 |
| | baz=219 | | | | | | | | |
| CHN1 | | | | *e*S | | Sg | | 19 53 46.5 | +0.7 |
| | baz=219 | | | | | | | | |
| SGST | Jiashian | 1.56 | 224 | *e*P | | Pn | | 19 53 23.2 | -0.2 |
| | baz=223 | | | | | | | | |
| SSD | Sandimen | 1.79 | 216 | *e*P | | Pb | | 19 53 28.6 | -0.2 |
| | baz=215 | | | | | | | | |
| IRIF | Iriomote-Funau | 1.80 | 86 | P | | Pn | | 19 53 26.9 | +0.3 |
| TWM1 | Shoushan | 1.85 | 222 | *e*P | | Pb | | 19 53 30.5 | +0.7 |
| | baz=222 | | | | | | | | |
| EAST | Anshuo | 2.01 | 205 | *e*P | | Pb | | 19 53 32.1 | -0.3 |
| | baz=193 | | | | | | | | |
| JKRS | Kuro-shima | 2.05 | 89 | P | | Pn | | 19 53 31.2 | +1.2 |
| JIJ | Ishigaki jima | 2.17 | 86 | P | | Pn | | 19 53 32.3 | +0.5 |
| JISG | Ishigakijimahi | 2.35 | 80 | P | | Pn | | 19 53 34.6 | +0.4 |

*ISCJB* ***23*** *19:54:16.8±0.5,11.85N±0.05×86.89W±0.05,h59km±7km, mb3.7/5,MS3.1/4,Error ellipse: s-maj=11.2km s-min=4.1km az=138.7*
*CASC* ***23*** *19:54:17.8±4.1,11.87N×86.90W,h38km±77km,MD4.1, ML4.1*
*IDC* ***23*** *19:54:17.4±3.4,11.84N×86.88W,h59km±40km,mb3.6/5, mb1 4.0/6,mb1mx3.6/40,mbtmp3.9/6,ML3.5/1,MS3.1/5, Ms1 3.1/5,ms1mx2.9/36,Error ellipse: s-maj=64.2km s-min=23.5km az=49.0*

**ISC 23 19:54:17.5±1.0,11.88N±0.06×86.88W±0.06,h56km±10km, n36,σ1s06/49,mb3.7/5,MS3.1/4,1C-2D,Near coast of Nicaragua**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| COPN | Copaltepe | 0.41 | 43 | *e*P | | P | Pn | 19 54 28.3 | +0.1 |
| COPN | | | | ⇑*i*P | | P | Pn | 19 54 28.3 | +0.1 |
| CRUN | El Crucero | 0.57 | 80 | *e*P | | P | Pn | 19 54 29.8 | -0.3 |
| XAVN | Gruta Xavier | 0.60 | 63 | *e*P | | P | Pn | 19 54 30.1 | -0.2 |
| MOMN | Momotombo | 0.62 | 32 | *e*P | | P | Pn | 19 54 30.7 | +0.1 |
| APYN | Apoyeque | 0.62 | 56 | *e*P | | P | Pn | 19 54 30.7 | +0.1 |
| CNGN | Cerro Negro | 0.64 | 16 | *e*P | | P | Pn | 19 54 30.7 | -0.2 |
| CNGN | | | | ⇓*i*P | | P | Pn | 19 54 30.8 | 0.0 |
| CNGN | | | | *i* S | | S | Sn | 19 54 41.2 | +0.7 |
| CNGN | | | | *e*S | | S | Sn | 19 54 41.4 | +0.8 |
| CNGN | | | | AML | | AML | | 19 54 45.4 | |
| | comp=N,6μm,0.3s | | | | | | | | |
| CNGN | | | | AML | | AML | | 19 54 47.5 | |
| TISN | Laguna Tiscapa | 0.65 | 66 | *e*P | | P | Pn | 19 54 29.8 | -1.1 |
| TISN | | | | *e*S | | S | Sn | 19 54 39.8 | -0.8 |
| MGAN | Managua | 0.67 | 67 | *e*P | | P | Pn | 19 54 31.1 | 0.0 |
| MGAN | | | | *e*P | | P | Pn | 19 54 31.3 | +0.2 |
| MGAN | | | | *e*P | | P | Pn | 19 54 31.3 | +0.2 |
| MGAN | | | | *e*S | | S | Sn | 19 54 41.3 | +0.3 |
| TEL3 | Telica 3 | 0.69 | 2 | *e*P | | P | Pn | 19 54 31.6 | +0.1 |
| MASN | Masaya | 0.72 | 81 | *e*P | | P | Pn | 19 54 31.7 | -0.1 |
| MASN | | | | *e*S | | S | Sn | 19 54 42.9 | +0.7 |
| MASN | | | | AML | | AML | | 19 54 48.7 | |
| | comp=N,7μm,0.7s | | | | | | | | |
| BOAB | BOACO BROADBAN | 0.31 | 64 | *e*P | | P | Pn | 19 54 39.2 | -0.3 |
| BOAB | | | | *e*S | | S | Sn | 19 54 56.8 | +0.8 |
| CNCH | Conchagua | 1.67 | 326 | *e*P | | P | Pn | 19 54 44.7 | +0.1 |
| GBS2 | Las Lilas | 1.74 | 126 | *i* P | | P | Pn | 19 54 43.8 | -1.6 |
| GBS2 | | | | *i* S | | S | S

### Oaxaca

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OXX** | **Oaxaca** | **0.56** | **150** | *e*P | Pn | 20 02 24.1 | +3.7 |
| OXX | | | | *e*S | Sn | 20 02 33.3 | +2.8 |
| **OXBJ** | **Oaxaca** | **0.57** | **151** | *i* P | Pn | 20 02 18.8 | -1.7 |
| OXBJ | | | | *i* S | Sn | 20 02 28.6 | -2.1 |
| **TPIG** | **Tehuac#an** | **0.91** | **339** | *e*P | Pn | 20 02 22.9 | -1.4 |
| TPIG | | | | *e*S | Sn | 20 02 35.7 | -1.6 |
| **TLIG** | **Tlapa** | **1.48** | **270** | *e*P | Pn | 20 02 30.4 | -1.1 |
| TLIG | | | | *e*S | Sn | 20 02 48.4 | -1.9 |
| **PNIG** | **Pinotepa** | **1.58** | **222** | *e*P | Pn | 20 02 30.4 | -2.4 |
| PNIG | | | | *e*S | Sn | 20 02 50.0 | -2.5 |
| **HUIG** | **Huatulco** | **1.99** | **154** | *e*P | Pn | 20 02 36.4 | -1.8 |
| HUIG | | | | *e*S | Sn | 20 02 59.9 | -2.3 |

*MDD **23** 20:06:10.2±0.8, 37°.35N×9°.15W, h43km±5km, mb3.8/28, Error ellipse: s-maj=5.5km s-min=3.9km az=58.0, PRXIMO*
*CSEM **23** 20:06:11.4±0.2, 37°.45N×9°.08W, h30km, ML3.2/12, Error ellipse: s-maj=4.3km s-min=2.1km az=58.0*
*INMG **23** 20:06:12.0±1.5, 37°.38N×9°.13W, h26km±5km, MD2.3, ML2.3, Error ellipse: s-maj=6.4km s-min=2.9km az=49.0*
*IGIL **23** 20:06:12.3, 37°.38N×9°.12W, h28km, ML2.3*

**ISC 23 20:06:10.5±1.1, 37°.41N±0°.04×9°.15W±0°.05, h32km±8km, n119, σ0°77/198, 11C-3D, Portugal**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PTEO** | **Sao Teotonio** | **0.36** | **68** | ⇑*i*Pg | **Pn** | **20 06 20.1** | **+0.6** |
| PTEO | | | | *e*Sg | **Sn** | **20 06 26.8** | **+1.2** |
| PTEO | | | | A | A | 20 06 28.7 | |
| | 77nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **0.36** | **68** | P | **Pn** | **20 06 20.1** | **+0.6** |
| PTEO | | | | S | **Sn** | **20 06 26.8** | **+1.2** |
| | 39nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **0.36** | **68** | P | **Pn** | **20 06 20.1** | **+0.6** |
| PTEO | | | | S | **Sn** | **20 06 26.8** | **+1.2** |
| | 39nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.38** | **137** | ⇓*e*Pg | **Pb** | **20 06 19.1** | **0.0** |
| PFVI | | | | *e*Sg | **Sb** | **20 06 24.6** | **-0.4** |
| PFVI | | | | A | A | 20 06 24.8 | |
| | 357nm,0.2s | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.38** | **137** | ⇓P | **Pb** | **20 06 19.1** | **0.0** |
| | 114nm,0.1s,SNR=18 | | | | | | |
| PFVI | | | | S | **Sb** | **20 06 24.5** | **-0.5** |
| | 827nm,0.1s,SNR=11 | | | | | | |
| **PFVI** | **Vila Bisbo** | **0.38** | **137** | P | **Pb** | **20 06 19.1** | **0.0** |
| | 114nm,0.1s,SNR=18 | | | | | | |
| PFVI | | | | *e*Sg | **Sb** | **20 06 24.6** | **-0.4** |
| | 357nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **0.41** | **104** | *e*P | **Pn** | **20 06 20.2** | **0.0** |
| MORF | | | | *e*S | **Sb** | **20 06 25.9** | **0.0** |
| MORF | | | | AML | AML | 20 06 26.8 | |
| | comp=E,428nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **0.41** | **104** | ⇑*i*Pg | **Pn** | **20 06 20.2** | **0.0** |
| MORF | | | | *e*Sg | **Sb** | **20 06 26.1** | **+0.2** |
| MORF | | | | A | A | 20 06 26.8 | |
| | comp=E,288nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **0.41** | **104** | P | **Pn** | **20 06 20.2** | **0.0** |
| MORF | | | | S | **Sb** | **20 06 26.1** | **+0.2** |
| | comp=E,288nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **0.41** | **104** | P | **Pn** | **20 06 20.2** | **0.0** |
| MORF | | | | S | **Sb** | **20 06 26.1** | **+0.2** |
| | comp=E,288nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **0.85** | **59** | *e*P | **Pb** | **20 06 26.8** | **0.0** |
| MESJ | | | | *e*S | **Sn** | **20 06 37.8** | **+0.1** |
| MESJ | | | | AML | AML | 20 06 41.7 | |
| | comp=N,33nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **0.85** | **59** | ⇑*i*P | **Pb** | **20 06 26.8** | **0.0** |
| MESJ | | | | *e*S | **Sn** | **20 06 38.1** | **+0.4** |
| MESJ | | | | A | A | 20 06 43.3 | |
| | comp=N,20nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **0.85** | **59** | P | **Pb** | **20 06 26.8** | **0.0** |
| MESJ | | | | S | **Sn** | **20 06 38.1** | **+0.4** |
| | comp=N,20nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **0.85** | **59** | P | **Pb** | **20 06 26.8** | **0.0** |
| MESJ | | | | *e*S | **Sn** | **20 06 38.1** | **+0.4** |
| | comp=N,20nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **0.86** | **35** | ⇑*i*P | **Pb** | **20 06 26.9** | **0.0** |
| PNCL | | | | *e*S | **Sb** | **20 06 38.6** | **+0.6** |
| PNCL | | | | A | A | 20 06 40.0 | |
| | comp=N,39nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **0.86** | **35** | ⇑*i*P | **Pb** | **20 06 26.9** | **0.0** |
| PNCL | | | | *e*S | **Sb** | **20 06 38.6** | **+0.6** |
| | comp=N,39nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **0.91** | **75** | ⇑*i*P | **Pb** | **20 06 27.6** | **-0.1** |
| PCVE | | | | *e*S | **Sn** | **20 06 39.4** | **+0.3** |
| PCVE | | | | A | A | 20 06 46.1 | |
| | comp=N,11nm,0.1s | | | | | | |
| **PCVE** | **Castro Verde** | **0.91** | **75** | P | **Pb** | **20 06 27.6** | **-0.1** |
| PCVE | | | | S | **Sn** | **20 06 39.4** | **+0.3** |
| | comp=N,11nm,0.1s | | | | | | |
| **PCVE** | **Castro Verde** | **0.91** | **75** | P | **Pb** | **20 06 27.6** | **-0.1** |
| PCVE | | | | *e*S | **Sn** | **20 06 39.4** | **+0.3** |
| | comp=N,11nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.98** | **99** | *e*P | **Pb** | **20 06 28.7** | **-0.3** |
| PBDV | | | | *e*S | **Sn** | **20 06 41.0** | **0.0** |
| PBDV | | | | A | A | 20 06 42.5 | |
| | comp=N,24nm,0.3s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.98** | **99** | P | **Pb** | **20 06 28.7** | **-0.3** |
| PBDV | | | | S | **Sn** | **20 06 41.0** | **0.0** |
| | comp=N,24nm,0.3s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **0.98** | **99** | P | **Pb** | **20 06 28.7** | **-0.3** |
| PBDV | | | | *e*S | **Sn** | **20 06 41.0** | **0.0** |
| | comp=N,24nm,0.3s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.14** | **90** | ⇑*e*P | **Pn** | **20 06 30.7** | **+0.5** |
| PVAQ | | | | *e*S | **Sn** | **20 06 44.6** | **-0.2** |
| PVAQ | | | | A | A | 20 06 48.5 | |
| | comp=N,30nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.14** | **90** | P | **Pn** | **20 06 30.7** | **+0.5** |
| PVAQ | | | | S | **Sn** | **20 06 44.6** | **-0.2** |
| | comp=N,30nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.14** | **90** | P | **Pn** | **20 06 30.7** | **+0.5** |
| PVAQ | | | | *e*S | **Sn** | **20 06 44.6** | **-0.2** |
| | comp=N,30nm,0.1s | | | | | | |
| **PBEJ** | **Beja** | **1.19** | **58** | ⇑*i*P | **Pn** | **20 06 31.2** | **+0.3** |
| PBEJ | | | | *e*S | **Sn** | **20 06 46.1** | **+0.1** |
| PBEJ | | | | A | A | 20 06 53.6 | |
| | comp=N,13nm,0.2s | | | | | | |
| **PBEJ** | **Beja** | **1.19** | **58** | P | **Pn** | **20 06 31.2** | **+0.3** |
| PBEJ | | | | S | **Sn** | **20 06 46.1** | **+0.1** |
| | comp=N,6.3nm,0.2s | | | | | | |
| **PBEJ** | **Beja** | **1.19** | **58** | P | **Pn** | **20 06 31.2** | **+0.3** |
| PBEJ | | | | *e*S | **Sn** | **20 06 46.1** | **+0.1** |
| | comp=N,13nm,0.2s | | | | | | |
| **EGRO** | **El Granado** | **1.33** | **84** | ⇑P | **Pn** | **20 06 33.1** | **+0.3** |
| | comp=N,1.7nm,0.0s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sn** | **20 06 49.1** | **-0.4** |
| | comp=N,11nm,0.3s,SNR=8.2 | | | | | | |
| **EGRO** | **El Granado** | **1.33** | **84** | P | **Pn** | **20 06 33.1** | **+0.3** |
| | comp=N,1.7nm,0.0s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sn** | **20 06 49.1** | **-0.4** |
| | comp=N,11nm,0.3s,SNR=8.2 | | | | | | |
| **EVO** | **Evora** | **1.44** | **38** | *e*P | **Pn** | **20 06 34.8** | **+0.5** |
| EVO | | | | *e*S | **Sn** | **20 06 52.3** | **+0.2** |
| EVO | | | | A | A | 20 06 52.6 | |
| | comp=N,30nm,0.1s | | | | | | |
| **EVO** | **Evora** | **1.44** | **38** | P | **Pn** | **20 06 34.8** | **+0.5** |
| EVO | | | | S | **Sn** | **20 06 52.3** | **+0.2** |
| | comp=N,30nm,0.1s | | | | | | |
| **EVO** | **Evora** | **1.44** | **38** | P | **Pn** | **20 06 34.8** | **+0.5** |
| EVO | | | | *e*S | **Sn** | **20 06 52.3** | **+0.2** |
| | comp=N,30nm,0.1s | | | | | | |
| **PMAFR** | **Mafra** | **1.55** | **356** | *e*P | **Pn** | **20 06 36.9** | **+1.0** |
| PMAFR | | | | *e*S | **Sn** | **20 06 55.4** | **+0.5** |
| PMAFR | | | | A | A | 20 06 56.7 | |
| | comp=N,31nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **1.55** | **356** | P | **Pn** | **20 06 36.9** | **+1.0** |
| | comp=N,11nm,0.1s,SNR=27 | | | | | | |
| PMAFR | | | | S | **Sn** | **20 06 56.0** | **+1.1** |
| | comp=N,38nm,0.2s,SNR=10 | | | | | | |
| **PMAFR** | **Mafra** | **1.55** | **356** | P | **Pn** | **20 06 36.9** | **+1.0** |
| | comp=N,11nm,0.1s,SNR=27 | | | | | | |
| PMAFR | | | | S | **Sn** | **20 06 56.0** | **+1.1** |
| | comp=N,38nm,0.2s,SNR=10 | | | | | | |
| **PMTG** | **Montargil** | **1.81** | **23** | *e*Pn | **Pn** | **20 06 40.1** | **+0.7** |
| PMTG | | | | *e*Sn | **Sn** | **20 07 01.4** | **+0.1** |
| PMTG | | | | A | A | 20 07 04.1 | |
| | comp=N,8.8nm,0.2s | | | | | | |
| **PMTG** | **Montargil** | **1.81** | **23** | *e*Pn | **Pn** | **20 06 40.1** | **+0.7** |
| PMTG | | | | *e*Sn | **Sn** | **20 07 01.4** | **+0.1** |
| | comp=N,8.8nm,0.2s | | | | | | |
| **PBAR** | **Barrancos** | **1.84** | **65** | *e*Pn | **Pn** | **20 06 40.0** | **+0.2** |
| PBAR | | | | *e*Sn | **Sn** | **20 07 01.5** | **-0.5** |
| PBAR | | | | A | A | 20 07 16.0 | |
| | comp=N,17nm,0.6s | | | | | | |
| **PBAR** | **Barrancos** | **1.84** | **65** | P | **Pn** | **20 06 40.0** | **+0.2** |
| PBAR | | | | S | **Sn** | **20 07 01.5** | **-0.5** |
| | comp=N,17nm,0.6s | | | | | | |
| **PBAR** | **Barrancos** | **1.84** | **65** | P | **Pn** | **20 06 40.0** | **+0.2** |
| PBAR | | | | S | **Sn** | **20 07 01.5** | **-0.5** |
| | comp=N,17nm,0.6s | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.00** | **79** | P | **Pn** | **20 06 42.1** | **+0.1** |
| | comp=N,2.8nm,0.1s,SNR=40 | | | | | | |
| EMIN | | | | S | **Sn** | **20 07 06.0** | **0.0** |
| | comp=N,3.3nm,0.1s,SNR=9.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.00** | **79** | P | **Pn** | **20 06 42.1** | **+0.1** |
| | comp=N,2.8nm,0.1s,SNR=40 | | | | | | |
| EMIN | | | | S | **Sn** | **20 07 06.0** | **0.0** |
| | comp=N,3.3nm,0.1s,SNR=9.9 | | | | | | |
| **EBAD** | **Badajoz** | **2.15** | **51** | ⇑P | **Pn** | **20 06 44.2** | **0.0** |
| | comp=N,4.1nm,0.0s,SNR=18 | | | | | | |
| EBAD | | | | S | **Sn** | **20 07 10.0** | **+0.1** |
| | comp=N,10nm,0.1s,SNR=4.6 | | | | | | |
| **EBAD** | **Badajoz** | **2.15** | **51** | P | **Pn** | **20 06 44.2** | **0.0** |
| | comp=N,4.1nm,0.0s,SNR=18 | | | | | | |
| EBAD | | | | S | **Sn** | **20 07 10.0** | **+0.1** |
| | comp=N,10nm,0.1s,SNR=4.6 | | | | | | |
| **PTOM** | **Tomar** | **2.28** | **14** | *e*Pn | **Pn** | **20 06 47.0** | **+1.1** |
| PTOM | | | | *e*Sn | **Sn** | **20 07 12.8** | **-0.1** |
| PTOM | | | | A | A | 20 07 16.1 | |
| | comp=N,12nm,0.1s | | | | | | |
| **PTOM** | **Tomar** | **2.28** | **14** | P | **Pn** | **20 06 47.0** | **+1.1** |
| PTOM | | | | S | **Sn** | **20 07 12.8** | **-0.1** |
| | comp=N,5.9nm,0.1s | | | | | | |
| **PTOM** | **Tomar** | **2.28** | **14** | P | **Pn** | **20 06 47.0** | **+1.1** |
| PTOM | | | | S | **Sn** | **20 07 12.8** | **-0.1** |
| | comp=N,5.9nm,0.1s | | | | | | |
| **PMRV** | **Marv??o** | **2.44** | **34** | *e*Pn | **Pn** | **20 06 48.7** | **+0.5** |
| PMRV | | | | *e*Sn | **Sn** | **20 07 15.9** | **-1.1** |
| PMRV | | | | A | A | 20 07 18.0 | |
| | comp=N,9.0nm,0.1s | | | | | | |
| **PMRV** | **Marv??o** | **2.44** | **34** | P | **Pn** | **20 06 48.7** | **+0.5** |
| **PMRV** | **Marv??o** | **2.44** | **34** | P | **Pn** | **20 06 48.7** | **+0.5** |
| PMRV | | | | *e*Sn | **Sn** | **20 07 15.9** | **-1.1** |
| | comp=N,9.0nm,0.1s | | | | | | |
| **ESPR** | **Espera** | **2.69** | **101** | P | **Pn** | **20 06 51.9** | **+0.5** |
| | comp=N,0.7nm,0.1s,SNR=8.9 | | | | | | |
| ESPR | | | | S | **Sn** | **20 07 22.2** | **-0.7** |
| | comp=N,23nm,0.3s | | | | | | |
| **ESPR** | **Espera** | **2.69** | **101** | P | **Pn** | **20 06 51.9** | **+0.5** |
| | comp=N,0.7nm,0.1s,SNR=8.9 | | | | | | |
| ESPR | | | | S | **Sn** | **20 07 22.2** | **-0.7** |
| | comp=N,23nm,0.3s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **2.69** | **11** | *e*Pn | **Pn** | **20 06 52.8** | **+1.3** |
| PCAS | | | | *e*Sn | **Sn** | **20 07 22.5** | **-0.5** |
| PCAS | | | | A | A | 20 07 24.7 | |
| | comp=N,4.1nm,0.2s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **2.69** | **11** | *e*Pn | **Pn** | **20 06 52.8** | **+1.3** |
| PCAS | | | | *e*Sn | **Sn** | **20 07 22.5** | **-0.5** |
| | comp=N,4.1nm,0.2s | | | | | | |
| **PCBR** | **Castelo Branco** | **2.76** | **28** | *e*Pn | **Pn** | **20 06 53.3** | **+0.8** |
| PCBR | | | | *e*Sn | **Sn** | **20 07 24.0** | **-0.7** |
| PCBR | | | | A | A | 20 07 27.3 | |
| | comp=N,5.7nm,0.8s | | | | | | |
| **PCBR** | **Castelo Branco** | **2.76** | **28** | P | **Pn** | **20 06 53.3** | **+0.8** |
| **PCBR** | **Castelo Branco** | **2.76** | **28** | P | **Pn** | **20 06 53.3** | **+0.8** |
| PCBR | | | | *e*Sn | **Sn** | **20 07 24.0** | **-0.7** |
| | comp=N,5.7nm,0.8s | | | | | | |
| **ECAB** | **El Cabril** | **3.03** | **76** | P | **Pn** | **20 06 56.5** | **+0.2** |
| | comp=N,4.4nm,0.1s,SNR=92 | | | | | | |
| ECAB | | | | S | **Sn** | **20 07 30.7** | **-0.8** |
| | comp=N,4.9nm,0.1s,SNR=14 | | | | | | |
| **ECAB** | **El Cabril** | **3.03** | **76** | P | **Pn** | **20 06 56.5** | **+0.2** |
| | comp=N,4.4nm,0.1s,SNR=92 | | | | | | |
| ECAB | | | | S | **Sn** | **20 07 30.7** | **-0.8** |
| | comp=N,4.9nm,0.1s,SNR=14 | | | | | | |
| **MTE** | **Manteigas** | **3.24** | **22** | *e*Sn | **Sn** | **20 07 36.0** | **-0.7** |
| MTE | | | | A | A | 20 07 38.3 | |
| | comp=N,6.7nm,0.2s | | | | | | |
| **MTE** | **Manteigas** | **3.24** | **22** | *e*Sn | **Sn** | **20 07 36.0** | **-0.7** |
| | comp=N,6.7nm,0.2s | | | | | | |
| **PVIS** | **Viseu** | **3.44** | **16** | ⇓*e*Pn | **Pn** | **20 07 03.1** | **+1.1** |
| PVIS | | | | *e*Sn | **Sn** | **20 07 40.7** | **-1.0** |
| PVIS | | | | A | A | 20 07 44.2 | |
| | comp=N,9.7nm,0.3s | | | | | | |
| **PVIS** | **Viseu** | **3.44** | **16** | P | **Pn** | **20 07 03.1** | **+1.1** |
| **PVIS** | **Viseu** | **3.44** | **16** | P | **Pn** | **20 07 03.1** | **+1.1** |
| PVIS | | | | *e*Sn | **Sn** | **20 07 40.7** | **-1.0** |
| | comp=N,9.7nm,0.3s | | | | | | |
| **EPLA** | **Plasencia** | **3.58** | **41** | P | **Pn** | **20 07 04.0** | **+0.2** |
| | comp=N,0.7nm,0.1s,SNR=10 | | | | | | |
| EPLA | | | | S | **Sn** | **20 07 45.0** | **+0.1** |
| | comp=N,8.7nm,0.1s | | | | | | |
| **EPLA** | **Plasencia** | **3.58** | **41** | P | **Pn** | **20 07 04.0** | **+0.2** |
| | comp=N,0.7nm,0.1s,SNR=10 | | | | | | |
| EPLA | | | | S | **Sn** | **20 07 45.0** | **+0.1** |
| | comp=N,8.7nm,0.1s | | | | | | |
| **EMIJ** | **Mijas** | **3.60** | **102** | P | **Pn** | **20 07 04.7** | **+0.6** |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | **Sn** | **20 07 46.4** | **+0.7** |
| | comp=N,1.5nm,0.2s,SNR=7.9 | | | | | | |
| **EMIJ** | **Mijas** | **3.60** | **102** | P | **Pn** | **20 07 04.7** | **+0.6** |
| | comp=N,0.2nm,0.1s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | **Sn** | **20 07 46.3** | **+0.7** |
| | comp=N,1.5nm,0.2s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **3.70** | **77** | P | **Pn** | **20 07 05.7** | **+0.3** |
| | comp=N,1.4nm,0.1s,SNR=31 | | | | | | |
| EADA | | | | S | **Sn** | **20 07 47.5** | **-0.5** |
| | comp=N,13nm,0.2s,SNR=5.6 | | | | | | |
| **EADA** | **Adamuz** | **3.70** | **77** | P | **Pn** | **20 07 05.7** | **+0.3** |
| | comp=N,1.4nm,0.1s,SNR=31 | | | | | | |
| EADA | | | | S | **Sn** | **20 07 47.5** | **-0.5** |
| | comp=N,13nm,0.2s,SNR=5.6 | | | | | | |
| **PTO** | **Porto** | **3.75** | **6** | *e*Sn | **Sn** | **20 07 47.0** | **-2.1** |
| PTO | | | | A | A | 20 07 49.7 | |
| | comp=N,31nm,0.2s | | | | | | |
| **PTO** | **Porto** | **3.75** | **6** | *e*Sn | **Sn** | **20 07 47.0** | **-2.1** |
| | comp=N,31nm,0.2s | | | | | | |
| **PVRL** | **Vila Real** | **4.02** | **16** | *e*Pn | **Pn** | **20 07 11.0** | **+1.2** |
| PVRL | | | | *e*Sn | **Sn** | **20 07 53.6** | **-2.3** |
| PVRL | | | | A | A | 20 07 57.2 | |
| | comp=N,10nm,0.4s | | | | | | |
| **PVRL** | **Vila Real** | **4.02** | **16** | P | **Pn** | **20 07 11.0** | **+1.2** |
| **PVRL** | **Vila Real** | **4.02** | **16** | P | **Pn** | **20 07 11.0** | **+1.2** |
| PVRL | | | | *e*Sn | **Sn** | **20 07 53.6** | **-2.3** |
| | comp=N,10nm,0.4s | | | | | | |
| **MVO** | **Moncorvo** | **4.09** | **23** | *e*Pn | **Pn** | **20 07 12.1** | **+1.2** |
| MVO | | | | *e*Sn | **Sn** | **20 07 56.6** | **-1.2** |
| MVO | | | | A | A | 20 07 59.3 | |
| | comp=N,4.7nm,0.5s | | | | | | |
| **MVO** | **Moncorvo** | **4.09** | **23** | P | **Pn** | **20 07 11.3** | **+0.4** |
| | comp=N,2.5nm,0.3s,SNR=9.1 | | | | | | |
| **MVO** | **Moncorvo** | **4.09** | **23** | P | **Pn** | **20 07 11.3** | **+0.4** |
| | comp=N,2.5nm,0.3s,SNR=9.1 | | | | | | |
| MVO | | | | *e*Sn | **Sn** | **20 07 56.6** | **-1.2** |
| | comp=N,4.7nm,0.5s | | | | | | |
| **POLO** | **Lamas de Olo** | **4.10** | **14** | *e*Pn | **Pn** | **20 07 11.8** | **+0.8** |
| POLO | | | | *e*Sn | **Sn** | **20 07 55.6** | **-2.3** |
| POLO | | | | A | A | 20 07 58.3 | |
| | comp=N,1.6nm,0.3s | | | | | | |
| **POLO** | **Lamas de Olo** | **4.10** | **14** | *e*Pn | **Pn** | **20 07 11.8** | **+0.8** |
| POLO | | | | *e*Sn | **Sn** | **20 07 55.6** | **-2.3** |
| | comp=N,1.6nm,0.3s | | | | | | |
| **SELV** | **Sierra Elvira** | **4.32** | **91** | P | **Pn** | **20 07 14.5** | **+0.4** |
| | comp=N,0.2nm,1.2s,SNR=7.9 | | | | | | |
| SELV | | | | S | **Sn** | **20 08 03.3** | **-0.1** |
| | comp=N,9.3nm,2.3s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **4.32** | **91** | P | **Pn** | **20 07 14.5** | **+0.4** |
| | comp=N,0.2nm,1.2s,SNR=7.9 | | | | | | |
| SELV | | | | S | **Sn** | **20 08 03.3** | **-0.1** |
| | comp=N,9.3nm,2.3s,SNR=7.9 | | | | | | |
| **PCAB** | **Cabril** | **4.38** | **11** | *e*Pn | **Pn** | **20 07 15.6** | **+0.8** |
| PCAB | | | | *e*Sn | **Sn** | **20 08 02.9** | **-1.9** |
| PCAB | | | | A | A | 20 08 06.0 | |
| | comp=N,6.5nm,0.1s | | | | | | |
| **PCAB** | **Cabril** | **4.38** | **11** | P | **Pn** | **20 07 15.6** | **+0.8** |
| **PCAB** | **Cabril** | **4.38** | **11** | P | **Pn** | **20 07 15.6** | **+0.8** |
| PCAB | | | | *e*Sn | **Sn** | **20 08 02.9** | **-1.9** |
| | comp=N,6.5nm,0.1s | | | | | | |
| **EGUA** | **Guajares** | **4.50** | **96** | P | **Pn** | **20 07 18.1** | **+1.7** |
| | comp=N,0.7nm,0.6s,SNR=7.9 | | | | | | |
| **EGUA** | **Guajares** | **4.50** | **96** | P | **Pn** | **20 07 18.1** | **+1.7** |
| | comp=N,0.7nm,0.6s,SNR=7.9 | | | | | | |
| **ELOB** | **Lobios** | **4.53** | **10** | P | **Pn** | **20 07 17.5** | **+0.5** |
| | comp=N,0.7nm,0.0s,SNR=11 | | | | | | |
| **ELOB** | **Lobios** | **4.53** | **10** | P | **Pn** | **20 07 17.5** | **+0.5** |
| | comp=N,0.7nm,0.0s,SNR=11 | | | | | | |
| **EQUE** | **Quentar** | **4.55** | **91** | P | **Pn** | **20 07 17.8** | **+0.5** |
| | comp=N,7.3nm,2.4s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **4.55** | **91** | P | **Pn** | **20 07 17.8** | **+0.5** |
| | comp=N,7.3nm,2.4s,SNR=7.9 | | | | | | |
| **PGAV** | **Gavieira, Arco** | **4.60** | **8** | *e*Pn | **Pn** | **20 07 18.7** | **+0.8** |
| PGAV | | | | *e*Sn | **Sn** | **20 08 07.3** | **-3.0** |
| PGAV | | | | A | A | 20 08 12.1 | |
| | comp=N,4.2nm,0.6s | | | | | | |
| **ESDC** | **Sonseca Array** | **4.65** | **59** | ⇑P | **Pn** | **20 07 18.7** | **+0.2** |
| | comp=N,0.4nm,0.2s,baz=246,slow=13,SNR=18 | | | | | | |
| **ESDC** | **Sonseca Array** | **4.65** | **59** | P | **Pn** | **20 07 18.7** | **+0.2** |
| | comp=N,0.4nm,0.2s,SNR=18 | | | | | | |
| **EQES** | **Quesada** | **4.84** | **83** | P | **Pn** | **20 07 21.5** | **+0.3** |
| | comp=N,1.2nm,0.1s,SNR=19 | | | | | | |
| EQES | | | | S | **Sn** | **20 08 15.9** | **-0.4** |
| | comp=N,2.5nm,0.2s | | | | | | |
| **EQES** | **Quesada** | **4.84** | **83** | P | **Pn** | **20 07 21.5** | **+0.3** |
| | comp=N,1.2nm,0.1s,SNR=19 | | | | | | |
| EQES | | | | S | **Sn** | **20 08 15.9** | **-0.4** |
| | comp=N,2.5nm,0.2s | | | | | | |
| **ECAL** | **Calabor** | **4.89** | **22** | P | **Pn** | **20 07 22.6** | **+0.7** |
| | comp=N,0.4nm,0.1s,SNR=6.6 | | | | | | |
| **ECAL** | **Calabor** | **4.89** | **22** | P | **Pn** | **20 07 22.6** | **+0.7** |
| | comp=N,0.4nm,0.1s,SNR=6.6 | | | | | | |
| **GUD** | **Guadarrama** | **5.05** | **49** | P | **Pn** | **20 07 23.8** | **-0.4** |
| | comp=N,1.7nm,0.2s,SNR=9.5 | | | | | | |
| **GUD** | **Guadarrama** | **5.05** | **49** | P | **Pn** | **20 07 23.8** | **-0.4** |
| | comp=N,1.7nm,0.2s,SNR=9.5 | | | | | | |
| **EHUE** | **Huescar** | **5.22** | **84** | P | **Pn** | **20 07 26.7** | **+0.3** |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **5.22** | **84** | P | **Pn** | **20 07 26.7** | **+0.3** |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **5.28** | **80** | P | **Pn** | **20 07 27.6** | **+0.3** |
| | comp=N,0.7nm,0.1s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **5.28** | **80** | P | **Pn** | **20 07 27.6** | **+0.3** |
| | comp=N,0.7nm,0.1s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **5.45** | **8** | P | **Pn** | **20 07 29.4** | **-0.1** |
| | comp=N,1.1nm,0.1s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **5.45** | **8** | P | **Pn** | **20 07 29.4** | **-0.1** |
| | comp=N,1.1nm,0.1s,SNR=7.9 | | | | | | |
| **EMAZ** | **Mazaricos** | **5.54** | **1** | P | **Pn** | **20 07 31.1** | **+0.5** |
| | comp=N,0.8nm,0.1s,SNR=6.6 | | | | | | |
| **EMAZ** | **Mazaricos** | **5.54** | **1** | P | **Pn** | **20 07 31.1** | **+0.5** |
| | comp=N,0.8nm,0.1s,SNR=6.6 | | | | | | |
| **ETOB** | **Tobarra** | **6.12** | **76** | P | **Pn** | **20 07 38.4** | **-0.4** |
| | comp=N,1.1nm,0.2s,SNR=9.1 | | | | | | |
| **ETOB** | **Tobarra** | **6.12** | **76** | P | **Pn** | **20 07 38.4** | **-0.4** |
| | comp=N,1.1nm,0.2s,SNR=9.1 | | | | | | |
| **EMUR** | **La Murta** | **6.29** | **84** | P | **Pn** | **20 07 41.2** | **+0.1** |
| | comp=N,0.1nm,0.6s,SNR=7.9 | | | | | | |
| **EMUR** | **La Murta** | **6.29** | **84** | P | **Pn** | **20 07 41.2** | **+0.1** |
| | comp=N,0.1nm,0.6s,SNR=7.9 | | | | | | |
| **ETOR** | **Torete** | **6.48** | **56** | P | **Pn** | **20 07 43.2** | **-0.5** |
| | comp=N,3.8nm,0.3s,SNR=8.2 | | | | | | |
| **ETOR** | **Torete** | **6.48** | **56** | P | **Pn** | **20 07 43.2** | **-0.5** |
| | comp=N,3.8nm,0.3s,SNR=8.2 | | | | | | |
| **EMOS** | **Mosqueruela** | **7.38** | **64** | P | **Pn** | **20 07 57.5** | **+1.4** |
| | comp=N,0.7nm,1.7s,SNR=7.9 | | | | | | |
| **EMOS** | **Mosqueruela** | **7.38** | **64** | P | **Pn** | **20 07 57.5** | **+1.4** |
| | comp=N,0.7nm,1.7s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **8.59** | **46** | P | **Pn** | **20 08 12.7** | **+0.1** |
| | comp=N,0.5nm,1.1s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **8.59** | **46** | P | **Pn** | **20 08 12.7** | **+0.1** |
| | comp=N,0.5nm,1.1s,SNR=7.9 | | | | | | |

**IDC 23 20:17:26.8±1.8, 14°.89S×177°.90W, h0km, mb3.7/5, mb1 4.1/5, mb1mx3.8/26, mbtmp3.7/5, MS3.5/6, Ms1 3.5/6, ms1mx3.2/28, Error ellipse: s-maj=125.8km s-min=24.7km az=150.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.01** | **81** | LR | LR | 20 20 42.5 | |
| | comp=Z,622nm,19.4s,baz=246,slow=32 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.47** | **242** | LR | LR | 20 26 34.6 | |
| | comp=Z,350nm,19.5s,baz=323,slow=33 | | | | | | |
| **URZ** | **Urewera** | **23.70** | **190** | LR | LR | 20 30 10.3 | |
| | comp=Z,87nm,20.0s,baz=22,slow=32 | | | | | | |
| **PPT** | **Papeete** | **27.32** | **99** | LR | LR | 20 31 07.2 | |
| | comp=Z,47nm,19.2s,baz=340,slow=30 | | | | | | |
| **PMG** | **Port Moresby** | **34.56** | **275** | LR | LR | 20 36 27.1 | |
| | comp=Z,59nm,19.5s,baz=32,slow=33 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.73** | **257** | P | P | 20 25 49.5 | -0.8 |
| | 0.4nm,0.9s,baz=84,slow=6.2,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **46.14** | **251** | P | P | 20 25 54.0 | +0.5 |
| | 3.1nm,0.5s,baz=84,slow=8.3,SNR=65 | | | | | | |
| ASAR | | | | PcP | PcP | 20 27 28.8 | -0.9 |
| | 0.3nm,0.6s,baz=76,slow=3.9,SNR=2.6 | | | | | | |
| ASAR | | | | LR | LR | 20 44 12.0 | |
| | comp=Z,99nm,19.9s,baz=112,slow=35 | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.92** | **44** | P | P | 20 29 21.6 | 0.0 |
| |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AMT** | **Artemida-Makis** | **0.46** | **191** | P | **Pg** | **20 18 59.3** | **-0.5** |
| AMT | | | | S | **Sb** | **20 19 08.3** | **+0.6** |
| **AMT** | **Artemida-Makis** | **0.46** | **191** | P | **Pg** | **20 18 59.3** | **-0.5** |
| **AMT** | **Artemida-Makis** | **0.46** | **191** | *e*Pb | **Pg** | **20 18 59.8** | **0.0** |
| AMT | | | | *e*Sb | **Sb** | **20 19 07.1** | **-0.6** |
| AMT | | | | S | **Sb** | **20 19 08.3** | **+0.6** |
| **SERG** | **Sergoula** | **0.47** | **23** | P | **Pg** | **20 18 59.5** | **-0.4** |
| **SERG** | **Sergoula** | **0.47** | **23** | P | **Pg** | **20 18 59.5** | **-0.4** |
| **KALE** | **Kalithea** | **0.48** | **32** | *e*PB | **Pg** | **20 18 59.9** | **-0.2** |
| KALE | | | | *e*SB | **Sg** | **20 19 06.6** | **+0.1** |
| **KALE** | **Kalithea** | **0.48** | **32** | P | **Pg** | **20 18 59.8** | **-0.3** |
| KALE | | | | S | **Sg** | **20 19 07.1** | **+0.6** |
| **KALE** | **Kalithea** | **0.48** | **32** | P | **Pg** | **20 18 59.8** | **-0.3** |
| KALE | | | | *e*Sb | **Sg** | **20 19 06.6** | **+0.1** |
| KALE | | | | S | **Sg** | **20 19 07.1** | **+0.6** |
| **THAL** | **Thalero** | **0.67** | **85** | *e*PB | **Pg** | **20 19 03.2** | **-0.5** |
| THAL | | | | *e*SB | **Sg** | **20 19 12.6** | **+0.1** |
| **THAL** | **Thalero** | **0.67** | **85** | P | **Pg** | **20 19 03.1** | **-0.6** |
| THAL | | | | S | **Sb** | **20 19 13.2** | **-0.4** |
| **THAL** | **Thalero** | **0.67** | **85** | *e*Pb | **Pg** | **20 19 03.2** | **-0.5** |
| THAL | | | | *e*Sb | **Sg** | **20 19 12.6** | **+0.1** |
| THAL | | | | S | **Sb** | **20 19 13.2** | **-0.4** |
| **PVO** | **Paravola** | **0.67** | **340** | P | **Pg** | **20 19 03.8** | **0.0** |
| PVO | | | | S | **Sb** | **20 19 15.1** | **+1.3** |
| **PVO** | **Paravola** | **0.67** | **340** | P | **Pg** | **20 19 03.8** | **0.0** |
| PVO | | | | S | **Sb** | **20 19 15.1** | **+1.3** |
| **DSF** | **Desfina** | **0.70** | **52** | *e*PB | **Pg** | **20 19 03.6** | **-0.8** |
| DSF | | | | *e*SB | **Sg** | **20 19 13.1** | **-0.4** |
| **DSF** | **Desfina** | **0.70** | **52** | P | **Pg** | **20 19 03.5** | **-0.8** |
| DSF | | | | S | **Sg** | **20 19 13.8** | **+0.3** |
| **DSF** | **Desfina** | **0.70** | **52** | *e*Pb | **Pg** | **20 19 03.6** | **-0.8** |
| DSF | | | | *e*Sb | **Sg** | **20 19 13.1** | **-0.4** |
| DSF | | | | S | **Sg** | **20 19 13.8** | **+0.3** |
| **DESF** | **Desfina** | **0.70** | **52** | *e*PB | **Pg** | **20 19 03.8** | **-0.6** |
| **DESF** | **Desfina** | **0.70** | **52** | *e*Pb | **Pg** | **20 19 03.8** | **-0.6** |
| **VLX** | **Vlachokerasia** | **0.76** | **144** | *e*PG | **Pg** | **20 19 04.7** | **-0.7** |
| **VLX** | **Vlachokerasia** | **0.76** | **144** | P | **Pg** | **20 19 04.7** | **-0.7** |
| VLX | | | | S | **Sb** | **20 19 16.5** | **+0.2** |
| **VLX** | **Vlachokerasia** | **0.76** | **144** | P | **Pg** | **20 19 04.7** | **-0.7** |
| VLX | | | | S | **Sb** | **20 19 16.5** | **+0.2** |
| **PDO** | **Prodromos** | **0.79** | **321** | *e*PB | **Pg** | **20 19 05.7** | **-0.4** |
| **PDO** | **Prodromos** | **0.79** | **321** | P | **Pg** | **20 19 05.6** | **-0.5** |
| PDO | | | | S | **Sb** | **20 19 18.2** | **+0.9** |
| **PDO** | **Prodromos** | **0.79** | **321** | P | **Pg** | **20 19 05.6** | **-0.5** |
| PDO | | | | S | **Sb** | **20 19 18.2** | **+0.9** |
| **ITM** | **Ithomi** | **0.81** | **174** | *e*PG | **Pg** | **20 19 05.7** | **-0.7** |
| **ITM** | **Ithomi** | **0.81** | **174** | P | **Pg** | **20 19 05.7** | **-0.7** |
| **ITM** | **Ithomi** | **0.81** | **174** | P | **Pg** | **20 19 05.7** | **-0.7** |
| **KFL** | **Anninata** | **0.82** | **279** | P | **Pg** | **20 19 06.5** | **-0.2** |
| KFL | | | | S | **Sn** | **20 19 20.1** | **-0.4** |
| **KFL** | **Anninata** | **0.82** | **279** | P | **Pg** | **20 19 06.5** | **-0.2** |
| KFL | | | | S | **Sn** | **20 19 20.1** | **-0.4** |
| **LTK** | **Loutraki** | **0.91** | **87** | *e*PB | **Pg** | **20 19 07.4** | **-0.8** |
| **LTK** | **Loutraki** | **0.91** | **87** | P | **Pg** | **20 19 07.4** | **-0.8** |
| **LTK** | **Loutraki** | **0.91** | **87** | P | **Pg** | **20 19 07.4** | **-0.8** |
| **EVR** | **Evrytania** | **0.93** | **359** | *e*PB | **Pg** | **20 19 08.1** | **-0.6** |
| **EVR** | **Evrytania** | **0.93** | **359** | P | **Pg** | **20 19 08.1** | **-0.6** |
| EVR | | | | S | **Sn** | **20 19 22.9** | **-0.3** |
| **EVR** | **Evrytania** | **0.93** | **359** | P | **Pg** | **20 19 08.1** | **-0.6** |
| EVR | | | | S | **Sn** | **20 19 22.9** | **-0.3** |
| **SFD** | **Strofades** | **0.97** | **221** | *e*PN | **Pn** | **20 19 10.1** | **-0.2** |
| **SFD** | **Strofades** | **0.97** | **221** | *e*Pn | **Pn** | **20 19 10.1** | **-0.2** |
| **VLS** | **Valsamata** | **0.99** | **282** | *e*PB | **Pg** | **20 19 08.5** | **-1.4** |
| **VLS** | **Valsamata** | **0.99** | **282** | P | **Pg** | **20 19 08.4** | **-1.4** |
| **VLS** | **Valsamata** | **0.99** | **282** | *e*Pb | **Pg** | **20 19 08.5** | **-1.4** |
| **AXAR** | **Agios Charalam** | **1.02** | **40** | *e*PB | **Pb** | **20 19 09.5** | **-0.9** |
| **AXAR** | **Agios Charalam** | **1.02** | **40** | P | **Pb** | **20 19 09.2** | **-1.2** |
| AXAR | | | | S | **Sn** | **20 19 26.0** | **+0.7** |
| **AXAR** | **Agios Charalam** | **1.02** | **40** | P | **Pb** | **20 19 09.2** | **-1.2** |
| **AXAR** | **Agios Charalam** | **1.02** | **40** | *e*Pb | **Pb** | **20 19 09.5** | **-0.9** |
| AXAR | | | | S | **Sn** | **20 19 26.0** | **+0.7** |
| **MAKR** | **Makrakomi, Fth** | **1.05** | **13** | *e*PN | **Pb** | **20 19 10.5** | **-0.6** |
| **MAKR** | **Makrakomi, Fth** | **1.05** | **13** | P | **Pb** | **20 19 10.4** | **-0.6** |
| **MAKR** | **Makrakomi, Fth** | **1.05** | **13** | P | **Pb** | **20 19 10.4** | **-0.6** |
| **PYL** | **PYLOS** | **1.09** | **183** | *e*PG | **Pb** | **20 19 10.5** | **-1.1** |
| **PYL** | **PYLOS** | **1.09** | **183** | P | **Pb** | **20 19 10.5** | **-1.1** |
| PYL | | | | S | **Sn** | **20 19 27.8** | **+0.8** |
| **PYL** | **PYLOS** | **1.09** | **183** | P | **Pb** | **20 19 10.5** | **-1.1** |
| PYL | | | | S | **Sn** | **20 19 27.8** | **+0.8** |
| **AGG** | **Agios Georgios** | **1.11** | **21** | *e*PG | **Pb** | **20 19 10.9** | **-1.0** |
| **AGG** | **Agios Georgios** | **1.11** | **21** | P | **Pb** | **20 19 11.0** | **-1.0** |
| **AGG** | **Agios Georgios** | **1.11** | **21** | P | **Pb** | **20 19 11.0** | **-1.0** |
| **LKR** | **Lokris** | **1.14** | **54** | *e*PN | **Pb** | **20 19 11.6** | **-0.9** |
| **LKR** | **Lokris** | **1.14** | **54** | P | **Pb** | **20 19 11.4** | **-1.1** |
| **LKR** | **Lokris** | **1.14** | **54** | P | **Pb** | **20 19 11.4** | **-1.1** |
| **VIL2** | **Platees** | **1.16** | **78** | *e*PB | **Pg** | **20 19 13.2** | **+0.1** |
| **ATAL** | **Atalanti** | **1.18** | **53** | P | **Pb** | **20 19 12.4** | **-0.7** |
| ATAL | | | | S | **Sn** | **20 19 29.2** | **0.0** |
| **ATAL** | **Atalanti** | **1.18** | **53** | P | **Pb** | **20 19 12.4** | **-0.7** |
| ATAL | | | | S | **Sn** | **20 19 29.2** | **0.0** |
| **VILL** | **Villia** | **1.19** | **81** | P | **Pn** | **20 19 13.3** | **-0.1** |
| **VILL** | **Villia** | **1.19** | **81** | P | **Pn** | **20 19 13.3** | **-0.1** |
| **KRND** | **KRANIDI** | **1.21** | **119** | *e*PB | **Pb** | **20 19 13.7** | **0.0** |
| **KRND** | **KRANIDI** | **1.21** | **119** | P | **Pn** | **20 19 13.5** | **-0.1** |
| **KRND** | **KRANIDI** | **1.21** | **119** | *e*Pb | **Pb** | **20 19 13.7** | **0.0** |
| **LKD2** | **Lefkada island** | **1.22** | **312** | *e*PN | **Pn** | **20 19 12.7** | **-1.0** |
| **LKD2** | **Lefkada island** | **1.22** | **312** | P | **Pn** | **20 19 12.8** | **-1.0** |
| **LKD2** | **Lefkada island** | **1.22** | **312** | P | **Pn** | **20 19 12.8** | **-1.0** |
| **DID** | **Didima** | **1.22** | **113** | *e*PB | **Pn** | **20 19 13.3** | **-0.4** |
| **DID** | **Didima** | **1.22** | **113** | P | **Pn** | **20 19 13.5** | **-0.2** |
| **DID** | **Didima** | **1.22** | **113** | P | **Pn** | **20 19 13.5** | **-0.2** |
| **DSL** | **Palaion Diasel** | **1.28** | **334** | *e*PB | **Pb** | **20 19 14.8** | **-0.1** |
| **DSL** | **Palaion Diasel** | **1.28** | **334** | P | **Pn** | **20 19 13.9** | **-0.7** |
| **DSL** | **Palaion Diasel** | **1.28** | **334** | P | **Pn** | **20 19 13.9** | **-0.7** |
| **DSL** | **Palaion Diasel** | **1.28** | **334** | *e*Pb | **Pb** | **20 19 14.8** | **-0.1** |
| **DYR** | **Agios Nikonas** | **1.29** | **161** | *e*PN | **Pn** | **20 19 14.1** | **-0.6** |
| **DYR** | **Agios Nikonas** | **1.29** | **161** | P | **Pn** | **20 19 14.2** | **-0.5** |
| **DYR** | **Agios Nikonas** | **1.29** | **161** | P | **Pn** | **20 19 14.2** | **-0.5** |
| **NAIG** | **Nisos Aigina** | **1.34** | **99** | *e*PB | **Pn** | **20 19 15.4** | **0.0** |
| **NAIG** | **Nisos Aigina** | **1.34** | **99** | *e*Pb | **Pn** | **20 19 15.4** | **0.0** |
| **SMIA** | **Simia** | **1.41** | **50** | *e*PG | **Pn** | **20 19 16.1** | **-0.3** |
| **SMIA** | **Simia** | **1.41** | **50** | P | **Pn** | **20 19 16.1** | **-0.3** |
| SMIA | | | | S | **Sg** | **20 19 35.8** | **-0.3** |
| **SMIA** | **Simia** | **1.41** | **50** | P | **Pn** | **20 19 16.1** | **-0.3** |
| SMIA | | | | S | **Sg** | **20 19 35.8** | **-0.3** |
| **ATH** | **Athens Observa** | **1.50** | **90** | *e*PG | **Pb** | **20 19 18.0** | **-0.5** |
| **ATH** | **Athens Observa** | **1.50** | **90** | *e*Pb | **Pb** | **20 19 18.0** | **-0.5** |
| **VLI** | **Veliai** | **1.55** | **145** | *e*PG | **Pb** | **20 19 19.3** | **-0.1** |
| **VLI** | **Veliai** | **1.55** | **145** | *e*Pg | **Pb** | **20 19 19.3** | **-0.1** |
| **MRKA** | **Markates** | **1.56** | **62** | *e*PN | **Pn** | **20 19 18.2** | **-0.3** |
| **MRKA** | **Markates** | **1.56** | **62** | *e*Pn | **Pn** | **20 19 18.2** | **-0.3** |
| **VLY** | **Voula,Athens** | **1.57** | **94** | *e*PN | **Pn** | **20 19 18.2** | **-0.3** |
| **VLY** | **Voula,Athens** | **1.57** | **94** | *e*Pn | **Pn** | **20 19 18.2** | **-0.3** |
| **THL** | **Klokotos Trika** | **1.58** | **5** | *e*PB | **Pb** | **20 19 20.0** | **0.0** |
| **THL** | **Klokotos Trika** | **1.58** | **5** | *e*Pb | **Pb** | **20 19 20.0** | **0.0** |
| **PTL** | **Penteli** | **1.61** | **87** | *e*PB | **Pn** | **20 19 19.1** | **-0.1** |
| **PTL** | **Penteli** | **1.61** | **87** | *e*Pb | **Pn** | **20 19 19.1** | **-0.1** |
| **NEO** | **Neokhori** | **1.72** | **39** | *e*PB | **Pn** | **20 19 20.5** | **-0.1** |
| **EREA** | **Eretria** | **1.72** | **75** | *e*PG | **Pn** | **20 19 21.0** | **+0.4** |
| **EREA** | **Eretria** | **1.72** | **75** | *e*Pg | **Pn** | **20 19 21.0** | **+0.4** |
| **SKIA** | **Skiathos** | **1.75** | **47** | *e*PB | **Pn** | **20 19 20.8** | **-0.2** |
| **XOR** | **Xorichti** | **1.75** | **37** | *e*PB | **Pn** | **20 19 20.5** | **-0.5** |
| **JAN** | **Janina** | **1.83** | **336** | *e*PG | **Pg** | **20 19 25.2** | **-0.7** |
| **JAN** | **Janina** | **1.83** | **336** | *e*Pg | **Pg** | **20 19 25.2** | **-0.7** |
| **IGT** | **Igoumenitsa** | **1.94** | **323** | *e*PG | **Pg** | **20 19 27.2** | **-0.7** |
| **IGT** | **Igoumenitsa** | **1.94** | **323** | *e*Pg | **Pg** | **20 19 27.2** | **-0.7** |
| **KYTH** | **Kithira** | **1.96** | **150** | *e*PG | **Pb** | **20 19 27.3** | **+0.9** |
| **KYTH** | **Kithira** | **1.96** | **150** | *e*Pg | **Pb** | **20 19 27.3** | **+0.9** |
| **AOS** | **Alonnisos** | **2.00** | **53** | *e*PB | **Pn** | **20 19 24.2** | **-0.3** |
| **SGD** | **Sagiada** | **2.04** | **323** | *e*PN | **Pb** | **20 19 27.2** | **-0.7** |
| **SGD** | **Sagiada** | **2.04** | **323** | *e*Pn | **Pb** | **20 19 27.2** | **-0.7** |
| **PENT** | **Pentalofos** | **2.27** | **347** | *e*PG | **Pb** | **20 19 32.2** | **+0.4** |
| **PENT** | **Pentalofos** | **2.27** | **347** | *e*Pg | **Pb** | **20 19 32.2** | **+0.4** |
| **SERI** | **Serifos** | **2.27** | **110** | *e*PB | **Pn** | **20 19 28.0** | **-0.2** |
| **KEK** | **Kerkira** | **2.34** | **318** | *e*PN | **Pn** | **20 19 30.7** | **+1.6** |
| **KEK** | **Kerkira** | **2.34** | **318** | *e*Pn | **Pn** | **20 19 30.7** | **+1.6** |
| **PAIG** | **Paliouri** | **2.42** | **36** | *e*PN | **Pn** | **20 19 29.6** | **-0.6** |
| **PAIG** | **Paliouri** | **2.42** | **36** | *e*Pn | **Pn** | **20 19 29.6** | **-0.6** |
| **ANKY** | **Antikythira Is** | **2.42** | **150** | *e*PG | **Pb** | **20 19 34.6** | **+0.3** |
| **ANKY** | **Antikythira Is** | **2.42** | **150** | *e*Pg | **Pb** | **20 19 34.6** | **+0.3** |
| **NEST** | **Nestorio** | **2.50** | **346** | *e*PG | **Pb** | **20 19 35.1** | **-0.6** |
| **PLG** | **Polygyros** | **2.70** | **27** | *e*PN | **Pn** | **20 19 34.3** | **+0.2** |
| **PLG** | **Polygyros** | **2.70** | **27** | *e*Pn | **Pn** | **20 19 34.3** | **+0.2** |
| **HORT** | **Hortiatis** | **2.79** | **20** | *e*PB | **Pn** | **20 19 36.2** | **+0.8** |
| **FNA** | **Florina** | **2.82** | **353** | *e*PB | **Pn** | **20 19 38.3** | **+2.6** |
| **OUR** | **Ouranopolis** | **2.88** | **35** | *e*PN | **Pn** | **20 19 36.4** | **-0.2** |
| **OUR** | **Ouranopolis** | **2.88** | **35** | *e*Pn | **Pn** | **20 19 36.4** | **-0.2** |
| **GRG** | **Griva** | **3.00** | **8** | *e*PN | **Pn** | **20 19 40.0** | **+1.7** |
| **GRG** | **Griva** | **3.00** | **8** | *e*Pn | **Pn** | **20 19 40.0** | **+1.7** |
| **IMMV** | **Iera Moni Meta** | **3.06** | **145** | *e*PB | **Pb** | **20 19 42.7** | **-2.5** |
| **APE** | **Apeiranthos** | **3.09** | **106** | *e*PN | **Pn** | **20 19 39.6** | **+0.2** |
| **APE** | **Apeiranthos** | **3.09** | **106** | *e*Pn | **Pn** | **20 19 39.6** | **+0.2** |
| **VAM** | **Vamos** | **3.21** | **143** | *e*PB | **Pn** | **20 19 43.9** | **+2.9** |
| **OHR** | **Ohrid** | **3.22** | **346** | *e*Pn | **Pb** | **20 19 47.6** | **-0.3** |
| **KNT** | **Kendrikon** | **3.28** | **14** | *e*PN | **Pn** | **20 19 43.1** | **+1.0** |
| **KNT** | **Kendrikon** | **3.28** | **14** | *e*Pn | **Pn** | **20 19 43.1** | **+1.0** |
| **CHOS** | **Chios island** | **3.36** | **82** | *e*PN | **Pn** | **20 19 43.8** | **+0.6** |
| **CHOS** | **Chios island** | **3.36** | **82** | *e*Pn | **Pn** | **20 19 43.8** | **+0.6** |
| **IDI** | **Anoyia** | **3.65** | **137** | *e*PN | **Pn** | **20 19 49.4** | **+2.2** |
| **IDI** | **Anoyia** | **3.65** | **137** | *e*Pn | **Pn** | **20 19 49.4** | **+2.2** |
| **SMTH** | **Samothraki Isl** | **3.80** | **48** | *e*PN | **Pn** | **20 19 48.7** | **-0.5** |
| **SMTH** | **Samothraki Isl** | **3.80** | **48** | *e*Pn | **Pn** | **20 19 48.7** | **-0.5** |
| **SMG** | **Samos** | **3.98** | **92** | *e*PN | **Pn** | **20 19 52.1** | **+0.4** |
| **SMG** | **Samos** | **3.98** | **92** | *e*Pn | **Pn** | **20 19 52.1** | **+0.4** |
| **LAST** | **Lasithi** | **4.08** | **133** | *e*PN | **Pn** | **20 19 54.2** | **+1.1** |
| **LAST** | **Lasithi** | **4.08** | **133** | *e*Pn | **Pn** | **20 19 54.2** | **+1.1** |
| **BRTR** | **Keskin Array B** | **9.38** | **76** | Pn | **Pn** | **20 21 08.2** | **+2.3** |
| | 0.1nm,0.3s,baz=258,slow=14,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **23.63** | **5** | P | **P** | **20 24 02.8** | **+1.3** |
| | 1.6nm,0.7s,baz=191,slow=13,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.54** | **221** | P | **P** | **20 25 04.4** | **+0.1** |
| | 0.4nm,0.5s,baz=33,slow=8.0,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.53** | **58** | P | **P** | **20 27 01.3** | **-1.0** |
| | 0.2nm,0.4s,baz=280,slow=9.6,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.06** | **48** | P | **P** | **20 27 05.9** | **-0.5** |
| | 1.1nm,0.4s,baz=266,slow=9.1,SNR=6.1 | | | | | | |

*NNC* ***23*** *20:21:59.4±1.3,42.°74N×72.°34E,h0km,mb2.6,mpv2.5, Error ellipse: s-maj=51.5km s-min=5.0km az=8.0*
*KRNET* ***23*** *20:22:00.9±0.1,42.°86N×72.°46E,h21km,mb2.2*
*KNET* ***23*** *20:22:02.1±0.4,42.°77N×72.°50E,h28km±6km, Error ellipse: s-maj=3.3km s-min=2.6km az=152.0*

**ISC 23 20:21:58.7±1.4, 42.89N±0.04×72.37E±0.03, h3km±12km, n24, σ0.82/47, 39C-5D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EKS2** | **Erkin-Say** | **1.06** | **102** | ⇑*i*P | | **Pn** | **20 22 20.0** | **-0.5** |
| | baz=101 | | | | | | | |
| EKS2 | | | | ⇑*i*S | | **Sg** | **20 22 33.9** | **+1.1** |
| | baz=101 | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.06** | **102** | ⇑P | | **Pn** | **20 22 20.0** | **-0.5** |
| | 4.1nm,0.1s,SNR=35 | | | | | | | |
| EKS2 | | | | ⇑S | | **Sb** | **20 22 34.1** | **+0.1** |
| | 14nm,0.2s | | | | | | | |
| **EKS** | **Erkin-Say** | **1.07** | **102** | ⇑*i*P | | **Pn** | **20 22 20.5** | **-0.1** |
| | baz=100 | | | | | | | |
| EKS | | | | ⇑*i*S | | **Sb** | **20 22 34.8** | **+0.6** |
| | baz=100 | | | | | | | |
| **ARK** | **Arkit** | **1.13** | **196** | ⇑*i*P | | **Pn** | **20 22 22.8** | **+1.3** |
| | baz=198 | | | | | | | |
| ARK | | | | ⇑*i*S | | **Sn** | **20 22 38.1** | **+0.5** |
| | baz=198 | | | | | | | |
| **AML** | **Almayashu** | **1.24** | **127** | ⇑*i*P | | **Pg** | **20 22 23.2** | **+0.8** |
| | baz=129 | | | | | | | |
| AML | | | | ⇑*i*S | | **Sg** | **20 22 38.4** | **-0.1** |
| | baz=129 | | | | | | | |
| **AML** | **Almayashu** | **1.24** | **127** | ⇑P | | **Pn** | **20 22 22.8** | **-0.4** |
| | 3.5nm,0.2s,SNR=17 | | | | | | | |
| AML | | | | ⇑S | | **Sg** | **20 22 38.6** | **+0.1** |
| | 5.8nm,0.1s | | | | | | | |
| **KK31** | **Karatay Array** | **1.38** | **279** | P | | **Pg** | **20 22 26.2** | **+1.1** |
| | 0.4nm,0.2s,baz=102,slow=18,SNR=67 | | | | | | | |
| KK31 | | | | ⇑S | | **Sn** | **20 22 44.1** | **+0.6** |
| | 1.0nm,0.2s,baz=101,slow=31,SNR=16 | | | | | | | |
| **AAK** | **Ala-Archa** | **1.59** | **99** | ⇑Pn | | **Pg** | **20 22 29.1** | **0.0** |
| | 1.7nm,0.2s | | | | | | | |
| AAK | | | | ⇑Sn | | **Sg** | **20 22 50.5** | **+0.9** |
| | 10nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **1.59** | **99** | ⇑*i*P | | **Pg** | **20 22 29.3** | **+0.3** |
| | baz=98 | | | | | | | |
| AAK | | | | ⇑*i*S | | **Sb** | **20 22 49.8** | **+0.6** |
| | baz=98 | | | | | | | |
| **AAK** | **Ala-Archa** | **1.59** | **99** | ⇓P | | **Pg** | **20 22 29.4** | **+0.3** |
| | 6.1nm,0.1s,SNR=7.8 | | | | | | | |
| AAK | | | | ⇑S | | **Sg** | **20 22 50.0** | **+0.4** |
| | 11nm,0.2s | | | | | | | |
| **USP** | **Ospenovka** | **1.60** | **76** | ⇑*i*P | | **Pg** | **20 22 29.1** | **-0.3** |
| | baz=74 | | | | | | | |
| USP | | | | ⇑*i*S | | **Sg** | **20 22 50.1** | **-0.1** |
| | baz=74 | | | | | | | |
| **USP** | **Ospenovka** | **1.60** | **76** | ⇑P | | **Pg** | **20 22 29.3** | **-0.2** |
| | 23nm,0.3s,SNR=15 | | | | | | | |
| USP | | | | ⇓S | | **Sg** | **20 22 50.6** | **+0.4** |
| | 9.8nm,0.2s | | | | | | | |
| **ARSB** | **Arslanbob** | **1.63** | **164** | ⇑*e*P | | **Pg** | **20 22 30.3** | **+0.4** |
| | baz=166 | | | | | | | |
| ARSB | | | | ⇑*i*S | | **Sg** | **20 22 52.2** | **+1.1** |
| | baz=166 | | | | | | | |
| **UCH** | **Uchtor** | **1.72** | **112** | ⇑*i*P | | **Pb** | **20 22 31.3** | **+0.2** |
| | baz=112 | | | | | | | |
| UCH | | | | ⇑*i*S | | **Sb** | **20 22 53.5** | **+0.3** |
| | baz=112 | | | | | | | |
| **UCH** | **Uchtor** | **1.72** | **112** | ⇑P | | **Pg** | **20 22 31.8** | **+0.2** |
| | 1.8nm,0.1s,SNR=11 | | | | | | | |
| UCH | | | | ⇑S | | **Sb** | **20 22 53.6** | **+0.4** |
| | 7.5nm,0.2s | | | | | | | |
| **CHMS** | **Chumysh** | **1.75** | **86** | ⇑*i*P | | **Pb** | **20 22 31.4** | **0.0** |
| | baz=85 | | | | | | | |
| CHMS | | | | ⇑*i*S | | **Sg** | **20 22 54.6** | **-0.3** |
| | baz=85 | | | | | | | |
| **CHMS** | **Chumysh** | **1.75** | **86** | ⇑P | | **Pg** | **20 22 31.7** | **-0.6** |
| | 5.0nm,0.1s,SNR=7.6 | | | | | | | |
| CHMS | | | | ⇑S | | **Sg** | **20 22 54.8** | **-0.1** |
| | 9.2nm,0.2s | | | | | | | |
| **ARLS** | **Aral** | **1.78** | **125** | ⇑*i*P | | **Pg** | **20 22 32.8** | **+0.1** |
| | baz=125 | | | | | | | |
| ARLS | | | | ⇑*i*S | | **Sb** | **20 22 55.2** | **+0.5** |
| | baz=125 | | | | | | | |
| **KBK** | **Karagaybulak** | **1.91** | **96** | ⇓*i*P | | **Pb** | **20 22 34.6** | **+0.3** |
| | baz=96 | | | | | | | |
| KBK | | | | ⇓*i*S | | **Sg** | **20 22 59.9** | **-0.2** |
| | baz=96 | | | | | | | |
| **KBK** | **Karagaybulak** | **1.91** | **96** | ⇑P | | **Pg** | **20 22 34.8** | **-0.5** |
| | 8.3nm,0.1s,SNR=16 | | | | | | | |
| **KZA** | **Kyzart** | **2.28** | **110** | *i* P | | **Pg** | **20 22 42.0** | **-0.4** |
| | baz=110 | | | | | | | |
| KZA | | | | *i* S | | **Sb** | **20 23 11.1** | **+1.7** |
| | baz=110 | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.37** | **88** | ⇓Pn | | **Pb** | **20 22 40.7** | **-1.4** |
| | 2.2nm,0.3s | | | | | | | |
| TKM2 | | | | ⇑Sn | | **Sb** | **20 23 12.5** | **+0.6** |
| | 7.4nm,0.6s | | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.66** | **97** | ⇑*e*P | | **Pb** | **20 22 45.7** | **-1.4** |
| | baz=97 | | | | | | | |
| BOOM | | | | ⇑*e*S | | **Sb** | **20 23 20.2** | **0.0** |
| | baz=97 | | | | | | | |
| **BTK** | **Batken** | **3.06** | **203** | ⇑*i*P | | **Pb** | **20 22 51.0** | **-2.8** |
| | baz=204 | | | | | | | |
| BTK | | | | ⇑*i*S | | **Sb** | **20 23 30.0** | **-1.6** |
| | baz=204 | | | | | | | |

*ISCJB* ***23*** *20:28:12.0±0.7,6.°2N×0.°1×127.°9E×0.°2,h100km,mb3.5/8, Error ellipse: s-maj=27.9km s-min=8.3km az=148.2*
*MAN* ***23*** *20:28:16,5.°56N×126.°97E,h75km,mb4.3,ML3.2,MS3.0*
*IDC* ***23*** *20:28:19.9±4.1,5.°94N×127.°49E,h160km±42km,mb3.2/8, mb1 3.3/9,mb1mx3.1/51,mbtmp3.7/9, Error ellipse: s-maj=51.0km s-min=16.3km az=69.0*

**ISC 23 20:28:14.5±0.9, 6.°1N×0.°1×127.°8E±0.°2, h100km, n13, σ1.9/83/12, mb3.6/8, 1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **1.73** | **299** | *e*P | | **Pn** | **20 28 43.7** | **+0.1** |
| **BIPH** | **Bislig** | **2.50** | **326** | ⇓*e*P | | Pn | 20 28 58.6 | +5.0 |
| BIPH | | | | *i* S | | **Sn** | **20 29 26.5** | **+3.0** |
| **BUKP** | **Musuan** | **3.22** | **303** | *e*P | | **Pn** | **20 29 02.5** | **-0.7** |
| BUKP | | | | *e*S | | Sn | 20 29 22.5 | -18 |
| **BUTP** | **Butuan** | **3.56** | **323** | *e*P | | Pn | 20 29 12.5 | +4.7 |
| **SIJI** | **Sorong** | **7.76** | **153** | P | | Pn | 20 30 09.9 | +5.1 |
| | 1.1nm,0.3s,baz=3.2,slow=14,SNR=6.5 | | | | | | | |
| SIJI | | | | S | | **Sn** | **20 31 33.3** | **+2.2** |
| | 0.9nm,0.3s,baz=222,slow=23,SNR=7.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **26.68** | **166** | P | | **P** | **20 33 42.5** | **-1.9** |
| | 0.4nm,0.8s,baz=344,slow=10,SNR=14 | | | | | | | |
| **ASAR** | **Alice Springs** | **30.19** | **169** | P | | **P** | **20 34 15.9** | **+0.3** |
| | 0.2nm,0.3s,baz=347,slow=8.0,SNR=2.6 | | | | | | | |
| **SONM** | **Songino Array** | **45.41** | **340** | P | | **P** | **20 36 24.8** | **+1.5** |
| | 0.2nm,0.5s,baz=162,slow=9.1,SNR=4.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.23** | **324** | P | | **P** | **20 37 43.0** | **-1.4** |
| | 0.8nm,0.5s,baz=124,slow=7.1,SNR=11 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.97** | **332** | P | | **P** | **20 38 02.4** | **-1.0** |
| | 0.4nm,0.4s,baz=126,slow=7.3,SNR=2.5 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.33** | **326** | P | | **P** | **20 38 11.1** | **-1.7** |
| | 1.2nm,0.6s,baz=125,slow=6.2,SNR=11 | | | | | | | |
| **BVAR** | **Borovoye Array** | **65.92** | **326** | P | | **P** | **20 38 48.0** | **-1.8** |
| | 0.6nm,0.5s,baz=118,slow=8.3,SNR=5.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.52** | **26** | P | | **P** | **20 40 25.4** | **-0.5** |
| | 0.7nm,1.1s,baz=246,slow=6.7,SNR=4.1 | | | | | | | |

**NNC 23 20:31:46.3±8.4, 37.°97N×71.°80E, h234km±114km, mb2.5, mpv3.8, 3C-1D, Error ellipse: s-maj=96.8km s-min=55.3km az=27.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **5.10** | **23** | ⇑P | | Pn | 20 33 01.8 | -1.1 |
| | 5.2nm,0.5s | | | | | | | |
| AAK | | | | ⇑S | | S | 20 34 04.5 | +0.8 |
| | 9.6nm,0.6s | | | | | | | |
| **KK31** | **Karatay Array** | **5.22** | **350** | P | | Pn | 20 33 04.6 | +0.4 |
| | 9.8nm,0.5s,baz=168,slow=11,SNR=163 | | | | | | | |
| KK31 | | | | S | | S | 20 34 06.7 | +0.4 |
| | 7.6nm,0.5s,baz=189,slow=27,SNR=15 | | | | | | | |
| **AB31** | **Akbulak array** | **14.16** | **327** | ⇓P | | P | 20 34 59.2 | +1.7 |
| | 0.4nm,0.7s,baz=146,slow=12,SNR=8.0 | | | | | | | |
| AB31 | | | | ⇑S | | S | 20 37 31.7 | -1.5 |
| | 1.4nm,0.7s,baz=160,slow=22,SNR=7.1 | | | | | | | |

*ISCJB* ***23*** *20:33:06.8±0.9,63.°38N±0.°06×23.°85W±0.°08,h3km±5km, mb4.0/21, Error ellipse: s-maj=10.1km s-min=4.3km az=154.9*
*CSEM* ***23*** *20:33:07.7±0.2,63.°40N×23.°77W,h2km,mb4.5/7, Error ellipse: s-maj=9.8km s-min=4.3km az=153.0*
*REY* ***23*** *20:33:07.8,63.°37N×24.°01W,h13km*
*IDC* ***23*** *20:33:08.3±0.9,63.°29N×24.°04W,h0km,mb3.8/14, mb1 4.1/14,mb1mx3.7/49,mbtmp3.8/14, Error ellipse: s-maj=24.0km s-min=17.5km az=19.0*
*NEIC* ***23*** *20:33:10.0±0.6,63.°49N×23.°97W,h10km,mb4.5/7, Error ellipse: s-maj=15.4km s-min=10.1km az=191.0*

**ISC 23 20:33:07.9±1.7, 63.°43N±0.°06×23.°73W±0.°05, h2km±10km, n63, σ1.9/06/84, mb4.0/21, Iceland region**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IRNE** | **Reykjanes** | **0.60** | **49** | P | | **Pb** | **20 33 20.6** | **-0.5** |
| | baz=52 | | | | | | | |
| IRNE | | |

7.6nm,1.1s
**LOHW Long Hollow 50.82 291 P P 20 42 11.3 +1.6**
8.9nm,1.3s
**LOHW Long Hollow 50.82 291 P P 20 42 11.3 +1.6**
8.9nm,1.3s
**KURK Kurchatov 51.07 53 P P 20 42 10.8 -0.4**
7.2nm,0.8s
**KURK Kurchatov 51.07 53 P P 20 42 10.8 -0.4**
7.2nm,0.8s
**KURBB Kurchatov Arra 51.12 53 P P 20 42 12.1 +0.6**
1.3nm,0.8s,baz=324,slow=7.5,SNR=7.6
**WMOK Wichita Mounta 52.97 275** *eP* **P 20 42 25.3 -0.3**
3.8nm,1.0s
**WMOK Wichita Mounta 52.97 275** *eP* **P 20 42 25.3 -0.3**
3.8nm,1.0s
**TORD Torodi Ar. Bea 53.31 149 P P 20 42 27.4 -0.8**
0.8nm,0.8s,baz=337,slow=6.6,SNR=5.6
**MKAR Makanchi Array 55.69 53 P P 20 42 47.0 +1.8**
1.3nm,0.8s,baz=320,slow=6.7,SNR=4.4
**KIPM Iron Peak 59.27 298** *eP* **P 20 43 10.0 -0.8**
**KIPM Iron Peak 59.27 298** *eP* **P 20 43 10.0 -0.8**
**TXAR Lajitas Array 59.74 276 P P 20 43 13.9 -0.1**
2.4nm,1.1s,baz=55,slow=4.8,SNR=5.7
**SONM Songino Array 62.30 36 P P 20 43 33.1 +1.8**
0.8nm,0.9s,baz=339,slow=7.7,SNR=4.2
**CMAR Chiang Mai Arr 87.10 53 P P** 20 45 57.8 +2.7
0.8nm,0.8s,baz=347,slow=7.4,SNR=4.6

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*IDC* ***23*** *20:34:29.2±0.7, 63˚.27N×24˚.17W, h0km, mb3.9/19, mb1 4.1/21, mb1mx3.9/52, mbtmp3.9/21, ML3.5/2, MS3.5/1, Ms1 3.5/1, ms1mx2.9/47, Error ellipse: s-maj=20.2km s-min=13.6km az=20.0*

*CSEM* ***23*** *20:34:29.5±0.2, 63˚.47N×23˚.85W, h2km, mb4.7/13, Error ellipse: s-maj=8.3km s-min=4.6km az=156.0*

*REY* ***23*** *20:34:29.3, 63˚.39N×24˚.01W, h10km*

*ISCJB* ***23*** *20:34:29.1±0.9, 63˚.49N±0˚.04×23˚.95W±0˚.07, h6km±5km, mb4.3/42, MS3.4/1, Error ellipse: s-maj=7.1km s-min=4.3km az=152.0*

*GCMT* ***23*** *20:34:31.0±0.4, 63˚.41N×23˚.98W, h19km±1km, MW4.9/74, Moment Tensor Solution. s6,c6; s74,c102; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=3.15±.33; Mθθ=0.67±.20; Mϕϕ=2.48±.19; Mrθ=1.16±.58; Mϕθ=0.40±.11; Mϕr=0.45±.39; Best double couple: M=3.04800×10¹⁶ NP1:ϑ=355.00000°, δ=50.00000°, λ=-112.00000°. NP2: ϕ=207.00000°, δ=45.00000°, λ=-66.00000°. Principal axes: T 2.5720, Plg2.0000°, Azm100.0000°; N 0.9500, Plg17.0000°, Azm10.0000°; P -3.5240, Plg73.0000°, Azm198.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC* ***23*** *20:34:31.1±0.4, 63˚.35N×24˚.04W, h10km, mb4.6/15 Error ellipse: s-maj=13.2km s-min=7.1km az=193.0*

*SZGRF* ***23*** *20:34:35.2, 64˚.08N×23˚.34W, h33km, mb4.8/11(BGR)*

**ISC 23 20:34:30.1±1.7, 63˚.47N±0˚.06×23˚.85W±0˚.05, h4km±9km, n107, σ1§36/119, mb4.5/42, Iceland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRNE** | **Reykjanes** | **0.62** | **55** | S | **Sg** | **20 34 51.6** | **+1.7** |
| | baz=53 | | | | | | |
| IRNE | | | | P | **Pg** | **20 34 41.8** | **-0.1** |
| | baz=53 | | | | | | |
| **INYL** | **Nylenda** | **0.70** | **44** | P | **Pg** | **20 34 43.4** | **-0.2** |
| | baz=44 | | | | | | |
| INYL | | | | S | **Sg** | **20 34 54.7** | **+1.9** |
| | baz=44 | | | | | | |
| **INYL** | **Nylenda** | **0.70** | **44** | P | **Pg** | **20 34 43.4** | **-0.2** |
| INYL | | | | S | **Sg** | **20 34 54.7** | **+1.9** |
| **IGRV** | **Grindav??k** | **0.73** | **57** | P | **Pg** | **20 34 43.6** | **-0.5** |
| | baz=55 | | | | | | |
| IGRV | | | | S | **Sg** | **20 34 55.1** | **+1.5** |
| | baz=55 | | | | | | |
| **IGRV** | **Grindav??k** | **0.73** | **57** | P | **Pg** | **20 34 43.6** | **-0.5** |
| IGRV | | | | S | **Sg** | **20 34 55.1** | **+1.5** |
| **IVOG** | **Vogar** | **0.82** | **52** | P | **Pg** | **20 34 45.1** | **-0.7** |
| | baz=50 | | | | | | |
| IVOG | | | | S | **Sg** | **20 34 57.9** | **+1.5** |
| | baz=50 | | | | | | |
| **IVOG** | **Vogar** | **0.82** | **52** | P | **Pg** | **20 34 45.1** | **-0.7** |
| IVOG | | | | S | **Sg** | **20 34 57.8** | **+1.5** |
| **IKRI** | **Krysuvik** | **0.89** | **62** | P | **Pg** | **20 34 46.1** | **-1.0** |
| | baz=60 | | | | | | |
| IKRI | | | | S | **Sg** | **20 34 59.4** | **+0.7** |
| | baz=60 | | | | | | |
| **IKRI** | **Krysuvik** | **0.89** | **62** | P | **Pg** | **20 34 46.1** | **-1.0** |
| IKRI | | | | S | **Sg** | **20 34 59.3** | **+0.7** |
| **IVOS** | **Vogsosar** | **1.03** | **67** | P | **Pb** | **20 34 48.4** | **-2.0** |
| | baz=65 | | | | | | |
| **IVOS** | **Vogsosar** | **1.03** | **67** | P | **Pb** | **20 34 48.4** | **-2.0** |
| **IKAS** | **Kald??rsel** | **1.04** | **57** | P | **Pb** | **20 34 48.8** | **-1.9** |
| | baz=56 | | | | | | |
| IKAS | | | | S | **Sb** | **20 35 03.9** | **-0.8** |
| | baz=56 | | | | | | |
| **IKAS** | **Kald??rsel** | **1.04** | **57** | P | **Pb** | **20 34 48.8** | **-1.9** |
| IKAS | | | | S | **Sb** | **20 35 03.9** | **-0.8** |
| **ISAN** | **Sandskeio** | **1.17** | **59** | P | Pn | 20 34 50.7 | -2.5 |
| | baz=57 | | | | | | |
| ISAN | | | | S | **Sb** | **20 35 07.6** | **-0.7** |
| | baz=57 | | | | | | |
| **ISAN** | **Sandskeio** | **1.17** | **59** | P | Pn | 20 34 50.7 | -2.5 |
| ISAN | | | | S | **Sb** | **20 35 07.6** | **-0.7** |
| **IKUD** | **Kuludalsa** | **1.22** | **45** | P | Pn | 20 34 51.8 | -2.1 |
| | baz=44 | | | | | | |
| IKUD | | | | S | **Sb** | **20 35 08.9** | **-0.8** |
| | baz=44 | | | | | | |
| **IKUD** | **Kuludalsa** | **1.22** | **45** | P | Pn | 20 34 51.8 | -2.1 |
| IKUD | | | | S | **Sb** | **20 35 08.9** | **-0.8** |
| **IHEI** | **Heioarbar** | **1.37** | **57** | P | **Pn** | **20 34 54.1** | **-1.8** |
| | baz=55 | | | | | | |
| IHEI | | | | S | **Sn** | **20 35 13.2** | **-1.3** |
| | baz=55 | | | | | | |
| **IHEI** | **Heioarbar** | **1.37** | **57** | P | **Pn** | **20 34 54.1** | **-1.8** |
| IHEI | | | | S | **Sn** | **20 35 13.2** | **-1.3** |
| **ISOL** | **Solvholt** | **1.37** | **69** | P | Pn | 20 34 53.8 | -2.1 |
| | baz=67 | | | | | | |
| **ISOL** | **Solvholt** | **1.37** | **69** | P | Pn | 20 34 53.8 | -2.1 |
| **ISAU** | **Saurbar** | **1.61** | **70** | P | **Pn** | **20 34 57.8** | **-1.5** |
| | baz=68 | | | | | | |
| ISAU | | | | S | **Sn** | **20 35 19.5** | **-1.0** |
| | baz=68 | | | | | | |
| **ISAU** | **Saurbar** | **1.61** | **70** | P | **Pn** | **20 34 57.8** | **-1.5** |
| ISAU | | | | S | **Sn** | **20 35 19.5** | **-1.0** |
| **BORG** | **Borgarnes** | **1.69** | **40** | Pn | **Pn** | **20 34 58.7** | **-1.7** |
| | 131nm,0.3s,baz=245,slow=4.7,SNR=11 | | | | | | |
| BORG | | | | Sn | **Sn** | **20 35 22.2** | **-0.3** |
| | 161nm,0.3s,baz=85,slow=18,SNR=9.4 | | | | | | |
| **BORG** | **Borgarnes** | **1.69** | **40** | *e*Pn | **Pn** | **20 34 58.9** | **-1.5** |
| BORG | | | | *e*Sn | **Sn** | **20 35 20.5** | **-1.9** |
| **BORG** | **Borgarnes** | **1.69** | **40** | *e*Pn | **Pn** | **20 34 58.9** | **-1.5** |
| BORG | | | | *e*Sn | **Sn** | **20 35 20.5** | **-1.9** |
| **IASB** | **`sbjarnarst** | **1.69** | **40** | P | **Pn** | **20 34 58.6** | **-1.8** |
| | baz=40 | | | | | | |
| IASB | | | | S | **Sn** | **20 35 21.9** | **-0.5** |
| | baz=40 | | | | | | |
| **IASB** | **`sbjarnarst** | **1.69** | **40** | P | **Pn** | **20 34 58.6** | **-1.8** |
| IASB | | | | S | **Sn** | **20 35 21.9** | **-0.5** |
| **SUMG** | **Summit** | **10.61** | **336** | *e*Pn | **Pn** | 20 37 00.3 | -2.6 |
| **EKA** | **Eskdalemuir Ar** | **13.27** | **118** | Pn | **Pn** | **20 37 40.8** | **+1.8** |
| | baz=334,slow=13,SNR=4.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **16.38** | **83** | Pn | **P** | **20 38 24.6** | **+1.1** |
| | 0.1nm,0.3s,baz=293,slow=11,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **20.07** | **51** | P | Pn | 20 39 06.0 | +0.3 |
| | 7.0nm,1.1s,baz=284,slow=8.0,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **20.07** | **51** | P | Pn | 20 39 06.0 | +0.3 |
| **CLZ** | **Clausthal** | **21.39** | **107** | *e*P | **P** | **20 39 19.5** | **+1.1** |
| | 164nm,2.3s,baz=321,slow=9.9 | | | | | | |
| **GTTG** | **Gvttingen** | **21.43** | **108** | *e*P | **P** | **20 39 19.8** | **+1.0** |
| | 161nm,2.3s,baz=321,slow=9.9 | | | | | | |
| **TNS** | **Taunus Mts** | **21.78** | **112** | *e*P | **P** | **20 39 24.2** | **+1.6** |
| | 126nm,2.5s,baz=321,slow=9.9 | | | | | | |
| **FINES** | **FINESS Array B** | **22.70** | **72** | P | **P** | **20 39 34.7** | **+2.4** |
| | 7.3nm,0.9s,baz=294,slow=12,SNR=7.5 | | | | | | |
| **BFO** | **Black Forest** | **23.21** | **116** | *e*P | **P** | **20 39 39.3** | **+1.5** |
| | 50nm,1.8s,baz=321,slow=9.9 | | | | | | |
| **STU** | **Stuttgart** | **23.21** | **114** | *e*P | **P** | **20 39 38.9** | **+1.2** |
| | 35nm,1.3s,baz=321,slow=9.9 | | | | | | |
| **STU** | **Stuttgart** | **23.21** | **114** | *e*P | **P** | **20 39 39.8** | **+2.1** |
| | 12nm,0.8s | | | | | | |
| **STU** | **Stuttgart** | **23.21** | **114** | *e*P | **P** | **20 39 39.8** | **+2.1** |
| | 12nm,0.8s | | | | | | |
| **SCHQ** | **Schefferville** | **23.25** | **268** | P | **P** | **20 39 36.5** | **-1.6** |
| | 4.4nm,0.6s,baz=63,slow=8.6,SNR=3.6 | | | | | | |
| **TANN** | **Tannenbergstha** | **23.33** | **107** | *e*P | **P** | **20 39 40.0** | **+1.0** |
| | 12nm,1.1s,baz=321,slow=9.9 | | | | | | |
| **GRF** | **Grafenberg Arr** | **23.35** | **110** | *e*P | **P** | **20 39 40.3** | **+1.2** |
| | 47nm,1.5s,baz=321,slow=9.9 | | | | | | |
| **BRG** | **Berggiesshubel** | **23.64** | **104** | *e*P | **P** | **20 39 42.9** | **+1.0** |
| | 23nm,1.4s,baz=321,slow=9.9 | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **23.71** | **108** | *e*P | **P** | **20 39 44.7** | **+2.0** |
| | 54nm,2.3s,baz=321,slow=9.9 | | | | | | |
| **KHC** | **Kasperske Hory** | **24.77** | **108** | *e*P | **P** | **20 39 54.2** | **+1.6** |
| **KHC** | **Kasperske Hory** | **24.77** | **108** | *e*P | **P** | **20 39 52.6** | **0.0** |
| | 28nm,2.0s | | | | | | |
| **KHC** | **Kasperske Hory** | **24.77** | **108** | *e*P | **P** | **20 39 52.6** | **0.0** |
| | 28nm,2.0s | | | | | | |
| **GERES** | **GERESS Array B** | **25.05** | **108** | P | **P** | **20 39 55.1** | **0.0** |
| | 1.4nm,0.9s,baz=303,slow=7.8,SNR=5.1 | | | | | | |
| **DPC** | **Dobruska-Polom** | **25.05** | **103** | *e*P | **P** | **20 39 57.7** | **+2.6** |
| **DAVOX** | **Davos/Dischmat** | **25.08** | **116** | P | **P** | **20 39 55.0** | **-0.5** |
| | 3.4nm,0.9s,baz=312,slow=13,SNR=4.3 | | | | | | |
| **RJOB** | **Jochberg** | **25.52** | **111** | *e*P | **P** | **20 40 00.7** | **+1.3** |
| | 10nm,1.1s,baz=321,slow=9.9 | | | | | | |
| **VRAC** | **Vranov** | **25.94** | **104** | P | **P** | **20 40 03.9** | **+0.7** |
| | 1.9nm,0.7s,baz=326,slow=10,SNR=3.6 | | | | | | |
| **MORC** | **Moravsky Berou** | **26.01** | **102** | *e*P | **P** | **20 40 02.4** | **-1.4** |
| | 33nm,1.2s | | | | | | |
| **MORC** | **Moravsky Berou** | **26.01** | **102** | *e*P | **P** | **20 40 02.4** | **-1.4** |
| | 33nm,1.2s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **26.23** | **101** | *e*P | **P** | **20 40 05.8** | **+0.1** |
| **OKC** | **Ostrava-Krasne** | **26.23** | **101** | P | **P** | **20 40 05.8** | **+0.1** |
| **ESDC** | **Sonseca Array** | **26.61** | **144** | P | **P** | **20 40 08.9** | **-0.4** |
| | 1.1nm,0.8s,baz=338,slow=9.9,SNR=6.4 | | | | | | |
| **PAB** | **San Pablo** | **26.63** | **145** | P | **P** | **20 40 05.9** | **-3.6** |
| **PSZ** | **Piszkesteto** | **28.43** | **102** | P | **P** | **20 40 24.0** | **-1.6** |
| **PSZ** | **Piszkesteto** | **28.43** | **102** | P | **P** | **20 40 24.0** | **-1.6** |
| **AKASG** | **Malin Array Be** | **30.55** | **89** | P | **P** | **20 40 44.3** | **+0.1** |
| | 0.2nm,0.3s,baz=325,slow=9.7,SNR=4.3 | | | | | | |
| **MLR** | **Muntele Rosu** | **32.97** | **99** | LR | LR | 20 55 11.0 | |
| | comp=Z,80nm,20.4s,baz=342,slow=38 | | | | | | |
| **INK** | **Inuvik** | **39.35** | **326** | P | **P** | **20 42 01.0** | **+1.2** |
| | 2.3nm,1.0s,baz=42,slow=6.3,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **40.98** | **97** | P | **P** | **20 42 15.2** | **+1.3** |
| | 2.3nm,0.8s,baz=332,slow=6.7,SNR=9.4 | | | | | | |
| **KBZ** | **Khabaz** | **41.93** | **85** | P | **P** | **20 42 23.4** | **+2.0** |
| | 2.9nm,1.0s,baz=301,slow=8.3,SNR=4.7 | | | | | | |
| **ILAR** | **Eielson Array** | **45.38** | **330** | P | **P** | **20 42 49.2** | **+0.3** |
| | 2.7nm,1.1s,baz=23,slow=7.3,SNR=9.4 | | | | | | |
| ILAR | | | | PcP | **PcP** | **20 44 27.5** | **-0.6** |
| | 0.3nm,0.6s,baz=352,slow=3.4,SNR=5.3 | | | | | | |
| **COLA** | **College** | **45.51** | **330** | P | **P** | **20 42 50.0** | **+0.1** |
| **COLA** | **College** | **45.51** | **330** | P | **P** | **20 42 50.0** | **+0.1** |
| **BRVK** | **Borovoye** | **46.14** | **57** | *e*P | **P** | **20 42 57.0** | **+1.9** |
| | 7.0nm,1.2s | | | | | | |
| **BRVK** | **Borovoye** | **46.14** | **57** | *e*P | **P** | **20 42 57.0** | **+1.9** |
| | 7.0nm,1.2s | | | | | | |
| **BVAR** | **Borovoye Array** | **46.21** | **57** | P | **P** | **20 42 57.4** | **+1.8** |
| | 1.8nm,0.8s,baz=312,slow=7.0,SNR=7.0 | | | | | | |
| **MCK** | **McKinley** | **46.74** | **330** | *e*P | P | 20 43 01.9 | +2.2 |
| **MCK** | **McKinley** | **46.74** | **330** | *e*P | P | 20 43 01.9 | +2.2 |
| **WALA** | **Waterton Lakes** | **47.73** | **297** | *e*P | **P** | **20 43 09.1** | **+1.4** |
| | 10nm,1.1s | | | | | | |
| **WALA** | **Waterton Lakes** | **47.73** | **297** | *e*P | **P** | **20 43 09.1** | **+1.4** |
| | 10nm,1.1s | | | | | | |
| **SLMT** | **Seeley Lake** | **49.01** | **295** | *e*P | P | 20 43 14.6 | -3.1 |
| | 6.3nm,1.1s | | | | | | |
| **BSMT** | **Bassoo Peak** | **49.04** | **297** | *e*P | **P** | **20 43 17.7** | **-0.2** |
| | 9.8nm,1.2s | | | | | | |
| **BSMT** | **Bassoo Peak** | **49.04** | **297** | *e*P | **P** | **20 43 17.7** | **-0.2** |
| | 9.8nm,1.2s | | | | | | |
| **BOZ** | **Bozeman (W)** | **49.53** | **293** | *e*P | P | 20 43 23.3 | +1.6 |
| | 14nm,1.1s | | | | | | |
| **BOZ** | **Bozeman (W)** | **49.53** | **293** | *e*P | P | 20 43 23.3 | +1.6 |
| | 14nm,1.1s | | | | | | |
| **LRM** | **Limekiln Ridge** | **49.73** | **294** | *e*P | **P** | **20 43 23.9** | **+0.6** |
| | 46nm,1.1s | | | | | | |
| **LRM** | **Limekiln Ridge** | **49.73** | **294** | *e*P | **P** | **20 43 23.9** | **+0.6** |
| | 46nm,1.1s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.52** | **47** | P | **P** | **20 43 28.9** | **0.0** |
| | 0.4nm,0.4s,baz=341,slow=3.5,SNR=3.9 | | | | | | |
| ZALV | | | | PcP | **PcP** | **20 44 47.5** | **+0.9** |
| | 0.4nm,0.5s,baz=352,slow=5.1,SNR=3.6 | | | | | | |
| **MCMT** | **McKenzie Canyo** | **50.70** | **293** | *e*P | **P** | **20 43 31.7** | **+1.0** |
| | 7.8nm,1.7s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **50.70** | **293** | *e*P | **P** | **20 43 31.7** | **+1.0** |
| | 7.8nm,1.7s | | | | | | |
| **MIAR** | **Mount Ida** | **50.74** | **270** | *e*P | **P** | **20 43 29.1** | **-1.7** |
| | 6.3nm,1.1s | | | | | | |
| **MIAR** | **Mount Ida** | **50.74** | **270** | *e*P | **P** | **20 43 29.1** | **-1.7** |
| | 6.3nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **51.09** | **53** | *e*P | **P** | **20 43 34.8** | **+1.6** |
| | 4.0nm,0.7s | | | | | | |
| KURK | | | | PcP | **PcP** | **20 44 49.8** | **+1.0** |
| **KURK** | **Kurchatov** | **51.09** | **53** | *e*P | **P** | **20 43 34.8** | **+1.6** |
| | 4.0nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **51.13** | **53** | P | **P** | **20 43 35.4** | **+1.9** |
| | 2.0nm,0.9s,baz=324,slow=7.7,SNR=11 | | | | | | |
| KURBB | | | | PcP | **PcP** | **20 44 49.8** | **+0.8** |
| | 0.2nm,0.3s,baz=308,slow=4.5,SNR=4.2 | | | | | | |
| **WMOK** | **Wichita Mounta** | **52.92** | **275** | *e*P | **P** | **20 43 46.2** | **-0.8** |
| | 6.0nm,1.0s | | | | | | |
| **WMOK** | **Wichita Mounta** | **52.92** | **275** | *e*P | **P** | **20 43 46.2** | **-0.8** |
| | 6.0nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **53.37** | **148** | P | **P** | **20 43 48.5** | **-2.0** |
| | 1.8nm,0.9s,baz=334,slow=7.2,SNR=8.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.70** | **53** | P | **P** | **20 44 06.8** | **-0.4** |
| | 1.1nm,0.9s,baz=336,slow=6.6,SNR=2.9 | | | | | | |
| **EKS2** | **Erkin-Say** | **55.99** | **62** | P | **P** | **20 44 09.9** | **+0.5** |
| **EKS2** | **Erkin-Say** | **55.99** | **62** | P | **P** | **20 44 09.9** | **+0.5** |
| **AAK** | **Ala-Archa** | **56.30** | **61** | *e*P | P | 20 44 14.4 | +2.8 |
| | 15nm,1.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **59.68** | **275** | P | **P** | **20 44 34.0** | **-1.4** |
| | 1.5nm,0.9s,baz=41,slow=4.0,SNR=7.2 | | | | | | |
| **SONM** | **Songino Array** | **62.30** | **36** | P | **P** | **20 44 54.3** | **+1.2** |
| | 0.7nm,0.9s,baz=344,slow=6.0,SNR=4.9 | | | | | | |
| **ULN** | **Ulaanbaatar** | **62.44** | **35** | *e*P | **P** | **20 44 55.4** | **+1.4** |
| | 3.8nm,1.1s | | | | | | |
| **ULN** | **Ulaanbaatar** | **62.44** | **35** | *e*P | **P** | **20 44 55.4** | **+1.4** |
| | 3.8nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **86.79** | **53** | P | **P** | **20 47 14.7** | **-0.7** |
| **CHTO** | **Chiang Mai** | **86.79** | **53** | P | **P** | **20 47 14.7** | **-0.7** |
| **WRA** | **Warramunga Arr** | **134.04** | **29** | PKP | **PKPdf** | **20 53 49.6** | **+1.3** |
| | 0.2nm,0.8s,baz=319,slow=2.7,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **137.54** | **31** | PKP | **PKPdf** | **20 53 56.1** | **+1.4** |
| | 0.2nm,0.3s,baz=337,slow=1.4,SNR=3.4 | | | | | | |

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*REY* ***23*** *20:38:24.4, 63˚.35N×24˚.04W, h10km*

*IDC* ***23*** *20:38:26.9±0.5, 63˚.38N×24˚.00W, h0km, mb4.2/31, mb1 4.3/34, mb1mx4.2/51, mbtmp4.1/34, ML3.4/3, MS4.5/40, Ms1 4.5/40, ms1mx4.4/46, Error ellipse: s-maj=15.5km s-min=10.4km az=16.0*

*ISCJB* ***23*** *20:38:27.9±0.2, 63˚.55N±0˚.02×23˚.79W±0˚.04, h10km, mb4.5/105, MS4.5/49, Error ellipse: s-maj=3.7km s-min=2.3km az=160.9*

*CSEM* ***23*** *20:38:28.0±0.1, 63˚.59N×23˚.61W, h2km, mb4.7/40*

*MOS* ***23*** *20:38:28.7±1.2, 63˚.56N×23˚.79W, h16km, mb4.9/33, MS4.5/12, Error ellipse: s-maj=10.8km s-min=8.2km az=116.2*

*BJI* ***23*** *20:38:29.9, 64˚.06N×23˚.65W, h10km, mb4.7/35, mB5.1/23, Ms5.0/21, Ms7 4.6/21*

*NEIC* ***23*** *20:38:29.1±0.2, 63˚.49N×23˚.80W, h10km, mb4.8/51, Error ellipse: s-maj=9.2km s-min=4.6km az=194.0*

*GCMT* ***23*** *20:38:29.0±0.2, 63˚.35N×24˚.03W, h12km, MW5.1/104, Moment Tensor Solution. s21,c21; s104,c180; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=6.05±.14; Mθθ=0.41±.15; Mϕϕ=5.64±.11; Mrθ=1.35±.62; Mϕθ=1.84±.11; Mϕr=0.55±.44; Best double couple: M=6.30700×10¹⁶ NP1:ϑ=5.00000°, δ=47.00000°, λ=-108.00000°. NP2: ϕ=210.00000°, δ=46.00000°, λ=-72.00000°. Principal axes: T 6.2240, Plg1.0000°, Azm107.0000°; N 0.1670, Plg13.0000°, Azm17.0000°; P -6.3910, Plg77.0000°, Azm200.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*SZGRF* ***23*** *20:38:36.3, 63˚.97N×22˚.26W, h33km, mb4.8/13(BGR)*

**ISC 23 20:38:29.9±0.5, 63˚.49N±0˚.04×23˚.65W±0˚.04, h12km±2km, h11km:pP-P, n350, σ1§49/342, mb4.7/105, MS4.5/49, 37C-4D, Iceland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IRNE** | **Reykjanes** | **0.53** | **51** | P | **Pg** | **20 38 37.6** | **-2.7** |
| | baz=51 | | | | | | |
| IRNE | | | | S | **Sb** | **20 38 48.0** | **-0.8** |
| | baz=51 | | | | | | |
| **INYL** | **Nylenda** | **0.63** | **39** | P | **Pg** | **20 38 39.2** | **-3.0** |
| | baz=42 | | | | | | |
| INYL | | | | S | **Sb** | **20 38 51.0** | **-0.7** |
| | baz=42 | | | | | | |
| **INYL** | **Nylenda** | **0.63** | **39** | P | **Pg** | **20 38 39.2** | **-3.0** |
| **IGRV** | **Grindav??k** | **0.65** | **54** | P | **Pg** | **20 38 39.3** | **-3.1** |
| | baz=53 | | | | | | |
| IGRV | | | | S | **Sg** | **20 38 50.7** | **-0.3** |
| | baz=53 | | | | | | |
| **IGRV** | **Grindav??k** | **0.65** | **54** | P | **Pg** | **20 38 39.3** | **-3.1** |
| **IVOG** | **Vogar** | **0.74** | **48** | P | **Pg** | **20 38 41.0** | **-3.2** |
| | baz=49 | | | | | | |
| IVOG | | | | S | **Sb** | **20 38 54.2** | **-0.4** |
| | baz=49 | | | | | | |
| **IVOG** | **Vogar** | **0.74** | **48** | P | **Pg** | **20 38 41.0** | **-3.2** |
| **IKRI** | **Krysuvik** | **0.80** | **60** | P | Pg | 20 38 41.8 | -3.5 |
| | baz=58 | | | | | | |
| IKRI | | | | S | **Sg** | **20 38 55.1** | **-0.7** |
| | baz=58 | | | | | | |
| **IKRI** | **Krysuvik** | **0.80** | **60** | P | Pg | 20 38 41.8 | -3.5 |
| **IVOS** | **Vogsosar** | **0.94** | **66** | P | Pg | 20 38 44.1 | -3.9 |
| | baz=63 | | | | | | |
| IVOS | | | | S | **Sg** | **20 38 59.4** | **-0.8** |
| | baz=63 | | | | | | |
| **IVOS** | **Vogsosar** | **0.94** | **66** | P | Pg | 20 38 44.1 | -3.9 |
| **IKAS** | **Kald??rsel** | **0.96** | **55** | P | Pg | 20 38 44.5 | -3.9 |
| | baz=54 | | | | | | |
| IKAS | | | | S | **Sb** | **20 39 00.7** | **-0.4** |
| | baz=54 | | | | | | |
| **IKAS** | **Kald??rsel** | **0.96** | **55** | P | Pg | 20 38 44.5 | -3.9 |
| **ISAN** | **Sandskeio** | **1.08** | **57** | P | Pg | 20 38 46.4 | -4.3 |
| | baz=56 | | | | | | |
| ISAN | | | | S | **Sg** | **20 39 04.0** | **-0.8** |
| | baz=56 | | | | | | |
| **ISAN** | **Sandskeio** | **1.08** | **57** | P | Pg | 20 38 46.4 | -4.3 |
| **IBJA** | **Bjarnastaoir** | **1.14** | **65** | P | Pb | 20 38 47.6 | -3.9 |
| | baz=62 | | | | | | |
| IBJA | | | | S | **Sg** | **20 39 04.8** | **-1.7** |
| | baz=62 | | | | | | |
| **IBJA** | **Bjarnastaoir** | **1.14** | **65** | P | Pb | 20 38 47.6 | -3.9 |
| IBJA | | | | S | **Sg** | **20 39 04.8** | **-1.7** |
| **IKUD** | **Kuludalsa** | **1.15** | **42** | P | Pb | 20 38 47.4 | -4.2 |
| | baz=43 | | | | | | |
| IKUD | | | | S | **Sg** | **20 39 05.3** | **-1.5** |
| | baz=43 | | | | | | |
| **IKUD** | **Kuludalsa** | **1.15** | **42** | P | Pb | 20 38 47.3 | -4.2 |
| IKUD | | | | S | **Sg** | **20 39 05.3** | **-1.5** |
| **ISOL** | **Solvholt** | **1.28** | **69** | P | Pn | 20 38 48.9 | -4.7 |
| | baz=66 | | | | | | |
| ISOL | | | | S | **Sb** | **20 39 08.4** | **-1.9** |
| | baz=66 | | | | | | |
| **ISOL** | **Solvholt** | **1.28** | **69** | S | **Sb** | **20 39 08.4** | **-1.9** |
| **IHEI** | **Heioarbar** | **1.29** | **55** | P | Pn | 20 38 49.8 | -3.8 |
| | baz=54 | | | | | | |
| IHEI | | | | S | **Sb** | **20 39 09.0** | **-1.4** |
| | baz=54 | | | | | | |
| **IHEI** | **Heioarbar** | **1.29** | **55** | P | Pn | 20 38 49.8 | -3.8 |
| IHEI | | | | S | **Sb** | **20 39 09.0** | **-1.4** |
| **BORG** | **Borgarnes** | **1.62** | **38** | Pn | Pn | 20 38 54.7 | -3.5 |
| | 174nm,0.3s,baz=257,slow=4.4,SNR=38 | | | | | | |
| BORG | | | | Sn | **Sg** | **20 39 22.3** | **+0.3** |
| | 143nm,0.3s,baz=31,slow=14,SNR=12 | | | | | | |
| BORG | | | | LR | LR | 20 39 28.8 | |
| | comp=Z,2µm,19.5s,baz=204,slow=34 | | | | | | |
| **BORG** | **Borgarnes** | **1.62** | **38** | *e*P | Pn | 20 38 54.7 | -3.5 |
| BORG | | | | *e* | | 20 39 21.8 | |
| **BORG** | **Borgarnes** | **1.62** | **38** | *e*Pn | Pn | 20 38 54.7 | -3.5 |
| BORG | | | | *e*Sn | **Sg** | **20 39 21.8** | **-0.2** |
| BORG | | | | Sn | **Sg** | **20 39 22.3** | **+0.3** |
| **BORG** | **Borgarnes** | **1.62** | **38** | *e*P | Pn | 20 38 54.7 | -3.5 |
| BORG | | | | *e*S | **Sg** | **20 39 21.8** | **-0.2** |
| **IASB** | **`sbjarnarst** | **1.62** | **38** | P | Pn | 20 38 54.8 | -3.4 |
| | baz=39 | | | | | | |
| IASB | | | | S | **Sn** | **20 39 18.2** | **-0.9** |
| | baz=39 | | | | | | |
| **IASB** | **`sbjarnarst** | **1.62** | **38** | P | Pn | 20 38 54.8 | -3.4 |
| IASB | | | | S | **Sn** | **20 39 18.2** | **-0.9** |
| **IHAU** | **Haukadalur** | **1.71** | **72** | S | **Sn** | **20 39 19.6** | **-1.5** |
| | baz=69 | | | | | | |
| **IHAU** | **Haukadalur** | **1.71** | **72** | S | **Sn** | **20 39 19.6** | **-1.5** |
| **IHVO** | **Lagu-Hvolar** | **2.15** | **87** | P | **Pn** | **20 39 02.5** | **-3.0** |
| | baz=83 | | | | | | |
| **IHVO** | **Lagu-Hvolar** | **2.15** | **87** | P | **Pn** | **20 39 02.5** | **-3.0** |
| **IVAT** | **Vatnsfell** | **2.21** | **69** | P | Pn | 20 39 03.0 | -3.3 |
| | baz=67 | | | | | | |
| **IVAT** | **Vatnsfell** | **2.21** | **69** | P | Pn | 20 39 03.0 | -3.3 |
| **ISNB** | **Snabyli** | **2.25** | **81** | P | Pn | 20 39 03.2 | -3.7 |
| | baz=78 | | | | | | |
| **IKAL** | **Kalfafell** | **2.69** | **77** | P | **Pn** | **20 39 10.5** | **-2.4** |
| | baz=75 | | | | | | |
| **IKAL** | **Kalfafell** | **2.69** | **77** | P | **Pn** | **20 39 10.5** | **-2.4** |
| **JMIC** | **Jan Mayen** | **9.51** | **31** | LR | LR | 20 43 39.1 | |
| | comp=Z,1µm,19.5s,baz=252,slow=32 | | | | | | |
| **SUMG** | **Summit** | **10.63** | **335** | P | **Pn** | **20 41 01.4** | **-0.7** |
| **SUMG** | **Summit** | **10.63** | **335** | Pn | **Pn** | **20 41 01.4** | **-0.7** |
| **SUMG** | **Summit** | **10.63** | **335** | P | **Pn** | **20 41 01.4** | **-0.7** |
| **SFJD** | **Kangerlussuaq** | **11.79** | **299** | LR | LR | 20 45 10.5 | |
| | comp=Z,7µm,18.8s,baz=98,slow=34 | | | | | | |
| **SFJD** | **Kangerlussuaq** | **11.79** | **299** | P | **Pn** | **20 41 17.1** | **-0.4** |
| SFJD | | | | pmax | pmax | | |
| | comp=Z,50nm,1.4s | | | | | | |
| **SFJD** | **Kangerlussuaq** | **11.79** | **299** | Pn | **Pn** | **20 41 17.1** | **-0.4** |
| | comp=Z,50nm,

CLL Lm MLR 20 52 00.0
comp=E,1μm,20.9s
CLL Lm MLR 20 52 00.0
comp=Z,1μm,19.8s
**CLL Collm 22.83 105** *eP* **P 20 43 33.0 +0.7**
comp=Z,43nm,1.8s
**MOF Molkenrain 23.04 118**⇑ *eP* **P 20 43 34.0 -0.7**
**BFO Black Forest 23.13 116** *eP* **P 20 43 35.9 +0.3**
BFO pmax pmax
comp=Z,21nm,1.2s
**BFO Black Forest 23.13 116** *eP* **P 20 43 36.5 +0.9**
comp=Z,40nm,1.6s,baz=321,slow=10
**BFO Black Forest 23.13 116** *eP* **P 20 43 35.9 +0.3**
comp=Z,21nm,1.2s
**BFO Black Forest 23.13 116** *eP* **P 20 43 35.9 +0.3**
comp=Z,21nm,1.2s
**STU Stuttgart 23.13 114** *eP* **P 20 43 36.6 +1.0**
STU pmax pmax
comp=Z,41nm,1.2s
**STU Stuttgart 23.13 114** *eP* **P 20 43 36.8 +1.2**
comp=Z,43nm,1.3s,baz=321,slow=10
**STU Stuttgart 23.13 114** *eP* **P 20 43 36.6 +1.0**
comp=Z,41nm,1.2s
**STU Stuttgart 23.13 114** *eP* **P 20 43 36.6 +1.0**
comp=Z,41nm,1.2s
**TANN Tannenbergstha 23.25 107** *eP* **P 20 43 35.4 -1.4**
comp=Z,16nm,1.2s,baz=321,slow=10
**LOMF Lomont 23.33 119**⇓ *eP* **P 20 43 36.4 -1.2**
**SCHQ Schefferville 23.34 268** P **P 20 43 35.5 -2.0**
comp=Z,8.4nm,0.7s,baz=58,slow=8.0,SNR=5.8
SCHQ LR LR 20 51 29.2
comp=Z,2μm,18.1s,baz=66,slow=34
**PGAV Gavieira, Arco 23.36 150** *eP* **P 20 43 38.2 +0.3**
comp=Z,52nm,1.7s
PGAV *eS* **S 20 47 55.2 +4.8**
**FELD Feldberg im Sc 23.36 117**⇑ *eP* **P 20 43 39.3 +1.3**
**NKC Novy Kostel 23.38 108** AMS AMS 20 54 20.0
comp=Z,2μm,13.9s
**SPAK Spaichingen-Ko 23.50 116** *eP* **P 20 43 39.7 +0.4**
**BBS Basel-Blauen 23.50 118**⇑ *eP* **P 20 43 39.2 -0.1**
**BRG Berggiesshubel 23.55 105** *eP* **P 20 43 39.6 -0.1**
comp=Z,89nm,2.2s
comp=N,1μm,20.0s
comp=E,808nm,17.9s
comp=Z,1μm,17.5s
**BRG Berggiesshubel 23.55 105** *eP* **P 20 43 39.6 -0.1**
BRG pmax pmax
comp=Z,89nm,2.2s
BRG MLR MLR
comp=N,1μm,20.0s
BRG MLR MLR
comp=E,808nm,17.9s
BRG MLR MLR
comp=Z,1μm,17.5s
**BRG Berggiesshubel 23.55 105** *eP* **P 20 43 39.3 -0.4**
comp=Z,90nm,2.2s,baz=321,slow=10
**BRG Berggiesshubel 23.55 105** *eP* **P 20 43 39.6 -0.1**
comp=Z,1μm,17.5s
**ROTZ Rotzenmuhle 23.63 109** *eP* **P 20 43 40.9 +0.4**
comp=Z,215nm,2.6s,baz=321,slow=10
**PCAB Cabril 23.65 150** *eP* **P 20 43 40.8 0.0**
comp=Z,56nm,2.0s
**POLO Lamas de Olo 24.03 150** *eP* **P 20 43 44.9 +0.5**
comp=Z,19nm,2.1s
**PVCC Panska Ves 24.07 105** AMS AMS 20 54 50.0
comp=Z,1μm,15.6s
**PVRL Vila Real 24.14 150** *eP* **P 20 43 46.5 +1.1**
comp=Z,33nm,1.8s
**SENIN Lac Senin/Sane 24.32 120** *eP* **P 20 43 47.5 +0.2**
comp=Z,24nm,1.4s
**PRA Prague 24.35 105** AMS AMS 20 55 30.0
comp=Z,1μm,13.0s
**WET Wettzell 24.39 109** *eP* **P 20 43 48.7 +1.0**
comp=Z,184nm,2.8s,baz=321,slow=10
**MVO Moncorvo 24.40 148** *eP* **P 20 43 48.1 +0.2**
comp=Z,33nm,1.8s
MVO *eS* **S 20 48 10.5 +3.4**
**PRU Pruhonice 24.46 105** *eP* **P 20 43 47.6 -0.7**
PRU *e* 20 43 52.5
PRU MLR MLR
comp=Z,500nm,14.3s
**PRU Pruhonice 24.46 105** *eP* **P 20 43 47.6 -0.7**
PRU *epP* **pP 20 43 52.5 +0.6**
PRU AMS AMS 20 55 30.0
comp=Z,500nm,14.3s
**PRU Pruhonice 24.46 105** P **P 20 43 47.6 -0.7**
**FUR Furstenfeldbru 24.47 112** *eP* **P 20 43 49.8 +1.4**
comp=Z,296nm,2.7s,baz=321,slow=10
**KSP Ksiaz 24.60 102** *eP* **P 20 43 50.0 +0.6**
**KSP Ksiaz 24.60 102** *eP* **P 20 43 50.1 +0.6**
**KSP Ksiaz 24.60 102** *eP* **P 20 43 50.1 +0.6**
**GOPC GO Pecny, Ondr 24.62 105** AMS AMS 20 55 40.0
comp=Z,1μm,14.9s
**PVIS Viseu 24.63 150** *eP* **P 20 43 51.1 +1.2**
comp=Z,39nm,2.0s
**KHC Kasperske Hory 24.69 108** *eP* **P 20 43 48.7 -1.7**
KHC pmax pmax
comp=Z,51nm,2.5s
**KHC Kasperske Hory 24.69 108** *eP* **P 20 43 50.5 +0.1**
KHC AMS AMS 20 54 50.0
comp=Z,2μm,16.1s
**KHC Kasperske Hory 24.69 108** *eP* **P 20 43 48.7 -1.7**
comp=Z,51nm,2.5s
**KHC Kasperske Hory 24.69 108** P **P 20 43 50.5 +0.1**
**UPC Upice 24.72 103** *eP* **P 20 43 51.4 +0.8**
UPC MLR MLR
comp=Z,2μm,16.2s
**UPC Upice 24.72 103** *eP* **P 20 43 51.4 +0.8**
UPC AMS AMS 20 55 20.0
comp=Z,2μm,16.2s
**UPC Upice 24.72 103** P **P 20 43 51.4 +0.8**
**GERES GERESS Array B 24.96 108** P **P 20 43 53.1 +0.2**
comp=Z,2.0nm,0.9s,baz=302,slow=8.0,SNR=8.9
GERES LR LR 20 54 36.0
comp=Z,1μm,19.3s,baz=308,slow=39
**DPC Dobruska-Polom 24.97 103** *eP* **P 20 43 53.6 +0.7**
DPC MLR MLR
comp=Z,2μm,16.2s
**DPC Dobruska-Polom 24.97 103** *eP* **P 20 43 53.6 +0.7**
DPC AMS AMS 20 55 10.0
comp=Z,2μm,16.2s
**DPC Dobruska-Polom 24.97 103** P **P 20 43 53.6 +0.7**
**DAVOX Davos/Dischmat 25.00 116** P **P 20 43 52.7 -0.7**
comp=Z,5.0nm,0.9s,baz=296,slow=12,SNR=6.3
DAVOX LR LR 20 53 01.5
comp=Z,1μm,20.8s,baz=308,slow=35
**MTE Manteigas 25.01 150** *eP* **P 20 43 54.3 +0.9**
comp=Z,47nm,2.0s
**MTE Manteigas 25.01 150** *eP* **P 20 43 53.8 +0.4**
comp=Z,21nm,1.0s
**MTE Manteigas 25.01 150** *eP* **P 20 43 54.3 +0.9**
comp=Z,47nm,2.0s
**TUE Stuetta 25.04 117** *eP* **P 20 43 54.1 +0.3**
comp=Z,17nm,0.9s
**FETA Feichten 25.15 115**⇑ *iP* **P 20 43 56.4 +1.7**
comp=Z,5.4nm,1.0s
**FETA Feichten 25.15 115** P **P 20 43 56.4 +1.7**
comp=Z,5.4nm,1.0s
**BNI Bardonecchia 25.18 123** *eP* **P 20 43 56.6 +1.6**
BNI pmax pmax
comp=Z,14nm,1.2s
**BNI Bardonecchia 25.18 123** *eP* **P 20 43 56.6 +1.6**
comp=Z,14nm,1.2s
**BNI Bardonecchia 25.18 123** *eP* **P 20 43 56.6 +1.6**
comp=Z,14nm,1.2s
**FUORN Ofenpass-Fuorn 25.29 116** *eP* **P 20 43 58.6 +2.6**
comp=Z,85nm,2.4s
**WTTA Wattenberg 25.33 113**⇓ *ipP* pP 20 43 58.8 -1.2
comp=Z,18nm,1.1s
**TREC Trest 25.39 105** *eP* **P 20 43 57.1 +0.4**
TREC MLR MLR
comp=Z,2μm,13.7s
**TREC Trest 25.39 105** *eP* **P 20 43 57.1 +0.4**
TREC AMS AMS 20 56 00.0
comp=Z,2μm,13.7s
**TREC Trest 25.39 105** P **P 20 43 57.1 +0.4**
**RJOB Jochberg 25.44 111** *eP* **P 20 43 57.4 +0.2**
comp=Z,14nm,0.9s,baz=321,slow=10
**PCBR Castelo Branco 25.56 150** *eP* **P 20 43 58.7 +0.4**
comp=Z,33nm,1.6s
**VRAC Vranov 25.86 104** P **P 20 43 59.7 -1.2**
comp=Z,4.6nm,0.9s,baz=293,slow=9.7,SNR=5.5
VRAC LR LR 20 54 00.1
comp=Z,1μm,20.5s,baz=317,slow=36
**VRAC Vranov 25.86 104**⇑ *iP* **P 20 43 59.1 -1.8**
**VRAC Vranov 25.86 104**⇑ *iP* **P 20 43 59.1 -1.8**
**VRAC Vranov 25.86 104**⇑ *iP* **P 20 43 59.1 -1.8**

**MORC Moravsky Berou 25.93 102** *eP* **P 20 44 02.5 +0.9**
MORC pmax pmax
comp=Z,45nm,1.0s
**MORC Moravsky Berou 25.93 102**⇓ *iP* P 20 43 54.5 -7.1
**MORC Moravsky Berou 25.93 102** *eP* **P 20 44 02.5 +0.9**
comp=Z,45nm,1.0s
**MORC Moravsky Berou 25.93 102** *eP* **P 20 44 01.7 +0.1**
**PMRV Marv??o 25.97 150** *eP* **P 20 44 02.1 0.0**
comp=Z,25nm,1.4s
PMRV *eS* S 20 48 44.8 +13
**ABTA Abfaltersbach 26.11 113**⇓ *iP* **P 20 44 04.3 +1.0**
comp=Z,11nm,1.9s
**ABTA Abfaltersbach 26.11 113** P **P 20 44 04.3 +1.0**
comp=Z,11nm,1.9s
**OKC Ostrava-Krasne 26.15 102** *eP* **P 20 44 04.6 +1.1**
OKC MLR MLR
comp=Z,1μm,14.0s
**OKC Ostrava-Krasne 26.15 102** *eP* **P 20 44 04.6 +1.1**
OKC AMS AMS 20 55 30.0
comp=Z,1μm,14.0s
**OKC Ostrava-Krasne 26.15 102** P **P 20 44 04.6 +1.1**
**ESDC Sonseca Array 26.57 144** P **P 20 44 07.5 0.0**
comp=Z,5.2nm,0.9s,baz=342,slow=9.1,SNR=17
ESDC LR LR 20 53 42.6
comp=Z,1μm,19.1s,baz=330,slow=34
**PAB San Pablo 26.59 145** *eP* **P 20 44 07.9 +0.2**
PAB pmax pmax
comp=Z,78nm,2.2s
**PAB San Pablo 26.59 145** *eP* **P 20 44 07.8 +0.2**
comp=Z,78nm,2.2s
**PAB San Pablo 26.59 145** *eP* **P 20 44 07.9 +0.2**
comp=Z,78nm,2.2s
**OJC Ojcow 26.60 99** *eP* **P 20 44 08.3 +0.7**
OJC pmax pmax
comp=Z,9.0nm,1.0s
**OJC Ojcow 26.60 99** *eP* **P 20 44 08.3 +0.7**
comp=Z,8.7nm,1.0s
**OJC Ojcow 26.60 99** *eP* **P 20 44 08.3 +0.7**
comp=Z,9.0nm,1.0s
**PVAQ Vaqueiros 27.85 152** *eS* S 20 49 10.3 +8.7
**PSZ Piszkesteto 28.35 103** *eP* **P 20 44 23.9 +0.5**
PSZ pmax pmax
comp=Z,11nm,1.2s
**PSZ Piszkesteto 28.35 103** *eP* **P 20 44 23.9 +0.5**
comp=Z,11nm,1.2s
**PSZ Piszkesteto 28.35 103** *eP* **P 20 44 23.9 +0.5**
comp=Z,11nm,1.2s
**KLMR Klimovskoe 28.55 66** *eP* P 20 44 17.6 -7.3
KLMR pmax pmax
comp=Z,42nm,1.8s
KLMR MLR MLR
comp=Z,3μm,19.0s
**LVV L'vov 28.77 96** *eP* **P 20 44 24.6 -2.4**
LVV MLR MLR
comp=N,900nm,16.0s
LVV MLR MLR
comp=E,700nm,16.0s
LVV MLR MLR
comp=Z,1μm,16.0s
**LVV L'vov 28.77 96** *eP* **P 20 44 24.6 -2.4**
**UZH Uzhgorod 28.87 99** *eP* **P 20 44 25.2 -2.7**
UZH *e* 20 44 29.2
UZH *eS* S 20 49 11.0 -6.5
UZH MLR MLR
comp=N,800nm,12.0s
UZH MLR MLR
comp=E,700nm,12.0s
UZH MLR MLR
comp=Z,400nm,12.0s
**UZH Uzhgorod 28.87 99** *eP* **P 20 44 25.2 -2.7**
**AKASG Malin Array Be 30.46 90** P **P 20 44 40.4 -1.6**
comp=Z,1.6nm,0.8s,baz=317,slow=9.5,SNR=4.7
AKASG LR LR 20 56 42.1
comp=Z,991nm,19.7s,baz=310,slow=36
**AKASG Malin Array Be 30.46 90** *ceP* **P 20 44 43.5 +1.5**
AKASG pmax pmax
comp=Z,2.0nm,0.8s
**AKASG Malin Array Be 30.46 90** *eP* **P 20 44 43.5 +1.5**
comp=Z,2.0nm,0.8s
**BURAR Bucovina Array 30.93 98**⇑ *iP* **P 20 44 47.0 +0.7**
**BURAR Bucovina Array 30.93 98**⇑ *iP* **P 20 44 47.0 +0.7**
**DIVS Divibare 31.38 107**⇑ *iP* **P 20 44 49.8 -0.5**
**GZR Gura Zlata 31.56 103**⇑ *iP* P 20 44 47.5 -4.3
**GZR Gura Zlata 31.56 103**⇑ *iP* P 20 44 47.5 -4.3
**ARR Arges 32.40 101**⇑ *iP* **P 20 44 59.9 +0.8**
**TESR Tescani 32.40 97**⇓ *iP* **P 20 45 01.6 +2.5**
**VOIR 32.52 100**⇑ *iP* **P 20 45 00.2 -0.1**
**VOIR 32.52 100**⇑ *iP* **P 20 45 00.2 -0.1**
**VOIR 32.52 100**⇑ *iP* **P 20 45 00.2 -0.1**
**MLR Muntele Rosu 32.88 99** P **P 20 45 05.3 +1.9**
comp=Z,1.2nm,1.0s,baz=129,slow=13,SNR=2.6
**MLR Muntele Rosu 32.88 99**⇑ *iP* **P 20 45 03.0 -0.4**
**MLR Muntele Rosu 32.88 99**⇑ *iP* **P 20 45 03.0 -0.4**
**MLR Muntele Rosu 32.88 99**⇑ *iP* **P 20 45 03.0 -0.4**
**PLOR Plostina 32.91 98**⇑ *iP* **P 20 45 05.4 +1.8**
**PLOR Plostina 32.91 98**⇑ *iP* **P 20 45 05.4 +1.8**
**PLOR Plostina 32.91 98**⇑ *iP* **P 20 45 05.4 +1.8**
**VRI Vrincioaia 32.94 98**⇑ *iP* **P 20 45 05.5 +1.7**
**VRI Vrincioaia 32.94 98**⇑ *iP* **P 20 45 05.5 +1.7**
**VRI Vrincioaia 32.94 98**⇑ *iP* **P 20 45 05.5 +1.7**
**CFR Carcaliu 34.09 98**⇑ *iP* **P 20 45 13.5 -0.4**
**CFR Carcaliu 34.09 98**⇑ *iP* **P 20 45 13.4 -0.4**
**CFR Carcaliu 34.09 98** P **P 20 45 13.5 -0.4**
**KEST Kesra 34.33 128** P **P 20 45 16.2 +0.1**
comp=Z,4.8nm,1.0s,baz=9.5,slow=6.1,SNR=3.5
KEST LR LR 20 58 11.7
comp=Z,903nm,20.6s,baz=333,slow=34
**AGG Agios Georgios 36.55 110** *eP* **P 20 45 35.4 +0.3**
AGG pmax pmax
comp=Z,14nm,1.0s
**AGG Agios Georgios 36.55 110** *eP* **P 20 45 35.4 +0.3**
comp=Z,14nm,1.0s
**AGG Agios Georgios 36.55 110** *eP* **P 20 45 35.4 +0.3**
comp=Z,14nm,1.0s
**SIM Simferopol' 36.95 92** *eP* P 20 45 46.4 +8.0
SIM pmax pmax
comp=Z,150nm,6.0s
**YKA Yellowknife Ar 38.00 311** P **P 20 45 46.6 -0.5**
comp=Z,1.2nm,0.8s,baz=48,slow=8.4,SNR=4.6
**ANN Anapa 38.55 89** *eP* **P 20 45 55.0 +3.1**
ANN *eS* **S 20 51 50.2 +3.1**
ANN pmax pmax
comp=Z,69nm,1.4s
ANN MLR MLR
comp=Z,1μm,17.0s
**EYMN Ely 39.17 280** *eP* **P 20 45 56.2 -0.9**
comp=Z,15nm,0.9s
**ULM Lac du Bonnet 39.37 285** P **P 20 45 57.7 -1.0**
comp=Z,4.5nm,0.7s,baz=43,slow=8.4,SNR=4.1
ULM LR LR 21 01 04.7
comp=Z,1μm,18.8s,baz=62,slow=35
**INK Inuvik 39.39 327** P **P 20 45 58.0 -0.6**
comp=Z,2.3nm,0.9s,baz=41,slow=9.8,SNR=4.6
**SOC Sochi 40.52 88** *eP* P 20 46 14.4 +6.0
SOC *e* 20 47 44.9
SOC *eS* S 20 52 24.4 +7.6
SOC *eSSS* SSS 20 55 52.0
SOC MLR MLR
comp=Z,448nm,12.0s
**BRTR Keskin Array B 40.89 98** P **P 20 46 11.6 -0.1**
comp=Z,3.9nm,0.9s,baz=328,slow=5.1,SNR=12
BRTR LR LR 21 06 11.0
comp=Z,444nm,18.0s,baz=303,slow=41
**BRTR Keskin Array B 40.89 98** *ceP* **P 20 46 13.6 +1.9**
BRTR pmax pmax
comp=Z,4.0nm,0.9s
**BRTR Keskin Array B 40.89 98** *eP* **P 20 46 13.6 +1.9**
comp=Z,4.0nm,0.9s
**KBZ Khabaz 41.84 86** P **P 20 46 20.5 +1.4**
comp=Z,4.9nm,1.0s,baz=309,slow=6.2,SNR=6.1
KBZ LR LR 21 03 47.9
comp=Z,1μm,21.3s,baz=332,slow=36
**AKTK Aktyubinsk 43.23 67** P **P 20 46 31.7 +1.3**
**AKTO Aktyubinsk 43.23 67** P **P 20 46 31.7 +1.3**
comp=Z,2.8nm,1.1s,baz=307,slow=8.7,SNR=4.5
**WCI Wyandotte Cave 44.51 266** *eP* **P 20 46 40.5 -0.4**
WCI pmax pmax
comp=Z,41nm,0.7s
**WCI Wyandotte Cave 44.51 266** *eP* **P 20 46 40.5 -0.4**
comp=Z,41nm,0.7s
**WCI Wyandotte Cave 44.51 266** *eP* **P 20 46 40.5 -0.4**
comp=Z,41nm,0.7s
**ABKAR Akbulak array 44.93 67** *eP* **P 20 46 44.5 +0.5**
comp=Z,10nm,1.3s
**ILAR Eielson Array 45.42 330** P **P 20 46 45.9 -1.9**
comp=Z,3.4nm,1.0s,baz=24,slow=6.6,SNR=19
ILAR PcP **PcP 20 48 23.5 -3.1**
comp=Z,1.2nm,0.8s,baz=360,slow=3.0,SNR=7.3
ILAR LR LR 21 06 52.2
comp=Z,418nm,19.2s,baz=43,slow=38
**GNI Garni 45.52 87** P **P 20 46 47.3 -1.8**
**GNI Garni 45.52 87** P **P 20 46 47.3 -1.8**
**GNI Garni 45.52 87** P **P 20 46 47.3 -1.8**
**COLA College 45.54 330** *i* P **P 20 46 49.4 +0.7**
COLA pmax pmax
comp=Z,8.0nm,0.8s
**COLA College 45.54 330** P **P 20 46 45.9 -2.8**
**COLA College 45.54 330** *i* P **P 20 46 49.4 +0.7**
comp=Z,8.0nm,0.8s
**BRVK Borovoye 46.06 57** *eP* **P 20 46 54.2 +1.3**
BRVK pmax pmax
comp=Z,11nm,1.2s
**BRVK Borovoye 46.06 57** *eP* **P 20 46 54.2 +1.3**
comp=Z,11nm,1.2s
**BRVK Borovoye 46.06 57** *eP* **P 20 46 54.2 +1.3**
comp=Z,11nm,1.2s
**BVAR Borovoye Array 46.12 57** P **P 20 46 52.6 -0.8**
comp=Z,5.9nm,0.9s,baz=340,slow=6.6,SNR=15
**LAO LASA Array 46.52 290** *eP* **P 20 46 54.4 -2.4**
comp=Z,25nm,1.1s
**PAX Paxson 46.62 328** *eP* **P 20 46 58.3 +0.9**
PAX pmax pmax
comp=Z,12nm,1.1s
**PAX Paxson 46.62 328** *eP* **P 20 46 58.3 +0.9**
comp=Z,12nm,1.1s
**PAX Paxson 46.62 328** *eP* **P 20 46 58.3 +0.9**
comp=Z,12nm,1.1s
**SWET Sewanee 46.85 263** P **P 20 46 57.7 -1.7**
comp=Z,5.0nm,1.1s
**RSSD Black Hills 47.63 286** *eP* **P 20 47 05.7 +0.1**
RSSD pmax pmax
comp=Z,5.0nm,0.9s
**RSSD Black Hills 47.63 286** *eP* **P 20 47 05.7 +0.1**
comp=Z,7nm,0.9s
**RSSD Black Hills 47.63 286** *eP* **P 20 47 05.7 +0.1**
comp=Z,5.0nm,0.9s
**WALA Waterton Lakes 47.80 297** *eP* **P 20 47 06.7 0.0**
comp=Z,13nm,1.1s
**TIGA Tifton 49.01 259** P **P 20 47 14.7 -1.3**
comp=Z,18nm,0.8s
**RLMT Red Lodge 49.05 291** *eP* **P 20 47 17.0 +0.4**
comp=Z,11nm,1.2s
**SLMT Seeley Lake 49.09 296** *eP* P 20 47 13.2 -3.5
SLMT *eP* **P 20 47 16.1 -0.7**
**MSO Missoula 49.60 296** *eP* **P 20 47 22.9 +2.3**
comp=Z,21nm,1.8s
**BOZ Bozeman (W) 49.61 293** *eP* **P 20 47 18.2 -2.6**
BOZ pmax pmax
comp=Z,16nm,1.1s
**BOZ Bozeman (W) 49.61 293** *eP* **P 20 47 18.2 -2.6**
comp=Z,16nm,1.1s
**BOZ Bozeman (W) 49.61 293** *eP* **P 20 47 18.2 -2.6**
comp=Z,16nm,1.1s
**H17A Grant Village 50.19 291** *eP* **P 20 47 28.1 +2.7**
comp=Z,9.5nm,1.0s
**H17A Grant Village 50.19 291** *eP* **P 20 47 28.0 +2.7**
comp=Z,9.5nm,1.0s
**ZALV Zalesovo Beam 50.45 47** P **P 20 47 27.6 +0.8**
comp=Z,1.1nm,0.7s,baz=325,slow=7.2,SNR=7.2
ZALV PcP **PcP 20 48 45.0 +0.2**
comp=Z,0.5nm,0.5s,baz=321,slow=4.1,SNR=5.0
ZALV LR LR 21 09 49.9
comp=Z,153nm,18.8s,baz=252,slow=37
**ZALV Zalesovo Beam 50.45 47** *i* P **P 20 47 28.7 +1.9**
ZALV pmax pmax
comp=Z,1.0nm,0.7s
**ZALV Zalesovo Beam 50.45 47** PcP **PcP 20 48 45.0 +0.2**
**IMW Indian Meadow 50.75 291** *eP* **P 20 47 30.1 +0.6**
comp=Z,19nm,1.7s
**IMW Indian Meadow 50.75 291** *eP* **P 20 47 30.1 +0.6**
comp=Z,19nm,1.7s
**MCMT McKenzie Canyo 50.78 293** *eP* **P 20 47 30.3 +0.6**
**MCMT McKenzie Canyo 50.78 293** *eP* **P 20 47 30.3 +0.6**
**MIAR Mount Ida 50.83 270** *eP* **P 20 47 29.6 -0.3**
MIAR pmax pmax
comp=Z,12nm,1.0s
**MIAR Mount Ida 50.83 270** *eP* **P 20 47 29.6 -0.3**
comp=Z,12nm,1.0s
**MIAR Mount Ida 50.83 270** *eP* **P 20 47 29.6 -0.3**
comp=Z,12nm,1.0s
**KURK Kurchatov 51.01 53** *eP* **P 20 47 30.3 -0.7**
KURK 20 48 47.2
KURK pmax pmax
comp=Z,22nm,1.1s
**KURK Kurchatov 51.01 53** *eP* **P 20 47 30.3 -0.7**
comp=Z,22nm,1.1s
KURK PcP **PcP 20 48 47.2 +0.3**
**KURK Kurchatov 51.01 53** *eP* **P 20 47 30.3 -0.7**
comp=Z,22nm,1.1s
**KURBB Kurchatov Arra 51.05 53** P **P 20 47 32.2 +0.8**
comp=Z,4.9nm,0.9s,baz=324,slow=7.7,SNR=24
KURBB PcP **PcP 20 48 47.2 +0.1**
comp=Z,0.4nm,0.4s,baz=328,slow=4.4,SNR=4.2
**TPAW Teton Pass 51.08 291** *eP* **P 20 47 32.3 +0.2**
comp=Z,15nm,1.4s
**TPAW Teton Pass 51.08 291** *eP* **P 20 47 32.3 +0.2**
comp=Z,15nm,1.4s
**BW06 Boulder Array 51.09 289** *eP* P 20 47 27.9 -4.2
comp=Z,9.4nm,1.0s
**HWUT Hardware Ranch 52.89 290** *eP* **P 20 47 44.4 -1.1**
comp=Z,11nm,1.1s
**HWUT Hardware Ranch 52.89 290** *eP* **P 20 47 44.3 -1.1**
comp=Z,11nm,1.1s
**WMOK Wichita Mounta 53.01 275** P P 20 47 40.6 -5.6
WMOK pmax pmax
comp=Z,8.0nm,1.1s
**WMOK Wichita Mounta 53.01 275** P P 20 47 40.6 -5.6
comp=Z,8.2nm,1.1s
**GEYT Alibeck 53.28 78** P **P 20 47 48.9 +0.8**
comp=Z,0.8nm,0.3s,baz=324,slow=9.5,SNR=4.0
GEYT LR LR 21 12 60.0
comp=Z,720nm,18.7s,baz=330,slow=39
**TORD Torodi Ar. Bea 53.34 149** P **P 20 47 46.0 -2.8**
comp=Z,6.0nm,0.9s,baz=342,slow=6.6,SNR=30
TORD LR LR 21 10 20.2
comp=Z,236nm,18.4s,baz=345,slow=36
**SDCO Great Sand Dun 53.48 282** *eP* **P 20 47 49.2 -0.7**
comp=Z,10nm,1.7s
**SDCO Great Sand Dun 53.48 282** *eP* **P 20 47 49.2 -0.7**
comp=Z,10nm,1.7s
**AMTX Amarillo 54.18 277** *eP* **P 20 47 52.9 -2.0**
comp=Z,17nm,1.0s
**AMTX Amarillo 54.18 277** *eP* **P 20 47 52.9 -2.0**
comp=Z,17nm,1.0s
**KKAR Karatay Array 54.22 64** *eP* **P 20 47 57.0 +2.0**
KKAR pmax pmax
comp=Z,11nm,1.5s
**KKAR Karatay Array 54.22 64** *eP* **P 20 47 57.0 +2.0**
comp=Z,11nm,1.5s
**KKAR Karatay Array 54.22 64** *eP* **P 20 47 57.0 +2.0**
comp=Z,11nm,1.5s
**NLU North Lily Min 54.48 289** *eP* **P 20 47 57.7 +0.6**
comp=Z,9.3nm,1.4s
**NLU North Lily Min 54.48 289** *eP* **P 20 47 57.7 +0.6**
comp=Z,9.3nm,1.4s
**SRU San Rafael 54.52 287** *eP* **P 20 47 58.6 +1.2**
SRU pmax pmax
comp=Z,38nm,2.2s
**SRU San Rafael 54.52 287** *eP* **P 20 47 58.6 +1.2**
comp=Z,38nm,2.2s
**SRU San Rafael 54.52 287** *eP* **P 20 47 58.6 +1.2**
comp=Z,38nm,2.2s
**MKAR Makanchi Array 55.62 53** P **P 20 48 05.2 +0.1**
comp=Z,3.5nm,1.0s,baz=322,slow=5.8,SNR=7.2
MKAR LR LR 21 11 46.4
comp=Z,289nm,18.2s,baz=320,slow=36
**MKAR Makanchi Array 55.62 53** *ceP* **P 20 48 06.5 +1.4**
MKAR pmax pmax
comp=Z,4.0nm,1.0s
**MSU Marysvale 55.72 288** P **P 20 48 05.8 -0.3**
MSU pmax pmax
comp=Z,22nm,2.1s
**MSU Marysvale 55.72 288** P **P 20 48 05.8 -0.3**
comp=Z,22nm,2.1s
**MSU Marysvale 55.72 288** P **P 20 48 05.8 -0.3**
comp=Z,22nm,2.1s
**EKS2 Erkin-Say 55.90 62** P **P 20 48 06.2 -1.1**
EKS2 pmax pmax
comp=Z,5.0nm,1.0s
**EKS2 Erkin-Say 55.90 62** P **P 20 48 06.2 -1.1**
comp=Z,5.1nm,1.0s
**EKS2 Erkin-Say 55.90 62** P **P 20 48 06.2 -1.1**

comp=Z,5.1nm,1.0s
**AAK Ala-Archa 56.21 62** P **P 20 48 11.4 +1.9**
comp=Z,3.6nm,1.0s,baz=317,slow=3.3,SNR=6.8
**ANMO Albuquerque 56.24 281** *ce*P **P 20 48 12.1 +2.2**
ANMO pmax pmax
comp=Z,6.0nm,1.7s
**ANMO Albuquerque 56.24 281** *e*P **P 20 48 10.6 +0.8**
comp=Z,20nm,2.0s
**ANMO Albuquerque 56.24 281** *e*P **P 20 48 10.6 +0.8**
comp=Z,20nm,2.0s
**TKM2 Tokmak 2 56.40 61** P **P 20 48 12.2 +1.3**
TKM2 pmax pmax
comp=Z,6.0nm,0.9s
**TKM2 Tokmak 2 56.40 61** P **P 20 48 12.2 +1.3**
comp=Z,6.1nm,0.9s
**TKM2 Tokmak 2 56.40 61** P **P 20 48 12.2 +1.3**
comp=Z,6.1nm,0.9s
**JCT Junction City 57.06 273** *e*P P 20 48 11.8 -3.8
JCT pmax pmax
comp=Z,16nm,0.9s
**JCT Junction City 57.06 273** *e*P P 20 48 11.8 -3.8
comp=Z,16nm,0.9s
**R11A Troy Canyon, C 57.30 291** *e*P **P 20 48 16.6 -0.7**
comp=Z,16nm,1.7s
**R11A Troy Canyon, C 57.30 291** *e*P **P 20 48 16.6 -0.7**
comp=Z,16nm,1.7s
**YBH Yreka Blue Hor 57.34 299** LR LR 21 13 15.9
comp=Z,249nm,18.9s,baz=38,slow=36
**WUAZ Wupatki 57.90 286** *e*P **P 20 48 18.8 -2.8**
comp=Z,17nm,1.4s
**DBIC Dimbokro 58.32 158** LR LR 21 12 24.3
comp=Z,140nm,18.9s,baz=349,slow=35
**NVAR Mina Array Bea 58.36 293** P P 20 48 21.6 -3.2
comp=Z,0.5nm,0.8s,baz=55,slow=7.8,SNR=2.9
NVAR LR LR 21 13 14.1
comp=Z,3μm,19.1s,baz=36,slow=36
**SHPR Sheep Range 58.68 289** *e*P **P 20 48 28.1 +1.1**
**SHPR Sheep Range 58.68 289** *e*P **P 20 48 28.1 +1.1**
**KSH Kashi 59.45 62** P P 20 48 35.9 +3.7
KSH *e*pP pP 20 48 39.9 +3.8
KSH *e*ScP **ScP 20 53 21.8 +1.8**
KSH S **S 20 56 43.1 +2.1**
KSH SS **SS 21 00 41.9 +6.7**
KSH PMZ
comp=Z,170nm,4.8s
KSH LN
comp=Z,830nm,18.9s
KSH LE
comp=Z,230nm,8.1s
KSH LZ
comp=Z,1μm,19.5s
**TXAR Lajitas Array 59.77 276** P **P 20 48 33.1 -1.4**
comp=Z,1.5nm,0.8s,baz=58,slow=6.8,SNR=7.4
TXAR LR LR 21 13 18.4
comp=Z,444nm,21.2s,baz=0.0,slow=35
**WMQ Urumqi 60.11 51** *e*P **P 20 48 39.0 +2.4**
WMQ sP **sP 20 48 46.0 +4.1**
WMQ PP PP 20 50 54.0 +5.3
WMQ S **S 20 56 50.0 +0.8**
WMQ SS **SS 21 00 49.0 +3.7**
WMQ PMZ
comp=Z,12nm,1.0s
WMQ PMZ
comp=Z,23nm,6.0s
WMQ LN
comp=Z,300nm,18.0s
WMQ LE
comp=Z,440nm,20.0s
WMQ LZ
comp=Z,390nm,18.0s
**TUC Tucson 60.38 283** *e*P **P 20 48 39.1 +0.5**
TUC pmax pmax
comp=Z,11nm,1.2s
**TUC Tucson 60.38 283** *e*P **P 20 48 39.1 +0.5**
comp=Z,11nm,1.2s
**TUC Tucson 60.38 283** *e*P **P 20 48 39.1 +0.5**
comp=Z,11nm,1.2s
**PFO Pinyon Flat Ob 61.71 289** LR LR 21 15 18.6
comp=Z,1μm,18.2s,baz=48,slow=36
**SONM Songino Array 62.24 36** P **P 20 48 50.7 -0.4**
comp=Z,1.8nm,1.0s,baz=324,slow=6.4,SNR=8.7
SONM LR LR 21 18 58.5
comp=Z,255nm,18.8s,baz=332,slow=39
**ULN Ulaanbaatar 62.38 35** *ce*P **P 20 48 52.9 +0.8**
ULN pmax pmax
comp=Z,10.0nm,1.7s
**ULN Ulaanbaatar 62.38 35** *e*P **P 20 48 52.8 +0.7**
comp=Z,39nm,2.1s
**ULN Ulaanbaatar 62.38 35** *e*P **P 20 48 52.8 +0.7**
comp=Z,39nm,2.1s
**UOSS Wadi Hilu 63.47 87** *e*P **P 20 48 59.1 -0.3**
comp=Z,12nm,1.3s
**UOSS Wadi Hilu 63.47 87** *e*P **P 20 48 59.1 -0.3**
comp=Z,12nm,1.3s
**PETK Petropavlovsk- 63.74 359** LR LR 21 19 06.8
comp=Z,118nm,18.1s,baz=8.1,slow=38
**LPIG La Paz 67.25 278** LR LR 21 18 26.4
comp=Z,2μm,18.9s,baz=99,slow=36
**GTA Gaotai 68.08 44** *e*P **P 20 49 30.3 +1.2**
GTA pP **pP 20 49 35.3 +2.3**
GTA sP **sP 20 49 37.5 +3.0**
GTA S **S 20 58 30.5 +2.3**
GTA sS **sS 20 58 38.8 +4.1**
GTA PMZ
comp=Z,4.0nm,1.0s
GTA PMZ
comp=Z,58nm,6.2s
GTA LN
comp=Z,230nm,16.2s
GTA LE
comp=Z,390nm,15.2s
GTA LZ
comp=Z,400nm,15.7s
**ROSC El Rosal 68.99 236** LR LR 21 15 43.2
comp=Z,95nm,21.9s,baz=2.0,slow=32
**HHC Hu-ho-hao-te 70.08 35** *e*P **P 20 49 43.3 +1.8**
HHC S S 20 58 45.4 -6.5
HHC ScS **SKSac 20 59 38.9 -3.4**
HHC SS **SS 21 03 15.8 -4.5**
HHC PMZ
comp=Z,27nm,1.3s
HHC PMZ
comp=Z,120nm,7.2s
HHC LN
comp=Z,300nm,16.9s
HHC LE
comp=Z,230nm,16.8s
HHC LZ
comp=Z,200nm,16.6s
**MDJ Mudanjiang 70.17 20** P **P 20 49 42.9 +1.1**
MDJ PP **PP 20 52 17.5 +1.1**
MDJ S **S 20 58 53.3 +0.8**
MDJ PMZ
comp=Z,4.0nm,1.0s
MDJ PMZ
comp=Z,49nm,4.1s
MDJ LN
comp=Z,72nm,20.1s
MDJ LE
comp=Z,34nm,15.5s
MDJ LZ
comp=Z,82nm,22.4s
**CN2 Changchun 70.27 23** *e*P **P 20 49 43.0 +0.5**
**USRK Ussuriysk Ar. 70.92 18** P **P 20 49 46.2 -0.2**
comp=Z,0.9nm,0.6s,baz=274,slow=2.9,SNR=4.1
**BJI Beijing 71.98 31** P **P 20 49 54.5 +1.7**
BJI S **S 20 59 14.6 +1.0**
BJI PMZ
comp=Z,7.0nm,1.4s
BJI LN
comp=Z,300nm,16.1s
BJI LE
comp=Z,150nm,14.0s
BJI LZ
comp=Z,230nm,22.5s
**LZH Lanzhou 72.38 42** *e*P **P 20 49 56.0 +0.5**
LZH pP **pP 20 49 58.0 -1.4**
LZH *e*S **S 20 59 17.1 -1.6**
LZH sS **sS 20 59 23.0 -2.1**
LZH *e*SS **SS 21 03 56.3 +0.5**
LZH PMZ
comp=Z,35nm,1.2s
LZH PMZ
comp=Z,130nm,6.4s
LZH LN
comp=Z,550nm,14.4s
LZH LE
comp=Z,350nm,16.2s
LZH LZ
comp=Z,560nm,17.6s
**KSRS Korea Array 76.88 23** LR LR 21 27 35.5
comp=Z,100nm,18.4s,baz=325,slow=38
**CD2 Chengdu 77.15 44** *e*P **P 20 50 22.5 -0.6**
CD2 pP **pP 20 50 25.6 -1.4**
CD2 PP **PP 20 53 15.4 -0.7**
CD2 S **S 21 00 11.6 -0.2**
CD2 sS **sS 21 00 16.8 -1.5**
CD2 SKS **SKSac 21 00 34.3 -1.1**
CD2 SS **SS 21 05 09.3 +1.1**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.4s
**SAML Samuel 78.24 220** P P 20 50 24.8 -4.3
comp=Z,8.8nm,1.2s
**KMBO Kilima Mbogo 78.42 117** LR LR 21 28 13.6
comp=Z,234nm,18.2s,baz=89,slow=38
**MJAR Matsushiro Arr 79.26 15** P **P 20 50 33.3 -1.4**
comp=Z,0.8nm,0.6s,baz=344,slow=5.4,SNR=4.7
**NJ2 Nanjing 80.24 32** *e*P **P 20 50 42.8 +2.8**
NJ2 PMZ
comp=Z,30nm,0.6s
**BDFB Brasilia 81.12 204** P **P 20 50 42.8 -2.0**
comp=Z,6.6nm,0.9s,baz=13,slow=4.4,SNR=7.8
BDFB LR LR 21 20 42.7
comp=Z,211nm,20.9s,baz=62,slow=31
**KMI Kunming 82.19 47** P **P 20 50 52.0 +1.3**
KMI PMZ
comp=Z,5.0nm,1.0s
KMI PMZ
comp=Z,250nm,4.5s
**GYA Guiyang 82.20 44** *e*P **P 20 50 52.0 +1.3**
GYA PMZ
comp=Z,10.0nm,1.0s
**LPAZ La Paz 86.65 222** LR LR 21 27 25.5
comp=Z,52nm,19.4s,baz=2.0,slow=34
**CHTO Chiang Mai 86.70 53** *e*P **P 20 51 12.2 -1.2**
CHTO pmax pmax
comp=Z,10.0nm,1.5s
**CHTO Chiang Mai 86.70 53** *e*P **P 20 51 12.2 -1.2**
comp=Z,9.6nm,1.5s
**CHTO Chiang Mai 86.70 53** *e*P **P 20 51 12.2 -1.2**
comp=Z,9.6nm,1.5s
**CMAR Chiang Mai Arr 87.03 53** P **P 20 51 15.1 0.0**
comp=Z,2.0nm,0.9s,baz=311,slow=5.1,SNR=11
CMAR LR LR 21 32 56.3
comp=Z,199nm,19.8s,baz=317,slow=38
**CMAR Chiang Mai Arr 87.03 53** *ce*P **P 20 51 15.6 +0.6**
CMAR pmax pmax
comp=Z,2.0nm,0.9s
**QIZ Qiongzhong 90.15 43** P **P 20 51 30.0 +0.2**
QIZ S **S 21 02 25.9 +2.9**
QIZ PMZ
comp=Z,10.0nm,2.3s
**CPUP Villa Florida 93.39 210** LR LR 21 29 07.3
comp=Z,105nm,21.4s,baz=18,slow=33
**BOSA Boshof 99.58 138** LR LR 21 38 53.3
comp=Z,218nm,18.4s,baz=338,slow=36
**PPT2 Papeete2 121.31 295** *e*LR LR 21 34 47.5
comp=Z,261nm,23.5s
**TBI Tubuai 126.41 292** *e*LR LR 21 37 06.4
comp=Z,535nm,22.2s
**WRA Warramunga Arr 133.98 29** PKP **PKPdf 20 57 44.2 -2.4**
comp=Z,0.5nm,0.8s,baz=340,slow=2.4,SNR=5.1
**ASAR Alice Springs 137.48 31** PKP **PKPdf 20 57 50.6 -2.4**
comp=Z,0.5nm,0.4s,baz=1.7,slow=2.0,SNR=4.7
**DZM Mont Dzumac 138.05 346** *e*LR LR 21 42 38.7
comp=Z,186nm,22.6s
**MAW Mawson 144.58 139** PKP **PKPab 20 58 02.4 -0.5**
comp=Z,6.6nm,0.9s,baz=0.0,slow=3.0,SNR=15

*ISCJB **23** 20:42:28.4±0.5, 32.68N±0.03×115.68W±0.03, h16km±10km, Error ellipse: s-maj=5.3km s-min=4.3km az=151.0*
*NEIC **23** 20:42:29.1, 32.66N×115.67W, h14km, ML2.5(PAS), ML2.5(ECX), After PAS.*
*NEIC Felt at El Centro.*
*ECX **23** 20:42:29.6±0.5, 32.64N×115.70W, h4km, MD2.5, ML2.7*
**ISC 23 20:42:27.8±1.0, 32.68N±0.03×115.67W±0.03, h23km±7km, n16, σ0°69/25, 2C-5D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ERPC** | **Ernies Place** | **0.06** | **3** | ⇓*i* | P | **Pb** | **20 42 31.7** | **-0.3** |
| **WESC** | **Westside Schoo** | **0.10** | **325** | ⇓*i* | P | **Pb** | **20 42 32.0** | **-0.2** |
| **COK** | **Cook Ranch** | **0.18** | **343** | ⇓*i* | P | **Pb** | **20 42 33.5** | **+0.5** |
| **YUH** | **Yuha Desert** | **0.22** | **262** | ⇑*i* | P | **Pb** | **20 42 33.5** | **0.0** |
| **RMX** | **La Rumorosa** | **0.36** | **258** | *e* | P | **Pb** | **20 42 35.5** | **-0.2** |
| RMX | | | | *e* | S | **Sb** | **20 42 39.9** | **-1.2** |
| **IBP** | **Imperial Bould** | **0.36** | **267** | ⇑*i* | P | **Pb** | **20 42 36.2** | **+0.5** |
| **CPBX** | **Cerro Prieto** | **0.40** | **130** | *e* | P | **Pb** | **20 42 36.9** | **+0.6** |
| CPBX | | | | *e* | S | **Sb** | **20 42 42.9** | **+0.8** |
| CPBX | | | | | IAML | | 20 42 44.3 | |
| | comp=N,2μm,0.1s | | | | | | | |
| CPBX | | | | ⇓*e* | | | 20 42 44.3 | |
| **CLIC** | **Calipatria** | **0.47** | **14** | *e* | P | **Pb** | **20 42 38.5** | **+1.0** |
| **RDX** | **Rancho Dawling** | **0.79** | **197** | *e* | P | **Pb** | **20 42 42.6** | **-0.4** |
| RDX | | | | *e* | S | **Sb** | **20 42 52.6** | **-0.6** |
| RDX | | | | | IAML | | 20 42 54.8 | |
| | comp=E,174nm,0.5s | | | | | | | |
| RDX | | | | ⇓*e* | | | 20 42 54.8 | |
| **GLA** | **Glamis** | **0.80** | **62** | *e*Pg | | **Pb** | **20 42 42.8** | **-0.2** |
| GLA | | | | *e*Sg | | **Sb** | **20 42 53.4** | **0.0** |
| **BAR** | **Barrett** | **0.85** | **270** | *e*Pg | | **Pn** | **20 42 44.6** | **+0.3** |
| BAR | | | | *e*Sg | | **Sn** | **20 42 55.8** | **-0.3** |
| **CBX** | **Cerro Bola** | **0.92** | **247** | *e*P | | **Pn** | **20 42 46.1** | **+0.7** |
| CBX | | | | *e*S | | **Sn** | **20 42 58.0** | **0.0** |
| **PFO** | **Pinyon Flat Ob** | **1.14** | **325** | *e*Pg | | **Pn** | **20 42 48.5** | **0.0** |
| PFO | | | | *e*Sg | | **Sb** | **20 43 02.4** | **-0.9** |
| **ZAX** | **El Zacaton** | **1.27** | **204** | *e*P | | **Pn** | **20 42 50.7** | **+0.4** |
| ZAX | | | | *e*S | | **Sb** | **20 43 07.2** | **+0.1** |
| **ECNX** | **Esteban Cantu** | **1.29** | **218** | *e*P | | **Pn** | **20 42 51.3** | **+0.8** |
| ECNX | | | | *e*S | | **Sb** | **20 43 08.1** | **+0.5** |
| **214A** | **Organ Pipe Nat** | **2.52** | **106** | *e*Pn | | **Pb** | **20 43 10.8** | **-1.7** |

**WEL 23 21:03:38.6±0.1, 44.42S×169.52E, h5km, ML3.4/12, 5C-1D, Error ellipse: s-maj=1.1km s-min=1.0km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LBZ** | **Lake Benmore** | **0.48** | **87** | PG | | Pg | 21 03 47.9 | +0.1 |
| LBZ | | | | SG | | Sg | 21 03 54.3 | +0.2 |
| LBZ | | | | AML | | AML | 21 03 54.9 | |
| LBZ | | | | AML | | AML | 21 03 55.0 | |
| **WKZ** | **Wanaka** | **0.55** | **221** | ⇑PG | | Pg | 21 03 49.7 | +0.5 |
| WKZ | | | | SG | | Sg | 21 03 57.5 | +1.0 |
| WKZ | | | | AML | | AML | 21 03 58.3 | |
| WKZ | | | | AML | | AML | 21 03 58.7 | |
| **JCZ** | **Jackson Bay** | **0.64** | **302** | P* | | Pg | 21 03 51.0 | -0.2 |
| JCZ | | | | SG | | Sg | 21 03 59.0 | -0.7 |
| JCZ | | | | AML | | AML | 21 04 00.3 | |
| **EAZ** | **Earnscleugh** | **0.83** | **190** | ⇑P* | | Pg | 21 03 54.5 | -0.1 |
| EAZ | | | | S* | | Sb | 21 04 06.4 | -0.7 |
| EAZ | | | | AML | | AML | 21 04 06.9 | |
| EAZ | | | | AML | | AML | 21 04 07.5 | |
| **FOZ** | **Fox Glacier** | **0.86** | **8** | ⇑P* | | Pg | 21 03 54.7 | -0.4 |
| FOZ | | | | AML | | AML | 21 04 10.6 | |
| FOZ | | | | AML | | AML | 21 04 15.7 | |
| **ODZ** | **Otahua Downs** | **1.02** | **129** | ⇓P* | | Pg | 21 03 57.7 | -0.5 |
| ODZ | | | | AML | | AML | 21 04 12.7 | |
| ODZ | | | | AML | | AML | 21 04 13.6 | |
| ODZ | | | | AML | | AML | 21 04 13.6 | |
| ODZ | | | | AML | | AML | 21 04 14.4 | |
| **MSZ** | **Milford Sound** | **1.17** | **257** | P* | | Pg | 21 04 00.7 | -0.3 |
| MSZ | | | | S* | | Sg | 21 04 16.0 | -0.1 |
| MSZ | | | | AML | | AML | 21 04 17.0 | |
| MSZ | | | | AML | | AML | 21 04 17.1 | |
| MSZ | | | | AML | | AML | 21 04 17.1 | |
| **RPZ** | **Rata Peaks** | **1.31** | **58** | ⇑P* | | Pn | 21 04 02.5 | -1.0 |
| RPZ | | | | AML | | AML | 21 04 22.4 | |
| RPZ | | | | AML | | AML | 21 04 23.1 | |
| **MLZ** | **Mavora Lakes** | **1.34** | **225** | PN | | Pg | 21 04 04.5 | +0.2 |
| MLZ | | | | AML | | AML | 21 04 27.9 | |
| MLZ | | | | AML | | AML | 21 04 29.7 | |
| **TUZ** | **Tuapeka** | **1.54** | **177** | ⇑PN | | Pn | 21 04 05.7 | -1.1 |
| TUZ | | | | AML | | AML | 21 04 29.4 | |
| TUZ | | | | AML | | AML | 21 04 30.2 | |
| TUZ | | | | AML | | AML | 21 04 30.5 | |
| TUZ | | | | AML | | AML | 21 04 33.2 | |
| **WVZ** | **Waitaha Valley** | **1.60** | **34** | PN | | Pn | 21 04 07.7 | +0.1 |
| WVZ | | | | AML | | AML | 21 04 56.8 | |
| **HHSZ** | **Highcliff Hill** | **1.66** | **153** | PN | | Pb | 21 04 09.3 | -0.4 |
| **WHZ** | **Wether Hill Ro** | **1.85** | **216** | PN | | Pn | 21 04 10.1 | -1.0 |
| **DCZ** | **Deep Cove** | **1.99** | **237** | PN | | Pn | 21 04 13.2 | +0.4 |
| DCZ | | | | AML | | AML | 21 04 39.7 | |
| DCZ | | | | AML | | AML | 21 04 41.9 | |
| **OXZ** | **Oxford** | **2.12** | **60** | PN | | Pn | 21 04 12.9 | -1.8 |
| **SYZ** | **Scrubby Hill** | **2.14** | **187** | PN | | Pn | 21 04 14.1 | -0.8 |
| **APZ** | **The Paps** | **2.65** | **203** | PN | | Pn | 21 04 20.9 | -1.1 |
| **PYZ** | **Puysegur Point** | **2.66** | **228** | PN | | Pn | 21 04 21.8 | -0.4 |
| **DSZ** | **Denniston Nort** | **3.15** | **33** | PN | | Pn | 21 04 28.2 | -0.7 |
| **THZ** | **Tophouse** | **3.63** | **44** | PN | | Pn | 21 04 35.9 | +0.4 |
| **QRZ** | **Quartz Range** | **4.22** | **33** | PN | | Pn | 21 04 43.0 | -0.6 |

*CSEM **23** 21:04:07.8±0.4, 36.30N×35.64E, h5km, ML1.7, Error ellipse: s-maj=10.5km s-min=6.7km az=28.0*
*DDA **23** 21:04:07.9, 36.39N×35.66E, h7km, Md2.8*
*NSSC **23** 21:04:07.9±1.0, 35.86N×35.30E, h6km±14km, MD0.8, ML1.7*
*ISCJB **23** 21:04:09.0±0.5, 36.29N±0.03×35.69E±0.04, h23km±19km, Error ellipse: s-maj=5.8km s-min=4.4km az=142.1*
**ISC 23 21:04:08.5±1.0, 36.21N±0.03×35.67E±0.03, h28km±11km, n18, σ1°23/35, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **YAYL** | **Yayladag** | **0.40** | **116** | *i* P | | **Pb** | **21 04 17.9** | **+0.6** |
| YAYL | | | | *i* S | | **Sn** | **21 04 25.2** | **+0.2** |
| **YAYL** | **Yayladag** | **0.40** | **116** | P | | **Pb** | **21 04 17.9** | **+0.6** |
| YAYL | | | | S | | **Sn** | **21 04 25.2** | **+0.2** |
| **ARNB** | **Al Arnab** | **0.43** | **145** | *e*P | | **Pn** | **21 04 18.6** | **-0.2** |
| ARNB | | | | *e*S | | **Sn** | **21 04 25.9** | **+0.2** |
| ARNB | | | | AML | | AML | 21 04 29.0 | |
| | comp=E,14nm,0.2s | | | | | | | |
| ARNB | | | | AML | | AML | 21 04 29.1 | |
| | comp=N,24nm,0.3s | | | | | | | |
| **ARNB** | **Al Arnab** | **0.43** | **145** | *e*P | | **Pn** | **21 04 18.6** | **-0.2** |
| ARNB | | | | *e*S | | **Sn** | **21 04 25.9** | **+0.2** |
| **KRTS** | **Karatas** | **0.43** | **327** | *e*PG | | **Pb** | **21 04 16.6** | **-1.1** |
| KRTS | | | | *e*SG | | **Sb** | **21 04 23.6** | **-0.4** |
| **TAHT** | **Tahtakopru-Hat** | **0.45** | **68** | *e*PG | | **Pb** | **21 04 16.1** | **-1.9** |
| **SLNF** | **Slenfeh** | **0.76** | **144** | *e*P | | **Pb** | **21 04 22.7** | **-0.5** |
| SLNF | | | | *e*S | | **Sn** | **21 04 34.1** | **0.0** |
| SLNF | | | | AML | | AML | 21 04 38.0 | |
| | comp=N,17nm,0.4s | | | | | | | |
| SLNF | | | | AML | | AML | 21 04 41.2 | |
| | comp=E,84nm,0.3s | | | | | | | |
| **SLNF** | **Slenfeh** | **0.76** | **144** | *e*P | | **Pb** | **21 04 22.7** | **-0.5** |
| SLNF | | | | *e*S | | **Sn** | **21 04 34.1** | **0.0** |
| **WRDH** | **Warideh** | **0.93** | **139** | *e*P | | **Pn** | **21 04 26.9** | **+1.3** |
| WRDH | | | | *e*S | | **Sn** | **21 04 40.2** | **+2.2** |
| WRDH | | | | AML | | AML | 21 04 44.5 | |
| | comp=N,35nm,0.3s | | | | | | | |
| **WRDH** | **Warideh** | **0.93** | **139** | *e*P | | **Pn** | **21 04 26.9** | **+1.3** |
| WRDH | | | | *e*S | | **Sn** | **21 04 40.2** | **+2.2** |
| **KIZK** | **Mersin** | **1.26** | **283** | *i* P | | **Pb** | **21 04 31.1** | **+0.9** |
| KIZK | | | | *i* S | | **Sb** | **21 04 48.5** | **+1.1** |
| **KIZK** | **Mersin** | **1.26** | **283** | P | | **Pn** | **21 04 31.1** | **+0.9** |
| KIZK | | | | S | | **Sb** | **21 04 48.5** | **+1.1** |
| **KAMA** | **Osmaniye** | **1.26** | **39** | P | | **Pn** | **21 04 30.5** | **+0.2** |
| KAMA | | | | S | | **Sn** | **21 04 45.2** | **-1.3** |
| **KUZU** | **Kuzuini** | **1.27** | **63** | *i* P | | **Pb** | **21 04 31.1** | **-0.6** |
| KUZU | | | | *i* S | | **Sb** | **21 04 48.4** | **+0.8** |
| **KUZU** | **Kuzuini** | **1.27** | **63** | P | | **Pb** | **21 04 31.1** | **-0.6** |
| KUZU | | | | S | | **Sb** | **21 04 48.4** | **+0.8** |
| **BIDA** | **Albida** | **1.31** | **156** | *e*P | | **Pn** | **21 04 29.1** | **-1.8** |
| BIDA | | | | *e*S | | **Sn** | **21 04 45.0** | **-2.5** |
| BIDA | | | | AML | | AML | 21 04 50.6 | |
| | comp=E,84nm,0.5s | | | | | | | |
| BIDA | | | | AML | | AML | 21 04 50.7 | |
| | comp=N,25nm,0.3s | | | | | | | |
| BIDA | | | | AML | | AML | 21 04 52.1 | |
| | comp=E,40nm,0.5s | | | | | | | |
| **BIDA** | **Albida** | **1.31** | **156** | *e*P | | **Pn** | **21 04 29.1** | **-1.8** |
| BIDA | | | | *e*S | | **Sn** | **21 04 45.0** | **-2.5** |
| **AYKD** | **Aykdinkavak** | **1.51** | **37** | P | | **Pn** | **21 04 34.7** | **+1.0** |
| AYKD | | | | S | | **Sn** | **21 04 52.6** | **+0.1** |

*ISCJB **23** 21:15:19.4±0.2, 43.69N±0.02×105.31W±0.03, h0km, mb4.2/4, Error ellipse: s-maj=3.8km s-min=2.7km az=151.7*
*NEIC **23** 21:15:19.4±0.3, 43.80N×105.19W, h0km, ML3.4, Error ellipse: s-maj=5.6km s-min=4.7km az=0.0, Suspected Mining explosion.*
*NEIC 60 km [35 miles] SSE of Gillette.*
*IDC **23** 21:15:20.6±1.0, 44.06N×105.78W, h0km, mb4.1/4, mb1 3.9/8, mb1mx3.5/54, mbtmp3.7/8, ML3.0/4, Error ellipse: s-maj=25.7km s-min=13.6km az=126.0*
**ISC 23 21:15:19.2±0.6, 43.77N±0.03×105.26W±0.04, h0km, n68, σ1°31/78, mb4.2/4, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RSSD** | **Black Hills** | **0.95** | **68** | P | | **Pb** | **21 15 38.5** | **-0.1** |
| **J25A** | **Sunshine Ranch** | **1.12** | **109** | P | | **Pg** | **21 15 41.2** | **+0.5** |
| | baz=1.1,SNR=439 | | | | | | | |
| **I25A** | **Rochford** | **1.13** | **77** | P | | **Pb** | **21 15 41.7** | **0.0** |
| | baz=1.1,SNR=70 | | | | | | | |
| **K22A** | **Casper** | **1.45** | **220** | P | | **Pn** | **21 15 45.2** | **-1.6** |
| | baz=1.5 | | | | | | | |
| **K22A** | **Casper** | **1.45** | **220** | *e*Pn | | **Pn** | **21 15 45.3** | **-1.6** |
| **H25A** | **Fruitdale** | **1.47** | **54** | P | | **Pb** | **21 15 47.5** | **+0.1** |
| | baz=1.4,SNR=16 | | | | | | | |
| **J26A** | **Sides Ranch, S** | **1.65** | **105** | P | | **Pb** | **21 15 50.5** | **0.0** |
| | baz=1.6,SNR=79 | | | | | | | |
| J26A | | | | S | | **Sg** | **21 16 14.4** | **+2.2** |
| | baz=1.6 | | | | | | | |
| **I26A** | **New Underwood** | **1.75** | **81** | P | | **Pb** | **21 15 52.7** | **+0.5** |
| | baz=1.7,SNR=61 | | | | | | | |
| **G25A** | **Newell** | **1.94** | **42** | P | | **Pg** | **21 15 56.1** | **-0.3** |
| | baz=1.9,SNR=10.0 | | | | | | | |
| **H26A** | **Fairpoint** | **1.98** | **64** | P | | **Pg** | **21 15 56.7** | **-0.4** |
| | baz=1.9,SNR=89 | | | | | | | |
| H26A | | | | Sb | | **Sg** | **21 16 24.5** | **+1.9** |
| | baz=1.9 | | | | | | | |
| **I27A** | **Quinn** | **2.33** | **81** | P | | **Pb** | **21 16 01.4** | **-0.7** |
| | baz=2.3 | | | | | | | |
| **J27A** | **Elkhorn Farm,** | **2.42** | **101** | P | | **Pb** | **21 16 02.7** | **-0.9** |
| | baz=2.4,SNR=81 | | | | | | | |
| **G26A** | **Maurine** | **2.44** | **50** | P | | **Pb** | **21 16 02.6** | **-1.3** |
| | baz=2.4,SNR=36 | | | | | | | |
| **PHWY** | **Pilot Hill** | **2.47** | **184** | *e*Pn | | **Pn** | **21 16 01.4** | **+0.4** |
| **F25A** | **Bowman** | **2.51** | **30** | P | | **Pb** | **21 16 03.9** | **-1.3** |
| | baz=2.5,SNR=12 | | | | | | | |
| F25A | | | | Sb | | **Sg** | **21 16 40.6** | **+0.9** |
| | baz=2.5 | | | | | | | |
| **F26A** | **Lodgepole** | **2.78** | **41** | P | | **Pn** | **21 16 07.1** | **+2.1** |
| | baz=2.7 | | | | | | | |
| F26A | | | | Sb | | **Sg** | **21 16 47.1** | **-1.4** |
| | baz=2.7 | | | | | | | |
| **G27A** | **Dupree** | **2.87** | **55** | P | | **Pn** | **21 16 08.1** | **+1.8** |
| | baz=2.8,SNR=7.1 | | | | | | | |
| **N23A** | **Red Feather La** | **2.92** | **190** | P | | **Pn** | **21 16 07.9** | **+0.8** |
| | baz=3.0 | | | | | | | |
| **K28A** | **Ten Mile Ranch** | **3.03** | **109** | P | | **Pn** | **21 16 10.8** | **+2.3** |
| | baz=3.0 | | | | | | | |
| **RLMT** | **Red Lodge** | **3.18** | **297** | P | | **Pn** | **21 16 11.1** | **+0.5** |
| | baz=3.2 | | | | | | | |
| **RLMT** | **Red Lodge** | **3.18** | **297** | *e*Pn | | **Pn** | **21 16 11.2** | **+0.6** |
| **E26A** | **Carlson Angus** | **3.35** | **35** | P | | **Pn** | **21 16 14.9** | **+2.0** |
| | baz=3.3 | | | | | | | |
| **G28A** | **Parade** | **3.37** | **66** | P | | **Pn** | **21 16 15.3** | **+2.1** |
| | baz=3.3 | | | | | | | |
| **D25A** | **Fairfield** | **3.65** | **21** | P | | **Pn** | **21 16 19.6** | **+2.6** |
| | baz=3.6 | | | | | | | |
| **OGNE** | **Ogallala** | **3.70** | **139** | P | | **Pn** | **21 16 18.6** | **+0.9** |
| | baz=3.7 | | | | | | | |
| **OGNE** | **Ogallala** | **3.70** | **139** | *e*Pn | | **Pn** | **21 16 18.5** | **+0.9** |
| **M28A** | **Bar X Bar Ranc** | **3.72** | **128** | P | | **Pn** | **21 16 19.4** | **+1.4** |
| | baz=3.7 | | | | | | | |
| **D26A** | **Manning** | **3.82** | **30** | P | | **Pn** | **21 16 21.1** | **+1.8** |
| | baz=3.8 | | | | | | | |
| **LOHW** | **Long Hollow** | **3.88** | **270** | *e*Pn | | **Pn** | **21 16 21.4** | **+1.1** |
| **H17A** | **Grant Village** | **3.88** | **281** | *e*Pn | | **Pn** | **21 16 21.9** | **+1.5** |
| **FLWY** | **Flagg Ranch** | **3.94** | **276** | *e*Pn | | **Pn** | **21 16 21.6** | **+0.5** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ISCO** | **Idaho Springs** | **3.97** | **184** | P | | **Pn** | **21** | **16** | **22.3** | **+0.6** |
| | baz=4.0 | | | | | | | | | |
| **ISCO** | **Idaho Springs** | **3.97** | **184** | *e*Pn | | **Pn** | **21** | **16** | **22.6** | **+0.9** |
| **MOOW** | **Moose Ponds** | **3.98** | **272** | *e*Pn | | **Pn** | **21** | **16** | **22.4** | **+0.8** |
| **G29A** | **Hoven** | **4.07** | **68** | P | | **Pn** | **21** | **16** | **24.4** | **+1.6** |
| | baz=4.0,SNR=14 | | | | | | | | | |
| **YFT** | **Old Faithful** | **4.08** | **282** | *e*Pn | | **Pn** | **21** | **16** | **24.4** | **+1.4** |
| YFT | | | | *e*Pb | | **Pb** | **21** | **16** | **33.9** | **+1.9** |
| **IMW** | **Indian Meadow** | **4.11** | **274** | *e*Pn | | **Pn** | **21** | **16** | **25.4** | **+1.9** |
| **N28A** | **Pribbeno Ranch** | **4.13** | **137** | P | | **Pn** | **21** | **16** | **24.3** | **+0.7** |
| | baz=4.1 | | | | | | | | | |
| **TPAW** | **Teton Pass** | **4.14** | **268** | *e*Pn | | **Pn** | **21** | **16** | **25.0** | **+1.0** |
| **C25A** | **Freed Ranch, W** | **4.19** | **19** | P | | **Pn** | **21** | **16** | **26.8** | **+2.4** |
| | baz=4.1 | | | | | | | | | |
| **O20A** | **White River Ci** | **4.26** | **213** | P | | **Pn** | **21** | **16** | **26.3** | **+0.8** |
| | baz=4.3 | | | | | | | | | |
| **O20A** | **White River Ci** | **4.26** | **213** | *e*Pn | | **Pn** | **21** | **16** | **26.1** | **+0.6** |
| O20A | | | | *e*Pb | | **Pb** | **21** | **16** | **36.4** | **+1.3** |
| **L30A** | **Spencer Herefo** | **4.46** | **112** | P | | **Pn** | **21** | **16** | **29.5** | **+1.5** |
| | baz=4.4,SNR=8.4 | | | | | | | | | |
| **O28A** | **Krutsinger Ran** | **4.47** | **143** | P | | **Pn** | **21** | **16** | **28.7** | **+0.5** |
| | baz=4.5 | | | | | | | | | |
| **C26A** | **Wahner Farm, P** | **4.62** | **27** | P | | **Pn** | **21** | **16** | **32.6** | **+2.3** |
| | baz=4.6 | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.92** | **295** | P | | **Pn** | **21** | **16** | **33.8** | **-0.7** |
| | baz=4.9 | | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **4.92** | **295** | *e*Pn | | **Pn** | **21** | **16** | **34.1** | **-0.4** |
| **O29A** | **4D Ranch, Culb** | **4.93** | **136** | P | | **Pn** | **21** | **16** | **35.1** | **+0.6** |
| | baz=4.9 | | | | | | | | | |
| **P28A** | **Saint Francis** | **4.94** | **147** | P | | **Pn** | **21** | **16** | **35.2** | **+0.4** |
| | baz=4.9 | | | | | | | | | |
| **P29A** | **Atwood** | **5.27** | **141** | P | | **Pn** | **21** | **16** | **39.6** | **+0.3** |
| | baz=5.3 | | | | | | | | | |
| **O30A** | **MW Ranch, Wils** | **5.28** | **131** | P | | **Pn** | **21** | **16** | **40.9** | **+1.5** |
| | baz=5.3 | | | | | | | | | |
| **Q28A** | **Sharon Springs** | **5.36** | **150** | P | | **Pn** | **21** | **16** | **40.6** | **0.0** |
| | baz=5.4 | | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **5.55** | **284** | *e*Pn | | **Pn** | **21** | **16** | **44.6** | **+1.3** |
| | 2.0nm,0.4s | | | | | | | | | |
| MCMT | | | | *e*Pb | | **Pb** | **21** | **16** | **59.0** | **+1.9** |
| **SDCO** | **Great Sand Dun** | **6.02** | **182** | *e*Pn | | **Pn** | **21** | **16** | **50.6** | **+0.8** |
| | 3.9nm,0.6s | | | | | | | | | |
| SDCO | | | | *e*Pg | | **Pg** | **21** | **17** | **14.2** | **-0.3** |
| **SRU** | **San Rafael** | **6.11** | **222** | *e*Pn | | **Pn** | **21** | **16** | **50.6** | **-0.3** |
| | 16nm,0.4s | | | | | | | | | |
| SRU | | | | *e*Pb | | **Pb** | **21** | **17** | **05.3** | **-1.3** |
| **ECSD** | **EROS Data Cent** | **6.26** | **87** | *e*Pn | | **Pn** | **21** | **16** | **52.0** | **-0.8** |
| | 7.1nm,0.4s | | | | | | | | | |
| ECSD | | | | *e*Pb | | **Pb** | **21** | **17** | **07.0** | **-2.0** |
| ECSD | | | | *e*Pg | | Pg | 21 | 17 | 15.4 | -3.6 |
| **TMUT** | **Trail Mountain** | **6.32** | **227** | *e*Pn | | **Pn** | **21** | **16** | **54.7** | **+0.9** |
| | 41nm,0.6s | | | | | | | | | |
| TMUT | | | | *e*Pb | | **Pb** | **21** | **17** | **11.8** | **+1.7** |
| **MVCO** | **Mesa Verde** | **7.00** | **202** | *e*Pn | | **Pn** | **21** | **17** | **04.3** | **+1.2** |
| | 3.8nm,0.6s | | | | | | | | | |
| **I10CA** | **LAC DU BONNET** | **9.01** | **41** | *i* | | | 22 | 08 | 00.0 | |
| | baz=223,slow=319,SNR=2.8 | | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **9.11** | **41** | Pn | | **Pn** | **21** | **17** | **31.4** | **-0.4** |
| | 0.8nm,0.3s,baz=226,slow=13,SNR=3.7 | | | | | | | | | |
| ULM | | | | Lg | | Lg | 21 | 20 | 06.3 | |
| | 0.4nm,0.3s,baz=142,slow=19,SNR=3.5 | | | | | | | | | |
| **V34A** | **Guthrie** | **9.91** | **141** | *e*Pn | | **Pn** | **21** | **17** | **41.3** | **-1.5** |
| | 9.4nm,0.4s | | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **11.19** | **246** | Pn | | **Pn** | **21** | **18** | **01.7** | **+1.1** |
| | 0.1nm,0.3s,baz=53,slow=11,SNR=4.2 | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **14.46** | **174** | Pn | | **P** | **21** | **18** | **52.8** | **+0.6** |
| | 0.1nm,0.3s,baz=357,slow=11,SNR=3.8 | | | | | | | | | |
| TXAR | | | | Lg | | Lg | 21 | 22 | 59.0 | |
| | 0.1nm,0.3s,baz=358,slow=29,SNR=4.3 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.54** | **347** | P | | **P** | **21** | **19** | **45.3** | **-2.7** |
| | 0.1nm,0.3s,baz=163,slow=12,SNR=3.0 | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **61.39** | **18** | P | | **P** | **21** | **25** | **35.4** | **-1.0** |
| | 5.2nm,1.1s,baz=332,slow=8.5,SNR=4.9 | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.28** | **354** | P | | **P** | **21** | **27** | **41.5** | **-0.7** |
| | 1.1nm,0.7s,baz=354,slow=6.2,SNR=5.1 | | | | | | | | | |
| **SONM** | **Songino Array** | **84.61** | **339** | P | | **P** | **21** | **27** | **54.9** | **+0.5** |
| | 0.4nm,0.6s,baz=17,slow=6.0,SNR=3.8 | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **89.58** | **355** | P | | **P** | **21** | **28** | **18.1** | **-0.4** |
| | 1.0nm,0.7s,baz=28,slow=6.5,SNR=4.1 | | | | | | | | | |

**IDC 23 21:47:18.0±3.3, 33°06S×178°64W, h0km, mb3.5/2, mb1 3.8/3, mb1mx3.6/28, mbtmp3.6/3, ML3.6/1, Error ellipse: s-maj=75.5km s-min=47.6km az=117.0, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **URZ** | **Urewera** | **6.24** | **212** | Pn | Pn | 21 | 48 | 50.9 | -0.3 |
| | 1.3nm,0.3s,baz=270,slow=4.4,SNR=9.9 | | | | | | | | |
| URZ | | | | Sn | Sn | 21 | 49 | 59.3 | -3.9 |
| | 3.3nm,0.3s,baz=343,slow=20,SNR=11 | | | | | | | | |
| **ASAR** | **Alice Springs** | **42.49** | **270** | P | P | 21 | 55 | 15.2 | -0.1 |
| | 0.5nm,0.6s,baz=112,slow=7.8,SNR=11 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.72** | **275** | P | P | 21 | 55 | 25.1 | -0.1 |
| | 0.3nm,0.5s,baz=116,slow=7.8,SNR=5.2 | | | | | | | | |
| **FINES** | **FINESS Array B** | **147.43** | **338** | PKPbc | PKPbc | 22 | 07 | 02.2 | -0.8 |
| | 2.2nm,1.0s,baz=69,slow=4.6,SNR=3.4 | | | | | | | | |

*IDC **23** 21:49:18.4±0.7, 51°.42N×175°.17W, h0km, mb4.2/27, mb1 4.3/29, mb1mx4.2/52, mbtmp4.2/29, ML4.2/2, MS3.6/7, Ms1 3.6/7, ms1mx3.3/38, Error ellipse: s-maj=22.5km s-min=12.0km az=163.0*

*MOS **23** 21:49:20.8±1.1, 51°.39N×175°.10W, h29km, mb4.6/21, Error ellipse: s-maj=11.6km s-min=7.9km az=84.2*

*ISCJB **23** 21:49:22.4±0.3, 51°.23N±0°.05×175°.11W±0°.04, h40km, mb4.4/42, MS3.5/5, Error ellipse: s-maj=7.3km s-min=3.0km az=167.1*

*BJI **23** 21:49:22.2, 51°.92N×175°.35W, h25km, mb5.0/31, mB5.1/19, Ms4.8/12, Ms7 4.4/11*

*NEIC **23** 21:49:25.0±0.6, 51°.37N×175°.21W, h48km±3km, mb4.5/26, ML4.1(AEIC), Error ellipse: s-maj=9.9km s-min=2.9km az=167.0*

**ISC 23 21:49:24.1±0.5, 51°.32N±0°.07×175°.20W±0°.03, h40km, n185, σ1s25/190, mb4.4/42, MS3.4/5, 13C-10D, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | | | Res |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s | ISC |
| **GSMY** | **Great Sitkin M** | **0.90** | **324** | P | **Pn** | **21** | **49** | **40.5** | **+0.2** |
| **GSCK** | **Great Sitkin C** | **0.92** | **319** | P | **Pn** | **21** | **49** | **40.7** | **+0.2** |
| **ETKA** | **Kagalaska Isla** | **0.93** | **306** | P | **Pn** | **21** | **49** | **40.8** | **+0.1** |
| **GSTD** | **Great Sitkin T** | **0.94** | **322** | P | **Pn** | **21** | **49** | **41.3** | **+0.3** |
| **ATKA** | **Atka Island** | **1.08** | **35** | P | **Pn** | **21** | **49** | **41.8** | **-1.0** |
| ATKA | | | | S | **Sn** | **21** | **49** | **57.4** | **+0.9** |
| **ADAG** | **Mount Adagdak** | **1.10** | **307** | P | **Pn** | **21** | **49** | **44.1** | **+1.1** |
| **KOFP** | **Korovin Flat P** | **1.17** | **35** | P | **Pn** | **21** | **49** | **44.4** | **+0.3** |
| **KOKL** | **Mount Kliuchef** | **1.18** | **31** | P | **Pn** | **21** | **49** | **44.5** | **+0.3** |
| **KOKV** | **Korovin Volcan** | **1.22** | **31** | P | **Pn** | **21** | **49** | **45.9** | **+1.2** |
| **KOSE** | **Korovin Southe** | **1.25** | **34** | P | **Pn** | **21** | **49** | **45.8** | **+0.7** |
| **KIRH** | **Kanaga Island** | **1.32** | **297** | P | **Pn** | **21** | **49** | **46.5** | **+0.4** |
| **KIKV** | **Kanaga Island** | **1.35** | **295** | P | **Pn** | **21** | **49** | **46.8** | **+0.3** |
| **KICM** | **Kanaga Island** | **1.38** | **296** | P | **Pn** | **21** | **49** | **47.4** | **+0.5** |
| **TAPA** | **Tanaga Point A** | **1.71** | **288** | P | **Pn** | **21** | **49** | **51.9** | **+0.5** |
| **TAFL** | **Tanaga Flats** | **1.74** | **286** | P | **Pn** | **21** | **49** | **52.3** | **+0.4** |
| **TAFP** | **Tanaga Falls P** | **1.83** | **289** | P | **Pn** | **21** | **49** | **53.8** | **+0.7** |
| TAFP | | | | S | **Sn** | **21** | **50** | **16.9** | **+1.8** |
| **GAEA** | **Gareloi East** | **2.27** | **283** | P | **Pn** | **21** | **50** | **00.1** | **+1.0** |
| **GALAA** | **Gareloi Lava P** | **2.28** | **283** | P | **Pn** | **21** | **50** | **00.2** | **+1.0** |
| **GANE** | **Gareloi Northe** | **2.29** | **284** | P | **Pn** | **21** | **50** | **00.4** | **+1.0** |
| **CERAA** | **Semis' Rag'd T** | **3.25** | **282** | P | **Pn** | **21** | **50** | **12.8** | **+0.3** |
| **CESW** | **Semis' Southwe** | **3.32** | **282** | P | **Pn** | **21** | **50** | **13.7** | **+0.2** |
| **AMKA** | **Amchitka** | **3.45** | **273** | P | **Pn** | **21** | **50** | **14.9** | **-0.4** |
| AMKA | | | | S | **Sn** | **21** | **50** | **56.7** | **+1.8** |
| **LSNW** | **Little Sitkin** | **3.97** | **282** | P | **Pn** | **21** | **50** | **22.5** | **+0.1** |
| **NIKH** | **Nikolski High** | **4.24** | **65** | P | **Pn** | **21** | **50** | **25.8** | **-0.4** |
| **OKSO** | **Okmok South** | **4.77** | **62** | P | **Pn** | **21** | **50** | **34.5** | **+1.1** |
| **OKTU** | **Okmok Mt. Tuli** | **4.85** | **62** | P | **Pn** | **21** | **50** | **35.6** | **+1.1** |
| **MSOM** | **Makushin Julie** | **5.62** | **60** | P | **Pn** | **21** | **50** | **44.9** | **-0.1** |
| **MSOM** | **Makushin Julie** | **5.62** | **60** | P | **Pn** | **21** | **50** | **44.9** | **-0.1** |
| **ZRO** | **Akutan Zero** | **6.25** | **60** | P | **Pn** | **21** | **50** | **55.8** | **+2.1** |
| **AKUT** | **Akutan** | **6.38** | **60** | *e*Pn | Pn | 21 | 50 | 58.0 | +2.6 |
| **KDAK** | **Kodiak Island** | **14.58** | **55** | Pn | Pn | 21 | 52 | 43.7 | -3.8 |
| | 0.9nm,0.3s,baz=226,slow=3.5,SNR=9.1 | | | | | | | | |
| KDAK | | | | Sn | S | 21 | 55 | 38.8 | -6.8 |
| | 0.2nm,0.3s,baz=162,slow=20,SNR=4.1 | | | | | | | | |
| KDAK | | | | LR | LR | 21 | 58 | 40.5 | |
| | comp=Z,504nm,20.5s,baz=248,slow=39 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **16.67** | **287** | Pn | **Pn** | **21** | **53** | **13.7** | **-0.9** |
| | 1.6nm,0.3s,baz=90,slow=9.8,SNR=26 | | | | | | | | |
| PETK | | | | LR | LR | 21 | 59 | 04.0 | |
| | comp=Z,249nm,21.8s,baz=95,slow=35 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PETK** | **Petropavlovsk-** | **16.67** | **287** | P | **Pn** | **21** | **53** | **13.7** | **-0.9** |
| PETK | | | | pmax | pmax | | | | |
| | comp=Z,0.0nm,0.3s | | | | | | | | |
| PETK | | | | MLR | MLR | | | | |
| | comp=Z,249nm,21.8s | | | | | | | | |
| **PPLA** | **Purkeypile** | **16.92** | **38** | *e*P | **P** | **21** | **53** | **22.5** | **+3.1** |
| | comp=Z,56nm,1.4s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **17.09** | **45** | *e*Pn | **P** | **21** | **53** | **20.4** | **-0.7** |
| **CAST** | **Castle Rocks** | **17.25** | **37** | *e*P | **P** | **21** | **53** | **24.3** | **+1.4** |
| | comp=Z,38nm,1.6s | | | | | | | | |
| **KTH** | **Kantishna Hill** | **17.76** | **37** | *e*P | **P** | **21** | **53** | **28.4** | **-0.2** |
| | comp=Z,27nm,1.0s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **17.95** | **38** | *e*P | **P** | **21** | **53** | **31.8** | **+1.1** |
| | comp=Z,25nm,1.2s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **18.04** | **36** | *e*P | **P** | **21** | **53** | **31.7** | **+0.2** |
| | comp=Z,19nm,1.2s | | | | | | | | |
| **MCK** | **McKinley** | **18.61** | **38** | *e*P | **Pn** | **21** | **53** | **37.7** | **-0.7** |
| MCK | | | | pmax | pmax | | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **MCK** | **McKinley** | **18.61** | **38** | *e*P | **Pn** | **21** | **53** | **37.6** | **-0.7** |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **BWN** | **Browne** | **18.64** | **37** | *e*Pn | **Pn** | **21** | **53** | **39.4** | **+0.7** |
| | comp=Z,143nm,1.7s | | | | | | | | |
| **BILL** | **Bilibino** | **19.05** | **339** | *i*P | **Pn** | **21** | **53** | **43.6** | **0.0** |
| BILL | | | | *e*S | **S** | **21** | **57** | **19.5** | **+3.2** |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,31nm,1.1s | | | | | | | | |
| BILL | | | | MLR | MLR | | | | |
| | comp=Z,199nm,21.0s | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **19.50** | **36** | *e*P | **Pn** | **21** | **53** | **47.8** | **-1.2** |
| | comp=Z,20nm,1.4s | | | | | | | | |
| **COLA** | **College** | **19.60** | **36** | *i*P | **Pn** | **21** | **53** | **50.5** | **+0.4** |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,33nm,2.8s | | | | | | | | |
| **COLA** | **College** | **19.60** | **36** | *e*P | **P** | **21** | **53** | **45.9** | **-2.7** |
| | comp=Z,150nm,2.9s | | | | | | | | |
| **PAX** | **Paxson** | **19.68** | **42** | *e*P | **P** | **21** | **53** | **49.4** | **-0.2** |
| PAX | | | | pmax | pmax | | | | |
| | comp=Z,21nm,1.6s | | | | | | | | |
| **PAX** | **Paxson** | **19.68** | **42** | *e*P | **P** | **21** | **53** | **49.4** | **-0.2** |
| | comp=Z,21nm,1.6s | | | | | | | | |
| **ILAR** | **Eielson Array** | **19.91** | **37** | P | **P** | **21** | **53** | **49.3** | **-2.6** |
| | comp=Z,0.7nm,0.3s,baz=225,slow=9.0,SNR=48 | | | | | | | | |
| **ILAR** | **Eielson Array** | **19.91** | **37** | P | **P** | **21** | **53** | **49.3** | **-2.6** |
| ILAR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **COLD** | **Coldfoot** | **20.18** | **28** | *e*P | Pn | 21 | 53 | 55.5 | -1.5 |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **DOT** | **Dot Lake** | **20.53** | **41** | *e*P | **P** | **21** | **53** | **57.5** | **-1.2** |
| | comp=Z,24nm,0.6s | | | | | | | | |
| **SEY** | **Seymchan** | **20.82** | **316** | P | **P** | **21** | **54** | **01.5** | **-0.3** |
| | comp=Z,3.0nm,0.7s,baz=110,slow=13,SNR=3.2 | | | | | | | | |
| **SEY** | **Seymchan** | **20.82** | **316** | *e*P | **P** | **21** | **54** | **01.3** | **-0.5** |
| **EGAK** | **Eagle** | **22.13** | **40** | *e*P | **P** | **21** | **54** | **14.5** | **-1.3** |
| | comp=Z,20nm,0.8s | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **25.45** | **62** | *e*P | **P** | **21** | **54** | **49.2** | **+1.4** |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **INK** | **Inuvik** | **26.23** | **34** | P | **P** | **21** | **54** | **54.3** | **-0.5** |
| | comp=Z,1.5nm,0.5s,baz=252,slow=7.9,SNR=16 | | | | | | | | |
| **INK** | **Inuvik** | **26.23** | **34** | P | **P** | **21** | **54** | **54.3** | **-0.5** |
| INK | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | |
| **DLBC** | **Dease Lake** | **26.50** | **57** | P | **P** | **21** | **54** | **58.6** | **+1.1** |
| | comp=Z,5.1nm,0.7s,baz=230,slow=11,SNR=6.4 | | | | | | | | |
| **BBB** | **Bella Bella** | **28.76** | **70** | LR | LR | 22 | 05 | 45.8 | |
| | comp=Z,92nm,19.3s,baz=288,slow=34 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **28.97** | **272** | P | **P** | **21** | **55** | **20.6** | **+1.1** |
| | comp=Z,8.9nm,0.8s,baz=39,slow=5.1,SNR=5.8 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **28.97** | **272** | P | **P** | **21** | **55** | **20.7** | **+1.1** |
| ASAJ | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **KLR** | **Kul'dur** | **33.36** | **288** | *e*P | P | 21 | 55 | 54.7 | -3.5 |
| KLR | | | | pmax | pmax | | | | |
| | comp=Z,45nm,1.6s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.62** | **47** | P | **P** | **21** | **55** | **58.3** | **-2.0** |
| | comp=Z,0.8nm,0.8s,baz=273,slow=8.8,SNR=3.1 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.62** | **47** | P | **P** | **21** | **55** | **58.3** | **-2.0** |
| YKA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.54** | **211** | T | T | 22 | 32 | 56.7 | |
| | baz=18,slow=76,SNR=127 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.54** | **211** | T | T | 22 | 33 | 01.1 | |
| | baz=18,slow=76,SNR=116 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.55** | **211** | T | T | 22 | 33 | 07.1 | |
| | baz=18,slow=76,SNR=142 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **35.54** | **280** | P | **P** | **21** | **56** | **17.2** | **+0.1** |
| | comp=Z,3.1nm,0.6s,baz=56,slow=9.9,SNR=16 | | | | | | | | |
| USRK | | | | LR | LR | 22 | 11 | 38.2 | |
| | comp=Z,74nm,20.7s,baz=15,slow=38 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **35.74** | **210** | T | T | 22 | 34 | 33.6 | |
| | baz=18,slow=76,SNR=150 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **35.76** | **210** | T | T | 22 | 34 | 35.8 | |
| | baz=18,slow=76,SNR=80 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **35.76** | **210** | T | T | 22 | 34 | 30.2 | |
| | baz=18,slow=76,SNR=50 | | | | | | | | |
| **MAJO** | **Matsushiro** | **36.02** | **264** | *i*P | **P** | **21** | **56** | **21.9** | **+0.6** |
| MAJO | | | | pmax | pmax | | | | |
| | comp=Z,70nm,0.8s | | | | | | | | |
| **MAJO** | **Matsushiro** | **36.02** | **264** | *e*P | **P** | **21** | **56** | **21.2** | **-0.1** |
| | comp=Z,10nm,0.8s | | | | | | | | |
| **MAT** | **Matsushiro** | **36.02** | **264** | P | **P** | **21** | **56** | **22.2** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **36.02** | **264** | P | **P** | **21** | **56** | **22.1** | **+0.8** |
| | comp=Z,3.3nm,0.6s,baz=48,slow=7.4,SNR=17 | | | | | | | | |
| MJAR | | | | LR | LR | 22 | 09 | 31.7 | |
| | comp=Z,113nm,21.9s,baz=80,slow=34 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **36.02** | **264** | P | **P** | **21** | **56** | **22.1** | **+0.8** |
| MJAR | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| MJAR | | | | MLR | MLR | | | | |
| | comp=Z,113nm,21.9s | | | | | | | | |
| **NEW** | **Newport** | **36.77** | **71** | P | **P** | **21** | **56** | **26.9** | **-0.7** |
| | comp=Z,1.3nm,0.5s,baz=288,slow=8.0,SNR=3.5 | | | | | | | | |
| **NEW** | **Newport** | **36.77** | **71** | P | **P** | **21** | **56** | **26.9** | **-0.7** |
| NEW | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **EDM** | **Edmonton** | **36.85** | **62** | *e*P | **P** | **21** | **56** | **27.6** | **-0.6** |
| **EDM** | **Edmonton** | **36.85** | **62** | *e*P | **P** | **21** | **56** | **27.6** | **-0.6** |
| **BSMT** | **Basson Peak** | **38.35** | **71** | *e*P | **P** | **21** | **56** | **41.5** | **+0.4** |
| | comp=Z,4.3nm,0.9s | | | | | | | | |
| **CN2** | **Changchun** | **39.77** | **283** | *e*P | P | 21 | 56 | 56.0 | +3.2 |
| **NVAR** | **Mina Array Bea** | **41.31** | **85** | P | **P** | **21** | **57** | **06.8** | **+1.0** |
| | comp=Z,0.6nm,0.8s,baz=294,slow=7.4,SNR=2.7 | | | | | | | | |
| **KSRS** | **Korea Array** | **41.90** | **274** | P | **P** | **21** | **57** | **10.8** | **+0.4** |
| | comp=Z,5.2nm,0.9s,baz=53,slow=7.5,SNR=15 | | | | | | | | |
| KSRS | | | | LR | LR | 22 | 14 | 15.7 | |
| | comp=Z,47nm,19.7s,baz=42,slow=36 | | | | | | | | |
| **KSRS** | **Korea Array** | **41.90** | **274** | P | **P** | **21** | **57** | **10.8** | **+0.4** |
| KSRS | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| KSRS | | | | MLR | MLR | | | | |
| | comp=Z,47nm,19.7s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **41.93** | **274** | P | **P** | **21** | **57** | **10.8** | **+0.2** |
| **KSAR** | **Wonju Array Be** | **41.93** | **274** | P | **P** | **21** | **57** | **10.8** | **+0.2** |
| **DUG** | **Dugway** | **43.67** | **79** | *e*P | **P** | **21** | **57** | **23.4** | **-1.5** |
| DUG | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **DUG** | **Dugway** | **43.67** | **79** | *e*P | **P** | **21** | **57** | **23.4** | **-1.5** |
| | comp=Z,5.9nm,0.9s | | | | | | | | |
| **O20A** | **White River Ci** | **46.51** | **77** | *e*P | P | 21 | 57 | 52.3 | +4.8 |
| | comp=Z,60nm,2.1s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.30** | **298** | *e*P | **P** | **21** | **58** | **01.2** | **-0.1** |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **48.30** | **298** | *e*P | **P** | **21** | **58** | **00.7** | **-0.6** |
| | comp=Z,4.7nm,0.9s | | | | | | | | |
| **SONM** | **Songino Array** | **48.68** | **298** | P | **P** | **21** | **58** | **04.5** | **+0.4** |
| | comp=Z,3.4nm,0.8s,baz=52,slow=8.9,SNR=25 | | | | | | | | |
| SONM | | | | PcP | **PcP** | **21** | **59** | **29.0** | **+0.1** |
| | comp=Z,1.3nm,0.9s,baz=56,slow=2.8,SNR=3.4 | | | | | | | | |
| **SONM** | **Songino Array** | **48.68** | **298** | P | **P** | **21** | **58** | **04.5** | **+0.4** |
| SONM | | | | | | 21 | 59 | 29.0 | |
| SONM | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| SONM | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | | |
| **ZAK** | **Zakamensk** | **48.90** | **303** | *e*P | **P** | **21** | **58** | **05.1** | **-0.7** |
| ZAK | | | | *e* | | 21 | 59 | 30.9 | |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.87** | **288** | *e*P | **P** | **21** | **58** | **15.0** | **+1.7** |
| HHC | | | | S | **S** | **22** | **05** | **16.8** | **-3.5** |
| HHC | | | | PMZ | | | | | |
| | comp=Z,26nm,0.9s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,210nm,7.3s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NJ2** | **Nanjing** | **51.07** | **275** | *e*P | **P** | **21** | **58** | **23.1** | **+0.8** |
| NJ2 | | | | PMZ | | | | | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.69** | **315** | P | **P** | **21** | **58** | **54.9** | **-1.0** |
| | comp=Z,0.8nm,0.4s,baz=49,slow=7.2,SNR=4.8 | | | | | | | | |
| ZALV | | | | PcP | **PcP** | **21** | **59** | **55.9** | **+1.0** |
| | comp=Z,0.7nm,0.4s,baz=60,slow=3.5,SNR=4.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.69** | **315** | P | **P** | **21** | **58** | **54.9** | **-1.0** |
| ZALV | | | | | | 21 | 59 | 55.9 | |
| ZALV | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| ZALV | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **56.42** | **84** | P | **P** | **21** | **59** | **01.9** | **+0.3** |
| | comp=Z,0.5nm,0.8s,baz=301,slow=7.0,SNR=2.9 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **56.42** | **84** | P | **P** | **21** | **59** | **01.9** | **+0.3** |
| TXAR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **LZH** | **Lanzhou** | **57.56** | **289** | *e*P | **P** | **21** | **59** | **11.4** | **+1.7** |
| LZH | | | | pP | **pP** | **21** | **59** | **18.0** | **-3.4** |
| LZH | | | | sP | **sP** | **21** | **59** | **22.4** | **-3.6** |
| LZH | | | | PMZ | | | | | |
| | comp=Z,26nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,78nm,5.1s | | | | | | | | |
| **GTA** | **Gaotai** | **57.67** | **294** | *e*P | **P** | **21** | **59** | **10.3** | **-0.1** |
| GTA | | | | pP | **pP** | **21** | **59** | **20.4** | **-1.7** |
| GTA | | | | sP | **sP** | **21** | **59** | **24.3** | **-2.4** |
| GTA | | | | S | **S** | **22** | **07** | **03.8** | **-2.2** |
| GTA | | | | sS | **sS** | **22** | **07** | **20.6** | **-4.7** |
| GTA | | | | SS | **SS** | **22** | **10** | **53.9** | **-2.1** |
| GTA | | | | PMZ | | | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,62nm,5.5s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | comp=Z,200nm,19.0s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | comp=Z,140nm,20.4s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | comp=Z,210nm,18.5s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.51** | **352** | P | **P** | **21** | **59** | **14.3** | **-1.3** |
| | comp=Z,4.4nm,0.8s,baz=16,slow=10,SNR=4.5 | | | | | | | | |
| ARCES | | | | PcP | **PcP** | **22** | **00** | **05.7** | **+0.1** |
| | comp=Z,4.3nm,0.7s,baz=34,slow=3.7,SNR=8.2 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **58.51** | **352** | P | **P** | **21** | **59** | **14.3** | **-1.3** |
| ARCES | | | | | | 22 | 00 | 05.7 | |
| ARCES | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| ARCES | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **WMQ** | **Urumqi** | **61.25** | **305** | P | **P** | **21** | **59** | **37.0** | **+2.1** |
| WMQ | | | | PP | **PP** | **22** | **01** | **53.0** | **+3.4** |
| WMQ | | | | S | **S** | **22** | **07** | **50.0** | **-1.9** |
| WMQ | | | | SS | **SS** | **22** | **11** | **50.0** | **-1.8** |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,23nm,6.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,220nm,20.0s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,29nm,0.7s | | | | | | | | |
| **PKI** | **Pulchoki** | **74.48** | **295** | *e*P | | **P** | **22 00 59.5** | **+0.8** |
| | comp=Z,56nm,1.1s | | | | | | | | |
| **PKIN** | **Phulchoki** | **74.48** | **295** | *e*P | | **P** | **22 00 59.8** | **+1.2** |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **GKN** | **Gorkha** | **74.59** | **295** | *e*P | | **P** | **22 01 00.0** | **+0.9** |
| **DMN** | **Daman** | **74.63** | **295** | *e*P | | **P** | **22 01 00.6** | **+1.1** |
| | comp=Z,40nm,0.9s | | | | | | | | |
| **DANN** | **Dangsing** | **74.82** | **296** | *e*P | | **P** | **22 01 01.9** | **+1.3** |
| **KOLN** | **Koldanda** | **75.36** | **296** | *e*P | | **P** | **22 01 04.3** | **+0.7** |
| | comp=Z,26nm,0.9s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.26** | **344** | P | | **P** | **22 01 06.8** | **-1.3** |
| | comp=Z,1.6nm,0.4s,baz=17,slow=5.7,SNR=6.9 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **76.26** | **344** | P | | **P** | **22 01 06.8** | **-1.3** |
| AKASG | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **CLL** | **Collm** | **77.51** | **355** | *e*P | | **P** | **22 01 14.0** | **-1.1** |
| **CLL** | **Collm** | **77.51** | **355** | *e*P | | **P** | **22 01 14.0** | **-1.1** |
| **GEYT** | **Alibeck** | **79.62** | **320** | P | | **P** | **22 01 27.9** | **+0.8** |
| | comp=Z,7.8nm,0.8s,baz=339,slow=3.7,SNR=19 | | | | | | | | |
| **TRPA** | **Tarpa** | **79.77** | **348** | ⇑*i*P | | **P** | **22 01 27.4** | **-0.2** |
| **BURAR** | **Bucovina Array** | **79.89** | **346** | ⇓P | | **P** | **22 01 28.5** | **0.0** |
| **BURAR** | **Bucovina Array** | **79.89** | **346** | ⇓*i*P | | **P** | **22 01 28.5** | **0.0** |
| **GERES** | **GERESS Array B** | **79.92** | **354** | P | | **P** | **22 01 28.3** | **-0.2** |
| | comp=Z,0.4nm,0.5s,baz=20,slow=5.0,SNR=5.2 | | | | | | | | |
| **DRGR** | | **81.06** | **348** | ⇓P | | **P** | **22 01 34.3** | **-0.4** |
| **DRGR** | | **81.06** | **348** | ⇓*i*P | | **P** | **22 01 34.3** | **-0.4** |
| **PLOR** | **Plostina** | **81.39** | **345** | ⇓P | | **P** | **22 01 35.6** | **-0.8** |
| **PLOR** | **Plostina** | **81.39** | **345** | ⇓*i*P | | **P** | **22 01 35.6** | **-0.8** |
| **DOPR** | **Dopca** | **81.47** | **346** | ⇓*i*P | | P | 22 01 28.6 | -8.2 |
| **CFR** | **Carcaliu** | **81.78** | **344** | ⇑P | | **P** | **22 01 36.6** | **-1.8** |
| **CFR** | **Carcaliu** | **81.78** | **344** | ⇑*i*P | | **P** | **22 01 36.6** | **-1.8** |
| **MLR** | **Muntele Rosu** | **81.85** | **345** | ⇑P | | **P** | **22 01 38.8** | **-0.2** |
| **MLR** | **Muntele Rosu** | **81.85** | **345** | ⇑*i*P | | **P** | **22 01 38.8** | **-0.2** |
| **VOIR** | | **82.05** | **346** | ⇑P | | **P** | **22 01 41.3** | **+1.4** |
| **VOIR** | | **82.05** | **346** | ⇑*i*P | | **P** | **22 01 41.3** | **+1.4** |
| **ARR** | **Arges** | **82.18** | **346** | ⇑*i*P | | **P** | **22 01 41.7** | **+1.1** |
| **GZR** | **Gura Zlata** | **82.42** | **347** | ⇑P | | **P** | **22 01 40.9** | **-1.0** |
| **GZR** | **Gura Zlata** | **82.42** | **347** | ⇑*i*P | | **P** | **22 01 40.9** | **-1.0** |
| **WRA** | **Warramunga Arr** | **83.58** | **227** | P | | **P** | **22 01 47.0** | **-0.9** |
| | comp=Z,0.4nm,0.5s,baz=33,slow=5.9,SNR=3.4 | | | | | | | | |
| **DIVS** | **Divibare** | **84.05** | **349** | ⇑*i*P | | **P** | **22 01 50.0** | **-0.3** |
| **BRTR** | **Keskin Array B** | **85.89** | **338** | P | | **P** | **22 02 00.2** | **+0.5** |
| | comp=Z,1.3nm,0.5s,baz=24,slow=2.1,SNR=9.7 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **85.89** | **338** | P | | **P** | **22 02 00.2** | **+0.5** |
| BRTR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **ASAR** | **Alice Springs** | **87.02** | **225** | P | | **P** | **22 02 04.6** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=30,slow=4.9,SNR=8.7 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **89.06** | **7** | P | | **P** | **22 02 15.2** | **+0.4** |
| | comp=Z,0.2nm,0.5s,baz=343,slow=4.3,SNR=6.1 | | | | | | | | |
| **RAYN** | **Ar Rayn** | **97.33** | **323** | *e*P | | **P** | **22 02 51.4** | **-1.8** |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.75** | **3** | PKP | | **PKPdf** | **22 08 01.3** | **-1.0** |
| | comp=Z,0.2nm,0.4s,baz=358,slow=2.5,SNR=3.3 | | | | | | | | |
| **TSUM** | **Tsumeb** | **146.40** | **338** | *e*PKPab | | **PKPab** | **22 09 01.9** | **+0.2** |
| **BOSA** | **Boshof** | **152.61** | **318** | PKPbc | | **PKPbc** | **22 09 16.4** | **+0.3** |
| | comp=Z,4.4nm,0.5s,baz=24,slow=2.7,SNR=18 | | | | | | | | |
| **BOSA** | **Boshof** | **152.61** | **318** | PKIKP | | **PKPbc** | **22 09 16.4** | **+0.3** |
| BOSA | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | |

*NEIC* ***23*** *21:51:13.9±0.3, 1.°12N×78.°85W, mb4.4/14, MD4.4(IGQ), Error ellipse: s-maj=10.2km s-min=5.7km az=66.0*

*NEIC Felt lightly at Esmeraldas, Ecuador. Also felt at Quito.*

*IDC* ***23*** *21:51:14.1±0.6, 1.°25N×78.°72W, h39km±4km, mb4.1/19, mb1 4.3/23, mb1mx4.1/45, mbtmp4.3/23, ML4.2/4, MS3.6/6, Ms1 3.6/6, ms1mx3.4/22, Error ellipse: s-maj=19.7km s-min=10.0km az=57.0*

*ISCJB* ***23*** *21:51:15.3±0.4, 1.°24N±0.°03×78.°79W±0.°05, h66km±5km, mb4.3/30, Error ellipse: s-maj=8.4km s-min=5.3km az=178.1*

*IGQ* ***23*** *21:51:16±0.8, 0.°89N×78.°87W, h4km±47km, Mb4.2, Error ellipse: s-maj=4.7km s-min=2.1km az=12.0*

*BJI* ***23*** *21:51:18.0, 0.°90N×78.°20W, h35km*

**ISC 23 21:51:14.2±0.4, 1.°22N±0.°03×78.°87W±0.°05, h40km±3km, h40km:pP-P, n102, σ1°33/98, mb4.5/30, MS3.5/3, 6C-10D, Colombia-Ecuador border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LITE** | **Lita** | **0.65** | **129** | ⇑S | | **Sn** | **21 51 35.6** | **-0.8** |
| **LITE** | **Lita** | **0.65** | **129** | ⇑P | | **Pn** | **21 51 26.5** | **-0.6** |
| **URCU** | **Urcuqui** | **0.99** | **142** | ⇑P | | **Pn** | **21 51 31.1** | **-1.0** |
| **CUC** | **Volcan Cuicoch** | **1.04** | **151** | ⇑P | | **Pn** | **21 51 32.6** | **-0.1** |
| **CUIC** | **Volcan Cuicoch** | **1.04** | **151** | ⇑S | | **Sn** | **21 51 45.7** | **-0.2** |
| **OTAV** | **Otavalo** | **1.06** | **157** | ⇑P | | **Pn** | **21 51 31.5** | **-1.6** |
| **OTAV** | **Otavalo** | **1.06** | **157** | *e*Pn | | **Pn** | **21 51 31.5** | **-1.6** |
| OTAV | | | | *e*Sn | | **Sn** | **21 51 45.6** | **-1.3** |
| **TERV** | **Terraza Guagua** | **1.41** | **169** | P | | **Pn** | **21 51 37.4** | **-0.5** |
| **GGP** | **Refugio Guagua** | **1.41** | **169** | ⇓P | | **Pn** | **21 51 37.3** | **-0.7** |
| **CAYA** | **Cayambe** | **1.44** | **142** | P | | **Pn** | **21 51 40.0** | **+1.6** |
| **JUA2** | **San Juan 2** | **1.45** | **170** | P | | **Pn** | **21 51 38.8** | **+0.4** |
| **ELAGU** | **Cayambe Volc** | **1.52** | **145** | P | | **Pn** | **21 51 40.3** | **+0.9** |
| **CHAR** | **Charly** | **1.77** | **137** | P | | Pn | 21 51 45.8 | +3.1 |
| **CONE** | **Cono NE Rev Vo** | **1.77** | **136** | P | | Pn | 21 51 45.7 | +3.0 |
| **LAV4** | **Lava4-Reventad** | **1.80** | **136** | P | | **Pn** | **21 51 45.1** | **+2.1** |
| **ANTI** | **Antisana** | **1.80** | **157** | P | | **Pn** | **21 51 44.4** | **+1.0** |
| **PITA** | **Cotopaxi Volc** | **1.82** | **166** | ⇓P | | **Pn** | **21 51 45.6** | **+2.1** |
| **NAS2** | **Nasa** | **1.90** | **168** | P | | **Pn** | **21 51 46.9** | **+2.3** |
| **VC1** | **Cotopaxi 1** | **1.91** | **166** | P | | **Pn** | **21 51 46.1** | **+1.4** |
| **PAST** | **Pastocalle** | **1.92** | **173** | P | | **Pn** | **21 51 45.4** | **+0.6** |
| **BNAS** | **Cotopaxi Volca** | **1.92** | **168** | ⇓P | | **Pn** | **21 51 46.3** | **+1.4** |
| **CAMI** | **Rancho Maria** | **1.92** | **169** | ⇓P | | **Pn** | **21 51 46.3** | **+1.4** |
| **BVC2** | **Cotopaxi Volca** | **1.92** | **166** | ⇓P | | **Pn** | **21 51 46.3** | **+1.3** |
| **BREF** | **Cotopaxi Volca** | **1.93** | **167** | ⇓P | | **Pn** | **21 51 46.5** | **+1.3** |
| **COV1** | **Cotopaxi Volc** | **1.94** | **164** | P | | **Pn** | **21 51 47.6** | **+2.2** |
| **TAMB** | **Tambo** | **1.97** | **165** | P | | **Pn** | **21 51 47.2** | **+1.6** |
| **MOV1** | **Cotopaxi Vol s** | **1.97** | **167** | ⇓P | | **Pn** | **21 51 47.5** | **+1.8** |
| **MOV1** | **Cotopaxi Vol s** | **1.97** | **167** | ⇓S | | **Sn** | **21 52 11.2** | **+1.8** |
| **JAMA** | **Jama** | **1.99** | **222** | P | | **Pn** | **21 51 45.0** | **-0.5** |
| **PISA** | **Pisayambo** | **2.31** | **168** | P | | Pn | 21 51 53.6 | +3.3 |
| **RUN5** | **Runtun** | **2.66** | **170** | P | | Pn | 21 51 58.9 | +4.0 |
| **JUI6** | **Juive** | **2.66** | **171** | P | | **Pn** | **21 51 57.1** | **+2.3** |
| **BRUN** | **Tungurahua Vol** | **2.66** | **170** | P | | **Pn** | **21 51 57.5** | **+2.5** |
| **PORT** | **Chimborazo Vol** | **2.67** | **178** | P | | Pn | 21 51 58.5 | +3.2 |
| **BBIL** | **Ulba Tungurahu** | **2.68** | **172** | ⇓P | | Pn | 21 51 59.0 | +3.7 |
| **BIL2** | **Estacion Bilba** | **2.68** | **172** | P | | Pn | 21 51 59.6 | +4.4 |
| **RETU** | **Refugio** | **2.69** | **171** | P | | Pn | 21 51 59.7 | +4.2 |
| **IGUA** | **Igualata** | **2.70** | **175** | P | | **Pn** | **21 51 58.2** | **+2.4** |
| **BMAS** | **Trigal station** | **2.73** | **172** | P | | Pn | 21 51 59.7 | +3.7 |
| **ARRY** | **Arrayan** | **2.74** | **171** | ⇓P | | Pn | 21 51 59.8 | +3.7 |
| **BPAT** | **Tungurahua Vol** | **2.74** | **171** | P | | Pn | 21 51 59.7 | +3.5 |
| **PAT1** | **Patacocha** | **2.74** | **171** | P | | Pn | 21 51 59.6 | +3.4 |
| **CHIS** | **Cerro-Chispas-** | **2.92** | **219** | P | | **Pn** | **21 51 57.8** | **-0.4** |
| **RIOE** | **Riobamba** | **2.96** | **175** | P | | **Pn** | **21 52 01.4** | **+2.3** |
| **ROSC** | **El Rosal** | **5.79** | **51** | Pn | | **Pn** | **21 52 40.3** | **+2.2** |
| | 7.3nm,0.3s,baz=140,slow=2.7,SNR=22 | | | | | | | |
| ROSC | | | | Sn | | **Sn** | **21 53 47.2** | **+3.6** |
| | 2.7nm,0.3s,baz=77,slow=19,SNR=1.9 | | | | | | | |
| ROSC | | | | LR | | LR | 21 55 08.6 | |
| | comp=Z,321nm,19.8s,baz=211,slow=41 | | | | | | | |
| **BCIP** | **Isla Barro Col** | **7.95** | **353** | *e*Pn | | Pn | 21 53 11.0 | +3.6 |
| | 69nm,1.3s | | | | | | | |
| **ATAH** | **Atahualpa** | **8.31** | **177** | Pn | | **Pn** | **21 53 13.7** | **+1.0** |
| | 3.2nm,0.3s,baz=13,slow=7.5,SNR=22 | | | | | | | |
| ATAH | | | | Sn | | **Sn** | **21 54 48.2** | **+2.6** |
| | 1.2nm,0.3s,baz=252,slow=19,SNR=2.5 | | | | | | | |
| ATAH | | | | LR | | LR | 21 56 33.3 | |
| | comp=Z,613nm,20.2s,baz=344,slow=38 | | | | | | | |
| **JTS** | **JuntasAbangare** | **10.85** | **326** | Pn | | **Pn** | **21 53 49.3** | **+2.1** |
| | 1.7nm,0.3s,baz=346,slow=4.5,SNR=4.4 | | | | | | | |
| JTS | | | | LR | | LR | 21 57 27.5 | |
| | comp=Z,488nm,21.9s,baz=148,slow=34 | | | | | | | |
| **SDV** | **Santo Domingo** | **11.19** | **47** | *e*Pn | | **Pn** | **21 53 52.9** | **+1.0** |
| **NNA** | **Nana** | **13.28** | **171** | Pn | | **Pn** | **21 54 20.6** | **+0.3** |
| | 1.3nm,0.3s,baz=27,slow=4.5,SNR=2.6 | | | | | | | |
| **NNA** | **Nana** | **13.28** | **171** | *e*Pn | | **Pn** | **21 54 19.4** | **-0.9** |
| **SAML** | **Samuel** | **18.61** | **123** | *e*Pn | | **P** | **21 55 24.8** | **-3.6** |
| | 5.4nm,0.9s | | | | | | | |
| **PTGA** | **Pitinga** | **19.00** | **96** | P | | **P** | **21 55 33.0** | **+0.2** |
| | 1.1nm,0.3s,baz=282,slow=14,SNR=18 | | | | | | | |
| **LPAZ** | **La Paz** | **20.37** | **149** | P | | **P** | **21 55 47.9** | **-0.4** |
| | 33nm,0.8s,baz=339,slow=9.6,SNR=126 | | | | | | | |
| LPAZ | | | | LR | | LR | 22 06 03.7 | |
| | comp=Z,191nm,21.1s,baz=296,slow=44 | | | | | | | |
| **SJG** | **San Juan** | **20.92** | **36** | P | | **P** | **21 55 53.4** | **-0.2** |
| | 13nm,0.7s,baz=233,slow=10,SNR=4.3 | | | | | | | |
| **SJG** | **San Juan** | **20.92** | **36** | *e*P | | **P** | **21 55 52.3** | **-1.3** |
| | 11nm,0.6s | | | | | | | |
| **TEIG** | **Tepich** | **21.01** | **335** | *e*P | | **P** | **21 55 54.5** | **0.0** |
| **STVI** | **Saint Thomas** | **21.83** | **38** | *e*P | | **P** | **21 56 04.8** | **+1.6** |
| | 11nm,0.6s | | | | | | | |
| **CMIG** | **Matias Romero** | **22.30** | **316** | P | | **P** | **21 56 09.5** | **+1.2** |
| | 4.5nm,0.7s,baz=93,slow=13,SNR=7.4 | | | | | | | |
| **SIV** | **San Ignacio** | **24.53** | **135** | P | | **P** | **21 56 28.9** | **-1.4** |
| | 7.0nm,1.0s,baz=318,slow=9.9,SNR=9.5 | | | | | | | |
| **LVC** | **Limon Verde** | **25.60** | **158** | P | | **P** | **21 56 40.2** | **-0.1** |
| | 30nm,0.6s,baz=351,slow=8.6,SNR=12 | | | | | | | |
| **LVC** | **Limon Verde** | **25.60** | **158** | *e*P | | **P** | **21 56 39.9** | **-0.3** |
| | 9.0nm,0.7s | | | | | | | |
| **CFAA** | **Coronel Fontan** | **34.17** | **164** | P | | **P** | **21 57 56.4** | **+0.6** |
| | 0.6nm,0.7s,baz=349,slow=8.1,SNR=10 | | | | | | | |
| **CPUP** | **Villa Florida** | **34.39** | **144** | P | | **P** | **21 57 56.0** | **-1.7** |
| | 8.5nm,0.8s,baz=330,slow=12,SNR=21 | | | | | | | |
| CPUP | | | | LR | | LR | 22 13 25.5 | |
| | comp=Z,92nm,20.6s,baz=314,slow=39 | | | | | | | |
| **BDFB** | **Brasilia** | **34.79** | **120** | P | | **P** | **21 58 00.3** | **-1.2** |
| | 4.8nm,0.8s,baz=278,slow=7.5,SNR=6.1 | | | | | | | |
| BDFB | | | | LR | | LR | 22 13 01.6 | |
| | comp=Z,133nm,20.8s,baz=296,slow=38 | | | | | | | |
| **TZTN** | **Tazewell** | **35.41** | **353** | *e*P | | P | 21 58 13.8 | +7.3 |
| | 18nm,1.1s | | | | | | | |
| **WVT** | **Waverly** | **35.72** | **348** | *e*P | | **P** | **21 58 08.7** | **-0.4** |
| | 7.4nm,0.7s | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.60** | **322** | P | | **P** | **21 58 17.4** | **+0.5** |
| | 0.2nm,0.6s,baz=129,slow=7.2,SNR=4.1 | | | | | | | |
| TXAR | | | | PcP | | **PcP** | **22 00 39.8** | **+0.1** |
| | 0.6nm,0.6s,baz=146,slow=5.0,SNR=4.0 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **38.17** | **333** | *e*P | | **P** | **21 58 29.8** | **-0.3** |
| | 7.4nm,1.0s | | | | | | | |
| **CCM** | **Cathedral Cave** | **38.38** | **344** | *e*P | | **P** | **21 58 31.6** | **-0.1** |
| | 8.1nm,0.8s | | | | | | | |
| **TRQA** | **Tornquist** | **42.08** | **160** | *e*P | | **P** | **21 59 02.3** | **-0.1** |
| | 5.1nm,1.0s | | | | | | | |
| **ANMO** | **Albuquerque** | **42.27** | **326** | *e*P | | **P** | **21 59 05.3** | **+1.1** |
| | 7.3nm,0.8s | | | | | | | |
| **SDCO** | **Great Sand Dun** | **43.83** | **329** | *e*P | | **P** | **21 59 18.6** | **+1.7** |
| | 4.3nm,0.8s | | | | | | | |
| **RSSD** | **Black Hills** | **48.21** | **336** | *e*P | | **P** | **21 59 51.5** | **+0.3** |
| **IMW** | **Indian Meadow** | **51.17** | **330** | *e*P | | P | 22 00 22.7 | +8.9 |
| | 3.5nm,0.9s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **51.72** | **321** | P | | **P** | **22 00 18.8** | **+0.9** |
| | 0.9nm,0.8s,baz=127,slow=6.9,SNR=6.2 | | | | | | | |
| NVAR | | | | pP | | **pP** | **22 00 29.8** | **+0.2** |
| | 2.5nm,0.7s,baz=119,slow=7.3,SNR=9.5 | | | | | | | |
| **SCHQ** | **Schefferville** | **54.34** | **9** | P | | **P** | **22 00 36.5** | **-0.2** |
| | 4.3nm,0.7s,baz=27,slow=4.5,SNR=4.4 | | | | | | | |
| SCHQ | | | | pP | | **pP** | **22 00 47.2** | **-1.1** |
| | 4.1nm,0.6s,baz=232,slow=9.2,SNR=2.5 | | | | | | | |
| **FRB** | **Frobisher Bay** | **62.85** | **5** | P | | **P** | **22 01 34.7** | **-1.0** |
| | 5.2nm,0.7s,baz=170,slow=6.1,SNR=3.4 | | | | | | | |
| FRB | | | | pP | | **pP** | **22 01 47.0** | **-0.6** |
| | 6.3nm,0.9s,baz=207,slow=9.0,SNR=1.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **66.70** | **343** | P | | **P** | **22 02 00.3** | **-0.5** |
| | 1.6nm,0.8s,baz=132,slow=6.2,SNR=6.8 | | | | | | | |
| YKA | | | | pP | | **pP** | **22 02 12.3** | **-0.5** |
| | 1.9nm,0.8s,baz=138,slow=6.4,SNR=5.2 | | | | | | | |
| **LIC** | **Lamto** | **73.81** | **84** | *e*P | | **P** | **22 02 44.7** | **-0.6** |
| | 94nm,1.7s | | | | | | | |
| **TIC** | **Toumodi** | **73.82** | **83** | *e*P | | **P** | **22 02 44.5** | **-0.9** |
| **DBIC** | **Dimbokro** | **73.98** | **83** | P | | **P** | **22 02 45.3** | **-1.0** |
| | 9.4nm,0.9s,baz=255,slow=6.1,SNR=7.9 | | | | | | | |
| DBIC | | | | pP | | **pP** | **22 02 57.2** | **-1.2** |
| | 5.0nm,0.8s,baz=234,slow=6.9,SNR=3.1 | | | | | | | |
| **KIC** | **Kosan Boka** | **74.09** | **84** | *e*P | | **P** | **22 02 46.4** | **-0.6** |
| | 32nm,0.8s | | | | | | | |
| **INK** | **Inuvik** | **76.43** | **342** | P | | **P** | **22 02 59.1** | **-0.2** |
| | 1.9nm,0.8s,baz=117,slow=6.8,SNR=5.4 | | | | | | | |
| INK | | | | pP | | **pP** | **22 03 11.1** | **-0.3** |
| | 3.0nm,0.9s,baz=108,slow=4.8,SNR=4.5 | | | | | | | |
| **ESDC** | **Sonseca Array** | **77.62** | **50** | P | | **P** | **22 03 06.4** | **-0.3** |
| | 0.8nm,0.6s,baz=260,slow=6.2,SNR=7.5 | | | | | | | |
| ESDC | | | | pP | | **pP** | **22 03 18.5** | **-0.3** |
| | 1.4nm,0.7s,baz=262,slow=5.7,SNR=6.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **79.66** | **336** | P | | **P** | **22 03 17.2** | **-0.1** |
| | 0.7nm,0.7s,baz=123,slow=4.2,SNR=9.8 | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **80.53** | **77** | *e*P | | **P** | **22 03 21.5** | **-1.6** |
| **TORD** | **Torodi Ar. Bea** | **80.53** | **77** | P | | **P** | **22 03 21.8** | **-1.3** |
| | 1.1nm,0.7s,baz=283,slow=5.8,SNR=11 | | | | | | | |
| TORD | | | | pP | | **pP** | **22 03 32.9** | **-2.4** |
| | 1.1nm,0.6s,baz=280,slow=4.2,SNR=5.6 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **80.89** | **34** | pP | | pP | 22 03 36.5 | +0.2 |
| | 0.9nm,0.5s,baz=265,slow=4.3,SNR=2.1 | | | | | | | |
| **TAM** | **Tamanrasset** | **84.36** | **67** | P | | **P** | **22 03 44.2** | **+1.1** |
| | 4.3nm,0.9s | | | | | | | |
| **SNAA** | **Sanae** | **86.77** | **162** | *e*P | | **P** | **22 03 53.0** | **-1.0** |
| | 1.8nm,1.1s | | | | | | | |
| SNAA | | | | *e*pP | | **pP** | **22 04 04.6** | **-1.6** |
| **DAVOX** | **Davos/Dischmat** | **88.26** | **43** | P | | **P** | **22 04 01.2** | **-0.6** |
| | 2.9nm,0.8s,baz=328,slow=9.6,SNR=4.6 | | | | | | | |
| DAVOX | | | | pP | | **pP** | **22 04 14.5** | **+0.4** |
| | 3.1nm,0.8s,baz=72,slow=20,SNR=4.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **123.38** | **11** | PKP | | **PKPdf** | **22 10 06.0** | **-1.0** |
| | 0.6nm,0.4s,baz=336,slow=3.2,SNR=4.0 | | | | | | | |
| ZALV | | | | pPKP | | **pPKPdf** | **22 10 18.9** | **-0.9** |
| | 1.4nm,0.5s,baz=272,slow=2.3,SNR=6.6 | | | | | | | |
| **SONM** | **Songino Array** | **130.93** | **355** | PKP | | **PKPdf** | **22 10 21.8** | **-0.1** |
| | 0.4nm,0.6s,baz=22,slow=1.6,SNR=2.7 | | | | | | | |
| SONM | | | | pPKP | | **pPKPdf** | **22 10 34.1** | **-0.5** |
| | 0.9nm,0.5s,baz=11,slow=1.5,SNR=4.0 | | | | | | | |
| **KSH** | **Kashi** | **133.36** | **27** | *e*PKP | | PKPdf | 22 10 32.8 | +6.1 |
| KSH | | | | *es*PKP | | | 22 10 47.1 | |
| **WMQ** | **Urumqi** | **133.57** | **13** | *e*PKP | | PKPdf | 22 10 33.0 | +6.1 |
| **KSRS** | **Korea Array** | **134.22** | **330** | PKP | | **PKPdf** | **22 10 27.6** | **-0.5** |
| | 1.6nm,0.8s,baz=1.6,slow=2.8,SNR=5.2 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **134.25** | **330** | PKP | | **PKPdf** | **22 10 27.6** | **-0.6** |
| **GTA** | **Gaotai** | **139.55** | **2** | *e*PKP | | PKPdf | 22 10 46.3 | +8.1 |
| GTA | | | | sPKP | | | 22 11 00.8 | |
| **ASAR** | **Alice Springs** | **141.19** | **232** | PKhKP | | PKPpre | 22 10 33.3 | |
| | 1.2nm,0.7s,baz=122,slow=3.9,SNR=16 | | | | | | | |
| ASAR | | | | PKP | | **PKPdf** | **22 10 40.5** | **-1.0** |
| | 1.3nm,0.8s,baz=126,slow=2.7,SNR=6.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **142.57** | **238** | PKhKP | | PKPpre | 22 10 38.2 | |
| | 1.0nm,0.6s,baz=107,slow=2.8,SNR=7.4 | | | | | | | |
| WRA | | | | PKP | | **PKPdf** | **22 10 43.2** | **-0.8** |
| | 1.7nm,0.8s,baz=108,slow=2.2,SNR=8.4 | | | | | | | |
| **NJ2** | **Nanjing** | **142.89** | **335** | *e*PKP | | PKPdf | 22 10 50.1 | +5.9 |

*BJI* ***23*** *21:58:54.2, 63.°20N×24.°10W, h10km, mb4.7/40, mB5.0/25, Ms5.1/23, Ms7 4.7/21*

*IDC* ***23*** *21:58:56.4±0.6, 63.°33N×24.°08W, h0km, mb4.0/20, mb1 4.2/23, mb1mx4.1/40, mbtmp4.0/23, ML3.5/3, MS4.4/35, Ms1 4.4/35, ms1mx4.4/43, Error ellipse: s-maj=19.5km s-min=11.8km az=19.0*

*REY* ***23*** *21:58:56.9, 63.°30N×23.°86W, h10km*

*ISCJB* ***23*** *21:58:57.9±0.2, 63.°49N±0.°03×23.°91W±0.°04, h10km, mb4.6/81, MS4.5/51, Error ellipse: s-maj=3.8km s-min=2.5km az=155.3*

*CSEM* ***23*** *21:58:57.6±0.1, 63.°50N×23.°91W, h2km, mb4.9/48, Error ellipse: s-maj=4.9km s-min=3.6km az=171.0*

*GCMT* ***23*** *21:58:58.9±0.2, 63.°38N×24.°00W, h12km, MW5.2/109, Moment Tensor Solution. s18,c21; s109,c196; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~6.90±.14; Mθθ0.35±.16; Mϕϕ6.55±.11; Mrθ1.62±.58; Mϕϕ1.95±.11; Mϕr~0.63±.42; Best double couple: M○7.21800×10^16 NP1:ϕ3.00000°, δ47.00000°, λ-109.00000°. NP2: ϕ209.00000°, δ46.00000°, λ-71.00000°. Principal axes: T 7.1140, Plg1.0000°, Azm106.0000°; N 0.2090, Plg14.0000°, Azm16.0000°; P -7.3230, Plg76.0000°, Azm199.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*MOS* ***23*** *21:58:58.2±1.0, 63.°42N×24.°11W, h17km, mb4.9/26, MS4.7/19 Error ellipse: s-maj=11.5km s-min=8.7km az=121.5*

*NEIC* ***23*** *21:58:58.9±0.2, 63.°36N×23.°98W, h10km, mb4.8/32, Error ellipse: s-maj=8.1km s-min=3.9km az=197.0*

*SZGRF* ***23*** *21:59:01.1, 63.°12N×24.°32W, h33km, mb4.8/12(BGR)*

**ISC 23 21:58:59.7±0.5, 63.°46N±0.°04×23.°82W±0.°03, h10km±2km, h9km:pP-P, n318, σ1°30/316, mb4.7/81, MS4.6/51, 12C-4D, Iceland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **IRNE** | **Reykjanes** | **0.61** | **54** | P | | **Pg** | **21 59 09.5** | **-2.1** |
| | baz=45 | | | | | | | |
| IRNE | | | | S | | **Sg** | **21 59 19.4** | **-0.3** |
| | baz=45 | | | | | | | |
| **INYL** | **Nylenda** | **0.71** | **42** | P | | **Pg** | **21 59 11.4** | **-2.0** |
| | baz=36 | | | | | | | |
| INYL | | | | S | | **Sg** | **21 59 22.9** | **+0.3** |
| | baz=36 | | | | | | | |
| **INYL** | **Nylenda** | **0.71** | **42** | P | | **Pg** | **21 59 11.4** | **-2.0** |
| INYL | | | | S | | **Sg** | **21 59 22.9** | **+0.3** |
| **IGRV** | **Grindav??k** | **0.73** | **56** | P | | **Pg** | **21 59 11.5** | **-2.3** |
| | baz=48 | | | | | | | |
| IGRV | | | | S | | **Sg** | **21 59 22.6** | **-0.7** |
| | baz=48 | | | | | | | |
| **IGRV** | **Grindav??k** | **0.73** | **56** | P | | **Pg** | **21 59 11.5** | **-2.3** |
| IGRV | | | | S | | **Sg** | **21 59 22.6** | **-0.7** |
| **IVOG** | **Vogar** | **0.82** | **50** | P | | **Pg** | **21 59 13.2** | **-2.3** |
| | baz=44 | | | | | | | |
| IVOG | | | | S | | **Sg** | **21 59 25.4** | **-0.7** |
| | baz=44 | | | | | | | |
| **IVOG** | **Vogar** | **0.82** | **50** | P | | **Pg** | **21 59 13.2** | **-2.3** |
| IVOG | | | | S | | **Sg** | **21 59 25.4** | **-0.7** |
| **IKRI** | **Krysuvik** | **0.89** | **61** | P | | Pg | 21 59 13.6 | -3.2 |
| | baz=53 | | | | | | | |
| IKRI | | | | S | | **Sg** | **21 59 26.7** | **-1.5** |
| | baz=53 | | | | | | | |
| **IKRI** | **Krysuvik** | **0.89** | **61** | P | | Pg | 21 59 13.6 | -3.2 |
| IKRI | | | | S | | **Sg** | **21 59 26.7** | **-1.5** |
| **IVOS** | **Vogsosar** | **1.02** | **66** | P | | Pg | 21 59 15.7 | -3.7 |
| | baz=59 | | | | | | | |
| IVOS | | | | S | | **Sg** | **21 59 30.9** | **-1.7** |
| | baz=59 | | | | | | | |
| **IVOS** | **Vogsosar** | **1.02** | **66** | P | | Pg | 21 59 15.7 | -3.7 |
| IVOS | | | | S | | **Sg** | **21 59 31.0** | **-1.7** |
| **IKAS** | **Kald??rsel** | **1.04** | **56** | S | | **Sg** | **21 59 31.0** | **-2.3** |
| | baz=50 | | | | | | | |
| **IKAS** | **Kald??rsel** | **1.04** | **56** | S | | **Sg** | **21 59 31.0** | **-2.3** |
| **ISAN** | **Sandskeio** | **1.17** | **58** | S | | **Sb** | **21 59 35.1** | **-2.1** |
| | baz=52 | | | | | | | |
| **ISAN** | **Sandskeio** | **1.17** | **58** | S | | **Sb** | **21 59 35.1** | **-2.1** |
| **IKUD** | **Kuludalsa** | **1.22** | **44** | S | | **Sb** | **21 59 37.1** | **-1.6** |
| | baz=40 | | | | | | | |
| **IKUD** | **Kuludalsa** | **1.22** | **44** | S | | **Sb** | **21 59 37.1** | **-1.6** |
| **IBJA** | **Bjarnastaoir** | **1.22** | **65** | P | | Pn | 21 59 18.8 | -4.1 |
| | baz=59 | | | | | | | |
| IBJA | | | | S | | **Sb** | **21 59 36.6** | **-2.1** |
| | baz=59 | | | | | | | |
| **IBJA** | **Bjarnastaoir** | **1.22** | **65** | P | | Pn | 21 59 18.8 | -4.1 |
| IBJA | | | | S | | **Sb** | **21 59 36.6** | **-2.1** |
| **IHEI** | **Heioarbar** | **1.37** | **56** | S | | **Sb** | **21 59 40.9** | **-2.0** |
| | baz=51 | | | | | | | |
| **IHEI** | **Heioarbar** | **1.37** | **56** | S | | **Sb** | **21 59 40.9** | **-2.0** |
| **IASM** | **Asmuli** | **1.48** | **74** | S | | **Sn** | **21 59 42.6** | **-3.2** |
| | baz=68 | | | | | | | |
| **BORG** | **Borgarnes** | **1.69** | **39** | Pn | | Pn | 21 59 23.5 | -5.9 |
| | 107nm,0.3s,baz=247,slow=3.9,SNR=44 | | | | | | | |
| BORG | | | | Sn | | **Sn** | **21 59 50.5** | **-0.6** |
| | 179nm,0.3s,baz=229,slow=23,SNR=12 | | | | | | | |
| BORG | | | | LR | | LR | 21 59 59.1 | |
| | comp=Z,2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PGAV | **Gavieira, Arco** | **23.37** | **150** | *e*P | P | 22 04 03.0 | -5.3 | | |
| | comp=Z,47nm,1.9s | | | | | | | | |
| PGAV | | | | *e*S | Sn | 22 08 33.6 | -6.1 | | |
| PGAV | | | | *e*LR | LR | 22 09 50.6 | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| **NKC** | **Novy Kostel** | **23.45** | **107** | *e*P | **P** | **22 04 08.8** | **-0.1** | | |
| NKC | | | | MLR | MLR | | | | |
| | comp=Z,2µm,14.0s | | | | | | | | |
| **NKC** | **Novy Kostel** | **23.45** | **107** | *e*P | **P** | **22 04 08.8** | **-0.1** | | |
| NKC | | | | AMS | AMS | 22 16 00.0 | | | |
| | comp=Z,2µm,14.0s | | | | | | | | |
| **NKC** | **Novy Kostel** | **23.45** | **107** | *e*P | **P** | **22 04 08.8** | **-0.1** | | |
| | comp=Z,2µm,14.0s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **23.62** | **104** | *e*P | **P** | **22 04 10.3** | **-0.3** | | |
| | comp=Z,66nm,2.1s | | | | | | | | |
| BRG | | | | S | Sn | 22 08 40.0 | -5.3 | | |
| | comp=N,2µm,16.7s | | | | | | | | |
| | comp=E,830nm,11.6s | | | | | | | | |
| | comp=Z,2µm,15.3s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **23.62** | **104** | *e*P | **P** | **22 04 10.3** | **-0.3** | | |
| BRG | | | | pmax | pmax | | | | |
| | comp=Z,66nm,2.1s | | | | | | | | |
| BRG | | | | MLR | MLR | | | | |
| | comp=N,2µm,16.7s | | | | | | | | |
| BRG | | | | MLR | MLR | | | | |
| | comp=E,830nm,11.6s | | | | | | | | |
| BRG | | | | MLR | MLR | | | | |
| | comp=Z,2µm,15.3s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **23.62** | **104** | *e*P | **P** | **22 04 11.1** | **+0.5** | | |
| | comp=Z,66nm,2.1s,baz=319,slow=10 | | | | | | | | |
| **BRG** | **Berggiesshubel** | **23.62** | **104** | *e*P | **P** | **22 04 10.3** | **-0.3** | | |
| | comp=Z,2µm,15.3s | | | | | | | | |
| **PCAB** | **Cabril** | **23.67** | **149** | *e*P | **P** | **22 04 10.8** | **-0.4** | | |
| | comp=Z,64nm,1.9s | | | | | | | | |
| **PCAB** | **Cabril** | **23.67** | **149** | *e*P | **P** | **22 04 10.8** | **-0.4** | | |
| | comp=Z,64nm,1.9s | | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **23.69** | **108** | *e*P | **P** | **22 04 11.6** | **+0.3** | | |
| | comp=Z,88nm,2.1s,baz=319,slow=10 | | | | | | | | |
| **GRC4** | **Grafenberg Arr** | **23.92** | **110** | *e*P | **P** | **22 04 11.4** | **-2.1** | | |
| | baz=319,slow=10 | | | | | | | | |
| **POLO** | **Lamas de Olo** | **24.04** | **149** | *e*P | **P** | **22 04 14.5** | **-0.3** | | |
| | comp=Z,22nm,1.7s | | | | | | | | |
| **POLO** | **Lamas de Olo** | **24.04** | **149** | *e*P | **P** | **22 04 14.5** | **-0.3** | | |
| | comp=Z,22nm,1.7s | | | | | | | | |
| **PVCC** | **Panska Ves** | **24.14** | **104** | *e*P | **P** | **22 04 15.6** | **0.0** | | |
| PVCC | | | | MLR | MLR | | | | |
| | comp=Z,2µm,13.7s | | | | | | | | |
| **PVCC** | **Panska Ves** | **24.14** | **104** | *e*P | **P** | **22 04 15.6** | **0.0** | | |
| PVCC | | | | AMS | AMS | 22 15 30.0 | | | |
| | comp=Z,2µm,13.7s | | | | | | | | |
| **PVCC** | **Panska Ves** | **24.14** | **104** | *e*P | **P** | **22 04 15.6** | **0.0** | | |
| | comp=Z,2µm,13.7s | | | | | | | | |
| **PVRL** | **Vila Real** | **24.15** | **149** | *e*P | **P** | **22 04 18.6** | **+2.8** | | |
| | comp=Z,31nm,1.6s | | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **24.38** | **120** | *e*P | **P** | **22 04 17.0** | **-1.0** | | |
| | comp=Z,98nm,2.0s | | | | | | | | |
| **MVO** | **Moncorvo** | **24.42** | **148** | *e*P | **P** | **22 04 18.3** | **0.0** | | |
| | comp=Z,25nm,1.8s | | | | | | | | |
| MVO | | | | *e*LR | LR | 22 10 19.4 | | | |
| | comp=Z,1µm,18.0s | | | | | | | | |
| **MVO** | **Moncorvo** | **24.42** | **148** | *e*P | **P** | **22 04 18.3** | **0.0** | | |
| | comp=Z,25nm,1.8s | | | | | | | | |
| **PRA** | **Prague** | **24.42** | **105** | *e*P | **P** | **22 04 18.0** | **-0.1** | | |
| PRA | | | | MLR | MLR | | | | |
| | comp=Z,1µm,11.3s | | | | | | | | |
| **PRA** | **Prague** | **24.42** | **105** | *e*P | **P** | **22 04 18.0** | **-0.1** | | |
| PRA | | | | AMS | AMS | 22 16 00.0 | | | |
| | comp=Z,1µm,11.3s | | | | | | | | |
| **PRA** | **Prague** | **24.42** | **105** | *e*P | **P** | **22 04 18.0** | **-0.1** | | |
| | comp=Z,1µm,11.3s | | | | | | | | |
| **WET** | **Wettzell** | **24.45** | **109** | *e*P | **P** | **22 04 18.6** | **+0.1** | | |
| | comp=Z,80nm,2.2s,baz=319,slow=10 | | | | | | | | |
| **PRU** | **Pruhonice** | **24.53** | **105** | *e*P | **P** | **22 04 19.5** | **+0.4** | | |
| PRU | | | | MLR | MLR | | | | |
| | comp=Z,500nm,13.9s | | | | | | | | |
| **PRU** | **Pruhonice** | **24.53** | **105** | *e*P | **P** | **22 04 19.5** | **+0.4** | | |
| PRU | | | | AMS | AMS | 22 16 10.0 | | | |
| | comp=Z,500nm,13.9s | | | | | | | | |
| **PRU** | **Pruhonice** | **24.53** | **105** | *e*P | **P** | **22 04 19.5** | **+0.4** | | |
| | comp=Z,500nm,13.9s | | | | | | | | |
| **PVIS** | **Viseu** | **24.65** | **150** | *e*P | **P** | **22 04 22.3** | **+2.0** | | |
| | comp=Z,32nm,1.6s | | | | | | | | |
| **PVIS** | **Viseu** | **24.65** | **150** | *e*P | **P** | **22 04 22.3** | **+2.0** | | |
| | comp=Z,32nm,1.6s | | | | | | | | |
| **KSP** | **Ksiaz** | **24.67** | **102** | *e*P | **P** | **22 04 20.1** | **-0.3** | | |
| **KSP** | **Ksiaz** | **24.67** | **102** | *e*P | **P** | **22 04 20.1** | **-0.3** | | |
| **KSP** | **Ksiaz** | **24.67** | **102** | *e*P | **P** | **22 04 20.1** | **-0.3** | | |
| **GOPC** | **GO Pecny, Ondr** | **24.69** | **105** | *e*P | **P** | **22 04 21.2** | **+0.6** | | |
| GOPC | | | | MLR | MLR | | | | |
| | comp=Z,1µm,13.3s | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **24.69** | **105** | *e*P | **P** | **22 04 21.2** | **+0.6** | | |
| GOPC | | | | AMS | AMS | 22 16 10.0 | | | |
| | comp=Z,1µm,13.3s | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **24.69** | **105** | *e*P | **P** | **22 04 21.2** | **+0.6** | | |
| | comp=Z,1µm,13.3s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **24.76** | **108** | *e*P | **P** | **22 04 19.9** | **-1.4** | | |
| KHC | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **24.76** | **108** | *e*P | **P** | **22 04 20.5** | **-0.8** | | |
| KHC | | | | *ex* | x | 22 04 28.5 | | | |
| KHC | | | | *ex* | x | 22 04 36.7 | | | |
| KHC | | | | AMS | AMS | 22 15 20.0 | | | |
| | comp=Z,3µm,15.0s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **24.76** | **108** | *e*P | **P** | **22 04 19.9** | **-1.4** | | |
| | comp=Z,5.7nm,1.2s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **24.76** | **108** | P | **P** | **22 04 20.5** | **-0.8** | | |
| **UPC** | **Upice** | **24.79** | **103** | *e*P | **P** | **22 04 22.0** | **+0.5** | | |
| UPC | | | | MLR | MLR | | | | |
| | comp=Z,3µm,15.7s | | | | | | | | |
| **UPC** | **Upice** | **24.79** | **103** | *e*P | **P** | **22 04 22.0** | **+0.5** | | |
| UPC | | | | AMS | AMS | 22 15 30.0 | | | |
| | comp=Z,3µm,15.7s | | | | | | | | |
| **UPC** | **Upice** | **24.79** | **103** | *e*P | **P** | **22 04 22.0** | **+0.5** | | |
| | comp=Z,3µm,15.7s | | | | | | | | |
| **MTE** | **Manteigas** | **25.03** | **150** | *e*P | **P** | **22 04 23.9** | **+0.2** | | |
| | comp=Z,63nm,1.9s | | | | | | | | |
| MTE | | | | *e*LR | LR | 22 10 27.8 | | | |
| | comp=Z,1µm,20.0s | | | | | | | | |
| **MTE** | **Manteigas** | **25.03** | **150** | *e*P | **P** | **22 04 24.0** | **+0.2** | | |
| | comp=Z,32nm,1.2s | | | | | | | | |
| **MTE** | **Manteigas** | **25.03** | **150** | *e*P | **P** | **22 04 23.9** | **+0.2** | | |
| | comp=Z,63nm,1.9s | | | | | | | | |
| **GEC2** | **GERESS Array S** | **25.03** | **108** | *e*P | **P** | **22 04 26.1** | **+2.3** | | |
| **GEC2** | **GERESS Array S** | **25.03** | **108** | *e*P | **P** | **22 04 24.9** | **+1.1** | | |
| | comp=Z,59nm,2.2s,baz=319,slow=10 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **25.03** | **108** | *e*P | **P** | **22 04 26.1** | **+2.3** | | |
| **GEC2** | **GERESS Array S** | **25.03** | **108** | *e*P | **P** | **22 04 26.1** | **+2.3** | | |
| **GERES** | **GERESS Array B** | **25.03** | **108** | P | **P** | **22 04 22.7** | **-1.1** | | |
| | comp=Z,1.1nm,0.8s,baz=307,slow=9.7,SNR=4.2 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **25.04** | **103** | *e*P | **P** | **22 04 23.9** | **+0.1** | | |
| DPC | | | | MLR | MLR | | | | |
| | comp=Z,3µm,16.1s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **25.04** | **103** | *e*P | **P** | **22 04 23.9** | **+0.1** | | |
| DPC | | | | AMS | AMS | 22 15 50.0 | | | |
| | comp=Z,3µm,16.1s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **25.04** | **103** | *e*P | **P** | **22 04 23.9** | **+0.1** | | |
| | comp=Z,3µm,16.1s | | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **25.06** | **116** | LR | LR | 22 13 42.2 | | | |
| | comp=Z,1µm,21.2s,baz=319,slow=35 | | | | | | | | |
| **TUE** | **Stuetta** | **25.10** | **117** | *e*P | **P** | **22 04 22.9** | **-1.6** | | |
| | comp=Z,8.2nm,0.8s | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **25.15** | **151** | *e*P | **P** | **22 04 24.0** | **-0.8** | | |
| | comp=Z,49nm,1.8s | | | | | | | | |
| **PCAS** | **Casmilo, Conde** | **25.15** | **151** | *e*P | **P** | **22 04 24.0** | **-0.8** | | |
| | comp=Z,49nm,1.8s | | | | | | | | |
| **BNI** | **Bardonecchia** | **25.23** | **122** | *e*P | **P** | **22 04 25.4** | **-0.3** | | |
| BNI | | | | pmax | pmax | | | | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| **BNI** | **Bardonecchia** | **25.23** | **122** | *e*P | **P** | **22 04 25.4** | **-0.3** | | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| **BNI** | **Bardonecchia** | **25.23** | **122** | *e*P | **P** | **22 04 25.4** | **-0.3** | | |
| | comp=Z,28nm,1.5s | | | | | | | | |
| **TREC** | **Trest** | **25.46** | **105** | *e*P | **P** | **22 04 27.1** | **-0.4** | | |
| TREC | | | | MLR | MLR | | | | |
| | comp=Z,2µm,13.1s | | | | | | | | |
| **TREC** | **Trest** | **25.46** | **105** | *e*P | **P** | **22 04 27.1** | **-0.4** | | |
| TREC | | | | AMS | AMS | 22 16 40.0 | | | |
| | comp=Z,2µm,13.1s | | | | | | | | |
| **TREC** | **Trest** | **25.46** | **105** | *e*P | **P** | **22 04 27.1** | **-0.4** | | |
| | comp=Z,2µm,13.1s | | | | | | | | |
| **RJOB** | **Jochberg** | **25.50** | **111** | *e*P | **P** | **22 04 27.9** | **-0.1** | | |
| | comp=Z,14nm,0.9s,baz=319,slow=10 | | | | | | | | |
| **PCBR** | **Castelo Branco** | **25.58** | **150** | *e*P | **P** | **22 04 29.8** | **+1.2** | | |
| | comp=Z,45nm,1.9s | | | | | | | | |
| **PCBR** | **Castelo Branco** | **25.58** | **150** | *e*P | **P** | **22 04 29.8** | **+1.2** | | |
| | comp=Z,45nm,1.9s | | | | | | | | |
| **RES** | **Resolute Bay** | **25.84** | **325** | LR | LR | 22 14 23.5 | | | |
| | comp=Z,1µm,18.2s,baz=70,slow=36 | | | | | | | | |
| **VRAC** | **Vranov** | **25.93** | **104** | LR | LR | 22 14 30.2 | | | |
| | comp=Z,1µm,21.3s,baz=315,slow=36 | | | | | | | | |
| **BEL** | **Belsk** | **25.96** | **96** | *e*P | **P** | **22 04 33.0** | **+0.9** | | |
| **BEL** | **Belsk** | **25.96** | **96** | *e*P | **P** | **22 04 33.0** | **+0.9** | | |
| **BEL** | **Belsk** | **25.96** | **96** | *e*P | **P** | **22 04 33.0** | **+0.9** | | |
| **PMRV** | **Marv??o** | **25.99** | **150** | *e*P | **P** | **22 04 33.9** | **+1.5** | | |
| | comp=Z,34nm,1.5s | | | | | | | | |
| PMRV | | | | *e*S | S | 22 09 15.3 | +12 | | |
| PMRV | | | | *e*LR | LR | 22 11 08.9 | | | |
| | comp=Z,618nm,22.0s | | | | | | | | |
| **PMRV** | **Marv??o** | **25.99** | **150** | *e*P | **P** | **22 04 33.9** | **+1.5** | | |
| | comp=Z,34nm,1.5s | | | | | | | | |
| **PMAFR** | **Mafra** | **26.04** | **154** | *e*P | **P** | **22 04 28.3** | **-4.6** | | |
| | comp=Z,152nm,1.6s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **26.22** | **101** | AMS | AMS | 22 16 10.0 | | | |
| | comp=Z,2µm,16.3s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **26.59** | **144** | P | **P** | **22 04 36.0** | **-2.0** | | |
| | comp=Z,2.2nm,0.8s,baz=340,slow=8.9,SNR=11 | | | | | | | | |
| ESDC | | | | LR | LR | 22 14 12.5 | | | |
| | comp=Z,1µm,19.1s,baz=330,slow=34 | | | | | | | | |
| **OJC** | **Ojcow** | **26.67** | **99** | *e*P | **P** | **22 04 38.6** | **+0.1** | | |
| **OJC** | **Ojcow** | **26.67** | **99** | *e*P | **P** | **22 04 38.6** | **+0.1** | | |
| **OJC** | **Ojcow** | **26.67** | **99** | *e*P | **P** | **22 04 38.6** | **+0.1** | | |
| **PCVE** | **Castro Verde** | **27.57** | **152** | *e*P | **P** | **22 04 46.4** | **-0.3** | | |
| | comp=Z,41nm,1.7s | | | | | | | | |
| **PCVE** | **Castro Verde** | **27.57** | **152** | *e*P | **P** | **22 04 46.4** | **-0.3** | | |
| | comp=Z,41nm,1.7s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **27.86** | **152** | *e*S | S | 22 09 45.8 | +14 | | |
| PVAQ | | | | *e*LR | LR | 22 11 18.8 | | | |
| | comp=Z,335nm,22.0s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **27.89** | **154** | *e*P | **P** | **22 04 49.7** | **+0.2** | | |
| | comp=Z,106nm,1.6s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **27.89** | **154** | *e*P | **P** | **22 04 49.7** | **+0.2** | | |
| | comp=Z,106nm,1.6s | | | | | | | | |
| **PSZ** | **Piszkesteto** | **28.42** | **102** | *e*P | **P** | **22 04 54.3** | **0.0** | | |
| PSZ | | | | pmax | pmax | | | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **PSZ** | **Piszkesteto** | **28.42** | **102** | *e*P | **P** | **22 04 54.3** | **0.0** | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **PSZ** | **Piszkesteto** | **28.42** | **102** | *e*P | **P** | **22 04 54.3** | **0.0** | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| **LVV** | **L'vov** | **28.84** | **95** | *e*P | **P** | **22 04 56.4** | **-1.5** | | |
| LVV | | | | MLR | MLR | | | | |
| | comp=N,1µm,16.0s | | | | | | | | |
| LVV | | | | MLR | MLR | | | | |
| | comp=E,900nm,16.0s | | | | | | | | |
| LVV | | | | MLR | MLR | | | | |
| | comp=Z,2µm,16.0s | | | | | | | | |
| **LVV** | **L'vov** | **28.84** | **95** | *e*P | **P** | **22 04 56.4** | **-1.5** | | |
| **UZH** | **Uzhgorod** | **28.94** | **99** | *e*P | P | 22 04 55.4 | -3.4 | | |
| UZH | | | | *e*S | S | 22 09 41.0 | -8.1 | | |
| UZH | | | | *e*SS | **SnSn** | **22 11 15.6** | **+4.3** | | |
| UZH | | | | MLR | MLR | | | | |
| | comp=N,1µm,14.0s | | | | | | | | |
| UZH | | | | MLR | MLR | | | | |
| | comp=E,2µm,14.0s | | | | | | | | |
| UZH | | | | MLR | MLR | | | | |
| | comp=Z,800nm,14.0s | | | | | | | | |
| **KIEV** | **Kiev** | **30.54** | **89** | *ce*P | P | 22 05 17.2 | +4.3 | | |
| KIEV | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **30.54** | **89** | P | **P** | **22 05 10.6** | **-2.3** | | |
| | comp=Z,1.3nm,0.7s,baz=317,slow=9.3,SNR=5.5 | | | | | | | | |
| AKASG | | | | LR | LR | 22 17 11.9 | | | |
| | comp=Z,1µm,20.1s,baz=310,slow=36 | | | | | | | | |
| **OBN** | **Obninsk** | **30.82** | **77** | *e*P | **P** | **22 05 15.9** | **+0.6** | | |
| OBN | | | | *e* | | 22 06 12.1 | | | |
| OBN | | | | *e*S | S | 22 10 26.3 | +7.9 | | |
| OBN | | | | *e*SS | **SS** | **22 12 28.7** | **-0.8** | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,35nm,1.7s | | | | | | | | |
| OBN | | | | MLR | MLR | | | | |
| | comp=Z,713nm,15.0s | | | | | | | | |
| **OBN** | **Obninsk** | **30.82** | **77** | *e*P | **P** | **22 05 15.9** | **+0.6** | | |
| | comp=Z,35nm,1.7s | | | | | | | | |
| **PMOZ** | **Porto Moniz, M** | **30.94** | **169** | *e*LR | LR | 22 12 14.7 | | | |
| | comp=Z,395nm,22.0s | | | | | | | | |
| **KEST** | **Kesra** | **34.37** | **128** | P | **P** | **22 05 45.8** | **-0.9** | | |
| | comp=Z,2.5nm,0.9s,baz=259,slow=6.8,SNR=5.0 | | | | | | | | |
| KEST | | | | LR | LR | 22 18 41.4 | | | |
| | comp=Z,981nm,20.6s,baz=332,slow=34 | | | | | | | | |
| **VSR** | **Storozhevoye** | **34.62** | **80** | *e*P | **P** | **22 05 48.4** | **-0.2** | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=N,7.0nm,0.8s | | | | | | | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=E,7.0nm,0.8s | | | | | | | | |
| VSR | | | | MLR | MLR | | | | |
| | comp=Z,1µm,12.0s | | | | | | | | |
| VSR | | | | MLR | MLR | | | | |
| | comp=N,490nm,14.0s | | | | | | | | |
| VSR | | | | MLR | MLR | | | | |
| | comp=E,820nm,13.0s | | | | | | | | |
| **VSR** | **Storozhevoye** | **34.62** | **80** | *e*P | **P** | **22 05 48.4** | **-0.2** | | |
| | comp=E,490nm,14.0s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **35.76** | **79** | *e*P | **P** | **22 05 59.1** | **+0.7** | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=N,20nm,0.9s | | | | | | | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=E,20nm,0.7s | | | | | | | | |
| VRH | | | | MLR | MLR | | | | |
| | comp=Z,1µm,16.0s | | | | | | | | |
| VRH | | | | MLR | MLR | | | | |
| | comp=N,600nm,15.0s | | | | | | | | |
| VRH | | | | MLR | MLR | | | | |
| | comp=E,440nm,20.0s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **35.76** | **79** | *e*P | **P** | **22 05 59.1** | **+0.7** | | |
| | comp=E,600nm,15.0s | | | | | | | | |
| **AGG** | **Agios Georgios** | **36.62** | **110** | *e*P | **P** | **22 06 05.8** | **-0.1** | | |
| AGG | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| **AGG** | **Agios Georgios** | **36.62** | **110** | *e*P | **P** | **22 06 05.8** | **-0.1** | | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| **AGG** | **Agios Georgios** | **36.62** | **110** | *e*P | **P** | **22 06 05.8** | **-0.1** | | |
| | comp=Z,30nm,1.4s | | | | | | | | |
| **SIM** | **Simferopol'** | **37.02** | **92** | *e*P | P | 22 06 18.0 | +8.8 | | |
| SIM | | | | MLR | MLR | | | | |
| | comp=Z,1µm,13.0s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **37.96** | **311** | P | **P** | **22 06 14.9** | **-2.1** | | |
| | comp=Z,0.7nm,0.6s,baz=46,slow=8.9,SNR=4.6 | | | | | | | | |
| **ANN** | **Anapa** | **38.63** | **89** | *e*P | P | 22 06 14.0 | -8.8 | | |
| ANN | | | | pmax | pmax | | | | |
| | comp=Z,82nm,1.5s | | | | | | | | |
| ANN | | | | MLR | MLR | | | | |
| | comp=N,1µm,17.0s | | | | | | | | |
| ANN | | | | MLR | MLR | | | | |
| | comp=Z,2µm,17.0s | | | | | | | | |
| ANN | | | | MLR | MLR | | | | |
| | comp=E,573nm,17.0s | | | | | | | | |
| **INK** | **Inuvik** | **39.37** | **327** | P | **P** | **22 06 26.9** | **-1.8** | | |
| | comp=E,6.0nm,1.2s,baz=29,slow=5.2,SNR=4.6 | | | | | | | | |
| **SOC** | **Sochi** | **40.60** | **88** | *e*P | P | 22 06 42.8 | +3.5 | | |
| SOC | | | | *e* | | 22 08 13.7 | | | |
| SOC | | | | *e*S | S | 22 12 57.8 | +9.3 | | |
| SOC | | | | MLR | MLR | | | | |
| | comp=Z,814nm,16.0s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **40.97** | **97** | P | **P** | **22 06 41.6** | **-0.9** | | |
| | comp=Z,2.7nm,0.9s,baz=328,slow=5.1,SNR=8.8 | | | | | | | | |
| BRTR | | | | LR | LR | 22 26 31.9 | | | |
| | comp=Z,498nm,18.3s,baz=302,slow=40 | | | | | | | | |
| **KIV** | **Kislovodsk** | **41.64** | **85** | *e*P | **P** | **22 06 49.8** | **+1.9** | | |
| KIV | | | | *e*PPP | PPP | 22 08 50.6 | | | |
| KIV | | | | *i* S | S | 22 13 11.1 | +6.9 | | |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| KIV | | | | MLR | MLR | | | | |
| | comp=Z,1µm,22.0s | | | | | | | | |
| **KIV** | **Kislovodsk** | **41.64** | **85** | *e*P | **P** | **22 06 49.8** | **+1.9** | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **KBZ** | **Khabaz** | **41.92** | **85** | P | **P** | **22 06 49.2** | **-0.8** | | |
| | comp=Z,3.1nm,1.1s,baz=299,slow=9.7,SNR=5.1 | | | | | | | | |
| KBZ | | | | LR | LR | 22 24 17.8 | | | |
| | comp=Z,1µm,21.7s,baz=335,slow=36 | | | | | | | | |
| **EGAK** | **Eagle** | **44.04** | **327** | *e*P | **P** | **22 07 06.5** | **-0.5** | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| **MALT** | **Malatya** | **44.26** | **94** | *ce*P | **P** | **22 07 10.8** | **+1.6** | | |
| **MALT** | **Malatya** | **44.26** | **94** | *e*P | **P** | **22 07 10.8** | **+1.6** | | |
| **WCI** | **Wyandotte Cave** | **44.43** | **266** | *e*P | **P** | **22 07 08.9** | **-1.6** | | |
| WCI | | | | pmax | pmax | | | | |
| | comp=Z,705nm,2.5s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **44.43** | **266** | *e*P | **P** | **22 07 08.9** | **-1.6** | | |
| | comp=Z,705nm,2.5s | | | | | | | | |
| **WCI** | **Wyandotte Cave** | **44.43** | **266** | *e*P | **P** | **22 07 08.9** | **-1.6** | | |
| | comp=Z,705nm,2.5s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **45.02** | **67** | *e*P | **P** | **22 07 15.6** | **+0.6** | | |
| | comp=Z,19nm,1.6s | | | | | | | | |
| **TAM** | **Tamanrasset** | **45.13** | **140** | *e*P | **P** | **22 07 15.9** | **-0.4** | | |
| **TAM** | **Tamanrasset** | **45.13** | **140** | *e*P | **P** | **22 07 15.9** | **-0.4** | | |
| **TAM** | **Tamanrasset** | **45.13** | **140** | *e*P | **P** | **22 07 15.9** | **-0.4** | | |
| **ILAR** | **Eielson Array** | **45.40** | **330** | P | **P** | **22 07 16.2** | **-1.6** | | |
| | comp=Z,4.3nm,1.2s,baz=26,slow=7.2,SNR=14 | | | | | | | | |
| ILAR | | | | PcP | **PcP** | **22 08 55.0** | **-1.8** | | |
| | comp=Z,0.8nm,0.6s,baz=356,slow=3.3,SNR=11 | | | | | | | | |
| ILAR | | | | LR | LR | 22 27 21.7 | | | |
| | comp=Z,524nm,18.4s,baz=39,slow=38 | | | | | | | | |
| **COLA** | **College** | **45.53** | **330** | *e*P | **P** | **22 07 19.0** | **+0.2** | | |
| COLA | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **COLA** | **College** | **45.53** | **330** | *e*P | **P** | **22 07 19.0** | **+0.2** | | |
| | comp=Z,4.2nm,0.7s | | | | | | | | |
| **COLA** | **College** | **45.53** | **330** | *e*P | **P** | **22 07 19.0** | **+0.2** | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **GNI** | **Garni** | **45.60** | **87** | *ce*P | **P** | **22 07 21.3** | **+1.4** | | |
| GNI | | | | pmax | pmax | | | | |
| | comp=Z,118nm,1.7s | | | | | | | | |
| **GNI** | **Garni** | **45.60** | **87** | *e*P | **P** | **22 07 21.7** | **+1.8** | | |
| **GNI** | **Garni** | **45.60** | **87** | *e*P | **P** | **22 07 21.3** | **+1.4** | | |
| | comp=Z,118nm,1.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **46.14** | **57** | *ce*P | **P** | **22 07 24.5** | **+0.7** | | |
| BRVK | | | | pmax | pmax | | | | |
| | comp=Z,19nm,1.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **46.14** | **57** | *e*P | **P** | **22 07 23.9** | **+0.1** | | |
| | comp=Z,29nm,1.6s | | | | | | | | |
| **BRVK** | **Borovoye** | **46.14** | **57** | *e*P | **P** | **22 07 24.5** | **+0.7** | | |
| | comp=Z,19nm,1.7s | | | | | | | | |
| **PAX** | **Paxson** | **46.60** | **328** | *e*P | P | 22 07 31.9 | +4.4 | | |
| **PAX** | **Paxson** | **46.60** | **328** | *e*P | P | 22 07 31.9 | +4.4 | | |
| **PBMO** | **Poplar Bluff** | **47.48** | **269** | *e*P | **P** | **22 07 33.4** | **-1.1** | | |
| **WALA** | **Waterton Lakes** | **47.74** | **297** | *e*P | **P** | **22 07 36.0** | **-0.6** | | |
| | comp=Z,40nm,1.8s | | | | | | | | |
| **PMR** | **Palmer** | **48.67** | **329** | *e*P | **P** | **22 07 44.0** | **+0.7** | | |
| PMR | | | | pmax | pmax | | | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **PMR** | **Palmer** | **48.67** | **329** | *e*P | **P** | **22 07 44.0** | **+0.7** | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **PMR** | **Palmer** | **48.67** | **329** | *e*P | **P** | **22 07 44.0** | **+0.7** | | |
| | comp=Z,16nm,1.4s | | | | | | | | |
| **SLMT** | **Seeley Lake** | **49.03** | **296** | *e*P | **P** | **22 07 45.4** | **-1.1** | | |
| | comp=Z,6.1nm,0.7s | | | | | | | | |
| **BSMT** | **Bassoo Peak** | **49.06** | **297** | *e*P | **P** | **22 07 46.8** | **0.0** | | |
| | comp=Z,11nm,1.3s | | | | | | | | |
| **NVS** | **Novosibirsk** | **49.27** | **47** | *e*P | **P** | **22 07 49.1** | **+1.1** | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=Z,61nm,1.9s | | | | | | | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=N,19nm,1.8s | | | | | | | | |
| **NVS** | **Novosibirsk** | **49.27** | **47** | *e*P | **P** | **22 07 49.1** | **+1.1** | | |
| | comp=N,19nm,1.8s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **49.55** | **293** | *e*P | **P** | **22 07 50.1** | **-0.4** | | |
| BOZ | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **49.55** | **293** | *e*P | **P** | **22 07 50.1** | **-0.4** | | |
| | comp=Z,9.8nm,1.0s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **49.55** | **293** | *e*P | **P** | **22 07 50.1** | **-0.4** | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.52** | **47** | P | **P** | **22 07 57.9** | **+0.3** | | |
| | comp=Z,1.0nm,0.8s,baz=335,slow=6.4,SNR=6.3 | | | | | | | | |
| ZALV | | | | PcP | **PcP** | **22 09 13.5** | **-1.8** | | |
| | comp=Z,0.9nm,0.7s,baz=347,slow=5.9,SNR=4.2 | | | | | | | | |
| ZALV | | | | LR | LR | 22 31 13.7 | | | |
| | comp=Z,218nm,18.9s,baz=256,slow=38 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **50.52** | **47** | *i* P | **P** | **22 07 59.2** | **+1.6** | | |
| ZALV | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **50.72** | **293** | *e*P | **P** | **22 07 58.3** | **-1.2** | | |
| | comp=Z,2.4nm,1.4s | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **50.72** | **293** | *e*P | **P** | **22 07 58.3** | **-1.2** | | |
| | comp=Z,2.4nm,1.4s | | | | | | | | |
| **MIAR** | **Mount Ida** | **50.76** | **270** | *e*P | **P** | **22 07 58.6** | **-1.0** | | |
| MIAR | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **MIAR** | **Mount Ida** | **50.76** | **270** | *e*P | **P** | **22 07 58.5** | **-1.0** | | |
| | comp=Z,8.5nm,1.0s | | | | | | | | |
| **MIAR** | **Mount Ida** | **50.76** | **270** | *e*P | **P** | **22 07 58.6** | **-1.0** | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **TPAW** | **Teton Pass** | **51.02** | **291** | *e*P | **P** | **22 08 02.0** | **+0.2** | | |
| **TPAW** | **Teton Pass** | **51.02** | **291** | *e*P | **P** | **22 08 02.0** | **+0.2** | | |
| **BW06** | **Boulder Array** | **51.02** | **289** | *e*P | **P** | **22 07 59.4** | **-2.5** | | |
| | comp=Z,5.3nm,0.9s | | | | | | | | |
| **BW06** | **Boulder Array** | **51.02** | **289** | *e*P | **P** | **22 07 59.3**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| KSH | | | | S | **S** | **22 17 13.3 +0.8** |
| KSH | | | | sS | sS | 22 17 21.8 +4.1 |
| KSH | | | | SS | **SS** | **22 21 10.4 +3.4** |
| KSH | | | | PMZ | | |
| | comp=Z,34nm,1.8s | | | | | |
| KSH | | | | PMZ | | |
| | comp=Z,220nm,5.3s | | | | | |
| KSH | | | | LN | | |
| | comp=Z,1μm,18.7s | | | | | |
| KSH | | | | LE | | |
| | comp=Z,700nm,17.1s | | | | | |
| KSH | | | | LZ | | |
| | comp=Z,1μm,18.4s | | | | | |
| **TXAR** | **Lajitas Array** | **59.70** | **275** | P | P | 22 09 01.2 -3.1 |
| | comp=Z,2.0nm,1.1s,baz=35,slow=4.6,SNR=6.8 | | | | | |
| TXAR | | | | LR | LR | 22 33 48.4 |
| | comp=Z,486nm,21.5s,baz=0.0,slow=35 | | | | | |
| **RAYN** | **Ar Rayn** | **59.99** | **97** | *e*P | **P** | **22 09 06.1 -0.2** |
| | comp=Z,21nm,1.9s | | | | | |
| **RAYN** | **Ar Rayn** | **59.99** | **97** | *e*P | **P** | **22 09 06.1 -0.2** |
| | comp=Z,21nm,1.9s | | | | | |
| **WMQ** | **Urumqi** | **60.19** | **51** | P | P | 22 09 11.0 +3.6 |
| WMQ | | | | sP | sP | 22 09 18.0 +6.2 |
| WMQ | | | | PP | PP | 22 11 27.0 +7.4 |
| WMQ | | | | S | **S** | **22 17 25.0 +4.3** |
| WMQ | | | | PMZ | | |
| | comp=Z,16nm,1.0s | | | | | |
| WMQ | | | | PMZ | | |
| | comp=Z,31nm,6.0s | | | | | |
| WMQ | | | | LN | | |
| | comp=Z,400nm,16.0s | | | | | |
| WMQ | | | | LE | | |
| | comp=Z,520nm,20.0s | | | | | |
| WMQ | | | | LZ | | |
| | comp=Z,460nm,20.0s | | | | | |
| **TUC** | **Tucson** | **60.30** | **283** | *e*P | **P** | **22 09 08.8 +0.4** |
| **TUC** | **Tucson** | **60.30** | **283** | *e*P | **P** | **22 09 08.8 +0.4** |
| **TUC** | **Tucson** | **60.30** | **283** | *e*P | **P** | **22 09 08.8 +0.4** |
| **SONM** | **Songino Array** | **62.30** | **36** | P | **P** | **22 09 20.6 -1.1** |
| | comp=Z,1.4nm,0.8s,baz=334,slow=6.3,SNR=8.2 | | | | | |
| SONM | | | | LR | LR | 22 39 28.5 |
| | comp=Z,332nm,18.5s,baz=330,slow=39 | | | | | |
| **ULN** | **Ulaanbaatar** | **62.45** | **35** | *e*P | **P** | **22 09 23.4 +0.6** |
| ULN | | | | pmax | pmax | |
| | comp=Z,9.0nm,1.4s | | | | | |
| **ULN** | **Ulaanbaatar** | **62.45** | **35** | *e*P | **P** | **22 09 23.4 +0.6** |
| | comp=Z,9.5nm,1.4s | | | | | |
| **ULN** | **Ulaanbaatar** | **62.45** | **35** | *e*P | **P** | **22 09 23.4 +0.6** |
| | comp=Z,9.0nm,1.4s | | | | | |
| **PETK** | **Petropavlovsk-** | **63.77** | **359** | LR | LR | 22 39 36.5 |
| | comp=Z,132nm,18.4s,baz=0.6,slow=38 | | | | | |
| **KLR** | **Kul'dur** | **66.01** | **17** | *i* P | **P** | **22 09 46.7 +0.8** |
| **KLR** | **Kul'dur** | **66.01** | **17** | *i* P | **P** | **22 09 46.7 +0.8** |
| **GTA** | **Gaotai** | **68.15** | **44** | *e*P | **P** | **22 10 00.3 +0.5** |
| GTA | | | | pP | **pP** | **22 10 04.4 +1.4** |
| GTA | | | | sP | **sP** | **22 10 07.1 +2.9** |
| GTA | | | | S | **S** | **22 18 59.4 -0.2** |
| GTA | | | | sS | **sS** | **22 19 07.4 +2.5** |
| GTA | | | | SS | **SS** | **22 23 24.8 +3.6** |
| GTA | | | | PMZ | | |
| | comp=Z,4.0nm,1.6s | | | | | |
| GTA | | | | PMZ | | |
| | comp=Z,59nm,5.9s | | | | | |
| GTA | | | | LN | | |
| | comp=Z,330nm,14.7s | | | | | |
| GTA | | | | LE | | |
| | comp=Z,340nm,17.1s | | | | | |
| GTA | | | | LZ | | |
| | comp=Z,550nm,15.2s | | | | | |
| **ROSC** | **El Rosal** | **68.91** | **236** | LR | LR | 22 39 50.2 |
| | comp=Z,103nm,18.5s,baz=359,slow=36 | | | | | |
| **HHC** | **Hu-ho-hao-te** | **70.15** | **35** | *e*P | **P** | **22 10 13.0 +0.8** |
| HHC | | | | PP | **PP** | **22 12 45.3 -1.4** |
| HHC | | | | S | S | 22 19 14.8 -8.4 |
| HHC | | | | sS | **sS** | **22 19 29.0 +0.6** |
| HHC | | | | PMZ | | |
| | comp=Z,17nm,1.3s | | | | | |
| HHC | | | | PMZ | | |
| | comp=Z,190nm,7.3s | | | | | |
| HHC | | | | LN | | |
| | comp=Z,310nm,17.4s | | | | | |
| HHC | | | | LE | | |
| | comp=Z,310nm,16.9s | | | | | |
| HHC | | | | LZ | | |
| | comp=Z,240nm,16.7s | | | | | |
| **MDJ** | **Mudanjiang** | **70.22** | **20** | P | **P** | **22 10 14.3 +1.9** |
| MDJ | | | | PMZ | | |
| | comp=Z,7.0nm,1.0s | | | | | |
| MDJ | | | | PMZ | | |
| | comp=Z,73nm,6.2s | | | | | |
| **CN2** | **Changchun** | **70.33** | **23** | *e*P | **P** | **22 10 13.0 -0.1** |
| **BJI** | **Beijing** | **72.04** | **31** | P | **P** | **22 10 25.6 +2.1** |
| BJI | | | | S | **S** | **22 19 47.3 +2.5** |
| BJI | | | | PMZ | | |
| | comp=Z,11nm,2.1s | | | | | |
| BJI | | | | PMZ | | |
| | comp=Z,170nm,5.0s | | | | | |
| BJI | | | | LN | | |
| | comp=Z,300nm,16.8s | | | | | |
| BJI | | | | LE | | |
| | comp=Z,180nm,16.4s | | | | | |
| BJI | | | | LZ | | |
| | comp=Z,200nm,28.3s | | | | | |
| **LZH** | **Lanzhou** | **72.45** | **42** | *e*P | **P** | **22 10 28.3 +2.1** |
| LZH | | | | pP | **pP** | **22 10 30.9 +1.5** |
| LZH | | | | sP | **sP** | **22 10 32.4 +1.8** |
| LZH | | | | PMZ | | |
| | comp=Z,13nm,1.0s | | | | | |
| LZH | | | | PMZ | | |
| | comp=Z,99nm,4.0s | | | | | |
| LZH | | | | LN | | |
| | comp=Z,530nm,16.2s | | | | | |
| LZH | | | | LE | | |
| | comp=Z,490nm,15.8s | | | | | |
| LZH | | | | LZ | | |
| | comp=Z,430nm,18.9s | | | | | |
| **KOLN** | **Koldanda** | **72.85** | **62** | *e*P | **P** | **22 10 30.3 +1.5** |
| | comp=Z,20nm,1.3s | | | | | |
| **GKN** | **Gorkha** | **73.05** | **61** | *e*P | **P** | **22 10 29.8 -0.1** |
| | comp=Z,11nm,0.9s | | | | | |
| **KKN** | **Kakani** | **73.49** | **61** | *e*P | **P** | **22 10 32.7 +0.1** |
| **DMN** | **Daman** | **73.59** | **61** | *e*P | **P** | **22 10 33.5 +0.3** |
| **PKIN** | **Phulchoki** | **73.73** | **61** | *e*P | **P** | **22 10 33.9 -0.1** |
| **PKI** | **Pulchoki** | **73.74** | **61** | *e*P | **P** | **22 10 34.3 +0.1** |
| **RAMN** | **Ramite** | **74.76** | **60** | *e*P | **P** | **22 10 40.2 +0.2** |
| | comp=Z,75nm,1.5s | | | | | |
| **TAPN** | **Taplejung** | **74.83** | **59** | *e*P | **P** | **22 10 39.3 -1.2** |
| | comp=Z,26nm,1.4s | | | | | |
| **ODAN** | **Odare** | **75.15** | **59** | *e*P | **P** | **22 10 41.3 -1.0** |
| | comp=Z,30nm,1.3s | | | | | |
| **XAN** | **Xi'an** | **75.84** | **39** | P | P | 22 10 56.3 +10 |
| XAN | | | | pP | **PcP** | **22 11 02.3 +3.9** |
| XAN | | | | pmax | pmax | |
| | comp=Z,5.0nm,0.7s | | | | | |
| XAN | | | | pmax | pmax | |
| | comp=Z,120nm,4.6s | | | | | |
| **KSRS** | **Korea Array** | **76.93** | **23** | LR | LR | 22 47 45.2 |
| | comp=Z,97nm,19.3s,baz=337,slow=38 | | | | | |
| **CD2** | **Chengdu** | **77.22** | **44** | *e*P | **P** | **22 10 54.0 +0.2** |
| CD2 | | | | pP | **pP** | **22 10 57.3 +0.3** |
| CD2 | | | | PP | **PP** | **22 13 47.8 +0.8** |
| CD2 | | | | S | **S** | **22 20 44.5 +1.4** |
| CD2 | | | | sS | **sS** | **22 20 50.1 +1.7** |
| CD2 | | | | SS | **SS** | **22 25 43.3 +3.5** |
| CD2 | | | | PMZ | | |
| | comp=Z,10.0nm,0.5s | | | | | |
| CD2 | | | | PMZ | | |
| | comp=Z,120nm,5.0s | | | | | |
| **KMBO** | **Kilima Mbogo** | **78.47** | **117** | LR | LR | 22 48 52.3 |
| | comp=Z,290nm,18.0s,baz=274,slow=38 | | | | | |
| **NJ2** | **Nanjing** | **80.30** | **31** | *e*P | **P** | **22 11 13.0 +2.4** |
| NJ2 | | | | PMZ | | |
| | comp=Z,30nm,1.0s | | | | | |
| **WHN** | **Wuhan** | **80.62** | **36** | *e*P | P | 22 11 21.1 +8.8 |
| **BDFB** | **Brasilia** | **81.06** | **204** | LR | LR | 22 41 34.0 |
| | comp=Z,216nm,19.1s,baz=22,slow=32 | | | | | |
| **KMI** | **Kunming** | **82.26** | **47** | P | **P** | **22 11 23.1 +1.7** |
| KMI | | | | PMZ | | |
| | comp=Z,6.0nm,1.0s | | | | | |
| KMI | | | | PMZ | | |
| | comp=Z,230nm,4.5s | | | | | |
| **GYA** | **Guiyang** | **82.27** | **43** | *e*P | **P** | **22 11 23.3 +2.0** |
| GYA | | | | PMZ | | |
| | comp=Z,10.0nm,1.0s | | | | | |
| **LPAZ** | **La Paz** | **86.58** | **222** | LR | LR | 22 47 55.5 |
| | comp=Z,59nm,19.3s,baz=5.5,slow=34 | | | | | |
| **CHTO** | **Chiang Mai** | **86.78** | **53** | *e*P | **P** | **22 11 43.8 -0.3** |
| CHTO | | | | pmax | pmax | |
| | comp=Z,28nm,2.0s | | | | | |
| **CHTO** | **Chiang Mai** | **86.78** | **53** | *e*P | **P** | **22 11 43.8 -0.3** |
| | comp=Z,28nm,2.0s | | | | | |
| **CHTO** | **Chiang Mai** | **86.78** | **53** | *e*P | **P** | **22 11 43.8 -0.3** |
| | comp=Z,28nm,2.0s | | | | | |
| **CMAR** | **Chiang Mai Arr** | **87.11** | **53** | P | **P** | **22 11 43.0 -2.7** |
| | comp=Z,0.8nm,0.8s,baz=323,slow=5.9,SNR=6.4 | | | | | |
| CMAR | | | | LR | LR | 22 53 15.2 |
| | comp=Z,204nm,20.0s,baz=316,slow=37 | | | | | |
| **LSZ** | **Lusaka** | **88.11** | **130** | LR | LR | 22 52 41.8 |
| | comp=Z,365nm,19.5s,baz=300,slow=37 | | | | | |
| **TSUM** | **Tsumeb** | **88.49** | **141** | LR | LR | 22 51 36.9 |
| | comp=Z,205nm,19.7s,baz=320,slow=36 | | | | | |
| **QIZ** | **Qiongzhong** | **90.22** | **43** | P | **P** | **22 12 00.8 +0.4** |
| QIZ | | | | S | **S** | **22 22 55.8 +1.6** |
| QIZ | | | | PMZ | | |
| | comp=Z,14nm,2.4s | | | | | |
| **CPUP** | **Villa Florida** | **93.32** | **210** | LR | LR | 22 48 48.3 |
| | comp=Z,111nm,21.3s,baz=18,slow=32 | | | | | |
| **BOSA** | **Boshof** | **99.61** | **138** | LR | LR | 22 59 32.7 |
| | comp=Z,217nm,18.7s,baz=332,slow=36 | | | | | |
| **WRA** | **Warramunga Arr** | **134.04** | **29** | PKP | **PKPdf** | **22 18 15.7 -1.2** |
| | comp=Z,0.3nm,0.8s,baz=330,slow=2.1,SNR=3.2 | | | | | |
| **ASAR** | **Alice Springs** | **137.54** | **31** | PKP | **PKPdf** | **22 18 21.7 -1.7** |
| | comp=Z,0.7nm,0.8s,baz=344,slow=1.2,SNR=6.5 | | | | | |

*DDA* ***23*** *22:01:08.0, 37.76N×38.06E, h5km, Md2.6*
*ISCJB* ***23*** *22:01:08.6±1.3, 37.78N±0.06×38.05E±0.05, h1km±15km, Error ellipse: s-maj=9.4km s-min=6.7km az=0.0*
*CSEM* ***23*** *22:01:09.1±0.2, 37.77N×38.05E, h5km, MD2.4, Error ellipse: s-maj=5.9km s-min=3.6km az=136.0*
*ISK* ***23*** *22:01:12.6, 38.01N×38.05E, h23km, MD2.4*

**ISC 23 22:01:09.0±1.4, 37.76N±0.05×38.01E±0.04, h8km±11km, n19, σ1s23/31, 1C, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKCD** | **Akcadag** | **0.53** | **353** | *i* P | **Pg** | **22 01 18.6** | **-0.8** |
| AKCD | | | | *i* S | **Sg** | **22 01 27.0** | **+0.5** |
| **AKCD** | **Akcadag** | **0.53** | **353** | P | **Pg** | **22 01 18.6** | **-0.8** |
| AKCD | | | | S | **Sg** | **22 01 27.0** | **+0.5** |
| **MALT** | **Malatya** | **0.64** | **31** | *e*PG | **Pg** | **22 01 21.9** | **+0.5** |
| MALT | | | | *e*SG | **Pn** | **22 01 28.7** | **+4.1** |
| **MALT** | **Malatya** | **0.64** | **31** | ⇑*i* P | Pn | 22 01 28.7 | +4.1 |
| **MALT** | **Malatya** | **0.64** | **31** | *e*Pg | **Pg** | **22 01 22.0** | **+0.5** |
| MALT | | | | *e*Sg | **Pn** | **22 01 28.7** | **+4.1** |
| **URFA** | **Urfa** | **0.72** | **116** | *e*PG | Pn | 22 01 29.3 | +3.6 |
| **DARE** | **Darende-Malaty** | **0.90** | **333** | *e*PG | **Pb** | **22 01 27.2** | **+0.1** |
| DARE | | | | *e*SG | **Sg** | **22 01 37.8** | **-0.4** |
| **DARE** | **Darende-Malaty** | **0.90** | **333** | *e*Pg | **Pb** | **22 01 27.2** | **+0.1** |
| DARE | | | | *e*Sg | **Sg** | **22 01 37.8** | **-0.4** |
| **AYKD** | **Aykdinkavak** | **1.01** | **250** | P | **Pg** | **22 01 27.9** | **-0.6** |
| AYKD | | | | S | **Sn** | **22 01 43.7** | **-0.4** |
| **SVRC** | **Sivrice-ELAZID** | **1.20** | **59** | *e*PG | **Pb** | **22 01 31.7** | **-0.4** |
| SVRC | | | | *e*SG | **Sb** | **22 01 46.9** | **-0.9** |
| **SVRC** | **Sivrice-ELAZID** | **1.20** | **59** | *e*Pg | **Pb** | **22 01 31.7** | **-0.4** |
| SVRC | | | | *e*Sg | **Sb** | **22 01 46.9** | **-0.9** |
| **KAMA** | **Osmaniye** | **1.21** | **242** | P | **Pn** | **22 01 32.3** | **-0.1** |
| KAMA | | | | S | **Sn** | **22 01 49.0** | **0.0** |
| **KUZU** | **Kuzuini** | **1.24** | **217** | *i* P | **Pb** | **22 01 33.2** | **+0.5** |
| KUZU | | | | *i* S | **Sn** | **22 01 49.8** | **+0.2** |
| **KUZU** | **Kuzuini** | **1.24** | **217** | P | **Pb** | **22 01 33.2** | **+0.5** |
| KUZU | | | | S | **Sn** | **22 01 49.8** | **+0.2** |
| **ANDN** | **Andirin** | **1.33** | **263** | *i* P | **Pb** | **22 01 34.5** | **+0.2** |
| ANDN | | | | *i* S | **Sn** | **22 01 51.9** | **-0.1** |
| **ANDN** | **Andirin** | **1.33** | **263** | P | **Pb** | **22 01 34.5** | **+0.2** |
| ANDN | | | | S | **Sn** | **22 01 51.9** | **-0.1** |
| **SARI** | **SarD1z-Kayseri** | **1.41** | **298** | *e*PN | **Pg** | **22 01 36.5** | **+0.5** |
| **PTK** | **Pertek** | **1.57** | **44** | *e*PN | **Pn** | **22 01 36.9** | **-0.5** |
| **PTK** | **Pertek** | **1.57** | **44** | *e*Pn | **Pn** | **22 01 36.9** | **-0.5** |

*IPEC* ***23*** *22:04:05.0±0.2, 49.84N×18.54E, h0km, ML1.0/3, Error ellipse: s-maj=2.1km s-min=1.1km az=161.0*
*PRU* ***23*** *22:04:06.1, 49.80N×18.47E, h0km*

**CSEM 23 22:04:03.8±1.1, 49.77N×18.58E, h1km, ML1.8/4, Error ellipse: s-maj=16.1km s-min=11.4km az=87.0, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKC** | **Ostrava-Krasne** | **0.29** | **283** | *i* PG | Pg | 22 04 10.4 | +1.0 |
| OKC | | | | *e*SG | Sg | 22 04 13.9 | +0.7 |
| | comp=Z,28nm,0.7s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.29** | **283** | Pg | Pg | 22 04 10.4 | +1.0 |
| OKC | | | | Sg | Sg | 22 04 13.9 | +0.7 |
| | 28nm,0.7s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.67** | **271** | *e*P | Pb | 22 04 17.9 | -0.6 |
| | 112nm,1.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.67** | **271** | *e*Pg | Pg | 22 04 17.4 | +0.6 |
| MORC | | | | *e*Sg | Sg | 22 04 25.2 | -0.4 |
| | 1.7nm,0.1s | | | | | | |
| **LANS** | **Liptovska Anna** | **0.85** | **137** | *e*PG | Pn | 22 04 23.2 | +0.2 |
| LANS | | | | *e*SG | Sn | 22 04 36.6 | +0.5 |
| **OJC** | **Ojcow** | **0.90** | **60** | *e*Pg | Pb | 22 04 22.5 | +0.2 |
| OJC | | | | *e*Sg | Sb | 22 04 35.8 | +0.9 |
| **NIE** | **Niedzica** | **1.17** | **107** | *e*Pg | Pn | 22 04 29.7 | +2.3 |
| NIE | | | | *e*Sg | Sn | 22 04 48.4 | +4.3 |
| **VYHS** | **Vyhne** | **1.29** | **172** | *e*PG | Pn | 22 04 30.5 | +1.5 |
| VYHS | | | | *e*SG | Sb | 22 04 46.2 | +0.2 |
| **VRAC** | **Vranov** | **1.38** | **251** | *e*Pg | Pb | 22 04 30.5 | +0.1 |
| VRAC | | | | *e*Sg | Sg | 22 04 48.1 | 0.0 |
| | 3.7nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.57** | **292** | *e*PG | Pn | 22 04 33.1 | +0.2 |
| DPC | | | | *e*SG | Sn | 22 04 53.5 | -0.3 |
| **DPC** | **Dobruska-Polom** | **1.57** | **292** | Pg | Pn | 22 04 33.1 | +0.2 |
| DPC | | | | Sg | Sn | 22 04 53.5 | -0.3 |
| **KRUC** | **Moravsky** | **1.60** | **244** | *e*Pg | Pb | 22 04 33.9 | -0.2 |
| KRUC | | | | *e*Sg | Sg | 22 04 55.0 | -0.1 |
| | 1.1nm,0.2s | | | | | | |

**MEX 23 22:04:30.8±0.5, 14.76N×94.47W, h10km, MD4.2, Off coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **1.53** | **52** | *e*P | Pn | 22 04 54.5 | -3.7 |
| PCIG | | | | *e*S | Sn | 22 05 12.9 | -5.3 |
| **TGIG** | | **2.39** | **33** | *e*P | Pn | 22 05 07.6 | -2.6 |
| TGIG | | | | *e*S | Sn | 22 05 35.7 | -3.9 |
| **CCIG** | **Comitan** | **2.71** | **56** | *e*P | Pn | 22 05 13.3 | -1.4 |
| CCIG | | | | *i* S | Sn | 22 05 45.2 | -2.6 |

*ISCJB* ***23*** *22:05:54.7±0.2, 44.63N±0.01×7.25E±0.02, h25km±2km, Error ellipse: s-maj=2.9km s-min=2.0km az=160.0*
*CSEM* ***23*** *22:05:54.7±0.1, 44.63N×7.27E, h15km, ML3.3/37, Error ellipse: s-maj=2.3km s-min=1.8km az=63.0*
*STR* ***23*** *22:05:55.3±0.3, 44.60N×7.24E, h5km, Ml3.1, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*LDG* ***23*** *22:05:55.1±0.0, 44.62N×7.27E, h2km, Md3.1/3, Ml3.1/36, Error ellipse: s-maj=0.8km s-min=0.6km az=69.0*
*GEN* ***23*** *22:05:55.2, 44.60N×7.24E, h14km, ML3.0*

**ISC 23 22:05:54.5±0.8, 44.62N±0.01×7.26E±0.02, h18km±4km, n96, σ1s08/179, 1C, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DOI** | **San Damiano** | **0.12** | **183** | Pg | **Pg** | **22 05 58.5** | **+0.1** |
| DOI | | | | Sg | **Sg** | **22 06 00.3** | **-0.8** |
| | 9μm,0.2s | | | | | | |
| **PZZ** | **Stroppo** | **0.15** | **221** | P | **Pg** | **22 05 58.8** | **-0.1** |
| PZZ | | | | Sg | **Sg** | **22 06 00.9** | **-0.9** |
| | 15μm,0.3s | | | | | | |
| **BHB** | **Bricherasio** | **0.22** | **1** | Pg | **Pb** | **22 06 00.4** | **+0.5** |
| BHB | | | | S | **Sg** | **22 06 03.5** | **+0.2** |
| BHB | | | | Sg | **Sb** | **22 06 04.0** | **+0.5** |
| | 2μm,0.3s | | | | | | |
| **OG22** | **Abries** | **0.30** | **312** | Pg | **Pb** | **22 06 01.7** | **+0.3** |
| OG22 | | | | Sg | **Sg** | **22 06 05.9** | **+0.2** |
| **SURF** | **Saint Ours** | **0.35** | **246** | Pg | **Pg** | **22 06 01.9** | **0.0** |
| SURF | | | | Sg | **Sg** | **22 06 06.8** | **-0.1** |
| **SURF** | **Saint Ours** | **0.35** | **246** | Pg | **Pg** | **22 06 01.9** | **0.0** |
| SURF | | | | Sg | **Sg** | **22 06 06.8** | **-0.1** |
| **MBDF** | **Montbardon** | **0.36** | **287** | *e*Pg | **Pg** | **22 06 02.7** | **+0.6** |
| MBDF | | | | *e*Sg | **Sg** | **22 06 07.6** | **+0.3** |
| | 3μm,0.5s | | | | | | |
| **STV** | **Sant Anna di V** | **0.38** | **172** | P | **Pg** | **22 06 02.3** | **-0.1** |
| STV | | | | Sg | **Sg** | **22 06 07.2** | **-0.6** |
| | 810nm,0.2s | | | | | | |
| **RRL** | **Rocca Remolon** | **0.45** | **312** | Pg | **Pb** | **22 06 04.3** | **+0.3** |
| RRL | | | | Sg | **Sg** | **22 06 10.3** | **+0.4** |
| | 430nm,0.7s | | | | | | |
| **BNI** | **Bardonecchia** | **0.59** | **317** | Pg | **Pb** | **22 06 06.9** | **+0.4** |
| BNI | | | | Sg | **Sg** | **22 06 14.7** | **+0.3** |
| | 171nm,0.7s | | | | | | |
| **MVIF** | **Mont Vial** | **0.73** | **186** | Pg | **Pg** | **22 06 08.4** | **-0.4** |
| MVIF | | | | Sg | **Sg** | **22 06 18.1** | **-0.4** |
| **LUCF** | **Luceram** | **0.73** | **175** | Pg | **Pg** | **22 06 08.4** | **-0.5** |
| LUCF | | | | Sg | **Sg** | **22 06 18.7** | **+0.1** |
| **SBF** | **Sospel** | **0.77** | **170** | *e*Pg | **Pg** | **22 06 09.2** | **-0.3** |
| SBF | | | | *e*Sg | **Sg** | **22 06 19.5** | **-0.2** |
| | 619nm,0.4s | | | | | | |
| **RORO** | **Rocca Rossa** | **0.77** | **131** | Pg | **Pg** | **22 06 09.4** | **-0.2** |
| RORO | | | | Sg | **Sg** | **22 06 19.1** | **-0.7** |
| | 192nm,0.4s | | | | | | |
| **QLNO** | **Quiliano** | **0.83** | **110** | Pg | **Pg** | **22 06 11.1** | **+0.3** |
| QLNO | | | | Sg | **Sg** | **22 06 21.4** | **-0.4** |
| | 488nm,0.3s | | | | | | |
| **LSD** | **Lago del Serru** | **0.84** | **354** | Pg | **Pg** | **22 06 11.3** | **+0.3** |
| LSD | | | | Sg | **Sb** | **22 06 22.7** | **+0.8** |
| | 265nm,0.3s | | | | | | |
| **IMI** | **Imperia** | **0.85** | **147** | Pg | **Pb** | **22 06 10.4** | **-0.3** |
| IMI | | | | Sg | **Sb** | **22 06 21.4** | **-0.3** |
| | 290nm,0.2s | | | | | | |
| **REVF** | **Revere** | **0.89** | **175** | Pg | **Pb** | **22 06 11.0** | **-0.3** |
| REVF | | | | Sg | **Sg** | **22 06 24.4** | **+1.0** |
| **FINB** | **Finale Ligure** | **0.89** | **120** | Pg | **Pb** | **22 06 11.6** | **+0.3** |
| FINB | | | | Sg | **Sb** | **22 06 22.6** | **-0.2** |
| | 795nm,0.3s | | | | | | |
| **CALN** | **Calern** | **0.91** | **197** | Pg | **Pb** | **22 06 12.5** | **+0.7** |
| CALN | | | | Sg | **Sb** | **22 06 23.8** | **+0.2** |
| **PCP** | **Piancastagn** | **0.93** | **95** | Pg | **Pg** | **22 06 12.7** | **+0.2** |
| PCP | | | | Sg | **Sb** | **22 06 24.6** | **+0.6** |
| | 416nm,0.3s | | | | | | |
| **LPG** | **La Plagne** | **0.95** | **338** | *e*Pg | **Pb** | **22 06 13.2** | **+0.6** |
| LPG | | | | *e*Sg | **Sb** | **22 06 25.4** | **+0.5** |
| | 401nm,0.5s | | | | | | |
| **LPG** | **La Plagne** | **0.95** | **338** | *e*Pg | **Pb** | **22 06 13.2** | **+0.6** |
| LPG | | | | *e*Sg | **Sb** | **22 06 25.4** | **+0.5** |
| | 201nm,0.5s | | | | | | |
| **LPL** | **La Plagne** | **0.97** | **338** | *e*Pg | **Pg** | **22 06 13.6** | **+0.2** |
| LPL | | | | *e*Sg | **Sb** | **22 06 26.0** | **+0.5** |
| | 353nm,0.5s | | | | | | |
| **LPL** | **La Plagne** | **0.97** | **338** | *e*Pg | **Pg** | **22 06 13.6** | **+0.2** |
| LPL | | | | *e*Sg | **Sb** | **22 06 26.0** | **+0.5** |
| | 176nm,0.5s | | | | | | |
| **GDM** | **Grand'Maison** | **1.00** | **306** | Pg | **Pn** | **22 06 14.4** | **+0.6** |
| GDM | | | | Sg | **Sg** | **22 06 27.3** | **+0.3** |
| **GDM** | **Grand'Maison** | **1.00** | **306** | Pg | **Pn** | **22 06 14.4** | **+0.6** |
| GDM | | | | Sg | **Sg** | **22 06 27.3** | **+0.3** |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **287** | *e*Pg | **Pb** | **22 06 14.5** | **+0.7** |
| ORIF | | | | *e*Sg | **Sb** | **22 06 26.9** | **0.0** |
| | 261nm,0.5s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **287** | *e*Pg | **Pb** | **22 06 14.5** | **+0.7** |
| ORIF | | | | *e*Sg | **Sb** | **22 06 26.9** | **0.0** |
| | 131nm,0.5s | | | | | | |
| **FRF** | **La Foret Royal** | **1.15** | **203** | *e*Pg | **Pn** | **22 06 16.3** | **+0.6** |
| FRF | | | | *e*Sg | **Sb** | **22 06 30.9** | **+0.5** |
| | 530nm,0.3s | | | | | | |
| **MRGE** | **Morge** | **1.16** | **353** | Pg | **Pn** | **22 06 16.5** | **+0.5** |
| | 164nm,0.7s | | | | | | |
| **GRN** | **Grenoble** | **1.24** | **301** | Pg | **Pg** | **22 06 19.5** | **+1.0** |
| GRN | | | | Sg | **Sg** | **22 06 35.3** | **+0.6** |
| **GRN** | **Grenoble** | **1.24** | **301** | Pg | **Pg** | **22 06 19.5** | **+1.0** |
| GRN | | | | Sg | **Sg** | **22 06 35.3** | **+0.6** |
| **SMRF** | **Simiane la Rot** | **1.37** | **242** | *e*Pg | **Pg** | **22 06 21.2** | **+0.3** |
| SMRF | | | | *e*Sg | **Sg** | **22 06 38.8** | **+0.1** |
| | 172nm,0.5s | | | | | | |
| **LMR** | **La Mourre** | **1.40** | **203** | *e*Pn | **Pn** | **22 06 20.2** | **+1.1** |
| **LMR** | **La Mourre** | **1.40** | **203** | *e*Pg | **Pg** | **22 06 21.5** | **+0.1** |
| LMR | | | | *e*Sg | **Sb** | **22 06 38.9** | **+1.4** |
| | 569nm,0.3s | | | | | | |
| **OG26** | **St.-Nazaire-De** | **1.40** | **269** | Pg | **Pg** | **22 06 22.1** | **+0.7** |
| **OG26** | **St.-Nazaire-De** | **1.40** | **269** | Pg | **Pg** | **22 06 22.1** | **+0.7** |
| **VIVF** | **Saint-Julien-l** | **1.86** | **278** | *e*Pn | **Pb** | **22 06 27.3** | **-0.6** |
| VIVF | | | | *e*Sn | **Sn** | **22 06 49.1** | **+0.6** |
| | 63nm,0.5s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.86** | **278** | *e*Pn | **Pb** | **22 06 27.3** | **-0.6** |
| VIVF | | | | *e*Sn | **Sn** | **22 06 49.1** | **+0.6** |
| | 32nm,0.5s | | | | | | |
| **CABF** | **La Chapelle** | **2.15** | **338** | *e*Pn | **Pn** | **22 06 30.3** | **+0.7** |
| CABF | | | | *e*Sg | **Sg** | **22 07 03.1** | **-0.6** |
| | 274nm,1.3s | | | | | | |
| **CABF** | **La Chapelle** | **2.15** | **338** | *e*Pn | **Pn** | **22 06 30.3** | **+0.7** |
| CABF | | | | *e*Sg | **Sg** | **22 07 03.1** | **-0.6** |
| | 137nm,1.3s | | | | | | |
| **PGF** | **Pioggiola** | **2.43** | **148** | *e*Pn | **Pn** | **22 06 34.0** | **+0.6** |
| PGF | | | | *e*Sn | **Sn** | **22 07 02.6** | **-0.1** |
| | 16nm,0.3s | | | | | | |
| **PGF** | **Pioggiola** | **2.43** | **148** | *e*Pn | **Pn** | **22 06 34.0** | **+0.6** |
| PGF | | | | *e*Sn | **Sn** | **22 07 02.6** | **-0.1** |
| | 7.8nm,0.3s | | | | | | |
| **LASF** | **Ste Croix** | **2.50** | **259** | *e*Pn | **Pn** | **22 06 35.4** | **+1.1** |
| LASF | | | | *e*Sn | **Sn** | **22 07 04.4** | **+0.1** |
| | 22nm,0.6s | | | | | | |
| **SMF** | **Signal de Mont** | **3.14** | **311** | *e*Pn | **Pn** | **22 06 44.2** | **+1.2** |
| SMF | | | | *e*Sg | **Sg** | **22 07 33.9** | **-1.3** |
| | 13nm,0.2s | | | | | | |
| **SMF** | **Signal de Mont** | **3.14** | **311** | *e*Pn | **Pn** | **22 06 44.2** | **+1.2** |
| SMF | | | | *e*Sg | **Sg** | **22 07 33.9** | **-1.3** |
| | 6.6nm,0.2s | | | | | | |
| **HINF** | **Hinteralfeld** | **3.21** | **355** | *e*Pn | **Pn** | **22 06 44.9** | **+0.9** |
| HINF | | | | *e*Sn | **Sn** | **22 07 21.2** | **-0.6** |
| | 6.2nm,0.4s | | | | | | |
| **HINF** | **Hinteralfeld** | **3.21** | **355** | *e*Pn | **Pn** | **22 06 44.9** | **+0.9** |
| HINF | | | | *e*Sn | **Sn** | **22 07 21.2** | **-0.6** |
| | 3.1nm,0.4s | | | | | | |
| **DAVA** | **Damuels** | **3.23** | **34** | ⇑*i* Pn | **Pn** | **22 06 46.7** | **+2.2** |
| **DAVA** | **Damuels** | **3.23** | **34** | Pn | **Pn** | **22 06 46.7** | **+2.2** |
| **HAU** | **Haudompre** | **3.44** | **350** | *e*Pn | **Pn** | **22 06 48.3** | **+1.0** |
| HAU | | | | *e*Sn | **Sn** | **22 07 26.9** | **-0.7** |
| | 22nm,0.6s | | | | | | |
| **HAU** | **Haudompre** | **3.44** | **350** | *e*Pn | **Pn** | **22 06 48.3** | **+1.0** |
| HAU | | | | *e*Sn | **Sn** | **22 07 26.9** | **-0.7** |
| | 11nm,0.6s | | | | | | |
| **AVF** | **Avril sur Loir** | **3.49** | **310** | *e*Pn | **Pn** | **22 06 48.8** | **+0.9** |
| AVF | | | | *e*Sg | **Sg** | **22 07 45.1** | **-1.4** |
| | 29nm,0.7s | | | | | | |
| **AVF** | **Avril sur Loir** | **3.49** | **310** | *e*Pn | **Pn** | **22 06 48.8** | **+0.9** |
| AVF | | | | *e*Sg | **Sg** | **22 07 45.1** | **-1.4** |

5.0nm,0.3s
**SFTF Sexfontaines 3.90 338** *e*Pn **Pn 22 06 54.2 +0.7**
SFTF *e*Sn **Sn 22 07 37.7 -1.1**
2.5nm,0.3s
**TCF Toulx Ste Croi 3.92 297** *e*Pn **Pn 22 06 54.5 +0.7**
TCF *e*Sn **Sn 22 07 38.8 -0.6**
24nm,0.9s
**TCF Toulx Ste Croi 3.92 297** *e*Pn **Pn 22 06 54.5 +0.7**
TCF *e*Sn **Sn 22 07 38.8 -0.6**
12nm,0.9s
**PAGF Fort de Pagny 4.07 346** *e*Pn **Pn 22 06 56.4 +0.5**
baz=160
PAGF *e*Sn **Sn 22 07 41.9 -1.2**
1.9nm,0.4s
**PAGF Fort de Pagny 4.07 346** *e*Pn **Pn 22 06 56.4 +0.5**
PAGF *e*Sn **Sn 22 07 41.9 -1.2**
0.9nm,0.4s
**RJF Les Rejaudoux 4.13 282** *e*Pn **Pn 22 06 57.1 +0.4**
RJF *e*Sg **Sg 22 08 05.0 -2.1**
35nm,0.9s
**RJF Les Rejaudoux 4.13 282** *e*Pn **Pn 22 06 57.1 +0.4**
RJF *e*Sg **Sg 22 08 05.0 -2.1**
17nm,0.9s
**HYF Humbligny 4.17 311** *e*Pn **Pn 22 06 57.8 +0.6**
HYF *e*Sg **Sg 22 08 06.1 -2.2**
**MEZF Maizieres J'vi 4.17 339** *e*Pn **Pn 22 06 57.7 +0.5**
MEZF *e*Sn **Sn 22 07 44.2 -1.2**
2.2nm,0.2s
**MEZF Maizieres J'vi 4.17 339** *e*Pn **Pn 22 06 57.7 +0.5**
MEZF *e*Sn **Sn 22 07 44.2 -1.2**
1.1nm,0.2s
**CLLI Llivia 4.40 243** P **Pn 22 07 02.5 +2.0**
1.6nm,0.3s,SNR=11
CLLI S **Sn 22 07 49.9 -1.4**
2.5nm,0.5s,SNR=7.9
**CFON Fontmartina 4.54 233** P **Pn 22 07 04.2 +1.9**
2.1nm,0.2s,SNR=14
CFON S **Sn 22 07 54.5 -0.2**
6.1nm,0.3s,SNR=7.9
**LFF La Frestale 4.65 276** *e*Pn **Pn 22 07 04.4 +0.6**
LFF *e*Sg **Sg 22 08 21.1 -2.6**
15nm,0.8s
**LFF La Frestale 4.65 276** *e*Pn **Pn 22 07 04.4 +0.6**
LFF *e*Sg **Sg 22 08 21.1 -2.6**
7.6nm,0.8s
**CSOR Sort 4.99 245** P **Pn 22 07 11.7 +3.1**
0.8nm,0.2s,SNR=6.5
CSOR S **Sn 22 08 07.4 +1.6**
3.3nm,0.4s,SNR=7.9
**EPF Esparros 5.25 255** *e*Pn **Pn 22 07 12.8 +0.7**
EPF *e*Sn **Sn 22 08 10.0 -2.2**
3.0nm,0.6s
**GIVF Givet 5.73 344** *e*Pn **Pn 22 07 18.8 +0.2**
GIVF *e*Sn **Sn 22 08 21.1 -2.7**
3.5nm,0.3s
**GIVF Givet 5.73 344** *e*Pn **Pn 22 07 18.8 +0.2**
**BAIF Baives 5.82 340** *e*Pn **Pn 22 07 20.3 +0.4**
BAIF *e*Sn **Sn 22 08 23.6 -2.5**
1.2nm,0.4s
**BAIF Baives 5.82 340** *e*Pn **Pn 22 07 20.3 +0.4**
**ETOS Mallorca 5.87 216** P **Pn 22 07 23.2 +2.7**
0.4nm,0.1s,SNR=6.0
ETOS S **Sn 22 08 26.7 -0.6**
0.3nm,0.2s,SNR=7.9
**ETSF Etsaut 5.92 256** *e*Pn **Pn 22 07 21.8 +0.5**
ETSF *e*Sn **Sn 22 08 26.1 -2.5**
16nm,1.1s
**ETSF Etsaut 5.92 256** *e*Pn **Pn 22 07 21.8 +0.5**
**ATE Arette 5.95 258** P Pn 22 07 26.4 +4.7
SNR=7.9
ATE S **Sn 22 08 32.8 +3.3**
2.3nm,0.5s,SNR=7.9
**ERTA Horta de San J 6.27 237** P **Pn 22 07 28.4 +2.3**
0.3nm,0.2s,SNR=7.9
**GRR Gorron 6.75 307** *e*Pn **Pn 22 07 32.9 +0.3**
**GRR Gorron 6.75 307** *e*Pn **Pn 22 07 32.9 +0.3**
**EMOS Mosqueruela 7.12 236** P **Pn 22 07 39.6 +1.7**
0.2nm,0.1s,SNR=7.9

*MDD **23** 22:21:44.6±0.5, 43°.11N×0°.98W, h1km±5km, mbLg1.4/10, Error ellipse: s-maj=7.9km s-min=2.2km az=9.0, PRXIMO*
*STR **23** 22:21:44.0±0.1, 43°.09N×0°.99W, h5km, Ml1.8, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*LDG **23** 22:21:44.8±0.1, 43°.11N×0°.99W, h2km, Md1.7/2, Ml1.8/1, Error ellipse: s-maj=2.5km s-min=1.4km az=14.0*
**CSEM 23 22:21:44.5±0.1, 43°.09N×0°.96W, h2km, ML1.8, 1C-2D, Error ellipse: s-maj=4.0km s-min=2.2km az=15.0, Pyrenees**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LARF** | **Larrau** | **0.05** | **199** | Pg | Pg | 22 21 46.0 | +0.3 |
| LARF | | | | Sg | Sg | 22 21 47.0 | +0.5 |
| **LARF** | **Larrau** | **0.05** | **199** | Pg | Pg | 22 21 46.0 | +0.3 |
| LARF | | | | Sg | Sg | 22 21 47.0 | +0.5 |
| **ORDF** | **Ordiarp** | **0.13** | **9** | Pg | Pg | 22 21 47.2 | +0.2 |
| ORDF | | | | Sg | Sg | 22 21 49.3 | +0.6 |
| **ORDF** | **Ordiarp** | **0.13** | **9** | Pg | Pg | 22 21 47.2 | +0.2 |
| ORDF | | | | Sg | Sg | 22 21 49.3 | +0.6 |
| **ATE** | **Arette** | **0.19** | **91** | Pg | Pg | 22 21 48.7 | +0.4 |
| ATE | | | | Sg | Sg | 22 21 51.9 | +1.0 |
| **ATE** | **Arette** | **0.19** | **91** | ⇑Pg | Pg | 22 21 48.7 | +0.4 |
| 145nm,0.0s,SNR=18 | | | | | | | |
| ATE | | | | Lg | Lg | 22 21 52.0 | |
| 110nm,0.1s,SNR=7.9 | | | | | | | |
| **ATE** | **Arette** | **0.19** | **91** | Pg | Pg | 22 21 48.7 | +0.4 |
| 145nm,0.0s,SNR=18 | | | | | | | |
| ATE | | | | Sg | Sg | 22 21 51.9 | +1.0 |
| ATE | | | | Lg | Lg | 22 21 52.0 | |
| 110nm,0.1s,SNR=7.9 | | | | | | | |
| **SJPF** | **Ste Jean** | **0.19** | **278** | *e*Pg | Pg | 22 21 48.2 | -0.1 |
| SJPF | | | | *e*Sg | Sg | 22 21 50.4 | -0.5 |
| 45nm,0.2s | | | | | | | |
| **SJPF** | **Ste Jean** | **0.19** | **278** | Pg | Pg | 22 21 48.2 | -0.1 |
| SJPF | | | | Lg | Lg | 22 21 50.4 | |
| 22nm,0.2s | | | | | | | |
| **SJPF** | **Ste Jean** | **0.19** | **278** | *e*Pg | Pg | 22 21 48.2 | -0.1 |
| SJPF | | | | *e*Sg | Sg | 22 21 50.4 | -0.5 |
| 22nm,0.2s | | | | | | | |
| **OSSF** | **Osses** | **0.28** | **308** | Pg | Pg | 22 21 49.6 | -0.2 |
| OSSF | | | | Sg | Sg | 22 21 53.0 | -0.4 |
| **OSSF** | **Osses** | **0.28** | **308** | Pg | Pg | 22 21 49.6 | -0.2 |
| OSSF | | | | Sg | Sg | 22 21 53.0 | -0.4 |
| **ETSF** | **Etsaut** | **0.35** | **122** | *e*Pg | Pg | 22 21 51.3 | -0.1 |
| ETSF | | | | *e*Sg | Sg | 22 21 56.4 | +0.3 |
| 14nm,0.2s | | | | | | | |
| **ETSF** | **Etsaut** | **0.35** | **122** | Pg | Pg | 22 21 51.3 | -0.1 |
| ETSF | | | | Lg | Lg | 22 21 56.4 | |
| 6.8nm,0.2s | | | | | | | |
| **ETSF** | **Etsaut** | **0.35** | **122** | *e*Pg | Pg | 22 21 51.3 | -0.1 |
| ETSF | | | | *e*Sg | Sg | 22 21 56.4 | +0.3 |
| 6.8nm,0.2s | | | | | | | |
| **EALK** | **Alkurruntz** | **0.42** | **288** | Pg | Pg | 22 21 52.3 | -0.2 |
| 0.5nm,0.1s,SNR=22 | | | | | | | |
| EALK | | | | Lg | Lg | 22 21 57.7 | |
| 6.4nm,0.1s,SNR=14 | | | | | | | |
| **EALK** | **Alkurruntz** | **0.42** | **288** | Pg | Pg | 22 21 52.3 | -0.2 |
| 0.5nm,0.1s,SNR=22 | | | | | | | |
| EALK | | | | Lg | Lg | 22 21 57.7 | |
| 6.4nm,0.1s,SNR=14 | | | | | | | |
| **ELIZ** | **Elizondo** | **0.42** | **281** | ⇓Pg | Pg | 22 21 52.3 | -0.3 |
| 0.7nm,0.2s,SNR=18 | | | | | | | |
| ELIZ | | | | Lg | Lg | 22 21 57.9 | |
| 3.5nm,0.2s,SNR=8.4 | | | | | | | |
| **ELIZ** | **Elizondo** | **0.42** | **281** | Pg | Pg | 22 21 52.3 | -0.3 |
| 0.7nm,0.2s,SNR=18 | | | | | | | |
| ELIZ | | | | Lg | Lg | 22 21 57.9 | |
| 3.5nm,0.2s,SNR=8.4 | | | | | | | |
| **EARA** | **Aranguren** | **0.55** | **235** | Pg | Pg | 22 21 55.5 | +0.4 |
| 0.3nm,0.1s,SNR=7.9 | | | | | | | |
| EARA | | | | Lg | Lg | 22 22 03.1 | |
| 5.2nm,0.1s,SNR=6.8 | | | | | | | |
| **EARA** | **Aranguren** | **0.55** | **235** | Pg | Pg | 22 21 55.5 | +0.4 |
| 0.3nm,0.1s,SNR=7.9 | | | | | | | |
| EARA | | | | Lg | Lg | 22 22 03.1 | |
| 5.2nm,0.1s,SNR=6.8 | | | | | | | |
| **EPF** | **Esparros** | **0.96** | **93** | *e*Pg | Pg | 22 22 03.2 | +0.2 |
| EPF | | | | *e*Sg | Sg | 22 22 15.8 | +0.3 |
| 3.3nm,0.3s | | | | | | | |
| **EPF** | **Esparros** | **0.96** | **93** | Pg | Pg | 22 22 03.2 | +0.2 |
| EPF | | | | Lg | Lg | 22 22 15.8 | |
| 1.7nm,0.3s | | | | | | | |
| **EPF** | **Esparros** | **0.96** | **93** | *e*Pg | Pg | 22 22 03.2 | +0.2 |
| EPF | | | | *e*Sg | Sg | 22 22 15.8 | +0.3 |
| 1.6nm,0.3s | | | | | | | |
| **ESAC** | **San Caprasio** | **1.41** | **165** | ⇓Pn | Pg | 22 22 12.3 | +0.6 |
| 5.1nm,0.2s,SNR=18 | | | | | | | |
| ESAC | | | | Lg | Lg | 22 22 31.2 | |
| 4.7nm,0.1s | | | | | | | |
| **ESAC** | **San Caprasio** | **1.41** | **165** | Pn | Pg | 22 22 12.3 | +0.6 |
| 5.1nm,0.2s,SNR=18 | | | | | | | |
| ESAC | | | | Lg | Lg | 22 22 31.2 | |
| 4.7nm,0.1s | | | | | | | |
| **CSOR** | **Sort** | **1.70** | **114** | Pn | Pb | 22 22 16.4 | -0.3 |
| 0.0nm,0.0s,SNR=7.9 | | | | | | | |
| CSOR | | | | Lg | Lg | 22 22 39.3 | |
| 0.9nm,0.2s,SNR=7.9 | | | | | | | |
| **CSOR** | **Sort** | **1.70** | **114** | Pn | Pb | 22 22 16.4 | -0.3 |
| SNR=7.9 | | | | | | | |
| CSOR | | | | Lg | Lg | 22 22 39.3 | |
| 0.9nm,0.2s,SNR=7.9 | | | | | | | |
| **ELAN** | **Lanestosa** | **1.81** | **275** | Pn | Pn | 22 22 17.1 | +0.4 |
| 0.8nm,3.0s,SNR=7.9 | | | | | | | |
| ELAN | | | | Lg | Lg | 22 22 41.5 | |
| 3.1nm,1.8s,SNR=7.9 | | | | | | | |
| **ELAN** | **Lanestosa** | **1.81** | **275** | Pn | Pn | 22 22 17.1 | +0.4 |
| 0.8nm,3.0s,SNR=7.9 | | | | | | | |
| ELAN | | | | Lg | Lg | 22 22 41.5 | |
| 3.1nm,1.8s,SNR=7.9 | | | | | | | |
| **CLLI** | **Llivia** | **2.25** | **105** | Pg | Pb | 22 22 25.9 | -0.1 |
| 0.0nm,0.0s,SNR=7.9 | | | | | | | |
| CLLI | | | | Lg | Lg | 22 22 56.7 | |
| 0.0nm,0.1s,SNR=7.9 | | | | | | | |
| **CLLI** | **Llivia** | **2.25** | **105** | Pg | Pb | 22 22 25.9 | -0.1 |
| SNR=7.9 | | | | | | | |
| CLLI | | | | Lg | Lg | 22 22 56.7 | |
| SNR=7.9 | | | | | | | |
| **EPOB** | **Poblet** | **2.30** | **138** | Pg | Pb | 22 22 27.5 | +0.6 |
| 0.6nm,1.8s,SNR=7.9 | | | | | | | |
| EPOB | | | | Lg | Lg | 22 22 58.4 | |
| 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| **EPOB** | **Poblet** | **2.30** | **138** | Pg | Pb | 22 22 27.5 | +0.6 |
| 0.6nm,1.8s,SNR=7.9 | | | | | | | |
| EPOB | | | | Lg | Lg | 22 22 58.4 | |
| 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| **ERTA** | **Horta de San J** | **2.34** | **155** | Lg | Lg | 22 22 59.5 | |
| 14nm,1.8s,SNR=7.9 | | | | | | | |
| **ERTA** | **Horta de San J** | **2.34** | **155** | Lg | Lg | 22 22 59.5 | |
| 14nm,1.8s,SNR=7.9 | | | | | | | |

**IDC 23 22:42:42.0±3.9, 5°.88S×150°.84E, h0km, mb3.7/2, mb1 4.0/2, mb1mx3.5/31, mbtmp3.8/2, Error ellipse: s-maj=152.8km s-min=50.3km az=119.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **21.27** | **227** | P | P | 22 47 30.0 | -0.2 |
| 1.8nm,0.5s,baz=52,slow=10,SNR=10 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.05** | **221** | P | P | 22 47 58.9 | -0.2 |
| 1.0nm,0.4s,baz=57,slow=8.8,SNR=25 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.75** | **286** | PKPbc | PKPbc | 23 02 32.3 | -0.2 |
| 0.4nm,0.8s,baz=69,slow=2.0,SNR=2.8 | | | | | | | |

*ISCJB **23** 22:48:47.2±0.3, 44°.21N±0°.02×11°.67E±0°.03, h31km±2km, Error ellipse: s-maj=4.0km s-min=3.4km az=172.7*
*CSEM **23** 22:48:47.6±0.1, 44°.19N×11°.71E, h24km±1km, ML2.5/15, Error ellipse: s-maj=3.0km s-min=2.5km az=23.0*
*LDG **23** 22:48:48.2±0.1, 44°.19N×11°.73E, h10km, Ml2.6/16, Error ellipse: s-maj=3.3km s-min=1.8km az=40.0*
**ISC 23 22:48:47.4±0.9, 44°.20N±0°.02×11°.71E±0°.02, h29km±5km, n60, σ0°.99/94, 1C-1D, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IMOL** | **Imola, Italy** | **0.16** | **9** | Pg | **Pb** | **22 48 52.5** | **-0.6** |
| IMOL | | | | Sg | **Sb** | **22 48 57.5** | **+0.6** |
| 107nm,0.3s | | | | | | | |
| **MTRZ** | **Monterenzio** | **0.25** | **316** | Pg | **Pb** | **22 48 53.7** | **-0.4** |
| MTRZ | | | | Sg | **Sn** | **22 48 59.8** | **+1.1** |
| 665nm,0.3s | | | | | | | |
| **VMG** | **Vicchio** | **0.26** | **207** | Pg | **Pb** | **22 48 53.4** | **-0.9** |
| VMG | | | | Sg | **Sb** | **22 48 58.3** | **-0.6** |
| 200nm,0.2s | | | | | | | |
| **SEI** | **Scarperia** | **0.29** | **241** | Pg | **Pb** | **22 48 53.8** | **-0.8** |
| SEI | | | | Sg | **Sb** | **22 48 59.5** | **-0.1** |
| 1µm,0.4s | | | | | | | |
| **SFI** | **Santa Sofia** | **0.31** | **161** | Pg | **Pb** | **22 48 54.1** | **-0.8** |
| SFI | | | | Sg | **Sb** | **22 48 59.7** | **-0.3** |
| 662nm,0.3s | | | | | | | |
| **CMPO** | **Campotto Po** | **0.39** | **10** | Pg | **Pb** | **22 48 54.9** | **-1.1** |
| 252nm,0.8s | | | | | | | |
| **ASQU** | **Asqua** | **0.41** | **172** | Pg | **Pb** | **22 48 55.6** | **-0.7** |
| 226nm,0.5s | | | | | | | |
| **FNVD** | **Fontana Vidola** | **0.42** | **266** | Pg | **Pb** | **22 48 56.1** | **-0.5** |
| **FIU** | **Minerbio Fiu** | **0.47** | **341** | Pg | **Pn** | **22 48 58.9** | **+0.7** |
| **ZCCA** | **Zocca** | **0.55** | **286** | Pg | **Pn** | **22 48 59.5** | **+0.2** |
| 89nm,0.4s | | | | | | | |
| **RSM** | **Repubblica di** | **0.60** | **116** | Pg | **Pn** | **22 49 00.1** | **+0.1** |
| 93nm,0.5s | | | | | | | |
| **CRE** | **Caprese Michel** | **0.60** | **163** | Pg | **Pb** | **22 48 59.1** | **-0.4** |
| 113nm,0.3s | | | | | | | |
| **PARC** | **Parchiule** | **0.67** | **145** | Pg | **Pb** | **22 49 00.1** | **-0.5** |
| 63nm,0.5s | | | | | | | |
| **BDI** | **Bagni Di Lucca** | **0.81** | **261** | Pg | **Pn** | **22 49 03.6** | **+0.6** |
| 94nm,0.4s | | | | | | | |
| **GSCL** | **Gusciola** | **0.82** | **281** | Pg | **Pn** | **22 49 04.5** | **+1.5** |
| 13nm,0.3s | | | | | | | |
| **PESA** | **Pesaro** | **0.86** | **107** | Pg | **Pb** | **22 49 05.4** | **+1.7** |
| 176nm,0.2s | | | | | | | |
| **PIEI** | **Pieia** | **0.89** | **138** | Pg | **Pn** | **22 49 04.1** | **0.0** |
| 67nm,0.3s | | | | | | | |
| **ATPC** | **Peggio Castell** | **0.90** | **143** | Pg | **Pn** | **22 49 04.3** | **+0.2** |
| 64nm,0.4s | | | | | | | |
| **MAIM** | **Mastiano** | **0.92** | **252** | P | **Pb** | **22 49 04.7** | **-0.1** |
| MAIM | | | | S | **Sb** | **22 49 16.7** | **+0.1** |
| **FSSB** | **Fossombrone** | **0.92** | **123** | Pg | **Pb** | **22 49 04.9** | **+0.1** |
| 27nm,0.2s | | | | | | | |
| **ATVO** | **AVT- Monte Val** | **0.96** | **148** | Pg | **Pn** | **22 49 05.2** | **+0.2** |
| 93nm,0.7s | | | | | | | |
| **PII** | **Pisa** | **0.98** | **241** | Pg | **Pn** | **22 49 05.4** | **+0.2** |
| 72nm,0.2s | | | | | | | |
| **ARVD** | **Arcevia** | **1.13** | **128** | Pg | **Pb** | **22 49 08.4** | **0.0** |
| 40nm,0.6s | | | | | | | |
| **TEOL** | **Teolo** | **1.16** | **359** | Pg | **Pn** | **22 49 07.8** | **+0.1** |
| **SC2M** | **Scurtabo** | **1.57** | **278** | S | **Sb** | **22 49 34.5** | **-0.9** |
| **PCP** | **Piancastagn** | **2.29** | **280** | P | **Pn** | **22 49 24.9** | **+1.6** |
| **JAVS** | **Javornik** | **2.38** | **44** | *i* Pn | **Pn** | **22 49 24.3** | **-0.3** |
| JAVS | | | | *i* Sn | **Sn** | **22 49 53.2** | **+0.4** |
| **JAVS** | **Javornik** | **2.38** | **44** | Pn | **Pn** | **22 49 24.3** | **-0.3** |
| JAVS | | | | *i* Sn | **Sn** | **22 49 53.2** | **+0.4** |
| **ROBS** | **Robic** | **2.41** | **31** | *i* Pn | **Pn** | **22 49 24.8** | **-0.1** |
| ROBS | | | | *i* Sn | **Sn** | **22 49 53.7** | **+0.3** |
| **ROBS** | **Robic** | **2.41** | **31** | *i* Pn | **Pn** | **22 49 24.8** | **-0.1** |
| ROBS | | | | *i* Sn | **Sn** | **22 49 53.7** | **+0.3** |
| **PGF** | **Pioggiola** | **2.57** | **231** | *e*Pn | **Pn** | **22 49 27.8** | **+0.6** |
| PGF | | | | *e*Sn | **Sn** | **22 49 57.8** | **+0.2** |
| 9.8nm,0.5s | | | | | | | |
| **PGF** | **Pioggiola** | **2.57** | **231** | *e*Pn | **Pn** | **22 49 27.8** | **+0.6** |
| PGF | | | | *e*Sn | **Sn** | **22 49 57.8** | **+0.2** |
| 4.9nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **2.61** | **12** | ⇑*i* Pn | **Pn** | **22 49 28.7** | **+1.0** |
| **ABTA** | **Abfaltersbach** | **2.61** | **12** | Pn | **Pn** | **22 49 28.7** | **+1.0** |
| **SBF** | **Sospel** | **3.10** | **265** | *e*Pn | **Pn** | **22 49 36.1** | **+1.7** |
| SBF | | | | *e*Sn | **Sn** | **22 50 11.0** | **+0.5** |
| 5.7nm,0.5s | | | | | | | |
| **SBF** | **Sospel** | **3.10** | **265** | *e*Pn | **Pn** | **22 49 36.1** | **+1.7** |
| SBF | | | | *e*Sn | **Sn** | **22 50 11.0** | **+0.5** |
| 2.8nm,0.5s | | | | | | | |
| **MOTA** | **Moosalm** | **3.17** | **353** | ⇓*i* Pn | **Pn** | **22 49 37.5** | **+1.9** |
| **MOTA** | **Moosalm** | **3.17** | **353** | Pn | **Pn** | **22 49 37.5** | **+1.9** |
| **MBDF** | **Montbardon** | **3.57** | **280** | *e*Pn | **Pn** | **22 49 42.4** | **+1.4** |
| MBDF | | | | *e*Sn | **Sn** | **22 50 22.3** | **0.0** |
| 1.8nm,0.4s | | | | | | | |
| **FRF** | **La Foret Royal** | **3.71** | **262** | *e*Pn | **Pn** | **22 49 44.1** | **+1.3** |
| FRF | | | | *e*Sn | **Sn** | **22 50 25.3** | **-0.3** |
| 2.4nm,0.3s | | | | | | | |
| **FRF** | **La Foret Royal** | **3.71** | **262** | *e*Pn | **Pn** | **22 49 44.1** | **+1.3** |
| FRF | | | | *e*Sn | **Sn** | **22 50 25.3** | **-0.3** |
| 1.2nm,0.3s | | | | | | | |
| **LPG** | **La Plagne** | **3.76** | **292** | *e*Pn | **Pn** | **22 49 45.1** | **+1.4** |
| LPG | | | | *e*Sn | **Sn** | **22 50 27.0** | **0.0** |
| 4.9nm,0.5s | | | | | | | |
| **LPG** | **La Plagne** | **3.76** | **292** | *e*Pn | **Pn** | **22 49 45.1** | **+1.4** |
| LPG | | | | *e*Sn | **Sn** | **22 50 27.0** | **0.0** |
| 2.5nm,0.5s | | | | | | | |
| **LPL** | **La Plagne** | **3.77** | **292** | *e*Pn | **Pn** | **22 49 45.4** | **+1.6** |
| LPL | | | | *e*Sn | **Sn** | **22 50 27.3** | **-0.1** |
| 5.7nm,0.6s | | | | | | | |
| **LPL** | **La Plagne** | **3.77** | **292** | *e*Pn | **Pn** | **22 49 45.4** | **+1.6** |
| LPL | | | | *e*Sn | **Sn** | **22 50 27.3** | **-0.1** |
| 2.8nm,0.6s | | | | | | | |
| **LMR** | **La Mourre** | **3.86** | **259** | *e*Pn | **Pn** | **22 49 45.5** | **+0.7** |
| LMR | | | | *e*Sn | **Sn** | **22 50 28.9** | **-0.3** |
| 1.1nm,0.3s | | | | | | | |
| **LMR** | **La Mourre** | **3.86** | **259** | *e*Pn | **Pn** | **22 49 45.5** | **+0.7** |
| LMR | | | | *e*Sn | **Sn** | **22 50 28.9** | **-0.3** |
| 0.6nm,0.3s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **4.23** | **282** | *e*Pn | **Pn** | **22 49 51.1** | **+1.2** |
| ORIF | | | | *e*Sn | **Sn** | **22 50 38.1** | **-0.3** |
| 3.6nm,0.4s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **4.23** | **282** | *e*Pn | **Pn** | **22 49 51.1** | **+1.2** |
| ORIF | | | | *e*Sn | **Sn** | **22 50 38.1** | **-0.3** |
| 1.8nm,0.4s | | | | | | | |
| **SMRF** | **Simiane la Rot** | **4.42** | **269** | *e*Pn | **Pn** | **22 49 53.9** | **+1.3** |
| **SMRF** | **Simiane la Rot** | **4.42** | **269** | *e*Pn | **Pn** | **22 49 53.9** | **+1.3** |
| **CABF** | **La Chapelle** | **4.63** | **303** | *e*Pn | **Pn** | **22 49 57.0** | **+1.5** |
| CABF | | | | *e*Sn | **Sn** | **22 50 47.6** | **-0.8** |
| 4.5nm,0.6s | | | | | | | |
| **CABF** | **La Chapelle** | **4.63** | **303** | *e*Pn | **Pn** | **22 49 57.0** | **+1.5** |
| CABF | | | | *e*Sn | **Sn** | **22 50 47.6** | **-0.8** |
| 2.2nm,0.6s | | | | | | | |
| **HINF** | **Hinteralfeld** | **4.95** | **319** | *e*Pn | **Pn** | **22 50 00.7** | **+0.8** |
| HINF | | | | *e*Sn | **Sn** | **22 50 54.2** | **-2.0** |
| 1.2nm,0.4s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **5.07** | **280** | *e*Pn | **Pn** | **22 50 02.8** | **+1.3** |
| VIVF | | | | *e*Sn | **Sn** | **22 50 58.0** | **-1.1** |
| 1.7nm,0.5s | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **5.07** | **280** | *e*Pn | **Pn** | **22 50 02.8** | **+1.3** |
| VIVF | | | | *e*Sn | **Sn** | **22 50 58.0** | **-1.1** |
| 0.9nm,0.5s | | | | | | | |
| **CDF** | **Champ du Feu** | **5.21** | **325** | *e*Pn | **Pn** | **22 50 04.0** | **+0.5** |
| CDF | | | | *e*Sn | **Sn** | **22 51 01.0** | **-1.7** |
| 0.9nm,0.2s | | | | | | | |
| **CDF** | **Champ du Feu** | **5.21** | **325** | *e*Pn | **Pn** | **22 50 04.0** | **+0.5** |
| CDF | | | | *e*Sn | **Sn** | **22 51 01.0** | **-1.7** |
| 0.4nm,0.2s | | | | | | | |
| **HAU** | **Haudompre** | **5.33** | **318** | *e*Pn | **Pn** | **22 50 05.5** | **+0.5** |
| HAU | | | | *e*Sn | **Sn** | **22 51 03.5** | **-1.9** |
| 7.6nm,0.5s | | | | | | | |
| **LOR** | **Lormes** | **6.29** | **302** | *e*Pn | **Pn** | **22 50 19.0** | **+0.8** |
| LOR | | | | *e*Sn | **Sn** | **22 51 26.6** | **-2.5** |
| 6.3nm,0.4s | | | | | | | |

*ISCJB **23** 22:48:51.4±0.8, 65°.39S±0°.09×175°.1W±0°.4, h10km, mb4.4/10, MS3.9/7, Error ellipse: s-maj=22.0km s-min=12.1km az=162.1*
*IDC **23** 22:48:51.2±0.6, 65°.36S×174°.78W, h0km, mb4.4/7, mb1 4.6/8, mb1mx4.4/18, mbtmp4.4/8, ML3.3/1, MS3.9/8, Ms1 3.9/8, ms1mx3.7/20, Error ellipse: s-maj=26.4km s-min=19.7km az=51.0*
*NEIC **23** 22:48:52.6±0.3, 65°.38S×174°.82W, h10km, mb4.7/3, Error ellipse: s-maj=13.8km s-min=8.9km az=84.0*
**ISC 23 22:48:52.7±0.6, 65°.4S±0°.1×174°.8W±0°.2, h10km, n37, σ0°.70/33, mb4.5/10, MS4.0/7, Pacific-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SBA** | **Scott Base** | **13.69** | **196** | *e*Pn | **Pn** | **22 52 06.6** | **+0.1** |
| 16nm,1.2s | | | | | | | |
| **VNDA** | **Vanda** | **14.08** | **201** | Pn | **Pn** | **22 52 11.1** | **-0.8** |
| 0.1nm,0.3s,baz=45,slow=16,SNR=24 | | | | | | | |
| VNDA | | | | LR | LR | 22 56 40.3 | |
| comp=Z,402nm,18.2s,baz=42,slow=33 | | | | | | | |
| **RPZ** | **Rata Peaks** | **23.10** | **333** | LR | LR | 23 00 54.4 | |
| comp=Z,357nm,19.4s,baz=159,slow=31 | | | | | | | |
| **QSPA** | **South Pole Qui** | **24.71** | **180** | P | **P** | **22 54 14.3** | **+0.5** |
| 2.9nm,0.7s,baz=49,slow=3.9,SNR=9.5 | | | | | | | |
| QSPA | | | | PcP | **PcP** | **22 57 49.2** | **-0.9** |
| 3.2nm,1.0s,baz=338,slow=3.5,SNR=4.3 | | | | | | | |
| QSPA | | | | LR | LR | 23 02 33.1 | |
| comp=Z,208nm,20.6s,baz=47,slow=33 | | | | | | | |
| **URZ** | **Urewera** | **27.57** | **346** | LR | LR | 23 03 28.2 | |
| comp=Z,375nm,20.2s,baz=148,slow=32 | | | | | | | |
| **MAW** | **Mawson** | **41.16** | **209** | P | **P** | **22 56 37.6** | **+1.1** |
| 3.1nm,0.8s,baz=154,slow=9.8,SNR=7.6 | | | | | | | |
| MAW | | | | PcP | **PcP** | **22 58 35.4** | **0.0** |
| 1.5nm,0.8s,baz=97,slow=5.1,SNR=4.0 | | | | | | | |
| **SNAA** | **Sanae** | **43.10** | **176** | *e*P | **P** | **22 56 52.4** | **+0.1** |
| 8.0nm,1.3s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **43.68** | **174** | P | **P** | **22 56 56.9** | **-0.1** |
| baz=202,slow=8.9 | | | | | | | |
| **EIDS** | **Eidsvold** | **45.52** | **315** | *e*P | **P** | **22 57 12.8** | **+0.6** |
| 13nm,1.0s | | | | | | | |
| **PPT** | **Papeete** | **50.66** | **32** | LR | LR | 23 13 35.7 | |
| comp=Z,50nm,20.4s,baz=182,slow=29 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **51.03** | **270** | T | T | 23 53 07.6 | |
| baz=149,slow=76,SNR=58 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **51.04** | **270** | T | T | 23 53 19.9 | |
| baz=149,slow=76,SNR=58 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **51.05** | **270** | T | T | 23 53 12.7 | |
| baz=149,slow=76,SNR=49 | | | | | | | |
| **ASAR** | **Alice Springs** | **52.95** | **296** | P | **P** | **22 58 09.2** | **+0.1** |
| 5.9nm,0.7s,baz=155,slow=7.4,SNR=62 | | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 59 17.2** | **-0.5** |
| 2.1nm,0.8s,baz=147,slow=4.5,SNR=6.3 | | | | | | | |
| **WRA** | **Warramunga Arr** | **56.18** | **299** | P | **P** | **22 58 32.1** | **-0.4** |
| 9.0nm,0.8s,baz=161,slow=6.3,SNR=42 | | | | | | | |
| WRA | | | | PcP | **PcP** | **22 59 30.2** | **0.0** |
| 2.4nm,0.8s,baz=160,slow=3.5,SNR=7.4 | | | | | | | |
| WRA | | | | LR | LR | 23 18 53.8 | |
| comp=Z,154nm,21.7s,baz=135,slow=32 | | | | | | | |
| **WRAB** | **Tennant Creek** | **56.19** | **299** | *e*P | **P** | **22 58 32.0** | **-0.6** |
| 7.6nm,0.8s | | | | | | | |
| **BATI** | **Baumata** | **69.13** | **292** | LR | LR | 23 27 28.5 | |
| comp=Z,125nm,18.4s,slow=34 | | | | | | | |
| **CPUP** | **Villa Florida** | **76.86** | **125** | P | **P** | **23 00 43.9** | **-0.7** |
| 2.4nm,0.9s,baz=128,slow=5.0,SNR=4.0 | | | | | | | |
| **LEM** | **Lembang** | **78.66** | **278** | LR | LR | 23 30 43.0 | |
| comp=Z,67nm,18.8s,slow=32 | | | | | | | |
| **LPAZ** | **La Paz** | **82.08** | **112** | P | **P** | **23 01 14.5** | **+0.6** |
| 4.0nm,1.0s,baz=196,slow=6.3,SNR=15 | | | | | | | |
| **BOSA** | **Boshof** | **85.03** | **198** | P | **P** | **23 01 28.0** | **-0.4** |
| 5.3nm,1.0s,baz=162,slow=6.5,SNR=3.9 | | | | | | | |
| **SONM** | **Songim Array** | **128.04** | **303** | PKP | **PKPdf** | **23 07 57.4** | **-0.3** |
| 0.3nm,0.5s,baz=149,slow=3.0,SNR=3.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **131.44** | **16** | PKP | **PKPdf** | **23 08 04.8** | **+1.3** |
| 4.1nm,0.8s,baz=240,slow=2.5,SNR=29 | | | | | | | |
| **TAM** | **Tamanrasset** | **137.42**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SGSI** | **Sangihe** | **1.68** | **219** | P | **Pn** | **23 25 37.2** | **+1.2** |
| **MATI** | **Mati** | **1.95** | **350** | *eP* | Pn | 23 25 44.7 | +5.1 |
| **DAV** | **Davao City (W)** | **2.28** | **334** | P | Pn | 23 25 51.7 | +7.7 |
| | 70nm,0.3s,baz=244,slow=20,SNR=6.2 | | | | | | |
| DAV | | | | S | Sn | 23 26 20.1 | +9.0 |
| | 40nm,0.3s,baz=61,slow=19,SNR=3.8 | | | | | | |
| DAV | | | | LR | LR | 23 26 30.2 | |
| | comp=Z,123nm,20.7s,baz=270,slow=34 | | | | | | |
| **DMPH** | **Davao City--Mi** | **2.32** | **333**⇑ | *eP* | Pn | 23 25 39.1 | -5.5 |
| DMPH | | | | *eS* | Sn | 23 26 25.1 | +13 |
| **BUKP** | **Musuan** | **3.23** | **332** | *eP* | Pn | 23 26 01.4 | +4.5 |
| **PAGZ** | **Pagadian** | **4.25** | **312** | *eP* | Pn | 23 26 15.1 | +4.3 |
| **TNTI** | **Ternate** | **4.28** | **169** | P | **Pn** | **23 26 12.8** | **+1.5** |
| **KMSI** | **Cibinong** | **5.12** | **211** | P | **Pn** | **23 26 24.3** | **+1.6** |
| **MSLP** | **Maasin** | **5.37** | **342** | *eP* | Pn | 23 26 34.7 | +8.6 |
| **GTOI** | **Gorontalo** | **5.62** | **219** | P | **Pn** | **23 26 29.9** | **+0.3** |
| | 52nm,0.5s,950nm0.2nm | | | | | | |
| **LBMI** | **Labuha** | **5.69** | **171** | P | **Pn** | **23 26 32.2** | **+1.7** |
| | 71nm,0.8s,1μm | | | | | | |
| **MRSI** | **Marisa** | **6.46** | **226** | P | **Pn** | **23 26 42.2** | **+1.1** |
| | 128nm,0.9s,2μm | | | | | | |
| **SANI** | **Sanana** | **7.04** | **185** | P | **Pn** | **23 26 47.5** | **-1.5** |
| **LUWI** | **Luwuk** | **7.12** | **212** | P | Pn | 23 26 56.1 | +6.0 |
| | baz=9.9,SNR=13 | | | | | | |
| **LUWI** | **Luwuk** | **7.12** | **212** | P | **Pn** | **23 26 51.9** | **+1.9** |
| | 144nm,0.7s,5μm | | | | | | |
| **SIJI** | **Sorong** | **7.48** | **141** | P | Pn | 23 26 57.8 | +2.7 |
| | 1.6nm,0.3s,baz=336,slow=20,SNR=4.2 | | | | | | |
| SIJI | | | | S | **Sn** | **23 28 18.8** | **+0.2** |
| | 2.3nm,0.3s,baz=246,slow=19,SNR=4.5 | | | | | | |
| **APSI** | **Ampana** | **7.67** | **220** | P | **Pn** | **23 26 58.8** | **+1.1** |
| | 71nm,1.3s,1μm | | | | | | |
| **MPSI** | **Mapaga** | **8.13** | **235** | P | **Pn** | **23 27 04.4** | **+0.5** |
| | 13nm,0.8s,2μm | | | | | | |
| **NLAI** | **Namlea** | **8.21** | **176** | P | **Pn** | **23 27 04.9** | **-0.1** |
| | 70nm,0.6s,3μm | | | | | | |
| **FAKI** | **Fak Fak** | **9.70** | **144** | P | Pn | 23 27 28.9 | +3.5 |
| | baz=12,SNR=5.3 | | | | | | |
| **TTSI** | **Tana Toraja** | **10.47** | **220** | P | Pn | 23 27 39.5 | +3.6 |
| **KAPI** | **Kappang** | **12.07** | **215** | P | Pn | 23 28 01.7 | +4.0 |
| | 0.9nm,0.3s,baz=12,slow=14,SNR=4.0 | | | | | | |
| **BATI** | **Baumata** | **15.39** | **191** | P | **P** | **23 28 45.0** | **+0.1** |
| | 5.3nm,0.3s,baz=8.4,slow=4.8,SNR=6.4 | | | | | | |
| **MTN** | **Manton Dam** | **18.30** | **166** | P | **P** | **23 29 16.6** | **-0.4** |
| | baz=21,SNR=3.9 | | | | | | |
| **KDU** | **Kakadu** | **18.53** | **162** | P | **Pn** | **23 29 20.1** | **-0.4** |
| | baz=21,SNR=12 | | | | | | |
| **KNRA** | **Kununurra** | **20.67** | **174** | P | **P** | **23 29 43.6** | **+0.8** |
| | baz=24,SNR=9.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **25.94** | **163** | P | **P** | **23 30 34.3** | **-0.2** |
| | 4.6nm,0.3s,baz=343,slow=10.0,SNR=18 | | | | | | |
| WRA | | | | PcP | **PcP** | **23 34 01.7** | **0.0** |
| | 0.6nm,0.4s,baz=322,slow=2.6,SNR=3.6 | | | | | | |
| **QIS** | **Mount Isa** | **28.45** | **154** | P | **P** | **23 30 57.8** | **+0.9** |
| | baz=31,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **29.38** | **166** | P | **P** | **23 31 05.0** | **-0.2** |
| | 5.6nm,0.6s,baz=345,slow=7.1,SNR=56 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 34 10.6** | **+0.5** |
| | 1.2nm,0.5s,baz=344,slow=2.2,SNR=9.4 | | | | | | |
| **WRKA** | **Warakurna** | **29.91** | **177** | P | **P** | **23 31 09.9** | **0.0** |
| | baz=33,SNR=12 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.12** | **299** | P | **P** | **23 31 12.1** | **+0.3** |
| | 0.3nm,0.6s,baz=122,slow=7.1,SNR=2.8 | | | | | | |
| CMAR | | | | LR | LR | 23 43 39.6 | |
| | comp=Z,16nm,19.7s,baz=162,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **32.31** | **2** | P | **P** | **23 31 32.8** | **+2.0** |
| | 0.7nm,0.5s,baz=186,slow=9.8,SNR=2.7 | | | | | | |
| **MEEK** | **Meekatharra** | **32.39** | **193** | P | **P** | **23 31 30.8** | **-0.9** |
| | baz=36,SNR=36 | | | | | | |
| **BLDU** | **Ballidu** | **36.66** | **194** | P | **P** | **23 32 07.5** | **-1.0** |
| | baz=40,SNR=9.9 | | | | | | |
| **KLBR** | **Kellerberrin** | **37.36** | **192** | P | **P** | **23 32 13.8** | **-0.6** |
| | baz=40,SNR=12 | | | | | | |
| **BBOO** | **Buckleboo** | **38.67** | **167** | P | **P** | **23 32 25.7** | **+0.3** |
| | baz=42,SNR=18 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **38.76** | **193** | P | **P** | **23 32 25.9** | **-0.2** |
| | baz=42,SNR=9.0 | | | | | | |
| **HTT** | **Hallett** | **39.98** | **164** | P | P | 23 32 31.7 | -4.7 |
| | baz=43,SNR=5.3 | | | | | | |
| **RKGY** | **Rocky Gully** | **40.44** | **192** | P | **P** | **23 32 40.6** | **+0.6** |
| | baz=44,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **46.05** | **341** | P | **P** | **23 33 26.4** | **+1.1** |
| | 0.4nm,0.5s,baz=155,slow=9.8,SNR=3.8 | | | | | | |
| SONM | | | | PcP | **PcP** | **23 35 01.4** | **+0.7** |
| | 0.3nm,0.5s,baz=145,slow=3.0,SNR=4.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **54.31** | **23** | P | **P** | **23 34 29.6** | **+2.1** |
| | 2.1nm,0.9s,baz=212,slow=5.1,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.43** | **325** | P | **P** | **23 34 42.1** | **-0.8** |
| | 1.0nm,0.6s,baz=114,slow=7.4,SNR=8.7 | | | | | | |
| MKAR | | | | PcP | **PcP** | **23 35 38.7** | **-0.5** |
| | 3.5nm,0.7s,baz=124,slow=2.8,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.39** | **333** | P | **P** | **23 35 02.1** | **-1.3** |
| | 0.5nm,0.4s,baz=135,slow=6.5,SNR=3.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **66.17** | **327** | P | **P** | **23 35 48.0** | **-0.6** |
| | 1.2nm,0.7s,baz=128,slow=8.3,SNR=7.4 | | | | | | |
| **ILAR** | **Eielson Array** | **84.02** | **25** | P | **P** | **23 37 31.2** | **+0.2** |
| | 0.2nm,0.7s,baz=252,slow=7.5,SNR=4.5 | | | | | | |
| **VNDA** | **Vanda** | **84.71** | **173** | P | **P** | **23 37 34.6** | **+0.4** |
| | 2.0nm,0.8s,baz=320,slow=6.8,SNR=11 | | | | | | |
| **ARCES** | **ARCESS Array B** | **89.20** | **340** | P | **P** | **23 37 55.5** | **-0.7** |
| | 6.6nm,1.0s,baz=81,slow=5.6,SNR=5.6 | | | | | | |
| **FINES** | **FINESS Array B** | **90.64** | **332** | P | **P** | **23 38 02.2** | **-0.8** |
| | 2.5nm,0.8s,baz=66,slow=5.2,SNR=16 | | | | | | |
| **NB2** | **NORSAR Subarra** | **97.58** | **334** | P | **P** | **23 38 33.2** | **-1.8** |
| | comp=Z,2.6nm,1.0s,baz=68,slow=4.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **97.58** | **334** | P | **P** | **23 38 33.7** | **-1.3** |
| | comp=Z,1.3nm,0.7s,baz=65,slow=4.6,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **120.93** | **52** | PKP | **PKPdf** | **23 43 54.8** | **+1.1** |
| | comp=Z,0.2nm,0.7s,baz=333,slow=1.0,SNR=3.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.38** | **289** | PKP | **PKPdf** | **23 43 55.9** | **-0.8** |
| | comp=Z,0.7nm,0.7s,baz=61,slow=1.8,SNR=9.6 | | | | | | |

*IDC **23** 23:31:09.8±0.6,34˚.79S×108˚.16W,h0km,mb4.3/11, mb1 4.4/11,mb1mx4.3/21,mbtmp4.3/11,MS4.4/12, Ms1 4.4/12,ms1mx4.4/14,Error ellipse: s-maj=26.4km s-min=19.8km az=128.0*

*ISCJB **23** 23:31:10.2±0.5,34˚.8S±0˚.1×108˚.1W±0˚.1,h10km,mb4.4/17, MS4.5/11,Error ellipse: s-maj=15.7km s-min=13.4km az=136.3*

*NEIC **23** 23:31:11.5±0.4,34˚.79S×108˚.10W,h10km,mb4.7/6,Error ellipse: s-maj=18.3km s-min=14.1km az=120.0*

*GCMT **23** 23:31:11.5±0.2,35˚.07S×108˚.24W,h18km,MW5.3/113, Moment Tension Solution. s78,c125; s113,c205; Duration: 1ŝ1 Moment tensor: Scale 10^17^Nm; Mrr-0.16±.02; Mθθ-0.24±.02; Mϕϕ0.39±.02; Mrθ-0.08±.05; Mθϕ-1.08±.02; Mϕr-0.33±.05; Best double couple: M0 1.17900×10^17^ NP1:ϒϕ7.00000°,δ85.00000°, λ-18.00000°. NP2:ϒϕ99.00000°,δ73.00000°, λ-175.00000°. Principal axes: T 1.2390, Plg9.0000°, Azm54.0000°; N -0.1180, Plg72.0000°, Azm173.0000°; P -1.1200, Plg16.0000°, Azm322.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 23 23:31:11.2±0.5,34˚.8S±0˚.1×108˚.2W±0˚.1,h10km,n63, σ1ŝ59/39,mb4.5/15,MS4.5/11,8C-4D,Southern East Pacific Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RPN** | **Rapa Nui** | **7.73** | **352** | LR | LR | 23 35 15.3 | |
| | comp=Z,2μm,20.6s,baz=168,slow=32 | | | | | | |
| **RKT** | **Rikitea** | **26.09** | **289** | *eLQ* | LQ | 23 41 56.1 | |
| | 1μm,31.5s | | | | | | |
| RKT | | | | *eLR* | LR | 23 42 57.7 | |
| | 635nm,25.2s | | | | | | |
| **RKT** | **Rikitea** | **26.09** | **289** | *eT* | T | 00 03 07.8 | |
| | 3.2nm,0.3s | | | | | | |
| **LVC** | **Limon Verde** | **36.31** | **81** | P | **P** | **23 38 15.2** | **-0.3** |
| | 5.6nm,0.4s,baz=324,slow=3.5,SNR=3.2 | | | | | | |
| **TBI** | **Tubuai** | **37.60** | **276** | *eS* | **S** | **23 44 14.5** | **-1.2** |
| | 347nm,29.2s | | | | | | |
| TBI | | | | *eLQ* | LQ | 23 46 50.5 | |
| | 3μm,31.8s | | | | | | |
| TBI | | | | *eLR* | LR | 23 48 23.1 | |
| | 2μm,26.2s,baz=111 | | | | | | |
| **TBI** | **Tubuai** | **37.60** | **276** | *eT* | T | 00 17 46.3 | |
| | 4.7nm,0.3s | | | | | | |
| **MEH** | **Mehetia** | **39.22** | **285** | *eT* | T | 00 19 38.1 | |
| | 38nm,0.3s | | | | | | |
| **TVO** | **Taravao** | **40.22** | **284** | *eT* | T | 00 20 52.7 | |
| | 1.6nm,0.3s | | | | | | |
| **LPAZ** | **La Paz** | **40.25** | **73** | P | **P** | **23 38 48.3** | **-0.8** |
| | 5.1nm,0.9s,baz=238,slow=6.0,SNR=14 | | | | | | |
| LPAZ | | | | LR | LR | 23 51 37.7 | |
| | comp=Z,414nm,18.3s,baz=232,slow=30 | | | | | | |
| **VAH** | **Vaihoa** | **40.38** | **289** | *eT* | T | 00 20 59.6 | |
| | 5.9nm,0.3s | | | | | | |
| **TIAR** | **Tiarei** | **40.42** | **284** | *eT* | T | 00 21 07.5 | |
| | 7.2nm,0.3s | | | | | | |
| **PAE** | **Paea** | **40.55** | **284** | *eT* | T | 00 21 17.0 | |
| | 0.8nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **40.58** | **284** | *eS* | S | 23 44 49.3 | -12 |
| | 585nm,26.2s | | | | | | |
| PPT2 | | | | *eLQ* | LQ | 23 48 02.2 | |
| | 4μm,28.2s | | | | | | |
| PPT2 | | | | *eLR* | LR | 23 49 46.4 | |
| | 932nm,23.0s,baz=116 | | | | | | |
| **PPT** | **Papeete** | **40.59** | **284** | LR | LR | 23 50 50.0 | |
| | comp=Z,692nm,18.9s,baz=118,slow=29 | | | | | | |
| **CPUP** | **Villa Florida** | **44.20** | **93** | LR | LR | 23 54 34.7 | |
| | comp=Z,497nm,19.0s,baz=251,slow=32 | | | | | | |
| **ROSC** | **El Rosal** | **50.73** | **46** | P | **P** | **23 40 12.6** | **+0.7** |
| | 5.4nm,0.3s,baz=238,slow=2.1,SNR=8.0 | | | | | | |
| ROSC | | | | LR | LR | 23 57 50.2 | |
| | comp=Z,433nm,20.4s,baz=211,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **55.38** | **180** | P | **P** | **23 40 45.3** | **0.0** |
| | 3.2nm,1.0s,baz=117,slow=2.0,SNR=6.1 | | | | | | |
| **SDV** | **Santo Domingo** | **56.13** | **46** | *eP* | **P** | **23 40 50.5** | **-0.9** |
| | 10nm,1.0s | | | | | | |
| **VNDA** | **Vanda** | **56.30** | **195** | P | **P** | **23 40 53.8** | **+2.3** |
| | 0.6nm,0.8s,baz=76,slow=4.2,SNR=2.8 | | | | | | |
| VNDA | | | | LR | LR | 00 00 02.8 | |
| | comp=Z,173nm,18.1s,baz=98,slow=31 | | | | | | |
| **BDFB** | **Brasilia** | **56.87** | **86** | P | **P** | **23 40 57.8** | **+1.2** |
| | 1.7nm,0.5s,baz=230,slow=9.5,SNR=3.7 | | | | | | |
| BDFB | | | | LR | LR | 00 03 20.7 | |
| | comp=Z,448nm,18.9s,baz=236,slow=34 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **60.91** | **158** | P | **P** | **23 41 21.6** | **-2.1** |
| | baz=269,slow=4.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **63.95** | **4** | P | **P** | **23 41 44.6** | **0.0** |
| | 0.7nm,0.9s,baz=180,slow=10.0,SNR=3.4 | | | | | | |
| **JCT** | **Junction City** | **65.43** | **8** | *eP* | **P** | **23 41 55.5** | **+1.3** |
| | 18nm,1.0s | | | | | | |
| **SHPR** | **Sheep Range** | **71.26** | **354** | *eP* | **P** | **23 42 31.4** | **+0.7** |
| | 7.2nm,1.1s | | | | | | |
| **CCUT** | **Cedar City** | **72.16** | **356** | *eP* | **P** | **23 42 35.8** | **-0.5** |
| | 4.8nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.48** | **352** | P | **P** | **23 42 45.9** | **+1.9** |
| | 4.0nm,1.0s,baz=184,slow=6.8,SNR=15 | | | | | | |
| NVAR | | | | LR | LR | 00 08 52.4 | |
| | comp=Z,222nm,19.5s,baz=182,slow=31 | | | | | | |
| **DZM** | **Mont Dzumac** | **74.10** | **254** | *eS* | **SKiKP** | **23 52 17.5** | **+1.2** |
| | 268nm,25.4s | | | | | | |
| **DZM** | **Mont Dzumac** | **74.10** | **254** | *eLR* | LR | 00 05 30.6 | |
| | 1μm,30.2s | | | | | | |
| **BMN** | **Battle Mountai** | **75.34** | **353** | *eP* | **P** | **23 42 54.3** | **-0.5** |
| | 5.2nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **77.47** | **352** | *eP* | **P** | **23 43 08.9** | **+2.2** |
| | 10nm,1.1s | | | | | | |
| **MAW** | **Mawson** | **77.67** | **177** | LR | LR | 00 15 11.2 | |
| | comp=Z,157nm,19.6s,baz=228,slow=34 | | | | | | |
| **ULM** | **Lac du Bonnet** | **85.40** | **8** | P | **P** | **23 43 47.7** | **-0.6** |
| | 2.4nm,0.7s,baz=254,slow=3.3,SNR=2.9 | | | | | | |
| **SCHQ** | **Schefferville** | **96.10** | **23** | LR | LR | 00 22 32.7 | |
| | comp=Z,215nm,21.4s,baz=242,slow=32 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **96.47** | **288** | T | T | 01 31 47.9 | |
| | baz=126 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **96.48** | **288** | T | T | 01 31 48.1 | |
| | baz=126 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **96.48** | **288** | T | T | 01 31 49.0 | |
| | baz=126 | | | | | | |
| **ASAR** | **Alice Springs** | **97.25** | **235** | P | Pdif | 23 44 46.1 | +1.3 |
| | 0.2nm,0.3s,baz=124,slow=4.9,SNR=3.9 | | | | | | |
| ASAR | | | | LR | LR | 00 25 31.7 | |
| | comp=Z,299nm,18.1s,baz=146,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **99.46** | **238** | P | **Pdif** | **23 44 56.5** | **+1.8** |
| | 0.6nm,1.0s,baz=134,slow=4.8,SNR=3.6 | | | | | | |
| WRA | | | | LR | LR | 00 25 49.5 | |
| | comp=Z,471nm,18.6s,baz=160,slow=33 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **100.15** | **214** | T | T | 01 37 11.3 | |
| | baz=145,slow=76,SNR=31 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **100.16** | **214** | T | T | 01 36 52.6 | |
| | baz=145,slow=76,SNR=30 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **100.17** | **214** | T | T | 01 37 03.7 | |
| | baz=145,slow=76,SNR=23 | | | | | | |
| **ESDC** | **Sonseca Array** | **121.16** | **61** | PKP | **PKPdf** | **23 50 05.2** | **+0.9** |
| | 0.5nm,0.7s,baz=205,slow=2.6,SNR=3.0 | | | | | | |
| **DRGR** | | **141.54** | **57** | *iP* | PKPdf | 23 50 37.0 | -5.4 |
| **ARR** | **Arges** | **142.88** | **59** | *iP* | **PKPdf** | **23 50 40.4** | **-4.4** |
| **BURAR** | **Bucovina Array** | **143.23** | **55** | *iP* | **PKPdf** | **23 50 44.0** | **-1.4** |
| **MLR** | **Muntele Rosu** | **143.80** | **59** | *iP* | PKPbc | 23 50 44.5 | +0.3 |
| **TESR** | **Tescani** | **144.26** | **57** | *iP* | **PKPdf** | **23 50 46.3** | **-0.8** |
| **PLOR** | **Plostina** | **144.29** | **58** | *iP* | **PKPdf** | **23 50 46.5** | **-0.7** |
| **VRI** | **Vrincioaia** | **144.34** | **58** | *iP* | PKPbc | 23 50 45.6 | -0.1 |
| **SORM** | **Soroca** | **145.29** | **54** | *iP* | **PKPab** | **23 50 49.4** | **+0.7** |
| **TLB** | **Topalu** | **145.30** | **60** | *iP* | **PKPbc** | **23 50 47.1** | **-1.6** |
| **CFR** | **Carcaliu** | **145.35** | **59** | *iP* | **PKPab** | **23 50 49.0** | **0.0** |
| **KIEV** | **Kiev** | **145.46** | **49** | *e*PKPbc | **PKPdf** | **23 50 48.6** | **-0.4** |
| **AKASG** | **Malin Array Be** | **145.47** | **49** | PKPbc | **PKPdf** | **23 50 48.1** | **-0.9** |
| | 3.1nm,0.7s,baz=279,slow=3.5,SNR=14 | | | | | | |
| **ANTO** | **Ankara** | **148.75** | **69** | *i*P | **PKPbc** | **23 50 57.8** | **-1.0** |
| **ANTO** | **Ankara** | **148.75** | **69** | *e*PKPbc | **PKPbc** | **23 50 59.4** | **+0.6** |
| **BRTR** | **Keskin Array B** | **149.39** | **69** | PKPbc | **PKPbc** | **23 50 58.7** | **-1.9** |
| | 2.5nm,1.0s,baz=207,slow=2.2,SNR=11 | | | | | | |
| **ULN** | **Ulaanbaatar** | **150.78** | **307** | *e*PKPbc | **PKPbc** | **23 51 03.5** | **-0.1** |
| ULN | | | | *e*PKPab | **PKPab** | **23 51 11.5** | **+0.7** |
| **CMAR** | **Chiang Mai Arr** | **150.92** | **243** | PKPbc | **PKPbc** | **23 51 03.5** | **-1.1** |
| | 3.7nm,1.0s,baz=189,slow=2.1,SNR=14 | | | | | | |
| **CHTO** | **Chiang Mai** | **151.14** | **243** | *e*PKPbc | **PKPbc** | **23 51 05.1** | **-0.1** |
| **SONM** | **Songino Array** | **151.21** | **307** | PKPbc | **PKPbc** | **23 51 02.5** | **-2.2** |
| | 3.5nm,1.1s,baz=96,slow=2.4,SNR=10.0 | | | | | | |
| **MALT** | **Malatya** | **153.04** | **73** | *i*P | **PKPbc** | **23 51 13.6** | **+4.6** |
| **BVAR** | **Borovoye Array** | **161.77** | **3** | PKPab | **PKPab** | **23 51 56.4** | **-1.0** |
| | 0.6nm,0.7s,baz=347,slow=3.3,SNR=3.7 | | | | | | |

**WEL 24 00:02:41.8±0.1,43˚.64S×172˚.45E,h5km,ML3.6/17,4C-2D, Error ellipse: s-maj=0.5km s-min=0.4km az=0.0,South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.14** | **62** | ⇑PG | Pg | 00 02 44.7 | +0.2 |
| CRLZ | | | | SG | Sg | 00 02 46.5 | 0.0 |
| CRLZ | | | | AML | AML | 00 02 46.9 | |
| **MQZ** | **McQueen's Vall** | **0.16** | **114** | ⇓PG | Pg | 00 02 45.2 | +0.2 |
| MQZ | | | | SG | Sg | 00 02 47.2 | +0.1 |
| MQZ | | | | AML | AML | 00 02 47.6 | |
| **OXZ** | **Oxford** | **0.44** | **316** | PG | Pg | 00 02 50.7 | +0.5 |
| **LTZ** | **Lake Taylor** | **0.87** | **351** | P* | Pg | 00 02 58.6 | 0.0 |
| LTZ | | | | S* | Sg | 00 03 10.2 | +0.3 |
| LTZ | | | | AML | AML | 00 03 10.9 | |
| **RPZ** | **Rata Peaks** | **1.02** | **265** | P* | Pg | 00 03 01.5 | +0.2 |
| RPZ | | | | AML | AML | 00 03 16.8 | |
| RPZ | | | | AML | AML | 00 03 21.0 | |
| **WVZ** | **Waitaha Valley** | **1.37** | **294** | ⇑PN | Pn | 00 03 06.8 | -0.8 |
| WVZ | | | | AML | AML | 00 03 31.5 | |
| WVZ | | | | AML | AML | 00 03 33.4 | |
| **KHZ** | **Kahutara** | **1.46** | **33** | PN | Pn | 00 03 06.3 | -2.4 |
| KHZ | | | | AML | AML | 00 03 27.2 | |
| KHZ | | | | AML | AML | 00 03 27.9 | |
| **LBZ** | **Lake Benmore** | **1.80** | **245** | PN | Pn | 00 03 12.7 | -0.8 |
| LBZ | | | | AML | AML | 00 03 42.1 | |
| LBZ | | | | AML | AML | 00 03 42.1 | |
| LBZ | | | | AML | AML | 00 03 46.2 | |
| **ODZ** | **Otahua Downs** | **1.91** | **222** | ⇑PN | Pn | 00 03 13.8 | -1.2 |
| ODZ | | | | AML | AML | 00 03 52.2 | |
| ODZ | | | | AML | AML | 00 03 52.2 | |
| ODZ | | | | AML | AML | 00 03 53.0 | |
| ODZ | | | | AML | AML | 00 03 53.0 | |
| **THZ** | **Tophouse** | **1.91** | **10** | ⇓PN | Pn | 00 03 13.1 | -1.9 |
| THZ | | | | AML | AML | 00 03 50.5 | |
| THZ | | | | AML | AML | 00 03 50.6 | |
| **DSZ** | **Denniston Nort** | **1.96** | **346** | AML | AML | 00 03 42.7 | |
| DSZ | | | | AML | AML | 00 03 49.7 | |
| **FOZ** | **Fox Glacier** | **2.01** | **271** | PN | Pn | 00 03 15.2 | -1.0 |
| FOZ | | | | AML | AML | 00 03 49.7 | |
| **BSWZ** | **Blackbirch Sta** | **2.20** | **29** | PN | Pn | 00 03 16.9 | -2.0 |
| **NNZ** | **Nelson** | **2.52** | **16** | PN | Pn | 00 03 22.0 | -1.3 |
| **JCZ** | **Jackson Bay** | **2.71** | **260** | ⇑PN | Pn | 00 03 25.8 | -0.2 |
| JCZ | | | | AML | AML | 00 04 20.6 | |
| **WKZ** | **Wanaka** | **2.74** | **243** | AML | AML | 00 04 16.0 | |
| **EAZ** | **Earnscleugh** | **2.75** | **234** | PN | Pn | 00 03 25.5 | -1.1 |
| EAZ | | | | AML | AML | 00 04 13.8 | |
| EAZ | | | | AML | AML | 00 04 21.4 | |
| **QRZ** | **Quartz Range** | **2.81** | **1** | PN | Pn | 00 03 25.5 | -1.9 |
| QRZ | | | | AML | AML | 00 04 11.5 | |
| QRZ | | | | AML | AML | 00 04 13.3 | |
| QRZ | | | | AML | AML | 00 04 13.3 | |
| **PLWZ** | **Palliser** | **2.93** | **46** | PN | Pn | 00 03 25.9 | -3.1 |
| **TUZ** | **Tuapeka** | **3.06** | **220** | PN | Pn | 00 03 29.5 | -1.2 |
| TUZ | | | | AML | AML | 00 04 26.5 | |
| TUZ | | | | AML | AML | 00 04 33.9 | |
| **CAW** | **Cannon Point** | **3.19** | **38** | PN | Pn | 00 03 29.3 | -3.3 |
| CAW | | | | AML | AML | 00 04 07.3 | |
| **KIW** | **Kapiti Island** | **3.33** | **34** | PN | Pn | 00 03 32.3 | -2.1 |
| **MTW** | **Mount Morrison** | **3.36** | **43** | PN | Pn | 00 03 31.6 | -3.3 |

*CSEM **24** 00:12:25.8,39˚.45N×29˚.75W,h10km,ML2.6,After PDA*

**PDA 24 00:12:25.8±0.6,39˚.45N×29˚.75W,h10km,MD3.6,ML2.6, Error ellipse: s-maj=15.1km s-min=5.5km az=50.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCED** | **Cedros** | **1.16** | **135** | *eP* | Pb | 00 12 43.1 | -4.8 |
| PCED | | | | *eS* | Sb | 00 12 56.4 | -6.6 |
| PCED | | | | A | A | 00 12 57.4 | |
| | 40nm,0.5s | | | | | | |
| **PCED** | **Cedros** | **1.16** | **135** | *eP* | Pb | 00 12 43.1 | -4.8 |
| PCED | | | | *eS* | Sb | 00 12 56.4 | -6.6 |
| **ROSA** | **Rosais** | **1.38** | **121** | *eP* | Pn | 00 12 46.5 | -4.7 |
| ROSA | | | | *eS* | Sb | 00 13 01.9 | -7.6 |
| ROSA | | | | A | A | 00 13 02.8 | |
| | 14nm,0.4s | | | | | | |
| **ROSA** | **Rosais** | **1.38** | **121** | *eP* | Pn | 00 12 46.5 | -4.7 |
| ROSA | | | | *eS* | Sb | 00 13 01.9 | -7.6 |
| **PCAN** | **Candelaria** | **1.39** | **134** | *eP* | Pn | 00 12 46.7 | -4.7 |
| PCAN | | | | *eS* | Sn | 00 13 02.6 | -7.2 |
| PCAN | | | | A | A | 00 13 04.5 | |
| | 44nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.39** | **134** | *eP* | Pn | 00 12 46.7 | -4.7 |
| PCAN | | | | *eS* | Sn | 00 13 02.6 | -7.2 |
| **PICO** | **Pico** | **1.40** | **132** | *eP* | Pn | 00 12 47.0 | -4.5 |
| PICO | | | | *eS* | Sn | 00 13 02.5 | -7.7 |
| **PICO** | **Pico** | **1.40** | **132** | *eP* | Pn | 00 12 47.0 | -4.5 |
| PICO | | | | *eS* | Sn | 00 13 02.5 | -7.7 |

*ISCJB **24** 00:17:28.9±0.6,36˚.33N±0˚.02×35˚.70E±0˚.04,h13km±4km, Error ellipse: s-maj=5.8km s-min=3.6km az=166.3*

*ISK **24** 00:17:28.7,36˚.54N×35˚.79E,h2km,MD2.4*

*CSEM **24** 00:17:29.1±0.2,36˚.35N×35˚.72E,h14km±1km,MD2.4, Error ellipse: s-maj=5.0km s-min=3.1km az=60.0*

*DDA **24** 00:17:30.1,36˚.37N×35˚.79E,h10km,Md2.8*

*NSSC **24** 00:17:30.7±1.1,36˚.27N×35˚.77E,h8km±5km,MD0.9,ML1.8*

**ISC 24 00:17:29.0±0.9,36˚.35N±0˚.02×35˚.73E±0˚.03,h16km±8km, n28,σ0ŝ41/51,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KRTS** | **Karatas** | **0.36** | **308** | *e*PG | **Pg** | **00 17 36.0** | **-0.3** |
| KRTS | | | | *e*SG | **Sg** | **00 17 41.8** | **+0.4** |
| **KRTS** | **Karatas** | **0.36** | **308** | *e*Pg | **Pg** | **00 17 36.0** | **-0.3** |
| KRTS | | | | *e*Sg | **Sg** | **00 17 41.8** | **+0.4** |
| **TAHT** | **Tahtakopru-Hat** | **0.37** | **86** | *e*PG | **Pb** | **00 17 37.0** | **-0.2** |
| TAHT | | | | *e*SG | **Sb** | **00 17 42.6** | **-0.2** |
| **TAHT** | **Tahtakopru-Hat** | **0.37** | **86** | *e*Pg | **Pb** | **00 17 37.1** | **-0.2** |
| TAHT | | | | *e*Sg | **Sb** | **00 17 42.6** | **-0.2** |
| **YAYL** | **Yayladag** | **0.44** | **136** | *i* P | **Pg** | **00 17 38.1** | **+0.2** |
| YAYL | | | | *i* S | **Sg** | **00 17 44.4** | **+0.4** |
| **YAYL** | **Yayladag** | **0.44** | **136** | P | **Pg** | **00 17 38.1** | **+0.2** |
| YAYL | | | | S | **Sg** | **00 17 44.4** | **+0.4** |
| **ARNB** | **Al Arnab** | **0.53** | **158** | *e*P | **Pg** | **00 17 39.2** | **-0.3** |
| ARNB | | | | *e*S | **Sg** | **00 17 45.2** | **-1.5** |
| ARNB | | | | AML | AML | 00 17 49.0 | |
| | comp=E,22nm,0.2s | | | | | | |
| ARNB | | | | AML | AML | 00 17 49.1 | |
| | comp=N,40nm,0.3s | | | | | | |
| **BTCH** | **Batrach** | **0.67** | **118** | *e*P | **Pb** | **00 17 42.5** | **+0.1** |
| BTCH | | | | *e*S | **Sg** | **00 17 51.1** | **0.0** |
| BTCH | | | | AML | AML | 00 17 53.5 | |
| | comp=E,58nm,0.5s | | | | | | |
| BTCH | | | | AML | AML | 00 17 57.9 | |
| | comp=N,48nm,0.4s | | | | | | |
| **BTCH** | **Batrach** | **0.67** | **118** | *e*P | **Pb** | **00 17 42.5** | **+0.1** |
| BTCH | | | | *e*S | **Sg** | **00 17 51.1** | **0.0** |
| | comp=N,48nm,0.4s | | | | | | |
| **WRDH** | **Warideh** | **1.01** | **146** | *e*P | **Pb** | **00 17 48.3** | **+0.1** |
| WRDH | | | | *e*S | **Sb** | **00 18 01.6** | **+0.3** |
| WRDH | | | | AML | AML | 00 18 04.4 | |
| | comp=N,42nm,0.4s | | | | | | |
| **WRDH** | **Warideh** | **1.01** | **146** | *e*P | **Pb** | **00 17 48.3** | **+0.1** |
| WRDH | | | | *e*S | **Sb** | **00 18 01.6** | **+0.3** |
| | comp=N,42nm,0.4s | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| JCZ | | | | | AML | AML | 00 28 42.1 | | |
| JCZ | | | | | AML | AML | 00 28 43.2 | | |
| **EAZ** | **Earnscleugh** | **1.33** | **103** | ⇓PN | Pn | Pn | 00 28 22.6 | 0.0 | |
| EAZ | | | | | AML | AML | 00 28 38.5 | | |
| EAZ | | | | | AML | AML | 00 28 38.5 | | |
| EAZ | | | | | AML | AML | 00 28 39.8 | | |
| EAZ | | | | | AML | AML | 00 28 39.8 | | |
| **PYZ** | **Puysegur Point** | **1.33** | **204** | PN | Pn | Pn | 00 28 23.5 | +0.8 | |
| **TUZ** | **Tuapeka** | **1.82** | **124** | PN | Pn | Pn | 00 28 28.5 | -0.7 | |
| TUZ | | | | | AML | AML | 00 28 51.0 | | |
| TUZ | | | | | AML | AML | 00 28 51.0 | | |
| TUZ | | | | | AML | AML | 00 28 51.3 | | |
| TUZ | | | | | AML | AML | 00 28 51.3 | | |
| **APZ** | **The Paps** | **1.91** | **169** | ⇑PN | Pn | Pn | 00 28 30.5 | 0.0 | |
| APZ | | | | | AML | AML | 00 28 54.5 | | |
| APZ | | | | | AML | AML | 00 28 55.6 | | |
| **SYZ** | **Scrubby Hill** | **1.97** | **144** | PN | Pn | Pn | 00 28 30.6 | -0.5 | |
| SYZ | | | | | AML | AML | 00 28 54.7 | | |
| SYZ | | | | | AML | AML | 00 28 54.7 | | |
| SYZ | | | | | AML | AML | 00 28 55.0 | | |
| SYZ | | | | | AML | AML | 00 28 55.0 | | |
| **LBZ** | **Lake Benmore** | **2.02** | **75** | ⇓PN | Pn | Pn | 00 28 30.8 | -1.0 | |
| LBZ | | | | | AML | AML | 00 28 53.9 | | |
| LBZ | | | | | AML | AML | 00 29 00.5 | | |
| **FOZ** | **Fox Glacier** | **2.11** | **50** | PN | Pn | Pn | 00 28 32.9 | -0.2 | |
| FOZ | | | | | AML | AML | 00 29 08.2 | | |
| FOZ | | | | | AML | AML | 00 29 09.7 | | |
| **ODZ** | **Otahua Downs** | **2.25** | **93** | ⇓PN | Pn | Pn | 00 28 34.0 | -1.0 | |
| ODZ | | | | | AML | AML | 00 28 59.0 | | |
| ODZ | | | | | AML | AML | 00 28 59.9 | | |
| **HHSZ** | **Highcliff Hill** | **2.39** | **114** | ⇓PN | Pn | Pn | 00 28 36.6 | -0.3 | |
| **RPZ** | **Rata Peaks** | **2.85** | **66** | PN | Pn | Pn | 00 28 41.7 | -1.6 | |
| RPZ | | | | | AML | AML | 00 29 18.9 | | |
| RPZ | | | | | AML | AML | 00 29 19.1 | | |
| **WVZ** | **Waitaha Valley** | **3.01** | **53** | PN | Pn | Pn | 00 28 43.7 | -1.6 | |
| **MQZ** | **McQueen's Vall** | **3.92** | **73** | PN | Pn | Pn | 00 28 55.5 | -2.2 | |
| **THZ** | **Tophouse** | **5.08** | **53** | PN | Pn | Pn | 00 29 13.0 | -0.8 | |
| **QRZ** | **Quartz Range** | **5.55** | **44** | PN | Pn | Pn | 00 29 18.7 | -1.4 | |

*ISCJB **24** 00:36:38.0±0.7,38.˚74N±0.˙02×26.˚62E±0.˙05,h0km±7km, Error ellipse: s-maj=7.1km s-min=3.9km az=171.1*
*DDA **24** 00:36:37.8,38.˚76N×26.˚59E,h7km,Md2.8*
*CSEM **24** 00:36:38.5±0.3,38.˚72N×26.˚63E,h5km,MD2.5,Error ellipse: s-maj=7.6km s-min=4.6km az=88.0*
*ISK **24** 00:36:38.4,38.˚66N×26.˚66E,h7km,MD2.5*
**ISC 24 00:36:37.7±1.2,38.72N±0.˙02×26.59E±0.˙03,h3km±11km, n26,σ0°51/38,Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **DKL** | **Dikili** | **0.43** | **35** | *e*PG | | **Pb** | **00 36 47.8** | **-0.2** |
| **DKL** | **Dikili** | **0.43** | **35** | *e*Pg | | **Pb** | **00 36 47.8** | **-0.2** |
| **ZEY** | **˙zmir** | **0.48** | **188** | P | | **Pg** | **00 36 47.5** | **+0.6** |
| ZEY | | | | S | | **Sb** | **00 36 56.5** | **+0.3** |
| **BLCB** | **Balcova** | **0.48** | **133** | *e*PG | | **Pg** | **00 36 46.6** | **-0.3** |
| BLCB | | | | *e*SG | | **Sg** | **00 36 52.8** | **-0.4** |
| **BLCB** | **Balcova** | **0.48** | **133** | *e*Pg | | **Pg** | **00 36 46.6** | **-0.3** |
| BLCB | | | | *e*Sg | | **Sg** | **00 36 52.8** | **-0.4** |
| **CHOS** | **Chios island** | **0.53** | **232** | *e*PG | | **Pb** | **00 36 49.5** | **-0.2** |
| **CHOS** | **Chios island** | **0.53** | **232** | *e*Pg | | **Pb** | **00 36 49.5** | **-0.2** |
| **AYVA** | **Ayvalik** | **0.60** | **7** | *i* P | | **Pg** | **00 36 49.2** | **+0.1** |
| AYVA | | | | *i* S | | **Sg** | **00 36 57.5** | **+0.6** |
| **AYVA** | **Ayvalik** | **0.60** | **7** | P | | **Pg** | **00 36 49.2** | **+0.1** |
| AYVA | | | | S | | **Sg** | **00 36 57.5** | **+0.6** |
| **AKS** | **Akhisar** | **0.97** | **80** | *e*PG | | **Pg** | **00 36 56.6** | **+0.3** |
| **AKS** | **Akhisar** | **0.97** | **80** | *e*Pg | | **Pg** | **00 36 56.6** | **+0.3** |
| **GCAM** | **G?zelcami?** | **1.13** | **153** | *i* P | | **Pg** | **00 37 00.0** | **+0.6** |
| GCAM | | | | *i* S | | **Sn** | **00 37 17.1** | **+0.7** |
| **GCAM** | **G?zelcami?** | **1.13** | **153** | P | | **Pg** | **00 36 60.0** | **+0.6** |
| GCAM | | | | S | | **Sn** | **00 37 17.1** | **+0.7** |
| **BOZC** | **Bozcaada** | **1.20** | **340** | P | | **Pg** | **00 37 00.7** | **0.0** |
| BOZC | | | | S | | **Sg** | **00 37 15.6** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.28** | **126** | *e*PN | | **Pg** | **00 37 01.7** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.28** | **126** | *e*Pn | | **Pg** | **00 37 01.7** | **-0.4** |
| **BALY** | **Balya** | **1.30** | **38** | *i* P | | **Pn** | **00 37 01.7** | **-1.1** |
| BALY | | | | *i* S | | **Sg** | **00 37 19.6** | **+0.2** |
| **BALY** | **Balya** | **1.30** | **38** | P | | **Pn** | **00 37 01.7** | **-1.1** |
| BALY | | | | S | | **Sg** | **00 37 19.6** | **+0.2** |
| **BALB** | **Balikesir** | **1.36** | **47** | *e*PN | | **Pg** | **00 37 04.7** | **+0.9** |
| **BALB** | **Balikesir** | **1.36** | **47** | *e*Pn | | **Pg** | **00 37 04.7** | **+0.9** |
| **AYDN** | **Tasoluk** | **1.46** | **136** | *i* P | | **Pg** | **00 37 06.0** | **+0.3** |
| AYDN | | | | *i* S | | **Sb** | **00 37 24.5** | **-0.1** |
| **AYDN** | **Tasoluk** | **1.46** | **136** | P | | **Pg** | **00 37 06.0** | **+0.3** |
| AYDN | | | | S | | **Sb** | **00 37 24.5** | **-0.1** |
| **MANT** | **Manisa** | **1.56** | **98** | *i* S | | **Sb** | **00 37 27.4** | **-0.1** |
| **MANT** | **Manisa** | **1.56** | **98** | S | | **Sb** | **00 37 27.4** | **-0.1** |
| **KULA** | **Kula-Manisa** | **1.63** | **96** | *e*PN | | **Pn** | **00 37 07.4** | **0.0** |
| **KULA** | **Kula-Manisa** | **1.63** | **96** | *e*Pn | | **Pn** | **00 37 07.4** | **0.0** |

*IDC **24** 00:52:26.4±0.5,75.˚83N×7.˚06E,h0km,mb4.0/24, mb1 4.1/28,mb1mx4.0/58,mbtmp4.0/28,ML3.8/4,MS3.7/34, Ms1 3.7/34,ms1mx3.7/45,Error ellipse: s-maj=13.7km s-min=9.3km az=55.0*
*CSEM **24** 00:52:27.0±0.1,76.˚02N×7.˚36E,h2km,mb4.4/49,Error ellipse: s-maj=5.8km s-min=4.2km az=88.0*
*ISCJB **24** 00:52:27.0±0.2,76.˚05N±0.˚02×7.˚3E±0.˙1,h10km,mb4.3/63, MS3.7/29,Error ellipse: s-maj=4.8km s-min=3.5km az=7.6*
*MOS **24** 00:52:27.2±1.2,76.˚03N×7.˚10E,h10km,mb4.4/31,Error ellipse: s-maj=30.2km s-min=5.2km az=94.8*
*NEIC **24** 00:52:28.5±0.2,76.˚01N×7.˚50E,h10km,mb4.6/18,Error ellipse: s-maj=5.3km s-min=4.2km az=92.0*
*BJI **24** 00:52:29.2,76.˚10N×7.˚60E,h10km,mb4.6/22,mB5.0/10, Ms4.6/7,Ms7 4.4/8*
*BER **24** 00:52:30.6±3.2,75.˚98N×8.˚41E,h10km,MD2.4,ML3.1, ML4.7(NAO)*
**ISC 24 00:52:28.8±0.3,76.04N±0.˙04×7.58E±0.˙04,h10km,n321, σ1°63/306,mb4.4/67,MS3.7/29,28C-1D,Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **HSPB** | **Hornsund (broa** | **2.10** | **59** | P | | **Pn** | **00 53 00.9** | **-3.1** |
| HSPB | | | | *e*S | | **Sn** | **00 53 24.4** | **-5.7** |
| **HSPB** | **Hornsund (broa** | **2.10** | **59** | P | | **Pn** | **00 53 00.9** | **-3.1** |
| | SNR=50 | | | | | | | |
| HSPB | | | | Lg | | Lg | 00 53 24.8 | |
| **HSP** | **Hornsund** | **2.11** | **59** | Pn | | **Pn** | **00 53 00.9** | **-3.1** |
| HSP | | | | Lg | | Lg | 00 53 24.8 | |
| **SPB3** | **Spitsbergen Ar** | **2.91** | **38** | *e*Pn | | **Pn** | **00 53 14.5** | **-0.6** |
| **SPB3** | **Spitsbergen Ar** | **2.91** | **38** | *e*Pn | | **Pn** | **00 53 14.5** | **-0.6** |
| **SPB4** | **Spitsbergen Ar** | **2.91** | **38** | *e*Pn | | **Pn** | **00 53 14.8** | **-0.3** |
| **SPB4** | **Spitsbergen Ar** | **2.91** | **38** | *e*Pn | | **Pn** | **00 53 14.9** | **-0.3** |
| **SPA3** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.1** | **0.0** |
| **SPA3** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.1** | **0.0** |
| **SPA2** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 14.9** | **-0.3** |
| **SPA2** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 14.9** | **-0.3** |
| **SPB2** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 14.8** | **-0.3** |
| **SPB2** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 14.9** | **-0.3** |
| **SPA0** | **Spitsbergen Ar** | **2.92** | **38** | Pn | | **Pn** | **00 53 14.2** | **-1.0** |
| | baz=210,slow=14 | | | | | | | |
| SPA0 | | | | Sn | | **Sn** | **00 53 48.3** | **-1.9** |
| **SPA0** | **Spitsbergen Ar** | **2.92** | **38** | Pn | | **Pn** | **00 53 14.2** | **-1.0** |
| | baz=210,slow=14 | | | | | | | |
| SPA0 | | | | Sn | | **Sn** | **00 53 48.3** | **-1.9** |
| SPA0 | | | | IAML | | | 00 53 56.3 | |
| | comp=Z,104nm,0.7s | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.1** | **-0.1** |
| **SPA0** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.1** | **-0.1** |
| SPA0 | | | | Sn | | **Sn** | **00 53 48.3** | **-1.9** |
| **SPITS** | **Spitsbergen Ar** | **2.92** | **38** | Pn | | **Pn** | **00 53 14.8** | **-0.3** |
| | baz=212,slow=14,SNR=432 | | | | | | | |
| SPITS | | | | Sn | | **Sn** | **00 53 48.6** | **-1.6** |
| | baz=242,slow=25,SNR=7.9 | | | | | | | |
| SPITS | | | | LR | | LR | 00 54 31.5 | |
| | comp=Z,604nm,20.4s,baz=15,slow=40 | | | | | | | |
| **SPA1** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.2** | **0.0** |
| **SPA1** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.2** | **0.0** |
| **SPB5** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.1** | **-0.1** |
| **SPB5** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.1** | **-0.1** |
| **SPB1** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.2** | **-0.1** |
| **SPB1** | **Spitsbergen Ar** | **2.92** | **38** | *e*Pn | | **Pn** | **00 53 15.2** | **-0.1** |
| **KBS** | **Kingsbay** | **3.06** | **16** | Pn | | **Pn** | **00 53 16.5** | **-0.6** |
| **KBS** | **Kingsbay** | **3.06** | **16** | *e*P | | **Pn** | **00 53 16.1** | **-1.0** |
| KBS | | | | *e*S | | **Sn** | **00 53 50.8** | **-2.8** |
| **KBS** | **Kingsbay** | **3.06** | **16** | *e*P | | **Pn** | **00 53 16.3** | **-0.8** |
| KBS | | | | *e* | | | 00 53 50.1 | |
| **KBS** | **Kingsbay** | **3.06** | **16** | *e*Pn | | **Pn** | **00 53 16.3** | **-0.8** |
| KBS | | | | *e*Sn | | **Sn** | **00 53 50.1** | **-3.5** |
| **KBS** | **Kingsbay** | **3.06** | **16** | Pn | | **Pn** | **00 53 16.5** | **-0.6** |
| KBS | | | | *e*Sn | | **Sn** | **00 53 50.1** | **-3.5** |
| KBS | | | | *e*S | | **Sn** | **00 53 50.8** | **-2.8** |
| | SNR=50 | | | | | | | |
| **BJO** | **Bjornoya** | **3.34** | **112** | *e*P | | **Pn** | **00 53 19.2** | **-1.7** |
| BJO | | | | *e*S | | Sn | 00 53 51.6 | -8.9 |
| **BJO** | **Bjornoya** | **3.34** | **112** | *e*P | | **Pn** | **00 53 19.2** | **-1.7** |
| | SNR=50 | | | | | | | |
| **HOPEN** | **Hopen** | **4.17** | **75** | Pn | | **Pn** | **00 53 30.7** | **-1.7** |
| HOPEN | | | | Sn | | **Sn** | **00 54 15.6** | **-5.6** |
| **HOPEN** | **Hopen** | **4.17** | **75** | Pn | | **Pn** | **00 53 30.7** | **-1.7** |
| HOPEN | | | | Sn | | **Sn** | **00 54 15.6** | **-5.6** |
| HOPEN | | | | IAML | | | 00 54 18.8 | |
| | comp=Z,429nm,0.3s | | | | | | | |
| **HOPEN** | **Hopen** | **4.17** | **75** | Pn | | **Pn** | **00 53 30.7** | **-1.7** |
| **DAG** | **Danmarks Havn** | **6.20** | **289** | *i* P | | Pn | 00 53 54.8 | -5.3 |
| **DAG** | **Danmarks Havn** | **6.20** | **289** | *i* P | | Pn | 00 53 54.8 | -5.3 |
| **JMIC** | **Jan Mayen** | **6.80** | **230** | LR | | LR | 00 55 46.3 | |
| | comp=Z,282nm,19.0s,baz=69,slow=30 | | | | | | | |
| **HAMF** | **Hammerfest** | **7.09** | **131** | *e*P | | Pn | 00 54 07.1 | -5.4 |
| HAMF | | | | *e*S | | Sn | 00 55 19.9 | -13 |
| HAMF | | | | IAML | | | 00 55 22.7 | |
| | comp=Z,28nm,0.3s | | | | | | | |
| **TRO** | **Tromso** | **7.24** | **147** | *e*P | | **Pn** | **00 54 11.7** | **-2.8** |
| **TRO** | **Tromso** | **7.24** | **147** | *e*P | | **Pn** | **00 54 11.7** | **-2.8** |
| | SNR=47 | | | | | | | |
| **KIF** | **Kilpisjarvi** | **8.08** | **144** | *e*P | | Pn | 00 54 22.2 | -3.7 |
| **LOF** | **Lofoten** | **8.15** | **164** | *e*P | | Pn | 00 54 23.3 | -3.6 |
| **ARA0** | **ARCESS Array S** | **8.37** | **132** | Pn | | Pn | 00 54 24.4 | -5.6 |
| | baz=333,slow=11 | | | | | | | |
| ARA0 | | | | Sn | | Sn | 00 55 51.0 | -13 |
| | baz=331,slow=18 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **8.37** | **132** | P | | Pn | 00 54 24.4 | -5.6 |
| | baz=333,slow=11 | | | | | | | |
| ARA0 | | | | S | | Sn | 00 55 51.0 | -13 |
| | baz=331,slow=18 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **8.37** | **132** | Pn | | Pn | 00 54 25.0 | -4.9 |
| | comp=Z,2.5nm,0.3s,baz=330,slow=12,SNR=45 | | | | | | | |
| ARCES | | | | Sn | | Sn | 00 55 50.9 | -13 |
| | comp=Z,6.6nm,0.3s,baz=331,slow=22,SNR=8.8 | | | | | | | |
| ARCES | | | | LR | | LR | 00 57 43.8 | |
| | comp=Z,441nm,21.4s,baz=316,slow=38 | | | | | | | |
| **ARE0** | **ARCESS Array S** | **8.37** | **132** | *e*P | | Pn | 00 54 25.2 | -4.7 |
| ARE0 | | | | IAML | | | 00 55 53.5 | |
| | comp=Z,13nm,0.6s | | | | | | | |
| **KTK1** | **Kautokeino** | **8.44** | **139** | *e*P | | **Pn** | **00 54 28.2** | **-2.8** |
| KTK1 | | | | IAML | | | 00 55 59.3 | |
| | comp=Z,11nm,0.4s | | | | | | | |
| **KTK1** | **Kautokeino** | **8.44** | **139** | *e*P | | **Pn** | **00 54 28.2** | **-2.8** |
| | SNR=47 | | | | | | | |
| **HEF** | **Hetta** | **9.06** | **139** | *e*P | | Pn | 00 54 36.1 | -3.3 |
| **SCO** | **Scoresbysund** | **10.05** | **252** | *i* P | | Pn | 00 54 47.7 | -5.2 |
| **SCO** | **Scoresbysund** | **10.05** | **252** | *i* P | | Pn | 00 54 47.7 | -5.2 |
| SCO | | | | *i* S | | Sn | 00 56 26.1 | -19 |
| **APA0** | **Apatity Array** | **11.46** | **124** | Pn | | Pn | 00 55 07.1 | -5.1 |
| | baz=307,slow=11 | | | | | | | |
| **APA0** | **Apatity Array** | **11.46** | **124** | P | | Pn | 00 55 07.1 | -5.1 |
| | baz=307,slow=11 | | | | | | | |
| **LVZ** | **Lovozero** | **11.55** | **121** | *i* P | | Pn | 00 55 08.9 | -4.6 |
| **APA** | **Apatity** | **11.57** | **124** | ⇓*i* P | | **Pn** | **00 55 10.6** | **-3.1** |
| APA | | | | pmax | | pmax | | |
| | comp=Z,475nm,0.4s | | | | | | | |
| APA | | | | MLR | | MLR | | |
| | comp=Z,2μm,11.0s | | | | | | | |
| **SUMG** | **Summit** | **12.63** | **278** | *i* P | | **Pn** | **00 55 26.3** | **-2.3** |
| **SUMG** | **Summit** | **12.63** | **278** | *i* P | | **Pn** | **00 55 26.3** | **-2.3** |
| SUMG | | | | *i* S | | Sn | 00 57 34.8 | -15 |
| **SUMG** | **Summit** | **12.63** | **278** | *e*Pn | | Pn | 00 55 24.6 | -4.0 |
| **SUMG** | **Summit** | **12.63** | **278** | *i* P | | **Pn** | **00 55 26.3** | **-2.3** |
| **NB2** | **NORSAR Subarra** | **15.12** | **173** | P | | **P** | **00 56 07.0** | **-0.4** |
| | comp=Z,15nm,1.1s,baz=359,slow=11 | | | | | | | |
| **NOA** | **NORSAR Array B** | **15.12** | **173** | Pn | | **Pn** | **00 55 59.1** | **-3.1** |
| | comp=Z,0.1nm,0.3s,baz=225,slow=12,SNR=3.3 | | | | | | | |
| NOA | | | | LR | | LR | 01 00 55.6 | |
| | comp=Z,194nm,20.9s,baz=0.0,slow=34 | | | | | | | |
| **TMCR** | **Tamitsa** | **15.48** | **124** | *e*P | | **P** | **00 56 09.1** | **-2.2** |
| TMCR | | | | *e* | | | 00 58 59.0 | |
| TMCR | | | | pmax | | pmax | | |
| | comp=Z,51nm,0.9s | | | | | | | |
| **TMCR** | **Tamitsa** | **15.48** | **124** | *e*P | | **P** | **00 56 09.1** | **-2.2** |
| | comp=Z,51nm,0.9s | | | | | | | |
| **FIA0** | **FINESS Array S** | **15.97** | **146** | Pn | | **Pn** | **00 56 08.5** | **-4.7** |
| | baz=350,slow=12 | | | | | | | |
| **FIA0** | **FINESS Array S** | **15.97** | **146** | P | | **Pn** | **00 56 08.5** | **-4.7** |
| | baz=350,slow=12 | | | | | | | |
| **FINES** | **FINESS Array B** | **15.97** | **146** | Pn | | Pn | 00 56 08.2 | -5.0 |
| | comp=Z,0.6nm,0.3s,baz=355,slow=10,SNR=24 | | | | | | | |
| FINES | | | | LR | | LR | 01 02 31.9 | |
| | comp=Z,303nm,18.9s,baz=350,slow=38 | | | | | | | |
| **FINES** | **FINESS Array B** | **15.97** | **146** | P | | Pn | 00 56 08.2 | -5.0 |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| FINES | | | | MLR | | MLR | | |
| | comp=Z,303nm,18.9s | | | | | | | |
| **HFS** | **Hagfors** | **16.12** | **169** | P | | **Pn** | **00 56 15.2** | **+0.1** |
| | baz=14,slow=8.6 | | | | | | | |
| **HFS** | **Hagfors** | **16.12** | **169** | Pn | | **Pn** | **00 56 15.2** | **+0.1** |
| | baz=14,slow=8.6 | | | | | | | |
| **HFS** | **Hagfors** | **16.12** | **169** | Pn | | **Pn** | **00 56 15.1** | **0.0** |
| | comp=Z,0.4nm,0.3s,baz=13,slow=9.1,SNR=11 | | | | | | | |
| HFS | | | | LR | | LR | 01 01 48.1 | |
| | comp=Z,290nm,18.1s,baz=18,slow=35 | | | | | | | |
| **KONO** | **Kongsberg** | **16.48** | **176** | *e*P | | **Pn** | **00 56 18.8** | **-0.9** |
| KONO | | | | pmax | | pmax | | |
| | comp=Z,830nm,3.0s | | | | | | | |
| **KONO** | **Kongsberg** | **16.48** | **176** | *e*Pn | | **Pn** | **00 56 18.8** | **-0.9** |
| | comp=Z,830nm,3.0s | | | | | | | |
| **KONO** | **Kongsberg** | **16.48** | **176** | *e*Pn | | **Pn** | **00 56 18.8** | **-0.9** |
| | comp=Z,830nm,3.0s | | | | | | | |
| **KLMR** | **Klimovskoe** | **18.78** | **126** | *e*P | | P | 00 56 42.5 | -5.2 |
| KLMR | | | | pmax | | pmax | | |
| | comp=Z,63nm,1.9s | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **19.56** | **274** | LR | | LR | 01 03 37.4 | |
| | comp=Z,289nm,19.7s,baz=24,slow=34 | | | | | | | |
| **IZAR** | **Zarasai** | **21.53** | **150** | *e*P | | **P** | **00 57 17.5** | **-0.1** |
| IZAR | | | | IAmb | | IAmb | 00 57 30.2 | |
| | comp=Z,30nm,1.6s | | | | | | | |
| **IZAR** | **Zarasai** | **21.53** | **150** | *e*P | | **P** | **00 57 17.5** | **-0.1** |
| | SNR=51 | | | | | | | |
| **ISAL** | **Salakas** | **21.69** | **151** | *e*P | | **P** | **00 57 19.2** | **-0.1** |
| ISAL | | | | IAmb | | IAmb | 00 57 31.8 | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **ISAL** | **Salakas** | **21.69** | **151** | *e*P | | **P** | **00 57 19.2** | **-0.1** |
| | SNR=51 | | | | | | | |
| **IIGN** | **Ignalina** | **21.92** | **151** | *e*P | | **P** | **00 57 21.6** | **-0.2** |
| IIGN | | | | IAmb | | IAmb | 00 57 34.5 | |
| | comp=Z,27nm,1.4s | | | | | | | |
| **IIGN** | **Ignalina** | **21.92** | **151** | *e*P | | **P** | **00 57 21.6** | **-0.2** |
| | SNR=50 | | | | | | | |
| **IDID** | **Didziasalis** | **22.02** | **150** | *e*P | | **P** | **00 57 22.8** | **-0.1** |
| IDID | | | | IAmb | | IAmb | 00 57 27.9 | |
| | comp=Z,20nm,1.2s | | | | | | | |
| **IDID** | **Didziasalis** | **22.02** | **150** | *e*P | | **P** | **00 57 22.8** | **-0.1** |
| | SNR=50 | | | | | | | |
| **NACGM** | **Naroch** | **22.43** | **150** | *e* | | **P** | **00 57 30.0** | **+2.8** |
| **RES** | **Resolute Bay** | **22.89** | **318** | P | | **P** | **00 57 33.3** | **+1.3** |
| | comp=Z,2.5nm,0.9s,baz=52,slow=17,SNR=3.2 | | | | | | | |
| RES | | | | LR | | LR | 01 06 14.5 | |
| | comp=Z,175nm,21.5s,baz=27,slow=36 | | | | | | | |
| **RES** | **Resolute Bay** | **22.89** | **318** | P | | **P** | **00 57 33.3** | **+1.3** |
| RES | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| RES | | | | MLR | | MLR | | |
| | comp=Z,175nm,21.5s | | | | | | | |
| **SUW** | **Suwalki** | **22.91** | **156** | *e*P | | **P** | **00 57 33.7** | **+1.5** |
| **SUW** | **Suwalki** | **22.91** | **156** | *e*P | | **P** | **00 57 33.8** | **+1.5** |
| **SUW** | **Suwalki** | **22.91** | **156** | *e*P | | **P** | **00 57 33.8** | **+1.5** |
| **MNK** | **Minsk** | **22.95** | **149** | *e*P | | **P** | **00 57 34.0** | **+1.2** |
| **MNK** | **Minsk** | **22.95** | **149** | *e*P | | **P** | **00 57 34.0** | **+1.2** |
| **MICGM** | **Minsk** | **22.95** | **149** | *e* | | **P** | **00 57 34.0** | **+1.2** |
| **MOS** | **Moscow** | **23.23** | **134** | *e*P | | **P** | **00 57 36.8** | **+1.2** |
| MOS | | | | pmax | | pmax | | |
| | comp=Z,67nm,1.5s | | | | | | | |
| **MOS** | **Moscow** | **23.23** | **134** | *e*P | | **P** | **00 57 36.8** | **+1.2** |
| | comp=Z,67nm,1.5s | | | | | | | |
| **OBN** | **Obninsk** | **23.65** | **136** | P | | **P** | **00 57 39.0** | **-0.8** |
| | comp=Z,8.9nm,0.5s,baz=322,slow=13,SNR=5.8 | | | | | | | |
| OBN | | | | LR | | LR | 01 06 46.5 | |
| | comp=Z,237nm,20.6s,baz=22,slow=36 | | | | | | | |
| **OBN** | **Obninsk** | **23.65** | **136** | ⇑*e*P | | **P** | **00 57 39.5** | **-0.3** |
| OBN | | | | *e* | | | 00 58 11.4 | |
| OBN | | | | *e*SS | | Sn | 01 02 41.1 | +26 |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,34nm,1.2s | | | | | | | |
| OBN | | | | MLR | | MLR | | |
| | comp=Z,252nm,20.0s | | | | | | | |
| **OBN** | **Obninsk** | **23.65** | **136** | ⇑*e*P | | **P** | **00 57 39.5** | **-0.3** |
| | comp=Z,34nm,1.2s | | | | | | | |
| **SOKR** | **Solikamsk** | **23.67** | **106** | ⇑*i*P | | **P** | **00 57 42.3** | **+2.4** |
| SOKR | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **CLL** | **Collm** | **24.92** | **172** | *e*P | | **P** | **00 57 52.0** | **+0.4** |
| CLL | | | | *e* | | | 00 57 56.0 | |
| **CLL** | **Collm** | **24.92** | **172** | *e*P | | **P** | **00 57 52.0** | **+0.4** |
| CLL | | | | *e*SP | | **sP** | **00 57 56.0** | **+0.2** |
| **CLL** | **Collm** | **24.92** | **172** | *e*P | | **P** | **00 57 52.0** | **+0.4** |
| **BRG** | **Berggiesshubel** | **25.39** | **171** | *e*P | | **P** | **00 57 59.8** | **+4.0** |
| | comp=Z,12nm,1.1s | | | | | | | |
| **BRG** | **Berggiesshubel** | **25.39** | **171** | *e*P | | **P** | **00 57 59.8** | **+4.0** |
| BRG | | | | pmax | | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **PVCC** | **Panska Ves** | **25.76** | **170** | *e*P | | **P** | **00 57 59.3** | **+0.1** |
| PVCC | | | | *e* | | | 00 58 04.0 | |
| **PVCC** | **Panska Ves** | **25.76** | **170** | *e*P | | **P** | **00 57 59.3** | **+0.1** |
| PVCC | | | | *ex* | | x | 00 58 04.0 | |
| **PVCC** | **Panska Ves** | **25.76** | **170** | P | | **P** | **00 57 59.3** | **+0.1** |
| **NKC** | **Novy Kostel** | **25.98** | **173** | *e*P | | **P** | **00 58 00.1** | **-1.1** |
| NKC | | | | *e* | | | 00 58 06.4 | |
| **NKC** | **Novy Kostel** | **25.98** | **173** | *e*P | | **P** | **00 58 00.1** | **-1.1** |
| NKC | | | | *ex* | | x | 00 58 06.4 | |
| **NKC** | **Novy Kostel** | **25.98** | **173** | P | | **P** | **00 58 00.1** | **-1.1** |
| **DPC** | **Dobruska-Polom** | **26.02** | **167** | *e*P | | **P** | **00 58 03.3** | **+1.7** |
| DPC | | | | *e* | | | 00 58 07.9 | |
| **DPC** | **Dobruska-Polom** | **26.02** | **167** | *e*P | | **P** | **00 58 03.3** | **+1.7** |
| DPC | | | | *epP* | | **pP** | **00 58 07.9** | **+3.2** |
| DPC | | | | *ex* | | x | 00 58 11.7 | |
| **DPC** | **Dobruska-Polom** | **26.02** | **167** | P | | **P** | **00 58 03.3** | **+1.7** |
| **PRA** | **Prague** | **26.21** | **170** | *e*P | | **P** | **00 58 02.1** | **-1.2** |
| PRA | | | | *e* | | | 00 58 07.8 | |
| **PRA** | **Prague** | **26.21** | **170** | *e*P | | **P** | **00 58 02.1** | **-1.2** |
| PRA | | | | *epP* | | **pP** | **00 58 07.8** | **+1.5** |
| **PRA** | **Prague** | **26.21** | **170** | P | | **P** | **00 58 02.1** | **-1.2** |
| **PRU** | **Pruhonice** | **26.30** | **170** | *e*P | | **P** | **00 58 05.1** | **+1.0** |
| PRU | | | | *e* | | | 00 58 11.4 | |
| **PRU** | **Pruhonice** | **26.30** | **170** | *e*P | | **P** | **00 58 05.1** | **+1.0** |
| PRU | | | | *epP* | | **pP** | **00 58 11.4** | **+4.3** |
| **PRU** | **Pruhonice** | **26.30** | **170** | P | | **P** | **00 58 05.1** | **+1.0** |
| **OJC** | **Ojcow** | **26.38** | **162** | *e*P | | **P** | **00 58 06.2** | **+1.4** |
| OJC | | | | pmax | | pmax | | |
| | comp=Z,77nm,1.4s | | | | | | | |
| **OJC** | **Ojcow** | **26.38** | **162** | *e*P | | **P** | **00 58 06.2** | **+1.4** |
| | comp=Z,77nm,1.4s | | | | | | | |
| **OJC** | **Ojcow** | **26.38** | **162** | *e*P | | **P** | **00 58 06.2** | **+1.4** |
| | comp=Z,77nm,1.4s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **26.46** | **135** | *e*P | | **P** | **00 58 08.2** | **+2.7** |
| LPSR | | | | pmax | | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| LPSR | | | | pmax | | pmax | | |
| | comp=N,10.0nm,1.2s | | | | | | | |
| LPSR | | | | pmax | | pmax | | |
| | comp=E,10.0nm,0.8s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **26.46** | **135** | *e*P | | **P** | **00 58 08.2** | **+2.7** |
| | comp=E,10.0nm,1.2s | | | | | | | |
| **FRB** | **Frobisher Bay** | **26.52** | **285** | LR | | LR | 01 08 06.0 | |
| | comp=E,344nm,21.8s,baz=39,slow=36 | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **26.64** | **165** | *e*P | | **P** | **00 58 06.2** | **-1.0** |
| OKC | | | | *e* | | | 00 58 14.6 | |
| **OKC** | **Ostrava-Krasne** | **26.64** | **165** | *e*P | | **P** | **00 58 06.2** | **-1.0** |
| OKC | | | | *epP* | | **pP** | **00 58 14.6** | **+4.4** |
| **OKC** | **Ostrava-Krasne** | **26.64** | **165** | P | | **P** | **00 58 06.2** | **-1.0** |
| **MORC** | **Moravsky Berou** | **26.66** | **166** | *e*P | | **P** | **00 58 07.4** | **0.0** |
| MORC | | | | pmax | | pmax | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| **MORC

**BURAR Bucovina Array 29.44 155⇑ *i*P P 00 58 32.7 +0.4**
**DRGR 30.02 159 P P 00 58 37.1 -0.3**
**DRGR 30.02 159⇑ *i*P P 00 58 37.1 -0.3**
**DRGR 30.02 159 P P 00 58 37.1 -0.3**
**TESR Tescani 30.68 154⇑ *i*P P** 00 58 48.2 +5.1
**BZS Buzias 31.09 161 P P 00 58 46.6 -0.2**
**BZS Buzias 31.09 161⇑ *i*P P 00 58 46.6 -0.2**
**BZS Buzias 31.09 161 P P 00 58 46.6 -0.2**
**VRI Vrincioaia 31.32 154 ⇑P P** 00 58 54.0 +5.2
**VRI Vrincioaia 31.32 154⇑ *i*P P** 00 58 54.0 +5.2
**GZR Gura Zlata 31.41 159 ⇑P P 00 58 49.9 +0.3**
**GZR Gura Zlata 31.41 159⇑ *i*P P 00 58 49.9 +0.3**
**GZR Gura Zlata 31.41 159 P P 00 58 49.9 +0.3**
**LOT Lotru 31.44 158⇑ *i*P P 00 58 51.3 +1.3**
**LOT Lotru 31.44 158⇑ *i*P P 00 58 51.3 +1.3**
**ARR Arges 31.60 157⇑ *i*P P 00 58 53.1 +1.7**
**ARR Arges 31.60 157⇑ *i*P P 00 58 53.1 +1.7**
**MLR Muntele Rosu 31.61 155 ⇑P P** 00 58 54.8 +3.3
**MLR Muntele Rosu 31.61 155⇑ *i*P P** 00 58 54.8 +3.3
**AKTK Aktyubinsk 32.36 113 P P 00 58 57.5 -0.4**
comp=E,227nm,18.6s
**AKTO Aktyubinsk 32.36 113 P P 00 58 57.5 -0.4**
comp=E,4.5nm,1.0s,baz=302,slow=12,SNR=7.6
AKTO LR LR 01 12 46.7
comp=E,227nm,18.6s,baz=354,slow=38
**AKTO Aktyubinsk 32.36 113 P P 00 58 57.5 -0.4**
AKTO pmax pmax
comp=Z,5.0nm,1.0s
AKTO MLR MLR
comp=Z,227nm,18.6s
**DIVS Divibare 32.48 163⇑ *i*P P 00 59 00.2 +1.1**
**DIVS Divibare 32.48 163⇑ *i*P P 00 59 00.2 +1.1**
**BRVK Borovoye 32.79 98⇑ *e*P P 00 59 02.2 +0.5**
BRVK pmax pmax
comp=Z,7.0nm,1.7s
**BRVK Borovoye 32.79 98 *e*P P 00 59 02.1 +0.5**
comp=Z,6.8nm,1.4s
**BRVK Borovoye 32.79 98 *e*P P 00 59 02.1 +0.5**
comp=Z,6.8nm,1.4s
**BVAR Borovoye Array 32.85 98 P P 00 59 03.3 +1.2**
comp=Z,1.2nm,0.7s,baz=342,slow=9.3,SNR=9.3
BVAR LR LR 01 15 03.1
comp=Z,193nm,19.2s,baz=312,slow=41
**BVAR Borovoye Array 32.85 98 P P 00 59 03.3 +1.2**
BVAR pmax pmax
comp=Z,1.0nm,0.7s
BVAR MLR MLR
comp=Z,193nm,19.2s
**INK Inuvik 33.87 335 P P 00 59 10.9 +0.1**
comp=Z,1.6nm,0.8s,baz=35,slow=14,SNR=2.5
**INK Inuvik 33.87 335 P P 00 59 11.0 +0.1**
INK pmax pmax
comp=Z,2.0nm,0.8s
**INK Inuvik 33.87 335 P P 00 59 11.0 +0.1**
comp=Z,2.0nm,0.8s
**ABKAR Akbulak array 33.90 112 *e*P P 00 59 11.4 +0.1**
comp=Z,1.1nm,0.8s
**ABKAR Akbulak array 33.90 112 *e*P P 00 59 11.4 +0.1**
comp=Z,1.1nm,0.8s
**SCHQ Schefferville 34.01 275** LR LR 01 11 42.5
comp=Z,174nm,18.1s,baz=66,slow=34
**POLO Lamas de Olo 35.41 200 *e*P P 00 59 22.8 -1.8**
comp=Z,12nm,1.4s
**POLO Lamas de Olo 35.41 200 *e*P P 00 59 22.8 -1.8**
comp=Z,12nm,1.4s
**KIV Kislovodsk 35.47 134 *e*P P 00 59 25.5 +0.5**
KIV pmax pmax
comp=Z,5.0nm,1.1s
KIV MLR MLR
comp=Z,129nm,16.0s
**KIV Kislovodsk 35.47 134 *e*P P 00 59 25.5 +0.5**
comp=Z,129nm,16.0s
**ZALV Zalesovo Beam 35.50 83 P P 00 59 25.4 +0.4**
comp=Z,1.1nm,0.6s,baz=332,slow=9.3,SNR=6.6
ZALV PcP **PcP 01 01 53.5 -0.5**
comp=Z,0.9nm,0.6s,baz=297,slow=2.4,SNR=4.3
ZALV LR LR 01 17 58.2
comp=Z,217nm,18.7s,baz=250,slow=43
**ZALV Zalesovo Beam 35.50 83 P P 00 59 25.4 +0.4**
ZALV 01 01 53.5
ZALV pmax pmax
comp=Z,1.0nm,0.6s
ZALV pmax pmax
comp=Z,1.0nm,0.6s
ZALV MLR MLR
comp=Z,217nm,18.7s
**PVRL Vila Real 35.51 200 *e*P P** 00 59 21.7 -3.6
comp=Z,25nm,1.8s
**BILL Bilibino 35.54 14 *e*P P 00 59 26.9 +1.6**
BILL *e* 01 00 47.2
BILL *e*S S 01 04 51.7 -8.6
BILL pmax pmax
comp=Z,8.0nm,0.8s
BILL MLR MLR
comp=Z,88nm,19.0s
**BILL Bilibino 35.54 14 *e*P P 00 59 26.9 +1.6**
comp=Z,8.0nm,0.8s
**KBZ Khabaz 35.72 134 P P 00 59 24.8 -2.3**
comp=Z,2.0nm,0.9s,baz=340,slow=9.2,SNR=3.4
KBZ LR LR 01 14 27.3
comp=Z,164nm,19.2s,baz=20,slow=37
**KBZ Khabaz 35.72 134 P P 00 59 24.8 -2.3**
KBZ pmax pmax
comp=Z,2.0nm,0.9s
KBZ MLR MLR
comp=Z,164nm,19.2s
**NEY Neytrino 36.16 135 *i* P P 00 59 32.1 +1.0**
**NEY Neytrino 36.16 135 *i* P P 00 59 32.1 +1.0**
**PCAS Casmilo, Conde 36.79 201 *e*P P 00 59 34.4 -1.8**
comp=Z,33nm,1.5s
**PCAS Casmilo, Conde 36.79 201 *e*P P 00 59 34.4 -1.8**
comp=Z,33nm,1.5s
**ESDC Sonseca Array 36.82 195 P P** 00 59 32.4 -4.2
comp=Z,1.0nm,0.7s,baz=6.1,slow=8.0,SNR=7.4
**YKA Yellowknife Ar 36.95 319 P P 00 59 36.8 -0.6**
comp=Z,0.6nm,0.7s,baz=20,slow=9.2,SNR=3.2
**YKA Yellowknife Ar 36.95 319 P P 00 59 36.8 -0.6**
YKA pmax pmax
comp=Z,1.0nm,0.7s
**KURK Kurchatov 36.97 91 P P 00 59 38.4 +0.8**
KURK 01 01 02.2
KURK pmax pmax
comp=Z,1.0nm,0.6s
KURK pmax pmax
comp=Z,1.0nm,0.8s
**KURK Kurchatov 36.97 91 *e*P P 00 59 37.7 +0.1**
comp=Z,26nm,1.4s
**KURK Kurchatov 36.97 91 P P 00 59 38.4 +0.8**
comp=Z,1.0nm,0.6s
**KURBB Kurchatov Arra 37.03 91 P P 00 59 38.4 +0.2**
comp=Z,1.4nm,0.6s,baz=334,slow=7.4,SNR=11
KURBB PP **PnPn 01 01 02.2 -0.3**
comp=Z,1.3nm,0.8s,baz=335,slow=9.8,SNR=5.6
**PMRV Marv??o 37.31 199 *e*P P 00 59 39.0 -1.7**
comp=Z,26nm,1.9s
**PMRV Marv??o 37.31 199 *e*P P 00 59 39.0 -1.7**
comp=Z,26nm,1.9s
**YAK Yakutsk 37.38 41** LR LR 01 15 21.8
comp=Z,50nm,19.4s,baz=328,slow=37
**BRTR Keskin Array B 38.21 147 P P 00 59 47.4 -1.1**
comp=Z,0.4nm,0.3s,baz=345,slow=7.9,SNR=4.0
BRTR LR LR 01 17 08.4
comp=Z,90nm,20.3s,baz=43,slow=39
**BRTR Keskin Array B 38.21 147 *ce*P P 00 59 48.5 0.0**
BRTR pmax pmax
comp=Z,1.0nm,0.8s
**BRTR Keskin Array B 38.21 147 *e*P P 00 59 48.5 0.0**
comp=Z,1.0nm,0.8s
**ILAR Eielson Array 38.51 343 P P 00 59 52.1 +1.7**
comp=Z,2.8nm,0.9s,baz=359,slow=7.1,SNR=28
ILAR LR LR 01 17 37.4
comp=Z,27nm,18.4s,baz=351,slow=39
**ILAR Eielson Array 38.51 343 P P 00 59 52.2 +1.7**
ILAR pmax pmax
comp=Z,3.0nm,0.9s
ILAR MLR MLR
comp=Z,27nm,18.4s
**PBAR Barrancos 38.53 199 *e*P P 00 59 49.5 -1.5**
comp=Z,44nm,1.7s
**PBAR Barrancos 38.53 199 *e*P P 00 59 49.5 -1.5**
comp=Z,44nm,1.7s
**KEST Kesra 40.40 178 P P 01 00 06.6 -0.1**
comp=Z,3.7nm,0.9s,baz=312,slow=12,SNR=4.2
KEST LR LR 01 17 26.4
comp=Z,73nm,18.0s,baz=320,slow=37
**MKAR Makanchi Array 41.51 90 P P 01 00 16.4 +0.7**
comp=Z,1.0nm,0.6s,baz=359,slow=6.4,SNR=15
MKAR PP **PP 01 01 49.1 -2.1**
comp=Z,0.8nm,0.7s,baz=355,slow=8.7,SNR=3.3
MKAR LR LR 01 20 15.2
comp=Z,251nm,21.3s,baz=334,slow=40
**MKAR Makanchi Array 41.51 90 P P 01 00 16.4 +0.7**
MKAR 01 01 49.2
MKAR pmax pmax
comp=Z,1.0nm,0.6s
MKAR pmax pmax
comp=Z,1.0nm,0.7s
MKAR MLR MLR
comp=Z,251nm,21.3s
**TLY Talaya 42.00 68** LR LR 01 21 42.9
comp=Z,50nm,18.8s,baz=270,slow=42
**KKAR Karatay Array 42.15 104 *e*P P 01 00 22.2 +1.3**
KKAR pmax pmax
comp=Z,2.0nm,0.8s
**KKAR Karatay Array 42.15 104 *e*P P 01 00 22.2 +1.3**
comp=Z,1.9nm,0.8s
**KKAR Karatay Array 42.15 104 *e*P P 01 00 22.2 +1.3**
comp=Z,2.0nm,0.8s
**EKS2 Erkin-Say 43.34 100 *e*P P 01 00 31.7 +1.0**
EKS2 pmax pmax
comp=Z,6.0nm,1.1s
**EKS2 Erkin-Say 43.34 100 *e*P P 01 00 31.7 +1.0**
comp=Z,6.3nm,1.1s
**EKS2 Erkin-Say 43.34 100 *e*P P 01 00 31.7 +1.0**
comp=Z,6.0nm,1.1s
**AAK Ala-Archa 43.54 100** LR LR 01 19 45.2
comp=Z,96nm,21.3s,baz=286,slow=38
**GEYT Alibeck 44.29 119 P P 01 00 38.8 +0.5**
comp=Z,2.7nm,0.7s,baz=311,slow=9.4,SNR=8.4
GEYT LR LR 01 20 57.6
comp=Z,206nm,19.3s,baz=20,slow=39
**ISHV Shirvan 44.58 120 *e*P P 01 00 42.2 +1.4**
**ULM Lac du Bonnet 44.97 298** LR LR 01 19 57.6
comp=Z,203nm,18.9s,baz=352,slow=37
**ISFR Sfrayin 45.10 119 *e*P P** 01 00 48.6 +3.5
**WMQ Urumqi 45.61 86 *e*P P 01 00 51.0 +2.2**
WMQ PMZ
comp=Z,11nm,1.0s
**IPAY Payeh 45.90 119 *e*P P 01 00 52.7 +1.4**
**IPAY Payeh 45.90 119 *e*P P 01 00 52.7 +1.4**
**SONM Songino Array 46.23 67 P P 01 00 54.7 +1.0**
comp=Z,1.5nm,0.8s,baz=332,slow=6.1,SNR=8.8
SONM LR LR 01 23 16.9
comp=Z,68nm,19.3s,baz=300,slow=40
**SONM Songino Array 46.23 67 P P 01 00 54.7 +1.0**
SONM pmax pmax
comp=Z,2.0nm,0.9s
SONM MLR MLR
comp=Z,69nm,19.3s
**IMYA Miami 46.24 117 *e*P P** 01 00 59.3 +5.4
**ULN Ulaanbaatar 46.35 67 *e*P P 01 00 54.3 -0.3**
ULN pmax pmax
comp=Z,8.0nm,1.1s
**ULN Ulaanbaatar 46.35 67 *e*P P 01 00 54.3 -0.3**
comp=Z,8.4nm,1.1s
**ULN Ulaanbaatar 46.35 67 *e*P P 01 00 54.3 -0.3**
comp=Z,8.0nm,1.1s
**KSH Kashi 46.85 100 P P** 01 01 02.8 +4.2
KSH *ep*P pP 01 01 10.0 +8.3
KSH *es*P sP 01 01 13.6 +11
KSH *e*PP PP 01 02 54.4 +6.0
KSH S **S 01 07 50.3 +1.5**
KSH SS **SS 01 11 10.8 -4.0**
KSH PMZ
comp=Z,46nm,3.2s
KSH LN
comp=Z,84nm,6.3s
KSH LE
comp=Z,120nm,5.9s
KSH LZ
comp=Z,130nm,7.4s
**MSO Missoula 51.82 312 *e*P P 01 01 36.3 -0.2**
comp=Z,26nm,1.4s
**MSO Missoula 51.82 312 *e*P P 01 01 36.3 -0.2**
comp=Z,26nm,1.4s
**RLMT Red Lodge 52.59 307 *e*P P 01 01 42.9 +0.4**
comp=Z,14nm,1.4s
**RLMT Red Lodge 52.59 307 *e*P P 01 01 42.8 +0.4**
comp=Z,14nm,1.4s
**GTA Gaotai 52.70 77 *e*P P 01 01 43.8 +0.7**
GTA *p*P **pP 01 01 50.4 +4.1**
GTA *s*P sP 01 01 53.3 +5.8
GTA S **S 01 09 09.6 -0.9**
GTA sS sS 01 09 22.0 +6.3
GTA SS **SS 01 12 47.3 -1.0**
GTA PMZ
comp=Z,3.0nm,1.0s
GTA PMZ
comp=Z,79nm,5.0s
GTA LN
comp=Z,140nm,17.6s
GTA LE
comp=Z,150nm,17.6s
GTA LZ
comp=Z,150nm,16.1s
**TAM Tamanrasset 53.30 182 *e*P P 01 01 47.3 -0.4**
TAM pmax pmax
comp=Z,5.0nm,1.1s
**TAM Tamanrasset 53.30 182 *e*P P 01 01 47.3 -0.4**
comp=Z,4.8nm,1.1s
**TAM Tamanrasset 53.30 182 *e*P P 01 01 47.3 -0.4**
comp=Z,5.0nm,1.1s
**MCMT McKenzie Canyo 53.55 310 *e*P P 01 01 49.9 +0.4**
comp=Z,5.1nm,1.3s
**MCMT McKenzie Canyo 53.55 310 *e*P P 01 01 49.9 +0.4**
comp=Z,5.1nm,1.3s
**HHC Hu-ho-hao-te 54.02 65 *e*P P 01 01 52.0 -0.8**
HHC S **S 01 09 23.4 -5.0**
HHC PMZ
comp=Z,29nm,1.2s
HHC PMZ
comp=Z,140nm,6.4s
HHC LN
comp=Z,230nm,15.4s
HHC LE
comp=Z,200nm,16.1s
HHC LZ
comp=Z,190nm,15.5s
**IMW Indian Meadow 54.09 308 *e*P P 01 01 53.6 +0.1**
comp=Z,4.3nm,0.8s
**IMW Indian Meadow 54.09 308 *e*P P 01 01 53.6 +0.1**
comp=Z,4.3nm,0.8s
**K22A Casper 54.43 304 *e*P P 01 01 54.4 -1.4**
comp=Z,7.9nm,0.9s
**K22A Casper 54.43 304 *e*P P 01 01 54.4 -1.4**
comp=Z,7.9nm,0.9s
**USRK Ussurivsk Ar. 54.88 47** LR LR 01 26 50.9
comp=Z,64nm,19.1s,baz=314,slow=38
**BW06 Boulder Array 54.92 307 *e*P P 01 01 59.2 -0.3**
comp=Z,11nm,1.3s
**BW06 Boulder Array 54.92 307 *e*P P 01 01 59.2 -0.3**
comp=Z,11nm,1.3s
**BJI Beijing 55.80 62 P P 01 02 07.9 +2.4**
BJI PMZ
comp=Z,8.0nm,2.5s
**RAYN Ar Rayn 55.89 137 *e*P P 01 02 06.7 +0.3**
comp=Z,9.9nm,1.3s
**RAYN Ar Rayn 55.89 137 *e*P P 01 02 06.7 +0.3**
comp=Z,9.9nm,1.3s
**LZH Lanzhou 56.81 74 *e*P P 01 02 15.9 +2.9**
LZH *p*P pP 01 02 24.1 +7.9
LZH *s*P sP 01 02 29.6 +12
LZH PMZ
comp=Z,17nm,1.0s
LZH PMZ
comp=Z,62nm,4.0s
LZH LN
comp=Z,320nm,14.7s
LZH LE
comp=Z,280nm,14.7s
LZH LZ
comp=Z,210nm,15.3s
**O20A White River Ci 57.20 305 *e*P P 01 02 15.8 0.0**
comp=Z,7.8nm,0.9s
**O20A White River Ci 57.20 305 *e*P P 01 02 15.8 0.0**
comp=Z,7.8nm,0.9s
**O16A Spngville 57.77 308 *e*P P** 01 02 28.7 +9.0
comp=Z,12nm,1.3s
**MSU Marysvale 59.53 308 *e*P P 01 02 32.3 +0.2**
MSU pmax pmax
comp=Z,7.0nm,0.9s
**MSU Marysvale 59.53 308 *e*P P 01 02 32.3 +0.2**
comp=Z,6.8nm,0.9s
**MSU Marysvale 59.53 308 *e*P P 01 02 32.3 +0.2**
comp=Z,7.0nm,0.9s
**MVCO Mesa Verde 60.07 304 *e*P P 01 02 36.2 +0.4**
comp=Z,5.1nm,1.1s
**MVCO Mesa Verde 60.07 304 *e*P P 01 02 36.2 +0.4**
comp=Z,5.1nm,1.1s
**KSRS Korea Array 60.67 52** LR LR 01 33 46.8
comp=Z,49nm,18.0s,baz=335,slow=41
**NVAR Mina Array Bea 60.75 313 P P 01 02 38.4 -2.0**
comp=Z,0.9nm,0.8s,baz=25,slow=5.5,SNR=5.9
NVAR LR LR 01 28 27.9
comp=Z,110nm,18.3s,baz=41,slow=36
**CD2 Chengdu 61.75 76 *e*P P 01 02 47.0 0.0**
**TORD Torodi Ar. Bea 62.96 186 P P 01 02 53.1 -2.1**
comp=Z,4.0nm,0.9s,baz=360,slow=7.1,SNR=7.9
**MJAR Matsushiro Arr 63.40 43 P P 01 02 58.4 +0.4**
comp=Z,1.5nm,0.8s,baz=328,slow=6.7,SNR=4.8
MJAR LR LR 01 31 48.9
comp=Z,40nm,18.1s,baz=35,slow=37
**MJAR Matsushiro Arr 63.40 43 P P 01 02 58.4 +0.4**
MJAR pmax pmax
comp=Z,2.0nm,0.8s
MJAR MLR MLR
comp=Z,40nm,18.1s
**NJ2 Nanjing 64.06 62 *e*P P 01 03 03.1 +0.8**
NJ2 PMZ
comp=Z,20nm,0.6s
**TUC Tucson 65.27 305 *e*P P 01 03 11.0 +0.6**
TUC pmax pmax
comp=Z,4.0nm,1.0s
**TUC Tucson 65.27 305 *e*P P 01 03 11.0 +0.6**
comp=Z,4.0nm,1.0s
**TUC Tucson 65.27 305 *e*P P 01 03 11.0 +0.6**
comp=Z,4.0nm,1.0s
**TXAR Lajitas Array 66.67 298 P P 01 03 17.9 -1.5**
comp=Z,1.2nm,0.8s,baz=44,slow=4.6,SNR=13
TXAR LR LR 01 33 32.7
comp=Z,156nm,18.5s,baz=0.0,slow=37
**TXAR Lajitas Array 66.67 298 P P 01 03 18.0 -1.5**
TXAR pmax pmax
comp=Z,1.0nm,0.8s
TXAR MLR MLR
comp=Z,156nm,18.5s
**TXAR Lajitas Array 66.67 298 P P 01 03 18.0 -1.5**
comp=Z,156nm,18.5s
**KMI Kunming 67.06 79 P P 01 03 22.5 +0.4**
KMI PMZ
comp=Z,6.0nm,0.5s
KMI PMZ
comp=Z,220nm,4.8s
KMI LN
comp=Z,190nm,4.1s
KMI LE
comp=Z,210nm,4.8s
KMI LZ
comp=Z,190nm,5.1s
**CMAR Chiang Mai Arr 72.56 84 P P 01 03 55.6 0.0**
comp=Z,2.3nm,1.0s,baz=334,slow=7.7,SNR=13
**CMAR Chiang Mai Arr 72.56 84 P P 01 03 55.7 0.0**
CMAR pmax pmax
comp=Z,2.0nm,1.0s
**QIZ Qiongzhong 74.60 74 P P 01 04 09.5 +1.8**
QIZ S **S 01 13 47.5 +4.5**
QIZ PMZ
comp=Z,8.0nm,2.0s
QIZ LZ
comp=Z,190nm,6.5s
**PALK Pallekele 78.94 105 *i* P P 01 04 35.2 +2.9**
**PALK Pallekele 78.94 105 *i* P P 01 04 35.2 +2.9**
**OTAV Otavalo 88.81 266 *e*P P 01 05 23.1 -0.1**
comp=Z,21nm,1.6s
**OTAV Otavalo 88.81 266 *e*P P 01 05 23.1 -0.1**
comp=Z,21nm,1.6s
**WRA Warramunga Arr 117.75 58** PKP **PKPdf 01 11 12.8 -1.8**
comp=Z,0.3nm,0.3s,baz=326,slow=2.5,SNR=3.8
**ASAR Alice Springs 121.27 60** PKP **PKPdf 01 11 19.7 -1.6**
comp=Z,1.7nm,0.7s,baz=356,slow=2.0,SNR=24
**ASAR Alice Springs 121.27 60** PKIKP **PKPdf 01 11 19.7 -1.6**
ASAR pmax pmax
comp=Z,2.0nm,0.7s
**SYO Syowa Base 146.17 160⇑ *e*P PKPdf 01 12 05.0 -1.0**
**VNA1 Neumayer--Stat 146.80 190 P PKPdf 01 12 08.1 +1.1**
**VNA2 Neumayer--Watz 147.04 189 P PKPdf 01 12 08.1 +0.7**
baz=3.7,slow=5.0
**VNA3 Neumayer Olymp 147.44 190 P PKPdf 01 12 09.1 +0.9**
**MAW Mawson 147.46 144** PKPbc **PKPbc 01 12 09.8 -1.0**
comp=Z,8.1nm,0.9s,baz=306,slow=5.0,SNR=19
**MAW Mawson 147.46 144** PKP2 **PKPbc 01 12 09.8 -1.0**
MAW pmax pmax
comp=Z,8.0nm,0.9s
**SNAA Sanae 147.64 186 *e*PKP2 PKPdf 01 12 09.6 +1.1**
**SNAA Sanae 147.64 186 *e*PKPbc PKPdf 01 12 09.6 +1.1**

*ISCJB **24** 00:56:41.6±0.4,6°.28S±0°.06×71°.63W±0°.07,h600km, mb3.7/18,Error ellipse: s-maj=8.9km s-min=8.2km az=3.1*
*IDC **24** 00:56:42.6±0.8,6°.40S±0.71.69W,h603km±9km,mb3.3/17, mb1 3.4/23,mb1mx3.3/46,mbtmp4.3/23,Error ellipse: s-maj=13.3km s-min=9.8km az=40.0*
**ISC 24 00:56:42.4±0.4,6°.33S±0°.07×71°.70W±0°.07,h600km,n52, σ1s11/61,mb3.9/18,Western Brazil**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ATAH** | **Atahualpa** | **6.70** | **263** | P | P | P | **00 58 31.2** | **+1.0** |
| | 2.6nm,0.3s,baz=105,slow=4.4,SNR=20 | | | | | | | |
| ATAH | | | | S | S | S | **00 59 58.9** | **+0.6** |
| | 0.8nm,0.3s,baz=343,slow=21,SNR=11 | | | | | | | |
| **NNA** | **Nana** | **7.58** | **222** | P | P | P | **00 58 38.0** | **+0.1** |
| | 1.5nm,0.3s,baz=49,slow=9.3,SNR=3.1 | | | | | | | |
| NNA | | | | S | S | S | **01 00 10.4** | **-1.9** |
| | 1.7nm,0.3s,baz=196,slow=13,SNR=3.6 | | | | | | | |
| **LPAZ** | **La Paz** | **10.50** | **161** | P | P | P | **00 59 07.2** | **+0.3** |
| | 0.3nm,0.3s,baz=327,slow=12,SNR=11 | | | | | | | |
| LPAZ | | | | S | S | S | **01 01 08.9** | **+3.6** |
| | 0.2nm,0.3s,baz=356,slow=18,SNR=2.7 | | | | | | | |
| **PTGA** | **Pitinga** | **12.96** | **65** | P | P | P | **00 59 31.9** | **+0.9** |
| | 7.9nm,0.3s,baz=242,slow=12,SNR=89 | | | | | | | |
| PTGA | | | | S | S | S | **01 01 48.0** | **-1.4** |
| | 0.3nm,0.3s,baz=287,slow=19,SNR=3.7 | | | | | | | |
| **SIV** | **San Ignacio** | **14.17** | **134** | P | P | P | **00 59 41.9** | **-1.2** |
| | 0.4nm,0.3s,baz=318,slow=14,SNR=11 | | | | | | | |
| SIV | | | | S | S | S | **01 02 14.4** | **+3.8** |
| | 0.1nm,0.3s,baz=287,slow=17,SNR=5.0 | | | | | | | |
| **LVC** | **Limon Verde** | **16.41** | **171** | P | P | P | **01 00 03.1** | **-0.8** |
| | 25nm,0.3s,baz=18,slow=6.3,SNR=5.6 | | | | | | | |
| **CPUP** | **Villa Florida** | **24.16** | **147** | P | P | P | **01 01 11.0** | **-2.2** |
| | 0.7nm,0.5s,baz=339,slow=14,SNR=3.3 | | | | | | | |
| **BDFB** | **Brasilia** | **25.00** | **114** | P | P | P | **01 01 21.7** | **+0.7** |
| | 4.6nm,0.8s,baz=284,slow=12,SNR=7.1 | | | | | | | |
| **CMIG** | **Matias Romero** | **32.66** | **316** | P | P | P | **01 02 28.0** | **+1.1** |
| | 1.4nm,0.3s,baz=82,slow=7.1,SNR=3.2 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **43.28** | **346** | P | P | P | **01 03 53.6** | **+1.1** |
| | 1.9nm,0.8s,baz=141,slow=14,SNR=2.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **46.92** | **321** | P | P | P | **01 04 21.5** | **+0.9** |
| | 0.1nm,0.4s,baz=134,slow=6.5,SNR=3.1 | | | | | | | |
| TXAR | | | | PcP | **PcP** | **PcP** | **01 05 41.5** | **+0.6** |
| | 0.2nm,0.8s,baz=156,slow=5.9,SNR=3.5 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **60.12** | **342** | P | P | P | **01 05 51.9** | **-1.0** |
| | 5.4nm,0.7s,baz=141,slow=6.7,SNR=5.8 | | | | | | | |
| **SCHQ** | **Schefferville** | **61.07** | **3** | P | P | P | **01 05 58.9** | **-0.2** |
| | 4.6nm,0.9s,baz=214,slow=3.6,SNR=2.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.06** | **320** | P | P | P | **01 06 07.8** | **+1.6** |
| | 0.2nm,0.5s,baz=170,slow=6.4,SNR=3.1 | | | | | | | |
| NVAR | | | | PcP | **PcP** | **PcP** | **01 06 38.5** | **-1.1** |
| | 0.7nm,0.7s,baz=134,slow=5.2,SNR=6.3 | | | | | | | |
| **DBIC** | **Dimbokro** | **67.94** | **80** | P | P | P | **01 06 43.5** | **+0.3** |
| | 6.8nm,0.4s,baz=246,slow=5.3,SNR=28 | | | | | | | |
| **FRB** | **Frobisher Bay** | **69.92** | **1** | P | P | P | **01 06 53.3** | **-0.7** |
| | 6.4nm,0.9s,baz=198,slow=3.2,SNR=3.7 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **75.26** | **163** | P | P | P | **01 07 24.6** | **0.0** |
| **TORD** | **Torodi Ar. Bea** | **75.41** | **75** | P | P | P | **01 07 26.2** | **-0.3** |
| | 5.1nm,0.6s,baz=284,slow=4.7,SNR=69 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **75.44** | **162** | P | P | P | **01 07 25.9** | **+0.3** |
| **VNA2** | **Neumayer--Watz** | **75.81** | **162** | P | P | P | **01 07 27.6** | **-0.1** |
| | baz=293,slow=6.6 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.05** | **341** | P | P | P | **01 07 28.8** | **-0.2** |
| | 3.3nm,0.6s,baz=134,slow=6.2,SNR=20 | | | | | | | |
| **ESDC** | **Sonseca Array** | **77.23** | **47** | P | P | P | **01 07 36.9** | **+0.8** |
| | 1.8nm,0.9s,baz=260,slow=6.4,SNR=11 | | | | | | | |
| **KEST** | **Kesra** | **86.43** | **54** | P | P | P | **01 08 21.7** | **-1.2** |
| | 1.5nm,0.7s,baz=273,slow=8.8,SNR=5.4 | | | | | | | |
| **TSUM** | **Tsumeb** | **87.28** | **109** | P | P | P | **01 08 27.4** | **+0.2** |
| | 2.5nm,0.7s,baz=275,slow=5.6,SNR=7.9 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **88.82** | **43** | P | P | P | **01 08 33.6** | **-0.2** |
| | 2.8nm,0.7s,baz=201,slow=8.6,SNR=4.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **89.43** | **336** | P | P | P | **01 08 35.9** | **-0.2** |

0.4nm,0.8s,baz=135,slow=3.4,SNR=4.6
**VNDA Vanda 91.24 190** P **P** 01 08 44.3 **+0.1**
0.3nm,0.7s,baz=108,slow=2.8,SNR=3.4
**ZALV Zalesovo Beam 128.84 18** PKP **PKPdf** 01 14 42.9 **+0.3**
3.9nm,0.6s,baz=300,slow=2.8,SNR=20
**KURBB Kurchatov Arra 129.34 24** PKP **PKPdf** 01 14 44.0 **+0.4**
1.4nm,0.7s,baz=304,slow=2.7,SNR=12
**MKAR Makanchi Array 133.89 25** PKP **PKPdf** 01 14 52.5 **0.0**
1.2nm,0.7s,baz=333,slow=1.6,SNR=6.3
MKAR SKPbc **SKPbc** 01 17 25.8 **-0.4**
1.2nm,1.0s,baz=345,slow=4.5,SNR=3.1
**SONM Songino Array 138.61 2** PKP **PKPdf** 01 14 60.0 **-1.3**
0.4nm,0.5s,baz=345,slow=0.6,SNR=3.9
SONM SKPbc **SKPbc** 01 17 40.5 **+0.2**
0.4nm,0.5s,baz=338,slow=2.3,SNR=5.5
**ASAR Alice Springs 141.10 219** PKhKP PKPpre 01 15 00.5
0.3nm,0.4s,baz=134,slow=3.7,SNR=5.9
ASAR PKP **PKPdf** 01 15 03.8 **-2.6**
0.5nm,0.6s,baz=112,slow=1.7,SNR=6.5
ASAR SKPbc **SKPbc** 01 17 45.7 **-1.9**
0.7nm,0.6s,baz=130,slow=3.3,SNR=11
**WRA Warramunga Arr 143.43 224** PKP PKPab 01 15 08.4 -0.7
3.1nm,0.6s,baz=130,slow=3.4,SNR=20
WRA SKPbc **SKPbc** 01 17 51.5 **-1.9**
1.1nm,0.5s,baz=135,slow=2.4,SNR=5.0
**KSRS Korea Array 144.23 333** PKP PKPbc 01 15 11.3 +0.1
4.0nm,0.8s,baz=14,slow=2.4,SNR=13
**KOLN Koldanda 148.31 45** *eP* **PKPbc** 01 15 22.7 **-0.4**
**KOLN Koldanda 148.31 45** *eP* **PKPbc** 01 15 22.7 **-0.4**
6.1nm,0.7s
**GKN Gorkha 148.88 43** *eP* **PKPbc** 01 15 24.6 **+0.1**
**GKN Gorkha 148.88 43** *eP* **PKPbc** 01 15 24.5 **+0.1**
15nm,0.4s
**DMN Daman 149.46 43** *eP* **PKPbc** 01 15 25.9 **-0.1**
**DMN Daman 149.46 43** *eP* **PKPbc** 01 15 25.9 **-0.1**
11nm,0.6s
**KKN Kakani 149.46 43** *eP* **PKPbc** 01 15 25.8 **-0.1**
**KKN Kakani 149.46 43** *eP* **PKPbc** 01 15 25.9 **0.0**
19nm,0.7s
**PKI Pulchoki 149.69 43** *eP* **PKPbc** 01 15 25.9 **-0.6**
**PKI Pulchoki 149.69 43** *eP* **PKPbc** 01 15 26.0 **-0.6**
11nm,0.8s
**GUN Gumba 149.78 42** *eP* **PKPbc** 01 15 26.9 **+0.1**
**GUN Gumba 149.78 42** *eP* **PKPbc** 01 15 26.9 **+0.1**
16nm,0.7s
**RAMN Ramite 150.89 43** *eP* **PKPbc** 01 15 29.1 **-0.2**
**RAMN Ramite 150.89 43** *eP* **PKPbc** 01 15 29.1 **-0.2**
28nm,0.6s
**TAPN Taplejung 151.36 41** *eP* **PKPbc** 01 15 30.3 **-0.1**
**TAPN Taplejung 151.36 41** *eP* **PKPbc** 01 15 30.3 **-0.1**
16nm,0.6s
**ODAN Odare 151.48 42** *eP* **PKPbc** 01 15 30.3 **-0.3**
**ODAN Odare 151.48 42** *eP* **PKPbc** 01 15 30.3 **-0.3**
15nm,0.7s

**KRSC 24 01:04:36.0±1.5, 54°.39N×158°.95E, h236km±14km, ML3.7, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GNL** | **Ganaly** | **0.91** | **221** | *eP* | Pn | 01 05 09.7 | +0.5 |
| GNL | | | | *eS* | S | 01 05 35.5 | +0.3 |
| **KRX** | **Arik** | **1.05** | **190** | *eP* | Pn | 01 05 11.4 | +1.3 |
| **KZV** | **Kizimen** | **1.07** | **47** | *eP* | Pn | 01 05 11.4 | +1.3 |
| **KOK** | **Koryaka** | **1.11** | **190** | *eP* | Pn | 01 05 11.9 | +1.5 |
| **SDLR** | **Sedlovina** | **1.11** | **182** | *eP* | Pn | 01 05 11.6 | +1.2 |
| **SMAR** | **Somma** | **1.13** | **184** | *eP* | Pn | 01 05 12.2 | +1.5 |
| **AVH** | **Avacha** | **1.13** | **186** | *eP* | Pn | 01 05 12.5 | +2.0 |
| **TUMR** | **Tumrok** | **1.13** | **37** | *eP* | Pn | 01 05 12.0 | +1.6 |
| **UGLR** | **Uglovaya** | **1.19** | **184** | *eP* | Pn | 01 05 12.3 | +1.4 |
| **SPN** | **Mys Shipunski** | **1.44** | **153** | *eP* | Pn | 01 05 13.3 | +0.7 |
| SPN | | | | *eS* | S | 01 05 41.5 | +0.4 |
| **MKZ** | **Mys Kozlova** | **1.63** | **83** | *eP* | Pn | 01 05 14.7 | +0.7 |
| MKZ | | | | *eS* | S | 01 05 44.0 | +0.3 |
| **APC** | **Apacha** | **1.81** | **217** | *eP* | Pn | 01 05 15.9 | +0.3 |
| APC | | | | *eS* | S | 01 05 45.9 | -0.7 |
| **RUS** | **Russkaya** | **1.98** | **188** | *eP* | Pn | 01 05 16.9 | -0.2 |
| RUS | | | | *eS* | S | 01 05 47.7 | -1.5 |
| **ASAK** | **Asacha** | **2.10** | **198** | *eP* | Pn | 01 05 19.1 | +0.6 |
| **KBTR** | **Krutoberegovo** | **2.87** | **49** | *eP* | Pn | 01 05 26.2 | +0.1 |
| KBTR | | | | *eS* | S | 01 06 03.8 | -1.7 |
| **BKI** | **Bering** | **4.15** | **76** | *eS* | S | 01 06 32.7 | +0.6 |

**NNC 24 01:40:08.8±4.6, 37°.47N×71°.68E, h171km±66km, mb2.8, mpv3.5, 4C-3D, Error ellipse: s-maj=45.3km s-min=25.4km az=9.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAK** | **Ala-Archa** | **5.59** | **22** | ⇑*P* | Pn | 01 41 30.1 | -0.4 |
| AAK | 3.0nm,0.4s | | | ⇓*S* | Sn | 01 42 34.5 | -0.2 |
| **KK31** | **Karatay Array** | **5.69** | **351** | ⇑*P* | Pn | 01 41 32.4 | +0.7 |
| KK31 | 8.3nm,0.7s<br>1.1nm,0.2s,baz=172,slow=13,SNR=88 | | | ⇓*S* | Sn | 01 42 37.5 | +0.7 |
| **AB31** | **Akbulak array**<br>3.4nm,0.2s,baz=172,slow=21,SNR=19 | **14.52** | **328** | ⇓*P* | Pn | 01 43 25.6 | -0.7 |
| AB31 | 0.3nm,0.4s,baz=136,slow=14,SNR=18<br>0.3nm,0.5s | | | ⇑*Sn* | Sn | 01 46 00.5 | -7.2 |
| **AKTO** | **Aktyubinsk**<br>4.7nm,0.9s | **16.23** | **327** | ⇑*P* | Pn | 01 43 47.2 | 0.0 |

*IDC **24** 01:44:10.6±0.8, 20°.41S×172°.40E, h0km, mb4.1/13, mb1 4.3/15, mb1mx4.2/30, mbtmp4.1/15, ML3.6/2, MS3.7/15, Ms1 3.7/15, ms1mx3.6/26, Error ellipse: s-maj=23.7km s-min=19.6km az=130.0*
*SZGRF **24** 01:44:12.9, 21°.78S×171°.25E, h33km*
*ISCJB **24** 01:44:13.8±0.4, 20°.50S±0°.08×172°.42E±0°.09, h33km, mb4.2/18, MS3.7/12, Error ellipse: s-maj=12.0km s-min=11.1km az=22.2*
*NEIC **24** 01:44:16.2±2.4, 20°.43S×172°.43E, h40km±21km, mb4.6/7, Error ellipse: s-maj=15.3km s-min=12.3km az=50.0*
**ISC 24 01:44:15.6±0.6, 20°.5S±0°.1×172°.5E±0°.1, h35km, n82, σ1s04/60, mb4.2/18, MS3.6/12, 13C-5D, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **5.82** | **253** | *eP* | **Pn** | **01 45 40.5** | **+1.0** |
| DZM | 3.9nm,0.3s | | | *eLR* | LR | 01 47 08.1 | |
| **DZM** | 795nm,22.9s<br>**Mont Dzumac**<br>1.3nm,0.3s,baz=358,slow=2.8,SNR=14 | **5.82** | **253** | Pn | **Pn** | **01 45 39.9** | **+0.4** |
| **RAO** | **Raoul Island**<br>comp=Z,796nm,19.1s,baz=138,slow=32 | **12.36** | **137** | LR | LR | 01 50 50.5 | |
| **HNR** | **Honiara**<br>comp=Z,322nm,18.4s,baz=170,slow=34 | **16.30** | **310** | LR | LR | 01 53 25.6 | |
| **URZ** | **Urewera**<br>0.2nm,0.3s,baz=204,slow=13,SNR=7.2 | **18.18** | **168** | P | **Pn** | **01 48 24.9** | **-0.3** |
| URZ | | | | LR | LR | 01 53 42.5 | |
| **EIDS** | **Eidsvold**<br>14nm,0.9s | **20.27** | **252** | *eP* | Pn | 01 48 49.7 | -0.6 |
| **CTA** | **Charters Tower**<br>1.8nm,0.2s,baz=65,slow=9.3,SNR=4.6 | **24.57** | **266** | P | **P** | **01 49 32.0** | **-0.4** |
| **CTAO** | **Charters Tower**<br>39nm,1.7s | **24.57** | **266** | *eP* | **P** | **01 49 33.1** | **+0.7** |
| **RAR** | **Rarotonga**<br>comp=Z,150nm,20.3s,baz=287,slow=31 | **25.96** | **97** | LR | LR | 01 57 39.9 | |
| **PMG** | **Port Moresby**<br>comp=Z,290nm,18.1s,baz=122,slow=33 | **26.75** | **291** | LR | LR | 01 58 59.0 | |
| **TBI** | **Tubuai**<br>379nm,33.5s | **35.39** | **102** | *eLQ* | LQ | 01 58 53.9 | |
| TBI | 423nm,31.2s | | | *eLR* | LR | 02 00 22.3 | |
| **WRA** | **Warramunga Arr**<br>0.4nm,0.4s,baz=100,slow=8.1,SNR=4.4 | **35.71** | **264** | P | **P** | **01 51 09.8** | **-1.3** |
| WRA | | | | LR | LR | 02 04 51.5 | |
| **ASAR** | **Alice Springs**<br>1.4nm,0.6s,baz=87,slow=9.0,SNR=14 | **35.79** | **258** | P | **P** | **01 51 10.8** | **-0.9** |
| ASAR | comp=Z,277nm,18.2s,baz=96,slow=35 | | | LR | LR | 02 05 07.7 | |
| **PPT2** | **Papeete2**<br>477nm,33.5s | **35.97** | **92** | *eLQ* | LQ | 01 59 06.8 | |
| PPT2 | 492nm,28.5s,baz=258 | | | *eLR* | LR | 02 00 36.9 | |
| **PPT** | **Papeete** | **35.97** | **92** | LR | LR | 02 03 10.5 | |
| | comp=Z,93nm,18.4s,baz=244,slow=32 | | | | | | |
| **RKT** | **Rikitea**<br>272nm,29.2s | **48.68** | **103** | *e*LR | LR | 02 06 31.8 | |
| **VNDA** | **Vanda**<br>0.5nm,0.5s,baz=349,slow=5.2,SNR=3.9 | **57.33** | **183** | P | **P** | **01 54 00.8** | **+1.2** |
| VNDA | comp=Z,63nm,20.6s,baz=4.0,slow=32 | | | LR | LR | 02 14 34.7 | |
| **SBA** | **Scott Base**<br>3.6nm,0.8s | **57.49** | **181** | *eP* | **P** | **01 54 03.1** | **+2.3** |
| **MJAR** | **Matsushiro Arr**<br>1.6nm,0.9s,baz=170,slow=5.8,SNR=4.7 | **65.28** | **330** | P | **P** | **01 54 53.2** | **-0.7** |
| MJAR | comp=Z,40nm,21.9s,baz=125,slow=31 | | | LR | LR | 02 18 17.9 | |
| **MAJO** | **Matsushiro**<br>2.9nm,0.5s | **65.28** | **330** | *eP* | P | 01 54 50.0 | -4.0 |
| **QSPA** | **South Pole Qui**<br>comp=Z,65nm,20.5s,baz=40,slow=33 | **69.59** | **180** | LR | LR | 02 22 33.4 | |
| **KSRS** | **Korea Array**<br>1.7nm,0.8s,baz=126,slow=5.1,SNR=5.9 | **71.25** | **324** | P | **P** | **01 55 31.4** | **+0.1** |
| KSRS | comp=Z,31nm,21.3s,baz=136,slow=33 | | | LR | LR | 02 23 48.4 | |
| **KSAR** | **Wonju Array Be** | **71.26** | **324** | P | **P** | **01 55 31.4** | **0.0** |
| **USRK** | **Ussuriysk Ar.**<br>1.1nm,0.7s,baz=194,slow=3.9,SNR=4.7 | **74.24** | **331** | P | **P** | **01 55 49.8** | **+0.9** |
| **PETK** | **Petropavlovsk-**<br>8.9nm,1.0s,baz=153,slow=11,SNR=5.4 | **74.38** | **151** | P | **P** | **01 55 50.9** | **+1.4** |
| PETK | comp=Z,27nm,18.9s,baz=145,slow=32 | | | LR | LR | 02 24 23.7 | |
| **CMAR** | **Chiang Mai Arr**<br>1.1nm,0.4s,baz=139,slow=4.0,SNR=8.0 | **81.76** | **293** | P | **P** | **01 56 32.4** | **+1.1** |
| CMAR | comp=Z,10nm,18.2s,baz=154,slow=37 | | | LR | LR | 02 35 04.9 | |
| **CHTO** | **Chiang Mai**<br>6.9nm,1.0s | **81.91** | **293** | *eP* | **P** | **01 56 32.8** | **+0.8** |
| **ISA** | **Isabella** | **85.94** | **50** | *eP* | **P** | **01 56 53.0** | **+0.7** |
| **NVAR** | **Mina Array Bea**<br>1.4nm,0.9s,baz=226,slow=8.8,SNR=4.4 | **87.38** | **47** | P | **P** | **01 56 59.9** | **+0.4** |
| **SNAA** | **Sanae**<br>1.2nm,0.9s | **88.04** | **181** | *eP* | **P** | **01 57 01.2** | **-0.8** |
| **VNA3** | **Neumayer Olymp** | **88.52** | **179** | P | **P** | **01 57 02.0** | **-2.2** |
| **VNA2** | **Neumayer--Watz**<br>baz=176,slow=3.9 | **88.85** | **180** | P | **P** | **01 57 03.6** | **-2.1** |
| **SONM** | **Songino Array**<br>0.8nm,0.7s,baz=137,slow=5.1,SNR=4.8 | **90.03** | **322** | P | **P** | **01 57 11.9** | **+0.2** |
| SONM | comp=Z,25nm,19.6s,baz=112,slow=35 | | | LR | LR | 02 36 17.2 | |
| **ILAR** | **Eielson Array**<br>0.8nm,0.8s,baz=234,slow=5.4,SNR=7.4 | **90.53** | **16** | P | **P** | **01 57 11.9** | **-1.5** |
| **EGAK** | **Eagle**<br>5.3nm,0.9s | **92.12** | **18** | *eP* | **P** | **01 57 20.2** | **-0.6** |
| **TXAR** | **Lajitas Array**<br>0.6nm,0.9s,baz=235,slow=4.4,SNR=5.5 | **94.72** | **61** | P | **P** | **01 57 34.8** | **+1.0** |
| **BURAR** | **Bucovina Array** | **142.13** | **323** | ⇓*iP* | **PKPdf** | **02 03 44.7** | **+0.5** |
| **PLOR** | **Plostina** | **142.24** | **320** | ⇑*iP* | PKPdf | 02 03 53.4 | +9.0 |
| **TRPA** | **Tarpa** | **143.28** | **326** | ⇑*iP* | PKPab | 02 03 41.4 | -0.5 |
| **VOIR** | | **143.42** | **320** | ⇑*iP* | **PKPdf** | **02 03 45.1** | **-1.4** |
| **CJR** | **Cluj-Napoca** | **143.55** | **323** | ⇑*iP* | PKPbc | 02 03 43.6 | -0.5 |
| **ARR** | **Arges** | **143.70** | **321** | ⇑*iP* | PKPbc | 02 03 44.9 | +0.3 |
| **DRGR** | | **144.00** | **324** | ⇑*iP* | PKPab | 02 03 43.8 | -1.1 |
| **LOT** | **Lotru** | **144.17** | **321** | ⇑*iP* | PKPbc | 02 03 46.1 | +0.1 |
| **MORC** | **Moravsky Berou** | **144.60** | **332** | ⇓*iP* | PKPbc | 02 03 47.3 | +0.1 |
| **MORC** | **Moravsky Berou** | **144.60** | **332** | *e*PKPdf | PKPbc | 02 03 47.3 | +0.1 |
| **DPC** | **Dobruska-Polom** | **144.71** | **333** | *e*PKP | PKPbc | 02 03 47.8 | +0.3 |
| DPC | | | | *ex* | x | 02 03 55.4 | |
| **UPC** | **Upice** | **144.72** | **334** | *e*PKP | PKPbc | 02 03 47.8 | +0.3 |
| UPC | | | | *ex* | x | 02 03 55.2 | |
| **GZR** | **Gura Zlata** | **144.78** | **322** | ⇑*iP* | PKPbc | 02 03 47.9 | 0.0 |
| **PSZ** | **Piszkesteto** | **144.78** | **327** | ⇑*iP* | **PKPab** | **02 03 43.1** | **-4.6** |
| **PSZ** | **Piszkesteto** | **144.78** | **327** | *e*PKPdf | PKPbc | 02 03 48.0 | +0.1 |
| **CLL** | **Collm**<br>baz=37,slow=2.8 | **145.25** | **337** | *e*PKPbc | **PKPbc** | **02 03 48.9** | **-0.2** |
| **CLL** | **Collm**<br>comp=Z,24nm,0.9s | **145.25** | **337** | ⇓*i*PKPbc | **PKPbc** | **02 03 48.9** | **-0.2** |
| CLL | | | | *e* | | 02 03 57.0 | |
| CLL | | | | *ep*PKPdf | **pPKPdf** | **02 04 02.0** | **+1.1** |
| **BRG** | **Berggiesshubel**<br>comp=Z,23nm,1.0s | **145.25** | **336** | *i* PKP | **PKPab** | **02 03 49.2** | **0.0** |
| **BRG** | **Berggiesshubel**<br>baz=37,slow=2.8 | **145.25** | **336** | *e*PKPbc | **PKPbc** | **02 03 48.6** | **-0.6** |
| **PVCC** | **Panska Ves** | **145.28** | **335** | *e*PKP | **PKPdf** | **02 03 49.5** | **0.0** |
| **BZS** | **Buzias** | **145.31** | **323** | ⇑*iP* | **PKPbc** | **02 03 48.9** | **-0.6** |
| **VRAC** | **Vranov** | **145.37** | **332** | ⇓*iP* | **PKPab** | **02 03 49.9** | **+0.1** |
| **FBE** | **Freiberg**<br>baz=37,slow=2.8 | **145.44** | **337** | *e*PKPbc | **PKPab** | **02 03 50.0** | **+0.1** |
| **GOPC** | **GO Pecny, Ondr** | **145.68** | **334** | *e*PKP | **PKPbc** | **02 03 50.6** | **0.0** |
| **PRU** | **Pruhonice** | **145.72** | **334** | *e*PKP | **PKPbc** | **02 03 50.7** | **0.0** |
| **TREC** | **Trest** | **145.86** | **333** | *e*PKP | **PKPbc** | **02 03 51.2** | **0.0** |
| **TANN** | **Tannenbergstha**<br>baz=37,slow=2.8 | **146.18** | **337** | *e*PKPbc | **PKPbc** | **02 03 51.9** | **-0.3** |
| **WERD** | **Werda**<br>baz=37,slow=2.8 | **146.21** | **337** | *e*PKPbc | **PKPbc** | **02 03 52.4** | **+0.2** |
| **GUNZ** | **Gunzen**<br>baz=37,slow=2.8 | **146.27** | **337** | *e*PKPbc | **PKPbc** | **02 03 52.7** | **+0.3** |
| **WERN** | **Wernitzgruen**<br>baz=37,slow=2.8 | **146.32** | **337** | *e*PKPbc | **PKPab** | **02 03 53.0** | **-0.4** |
| **NKC** | **Novy Kostel** | **146.34** | **337** | *e*PKP | **PKPab** | **02 03 53.0** | **-0.4** |
| **CONA** | **Conrad Observa**<br>comp=Z,9.5nm,1.0s | **146.71** | **331** | ⇓*i*PKPab | **PKPbc** | **02 03 54.1** | **+0.2** |
| **KHC** | **Kasperske Hory** | **146.78** | **334** | *e*PKP | **PKPbc** | **02 03 53.9** | **0.0** |
| KHC | | | | *ex* | x | 02 04 00.1 | |
| **KHC** | **Kasperske Hory** | **146.78** | **334** | *e*PKPbc | **PKPbc** | **02 03 53.8** | **-0.2** |
| **GEC2** | **GERESS Array S**<br>baz=37,slow=2.8 | **146.96** | **334** | *e*PKPbc | **PKPbc** | **02 03 54.2** | **-0.3** |
| **GERES** | **GERESS Array B**<br>comp=Z,4.7nm,0.7s,baz=32,slow=2.9,SNR=39 | **146.96** | **334** | PKPbc | **PKPbc** | **02 03 54.4** | **-0.1** |
| **DIVS** | **Divibare** | **147.14** | **322** | ⇑*iP* | **PKPbc** | **02 03 55.0** | **-0.2** |
| **GRF** | **Grafenberg Arr**<br>baz=37,slow=2.8 | **147.23** | **337** | *e*PKPbc | **PKPbc** | **02 03 54.4** | **-0.7** |
| **GRB5** | **Grafenberg Arr**<br>baz=37,slow=2.8 | **147.54** | **336** | *e*PKPbc | **PKPbc** | **02 03 55.4** | **-0.6** |
| **GRC4** | **Grafenberg Arr**<br>baz=37,slow=2.8 | **147.62** | **336** | *e*PKPbc | **PKPbc** | **02 03 55.9** | **-0.3** |
| **GRC3** | **Grafenberg Arr**<br>baz=37,slow=2.8 | **147.76** | **336** | *e*PKPbc | **PKPbc** | **02 03 55.9** | **-0.7** |
| **GRC2** | **Grafenberg Arr**<br>baz=37,slow=2.8 | **147.86** | **336** | *e*PKPbc | **PKPbc** | **02 03 56.5** | **-0.3** |
| **ABTA** | **Abfaltersbach**<br>comp=Z,8.3nm,1.0s | **149.09** | **333** | ⇑*i*PKPbc | **PKPbc** | **02 03 59.2** | **-1.1** |
| **FETA** | **Feichten**<br>comp=Z,6.9nm,0.9s | **149.62** | **335** | ⇑*i*PKPbc | **PKPbc** | **02 04 01.1** | **-0.6** |
| **TUE** | **Stuetta** | **150.61** | **336** | *e*PKPbc | **PKPbc** | **02 04 03.4** | **-0.7** |
| **ESDC** | **Sonseca Array**<br>comp=Z,0.6nm,0.8s,baz=347,slow=3.4,SNR=4.3 | **160.61** | **352** | PKPab | **PKPab** | **02 04 52.8** | **-0.7** |

**MEX 24 02:03:34.6±0.5, 14°.25N×93°.38W, h16km±81km, MD4.0, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **1.45** | **6** | *eP* | Pn | 02 03 56.5 | -3.8 |
| PCIG | | | | *eS* | Sn | 02 04 13.6 | -5.3 |
| **CCIG** | **Comitan** | **2.35** | **30** | *eP* | Pn | 02 04 12.2 | -0.6 |
| CCIG | | | | *eS* | Sn | 02 04 37.5 | -4.0 |
| **TGIG** | | **2.52** | **6** | *eP* | Pn | 02 04 12.6 | -2.5 |
| TGIG | | | | *eS* | Sn | 02 04 41.6 | -4.0 |

*ISCJB **24** 02:13:27.3±0.5, 43°.50S±0°.03×172°.86E±0°.04, h15km±3km, mb4.1/8, MS3.7/6, Error ellipse: s-maj=6.4km s-min=2.7km az=43.7*
*IDC **24** 02:13:27.6±0.8, 43°.35S×172°.71E, h0km, mb4.1/6, mb1 4.2/7, mb1mx4.1/19, mbtmp4.1/7, ML4.1/1, MS3.5/7, Ms1 3.5/7, ms1mx3.3/19, Error ellipse: s-maj=20.4km s-min=14.8km az=159.0*
*WEL **24** 02:13:28.9±0.2, 43°.46S×172°.77E, h9km±1km, ML4.7/55, Error ellipse: s-maj=2.0km s-min=0.9km az=90.0*
*WEL Felt from Marlborough to Otago, maximum reported intensity MM 7.*
*NEIC **24** 02:13:28.8, 43°.46S×172°.78E, h9km, mb4.3/2, ML4.8(WEL), After WEL.*
*NEIC Felt in Canterbury.*
**ISC 24 02:13:28.8±0.9, 43°.45S±0°.03×172°.78E±0°.03, h10km±6km, n177, σ1s27/166, mb4.1/8, MS3.7/6, 1C-4D, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CRLZ** | **Canterbury Las** | **0.17** | **222** | ⇓*P*G | **Pg** | **02 13 32.4** | **-0.1** |
| CRLZ | | | | SG | **Sg** | **02 13 34.9** | **-0.1** |
| CRLZ | | | | AML | AML | 02 13 35.1 | |
| **CRLZ** | **Canterbury Las** | **0.17** | **222** | *e*Pg | **Pg** | **02 13 32.5** | **-0.1** |
| CRLZ | | | | Sg | **Sg** | **02 13 34.9** | **-0.1** |
| **MQZ** | **McQueen's Vall** | **0.28** | **200** | ⇓*P*G | **Pg** | **02 13 34.4** | **+0.1** |
| MQZ | | | | SG | **Sg** | **02 13 38.4** | **+0.3** |
| MQZ | | | | | AML | AML | 02 13 38.4 |
| **MQZ** | **McQueen's Vall** | **0.28** | **200** | Pg | **Pg** | **02 13 34.4** | **+0.1** |
| MQZ | | | | Sg | **Sg** | **02 13 38.4** | **+0.3** |
| **OXZ** | **Oxford** | **0.55** | **282** | P* | **Pg** | **02 13 39.2** | **-0.3** |
| OXZ | | | | S* | **Sg** | **02 13 46.0** | **-0.8** |
| **OXZ** | **Oxford** | **0.55** | **282** | P* | **Pg** | **02 13 39.2** | **-0.3** |
| **LTZ** | **Lake Taylor** | **0.76** | **330** | ⇑P* | **Pb** | **02 13 44.0** | **-0.2** |
| LTZ | | | | | AML | AML | 02 13 56.2 |
| LTZ | | | | | AML | AML | 02 13 56.6 |
| **LTZ** | **Lake Taylor** | **0.76** | **330** | P* | **Pb** | **02 13 44.0** | **-0.2** |
| **KHZ** | **Kahutara** | **1.17** | **29** | P* | **Pb** | **02 13 50.4** | **-0.6** |
| KHZ | | | | | AML | AML | 02 14 24.5 |
| KHZ | | | | | AML | AML | 02 14 30.0 |
| **KHZ** | **Kahutara** | **1.17** | **29** | *e*Pn | **Pb** | **02 13 50.0** | **-0.4** |
| KHZ | | | | *e*Sg | **Sg** | **02 14 06.7** | **+0.4** |
| **RPZ** | **Rata Peaks** | **1.28** | **257** | P* | **Pn** | **02 13 51.1** | **-1.7** |
| RPZ | | | | | AML | AML | 02 14 10.0 |
| RPZ | | | | | AML | AML | 02 14 15.4 |
| **RPZ** | **Rata Peaks**<br>397nm,0.3s,baz=67,slow=4.4,SNR=517 | **1.28** | **257** | Pg | **Pn** | **02 13 51.6** | **-1.2** |
| RPZ | 3μm,0.3s,baz=351,slow=19,SNR=54 | | | Lg | Lg | 02 14 07.9 | |
| **RPZ** | **Rata Peaks** | **1.28** | **257** | P* | **Pn** | **02 13 51.1** | **-1.7** |
| RPZ | | | | Pg | **Pn** | **02 13 51.6** | **-1.2** |
| RPZ | | | | Lg | Lg | 02 14 07.9 | |
| **WVZ** | **Waitaha Valley** | **1.54** | **283** | PN | **Pn** | **02 13 55.8** | **-0.5** |
| WVZ | | | | | AML | AML | 02 14 26.2 |
| WVZ | | | | | AML | AML | 02 14 26.6 |
| **WVZ** | **Waitaha Valley** | **1.54** | **283** | Pn | **Pn** | **02 13 55.8** | **-0.5** |
| **THZ** | **Tophouse** | **1.68** | **3** | PN | **Pn** | **02 13 57.9** | **-0.5** |
| THZ | | | | | AML | AML | 02 14 33.8 |
| THZ | | | | | AML | AML | 02 14 35.4 |
| **THZ** | **Tophouse** | **1.68** | **3** | Pn | **Pn** | **02 13 57.9** | **-0.5** |
| **DSZ** | **Denniston Nort** | **1.84** | **337** | PN | **Pn** | **02 14 00.3** | **-0.2** |
| DSZ | | | | | AML | AML | 02 14 25.5 |
| DSZ | | | | | AML | AML | 02 14 25.8 |
| DSZ | | | | | AML | AML | 02 14 36.6 |
| DSZ | | | | | AML | AML | 02 14 37.6 |
| **DSZ** | **Denniston Nort** | **1.84** | **337** | Pn | **Pn** | **02 14 00.3** | **-0.2** |
| **BSWZ** | **Blackbirch Sta** | **1.91** | **25** | PN | **Pn** | **02 14 01.4** | **0.0** |
| BSWZ | | | | | AML | AML | 02 14 35.2 |
| BSWZ | | | | | AML | AML | 02 14 46.4 |
| **BSWZ** | **Blackbirch Sta** | **1.91** | **25** | Pn | **Pn** | **02 14 01.4** | **0.0** |
| **LBZ** | **Lake Benmore** | **2.10** | **242** | AML | AML | 02 14 40.3 |
| LBZ | | | | | AML | AML | 02 14 40.3 |
| LBZ | | | | | AML | AML | 02 14 41.4 |
| LBZ | | | | | AML | AML | 02 14 41.4 |
| **LBZ** | **Lake Benmore** | **2.10** | **242** | Pn | **Pn** | **02 14 03.0** | **-1.0** |
| **TUWZ** | **Tuamarina** | **2.19** | **24** | PN | **Pn** | **02 14 04.7** | **-0.6** |
| TUWZ | | | | | AML | AML | 02 15 01.8 |
| TUWZ | | | | | AML | AML | 02 15 13.7 |
| **TUWZ** | **Tuamarina** | **2.19** | **24** | Pn | **Pn** | **02 14 04.9** | **-0.3** |
| **ODZ** | **Otahua Downs** | **2.22** | **223** | ⇓PN | **Pn** | **02 14 04.4** | **-1.2** |
| ODZ | | | | | AML | AML | 02 14 43.8 |
| ODZ | | | | | AML | AML | 02 14 43.8 |
| ODZ | | | | | AML | AML | 02 14 50.4 |
| ODZ | | | | | AML | AML | 02 14 50.4 |
| **ODZ** | **Otahua Downs** | **2.22** | **223** | Pn | **Pn** | **02 14 04.4** | **-1.2** |
| **FOZ** | **Fox Glacier** | **2.25** | **266** | AML | AML | 02 14 41.7 |
| FOZ | | | | | AML | AML | 02 14 41.7 |
| FOZ | | | | | AML | AML | 02 14 44.7 |
| FOZ | | | | | AML | AML | 02 14 44.7 |
| **FOZ** | **Fox Glacier** | **2.25** | **266** | Pn | **Pn** | **02 14 05.2** | **-0.9** |
| **NNZ** | **Nelson** | **2.27** | **11** | PN | **Pn** | **02 14 06.6** | **+0.3** |
| NNZ | | | | | AML | AML | 02 14 57.7 |
| NNZ | | | | | AML | AML | 02 14 57.7 |
| NNZ | | | | | AML | AML | 02 15 02.1 |
| NNZ | | | | | AML | AML | 02 15 02.1 |
| **NNZ** | **Nelson** | **2.27** | **11** | Pn | **Pn** | **02 14 06.9** | **+0.6** |
| **TCW** | **Tory Channel** | **2.49** | **27** | AML | AML | 02 14 43.8 |
| TCW | | | | | AML | AML | 02 14 44.1 |
| **TCW** | **Tory Channel** | **2.49** | **27** | Pn | **Pn** | **02 14 08.8** | **-0.6** |
| **BHW** | **Baring Head** | **2.56** | **38** | AML | AML | 02 14 44.9 |
| BHW | | | | | AML | AML | 02 14 47.9 |
| **BHW** | **Baring Head** | **2.56** | **38** | Pn | **Pn** | **02 14 09.7** | **-0.6** |
| **SNZO** | **South Karori** | **2.57** | **34** | *e*Pn | **Pn** | **02 14 09.8** | **-0.6** |
| SNZO | | | | *e*Pg | **Pg** | **02 14 17.7** | **-0.2** |
| **WEL** | **Wellington** | **2.61** | **35** | Pn | **Pn** | **02 14 10.6** | **-0.4** |
| **PLWZ** | **Palliser** | **2.62** | **45** | Pn | **Pn** | **02 14 10.1** | **-1.1** |
| **PLWZ** | **Palliser** | **2.62** | **45** | Pn | **Pn** | **02 14 10.2** | **-1.0** |
| **QRZ** | **Quartz Range** | **2.62** | **356** | AML | AML | 02 14 22.8 |
| QRZ | | | | | AML | AML | 02 15 03.2 |
| **QRZ** | **Quartz Range** | **2.62** | **356** | Pn | **Pn** | **02 14 10.9** | **-0.3** |
| **MSWZ** | **Moikau Station** | **2.73** | **43** | PN | **Pn** | **02 14 11.4** | **-1.2** |
| MSWZ | | | | | AML | AML | 02 14 52.3 |
| MSWZ | | | | | AML | AML | 02 15 02.2 |
| **MSWZ** | **Moikau Station** | **2.73** | **43** | Pn | **Pn** | **02 14 11.5** | **-1.2** |
| **DUWZ** | **D'Urville Isla** | **2.77** | **18** | AML | AML | 02 15 13.2 |
| DUWZ | | | | | AML | AML | 02 15 24.1 |
| **DUWZ** | **D'Urville Isla** | **2.77** | **18** | Pn | **Pn** | **02 14 13.7** | **+0.4** |
| **PAWZ** | **Paruwai Farm** | **2.84** | **44** | AML | AML | 02 14 51.1 |
| PAWZ | | | | | AML | AML | 02 15 56.9 |
| **PAWZ** | **Paruwai Farm** | **2.84** | **44** | Pn | **Pn** | **02 14 13.2** | **-1.0** |
| **CAW** | **Cannon Point** | **2.89** | **37** | PN | **Pn** | **02 14 13.8** | **-1.0** |
| CAW | | | | | AML | AML | 02 15 28.3 |
| CAW | | | | | AML | AML | 02 15 31.9 |
| **CAW** | **Cannon Point** | **2.89** | **37** | Pn | **Pn** | **02 14 13.9** | **-1.0** |
| **HHSZ** | **Highcliff Hill** | **2.89** | **212** | PN | **Pn** | **02 14 13.4** | **-1.6** |
| **HHSZ** | **Highcliff Hill** | **2.89** | **212** | Pn | **Pn** | **02 14 13.9** | **-1.7** |
| **TRWZ** | **Traveller** | **2.97** | **47** | AML | AML | 02 14 53.8 |
| TRWZ | | | | | AML | AML | 02 15 25.3 |
| **TRWZ** | **Traveller** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WHZ** | **Wether Hill Ro** | **4.23** | **233** | PN | **Pn** | **02 14 30.8** | **-2.4** |
| WHZ | | | | AML | AML | 02 15 49.2 | |
| WHZ | | | | AML | AML | 02 15 53.8 | |
| **WHZ** | **Wether Hill Ro** | **4.23** | **233** | Pn | **Pn** | **02 14 30.8** | **-2.4** |
| WHZ | | | | *e*Pg | **Pb** | **02 14 45.9** | **+2.7** |
| WHZ | | | | *e*Sg | **Sg** | **02 15 40.4** | **-4.1** |
| **PREZ** | **Palmer Road** | **4.23** | **15** | Pn | **Pn** | **02 14 35.1** | **+1.8** |
| **NWEZ** | **Newall Road** | **4.25** | **11** | Pn | **Pn** | **02 14 35.6** | **+2.1** |
| **KHEZ** | **Kahui Hut** | **4.25** | **13** | PN | **Pn** | **02 14 35.1** | **+1.4** |
| **KHEZ** | **Kahui Hut** | **4.25** | **13** | Pn | **Pn** | **02 14 35.3** | **+1.6** |
| **NEZ** | **North Egmont** | **4.29** | **14** | Pn | **Pn** | **02 14 35.5** | **+1.4** |
| **PKE** | **Pukeiti** | **4.34** | **12** | AML | AML | 02 15 33.2 | |
| PKE | | | | AML | AML | 02 15 34.5 | |
| **PKE** | **Pukeiti** | **4.34** | **12** | Pn | **Pn** | **02 14 36.1** | **+1.2** |
| **PNHZ** | **Pukenui** | **4.36** | **37** | Pn | **Pn** | **02 14 33.5** | **-1.6** |
| **DCZ** | **Deep Cove** | **4.51** | **241** | PN | **Pn** | **02 14 35.5** | **-1.6** |
| DCZ | | | | AML | AML | 02 16 00.8 | |
| DCZ | | | | AML | AML | 02 16 04.9 | |
| **DCZ** | **Deep Cove** | **4.51** | **241** | Pn | **Pn** | **02 14 35.3** | **-1.8** |
| **MHEZ** | **Mangahewa** | **4.52** | **15** | Pn | **Pn** | **02 14 39.2** | **+2.0** |
| **VRZ** | **Vera Road** | **4.57** | **20** | PN | **Pn** | **02 14 38.9** | **+1.0** |
| VRZ | | | | AML | AML | 02 15 48.7 | |
| VRZ | | | | AML | AML | 02 16 16.4 | |
| **VRZ** | **Vera Road** | **4.57** | **20** | Pn | **Pn** | **02 14 38.9** | **+1.0** |
| **PKVZ** | **Pokaka** | **4.58** | **26** | PN | **Pn** | **02 14 38.4** | **+0.3** |
| PKVZ | | | | AML | AML | 02 15 42.5 | |
| PKVZ | | | | AML | AML | 02 15 42.6 | |
| **MOVZ** | **Moawhango** | **4.61** | **30** | AML | AML | 02 15 45.1 | |
| MOVZ | | | | AML | AML | 02 16 42.4 | |
| **MOVZ** | **Moawhango** | **4.61** | **30** | Pn | **Pn** | **02 14 38.2** | **-0.4** |
| **WNVZ** | **Wahianoa** | **4.63** | **28** | PN | **Pn** | **02 14 39.1** | **+0.2** |
| **WNVZ** | **Wahianoa** | **4.63** | **28** | Pn | **Pn** | **02 14 38.9** | **+0.2** |
| **KRHZ** | **Kereru** | **4.66** | **37** | PN | **Pn** | **02 14 37.2** | **-2.0** |
| **BHHZ** | **Black Hill Sta** | **4.66** | **33** | PN | **Pn** | **02 14 38.7** | **-0.6** |
| **BHHZ** | **Black Hill Sta** | **4.66** | **33** | Pn | **Pn** | **02 14 38.7** | **-0.6** |
| **WHVZ** | **Whangaehu Hut** | **4.67** | **28** | PN | **Pn** | **02 14 40.3** | **+0.8** |
| **WHVZ** | **Whangaehu Hut** | **4.67** | **28** | Pn | **Pn** | **02 14 40.1** | **+0.7** |
| **TUVZ** | **Tukino** | **4.70** | **28** | AML | AML | 02 15 43.2 | |
| TUVZ | | | | AML | AML | 02 15 45.9 | |
| **TUVZ** | **Tukino** | **4.70** | **28** | Pn | **Pn** | **02 14 39.9** | **0.0** |
| **WPVZ** | **Whakapapa** | **4.72** | **27** | AML | AML | 02 16 24.1 | |
| WPVZ | | | | AML | AML | 02 16 24.2 | |
| **WPVZ** | **Whakapapa** | **4.72** | **27** | Pn | **Pn** | **02 14 40.9** | **+0.7** |
| **NGZ** | **Ngauruhoe** | **4.76** | **27** | AML | AML | 02 15 43.8 | |
| NGZ | | | | AML | AML | 02 15 48.9 | |
| **NGZ** | **Ngauruhoe** | **4.76** | **27** | Pn | **Pn** | **02 14 40.4** | **-0.4** |
| **KAHZ** | **Kahuranaki** | **4.77** | **41** | Pn | **Pn** | **02 14 39.5** | **-1.2** |
| **APZ** | **The Paps** | **4.79** | **223** | PN | **Pn** | **02 14 39.2** | **-1.8** |
| APZ | | | | AML | AML | 02 16 09.2 | |
| APZ | | | | AML | AML | 02 16 21.5 | |
| **APZ** | **The Paps** | **4.79** | **223** | Pn | **Pn** | **02 14 39.2** | **-1.8** |
| **OTVZ** | **Oturere** | **4.80** | **28** | AML | AML | 02 15 41.8 | |
| OTVZ | | | | AML | AML | 02 15 47.1 | |
| **OTVZ** | **Oturere** | **4.80** | **28** | Pn | **Pn** | **02 14 40.7** | **-0.6** |
| **TWVZ** | **Taurewa** | **4.81** | **26** | PN | **Pn** | **02 14 41.7** | **+0.4** |
| TWVZ | | | | AML | AML | 02 16 04.2 | |
| TWVZ | | | | AML | AML | 02 16 22.4 | |
| **TWVZ** | **Taurewa** | **4.81** | **26** | Pn | **Pn** | **02 14 41.7** | **+0.4** |
| **WTVZ** | **West Tongariro** | **4.81** | **27** | PN | **Pn** | **02 14 41.9** | **+0.4** |
| WTVZ | | | | AML | AML | 02 16 21.1 | |
| WTVZ | | | | AML | AML | 02 16 35.2 | |
| **WTVZ** | **West Tongariro** | **4.81** | **27** | Pn | **Pn** | **02 14 41.2** | **-0.2** |
| **KRVZ** | **Karewarewa** | **4.85** | **27** | PN | **Pn** | **02 14 42.9** | **+0.9** |
| KRVZ | | | | AML | AML | 02 16 13.4 | |
| KRVZ | | | | AML | AML | 02 16 16.4 | |
| **KRVZ** | **Karewarewa** | **4.85** | **27** | Pn | **Pn** | **02 14 42.9** | **+0.9** |
| **MCHZ** | **McNeill Hill** | **4.96** | **38** | PN | **Pn** | **02 14 42.5** | **-0.9** |
| **MCHZ** | **McNeill Hill** | **4.96** | **38** | Pn | **Pn** | **02 14 42.5** | **-0.9** |
| **BKZ** | **Black Stump Fm** | **5.11** | **34** | PN | **Pn** | **02 14 44.1** | **-1.3** |
| BKZ | | | | AML | AML | 02 16 47.7 | |
| BKZ | | | | AML | AML | 02 16 55.9 | |
| **BKZ** | **Black Stump Fm** | **5.11** | **34** | Pn | **Pn** | **02 14 44.1** | **-1.3** |
| **HIZ** | **Hauiti** | **5.17** | **18** | PN | **Pn** | **02 14 46.3** | **+0.1** |
| HIZ | | | | AML | AML | 02 16 14.9 | |
| HIZ | | | | AML | AML | 02 16 33.7 | |
| **HIZ** | **Hauiti** | **5.17** | **18** | Pn | **Pn** | **02 14 46.3** | **+0.1** |
| **ARHZ** | **Aropaoanui** | **5.25** | **39** | Pn | **Pn** | **02 14 46.4** | **-0.9** |
| **NMHZ** | **Naumai** | **5.30** | **36** | Pn | **Pn** | **02 14 47.0** | **-1.1** |
| **ALRZ** | **Allen Road** | **5.57** | **30** | Pn | **Pn** | **02 14 50.8** | **-0.9** |
| **KNZ** | **Kokohu** | **5.76** | **41** | PN | **Pn** | **02 14 52.2** | **-2.0** |
| KNZ | | | | AML | AML | 02 16 07.1 | |
| KNZ | | | | AML | AML | 02 16 22.2 | |
| **KNZ** | **Kokohu** | **5.76** | **41** | Pn | **Pn** | **02 14 52.2** | **-2.0** |
| **MHGZ** | **Mahia Peninsul** | **5.77** | **44** | Pn | **Pn** | **02 14 53.5** | **-0.9** |
| **RIGZ** | **Rimuhau** | **6.05** | **40** | PN | **Pn** | **02 14 56.0** | **-2.3** |
| **TOZ** | **Tahuroa Road** | **6.07** | **21** | PN | **Pn** | **02 14 58.0** | **-0.6** |
| TOZ | | | | AML | AML | 02 16 59.1 | |
| TOZ | | | | AML | AML | 02 17 08.4 | |
| **TOZ** | **Tahuroa Road** | **6.07** | **21** | Pn | **Pn** | **02 14 58.3** | **-0.3** |
| **URZ** | **Urewera** | **6.13** | **34** | PN | **Pn** | **02 14 57.0** | **-2.4** |
| URZ | | | | AML | AML | 02 16 19.3 | |
| **URZ** | **Urewera** | **6.13** | **34** | Pn | **Pn** | **02 14 56.9** | **-2.5** |
| | 4.6nm,0.3s,baz=230,slow=6.7,SNR=22 | | | | | | |
| URZ | | | | Sn | **Sn** | **02 16 05.9** | **-3.7** |
| | 6.7nm,0.3s,baz=56,slow=9.3,SNR=4.2 | | | | | | |
| URZ | | | | LR | LR | 02 16 50.3 | |
| | comp=Z,67nm,20.6s,baz=262,slow=33 | | | | | | |
| **MWZ** | **Matawai** | **6.24** | **37** | PN | **Pn** | **02 14 58.8** | **-2.2** |
| MWZ | | | | AML | AML | 02 16 13.6 | |
| MWZ | | | | AML | AML | 02 16 17.3 | |
| **MWZ** | **Matawai** | **6.24** | **37** | Pn | **Pn** | **02 14 58.8** | **-2.2** |
| **MKAZ** | **Moumakai** | **6.58** | **17** | PN | **Pn** | **02 15 05.4** | **-0.2** |
| **MKAZ** | **Moumakai** | **6.58** | **17** | Pn | **Pn** | **02 15 05.4** | **-0.2** |
| **WMGZ** | **Waiomatatini S** | **7.07** | **39** | Pn | **Pn** | **02 15 10.1** | **-2.2** |
| **MXZ** | **Matakaoa Point** | **7.23** | **37** | Pn | **Pn** | **02 15 12.3** | **-2.2** |
| **CTZ** | **Chatham Island** | **7.70** | **96** | Pn | **Pn** | **02 15 20.1** | **-0.8** |
| **OUZ** | **Omahuta** | **8.24** | **5** | *e*Pn | **Pn** | **02 15 28.5** | **+0.2** |
| | 22nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **34.47** | **184** | P | **P** | **02 20 15.4** | **-0.9** |
| | 0.8nm,1.0s,baz=349,slow=10,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **37.50** | **289** | P | **P** | **02 20 42.3** | **-0.5** |
| | 0.7nm,0.5s,baz=130,slow=8.2,SNR=16 | | | | | | |
| ASAR | | | | LR | LR | 02 35 46.0 | |
| | comp=Z,108nm,18.8s,baz=137,slow=36 | | | | | | |
| **WRAB** | **Tennant Creek** | **39.73** | **294** | *e*P | **P** | **02 21 01.1** | **-0.5** |
| | 2.8nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **39.74** | **294** | P | **P** | **02 21 01.4** | **-0.2** |
| | 1.8nm,0.7s,baz=132,slow=7.7,SNR=15 | | | | | | |
| **QSPA** | **South Pole Qui** | **46.68** | **180** | P | **P** | **02 22 00.1** | **+2.7** |
| | 14nm,1.0s,baz=22,slow=23 | | | | | | |
| **MAW** | **Mawson** | **57.46** | **205** | P | **P** | **02 23 19.0** | **+1.6** |
| | 2.2nm,0.7s,baz=130,slow=14,SNR=5.4 | | | | | | |
| **GUMO** | **Guam** | **62.24** | **329** | LR | LR | 02 46 40.2 | |
| | comp=Z,14nm,20.3s,baz=120,slow=32 | | | | | | |
| **SYO** | **Syowa Base** | **62.64** | **197** | *e*P | **P** | **02 23 52.0** | **-0.8** |
| **SNAA** | **Sanae** | **65.15** | **182** | *e*P | **P** | **02 24 09.4** | **0.0** |
| | 3.2nm,1.2s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **65.61** | **179** | P | **P** | **02 24 13.3** | **+0.9** |
| **VNA2** | **Neumayer--Watz** | **65.94** | **180** | P | **P** | **02 24 15.8** | **+1.3** |
| | baz=173,slow=5.1 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **66.21** | **180** | P | **P** | **02 24 17.6** | **+1.5** |
| **JHJ** | **Hachijo jima 2** | **81.95** | **333** | LR | LR | 03 02 17.0 | |
| | comp=Z,39nm,18.5s,baz=246,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **90.23** | **326** | P | **P** | **02 26 31.0** | **+1.8** |
| | 0.8nm,0.6s,baz=116,slow=5.7,SNR=4.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **90.24** | **326** | P | **P** | **02 26 31.0** | **+1.8** |
| **ASAJ** | **Asahikawa** | **91.25** | **339** | LR | LR | 03 02 31.8 | |
| | comp=Z,137nm,19.9s,baz=184,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **91.33** | **294** | LR | LR | 03 10 29.4 | |
| | comp=Z,12nm,19.9s,baz=135,slow=38 | | | | | | |
| **CPUP** | **Villa Florida** | **96.71** | **136** | LR | LR | 03 05 01.7 | |
| | comp=Z,54nm,19.5s,baz=340,slow=32 | | | | | | |
| **KKAR** | **Karatay Array** | **125.44** | **299** | *e*PKPdf | **PKPdf** | **02 32 29.3** | **-0.2** |
| **TORD** | **Torodi Ar. Bea** | **148.85** | **197** | PKPbc | **PKPbc** | **02 33 16.6** | **-0.4** |
| | 3.2nm,0.9s,baz=159,slow=1.9,SNR=9.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **148.98** | **338** | PKPbc | **PKPbc** | **02 33 14.6** | **-1.1** |
| | 5.8nm,0.8s,baz=64,slow=4.1,SNR=4.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **149.43** | **277** | PKPbc | **PKPbc** | **02 33 17.6** | **-0.3** |
| | 2.4nm,0.6s,baz=144,slow=5.4,SNR=16 | | | | | | |
| **FINES** | **FINESS Array B** | **153.31** | **324** | PKPbc | **PKPbc** | **02 33 25.9** | **-0.1** |
| | 1.5nm,0.6s,baz=104,slow=6.1,SNR=7.9 | | | | | | |

*BJI **24** 02:17:49.5, 19˚.20N×64˚.50W, h10km, mB5.1/2*
*IDC **24** 02:17:51.6±2.4, 19˚.14N×64˚.58W, h27km±16km, mb4.1/26, mb1 4.3/27, mb1mx4.2/42, mbtmp4.3/27, ML3.7/1, MS3.9/20, Ms1 3.9/20, ms1mx3.7/38, Error ellipse: s-maj=11.3km s-min=10.0km az=67.0*
*ISCJB **24** 02:17:52.0±0.1, 19˚.24N±0˚.02×64˚.58W±0˚.02, h42km, mb4.6/91, MS3.8/19, Error ellipse: s-maj=2.8km s-min=2.1km az=44.7*

*RSPR **24** 02:17:52.2, 19˚.38N×64˚.58W, h10km±31km, MD4.6/20*
*NEIC **24** 02:17:53.4±0.5, 19˚.16N×64˚.59W, h38km±4km, mb4.7/69, MD4.6(RSPR), Error ellipse: s-maj=4.9km s-min=3.3km az=222.0*
*NEIC Felt on Saint John, Saint Thomas and Tortola. Also felt at Caguas, Fajardo, Gurabo, Humacao, Juncos, Naguabo and San Juan, Puerto Rico.*

**ISC 24 02:17:53.8±0.3, 19˚.21N±0˚.04×64˚.62W±0˚.03, h42km, n385, σ1§16/419, mb4.6/90, MS3.8/19, 29C-35D, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **STVI** | **Saint Thomas** | **0.91** | **200** | *e*S | | | **Sn** | **02 18 24.0** | **+1.9** |
| **STVI** | **Saint Thomas** | **0.91** | **200** | *e*P | | | **Pn** | **02 18 08.8** | **-1.3** |
| **STVI** | **Saint Thomas** | **0.91** | **200** | P | | | **Pn** | **02 18 09.1** | **-1.1** |
| **STVI** | **Saint Thomas** | **0.91** | **200** | P | | | **Pn** | **02 18 08.8** | **-1.3** |
| **STVI** | **Saint Thomas** | **0.91** | **200** | P | | | **Pn** | **02 18 09.1** | **-1.1** |
| STVI | | | | *e*S | | | **Sn** | **02 18 24.0** | **+1.9** |
| **STVI** | **Saint Thomas** | **0.91** | **200** | *e*P | | | **Pn** | **02 18 08.8** | **-1.3** |
| STVI | | | | *e*S | | | **Sn** | **02 18 24.0** | **+1.9** |
| **HUMP** | **Col San Antoni** | **1.58** | **228** | *e*P | | | **Pn** | **02 18 18.9** | **-0.4** |
| **HUMP** | **Col San Antoni** | **1.58** | **228** | *e*P | | | **Pn** | **02 18 18.8** | **-0.5** |
| **HUMP** | **Col San Antoni** | **1.58** | **228** | *e*S | | | **Sn** | **02 18 40.3** | **+1.8** |
| **HUMP** | **Col San Antoni** | **1.58** | **228** | *e*P | | | **Pn** | **02 18 18.8** | **-0.5** |
| **HUMP** | **Col San Antoni** | **1.58** | **228** | *e*P | | | **Pn** | **02 18 18.9** | **-0.4** |
| HUMP | | | | *e*S | | | **Sn** | **02 18 40.3** | **+1.8** |
| **HUMP** | **Col San Antoni** | **1.58** | **228** | *e*P | | | **Pn** | **02 18 18.8** | **-0.5** |
| HUMP | | | | *e*S | | | **Sn** | **02 18 40.3** | **+1.8** |
| **CPD** | **Cerro la Pandu** | **1.69** | **227** | *e*P | | | **Pn** | **02 18 20.7** | **-0.3** |
| **CPD** | **Cerro la Pandu** | **1.69** | **227** | *e*S | | | **Sn** | **02 18 43.4** | **+1.9** |
| **CPD** | **Cerro la Pandu** | **1.69** | **227** | *e*P | | | **Pn** | **02 18 20.7** | **-0.3** |
| CPD | | | | *e*S | | | **Sn** | **02 18 43.4** | **+1.9** |
| **CPD** | **Cerro la Pandu** | **1.69** | **227** | *e*P | | | **Pn** | **02 18 20.7** | **-0.3** |
| CPD | | | | *e*S | | | **Sn** | **02 18 43.4** | **+1.9** |
| **SJG** | **San Juan** | **1.82** | **233** | *e*P | | | **Pn** | **02 18 21.9** | **-0.6** |
| **SJG** | **San Juan** | **1.82** | **233** | *i*P | | | **Pn** | **02 18 21.9** | **-0.6** |
| **SJG** | **San Juan** | **1.82** | **233** | Pn | | | **Pn** | **02 18 22.0** | **-0.6** |
| | 170nm,0.3s,baz=65,slow=11,SNR=507 | | | | | | | | |
| SJG | | | | Sn | | | **Sn** | **02 18 45.4** | **+1.0** |
| | 850nm,0.3s,baz=240,slow=22,SNR=8.5 | | | | | | | | |
| **SJG** | **San Juan** | **1.82** | **233** | *e*P | | | **Pn** | **02 18 21.9** | **-0.6** |
| **SMRT** | **St. Maarten** | **1.86** | **128** | *e*P | | | **Pn** | **02 18 22.5** | **-0.8** |
| **SMRT** | **St. Maarten** | **1.86** | **128** | *e*S | | | **Sn** | **02 18 45.9** | **+0.3** |
| **SMRT** | **St. Maarten** | **1.86** | **128** | P | | | **Pn** | **02 18 22.5** | **-0.8** |
| SMRT | | | | *e*S | | | **Sn** | **02 18 45.9** | **+0.3** |
| **SMRT** | **St. Maarten** | **1.86** | **128** | P | | | **Pn** | **02 18 22.5** | **-0.8** |
| SMRT | | | | *e*S | | | **Sn** | **02 18 45.9** | **+0.3** |
| **SABA** | **Saba** | **2.05** | **140** | *e*P | | | **Pn** | **02 18 25.5** | **-0.3** |
| **SABA** | **Saba** | **2.05** | **140** | *e*S | | | **Sn** | **02 18 51.5** | **+1.3** |
| **SABA** | **Saba** | **2.05** | **140** | P | | | **Pn** | **02 18 25.5** | **-0.3** |
| SABA | | | | *e*S | | | **Sn** | **02 18 51.5** | **+1.3** |
| **SABA** | **Saba** | **2.05** | **140** | P | | | **Pn** | **02 18 25.5** | **-0.3** |
| SABA | | | | *e*S | | | **Sn** | **02 18 51.5** | **+1.3** |
| **CELP** | **Cerrillos** | **2.17** | **239** | *i*P | | | **Pn** | **02 18 27.3** | **-0.2** |
| **CELP** | **Cerrillos** | **2.17** | **239** | *i*P | | | **Pn** | **02 18 27.3** | **-0.2** |
| **CELP** | **Cerrillos** | **2.17** | **239** | *i*P | | | **Pn** | **02 18 27.3** | **-0.2** |
| **AOPR** | **Arecibo Observ** | **2.20** | **247** | *e*P | | | **Pn** | **02 18 27.2** | **-0.7** |
| **AOPR** | **Arecibo Observ** | **2.20** | **247** | *e*S | | | **Sn** | **02 18 56.4** | **+2.6** |
| **AOPR** | **Arecibo Observ** | **2.20** | **247** | P | | | **Pn** | **02 18 27.2** | **-0.7** |
| AOPR | | | | *e*S | | | **Sn** | **02 18 56.4** | **+2.6** |
| **AOPR** | **Arecibo Observ** | **2.20** | **247** | P | | | **Pn** | **02 18 27.2** | **-0.7** |
| AOPR | | | | *e*S | | | **Sn** | **02 18 56.4** | **+2.6** |
| **OBIP** | **Obispado Ponce** | **2.21** | **239** | *e*P | | | **Pn** | **02 18 27.8** | **-0.2** |
| **OBIP** | **Obispado Ponce** | **2.21** | **239** | *e*S | | | **Sn** | **02 18 56.8** | **+2.6** |
| **OBIP** | **Obispado Ponce** | **2.21** | **239** | P | | | **Pn** | **02 18 27.8** | **-0.2** |
| OBIP | | | | *e*S | | | **Sn** | **02 18 56.8** | **+2.6** |
| **OBIP** | **Obispado Ponce** | **2.21** | **239** | P | | | **Pn** | **02 18 27.8** | **-0.2** |
| OBIP | | | | *e*S | | | **Sn** | **02 18 56.8** | **+2.6** |
| **ICMP** | **Isla Caja de M** | **2.24** | **234** | *e*Pn | | | Pn | 02 18 23.0 | -5.4 |
| **LRS** | **Lares** | **2.30** | **247** | *i*P | | | **Pn** | **02 18 29.0** | **-0.2** |
| **LRS** | **Lares** | **2.30** | **247** | *i*P | | | **Pn** | **02 18 29.0** | **-0.2** |
| **LRS** | **Lares** | **2.30** | **247** | *i*P | | | **Pn** | **02 18 29.0** | **-0.2** |
| **SEUS** | **St. Eustatius** | **2.31** | **137** | *e*P | | | **Pn** | **02 18 29.7** | **+0.4** |
| **SEUS** | **St. Eustatius** | **2.31** | **137** | *e*S | | | **Sn** | **02 18 58.4** | **+1.8** |
| **SEUS** | **St. Eustatius** | **2.31** | **137** | *e*P | | | **Pn** | **02 18 29.7** | **+0.4** |
| SEUS | | | | *e*S | | | **Sn** | **02 18 58.4** | **+1.8** |
| **SEUS** | **St. Eustatius** | **2.31** | **137** | *e*P | | | **Pn** | **02 18 29.7** | **+0.4** |
| SEUS | | | | *e*S | | | **Sn** | **02 18 58.4** | **+1.8** |
| **GBPR** | **Guanica, Bosqu** | **2.47** | **241** | *e*P | | | **Pn** | **02 18 32.2** | **+0.6** |
| **GBPR** | **Guanica, Bosqu** | **2.47** | **241** | *e*P | | | **Pn** | **02 18 32.2** | **+0.6** |
| **GBPR** | **Guanica, Bosqu** | **2.47** | **241** | *e*P | | | **Pn** | **02 18 32.2** | **+0.6** |
| **AGPR** | **Aguadilla, PR** | **2.47** | **253** | *e*P | | | **Pn** | **02 18 30.6** | **-1.0** |
| **AGPR** | **Aguadilla, PR** | **2.47** | **253** | *e*S | | | **Sn** | **02 19 01.6** | **+1.0** |
| **AGPR** | **Aguadilla, PR** | **2.47** | **253** | P | | | **Pn** | **02 18 30.6** | **-1.0** |
| AGPR | | | | *e*S | | | **Sn** | **02 19 01.6** | **+1.0** |
| **AGPR** | **Aguadilla, PR** | **2.47** | **253** | P | | | **Pn** | **02 18 30.6** | **-1.0** |
| AGPR | | | | *e*S | | | **Sn** | **02 19 01.6** | **+1.0** |
| **LSP** | **Las Mesas** | **2.56** | **247** | *e*P | | | **Pn** | **02 18 32.6** | **-0.2** |
| **LSP** | **Las Mesas** | **2.56** | **247** | *e*P | | | **Pn** | **02 18 32.6** | **-0.2** |
| **LSP** | **Las Mesas** | **2.56** | **247** | *e*P | | | **Pn** | **02 18 32.6** | **-0.2** |
| **SKI** | **Saint Kitts** | **2.58** | **136** | *e*P | | | **Pn** | **02 18 32.3** | **-0.9** |
| **MPR** | **Mayaguez** | **2.59** | **248** | *e*P | | | **Pn** | **02 18 33.6** | **+0.5** |
| **MPR** | **Mayaguez** | **2.59** | **248** | *e*S | | | **Sn** | **02 19 05.2** | **+1.8** |
| **MPR** | **Mayaguez** | **2.59** | **248** | *e*P | | | **Pn** | **02 18 33.6** | **+0.5** |
| MPR | | | | *e*S | | | **Sn** | **02 19 05.2** | **+1.8** |
| **MPR** | **Mayaguez** | **2.59** | **248** | *e*P | | | **Pn** | **02 18 33.6** | **+0.5** |
| MPR | | | | *e*S | | | **Sn** | **02 19 05.2** | **+1.8** |
| **CRPR** | **Cabo Rojo, PR** | **2.65** | **244** | *e*P | | | **Pn** | **02 18 33.9** | **-0.1** |
| **CRPR** | **Cabo Rojo, PR** | **2.65** | **244** | *e*S | | | **Sn** | **02 19 05.6** | **+0.7** |
| **CRPR** | **Cabo Rojo, PR** | **2.65** | **244** | P | | | **Pn** | **02 18 33.9** | **-0.1** |
| CRPR | | | | *e*S | | | **Sn** | **02 19 05.6** | **+0.7** |
| **CRPR** | **Cabo Rojo, PR** | **2.65** | **244** | P | | | **Pn** | **02 18 33.9** | **-0.1** |
| CRPR | | | | *e*S | | | **Sn** | **02 19 05.6** | **+0.7** |
| **IDE** | **Isla Desecheo** | **2.83** | **254** | P | | | **Pn** | **02 18 35.8** | **-0.7** |
| **IDE** | **Isla Desecheo** | **2.83** | **254** | P | | | **Pn** | **02 18 35.8** | **-0.7** |
| **IDE** | **Isla Desecheo** | **2.83** | **254** | P | | | **Pn** | **02 18 35.8** | **-0.7** |
| **ANWB** | **Willy Bob** | **3.10** | **119** | *e*Pn | | | **Pn** | **02 18 38.2** | **-1.9** |
| ANWB | | | | *e*Sn | | | **Sn** | **02 19 13.1** | **-2.8** |
| **MBWH** | | **3.37** | **136** | *e*P | | | **Pn** | **02 18 43.2** | **-0.8** |
| **MBWH** | | **3.37** | **136** | *e*S | | | **Sn** | **02 19 28.4** | **+5.6** |
| **SEG** | **Port Louis** | **4.07** | **133** | *e*P | | | **Pn** | **02 18 52.2** | **-1.4** |
| **LZG** | **Guadaloupe-1** | **4.08** | **138** | *i*P | | | **Pn** | **02 18 53.2** | **-0.5** |
| **MLG** | **Mont-d'or** | **4.18** | **138** | *e*P | | | **Pn** | **02 18 54.8** | **-0.4** |
| **HMG** | **Houelmont** | **4.25** | **139** | *e*P | | | **Pn** | **02 18 57.2** | **+1.1** |
| **PHG** | **Guadaloupe-2** | **4.26** | **138** | *i*P | | | **Pn** | **02 18 57.5** | **+1.2** |
| **SMN1** | **Samana, DR** | **4.40** | **270** | *e*P | | | **Pn** | **02 18 57.2** | **-1.0** |
| **SMN1** | **Samana, DR** | **4.40** | **270** | *e*P | | | **Pn** | **02 18 57.2** | **-1.0** |
| **SMN1** | **Samana, DR** | **4.40** | **270** | *e*P | | | **Pn** | **02 18 57.2** | **-1.0** |
| SMN1 | | | | *e*S | | | **Sn** | **02 19 49.3** | **+1.2** |
| **DEG** | **La Desirade** | **4.45** | **130** | *e*P | | | **Pn** | **02 18 57.1** | **-1.8** |
| **H05N1** | **Guadeloupe/Mar** | **4.45** | **130** | Pn | | | **Pn** | **02 18 56.7** | **-2.1** |
| **MGG** | **Marie-Galante** | **4.54** | **136** | *i*P | | | **Pn** | **02 18 59.2** | **-0.8** |
| **BBL** | **Barber's Block** | **4.74** | **140** | *e*P | | | **Pn** | **02 19 02.6** | **-0.2** |
| **PCM** | **Pelee Case Pet** | **5.45** | **143** | *e*P | | | **Pn** | **02 19 13.8** | **+1.2** |
| **PCM** | **Pelee Case Pet** | **5.45** | **143** | *e*P | | | **Pn** | **02 19 15.5** | **+2.9** |
| **BAMF** | **Morne Balai** | **5.49** | **142** | *e*P | | | **Pn** | **02 19 13.6** | **+0.5** |
| **GBMF** | **Grand Be** | **5.49** | **143** | *e*P | | | Pn | 02 19 18.3 | +5.1 |
| **ZAM** | **Aeronautique** | **5.75** | **143** | *e*P | | | **Pn** | **02 19 17.9** | **+1.2** |
| **H05S1** | **Guadeloupe/Mar** | **5.98** | **142** | Pn | | | **Pn** | **02 19 17.6** | **-2.2** |
| H05S1 | | | | Sn | | | **Sn** | **02 20 28.2** | **+1.2** |
| **SDDR** | **Presa de Saban** | **6.31** | **269** | *e*P | | | **Pn** | **02 19 24.7** | **+0.3** |
| SDDR | | | | *e*S | | | **Sn** | **02 20 36.0** | **+0.7** |
| **SDDR** | **Presa de Saban** | **6.31** | **269** | *e*P | | | **Pn** | **02 19 24.7** | **+0.3** |
| **SDDR** | **Presa de Saban** | **6.31** | **269** | *e*S | | | **Sn** | **02 20 36.0** | **+0.7** |
| **SDDR** | **Presa de Saban** | **6.31** | **269** | *e*P | | | **Pn** | **02 19 24.7** | **+0.3** |
| SDDR | | | | *e*S | | | **Sn** | **02 20 36.0** | **+0.7** |
| **LGNH** | **LØogne** | **7.59** | **266** | *e*Pn | | | **Pn** | **02 19 41.7** | **-0.3** |
| **GTBY** | **Guantanamo Bay** | **9.92** | **276** | *e*Pn | | | Pn | 02 20 09.4 | -4.4 |
| GTBY | | | | *e*Sn | | | **Sn** | **02 21 58.1** | **-5.8** |
| **SDV** | **Santo Domingo** | **11.80** | **210** | *e*Pn | | | **Pn** | **02 20 40.2** | **+0.4** |
| SDV | | | | *e*Sn | | | Sn | 02 22 43.1 | -7.3 |
| **MTDJ** | **Mount Denham** | **12.28** | **268** | *e*Pn | | | **Pn** | **02 20 43.5** | **-2.7** |
| **ROSC** | **El Rosal** | **17.12** | **215** | P | | | **Pn** | **02 21 50.1** | **-0.4** |
| | 5.5nm,0.3s,baz=98,slow=8.3,SNR=45 | | | | | | | | |
| ROSC | | | | S | | | **Sn** | **02 25 02.7** | **+2.4** |
| | 0.4nm,0.3s,baz=90,slow=20,SNR=2.0 | | | | | | | | |
| ROSC | | | | LR | | | LR | 02 29 14.9 | |
| | comp=Z,1µm,19.2s,baz=10.0,slow=40 | | | | | | | | |
| **ROSC** | **El Rosal** | **17.12** | **215** | *e*P | | | **P** | **02 21 52.2** | **+0.4** |
| ROSC | | | | S | | | **Sn** | **02 25 02.7** | **+2.4** |
| **DWPF** | **Disney** | **17.75** | **303** | *e*Pn | | | **P** | **02 21 58.1** | **-0.1** |
| | 499nm,0.9s | | | | | | | | |
| **BCIP** | **Isla Barro Col** | **17.80** | **238** | *e*Pn | | | **Pn** | **02 21 57.1** | **-1.4** |
| | 44nm,0.9s | | | | | | | | |
| **NHSC** | **New Hope** | **19.63** | **318** | *e*Pn | | | **Pn** | **02 22 25.1** | **+4.7** |
| | 78nm,0.5s | | | | | | | | |
| NHSC | | | | *e*S | | | S | 02 25 50.2 | -7.9 |
| **PTGA** | **Pitinga** | **20.34** | **167** | P | | | **P** | **02 22 25.2** | **-1.5** |
| | 14nm,0.8s,baz=351,slow=12,SNR=27 | | | | | | | | |
| PTGA | | | | LR | | | LR | 02 30 34.1 | |
| | comp=Z,240nm,19.1s,baz=348,slow=38 | | | | | | | | |
| **TIGA** | **Tifton** | **20.99** | **309** | *e*P | | | **P** | **02 22 34.3** | **+0.7** |
| | 200nm,1.0s | | | | | | | | |
| **JTS** | **JuntasAbangare** | **21.55** | **249** | *e*P | | | **P** | **02 22 39.5** | **-0.3** |
| | 60nm,1.0s | | | | | | | | |
| **CBN** | **Corbin** | **21.94** | **332** | *e*P | | | **P** | **02 22 45.3** | **+1.6** |
| **GOGA** | **Godfrey** | **21.98** | **314** | *e*P | | | **P** | **02 22 43.8** | **-0.5** |
| | 30nm,0.6s | | | | | | | | |
| GOGA | | | | *e*S | | | **S** | **02 26 39.5** | **-5.0** |
| **TGUH** | **Tegucigalpa,Un** | **22.30** | **260** | *e*P | | | **P** | **02 22 51.0** | **+3.3** |
| | 102nm,1.0s | | | | | | | | |
| **SDMD** | **Soldier's Deli** | **22.73** | **335** | *e*P | | | **P** | **02 22 50.9** | **-1.3** |
| | 80nm,0.6s | | | | | | | | |
| SDMD | | | | *e*S | | | **S** | **02 26 58.8** | **+0.9** |
| **YLE** | **Yale** | **23.15** | **344** | *e*P | | | **P** | **02 22 57.2** | **+0.8** |
| | 37nm,0.4s | | | | | | | | |
| **OTAV** | **Otavalo** | **23.23** | **217** | *e*P | | | **P** | **02 22 57.5** | **-0.4** |
| | 49nm,1.0s | | | | | | | | |
| OTAV | | | | *e*S | | | **S** | **02 27 04.1** | **-3.4** |
| **TKL** | **Tuckaleechee C** | **23.54** | **318** | P | | | **P** | **02 23 00.6** | **+0.2** |
| | 6.2nm,1.0s,baz=144,slow=5.7,SNR=5.1 | | | | | | | | |
| TKL | | | | S | | | **S**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | baz=34 | | | | | | |
| 432A | **Menard** | 33.78 | 297 | P | P | 02 24 31.8 | -0.1 |
| | baz=34 | | | | | | |
| W33A | **Caddo, Fort Co** | 33.84 | 305 | P | P | 02 24 33.4 | +1.1 |
| | baz=34 | | | | | | |
| 332A | **Millersview** | 33.85 | 298 | P | P | 02 24 32.4 | 0.0 |
| | baz=34 | | | | | | |
| 232A | **Coleman** | 33.88 | 299 | P | P | 02 24 32.7 | 0.0 |
| | baz=34 | | | | | | |
| V33A | **Lossen Ranch,** | 33.93 | 306 | P | P | 02 24 33.3 | +0.2 |
| | baz=34 | | | | | | |
| WMOK | **Wichita Mounta** | 33.95 | 304 | *e*P | P | 02 24 32.5 | -0.7 |
| | 7.2nm,1.0s | | | | | | |
| ABTX | **Abilene, Hawle** | 34.05 | 300 | P | P | 02 24 34.1 | 0.0 |
| | baz=34 | | | | | | |
| ABTX | **Abilene, Hawle** | 34.05 | 300 | *e*P | P | 02 24 34.2 | 0.0 |
| | 55nm,1.6s | | | | | | |
| Z32A | **Haskell** | 34.09 | 301 | P | P | 02 24 34.6 | 0.0 |
| | baz=34,SNR=7.4 | | | | | | |
| 631A | **Perdido Creek** | 34.19 | 294 | P | P | 02 24 35.2 | -0.2 |
| | baz=34 | | | | | | |
| X32A | **Elmer** | 34.25 | 303 | P | P | 02 24 36.0 | +0.1 |
| | baz=34,SNR=11 | | | | | | |
| Y32A | **R-V Farms, Ver** | 34.26 | 303 | P | P | 02 24 35.9 | 0.0 |
| | baz=34,SNR=5.9 | | | | | | |
| 431A | **Sonora** | 34.43 | 296 | P | P | 02 24 37.2 | -0.3 |
| | baz=34 | | | | | | |
| W32A | **Sentinel** | 34.44 | 305 | P | P | 02 24 37.6 | +0.1 |
| | baz=34,SNR=7.5 | | | | | | |
| V32A | **Arapaho** | 34.47 | 306 | P | P | 02 24 38.5 | +0.7 |
| | baz=34 | | | | | | |
| R33A | **Olander Ranch,** | 34.63 | 310 | P | P | 02 24 39.8 | +0.6 |
| | baz=35 | | | | | | |
| Z31A | **Sharp Cattle R** | 34.63 | 301 | P | P | 02 24 39.2 | 0.0 |
| | baz=35 | | | | | | |
| U32A | **Winter Ranch,** | 34.66 | 307 | P | P | 02 24 40.0 | +0.6 |
| | baz=35 | | | | | | |
| X31A | **McDonald Ranch** | 34.86 | 303 | P | P | 02 24 41.2 | 0.0 |
| | baz=35,SNR=9.4 | | | | | | |
| P33A | **Williams Farm,** | 34.90 | 312 | P | P | 02 24 41.3 | -0.1 |
| | baz=35 | | | | | | |
| Y31A | **Rekieta Farm,** | 34.90 | 302 | P | P | 02 24 41.5 | 0.0 |
| | baz=35,SNR=8.5 | | | | | | |
| 530A | **J-C Ranch, Com** | 34.96 | 295 | P | P | 02 24 42.0 | -0.1 |
| | baz=35 | | | | | | |
| 430A | **Baggett Ranch,** | 34.98 | 296 | P | P | 02 24 42.0 | -0.3 |
| | baz=35 | | | | | | |
| W31A | **Holland Ranch,** | 35.00 | 304 | P | P | 02 24 42.4 | 0.0 |
| | baz=35 | | | | | | |
| 330A | **Mertzon** | 35.05 | 298 | P | P | 02 24 42.6 | -0.3 |
| | baz=35 | | | | | | |
| V31A | **Spring Creek L** | 35.10 | 305 | P | P | 02 24 43.8 | +0.5 |
| | baz=35 | | | | | | |
| R32A | **Long Quarter,** | 35.20 | 310 | P | P | 02 24 44.1 | 0.0 |
| | baz=35 | | | | | | |
| Q32A | **Meitler Ranch,** | 35.32 | 311 | P | P | 02 24 45.1 | +0.1 |
| | baz=35 | | | | | | |
| Y30A | **Stafford Cattl** | 35.39 | 302 | P | P | 02 24 45.8 | 0.0 |
| | baz=35 | | | | | | |
| Z30A | **Sanderson Ranc** | 35.42 | 301 | P | P | 02 24 45.7 | -0.4 |
| | baz=36,SNR=5.9 | | | | | | |
| LPAZ | **La Paz** | **35.44** | **186** | P | P | 02 24 45.5 | -1.4 |
| | 1.9nm,0.7s,baz=118,slow=2.1,SNR=7.2 | | | | | | |
| LPAZ | | | | LR | LR | 02 40 16.8 | |
| | comp=Z,131nm,18.2s,baz=355,slow=38 | | | | | | |
| S31A | **Mullinville** | 35.46 | 309 | P | P | 02 24 47.2 | +0.9 |
| | baz=36 | | | | | | |
| 429A | **Davenport Ranc** | 35.51 | 296 | P | P | 02 24 45.7 | -1.1 |
| | baz=36 | | | | | | |
| X30A | **Coker Ranch, T** | 35.52 | 303 | P | P | 02 24 46.8 | 0.0 |
| | baz=36 | | | | | | |
| SCHQ | **Scheefferville** | 35.60 | 358 | P | P | 02 24 48.8 | +1.6 |
| | 4.5nm,0.8s,baz=156,slow=10.0,SNR=2.7 | | | | | | |
| SCHQ | | | | LR | LR | 02 36 50.4 | |
| | comp=Z,139nm,21.2s,baz=272,slow=32 | | | | | | |
| 529A | **Stev Forest Ra** | 35.71 | 295 | P | P | 02 24 48.3 | -0.3 |
| | baz=36 | | | | | | |
| 329A | **Wagon Wheel Ra** | 35.74 | 297 | P | P | 02 24 48.6 | -0.2 |
| | baz=36 | | | | | | |
| 129A | **Stewart Farms,** | 35.88 | 299 | P | P | 02 24 49.9 | -0.1 |
| | baz=36 | | | | | | |
| Z29A | **Hungry Hill Ra** | 35.89 | 300 | P | P | 02 24 50.0 | -0.1 |
| | baz=36 | | | | | | |
| U30A | **WK&E Inc. Balk** | 35.97 | 306 | P | P | 02 24 51.2 | +0.5 |
| | baz=36,SNR=5.9 | | | | | | |
| Y29A | **Porterfield Fa** | 36.01 | 301 | P | P | 02 24 51.1 | 0.0 |
| | baz=36,SNR=6.2 | | | | | | |
| T30A | **Plains** | 36.04 | 307 | P | P | 02 24 52.2 | +0.9 |
| | baz=36 | | | | | | |
| CBKS | **Cedar Bluff** | 36.09 | 310 | P | P | 02 24 52.1 | +0.3 |
| | baz=36 | | | | | | |
| CBKS | **Cedar Bluff** | 36.09 | 310 | *e*P | P | 02 24 52.6 | +0.8 |
| | 11nm,0.8s | | | | | | |
| P31A | **Stockton** | 36.12 | 312 | P | P | 02 24 51.8 | -0.1 |
| | baz=36 | | | | | | |
| X29A | **Tulia** | 36.18 | 302 | P | P | 02 24 52.4 | -0.1 |
| | baz=36,SNR=6.5 | | | | | | |
| S30A | **Montezuma** | 36.20 | 308 | P | P | 02 24 53.4 | +0.8 |
| | baz=36,SNR=11 | | | | | | |
| AMTX | **Amarillo** | 36.28 | 303 | P | P | 02 24 53.3 | -0.1 |
| | baz=36 | | | | | | |
| AMTX | **Amarillo** | 36.28 | 303 | *e*P | P | 02 24 53.7 | +0.3 |
| | 23nm,1.1s | | | | | | |
| R30A | **Dighton** | 36.29 | 309 | P | P | 02 24 53.4 | 0.0 |
| | baz=36 | | | | | | |
| W29A | **Amraillo** | 36.32 | 304 | P | P | 02 24 53.8 | +0.1 |
| | baz=36,SNR=5.9 | | | | | | |
| O31A | **Woolen Ranch,** | 36.34 | 313 | P | P | 02 24 54.1 | +0.3 |
| | baz=36 | | | | | | |
| 228A | **UT Block 9, Go** | 36.37 | 298 | P | P | 02 24 53.6 | -0.7 |
| | baz=36 | | | | | | |
| Z28A | **Tucker Farm, M** | 36.45 | 300 | P | P | 02 24 53.7 | -1.2 |
| | baz=36 | | | | | | |
| Y28A | **McKinney Farm,** | 36.48 | 301 | P | P | 02 24 55.0 | -0.2 |
| | baz=36 | | | | | | |
| X28A | **Dimmitt** | 36.59 | 302 | P | P | 02 24 54.9 | -1.2 |
| | baz=37 | | | | | | |
| T29A | **Hugoton** | 36.66 | 307 | P | P | 02 24 57.3 | +0.7 |
| | baz=37 | | | | | | |
| S29A | **Ulysses** | 36.68 | 308 | P | P | 02 24 56.9 | +0.1 |
| | baz=37 | | | | | | |
| P30A | **Selden** | 36.74 | 311 | P | P | 02 24 56.7 | -0.5 |
| | baz=37 | | | | | | |
| TXAR | **Lajitas Array** | 36.85 | 293 | P | P | 02 24 59.0 | +0.7 |
| | 2.8nm,0.7s,baz=110,slow=10,SNR=37 | | | | | | |
| TXAR | | | | PcP | PcP | 02 27 20.8 | +1.1 |
| | 1.2nm,0.9s,baz=108,slow=5.8,SNR=4.0 | | | | | | |
| TXAR | | | | ScP | ScP | 02 31 05.5 | +2.2 |
| | 0.4nm,0.9s,baz=102,slow=7.5,SNR=3.2 | | | | | | |
| TXAR | | | | LR | LR | 02 45 47.7 | |
| | comp=Z,72nm,19.2s,baz=0.0,slow=45 | | | | | | |
| O30A | **MW Ranch, Wils** | 36.86 | 312 | P | P | 02 24 58.5 | +0.3 |
| | baz=37 | | | | | | |
| R29A | **Marienthal** | 36.97 | 309 | P | P | 02 24 59.2 | 0.0 |
| | baz=37,SNR=12 | | | | | | |
| Q29A | **Oakley** | 37.02 | 310 | P | P | 02 24 59.8 | +0.2 |
| | baz=37,SNR=6.9 | | | | | | |
| U28A | **Mallet** | 37.13 | 305 | P | P | 02 25 00.8 | +0.2 |
| | baz=37,SNR=7.8 | | | | | | |
| S28A | **Manter** | 37.25 | 307 | P | P | 02 25 02.3 | +0.6 |
| | baz=37 | | | | | | |
| P29A | **Atwood** | 37.25 | 311 | P | P | 02 25 00.8 | -0.8 |
| | baz=37 | | | | | | |
| T28A | **Walsh** | 37.27 | 307 | P | P | 02 25 02.5 | +0.7 |
| | baz=37 | | | | | | |
| O29A | **4D Ranch, Culb** | 37.36 | 312 | P | P | 02 25 02.8 | +0.2 |
| | baz=37 | | | | | | |
| B35A | **Bob, Littlefor** | 37.41 | 328 | P | P | 02 25 02.2 | -0.5 |
| | baz=38 | | | | | | |
| V27A | **Dan Oppiter Fa** | 37.42 | 304 | P | P | 02 25 03.6 | +0.4 |
| | baz=38 | | | | | | |
| R28A | **Tribune** | 37.44 | 309 | P | P | 02 25 03.4 | +0.1 |
| | baz=38,SNR=14 | | | | | | |
| U27A | **Thompson Grove** | 37.60 | 305 | P | P | 02 25 04.9 | +0.3 |
| | baz=38 | | | | | | |
| RCBR | **Riachuelo** | 37.67 | 129 | P | P | 02 25 07.3 | +2.0 |
| | 6.0nm,0.9s,baz=306,slow=6.9,SNR=4.1 | | | | | | |
| RCBR | **Riachuelo** | 37.67 | 129 | *e*P | P | 02 25 05.7 | -0.4 |
| | 24nm,1.3s | | | | | | |
| Q28A | **Sharon Springs** | 37.70 | 310 | P | P | 02 25 03.6 | -1.8 |
| | baz=38 | | | | | | |
| P28A | **Saint Francis** | 37.83 | 310 | P | P | 02 25 06.5 | -0.1 |
| | baz=38 | | | | | | |
| SUSD | **South Dakota S** | 38.08 | 319 | P | P | 02 25 08.9 | +0.5 |
| | baz=38 | | | | | | |
| KSCO | **Kaye Shedlock'** | 38.27 | 309 | P | P | 02 25 10.5 | +0.3 |
| | baz=38 | | | | | | |
| KSCO | **Kaye Shedlock'** | 38.27 | 309 | *e*P | P | 02 25 11.5 | +1.2 |
| | 22nm,1.1s | | | | | | |
| BDFB | **Brasilia** | 38.29 | 154 | P | P | 02 25 08.8 | -1.8 |
| | 5.5nm,1.0s,baz=360,slow=11,SNR=4.9 | | | | | | |
| BDFB | **Brasilia** | 38.29 | 154 | *e*P | P | 02 25 10.7 | +0.1 |
| T26A | **Comanche Natio** | 38.41 | 306 | P | P | 02 25 11.1 | -0.5 |
| | baz=38 | | | | | | |
| AGMN | **Agassiz Nation** | 38.47 | 326 | *e*P | P | 02 25 10.6 | -1.1 |
| A33A | **Warroad** | 38.62 | 327 | P | P | 02 25 12.5 | -0.4 |
| | baz=39 | | | | | | |
| MNTX | **Cornudas Mount** | 38.64 | 297 | P | P | 02 25 13.3 | 0.0 |
| | baz=39 | | | | | | |
| MNTX | **Cornudas Mount** | 38.64 | 297 | *e*P | P | 02 25 13.1 | -0.2 |
| | 4.0nm,0.9s | | | | | | |
| T25A | **Trinidad** | 39.02 | 306 | P | P | 02 25 16.8 | +0.1 |
| | baz=39,SNR=14 | | | | | | |
| J28A | **Allard Ranch,** | 39.05 | 316 | P | P | 02 25 16.9 | +0.3 |
| | baz=39 | | | | | | |
| I28A | **Midland** | 39.26 | 317 | P | P | 02 25 18.7 | +0.2 |
| | baz=39 | | | | | | |
| H28A | **Mission Ridge** | 39.48 | 318 | P | P | 02 25 19.8 | -0.4 |
| | baz=40 | | | | | | |
| ULM | **Lac du Bonnet** | 39.70 | 329 | P | P | 02 25 20.7 | -1.2 |
| | 3.3nm,0.6s,baz=112,slow=5.7,SNR=4.0 | | | | | | |
| SDCO | **Great Sand Dun** | 40.03 | 306 | P | P | 02 25 25.5 | +0.3 |
| | baz=40 | | | | | | |
| SDCO | **Great Sand Dun** | 40.03 | 306 | *e*P | P | 02 25 25.2 | 0.0 |
| | 9.5nm,0.8s | | | | | | |
| ANMO | **Albuquerque** | 40.10 | 302 | P | P | 02 25 26.7 | +0.9 |
| | 4.7nm,0.9s,baz=110,slow=7.6,SNR=17 | | | | | | |
| ANMO | **Albuquerque** | 40.10 | 302 | *e*P | P | 02 25 26.1 | +0.4 |
| | 8.1nm,1.0s | | | | | | |
| LPM | **Los Pinos Moun** | 40.12 | 301 | *e*P | P | 02 25 26.6 | +0.8 |
| | 4.4nm,0.8s | | | | | | |
| G27A | **Dupree** | 40.38 | 319 | P | P | 02 25 27.7 | 0.0 |
| | baz=40 | | | | | | |
| LAZ | **Ladron** | 40.55 | 301 | *e*P | P | 02 25 29.7 | +0.2 |
| | 2.6nm,0.9s | | | | | | |
| H26A | **Fairpoint** | 40.57 | 317 | P | P | 02 25 29.5 | +0.2 |
| | baz=41 | | | | | | |
| ISCO | **Idaho Springs** | 40.71 | 309 | P | P | 02 25 31.0 | +0.2 |
| | baz=41,SNR=6.5 | | | | | | |
| ISCO | **Idaho Springs** | 40.71 | 309 | *e*P | P | 02 25 31.9 | +1.1 |
| | 10nm,1.1s | | | | | | |
| G26A | **Maurine** | 40.76 | 318 | P | P | 02 25 30.6 | -0.3 |
| | baz=41 | | | | | | |
| 121A | **Cookes Peak, D** | 40.78 | 298 | P | P | 02 25 31.7 | +0.4 |
| | baz=41 | | | | | | |
| S22A | **4UR Ranch, Cre** | 41.04 | 306 | P | P | 02 25 33.9 | +0.3 |
| | baz=41 | | | | | | |
| PHWY | **Pilot Hill** | 41.09 | 311 | *e*P | P | 02 25 34.3 | +0.4 |
| | 8.2nm,1.0s | | | | | | |
| H25A | **Fruitdale** | 41.10 | 317 | P | P | 02 25 33.7 | 0.0 |
| | baz=41 | | | | | | |
| G25A | **Newell** | 41.23 | 318 | P | P | 02 25 34.7 | -0.1 |
| | baz=41 | | | | | | |
| N23A | **Red Feather La** | 41.30 | 311 | P | P | 02 25 35.0 | -0.6 |
| | baz=41 | | | | | | |
| LVC | **Limon Verde** | 41.78 | 186 | P | P | 02 25 37.0 | -2.6 |
| | 19nm,0.6s,baz=32,slow=4.6,SNR=6.6 | | | | | | |
| LVC | **Limon Verde** | 41.78 | 186 | *e*P | P | 02 25 37.0 | -2.6 |
| | 6.4nm,0.6s | | | | | | |
| MVCO | **Mesa Verde** | 42.20 | 305 | P | P | 02 25 42.3 | -0.7 |
| | baz=42 | | | | | | |
| K22A | **Casper** | 42.30 | 313 | P | P | 02 25 43.7 | +0.1 |
| | baz=42 | | | | | | |
| K22A | **Casper** | 42.30 | 313 | *e*P | P | 02 25 44.6 | +1.0 |
| | 10nm,1.0s | | | | | | |
| O20A | **White River Ci** | 42.74 | 309 | P | P | 02 25 46.7 | -0.6 |
| | baz=43 | | | | | | |
| W18A | **Petrified Fore** | 42.78 | 301 | P | P | 02 25 48.3 | +0.7 |
| | baz=43 | | | | | | |
| TUC | **Tucson** | 43.27 | 297 | *e*P | P | 02 25 52.9 | +1.4 |
| | 6.6nm,1.2s | | | | | | |
| LAO | **LASA Array** | 43.64 | 319 | P | P | 02 25 54.2 | -0.1 |
| | baz=44 | | | | | | |
| WUAZ | **Wupatki** | 44.17 | 301 | P | P | 02 25 59.5 | +0.7 |
| | baz=44,SNR=8.6 | | | | | | |
| WUAZ | **Wupatki** | 44.17 | 301 | *e*P | P | 02 26 00.3 | +1.5 |
| | 15nm,1.0s | | | | | | |
| SRU | **San Rafael** | 44.19 | 307 | *e*P | P | 02 25 59.9 | +0.9 |
| | 4.3nm,0.7s | | | | | | |
| P17A | **Butcher Ranch,** | 44.43 | 307 | *e*P | P | 02 26 02.0 | +1.1 |
| BW06 | **Boulder Array** | 44.45 | 312 | *e*P | P | 02 26 01.2 | +0.2 |
| | 10nm,0.9s | | | | | | |
| FRB | **Frobisher Bay** | 44.58 | 358 | P | P | 02 26 01.4 | -0.1 |
| | 3.7nm,0.6s,baz=163,slow=12,SNR=6.0 | | | | | | |
| TMUT | **Trail Mountain** | 44.75 | 307 | *e*P | P | 02 26 04.1 | +0.5 |
| | 36nm,1.2s | | | | | | |
| FCC | **Fort Churchill** | 44.94 | 339 | *e*P | P | 02 26 06.5 | +2.2 |
| RLMT | **Red Lodge** | 45.01 | 315 | P | P | 02 26 05.3 | -0.2 |
| | baz=45 | | | | | | |
| RLMT | **Red Lodge** | 45.01 | 315 | *e*P | P | 02 26 07.4 | +1.9 |
| O16A | **Springville** | 45.17 | 308 | *e*P | P | 02 26 04.3 | -2.5 |
| MSU | **Marysvale** | 45.32 | 305 | *e*P | P | 02 26 09.0 | +0.9 |
| | 6.1nm,1.2s | | | | | | |
| FFC | **Flin Flon** | 45.40 | 330 | *e*P | P | 02 26 08.2 | +0.1 |
| | 4.2nm,0.7s | | | | | | |
| LOHW | **Long Hollow** | 45.43 | 313 | *e*P | P | 02 26 09.1 | +0.2 |
| | 4.9nm,0.7s | | | | | | |
| CTU | **Camp Tracy** | 45.47 | 309 | *e*P | P | 02 26 10.1 | +1.0 |
| GCMT | **Greycliff** | 45.51 | 316 | *e*P | P | 02 26 09.6 | +0.3 |
| | 5.3nm,1.0s | | | | | | |
| REDW | **Red Top Meadow** | 45.53 | 312 | *e*P | P | 02 26 10.9 | +1.3 |
| | 20nm,1.2s | | | | | | |
| AHID | **Auburn Hatcher** | 45.54 | 312 | *e*P | P | 02 26 09.9 | +0.3 |
| | 8.2nm,0.7s | | | | | | |
| NLU | **North Lily Min** | 45.55 | 307 | *e*P | P | 02 26 11.3 | +1.6 |
| HWUT | **Hardware Ranch** | 45.56 | 310 | *e*P | P | 02 26 10.2 | +0.3 |
| MOOW | **Moose Ponds** | 45.57 | 313 | *e*P | P | 02 26 10.8 | +0.8 |
| | 5.5nm,0.8s | | | | | | |
| TPAW | **Teton Pass** | 45.64 | 313 | *e*P | P | 02 26 10.8 | +0.2 |
| | 6.7nm,0.8s | | | | | | |
| IMW | **Indian Meadow** | 45.75 | 313 | *e*P | P | 02 26 12.7 | +1.3 |
| CPUP | **Villa Florida** | 45.82 | 171 | P | P | 02 26 09.6 | -2.1 |
| | 8.8nm,0.9s,baz=353,slow=7.3,SNR=16 | | | | | | |
| CPUP | | | | LR | LR | 02 46 11.5 | |
| | comp=Z,101nm,20.4s,baz=350,slow=37 | | | | | | |
| YMR | **Madison River** | 46.00 | 314 | *e*P | P | 02 26 15.0 | +1.6 |
| | 8.1nm,0.7s | | | | | | |
| DUG | **Dugway** | 46.15 | 308 | P | P | 02 26 14.7 | +0.2 |
| | baz=46,SNR=6.5 | | | | | | |
| DUG | **Dugway** | 46.15 | 308 | *e*P | P | 02 26 15.5 | +1.0 |
| QLMT | **Earthquake Lak** | 46.37 | 314 | *e*P | P | 02 26 17.6 | +1.4 |
| | 1.5nm,0.8s | | | | | | |
| EGMT | **Easton** | 46.38 | 319 | P | P | 02 26 16.0 | -0.1 |
| | baz=46 | | | | | | |
| BOZ | **Bozeman (W)** | 46.76 | 315 | P | P | 02 26 18.9 | -0.3 |
| | baz=47 | | | | | | |
| IRM | **Iron Mountain** | 47.09 | 299 | P | P | 02 26 21.2 | -0.5 |
| | baz=47 | | | | | | |
| BC3 | **Big Chuckawall** | 47.30 | 298 | P | P | 02 26 22.9 | -0.6 |
| | baz=47 | | | | | | |
| MCMT | **McKenzie Canyo** | 47.33 | 314 | *e*P | P | 02 26 25.0 | +1.2 |
| | 2.6nm,1.0s | | | | | | |
| SHPR | **Sheep Range** | 47.34 | 302 | *e*P | P | 02 26 24.6 | +0.7 |
| | 4.7nm,1.3s | | | | | | |
| GMRC | **Granite Mounta** | 47.56 | 300 | P | P | 02 26 26.1 | +0.5 |
| | baz=48 | | | | | | |
| TUQ | **Turquoise Moun** | 47.84 | 301 | P | P | 02 26 28.5 | +0.8 |
| | baz=48 | | | | | | |
| R11A | **Troy Canyon, C** | 47.93 | 305 | P | P | 02 26 29.4 | +1.0 |
| | baz=48 | | | | | | |
| HLID | **Hailey** | 48.08 | 312 | *e*P | P | 02 26 31.0 | +1.5 |
| | 14nm,1.4s | | | | | | |
| LCO | **Las Campanas** | 48.30 | 187 | *e*P | P | 02 26 30.1 | -1.2 |
| SWMT | **Swartz Lake** | 48.89 | 317 | *e*P | P | 02 26 35.4 | -0.2 |
| YBMT | **Yellow Bay** | 49.01 | 317 | *e*P | P | 02 26 36.7 | +0.2 |
| | 7.1nm,0.8s | | | | | | |
| MFID | **Camas Ranch** | 49.05 | 311 | *e*P | P | 02 26 38.4 | +1.5 |
| | 7.1nm,1.0s | | | | | | |
| JTMT | **Jette** | 49.15 | 317 | *e*P | P | 02 26 37.5 | -0.1 |
| | 2.3nm,0.6s | | | | | | |
| DAC | **Davin (Calif)** | 49.27 | 302 | *e*P | P | 02 26 39.8 | +1.0 |
| | 5.5nm,0.9s | | | | | | |
| BMN | **Battle Mountai** | 49.51 | 307 | *e*P | P | 02 26 41.0 | +0.5 |
| | 18nm,1.4s | | | | | | |
| NVAR | **Mina Array Bea** | 50.06 | 304 | P | P | 02 26 45.5 | +0.7 |
| | 5.2nm,1.1s,baz=102,slow=5.5,SNR=24 | | | | | | |
| NVAR | | | | ScP | ScP | 02 31 59.5 | +2.8 |
| | 1.7nm,1.2s,baz=116,slow=6.1,SNR=4.0 | | | | | | |
| NVAR | | | | LR | LR | 02 48 41.2 | |
| | comp=Z,207nm,21.9s,baz=98,slow=37 | | | | | | |
| NEW | **Newport** | 51.12 | 317 | P | P | 02 26 52.1 | -0.4 |
| | baz=51 | | | | | | |
| NEW | **Newport** | 51.12 | 317 | *e*P | P | 02 26 51.9 | -0.5 |
| | 9.3nm,0.8s | | | | | | |
| MDT | **Midelt** | 54.95 | 63 | P | P | 02 27 21.1 | +0.1 |
| | 4.2nm,0.9s,baz=257,slow=11,SNR=6.5 | | | | | | |
| YKA | **Yellowknife Ar** | 55.13 | 334 | P | P | 02 27 20.4 | -1.2 |
| | 2.0nm,0.6s,baz=103,slow=7.2,SNR=12 | | | | | | |
| SUMG | **Summit** | 55.43 | 9 | *i* P | P | 02 27 24.6 | +0.5 |
| | 13nm,1.0s | | | | | | |
| SUMG | **Summit** | 55.43 | 9 | *e*P | P | 02 27 24.2 | +0.1 |
| | 12nm,0.9s | | | | | | |
| ESDC | **Sonseca Array** | 55.57 | 55 | P | P | 02 27 25.8 | +0.5 |
| | 1.2nm,0.8s,baz=258,slow=7.1,SNR=6.9 | | | | | | |
| ESDC | | | | LR | LR | 02 45 31.8 | |
| | comp=Z,119nm,21.6s,baz=295,slow=30 | | | | | | |
| TRQA | **Tornquist** | 57.02 | 178 | *e*P | P | 02 27 36.8 | +1.4 |
| | 9.3nm,1.2s | | | | | | |
| RES | **Resolute Bay** | 57.85 | 351 | P | P | 02 27 39.9 | -0.8 |
| | 2.0nm,0.7s,baz=153,slow=2.9,SNR=4.4 | | | | | | |
| DBIC | **Dimbokro** | 59.31 | 94 | P | P | 02 27 52.1 | +0.2 |
| | 4.5nm,0.6s,baz=288,slow=6.5,SNR=11 | | | | | | |
| TORD | **Torodi Ar. Bea** | 63.66 | 85 | P | P | 02 28 20.9 | -0.4 |
| | 2.3nm,0.7s,baz=286,slow=5.8,SNR=21 | | | | | | |
| TORD | | | | LR | LR | 02 53 24.6 | |
| | comp=Z,199nm,20.0s,baz=285,slow=34 | | | | | | |
| INK | **Inuvik** | 64.53 | 337 | *e*P | P | 02 28 27.5 | +1.4 |
| | 11nm,1.3s | | | | | | |
| KEST | **Kesra** | 66.26 | 59 | P | P | 02 28 38.0 | 0.0 |
| | 2.7nm,0.7s,baz=185,slow=14,SNR=5.8 | | | | | | |
| KEST | | | | LR | LR | 02 52 44.1 | |
| | comp=Z,109nm,21.8s,baz=265,slow=32 | | | | | | |
| NOA | **NORSAR Array B** | 66.53 | 31 | LR | LR | 02 53 58.2 | |
| | comp=Z,96nm,20.1s,baz=270,slow=32 | | | | | | |
| EGAK | **Eagle** | 67.06 | 333 | *e*P | P | 02 28 43.3 | +0.9 |
| | 3.4nm,0.7s | | | | | | |
| CLL | **Collm** | 67.56 | 42 | *es*P | sP | 02 29 03.0 | 0.0 |
| GERES | **GERESS Array B** | 68.17 | 44 | P | P | 02 28 48.4 | -1.4 |
| | 0.2nm,0.4s,baz=275,slow=4.6,SNR=3.0 | | | | | | |
| GERES | | | | LR | LR | 02 54 37.9 | |
| | comp=Z,60nm,20.6s,baz=328,slow=32 | | | | | | |
| ILAR | **Eielson Array** | 69.51 | 333 | P | P | 02 28 56.6 | -1.2 |
| | 0.6nm,0.5s,baz=105,slow=4.3,SNR=13 | | | | | | |
| ILAR | | | | LR | LR | 02 58 06.9 | |
| | comp=Z,39nm,22.0s,baz=100,slow=35 | | | | | | |
| COLA | **College** | 69.92 | 333 | *e*P | P | 02 29 01.3 | +1.0 |
| | 4.5nm,0.8s | | | | | | |
| ARCES | **ARCESS Array B** | 72.22 | 22 | P | P | 02 29 14.4 | +0.3 |
| | 11nm,1.1s,baz=278,slow=3.6,SNR=4.0 | | | | | | |
| ARCES | | | | LR | LR | 02 56 45.7 | |
| | comp=Z,44nm,21.6s,baz=352,slow=32 | | | | | | |
| FINES | **FINESS Array B** | 73.66 | 30 | P | P | 02 29 23.2 | +0.4 |
| | 2.4nm,0.9s,baz=301,slow=11,SNR=3.7 | | | | | | |
| FINES | | | | LR | LR | 02 59 00.3 | |
| | comp=Z,116nm,20.0s,baz=318,slow=34 | | | | | | |
| BRTR | **Keskin Array B** | 84.06 | 50 | P | P | 02 30 21.1 | +0.7 |
| | 1.2nm,0.9s,baz=285,slow=2.4,SNR=5.1 | | | | | | |
| BRTR | | | | LR | LR | 03 08 08.5 | |
| | comp=Z,18nm,18.1s,baz=282,slow=36 | | | | | | |
| PPT | **Papeete** | 91.08 | 252 | LR | LR | 03 04 54.4 | |
| | comp=Z,34nm,21.1s,baz=54,slow=31 | | | | | | |
| GNI | **Garni** | 91.72 | 46 | *e*P | P | 02 30 56.4 | -1.0 |
| | 20nm,0.9s | | | | | | |
| BOSA | **Boshof** | 98.86 | 117 | LR | LR | 03 11 01.5 | |
| | comp=Z,44nm,19.1s,baz=322,slow=32 | | | | | | |
| KSH | **Kashi** | 110.95 | 32 | *e*PKP | PKiKP | 02 36 25.9 | +2.9 |
| KSH | | | | *e*PP | PP | 02 37 06.6 | +6.1 |
| KSH | | | | SKKS | | 02 44 04.0 | |
| KSH | | | | PPMZ | | | |
| | 56nm,7.7s | | | | | | |
| WMQ | **Urumqi** | 112.33 | 21 | *e*PKP | PKiKP | 02 36 25.0 | -0.4 |
| HHC | **Hu-ho-hao-te** | 120.14 | 3 | *e*PKP | PKPdf | 02 36 39.1 | -1.5 |
| HHC | | | | PP | PP | 02 38 09.4 | +4.9 |
| HHC | | | | PPMZ | | | |
| | 49nm,9.9s | | | | | | |
| MAW | **Mawson** | 121.50 | 159 | PKP | PKPdf | 02 36 41.6 | -0.4 |
| | 0.6nm,0.2s,baz=270,slow=6.1,SNR=3.6 | | | | | | |
| CD2 | **Chengdu** | 128.93 | 13 | PKP | PKPdf | 02 36 56.5 | -1.1 |
| PALK | **Pallekele** | 136.87 | 56 | *e*PKPdf | PKPdf | 02 37 12.1 | -0.8 |
| ARMA | **Armidale** | 145.40 | 244 | *e*PKPbc | PKPab | 02 37 28.9 | +0.9 |
| CTAO | **Charters Tower** | 150.93 | 263 | *e*PKPbc | PKPbc | 02 37 42.9 | +0.1 |
| WRAB | **Tennant Creek** | 162.11 | 265 | *e*PKPdf | PKPdf | 02 37 51.5 | 0.0 |
| WRAB | | | | *e*PKPab | PKPab | 02 38 37.9 | -0.3 |
| WRA | **Warramunga Arr** | 162.12 | 265 | PKP | PKPdf | 02 37 50.8 | -0.7 |
| | 1.1nm,0.9s,baz=30,slow=0.7,SNR=6.6 | | | | | | |
| WRA | | | | PKPab | PKPab | 02 38 38.4 | +0.1 |
| | 1.4nm,0.7s,baz=84,slow=4.0,SNR=6.5 | | | | | | |
| ASAR | **Alice Springs** | 162.20 | 252 | PKP | PKPdf | 02 37 50.9 | -0.7 |
| | 1.0nm,1.0s,baz=113,slow=1.5,SNR=8.4 | | | | | | |
| ASAR | | | | PKPab | PKPab | 02 38 38.5 | -0.1 |
| | 3.5nm,0.8s,baz=110,slow=4.3,SNR=22 | | | | | | |

*IDC* ***24*** *02:20:05.1±1.3, 14°.97S×41°.24E, h0km, mb3.9/5, mb1 4.1/8, mb1mx3.8/29, mbtmp4.1/8, ML4.4/3, MS2.9/2, Ms1 2.8/2, ms1mx2.5/32, Error ellipse: s-maj=31.4km s-min=23.1km az=39.0*

*NEIC* ***24*** *02:20:06.0±1.0, 14°.95S×41°.28E, h10km, mb4.3/3, Error ellipse: s-maj=22.7km s-min=10.5km az=13.0*

**ISC 24 02:20:05.7±0.9, 15°.05S±0°.1×41°.33E±0°.08, h10km, n22, σ2s 44/19, mb4.0/7, Mozambique Channel**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| ZOMB | **Zomba** | **5.78** | **266** | *i* P | **Pn** | **02 21 32.0** | **+0.3** |
| OPO | **Ambohidratompo** | **6.62** | **123** | Pn | **Pn** | **02 21 44.1** | **+0.7** |
| | 21nm,0.3s,baz=286,slow=14,SNR=94 | | | | | | |
| OPO | | | | Sn | **Sn** | **02 22 53.7** | **-5.4** |
| | 11nm,0.3s,baz=21,slow=18,SNR=6.8 | | | | | | |
| ABPO | **Ambohimpanom** | **6.90** | **126** | *e*Pn | **Pn** | **02 21 47.5** | **+0.4** |
| | 78nm,0.5s | | | | | | |
| ABPO | | | | *e*Sn | **Sn** | **02 23 02.3** | **-3.5** |
| MZM | **Mzuzu** | **7.97** | **296** | *i* P | **Pn** | **02 22 00.2** | **-1.4** |
| DODT | **Dodoma, Tanzan** | **10.35** | **327** | *i* P | Pn | 02 22 29.7 | -4.8 |
| DODT | | | | *i* S | Sn | 02 24 17.1 | -14 |
| LSZ | **Lusaka** | **12.69** | **267** | Pn | **Pn** | **02 23 05.2** | **-1.3** |
| | 1.1nm,0.3s,baz=78,slow=12,SNR=16 | | | | | | |
| LSZ | | | | Sn | **Sn** | **02 25 23.9** | **-4.2** |
| | 0.5nm,0.3s,baz=126,slow=17,SNR=2.3 | | | | | | |
| LSZ | | | | Lg | Lg | 02 26 39.2 | |
| | 0.6nm,0.3s,baz=40,slow=16,SNR=4.0 | | | | | | |
| MATP | **Matopo** | **13.35** | **244** | Pn | **Pn** | **02 23 13.8** | **-1.6** |
| | 0.3nm,0.3s,baz=70,slow=13,SNR=11 | | | | | | |
| MATP | | | | Sn | Sn | 02 25 33.6 | -11 |
| | 0.3nm,0.3s,baz=345,slow=20,SNR=1.8 | | | | | | |
| MATP | | | | Lg | Lg | 02 26 56.2 | |
| | 0.7nm,0.3s,baz=338,slow=20,SNR=4.3 | | | | | | |
| MATP | | | | LR | LR | 02 28 09.9 | |
| | comp=Z,45nm,18.8s,ba

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 0.8nm,0.5s,baz=198,slow=6.6,SNR=22 | | | | | | | |
| **SONM** | **Songino Array** | **150.03** | **88** | PKPbc | PKPbc | 02 50 33.9 | -1.7 | |
| | 0.4nm,0.4s,baz=225,slow=4.1,SNR=3.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **151.73** | **309** | PKPbc | PKPbc | 02 50 37.9 | -1.0 | |
| | 1.1nm,0.9s,baz=100,slow=1.1,SNR=9.7 | | | | | | | |

**WEL 24 02:34:51.5±0.5, 38.76S×175.29E, h249km±3km, ML3.7/5, 2C-12D, Error ellipse: s-maj=5.2km s-min=4.8km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WTVZ** | **West Tongariro** | **0.43** | **146** | ⇓PN | Pn | 02 35 24.1 | 0.0 |
| WTVZ | | | | SN | S | 02 35 50.2 | +0.4 |
| **NGZ** | **Ngauruhoe** | **0.48** | **150** | PN | Pn | 02 35 24.3 | 0.0 |
| NGZ | | | | SN | S | 02 35 51.5 | +1.3 |
| **WHVZ** | **Whangaehu Hut** | **0.57** | **156** | PN | Pn | 02 35 24.7 | 0.0 |
| **TUVZ** | **Tukino** | **0.58** | **151** | PN | Pn | 02 35 24.7 | 0.0 |
| **WNVZ** | **Wahianoa** | **0.62** | **157** | ⇓PN | Pn | 02 35 24.6 | -0.2 |
| **MOVZ** | **Moawhango** | **0.74** | **151** | PN | Pn | 02 35 24.8 | -0.3 |
| MOVZ | | | | SN | S | 02 35 50.6 | -1.1 |
| **MRHZ** | **Matea Rd** | **0.89** | **95** | PN | Pn | 02 35 24.9 | -0.9 |
| **BHHZ** | **Black Hill Sta** | **0.95** | **141** | ⇓PN | Pn | 02 35 25.9 | -0.2 |
| BHHZ | | | | SN | S | 02 35 52.4 | -1.0 |
| **BKZ** | **Black Stump Fm** | **1.02** | **114** | ⇓PN | Pn | 02 35 26.3 | -0.2 |
| BKZ | | | | SN | S | 02 35 54.0 | -0.1 |
| **KRHZ** | **Kereru** | **1.22** | **137** | PN | Pn | 02 35 27.6 | -0.1 |
| **NMHZ** | **Naumai** | **1.23** | **106** | ⇓PN | Pn | 02 35 28.3 | +0.5 |
| **MCHZ** | **McNeill Hill** | **1.29** | **122** | PN | Pn | 02 35 28.6 | +0.5 |
| **PNHZ** | **Pukenui** | **1.35** | **149** | PN | Pn | 02 35 28.4 | -0.2 |
| **TSZ** | **Takapari Road** | **1.40** | **158** | PN | Pn | 02 35 28.7 | -0.3 |
| TSZ | | | | AML | AML | 02 36 00.2 | |
| TSZ | | | | AML | AML | 02 36 01.6 | |
| **RAHZ** | **Arahi** | **1.42** | **97** | ⇓PN | Pn | 02 35 29.0 | 0.0 |
| **ARHZ** | **Aropaoanui** | **1.42** | **111** | PN | Pn | 02 35 29.2 | +0.2 |
| **URZ** | **Urewera** | **1.52** | **71** | ⇓PN | Pn | 02 35 28.2 | -1.6 |
| **WPHZ** | **Waipukurau** | **1.58** | **146** | PN | Pn | 02 35 30.1 | -0.2 |
| **KAHZ** | **Kahuranaki** | **1.61** | **130** | ⇓PN | Pn | 02 35 30.7 | +0.1 |
| **RAGZ** | **Rawiri** | **1.69** | **82** | PN | Pn | 02 35 30.4 | -0.8 |
| **PXZ** | **Pawanui** | **1.76** | **137** | ⇑PN | Pn | 02 35 31.5 | -0.2 |
| **MWZ** | **Matawai** | **1.81** | **77** | ⇓PN | Pn | 02 35 31.0 | -1.2 |
| **KNZ** | **Kokohu** | **1.88** | **99** | ⇓PN | Pn | 02 35 32.2 | -0.6 |
| **MRZ** | **Mangatainoka R** | **1.91** | **173** | PN | Pn | 02 35 31.8 | -1.2 |
| MRZ | | | | AML | AML | 02 36 06.9 | |
| **RIGZ** | **Rimuhau** | **1.94** | **89** | PN | Pn | 02 35 32.7 | -0.6 |
| **BFZ** | **Birch Farm** | **2.06** | **159** | PN | Pn | 02 35 33.5 | -0.8 |
| **OGWZ** | **Otaki Gorge** | **2.06** | **182** | PN | Pn | 02 35 33.3 | -1.0 |
| **MHGZ** | **Mahia Peninsul** | **2.08** | **102** | PN | Pn | 02 35 34.3 | -0.2 |
| **KIW** | **Kapiti Island** | **2.12** | **188** | PN | Pn | 02 35 33.5 | -1.4 |
| **HOWZ** | **Holdsworth Sta** | **2.14** | **175** | PN | Pn | 02 35 33.7 | -1.5 |
| **TWGZ** | **Tauwhareparae** | **2.19** | **75** | PN | Pn | 02 35 34.7 | -1.0 |
| **HAZ** | **Te Kaha** | **2.21** | **64** | PN | Pn | 02 35 33.2 | -2.5 |
| **DUWZ** | **D'Urville Isla** | **2.30** | **207** | PN | Pn | 02 35 34.9 | -1.7 |
| **CAW** | **Cannon Point** | **2.35** | **184** | PN | Pn | 02 35 35.6 | -1.5 |
| CAW | | | | AML | AML | 02 36 13.2 | |
| CAW | | | | AML | AML | 02 36 14.5 | |
| **MTW** | **Mount Morrison** | **2.40** | **176** | PN | Pn | 02 35 36.0 | -1.6 |
| **PUZ** | **Puketiti** | **2.43** | **75** | PN | Pn | 02 35 36.4 | -1.6 |
| **TCW** | **Tory Channel** | **2.57** | **197** | PN | Pn | 02 35 37.6 | -1.7 |
| TCW | | | | AML | AML | 02 36 16.6 | |
| TCW | | | | AML | AML | 02 36 17.0 | |
| **WMGZ** | **Waiomatatini S** | **2.63** | **70** | PN | Pn | 02 35 38.3 | -1.7 |
| **MSWZ** | **Moikau Station** | **2.65** | **181** | PN | Pn | 02 35 38.3 | -1.8 |
| **PLWZ** | **Palliser** | **2.81** | **180** | PN | Pn | 02 35 39.8 | -2.0 |
| **NNZ** | **Nelson** | **2.86** | **210** | ⇑PN | Pn | 02 35 39.9 | -2.3 |
| **TUWZ** | **Tuamarina** | **2.86** | **201** | PN | Pn | 02 35 40.4 | -1.8 |
| TUWZ | | | | AML | AML | 02 36 20.8 | |
| **QRZ** | **Quartz Range** | **2.96** | **225** | PN | Pn | 02 35 40.2 | -3.2 |
| **BSWZ** | **Blackbirch Sta** | **3.14** | **200** | PN | Pn | 02 35 43.4 | -1.9 |
| **THZ** | **Tophouse** | **3.51** | **211** | PN | Pn | 02 35 46.8 | -2.7 |
| **KHZ** | **Kahutara** | **3.89** | **199** | PN | Pn | 02 35 51.2 | -2.6 |
| **DSZ** | **Dennistoun Nort** | **4.00** | **221** | ⇓PN | Pn | 02 35 51.3 | -3.9 |
| **LTZ** | **Lake Taylor** | **4.62** | **209** | PN | Pn | 02 35 59.0 | -3.6 |
| **MQZ** | **McQueen's Vall** | **5.33** | **201** | PN | Pn | 02 36 06.4 | -4.7 |
| **WVZ** | **Waitaha Valley** | **5.52** | **217** | ⇓PN | Pn | 02 36 09.0 | -4.4 |

*NIED **24** 02:43:00, 37.30N×140.00E, h8km, Mw4.1 Best double couple: Mo1.50000×10^15 NP1:φs11.00000°, δ23.00000°, λ100.00000°. NP2:φs180.00000°, δ68.00000°, λ86.00000°.*
*IDC **24** 02:43:43.0±1.1, 37.15N×140.24E, h0km, mb3.6/4, mb1 3.8/6, mb1mx3.5/39, mbtmp3.7/6, ML3.5/2, MS3.2/4, Ms1 3.2/4, ms1mx2.7/38, Error ellipse: s-maj=31.4km s-min=17.4km az=132.0*
*ISCJB **24** 02:43:43.6±0.8, 37.28N±0.04×140.05E±0.05, h13km±5km, mb3.7/3, MS3.8/2, Error ellipse: s-maj=8.1km s-min=4.7km az=137.6*
*JMA **24** 02:43:44.1, 37.28N×140.01E, h7km±1km, M3.6 Broadband fault plane solution: P waves. NP1: φs159.00000°, δ80.00000°, λ81.00000°. NP2:φs23.00000°, δ13.00000°, λ133.00000°. Principal axes: T Plg54.0000°, Azm58.0000°; N Plg9.0000°, Azm161.0000°; P Plg35.0000°, Azm257.0000°;*
*JMA Felt III J1.*

**ISC 24 02:43:44.2±1.3, 37.26N±0.04×140.03E±0.04, h5km±10km, n23, σ0.98/23, mb3.6/3, 1C-5D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFY** | **Yanaizu** | **0.29** | **299** | ⇓P | **Pg** | **02 43 49.6** | **-0.3** |
| JFY | | | | S | **Sg** | **02 43 53.5** | **-0.3** |
| **JFT** | **Otama** | **0.35** | **44** | ⇓P | **Pg** | **02 43 51.0** | **-0.1** |
| JFT | | | | S | **Sg** | **02 43 56.0** | **+0.2** |
| **JNS** | **Sasagawa** | **0.79** | **315** | P | **Pg** | **02 43 58.6** | **-0.7** |
| **JKT** | **Katashina** | **0.80** | **232** | ⇓P | **Pg** | **02 43 59.2** | **-0.2** |
| JKT | | | | S | **Sg** | **02 44 09.5** | **-0.3** |
| **JHK** | **Hiroka** | **0.81** | **269** | ⇓P | **Pg** | **02 43 59.0** | **-0.6** |
| JHK | | | | S | **Sg** | **02 44 09.1** | **-1.0** |
| **JAG** | **Ashikaga** | **0.95** | **209** | ⇓P | **Pg** | **02 44 02.4** | **-0.1** |
| JAG | | | | S | **Sb** | **02 44 15.2** | **-0.9** |
| **JYS** | **Shirataka** | **0.96** | **2** | ⇑P | **Pg** | **02 44 02.0** | **-0.5** |
| JYS | | | | S | **Sg** | **02 44 14.5** | **-0.5** |
| **MJAR** | **Matsushiro Arr** | **1.62** | **244** | Pn | **Pn** | **02 44 13.8** | **+0.4** |
| | 29nm,0.3s,baz=40,slow=13,SNR=341 | | | | | | |
| MJAR | | | | Sn | **Sg** | **02 44 38.3** | **+1.9** |
| | 9.9nm,0.3s,baz=80,slow=31,SNR=7.5 | | | | | | |
| MJAR | | | | LR | LR | 02 45 12.7 | |
| | comp=Z,242nm,19.5s,baz=70,slow=52 | | | | | | |
| **MAT** | **Matsushiro** | **1.63** | **244** | P | **Pn** | **02 44 13.8** | **+0.4** |
| MAT | | | | eS | **Sb** | **02 44 35.7** | **+0.3** |
| **ASAJ** | **Asahikawa** | **7.12** | **15** | Pn | **Pn** | **02 45 28.9** | **0.0** |
| | 0.7nm,0.3s,baz=210,slow=14,SNR=3.7 | | | | | | |
| ASAJ | | | | LR | LR | 02 48 39.2 | |
| | comp=Z,41nm,19.7s,baz=58,slow=41 | | | | | | |
| **KSRS** | **Korea Array** | **9.64** | **275** | Pn | **Pn** | **02 46 06.2** | **+2.8** |
| | 0.6nm,0.3s,baz=89,slow=15,SNR=5.4 | | | | | | |
| KSRS | | | | LR | LR | 02 49 42.9 | |
| | comp=Z,59nm,20.4s,baz=88,slow=36 | | | | | | |
| **PETK** | **Petropavlovsk-** | **20.07** | **32** | P | **P** | **02 48 18.5** | **+0.4** |
| | 2.4nm,0.8s,baz=195,slow=10,SNR=3.7 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.22** | **119** | T | T | 03 19 45.9 | |
| | baz=313,slow=75,SNR=114 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.23** | **119** | T | T | 03 19 46.6 | |
| | baz=313,slow=75,SNR=129 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.24** | **119** | T | T | 03 19 47.3 | |
| | baz=313,slow=75,SNR=104 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.92** | **121** | T | T | 03 20 37.7 | |
| | baz=314,slow=76,SNR=92 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.92** | **121** | T | T | 03 20 38.4 | |
| | baz=314,slow=76,SNR=109 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.94** | **121** | T | T | 03 20 39.6 | |
| | baz=314,slow=76,SNR=72 | | | | | | |
| **ILAR** | **Eielson Array** | **49.89** | **32** | P | **P** | **02 52 37.5** | **-0.7** |
| | 1.2nm,0.8s,baz=273,slow=6.4,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.15** | **186** | P | **P** | **02 53 30.4** | **-1.4** |
| | 0.5nm,0.7s,baz=2.2,slow=7.6,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **60.88** | **186** | P | **P** | **02 53 57.1** | **-0.6** |
| | 0.3nm,0.6s,baz=15,slow=7.7,SNR=3.8 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **71.08** | **52** | LR | LR | 03 18 58.3 | |
| | comp=Z,139nm,22.0s,baz=68,slow=30 | | | | | | |
| **PPT** | **Papeete** | **85.73** | **116** | LR | LR | 03 28 17.3 | |
| | comp=Z,17nm,19.8s,baz=36,slow=31 | | | | | | |

**CASC 24 02:43:49.6±1.6, 15.26N×91.23W, h24km±6km, MD3.7, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FUG** | **Fuego 3** | **0.89** | **155** | *e*P | Pb | 02 44 05.8 | -0.9 |
| **PCG** | **Pacaya** | **1.05** | **145** | *e*P | Pn | 02 44 08.8 | -0.5 |
| **NBG** | **Las Nubes** | **1.09** | **128** | *e*P | Pn | 02 44 08.9 | -0.8 |
| NBG | | | | *e*S | Sn | 02 44 25.4 | +1.1 |
| **IXG** | **Ixpaco** | **1.32** | **145** | *e*P | Pn | 02 44 12.6 | -0.2 |
| IXG | | | | *e*S | Sb | 02 44 31.0 | +0.5 |
| **MRL** | **Marmol** | **1.50** | **97** | *e*P | Pn | 02 44 15.3 | 0.0 |
| MRL | | | | *e*S | Sn | 02 44 34.1 | -0.2 |
| **RBDL** | **Robledal** | **1.88** | **127** | *e*P | Pn | 02 44 21.2 | +0.6 |
| RBDL | | | | *e*S | Sn | 02 44 43.7 | 0.0 |
| **RTR** | **El Retiro** | **2.05** | **131** | *e*P | Pn | 02 44 23.1 | +0.2 |
| **SNJE** | **San Jose** | **2.10** | **131** | *e*P | Pn | 02 44 24.6 | +1.0 |
| **LFU** | **La Fuente** | **2.54** | **126** | *e*P | Pn | 02 44 29.3 | -0.2 |

**JMA 24 02:47:41.2, 37.28N×140.00E, h9km±1km, M0.6, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFY** | **Yanaizu** | **0.27** | **298** | P | Pg | 02 47 46.8 | +0.2 |
| JFY | | | | S | Sg | 02 47 50.4 | +0.1 |
| **JFT** | **Otama** | **0.36** | **48** | P | Pg | 02 47 48.3 | 0.0 |
| JFT | | | | S | Sg | 02 47 53.2 | +0.1 |

*NIED **24** 02:48:00, 37.30N×140.00E, h5km, Mw4.1 Best double couple: Mo1.37000×10^15 NP1:φs13.00000°, δ20.00000°, λ97.00000°. NP2:φs186.00000°, δ70.00000°, λ88.00000°.*
*IDC **24** 02:48:20.4±0.9, 37.21N×140.10E, h0km, mb3.6/6, mb1 3.9/8, mb1mx3.6/35, mbtmp3.6/8, ML3.4/2, Error ellipse: s-maj=25.3km s-min=17.2km az=136.0*
*ISCJB **24** 02:48:21.2±0.7, 37.32N±0.06×140.02E±0.04, h13km±4km, mb3.6/6, Error ellipse: s-maj=10.1km s-min=5.2km az=162.9*
*JMA **24** 02:48:21.4, 37.29N×140.01E, h7km±1km, M3.7 Broadband fault plane solution: P waves. NP1: φs173.00000°, δ88.00000°, λ86.00000°. NP2:φs59.00000°, δ5.00000°, λ156.00000°. Principal axes: T Plg47.0000°, Azm78.0000°; N Plg4.0000°, Azm173.0000°; P Plg43.0000°, Azm267.0000°;*
*JMA Felt III J1.*

**ISC 24 02:48:21.8±1.2, 37.29N±0.04×140.01E±0.03, h7km±8km, n22, σ0.97/21, mb3.6/6, 2C-3D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFY** | **Yanaizu** | **0.27** | **297** | ⇓P | **Pg** | **02 48 26.9** | **-0.2** |
| JFY | | | | S | **Sg** | **02 48 30.6** | **-0.1** |
| **JSB** | **Shiboa** | **0.32** | **193** | P | **Pg** | **02 48 28.5** | **+0.4** |
| **JFT** | **Otama** | **0.35** | **48** | ⇑P | **Pg** | **02 48 28.3** | **-0.3** |
| JFT | | | | S | **Sg** | **02 48 33.1** | **-0.2** |
| **JFK** | **Kawauchi** | **0.69** | **83** | ⇑P | **Pg** | **02 48 34.5** | **-0.7** |
| **JNS** | **Sasagawa** | **0.77** | **314** | ⇓P | **Pg** | **02 48 35.8** | **-0.7** |
| **JHK** | **Hiroka** | **0.79** | **268** | ⇓P | **Pg** | **02 48 36.3** | **-0.7** |
| JHK | | | | S | **Sg** | **02 48 46.2** | **-1.1** |
| **MJAR** | **Matsushiro Arr** | **1.62** | **243** | Pn | **Pn** | **02 48 51.0** | **+0.2** |
| | 30nm,0.3s,baz=39,slow=15,SNR=172 | | | | | | |
| MJAR | | | | Sn | **Sg** | **02 49 15.0** | **+1.1** |
| | 14nm,0.3s,baz=17,slow=27,SNR=12 | | | | | | |
| **MAT** | **Matsushiro** | **1.62** | **243** | P | **Pn** | **02 48 51.1** | **+0.3** |
| MAT | | | | S | **Sb** | **02 49 12.6** | **-0.2** |
| **ASAJ** | **Asahikawa** | **7.10** | **15** | Pn | **Pn** | **02 50 06.5** | **+0.4** |
| | 0.6nm,0.3s,baz=195,slow=12,SNR=3.2 | | | | | | |
| **KSRS** | **Korea Array** | **9.62** | **275** | Pn | **Pn** | **02 50 43.2** | **+2.6** |
| | 0.5nm,0.3s,baz=87,slow=14,SNR=4.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.25** | **119** | T | T | 03 24 23.4 | |
| | baz=313,slow=75,SNR=26 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.25** | **119** | T | T | 03 24 58.5 | |
| | baz=313,slow=75,SNR=21 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.26** | **119** | T | T | 03 24 24.8 | |
| | baz=313,slow=75,SNR=21 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.94** | **121** | T | T | 03 25 15.3 | |
| | baz=314,slow=76,SNR=44 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.94** | **121** | T | T | 03 25 15.3 | |
| | baz=314,slow=76,SNR=41 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.96** | **121** | T | T | 03 25 13.8 | |
| | baz=314,slow=76,SNR=26 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.03** | **302** | P | **P** | **02 56 21.2** | **-0.8** |
| | 0.8nm,0.7s,baz=93,slow=10,SNR=2.6 | | | | | | |
| **ILAR** | **Eielson Array** | **49.88** | **32** | P | **P** | **02 57 14.9** | **-0.6** |
| | 0.8nm,0.8s,baz=266,slow=5.8,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.17** | **186** | P | **P** | **02 58 07.8** | **-1.6** |
| | 0.7nm,0.9s,baz=0.8,slow=7.2,SNR=6.2 | | | | | | |
| **ASAR** | **Alice Springs** | **60.90** | **186** | P | **P** | **02 58 34.4** | **-0.8** |
| | 0.4nm,0.8s,baz=3.3,slow=6.5,SNR=2.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.73** | **53** | P | **P** | **03 00 09.3** | **+0.8** |
| | 0.2nm,0.4s,baz=287,slow=6.3,SNR=3.1 | | | | | | |
| **GERES** | **GERESS Array B** | **81.90** | **327** | P | **P** | **03 00 42.3** | **+0.3** |
| | 0.3nm,0.6s,baz=2.1,slow=5.3,SNR=3.5 | | | | | | |

*CSEM **24** 02:53:44.5±0.3, 37.17N×42.74E, h5km, MD2.5, Error ellipse: s-maj=8.1km s-min=2.2km az=7.0*
*DDA **24** 02:53:45.2, 37.27N×42.79E, h3km, Md2.7*
*ISK **24** 02:53:45.3, 37.17N×42.82E, h20km, MD2.5*

**ISC 24 02:53:45.0±1.4, 37.27N±0.09×42.74E±0.03, h2km±12km, n14, σ1.08/24, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIRN** | **S¯¯rnak** | **0.34** | **311** | *i* P | **Pg** | **02 53 49.6** | **-2.0** |
| SIRN | | | | *i* S | **Sg** | **02 53 58.4** | **+2.3** |
| **SIRN** | **S¯¯rnak** | **0.34** | **311** | P | **Pg** | **02 53 49.6** | **-2.0** |
| SIRN | | | | S | **Sg** | **02 53 58.4** | **+2.3** |
| **CUKT** | **Cukurca** | **0.69** | **92** | *e*PG | **Pg** | **02 53 58.2** | **-0.1** |
| CUKT | | | | *e*SG | **Sg** | **02 54 07.6** | **+0.3** |
| **CUKT** | **Cukurca** | **0.69** | **92** | *e*Pg | **Pg** | **02 53 58.2** | **-0.1** |
| CUKT | | | | *e*Sg | **Sg** | **02 54 07.6** | **+0.3** |
| **HAKT** | **HAKKARI** | **0.82** | **69** | *i* P | **Pg** | **02 54 01.0** | **+0.2** |
| HAKT | | | | *i* S | **Sg** | **02 54 12.1** | **+0.6** |
| **HAKT** | **HAKKARI** | **0.82** | **69** | P | **Pg** | **02 54 01.0** | **+0.2** |
| HAKT | | | | S | **Sg** | **02 54 12.1** | **+0.6** |
| **HKR** | **Hakkari** | **0.85** | **69** | *e*PG | **Pb** | **02 54 02.1** | **-0.7** |
| HKR | | | | *e*SG | **Sb** | **02 54 14.2** | **-0.6** |
| **HKR** | **Hakkari** | **0.85** | **69** | *e*Pg | **Pb** | **02 54 02.1** | **-0.7** |
| HKR | | | | *e*Sg | **Sb** | **02 54 14.2** | **-0.6** |
| **BEST** | **Besiri** | **1.32** | **298** | P | **Pb** | **02 54 11.1** | **+0.4** |
| BEST | | | | S | **Sn** | **02 54 29.9** | **+1.0** |
| **BTMT** | **Batman** | **1.35** | **313** | *e*PN | **Pn** | **02 54 11.2** | **+0.1** |
| **BTMT** | **Batman** | **1.35** | **313** | *e*Pn | **Pn** | **02 54 11.2** | **+0.1** |
| **SVAN** | **Silvan-Diyarba** | **1.50** | **306** | *e*PN | **Pn** | **02 54 13.1** | **-0.1** |
| **SVAN** | **Silvan-Diyarba** | **1.50** | **306** | *e*Pn | **Pn** | **02 54 13.1** | **-0.1** |
| **MARD** | **Mardin** | **1.56** | **272** | P | **Pn** | **02 54 13.9** | **-0.2** |
| MARD | | | | S | **Sg** | **02 54 36.3** | **+1.0** |

*GUC **24** 02:54:08.8±0.5, 32.38S×71.34W, h42km±1km, ML2.9*

**ISC 24 02:54:03.1±4.3, 32.19S±0.07×71.7W±0.1, h25km±28km, n14, σ1.65/22, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ROCH** | **El Roble** | **0.97** | **144** | *e*P | **Pn** | **02 54 22.4** | **+1.1** |
| ROCH | | | | *e*S | **Sn** | **02 54 32.8** | **-1.7** |
| ROCH | | | | AML | AML | 02 54 33.8 | |
| | comp=N,1μm,0.1s | | | | | | |
| **PEL** | **Peldehue** | **1.28** | **139** | *e*P | **Pn** | **02 54 26.4** | **+1.1** |
| PEL | | | | *e*S | **Sn** | **02 54 39.6** | **-2.2** |
| PEL | | | | AML | AML | 02 54 40.4 | |
| | comp=N,1μm,0.2s | | | | | | |
| **RCDM** | **Rinconada Maip** | **1.50** | **150** | *e*P | **Pn** | **02 54 30.0** | **+1.6** |
| RCDM | | | | *e*S | **Sn** | **02 54 46.2** | **-1.0** |
| RCDM | | | | AML | AML | 02 54 49.0 | |
| | comp=E,279nm,1.8s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.55** | **141** | *e*P | **Pn** | **02 54 30.4** | **+1.3** |
| CLCH | | | | *e*S | **Sn** | **02 54 46.7** | **-1.8** |
| CLCH | | | | AML | AML | 02 54 47.9 | |
| | comp=N,584nm,0.5s | | | | | | |
| **TACH** | **Talagante** | **1.59** | **157** | *e*P | **Pn** | **02 54 31.6** | **+1.9** |
| TACH | | | | *e*S | **Sn** | **02 54 48.9** | **-0.6** |
| **LACH** | **Col Las Americ** | **1.60** | **142** | *e*P | **Pn** | **02 54 30.7** | **+0.9** |
| LACH | | | | *e*S | **Sn** | **02 54 48.0** | **-1.6** |
| **ANTU** | **Antumapu** | **1.64** | **147** | *e*P | **Pn** | **02 54 32.2** | **+1.9** |
| ANTU | | | | *e*S | **Sn** | **02 54 49.5** | **-1.3** |
| ANTU | | | | AML | AML | 02 54 56.7 | |
| | comp=E,227nm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **1.96** | **92** | *e*P | **Pn** | **02 54 37.0** | **+2.1** |
| AUSP | | | | *e*S | **Sb** | **02 55 01.1** | **-1.2** |
| **RTLS** | **Leoncito** | **2.07** | **80** | *e*P | **Pn** | **02 54 38.2** | **+1.7** |
| RTLS | | | | *e*S | **Sn** | **02 55 03.0** | **+1.3** |
| **ARCO** | **CERRO ARCO** | **2.42** | **106** | *e*P | **Pn** | **02 54 43.9** | **+2.6** |
| ARCO | | | | IAML | | 02 55 16.6 | |
| | comp=Z,64nm,0.9s | | | | | | |
| **AAGR** | **Agrelo** | **2.58** | **111** | *e*P | Pn | 02 54 46.4 | +3.0 |
| **CFAA** | **Coronel Fontan** | **3.00** | **80** | *e*P | **Pn** | **02 54 49.8** | **+0.8** |
| **AGUA** | **GUANDACOL** | **3.85** | **46** | *e*P | **Pn** | **02 55 00.2** | **-0.6** |
| **AVFE** | **Valle Fertil** | **3.93** | **68** | *e*P | **Pn** | **02 55 02.2** | **+0.3** |
| AVFE | | | | IAML | | 02 55 59.4 | |
| | comp=Z,27nm,0.3s | | | | | | |

**IDC 24 02:58:44.3±2.1, 6.84S×129.44E, h0km, mb3.8/1, mb1 3.5/3, mb1mx3.3/20, mbtmp3.4/3, ML3.5/2, Error ellipse: s-maj=136.0km s-min=31.8km az=68.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.87** | **160** | Pn | Pn | 03 02 01.8 | -0.4 |
| | 0.4nm,0.3s,baz=340,slow=14,SNR=7.8 | | | | | | |
| WRA | | | | Sn | Sn | 03 04 23.9 | -13 |
| | 0.9nm,0.3s,baz=331,slow=22,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **17.27** | **166** | P | Pn | 03 02 47.5 | +0.3 |
| | 0.1nm,0.3s,baz=334,slow=8.8,SNR=4.3 | | | | | | |
| ASAR | | | | S | Sn | 03 05 47.2 | -13 |
| | 0.3nm,0.3s,baz=355,slow=28,SNR=5.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.79** | **327** | P | P | 03 09 44.1 | 0.0 |
| | 0.3nm,0.3s,baz=142,slow=7.8,SNR=3.6 | | | | | | |

*NEIC **24** 03:02:17.5, 32.13N×115.22W, h5km, ML2.8(ECX), ML2.8(PAS), After ECX.*

**ECX 24 03:02:17.5±0.5, 32.12N×115.21W, h5km, MD2.6, ML2.9, 1C-5D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MBIG** | **Mexicali** | **0.28** | **2** | *e*P | Pg | 03 02 23.0 | 0.0 |
| **CPBX** | **Cerro Prieto** | **0.30** | **345** | *e*P | Pg | 03 02 23.0 | -0.5 |
| CPBX | | | | *e*S | Sg | 03 02 27.8 | +0.3 |
| CPBX | | | | IAML | | 03 02 29.9 | |
| | comp=E,5μm,0.1s | | | | | | |
| CPBX | | | | *e* | | 03 02 29.9 | |
| **EMSC** | **East Mesa** | **0.64** | **17** | ⇓*i*P | Pg | 03 02 28.8 | -1.1 |
| **RDX** | **Rancho Dawling** | **0.65** | **253** | *e*P | Pg | 03 02 29.4 | -0.9 |
| RDX | | | | *e*S | Sg | 03 02 38.3 | -0.7 |
| RDX | | | | ⇑*e* | | 03 02 38.9 | |
| RDX | | | | IAML | | 03 02 38.9 | |
| | comp=N,282nm,0.5s | | | | | | |
| **RDX** | **Rancho Dawling** | **0.65** | **253** | *e*P | Pg | 03 02 29.4 | -0.9 |
| RDX | | | | *e*S | Sg | 03 02 37.9 | -1.2 |
| **ECBX** | **El Chinero** | **0.66** | **168** | *e*P | Pg | 03 02 29.5 | -0.8 |
| ECBX | | | | *e*S | Sg | 03 02 38.6 | -0.2 |
| ECBX | | | | *e* | | 03 02 40.4 | |
| **YMD** | **Yuma Desert** | **0.71** | **52** | ⇓*i*P | Pg | 03 02 29.5 | -1.6 |
| **DREC** | **Desert Rsrch C** | **0.71** | **344** | *e*P | Pg | 03 02 30.3 | -0.8 |
| **YUH** | **Yuha Desert** | **0.80** | **311** | *e*P | Pg | 03 02 31.2 | -1.7 |
| **RMX** | **La Rumorosa** | **0.88** | **303** | *e*P | Pg | 03 02 32.5 | -2.1 |
| RMX | | | | *e*S | Sg | 03 02 43.7 | -2.4 |
| RMX | | | | IAML | | 03 02 45.2 | |
| | comp=N,502nm,0.1s | | | | | | |
| RMX | | | | ⇓*e* | | 03 02 45.2 | |
| **RMX** | **La Rumorosa** | **0.88** | **303** | *e*P | Pg | 03 02 32.5 | -2.1 |
| RMX | | | | *e*S | Sg | 03 02 44.2 | -2.0 |
| **GLA** | **Glamis** | **0.98** | **19** | *e*Pg | Pg | 03 02 33.1 | -3.3 |
| GLA | | | | *e*Sg | Sg | 03 02 46.6 | -2.6 |
| **ZAX** | **El Zacaton** | **1.09** | **236** | *e*P | Pg | 03 02 36.5 | -2.1 |
| ZAX | | | | *e*S | Sg | 03 02 51.4 | -1.5 |
| **SPX** | **San Pedro Mart** | **1.10** | **192** | *e*P | Pg | 03 02 36.6 | -2.4 |
| SPX | | | | IAML | | 03 02 54.1 | |
| | comp=E,173nm,0.3s | | | | | | |
| SPX | | | | ⇓*e* | | 03 02 54.1 | |
| **CBX** | **Cerro Bola** | **1.25** | **279** | *e*P | Pg | 03 02 39.1 | -2.6 |
| CBX | | | | *e*S | Sg | 03 02 56.2 | -1.8 |
| CBX | | | | ⇓*e* | | 03 02 59.2 | |
| CBX | | | | IAML | | 03 02 59.2 | |
| | comp=E,188nm,0.4s | | | | | | |
| **CBX** | **Cerro Bola** | **1.25** | **279** | *e*P | Pg | 03 02 39.1 | -2.6 |
| CBX | | | | *e*S | Sg | 03 02 56.2 | -1.8 |
| **ECNX** | **Esteban Cantu** | **1.27** | **249** | *e*P | Pg | 03 02 39.5 | -2.6 |
| **PBX** | **Punta Banda** | **1.34** | **254** | *e*P | Pn | 03 02 40.3 | -2.7 |
| **PBX** | **Punta Banda** | **1.34** | **254** | *e*P | Pn | 03 02 40.3 | -2.7 |
| **BAR** | **Barrett** | **1.36** | **295** | *e*P | Pn | 03 02 40.4 | -2.8 |
| **BAR** | **Barrett** | **1.36** | **295** | *e*Pn | Pn | 03 02 40.6 | -2.6 |
| BAR | | | | *e*Sg | Sb | 03 02 58.6 | -2.6 |
| **PFO** | **Pinyon Flat Ob** | **1.81** | **325** | *e*Pn | Pn | 03 02 45.6 | -4.0 |
| **214A** | **Organ Pipe Nat** | **2.04** | **94** | *e*Pn | Pn | 03 02 49.9 | -2.7 |
| **GSC** | **Goldstone** | **3.44** | **338** | *e*Pn | Pn | 03 03 09.9 | -1.9 |

*IDC **24** 03:14:23.0±1.5, 7.87S×130.88E, h0km, mb4.5/2, mb1 4.8/6, mb1mx4.1/30, mbtmp4.7/6, ML4.6/4, MS2.9/3, Ms1 2.9/3, 

1.9nm,0.3s,baz=15,slow=13,SNR=95
ASAR Sn **Sn** **03 20 58.4 -2.4**
1.0nm,0.3s,baz=354,slow=28,SNR=8.1
**PMG Port Moresby 16.03 96** LR LR 03 24 36.8
comp=Z,46nm,22.0s,baz=234,slow=38
**PMG Port Moresby 16.03 96** *e*Pn **P** **03 18 10.6 -1.8**
**MBWA Marble Bar 17.01 219** *e*Pn **P** **03 18 23.7 +0.5**
**CTAO Charters Tower 19.03 131** *e*P **Pn** **03 18 47.3 +0.8**
13nm,1.1s
**GUMO Guam 25.50 33** LR LR 03 30 13.9
comp=Z,36nm,19.2s,baz=99,slow=37
**CMAR Chiang Mai Arr 41.14 310** P **P** **03 22 06.7 -0.9**
1.1nm,0.4s,baz=140,slow=7.1,SNR=6.9
**MKAR Makanchi Array 69.61 327** P **P** **03 25 33.2 +1.2**
3.6nm,0.5s,baz=115,slow=8.3,SNR=22
**TKM2 Tokmak 2 71.39 320** *e*P **P** **03 25 43.8 +0.5**
1.7nm,0.5s
**EKS2 Erkin-Say 72.43 319** *e*P **P** **03 25 50.4 +1.1**
1.9nm,0.6s
**ABKAR Akbulak array 83.92 321** *e*P **P** **03 26 53.5 +0.8**
0.9nm,0.7s
**TORD Torodi Ar. Bea 129.98 280** PKP **PKPdf** **03 33 35.8 +2.4**
0.2nm,0.7s,baz=89,slow=2.2,SNR=3.1

*IDC* ***24*** *03:31:33.7±1.0, 6.20N×90.63E, h0km, mb3.5/8, mb1 3.8/10, mb1mx3.6/45, mbtmp3.7/10, ML4.4/2, Error ellipse: s-maj=34.2km s-min=19.5km az=45.0*

**ISC 24 03:31:36.3±1.2, 5.9N±0.2×90.84E±0.10, h35km, n24, σ0s80/16, mb3.4/8, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **8.62** | **111** | Sn | **Sn** | **03 35 14.8** | **-0.2** |
| | 0.7nm,0.3s,baz=72,slow=20,SNR=4.6 | | | | | | |
| **PALK** | **Pallekele** | **10.17** | **278** | Pn | **Pn** | **03 33 59.1** | **-0.8** |
| | 3.9nm,0.3s,baz=116,slow=13,SNR=15 | | | | | | |
| PALK | | | | Sn | Sn | 03 35 37.6 | -15 |
| | 6.2nm,0.3s,baz=116,slow=20,SNR=13 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **14.77** | **32** | Pn | **Pn** | **03 35 01.6** | **-1.2** |
| | 0.4nm,0.3s,baz=226,slow=14,SNR=7.7 | | | | | | |
| **ODAN** | **Odare** | **21.10** | **351** | *e*P | **P** | **03 36 18.5** | **+0.3** |
| | 11nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **21.32** | **350** | *e*P | **P** | **03 36 21.3** | **+0.8** |
| | 13nm,0.7s | | | | | | |
| **TAPN** | **Taplejung** | **21.54** | **352** | *e*P | **P** | **03 36 23.0** | **+0.1** |
| | 26nm,0.9s | | | | | | |
| **PKI** | **Pulchoki** | **22.16** | **347** | *e*P | **P** | **03 36 29.7** | **0.0** |
| **PKIN** | **Phulchoki** | **22.17** | **347** | *e*P | **P** | **03 36 29.7** | **0.0** |
| | 8.6nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **22.39** | **348** | *e*P | **P** | **03 36 31.9** | **-0.3** |
| | 17nm,0.8s | | | | | | |
| **H08S3** | **Diego Garcia H** | **22.72** | **234** | T | T | 04 00 03.6 | |
| | baz=52,slow=75,SNR=28 | | | | | | |
| **H08S2** | **Diego Garcia H** | **22.72** | **234** | T | T | 04 00 03.7 | |
| | baz=52,slow=75,SNR=27 | | | | | | |
| **H08S1** | **Diego Carcia H** | **22.73** | **234** | T | T | 04 00 03.8 | |
| | baz=52,slow=75,SNR=25 | | | | | | |
| **KOLN** | **Koldanda** | **22.82** | **343** | *e*P | **P** | **03 36 37.0** | **+0.5** |
| | 18nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **41.41** | **351** | P | **P** | **03 39 19.4** | **+0.1** |
| | 0.5nm,0.7s,baz=174,slow=7.2,SNR=3.4 | | | | | | |
| **SONM** | **Songino Array** | **43.85** | **15** | P | **P** | **03 39 40.9** | **+1.7** |
| | 0.4nm,0.5s,baz=186,slow=12,SNR=3.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **45.75** | **349** | P | **P** | **03 39 53.3** | **-0.9** |
| | 0.3nm,0.6s,baz=171,slow=7.4,SNR=4.5 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **46.13** | **153** | T | T | 04 29 56.5 | |
| | baz=329,slow=76,SNR=7.7 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **46.14** | **153** | T | T | 04 29 51.9 | |
| | baz=329,slow=76,SNR=7.5 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **46.15** | **153** | T | T | 04 29 44.1 | |
| | baz=329,slow=76,SNR=9.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.89** | **122** | P | P | 03 40 30.7 | +4.0 |
| | 0.3nm,0.8s,baz=302,slow=8.0,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **51.27** | **127** | P | P | 03 40 43.4 | +6.2 |
| | 0.3nm,0.7s,baz=316,slow=7.9,SNR=2.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **61.28** | **312** | P | **P** | **03 41 48.4** | **-0.1** |
| | 0.2nm,0.4s,baz=99,slow=9.0,SNR=2.9 | | | | | | |
| **FINES** | **FINESS Array B** | **72.94** | **333** | P | **P** | **03 43 01.6** | **-0.3** |
| | 1.5nm,0.7s,baz=99,slow=8.3,SNR=5.4 | | | | | | |
| **GERES** | **GERESS Array B** | **77.12** | **319** | P | **P** | **03 43 27.6** | **+1.1** |
| | 0.4nm,0.7s,baz=112,slow=4.4,SNR=4.1 | | | | | | |

*CSEM* ***24*** *04:14:32.9, 38.55N×29.47W, h5km, ML2.8, After PDA*

**PDA 24 04:14:32.9±1.1, 38.55N×29.47W, h5km, MD3.6, ML2.8, Error ellipse: s-maj=9.7km s-min=6.2km az=144.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CALA** | **Caldeira** | **0.60** | **87** | *e*S | Sg | 04 14 50.9 | -1.5 |
| **CALA** | **Caldeira** | **0.60** | **87** | *e*S | Sg | 04 14 50.9 | -1.5 |
| **PCED** | **Cedros** | **0.60** | **82** | *e*P | Pg | 04 14 43.3 | -1.2 |
| PCED | | | | *e*S | Sg | 04 14 50.8 | -1.6 |
| PCED | | | | A | A | 04 14 51.8 | |
| | 194nm,0.4s | | | | | | |
| **PCED** | **Cedros** | **0.60** | **82** | *e*P | Pg | 04 14 43.3 | -1.2 |
| PCED | | | | *e*S | Sg | 04 14 50.8 | -1.6 |
| **HOR** | **Horta** | **0.66** | **92** | *e*P | Pg | 04 14 43.9 | -1.6 |
| HOR | | | | *e*S | Sg | 04 14 52.1 | -1.9 |
| **HOR** | **Horta** | **0.66** | **92** | *e*P | Pg | 04 14 43.9 | -1.6 |
| HOR | | | | *e*S | Sg | 04 14 52.1 | -1.9 |
| **PCAN** | **Candelaria** | **0.77** | **96** | *i* P | Pg | 04 14 45.2 | -2.6 |
| PCAN | | | | *e*S | Sg | 04 14 54.8 | -3.1 |
| PCAN | | | | A | A | 04 14 58.5 | |
| | 202nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **0.77** | **96** | *i* P | Pg | 04 14 45.2 | -2.6 |
| PCAN | | | | *e*S | Sg | 04 14 54.8 | -3.1 |
| **PICO** | **Pico** | **0.82** | **93** | *e*P | Pg | 04 14 46.5 | -2.2 |
| PICO | | | | *e*S | Sg | 04 14 56.0 | -3.4 |
| **PICO** | **Pico** | **0.82** | **93** | *e*P | Pg | 04 14 46.5 | -2.2 |
| PICO | | | | *e*S | Sg | 04 14 56.0 | -3.4 |
| **ROSA** | **Rosais** | **0.97** | **80** | *e*P | Pg | 04 14 48.8 | -2.8 |
| ROSA | | | | *e*S | Sg | 04 14 59.8 | -4.5 |
| ROSA | | | | A | A | 04 15 03.9 | |
| | 117nm,0.4s | | | | | | |
| **ROSA** | **Rosais** | **0.97** | **80** | *e*P | Pg | 04 14 48.8 | -2.8 |
| ROSA | | | | *e*S | Sg | 04 14 59.8 | -4.5 |
| **PMAN** | **Manadas** | **1.08** | **85** | *e*S | Sg | 04 15 02.5 | -5.2 |
| PMAN | | | | A | A | 04 15 05.5 | |
| | 50nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.08** | **85** | *e*S | Sg | 04 15 02.5 | -5.2 |
| **PGRA** | **Graciosa** | **1.25** | **67** | *e*S | Sg | 04 15 06.5 | -6.8 |
| PGRA | | | | A | A | 04 15 12.2 | |
| | 50nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.25** | **67** | *e*S | Sg | 04 15 06.5 | -6.8 |
| **PSET** | **Sete Cidades** | **3.04** | **103** | *e*P | Pn | 04 15 17.4 | -4.3 |
| PSET | | | | *e*S | Sn | 04 15 50.9 | -7.6 |
| PSET | | | | A | A | 04 15 53.0 | |
| | 11nm,0.3s | | | | | | |
| **PSET** | **Sete Cidades** | **3.04** | **103** | *e*P | Pn | 04 15 17.4 | -4.3 |
| PSET | | | | *e*S | Sn | 04 15 50.9 | -7.6 |
| **PDA** | **Ponta Delgada** | **3.10** | **104** | *e*P | Pn | 04 15 18.3 | -4.2 |
| **PDA** | **Ponta Delgada** | **3.10** | **104** | *e*P | Pn | 04 15 18.3 | -4.2 |
| **BART** | **Pico Bartolome** | **3.47** | **102** | *e*P | Pn | 04 15 24.2 | -3.5 |
| **BART** | **Pico Bartolome** | **3.47** | **102** | *e*P | Pn | 04 15 24.2 | -3.5 |
| **PSMA** | **Santa Maria** | **3.77** | **113** | *e*P | Pn | 04 15 26.7 | -5.0 |
| **PSMN** | **Pico do Norte,** | **3.81** | **113** | *e*P | Pn | 04 15 27.2 | -5.1 |
| **PSMN** | **Pico do Norte,** | **3.81** | **113** | *e*P | Pn | 04 15 27.2 | -5.1 |

**TRN 24 04:37:37.2, 13.69N×60.08W, h18km, MD3.6, Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MCLT** | **Moule a Chique** | **0.84** | **271** | *e*P | Pn | 04 37 55.9 | +1.8 |
| MCLT | | | | *e*S | Sn | 04 38 09.9 | +3.8 |
| **SVB** | **Belmont** | **1.22** | **250** | *e*P | Pg | 04 38 01.0 | +0.2 |
| SVB | | | | *e*S | Sg | 04 38 17.0 | +0.2 |
| **GRSS** | **Sisters** | **2.04** | **227** | *e*P | Pn | 04 38 11.5 | +0.9 |
| GRSS | | | | *e*S | Sb | 04 38 39.2 | +0.5 |
| **GRW** | **Mount Saint Ca** | **2.17** | **226** | *e*P | Pb | 04 38 14.4 | -1.6 |
| GRW | | | | *e*S | Sn | 04 38 40.3 | +1.4 |
| **TOSP** | **Speyside** | **2.42** | **191** | *e*P | Pn | 04 38 17.6 | +1.8 |
| TOSP | | | | *e*S | Sn | 04 38 46.6 | +1.6 |

*CSEM* ***24*** *04:38:04.6, 38.50N×29.48W, h5km, ML2.2, After PDA*

**PDA 24 04:38:04.6±0.6, 38.50N×29.48W, h5km, MD3.6, ML2.2, Error ellipse: s-maj=6.8km s-min=5.1km az=146.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCED** | **Cedros** | **0.63** | **77** | *e*P | Pg | 04 38 15.3 | -1.4 |
| PCED | | | | *e*S | Sg | 04 38 23.2 | -1.6 |
| PCED | | | | A | A | 04 38 25.5 | |
| | 28nm,0.2s | | | | | | |
| **PCED** | **Cedros** | **0.63** | **77** | *e*P | Pg | 04 38 15.3 | -1.4 |
| PCED | | | | *e*S | Sg | 04 38 23.2 | -1.6 |
| **HOR** | **Horta** | **0.67** | **87** | *e*S | Sg | 04 38 24.0 | -2.2 |
| **HOR** | **Horta** | **0.67** | **87** | *e*S | Sg | 04 38 24.0 | -2.2 |
| **PCAN** | **Candelaria** | **0.78** | **92** | *e*P | Pg | 04 38 17.3 | -2.4 |
| PCAN | | | | *e*S | Sg | 04 38 27.1 | -2.8 |
| PCAN | | | | A | A | 04 38 30.4 | |
| | 29nm,0.2s | | | | | | |
| **PCAN** | **Candelaria** | **0.78** | **92** | *e*P | Pg | 04 38 17.3 | -2.4 |
| PCAN | | | | *e*S | Sg | 04 38 27.1 | -2.8 |
| **PICO** | **Pico** | **0.83** | **89** | *e*P | Pg | 04 38 17.9 | -2.8 |
| PICO | | | | *e*S | Sg | 04 38 28.0 | -3.5 |
| **PICO** | **Pico** | **0.83** | **89** | *e*P | Pg | 04 38 17.9 | -2.8 |
| PICO | | | | *e*S | Sg | 04 38 28.0 | -3.5 |
| **ROSA** | **Rosais** | **1.00** | **77** | *e*S | Sg | 04 38 32.2 | -4.6 |
| ROSA | | | | A | A | 04 38 33.6 | |
| | 30nm,0.3s | | | | | | |
| **ROSA** | **Rosais** | **1.00** | **77** | *e*S | Sg | 04 38 32.2 | -4.6 |
| **PMAN** | **Manadas** | **1.10** | **82** | *e*S | Sg | 04 38 34.8 | -5.3 |
| PMAN | | | | A | A | 04 38 40.5 | |
| | 14nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.10** | **82** | *e*S | Sg | 04 38 34.8 | -5.3 |
| **PGRA** | **Graciosa** | **1.29** | **65** | *e*S | Sg | 04 38 39.0 | -7.1 |
| PGRA | | | | A | A | 04 38 41.4 | |
| | 8.9nm,0.4s | | | | | | |
| **PGRA** | **Graciosa** | **1.29** | **65** | *e*S | Sg | 04 38 39.0 | -7.1 |

**KRSC 24 04:41:04.8±0.5, 55.15N×160.31E, h4km±3km, ML3.7, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZV** | **Kizimen** | **0.03** | **195** | *i* P | Pg | 04 41 06.8 | +0.8 |
| **TUMR** | **Tumrok** | **0.17** | **326** | *i* P | Pg | 04 41 08.4 | +0.1 |
| TUMR | | | | *e*S | Sg | 04 41 11.5 | +0.9 |
| **KMNR** | **Kamenistaya** | **0.61** | **356** | *e*P | Pg | 04 41 17.0 | +0.3 |
| KMNR | | | | *e*S | Sb | 04 41 26.4 | -0.9 |
| **KIRR** | **Kirishev** | **0.81** | **1** | S | Sb | 04 41 32.7 | -0.3 |
| **KPT** | **Kopyto** | **0.82** | **357** | *e*P | Pg | 04 41 21.2 | +0.4 |
| KPT | | | | *e*S | Sb | 04 41 34.0 | +0.7 |
| **KOZ** | **Kozyrevsk** | **0.95** | **345** | *e*P | Pb | 04 41 23.7 | -0.1 |
| KOZ | | | | S | Sn | 04 41 38.2 | -0.6 |
| **MKZ** | **Mys Kozlova** | **1.01** | **125** | *e*P | Pg | 04 41 24.3 | +0.2 |
| MKZ | | | | *e*S | Sb | 04 41 38.7 | +0.3 |
| **KLY** | **Klyuchi** | **1.19** | **9** | *e*P | Pn | 04 41 28.5 | +0.4 |
| **ESO** | **Esso** | **1.20** | **311** | *e*P | Pg | 04 41 26.3 | -1.6 |
| ESO | | | | *e*S | Sg | 04 41 42.8 | -0.7 |
| **KII** | **Karymskiy** | **1.22** | **205** | *e*P | Pb | 04 41 28.5 | 0.0 |
| KII | | | | *e*S | Sn | 04 41 45.9 | +0.3 |
| **SRDR** | **Sredinnyy** | **1.22** | **344** | *e*P | Pg | 04 41 28.1 | -0.2 |
| SRDR | | | | *e*S | Sb | 04 41 44.5 | -0.2 |
| **BDR** | **Baidarnaya** | **1.51** | **19** | *e*P | Pn | 04 41 33.0 | +0.3 |
| BDR | | | | *e*S | Sg | 04 41 54.6 | +1.0 |
| **SMKR** | **Semkarok** | **1.58** | **24** | *e*P | Pb | 04 41 34.8 | +0.1 |
| SMKR | | | | *e*S | Sg | 04 41 57.5 | +1.7 |
| **SRKR** | **Sorokina** | **1.59** | **17** | *e*P | Pn | 04 41 34.1 | +0.4 |
| SRKR | | | | *e*S | Sb | 04 41 55.0 | -0.2 |
| **KBTR** | **Krutoberegovo** | **1.78** | **52** | *e*P | Pn | 04 41 35.8 | -0.4 |
| KBTR | | | | *e*S | Sn | 04 41 59.2 | 0.0 |
| **GNL** | **Ganaly** | **2.01** | **225** | *e*P | Pn | 04 41 40.1 | -0.4 |
| GNL | | | | *e*S | Sn | 04 42 06.2 | +1.1 |
| **KRX** | **Arik** | **2.04** | **209** | *e*P | Pb | 04 41 41.3 | -1.2 |
| **SDLR** | **Sedlovina** | **2.05** | **205** | *e*P | Pn | 04 41 41.4 | +1.3 |
| **NLC** | **Nalytchevo** | **2.06** | **196** | *e*P | Pb | 04 41 41.7 | -0.9 |
| NLC | | | | *e*S | Sb | 04 42 08.9 | +0.4 |
| **SPN** | **Mys Shipunski** | **2.06** | **185** | *e*P | Pn | 04 41 39.9 | -0.2 |
| SPN | | | | *e*S | Sn | 04 42 05.9 | -0.2 |
| **SMAR** | **Somma** | **2.08** | **206** | *e*P | Pb | 04 41 42.2 | -1.2 |
| SMAR | | | | *e*S | Sn | 04 42 01.0 | -6.3 |
| **AVH** | **Avacha** | **2.10** | **207** | P | Pb | 04 41 43.3 | -0.1 |
| **KOK** | **Koryaka** | **2.10** | **209** | *e*P | Pb | 04 41 42.5 | -1.0 |
| **UGLR** | **Uglovaya** | **2.13** | **205** | *e*P | Pb | 04 41 43.0 | -1.0 |
| **APC** | **Apacha** | **2.90** | **221** | *e*P | Pn | 04 41 53.1 | +1.5 |
| APC | | | | *e*S | Sn | 04 42 28.6 | +1.8 |
| **RUS** | **Russkaya** | **2.92** | **202** | *e*P | Pn | 04 41 53.8 | +1.9 |
| RUS | | | | *e*S | Sb | 04 42 30.8 | -2.5 |
| **ASAK** | **Asacha** | **3.12** | **208** | P | Pb | 04 41 58.8 | -2.0 |
| **BKI** | **Bering** | **3.25** | **87** | P | Pn | 04 41 56.5 | +0.1 |

*NIED* ***24*** *04:50:00, 36.10N×139.90E, h53km, Mw4.5 Best double couple: M0 6.43000×10^15 NP1:φs247.00000°, δ22.00000°, λ108.00000°. NP2:φs48.00000°, δ69.00000°, λ83.00000°.*

*ISCJB* ***24*** *04:50:41.4±0.3, 36.06N±0.03×139.84E±0.04, h59km±2km, mb4.4/61, MS3.1/11, Error ellipse: s-maj=5.5km s-min=5.1km az=135.1*

*JMA* ***24*** *04:50:42.6, 36.06N×139.85E, h45km±1km, M4.4 Broadband fault plane solution: P waves. NP1: φs45.00000°, δ71.00000°, λ86.00000°. NP2:φs237.00000°, δ19.00000°, λ102.00000°. Principal axes: T Plg64.0000°, Azm308.0000°; N Plg4.0000°, Azm46.0000°; P Plg26.0000°, Azm138.0000°;*

*JMA Felt III J1.*

*IDC* ***24*** *04:50:42.1±1.5, 35.99N×139.80E, h52km±15km, mb4.0/22, mb1 4.2/24, mb1mx4.1/50, mbtmp4.3/24, ML4.2/2, MS3.1/12, Ms1 3.2/12, ms1mx3.0/33 Error ellipse: s-maj=14.0km s-min=9.8km az=76.0*

*BJI* ***24*** *04:50:43.4, 36.10N×139.80E, h65km, mb4.8/7, mB4.6/1*

*NEIC* ***24*** *04:50:43.8±0.7, 36.09N×139.75E, h63km±6km, mb4.3/22, Error ellipse: s-maj=7.9km s-min=5.5km az=154.0*

*NEIC Felt [III] at Tokyo. Recorded [3 JMA] in Ibaraki, Saitama and Tochigi; [2 JMA] in Chiba, Fukushima, Gumma, Kanagawa and Tokyo.*

*MOS* ***24*** *04:50:45.7±0.8, 36.51N×139.63E, h78km, mb4.7/46, Error ellipse: s-maj=9.4km s-min=6.7km az=120.0*

**ISC 24 04:50:42.1±0.6, 36.04N±0.04×139.85E±0.04, h53km±5km, n155, σ1s00/153, mb4.4/61, MS3.2/11, 3C-9D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JYT** | **Yasato** | **0.34** | **56** | ↑P | **Pn** | **04 50 51.5** | **-0.3** |
| JYT | | | | S | **Sn** | **04 50 57.8** | **-1.0** |
| **JHU** | **Hanno** | **0.50** | **248** | ↓P | **Pn** | **04 50 53.5** | **0.0** |
| JHU | | | | S | **Sn** | **04 51 01.2** | **-0.5** |
| **JAG** | **Ashikaga** | **0.50** | **320** | ↓P | **Pn** | **04 50 53.5** | **-0.1** |
| JAG | | | | S | **Sn** | **04 51 00.9** | **-0.9** |
| **JRY** | **Ryogami san** | **0.77** | **268** | ↓P | **Pn** | **04 50 57.0** | **+0.1** |
| JRY | | | | S | **Sn** | **04 51 06.8** | **-0.9** |
| **JKT** | **Katashina** | **0.87** | **326** | ↓P | **Pn** | **04 50 58.1** | **-0.2** |
| JKT | | | | S | **Sn** | **04 51 10.3** | **+0.1** |
| **JOD2** | **Odawara 2** | **0.99** | **219** | ↓P | **Pn** | **04 51 00.5** | **+0.7** |
| JOD2 | | | | S | **Sn** | **04 51 13.9** | **+1.0** |
| **JYN** | **Shimob** | **1.19** | **243** | P | **Pn** | **04 51 03.8** | **+1.3** |
| **BSO3** | **Boso 3** | **1.35** | **156** | ↓P | **Pn** | **04 51 04.7** | **+0.3** |
| **JIM2** | **Oshima 3** | **1.36** | **195** | ↓P | **Pn** | **04 51 04.9** | **+0.1** |
| **MJAR** | **Matsushiro Arr** | **1.42** | **291** | P | **Pn** | **04 51 06.0** | **+0.5** |
| | 202nm,0.3s,baz=93,slow=10,SNR=1778 | | | | | | |
| MJAR | | | | LR | LR | 04 51 52.2 | |
| | comp=Z,668nm,20.0s,baz=120,slow=52 | | | | | | |
| **MAJO** | **Matsushiro** | **1.42** | **291** | *i* P | **Pn** | **04 51 06.2** | **+0.6** |
| **MAJO** | **Matsushiro** | **1.42** | **291** | *e*Pn | **Pn** | **04 51 06.1** | **+0.6** |
| **MAT** | **Matsushiro** | **1.42** | **291** | P | **Pn** | **04 51 06.2** | **+0.6** |
| MAT | | | | S | **Sn** | **04 51 23.3** | **+0.2** |
| **JHJ** | **Hachijo jima 2** | **2.92** | **181** | P | **Pn** | **04 51 26.4** | **+0.3** |
| | 629nm,0.3s,baz=330,slow=17,SNR=31 | | | | | | |
| JHJ | | | | S | **Sn** | **04 51 58.2** | **-1.6** |
| | 313nm,0.3s,baz=77,slow=22,SNR=9.0 | | | | | | |
| **ERM** | **Erimo** | **6.50** | **22** | *e*P | **Pn** | **04 52 15.8** | **+0.7** |
| **JNU** | **Nakatsue** | **7.95** | **251** | P | **Pn** | **04 52 37.0** | **+2.0** |
| | 0.6nm,0.3s,baz=142,slow=4.1,SNR=5.1 | | | | | | |
| **ASAJ** | **Asahikawa** | **8.34** | **14** | P | **Pn** | **04 52 40.6** | **+0.4** |
| | 1.5nm,0.3s,baz=203,slow=16,SNR=8.6 | | | | | | |
| **ASAJ** | **Asahikawa** | **8.34** | **14** | P | **Pn** | **04 52 40.6** | **+0.4** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **9.68** | **282** | P | Pn | 04 53 03.1 | +4.6 |
| | comp=Z,0.8nm,0.3s,baz=93,slow=14,SNR=12 | | | | | | |
| KSRS | | | | LR | LR | 04 56 38.8 | |
| | comp=Z,155nm,20.9s,baz=86,slow=37 | | | | | | |
| **KSRS** | **Korea Array** | **9.68** | **282** | P | Pn | 04 53 03.2 | +4.6 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,155nm,20.9s | | | | | | |
| **KSAR** | **Wonju Array Be** | **9.70** | **282** | P | Pn | 04 53 03.2 | +4.2 |
| **KSAR** | **Wonju Array Be** | **9.70** | **282** | P | Pn | 04 53 03.1 | +4.2 |
| **USRK** | **Ussuriysk Ar.** | **10.12** | **326** | P | Pn | 04 53 09.7 | +5.0 |
| | comp=Z,0.7nm,0.3s,baz=141,slow=13,SNR=13 | | | | | | |
| USRK | | | | LR | LR | 04 56 54.6 | |
| | comp=Z,66nm,18.1s,baz=138,slow=37 | | | | | | |
| **CN2** | **Changchun** | **13.49** | **309** | *e*P | **P** | **04 53 57.3** | **-1.0** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **TYV** | **Tymovskoe** | **14.95** | **7** | *e*P | **P** | **04 54 15.8** | **+1.3** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| **PETK** | **Petropavlovsk-** | **21.18** | **31** | LR | LR | 05 03 20.7 | |
| | comp=Z,23nm,21.1s,baz=247,slow=36 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **22.62** | **291** | *e*P | **P** | **04 55 37.4** | **-1.1** |
| HHC | | | | PMZ | | | |
| | comp=Z,18nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,97nm,3.6s | | | | | | |
| **GUMO** | **Guam** | **22.81** | **167** | LR | LR | 05 04 20.4 | |
| | comp=Z,16nm,18.4s,baz=92,slow=36 | | | | | | |
| **YAK** | **Yakutsk** | **26.79** | **349** | LR | LR | 05 07 43.3 | |
| | comp=Z,37nm,18.1s,baz=184,slow=38 | | | | | | |
| **YAK** | **Yakutsk** | **26.79** | **349** | *e*P | **P** | **04 56 16.4** | **-0.4** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **27.32** | **306** | P | **P** | **04 56 22.7** | **+0.8** |
| | comp=Z,1.1nm,0.5s,baz=110,slow=9.0,SNR=7.1 | | | | | | |
| SONM | | | | LR | LR | 05 07 54.1 | |
| | comp=Z,55nm,18.1s,baz=98,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **27.32** | **306** | P | **P** | **04 56 22.7** | **+0.8** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,55nm,18.1s | | | | | | |
| **BOD** | **Bodaibo** | **27.73** | **330** | *e*P | **P** | **04 56 23.0** | **-2.3** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **28.77** | **117** | T | T | 05 26 46.1 | |
| | baz=312,slow=75,SNR=75 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **28.78** | **117** | T | T | 05 26 44.1 | |
| | baz=312,slow=75,SNR=104 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **28.79** | **117** | T | T | 05 26 47.9 | |
| | baz=312,slow=75,SNR=68 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.43** | **119** | T | T | 05 27 36.3 | |
| | baz=314,slow=76,SNR=296 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.43** | **119** | T | T | 05 27 36.7 | |
| | baz=314,slow=76,SNR=196 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.44** | **119** | T | T | 05 27 40.6 | |
| | baz=314,slow=76,SNR=129 | | | | | | |
| **TLY** | **Talaya** | **30.05** | **313** | LR | LR | 05 10 04.5 | |
| | comp=Z,28nm,18.2s,baz=128,slow=39 | | | | | | |
| **GTA** | **Gaotai** | **31.66** | **288** | *e*P | **P** | **04 57 00.8** | **+0.3** |
| GTA | | | | PMZ | | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.02** | **255** | LR | LR | 05 16 14.8 | |
| | comp=Z,27nm,18.2s,baz=18,slow=38 | | | | | | |
| **LSA** | **Lhasa** | **41.05** | **276** | *e*P | **P** | **04 58 21.5** | **+0.5** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **LSA** | **Lhasa** | **41.05** | **276** | *e*P | **P** | **04 58 21.5** | **+0.5** |
| | comp=Z,5.0nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.66** | **313** | P | **P** | **04 58 25.0** | **-0.2** |
| | comp=Z,12nm,0.6s,baz=94,slow=6.2,SNR=45 | | | | | | |
| ZALV | | | | PcP | **PcP** | **05 00 20.8** | **-0.2** |
| | comp=Z,1.8nm,0.4s,baz=104,slow=3.6,SNR=6.0 | | | | | | |
| ZALV | | | | LR | LR | 05 16 28.8 | |
| | comp=Z,34nm,18.8s,baz=66,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **41.66** | **313** | P | **P** | **04 58 25.0** | **-0.2** |
| ZALV | | | | | | 05 00 20.8 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,12nm,0.6s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| ZALV | | | | MLR | MLR | | |
| | comp=Z,34nm,18.8s | | | | | | |
| **NVS** | **Novosibirsk** | **42.62** | **315** | *e*P | **P** | **04 58 33.1** | **+0.2** |
| NVS | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.7s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,11nm,0.7s | | | | | | |
| **MK31** | **Makanchi Array** | **43.59** | **303** | P | **P** | **04 58 40.5** | **-0.4** |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.59** | **303** | P | **P** | **04 58 40.9** | **0.0** |
| | comp=Z,3.9nm,0.6s,baz=86,slow=9.3,SNR=17 | | | | | | |
| MKAR | | | | LR | LR | 05 16 36.9 | |
| | comp=Z,33nm,18.3s,baz=1.0,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.59** | **303** | P | **P** | **04 58 40.9** | **0.0** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| MKAR | | | | MLR | MLR | | |
| | comp=Z,33nm,18.3s | | | | | | |
| **TAPN** | **Taplejung** | **44.75** | **274** | *e*P | **P** | **04 58 50.2** | **-0.6** |
| | comp=Z,5.3nm,0.4s | | | | | | |
| **ODAN** | **Odare** | **45.22** | **274** | *e*P | **P** | **04 58 54.1** | **-0.3** |
| | comp=Z,5.3nm,0.5s | | | | | | |
| **KURK** | **Kurchatov** | **45.56** | **309** | *e*P | **P** | **04 58 56.0** | **-0.5** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **45.56** | **309** | *e*P | **P** | **04 58 56.0** | **-0.5** |
| | comp=Z,19nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **45.82** | **274** | *e*P | **P** | **04 58 58.8** | **-0.4** |
| | comp=Z,21nm,0.8s | | | | | | |
| **GUN** | **Gumba** | **46.00** | **276** | *e*P | **P** | **04 59 00.8** | **+0.1** |
| **PKI** | **Pulchoki** | **46.52** | **276** | *e*P | **P** | **04 59 04.4** | **-0.4** |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **PKIN** | **Phulchoki** | **46.53** | **276** | *e*P | **P** | **04 59 04.8** | **0.0** |
| | comp=Z,5.2nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **46.96** | **277** | *e*P | **P** | **04 59 08.0** | **0.0** |
| | comp=Z,54nm,0.8s | | | | | | |
| **DANN** | **Dangsing** | **47.52** | **277** | *e*P | **P** | **04 59 13.0** | **+0.4** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **51.00** | **32** | P | | **P** | | **04 59 38.9** | **+0.6** |
| | comp=Z,1.3nm,0.6s,baz=265,slow=5.6,SNR=24 | | | | | | | | |
| **ILAR** | **Eielson Array** | **51.00** | **32** | P | | **P** | | **04 59 38.9** | **+0.6** |
| ILAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **ZRNK** | **Zerenda** | **51.15** | **313** | P | | **P** | | **04 59 37.8** | **-1.7** |
| ZRNK | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **KK31** | **Karatay Array** | **52.53** | **300** | *i* P | | **P** | | **04 59 49.9** | **-0.1** |
| KK31 | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **EGAK** | **Eagle** | **53.45** | **32** | *e*P | | **P** | | **04 59 56.9** | **+0.5** |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| **INK** | **Inuvik** | **55.84** | **27** | P | | **P** | | **05 00 13.5** | **-0.1** |
| | comp=Z,2.2nm,0.7s,baz=294,slow=4.6,SNR=7.7 | | | | | | | | |
| **INK** | **Inuvik** | **55.84** | **27** | *e*P | | **P** | | **05 00 14.4** | **+0.8** |
| INK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **INK** | **Inuvik** | **55.84** | **27** | *e*P | | **P** | | **05 00 14.4** | **+0.8** |
| | comp=Z,3.1nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **55.91** | **186** | *c*eP | | **P** | | **05 00 15.0** | **+0.3** |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,25nm,1.7s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **55.91** | **186** | *e*P | | **P** | | **05 00 14.4** | **-0.2** |
| | comp=Z,5.4nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.92** | **186** | P | | **P** | | **05 00 14.4** | **-0.3** |
| | comp=Z,3.4nm,0.6s,baz=2.9,slow=7.5,SNR=14 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **55.92** | **186** | P | | **P** | | **05 00 14.5** | **-0.3** |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| **ARU** | **Arti** | **56.27** | **319** | *c i*P | | **P** | | **05 00 16.7** | **-0.2** |
| ARU | | | | *PP | | **pP** | | **05 00 32.8** | **+1.5** |
| ARU | | | | | | | | 05 02 19.9 | |
| ARU | | | | S | | **S** | | **05 08 04.7** | **+2.0** |
| ARU | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| **AB31** | **Akbulak array** | **57.62** | **310** | *e*P | | **P** | | **05 00 26.0** | **-0.5** |
| AB31 | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **58.40** | **312** | P | | **P** | | **05 00 31.1** | **-0.9** |
| AKTO | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **59.65** | **186** | P | | **P** | | **05 00 41.6** | **+0.8** |
| | comp=Z,0.5nm,0.4s,baz=20,slow=9.9,SNR=12 | | | | | | | | |
| **ASAR** | **Alice Springs** | **59.65** | **186** | P | | **P** | | **05 00 41.7** | **+0.8** |
| ASAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **DLBC** | **Dease Lake** | **60.18** | **37** | P | | **P** | | **05 00 43.0** | **-1.3** |
| | comp=Z,1.1nm,0.4s,baz=342,slow=6.4,SNR=3.1 | | | | | | | | |
| **GEYT** | **Alibeck** | **63.21** | **299** | P | | **P** | | **05 01 05.3** | **+0.3** |
| | comp=Z,4.7nm,0.8s,baz=2.9,slow=5.9,SNR=6.2 | | | | | | | | |
| **RES** | **Resolute Bay** | **63.87** | **14** | P | | **P** | | **05 01 09.1** | **+0.5** |
| | comp=Z,3.2nm,1.0s,baz=338,slow=7.1,SNR=7.0 | | | | | | | | |
| **RES** | **Resolute Bay** | **63.87** | **14** | P | | **P** | | **05 01 09.1** | **+0.5** |
| RES | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **RES** | **Resolute Bay** | **63.87** | **14** | *e*P | | **P** | | **05 01 09.0** | **+0.4** |
| | comp=Z,3.7nm,0.8s | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **64.48** | **339** | P | | **P** | | **05 01 12.1** | **-0.6** |
| | comp=Z,3.0nm,0.8s,baz=50,slow=7.3,SNR=6.8 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **64.48** | **339** | P | | **P** | | **05 01 12.1** | **-0.6** |
| ARCES | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **65.30** | **29** | P | | **P** | | **05 01 18.8** | **+0.7** |
| | comp=Z,1.6nm,0.8s,baz=306,slow=4.6,SNR=3.9 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **65.30** | **29** | P | | **P** | | **05 01 18.8** | **+0.7** |
| YKA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **67.47** | **318** | *e*P | | **P** | | **05 01 31.5** | **-0.6** |
| VRH | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| VRH | | | | pmax | | pmax | | | |
| | comp=N,10.0nm,1.4s | | | | | | | | |
| VRH | | | | pmax | | pmax | | | |
| | comp=E,3.0nm,0.7s | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **68.25** | **320** | *e*P | | **P** | | **05 01 36.8** | **-0.3** |
| LPSR | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.7s | | | | | | | | |
| LPSR | | | | pmax | | pmax | | | |
| | comp=N,6.0nm,0.9s | | | | | | | | |
| LPSR | | | | pmax | | pmax | | | |
| | comp=E,3.0nm,0.6s | | | | | | | | |
| **VSR** | **Storozhevoye** | **68.84** | **318** | *e*P | | **P** | | **05 01 40.1** | **-0.7** |
| VSR | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| VSR | | | | pmax | | pmax | | | |
| | comp=N,10.0nm,1.0s | | | | | | | | |
| VSR | | | | pmax | | pmax | | | |
| | comp=E,9.0nm,0.6s | | | | | | | | |
| **VORD** | **Divnogorie** | **68.90** | **318** | *e*P | | **P** | | **05 01 40.7** | **-0.5** |
| VORD | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| VORD | | | | pmax | | pmax | | | |
| | comp=N,7.0nm,1.1s | | | | | | | | |
| VORD | | | | pmax | | pmax | | | |
| | comp=E,7.0nm,0.8s | | | | | | | | |
| **FINES** | **FINESS Array B** | **69.10** | **332** | P | | **P** | | **05 01 42.1** | **-0.1** |
| | comp=E,4.6nm,0.7s,baz=87,slow=6.4,SNR=15 | | | | | | | | |
| **FINES** | **FINESS Array B** | **69.10** | **332** | P | | **P** | | **05 01 42.1** | **-0.1** |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| **KBZ** | **Khabaz** | **70.59** | **310** | P | | **P** | | **05 01 52.1** | **+0.5** |
| | comp=Z,5.1nm,0.9s,baz=172,slow=1.7,SNR=8.9 | | | | | | | | |
| **KBZ** | **Khabaz** | **70.59** | **310** | P | | **P** | | **05 01 52.1** | **+0.5** |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **KIV** | **Kislovodsk** | **70.60** | **311** | *e*P | | **P** | | **05 01 52.4** | **+0.5** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| KIV | | | | MLR | | MLR | | | |
| | comp=Z,31nm,17.0s | | | | | | | | |
| **NEW** | **Newport** | **71.72** | **43** | P | | **P** | | **05 01 58.8** | **+0.3** |
| | comp=Z,0.6nm,0.3s,baz=0.0,slow=4.0,SNR=3.2 | | | | | | | | |
| **NEW** | **Newport** | **71.72** | **43** | P | | **P** | | **05 01 58.8** | **+0.3** |
| NEW | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| **ANN** | **Anapa** | **73.30** | **313** | *e*P | | **P** | | **05 02 05.2** | **-2.7** |
| ANN | | | | *e*PP | | **pP** | | **05 02 21.4** | **-1.4** |
| ANN | | | | *e* | | | | 05 04 48.6 | |
| ANN | | | | *e*S | | **S** | | **05 11 29.3** | **-3.1** |
| ANN | | | | *e*SS | | **SS** | | **05 16 09.2** | **-5.1** |
| ANN | | | | pmax | | pmax | | | |
| | comp=Z,85nm,1.5s | | | | | | | | |
| **SWMT** | **Swartz Lake** | **73.87** | **43** | *e*P | | **P** | | **05 02 12.1** | **+0.7** |
| **AKASG** | **Malin Array Be** | **74.30** | **322** | P | | **P** | | **05 02 13.1** | **-0.5** |
| | comp=Z,6.7nm,0.9s,baz=48,slow=6.1,SNR=18 | | | | | | | | |
| AKASG | | | | LR | | LR | | 05 36 03.8 | |
| | comp=Z,35nm,20.9s,baz=225,slow=37 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **74.30** | **322** | P | | **P** | | **05 02 13.1** | **-0.5** |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| AKASG | | | | MLR | | MLR | | | |
| | comp=Z,35nm,20.9s | | | | | | | | |
| **SLMT** | **Seeley Lake** | **74.31** | **43** | *e*P | | **P** | | **05 02 14.5** | **+0.5** |
| | comp=Z,2.2nm,0.5s | | | | | | | | |
| **KIEV** | **Kiev** | **74.31** | **322** | ǁ*e*P | | **P** | | **05 02 13.1** | **-0.6** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **KIEV** | **Kiev** | **74.31** | **322** | *e*P | | **P** | | **05 02 13.0** | **-0.6** |
| | comp=Z,2.7nm,0.6s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **74.61** | **337** | P | | **P** | | **05 02 14.8** | **-0.5** |
| | comp=Z,1.1nm,0.5s,baz=42,slow=6.2 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.61** | **337** | P | | **P** | | **05 02 14.9** | **-0.3** |
| | comp=Z,2.7nm,0.7s,baz=55,slow=7.9,SNR=9.8 | | | | | | | | |
| NOA | | | | LR | | LR | | 05 38 00.8 | |
| | comp=Z,27nm,18.2s,baz=20,slow=38 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **74.61** | **337** | P | | **P** | | **05 02 15.0** | **-0.3** |
| NOA | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| NOA | | | | MLR | | MLR | | | |
| | comp=Z,27nm,18.2s | | | | | | | | |
| **HLID** | **Hailey** | **75.97** | **46** | *e*P | | **P** | | **05 02 23.6** | **0.0** |
| | comp=Z,1.7nm,0.9s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **76.30** | **43** | *e*P | | **P** | | **05 02 26.5** | **+1.1** |
| BOZ | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **76.30** | **43** | *e*P | | **P** | | **05 02 26.5** | **+1.1** |
| | comp=Z,1.7nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **76.59** | **52** | P | | **P** | | **05 02 29.3** | **+2.0** |
| | comp=Z,2.0nm,0.7s,baz=292,slow=5.6,SNR=22 | | | | | | | | |
| **ELK** | **Elko** | **77.15** | **49** | *e*P | | **P** | | **05 02 32.2** | **+1.8** |
| ELK | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **ELK** | **Elko** | **77.15** | **49** | *e*P | | **P** | | **05 02 32.2** | **+1.8** |
| | comp=Z,1.7nm,0.7s | | | | | | | | |
| **MOOW** | **Moose Ponds** | **77.97** | **44** | *e*P | | **P** | | **05 02 36.1** | **+1.2** |
| | comp=Z,0.9nm,0.6s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.56** | **311** | P | | **P** | | **05 02 38.2** | **+0.1** |
| | comp=Z,1.3nm,0.8s,baz=113,slow=3.2,SNR=6.0 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.56** | **311** | P | | **P** | | **05 02 38.2** | **+0.1** |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **78.83** | **46** | *e*P | | **P** | | **05 02 40.7** | **+1.0** |
| | comp=Z,2.8nm,0.9s | | | | | | | | |
| **DUG** | **Dugway** | **78.96** | **48** | *e*P | | **P** | | **05 02 41.7** | **+1.3** |
| DUG | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **DUG** | **Dugway** | **78.96** | **48** | *e*P | | **P** | | **05 02 41.7** | **+1.3** |
| | comp=Z,2.8nm,0.9s | | | | | | | | |
| **UZH** | **Uzhgorod** | **79.07** | **323** | *e*P | | **P** | | **05 02 42.3** | **+1.7** |
| UZH | | | | *e* | | | | 05 02 56.9 | |
| **SRU** | **San Rafael** | **81.01** | **48** | *e*P | | **P** | | **05 02 52.6** | **+1.1** |
| SRU | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **SRU** | **San Rafael** | **81.01** | **48** | *e*P | | **P** | | **05 02 52.6** | **+1.1** |
| | comp=Z,2.2nm,0.6s | | | | | | | | |
| **CLL** | **Collm** | **81.32** | **329** | *e*P | | **P** | | **05 02 52.0** | **-0.6** |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **81.32** | **329** | *e*P | | **P** | | **05 02 52.0** | **-0.6** |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| **GERES** | **GERESS Array B** | **82.88** | **327** | P | | **P** | | **05 03 01.1** | **+0.1** |
| | comp=Z,0.6nm,0.5s,baz=40,slow=6.5,SNR=7.5 | | | | | | | | |
| **GERES** | **GERESS Array B** | **82.88** | **327** | P | | **P** | | **05 03 01.1** | **+0.1** |
| GERES | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **84.89** | **46** | *e*P | | **P** | | **05 03 12.6** | **+0.9** |
| | comp=Z,1.4nm,0.8s | | | | | | | | |
| **TUC** | **Tucson** | **85.18** | **53** | *e*P | | **P** | | **05 03 13.9** | **+0.8** |
| TUC | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **TUC** | **Tucson** | **85.18** | **53** | *e*P | | **P** | | **05 03 13.8** | **+0.8** |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.72** | **51** | P | | **P** | | **05 03 45.6** | **+1.3** |
| | comp=Z,0.8nm,0.5s,baz=305,slow=2.9,SNR=15 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.72** | **51** | P | | **P** | | **05 03 45.6** | **+1.3** |
| TXAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **117.11** | **313** | PKP | | **PKPdf** | | **05 09 21.4** | **-0.4** |
| | comp=Z,0.4nm,0.6s,baz=8.8,slow=0.8,SNR=4.4 | | | | | | | | |
| **LPAZ** | **La Paz** | **148.28** | **59** | PKPbc | | **PKPbc** | | **05 10 24.4** | **+0.8** |
| | comp=Z,1.2nm,0.7s,baz=297,slow=2.3,SNR=10 | | | | | | | | |
| **LPAZ** | **La Paz** | **148.28** | **59** | PKP2 | | **PKPbc** | | **05 10 24.4** | **+0.8** |
| LPAZ | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |

**NEIC 24 04:58:08.2,51°10N×176°11W,h28km,ML3.3(AEIC), After AEIC.,Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **ETKA** | **Kagalaska Isla** | **0.78** | **346** | P | Pb | 04 58 22.6 | | -0.7 |
| ETKA | | | | S | Sb | 04 58 32.9 | | -0.8 |
| **GSCK** | **Great Sitkin C** | **0.91** | **358** | P | Pn | 04 58 24.8 | | -0.5 |
| GSCK | | | | S | Sb | 04 58 36.9 | | -0.4 |
| **ADAG** | **Mount Adagdak** | **0.93** | **341** | P | Pn | 04 58 25.4 | | -0.1 |
| **GSMY** | **Great Sitkin M** | **0.94** | **2** | P | Pn | 04 58 25.2 | | -0.5 |
| **GSTD** | **Great Sitkin T** | **0.96** | **359** | P | Pn | 04 58 25.5 | | -0.5 |
| **GSTR** | **Great Sitkin T** | **0.99** | **2** | *e*Pn | Pn | 04 58 25.9 | | -0.5 |
| **KIRH** | **Kanaga Island** | **1.01** | **323** | P | Pn | 04 58 26.1 | | -0.5 |
| **KIKV** | **Kanaga Island** | **1.02** | **320** | P | Pn | 04 58 26.2 | | -0.6 |
| **KICM** | **Kanaga Island** | **1.06** | **321** | P | Pn | 04 58 27.1 | | -0.2 |
| **TAPA** | **Tanaga Point A** | **1.28** | **305** | P | Pn | 04 58 29.8 | | -0.6 |
| TAPA | | | | S | Sn | 04 58 46.4 | | -0.3 |
| **TAFL** | **Tanaga Flats** | **1.30** | **301** | P | Pn | 04 58 29.1 | | -1.4 |
| TAFL | | | | S | Sn | 04 58 45.6 | | -1.3 |
| **TAFP** | **Tanaga Falls P** | **1.42** | **305** | P | Pn | 04 58 31.9 | | -0.3 |
| TAFP | | | | S | Sn | 04 58 50.2 | | +0.2 |
| **ATKA** | **Atka Island** | **1.62** | **46** | P | Pn | 04 58 34.4 | | -0.6 |
| ATKA | | | | S | Sn | 04 58 54.5 | | -0.4 |
| **KOKL** | **Mount Kliuchef** | **1.71** | **43** | P | Pn | 04 58 37.2 | | +0.9 |
| KOKL | | | | S | Sb | 04 58 58.9 | | -1.2 |
| **KOFP** | **Korovin Flat P** | **1.72** | **46** | P | Pn | 04 58 37.4 | | +1.0 |
| KOFP | | | | S | Sn | 04 58 58.9 | | +1.4 |
| **GAEA** | **Gareloi East** | **1.79** | **294** | P | Pn | 04 58 37.5 | | +0.3 |
| **GALAA** | **Gareloi Lava P** | **1.79** | **293** | P | Pn | 04 58 37.8 | | +0.5 |
| **GANE** | **Gareloi Northe** | **1.82** | **294** | P | Pn | 04 58 38.4 | | +0.7 |
| **CERAA** | **Semis' Rag'd T** | **2.75** | **289** | P | Pn | 04 58 51.1 | | +0.6 |
| CERAA | | | | S | Sn | 04 59 24.4 | | +1.6 |

*CASC **24** 04:59:31.7±3.4, 9.99N×86.21W, h42km±202km, MD4.1, ML3.4*
*ISCJB **24** 04:59:34.1±1.1, 10.14N±0.08×86.06W±0.06, h33km, mb3.7/3, Error ellipse: s-maj=13.4km s-min=5.1km az=31.4*
*IDC **24** 04:59:37.8±31.0, 11.39N×85.61W, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.6/28, mbtmp3.8/3, Error ellipse: s-maj=635.4km s-min=53.6km az=172.0*

**ISC 24 04:59:33.0±1.5, 10.1N±0.1×86.11W±0.08, h33km, n31, σ1§47/33, mb3.6/3, 2C, Off coast of Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **GBS3** | **Finca Las Im˜¡** | **0.91** | **45** | *i* P | **Pb** | **04 59 49.9** | | **-0.5** |
| GBS3 | | | | *i* S | Sb | 05 00 07.2 | | +4.9 |
| **LAPC** | **Finca la Perla** | **0.92** | **47** | *i* P | **Pb** | **04 59 49.9** | | **-0.6** |
| LAPC | | | | *i* S | Sb | 05 00 07.0 | | +4.6 |
| **GBS2** | **Las Lilas** | **0.95** | **43** | *i* P | **Pb** | **04 59 50.4** | | **-0.7** |
| **BUEV** | **Buena Vista** | **0.95** | **47** | *i* P | **Pb** | **04 59 50.5** | | **-0.7** |
| **GPS3** | **Bodega del ICE** | **0.96** | **50** | ǁ*i*P | **Pb** | **04 59 50.8** | | **-0.4** |
| **GB1A** | **Boringuen Arri** | **0.97** | **46** | *i* P | **Pb** | **04 59 50.9** | | **-0.6** |
| **GPS1** | **Guardaparques** | **0.98** | **50** | *i* P | **Pb** | **04 59 51.1** | | **-0.6** |
| **LIM1** | **Limonal** | **1.01** | **57** | *i* P | **Pb** | **04 59 51.5** | | **-0.7** |
| **JCR** | **Jicaral** | **1.03** | **106** | ǁ*e*P | **Pn** | **04 59 50.4** | | **-0.8** |
| JCR | | | | *e*S | **Sn** | **05 00 03.8** | | **-0.7** |
| **COLC** | **Colonia** | **1.04** | **60** | *i* P | **Pb** | **04 59 51.7** | | **-0.8** |
| **CUI** | **Cuipilapa** | **1.07** | **61** | *i* P | **Pb** | **04 59 52.4** | | **-0.7** |
| **HORNC** | **Hornillas** | **1.08** | **58** | *i* P | **Pb** | **04 59 52.4** | | **-0.9** |
| **MESS** | **Mesas** | **1.08** | **56** | *i* P | **Pb** | **04 59 52.5** | | **-0.8** |
| **AMAS** | **Alto Masis** | **1.20** | **67** | *i* P | **Pb** | **04 59 54.0** | | **-1.3** |
| **PTEN** | **Parque Tenorio** | **1.25** | **63** | *i* P | **Pb** | **04 59 54.9** | | **-1.1** |
| **FORC** | **Fortuna** | **1.46** | **77** | *i* P | **Pb** | **04 59 58.4** | | **-1.1** |
| **CONN** | **Concepcion** | **1.50** | **19** | *e*P | **Pb** | **04 59 59.4** | | **-0.9** |
| **CGA2** | **Cerro Gallo 2** | **1.63** | **94** | *e*P | **Pn** | **04 59 59.9** | | **+0.4** |
| CGA2 | | | | *e*S | **Sn** | **05 00 19.3** | | **-0.1** |
| **TISN** | **Laguna Tiscapa** | **2.00** | **356** | *e*P | **Pn** | **05 00 05.3** | | **+0.8** |
| **XAVN** | **Gruta Xavier** | **2.01** | **354** | *e*P | **Pb** | **05 00 06.7** | | **-2.3** |
| **COPN** | **Copaltepe** | **2.08** | **347** | *e*P | **Pb** | **05 00 07.1** | | **-3.1** |
| COPN | | | | *e*P | **Pn** | **05 00 07.3** | | **+1.6** |
| COPN | | | | *e*S | **Sn** | **05 00 29.3** | | **-1.2** |
| **APYN** | **Apoyeque** | **2.10** | **354** | *e*P | **Pb** | **05 00 07.6** | | **-2.9** |
| **MOMN** | **Momotombo** | **2.29** | **350** | *e*P | **Pn** | **05 00 10.2** | | **+1.6** |
| **BOAB** | **BOACO BROADBAN** | **2.34** | **11** | *e*P | Pb | 05 00 10.8 | | -3.8 |
| **BUS** | **Buena Vista** | **2.39** | **104** | *e*P | **Pn** | **05 00 11.2** | | **+0.9** |
| **CNQN** | **Cerro Negro** | **2.42** | **346** | *e*P | **Pn** | **05 00 11.8** | | **+1.5** |
| **LFRS** | **El Faro** | **4.51** | **320** | *e*P | **Pn** | **05 00 41.4** | | **+2.3** |
| LFRS | | | | *e*S | **Sn** | **05 01 29.1** | | **-1.4** |
| **SNET** | **Serv Nac Est T** | **4.66** | **319** | AML | AML | 05 01 12.8 | | |
| | comp=Z,249nm,0.1s | | | | | | | |
| **TXAR** | **Lajitas Array** | **25.19** | **322** | P | **P** | **05 04 59.2** | | **+3.5** |
| | comp=Z,0.7nm,0.6s,baz=139,slow=9.8,SNR=8.8 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **40.30** | **320** | P | P | 05 07 12.1 | | +4.6 |
| | comp=Z,0.6nm,0.5s,baz=128,slow=7.7,SNR=6.5 | | | | | | | |
| **SCHQ** | **Schefferville** | **47.13** | **15** | P | **P** | **05 08 01.1** | | **-0.8** |
| | comp=Z,1.6nm,0.5s,baz=212,slow=9.5,SNR=4.6 | | | | | | | |

*ISCJB **24** 05:14:56.4±0.9, 40.34N±0.04×126.29W±0.08, h12km, Error ellipse: s-maj=9.2km s-min=4.8km az=163.3*
*NEIC **24** 05:14:56.7±2.0, 40.33N×126.41W, h10km, ML3.4(NCEDC), Error ellipse: s-maj=26.1km s-min=5.7km az=83.0*

**ISC 24 05:14:59.7±1.3, 40.43N±0.06×126.2W±0.1, h12km, n51, σ1§45/62, mb3.9/4, MS3.5/7, Off coast of northern California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **KHMM** | **Horse Mountain** | **1.93** | **76** | *e*Pn | **Pn** | **05 15 31.0** | | **-1.5** |
| KHMM | | | | *e*Sn | **Sn** | **05 15 56.0** | | **-0.7** |
| **KCPM** | **Cahto Peak** | **2.14** | **109** | *e*Pn | **Pn** | **05 15 34.4** | | **-0.9** |
| KCPM | | | | *e*Sn | **Sn** | **05 15 58.6** | | **-3.3** |
| **KIPM** | **Iron Peak** | **2.17** | **106** | *e*Pn | **Pn** | **05 15 34.3** | | **-1.5** |
| **KSXB** | **Camp Six Broad** | **2.24** | **51** | P | **Pn** | **05 15 35.1** | | **-1.7** |
| **KBO** | **Bosley Butte** | **2.32** | **39** | *e*Pn | **Pn** | **05 15 35.9** | | **-1.9** |
| **KTRM** | **Thompson Ridge** | **2.59** | **54** | P | **Pn** | **05 15 41.2** | | **-0.4** |
| **L02D** | **Cave Junction,** | **2.61** | **48** | P | **Pn** | **05 15 40.7** | | **-1.0** |
| | baz=2.8,SNR=602 | | | | | | | |
| **M02C** | **Callahan** | **2.71** | **68** | S | **Sn** | **05 16 14.7** | | **-1.2** |
| | baz=2.9 | | | | | | | |
| **N02D** | **Trinity Center** | **2.71** | **77** | P | **Pn** | **05 15 42.0** | | **-1.2** |
| | baz=2.9,SNR=16 | | | | | | | |
| N02D | | | | S | **Sn** | **05 16 15.5** | | **-0.4** |
| | baz=2.9 | | | | | | | |
| **WDC** | **Whiskeytown Da** | **2.79** | **86** | *e*Pn | **Pn** | **05 15 43.6** | | **-0.6** |
| WDC | | | | *e*Sn | **Sn** | **05 16 17.6** | | **-0.2** |
| **KEBM** | **Edson Butte** | **2.81** | **29** | *e*Pn | **Pn** | **05 15 43.1** | | **-1.5** |
| **YBH** | **Yreka Blue Hor** | **2.94** | **63** | *e*Pn | **Pn** | **05 15 46.7** | | **+0.3** |
| **O03D** | **Paynes Creek** | **3.36** | **91** | P | **Pn** | **05 15 51.2** | | **-0.9** |
| | baz=3.5,SNR=33 | | | | | | | |
| **MCCM** | **Marconi Confer** | **3.44** | **131** | *e*Pn | **Pn** | **05 15 51.3** | | **-1.8** |
| **BUOR** | **Burton Butte** | **3.50** | **57** | P | **Pn** | **05 15 55.5** | | **+1.3** |
| **VSP** | **Spence Mountai** | **3.72** | **58** | P | **Pn** | **05 15 58.0** | | **+0.8** |
| **I03D** | **Drain, OR** | **3.89** | **32** | P | **Pn** | **05 15 57.6** | | **-1.8** |
| | baz=4.1,SNR=43 | | | | | | | |
| **K04D** | **Chiloquin, OR** | **3.99** | **55** | P | **Pn** | **05 16 01.2** | | **+0.4** |
| | baz=4.2 | | | | | | | |
| **SAC** | **San Andreas** | **4.09** | **133** | *e*Pn | **Pn** | **05 15 59.8** | | **-2.3** |
| SAC | | | | *e*Sn | **Sn** | **05 16 46.5** | | **-3.3** |
| **I04A** | **Tendick Farm,** | **4.38** | **39** | P | **Pn** | **05 16 06.1** | | **-0.1** |
| | baz=4.6 | | | | | | | |
| **IRO** | **Indian Ridge** | **4.62** | **38** | P | **Pn** | **05 16 09.3** | | **-0.1** |
| **COR** | **Corvallis** | **4.67** | **26** | *e*Pn | **Pn** | **05 16 09.5** | | **-0.5** |
| **J05D** | **Fort Rock, OR** | **4.67** | **51** | P | **Pn** | **05 16 10.8** | | **+0.6** |
| | baz=4.9,SNR=42 | | | | | | | |
| **MOD** | **Modoc** | **4.68** | **70** | *e*Pn | **Pn** | **05 16 10.3** | | **-0.1** |
| **CMB** | **Columbia Colle** | **5.10** | **116** | Pn | **Pn** | **05 16 14.8** | | **-1.3** |
| | 30nm,0.6s | | | | | | | |
| CMB | | | | *e*Sn | **Sn** | **05 17 18.5** | | **+3.6** |
| **I05D** | **Terrebonne, OR** | **5.31** | **41** | P | **Pn** | **05 16 18.9** | | **0.0** |
| | baz=5.5,SNR=6.2 | | | | | | | |
| **G05D** | **Wamic, OR** | **6.00** | **35** | P | **Pn** | **05 16 28.6** | | **+0.3** |
| | baz=6.2 | | | | | | | |
| **WVOR** | **Wild Horse Val** | **6.02** | **68** | *e*Pn | **Pn** | **05 16 28.0** | | **-0.8** |
| | 15nm,0.9s | | | | | | | |
| **JBO** | **Jordan Butte** | **6.86** | **41** | P | **Pn** | **05 16 40.9** | | **+0.8** |
| **VES** | **Vestal, Richgr** | **7.24** | **127** | P | **Pn** | **05 16 44.6** | | **-0.7** |
| | baz=7.3 | | | | | | | |
| **HAWA** | **Hanford** | **7.68** | **37** | *e*Pn | **Pn** | **05 16 51.6** | | **+0.2** |
| | 6.8nm,0.5s | | | | | | | |
| **ISA** | **Isabella** | **7.73** | **126** | *e*Pn | **Pn** | **05 16 52.4** | | **+0.2** |
| | 23nm,0.7s | | | | | | | |
| ISA | | | | *e*Sn | **Sn** | **05 18 20.4** | | **+0.9** |
| **MFID** | **Camas Ranch** | **8.28** | **66** | *e*Pn | **Pn** | **05 17 00.7** | | **+0.9** |
| | 8.5nm,1.1s | | | | | | | |
| **OSI** | **Osito Adit** | **8.30** | **132** | *e*Pn | **Pn** | **05 16 57.3** | | **-2.6** |
| | 7.6nm,0.5s | | | | | | | |
| **GSC** | **Goldstone** | **9.01** | **122** | *e*Pn | **Pn** | **05 17 07.9** | | **-1.9** |
| | 5.4nm,0.4s | | | | | | | |
| **SHPR** | **Sheep Range** | **9.50** | **111** | *e*Pn | Pn | 05 17 21.2 | | +4.7 |
| | 21nm,1.2s | | | | | | | |
| **DUG** | **Dugway** | **10.22** | **87** | *e*Pn | **Pn** | **05 17 28.8** | | **+2.3** |
| | 6.8nm,1.0s | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **10.77** | **62** | *e*Pn | Pn | 05 17 37.2 | | +3.3 |
| | 6.0nm,1.1s | | | | | | | |
| **MSU** | **Marysvale** | **11.00** | **96** | *e*Pn | Pn | 05 17 40.5 | | +3.3 |
| | 5.7nm,1.2s | | | | | | | |
| **BSMT** | **Bassoo Peak** | **11.05** | **44** | *e*Pn | **Pn** | **05 17 38.1** | | **+0.5** |
| | 7.0nm,1.2s | | | | | | | |
| **DLMT** | **Dillon** | **11.12** | **59** | Pn | Pn | 05 17 45.7 | | +7.0 |
| | 18nm,1.1s | | | | | | | |
| **SWMT** | **Swartz Lake** | **11.27** | **47** | Pn | **Pn** | **05 17 40.8** | | **+0.1** |
| | 6.5nm,1.1s | | | | | | | |
| **CHMT** | **Chamberlain Mo** | **11.39** | **51** | *e*Pn | **Pn** | **05 17 43.5** | | **+1.1** |
| | 9.9nm,1.1s | | | | | | | |
| **SLMT** | **Seeley Lake** | **11.41** | **49** | *e*Pn | **Pn** | **05 17 43.2** | | **+0.6** |
| | 15nm,1.1s | | | | | | | |
| **FLWY** | **Flagg Ranch** | **12.05** | **67** | *e*Pn | **Pn** | **05 17 50.6** | | **-0.8** |
| | 6.6nm,1.0s | | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JPK** | **Jack Peak** | **3.17** | **322** | P | **Pn** | **05 22 37.9** | **+1.0** |
| **YUK6** | **Outpost Mounta** | **3.18** | **41** | Pn | **Pn** | **05 22 38.7** | **+1.6** |
| YUK6 | | | | Sn | **Sn** | **05 23 14.2** | **-0.1** |
| **GLI** | **Glacier Island** | **3.21** | **317** | P | Pn | 05 22 37.4 | +0.1 |
| GLI | | | | S | Sn | 05 23 12.6 | -2.3 |
| **YUK2** | **White River** | **3.31** | **15** | Pn | **Pn** | **05 22 40.9** | **+2.2** |
| YUK2 | | | | Sn | **Sn** | **05 23 17.6** | **+0.2** |
| **KLU** | **Klutina** | **3.33** | **332** | P | **Pn** | **05 22 39.8** | **+0.7** |
| **PLBC** | **Pleasant Camp** | **3.34** | **73** | Pn | **Pn** | **05 22 39.9** | **+0.9** |
| PLBC | | | | Sn | **Sn** | **05 23 16.6** | **-1.4** |
| **PLBC** | **Pleasant Camp** | **3.34** | **73** | P | **Pn** | **05 22 39.8** | **+0.7** |
| PLBC | | | | S | **Sn** | **05 23 16.6** | **-1.4** |
| **YUK3** | **Moose Creek** | **3.35** | **18** | Pn | **Pn** | **05 22 41.6** | **+2.1** |
| YUK3 | | | | Sn | **Sn** | **05 23 19.6** | **+1.0** |
| **YUK4** | **Talbot Arm** | **3.39** | **34** | Pn | Pn | 05 22 43.4 | +3.4 |
| YUK4 | | | | Sn | **Sn** | **05 23 21.6** | **+2.0** |
| **HYT** | **Haines Junctio** | **3.41** | **47** | Pn | **Pn** | **05 22 41.2** | **+1.0** |
| HYT | | | | Sn | **Sn** | **05 23 18.9** | **-1.1** |
| **WASW** | **Wrangell South** | **3.42** | **348** | P | **Pn** | **05 22 41.7** | **+1.3** |
| **YUK5** | **Granite Creek** | **3.48** | **41** | Pn | **Pn** | **05 22 43.0** | **+1.7** |
| YUK5 | | | | Sn | **Sn** | **05 23 20.7** | **-1.1** |
| **PWL** | **Port Wells** | **3.67** | **310** | P | **Pn** | **05 22 44.4** | **+0.7** |
| PWL | | | | S | **Sn** | **05 23 24.2** | **-1.9** |
| **YUK1** | **Sand Pete Hill** | **3.70** | **15** | Pn | **Pn** | **05 22 46.0** | **+1.8** |
| YUK1 | | | | Sn | **Sn** | **05 23 27.0** | **-0.2** |
| **PS11** | **TAPS Pump St11** | **3.76** | **339** | P | **Pn** | **05 22 46.1** | **+1.2** |
| PS11 | | | | S | **Sn** | **05 23 28.6** | **+0.3** |
| **SEW** | **Seward** | **3.81** | **296** | P | Pn | 05 22 45.9 | +0.4 |
| SEW | | | | S | **Sn** | **05 23 27.9** | **-1.5** |
| **SKAG** | **Skagway** | **3.86** | **74** | P | **Pn** | **05 22 47.0** | **+0.8** |
| SKAG | | | | S | **Sn** | **05 23 29.6** | **-1.2** |
| **BVCY** | **Beaver Creek** | **3.91** | **12** | Sn | **Sn** | **05 23 30.7** | **+1.5** |
| **SCM** | **Sheep Creek Mo** | **4.00** | **326** | P | **Pn** | **05 22 49.1** | **+0.9** |
| SCM | | | | S | **Sn** | **05 23 32.9** | **-1.4** |
| **HARP** | **HAARP** | **4.01** | **343** | P | **Pn** | **05 22 49.4** | **+1.0** |
| **BESE** | **Bessie Mountai** | **4.06** | **87** | P | **Pn** | **05 22 49.1** | **+0.1** |
| BESE | | | | S | **Sn** | **05 23 33.7** | **-2.2** |
| **SML** | **Sawmill** | **4.29** | **321** | P | **Pn** | **05 22 53.0** | **+0.8** |
| SML | | | | S | **Sn** | **05 23 40.0** | **-1.6** |
| **RC01** | **Rabbit Creek A** | **4.37** | **308** | P | **Pn** | **05 22 54.0** | **+0.8** |
| RC01 | | | | S | Sn | 05 23 41.4 | -1.9 |
| **WHY** | **Whitehorse** | **4.43** | **59** | Pn | **Pn** | **05 22 55.0** | **+0.9** |
| **WHY** | **Whitehorse** | **4.43** | **59** | P | **Pn** | **05 22 55.0** | **+0.9** |
| **PAX** | **Paxson** | **4.59** | **343** | P | **Pn** | **05 22 57.1** | **+0.8** |
| **STLK** | **Strandline Lak** | **5.45** | **306** | P | **Pn** | **05 23 09.6** | **+1.4** |
| **SKT** | **Skwentna** | **5.57** | **311** | P | **Pn** | **05 23 10.4** | **+0.6** |
| **RND** | **Reindeer** | **5.69** | **330** | P | **Pn** | **05 23 12.6** | **+1.2** |
| **DAWY** | **Dawson** | **5.69** | **14** | Pn | **Pn** | **05 23 13.0** | **+1.6** |
| DAWY | | | | Sn | **Sn** | **05 24 13.0** | **-2.9** |
| **PPLA** | **Purkeypile** | **6.36** | **317** | P | **Pn** | **05 23 21.1** | **+0.5** |
| **IL1** | **Eielson Array** | **6.51** | **344** | P | **Pn** | **05 23 23.0** | **+0.5** |
| **CCB** | **Clear Creek Bu** | **6.54** | **340** | P | **Pn** | **05 23 23.1** | **+0.1** |
| **DLBC** | **Dease Lake** | **6.60** | **86** | Pn | **Pn** | **05 23 25.1** | **+1.2** |
| DLBC | | | | Sn | **Sn** | **05 24 35.2** | **-3.1** |
| **BPAW** | **Bear Paw Mtn.** | **6.82** | **327** | P | **Pn** | **05 23 27.4** | **+0.5** |
| **MDM** | **Murphy Dome** | **6.90** | **340** | P | **Pn** | **05 23 28.1** | **+0.1** |
| **NDB** | **Naden** | **7.12** | **127** | Pn | **Pn** | **05 23 33.5** | **+2.4** |
| **MLY** | **Manley** | **7.50** | **333** | P | **Pn** | **05 23 36.3** | **+0.1** |
| **DIB** | **Dawson Inlet,** | **7.86** | **129** | Pn | **Pn** | **05 23 41.5** | **+0.5** |
| DIB | | | | Sn | Sn | 05 25 04.6 | -4.5 |
| **MOBC** | **Moresby Island** | **8.11** | **128** | Pn | **Pn** | **05 23 46.3** | **+1.7** |
| **BNB** | **Barry Inlet** | **8.62** | **130** | Pn | **Pn** | **05 23 53.4** | **+1.8** |

*ISCJB **24** 05:35:51.7±0.6,0.°95S±0.°06×128.°63E±0.°05,h17km, Error ellipse: s-maj=10.2km s-min=5.4km az=39.9*
*DJA **24** 05:35:53.5±1.1,1°S±3°×12°9E±°,h27km±13km,M4.5/13, mb5.4/1,mB5.5/1,MLv4.1/13,Mw(mB)5.0/1*
*AUST **24** 05:35:53.4,1.°00S×128.°50E,h60km*
**ISC 24 05:35:52.1**±1.0,**0.°89S**±0.°08×**128.°59E**±0.°07,**h17**km,**n18,** σ**0°72**/18,**Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LBMI** | **Labuha** | **1.12** | **283** | P | **Pg** | **05 36 13.0** | **-0.7** |
| LBMI | | | | S | **Sg** | **05 36 29.1** | **+0.7** |
| **TNTI** | **Ternate** | **2.05** | **323** | P | **Pb** | **05 36 28.4** | **-0.5** |
| TNTI | | | | S | **Sn** | **05 36 52.1** | **+1.0** |
| **MSAI** | **Masohi** | **2.47** | **172** | P | **Pn** | **05 36 32.1** | **+0.6** |
| **SWI** | **Sorong** | **2.67** | **90** | P | **Pn** | **05 36 35.3** | **+1.0** |
| | baz=2.8,SNR=14 | | | | | | |
| **SWI** | **Sorong** | **2.67** | **90** | P | **Pn** | **05 36 34.7** | **+0.4** |
| **NLAI** | **Namlea** | **2.77** | **212** | P | **Pn** | **05 36 35.5** | **-0.2** |
| **AAI** | **Ambon** | **2.81** | **188** | P | **Pn** | **05 36 37.1** | **+0.8** |
| | baz=2.7,SNR=11 | | | | | | |
| **AAI** | **Ambon** | **2.81** | **188** | P | **Pn** | **05 36 37.1** | **+0.8** |
| **SANI** | **Sanana** | **2.85** | **246** | P | **Pn** | **05 36 36.7** | **-0.1** |
| **BNDI** | **Bandanaira** | **3.84** | **160** | P | **Pn** | **05 36 50.8** | **+0.3** |
| **FAKI** | **Fak Fak** | **4.18** | **119** | P | **Pn** | **05 36 54.8** | **-0.3** |
| | baz=4.2,SNR=12 | | | | | | |
| **FAKI** | **Fak Fak** | **4.18** | **119** | P | **Pn** | **05 36 55.0** | **-0.1** |
| **APSI** | **Ampana** | **6.94** | **270** | P | **Pn** | **05 37 34.4** | **+1.3** |
| **MTN** | **Manton Dam** | **12.14** | **168** | P | **Pn** | **05 38 44.5** | **0.0** |
| | baz=12,SNR=5.2 | | | | | | |
| **KDU** | **Kakadu** | **12.34** | **162** | P | Pn | 05 38 43.0 | -4.2 |
| | baz=12,SNR=8.4 | | | | | | |
| **QIS** | **Mount Isa** | **22.32** | **152** | P | **P** | **05 40 49.2** | **+0.1** |
| | baz=22,SNR=9.4 | | | | | | |
| **WRKA** | **Warakurna** | **24.01** | **181** | P | **P** | **05 41 05.5** | **-0.7** |
| | baz=24,SNR=7.0 | | | | | | |
| **XMI** | **Christmas Isla** | **24.66** | **247** | P | P | 05 41 04.7 | -7.7 |
| | baz=25,SNR=3.8 | | | | | | |

*NIED **24** 05:50:00,44.°90N×149.°50E,h41km,Mw4.0 Best double couple: M0 1.08000×10^15 NP1:φs131.00000°,δ60.00000°, λ6.00000°. NP2:φs38.00000°,δ85.00000°,λ150.00000°.*
*SKHL **24** 05:50:53.3±0.5,44.°66N×149.°46E,h45km±2km,mb4.5/4*
**ISC 24 05:50:50.8**±3.8,**44.°45N**±0.°08×**149.°7E**±0.°2,**h36**km,**n18,** σ**2°69**/26,**Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **1.49** | **302** | *i* P | Pn | 05 51 13.5 | -1.4 |
| KUR | | | | AMB | AMB | 05 51 14.8 | |
| | 69nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 05 51 14.8 | |
| | 27nm,0.3s | | | | | | |
| KUR | | | | AMB | AMB | 05 51 14.8 | |
| | 166nm,0.3s | | | | | | |
| KUR | | | | *e*S | **Sn** | **05 51 29.0** | **-4.1** |
| KUR | | | | A | A | 05 51 32.8 | |
| | 299nm,0.3s | | | | | | |
| KUR | | | | A | A | 05 51 32.8 | |
| | 238nm,0.3s | | | | | | |
| **SHO** | **Shikotan** | **2.11** | **255** | *i* P | **Pn** | **05 51 23.9** | **+0.4** |
| SHO | | | | AMB | AMB | 05 51 28.6 | |
| | 43nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sn** | **05 51 46.8** | **-1.6** |
| SHO | | | | A | A | 05 51 56.7 | |
| | 301nm,0.4s | | | | | | |
| SHO | | | | A | A | 05 51 56.7 | |
| | 433nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.75** | **263** | *i* P | **Pn** | **05 51 34.3** | **+2.0** |
| YUK | | | | AMB | AMB | 05 51 36.6 | |
| | 21nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 05 51 36.6 | |
| | 15nm,0.2s | | | | | | |
| YUK | | | | AMB | AMB | 05 51 36.6 | |
| | 72nm,0.2s | | | | | | |
| YUK | | | | *i* S | **Sn** | **05 52 04.7** | **+0.4** |
| YUK | | | | A | A | 05 52 10.8 | |
| | 119nm,0.4s | | | | | | |
| YUK | | | | A | A | 05 52 10.8 | |
| | 177nm,0.4s | | | | | | |
| **NEM2** | **Nemuro 2** | **3.02** | **250** | P | **Pn** | **05 51 36.8** | **+0.8** |
| NEM2 | | | | *e*S | **Sn** | **05 52 11.2** | **+0.3** |
| **JRA** | **Rausu** | **3.29** | **263** | P | **Pn** | **05 51 41.7** | **+1.9** |
| **JNK** | **Nakash** | **3.66** | **258** | P | **Pn** | **05 51 46.9** | **+2.1** |
| **JAK** | **Akkeshi** | **3.87** | **250** | P | **Pn** | **05 51 49.2** | **+1.5** |
| **JAR** | **Ashorobuto** | **4.40** | **257** | P | **Pn** | **05 51 58.0** | **+3.0** |
| **JCH** | **Churui** | **4.92** | **250** | P | **Pn** | **05 52 04.5** | **+2.3** |
| JCH | | | | *e*S | **Sn** | **05 52 58.7** | **+0.9** |
| **MYR** | **Moyori** | **5.12** | **247** | *e*P | **Pn** | **05 52 07.6** | **+2.8** |
| MYR | | | | *e*S | **Sn** | **05 53 04.4** | **+1.8** |
| **YSS** | **Yuzh-Sakhalins** | **5.44** | **300** | *e*P | **Pn** | **05 52 09.7** | **+0.5** |
| YSS | | | | AMB | AMB | 05 52 10.1 | |
| | 9.0nm,0.2s | | | | | | |
| **JNBK** | **Urakawa-nobuka** | **5.47** | **249** | P | **Pn** | **05 52 11.3** | **+1.6** |
| **JBT2** | **Biratori 2** | **5.54** | **255** | P | **Pn** | **05 52 13.4** | **+2.7** |
| **JNB** | **Noboribetsu** | **6.57** | **255** | P | **Pn** | **05 52 27.2** | **+2.4** |
| **JKB** | **Kayabe** | **6.80** | **251** | P | **Pn** | **05 52 29.6** | **+1.7** |
| JKB | | | | *e*S | **Sn** | **05 53 42.0** | **-2.0** |
| **JANG** | **Nango** | **7.27** | **239** | P | **Pn** | **05 52 36.0** | **+1.7** |
| JANG | | | | *e*S | **Sn** | **05 53 50.5** | **-5.0** |
| **OFUJ** | **Ofunato** | **8.02** | **231** | P | **Pn** | **05 52 46.9** | **+2.2** |
| OFUJ | | | | *e*S | **Sn** | **05 54 09.7** | **-4.4** |
| **JIO** | **Ouri** | **8.64** | **229** | *e*S | **Sn** | **05 54 23.8** | **-5.5** |

*IDC **24** 05:55:19.2±3.9,10.°92N×62.°44W,h0km,mb3.5/3, mb1 3.7/3,mb1mx3.4/41,mbtmp3.5/3,Error ellipse: s-maj=152.6km s-min=34.2km az=11.0*
*ISCJB **24** 05:55:29.1±0.3,10.°73N±0.°03×62.°48W±0.°03,h95km±5km, mb3.3/3, Error ellipse: s-maj=6.1km s-min=3.3km az=151.4*
*FUNV **24** 05:55:31.9,10.°69N×62.°41W,h69km,MW3.4*
*TRN **24** 05:55:32.6,10.°81N×62.°32W,h90km,MD3.7*
**ISC 24 05:55:29.8**±0.9,**10.°73N**±0.°04×**62.°48W**±0.°03,**h88**km±7km, **n32,**σ**1°34**/52,**mb3.3**/3,**8C-5D,Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUIV** | **Guiria** | **0.26** | **109** | *i*P | **Pn** | **05 55 43.1** | **+0.4** |
| GUIV | | | | *e*S | **Sn** | **05 55 49.2** | **-3.1** |
| **TCE** | **Chacachacare** | **0.71** | **93** | *e*P | **Pn** | **05 55 47.7** | **+1.5** |
| TCE | | | | *e*S | **Sn** | **05 55 58.9** | **+0.4** |
| **GUNV** | **Guanoco** | **0.73** | **219** | *i*P | **Pn** | **05 55 48.1** | **+1.7** |
| GUNV | | | | *e*S | **Sn** | **05 55 58.2** | **-0.6** |
| **CRUV** | **Carupano** | **0.75** | **266** | *i*P | **Pn** | **05 55 47.5** | **+0.9** |
| CRUV | | | | *e*S | **Sn** | **05 55 58.4** | **-0.7** |
| **TRN** | **Trinidad (W)** | **1.06** | **94** | *e*P | **Pn** | **05 55 51.7** | **+1.7** |
| TRN | | | | *e*S | **Sn** | **05 56 04.5** | **-0.7** |
| **TPP** | **Pointe-a-Pierr** | **1.09** | **112** | *e*P | **Pn** | **05 55 53.0** | **+2.6** |
| TPP | | | | *e*S | **Sn** | **05 56 06.5** | **+0.7** |
| **TBH** | **Brigand Hill** | **1.41** | **100** | *e*P | **Pn** | **05 55 56.7** | **+2.4** |
| TBH | | | | *e*S | **Sn** | **05 56 13.4** | **+0.6** |
| **GRW** | **Mount Saint Ca** | **1.63** | **29** | *e*P | **Pn** | **05 55 58.5** | **+1.4** |
| **GRHS** | **Sauteurs** | **1.69** | **29** | *e*P | **Pn** | **05 55 59.0** | **+1.1** |
| GRHS | | | | *e*S | **Sn** | **05 56 19.3** | **0.0** |
| **GRSS** | **Sisters** | **1.77** | **28** | *e*P | **Pn** | **05 56 00.3** | **+1.4** |
| GRSS | | | | *e*S | **Sn** | **05 56 21.3** | **+0.2** |
| **BOT** | **Bacolet** | **1.78** | **76** | *e*P | **Pn** | **05 56 00.5** | **+1.5** |
| BOT | | | | *e*S | **Sn** | **05 56 19.5** | **-1.7** |
| **ORIV** | **Oritupano** | **1.89** | **209** | *i*P | **Pn** | **05 56 02.1** | **+1.6** |
| ORIV | | | | *e*S | **Sn** | **05 56 23.5** | **-0.3** |
| **TOSP** | **Speyside** | **1.99** | **73** | *e*P | **Pn** | **05 56 01.9** | **+0.2** |
| TOSP | | | | *e*S | **Sn** | **05 56 24.4** | **-1.7** |
| **PCRV** | **Puerto La Cruz** | **2.19** | **256** | *e*P | **Pn** | **05 56 06.6** | **+2.1** |
| PCRV | | | | *e*S | **Sn** | **05 56 30.7** | **-0.4** |
| **SVB** | **Belmont** | **2.79** | **25** | *e*P | **Pn** | **05 56 12.9** | **+0.4** |
| SVB | | | | *e*S | **Sn** | **05 56 44.7** | **-0.7** |
| **PRGV** | **PARIAGUAN** | **2.90** | **228** | *e*P | **Pn** | **05 56 15.4** | **+1.4** |
| PRGV | | | | *e*S | **Sn** | **05 56 46.7** | **-1.2** |
| **GURV** | **El Guri** | **3.01** | **192** | *e*P | **Pn** | **05 56 16.0** | **+0.5** |
| GURV | | | | *e*S | **Sn** | **05 56 48.4** | **-2.3** |
| **MCLT** | **Moule a Chique** | **3.32** | **27** | *e*P | **Pn** | **05 56 20.3** | **+0.7** |
| MCLT | | | | *e*S | **Sn** | **05 56 56.3** | **-1.7** |
| **CUPV** | **Cœpira** | **3.33** | **259** | *e*P | **Pn** | **05 56 21.9** | **+2.1** |
| CUPV | | | | *e*S | **Sn** | **05 56 58.7** | **+0.4** |
| **BIRV** | **Birongo** | **3.74** | **266** | *e*P | **Pn** | **05 56 27.7** | **+2.4** |
| BIRV | | | | *e*S | **Sn** | **05 57 08.1** | **-0.1** |
| **ORCV** | **Isla La Orchil** | **3.80** | **287** | *e*P | **Pn** | **05 56 27.4** | **+1.3** |
| **MERV** | **Las Mercedes** | **4.04** | **249** | *e*P | **Pn** | **05 56 30.8** | **+1.4** |
| MERV | | | | *e*S | **Sn** | **05 57 14.5** | **-1.1** |
| **LUEV** | **Luepa** | **4.96** | **168** | *e*P | **Pn** | **05 56 41.5** | **-0.5** |
| **TURV** | **Turiamo** | **5.28** | **267** | *e*P | **Pn** | **05 56 47.4** | **+1.2** |
| **BAUV** | **El Baul** | **5.76** | **253** | *e*P | **Pn** | **05 56 53.0** | **+0.2** |
| **TEPV** | **Terepaima** | **6.65** | **264** | *e*P | **Pn** | **05 57 05.3** | **+0.3** |
| **SANV** | **Sanarito** | **7.06** | **261** | *e*P | **Pn** | **05 57 10.9** | **+0.3** |
| **MONV** | **Montecano** | **7.45** | **280** | *e*P | **Pn** | **05 57 16.8** | **+0.9** |
| **SOCV** | **Socops** | **8.62** | **254** | *e*P | **Pn** | **05 57 31.4** | **-0.3** |
| **TXAR** | **Lajitas Array** | **42.62** | **302** | P | **P** | **06 03 16.9** | **-0.8** |
| | 0.1nm,0.4s,baz=116,slow=9.8,SNR=6.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **62.68** | **81** | P | **P** | **06 05 46.0** | **+0.1** |
| | 0.1nm,0.3s,baz=280,slow=5.9,SNR=5.0 | | | | | | |
| **FINES** | **FINESS Array B** | **79.97** | **29** | P | **P** | **06 07 29.2** | **+0.1** |
| | 1.3nm,0.8s,baz=259,slow=2.8,SNR=5.5 | | | | | | |

*BJI **24** 05:56:11.0,1.°67S×133.°58E,h15km,mb4.9/4,mB5.1/1, Ms5.0/2*
*IDC **24** 05:56:15.4±0.6,0.°73S×133.°93E,h0km,mb4.4/14, mb1 4.5/16,mb1mx4.2/41,mbtmp4.4/16,ML4.4/2,MS3.2/6, Ms1 3.2/6,ms1mx2.9/34,Error ellipse: s-maj=23.1km s-min=13.7km az=66.0*
*ISCJB **24** 05:56:17.8±0.3,0.°70S±0.°03×133.°94E±0.°03,h27km, mb4.3/16,MS3.3/3, Error ellipse: s-maj=4.7km s-min=4.1km az=143.6*
*NEIC **24** 05:56:17.0±0.3,0.°74S×133.°92E,h10km,mb4.1/4, Error ellipse: s-maj=10.9km s-min=5.9km az=67.0*
*NEIC Felt [IV] at Manokwari.*
*AUST **24** 05:56:18.2,0.°48S×134.°00E,h100km*
*DJA **24** 05:56:19.2±0.6,1°S±4°×13°4E±°,h17km±4km,M4.8/14, mb5.0/8,mB5.5/4,MLv4.7/14,Mw(mB)5.0/4*
**ISC 24 05:56:19.5**±0.5,**0.°80S**±0.°05×**133.°90E**±0.°05,**h27**km,**n56,** σ**1°51**/65,**mb4.4**/16,**MS3.3**/3,**Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RKPI** | **Ransiki, Papua** | **0.76** | **158** | P | **Pb** | **05 56 34.0** | **-0.2** |
| RKPI | | | | S | **Sn** | **05 56 46.5** | **+1.4** |
| **SRPI** | **Serui, Papua** | **2.57** | **114** | P | **Pn** | **05 57 00.9** | **+1.4** |
| **SIJI** | **Sorong** | **2.63** | **269** | Pn | **Pn** | **05 57 00.4** | **+0.2** |
| | 28nm,0.3s,baz=260,slow=22,SNR=16 | | | | | | |
| SIJI | | | | Sn | **Sn** | **05 57 33.5** | **+2.1** |
| | 36nm,0.3s,baz=64,slow=9.5,SNR=4.5 | | | | | | |
| SIJI | | | | LR | LR | 05 58 26.0 | |
| | comp=Z,408nm,20.3s,baz=114,slow=49 | | | | | | |
| **SWI** | **Sorong** | **2.64** | **269** | P | **Pn** | **05 57 01.4** | **+1.1** |
| | baz=2.8,SNR=15 | | | | | | |
| **SWI** | **Sorong** | **2.64** | **269** | P | **Pn** | **05 57 01.6** | **+1.3** |
| SWI | | | | S | **Sn** | **05 57 34.4** | **+3.0** |
| **FAKI** | **Fak Fak** | **2.67** | **218** | P | **Pn** | **05 57 02.6** | **+1.8** |
| | baz=3.0,SNR=114 | | | | | | |
| **FAKI** | **Fak Fak** | **2.67** | **218** | P | **Pn** | **05 57 03.0** | **+2.2** |
| FAKI | | | | S | **Sb** | **05 57 36.6** | **-2.5** |
| **FAKI** | **Fak Fak** | **2.67** | **218** | *e*Pn | **Pn** | **05 57 02.3** | **+1.5** |
| **KMPI** | **Kaimana, Papua** | **2.85** | **184** | P | **Pn** | **05 57 05.8** | **+2.6** |
| **SMPI** | **Sarmi** | **4.96** | **104** | P | **Pn** | **05 57 33.0** | **+0.8** |
| SMPI | | | | S | **Sn** | **05 58 31.1** | **+2.4** |
| **BNDI** | **Bandanaira** | **5.44** | **227** | P | **Pn** | **05 57 41.9** | **+3.1** |
| | 361nm,0.7s,4μm1.6nm | | | | | | |
| BNDI | | | | S | **Sn** | **05 58 43.6** | **+3.0** |
| | 361nm,0.7s,4μm1.6nm | | | | | | |
| **AAI** | **Ambon** | **6.38** | **243** | P | **Pn** | **05 57 53.3** | **+1.5** |
| | 84nm,0.7s,0.3nm | | | | | | |
| **NLAI** | **Namlea** | **7.21** | **250** | P | **Pn** | **05 58 04.9** | **+1.7** |
| | 35nm,0.7s,3μm0.2nm | | | | | | |
| **SAUI** | **Saumlaki** | **7.59** | **200** | P | **Pn** | **05 58 10.9** | **+2.5** |
| | 298nm,0.9s,12μm1.0nm | | | | | | |
| **SANI** | **Sanana** | **8.00** | **261** | P | **Pn** | **05 58 15.0** | **+0.9** |
| | 9.7nm,0.7s | | | | | | |
| **PALU** | **Palau** | **8.11** | **4** | P | **Pn** | **05 58 13.9** | **-1.7** |
| | baz=7.8,SNR=4.0 | | | | | | |
| **KDU** | **Kakadu** | **11.89** | **187** | P | **Pn** | **05 59 07.8** | **+0.4** |
| | baz=12,SNR=7.1 | | | | | | |
| **MTN** | **Manton Dam** | **12.27** | **193** | P | **Pn** | **05 59 12.6** | **0.0** |
| | baz=13,SNR=8.5 | | | | | | |
| **KNRA** | **Kununurra** | **15.62** | **199** | P | **Pn** | **05 59 57.7** | **-0.4** |
| | baz=16,SNR=13 | | | | | | |
| **PMG** | **Port Moresby** | **15.73** | **123** | LR | LR | 06 08 09.6 | |
| | comp=Z,108nm,18.9s,baz=298,slow=45 | | | | | | |
| **PMG** | **Port Moresby** | **15.73** | **123** | *e*Pn | **Pn** | **05 59 59.7** | **+0.4** |
| | 6.1nm,0.7s | | | | | | |
| **COEN** | **Coen** | **15.97** | **145** | Pn | **Pn** | **06 00 02.3** | **-0.3** |
| | 18nm,1.4s | | | | | | |
| **GUMO** | **Guam** | **17.96** | **37** | LR | LR | 06 06 27.6 | |
| | comp=Z,31nm,20.6s,baz=237,slow=34 | | | | | | |
| **WRAB** | **Tennant Creek** | **19.02** | **179** | *e*P | **P** | **06 00 38.9** | **-0.6** |
| | 7.2nm,0.6s | | | | | | |
| WRAB | | | | *e*S | Sn | 06 03 59.3 | -13 |
| **WRA** | **Warramunga Arr** | **19.03** | **179** | P | **P** | **06 00 39.0** | **-0.6** |
| | 2.0nm,0.3s,baz=358,slow=11,SNR=17 | | | | | | |
| WRA | | | | S | **Sn** | **06 04 08.1** | **-4.9** |
| | 0.2nm,0.3s,baz=0.7,slow=22,SNR=6.1 | | | | | | |
| **CTA** | **Charters Tower** | **22.66** | **149** | P | **P** | **06 01 19.5** | **+0.5** |
| | 7.1nm,0.7s,baz=326,slow=12,SNR=8.6 | | | | | | |
| **ASAR** | **Alice Springs** | **22.73** | **180** | P | **P** | **06 01 19.2** | **-0.4** |
| | 4.3nm,0.3s,baz=2.1,slow=11,SNR=74 | | | | | | |
| ASAR | | | | S | **S** | **06 05 23.8** | **-3.0** |
| | 4.1nm,0.8s,baz=5.7,slow=22,SNR=11 | | | | | | |
| ASAR | | | | LR | LR | 06 11 38.7 | |
| | comp=Z,110nm,21.6s,baz=346,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **38.46** | **352** | LR | LR | 06 16 30.1 | |
| | comp=Z,20nm,20.7s,baz=172,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.33** | **301** | P | **P** | **06 03 47.1** | **+0.4** |
| | 7.1nm,0.7s,baz=116,slow=6.7,SNR=39 | | | | | | |
| **CHTO** | **Chiang Mai** | **39.48** | **301** | *e*P | **P** | **06 03 48.0** | **0.0** |
| | 9.7nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **46.16** | **336** | *e*P | **P** | **06 04 42.9** | **+0.9** |
| HHC | | | | S | **S** | **06 11 28.1** | **+1.4** |
| HHC | | | | PMZ | | | |
| | 21nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | 98nm,3.7s | | | | | | |
| HHC | | | | LN | | | |
| | 190nm,14.8s | | | | | | |
| HHC | | | | LE | | | |
| | 790nm,14.8s | | | | | | |
| **GTA** | **Gaotai** | **50.74** | **326** | *e*P | **P** | **06 05 18.1** | **+0.7** |
| GTA | | | | pP | **pP** | **06 05 23.3** | **-2.4** |
| GTA | | | | sP | **sP** | **06 05 26.4** | **-2.5** |
| GTA | | | | PMZ | | | |
| | 5.0nm,1.0s | | | | | | |
| **TAPN** | **Taplejung** | **52.45** | **306** | *e*P | **P** | **06 05 30.4** | **-0.2** |
| | 13nm,0.7s | | | | | | |
| **ODAN** | **Odare** | **52.51** | **305** | *e*P | **P** | **06 05 30.8** | **-0.2** |
| | 21nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **53.20** | **305** | *e*P | **P** | **06 05 35.8** | **-0.2** |
| | 16nm,0.5s | | | | | | |
| **SONM** | **Songino Array** | **54.03** | **337** | P | **P** | **06 05 41.9** | **+0.2** |
| | 0.5nm,0.5s,baz=163,slow=5.6,SNR=3.2 | | | | | | |
| SONM | | | | PcP | **PcP** | **06 06 45.8** | **-0.7** |
| | 1.2nm,0.7s,baz=164,slow=2.8,SNR=5.9 | | | | | | |
| **GUN** | **Gumba** | **54.16** | **306** | *e*P | **P** | **06 05 42.9** | **-0.3** |
| | 12nm,0.7s | | | | | | |
| **PKI** | **Pulchoki** | **54.41** | **305** | *e*P | **P** | **06 05 44.1** | **-0.9** |
| | 3.7nm,0.4s | | | | | | |
| **DMN** | **Daman** | **54.68** | **305** | *e*P | **P** | **06 05 46.3** | **-0.6** |
| | 8.7nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **55.21** | **305** | *e*P | **P** | **06 05 50.3** | **-0.3** |
| **KOLN** | **Koldanda** | **55.97** | **305** | *e*P | **P** | **06 05 56.1** | **-0.1** |
| | 8.5nm,0.5s | | | | | | |
| **SEY** | **Seymchan** | **65.07** | **9** | P | **P** | **06 06 57.3** | **0.0** |
| | 3.2nm,0.7s,baz=203,slow=7.5,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.38** | **324** | P | **P** | **06 06 60.0** | **+0.3** |
| | 7.1nm,0.6s,baz=114,slow=7.9,SNR=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.92** | **331** | P | **P** | **06 07 14.6** | **-1.1** |
| | 1.4nm,0.5s,baz=125,slow=6.2,SNR=5.9 | | | | | | |
| **KURK** | **Kurchatov** | **69.43** | **326** | P | **P** | **06 07 25.1** | **-0.1** |
| | 0.7nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.43** | **326** | P | **P** | **06 07 25.1** | **-0.2** |
| | 6.0nm,0.8s,baz=119,slow=5.8,SNR=60 | | | | | | |
| **BVAR** | **Borovoye Array** | **75.03** | **326** | P | **P** | **06 07 58.4** | **-0.3** |
| | 2.9nm,0.7s,baz=121,slow=7.1,SNR=14 | | | | | | |
| **VNDA** | **Vanda** | **78.13** | **174** | P | **P** | **06 08 16.2** | **+0.4** |
| | 1.1nm,0.6s,baz=335,slow=6.9,SNR=3.8 | | | | | | |
| VNDA | | | | LR | LR | 06 41 17.2 | |
| | comp=Z,40nm,19.5s,baz=304,slow=35 | | | | | | |
| **GEYT** | **Alibeck** | **79.30** | **309** | P | **P** | **06 08 23.4** | **+0.3** |
| | 4.1nm,0.6s,baz=164,slow=5.9,SNR=6.1 | | | | | | |
| **AKTO** | **Aktyubinsk** | **81.64** | **321** | P | **P** | **06 08 34.8** | **-0.5** |
| | 1.1nm,0.6s,baz=90,slow=6.1,SNR=2.7 | | | | | | |
| **MAW** | **Mawson** | **82.10** | **201** | P | **P** | **06 08 37.8** | **+0.5** |
| | 2.1nm,0.8s,baz=34,slow=3.5,SNR=4.8 | | | | | | |
| **ILAR** | **Eielson Array** | **86.12** | **25** | P | **P** | **06 08 56.8** | **-1.1** |
| | 1.6nm,0.6s,baz=249,slow=4.9,SNR=19 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **131.10** | **287** | PKP | **PKPdf** | **06 15 30.1** | **+0.1** |
| | 0.4nm,0.8s,baz=60,slow=1.5,SNR=2.9 | | | | | | |
| **CPUP** | **Villa Florida** | **150.93** | **159** | PKPbc | **PKPbc** | **06 16 11.7** | **+1.1** |
| | 3.1nm,0.8s,baz=243,slow=2.9,SNR=9.8 | | | | | | |
| **ROSC** | **El Rosal** | **151.53** | **81** | PKPbc | **PKPbc** | **06 16 13.1** | **+0.3** |
| | 3.6nm,0.5s,baz=63,slow=18,SNR=6.7 | | | | | | |
| **LPAZ** | **La Paz** | **152.41** | **129** | PKPbc | **PKPbc** | **06 16 16.6** | **+1.6** |
| | 1.9nm,0.6s,baz=220,slow=2.3,SNR=12 | | | | | | |

**MEX 24 05:58:35.3**±0.3,**17.°92N**×**98.°95W**,**h54**km±4km,**MD3.5, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HMTT** | **Tlapaneco** | **0.39** | **108** | *e*P | Pn | 05 58 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KSAR | Wonju Array Be | 22.13 | 319 | P | P | 06 34 41.8 | +1.2 | |
| DAV | Davao City (W) | 24.33 | 237 | LR | LR | 06 42 59.3 | | |
| | comp=Z,220nm,20.4s,baz=9.5,slow=33 | | | | | | | |
| USRK | Ussuriysk Ar. | 25.27 | 336 | P | P | 06 35 10.5 | -0.5 | |
| | 1.9nm,0.8s,baz=157,slow=7.8,SNR=2.5 | | | | | | | |
| PETK | Petropavlovsk- | 32.72 | 13 | LR | LR | 06 53 38.1 | | |
| | comp=Z,56nm,18.0s,baz=192,slow=44 | | | | | | | |
| KAPI | Kappang | 36.80 | 227 | LR | LR | 06 51 11.2 | | |
| | comp=Z,58nm,19.6s,baz=94,slow=35 | | | | | | | |
| BATI | Baumata | 38.40 | 217 | LR | LR | 06 50 51.0 | | |
| | comp=Z,69nm,20.1s,baz=68,slow=33 | | | | | | | |
| SONM | Songino Array | 40.98 | 319 | P | P | 06 37 28.4 | +0.7 | |
| | 1.3nm,0.7s,baz=121,slow=7.3,SNR=4.7 | | | | | | | |
| WRAB | Tennant Creek | 42.80 | 196 | *e*P | P | 06 37 41.1 | -1.6 | |
| | 17nm,1.1s | | | | | | | |
| WRA | Warramunga Arr | 42.81 | 196 | P | P | 06 37 42.0 | -0.9 | |
| | 2.1nm,0.6s,baz=17,slow=8.8,SNR=14 | | | | | | | |
| WRA | | | | LR | LR | 06 55 35.3 | | |
| | comp=Z,72nm,19.5s,baz=25,slow=36 | | | | | | | |
| CMAR | Chiang Mai Arr | 44.04 | 275 | LR | LR | 06 54 41.1 | | |
| | comp=Z,33nm,21.2s,baz=116,slow=34 | | | | | | | |
| ASAR | Alice Springs | 46.49 | 195 | P | P | 06 38 11.1 | -1.1 | |
| | 1.3nm,0.8s,baz=11,slow=7.6,SNR=14 | | | | | | | |
| ASAR | | | | LR | LR | 06 57 20.6 | | |
| | comp=Z,72nm,20.4s,baz=5.0,slow=36 | | | | | | | |
| DZM | Mont Dzumac | 47.86 | 154 | P | P | 06 38 24.1 | +1.2 | |
| | 5.9nm,1.0s,baz=0.0,slow=10,SNR=3.6 | | | | | | | |
| ZALV | Zalesovo Beam | 55.80 | 321 | P | P | 06 39 23.4 | +1.7 | |
| | 1.1nm,0.5s,baz=107,slow=9.2,SNR=3.6 | | | | | | | |
| MKAR | Makanchi Array | 56.56 | 313 | P | P | 06 39 26.4 | -0.9 | |
| | 0.7nm,0.5s,baz=99,slow=7.6,SNR=6.7 | | | | | | | |
| MKAR | | | | LR | LR | 07 05 36.5 | | |
| | comp=Z,46nm,18.1s,baz=16,slow=38 | | | | | | | |
| KURK | Kurchatov | 59.21 | 317 | *e*P | P | 06 39 45.0 | -0.7 | |
| | 7.3nm,0.8s | | | | | | | |
| ILAR | Eielson Array | 60.98 | 27 | P | P | 06 39 56.6 | -1.0 | |
| | 2.0nm,0.8s,baz=259,slow=6.1,SNR=19 | | | | | | | |
| ILAR | | | | LR | LR | 07 06 55.4 | | |
| | comp=Z,48nm,18.8s,baz=273,slow=37 | | | | | | | |
| ARU | Arti | 70.78 | 324 | LR | LR | 07 14 48.4 | | |
| | comp=Z,42nm,18.1s,baz=157,slow=38 | | | | | | | |
| NVAR | Mina Array Bea | 81.25 | 52 | P | P | 06 42 01.9 | +0.7 | |
| | 0.7nm,0.7s,baz=271,slow=3.6,SNR=5.7 | | | | | | | |
| NVAR | | | | LR | LR | 07 10 24.9 | | |
| | comp=Z,108nm,20.6s,baz=256,slow=30 | | | | | | | |
| KBZ | Khabaz | 84.18 | 315 | P | P | 06 42 17.7 | +1.7 | |
| | 1.7nm,0.7s,baz=75,slow=4.5,SNR=4.8 | | | | | | | |
| FINES | FINESS Array B | 84.30 | 335 | P | P | 06 42 14.4 | -1.8 | |
| | 1.0nm,0.5s,baz=97,slow=4.4,SNR=7.6 | | | | | | | |
| GERES | GERESS Array B | 97.89 | 330 | LR | LR | 07 31 24.4 | | |
| | comp=Z,27nm,18.8s,baz=311,slow=38 | | | | | | | |
| SAML | Samuel | 149.37 | 70 | *e*PKPbc | PKPbc | 06 49 34.9 | +0.5 | |

**IDC 24 06:37:05.5±1.8, 6°.59S×150°.26E, *h*0km, mb3.8/3, mb1 4.2/4, mb1mx3.7/30, mbtmp3.9/4, ML2.1/1, Error ellipse: s-maj=105.0km s-min=23.3km az=128.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.16 | 227 | Pn | Pn | 06 38 11.5 | +1.2 |
| | 7.7nm,0.3s,baz=54,slow=10,SNR=21 | | | | | | |
| PMG | | | | Sn | Sn | 06 39 00.3 | +0.6 |
| | 5.7nm,0.3s,baz=14,slow=14,SNR=3.3 | | | | | | |
| WRA | Warramunga Arr | 20.38 | 228 | P | P | 06 41 43.6 | -0.4 |
| | 7.1nm,0.7s,baz=52,slow=11,SNR=22 | | | | | | |
| ASAR | Alice Springs | 23.14 | 221 | P | P | 06 42 12.4 | -1.2 |
| | 1.6nm,0.7s,baz=55,slow=9.3,SNR=16 | | | | | | |
| ILAR | Eielson Array | 84.76 | 23 | P | P | 06 49 40.8 | -0.6 |
| | 0.3nm,0.7s,baz=259,slow=5.1,SNR=3.9 | | | | | | |
| TORD | Torodi Ar. Bea | 148.38 | 284 | PKPbc | PKPbc | 06 56 55.8 | +0.7 |
| | 0.4nm,0.3s,baz=60,slow=2.4,SNR=8.8 | | | | | | |

**DJA 24 06:41:17.8±1.4, 9°S±6°×111°E±°, *h*13km±10km, M3.8/10, MLv3.8/10, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PCJI | Pacitan | 1.06 | 353 | P | Pb | 06 41 35.2 | -2.7 |
| PCJI | | | | S | Sb | 06 41 45.9 | -5.8 |
| WOJI | Wonogiri, Jawa | 1.45 | 345 | P | Pn | 06 41 41.8 | -2.0 |
| UGM | Wanagama | 1.54 | 330 | P | Pn | 06 41 44.2 | -0.8 |
| UGM | | | | S | Sn | 06 42 00.3 | -4.5 |
| NGJI | Ngawi | 1.88 | 5 | P | Pn | 06 41 50.6 | +1.0 |
| TBJI | Tambak Boyo | 2.48 | 13 | P | Pn | 06 41 58.3 | +0.4 |
| UWJI | Ujung Watu | 2.83 | 353 | P | Pn | 06 42 02.5 | -0.3 |
| JAGI | Jajag, Banyuwa | 2.92 | 75 | P | Pn | 06 42 04.4 | +0.4 |
| JAGI | | | | S | Sn | 06 42 39.9 | +0.8 |
| CMJI | Cimerak | 3.17 | 297 | P | Pn | 06 42 07.6 | +0.1 |

*ISCJB **24** 07:13:02.4±0.4, 59°.85N±0°.04×22°.94E±0°.04, h0km, Error ellipse: s-maj=5.3km s-min=3.2km az=175.9*
*CSEM **24** 07:13:04.2±0.3, 59°.93N×22°.93E, h2km, ML1.9, Error ellipse: s-maj=10.2km s-min=4.2km az=161.0, Mining explosion.*
*HEL **24** 07:13:04.0±0.1, 59°.84N×22°.93E, h0km, ML1.9, ML1.9(UPP), Explosion*
*IDC **24** 07:13:04.2±1.8, 59°.87N×23°.00E, h0km, mb1 3.3/4, mb1mx3.1/49, mbtmp3.2/4, ML2.5/4, Error ellipse: s-maj=25.4km s-min=6.2km az=157.0*
*UPP **24** 07:13:06.6, 59°.86N×22°.55E, h0km, ML1.9, Suspected Mining explosion.*

**ISC 24 07:13:03.5±0.8, 59°.88N±0°.04×22°.90E±0°.02, h0km, n35, σ1°08/52, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MEF | Metsahovi | 0.82 | 65 | *e*P | Pg | 07 13 19.1 | -0.2 |
| MEF | | | | *e*S | Sg | 07 13 29.0 | -1.0 |
| MEF | Metsahovi | 0.82 | 65 | P | Pg | 07 13 19.0 | -0.2 |
| MEF | | | | S | Sg | 07 13 28.9 | -1.0 |
| MTSE | Matsula | 1.26 | 158 | *e*P | Pg | 07 13 26.0 | -1.7 |
| RAF | Rauma | 1.28 | 334 | *e*P | Pg | 07 13 27.7 | -0.2 |
| RAF | | | | *e*SB | Sg | 07 13 45.3 | +0.9 |
| RAF | Rauma | 1.28 | 334 | P | Pg | 07 13 27.7 | -0.2 |
| AAL | Aland | 1.49 | 283 | *e*P | Pn | 07 13 30.9 | -0.5 |
| AAL | | | | *e*S | Sg | 07 13 50.1 | -1.1 |
| AAL | Aland | 1.49 | 283 | P | Pn | 07 13 30.9 | -0.5 |
| AAL | | | | S | Sg | 07 13 50.3 | -0.9 |
| PVF | Pernaja | 1.62 | 64 | *e*P | Pn | 07 13 33.1 | -0.2 |
| PVF | | | | *e*S | Sn | 07 13 54.0 | -1.0 |
| PVF | | | | MSG | | 07 13 58.6 | |
| | comp=Z,7.3nm,0.2s | | | | | | |
| PVF | Pernaja | 1.62 | 64 | P | Pn | 07 13 33.1 | -0.2 |
| PVF | | | | S | Sn | 07 13 53.9 | -1.0 |
| NRTU | Norrtaelje | 2.17 | 266 | *e*P | Pn | 07 13 41.4 | +0.6 |
| NRTU | Norrtaelje | 2.17 | 266 | P | Pn | 07 13 41.3 | +0.6 |
| FIA0 | FINESS Array S | 2.22 | 44 | *e*P | Pn | 07 13 43.1 | +1.7 |
| FIA0 | | | | *e*SG | Sb | 07 14 12.5 | +0.1 |
| FIA0 | | | | MSG | | 07 14 14.1 | |
| | comp=Z,7.0nm,0.2s | | | | | | |
| FIA0 | FINESS Array S | 2.22 | 44 | P | Pn | 07 13 43.1 | +1.7 |
| FIA0 | | | | Sg | Sb | 07 14 12.4 | +0.1 |
| FINES | FINESS Array B | 2.22 | 44 | Pn | Pn | 07 13 43.2 | +1.7 |
| | comp=Z,2.2nm,0.3s,baz=220,slow=16,SNR=170 | | | | | | |
| FINES | | | | Lg | Lg | 07 14 12.6 | |
| | comp=Z,1.8nm,0.3s,baz=227,slow=26,SNR=23 | | | | | | |
| GRAU | Graesoe | 2.23 | 284 | *e*P | Pn | 07 13 42.1 | +0.4 |
| GRAU | Graesoe | 2.23 | 284 | P | Pn | 07 13 42.0 | +0.4 |
| FORU | Forsmark | 2.41 | 284 | *e*P | Pn | 07 13 46.2 | +2.0 |
| FORU | Forsmark | 2.41 | 284 | P | Pn | 07 13 46.1 | +2.0 |
| VJF | Virojoki | 2.42 | 72 | *e*P | Pn | 07 13 44.2 | -0.1 |
| VJF | | | | *e*SB | Sn | 07 14 15.8 | +1.3 |
| VJF | | | | MSG | | 07 14 21.0 | |
| | comp=Z,4.1nm,0.2s | | | | | | |
| VJF | Virojoki | 2.42 | 72 | P | Pn | 07 13 44.1 | -0.1 |
| VSU | Vasula | 2.44 | 124 | *e*PB | Pn | 07 13 46.1 | +1.7 |
| VSU | | | | *e*SB | Sn | 07 14 16.0 | +1.1 |
| KEF | Keuruu | 2.49 | 22 | *e*PB | Pb | 07 13 48.0 | -1.0 |
| KEF | | | | *e*SG | Sb | 07 14 20.9 | +0.7 |
| KEF | | | | MSG | | 07 14 23.8 | |
| | comp=Z,5.3nm,0.2s | | | | | | |
| KEF | Keuruu | 2.49 | 22 | Pb | Pb | 07 13 48.0 | -1.0 |
| KEF | | | | Sg | Sb | 07 14 20.8 | +0.7 |
| FLYU | Flymyra | 2.53 | 278 | *e*P | Pn | 07 13 46.3 | +0.6 |
| FLYU | Flymyra | 2.53 | 278 | P | Pn | 07 13 46.3 | +0.6 |
| NYNU | Nynaeshamn | 2.65 | 253 | *e*P | Pn | 07 13 48.2 | +0.8 |
| NYNU | Nynaeshamn | 2.65 | 253 | P | Pn | 07 13 48.2 | +0.8 |
| KAF | Kangasniemi | 2.79 | 35 | *e*PB | Pn | 07 13 51.9 | +2.6 |
| KAF | | | | *e*SB | Sb | 07 14 29.0 | +0.2 |
| OSTU | Oestervaala | 2.91 | 279 | *e*P | Pn | 07 13 51.8 | +0.8 |
| OSTU | Oestervaala | 2.91 | 279 | P | Pn | 07 13 51.8 | +0.8 |
| UMAU | Umeaa | 4.15 | 346 | *e*P | Pn | 07 14 09.4 | +1.4 |
| UMAU | Umeaa | 4.15 | 346 | P | Pn | 07 14 09.4 | +1.4 |
| HFS | Hagfors | 4.63 | 277 | Pn | Pn | 07 14 14.7 | +0.2 |
| | comp=Z,0.1nm,0.3s,baz=97,slow=12,SNR=14 | | | | | | |
| HFS | | | | Pg | Pb | 07 14 26.6 | +1.1 |
| | comp=Z,0.1nm,0.3s,baz=100,slow=17,SNR=6.2 | | | | | | |
| HFS | | | | Sn | Sn | 07 15 08.4 | -0.5 |
| | comp=Z,0.2nm,0.3s,baz=90,slow=20,SNR=6.0 | | | | | | |
| HFS | | | | Lg | Lg | 07 15 27.8 | |
| | comp=Z,0.4nm,0.3s,baz=95,slow=32,SNR=6.7 | | | | | | |
| NOA | NORSAR Array B | 5.90 | 286 | Pn | Pn | 07 14 31.5 | -0.6 |
| | comp=Z,0.3nm,0.3s,baz=92,slow=12,SNR=17 | | | | | | |
| NOA | | | | Sn | Sn | 07 15 38.6 | -1.6 |
| | comp=Z,0.1nm,0.3s,baz=358,slow=11,SNR=3.8 | | | | | | |
| ARCES | ARCESS Array B | 9.76 | 5 | Pn | Pn | 07 15 23.4 | -1.5 |
| | comp=Z,0.1nm,0.3s,baz=187,slow=13,SNR=5.8 | | | | | | |

*IDC **24** 07:13:36.0±1.2, 21°.24N×122°.21E, h0km, mb3.4/4, mb1 3.6/4, mb1mx3.3/49, mbtmp3.4/4, Error ellipse: s-maj=58.1km s-min=25.0km az=74.0*
*JMA **24** 07:13:48.9±0.3, 21°.41N×121°.93E, h0km, M3.6*
*TAP **24** 07:13:51.3, 21°.34N×121°.82E, h121km±1km, ML4.3, D*

**ISC 24 07:13:51.8±1.5, 21°.38N±0°.09×121°.80E±0°.06, h122km±8km, n47, σ0°81/83, mb3.2/4, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LAY | Lan-yu | 0.69 | 340 | P | Pn | 07 14 11.6 | +0.3 |
| | baz=340 | | | | | | |
| LAY | | | | *e*S | Sn | 07 14 25.6 | -0.4 |
| | baz=340 | | | | | | |
| TSEB | Hengchuen, Pin | 0.98 | 302 | P | Pn | 07 14 14.2 | +0.4 |
| | baz=301 | | | | | | |
| TSEB | | | | S | Sn | 07 14 31.9 | +1.4 |
| | baz=301 | | | | | | |
| TWK1 | Hengchun | 1.08 | 301 | P | Pn | 07 14 14.7 | 0.0 |
| | baz=302 | | | | | | |
| TWK1 | | | | *i* S | Sn | 07 14 31.9 | -0.3 |
| | baz=302 | | | | | | |
| HEN | Hengchun | 1.17 | 302 | P | Pn | 07 14 15.8 | +0.1 |
| | baz=303 | | | | | | |
| HEN | | | | S | Sn | 07 14 34.0 | +0.3 |
| | baz=303 | | | | | | |
| TAW | Tawu | 1.28 | 319 | *e*P | Pn | 07 14 16.5 | -0.4 |
| | baz=319 | | | | | | |
| TAW | | | | *e*S | Sn | 07 14 34.5 | -1.5 |
| | baz=319 | | | | | | |
| EAST | Anshuo | 1.33 | 319 | P | Pn | 07 14 16.9 | -0.6 |
| | baz=318 | | | | | | |
| EAST | | | | S | Sn | 07 14 36.6 | -0.4 |
| | baz=318 | | | | | | |
| ECL | Taimali | 1.44 | 327 | *e*P | Pn | 07 14 19.1 | +0.5 |
| | baz=327 | | | | | | |
| ECL | | | | *e*S | Sn | 07 14 37.9 | -1.2 |
| | baz=327 | | | | | | |
| SCZT | Fangliau | 1.47 | 312 | P | Pn | 07 14 18.7 | -0.3 |
| | baz=312 | | | | | | |
| SCZT | | | | *e*S | Sn | 07 14 38.7 | -1.0 |
| | baz=312 | | | | | | |
| TWG | Pinlang | 1.58 | 335 | *e*P | Pn | 07 14 20.4 | +0.1 |
| | baz=334 | | | | | | |
| TWG | | | | S | Sn | 07 14 41.3 | -0.7 |
| | baz=334 | | | | | | |
| TWP | Hsiaoliuchiu | 1.64 | 306 | P | Pn | 07 14 21.8 | +0.8 |
| | baz=306 | | | | | | |
| TWP | | | | *e*S | Sn | 07 14 44.1 | +0.9 |
| | baz=306 | | | | | | |
| SSD | Sandimen | 1.74 | 322 | *i* P | Pn | 07 14 22.0 | -0.1 |
| | baz=321 | | | | | | |
| SSD | | | | *e*S | Sn | 07 14 43.8 | -1.5 |
| | baz=321 | | | | | | |
| CHKT | Chengkung | 1.75 | 347 | *e*P | Pn | 07 14 22.5 | +0.2 |
| | baz=346 | | | | | | |
| CHKT | | | | *e*S | Sn | 07 14 45.8 | +0.2 |
| | baz=346 | | | | | | |
| SGLT | Jiouru | 1.81 | 318 | *e*P | Pn | 07 14 23.5 | +0.6 |
| | baz=318 | | | | | | |
| SGLT | | | | *e*S | Sn | 07 14 47.2 | +0.5 |
| | baz=318 | | | | | | |
| KAU | Kaohsiung | 1.82 | 311 | *e*P | Pn | 07 14 24.0 | +0.9 |
| | baz=310 | | | | | | |
| KAU | | | | *e*S | Sn | 07 14 47.5 | +0.4 |
| | baz=310 | | | | | | |
| TWM1 | Shoushan | 1.92 | 319 | *e*P | Pn | 07 14 25.5 | +1.1 |
| | baz=318 | | | | | | |
| TWM1 | | | | *e*S | Sn | 07 14 49.6 | +0.3 |
| | baz=318 | | | | | | |
| TWF1 | Yuli | 2.01 | 347 | *e*P | Pn | 07 14 26.4 | +0.9 |
| | baz=346 | | | | | | |
| TWF1 | | | | *e*S | Sn | 07 14 50.5 | -0.9 |
| | baz=346 | | | | | | |
| SGST | Jiashian | 2.03 | 327 | P | Pn | 07 14 26.1 | +0.3 |
| | baz=326 | | | | | | |
| SGST | | | | S | Sn | 07 14 51.5 | -0.2 |
| | baz=326 | | | | | | |
| CHN1 | Nanshi | 2.15 | 327 | *e*P | Pn | 07 14 27.2 | 0.0 |
| | baz=326 | | | | | | |
| CHN1 | | | | *e*S | Sn | 07 14 53.8 | -0.5 |
| | baz=326 | | | | | | |
| CHN3 | Shinhua | 2.15 | 322 | *e*P | Pn | 07 14 28.4 | +1.2 |
| | baz=321 | | | | | | |
| CHN3 | | | | *e*S | Sn | 07 14 56.3 | +2.0 |
| | baz=321 | | | | | | |
| WTP | Ta-pu | 2.15 | 330 | *e*P | Pn | 07 14 27.2 | -0.1 |
| | baz=329 | | | | | | |
| WTP | | | | *e*S | Sn | 07 14 54.5 | -0.1 |
| | baz=329 | | | | | | |
| EHY | Hungye | 2.16 | 348 | *e*P | Pn | 07 14 28.2 | +0.9 |
| | baz=347 | | | | | | |
| EHY | | | | *e*S | Sn | 07 14 54.2 | -0.4 |
| | baz=347 | | | | | | |
| TAI1 | Yung-k'ang | 2.20 | 319 | *e*P | Pn | 07 14 28.6 | +0.8 |
| | baz=318 | | | | | | |
| TAI1 | | | | *e*S | Sn | 07 14 55.5 | 0.0 |
| | baz=318 | | | | | | |
| TWK | Hsinying | 2.23 | 327 | *e*P | Pn | 07 14 27.9 | -0.4 |
| | baz=327 | | | | | | |
| TWK | | | | *e*S | Sn | 07 14 56.4 | 0.0 |
| | baz=327 | | | | | | |
| YUS | Yu-Shan | 2.24 | 340 | P | Pn | 07 14 29.6 | +0.7 |
| | baz=339 | | | | | | |
| YUS | | | | *e*S | Sn | 07 14 56.9 | -0.2 |
| | baz=339 | | | | | | |
| CHN4 | Tsaushan | 2.25 | 331 | *e*P | Pn | 07 14 28.1 | -0.4 |
| | baz=330 | | | | | | |
| CHN4 | | | | *e*S | Sn | 07 14 56.2 | -0.6 |
| | baz=330 | | | | | | |
| ALS | Alishan | 2.31 | 337 | *e*P | Pn | 07 14 29.9 | +0.4 |
| | baz=336 | | | | | | |
| ALS | | | | *e*S | Sn | 07 14 58.0 | -0.5 |
| | baz=336 | | | | | | |
| SCLT | Jiali | 2.32 | 320 | *e*P | Pn | 07 14 30.3 | +0.9 |
| | baz=320 | | | | | | |
| SCLT | | | | *e*S | Sn | 07 14 58.1 | -0.1 |
| | baz=320 | | | | | | |
| CHN5 | Tsauling | 2.44 | 335 | *e*P | Pn | 07 14 30.9 | 0.0 |
| | baz=334 | | | | | | |
| CHN5 | | | | *e*S | Sn | 07 15 01.2 | +0.2 |
| | baz=334 | | | | | | |
| WDT | Danda | 2.44 | 345 | P | Pn | 07 14 32.3 | +1.0 |
| | baz=345 | | | | | | |
| WDT | | | | S | Sn | 07 15 01.6 | +0.2 |
| | baz=345 | | | | | | |
| CHY | Chiayi | 2.46 | 329 | *e*P | Pn | 07 14 31.9 | +0.7 |
| | baz=328 | | | | | | |
| CHY | | | | *e*S | Sn | 07 15 01.5 | +0.1 |
| | baz=328 | | | | | | |
| CHN2 | Minshiung | 2.46 | 330 | *e*P | Pn | 07 14 30.8 | -0.4 |
| | baz=330 | | | | | | |
| CHN2 | | | | *e*S | Sn | 07 15 01.7 | +0.2 |
| | baz=330 | | | | | | |
| SMLT | Sun Moon Lake | 2.62 | 342 | *e*P | Pn | 07 14 32.9 | -0.5 |
| | baz=341 | | | | | | |
| SMLT | | | | *e*S | Sn | 07 15 06.5 | +1.1 |
| | baz=341 | | | | | | |
| TYC | Yuchr | 2.66 | 341 | *e*P | Pn | 07 14 33.1 | -0.6 |
| | baz=340 | | | | | | |
| TYC | | | | *e*S | Sn | 07 15 04.9 | -1.0 |
| | baz=340 | | | | | | |
| WDGT | Dungji | 2.72 | 314 | *e*P | Pn | 07 14 33.6 | -0.9 |
| | baz=313 | | | | | | |
| WDGT | | | | *e*S | Sn | 07 15 04.6 | -2.8 |
| | baz=313 | | | | | | |
| WHF | Hehuan Shan | 2.79 | 350 | *e*P | Pn | 07 14 36.4 | +0.5 |
| | baz=349 | | | | | | |
| WHF | | | | *e*S | Sn | 07 15 09.3 | -0.4 |
| | baz=349 | | | | | | |
| TWT | Tachien | 2.91 | 349 | *e*P | Pn | 07 14 38.8 | +1.6 |
| | baz=348 | | | | | | |
| TWT | | | | *e*S | Sn | 07 15 13.0 | +0.8 |
| | baz=348 | | | | | | |
| JYNG | Yonagunijimaku | 3.23 | 19 | P | Pn | 07 14 42.2 | +1.0 |
| HATJ | Hateruma jima | 3.24 | 34 | P | Pn | 07 14 41.3 | 0.0 |
| HATJ | | | | *e*S | Sn | 07 15 19.8 | +0.3 |
| NSK | Sanguang | 3.30 | 353 | *e*P | Pn | 07 14 43.2 | +1.0 |
| | baz=352 | | | | | | |
| NSK | | | | *e*S | Sn | 07 15 19.1 | -2.0 |
| | baz=352 | | | | | | |
| IRIF | Iriomote-Funau | 3.44 | 31 | P | Pn | 07 14 44.3 | +0.5 |
| JKRS | Kuro-shima | 3.50 | 35 | P | Pn | 07 14 45.1 | +0.4 |
| JIJ | Ishigaki jima | 3.67 | 36 | P | Pn | 07 14 46.9 | -0.1 |
| JISG | Ishigakijimahi | 3.94 | 35 | P | Pn | 07 14 50.4 | -0.1 |
| MKAR | Makanchi Array | 40.76 | 318 | P | P | 07 21 21.6 | +0.8 |
| | 0.3nm,0.4s,baz=104,slow=9.6,SNR=5.4 | | | | | | |
| WRA | Warramunga Arr | 42.86 | 163 | P | P | 07 21 33.9 | -4.3 |
| | 0.3nm,0.3s,baz=345,slow=8.9,SNR=4.9 | | | | | | |
| ASAR | Alice Springs | 46.30 | 165 | P | P | 07 22 01.8 | -3.7 |
| | 0.1nm,0.3s,baz=343,slow=7.7,SNR=4.6 | | | | | | |
| ILAR | Eielson Array | 71.44 | 27 | P | P | 07 24 57.7 | -0.9 |
| | 0.2nm,0.7s,baz=271,slow=5.3,SNR=3.7 | | | | | | |

*ISCJB **24** 07:20:50.7±0.5, 2°.43S±0°.04×127°.21E±0°.04, h29km, mb3.8/2, Error ellipse: s-maj=6.1km s-min=4.9km az=141.0*
*IDC **24** 07:20:50.6±1.4, 2°.71S×127°.63E, h0km, mb3.7/2, mb1 4.2/5, mb1mx3.7/30, mbtmp4.0/5, ML4.2/3, Error ellipse: s-maj=27.4km s-min=25.4km az=72.0*
*DJA **24** 07:20:51.1±0.8, 2°.S±3°×12°.7E±°, h12km±7km, M4.2/15, mb4.8/4, mB4.9/4, MLv4.0/15, Mw(mB)4.2/4*
*AUST **24** 07:20:52.9±0.0, 2°.35S×127°.39E, h42km, Error ellipse: s-maj=1.4km s-min=1.0km az=1.0*
*NEIC **24** 07:20:55.1±0.7, 2°.70S×127°.51E, h35km, mb4.1/2, Error ellipse: s-maj=16.6km s-min=10.5km az=65.0*

**ISC 24 07:20:51.4±0.8, 2°.47S±0°.04×127°.26E±0°.05, h29km, n25, σ1°57/28, Ceram Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NLAI | Namlea | 0.78 | 192 | P | Pn | 07 21 07.1 | +0.7 |
| NLAI | | | | S | Sn | 07 21 17.7 | +0.6 |
| SANI | Sanana | 1.33 | 288 | P | Pn | 07 21 12.9 | -1.2 |
| SANI | | | | S | Sn | 07 21 27.9 | -3.0 |
| AAI | Ambon | 1.53 | 142 | P | Pb | 07 21 18.6 | -0.5 |
| | baz=1.6,SNR=16 | | | | | | |
| AAI | Ambon | 1.53 | 142 | P | Pb | 07 21 19.0 | -0.1 |
| LBMI | Labuha | 1.84 | 8 | P | Pn | 07 21 21.6 | +0.6 |
| LBMI | | | | S | Sn | 07 21 43.6 | +0.3 |
| MSAI | Masohi | 1.88 | 118 | P | Pb | 07 21 23.8 | -1.3 |
| MSAI | | | | S | Sb | 07 21 49.3 | +1.0 |
| TNTI | Ternate | 3.22 | 2 | *e*Pn | Pn | 07 21 45.5 | +5.4 |
| TNTI | | | | *e*Sn | Sb | 07 22 28.4 | +1.5 |
| BNDI | Bandanaira | 3.34 | 128 | P | Pn | 07 21 44.0 | +2.3 |
| BNDI | | | | S | Sb | 07 22 25.7 | -4.4 |
| SWI | Sorong | 4.31 | 68 | P | Pn | 07 21 55.0 | -0.1 |
| | baz=4.1,SNR=3.4 | | | | | | |
| SWI | Sorong | 4.31 | 68 | P | Pn | 07 21 55.7 | +0.7 |
| SIJI | Sorong | 4.31 | 68 | Pn | Pn | 07 21 54.4 | -0.7 |
| | 6.1nm,0.3s,baz=319,slow=23,SNR=9.1 | | | | | | |
| SIJI | | | | Sn | Sn | 07 22 42.6 | -1.9 |
| | 6.9nm,0.3s,baz=4.9,slow=23,SNR=10 | | | | | | |
| LUWI | Luwuk | 4.70 | 288 | P | Pn | 07 22 01.2 | +0.8 |
| | baz=4.8,SNR=3.3 | | | | | | |
| LUWI | Luwuk | 4.70 | 288 | P | Pn | 07 22 01.2 | +0.8 |
| FAKI | Fak Fak | 5.01 | 95 | P | Pn | 07 22 01.2 | -3.4 |
| | baz=4.9,SNR=3.1 | | | | | | |
| FAKI | Fak Fak | 5.01 | 95 | P | Pn | 07 22 06.6 | +1.9 |
| | 22nm,1.1s,807nm0.2nm | | | | | | |
| APSI | Ampana | 5.81 | 285 | P | Pn | 07 22 17.0 | +1.3 |
| | 81nm,0.5s,2µm0.4nm | | | | | | |
| MRSI | Marisa | 6.07 | 299 | P | Pn | 07 22 20.0 | +0.8 |
| KAPI | Kappang | 7.90 | 251 | Pn | Pn | 07 22 49.6 | +5.1 |
| | 1.5nm,0.3s,baz=109,slow=9.6,SNR=5.9 | | | | | | |
| MTN | Manton Dam | 11.00 | 160 | P | Pn | 07 23 29.6 | +2.7 |
| | baz=11,SNR=6.1 | | | | | | |
| WRAB | Tennant Creek | 18.69 | 159 | *e*P | P | 07 25 07.0 | -0.5 |
| | 9.9nm,0.8s | | | | | | |
| WRAB | | | | *e*S | Sn | 07 28 28.0 | -8.3 |
| WRA | Warramunga Arr | 18.69 | 159 | P | P | 07 25 06.9 | -0.6 |
| | 1.3nm,0.3s,baz=345,slow=12,SNR=25 | | | | | | |
| COEN | Coen | 19.43 | 127 | P | P | 07 25 16.0 | +0.2 |
| | baz=19,SNR=7.7 | | | | | | |
| COEN | Coen | 19.43 | 127 | *e*P | P | 07 25 15.3 | -0.5 |
| | 7.2nm,0.4s | | | | | | |
| ASAR | Alice Springs | 22.03 | 164 | P | P | 07 25 43.6 | -0.1 |
| | 1.8nm,0.4s,baz=346,slow=11,SNR=47 | | | | | | |
| MKAR | Makanchi Array | 62.96 | 327 | P | P | 07 31 21.9 | +6.5 |
| | 0.4nm,0.6s,baz=129,slow=8.5,SNR=3.7 | | | | | | |

*IDC **24** 07:43:26.4±0.9, 51°.25N×167°.95W, h0km, mb3.9/7, mb1 4.1/8, mb1mx3.7/44, mbtmp3.8/8, ML3.3/1, Error ellipse: s-maj=30.2km s-min=22.5km az=136.0*
*ISCJB **24** 07:43:28.6±0.6, 51°.44N±0°.04×167°.80W±0°.08, h22km, mb3.9/7, Error ellipse: s-maj=7.2km s-min=4.9km az=19.3*
*NEIC **24** 07:43:30.9, 51°.60N×167°.80W, h15km, ML3.3(AEIC), After AEIC.*

**ISC 24 07:43:30.1±0.9, 51°.45N±0°.08×167°.91W±0°.07, h22km, n31, σ0°86/49, mb3.9/7, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| NIKH | Nikolski High | 1.63 | 340 | P | Pn | 07 43 55.8 | -1.6 |
| NIKH | | | | S | Sn | 07 44 17.1 | -0.5 |
| OKSO | Okmok South | 1.91 | 356 | P | Pn | 07 44 00.7 | -0.6 |
| OKSO | | | | S | Sn | 07 44 24.4 | -0.3 |
| OKTU | Okmok Mt. Tuli | 1.94 | 358 | P | Pn | 07 44 01.6 | 0.0 |
| OKTU | | | | S | Sn | 07 44 25.9 | +0.6 |
| OKFG | Magazine Ridge | 1.96 | 360 | P | Pn | 07 44 01.4 | -0.6 |
| OKFG | | | | S | Sn | 07 44 24.7 | -1.1 |
| OKER | Okmok East Rim | 2.00 | 358 | P | Pn | 07 44 02.8 | +0.2 |
| OKER | | | | S | Sn | 07 44 28.2 | +1.2 |
| MGOD | Makushin Gods | 2.43 | 15 | P | Pn | 07 44 07.8 | -0.7 |
| MGOD | | | | S | Sn | 07 44 36.4 | -1.1 |
| MSOM | Makushin Julie | 2.44 | 14 | P | Pn | 07 44 08.3 | -0.2 |
| MSOM | | | | S | Sn | 07 44 37.3 | -0.3 |
| MSW | Makushin Switc | 2.56 | 15 | P | Pn | 07 44 09.8 | -0.4 |
| MSW | | | | S | Sn | 07 44 40.9 | +0.2 |
| MTBL | Makushin Table | 2.63 | 16 | P | Pn | 07 44 11.3 | +0.1 |
| MTBL | | | | S | Sn | 07 44 42.9 | +0.5 |
| ZRO | Akutan Zero | 2.89 | 23 | P | Pn | 07 44 14.6 | -0.2 |
| ZRO | | | | S | Sn | 07 44 48.1 | -0.7 |
| AKRB | Akutan Reef Bi | 2.91 | 22 | P | Pn | 07 44 14.9 | 0.0 |
| AKRB | | | | S | Sn | 07 44 49.0 | -0.2 |
| AKV | Akutan Volcano | 2.93 | 23 | P | Pn | 07 44 15.4 | +0.1 |
| AKV | | | | S | Sn | 07 44 48.2 | -1.5 |
| AHB | Akutan Harbor | 2.95 | 25 | P | Pn | 07 44 15.7 | +0.1 |
| AHB | | | | S | Sn | 07 44 49.6 | -0.8 |
| AKUT | Akutan | 2.98 | 25 | P | Pn | 07 44 15.9 | -0.1 |
| AKUT | | | | S | Sn | 07 44 50.2 | -0.8 |
| AKGG | Akutan Green G | 2.99 | 22 | P | Pn | 07 44 15.9 | -0.2 |
| AKGG | | | | S | Sn | 07 44 50.1 | -1.1 |
| WESP | Westdahl Peak | 3.60 | 31

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **90.51** | **231** | P | **P** | **07 56 29.9** | **-0.2** |
| | 0.7nm,0.5s,baz=28,slow=4.6,SNR=19 | | | | | | |
| **MAW** | **Mawson** | **150.71** | **217** | PKPbc | **PKPbc** | **08 03 17.9** | **-0.9** |
| | 1.0nm,0.5s,baz=127,slow=3.3,SNR=4.7 | | | | | | |

*ISCJB* ***24*** *08:09:49.8±0.5, 40˚.44N±0˚.02×21˚.87E±0˚.03, h4km±5km, Error ellipse: s-maj=4.3km s-min=3.9km az=178.0*
*CSEM* ***24*** *08:09:49.8±0.1, 40˚.45N×21˚.88E, h5km, ML1.7, Error ellipse: s-maj=2.7km s-min=2.5km az=157.0*
*ATH* ***24*** *08:09:49.8, 40˚.44N×21˚.85E, h5km±1km, MD3.1/8*
*THE* ***24*** *08:09:51.2, 40˚.41N×21˚.85E, h0km±5km, ML1.7/3, Error ellipse: s-maj=5.9km s-min=1.3km az=229.0*

**ISC 24 08:09:50.2±0.9, 40˚.43N±0˚.02×21˚.86E±0˚.02, h7km±8km, n46, σ0§42/65, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KZN** | **Kozani** | **0.14** | **209** | *e*PG | | **Pg** | **08 09 53.0** | **-0.2** |
| KZN | | | | *e*SG | | **Sg** | **08 09 55.4** | **+0.1** |
| **KZN** | **Kozani** | **0.14** | **209** | P | | **Pg** | **08 09 52.9** | **-0.2** |
| **KZN** | **Kozani** | **0.14** | **209** | *e*Pg | | **Pg** | **08 09 53.0** | **-0.2** |
| KZN | | | | *e*Sg | | **Sg** | **08 09 55.4** | **+0.1** |
| **FNA** | **Florina** | **0.51** | **314** | *e*PB | | **Pg** | **08 09 59.6** | **-0.4** |
| FNA | | | | *e*SB | | **Sg** | **08 10 06.4** | **-0.3** |
| **FNA** | **Florina** | **0.51** | **314** | P | | **Pg** | **08 10 00.4** | **+0.4** |
| FNA | | | | S | | **Sb** | **08 10 09.3** | **+0.1** |
| **FNA** | **Florina** | **0.51** | **314** | *e*Pb | | **Pg** | **08 09 59.6** | **-0.4** |
| **FNA** | **Florina** | **0.51** | **314** | P | | **Pg** | **08 10 00.4** | **+0.4** |
| FNA | | | | *e*Sb | | **Sg** | **08 10 06.4** | **-0.3** |
| **LIT** | **Litokhoron** | **0.58** | **124** | *e*PB | | **Pg** | **08 10 01.3** | **-0.1** |
| LIT | | | | *e*SB | | **Sg** | **08 10 09.9** | **+0.9** |
| **LIT** | **Litokhoron** | **0.58** | **124** | P | | **Pg** | **08 10 01.4** | **0.0** |
| **LIT** | **Litokhoron** | **0.58** | **124** | *e*Pb | | **Pg** | **08 10 01.3** | **-0.1** |
| LIT | | | | *e*Sb | | **Sg** | **08 10 09.9** | **+0.9** |
| **NEST** | **Nestorio** | **0.62** | **269** | P | | **Pg** | **08 10 02.3** | **+0.1** |
| **NEST** | **Nestorio** | **0.62** | **269** | P | | **Pg** | **08 10 02.3** | **+0.1** |
| **GRG** | **Griva** | **0.67** | **38** | *e*PB | | **Pg** | **08 10 02.9** | **-0.1** |
| GRG | | | | *e*SB | | **Sg** | **08 10 11.7** | **0.0** |
| **GRG** | **Griva** | **0.67** | **38** | P | | **Pg** | **08 10 03.1** | **+0.1** |
| GRG | | | | S | | **Sb** | **08 10 15.1** | **+1.5** |
| **GRG** | **Griva** | **0.67** | **38** | *e*Pb | | **Pg** | **08 10 02.9** | **-0.1** |
| GRG | | | | *e*Sb | | **Sg** | **08 10 11.7** | **0.0** |
| **THL** | **Klokotos Trika** | **0.88** | **172** | *e*PB | | **Pg** | **08 10 06.6** | **-0.4** |
| THL | | | | *e*SB | | **Sb** | **08 10 19.3** | **-0.2** |
| **THL** | **Klokotos Trika** | **0.88** | **172** | P | | **Pg** | **08 10 07.1** | **+0.1** |
| THL | | | | S | | **Sn** | **08 10 20.9** | **-0.9** |
| **THL** | **Klokotos Trika** | **0.88** | **172** | *e*Pb | | **Pg** | **08 10 06.6** | **-0.4** |
| **THL** | **Klokotos Trika** | **0.88** | **172** | P | | **Pg** | **08 10 07.1** | **+0.1** |
| THL | | | | *e*Sb | | **Sb** | **08 10 19.3** | **-0.2** |
| **HORT** | **Hortiatis** | **0.96** | **80** | *e*PB | | **Pg** | **08 10 08.4** | **-0.2** |
| HORT | | | | *e*SB | | **Sb** | **08 10 22.2** | **+0.1** |
| **HORT** | **Hortiatis** | **0.96** | **80** | *e*Pb | | **Pg** | **08 10 08.4** | **-0.2** |
| HORT | | | | *e*Sb | | **Sb** | **08 10 22.2** | **+0.1** |
| **VAY** | **Valandovo** | **1.04** | **31** | *e*Pn | | **Pn** | **08 10 11.8** | **+0.6** |
| **VAY** | **Valandovo** | **1.04** | **31** | *e*Pn | | **Pn** | **08 10 11.7** | **+0.6** |
| **OHR** | **Ohrid** | **1.05** | **310** | *e*Pn | | **Pg** | **08 10 10.5** | **0.0** |
| **OHR** | **Ohrid** | **1.05** | **310** | *e*Pn | | **Pg** | **08 10 10.4** | **0.0** |
| **KNT** | **Kendrikon** | **1.07** | **47** | *e*PB | | **Pg** | **08 10 10.2** | **-0.5** |
| KNT | | | | *e*SB | | **Sb** | **08 10 25.2** | **-0.1** |
| **KNT** | **Kendrikon** | **1.07** | **47** | *e*Pb | | **Pg** | **08 10 10.2** | **-0.5** |
| KNT | | | | *e*Sb | | **Sb** | **08 10 25.2** | **-0.1** |
| **SOH** | **Sokhos** | **1.20** | **71** | *e*PB | | **Pg** | **08 10 12.9** | **-0.3** |
| SOH | | | | *e*SB | | **Sb** | **08 10 29.4** | **+0.4** |
| **SOH** | **Sokhos** | **1.20** | **71** | *e*Pb | | **Pg** | **08 10 12.9** | **-0.3** |
| SOH | | | | *e*Sb | | **Sb** | **08 10 29.4** | **+0.4** |
| **PLG** | **Polygyros** | **1.21** | **92** | *e*PB | | **Pb** | **08 10 12.6** | **-0.8** |
| **PLG** | **Polygyros** | **1.21** | **92** | *e*Pb | | **Pb** | **08 10 12.6** | **-0.8** |
| **DSL** | **Palaion Diasel** | **1.43** | **205** | *e*PB | | **Pb** | **08 10 17.0** | **-0.1** |
| **DSL** | **Palaion Diasel** | **1.43** | **205** | *e*Pb | | **Pb** | **08 10 17.0** | **-0.1** |
| **AGG** | **Agios Georgios** | **1.45** | **165** | *e*PB | | **Pb** | **08 10 17.6** | **0.0** |
| **AGG** | **Agios Georgios** | **1.45** | **165** | P | | **Pg** | **08 10 18.1** | **+0.1** |
| **AGG** | **Agios Georgios** | **1.45** | **165** | *e*Pb | | **Pb** | **08 10 17.6** | **0.0** |
| **AGG** | **Agios Georgios** | **1.45** | **165** | P | | **Pg** | **08 10 18.1** | **+0.1** |
| **XOR** | **Xorichti** | **1.48** | **136** | *e*PG | | **Pb** | **08 10 17.6** | **-0.4** |
| **XOR** | **Xorichti** | **1.48** | **136** | P | | **Pb** | **08 10 17.7** | **-0.3** |
| **XOR** | **Xorichti** | **1.48** | **136** | P | | **Pb** | **08 10 17.7** | **-0.3** |
| **IGT** | **Igoumenitsa** | **1.48** | **233** | *e*PB | | **Pg** | **08 10 18.2** | **-0.3** |
| **IGT** | **Igoumenitsa** | **1.48** | **233** | *e*Pb | | **Pg** | **08 10 18.2** | **-0.3** |
| **PAIG** | **Paliouri** | **1.48** | **109** | *e*PG | | **Pb** | **08 10 17.7** | **-0.3** |
| **PAIG** | **Paliouri** | **1.48** | **109** | *e*Pg | | **Pb** | **08 10 17.7** | **-0.3** |
| **OUR** | **Ouranopolis** | **1.62** | **93** | *e*PG | | **Pb** | **08 10 19.9** | **-0.5** |
| **OUR** | **Ouranopolis** | **1.62** | **93** | *e*Pg | | **Pb** | **08 10 19.9** | **-0.5** |

*IDC* ***24*** *08:20:21.4±0.6, 47˚.08S×165˚.64E, h0km, mb4.3/11, mb1 4.5/13, mb1mx4.4/27, mbtmp4.4/13, ML4.6/2, MS4.4/11, Ms1 4.4/11, ms1mx4.1/23, Error ellipse: s-maj=21.6km s-min=16.5km az=92.0*
*WEL* ***24*** *08:20:21.6±0.9, 47˚.42S×164˚.93E, h33km, ML5.4/26, Ms4.7, Error ellipse: s-maj=9.2km s-min=6.0km az=90.0*
*WEL Felt in the Southland region, maximum reported intensity MM 4.*
*ISCJB* ***24*** *08:20:22.4±0.3, 47˚.20S±0˚.04×165˚.45E±0˚.04, h15km, mb4.4/16, MS4.3/10, Error ellipse: s-maj=6.7km s-min=3.2km az=157.8*
*AUST* ***24*** *08:20:23.2±2.3, 47˚.21S×165˚.48E, h6km, Error ellipse: s-maj=1.3km s-min=0.7km az=349.0*
*BJI* ***24*** *08:20:25.5, 47˚.25S×165˚.43E, h35km, mb5.1/9, mB5.5/3, Ms5.3/3, Ms7 5.1/2*
*GCMT* ***24*** *08:20:26.8±0.5, 47˚.17S×165˚.04E, h30km±1km, MW5.0/51, Moment Tensor Solution. s27,c33; s51,c71; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr=2.61±.26; Mθθ=0.39±.18; Mϕϕ=-3.00±.16; Mrθ=0.45±.31; Mϕθ=0.38±.14; Mϕr=2.04±.25; Best double couple: Mo=3.51500×10^16 NP1:ϕs=170.00000°, δ63.00000°, λ86.00000°. NP2: ϕs=359.00000°, δ27.00000°, λ98.00000°. Principal axes: T 3.3070, Plg71.0000°, Azm70.0000°; N 0.4130, Plg4.0000°, Azm171.0000°; P -3.7230, Plg18.0000°, Azm263.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC* ***24*** *08:20:26.8±0.3, 47˚.11S×165˚.42E, h35km, mb4.7/5, ML4.7(WEL) Error ellipse: s-maj=10.0km s-min=5.3km az=165.0*
*NEIC Felt at Dunedin, Edendale, Invercargill and Palmerston.*

**ISC 24 08:20:24.1±0.4, 47˚.24S±0˚.06×165˚.46E±0˚.05, h15km, n147, σ1§34/132, mb4.5/16, MS4.3/10, 10C-3D, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PYZ** | **Puysegur Point** | **1.36** | **38** | PN | | **Pn** | **08 20 48.8** | **+0.2** |
| **APZ** | **The Paps** | **1.78** | **78** | PN | | **Pn** | **08 20 54.1** | **-0.2** |
| APZ | | | | AML | | AML | 08 21 18.3 | |
| APZ | | | | AML | | AML | 08 21 18.8 | |
| **APZ** | **The Paps** | **1.78** | **78** | Sn | | **Sn** | **08 21 17.5** | **+0.9** |
| **DCZ** | **Deep Cove** | **2.12** | **34** | PN | | **Pn** | **08 20 58.8** | **-0.1** |
| DCZ | | | | AML | | AML | 08 21 37.4 | |
| DCZ | | | | AML | | AML | 08 21 37.5 | |
| DCZ | | | | AML | | AML | 08 21 38.4 | |
| DCZ | | | | AML | | AML | 08 21 38.5 | |
| **WHZ** | **Wether Hill Ro** | **2.18** | **53** | PN | | **Pn** | **08 21 00.8** | **+1.0** |
| WHZ | | | | SN | | **Sb** | **08 21 29.9** | **-0.2** |
| WHZ | | | | AML | | AML | 08 21 33.0 | |
| **WHZ** | **Wether Hill Ro** | **2.18** | **53** | *e*Pn | | **Pn** | **08 21 00.9** | **+1.0** |
| WHZ | | | | *e*Sn | | **Sb** | **08 21 29.9** | **-0.2** |
| **SYZ** | **Scrubby Hill** | **2.62** | **76** | PN | | **Pn** | **08 21 06.6** | **+0.8** |
| SYZ | | | | SN | | **Sn** | **08 21 39.3** | **+2.0** |
| SYZ | | | | AML | | AML | 08 21 42.2 | |
| SYZ | | | | AML | | AML | 08 21 42.2 | |
| SYZ | | | | AML | | AML | 08 21 44.1 | |
| **MLZ** | **Mavora Lakes** | **2.67** | **46** | PN | | **Pn** | **08 21 07.7** | **+1.1** |
| MLZ | | | | AML | | AML | 08 21 51.0 | |
| MLZ | | | | AML | | AML | 08 22 04.8 | |
| **MSZ** | **Milford Sound** | **3.09** | **35** | PN | | **Pn** | **08 21 13.4** | **+1.1** |
| MSZ | | | | AML | | AML | 08 22 13.3 | |
| MSZ | | | | AML | | AML | 08 22 13.4 | |
| MSZ | | | | AML | | AML | 08 22 14.2 | |
| MSZ | | | | AML | | AML | 08 22 14.8 | |
| **TUZ** | **Tuapeka** | **3.15** | **67** | PN | | **Pn** | **08 21 13.9** | **+0.8** |
| TUZ | | | | SN | | **Sn** | **08 21 53.2** | **+2.7** |
| TUZ | | | | AML | | AML | 08 21 57.2 | |
| **EAZ** | **Earnscleugh** | **3.34** | **54** | PN | | **Pn** | **08 21 16.4** | **+0.6** |
| EAZ | | | | AML | | AML | 08 22 02.4 | |
| EAZ | | | | AML | | AML | 08 22 03.7 | |
| **WKZ** | **Wanaka** | **3.46** | **47** | PN | | **Pn** | **08 21 19.3** | **+1.9** |
| WKZ | | | | AML | | AML | 08 22 12.4 | |
| WKZ | | | | AML | | AML | 08 22 14.0 | |
| **HHSZ** | **Highcliff Hill** | **3.80** | **71** | PN | | **Pn** | **08 21 22.6** | **+0.6** |
| **JCZ** | **Jackson Bay** | **3.92** | **37** | ||PN | **Pn** | **08 21 26.6** | **+2.8** |
| JCZ | | | | AML | | AML | 08 22 34.0 | |
| JCZ | | | | AML | | AML | 08 22 34.1 | |
| **ODZ** | **Otahua Downs** | **4.22** | **61** | PN | | **Pn** | **08 21 27.1** | **-0.8** |
| ODZ | | | | AML | | AML | 08 22 33.7 | |
| ODZ | | | | AML | | AML | 08 22 35.6 | |
| **ODZ** | **Otahua Downs** | **4.22** | **61** | *e*Pn | | **Pn** | **08 21 27.1** | **-0.8** |
| ODZ | | | | *e*Sn | | **Sn** | **08 22 18.1** | **+1.3** |
| **LBZ** | **Lake Benmore** | **4.37** | **51** | PN | | **Pn** | **08 21 29.2** | **-0.7** |
| LBZ | | | | AML | | AML | 08 22 46.4 | |
| LBZ | | | | AML | | AML | 08 22 57.5 | |
| **FOZ** | **Fox Glacier** | **4.73** | **41** | ⇑PN | | **Pn** | **08 21 37.1** | **+2.3** |
| FOZ | | | | AML | | AML | 08 22 42.5 | |
| FOZ | | | | AML | | AML | 08 23 07.8 | |
| **RPZ** | **Rata Peaks** | **5.28** | **50** | PN | | **Pn** | **08 21 40.1** | **-2.4** |
| RPZ | | | | AML | | AML | 08 23 19.2 | |
| RPZ | | | | AML | | AML | 08 23 32.7 | |
| **RPZ** | **Rata Peaks** | **5.28** | **50** | Pn | | **Pn** | **08 21 39.7** | **-2.7** |
| | 24nm,0.3s,baz=204,slow=4.4,SNR=42 | | | | | | | |
| RPZ | | | | Sn | | **Sn** | **08 22 43.3** | **+0.2** |
| | 51nm,0.3s,baz=220,slow=21,SNR=3.1 | | | | | | | |
| RPZ | | | | LR | | LR | 08 24 03.9 | |
| | comp=Z,9μm,18.4s,baz=244,slow=44 | | | | | | | |
| **RPZ** | **Rata Peaks** | **5.28** | **50** | *e*Pn | | **Pn** | **08 21 41.2** | **-1.2** |
| RPZ | | | | Sn | | **Sn** | **08 22 43.3** | **+0.2** |
| **WVZ** | **Waitaha Valley** | **5.59** | **44** | PN | | **Pn** | **08 21 46.7** | **0.0** |
| WVZ | | | | AML | | AML | 08 23 01.1 | |
| WVZ | | | | AML | | AML | 08 23 03.8 | |
| **MQZ** | **McQueen's Vall** | **6.17** | **58** | PN | | **Pn** | **08 21 53.4** | **-1.2** |
| MQZ | | | | AML | | AML | 08 23 08.3 | |
| MQZ | | | | AML | | AML | 08 23 08.9 | |
| **LTZ** | **Lake Taylor** | **6.57** | **50** | PN | | **Pn** | **08 21 58.8** | **-1.4** |
| LTZ | | | | AML | | AML | 08 23 22.1 | |
| LTZ | | | | AML | | AML | 08 23 23.8 | |
| **DSZ** | **Denniston Nort** | **7.12** | **42** | PN | | **Pn** | **08 22 07.1** | **-0.6** |
| DSZ | | | | AML | | AML | 08 23 36.4 | |
| DSZ | | | | AML | | AML | 08 23 36.8 | |
| **KHZ** | **Kahutara** | **7.50** | **53** | PN | | **Pn** | **08 22 11.2** | **-1.6** |
| KHZ | | | | AML | | AML | 08 23 44.2 | |
| **KHZ** | **Kahutara** | **7.50** | **53** | *e*Pn | | **Pn** | **08 22 11.3** | **-1.5** |
| | 122nm,1.0s | | | | | | | |
| **THZ** | **Tophouse** | **7.63** | **47** | PN | | **Pn** | **08 22 13.8** | **-1.0** |
| THZ | | | | AML | | AML | 08 23 52.1 | |
| THZ | | | | AML | | AML | 08 23 53.9 | |
| **QRZ** | **Quartz Range** | **8.19** | **41** | PN | | **Pn** | **08 22 22.2** | **-0.1** |
| QRZ | | | | AML | | AML | 08 24 00.2 | |
| QRZ | | | | AML | | AML | 08 24 02.4 | |
| **NNZ** | **Nelson** | **8.28** | **46** | PN | | **Pn** | **08 22 22.9** | **-0.7** |
| NNZ | | | | AML | | AML | 08 24 08.2 | |
| NNZ | | | | AML | | AML | 08 24 08.3 | |
| **MCQ** | **Macquarie Isla** | **8.34** | **207** | P | | **Pn** | **08 22 26.1** | **+1.8** |
| | baz=8.4,SNR=7.1 | | | | | | | |
| **TCW** | **Tory Channel** | **8.74** | **50** | PN | | **Pn** | **08 22 30.7** | **+0.9** |
| TCW | | | | AML | | AML | 08 24 16.4 | |
| TCW | | | | AML | | AML | 08 24 20.2 | |
| **CAW** | **Cannon Point** | **9.23** | **52** | PN | | **Pn** | **08 22 36.7** | **+0.2** |
| CAW | | | | AML | | AML | 08 24 31.1 | |
| CAW | | | | AML | | AML | 08 24 32.6 | |
| **KIW** | **Kapiti Island** | **9.32** | **50** | PN | | **Pn** | **08 22 38.5** | **+0.6** |
| KIW | | | | AML | | AML | 08 24 29.0 | |
| KIW | | | | AML | | AML | 08 24 29.4 | |
| **KHEZ** | **Kahui Hut** | **10.10** | **41** | PN | | **Pn** | **08 22 48.5** | **-0.1** |
| **PREZ** | **Palmer Road** | **10.12** | **42** | PN | | **Pn** | **08 22 49.8** | **+1.0** |
| **NEZ** | **North Egmont** | **10.15** | **41** | PN | | **Pn** | **08 22 50.6** | **+1.4** |
| **PKE** | **Pukeiti** | **10.16** | **41** | PN | | **Pn** | **08 22 49.3** | **-0.1** |
| PKE | | | | AML | | AML | 08 24 52.4 | |
| **WAZ** | **Wanganui** | **10.19** | **46** | PN | | **Pn** | **08 22 50.7** | **+1.0** |
| **WNVZ** | **Wahianoa** | **10.82** | **47** | PN | | **Pn** | **08 22 58.4** | **-0.1** |
| **PXZ** | **Pawanui** | **10.96** | **53** | PN | | **Pn** | **08 22 59.9** | **-0.3** |
| **HIZ** | **Hauiti** | **11.11** | **42** | PN | | **Pn** | **08 23 01.3** | **-1.0** |
| **KAHZ** | **Kahuranaki** | **11.13** | **52** | PN | | **Pn** | **08 23 02.4** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **11.39** | **49** | PN | | **Pn** | **08 23 06.1** | **-0.1** |
| **TLZ** | **Tolley Road** | **11.57** | **43** | PN | | **Pn** | **08 23 07.1** | **-1.6** |
| **WHHZ** | **Waihua** | **11.85** | **51** | PN | | Pn | 08 23 16.5 | +4.2 |
| **URZ** | **Urewera** | **12.39** | **48** | PN | | Pn | 08 23 16.6 | -3.3 |
| **URZ** | **Urewera** | **12.39** | **48** | Pn | | Pn | 08 23 15.7 | -4.2 |
| | 2.8nm,0.3s,baz=239,slow=7.7,SNR=26 | | | | | | | |
| URZ | | | | Sn | | **Sn** | **08 25 36.5** | **-1.1** |
| | 2.6nm,0.3s,baz=50,slow=15,SNR=5.9 | | | | | | | |
| **URZ** | **Urewera** | **12.39** | **48** | *e*Pn | | **Pn** | **08 23 17.8** | **-2.1** |
| URZ | | | | *e*Sn | | Sn | 08 25 31.4 | -6.3 |
| URZ | | | | Sn | | Sn | 08 25 36.5 | -1.1 |
| **MKAZ** | **Moumakai** | **12.41** | **39** | PN | | **Pn** | **08 23 20.3** | **+0.2** |
| **MWZ** | **Matawai** | **12.55** | **49** | PN | | **Pn** | **08 23 19.5** | **-2.5** |
| **CTZ** | **Chatham Island** | **13.05** | **81** | PN | | **Pn** | **08 23 28.1** | **-0.8** |
| **WCZ** | **Waipu Caves** | **13.09** | **31** | PN | | **Pn** | **08 23 29.6** | **+0.2** |
| **OUZ** | **Omahuta** | **13.47** | **30** | PN | | **Pn** | **08 23 34.4** | **-0.2** |
| **OUZ** | **Omahuta** | **13.47** | **30** | *e*Pn | | **Pn** | **08 23 34.1** | **-0.5** |
| | 68nm,1.1s | | | | | | | |
| **TAU** | **Tasmania Unive** | **13.53** | **282** | *e*Pn | | Pn | 08 23 31.4 | -3.9 |
| | 166nm,1.4s | | | | | | | |
| TAU | | | | *e*Sn | | Sn | 08 25 48.3 | -17 |
| **MOO** | **Moorlands** | **13.81** | **284** | P | | **Pn** | **08 23 37.8** | **-1.4** |
| | baz=14,SNR=18 | | | | | | | |
| **MILA** | **Mila** | **15.78** | **304** | P | | **Pn** | **08 24 03.8** | **-1.8** |
| | baz=16,SNR=13 | | | | | | | |
| **CNB** | **Canberra Magne** | **16.94** | **309** | P | | **P** | **08 24 23.1** | **+0.7** |
| | baz=17,SNR=10 | | | | | | | |
| **TOO** | **Toolangi** | **17.59** | **296** | P | | **P** | **08 24 29.4** | **-0.1** |
| | baz=18,SNR=23 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **20.36** | **292** | P | | Pn | 08 25 03.1 | +1.2 |
| | baz=20,SNR=6.6 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **21.80** | **309** | P | | **P** | **08 25 17.0** | **+1.6** |
| | baz=22,SNR=5.5 | | | | | | | |
| **HTT** | **Hallett** | **24.34** | **295** | P | | **P** | **08 25 36.9** | **-4.4** |
| | baz=24,SNR=9.6 | | | | | | | |
| **RMQ** | **Roma** | **24.55** | **322** | P | | **P** | **08 25 44.7** | **+1.5** |
| | baz=24,SNR=7.7 | | | | | | | |
| **EIDS** | **Eidsvold** | **24.63** | **327** | P | | **P** | **08 25 44.6** | **+0.7** |
| | baz=25,SNR=6.1 | | | | | | | |
| **EIDS** | **Eidsvold** | **24.63** | **327** | *e*P | | **P** | **08 25 44.0** | **+0.1** |
| | 9.1nm,0.8s | | | | | | | |
| **DZM** | **Mont Dzumac** | **25.13** | **2** | *e*P | | **P** | **08 25 51.5** | **+3.0** |
| | 226nm,1.2s | | | | | | | |
| DZM | | | | *e*LR | | LR | 08 32 03.8 | |
| | 690nm,23.5s | | | | | | | |
| **DZM** | **Mont Dzumac** | **25.13** | **2** | P | | **P** | **08 25 47.4** | **-1.0** |
| | 78nm,1.1s,baz=180,slow=6.9,SNR=17 | | | | | | | |
| **BBOO** | **Buckleboo** | **26.54** | **292** | *e*P | | **P** | **08 26 00.2** | **-1.0** |
| | 15nm,0.9s | | | | | | | |
| **VNDA** | **Vanda** | **30.42** | **182** | P | | **P** | **08 26 37.4** | **+2.1** |
| | 0.8nm,1.0s,baz=357,slow=12,SNR=2.7 | | | | | | | |
| VNDA | | | | LR | | LR | 08 36 21.6 | |
| | comp=Z,558nm,20.2s,baz=22,slow=31 | | | | | | | |
| **QIS** | **Mount Isa** | **33.89** | **313** | P | | **P** | **08 27 06.7** | **+0.4** |
| | baz=34,SNR=3.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **34.46** | **302** | P | | **P** | **08 27 10.9** | **-0.3** |
| | 6.3nm,0.6s,baz=136,slow=9.3,SNR=71 | | | | | | | |
| ASAR | | | | LR | | LR | 08 40 17.1 | |
| | comp=Z,506nm,21.4s,baz=142,slow=35 | | | | | | | |
| **WRKA** | **Warakurna** | **36.81** | **294** | P | | **P** | **08 27 31.4** | **0.0** |
| | baz=37,SNR=5.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.16** | **306** | P | | **P** | **08 27 33.6** | **-0.8** |
| | 3.6nm,0.7s,baz=139,slow=7.7,SNR=28 | | | | | | | |
| WRA | | | | LR | | LR | 08 42 53.9 | |
| | comp=Z,424nm,19.0s,baz=150,slow=36 | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.16** | **306** | *e*P | | **P** | **08 27 33.6** | **-0.8** |
| | 8.9nm,0.9s | | | | | | | |
| **HNR** | **Honiara** | **37.97** | **351** | LR | | LR | 08 40 58.4 | |
| | comp=Z,501nm,19.1s,baz=174,slow=33 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **38.95** | **274** | P | | **P** | **08 27 49.7** | **+0.4** |
| | 9.4nm,1.0s,baz=68,slow=0.1,SNR=3.4 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **39.92** | **269** | T | | T | 09 10 03.0 | |
| | SNR=664 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **39.93** | **269** | T | | T | 09 10 46.5 | |
| | baz=124,slow=74,SNR=543 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **39.93** | **269** | T | | T | 09 10 40.6 | |
| | baz=250,slow=74,SNR=633 | | | | | | | |
| **QSPA** | **South Pole Qui** | **42.88** | **180** | P | | **P** | **08 28 21.9** | **+0.4** |
| | 4.4nm,0.9s,baz=25,slow=3.0,SNR=15 | | | | | | | |
| **TBI** | **Tubuai** | **43.06** | **72** | *e*S | | S | 08 34 58.1 | +10 |
| | 160nm,28.8s | | | | | | | |
| TBI | | | | *e*LR | | LR | 08 40 38.5 | |
| | 784nm,23.2s,baz=218 | | | | | | | |
| **MTN** | **Manton Dam** | **44.73** | **309** | P | | P | 08 28 45.7 | +9.0 |
| | baz=45,SNR=3.9 | | | | | | | |
| **MBWA** | **Marble Bar** | **45.04** | **289** | *e*P | | **P** | **08 28 38.1** | **-1.1** |
| | 14nm,0.9s | | | | | | | |
| **PPT2** | **Papeete2** | **47.18** | **67** | *e*S | | S | 08 35 56.3 | +7.9 |
| | 187nm,29.2s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 08 42 35.9 | |
| | 665nm,22.2s,baz=218 | | | | | | | |
| **PPT** | **Papeete** | **47.20** | **67** | LR | | LR | 08 47 00.4 | |
| | comp=Z,387nm,18.8s,baz=204,slow=34 | | | | | | | |
| **BATI** | **Baumata** | **51.03** | **302** | LR | | LR | 08 51 56.6 | |
| | comp=Z,342nm,18.1s,baz=184,slow=37 | | | | | | | |
| **MAW** | **Mawson** | **51.74** | **208** | P | | **P** | **08 29 32.2** | **+2.0** |
| | 0.8nm,0.8s,baz=117,slow=18,SNR=2.6 | | | | | | | |
| MAW | | | | LR | | LR | 08 50 05.1 | |
| | comp=Z,620nm,18.0s,baz=76,slow=34 | | | | | | | |
| **RKT** | **Rikitea** | **52.88** | **85** | *e*LR | | LR | 08 45 13.5 | |
| | 573nm,29.2s,baz=226 | | | | | | | |
| **SYO** | **Syowa Base** | **57.39** | **200** | ⇑*e*P | | **P** | **08 30 09.0** | **-2.2** |
| **SYO** | **Syowa Base** | **57.39** | **200** | ||*e*pP | pP | 08 30 19.0 | +3.0 |
| **KAPI** | **Kappang** | **57.48** | **302** | P | | **P** | **08 30 12.2** | **-0.3** |
| | 3.4nm,0.7s,baz=262,slow=7.3,SNR=3.9 | | | | | | | |
| **SNAA** | **Sanae** | **61.10** | **184** | *e*P | | **P** | **08 30 35.6** | **-1.4** |
| | 11nm,1.1s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **61.77** | **182** | P | | **P** | **08 30 40.2** | **-1.2** |
| **VNA2** | **Neumayer--Watz** | **62.03** | **183** | P | | **P** | **08 30 42.5** | **-0.7** |
| | baz=174,slow=5.6 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **62.33** | **182** | P | | **P** | **08 30 44.7** | **-0.4** |
| **QIZ** | **Qiongzhong** | **82.72** | **308** | P | | **P** | **08 32 46.8** | **-0.3** |
| QIZ | | | | S | | **S** | **08 43 03.8** | **-0.5** |
| QIZ | | | | PMZ | | | | |
| | 6.0nm,1.2s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **86.46** | **263** | T | | T | 10 08 16.0 | |
| | baz=138,slow=76,SNR=36 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **86.47** | **263** | T | | T | 10 08 17.2 | |
| | baz=138,slow=76,SNR=38 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **86.48** | **263** | T | | T | 10 08 21.6 | |
| | baz=138,slow=76,SNR=12 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **86.91** | **338** | P | | **P** | **08 33 07.0** | **-0.9** |
| | 0.7nm,0.7s,baz=174,slow=7.0,SNR=5.0 | | | | | | | |
| **H08N1** | **Diego Garcia H** | **88.40** | **262** | T | | T | 10 10 56.7 | |
| | baz=144,slow=75,SNR=13 | | | | | | | |
| **H08N3** | **Diego Garcia H** | **88.42** | **262** | T | | T | 10 10 55.1 | |
| | baz=144,slow=75,SNR=14 | | | | | | | |
| **H08N2** | **Diego Garcia H** | **88.43** | **262** | T | | T | 10 10 57.9 | |
| | baz=144,slow=75,SNR=16 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.43** | **299** | P | | **P** | **08 33 16.4** | **+0.8** |
| | 2.7nm,0.9s,baz=166,slow=3.9,SNR=16 | | | | | | | |
| CMAR | | | | LR | | LR | 09 12 04.8 | |
| | comp=Z,95nm,21.7s,baz=20,slow=35 | | | | | | | |
| **NJ2** | **Nanjing** | **89.37** | **322** | *e*P | | **P** | **08 33 20.1** | **+0.4** |
| **GYA** | **Guiyang** | **90.45** | **310** | *e*P | | **P** | **08 33 26.3** | **+1.3** |
| GYA | | | | PMZ | | | | |
| | 10.0nm,1.0s | | | | | | | |
| **KSRS** | **Korea Array** | **90.76** | **331** | P | | **P** | **08 33 27.2** | **+1.3** |
| | 0.6nm,0.6s,baz=142,slow=6.2,SNR=4.2 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **90.76** | **331** | P | | **P** | **08 33 27.2** | **+1.2** |
| **KMI** | **Kunming** | **91.49** | **306** | P | | **P** | **08 33 31.5** | **+1.5** |
| KMI | | | | PMZ | | | | |
| | 6.0nm,0.5s | | | | | | | |
| **CD2** | **Chengdu** | **95.54** | **311** | *e*P | | **P** | **08 33 49.0** | **+0.7** |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| **BOSA** | **Boshof** | **96.40** | **214** | LR | | LR | 09 13 33.9 | |
| | comp=Z,144nm,18.3s,baz=175,slow=33 | | | | | | | |
| **CPUP** | **Villa Florida** | **97.23** | **142** | LR | | LR | 09 13 04.1 | |
| | comp=Z,88nm,18.4s,baz=210,slow=32 | | | | | | | |
| **LZH** | **Lanzhou** | **99.61** | **314** | *e*P | | **Pdif** | **08 34 05.9** | **-0.8** |
| LZH | | | | pP | | **pP** | **08 34 15.0** | **+3.3** |
| LZH | | | | sP | | sP | 08 34 19.4 | +5.9 |
| **HHC** | **Hu-ho-hao-te** | **99.92** | **322** | *e*P | | **Pdif** | **08 34 07.9** | **0.0** |
| HHC | | | | PP | | PP | 08 38 19.3 | +5.8 |
| HHC | | | | PMZ | | | | |
| | 22nm,1.4s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | 53nm,9.1s | | | | | | | |
| **WMQ** | **Urumqi** | **113.61** | **309** | *e*PKP | | **PKiKP** | **08 39 01.0** | **-0.1** |
| **KSH** | **Kashi** | **117.33** | **299** | *e*PKP | | **PKPdf** | **08 39 08.5** | **0.0** |
| KSH | | | | *es*PKP | | | 08 39 23.1 | |
| KSH | | | | *e*PP | | PP | 08 40 26.3 | +5.9 |
| KSH | | | | SKKS | | | 08 47 14.8 | |
| KSH | | | | PPMZ | | | | |
| | 110nm,5.4s | | | | | | | |
| KSH | | | | L

*ISCJB* ***24*** *08:24:33.6±0.8, 38°.85N±0°.03×26°.34E±0°.04, h4km±5km, Error ellipse: s-maj=5.8km s-min=4.0km az=159.6*
*DDA* ***24*** *08:24:33.4, 38°.86N×26°.36E, h6km, Md2.8*
*ATH* ***24*** *08:24:33.9, 38°.84N×26°.33E, h24km, MD3.1/5*
*ISK* ***24*** *08:24:33.3, 38°.86N×26°.38E, h3km, MD2.7*
*CSEM* ***24*** *08:24:34.2±0.2, 38°.85N×26°.36E, h7km±2km, MD3.1, Error ellipse: s-maj=4.1km s-min=3.0km az=84.0*

**ISC 24 08:24:34.2±1.0, 38°.88N±0°.02×26°.34E±0°.02, h10km±9km, n44, σ0.47/65, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRK** | **Paraskevi** | **0.38** | **352** | *e*PB | **Pb** | **08 24 42.6** | **-0.3** |
| PRK | | | | eSB | **Sb** | **08 24 49.1** | **+0.3** |
| **PRK** | **Paraskevi** | **0.38** | **352** | *e*Pb | **Pb** | **08 24 42.6** | **-0.3** |
| PRK | | | | eSb | **Sb** | **08 24 49.1** | **+0.3** |
| **DKL** | **Dikili** | **0.48** | **66** | *e*PG | **Pg** | **08 24 43.1** | **-0.5** |
| DKL | | | | eSG | **Sg** | **08 24 50.2** | **+0.3** |
| **DKL** | **Dikili** | **0.48** | **66** | *e*Pg | **Pg** | **08 24 43.1** | **-0.5** |
| DKL | | | | eSg | **Sg** | **08 24 50.2** | **+0.3** |
| **AYVA** | **Ayvalik** | **0.51** | **32** | *i* P | **Pg** | **08 24 44.2** | **+0.1** |
| AYVA | | | | *i* S | **Sg** | **08 24 51.3** | **+0.4** |
| **AYVA** | **Ayvalik** | **0.51** | **32** | P | **Pg** | **08 24 44.2** | **+0.1** |
| AYVA | | | | S | **Sg** | **08 24 51.3** | **+0.4** |
| **CHOS** | **Chios island** | **0.54** | **205** | *e*PG | **Pg** | **08 24 44.5** | **-0.1** |
| **CHOS** | **Chios island** | **0.54** | **205** | *e*PN | **Pg** | **08 24 44.5** | **-0.1** |
| CHOS | | | | eSN | **Sg** | **08 24 51.6** | **-0.1** |
| **CHOS** | **Chios island** | **0.54** | **205** | *e*Pg | **Pg** | **08 24 44.5** | **-0.1** |
| CHOS | | | | eSn | **Sg** | **08 24 51.6** | **-0.1** |
| **BLCB** | **Balcova** | **0.73** | **132** | *e*PG | **Pg** | **08 24 47.5** | **-0.9** |
| **BLCB** | **Balcova** | **0.73** | **132** | *e*Pg | **Pg** | **08 24 47.5** | **-0.9** |
| **EZN** | **Ezine** | **0.95** | **359** | *e*PG | **Pb** | **08 24 52.8** | **0.0** |
| **EZN** | **Ezine** | **0.95** | **359** | *e*Pg | **Pg** | **08 24 52.8** | **0.0** |
| **BOZC** | **Bozcaada** | **0.99** | **347** | P | **Pg** | **08 24 52.9** | **-0.4** |
| BOZC | | | | P | **Pb** | **08 24 53.6** | **+0.1** |
| BOZC | | | | S | **Sb** | **08 25 07.3** | **+0.7** |
| BOZC | | | | S | **Sn** | **08 25 07.5** | **-0.8** |
| **AKS** | **Akhisar** | **1.15** | **89** | *e*PN | **Pb** | **08 24 55.5** | **-0.7** |
| **AKS** | **Akhisar** | **1.15** | **89** | *e*Pn | **Pb** | **08 24 55.5** | **-0.7** |
| **SMG** | **Samos** | **1.23** | **161** | *e*PN | **Pn** | **08 24 57.1** | **-0.3** |
| SMG | | | | eSN | **Sb** | **08 25 13.2** | **-0.2** |
| **SMG** | **Samos** | **1.23** | **161** | *e*Pn | **Pn** | **08 24 57.1** | **-0.3** |
| SMG | | | | eSn | **Sb** | **08 25 13.2** | **-0.2** |
| **BALY** | **Balya** | **1.31** | **49** | *i* P | **Pn** | **08 24 58.2** | **-0.5** |
| BALY | | | | *i* S | **Sg** | **08 25 16.6** | **+0.1** |
| **BALY** | **Balya** | **1.31** | **49** | P | **Pn** | **08 24 58.2** | **-0.5** |
| BALY | | | | S | **Sg** | **08 25 16.6** | **+0.1** |
| **GADA** | **Gvkgeada** | **1.36** | **345** | *e*PN | **Pn** | **08 24 59.3** | **+0.1** |
| **GADA** | **Gvkgeada** | **1.36** | **345** | *e*Pn | **Pn** | **08 24 59.3** | **+0.1** |
| **LIA** | **Limnos Island** | **1.36** | **319** | *e*PN | **Pb** | **08 24 59.9** | **+0.2** |
| LIA | | | | eSN | **Sg** | **08 25 18.3** | **+0.3** |
| **LIA** | **Limnos Island** | **1.36** | **319** | *e*Pn | **Pb** | **08 24 59.9** | **+0.2** |
| LIA | | | | eSn | **Sg** | **08 25 18.3** | **+0.3** |
| **BALB** | **Balikesir** | **1.42** | **57** | *e*PN | **Pb** | **08 25 00.5** | **-0.2** |
| **BALB** | **Balikesir** | **1.42** | **57** | *e*Pn | **Pb** | **08 25 00.5** | **-0.2** |
| **GELI** | **Tayfur-Gelibol** | **1.52** | **4** | *e*PN | **Pb** | **08 25 02.4** | **-0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.52** | **4** | *e*Pn | **Pb** | **08 25 02.4** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.53** | **127** | *e*PN | **Pn** | **08 25 01.9** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.53** | **127** | *e*Pn | **Pn** | **08 25 01.9** | **+0.2** |
| **LPK** | **Lapseki** | **1.53** | **12** | *e*PN | **Pb** | **08 25 02.6** | **-0.1** |
| **LPK** | **Lapseki** | **1.53** | **12** | *e*Pn | **Pb** | **08 25 02.6** | **-0.1** |
| **KRBG** | **Karabiga-Canak** | **1.69** | **26** | *e*PN | **Pb** | **08 25 04.7** | **-0.6** |
| **KRBG** | **Karabiga-Canak** | **1.69** | **26** | *e*Pn | **Pb** | **08 25 04.7** | **-0.6** |
| **AYDN** | **Tasoluk** | **1.71** | **135** | *i* P | **Pg** | **08 25 08.6** | **+1.6** |
| AYDN | | | | *i* S | **Sb** | **08 25 27.6** | **+0.2** |
| **AYDN** | **Tasoluk** | **1.71** | **135** | P | **Pg** | **08 25 08.6** | **+1.6** |
| AYDN | | | | S | **Sb** | **08 25 27.6** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **1.71** | **339** | *e*PN | **Pn** | **08 25 04.4** | **+0.3** |
| **SMTH** | **Samothraki Isl** | **1.71** | **339** | *e*Pn | **Pn** | **08 25 04.4** | **+0.3** |
| **MANT** | **Manisa** | **1.78** | **102** | *i* P | **Pb** | **08 25 07.5** | **+0.5** |
| MANT | | | | *i* S | **Sn** | **08 25 27.5** | **-0.4** |
| **MANT** | **Manisa** | **1.78** | **102** | P | **Pb** | **08 25 07.5** | **+0.5** |
| MANT | | | | S | **Sn** | **08 25 27.5** | **-0.4** |
| **KULA** | **Kula-Manisa** | **1.85** | **101** | *e*PN | **Pn** | **08 25 06.6** | **+0.6** |
| **KULA** | **Kula-Manisa** | **1.85** | **101** | *e*Pn | **Pn** | **08 25 06.6** | **+0.6** |
| **APE** | **Apeiranthos** | **1.91** | **200** | *e*PN | **Pn** | **08 25 06.8** | **-0.1** |
| **APE** | **Apeiranthos** | **1.91** | **200** | *e*Pn | **Pn** | **08 25 06.8** | **-0.1** |

**IDC 24 08:37:46.9±3.0, 6.70S×150.44E, h0km, mb3.1/2, mb1 3.5/3, mb1mx3.3/32, mbtmpg3.4/3, ML1.5/1, Error ellipse: s-maj=120.2km s-min=36.8km az=127.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.22** | **230** | Pn | Pn | 08 38 54.0 | +1.5 |
| | 1.9nm,0.3s,baz=57,slow=7.6,SNR=5.1 | | | | | | |
| PMG | | | | Sn | Sn | 08 39 43.1 | +0.6 |
| | 1.6nm,0.3s,baz=218,slow=19,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.44** | **228** | P | P | 08 42 24.8 | -1.2 |
| | 0.5nm,0.5s,baz=54,slow=11,SNR=7.2 | | | | | | |
| **ASAR** | **Alice Springs** | **23.18** | **222** | P | P | 08 42 55.3 | -0.1 |
| | 0.4nm,0.4s,baz=57,slow=9.4,SNR=8.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.58** | **284** | PKPbc | PKPbc | 08 57 36.6 | -0.3 |
| | 0.2nm,0.4s,baz=77,slow=2.1,SNR=3.5 | | | | | | |

*ISCJB* ***24*** *08:52:28.8±0.2, 62°.58N±0°.03×125°.74W±0°.05, h10km, mb3.9/15, MS3.6/7, Error ellipse: s-maj=3.7km s-min=2.9km az=20.5*
*IDC* ***24*** *08:52:29.8±0.6, 62°.62N×125°.57W, h0km, mb3.8/11, mb1 4.0/16, mb1mx3.8/60, mbtmpg3.8/16, ML3.7/5, MS3.5/12, Ms1 3.5/12, ms1mx3.3/49, Error ellipse: s-maj=11.2km s-min=8.6km az=172.0*
*NEIC* ***24*** *08:52:32.0, 62°.56N×125°.70W, h10km, mb4.0/18, MW4.0(OTT), After OTT.*
*PGC* ***24*** *08:52:32.0±0.0, 62°.56N×125°.70W, h10km, ML4.3/21, Mw4.0, 247km west of Fort Simpson, Nt Northwest Territories, Canada*

**ISC 24 08:52:30.6±0.5, 62°.61N±0°.03×125°.60W±0°.03, h10km, n142, σ1§89/143, mb4.0/15, MS3.4/7, Northwest Territories**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FNBB** | **Fort Nelson** | **3.94** | **160** | Pn | **Pn** | **08 53 31.6** | **+0.4** |
| FNBB | | | | Sn | **Sn** | **08 54 15.4** | **-2.0** |
| **FNBB** | **Fort Nelson** | **3.94** | **160** | Pn | **Pn** | **08 53 31.6** | **+0.4** |
| FNBB | | | | Sn | **Sn** | **08 54 15.4** | **-2.0** |
| **CLVN** | **Colville Lake** | **4.45** | **358** | Pn | **Pn** | **08 53 39.0** | **+0.9** |
| CLVN | | | | Sn | **Sn** | **08 54 30.7** | **+0.8** |
| **CLVN** | **Colville Lake** | **4.45** | **358** | Pn | **Pn** | **08 53 39.0** | **+0.9** |
| CLVN | | | | Sn | **Sn** | **08 54 30.7** | **+0.8** |
| **DLBC** | **Dease Lake** | **4.72** | **210** | Pn | **Pn** | **08 53 42.1** | **+0.2** |
| | 3.0nm,0.3s,baz=34,slow=9.2,SNR=32 | | | | | | |
| DLBC | | | | Lg | Lg | 08 54 58.5 | |
| | 15nm,0.3s,baz=265,slow=13,SNR=8.6 | | | | | | |
| DLBC | | | | LR | LR | 08 55 41.4 | |
| | comp=Z,318nm,22.0s,baz=351,slow=40 | | | | | | |
| **DLBC** | **Dease Lake** | **4.72** | **210** | Pn | **Pn** | **08 53 41.6** | **-0.3** |
| DLBC | | | | Sg | **Sb** | **08 54 54.2** | **+3.9** |
| **DLBC** | **Dease Lake** | **4.72** | **210** | *e*Pn | **Pn** | **08 53 39.6** | **-2.3** |
| DLBC | | | | *e*Sg | **Sg** | **08 54 58.0** | **-4.1** |
| DLBC | | | | Lg | Lg | 08 54 58.5 | |
| **WHY** | **Whitehorse** | **4.84** | **250** | Pn | **Pn** | **08 53 43.1** | **-0.5** |
| WHY | | | | Sg | **Sb** | **08 54 57.8** | **+4.0** |
| **WHY** | **Whitehorse** | **4.84** | **250** | Pn | **Pn** | **08 53 43.1** | **-0.5** |
| WHY | | | | Sg | **Sb** | **08 54 57.8** | **+4.0** |
| **YKR1** | **Yellowknife Ar** | **4.93** | **87** | Pn | **Pn** | **08 53 45.8** | **+1.1** |
| **YKR2** | **Yellowknife Ar** | **4.96** | **87** | Pn | **Pn** | **08 53 45.9** | **+0.9** |
| YKR2 | | | | Sn | **Sn** | **08 54 40.9** | **-1.4** |
| **YKR3** | **Yellowknife Ar** | **4.98** | **87** | Sn | **Sn** | **08 54 42.2** | **-0.6** |
| **YKR4** | **Yellowknife Ar** | **5.00** | **87** | Pn | **Pn** | **08 53 46.6** | **+0.9** |
| **YKR5** | **Yellowknife Ar** | **5.02** | **87** | Pn | **Pn** | **08 53 46.7** | **+0.8** |
| **YKR7** | **Yellowknife Ar** | **5.07** | **86** | Pn | **Pn** | **08 53 47.9** | **+1.4** |
| **YKW3** | **Yellowknife Ar** | **5.08** | **86** | Pn | **Pn** | **08 53 48.1** | **+1.4** |
| YKW3 | | | | Sn | **Sn** | **08 54 43.5** | **-1.9** |
| YKW3 | | | | Sg | **Sg** | **08 55 10.7** | **-2.8** |
| **YKB0** | **Yellowknife Ar** | **5.08** | **85** | Pn | **Pn** | **08 53 48.1** | **+1.4** |
| **YKB9** | **Yellowknife Ar** | **5.08** | **85** | Pn | **Pn** | **08 53 48.0** | **+1.2** |
| **YKB8** | **Yellowknife Ar** | **5.08** | **86** | Pn | **Pn** | **08 53 47.9** | **+1.1** |
| **YKB7** | **Yellowknife Ar** | **5.09** | **86** | Pn | **Pn** | **08 53 47.7** | **+0.9** |
| YKB7 | | | | Sn | **Sn** | **08 54 43.7** | **-1.8** |
| YKB7 | | | | Sg | **Sg** | **08 55 10.4** | **-3.3** |
| **YKB6** | **Yellowknife Ar** | **5.09** | **86** | Pn | **Pn** | **08 53 47.5** | **+0.7** |
| **YKA** | **Yellowknife Ar** | **5.09** | **86** | Pn | **Pn** | **08 53 46.2** | **-0.7** |
| | 1.6nm,0.3s,baz=271,slow=13,SNR=38 | | | | | | |
| YKA | | | | Sn | **Sn** | **08 54 43.2** | **-2.4** |
| | 3.3nm,0.3s,baz=282,slow=17,SNR=7.0 | | | | | | |
| YKA | | | | Lg | Lg | 08 55 05.6 | |
| | 4.4nm,0.3s,baz=271,slow=30,SNR=5.7 | | | | | | |
| **YKR8** | **Yellowknife Ar** | **5.09** | **86** | Pn | **Pn** | **08 53 48.2** | **+1.4** |
| YKR8 | | | | Sg | **Sg** | **08 55 11.7** | **-2.2** |
| **YKB4** | **Yellowknife Ar** | **5.09** | **87** | Pn | **Pn** | **08 53 47.9** | **+1.0** |
| **YKB3** | **Yellowknife Ar** | **5.10** | **87** | Pn | **Pn** | **08 53 48.0** | **+1.1** |
| YKB3 | | | | Sg | **Sg** | **08 55 11.2** | **-2.8** |
| **YKB2** | **Yellowknife Ar** | **5.10** | **87** | Pn | **Pn** | **08 53 48.1** | **+1.2** |
| YKB2 | | | | Sg | **Sg** | **08 55 11.5** | **-2.7** |
| **YKB1** | **Yellowknife Ar** | **5.10** | **87** | Pn | **Pn** | **08 53 48.0** | **+1.0** |
| **YKR9** | **Yellowknife Ar** | **5.11** | **86** | Pn | **Pn** | **08 53 47.8** | **+0.6** |
| **SMPN** | **Simpson Lake** | **5.64** | **356** | Pn | **Pn** | **08 53 55.0** | **+0.5** |
| **SKAG** | **Skagway** | **5.68** | **241** | *e*Pn | **Pn** | **08 53 54.5** | **-0.5** |
| | 20nm,1.6s | | | | | | |
| SKAG | | | | *e*Sg | **Sg** | **08 55 28.7** | **-4.2** |
| **HYT** | **Haines Junctio** | **5.94** | **258** | Pn | **Pn** | **08 53 58.5** | **-0.1** |
| HYT | | | | Sg | **Sg** | **08 55 34.4** | **-6.6** |
| **HYT** | **Haines Junctio** | **5.94** | **258** | Pn | **Pn** | **08 53 58.5** | **-0.1** |
| HYT | | | | Sg | **Sg** | **08 55 34.4** | **-6.6** |
| **YUK5** | **Granite Creek** | **5.99** | **261** | Pn | **Pn** | **08 53 59.0** | **-0.3** |
| YUK5 | | | | Sg | **Sg** | **08 55 34.2** | **-8.4** |
| **PLBC** | **Pleasant Camp** | **6.11** | **244** | Pn | **Pn** | **08 54 00.4** | **-0.4** |
| PLBC | | | | Sg | **Sg** | **08 55 38.7** | **-7.9** |
| **PLBC** | **Pleasant Camp** | **6.11** | **244** | Pn | **Pn** | **08 54 00.4** | **-0.4** |
| PLBC | | | | Sg | **Sg** | **08 55 38.7** | **-7.9** |
| **YUK4** | **Talbot Arm** | **6.28** | **264** | Pn | **Pn** | **08 54 01.6** | **-1.8** |
| **YUK6** | **Outpost Mounta** | **6.28** | **260** | Pn | **Pn** | **08 54 03.2** | **-0.3** |
| YUK6 | | | | Sg | **Sg** | **08 55 44.1** | **-7.9** |
| **YUK7** | **Dusty Glacier** | **6.34** | **256** | Pn | **Pn** | **08 54 04.4** | **+0.2** |
| **DAWY** | **Dawson** | **6.38** | **289** | Pn | **Pn** | **08 54 04.9** | **+0.3** |
| DAWY | | | | Pg | Pb | 08 54 26.1 | +4.5 |
| DAWY | | | | Sg | **Sg** | **08 55 49.4** | **-5.7** |
| **DAWY** | **Dawson** | **6.38** | **289** | *e*Pn | **Pn** | **08 54 04.0** | **-0.5** |
| | 39nm,1.0s | | | | | | |
| DAWY | | | | *e*S | Sg | 08 55 48.5 | -6.6 |
| **INK** | **Inuvik** | **6.60** | **334** | Pn | **Pn** | **08 54 06.2** | **-1.3** |
| | 2.8nm,0.3s,baz=143,slow=12,SNR=24 | | | | | | |
| INK | | | | Sn | **Sn** | **08 55 18.6** | **-4.0** |
| | 1.8nm,0.3s,baz=173,slow=7.3,SNR=5.5 | | | | | | |
| INK | | | | LR | LR | 08 57 07.0 | |
| | comp=Z,101nm,20.2s,baz=106,slow=42 | | | | | | |
| **INK** | **Inuvik** | **6.60** | **334** | Pn | **Pn** | **08 54 06.9** | **-0.6** |
| INK | | | | Sn | **Sn** | **08 55 17.0** | **-5.6** |
| **KUKN** | **Kugluktuk,NWT** | **6.84** | **36** | Pn | **Pn** | **08 54 11.9** | **+1.0** |
| KUKN | | | | Sn | **Sn** | **08 55 25.7** | **-3.0** |
| **YUK1** | **Sand Pete Hill** | **6.96** | **273** | Pn | **Pn** | **08 54 11.9** | **-0.7** |
| **YUK3** | **Moose Creek** | **7.00** | **270** | Pn | **Pn** | **08 54 12.3** | **-1.0** |
| **MANA** | **Manning** | **7.03** | **142** | Sn | **Sn** | **08 55 31.6** | **-1.9** |
| **BVCY** | **Beaver Creek** | **7.07** | **275** | Pn | **Pn** | **08 54 13.9** | **-0.1** |
| BVCY | | | | Sg | Sg | 08 56 09.7 | -7.4 |
| **YUK2** | **White River** | **7.18** | **270** | Pn | **Pn** | **08 54 14.3** | **-1.3** |
| **EGAK** | **Eagle** | **7.24** | **294** | *e*Pn | **Pn** | **08 54 16.9** | **+0.5** |
| | 15nm,9s | | | | | | |
| **WAPA** | **Wapiti River** | **8.14** | **153** | Pn | **Pn** | **08 54 27.3** | **-1.5** |
| **WAPA** | **Wapiti River** | **8.14** | **153** | Pn | **Pn** | **08 54 27.3** | **-1.5** |
| **GDLN** | **Gardenia Lake,** | **9.14** | **85** | Pn | **Pn** | **08 54 43.1** | **+0.7** |
| **ILAR** | **Eielson Array** | **9.68** | **292** | Pn | **Pn** | **08 54 48.8** | **-1.0** |
| | 0.1nm,0.3s,baz=101,slow=11,SNR=12 | | | | | | |
| ILAR | | | | Lg | Lg | 08 57 31.0 | |
| | 0.2nm,0.3s,baz=91,slow=28,SNR=8.7 | | | | | | |
| ILAR | | | | LR | LR | 08 58 45.3 | |
| | comp=Z,195nm,18.1s,baz=108,slow=39 | | | | | | |
| **MNB** | **Monnoet Dainar** | **11.13** | **156** | P | **Pn** | **08 55 10.1** | **+0.2** |
| **EDM** | **Edmonton** | **11.42** | **140** | P | **Pn** | **08 55 12.1** | **-1.6** |
| **EDM** | **Edmonton** | **11.42** | **140** | *e*Pn | **Pn** | **08 55 12.8** | **-0.9** |
| | 56nm,0.9s | | | | | | |
| **DOWB** | **Downie Slide** | **11.76** | **158** | P | **Pn** | **08 55 18.3** | **0.0** |
| **SLEB** | **Sale Mountain** | **12.16** | **157** | P | **Pn** | **08 55 22.5** | **-1.5** |
| **PRDA** | **Priddis** | **13.28** | **147** | P | **Pn** | **08 55 36.5** | **-2.6** |
| **PGC** | **Sidney** | **14.04** | **174** | Pn | **Pn** | **08 55 48.7** | **-0.8** |
| **KDAK** | **Kodiak Island** | **14.20** | **262** | LR | LR | 09 01 55.8 | |
| | comp=Z,202nm,18.3s,baz=73,slow=40 | | | | | | |
| **BULN** | **Bullion Camp,** | **14.38** | **61** | P | Pn | 08 55 50.9 | -3.0 |
| **FFC** | **Flin Flon** | **14.53** | **112** | *e*Pn | Pn | 08 55 52.1 | -4.0 |
| | 15nm,1.0s | | | | | | |
| FFC | | | | *e*Sn | Sn | 08 58 30.7 | -6.4 |
| **WALA** | **Waterton Lakes** | **15.05** | **149** | P | **Pn** | **08 55 59.0** | **-4.2** |
| **WALA** | **Waterton Lakes** | **15.05** | **149** | *e*Pn | **Pn** | **08 56 01.5** | **-1.7** |
| | 31nm,1.4s | | | | | | |
| **NEW** | **Newport** | **15.14** | **158** | Pn | **Pn** | **08 56 04.1** | **-0.3** |
| | 0.1nm,0.3s,baz=132,slow=4.3,SNR=3.7 | | | | | | |
| **YBMT** | **Yellow Bay** | **16.15** | **151** | *e*Pn | **Pn** | **08 56 15.5** | **-2.1** |
| | 3.2nm,0.8s | | | | | | |
| **RES** | **Resolute Bay** | **16.17** | **29** | Pn | **Pn** | **08 56 16.9** | **-0.6** |
| | 0.7nm,0.3s,baz=218,slow=10,SNR=10 | | | | | | |
| RES | | | | Sn | Sn | 08 59 04.6 | -12 |
| | 0.7nm,0.3s,baz=53,slow=3.0,SNR=6.5 | | | | | | |
| RES | | | | Lg | Lg | 09 00 56.9 | |
| | baz=67,slow=8.9,SNR=4.2 | | | | | | |
| RES | | | | LR | LR | 09 02 47.8 | |
| | comp=Z,151nm,19.1s,baz=353,slow=38 | | | | | | |
| **RES** | **Resolute Bay** | **16.17** | **29** | P | **Pn** | **08 56 15.5** | **-2.1** |
| **RES** | **Resolute Bay** | **16.17** | **29** | *e*Pn | **Pn** | **08 56 17.3** | **-0.3** |
| RES | | | | Sn | Sn | 08 59 04.6 | -12 |
| RES | | | | Lg | Lg | 09 00 56.9 | |
| **JTMT** | **Jette** | **16.20** | **152** | *e*Pn | **Pn** | **08 56 15.2** | **-3.0** |
| | 5.0nm,0.9s | | | | | | |
| **SWMT** | **Swartz Lake** | **16.48** | **151** | *e*Pn | **Pn** | **08 56 19.6** | **-2.3** |
| | 7.2nm,1.1s | | | | | | |
| **SLMT** | **Seeley Lake** | **16.85** | **150** | *e*Pn | **Pn** | **08 56 24.3** | **-2.3** |
| | 9.7nm,0.8s | | | | | | |
| **EGMT** | **Eagleton** | **17.09** | **141** | P | **Pn** | **08 56 27.1** | **-2.4** |
| | baz=17,SNR=13 | | | | | | |
| **EGMT** | **Eagleton** | **17.09** | **141** | *e*P | **Pn** | **08 56 26.3** | **-3.2** |
| | 20nm,0.7s | | | | | | |
| EGMT | | | | *e*S | **Sn** | **08 59 42.7** | **+3.2** |
| **MSO** | **Missoula** | **17.14** | **152** | P | **Pn** | **08 56 27.5** | **-2.6** |
| | baz=17 | | | | | | |
| **CHMT** | **Chamberlain Mo** | **17.21** | **150** | *e*P | **P** | **08 56 33.3** | **+0.6** |
| | 4.1nm,0.9s | | | | | | |
| **HRY** | **Holter Researc** | **17.74** | **147** | *e*P | **Pn** | **08 56 35.2** | **-2.4** |
| | 4.2nm,0.6s | | | | | | |
| **DGMT** | **Dagmar** | **18.50** | **130** | *e*P | **P** | **08 56 45.0** | **-1.7** |
| | 17nm,0.7s | | | | | | |
| **BOZ** | **Bozeman (W)** | **18.79** | **148** | *e*P | **Pn** | **08 56 52.5** | **+2.0** |
| | 4.7nm,0.8s | | | | | | |
| **A26A** | **Wade Farm, Ken** | **18.93** | **126** | P | **P** | **08 56 49.8** | **-1.6** |
| | baz=19,SNR=15 | | | | | | |
| A26A | | | | S | Sn | 09 00 11.8 | -12 |
| | baz=19 | | | | | | |
| **GCMT** | **Greycliff** | **19.16** | **144** | *e*P | **P** | **08 56 53.9** | **-0.2** |
| | 6.2nm,0.9s | | | | | | |
| **MCMT** | **McKenzie Canyo** | **19.28** | **152** | *e*P | **P** | **08 56 55.0** | **-0.5** |
| | 2.7nm,1.1s | | | | | | |
| **LAO** | **LASA Array** | **19.36** | **136** | P | **P** | **08 56 56.9** | **+0.7** |
| | baz=19 | | | | | | |
| **LAO** | **LASA Array** | **19.36** | **136** | *e*P | **Pn** | **08 56 57.4** | **+0.1** |
| | 12nm,0.8s | | | | | | |
| **A28A** | **Rude Farm, Bot** | **19.60** | **123** | P | **Pn** | **08 56 59.8** | **-0.3** |
| | baz=20,SNR=6.8 | | | | | | |
| **C26A** | **Wahner Farm, P** | **19.80** | **127** | P | **Pn** | **08 57 02.1** | **-0.4** |
| | baz=20,SNR=6.4 | | | | | | |
| **RLMT** | **Red Lodge** | **19.89** | **144** | P | **Pn** | **08 57 04.1** | **+0.4** |
| | baz=20 | | | | | | |
| **D25A** | **Fairfield** | **19.93** | **131** | P | **Pn** | **08 57 04.0** | **-0.1** |
| | baz=20 | | | | | | |
| **A29A** | **Manning Farm,** | **20.00** | **121** | P | Pn | 08 57 04.4 | -0.4 |
| | baz=20 | | | | | | |
| **C27A** | **Sayler Ranch,** | **20.11** | **127** | P | Pn | 08 57 06.1 | -0.1 |
| | baz=20,SNR=9.2 | | | | | | |
| **HLID** | **Hailey** | **20.17** | **156** | P | Pn | 08 57 06.6 | -0.4 |
| | baz=20 | | | | | | |
| **B29A** | **Wagenman Farm,** | **20.32** | **122** | P | Pn | 08 57 08.6 | +0.1 |
| | baz=20,SNR=6.7 | | | | | | |
| **ULM** | **Lac du Bonnet** | **20.34** | **114** | P | **P** | **08 57 07.0** | **+0.2** |
| | 4.7nm,0.6s,baz=318,slow=12,SNR=4.5 | | | | | | |
| ULM | | | | S | S | 09 00 42.5 | -12 |
| | 3.3nm,0.6s,baz=290,slow=14,SNR=3.2 | | | | | | |
| **D26A** | **Manning** | **20.35** | **129** | P | Pn | 08 57 08.5 | -0.5 |
| | baz=20 | | | | | | |
| **A30A** | **Hoffart Farm,** | **20.35** | **120** | P | Pn | 08 57 09.7 | +0.8 |
| | baz=20 | | | | | | |
| **E25A** | **Miller Ranch,** | **20.46** | **132** | P | Pn | 08 57 10.2 | -0.2 |
| | baz=20 | | | | | | |
| **C28A** | **Hausauer Farms** | **20.53** | **125** | P | Pn | 08 57 11.6 | +0.6 |
| | baz=20 | | | | | | |
| **D27A** | **Center** | **20.61** | **128** | P | Pn | 08 57 11.7 | -0.3 |
| | baz=20,SNR=6.5 | | | | | | |
| **B30A** | **Myrvik Farm, E** | **20.73** | **120** | P | Pn | 08 57 14.0 | +0.5 |
| | baz=21 | | | | | | |
| **E26A** | **Carlson Angus** | **20.82** | **130** | P | Pn | 08 57 14.7 | +0.2 |
| | baz=21 | | | | | | |
| **D28A** | **Regan** | **20.90** | **126** | P | Pn | 08 57 15.3 | 0.0 |
| | baz=21 | | | | | | |
| **F25A** | **Bowman** | **20.95** | **133** | P | Pn | 08 57 15.1 | -0.9 |
| | baz=21 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **20.98** | **174** | LR | LR | 09 06 07.5 | |
| | comp=Z,126nm,19.2s,baz=326,slow=39 | | | | | | |
| **SNOW** | **Snow King Moun** | **21.05** | **149** | *e*P | **P** | **08 57 17.9** | **+3.1** |
| | 3.9nm,0.8s | | | | | | |
| **E27A** | **Carson** | **21.18** | **129** | P | **P** | **08 57 18.2** | **+2.3** |
| | baz=21,SNR=9.5 | | | | | | |
| **C30A** | **Mose, Pekin** | **21.28** | **122** | P | **P** | **08 57 18.6** | **+1.7** |
| | baz=21 | | | | | | |
| **F26A** | **Lodgepole** | **21.28** | **131** | P | **P** | **08 57 19.3** | **+2.3** |
| | baz=21 | | | | | | |
| **E28A** | **Huff** | **21.37** | **127** | P | **P** | **08 57 20.1** | **+2.2** |
| | baz=21 | | | | | | |
| **F27A** | **Lemmon** | **21.49** | **130** | P | **P** | **08 57 21.3** | **+2.0** |
| | baz=21,SNR=6.8 | | | | | | |
| **C31A** | **Landman Farms,** | **21.50** | **121** | P | **P** | **08 57 21.5** | **+2.2** |
| | baz=21 | | | | | | |
| **D30A** | **Buchanan** | **21.66** | **123** | P | **P** | **08 57 23.9** | **+3.0** |
| | baz=22 | | | | | | |
| **E29A** | **Napoleon** | **21.77** | **125** | P | **P** | **08 57 24.0** | **+1.8** |
| | baz=22 | | | | | | |
| **G26A** | **Maurine** | **21.79** | **132** | P | **P** | **08 57 24.4** | **+1.9** |
| | baz=22,SNR=13 | | | | | | |
| **AGMN** | **Agassiz Nation** | **21.85** | **117** | *e*P | **P** | **08 57 26.0** | **+2.9** |
| | 3.9nm,0.3s | | | | | | |
| **F28A** | **McLaughlin** | **21.95** | **128** | P | **P** | **08 57 25.2** | **+1.1** |
| | baz=22,SNR=6.6 | | | | | | |
| **G27A** | **Dupree** | **21.95** | **131** | P | **P** | **08 57 26.1** | **+1.9** |
| | baz=22,SNR=11 | | | | | | |
| **RSSD** | **Black Hills** | **22.35** | **136** | *e*P | **P** | **08 57 27.1** | **-1.6** |
| | 8.0nm,0.9s | | | | | | |
| **I25A** | **Rochford** | **22.54** | **135** | P | **P** | **08 57 32.1** | **+1.4** |
| | baz=22 | | | | | | |
| **H27A** | **Howes** | **22.55** | **132** | P | **P** | **08 57 32.5** | **+1.9** |
| | baz=22 | | | | | | |
| **G28A** | **Parade** | **22.57** | **130** | P | **P** | **08 57 33.4** | **+2.5** |
| | baz=22,SNR=6.7 | | | | | | |
| **K22A** | **Casper** | **22.93** | **142** | P | **P** | **08 57 36.4** | **+1.7** |
| | baz=23,SNR=6.6 | | | | | | |
| **K22A** | **Casper** | **22.93** | **142** | *e*P | **P** | **08 57 36.5** | **+1.7** |
| | 14nm,0.8s | | | | | | |
| **H29A** | **Onida** | **23.21** | **129** | P | **P** | **08 57 38.7** | **+1.2** |
| | baz=23 | | | | | | |
| **NVAR** | **Mina Array Bea** | **24.62** | **166** | P | **P** | **08 57 52.4** | **+1.3** |
| | 0.9nm,0.7s,baz=339,slow=9.1,SNR=6.0 | | | | | | |
| **FRB** | **Frobisher Bay** | **25.05** | **62** | LR | LR | 09 07 35.2 | |
| | comp=Z,131nm,19.9s,baz=354,slow=36 | | | | | | |
| **SRU** | **San Rafael** | **25.25** | **152** | *e*P | **P** | **08 57 57.9** | **+1.1** |
| | 5.0nm,0.9s | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **29.59** | **164** | LR | LR | 09 11 37.4 | |
| | comp=Z,95nm,21.2s,baz=254,slow=39 | | | | | | |
| **SCHQ** | **Schefferville** | **30.47** | **77** | LR | LR | 09 11 01.0 | |
| | comp=Z,213nm,18.2s,baz=251,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **36.22** | **146** | P | **P** | **08 59 35.5** | **+2.0** |
| | 0.3nm,0.8s,baz=355,slow=6.3,SNR=4.1 | | | | | | |
| TXAR | | | | LR | LR | 09 15 49.7 | |
| | comp=Z,282nm,19.1s,baz=0.0,slow=39 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **37.58** | **12** | LR | LR | 09 17 21.1 | |
| | comp=Z,41nm,18.1s,baz=15,slow=40 | | | | | | |
| **FINES** | **FINESS Array B** | **54.41** | **16** | P | **P** | **09 01 56.1** | **-1.1** |
| | 2.7nm,1.0s,baz=352,slow=8.4,SNR=3.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.35** | **340** | P | **P** | **09 02 46.3** | **+0.4** |
| | 0.6nm,0.5s,baz=350,slow=7.6,SNR=2.9 | | | | | | |
| **GERES** | **GERESS Array B** | **64.28** | **29** | P | **P** | **09 03 06.9** | **+1.3** |
| | 0.4nm,0.5s,baz=328,slow=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LZH | comp=Z,920nm,1.3s | | | | SME | | | | |
| LZH | comp=Z,530nm,1.2s | | | | LN | | | | |
| LZH | comp=Z,3μm,4.4s | | | | LE | | | | |
| LZH | comp=Z,950nm,4.2s | | | | LZ | | | | |
| **LZH** | comp=Z,2μm,5.2s **Lanzhou** | **9.18** | **286** | | P | **Pn** | | **09 01 07.9** | **+0.5** |
| **LZH** | **Lanzhou** | **9.18** | **286** | | P | **Pn** | | **09 01 07.9** | **+0.5** |
| **CD2** | **Chengdu** | **9.79** | **255** | | P | **Pn** | | **09 01 15.4** | **-0.2** |
| CD2 | | | | | S | **Sn** | | **09 03 05.9** | **+0.3** |
| CD2 | comp=Z,110nm,0.6s | | | | PMZ | | | | |
| CD2 | comp=Z,190nm,4.0s | | | | PMZ | | | | |
| CD2 | comp=Z,5μm,5.3s | | | | LN | | | | |
| CD2 | comp=Z,2μm,7.2s | | | | LZ | | | | |
| **GYA** | **Guiyang** | **10.26** | **225** | ⇓ | *i* P | | Pn | 09 01 26.9 | +4.7 |
| GYA | | | | | S | | **Sn** | **09 03 12.8** | **-4.6** |
| GYA | comp=Z,20nm,0.8s | | | | PMZ | | | | |
| GYA | comp=Z,120nm,4.3s | | | | PMZ | | | | |
| GYA | comp=Z,2μm,13.4s | | | | LN | | | | |
| GYA | comp=Z,2μm,13.1s | | | | LE | | | | |
| GYA | comp=Z,1μm,13.4s | | | | LZ | | | | |
| **SNY** | **Shenyang** | **10.47** | **39** | ⇓ | P | | Pn | 09 01 30.5 | +5.7 |
| SNY | comp=Z,16nm,0.6s | | | | PMZ | | | | |
| SNY | comp=Z,120nm,3.5s | | | | PMZ | | | | |
| SNY | comp=Z,1μm,20.4s | | | | LN | | | | |
| SNY | comp=Z,1μm,15.9s | | | | LE | | | | |
| SNY | comp=Z,650nm,10.8s | | | | LZ | | | | |
| **GZH** | **Guangzhou** | **10.95** | **187** | | P | | **Pn** | **09 01 28.9** | **-2.5** |
| GZH | | | | | S | | Sn | 09 03 28.3 | -5.6 |
| GZH | comp=N,2μm,7.4s | | | | LR | | LR | | |
| GZH | comp=E,4μm,7.7s | | | | LR | | LR | | |
| **KSAR** | **Wonju Array Be** | **11.21** | **68** | | P | | **Pn** | **09 01 37.0** | **+2.0** |
| **KSAR** | **Wonju Array Be** | **11.21** | **68** | | Pn | | **Pn** | **09 01 37.0** | **+2.0** |
| KSAR | | | | | Lg | | Lg | 09 04 50.2 | |
| **KSRS** | **Korea Array** | **11.24** | **68** | | Pn | | **Pn** | **09 01 37.0** | **+1.5** |
| KSRS | comp=E,2.9nm,0.3s,baz=257,slow=13,SNR=18 | | | | Lg | | Lg | 09 04 50.2 | |
| **KSRS** | comp=E,1.6nm,0.3s,baz=249,slow=26,SNR=6.4 **Korea Array** | **11.24** | **68** | | P | | **Pn** | **09 01 37.0** | **+1.5** |
| KSRS | comp=Z,3.0nm,0.3s | | | | pmax | | pmax | | |
| **CN2** | **Changchun** | **12.84** | **37** | | *e*P | | Pn | 09 02 03.8 | +6.6 |
| CN2 | | | | | *e*S | | Sn | 09 04 27.8 | +7.7 |
| CN2 | comp=Z,10.0nm,0.6s | | | | PMZ | | | | |
| CN2 | comp=Z,100nm,3.0s | | | | PMZ | | | | |
| CN2 | comp=Z,900nm,12.0s | | | | LN | | | | |
| CN2 | comp=Z,900nm,12.0s | | | | LE | | | | |
| CN2 | comp=Z,500nm,13.0s | | | | LZ | | | | |
| **GTA** | **Gaotai** | **13.14** | **299** | ⇑ | P | | **Pn** | **09 02 01.6** | **+0.1** |
| GTA | | | | | pP | | pP | 09 02 05.4 | |
| GTA | | | | | sP | | sP | 09 02 08.1 | |
| GTA | | | | | S | | **Sn** | **09 04 27.3** | **-0.5** |
| GTA | | | | | sS | | sS | 09 04 32.3 | |
| GTA | | | | | SS | | **SnSn** | **09 04 42.0** | **+2.1** |
| GTA | comp=Z,7.0nm,0.9s | | | | PMZ | | | | |
| GTA | comp=Z,54nm,5.0s | | | | PMZ | | | | |
| GTA | comp=Z,2μm,13.3s | | | | LN | | | | |
| GTA | comp=Z,1μm,12.8s | | | | LE | | | | |
| **JNU** | **Nakatsue** | **13.48** | **89** | | LR | | LR | 09 07 22.4 | |
| **KMI** | comp=Z,242nm,20.9s,baz=298,slow=38 **Kunming** | **13.69** | **233** | | P | | P | 09 02 13.1 | -4.8 |
| KMI | | | | | pP | | Pn | 09 02 18.9 | +10 |
| KMI | | | | | S | | **Sn** | **09 04 45.5** | **+4.2** |
| KMI | comp=Z,11nm,0.9s | | | | PMZ | | | | |
| KMI | comp=Z,140nm,3.8s | | | | PMZ | | | | |
| KMI | comp=Z,3μm,14.3s | | | | LN | | | | |
| KMI | comp=Z,2μm,13.1s | | | | LE | | | | |
| **ULN** | **Ulaanbaatar** | **15.01** | **340** | | *e*P | | **Pn** | **09 02 26.1** | **-0.9** |
| ULN | comp=Z,9.0nm,0.9s | | | | pmax | | pmax | | |
| **ULN** | **Ulaanbaatar** | **15.01** | **340** | | *e*P | | **Pn** | **09 02 26.1** | **-0.9** |
| **SONM** | comp=Z,8.5nm,0.9s **Songino Array** | **15.18** | **338** | | Pn | | **Pn** | **09 02 30.0** | **+0.8** |
| SONM | comp=Z,0.3nm,0.3s,baz=153,slow=13,SNR=4.3 | | | | Lg | | Lg | 09 06 47.3 | |
| SONM | comp=Z,0.4nm,0.3s,baz=172,slow=22,SNR=7.7 | | | | LR | | LR | 09 08 26.2 | |
| **QIZ** | comp=Z,232nm,18.9s,baz=155,slow=38 **Qiongzhong** | **15.54** | **198** | | P | | **P** | **09 02 36.8** | **-1.5** |
| QIZ | | | | | S | | **Sn** | **09 05 30.3** | **+4.0** |
| QIZ | comp=Z,570nm,12.7s | | | | LN | | | | |
| QIZ | comp=Z,720nm,14.6s | | | | LE | | | | |
| QIZ | comp=Z,690nm,11.5s | | | | LZ | | | | |
| **HIA** | **Hailar** | **15.70** | **12** | | *e*P | | **P** | **09 02 38.0** | **-1.9** |
| HIA | comp=Z,19nm,1.1s | | | | pmax | | pmax | | |
| **HIA** | **Hailar** | **15.70** | **12** | | *e*Pn | | **P** | **09 02 38.0** | **-1.9** |
| **USRK** | comp=Z,19nm,1.1s **Ussuriysk Ar.** | **16.78** | **48** | | Pn | | **P** | **09 02 52.4** | **+0.5** |
| USRK | comp=Z,0.1nm,0.3s,baz=233,slow=14,SNR=4.1 | | | | Lg | | Lg | 09 07 51.8 | |
| **ZAK** | comp=Z,0.1nm,0.3s,baz=230,slow=29,SNR=6.4 **Zakamensk** | **18.41** | **336** | | *e*P | | **P** | **09 03 10.7** | **+0.7** |
| ZAK | comp=Z,10.0nm,1.2s | | | | pmax | | pmax | | |
| **MJAR** | **Matsushiro Arr** | **19.31** | **76** | | P | | **Pn** | **09 03 22.1** | **+1.2** |
| MJAR | comp=Z,0.3nm,0.3s,baz=276,slow=13,SNR=10 | | | | LR | | LR | 09 10 21.2 | |
| **TLY** | comp=Z,170nm,20.3s,baz=275,slow=35 **Talaya** | **19.42** | **339** | | Lg | | Lg | 09 08 59.5 | |
| **TLY** | comp=Z,0.0nm,0.3s,baz=226,slow=21,SNR=3.3 **Talaya** | **19.42** | **339** | *i* | P | | Pn | 09 03 26.8 | +4.7 |
| TLY | comp=Z,9.0nm,0.9s | | | | pmax | | pmax | | |
| TLY | comp=Z,126nm,11.0s | | | | MLR | | MLR | | |
| **KLR** | **Kul'dur** | **19.75** | **35** | | *e*P | | **P** | **09 03 24.0** | **-0.6** |
| KLR | comp=Z,2μm,11.5s | | | | MLR | | MLR | | |
| **LSA** | **Lhasa** | **20.49** | **264** | | P | | Pn | 09 03 35.1 | -0.5 |
| LSA | comp=Z,20nm,0.9s | | | | PMZ | | | | |
| **LSA** | **Lhasa** | **20.49** | **264** | | *e*P | | **P** | **09 03 33.4** | **+0.1** |
| LSA | comp=Z,33nm,0.9s | | | | pmax | | pmax | | |
| **LSA** | **Lhasa** | **20.49** | **264** | | *e*P | | **P** | **09 03 33.4** | **+0.1** |
| **CHTO** | comp=Z,34nm,0.9s **Chiang Mai** | **20.68** | **227** | | *e*P | | **P** | **09 03 34.6** | **-0.3** |
| CHTO | comp=Z,11nm,0.8s | | | | pmax | | pmax | | |
| **CHTO** | **Chiang Mai** | **20.68** | **227** | | *e*P | | **P** | **09 03 34.6** | **-0.3** |
| **HABR** | comp=Z,11nm,0.8s **Khabarovsk** | **20.93** | **40** | | *e*P | | **P** | **09 03 36.3** | **-1.1** |
| HABR | | | | | *e**PP | | pP | 09 03 45.5 | +5.2 |
| HABR | | | | | *e* | | | 09 03 55.7 | |
| HABR | | | | | *e*S | | **S** | **09 07 28.3** | **-2.3** |
| HABR | | | | | *e**SS | | Sn | 09 07 43.3 | +7.0 |
| HABR | | | | | *e*SS | | **SnSn** | **09 07 52.2** | **+1.0** |
| HABR | | | | | *e* | | | 09 15 00.7 | |
| HABR | comp=Z,91nm,2.5s | | | | pmax | | pmax | | |
| HABR | comp=Z,260nm,17.0s | | | | MLR | | MLR | | |
| **CMAR** | **Chiang Mai Arr** | **20.95** | **226** | | P | | **P** | **09 03 36.4** | **-1.5** |
| CMAR | comp=Z,1.5nm,0.3s,baz=32,slow=8.9,SNR=9.8 | | | | pmax | | pmax | | |
| **CMAR** | **Chiang Mai Arr** | **20.95** | **226** | | P | | **P** | **09 03 36.4** | **-1.5** |
| **HVS** | comp=Z,2.0nm,0.4s **Khovu-Aksy** | **22.96** | **325** | ⇓ | *e*P | | P | 09 04 04.1 | +4.8 |
| HVS | comp=Z,24nm,0.9s | | | | pmax | | pmax | | |
| HVS | comp=Z,3μm,16.0s | | | | MLR | | MLR | | |
| **WMQ** | **Urumqi** | **23.14** | **303** | | P | | P | 09 04 10.6 | +9.5 |
| WMQ | comp=Z,11nm,1.0s | | | | pmax | | pmax | | |
| **BOD** | **Bodaibo** | **23.83** | **359** | | *e*P | | **P** | **09 04 08.0** | **+0.3** |
| BOD | comp=Z,4.0nm,1.0s | | | | pmax | | pmax | | |
| **TAPN** | **Taplejung** | **24.14** | **261** | | *e*P | | **P** | **09 04 12.4** | **+1.1** |
| **ODAN** | comp=Z,26nm,0.7s **Odare** | **24.60** | **261** | | *e*P | | **P** | **09 04 16.8** | **+1.4** |
| **RAMN** | comp=Z,26nm,0.6s **Ramite** | **25.21** | **261** | | *e*P | | **P** | **09 04 22.6** | **+1.7** |
| **GUN** | comp=Z,21nm,0.9s **Gumba** | **25.44** | **264** | | *e*P | | **P** | **09 04 23.3** | **+0.1** |
| **PKI** | comp=Z,36nm,0.8s **Pulchoki** | **25.95** | **264** | | *e*P | | **P** | **09 04 28.1** | **+0.3** |
| **KKN** | comp=Z,21nm,0.6s **Kakani** | **25.98** | **264** | | *e*P | | **P** | **09 04 27.9** | **0.0** |
| **DMN** | comp=Z,34nm,0.7s **Daman** | **26.19** | **264** | | *e*P | | **P** | **09 04 30.2** | **+0.3** |
| **GKN** | comp=Z,35nm,0.8s **Gorkha** | **26.44** | **265** | | *e*P | | **P** | **09 04 32.0** | **0.0** |
| **MKAR** | comp=Z,45nm,0.9s **Makanchi Array** | **27.62** | **307** | | P | | **P** | **09 04 43.2** | **+0.9** |
| MKAR | comp=Z,1.2nm,0.6s,baz=98,slow=13,SNR=4.1 | | | | pmax | | pmax | | |
| **MKAR** | comp=Z,1.0nm,0.6s **Makanchi Array** | **27.62** | **307** | | P | | **P** | **09 04 43.2** | **+0.9** |
| MKAR | comp=Z,1.0nm,0.6s | | | | pmax | | pmax | | |
| **ZALV** | **Zalesovo Beam** | **29.01** | **323** | | P | | **P** | **09 04 54.7** | **+0.2** |
| ZALV | comp=Z,5.8nm,0.8s,baz=122,slow=8.9,SNR=13 | | | | pmax | | pmax | | |
| **ZALV** | **Zalesovo Beam** | **29.01** | **323** | | P | | **P** | **09 04 54.7** | **+0.2** |
| ZALV | comp=Z,6.0nm,0.8s | | | | pmax | | pmax | | |
| **YAK** | **Yakutsk** | **29.62** | **14** | | LR | | LR | 09 17 26.4 | |
| **NVS** | comp=Z,106nm,19.5s,baz=214,slow=38 **Novosibirsk** | **30.26** | **323** | | *e*P | | P | 09 05 12.7 | +7.1 |
| **KURK** | **Kurchatov** | **31.10** | **313** | | P | | **P** | **09 05 13.5** | **+0.4** |
| KURK | comp=Z,1.0nm,0.3s | | | | pmax | | pmax | | |
| **KURK** | **Kurchatov** | **31.10** | **313** | | *e*P | | **P** | **09 05 13.3** | **+0.2** |
| **KURBB** | comp=Z,12nm,0.8s **Kurchatov Arra** | **31.13** | **313** | | P | | **P** | **09 05 13.5** | **+0.2** |
| **KSH** | comp=Z,0.6nm,0.2s,baz=112,slow=9.8,SNR=5.7 **Kashi** | **31.38** | **292** | | *e*P | | P | 09 05 20.3 | +4.5 |
| KSH | | | | | *es*P | | sP | 09 05 26.4 | +6.3 |
| KSH | | | | | *e*PP | | **PP** | **09 06 24.4** | **-2.2** |
| KSH | | | | | S | | **S** | **09 10 25.3** | **+2.0** |
| KSH | comp=Z,120nm,6.2s | | | | PMZ | | | | |
| KSH | comp=Z,280nm,8.5s | | | | LN | | | | |
| KSH | comp=Z,190nm,8.4s | | | | LE | | | | |
| KSH | comp=Z,200nm,13.8s | | | | LZ | | | | |
| **KSH** | **Kashi** | **31.38** | **292** | | *e*P | | P | 09 05 20.3 | +4.5 |
| KSH | | | | | *es*P | | sP | 09 05 26.4 | +6.3 |
| KSH | | | | | *e*PP | | **PP** | **09 06 24.4** | **-2.2** |
| KSH | | | | | S | | **S** | **09 10 25.3** | **+2.0** |
| **TKM2** | **Tokmak 2** | **31.69** | **298** | | *e*P | | **P** | **09 05 19.2** | **+0.6** |
| TKM2 | comp=Z,2.0nm,0.7s | | | | pmax | | pmax | | |
| **TKM2** | **Tokmak 2** | **31.69** | **298** | | *e*P | | **P** | **09 05 19.2** | **+0.6** |
| **PSI** | comp=Z,2.2nm,0.7s **Prapat** | **34.38** | **209** | | P | | **P** | **09 05 41.3** | **-0.9** |
| **PSI** | comp=Z,4.8nm,0.4s,baz=78,slow=0.5,SNR=4.3 **Prapat** | **34.38** | **209** | | P | | **P** | **09 05 41.3** | **-0.9** |
| PSI | comp=Z,5.0nm,0.4s | | | | pmax | | pmax | | |
| **PET** | **Petropavlovsk** | **36.37** | **45** | | *e*P | | **P** | **09 06 00.0** | **+1.2** |
| PET | | | | | *e*S | | **S** | **09 11 38.7** | **-1.2** |
| PET | comp=Z,6.0nm,0.4s | | | | pmax | | pmax | | |
| PET | comp=Z,200nm,14.0s | | | | MLR | | MLR | | |
| **BRVK** | **Borovoye** | **36.71** | **315** | | P | | P | 09 06 04.0 | +2.2 |
| BRVK | comp=Z,3.0nm,0.7s | | | | pmax | | pmax | | |
| BRVK | comp=Z,98nm,15.0s | | | | MLR | | MLR | | |
| **SEY** | **Seymchan** | **37.26** | **27** | | P | | **P** | **09 06 06.5** | **+0.2** |
| **SEY** | comp=Z,5.1nm,1.0s,baz=175,slow=4.2,SNR=4.4 **Seymchan** | **37.26** | **27** | ⇓ | *e*P | | **P** | **09 06 07.0** | **+0.8** |
| **ARU** | **Arti** | **43.98** | **318** | | P | | P | 09 07 05.3 | +3.5 |
| ARU | | | | | | | | 09 08 45.6 | |
| ARU | | | | | S | | S | 09 13 39.7 | +6.2 |
| ARU | | | | | SS | | **ScS** | **09 17 00.5** | **-0.1** |
| **GEYT** | **Alibeck** | **45.41** | **292** | | P | | **P** | **09 07 11.8** | **-1.8** |
| GEYT | comp=Z,1.7nm,0.3s,baz=283,slow=5.6,SNR=8.8 | | | | LR | | LR | 09 26 50.4 | |
| **VRH** | comp=Z,102nm,20.3s,baz=55,slow=37 **Novokhopyorsk** | **54.18** | **312** | | *e*P | | **P** | **09 08 22.1** | **+2.0** |
| VRH | comp=Z,10.0nm,0.7s | | | | pmax | | pmax | | |
| VRH | comp=N,5.0nm,0.6s | | | | pmax | | pmax | | |
| VRH | comp=E,9.0nm,0.7s | | | | pmax | | pmax | | |
| **KBZ** | **Khabaz** | **55.18** | **303** | | P | | **P** | **09 08 27.6** | **+0.2** |
| KBZ | comp=E,1.8nm,0.7s,baz=110,slow=15,SNR=3.3 | | | | LR | | LR | 09 34 06.1 | |
| **KBZ** | comp=E,88nm,18.5s,baz=86,slow=38 **Khabaz** | **55.18** | **303** | | P | | **P** | **09 08 27.7** | **+0.2** |
| KBZ | comp=Z,2.0nm,0.7s | | | | pmax | | pmax | | |
| KBZ | comp=Z,88nm,18.5s | | | | MLR | | MLR | | |
| **KIV** | **Kislovodsk** | **55.27** | **303** | | *e*P | | **P** | **09 08 29.0** | **+0.8** |
| KIV | comp=Z,11nm,0.8s | | | | pmax | | pmax | | |
| KIV | comp=Z,73nm,17.0s | | | | MLR | | MLR | | |
| **LPSR** | **Galich'ya Gora** | **55.58** | **314** | | *e*P | | P | 09 08 32.6 | +2.4 |
| LPSR | comp=Z,6.0nm,0.6s | | | | pmax | | pmax | | |
| LPSR | comp=N,2.0nm,0.5s | | | | pmax | | pmax | | |
| LPSR | comp=E,2.0nm,0.5s | | | | pmax | | pmax | | |
| **VSR** | **Storozhevoye** | **55.75** | **313** | | *e*P | | P | 09 08 35.6 | +4.2 |
| VSR | comp=N,10.0nm,0.8s | | | | pmax | | pmax | | |
| VSR | comp=E,9.0nm,0.8s | | | | pmax | | pmax | | |
| VSR | comp=Z,9.0nm,0.8s | | | | pmax | | pmax | | |
| **WRAB** | **Tennant Creek** | **56.79** | **158** | *ce* | P | | **P** | **09 08 39.5** | **+0.3** |
| WRAB | comp=Z,19nm,1.1s | | | | pmax | | pmax | | |
| **WRA** | **Warramunga Arr** | **56.80** | **158** | | P | | **P** | **09 08 39.2** | **0.0** |
| WRA | comp=Z,2.4nm,0.5s,baz=346,slow=7.9,SNR=20 | | | | pmax | | pmax | | |
| **WRA** | **Warramunga Arr** | **56.80** | **158** | | P | | **P** | **09 08 39.2** | **0.0** |
| **ARCES** | comp=Z,2.0nm,0.5s **ARCESS Array B** | **58.34** | **336** | | P | | **P** | **09 08 50.0** | **+0.5** |
| ARCES | comp=Z,2.5nm,0.6s,baz=65,slow=9.5,SNR=8.8 | | | | pmax | | pmax | | |
| **ARCES** | **ARCESS Array B** | **58.34** | **336** | | P | | **P** | **09 08 50.1** | **+0.5** |
| ARCES | comp=Z,3.0nm,0.6s | | | | pmax | | pmax | | |
| **ANN** | **Anapa** | **58.62** | **306** | | *e*P | | P | **09 08 53.3** | **+1.5** |
| ANN | | | | | *e**PP | | pP | 09 09 03.5 | +8.5 |
| ANN | | | | | *e* | | | 09 09 41.9 | |
| ANN | | | | | *e*S | | **S** | **09 16 57.7** | **+1.7** |
| ANN | | | | | *e*SS | | **SS** | **09 20 50.5** | **+2.2** |
| ANN | comp=Z,43nm,1.3s | | | | pmax | | pmax | | |
| **SPITS** | **Spitsbergen Ar** | **58.69** | **346** | | P | | **P** | **09 08 52.6** | **+0.7** |
| **SPITS** | comp=Z,9.4nm,0.9s,baz=105,slow=11,SNR=3.1 **Spitsbergen Ar** | **58.69** | **346** | | P | | **P** | **09 08 52.6** | **+0.7** |
| SPITS | comp=Z,9.0nm,0.9s | | | | pmax | | pmax | | |
| **FINES** | **FINESS Array B** | **60.17** | **326** | | P | | **P** | **09 09 01.9** | **-0.3** |
| **FINES** | comp=Z,3.7nm,0.7s,baz=90,slow=7.1,SNR=20 **FINESS Array B** | **60.17** | **326** | | P | | **P** | **09 09 02.0** | **-0.3** |
| FINES | | | | | pmax | | pmax | | |
| **ASAR** | comp=Z,4.0nm,0.7s **Alice Springs** | **60.17** | **160** | | P | | **P** | **09 09 02.8** | **0.0** |
| **ASAR** | comp=Z,3.0nm,0.6s,baz=347,slow=6.8,SNR=40 **Alice Springs** | **60.17** | **160** | | P | | **P** | **09 09 02.8** | **0.0** |
| ASAR | comp=Z,3.0nm,0.6s | | | | pmax | | pmax | | |
| **AKASG** | **Malin Array Be** | **61.91** | **314** | | P | | **P** | **09 09 12.9** | **-1.4** |
| **KIEV** | comp=Z,0.4nm,0.4s,baz=66,slow=6.9,SNR=3.3 **Kiev** | **61.93** | **314** | | P | | P | 09 09 19.0 | +4.6 |
| KIEV | | | | | pmax | | pmax | | |
| KIEV | comp=Z,6.0nm,1.0s | | | | MLR | | MLR | | |
| **COLA** | comp=Z,83nm,15.0s **College** | **62.76** | **28** | ⇑ | *e*P | | **P** | **09 09 20.3** | **+0.6** |
| COLA | comp=Z,4.0nm,0.8s | | | | pmax | | pmax | | |
| **BRTR** | **Keskin Array B** | **63.04** | **301** | | P | | **P** | **09 09 21.9** | **-0.4** |
| BRTR | comp=Z,2.9nm,0.9s,baz=91,slow=5.2,SNR=13 | | | | pmax | | pmax | | |
| **BRTR** | **Keskin Array B** | **63.04** | **301** | | P | | **P** | **09 09 21.9** | **-0.4** |
| **ILAR** | comp=Z,3.0nm,0.9s **Eielson Array** | **63.18** | **28** | | P | | **P** | **09 09 21.3** | **-1.3** |
| **MLR** | comp=Z,0.4nm,0.7s,baz=290,slow=4.8,SNR=7.5 **Muntele Rosu** | **65.93** | **310** | | P | | **P** | **09 09 39.4** | **-1.7** |
| **HFS** | comp=Z,0.3nm,0.5s,baz=301,slow=9.9,SNR=3.8 **Hagfors** | **66.29** | **328** | | P | | **P** | **09 09 41.8** | **-1.1** |
| HFS | comp=Z,3.4nm,0.7s,baz=81,slow=9.5,SNR=11 | | | | pmax | | pmax | | |
| **HFS** | comp=Z,3.0nm,0.7s **Hagfors** | **66.29** | **328** | | P | | **P** | **09 09 41.8** | **-1.1** |
| **NB2** | **NORSAR Subarra** | **66.94** | **329** | | P | | **P** | **09 09 46.6** | **-0.5** |
| **NOA** | comp=Z,3.6nm,0.8s,baz=60,slow=6.2 **NORSAR Array B** | **66.94** | **329** | | P | | **P** | **09 09 46.4** | **-0.8** |
| NOA | comp=Z,3.7nm,0.9s,baz=60,slow=6.2,SNR=3.9 | | | | LR | | LR | 09 40 56.5 | |
| **NOA** | comp=Z,97nm,19.3s,baz=75,slow=38 **NORSAR Array B** | **66.94** | **329** | | P | | **P** | **09 09 46.4** | **-0.8** |
| NOA | comp=Z,4.0nm,0.9s | | | | pmax | | pmax | | |
| NOA | comp=Z,97nm,19.3s | | | | MLR | | MLR | | |
| **CLL** | **Collm** | **70.91** | **319** | | *e*P | | P | 09 10 15.0 | +3.1 |
| **GERES** | **GERESS Array B** | **71.78** | **317** | | P | | **P** | **09 10 17.1** | **-0.3** |
| GERES | comp=Z,0.7nm,0.8s,baz=64,slow=6.1,SNR=4.4 **GERESS Array B** | **71.78** | **317** | | P | | **P** | **09 10 17.1** | **-0.3** |
| **SUMG** | comp=Z,1.0nm,0.8s **Summit** | **72.10** | **352** | | *i* P | | P | 09 10 24.4 | +5.2 |
| SUMG | | | | | pmax | | pmax | | |
| **SUMG** | comp=Z,8.0nm,0.6s **Summit** | **72.10** | **352** | | *i* P | | P | 09 10 24.4 | +5.2 |
| **YKA** | comp=Z,8.4nm,0.6s **Yellowknife Ar** | **76.01** | **21** | | P | | **P** | **09 10 42.1** | **+0.4** |
| **YKA** | comp=Z,2.4nm,0.6s,baz=320,slow=5.0,SNR=5.4 **Yellowknife Ar** | **76.01** | **21** | | P | | **P** | **09 10 42.1** | **+0.4** |
| YKA | | | | | pmax | | pmax | | |
| **ESDC** | comp=Z,2.0nm,0.6s **Sonseca Array** | **87.37** | **317** | | P | | **P** | **09 11 43.0** | **+0.8** |
| **ULM** | comp=Z,0.7nm,0.6s,baz=36,slow=4.6,SNR=6.6 **Lac du Bonnet** | **91.84** | **19** | | LR | | LR | 09 56 48.7 | |
| | comp=Z,58nm,20.0s,baz=16,slow=38 | | | | | | | | |

*CSEM* ***24*** *09:02:30.9, 39.˚53N×29.˚70W, h10km, ML3.4, After PDA*
**PDA 24 09:02:30.9±0.7, 39.˚53N×29.˚70W, h10km, MD3.6, ML3.4,**
**Error ellipse: s-maj=5.3km s-min=2.5km az=46.0,**
**Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **H07N1** | **FLORES T-PHASE** | **1.11** | **279** | | *e*P | | Pb | 09 02 47.4 | -4.8 |
| **PCED** | **Cedros** | **1.19** | **139** | | *e*P | | Pb | 09 02 49.0 | -4.5 |
| PCED | | | | | *e*S | | Sb | 09 03 02.3 | -6.7 |
| PCED | 160nm,0.4s | | | | A | | A | 09 03 05.4 | |
| **PCED** | **Cedros** | **1.19** | **139** | | *e*P | | Pb | 09 02 49.0 | -4.5 |
| PCED | | | | | *e*S | | Sb | 09 03 02.3 | -6.7 |
| **CALA** | **Caldeira** | **1.23** | **140** | | *e*P | | Pn | 09 02 49.6 | -4.6 |
| CALA | | | | | *e*S | | Sb | 09 03 03.4 | -6.8 |
| **CALA** | **Caldeira** | **1.23** | **140** | | *e*P | | Pn | 09 02 49.6 | -4.6 |
| CALA | | | | | *e*S | | Sb | 09 03 03.4 | -6.8 |
| **HOR** | **Horta** | **1.30** | **140** | | *e*P | | Pn | 09 02 50.4 | -4.7 |
| HOR | | | | | *e*S | | Sb | 09 03 05.3 | -6.9 |
| **HOR** | **Horta** | **1.30** | **140** | | *e*P | | Pn | 09 02 50.4 | -4.7 |
| HOR | | | | | *e*S | | Sb | 09 03 05.3 | -6.9 |
| **ROSA** | **Rosais** | **1.39** | **125** | | *e*P | | Pn | 09 02 51.6 | -4.8 |
| ROSA | | | | | *e*S | | Sn | 09 03 07.0 | -7.9 |
| ROSA | 68nm,0.2s | | | | A | | A | 09 03 08.0 | |
| **ROSA** | **Rosais** | **1.39** | **125** | | *e*P | | Pn | 09 02 51.6 | -4.8 |
| ROSA | | | | | *e*S | | Sn | 09 03 07.0 | -7.9 |
| **PCAN** | **Candelaria** | **1.42** | **138** | | *i* P | | Pn | 09 02 52.3 | -4.6 |
| PCAN | | | | | *e*S | | Sn | 09 03 08.4 | -7.3 |
| PCAN | 652nm,0.2s | | | | A | | A | 09 03 11.6 | |
| **PCAN** | **Candelaria** | **1.42** | **138** | | *i* P | | Pn | 09 02 52.3 | -4.6 |
| PCAN | | | | | *e*S | | Sn | 09 03 08.4 | -7.3 |
| **PGRA** | **Graciosa** | **1.43** | **110** | | *e*P | | Pn | 09 02 52.4 | -4.5 |
| PGRA | | | | | *e*S | | Sn | 09 03 07.7 | -8.0 |
| PGRA | 212nm,0.4s | | | | A | | A | 09 03 09.0 | |
| **PGRA** | **Graciosa** | **1.43** | **110** | | *e*P | | Pn | 09 02 52.4 | -4.5 |
| PGRA | | | | | *e*S | | Sn | 09 03 07.7 | -8.0 |
| **PICO** | **Pico** | **1.43** | **135** | | *e*P | | Pn | 09 02 52.6 | -4.4 |
| PICO | | | | | *e*S | | Sn | 09 03 08.1 | -7.8 |
| **PICO** | **Pico** | **1.43** | **135** | | *e*P | | Pn | 09 02 52.6 | -4.4 |
| PICO | | | | | *e*S | | Sn | 09 03 08.1 | -7.8 |
| **PPNO** | **Prainha do Nor** | **1.54** | **133** | | *e*P | | Pn | 09 02 53.6 | -4.9 |
| PPNO | | | | | *e*S | | Sn | 09 03 11.0 | -7.6 |
| PPNO | 158nm,0.2s | | | | A | | A | 09 03 17.1 | |
| **PPNO** | **Prainha do Nor** | **1.54** | **133** | | *e*P | | Pn | 09 02 53.6 | -4.9 |
| PPNO | | | | | *e*S | | Sn | 09 03 11.0 | -7.6 |
| **PMAN** | **Manadas** | **1.54** | **125** | | *e*P | | Pn | 09 02 53.9 | -4.5 |
| PMAN | | | | | *e*S | | Sn | 09 03 10.8 | -7.7 |
| PMAN | 83nm,0.2s | | | | A | | A | 09 03 12.8 | |
| **PMAN** | **Manadas** | **1.54** | **125** | | *e*P | | Pn | 09 02 53.9 | -4.5 |
| PMAN | | | | | *e*S | | Sn | 09 03 10.8 | -7.7 |
| **ADH** | **Angra Heroismo** | **2.11** | **114** | | *e*P | | Pn | 09 03 02.0 | -4.2 |
| **ADH** | **Angra Heroismo** | **2.11** | **114** | | *e*P | | Pn | 09 03 02.0 | -4.2 |
| **PSET** | **Sete Cidades** | **3.55** | **117** | | *e*P | | Pn | 09 03 22.1 | -4.0 |
| **PSET** | **Sete Cidades** | **3.55** | **117** | | *e*P | | Pn | 09 03 22.1 | -4.0 |
| **PDA** | **Ponta Delgada** | **3.63** | **118** | | *e*P | | Pn | 09 03 22.9 | -4.2 |
| **PDA** | **Ponta Delgada** | **3.63** | **118** | | *e*P | | Pn | 09 03 22.9 | -4.2 |
| **BART** | **Pico Bartolome** | **3.96** | **115** | | *e*P | | Pn | 09 03 27.6 | -4.2 |
| **BART** | **Pico Bartolome** | **3.96** | **115** | | *e*P | | Pn | 09 03 27.6 | -4.2 |
| **PSMA** | **Santa Maria** | **4.40** | **124** | | *e*P | | Pn | 09 03 33.4 | -4.3 |
| **PSMN** | **Pico do Norte,** | **4.43** | **123** | | *e*P | | Pn | 09 03 34.1 | -4.1 |
| **PSMN** | **Pico do Norte,** | **4.43** | **123** | | *e*P | | Pn | 09 03 34.1 | -4.1 |

*ISCJB* ***24*** *09:07:04.5±0.8, 2.˚89S×0.˚09×100.˚29E±0.˚10, h28km, mb3.8/5, Error ellipse: s-maj=18.5km s-min=6.0km az=137.2*
*DJA* ***24*** *09:07:06.6±0.9, 3.˚S±6.˚×10.˚0E±.˚, h59km±12km, M4.1/11, MLv4.1/11*
*IDC* ***24*** *09:07:07.5±1.6, 3.˚06S×100.˚31E, h45km±8km, mb3.5/5, mb1 3.7/6, mb1mx3.3/59, mbtmp3.8/6, ML3.4/1, MS3.1/1, Ms1 3.1/1, ms1mx2.7/33, Error ellipse: s-maj=74.0km s-min=15.7km az=50.0*
**ISC 24 09:07:07.2±0.8, 2.˚76S±0.˚07×100.˚46E±0.˚05, h28km, n21,**
**σ1§61/21, mb3.8/5, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.45** | **269** | | P | | **Pn** | **09 07 18.4** | **+0.6** |
| PPSI | | | | | S | | **Sn** | **09 07 27.0** | **+2.1** |
| **MASI** | **Maura Aman, Be** | **1.82** | **102** | | P | | **Pn** | **09 07 36.5** | **-0.2** |
| **PDSI** | **Padang** | **1.83** | **0** | | P | | **Pn** | **09 07 36.6** | **-0.3** |
| **SISI** | **Saibi** | **1.97** | **316** | | P | | **Pn** | **09 07 37.2** | **-1.6** |
| **SDSI** | **Sungai Dareh** | **2.06** | **28** | | P | | **Pn** | **09 07 40.8** | **+0.9** |
| **PPI** | **Padang Panjang** | **2.29** | **358** | | P | | **Pn** | **09 07 42.3** | **-0.8** |
| **KSI** | **Kapahiang** | **2.31** | **113** | | P | | **Pn** | **09 07 44.4** | **+0.9** |
| **MNAI** | **Manna** | **2.96** | **123** | | P | | **Pn** | **09 07 51.3** | **-1.0** |
| MNAI | | | | | S | | **Sn** | **09 08 29.0** | **+2.1** |
| **MDSI** | **Maura Dua** | **4.09** | **115** | | P | | **Pn** | **09 08 08.7** | **+0.8** |
| **LWLI** | **Liwa** | **4.24** | **122** | | P | | **Pn** | **09 08 08.8** | **-1.2** |
| **PSI** | **Prapat** | **5.73** | **344** | | P | | **Pn** | **09 08 32.4** | **+1.8** |
| | 1.1nm,0.3s,baz=23,slow=4.5,SNR=3.6 | | | | | | | | |
| **LEM** | **Lembang** | **8.20** | **120** | | LR | | LR | 09 12 14.2 | |
| | comp=Z,116nm,18.2s,baz=66,slow=38 | | | | | | | | |

baz=81,slow=75,SNR=132
**H08S3 Diego Garcia H 28.27 259** T T 09 41 56.7
baz=81,slow=75,SNR=87
**H08S1 Diego Garcia H 28.28 259** T T 09 41 57.6
baz=81,slow=75,SNR=115
**WRA Warramunga Arr 37.22 120** P **P** **09 14 14.1 -2.5**
0.6nm,0.5s,baz=304,slow=9.0,SNR=23
WRA pP **pP** **09 14 26.8 +1.9**
0.8nm,0.4s,baz=309,slow=8.7,SNR=6.5
**ASAR Alice Springs 38.44 126** P **P** **09 14 25.0 -1.9**
1.2nm,0.8s,baz=305,slow=8.3,SNR=11
**MKAR Makanchi Array 51.88 344** P **P** **09 16 13.6 +0.4**
0.4nm,0.4s,baz=147,slow=8.6,SNR=2.6
MKAR pP **pP** **09 16 24.8 +3.1**
1.2nm,0.7s,baz=145,slow=8.6,SNR=4.4
**ZALV Zalesovo Beam 57.99 349** P **P** **09 16 56.8 -0.4**
0.5nm,0.3s,baz=139,slow=6.8,SNR=2.3
**BRTR Keskin Array B 74.17 313** P **P** **09 18 40.4 -1.3**
0.7nm,0.9s,baz=36,slow=5.4,SNR=2.6
**TXAR Lajitas Array 145.01 38** PKPbc **PKPbc** **09 26 40.9 -1.2**
0.3nm,0.5s,baz=203,slow=1.2,SNR=9.1
TXAR pPKPbc pPKPbc 09 26 54.9 +3.3
0.5nm,0.5s,baz=233,slow=1.4,SNR=6.2

*DDA* ***24*** *09:10:46.2, 38.82N×26.26E, h22km, Md3.1*
*ATH* ***24*** *09:10:46.6, 38.85N×26.29E, h26km±1km, MD3.2/14*
*ISK* ***24*** *09:10:46.6, 38.84N×26.30E, h14km, MD3.1*
*ISCJB* ***24*** *09:10:46.5±0.4, 38.83N±0.01×26.26E±0.02, h7km±3km, Error ellipse: s-maj=3.2km s-min=2.4km az=165.5*
*THE* ***24*** *09:10:46.9, 38.81N×26.30E, h0km±1km, ML3.1/5, Error ellipse: s-maj=2.5km s-min=0.9km az=86.0*
*CSEM* ***24*** *09:10:47.3±0.1, 38.83N×26.30E, h12km, MD3.2, Error ellipse: s-maj=2.0km s-min=1.8km az=62.0*

**ISC 24 09:10:47.4±0.9, 38.84N±0.01×26.30E±0.02, h15km±8km, n120, σ0.55/164, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PRK** | **Paraskevi** | **0.41** | **357** | *e*PB | | **Pg** | **09 10 55.4** | **-0.3** |
| PRK | | | | *e*SB | | **Sb** | **09 11 02.0** | **-0.5** |
| **PRK** | **Paraskevi** | **0.41** | **357** | P | | **Pg** | **09 10 55.5** | **-0.3** |
| PRK | | | | S | | **Sb** | **09 11 02.0** | **-0.5** |
| **PRK** | **Paraskevi** | **0.41** | **357** | *e*Pb | | **Pg** | **09 10 55.4** | **-0.3** |
| PRK | | | | S | | **Sb** | **09 11 02.0** | **-0.5** |
| **CHOS** | **Chios island** | **0.49** | **203** | *e*PB | | **Pg** | **09 10 56.8** | **-0.4** |
| CHOS | | | | *e*SB | | **Sg** | **09 11 03.8** | **+0.1** |
| **CHOS** | **Chios island** | **0.49** | **203** | P | | **Pg** | **09 10 57.0** | **-0.2** |
| CHOS | | | | S | | **Sg** | **09 11 03.4** | **-0.3** |
| **CHOS** | **Chios island** | **0.49** | **203** | *e*Pb | | **Pg** | **09 10 56.8** | **-0.4** |
| CHOS | | | | S | | **Sg** | **09 11 03.4** | **-0.3** |
| CHOS | | | | *e*Sb | | **Sg** | **09 11 03.8** | **+0.1** |
| **SIGR** | **SIGRI** | **0.51** | **317** | *e*PN | | **Pb** | **09 10 57.8** | **-0.3** |
| SIGR | | | | *e*SN | | **Sb** | **09 11 04.9** | **-0.4** |
| **SIGR** | **SIGRI** | **0.51** | **317** | P | | **Pg** | **09 10 57.5** | **0.0** |
| SIGR | | | | S | | **Sg** | **09 11 04.5** | **+0.1** |
| **SIGR** | **SIGRI** | **0.51** | **317** | P | | **Pg** | **09 10 57.5** | **0.0** |
| **SIGR** | **SIGRI** | **0.51** | **317** | *e*Pb | | **Pb** | **09 10 57.8** | **-0.3** |
| SIGR | | | | S | | **Sg** | **09 11 04.5** | **+0.1** |
| SIGR | | | | *e*Sb | | **Sb** | **09 11 04.9** | **-0.4** |
| **DKL** | **Dikili** | **0.53** | **63** | *e*PG | | **Pg** | **09 10 57.6** | **-0.3** |
| DKL | | | | *e*SG | | **Sb** | **09 11 05.2** | **-0.6** |
| **DKL** | **Dikili** | **0.53** | **63** | *e*Pg | | **Pg** | **09 10 57.6** | **-0.3** |
| DKL | | | | *e*Sg | | **Sb** | **09 11 05.2** | **-0.6** |
| **AYVA** | **Ayvalik** | **0.56** | **33** | *i* P | | **Pg** | **09 10 58.2** | **-0.3** |
| AYVA | | | | *i* S | | **Sg** | **09 11 05.7** | **-0.3** |
| **AYVA** | **Ayvalik** | **0.56** | **33** | P | | **Pg** | **09 10 58.2** | **-0.3** |
| AYVA | | | | S | | **Sg** | **09 11 05.7** | **-0.3** |
| **ZEY** | **˜zmir** | **0.62** | **165** | P | | **Pg** | **09 10 59.1** | **-0.4** |
| ZEY | | | | S | | **Sg** | **09 11 07.4** | **-0.3** |
| **BLCB** | **Balcova** | **0.74** | **128** | *e*PG | | **Pg** | **09 11 01.5** | **-0.3** |
| BLCB | | | | *e*SG | | **Sb** | **09 11 12.1** | **+0.2** |
| **BLCB** | **Balcova** | **0.74** | **128** | *e*Pg | | **Pg** | **09 11 01.5** | **-0.3** |
| BLCB | | | | *e*Sg | | **Sb** | **09 11 12.1** | **+0.2** |
| **EZN** | **Ezine** | **0.99** | **1** | *e*PG | | **Pb** | **09 11 06.1** | **-0.2** |
| EZN | | | | *e*SG | | **Sn** | **09 11 20.3** | **-0.2** |
| **EZN** | **Ezine** | **0.99** | **1** | *e*Pg | | **Pb** | **09 11 06.1** | **-0.2** |
| EZN | | | | *e*Sg | | **Sn** | **09 11 20.3** | **-0.2** |
| **BOZC** | **Bozcaada** | **1.02** | **349** | P | | **Pb** | **09 11 06.7** | **-0.1** |
| BOZC | | | | P | | **Pn** | **09 11 07.1** | **-0.2** |
| BOZC | | | | S | | **Sg** | **09 11 20.5** | **0.0** |
| BOZC | | | | S | | **Sg** | **09 11 20.6** | **0.0** |
| **AKS** | **Akhisar** | **1.18** | **87** | *e*PN | | **Pb** | **09 11 09.5** | **-0.1** |
| **AKS** | **Akhisar** | **1.18** | **87** | *e*Pn | | **Pb** | **09 11 09.5** | **-0.1** |
| **AKHS** | **Akhisar** | **1.18** | **87** | *i* P | | **Pn** | **09 11 09.2** | **-0.3** |
| AKHS | | | | *i* S | | **Sg** | **09 11 26.6** | **+0.9** |
| **AKHS** | **Akhisar** | **1.18** | **87** | P | | **Pn** | **09 11 09.2** | **-0.3** |
| AKHS | | | | S | | **Sg** | **09 11 26.6** | **+0.9** |
| **SMG** | **Samos** | **1.20** | **159** | *e*PN | | **Pb** | **09 11 09.0** | **-0.7** |
| SMG | | | | *e*SN | | **Sg** | **09 11 27.0** | **+0.7** |
| **SMG** | **Samos** | **1.20** | **159** | P | | **Pn** | **09 11 09.1** | **-0.7** |
| SMG | | | | S | | **Sg** | **09 11 27.1** | **+0.7** |
| **SMG** | **Samos** | **1.20** | **159** | P | | **Pn** | **09 11 09.1** | **-0.7** |
| SMG | | | | *e*Sn | | **Sg** | **09 11 27.0** | **+0.7** |
| **GCAM** | **G?zelcaml?** | **1.35** | **147** | *i* P | | **Pb** | **09 11 12.2** | **-0.3** |
| GCAM | | | | *i* S | | **Sb** | **09 11 30.2** | **+0.7** |
| **GCAM** | **G?zelcaml?** | **1.35** | **147** | P | | **Pb** | **09 11 12.2** | **-0.3** |
| GCAM | | | | S | | **Sb** | **09 11 30.2** | **+0.7** |
| **BALY** | **Balya** | **1.36** | **48** | *i* P | | **Pn** | **09 11 11.8** | **-0.2** |
| BALY | | | | *i* S | | **Sg** | **09 11 33.3** | **+1.8** |
| **BALY** | **Balya** | **1.36** | **48** | P | | **Pn** | **09 11 11.8** | **-0.2** |
| BALY | | | | S | | **Sg** | **09 11 33.3** | **+1.8** |
| **LIA** | **Limnos Island** | **1.37** | **321** | *e*PN | | **Pn** | **09 11 12.2** | **+0.2** |
| LIA | | | | *e*SN | | **Sn** | **09 11 29.2** | **-0.7** |
| **LIA** | **Limnos Island** | **1.37** | **321** | P | | **Pn** | **09 11 11.9** | **-0.1** |
| LIA | | | | S | | **Sg** | **09 11 33.1** | **+1.5** |
| **LIA** | **Limnos Island** | **1.37** | **321** | P | | **Pn** | **09 11 11.9** | **-0.1** |
| **LIA** | **Limnos Island** | **1.37** | **321** | *e*Pn | | **Pn** | **09 11 12.2** | **+0.2** |
| LIA | | | | *e*Sn | | **Sn** | **09 11 29.2** | **-0.7** |
| LIA | | | | S | | **Sg** | **09 11 33.1** | **+1.5** |
| **GADA** | **Gvkgeada** | **1.39** | **347** | *e*PN | | **Pn** | **09 11 11.5** | **-0.8** |
| **GADA** | **Gvkgeada** | **1.39** | **347** | *e*Pn | | **Pn** | **09 11 11.5** | **-0.8** |
| **BALB** | **Balikesir** | **1.47** | **56** | *e*PN | | **Pn** | **09 11 13.6** | **+0.2** |
| **BALB** | **Balikesir** | **1.47** | **56** | *e*Pn | | **Pn** | **09 11 13.6** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.53** | **125** | *e*PN | | **Pn** | **09 11 14.5** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.53** | **125** | *e*Pn | | **Pn** | **09 11 14.5** | **+0.1** |
| **LPK** | **Lapseki** | **1.57** | **13** | *e*PN | | **Pn** | **09 11 14.5** | **-0.4** |
| **LPK** | **Lapseki** | **1.57** | **13** | *e*Pn | | **Pn** | **09 11 14.5** | **-0.4** |
| **GONE** | **Gonen-Balikesi** | **1.62** | **41** | *e*PN | | **Pn** | **09 11 15.8** | **+0.4** |
| **GONE** | **Gonen-Balikesi** | **1.62** | **41** | *e*Pn | | **Pn** | **09 11 15.8** | **+0.4** |
| **AYDN** | **Tasoluk** | **1.71** | **133** | *i* P | | **Pb** | **09 11 18.7** | **+0.1** |
| AYDN | | | | *i* S | | **Sg** | **09 11 43.1** | **+0.6** |
| **AYDN** | **Tasoluk** | **1.71** | **133** | P | | **Pb** | **09 11 18.7** | **+0.1** |
| AYDN | | | | S | | **Sg** | **09 11 43.1** | **+0.6** |
| **KRBG** | **Karabiga-Canak** | **1.73** | **26** | *e*PN | | **Pn** | **09 11 17.4** | **+0.4** |
| **KRBG** | **Karabiga-Canak** | **1.73** | **26** | *e*Pn | | **Pn** | **09 11 17.4** | **+0.4** |
| **SMTH** | **Samothraki Isl** | **1.74** | **340** | *e*PN | | **Pn** | **09 11 17.2** | **+0.1** |
| **SMTH** | **Samothraki Isl** | **1.74** | **340** | P | | **Pn** | **09 11 16.9** | **-0.2** |
| **SMTH** | **Samothraki Isl** | **1.74** | **340** | P | | **Pn** | **09 11 16.9** | **-0.2** |
| **SMTH** | **Samothraki Isl** | **1.74** | **340** | *e*Pn | | **Pn** | **09 11 17.2** | **+0.1** |
| **ERIK** | **Erikli-Kesan** | **1.84** | **5** | *e*PN | | **Pn** | **09 11 18.8** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **1.84** | **5** | *e*Pn | | **Pn** | **09 11 18.8** | **+0.3** |
| **APE** | **Apeiranthos** | **1.87** | **199** | *e*PB | | **Pn** | **09 11 18.3** | **-0.7** |
| **APE** | **Apeiranthos** | **1.87** | **199** | P | | **Pn** | **09 11 18.2** | **-0.7** |
| **APE** | **Apeiranthos** | **1.87** | **199** | P | | **Pn** | **09 11 18.2** | **-0.7** |
| **KULA** | **Kula-Manisa** | **1.88** | **99** | *e*PN | | **Pn** | **09 11 19.3** | **+0.2** |
| **KULA** | **Kula-Manisa** | **1.88** | **99** | *e*Pn | | **Pn** | **09 11 19.3** | **+0.2** |
| **DEMI** | **Demirci** | **1.90** | **83** | *i* P | | **Pn** | **09 11 18.9** | **-0.4** |
| DEMI | | | | *i* S | | **Sg** | **09 11 47.4** | **-1.1** |
| **DEMI** | **Demirci** | **1.90** | **83** | P | | **Pn** | **09 11 18.9** | **-0.4** |
| DEMI | | | | S | | **Sg** | **09 11 47.4** | **-1.1** |
| **EREA** | **Eretria** | **1.90** | **258** | *e*PN | | **Pn** | **09 11 19.5** | **+0.1** |
| **EREA** | **Eretria** | **1.90** | **258** | *e*Pn | | **Pn** | **09 11 19.5** | **+0.1** |
| **EDC** | **Edincik** | **1.93** | **38** | *e*PN | | **Pn** | **09 11 19.5** | **-0.3** |
| **EDC** | **Edincik** | **1.93** | **38** | *e*Pn | | **Pn** | **09 11 19.5** | **-0.3** |
| **BNT** | **Bandirma** | **1.97** | **39** | *e*PN | | **Pn** | **09 11 20.5** | **+0.2** |
| **BNT** | **Bandirma** | **1.97** | **39** | *e*Pn | | **Pn** | **09 11 20.5** | **+0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.97** | **20** | *e*PN | | **Pn** | **09 11 20.8** | **+0.4** |
| **RKY** | **Sarkoy-Tekirda** | **1.97** | **20** | *e*Pn | | **Pn** | **09 11 20.8** | **+0.4** |
| **MRMT** | **Marmara Adasi** | **2.03** | **29** | *e*PN | | **Pn** | **09 11 21.6** | **+0.4** |
| **MRMT** | **Marmara Adasi** | **2.03** | **29** | *e*Pn | | **Pn** | **09 11 21.6** | **+0.4** |
| **ALN** | **Alexandroupoli** | **2.07** | **355** | *e*PN | | **Pn** | **09 11 21.4** | **-0.2** |
| **ALN** | **Alexandroupoli** | **2.07** | **355** | *e*PN | | **Pn** | **09 11 20.4** | **-1.2** |
| **ALN** | **Alexandroupoli** | **2.07** | **355** | P | | **Pn** | **09 11 21.9** | **+0.3** |
| ALN | | | | S | | **Sb** | **09 11 50.4** | **+0.2** |
| **ALN** | **Alexandroupoli** | **2.07** | **355** | *e*Pn | | **Pn** | **09 11 21.4** | **-0.2** |
| **ALN** | **Alexandroupoli** | **2.07** | **355** | P | | **Pn** | **09 11 21.9** | **+0.3** |
| ALN | | | | S | | **Sb** | **09 11 50.4** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **2.14** | **47** | *e*PN | | **Pn** | **09 11 22.2** | **-0.4** |
| **KCTX** | **Karacabey (Bur** | **2.14** | **47** | *e*Pn | | **Pn** | **09 11 22.2** | **-0.4** |
| **SERI** | **Serifos** | **2.20** | **221** | *e*PN | | **Pn** | **09 11 23.9** | **+0.4** |
| **SERI** | **Serifos** | **2.20** | **221** | *e*Pn | | **Pn** | **09 11 23.9** | **+0.4** |
| **SKIA** | **Skiathos** | **2.23** | **279** | *e*PB | | **Pn** | **09 11 24.4** | **+0.5** |
| **SKIA** | **Skiathos** | **2.23** | **279** | *e*Pb | | **Pn** | **09 11 24.4** | **+0.5** |
| **PAIG** | **Paliouri** | **2.30** | **299** | *e*PN | | **Pn** | **09 11 25.1** | **+0.2** |
| **PAIG** | **Paliouri** | **2.30** | **299** | *e*Pn | | **Pn** | **09 11 25.1** | **+0.2** |
| **YER** | **Yerkesik** | **2.31** | **137** | *e*PN | | **Pn** | **09 11 25.3** | **+0.3** |
| **YER** | **Yerkesik** | **2.31** | **137** | *e*Pn | | **Pn** | **09 11 25.3** | **+0.3** |
| **OUR** | **Ouranopolis** | **2.33** | **311** | *e*PB | | **Pn** | **09 11 25.8** | **+0.5** |
| **OUR** | **Ouranopolis** | **2.33** | **311** | *e*Pn | | **Pn** | **09 11 25.8** | **+0.5** |
| **NIS1** | **Nisyros Isl.** | **2.34** | **162** | *e*PB | | **Pn** | **09 11 26.2** | **+0.8** |
| **NIS1** | **Nisyros Isl.** | **2.34** | **162** | *e*Pb | | **Pn** | **09 11 26.2** | **+0.8** |
| **ORLT** | **Orhaneli** | **2.34** | **58** | *e*PN | | **Pn** | **09 11 26.0** | **+0.5** |
| **ORLT** | **Orhaneli** | **2.34** | **58** | *e*Pn | | **Pn** | **09 11 26.0** | **+0.5** |
| **MDNY** | **Mudanya-Bursa** | **2.52** | **52** | *e*PN | | **Pn** | **09 11 28.5** | **+0.7** |
| **MDNY** | **Mudanya-Bursa** | **2.52** | **52** | *e*Pn | | **Pn** | **09 11 28.5** | **+0.7** |
| **TVSB** | **Tavsanli** | **2.53** | **75** | *e*PN | | **Pn** | **09 11 28.0** | **-0.1** |
| **TVSB** | **Tavsanli** | **2.53** | **75** | *e*Pn | | **Pn** | **09 11 28.0** | **-0.1** |
| **KHAL** | **Karahalli** | **2.54** | **100** | *i* P | | **Pn** | **09 11 28.7** | **+0.4** |
| **KHAL** | **Karahalli** | **2.54** | **100** | P | | **Pn** | **09 11 28.7** | **+0.4** |
| KHAL | | | | S | | **Sb** | **09 12 04.3** | **+0.3** |
| **ARMT** | **Armutlu** | **2.62** | **48** | *e*PN | | **Pn** | **09 11 30.2** | **+0.9** |
| **ARMT** | **Armutlu** | **2.62** | **48** | *e*Pn | | **Pn** | **09 11 30.2** | **+0.9** |
| **IGD** | **Bursa** | **2.66** | **57** | P | | **Pb** | **09 11 35.5** | **+0.7** |
| IGD | | | | S | | **Sg** | **09 12 12.7** | **-0.2** |
| **PLG** | **Polygyros** | **2.69** | **306** | *e*PN | | **Pn** | **09 11 30.6** | **+0.4** |
| **PLG** | **Polygyros** | **2.69** | **306** | *e*Pn | | **Pn** | **09 11 30.6** | **+0.4** |
| **KDZ** | **Kurdzhali** | **2.89** | **347** | *i* P | | **Pn** | **09 11 33.1** | **+0.1** |
| **KDZ** | **Kurdzhali** | **2.89** | **347** | *i* P | | **Pn** | **09 11 33.1** | **+0.1** |
| **DESF** | **Desfina** | **2.98** | **263** | *e*PN | | **Pn** | **09 11 35.7** | **+1.4** |
| **DESF** | **Desfina** | **2.98** | **263** | *e*Pn | | **Pn** | **09 11 35.7** | **+1.4** |
| **HORT** | **Hortiatis** | **3.03** | **306** | *e*PN | | **Pn** | **09 11 35.2** | **+0.2** |
| **HORT** | **Hortiatis** | **3.03** | **306** | *e*Pn | | **Pn** | **09 11 35.2** | **+0.2** |
| **RZN** | **Rozhen** | **3.10** | **337** | *i* P | | **Pn** | **09 11 36.6** | **+0.7** |
| **RZN** | **Rozhen** | **3.10** | **337** | *i* P | | **Pn** | **09 11 36.6** | **+0.7** |
| **VLI** | **Veliai** | **3.40** | **233** | *e*PN | | **Pn** | **09 11 39.9** | **-0.1** |
| **VLI** | **Veliai** | **3.40** | **233** | *e*Pn | | **Pn** | **09 11 39.9** | **-0.1** |
| **KYTH** | **Kithira** | **3.64** | **226** | *e*PN | | **Pn** | **09 11 43.3** | **0.0** |
| **KYTH** | **Kithira** | **3.64** | **226** | *e*Pn | | **Pn** | **09 11 43.3** | **0.0** |
| **GRG** | **Griva** | **3.67** | **306** | *e*PN | | **Pn** | **09 11 44.8** | **+1.1** |
| **GRG** | **Griva** | **3.67** | **306** | *e*Pn | | **Pn** | **09 11 44.8** | **+1.1** |
| **PRD** | **Provadia** | **4.44** | **10** | *i* P | | **Pn** | **09 11 53.7** | **-0.5** |
| **PRD** | **Provadia** | **4.44** | **10** | *i* P | | **Pn** | **09 11 53.7** | **-0.5** |

*SZGRF* ***24*** *09:11:05.1, 20.65×168.93E, h33km*
*MOS* ***24*** *09:11:06.4±1.1, 19.63S×167.99E, h33km, mb5.4/36, Error ellipse: s-maj=10.9km s-min=9.1km az=168.8*
*GCMT* ***24*** *09:11:07.9±0.2, 19.64S×167.97E, h17km, MW5.1/74, Moment Tensor Solution. s40,c55; s74,c107; Duration: 0 Moment tensor: Scale 10^16Nm; Mrr-4.58±.20; Mθθ-1.12±.15; Mϕϕ5.71±.15; Mrθ-0.14±.45; Mrϕ-0.05±.12; Mθr-0.92±.34; Best double couple: Ms5.23000×10^16 NP1:ϕ=2.00000°, δ50.00000°, λ-87.00000°. NP2: ϕ=177.00000°, δ40.00000°, λ-94.00000°. Principal axes: T 5.7920, Plg5.0000°, Azm90.0000°; N -1.1140, Plg2.0000°, Azm180.0000°; P -4.6680, Plg84.0000°, Azm295.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*IDC* ***24*** *09:11:07.9±0.6, 19.67S×168.05E, h36km±4km, mb4.7/26, mb1 4.8/27, mb1mx4.7/41, mbtmp4.9/27, ML4.3/1, MS4.2/19, Ms1 4.3/19, ms1mx4.2/25 Error ellipse: s-maj=12.4km s-min=11.7km az=80.0*
*NEIC* ***24*** *09:11:07.9±0.2, 19.61S×168.13E, h35km, mb5.2/45, Error ellipse: s-maj=6.2km s-min=5.6km az=158.0*
*AUST* ***24*** *09:11:07.9±1.6, 19.58S×168.27E, h41km±13km, Error ellipse: s-maj=13.3km s-min=7.9km az=53.0*
*ISCJB* ***24*** *09:11:09.1±1.2, 19.68S±0.04×168.06E±0.03, h59km±10km, mb5.2/104, MS4.2/18, Error ellipse: s-maj=6.5km s-min=4.4km az=8.7*
*BJI* ***24*** *09:11:13.3, 19.26S×167.99E, h78km, mb4.9/35, mB5.1/25, Ms5.1/10, Ms7 4.7/6*

**ISC 24 09:11:08.4±0.5, 19.70S±0.05×168.07E±0.05, h42km±4km, h40km:pP-P, n384, σ1s24/373, mb5.2/103, MS4.2/18, 11C-6D, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **2.81** | **213** | *e*Pn | | **Pn** | **09 11 48.5** | **-2.4** |
| DZM | 417nm,0.2s | | | *e*Sn | | **Sn** | **09 12 21.1** | **-2.5** |
| DZM | 1μm,0.2s | | | *e*LR | | LR | 09 12 22.1 | |
| **DZM** | 8μm,23.1s **Mont Dzumac** | **2.81** | **213** | Pn | | **Pn** | **09 11 48.4** | **-2.6** |
| DZM | 50nm,0.3s,baz=89,slow=24,SNR=480 | | | Sn | | **Sn** | **09 12 20.7** | **-2.9** |
| DZM | 84nm,0.3s,baz=0.0,slow=20,SNR=5.8 | | | LR | | LR | 09 12 59.7 | |
| **NFK** | comp=Z,12μm,18.7s,baz=188,slow=40 **Norfolk Island** | **9.30** | **181** | P | | **Pn** | **09 13 20.1** | **+0.2** |
| **MSVF** | baz=9.5,SNR=5.8 **Nonsavu** | **9.66** | **80** | *e*P | | Pn | 09 13 28.7 | +3.7 |
| **MSVF** | **Nonsavu** | **9.66** | **80** | Pn | | **Pn** | **09 13 28.0** | **+3.0** |
| **MSVF** | 727nm,1.7s,SNR=11 **Nonsavu** | **9.66** | **80** | *e*Pn | | Pn | 09 13 28.7 | +3.7 |
| **HNR** | **Honiara** comp=Z,806nm,19.7s,baz=152,slow=31 | **12.88** | **321** | LR | | LR | 09 17 43.0 | |
| **RAO** | **Raoul Island** comp=Z,1μm,19.4s,baz=308,slow=33 | **15.89** | **129** | LR | | LR | 09 19 52.3 | |
| **OUZ** | **Omahuta** 52nm,0.7s | **16.21** | **164** | *e*Pn | | **P** | **09 14 54.9** | **-0.9** |
| **EIDS** | **Eidsvold** baz=17,SNR=8.6 | **16.67** | **247** | P | | **P** | **09 15 01.7** | **+0.6** |
| **EIDS** | **Eidsvold** 84nm,1.2s | **16.67** | **247** | *e*P | | **P** | **09 15 02.2** | **+1.2** |
| **ARMA** | **Armidale** baz=18,SNR=4.8 | **18.30** | **231** | P | | **Pn** | **09 15 21.9** | **+2.6** |
| **ARMA** | **Armidale** 120nm,1.4s | **18.30** | **231** | *e*P | | **Pn** | **09 15 21.4** | **+2.0** |
| **RMQ** | **Roma** baz=19,SNR=36 | **19.00** | **246** | P | | **Pn** | **09 15 29.3** | **+1.7** |
| **HAZ** | **Te Kaha** | **19.88** | **157** | PN | | **Pn** | **09 15 38.7** | **+0.6** |
| **MXZ** | **Matakaoa Point** | **19.91** | **156** | PN | | **Pn** | **09 15 38.9** | **+0.5** |
| **URZ** | **Urewera** 17nm,0.7s,baz=331,slow=2.1,SNR=29 | **20.09** | **159** | P | | **P** | **09 15 39.4** | **+0.9** |
| URZ | comp=Z,611nm,19.1s,baz=346,slow=34 | | | LR | | LR | 09 22 32.1 | |
| **URZ** | **Urewera** 100nm,1.1s | **20.09** | **159** | *e*P | | Pn | 09 15 40.5 | 0.0 |
| **AFI** | **Afiamalu** 14nm,0.7s,baz=53,slow=20,SNR=2.8 | **20.12** | **76** | P | | Pn | 09 15 40.4 | -0.8 |
| AFI | comp=Z,2μm,18.8s,baz=251,slow=33 | | | LR | | LR | 09 22 09.5 | |
| **AFI** | **Afiamalu** comp=Z,47nm,1.0s | **20.12** | **76** | *e*P | | Pn | 09 15 42.1 | +0.9 |
| AFI | | | | pmax | | pmax | | |
| **AFI** | **Afiamalu** comp=Z,47nm,1.0s | **20.12** | **76** | *e*P | | Pn | 09 15 42.0 | +0.8 |
| **WMGZ** | **Waiomatatini S** | **20.18** | **156** | PN | | Pn | 09 15 40.9 | -0.6 |
| **MGCD** | **Mangrove Creek** baz=20,SNR=8.8 | **20.25** | **225** | P | | Pn | 09 15 42.1 | -0.4 |
| **PUZ** | **Puketiti** | **20.34** | **156** | PN | | **P** | **09 15 42.2** | **+1.0** |
| **CTA** | **Charters Tower** comp=Z,48nm,1.1s,baz=84,slow=15,SNR=26 | **20.52** | **265** | P | | **P** | **09 15 44.2** | **+0.8** |
| CTA | comp=Z,2μm,21.0s,baz=93,slow=33 | | | LR | | LR | 09 22 16.8 | |
| **CTAO** | **Charters Tower** | **20.52** | **265** | *e*P | | Pn | 09 15 45.4 | -0.4 |
| CTAO | comp=Z,226nm,1.2s | | | pmax | | pmax | | |
| **CTAO** | **Charters Tower** comp=Z,226nm,1.2s | **20.52** | **265** | *e*P | | Pn | 09 15 45.4 | -0.4 |
| **RIGZ** | **Rimuhau** | **20.72** | **158** | PN | | Pn | 09 15 47.0 | -0.9 |
| **BKZ** | **Black Stump Fm** comp=Z,58nm,0.9s | **20.72** | **161** | *e*P | | Pn | 09 15 47.4 | -0.6 |
| **MTSU** | **Mount Surprise** baz=23,SNR=14 | **22.52** | **270** | P | | **P** | **09 16 06.3** | **+1.4** |
| **PMG** | **Port Moresby** comp=Z,48nm,0.9s,baz=95,slow=10.0,SNR=7.5 | **22.65** | **294** | P | | **P** | **09 16 06.2** | **-0.1** |
| **PMG** | **Port Moresby** | **22.65** | **294** | *d* P | | **P** | **09 16 06.8** | **+0.5** |
| PMG | comp=Z,269nm,1.0s | | | pmax | | pmax | | |
| **PMG** | **Port Moresby** baz=23,SNR=5.1 | **22.65** | **294** | P | | **P** | **09 16 07.2** | **+1.0** |
| **PMG** | **Port Moresby** comp=Z,66nm,1.0s | **22.65** | **294** | *e*P | | **P** | **09 16 07.2** | **+1.0** |
| **CNB** | **Canberra Magne** baz=23,SNR=22 | **22.68** | **223** | P | | **P** | **09 16 08.6** | **+2.1** |
| **YNG** | **Young** baz=23,SNR=17 | **22.71** | **226** | P | | **P** | **09 16 09.4** | **+2.7** |
| **QLP** | **Quilpie** | **22.94** | **248** | P | | **P** | **09 16 09.8** | **+0.6** |
| **KHZ** | **Kahutara** comp=Z,198nm,1.7s | **23.11** | **170** | *e*P | | **P** | **09 16 10.8** | **0.0** |
| **CMSA** | **Cobar Meteorol** baz=24,SNR=45 | **23.32** | **235** | P | | **P** | **09 16 13.7** | **+0.9** |
| **MILA** | **Mila** baz=24,SNR=6.6 | **23.92** | **220** | P | | **P** | **09 16 21.3** | **+2.7** |
| **RPZ** | **Rata Peaks** comp=Z,30nm,0.6s,baz=305,slow=3.4,SNR=21 | **24.07** | **175** | P | | **P** | **09 16 21.1** | **+1.2** |
| RPZ | comp=Z,415nm,18.2s,baz=24,slow=35 | | | LR | | LR | 09 25 01.5 | |
| **RPZ** | **Rata Peaks** comp=Z,36nm,0.8s | **24.07** | **175** | *e*P | | **P** | **09 16 21.0** | **+1.1** |
| **COEN** | **Coen** baz=25,SNR=14 | **24.49** | **280** | P | | **P** | **09 16 26.0** | **+2.0** |
| **COEN** | **Coen** comp=Z,188nm,1.3s | **24.49** | **280** | *e*P | | **P** | **09 16 25.9** | **+2.0** |
| **TOO** | **Toolangi** baz=27,SNR=7.7 | **26.53** | **223** | P | | **P** | **09 16 43.5** | **+1.3** |
| **QIS** | **Mount Isa** baz=27,SNR=9.9 | **26.73** | **263** | P | | **P** | **09 16 44.9** | **+0.6** |
| **ARPS** | **Mount Arapiles** baz=29,SNR=13 | **28.55** | **228** | P | | **P** | **09 17 01.7** | **+1.3** |
| **MOO** | **Moorlands** baz=29,SNR=3.1 | **28.73** | **213** | P | | **P** | **09 17 03.7** | **+1.9** |
| **RAR** | **Rarotonga** comp=Z,347nm,19.1s,baz=276,slow=32 | **30.14** | **98** | LR | | LR | 09 27 08.2 | |
| **BBOO** | **Buckleboo** baz=32,SNR=11 | **31.41** | **239** | P | | **P** | **09 17 26.1** | **+0.4** |
| **BBOO** | **Buckleboo** comp=Z,56nm,1.3s | **31.41** | **239** | *e*P | | **P** | **09 17 26.4** | **+0.7** |
| **WRAB** | **Tennant Creek** | **31.70** | **264** | *i* P | | **P** | **09 17 27.2** | **-1.2** |
| WRAB | comp=Z,83nm,1.2s | | | pmax | | pmax | | |
| **WRAB** | **Tennant Creek** comp=Z,121nm,1.0s,SNR=18 | **31.70** | **264** | P | | **P** | **09 17 27.6** | **-0.8** |
| **WRAB** | **Tennant Creek** comp=Z,35nm,1.2s | **31.70** | **264** | *e*P | | **P** | **09 17 26.9** | **-1.5** |
| **WRA** | **Warramunga Arr** comp=Z,10nm,0.8s,baz=101,slow=8.2,SNR=74 | **31.70** | **264** | P | | **P** | **09 17 27.4** | **-1.1** |
| WRA | comp=Z,6.6nm,0.7s,baz=90,slow=8.3,SNR=8.1 | | | pP | | **pP** | **09 17 38.4** | **-1.5** |
| WRA | comp=Z,1μm,18.3s,baz=95,slow=36 | | | LR | | LR | 09 29 56.6 | |
| **ASAR** | **Alice Springs** comp=Z,24nm,0.8s,baz=85,slow=8.7,SNR=192 | **31.95** | **257** | P | | **P** | **09 17 30.2** | **-0.4** |
| ASAR | comp=Z,19nm,0.6s,baz=84,slow=8.8,SNR=15 | | | pP | | **pP** | **09 17 41.0** | **-0.9** |
| ASAR | comp=Z,3.6nm,1.1s,baz=99,slow=3.0,SNR=4.0 | | | PcP | | **PcP** | **09 20 20.4** | **+0.1** |
| ASAR | comp=Z,1μm,18.4s,baz=102,slow=36 | | | LR | | LR | 09 30 33.9 | |
| **GENI** | **Genyem** comp=Z,172nm,1.4s | **32.13** | **298** | P | | **P** | **09 17 32.8** | **+0.6** |
| **MTN** | **Manton Dam** comp=Z,20nm,0.8s | **36.05** | **275** | *e*P | | **P** | **09 18 06.4** | **+0.2** |
| **WRKA** | **Warakurna** baz=37,SNR=9.8 | **37.07** | **254** | P | | **P** | **09 18 14.9** | **0.0** |
| **KNRA** | **Kununurra** baz=38,SNR=10 | **37.61** | **270** | P | | **P** | **09 18 19.1** | **-0.4** |
| **FAKI** | **Fak Fak** comp=Z,37nm,1.4s,comp=Z,569nm | **38.75** | **291** | P | | **P** | **09 18 28.1** | **-1.0** |
| **FAKI** | **Fak Fak** comp=Z,45nm,1.4s | **38.75** | **291** | *e*P | | **P** | **09 18 28.3** | **-0.7** |
| **TBI** | **Tubuai** comp=Z,180nm,28.2s | **39.57** | **103** | *e*S | | **S** | **09 24 35.5** | **-0.5** |
| TBI | comp=Z,881nm,28.0s | | | *e*LQ | | LQ | 09 27 58.6 | |
| TBI | comp=Z,868nm,29.8s | | | *e*LR | | LR | 09 29 39.3 | |
| **PPT2** | **Papeete2** comp=Z,249nm,26.2s | **40.11** | **94** | *e*S | | **S**

comp=Z,36nm,1.4s
**SBA Scott Base 58.20 180** *e*P P 09 20 59.0 +1.2
comp=Z,36nm,1.4s
**STKI Sintang 58.78 283** P P 09 21 04.7 +1.8
comp=Z,79nm,1.2s
**CASY Casey 59.27 203** *e*P P 09 21 05.2 -0.2
comp=Z,14nm,0.6s
**CISI Cisompet, Garu 59.52 273** P P 09 21 08.0 -0.1
comp=Z,82nm,1.4s,comp=Z,2µm
**LEM Lembang 59.94 274** P P 09 21 12.7 +1.6
comp=Z,1µm,1.3s
**KSM Kuching 60.41 283** P P 09 21 14.9 +0.8
baz=61,SNR=9.7
**CBJI Citeko 60.79 274** P P 09 21 16.4 -0.3
comp=Z,393nm,1.1s
**CGJI Cibinong 61.82 273** P P 09 21 23.3 -0.4
comp=Z,150nm,0.8s,comp=Z,4µm
**MJAR Matsushiro Arr 62.66 333** P P 09 21 27.7 -1.1
comp=Z,8.5nm,1.0s,baz=170,slow=6.6,SNR=14
MJAR LR LR 09 48 55.1
comp=Z,31nm,19.2s,baz=150,slow=36
**MAJO Matsushiro 62.66 333**⇑ *i*P P 09 21 28.9 +0.1
MAJO pmax pmax
comp=Z,145nm,1.4s
**MAJO Matsushiro 62.66 333** *e*P P 09 21 28.7 -0.1
comp=Z,44nm,1.8s
**MAT Matsushiro 62.66 333** P P 09 21 28.9 +0.1
MAT S **S** 09 29 51.6 -2.7
**PPBI Pangkal Pinang 62.90 278** P P 09 21 31.4 +0.5
comp=Z,28nm,0.9s
**KASI Kota Agung 63.29 274** P P 09 21 32.8 -0.7
comp=Z,81nm,0.9s
**JNU Nakatsue 63.41 325** P P 09 21 34.2 +0.3
comp=Z,36nm,1.2s,baz=27,slow=0.6,SNR=3.6
**MDSI Maura Dua 63.94 275** P P 09 21 36.9 -0.9
comp=Z,23nm,1.2s,comp=Z,1µm
**KUR Kuril'sk 67.19 345** P P 09 22 07.7 +10
KUR *i* 09 22 25.9
KUR S S 09 31 09.2 +20
KUR pmax pmax
comp=Z,303nm,4.1s
KUR MLR MLR
comp=Z,421nm,19.0s
**ASAJ Asahikawa 67.66 340** P P 09 22 01.4 +0.4
comp=Z,12nm,0.9s,baz=152,slow=4.0,SNR=7.2
**KSRS Korea Array 68.27 326** P P 09 22 04.9 -0.2
comp=Z,8.1nm,1.0s,baz=148,slow=7.1,SNR=18
KSRS LR LR 09 48 36.7
comp=Z,32nm,21.7s,baz=159,slow=33
**KSAR Wonju Array Be 68.28 326** P P 09 22 04.9 -0.2
**KSAR Wonju Array Be 68.28 326** P P 09 22 04.9 -0.2
**KTGM Kuala Trenggan 68.50 284**⇑ P P 09 22 06.2 -0.8
**BKNI Bangkinang 68.55 278** P P 09 22 08.2 +0.8
comp=Z,130nm,1.3s,comp=Z,3µm
**QIZ Qiongzhong 68.86 300** P P 09 22 09.8 +0.7
QIZ S **S** 09 31 10.3 -0.2
QIZ sS sS 09 31 41.8 +11
QIZ PMZ
comp=Z,10.0nm,1.1s
QIZ PMZ
comp=Z,150nm,6.8s
**NJ2 Nanjing 69.78 317** *e*P P 09 22 13.3 -1.3
NJ2 PMZ
comp=Z,40nm,0.8s
**MNSI Mandailing Nat 70.08 278** P P 09 22 16.8 0.0
comp=Z,34nm,1.3s,comp=Z,1µm
**QSPA South Pole Qui 70.35 180** P P 09 22 17.7 -0.1
comp=Z,17nm,1.1s,baz=3.1,slow=2.5,SNR=7.8
**PSI Prapat 71.41 280** P P 09 22 24.9 -0.2
baz=72,SNR=17
**SKLT Songkhla 71.52 285** P P 09 22 26.9 +1.3
comp=Z,43nm,1.1s
**USRK Ussuriysk Ar. 71.65 333** P P 09 22 25.8 +0.1
comp=Z,21nm,1.0s,baz=147,slow=4.1,SNR=23
USRK LR LR 09 51 37.1
comp=Z,90nm,19.9s,baz=161,slow=34
**GSI Gunungsitoli 72.13 278** P P 09 22 29.5 +0.2
comp=Z,66nm,1.2s
**SKNT Sakolnakorn 72.74 296** P P 09 22 33.5 +0.7
comp=Z,30nm,1.7s
**MDJ Mudanjiang 73.01 332** P P 09 22 35.5 +1.7
MDJ PMZ
comp=Z,47nm,1.0s
MDJ PMZ
comp=Z,170nm,7.1s
**PETK Petropavlovsk- 73.06 353** P P 09 22 34.6 +0.7
comp=Z,11nm,0.8s,baz=133,slow=10,SNR=4.9
**TIA Tai'an 73.56 319** *e*P P 09 22 28.5 -8.8
**NONG Nongkai 73.94 296** P P 09 22 41.1 +1.2
comp=Z,13nm,1.5s
**HABR Khabarovsk 74.00 338** *e*P P 09 22 39.1 -0.4
HABR *e**PP **pP** 09 22 49.2 -2.7
HABR *e* 09 22 53.7
HABR *e* 09 25 24.1
HABR *e*S S 09 32 09.6 +0.8
HABR *e* 09 32 46.3
HABR *e*SS SS 09 36 56.0 +1.4
HABR pmax pmax
comp=Z,14nm,1.3s
HABR pmax pmax
comp=E,50nm,2.3s
HABR MLR MLR
comp=Z,76nm,19.0s
**CN2 Changchun 74.29 329** *e*P P 09 22 42.0 +0.7
CN2 PMZ
comp=Z,30nm,1.3s
**GYA Guiyang 75.19 305** P P 09 22 48.3 +1.2
GYA pP PcP 09 23 08.4 +8.0
GYA sP sP 09 23 16.0 +12
GYA PP **PP** 09 25 40.0 +4.0
GYA S S 09 32 21.3 -1.9
GYA SKS **SKSac** 09 32 46.6 -6.9
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.2s
GYA LN
comp=Z,540nm,18.8s
GYA LE
comp=Z,480nm,19.0s
GYA LZ
comp=Z,470nm,18.6s
**LOEI Loei 75.29 295** P P 09 22 47.0 -0.7
comp=Z,11nm,1.1s
**SRDT SRDT 75.79 291** P P 09 22 53.9 +3.3
comp=Z,56nm,1.1s,comp=Z,7µm
**KLR Kul'dur 75.84 336** *e*P P 09 22 48.2 -1.9
KLR pmax pmax
comp=Z,130nm,1.8s
**UTTA Uttaradit 76.00 295** P P 09 22 53.9 +2.2
comp=Z,2.7nm,1.1s
**NANT Nan 76.35 296** P P 09 22 55.8 +2.1
comp=Z,3.5nm,0.7s
**BJI Beijing 76.61 322** P P 09 22 55.4 +0.7
BJI S **S** 09 32 38.8 +0.8
BJI PMZ
comp=Z,14nm,1.6s
**LAMP Lampang 77.13 295** P P 09 23 00.3 +2.2
comp=Z,5.6nm,1.1s,comp=Z,112nm
**KMI Kunming 77.59 302** P P 09 23 02.8 +2.0
KMI PMZ
comp=Z,19nm,0.9s
KMI PMZ
comp=Z,140nm,4.6s
KMI LN
comp=Z,120nm,5.0s
KMI LE
comp=Z,140nm,5.0s
KMI LZ
comp=Z,110nm,6.5s
**MAW Mawson 77.59 202** P P 09 23 00.1 +0.3
comp=Z,23nm,1.0s,baz=115,slow=6.8,SNR=32
MAW LR LR 09 54 00.2
comp=Z,255nm,18.7s,baz=62,slow=33
**MAW Mawson 77.59 202** P P 09 23 01.2 +1.4
baz=78,SNR=21
**CMAR Chiang Mai Arr 77.69 295** P P 09 23 01.6 +0.3
comp=Z,3.3nm,0.3s,baz=131,slow=4.6,SNR=23
**CMAR Chiang Mai Arr 77.69 295** *i* P P 09 23 02.5 +1.2
CMAR pmax pmax
comp=Z,11nm,1.0s
**CHTO Chiang Mai 77.84 295** P P 09 23 03.4 +1.3
comp=Z,62nm,1.2s
**CHTO Chiang Mai 77.84 295** *e*P P 09 23 03.5 +1.3
CHTO pmax pmax
comp=Z,18nm,1.3s
**CHTO Chiang Mai 77.84 295** *e*P P 09 23 03.5 +1.4
comp=Z,18nm,1.3s
**CMAI Chiengmai2 78.25 296** P P 09 23 07.2 +2.7
comp=Z,14nm,1.1s,comp=Z,892nm
**MHMT Maesarieng 78.44 294** P P 09 23 08.1 +2.7
comp=Z,9.0nm,1.3s
**CD2 Chengdu 79.65 308** P P 09 23 12.5 +0.7
CD2 pP pP 09 23 32.3 +8.0
CD2 sP sP 09 23 40.5 +11
CD2 S S **09 33 10.0 -1.3**
CD2 sS ScS 09 33 44.1 +11
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.0s
**HHC Hu-ho-hao-te 79.86 320** *e*P P 09 23 14.3 +1.5
HHC pP pP 09 23 37.9 +13
HHC sP sP 09 23 42.4 +12
HHC PP **PP** **09 26 15.6 +0.6**
HHC sS **ScS** **09 33 40.9 +6.7**
HHC PMZ
comp=Z,29nm,1.3s
HHC PMZ
comp=Z,190nm,7.2s
HHC LN
comp=Z,160nm,17.9s
HHC LE
comp=Z,270nm,17.4s
**HIA Hailar 80.96 330**⇑ *i*P P 09 23 19.4 +0.9
HIA pmax pmax
comp=Z,33nm,1.5s
**LZH Lanzhou 82.22 313** *e*P P 09 23 26.8 +1.2
LZH pP pP 09 23 48.6 +10
LZH sP sP 09 23 57.8 +15
LZH PP **PP** **09 26 37.3 +2.6**
LZH *e*SS **SS** **09 38 58.0 -1.3**
LZH PMZ
comp=Z,36nm,1.1s
LZH PMZ
comp=Z,190nm,4.0s
**SYO Syowa Base 84.18 196**⇑ *e*P P 09 23 33.6 -1.4
**SYO Syowa Base 84.18 196**⇓ *e*PcP P 09 23 36.8 +1.8
**ULN Ulaanbaatar 86.58 324** *d* *i*P P 09 23 48.1 +0.7
ULN pmax pmax
comp=Z,35nm,1.2s
**ULN Ulaanbaatar 86.58 324** *e*P P 09 23 48.4 +1.0
comp=Z,50nm,1.4s
**GTA Gaotai 86.65 314** P P 09 23 49.1 +1.2
GTA pP pP 09 24 09.6 +9.1
GTA sP sP 09 24 17.6 +12
GTA SKS **SKSac** **09 34 07.1 -4.4**
GTA S **SKKSac** **09 34 20.4 +0.6**
GTA sS sS 09 34 57.0 +14
GTA PMZ
comp=Z,5.0nm,1.1s
GTA PMZ
comp=Z,120nm,6.7s
GTA LN
comp=Z,120nm,18.0s
GTA LE
comp=Z,120nm,19.0s
GTA LZ
comp=Z,99nm,16.6s
**SONM Songino Array 86.93 324** P P 09 23 48.7 -0.4
comp=Z,7.0nm,0.9s,baz=143,slow=4.2,SNR=34
SONM LR LR 10 00 57.1
comp=Z,43nm,20.6s,baz=125,slow=34
**YAK Yakutsk 86.98 343** *e*P P 09 23 48.9 +0.1
YAK pmax pmax
comp=Z,42nm,1.6s
**BILL Bilibino 87.50 359**⇑ *i*P P 09 23 51.5 +0.3
BILL pmax pmax
comp=Z,47nm,2.6s
**PMR Palmer 87.92 19** *e*P P 09 23 52.9 -0.4
PMR pmax pmax
comp=Z,18nm,1.2s
**PMR Palmer 87.92 19** *e*P P 09 23 52.9 -0.4
comp=Z,18nm,1.2s
**N02D Trinity Center 88.04 45** P P 09 23 54.0 -0.5
baz=88
**ARVC Arvin 88.13 52** P P 09 23 54.5 -0.5
baz=88
**M02C Callahan 88.14 45** P P 09 23 54.8 -0.2
baz=88
**VES Vestal, Richgr 88.25 51** P P 09 23 55.3 -0.2
baz=88
**NVL N'lazarevskaya 88.26 188** *e*P P 09 23 46.3 -8.7
NVL pmax pmax
comp=Z,14nm,0.9s
**CMB Columbia Colle 88.28 49** *e*P P 09 23 55.8 +0.1
CMB pmax pmax
comp=Z,14nm,0.8s
**CMB Columbia Colle 88.28 49** *e*P P 09 23 55.8 +0.1
comp=Z,14nm,0.8s
**MWC Mount Wilson 88.32 53** *e*P P 09 23 56.0 -0.1
MWC pmax pmax
comp=Z,11nm,0.8s
**MWC Mount Wilson 88.32 53** *e*P P 09 23 56.0 -0.1
comp=Z,11nm,0.8s
**O03D Paynes Creek 88.33 46** P P 09 23 55.6 -0.3
baz=88
**RCTC Rector, Farmer 88.34 50** P P 09 23 55.3 -0.6
baz=88
**YBH Yreka Blue Hor 88.40 44** P P 09 23 56.3 +0.1
comp=Z,11nm,0.8s,baz=251,slow=1.9,SNR=12
**109C Camp Elliot, M 88.49 54** P P 09 23 56.5 -0.2
baz=88
**ISA Isabella 88.63 51** *e*P P 09 23 57.7 +0.3
ISA pmax pmax
comp=Z,9.0nm,0.8s
**ISA Isabella 88.63 51** P P 09 23 57.8 +0.4
baz=89,SNR=10.0
**ISA Isabella 88.63 51** *e*P P 09 23 57.7 +0.3
comp=Z,9.1nm,0.8s
**BFSC Mount Baldy Ra 88.63 53** P P 09 23 57.2 -0.4
baz=89,SNR=7.0
**HUMO Hull Mountain 88.65 44** *e*P P 09 23 58.1 +0.8
comp=Z,75nm,0.8s
**SNAA Sanae 88.65 183** P P 09 23 56.7 -0.2
comp=Z,6.0nm,1.1s,baz=180,slow=4.9,SNR=23
**SNAA Sanae 88.65 183** *e*P P 09 23 56.2 -0.8
SNAA pmax pmax
comp=Z,13nm,1.3s
**SNAA Sanae 88.65 183** *e*P P 09 23 56.2 -0.8
comp=Z,13nm,1.3s
**EDW2 Edwards Air Fo 88.65 52** P P 09 23 57.5 0.0
baz=89,SNR=6.0
**MURC Murrieta 88.71 54** P P 09 23 57.7 -0.1
baz=89
**I03D Drain, OR 88.92 42** P P 09 23 58.4 0.0
baz=89
**M04C Macdoel 89.00 45** P P 09 23 59.0 0.0
baz=89
**MONP Monument Peak 89.01 55** P P 09 23 59.1 -0.3
baz=89,SNR=9.8
**BBRC Big Bear Solar 89.19 53** P P 09 23 59.4 -0.9
baz=89
**CWC Cottonwood Cre 89.25 51** P P 09 23 59.7 -0.7
baz=89,SNR=6.8
**BOD Bodaibo 89.27 334** *e*P P 09 23 58.9 -0.8
BOD pmax pmax
comp=Z,15nm,1.4s
**VNA3 Neumayer Olymp 89.28 181** P P 09 23 59.5 -0.4
**TIN Tinemaha 89.40 50** P P 09 24 00.9 -0.1
baz=90
**K04D Chiloquin, OR 89.44 44** P P 09 24 01.3 +0.1
baz=90
**SWSC Sam W. Stewart 89.51 55** P P 09 24 01.2 -0.3
baz=90
**MPMC Manual Prospec 89.52 51** P P 09 24 00.9 -0.8
baz=90,SNR=11
**DAC Darwin (Calif) 89.53 51** *e*P P 09 23 59.5 -2.3
DAC pmax pmax
comp=Z,9.0nm,0.9s
**DAC Darwin (Calif) 89.53 51** *e*P P 09 23 59.5 -2.3
comp=Z,8.8nm,0.9s
**VNA2 Neumayer--Watz 89.56 181** P P 09 24 01.2 +0.1
baz=173,slow=4.5
**GSC Goldstone 89.71 52** *e*P P 09 24 02.1 -0.5
GSC pmax pmax
comp=Z,49nm,1.8s
**GSC Goldstone 89.71 52** P P 09 24 02.0 -0.5
baz=90
**GSC Goldstone 89.71 52** *e*P P 09 24 02.0 -0.5
comp=Z,49nm,1.8s
**BELC Belle Mtn. Jos 89.78 54** P P 09 24 02.6 -0.4
baz=90,SNR=12
**VNA1 Neumayer--Stat 89.85 181** P P 09 24 02.5 0.0
**HEC Hector,Ludlow 89.87 53** P P 09 24 03.1 -0.1
baz=90,SNR=5.6
**NVAR Mina Array Bea 89.93 49** P P 09 24 03.7 0.0
comp=Z,5.5nm,0.7s,baz=226,slow=8.6,SNR=38
NVAR pP **pP** 09 24 14.9 -1.5
comp=Z,7.9nm,0.7s,baz=228,slow=8.5,SNR=15
NVAR LR LR 09 57 09.5
comp=Z,410nm,20.0s,baz=260,slow=31
**GRAC Grapevine Rang 90.00 51** P P 09 24 03.7 -0.1
baz=90,SNR=7.8
**ZAK Zakamensk 90.03 325** *e*P P 09 24 02.2 -1.5
ZAK pmax pmax
comp=Z,12nm,1.4s
ZAK pmax pmax
comp=Z,7.0nm,1.1s
**BC3 Big Chuckawall 90.06 54** P P 09 24 03.8 -0.5
baz=90,SNR=5.5
**MOD Modoc 90.07 45** *e*P P 09 24 04.5 +0.4
comp=Z,20nm,0.8s
**J05D Fort Rock, OR 90.08 44** P P 09 24 03.7 -0.5
baz=90
**FURC Furnace Creek, 90.15 51** P P 09 24 04.8 +0.4
baz=90,SNR=8.6
**GLA Glamis 90.30 55** P P 09 24 05.0 -0.3
baz=90,SNR=6.5
**SHOC Shoshone 90.34 52** P P 09 24 05.1 -0.2
baz=90,SNR=9.5
**GMRC Granite Mounta 90.36 53** P P 09 24 04.9 -0.7
baz=90,SNR=8.5
**IRM Iron Mountain 90.49 54** P P 09 24 05.8 -0.3
baz=90,SNR=7.4
**I05D Terrebonne, OR 90.50 43** P P 09 24 06.0 0.0
baz=91
**TLY Talaya 90.52 326** *e*P P 09 24 06.7 +0.9
TLY pmax pmax
comp=Z,29nm,2.0s
**COLA College 90.81 17** P P 09 24 07.0 +0.3
COLA pmax pmax
comp=Z,21nm,2.7s
**COLA College 90.81 17** *e*P P 09 24 06.3 -0.4
comp=Z,8.3nm,1.0s
**Y12C Blythe 90.81 54** P P 09 24 07.3 -0.3
baz=91,SNR=6.6
**G05D Wamic, OR 90.93 42** P P 09 24 07.7 -0.2
baz=91
**ILAR Eielson Array 91.00 18** P P 09 24 06.2 -1.6
comp=Z,1.8nm,0.6s,baz=236,slow=5.0,SNR=33
ILAR LR LR 09 58 24.0
comp=Z,109nm,19.9s,baz=247,slow=31
**NEE2 Needles Airpor 91.14 53** P P 09 24 08.7 -0.4
baz=91
**SHPR Sheep Range 91.42 52** *e*P P 09 24 10.8 +0.2
comp=Z,21nm,1.5s
**WVOR Wild Horse Val 91.42 45** *e*P P 09 24 10.9 +0.5
WVOR pmax pmax
comp=Z,8.0nm,0.8s
**WVOR Wild Horse Val 91.42 45** *e*P P 09 24 10.9 +0.5
comp=Z,8.2nm,0.8s
**214A Organ Pipe Nat 91.45 57** P P 09 24 10.1 -0.6
baz=92,SNR=6.0
**BMN Battle Mountai 91.54 47** *e*P P 09 24 11.2 +0.2
BMN pmax pmax
comp=Z,11nm,0.7s
**BMN Battle Mountai 91.54 47** *e*P P 09 24 11.2 +0.2
comp=Z,10nm,0.7s
**R11A Troy Canyon, C 91.84 50** P P 09 24 11.7 -0.8
baz=92
**B05A Bryant 91.85 39** P P 09 24 11.7 -0.3
baz=92
**TUC Tucson 93.18 57** *e*P P 09 24 19.5 +0.8
TUC pmax pmax
comp=Z,10.0nm,0.9s
**TUC Tucson 93.18 57** *e*P P 09 24 19.5 +0.8
comp=Z,10.0nm,0.9s
**WUAZ Wupatki 93.88 54** P P 09 24 21.5 -0.5
baz=94
**WUAZ Wupatki 93.88 54** *e*P P 09 24 22.4 +0.5
comp=Z,6.1nm,0.8s
**MSU Marysvale 94.38 51** *e*P P 09 24 25.1 +0.9
MSU pmax pmax
comp=Z,3.0nm,0.8s
**MSU Marysvale 94.38 51** *e*P P 09 24 25.1 +0.9
comp=Z,3.2nm,0.8s
**DUG Dugway 94.54 49** P P 09 24 24.2 -0.7
baz=95
**HLID Hailey 94.71 45** P P 09 24 24.8 -0.7
baz=95
**NEW Newport 94.84 40** P P 09 24 25.5 -0.4
baz=95
**121A Cookes Peak, D 95.63 58** P P 09 24 29.3 -0.7
baz=96
**TCUT Toone Canyon 95.87 49** *e*P P 09 24 30.4 -0.6
comp=Z,6.6nm,0.7s
**HWUT Hardware Ranch 95.94 48** *e*P P 09 24 30.6 -0.6
comp=Z,3.8nm,0.9s
**MSO Missoula 96.26 43** P P 09 24 32.1 -0.4
baz=96
**WMQ Urumqi 96.73 314** P P 09 24 35.0 +0.4
WMQ SKS **SKSac** **09 35 04.0 -4.3**
WMQ S S 09 35 46.0 -7.2
WMQ SS **SS** **09 42 26.0 -3.3**
WMQ PMZ
comp=Z,12nm,1.0s
WMQ PMZ
comp=Z,13nm,8.0s
WMQ LN
comp=Z,86nm,19.0s
WMQ LE
comp=Z,68nm,20.0s
**MNTX Cornudas Mount 97.29 59** P P 09 24 36.8 -0.6
baz=97
**BOZ Bozeman (W) 97.32 44** P P 09 24 37.0 -0.4
baz=97
**ANMO Albuquerque 97.47 56**⇓ *e*P P 09 24 37.8 -0.6
ANMO pmax pmax
comp=Z,4.0nm,1.5s
**ANMO Albuquerque 97.47 56** *e*P P 09 24 37.8 -0.6
comp=Z,2.0nm,1.1s
**TXAR Lajitas Array 97.95 62** P Pdif 09 24 40.9 +0.3
comp=Z,1.0nm,0.8s,baz=218,slow=5.8,SNR=15
TXAR pP pP 09 24 52.0 -1.3
comp=Z,1.1nm,0.8s,baz=223,slow=5.4,SNR=7.5
TXAR LR LR 10 02 14.8
comp=Z,248nm,18.9s,baz=0.0,slow=31
**S22A 4UR Ranch, Cre 98.08 53** P P 09 24 39.6 -1.6
baz=98
**429A Davenport Ranc 99.81 61** P **Pdif** 09 24 47.6 -1.2
baz=100
**MKAR Makanchi Array 101.30 316** PP PP 09 29 06.0 +1.2
comp=Z,0.7nm,0.7s,baz=84,slow=11,SNR=3.6
**YKA Yellowknife Ar 101.58 28** P **Pdif** 09 24 54.7 -1.0
comp=Z,1.7nm,0.7s,baz=261,slow=5.0,SNR=5.7
**M28A Bar X Bar Ranc 103.16 51** P **Pdif** 09 25 02.7 -0.8
baz=103
**W32A Sentinel 103.19 57** P **Pdif** 09 25 02.7 -0.9
baz=103
**R30A Dighton 103.19 54** P **Pdif** 09 25 02.5 -1.1
baz=103
**ARU Arti 116.97 324** *i* PKIKP **PKPdf** 09 29 47.7 -0.6
ARU 09 30 55.1
**ARCES ARCESS Array B 125.23 345** PKP **PKPdf** 09 30 03.9 0.0
comp=Z,1.7nm,0.6s,baz=90,slow=1.2,SNR=11
ARCES pPKP **pPKPdf** 09 30 15.5 -1.4
comp=Z,3.8nm,0.7s,baz=14,slow=2.5,SNR=2.2
**KLMR Klimovskoe 125.43 332** *e*PKIKP **PKPdf** 09 30 02.9 -1.6
KLMR pmax pmax
comp=Z,47nm,1.8s
**LSZ Lusaka 127.42 232** PKP **PKPdf** 09 30 10.5 +0.7
comp=Z,0.7nm,0.4s,baz=19,slow=12,SNR=3.2
**KMBO Kilima Mbogo 127.53 253** PKP **PKPdf** 09 30 11.4 +1.2
comp=Z,3.3nm,1.1s,baz=70,slow=6.2,SNR=5.1
**KMBO Kilima Mbogo 127.53 253** *e*PKIKP **PKPdf** **09 30 11.6 +1.3**
**KMBO Kilima Mbogo 127.53 253** *e*P **PKPdf** **09 30 11.6 +1.3**
**KIV Kislovodsk 128.74 311** *i* PKIKP **PKPdf** **09 30 12.8 +1.3**
KIV pmax pmax
comp=Z,5.0nm,0.9s
**NEY Neytrino 128.84 310** PKIKP **PKPdf** **09 30 11.0 -0.8**
**OBN Obninsk 129.27 326** *i* PKIKP **PKPdf** **09 30 14.0 +2.1**
OBN *i* 09 32 27.9
OBN pmax pmax
comp=Z,29nm,1.6s
**FINES FINESS Array B 130.59 337** PKP **PKPdf** **09 30 13.2 -1.1**
comp=Z,3.7nm,1.1s,baz=145,slow=7.0,SNR=5.1
**ANN Anapa 132.24 313** *i* PKIKP **PKPdf** **09 30 17.3 -0.6**
ANN pmax pmax

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,45nm,1.8s | | | | | | | |
| AKASG | **Malin Array Be** | **135.22 324** | | PKP | **PKPdf** | **09 30 22.7** | **-0.6** |
| | comp=Z,0.9nm,0.6s,baz=56,slow=1.4,SNR=5.1 | | | | | | | |
| NOA | **NORSAR Array B** | **135.59 344** | | PKP | **PKPdf** | **09 30 22.8** | **-1.0** |
| | comp=Z,1.2nm,0.8s,baz=260,slow=3.0,SNR=3.5 | | | | | | | |
| BRTR | **Keskin Array B** | **136.22 307** | | PKP | **PKPdf** | **09 30 26.6** | **+0.9** |
| | comp=Z,0.4nm,0.4s,baz=152,slow=8.1,SNR=4.4 | | | | | | | |
| KOLS | **Kolonicke sedl** | **139.98 325** | *e* | PKIKP | **PKPdf** | **09 30 33.1** | **+0.9** |
| KOLS | **Kolonicke sedl** | **139.98 325** | *e* | PKP | **PKPdf** | **09 30 33.1** | **+0.9** |
| VYHS | **Vyhne** | **142.07 326** | *e* | PKIKP | **PKPdf** | **09 30 35.2** | **-0.8** |
| VYHS | **Vyhne** | **142.07 326** | *e* | PKP | **PKPdf** | **09 30 35.2** | **-0.8** |
| DPC | **Dobruska-Polom** | **142.09 330** | *e* | PKIKP | **PKPdf** | **09 30 33.7** | **-2.3** |
| DPC | | | *e* | | | 09 30 50.2 | | |
| DPC | **Dobruska-Polom** | **142.09 330** | *e* | PKP | **PKPdf** | **09 30 33.7** | **-2.3** |
| DPC | | | *ep* | PKP | **pPKPdf** | **09 30 50.2** | **+1.1** |
| BRG | **Berggiesshubel** | **142.79 333** | *e* | P | **PKPdf** | **09 30 34.4** | **-2.8** |
| | comp=Z,16nm,1.6s | | | | | | | |
| BRG | **Berggiesshubel** | **142.79 333** | | PKIKP | **PKPdf** | **09 30 34.4** | **-2.8** |
| BRG | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.6s | | | | | | | |
| CLL | **Collm** | **142.86 334** | *e* | PKIKP | **PKPdf** | **09 30 37.0** | **-0.3** |
| CLL | | | *e* | | | 09 30 48.0 | | |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| CLL | **Collm** | **142.86 334** | *e* | PKPdf | **PKPdf** | **09 30 37.0** | **-0.3** |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| CLL | | | *ep* | PKPdf | **pPKPdf** | **09 30 48.0** | **-2.4** |
| GOPC | **GO Pecny, Ondr** | **143.10 331** | *e* | PKIKP | **PKPdf** | **09 30 37.4** | **-0.4** |
| GOPC | **GO Pecny, Ondr** | **143.10 331** | *e* | PKP | **PKPdf** | **09 30 37.4** | **-0.4** |
| SCHF | **Schoenfels** | **143.59 334** | *e* | PKPbc | PKPbc | 09 30 36.8 | +0.8 |
| | baz=39,slow=3.1 | | | | | | | |
| TAUT | **Tautenburg** | **143.64 335** | *e* | PKPbc | PKPbc | 09 30 36.9 | +0.8 |
| | baz=39,slow=3.1 | | | | | | | |
| TANN | **Tannenbergstha** | **143.76 333** | *e* | PKPbc | PKPbc | 09 30 37.3 | +0.7 |
| | baz=39,slow=3.1 | | | | | | | |
| WERD | **Werda** | **143.80 334** | *e* | PKPbc | PKPbc | 09 30 37.2 | +0.5 |
| | baz=39,slow=3.1 | | | | | | | |
| PLN | **Plauen** | **143.83 334** | *e* | PKPbc | PKPbc | 09 30 37.4 | +0.7 |
| | baz=39,slow=3.1 | | | | | | | |
| GUNZ | **Gunzen** | **143.85 334** | *e* | PKPbc | PKPbc | 09 30 37.7 | +0.8 |
| | baz=39,slow=3.1 | | | | | | | |
| WERN | **Wernitzgruen** | **143.89 333** | *e* | PKPbc | PKPbc | 09 30 38.0 | +1.0 |
| | baz=39,slow=3.1 | | | | | | | |
| NKC | **Novy Kostel** | **143.90 333** | *e* | PKIKP | PKPbc | 09 30 37.9 | +0.9 |
| NKC | | | *e* | | | 09 30 54.7 | | |
| NKC | **Novy Kostel** | **143.90 333** | *e* | PKPbc | PKPbc | 09 30 37.6 | +0.6 |
| | baz=39,slow=3.1 | | | | | | | |
| NKC | **Novy Kostel** | **143.90 333** | *e* | PKP | PKPbc | 09 30 37.9 | +0.9 |
| NKC | | | *ep* | PKP | pPKPdf | 09 30 54.7 | +2.4 |
| MOX | **Moxa** | **143.93 334** | *e* | PKPbc | PKPbc | 09 30 37.4 | +0.4 |
| | baz=39,slow=3.1 | | | | | | | |
| TRIB | **Obertriebel** | **143.94 334** | *e* | PKPbc | PKPbc | 09 30 37.4 | +0.3 |
| | baz=39,slow=3.1 | | | | | | | |
| ROHR | **Rohrbach** | **143.96 333** | *e* | PKPbc | PKPbc | 09 30 37.9 | +0.7 |
| | baz=39,slow=3.1 | | | | | | | |
| CONA | **Conrad Observa** | **143.96 328** | *i* | PKPdf | **PKPdf** | **09 30 39.0** | **-0.5** |
| | comp=Z,36nm,1.1s,SNR=12 | | | | | | | |
| LIT | **Litokhoron** | **144.21 312** | | P | **PKPab** | **09 30 37.1** | **-0.8** |
| KHC | **Kasperske Hory** | **144.22 331** | *e* | PKIKP | PKPbc | 09 30 38.3 | +0.3 |
| KHC | | | *e* | | | 09 30 42.8 | | |
| KHC | **Kasperske Hory** | **144.22 331** | *e* | PKP | PKPbc | 09 30 38.3 | +0.3 |
| KHC | | | *ex* | | x | 09 30 42.8 | | |
| KHC | | | *ep* | PKP | pPKPdf | 09 30 56.8 | +3.9 |
| KHC | **Kasperske Hory** | **144.22 331** | *e* | PKPdf | PKPbc | 09 30 38.2 | +0.2 |
| ROTZ | **Rotzenmuhle** | **144.35 333** | *e* | PKPbc | **PKPdf** | **09 30 39.3** | **-0.7** |
| | baz=39,slow=3.1 | | | | | | | |
| GEC2 | **GERESS Array S** | **144.37 331** | *e* | PKPbc | PKPbc | 09 30 39.3 | +0.7 |
| | baz=39,slow=3.1 | | | | | | | |
| GERES | **GERESS Array B** | **144.37 331** | | PKP | PKPbc | 09 30 39.0 | +0.5 |
| | comp=Z,2.5nm,0.7s,baz=41,slow=2.6,SNR=20 | | | | | | | |
| WET | **Wettzell** | **144.52 332** | *e* | PKPbc | PKPbc | 09 30 39.6 | +0.6 |
| | baz=39,slow=3.1 | | | | | | | |
| ARSA | **Arzberg** | **144.58 327** | *i* | PKPdf | PKPbc | 09 30 39.8 | +0.6 |
| | comp=Z,39nm,1.4s,SNR=15 | | | | | | | |
| WTSB | **Winterswijk** | **144.62 340** | *e* | PKP | **PKPdf** | **09 30 42.7** | **+2.4** |
| | comp=Z,38nm,1.1s | | | | | | | |
| MOA | **Molln** | **144.80 329** | *i* | PKPdf | **PKPdf** | **09 30 40.9** | **+0.1** |
| | comp=Z,64nm,1.3s,SNR=19 | | | | | | | |
| GRF | **Grafenberg Arr** | **144.83 334** | *e* | PKPbc | **PKPdf** | **09 30 40.9** | **+0.1** |
| | baz=39,slow=3.1 | | | | | | | |
| GRFO | **Grafenberg** | **144.83 334** | *e* | PKIKP | **PKPdf** | **09 30 41.0** | **+0.2** |
| GRFO | **Grafenberg** | **144.83 334** | *e* | PKPdf | **PKPdf** | **09 30 41.0** | **+0.2** |
| NEST | **Nestorio** | **145.07 313** | | P | **PKPbc** | **09 30 40.6** | **-0.5** |
| PERS | **Pernice** | **145.19 327** | *i* | PKPbc | **PKPab** | **09 30 41.5** | **+0.2** |
| SOKA | **Soboth** | **145.21 327** | *i* | PKPdf | **PKPdf** | **09 30 41.9** | **+0.2** |
| | comp=Z,52nm,1.2s,SNR=21 | | | | | | | |
| KLV | **Kalavryta, Ach** | **145.26 309** | | P | **PKPbc** | **09 30 41.8** | **0.0** |
| LAKA | **Lakka** | **145.32 309** | | P | **PKPbc** | **09 30 41.5** | **-0.4** |
| RCBR | **Riachuelo** | **145.36 135** | | PKPbc | **PKPbc** | **09 30 41.3** | **-1.4** |
| | comp=Z,10.0nm,0.9s,baz=222,slow=7.2,SNR=6.2 | | | | | | | |
| RCBR | **Riachuelo** | **145.36 135** | | PKPbc | **PKPbc** | **09 30 41.3** | **-1.4** |
| RCBR | | | *e* | PKPdf | **PKPdf** | **09 30 41.9** | **-1.0** |
| TNS | **Taunus Mts** | **145.50 337** | *e* | PKPbc | **PKPab** | **09 30 43.0** | **+0.6** |
| | baz=39,slow=3.1 | | | | | | | |
| JAN | **Janina** | **145.54 312** | | P | **PKPdf** | **09 30 42.1** | **-0.3** |
| OBKA | **Obir** | **145.57 327** | *i* | PKPab | **PKPab** | **09 30 43.2** | **+0.4** |
| | comp=Z,37nm,1.2s,SNR=9.0 | | | | | | | |
| RJOB | **Jochberg** | **145.58 330** | *e* | PKPbc | **PKPab** | **09 30 42.9** | **+0.1** |
| | baz=39,slow=3.1 | | | | | | | |
| DSL | **Palaion Diasel** | **145.59 311** | | P | **PKPbc** | **09 30 42.9** | **+0.2** |
| DRO | **Drossia** | **145.62 309** | | P | **PKPab** | **09 30 43.8** | **+0.6** |
| PDKS | **Podkum** | **145.63 326** | *i* | PKPbc | **PKPab** | **09 30 44.9** | **+1.9** |
| ITM | **Ithomi** | **145.75 308** | | P | **PKPdf** | **09 30 42.6** | **-0.2** |
| PDO | **Prodromos** | **145.75 310** | | P | **PKPab** | **09 30 43.6** | **0.0** |
| KBA | **Koelnbreinsper** | **145.78 329** | *i* | PKPab | **PKPbc** | **09 30 43.1** | **-0.1** |
| | comp=Z,45nm,1.3s,SNR=14 | | | | | | | |
| BOJS | **Bojanci** | **145.86 325** | *i* | PKPbc | **PKPab** | **09 30 44.1** | **+0.3** |
| HGN | **Heimansgroeve** | **145.93 340** | *e* | PKP | **PKPbc** | **09 30 43.5** | **+0.1** |
| | comp=Z,84nm,1.4s | | | | | | | |
| MYKA | **Terra Mystica** | **145.95 328** | *i* | PKPab | **PKPbc** | **09 30 43.9** | **+0.2** |
| | comp=Z,39nm,1.4s,SNR=9.8 | | | | | | | |
| IGT | **Igoumenitsa** | **145.96 312** | | P | **PKPbc** | **09 30 43.9** | **+0.1** |
| FUR | **Furstenfeldbru** | **145.96 332** | *e* | PKPbc | **PKPab** | **09 30 44.6** | **+0.5** |
| | baz=39,slow=3.1 | | | | | | | |
| PYL | **PYLOS** | **145.99 307** | | P | **PKPdf** | **09 30 43.0** | **-0.2** |
| SGD | **Sagiada** | **145.99 313** | | P | **PKPbc** | **09 30 44.1** | **+0.2** |
| MEM | **Membach** | **146.04 339** | | PKP | **PKPdf** | **09 30 41.2** | **-1.6** |
| LKD2 | **Lefkada island** | **146.05 311** | | P | **PKPbc** | **09 30 44.4** | **+0.2** |
| JAVS | **Javornik** | **146.23 327** | *i* | PKPbc | **PKPbc** | **09 30 44.8** | **+0.2** |
| JAVS | | | *i* | | | 09 30 46.8 | | |
| KEK | **Kerkira** | **146.25 313** | | P | **PKPdf** | **09 30 42.5** | **-1.0** |
| STU | **Stuttgart** | **146.38 334** | *e* | PKP2 | **PKPab** | **09 30 45.6** | **0.0** |
| STU | **Stuttgart** | **146.38 334** | *e* | PKPbc | **PKPab** | **09 30 45.6** | **0.0** |
| | baz=39,slow=3.1 | | | | | | | |
| STU | **Stuttgart** | **146.38 334** | *e* | PKPbc | **PKPab** | **09 30 45.6** | **0.0** |
| ABTA | **Abfaltersbach** | **146.42 329** | ‖ | PKPbc | **PKPdf** | **09 30 42.8** | **-0.9** |
| | comp=Z,45nm,1.2s,SNR=16 | | | | | | | |
| BCLA | **Clavier** | **146.43 340** | | PKP | **PKPbc** | **09 30 45.0** | **+0.1** |
| WATA | **Walderalm** | **146.44 331** | ⇑ | PKPbc | **PKPdf** | **09 30 43.6** | **-0.2** |
| | comp=Z,13nm,1.0s,SNR=6.4 | | | | | | | |
| WTTA | **Wattenberg** | **146.47 330** | *i* | PKPab | **PKPab** | **09 30 46.3** | **0.0** |
| | comp=Z,50nm,1.7s,SNR=8.8 | | | | | | | |
| MOTA | **Moosalm** | **146.65 331** | ⇑ | PKPbc | **PKPdf** | **09 30 44.4** | **+0.2** |
| | comp=Z,22nm,0.9s,SNR=15 | | | | | | | |
| SNF | **Seneffe** | **146.68 341** | | PKP | **PKPab** | **09 30 46.4** | **-0.3** |
| WLF | **Walferdange** | **146.79 338** | | PKP | **PKPab** | **09 30 47.0** | **-0.1** |
| WLF | | | | APKP | **pPKPdf** | **09 30 58.3** | **+1.1** |
| WLF | **Walferdange** | **146.79 338** | *e* | PKP2 | **PKPab** | **09 30 46.7** | **-0.5** |
| WLF | **Walferdange** | **146.79 338** | *e* | PKPbc | **PKPab** | **09 30 47.1** | **-0.1** |
| | baz=39,slow=3.1 | | | | | | | |
| WLF | **Walferdange** | **146.79 338** | *e* | PKPbc | **PKPab** | **09 30 46.7** | **-0.5** |
| DOU | **Dourbes** | **146.94 340** | | PKP | **PKPbc** | **09 30 46.7** | **+0.4** |
| FETA | **Feichten** | **147.06 331** | ⇑ | PKPbc | **PKPdf** | **09 30 45.2** | **+0.2** |
| | comp=Z,36nm,1.3s,SNR=11 | | | | | | | |
| BFO | **Black Forest** | **147.08 335** | *i* | PKP2 | **PKPbc** | **09 30 47.6** | **+0.8** |
| BFO | **Black Forest** | **147.08 335** | *e* | PKPbc | **PKPbc** | **09 30 47.2** | **+0.3** |
| | baz=39,slow=3.1 | | | | | | | |
| BFO | **Black Forest** | **147.08 335** | *e* | PKPbc | **PKPbc** | **09 30 47.0** | **+0.1** |
| DAVA | **Damuels** | **147.24 332** | *i* | PKPab | **PKPbc** | **09 30 48.5** | **+0.9** |
| | comp=Z,36nm,1.1s,SNR=7.4 | | | | | | | |
| TUE | **Stuetta** | **148.10 332** | *e* | PKPbc | **PKPbc** | **09 30 50.1** | **+0.2** |
| TIP | **Timpagrande** | **148.57 314** | *e* | PKPbc | **PKPbc** | **09 30 51.6** | **+0.4** |
| BNI | **Bardonecchia** | **150.38 333** | *e* | PKIKP | **PKPbc** | **09 30 56.1** | **+0.5** |
| BNI | **Bardonecchia** | **150.38 333** | *e* | PKPbc | **PKPbc** | **09 30 56.1** | **+0.5** |
| KEST | **Kesra** | **155.39 315** | | PKPab | **PKPab** | **09 31 23.0** | **-0.4** |
| | comp=Z,2.3nm,0.8s,baz=231,slow=10,SNR=3.6 | | | | | | | |
| ESDC | **Sonseca Array** | **158.94 343** | | PKPab | **PKPab** | **09 31 38.4** | **0.0** |
| | comp=Z,1.1nm,0.8s,baz=27,slow=3.8,SNR=5.3 | | | | | | | |
| TORD | **Torodi Ar. Bea** | **165.40 246** | | PKP | **PKPdf** | **09 31 07.5** | **-1.8** |
| | comp=Z,4.0nm,1.2s,baz=335,slow=0.9,SNR=12 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **09 32 07.3** | **-0.1** |
| | comp=Z,5.6nm,1.2s,baz=114,slow=4.8,SNR=8.9 | | | | | | | |

*CSEM **24** 09:13:49.9, 39.48N×20.29E, h6km, MD3.0, After ATH*
**ATH 24 09:13:49.9, 39.48N×20.29E, h5km±1km, MD3.0/4, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IGT** | **Igoumenitsa** | **0.06** | **32** | *e*PG | Pg | 09 13 51.4 | 0.0 |
| IGT | | | | *e*SG | Sg | 09 13 52.8 | +0.3 |
| **IGT** | **Igoumenitsa** | **0.06** | **32** | *e*Pg | Pg | 09 13 51.4 | 0.0 |
| IGT | | | | *e*Sg | Sg | 09 13 52.8 | +0.3 |
| **SGD** | **Sagiada** | **0.14** | **342** | *e*PG | Pg | 09 13 52.8 | 0.0 |
| SGD | | | | *e*SG | Sg | 09 13 55.0 | +0.3 |
| **SGD** | **Sagiada** | **0.14** | **342** | *e*Pg | Pg | 09 13 52.8 | 0.0 |
| SGD | | | | *e*Sg | Sg | 09 13 55.0 | +0.3 |
| **KEK** | **Kerkira** | **0.45** | **302** | *e*PB | Pg | 09 13 58.6 | +0.1 |
| **KEK** | **Kerkira** | **0.45** | **302** | *e*Pb | Pg | 09 13 58.6 | +0.1 |
| **JAN** | **Janina** | **0.47** | **68** | *e*PG | Pg | 09 13 58.8 | -0.2 |
| **JAN** | **Janina** | **0.47** | **68** | *e*Pg | Pg | 09 13 58.8 | -0.2 |

**KRSC 24 09:17:20.0±0.5, 55.14N×160.35E, h6km±4km, ML3.6, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KZV** | **Kizimen** | **0.04** | **225** | *i* P | Pg | 09 17 22.1 | +0.6 |
| **TUMR** | **Tumrok** | **0.18** | **321** | *i* P | Pg | 09 17 23.7 | -0.1 |
| TUMR | | | | *e*S | Sg | 09 17 26.5 | +0.1 |
| **KMNR** | **Kamenistaya** | **0.62** | **354** | *e*P | Pg | 09 17 32.2 | +0.2 |
| KMNR | | | | *e*S | Sg | 09 17 41.1 | +0.9 |
| **BZMR** | **Bezymyannaya** | **0.80** | **6** | *e*P | Pb | 09 17 36.4 | -0.1 |
| **KIRR** | **Kirishev** | **0.81** | **360** | *e*P | Pg | 09 17 36.0 | +0.2 |
| KIRR | | | | *e*S | Sb | 09 17 47.8 | -0.3 |
| **BZWR** | **Bezymyannyi-We** | **0.83** | **6** | *e*P | Pg | 09 17 36.5 | +0.4 |
| BZWR | | | | *e*S | Sb | 09 17 48.7 | +0.1 |
| **KPT** | **Kopyto** | **0.83** | **355** | *e*P | Pb | 09 17 36.8 | -0.1 |
| **KOZ** | **Kozyrevsk** | **0.96** | **344** | *e*P | Pg | 09 17 38.4 | 0.0 |
| KOZ | | | | *e*S | Sb | 09 17 52.0 | +0.1 |
| **MKZ** | **Mys Kozlova** | **0.99** | **126** | *e*P | Pb | 09 17 39.7 | +0.2 |
| MKZ | | | | *e*S | Sn | 09 17 53.9 | -0.8 |
| **KLY** | **Klyuchi** | **1.19** | **8** | *e*P | Pn | 09 17 43.6 | +0.5 |
| KLY | | | | *e*S | Sn | 09 18 00.3 | +0.8 |
| **ESO** | **Esso** | **1.22** | **311** | *e*P | Pg | 09 17 42.0 | -1.4 |
| ESO | | | | *e*S | Sg | 09 17 57.5 | -1.8 |
| **KII** | **Karymskiy** | **1.23** | **206** | *e*P | Pn | 09 17 43.9 | +0.2 |
| KII | | | | *e*S | Sn | 09 18 00.9 | +0.3 |
| **SRDR** | **Sredinnyy** | **1.23** | **343** | *e*P | Pg | 09 17 43.6 | -0.1 |
| SRDR | | | | *e*S | Sn | 09 18 00.5 | -0.3 |
| **BDR** | **Baidarnaya** | **1.51** | **18** | *e*P | Pb | 09 17 48.3 | -0.2 |
| BDR | | | | *e*S | Sg | 09 18 08.5 | -0.2 |
| **SMKR** | **Semkarok** | **1.58** | **23** | *e*P | Pg | 09 17 50.0 | -0.3 |
| SMKR | | | | *e*S | Sg | 09 18 11.3 | +0.5 |
| **SRKR** | **Sorokina** | **1.58** | **17** | *e*P | Pb | 09 17 49.4 | -0.4 |
| SRKR | | | | *e*S | Sg | 09 18 10.7 | -0.4 |
| **KBTR** | **Krutoberegovo** | **1.76** | **52** | *e*P | Pn | 09 17 51.1 | +0.1 |
| KBTR | | | | *e*S | Sb | 09 18 14.4 | -0.6 |
| **GNL** | **Ganaly** | **2.02** | **225** | *e*P | Pn | 09 17 55.4 | +0.7 |
| GNL | | | | *e*S | Sn | 09 18 20.6 | +0.3 |
| **KRX** | **Arik** | **2.04** | **210** | *e*P | Pb | 09 17 56.5 | -1.2 |
| **SDLR** | **Sedlovina** | **2.06** | **205** | *e*P | Pn | 09 17 56.5 | +1.3 |
| SDLR | | | | *e*S | Sb | 09 18 22.5 | -1.2 |
| **SPN** | **Mys Shipunskii** | **2.06** | **185** | *e*P | Pn | 09 17 55.3 | +0.3 |
| SPN | | | | *e*S | Sn | 09 18 21.0 | +0.1 |
| **NLC** | **Nalytchevo** | **2.06** | **197** | *e*P | Pb | 09 17 57.0 | -0.7 |
| NLC | | | | *e*S | Sb | 09 18 24.6 | +1.1 |
| **SMAR** | **Somma** | **2.09** | **206** | *e*P | Pb | 09 17 57.4 | -1.1 |
| **AVH** | **Avacha** | **2.10** | **207** | *e*P | Pb | 09 17 58.4 | -0.2 |
| **KOK** | **Koryaka** | **2.11** | **209** | *e*P | Pb | 09 17 57.9 | -0.8 |
| KOK | | | | *e*S | Sb | 09 18 25.8 | +0.6 |
| **UGLR** | **Uglovaya** | **2.13** | **205** | *e*P | Pb | 09 17 58.2 | -0.9 |
| UGLR | | | | *e*S | Sb | 09 18 25.4 | -0.5 |
| **APC** | **Apacha** | **2.91** | **222** | *e*P | Pn | 09 18 08.3 | +1.6 |
| APC | | | | *e*S | Sn | 09 18 43.6 | +1.6 |
| **RUS** | **Russkaya** | **2.92** | **203** | *e*P | Pn | 09 18 08.9 | +2.0 |
| RUS | | | | *e*S | Sn | 09 18 44.5 | +2.2 |
| **ASAK** | **Asacha** | **3.12** | **209** | *e*P | Pn | 09 18 11.8 | +2.0 |
| **BKI** | **Bering** | **3.23** | **87** | *e*P | Pn | 09 18 11.7 | +0.6 |
| BKI | | | | *e*S | Sn | 09 18 49.0 | -0.8 |

**WEL 24 09:23:40.7±0.8, 47.49S×165.17E, h33km, ML3.7/6, Error ellipse: s-maj=10.0km s-min=5.7km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PYZ** | **Puysegur Point** | **1.68** | **39** | PN | Pn | 09 24 06.4 | -1.4 |
| **APZ** | **The Paps** | **2.03** | **72** | PN | Pn | 09 24 11.2 | -1.5 |
| APZ | | | | SN | Sn | 09 24 34.4 | -2.6 |
| APZ | | | | AML | AML | 09 24 34.7 | |
| **WHZ** | **Wether Hill Ro** | **2.49** | **51** | PN | Pn | 09 24 18.0 | -0.9 |
| WHZ | | | | SN | Sn | 09 24 45.0 | -3.1 |
| WHZ | | | | AML | AML | 09 24 50.9 | |
| **SYZ** | **Scrubby Hill** | **2.88** | **72** | PN | Pn | 09 24 23.9 | -0.2 |
| SYZ | | | | SN | Sn | 09 24 55.5 | -2.2 |
| **MLZ** | **Mavora Lakes** | **2.98** | **45** | PN | Pn | 09 24 25.1 | -0.6 |
| MLZ | | | | SN | Sn | 09 24 58.3 | -2.1 |
| **MSZ** | **Milford Sound** | **3.41** | **35** | PN | Pn | 09 24 32.6 | +1.2 |
| MSZ | | | | AML | AML | 09 25 20.5 | |
| MSZ | | | | AML | AML | 09 25 26.6 | |
| **TUZ** | **Tuapeka** | **3.43** | **65** | PN | Pn | 09 24 31.2 | -0.6 |
| TUZ | | | | SN | Sn | 09 25 09.6 | -1.7 |
| TUZ | | | | AML | AML | 09 25 14.6 | |
| **EAZ** | **Earnscleugh** | **3.65** | **53** | PN | Pn | 09 24 34.0 | -0.8 |
| EAZ | | | | AML | AML | 09 25 20.6 | |
| EAZ | | | | AML | AML | 09 25 21.5 | |
| **WKZ** | **Wanaka** | **3.77** | **47** | PN | Pn | 09 24 37.0 | +0.4 |
| **ODZ** | **Otahua Downs** | **4.52** | **59** | PN | Pn | 09 24 44.2 | -2.5 |
| **LBZ** | **Lake Benmore** | **4.68** | **50** | PN | Pn | 09 24 47.0 | -1.9 |

*BJI **24** 09:26:23.3, 20.67S×177.13W, h462km, mb4.6/12, mB5.0/10*
*MOS **24** 09:26:25.4±2.3, 20.14S×177.81W, h432km, mb4.8/9, Error ellipse: s-maj=12.9km s-min=12.1km az=59.9*
*IDC **24** 09:26:26.3±1.5, 20.12S×177.64W, h455km±16km, mb3.8/15, mb1 4.1/19, mb1mx4.0/29, mbtmp4.7/19, Error ellipse: s-maj=13.8km s-min=11.3km az=97.0*
*NEIC **24** 09:26:27.8±0.8, 20.17S×177.59W, h474km±9km, mb4.7/21, Error ellipse: s-maj=11.7km s-min=9.3km az=115.0*
*ISCJB **24** 09:26:27.4±0.9, 20.19S±0.04×177.70W±0.06, h475km±10km, mb4.4/33, Error ellipse: s-maj=8.2km s-min=6.7km az=9.6*
*AUST **24** 09:26:28.0, 19.99S×177.78W, h450km*
**ISC 24 09:26:27.3±0.5, 20.17S±0.06×177.65W±0.06, h465km±4km, h466km; pP-P, n193, σ1s44/211, mb4.4/33, 28C-6D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.74** | **300** | *e*P | P | 09 27 55.3 | +5.2 |
| **MSVF** | **Nonsavu** | **4.74** | **300** | *e*Pn | P | 09 27 55.3 | +5.2 |
| **NIUE** | **Niue** | **7.36** | **83** | P | **P** | **09 28 17.7** | **+1.6** |
| | baz=7.5,SNR=9.4 | | | | | | |
| **AFI** | **Afiamalu** | **8.38** | **43** | P | **P** | **09 28 24.3** | **-2.9** |
| | 39nm,0.3s,baz=143,slow=0.7,SNR=65 | | | | | | |
| AFI | | | | S | S | 09 29 56.6 | -9.0 |
| | 64nm,0.3s,baz=302,slow=24,SNR=11 | | | | | | |
| **AFI** | **Afiamalu** | **8.38** | **43** | P | **P** | **09 28 24.3** | **-2.9** |
| AFI | | | | *e*Pn | **P** | **09 28 25.7** | **-1.5** |
| AFI | | | | S | S | 09 29 56.6 | -9.0 |
| AFI | | | | *e*Sn | S | 09 29 57.1 | -8.6 |
| **RAO** | **Raoul Island** | **9.04** | **182** | P | **P** | **09 28 33.0** | **-1.0** |
| | 99nm,0.3s,baz=101,slow=6.0,SNR=7.6 | | | | | | |
| **RAO** | **Raoul Island** | **9.04** | **182** | P | **P** | **09 28 33.0** | **-1.0** |
| **RAO** | **Raoul Island** | **9.04** | **182** | P | **P** | **09 28 33.0** | **-1.0** |
| RAO | | | | *e*Pn | **P** | **09 28 33.8** | **-0.2** |
| **DZM** | **Mont Dzumac** | **14.96** | **260** | P | **P** | **09 29 37.4** | **-0.5** |
| | 1.9nm,0.3s,baz=1.0,slow=23,SNR=10 | | | | | | |
| **NFK** | **Norfolk Island** | **15.79** | **233** | P | **P** | **09 29 50.7** | **+4.3** |
| | baz=16,SNR=4.4 | | | | | | |
| **OUZ** | **Omahuta** | **16.86** | **205** | PN | **P** | **09 29 59.2** | **+1.6** |
| **OUZ** | **Omahuta** | **16.86** | **205** | *e*P | **P** | **09 29 59.4** | **+1.8** |
| | 21nm,0.7s | | | | | | |
| **KUZ** | **Kuaotunu** | **17.50** | **198** | PN | **P** | **09 30 06.7** | **+2.5** |
| **MXZ** | **Matakaoa Point** | **17.68** | **191** | *e*PN | **P** | **09 30 04.8** | **-1.2** |
| MXZ | | | | SN | **S** | **09 33 04.1** | **-1.5** |
| **WMGZ** | **Waiomatatini S** | **17.91** | **190** | PN | **P** | **09 30 08.3** | **0.0** |
| **HAZ** | **Te Kaha** | **17.97** | **192** | PN | **P** | **09 30 09.2** | **+0.4** |
| HAZ | | | | SN | **S** | **09 33 05.6** | **-4.8** |
| **PKGZ** | **Pakihiroa** | **18.02** | **191** | PN | **P** | **09 30 09.4** | **0.0** |
| PKGZ | | | | SN | **S** | **09 33 06.1** | **-5.2** |
| **PUZ** | **Puketiti** | **18.19** | **190** | *e*PN | **P** | **09 30 11.6** | **+0.5** |
| PUZ | | | | SN | **S** | **09 33 14.2** | **+0.1** |
| **MWZ** | **Matawai** | **18.58** | **192** | PN | **P** | **09 30 13.8** | **-0.9** |
| **URZ** | **Urewera** | **18.59** | **193** | P | **P** | **09 30 12.8** | **-2.0** |
| | 9.8nm,0.3s,baz=306,slow=2.1,SNR=47 | | | | | | |
| URZ | | | | S | S | **09 33 13.7** | **-6.9** |
| | 0.4nm,0.3s,baz=162,slow=18,SNR=4.5 | | | | | | |
| **URZ** | **Urewera** | **18.59** | **193** | PN | **P** | **09 30 12.7** | **-2.0** |
| **URZ** | **Urewera** | **18.59** | **193** | *e*P | **P** | **09 30 12.9** | **-1.9** |
| | 31nm,0.7s | | | | | | |
| URZ | | | | *e*S | **S** | **09 33 22.4** | **+1.9** |
| **HIZ** | **Hauiti** | **19.40** | **198** | PN | **P** | **09 30 24.5** | **+2.3** |
| **BKZ** | **Black Stump Fm** | **19.59** | **194** | *e*P | **P** | **09 30 23.1** | **-0.9** |
| | 25nm,0.5s | | | | | | |
| **WNVZ** | **Wahianoa** | **19.96** | **196** | PN | **P** | **09 30 26.6** | **-0.9** |
| **THZ** | **Tophouse** | **22.97** | **198** | PN | **P** | **09 30 54.6** | **0.0** |
| **DSZ** | **Denniston Nort** | **23.29** | **200** | PN | **P** | **09 30 57.4** | **-0.1** |
| **KHZ** | **Kahutara** | **23.39** | **197** | *e*P | **P** | **09 30 57.7** | **-0.6** |
| | 271nm,2.2s | | | | | | |
| **LHI** | **Lord Howe Isla** | **23.76** | **237** | P | **P** | **09 31 05.2** | **+3.4** |
| | baz=24,SNR=3.4 | | | | | | |
| **RPZ** | **Rata Peaks** | **25.31** | **199** | P | **P** | **09 31 15.1** | **-0.3** |
| | 7.7nm,0.4s,baz=313,slow=3.0,SNR=6.5 | | | | | | |
| **RPZ** | **Rata Peaks** | **25.31** | **199** | *e*P | **P** | **09 31 16.0** | **+0.6** |
| | 15nm,0.8s | | | | | | |
| **WHZ** | **Wether Hill Ro** | **28.26** | **202** | *e*P | **P** | **09 31 42.8** | **+1.4** |
| | 38nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **29.25** | **254** | P | **P** | **09 31 50.9** | **+0.5** |
| | baz=29,SNR=4.4 | | | | | | |
| **EIDS** | **Eidsvold** | **29.25** | **254** | *e*P | **P** | **09 31 50.8** | **+0.4** |
| | 4.2nm,0.4s | | | | | | |
| **ARMA** | **Armidale** | **29.51** | **244** | P | **P** | **09 31 54.1** | **+1.5** |
| | baz=30,SNR=15 | | | | | | |
| **RMQ** | **Roma** | **31.42** | **252** | P | **P** | **09 32 10.6** | **+1.5** |
| | baz=31,SNR=8.2 | | | | | | |
| **CNB** | **Canberra Magne** | **32.68** | **236** | P | **P** | **09 32 21.3** | **+1.4** |
| | baz=33,SNR=42 | | | | | | |
| **MILA** | **Mila** | **33.43** | **233** | P | **P** | **09 32 27.4** | **+1.2** |
| | baz=33,SNR=13 | | | | | | |
| **CTA** | **Charters Tower** | **33.85** | **264** | P | **P** | **09 32 29.6** | **-0.4** |
| | 31nm,0.4s,baz=91,slow=12,SNR=22 | | | | | | |
| **CTAO** | **Charters Tower** | **33.85** | **264** | *e*P | **P** | **09 32 30.7** | **+0.7** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,34nm,0.5s | | | | | | |
| **CTAO** | **Charters Tower** | **33.85** | **264** | *e*P | **P** | **09 32 30.7** | **+0.7** |
| | comp=Z,34nm,0.5s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **34.73** | **244** | P | **P** | **09 32 37.9** | **+0.7** |
| | baz=35,SNR=23 | | | | | | |
| **QLP** | **Quilpie** | **35.47** | **252** | P | **P** | **09 32 44.0** | **+0.5** |
| | baz=35,SNR=35 | | | | | | |
| **PMG** | **Port Moresby** | **35.59** | **282** | P | **P** | **09 32 44.0** | **-0.7** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,105nm,0.9s | | | | | | |
| **PMG** | **Port Moresby** | **35.59** | **282** | P | P | 09 32 49.0 | +4.4 |
| | baz=35,SNR=3.3 | | | | | | |
| **MTSU** | **Mount Surprise** | **35.94** | **267** | P | **P** | **09 32 48.2** | **+0.7** |
| | baz=36,SNR=22 | | | | | | |
| **TOO** | **Toolangi** | **36.35** | **234** | P | **P** | **09 32 51.8** | **+1.1** |
| | baz=36,SNR=46 | | | | | |

comp=Z,2.2nm,1.1s,baz=220,slow=8.9,SNR=8.3
**MAW Mawson 81.98 200** P **P** 09 37 57.5 +0.3
comp=Z,5.8nm,0.6s,baz=135,slow=7.1,SNR=30
**MAW Mawson 81.98 200** P **P** 09 37 57.7 +0.5
baz=82,SNR=14
**TUC Tucson 82.52 52** *e*P **P** 09 38 01.8 +1.1
TUC pmax pmax
comp=Z,9.0nm,1.1s
**TUC Tucson 82.52 52** *e*P **P** 09 38 01.8 +1.1
comp=Z,8.6nm,1.1s
**SRU San Rafael 86.06 46** *e*P **P** 09 38 18.4 +0.3
SRU pmax pmax
comp=Z,6.0nm,1.1s
**SRU San Rafael 86.06 46** *e*P **P** 09 38 18.4 +0.3
comp=Z,6.4nm,1.1s
**TXAR Lajitas Array 86.60 57** P **P** 09 38 21.4 +0.5
comp=Z,2.0nm,0.7s,baz=221,slow=6.8,SNR=25
**GYA Guiyang 86.78 300** *e*P **P** 09 38 22.0 +0.3
GYA pP **pP** 09 40 06.3 +0.3
GYA sP **sP** 09 40 52.6 -1.1
GYA PP **PP** 09 41 54.5 +1.8
GYA SKS **SKSac** 09 48 03.8 -0.3
GYA S **S** 09 48 21.0 +0.8
GYA sS **sS** 09 51 23.3 -2.5
GYA PMZ
comp=Z,10.0nm,1.0s
**ANMO Albuquerque 86.94 51**⇓ *e*P **P** 09 38 22.6 +0.2
ANMO pmax pmax
comp=Z,2.0nm,0.8s
**SYO Syowa Base 87.12 193**⇑ *e*P **P** 09 38 20.4 -2.0
**MCMT McKenzie Canyo 87.49 40** *e*P **P** 09 38 25.0 +0.2
**ILAR Eielson Array 87.92 13** P **P** 09 38 24.8 -1.3
comp=Z,0.5nm,0.5s,baz=225,slow=5.8,SNR=18
ILAR pP **pP** 09 40 15.0 +4.3
comp=Z,2.0nm,1.0s,baz=227,slow=6.0,SNR=7.6
**TPAW Teton Pass 87.97 42** *e*P **P** 09 38 27.1 -0.1
comp=Z,7.5nm,1.5s
**SNAA Sanae 88.33 178**⇓ *i*P **P** 09 38 27.0 -1.2
SNAA pmax pmax
comp=Z,2.0nm,0.8s
**SNAA Sanae 88.33 178** *e*P **P** 09 38 26.6 -1.5
comp=Z,1.3nm,0.7s
**VNA3 Neumayer Olymp 88.44 176** P **P** 09 38 27.9 -0.7
**VNA2 Neumayer--Watz 88.89 177** P **P** 09 38 30.1 -0.6
baz=193,slow=3.5
**NVL N'lazarevskaya 89.06 183** *e*P P 09 38 23.2 -8.3
NVL pmax pmax
comp=Z,9.0nm,0.6s
**VNA1 Neumayer--Stat 89.11 176** P **P** 09 38 31.4 -0.3
**HHC Hu-ho-hao-te 89.36 314** *e*P **P** 09 38 32.8 -0.7
HHC PMZ
comp=Z,120nm,7.4s
**KMI Kunming 89.50 297** P **P** 09 38 35.9 +1.3
KMI PMZ
comp=Z,9.0nm,0.5s
KMI PMZ
comp=Z,140nm,4.9s
**CMAR Chiang Mai Arr 90.32 289** P **P** 09 38 38.8 +0.5
comp=Z,3.3nm,0.8s,baz=124,slow=3.0,SNR=18
**CMAR Chiang Mai Arr 90.32 289** *i*P **P** 09 38 39.7 +1.4
CMAR pmax pmax
comp=Z,3.0nm,0.8s
**CHTO Chiang Mai 90.44 290** *e*P **P** 09 38 39.6 +0.7
CHTO pmax pmax
comp=Z,6.0nm,0.8s
**CHTO Chiang Mai 90.44 290** *e*P **P** 09 38 39.6 +0.7
comp=Z,6.1nm,0.8s
**CD2 Chengdu 90.89 303** *e*P **P** 09 38 41.5 +0.7
CD2 pP **pP** 09 40 25.0 -0.8
CD2 sP **sP** 09 41 12.0 -1.2
CD2 SKS **SKSac** 09 48 28.3 +0.5
CD2 S **ScS** 09 48 59.0 -0.8
CD2 sS **sS** 09 52 04.9 -0.5
CD2 SS **SS** 09 55 17.0 +2.3
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.0s
**CFAA Coronel Fontan 95.03 126** P **P** 09 39 00.0 +0.2
comp=Z,0.3nm,0.7s,baz=231,slow=4.4,SNR=6.0
**ZALV Zalesovo Beam 110.45 321** PKiKP **PKiKP** 09 44 04.2 -1.4
comp=Z,1.3nm,0.5s,baz=180,slow=1.6,SNR=5.0
**MKAR Makanchi Array 111.21 313** PKiKP **PKiKP** 09 44 05.4 -2.0
comp=Z,1.2nm,0.6s,baz=184,slow=0.6,SNR=6.6
**KSH Kashi 114.97 305** *e*PKP PKPdf 09 44 16.5 +1.6
KSH PPMZ
comp=Z,51nm,4.4s
**BRVK Borovoye 119.10 320**⇓ *i*PKIKP **PKPdf** 09 44 21.9 -0.4
**BOSA Boshof 126.69 205** PKP **PKPdf** 09 44 36.9 -0.9
comp=Z,5.5nm,1.1s,baz=178,slow=2.5,SNR=5.8
**ARCES ARCESS Array B 128.66 350** PKP **PKPdf** 09 44 39.0 -1.1
comp=Z,3.3nm,0.8s,baz=354,slow=2.4,SNR=6.8
**FINES FINESS Array B 135.55 344** PKP **PKPdf** 09 44 51.6 -1.7
comp=Z,1.3nm,0.5s,baz=211,slow=6.0,SNR=4.2
FINES SKPbc **SKPbc** 09 47 39.0 -1.5
comp=Z,2.2nm,0.9s,baz=8.5,slow=3.9,SNR=4.1
**NOA NORSAR Array B 138.70 353** PKhKP PKPpre 09 44 52.0
comp=Z,0.8nm,0.8s,baz=23,slow=3.9,SNR=3.6
**NOA NORSAR Array B 138.70 353** PKHKP PKPpre 09 44 52.0
**KIV Kislovodsk 138.96 315** *e*PKIKP **PKPdf** 09 45 01.0 +0.7
KIV pmax pmax
comp=Z,5.0nm,0.9s
**AKASG Malin Array Be 142.89 332** PKhKP PKPpre 09 45 02.4
AKASG SKPbc **SKPbc** 09 47 58.7 -2.0
comp=Z,1.2nm,0.3s,baz=43,slow=4.3,SNR=19
comp=Z,1.3nm,0.7s,baz=36,slow=3.4,SNR=4.4
**KIEV Kiev 142.90 332**⇓ *e*PKHKP PKPpre 09 45 03.2
**SIM Simferopol' 143.95 321** *i* PKHKP PKPpre 09 45 08.0
SIM *e* 09 45 12.0
SIM pmax pmax
comp=Z,13nm,0.6s
**MALT Malatya 143.99 308**⇑ *i*P PKPbc 09 45 08.2 -0.3
**BEL Belsk 145.27 340** *e*PKP **PKPab** 09 45 12.4 -0.4
**BEL Belsk 145.27 340** *e*PKIKP **PKPab** 09 45 12.4 -0.4
**BRTR Keskin Array B 146.86 313** PKPbc **PKPbc** 09 45 16.1 -1.0
comp=Z,4.2nm,0.6s,baz=136,slow=4.4,SNR=22
**BURAR Bucovina Array 146.94 331**⇑ PKIKP **PKPbc** 09 45 17.2 +0.3
**BURAR Bucovina Array 146.94 331**⇑ *i*P **PKPbc** 09 45 17.2 +0.3
**OJC Ojcow 146.97 339** *e*PKP **PKPbc** 09 45 15.6 -1.2
**OJC Ojcow 146.97 339** *e*PKIKP **PKPbc** 09 45 15.6 -1.2
**TESR Tescani 147.06 328**⇑ *i*P **PKPbc** 09 45 16.6 -0.5
**STHS Stebnicka Huta 147.15 337** *e*PKIKP **PKPbc** 09 45 17.3 0.0
**STHS Stebnicka Huta 147.15 337** *e*PKP **PKPbc** 09 45 17.3 0.0
**KOLS Kolonicke sedl 147.15 336** *e*PKIKP **PKPbc** 09 45 16.7 -0.6
**KOLS Kolonicke sedl 147.15 336** *e*PKP **PKPbc** 09 45 16.6 -0.7
**VRI Vrincioaia 147.47 328**⇓ PKIKP **PKPbc** 09 45 17.9 -0.4
**VRI Vrincioaia 147.47 328**⇓ *i*P **PKPbc** 09 45 17.9 -0.4
**KSP Ksiaz 147.47 343** *e*PKP **PKPbc** 09 45 18.1 0.0
**KSP Ksiaz 147.47 343** *e*PKIKP **PKPbc** 09 45 18.1 0.0
**NIE Niedzica 147.49 338** *e*PKP **PKPbc** 09 45 18.2 0.0
**NIE Niedzica 147.49 338** *e*PKIKP **PKPbc** 09 45 18.3 0.0
**PLOR Plostina 147.52 328**⇑ PKIKP **PKPdf** 09 45 16.6 +1.5
**PLOR Plostina 147.52 328**⇑ *i*P **PKPdf** 09 45 16.6 +1.5
**TRPA Tarpa 147.69 334**⇑ *i*P **PKPbc** 09 45 18.2 -0.5
**CLL Collm 147.82 347** *i* PKIKP **PKPbc** 09 45 18.0 -0.9
CLL *e* 09 45 23.0
CLL pmax pmax
comp=Z,14nm,0.6s
**CLL Collm 147.82 347** *i* PKPbc **PKPbc** 09 45 18.0 -0.9
comp=Z,14nm,0.6s
CLL *e*PKPab **PKPab** 09 45 23.0 0.0
**UPC Upice 147.85 344** *e*PKIKP **PKPbc** 09 45 19.4 +0.3
**UPC Upice 147.85 344**⇑ *e*PKP **PKPbc** 09 45 19.4 +0.3
**DPC Dobruska-Polom 147.91 343** *e*PKIKP **PKPbc** 09 45 19.2 -0.1
DPC *e* 09 45 24.9
**DPC Dobruska-Polom 147.91 343**⇑ *e*PKP **PKPbc** 09 45 19.2 -0.1
DPC *e*PKPab **PKPab** 09 45 24.9 +1.4
**BRG Berggiesshubel 148.03 346** *i* PKP **PKPbc** 09 45 19.6 0.0
comp=Z,8.9nm,0.6s
**BRG Berggiesshubel 148.03 346** *i* PKIKP **PKPbc** 09 45 19.5 0.0
BRG pmax pmax
comp=Z,9.0nm,0.6s
**DOPR Dopca 148.06 329**⇑ *i*P **PKPbc** 09 45 19.7 -0.1
**MLR Muntele Rosu 148.13 328**⇑ *i*P **PKPbc** 09 45 18.7 -1.4
**PVCC Panska Ves 148.20 345**⇑ *e*PKP **PKPbc** 09 45 19.9 0.0
**VOIR 148.61 329**⇑ *i*P **PKPbc** 09 45 20.4 -0.8
**PRU Pruhonice 148.71 345**⇑ *e*PKP **PKPbc** 09 45 20.9 -0.3
**GOPC GO Pecny, Ondr 148.72 344**⇑ *e*PKP **PKPbc** 09 45 20.9 -0.4
**VYHS Vyhne 148.78 339** *e*PKP **PKPbc** 09 45 20.6 -0.9
**ARR Arges 148.86 329**⇑ *i*P **PKPbc** 09 45 22.3 +0.4
**NKC Novy Kostel 148.95 347**⇑ *e*PKP **PKPbc** 09 45 21.6 -0.3
NKC *e*PKPAB **PKiKP** 09 45 23.6 +0.7
**TREC Trest 149.10 343**⇑ *e*PKP **PKPbc** 09 45 21.7 -0.5
**MEM Membach 149.49 355** PKPbc **PKPbc** 09 45 22.0 -1.1
**GZR Gura Zlata 149.72 331**⇑ PKIKP **PKPbc** 09 45 23.0 -0.9
**GZR Gura Zlata 149.72 331**⇑ *i*P **PKPbc** 09 45 23.0 -0.9
**KHC Kasperske Hory 149.74 345**⇑ *e*PKP **PKPbc** 09 45 23.3 -0.5
**KHC Kasperske Hory 149.74 345** *e*PKPbc **PKPbc** 09 45 23.3 -0.5
**GERES GERESS Array B 149.97 345** PKPbc **PKPbc** 09 45 24.1 -0.4
comp=Z,4.2nm,0.7s,baz=28,slow=2.3,SNR=29
**BZS Buzias 150.07 332**⇑ *i*P **PKPbc** 09 45 24.0 -0.6
**DOU Dourbes 150.09 357** PKPbc **PKPbc** 09 45 24.3 -0.2
**WLF Walferdange 150.42 355** PKPbc **PKPbc** 09 45 25.5 +0.2
**PERS Pernice 151.61 341** *i* PKPbc **PKPbc** 09 45 27.2 -1.0
**KBA Koelnbreinsper 151.70 344**⇑ *i*PKPbc **PKPbc** 09 45 27.6 -1.0
comp=Z,2.8nm,0.5s
**WTTA Wattenberg 151.94 346**⇑ *i*PKPbc **PKPbc** 09 45 28.2 -0.9
comp=Z,6.4nm,0.8s
**DIVS Divibare 151.97 332**⇑ *i*P **PKPbc** 09 45 27.5 -1.7
**PDKS Podkum 152.17 341** *i* PKPbc **PKPbc** 09 45 30.7 +1.2
**ABTA Abfaltersbach 152.22 345**⇑ *i*PKPbc **PKPbc** 09 45 28.1 -1.5
comp=Z,4.1nm,0.5s
**BOJS Bojanci 152.58 340** *i* PKPbc **PKPbc** 09 45 30.1 -0.2
**JAVS Javornik 152.60 342** *i* PKPbc **PKPbc** 09 45 29.7 -0.8
**LIC Lamto 164.39 152** *e*P **PKPab** 09 46 33.4 -1.6
comp=Z,98nm,1.5s
**KIC Kosan Boka 164.64 152** *e*P **PKPab** 09 46 36.3 +0.2
comp=Z,38nm,1.2s
**TIC Toumodi 164.77 151** *e*P **PKPab** 09 46 37.1 +0.4
**DBIC Dimbokro 164.86 151** PKPab **PKPab** 09 46 36.8 -0.3
comp=Z,2.7nm,0.8s,baz=182,slow=3.2,SNR=4.7
**TORD Torodi Ar. Bea 172.99 175** PKP **PKPdf** 09 45 41.8 -1.4
comp=Z,2.2nm,0.9s,baz=273,slow=0.3,SNR=12
TORD PKPab **PKPab** 09 47 12.3 -0.7
comp=Z,1.3nm,0.7s,baz=179,slow=3.3,SNR=10
TORD PP **PP** 09 51 02.8 -0.9
comp=Z,0.8nm,0.8s,baz=199,slow=5.4,SNR=4.4

*ISCJB **24** 09:30:01.5±0.5, 6°.85N±0°.06×72°.97W±0°.06, h166km, mb3.8/7, Error ellipse: s-maj=10.1km s-min=5.7km az=44.2*
*IDC **24** 09:30:01.6±1.4, 6°.78N×72°.87W, h159km±15km, mb3.6/7, mb1 3.8/10, mb1mx3.5/30, mbtmp4.1/10, Error ellipse: s-maj=20.2km s-min=17.8km az=109.0*
*FUNV **24** 09:30:05.2, 6°.95N×72°.97W, h166km, MW4.1*

**ISC 24 09:30:02.4±0.7, 6°.90N±0°.06×72°.93W±0°.07, h166km, n34, σ1°51/41, mb4.2/7, 3C-10D, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **CAPV** | **Capacho** | **1.14** | **32** | ⇓*i*P | | **Pn** | **09 30 31.4** | **+1.3** |
| CAPV | | | | *e*S | | **Sn** | **09 30 51.9** | **+0.5** |
| **ROSC** | **El Rosal** | **2.46** | **215** | P | | **Pn** | **09 30 43.6** | **-0.7** |
| ROSC | 257nm,0.3s,baz=286,slow=11,SNR=1641 | | | S | | **Sn** | **09 31 13.9** | **-2.8** |
| | 55nm,0.3s,baz=79,slow=19,SNR=4.5 | | | | | | | |
| **SOCV** | **Socops** | **2.47** | **56**⇓ | *e*P | | **Pn** | **09 30 46.1** | **+2.1** |
| SOCV | | | | *e*S | | **Sn** | **09 31 16.0** | **-0.3** |
| **VIGV** | **El Vigia** | **2.47** | **39**⇓ | *i*P | | **Pn** | **09 30 45.8** | **+1.7** |
| VIGV | | | | *e*S | | **Sn** | **09 31 15.9** | **-0.5** |
| **ELOV** | **Elorza** | **3.42** | **88**⇓ | *e*P | | **Pn** | **09 30 57.5** | **+1.8** |
| **VIRV** | **Villa del Rosa** | **3.62** | **8**⇑ | *i*P | | **Pn** | **09 30 58.2** | **0.0** |
| VIRV | | | | *e*S | | **Sn** | **09 31 38.8** | **-3.0** |
| **QARV** | **Quebrada Arrib** | **4.06** | **36** | *e*P | | **Pn** | **09 31 05.7** | **+1.8** |
| **SANV** | **Sanarito** | **4.24** | **52**⇓ | *e*P | | **Pn** | **09 31 07.5** | **+1.1** |
| SANV | | | | *e*S | | **Sn** | **09 31 53.5** | **-2.7** |
| **CURV** | **Curarigua** | **4.26** | **43**⇓ | *e*P | | **Pn** | **09 31 07.9** | **+1.2** |
| CURV | | | | *e*S | | **Sn** | **09 31 54.0** | **-2.8** |
| **DABV** | **Dabajuro** | **4.59** | **29**⇑ | *e*P | | **Pn** | **09 31 12.2** | **+1.4** |
| **ITEPV** | **Terepaima** | **4.79** | **50**⇓ | *e*P | | **Pn** | **09 31 14.9** | **+1.5** |
| **SIQV** | **Siquisique** | **4.84** | **39**⇑ | *i*P | | **Pn** | **09 31 15.3** | **+1.2** |
| SIQV | | | | *e*S | | **Sn** | **09 32 06.0** | **-4.1** |
| **BAUV** | **El Baul** | **5.25** | **67**⇓ | *i*P | | **Pn** | **09 31 19.8** | **+0.3** |
| **MAPV** | **Macapo** | **5.30** | **56**⇓ | *i*P | | **Pn** | **09 31 21.1** | **+1.0** |
| **JACV** | **Jacura** | **5.81** | **44** | *e*P | | **Pn** | **09 31 27.9** | **+1.1** |
| **MONV** | **Montecano** | **5.81** | **30** | *e*P | | **Pn** | **09 31 27.3** | **+0.5** |
| **TURV** | **Turiamo** | **6.14** | **55** | *e*P | | **Pn** | **09 31 31.9** | **+0.7** |
| **MERV** | **Las Mercedes** | **6.97** | **70** | *e*P | | **Pn** | **09 31 42.2** | **+0.1** |
| **BIRV** | **Birongo** | **7.48** | **61** | *e*P | | **Pn** | **09 31 49.2** | **+0.3** |
| **CUPV** | **Cœpira** | **7.73** | **66**⇓ | *e*P | | **Pn** | **09 31 52.5** | **+0.2** |
| **PCRV** | **Puerto La Cruz** | **8.82** | **68** | *e*P | | **Pn** | **09 32 08.4** | **+1.7** |
| **SJG** | **San Juan** | **12.96** | **30** | P | | **Pn** | **09 33 01.4** | **+0.8** |
| | 2.1nm,0.3s,baz=202,slow=19,SNR=5.7 | | | | | | | |
| **PTGA** | **Pitinga** | **14.99** | **120** | P | | **Pn** | **09 33 24.9** | **-1.2** |
| | 0.3nm,0.3s,baz=324,slow=19,SNR=2.4 | | | | | | | |
| **LPAZ** | **La Paz** | **23.52** | **168** | pP | | pP | 09 35 30.3 | +0.3 |
| | 1.9nm,0.7s,baz=356,slow=11,SNR=8.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.55** | **311** | P | | **P** | **09 36 53.4** | **+0.9** |
| | 0.3nm,0.6s,baz=124,slow=8.2,SNR=8.3 | | | | | | | |
| **ULM** | **Lac du Bonnet** | **47.28** | **340** | P | | **P** | **09 38 18.7** | **-0.3** |
| | 3.0nm,0.5s,baz=148,slow=6.8,SNR=5.5 | | | | | | | |
| **SCHQ** | **Schefferville** | **48.05** | **5** | P | | **P** | **09 38 26.4** | **+1.6** |
| | 6.4nm,0.5s,baz=184,slow=7.2,SNR=11 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.26** | **340** | P | | **P** | **09 40 13.2** | **+0.2** |
| | 2.2nm,0.5s,baz=132,slow=6.7,SNR=22 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.53** | **78** | P | | **P** | **09 41 16.6** | **-1.2** |
| | 0.3nm,0.7s,baz=294,slow=6.8,SNR=4.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **82.64** | **42** | P | | **P** | **09 42 07.6** | **+0.2** |
| | 0.2nm,0.5s,baz=239,slow=5.5,SNR=2.3 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.53** | **20** | P | | **P** | **09 42 26.8** | **+0.4** |
| | 3.4nm,0.9s,baz=292,slow=4.8,SNR=2.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **122.19** | **20** | PKP | | **PKPdf** | **09 48 38.0** | **+0.3** |
| | 0.3nm,0.3s,baz=261,slow=1.7,SNR=3.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **149.31** | **234** | PKPbc | | **PKPbc** | **09 49 32.6** | **+0.2** |
| | 0.5nm,0.5s,baz=113,slow=3.4,SNR=13 | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.54** | **241** | PKPbc | | **PKPbc** | **09 49 35.2** | **-0.3** |
| | 0.4nm,0.5s,baz=108,slow=2.7,SNR=17 | | | | | | | |

**JMA 24 09:40:39.9±0.2, 42°.84N×139°.15E, h27km±2km, M3.5, 2D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **JSH** | **Shimam** | **0.69** | **106** | ⇓P | | Pb | 09 40 52.8 | -0.5 |
| JSH | | | | *e*S | | Sb | 09 41 01.6 | -0.8 |
| **JOSM** | **Okushiri--Mats** | **0.79** | **162** | P | | Pb | 09 40 54.6 | -0.5 |
| JOSM | | | | *e*S | | Sb | 09 41 05.1 | -0.4 |
| **JSK** | **Shakotan** | **1.10** | **62** | P | | Pn | 09 40 59.3 | -0.2 |
| JSK | | | | *e*S | | Sn | 09 41 12.6 | -1.1 |
| **JYM2** | **Yakumo 2** | **1.16** | **128** | ⇓P | | Pn | 09 41 00.2 | -0.1 |
| JYM2 | | | | *e*S | | Sn | 09 41 15.0 | -0.2 |
| **JNB** | **Noboribetsu** | **1.44** | **104** | P | | Pn | 09 41 04.6 | +0.4 |
| JNB | | | | *e*S | | Sn | 09 41 22.6 | +0.4 |
| **JSR** | **Shiriuchi** | **1.61** | **144** | P | | Pn | 09 41 07.6 | +1.0 |
| JSR | | | | *e*S | | Sb | 09 41 28.1 | -0.8 |
| **JKB** | **Kayabe** | **1.69** | **124** | P | | Pn | 09 41 08.4 | +0.8 |
| **JEW** | **Eniwo** | **1.69** | **89** | P | | Pb | 09 41 09.3 | -1.0 |

*UPP **24** 09:43:04.1, 58°.99N×18°.19E, h0km, ML2.2, Mining explosion.*
*CSEM **24** 09:43:04.3±0.2, 59°.01N×18°.14E, h2km, ML1.6, Error ellipse: s-maj=6.0km s-min=3.9km az=119.0, Mining explosion.*

**HEL 24 09:43:05.2±0.1, 59°.01N×18°.14E, h0km, ML1.6, ML2.2(UPP), Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **NYNU** | **Nynaeshamn** | **0.07** | **264** | *i*P | | Pg | 09 43 06.2 | -0.3 |
| NYNU | | | | *i*S | | Sg | 09 43 07.5 | +0.2 |
| **NYNU** | **Nynaeshamn** | **0.07** | **264** | P | | Pg | 09 43 06.1 | -0.4 |
| NYNU | | | | S | | Sg | 09 43 07.5 | +0.1 |
| **NRTU** | **Norrtaelje** | **0.71** | **21** | *i*P | | Pg | 09 43 17.6 | -1.2 |
| **NRTU** | **Norrtaelje** | **0.71** | **21** | P | | Pg | 09 43 17.6 | -1.3 |
| **VIKU** | **Vikbolandet** | **0.91** | **236** | *e*P | | Pg | 09 43 21.4 | -1.1 |
| **VIKU** | **Vikbolandet** | **0.91** | **236** | P | | Pg | 09 43 21.5 | -1.1 |
| **ESKU** | **Eskilstuna** | **0.93** | **284** | *e*P | | Pg | 09 43 21.9 | -1.0 |
| **ESKU** | **Eskilstuna** | **0.93** | **284** | P | | Pg | 09 43 21.9 | -1.0 |
| **BACU** | **Backbrunna** | **0.99** | **329** | *e*P | | Pg | 09 43 23.2 | -1.1 |
| **BACU** | **Backbrunna** | **0.99** | **329** | P | | Pg | 09 43 23.2 | -1.1 |
| **OSTU** | **Oestervaala** | **1.32** | **338** | *e*P | | Pg | 09 43 29.4 | -1.2 |
| **OSTU** | **Oestervaala** | **1.32** | **338** | P | | Pg | 09 43 29.3 | -1.3 |
| **GRAU** | **Graesoe** | **1.34** | **9** | *e*P | | Pg | 09 43 29.3 | -1.6 |
| **GRAU** | **Graesoe** | **1.34** | **9** | P | | Pg | 09 43 29.3 | -1.6 |
| **GOTU** | **Gotland** | **1.35** | **170** | *e*P | | Pg | 09 43 28.2 | -2.8 |
| **GOTU** | **Gotland** | **1.35** | **170** | P | | Pg | 09 43 28.2 | -2.8 |
| **AAL** | **Aland** | **1.50** | **38** | *e*P | | Pn | 09 43 31.7 | -1.7 |
| AAL | | | | *e*S | | Sg | 09 43 51.7 | -1.7 |
| **AAL** | **Aland** | **1.50** | **38** | P | | Pn | 09 43 31.6 | -1.8 |
| AAL | | | | S | | Sg | 09 43 51.7 | -1.8 |
| **LNKU** | **Linkoeping** | **1.59** | **241** | *e*P | | Pn | 09 43 33.5 | -1.0 |
| **LNKU** | **Linkoeping** | **1.59** | **241** | P | | Pn | 09 43 33.5 | -1.0 |
| **VSTU** | **Vaestervik** | **1.60** | **213** | *e*P | | Pn | 09 43 33.2 | -1.5 |
| **VSTU** | **Vaestervik** | **1.60** | **213** | P | | Pn | 09 43 33.2 | -1.4 |
| **ASKU** | **Askersund** | **1.72** | **267** | *e*P | | Pn | 09 43 35.9 | -0.4 |
| **ASKU** | **Askersund** | **1.72** | **267** | P | | Pn | 09 43 35.9 | -0.4 |
| **ASPU** | **Aespoe** | **1.79** | **208** | *e*P | | Pn | 09 43 37.0 | -0.4 |
| **ASPU** | **Aespoe** | **1.79** | **208** | P | | Pn | 09 43 36.9 | -0.4 |
| **BYXU** | **Byxelkrok** | **1.83** | **200** | *e*P | | Pn | 09 43 37.4 | -0.4 |
| **BYXU** | **Byxelkrok** | **1.83** | **200** | P | | Pn | 09 43 37.4 | -0.4 |
| **RAF** | **Rauma** | **2.72** | **41** | *e*P | | Pn | 09 43 50.9 | +0.8 |
| RAF | | | | MSG | | | 09 44 25.5 | |
| | comp=Z,1.6nm,0.2s | | | | | | | |
| RAF | | | | *e*SG | | Sb | 09 44 28.2 | -0.3 |
| **RAF** | **Rauma** | **2.72** | **41** | P | | Pn | 09 43 50.8 | +0.8 |
| RAF | | | | Sg | | Sb | 09 44 28.2 | -0.3 |
| **MTSE** | **Matsula** | **2.96** | **93** | *e*S | | Sn | 09 44 29.4 | -0.2 |
| **MTSE** | **Matsula** | **2.96** | **93** | S | | Sn | 09 44 29.4 | -0.2 |
| **KEF** | **Keuruu** | **4.59** | **43** | *e*SG | | Sb | 09 45 26.2 | +4.0 |
| **KEF** | **Keuruu** | **4.59** | **43** | Sg | | Sb | 09 45 26.2 | +4.0 |
| **VAF** | **Ylistaro** | **4.61** | **27** | *e*SG | | Sg | 09 45 28.4 | -4.5 |
| **VAF** | **Ylistaro** | **4.61** | **27** | Sg | | Sg | 09 45 28.4 | -4.6 |
| **FIA0** | **FINESS Array S** | **4.65** | **55** | *e*P | | Pn | 09 44 18.5 | +1.9 |
| FIA0 | | | | *e*S | | Sn | 09 45 09.9 | -1.3 |
| **FIA0** | **FINESS Array S** | **4.65** | **55** | P | | Pn | 09 44 18.5 | +1.9 |
| FIA0 | | | | S | | Sn | 09 45 09.9 | -1.3 |

*IDC **24** 09:50:01.6±1.2, 19°.87S×168°.17E, h0km, mb4.2/8, mb1 4.3/9, mb1mx4.0/34, mbtmp4.2/9, ML3.5/1, MS3.4/2, Ms1 3.4/2, ms1mx2.8/29, Error ellipse: s-maj=38.0km s-min=21.6km az=141.0*
*ISCJB **24** 09:50:05.3±0.9, 19°.70S±0°.09×167°.9E±0°.1, h27km, mb4.2/9, MS3.7/1, Error ellipse: s-maj=19.8km s-min=10.9km az=21.4*
*NEIC **24** 09:50:07.2±0.9, 19°.90S×168°.10E, h35km, mb4.4/5, Error ellipse: s-maj=25.3km s-min=16.3km az=145.0*

**ISC 24 09:50:06.6±1.0, 19°.8S±0°.1×168°.0E±0°.1, h27km, n15, σ1°17/14, mb4.3/9, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **2.70** | **212** | Pn | | **Pn** | **09 50 47.7** | **-0.7** |
| | 8.5nm,0.3s,baz=180,slow=9.5,SNR=93 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **09 51 20.3** | **0.0** |
| | 121nm,0.3s,baz=180,slow=23,SNR=11 | | | | | | | |
| DZM | | | | LR | | LR | 09 51 49.7 | |
| | comp=Z,346nm,19.0s,baz=355,slow=40 | | | | | | | |
| **OUZ** | **Omahuta** | **16.17** | **163** | *e*P | | **P** | **09 53 56.8** | **+1.8** |
| | 7.7nm,0.7s | | | | | | | |
| **CTA** | **Charters Tower** | **20.43** | **265** | P | | Pn | 09 54 44.1 | 0.0 |
| | 3.3nm,0.6s,baz=122,slow=5.2,SNR=3.9 | | | | | | | |
| **CTAO** | **Charters Tower** | **20.43** | **265** | *e*P | | **P** | **09 54 41.8** | **-0.2** |
| | 18nm,1.3s | | | | | | | |
| **WRAB** | **Tennant Creek** | **31.60** | **264** | *e*P | | **P** | **09 56 26.3** | **-1.1** |
| | 4.2nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.61** | **264** | P | | **P** | **09 56 26.6** | **-0.9** |
| | 0.7nm,0.4s,baz=86,slow=8.4,SNR=5.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **31.85** | **257** | P | | **P** | **09 56 29.9** | **+0.3** |
| | 2.4nm,0.6s,baz=83,slow=8.6,SNR=30 | | | | | | | |
| **MBWA** | **Marble Bar** | **45.09** | **260** | *e*P | | **P** | **09 58 21.4** | **+0.6** |
| | 8.6nm,1.0s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **46.91** | **243** | P | | **P** | **09 58 34.2** | **-0.8** |
| | 12nm,0.8s,baz=95,slow=0.1,SNR=3.7 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **46.91** | **243** | *e*P | | **P** | **09 58 35.5** | **+0.5** |
| | 16nm,1.0s | | | | | | | |
| **KAPI** | **Kappang** | **49.14** | **281** | P | | **P** | **09 58 53.7** | **+1.3** |
| | 8.9nm,0.8s,baz=189,slow=19,SNR=3.9 | | | | | | | |
| **VNDA** | **Vanda** | **57.87** | **182** | LR | | LR | 10 21 21.1 | |
| | comp=Z,52nm,19.2s,baz=334,slow=32 | | | | | | | |
| **MAW** | **Mawson** | **77.50** | **202** | P | | **P** | **10 01 58.5** | **-0.9** |
| | 1.1nm,0.6s,baz=128,slow=12,SNR=6.1 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.04** | **49** | P | | **P** | **10 03 02.3** | **-2.0** |
| | 0.3nm,0.7s,baz=234,slow=6.1,SNR=3.5 | | | | | | | |
| **ILAR** | **Eielson Array** | **91.09** | **18** | P | | **P** | **10 03 09.6** | **+1.3** |
| | 0.3nm,0.7s,baz=233,slow=4.8,SNR=4.6 | | | | | | | |

*IDC **24** 09:53:09.6±0.6, 22°.75S×175°.34W, h0km, mb4.3/15, mb1 4.5/15, mb1mx4.4/33, mbtmp4.3/15, MS3.6/7, Ms1 3.7/7, ms1mx3.3/26, Error ellipse: s-maj=21.2km s-min=19.2km az=95.0*
*ISCJB **24** 09:53:13.4±0.6, 22°.87S±0°.06×175°.4W±0°.1, h34km, mb4.3/18, MS3.6/6, Error ellipse: s-maj=17.8km s-min=8.4km az=10.2*
*NEIC **24** 09:53:14.9±0.5, 22°.81S×175°.15W, h35km, mb4.6/6, Error ellipse: s-maj=15.2km s-min=12.0km az=99.0*

**ISC 24 09:53:14.9±0.6, 22°.85S±0°.07×175°.3W±0°.1, h34km, n39, σ1°13/31, mb4.4/18, MS3.6/6, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **6.80** | **200** | Sn | | **Sn** | **09 56 06.7** | **-1.6** |
| | 46nm,0.3s,baz=92,slow=19,SNR=5.0 | | | | | | | |
| **RAO** | **Raoul Island** | **6.80** | **200** | *e*Pn | | **Pn** | **09 54 52.0** | **-0.2** |
| RAO | | | | Sn | | **Sn** | **09 56 06.8** | **-1.6** |
| RAO | | | | *e*Sn | | **Sn** | **09 56 09.1** | **+0.7** |
| **MSVF** | **Nonsavu** | **8.06** | **308** | *e*Pn | | Pn | 09 55 17.0 | +7.3 |
| | 67nm,1.1s | | | | | | | |
| **AFI** | **Afiamalu** | **9.50** | **21** | Pn | | Pn | 09 55 22.2 | -7.2 |
| | 7.7nm,0.3s,baz=143,slow=2.2,SNR=12 | | | | | | | |
| AFI | | | | Sn | | Sn | 09 56 57.9 | -17 |
| | 3.8nm,0.3s,baz=123,slow=17,SNR=3.1 | | | | | | | |
| **AFI** | **Afiamalu** | **9.50** | **21** | *e*Pn | | Pn | 09 55 24.3 | -5.1 |
| AFI | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CMAR | | | | LR | LR | 10 46 03.2 | |
| | comp=Z,14nm,20.4s,baz=255,slow=34 | | | | | | |
| **FINES** | **FINESS Array B** | **138.71** | **345** | PKP | **PKPdf** | **10 12 37.8** | **+1.0** |
| | 1.3nm,0.7s,baz=212,slow=4.9,SNR=3.5 | | | | | | |
| **AKASG** | **Malin Array Be** | **146.27** | **332** | PKPbc | **PKPbc** | **10 12 50.9** | **-0.8** |
| | 3.8nm,0.7s,baz=40,slow=4.1,SNR=18 | | | | | | |
| **BRTR** | **Keskin Array B** | **150.28** | **311** | PKPbc | **PKPbc** | **10 13 01.6** | **-1.3** |
| | 1.8nm,0.8s,baz=96,slow=2.5,SNR=8.4 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **151.14** | **297** | PKPbc | **PKPbc** | **10 13 06.0** | **+1.0** |
| | 0.8nm,0.3s,baz=60,slow=4.9,SNR=4.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.93** | **163** | PKPab | **PKPab** | **10 14 34.7** | **+0.3** |
| | 0.4nm,0.8s,baz=169,slow=1.5,SNR=3.2 | | | | | | |

**DJA 24 09:53:35.1±0.7,1°N±5°×12°1E±°, h25km±10km, M4.0/9, mb4.2/2, mB4.7/1, MLv3.9/9, Mw(mB)3.9/1, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **1.15** | **119** | P | Pn | 09 53 54.7 | -0.9 |
| MRSI | | | | S | Sb | 09 54 10.8 | 0.0 |
| **MPSI** | **Mapaga** | **1.24** | **236** | P | Pn | 09 53 56.5 | -0.4 |
| MPSI | | | | S | Sn | 09 54 12.8 | 0.0 |
| **APSI** | **Ampana** | **2.06** | **160** | P | Pn | 09 54 08.6 | +0.5 |
| APSI | | | | S | Sn | 09 54 34.6 | +1.6 |
| **GTOI** | **Gorontalo** | **2.12** | **101** | P | Pn | 09 54 06.9 | -2.0 |
| GTOI | | | | S | Sn | 09 54 31.6 | -2.9 |
| **PCI** | **Palu** | **2.21** | **210** | P | Pn | 09 54 10.7 | +0.4 |
| PCI | | | | S | Sn | 09 54 38.3 | +1.5 |
| **LUWI** | **Luwuk** | **2.76** | **138** | P | Pn | 09 54 18.0 | +0.2 |
| LUWI | | | | S | Sn | 09 54 52.5 | +2.1 |
| **TTSI** | **Tana Toraja** | **4.20** | **195** | P | Pn | 09 54 37.5 | -0.1 |
| TTSI | | | | S | Sn | 09 55 27.7 | +1.9 |
| **BKB** | **Balikpapan** | **4.63** | **241** | P | Pb | 09 54 51.8 | -3.9 |
| **SPSI** | **Sidrap Palu** | **5.09** | **193** | P | Pn | 09 54 34.9 | -15 |
| **SANI** | **Sanana** | **5.91** | **121** | P | Pn | 09 55 00.8 | -0.3 |
| | 9.8nm,0.9s,609nm0.1nm | | | | | | |
| **BKSI** | **Bulukumba** | **6.36** | **187** | P | Pn | 09 55 08.7 | +1.4 |
| **LBMI** | **Labuha** | **6.78** | **104** | P | Pn | 09 55 13.5 | +0.5 |

*ISCJB **24** 10:02:05.3±0.5,59.°72N±0.°03×22.°99E±0.°05, h0km, Error ellipse: s-maj=4.7km s-min=3.8km az=164.6*
*HEL **24** 10:02:06.9±0.1,59.°67N×23.°09E, h0km, ML1.8, Explosion*
*IDC **24** 10:02:08.8±1.9,59.°87N×22.°99E, h0km, mb1 3.1/4, mb1mx2.9/37, mbtmp3.0/4, ML2.3/4, Error ellipse: s-maj=26.0km s-min=6.9km az=158.0*
**ISC 24 10:02:06.5±0.9,59.°75N±0.°04×23.°02E±0.°03, h0km, n15, σ1s24/28, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **0.84** | **55** | *e*PB | **Pg** | **10 02 22.7** | **+0.2** |
| MEF | | | | *e*S | **Sg** | **10 02 33.6** | **+0.3** |
| **MTSE** | **Matsula** | **1.11** | **158** | *e*PN | **Pb** | **10 02 28.1** | **-0.5** |
| MTSE | | | | *e*SB | **Sg** | **10 02 41.5** | **-0.7** |
| **RAF** | **Rauma** | **1.42** | **335** | *e*P | **Pn** | **10 02 33.6** | **0.0** |
| RAF | | | | MSG | | 10 02 51.9 | |
| | comp=Z,6.2nm,0.2s | | | | | | |
| RAF | | | | *e*S | **Sb** | **10 02 53.1** | **+0.6** |
| **AAL** | **Aland** | **1.58** | **287** | *e*PG | **Pb** | **10 02 36.3** | **-0.3** |
| AAL | | | | *e*SG | **Sg** | **10 02 57.6** | **+0.3** |
| **PVF** | **Pernaja** | **1.63** | **59** | *e*PN | **Pn** | **10 02 36.8** | **+0.4** |
| PVF | | | | MSG | | 10 02 56.3 | |
| | comp=Z,8.4nm,0.2s | | | | | | |
| PVF | | | | *e*SN | **Sn** | **10 02 58.7** | **+0.6** |
| **FIA0** | **FINESS Array S** | **2.27** | **40** | *e*PB | **Pb** | **10 02 47.3** | **-1.1** |
| FIA0 | | | | *e*SB | **Sb** | **10 03 16.4** | **-0.6** |
| **FINES** | **FINESS Array B** | **2.27** | **40** | Pn | **Pb** | **10 02 47.8** | **-0.5** |
| | comp=Z,1.6nm,0.3s,baz=224,slow=16,SNR=79 | | | | | | |
| FINES | | | | Lg | Lg | 10 03 16.8 | |
| | comp=Z,1.9nm,0.3s,baz=224,slow=26,SNR=21 | | | | | | |
| **VJF** | **Virojoki** | **2.40** | **69** | *e*PB | **Pn** | **10 02 49.1** | **+2.1** |
| VJF | | | | MSG | | 10 03 18.1 | |
| | comp=Z,3.4nm,0.2s | | | | | | |
| VJF | | | | *e*SG | **Sb** | **10 03 21.8** | **+1.1** |
| **KEF** | **Keuruu** | **2.59** | **20** | *e*PB | **Pb** | **10 02 53.2** | **-0.5** |
| KEF | | | | MSG | | 10 03 25.1 | |
| | comp=Z,2.9nm,0.2s | | | | | | |
| KEF | | | | *e*SB | **Sb** | **10 03 26.5** | **+0.4** |
| **KAF** | **Kangasniemi** | **2.86** | **33** | *e*PB | **Pb** | **10 02 56.7** | **-1.7** |
| KAF | | | | MSG | | 10 03 32.8 | |
| | comp=Z,1.8nm,0.2s | | | | | | |
| KAF | | | | *e*SB | **Sb** | **10 03 33.7** | **-0.2** |
| **VAF** | **Ylistaro** | **3.31** | **357** | *e*PB | **Pb** | **10 03 04.2** | **-1.8** |
| VAF | | | | *e*SB | **Sb** | **10 03 46.9** | **+0.1** |
| **UMAU** | **Umeaa** | **4.29** | **346** | *e*PG | **Pb** | **10 03 25.9** | **+3.1** |
| UMAU | | | | *e*SG | **Sg** | **10 04 23.4** | **-0.9** |
| **HFS** | **Hagfors** | **4.71** | **279** | Pn | **Pn** | **10 03 20.3** | **+1.6** |
| | comp=Z,0.1nm,0.3s,baz=103,slow=13,SNR=6.2 | | | | | | |
| HFS | | | | Sn | **Sn** | **10 04 15.3** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=74,slow=28,SNR=6.9 | | | | | | |
| HFS | | | | Lg | Lg | 10 04 31.3 | |
| | comp=Z,0.2nm,0.3s,baz=92,slow=33,SNR=6.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **6.00** | **288** | Pn | **Pn** | **10 03 35.6** | **-0.8** |
| | comp=Z,0.1nm,0.3s,baz=114,slow=13,SNR=2.6 | | | | | | |
| NOA | | | | Sn | **Sn** | **10 04 43.1** | **-2.6** |
| | comp=Z,0.1nm,0.3s,baz=19,slow=19,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.88** | **5** | Pn | **Pn** | **10 04 29.0** | **-0.7** |
| | comp=Z,0.1nm,0.3s,baz=180,slow=13,SNR=6.4 | | | | | | |

**AUST 24 10:17:23.1±1.7,30.°58S×124.°23E, h30km±16km, Error ellipse: s-maj=9.3km s-min=4.2km az=145.0, Western Australia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMBL** | **Kambalda** | **2.16** | **248** | P | Pn | 10 17 57.7 | +0.6 |
| | baz=2.2,SNR=46 | | | | | | |
| **KLBR** | **Kellerberrin** | **5.64** | **258** | P | Pn | 10 18 44.0 | -1.0 |
| | baz=5.6,SNR=6.2 | | | | | | |
| **MEEK** | **Meekatharra** | **6.31** | **307** | P | Pn | 10 18 55.7 | +1.6 |
| | baz=6.3 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **6.40** | **247** | P | Pn | 10 18 55.6 | +0.2 |
| | baz=6.4 | | | | | | |
| **BLDU** | **Ballidu** | **6.48** | **268** | P | Pn | 10 18 54.9 | -1.6 |
| | baz=6.5 | | | | | | |
| **MORW** | **Morawa** | **7.27** | **280** | P | Pn | 10 19 06.9 | -0.4 |
| | baz=7.3 | | | | | | |
| **RKGY** | **Rocky Gully** | **7.32** | **235** | P | Pn | 10 19 07.8 | -0.2 |
| | baz=7.3,SNR=5.6 | | | | | | |
| **AS01** | **Alice Springs** | **11.06** | **54** | P | Pn | 10 19 58.7 | -0.7 |
| | baz=11 | | | | | | |

*CSEM **24** 10:19:35.0,34.°11N×35.°29E, h18km, ML2.0, After NSSC*
*NSSC **24** 10:19:35.0±1.2,34.°11N×35.°29E, h18km±10km, MD1.2, ML2.0*
*GRAL **24** 10:19:38.9±0.3,33.°81N×36.°81E, h32km±3km, MD3.1*
**ISC 24 10:19:27.4±2.7,33.°70N±0.°07×37.°4E±0.°1, h10km, n12, σ2s97/20, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FKH** | **Fakeheh** | **0.96** | **305** | *e*P | **Pn** | **10 19 49.4** | **+2.3** |
| FKH | | | | *e*S | **Sb** | **10 19 57.2** | **-1.8** |
| **HAWK** | **Haweek** | **1.14** | **316** | *e*P | Pn | 10 19 53.7 | +4.1 |
| HAWK | | | | *e*S | **Sn** | **10 20 06.5** | **+1.2** |
| HAWK | | | | AML | AML | 10 20 11.2 | |
| | comp=N,42nm,0.5s | | | | | | |
| HAWK | | | | AML | AML | 10 20 12.2 | |
| | comp=E,24nm,0.7s | | | | | | |
| **HAWK** | **Haweek** | **1.14** | **316** | *e*P | Pn | 10 19 53.7 | +4.1 |
| HAWK | | | | *e*S | **Sn** | **10 20 06.5** | **+1.2** |
| | comp=E,24nm,0.7s | | | | | | |
| **BRBR** | **Barbar** | **1.21** | **257** | *e*P | **Pn** | **10 19 50.7** | **+0.1** |
| BRBR | | | | *e*S | **Sn** | **10 20 03.5** | **-3.7** |
| BRBR | | | | AML | AML | 10 20 14.1 | |
| | comp=N,64nm,0.4s | | | | | | |
| BRBR | | | | AML | AML | 10 20 15.7 | |
| | comp=E,46nm,0.5s | | | | | | |
| **BRBR** | **Barbar** | **1.21** | **257** | *e*P | **Pn** | **10 19 50.7** | **+0.1** |
| BRBR | | | | *e*S | **Sn** | **10 20 03.5** | **-3.7** |
| | comp=E,46nm,0.5s | | | | | | |
| **RCY** | **Rachaya** | **1.29** | **261** | *e*P | **Pn** | **10 19 54.3** | **+2.7** |
| RCY | | | | *e*S | **Sn** | **10 20 05.6** | **-3.4** |
| **HWQ** | **Hawqa** | **1.31** | **297** | *e*P | **Pn** | **10 19 54.0** | **+2.1** |
| **BHL** | **Bhannes** | **1.44** | **279** | *e*P | **Pn** | **10 19 55.5** | **+1.9** |
| **BIDA** | **Albida** | **1.57** | **327** | *e*P | **Pb** | **10 19 58.1** | **+1.5** |
| BIDA | | | | *e*S | **Sb** | **10 20 12.7** | **-3.9** |
| BIDA | | | | AML | AML | 10 20 26.5 | |
| | comp=N,34nm,0.4s | | | | | | |
| BIDA | | | | AML | AML | 10 20 29.0 | |
| | comp=E,80nm,0.5s | | | | | | |
| **BIDA** | **Albida** | **1.57** | **327** | *e*P | **Pb** | **10 19 58.1** | **+1.5** |
| BIDA | | | | *e*S | **Sb** | **10 20 12.7** | **-3.9** |
| | comp=E,80nm,0.5s | | | | | | |
| **SLNF** | **Slenfeh** | **2.11** | **334** | *e*P | **Pn** | **10 20 03.0** | **0.0** |
| SLNF | | | | *e*S | **Sn** | **10 20 24.4** | **-5.0** |
| SLNF | | | | AML | AML | 10 20 32.4 | |
| | comp=E,62nm,0.4s | | | | | | |
| SLNF | | | | AML | AML | 10 20 33.0 | |
| | comp=N,18nm,0.3s | | | | | | |
| **SLNF** | **Slenfeh** | **2.11** | **334** | *e*P | **Pn** | **10 20 03.0** | **0.0** |
| SLNF | | | | *e*S | **Sn** | **10 20 24.4** | **-5.0** |
| | comp=N,18nm,0.3s | | | | | | |

*BJI **24** 10:46:56.5,22.°00S×66.°80W, h163km, mB4.6/2*
*NEIC **24** 10:46:57.4±0.6,22.°01S×67.°04W, h164km±5km, mb4.5/37, Error ellipse: s-maj=8.7km s-min=5.9km az=74.0*
*ISCJB **24** 10:46:57.8±0.3,21.°95S±0.°04×67.°18W±0.°04, h179km±2km, mb4.4/49, Error ellipse: s-maj=7.1km s-min=4.1km az=135.4*
*IDC **24** 10:46:58.3±0.7,21.°93S×67.°08W, h169km±6km, mb4.1/16, mb1 4.1/21, mb1mx4.0/37, mbtmp4.5/21, Error ellipse: s-maj=11.0km s-min=8.5km az=100.0*
*SJA **24** 10:46:59.6±0.4,22.°06S×66.°62W, h226km±4km, ML4.2, MW3.6*
*GUC **24** 10:47:00.5±0.8,21.°92S×67.°90W, h237km±14km, ML4.8*
**ISC 24 10:46:58.5±0.7,21.°98S±0.°05×67.°16W±0.°04, h173km±6km, n337, σ0s98/350, mb4.5/49, 1D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YJA** | **Yavi** | **1.54** | **98** | *e*P | Pn | 10 47 33.8 | +3.1 |
| YJA | | | | *e*S | **Sn** | **10 47 58.8** | **+3.2** |
| YJA | | | | IAML | | 10 48 01.4 | |
| | comp=Z,560nm,0.7s | | | | | | |
| **LVC** | **Limon Verde** | **1.74** | **248** | P | **Pn** | **10 47 33.7** | **+1.2** |
| | comp=Z,2μm,0.3s,baz=41,slow=7.9,SNR=689 | | | | | | |
| LVC | | | | S | **Sn** | **10 47 59.7** | **+0.8** |
| | comp=Z,3μm,0.3s,baz=320,slow=22,SNR=114 | | | | | | |
| **LVC** | **Limon Verde** | **1.74** | **248** | *e*Pn | **Pn** | **10 47 33.4** | **+0.9** |
| LVC | | | | *e*Sn | **Sn** | **10 48 00.1** | **+1.1** |
| **HJA** | **Humahuaca** | **2.03** | **127** | *e*P | Pn | 10 47 37.9 | +2.1 |
| HJA | | | | IAML | | 10 47 39.9 | |
| | comp=Z,2μm,0.2s | | | | | | |
| HJA | | | | *e*S | **Sn** | **10 48 05.9** | **+1.2** |
| **PB01** | **IPOC Station P** | **2.36** | **293** | *e*P | **Pn** | **10 47 40.0** | **+0.8** |
| PB01 | | | | *e*S | **Sn** | **10 48 10.3** | **-0.5** |
| PB01 | | | | AML | AML | 10 48 11.9 | |
| | comp=N,5μm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **2.54** | **275** | *e*P | **Pn** | **10 47 41.7** | **+0.2** |
| PB07 | | | | *e*S | **Sn** | **10 48 13.2** | **-1.6** |
| PB07 | | | | AML | AML | 10 48 15.2 | |
| | comp=E,3μm,0.7s | | | | | | |
| **PB04** | **IPOC Station P** | **2.79** | **262** | *e*P | **Pn** | **10 47 44.4** | **0.0** |
| PB04 | | | | *e*S | **Sn** | **10 48 17.6** | **-2.6** |
| PB04 | | | | AML | AML | 10 48 19.2 | |
| | comp=N,2μm,0.5s | | | | | | |
| **AZAP** | **Zapla** | **2.95** | **140** | *e*P | **Pn** | **10 47 47.2** | **+0.7** |
| **SLA** | **San Lorenzo** | **3.13** | **151** | *e*P | **Pn** | **10 47 49.8** | **+1.3** |
| **ASTB** | **Santa Barbara** | **3.15** | **129** | *e*P | **Pn** | **10 47 48.7** | **-0.1** |
| ASTB | | | | *e*S | **Sn** | **10 48 25.1** | **-3.0** |
| **ANCH** | **Antofagasta** | **3.44** | **240** | *e*P | Pn | 10 47 41.9 | -10 |
| ANCH | | | | *e*S | Sn | 10 48 20.4 | -14 |
| **ALOL** | **LOMAS DE OLMED** | **3.46** | **123** | *e*P | **Pn** | **10 47 50.7** | **-1.9** |
| ALOL | | | | *e*S | **Sn** | **10 48 29.2** | **-5.6** |
| **FSA** | **Cafayete** | **4.23** | **166** | *e*P | **Pn** | **10 48 04.2** | **+1.8** |
| **ARCH** | **Arica** | **4.55** | **319** | *e*P | **Pn** | **10 48 06.2** | **-0.3** |
| ARCH | | | | *e*S | **Sn** | **10 48 56.3** | **-3.4** |
| **AHML** | **Horco Molle** | **5.07** | **161** | *e*P | **Pn** | **10 48 13.5** | **+0.3** |
| **LPAZ** | **La Paz** | **5.73** | **351** | P | **Pn** | **10 48 23.7** | **+1.2** |
| | comp=N,4.7nm,0.3s,baz=98,slow=3.8,SNR=188 | | | | | | |
| LPAZ | | | | S | **Sn** | **10 49 28.6** | **+0.1** |
| | comp=N,2.4nm,0.3s,baz=52,slow=24,SNR=6.0 | | | | | | |
| **CYA** | **Choya** | **6.55** | **169** | *e*P | **Pn** | **10 48 33.0** | **+0.3** |
| **ARE** | **Arequipa** | **6.84** | **323** | *e*P | **Pn** | **10 48 36.0** | **-0.8** |
| ARE | | | | *e*S | **Sn** | **10 49 51.0** | **-3.3** |
| **LCO** | **Las Campanas** | **7.70** | **204** | *e*Pn | **Pn** | **10 48 45.0** | **-3.0** |
| LCO | | | | *e*Sn | Sn | 10 50 07.3 | -7.3 |
| **SIV** | **San Ignacio** | **8.28** | **45** | P | **Pn** | **10 48 54.8** | **-0.8** |
| | comp=N,12nm,0.3s,baz=254,slow=9.8,SNR=138 | | | | | | |
| SIV | | | | S | Sn | 10 50 18.0 | -10 |
| | comp=N,3.6nm,0.3s,baz=247,slow=18,SNR=6.8 | | | | | | |
| **CFAA** | **Coronel Fontan** | **9.64** | **185** | P | **Pn** | **10 49 10.7** | **-2.7** |
| | comp=N,0.3nm,0.3s,baz=4.0,slow=12,SNR=67 | | | | | | |
| CFAA | | | | S | Sn | 10 50 51.2 | -9.4 |
| | comp=N,0.5nm,0.3s,baz=110,slow=23,SNR=9.2 | | | | | | |
| **CPUP** | **Villa Florida** | **9.97** | **118** | P | **Pn** | **10 49 16.0** | **-1.7** |
| | comp=N,0.3nm,0.3s,baz=294,slow=12,SNR=9.7 | | | | | | |
| **SAML** | **Samuel** | **13.51** | **17** | *e*P | **Pn** | **10 50 02.7** | **-0.7** |
| | comp=N,6.6nm,0.6s | | | | | | |
| **NNA** | **Nana** | **13.57** | **315** | P | **Pn** | **10 50 05.2** | **+0.9** |
| | comp=N,1.3nm,0.3s,baz=170,slow=10,SNR=9.0 | | | | | | |
| **NNA** | **Nana** | **13.57** | **315** | *e*P | **P** | **10 50 09.3** | **+1.9** |
| | comp=N,16nm,0.7s | | | | | | |
| **TRQA** | **Tornquist** | **16.64** | **166** | *e*P | **P** | **10 50 38.8** | **-2.3** |
| | comp=N,20nm,0.5s | | | | | | |
| **BDFB** | **Brasilia** | **19.18** | **74** | P | **P** | **10 51 06.8** | **-2.4** |
| | comp=N,0.3nm,0.3s,baz=184,slow=15,SNR=2.1 | | | | | | |
| **PTGA** | **Pitinga** | **22.25** | **19** | P | **P** | **10 51 39.3** | **-2.0** |
| | comp=N,8.0nm,0.4s,baz=205,slow=18,SNR=24 | | | | | | |
| **OTAV** | **Otavalo** | **24.67** | **332** | *e*P | **P** | **10 52 05.4** | **+1.3** |
| | comp=N,3.4nm,0.8s | | | | | | |
| **BCIP** | **Isla Barro Col** | **33.35** | **337** | *e*P | **P** | **10 53 21.6** | **+1.3** |
| | comp=N,15nm,0.7s | | | | | | |
| **CELP** | **Cerrillos** | **39.81** | **1** | *e*P | **P** | **10 54 13.0** | **-1.9** |
| **SJG** | **San Juan** | **39.85** | **2** | P | **P** | **10 54 13.5** | **-1.7** |
| | comp=N,13nm,0.6s,baz=132,slow=8.8,SNR=6.4 | | | | | | |
| **GOGA** | **Godfrey** | **57.23** | **344** | *e*P | **P** | **10 56 27.1** | **-0.5** |
| | comp=N,5.9nm,0.7s | | | | | | |
| **LRAL** | **Lakeview Retre** | **57.89** | **340** | *e*P | **P** | **10 56 31.7** | **-0.5** |
| | comp=N,8.9nm,0.9s | | | | | | |
| **933A** | **Laredo** | **58.26** | **326** | P | **P** | **10 56 35.9** | **+0.9** |
| | baz=59 | | | | | | |
| **637A** | **Eagle Lake** | **58.33** | **330** | P | **P** | **10 56 36.9** | **+1.5** |
| | baz=59 | | | | | | |
| **KMSC** | **Kings Mountain** | **58.38** | **346** | P | **P** | **10 56 36.2** | **+0.6** |
| | baz=59 | | | | | | |
| **KMSC** | **Kings Mountain** | **58.38** | **346** | *e*P | **P** | **10 56 35.8** | **+0.2** |
| | comp=N,9.9nm,0.9s | | | | | | |
| **440A** | **Kirbyville** | **58.40** | **333** | P | **P** | **10 56 37.2** | **+1.4** |
| | baz=59 | | | | | | |
| **538A** | **Harpers Horsep** | **58.61** | **331** | P | **P** | **10 56 38.5** | **+1.2** |
| | baz=59 | | | | | | |
| **439A** | **Center Grove,** | **58.78** | **332** | P | **P** | **10 56 39.7** | **+1.2** |
| | baz=59 | | | | | | |
| **833A** | **Chaparral WMA,** | **58.90** | **327** | P | **P** | **10 56 40.0** | **+0.7** |
| | baz=59,SNR=5.7 | | | | | | |
| **734A** | **La Parita Cree** | **58.90** | **328** | P | **P** | **10 56 40.0** | **+0.6** |
| | baz=59 | | | | | | |
| **340A** | **Bronson** | **58.95** | **333** | P | **P** | **10 56 40.7** | **+1.1** |
| | baz=59 | | | | | | |
| **438A** | **Sam Houston St** | **59.05** | **332** | P | **P** | **10 56 41.7** | **+1.3** |
| | baz=59 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **59.11** | **161** | P | **P** | **10 56 41.1** | **+0.8** |
| **339A** | **Huntington** | **59.16** | **333** | P | **P** | **10 56 41.9** | **+0.8** |
| | baz=60 | | | | | | |
| **832A** | **Faith Ranch, C** | **59.16** | **326** | P | **P** | **10 56 41.8** | **+0.6** |
| | baz=60 | | | | | | |
| **733A** | **Divot King Ran** | **59.17** | **327** | P | **P** | **10 56 42.5** | **+1.3** |
| | baz=60 | | | | | | |
| **536A** | **Bastrop** | **59.21** | **330** | P | **P** | **10 56 42.8** | **+1.4** |
| | baz=60 | | | | | | |
| **535A** | **Dale** | **59.41** | **329** | P | **P** | **10 56 44.0** | **+1.2** |
| | baz=60 | | | | | | |
| **TKL** | **Tuckaleechee C** | **59.44** | **344** | P | **P** | **10 56 42.7** | **-0.2** |
| | comp=N,16nm,0.7s,baz=166,slow=8.1,SNR=27 | | | | | | |
| **338A** | **Crockett** | **59.50** | **332** | P | **P** | **10 56 44.7** | **+1.3** |
| | baz=60 | | | | | | |
| **SWET** | **Sewanee** | **59.60** | **342** | *e*P | **P** | **10 56 43.8** | **-0.3** |
| | comp=N,9.3nm,0.6s | | | | | | |
| **436A** | **Wall Ranch, Ga** | **59.67** | **330** | P | **P** | **10 56 45.7** | **+1.2** |
| | baz=60 | | | | | | |
| **VNA2** | **Neumayer--Watz** | **59.67** | **161** | P | **P** | **10 56 44.9** | **+0.8** |
| | baz=276,slow=11 | | | | | | |
| **239A** | **Gary** | **59.72** | **333** | P | **P** | **10 56 45.7** | **+0.8** |
| | baz=60 | | | | | | |
| **337A** | **Centerville** | **59.72** | **332** | P | **P** | **10 56 45.6** | **+0.7** |
| | baz=60 | | | | | | |
| **238A** | **Jacksonville** | **59.98** | **333** | P | **P** | **10 56 47.8** | **+1.1** |
| | baz=60 | | | | | | |
| **OXF** | **Oxford** | **60.03** | **339** | *e*P | **P** | **10 56 45.8** | **-1.1** |
| | comp=N,27nm,1.2s | | | | | | |
| **632A** | **Uvalde** | **60.06** | **327** | P | **P** | **10 56 47.9** | **+0.6** |
| | baz=60 | | | | | | |
| **533A** | **Kerrville** | **60.15** | **328** | P | **P** | **10 56 48.6** | **+0.7** |
| | baz=60 | | | | | | |
| **336A** | **Riesel** | **60.21** | **331** | P | **P** | **10 56 49.1** | **+0.8** |
| | baz=61 | | | | | | |
| **631A** | **Perdido Creek** | **60.38** | **326** | P | **P** | **10 56 50.1** | **+0.6** |
| | baz=61 | | | | | | |
| **335A** | **Moody** | **60.39** | **330** | P | **P** | **10 56 50.2** | **+0.8** |
| | baz=61 | | | | | | |
| **138A** | **Matatall Enter** | **60.53** | **333** | P | **P** | **10 56 51.5** | **+1.1** |
| | baz=61 | | | | | | |
| **236A** | **Katherine and** | **60.59** | **331** | P | **P** | **10 56 51.4** | **+0.6** |
| | baz=61 | | | | | | |
| **532A** | **Rocksprings** | **60.62** | **327** | P | **P** | **10 56 51.8** | **+0.7** |
| | baz=61 | | | | | | |
| **433A** | **Art** | **60.73** | **329** | P | **P** | **10 56 52.2** | **+0.3** |
| | baz=61,SNR=5.8 | | | | | | |
| **JCT** | **Junction City** | **60.86** | **328** | P | **P** | **10 56 53.7** | **+0.9** |
| | baz=61 | | | | | | |
| **JCT** | **Junction City** | **60.86** | **328** | *e*P | **P** | **10 56 53.3** | **+0.6** |
| | comp=N,10.0nm,0.9s | | | | | | |
| **531A** | **Rocksprings** | **60.97** | **327** | P | **P** | **10 56 54.2** | **+0.7** |
| | baz=61,SNR=6.8 | | | | | | |
| **136A** | **Ennis** | **60.99** | **332** | P | **P** | **10 56 54.2** | **+0.7** |
| | baz=61 | | | | | | |
| **WHTX** | **Lake Whitney** | **61.00** | **331** | P | **P** | **10 56 54.0** | **+0.4** |
| | baz=61 | | | | | | |
| **WVT** | **Waverly** | **61.01** | **341** | *e*P | **P** | **10 56 52.9** | **-0.7** |
| | comp=N,21nm,0.6s | | | | | | |
| **333A** | **Richland Sprin** | **61.16** | **329** | P | **P** | **10 56 55.0** | **+0.3** |
| | baz=62 | | | | | | |
| **432A** | **Menard** | **61.18** | **328** | P | **P** | **10 56 55.0** | **+0.1** |
| | baz=62,SNR=7.1 | | | | | | |
| **Y39A** | **Lockesburg** | **61.23** | **335** | P | **P** | **10 56 55.6** | **+0.5** |
| | baz=62 | | | | | | |
| **SNAA** | **Sanae** | **61.30** | **161** | P | **P** | **10 56 56.1** | **+0.9** |
| | comp=N,1.5nm,0.7s,baz=291,slow=7.1,SNR=18 | | | | | | |
| **SNAA** | **Sanae** | **61.30** | **161** | *e*P | **P** | **10 56 55.5** | **+0.3** |
| | comp=N,1.8nm,0.8s | | | | | | |
| **530A** | **J-C Ranch, Com** | **61.37** | **326** | P | **P** | **10 56 56.7** | **+0.6** |
| | baz=62 | | | | | | |
| **431A** | **Sonora** | **61.42** | **327** | P | **P** | **10 56 56.8** | **+0.2** |
| | baz=62 | | | | | | |
| **MIAR** | **Mount Ida** | **61.56** | **335** | P | **P** | **10 56 57.6** | **+0.2** |
| | baz=62 | | | | | | |
| **MIAR** | **Mount Ida** | **61.56** | **335** | *e*P | **P** | **10 56 57.3** | **0.0** |
| | comp=N,2.2nm,0.5s | | | | | | |
| **332A** | **Millersview** | **61.57** | **328** | P | **P** | **10 56 57.6** | **+0.2** |
| | baz=62 | | | | | | |
| **Z36A** | **Blue Ridge** | **61.63** | **332** | P | **P** | **10 56 58.1** | **+0.3** |
| | baz=62 | | | | | | |
| **233A** | **Rising Star** | **61.69** | **329** | P | **P** | **10 56 58.8** | **+0.5** |
| | baz=62 | | | | | | |
| **529A** | **Stev Forest Ra** | **61.80** | **326** | P | **P** | **10 56 59.9** | **+0.8** |
| | baz=62,SNR=7.2 | | | | | | |
| **430A** | **Baggett Ranch,** | **61.83** | **327** | P | **P** | **10 56 59.5** | **+0.3** |
| | baz=62,SNR=8.5 | | | | | | |
| **331A** | **San Angelo** | **61.84** | **328** | P | **P** | **10 56 59.4** | **0.0** |
| | baz=62,SNR=5.9 | | | | | | |
| **Y37A** | **Hugo** | **61.89** | **333** | P | **P** | **10 57 00.8** | **+1.3** |
| | baz=62 | | | | | | |
| **232A** | **Coleman** | **61.94** | **329** | P | **P** | **10 57 00.3** | **+0.3** |
| | baz=62 | | | | | | |
| **TXAR** | **Lajitas Array** | **61.96** | **324** | P | **P** | **10 57 00.3** | **+0.1** |
| | comp=N,0.7nm,0.5s,baz=155,slow=7.6,SNR=13 | | | | | | |
| **429A** | **Davenport Ranc** | **62.03** | **326** | P | **P** | **10 57 01.2** | **+0.6** |
| | baz=62,SNR=5.1 | | | | | | |
| **X38A** | **Whitesboro** | **62.17** | **334** | P | **P** | **10 57 02.1** | **+0.7** |
| | baz=62 | | | | | | |
| **133A** | **Hamilton Ranch** | **62.19** | **330** | P | **P** | **10 57 02.2** | **+0.6** |
| | baz=62 | | | | | | |
| **330A** | **Mertzon** | **62.30** | **327** | P | **P** | **10 57 03.0** | **+0.6** |
| | baz=63 | | | | | | |
| **231A** | **Bronte** | **62.30** | **328** | P | **P** | **10 57 02.4** | **+0.1** |
| | baz=63 | | | | | | |
| **X37A** | **Clayton** | **62.32** | **334** | P | **P** | **10 57 02.8** | **+0.5** |
| | baz=63 | | | | | | |
| **Z34A** | **Collier Ranch,** | **62.37** | **331** | P | **P** | **10 57 02.9** | **+0.1** |
| | baz=63 | | | | | | |
| **W38A** | **Poteau** | **62.39** | **335** | P | **P** | **10 57 03.3** | **+0.5** |
| | baz=63 | | | | | | |
| **PBMO** | **Poplar Bluff** | **62.43** | **339** | *e*P | **P** | **10 57 02.8** | **-0.3** |
| | comp=N,13nm,1.3s | | | | | | |
| **Y35A** | **Marietta** | **62.43** | **332** | P | **P** | **10 57 03.8** | **+0.7** |
| | baz=63 | | | | | | |
| **WCI** | **Wyandotte Cave** | **62.52** | **343** | *e*P | **P** | **10 57 02.8** | **-0.9** |
| | comp=N,39nm,1.1s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **62.54** | **329** | P | **P** | **10 57 04.5** | **+0.5** |
| | baz=63 | | | | | | |
| **230A** | **Sterling City** | **62.65** | **328** | P | **P** | **10 57 05.2** | **+0.5** |
| | baz=63 | | | | | | |
| **Z33A** | **Whitaker Ranch** | **62.68** | **330** | P | **P** | **10 57 05.3** | **+0.5** |
| | baz=63 | | | | | | |
| **X36A** | **Centrahoma** | **62.71** | **333** | P | **P** | **10 57 05.0** | **+0.1** |
| | baz=63 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **62.77** | **327** | P | **P** | **10 57 05.5** | **0.0** |
| | baz=63 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **62.79** | **332** | P | **P** | **10 57 05.9** | **+0.4** |
| | baz=63 | | | | | | |
| **W37A** | **Quinton** | **62.82** | **334** | P | **P** | **10 57 05.9** | **+0.2** |
| | baz=63 | | | | | | |
| **X35A** | **Drake** | **62.83** | **332** | P | **P** | **10 57 06.0** | **+0.3** |
| | baz=63 | | | | | | |
| **SIUC** | **Southern Illin** | **62.90** | **340** | *e*P | **P** | **10 57 05.3** | **-0.8** |
| | comp=N,5.7nm,0.5s | | | | | | |
| **131A** | **Roby** | **62.94** | **329** | P | **P** | **10 57 06.8** | **+0.2** |
| | baz=63 | | | | | | |
| **Z32A** | **Haskell** | **63.03** | **330** | P | **P** | **10 57 07.3** | **+0.2** |
| | baz=63 | | | | | | |
| **V38A** | **Canehill** | **63.04** | **335** | P

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| X30A | Coker Ranch, T | 64.62 | 329 | P | P | 10 57 17.8 | +0.3 |
| | baz=65 | | | | | | |
| T36A | Boggs Farm, Ca | 64.67 | 335 | P | P | 10 57 18.1 | +0.3 |
| | baz=65,SNR=5.6 | | | | | | |
| MNTX | Cornudas Mount | 64.72 | 324 | P | P | 10 57 18.4 | +0.1 |
| | baz=65 | | | | | | |
| SFIN | Scholer Farm | 64.75 | 343 | P | P | 10 57 18.4 | +0.2 |
| | baz=65 | | | | | | |
| T35A | Sooner Cattle | 64.79 | 334 | P | P | 10 57 18.6 | 0.0 |
| | baz=65 | | | | | | |
| U34A | Anderson Ranch | 64.80 | 333 | P | P | 10 57 18.9 | +0.3 |
| | baz=65 | | | | | | |
| Y28A | McKinney Farm, | 64.84 | 328 | P | P | 10 57 19.1 | 0.0 |
| | baz=65 | | | | | | |
| S37A | Fort Scott | 64.87 | 336 | P | P | 10 57 19.9 | +0.9 |
| | baz=65 | | | | | | |
| X29A | Tulia | 65.01 | 329 | P | P | 10 57 20.7 | +0.5 |
| | baz=65 | | | | | | |
| U33A | Lingo Farm, Me | 65.04 | 333 | P | P | 10 57 20.2 | 0.0 |
| | baz=65 | | | | | | |
| S36A | Lake Cedric, C | 65.13 | 335 | P | P | 10 57 20.9 | +0.2 |
| | baz=66,SNR=8.1 | | | | | | |
| T34A | McClaskey Farm | 65.16 | 334 | P | P | 10 57 21.0 | +0.1 |
| | baz=66 | | | | | | |
| V31A | Spring Creek L | 65.24 | 331 | P | P | 10 57 21.8 | +0.3 |
| | baz=66 | | | | | | |
| X28A | Dimmitt | 65.31 | 329 | P | P | 10 57 22.4 | +0.3 |
| | baz=66 | | | | | | |
| R37A | Teagarden Farm | 65.36 | 336 | P | P | 10 57 22.3 | +0.1 |
| | baz=66,SNR=5.1 | | | | | | |
| AMTX | Amarillo | 65.36 | 329 | P | P | 10 57 22.6 | +0.2 |
| | baz=66 | | | | | | |
| S35A | Otter Creek Ra | 65.38 | 335 | P | P | 10 57 22.8 | +0.5 |
| | baz=66 | | | | | | |
| R36A | Gordon, Harris | 65.62 | 336 | P | P | 10 57 24.4 | +0.5 |
| | baz=66 | | | | | | |
| T33A | Patterson Ranc | 65.65 | 333 | P | P | 10 57 24.7 | +0.6 |
| | baz=66 | | | | | | |
| Q37A | Longview Farm, | 65.71 | 337 | P | P | 10 57 24.8 | +0.4 |
| | baz=66 | | | | | | |
| R34A | Isabella, Hill | 66.28 | 334 | P | P | 10 57 28.5 | +0.4 |
| | baz=67 | | | | | | |
| V28A | Channing | 66.32 | 329 | P | P | 10 57 29.1 | +0.6 |
| | baz=67 | | | | | | |
| U29A | Oasis Ranch, S | 66.45 | 330 | P | P | 10 57 30.5 | +1.3 |
| | baz=67 | | | | | | |
| S32A | Newby Ranch, P | 66.46 | 333 | P | P | 10 57 29.8 | +0.5 |
| | baz=67 | | | | | | |
| P36A | Good Intent, A | 66.64 | 337 | P | P | 10 57 30.4 | +0.1 |
| | baz=67,SNR=6.3 | | | | | | |
| 121A | Cookes Peak, D | 66.67 | 323 | P | P | 10 57 31.7 | +0.8 |
| | baz=67,SNR=5.7 | | | | | | |
| KSU1 | Kansas State U | 66.72 | 335 | P | P | 10 57 31.3 | +0.5 |
| | baz=67 | | | | | | |
| U28A | Mallet | 66.83 | 330 | P | P | 10 57 32.1 | +0.4 |
| | baz=67 | | | | | | |
| P35A | Duane Minner, | 66.87 | 336 | P | P | 10 57 31.7 | 0.0 |
| | baz=67 | | | | | | |
| R32A | Long Quarter, | 66.98 | 333 | P | P | 10 57 32.8 | +0.3 |
| | baz=67 | | | | | | |
| O36A | Bolckow | 67.01 | 337 | P | P | 10 57 32.3 | -0.3 |
| | baz=67,SNR=5.4 | | | | | | |
| T29A | Hugoton | 67.04 | 331 | P | P | 10 57 33.6 | +0.6 |
| | baz=67 | | | | | | |
| Q33A | Connelly Farm, | 67.11 | 334 | P | P | 10 57 33.6 | +0.3 |
| | baz=68 | | | | | | |
| U27A | Thompson Grove | 67.15 | 329 | P | P | 10 57 34.1 | +0.3 |
| | baz=68 | | | | | | |
| P34A | Walnut Farm, R | 67.19 | 335 | P | P | 10 57 34.3 | +0.5 |
| | baz=68,SNR=6.8 | | | | | | |
| R31A | Burdett | 67.21 | 333 | P | P | 10 57 34.6 | +0.6 |
| | baz=68 | | | | | | |
| S29A | Ulysses | 67.34 | 331 | P | P | 10 57 35.6 | +0.7 |
| | baz=68 | | | | | | |
| T28A | Walsh | 67.39 | 330 | P | P | 10 57 35.4 | +0.2 |
| | baz=68 | | | | | | |
| T27A | Campo | 67.62 | 330 | P | P | 10 57 37.4 | +0.7 |
| | baz=68,SNR=6.4 | | | | | | |
| S28A | Manter | 67.67 | 331 | P | P | 10 57 37.8 | +0.8 |
| | baz=68,SNR=7.0 | | | | | | |
| CBKS | Cedar Bluff | 67.74 | 333 | P | P | 10 57 38.1 | +0.8 |
| | baz=68 | | | | | | |
| Q31A | Ellis | 67.76 | 333 | P | P | 10 57 38.4 | +1.0 |
| | baz=68 | | | | | | |
| ANMO | Albuquerque | 67.79 | 326 | P | P | 10 57 39.2 | +1.3 |
| | comp=N,2.1nm,0.7s,baz=126,slow=8.0,SNR=13 | | | | | | |
| ANMO | Albuquerque | 67.79 | 326 | *e*P | P | 10 57 38.9 | +0.9 |
| | comp=N,2.6nm,0.9s | | | | | | |
| N35A | Tabor | 67.89 | 337 | P | P | 10 57 38.3 | +0.1 |
| | baz=68 | | | | | | |
| O33A | Hebron | 67.94 | 335 | P | P | 10 57 38.9 | +0.4 |
| | baz=68,SNR=8.4 | | | | | | |
| R29A | Marienthal | 68.02 | 332 | P | P | 10 57 40.0 | +0.9 |
| | baz=68 | | | | | | |
| Q30A | Quinter | 68.08 | 333 | P | P | 10 57 40.4 | +0.9 |
| | baz=68,SNR=5.6 | | | | | | |
| T26A | Comanche Natio | 68.12 | 329 | P | P | 10 57 40.8 | +0.9 |
| | baz=68,SNR=5.0 | | | | | | |
| P31A | Stockton | 68.19 | 334 | P | P | 10 57 40.9 | +0.8 |
| | baz=68 | | | | | | |
| N34A | Lincoln | 68.19 | 336 | P | P | 10 57 40.0 | 0.0 |
| | baz=68 | | | | | | |
| QSPA | South Pole Qui | 68.22 | 180 | P | P | 10 57 41.3 | +1.2 |
| | comp=N,4.3nm,0.4s,baz=283,slow=0.3,SNR=25 | | | | | | |
| TUC | Tucson | 68.22 | 321 | *e*P | P | 10 57 42.0 | +1.5 |
| | comp=N,1.0nm,0.9s | | | | | | |
| R28A | Tribune | 68.25 | 331 | P | P | 10 57 41.1 | +0.6 |
| | baz=69 | | | | | | |
| Q29A | Oakley | 68.33 | 332 | P | P | 10 57 41.9 | +0.8 |
| | baz=69 | | | | | | |
| O32A | Brockman Farm, | 68.37 | 335 | P | P | 10 57 41.7 | +0.5 |
| | baz=69 | | | | | | |
| S26A | Kim | 68.42 | 330 | P | P | 10 57 42.8 | +1.1 |
| | baz=69,SNR=5.5 | | | | | | |
| T25A | Trinidad | 68.48 | 329 | P | P | 10 57 42.7 | +0.5 |
| | baz=69 | | | | | | |
| K38A | Parkersburg | 68.51 | 340 | P | P | 10 57 42.5 | +0.5 |
| | baz=69 | | | | | | |
| P30A | Selden | 68.57 | 333 | P | P | 10 57 43.1 | +0.6 |
| | baz=69 | | | | | | |
| R27A | Eads | 68.65 | 331 | P | P | 10 57 43.5 | +0.4 |
| | baz=69 | | | | | | |
| O31A | Woolen Ranch, | 68.70 | 334 | P | P | 10 57 44.0 | +0.8 |
| | baz=69 | | | | | | |
| M34A | Aspy Farms, Fr | 68.80 | 337 | P | P | 10 57 44.9 | +1.1 |
| | baz=69 | | | | | | |
| Q28A | Sharon Springs | 68.85 | 332 | P | P | 10 57 45.3 | +1.0 |
| | baz=69 | | | | | | |
| K37A | Belmond | 68.89 | 339 | P | P | 10 57 45.5 | +1.2 |
| | baz=69 | | | | | | |
| P29A | Atwood | 68.91 | 333 | P | P | 10 57 45.3 | +0.7 |
| | baz=69 | | | | | | |
| O30A | MW Ranch, Wils | 69.02 | 334 | P | P | 10 57 45.8 | +0.5 |
| | baz=69 | | | | | | |
| K36A | Gilmore City | 69.05 | 339 | P | P | 10 57 45.3 | 0.0 |
| | baz=69 | | | | | | |
| M33A | Taylor Creek F | 69.08 | 336 | P | P | 10 57 45.6 | 0.0 |
| | baz=69 | | | | | | |
| L34A | Svendsen Farm, | 69.13 | 337 | P | P | 10 57 46.1 | +0.2 |
| | baz=70 | | | | | | |
| KSCO | Kaye Shedlock' | 69.16 | 331 | P | P | 10 57 47.2 | +0.9 |
| | baz=70 | | | | | | |
| 214A | Organ Pipe Nat | 69.17 | 319 | P | P | 10 57 47.6 | +1.2 |
| | baz=70 | | | | | | |
| P28A | Saint Francis | 69.24 | 332 | P | P | 10 57 47.6 | +1.0 |
| | baz=70 | | | | | | |
| BGNE | Belgrade | 69.31 | 336 | P | P | 10 57 47.5 | +0.5 |
| | baz=70,SNR=9.0 | | | | | | |
| BGNE | Belgrade | 69.31 | 336 | *e*P | P | 10 57 47.2 | +0.3 |
| | comp=N,75nm,0.6s | | | | | | |
| K35A | Storm Lake | 69.39 | 338 | P | P | 10 57 47.8 | +0.4 |
| | baz=70 | | | | | | |
| SDCO | Great Sand Dun | 69.49 | 328 | P | P | 10 57 49.5 | +1.0 |
| | baz=70 | | | | | | |
| SDCO | Great Sand Dun | 69.49 | 328 | *e*P | P | 10 57 49.5 | +1.0 |
| | comp=N,8.6nm,1.2s | | | | | | |
| M31A | Lambtecht Ranc | 69.57 | 335 | P | P | 10 57 49.6 | +1.0 |
| | baz=70 | | | | | | |
| J36A | Seneca 1, Swea | 69.63 | 339 | P | P | 10 57 48.6 | -0.2 |
| | baz=70 | | | | | | |
| I38A | Scanlan Farm, | 69.63 | 341 | P | P | 10 57 48.8 | 0.0 |
| | baz=70 | | | | | | |
| O28A | Krutsinger Ran | 69.70 | 332 | P | P | 10 57 49.5 | 0.0 |
| | baz=70 | | | | | | |
| L32A | Elgin | 69.76 | 336 | P | P | 10 57 49.7 | 0.0 |
| | baz=70 | | | | | | |
| I37A | Lemond, Waseca | 69.94 | 340 | P | P | 10 57 50.6 | -0.1 |
| | baz=70 | | | | | | |
| N28A | Pribbeno Ranch | 70.07 | 333 | P | P | 10 57 52.6 | +1.0 |
| | baz=70 | | | | | | |
| S22A | 4UR Ranch, Cre | 70.15 | 327 | P | P | 10 57 53.0 | +0.4 |
| | baz=70 | | | | | | |
| L31A | Butterfield Fa | 70.23 | 335 | P | P | 10 57 53.2 | +0.7 |
| | baz=71 | | | | | | |
| H37A | Dierke Farm, C | 70.30 | 341 | P | P | 10 57 52.6 | -0.2 |
| | baz=71 | | | | | | |
| I35A | Creekview Farm | 70.31 | 339 | P | P | 10 57 52.8 | -0.2 |
| | baz=71,SNR=5.1 | | | | | | |
| MVCO | Mesa Verde | 70.59 | 326 | P | P | 10 57 55.8 | +0.7 |
| | baz=71 | | | | | | |
| MVCO | Mesa Verde | 70.59 | 326 | *e*P | P | 10 57 56.3 | +1.1 |
| | comp=N,2.2nm,0.6s | | | | | | |
| H36A | Jessenland, He | 70.61 | 340 | P | P | 10 57 55.2 | +0.4 |
| | baz=71,SNR=5.0 | | | | | | |
| ECSD | EROS Data Cent | 70.76 | 338 | P | P | 10 57 55.5 | -0.2 |
| | baz=71 | | | | | | |
| ECSD | EROS Data Cent | 70.76 | 338 | *e*P | P | 10 57 55.6 | -0.2 |
| | comp=N,51nm,2.5s | | | | | | |
| I34A | Hadley | 70.77 | 338 | P | P | 10 57 56.4 | +0.6 |
| | baz=71 | | | | | | |
| L29A | Maesberg Ranch | 70.78 | 334 | P | P | 10 57 56.6 | +0.7 |
| | baz=71 | | | | | | |
| WUAZ | Wupatki | 70.88 | 323 | P | P | 10 57 57.0 | +0.1 |
| | baz=71,SNR=5.2 | | | | | | |
| WUAZ | Wupatki | 70.88 | 323 | *e*P | P | 10 57 58.5 | +1.7 |
| | comp=N,5.0nm,0.9s | | | | | | |
| J32A | Parkston | 70.88 | 337 | P | P | 10 57 56.8 | +0.4 |
| | baz=71 | | | | | | |
| K30A | Basset | 70.95 | 335 | P | P | 10 57 57.8 | +0.8 |
| | baz=71 | | | | | | |
| J31A | Geddes | 71.14 | 336 | P | P | 10 57 58.4 | +0.3 |
| | baz=72 | | | | | | |
| GLA | Glamis | 71.15 | 319 | P | P | 10 57 58.9 | +0.5 |
| | baz=72 | | | | | | |
| ISCO | Idaho Springs | 71.17 | 330 | P | P | 10 57 59.0 | +0.4 |
| | baz=72 | | | | | | |
| H34A | Spellman Lake, | 71.29 | 339 | P | P | 10 57 58.9 | 0.0 |
| | baz=72,SNR=6.3 | | | | | | |
| K29A | Lazy Trails An | 71.30 | 335 | P | P | 10 58 00.1 | +1.0 |
| | baz=72 | | | | | | |
| I32A | Karley and Nic | 71.31 | 337 | P | P | 10 57 59.6 | +0.5 |
| | baz=72 | | | | | | |
| G35A | Watkins | 71.36 | 340 | P | P | 10 57 59.5 | +0.2 |
| | baz=72 | | | | | | |
| J30A | Dallas | 71.46 | 336 | P | P | 10 58 00.8 | +0.9 |
| | baz=72 | | | | | | |
| H33A | Prehn Over Nor | 71.63 | 338 | P | P | 10 58 01.3 | +0.3 |
| | baz=72,SNR=5.3 | | | | | | |
| F36A | Milaca | 71.64 | 341 | P | P | 10 58 00.8 | -0.1 |
| | baz=72 | | | | | | |
| K28A | Ten Mile Ranch | 71.68 | 334 | P | P | 10 58 02.2 | +0.8 |
| | baz=72 | | | | | | |
| H32A | Carlson Farm, | 71.72 | 338 | P | P | 10 58 01.6 | +0.1 |
| | baz=72 | | | | | | |
| G34A | Benson | 71.75 | 339 | P | P | 10 58 03.1 | +1.5 |
| | baz=72 | | | | | | |
| J29A | Okreek | 71.85 | 335 | P | P | 10 58 02.9 | +0.6 |
| | baz=72,SNR=5.1 | | | | | | |
| E37A | Wrenshall | 71.94 | 342 | P | P | 10 58 03.7 | +1.0 |
| | baz=72 | | | | | | |
| BC3 | Big Chuckawall | 71.95 | 319 | P | P | 10 58 04.1 | +0.9 |
| | baz=72 | | | | | | |
| G33A | Ortonville | 71.98 | 339 | P | P | 10 58 02.9 | 0.0 |
| | baz=72,SNR=9.2 | | | | | | |
| E36A | McGregor | 72.15 | 341 | P | P | 10 58 04.3 | +0.3 |
| | baz=72 | | | | | | |
| SUSD | South Dakota S | 72.21 | 337 | P | P | 10 58 04.8 | +0.4 |
| | baz=73 | | | | | | |
| J28A | Allard Ranch, | 72.22 | 335 | P | P | 10 58 05.3 | +0.7 |
| | baz=73 | | | | | | |
| J27A | Elkhorn Farm, | 72.39 | 334 | P | P | 10 58 07.3 | +1.7 |
| | baz=73,SNR=8.0 | | | | | | |
| O20A | White River Ci | 72.69 | 328 | P | P | 10 58 08.8 | +1.2 |
| | baz=73 | | | | | | |
| GMRC | Granite Mounta | 72.84 | 320 | P | P | 10 58 09.7 | +1.2 |
| | baz=73 | | | | | | |
| J26A | Sides Ranch, S | 72.88 | 333 | P | P | 10 58 09.8 | +1.3 |
| | baz=73 | | | | | | |
| E33A | Westby DABS, E | 72.99 | 340 | P | P | 10 58 09.8 | +0.9 |
| | baz=73 | | | | | | |
| SRU | San Rafael | 73.07 | 326 | *e*P | P | 10 58 10.9 | +1.1 |
| | comp=N,11nm,0.7s | | | | | | |
| I27A | Quinn | 73.09 | 334 | P | P | 10 58 10.5 | +0.8 |
| | baz=73 | | | | | | |
| F31A | Hecla | 73.18 | 338 | P | P | 10 58 10.6 | +0.5 |
| | baz=74,SNR=5.6 | | | | | | |
| H28A | Mission Ridge | 73.19 | 335 | P | P | 10 58 10.9 | +0.7 |
| | baz=74 | | | | | | |
| P18A | Preston Nutter | 73.31 | 327 | *e*P | P | 10 58 13.4 | +2.0 |
| P17A | Butcher Ranch, | 73.45 | 326 | *e*P | P | 10 58 13.7 | +1.7 |
| | comp=N,8.8nm,0.9s | | | | | | |
| MSU | Marysvale | 73.50 | 325 | *e*P | P | 10 58 14.1 | +1.7 |
| | comp=N,4.3nm,0.6s | | | | | | |
| H27A | Howes | 73.57 | 335 | P | P | 10 58 12.9 | +0.5 |
| | baz=74 | | | | | | |
| E31A | Nome | 73.66 | 338 | P | P | 10 58 13.6 | +0.7 |
| | baz=74 | | | | | | |
| I25A | Rochford | 73.73 | 333 | P | P | 10 58 14.7 | +1.1 |
| | baz=74,SNR=6.4 | | | | | | |
| H26A | Fairpoint | 73.83 | 334 | P | P | 10 58 15.5 | +1.5 |
| | baz=74 | | | | | | |
| RSSD | Black Hills | 73.94 | 333 | *e*P | P | 10 58 15.5 | +0.7 |
| | comp=N,4.6nm,0.8s | | | | | | |
| B35A | Bob, Littlefor | 73.95 | 342 | P | P | 10 58 15.7 | +1.2 |
| | baz=74 | | | | | | |
| F28A | McLaughlin | 74.09 | 336 | P | P | 10 58 16.6 | +1.2 |
| | baz=74 | | | | | | |
| G27A | Dupree | 74.13 | 335 | P | P | 10 58 16.3 | +0.6 |
| | baz=74 | | | | | | |
| H25A | Fruitdale | 74.17 | 334 | P | P | 10 58 16.6 | +0.7 |
| | baz=74 | | | | | | |
| G26A | Maurine | 74.32 | 335 | P | P | 10 58 17.5 | +0.7 |
| | baz=75 | | | | | | |
| D30A | Buchanan | 74.44 | 338 | P | P | 10 58 18.1 | +0.8 |
| | baz=75 | | | | | | |
| NLU | North Lily Min | 74.50 | 326 | *e*P | P | 10 58 19.8 | +1.7 |
| | comp=N,27nm,1.1s | | | | | | |
| G25A | Newell | 74.56 | 334 | P | P | 10 58 18.9 | +0.7 |
| | baz=75 | | | | | | |
| F27A | Lemmon | 74.58 | 336 | P | P | 10 58 18.8 | +0.6 |
| | baz=75 | | | | | | |
| FURC | Furnace Creek, | 74.71 | 320 | P | P | 10 58 20.3 | +1.2 |
| | baz=75 | | | | | | |
| MPMC | Manual Prospec | 74.81 | 320 | P | P | 10 58 20.9 | +0.9 |
| | baz=75 | | | | | | |
| F26A | Lodgepole | 74.81 | 335 | P | P | 10 58 20.6 | +1.0 |
| | baz=75,SNR=5.0 | | | | | | |
| B32A | Ashes, Strandq | 74.83 | 340 | P | P | 10 58 19.8 | +0.2 |
| | baz=75 | | | | | | |
| C30A | Mose, Pekin | 74.86 | 339 | P | P | 10 58 20.6 | +0.8 |
| | baz=75 | | | | | | |
| DUG | Dugway | 75.06 | 325 | P | P | 10 58 22.2 | +1.0 |
| | baz=75 | | | | | | |
| D28A | Regan | 75.15 | 337 | P | P | 10 58 22.0 | +0.5 |
| | baz=76 | | | | | | |
| F25A | Bowman | 75.18 | 335 | P | P | 10 58 22.4 | +0.6 |
| | baz=76 | | | | | | |
| R11A | Troy Canyon, C | 75.26 | 323 | P | P | 10 58 23.4 | +0.9 |
| | baz=76 | | | | | | |
| BW06 | Boulder Array | 75.34 | 329 | *e*P | P | 10 58 23.4 | +0.4 |
| | comp=N,1.7nm,0.8s | | | | | | |
| MDND | Maddock | 75.37 | 338 | P | P | 10 58 23.9 | +1.2 |
| | baz=76 | | | | | | |
| D27A | Center | 75.43 | 337 | P | P | 10 58 24.0 | +1.0 |
| | baz=76 | | | | | | |
| HWUT | Hardware Ranch | 75.45 | 327 | *e*P | P | 10 58 24.3 | +0.8 |
| | comp=N,3.8nm,0.7s | | | | | | |
| SYO | Syowa Base | 75.48 | 159 | ‖*e*P | P | 10 58 22.6 | -0.5 |
| C28A | Hausauer Farms | 75.53 | 338 | P | P | 10 58 24.5 | +0.9 |
| | baz=76 | | | | | | |
| VES | Vestal, Richgr | 75.63 | 319 | P | P | 10 58 25.4 | +1.0 |
| | baz=76 | | | | | | |
| E25A | Miller Ranch, | 75.63 | 335 | P | P | 10 58 25.5 | +1.2 |
| | baz=76 | | | | | | |
| B29A | Wagenman Farm, | 75.81 | 339 | P | P | 10 58 26.1 | +0.9 |
| | baz=76 | | | | | | |
| TORD | Torodi Ar. Bea | 75.99 | 69 | P | P | 10 58 26.8 | -0.2 |
| | comp=N,7.1nm,0.5s,baz=255,slow=5.5,SNR=108 | | | | | | |
| D25A | Fairfield | 76.14 | 335 | P | P | 10 58 28.9 | +1.8 |
| | baz=76 | | | | | | |
| B28A | Dugan Ranch, T | 76.14 | 338 | P | P | 10 58 28.1 | +1.0 |
| | baz=76 | | | | | | |
| A29A | Manning Farm, | 76.16 | 339 | P | P | 10 58 27.9 | +0.7 |
| | baz=76 | | | | | | |
| ULM | Lac du Bonnet | 76.27 | 341 | P | P | 10 58 27.8 | 0.0 |
| | comp=N,8.1nm,0.6s,baz=142,slow=5.0,SNR=9.5 | | | | | | |
| SCHQ | Schefferville | 76.49 | 0 | P | P | 10 58 28.4 | -0.5 |
| | comp=N,3.6nm,0.6s,baz=165,slow=5.1,SNR=5.2 | | | | | | |
| NVAR | Mina Array Bea | 76.88 | 321 | P | P | 10 58 33.1 | +1.5 |
| | comp=N,1.1nm,0.7s,baz=153,slow=5.8,SNR=10 | | | | | | |
| RLMT | Red Lodge | 77.01 | 331 | P | P | 10 58 33.3 | +1.0 |
| | baz=77 | | | | | | |
| RLMT | Red Lodge | 77.01 | 331 | *e*P | P | 10 58 33.6 | +1.3 |
| | comp=N,4.4nm,0.4s | | | | | | |
| A25A | Svangstu Ranch | 77.54 | 337 | P | P | 10 58 36.0 | +1.1 |
| | baz=78 | | | | | | |
| DGMT | Dagmar | 77.56 | 336 | P | P | 10 58 36.3 | +1.3 |
| | baz=78 | | | | | | |
| DGMT | Dagmar | 77.56 | 336 | *e*P | P | 10 58 36.3 | +1.3 |
| | comp=N,19nm,1.2s | | | | | | |
| GCMT | Greycliff | 77.70 | 331 | *e*P | P | 10 58 37.2 | +1.2 |
| HLID | Hailey | 78.32 | 327 | P | P | 10 58 40.7 | +1.2 |
| | baz=79,SNR=7.5 | | | | | | |
| HLID | Hailey | 78.32 | 327 | *e*P | P | 10 58 41.0 | +1.5 |
| | comp=N,5.2nm,0.8s | | | | | | |
| BOSA | Boshof | 81.79 | 117 | P | P | 10 58 58.6 | +0.1 |
| | comp=N,3.5nm,0.5s,baz=239,slow=4.0,SNR=14 | | | | | | |
| WALA | Waterton Lakes | 82.06 | 331 | *e*P | P | 10 58 59.6 | +0.2 |
| | comp=N,2.8nm,0.6s | | | | | | |
| MAW | Mawson | 83.40 | 163 | P | P | 10 59 06.5 | +0.6 |
| | comp=N,2.1nm,0.6s,baz=200,slow=7.5,SNR=11 | | | | | | |
| ESDC | Sonseca Array | 85.04 | 44 | P | P | 10 59 15.6 | +1.0 |
| | comp=N,0.8nm,0.6s,baz=250,slow=6.1,SNR=7.5 | | | | | | |
| MATP | Matopo | 87.52 | 111 | P | P | 10 59 28.2 | +0.8 |
| | comp=N,2.6nm,0.6s,baz=225,slow=10.0,SNR=7.3 | | | | | | |
| YKA | Yellowknife Ar | 92.18 | 340 | P | P | 10 59 48.2 | +0.4 |
| | comp=N,2.4nm,0.6s,baz=133,slow=4.8,SNR=25 | | | | | | |
| ASAR | Alice Springs | 130.22 | 206 | PKP | PKPdf | 11 05 48.6 | -0.1 |
| | comp=N,0.3nm,0.7s,baz=132,slow=2.0,SNR=4.1 | | | | | | |
| ASAR | | | | SKPbc | SKPab | 11 08 54.3 | -1.3 |
| | comp=N,0.5nm,0.5s,baz=146,slow=3.2,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 133.34 | 208 | PKP | PKPdf | 11 05 54.8 | +0.1 |
| | comp=N,0.3nm,0.6s,baz=172,slow=1.5,SNR=5.1 | | | | | | |
| WRA | | | | SKPbc | SKPbc | 11 09 05.1 | -1.8 |
| | comp=N,0.6nm,0.8s,baz=150,slow=3.3,SNR=8.5 | | | | | | |
| ZALV | Zalesovo Beam | 141.67 | 27 | PKP | PKPdf | 11 06 09.7 | +0.8 |
| | comp=N,1.3nm,0.4s,baz=26,slow=0.3,SNR=4.8 | | | | | | |
| ZALV | | | | SKPbc | SKPbc | 11 09 30.1 | +0.2 |
| | comp=N,1.8nm,0.8s,baz=284,slow=4.8,SNR=4.2 | | | | | | |
| MKAR | Makanchi Array | 145.04 | 38 | PKP | PKPbc | 11 06 14.9 | +0.1 |
| | comp=N,4.3nm,0.8s,baz=319,slow=4.2,SNR=16 | | | | | | |
| WMQ | Urumqi | 149.87 | 38 | *e*PKPbc | PKPdf | 11 06 22.5 | -0.7 |
| SONM | Songino Array | 153.68 | 10 | PKPbc | PKPbc | 11 06 35.4 | -1.4 |
| | comp=N,0.5nm,0.6s,baz=277,slow=1.7,SNR=4.0 | | | | | | |
| HHC | Hu-ho-hao-te | 161.15 | 3 | *e*PKP | PKPdf | 11 06 36.8 | -1.6 |
| HHC | | | | PP | PP | 11 11 05.3 | +0.2 |
| HHC | | | | SS | SS | 11 31 09.4 | +4.4 |
| HHC | | | | PPMZ | | | |
| | comp=N,36nm,10.0s | | | | | | |
| HHC | | | | LN | | | |
| | comp=N,140nm,22.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=N,190nm,21.5s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=N,74nm,21.6s | | | | | | |
| CD2 | Chengdu | 167.95 | 41 | PKP | PKPdf | 11 06 45.6 | +1.0 |

*GUC **24** 10:53:09.3±0.8,36°.86S×73°.66W,h13km±3km,ML4.6*
**ISC 24 10:53:07.5**±1.8,**36°.82S**±0°.06×**73°.8W**±0°.1,**h10**km,**n16**,
σ1°**27**/17,**Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CCSP** | **San Pedro de C** | **0.52** | **92** | *e*P | **Pb** | **10 53 18.8** | **0.0** |
| CCSP | | | | *e*S | **Sb** | **10 53 25.6** | **-0.8** |
| **PSCH** | **Puerto Saavedr** | **1.99** | **172** | *e*P | **Pg** | **10 53 46.8** | **+1.1** |
| PSCH | | | | *e*S | **Sg** | **10 54 13.4** | **+1.9** |
| PSCH | | | | AML | AML | 10 54 19.0 | |
| | comp=N,6μm,0.4s | | | | | | |
| **TALC** | **Talca** | **2.23** | **51** | *e*P | **Pb** | **10 53 47.5** | **-0.5** |
| TALC | | | | *e*S | **Sb** | **10 54 16.6** | **+0.9** |
| **NICH** | **Los Niches** | **2.74** | **49** | *e*P | Pn | 10 53 55.0 | +3.4 |
| NICH | | | | *e*S | **Sb** | **10 54 30.2** | **-0.1** |
| NICH | | | | AML | AML | 10 54 47.1 | |
| | comp=E,3μm,0.7s | | | | | | |
| **VLCH** | **Valdivia** | **3.00** | **172** | *e*P | Pn | 10 53 50.7 | -4.5 |
| VLCH | | | | *e*S | **Sn** | **10 54 27.4** | **-3.8** |
| **AAGR** | **Agrelo** | **5.51** | **49** | *e*P | **Pn** | **10 54 30.1** | **+0.4** |
| **ARCO** | **CERRO ARCO** | **5.62** | **46** | *e*P | **Pn** | **10 54 32.1** | **+0.8** |
| ARCO | | | | IAML | | 10 55 05.0 | |
| | comp=Z,29nm,0.5s | | | | | | |
| **AUSP** | **Uspallata** | **5.84** | **39** | *e*P | **Pn** | **10 54 34.7** | **+0.3** |
| AUSP | | | | *e*S | Sb | 10 56 08.7 | +9.0 |
| **ASAL** | **Salagasta** | **5.86** | **45** | *e*P | **Pn** | **10 54 35.1** | **+0.7** |
| ASAL | | | | *e*S | Sb | 10 56 08.5 | +8.5 |
| **RTLS** | **Leoncito** | **6.23** | **38** | *e*P | **Pn** | **10 54 39.9** | **+0.2** |
| **RTCV** | **Cerro Valdivia** | **6.57** | **43** | *e*P | **Pn** | **10 54 44.3** | **+0.1** |
| **CFAA** | **Coronel Fontan** | **6.93** | **43** | *e*P | **Pn** | **10 54 49.3** | **+0.1** |
| **RTLL** | **Cerro Vilicun** | **7.02** | **40** | *e*P | **Pn** | **10 54 50.2** | **-0.2** |
| **AMOG** | **MOGNA** | **7.32** | **38** | *e*P | **Pn** | **10 54 53.9** | **-0.7** |
| **AGUA** | **GUANDACOL** | **8.55** | **33** | *e*P | Pn | 10 55 09.4 | -2.0 |
| **VCA** | **Vinchina** | **9.32** | **32** | IAML | | 10 55 46.5 | |
| | comp=Z,10nm,0.4s | | | | | | |

*DDA **24** 10:54:23.7,38°.86N×26°.38E,h22km,Md3.0*
*ATH **24** 10:54:23.9,38°.84N×26°.31E,h27km±1km,MD3.3/6*
*ISK **24** 10:54:23.8,38°.86N×26°.37E,h14km,MD3.3*
*ISCJB **24** 10:54:24.0±0.5,38°.85N±0°.02×26°.33E±0°.03,h10km±3km,*
*Error ellipse: s-maj=3.9km s-min=2.9km az=176.4*
*CSEM **24** 10:54:24.2±0.1,38°.86N×26°.35E,h10km,ML3.1,Error*
*ellipse: s-maj=2.4km s-min=1.9km az=84.0*
*THE **24** 10:54:25.2,38°.84N×26°.28E,h12km±1km,ML3.1/5,Error*
*ellipse: s-maj=2.4km s-min=0.9km az=264.0*
**ISC 24 10:54:24.0**±1.0,**38°.87N**±0°.02×**26°.34E**±0°.02,**h10**km±9km,
**n80**,σ0°**41**/111,**Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRK** | **Paraskevi** | **0.38** | **352** | *e*PB | **Pb** | **10 54 32.9** | **+0.1** |
| PRK | | | | *e*SB | **Sb** | **10 54 39.0** | **+0.1** |
| **PRK** | **Paraskevi** | **0.38** | **352** | P | **Pb** | **10 54 32.9** | **+0.1** |
| PRK | | | | S | **Sb** | **10 54 38.9** | **+0.1** |
| **PRK** | **Paraskevi** | **0.38** | **352** | P | **Pb** | **10 54 32.9** | **+0.1** |
| PRK | | | | S | **Sb** | **10 54 38.9** | **+0.1** |
| **DKL** | **Dikili** | **0.48** | **65** | *e*PG | **Pg** | **10 54 32.8** | **-0.6** |
| DKL | | | | *e*SG | **Sb** | **10 54 40.7** | **-1.0** |
| **DKL** | **Dikili** | **0.48** | **65** | *e*Pg | **Pg** | **10 54 32.8** | **-0.6** |
| DKL | | | | *e*Sg | **Sb** | **10 54 40.7** | **-1.0** |
| **SIGR** | **SIGRI** | **0.51** | **312** | *e*PG | **Pb** | **10 54 35.2** | **+0.2** |
| **SIGR** | **SIGRI** | **0.51** | **312** | *e*PN | **Pb** | **10 54 35.2** | **+0.2** |
| SIGR | | | | *e*SN | **Sb** | **10 54 42.5** | **-0.1** |
| **SIGR** | **SIGRI** | **0.51** | **312** | P | **Pb** | **10 54 35.3** | **+0.2** |
| SIGR | | | | S | **Sb** | **10 54 42.4** | **-0.1** |
| **SIGR** | **SIGRI** | **0.51** | **312** | P | **Pb** | **10 54 35.3** | **+0.2** |
| SIGR | | | | S | **Sb** | **10 54 42.4** | **-0.1** |
| **AYVA** | **Ayvalik** | **0.52** | **32** | *i* P | **Pb** | **10 54 34.8** | **-0.3** |
| AYVA | | | | *i* S | **Sg** | **10 54 41.5** | **+0.6** |
| **AYVA** | **Ayvalik** | **0.52** | **32** | P | **Pb** | **10 54 34.9** | **-0.3** |
| AYVA | | | | S | **Sg** | **10 54 41.5** | **+0.6** |
| **CHOS** | **Chios island** | **0.53** | **205** | *e*PB | **Pg** | **10 54 34.1** | **-0.2** |
| CHOS | | | | *e*SB | **Sg** | **10 54 41.8** | **+0.5** |
| **CHOS** | **Chios island** | **0.53** | **205** | P | **Pb** | **10 54 35.5** | **+0.1** |
| CHOS | | | | S | **Sg** | **10 54 41.4** | **+0.1** |
| **CHOS** | **Chios island** | **0.53** | **205** | *e*Pb | **Pg** | **10 54 34.1** | **-0.2** |
| **CHOS** | **Chios island

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SMG** | **Samos** | **1.22** | **161** | *e*Pn | **Pn** | **10 54 46.5** | **-0.6** |
| **SMG** | **Samos** | **1.22** | **161** | P | **Pn** | **10 54 47.0** | **-0.1** |
| SMG | | | | S | **Sn** | **10 55 03.8** | **+0.2** |
| SMG | | | | *e*Sn | **Sn** | **10 55 04.1** | **+0.5** |
| **BALY** | **Balya** | **1.32** | **48** | *i* P | **Pn** | **10 54 48.5** | **0.0** |
| BALY | | | | *i* S | **Sg** | **10 55 06.4** | **-0.1** |
| **BALY** | **Balya** | **1.32** | **48** | P | **Pn** | **10 54 48.5** | **0.0** |
| BALY | | | | S | **Sg** | **10 55 06.3** | **-0.1** |
| **GADA** | **Gvkgeada** | **1.36** | **346** | *e*PN | **Pn** | **10 54 48.8** | **-0.2** |
| **GADA** | **Gvkgeada** | **1.36** | **346** | *e*Pn | **Pn** | **10 54 48.8** | **-0.2** |
| **LIA** | **Limnos Island** | **1.37** | **319** | *e*PN | **Pb** | **10 54 49.4** | **-0.2** |
| **LIA** | **Limnos Island** | **1.37** | **319** | P | **Pb** | **10 54 49.7** | **+0.1** |
| LIA | | | | S | **Sb** | **10 55 06.6** | **-0.5** |
| **LIA** | **Limnos Island** | **1.37** | **319** | *e*Pn | **Pb** | **10 54 49.4** | **-0.2** |
| **LIA** | **Limnos Island** | **1.37** | **319** | P | **Pb** | **10 54 49.7** | **+0.1** |
| LIA | | | | S | **Sb** | **10 55 06.6** | **-0.5** |
| **BALB** | **Balikesir** | **1.42** | **57** | *e*PN | **Pb** | **10 54 50.2** | **-0.3** |
| **BALB** | **Balikesir** | **1.42** | **57** | *e*Pn | **Pb** | **10 54 50.2** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.52** | **127** | *e*PN | **Pn** | **10 54 51.3** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.52** | **127** | *e*Pn | **Pn** | **10 54 51.3** | **-0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.53** | **4** | *e*PN | **Pn** | **10 54 51.5** | **+0.1** |
| **GELI** | **Tayfur-Gelibol** | **1.53** | **4** | *e*Pn | **Pn** | **10 54 51.5** | **+0.1** |
| **LPK** | **Lapseki** | **1.54** | **12** | *e*PN | **Pn** | **10 54 51.8** | **+0.4** |
| **LPK** | **Lapseki** | **1.54** | **12** | *e*Pn | **Pn** | **10 54 51.8** | **+0.4** |
| **KRBG** | **Karabiga-Canak** | **1.69** | **26** | *e*PN | **Pn** | **10 54 53.4** | **-0.2** |
| **KRBG** | **Karabiga-Canak** | **1.69** | **26** | *e*Pn | **Pn** | **10 54 53.4** | **-0.2** |
| **AYDN** | **Tasoluk** | **1.71** | **134** | *i* P | **Pb** | **10 54 55.5** | **0.0** |
| AYDN | | | | *i* S | **Sn** | **10 55 16.2** | **+0.5** |
| **AYDN** | **Tasoluk** | **1.71** | **134** | P | **Pb** | **10 54 55.5** | **0.0** |
| AYDN | | | | S | **Sn** | **10 55 16.2** | **+0.5** |
| **SMTH** | **Samothraki Isl** | **1.72** | **339** | *e*PN | **Pn** | **10 54 54.3** | **+0.3** |
| **SMTH** | **Samothraki Isl** | **1.72** | **339** | P | **Pn** | **10 54 54.3** | **+0.3** |
| **SMTH** | **Samothraki Isl** | **1.72** | **339** | P | **Pn** | **10 54 54.3** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **1.81** | **4** | *e*PN | **Pn** | **10 54 55.9** | **+0.8** |
| **ERIK** | **Erikli-Kesan** | **1.81** | **4** | *e*Pn | **Pn** | **10 54 55.9** | **+0.8** |
| **EDC** | **Edincik** | **1.89** | **38** | *e*PN | **Pn** | **10 54 56.2** | **0.0** |
| **EDC** | **Edincik** | **1.89** | **38** | *e*Pn | **Pn** | **10 54 56.2** | **0.0** |
| **APE** | **Apeiranthos** | **1.91** | **200** | *e*PN | **Pn** | **10 54 56.2** | **-0.3** |
| **APE** | **Apeiranthos** | **1.91** | **200** | *e*PB | **Pn** | **10 54 55.8** | **-0.8** |
| **APE** | **Apeiranthos** | **1.91** | **200** | *e*Pb | **Pn** | **10 54 55.8** | **-0.8** |
| **APE** | **Apeiranthos** | **1.91** | **200** | *e*Pn | **Pn** | **10 54 56.2** | **-0.3** |
| **BNT** | **Bandirma** | **1.92** | **39** | *e*PN | **Pn** | **10 54 56.5** | **-0.2** |
| **BNT** | **Bandirma** | **1.92** | **39** | *e*Pn | **Pn** | **10 54 56.5** | **-0.2** |
| **RKY** | **Sarkoy-Tekirda** | **1.93** | **19** | *e*PN | **Pn** | **10 54 57.4** | **+0.5** |
| **RKY** | **Sarkoy-Tekirda** | **1.93** | **19** | *e*Pn | **Pn** | **10 54 57.4** | **+0.5** |
| **AOS** | **Alonnisos** | **1.94** | **280** | *e*PN | **Pn** | **10 54 56.9** | **-0.1** |
| **AOS** | **Alonnisos** | **1.94** | **280** | *e*Pn | **Pn** | **10 54 56.9** | **-0.1** |
| **MRMT** | **Marmara Adasi** | **1.98** | **29** | *e*PN | **Pn** | **10 54 57.9** | **+0.2** |
| **MRMT** | **Marmara Adasi** | **1.98** | **29** | *e*Pn | **Pn** | **10 54 57.9** | **+0.2** |
| **ALN** | **Alexandroupoli** | **2.04** | **354** | *e*PN | **Pb** | **10 54 59.8** | **-1.3** |
| **ALN** | **Alexandroupoli** | **2.04** | **354** | *e*PN | **Pb** | **10 54 58.6** | **+0.3** |
| **ALN** | **Alexandroupoli** | **2.04** | **354** | *e*Pn | **Pn** | **10 54 58.6** | **+0.3** |
| **KCTX** | **Karacabey (Bur** | **2.09** | **47** | *e*PN | **Pn** | **10 54 59.4** | **+0.3** |
| **KCTX** | **Karacabey (Bur** | **2.09** | **47** | *e*Pn | **Pn** | **10 54 59.4** | **+0.3** |
| **ORLT** | **Orhaneli** | **2.30** | **58** | *e*PN | **Pn** | **10 55 02.4** | **+0.4** |
| **ORLT** | **Orhaneli** | **2.30** | **58** | *e*Pn | **Pn** | **10 55 02.4** | **+0.4** |
| **TVSB** | **Tavsanli** | **2.49** | **76** | *e*PN | **Pn** | **10 55 05.2** | **+0.5** |
| **TVSB** | **Tavsanli** | **2.49** | **76** | *e*Pn | **Pn** | **10 55 05.2** | **+0.5** |
| **KHL** | **Karahalli** | **2.55** | **101** | *e*PN | **Pn** | **10 55 06.2** | **+0.7** |
| **KHL** | **Karahalli** | **2.55** | **101** | *e*Pn | **Pn** | **10 55 06.2** | **+0.7** |
| **EDRB** | **Edirne** | **2.99** | **6** | *e*PN | **Pn** | **10 55 11.8** | **+0.4** |
| **EDRB** | **Edirne** | **2.99** | **6** | *e*Pn | **Pn** | **10 55 11.8** | **+0.4** |

**MEX 24 11:16:52.2**±0.5,**14°18N**×93°43W, **h15**km, **MD4.0**, **Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **1.53** | **8** | *e*P | Pn | 11 17 15.3 | -3.7 |
| PCIG | | | | *e*S | Sn | 11 17 33.6 | -5.1 |
| **CCIG** | **Comitan** | **2.44** | **31** | *e*P | Pn | 11 17 30.9 | -0.8 |
| CCIG | | | | *e*S | Sn | 11 18 00.0 | -1.4 |
| **TGIG** | | **2.60** | **6** | *e*P | Pn | 11 17 30.6 | -3.3 |
| TGIG | | | | *e*S | Sn | 11 18 01.9 | -3.5 |

*DDA **24** 11:21:56.4, 40°.33N×42°.25E, h7km, Md2.6*
*ISK **24** 11:21:56.3, 40°.41N×42°.17E, h5km, MD2.7*
*ISCJB **24** 11:21:57.3±0.7, 40°.38N±0°.03×42°.21E±0°.06, h6km±8km, Error ellipse: s-maj=8.0km s-min=4.5km az=154.4*
*CSEM **24** 11:21:57.8±0.2, 40°.45N×42°.29E, h15km, MD2.6, Error ellipse: s-maj=6.7km s-min=3.3km az=47.0*
**ISC 24 11:21:55.9**±1.4, **40°.46N**±0°.04×**42°.21E**±0°.04, **h1**km±12km, **n18**, σ**1**§**01**/29, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HOMI** | **Horasan** | **0.48** | **210** | P | **Pg** | **11 22 03.4** | **-1.6** |
| HOMI | | | | S | **Sg** | **11 22 10.6** | **-0.6** |
| **DDEM** | **Demirkent** | **0.56** | **321** | *i* P | **Pn** | **11 22 09.7** | **-1.4** |
| DDEM | | | | *i* S | **Sb** | **11 22 17.6** | **+0.5** |
| **DDEM** | **Demirkent** | **0.56** | **321** | P | **Pn** | **11 22 09.7** | **-1.4** |
| DDEM | | | | S | **Sb** | **11 22 17.6** | **+0.5** |
| **DBAD** | **Bademkaya** | **0.68** | **325** | *i* P | **Pn** | **11 22 11.9** | **-0.9** |
| DBAD | | | | *i* S | **Sn** | **11 22 23.9** | **-0.3** |
| **DBAD** | **Bademkaya** | **0.68** | **325** | P | **Pn** | **11 22 11.9** | **-0.9** |
| DBAD | | | | S | **Sn** | **11 22 23.9** | **-0.3** |
| **ARTV** | **Artvin** | **0.76** | **343** | *i* P | **Pn** | **11 22 13.8** | **-0.1** |
| **ARTV** | **Artvin** | **0.76** | **343** | P | **Pn** | **11 22 13.8** | **-0.1** |
| ARTV | | | | S | **Sn** | **11 22 27.0** | **+0.9** |
| **EZM** | **Erzurum** | **0.86** | **230** | *e*PG | **Pg** | **11 22 12.8** | **+0.5** |
| **DIGO** | **Kars** | **0.89** | **93** | *i* P | **Pn** | **11 22 14.4** | **-1.4** |
| DIGO | | | | *i* S | **Sg** | **11 22 24.4** | **+0.1** |
| **DIGO** | **Kars** | **0.89** | **93** | P | **Pn** | **11 22 14.3** | **-1.4** |
| DIGO | | | | S | **Sg** | **11 22 24.4** | **+0.1** |
| **AGRB** | **Hanur-Agry** | **1.07** | **146** | *e*PG | **Pn** | **11 22 17.6** | **-0.5** |
| AGRB | | | | *e*SG | **Sn** | **11 22 33.1** | **-0.7** |
| **AGRB** | **Hanur-Agry** | **1.07** | **146** | *e*Pg | **Pn** | **11 22 17.6** | **-0.5** |
| AGRB | | | | *e*Sg | **Sn** | **11 22 33.1** | **-0.7** |
| **BCA** | **Borcka** | **1.08** | **336** | *e*PN | **Pn** | **11 22 18.7** | **+0.5** |
| **BCA** | **Borcka** | **1.08** | **336** | *e*Pn | **Pn** | **11 22 18.7** | **+0.5** |
| **EKAR** | **Karacoban** | **1.21** | **186** | *i* P | **Pg** | **11 22 20.6** | **+1.6** |
| **EKAR** | **Karacoban** | **1.21** | **186** | P | **Pg** | **11 22 20.6** | **+1.6** |
| EKAR | | | | S | **Sn** | **11 22 39.4** | **+2.1** |
| **BAYT** | **Ayd¨¨ntepe-Bay** | **1.58** | **268** | *e*PN | **Pg** | **11 22 26.3** | **+0.1** |
| **BAYT** | **Ayd¨¨ntepe-Bay** | **1.58** | **268** | *e*Pn | **Pg** | **11 22 26.3** | **+0.1** |

*ISCJB **24** 11:22:06.9±0.8, 9°.37N±0°.05×61°.00W±0°.05, h102km±10km, Error ellipse: s-maj=9.0km s-min=7.5km az=17.5*
*FUNV **24** 11:22:07.5, 9°.42N×60°.87W, h24km, MW3.7*
*TRN **24** 11:22:15.7, 9°.85N×61°.14W, h61km, MD3.7*
**ISC 24 11:22:07.5**±2.2, **9°.50N**±0°.08×**60°.99W**±0°.10, **h99**km±16km, **n25**, σ**79**/32, **2C, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TPP** | **Pointe-a-Pierr** | **0.93** | **331** | *i* P | **Pn** | **11 22 29.0** | **+2.0** |
| TPP | | | | *e*S | **Sn** | **11 22 38.5** | **-3.2** |
| **TBH** | **Brigand Hill** | **0.98** | **355** | *e*P | **Pn** | **11 22 29.5** | **+1.9** |
| **TRN** | **Trinidad (W)** | **1.21** | **340** | *e*P | **Pn** | **11 22 31.7** | **+1.5** |
| TRN | | | | *e*S | **Sn** | **11 22 42.8** | **-4.5** |
| **GUIV** | **Guiria** | **1.66** | **313** | *e*P | **Pn** | **11 22 36.5** | **+0.8** |
| GUIV | | | | *e*S | **Sn** | **11 22 57.7** | **+0.5** |
| **TOSP** | **Speyside** | **1.84** | **14** | *e*P | **Pn** | **11 22 40.9** | **+2.9** |
| TOSP | | | | *e*S | **Sn** | **11 23 00.5** | **-0.6** |
| **GUNV** | **Guanoco** | **2.03** | **289** | *e*P | **Pn** | **11 22 42.2** | **+1.7** |
| GUNV | | | | *e*S | **Sn** | **11 23 07.2** | **+1.6** |
| **ORIV** | **Oritupano** | **2.43** | **260** | *e*P | **Pn** | **11 22 46.7** | **+1.1** |
| ORIV | | | | *e*S | **Sn** | **11 23 15.7** | **+0.8** |
| **CRUV** | **Carupano** | **2.50** | **298** | *e*P | **Pn** | **11 22 46.6** | **0.0** |
| CRUV | | | | *e*S | **Sn** | **11 23 16.4** | **-0.2** |
| **GURV** | **El Guri** | **2.70** | **230** | *e*P | **Pn** | **11 22 49.3** | **0.0** |
| **GRW** | **Mount Saint Ca** | **2.72** | **346** | *e*P | **Pn** | **11 22 52.0** | **+2.4** |
| GRW | | | | *e*S | **Sn** | **11 23 18.6** | **-3.4** |
| **PCRV** | **Puerto La Cruz** | **3.66** | **281** | *e*P | **Pn** | **11 23 03.2** | **+1.1** |
| **LUEV** | **Luepa** | **3.67** | **187** | *e*P | **Pn** | 11 23 00.2 | -2.1 |
| LUEV | | | | *e*S | Sn | 11 23 40.9 | -3.9 |
| **PRGV** | **PARIAGUAN** | **3.69** | **259** | *e*P | **Pn** | **11 23 02.7** | **+0.3** |
| **SVB** | **Belmont** | **3.75** | **356** | *e*P | **Pn** | 11 23 07.3 | +3.9 |
| SVB | | | | *e*S | **Sn** | **11 23 44.8** | **-1.9** |
| **IBAV** | **Isla La Blanqu** | **4.21** | **303** | *e*P | Pn | 11 23 33.2 | +24 |
| **CUPV** | **Cœpira** | **4.76** | **277** | *e*P | **Pn** | **11 23 17.8** | **+0.7** |
| CUPV | | | | *e*S | **Sn** | **11 24 09.5** | **-1.6** |
| **MERV** | **Las Mercedes** | **5.25** | **268** | *e*P | **Pn** | **11 23 23.6** | **0.0** |
| **BIRV** | **Birongo** | **5.29** | **281** | *e*P | **Pn** | **11 23 26.0** | **+1.8** |
| **TURV** | **Turiamo** | **6.81** | **279** | *e*P | **Pn** | **11 23 45.5** | **+0.6** |
| **BAUV** | **El Baul** | **6.99** | **266** | *e*P | **Pn** | **11 23 46.8** | **-0.4** |
| **MAPV** | **Macapo** | **7.37** | **273** | *e*P | **Pn** | **11 23 53.4** | **+0.9** |
| **TEPV** | **Terepaima** | **8.10** | **274** | *e*P | **Pn** | **11 24 02.3** | **-0.1** |
| **SANV** | **Sanarito** | **8.43** | **271** | *e*P | **Pn** | **11 24 08.1** | **+1.1** |
| **CURV** | **Curarigua** | **8.86** | **274** | *e*P | **Pn** | **11 24 13.2** | **+0.4** |
| **MONV** | **Montecano** | **9.16** | **286** | *e*P | **Pn** | **11 24 18.0** | **+1.2** |

**IDC 24 11:27:17.1**±11.0, **22°.30S**×**177°.16W, h184**km±92km, **mb3.6**/5, **mb1 3.9**/5, **mb1mx3.4**/31, **mbtmp4.1**/5, **Error ellipse: s-maj=97.5km s-min=30.0km az=152.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **34.13** | **267** | P | P | 11 33 46.0 | +1.3 |
| | 4.8nm,0.5s,baz=102,slow=13 | | | | | | |
| **ASAR** | **Alice Springs** | **44.90** | **258** | P | P | 11 35 13.3 | -0.4 |
| | 2.3nm,0.8s,baz=91,slow=7.2,SNR=24 | | | | | | |
| ASAR | | | | PcP | PcP | 11 36 51.8 | -0.3 |
| | 0.5nm,0.6s,baz=107,slow=3.9,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.16** | **264** | P | P | 11 35 14.9 | -0.8 |
| | 2.1nm,0.5s,baz=102,slow=9.0,SNR=60 | | | | | | |
| WRA | | | | PcP | PcP | 11 36 52.8 | -0.2 |
| | 0.2nm,0.3s,baz=94,slow=2.8,SNR=3.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.37** | **57** | P | P | 11 39 44.0 | +0.3 |
| | 0.3nm,0.9s,baz=254,slow=6.5,SNR=3.2 | | | | | | |
| **ILAR** | **Eielson Array** | **89.89** | **12** | P | P | 11 39 54.0 | -0.6 |
| | 0.5nm,0.6s,baz=223,slow=5.8,SNR=13 | | | | | | |
| **HFS** | **Hagfors** | **141.43** | **351** | PKhKP | PKPpre | 11 46 18.5 | |
| | 2.0nm,0.8s,baz=35,slow=5.4,SNR=6.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.36** | **331** | PKP | PKPbc | 11 46 30.4 | -1.3 |
| | 0.4nm,0.4s,baz=45,slow=4.4,SNR=8.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **148.61** | **311** | PKPbc | PKPbc | 11 46 42.2 | -0.5 |
| | 1.1nm,0.7s,baz=122,slow=5.1,SNR=5.5 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **149.36** | **297** | PKPbc | PKPbc | 11 46 44.1 | -0.5 |
| | 2.4nm,0.5s,baz=52,slow=5.7,SNR=4.3 | | | | | | |
| **GERES** | **GERESS Array B** | **152.13** | **345** | PKPbc | PKPbc | 11 46 51.2 | +0.5 |
| | 0.2nm,0.4s,baz=54,slow=5.0,SNR=2.2 | | | | | | |

*GEN **24** 11:29:40.9, 44°.60N×7°.23E, h14km, ML3.2*
*CSEM **24** 11:29:40.4±0.1, 44°.62N×7°.26E, h10km, ML3.6/33, Error ellipse: s-maj=2.2km s-min=1.6km az=83.0*
*ISCJB **24** 11:29:40.5±0.2, 44°.61N±0°.01×7°.25E±0°.02, h21km±2km, Error ellipse: s-maj=2.9km s-min=2.0km az=177.0*
*LDG **24** 11:29:41.1±0.1, 44°.60N×7°.27E, h2km, Md3.5/3, Ml3.5/39, Error ellipse: s-maj=1.3km s-min=1.0km az=77.0*
*STR **24** 11:29:41.3±0.1, 44°.58N×7°.20E, h5km, Ml3.3, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*PRU **24** 11:29:44.3, 44°.85N×7°.26E, h9km*
**ISC 24 11:29:40.5**±0.8, **44°.62N**±0°.01×**7°.26E**±0°.02, **h17**km±5km, **n167**, σ**1**§**23**/286, **1C-1D, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DOI** | **San Damiano** | **0.12** | **184** | Pg | **Pg** | **11 29 44.1** | **-0.2** |
| DOI | | | | Sg | **Sg** | **11 29 46.0** | **-0.8** |
| | 14μm,0.3s | | | | | | |
| **PZZ** | **Stroppo** | **0.15** | **221** | P | **Pg** | **11 29 44.4** | **-0.4** |
| PZZ | | | | Sg | **Sg** | **11 29 46.6** | **-1.0** |
| | 24μm,0.3s | | | | | | |
| **BHB** | **Bricherasio** | **0.22** | **1** | P | **Pg** | **11 29 45.9** | **+0.3** |
| BHB | | | | S | **Sg** | **11 29 49.4** | **+0.3** |
| **SURF** | **Saint Ours** | **0.35** | **246** | Pg | **Pg** | **11 29 47.5** | **-0.4** |
| SURF | | | | Sg | **Sg** | **11 29 51.8** | **-1.1** |
| **SURF** | **Saint Ours** | **0.35** | **246** | Pg | **Pg** | **11 29 47.5** | **-0.4** |
| SURF | | | | Sg | **Sg** | **11 29 51.8** | **-1.1** |
| **MBDF** | **Montbardon** | **0.36** | **287** | *e*Pg | **Pb** | **11 29 48.2** | **-0.4** |
| MBDF | | | | *e*Sg | **Sg** | **11 29 52.9** | **-0.4** |
| | 4μm,0.3s | | | | | | |
| **MBDF** | **Montbardon** | **0.36** | **287** | *e*Pg | **Pb** | **11 29 48.2** | **-0.4** |
| MBDF | | | | *e*Sg | **Sg** | **11 29 52.9** | **-0.4** |
| | 2μm,0.3s | | | | | | |
| **STV** | **Sant Anna di V** | **0.38** | **173** | P | **Pg** | **11 29 48.0** | **-0.3** |
| STV | | | | S | **Sg** | **11 29 52.9** | **-0.8** |
| **RRL** | **Rocca Remolon** | **0.45** | **312** | P | **Pb** | **11 29 49.8** | **-0.3** |
| RRL | | | | Sg | **Sg** | **11 29 55.7** | **-0.1** |
| | 1μm,0.3s | | | | | | |
| **RSP** | **Reno Superiore** | **0.53** | **1** | Pg | **Pg** | **11 29 50.8** | **-0.2** |
| RSP | | | | Sg | **Sb** | **11 29 59.2** | **+0.4** |
| | 758nm,0.2s | | | | | | |
| **BNI** | **Bardonecchia** | **0.60** | **316** | Pg | **Pb** | **11 29 52.4** | **-0.2** |
| BNI | | | | Sg | **Sg** | **11 30 00.2** | **-0.1** |
| | 514nm,0.6s | | | | | | |
| **MONC** | **Moncucco Torin** | **0.66** | **46** | Pg | **Pb** | **11 29 54.4** | **+0.9** |
| **MVIF** | **Mont Vial** | **0.73** | **186** | Pg | **Pg** | **11 29 54.5** | **-0.3** |
| MVIF | | | | Sg | **Sg** | **11 30 04.0** | **-0.5** |
| **MVIF** | **Mont Vial** | **0.73** | **186** | Pg | **Pg** | **11 29 54.5** | **-0.3** |
| MVIF | | | | Sg | **Sg** | **11 30 04.0** | **-0.5** |
| **LUCF** | **Luceram** | **0.73** | **175** | Pg | **Pg** | **11 29 54.0** | **-0.8** |
| LUCF | | | | Sg | **Sg** | **11 30 04.0** | **-0.5** |
| **LUCF** | **Luceram** | **0.73** | **175** | Pg | **Pg** | **11 29 54.0** | **-0.8** |
| LUCF | | | | Sg | **Sg** | **11 30 04.0** | **-0.5** |
| **SBF** | **Sospel** | **0.77** | **170** | *e*Pg | **Pg** | **11 29 54.6** | **-0.9** |
| SBF | | | | *e*Sg | **Sg** | **11 30 05.0** | **-0.7** |
| | 770nm,0.3s | | | | | | |
| **SBF** | **Sospel** | **0.77** | **170** | *e*Pg | **Pg** | **11 29 54.6** | **-0.9** |
| SBF | | | | *e*Sg | **Sg** | **11 30 05.0** | **-0.7** |
| | 385nm,0.3s | | | | | | |
| **RORO** | **Rocca Rossa** | **0.77** | **131** | Pg | **Pg** | **11 29 55.0** | **-0.6** |
| | 603nm,0.3s | | | | | | |
| **QLNO** | **Quiliano** | **0.83** | **111** | Pg | **Pg** | **11 29 56.6** | **-0.1** |
| | 848nm,0.3s | | | | | | |
| **LSD** | **Lago del Serru** | **0.84** | **354** | Pg | **Pg** | **11 29 56.4** | **-0.6** |
| | 613nm,0.3s | | | | | | |
| **IMI** | **Imperia** | **0.84** | **147** | Pg | **Pg** | **11 29 56.1** | **-0.9** |
| IMI | | | | Sg | **Sg** | **11 30 06.7** | **-1.4** |
| | 452nm,0.3s | | | | | | |
| **FINB** | **Finale Ligure** | **0.89** | **120** | Pg | **Pg** | **11 29 57.2** | **-0.5** |
| | 1μm,0.4s | | | | | | |
| **REVF** | **Revere** | **0.89** | **175** | Pg | **Pg** | **11 29 57.3** | **-0.4** |
| REVF | | | | Sg | **Sg** | **11 30 08.7** | **-0.7** |
| **REVF** | **Revere** | **0.89** | **175** | Pg | **Pg** | **11 29 57.3** | **-0.4** |
| REVF | | | | Sg | **Sg** | **11 30 08.7** | **-0.7** |
| **CALN** | **Calern** | **0.91** | **197** | Pg | **Pb** | **11 29 58.3** | **+0.4** |
| CALN | | | | Sg | **Sg** | **11 30 09.8** | **-0.4** |
| **CALN** | **Calern** | **0.91** | **197** | Pg | **Pb** | **11 29 58.3** | **+0.4** |
| CALN | | | | Sg | **Sg** | **11 30 09.8** | **-0.4** |
| **PCP** | **Piancastagn** | **0.92** | **95** | Pg | **Pg** | **11 29 58.3** | **-0.1** |
| | 878nm,0.3s | | | | | | |
| **LPG** | **La Plagne** | **0.95** | **338** | *e*Pg | **Pb** | **11 29 58.8** | **+0.1** |
| LPG | | | | *e*Sg | **Sb** | **11 30 11.9** | **+0.9** |
| | 850nm,0.5s | | | | | | |
| **LPG** | **La Plagne** | **0.95** | **338** | *e*Pg | **Pb** | **11 29 58.8** | **+0.1** |
| LPG | | | | *e*Sg | **Sb** | **11 30 11.9** | **+0.9** |
| | 425nm,0.5s | | | | | | |
| **TRAV** | **Traversella** | **0.96** | **21** | Pg | **Pg** | **11 29 57.0** | **-2.1** |
| | 224nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.97** | **338** | *e*Pg | **Pb** | **11 29 59.3** | **+0.3** |
| LPL | | | | *e*Sg | **Sg** | **11 30 11.6** | **-0.5** |
| | 569nm,0.4s | | | | | | |
| **LPL** | **La Plagne** | **0.97** | **338** | *e*Pg | **Pb** | **11 29 59.3** | **+0.3** |
| LPL | | | | *e*Sg | **Sg** | **11 30 11.6** | **-0.5** |
| | 284nm,0.4s | | | | | | |
| **GDM** | **Grand'Maison** | **1.00** | **306** | Pg | **Pn** | **11 30 00.2** | **+0.3** |
| GDM | | | | Sg | **Sn** | **11 30 13.5** | **-0.2** |
| **GDM** | **Grand'Maison** | **1.00** | **306** | Pg | **Pn** | **11 30 00.2** | **+0.3** |
| GDM | | | | Sg | **Sn** | **11 30 13.5** | **-0.2** |
| **CIRO** | **Champorcher** | **1.00** | **13** | Pg | **Pb** | **11 29 58.0** | **-1.6** |
| | 119nm,0.6s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **287** | *e*Pg | **Pb** | **11 30 00.0** | **+0.1** |
| ORIF | | | | *e*Sg | **Sb** | **11 30 12.7** | **-0.4** |
| | 310nm,0.2s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.02** | **287** | *e*Pg | **Pb** | **11 30 00.0** | **+0.1** |
| ORIF | | | | *e*Sg | **Sb** | **11 30 12.7** | **-0.4** |
| | 155nm,0.2s | | | | | | |
| **FRF** | **La Foret Royal** | **1.15** | **203** | *e*Pg | **Pb** | **11 30 02.1** | **+0.2** |
| FRF | | | | *e*Sg | **Sb** | **11 30 16.5** | **0.0** |
| | 991nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.15** | **203** | *e*Pg | **Pb** | **11 30 02.1** | **+0.2** |
| FRF | | | | *e*Sg | **Sb** | **11 30 16.5** | **0.0** |
| | 495nm,0.3s | | | | | | |
| **MRGE** | **Morge** | **1.16** | **353** | Pg | **Pb** | **11 30 02.1** | **-0.1** |
| | 299nm,0.6s | | | | | | |
| **GRN** | **Grenoble** | **1.24** | **301** | Pg | **Pg** | **11 30 04.9** | **+0.4** |
| GRN | | | | Sg | **Sg** | **11 30 21.4** | **+0.7** |
| **GRN** | **Grenoble** | **1.24** | **301** | Pg | **Pg** | **11 30 04.9** | **+0.4** |
| GRN | | | | Sg | **Sg** | **11 30 21.4** | **+0.7** |
| **SMRF** | **Simiane la Rot** | **1.37** | **242** | *e*Pg | **Pb** | **11 30 06.1** | **+0.4** |
| SMRF | | | | *e*Sg | **Sg** | **11 30 24.3** | **-0.5** |
| | 251nm,0.4s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.37** | **242** | *e*Pg | **Pb** | **11 30 06.1** | **+0.4** |
| SMRF | | | | *e*Sg | **Sg** | **11 30 24.3** | **-0.5** |
| | 126nm,0.4s | | | | | | |
| **LMR** | **La Mourre** | **1.40** | **203** | *e*Pn | **Pn** | **11 30 05.7** | **+0.5** |
| **LMR** | **La Mourre** | **1.40** | **203** | *e*Pg | **Pg** | **11 30 07.4** | **0.0** |
| LMR | | | | *e*Sg | **Sb** | **11 30 24.5** | **+0.8** |
| | 926nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **1.40** | **203** | *e*Pn | **Pn** | **11 30 05.7** | **+0.5** |
| **LMR** | **La Mourre** | **1.40** | **203** | *e*Pg | **Pg** | **11 30 07.4** | **0.0** |
| LMR | | | | *e*Sg | **Sb** | **11 30 24.5** | **+0.8** |
| | 463nm,0.3s | | | | | | |
| **OG26** | **St.-Nazaire-De** | **1.40** | **269** | Pg | **Pg** | **11 30 07.0** | **-0.4** |
| **OG26** | **St.-Nazaire-De** | **1.40** | **269** | Pg | **Pg** | **11 30 07.0** | **-0.4** |
| **BOB** | **Bobbio (Coli)** | **1.57** | **84** | Pg | **Pb** | **11 30 10.0** | **+0.9** |
| **VIVF** | **Saint-Julien-l** | **1.86** | **278** | *e*Pn | **Pn** | **11 30 12.9** | **+1.3** |
| **VIVF** | **Saint-Julien-l** | **1.86** | **278** | *e*Pg | **Pg** | **11 30 16.0** | **-0.2** |
| VIVF | | | | *e*Sn | **Sn** | **11 30 35.6** | **+0.9** |
| | 110nm,0.3s | | | | | | |
| **VIVF** | **Saint-Julien-l** | **1.86** | **278** | *e*Pn | **Pn** | **11 30 12.9** | **+1.3** |
| **VIVF** | **Saint-Julien-l** | **1.86** | **278** | *e*Pg | **Pg** | **11 30 16.0** | **-0.2** |
| VIVF | | | | *e*Sn | **Sn** | **11 30 35.6** | **+0.9** |
| | 55nm,0.3s | | | | | | |
| **SSB** | **Saint Sauveur** | **2.04** | **290** | Pn | **Pn** | **11 30 14.8** | **+0.7** |
| **SSB** | **Saint Sauveur** | **2.04** | **290** | Pg | **Pg** | **11 30 19.8** | **+0.2** |
| SSB | | | | Sn | **Sn** | **11 30 40.8** | **+1.6** |
| SSB | | | | Sg | **Sg** | **11 30 47.1** | **+1.1** |
| **SSB** | **Saint Sauveur** | **2.04** | **290** | Pn | **Pn** | **11 30 14.8** | **+0.7** |
| **SSB** | **Saint Sauveur** | **2.04** | **290** | Pg | **Pg** | **11 30 19.8** | **+0.2** |
| SSB | | | | Sn | **Sn** | **11 30 40.8** | **+1.6** |
| SSB | | | | Sg | **Sg** | **11 30 47.1** | **+1.1** |
| **CABF** | **La Chapelle** | **2.15** | **338** | *e*P | **Pb** | **11 30 18.7** | **-0.4** |
| CABF | | | | *e*Sg | **Sg** | **11 30 49.4** | **-0.3** |
| | 170nm,0.7s | | | | | | |
| **CABF** | **La Chapelle** | **2.15** | **338** | *e*P | **Pb** | **11 30 18.7** | **-0.4** |
| CABF | | | | *e*Sg | **Sg** | **11 30 49.4** | **-0.3** |
| | 85nm,0.7s | | | | | | |
| **PGF** | **Pioggiola** | **2.43** | **148** | *e*Pn | **Pn** | **11 30 18.5** | **-1.0** |
| PGF | | | | *e*Sn | **Sn** | **11 30 47.8** | **-1.1** |
| | 26nm,0.3s | | | | | | |
| **PGF** | **Pioggiola** | **2.43** | **148** | *e*Pn | **Pn** | **11 30 18.5** | **-1.0** |
| PGF | | | | *e*Sn | **Sn** | **11 30 47.8** | **-1.1** |
| | 13nm,0.3s | | | | | | |
| **LASF** | **Ste Croix** | **2.50** | **259** | *e*Pn | **Pn** | **11 30 21.0** | **+0.6** |
| LASF | | | | *e*Sn | **Sn** | **11 30 50.5** | **-0.1** |
| | 54nm,0.7s | | | | | | |
| **LASF** | **Ste Croix** | **2.50** | **259** | *e*Pn | **Pn** | **11 30 21.0** | **+0.6** |
| LASF | | | | *e*Sn | **Sn** | **11 30 50.5** | **-0.1** |
| | 27nm,0.7s | | | | | | |
| **LOMF** | **Lomont** | **2.75** | **354** | Pg | **Pg** | **11 30 33.3** | **+0.2** |
| **LOMF** | **Lomont** | **2.75** | **354** | Pg | **Pg** | **11 30 33.3** | **+0.2** |
| **BBS** | **Basel-Blauen** | **2.85** | **3** | Pn | **Pn** | **11 30 26.3** | **+1.1** |
| **BBS** | **Basel-Blauen** | **2.85** | **3** | Pg | **Pg** | **11 30 36.7** | **+1.6** |
| BBS | | | | Sg | **Sg** | **11 31

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WTTA** | **Wattenberg** | **4.04** | **48** | ⇑*i*Pn | **Pn** | **11 30 43.6** | **+1.9** |
| **WTTA** | **Wattenberg** | **4.04** | **48** | Pn | **Pn** | **11 30 43.6** | **+1.9** |
| **PAGF** | **Fort de Pagny** | **4.07** | **346** | *e*Pn | **Pn** | **11 30 43.1** | **+1.1** |
| PAGF | baz=164 | | | *e*Sn | **Sn** | **11 31 28.0** | **-1.3** |
| PAGF | 2.8nm,0.4s | | | *e*Sg | **Sg** | **11 31 49.4** | **-1.8** |
| **PAGF** | **Fort de Pagny** | **4.07** | **346** | *e*Pn | **Pn** | **11 30 43.1** | **+1.1** |
| PAGF | | | | *e*Sn | **Sn** | **11 31 28.0** | **-1.3** |
| PAGF | 1.4nm,0.4s | | | *e*Sg | **Sg** | **11 31 49.4** | **-1.8** |
| **RJF** | **Les Rejaudoux** | **4.13** | **282** | *e*Pn | **Pn** | **11 30 43.0** | **+0.2** |
| RJF | 89nm,1.1s | | | *e*Sg | **Sg** | **11 31 51.1** | **-2.0** |
| **RJF** | **Les Rejaudoux** | **4.13** | **282** | *e*Pn | **Pn** | **11 30 43.0** | **+0.2** |
| RJF | 44nm,1.1s | | | *e*Sg | **Sg** | **11 31 51.1** | **-2.0** |
| **MEZF** | **Maizieres J'vi** | **4.17** | **339** | *e*Pn | **Pn** | **11 30 45.4** | **+2.1** |
| MEZF | baz=158 | | | *e*Sn | **Sn** | **11 31 30.9** | **-0.7** |
| MEZF | baz=163 | | | *e*Sg | **Sg** | **11 31 52.3** | **-2.0** |
| **MEZF** | **Maizieres J'vi** | **4.17** | **339** | *e*Pn | **Pn** | **11 30 45.4** | **+2.1** |
| MEZF | 35nm,0.6s | | | *e*Sn | **Sn** | **11 31 30.9** | **-0.7** |
| MEZF | 18nm,0.6s | | | *e*Sg | **Sg** | **11 31 52.3** | **-2.0** |
| **HYF** | **Humbligny** | **4.17** | **311** | *e*Pn | **Pn** | **11 30 45.5** | **+2.1** |
| HYF | | | | *e*Sg | **Sg** | **11 31 52.4** | **-1.9** |
| **HYF** | **Humbligny** | **4.17** | **311** | *e*Pn | **Pn** | **11 30 45.5** | **+2.1** |
| HYF | | | | *e*Sg | **Sg** | **11 31 52.4** | **-1.9** |
| **CLLI** | **Llivia** | **4.40** | **243** | P | **Pn** | **11 30 48.4** | **+1.8** |
| CLLI | 1.3nm,0.2s,SNR=14 1.5nm,0.3s,SNR=7.1 | | | S | **Sn** | **11 31 39.9** | **+2.4** |
| **CFON** | **Fontmartina** | **4.54** | **233** | P | **Pn** | **11 30 50.0** | **+1.5** |
| CFON | 8.9nm,0.3s,SNR=14 6.6nm,0.2s,SNR=7.9 | | | S | **Sn** | **11 31 41.6** | **+0.7** |
| **LFF** | **La Frestale** | **4.65** | **276** | *e*Pn | **Pn** | **11 30 50.3** | **+0.3** |
| LFF | 43nm,0.8s | | | *e*Sg | **Sg** | **11 32 07.4** | **-2.3** |
| **LFF** | **La Frestale** | **4.65** | **276** | *e*Pn | **Pn** | **11 30 50.3** | **+0.3** |
| LFF | 21nm,0.8s | | | *e*Sg | **Sg** | **11 32 07.4** | **-2.3** |
| **EMIR** | **Miracle** | **4.98** | **239** | P | **Pn** | **11 30 57.5** | **+2.9** |
| **CSOR** | **Sort** | **4.99** | **245** | P | **Pn** | **11 30 56.5** | **+1.8** |
| CSOR | 1.3nm,0.2s,SNR=11 1.7nm,0.4s | | | S | **Sn** | **11 31 53.6** | **+1.5** |
| **EPF** | **Esparros** | **5.25** | **255** | *e*Pn | **Pn** | **11 30 58.3** | **0.0** |
| EPF | 6.3nm,0.5s | | | *e*Sn | **Sn** | **11 31 56.1** | **-2.4** |
| **EPF** | **Esparros** | **5.25** | **255** | *e*Pn | **Pn** | **11 30 58.3** | **0.0** |
| EPF | 3.2nm,0.5s | | | *e*Sn | **Sn** | **11 31 56.1** | **-2.4** |
| **MFF** | **Saint Martin d** | **5.56** | **293** | *e*Pn | **Pn** | **11 31 02.8** | **+0.4** |
| **MFF** | **Saint Martin d** | **5.56** | **293** | *e*Pn | **Pn** | **11 31 02.8** | **+0.4** |
| **EPOB** | **Poblet** | **5.59** | **236** | P | **Pn** | **11 31 04.7** | **+1.8** |
| **GIVF** | **Givet** | **5.73** | **344** | *e*Pn | **Pn** | **11 31 04.8** | **+0.1** |
| GIVF | 4.0nm,0.3s | | | *e*Sg | **Sg** | **11 32 41.0** | **-3.2** |
| **GIVF** | **Givet** | **5.73** | **344** | *e*Pn | **Pn** | **11 31 04.8** | **+0.1** |
| **DOU** | **Dourbes** | **5.77** | **343** | PN | **Pn** | **11 31 07.7** | **+2.4** |
| DOU | comp=E,4.7nm,0.0s | | | SN | **Sn** | **11 32 10.5** | **-0.6** |
| **DOU** | **Dourbes** | **5.77** | **343** | Pn | **Pn** | **11 31 07.6** | **+2.4** |
| DOU | | | | Sn | **Sn** | **11 32 10.4** | **-0.6** |
| **BAIF** | **Baives** | **5.82** | **340** | *e*Pn | **Pn** | **11 31 05.7** | **-0.3** |
| BAIF | comp=E,6.7nm,0.7s | | | *e*Sg | **Sg** | **11 32 44.1** | **-3.1** |
| **BAIF** | **Baives** | **5.82** | **340** | *e*Pn | **Pn** | **11 31 05.7** | **-0.3** |
| **ETOS** | **Mallorca** | **5.87** | **216** | P | **Pn** | **11 31 08.7** | **+2.0** |
| **ETSF** | **Etsaut** | **5.92** | **256** | *e*Pn | **Pn** | **11 31 07.7** | **+0.3** |
| ETSF | comp=E,21nm,0.9s | | | *e*Sn | **Sn** | **11 32 12.2** | **-2.7** |
| **ETSF** | **Etsaut** | **5.92** | **256** | *e*Pn | **Pn** | **11 31 07.7** | **+0.3** |
| **BCLA** | **Clavier** | **5.95** | **348** | PN | **Pn** | **11 31 10.9** | **+3.1** |
| BCLA | comp=E,7.2nm,0.0s | | | SN | **Sn** | **11 32 18.3** | **+2.7** |
| **BCLA** | **Clavier** | **5.95** | **348** | Pn | **Pn** | **11 31 10.8** | **+3.1** |
| BCLA | | | | Sn | **Sn** | **11 32 18.2** | **+2.7** |
| **MEM** | **Membach** | **6.05** | **352** | PN | Pn | 11 31 13.6 | +4.4 |
| **KHC** | **Kasperske Hory** | **6.25** | **42** | *e*PN | **Pn** | **11 31 12.7** | **+0.7** |
| KHC | | | | *ex* | x | 11 31 29.6 | |
| KHC | | | | *e*SN | **Sn** | **11 32 22.2** | **-0.8** |
| **KHC** | **Kasperske Hory** | **6.25** | **42** | Pn | **Pn** | **11 31 12.7** | **+0.7** |
| **ERTA** | **Horta de San J** | **6.27** | **237** | P | **Pn** | **11 31 14.3** | **+2.0** |
| **SJPF** | **Ste Jean** | **6.32** | **259** | *e*Pn | **Pn** | **11 31 12.8** | **0.0** |
| SJPF | comp=E,4.6nm,0.7s | | | *e*Sn | **Sn** | **11 32 21.3** | **-3.3** |
| **SJPF** | **Ste Jean** | **6.32** | **259** | *e*Pn | **Pn** | **11 31 12.8** | **0.0** |
| **ESAC** | **San Caprasio** | **6.35** | **246** | P | **Pn** | **11 31 14.7** | **+1.3** |
| **IELO** | **Elcoad** | **6.41** | **257** | P | **Pn** | **11 31 16.8** | **+2.7** |
| IELO | comp=E,1.6nm,0.3s,SNR=7.9 | | | S | **Sn** | **11 32 28.3** | **+1.4** |
| **LDF** | **La Druitiere** | **6.45** | **311** | *e*Pn | **Pn** | **11 31 14.7** | **0.0** |
| LDF | comp=E,1.3nm,0.3s,SNR=7.9 | | | *e*Sg | **Sg** | **11 33 03.7** | **-3.7** |
| **LDF** | **La Druitiere** | **6.45** | **311** | *e*Pn | **Pn** | **11 31 14.7** | **0.0** |
| **FLN** | **La Foliniere** | **6.74** | **311** | *e*Pn | **Pn** | **11 31 18.5** | **-0.2** |
| **FLN** | **La Foliniere** | **6.74** | **311** | *e*Pn | **Pn** | **11 31 18.5** | **-0.2** |
| **GRR** | **Gorron** | **6.75** | **307** | *e*Pn | **Pn** | **11 31 18.8** | **+0.1** |
| **GRR** | **Gorron** | **6.75** | **307** | *e*Pn | **Pn** | **11 31 18.8** | **+0.1** |
| **SGMF** | **Saint Gilles** | **7.69** | **302** | *e*Pn | **Pn** | **11 31 31.5** | **-0.2** |
| **SGMF** | **Saint Gilles** | **7.69** | **302** | *e*Pn | **Pn** | **11 31 31.5** | **-0.2** |
| **ELAN** | **Lanestosa** | **7.84** | **264** | P | **Pn** | **11 31 36.5** | **+2.7** |
| **QUIF** | **Quistinic** | **7.94** | **298** | *e*Pn | **Pn** | **11 31 34.7** | **-0.3** |
| **QUIF** | **Quistinic** | **7.94** | **298** | *e*Pn | **Pn** | **11 31 34.7** | **-0.3** |
| **ROSF** | **Rostrenen** | **8.16** | **301** | *e*Pn | **Pn** | **11 31 38.0** | **-0.1** |
| **ROSF** | **Rostrenen** | **8.16** | **301** | *e*Pn | **Pn** | **11 31 38.0** | **-0.1** |
| **VYHS** | **Vyhne** | **8.87** | **60** | *e*PN | Pn | 11 31 40.9 | -6.9 |

*IDC **24** 11:30:45.7±0.5,23°.86N×146°.08E,h0km,mb4.1/24, mb1 4.3/26,mb1mx4.2/55,mbtmp4.2/26,ML3.5/3,MS3.4/15, Ms1 3.5/15,ms1mx3.3/41,Error ellipse: s-maj=16.1km s-min=13.0km az=98.0*

*ISCJB **24** 11:30:48.0±0.5,24°.24N±0°.06×146°.07E±0°.05,h10km, mb4.3/40,MS3.4/14,Error ellipse: s-maj=10.3km s-min=4.7km az=28.6*

*NEIC **24** 11:30:47.6±0.3,23°.89N×146°.05E,h10km,mb4.5/16,Error ellipse: s-maj=6.3km s-min=6.2km az=167.0*

*MOS **24** 11:30:47.1±0.9,23°.92N×145°.94E,h18km,mb4.7/14,Error ellipse: s-maj=14.1km s-min=7.7km az=98.9*

*JMA **24** 11:30:52.6±0.2,24°.80N×146°.14E,h0km,M5.5*

**ISC 24 11:30:49.6±0.7,24°.26N±0°.09×146°.06E±0°.07,h10km,n90,**
**σ1$22/85,mb4.4/40,MS3.5/14,1D,North Pacific Ocean**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHHJ** | **Haha-jima-NKT** | **4.23** | **305** | P | Pn | 11 31 57.4 | +3.2 |
| JHHJ | | | | S | **Sn** | **11 32 45.7** | **+2.0** |
| **CBIJ** | **Chichi jima** | **4.50** | **310** | P | **Pn** | **11 31 59.9** | **+2.1** |
| CBIJ | | | | S | **Sn** | **11 32 51.4** | **+1.1** |
| **JHJ2** | **Mitsune** | **10.38** | **330** | S | **Sn** | **11 35 11.9** | **-3.2** |
| **BSO1** | **Boso 1** | **11.27** | **338** | P | **Pn** | **11 33 31.5** | **+1.3** |
| BSO1 | | | | S | **Sn** | **11 35 33.8** | **-2.1** |
| **BSO3** | **Boso 3** | **11.56** | **337** | P | **Pn** | **11 33 36.1** | **+1.6** |
| BSO3 | | | | S | **Sn** | **11 35 41.2** | **-2.4** |
| **BSO4** | **Boso 4** | **11.79** | **336** | P | **Pn** | **11 33 38.8** | **+1.0** |
| BSO4 | | | | S | **Sn** | **11 35 47.4** | **-2.1** |
| **JOD2** | **Odawara 2** | **12.53** | **333** | P | **Pn** | **11 33 49.5** | **+1.6** |
| JOD2 | | | | S | **Sn** | **11 36 04.3** | **-3.3** |
| **JHU** | **Hanno** | **12.96** | **335** | P | **Pn** | **11 33 54.3** | **+0.5** |
| **JYT** | **Yasato** | **12.96** | **338** | P | **Pn** | **11 33 54.5** | **+0.7** |
| JYT | | | | S | **Sn** | **11 36 14.6** | **-3.5** |
| **JKN2** | **Miekihoku** | **13.11** | **322** | P | **Pn** | **11 33 57.7** | **+1.9** |
| **JHO** | **Hitachi** | **13.19** | **340** | P | **Pn** | **11 33 57.4** | **+0.4** |
| **JRY** | **Ryogami san** | **13.25** | **334** | P | **Pn** | **11 33 59.0** | **+1.1** |
| JRY | | | | S | **Sn** | **11 36 22.8** | **-2.5** |
| **MJAR** | **Matsushiro Arr** | **13.99** | **333** | Pn | **Pn** | **11 34 08.3** | **+0.4** |
| **MAJO** | **Matsushiro** | **13.99** | **333** | *e*P | **Pn** | **11 34 09.2** | **+1.3** |
| MAJO | | | | *e* | | 11 36 42.9 | |
| MAJO | | | | pmax | pmax | | |
| **MAJO** | **Matsushiro** | **13.99** | **333** | *e*Pn | **Pn** | **11 34 09.2** | **+1.3** |
| MAJO | | | | *e*Sn | **Sn** | **11 36 42.9** | **-0.4** |
| **MAT** | **Matsushiro** | **13.99** | **333** | P | **Pn** | **11 34 08.7** | **+0.8** |
| MAT | | | | S | Sn | 11 36 32.3 | -11 |
| **JHS** | **Saijyo** | **15.52** | **317** | P | **Pn** | **11 34 30.7** | **+2.1** |
| **JNU** | **Nakatsue** | **15.97** | **307** | Pn | **Pn** | **11 34 36.1** | **+1.6** |
| JNU | comp=E,0.2nm,0.3s,baz=105,slow=6.9,SNR=7.4 comp=E,127nm,19.8s,baz=114,slow=35 | | | LR | LR | 11 40 15.8 | |
| **JOW** | **Kunigami** | **16.26** | **283** | Pn | **Pn** | **11 34 37.3** | **-0.9** |
| **ERM** | **Erimo** | **17.88** | **353** | *e*P | **P** | **11 35 00.1** | **+1.1** |
| ERM | comp=E,0.1nm,0.3s,baz=180,slow=30,SNR=3.8 comp=E,60nm,1.2s | | | pmax | pmax | | |
| **ERM** | **Erimo** | **17.88** | **353** | *e*P | **P** | **11 35 00.1** | **+1.1** |
| ERM | comp=E,60nm,1.2s | | | eS | Sn | 11 38 09.3 | -8.3 |
| **H11N1** | **WAKE ISLAND Hy** | **19.83** | **99** | P | **Pn** | **11 35 22.0** | **0.0** |
| **H11N2** | **WAKE ISLAND Hy** | **19.83** | **99** | P | **Pn** | **11 35 22.2** | **+0.2** |
| **H11N3** | **WAKE ISLAND Hy** | **19.85** | **99** | P | **Pn** | **11 35 21.9** | **-0.3** |
| **ASAJ** | **Asahikawa** | **20.01** | **353** | P | Pn | 11 35 25.1 | +0.9 |
| ASAJ | comp=E,16nm,0.8s,baz=227,slow=9.2,SNR=7.7 comp=E,16nm,0.8s | | | P | Pn | 11 35 25.1 | +0.9 |
| **ASAJ** | **Asahikawa** | **20.01** | **353** | pmax | pmax | | |
| **KSRS** | **Korea Array** | **20.34** | **315** | P | **P** | **11 35 26.6** | **+0.6** |
| KSRS | comp=E,8.0nm,1.1s,baz=130,slow=11,SNR=17 comp=E,94nm,19.3s,baz=124,slow=36 | | | LR | LR | 11 43 05.8 | |
| **KSRS** | **Korea Array** | **20.34** | **315** | P | **P** | **11 35 26.6** | **+0.6** |
| KSRS | comp=E,8.0nm,1.1s | | | pmax | pmax | | |
| KSRS | comp=E,95nm,19.3s | | | MLR | MLR | | |
| **KSAR** | **Wonju Array Be** | **20.36** | **314** | P | **P** | **11 35 26.6** | **+0.4** |
| **KSAR** | **Wonju Array Be** | **20.36** | **314** | P | **P** | **11 35 26.6** | **+0.4** |
| **SSLB** | **Suanglung** | **22.93** | **274** | *e*P | **P** | **11 35 53.9** | **-0.2** |
| **TWG** | **Pinlang** | **22.95** | **272** | *e*P | **P** | **11 35 53.8** | **-0.4** |
| **USRK** | **Ussuriysk Ar.** | **22.98** | **333** | P | **P** | **11 35 54.9** | **+0.6** |
| **DAV** | **Davao City (W)** | **26.03** | **232** | LR | LR | 11 44 27.2 | |
| **SIJI** | **Soreng** | **28.81** | **212** | LR | LR | 11 45 45.1 | |
| **PETK** | **Petropavlovsk-** | **30.13** | **14** | P | **P** | **11 37 01.0** | **+1.6** |
| PETK | comp=E,52nm,20.7s,baz=200,slow=35 | | | LR | LR | 11 48 38.5 | |
| **SONM** | **Songino Array** | **39.17** | **317** | P | **P** | **11 38 18.8** | **+1.0** |
| SONM | | | | LR | LR | 11 54 13.6 | |
| **YAK** | **Yakutsk** | **39.37** | **348** | *e*P | **P** | **11 38 20.3** | **+1.4** |
| YAK | comp=E,11nm,1.0s | | | pmax | pmax | | |
| **BATI** | **Baumata** | **40.64** | **215** | P | P | 11 38 24.2 | -6.0 |
| **TLY** | **Talaya** | **42.34** | **321** | LR | LR | 11 56 07.7 | |
| **CTA** | **Charters Tower** | **44.08** | **180** | P | P | 11 38 52.5 | -5.5 |
| **CMAR** | **Chiang Mai Arr** | **44.10** | **272** | P | **P** | **11 38 57.2** | **-1.1** |
| CMAR | | | | LR | LR | 11 55 42.5 | |
| **WRAB** | **Tennant Creek** | **45.38** | **196** | *e*P | P | 11 39 03.5 | -4.9 |
| WRAB | comp=E,13nm,0.9s | | | pmax | pmax | | |
| **WRAB** | **Tennant Creek** | **45.38** | **196** | *e*P | P | 11 39 03.5 | -4.9 |
| **WRA** | **Warramunga Arr** | **45.39** | **196** | P | P | 11 39 03.2 | -5.3 |
| WRA | comp=E,1.1nm,0.7s,baz=19,slow=8.9,SNR=12 comp=E,34nm,20.7s,baz=225,slow=36 | | | LR | LR | 11 57 41.3 | |
| **BILL** | **Bilibino** | **45.52** | **10***d* | *i*P | **P** | **11 39 10.8** | **+1.9** |
| BILL | comp=E,11nm,1.0s | | | pmax | pmax | | |
| **ASAR** | **Alice Springs** | **49.08** | **195** | P | P | 11 39 31.9 | -5.3 |
| ASAR | comp=E,1.1nm,0.7s,baz=14,slow=6.9,SNR=11 comp=E,17nm,18.2s,baz=9.5,slow=37 | | | LR | LR | 12 00 55.9 | |
| **ZALV** | **Zalesovo Beam** | **53.91** | **320** | P | **P** | **11 40 12.8** | **-0.3** |
| **KDAK** | **Kodiak Island** | **54.59** | **35** | P | **P** | **11 40 18.6** | **+0.6** |
| **MKAR** | **Makanchi Array** | **54.97** | **311** | P | **P** | **11 40 21.9** | **+0.9** |
| MKAR | comp=E,0.2nm,0.3s,baz=92,slow=8.7,SNR=3.3 comp=E,35nm,18.3s,baz=128,slow=38 | | | LR | LR | 12 05 52.4 | |
| **PMR** | **Palmer** | **57.00** | **31** | *e*P | **P** | **11 40 35.3** | **+0.1** |
| PMR | comp=E,19nm,0.9s | | | pmax | pmax | | |
| **PMR** | **Palmer** | **57.00** | **31** | *e*P | **P** | **11 40 35.3** | **+0.1** |
| **KURK** | **Kurchatov** | **57.46** | **316** | P | **P** | **11 40 38.7** | **+0.1** |
| **KURK** | **Kurchatov** | **57.46** | **316** | P | **P** | **11 40 38.7** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **57.51** | **316** | P | **P** | **11 40 38.7** | **-0.3** |
| **COLA** | **College** | **58.17** | **27** | *e*P | **P** | **11 40 44.3** | **+0.9** |
| COLA | comp=E,1.3nm,0.9s,baz=94,slow=7.9,SNR=6.0 comp=E,3.0nm,0.9s | | | pmax | pmax | | |
| **COLA** | **College** | **58.17** | **27** | *e*P | **P** | **11 40 44.3** | **+0.9** |
| **ILAR** | **Eielson Array** | **58.56** | **28** | P | **P** | **11 40 45.7** | **-0.4** |
| ILAR | comp=E,3.2nm,0.9s comp=E,7.6nm,0.9s,baz=258,slow=5.8,SNR=66 comp=E,50nm,21.8s,baz=308,slow=33 | | | LR | LR | 12 03 21.3 | |
| **BVAR** | **Borovoye Array** | **62.48** | **319** | P | **P** | **11 41 12.5** | **-0.6** |
| **INK** | **Inuvik** | **64.17** | **24** | P | **P** | **11 41 24.2** | **+0.2** |
| **DLBC** | **Dease Lake** | **66.52** | **35** | P | **P** | **11 41 39.9** | **+0.3** |
| **BBB** | **Bella Bella** | **68.72** | **41** | LR | LR | 12 03 15.9 | |
| **AKTO** | **Aktyubinsk** | **70.49** | **317** | P | **P** | **11 42 03.5** | **-0.9** |
| **YKA** | **Yellowknife Ar** | **72.95** | **29** | P | **P** | **11 42 18.0** | **-1.0** |
| **YKA** | **Yellowknife Ar** | **72.95** | **29** | P | **P** | **11 42 18.0** | **-1.0** |
| YKA | comp=E,3.0nm,0.7s | | | pmax | pmax | | |
| **NEW** | **Newport** | **76.61** | **43** | *e*P | **P** | **11 42 40.4** | **-0.1** |
| NEW | comp=E,11nm,1.3s | | | pmax | pmax | | |
| **NEW** | **Newport** | **76.61** | **43** | *e*P | **P** | **11 42 40.4** | **-0.1** |
| **ARCES** | **ARCESS Array B** | **77.34** | **342** | LR | LR | 12 23 20.1 | |
| **CMB** | **Columbia Colle** | **78.11** | **54** | *e*P | **P** | **11 42 48.9** | **-0.3** |
| CMB | comp=E,5.0nm,1.0s | | | pmax | pmax | | |
| **CMB** | **Columbia Colle** | **78.11** | **54** | *e*P | **P** | **11 42 48.9** | **-0.3** |
| **WALA** | **Waterton Lakes** | **78.28** | **41** | *e*P | **P** | **11 42 50.1** | **+0.2** |
| **JTMT** | **Jette** | **78.57** | **43** | *e*P | **P** | **11 42 51.1** | **-0.5** |
| **NVAR** | **Mina Array Bea** | **79.48** | **53** | P | P | **11 42 56.4** | **-0.5** |
| NVAR | comp=E,3.4nm,0.8s,baz=270,slow=6.4,SNR=19 comp=E,85nm,19.3s,baz=267,slow=32 | | | LR | LR | 12 13 25.0 | |
| **HLID** | **Hailey** | **80.17** | **47** | *e*P | **P** | **11 43 01.0** | **+0.6** |
| **ELK** | **Elko** | **80.75** | **50** | *e*P | **P** | **11 43 03.4** | **-0.3** |
| ELK | comp=E,5.0nm,1.2s | | | pmax | pmax | | |
| **ELK** | **Elko** | **80.75** | **50** | *e*P | **P** | **11 43 03.4** | **-0.3** |
| **FINES** | **FINESS Array B** | **82.00** | **335** | P | **P** | **11 43 09.0** | **-0.6** |
| **FINES** | **FINESS Array B** | **82.00** | **335** | *i*P | **P** | **11 43 09.6** | **0.0** |
| FINES | comp=E,1.8nm,0.8s,baz=100,slow=4.2,SNR=4.7 | | | pmax | pmax | | |
| **KBZ** | **Khabaz** | **82.49** | **315** | P | **P** | **11 43 11.9** | **-0.6** |
| **DUG** | **Dugway** | **82.66** | **49** | *e*P | **P** | **11 43 13.5** | **-0.2** |
| DUG | comp=E,2.0nm,0.8s,baz=180,slow=8.1,SNR=3.4 comp=E,2.0nm,1.1s | | | pmax | pmax | | |
| **DUG** | **Dugway** | **82.66** | **49** | *e*P | **P** | **11 43 13.4** | **-0.2** |
| **HWUT** | **Hardware Ranch** | **82.90** | **48** | *e*P | **P** | **11 43 15.0** | **0.0** |
| **HFS** | **Hagfors** | **87.37** | **338** | P | **P** | **11 43 34.7** | **-2.0** |
| **ISCO** | **Idaho Springs** | **87.74** | **47** | *e*P | **P** | **11 43 39.7** | **+0.3** |
| ISCO | comp=E,2.0nm,0.9s | | | pmax | pmax | | |
| **ISCO** | **Idaho Springs** | **87.74** | **47** | *e*P | **P** | **11 43 39.7** | **+0.3** |
| **ANMO** | **Albuquerque** | **89.56** | **52** | *e*P | **P** | **11 43 47.5** | **-0.4** |
| ANMO | comp=E,5.0nm,1.6s | | | pmax | pmax | | |
| **ANMO** | **Albuquerque** | **89.56** | **52** | *e*P | **P** | **11 43 47.5** | **-0.4** |
| **TXAR** | **Lajitas Array** | **94.42** | **55** | P | **P** | **11 44 09.2** | **-1.2** |
| **TORD** | **Torodi Ar. Bea** | **129.07** | **313** | PKP | **PKPdf** | **11 49 56.7** | **-2.0** |
| **LPAZ** | **La Paz** | **147.03** | **83** | PKPbc | **PKPdf** | **11 50 31.8** | **-0.4** |

*ISCJB **24** 11:52:51.6±1.2,39°.12N±0°.05×27°.56E±0°.08,h0km,Error ellipse: s-maj=10.0km s-min=6.8km az=155.8*

*CSEM **24** 11:52:51.9±0.6,39°.11N×27°.54E,h1km,MD2.7,Error ellipse: s-maj=13.3km s-min=7.7km az=78.0,Mining explosion.*

*DDA **24** 11:52:52.1,39°.13N×27°.55E,h7km,Md2.7*

**ISC 24 11:52:51.0±1.3,39°.12N±0°.05×27°.51E±0°.07,h0km,n18,**
**σ0$73/27,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKHS** | **Akhisar** | **0.34** | **135** | *i*P | **Pg** | **11 52 57.5** | **+0.1** |
| AKHS | | | | *i*S | **Sg** | **11 53 02.4** | **+0.7** |
| **AKHS** | **Akhisar** | **0.34** | **135** | P | **Pg** | **11 52 57.5** | **+0.1** |
| AKHS | | | | S | **Sg** | **11 53 02.4** | **+0.7** |
| **AKS** | **Akhisar** | **0.34** | **135** | *e*PG | **Pg** | **11 52 58.1** | **+0.7** |
| **AKS** | **Akhisar** | **0.34** | **135** | *e*Pg | **Pg** | **11 52 58.1** | **+0.7** |
| **BALY** | **Balya** | **0.63** | **8** | *i*P | **Pb** | **11 53 04.5** | **-0.4** |
| **BALY** | **Balya** | **0.63** | **8** | P | **Pb** | **11 53 04.5** | **-0.4** |
| BALY | | | | S | **Sn** | **11 53 18.4** | **+0.4** |
| **DEMI** | **Demirci** | **0.94** | **94** | *i*P | **Pb** | **11 53 10.6** | **+0.3** |
| DEMI | | | | *i*S | **Sg** | **11 53 22.0** | **+0.7** |
| **DEMI** | **Demirci** | **0.94** | **94** | P | **Pb** | **11 53 10.6** | **+0.3** |
| DEMI | | | | S | **Sg** | **11 53 22.0** | **+0.7** |
| **MANT** | **Manisa** | **1.03** | **127** | *i*P | **Pn** | **11 53 12.8** | **0.0** |
| MANT | | | | *i*S | **Sb** | **11 53 26.0** | **0.0** |
| **MANT** | **Manisa** | **1.03** | **127** | P | **Pn** | **11 53 12.8** | **0.0** |
| MANT | | | | S | **Sb** | **11 53 26.0** | **0.0** |
| **KULA** | **Kula-Manisa** | **1.08** | **123** | *e*PG | **Pg** | **11 53 12.0** | **+0.3** |
| **KULA** | **Kula-Manisa** | **1.08** | **123** | *e*Pg | **Pg** | **11 53 12.0** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.21** | **165** | *e*PG | **Pg** | **11 53 14.5** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.21** | **165** | *e*Pg | **Pg** | **11 53 14.5** | **+0.5** |
| **TVSB** | **Tavsanli** | **1.55** | **77** | *e*PG | **Pn** | **11 53 19.8** | **-0.2** |
| **TVSB** | **Tavsanli** | **1.55** | **77** | *e*Pg | **Pn** | **11 53 19.8** | **-0.2** |
| **KHAL** | **Karahalli** | **1.72** | **115** | *i*P | **Pb** | **11 53 23.2** | **-0.3** |
| KHAL | | | | *i*S | **Sn** | **11 53 43.0** | **-2.0** |
| **KHAL** | **Karahalli** | **1.72** | **115** | P | **Pb** | **11 53 23.2** | **-0.3** |
| KHAL | | | | S | **Sn** | **11 53 43.0** | **-2.0** |

**DJA 24 11:57:19.4±0.7,1°N±5°×122°2E±°,h10km,M3.9/8,MLv3.9/8,**
**Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **0.71** | **186** | P | Pg | 11 57 32.5 | -0.7 |
| MRSI | | | | S | Sg | 11 57 43.1 | +0.6 |
| **KMSI** | **Cibinong** | **2.05** | **107** | P | Pb | 11 57 55.7 | -1.1 |
| **APSI** | **Ampana** | **2.12** | **190** | P | Pn | 11 57 56.2 | +1.3 |
| **MPSI** | **Mapaga** | **2.29** | **248** | P | Pn | 11 57 55.4 | -1.8 |
| **LUWI** | **Luwuk** | **2.34** | **161** | P | Pn | 11 57 57.3 | -0.7 |
| **PCI** | **Palu** | **3.02** | **226** | P | Pn | 11 58 07.2 | -0.1 |
| **TTSI** | **Tana Toraja** | **4.75** | **208** | P | Pn | 11 58 31.6 | +0.5 |

*IDC **24** 12:12:09.6±0.7,15°.22S×173°.61W,h0km,mb4.0/8, mb1 4.3/8,mb1mx3.9/40,mbtmp4.0/8,MS3.5/20, Ms1 3.5/20,ms1mx3.4/34,Error ellipse: s-maj=33.0km s-min=20.8km az=129.0*

*NEIC **24** 12:12:11.4±0.5,15°.10S×173°.67W,h10km,mb4.6/2,Error ellipse: s-maj=22.3km s-min=15.1km az=129.0*

**ISC 24 12:12:13.0±0.8,15°.0S±0°.2×173°.2W±0°.2,h30km,n43,**
**σ1$67/11,mb4.1/10,MS3.5/19,Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **1.76** | **52** | *e*Pn | **Pn** | **12 12 40.2** | **-1.4** |
| AFI | | | | *e*Sn | **Sn** | **12 13 02.7** | **-0.3** |
| **RAR** | **Rarotonga** | **14.18** | **118** | LR | LR | 12 19 37.4 | |
| **DZM** | **Mont Dzumac** | **20.52** | **247** | *e*LR | LR | 12 22 12.8 | |
| **DZM** | **Mont Dzumac** | **20.52** | **247** | LR | LR | 12 23 18.1 | |
| **PPT** | **Papeete** | **22.82** | **100** | LR | LR | 12 25 36.0 | |
| **PPT2** | **Papeete2** | **22.82** | **100** | *e*LQ | LQ | 12 21 39.1 | |
| PPT2 | | | | *e*LR | LR | 12 22 39.4 | |
| **PPT2** | **Papeete2** | **22.82** | **100** | *e*T | T | 12 40 27.6 | |
| **PAE** | **Paea** | **22.82** | **100** | *e*T | T | 12 40 26.6 | |
| **TVO** | **Taravao** | **23.14** | **100** | *e*T | T | 12 40 49.8 | |
| **TBI** | **Tubuai** | **23.89** | **114** | *e*LR | LR | 12 23 15.9 | |
| **TBI** | **Tubuai** | **23.89** | **114** | *e*T | T | 12 41 34.4 | |
| **VAH** | **Vaihoa** | **24.69** | **94** | *e*T | T | 12 42 51.5 | |
| **URZ** | **Urewera** | **24.70** | **198** | LR | LR | 12 25 36.2 | |
| **HNR** | **Honiara** | **26.80** | **279** | LR | LR | 12 25 55.4 | |
| **RKT** | **Rikitea** | **36.94** | **109** | *e*T | T | 12 57 56.8 | |
| **H11S2** | **WAKE ISLAND Hy** | **38.72** | **329** | T | T | 13 00 58.0 | |
| **H11S3** | **WAKE ISLAND Hy** | **38.74** | **329** | T | T | 13 00 52.6 | |
| **H11S1** | **WAKE ISLAND Hy** | **38.74** | **329** | T | T | 13 00 56.5 | |
| **H11N3** | **WAKE ISLAND Hy** | **39.66** | **330** | T | T | 13 02 17.0 | |
| **H11N1** | **WAKE ISLAND Hy** | **39.67** | **330** | T | T | 13 02 07.8 | |
| **H11N2** | **WAKE ISLAND Hy** | **39.68** | **330** | T | T | 13 02 12.3 | |
| **WRAB** | **Tennant Creek** | **50.11** | **256** | *e*P | **P** | **12 21 04.2** | **-1.7** |
| **WRA** | **Warramunga Arr** | **50.12** | **256** | P | P | 12 21 03.4 | -2.5 |
| **ASAR** | **Alice Springs** | **50.41** | **252** | P | **P** | **12 21 06.0** | **-2.1** |
| ASAR | | | | LR | LR | 12 41 16.4 | |
| **SBA** | **Scott Base** | **63.66** | **185** | *e*P | **P** | **12 22 42.9** | **+2.0** |
| **VNDA** | **Vanda** | **63.78** | **186** | P | **P** | **12 22 42.9** | **+1.1** |
| VNDA | | | | LR | LR | 12 45 33.7 | |
| **KAPI** | **Kappang** | **66.56** | **271** | LR | LR | 12 49 20.6 | |
| **MJAR** | **Matsushiro Arr** | **68.76** | **320** | LR | LR | 12 47 03.0 | |
| **JNU** | **Nakatsue** | **71.67** | **313** | LR | LR | 12 47 34.4 | |
| **PETK** | **Petropavlovsk-** | **72.31** | **342** | LR | LR | 12 50 58.8 | |
| **YBH** | **Yreka Blue Hor** | **73.17** | **37** | LR | LR | 12 47 39.6 | |
| **NVAR** | **Mina Array Bea** | **73.91** | **42** | P | P | 12 23 49.5 | +3.9 |
| NVAR | | | | LR | LR | 12 48 44.6 | |
| **KDAK** | **Kodiak Island** | **74.50** | **11** | LR | LR | 12 48 49.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 6.9nm,1.0s,baz=20,slow=2.9,SNR=16 | | | | | | | |
| **KSRS** | **Korea Array** | **76.01** | **315** | LR | LR | 12 50 38.2 | | |
| | comp=Z,21nm,21.1s,baz=94,slow=30 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **77.18** | **323** | LR | LR | 12 51 48.8 | | |
| | comp=Z,53nm,20.3s,baz=123,slow=31 | | | | | | | |
| **TXAR** | **Lajitas Array** | **80.24** | **56** | P | P | 12 24 25.4 | +4.1 | |
| | 1.2nm,1.1s,baz=251,slow=7.6,SNR=7.4 | | | | | | | |
| TXAR | | | | LR | LR | 12 54 38.3 | | |
| | comp=Z,23nm,18.8s,baz=0.0,slow=32 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.03** | **11** | P | **P** | **12 24 31.6** | **+1.8** | |
| | 0.6nm,0.9s,baz=202,slow=7.0,SNR=4.1 | | | | | | | |
| **MAW** | **Mawson** | **88.22** | **199** | P | **P** | **12 25 00.4** | **-0.6** | |
| | 0.8nm,0.7s,baz=143,slow=5.1,SNR=6.2 | | | | | | | |
| MAW | | | | LR | LR | 13 01 46.3 | | |
| | comp=Z,52nm,20.4s,baz=62,slow=34 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **92.67** | **288** | LR | LR | 13 03 03.6 | | |
| | comp=Z,10nm,19.6s,baz=157,slow=33 | | | | | | | |
| **SONM** | **Songino Array** | **94.68** | **318** | LR | LR | 13 02 19.2 | | |
| | comp=Z,24nm,21.5s,baz=100,slow=32 | | | | | | | |
| **GERES** | **GERESS Array B** | **145.78** | **352** | PKPbc | **PKPab** | **12 31 51.5** | **+1.9** | |
| | 0.7nm,0.8s,baz=224,slow=3.7,SNR=4.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.97** | **322** | PKPbc | **PKPbc** | **12 31 51.0** | **+0.7** | |
| | 0.4nm,0.4s,baz=63,slow=0.3,SNR=2.9 | | | | | | | |

*ISCJB **24** 12:18:39.7±0.4, 44°.68N±0°.05×146°.36E±0°.06, h173km±3km, mb3.7/17, Error ellipse: s-maj=8.2km s-min=6.1km az=152.5*
*MOS **24** 12:18:39.8±1.1, 44°.80N×146°.35E, h174km, mb3.8/11, Error ellipse: s-maj=15.0km s-min=12.2km az=93.5*
*SKHL **24** 12:18:40.2±0.5, 44°.74N×146°.33E, h148km±6km, mb4.6/4, msh5.1/3*
*JMA **24** 12:18:41.9±0.4, 44°.59N×146°.32E, h163km±3km, M3.3*
*IDC **24** 12:18:41.9±1.7, 44°.83N×146°.24E, h173km±13km, mb3.5/16,mb1 3.6/19, mb1mx3.4/57, mbtmp4.0/19, MS3.8/2, Ms1 3.7/2, ms1mx2.6/36, Error ellipse: s-maj=17.9km s-min=14.3km az=116.0*

**ISC 24 12:18:40.7±0.6, 44°.66N±0°.05×146°.35E±0°.04, h169km±6km, n66, σ1§05/78, mb3.8/17, 1C-4D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YUK** | **Yuzh-Kuril'sk** | **0.72** | **210** | *d* iPN | **Pn** | **12 19 05.6** | **+0.3** |
| YUK | | | | *i* S | **Sn** | **12 19 24.6** | **+0.4** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,454nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,93nm,0.3s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,63nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,224nm,0.9s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,500nm,0.8s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.72** | **210** | *i* P | **Pn** | **12 19 05.6** | **+0.3** |
| YUK | | | | AMB | AMB | 12 19 07.0 | |
| | comp=N,93nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 12 19 07.0 | |
| | comp=N,63nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 12 19 07.0 | |
| | comp=N,454nm,0.3s | | | | | | |
| YUK | | | | *i* S | **Sn** | **12 19 24.6** | **+0.4** |
| YUK | | | | A | A | 12 19 25.6 | |
| | comp=N,500nm,0.5s | | | | | | |
| YUK | | | | A | A | 12 19 25.6 | |
| | comp=N,224nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **0.86** | **156** | *d* iPN | **Pn** | **12 19 05.8** | **-0.5** |
| SHO | | | | *i* S | **Sn** | **12 19 24.9** | **-1.0** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,473nm,0.4s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,203nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,220nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,720nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,913nm,0.8s | | | | | | |
| **SHO** | **Shikotan** | **0.86** | **156** | *i* P | **Pn** | **12 19 05.8** | **-0.5** |
| SHO | | | | AMB | AMB | 12 19 06.8 | |
| | comp=E,473nm,0.4s | | | | | | |
| SHO | | | | *i* S | **Sn** | **12 19 24.9** | **-1.0** |
| SHO | | | | A | A | 12 19 25.9 | |
| | comp=E,720nm,0.4s | | | | | | |
| SHO | | | | A | A | 12 19 25.9 | |
| | comp=E,913nm,0.4s | | | | | | |
| **JRA** | **Rausu** | **1.14** | **231** | P | **Pn** | **12 19 08.5** | **+0.1** |
| **KUR** | **Kuril'sk** | **1.22** | **61** | *d* iPN | **Pn** | **12 19 09.7** | **+0.7** |
| KUR | | | | *i* S | **Sn** | **12 19 31.5** | **+0.6** |
| KUR | | | | pmax | pmax | | |
| | comp=N,33nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,70nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,18nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,62nm,0.9s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,66nm,0.9s | | | | | | |
| **KUR** | **Kuril'sk** | **1.22** | **61** | *i* P | **Pn** | **12 19 09.7** | **+0.7** |
| KUR | | | | AMB | AMB | 12 19 10.8 | |
| | comp=E,35nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 12 19 10.8 | |
| | comp=E,39nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 12 19 10.8 | |
| | comp=E,128nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **12 19 31.5** | **+0.6** |
| KUR | | | | A | A | 12 19 34.2 | |
| | comp=E,160nm,0.3s | | | | | | |
| KUR | | | | A | A | 12 19 34.2 | |
| | comp=E,162nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.37** | **199** | P | **Pn** | **12 19 10.1** | **-0.3** |
| NEM2 | | | | *e*S | **Sn** | **12 19 31.9** | **-1.4** |
| **JNK** | **Nakash** | **1.59** | **228** | P | **Pn** | **12 19 13.1** | **+0.4** |
| **JTKR** | **Abashiri--Toko** | **1.89** | **249** | P | **Pn** | **12 19 15.8** | **+0.1** |
| JTKR | | | | *e*S | **Sn** | **12 19 42.3** | **-0.4** |
| **JAK** | **Akkeshi** | **2.05** | **216** | P | **Pn** | **12 19 17.6** | **+0.1** |
| JAK | | | | *e*S | **Sn** | **12 19 44.4** | **-1.6** |
| **JMP** | **Maruseppu** | **2.25** | **254** | P | **Pn** | **12 19 20.0** | **+0.2** |
| JMP | | | | *e*S | **Sn** | **12 19 50.3** | **+0.3** |
| **JAR** | **Ashorobuto** | **2.31** | **235** | P | **Pn** | **12 19 21.7** | **+1.2** |
| **JOB** | **Onbets** | **2.53** | **227** | P | **Pn** | **12 19 24.1** | **+1.0** |
| JOB | | | | *e*S | **Sn** | **12 19 55.6** | **-0.4** |
| **JSE** | **Soyaes** | **2.70** | **278** | P | **Pn** | **12 19 25.3** | **+0.2** |
| **JKK2** | **Kamakawa 2** | **2.71** | **254** | P | **Pn** | **12 19 25.9** | **+0.7** |
| JKK2 | | | | *e*S | **Sn** | **12 20 00.2** | **+0.4** |
| **JKA** | **Kamikawa-asahi** | **2.75** | **260** | *e*P | **Pn** | **12 19 26.7** | **+1.0** |
| **ASAJ** | **Asahikawa** | **2.75** | **260** | P | **Pn** | **12 19 26.7** | **+1.0** |
| | comp=E,9.1nm,0.3s,baz=75,slow=11,SNR=136 | | | | | | |
| ASAJ | | | | S | **Sn** | **12 20 01.5** | **+0.9** |
| | comp=E,2.0nm,0.3s,baz=298,slow=25,SNR=4.1 | | | | | | |
| ASAJ | | | | LR | LR | 12 20 01.6 | |
| | comp=E,22nm,19.4s,baz=130,slow=30 | | | | | | |
| **ASAJ** | **Asahikawa** | **2.75** | **260** | PN | **Pn** | **12 19 26.7** | **+1.0** |
| ASAJ | | | | S | **Sn** | **12 20 01.5** | **+0.9** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,22nm,19.4s | | | | | | |
| **JCH** | **Churui** | **2.98** | **228** | P | **Pn** | **12 19 28.9** | **+0.3** |
| JCH | | | | *e*S | **Sn** | **12 20 03.4** | **-2.4** |
| **JFR** | **Furan** | **3.10** | **242** | P | **Pn** | **12 19 31.4** | **+1.3** |
| **JWK2** | **Keihoku** | **3.23** | **283** | P | **Pn** | **12 19 32.9** | **+1.3** |
| **YSS** | **Yuzh-Sakhalins** | **3.41** | **314** | ⇑*i* PN | **Pn** | **12 19 33.0** | **-0.8** |
| YSS | | | | *e*S | **Sn** | **12 20 14.0** | **-1.2** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,60nm,1.0s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **3.41** | **314** | *e*P | **Pn** | **12 19 33.5** | **-0.3** |
| YSS | | | | AMB | AMB | 12 19 34.2 | |
| | comp=E,41nm,0.7s | | | | | | |
| YSS | | | | *e*S | **Sn** | **12 20 14.0** | **-1.2** |
| YSS | | | | A | A | 12 20 16.3 | |
| | comp=E,60nm,1.0s | | | | | | |
| **ERM** | **Erimo** | **3.52** | **223** | *de*PN | **Pn** | **12 19 36.5** | **+1.1** |
| **ERM** | **Erimo** | **3.52** | **223** | *e*P | **Pn** | **12 19 36.5** | **+1.1** |
| **JNBK** | **Urakawa-nobuka** | **3.54** | **229** | P | **Pn** | **12 19 35.1** | **-0.4** |
| JNBK | | | | *e*S | **Sn** | **12 20 14.0** | **-4.2** |
| **KSRS** | **Korea Array** | **15.64** | **249** | P | **P** | **12 22 14.3** | **+1.8** |
| | baz=48,slow=12,SNR=4.2 | | | | | | |
| **YAK** | **Yakutsk** | **19.94** | **337** | P | **P** | **12 22 58.1** | **-1.0** |
| | comp=E,0.0nm,0.3s,baz=124,slow=3.6,SNR=2.1 | | | | | | |
| **SONM** | **Songino Array** | **27.60** | **291** | P | **P** | **12 24 11.9** | **-0.2** |
| | comp=E,1.3nm,0.6s,baz=80,slow=8.1,SNR=8.8 | | | | | | |
| **SONM** | **Songino Array** | **27.60** | **291** | P | **P** | **12 24 11.9** | **-0.2** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.16** | **139** | T | T | 12 55 57.4 | | |
| | baz=330,slow=75,SNR=47 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.18** | **139** | T | T | 12 55 56.6 | | |
| | baz=330,slow=75,SNR=39 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.18** | **139** | T | T | 12 55 56.4 | | |
| | baz=330,slow=75,SNR=36 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.13** | **140** | T | T | 12 57 05.3 | | |
| | baz=330,slow=76,SNR=54 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.14** | **140** | T | T | 12 57 08.8 | | |
| | baz=330,slow=76,SNR=31 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.15** | **140** | T | T | 12 57 10.4 | | |
| | baz=330,slow=76,SNR=33 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.00** | **306** | P | **P** | **12 25 58.7** | **+0.2** | |
| | comp=Z,0.5nm,0.3s,baz=69,slow=7.9,SNR=3.3 | | | | | | | |
| ZALV | | | | PcP | **PcP** | **12 28 00.4** | **+0.3** | |
| | comp=Z,1.1nm,0.6s,baz=128,slow=2.7,SNR=4.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.00** | **306** | P | **P** | **12 25 58.7** | **+0.2** | |
| ZALV | | | | | | 12 28 00.4 | | |
| ZALV | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| ZALV | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **41.10** | **37** | P | **P** | **12 26 08.2** | **+0.8** | |
| | comp=Z,1.0nm,0.8s,baz=277,slow=8.1,SNR=11 | | | | | | | |
| **ILAR** | **Eielson Array** | **41.10** | **37** | P | **P** | **12 26 08.3** | **+0.8** | |
| ILAR | | | | pmax | pmax | | | |
| | comp=E,1.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.66** | **296** | P | **P** | **12 26 27.6** | **-0.8** | |
| | comp=Z,2.5nm,0.7s,baz=77,slow=8.1,SNR=13 | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.66** | **296** | P | **P** | **12 26 27.6** | **-0.8** | |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **KURK** | **Kurchatov** | **44.55** | **303** | P | **P** | **12 26 35.3** | **0.0** | |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **44.55** | **303** | *e*P | **P** | **12 26 35.3** | **0.0** | |
| **KURBB** | **Kurchatov Arra** | **44.63** | **303** | P | **P** | **12 26 35.2** | **-0.8** | |
| | comp=Z,0.9nm,0.6s,baz=72,slow=8.8,SNR=7.4 | | | | | | | |
| **INK** | **Inuvik** | **45.91** | **31** | P | **P** | **12 26 45.2** | **-0.6** | |
| | comp=Z,0.4nm,0.3s,baz=299,slow=6.3,SNR=5.8 | | | | | | | |
| INK | | | | LR | LR | 12 47 58.8 | | |
| | comp=Z,95nm,18.6s,baz=336,slow=38 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.24** | **252** | P | **P** | **12 26 58.0** | **+1.2** | |
| | comp=Z,0.8nm,0.5s,baz=37,slow=7.2,SNR=6.5 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.24** | **252** | P | **P** | **12 26 58.0** | **+1.2** | |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.24** | **252** | *e*P | **P** | **12 26 58.0** | **+1.2** | |
| **GEYT** | **Alibeck** | **63.50** | **298** | P | **P** | **12 28 52.4** | **-0.4** | |
| | comp=Z,1.5nm,0.3s,baz=90,slow=8.6,SNR=5.1 | | | | | | | |
| **FINES** | **FINESS Array B** | **63.80** | **332** | P | **P** | **12 28 52.8** | **-1.4** | |
| | comp=Z,1.5nm,0.6s,baz=46,slow=6.1,SNR=9.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **63.80** | **332** | P | **P** | **12 28 52.8** | **-1.4** | |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **65.22** | **192** | P | **P** | **12 29 04.5** | **+0.6** | |
| | comp=Z,0.3nm,0.4s,baz=8.8,slow=6.6,SNR=6.3 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **68.55** | **338** | P | **P** | **12 29 23.4** | **-1.1** | |
| | comp=Z,1.2nm,0.6s,baz=31,slow=6.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.55** | **338** | P | **P** | **12 29 23.5** | **-1.1** | |
| | comp=Z,1.5nm,0.7s,baz=33,slow=6.6,SNR=5.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.55** | **338** | P | **P** | **12 29 23.5** | **-1.1** | |
| NOA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **KBZ** | **Khabaz** | **68.77** | **311** | P | **P** | **12 29 27.0** | **+0.9** | |
| | comp=Z,1.1nm,0.6s,baz=51,slow=7.0,SNR=5.0 | | | | | | | |
| **KBZ** | **Khabaz** | **68.77** | **311** | P | **P** | **12 29 27.0** | **+0.9** | |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **68.94** | **192** | P | **P** | **12 29 29.7** | **+2.4** | |
| | comp=Z,0.2nm,0.7s,baz=11,slow=5.4,SNR=5.3 | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.51** | **323** | P | **P** | **12 29 36.2** | **-0.4** | |
| | comp=Z,0.9nm,0.5s,baz=36,slow=5.5,SNR=7.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.51** | **323** | P | **P** | **12 29 36.3** | **-0.4** | |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **ULM** | **Lac du Bonnet** | **71.12** | **37** | LR | LR | 13 03 01.6 | | |
| | comp=Z,62nm,18.6s,baz=198,slow=37 | | | | | | | |
| **GERES** | **GERESS Array B** | **78.08** | **330** | P | **P** | **12 30 19.5** | **-1.1** | |
| | comp=Z,1.0nm,0.8s,baz=224,slow=3.5,SNR=4.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **78.08** | **330** | P | **P** | **12 30 19.5** | **-1.1** | |
| GERES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **KEST** | **Kesra** | **91.00** | **326** | P | **P** | **12 31 25.1** | **-0.6** | |
| | comp=Z,1.8nm,0.4s,baz=303,slow=2.4,SNR=5.9 | | | | | | | |

**IDC 24 12:30:09.2±3.2, 24°.42N×109°.06W, h0km, mb2.9/1, mb1 3.5/3, mb1mx3.4/30, mbtmp3.1/3, ML3.3/2, MS3.6/1, Ms1 3.6/1, ms1mx2.8/10, Error ellipse: s-maj=62.5km s-min=18.4km az=144.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.18** | **255** | Pn | Pn | 12 30 32.9 | -0.1 |
| | 23nm,0.3s,baz=222,slow=4.3,SNR=17 | | | | | | |
| LPIG | | | | Sn | Sg | 12 30 45.7 | -1.5 |
| | 80nm,0.3s,baz=128,slow=19,SNR=14 | | | | | | |
| **TXAR** | **Lajitas Array** | **6.87** | **43** | Pn | Pn | 12 31 51.1 | -0.3 |
| | 0.2nm,0.3s,baz=229,slow=13,SNR=26 | | | | | | |
| TXAR | | | | Pg | Pg | 12 32 20.4 | -0.6 |
| | 0.4nm,0.3s,baz=232,slow=17,SNR=8.1 | | | | | | |
| TXAR | | | | Lg | Lg | 12 33 46.3 | |
| | 0.5nm,0.3s,baz=228,slow=30,SNR=3.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.02** | **333** | Pn | P | 12 34 00.2 | +0.3 |
| | 0.1nm,0.3s,baz=156,slow=9.8,SNR=4.8 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.52** | **57** | LR | LR | 12 47 20.1 | |
| | comp=Z,145nm,18.6s,baz=248,slow=42 | | | | | | |
| **ILAR** | **Eielson Array** | **47.15** | **339** | P | P | 12 38 43.0 | -0.1 |
| | 0.1nm,0.6s,baz=146,slow=6.6,SNR=2.7 | | | | | | |

*BEO **24** 12:34:25.8±0.4, 43°.63N×17°.69E, h8km±3km, ML2.8/1*
*CSEM **24** 12:34:26.0±0.2, 43°.67N×17°.79E, h2km, ML2.8, Error ellipse: s-maj=5.3km s-min=3.0km az=49.0*
*PDG **24** 12:34:26.1±0.3, 43°.64N×17°.78E, h10km, ML2.9/11, Error ellipse: s-maj=0.4km s-min=0.8km az=0.0*
*PRU **24** 12:34:28.6, 43°.69N×17°.83E, h0km*

**ISC 24 12:34:25.6±1.2, 43°.64N±0°.02×17°.75E±0°.03, h2km±10km, n59, σ0§75/92, 9C-12D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STON** | **Ston** | **0.77** | **183** | *e*Pg | **Pg** | **12 34 38.1** | **-2.2** |
| **BRY** | **Bratogost** | **0.94** | **142** | ⇓*i* Pg | **Pg** | **12 34 42.8** | **-0.8** |
| BRY | | | | *e*Sg | **Sb** | **12 34 57.6** | **+0.1** |
| **BRY** | **Bratogost** | **0.94** | **142** | ⇓*i* Pg | **Pg** | **12 34 42.8** | **-0.8** |
| BRY | | | | *e*Sg | **Sb** | **12 34 57.6** | **+0.1** |
| **UPM** | **Unac-Piva** | **0.95** | **117** | ⇓*i* Pg | **Pg** | **12 34 43.5** | **-0.3** |
| UPM | | | | *e*Sg | **Sb** | **12 34 58.1** | **+0.1** |
| **UPM** | **Unac-Piva** | **0.95** | **117** | ⇓*i* Pg | **Pg** | **12 34 43.5** | **-0.3** |
| UPM | | | | *e*Sg | **Sb** | **12 34 58.1** | **+0.1** |
| **BLY** | **Banja Luka** | **1.18** | **340** | *e*Pg | **Pg** | **12 34 47.9** | **-0.4** |
| BLY | | | | *i* Sg | **Sn** | **12 35 04.7** | **-1.1** |
| **BLY** | **Banja Luka** | **1.18** | **340** | *e*Pg | **Pg** | **12 34 47.9** | **-0.4** |
| BLY | | | | *i* Sg | **Sn** | **12 35 04.7** | **-1.1** |
| **BBLS** | **Lazići** | **1.22** | **79** | *e*Pg | **Pg** | **12 34 49.0** | **0.0** |
| BBLS | | | | *e*Sg | **Sn** | **12 35 06.3** | **-0.6** |
| **BBLS** | **Lazići** | **1.22** | **79** | *e*Pg | **Pg** | **12 34 49.0** | **0.0** |
| BBLS | | | | *e*Sg | **Sn** | **12 35 06.3** | **-0.6** |
| **NKY** | **Niksic** | **1.23** | **132** | ⇑*i* Pg | **Pg** | **12 34 48.4** | **-0.8** |
| NKY | | | | *e*Sg | **Sn** | **12 35 07.9** | **+0.8** |
| **NKY** | **Niksic** | **1.23** | **132** | ⇑*i* Pg | **Pg** | **12 34 48.4** | **-0.8** |
| NKY | | | | *e*Sg | **Sn** | **12 35 07.9** | **+0.8** |
| **PLE** | **Pljevlja** | **1.23** | **104** | *e*Pg | **Pg** | **12 34 49.1** | **-0.2** |
| PLE | | | | *e*Sg | **Sn** | **12 35 07.9** | **+0.7** |
| **PLE** | **Pljevlja** | **1.23** | **104** | *e*Pg | **Pg** | **12 34 49.1** | **-0.2** |
| PLE | | | | *e*Sg | **Sn** | **12 35 07.9** | **+0.7** |
| **NKME** | **Niksic** | **1.24** | **134** | ⇑*i* Pg | **Pg** | **12 34 48.5** | **-0.9** |
| NKME | | | | *e*Sg | **Sn** | **12 35 08.0** | **+0.7** |
| **NKME** | **Niksic** | **1.24** | **134** | ⇑*i* Pg | **Pg** | **12 34 48.5** | **-0.9** |
| NKME | | | | *e*Sg | **Sn** | **12 35 08.0** | **+0.7** |
| **HCY** | **Herceg Novi** | **1.31** | **155** | ⇑*i* Pg | **Pn** | **12 34 49.4** | **-1.5** |
| HCY | | | | *e*Sg | **Sn** | **12 35 10.1** | **+1.1** |
| **TEKS** | **Tekeris** | **1.57** | **54** | *e*Pg | **Pn** | **12 34 53.9** | **-0.7** |
| TEKS | | | | *e*Sg | **Sg** | **12 35 16.8** | **+0.6** |
| **TEKS** | **Tekeris** | **1.57** | **54** | *e*Pg | **Pn** | **12 34 53.9** | **-0.7** |
| TEKS | | | | *e*Sg | **Sg** | **12 35 16.8** | **+0.6** |
| **BUM** | **Brajici-Budva** | **1.58** | **147** | ⇓*i* Pg | **Pb** | **12 34 55.3** | **-0.3** |
| BUM | | | | *e*Sg | **Sg** | **12 35 17.9** | **+1.5** |
| **PDG** | **Podgorica** | **1.64** | **137** | *e*Pn | **Pn** | **12 34 55.4** | **0.0** |
| PDG | | | | *i* Sn | **Sb** | **12 35 18.0** | **+0.4** |
| **PDG** | **Podgorica** | **1.64** | **137** | *e*Pn | **Pn** | **12 34 55.4** | **0.0** |
| PDG | | | | *e*Sn | **Sg** | **12 35 19.2** | **+1.0** |
| **TTG** | **Podgorica** | **1.64** | **137** | ⇑*i* Pn | **Pn** | **12 34 55.9** | **+0.5** |
| TTG | | | | *e*Sn | **Sg** | **12 35 19.2** | **+1.0** |
| **SJES** | **Sjenica** | **1.66** | **102** | *e*Pg | **Pg** | **12 34 57.7** | **+0.2** |
| SJES | | | | *i* Sg | **Sb** | **12 35 18.7** | **+0.2** |
| **DIVS** | **Divibare** | **1.69** | **73** | *e*Pg | **Pb** | **12 34 56.8** | **-0.6** |
| DIVS | | | | *e*Sg | **Sg** | **12 35 21.3** | **+1.5** |
| **DIVS** | **Divibare** | **1.69** | **73** | ⇓*i* P | **Pb** | **12 34 56.9** | **-0.5** |
| DIVS | | | | S | **Sn** | **12 35 17.7** | **-0.7** |
| **DIVS** | **Divibare** | **1.69** | **73** | *e*Pg | **Pb** | **12 34 56.8** | **-0.6** |
| DIVS | | | | S | **Sn** | **12 35 17.7** | **-0.7** |
| DIVS | | | | *e*Sg | **Sg** | **12 35 21.3** | **+1.5** |
| **BEY** | **Berane** | **1.75** | **115** | ⇓*i* Pn | **Pn** | **12 34 57.4** | **+0.4** |
| BEY | | | | *e*Sn | **Sg** | **12 35 21.4** | **-0.3** |
| **IVA** | **Berane** | **1.75** | **115** | ⇓*i* Pn | **Pn** | **12 34 57.4** | **+0.4** |
| IVA | | | | *e*Sn | **Sg** | **12 35 21.4** | **-0.3** |
| **DRME** | **Dracevica, Mon** | **1.79** | **143** | ⇑*i* Pn | **Pb** | **12 34 58.6** | **-0.6** |
| DRME | | | | *e*Sn | **Sb** | **12 35 23.1** | **+1.0** |
| **PVY** | **Plav** | **1.93** | **122** | ⇓*i* Pn | **Pn** | **12 35 00.0** | **+0.5** |
| PVY | | | | *e*Sn | **Sb** | **12 35 26.2** | **+0.2** |
| **ULC** | **Ulcinj** | **2.00** | **146** | *e*Pn | **Pn** | **12 35 00.9** | **+0.4** |
| ULC | | | | *e*Sn | **Sb** | **12 35 28.2** | **0.0** |
| **TRUS** | **Trudelj** | **2.01** | **72** | *e*Pn | **Pn** | **12 34 59.9** | **-0.6** |
| TRUS | | | | *e*Sn | **Sn** | **12 35 25.2** | **-1.0** |
| **TRUS** | **Trudelj** | **2.01** | **72** | *e*Pn | **Pn** | **12 34 59.9** | **-0.6** |
| TRUS | | | | *e*Sn | **Sn** | **12 35 25.2** | **-1.0** |
| **FGSL** | **Fruska Gora** | **2.12** | **44** | *e*Pn | **Pn** | **12 35 01.8** | **-0.3** |
| **FRGS** | **Fruska Gora** | **2.12** | **44** | *e*Pn | **Pn** | **12 35 01.8** | **-0.3** |
| **GRUS** | **Gruza** | **2.16** | **82** | *e*Pn | **Pn** | **12 35 02.6** | **-0.1** |
| **GRUS** | **Gruza** | **2.16** | **82** | *e*Pn | **Pn** | **12 35 02.6** | **-0.1** |
| **SELS** | **Selova** | **2.49** | **99** | *e*Pn | **Pn** | **12 35 07.7** | **+0.5** |
| **SELS** | **Selova** | **2.49** | **99** | *e*Pn | **Pn** | **12 35 07.7** | **+0.5** |
| **CRES** | **Cresnjev** | **2.73** | **324** | *i* Pn | **Pn** | **12 35 11.8** | **+1.4** |
| **CRES** | **Cresnjev** | **2.73** | **324** | *i* Pn | **Pn** | **12 35 11.8** | **+1.4** |
| **KUBS** | **Kucevo** | **2.94** | **73** | *e*Pn | **Pn** | **12 35 13.2** | **-0.1** |
| **KUBS** | **Kucevo** | **2.94** | **73** | *e*Pn | **Pn** | **12 35 13.2** | **-0.1** |
| **BZS** | **Buzias** | **3.40** | **53** | ⇓*i* P | **Pg** | **12 35 30.8** | **+0.1** |
| **BZS** | **Buzias** | **3.40** | **53** | S | **Sn** | **12 36 00.0** | **-0.4** |
| **BZS** | **Buzias** | **3.40** | **53** | S | **Sn** | **12 36 00.0** | **-0.4** |
| **PERS** | **Pernice** | **3.53** | **329** | *i* Pn | **Pn** | **12 35 22.1** | **+0.6** |
| **PERS** | **Pernice** | **3.53** | **329** | *i* Pn | **Pn** | **12 35 22.1** | **+0.6** |
| **ZAPS** | **Zavoj** | **3.58** | **94** | *e*Pn | **Pn** | **12 35 21.3** | **-0.8** |
| **SOKA** | **Soboth** | **3.59** | **329** | ⇑*i* Pn | **Pn** | **12 35 22.5** | **+0.1** |
| **SOKA** | **Soboth** | **3.59** | **329** | Pn | **Pn** | **12 35 22.5** | **+0.1** |
| **DRGR** | | **4.71** | **46** | ⇓*i* P | **Pg** | **12 35 55.0** | **-0.9** |
| **DRGR** | | **4.71** | **46** | S | **Sn** | **12 36 32.9** | **-0.1** |
| **DRGR** | | **4.71** | **46** | S | **Sn** | **12 36 32.9** | **-0.1** |
| **ABTA** | **Abfaltersbach** | **4.83** | **312** | ⇓*i* Pn | **Pn** | **12 35 40.8** | **+1.4** |
| **ABTA** | **Abfaltersbach** | **4.83** | **312** | Pn | **Pn** | **12 35 40.8** | **+1.4** |
| **MOA** | **Molln** | **4.87** | **331** | ⇑*i* Pn | **Pn** | **12 35 40.4** | **+0.6** |
| **MOA** | **Molln** | **4.87** | **331** | Pn | **Pn** | **12 35 40.4** | **+0.6** |
| **KHC** | **Kasperske Hory** | **6.20** | **334** | *e*SN | **Sn** | **12 37 09.0** | **-0.7** |

*ISCJB **24** 13:05:47.2±0.9, 37°.23N±0°.04×28°.27E±0°.06, h0km, Error ellipse: s-maj=7.7km s-min=5.9km az=154.6*
*CSEM **24** 13:05:47.4±0.2, 37°.22N×28°.26E, h1km, MD2.7, Error ellipse: s-maj=6.7km s-min=3.9km az=66.0, Mining explosion.*
*DDA **24** 13:05:48.0, 37°.29N×28°.26E, h7km, Md2.7*

**ISC 24 13:05:47.5±1.4, 37°.22N±0°.04×28°.26E±0°.04, h0km, n12, σ0§72/16, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.09** | **165** | *e*PG | **Pg** | **13 05 48.9** | **-0.2** |
| **YER** | **Yerkesik** | **0.09** | **165** | *e*Pg | **Pg** | **13 05 48.9** | **-0.2** |
| **DALY** | **Dalyan (Mu¨la** | **0.51** | **141** | *e*PG | **Pg** | **13 05 57.5** | **+0.3** |
| **DALY** | **Dalyan (Mu¨la** | **0.51** | **141** | *e*Pg | **Pg** | **13 05 57.5** | **+0.3** |
| **AYDN** | **Tasoluk** | **0.54** | **326** | *i* P | **Pg** | **13 05 58.1** | **+0.4** |
| AYDN | | | | *i* S | **Sg** | **13 06 05.3** | **+0.6** |
| **AYDN** | **Tasoluk** | **0.54** | **326** | P | **Pg** | **13 05 58.1** | **+0.4** |
| AYDN |

| | | | | | | |
|---|---|---|---|---|---|---|
| KBZ | | | | LR | LR | 13 44 59.8 |
| | comp=Z,39nm,18.5s,baz=354,slow=37 | | | | | |
| **TXAR** | **Lajitas Array** | **51.25** | **231** | P | **P** | **13 22 41.8 +0.5** |
| | 0.5nm,1.0s,baz=117,slow=0.4,SNR=3.4 | | | | | |
| TXAR | | | | LR | LR | 13 45 04.2 |
| | comp=Z,63nm,18.7s,baz=0.0,slow=37 | | | | | |
| **BRTR** | **Keskin Array B** | **52.71** | **75** | P | **P** | **13 22 52.1 0.0** |
| | 0.5nm,0.6s,baz=347,slow=3.1,SNR=2.9 | | | | | |
| **MKAR** | **Makanchi Array** | **55.02** | **31** | P | **P** | **13 23 08.1 -0.7** |
| | 0.7nm,0.7s,baz=340,slow=5.9,SNR=3.3 | | | | | |
| MKAR | | | | LR | LR | 13 48 30.8 |
| | comp=Z,32nm,18.9s,baz=356,slow=38 | | | | | |
| **SONM** | **Songino Array** | **56.06** | **11** | P | **P** | **13 23 16.5 0.0** |
| | 0.2nm,0.6s,baz=331,slow=5.6,SNR=2.0 | | | | | |
| **GEYT** | **Alibeck** | **59.76** | **54** | P | **P** | **13 23 43.4 +1.0** |
| | 0.5nm,0.3s,baz=316,slow=4.0,SNR=2.8 | | | | | |
| GEYT | | | | LR | LR | 13 50 51.5 |
| | comp=Z,31nm,19.2s,baz=330,slow=37 | | | | | |
| **KSRS** | **Korea Array** | **66.64** | **353** | LR | LR | 13 56 20.5 |
| | comp=Z,20nm,18.9s,baz=31,slow=38 | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.06** | **344** | P | **P** | **13 24 30.9 +0.2** |
| | 0.9nm,0.7s,baz=7.4,slow=5.5,SNR=2.8 | | | | | |
| **CMAR** | **Chiang Mai Arr** | **84.80** | **20** | P | **P** | **13 26 12.4 +0.4** |
| | 1.3nm,0.8s,baz=338,slow=6.8,SNR=6.1 | | | | | |
| CMAR | | | | LR | LR | 14 06 16.0 |
| | comp=Z,22nm,18.0s,baz=355,slow=37 | | | | | |
| **LPAZ** | **La Paz** | **92.30** | **188** | P | **P** | **13 26 48.2 -0.1** |
| | 0.4nm,0.7s,baz=126,slow=8.7,SNR=2.9 | | | | | |
| **ASAR** | **Alice Springs** | **127.08** | **344** | PKP | **PKPdf** | **13 32 42.6 +1.3** |
| | 0.4nm,0.8s,baz=52,slow=1.2,SNR=4.4 | | | | | |

*CSEM **24** 13:32:37.7,37.50N×24.73W,h5km,ML1.9,After PDA*
**PDA 24 13:32:37.7±0.9,37.50N×24.73W,h5km,MD3.5,ML1.9, Error ellipse: s-maj=9.5km s-min=2.6km az=76.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BART** | **Pico Bartolome** | **0.44** | **309** | *i* P | Pg | 13 32 45.3 | -1.1 |
| BART | | | | *e*S | Sg | 13 32 51.1 | -1.2 |
| BART | | | | A | A | 13 32 53.3 | |
| | 67nm,0.2s | | | | | | |
| **BART** | **Pico Bartolome** | **0.44** | **309** | *i* P | Pg | 13 32 45.3 | -1.1 |
| BART | | | | *e*S | Sg | 13 32 51.1 | -1.2 |
| **PSMN** | **Pico do Norte,** | **0.56** | **208** | *e*P | Pg | 13 32 47.4 | -1.2 |
| PSMN | | | | *e*S | Sg | 13 32 54.3 | -1.6 |
| PSMN | | | | A | A | 13 32 56.4 | |
| | 17nm,0.2s | | | | | | |
| **PSMN** | **Pico do Norte,** | **0.56** | **208** | *e*P | Pg | 13 32 47.4 | -1.2 |
| PSMN | | | | *e*S | Sg | 13 32 54.3 | -1.6 |
| **GRON** | **Grota Negra** | **0.69** | **293** | *e*P | Pg | 13 32 47.4 | -3.7 |
| GRON | | | | *e*S | Sg | 13 32 55.2 | -4.9 |
| GRON | | | | A | A | 13 32 56.8 | |
| | 16nm,0.2s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.78** | **289** | *e*P | Pg | 13 32 50.6 | -2.1 |
| PDA | | | | *e*S | Sg | 13 33 00.0 | -2.8 |
| PDA | | | | A | A | 13 33 01.3 | |
| | 30nm,0.2s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.78** | **289** | *e*P | Pg | 13 32 50.6 | -2.1 |
| PDA | | | | *e*S | Sg | 13 33 00.0 | -2.8 |
| **PSET** | **Sete Cidades** | **0.85** | **293** | *e*P | Pg | 13 32 51.8 | -2.3 |
| PSET | | | | *e*S | Sg | 13 33 01.8 | -3.4 |
| PSET | | | | A | A | 13 33 03.9 | |
| | 34nm,0.3s | | | | | | |
| **PSET** | **Sete Cidades** | **0.85** | **293** | *e*P | Pg | 13 32 51.8 | -2.3 |
| PSET | | | | *e*S | Sg | 13 33 01.8 | -3.4 |

**IDC 24 13:35:06.1±5.3,8.41S×103.25E,h0km,mb3.7/3, mb1 3.8/3,mb1mx3.4/38,mbtmp3.7/3,Error ellipse: s-maj=235.1km s-min=67.5km az=61.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **27.03** | **351** | P | P | 13 40 50.5 | +0.3 |
| | 0.9nm,0.9s,baz=184,slow=7.9,SNR=5.8 | | | | | | |
| **SONM** | **Songino Array** | **56.06** | **3** | P | P | 13 44 46.6 | -0.4 |
| | 0.6nm,0.7s,baz=170,slow=6.9,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **64.05** | **348** | P | P | 13 45 41.4 | -0.1 |
| | 0.3nm,0.3s,baz=183,slow=9.8,SNR=2.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **147.26** | **47** | PKPbc | PKPbc | 13 54 51.7 | -0.6 |
| | 0.2nm,0.8s,baz=282,slow=1.2,SNR=3.5 | | | | | | |

*ISCJB **24** 13:37:20.2±0.5,3.30S±0.04×139.99E±0.06,h56km, mb3.8/4,MS2.8/2,Error ellipse: s-maj=8.5km s-min=5.6km az=23.2*
*DJA **24** 13:37:20.2±1.4,3.3°S±10°×14°0E±°,h24km±10km,M4.0/3, MLv4.0/3*
*IDC **24** 13:37:21.1±1.2,3.25S×140.06E,h61km±15km,mb3.6/4, mb1 4.0/8,mb1mx3.6/30,mbtmp4.2/8,MS3.0/2,Ms1 3.0/2, ms1mx2.5/22,Error ellipse: s-maj=23.2km s-min=13.0km az=105.0*
*AUST **24** 13:37:45.4±99.0,5.28S×139.30E,h14km±5km,Error ellipse: s-maj=19.5km s-min=1.3km az=352.0*
**ISC 24 13:37:21.3±0.7,3.28S±0.06×139.98E±0.06,h56km,n19, σ1s99/23,mb3.8/4,Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **0.71** | **15** | P | **Pn** | **13 37 34.9** | **-0.6** |
| GENI | | | | S | **Sn** | **13 37 45.2** | **-0.5** |
| **JAY** | **Jayapura** | **1.05** | **44** | P | **Pn** | **13 37 39.6** | **-0.3** |
| | baz=217,slow=20 | | | | | | |
| JAY | | | | S | **Sn** | **13 37 52.2** | **-1.4** |
| | baz=128,slow=19 | | | | | | |
| **JAY** | **Jayapura** | **1.05** | **44** | P | **Pn** | **13 37 39.4** | **-0.5** |
| JAY | | | | S | **Sn** | **13 37 54.7** | **+1.1** |
| **SMPI** | **Sarmi** | **1.81** | **315** | P | **Pn** | **13 37 49.2** | **-0.9** |
| SMPI | | | | S | **Sn** | **13 38 12.6** | **+0.7** |
| **PMG** | **Port Moresby** | **8.81** | **118** | P | Pn | 13 39 52.4 | -0.1 |
| | baz=8.8,SNR=3.8 | | | | | | |
| **SIJI** | **Sorong** | **9.03** | **285** | P | **Pn** | **13 39 30.0** | **+0.8** |
| | 1.6nm,0.3s,baz=169,slow=23,SNR=11 | | | | | | |
| **PMG** | **Port Moresby** | **9.37** | **131** | P | **Pn** | **13 39 34.5** | **+0.7** |
| | 0.3nm,0.3s,baz=342,slow=20,SNR=1.7 | | | | | | |
| **KDU** | **Kakadu** | **11.94** | **218** | P | **Pn** | **13 40 08.6** | **-0.3** |
| | baz=10.0,SNR=16 | | | | | | |
| **MTN** | **Manton Dam** | **12.92** | **222** | P | **Pn** | **13 40 23.3** | **+1.0** |
| | baz=11,SNR=7.2 | | | | | | |
| **KNRA** | **Kununurra** | **16.55** | **221** | P | **P** | **13 41 12.1** | **+0.6** |
| | baz=15,SNR=5.6 | | | | | | |
| **QIS** | **Mount Isa** | **17.18** | **181** | P | **P** | **13 41 20.6** | **+2.0** |
| | baz=15,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.45** | **198** | P | **Pn** | **13 41 19.9** | **-1.2** |
| | 0.7nm,0.3s,baz=16,slow=12,SNR=33 | | | | | | |
| WRA | | | | S | **Sn** | **13 44 28.0** | **-6.7** |
| | 0.3nm,0.3s,baz=17,slow=22,SNR=5.2 | | | | | | |
| **BATI** | **Baumata** | **17.60** | **246** | P | **P** | **13 41 24.3** | **+1.0** |
| | 2.4nm,0.3s,baz=352,slow=20,SNR=3.7 | | | | | | |
| **KAPI** | **Kappang** | **20.25** | **264** | LR | LR | 13 51 52.3 | |
| | comp=Z,20nm,19.4s,baz=99,slow=43 | | | | | | |
| **ASAR** | **Alice Springs** | **21.10** | **196** | P | **P** | **13 42 01.9** | **+0.5** |
| | 2.2nm,0.5s,baz=25,slow=9.3,SNR=62 | | | | | | |
| ASAR | | | | S | **S** | **13 45 52.7** | **-0.7** |
| | 1.1nm,0.7s,baz=9.6,slow=28,SNR=4.1 | | | | | | |
| ASAR | | | | LR | LR | 13 50 49.7 | |
| | comp=Z,99nm,19.6s,baz=11,slow=38 | | | | | | |
| **EIDS** | **Eidsvold** | **24.42** | **155** | P | **P** | **13 42 38.6** | **+3.8** |
| | baz=23,SNR=5.7 | | | | | | |
| **KSRS** | **Korea Array** | **42.05** | **346** | P | **P** | **13 45 07.0** | **-0.5** |
| | 1.3nm,0.7s,baz=160,slow=9.1,SNR=7.8 | | | | | | |
| **VNDA** | **Vanda** | **75.11** | **175** | P | **P** | **13 48 57.3** | **+0.4** |
| | 0.9nm,0.8s,baz=339,slow=5.0,SNR=4.8 | | | | | | |
| **ILAR** | **Eielson Array** | **85.82** | **24** | P | **P** | **13 49 52.7** | **-1.9** |
| | 1.3nm,0.9s,baz=262,slow=4.4,SNR=10 | | | | | | |

*JMA **24** 14:15:12.9±0.1,24.79N×122.01E,h72km±2km,M2.1*
*ISCJB **24** 14:15:13.9±0.6,24.80N±0.04×122.06E±0.02,h63km±5km, Error ellipse: s-maj=6.2km s-min=3.1km az=164.5*
*TAP **24** 14:15:14.0,24.80N×122.01E,h63km±1km,ML3.1,D*
**ISC 24 14:15:14.7±1.4,24.76N±0.05×122.06E±0.03,h59km±8km, n40,σ1s06/74,2D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **EGS** | | **0.14** | **305** | *e*P | **Pn** | **14 15 23.9** | **+0.2** |
| | baz=304 | | | | | | |
| EGS | | | | *e*S | **Sn** | **14 15 31.5** | **+1.3** |
| | baz=304 | | | | | | |
| **TWC** | **Suao** | **0.24** | **231** | P | **Pn** | **14 15 24.0** | **-0.3** |
| | baz=216 | | | | | | |
| TWC | | | | S | **Sn** | **14 15 31.0** | **-0.2** |
| | baz=216 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.25** | **346** | P | **Pn** | **14 15 24.2** | **-0.1** |
| | baz=355 | | | | | | |
| TWB1 | | | | S | **Sn** | **14 15 31.3** | **0.0** |
| | baz=355 | | | | | | |
| **ILA** | **Ilan** | **0.28** | **270** | P | **Pn** | **14 15 24.6** | **0.0** |
| | baz=261 | | | | | | |
| ILA | | | | *e*S | **Sn** | **14 15 32.3** | **+0.6** |
| | baz=261 | | | | | | |
| **TWE** | **Neicheng** | **0.36** | **263** | *e*P | **Pn** | **14 15 24.7** | **-0.5** |
| | baz=255 | | | | | | |
| TWE | | | | *e*S | **Sn** | **14 15 32.6** | **-0.1** |
| | baz=255 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.40** | **321** | *e*P | **Pn** | **14 15 25.2** | **-0.4** |
| | baz=322 | | | | | | |
| NWF | | | | *e*S | **Sn** | **14 15 33.3** | **-0.2** |
| | baz=322 | | | | | | |
| **ENA** | **Nanau** | **0.44** | **221** | P | **Pn** | **14 15 26.0** | **0.0** |
| | baz=212 | | | | | | |
| ENA | | | | S | **Sn** | **14 15 35.3** | **+1.1** |
| | baz=212 | | | | | | |
| **ENTT** | **Nioudou** | **0.46** | **255** | *e*P | **Pn** | **14 15 26.0** | **-0.2** |
| | baz=248 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **14 15 35.5** | **+1.0** |
| | baz=248 | | | | | | |
| **TWA** | **Mucha** | **0.48** | **297** | *e*P | **Pn** | **14 15 25.6** | **-0.7** |
| | baz=294 | | | | | | |
| TWA | | | | *e*S | **Sn** | **14 15 34.1** | **-0.8** |
| | baz=294 | | | | | | |
| **NSK** | **Sanguang** | **0.64** | **262** | ⇓*i*P | **Pn** | **14 15 27.7** | **-0.6** |
| | baz=258 | | | | | | |
| NSK | | | | S | **Sn** | **14 15 37.8** | **-0.4** |
| | baz=258 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.67** | **300** | *e*P | **Pn** | **14 15 27.8** | **-0.7** |
| | baz=299 | | | | | | |
| TWS1 | | | | *e*S | **Sn** | **14 15 38.1** | **-0.5** |
| | baz=299 | | | | | | |
| **NNS** | **Nan Shan** | **0.70** | **243** | ⇓*i*P | **Pn** | **14 15 28.8** | **-0.3** |
| | baz=237 | | | | | | |
| NNS | | | | S | **Sn** | **14 15 39.7** | **+0.2** |
| | baz=237 | | | | | | |
| **TWD** | **Chiawan** | **0.80** | **212** | *e*P | **Pn** | **14 15 29.4** | **-0.7** |
| | baz=207 | | | | | | |
| TWD | | | | *e*S | **Sn** | **14 15 41.3** | **-0.2** |
| | baz=207 | | | | | | |
| **NCU** | **National Centr** | **0.82** | **285** | *e*S | **Sn** | **14 15 42.3** | **+0.5** |
| | baz=282 | | | | | | |
| **JYNG** | **Yonagunijimaku** | **0.87** | **111** | P | **Pn** | **14 15 30.7** | **-0.3** |
| JYNG | | | | S | **Sn** | **14 15 43.8** | **+0.9** |
| **YOJ** | **Yonaguni jima** | **0.92** | **109** | P | **Pn** | **14 15 31.2** | **-0.4** |
| YOJ | | | | S | **Sn** | **14 15 44.5** | **+0.4** |
| **WHF** | **Hehuan Shan** | **0.95** | **230** | *e*P | **Pn** | **14 15 31.9** | **-0.5** |
| | baz=225 | | | | | | |
| WHF | | | | *e*S | **Sn** | **14 15 45.1** | **-0.4** |
| | baz=225 | | | | | | |
| **TWT** | **Tachien** | **0.95** | **238** | P | **Pn** | **14 15 32.3** | **+0.1** |
| | baz=234 | | | | | | |
| TWT | | | | S | **Sn** | **14 15 45.5** | **+0.4** |
| | baz=234 | | | | | | |
| **NSTT** | **Nanjuang** | **0.97** | **262** | *e*P | **Pn** | **14 15 31.6** | **-0.7** |
| | baz=259 | | | | | | |
| NSTT | | | | *e*S | **Sn** | **14 15 44.5** | **-0.8** |
| | baz=259 | | | | | | |
| **ESL** | **Shilin** | **1.10** | **211** | *e*P | **Pn** | **14 15 31.9** | **-2.2** |
| | baz=207 | | | | | | |
| ESL | | | | *e*S | **Sn** | **14 15 46.1** | **-2.3** |
| | baz=207 | | | | | | |
| **NSY** | **Sanyi** | **1.23** | **254** | *e*S | **Sn** | **14 15 51.3** | **-0.2** |
| | baz=251 | | | | | | |
| **TWQ1** | **Liyutan** | **1.24** | **251** | *e*P | **Pn** | **14 15 35.7** | **-0.2** |
| | baz=248 | | | | | | |
| TWQ1 | | | | *e*S | **Sn** | **14 15 51.1** | **-0.6** |
| | baz=248 | | | | | | |
| **WDT** | **Danda** | **1.31** | **220** | *e*P | **Pn** | **14 15 36.1** | **-1.0** |
| | baz=217 | | | | | | |
| WDT | | | | *e*S | **Sn** | **14 15 52.5** | **-1.3** |
| | baz=217 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.37** | **230** | *e*P | **Pn** | **14 15 37.7** | **-0.1** |
| | baz=227 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **14 15 57.3** | **+2.3** |
| | baz=227 | | | | | | |
| **TYC** | **Yuchr** | **1.39** | **232** | *e*P | **Pn** | **14 15 37.5** | **-0.4** |
| | baz=229 | | | | | | |
| TYC | | | | *e*S | **Sn** | **14 15 55.8** | **+0.5** |
| | baz=229 | | | | | | |
| **EHY** | **Hungye** | **1.42** | **208** | *e*P | **Pn** | **14 15 36.9** | **-1.4** |
| | baz=205 | | | | | | |
| EHY | | | | *e*S | **Sn** | **14 15 54.9** | **-1.2** |
| | baz=205 | | | | | | |
| **TWF1** | **Yuli** | **1.57** | **206** | *e*P | **Pn** | **14 15 39.3** | **-1.0** |
| | baz=204 | | | | | | |
| TWF1 | | | | *e*S | **Sn** | **14 16 00.3** | **+0.7** |
| | baz=204 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.58** | **105** | P | **Pn** | **14 15 39.8** | **-0.7** |
| IRIF | | | | S | **Sn** | **14 15 59.5** | **-0.4** |
| **ALS** | **Alishan** | **1.69** | **223** | *e*P | **Pn** | **14 15 41.6** | **-0.7** |
| | baz=220 | | | | | | |
| ALS | | | | *e*S | **Sn** | **14 16 04.8** | **+1.7** |
| | baz=220 | | | | | | |
| **CHN5** | **Tsauling** | **1.71** | **228** | *e*P | **Pn** | **14 15 42.2** | **-0.1** |
| | baz=225 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **14 16 03.9** | **+0.7** |
| | baz=225 | | | | | | |
| **CHKT** | **Chengkung** | **1.77** | **201** | *e*S | **Sn** | **14 16 01.2** | **-3.3** |
| | baz=199 | | | | | | |
| **ELDTW** | **Lidau** | **1.83** | **211** | *e*P | **Pn** | **14 15 44.5** | **+0.5** |
| | baz=209 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **14 16 05.2** | **-1.0** |
| | baz=209 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.85** | **106** | P | **Pn** | **14 15 44.0** | **-0.1** |
| JKRS | | | | S | **Sn** | **14 16 07.1** | **+0.6** |
| **CHN4** | **Tsaushan** | **1.94** | **224** | *e*S | **Sn** | **14 16 10.4** | **+1.7** |
| | baz=222 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.94** | **101** | P | **Pn** | **14 15 45.2** | **-0.1** |
| JIJ | | | | *e*S | **Sn** | **14 16 08.4** | **-0.2** |
| **STYT** | **Tauyuan** | **1.99** | **217** | *e*S | **Sn** | **14 16 12.1** | **+2.2** |
| | baz=214 | | | | | | |
| **WTP** | **Ta-pu** | **2.01** | **221** | *e*P | **Pn** | **14 15 47.4** | **+1.1** |
| | baz=219 | | | | | | |
| WTP | | | | *e*S | **Sn** | **14 16 12.6** | **+2.3** |
| | baz=219 | | | | | | |
| **JISG** | **Ishigakijimahi** | **2.06** | **94** | P | **Pn** | **14 15 47.0** | **+0.1** |
| JISG | | | | *e*S | **Sn** | **14 16 12.0** | **+0.5** |
| **CHN1** | **Nanshi** | **2.10** | **222** | *e*P | **Pn** | **14 15 48.9** | **+1.3** |
| | baz=220 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **14 16 13.7** | **+1.0** |
| | baz=220 | | | | | | |
| **SGST** | **Jiashian** | **2.15** | **219** | *e*S | **Sn** | **14 16 16.7** | **+2.9** |
| | baz=217 | | | | | | |

*IDC **24** 14:23:16.6±2.7,10.65S×113.16E,h0km,mb3.4/3, mb1 3.7/3,mb1mx3.4/31,mbtmp3.4/3,MS2.6/1,Ms1 2.6/1, ms1mx2.2/13,Error ellipse: s-maj=117.7km s-min=24.5km az=47.0*
*DJA **24** 14:23:23.4±2.2,10°S±41°×11°4E±°,h142km±83km,M3.7/9, MLv3.7/9*
**ISC 24 14:23:19.8±1.4,10.5S±0.1×113.27E±0.08,h23km,n13, σ2s00/10,mb3.3/3,South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IGBI** | **Denpasar** | **2.47** | **49** | P | **Pn** | **14 24 00.4** | **+1.7** |
| **ABJI** | **Asem Bagus** | **2.82** | **20** | P | **Pb** | **14 24 08.3** | **-1.2** |
| **PWJI** | **Pagerwojo** | **2.83** | **329** | P | **Pb** | **14 24 09.0** | **-0.6** |
| **SRBI** | **Singaraja** | **3.05** | **39** | P | **Pn** | **14 24 09.0** | **+2.4** |
| **UGM** | **Wanagama** | **3.71** | **313** | P | **Pb** | **14 24 22.3** | **-2.4** |
| **TWSI** | **Taliwang, Sumb** | **3.96** | **65** | P | **Pn** | **14 24 19.8** | **+0.7** |
| TWSI | | | | S | **Sn** | **14 25 01.9** | **-2.9** |
| **KAPI** | **Kappang** | **8.40** | **50** | LR | LR | 14 29 34.2 | |
| | comp=Z,33nm,18.4s,baz=228,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.39** | **117** | P | **P** | **14 28 16.2** | **-0.6** |
| | 1.0nm,0.8s,baz=290,slow=11,SNR=8.6 | | | | | | |
| **ASAR** | **Alice Springs** | **23.65** | **126** | P | **P** | **14 28 30.2** | **+0.5** |
| | 0.8nm,0.8s,baz=304,slow=9.5,SNR=12 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.03** | **334** | P | **P** | **14 29 46.2** | **+1.4** |
| | 0.3nm,0.4s,baz=165,slow=7.5,SNR=2.3 | | | | | | |
| **H08S2** | **Diego Garcia H** | **40.34** | **270** | T | T | 15 14 12.0 | |
| | baz=96,slow=75,SNR=18 | | | | | | |
| **H08S3** | **Diego Garcia H** | **40.36** | **271** | T | T | 15 14 12.7 | |
| | baz=96,slow=75,SNR=21 | | | | | | |
| **H08S1** | **Diego Carcia H** | **40.36** | **270** | T | T | 15 14 10.5 | |
| | baz=96,slow=75,SNR=18 | | | | | | |

*CSEM **24** 14:26:11.4,39.50N×29.86W,h10km,ML2.8,After PDA*
**PDA 24 14:26:11.4±0.9,39.50N×29.86W,h10km,MD3.5,ML2.8, Error ellipse: s-maj=90.8km s-min=8.1km az=52.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCED** | **Cedros** | **1.25** | **134** | *e*P | Pn | 14 26 29.7 | -5.3 |
| PCED | | | | *e*S | Sb | 14 26 44.5 | -6.8 |
| PCED | | | | A | A | 14 26 46.4 | |
| | 30nm,0.4s | | | | | | |
| **PCED** | **Cedros** | **1.25** | **134** | *e*P | Pn | 14 26 29.7 | -5.3 |
| PCED | | | | *e*S | Sb | 14 26 44.5 | -6.8 |
| **CALA** | **Caldeira** | **1.28** | **135** | *e*S | Sb | 14 26 45.5 | -6.9 |
| **CALA** | **Caldeira** | **1.28** | **135** | *e*S | Sb | 14 26 45.5 | -6.9 |
| **PCAN** | **Candelaria** | **1.49** | **134** | *e*P | Pn | 14 26 33.9 | -4.3 |
| PCAN | | | | *e*S | Sn | 14 26 50.4 | -7.4 |
| PCAN | | | | A | A | 14 26 52.5 | |
| | 42nm,0.3s | | | | | | |
| **PCAN** | **Candelaria** | **1.49** | **134** | *e*P | Pn | 14 26 33.9 | -4.3 |
| PCAN | | | | *e*S | Sn | 14 26 50.4 | -7.4 |
| **PICO** | **Pico** | **1.50** | **131** | *e*P | Pn | 14 26 34.1 | -4.3 |
| PICO | | | | *e*S | Sn | 14 26 50.4 | -7.7 |
| **PICO** | **Pico** | **1.50** | **131** | *e*P | Pn | 14 26 34.1 | -4.3 |
| PICO | | | | *e*S | Sn | 14 26 50.4 | -7.7 |

*NEIC **24** 14:32:48.0,37.21S×179.54E,h16km,ML4.1(WEL),After WEL.*
**WEL 24 14:32:50.6±0.7,37.19S×179.41E,h33km,MD3.7/4,3C-1D, Error ellipse: s-maj=6.8km s-min=5.7km az=0.0,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **0.95** | **246** | PN | Pn | 14 33 06.3 | -1.4 |
| MXZ | | | | SN | Sn | 14 33 18.3 | -1.8 |
| MXZ | | | | AML | AML | 14 33 20.7 | |
| MXZ | | | | AML | AML | 14 33 21.3 | |
| MXZ | | | | AML | AML | 14 33 21.3 | |
| **MXZ** | **Matakaoa Point** | **0.95** | **246** | P* | Pn | 14 33 06.3 | -1.4 |
| MXZ | | | | S* | Sn | 14 33 18.4 | -1.8 |
| **WMGZ** | **Waiomatatini S** | **1.01** | **231** | ⇓PN | Pn | 14 33 07.8 | -0.7 |
| WMGZ | | | | SN | Sn | 14 33 21.9 | +0.3 |
| **WMGZ** | **Waiomatatini S** | **1.01** | **231** | P* | Pn | 14 33 07.8 | -0.7 |
| WMGZ | | | | S* | Sn | 14 33 21.9 | +0.3 |
| **PKGZ** | **Pakihiroa** | **1.25** | **237** | PN | Pn | 14 33 11.4 | -0.5 |
| PKGZ | | | | SN | Sn | 14 33 27.7 | +0.1 |
| **PUZ** | **Puketiti** | **1.27** | **225** | PN | Pn | 14 33 11.1 | -1.0 |
| PUZ | | | | AML | AML | 14 33 28.1 | |
| PUZ | | | | AML | AML | 14 33 28.6 | |
| **PUZ** | **Puketiti** | **1.27** | **225** | Pn | Pn | 14 33 11.2 | -0.9 |
| **HAZ** | **Te Kaha** | **1.41** | **246** | PN | Pn | 14 33 14.3 | +0.3 |
| **TWGZ** | **Tauwhareparae** | **1.50** | **228** | PN | Pn | 14 33 14.9 | -0.5 |
| **TWGZ** | **Tauwhareparae** | **1.50** | **228** | Pn | Pn | 14 33 14.9 | -0.5 |
| **CNGZ** | **Carnagh Statio** | **1.61** | **216** | PN | Pn | 14 33 16.2 | -0.5 |
| **CNGZ** | **Carnagh Statio** | **1.61** | **216** | Pn | Pn | 14 33 16.2 | -0.5 |
| **TKGZ** | **Te Karaka** | **1.76** | **224** | PN | Pn | 14 33 17.7 | -1.1 |
| **TKGZ** | **Te Karaka** | **1.76** | **224** | Pn | Pn | 14 33 17.7 | -1.1 |
| **MWZ** | **Matawai** | **1.88** | **232** | ⇑PN | Pn | 14 33 19.7 | -0.9 |
| MWZ | | | | AML | AML | 14 33 48.6 | |
| MWZ | | | | AML | AML | 14 34 52.4 | |
| **MWZ** | **Matawai** | **1.88** | **232** | Pn | Pn | 14 33 19.7 | -0.9 |
| **RIGZ** | **Rimuhau** | **2.00** | **220** | PN | Pn | 14 33 20.9 | -1.3 |
| **PRGZ** | **Paritu Road** | **2.11** | **214** | PN | Pn | 14 33 22.4 | -1.3 |
| **PRGZ** | **Paritu Road** | **2.11** | **214** | Pn | Pn | 14 33 22.4 | -1.3 |
| **URZ** | **Urewera** | **2.11** | **239** | PN | Pn | 14 33 23.2 | -0.4 |
| URZ | | | | AML | AML | 14 33 49.5 | |
| URZ | | | | AML | AML | 14 33 49.7 | |
| **SNGZ** | **Shannon Statio** | **2.28** | **225** | PN | Pn | 14 33 24.4 | -1.7 |
| **KNZ** | **Kokohu** | **2.29** | **216** | PN | Pn | 14 33 24.1 | -1.9 |
| **KNZ** | **Kokohu** | **2.29** | **216** | Pn | Pn | 14 33 24.1 | -1.9 |
| **MHGZ** | **Mahia Peninsul** | **2.29** | **211** | PN | Pn | 14 33 24.6 | -1.5 |
| **MHGZ** | **Mahia Peninsul** | **2.29** | **211** | Pn | Pn | 14 33 24.6 | -1.5 |
| **OPRZ** | **Ohinepanea** | **2.36** | **253** | PN | Pn | 14 33 26.6 | -0.5 |
| **OPRZ** | **Ohinepanea** | **2.36** | **253** | Pn | Pn | 14 33 26.6 | -0.5 |
| **RAHZ** | **Arahi** | **2.52** | **226** | PN | Pn | 14 33 28.2 | -1.1 |
| **RAHZ** | **Arahi** | **2.52** | **226** | Pn | Pn | 14 33 28.2 | -1.1 |
| **TARZ** | **Mount Tarawera** | **2.53** | **245** | PN | Pn | 14 33 29.5 | 0.0 |
| **TARZ** | **Mount Tarawera** | **2.53** | **245** | Pn | Pn | 14 33 29.5 | 0.0 |
| **WHHZ** | **Waihua** | **2.55** | **222** | PN | Pn | 14 33 28.2 | -1.5 |
| **RRRZ** | **Republican Roa** | **2.56** | **242** | PN | Pn | 14 33 29.6 | -0.3 |
| **RRRZ** | **Republican Roa** | **2.56** | **242** | Pn | Pn | 14 33 29.6 | -0.3 |
| **NMHZ** | **Naumai** | **2.80** | **226** | PN | Pn | 14 33 32.1 | -1.1 |
| **NMHZ** | **Naumai** | **2.80** | **226** | Pn | Pn | 14 33 32.1 | -1.1 |
| **ARHZ** | **Aropaoanui** | **2.81** | **222** | PN | Pn | 14 33 32.0 | -1.2 |
| **ARHZ** | **Aropaoanui** | **2.81** | **222** | Pn | Pn | 14 33 32.0 | -1.2 |
| **KUZ** | **Kuaotunu** | **2.98** | **277** | ⇑PN | Pn | 14 33 35.5 | -0.1 |
| **KUZ** | **Kuaotunu** | **2.98** | **277** | Pn | Pn | 14 33 35.5 | -0.1 |
| **BKZ** | **Black Stump Fm** | **3.03** | **228** | PN | Pn | 14 33 34.9 | -1.4 |
| **BKZ** | **Black Stump Fm** | **3.03** | **228** | Pn | Pn | 14 33 34.9 | -1.4 |
| **CKHZ** | **Cape Kidnapper** | **3.07** | **216** | PN | Pn | 14 33 34.5 | -2.4 |
| **CKHZ** | **Cape Kidnapper** | **3.07** | **216** | Pn | Pn | 14 33 34.5 | -2.4 |
| **MCHZ** | **McNeill Hill** | **3.10** | **223** | ⇑PN | Pn | 14 33 35.7 | -1.6 |
| **MCHZ** | **McNeill Hill** | **3.10** | **223** | Pn | Pn | 14 33 35.7 | -1.6 |
| **TLZ** | **Tolley Road** | **3.27** | **248** | PN | Pn | 14 33 39.3 | -0.4 |
| **TLZ** | **Tolley Road** | **3.27** | **248** | Pn | Pn | 14 33 39.3 | -0.4 |
| **KAHZ** | **Kahuranaki** | **3.27** | **217** | PN | Pn | 14 33 37.1 | -2.6 |
| **KAHZ** | **Kahuranaki** | **3.27** | **217** | Pn | Pn | 14 33 37.1 | -2.6 |
| **GRZ** | **Great Barrier** | **3.31** | **285** | PN | Pn | 14 33 41.5 | +1.4 |
| **MKAZ** | **Moumakai** | **3.39** | **270** | PN | Pn | 14 33 41.8 | +0.7 |
| **MKAZ** | **Moumakai** | **3.39** | **270** | Pn | Pn | 14 33 41.8 | +0.7 |
| **KRHZ** | **Kereru** | **3.42** | **223** | PN | Pn | 14 33 39.5 | -2.2 |
| **PXZ** | **Pawanui** | **3.47** | **214** | PN | Pn | 14 33 39.0 | -3.3 |
| **BHHZ** | **Black Hill Sta** | **3.49** | **228** | PN | Pn | 14 33 41.0 | -1.7 |
| **BHHZ** | **Black Hill Sta** | **3.49** | **228** | Pn | Pn | 14 33 41.0 | -1.7 |
| **NGZ** | **Ngauruhoe** | **3.60** | **235** | PN | Pn | 14 33 43.3 | -1.0 |
| **NGZ** | **Ngauruhoe** | **3.60** | **235** | Pn | Pn | 14 33 42.9 | -1.4 |
| **WNVZ** | **Wahianoa** | **3.68** | **233** | PN | Pn | 14 33 44.2 | -1.2 |
| **WNVZ** | **Wahianoa** | **3.68** | **233** | Pn

**ISC 24 15:13:13.8±0.6, 22°40S±0°07×171°46E±0°06, h124km±4km, h125km:pP-P, n91, σ1§53/96, mb4.3/19, 7C-9D, Southeast of Loyalty Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **4.65** | **273** | *e*Pn | **Pn** | **15 14 21.4** | **-0.9** |
| | 110nm,0.2s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **15 15 11.6** | **-3.9** |
| | 494nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **4.65** | **273** | P | **Pn** | **15 14 21.4** | **-0.9** |
| | 17nm,0.3s,baz=89,slow=23,SNR=403 | | | | | | |
| DZM | | | | S | **Sn** | **15 15 13.1** | **-2.4** |
| | 104nm,0.3s,baz=0.0,slow=20,SNR=22 | | | | | | |
| **NFK** | **Norfolk Island** | **7.34** | **205** | P | **Pn** | **15 14 57.9** | **-0.4** |
| | baz=6.9,SNR=65 | | | | | | |
| **MSVF** | **Nonsavu** | **7.74** | **54** | *e*P | **Pn** | **15 15 04.8** | **+0.9** |
| | 67nm,1.0s | | | | | | |
| **OUZ** | **Omahuta** | **12.91** | **172** | *e*Pn | **Pn** | **15 16 12.5** | **-0.2** |
| | 23nm,0.9s | | | | | | |
| **URZ** | **Urewera** | **16.54** | **164** | P | **P** | **15 16 59.9** | **+1.2** |
| | 1.1nm,0.3s,baz=358,slow=5.9,SNR=19 | | | | | | |
| URZ | | | | LR | LR | 15 22 37.6 | |
| | comp=Z,123nm,19.2s,baz=348,slow=34 | | | | | | |
| **URZ** | **Urewera** | **16.54** | **164** | *e*P | **P** | **15 16 59.9** | **+1.2** |
| | 126nm,1.5s | | | | | | |
| **EIDS** | **Eidsvold** | **18.86** | **257** | P | **Pn** | **15 17 27.2** | **+0.8** |
| | baz=19,SNR=6.3 | | | | | | |
| **EIDS** | **Eidsvold** | **18.86** | **257** | *e*P | **Pn** | **15 17 26.5** | **+0.1** |
| | 29nm,1.3s | | | | | | |
| **ARMA** | **Armidale** | **19.45** | **242** | P | **Pn** | **15 17 36.8** | **+3.5** |
| | baz=19,SNR=5.4 | | | | | | |
| **RMQ** | **Roma** | **21.05** | **254** | P | **P** | **15 17 50.9** | **+2.8** |
| | baz=21,SNR=21 | | | | | | |
| **RPZ** | **Rata Peaks** | **21.26** | **181** | P | **P** | **15 17 50.9** | **+0.8** |
| | 16nm,0.8s,baz=333,slow=4.0,SNR=5.7 | | | | | | |
| RPZ | | | | LR | LR | 15 25 02.0 | |
| | comp=Z,134nm,18.6s,baz=42,slow=33 | | | | | | |
| **RPZ** | **Rata Peaks** | **21.26** | **181** | *e*P | **P** | **15 17 50.2** | **+0.1** |
| | 81nm,1.4s | | | | | | |
| **CNB** | **Canberra Magne** | **23.18** | **231** | P | **P** | **15 18 11.0** | **+1.4** |
| | baz=23,SNR=5.8 | | | | | | |
| **CTA** | **Charters Tower** | **23.59** | **271** | P | **P** | **15 18 13.6** | **+0.1** |
| | 5.1nm,0.6s,baz=93,slow=11,SNR=10.0 | | | | | | |
| **QLP** | **Quilpie** | **25.10** | **255** | P | **P** | **15 18 27.8** | **+0.7** |
| | baz=25,SNR=10.0 | | | | | | |
| **MTSU** | **Mount Surprise** | **25.79** | **275** | P | **P** | **15 18 34.5** | **+1.0** |
| | baz=26,SNR=24 | | | | | | |
| **PMG** | **Port Moresby** | **26.64** | **295** | P | **P** | **15 18 40.7** | **-0.4** |
| | 11nm,0.7s,baz=123,slow=13,SNR=3.7 | | | | | | |
| **RAR** | **Rarotonga** | **26.72** | **93** | LR | LR | 15 26 26.2 | |
| | comp=Z,101nm,19.6s,baz=240,slow=30 | | | | | | |
| **ASAR** | **Alice Springs** | **34.52** | **260** | P | **P** | **15 19 49.9** | **-0.5** |
| | 11nm,0.8s,baz=86,slow=9.0,SNR=96 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 22 22.3** | **-0.4** |
| | 1.2nm,0.8s,baz=110,slow=3.4,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.64** | **267** | P | **P** | **15 19 50.0** | **-1.4** |
| | 2.6nm,0.6s,baz=94,slow=8.0,SNR=26 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 22 22.4** | **-0.8** |
| | 1.0nm,0.9s,baz=100,slow=4.2,SNR=4.4 | | | | | | |
| **TBI** | **Tubuai** | **35.95** | **99** | *e*LR | LR | 15 29 57.1 | |
| | 83nm,31.0s | | | | | | |
| **PPT2** | **Papeete2** | **36.86** | **90** | *e*LR | LR | 15 30 27.5 | |
| | 129nm,28.5s | | | | | | |
| **MTN** | **Manton Dam** | **39.48** | **277** | P | **P** | **15 20 31.8** | **-0.6** |
| | baz=40,SNR=4.3 | | | | | | |
| **WRKA** | **Warakurna** | **39.48** | **257** | P | **P** | **15 20 32.2** | **-0.2** |
| | baz=40,SNR=8.2 | | | | | | |
| **KNRA** | **Kununurra** | **40.80** | **272** | P | **P** | **15 20 42.9** | **-0.4** |
| | baz=41,SNR=3.3 | | | | | | |
| **FAKI** | **Fak Fak** | **42.66** | **291** | P | **P** | **15 20 57.8** | **-0.6** |
| | baz=43,SNR=3.6 | | | | | | |
| **SIJI** | **Sorong** | **44.55** | **293** | P | **P** | **15 21 12.9** | **-0.7** |
| | 17nm,0.7s,baz=91,slow=5.8,SNR=14 | | | | | | |
| **SWI** | **Sorong** | **44.56** | **293** | P | **P** | **15 21 13.8** | **+0.2** |
| | baz=45,SNR=3.2 | | | | | | |
| **SOEI** | **Soe** | **46.86** | **278** | *e*P | **P** | **15 21 32.4** | **+0.5** |
| | 20nm,0.9s | | | | | | |
| **BATI** | **Baumata** | **47.26** | **277** | P | **P** | **15 21 35.1** | **+0.2** |
| | 18nm,0.7s,baz=133,slow=2.8,SNR=4.2 | | | | | | |
| **MEEK** | **Meekatharra** | **47.99** | **254** | P | **P** | **15 21 40.2** | **-0.2** |
| | baz=48,SNR=8.1 | | | | | | |
| **KLBR** | **Kellerberrin** | **48.31** | **247** | P | **P** | **15 21 42.6** | **-0.2** |
| | baz=48,SNR=8.1 | | | | | | |
| **MORW** | **Morawa** | **49.98** | **250** | P | **P** | **15 21 55.5** | **0.0** |
| | baz=50,SNR=3.2 | | | | | | |
| **VNDA** | **Vanda** | **55.37** | **183** | P | **P** | **15 22 34.4** | **0.0** |
| | 1.3nm,1.0s,baz=0.5,slow=5.2,SNR=7.8 | | | | | | |
| VNDA | | | | LR | LR | 15 43 01.8 | |
| | comp=Z,14nm,19.0s,baz=16,slow=32 | | | | | | |
| **KKM** | **Kota Kinabalu** | **60.98** | **291** | P | **P** | **15 23 16.4** | **+1.9** |
| | baz=61,SNR=3.3 | | | | | | |
| **KSM** | **Kuching** | **64.10** | **283** | P | **P** | **15 23 35.5** | **+0.3** |
| | baz=64,SNR=4.8 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **66.50** | **331** | P | **P** | **15 23 47.5** | **-2.7** |
| | 4.1nm,0.9s,baz=162,slow=7.6,SNR=10 | | | | | | |
| **KSRS** | **Korea Array** | **72.27** | **325** | P | **P** | **15 24 25.1** | **-0.5** |
| | 4.1nm,0.9s,baz=151,slow=5.4,SNR=7.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **72.28** | **325** | P | **P** | **15 24 25.1** | **-0.6** |
| **NJ2** | **Nanjing** | **73.91** | **315** | *e*P | **P** | **15 24 37.5** | **+2.1** |
| NJ2 | | | | PMZ | | | |
| | 20nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **75.48** | **332** | P | **P** | **15 24 43.9** | **-0.3** |
| | 2.5nm,0.9s,baz=126,slow=7.3,SNR=4.5 | | | | | | |
| **PETK** | **Petropavlovsk-** | **76.13** | **352** | P | **P** | **15 24 46.9** | **-0.8** |
| | 6.3nm,1.0s,baz=122,slow=6.9,SNR=5.3 | | | | | | |
| PETK | | | | LR | LR | 15 52 05.1 | |
| | comp=Z,21nm,21.9s,baz=97,slow=31 | | | | | | |
| **MAW** | **Mawson** | **76.30** | **202** | LR | LR | 15 54 50.7 | |
| | comp=Z,22nm,18.8s,baz=7.0,slow=33 | | | | | | |
| **CN2** | **Changchun** | **78.22** | **328** | *e*P | **P** | **15 24 58.9** | **-0.7** |
| **GYA** | **Guiyang** | **79.31** | **304** | *e*P | **P** | **15 25 08.0** | **+1.9** |
| GYA | | | | pP | **pP** | **15 25 37.8** | **+0.3** |
| GYA | | | | sP | **sP** | **15 25 51.0** | **+0.2** |
| GYA | | | | PP | **PP** | **15 28 11.6** | **+3.7** |
| GYA | | | | S | **S** | **15 34 59.4** | **+2.7** |
| GYA | | | | SKS | **SKSac** | **15 35 09.3** | **-1.8** |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **BJI** | **Beijing** | **80.68** | **320** | P | **P** | **15 25 13.0** | **0.0** |
| BJI | | | | PMZ | | | |
| | 14µm,3.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.68** | **294** | P | **P** | **15 25 20.0** | **+1.3** |
| | 3.0nm,0.8s,baz=136,slow=4.0,SNR=22 | | | | | | |
| **KMI** | **Kunming** | **81.69** | **301** | P | **P** | **15 25 21.1** | **+2.2** |
| KMI | | | | PMZ | | | |
| | 5.0nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **81.84** | **294** | *e*P | **P** | **15 25 20.1** | **+0.6** |
| | 8.8nm,1.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **83.95** | **319** | *e*P | **P** | **15 25 31.8** | **+1.6** |
| HHC | | | | PP | PP | 15 28 53.6 | +7.8 |
| HHC | | | | S | S | 15 35 36.6 | -7.2 |
| HHC | | | | PMZ | | | |
| | 36nm,1.3s | | | | | | |
| HHC | | | | PMZ | | | |
| | 130nm,7.4s | | | | | | |
| HHC | | | | LN | | | |
| | 120nm,16.2s | | | | | | |
| HHC | | | | LE | | | |
| | 190nm,17.5s | | | | | | |
| HHC | | | | LZ | | | |
| | 74nm,17.1s | | | | | | |
| **LZH** | **Lanzhou** | **86.37** | **311** | *e*P | **P** | **15 25 43.1** | **+0.7** |
| LZH | | | | pP | **pP** | **15 26 16.3** | **+2.1** |
| LZH | | | | sP | **sP** | **15 26 31.3** | **+3.9** |
| LZH | | | | PMZ | | | |
| | 22nm,1.2s | | | | | | |
| LZH | | | | PMZ | | | |
| | 180nm,5.0s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **86.61** | **180** | P | **P** | **15 25 41.1** | **-1.8** |
| **VNA2** | **Neumayer--Watz** | **86.93** | **180** | P | **P** | **15 25 43.1** | **-1.3** |
| | baz=179,slow=4.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **89.36** | **48** | P | **P** | **15 25 56.2** | **-0.4** |
| | 2.2nm,0.7s,baz=227,slow=8.4,SNR=12 | | | | | | |
| **GTA** | **Gaotai** | **90.79** | **313** | P | **P** | **15 26 04.3** | **+1.1** |
| GTA | | | | pP | **pP** | **15 26 33.4** | **-1.8** |
| GTA | | | | sP | **sP** | **15 26 45.4** | **-2.9** |
| GTA | | | | PMZ | | | |
| | 5.0nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **90.98** | **322** | P | **P** | **15 26 03.4** | **-0.5** |
| | 4.3nm,1.0s,baz=139,slow=4.3,SNR=20 | | | | | | |
| **ILAR** | **Eielson Array** | **92.64** | **17** | P | **P** | **15 26 08.3** | **-2.6** |
| | 0.8nm,0.9s,baz=230,slow=5.0,SNR=6.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **96.46** | **61** | P | **P** | **15 26 29.2** | **-0.2** |
| | 0.1nm,0.4s,baz=200,slow=7.7,SNR=2.9 | | | | | | |
| TXAR | | | | PKKPbc | **PKKPbc** | **15 43 12.8** | **-1.2** |
| | 0.3nm,0.7s,baz=55,slow=4.8,SNR=3.5 | | | | | | |
| **WMQ** | **Urumqi** | **100.87** | **313** | *e*P | **Pdif** | **15 26 50.5** | **+1.7** |
| **MKAR** | **Makanchi Array** | **105.43** | **315** | Pdiff | **Pdif** | **15 27 09.1** | **+0.2** |
| | 0.3nm,0.4s,baz=98,slow=7.4,SNR=3.1 | | | | | | |
| **KSH** | **Kashi** | **107.97** | **306** | *e*Pdif | **Pdif** | **15 27 26.0** | **+5.5** |
| KSH | | | | *e*PP | PP | 15 31 59.5 | +8.1 |
| KSH | | | | PPMZ | | | |
| | 77nm,5.6s | | | | | | |
| KSH | | | | LN | | | |
| | 100nm,9.2s | | | | | | |
| KSH | | | | LE | | | |
| | 120nm,5.5s | | | | | | |
| KSH | | | | LZ | | | |
| | 82nm,5.0s | | | | | | |
| **BOSA** | **Boshof** | **119.71** | **214** | PKP | **PKPdf** | **15 31 49.3** | **-0.6** |
| | 2.1nm,1.0s,baz=109,slow=7.6,SNR=3.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **140.36** | **306** | PKP | **PKPdf** | **15 32 29.8** | **+1.3** |
| | 0.3nm,0.3s,baz=115,slow=5.8,SNR=3.4 | | | | | | |
| **VRI** | **Vrincioaia** | **143.03** | **318** | *i*P | **PKPdf** | **15 32 29.9** | **-3.0** |
| **MLR** | **Muntele Rosu** | **143.69** | **318** | *i*P | PKPbc | 15 32 31.9 | -0.2 |
| **DOPR** | **Dopca** | **143.81** | **319** | *i*P | PKPbc | 15 32 31.6 | -0.7 |
| **SECR** | | **143.82** | **317** | *i*P | PKPbc | 15 32 32.4 | +0.1 |
| **ARCR** | **ARCALIA** | **143.86** | **321** | *i*P | PKPbc | 15 32 32.7 | +0.3 |
| **BMR** | **Baia Mare** | **144.04** | **322** | *i*P | PKPbc | 15 32 32.7 | -0.2 |
| **VOIR** | | **144.27** | **318** | *i*P | PKPbc | 15 32 33.3 | -0.5 |
| **TRPA** | **Tarpa** | **144.31** | **324** | *i*P | PKPbc | 15 32 33.4 | -0.3 |
| **CJR** | **Cluj-Napoca** | **144.50** | **321** | *i*P | **PKPdf** | **15 32 34.8** | **-0.7** |
| **ARR** | **Arges** | **144.56** | **318** | *i*P | PKPbc | 15 32 34.3 | -0.3 |
| **DRGR** | | **144.97** | **322** | *i*P | **PKPab** | **15 32 35.5** | **-0.4** |
| **LOT** | **Lotru** | **145.05** | **319** | *i*P | **PKPbc** | **15 32 35.5** | **-0.7** |
| **OKC** | **Ostrava-Krasne** | **145.50** | **329** | *e*PKP | **PKPdf** | **15 32 36.5** | **-0.5** |
| **GZR** | **Gura Zlata** | **145.68** | **319** | *i*P | **PKPbc** | **15 32 37.5** | **-0.6** |
| **MORC** | **Moravsky Berou** | **145.82** | **330** | *i*P | **PKPdf** | **15 32 37.5** | **-0.2** |
| **SIRR** | **Siria** | **145.87** | **322** | *i*P | **PKPab** | **15 32 38.5** | **-0.7** |
| **DPC** | **Dobruska-Polom** | **145.98** | **331** | *e*PKP | **PKPbc** | **15 32 38.2** | **-0.7** |
| DPC | | | | *ep*PKP | **pPKPdf** | **15 33 10.5** | **-1.0** |
| DPC | | | | *es*PKP | | 15 33 22.5 | |
| **PVCC** | **Panska Ves** | **146.61** | **333** | *e*PKP | **PKPbc** | **15 32 39.7** | **-0.9** |
| **CLL** | **Collm** | **146.64** | **335** | *e*PKPbc | **PKPdf** | **15 32 39.0** | **+0.1** |
| | comp=Z,8.0nm,1.1s | | | | | | |
| CLL | | | | *e*PKPab | **PKPab** | **15 32 41.0** | **-1.0** |
| **EKA** | **Eskdalemuir Ar** | **146.87** | **354** | PKPbc | **PKPdf** | **15 32 39.4** | **+0.3** |
| | comp=Z,2.0nm,0.7s,baz=1.0,slow=2.7,SNR=5.2 | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **146.97** | **332** | *e*PKP | **PKPbc** | **15 32 40.8** | **-0.9** |
| **PRU** | **Pruhonice** | **147.02** | **332** | *e*PKP | **PKPbc** | **15 32 40.8** | **-1.0** |
| **TREC** | **Trest** | **147.11** | **331** | *e*PKP | **PKPbc** | **15 32 41.0** | **-1.1** |
| **DIVS** | **Divibare** | **148.05** | **319** | *i*P | **PKPbc** | **15 32 44.3** | **-0.6** |
| **KHC** | **Kasperske Hory** | **148.08** | **332** | *e*PKP | **PKPbc** | **15 32 43.9** | **-0.9** |
| **GERES** | **GERESS Array B** | **148.24** | **332** | PKPbc | **PKPbc** | **15 32 44.1** | **-1.2** |
| | comp=Z,2.0nm,0.9s,baz=37,slow=3.3,SNR=8.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **166.60** | **228** | PKP | **PKPdf** | **15 33 03.5** | **-1.8** |
| | comp=Z,0.4nm,0.6s,baz=342,slow=1.4,SNR=3.4 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **15 34 07.3** | **-0.9** |
| | comp=Z,1.3nm,0.9s,baz=122,slow=4.9,SNR=5.7 | | | | | | |

*NNC **24** 15:30:43.1±4.9, 38°58N×69°02E, h0km, mb3.9, mpv3.5, Error ellipse: s-maj=44.7km s-min=24.7km az=177.0*

**ISC 24 15:30:42.5±3.7, 38°4N±0°2×69°0E±0°1, h10km, n10, σ1§36/14, 7C-3D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **4.86** | **13** | ⇑Pn | **Pn** | **15 31 55.9** | **+0.2** |
| | 1.6nm,0.5s,baz=185,slow=11,SNR=34 | | | | | | |
| KK31 | | | | ⇑Pg | **Pb** | **15 32 07.4** | **-0.3** |
| | 3.1nm,0.5s,baz=194,slow=17,SNR=11 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 15 33 07.3 | |
| | 8.7nm,0.5s,baz=186,slow=31,SNR=8.0 | | | | | | |
| **AML** | **Almayashu** | **5.20** | **42** | P | **Pn** | **15 32 00.8** | **+0.1** |
| | SNR=16 | | | | | | |
| **KSH** | **Kashi** | **5.57** | **76** | *e*Pn | Pn | 15 31 57.4 | -8.1 |
| KSH | | | | Sn | Sn | 15 32 55.0 | -15 |
| KSH | | | | smax | smax | | |
| | comp=N,32nm,0.3s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,19nm,0.3s | | | | | | |
| **EKS2** | **Erkin-Say** | **5.63** | **39** | P | **Pn** | **15 32 06.9** | **+0.6** |
| | SNR=13 | | | | | | |
| **UCH** | **Uchtor** | **5.72** | **46** | P | **Pn** | **15 32 07.4** | **-0.4** |
| | SNR=9.1 | | | | | | |
| **AAK** | **Ala-Archa** | **5.98** | **43** | ⇓Pn | **Pn** | **15 32 10.9** | **-0.2** |
| | comp=E,2.6nm,0.4s | | | | | | |
| AAK | | | | ⇓Pg | **Pb** | **15 32 27.3** | **+0.5** |
| | comp=E,4.7nm,0.6s | | | | | | |
| AAK | | | | ⇑Sn | **Sn** | **15 33 21.7** | **+1.9** |
| | comp=E,5.3nm,0.7s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 15 33 41.7 | |
| | comp=E,20nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **5.98** | **43** | P | **Pn** | **15 32 12.2** | **+1.0** |
| | SNR=10 | | | | | | |
| **USP** | **Ospenovka** | **6.43** | **39** | P | **Pn** | **15 32 17.9** | **+0.6** |
| | SNR=5.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.77** | **46** | ⇑Pn | **Pn** | **15 32 19.1** | **-3.0** |
| | comp=E,3.0nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Sn | **Sn** | **15 33 37.9** | **-1.5** |
| | comp=E,11nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **12.67** | **332** | Pn | **Pn** | **15 33 43.4** | **+0.8** |
| | comp=E,0.4nm,0.3s,baz=155,slow=12,SNR=28 | | | | | | |
| AB31 | | | | ⇑Sn | **Sn** | **15 36 02.2** | **-1.4** |
| | comp=E,0.5nm,0.5s | | | | | | |

*SKHL **24** 15:39:27.8±1.2, 47°42N×152°48E, h126km±5km, mb4.6/3, msh4.7/2*

*ISCJB **24** 15:39:29.7±0.7, 47°38N±0°08×152°2E±0°1, h124km, mb3.6/7, Error ellipse: s-maj=13.9km s-min=6.1km az=135.1*

*MOS **24** 15:39:31.4±1.4, 47°38N×151°93E, h145km, mb3.7/2, Error ellipse: s-maj=15.6km s-min=10.7km az=59.9*

*IDC **24** 15:39:33.2±2.4, 47°36N×152°16E, h145km±21km, mb3.3/8, mb1 3.4/13, mb1mx3.2/33, mbtmp3.8/13, MS3.7/1, Ms1 3.7/1, ms1mx2.5/17, Error ellipse: s-maj=22.5km s-min=14.2km az=119.0*

**ISC 24 15:39:31.4±0.8, 47°49N±0°07×152°03E±0°09, h124km, n43, σ1§54/37, mb3.5/7, 1C-1D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **3.66** | **233** | *c i* PN | **Pn** | **15 40 27.5** | **+1.0** |
| KUR | | | | *e*S | **Sn** | **15 41 10.2** | **+1.1** |
| KUR | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,3.0nm,0.3s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,14nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,17nm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **3.66** | **233** | *i* P | **Pn** | **15 40 26.0** | **-0.5** |
| KUR | | | | AMB | AMB | 15 40 30.2 | |
| | comp=E,60nm,0.6s | | | | | | |
| KUR | | | | AMB | AMB | 15 40 30.2 | |
| | comp=E,30nm,0.6s | | | | | | |
| KUR | | | | AMB | AMB | 15 40 30.2 | |
| | comp=E,90nm,0.6s | | | | | | |
| KUR | | | | *e*S | **Sn** | **15 41 10.2** | **+1.1** |
| KUR | | | | A | A | 15 41 18.1 | |
| | comp=E,14nm,0.3s | | | | | | |
| KUR | | | | A | A | 15 41 18.1 | |
| | comp=E,17nm,0.3s | | | | | | |
| **SKR** | **Severo-Kuril's** | **4.17** | **39** | *e*PN | Pn | 15 40 28.0 | -5.2 |
| **SKR** | **Severo-Kuril's** | **4.17** | **39** | *e*P | Pn | 15 40 28.0 | -5.2 |
| SKR | | | | *erx* | rx | 15 41 12.5 | |
| **YUK** | **Yuzh-Kuril'sk** | **5.53** | **234** | *d i* PN | **Pn** | **15 40 50.6** | **-0.8** |
| YUK | | | | *i* S | **Sn** | **15 41 52.9** | **-0.9** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,20nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,6.0nm,0.1s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,22nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,9.0nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.53** | **234** | *i* P | **Pn** | **15 40 50.6** | **-0.8** |
| YUK | | | | AMB | AMB | 15 40 52.4 | |
| | comp=N,6.0nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 15 40 52.4 | |
| | comp=N,4.0nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 15 40 52.4 | |
| | comp=N,20nm,0.4s | | | | | | |
| YUK | | | | *i* S | **Sn** | **15 41 53.2** | **-0.6** |
| YUK | | | | A | A | 15 42 00.2 | |
| | comp=N,10.0nm,0.4s | | | | | | |
| YUK | | | | A | A | 15 42 00.2 | |
| | comp=N,22nm,0.4s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **6.34** | **269** | PN | **Pn** | **15 41 04.0** | **+1.6** |
| **YSS** | **Yuzh-Sakhalins** | **6.34** | **269** | *e*P | **Pn** | **15 41 04.0** | **+1.6** |
| YSS | | | | AMB | AMB | 15 41 14.0 | |
| | comp=N,21nm,0.5s | | | | | | |
| **PETK** | **Petropavlovsk-** | **6.69** | **31** | P | Pn | 15 41 09.3 | +2.2 |
| | comp=N,1.8nm,0.3s,baz=201,slow=12,SNR=22 | | | | | | |
| **PETK** | **Petropavlovsk-** | **6.69** | **31** | PN | Pn | 15 41 09.3 | +2.2 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **UGL** | **Uglegorsk** | **6.84** | **287** | *e*PN | **Pn** | **15 41 07.9** | **-1.1** |
| UGL | | | | *eS* | **Sn** | **15 42 22.0** | **-3.3** |
| **UGL** | **Uglegorsk** | **6.84** | **287** | *e*P | **Pn** | **15 41 07.9** | **-1.1** |
| UGL | | | | *erx* | rx | 15 42 22.0 | |
| **JKA** | **Kamikawa-asahi** | **7.40** | **246** | *e*P | **Pn** | **15 41 18.9** | **+2.2** |
| **ASAJ** | **Asahikawa** | **7.41** | **246** | P | **Pn** | **15 41 18.9** | **+2.1** |
| | comp=Z,0.7nm,0.3s,baz=75,slow=14,SNR=9.5 | | | | | | |
| ASAJ | | | | LR | LR | 15 44 13.7 | |
| | comp=Z,636nm,21.9s,baz=158,slow=38 | | | | | | |
| **ASAJ** | **Asahikawa** | **7.41** | **246** | PN | **Pn** | **15 41 18.9** | **+2.1** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,636nm,21.9s | | | | | | |
| **ERM** | **Erimo** | **8.35** | **232** | PN | **Pn** | **15 41 27.0** | **-2.5** |
| **ERM** | **Erimo** | **8.35** | **232** | *e*P | **Pn** | **15 41 27.0** | **-2.5** |
| **HABR** | **Khabarovsk** | **11.43** | **281** | *e*PN | **Pn** | **15 42 08.1** | **-2.6** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,29nm,1.9s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,48nm,16.0s | | | | | | |
| **HABR** | **Khabarovsk** | **11.43** | **281** | *e*P | **Pn** | **15 42 08.1** | **-2.6** |
| **EKMR** | **Ekimchan** | **13.40** | **302** | *erx* | rx | 15 42 44.0 | |
| **USRK** | **Ussuriysk Ar.** | **14.35** | **264** | P | **Pn** | **15 42 49.9** | **+1.3** |
| | comp=Z,0.2nm,0.3s,baz=71,slow=14,SNR=4.4 | | | | | | |
| **SEY** | **Seymchan** | **15.48** | **1** | P | **P** | **15 43 06.2** | **+1.8** |
| | comp=Z,0.2nm,0.3s,baz=180,slow=20,SNR=5.4 | | | | | | |
| **KROS** | **Kirovskiy** | **17.19** | **303** | *e*P | **Pn** | **15 43 24.5** | **+0.8** |
| KROS | | | | AMB | AMB | 15 43 26.8 | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **19.30** | **327** | P | **Pn** | **15 43 49.0** | **+0.4** |
| | comp=Z,0.0nm,0.3s,baz=102,slow=6.7,SNR=2.7 | | | | | | |
| **KSRS** | **Korea Array** | **20.34** | **249** | P | **P** | **15 43 58.7** | **+0.9** |
| | comp=Z,0.9nm,0.7s,baz=53,slow=10,SNR=2.8 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.22** | **151** | T | T | 16 17 04.2 | |
| | baz=340,slow=75,SNR=72 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.23** | **151** | T | T | 16 17 03.9 | |
| | baz=340,slow=75,SNR=29 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.24** | **151** | T | T | 16 17 08.8 | |
| | baz=340,slow=75,SNR=30 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.30** | **152** | T | T | 16 18 24.9 | |
| | baz=341,slow=76,SNR=55 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.31** | **152** | T | T | 16 18 28.4 | |
| | baz=341,slow=76,SNR=49 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.32** | **152** | T | T | 16 18 29.1 | |
| | baz=341,slow=76,SNR=63 | | | | | | |
| **ILAR** | **Eielson Array** | **36.44** | **39** | P | **P** | **15 46 23.9** | **+0.2** |
| | comp=Z,0.2nm,0.5s,baz=276,slow=4.4,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **63.05** | **334** | P | **P** | **15 49 45.3** | **+0.5** |
| | comp=Z,3.9nm,1.1s,baz=43,slow=5.9,SNR=8.9 | | | | | | |
| **FINES** | **FINESS Array B** | **63.05** | **334** | *e*P | **P** | **15 49 45.0** | **+0.2** |
| **FINES** | **FINESS Array B** | **63.05** | **334** | *e*P | **P** | **15 49 45.0** | **+0.2** |
| **NOA** | **NORSAR Array B** | **67.28** | **341** | P | **P** | **15 50 12.3** | **+0.1** |
| | comp=Z,0.8nm,0.8s,baz=27,slow=5.4,SNR=3.3 | | | | | | |
| **NOA** | **NORSAR Array B** | **67.28** | **341** | P | **P** | **15 50 12.3** | **+0.1** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **68.98** | **198** | P | **P** | **15 50 21.1** | **-2.1** |
| | comp=Z,0.6nm,0.8s,baz=9.4,slow=6.7,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **68.98** | **198** | *e*P | **P** | **15 50 21.8** | **-1.4** |
| **AKASG** | **Malin Array Be** | **70.52** | **325** | P | **P** | **15 50 32.5** | **+0.2** |
| | comp=Z,0.2nm,0.3s,baz=35,slow=6.6,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **72.69** | **197** | P | **P** | **15 50 45.0** | **-0.5** |
| | comp=Z,1.0nm,0.9s,baz=6.6,slow=5.7,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **72.69** | **197** | P | **P** | **15 50 45.1** | **-0.5** |
| ASAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **TXAR** | **Lajitas Array** | **77.77** | **60** | P | **P** | **15 51 14.4** | **-0.5** |
| | comp=Z,0.5nm,0.7s,baz=296,slow=3.1,SNR=6.0 | | | | | | |

*ISCJB **24** 15:51:13.1±0.6, 21°9N±0°1×96°1E±0°1, h10km, mb3.3/4, MS2.9/1, Error ellipse: s-maj=25.5km s-min=6.9km az=41.6*

*IDC **24** 15:51:14.2±1.3, 22°01N×96°17E, h0km, mb3.5/4, mb1 3.6/5, mb1mx3.3/40, mbtmp3.4/5, ML3.7/1, MS2.9/2, Ms1 3.0/2, ms1mx2.4/31, Error ellipse: s-maj=39.6km s-min=17.0km az=66.0*

**ISC 24 15:51:15.5±0.9, 22°0N±0°2×96°2E±0°2, h10km, n14, σ0§86/14, mb3.6/4, Myanmar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **4.37** | **143** | Pn | **Pn** | **15 52 22.4** | **+0.3** |
| | 1.0nm,0.3s,baz=316,slow=13,SNR=36 | | | | | | |
| CMAR | | | | Pg | **Pg** | **15 52 38.8** | **-0.5** |
| | 7.9nm,0.3s,baz=313,slow=18,SNR=32 | | | | | | |
| CMAR | | | | Lg | Lg | 15 53 34.0 | |
| | 9.5nm,0.3s,baz=320,slow=28,SNR=11 | | | | | | |
| CMAR | | | | LR | LR | 15 54 21.0 | |
| | comp=Z,116nm,18.2s,baz=278,slow=43 | | | | | | |
| **ODAN** | **Odare** | **9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NLAI** | **Namlea** | **4.93** | **180** | P | | **Pn** | **16 14 41.8** | **+2.1** |
| **LUWI** | **Luwuk** | **5.16** | **238** | P | | **Pn** | **16 14 44.3** | **+1.5** |
| **APSI** | **Ampana** | **6.08** | **245** | P | | **Pn** | **16 14 56.7** | **+1.2** |
| **WRA** | **Warramunga Arr** | **22.66** | **162** | P | | **P** | **16 18 23.7** | **-2.8** |
| | 0.6nm,0.4s,baz=339,slow=11,SNR=9.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.08** | **166** | P | | **P** | **16 18 56.1** | **-2.6** |
| | 0.7nm,0.4s,baz=341,slow=11,SNR=22 | | | | | | | |
| ASAR | | | | PcP | | PcP | 16 22 23.3 | -2.7 |
| | 0.6nm,1.2s,baz=355,slow=2.1,SNR=3.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.43** | **326** | P | | P | 16 23 27.9 | +0.6 |
| | 0.2nm,0.3s,baz=112,slow=7.3,SNR=5.7 | | | | | | | |

*ISCJB **24** 16:44:41.3±0.6, 33.58S±0.05×71.40W±0.07, h50km±7km, mb4.0/4, Error ellipse: s-maj=12.1km s-min=4.8km az=34.1*
*GUC **24** 16:44:41.5±0.7, 33.55S×71.34W, h44km±6km, ML4.1*
*IDC **24** 16:44:41.1±0.7, 33.60S×71.67W, h47km±6km, mb3.7/4, mb1 3.8/7, mb1mx3.6/26, mbtmp3.8/7, ML3.7/3, MS1.9/1, Ms1 1.9/1, ms1mx1.8/21, Error ellipse: s-maj=20.4km s-min=12.1km az=135.0*
**ISC 24 16:44:41.5±0.7, 33.61S±0.05×71.40W±0.06, h42km±6km, n36, σ1§94/50, mb4.0/4, 7C-3D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **TACH** | **Talagante** | **0.39** | **96** | **⇑*i*P** | | **Pn** | **16 44 51.0** | **0.0** |
| **RCDM** | **Rinconada Maip** | **0.51** | **76** | **⇓*i*P** | | **Pn** | **16 44 51.9** | **-0.6** |
| RCDM | | | | *i* S | | **Sn** | **16 44 59.5** | **-0.7** |
| **SAN** | **Santiago** | **0.64** | **76** | **⇑*i*P** | | **Pn** | **16 44 53.9** | **-0.3** |
| SAN | | | | *i* S | | **Sn** | **16 45 02.5** | **-0.8** |
| **PCH** | **Pirque** | **0.74** | **91** | **⇑*i*P** | | **Pn** | **16 44 55.1** | **-0.5** |
| **FSR** | **Penalolen** | **0.74** | **80** | ***e*P** | | **Pn** | **16 44 56.4** | **+0.8** |
| FSR | | | | *i* S | | **Sn** | **16 45 06.7** | **+1.0** |
| **LACH** | **Col Las Americ** | **0.75** | **78** | ***e*P** | | **Pn** | **16 44 54.4** | **-1.3** |
| LACH | | | | *i* S | | **Sn** | **16 45 05.2** | **-0.6** |
| **CLCH** | **Cerro Calan** | **0.76** | **74** | **⇓*i*P** | | **Pn** | **16 44 55.4** | **-0.4** |
| CLCH | | | | *i* S | | **Sn** | **16 45 05.9** | **-0.2** |
| CLCH | | | | AML | | AML | 16 45 11.2 | |
| | comp=N,7μm,0.5s | | | | | | | |
| **PEL** | **Peldehue** | **0.76** | **52** | **⇑*i*P** | | **Pn** | **16 44 55.5** | **-0.4** |
| PEL | | | | *i* S | | **Sn** | **16 45 05.5** | **-0.7** |
| PEL | | | | AML | | AML | 16 45 06.3 | |
| | comp=E,44μm,0.3s | | | | | | | |
| **CHPI** | **Pichilemu** | **0.92** | **213** | **⇓*i*P** | | **Pn** | **16 44 57.7** | **-0.2** |
| CHPI | | | | *i* S | | **Sn** | **16 45 10.3** | **+0.3** |
| **YECH** | **El Yeso** | **1.10** | **93** | **⇑*i*P** | | Pn | 16 44 57.0 | -3.7 |
| YECH | | | | *i* S | | **Sn** | **16 45 12.5** | **-2.4** |
| **NICH** | **Los Niches** | **1.39** | **174** | **⇑*i*P** | | **Pn** | **16 45 05.8** | **+1.3** |
| NICH | | | | *i* S | | **Sn** | **16 45 24.5** | **+2.8** |
| **TALC** | **Talca** | **1.79** | **186** | **⇑*i*P** | | **Pn** | **16 45 11.9** | **+2.1** |
| TALC | | | | *i* S | | **Sn** | **16 45 34.7** | **+3.3** |
| **AUSP** | **Uspallata** | **2.19** | **51** | ***e*P** | | **Pn** | **16 45 17.2** | **+1.6** |
| **ARCO** | **CERRO ARCO** | **2.21** | **70** | ***e*P** | | **Pn** | **16 45 17.8** | **+2.0** |
| ARCO | | | | IAML | | | 16 45 35.2 | |
| | comp=Z,559nm,0.5s | | | | | | | |
| **AAGR** | **Agrelo** | **2.22** | **77** | ***e*P** | | **Pn** | **16 45 18.1** | **+2.2** |
| **ASAL** | **Salagasta** | **2.38** | **65** | ***e*P** | | **Pn** | **16 45 20.0** | **+1.9** |
| **RTLS** | **Leoncito** | **2.54** | **45** | ***e*P** | | **Pn** | **16 45 21.8** | **+1.5** |
| **RTCV** | **Cerro Valdivia** | **2.98** | **55** | ***e*P** | | **Pn** | **16 45 27.8** | **+1.5** |
| **CFAA** | **Coronel Fontan** | **3.34** | **54** | **P** | | **Pn** | **16 45 32.5** | **+1.3** |
| | comp=Z,1.6nm,0.3s,baz=226,slow=12,SNR=73 | | | | | | | |
| CFAA | | | | S | | **Sn** | | **16 46 15.4** | **+5.8** |
| | comp=Z,6.5nm,0.3s,baz=141,slow=15,SNR=9.2 | | | | | | | |
| CFAA | | | | LR | | LR | 16 47 15.2 | |
| | comp=Z,16nm,20.5s,baz=235,slow=44 | | | | | | | |
| **CFAA** | **Coronel Fontan** | **3.34** | **54** | ***e*P** | | **Pn** | **16 45 33.1** | **+1.9** |
| CFAA | | | | *e*S | | **Sn** | **16 46 14.8** | **+5.2** |
| **RTLL** | **Cerro Villicun** | **3.36** | **48** | ***e*P** | | **Pn** | **16 45 33.1** | **+1.5** |
| RTLL | | | | *e*S | | **Sn** | **16 46 15.0** | **+4.7** |
| **AMOG** | **MOGNA** | **3.63** | **44** | ***e*P** | | **Pn** | **16 45 36.6** | **+1.4** |
| **ACAN** | **Cantantal** | **3.79** | **70** | ***e*P** | | **Pn** | **16 45 39.4** | **+2.1** |
| **AGUA** | **GUANDACOL** | **4.81** | **32** | ***e*P** | | **Pn** | **16 45 52.5** | **+1.1** |
| **CPUP** | **Villa Florida** | **14.19** | **63** | P | | **Pn** | **16 48 01.4** | **+1.6** |
| | comp=Z,0.2nm,0.3s,baz=246,slow=17,SNR=3.0 | | | | | | | |
| **LPAZ** | **La Paz** | **17.50** | **11** | P | | **Pn** | **16 48 42.1** | **-1.0** |
| | comp=Z,0.2nm,0.3s,baz=184,slow=6.2,SNR=7.3 | | | | | | | |
| **SNAA** | **Sanae** | **51.74** | **158** | P | | **P** | **16 53 44.2** | **-0.1** |
| | comp=Z,0.7nm,0.5s,baz=285,slow=9.9,SNR=25 | | | | | | | |
| **QSPA** | **South Pole Qui** | **56.62** | **180** | P | | **P** | **16 54 20.4** | **+0.4** |
| | comp=Z,0.6nm,0.3s,baz=360,slow=0.7,SNR=13 | | | | | | | |
| QSPA | | | | pP | | **pP** | **16 54 32.6** | **+0.6** |
| | comp=Z,1.5nm,1.0s,baz=189,slow=3.5,SNR=2.7 | | | | | | | |
| **TXAR** | **Lajitas Array** | **69.66** | **330** | P | | **P** | **16 55 46.1** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=162,slow=8.3,SNR=8.6 | | | | | | | |
| TXAR | | | | pP | | **pP** | **16 55 59.1** | **+0.1** |
| | comp=Z,0.9nm,0.5s,baz=153,slow=8.3,SNR=11 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.58** | **70** | P | | **P** | **16 57 04.1** | **-1.5** |
| | comp=Z,1.7nm,0.8s,baz=255,slow=4.1,SNR=7.9 | | | | | | | |
| TORD | | | | pP | | **pP** | **16 57 18.1** | **-0.1** |
| | comp=Z,0.9nm,0.8s,baz=250,slow=5.0,SNR=4.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **121.36** | **209** | PKP | | **PKPdf** | **17 03 28.9** | **-1.8** |
| | comp=Z,0.3nm,0.4s,baz=156,slow=1.7,SNR=7.7 | | | | | | | |
| WRA | | | | pPKP | | **pPKPdf** | **17 03 42.4** | **-1.4** |
| | comp=Z,0.2nm,0.5s,baz=172,slow=1.6,SNR=2.1 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **26.31** | **269** | T | | T | 19 22 40.6 | |
| | baz=118,slow=74,SNR=17 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **26.32** | **269** | T | | T | 19 22 34.0 | |
| | baz=118,slow=74,SNR=13 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **26.32** | **269** | T | | T | 19 22 41.2 | |
| | baz=118,slow=74,SNR=14 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **153.62** | **32** | PKPbc | | **PKPbc** | **17 04 33.7** | **-1.3** |
| | comp=Z,1.4nm,0.5s,baz=297,slow=3.0,SNR=6.3 | | | | | | | |
| ZALV | | | | PKPab | | **PKPab** | **17 04 46.4** | **-1.4** |
| | comp=Z,0.8nm,0.4s,baz=297,slow=3.5,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **156.11** | **49** | PKPab | | **PKPab** | **17 04 57.1** | **-1.6** |
| | comp=Z,0.2nm,0.2s,baz=275,slow=2.8,SNR=3.9 | | | | | | | |

*ISCJB **24** 16:48:46.2±0.5, 10.53N±0.04×62.54W±0.03, h91km±6km, Error ellipse: s-maj=7.9km s-min=3.8km az=157.5*
*FUNV **24** 16:48:48.1, 10.50N×62.46W, h80km, MW3.0*
*TRN **24** 16:48:48.9, 10.54N×62.44W, h80km, MD3.3*
**ISC 24 16:48:46.2±1.3, 10.47N±0.04×62.52W±0.04, h94km±9km, n22, σ1§56/37, 4D, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **GUIV** | **Guiria** | **0.34** | **58** | **⇓***e*P** | | **Pn** | **16 49 00.3** | **0.0** |
| GUIV | | | | *e*S | | **Sn** | **16 49 08.6** | **-2.2** |
| **GUNV** | **Guanoco** | **0.52** | **234** | **⇓*i*P** | | **Pn** | **16 49 03.1** | **+1.6** |
| GUNV | | | | *e*S | | **Sn** | **16 49 13.4** | **+0.5** |
| **CRUV** | **Carupano** | **0.74** | **286** | **⇓*i*P** | | **Pn** | **16 49 03.7** | **+0.3** |
| CRUV | | | | *e*S | | **Sn** | **16 49 14.6** | **-1.7** |
| **TRN** | **Trinidad (W)** | **1.11** | **81** | ***e*P** | | **Pn** | **16 49 09.0** | **+1.6** |
| TRN | | | | *e*S | | **Sn** | **16 49 22.8** | **-0.6** |
| **TBH** | **Brigand Hill** | **1.43** | **89** | ***e*P** | | **Pn** | **16 49 11.9** | **+0.7** |
| TBH | | | | *e*S | | **Sn** | **16 49 29.8** | **-0.4** |
| **ORIV** | **Oritupano** | **1.64** | **212** | **⇓***e*P** | | **Pn** | **16 49 16.2** | **+2.2** |
| ORIV | | | | *e*S | | **Sn** | **16 49 36.5** | **+1.4** |
| **GRW** | **Mount Saint Ca** | **1.88** | **26** | ***e*P** | | **Pn** | **16 49 18.7** | **+1.6** |
| GRW | | | | *e*S | | **Sn** | **16 49 38.9** | **-1.7** |
| **BOT** | **Bacolet** | **1.90** | **68** | ***e*P** | | **Pn** | **16 49 18.9** | **+1.6** |
| BOT | | | | *e*S | | **Sn** | **16 49 39.5** | **-1.4** |
| **PCRV** | **Puerto La Cruz** | **2.11** | **262** | ***e*P** | | **Pn** | **16 49 21.1** | **+1.2** |
| PCRV | | | | *e*S | | **Sn** | **16 49 44.8** | **-1.0** |
| **TOSP** | **Speyside** | **2.11** | **67** | ***e*P** | | **Pn** | **16 49 20.8** | **+0.7** |
| TOSP | | | | *e*S | | **Sn** | **16 49 45.6** | **-0.3** |
| **PRGV** | **PARIAGUAN** | **2.70** | **231** | ***e*P** | | **Pn** | **16 49 29.3** | **+1.5** |
| **GURV** | **El Guri** | **2.75** | **192** | ***e*P** | | **Pn** | **16 49 29.5** | **+1.1** |
| **SVB** | **Belmont** | **3.05** | **24** | ***e*P** | | **Pn** | **16 49 33.6** | **+1.1** |
| SVB | | | | *e*S | | **Sn** | **16 50 07.7** | **-0.6** |
| **CUPV** | **Cœpira** | **3.25** | **263** | ***e*P** | | **Pn** | **16 49 37.2** | **+2.1** |
| CUPV | | | | *e*S | | **Sn** | **16 50 12.9** | **-0.1** |
| **BIRV** | **Birongo** | **3.69** | **270** | ***e*P** | | **Pn** | **16 49 43.1** | **+1.9** |
| BIRV | | | | *e*S | | **Sn** | **16 50 23.1** | **-0.6** |
| **MERV** | **Las Mercedes** | **3.92** | **252** | ***e*P** | | **Pn** | **16 49 45.5** | **+1.3** |
| **LUEV** | **Luepa** | **4.71** | **167** | ***e*P** | | **Pn** | **16 49 56.0** | **+0.8** |
| LUEV | | | | *e*S | | **Sn** | **16 50 45.1** | **-3.6** |
| **TURV** | **Turiamo** | **5.24** | **270** | ***e*P** | | **Pn** | **16 50 04.0** | **+1.9** |
| **BAUV** | **El Baul** | **5.65** | **255** | ***e*P** | | **Pn** | **16 50 08.4** | **+0.7** |
| BAUV | | | | *e*S | | **Sn** | **16 51 07.9** | **-3.5** |
| **TEPV** | **Terepaima** | **6.59** | **266** | ***e*P** | | **Pn** | **16 50 20.9** | **+0.4** |
| **SOCV** | **Socops** | **8.51** | **256** | ***e*P** | | **Pn** | **16 50 46.3** | **-0.4** |
| **VIGV** | **El Vigia** | **8.87** | **260** | ***e*P** | | **Pn** | **16 50 51.0** | **-0.7** |

*ISCJB **24** 16:52:35.9±0.9, 22.90S±0.08×179.74W±0.1, h526km, mb4.0/5, Error ellipse: s-maj=18.6km s-min=9.5km az=159.6*

*IDC **24** 16:52:36.0±2.5, 22.87S×179.44W, h512km±34km, mb3.5/5, mb1 3.7/6, mb1mx3.2/33, mbtmp4.3/6, Error ellipse: s-maj=32.1km s-min=22.3km az=155.0*
*AUST **24** 16:53:28.1, 24.93S×174.41E, h600km*
**ISC 24 16:52:36.8±1.0, 23.00S±0.10×179.3W±0.2, h526km, n22, σ0§88/21, mb4.2/5, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **6.36** | **169** | P | | **P** | **16 54 18.4** | **+0.9** |
| | 129nm,0.3s,baz=24,slow=22,SNR=17 | | | | | | | |
| RAO | | | | S | | **S** | **16 55 40.7** | **+0.7** |
| | 41nm,0.3s,baz=72,slow=20,SNR=4.2 | | | | | | | |
| **URZ** | **Urewera** | **15.51** | **190** | P | | **P** | **16 55 50.5** | **-1.2** |
| | 1.9nm,0.3s,baz=6.7,slow=3.2,SNR=18 | | | | | | | |
| URZ | | | | S | | **S** | **16 58 29.6** | **-2.6** |
| | 0.3nm,0.3s,baz=41,slow=23,SNR=6.9 | | | | | | | |
| **RPZ** | **Rata Peaks** | **22.13** | **199** | P | | **P** | **16 56 54.4** | **+1.3** |
| | 7.6nm,0.6s,baz=24,slow=5.8,SNR=8.3 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **32.12** | **247** | P | | **P** | **16 58 21.3** | **+0.6** |
| | baz=26,SNR=16 | | | | | | | |
| **QLP** | **Quilpie** | **33.19** | **256** | P | | **P** | **16 58 30.2** | **+0.3** |
| | baz=27,SNR=9.6 | | | | | | | |
| **TOO** | **Toolangi** | **33.45** | **236** | P | | **P** | **16 58 32.9** | **+0.9** |
| | baz=28,SNR=6.0 | | | | | | | |
| **MTSU** | **Mount Surprise** | **34.31** | **271** | P | | **P** | **16 58 40.0** | **+0.5** |
| | baz=29,SNR=13 | | | | | | | |
| **PATS** | **Pohnpei** | **35.25** | **332** | P | | P | 16 59 34.9 | +0.6 |
| | baz=35,SNR=3.4 | | | | | | | |
| **HTT** | **Hallett** | **38.00** | **245** | P | | P | 16 59 04.5 | -5.3 |
| | baz=32,SNR=4.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.78** | **260** | P | | **P** | **16 59 48.0** | **-0.2** |
| | 6.8nm,0.8s,baz=93,slow=8.0,SNR=91 | | | | | | | |
| **WRA** | **Warramunga Arr** | **43.08** | **265** | P | | **P** | **16 59 49.7** | **-0.8** |
| | 5.1nm,0.7s,baz=100,slow=8.4,SNR=82 | | | | | | | |
| **WRKA** | **Warakurna** | **47.63** | **256** | P | | **P** | **17 00 25.1** | **-0.2** |
| | baz=42,SNR=15 | | | | | | | |
| **KNRA** | **Kununurra** | **49.30** | **269** | P | | **P** | **17 00 37.6** | **-0.2** |
| | baz=44,SNR=16 | | | | | | | |
| **KLBR** | **Kellerberrin** | **55.90** | **247** | P | | **P** | **17 01 24.7** | **-0.1** |
| | baz=50,SNR=8.9 | | | | | | | |
| **MEEK** | **Meekatharra** | **55.95** | **253** | P | | **P** | **17 01 25.6** | **+0.3** |
| | baz=50,SNR=3.7 | | | | | | | |
| **BLDU** | **Ballidu** | **56.92** | **248** | P | | **P** | **17 01 31.5** | **-0.4** |
| | baz=51,SNR=8.6 | | | | | | | |
| **MORW** | **Morawa** | **57.75** | **249** | P | | **P** | **17 01 37.6** | **-0.1** |
| | baz=52,SNR=3.9 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **78.37** | **346** | P | | **P** | **17 03 42.4** | **+0.1** |
| | 2.1nm,0.7s,baz=156,slow=7.6,SNR=6.1 | | | | | | | |
| **ILAR** | **Eielson Array** | **91.02** | **13** | P | | **P** | **17 04 43.7** | **-0.5** |
| | 0.3nm,0.7s,baz=204,slow=8.6,SNR=4.4 | | | | | | | |
| **HFS** | **Hagfors** | **141.78** | **349** | PKhKP | | PKPpre | 17 11 03.2 | |
| | 1.8nm,0.7s,baz=52,slow=3.9,SNR=11 | | | | | | | |
| **AKASG** | **Malin Array Be** | **144.53** | **328** | PKP | | **PKPdf** | **17 11 12.5** | **-0.5** |
| | 0.9nm,0.4s,baz=42,slow=4.0,SNR=7.0 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **147.58** | **4** | PKPbc | | **PKPbc** | **17 11 21.2** | **-0.2** |
| | 1.6nm,0.8s,baz=347,slow=2.6,SNR=3.6 | | | | | | | |

*ISCJB **24** 17:09:03.6±0.4, 42.26N±0.03×13.23E±0.04, h64km±4km, Error ellipse: s-maj=4.9km s-min=4.1km az=149.3*
*CSEM **24** 17:09:05.2±0.1, 42.26N×13.24E, h50km±2km, ML3.2/12, Error ellipse: s-maj=3.6km s-min=3.1km az=7.0*
*LDG **24** 17:09:05.2±0.1, 43.05N×13.40E, h30km, Ml3.1/11, Error ellipse: s-maj=4.3km s-min=3.2km az=56.0*
*PRU **24** 17:09:05.6, 43.15N×13.54E, h10km*
**ISC 24 17:09:04.4±1.2, 42.97N±0.03×13.24E±0.03, h56km±7km, n99, σ1§40/127, 10C-10D, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **FDMO** | **Fiordimonte** | **0.13** | **300** | **⇓*i*Pg** | | **Pn** | **17 09 13.0** | **-0.1** |
| FDMO | | | | Sg | | **Sn** | **17 09 18.8** | **-0.5** |
| | 2μm,0.3s | | | | | | | |
| **CESI** | **CESI - Serrava** | **0.25** | **278** | **⇓*i*Pg** | | **Pn** | **17 09 14.2** | **+0.4** |
| CESI | | | | Sg | | **Sn** | **17 09 21.1** | **+0.6** |
| | 658nm,0.2s | | | | | | | |
| **OFFI** | **Offida** | **0.33** | **96** | **⇓*i*Pg** | | **Pn** | **17 09 14.7** | **+0.4** |
| OFFI | | | | Sg | | **Sn** | **17 09 22.3** | **+0.9** |
| | 1μm,0.6s | | | | | | | |
| **SMA1** | **SAN MARTINO** | **0.35** | **169** | **⇑*i*Pg** | | **Pn** | **17 09 14.3** | **-0.3** |
| SMA1 | | | | Sg | | **Sn** | **17 09 20.7** | **-1.2** |
| | 782nm,0.2s | | | | | | | |
| **LNSS** | **Leonessa** | **0.40** | **202** | **⇑*i*Pg** | | **Pn** | **17 09 15.3** | **+0.2** |
| LNSS | | | | Sg | | **Sn** | **17 09 22.5** | **-0.3** |
| | 1μm,0.2s | | | | | | | |
| **RM32** | **Poggio Cancell** | **0.40** | **175** | **⇓*i*Pg** | | **Pn** | **17 09 15.1** | **-0.1** |
| RM32 | | | | Sg | | **Sn** | **17 09 22.4** | **-0.5** |
| | 510nm,0.2s | | | | | | | |
| **RM29** | **Verrico (Monte** | **0.41** | **184** | **⇑*i*Pg** | | **Pn** | **17 09 15.4** | **+0.2** |
| RM29 | | | | Sg | | **Sn** | **17 09 22.6** | **-0.4** |
| | 1μm,0.3s | | | | | | | |
| **TERO** | **Teramo** | **0.44** | **143** | **⇑*i*Pg** | | **Pn** | **17 09 15.1** | **-0.3** |
| TERO | | | | Sg | | **Sn** | **17 09 22.8** | **-0.6** |
| | 969nm,0.3s | | | | | | | |
| **CAMP** | **Campotosto** | **0.45** | **164** | Pg | | **Pn** | **17 09 15.5** | **-0.2** |
| CAMP | | | | Sg | | **Sn** | **17 09 23.1** | **-0.7** |
| **RM33** | **Pellescritta (** | **0.46** | **183** | **⇑*i*Pg** | | **Pn** | **17 09 15.9** | **+0.2** |
| | 823nm,0.3s | | | | | | | |
| **TRTR** | **Tortoreto Alta** | **0.52** | **108** | Pg | | **Pn** | **17 09 17.2** | **+1.0** |
| **ARVD** | **Arcevia** | **0.57** | **337** | Pg | | **Pn** | **17 09 18.2** | **+1.3** |
| **CESX** | **Cesi** | **0.61** | **234** | Pg | | **Pn** | **17 09 18.4** | **+1.1** |
| | 648nm,0.3s | | | | | | | |
| **AOI** | **Ancona** | **0.64** | **24** | Pg | | **Pn** | **17 09 18.4** | **+0.8** |
| AOI | | | | Sg | | **Sn** | **17 09 28.7** | **+1.4** |
| | 397nm,0.3s | | | | | | | |
| **VCEL** | **Villa Celiera** | **0.72** | **142** | Pg | | **Pn** | **17 09 19.5** | **+0.7** |
| | 869nm,0.6s | | | | | | | |
| **SENI** | **Senigallia** | **0.73** | **359** | Pg | | **Pn** | **17 09 20.4** | **+1.6** |
| | 103nm,0.4s | | | | | | | |
| **ATVO** | **AVT- Monte Val** | **0.74** | **304** | Pg | | **Pn** | **17 09 21.2** | **+2.3** |
| | 197nm,0.4s | | | | | | | |
| **FAGN** | **Fagnano** | **0.75** | **160** | Pg | | **Pn** | **17 09 19.7** | **+0.6** |
| | 817nm,0.4s | | | | | | | |
| **PIEI** | **Pieia** | **0.77** | **318** | Pg | | **Pn** | **17 09 21.3** | **+2.0** |
| | 236nm,0.2s | | | | | | | |
| **FSSB** | **Fossombrone** | **0.80** | **335** | Pg | | **Pn** | **17 09 21.5** | **+1.9** |
| | 486nm,0.3s | | | | | | | |
| **INTR** | **Introdacqua** | **1.08** | **153** | Pg | | **Pn** | **17 09 24.2** | **+0.8** |
| | 269nm,0.9s | | | | | | | |
| **MAIM** | **Mastiano** | **2.21** | **296** | P | | **Pn** | **17 09 40.7** | **+2.0** |
| **SKDS** | **Skadanscina** | **2.63** | **12** | *i* Pn | | **Pn** | **17 09 44.6** | **+0.2** |
| | comp=Z,16nm,0.1s | | | | | | | |
| **SKDS** | **Skadanscina** | **2.63** | **12** | Pn | | **Pn** | **17 09 44.6** | **+0.2** |
| | comp=Z,16nm,0.1s | | | | | | | |
| **BOJS** | **Bojanci** | **2.92** | **29** | *i* Pn | | **Pn** | **17 09 50.0** | **+1.7** |
| BOJS | | | | *i* Sn | | **Sn** | **17 10 22.5** | **+0.5** |
| **JAVS** | **Javornik** | **2.98** | **11** | *i* Pn | | **Pn** | **17 09 49.3** | **0.0** |
| JAVS | | | | *e*Sn | | **Sn** | **17 10 23.9** | **+0.2** |
| | comp=Z,3.0nm,0.1s | | | | | | | |
| **JAVS** | **Javornik** | **2.98** | **11** | *i* Pn | | **Pn** | **17 09 49.3** | **0.0** |
| JAVS | | | | *e*Sn | | **Sn** | **17 10 24.0** | **+0.2** |
| | comp=Z,3.0nm,0.1s | | | | | | | |
| **SC2M** | **Scurtabo** | **3.05** | **299** | P | | **Pn** | **17 09 52.3** | **+2.2** |
| **VOJS** | **Vojsko** | **3.09** | **8** | *i* Pn | | **Pn** | **17 09 50.9** | **+0.1** |
| **VOJS** | **Vojsko** | **3.09** | **8** | *i* Pn | | **Pn** | **17 09 50.9** | **+0.1** |
| **PGF** | **Pioggiola** | **3.15** | **264** | *e*Pn | | **Pn** | **17 09 54.4** | **+2.8** |
| PGF | | | | *e*Sn | | **Sn** | **17 10 29.1** | **+1.0** |
| | comp=Z,7.7nm,0.5s | | | | | | | |
| **PGF** | **Pioggiola** | **3.15** | **264** | *e*Pn | | **Pn** | **17 09 54.4** | **+2.8** |
| PGF | | | | *e*Sn | | **Sn** | **17 10 29.1** | **+1.0** |
| | comp=Z,3.8nm,0.5s | | | | | | | |
| **CRNS** | **Crni Vrh** | **3.19** | **13** | *i* Pn | | **Pn** | **17 09 52.8** | **+0.7** |
| **CADS** | **Cadrg** | **3.27** | **6** | *i* Pn | | **Pn** | **17 09 53.5** | **+0.2** |
| **CADS** | **Cadrg** | **3.27** | **6** | *i* Pn | | **Pn** | **17 09 53.5** | **+0.2** |
| **PDKS** | **Podkum** | **3.33** | **22** | *i* Pn | | **Pn** | **17 09 55.7** | **+1.6** |
| PDKS | | | | *i* Sn | | **Sn** | **17 10 32.0** | **-0.4** |
| **PDKS** | **Podkum** | **3.33** | **22** | *i* Pn | | **Pn** | **17 09 55.7** | **+1.6** |
| PDKS | | | | *i* Sn | | **Sn** | **17 10 32.0** | **-0.4** |
| **OBKA** | **Obir** | **3.66** | **14** | **⇓*i*Pn** | | **Pn** | **17 09 59.0** | **+0.5** |
| **OBKA** | **Obir** | **3.66** | **14** | Pn | | **Pn** | **17 09 59.0** | **+0.5** |
| **MYKA** | **Terra Mystica** | **3.67** | **4** | **⇑*i*Pn** | | **Pn** | **17 09 59.7** | **+1.0** |
| **MYKA** | **Terra Mystica** | **3.67** | **4** | Pn | | **Pn** | **17 09 59.7** | **+1.0** |
| **ABTA** | **Abfaltersbach** | **3.81** | **352** | **⇑*i*Pn** | | **Pn** | **17 10 01.9** | **+1.3** |
| **ABTA** | **Abfaltersbach** | **3.81** | **352** | Pn | | **Pn** | **17 10 01.9** | **+1.3** |
| **KBA** | **Koelnbreinsper** | **4.11** | **1** | **⇓*i*Pn** | | **Pn** | **17 10 06.0** | **+1.3** |
| **KBA** | **Koelnbreinsper** | **4.11** | **1** | Pn | | **Pn** | **17 10 06.0** | **+1.3** |
| **SBF** | **Sospel** | **4.32** | **284** | *e*Pn | | **Pn** | **17 10 08.7** | **+1.1** |
| **SBF** | **Sospel** | **4.32** | **284** | *e*Pn | | **Pn** | **17 10 08.7** | **+1.1** |
| **FETA** | **Feichten** | **4.42** | **337** | **⇓*i*Pn** | | **Pn** | **17 10 11.4** | **+2.3** |
| **FETA** | **Feichten** | **4.42** | **337** | Pn | | **Pn** | **17 10 11.4** | **+2.3** |
| **WTTA** | **Wattenberg** | **4.44** | **346** | **⇓*i*Pn** | | **Pn** | **17 10 11.3** | **+2.0** |
| **WTTA** | **Wattenberg** | **4.44** | **346** | Pn | | **Pn** | **17 10 11.3** | **+2.0** |
| **WATA** | **Walderalm** | **4.52** | **345** | **⇑*i*Pn** | | **Pn** | **17 10 12.8** | **+2.4** |
| **WATA** | **Walderalm** | **4.52** | **345** | Pn | | **Pn** | **17 10 12.8** | **+2.4** |
| **MOTA** | **Moosalm** | **4.63** | **342** | **⇑*i*Pn** | | **Pn** | **17 10 13.5** | **+1.6** |
| **MOTA** | **Moosalm** | **4.63** | **342** | Pn | | **Pn** | **17 10 13.5** | **+1.6** |
| **CIRO** | **Champorcher** | **4.85** | **305** | P | | **Pn** | **17 10 14.0** | **-1.0** |
| **FRF** | **La Foret Royal** | **4.85** | **279** | *e*Pn | | **Pn** | **17 10 16.5** | **+1.7** |
| **FRF** | **La Foret Royal** | **4.85** | **279** | *e*Pn | | **Pn** | **17 10 16.5** | **+1.7** |
| **DAVA** | **Damuels** | **4.93** | **332** | **⇑*i*Pn** | | **Pn** | **17 10 18.3** | **+2.3** |
| **DAVA** | **Damuels** | **4.93** | **332** | Pn | | **Pn** | **17 10 18.3** | **+2.3** |
| **MOA** | **Molln** | **4.93** | **8** | **⇓*i*Pn** | | **Pn** | **17 10 16.8** | **+0.9** |
| **MOA** | **Molln** | **4.93** | **8** | Pn | | **Pn** | **17 10 16.8** | **+0.9** |
| **LMR** | **La Mourre** | **4.94** | **276** | *e*Pn | | **Pn** | **17 10 17.5** | **+1.5** |
| **LMR** | **La Mourre** | **4.94** | **276** | *e*Pn | | **Pn** | **17 10 17.5** | **+1.5** |
| **MBDF** | **Montbardon** | **5.00** | **293** | *e*Pn | | **Pn** | **17 10 17.9** | **+1.0** |
| MBDF | | | | *e*Sn | | **Sn** | **17 11 12.0** | **-1.5** |
| | comp=Z,0.9nm,0.3s | | | | | | | |
| **MBDF** | **Montbardon** | **5.00** | **293** | *e*Pn | | **Pn** | **17 10 17.9** | **+1.0** |
| MBDF | | | | *e*Sn | | **Sn** | **17 11 12.0** | **-1.5** |
| | comp=Z,0.4nm,0.3s | | | | | | | |
| **IVAS** | **Ivanjica** | **5.08** | **81** | *e*Pn | | **Pn** | **17 10 19.4** | **+1.4** |
| **CONA** | **Conrad Observa** | **5.29** | **19** | **⇓*i*Pn** | | **Pn** | **17 10 21.7** | **+0.9** |
| **CONA** | **Conrad Observa** | **5.29** | **19** | Pn | | **Pn** | **17 10 21.7** | **+0.9** |
| **LPG** | **La Plagne** | **5.30** | **301** | *e*Pn | | **Pn** | **17 10 21.8** | **+0.5** |
| LPG | | | | *e*Sn | | **Sn** | **17 11 19.1** | **-2.0** |
| | comp=Z,1.3nm,0.2s | | | | | | | |
| **LPG** | **La Plagne** | **5.30** | **301** | *e*Pn | | **Pn** | **17 10 21.8** | **+0.5** |
| LPG | | | | *e*Sn | | **Sn** | **17 11 19.1** | **-2.0** |
| | comp=Z,0.6nm,0.2s | | | | | | | |
| **LPL** | **La Plagne** | **5.32** | **301** | *e*Pn | | **Pn** | **17 10 22.1** | **+0.6** |
| LPL | | | | *e*Sn | | **Sn** | **17 11 19.5** | **-2.1** |
| | comp=Z,1.5nm,0.3s | | | | | | | |
| **LPL** | **La Plagne** | **5.32** | **301** | *e*Pn | | **Pn** | **17 10 22.1** | **+0.6** |
| LPL | | | | *e*Sn | | **Sn** | **17 11 19.5** | **-2.1** |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **5.66** | **293** | *e*Pn | | **Pn** | **17 10 26.5** | **+0.5** |
| **ORIF** | **Oris-en-Rattie** | **5.66** | **293** | *e*Pn | | **Pn** | **17 10 26.5** | **+0.5** |
| **SMRF** | **Simiane la Rot** | **5.67** | **283** | *e*Pn | | **Pn** | **17 10 26.8** | **+0.8** |
| **SMRF** | **Simiane la Rot** | **5.67** | **283** | *e*Pn | | **Pn** | **17 10 26.8** | **+0.8** |
| **SELS** | **Selova** | **5.77** | **85** | *e*Pn | | **Pn** | **17 10 27.9** | **+0.5** |
| **KHC** | **Kasperske Hory** | **6.17** | **2** | *e*PN | | **Pn** | **17 10 33.0** | **+0.2** |
| KHC | | | | *ex* | | | 17 10 42.6 | |
| KHC | | | | *e*SN | | **Sn** | **17 

*Also felt at Alta and Cora. Felt [II] at Driggs, Tetonia and Victor, Idaho. Also felt at Ashton and Blackfoot. Felt as far as Bozeman, Montana and Magna, Utah.*

**ISC 24 17:43:58.7**±1.0, **43°62**N-0°02-**110°41**W-0°03, **h1**km-7km, **n231**,σ1°**23**/234, **mb4.6**/44, **MS3.8**/19, **8C-1D, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LOHW** | **Long Hollow** | **0.14** | **267** | *e*Pg | **Pg** | **17 44 01.4** | **-0.1** |
| LOHW | | | | *e*Sg | **Sg** | **17 44 05.0** | **+1.6** |
| **MOOW** | **Moose Ponds** | **0.28** | **298** | *e*Pg | **Pg** | **17 44 04.0** | **-0.1** |
| MOOW | | | | *e*Sg | **Sg** | **17 44 08.6** | **+1.0** |
| **SNOW** | **Snow King Moun** | **0.30** | **238** | *e*Pg | **Pg** | **17 44 04.3** | **-0.1** |
| **REDW** | **Red Top Meadow** | **0.41** | **232** | *e*Pg | **Pg** | **17 44 06.6** | **-0.1** |
| REDW | | | | *e*Sg | **Sg** | **17 44 13.3** | **+1.3** |
| **TPAW** | **Teton Pass** | **0.41** | **252** | *e*Pg | **Pg** | **17 44 06.2** | **-0.5** |
| **IMW** | **Indian Meadow** | **0.47** | **306** | *e*Pg | **Pg** | **17 44 07.5** | **-0.3** |
| IMW | | | | *e*Sg | **Sg** | **17 44 13.9** | **-0.1** |
| **FLWY** | **Flagg Ranch** | **0.51** | **336** | *e*Pg | **Pg** | **17 44 08.6** | **0.0** |
| FLWY | | | | *e*Sg | **Sg** | **17 44 14.9** | **-0.2** |
| **H17A** | **Grant Village** | **0.79** | **351** | P | **Pg** | **17 44 13.7** | **-0.1** |
| | baz=0.8 | | | | | | |
| H17A | | | | S | **Sg** | **17 44 24.0** | **0.0** |
| | baz=0.8 | | | | | | |
| **H17A** | **Grant Village** | **0.79** | **351** | *e*Pg | **Pg** | **17 44 13.8** | **0.0** |
| H17A | | | | *e*Sg | **Sg** | **17 44 24.3** | **+0.3** |
| **YFT** | **Old Faithful** | **0.89** | **340** | *e*Pg | **Pg** | **17 44 15.9** | **+0.2** |
| YFT | | | | *e*Sg | **Sb** | **17 44 28.8** | **-0.8** |
| **LKWY** | **Lake** | **0.95** | **0** | *e*P | **Pg** | **17 44 17.0** | **+0.1** |
| LKWY | | | | *e* | | 17 44 30.1 | |
| **LKWY** | **Lake** | **0.95** | **0** | *e*Pg | **Pg** | **17 44 17.0** | **+0.1** |
| LKWY | | | | *e*Sg | **Sg** | **17 44 30.1** | **+0.9** |
| **AHID** | **Auburn Hatcher** | **0.99** | **211** | *e*Pg | **Pg** | **17 44 17.0** | **-0.7** |
| AHID | | | | *e*Sg | **Sg** | **17 44 31.0** | **+0.4** |
| **BW06** | **Boulder Array** | **1.05** | **144** | *e*Pg | **Pg** | **17 44 17.8** | **-1.2** |
| BW06 | | | | *e*Sg | **Sg** | **17 44 32.3** | **-0.3** |
| **YNR** | **Norris Junctio** | **1.11** | **350** | *e*Pg | **Pb** | **17 44 20.2** | **-0.8** |
| **YMR** | **Madison River** | **1.12** | **339** | *e*Pg | **Pb** | **17 44 19.9** | **-1.2** |
| YMR | | | | *e*Sg | **Sg** | **17 44 36.2** | **+1.3** |
| **QLMT** | **Earthquake Lak** | **1.42** | **329** | *e*Pn | **Pn** | **17 44 24.5** | **-1.4** |
| **RLMT** | **Red Lodge** | **1.71** | **28** | P | **Pn** | **17 44 29.8** | **-0.1** |
| | baz=1.7 | | | | | | |
| RLMT | | | | S | **Sn** | **17 44 51.9** | **-0.7** |
| | baz=1.7 | | | | | | |
| **RLMT** | **Red Lodge** | **1.71** | **28** | *e*Pn | **Pn** | **17 44 29.6** | **-0.3** |
| **MCMT** | **McKenzie Canyo** | **2.13** | **305** | *e*Pn | **Pn** | **17 44 36.2** | **+0.5** |
| **HWUT** | **Hardware Ranch** | **2.19** | **203** | *e*Pn | **Pn** | **17 44 36.4** | **0.0** |
| HWUT | | | | *e*Sb | **Sb** | **17 45 07.1** | **+0.2** |
| **BOZ** | **Bozeman (W)** | **2.21** | **337** | *e*P | **Pn** | **17 44 36.8** | **+0.1** |
| BOZ | | | | *e* | | 17 45 05.4 | |
| **BOZ** | **Bozeman (W)** | **2.21** | **337** | P | **Pn** | **17 44 36.8** | **+0.1** |
| | baz=2.2 | | | | | | |
| BOZ | | | | S | **Sb** | **17 45 05.4** | **-2.1** |
| | baz=2.2 | | | | | | |
| **BOZ** | **Bozeman (W)** | **2.21** | **337** | *e*Pn | **Pn** | **17 44 36.8** | **+0.1** |
| BOZ | | | | *e*Sn | **Sb** | **17 45 05.4** | **-2.1** |
| **GCMT** | **Greycliff** | **2.23** | **13** | *e*Pn | **Pn** | **17 44 37.5** | **+0.5** |
| GCMT | | | | *e*Sn | **Sn** | **17 45 04.2** | **-1.2** |
| **DLMT** | **Dillon** | **2.34** | **319** | *e*Pn | **Pb** | **17 44 40.1** | **-1.7** |
| DLMT | | | | *e*Sn | **Sn** | **17 45 07.9** | **-0.2** |
| **TCUT** | **Toone Canyon** | **2.61** | **197** | *e*Pn | **Pb** | **17 44 44.1** | **-2.3** |
| TCUT | | | | *e*Sn | **Sn** | **17 45 13.5** | **-1.2** |
| **LRM** | **Limekiln Ridge** | **2.64** | **327** | *e*Pn | **Pn** | **17 44 43.2** | **+0.4** |
| **SPUT** | **South Promonto** | **2.76** | **214** | *e*Pn | **Pn** | **17 44 44.1** | **-0.1** |
| SPUT | | | | *e*Sn | **Sn** | **17 45 18.4** | **0.0** |
| **HLID** | **Hailey** | **2.91** | **270** | P | **Pn** | **17 44 46.6** | **+0.2** |
| | baz=3.0 | | | | | | |
| **HLID** | **Hailey** | **2.91** | **270** | *e*Pn | **Pn** | **17 44 46.5** | **+0.2** |
| **K22A** | **Casper** | **3.00** | **107** | P | **Pn** | **17 44 49.0** | **+1.4** |
| | baz=2.9 | | | | | | |
| K22A | | | | Sb | **Sb** | **17 45 29.9** | **-0.5** |
| | baz=2.9 | | | | | | |
| **K22A** | **Casper** | **3.00** | **107** | *e*Pn | **Pn** | **17 44 48.8** | **+1.1** |
| **CTU** | **Camp Tracy** | **3.09** | **199** | *e*Pn | **Pn** | **17 44 49.5** | **+0.7** |
| **HRY** | **Holter Researc** | **3.25** | **342** | *e*Pn | **Pn** | **17 44 51.7** | **+0.7** |
| **O16A** | **Springville** | **3.51** | **194** | *e*Pn | Pg | 17 45 12.2 | +6.2 |
| **O20A** | **White River Ci** | **3.84** | **154** | P | **Pn** | **17 45 00.1** | **+1.0** |
| | baz=3.8 | | | | | | |
| O20A | | | | Sb | **Sb** | **17 45 57.2** | **+2.8** |
| | baz=3.8 | | | | | | |
| **O20A** | **White River Ci** | **3.84** | **154** | *e*Pn | **Pn** | **17 45 00.4** | **+1.2** |
| **CHMT** | **Chamberlain Mo** | **3.86** | **330** | *e*Pn | **Pn** | **17 44 59.8** | **+0.4** |
| **DUG** | **Dugway** | **3.86** | **208** | *e*P | **Pn** | **17 44 59.5** | **+0.1** |
| **DUG** | **Dugway** | **3.86** | **208** | P | **Pn** | **17 44 59.6** | **+0.1** |
| | baz=3.9 | | | | | | |
| **DUG** | **Dugway** | **3.86** | **208** | *e*Pn | **Pn** | **17 44 59.5** | **+0.1** |
| **NLU** | **North Lily Min** | **3.87** | **199** | *e*Pn | **Pn** | **17 44 59.8** | **+0.2** |
| **MFID** | **Camas Ranch** | **3.95** | **269** | *e*Pn | **Pn** | **17 45 00.9** | **+0.3** |
| **P18A** | **Preston Nutter** | **3.99** | **178** | *e*Pn | **Pn** | **17 45 03.1** | **+1.8** |
| **MSO** | **Missoula** | **4.07** | **323** | P | **Pn** | **17 45 03.9** | **+1.7** |
| | baz=4.1 | | | | | | |
| MSO | | | | Sb | **Sb** | **17 46 04.3** | **+3.4** |
| | baz=4.1 | | | | | | |
| **MSO** | **Missoula** | **4.07** | **323** | *e*Pn | **Pn** | **17 45 04.2** | **+2.0** |
| **P17A** | **Butcher Ranch,** | **4.15** | **184** | *e*Pn | **Pn** | **17 45 04.6** | **+1.2** |
| **SLMT** | **Seeley Lake** | **4.22** | **330** | *e*Pn | **Pn** | **17 45 04.8** | **+0.4** |
| **LAO** | **LASA Array** | **4.26** | **43** | P | **Pn** | **17 45 05.1** | **+0.3** |
| | baz=4.2 | | | | | | |
| LAO | | | | Sb | **Sb** | **17 46 08.1** | **+1.6** |
| | baz=4.2 | | | | | | |
| **LAO** | **LASA Array** | **4.26** | **43** | *e*Pn | **Pn** | **17 45 05.6** | **+0.7** |
| **N23A** | **Red Feather La** | **4.29** | **128** | Sb | **Sb** | **17 46 08.2** | **+0.8** |
| | baz=4.2 | | | | | | |
| **PHWY** | **Pilot Hill** | **4.33** | **121** | *e*Pn | **Pn** | **17 45 07.2** | **+1.2** |
| **TMUT** | **Trail Mountain** | **4.36** | **188** | *e*Pn | **Pn** | **17 45 07.8** | **+1.4** |
| **EGMT** | **Eagleton** | **4.43** | **6** | *e*Pn | **Pn** | **17 45 08.2** | **+1.1** |
| **SRU** | **San Rafael** | **4.50** | **181** | *e*P | **Pn** | **17 45 09.5** | **+1.2** |
| **SRU** | **San Rafael** | **4.50** | **181** | *e*Pn | **Pn** | **17 45 09.5** | **+1.2** |
| **ELK** | **Elko** | **4.60** | **233** | *e*P | **Pn** | **17 45 10.6** | **+1.0** |
| ELK | | | | *e* | | 17 46 02.9 | |
| **ELK** | **Elko** | **4.60** | **233** | *e*Pn | **Pn** | **17 45 10.6** | **+1.0** |
| ELK | | | | *e*Sn | **Sn** | **17 46 02.9** | **-0.8** |
| **RSSD** | **Black Hills** | **4.63** | **82** | *e*P | **Pn** | **17 45 10.6** | **+0.5** |
| **RSSD** | **Black Hills** | **4.63** | **82** | *e*Pn | **Pn** | **17 45 10.6** | **+0.5** |
| **SWMT** | **Swartz Lake** | **4.64** | **328** | *e*Pn | **Pn** | **17 45 11.5** | **+1.5** |
| **YBMT** | **Yellow Bay** | **4.94** | **331** | *e*Pn | **Pn** | **17 45 15.3** | **+1.1** |
| YBMT | | | | *e*Sn | **Sn** | **17 46 11.4** | **-0.5** |
| **JTMT** | **Jette** | **4.94** | **328** | *e*Pn | **Pn** | **17 45 16.3** | **+2.1** |
| **SMCO** | **Snowmass** | **5.13** | **149** | *e*Pn | **Pn** | **17 45 17.9** | **+0.8** |
| | 115nm,0.9s | | | | | | |
| **BLMT** | **Blacktail Moun** | **5.19** | **329** | *e*Pn | Pn | 17 45 20.1 | +2.4 |
| **BSMT** | **Bassoo Peak** | **5.22** | **326** | *e*Pn | **Pn** | **17 45 19.6** | **+1.4** |
| | 5.7nm,0.7s | | | | | | |
| **ISCO** | **Idaho Springs** | **5.24** | **135** | *e*P | **Pn** | **17 45 19.4** | **+0.9** |
| **ISCO** | **Idaho Springs** | **5.24** | **135** | *e*Pn | **Pn** | **17 45 19.4** | **+0.9** |
| **MSU** | **Marysvale** | **5.27** | **195** | P | **Pn** | **17 45 19.0** | **+0.1** |
| **MSU** | **Marysvale** | **5.27** | **195** | Pn | **Pn** | **17 45 19.0** | **+0.1** |
| | 0.2nm,0.7s | | | | | | |
| **PV04** | **Paradox Valley** | **5.34** | **167** | *e*Pn | **Pn** | **17 45 20.5** | **+0.7** |
| **PV01** | **Paradox Valley** | **5.65** | **165** | *e*Pn | **Pn** | **17 45 24.6** | **+0.4** |
| | 25nm,0.4s | | | | | | |
| **J08A** | **Circle Bar Ran** | **5.87** | **270** | *e*Pn | Pn | 17 45 31.1 | +4.1 |
| **WALA** | **Waterton Lakes** | **5.96** | **337** | *e*Pn | **Pn** | **17 45 27.9** | **-0.2** |
| | 61nm,0.7s | | | | | | |
| **BMN** | **Battle Mountai** | **5.99** | **240** | *e*P | **Pn** | **17 45 30.6** | **+1.9** |
| **BMN** | **Battle Mountai** | **5.99** | **240** | *e*Pn | **Pn** | **17 45 30.6** | **+1.9** |
| **WVOR** | **Wild Horse Val** | **6.15** | **262** | P | **Pn** | **17 45 29.0** | **-1.8** |
| WVOR | | | | pmax | pmax | | |
| | comp=Z,302nm,1.0s | | | | | | |
| **WVOR** | **Wild Horse Val** | **6.15** | **262** | Pn | **Pn** | **17 45 29.0** | **-1.8** |
| | comp=Z,302nm,1.0s | | | | | | |
| **G08A** | **Pilot Rock** | **6.34** | **288** | *e*Pn | Pn | 17 45 37.2 | +3.7 |
| **CCUT** | **Cedar City** | **6.46** | **201** | Pn | **Pn** | **17 45 37.4** | **+2.1** |
| | comp=Z,37nm,0.8s | | | | | | |
| **DGMT** | **Dagmar** | **6.50** | **40** | *e*Pn | **Pn** | **17 45 36.7** | **+1.2** |
| **R11A** | **Troy Canyon, C** | **6.56** | **218** | *e*Pn | Pn | 17 45 39.1 | +2.6 |
| **MVCO** | **Mesa Verde** | **6.56** | **167** | *e*Pn | **Pn** | **17 45 36.8** | **+0.2** |
| **I07A** | **Izee** | **6.59** | **277** | *e*Pn | Pn | 17 45 42.1 | +5.2 |
| **NEW** | **Newport** | **6.59** | **317** | Pn | **Pn** | **17 45 38.9** | **+2.1** |
| | comp=Z,5.6nm,0.3s,baz=127,slow=12,SNR=55 | | | | | | |
| NEW | | | | Sn | **Sn** | **17 46 50.9** | **-1.8** |
| | comp=Z,3.4nm,0.3s,baz=121,slow=15,SNR=3.1 | | | | | | |
| NEW | | | | Lg | Lg | 17 47 22.4 | |
| | comp=Z,28nm,0.3s,baz=227,slow=23,SNR=15 | | | | | | |
| **NEW** | **Newport** | **6.59** | **317** | P | **Pn** | **17 45 38.9** | **+2.1** |
| NEW | | | | | | 17 46 50.9 | |
| NEW | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.3s | | | | | | |
| NEW | | | | smax | smax | | |
| | comp=N,3.0nm,0.3s | | | | | | |
| **NEW** | **Newport** | **6.59** | **317** | *e*Pn | **Pn** | **17 45 38.5** | **+1.7** |
| NEW | | | | Sn | **Sn** | **17 46 50.9** | **-1.8** |
| NEW | | | | Lg | Lg | 17 47 22.4 | |
| **OGNE** | **Ogallala** | **6.76** | **110** | *e*Pn | **Pn** | **17 45 39.8** | **+0.6** |
| **D08A** | **Wollman Farm,** | **6.91** | **303** | *e*Pn | Pn | 17 45 43.8 | +2.6 |
| **SDCO** | **Great Sand Dun** | **6.95** | **146** | *e*Pn | **Pn** | **17 45 42.4** | **+0.4** |
| | comp=N,64nm,0.3s | | | | | | |
| **HAWA** | **Hanford** | **7.04** | **296** | *e*Pn | Pn | 17 45 46.1 | +3.2 |
| | comp=N,47nm,0.8s | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **7.45** | **126** | *e*Pn | **Pn** | **17 45 48.2** | **-0.5** |
| | comp=N,225nm,0.6s | | | | | | |
| **MOD** | **Modoc** | **7.48** | **260** | *e*Pn | **Pn** | **17 45 48.9** | **-0.2** |
| | comp=N,136nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **7.90** | **232** | Pn | Pn | 17 45 58.5 | +3.5 |
| | comp=N,1.1nm,0.3s,baz=49,slow=10.0,SNR=27 | | | | | | |
| NVAR | | | | Pg | Pg | 17 46 23.7 | -6.4 |
| | comp=N,3.7nm,0.3s,baz=45,slow=18,SNR=13 | | | | | | |
| NVAR | | | | Lg | Lg | 17 48 02.9 | |
| | baz=45,slow=27,SNR=2.7 | | | | | | |
| NVAR | | | | LR | LR | 17 49 32.6 | |
| | comp=N,390nm,18.8s,baz=78,slow=42 | | | | | | |
| **SHPR** | **Sheep Range** | **7.98** | **209** | *e*Pn | Pn | 17 45 59.1 | +3.1 |
| **WUAZ** | **Wupatki** | **8.13** | **186** | *e*Pn | **Pn** | **17 45 58.6** | **+0.6** |
| **W18A** | **Petrified Fore** | **8.51** | **176** | *e*Pn | **Pn** | **17 46 02.9** | **-0.3** |
| | comp=N,97nm,0.8s | | | | | | |
| **LON** | **Longmire** | **8.64** | **295** | *e*P | Pn | 17 46 08.9 | +4.0 |
| **LON** | **Longmire** | **8.64** | **295** | *e*Pn | Pn | 17 46 08.9 | +4.0 |
| **MDND** | **Maddock** | **8.66** | **57** | *e*Pn | Pn | 17 46 09.9 | +4.7 |
| **D05A** | **Enumclaw** | **8.89** | **298** | *e*Pn | Pn | 17 46 13.3 | +5.0 |
| D05A | | | | *e*Sg | **Sg** | **17 48 43.9** | **-0.3** |
| **ANMO** | **Albuquerque** | **9.19** | **159** | Pn | **Pn** | **17 46 13.8** | **+1.3** |
| | comp=N,0.4nm,0.3s,baz=336,slow=11,SNR=12 | | | | | | |
| ANMO | | | | Pg | | 17 46 49.0 | |
| | comp=N,0.6nm,0.3s,baz=344,slow=9.4,SNR=4.5 | | | | | | |
| ANMO | | | | Lg | Lg | 17 48 45.2 | |
| | comp=N,2.7nm,0.3s,baz=256,slow=23,SNR=6.9 | | | | | | |
| ANMO | | | | LR | LR | 17 50 12.9 | |
| | comp=N,468nm,18.6s,baz=339,slow=41 | | | | | | |
| **ANMO** | **Albuquerque** | **9.19** | **159** | *e*P | **Pn** | **17 46 14.4** | **+1.8** |
| **ANMO** | **Albuquerque** | **9.19** | **159** | *e*Pn | **Pn** | **17 46 14.4** | **+1.8** |
| ANMO | | | | Lg | Lg | 17 48 45.2 | |
| **YBH** | **Yreka Blue Hor** | **9.26** | **262** | Pn | Pn | 17 46 17.8 | +4.4 |
| | comp=N,0.3nm,0.3s,baz=56,slow=18,SNR=1.9 | | | | | | |
| YBH | | | | Pg | | 17 46 46.0 | |
| | comp=N,0.2nm,0.3s,baz=81,slow=14,SNR=9.6 | | | | | | |
| YBH | | | | Lg | Lg | 17 49 00.8 | |
| | comp=N,0.2nm,0.3s,baz=94,slow=18,SNR=2.3 | | | | | | |
| YBH | | | | LR | LR | 17 50 04.8 | |
| | comp=N,474nm,21.4s,baz=75,slow=39 | | | | | | |
| **BGNE** | **Belgrade** | **9.32** | **100** | *e*Pn | **Pn** | **17 46 16.3** | **+2.1** |
| **CBKS** | **Cedar Bluff** | **9.36** | **117** | *e*P | **Pn** | **17 46 14.5** | **-0.3** |
| **CBKS** | **Cedar Bluff** | **9.36** | **117** | *e*Pn | **Pn** | **17 46 14.5** | **-0.3** |
| **CMB** | **Columbia Colle** | **9.39** | **237** | P | **Pn** | **17 46 16.2** | **+0.9** |
| CMB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **CMB** | **Columbia Colle** | **9.39** | **237** | Pn | **Pn** | **17 46 16.2** | **+0.9** |
| | comp=Z,5.7nm,0.9s | | | | | | |
| **WDC** | **Whiskeytown Da** | **9.52** | **256** | P | **Pn** | **17 46 17.4** | **+0.5** |
| WDC | | | | pmax | pmax | | |
| | comp=Z,58nm,1.4s | | | | | | |
| **WDC** | **Whiskeytown Da** | **9.52** | **256** | Pn | **Pn** | **17 46 17.4** | **+0.5** |
| | comp=Z,58nm,1.4s | | | | | | |
| **EDM** | **Edmonton** | **9.80** | **350** | *e*P | **Pn** | **17 46 20.4** | **-0.4** |
| **EDM** | **Edmonton** | **9.80** | **350** | *e*Pn | **Pn** | **17 46 20.4** | **-0.4** |
| **ECSD** | **EROS Data Cent** | **10.00** | **85** | *e*Pn | **Pn** | **17 46 22.9** | **-0.5** |
| **AMTX** | **Amarillo** | **11.03** | **139** | *e*Pn | Pn | 17 46 41.4 | +3.6 |
| **PFO** | **Pinyon Flat Ob** | **11.05** | **207** | Pn | Pn | 17 46 43.0 | +5.0 |
| | comp=Z,0.1nm,0.3s,baz=16,slow=4.5,SNR=3.8 | | | | | | |
| PFO | | | | Lg | Lg | 17 49 47.1 | |
| | comp=Z,0.1nm,0.3s,baz=64,slow=18,SNR=3.0 | | | | | | |
| PFO | | | | LR | LR | 17 51 53.4 | |
| | comp=Z,128nm,20.0s,baz=354,slow=43 | | | | | | |
| **MWC** | **Mount Wilson** | **11.11** | **215** | *e*P | **Pn** | **17 46 40.9** | **+2.0** |
| MWC | | | | pmax | pmax | | |
| | comp=Z,84nm,1.7s | | | | | | |
| **MWC** | **Mount Wilson** | **11.11** | **215** | *e*Pn | **Pn** | **17 46 40.9** | **+2.0** |
| | comp=Z,84nm,1.7s | | | | | | |
| **AGMN** | **Agassiz Nation** | **11.15** | **60** | *e*Pn | **Pn** | **17 46 40.0** | **+0.8** |
| **121A** | **Cookes Peak, D** | **11.26** | **169** | Pn | **Pn** | **17 46 40.6** | **-0.4** |
| | comp=Z,47nm,0.9s | | | | | | |
| **KSU1** | **Kansas State U** | **11.31** | **109** | *e*Pn | **Pn** | **17 46 42.9** | **+1.5** |
| **ULM** | **Lac du Bonnet** | **11.93** | **51** | Pn | **Pn** | **17 46 47.5** | **-2.4** |
| | comp=Z,3.9nm,0.3s,baz=242,slow=11,SNR=18 | | | | | | |
| ULM | | | | Lg | Lg | 17 50 02.1 | |
| | comp=Z,2.5nm,0.3s,baz=335,slow=14,SNR=3.1 | | | | | | |
| ULM | | | | LR | LR | 17 51 19.9 | |
| | comp=Z,210nm,20.0s,baz=256,slow=37 | | | | | | |
| **U34A** | **Anderson Ranch** | **12.19** | **122** | *e*Pn | **Pn** | **17 46 52.4** | **-1.1** |
| | comp=Z,68nm,0.6s | | | | | | |
| **FFC** | **Flin Flon** | **12.40** | **23** | *e*P | Pn | 17 46 53.1 | -3.1 |
| **FFC** | **Flin Flon** | **12.40** | **23** | *e*Pn | Pn | 17 46 53.0 | -3.1 |
| **V34A** | **Guthrie** | **12.60** | **124** | *e*Pn | **Pn** | **17 46 58.8** | **-0.2** |
| | comp=Z,48nm,0.6s | | | | | | |
| **WMOK** | **Wichita Mounta** | **12.64** | **131** | *e*P | **Pn** | **17 46 58.6** | **-1.0** |
| WMOK | | | | pmax | pmax | | |
| | comp=Z,167nm,0.5s | | | | | | |
| **WMOK** | **Wichita Mounta** | **12.64** | **131** | *e*Pn | **Pn** | **17 46 58.6** | **-1.0** |
| | comp=Z,167nm,0.5s | | | | | | |
| **SPMN** | **St. Paul** | **12.69** | **77** | *e*Pn | **Pn** | **17 47 00.7** | **+0.4** |
| **SCIA** | **State Center** | **12.75** | **92** | *e*Pn | **Pn** | **17 47 00.5** | **-0.7** |
| **W34A** | **Bridge Creek,** | **12.85** | **126** | *e*Pn | **Pn** | **17 47 02.2** | **-0.4** |
| | comp=Z,36nm,0.6s | | | | | | |
| **TUL1** | **Tulsa** | **13.61** | **120** | *e*Pn | **Pn** | **17 47 11.1** | **-1.9** |
| **EYMN** | **Ely** | **13.88** | **65** | *e*Pn | Pn | 17 47 12.9 | -3.6 |
| **BBB** | **Bella Bella** | **14.61** | **312** | LR | LR | 17 53 04.6 | |
| | comp=Z,412nm,21.4s,baz=117,slow=37 | | | | | | |
| **JFWS** | **Jewell Farm** | **14.71** | **86** | *e*P | **Pn** | **17 47 29.0** | **+1.1** |
| **JFWS** | **Jewell Farm** | **14.71** | **86** | *e*Pn | **Pn** | **17 47 29.0** | **+1.1** |
| **TXAR** | **Lajitas Array** | **15.24** | **157** | Pn | **Pn** | **17 47 35.3** | **+0.1** |
| | comp=Z,0.1nm,0.3s,baz=342,slow=10,SNR=9.1 | | | | | | |
| TXAR | | | | Lg | Lg | 17 52 06.9 | |
| | comp=Z,0.1nm,0.3s,baz=354,slow=22,SNR=3.8 | | | | | | |
| TXAR | | | | LR | LR | 17 53 58.5 | |
| | comp=Z,297nm,19.4s,baz=0.0,slow=40 | | | | | | |
| **COWI** | **Conover** | **15.28** | **73** | *e*Pn | **Pn** | **17 47 33.9** | **-1.7** |
| | comp=Z,15nm,0.6s | | | | | | |
| **WHTX** | **Lake Whitney** | **15.45** | **134** | *e*Pn | **P** | **17 47 40.0** | **-2.6** |
| | comp=Z,32nm,1.1s | | | | | | |
| **CCM** | **Catedral Cave** | **15.52** | **104** | *e*P | **Pn** | **17 47 36.9** | **-1.9** |
| **CCM** | **Cathedral Cave** | **15.52** | **104** | *e*Pn | **Pn** | **17 47 36.9** | **-1.9** |
| **JCT** | **Junction City** | **15.59** | **144** | *e*P | **Pn** | **17 47 40.8** | **+1.1** |
| JCT | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **15.59** | **144** | *e*Pn | **Pn** | **17 47 40.8** | **+1.1** |
| | comp=Z,11nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **15.88** | **119** | *e*P | **Pn** | **17 47 41.2** | **-2.3** |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **15.88** | **119** | *e*Pn | **Pn** | **17 47 41.1** | **-2.3** |
| | comp=Z,11nm,0.8s | | | | | | |
| **HDIL** | **Hopedale** | **15.97** | **94** | *e*Pn | **P** | **17 47 46.0** | **-2.2** |
| | comp=Z,40nm,0.6s | | | | | | |
| **PBMO** | **Poplar Bluff** | **16.70** | **107** | *e*Pn | **Pn** | **17 47 52.8** | **-1.2** |
| | comp=Z,19nm,0.9s | | | | | | |
| **SIUC** | **Southern Illin** | **17.11** | **103** | *e*Pn | **Pn** | **17 47 57.4** | **-1.6** |
| | comp=Z,22nm,0.6s | | | | | | |
| **OLIL** | **Olney** | **17.47** | **99** | *e*Pn | **P** | **17 48 04.9** | **0.0** |
| | comp=Z,33nm,0.8s | | | | | | |
| **SFIN** | **Scher Farm** | **17.61** | **93** | *e*Pn | **P** | **17 48 06.4** | **-0.1** |
| | comp=Z,26nm,0.9s | | | | | | |
| **HKT** | **Hockley** | **17.92** | **135** | *e*P | **P** | **17 48 13.1** | **+3.3** |
| HKT | | | | pmax | pmax | | |
| | comp=Z,18nm,1.2s | | | | | | |
| **HKT** | **Hockley** | **17.92** | **135** | *e*P | **P** | **17 48 13.1** | **+3.3** |
| | comp=Z,18nm,1.2s | | | | | | |
| **BLO** | **Bloomington** | **18.44** | **96** | *e*P | **Pn** | **17 48 17.8** | **+2.2** |
| BLO | | | | pmax | pmax | | |
| | comp=Z,27nm,0.7s | | | | | | |
| **BLO** | **Bloomington** | **18.44** | **96** | *e*Pn | **Pn** | **17 48 17.8** | **+2.2** |
| | comp=Z,27nm,0.7s | | | | | | |
| **WVT** | **Waverly** | **18.84** | **106** | *e*P | **Pn** | **17 48 19.3** | **-1.1** |
| WVT | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| **WVT** | **Waverly** | **18.84** | **106** | *e*Pn | **Pn** | **17 48 19.3** | **-1.1** |
| | comp=Z,21nm,0.9s | | | | | | |
| **WCI** | **Wyandotte Cave** | **18.97** | **98** | *e*P | **Pn** | **17 48 20.7** | **-1.4** |
| WCI | | | | pmax | pmax | | |
| | comp=Z,69nm,0.6s | | | | | | |
| **WCI** | **Wyandotte Cave** | **18.97** | **98** | *e*P | **Pn** | **17 48 20.6** | **-1.4** |
| | comp=Z,69nm,0.6s | | | | | | |
| **YKA** | **Yellowknife Ar** | **19.07** | **354** | P | **Pn** | **17 48 21.9** | **-1.1** |
| | comp=Z,0.9nm,0.3s,baz=165,slow=11,SNR=16 | | | | | | |
| **DLBC** | **Dease Lake** | **19.18** | **327** | P | **Pn** | **17 48 26.6** | **+2.0** |
| | comp=Z,0.5nm,0.3s,baz=128,slow=9.3,SNR=25 | | | | | | |
| DLBC | | | | LR | LR | 17 55 00.9 | |
| | comp=Z,176nm,21.8s,baz=168,slow=34 | | | | | | |
| **DLBC** | **Dease Lake** | **19.18** | **327** | *e*P | **Pn** | **17 48 24.5** | **0.0** |
| | comp=Z,96nm,1.6s | | | | | | |
| **LPIG** | **La Paz** | **19.47** | **180** | LR | LR | 17 56 22.7 | |
| | comp=Z,130nm,19.3s,baz=19,slow=38 | | | | | | |
| **AAM** | **Ann Arbor** | **19.60** | **85** | *e*P | **P** | **17 48 27.0** | **-1.2** |
| AAM | | | | pmax | pmax | | |
| | comp=Z,31nm,0.9s | | | | | | |
| **AAM** | **Ann Arbor** | **19.60** | **85** | *e*Pn | **P** | **17 48 27.0** | **-1.2** |
| | comp=Z,31nm,0.9s | | | | | | |
| **SWET** | **Sewanee** | **20.63** | **106** | *e*P | **P** | **17 48 39.0** | **-0.6** |
| | comp=Z,8.1nm,0.5s | | | | | | |
| **ACSO** | **Alum Creek Sta** | **20.65** | **90** | *e*P | **P** | **17 48 38.8** | **-1.0** |
| | comp=Z,19nm,0.6s | | | | | | |
| **LRAL** | **Lakeview Retre** | **21.12** | **112** | *e*P | **P** | **17 48 44.5** | **-0.4** |
| | comp=Z,12nm,0.6s | | | | | | |
| **TZTN** | **Tazewell** | **21.67** | **100** | P | **P** | **17 48 50.1** | **-0.7** |
| | comp=Z,38nm,1.3s | | | | | | |
| **TKL** | **Tuckaleechee C** | **21.93** | **102** | P | **P** | **17 48 52.6** | **-1.0** |
| | comp=Z,4.0nm,0.5s,baz=267,slow=7.0,SNR=7.7 | | | | | | |
| TKL | | | | Lg | Lg | 17 55 31.1 | |
| | comp=Z,12nm,0.9s,baz=20,slow=7.3,SNR=5.6 | | | | | | |
| TKL | | | | LR | LR | 17 58 11.4 | |
| | comp=Z,147nm,19.8s,baz=317,slow=39 | | | | | | |
| **ERPA** | **Erie** | **22.29** | **83** | *e*P | **P** | **17 48 57.6** | **+0.3** |
| | comp=Z,30nm,0.8s | | | | | | |
| **SADO** | **Sadowa** | **22.38** | **76** | P | **P** | **17 48 58.3** | **0.0** |
| | comp=Z,3.1nm,0.5s,baz=277,slow=12,SNR=3.7 | | | | | | |
| SADO | | | | Lg | Lg | 17 55 42.9 | |
| | comp=Z,10nm,0.9s,baz=92,slow=14,SNR=4.3 | | | | | | |
| SADO | | | | LR | LR | 17 57 57.6 | |
| | comp=Z,173nm,21.0s,baz=326,slow=38 | | | | | | |
| **GOGA** | **Godfrey** | **23.32** | **107** | *e*P | **P** | **17 49 07.7** | **-0.6** |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| **GOGA** | **Godfrey** | **23.32** | **107** | *e*P | **P** | **17 49 07.7** | **-0.6** |
| | comp=Z,20nm,1.0s | | | | | | |
| **BLA** | **Blacksburg** | **23.63** | **95** | *e*P | **P** | **17 49 11.0** | **-0.4** |
| BLA | | | | pmax | pmax | | |
| | comp=Z,27nm,1.3s | | | | | | |
| **BLA** | **Blacksburg** | **23.63** | **95** | *e*P | **P** | **17 49 11.0** | **-0.4** |
| | comp=Z,27nm,1.3s | | | | | | |
| **MMNY** | **Mt. Morris Dam** | **23.64** | **81** | *e*P | **P** | **17 49 11.5** | **+0.2** |
| | comp=Z,46nm,1.5s | | | | | | |
| **SSPA** | **Standing Stone** | **24.22** | **86** | *e*P | **P** | **17 49 16.5** | **-0.4** |
| | comp=Z,153nm,1.5s | | | | | | |
| **BINY** | **Binghamton** | **25.15** | **81** | *e*P | **P** | **17 49 26.7** | **+1.4** |
| | comp=Z,42nm,1.3s | | | | | | |
| **CBN** | **Corbin** | **25.44** | **91** | *e*P | **P** | **17 49 30.3** | **+2.4** |
| | comp=Z,59nm,1.3s | | | | | | |
| **LUPA** | **Lehigh Univers** | **26.05** | **84** | *e*P | **P** | **17 49 36.4** | **+2.8** |
| | comp=Z,12nm,1.0s | | | | | | |
| **BRNJ** | **Basking Ridge** | **26.61** | **84** | *e*P | P | 17 49 43.6 | +5.1 |
| | comp=Z,35nm,1.0s | | | | | | |
| **EGAK** | **Eagle** | **27.31** | **331** | *e*P | **P** | **17 49 46.1** | **+1.5** |
| | comp=Z,14nm,1.1s | | | | | | |
| **INK** | **Inuvik** | **27.56** | **342** | P | **P** | **17 49 48.0** | **+1.2** |
| | comp=Z,3.5nm,0.9s,baz=133

comp=Z,32nm,18.4s,baz=39,slow=39
**KSRS Korea Array 83.52 317** LR LR 18 34 04.1
comp=Z,16nm,20.6s,baz=54,slow=36
**BRVK Borovoye 83.70 360** *i* P **P** **17 56 28.1 -0.8**
BRVK pmax pmax
comp=Z,9.0nm,2.5s
**CPUP Villa Florida 84.94 134** P **P** **17 56 34.6 -0.8**
comp=Z,2.8nm,0.8s,baz=313,slow=4.4,SNR=6.7
**HHC Hu-ho-hao-te 87.81 329** *eP* **P** **17 56 49.9 +0.2**
HHC S **S** **18 07 35.3 +2.0**
HHC PMZ
comp=Z,31nm,1.2s
HHC PMZ
comp=Z,120nm,7.3s
**MKAR Makanchi Array 89.27 351** P **P** **17 56 55.9 -0.6**
comp=Z,3.8nm,0.8s,baz=347,slow=4.4,SNR=16
MKAR LR LR 18 40 24.8
comp=Z,28nm,19.7s,baz=360,slow=38
**KBZ Khabaz 89.82 19** P **P** **17 56 59.7 +0.7**
comp=Z,1.7nm,0.9s,baz=267,slow=6.1,SNR=4.9
KBZ LR LR 18 36 23.6
comp=Z,26nm,19.5s,baz=8.0,slow=35
**WMQ Urumqi 91.45 347** *eP* P 17 57 09.0 +2.3
**TORD Torodi Ar. Bea 96.36 65** LR LR 18 38 09.7
comp=Z,44nm,20.9s,baz=175,slow=34
**GEYT Alibeck 98.17 9** LR LR 18 45 46.0
comp=Z,41nm,20.0s,baz=240,slow=38
**CD2 Chengdu 99.50 331** *eP* **Pdif** **17 57 39.3 -4.3**
**WRA Warramunga Arr 121.64 272** PKP **PKPdf** **18 02 54.0 -0.4**
comp=Z,2.4nm,0.8s,baz=43,slow=2.0,SNR=35
**WRA Warramunga Arr 121.64 272** *i* PKIKP **PKPdf** **18 02 54.0 -0.4**
WRA pmax pmax
comp=Z,2.0nm,0.7s
**ASAR Alice Springs 124.27 269** PKP **PKPdf** **18 02 58.8 -0.7**
comp=Z,1.2nm,0.7s,baz=76,slow=2.4,SNR=22

**KRSC 24 17:59:41.1±1.3, 53.93N×161.38E, h24km±12km, ML3.8, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MKZ** | **Mys Kozlova** | **0.66** | **18** | *e*P | Pb | 17 59 53.8 | -0.2 |
| MKZ | | | | *e*S | Sb | 18 00 00.9 | -1.9 |
| **KII** | **Karymskiy** | **1.14** | **276** | *e*P | Pb | 18 00 03.3 | +1.0 |
| KII | | | | *e*S | Sb | 18 00 17.3 | +0.5 |
| **SPN** | **Mys Shipunski** | **1.16** | **225** | *e*P | Pb | 18 00 02.5 | 0.0 |
| SPN | | | | *e*S | Sn | 18 00 16.1 | -0.8 |
| **KZV** | **Kizimen** | **1.34** | **332** | *e*P | Pb | 18 00 06.1 | +0.3 |
| KZV | | | | *e*S | Sn | 18 00 22.2 | +0.3 |
| **NLC** | **Nalytchevo** | **1.43** | **239** | *e*P | Pb | 18 00 06.9 | -0.1 |
| NLC | | | | *e*S | Sn | 18 00 23.5 | 0.0 |
| **TUMR** | **Tumrok** | **1.53** | **333** | *e*P | Pb | 18 00 09.1 | +0.1 |
| **SDLR** | **Sedlovina** | **1.62** | **247** | *e*P | Pb | 18 00 10.3 | -0.2 |
| SDLR | | | | *e*S | Sb | 18 00 29.8 | -0.9 |
| **SMAR** | **Somma** | **1.67** | **248** | *e*P | Pb | 18 00 11.2 | -0.3 |
| SMAR | | | | *e*S | Sb | 18 00 31.6 | -0.7 |
| **UGLR** | **Uglovaya** | **1.69** | **246** | *e*P | Pb | 18 00 11.4 | -0.2 |
| **AVH** | **Avacha** | **1.71** | **248** | *e*P | Pb | 18 00 12.0 | +0.1 |
| AVH | | | | *e*S | Sb | 18 00 32.1 | -0.9 |
| **KRX** | **Arik** | **1.72** | **252** | *e*P | Pb | 18 00 11.9 | -0.3 |
| KRX | | | | *e*S | Sn | 18 00 32.2 | +1.1 |
| **KOK** | **Koryaka** | **1.75** | **250** | *e*P | Pb | 18 00 12.4 | -0.3 |
| KOK | | | | *e*S | Sb | 18 00 33.1 | -1.3 |
| **PET** | **Petropavlovsk** | **1.86** | **242** | *e*P | Pb | 18 00 13.5 | -0.9 |
| PET | | | | *e*S | Sn | 18 00 35.7 | +1.5 |
| **KMNR** | **Kamenistaya** | **1.95** | **341** | *e*P | Pb | 18 00 14.8 | -0.2 |
| **GNL** | **Ganaly** | **2.05** | **265** | *e*P | Pb | 18 00 17.5 | -0.3 |
| GNL | | | | *e*S | Sb | 18 00 41.9 | -1.0 |
| **RUS** | **Russkaya** | **2.28** | **230** | *e*P | Pn | 18 00 18.9 | +1.6 |
| RUS | | | | *e*S | Sn | 18 00 44.9 | +0.3 |
| **MTVR** | **Mutnovka** | **2.41** | **234** | *e*P | Pb | 18 00 21.7 | -2.2 |
| MTVR | | | | *e*S | Sn | 18 00 48.6 | +0.6 |
| **KBTR** | **Krutoberegovo** | **2.43** | **19** | *e*P | Pb | 18 00 22.7 | -1.4 |
| KBTR | | | | *e*S | Sn | 18 00 49.8 | +1.6 |
| **ESO** | **Esso** | **2.53** | **323** | *e*P | Pn | 18 00 22.7 | +2.0 |
| ESO | | | | *e*S | Sn | 18 00 52.9 | +2.2 |
| **SRDR** | **Sredinnyy** | **2.58** | **339** | *e*P | Pn | 18 00 23.8 | +2.4 |
| **ASAK** | **Asacha** | **2.60** | **235** | *e*P | Pb | 18 00 24.9 | -2.3 |
| ASAK | | | | *e*S | Sn | 18 00 54.4 | +1.7 |
| **SMKR** | **Semkarok** | **2.66** | **1** | *e*P | Pb | 18 00 25.8 | -2.3 |
| SMKR | | | | *e*S | Sn | 18 00 56.3 | +2.2 |
| **APC** | **Apacha** | **2.72** | **250** | *e*P | Pb | 18 00 27.3 | -1.7 |
| APC | | | | *e*S | Sb | 18 00 59.4 | -2.4 |
| **SRKR** | **Sorokina** | **2.73** | **358** | *e*P | Pb | 18 00 26.6 | -2.8 |
| **SKR** | **Severo-Kuril's** | **4.58** | **227** | *e*P | Pn | 18 00 54.1 | +5.3 |

*ISCJB **24** 18:20:06.2±0.7, 37.93N±0.03×31.00E±0.05, h2km±10km, Error ellipse: s-maj=7.2km s-min=5.0km az=176.4*
*CSEM **24** 18:20:06.5±0.1, 37.93N×30.95E, h12km, MD2.4, Error ellipse: s-maj=3.4km s-min=2.5km az=99.0*
*DDA **24** 18:20:06.3, 37.92N×30.93E, h5km, Md2.6*
*ISK **24** 18:20:06.0, 37.93N×30.96E, h9km, MD2.4*
**ISC 24 18:20:06.4±1.1, 37.92N±0.03×30.97E±0.03, h4km±10km, n19, σ0°93/30, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BAGO** | **Egridir - ISPA** | **0.16** | **296** | P | **Pg** | **18 20 09.3** | **-0.2** |
| BAGO | | | | S | **Sg** | **18 20 11.9** | **+0.2** |
| **ISP** | **Isparta** | **0.37** | **255** | *e*PG | **Pg** | **18 20 13.4** | **-0.1** |
| ISP | | | | *e*SG | **Sg** | **18 20 19.3** | **+0.9** |
| **ISP** | **Isparta** | **0.37** | **255** | *e*Pg | **Pg** | **18 20 13.4** | **-0.1** |
| ISP | | | | *e*Sg | **Sg** | **18 20 19.3** | **+0.9** |
| **SUTC** | **Sutluce-Ispart** | **0.44** | **177** | *e*PG | **Pg** | **18 20 15.6** | **+0.6** |
| SUTC | | | | *e*SG | **Sb** | **18 20 22.3** | **-1.5** |
| **SUTC** | **Sutluce-Ispart** | **0.44** | **177** | *e*Pg | **Pg** | **18 20 15.6** | **+0.6** |
| SUTC | | | | *e*Sg | **Sb** | **18 20 22.3** | **-1.5** |
| **BCK** | **Bucak** | **0.55** | **213** | *e*PG | **Pg** | **18 20 17.2** | **+0.3** |
| BCK | | | | *e*SG | **Sb** | **18 20 25.5** | **-1.3** |
| **BCK** | **Bucak** | **0.55** | **213** | *e*Pg | **Pg** | **18 20 17.2** | **+0.3** |
| BCK | | | | *e*Sg | **Sb** | **18 20 25.5** | **-1.3** |
| **SHUT** | **Suhut-Afyon** | **0.71** | **333** | *e*PG | **Pg** | **18 20 20.1** | **0.0** |
| **SHUT** | **Suhut-Afyon** | **0.71** | **333** | *e*Pg | **Pg** | **18 20 20.1** | **0.0** |
| **BOLV** | **Bolvadin** | **0.80** | **359** | *i* P | **Pg** | **18 20 21.7** | **0.0** |
| BOLV | | | | *i* S | **Sb** | **18 20 33.7** | **-0.4** |
| **BOLV** | **Bolvadin** | **0.80** | **359** | P | **Pg** | **18 20 21.7** | **0.0** |
| BOLV | | | | S | **Sb** | **18 20 33.7** | **-0.4** |
| **KONT** | **Konya--Tatoy** | **1.10** | **88** | *e*PN | **Pg** | **18 20 27.6** | **+0.1** |
| **KONT** | **Konya--Tatoy** | **1.10** | **88** | *e*Pn | **Pg** | **18 20 27.6** | **+0.1** |
| **KIZT** | **Kizilcal** | **1.20** | **36** | *e*PN | **Pb** | **18 20 29.4** | **-0.2** |
| **KIZT** | **Kizilcal** | **1.20** | **36** | *e*Pn | **Pb** | **18 20 29.5** | **-0.2** |
| **KHAL** | **Karahalli** | **1.25** | **292** | *i* P | **Pn** | **18 20 29.7** | **-1.0** |
| KHAL | | | | *i* S | **Sn** | **18 20 50.1** | **+2.1** |
| **KHAL** | **Karahalli** | **1.25** | **292** | P | **Pn** | **18 20 29.7** | **-1.0** |
| KHAL | | | | S | **Sn** | **18 20 50.1** | **+2.1** |
| **HDMB** | **Hadim** | **1.54** | **128** | *e*PN | **Pn** | **18 20 34.5** | **-0.3** |
| **HDMB** | **Hadim** | **1.54** | **128** | *e*Pn | **Pn** | **18 20 34.5** | **-0.3** |

*ISCJB **24** 18:40:05.4±0.9, 31.5N±0.2×41.1W±0.2, h14km, mb3.6/6, MS3.5/3, Error ellipse: s-maj=33.0km s-min=19.1km az=154.8*
*IDC **24** 18:40:05.1±1.1, 31.44N×41.13W, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.6/28, mbtmp3.6/6, MS3.5/3, Ms1 3.6/3, ms1mx2.8/32, Error ellipse: s-maj=42.7km s-min=24.3km az=153.0*
**ISC 24 18:40:07.2±1.0, 31.4N±0.2×41.1W±0.2, h14km, n14, σ0°67/6, mb3.7/6, MS3.5/3, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCHQ** | **Schefferville** | **29.66** | **330** | LR | LR | 18 56 32.1 | |
| | comp=Z,113nm,19.9s,baz=317,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **43.28** | **105** | P | **P** | **18 48 09.2** | **+0.5** |
| | 0.8nm,0.9s,baz=306,slow=6.1,SNR=4.6 | | | | | | |
| **GERES** | **GERESS Array B** | **44.36** | **51** | P | **P** | **18 48 17.6** | **+0.4** |
| | 0.2nm,0.6s,baz=285,slow=11,SNR=3.4 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **46.63** | **142** | T | T | 19 38 13.4 | |
| | baz=328,slow=75,SNR=62 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **46.63** | **142** | T | T | 19 38 13.6 | |
| | baz=328,slow=75,SNR=56 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **46.65** | **142** | T | T | 19 38 14.8 | |
| | baz=328,slow=75,SNR=70 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **47.49** | **143** | T | T | 19 39 16.9 | |
| | baz=329,slow=75,SNR=60 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **47.49** | **143** | T | T | 19 39 18.5 | |
| | baz=329,slow=75,SNR=73 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **47.50** | **143** | T | T | 19 39 19.1 | |
| | baz=329,slow=75,SNR=62 | | | | | | |
| **TXAR** | **Lajitas Array** | **53.33** | **285** | P | **P** | **18 49 26.6** | **+0.3** |
| | 0.5nm,0.9s,baz=99,slow=5.6,SNR=3.6 | | | | | | |
| **LPAZ** | **La Paz** | **54.08** | **213** | P | **P** | **18 49 32.1** | **-0.3** |
| | 0.9nm,0.8s,baz=30,slow=14,SNR=4.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **54.31** | **48** | P | **P** | **18 49 33.0** | **0.0** |
| | 1.0nm,0.6s,baz=276,slow=6.9,SNR=4.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **59.76** | **59** | P | **P** | **18 50 11.1** | **-0.9** |
| | 0.9nm,0.8s,baz=266,slow=7.6,SNR=5.0 | | | | | | |
| BRTR | | | | LR | LR | 19 15 59.5 | |
| | comp=Z,15nm,18.4s,baz=273,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **61.95** | **300** | LR | LR | 19 16 52.2 | |
| | comp=Z,89nm,18.3s,baz=264,slow=36 | | | | | | |

*CSEM **24** 18:42:23.7±0.3, 38.04N×20.31E, h2km, MD3.6, Error ellipse: s-maj=6.3km s-min=3.8km az=63.0*
*ATH **24** 18:42:23.8, 38.06N×20.35E, h15km±1km, MD3.6/35*
*THE **24** 18:42:24.7, 38.07N×20.35E, h0km±3km, ML2.8/7, Error ellipse: s-maj=3.5km s-min=1.4km az=257.0*
**ISC 24 18:42:23.8±1.5, 38.05N±0.03×20.34E±0.04, h0km±10km, n143, σ0°79/176, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VLS** | **Valsamata** | **0.24** | **57** | *e*PB | **Pg** | **18 42 29.2** | **+0.8** |
| VLS | | | | *e*SB | **Sg** | **18 42 32.6** | **+1.1** |
| **VLS** | **Valsamata** | **0.24** | **57** | P | **Pg** | **18 42 29.2** | **+0.8** |
| VLS | | | | S | **Sg** | **18 42 32.5** | **+1.1** |
| **VLS** | **Valsamata** | **0.24** | **57** | P | **Pg** | **18 42 29.2** | **+0.8** |
| VLS | | | | S | **Sg** | **18 42 32.5** | **+1.1** |
| **KFL** | **Anninata** | **0.36** | **80** | P | **Pg** | **18 42 31.1** | **+0.4** |
| KFL | | | | S | **Sg** | **18 42 36.0** | **+0.6** |
| **KFL** | **Anninata** | **0.36** | **80** | P | **Pg** | **18 42 31.1** | **+0.4** |
| KFL | | | | S | **Sg** | **18 42 36.0** | **+0.6** |
| **LKD2** | **Lefkada island** | **0.78** | **19** | *e*PN | **Pg** | **18 42 38.7** | **0.0** |
| **LKD2** | **Lefkada island** | **0.78** | **19** | P | **Pg** | **18 42 38.8** | **0.0** |
| LKD2 | | | | S | **Sb** | **18 42 51.4** | **-0.1** |
| **LKD2** | **Lefkada island** | **0.78** | **19** | P | **Pg** | **18 42 38.8** | **0.0** |
| LKD2 | | | | S | **Sb** | **18 42 51.4** | **-0.1** |
| **AXS** | **Araxos** | **0.83** | **79** | P | **Pg** | **18 42 39.2** | **-0.6** |
| **AXS** | **Araxos** | **0.83** | **79** | P | **Pg** | **18 42 39.2** | **-0.6** |
| **PDO** | **Prodromos** | **0.87** | **50** | *e*PN | **Pg** | **18 42 39.8** | **-0.6** |
| PDO | | | | *e*SN | **Sg** | **18 42 52.4** | **+0.8** |
| **PDO** | **Prodromos** | **0.87** | **50** | P | **Pg** | **18 42 39.8** | **-0.6** |
| PDO | | | | S | **Sb** | **18 42 53.1** | **-0.7** |
| **PDO** | **Prodromos** | **0.87** | **50** | P | **Pg** | **18 42 39.8** | **-0.6** |
| PDO | | | | S | **Sb** | **18 42 53.1** | **-0.7** |
| **RLS** | **Riolos of Patr** | **0.89** | **89** | *e*PN | **Pg** | **18 42 40.3** | **-0.6** |
| RLS | | | | *e*SN | **Sg** | **18 42 53.0** | **+0.5** |
| **RLS** | **Riolos of Patr** | **0.89** | **89** | P | **Pg** | **18 42 41.2** | **+0.3** |
| RLS | | | | S | **Sb** | **18 42 54.1** | **-0.5** |
| **RLS** | **Riolos of Patr** | **0.89** | **89** | P | **Pg** | **18 42 41.2** | **+0.3** |
| RLS | | | | S | **Sb** | **18 42 54.1** | **-0.5** |
| **SFD** | **Strofades** | **0.96** | **146** | *e*PN | **Pb** | **18 42 42.8** | **-0.5** |
| **SFD** | **Strofades** | **0.96** | **146** | P | **Pn** | **18 42 43.9** | **-0.6** |
| SFD | | | | S | **Sn** | **18 42 58.6** | **-0.2** |
| **SFD** | **Strofades** | **0.96** | **146** | *e*Pn | **Pb** | **18 42 42.8** | **-0.6** |
| **SFD** | **Strofades** | **0.96** | **146** | P | **Pn** | **18 42 43.9** | **-0.6** |
| SFD | | | | S | **Sn** | **18 42 58.6** | **-0.2** |
| **DRO** | **Drossia** | **1.09** | **95** | *e*PN | **Pg** | **18 42 44.6** | **-0.1** |
| **DRO** | **Drossia** | **1.09** | **95** | P | **Pg** | **18 42 44.4** | **-0.3** |
| **DRO** | **Drossia** | **1.09** | **95** | P | **Pg** | **18 42 44.4** | **-0.3** |
| **PVO** | **Paravola** | **1.10** | **58** | P | **Pg** | **18 42 44.4** | **-0.4** |
| PVO | | | | S | **Sn** | **18 43 02.3** | **+0.1** |
| **PVO** | **Paravola** | **1.10** | **58** | P | **Pg** | **18 42 44.4** | **-0.4** |
| PVO | | | | S | **Sn** | **18 43 02.3** | **+0.1** |
| **UPR** | **University Cam** | **1.17** | **78** | P | **Pn** | **18 42 47.1** | **-0.3** |
| **UPR** | **University Cam** | **1.17** | **78** | P | **Pn** | **18 42 47.1** | **-0.3** |
| **AMT** | **Artemida-Makis** | **1.20** | **115** | *e*PN | **Pn** | **18 42 47.5** | **-0.4** |
| **AMT** | **Artemida-Makis** | **1.20** | **115** | P | **Pn** | **18 42 47.9** | **0.0** |
| AMT | | | | S | **Sn** | **18 43 05.3** | **+0.4** |
| **AMT** | **Artemida-Makis** | **1.20** | **115** | *e*Pn | **Pn** | **18 42 47.5** | **-0.4** |
| **AMT** | **Artemida-Makis** | **1.20** | **115** | P | **Pn** | **18 42 47.9** | **0.0** |
| AMT | | | | S | **Sn** | **18 43 05.3** | **+0.4** |
| **DSL** | **Palaion Diasel** | **1.24** | **29** | *e*PN | **Pg** | **18 42 47.4** | **-0.1** |
| **DSL** | **Palaion Diasel** | **1.24** | **29** | P | **Pg** | **18 42 46.9** | **-0.6** |
| DSL | | | | S | **Sn** | **18 43 05.2** | **-0.6** |
| **DSL** | **Palaion Diasel** | **1.24** | **29** | P | **Pg** | **18 42 46.9** | **-0.6** |
| **DSL** | **Palaion Diasel** | **1.24** | **29** | *e*Pn | **Pg** | **18 42 47.4** | **-0.1** |
| DSL | | | | S | **Sn** | **18 43 05.2** | **-0.6** |
| **EFP** | **Efpalio** | **1.29** | **72** | *e*PN | **Pg** | **18 42 47.1** | **-1.5** |
| **EFP** | **Efpalio** | **1.29** | **72** | P | **Pg** | **18 42 47.1** | **-1.5** |
| EFP | | | | S | **Sn** | **18 43 07.0** | **-0.1** |
| **EFP** | **Efpalio** | **1.29** | **72** | P | **Pg** | **18 42 47.1** | **-1.5** |
| EFP | | | | S | **Sn** | **18 43 07.0** | **-0.1** |
| **LAKA** | **Lakka** | **1.31** | **81** | *e*PN | **Pg** | **18 42 47.6** | **-1.3** |
| **LAKA** | **Lakka** | **1.31** | **81** | P | **Pg** | **18 42 47.5** | **-1.3** |
| LAKA | | | | S | **Sn** | **18 43 07.7** | **+0.1** |
| **LAKA** | **Lakka** | **1.31** | **81** | P | **Pg** | **18 42 47.5** | **-1.4** |
| LAKA | | | | S | **Sn** | **18 43 07.7** | **+0.1** |
| **SERG** | **Sergoula** | **1.40** | **74** | P | **Pn** | **18 42 48.8** | **-1.8** |
| SERG | | | | S | **Sn** | **18 43 12.1** | **+2.2** |
| **SERG** | **Sergoula** | **1.40** | **74** | P | **Pn** | **18 42 48.8** | **-1.8** |
| SERG | | | | S | **Sn** | **18 43 12.1** | **+2.2** |
| **TRIZ** | **Trizonia** | **1.41** | **76** | *e*PB | **Pn** | **18 42 49.0** | **-1.7** |
| **TRIZ** | **Trizonia** | **1.41** | **76** | P | **Pn** | **18 42 48.9** | **-1.7** |
| **TRIZ** | **Trizonia** | **1.41** | **76** | P | **Pn** | **18 42 48.9** | **-1.7** |
| **KLV** | **Kalavryta, Ach** | **1.43** | **90** | *e*PN | **Pn** | **18 42 49.6** | **-1.5** |
| **KLV** | **Kalavryta, Ach** | **1.43** | **90** | P | **Pn** | **18 42 49.9** | **-1.2** |
| KLV | | | | S | **Sn** | **18 43 12.1** | **+1.5** |
| **KLV** | **Kalavryta, Ach** | **1.43** | **90** | *e*Pn | **Pn** | **18 42 49.6** | **-1.5** |
| **KLV** | **Kalavryta, Ach** | **1.43** | **90** | P | **Pn** | **18 42 49.9** | **-1.2** |
| KLV | | | | S | **Sn** | **18 43 12.1** | **+1.5** |
| **EVR** | **Evrytania** | **1.45** | **53** | *e*PN | **Pn** | **18 42 51.1** | **-0.2** |
| **EVR** | **Evrytania** | **1.45** | **53** | P | **Pn** | **18 42 51.1** | **-0.2** |
| **EVR** | **Evrytania** | **1.45** | **53** | P | **Pn** | **18 42 51.1** | **-0.2** |
| **KALE** | **Kalithea** | **1.46** | **76** | *e*PN | **Pn** | **18 42 50.2** | **-1.3** |
| **KALE** | **Kalithea** | **1.46** | **76** | P | **Pn** | **18 42 50.2** | **-1.3** |
| KALE | | | | S | **Sn** | **18 43 12.7** | **+1.3** |
| **KALE** | **Kalithea** | **1.46** | **76** | P | **Pn** | **18 42 50.2** | **-1.3** |
| KALE | | | | S | **Sn** | **18 43 12.7** | **+1.3** |
| **IGT** | **Igoumenitsa** | **1.48** | **360** | *e*PN | **Pn** | **18 42 51.0** | **-0.7** |
| **IGT** | **Igoumenitsa** | **1.48** | **360** | P | **Pn** | **18 42 51.2** | **-0.5** |
| **IGT** | **Igoumenitsa** | **1.48** | **360** | P | **Pn** | **18 42 51.2** | **-0.5** |
| **ITM** | **Ithomi** | **1.53** | **124** | *e*PN | **Pn** | **18 42 51.8** | **-0.6** |
| **ITM** | **Ithomi** | **1.53** | **124** | P | **Pn** | **18 42 51.9** | **-0.5** |
| **ITM** | **Ithomi** | **1.53** | **124** | *e*Pn | **Pn** | **18 42 51.8** | **-0.6** |
| **SGD** | **Sagiada** | **1.57** | **357** | *e*PN | **Pn** | **18 42 52.3** | **-0.5** |
| **SGD** | **Sagiada** | **1.57** | **357** | P | **Pn** | **18 42 52.5** | **-0.3** |
| **SGD** | **Sagiada** | **1.57** | **357** | P | **Pn** | **18 42 52.5** | **-0.3** |
| **GUR** | **Goura** | **1.59** | **93** | *e*PN | **Pn** | **18 42 52.9** | **-0.4** |
| **GUR** | **Goura** | **1.59** | **93** | P | **Pn** | **18 42 52.3** | **-1.0** |
| GUR | | | | S | **Sg** | **18 43 15.2** | **+0.4** |
| **GUR** | **Goura** | **1.59** | **93** | P | **Pn** | **18 42 52.3** | **-1.0** |
| **GUR** | **Goura** | **1.59** | **93** | *e*Pn | **Pn** | **18 42 52.9** | **-0.4** |
| GUR | | | | S | **Sg** | **18 43 15.2** | **+0.4** |
| **PYL** | **PYLOS** | **1.60** | **135** | *e*PN | **Pn** | **18 42 53.0** | **-0.3** |
| **PYL** | **PYLOS** | **1.60** | **135** | *e*Pn | **Pn** | **18 42 53.0** | **-0.3** |
| **JAN** | **Janina** | **1.66** | **14** | *e*PN | **Pb** | **18 42 54.6** | **-0.6** |
| **JAN** | **Janina** | **1.66** | **14** | *e*Pn | **Pb** | **18 42 54.6** | **-0.6** |
| **MAKR** | **Makrakomi, Fth** | **1.71** | **55** | *e*PN | **Pb** | **18 42 55.7** | **-0.4** |
| **MAKR** | **Makrakomi, Fth** | **1.71** | **55** | P | **Pb** | **18 42 55.9** | **-0.2** |
| **MAKR** | **Makrakomi, Fth** | **1.71** | **55** | *e*Pn | **Pb** | **18 42 55.7** | **-0.4** |
| **KEK** | **Kerkira** | **1.72** | **346** | *e*PN | **Pn** | **18 42 54.4** | **-0.5** |
| **KEK** | **Kerkira** | **1.72** | **346** | *e*Pn | **Pn** | **18 42 54.4** | **-0.5** |
| **VLX** | **Vlachokerasia** | **1.76** | **112** | *e*PN | **Pb** | **18 42 56.9** | **0.0** |
| **VLX** | **Vlachokerasia** | **1.76** | **112** | P | **Pb** | **18 42 56.9** | **0.0** |
| **VLX** | **Vlachokerasia** | **1.76** | **112** | P | **Pb** | **18 42 56.9** | **0.0** |
| **DSF** | **Desfina** | **1.76** | **77** | *e*PN | **Pn** | **18 42 55.7** | **+0.1** |
| **DSF** | **Desfina** | **1.76** | **77** | P | **Pn** | **18 42 55.8** | **+0.1** |
| **DSF** | **Desfina** | **1.76** | **77** | *e*Pn | **Pn** | **18 42 55.7** | **+0.1** |
| **THAL** | **Thalero** | **1.84** | **90** | *e*PN | **Pn** | **18 42 56.8** | **+0.2** |
| **THAL** | **Thalero** | **1.84** | **90** | P | **Pg** | **18 42 58.7** | **-0.3** |
| **THAL** | **Thalero** | **1.84** | **90** | *e*Pn | **Pn** | **18 42 56.8** | **+0.2** |
| **THAL** | **Thalero** | **1.84** | **90** | P | **Pg** | **18 42 58.7** | **-0.3** |
| **AGG** | **Agios Georgios** | **1.84** | **57** | *e*PN | **Pb** | **18 42 57.3** | **-1.1** |
| **AGG** | **Agios Georgios** | **1.84** | **57** | P | **Pb** | **18 42 57.4** | **-1.0** |
| **AGG** | **Agios Georgios** | **1.84** | **57** | *e*Pn | **Pb** | **18 42 57.3** | **-1.1** |
| **AXAR** | **Agios Charalam** | **1.96** | **68** | *e*PN | **Pn** | **18 42 59.0** | **+0.7** |
| **AXAR** | **Agios Charalam** | **1.96** | **68** | *e*Pn | **Pn** | **18 42 59.0** | **+0.7** |
| **THL** | **Klokotos Trika** | **2.00** | **40** | *e*PN | **Pn** | **18 42 59.2** | **+0.3** |
| **THL** | **Klokotos Trika** | **2.00** | **40** | P | **Pn** | **18 42 59.6** | **+0.7** |
| **THL** | **Klokotos Trika** | **2.00** | **40** | *e*Pn | **Pn** | **18 42 59.2** | **+0.3** |
| **THL** | **Klokotos Trika** | **2.00** | **40** | P | **Pn** | **18 42 59.6** | **+0.7** |
| **LTK** | **Loutraki** | **2.08** | **90** | *e*PB | **Pn** | **18 42 59.3** | **-0.6** |
| **LTK** | **Loutraki** | **2.08** | **90** | P | **Pn** | **18 42 59.4** | **-0.5** |
| **LTK** | **Loutraki** | **2.08** | **90** | P | **Pn** | **18 42 59.4** | **-0.5** |
| **LKR** | **Lokris** | **2.18** | **73** | *e*PN | **Pn** | **18 43 01.2** | **-0.1** |
| **LKR** | **Lokris** | **2.18** | **73** | *e*Pn | **Pn** | **18 43 01.2** | **-0.1** |
| **PENT** | **Pentalofos** | **2.24** | **16** | *e*PN | **Pn** | **18 43 02.9** | **+0.7** |
| **PENT** | **Pentalofos** | **2.24** | **16** | *e*Pn | **Pn** | **18 43 02.9** | **+0.7** |
| **VIL2** | **Platees** | **2.32** | **85** | *e*PB | **Pn** | **18 43 03.1** | **-0.1** |
| **KRND** | **KRANIDI** | **2.33** | **106** | *e*PN | **Pn** | **18 43 04.6** | **+1.3** |
| **KRND** | **KRANIDI** | **2.33** | **106** | *e*Pn | **Pn** | **18 43 04.6** | **+1.3** |
| **VILL** | **Villia** | **2.35** | **86** | *e*Pb | **Pn** | **18 43 03.1** | **-0.6** |
| **DID** | **Didima** | **2.36** | **102** | *e*PB | **Pn** | **18 43 03.6** | **-0.2** |
| **DID** | **Didima** | **2.36** | **102** | P | **Pn** | **18 43 04.4** | **+0.6** |
| **DID** | **Didima** | **2.36** | **102** | *e*Pb | **Pn** | **18 43 03.6** | **-0.2** |
| **DID** | **Didima** | **2.36** | **102** | P | **Pn** | **18 43 04.4** | **+0.6** |
| **SMIA** | **Simia** | **2.40** | **69** | P | **Pn** | **18 43 04.4** | **0.0** |
| **SMIA** | **Simia** | **2.40** | **69** | P | **Pn** | **18 43 04.4** | **0.0** |
| **NEST** | **Nestorio** | **2.43** | **13** | P | **Pn** | **18 43 06.2** | **+1.4** |
| **NEST** | **Nestorio** | **2.43** | **13** | P | **Pn** | **18 43 06.2** | **+1.4** |
| **VLI** | **Veliai** | **2.46** | **122** | *e*PN | **Pn** | **18 43 05.8** | **+0.7** |
| **VLI** | **Veliai** | **2.46** | **122** | *e*Pn | **Pn** | **18 43 05.8** | **+0.7** |
| **NEO** | **Neokhori** | **2.59** | **60** | *e*PN | **Pn** | **18 43 06.5** | **-0.4** |
| **NEO** | **Neokhori** | **2.59** | **60** | *e*Pn | **Pn** | **18 43 06.5** | **-0.4** |
| **XOR** | **Xorichti** | **2.59** | **59** | *e*PN | **Pn** | **18 43 07.0** | **0.0** |
| **XOR** | **Xorichti** | **2.59** | **59** | P | **Pn** | **18 43 06.0** | **-1.0** |
| **XOR** | **Xorichti** | **2.59** | **59** | P | **Pn** | **18 43 06.0** | **-1.0** |
| **XOR** | **Xorichti** | **2.59** | **59** | *e*Pn | **Pn** | **18 43 07.0** | **0.0** |
| **LIT** | **Litokhoron** | **2.65** | **39** | *e*PB | **Pn** | **18 43 08.9** | **+1.1** |
| **LIT** | **Litokhoron** | **2.65** | **39** | *e*Pb | **Pn** | **18 43 08.9** | **+1.1** |
| **VLY** | **Voula,Athens** | **2.74** | **93** | P | **Pn** | **18 43 08.5** | **-0.5** |
| **VLY** | **Voula,Athens** | **2.74** | **93** | P | **Pn** | **18 43 08.5** | **-0.5** |
| **KYTH** | **Kithira** | **2.79** | **128** | *e*PB | **Pn** | **18 43 11.0** | **+1.4** |
| **KYTH** | **Kithira** | **2.79** | **128** | *e*Pb | **Pn** | **18 43 11.0** | **+1.4** |
| **FNA** | **Florina** | **2.85** | **16** | *e*PN | **Pn** | **18 43 10.8** | **+0.2** |
| **FNA** | **Florina** | **2.85** | **16** | P | **Pn** | **18 43 10.8** | **+0.2** |
| **FNA** | **Florina** | **2.85** | **16** | P | **Pn** | **18 43 10.8** | **+0.2** |
| **EREA** | **Eretria** | **2.86** | **81** | *e*PN | **Pn** | **18 43 10.1** | **-0.5** |
| **EREA** | **Eretria** | **2.86** | **81** | *e*Pn | **Pn** | **18 43 10.1** | **-0.5** |
| **OHR** | **Ohrid** | **3.08** | **7** | *i* Pn | **Pn** | **18 43 14.5** | **+0.8** |
| **OHR** | **Ohrid** | **3.08** | **7** | *i* Pn | **Pn** | **18 43 14.5** | **+0.8** |
| **PAIG** | **Paliouri** | **3.21** | **53** | *e*PN | **Pn** | **18 43 14.7** | **-0.8** |
| **PAIG** | **Paliouri** | **3.21** | **53** | *e*Pn | **Pn** | **18 43 14.7** | **-0.8** |
| **PLG** | **Polygyros** | **3.35** | **45** | *e*PN | **Pn** | **18 43 17.7** | **+0.3** |
| **PLG** | **Polygyros** | **3.35** | **45** | *e*Pn | **Pn** | **18 43 17.7** | **+0.3** |
| **OUR** | **Ouranopolis** | **3.64** | **50** | *e*PN | **Pn** | **18 43 20.9** | **-0.4** |
| **OUR** | **Ouranopolis** | **3.64** | **50** | *e*Pn | **Pn** | **18 43 20.9** | **-0.4** |

**KRSC 24 18:47:37.5±0.4, 55.16N×160.28E, h4km±2km, ML3.6, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZV** | **Kizimen** | **0.05** | **170** | *i* P | Pg | 18 47 39.5 | +0.6 |
| KZV | | | | *i* S | Sg | 18 47 41.0 | +1.1 |
| **TUMR** | **Tumrok** | **0.14** | **328** | *i* P | Pg | 18 47 41.1 | +0.5 |
| TUMR | | | | *e*S | Sg | 18 47 44.0 | +1.4 |
| **KMNR** | **Kamenista

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AYDB** | **Zeytinkoy-Aydi** | **1.57 124** | *e*Pn | | **Pn** | **18 56 54.9** | **-0.1** |
| **AYDN** | **Tasoluk** | **1.74 132** | *i* P | | **Pg** | **18 57 00.2** | **-0.6** |
| AYDN | | | *i* S | | **Sg** | **18 57 25.4** | **+2.0** |
| **AYDN** | **Tasoluk** | **1.74 132** | P | | **Pg** | **18 57 00.2** | **-0.6** |
| AYDN | | | S | | **Sg** | **18 57 25.4** | **+2.0** |
| **MANT** | **Manisa** | **1.84 100** | *i* P | | **Pb** | **18 57 01.3** | **+0.3** |
| MANT | | | *i* S | | **Sb** | **18 57 24.5** | **+0.5** |
| **MANT** | **Manisa** | **1.84 100** | P | | **Pb** | **18 57 01.3** | **+0.3** |
| MANT | | | S | | **Sb** | **18 57 24.5** | **+0.5** |

*BJI* ***24*** *18:59:33.8,5.˝54S×131.˚66E,h45km,mb4.8/29,mB4.9/13, Ms4.7/3,Ms7 4.5/2*
*NEIC* ***24*** *18:59:33.8±2.0,5.˝53S×131.˚39E,h24km±16km,mb4.7/15, Error ellipse: s-maj=8.1km s-min=7.0km az=225.0*
*ISCJB* ***24*** *18:59:35.7±0.2,5.˝44S±0.˚02×131.˚58E±0.˚03,h54km, mb4.6/41,MS3.3/9,Error ellipse: s-maj=4.0km s-min=3.4km az=154.4*
*IDC* ***24*** *18:59:35.4±2.5,5.˝48S×131.˚35E,h31km±17km,mb4.4/20, mb1 4.5/25,mb1mx4.4/38,mbtmp4.6/25,ML4.8/4,MS3.4/12, Ms1 3.4/12,ms1mx3.1/32,Error ellipse: s-maj=15.9km s-min=11.6km az=98.0*
*AUST* ***24*** *18:59:36.8,5.˝47S×131.˚53E,h35km*
*DJA* ***24*** *18:59:39.3±0.8,5.˚S±2.˚×13.˚2E±.˚,h40km±8km,M5.0/37, mb5.0/37,mB5.4/19,MLv5.4/6,Mw(mB)4.9/19*

**ISC 24 18:59:37.3**±0.3,**5.˚51S**±0.˚04×**131.˚59E**±0.˚05,**h54**km,**n163,** σ1**ş59**/147,**mb4.6**/41,**MS3.4**/9,**9C-1D,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BNDI** | **Bandanaira** | **1.94 300** | | P | **Pn** | **19 00 07.1** | **-0.8** |
| **SAUI** | **Saumlaki** | **2.47 187** | | P | Pn | 19 00 19.3 | +4.2 |
| **FAKI** | **Fak Fak** | **2.66 14** | | P | **Pn** | **19 00 16.4** | **-1.4** |
| | baz=2.7,SNR=372 | | | | | | |
| **FAKI** | **Fak Fak** | **2.66 14** | | P | **Pn** | **19 00 16.7** | **-1.0** |
| **FAKI** | **Fak Fak** | **2.66 14** | | *e*Pn | **Pn** | **19 00 16.3** | **-1.4** |
| FAKI | | | | *e*Sn | **Sn** | **19 00 48.1** | **-0.7** |
| **MSAI** | **Masohi** | **3.42 309** | | P | **Pn** | **19 00 26.5** | **-1.6** |
| **AAI** | **Ambon** | **3.84 298** | | P | **Pn** | **19 00 33.2** | **-0.7** |
| | baz=3.8,SNR=113 | | | | | | |
| **AAI** | **Ambon** | **3.84 298** | | P | **Pn** | **19 00 33.3** | **-0.6** |
| **SIJI** | **Sorong** | **4.62 356** | | Pn | Pn | 19 00 41.1 | -3.6 |
| | 84nm,0.3s,baz=200,slow=9.2,SNR=310 | | | | | | |
| SIJI | | | | Sn | Sn | 19 01 27.4 | -10 |
| | 54nm,0.3s,baz=217,slow=23,SNR=11 | | | | | | |
| **SWI** | **Sorong** | **4.63 356** | | P | **Pn** | **19 00 41.6** | **-3.1** |
| | baz=4.6,SNR=165 | | | | | | |
| **SWI** | **Sorong** | **4.63 356** | | P | **Pn** | **19 00 41.6** | **-3.1** |
| **RKPI** | **Ransiki, Papua** | **4.74 33** | | P | **Pn** | **19 00 46.7** | **+0.4** |
| **NLAI** | **Namlea** | **5.01 297** | | P | **Pn** | **19 00 50.7** | **+0.7** |
| **LBMI** | **Labuha** | **6.33 320** | | P | **Pn** | **19 01 05.9** | **-2.2** |
| **SANI** | **Sanana** | **6.56 301** | | P | **Pn** | **19 01 09.8** | **-1.4** |
| | 129nm,0.6s,2µm0.7nm | | | | | | |
| **KDU** | **Kakadu** | **7.18 173** | | P | **Pn** | **19 01 21.1** | **+1.4** |
| | baz=7.3,SNR=113 | | | | | | |
| **MTN** | **Manton Dam** | **7.30 183** | | P | **Pn** | **19 01 23.2** | **+1.9** |
| | baz=7.4,SNR=154 | | | | | | |
| **SMPI** | **Sarmi** | **7.92 64** | | P | **Pn** | **19 01 29.9** | **0.0** |
| **SOEI** | **Soe** | **8.39 239** | | P | **Pn** | **19 01 38.3** | **+1.9** |
| | baz=8.4,SNR=24 | | | | | | |
| **SOEI** | **Soe** | **8.39 239** | | P | **Pn** | **19 01 38.5** | **+2.1** |
| | 437nm,0.8s,3µm | | | | | | |
| **SOEI** | **Soe** | **8.39 239** | | Pn | **Pn** | **19 01 34.7** | **-1.8** |
| | 294nm,0.8s | | | | | | |
| **BBSI** | **Bau Bau** | **8.98 270** | | P | **Pn** | **19 01 47.2** | **+2.9** |
| **GENI** | **Genyem** | **9.04 72** | | P | **Pn** | **19 01 47.2** | **+2.0** |
| | 211nm,0.8s,2µm | | | | | | |
| **KDI** | **Kendari** | **9.07 279** | | P | **Pn** | **19 01 47.7** | **+2.1** |
| | 88nm,1.2s | | | | | | |
| **BATI** | **Baumata** | **9.13 239** | | Pn | Pn | 19 01 41.2 | -5.2 |
| | 2.6nm,0.3s,baz=18,slow=1.8,SNR=6.9 | | | | | | |
| BATI | | | | Sn | Sn | 19 03 21.0 | -6.9 |
| | baz=191,slow=16,SNR=1.2 | | | | | | |
| BATI | | | | LR | LR | 19 05 47.8 | |
| | comp=Z,327nm,19.2s,baz=85,slow=42 | | | | | | |
| **BATI** | **Baumata** | **9.13 239** | | P | **Pn** | **19 01 47.9** | **+1.4** |
| | 197nm,1.1s,2µm | | | | | | |
| **JAY** | **Jayapura** | **9.57 72** | | Pn | **Pn** | **19 01 54.0** | **+1.5** |
| | 24nm,0.3s,baz=183,slow=0.0,SNR=11 | | | | | | |
| JAY | | | | Sn | **Sn** | **19 03 34.9** | **-3.8** |
| | 9.8nm,0.3s,baz=310,slow=0.7,SNR=1.8 | | | | | | |
| **JAY** | **Jayapura** | **9.57 72** | | P | **Pn** | **19 01 55.0** | **+2.5** |
| | baz=9.6,SNR=11 | | | | | | |
| **KMSI** | **Cibinong** | **9.71 308** | | P | **Pn** | **19 01 52.7** | **-1.7** |
| | 156nm,0.8s,3µm | | | | | | |
| **MMRI** | **Maumere** | **9.78 251** | | P | Pn | 19 01 58.9 | +3.5 |
| **MMRI** | **Maumere** | **9.78 251** | | *e*Pn | Pn | 19 01 48.3 | -7.1 |
| | 247nm,1.2s | | | | | | |
| **LUWI** | **Luwuk** | **9.86 296** | | P | **Pn** | **19 01 57.6** | **+1.2** |
| | baz=9.8,SNR=9.2 | | | | | | |
| **LUWI** | **Luwuk** | **9.86 296** | | P | **Pn** | **19 01 58.6** | **+2.2** |
| | 87nm,1.0s,942nm | | | | | | |
| **LUWI** | **Luwuk** | **9.86 296** | | *e*Pn | Pn | 19 01 52.3 | -4.1 |
| | 29nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **10.47 195** | | P | **Pn** | **19 02 05.0** | **+0.2** |
| | baz=11,SNR=114 | | | | | | |
| **GTOI** | **Gorontalo** | **10.52 305** | | P | Pn | 19 02 09.8 | +4.3 |
| | 25nm,0.9s | | | | | | |
| **APSI** | **Ampana** | **10.92 294** | | P | **Pn** | **19 02 13.3** | **+2.3** |
| | 86nm,1.1s,884nm | | | | | | |
| **SGSI** | **Sangihe** | **10.96 326** | | P | **Pn** | **19 02 13.0** | **+1.5** |
| | 1µm,0.8s,42µm | | | | | | |
| **MRSI** | **Marisa** | **11.32 301** | | P | Pn | **19 02 16.4** | **0.0** |
| | 36nm,0.6s,471nm | | | | | | |
| **BKSI** | **Bulukumba** | **11.42 270** | | P | **Pn** | **19 02 19.9** | **+2.2** |
| **KAPI** | **Kappang** | **11.80 272** | | Pn | Pn | 19 02 18.1 | -4.9 |
| | baz=75,slow=18,SNR=1.7 | | | | | | |
| KAPI | | | | LR | LR | 19 07 39.0 | |
| | comp=Z,299nm,18.0s,baz=107,slow=42 | | | | | | |
| **KAPI** | **Kappang** | **11.80 272** | | Pn | Pn | 19 02 18.1 | -4.9 |
| | 14nm,0.8s | | | | | | |
| **SPSI** | **Sidrap Palu** | **11.88 277** | | P | **Pn** | **19 02 26.6** | **+2.6** |
| **WSI** | **Waingapu** | **11.93 249** | | P | **Pn** | **19 02 25.8** | **+1.1** |
| | 290nm,0.6s,4µm | | | | | | |
| **TTSI** | **Tana Toraja** | **11.99 281** | | P | **Pn** | **19 02 28.3** | **+2.8** |
| **PCI** | **Palu** | **12.59 291** | | P | **Pn** | **19 02 34.1** | **+0.3** |
| | 71nm,1.1s,759nm | | | | | | |
| **MPSI** | **Mapaga** | **13.04 296** | | P | **Pn** | **19 02 41.4** | **+1.5** |
| | 16nm,0.9s | | | | | | |
| **PALU** | **Palau** | **13.09 13** | | P | **Pn** | **19 02 42.3** | **+1.7** |
| | baz=13,SNR=6.2 | | | | | | |
| **COEN** | **Coen** | **14.16 127** | | P | **Pn** | **19 02 55.8** | **+0.7** |
| | baz=14,SNR=11 | | | | | | |
| **COEN** | **Coen** | **14.16 127** | | *e*Pn | **Pn** | **19 02 55.4** | **+0.2** |
| | 25nm,0.5s | | | | | | |
| COEN | | | | Sn | **Sn** | **19 05 31.9** | **+1.0** |
| **WRAB** | **Tennant Creek** | **14.58 170** | | *e*Pn | **Pn** | **19 02 57.5** | **-3.1** |
| | 34nm,0.6s | | | | | | |
| WRAB | | | | *e*Sn | **Sn** | **19 05 38.5** | **-2.6** |
| **WRA** | **Warramunga Arr** | **14.59 170** | | Pn | **Pn** | **19 02 58.4** | **-2.4** |
| | 1.3nm,0.3s,baz=345,slow=14,SNR=76 | | | | | | |
| WRA | | | | Sn | Sn | 19 05 32.1 | -9.2 |
| | 7.4nm,0.3s,baz=345,slow=23,SNR=11 | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **14.94 257** | | P | **P** | **19 03 11.4** | **+1.6** |
| | 36nm,0.8s | | | | | | |
| **KBKI** | **Kotabaru** | **15.53 277** | | P | **P** | **19 03 16.7** | **+0.3** |
| | 36nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **15.91 105** | | *e*Pn | **P** | **19 03 20.1** | **-0.6** |
| | 37nm,0.9s | | | | | | |
| **SRBI** | **Singaraja** | **16.46 260** | | P | P | 19 03 31.6 | +4.9 |
| **BBKI** | **Banjar Baru** | **16.82 276** | | P | **P** | **19 03 30.8** | **+0.1** |
| | 104nm,1.0s,1µm | | | | | | |
| **QIS** | **Mount Isa** | **16.86 153** | | P | **Pn** | **19 03 30.4** | **+0.7** |
| | baz=17,SNR=36 | | | | | | |
| **ABJI** | **Asem Bagus** | **17.38 262** | | P | **P** | **19 03 38.2** | **+1.3** |
| | 117nm,1.0s,2µm | | | | | | |
| **KMMI** | **Kalianget** | **17.58 264** | | P | **P** | **19 03 41.7** | **+2.6** |
| | 128nm,1.3s,2µm | | | | | | |
| **MTSU** | **Mount Surprise** | **17.66 136** | | P | **P** | **19 03 42.5** | **+2.5** |
| | baz=18,SNR=92 | | | | | | |
| **ASAR** | **Alice Springs** | **18.19 173** | | P | **P** | **19 03 45.1** | **-0.6** |
| | 1.8nm,0.3s,baz=343,slow=7.8,SNR=120 | | | | | | |
| ASAR | | | | S | Sn | 19 06 54.9 | -14 |
| | baz=347,slow=16,SNR=3.8 | | | | | | |
| ASAR | | | | LR | LR | 19 11 06.1 | |
| | comp=Z,171nm,21.3s,baz=346,slow=38 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 11 48.9** | **+0.8** |
| | 0.2nm,0.3s,baz=10,slow=1.9,SNR=3.7 | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.17 307** | | P | **P** | **19 03 57.0** | **+0.3** |
| | baz=19,SNR=6.5 | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.17 307** | | ⇑P | **P** | **19 03 56.2** | **-0.4** |
| **KKM** | **Kota Kinabalu** | **19.17 307** | | *e*Pn | **P** | **19 03 55.7** | **-0.9** |
| | 40nm,0.8s | | | | | | |
| **MBWA** | **Marble Bar** | **19.34 215** | | P | **P** | **19 03 57.2** | **-1.2** |
| | 37nm,0.7s | | | | | | |
| MBWA | | | | *e*Sn | **S** | **19 07 31.0** | **-3.6** |
| **WRKA** | **Warakurna** | **19.67 189** | | P | **Pn** | **19 04 04.5** | **+0.7** |
| | baz=20,SNR=156 | | | | | | |
| **PBKI** | **Pangkalan Bun** | **20.06 277** | | P | Pn | 19 04 12.6 | +4.1 |
| | 50nm,1.0s | | | | | | |
| **CTA** | **Charters Tower** | **20.33 137** | | P | Pn | 19 04 10.7 | -0.9 |
| | 17nm,1.1s,baz=312,slow=12,SNR=2.6 | | | | | | |
| CTA | | | | S | **S** | **19 07 51.4** | **-2.8** |
| | 4.1nm,0.8s,baz=34,slow=23,SNR=2.4 | | | | | | |
| **CTAO** | **Charters Tower** | **20.33 137** | | P | **P** | **19 04 06.8** | **-2.3** |
| | 41nm,1.0s | | | | | | |
| **BTM** | **Bintulu** | **20.41 295** | | ⇑P | **P** | **19 04 09.1** | **-0.9** |
| **SBUM** | **Sibu** | **20.90 292** | | ⇑P | **P** | **19 04 14.5** | **-0.9** |
| **KSM** | **Kuching** | **22.36 287** | | ⇑P | **P** | **19 04 30.2** | **-0.9** |
| **GUMO** | **Guam** | **23.11 35** | | LR | LR | 19 12 54.6 | |
| | comp=Z,35nm,21.6s,baz=221,slow=34 | | | | | | |
| **CISI** | **Cisompet, Garu** | **23.70 264** | | P | **P** | **19 04 42.2** | **-2.4** |
| | baz=24,SNR=6.8 | | | | | | |
| **LEM** | **Lembang** | **23.87 266** | | P | **P** | **19 04 42.6** | **-3.6** |
| | 27nm,0.8s,baz=280,slow=17,SNR=3.7 | | | | | | |
| LEM | | | | LR | LR | 19 15 58.3 | |
| | comp=Z,47nm,20.7s,baz=63,slow=42 | | | | | | |
| **GIRL** | **Giralia** | **23.89 223** | | P | **P** | **19 04 48.0** | **+1.9** |
| | baz=24,SNR=4.4 | | | | | | |
| **QLP** | **Quilpie** | **24.18 151** | | P | **P** | **19 04 53.3** | **+4.6** |
| | baz=24,SNR=20 | | | | | | |
| **MEEK** | **Meekatharra** | **24.39 209** | | P | **P** | **19 04 51.6** | **+1.0** |
| | baz=24,SNR=19 | | | | | | |
| **KMBL** | **Kambalda** | **27.28 198** | | P | **P** | **19 05 18.9** | **+2.1** |
| | baz=27,SNR=15 | | | | | | |
| **BBOO** | **Buckleboo** | **27.48 172** | | P | **P** | **19 05 15.6** | **-2.9** |
| **MORW** | **Morawa** | **27.66 210** | | P | **P** | **19 05 21.4** | **+1.2** |
| | baz=28,SNR=10 | | | | | | |
| **HTT** | **Hallett** | **28.60 167** | | P | **P** | **19 05 28.2** | **-0.4** |
| | baz=29,SNR=13 | | | | | | |
| **BLDU** | **Balliduu** | **28.63 208** | | P | **P** | **19 05 30.3** | **+1.5** |
| | baz=29,SNR=12 | | | | | | |
| **MYKOM** | **Kota Tinggi** | **28.64 284** | | ⇑P | **P** | **19 05 27.6** | **-1.5** |
| **KLBR** | **Kellerberrin** | **29.00 205** | | P | **P** | **19 05 33.9** | **+1.8** |
| | baz=29,SNR=5.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **29.07 155** | | P | P | 19 05 37.6 | +4.9 |
| | baz=29,SNR=5.9 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **30.38 204** | | P | **P** | **19 05 44.4** | **+0.1** |
| | 2.8nm,0.5s,baz=96,slow=0.4,SNR=5.0 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **30.38 204** | | P | P | 19 05 50.1 | +5.8 |
| | baz=30,SNR=3.9 | | | | | | |
| **RKGY** | **Rocky Gully** | **31.95 203** | | P | P | 19 06 01.4 | +3.3 |
| | baz=32,SNR=5.1 | | | | | | |
| **IPM** | **Ipoh** | **32.10 287** | | ⇑P | **P** | **19 05 58.1** | **-1.6** |
| **ARPS** | **Mount Arapiles** | **32.50 165** | | P | P | 19 06 07.9 | +5.1 |
| | baz=33,SNR=9.0 | | | | | | |
| **KULM** | **Kulim** | **32.70 289** | | ⇑P | **P** | **19 06 03.3** | **-1.6** |
| **PSI** | **Prapat** | **33.66 283** | | P | P | 19 06 09.8 | -3.7 |
| | 2.8nm,0.4s,baz=52,slow=3.8,SNR=4.9 | | | | | | |
| **TOO** | **Toolangi** | **34.34 160** | | P | P | 19 06 26.0 | +7.1 |
| | baz=34,SNR=4.2 | | | | | | |
| **SKNT** | **Salnakorn** | **35.27 310** | | P | **P** | **19 06 26.6** | **-0.5** |
| | 19nm,0.8s | | | | | | |
| **KHON** | **Khomkaen** | **35.79 308** | | P | **P** | **19 06 31.6** | **0.0** |
| | 12nm,0.8s,269nm | | | | | | |
| **CHAI** | **Chaiyaphum** | **36.21 306** | | P | **P** | **19 06 34.8** | **-0.5** |
| | 3.5nm,0.8s | | | | | | |
| **NONG** | **Nongkai** | **36.56 310** | | P | **P** | **19 06 37.2** | **-1.0** |
| | 117nm,1.1s,9µm | | | | | | |
| **PBKT** | **Sadao Pong** | **37.39 306** | | P | **P** | **19 06 46.1** | **+0.8** |
| | 5.6nm,1.1s,908nm | | | | | | |
| **LOEI** | **Loei** | **37.68 308** | | P | **P** | **19 06 44.7** | **-3.1** |
| | 47nm,1.0s | | | | | | |
| **UTTA** | **Uttaradit** | **38.37 308** | | P | **P** | **19 06 53.3** | **-0.2** |
| | 3.7nm,0.8s | | | | | | |
| **JNU** | **Nakatsue** | **38.43 359** | | P | **P** | **19 06 53.4** | **-0.4** |
| | 50nm,0.9s,baz=205,slow=2.6,SNR=23 | | | | | | |
| **LAMP** | **Lampang** | **39.53 308** | | P | **P** | **19 07 04.9** | **+1.6** |
| | 5.6nm,0.7s | | | | | | |
| **CRAI** | **Chiangrai** | **39.95 311** | | P | P | 19 07 02.3 | -4.4 |
| | 53nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **40.04 307** | | P | **P** | **19 07 07.1** | **-0.4** |
| | 3.8nm,0.6s,baz=136,slow=7.3,SNR=45 | | | | | | |
| CMAR | | | | ScP | **ScP** | **19 12 57.2** | **+0.8** |
| | 1.4nm,0.8s,baz=163,slow=3.3,SNR=6.1 | | | | | | |
| **CHTO** | **Chiang Mai** | **40.24 308** | | P | **P** | **19 07 08.7** | **-0.4** |
| | 54nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **40.24 308** | | *e*P | **P** | **19 07 07.9** | **-1.2** |
| | 9.2nm,0.8s | | | | | | |
| **MHMT** | **Maesarieng** | **40.70 306** | | P | P | 19 07 17.4 | +4.5 |
| | 6.2nm,0.9s | | | | | | |
| **CMAI** | **Chiengmai2** | **40.79 309** | | P | **P** | **19 07 13.5** | **-0.3** |
| | 114nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **42.29 8** | | *e*P | **P** | **19 07 23.9** | **-1.8** |
| | 16nm,0.8s | | | | | | |
| **MAT** | **Matsushiro** | **42.29 8** | | P | **P** | **19 07 24.7** | **-1.0** |
| **MJAR** | **Matsushiro Arr** | **42.29 8** | | P | **P** | **19 07 24.6** | **-1.1** |
| | 6.3nm,0.8s,baz=181,slow=9.2,SNR=24 | | | | | | |
| MJAR | | | | LR | LR | 19 24 40.4 | |
| | comp=Z,48nm,19.1s,baz=215,slow=36 | | | | | | |
| **KSAR** | **Wonju Array Be** | **42.87 356** | | P | **P** | **19 07 30.8** | **+0.5** |
| **KSRS** | **Korea Array** | **42.88 356** | | P | **P** | **19 07 30.8** | **+0.4** |
| | 2.6nm,0.6s,baz=171,slow=9.1,SNR=16 | | | | | | |
| KSRS | | | | LR | LR | 19 23 06.2 | |
| | comp=Z,32nm,21.9s,baz=167,slow=33 | | | | | | |
| **SNY** | **Shenyang** | **47.68 352** | | ⇓P | **P** | **19 08 08.3** | **0.0** |
| SNY | | | | PMZ | | | |
| | 22nm,0.7s | | | | | | |
| **CN2** | **Changchun** | **49.40 354** | | *e*P | **P** | **19 08 20.8** | **-0.8** |
| CN2 | | | | PMZ | | | |
| | 10.0nm,0.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.48 0** | | P | **P** | **19 08 22.9** | **+0.7** |
| | 10nm,0.6s,baz=183,slow=7.4,SNR=29 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.66 340** | | *e*P | **P** | **19 08 25.9** | **+2.1** |
| HHC | | | | S | **S** | **19 15 26.9** | **-1.8** |
| HHC | | | | PMZ | | | |
| | 62nm,5.9s | | | | | | |
| HHC | | | | LN | | | |
| | 120nm,12.3s | | | | | | |
| HHC | | | | LE | | | |
| | 140nm,13.6s | | | | | | |
| **RPZ** | **Rata Peaks** | **51.47 144** | | LR | LR | 19 30 04.5 | |
| | comp=Z,69nm,18.8s,baz=284,slow=35 | | | | | | |
| **LSA** | **Lhasa** | **52.26 314** | | P | **P** | **19 08 44.0** | **+0.1** |
| LSA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **LSA** | **Lhasa** | **52.26 314** | | P | P | 19 08 40.2 | -3.7 |
| | 8.3nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **52.34 284** | | P | **P** | **19 08 42.8** | **-1.5** |
| | 7.3nm,0.8s,baz=112,slow=6.2,SNR=3.6 | | | | | | |
| **URZ** | **Urewera** | **52.56 135** | | LR | LR | 19 33 54.4 | |
| | comp=Z,46nm,18.0s,baz=326,slow=39 | | | | | | |
| **GTA** | **Gaotai** | **53.47 329** | | *e*P | **P** | **19 08 52.8** | **+0.5** |
| GTA | | | | PMZ | | | |
| | 6.0nm,0.9s | | | | | | |
| **ODAN** | **Odare** | **53.51 309** | | *e*P | **P** | **19 08 52.2** | **-0.8** |
| | 21nm,0.7s | | | | | | |
| **TAPN** | **Taplejung** | **53.52 310** | | *e*P | **P** | **19 08 52.3** | **-0.8** |
| | 16nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **54.17 309** | | *e*P | **P** | **19 08 57.3** | **-0.5** |
| | 31nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **55.20 310** | | *e*P | **P** | **19 09 04.6** | **-0.7** |
| | 14nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **55.40 309** | | *e*P | **P** | **19 09 05.6** | **-1.1** |
| | 8.5nm,0.6s | | | | | | |
| **PKIN** | **Phulchoki** | **55.41 309** | | *e*P | **P** | **19 09 06.0** | **-0.8** |
| | 1.9nm,0.2s | | | | | | |
| **KKN** | **Kakani** | **55.60 309** | | *e*P | **P** | **19 09 07.1** | **-1.0** |
| **DMN** | **Daman** | **55.65 309** | | *e*P | **P** | **19 09 07.7** | **-0.8** |
| | 12nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **56.20 309** | | *e*P | **P** | **19 09 11.6** | **-0.7** |
| | 26nm,0.7s | | | | | | |
| **KOLN** | **Koldanda** | **56.90 308** | | *e*P | **P** | **19 09 16.9** | **-0.4** |
| | 21nm,0.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **57.37 341** | | *e*P | **P** | **19 09 18.6** | **-1.6** |
| | 5.0nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **57.56 340** | | P | **P** | **19 09 21.9** | **+0.4** |
| | 3.0nm,0.7s,baz=159,slow=6.8,SNR=19 | | | | | | |
| **TLY** | **Talaya** | **61.78 341** | | LR | LR | 19 39 50.9 | |
| | comp=Z,25nm,18.4s,baz=138,slow=39 | | | | | | |
| **PETK** | **Petropavlovsk-** | **62.44 17** | | P | **P** | **19 09 56.2** | **+1.6** |
| | 7.3nm,0.7s,baz=180,slow=7.2,SNR=15 | | | | | | |
| PETK | | | | LR | LR | 19 39 37.3 | |
| | comp=Z,10nm,18.2s,baz=193,slow=38 | | | | | | |
| **WMQ** | **Urumqi** | **63.04 326** | | P | **P** | **19 10 00.0** | **+1.0** |
| WMQ | | | | PMZ | | | |
| | 13nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **67.87 326** | | P | **P** | **19 10 30.5** | **+0.4** |
| | 10nm,0.6s,baz=111,slow=8.3,SNR=98 | | | | | | |
| **KSH** | **Kashi** | **68.01 316** | | P | **P** | **19 10 30.1** | **-1.2** |
| KSH | | | | PMZ | | | |
| | 5.0nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **69.86 320** | | *e*P | **P** | **19 10 42.3** | **-0.5** |
| | 5.4nm,0.6s | | | | | | |
| **UCH** | **Uchtor** | **70.25 319** | | ⇑*i*P | **P** | **19 10 43.6** | **-1.9** |
| | baz=94 | | | | | | |
| **AAK** | **Ala-Archa** | **70.45 319** | | *e*P | **P** | **19 10 44.4** | **-1.9** |
| | 6.0nm,1.1s | | | | | | |
| **EKS2** | **Erkin-Say** | **70.93 319** | | *e*P | **P** | **19 10 48.9** | **-0.3** |
| | 5.0nm,0.8s | | | | | | |
| **EKS2** | **Erkin-Say** | **70.93 319** | | ⇑*i*S | **P** | **19 10 48.5** | **-0.7** |
| | baz=351 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.97 333** | | P | **P** | **19 10 48.6** | **-0.4** |
| | 3.1nm,0.6s,baz=124,slow=6.2,SNR=12 | | | | | | |
| **KURK** | **Kurchatov** | **72.09 328** | | *e*P | **P** | **19 10 54.6** | **-1.2** |
| | 13nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **73.28 318** | | *e*P | **P** | **19 11 02.9** | **-0.2** |
| | 2.0nm,0.6s | | | | | | |
| **VNDA** | **Vanda** | **73.73 173** | | P | **P** | **19 11 05.5** | **+0.4** |
| | 0.9nm,0.8s,baz=325,slow=8.5,SNR=6.7 | | | | | | |
| VNDA | | | | LR | LR | 19 44 15.8 | |
| | comp=Z,29nm,18.1s,baz=306,slow=36 | | | | | | |
| **MAW** | **Mawson** | **76.90 202** | | P | **P** | **19 11 25.1** | **+1.6** |
| | 4.4nm,0.9s,baz=52,slow=8.9,SNR=8.5 | | | | | | |
| **MAW** | **Mawson** | **76.90 202** | | P | **P** | **19 11 26.0** | **+2.5** |
| | baz=77,SNR=6.9 | | | | | | |
| **GEYT** | **Alibeck** | **80.47 310** | | P | **P** | **19 11 43.7** | **0.0** |
| | 1.2nm,0.6s,baz=96,slow=7.6,SNR=4.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **82.34 321** | | *e*P | **P** | **19 11 53.0** | **-0.3** |
| | 6.1nm,0.6s | | | | | | |
| **OPO** | **Ambohidratompo** | **82.97 252** | | P | **P** | **19 11 58.3** | **+0.8** |
| | 5.3nm,0.8s,baz=37,slow=2.7,SNR=7.6 | | | | | | |
| **RAYN** | **Ar Rayn** | **88.59 294** | | *e*P | **P** | **19 12 23.3** | **-1.8** |
| | 5.3nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **91.34 25** | | P | **P** | **19 12 36.5** | **-0.4** |
| | 1.2nm,0.6s,baz=270,slow=4.3,SNR=17 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **94.21 268** | | P | **P** | **19 12 52.1** | **+0.5** |
| | 0.6nm,0.5s,baz=108,slow=20,SNR=2.8 | | | | | | |
| **CLL** | **Collm** | **111.92 324** | | *e*PP | PP | 19 18 45.0 | -5.0 |
| **TORD** | **Torodi Ar. Bea** | **130.05 282** | | PKP | **PKPdf** | **19 18 43.6** | **+1.4** |
| | 0.6nm,0.6s,baz=91,slow=1.9,SNR=6.1 | | | | | | |
| TORD | | | | SKPbc | **SKPab** | **19 22 00.3** | **0.0** |
| | 4.9nm,0.9s,baz=79,slow=3.8,SNR=22 | | | | | | |
| **CPUP** | **Villa Florida** | **147.19 165** | | PKPbc | **PKPbc** | **19 19 15.8** | **+0.5** |
| | 2.1nm,0.8s,baz=184,slow=2.1,SNR=4.7 | | | | | | |
| **LPAZ** | **La Paz** | **150.85 138** | | PKPbc | **PKPbc** | **19 19 28.4** | **+2.8** |
| | 1.1nm,0.4s,baz=44,slow=3.0,SNR=6.2 | | | | | | |

*IDC* ***24*** *18:59:44.5±1.5,52.˝36N×168.˚60W,h0km,mb4.0/14, mb1 4.1/15,mb1mx3.9/51,mbtmp4.0/15,ML3.4/1,Error ellipse: s-maj=36.5km s-min=19.6km az=170.0*
*NEIC* ***24*** *18:59:48.1,52.˝22N×168.˚60W,h16km,ML3.5(AEIC),After AEIC.*

**ISC 24 18:59:46.6**±2.3,**52.˚17N**±0.˚09×**168.˚52W**±0.˚07, **h17**km±13km,**n36,**σ1**ş27**/32,**mb4.0**/13,**Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NIKH** | **Nikolski High** | **0.83 346** | | P | **Pg** | **19 00 02.6** | **-0.1** |
| NIKH | | | | S | **Sn** | **19 00 15.5** | **+0.1** |
| **OKSO** | **Okmok South** | **1.21 10** | | P | **Pg** | **19 00 08.7** | **-0.3** |
| OKSO | | | | S | **Sb** | **19 00 25.0** | **+0.6** |
| **OKTU** | **Okmok Mt. Tuli** | **1.25 13** | | P | **Pn** | **19 00 10.1** | **+0.7** |
| OKTU | | | | S | **Sb** | **19 00 26.1** | **+0.5** |
| **OKFG** | **Magazine Ridge** | **1.29 16** | | P | **Pn** | **19 00 10.2** | **+0.3** |
| OKFG | | | | S | **Sb** | **19 00 27.9** | **+1.1** |
| **MSOM** | **Makushin Julie** | **1.90 29** | | P | **Pn** | **19 00 19.3** | **+1.0** |
| **MSW** | **Makushin Switc** | **2.04 30** | | P | **Pn** | **19 00 21.6** | **+1.5** |
| MSW | | | | S | **Sn** | **19 00 45.5** | **+0.3** |
| **MTBL** | **Makushin Table** | **2.12 31** | | P | **Pn** | **19 00 22.6** | **+1.4** |
| MTBL | | | | S | **Sn** | **19 00 48.6** | **+1.3** |
| **ZRO** | **Akutan Zero** | **2.46 37** | | P | **Pn** | **19 00 27.6** | **+1.6** |
| **AKGG** | **Akutan Green G** | **2.54 36** | | P | **Pn** | **19 00 28.4** | **+1.4** |
| **KOFP** | **Korovin Flat P** | **3.43 274** | | P | **Pn** | **19 00 41.3** | **+2.0** |
| **ATKA** | **Atka Island** | **3.50 273** | | P | **Pn** | **19 00 41.3** | **+1.2** |
| **GSTD** | **Great Sitkin T** | **4.70 272** | | P | **Pn** | **19 00 57.8** | **+1.0** |
| **ETKA** | **Kagalaska Isla** | **4.88 269** | | P | **Pn** | **19 01 00.7** | **+1.4** |
| **CHGN** | **Chignik** | **7.22 51** | | *e*Pn | **Pn** | **19 01 33.5** | **+2.2** |
| **KDAK** | **Kodiak Island** | **10.73 52** | | Pn | **Pn** | **19 02 19.1** | **-0.2** |
| | 1.0nm,0.3s,baz=161,slow=4.3,SNR=18 | | | | | | |
| KDAK | | | | Sn | **Sn** | **19 04 16.4** | **-2.5** |
| | 0.1nm,0.3s,baz=128,slow=19,SNR=2.0 | | | | | | |
| **ILAR** | **Eielson Array** | **16.83 33** | | Pn | **Pn** | **19 03 39.5** | **-1.6** |
| | 0.1nm,0.3s,baz=232,slow=10,SNR=3.6 | | | | | | |
| **PETK** | **Petropavlovsk-** | **20.42 286** | | P | **P** | **19 04

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CNJI | | | | S | Sn | 19 05 20.1 | -1.1 | |
| **CMJI** | **Cimerak** | **1.22** | **66** | P | Pn | 19 05 11.2 | -0.6 | |
| CMJI | | | | S | Sn | 19 05 24.7 | -2.3 | |
| **LEM** | **Lembang** | **1.47** | **11** | Pn | Pn | 19 05 16.4 | +1.0 | |
| | 249nm,0.3s,baz=94,slow=22,SNR=103 | | | | | | | |
| LEM | | | | Sn | Sn | 19 05 34.1 | +0.6 | |
| | 654nm,0.3s,baz=346,slow=19,SNR=14 | | | | | | | |
| LEM | | | | LR | LR | 19 06 04.5 | | |
| | comp=Z,464nm,19.2s,baz=240,slow=49 | | | | | | | |
| **LEM** | **Lembang** | **1.47** | **11** | P | Pn | 19 05 16.5 | +1.0 | |
| | baz=1.6,SNR=133 | | | | | | | |
| **LEM** | **Lembang** | **1.47** | **11** | P | Pn | 19 05 16.4 | +1.0 | |
| LEM | | | | S | Sn | 19 05 35.5 | +2.0 | |
| **SKJI** | **Sukabumi** | **1.48** | **329** | P | Pn | 19 05 15.6 | +0.2 | |
| SKJI | | | | S | Sn | 19 05 33.9 | +0.4 | |
| **CGJI** | **Cibinong** | **2.31** | **315** | P | Pn | 19 05 27.4 | +0.5 | |
| **XMI** | **Christmas Isla** | **2.69** | **217** | P | Pn | 19 05 33.1 | +0.9 | |
| | baz=2.7,SNR=15 | | | | | | | |
| **XMIS** | **Christmas Isla** | **2.74** | **217** | P | Pn | 19 05 33.4 | +0.6 | |
| | baz=2.7,SNR=38 | | | | | | | |
| **UGM** | **Wanagama** | **3.19** | **84** | P | Pn | 19 05 39.2 | +0.2 | |
| | baz=3.1,SNR=22 | | | | | | | |
| **UGM** | **Wanagama** | **3.19** | **84** | P | Pn | 19 05 38.5 | -0.4 | |
| **SMRI** | **Semarang** | **3.32** | **69** | P | Pn | 19 05 42.7 | +2.0 | |
| | baz=3.3,SNR=7.7 | | | | | | | |
| **SMRI** | **Semarang** | **3.32** | **69** | P | Pn | 19 05 42.5 | +1.8 | |
| **WOJI** | **Wonogiri, Jawa** | **3.59** | **83** | P | Pn | 19 05 45.8 | +1.4 | |
| **PCJI** | **Pacitan** | **3.81** | **89** | P | Pn | 19 05 47.9 | +0.4 | |
| **KASI** | **Kota Agung** | **3.92** | **314** | P | Pn | 19 05 51.6 | +2.6 | |
| **NGJI** | **Ngawi** | **4.20** | **78** | P | Pn | 19 05 55.5 | +2.7 | |
| **PWJI** | **Pagerwojo** | **4.44** | **87** | P | Pn | 19 05 58.1 | +2.0 | |
| **LWLI** | **Liwa** | **4.58** | **315** | P | Pn | 19 06 01.7 | +3.5 | |
| **MDSI** | **Maura Dua** | **4.90** | **320** | P | Pn | 19 06 04.0 | +1.6 | |
| **TPI** | **Tanjungpandan** | **5.49** | **3** | P | Pn | 19 06 12.2 | +1.5 | |
| | 24nm,0.9s,0.1nm | | | | | | | |
| **MNAI** | **Manna** | **5.83** | **312** | P | Pn | 19 06 18.0 | +2.7 | |
| | baz=5.9,SNR=12 | | | | | | | |
| **ABJI** | **Asem Bagus** | **6.86** | **86** | P | Pn | 19 06 32.2 | +2.8 | |
| | 52nm,0.5s,0.2nm | | | | | | | |
| **SRBI** | **Singaraja** | **7.81** | **89** | P | Pn | 19 06 45.1 | +2.6 | |
| **CMAR** | **Chiang Mai Arr** | **27.82** | **343** | P | P | 19 10 36.0 | -1.5 | |
| | 0.3nm,0.4s,baz=183,slow=8.1,SNR=2.8 | | | | | | | |
| CMAR | | | | LR | LR | 19 22 22.3 | | |
| | comp=Z,12nm,18.6s,baz=150,slow=38 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **34.50** | **269** | T | T | 19 48 40.5 | | |
| | baz=92,slow=75,SNR=12 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **34.51** | **269** | T | T | 19 48 41.6 | | |
| | baz=92,slow=75,SNR=13 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **34.52** | **269** | T | T | 19 48 42.2 | | |
| | baz=92,slow=75,SNR=15 | | | | | | | |
| **SONM** | **Songino Array** | **55.87** | **359** | P | P | 19 14 24.2 | -1.3 | |
| | 0.3nm,0.4s,baz=183,slow=7.5,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.19** | **340** | P | P | 19 14 46.2 | -2.6 | |
| | 0.3nm,0.5s,baz=164,slow=7.9,SNR=5.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **64.84** | **346** | LR | LR | 19 44 08.0 | | |
| | comp=Z,18nm,18.5s,baz=70,slow=36 | | | | | | | |
| **MAW** | **Mawson** | **66.25** | **197** | P | P | 19 15 34.3 | -1.1 | |
| | 0.9nm,0.6s,baz=8.1,slow=7.1,SNR=2.3 | | | | | | | |
| **VNDA** | **Vanda** | **74.66** | **169** | P | P | 19 16 28.1 | +1.4 | |
| | 0.3nm,0.4s,baz=316,slow=7.5,SNR=3.8 | | | | | | | |
| **BRTR** | **Keskin Array B** | **82.91** | **312** | P | P | 19 17 12.8 | 0.0 | |
| | 0.5nm,0.6s,baz=148,slow=7.3,SNR=3.4 | | | | | | | |
| **NOA** | **NORSAR Array B** | **100.15** | **331** | LR | LR | 20 07 29.8 | | |
| | comp=Z,8.8nm,21.8s,baz=305,slow=38 | | | | | | | |

*IDC **24** 19:29:31.8±1.0,37°21′N×20°15′E,h0km,mb3.8/9,*
*mb1 3.7/17,mb1mx3.6/52,mbtmp3.6/17,ML2.9/8,Error*
*ellipse: s-maj=17.7km s-min=16.6km az=176.0*
*CSEM **24** 19:29:33.0±0.3,37°11′N×19°98′E,h5km,MD3.8,Error*
*ellipse: s-maj=7.6km s-min=3.9km az=48.0*
*ATH **24** 19:29:33.2,37°10′N×20°02′E,h23km±3km,MD3.8/42*
*THE **24** 19:29:35.3,37°17′N×20°06′E,h7km±31km,ML3.0/10,Error*
*ellipse: s-maj=31.6km s-min=1.7km az=0.0*

**ISC 24 19:29:32.6±2.9,37°07′N±0′.04×20°00′E±0′.04,h13km±19km,**
**n193,σ1s23/231,mb3.8/9,5C-1D,Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SFD** | **Strofades** | **0.83** | **77** | *e*PN | | **Pn** | **19 29 50.2** | **+0.2** |
| SFD | | | | *e*SN | | **Sb** | **19 30 00.3** | **+0.2** |
| **SFD** | **Strofades** | **0.83** | **77** | P | | **Pn** | **19 29 50.6** | **+0.6** |
| SFD | | | | S | | **Sn** | **19 29 50.2** | **+0.4** |
| **SFD** | **Strofades** | **0.83** | **77** | *e*Pn | | **Pn** | **19 29 50.4** | **+0.2** |
| **SFD** | **Strofades** | **0.83** | **77** | P | | **Pn** | **19 29 50.6** | **+0.6** |
| **VLS** | **Valsamata** | **1.20** | **23** | *e*PN | | **Pn** | **19 29 55.4** | **+0.2** |
| VLS | | | | *e*SN | | **Sn** | **19 30 11.3** | **0.0** |
| **VLS** | **Valsamata** | **1.20** | **23** | P | | **Pn** | **19 29 55.4** | **+0.2** |
| VLS | | | | S | | **Sb** | **19 30 10.7** | **-0.1** |
| **VLS** | **Valsamata** | **1.20** | **23** | P | | **Pn** | **19 29 55.4** | **+0.2** |
| VLS | | | | S | | **Sb** | **19 30 10.7** | **-0.1** |
| VLS | | | | *e*Sn | | **Sn** | **19 30 11.3** | **0.0** |
| **KFL** | **Anninata** | **1.22** | **31** | P | | **Pb** | **19 29 55.8** | **+0.3** |
| KFL | | | | S | | **Sn** | **19 30 11.7** | **+0.1** |
| **KFL** | **Anninata** | **1.22** | **31** | P | | **Pb** | **19 29 55.8** | **+0.3** |
| KFL | | | | S | | **Sn** | **19 30 11.7** | **+0.1** |
| **PYL** | **PYLOS** | **1.41** | **96** | *e*PN | | **Pn** | **19 29 58.6** | **+0.7** |
| **PYL** | **PYLOS** | **1.41** | **96** | P | | **Pb** | **19 29 58.8** | **+0.1** |
| **PYL** | **PYLOS** | **1.41** | **96** | P | | **Pb** | **19 29 58.8** | **+0.1** |
| **AMT** | **Artemida-Makis** | **1.44** | **71** | *e*PN | | **Pn** | **19 29 59.1** | **+0.7** |
| **AMT** | **Artemida-Makis** | **1.44** | **71** | P | | **Pb** | **19 29 59.4** | **+0.1** |
| **AMT** | **Artemida-Makis** | **1.44** | **71** | *e*Pn | | **Pn** | **19 29 59.1** | **+0.7** |
| **AMT** | **Artemida-Makis** | **1.44** | **71** | P | | **Pb** | **19 29 59.4** | **+0.1** |
| **RLS** | **Riolos of Patr** | **1.53** | **49** | *e*PN | | **Pb** | **19 30 00.9** | **+0.1** |
| **RLS** | **Riolos of Patr** | **1.53** | **49** | P | | **Pb** | **19 30 00.9** | **+0.1** |
| **RLS** | **Riolos of Patr** | **1.53** | **49** | P | | **Pb** | **19 30 00.9** | **+0.1** |
| **ITM** | **Ithomi** | **1.55** | **85** | *e*PN | | **Pb** | **19 30 01.2** | **+0.1** |
| **ITM** | **Ithomi** | **1.55** | **85** | P | | **Pb** | **19 30 01.1** | **0.0** |
| ITM | | | | S | | **Sn** | **19 30 20.1** | **+0.3** |
| **ITM** | **Ithomi** | **1.55** | **85** | P | | **Pb** | **19 30 01.1** | **0.0** |
| **AXS** | **Araxos** | **1.57** | **44** | P | | **Pb** | **19 30 01.7** | **+0.2** |
| **AXS** | **Araxos** | **1.57** | **44** | P | | **Pb** | **19 30 01.7** | **+0.2** |
| **DRO** | **Drossia** | **1.62** | **57** | *e*PN | | **Pb** | **19 30 02.4** | **0.0** |
| **DRO** | **Drossia** | **1.62** | **57** | P | | **Pb** | **19 30 02.3** | **-0.1** |
| **DRO** | **Drossia** | **1.62** | **57** | *e*Pn | | **Pb** | **19 30 02.4** | **0.0** |
| **PDO** | **Prodromos** | **1.79** | **31** | *e*PN | | **Pb** | **19 30 05.4** | **+0.1** |
| **PDO** | **Prodromos** | **1.79** | **31** | P | | **Pb** | **19 30 05.3** | **0.0** |
| PDO | | | | S | | **Sn** | **19 30 27.0** | **+1.1** |
| **PDO** | **Prodromos** | **1.79** | **31** | P | | **Pb** | **19 30 05.3** | **0.0** |
| PDO | | | | S | | **Sn** | **19 30 27.0** | **+1.1** |
| **LKD2** | **Lefkada island** | **1.80** | **17** | *e*PN | | **Pb** | **19 30 04.7** | **-0.6** |
| **LKD2** | **Lefkada island** | **1.80** | **17** | P | | **Pb** | **19 30 04.8** | **-0.6** |
| LKD2 | | | | S | | **Sb** | **19 30 27.3** | **-0.5** |
| **LKD2** | **Lefkada island** | **1.80** | **17** | P | | **Pb** | **19 30 04.8** | **-0.6** |
| LKD2 | | | | S | | **Sb** | **19 30 27.3** | **-0.5** |
| **DYR** | **Agios Nikonas** | **1.90** | **99** | *e*PB | | **Pn** | **19 30 05.5** | **+0.8** |
| **DYR** | **Agios Nikonas** | **1.90** | **99** | P | | **Pb** | **19 30 06.2** | **-0.9** |
| **DYR** | **Agios Nikonas** | **1.90** | **99** | *e*Pn | | **Pn** | **19 30 05.5** | **+0.8** |
| **DYR** | **Agios Nikonas** | **1.90** | **99** | P | | **Pb** | **19 30 06.2** | **-0.9** |
| **VLX** | **Vlachokerasia** | **1.93** | **80** | *e*PN | | **Pn** | **19 30 06.3** | **+1.1** |
| **VLX** | **Vlachokerasia** | **1.93** | **80** | P | | **Pn** | **19 30 06.7** | **+1.5** |
| **VLX** | **Vlachokerasia** | **1.93** | **80** | *e*Pn | | **Pn** | **19 30 06.3** | **+1.1** |
| **VLX** | **Vlachokerasia** | **1.93** | **80** | P | | **Pn** | **19 30 06.7** | **+1.5** |
| **LAKA** | **Lakka** | **1.96** | **53** | *e*PN | | **Pb** | **19 30 07.6** | **-0.6** |
| **LAKA** | **Lakka** | **1.96** | **53** | P | | **Pb** | **19 30 07.9** | **-0.3** |
| **LAKA** | **Lakka** | **1.96** | **53** | *e*Pb | | **Pb** | **19 30 07.6** | **-0.6** |
| **LAKA** | **Lakka** | **1.96** | **53** | P | | **Pb** | **19 30 07.9** | **-0.3** |
| **PVO** | **Paravola** | **1.96** | **38** | P | | **Pb** | **19 30 08.3** | **+0.1** |
| **PVO** | **Paravola** | **1.96** | **38** | P | | **Pb** | **19 30 08.3** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **1.97** | **60** | *e*PN | | **Pb** | **19 30 07.5** | **-0.9** |
| **KLV** | **Kalavryta, Ach** | **1.97** | **60** | P | | **Pb** | **19 30 07.4** | **-0.9** |
| **KLV** | **Kalavryta, Ach** | **1.97** | **60** | P | | **Pb** | **19 30 07.4** | **-0.9** |
| **EFP** | **Efpalio** | **2.03** | **48** | *e*PN | | **Pb** | **19 30 08.3** | **-1.1** |
| **EFP** | **Efpalio** | **2.03** | **48** | P | | **Pb** | **19 30 08.7** | **-0.7** |
| **EFP** | **Efpalio** | **2.03** | **48** | *e*Pb | | **Pb** | **19 30 08.3** | **-1.1** |
| **EFP** | **Efpalio** | **2.03** | **48** | P | | **Pb** | **19 30 08.7** | **-0.7** |
| **GUR** | **Goura** | **2.06** | **64** | *e*PN | | **Pn** | **19 30 08.6** | **+1.6** |
| **GUR** | **Goura** | **2.06** | **64** | P | | **Pn** | **19 30 08.4** | **+1.4** |
| **GUR** | **Goura** | **2.06** | **64** | P | | **Pn** | **19 30 08.4** | **+1.4** |
| **TRIZ** | **Trizonia** | **2.10** | **51** | *e*PN | | **Pb** | **19 30 09.6** | **-0.9** |
| **TRIZ** | **Trizonia** | **2.10** | **51** | *e*Pb | | **Pb** | **19 30 09.6** | **-0.9** |
| **SERG** | **Sergoula** | **2.12** | **50** | P | | **Pb** | **19 30 10.0** | **-0.8** |
| **SERG** | **Sergoula** | **2.12** | **50** | P | | **Pb** | **19 30 10.0** | **-0.8** |
| **KALE** | **Kalithea** | **2.15** | **51** | *e*PN | | **Pb** | **19 30 10.2** | **-1.3** |
| **KALE** | **Kalithea** | **2.15** | **51** | P | | **Pb** | **19 30 10.7** | **-0.8** |
| KALE | | | | S | | **Sb** | **19 30 37.8** | **-0.3** |
| **KALE** | **Kalithea** | **2.15** | **51** | *e*Pb | | **Pb** | **19 30 10.2** | **-1.3** |
| **KALE** | **Kalithea** | **2.15** | **51** | P | | **Pb** | **19 30 10.7** | **-0.8** |
| KALE | | | | S | | **Sb** | **19 30 37.8** | **-0.3** |
| **DSL** | **Palaion Diasel** | **2.24** | **22** | *e*PB | | **Pn** | **19 30 11.1** | **+1.7** |
| **DSL** | **Palaion Diasel** | **2.24** | **22** | P | | **Pn** | **19 30 10.9** | **+1.5** |
| **DSL** | **Palaion Diasel** | **2.24** | **22** | P | | **Pn** | **19 30 10.9** | **+1.5** |
| **THAL** | **Thalero** | **2.33** | **65** | *e*PN | | **Pn** | **19 30 12.1** | **+1.5** |
| **THAL** | **Thalero** | **2.33** | **65** | P | | **Pn** | **19 30 12.3** | **+1.7** |
| THAL | | | | S | | **Sn** | **19 30 40.3** | **+1.2** |
| **THAL** | **Thalero** | **2.33** | **65** | *e*Pn | | **Pn** | **19 30 12.1** | **+1.5** |
| THAL | | | | S | | **Sn** | **19 30 40.3** | **+1.2** |
| **EVR** | **Evrytania** | **2.34** | **37** | *e*PB | | **Pn** | **19 30 12.7** | **+1.9** |
| **EVR** | **Evrytania** | **2.34** | **37** | P | | **Pb** | **19 30 13.3** | **-1.3** |
| **EVR** | **Evrytania** | **2.34** | **37** | *e*Pb | | **Pn** | **19 30 12.7** | **+1.9** |
| **EVR** | **Evrytania** | **2.34** | **37** | P | | **Pb** | **19 30 13.3** | **-1.3** |
| **VLI** | **Veliai** | **2.38** | **98** | *e*PN | | **Pn** | **19 30 13.3** | **+2.0** |
| **VLI** | **Veliai** | **2.38** | **98** | P | | **Pb** | **19 30 14.2** | **-1.2** |
| **VLI** | **Veliai** | **2.38** | **98** | *e*Pn | | **Pn** | **19 30 13.3** | **+2.0** |
| **VLI** | **Veliai** | **2.38** | **98** | P | | **Pb** | **19 30 14.2** | **-1.2** |
| **DSF** | **Desfina** | **2.41** | **55** | *e*PB | | **Pn** | **19 30 13.7** | **+1.9** |
| **DSF** | **Desfina** | **2.41** | **55** | P | | **Pn** | **19 30 13.7** | **+1.9** |
| DSF | | | | S | | **Sb** | **19 30 43.9** | **-1.7** |
| **DSF** | **Desfina** | **2.41** | **55** | P | | **Pn** | **19 30 13.7** | **+1.9** |
| DSF | | | | S | | **Sb** | **19 30 43.9** | **-1.7** |
| **IGT** | **Igoumenitsa** | **2.48** | **6** | *e*PN | | **Pn** | **19 30 13.3** | **+0.7** |
| **IGT** | **Igoumenitsa** | **2.48** | **6** | *e*Pn | | **Pn** | **19 30 13.3** | **+0.7** |
| **KRND** | **KRANIDI** | **2.54** | **82** | *e*PN | | **Pn** | **19 30 14.4** | **+1.0** |
| **KRND** | **KRANIDI** | **2.54** | **82** | P | | **Pn** | **19 30 15.3** | **+1.9** |
| KRND | | | | S | | **Sn** | **19 30 45.4** | **+1.2** |
| **KRND** | **KRANIDI** | **2.54** | **82** | *e*Pn | | **Pn** | **19 30 14.4** | **+1.0** |
| **KRND** | **KRANIDI** | **2.54** | **82** | P | | **Pn** | **19 30 15.3** | **+1.9** |
| KRND | | | | S | | **Sn** | **19 30 45.4** | **+1.2** |
| **LTK** | **Loutraki** | **2.55** | **67** | *e*PN | | **Pn** | **19 30 14.7** | **+1.1** |
| **LTK** | **Loutraki** | **2.55** | **67** | *e*Pn | | **Pn** | **19 30 14.7** | **+1.1** |
| **SGD** | **Sagiada** | **2.55** | **4** | *e*PN | | **Pn** | **19 30 14.5** | **+0.9** |
| **SGD** | **Sagiada** | **2.55** | **4** | *e*Pn | | **Pn** | **19 30 14.5** | **+0.9** |
| **KYTH** | **Kithira** | **2.57** | **107** | *e*PB | | **Pn** | **19 30 16.5** | **+2.4** |
| **KYTH** | **Kithira** | **2.57** | **107** | P | | **Pn** | **19 30 16.3** | **+2.4** |
| **KYTH** | **Kithira** | **2.57** | **107** | P | | **Pn** | **19 30 16.3** | **+2.4** |
| **MAKR** | **Makrakomi, Fth** | **2.57** | **40** | *e*PB | | **Pn** | **19 30 16.0** | **+2.0** |
| **MAKR** | **Makrakomi, Fth** | **2.57** | **40** | P | | **Pn** | **19 30 16.6** | **+2.6** |
| MAKR | | | | S | | **Sn** | **19 30 47.1** | **+2.0** |
| **MAKR** | **Makrakomi, Fth** | **2.57** | **40** | *e*Pb | | **Pn** | **19 30 16.0** | **+2.0** |
| **MAKR** | **Makrakomi, Fth** | **2.57** | **40** | P | | **Pn** | **19 30 16.6** | **+2.6** |
| MAKR | | | | S | | **Sn** | **19 30 47.1** | **+2.0** |
| **DID** | **Didima** | **2.62** | **79** | *e*PN | | **Pn** | **19 30 15.5** | **+0.8** |
| **DID** | **Didima** | **2.62** | **79** | P | | **Pn** | **19 30 15.8** | **+1.1** |
| **DID** | **Didima** | **2.62** | **79** | *e*Pn | | **Pn** | **19 30 15.5** | **+0.8** |
| **DID** | **Didima** | **2.62** | **79** | P | | **Pn** | **19 30 15.8** | **+1.1** |
| **KEK** | **Kerkira** | **2.65** | **357** | *e*PN | | **Pn** | **19 30 15.9** | **+0.9** |
| **KEK** | **Kerkira** | **2.65** | **357** | P | | **Pn** | **19 30 15.9** | **+0.9** |
| KEK | | | | S | | **Sn** | **19 30 46.1** | **-0.8** |
| **KEK** | **Kerkira** | **2.65** | **357** | P | | **Pn** | **19 30 15.9** | **+0.9** |
| KEK | | | | S | | **Sn** | **19 30 46.1** | **-0.8** |
| **JAN** | **Janina** | **2.67** | **14** | *e*PN | | **Pn** | **19 30 16.9** | **+1.5** |
| **JAN** | **Janina** | **2.67** | **14** | *e*Pn | | **Pn** | **19 30 16.9** | **+1.5** |
| **AGG** | **Agios Georgios** | **2.68** | **43** | *e*PN | | **Pn** | **19 30 17.4** | **+1.9** |
| **AGG** | **Agios Georgios** | **2.68** | **43** | P | | **Pn** | **19 30 17.8** | **+2.3** |
| AGG | | | | S | | **Sn** | **19 30 49.5** | **+1.6** |
| **AGG** | **Agios Georgios** | **2.68** | **43** | *e*Pn | | **Pn** | **19 30 17.4** | **+1.9** |
| **AGG** | **Agios Georgios** | **2.68** | **43** | P | | **Pn** | **19 30 17.8** | **+2.3** |
| AGG | | | | S | | **Sn** | **19 30 49.5** | **+1.6** |
| **AXAR** | **Agios Charalam** | **2.70** | **50** | *e*PN | | **Pn** | **19 30 17.6** | **+1.8** |
| **AXAR** | **Agios Charalam** | **2.70** | **50** | *e*Pn | | **Pn** | **19 30 17.6** | **+1.8** |
| **VIL2** | **Platees** | **2.84** | **65** | *e*PN | | **Pn** | **19 30 18.6** | **+1.0** |
| **VILL** | **Villia** | **2.85** | **66** | *e*Pn | | **Pn** | **19 30 18.6** | **+0.8** |
| **LKR** | **Lokris** | **2.85** | **55** | *e*PN | | **Pn** | **19 30 19.4** | **+1.6** |
| **LKR** | **Lokris** | **2.85** | **55** | *e*Pn | | **Pn** | **19 30 19.4** | **+1.6** |
| **THL** | **Klokotos Trika** | **2.96** | **32** | *e*PN | | **Pn** | **19 30 20.8** | **+1.6** |
| **THL** | **Klokotos Trika** | **2.96** | **32** | P | | **Pn** | **19 30 21.2** | **+2.0** |
| THL | | | | S | | **Sn** | **19 30 54.6** | **+0.1** |
| **THL** | **Klokotos Trika** | **2.96** | **32** | *e*Pn | | **Pn** | **19 30 20.8** | **+1.6** |
| **THL** | **Klokotos Trika** | **2.96** | **32** | P | | **Pn** | **19 30 21.2** | **+2.0** |
| THL | | | | S | | **Sn** | **19 30 54.6** | **+0.1** |
| **SMIA** | **Simia** | **3.12** | **54** | *e*PN | | **Pn** | **19 30 22.7** | **+1.2** |
| **SMIA** | **Simia** | **3.12** | **54** | P | | **Pn** | **19 30 22.9** | **+1.4** |
| SMIA | | | | S | | **Sn** | **19 30 59.7** | **+1.2** |
| **SMIA** | **Simia** | **3.12** | **54** | P | | **Pn** | **19 30 22.9** | **+1.4** |
| SMIA | | | | S | | **Sn** | **19 30 59.7** | **+1.2** |
| **VLY** | **Voula,Athens** | **3.12** | **74** | *e*PN | | **Pn** | **19 30 22.0** | **+0.5** |
| **VLY** | **Voula,Athens** | **3.12** | **74** | P | | **Pn** | **19 30 21.8** | **+0.3** |
| **VLY** | **Voula,Athens** | **3.12** | **74** | *e*Pn | | **Pn** | **19 30 22.0** | **+0.5** |
| **PENT** | **Pentalofos** | **3.25** | **16** | *e*PN | | **Pn** | **19 30 25.5** | **+2.1** |
| **PENT** | **Pentalofos** | **3.25** | **16** | *e*Pn | | **Pn** | **19 30 25.5** | **+2.1** |
| **NEO** | **Neokhori** | **3.39** | **48** | *e*PN | | **Pn** | **19 30 25.9** | **+0.7** |
| **NEO** | **Neokhori** | **3.39** | **48** | P | | **Pn** | **19 30 26.1** | **+0.9** |
| **NEO** | **Neokhori** | **3.39** | **48** | P | | **Pn** | **19 30 26.1** | **+0.9** |
| **XOR** | **Xorichti** | **3.41** | **47** | *e*PN | | **Pn** | **19 30 26.5** | **+1.0** |
| **XOR** | **Xorichti** | **3.41** | **47** | P | | **Pn** | **19 30 26.4** | **+1.0** |
| **XOR** | **Xorichti** | **3.41** | **47** | *e*Pn | | **Pn** | **19 30 26.5** | **+1.0** |
| **NEST** | **Nestorio** | **3.44** | **13** | P | | **Pn** | **19 30 28.6** | **+2.6** |
| NEST | | | | S | | **Sn** | **19 31 08.9** | **+2.2** |
| **NEST** | **Nestorio** | **3.44** | **13** | P | | **Pn** | **19 30 28.6** | **+2.6** |
| NEST | | | | S | | **Sn** | **19 31 08.9** | **+2.2** |
| **SKIA** | **Skiathos** | **3.45** | **51** | *e*PN | | **Pn** | **19 30 27.0** | **+1.0** |
| **SKIA** | **Skiathos** | **3.45** | **51** | *e*Pn | | **Pn** | **19 30 27.0** | **+1.0** |
| **KZN** | **Kozani** | **3.52** | **23** | *e*PN | | **Pn** | **19 30 29.0** | **+1.9** |
| **KZN** | **Kozani** | **3.52** | **23** | *e*Pn | | **Pn** | **19 30 29.0** | **+1.9** |
| **SERI** | **Serifos** | **3.59** | **87** | *e*PN | | **Pn** | **19 30 28.6** | **+0.6** |
| **SERI** | **Serifos** | **3.59** | **87** | *e*Pn | | **Pn** | **19 30 28.6** | **+0.6** |
| **LIT** | **Litokhoron** | **3.60** | **32** | *e*PN | | **Pn** | **19 30 29.1** | **+0.9** |
| **LIT** | **Litokhoron** | **3.60** | **32** | *e*Pn | | **Pn** | **19 30 29.1** | **+0.9** |
| **FNA** | **Florina** | **3.86** | **16** | *e*PN | | **Pn** | **19 30 33.4** | **+1.6** |
| **FNA** | **Florina** | **3.86** | **16** | P | | **Pn** | **19 30 33.3** | **+1.5** |
| FNA | | | | S | | **Sn** | **19 31 17.0** | **0.0** |
| **FNA** | **Florina** | **3.86** | **16** | P | | **Pn** | **19 30 33.3** | **+1.5** |
| FNA | | | | S | | **Sn** | **19 31 17.0** | **0.0** |
| **OHR** | **Ohrid** | **4.09** | **9** | *i* Pn | | **Pn** | **19 30 36.9** | **+2.0** |
| OHR | | | | *i* Sn | | **Sn** | **19 31 22.6** | **0.0** |
| **OHR** | **Ohrid** | **4.09** | **9** | *i* Pn | | **Pn** | **19 30 36.8** | **+2.0** |
| OHR | | | | *i* Sn | | **Sn** | **19 31 22.5** | **0.0** |
| **PE1** | **Pezze di Greco** | **4.24** | **333** | *e*Pn | | **Pn** | **19 30 37.5** | **+0.7** |
| PE1 | | | | S | | **Sn** | **19 31 23.1** | **-3.0** |
| **THE** | **Thessaloniki** | **4.25** | **32** | *e*PN | | **Pn** | **19 30 37.9** | **+0.9** |
| **THE** | **Thessaloniki** | **4.25** | **32** | *e*Pn | | **Pn** | **19 30 37.9** | **+0.9** |
| **PLG** | **Polygyros** | **4.26** | **38** | P | | **Pn** | **19 30 38.4** | **+1.2** |
| **PLG** | **Polygyros** | **4.26** | **38** | P | | **Pn** | **19 30 38.4** | **+1.2** |
| **HORT** | **Hortiatis** | **4.28** | **34** | *e*PN | | **Pn** | **19 30 38.2** | **+0.7** |
| **HORT** | **Hortiatis** | **4.28** | **34** | *e*Pn | | **Pn** | **19 30 38.2** | **+0.7** |
| **GRG** | **Griva** | **4.31** | **25** | *e*PN | | **Pn** | **19 30 39.0** | **+1.1** |
| **GRG** | **Griva** | **4.31** | **25** | *e*Pn | | **Pn** | **19 30 39.0** | **+1.1** |
| **IDI** | **Anoyia** | **4.34** | **113** | Pn | | **Pn** | **19 30 39.2** | **+0.9** |
| | 0.3nm,0.3s,baz=259,slow=15,SNR=3.1 | | | | | | | |
| IDI | | | | | | **Sn** | **19 31 27.6** | **-1.1** |
| | 1.1nm,0.3s,baz=128,slow=5.3,SNR=4.1 | | | | | | | |
| **VAE** | **Valguarnera** | **4.47** | **277** | Pn | | Pn | 19 30 43.4 | +3.3 |
| | 0.4nm,0.3s,baz=356,slow=4.7,SNR=8.9 | | | | | | | |
| VAE | | | | | | **Sn** | **19 31 31.9** | **-0.1** |
| | 0.3nm,0.3s,baz=128,slow=17,SNR=2.6 | | | | | | | |
| **OUR** | **Ouranopolis** | **4.51** | **42** | *e*PN | | **Pn** | **19 30 41.8** | **+1.2** |
| **OUR** | **Ouranopolis** | **4.51** | **42** | *e*Pn | | **Pn** | **19 30 41.8** | **+1.2** |
| **SOH** | **Sokhos** | **4.57** | **34** | P | | **Pn** | **19 30 43.2** | **+1.7** |
| **SOH** | **Sokhos** | **4.57** | **34** | P | | **Pn** | **19 30 43.2** | **+1.7** |
| **KNT** | **Kendrikon** | **4.67** | **28** | *e*PN | | **Pn** | **19 30 44.1** | **+1.3** |
| **KNT** | **Kendrikon** | **4.67** | **28** | *e*Pn | | **Pn** | **19 30 44.1** | **+1.3** |
| **BARS** | **Barje** | **5.91** | **13** | *i* Pn | | **Pn** | **19 31 00.1** | **+0.3** |
| **SJES** | **Sjenica** | **6.19** | **360** | *i* Pn | | **Pn** | **19 31 04.9** | **+1.2** |
| **IVAS** | **Ivanjica** | **6.50** | **1** | *e*Pn | | **Pn** | **19 31 09.1** | **+1.1** |
| **BOVS** | **Bovan** | **6.69** | **11** | *i* Pn | | **Pn** | **19 31 10.5** | **0.0** |
| **GRUS** | **Gruza** | **6.84** | **4** | *e*Pn | | **Pn** | **19 31 11.5** | **-1.0** |
| **DIVS** | **Divibare** | **7.02** | **360** | *i* Pn | | **Pn** | **19 31 14.8** | **-0.4** |
| **TRUS** | **Trudelj** | **7.16** | **2** | *i* Pn | | **Pn** | **19 31 15.7** | **-1.2** |
| **TEKS** | **Tekeris** | **7.48** | **357** | *i* Pn | | **Pn** | **19 31 21.1** | **-0.3** |
| **KEST** | **Kesra** | **8.69** | **264** | Pn | | Pn | 19 31 41.8 | +3.7 |
| | 0.1nm,0.3s,baz=240,slow=20,SNR=3.4 | | | | | | | |
| KEST | | | | | | **Sn** | **19 33 15.1** | **-0.9** |
| | 0.1nm,0.3s,baz=243,slow=18,SNR=2.5 | | | | | | | |
| **MLR** | **Muntele Rosu** | **9.53** | **26** | Pn | | **Pn** | **19 31 49.9** | **+0.3** |
| | 0.0nm,0.3s,baz=248,slow=16,SNR=2.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **12.64** | **341** | Pn | | **Pn** | **19 32 32.4** | **+0.4** |
| | 0.1nm,0.3s,baz=158,slow=14,SNR=2.9 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **13.25** | **103** | Pn | | **Pn** | **19 32 40.6** | **+0.1** |
| | 0.5nm,0.3s,baz=278,slow=9.9,SNR=2.1 | | | | | | | |
| **AKASG** | **Malin Array Be** | **15.15** | **23** | Pn | | **Pn** | **19 33 04.5** | **-1.6** |
| | 0.1nm,0.3s,baz=209,slow=9.0,SNR=3.1 | | | | | | | |
| **KBZ** | **Khabaz** | **18.64** | **62** | P | | **P** | **19 33 50.1** | **+0.3** |
| | 0.1nm,0.3s,baz=272,slow=9.9,SNR=5.2 | | | | | | | |
| **HFS** | **Hagfors** | **23.44** | **352** | P | | **P** | **19 34 40.8** | **-0.5** |
| | 3.0nm,0.3s,baz=169,slow=8.8,SNR=16 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **24.63** | **350** | P | | **P** | **19 34 53.2** | **+0.7** |
| | comp=Z,1.4nm,0.7s,baz=159,slow=9.3 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **24.63** | **350** | P | | **P** | **19 34 53.2** | **+0.7** |
| | comp=Z,1.4nm,0.7s,SNR=5.7 | | | | | | | |
| **NOA** | **NORSAR Array B** | **24.63** | **350** | P | | **P** | **19 34 52.9** | **+0.4** |
| | comp=Z,1.6nm,0.6s,baz=161,slow=9.2,SNR=5.7 | | | | | | | |
| **FINES** | **FINESS Array B** | **24.70** | **7** | P | | **P** | **19 34 53.1** | **+0.1** |
| | comp=Z,3.1nm,0.6s,baz=167,slow=12,SNR=19 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **28.91** | **219** | P | | P | 19 35 34.1 | +2.8 |
| | comp=Z,0.4nm,0.7s,baz=28,slow=9.5,SNR=3.1 | | | | | | | |
| **GEYT** | **Alibeck** | **30.12** | **77** | P | | **P** | **19 35 43.0** | **+1.0** |
| | comp=Z,0.8nm,0.5s,baz=257,slow=13,SNR=3.6 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.66** | **4** | P | | **P** | **19 36 03.7** | **-0.3** |
| | comp=Z,4.4nm,1.1s,baz=185,slow=12,SNR=5.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **46.24** | **57** | P | | **P** | **19 37 55.6** | **-1.8** |
| | comp=Z,0.3nm,0.5s,baz=273,slow

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NAX** | **Nakhchivan** | **5.02** | **263** | ⇑P | | **Pn** | **19 45 48.3** | **-0.4** |
| NAX | | | | ⇓S | | **Sn** | **19 46 43.9** | **-1.6** |
| **NAX** | **Nakhchivan** | **5.02** | **263** | P | | **Pn** | **19 45 48.3** | **-0.4** |
| NAX | | | | S | | **Sn** | **19 46 43.9** | **-1.6** |
| **QZX** | **Qazax, Azerbai** | **5.12** | **285** | ⇓P | | **Pn** | **19 45 49.4** | **-0.6** |
| QZX | | | | ⇓S | | **Sn** | **19 46 45.2** | **-2.6** |
| **QZX** | **Qazax, Azerbai** | **5.12** | **285** | P | | **Pn** | **19 45 49.4** | **-0.6** |
| QZX | | | | S | | **Sn** | **19 46 45.2** | **-2.6** |
| **DGRG** | **David-gareji** | **5.20** | **289** | P | | **Pn** | **19 45 51.6** | **+0.4** |
| DGRG | | | | S | | **Sn** | **19 46 48.7** | **-1.2** |
| **DGRG** | **David-gareji** | **5.20** | **289** | P | | **Pn** | **19 45 51.6** | **+0.4** |
| DGRG | | | | S | | **Sn** | **19 46 48.7** | **-1.2** |
| **GEYT** | **Alibeck** | **5.23** | **110** | Pn | | Pn | 19 45 55.5 | +3.9 |
| | 0.3nm,0.3s,baz=292,slow=16,SNR=9.2 | | | | | | | |
| GEYT | | | | | | Sn | **19 46 51.4** | **+0.8** |
| | 0.5nm,0.3s,baz=315,slow=16,SNR=2.5 | | | | | | | |
| **KBZ** | **Khabaz** | **7.73** | **302** | Pn | | **Pn** | **19 46 23.6** | **-2.2** |
| | 0.1nm,0.3s,baz=128,slow=3.5,SNR=3.8 | | | | | | | |
| KBZ | | | | | | Sn | 19 47 44.2 | -7.8 |
| | 0.2nm,0.3s,baz=107,slow=11,SNR=2.2 | | | | | | | |
| **AB31** | **Akbulak array** | **10.94** | **29** | Pn | | **Pn** | **19 47 08.7** | **-0.9** |
| | 0.5nm,0.3s,baz=206,slow=14,SNR=23 | | | | | | | |
| AB31 | | | | ⇓Sn | | Sn | 19 49 02.7 | -7.8 |
| | 0.4nm,0.3s,baz=207,slow=24,SNR=5.4 | | | | | | | |
| **AB31** | **Akbulak array** | **10.94** | **29** | Pn | | **Pn** | **19 47 08.7** | **-0.9** |
| | 0.5nm,0.3s,SNR=23 | | | | | | | |
| AB31 | | | | | | Sn | 19 49 02.7 | -7.8 |
| | 0.4nm,0.3s,SNR=5.4 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **11.35** | **20** | ⇑Pn | | **Pn** | **19 47 15.0** | **-0.3** |
| | 3.2nm,0.6s | | | | | | | |
| AKTO | | | | ⇓Sn | | **Sn** | **19 49 15.3** | **-5.3** |
| | 4.5nm,0.7s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **11.35** | **20** | Pn | | **Pn** | **19 47 15.0** | **-0.3** |
| | 3.2nm,0.6s | | | | | | | |
| AKTO | | | | | | Sn | **19 49 15.3** | **-5.3** |
| | 4.5nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **17.18** | **74** | LR | | LR | 19 55 10.0 | |
| | comp=Z,27nm,18.8s,baz=179,slow=37 | | | | | | | |
| **AKASG** | **Malin Array Be** | **19.18** | **312** | P | | **P** | **19 48 53.8** | **-1.6** |
| | 1.1nm,0.3s,baz=113,slow=13,SNR=4.3 | | | | | | | |
| **MLR** | **Muntele Rosu** | **19.84** | **295** | P | | **P** | **19 49 03.6** | **+0.7** |
| | 0.0nm,0.3s,baz=156,slow=20,SNR=3.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **23.03** | **63** | P | | **P** | **19 49 38.5** | **+1.6** |
| | 0.5nm,0.7s,baz=262,slow=9.8,SNR=2.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.20** | **47** | P | | **P** | **19 50 08.5** | **+2.5** |
| | 0.5nm,0.6s,baz=268,slow=11,SNR=2.8 | | | | | | | |
| **FINES** | **FINESS Array B** | **26.72** | **332** | P | | **P** | **19 50 11.3** | **+0.7** |
| | 2.7nm,0.9s,baz=133,slow=14,SNR=3.5 | | | | | | | |
| **HFS** | **Hagfors** | **31.15** | **323** | P | | **P** | **19 50 50.7** | **+0.7** |
| | 1.5nm,0.7s,baz=105,slow=9.1,SNR=3.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.79** | **343** | LR | | LR | 20 07 14.3 | |
| | comp=Z,47nm,18.5s,baz=88,slow=42 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **39.09** | **312** | P | | **P** | **19 51 59.8** | **+1.5** |
| | 2.9nm,1.0s,baz=97,slow=9.0,SNR=4.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **51.41** | **253** | P | | **P** | **19 53 37.6** | **+1.3** |
| | 0.1nm,0.3s,baz=46,slow=6.1,SNR=4.2 | | | | | | | |

**MEX 24 19:52:38.8±0.6, 17.26N×94.76W, h113km±30km, MD3.9, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TGIG** | | **1.63** | **107** | *eP* | Pn | 19 53 06.1 | -1.4 |
| TGIG | | | | *i* S | Sn | 19 53 27.7 | -1.6 |
| **HUIG** | **Huatulco** | **1.97** | **221** | *eP* | Pn | 19 53 10.0 | -1.5 |
| HUIG | | | | *eS* | Sn | 19 53 34.5 | -1.9 |
| **PCIG** | | **2.13** | **136** | *eP* | Pn | 19 53 13.0 | -0.6 |
| PCIG | | | | *eS* | Sn | 19 53 39.0 | -1.2 |
| **CCIG** | **Comitan** | **2.69** | **111** | *eP* | Pn | 19 53 19.0 | -2.0 |
| CCIG | | | | *i* S | Sn | 19 53 48.2 | -5.3 |

*IDC **24** 20:01:42.2±1.4, 34.03N×135.25E, h0km, mb3.3/3, mb1 3.4/6, mb1mx3.2/33, mbtmp3.2/6, ML2.8/3, Error ellipse: s-maj=27.1km s-min=12.8km az=150.0*
*ISCJB **24** 20:01:43.3±0.6, 34.18N±0.03×135.14E±0.03, h7km±4km, mb3.2/3, Error ellipse: s-maj=4.8km s-min=4.0km az=21.5*
*JMA **24** 20:01:43.5, 34.17N×135.12E, h8km±1km, M3.1*
*JMA Felt II J1.*

**ISC 24 20:01:43.9±1.1, 34.17N±0.03×135.14E±0.03, h4km±9km, n15, σ0s94/28, mb3.3/3, Near south coast of western Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAJ2** | **Tsuna** | **0.33** | **320** | P | **Pg** | **20 01 50.1** | **-0.2** |
| JAJ2 | | | | S | **Sg** | **20 01 54.5** | **-0.1** |
| **JWM** | **Minabe** | **0.36** | **151** | P | **Pg** | **20 01 51.1** | **+0.1** |
| JWM | | | | S | **Sg** | **20 01 56.1** | **+0.4** |
| **JWY** | **Kouya** | **0.38** | **82** | P | **Pg** | **20 01 50.9** | **-0.4** |
| JWY | | | | S | **Sg** | **20 01 56.7** | **+0.4** |
| **JHE** | **Heguri** | **0.66** | **43** | P | **Pg** | **20 01 56.4** | **-0.3** |
| JHE | | | | S | **Sg** | **20 02 05.3** | **0.0** |
| **JAI** | **Aioi** | **0.68** | **237** | P | **Pg** | **20 01 56.2** | **-0.8** |
| **JWZ** | **Kozaga** | **0.80** | **143** | P | **Pg** | **20 01 59.0** | **-0.2** |
| JWZ | | | | S | **Sg** | **20 02 09.8** | **+0.3** |
| **JKS** | **Kasai** | **0.85** | **343** | P | **Pg** | **20 01 59.6** | **-0.6** |
| JKS | | | | S | **Sg** | **20 02 11.1** | **-0.2** |
| **JKN2** | **Miekihoku** | **0.94** | **85** | P | **Pg** | **20 02 01.5** | **-0.5** |
| JKN2 | | | | S | **Sg** | **20 02 14.5** | **+0.3** |
| **MAT** | **Matsushiro** | **3.45** | **46** | P | **Pn** | **20 02 38.7** | **+0.3** |
| MAT | | | | *eS* | **Sn** | **20 03 20.6** | **+0.9** |
| **MJAR** | **Matsushiro Arr** | **3.45** | **46** | Pn | **Pn** | **20 02 39.2** | **+0.7** |
| | 1.1nm,0.3s,baz=237,slow=13,SNR=13 | | | | | | |
| MJAR | | | | Pg | **Pb** | **20 02 46.2** | **+0.7** |
| | 1.4nm,0.3s,baz=229,slow=14,SNR=14 | | | | | | |
| MJAR | | | | Sn | **Sn** | **20 03 19.1** | **-0.7** |
| | 0.4nm,0.3s,baz=212,slow=16,SNR=4.0 | | | | | | |
| MJAR | | | | Lg | Lg | 20 03 32.4 | |
| | baz=220,slow=28,SNR=3.0 | | | | | | |
| **JNU** | **Nakatsue** | **3.71** | **255** | Pn | **Pn** | **20 02 42.0** | **+0.1** |
| | 0.8nm,0.3s,baz=165,slow=6.1,SNR=16 | | | | | | |
| JNU | | | | Pg | **Pb** | **20 02 50.0** | **+0.1** |
| | 1.9nm,0.3s,baz=73,slow=3.2,SNR=15 | | | | | | |
| JNU | | | | Sn | **Sn** | **20 03 28.0** | **+2.0** |
| | baz=347,slow=14,SNR=1.7 | | | | | | |
| JNU | | | | Lg | Lg | 20 03 41.6 | |
| | 0.7nm,0.3s,baz=141,slow=14,SNR=2.6 | | | | | | |
| **KSRS** | **Korea Array** | **6.72** | **301** | Pn | **Pn** | **20 03 24.2** | **+0.9** |
| | 0.3nm,0.3s,baz=117,slow=14,SNR=4.4 | | | | | | |
| KSRS | | | | Sn | **Sn** | **20 04 42.2** | **+2.0** |
| | 0.2nm,0.3s,baz=121,slow=24,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **25.46** | **311** | P | **P** | **20 07 12.7** | **-0.2** |
| | 0.4nm,0.8s,baz=119,slow=11,SNR=3.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **35.82** | **250** | P | **P** | **20 08 45.1** | **+0.6** |
| | 0.2nm,0.5s,baz=57,slow=8.7,SNR=3.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.81** | **181** | P | **P** | **20 11 05.0** | **-2.8** |
| | 0.4nm,0.8s,baz=358,slow=8.5,SNR=3.8 | | | | | | |

*GII **24** 20:07:44.4±0.0, 27.82N×34.04E, h1km, MD3.2/8*
*CSEM **24** 20:07:45.2±0.8, 27.97N×33.50E, h10km, ML3.4, Error ellipse: s-maj=16.6km s-min=11.3km az=25.0*
*SGS **24** 20:07:46.3, 28.10N×33.41E, h15km*

**ISC 24 20:07:49.1±2.9, 28.18N±0.08×33.68E±0.10, h10km±12km, n37, σ1s03/52, Egypt**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RSHS** | | **0.99** | **83** | S | **Sn** | **20 08 24.7** | **+1.5** |
| **RSHS** | | **0.99** | **83** | P | **Pn** | **20 08 08.3** | **-0.7** |
| **RSHS** | | **0.99** | **83** | P | **Pn** | **20 08 08.0** | **-1.1** |
| RSHS | | | | S | **Sn** | **20 08 25.0** | **+1.9** |
| **BDAS** | **Al Bad'** | **1.28** | **79** | S | **Sg** | **20 08 32.2** | **+1.9** |
| **BDAS** | **Al Bad'** | **1.28** | **79** | P | **Pg** | **20 08 12.6** | **-1.1** |
| **BDAS** | **Al Bad'** | **1.28** | **79** | P | **Pg** | **20 08 13.0** | **-0.6** |
| BDAS | | | | S | **Sg** | **20 08 32.0** | **+1.8** |
| **HAQS** | **Haql** | **1.39** | **51** | S | **Sg** | **20 08 34.7** | **+0.8** |
| **HAQS** | **Haql** | **1.39** | **51** | P | **Pn** | **20 08 13.9** | **-0.6** |
| **HAQS** | **Haql** | **1.39** | **51** | P | **Pn** | **20 08 14.0** | **-0.6** |
| HAQS | | | | S | **Sg** | **20 08 35.0** | **+1.1** |
| **HQLS** | | **1.65** | **47** | P | **Pn** | **20 08 17.4** | **-0.7** |
| **HQLS** | | **1.65** | **47** | P | **Pn** | **20 08 17.0** | **-1.1** |
| **EIL** | **Elat** | **1.85** | **37** | Pn | **Pn** | **20 08 18.2** | **-2.7** |
| EIL | | | | Sn | **Sb** | **20 08 46.3** | **0.0** |
| **EIL** | **Elat** | **1.85** | **37** | Pn | **Pn** | **20 08 18.2** | **-2.7** |
| EIL | | | | Sn | **Sb** | **20 08 46.3** | **0.0** |
| **MBRI** | **Mt Berech** | **1.94** | **34** | Pn | Pn | 20 08 18.9 | -3.2 |
| MBRI | | | | Sn | **Sb** | **20 08 48.6** | **-0.1** |
| **MBRI** | **Mt Berech** | **1.94** | **34** | Pn | Pn | 20 08 18.9 | -3.2 |
| MBRI | | | | Sn | **Sb** | **20 08 48.6** | **-0.1** |
| **KRMI** | **Paran Flat** | **2.13** | **25** | Pn | **Pn** | **20 08 24.0** | **-0.8** |
| KRMI | | | | Sn | **Sb** | **20 08 53.4** | **-1.0** |
| **KRMI** | **Paran Flat** | **2.13** | **25** | Pn | **Pn** | **20 08 24.0** | **-0.8** |
| KRMI | | | | Sn | **Sb** | **20 08 53.4** | **-1.0** |
| **HRFI** | **Mount Harif** | **2.20** | **32** | Pn | **Pn** | **20 08 24.7** | **-0.9** |
| HRFI | | | | Sn | **Sb** | **20 08 55.7** | **-0.5** |
| **HRFI** | **Mount Harif** | **2.20** | **32** | Pn | **Pn** | **20 08 24.7** | **-0.9** |
| HRFI | | | | Sn | **Sb** | **20 08 55.7** | **-0.5** |
| **PRNI** | **Paran** | **2.45** | **28** | Pn | **Pn** | **20 08 29.1** | **0.0** |
| PRNI | | | | Sn | **Sb** | **20 09 02.9** | **-0.6** |
| **PRNI** | **Paran** | **2.45** | **28** | Pn | **Pn** | **20 08 29.1** | **0.0** |
| PRNI | | | | Sn | **Sb** | **20 09 02.9** | **-0.6** |
| **RMNI** | **Mount Ramon** | **2.58** | **21** | Pn | **Pn** | **20 08 31.8** | **+0.8** |
| **RMNI** | **Mount Ramon** | **2.58** | **21** | Pn | **Pn** | **20 08 31.8** | **+0.8** |
| **ZFRI** | **Zfri** | **2.70** | **29** | Pn | **Pn** | **20 08 32.3** | **-0.2** |
| ZFRI | | | | Sn | **Sb** | **20 09 09.1** | **-1.5** |
| **ZFRI** | **Zfri** | **2.70** | **29** | Pn | **Pn** | **20 08 32.3** | **-0.2** |
| ZFRI | | | | Sn | **Sb** | **20 09 09.1** | **-1.5** |
| **KZIT** | **Kziot** | **2.79** | **13** | Pn | **Pn** | **20 08 34.4** | **+0.7** |
| KZIT | | | | Sn | **Sb** | **20 09 13.3** | **+0.2** |
| **KZIT** | **Kziot** | **2.79** | **13** | Pn | **Pn** | **20 08 34.4** | **+0.7** |
| KZIT | | | | Sn | **Sb** | **20 09 13.3** | **+0.2** |
| **REVI** | **Revivim** | **2.99** | **17** | Pn | **Pn** | **20 08 36.0** | **-0.5** |
| **REVI** | **Revivim** | **2.99** | **17** | Pn | **Pn** | **20 08 36.0** | **-0.5** |
| **MZDA** | **Masada** | **3.44** | **25** | Pn | **Pn** | **20 08 43.2** | **+0.5** |
| **MZDA** | **Masada** | **3.44** | **25** | Pn | **Pn** | **20 08 43.2** | **+0.5** |
| **DSI** | **Dead Sea** | **3.68** | **23** | Pn | **Pn** | **20 08 46.7** | **+0.7** |
| **DSI** | **Dead Sea** | **3.68** | **23** | Pn | **Pn** | **20 08 46.7** | **+0.7** |
| **SLTI** | **Sal'it** | **4.21** | **16** | Pn | **Pn** | **20 08 53.6** | **+0.3** |
| **SLTI** | **Sal'it** | **4.21** | **16** | Pn | **Pn** | **20 08 53.6** | **+0.3** |
| **HMDT** | **Nahal Hemdat** | **4.36** | **21** | Pn | **Pn** | **20 08 54.5** | **-0.8** |
| **HMDT** | **Nahal Hemdat** | **4.36** | **21** | Pn | **Pn** | **20 08 54.5** | **-0.8** |

**IDC 24 20:23:40.4±3.8, 7.63S×147.39E, h0km, mb3.2/1, mb1 3.5/2, mb1mx3.2/31, mbtmp3.3/2, ML3.1/1, MS3.1/1, Ms1 3.1/1, ms1mx2.6/10, Error ellipse: s-maj=132.7km s-min=48.1km az=114.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.60** | **225** | P | Pn | 20 27 45.8 | -1.5 |
| | 0.1nm,0.3s,baz=47,slow=12,SNR=7.9 | | | | | | |
| **ASAR** | **Alice Springs** | **20.53** | **218** | P | P | 20 28 20.4 | -0.2 |
| | 0.8nm,0.6s,baz=53,slow=9.8,SNR=18 | | | | | | |
| ASAR | | | | LR | LR | 20 37 28.6 | |
| | comp=Z,56nm,20.7s,baz=346,slow=40 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.84** | **282** | PKPbc | PKPdf | 20 43 22.4 | +0.2 |
| | 0.2nm,0.6s,baz=82,slow=4.8,SNR=2.5 | | | | | | |

**IDC 24 20:32:48.5±8.1, 4.64N×124.70E, h346km±90km, mb3.0/6, mb1 3.2/8, mb1mx2.9/32, mbtmp3.9/8, Error ellipse: s-maj=80.0km s-min=16.4km az=58.0, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **10.79** | **207** | P | Pn | 20 35 16.3 | +0.3 |
| | 0.3nm,0.3s,baz=59,slow=16,SNR=4.4 | | | | | | |
| **BATI** | **Baumata** | **14.79** | **184** | P | P | 20 36 01.6 | +0.4 |
| | 2.1nm,0.3s,baz=257,slow=1.1,SNR=6.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.20** | **159** | P | P | 20 37 53.3 | +0.3 |
| | 0.2nm,0.4s,baz=334,slow=10,SNR=8.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.67** | **301** | P | P | 20 38 14.4 | -0.5 |
| | 0.5nm,0.8s,baz=115,slow=8.1,SNR=4.1 | | | | | | |
| **ASAR** | **Alice Springs** | **29.53** | **163** | P | P | 20 38 21.6 | -0.9 |
| | 0.1nm,0.3s,baz=338,slow=7.4,SNR=5.7 | | | | | | |
| **SONM** | **Songino Array** | **45.81** | **343** | P | P | 20 40 36.9 | -0.3 |
| | 0.6nm,0.7s,baz=167,slow=7.1,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.66** | **326** | P | P | 20 41 49.7 | -0.1 |
| | 1.4nm,0.6s,baz=220,slow=47,SNR=13 | | | | | | |
| **FINES** | **FINESS Array B** | **90.08** | **332** | P | P | 20 45 10.4 | +0.8 |
| | 3.4nm,1.0s,baz=72,slow=4.5,SNR=4.1 | | | | | | |

*NIED **24** 21:09:00, 39.80N×141.80E, h62km, Mw4.3 Best double couple: M0 3.47000×10^15 NP1:φ206.00000°, δ24.00000°, λ96.00000°. NP2:φ19.00000°, δ66.00000°, λ87.00000°.*
*ISCJB **24** 21:09:57.7±0.4, 39.77N±0.03×141.87E±0.06, h67km±2km, mb4.1/23, Error ellipse: s-maj=7.9km s-min=4.2km az=18.1*
*MOS **24** 21:09:58.8±0.9, 39.84N×141.73E, h70km, mb4.4/14, Error ellipse: s-maj=12.1km s-min=8.7km az=87.0*
*JMA **24** 21:09:59.0, 39.76N×141.84E, h59km±1km, M4.0 Broadband fault plane solution: P waves. NP1: φs17.00000°, δ62.00000°, λ88.00000°. NP2:φs200.00000°, δ28.00000°, λ93.00000°. Principal axes: T Plg73.0000°, Azm283.0000°; N Plg1.0000°, Azm18.0000°; P Plg17.0000°, Azm108.0000°;*
*JMA Felt II J1.*
*NEIC **24** 21:10:00.7±0.5, 39.77N×141.80E, h77km±4km, MW4.3(NIED) Error ellipse: s-maj=7.5km s-min=4.4km az=125.0*
*NEIC Recorded [2 JMA] in Aomori and Iwate; [1 JMA] in Miyagi.*
*IDC **24** 21:10:01.4±2.0, 39.75N×141.74E, h85km±17km, mb3.8/19, mb1 3.9/24, mb1mx3.7/53, mbtmp4.1/24, MS2.8/8, Ms1 2.8/8, ms1mx2.6/41, Error ellipse: s-maj=18.8km s-min=12.8km az=106.0*

**ISC 24 21:09:58.8±0.7, 39.75N±0.03×141.83E±0.06, h60km±5km, n110, σ0s98/116, mb4.2/23, 3C-8D, Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MIYJ** | **Miyakonagasawa** | **0.17** | **182** | ⇑P | **Pn** | **21 10 08.3** | **+0.2** |
| MIYJ | | | | *eS* | **Sn** | **21 10 14.7** | **-0.1** |
| **JTH** | **Tanohata** | **0.19** | **9** | ⇑P | **Pn** | **21 10 08.3** | **+0.1** |
| JTH | | | | *eS* | **Sn** | **21 10 14.8** | **-0.3** |
| **JKZ** | **Kuzumaki** | **0.45** | **302** | ⇓P | **Pn** | **21 10 10.5** | **+0.2** |
| JKZ | | | | *eS* | **Sn** | **21 10 18.6** | **-0.1** |
| **JOM** | **Ohasama** | **0.50** | **236** | ⇓P | **Pn** | **21 10 10.9** | **+0.2** |
| JOM | | | | *eS* | **Sn** | **21 10 19.4** | **0.0** |
| **JANG** | **Nango** | **0.67** | **339** | ⇓P | **Pn** | **21 10 12.0** | **-0.7** |
| JANG | | | | *eS* | **Sn** | **21 10 22.2** | **-0.6** |
| **JMK** | **Ichinoseki** | **0.92** | **211** | ⇓P | **Pn** | **21 10 16.0** | **+0.2** |
| JMK | | | | *eS* | **Sn** | **21 10 28.4** | **0.0** |
| **JRG** | **Rokugo** | **0.99** | **249** | ⇓P | **Pn** | **21 10 16.7** | **+0.1** |
| JRG | | | | *eS* | **Sn** | **21 10 30.6** | **+0.7** |
| **JAH** | **Hinai** | **1.01** | **296** | ⇓P | **Pn** | **21 10 17.2** | **+0.2** |
| JAH | | | | *eS* | **Sn** | **21 10 31.3** | **+0.8** |
| **JTM** | **Tenmabayashi** | **1.19** | **331** | ⇓P | **Pn** | **21 10 19.3** | **0.0** |
| JTM | | | | *eS* | **Sn** | **21 10 34.5** | **-0.1** |
| **JIO** | **Ouri** | **1.34** | **196** | ⇑P | **Pn** | **21 10 21.5** | **+0.1** |
| JIO | | | | *eS* | **Sn** | **21 10 37.9** | **-0.4** |
| **JYK** | **Kaneyama** | **1.41** | **234** | ⇓P | **Pn** | **21 10 22.6** | **+0.4** |
| JYK | | | | *eS* | **Sn** | **21 10 40.2** | **+0.4** |
| **ERM** | **Erimo** | **2.48** | **24** | *eP* | **Pn** | **21 10 37.9** | **+1.2** |
| **ERM** | **Erimo** | **2.48** | **24** | *ePn* | **Pn** | **21 10 37.9** | **+1.2** |
| **MAJO** | **Matsushiro** | **4.29** | **223** | *eP* | **Pn** | **21 11 03.2** | **+1.7** |
| **MAJO** | **Matsushiro** | **4.29** | **223** | *eP* | **Pn** | **21 11 03.2** | **+1.7** |
| **MAT** | **Matsushiro** | **4.29** | **223** | P | **Pn** | **21 11 03.5** | **+2.0** |
| MAT | | | | *eS* | **Sn** | **21 11 54.1** | **+1.1** |
| **MJAR** | **Matsushiro Arr** | **4.29** | **223** | P | **Pn** | **21 11 03.5** | **+2.0** |
| | 2.6nm,0.3s,baz=32,slow=13,SNR=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **4.29** | **223** | P | **Pn** | **21 11 03.5** | **+2.0** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | |
| **ASAJ** | **Asahikawa** | **4.40** | **7** | P | **Pn** | **21 11 04.1** | **+1.1** |
| | baz=200,slow=14 | | | | | | |
| ASAJ | | | | S | **Sn** | **21 11 51.8** | **-1.2** |
| | comp=Z,1.5nm,0.3s,baz=184,slow=14,SNR=2.7 | | | | | | |
| ASAJ | | | | LR | LR | 21 13 18.4 | |
| | comp=Z,60nm,20.7s,baz=118,slow=45 | | | | | | |
| **ASAJ** | **Asahikawa** | **4.40** | **7** | P | **Pn** | **21 11 04.1** | **+1.1** |
| ASAJ | | | | S | **Sn** | **21 11 51.8** | **-1.2** |
| ASAJ | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,60nm,20.7s | | | | | | |
| **JHJ** | **Hachijo jima 2** | **6.82** | **195** | S | **Sn** | **21 12 49.3** | **-3.0** |
| | comp=Z,5.2nm,0.3s,baz=107,slow=19,SNR=2.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **8.57** | **304** | P | **Pn** | **21 12 01.6** | **+1.6** |
| | comp=Z,0.6nm,0.3s,baz=112,slow=14,SNR=15 | | | | | | |
| USRK | | | | LR | LR | 21 15 15.0 | |
| | comp=Z,53nm,18.4s,baz=106,slow=37 | | | | | | |
| **JNU** | **Nakatsue** | **11.02** | **237** | P | Pn | 21 12 37.0 | +3.4 |
| | comp=Z,0.2nm,0.3s,baz=15,slow=12,SNR=3.8 | | | | | | |
| JNU | | | | LR | LR | 21 16 60.0 | |
| | comp=Z,24nm,18.8s,baz=282,slow=38 | | | | | | |
| **KSRS** | **Korea Array** | **11.12** | **263** | P | **Pn** | **21 12 38.0** | **+3.1** |
| | comp=Z,0.8nm,0.3s,baz=71,slow=13,SNR=7.4 | | | | | | |
| KSRS | | | | LR | LR | 21 16 20.4 | |
| | comp=Z,54nm,21.1s,baz=54,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **11.12** | **263** | P | **Pn** | **21 12 38.0** | **+3.1** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,54nm,21.1s | | | | | | |
| **KS15** | **Wonju Array Si** | **11.15** | **262** | *e*Pn | **Pn** | **21 12 38.0** | **+2.6** |
| **KSAR** | **Wonju Array Be** | **11.15** | **262** | P | **Pn** | **21 12 38.0** | **+2.6** |
| **KSAR** | **Wonju Array Be** | **11.15** | **262** | P | **Pn** | **21 12 38.0** | **+2.6** |
| **YAK** | **Yakutsk** | **23.51** | **346** | LR | LR | 21 26 23.6 | |
| | comp=Z,11nm,19.7s,baz=36,slow=42 | | | | | | |
| **SEY** | **Seymchan** | **24.07** | **12** | P | **P** | **21 15 08.2** | **+0.1** |
| | comp=Z,9.5nm,1.0s,baz=202,slow=9.9,SNR=6.6 | | | | | | |
| **SEY** | **Seymchan** | **24.07** | **12** | P | **P** | **21 15 08.2** | **+0.1** |
| SEY | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **BOD** | **Bodaibo** | **25.46** | **324** | *e*P | **P** | **21 15 19.9** | **-0.9** |
| BOD | | | | *e* | | 21 15 40.3 | |
| BOD | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **SONA0** | **Songino Array** | **26.64** | **299** | *e*P | **P** | **21 15 30.9** | **-0.9** |
| **SONM** | **Songino Array** | **26.64** | **299** | P | **P** | **21 15 30.8** | **-0.9** |
| | comp=Z,0.6nm,0.5s,baz=83,slow=9.1,SNR=7.2 | | | | | | |
| SONM | | | | LR | LR | 21 25 53.7 | |
| | comp=Z,46nm,19.7s,baz=116,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **26.64** | **299** | P | **P** | **21 15 30.8** | **-0.9** |
| SONM | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| SONM | | | | MLR | MLR | | |
| | comp=Z,46nm,19.7s | | | | | | |
| **TLY** | **Talaya** | **28.87** | **307** | LR | LR | 21 27 39.5 | |
| | comp=Z,40nm,18.0s,baz=91,slow=37 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.36** | **125** | T | T | 21 46 32.8 | |
| | baz=318,slow=75,SNR=496 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.37** | **126** | T | T | 21 46 34.5 | |
| | baz=318,slow=75,SNR=537 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.38** | **125** | T | T | 21 46 35.0 | |
| | baz=318,slow=75,SNR=611 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.16** | **127** | T | T | 21 47 36.8 | |
| | baz=320,slow=76,SNR=90 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.16** | **127** | T | T | 21 47 37.0 | |
| | baz=320,slow=76,SNR=90 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.17** | **127** | T | T | 21 47 36.4 | |
| | baz=320,slow=76,SNR=85 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **40.37** | **310** | *e*P | **P** | **21 17 30.5** | **0.0** |
| **ZAA1** | **Zalesovo Array** | **40.37** | **310** | *e*P | **P** | **21 17 30.6** | **+0.2** |
| **ZALV** | **Zalesovo Beam** | **40.37** | **310** | P | **P** | **21 17 30.6** | **+0.2** |
| | comp=Z,7.6nm,0.5s,baz=94,slow=7.8,SNR=40 | | | | | | |
| ZALV | | | | PcP | **PcP** | **21 19 30.3** | **-2.2** |
| | comp=Z,0.6nm,0.4s,baz=106,slow=2.1,SNR=3.2 | | | | | | |
| ZALV | | | | LR | LR | 21 36 52.2 | |
| | comp=Z,21nm,18.0s,baz=70,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.37** | **310** | P | **P** | **21 17 30.6** | **+0.2** |
| ZALV | | | | | | 21 19 30.3 | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.5s | | | | | | |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| ZALV | | | | MLR | MLR | | |
| | comp=Z,21nm,18.0s | | | | | | |
| **CM31** | **Chiang Mai Arr** | **42.55** | **253** | *e*P | **P** | **21 17 49.0** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **42.55** | **253** | P | **P** | **21 17 49.0** | **+0.3** |
| | comp=Z,0.3nm,0.4s,baz=39,slow=6.3,SNR=4.7 | | | | | | |
| **MK01** | **Makanchi Array** | **43.00** | **300** | *e*P | **P** | **21 17 51.9** | **-0.2** |
| **MK32** | **Makanchi Array** | **43.00** | **300** | *e*P | **P** | **21 17 52.1** | **0.0** |
| **MKAR** | **Makanchi Array** | **43.00** | **300** | P | **P** | **21 17 52.1** | **0.0** |
| | comp=Z,3.5nm,0.6s,baz=86,slow=9.8,SNR=23 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.00** | **300** | P | **P** | **21 17 52.1** | **0.0** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **43.00** | **300** | *e*P | **P** | **21 17 51.6** | **-0.5** |
| **KURK** | **Kurchatov** | **44.56** | **306** | *e*P | **P** | **21 18 03.0** | **-1.4** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **44.56** | **306** | *e*P | **P** | **21 18 03.0** | **-1.4** |
| | comp=Z,21nm,0.9s | | | | | | |
| **TAPN** | **Taplejung** | **46.13** | **272** | *e*P | **P** | **21 18 17.6** | **0.0** |
| **ODAN** | **Odare** | **46.62** | **271** | *e*P | **P** | **21 18 20.9** | **-0.5** |
| **ILAR** | **Eielson Array** | **47.04** | **34** | P | **P** | **21 18 25.0** | **+1.1** |
| | comp=Z,0.6nm,0.6s,baz=262,slow=5.8,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **47.04** | **34** | P | **P** | **21 18 25.0** | **+1.1** |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ILB** | **Eielson Array** | **47.04** | **34** | *e*P | **P** | **21 18 25.0** | **+1.1** |
| **RAMN** | **Ramite** | **47.19** | **272** | *e*P |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BUR04** | **Bucovina Ar. S** | **76.39** | **322** | *eP* | **P** | **21 21 41.8** | **+0.2** |
| **BR101** | **Keskin Array S** | **77.30** | **311** | *eP* | **P** | **21 21 46.8** | **-0.1** |
| **BRTR** | **Keskin Array B** | **77.30** | **311** | P | **P** | **21 21 46.8** | **-0.2** |
| | comp=Z,0.6nm,0.6s,baz=57,slow=5.3,SNR=3.5 | | | | | | |
| **BRTR** | **Keskin Array B** | **77.30** | **311** | P | **P** | **21 21 46.8** | **-0.2** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **GEC2** | **GERESS Array S** | **80.58** | **328** | *eP* | **P** | **21 22 04.7** | **0.0** |
| **GEC2** | **GERESS Array S** | **80.58** | **328** | *eP* | **P** | **21 22 04.7** | **0.0** |
| **GERES** | **GERESS Array B** | **80.58** | **328** | P | **P** | **21 22 04.7** | **0.0** |
| | comp=Z,0.4nm,0.5s,baz=33,slow=5.1,SNR=5.2 | | | | | | |

*ISCJB **24** 21:11:20.9±0.3, 34°.45S±0°.03×70°.54W±0°.07, h107km±3km, mb4.1/10, Error ellipse: s-maj=9.4km s-min=4.9km az=21.0*
*GUC **24** 21:11:21.2±0.6, 34°.40S×70°.63W, h106km±4km, ML4.4*
*NEIC **24** 21:11:21.0, 34°.40S×70°.63W, h106km, mb4.4/5, After GUC.*
*NEIC Felt [III] at Melipilla, Rancagua and San Fernando; [II] at Los Quenes, Pencahue and Santiago.*
*IDC **24** 21:11:22.8±2.4, 34°.43S×70°.40W, h112km±21km, mb3.8/10, mb1 3.9/13, mb1mx3.7/34, mbtmp4.1/13, MS3.2/1, Ms1 3.1/1, ms1mx2.3/17, Error ellipse: s-maj=25.0km s-min=12.8km az=81.0*

**ISC 24 21:11:22.1±0.6, 34°.43S±0°.04×70°.59W±0°.06, h106km±6km, n43, σ1§02/55, mb4.1/10, 7C-4D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NICH** | **Los Niches** | **0.78** | **223** | ⇑*iP* | **Pn** | **21 11 40.3** | **-0.4** |
| NICH | | | | *i* S | **Sn** | **21 11 55.0** | **+0.2** |
| **PCH** | **Pirque** | **0.81** | **4** | ⇓*iP* | **Pn** | **21 11 40.7** | **-0.5** |
| **TACH** | **Talagante** | **0.83** | **339** | ⇓*iP* | **Pn** | **21 11 40.5** | **-0.8** |
| **YECH** | **El Yeso** | **0.87** | **29** | ⇑*iP* | **Pn** | **21 11 42.1** | **+0.2** |
| YECH | | | | *i* S | **Sn** | **21 11 57.8** | **+0.8** |
| YECH | | | | AML | AML | 21 12 04.8 | |
| | comp=N,6μm,0.2s | | | | | | |
| **FSR** | **Penalolen** | **0.95** | **3** | ⇓*iP* | **Pn** | **21 11 43.0** | **+0.5** |
| FSR | | | | *i* S | **Sn** | **21 11 58.5** | **+0.6** |
| **RCDM** | **Rinconada Maip** | **0.95** | **349** | ⇑*iP* | **Pn** | **21 11 41.8** | **-0.8** |
| RCDM | | | | *i* S | **Sn** | **21 11 57.5** | **-0.5** |
| RCDM | | | | AML | AML | 21 11 59.2 | |
| | comp=E,10μm,0.1s | | | | | | |
| **SAN** | **Santiago** | **0.98** | **356** | ⇑*iP* | **Pn** | **21 11 42.1** | **-0.6** |
| SAN | | | | *i* S | **Sn** | **21 11 57.4** | **-1.0** |
| **CLCH** | **Cerro Calan** | **1.03** | **2** | ⇑*iP* | **Pn** | **21 11 42.5** | **-0.9** |
| CLCH | | | | *i* S | **Sn** | **21 11 59.0** | **-0.5** |
| CLCH | | | | AML | AML | 21 12 00.3 | |
| | comp=E,13μm,0.4s | | | | | | |
| **CHPI** | **Pichilemu** | **1.17** | **271** | ⇑*iP* | **Pn** | **21 11 44.2** | **-0.6** |
| CHPI | | | | *i* S | **Sn** | **21 12 01.3** | **-0.7** |
| **PEL** | **Peldehue** | **1.28** | **356** | ⇓*iP* | **Pn** | **21 11 45.6** | **-0.6** |
| PEL | | | | *i* S | **Sn** | **21 12 04.1** | **-0.3** |
| PEL | | | | AML | AML | 21 12 05.3 | |
| | comp=N,23μm,0.2s | | | | | | |
| **TALC** | **Talca** | **1.29** | **221** | ⇑*iP* | **Pn** | **21 11 45.6** | **-0.6** |
| TALC | | | | *i* S | **Sn** | **21 12 04.3** | **-0.2** |
| **CFAA** | **Coronel Fontan** | **3.44** | **36** | P | **Pn** | **21 12 13.3** | **-0.6** |
| | comp=N,0.9nm,0.3s,baz=206,slow=13,SNR=85 | | | | | | |
| CFAA | | | | S | **Sn** | **21 12 53.2** | **-0.6** |
| | comp=N,3.7nm,0.3s,baz=298,slow=17,SNR=7.6 | | | | | | |
| **LCO** | **Las Campanas** | **5.40** | **359** | *ePn* | **Pn** | **21 12 37.8** | **-2.8** |
| LCO | | | | *eSn* | Sn | 21 13 32.3 | -9.3 |
| **PLCA** | **Paso Flores** | **6.29** | **180** | *ePn* | **Pn** | **21 12 51.8** | **-0.6** |
| **TRQA** | **Tornquist** | **7.84** | **120** | *ePn* | **Pn** | **21 13 11.9** | **-1.4** |
| **LVC** | **Limon Verde** | **11.87** | **8** | P | **Pn** | **21 14 07.0** | **-1.0** |
| | comp=N,9.1nm,0.3s,baz=186,slow=10,SNR=3.2 | | | | | | |
| LVC | | | | S | **Sn** | **21 16 21.6** | **+2.9** |
| | comp=N,11nm,0.3s,baz=229,slow=17,SNR=2.2 | | | | | | |
| **CPUP** | **Villa Florida** | **13.99** | **58** | P | **Pn** | **21 14 34.3** | **-1.3** |
| | comp=N,0.1nm,0.3s,baz=170,slow=17,SNR=2.2 | | | | | | |
| **LPAZ** | **La Paz** | **18.20** | **8** | P | **Pn** | **21 15 28.7** | **+0.2** |
| | comp=N,0.4nm,0.3s,baz=186,slow=8.7,SNR=28 | | | | | | |
| **LPAZ** | **La Paz** | **18.20** | **8** | *eP* | **Pn** | **21 15 28.6** | **+0.1** |
| | comp=N,5.4nm,0.8s | | | | | | |
| **SIV** | **San Ignacio** | **20.25** | **27** | P | **P** | **21 15 48.1** | **-1.0** |
| | comp=N,4.3nm,0.8s,baz=211,slow=8.0,SNR=12 | | | | | | |
| **USHA** | **Ushuaia** | **20.46** | **176** | P | **P** | **21 15 51.9** | **+1.1** |
| | comp=N,10nm,0.8s,baz=331,slow=9.2,SNR=9.8 | | | | | | |
| **NNA** | **Nana** | **23.06** | **344** | P | **P** | **21 16 19.8** | **+1.3** |
| | comp=N,4.9nm,0.5s,baz=196,slow=15,SNR=3.4 | | | | | | |
| **BDFB** | **Brasilia** | **27.61** | **53** | LR | LR | 21 28 45.0 | |
| | comp=N,48nm,18.8s,baz=350,slow=38 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **48.51** | **158** | P | **P** | **21 19 56.0** | **+2.3** |
| **VNA2** | **Neumayer--Watz** | **49.15** | **157** | P | **P** | **21 20 00.8** | **+2.2** |
| | baz=290,slow=8.8 | | | | | | |
| **SNAA** | **Sanae** | **50.73** | **158** | P | **P** | **21 20 10.1** | **-0.5** |
| **SNAA** | **Sanae** | **50.73** | **158** | P | **P** | **21 20 10.2** | **-0.5** |
| | comp=N,0.7nm,0.8s,baz=299,slow=7.4,SNR=25 | | | | | | |
| **SNAA** | **Sanae** | **50.73** | **158** | *eP* | **P** | **21 20 10.2** | **-0.5** |
| | comp=N,19nm,2.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **55.81** | **180** | P | **P** | **21 20 48.1** | **+0.1** |
| | comp=N,1.3nm,0.4s,baz=147,slow=3.1,SNR=9.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **70.70** | **330** | P | **P** | **21 22 27.0** | **+0.5** |
| | comp=N,1.5nm,0.6s,baz=156,slow=8.9,SNR=13 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **70.70** | **330** | *eP* | **P** | **21 22 26.9** | **+0.4** |
| **WVT** | **Waverly** | **72.02** | **345** | *eP* | **P** | **21 22 33.5** | **-0.6** |
| | comp=N,15nm,0.6s | | | | | | |
| **ANMO** | **Albuquerque** | **76.74** | **330** | P | **P** | **21 23 02.3** | **+0.5** |
| | comp=N,1.6nm,0.8s,baz=142,slow=8.0,SNR=4.6 | | | | | | |
| **ANMO** | **Albuquerque** | **76.74** | **330** | *eP* | **P** | **21 23 02.9** | **+1.1** |
| | comp=N,2.5nm,0.9s | | | | | | |
| **T25A** | **Trinidad** | **77.85** | **333** | *eP* | **P** | **21 23 09.2** | **+1.2** |
| | comp=N,5.5nm,0.8s | | | | | | |
| **BOSA** | **Boshof** | **78.80** | **117** | P | **P** | **21 23 13.4** | **-0.1** |
| | comp=N,1.6nm,0.6s,baz=225,slow=10.0,SNR=6.1 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **83.23** | **69** | *eP* | **P** | **21 23 36.7** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **83.23** | **69** | P | **P** | **21 23 36.2** | **-0.8** |
| | comp=N,0.9nm,0.6s,baz=286,slow=5.5,SNR=17 | | | | | | |
| TORD | | | | pP | **pP** | **21 24 05.2** | **+0.7** |
| | comp=N,0.4nm,0.7s,baz=238,slow=6.1,SNR=3.4 | | | | | | |
| **BW06** | **Boulder Array** | **84.69** | **332** | *eP* | **P** | **21 23 43.9** | **-0.2** |
| **NV01** | **Mina Array Sit** | **84.93** | **324** | *eP* | **P** | **21 23 46.1** | **+0.8** |
| **NVAR** | **Mina Array Bea** | **84.93** | **324** | P | **P** | **21 23 46.1** | **+0.8** |
| | comp=N,0.4nm,0.6s,baz=145,slow=5.4,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **120.96** | **208** | PKP | **PKPdf** | **21 30 00.9** | **-1.6** |
| | comp=N,0.2nm,0.5s,baz=160,slow=1.7,SNR=7.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **153.93** | **34** | PKPbc | **PKPbc** | **21 31 07.8** | **-0.5** |
| | comp=N,0.6nm,0.5s,baz=280,slow=3.4,SNR=4.0 | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **21 31 22.0** | **0.0** |
| | comp=N,0.7nm,0.6s,baz=274,slow=5.5,SNR=3.2 | | | | | | |

*IDC **24** 21:20:24.1±2.4, 13°.41N×90°.17W, h0km, mb3.8/4, mb1 4.2/5, mb1mx3.7/42, mbtmp3.9/5, ML4.2/1, MS3.0/3, Ms1 3.0/3, ms1mx2.8/25, Error ellipse: s-maj=52.5km s-min=44.2km az=26.0*
*ISCJB **24** 21:20:31.5±1.0, 13°.41N±0°.08×90°.72W±0°.05, h38km, mb4.1/3, MS3.1/2, Error ellipse: s-maj=12.3km s-min=5.8km az=20.4*
*CASC **24** 21:20:33.3±1.3, 13°.56N×90°.59W, h27km±4km, MD3.9, ML4.2*

**ISC 24 21:20:31.4±1.1, 13°.41N±0°.08×90°.72W±0°.05, h38km, n26, σ1§55/29, mb4.2/3, 4C-8D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IXG** | **Ixpaco** | **0.80** | **19** | ⇑*iP* | **Pn** | **21 20 45.5** | **-0.8** |
| **PCG** | **Pacaya** | **0.98** | **6** | ⇓*eP* | **Pn** | **21 20 49.2** | **+0.2** |
| **FUG** | **Fuego 3** | **1.03** | **353** | ⇓*eP* | **Pn** | **21 20 49.9** | **+0.3** |
| **SBLS** | **San Blas** | **1.14** | **68** | ⇓*iP* | **Pn** | **21 20 51.2** | **0.0** |
| **RTR** | **El Retiro** | **1.15** | **65** | ⇓*iP* | **Pn** | **21 20 51.4** | **+0.3** |
| **SNJE** | **San Jose** | **1.17** | **67** | ⇓*iP* | **Pn** | **21 20 51.6** | **+0.1** |
| **RBDL** | **Robledal** | **1.22** | **55** | ⇓*iP* | **Pn** | **21 20 52.3** | **+0.2** |
| **NBG** | **Las Nubes** | **1.22** | **17** | ⇓*eP* | **Pn** | **21 20 53.5** | **+1.2** |
| NBG | | | | *eS* | **Sn** | **21 21 08.6** | **+0.9** |
| **JAT** | **Jato** | **1.27** | **315** | ⇑*eP* | **Pn** | **21 20 54.8** | **+2.2** |
| **BQQS** | **Boqueron** | **1.43** | **77** | ⇓*iP* | **Pn** | **21 20 55.9** | **+0.8** |
| BQQS | | | | *eS* | **Sn** | **21 21 12.5** | **-0.3** |
| **SNET** | **Serv Nac Est T** | **1.47** | **79** | *eP* | **Pn** | **21 20 56.3** | **+0.8** |
| SNET | | | | *i* S | **Sn** | **21 21 13.6** | **+0.1** |
| SNET | | | | AML | AML | 21 21 14.7 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **LFU** | **La Fuente** | **1.59** | **78** | *eP* | **Pn** | **21 20 58.0** | **+0.9** |
| **LFRS** | **El Faro** | **1.62** | **82** | *eP* | **Pn** | **21 20 58.6** | **+1.0** |
| **LBRS** | **Las Brisas** | **1.66** | **79** | ⇑*eP* | **Pn** | **21 20 59.1** | **+1.0** |
| **MRL** | **Marmol** | **1.92** | **31** | ⇑*iP* | **Pn** | **21 21 02.0** | **+0.2** |
| MRL | | | | *eS* | **Sn** | **21 21 29.9** | **+5.1** |
| **CAHU** | **Cacacuatique** | **2.46** | **81** | *eP* | **Pn** | **21 21 09.8** | **+0.5** |
| **CNCH** | **Conchagua** | **2.81** | **92** | *eP* | **Pn** | **21 21 15.7** | **+1.8** |
| **CMIG** | **Matias Romero** | **5.43** | **313** | Pn | **Pn** | **21 21 51.1** | **+1.2** |
| | comp=Z,5.7nm,0.3s,baz=123,slow=8.6,SNR=35 | | | | | | |
| CMIG | | | | Sn | **Sn** | **21 22 49.6** | **-1.7** |
| | comp=Z,7.7nm,0.3s,baz=40,slow=4.2,SNR=5.7 | | | | | | |
| CMIG | | | | LR | LR | 21 23 50.5 | |
| | comp=Z,60nm,21.9s,baz=182,slow=35 | | | | | | |
| **TXAR** | **Lajitas Array** | **19.88** | **325** | P | **Pn** | **21 25 01.4** | **-0.1** |
| | comp=Z,0.7nm,0.7s,baz=144,slow=11,SNR=6.5 | | | | | | |
| **LPIG** | **La Paz** | **21.35** | **303** | LR | LR | 21 32 29.4 | |
| | comp=Z,62nm,18.2s,baz=7.0,slow=33 | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.02** | **15** | P | **P** | **21 25 30.5** | **-2.6** |
| | comp=Z,2.3nm,0.4s,baz=166,slow=12,SNR=7.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **34.91** | **321** | P | **P** | **21 27 21.5** | **+1.7** |
| | comp=Z,2.4nm,0.7s,baz=125,slow=7.8,SNR=11 | | | | | | |
| **LPAZ** | **La Paz** | **37.01** | **142** | LR | LR | 21 41 58.9 | |
| | comp=Z,28nm,18.7s,baz=348,slow=35 | | | | | | |
| **INK** | **Inuvik** | **61.35** | **343** | P | **P** | **21 30 40.5** | **-2.6** |
| | comp=Z,1.3nm,0.7s,baz=141,slow=6.5,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **136.46** | **255** | PKP | **PKPdf** | **21 39 50.0** | **-0.1** |
| | comp=Z,0.2nm,0.6s,baz=84,slow=2.2,SNR=3.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **146.93** | **343** | PKPbc | **PKPdf** | **21 40 09.4** | **+0.5** |
| | comp=Z,2.0nm,0.5s,baz=342,slow=3.5,SNR=16 | | | | | | |

**IDC 24 21:37:16.7±1.4, 5°.47S×128°.81E, h307km±19km, mb2.8/1, mb1 2.8/4, mb1mx2.6/30, mbtmp3.5/4, Error ellipse: s-maj=31.7km s-min=15.3km az=98.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.19** | **28** | P | Pn | 21 38 38.3 | +1.6 |
| | 1.3nm,0.3s,baz=156,slow=24,SNR=15 | | | | | | |
| SIJI | | | | S | S | 21 39 40.6 | -0.5 |
| | 0.7nm,0.3s,baz=253,slow=19,SNR=2.7 | | | | | | |
| **BATI** | **Baumata** | **6.94** | **227** | P | Pn | 21 38 56.9 | -0.6 |
| | 9.5nm,0.3s,baz=93,slow=1.7,SNR=8.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.36** | **160** | P | P | 21 40 37.4 | 0.0 |
| | 0.1nm,0.3s,baz=341,slow=11,SNR=6.2 | | | | | | |
| WRA | | | | S | S | 21 43 19.2 | -4.7 |
| | 0.0nm,0.3s,baz=338,slow=22,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **18.74** | **165** | P | P | 21 41 14.0 | 0.0 |
| | 0.3nm,0.3s,baz=346,slow=12,SNR=14 | | | | | | |
| ASAR | | | | S | S | 21 44 25.7 | -5.3 |
| | 0.1nm,0.3s,baz=344,slow=16,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.31** | **327** | P | P | 21 47 32.7 | -0.1 |
| | 0.3nm,0.6s,baz=145,slow=5.3,SNR=4.0 | | | | | | |

**SJA 24 21:38:54.9±0.2, 28°.59S×67°.53W, h130km±3km, ML3.4, MW3.7, La Rioja Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VCA** | **Vinchina** | **0.61** | **256** | *eP* | Pn | 21 39 15.5 | +0.6 |
| VCA | | | | *eS* | Sn | 21 39 30.7 | +0.7 |
| VCA | | | | IAML | | 21 39 33.7 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **CYA** | **Choya** | **1.53** | **85** | *eP* | Pn | 21 39 24.2 | +0.7 |
| CYA | | | | IAML | | 21 39 24.9 | |
| | comp=Z,192nm,0.3s | | | | | | |
| CYA | | | | *eS* | Sn | 21 39 45.9 | +0.7 |
| **RTLL** | **Cerro Villicun** | **2.85** | **196** | *eP* | Pn | 21 39 40.6 | +1.0 |
| **RTCV** | **Cerro Valdivia** | **3.37** | **195** | *eP* | Pn | 21 39 47.5 | +1.0 |
| **RTLS** | **Leoncito** | **3.54** | **205** | *eP* | Pn | 21 39 50.4 | +1.5 |
| **TCA** | **Tanti** | **3.74** | **138** | *eP* | Pn | 21 39 52.4 | +1.1 |

*CSEM **24** 21:42:51.9±0.2, 37°.69N×43°.36E, h10km, MD2.7, Error ellipse: s-maj=6.6km s-min=4.4km az=38.0*
*DDA **24** 21:42:51.9, 37°.70N×43°.35E, h7km, Md2.7*

**ISC 24 21:42:52.0±1.0, 37°.69N±0°.04×43°.36E±0°.03, h15km±12km, n13, σ0§42/22, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HAKT** | **HAKKARI** | **0.31** | **115** | *i* P | **Pg** | **21 42 58.5** | **0.0** |
| HAKT | | | | *i* S | **Sb** | **21 43 04.4** | **+0.1** |
| **HAKT** | **HAKKARI** | **0.31** | **115** | P | **Pg** | **21 42 58.5** | **0.0** |
| HAKT | | | | S | **Sb** | **21 43 04.4** | **+0.1** |
| **CUKT** | **Cukurca** | **0.49** | **156** | PG | **Pg** | **21 43 01.2** | **-0.4** |
| CUKT | | | | SG | **Sg** | **21 43 08.4** | **+0.2** |
| **CUKT** | **Cukurca** | **0.49** | **156** | *i* Pg | **Pg** | **21 43 01.2** | **-0.4** |
| CUKT | | | | *i* Sg | **Sg** | **21 43 08.4** | **+0.2** |
| **GEVA** | **Gevas** | **0.66** | **339** | *i* P | **Pg** | **21 43 04.7** | **-0.3** |
| GEVA | | | | *i* S | **Sg** | **21 43 14.1** | **+0.3** |
| **GEVA** | **Gevas** | **0.66** | **339** | P | **Pg** | **21 43 04.7** | **-0.3** |
| GEVA | | | | S | **Sg** | **21 43 14.1** | **+0.3** |
| **SIRT** | **Sirnak** | **0.75** | **256** | *e*PG | **Pg** | **21 43 06.0** | **-0.6** |
| **SIRT** | **Sirnak** | **0.75** | **256** | *e*Pg | **Pg** | **21 43 06.0** | **-0.6** |
| **SIRN** | **S¨–rnak** | **0.77** | **256** | *i* P | **Pg** | **21 43 06.9** | **-0.1** |
| SIRN | | | | *i* S | **Sb** | **21 43 18.0** | **+0.4** |
| **SIRN** | **S¨–rnak** | **0.77** | **256** | P | **Pg** | **21 43 06.9** | **-0.1** |
| SIRN | | | | S | **Sb** | **21 43 18.0** | **+0.4** |
| **BEST** | **Besiri** | **1.67** | **278** | P | **Pb** | **21 43 23.0** | **+0.6** |
| BEST | | | | S | **Sg** | **21 43 46.2** | **+0.6** |
| **SVAN** | **Silvan-Diyarba** | **1.77** | **286** | *e*PN | **Pb** | **21 43 23.6** | **-0.5** |
| **SVAN** | **Silvan-Diyarba** | **1.77** | **286** | *e*Pn | **Pb** | **21 43 23.6** | **-0.5** |

*IDC **24** 21:50:46.2±1.4, 3°.35S×140°.42E, h0km, mb4.2/2, mb1 4.7/4, mb1mx3.9/22, mbtmp4.5/4, ML4.5/2, MS3.3/8, Ms1 3.3/8, ms1mx3.1/27, Error ellipse: s-maj=60.9km s-min=28.5km az=120.0*
*ISCJB **24** 21:50:49.9±0.8, 3°.56S±0°.07×140°.5E±0°.1, h39km, mb4.0/1, MS3.3/7, Error ellipse: s-maj=21.6km s-min=8.3km az=13.6*
*AUST **24** 21:50:50.0±4.8, 3°.58S×140°.79E, h36km±1km, Error ellipse: s-maj=2.6km s-min=1.4km az=285.0*

**ISC 24 21:50:51.3±0.9, 3°.54S±0°.09×140°.6E±0°.2, h39km, n21, σ1§80/15, MS3.2/7, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **1.02** | **338** | P | **Pn** | **21 51 08.2** | **-0.9** |
| **JAY** | **Jayapura** | **1.03** | **9** | P | **Pn** | **21 51 08.0** | **-1.3** |
| | baz=1.1,SNR=89 | | | | | | |
| **KDU** | **Kakadu** | **12.10** | **221** | P | **Pn** | **21 53 42.6** | **+1.4** |
| | baz=12,SNR=3.6 | | | | | | |
| **MTN** | **Manton Dam** | **13.12** | **225** | P | **Pn** | **21 53 54.3** | **-0.9** |
| | baz=13,SNR=4.5 | | | | | | |
| **KNRA** | **Kununurra** | **16.73** | **223** | P | **Pn** | **21 54 41.8** | **-1.1** |
| | baz=17,SNR=5.6 | | | | | | |
| **QIS** | **Mount Isa** | **16.94** | **183** | P | **Pn** | **21 54 45.3** | **-0.2** |
| | baz=17,SNR=5.4 | | | | | | |
| **SOEI** | **Soe** | **17.30** | **248** | P | **P** | **21 54 53.6** | **+2.3** |
| | baz=18,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.39** | **200** | P | **Pn** | **21 54 50.5** | **-0.6** |
| | 1.1nm,0.3s,baz=25,slow=12,SNR=35 | | | | | | |
| **GUMO** | **Guam** | **17.55** | **14** | LR | LR | 22 02 31.4 | |
| | comp=Z,77nm,18.1s,baz=178,slow=40 | | | | | | |
| **BATI** | **Baumata** | **18.02** | **248** | P | **Pn** | **21 54 58.7** | **-0.2** |
| | 4.4nm,0.3s,baz=102,slow=5.0,SNR=6.3 | | | | | | |
| **HNR** | **Honiara** | **20.14** | **108** | LR | LR | 22 02 24.8 | |
| | comp=Z,33nm,19.1s,baz=273,slow=34 | | | | | | |
| **KAPI** | **Kappang** | **20.79** | **265** | LR | LR | 22 05 32.6 | |
| | comp=Z,40nm,20.6s,baz=91,slow=43 | | | | | | |
| **ASAR** | **Alice Springs** | **21.01** | **197** | P | **P** | **21 55 32.9** | **+1.2** |
| | 18nm,0.8s,baz=24,slow=9.2,SNR=64 | | | | | | |
| ASAR | | | | S | **S** | **21 59 19.0** | **-4.8** |
| | 0.8nm,0.9s,baz=13,slow=26,SNR=2.6 | | | | | | |
| ASAR | | | | LR | LR | 22 04 05.8 | |
| | comp=Z,187nm,18.5s,baz=24,slow=38 | | | | | | |
| **WRKA** | **Warakurna** | **24.41** | **208** | P | **P** | **21 56 06.6** | **+0.3** |
| | baz=25,SNR=3.7 | | | | | | |
| **KSRS** | **Korea Array** | **42.44** | **345** | LR | LR | 22 14 43.0 | |
| | comp=Z,25nm,18.6s,baz=156,slow=34 | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.26** | **12** | LR | LR | 22 21 48.5 | |
| | comp=Z,19nm,22.0s,baz=213,slow=32 | | | | | | |
| **VNDA** | **Vanda** | **74.80** | **175** | LR | LR | 22 35 13.9 | |
| | comp=Z,79nm,18.1s,baz=352,slow=36 | | | | | | |
| **MAW** | **Mawson** | **82.05** | **202** | LR | LR | 22 37 55.4 | |
| | comp=Z,31nm,18.4s,baz=228,slow=34 | | | | | | |
| **ILAR** | **Eielson Array** | **85.83** | **24** | P | **P** | **22 03 26.3** | **-0.2** |
| | 0.6nm,0.7s,baz=251,slow=4.8,SNR=7.4 | | | | | | |
| **LPAZ** | **La Paz** | **145.47** | **126** | PKPbc | **PKPab** | **22 10 28.5** | **+1.2** |
| | 0.6nm,0.5s,baz=249,slow=5.1,SNR=3.1 | | | | | | |
| **CPUP** | **Villa Florida** | **145.63** | **151** | PKPbc | **PKPab** | **22 10 27.9** | **+1.1** |
| | 0.5nm,0.4s,baz=270,slow=20,SNR=2.8 | | | | | | |

*CSEM **24** 22:22:31.2, 37°.97N×26°.44W, h4km, ML2.2, After PDA*

**PDA 24 22:22:31.2±1.2, 37°.97N×26°.44W, h4km±7km, MD3.6, ML2.2, Error ellipse: s-maj=5.4km s-min=4.8km az=30.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSET** | **Sete Cidades** | **0.59** | **104** | *eP* | Pg | 22 22 41.0 | -1.6 |
| PSET | | | | *eS* | Sg | 22 22 48.9 | -1.4 |
| PSET | | | | A | A | 22 22 50.5 | |
| | 65nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **0.59** | **104** | *eP* | Pg | 22 22 41.0 | -1.6 |
| PSET | | | | *eS* | Sg | 22 22 48.9 | -1.4 |
| **PDA** | **Ponta Delgada** | **0.66** | **110** | *eP* | Pg | 22 22 42.0 | -1.8 |
| PDA | | | | *eS* | Sg | 22 22 50.9 | -1.4 |
| PDA | | | | A | A | 22 22 52.1 | |
| | 92nm,0.2s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.66** | **110** | *eP* | Pg | 22 22 42.0 | -1.8 |
| PDA | | | | *eS* | Sg | 22 22 50.9 | -1.4 |
| **GRON** | **Grota Negra** | **0.75** | **105** | *eP* | Pg | 22 22 45.2 | -0.4 |
| GRON | | | | *eS* | Sg | 22 22 55.9 | +0.5 |
| GRON | | | | A | A | 22 22 58.5 | |
| | 8.6nm,0.2s | | | | | | |
| **ADH** | **Angra Heroismo** | **0.93** | **318** | *eP* | Pg | 22 22 46.3 | -2.7 |
| ADH | | | | *eS* | Sg | 22 22 57.2 | -3.8 |
| ADH | | | | A | A | 22 23 01.1 | |
| | 25nm,0.3s | | | | | | |
| **ADH** | **Angra Heroismo** | **0.93** | **318** | *eP* | Pg | 22 22 46.3 | -2.7 |
| ADH | | | | *eS* | Sg | 22 22 57.2 | -3.8 |
| **BART** | **Pico Bartolome** | **1.03** | **100** | *eP* | Pg | 22 22 47.8 | -3.2 |
| BART | | | | *eS* | Sg | 22 22 59.9 | -4.5 |
| BART | | | | A | A | 22 23 04.6 | |
| | 14nm,0.2s | | | | | | |
| **BART** | **Pico Bartolome** | **1.03** | **100** | *eP* | Pg | 22 22 47.8 | -3.2 |
| BART | | | | *eS* | Sg | 22 22 59.9 | -4.5 |
| **PSMA** | **Santa Maria** | **1.43** | **133** | *eS* | Sb | 22 23 09.7 | -7.3 |
| PSMA | | | | A | A | 22 23 13.0 | |
| | 7.8nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.46** | **298** | *eS* | Sb | 22 23 10.2 | -7.6 |
| PMAN | | | | A | A | 22 23 11.1 | |
| | 14nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.46** | **298** | *eS* | Sb | 22 23 10.2 | -7.6 |
| **PSMN** | **Pico do Norte,** | **1.46** | **131** | *eS* | Sb | 22 23 09.9 | -8.0 |
| PSMN | | | | A | A | 22 23 10.8 | |
| | 6.8nm,0.2s | | | | | | |
| **PSMN** | **Pico do Norte,** | **1.46** | **131** | *eS* | Sb | 22 23 09.9 | -8.0 |
| **ROSA** | **Rosais** | **1.60** | **298** | *eP* | Pn | 22 22 55.6 | -4.8 |
| ROSA | | | | *eS* | Sn | 22 23 13.6 | -7.9 |
| ROSA | | | | A | A | 22 23 16.9 | |
| | 9.1nm,0.1s | | | | | | |
| **ROSA** | **Rosais** | **1.60** | **298** | *eP* | Pn | 22 22 55.6 | -4.8 |
| ROSA | | | | *eS* | Sn | 22 23 13.6 | -7.9 |
| **PGRA** | **Graciosa** | **1.61** | **312** | *eS* | Sn | 22 23 13.6 | -8.0 |
| PGRA | | | | A | A | 22 23 15.4 | |
| | 8.2nm,0.1s | | | | | | |
| **PGRA** | **Graciosa** | **1.61** | **312** | *eS* | Sn | 22 23 13.6 | -8.0 |
| **PICO** | **Pico** | **1.65** | **289** | *eP* | Pn | 22 22 56.5 | -4.6 |
| PICO | | | | *eS* | Sn | 22 23 15.0 | -7.9 |
| **PICO** | **Pico** | **1.65** | **289** | *eP* | Pn | 22 22 56.5 | -4.6 |
| PICO | | | | *eS* | Sn | 22 23 15.0 | -7.9 |
| **CALA** | **Caldeira** | **1.88** | **290** | *eS* | Sn | 22 23 20.8 | -7.8 |
| **CALA** | **Caldeira** | **1.88** | **290** | *eS* | Sn | 22 23 20.8 | -7.8 |
| **PCED** | **Cedros** | **1.90** | **291** | *eS* | Sn | 22 23 20.5 | -8.3 |
| PCED | | | | A | A | 22 23 21.9 | |
| | 18nm,0.2s | | | | | | |
| **PCED** | **Cedros** | **1.90** | **291** | *eS* | Sn | 22 23 20.5 | -8.3 |

*ISCJB **24** 22:27:26.9±0.4, 39°.45N±0°.05×52°.48E±0°.03, h10km, mb3.7/17, Error ellipse: s-maj=7.8km s-min=2.9km az=2.8*
*IDC **24** 22:27:27.1±1.1, 39°.42N×52°.34E, h0km, mb3.8/15, mb1 3.9/22, mb1mx3.8/52, mbtmp3.9/22, ML3.7/6, MS2.8/1, Ms1 2.8/1, ms1mx2.1/46, Error ellipse: s-maj=23.2km s-min=11.4km az=177.0*
*NEIC **24** 22:27:28.7±0.6, 39°.47N×52°.46E, h10km, mb4.4/3, Error ellipse: s-maj=11.7km s-min=4.7km az=171.0*
*CSEM **24** 22:27:30.9±0.2, 39°.39N×52°.48E, h30km, mb4.0/8, Error ellipse: s-maj=9.7km s-min=3.5km az=175.0*
*AZER **24** 22:27:32.5±0.2, 39°.21N×52°.12E, h50km, Error ellipse: s-maj=5.7km s-min=3.7km az=229.0*
*MOS **24** 22:27:34.5±1.2, 39°.99N×52°.30E, h42km, mb4.2/9, Error ellipse: s-maj=9.6km s-min=7.3km az=127.9*
*NNC **24** 22:27:35.9±5.3, 40°.01N×53°.13E, h0km, mb3.9, Error ellipse: s-maj=77.3km s-min=41.3km az=92.0*

**ISC 24 22:27:27.9±0.6, 39°.31N±0°.05×52°.40E±0°.04, h10km, n161, σ1§58/193, mb3.9/17, 23C-28D, Caspian Sea**

| Code | Station Name | Δ° | A

**SEKA Sheki** 4.41 297 P Pn 22 28 36.5 +1.6
SNR=24
SEKA S Sn 22 29 24.7 -1.6
**GEYT Alibeck** 4.69 105 Pn Pn 22 28 39.5 +0.8
1.2nm,0.3s,baz=288,slow=15,SNR=27
GEYT Sn Sn 22 29 30.1 -3.1
0.9nm,0.3s,baz=270,slow=17,SNR=4.0
**GANJ Ganja** 4.85 288 ⇑P Pn 22 28 41.5 +0.6
SNR=9.3
GANJ ⇓S Sn 22 29 33.3 -3.9
**GANJ Ganja** 4.85 288 P Pn 22 28 41.5 +0.6
SNR=9.3
**ZKTA Zakatala** 4.98 300 ⇓P Pn 22 28 44.8 +2.1
SNR=21
ZKTA ⇓S Sn 22 29 40.9 +0.6
**NAX Nakhchivan** 5.36 271 ⇑P Pn 22 28 49.0 +1.0
SNR=5.2
NAX ⇓S Sn 22 29 48.4 -1.4
**NAX Nakhchivan** 5.36 271 P Pn 22 28 48.9 +1.0
**NAX Nakhchivan** 5.36 271 P Pn 22 28 49.0 +1.0
SNR=5.2
NAX S Sn 22 29 48.4 -1.4
**QZX Qazax, Azerbai** 5.66 290 P Pn 22 28 53.2 +1.2
SNR=14
QZX ⇓S Sn 22 29 53.6 -3.4
**QZX Qazax, Azerbai** 5.66 290 P Pn 22 28 53.2 +1.2
SNR=14
**DGRG David-gareji** 5.77 294 P Pn 22 28 55.4 +1.7
DGRG S Sn 22 29 55.5 -4.5
**DGRG David-gareji** 5.77 294 P Pn 22 28 55.3 +1.7
DGRG ⇓S Sn 22 29 55.4 -4.5
**DGRG David-gareji** 5.77 294 P Pn 22 28 55.3 +1.7
**GNI Garni** 5.96 280 *i* P Pn 22 29 03.1 +6.8
**GNI Garni** 5.96 280 *i* P Pn 22 29 03.1 +6.8
**SEAG Tbilisi Sea** 6.28 295 P Sn 22 30 10.7 -1.7
**TBLG Delisi** 6.32 295 P Pn 22 29 00.8 -0.3
TBLG S Sn 22 30 09.1 -4.1
**TBLG Delisi** 6.32 295 P Pn 22 29 00.7 -0.3
TBLG S Sn 22 30 09.1 -4.1
**TBLG Delisi** 6.32 295 P Pn 22 29 00.7 -0.3
**DUS Dusheti** 6.47 298 P Sn 22 30 15.7 -1.4
**KBZ Khabaz** 8.38 305 Pn Pn 22 29 29.8 +0.5
0.1nm,0.3s,baz=84,slow=3.5,SNR=7.2
KBZ Sn Sn 22 30 56.8 -7.1
0.4nm,0.3s,baz=59,slow=18,SNR=2.5
**KIV Kislovodsk** 8.62 306 *e*P Pn 22 29 34.7 +2.0
KIV *e*S Sn 22 31 05.9 -4.2
KIV pmax pmax
comp=Z,3.0nm,1.1s
**KIV Kislovodsk** 8.62 306 *e*P Pn 22 29 34.8 +2.0
**KIV Kislovodsk** 8.62 306 *e*P Pn 22 29 34.7 +2.0
comp=Z,3.0nm,1.1s
**AB31 Akbulak array** 11.31 26 Pn Pn 22 30 07.0 -2.4
comp=Z,0.9nm,0.5s,baz=208,slow=14,SNR=18
AB31 ⇓Sn Sn 22 32 08.8 -7.0
comp=Z,3.0nm,0.6s,baz=209,slow=25,SNR=4.2
**AB31 Akbulak array** 11.31 26 Pn Pn 22 30 07.0 -2.4
comp=Z,0.9nm,0.5s,baz=208,SNR=18
**ABKAR Akbulak array** 11.31 26 *e*Pn Pn 22 30 06.7 -2.7
ABKAR *e*Sn Sn 22 32 09.2 -6.6
**AKTO Aktyubinsk** 11.81 18 ⇓Pn Pn 22 30 13.6 -2.6
comp=Z,4.0nm,0.9s
AKTO ⇓Sn Sn 22 32 15.5 -13
comp=Z,12nm,1.4s
**AKTO Aktyubinsk** 11.81 18 Pn Pn 22 30 13.3 -2.9
comp=Z,0.4nm,0.3s,baz=206,slow=15,SNR=5.8
AKTO Sn Sn 22 32 17.6 -10
comp=Z,0.6nm,0.3s,baz=139,slow=18,SNR=4.3
**AKTO Aktyubinsk** 11.81 18 P Pn 22 30 13.3 -2.9
AKTO 22 32 17.7
AKTO smax smax
comp=N,1.0nm,0.3s
**AKTO Aktyubinsk** 11.81 18 Pn Pn 22 30 13.6 -2.6
comp=N,4.0nm,0.9s
**ANN Anapa** 12.39 301 *e*P Pn 22 30 25.3 +1.0
ANN *e*S Sn 22 32 38.6 -3.7
ANN pmax pmax
comp=Z,19nm,1.0s
**AAK Ala-Archa** 17.01 72 Pn Pn 22 31 25.5 -0.4
comp=Z,0.1nm,0.3s,baz=257,slow=12,SNR=3.0
AAK LR LR 22 39 15.2
comp=Z,32nm,19.5s,baz=242,slow=42
**AAK Ala-Archa** 17.01 72⇑ *e*P P 22 31 30.7 +2.9
AAK pmax pmax
comp=Z,11nm,1.5s
**ZRNK Zerenda** 17.79 34 ⇑P Pn 22 31 32.6 -2.8
comp=Z,2.7nm,0.7s
**BRVK Borovoye** 18.43 36 ⇑P P 22 31 42.4 -0.8
comp=Z,5.1nm,0.8s
**BRVK Borovoye** 18.43 36 P P 22 31 43.0 -0.2
BRVK pmax pmax
comp=Z,4.0nm,1.4s
**BRVK Borovoye** 18.43 36 P P 22 31 43.0 -0.2
comp=Z,4.0nm,1.4s
**BVA0 Borovoye Array** 18.46 36 P P 22 31 43.2 -0.3
comp=Z,2.1nm,0.6s,baz=232,slow=14,SNR=22
**BVA0 Borovoye Array** 18.46 36 P P 22 31 43.2 -0.3
comp=Z,2.1nm,0.6s,SNR=22
**BVAR Borovoye Array** 18.46 36 P Pn 22 31 41.6 -2.0
comp=Z,0.8nm,0.3s,baz=233,slow=11,SNR=26
BVAR S Sn 22 34 55.1 -15
comp=Z,0.1nm,0.3s,baz=231,slow=25,SNR=2.6
**BVAR Borovoye Array** 18.46 36 P Pn 22 31 41.6 -2.0
BVAR S Sn 22 34 55.1 -15
BVAR pmax pmax
comp=Z,1.0nm,0.3s
**VOSK Vostochnaya** 18.54 38 ⇑P P 22 31 43.6 -0.8
comp=Z,1.8nm,0.7s
**CHKZ Chkalovo** 18.99 35 ⇓P P 22 31 47.5 -1.9
comp=Z,2.0nm,0.8s
**CHKZ Chkalovo** 18.99 35 P P 22 31 47.5 -1.9
comp=Z,2.0nm,0.8s
**OBN Obninsk** 19.04 331 P P 22 31 49.2 -0.7
comp=Z,1.9nm,0.3s,baz=162,slow=20,SNR=3.7
**OBN Obninsk** 19.04 331 P Pn 22 31 50.8 +0.2
OBN pmax pmax
comp=Z,16nm,1.3s
**OBN Obninsk** 19.04 331 P Pn 22 31 50.8 +0.2
comp=Z,16nm,1.3s
**AKASG Malin Array Be** 19.86 313 P P 22 31 58.2 -0.7
comp=Z,5.4nm,0.3s,baz=92,slow=8.5,SNR=16
**AKASG Malin Array Be** 19.86 313 *e*P P 22 31 58.7 -0.2
AKASG pmax pmax
comp=Z,5.0nm,0.3s
**AKASG Malin Array Be** 19.86 313 *e*P P 22 31 58.7 -0.2
comp=Z,5.0nm,0.3s
**AKBB Malin Array Si** 19.86 313 *e*P P 22 31 58.2 -0.7
**AKBB Malin Array Si** 19.86 313 *e*P P 22 31 58.2 -0.7
**AKBB Malin Array Si** 19.86 313 *e*P P 22 31 58.2 -0.7
**KIEV Kiev** 19.87 313 *d* iP P 22 31 59.1 +0.1
KIEV pmax pmax
comp=Z,10.0nm,0.6s
**KIEV Kiev** 19.87 313 *e*P P 22 31 58.4 -0.6
comp=Z,13nm,0.6s
**KIEV Kiev** 19.87 313 *i* P P 22 31 59.1 +0.1
comp=Z,10.0nm,0.6s
**MLR Muntele Rosu** 20.43 296 P Pn 22 32 07.8 +0.3
comp=Z,0.3nm,0.5s,baz=97,slow=14
**MLR Muntele Rosu** 20.43 296⇑ *i* P Pn 22 32 08.6 +1.1
**VOIR** 21.05 296⇑ *i* P P 22 32 13.7 +1.7
**VOIR** 21.05 296⇑ *i* P P 22 32 13.7 +1.7
**BURAR Bucovina Array** 21.32 302⇓ *i* P P 22 32 15.4 +0.5
**BURAR Bucovina Array** 21.32 302⇓ *i* P P 22 32 15.4 +0.5
**BUR04 Bucovina Ar. S** 21.32 302 *e*P P 22 32 15.3 +0.4
**BUR04 Bucovina Ar. S** 21.32 302 *e*P P 22 32 15.3 +0.4
**KURBB Kurchatov Arra** 21.55 50 P P 22 32 17.7 +0.5
comp=Z,2.5nm,0.5s,baz=252,slow=11,SNR=9.1
**KURK Kurchatov** 21.64 50 *e*P P 22 32 18.3 +0.1
KURK pmax pmax
comp=Z,12nm,0.6s
**KURK Kurchatov** 21.64 50 *e*P P 22 32 18.3 +0.1
comp=Z,12nm,0.6s
**KURK Kurchatov** 21.64 50 *e*P P 22 32 18.3 +0.1
comp=Z,12nm,0.6s
**IDI Anoyia** 22.21 268 P P 22 32 25.5 +1.0
comp=Z,2.7nm,0.7s,baz=57,slow=17,SNR=3.7
**IDI Anoyia** 22.21 268 *e*P P 22 32 25.5 +1.0
comp=Z,9.5nm,1.0s
**IDI Anoyia** 22.21 268 *e*P P 22 32 25.5 +1.0
comp=Z,9.5nm,1.0s
**MK32 Makanchi Array** 22.99 61 *e*P P 22 32 32.8 +0.2
**MK32 Makanchi Array** 22.99 61 *e*P P 22 32 32.8 +0.2
**MKAR Makanchi Array** 22.99 61 P P 22 32 32.8 +0.2
comp=Z,0.6nm,0.4s,baz=255,slow=9.0,SNR=6.6
**MKAR Makanchi Array** 22.99 61 P P 22 32 32.8 +0.2
MKAR pmax pmax
comp=Z,1.0nm,0.4s
**MK01 Makanchi Array** 22.99 61 *e*P P 22 32 33.0 +0.3
**MK01 Makanchi Array** 22.99 61 *e*P P 22 32 33.0 +0.3
**OJC Ojcow** 25.39 306 *e*P P 22 32 52.8 -2.4
**OJC Ojcow** 25.39 306 *e*P P 22 32 52.8 -2.4
**NVS Novosibirsk** 25.84 43 *e*P P 22 32 57.7 -1.5
**NVS Novosibirsk** 25.84 43 *e*P P 22 32 57.7 -1.5
**ZAA0 Zalesovo Array** 26.36 46 *e*P P 22 33 04.6 +0.7
**ZAA0 Zalesovo Array** 26.36 46 *e*P P 22 33 04.6 +0.7
**ZALV Zalesovo Beam** 26.36 46 P P 22 33 03.8 -0.1
comp=Z,2.0nm,0.7s,baz=261,slow=8.6,SNR=8.5
**ZALV Zalesovo Beam** 26.36 46 *e*P P 22 33 04.6 +0.7
ZALV pmax pmax
comp=Z,2.0nm,0.7s
**ZAA1 Zalesovo Array** 26.36 46 *e*P P 22 33 03.8 -0.1
**ZAA1 Zalesovo Array** 26.36 46 *e*P P 22 33 03.8 -0.1
**FIA0 FINESS Array S** 27.44 332 *e*P P 22 33 13.3 -0.2
**FIA0 FINESS Array S** 27.44 332 *e*P P 22 33 13.3 -0.2
**FIA0 FINESS Array S** 27.44 332 *e*P P 22 33 13.3 -0.2
**FINES FINESS Array B** 27.44 332 P P 22 33 13.3 -0.2
comp=Z,1.7nm,0.5s,baz=141,slow=10.0,SNR=21
**FINES FINESS Array B** 27.44 332 P P 22 33 13.3 -0.2
FINES pmax pmax
comp=Z,2.0nm,0.5s
**GEC2 GERESS Array S** 29.11 302 *e*P P 22 33 29.5 +0.8
**GEC2 GERESS Array S** 29.11 302 *e*P P 22 33 29.5 +0.8
**GEC2 GERESS Array S** 29.11 302 *e*P P 22 33 29.5 +0.8
**GERES GERESS Array B** 29.11 302 P P 22 33 29.5 +0.8
comp=Z,0.2nm,0.6s,baz=78,slow=9.1,SNR=4.0
**CLL Collm** 29.83 307 *e*P P 22 33 45.0 +10
**DAVOX Davos/Dischmat** 31.64 298 P P 22 33 51.6 +0.3
comp=Z,1.1nm,0.5s,baz=90,slow=8.1,SNR=3.8
**DAVOX Davos/Dischmat** 31.64 298 P P 22 33 51.6 +0.3
DAVOX pmax pmax
comp=Z,1.0nm,0.5s
**HFS Hagfors** 31.86 324 P P 22 33 52.7 -0.1
comp=Z,1.5nm,0.4s,baz=116,slow=11,SNR=23
**HFS Hagfors** 31.86 324 P P 22 33 52.7 -0.1
HFS pmax pmax
comp=Z,2.0nm,0.4s
**NB2 NORSAR Subarra** 33.34 324 P P 22 34 05.9 +0.1
comp=Z,0.3nm,0.4s,baz=119,slow=8.6
**NB200 NORSAR Array S** 33.34 324 *e*P P 22 34 05.4 -0.4
**NB200 NORSAR Array S** 33.34 324 *e*P P 22 34 05.4 -0.4
**NOA NORSAR Array B** 33.34 324 P P 22 34 05.4 -0.4
comp=Z,0.7nm,0.7s,baz=167,slow=8.8,SNR=4.8
**NOA NORSAR Array B** 33.34 324 P P 22 34 05.4 -0.4
NOA pmax pmax
comp=Z,1.0nm,0.7s
**ARA0 ARCESS Array S** 33.48 343 *e*P P 22 34 06.1 -0.8
**ARCES ARCESS Array B** 33.48 343 P P 22 34 06.1 -0.8
comp=Z,2.4nm,0.9s,baz=145,slow=11,SNR=4.2
**ARCES ARCESS Array B** 33.48 343 P P 22 34 06.1 -0.8
ARCES pmax pmax
comp=Z,2.0nm,0.9s
**SONA0 Songino Array** 39.33 59 *e*P P 22 34 57.1 -0.1
**SONA0 Songino Array** 39.33 59 *e*P P 22 34 57.1 -0.1
**SONM Songino Array** 39.33 59 P P 22 34 57.1 -0.1
comp=Z,0.2nm,0.5s,baz=289,slow=8.7,SNR=2.5
**ULN Ulaanbaatar** 39.76 59⇓ *i* P P 22 35 01.7 +0.9
ULN pmax pmax
comp=Z,3.0nm,1.4s
**ULN Ulaanbaatar** 39.76 59 *i* P P 22 35 01.7 +0.9
comp=Z,3.0nm,1.4s
**SPA0 Spitsbergen Ar** 41.69 349 *e*P P 22 35 16.8 +0.6
**SPITS Spitsbergen Ar** 41.69 349 P P 22 35 16.8 +0.6
comp=Z,2.6nm,0.5s,baz=146,slow=8.0,SNR=7.5
**SPITS Spitsbergen Ar** 41.69 349 P P 22 35 16.8 +0.6
SPITS pmax pmax
comp=Z,3.0nm,0.5s
**ESDC Sonseca Array** 42.87 289 P P 22 35 26.5 +0.1
comp=Z,0.3nm,0.5s,baz=56,slow=8.8,SNR=4.7
**TOA0 Torodi Ar. Sit** 51.59 254 *e*P P 22 36 34.8 +0.3
**TOA0 Torodi Ar. Sit** 51.59 254 *e*P P 22 36 34.8 +0.3
**TORD Torodi Ar. Bea** 51.59 254 P P 22 36 34.8 +0.3
comp=Z,0.4nm,1.2s,baz=47,slow=6.7,SNR=4.8
**ILAR Eielson Array** 75.15 8 P P 22 39 09.8 -0.1
comp=Z,0.4nm,0.7s,baz=343,slow=4.5,SNR=5.0
**ILAR Eielson Array** 75.15 8 *e*P P 22 39 10.0 +0.1
ILAR pmax pmax
comp=Z,1.0nm,0.8s
**ILAR Eielson Array** 75.15 8 *e*P P 22 39 10.0 +0.1
comp=Z,1.0nm,0.8s
**ILB Eielson Array** 75.15 8 *e*P P 22 39 09.8 -0.1
**ILB Eielson Array** 75.15 8 *e*P P 22 39 09.8 -0.1

*CSEM* ***24*** *22:32:09.8± 0.5, 76.77N× 19.06E, h5km, ML3.5, Error ellipse: s-maj=14.3km s-min=8.5km az=74.0*
*ISCJB* ***24*** *22:32:13.2± 1.0, 76.90N± 0.08× 18.3E± 0.3, h10km, Error ellipse: s-maj=11.8km s-min=7.2km az=29.4*
*NAO* ***24*** *22:32:13.7± 1.4, 76.86N× 18.17E, h15km± 11km, ML3.5*
*BER* ***24*** *22:32:14.8± 3.0, 76.82N× 18.54E, h15km± 20km, MD2.3, ML2.2, ML3.5(NAO)*
**ISC 24 22:32:11.4±1.0, 76.70N±0.07× 18.37E±0.08, h10km, n15, σ1§08/22, Svalbard region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **HSP** | **Hornsund** | **0.72** | **297** | Pg | | **Pg** | **22 32 26.2** | **+1.0** |
| HSP | | | | Lg | | Lg | 22 32 34.1 | |
| **HSPB** | **Hornsund (broa** | **0.72** | **297** | *e*P | | **Pg** | **22 32 26.2** | **+1.0** |
| **HSPB** | **Hornsund (broa** | **0.72** | **297** | *e*P | | **Pg** | **22 32 26.2** | **+1.0** |
| | SNR=91 | | | | | | | |
| HSPB | | | | Lg | | Lg | 22 32 34.1 | |
| **SPA0** | **Spitsbergen Ar** | **1.55** | **345** | Pn | | **Pn** | **22 32 38.8** | **-0.2** |
| | baz=153,slow=22 | | | | | | | |
| SPA0 | | | | Pg | | **Pn** | **22 32 39.6** | **+0.6** |
| | baz=154,slow=18 | | | | | | | |
| SPA0 | | | | Lg | | Lg | 22 32 56.1 | |
| | baz=153,slow=22 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.55** | **345** | *e*P | | **Pn** | **22 32 39.0** | **-0.1** |
| SPA0 | | | | Pg | | **Pn** | **22 32 39.6** | **+0.6** |
| | baz=154,slow=18 | | | | | | | |
| SPA0 | | | | *e*S | | **Sn** | **22 32 56.6** | **-2.5** |
| SPA0 | | | | IAML | | | 22 33 04.4 | |
| | comp=Z,33nm,0.5s | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.55** | **345** | Pn | | **Pn** | **22 32 38.8** | **-0.2** |
| | baz=153,slow=20 | | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **1.55** | **345** | Pg | | **Pn** | **22 32 39.6** | **+0.6** |
| | baz=154,slow=17,SNR=1.7 | | | | | | | |
| SPA0 | | | | Lg | | Lg | 22 32 56.1 | |
| | SNR=7.9 | | | | | | | |
| SPA0 | | | | *e*S | | **Sn** | **22 32 56.7** | **-2.5** |
| | SNR=50 | | | | | | | |
| **HOPEN** | **Hopen** | **1.56** | **94** | Sn | | **Sg** | **22 33 02.7** | **+1.3** |
| HOPEN | | | | Lg | | Lg | 22 33 06.7 | |
| **KBS** | **Kingsbay** | **2.62** | **332** | Pn | | **Pn** | **22 32 53.4** | **-0.3** |
| KBS | | | | Pg | | **Pb** | **22 32 59.0** | **+0.7** |
| KBS | | | | Lg | | Lg | 22 33 29.4 | |
| **KBS** | **Kingsbay** | **2.62** | **332** | *e*P | | **Pn** | **22 32 53.5** | **-0.3** |
| KBS | | | | *e*Sg | | **Sb** | **22 33 30.7** | **+0.2** |
| KBS | | | | IAML | | | 22 33 38.8 | |
| | comp=Z,38nm,0.5s | | | | | | | |
| **KBS** | **Kingsbay** | **2.62** | **332** | Pn | | **Pn** | **22 32 53.4** | **-0.3** |
| **KBS** | **Kingsbay** | **2.62** | **332** | Pg | | **Pb** | **22 32 59.0** | **+0.7** |
| KBS | | | | Lg | | Lg | 22 33 29.4 | |
| KBS | | | | *e*Sg | | **Sb** | **22 33 30.7** | **+0.2** |
| | SNR=90 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.49** | **160** | Sn | | **Sn** | **22 35 24.2** | **-1.0** |
| | baz=2.4,slow=22 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.49** | **160** | Sn | | **Sn** | **22 35 24.2** | **-1.0** |
| | baz=2.4,slow=22 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **7.49** | **160** | Sn | | **Sn** | **22 35 24.2** | **-1.0** |
| | baz=2.4,slow=22,SNR=7.2 | | | | | | | |

*AUST* ***24*** *22:43:26.0, 18.58S× 178.95W, h200km*
*ISCJB* ***24*** *22:43:50.4± 0.6, 17.9S± 0.2× 178.7W± 0.1, h550km, mb3.9/7, Error ellipse: s-maj=25.6km s-min=8.9km az=155.6*
*IDC* ***24*** *22:43:51.8± 1.9, 17.88S× 178.57W, h558km, 24km, mb3.5/8, mb1 3.7/9, mb1mx3.3/34, mbtmp4.4/9, Error ellipse: s-maj=29.9km s-min=15.1km az=156.0*
**ISC 24 22:43:51.3±0.7, 17.9S±0.2× 178.6W±0.1, h550km, n17, σ0§92/17, mb3.9/7, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **AFI** | **Afiamalu** | **7.63** | **60** | P | | **P** | **22 45 45.9** | **+0.3** |
| | 2.4nm,0.3s,baz=172,slow=15,SNR=3.4 | | | | | | | |
| AFI | | | | S | | **S** | **22 47 18.2** | **-0.9** |
| | 0.7nm,0.3s,baz=248,slow=19,SNR=2.1 | | | | | | | |

**URZ Urewera** 20.65 190 P P 22 47 53.6 +0.5
4.6nm,0.7s,baz=342,slow=4.4,SNR=4.4
**CTA Charters Tower** 33.30 260 P P 22 49 44.2 +0.1
1.5nm,0.4s,baz=123,slow=12,SNR=4.7
**HTT Hallett** 41.03 239 P P 22 50 42.2 -5.0
baz=40,SNR=5.5
**WRA Warramunga Arr** 44.49 260 P P 22 51 13.6 -0.7
3.5nm,0.5s,baz=96,slow=7.0,SNR=82
**ASAR Alice Springs** 44.65 254 P P 22 51 15.7 0.0
28nm,0.6s,baz=88,slow=8.5,SNR=368
ASAR PcP PcP 22 52 44.8 -1.6
0.7nm,0.5s,baz=99,slow=4.0,SNR=4.7
**KDU Kakadu** 47.41 269 P P 22 51 36.6 0.0
baz=47,SNR=4.1
**MTN Manton Dam** 48.65 268 P P 22 51 45.6 -0.2
baz=48,SNR=4.2
**WRKA Warakurna** 49.71 252 P P 22 51 53.5 -0.1
baz=49,SNR=18
**SIJI Sorong** 52.08 283 P P 22 52 11.1 +0.2
7.5nm,0.5s,baz=86,slow=4.7,SNR=5.8
**MEEK Meekatharra** 58.30 249 P P 22 52 53.1 -1.0
baz=58,SNR=5.1
**CISI Cisompet, Garu** 72.17 268 P P 22 54 25.5 +4.2
baz=72,SNR=3.4
**NVAR Mina Array Bea** 79.51 44 P P 22 55 01.2 -0.3
0.7nm,0.6s,baz=228,slow=9.5,SNR=4.7
**TXAR Lajitas Array** 86.11 58 P P 22 55 35.1 +0.4
0.8nm,0.7s,baz=206,slow=5.4,SNR=7.3
**CMAR Chiang Mai Arr** 88.73 290 P P 22 55 48.1 +1.0
0.4nm,0.4s,baz=126,slow=2.3,SNR=3.6
**BRTR Keskin Array B** 144.66 315 PKP PKPdf 23 02 25.0 -1.0
0.3nm,0.4s,baz=124,slow=2.8,SNR=4.9
**GERES GERESS Array B** 147.55 345 PKPbc PKPdf 23 02 32.5 +2.0
0.2nm,0.5s,baz=5.7,slow=3.9,SNR=3.4

**IDC 24 22:49:13.6±2.0, 4.59S× 150.94E, h0km, mb3.4/3, mb1 3.8/3, mb1mx3.4/34, mbtmp3.5/3, Error ellipse: s-maj=129.3km s-min=29.2km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **22.23** | **225** | P | | P | 22 54 12.4 | +0.3 |
| | 0.5nm,0.5s,baz=50,slow=10,SNR=5.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.10** | **219** | P | | P | 22 54 40.1 | -0.1 |
| | 1.6nm,0.8s,baz=57,slow=9.5,SNR=11 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.67** | **22** | P | | P | 23 01 39.2 | +0.4 |
| | 0.2nm,0.6s,baz=251,slow=5.4,SNR=4.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.48** | **288** | PKPbc | | PKPbc | 23 09 02.5 | -1.0 |
| | 0.3nm,0.3s,baz=85,slow=2.3,SNR=16 | | | | | | | |

*ISCJB* ***24*** *22:56:24.2± 0.6, 29.90S± 0.03× 71.75W± 0.06, h25km, mb3.7/5, MS3.3/2, Error ellipse: s-maj=7.5km s-min=3.7km az=5.9*
*GUC* ***24*** *22:56:27.0± 0.5, 29.96S× 71.42W, h37km± 1km, ML4.9*
*IDC* ***24*** *22:56:27.8± 3.3, 29.97S× 71.51W, h49km± 27km, mb3.6/4, mb1 3.8/8, mb1mx3.6/26, mbtmp3.8/8, ML3.9/4, MS3.3/6, Ms1 3.3/6, ms1mx3.0/21, Error ellipse: s-maj=36.4km s-min=22.0km az=79.0*
*NEIC* ***24*** *22:56:27.0, 29.96S× 71.42W, h37km, mb3.8/2, After GUC.*
*NEIC Felt [III] at Coquimbo, La Serena and Vicuna.*
**ISC 24 22:56:25.3±0.7, 29.91S±0.04× 71.76W±0.06, h25km, n45, σ1§89/51, mb3.7/5, 5C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **LSCH** | **La Serena** | **0.45** | **90** | *i* P | | **Pb** | **22 56 33.5** | **-1.1** |
| LSCH | | | | *i* S | | **Sb** | **22 56 38.5** | **-2.4** |
| **LCO** | **Las Campanas** | **1.28** | **46** | *e*Pn | | **Pn** | **22 56 46.7** | **-1.2** |
| LCO | | | | *e*Sn | | **Sn** | **22 57 00.6** | **-3.8** |
| **VACH** | **Vallenar** | **1.59** | **34** ⇑ | *i* P | | **Pn** | **22 56 52.3** | **+0.5** |
| VACH | | | | *i* S | | **Sn** | **22 57 12.1** | **+0.5** |
| **CPCH** | **Copiapo** | **2.82** | **26** ⇑ | *i* P | | **Pn** | **22 57 10.3** | **+1.5** |
| **RTLS** | **Leoncito** | **2.83** | **132** | *e*P | | **Pn** | **22 57 10.5** | **+1.3** |
| **AGUA** | **GUANDACOL** | **2.87** | **82** | *e*P | | **Pn** | **22 57 11.3** | **+1.7** |
| AGUA | | | | *e*S | | **Sn** | **22 57 48.0** | **+4.5** |
| **AMOG** | **MOGNA** | **3.00** | **111** | *e*P | | **Pn** | **22 57 12.1** | **+0.8** |
| **AUSP** | **Uspallata** | **3.08** | **139** | *e*P | | **Pn** | **22 57 14.3** | **+1.8** |
| **ROCH** | **El Roble** | **3.12** | **168** ⇑ | *i* P | | **Pn** | **22 57 13.1** | **0.0** |
| ROCH | | | | *i* S | | **Sn** | **22 57 49.3** | **-0.5** |
| ROCH | | | | AML | | AML | 22 58 05.5 | |
| | comp=N,2μm,0.6s | | | | | | | |
| **ROC1** | **El Roble** | **3.12** | **168** | *e*P | | **Pn** | **22 57 13.1** | **-0.1** |
| **RTLL** | **Cerro Villicun** | **3.16** | **117** | *e*P | | **Pn** | **22 57 14.4** | **+0.9** |
| RTLL | | | | *e*S | | **Sn** | **22 57 55.5** | **+4.9** |
| **VCA** | **Vinchina** | **3.31** | **70** | *e*P | | **Pn** | **22 57 16.1** | **+0.4** |
| VCA | | | | IAML | | | 22 58 07.6 | |
| | comp=Z,1μm,0.5s | | | | | | | |
| **PEL** | **Peldehue** | **3.35** | **164** ⇓ | *i* P | | **Pn** | **22 57 16.6** | **+0.4** |
| PEL | | | | *e*S | | **Sn** | **22 57 54.5** | **-0.7** |
| PEL | | | | AML | | AML | 22 58 11.2 | |
| | comp=E,3μm,0.6s | | | | | | | |
| **RTCV** | **Cerro Valdivia** | **3.38** | **126** | *e*P | | **Pn** | **22 57 17.5** | **+0.9** |
| **CFAA** | **Coronel Fontan** | **3.47** | **120** | P | | **Pn** | **22 57 17.3** | **-0.5** |
| | comp=E,2.6nm,0.3s,baz=310,slow=11,SNR=96 | | | | | | | |
| CFAA | | | | S | | **Sn** | **22 57 58.4** | **+0.3** |
| | comp=E,3.7nm,0.3s,baz=332,slow=18,SNR=3.3 | | | | | | | |
| CFAA | | | | LR | | LR | 22 58 54.1 | |
| | comp=E,20nm,20.7s,baz=310,slow=45 | | | | | | | |
| **CFAA** | **Coronel Fontan** | **3.47** | **120** | *e*P | | **Pn** | **22 57 19.4** | **+1.6** |
| **CLCH** | **Cerro Calan** | **3.63** | **164** ⇑ | *i* P | | **Pn** | **22 57 20.5** | **+0.5** |
| CLCH | | | | *e*S | | **Sn** | **22 58 00.9** | **-1.2** |
| CLCH | | | | AML | | AML | 22 58 17.9 | |
| | comp=E,2μm,0.5s | | | | | | | |
| **ASAL** | **Salagasta** | **3.66** | **138** | *e*P | | **Pn** | **22 57 22.1** | **+1.6** |
| **ARCO** | **CERRO ARCO** | **3.79** | **141** | *e*P | | **Pn** | **22 57 24.4** | **+2.1** |
| ARCO | | | | IAML | | | 22 58 22.9 | |
| | comp=Z,616nm,0.6s | | | | | | | |
| **AAGR** | **Agrelo** | **4.04** | **142** | *e*P | | **Pn** | **22 57 28.3** | **+2.7** |
| **ACAN** | **Cantantal** | **4.57** | **122** | *e*P | | **Pn** | **22 57 32.6** | **-0.3** |
| **CYA** | **Choya** | **5.41** | **76** | *e*P | | **Pn** | **22 57 43.6** | **-0.8** |
| **LVC** | **Limon Verde** | **7.70** | **20** | P | | **Pn** | **22 58 16.0** | **-0.1** |
| | comp=Z,9.6nm,0.3s,baz=231,slow=6.5,SNR=3.5 | | | | | | | |
| LVC | | | | S | | **Sn** | **22 59 43.6** | **+0.9** |
| | comp=Z,226nm,0.3s,baz=230,slow=22,SNR=6.0 | | | | | | | |
| LVC | | | | LR | | LR | 23 01 07.9 | |
| | comp=Z,573nm,20.8s,baz=215,slow=36 | | | | | | | |
| **LVC** | **Limon Verde** | **7.70** | **20** | *e*Pn | | **Pn** | **22 58 17.8** | **+1.7** |
| | comp=Z,18nm,0.6s | | | | | | | |
| LVC | | | | *e*Sn | | **Sn** | **22 59 42.9** | **+0.2** |
| **TRQA** | **Tornquist** | **11.48** | **138** | *e*Pn | | **Pn** | **22 59 06.1** | **-1.5** |
| | comp=Z,9.2nm,0.6s | | | | | | | |
| **CPUP** | **Villa Florida** | **13.22** | **78** | P | | Pn | 22 59 29.8 | -1.7 |
| | comp=Z,0.2nm,0.3s,baz=266,slow=19,SNR=2.7 | | | | | | | |
| CPUP | | | | S | | **Sn** | **23 01 59.6** | **+1.9** |
| | comp=Z,0.3nm,0.3s,baz=150,slow=16,SNR=2.4 | | | | | | | |
| CPUP | | | | LR | | LR | 23 04 49.1 | |
| | comp=Z,77nm,20.1s,baz=252,slow=38 | | | | | | | |
| **LPAZ** | **La Paz** | **13.96** | **15** | LR | | LR | 23 05 05.7 | |
| | comp=Z,92nm,21.7s,baz=216,slow=37 | | | | | | | |
| **SIV** | **San Ignacio** | **16.97** | **38** | P | | **Pn** | **23 00 22.1** | **+0.9** |
| | comp=Z,0.4nm,0.3s,baz=224,slow=14,SNR=8.9 | | | | | | | |
| SIV | | | | LR | | LR | 23 08 07.3 | |
| | comp=Z,62nm,21.9s,baz=195,slow=41 | | | | | | | |
| **SAML** | **Samuel** | **22.34** | **23** | *e*P | | **P** | **23 01 21.6** | **+0.2** |
| | comp=Z,0.8nm,0.5s | | | | | | | |
| **BDFB** | **Brasilia** | **26.02** | **62** | P | | **P** | **23 01 54.2** | **-2.5** |
| | comp=Z,0.5nm,0.3s,baz=245,slow=7.8,SNR=3.5 | | | | | | | |
| BDFB | | | | LR | | LR | 23 12 23.1 | |
| | comp=Z,65nm,22.0s,baz=256,slow=37 | | | | | | | |
| **SNAA** | **Sanae** | **55.29** | **159** | P | | **P** | **23 05 54.7** | **-1.6** |
| | comp=Z,0.8nm,0.5s,baz=289,slow=7.7,SNR=32 | | | | | | | |
| **SNAA** | **Sanae** | **55.29** | **159** | *e*P | | **P** | **23 05 54.5** | **-1.8** |
| | comp=Z,1.6nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.32** | **180** | LR | | LR | 23 32 42.8 | |
| | comp=Z,31nm,19.6s,baz=104,slow=36 | | | | | | | |
| **TXAR** | **Lajitas Array** | **66.31** | **330** | P | | **P** | **23 07 12.8** | **+1.1** |
| | comp=Z,0.3nm,0.5s,baz=156,slow=7.5,SNR=5.2 | | | | | | | |
| TXAR | | | | pP | | **pP** | **23 07 24.8** | **+5.1** |
| | comp=Z,0.2nm,0.5s,baz=168,slow=6.4,SNR=3.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.60** | **70** | P | | **P** | **23 08 45.1** | **-1.6** |
| | comp=Z,1.3nm,0.9s,baz=266,sl

baz=109
**H11N1 WAKE ISLAND Hyl 26.29 273** T T 01 34 47.2
baz=109
**H11N2 WAKE ISLAND Hyl 26.30 273** T T 01 34 48.8
baz=109
**AAK Ala-Archa 150.18 56** PKPbc **PKPbc 23 16 13.4 -0.7**
baz=247,slow=1.4
AAK pPKPbc **pPKPbc 23 16 25.2 +2.7**
comp=Z,2.0nm,0.7s,baz=246,slow=6.3,SNR=3.5
**ZALV Zalesovo Beam 150.59 29** PKPbc **PKPbc 23 16 13.8 -0.7**
comp=Z,2.7nm,0.5s,baz=306,slow=3.0,SNR=14
ZALV pPKPbc **pPKPbc 23 16 25.2 +2.4**
comp=Z,1.8nm,0.6s,baz=293,slow=3.9,SNR=5.8

**IDC 24 22:57:48.7±2.2, 19.09S×69.08W, h78km±19km, mb3.4/2, mb1 3.5/5, mb1mx3.3/26, mbtmp3.7/5, Error ellipse: s-maj=55.8km s-min=8.7km az=98.0, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **2.93** | **18** | P | | Pn | 22 58 34.3 | +0.5 |
| | 1.2nm,0.3s,baz=221,slow=7.0,SNR=29 | | | | | | | |
| LPAZ | | | | S | | Sn | 22 59 08.6 | 0.0 |
| | 0.6nm,0.3s,baz=186,slow=9.6,SNR=7.0 | | | | | | | |
| **LVC** | **Limon Verde** | **3.51** | **177** | P | | Pn | 22 58 41.6 | +0.3 |
| | 99nm,0.3s,baz=14,slow=12,SNR=15 | | | | | | | |
| LVC | | | | S | | Sn | 22 59 22.2 | +0.2 |
| | 123nm,0.3s,baz=79,slow=23,SNR=9.1 | | | | | | | |
| **SIV** | **San Ignacio** | **8.24** | **69** | P | | Pn | 22 59 44.7 | -0.9 |
| | 0.4nm,0.3s,baz=249,slow=7.0,SNR=5.8 | | | | | | | |
| **BDFB** | **Brasilia** | **20.39** | **84** | P | | P | 23 02 20.1 | +0.5 |
| | 1.5nm,0.5s,baz=229,slow=9.3,SNR=4.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.71** | **71** | P | | P | 23 09 31.9 | -0.1 |
| | 0.3nm,0.4s,baz=257,slow=4.6,SNR=4.0 | | | | | | | |

**SJA 24 23:14:41.5±0.5, 32.89S×68.78W, h26km±2km, ML2.6, MW3.5, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ARCO** | **CERRO ARCO** | **0.14** | **290** | *e*P | | Pb | 23 14 47.1 | +0.2 |
| ARCO | | | | IAML | | | 23 14 52.3 | |
| | comp=Z,1μm,0.1s | | | | | | | |
| **AAGR** | **Agrelo** | **0.20** | **192** | *e*P | | Pb | 23 14 48.1 | +0.6 |
| AAGR | | | | *e*S | | Sb | 23 14 52.3 | +0.8 |
| **ASAL** | **Salagasta** | **0.30** | **351** | *e*P | | Pb | 23 14 49.4 | +0.6 |
| **AUSP** | **Uspallata** | **0.84** | **322** | *e*P | | Pn | 23 14 58.7 | +0.6 |
| **RTCV** | **Cerro Valdivia** | **1.04** | **11** | *e*P | | Pb | 23 15 01.6 | +0.6 |
| **RTLS** | **Leoncito** | **1.17** | **338** | *e*P | | Pb | 23 15 04.5 | +1.0 |
| **ACAN** | **Cantantal** | **1.48** | **66** | *e*P | | Pb | 23 15 08.4 | +0.1 |
| **RTLL** | **Cerro Villicun** | **1.58** | **9** | *e*P | | Pb | 23 15 10.1 | 0.0 |
| **AMOG** | **MOGNA** | **1.96** | **7** | *e*P | | Pb | 23 15 15.4 | -1.3 |

*BJI **24** 23:15:47.0, 5.24S×154.58E, h128km, mb5.3/69, mB5.2/40*
*ISCJB **24** 23:15:48.6±0.6, 5.45S±0.02×154.24E±0.02, h134km±5km, mb5.2/190, Error ellipse: s-maj=3.9km s-min=3.3km az=153.9*
*IDC **24** 23:15:48.5±0.7, 5.45S×154.21E, h121km±6km, mb5.0/33, mb1 5.1/35, mb1mx4.9/44, mbtmp5.4/35, MS3.8/15, Ms1 3.8/15, ms1mx3.7/24, Error ellipse: s-maj=11.3km s-min=8.2km az=77.0*
*AUST **24** 23:15:49.0±0.8, 5.43S×154.34E, h131km±7km, Error ellipse: s-maj=7.0km s-min=3.7km az=77.0*
*GCMT **24** 23:15:49.6±0.2, 5.51S×154.26E, h129km±1km, MW5.3/81, Moment Tensor Solution. s71,c109; s81,c144; Duration: 1s1 Moment tensor: Scale 10^17 Nm; Mrr-0.09±.02; Mθθ 0.54±.02; Mφφ-0.45±.02; Mrθ-0.54±.02; Mθφ-0.84±.02; Mφr-0.23±.02; Best double couple: M0 1.14400×10^17 NP1:φs76.00000°, δ85.00000°, λ-149.00000°. NP2:φs343.00000°, δ59.00000°, λ-5.00000°. Principal axes: T 1.1370, Plg18.0000°, Azm206.0000°; N 0.0140, Plg59.0000°, Azm84.0000°; P -1.1500, Plg25.0000°, Azm304.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*MOS **24** 23:15:49.2±1.0, 5.36S×154.18E, h134km, mb5.2/55 Error ellipse: s-maj=8.4km s-min=6.0km az=95.2*
*NEIC **24** 23:15:49.6±0.4, 5.45S×154.23E, h129km±3km, mb5.3/88, Error ellipse: s-maj=3.6km s-min=3.3km az=102.0*
*NEIC Felt at Namatanai, New Ireland.*
*DJA **24** 23:15:53.2±0.6, 5.3S×15.4E±*, h156km±6km, M5.4/103, mb5.5/103, mB5.8/50, MLv6.2/1, Mw(mB)5.3/50, Mwp6.5/4*
**ISC 24 23:15:49.5±0.3, 5.47S±0.04×154.24E±0.04, h128km±1km, h128km:pP-P, n545, σ1915/631, mb5.3/202, 18C-11D, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.43** | **301** | P | | **Pn** | **23 16 28.3** | **-0.4** |
| | baz=2.5,SNR=106 | | | | | | | |
| **HNR** | **Honiara** | **6.89** | **125** | P | | **Pn** | **23 17 27.6** | **-0.5** |
| | 138nm,0.3s,baz=226,slow=2.7,SNR=41 | | | | | | | |
| HNR | | | | S | | **Sn** | **23 18 45.3** | **+0.1** |
| | baz=229,slow=18,SNR=3.5 | | | | | | | |
| **HNR** | **Honiara** | **6.89** | **125** | P | | **Pn** | **23 17 27.6** | **-0.5** |
| HNR | | | | S | | **Sn** | **23 18 45.3** | **+0.1** |
| HNR | | | | pmax | pmax | | | |
| | comp=Z,138nm,0.3s | | | | | | | |
| **HNR** | **Honiara** | **6.89** | **125** | *e*P | | **Pn** | **23 17 26.0** | **-2.1** |
| HNR | | | | *e*S | | Sn | 23 18 33.0 | -12 |
| **HNR** | **Honiara** | **6.89** | **125** | *e*Pn | | **Pn** | **23 17 27.8** | **-0.3** |
| HNR | | | | *e*Sn | | **Sn** | **23 18 48.7** | **+3.5** |
| **MANU** | **Manus Island** | **7.66** | **296** | P | | **Pn** | **23 17 38.2** | **-0.1** |
| | baz=7.7,SNR=17 | | | | | | | |
| **MANU** | **Manus Island** | **7.66** | **296** | *e*Pn | | **Pn** | **23 17 38.0** | **-0.3** |
| **PMG** | **Port Moresby** | **8.04** | **240** | *e*P | | **Pn** | **23 17 45.2** | **+1.7** |
| PMG | | | | *e* | | | 23 19 17.0 | |
| **PMG** | **Port Moresby** | **8.04** | **240** | *e*Pn | | **Pn** | **23 17 45.1** | **+1.7** |
| PMG | | | | *e*Sn | | **Sn** | **23 19 16.9** | **+4.2** |
| **PATS** | **Pohnpei** | **12.88** | **18** | P | | **Pn** | **23 18 46.5** | **-1.5** |
| | baz=13,SNR=6.1 | | | | | | | |
| **COEN** | **Coen** | **13.78** | **231** | P | | **P** | **23 19 02.2** | **-1.6** |
| | baz=14,SNR=43 | | | | | | | |
| **COEN** | **Coen** | **13.78** | **231** | *e*Pn | | **Pn** | **23 19 01.3** | **+1.7** |
| **JAY** | **Jayapura** | **13.81** | **282** | P | | **Pn** | **23 18 59.8** | **-0.3** |
| | comp=Z,92nm,0.3s,baz=15,slow=0.2,SNR=34 | | | | | | | |
| JAY | | | | S | | **S** | **23 21 44.0** | **-1.7** |
| | comp=Z,146nm,0.3s,baz=68,slow=17,SNR=4.2 | | | | | | | |
| **JAY** | **Jayapura** | **13.81** | **282** | P | | **Pn** | **23 18 59.6** | **-0.5** |
| | baz=14,SNR=63 | | | | | | | |
| **GENI** | **Genyem** | **14.32** | **281** | P | | **Pn** | **23 19 06.9** | **+0.4** |
| | comp=Z,1μm,1.4s,comp=Z,17μm | | | | | | | |
| **SMPI** | **Sarmi** | **15.87** | **282** | P | | **Pn** | **23 19 26.2** | **+0.3** |
| | comp=Z,498nm,1.0s,comp=Z,167μm | | | | | | | |
| **MTSU** | **Mount Surprise** | **15.89** | **217** | P | | **P** | **23 19 27.4** | **+0.2** |
| | baz=16,SNR=90 | | | | | | | |
| **CTA** | **Charters Tower** | **16.48** | **207** | P | | **P** | **23 19 35.2** | **+1.6** |
| | comp=Z,8.7nm,0.3s,baz=29,slow=14,SNR=174 | | | | | | | |
| **CTA** | **Charters Tower** | **16.48** | **207** | P | | **P** | **23 19 35.3** | **+1.6** |
| CTA | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.3s | | | | | | | |
| **CTA** | **Charters Tower** | **16.48** | **207** | P | | **P** | **23 19 35.9** | **+2.2** |
| | baz=17 | | | | | | | |
| **CTAO** | **Charters Tower** | **16.48** | **207** | *e*P | | **P** | **23 19 35.1** | **+1.4** |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,393nm,0.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **16.48** | **207** | *e*Pn | | **P** | **23 19 35.1** | **+1.4** |
| | comp=Z,393nm,0.9s | | | | | | | |
| **SRPI** | **Serui, Papua** | **18.31** | **281** | P | | **Pn** | **23 19 55.2** | **-0.2** |
| | comp=Z,395nm,1.0s,comp=Z,58μm | | | | | | | |
| **KWAJ** | **Kwajalein Atol** | **19.46** | **43** | *e*P | | **P** | **23 20 07.2** | **+0.8** |
| KWAJ | | | | pmax | pmax | | | |
| | comp=Z,156nm,0.6s | | | | | | | |
| **KWAJ** | **Kwajalein Atol** | **19.46** | **43** | *e*P | | **P** | **23 20 07.2** | **+0.8** |
| | comp=Z,156nm,0.6s | | | | | | | |
| **TARA** | **Tarawa** | **19.86** | **71** | *e*P | | **P** | **23 20 11.3** | **+0.7** |
| | comp=Z,562nm,1.4s | | | | | | | |
| **EIDS** | **Eidsvold** | **20.02** | **188** | P | | **P** | **23 20 13.7** | **+1.4** |
| | baz=20,SNR=85 | | | | | | | |
| **EIDS** | **Eidsvold** | **20.02** | **188** | *e*P | | **P** | **23 20 13.6** | **+1.3** |
| | comp=Z,538nm,0.9s | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.29** | **146** | *e*P | | **P** | **23 20 15.6** | **+0.1** |
| | comp=Z,254nm,0.8s | | | | | | | |
| DZM | | | | *e*LR | | LR | 23 25 17.4 | |
| | comp=Z,2μm,31.5s | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.29** | **146** | P | | **P** | **23 20 15.5** | **+0.1** |
| | comp=Z,147nm,0.5s,baz=359,slow=2.0,SNR=261 | | | | | | | |
| DZM | | | | S | | **S** | **23 23 53.3** | **-2.9** |
| | comp=Z,8.9nm,1.0s,baz=180,slow=18,SNR=2.3 | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.29** | **146** | *e*P | | **P** | **23 20 15.7** | **+0.3** |
| | comp=Z,137nm,0.5s | | | | | | | |
| DZM | | | | S | | **S** | **23 23 53.3** | **-2.9** |
| **RKPI** | **Ransiki, Papua** | **20.40** | **280** | P | | Pn | 23 20 19.2 | -0.7 |
| | comp=Z,578nm,1.0s | | | | | | | |
| **KMPI** | **Kaimana, Papua** | **20.55** | **274** | P | | **P** | **23 20 18.7** | **+0.6** |
| | comp=Z,270nm,1.4s,comp=Z,3μm | | | | | | | |
| **QIS** | **Mount Isa** | **20.66** | **222** | P | | **P** | **23 20 20.3** | **+1.0** |
| | baz=21,SNR=283 | | | | | | | |
| **GUMO** | **Guam** | **21.10** | **334** | P | | **P** | **23 20 23.0** | **-0.9** |
| | comp=Z,878nm,1.0s,baz=176,slow=6.8,SNR=24 | | | | | | | |
| **GUMO** | **Guam** | **21.10** | **334** | P | | **P** | **23 20 23.0** | **-0.9** |
| GUMO | | | | pmax | pmax | | | |
| | comp=Z,878nm,1.0s | | | | | | | |
| **RMQ** | **Roma** | **21.55** | **193** | P | | **P** | **23 20 29.6** | **+0.9** |
| | baz=22,SNR=230 | | | | | | | |
| **FAKI** | **Fak Fak** | **22.07** | **276** | P | | **P** | **23 20 33.5** | **-0.9** |
| | baz=22,SNR=18 | | | | | | | |
| **FAKI** | **Fak Fak** | **22.07** | **276** | P | | **P** | **23 20 33.2** | **-1.2** |
| | comp=Z,140nm,1.3s,comp=Z,2μm | | | | | | | |
| **FAKI** | **Fak Fak** | **22.07** | **276** | *e*P | | **P** | **23 20 33.5** | **-0.9** |
| | comp=Z,247nm,1.3s | | | | | | | |
| **KDU** | **Kakadu** | **22.64** | **250** | P | | **P** | **23 20 39.5** | **-0.6** |
| | baz=23,SNR=14 | | | | | | | |
| **SAUI** | **Saumlaki** | **22.91** | **262** | P | | **P** | **23 20 44.5** | **+1.8** |
| | comp=Z,514nm,1.3s,comp=Z,8μm | | | | | | | |
| **SAUI** | **Saumlaki** | **22.91** | **262** | *e*P | | **P** | **23 20 43.4** | **+0.8** |
| | comp=Z,687nm,1.2s | | | | | | | |
| **QLP** | **Quilpie** | **23.07** | **203** | P | | **P** | **23 20 44.1** | **+0.2** |
| | baz=23,SNR=640 | | | | | | | |
| **ANA2** | **Anatahan** | **23.25** | **339** | *e*P | | **P** | **23 20 44.4** | **-1.4** |
| **SIJI** | **Sorong** | **23.38** | **280** | P | | **P** | **23 20 46.5** | **-0.5** |
| | comp=Z,280nm,0.8s,baz=84,slow=9.2,SNR=66 | | | | | | | |
| **SWI** | **Sorong** | **23.39** | **280** | P | | **P** | **23 20 47.3** | **+0.2** |
| | baz=24,SNR=23 | | | | | | | |
| **SWI** | **Sorong** | **23.39** | **280** | P | | **P** | **23 20 47.1** | **0.0** |
| | comp=Z,450nm,0.9s,comp=Z,4μm | | | | | | | |
| **PALU** | **Palau** | **23.47** | **303** | P | | **P** | **23 20 48.0** | **+0.2** |
| | baz=24,SNR=32 | | | | | | | |
| **MTN** | **Manton Dam** | **23.94** | **251** | P | | **P** | **23 20 52.5** | **+0.5** |
| | baz=24,SNR=15 | | | | | | | |
| **MTN** | **Manton Dam** | **23.94** | **251** | *e*P | | **P** | **23 20 53.3** | **+1.2** |
| | comp=Z,92nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.10** | **232** | *e*P | | **P** | **23 20 53.7** | **+0.2** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,190nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.10** | **232** | P | | **P** | **23 20 53.0** | **-0.5** |
| | comp=Z,1μm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.10** | **232** | *e*P | | **P** | **23 20 53.7** | **+0.2** |
| | comp=Z,185nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.11** | **232** | P | | **P** | **23 20 53.7** | **+0.1** |
| | comp=Z,186nm,0.8s,baz=54,slow=9.7,SNR=188 | | | | | | | |
| WRA | | | | S | | **S** | **23 25 00.2** | **-2.1** |
| | comp=Z,16nm,1.1s,baz=53,slow=15,SNR=7.3 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **23 27 57.9** | **-0.7** |
| | comp=Z,6.7nm,0.9s,baz=60,slow=3.2,SNR=6.2 | | | | | | | |
| WRA | | | | LR | | LR | 23 29 43.4 | |
| | comp=Z,240nm,21.9s,baz=15,slow=35 | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.11** | **232** | P | | **P** | **23 20 53.7** | **+0.1** |
| WRA | | | | S | | **S** | **23 25 00.2** | **-2.1** |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,186nm,0.8s | | | | | | | |
| WRA | | | | smax | smax | | | |
| | comp=N,16nm,1.1s | | | | | | | |
| WRA | | | | pmax | pmax | | | |
| | comp=N,7.0nm,0.9s | | | | | | | |
| WRA | | | | MLR | MLR | | | |
| | comp=Z,240nm,21.9s | | | | | | | |
| **BNDI** | **Bandanaira** | **24.26** | **271** | P | | **P** | **23 20 55.6** | **+0.7** |
| | comp=Z,137nm,1.4s,comp=Z,2μm | | | | | | | |
| **ARMA** | **Armidale** | **24.94** | **185** | P | | **P** | **23 21 01.9** | **+0.8** |
| | baz=25,SNR=37 | | | | | | | |
| **ARMA** | **Armidale** | **24.94** | **185** | *e*P | | **P** | **23 21 00.9** | **-0.1** |
| | comp=Z,180nm,0.8s | | | | | | | |
| **MSAI** | **Masohi** | **25.32** | **274** | P | | **P** | **23 21 06.2** | **+1.6** |
| | comp=Z,22nm,0.9s | | | | | | | |
| **AAI** | **Ambon** | **26.02** | **273** | P | | **P** | **23 21 11.1** | **+0.2** |
| | comp=Z,205nm,1.0s,comp=Z,35μm | | | | | | | |
| **LHI** | **Lord Howe Isla** | **26.31** | **171** | P | | **P** | **23 21 13.3** | **+0.1** |
| | baz=26,SNR=4.3 | | | | | | | |
| **AS17** | **Alice Springs** | **26.60** | **225** | P | | **P** | **23 21 16.0** | **0.0** |
| | baz=27 | | | | | | | |
| **AS01** | **Alice Springs** | **26.63** | **225** | *e*P | | **P** | **23 21 16.1** | **-0.2** |
| **ASAR** | **Alice Springs** | **26.66** | **225** | P | | **P** | **23 21 16.4** | **-0.1** |
| | comp=Z,20nm,0.5s,baz=59,slow=8.7,SNR=279 | | | | | | | |
| ASAR | | | | S | | **S** | **23 25 40.0** | **-2.6** |
| | comp=Z,7.6nm,0.8s,baz=56,slow=14,SNR=4.3 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **23 28 05.6** | **-0.2** |
| | comp=Z,7.9nm,0.8s,baz=51,slow=3.0,SNR=9.8 | | | | | | | |
| ASAR | | | | LR | | LR | 23 32 13.8 | |
| | comp=Z,219nm,18.8s,baz=52,slow=37 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.66** | **225** | P | | **P** | **23 21 16.5** | **-0.1** |
| ASAR | | | | S | | **S** | **23 25 40.0** | **-2.6** |
| ASAR | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.5s | | | | | | | |
| ASAR | | | | smax | smax | | | |
| | comp=N,8.0nm,0.8s | | | | | | | |
| ASAR | | | | pmax | pmax | | | |
| | comp=N,8.0nm,0.8s | | | | | | | |
| ASAR | | | | MLR | MLR | | | |
| | comp=Z,219nm,18.8s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.79** | **27** | T | | T | 23 49 54.1 | |
| | baz=207,slow=73,SNR=348 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.80** | **27** | T | | T | 23 49 52.5 | |
| | baz=207,slow=73,SNR=413 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.81** | **27** | T | | T | 23 49 52.9 | |
| | baz=207,slow=73,SNR=289 | | | | | | | |
| **KNRA** | **Kununurra** | **26.98** | **246** | P | | **P** | **23 21 19.7** | **+0.1** |
| | baz=27,SNR=5.8 | | | | | | | |
| **LBMI** | **Labuha** | **27.12** | **279** | P | | **P** | **23 21 21.7** | **+0.9** |
| | comp=Z,280nm,1.2s,comp=Z,2μm | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **27.14** | **196** | P | | **P** | **23 21 20.5** | **-0.3** |
| | baz=27,SNR=102 | | | | | | | |
| **NLAI** | **Namlea** | **27.15** | **274** | P | | **P** | **23 21 21.8** | **+0.8** |
| | comp=Z,84nm,1.4s,comp=Z,2μmcomp=Z,7μm | | | | | | | |
| **TNTI** | **Ternate** | **27.54** | **282** | P | | **P** | **23 21 25.9** | **+1.3** |
| | comp=Z,103nm,1.0s | | | | | | | |
| **TNTI** | **Ternate** | **27.54** | **282** | *e*P | | **P** | **23 21 24.7** | **+0.1** |
| | comp=Z,77nm,0.9s | | | | | | | |
| **MGCD** | **Mangrove Creek** | **27.75** | **186** | P | | **P** | **23 21 26.7** | **+0.5** |
| | baz=28,SNR=9.4 | | | | | | | |
| **SANI** | **Sanana** | **28.39** | **276** | P | | **P** | **23 21 32.7** | **+0.6** |
| | comp=Z,156nm,1.0s,comp=Z,1μm | | | | | | | |
| **YNG** | **Young** | **29.19** | **190** | P | | **P** | **23 21 39.2** | **+0.2** |
| | baz=29,SNR=12 | | | | | | | |
| **SOEI** | **Soe** | **30.00** | **260** | P | | P | 23 21 56.2 | +10 |
| **SOEI** | **Soe** | **30.00** | **260** | *e*P | | **P** | **23 21 47.7** | **+1.2** |
| | comp=Z,209nm,1.6s | | | | | | | |
| **CNB** | **Canberra Magne** | **30.04** | **188** | P | | **P** | **23 21 46.9** | **+0.4** |
| | baz=30,SNR=12 | | | | | | | |
| **CAN** | **Canberra** | **30.10** | **189** | *e*P | | **P** | **23 21 47.6** | **+0.6** |
| CAN | | | | pmax | pmax | | | |
| | comp=Z,73nm,1.0s | | | | | | | |
| **CAN** | **Canberra** | **30.10** | **189** | P | | **P** | **23 21 47.9** | **+0.9** |
| | baz=30 | | | | | | | |
| **CAN** | **Canberra** | **30.10** | **189** | *e*P | | **P** | **23 21 47.6** | **+0.6** |
| | comp=Z,73nm,1.0s | | | | | | | |
| **BATI** | **Baumata** | **30.64** | **259** | P | | **P** | **23 21 53.9** | **+1.8** |
| | comp=Z,71nm,0.7s,baz=93,slow=1.6,SNR=14 | | | | | | | |
| BATI | | | | LR | | LR | 23 36 49.2 | |
| | comp=Z,303nm,19.5s,baz=76,slow=41 | | | | | | | |
| **BATI** | **Baumata** | **30.64** | **259** | P | | **P** | **23 21 53.7** | **+1.7** |
| | comp=Z,50nm,0.9s,comp=Z,664nm | | | | | | | |
| **KMSI** | **Cibinong** | **30.81** | **280** | P | | **P** | **23 21 53.8** | **+0.3** |
| | comp=Z,573nm,0.7s | | | | | | | |
| **BBSI** | **Bau Bau** | **31.52** | **268** | P | | **P** | **23 22 02.4** | **+2.6** |
| | comp=Z,133nm,1.1s,comp=Z,1μm | | | | | | | |
| **WRKA** | **Warakurna** | **31.58** | **229** | P | | **P** | **23 21 59.7** | **-0.5** |
| | baz=32,SNR=253 | | | | | | | |
| **LUWI** | **Luwuk** | **31.71** | **277** | P | | **P** | **23 22 01.9** | **+0.4** |
| | baz=32,SNR=4.3 | | | | | | | |
| **LUWI** | **Luwuk** | **31.71** | **277** | P | | **P** | **23 22 01.6** | **+0.2** |
| | comp=Z,243nm,1.1s,comp=Z,3μm | | | | | | | |
| **LUWI** | **Luwuk** | **31.71** | **277** | *e*P | | **P** | **23 22 01.0** | **-0.4** |
| | comp=Z,280nm,1.1s | | | | | | | |
| **GTOI** | **Gorontalo** | **31.77** | **280** | P | | **P** | **23 22 02.8** | **+0.9** |
| | comp=Z,150nm,0.9s,comp=Z,1μm | | | | | | | |
| **MILA** | **Mila** | **31.78** | **188** | P | | **P** | **23 22 02.7** | **+0.9** |
| | baz=32,SNR=24 | | | | | | | |
| **BBOO** | **Buckleboo** | **32.05** | **210** | P | | **P** | **23 22 03.8** | **-0.4** |
| | baz=32,SNR=141 | | | | | | | |
| **BBOO** | **Buckleboo** | **32.05** | **210** | *e*P | | **P** | **23 22 03.8** | **-0.4** |
| | comp=Z,183nm,0.8s | | | | | | | |
| **MRSI** | **Marisa** | **32.79** | **279** | P | | **P** | **23 22 10.2** | **-0.6** |
| | comp=Z,57nm,0.9s | | | | | | | |
| **APSI** | **Ampana** | **32.84** | **277** | P | | **P** | **23 22 12.2** | **+0.9** |
| | comp=Z,196nm,1.1s,comp=Z,2μm | | | | | | | |
| **TOO** | **Toolangi** | **32.94** | **193** | P | | **P** | **23 22 12.3** | **+0.4** |
| | baz=33,SNR=13 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **33.16** | **198** | P | | **P** | **23 22 14.1** | **+0.3** |
| | baz=33,SNR=42 | | | | | | | |
| **BASI** | **Baing, Sumba** | **33.66** | **260** | P | | **P** | **23 22 19.3** | **+0.9** |
| | comp=Z,226nm,1.0s | | | | | | | |
| **BKSI** | **Bulukumba** | **33.96** | **269** | P | | **P** | **23 22 21.2** | **+0.2** |
| | comp=Z,41nm,1.2s,comp=Z,440nm | | | | | | | |
| **KAPI** | **Kappang** | **34.34** | **269** | P | | **P** | **23 22 24.4** | **0.0** |
| | comp=Z,60nm,0.8s,baz=121,slow=3.6,SNR=40 | | | | | | | |
| **KAPI** | **Kappang** | **34.34** | **269** | P | | **P** | **23 22 24.3** | **0.0** |
| | comp=Z,480nm,0.9s,SNR=9.1 | | | | | | | |
| **KAPI** | **Kappang** | **34.34** | **269** | *e*P | | **P** | **23 22 24.1** | **-0.2** |
| | comp=Z,64nm,0.8s | | | | | | | |
| **SPSI** | **Sidrap Palu** | **34.38** | **271** | P | | **P** | **23 22 24.1** | **-0.6** |
| | comp=Z,80nm,0.8s,comp=Z,880nm | | | | | | | |
| **TTSI** | **Tana Toraja** | **34.40** | **273** | P | | **P** | **23 22 25.7** | **+0.8** |
| | comp=Z,41nm,1.5s,comp=Z,783nm | | | | | | | |
| **PCI** | **Palu** | **34.64** | **276** | P | | **P** | **23 22 28.3** | **+1.4** |
| | comp=Z,280nm,1.1s,comp=Z,3μm | | | | | | | |
| **MPSI** | **Mapaga** | **34.77** | **278** | P | | **P** | **23 22 27.1** | **-0.9** |
| | comp=Z,157nm,0.8s,comp=Z,5μm | | | | | | | |
| **RCP** | **Roxas** | **35.61** | **298** | ↑*e*P | | **P** | **23 22 36.4** | **+1.2** |
| **MBWA** | **Marble Bar** | **36.90** | **242** | *e*P | | **P** | **23 22 45.5** | **-0.6** |
| | comp=Z,17nm,0.8s | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **37.20** | **263** | P | | **P** | **23 22 47.9** | **-0.8** |
| | comp=Z,36nm,0.9s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **37.22** | **286** | ↑P | | **P** | **23 22 49.3** | **+0.4** |
| **MYLDM** | **Lahad Datu** | **37.22** | **286** | *e*P | | **P** | **23 22 50.2** | **+1.3** |
| **MOO** | **Moorlands** | **37.35** | **189** | P | | **P** | **23 22 50.9** | **+1.3** |
| | baz=38,SNR=15 | | | | | | | |
| **TSM** | **Tawau** | **37.59** | **284** | ↑P | | **P** | **23 22 51.5** | **-0.6** |
| **TAU** | **Tasmania Unive** | **37.79** | **188** | *e*P | | **P** | **23 22 54.2** | **+1.0** |
| TAU | | | | pmax | pmax | | | |
| | comp=Z,134nm,1.0s | | | | | | | |
| **TAU** | **Tasmania Unive** | **37.79** | **188** | P | | **P** | **23 22 54.0** | **+0.8** |
| | comp=Z,737nm,1.0s,SNR=7.0 | | | | | | | |
| **TAU** | **Tasmania Unive** | **37.79** | **188** | *e*P | | **P** | **23 22 54.2** | **+1.0** |
| | comp=Z,134nm,1.0s | | | | | | | |
| **HIZ** | **Hauiti** | **37.85** | **153** | *e*P | | **P** | **23 22 55.0** | **+1.2** |
| | comp=Z,205nm,1.4s | | | | | | | |
| **KBKI** | **Kotabaru** | **38.02** | **272** | P | | **P** | **23 22 55.6** | **0.0** |
| | comp=Z,43nm,0.8s,comp=Z,987nm | | | | | | | |
| **URZ** | **Urewera** | **38.70** | **151** | P | | **P** | **23 23 00.7** | **-0.2** |
| | comp=Z,16nm,0.3s,baz=316,slow=2.5,SNR=31 | | | | | | | |
| URZ | | | | S | | **S** | **23 28 47.9** | **-0.5** |
| | comp=Z,2.7nm,0.7s,baz=257,slow=18,SNR=3.8 | | | | | | | |
| **URZ** | **Urewera** | **38.70** | **151** | *e*P | | **P** | **23 23 00.8** | **-0.2** |
| | comp=Z,64nm,1.3s | | | | | | | |
| URZ | | | | S | | **S** | **23 28 47.9** | **-0.5** |
| **QRZ** | **Quartz Range** | **38.84** | **158** | PN | | **P** | **23 23 03.0** | **+1.0** |
| **WMGZ** | **Waiomatatini S** | **39.01** | **149** | PN | | **P** | **23 23 03.3** | **-0.3** |
| **BKZ** | **Black Stump Fm** | **39.12** | **152** | *e*P | | **P** | **23 23 04.2** | **-0.4** |
| | comp=Z,30nm,0.4s | | | | | | | |
| **PUZ** | **Puketiti** | **39.12** | **149** | PN | | **P** | **23 23 04.1** | **-0.5** |
| **BBKI** | **Banjar Baru** | **39.32** | **271** | P | | **P** | **23 23 08.3** | **+1.8** |
| | comp=Z,202nm,0.9s,comp=Z,3μm | | | | | | | |
| **RIGZ** | **Rimuhau** | **39.36** | **151** | PN | | **P** | **23 23 06.4** | **-0.2** |
| **DSZ** | **Denniston Nort** | **39.37** | **159** | PN | | **P** | **23 23 06.8** | **+0.2** |
| **KKM** | **Kota Kinabalu** | **39.65** | **286** | P | | **P** | **23 23 09.2** | **-0.1** |
| | baz=40,SNR=23 | | | | | | | |
| **KKM** | **Kota Kinabalu** | **39.65** | **286** | *e*P | | **P** | **23 23 08.9** | **-0.4** |
| | comp=Z,82nm,0.8s | | | | | | | |
| **THZ** | **Tophouse** | **39.79** | **158** | PN | | **P** | **23 23 09.7** | **-0.3** |
| **THZ** | **Tophouse** | **39.79** | **158** | *e*P | | **P** | **23 23 09.9** | **-0.1** |
| | comp=Z,178nm,0.8s | | | | | | | |
| **KMBL** | **Kambalda** | **39.79** | **226** | P | | **P** | **23 23 09.8** | **-0.3** |
| | baz=40,SNR=87 | | | | | | | |
| **MEEK** | **Meekatharra** | **39.96** | **234** | P | | **P** | **23 23 11.3** | **-0.4** |
| | baz=40,SNR=46 | | | | | | | |
| **BFZ** | **Birch Farm** | **40.23** | **154** | *e*P | | **P** | **23 23 13.2** | **-0.5** |
| | comp=Z,65nm,0.5s | | | | | | | |
| BFZ | | | | *e*pP | | **pP** | **23 23 42.1** | **-0.2** |
| **LTZ** | **Lake Taylor** | **40.45** | **159** | PN | | **P** | **23 23 15.2** | **-0.3** |
| **OXZ** | **Oxford** | **40.85** | **160** | PN | | **P** | **23 23 17.6** | **-1.1** |
| **OXZ** | **Oxford** | **40.85** | **160** | *e*P | | **P** | **23 23 18.3** | **-0.4** |
| | comp=Z,94nm,0.7s | | | | | | | |
| **RPZ** | **Rata Peaks** | **40.87** | **161** | P | | **P** | **23 23 18.1** | **-0.8** |
| | comp=Z,262nm,0.8s,baz=314,slow=1.7,SNR=126 | | | | | | | |
| **RPZ** | **Rata Peaks** | **40.87** | **161** | PN | | **P** | **23 23 18.0** | **-0.9** |
| **LBZ** | **Lake Benmore** | **41.21** | **163** | PN | | **P** | **23 23 20.6** | **-1.1** |
| **WKZ** | **Wanaka** | **41.28** | **164** | *e*P | | **P** | **23 23 22.0** | **-0.3** |
| | comp=Z,70nm,0.8s | | | | | | | |
| **MQZ** | **McQueen's Vall** | **41.40** | **160** | *e*P | | **P** | **23 23 22.8** | **-0.3** |
| | comp=Z,114nm,0.6s | | | | | | | |
| **DCZ** | **Deep Cove** | **41.41** | **166** | *e*P | | **P** | **23 23 23.3** | **+0.1** |
| | comp=Z,76nm,0.8s | | | | | | | |
| **ODZ** | **Otahua Downs** | **41.95** | **163** | *e*P | | **P** | **23 23 26.9** | **-0.7** |
| | comp=Z,46nm,0.8s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **41.99** | **166** | PN | | **P** | **23 23 27.0** | **-1.0** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KSNAH | **Namhae** | **47.12** | **330** | P | | **P** | **23** | **24** | **08.7 -0.2** |
| | SNR=20 | | | | | | | | |
| RAR | **Rarotonga** | **47.20** | **114** | LR | | LR | 23 | 41 | 35.1 |
| | comp=Z,95nm,20.7s,baz=262,slow=33 | | | | | | | | |
| KSKOH | **Goheung** | **47.29** | **329** | P | | **P** | **23** | **24** | **09.8 -0.3** |
| | SNR=6.1 | | | | | | | | |
| KSKOH | **Goheung** | **47.29** | **329** | P | | **P** | **23** | **24** | **09.8 -0.3** |
| | SNR=6.1 | | | | | | | | |
| KSJIN | **Jinju** | **47.35** | **331** | P | | **P** | **23** | **24** | **11.4 +0.8** |
| | SNR=11 | | | | | | | | |
| KSJIN | **Jinju** | **47.35** | **331** | P | | **P** | **23** | **24** | **11.4 +0.8** |
| | SNR=11 | | | | | | | | |
| SKJI | **Sukabumi** | **47.41** | **266** | P | | **P** | **23** | **24** | **14.1 +2.6** |
| | comp=Z,152nm,0.8s | | | | | | | | |
| KSKWJ | **Gwangju** | **47.86** | **330** | P | | **P** | **23** | **24** | **14.3 -0.2** |
| | SNR=8.0 | | | | | | | | |
| KSKWJ | **Gwangju** | **47.86** | **330** | P | | **P** | **23** | **24** | **14.3 -0.2** |
| | SNR=8.0 | | | | | | | | |
| KSULJ | **Uljin** | **47.95** | **333** | P | | **P** | **23** | **24** | **14.9 -0.3** |
| | SNR=46 | | | | | | | | |
| KSULJ | **Uljin** | **47.95** | **333** | P | | **P** | **23** | **24** | **14.9 -0.3** |
| | SNR=46 | | | | | | | | |
| KSEUS | **ULSEONG** | **48.00** | **332** | P | | **P** | **23** | **24** | **16.1 +0.6** |
| | SNR=8.6 | | | | | | | | |
| KSEUS | **ULSEONG** | **48.00** | **332** | P | | **P** | **23** | **24** | **16.1 +0.6** |
| | SNR=8.6 | | | | | | | | |
| KSJEU | **Jeongeup** | **48.16** | **330** | P | | **P** | **23** | **24** | **16.3 -0.6** |
| | SNR=12 | | | | | | | | |
| KSJEU | **Jeongeup** | **48.16** | **330** | P | | **P** | **23** | **24** | **16.3 -0.6** |
| | SNR=12 | | | | | | | | |
| KSCPR | **CHUPUNGNYEONG** | **48.23** | **331** | P | | **P** | **23** | **24** | **16.9 -0.5** |
| | SNR=20 | | | | | | | | |
| KSCPR | **CHUPUNGNYEONG** | **48.23** | **331** | P | | **P** | **23** | **24** | **16.9 -0.5** |
| | SNR=20 | | | | | | | | |
| CGJI | **Cibinong** | **48.27** | **266** | P | | **P** | **23** | **24** | **16.5 -1.6** |
| | comp=Z,175nm,1.0s,comp=Z,2µm | | | | | | | | |
| ERM | **Erimo** | **48.33** | **349** | P | | **P** | **23** | **24** | **18.0 0.0** |
| ERM | | | | pmax | | pmax | | | |
| | comp=Z,36nm,0.9s | | | | | | | | |
| KSTBA | **Taebaek** | **48.50** | **333** | P | | **P** | **23** | **24** | **20.2 +0.6** |
| | SNR=11 | | | | | | | | |
| KSTBA | **Taebaek** | **48.50** | **333** | P | | **P** | **23** | **24** | **20.2 +0.6** |
| | SNR=11 | | | | | | | | |
| KSBON | **Boeun** | **48.53** | **331** | P | | **P** | **23** | **24** | **20.9 +1.2** |
| | SNR=18 | | | | | | | | |
| KSBON | **Boeun** | **48.53** | **331** | P | | **P** | **23** | **24** | **20.9 +1.2** |
| | SNR=18 | | | | | | | | |
| KSTEJ | **Daejeon** | **48.63** | **331** | P | | **P** | **23** | **24** | **21.3 +0.8** |
| | SNR=8.6 | | | | | | | | |
| KSTEJ | **Daejeon** | **48.63** | **331** | P | | **P** | **23** | **24** | **21.3 +0.8** |
| | SNR=8.6 | | | | | | | | |
| KSCHJ | **Chungju** | **48.75** | **332** | P | | **P** | **23** | **24** | **21.5 +0.1** |
| | SNR=5.8 | | | | | | | | |
| KSYOW | **Yeongwol** | **48.77** | **332** | P | | **P** | **23** | **24** | **22.2 +0.7** |
| | SNR=12 | | | | | | | | |
| KSJES | **JEONGSEON** | **48.89** | **333** | P | | **P** | **23** | **24** | **23.0 +0.6** |
| | SNR=6.3 | | | | | | | | |
| KSJES | **JEONGSEON** | **48.89** | **333** | P | | **P** | **23** | **24** | **23.0 +0.6** |
| | SNR=6.3 | | | | | | | | |
| GZH | **Guangzhou** | **49.00** | **307** | *e*P | | **P** | **23** | **24** | **25.0 +1.5** |
| GZH | | | | PMZ | | | | | |
| | comp=Z,120nm,0.8s | | | | | | | | |
| KSCEA | **Cheonan** | **49.05** | **331** | P | | **P** | **23** | **24** | **24.3 +0.6** |
| | SNR=22 | | | | | | | | |
| KSDGY | **Daegwallycong** | **49.10** | **333** | P | | **P** | **23** | **24** | **24.6 +0.5** |
| | SNR=8.6 | | | | | | | | |
| KSJMJ | **Jumunjin** | **49.22** | **333** | P | | **P** | **23** | **24** | **24.4 -0.5** |
| | SNR=7.5 | | | | | | | | |
| KSJMJ | **Jumunjin** | **49.22** | **333** | P | | **P** | **23** | **24** | **25.7 +0.8** |
| | SNR=11 | | | | | | | | |
| KSRS | **Korea Array** | **49.25** | **332** | P | | **P** | **23** | **24** | **24.6 -0.5** |
| | comp=Z,44nm,0.6s,baz=146,slow=7.0,SNR=96 | | | | | | | | |
| KSRS | | | | LR | | LR | 23 | 40 | 52.8 |
| | comp=Z,103nm,20.2s,baz=146,slow=31 | | | | | | | | |
| KSRS | **Korea Array** | **49.25** | **332** | P | | **P** | **23** | **24** | **24.6 -0.5** |
| KSRS | | | | pmax | | pmax | | | |
| | comp=Z,44nm,0.6s | | | | | | | | |
| KSRS | | | | MLR | | MLR | | | |
| | comp=Z,103nm,20.2s | | | | | | | | |
| KSAR | **Wonju Array Be** | **49.26** | **332** | P | | **P** | **23** | **24** | **24.6 -0.6** |
| KSAR | **Wonju Array Be** | **49.26** | **332** | P | | **P** | **23** | **24** | **24.6 -0.6** |
| KS01 | **Wonju Array Si** | **49.28** | **332** | *e*P | | **P** | **23** | **24** | **24.7 -0.7** |
| KSSES | **Seosan** | **49.42** | **330** | P | | **P** | **23** | **24** | **26.7 +0.3** |
| | SNR=7.8 | | | | | | | | |
| KASI | **Kota Agung** | **49.50** | **267** | P | | **P** | **23** | **24** | **26.7 -0.8** |
| | comp=Z,180nm,1.3s | | | | | | | | |
| KSSWO | **Suwon** | **49.55** | **331** | P | | **P** | **23** | **24** | **27.8 +0.4** |
| | SNR=11 | | | | | | | | |
| KSCHC | **Chuncheon** | **49.56** | **332** | P | | **P** | **23** | **24** | **28.1 +0.6** |
| | SNR=9.0 | | | | | | | | |
| KSIJA | **INJE** | **49.59** | **333** | P | | **P** | **23** | **24** | **27.8 0.0** |
| | SNR=17 | | | | | | | | |
| KSSKC | **Sokcho** | **49.66** | **333** | P | | **P** | **23** | **24** | **28.9 +0.7** |
| | SNR=9.8 | | | | | | | | |
| KSSEO | **Seoul** | **49.75** | **331** | P | | **P** | **23** | **24** | **29.5 +0.6** |
| | SNR=11 | | | | | | | | |
| MDSI | **Maura Dua** | **49.87** | **269** | P | | **P** | **23** | **24** | **28.9 -1.4** |
| | comp=Z,51nm,1.4s | | | | | | | | |
| INCN | **Inchon** | **49.88** | **331** | *e*P | | **P** | **23** | **24** | **29.6 -0.4** |
| | comp=Z,231nm,0.7s | | | | | | | | |
| KSCWO | **Cheorwon** | **49.95** | **332** | P | | **P** | **23** | **24** | **30.3 -0.2** |
| | SNR=24 | | | | | | | | |
| LWLI | **Liwa** | **49.96** | **268** | P | | **P** | **23** | **24** | **31.1 0.0** |
| | comp=Z,122nm,0.8s | | | | | | | | |
| KSDDC | **Dongducheon** | **50.01** | **332** | P | | **P** | **23** | **24** | **31.7 +0.8** |
| | SNR=9.7 | | | | | | | | |
| QIZ | **Qiongzhong** | **50.04** | **300** | P | | **P** | **23** | **24** | **31.3 -0.2** |
| QIZ | | | | pP | | **pP** | **23** | **24** | **59.6 -1.5** |
| QIZ | | | | sP | | **sP** | **23** | **25** | **13.3 -2.0** |
| QIZ | | | | PP | | **PP** | **23** | **26** | **28.9 +1.1** |
| QIZ | | | | S | | **S** | **23** | **31** | **30.1 -3.0** |
| QIZ | | | | sS | | **sS** | **23** | **32** | **23.9 -0.4** |
| QIZ | | | | PMZ | | | | | |
| | comp=Z,30nm,1.3s | | | | | | | | |
| QIZ | | | | PMZ | | | | | |
| | comp=Z,140nm,6.4s | | | | | | | | |
| QIZ | | | | LN | | | | | |
| | comp=Z,150nm,4.8s | | | | | | | | |
| QIZ | **Qiongzhong** | **50.04** | **300** | *e*P | | **P** | **23** | **24** | **31.2 -0.2** |
| | comp=Z,102nm,1.6s | | | | | | | | |
| KSMUS | **Musan** | **50.14** | **332** | P | | **P** | **23** | **24** | **32.6 +0.8** |
| | SNR=7.6 | | | | | | | | |
| KSGAH | **Ganghwa** | **50.15** | **331** | P | | **P** | **23** | **24** | **32.6 +0.7** |
| | SNR=7.8 | | | | | | | | |
| YNCB | **YEONCHEON** | **50.19** | **332** | P | | **P** | **23** | **24** | **32.9 +0.7** |
| | SNR=25 | | | | | | | | |
| NJ2 | **Nanjing** | **50.27** | **320** | *e*P | | **P** | **23** | **24** | **33.0 +0.1** |
| NJ2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| ASAJ | **Asahikawa** | **50.46** | **349** | P | | **P** | **23** | **24** | **34.7 +0.5** |
| | comp=Z,102nm,0.7s,baz=200,slow=6.6 | | | | | | | | |
| ASAJ | **Asahikawa** | **50.46** | **349** | P | | **P** | **23** | **24** | **34.7 +0.5** |
| ASAJ | | | | pmax | | pmax | | | |
| | comp=Z,102nm,0.7s | | | | | | | | |
| JMBI | **JAMBI** | **50.63** | **272** | P | | **P** | **23** | **24** | **38.9 +2.9** |
| | comp=Z,347nm,1.0s | | | | | | | | |
| MYKOM | **Kota Tinggi** | **50.84** | **277** | ⇑P | | **P** | **23** | **24** | **37.7 +0.1** |
| MYKOM | **Kota Tinggi** | **50.84** | **277** | *e*P | | **P** | **23** | **24** | **37.5 -0.1** |
| | comp=Z,70nm,1.3s | | | | | | | | |
| KGM | **Kluang** | **51.40** | **277** | ⇑P | | **P** | **23** | **24** | **41.7 -0.1** |
| KSI | **Kapahiang** | **51.50** | **270** | P | | P | 23 | 24 | 46.4 +3.8 |
| KTGM | **Kuala Trenggan** | **52.14** | **281** | ⇑P | | **P** | **23** | **24** | **47.0 -0.3** |
| WHN | **Wuhan** | **52.33** | **316** | P | | **P** | **23** | **24** | **49.3 +1.0** |
| VLA | **Vladivostok** | **52.44** | **339** | ⇑*i*P | | **P** | **23** | **24** | **47.8 -1.1** |
| VLA | | | | *e* | | | 23 | 26 | 47.6 |
| VLA | | | | *e*S | | **S** | **23** | **32** | **03.5 -1.7** |
| VLA | | | | pmax | | pmax | | | |
| | comp=Z,104nm,1.6s | | | | | | | | |
| UBPT | **Khong Chiam** | **52.52** | **294** | P | | **P** | **23** | **24** | **50.9 +0.9** |
| | comp=Z,30nm,0.9s | | | | | | | | |
| SDSI | **Sungai Dareh** | **52.90** | **273** | P | | **P** | **23** | **24** | **52.2 -0.7** |
| | comp=Z,178nm,0.8s,comp=Z,39µm | | | | | | | | |
| YSS | **Yuzh-Sakhalins** | **53.18** | **350** | ⇑*e*P | | **P** | **23** | **24** | **54.4 +0.1** |
| YSS | | | | pmax | | pmax | | | |
| | comp=Z,90nm,1.0s | | | | | | | | |
| USRK | **Ussuriysk Ar.** | **53.35** | **340** | P | | **P** | **23** | **24** | **55.3 -0.3** |
| | comp=Z,32nm,0.6s,baz=184,slow=6.5,SNR=69 | | | | | | | | |
| BKNI | **Bangkinang** | **53.43** | **274** | P | | **P** | **23** | **24** | **56.6 -0.2** |
| | comp=Z,134nm,0.8s,comp=Z,3µm | | | | | | | | |
| BKNI | **Bangkinang** | **53.43** | **274** | *e*P | | **P** | **23** | **24** | **56.4 -0.4** |
| | comp=Z,71nm,0.8s | | | | | | | | |
| PPI | **Padang Panjang** | **53.98** | **273** | P | | **P** | **23** | **24** | **59.6 -1.1** |
| | baz=54,SNR=5.9 | | | | | | | | |
| PPI | **Padang Panjang** | **53.98** | **273** | P | | **P** | **23** | **24** | **59.3 -1.4** |
| | comp=Z,146nm,0.8s,comp=Z,932nm | | | | | | | | |
| IPM | **Ipoh** | **54.05** | **280** | ⇑P | | **P** | **23** | **25** | **00.9 -0.4** |
| IPM | **Ipoh** | **54.05** | **280** | *e*P | | **P** | **23** | **25** | **00.8 -0.6** |
| | comp=Z,20nm,0.9s | | | | | | | | |
| TIA | **Tai'an** | **54.10** | **323** | ⇓P | | **P** | **23** | **25** | **02.6 +1.3** |
| TIA | | | | PMZ | | | | | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| SKNT | **Sakolnakorn** | **54.44** | **295** | P | | **P** | **23** | **25** | **04.0 0.0** |
| | comp=Z,72nm,0.9s | | | | | | | | |
| MDJ | **Mudanjiang** | **54.55** | **339** | P | | **P** | **23** | **25** | **04.5 +0.2** |
| MDJ | | | | pP | | **pP** | **23** | **25** | **32.5 -2.0** |
| MDJ | | | | sP | | **sP** | **23** | **25** | **47.1 -1.5** |
| MDJ | | | | PP | | PP | 23 | 27 | 14.4 +6.3 |
| MDJ | | | | S | | **S** | **23** | **32** | **37.3 +3.5** |
| MDJ | | | | PMZ | | | | | |
| | comp=Z,32nm,0.8s | | | | | | | | |
| MDJ | | | | PMZ | | | | | |
| | comp=Z,130nm,6.0s | | | | | | | | |
| MDJ | | | | LN | | | | | |
| | comp=Z,230nm,22.6s | | | | | | | | |
| MDJ | | | | LE | | | | | |
| | comp=Z,260nm,17.3s | | | | | | | | |
| MDJ | | | | LZ | | | | | |
| | comp=Z,170nm,15.1s | | | | | | | | |
| MDJ | **Mudanjiang** | **54.55** | **339** | *e*P | | **P** | **23** | **25** | **04.2 -0.1** |
| | comp=Z,20nm,0.6s | | | | | | | | |
| CHBT | **CHBT** | **54.66** | **290** | P | | **P** | **23** | **25** | **05.6 0.0** |
| | comp=Z,49nm,1.0s | | | | | | | | |
| SNY | **Shenyang** | **54.75** | **332** | ⇑P | | **P** | **23** | **25** | **05.6 -0.2** |
| SNY | | | | PMZ | | | | | |
| | comp=Z,17nm,0.5s | | | | | | | | |
| MNSI | **Mandailing Nat** | **54.94** | **275** | P | | **P** | **23** | **25** | **06.8 -0.9** |
| | comp=Z,42nm,0.8s | | | | | | | | |
| SISI | **Saibi** | **55.19** | **272** | P | | **P** | **23** | **25** | **11.0 +1.5** |
| | comp=Z,88nm,0.7s | | | | | | | | |
| KHON | **Khomkaen** | **55.27** | **294** | P | | **P** | **23** | **25** | **10.3 +0.3** |
| | comp=Z,26nm,0.9s,comp=Z,462nm | | | | | | | | |
| CN2 | **Changchun** | **55.50** | **335** | *e*P | | **P** | **23** | **25** | **10.8 -0.4** |
| CN2 | | | | PMZ | | | | | |
| | comp=Z,40nm,0.9s | | | | | | | | |
| CN2 | | | | PMZ | | | | | |
| | comp=Z,200nm,3.0s | | | | | | | | |
| NONG | **Nongkai** | **55.55** | **296** | P | | **P** | **23** | **25** | **12.0 0.0** |
| | comp=Z,111nm,0.8s | | | | | | | | |
| ENH | **Enshi** | **55.66** | **312** | *e*P | | **P** | **23** | **25** | **12.8 +0.2** |
| | comp=Z,24nm,0.9s | | | | | | | | |
| PSI | **Prapat** | **55.86** | **277** | P | | **P** | | | |
| | comp=Z,10nm,0.7s,baz=166,slow=3.7,SNR=9.2 | | | | | | | | |
| PSI | **Prapat** | **55.86** | **277** | P | | **P** | **23** | **25** | **13.1 -1.4** |
| PSI | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| PSI | **Prapat** | **55.86** | **277** | P | | **P** | **23** | **25** | **13.0 -1.4** |
| | baz=56,SNR=7.1 | | | | | | | | |
| PSI | **Prapat** | **55.86** | **277** | *e*P | | **P** | **23** | **25** | **13.0 -1.4** |
| | comp=Z,60nm,1.6s | | | | | | | | |
| CHAI | **Chaiyaphum** | **55.90** | **293** | P | | **P** | **23** | **25** | **14.3 -0.2** |
| | comp=Z,11nm,0.8s,comp=Z,142nm | | | | | | | | |
| GYA | **Guiyang** | **55.94** | **307** | ⇓*i*P | | **P** | **23** | **25** | **15.5 +0.7** |
| GYA | | | | pP | | **pP** | **23** | **25** | **47.3 +2.3** |
| GYA | | | | sP | | **sP** | **23** | **26** | **01.8 +2.7** |
| GYA | | | | PcP | | **PcP** | **23** | **26** | **13.0 +1.1** |
| GYA | | | | PP | | **PP** | **23** | **27** | **23.3 +2.3** |
| GYA | | | | ScP | | **ScP** | **23** | **29** | **58.5 -0.8** |
| GYA | | | | PcS | | **PcS** | **23** | **30** | **12.0 -0.7** |
| GYA | | | | S | | **S** | **23** | **32** | **52.6 -0.6** |
| GYA | | | | sS | | **sS** | **23** | **33** | **46.3 +1.0** |
| GYA | | | | PMZ | | | | | |
| | comp=Z,40nm,0.8s | | | | | | | | |
| GYA | | | | PMZ | | | | | |
| | comp=Z,140nm,4.5s | | | | | | | | |
| TRTT | **Trang** | **55.99** | **283** | P | | **P** | **23** | **25** | **15.8 +0.6** |
| | comp=Z,18nm,0.8s | | | | | | | | |
| SLVN | **Son La** | **56.07** | **300** | *e*P | | **P** | **23** | **25** | **16.4 +0.7** |
| | comp=Z,15nm,0.9s | | | | | | | | |
| PATY | **Pattaya** | **56.08** | **289** | P | | **P** | **23** | **25** | **16.7 +0.9** |
| | comp=Z,13nm,0.8s | | | | | | | | |
| PPT2 | **Papeete2** | **56.16** | **107** | *e*P | | **P** | **23** | **25** | **18.8 +2.3** |
| | comp=Z,41nm,1.1s | | | | | | | | |
| PPT2 | | | | *e*S | | **S** | **23** | **32** | **59.8 +3.5** |
| | comp=Z,214nm,24.0s | | | | | | | | |
| HABR | **Khabarovsk** | **56.29** | **345** | *e*P | | **P** | **23** | **25** | **14.5 -2.1** |
| HABR | | | | *e**PP | | **pP** | **23** | **25** | **47.4 +0.5** |
| HABR | | | | *e**SP | | **sP** | **23** | **26** | **03.0 +2.0** |
| HABR | | | | *e* | | | 23 | 26 | 10.0 |
| HABR | | | | *e* | | | 23 | 27 | 21.4 |
| HABR | | | | *e*S | | **S** | **23** | **54** | **0.0 -2.7** |
| HABR | | | | *e*SS | | **SS** | **23** | **36** | **44.3 -1.4** |
| HABR | | | | pmax | | pmax | | | |
| | comp=E,45nm,1.7s | | | | | | | | |
| HABR | | | | pmax | | pmax | | | |
| | comp=Z,153nm,1.7s | | | | | | | | |
| HABR | | | | pmax | | pmax | | | |
| | comp=N,56nm,1.7s | | | | | | | | |
| HABR | | | | MLR | | MLR | | | |
| | comp=Z,237nm,21.0s | | | | | | | | |
| TIAR | **Tiarei** | **56.38** | **107** | *e*P | | **P** | **23** | **25** | **20.4 +2.5** |
| | comp=Z,12nm,0.8s | | | | | | | | |
| KRAB | **Krabi** | **56.55** | **284** | P | | **P** | **23** | **25** | **21.5 +2.3** |
| | comp=Z,18nm,0.8s,comp=Z,4µm | | | | | | | | |
| TBI | **Tubuai** | **56.98** | **114** | *e*S | | **S** | **23** | **33** | **09.4 +2.6** |
| | comp=Z,178nm,26.5s | | | | | | | | |
| TBI | | | | *e*LR | | LR | 23 | 42 | 20.6 |
| | comp=Z,414nm,37.0s | | | | | | | | |
| GSI | **Gunungsitoli** | **56.99** | **275** | P | | **P** | **23** | **25** | **23.0 +0.7** |
| | comp=Z,51nm,0.9s | | | | | | | | |
| TYV | **Tymovskoe** | **56.99** | **351** | *e*P | | **P** | **23** | **25** | **22.8 +1.2** |
| TYV | | | | pmax | | pmax | | | |
| | comp=Z,37nm,0.8s | | | | | | | | |
| TYV | | | | pmax | | pmax | | | |
| | comp=E,26nm,1.0s | | | | | | | | |
| PBKT | **Sadao Pong** | **57.03** | **294** | P | | **P** | **23** | **25** | **23.1 +0.6** |
| | comp=E,37nm,1.1s | | | | | | | | |
| LOEI | **Loei** | **57.06** | **295** | P | | **P** | **23** | **25** | **20.4 -2.3** |
| | comp=E,78nm,0.9s,comp=E,3µm | | | | | | | | |
| KCSI | **Kotcane, Aceh** | **57.10** | **278** | P | | **P** | **23** | **25** | **23.9 +0.8** |
| | comp=E,36nm,0.8s,comp=E,5µm | | | | | | | | |
| BJT | **Baijiatuau** | **57.23** | **326** | *e*P | | **P** | **23** | **25** | **23.2 -0.3** |
| BJT | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.6s | | | | | | | | |
| BJT | **Baijiatuau** | **57.23** | **326** | *e*P | | **P** | **23** | **25** | **23.2 -0.3** |
| | comp=Z,20nm,0.6s | | | | | | | | |
| PMOR | **Pomariorio Ree** | **57.59** | **104** | *e*P | | **P** | **23** | **25** | **28.7 +2.3** |
| | comp=Z,119nm,0.9s | | | | | | | | |
| MEH | **Mehetia** | **57.62** | **108** | *e*P | | **P** | **23** | **25** | **28.9 +2.2** |
| | comp=Z,17nm,0.9s | | | | | | | | |
| UTTA | **Uttaradit** | **57.78** | **295** | P | | **P** | **23** | **25** | **28.2 +0.5** |
| | comp=Z,30nm,0.9s,comp=Z,229nm | | | | | | | | |
| KLR | **Kul'dur** | **57.90** | **343** | *e*P | | P | 23 | 25 | 24.2 -3.8 |
| KLR | | | | pmax | | pmax | | | |
| | comp=E,57nm,1.6s | | | | | | | | |
| KLR | | | | pmax | | pmax | | | |
| | comp=Z,220nm,1.6s | | | | | | | | |
| NANT | **Nan** | **57.99** | **296** | P | | **P** | **23** | **25** | **29.4 +0.2** |
| | comp=Z,46nm,0.8s,comp=Z,9µm | | | | | | | | |
| XAN | **Xi'an** | **58.09** | **316** | P | | **P** | **23** | **25** | **29.1 -0.6** |
| XAN | | | | PMZ | | | | | |
| | comp=Z,44nm,0.9s | | | | | | | | |
| XAN | | | | PMZ | | | | | |
| | comp=Z,61nm,2.6s | | | | | | | | |
| SRDT | **SRDT** | **58.10** | **291** | P | | **P** | **23** | **25** | **30.8 +0.8** |
| | comp=Z,121nm,0.8s | | | | | | | | |
| PET | **Petropavlovsk** | **58.39** | **3** | *i*P | | **P** | **23** | **25** | **31.7 +0.4** |
| PET | | | | pmax | | pmax | | | |
| | comp=Z,49nm,1.2s | | | | | | | | |
| PEA0 | **Petropavlovsk-** | **58.43** | **2** | *e*P | | **P** | **23** | **25** | **32.4 +0.8** |
| PETK | **Petropavlovsk-** | **58.43** | **2** | P | | **P** | **23** | **25** | **32.2 +0.6** |
| | comp=Z,22nm,0.6s,baz=176,slow=8.6,SNR=20 | | | | | | | | |
| PETK | | | | pP | | **pP** | **23** | **26** | **00.0 -2.1** |
| | comp=Z,25nm,0.9s,baz=150,slow=6.2,SNR=5.8 | | | | | | | | |
| PETK | | | | LR | | LR | 23 | 49 | 43.4 |
| | comp=Z,24nm,19.0s,baz=180,slow=35 | | | | | | | | |
| PETK | **Petropavlovsk-** | **58.43** | **2** | P | | **P** | **23** | **25** | **32.2 +0.6** |
| PETK | | | | *PP | | **pP** | **23** | **26** | **00.0 -2.1** |
| PETK | | | | pmax | | pmax | | | |
| | comp=Z,22nm,0.6s | | | | | | | | |
| PETK | | | | pmax | | pmax | | | |
| | comp=Z,25nm,0.9s | | | | | | | | |
| PETK | | | | MLR | | MLR | | | |
| | comp=Z,24nm,19.0s | | | | | | | | |
| KMI | **Kunming** | **58.55** | **304** | P | | **P** | **23** | **25** | **34.6 +1.3** |
| KMI | | | | pP | | **pP** | **23** | **26** | **05.3 +1.5** |
| KMI | | | | S | | **S** | **23** | **33** | **30.3 +2.7** |
| KMI | | | | sS | | **sS** | **23** | **34** | **24.3 +4.2** |
| KMI | | | | SS | | **SS** | **23** | **37** | **27.3 +4.8** |
| KMI | | | | PMZ | | | | | |
| | comp=Z,96nm,1.2s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,200nm,3.1s | | | | | | | | |
| KMI | | | | LN | | | | | |
| | comp=Z,110nm,4.5s | | | | | | | | |
| KMI | | | | LE | | | | | |
| | comp=Z,88nm,6.2s | | | | | | | | |
| KMI | | | | LZ | | | | | |
| | comp=Z,68nm,8.4s | | | | | | | | |
| KHLT | **Khaolaem Dam** | **58.71** | **291** | P | | **P** | **23** | **25** | **35.1 +0.8** |
| | comp=Z,14nm,1.4s,comp=Z,303nm | | | | | | | | |
| LAMP | **Lampang** | **58.85** | **295** | P | | **P** | **23** | **25** | **36.0 +0.8** |
| | comp=Z,42nm,0.8s,comp=Z,290nm | | | | | | | | |
| UMPA | **Umpang Tak** | **58.86** | **293** | P | | **P** | **23** | **25** | **35.7 +0.4** |
| | comp=Z,11nm,1.1s,comp=Z,681nm | | | | | | | | |
| CM01 | **Chiang Mai Arr** | **59.43** | **295** | *e*P | | **P** | **23** | **25** | **40.3 +1.1** |
| CM31 | **Chiang Mai Arr** | **59.46** | **295** | P | | **P** | **23** | **25** | **40.7 +1.3** |
| | baz=60,SNR=14 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **59.46** | **295** | P | | **P** | **23** | **25** | **40.3 +0.9** |
| | comp=Z,44nm,0.8s,baz=113,slow=5.1,SNR=244 | | | | | | | | |
| CMAR | | | | LR | | LR | 23 | 49 | 20.3 |
| | comp=Z,45nm,21.7s,baz=105,slow=34 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **59.46** | **295** | P | | **P** | **23** | **25** | **40.3 +0.9** |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,44nm,0.8s | | | | | | | | |
| CMAR | | | | MLR | | MLR | | | |
| | comp=Z,45nm,21.7s | | | | | | | | |
| NKL | **Nikolayevsk** | **59.52** | **351** | *e*P | | **P** | **23** | **25** | **38.0 -1.1** |
| NKL | | | | pmax | | pmax | | | |
| | comp=Z,69nm,1.0s | | | | | | | | |
| CHTO | **Chiang Mai** | **59.57** | **295** | P | | **P** | **23** | **25** | **40.3 +0.2** |
| | comp=Z,225nm,1.3s,comp=Z,3µm | | | | | | | | |
| CHTO | **Chiang Mai** | **59.57** | **295** | *e*P | | **P** | **23** | **25** | **40.7 +0.6** |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,92nm,1.4s | | | | | | | | |
| CHTO | **Chiang Mai** | **59.57** | **295** | *e*P | | **P** | **23** | **25** | **40.4 +0.2** |
| | comp=Z,92nm,1.4s | | | | | | | | |
| CMAI | **Chiengmai2** | **59.83** | **297** | P | | **P** | **23** | **25** | **42.4 +0.3** |
| | comp=Z,143nm,0.8s,comp=Z,6µm | | | | | | | | |
| CD2 | **Chengdu** | **60.26** | **310** | P | | **P** | **23** | **25** | **44.8 +0.1** |
| CD2 | | | | pP | | **pP** | **23** | **26** | **15.0 -0.4** |
| CD2 | | | | sP | | **sP** | **23** | **26** | **29.0 -0.3** |
| CD2 | | | | PcS | | **PcS** | **23** | **30** | **31.1 -0.4** |
| CD2 | | | | S | | **S** | **23** | **33** | **50.1 +1.0** |
| CD2 | | | | sS | | **sS** | **23** | **34** | **42.6 +0.7** |
| CD2 | | | | SS | | **SS** | **23** | **37** | **51.0 +2.1** |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,90nm,0.6s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,220nm,5.4s | | | | | | | | |
| MHMT | **Maesarieng** | **60.29** | **294** | P | | **P** | **23** | **25** | **45.6 +0.6** |
| | comp=Z,28nm,0.8s,comp=Z,320nm | | | | | | | | |
| HHC | **Hu-ho-hao-te** | **60.43** | **324** | *e*P | | **P** | **23** | **25** | **45.8 +0.1** |
| HHC | | | | sP | | **sP** | **23** | **26** | **31.3 +0.9** |
| HHC | | | | PP | | **PP** | **23** | **27** | **59.8 -0.7** |
| HHC | | | | S | | **S** | **23** | **33** | **51.3 +0.3** |
| HHC | | | | sS | | **sS** | **23** | **34** | **45.6 +1.8** |
| HHC | | | | ScS | | SKKSac | 23 | 35 | 22.9 -1.4 |
| HHC | | | | PMZ | | | | | |
| | comp=Z,34nm,1.1s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,190nm,6.9s | | | | | | | | |
| HIA | **Hailar** | **62.23** | **335** | *e*P | | **P** | **23** | **25** | **57.4 -0.2** |
| HIA | | | | pmax | | pmax | | | |
| | comp=Z,38nm,0.7s | | | | | | | | |
| HIA | **Hailar** | **62.23** | **335** | *e*P | | **P** | **23** | **25** | **57.4 -0.2** |
| | comp=Z,38nm,0.7s | | | | | | | | |
| LZH | **Lanzhou** | **62.71** | **315** | ⇓P | | **P** | **23** | **26** | **02.3 +1.1** |
| LZH | | | | pP | | **pP** | **23** | **26** | **30.1 -2.0** |
| LZH | | | | sP | | **sP** | **23** | **26** | **45.0 -1.0** |
| LZH | | | | PP | | **PP** | **23** | **28** | **24.0 +3.2** |
| LZH | | | | *e*S | | **S** | **23** | **34** | **18.4 -1.7** |
| LZH | | | | sS | | **sS** | **23** | **35** | **10.3 -3.0** |
| LZH | | | | SS | | **SS** | **23** | **38** | **30.0 +2.7** |
| LZH | | | | PMZ | | | | | |
| | comp=Z,62nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,260nm,4.0s | | | | | | | | |
| MA2 | **Magadan** | **64.90** | **358** | *e*P | | **P** | **23** | **26** | **14.8 -0.1** |
| CLNS | **Chul'man** | **66.56** | **343** | *e*P | | **P** | **23** | **26** | **25.6 0.0** |
| CLNS | | | | pmax | | pmax | | | |
| | comp=Z,18nm,0.5s | | | | | | | | |
| CLNS | | | | pmax | | pmax | | | |
| | comp=N,15nm,0.7s | | | | | | | | |
| CLNS | | | | pmax | | pmax | | | |
| | comp=E,7.0nm,0.7s | | | | | | | | |
| GTA | **Gaotai** | **67.12** | **317** | ⇓P | | **P** | **23** | **26** | **30.5 +0.8** |
| GTA | | | | PcP | | **PcP** | **23** | **26** | **59.1 +2.2** |
| GTA | | | | pP | | **pP** | **23** | **27** | **01.4 +0.5** |
| GTA | | | | sP | | **sP** | **23** | **27** | **15.3 +0.5** |
| GTA | | | | PcS | | | 23 | 31 | 03.3 |
| GTA | | | | S | | **S** | **23** | **35** | **15.4 +1.4** |
| GTA | | | | sS | | **sS** | **23** | **36** | **07.4 -0.4** |
| GTA | | | | SS | | **SS** | **23** | **39** | **38.6 +2.9** |
| GTA | | | | PMZ | | | | | |
| | comp=E,54nm,1.2s | | | | | | | | |
| GTA | | | | PMZ | | | | | |
| | comp=E,210nm,6.2s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | comp=E,110nm,18.5s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | comp=E,100nm,17.6s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | comp=E,110nm,16.6s | | | | | | | | |
| ULN | **Ulaanbaatar** | **67.32** | **328** | *e*P | | **P** | **23** | **26** | **31.1 +0.3** |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,54nm,0.8s | | | | | | | | |
| SONM | **Songino Array** | **67.65** | **327** | P | | **P** | **23** | **26** | **33.1 +0.2** |
| | comp=Z,29nm,0.6s,baz=144,slow=7.6,SNR=115 | | | | | | | | |
| SONM | | | | LR | | LR | 23 | 54 | 46.2 |
| | comp=Z,59nm,21.3s,baz=112,slow=35 | | | | | | | | |
| SONM | **Songino Array** | **67.65** | **327** | P | | **P** | **23** | **26** | **33.1 +0.2** |
| SONM | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.6s | | | | | | | | |
| SONM | | | | MLR | | MLR | | | |
| | comp=Z,59nm,21.3s | | | | | | | | |
| SONA1 | **Songino Array** | **67.66** | **327** | *e*P | | **P** | **23** | **26** | **33.1 +0.2** |
| CASY | **Casey** | **67.81** | **198** | *e*P | | **P** | **23** | **26** | **32.7 -

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CHLP | Challavanipeta | 73.12 | 291 | eP | P | 23 27 06.4 | -0.1 |
| CHLP | | | | IAmb | IAmb | 23 27 08.0 | |
| | comp=Z,136nm,0.9s | | | | | | |
| GUN | Gumba | 73.69 | 301 | eP | P | 23 27 10.2 | 0.0 |
| | comp=Z,155nm,0.9s | | | | | | |
| BILL | Bilibino | 73.83 | 5 | d iP | P | 23 27 10.0 | +0.3 |
| BILL | | | | i | | 23 28 00.7 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,47nm,1.1s | | | | | | |
| PKI | Pulchoki | 74.00 | 301 | eP | P | 23 27 11.7 | -0.3 |
| | comp=Z,119nm,1.1s | | | | | | |
| PKIN | Phulchoki | 74.02 | 301 | eP | P | 23 27 12.0 | 0.0 |
| | comp=Z,51nm,1.0s | | | | | | |
| KKN | Kakani | 74.17 | 301 | eP | P | 23 27 12.8 | 0.0 |
| | comp=Z,44nm,0.6s | | | | | | |
| DMN | Daman | 74.27 | 301 | eP | P | 23 27 13.6 | +0.1 |
| | comp=Z,230nm,1.0s | | | | | | |
| PALK | Pallekele | 74.45 | 279 | P | P | 23 27 14.5 | 0.0 |
| | comp=Z,18nm,0.7s,baz=115,slow=7.0,SNR=11 | | | | | | |
| PALK | Pallekele | 74.45 | 279 | eP | P | 23 27 15.0 | +0.5 |
| PALK | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| PALK | Pallekele | 74.45 | 279 | eP | P | 23 27 14.3 | -0.2 |
| | comp=Z,23nm,0.8s | | | | | | |
| SII | Sitkinak Islan | 74.71 | 27 | eP | P | 23 27 16.0 | +1.0 |
| | comp=Z,81nm,0.8s | | | | | | |
| GKN | Gorkha | 74.78 | 301 | eP | P | 23 27 16.2 | 0.0 |
| | comp=Z,160nm,1.0s | | | | | | |
| PVM | Polavaram | 75.15 | 289 | eP | P | 23 27 17.8 | -0.5 |
| PVM | | | | IAmb | IAmb | 23 27 18.9 | |
| | comp=Z,52nm,0.9s | | | | | | |
| OHAK | Old Harbor | 75.50 | 26 | eP | P | 23 27 20.1 | +0.6 |
| | comp=Z,26nm,0.7s | | | | | | |
| KOLN | Koldanda | 75.61 | 300 | eP | P | 23 27 20.8 | -0.3 |
| | comp=Z,96nm,0.7s | | | | | | |
| DANN | Dangsing | 75.61 | 301 | eP | P | 23 27 20.8 | -0.4 |
| | comp=Z,12nm,0.7s | | | | | | |
| KDAK | Kodiak Island | 76.13 | 26 | P | P | 23 27 23.1 | 0.0 |
| | comp=Z,14nm,0.7s,baz=276,slow=6.8,SNR=9.4 | | | | | | |
| KDAK | Kodiak Island | 76.13 | 26 | P | P | 23 27 23.1 | 0.0 |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,14nm,0.7s | | | | | | |
| SKHT | Srikalahasti | 76.37 | 285 | eP | P | 23 27 24.8 | -0.5 |
| SKHT | | | | IAmb | IAmb | 23 27 25.9 | |
| | comp=Z,49nm,1.1s | | | | | | |
| HVS | Khovu-Aksy | 76.41 | 326⇓ | eP | P | 23 27 25.8 | +0.9 |
| HVS | | | | pmax | pmax | | |
| | comp=Z,50nm,1.0s | | | | | | |
| ADKI | Addanki | 76.46 | 288 | eP | P | 23 27 25.1 | -0.7 |
| ADKI | | | | IAmb | IAmb | 23 27 26.5 | |
| | comp=Z,65nm,0.9s | | | | | | |
| SVW2 | Sparrevohn | 76.88 | 23 | eP | P | 23 27 29.1 | +1.8 |
| WMQ | Urumqi | 77.20 | 317 | eP | P | 23 27 30.0 | +0.5 |
| WMQ | | | | pP | pP | 23 28 00.0 | -1.6 |
| WMQ | | | | sP | sP | 23 28 15.0 | -0.2 |
| WMQ | | | | PP | PP | 23 30 27.0 | +1.7 |
| WMQ | | | | S | S | 23 37 08.0 | -0.8 |
| WMQ | | | | sS | sS | 23 38 03.0 | -0.9 |
| WMQ | | | | SS | SS | 23 42 11.0 | +1.5 |
| WMQ | | | | PMZ | | | |
| | comp=Z,32nm,1.0s | | | | | | |
| WMQ | | | | PMZ | | | |
| | comp=Z,33nm,8.0s | | | | | | |
| WMQ | | | | LN | | | |
| | comp=Z,110nm,20.0s | | | | | | |
| WMQ | | | | LE | | | |
| | comp=Z,79nm,18.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | comp=Z,83nm,18.0s | | | | | | |
| NJS | Nagarjunasagar | 77.21 | 288 | eP | P | 23 27 29.4 | -0.6 |
| NJS | | | | IAmb | IAmb | 23 27 30.3 | |
| | comp=Z,65nm,0.9s | | | | | | |
| RCLA | Racherla | 77.36 | 287 | eP | P | 23 27 30.2 | -0.7 |
| RCLA | | | | IAmb | IAmb | 23 27 30.5 | |
| | comp=Z,15nm,0.7s | | | | | | |
| SRLM | Srisailam | 77.53 | 288 | eP | P | 23 27 31.2 | -0.6 |
| SRLM | | | | IAmb | IAmb | 23 27 32.0 | |
| | comp=Z,105nm,0.9s | | | | | | |
| RPR | Rampur | 77.62 | 291 | eP | P | 23 27 31.4 | -0.8 |
| RPR | | | | IAmb | IAmb | 23 27 32.6 | |
| | comp=Z,54nm,1.0s | | | | | | |
| CNPM | China Poot | 77.70 | 25 | eP | P | 23 27 33.1 | +1.2 |
| TTA | Tatalina | 77.87 | 21 | eP | P | 23 27 33.6 | +0.7 |
| TTA | | | | e*PP | pP | 23 28 09.7 | +4.8 |
| TTA | Tatalina | 77.87 | 21 | eP | P | 23 27 33.6 | +0.7 |
| TTA | | | | epP | pP | 23 28 09.7 | +4.8 |
| BRLK | Bradley Lake | 77.98 | 25 | eP | P | 23 27 34.4 | +0.9 |
| HYB | Hyderabad | 78.06 | 289 | i P | P | 23 27 33.0 | -1.8 |
| HYB | | | | e | | 23 28 05.0 | |
| HYBB | Hyderabad (bro | 78.06 | 289 | eP | P | 23 27 34.1 | -0.8 |
| HYBB | | | | IAmb | IAmb | 23 27 34.8 | |
| | comp=Z,61nm,1.0s | | | | | | |
| SRSP | Sriramsagar | 78.51 | 290 | eP | P | 23 27 36.2 | -1.0 |
| SRSP | | | | IAmb | IAmb | 23 27 37.2 | |
| | comp=Z,85nm,1.0s | | | | | | |
| SEW | Seward | 78.78 | 25 | eP | P | 23 27 37.7 | 0.0 |
| | comp=Z,38nm,1.0s | | | | | | |
| URV | Uravakonda | 78.90 | 286 | eP | P | 23 27 38.2 | -1.2 |
| URV | | | | IAmb | IAmb | 23 27 39.9 | |
| | comp=Z,66nm,0.9s | | | | | | |
| SUA | Susitna One | 78.99 | 24 | eP | P | 23 27 39.3 | +0.3 |
| | comp=Z,37nm,0.6s | | | | | | |
| RC01 | Rabbit Creek A | 79.19 | 24 | eP | P | 23 27 40.4 | +0.4 |
| | comp=Z,23nm,0.6s | | | | | | |
| RC01 | | | | epP | pP | 23 28 11.8 | -0.4 |
| PPLA | Purkeypile | 79.25 | 22 | eP | P | 23 27 40.6 | +0.1 |
| | comp=Z,7.6nm,0.7s | | | | | | |
| PPLA | | | | epP | pP | 23 28 13.1 | +0.4 |
| PMR | Palmer | 79.71 | 24 | eP | P | 23 27 42.7 | 0.0 |
| PMR | | | | pmax | pmax | | |
| | comp=Z,16nm,0.7s | | | | | | |
| PMR | Palmer | 79.71 | 24 | eP | P | 23 27 42.7 | 0.0 |
| | comp=Z,16nm,0.7s | | | | | | |
| KLRI | Killari | 80.01 | 289 | eP | P | 23 27 44.4 | -1.0 |
| KLRI | | | | IAmb | IAmb | 23 27 45.0 | |
| | comp=Z,28nm,0.8s | | | | | | |
| KTH | Kantishna Hill | 80.09 | 22 | eP | P | 23 27 44.4 | -0.6 |
| | comp=Z,18nm,0.8s | | | | | | |
| KTH | | | | epP | pP | 23 28 16.8 | -0.4 |
| SML | Sawmill | 80.14 | 24 | eP | P | 23 27 45.5 | +0.3 |
| SML | | | | e*PP | pP | 23 28 17.5 | +0.1 |
| SML | | | | pmax | pmax | | |
| | comp=Z,11nm,0.6s | | | | | | |
| SML | Sawmill | 80.14 | 24 | eP | P | 23 27 45.5 | +0.3 |
| | comp=Z,11nm,0.6s | | | | | | |
| SML | | | | epP | pP | 23 28 17.5 | +0.1 |
| TRF | Thorofare Moun | 80.27 | 22 | eP | P | 23 27 45.6 | -0.5 |
| | comp=Z,22nm,0.8s | | | | | | |
| BPAW | Bear Paw Mtn. | 80.38 | 21 | eP | P | 23 27 46.4 | 0.0 |
| SCM | Sheep Creek Mo | 80.56 | 24 | eP | P | 23 27 48.2 | +0.7 |
| SCM | | | | pmax | pmax | | |
| | comp=Z,36nm,0.9s | | | | | | |
| SCM | Sheep Creek Mo | 80.56 | 24 | eP | P | 23 27 48.2 | +0.7 |
| | comp=Z,36nm,0.9s | | | | | | |
| RND | Reindeer | 80.79 | 22 | eP | P | 23 27 48.3 | -0.4 |
| RND | | | | pmax | pmax | | |
| | comp=Z,30nm,0.6s | | | | | | |
| RND | Reindeer | 80.79 | 22 | eP | P | 23 27 48.3 | -0.4 |
| | comp=Z,30nm,0.6s | | | | | | |
| DIV | Divide | 80.86 | 25 | eP | P | 23 27 49.4 | +0.3 |
| | comp=Z,24nm,0.6s | | | | | | |
| MCK | McKinley | 80.93 | 22 | eP | P | 23 27 48.5 | -0.9 |
| MCK | | | | e*PP | pP | 23 28 19.7 | -1.9 |
| MCK | | | | pmax | pmax | | |
| | comp=Z,29nm,0.7s | | | | | | |
| MCK | McKinley | 80.93 | 22 | eP | P | 23 27 48.5 | -0.9 |
| | comp=Z,29nm,0.7s | | | | | | |
| MCK | | | | epP | pP | 23 28 19.7 | -1.9 |
| KLU | Klutina | 80.97 | 25 | eP | P | 23 27 50.4 | +0.7 |
| | comp=Z,63nm,1.1s | | | | | | |
| MLY | Manley | 81.00 | 21 | eP | P | 23 27 49.8 | +0.1 |
| | comp=Z,30nm,0.6s | | | | | | |
| BMRM | Bremner River | 81.28 | 26 | eP | P | 23 27 51.9 | +0.6 |
| | comp=Z,13nm,0.7s | | | | | | |
| NDI | New Delhi | 81.30 | 300 | ex | P | 23 27 49.5 | -2.6 |
| WRH | Wood River Hil | 81.64 | 22 | eP | P | 23 27 52.7 | -0.3 |
| | comp=Z,34nm,1.1s | | | | | | |
| HARP | HAARP | 81.74 | 24 | eP | P | 23 27 55.3 | +1.7 |
| MK01 | Makanchi Array | 81.76 | 319 | eP | P | 23 27 53.8 | -0.3 |
| MKAR | Makanchi Array | 81.77 | 319 | P | P | 23 27 53.9 | -0.3 |
| | comp=Z,15nm,0.5s,baz=99,slow=6.3,SNR=83 | | | | | | |
| MKAR | | | | LR | LR | 00 02 20.2 | |
| | comp=Z,48nm,22.0s,baz=98,slow=34 | | | | | | |
| MKAR | Makanchi Array | 81.77 | 319 | P | P | 23 27 54.2 | +0.1 |
| | baz=82 | | | | | | |
| CCB | Clear Creek Bu | 81.84 | 22 | eP | P | 23 27 53.0 | -1.1 |
| | comp=Z,22nm,0.6s | | | | | | |
| MDM | Murphy Dome | 81.85 | 21 | eP | P | 23 27 54.0 | -0.2 |
| | comp=Z,22nm,1.0s | | | | | | |
| PAX | Paxson | 81.89 | 24 | eP | P | 23 27 54.9 | +0.4 |
| PAX | | | | pmax | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | |
| PAX | Paxson | 81.89 | 24 | eP | P | 23 27 54.9 | +0.4 |
| | comp=Z,15nm,1.1s | | | | | | |
| COLA | College | 81.94 | 21 | c iP | P | 23 27 54.0 | -0.6 |
| COLA | | | | pmax | pmax | | |
| | comp=Z,33nm,0.6s | | | | | | |
| MAKZ | Makanchi | 81.98 | 319 | eP | P | 23 27 55.2 | -0.1 |
| HDA | Harding Lake | 82.03 | 22 | eP | P | 23 27 53.0 | -2.1 |
| | comp=Z,21nm,0.5s | | | | | | |
| IL1 | Eielson Array | 82.24 | 22 | eP | P | 23 27 55.5 | -0.7 |
| ILAR | Eielson Array | 82.24 | 22 | P | P | 23 27 55.1 | -1.0 |
| | comp=Z,19nm,0.6s,baz=243,slow=5.3,SNR=235 | | | | | | |
| ILAR | | | | S | S | 23 38 02.2 | +1.4 |
| | comp=Z,0.1nm,0.5s,baz=250,slow=7.6,SNR=4.1 | | | | | | |
| ILAR | | | | LR | LR | 00 04 40.0 | |
| | comp=Z,59nm,18.4s,baz=262,slow=36 | | | | | | |
| ILAR | Eielson Array | 82.24 | 22 | P | P | 23 27 55.2 | -1.0 |
| ILAR | | | | S | S | 23 38 02.2 | +1.4 |
| ILAR | | | | pmax | pmax | | |
| | comp=Z,19nm,0.6s | | | | | | |
| ILAR | | | | MLR | MLR | | |
| | comp=Z,59nm,18.4s | | | | | | |
| COLD | Coldfoot | 82.42 | 19 | eP | P | 23 27 57.3 | +0.3 |
| | comp=Z,10nm,0.6s | | | | | | |
| ZAA0 | Zalesovo Array | 82.50 | 326 | eP | P | 23 27 56.5 | -1.3 |
| ZALV | Zalesovo Beam | 82.50 | 326 | P | P | 23 27 56.4 | -1.4 |
| | comp=Z,12nm,0.5s,baz=115,slow=5.4,SNR=52 | | | | | | |
| ZALV | Zalesovo Beam | 82.50 | 326 | P | P | 23 27 56.4 | -1.4 |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,12nm,0.5s | | | | | | |
| MENT | Mentasta | 82.57 | 24 | eP | P | 23 27 58.9 | +0.9 |
| POO | Poona | 82.66 | 289⇑ | iP | P | 23 27 54.0 | -5.4 |
| | comp=Z,50nm,1.0s | | | | | | |
| DOT | Dot Lake | 82.77 | 23 | eP | P | 23 27 59.1 | +0.1 |
| | comp=Z,46nm,0.7s | | | | | | |
| PCA | Pinnacle | 82.83 | 27 | epP | pP | 23 28 32.4 | +0.6 |
| NVS | Novosibirsk | 83.67 | 327 | eP | P | 23 28 02.9 | -0.8 |
| NVS | | | | eS | S | 23 38 15.7 | +0.1 |
| NVS | | | | pmax | pmax | | |
| | comp=Z,45nm,1.5s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=N,15nm,1.0s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,23nm,1.4s | | | | | | |
| NVS | | | | smax | smax | | |
| | comp=E,11nm,1.9s | | | | | | |
| FYU | Fort Yukon | 83.74 | 21 | eP | P | 23 28 04.5 | +0.7 |
| | comp=E,19nm,0.6s | | | | | | |
| FYU | | | | epP | pP | 23 28 41.1 | +4.8 |
| EGAK | Eagle | 84.41 | 23 | eP | P | 23 28 07.3 | 0.0 |
| | comp=E,33nm,0.9s | | | | | | |
| EGAK | | | | epP | pP | 23 28 39.1 | -0.7 |
| KSH | Kashi | 84.46 | 310 | P | P | 23 28 10.0 | +1.7 |
| KSH | | | | epP | pP | 23 28 42.3 | +1.5 |
| KSH | | | | ePP | PP | 23 31 26.1 | +0.8 |
| KSH | | | | S | S | 23 38 25.6 | +1.2 |
| KSH | | | | sS | sS | 23 39 21.6 | +1.1 |
| KSH | | | | PMZ | | | |
| | comp=E,15nm,0.8s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=E,130nm,3.5s | | | | | | |
| KSH | | | | LN | | | |
| | comp=E,97nm,5.2s | | | | | | |
| KSH | | | | LE | | | |
| | comp=E,92nm,4.7s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=E,140nm,7.9s | | | | | | |
| QSPA | South Pole Qui | 84.50 | 180 | P | P | 23 28 07.6 | -0.3 |
| | comp=E,39nm,0.8s,baz=305,slow=0.4,SNR=257 | | | | | | |
| DAWY | Dawson | 84.81 | 24 | eP | P | 23 28 10.7 | +1.3 |
| | comp=E,46nm,1.3s | | | | | | |
| KURK | Kurchatov | 85.17 | 322 | eP | P | 23 28 10.7 | -0.7 |
| KURK | | | | e*PP | pP | 23 28 43.4 | -0.6 |
| KURK | | | | pmax | pmax | | |
| | comp=Z,27nm,0.6s | | | | | | |
| KURK | Kurchatov | 85.17 | 322 | eP | P | 23 28 10.7 | -0.7 |
| | comp=Z,27nm,0.6s | | | | | | |
| KURK | | | | epP | pP | 23 28 43.4 | -0.6 |
| KURBB | Kurchatov Arra | 85.21 | 322 | P | P | 23 28 10.2 | -1.4 |
| | comp=Z,5.3nm,0.5s,baz=99,slow=4.8,SNR=44 | | | | | | |
| TKM2 | Tokmak 2 | 85.42 | 314 | eP | P | 23 28 12.7 | -0.4 |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| TKM2 | Tokmak 2 | 85.42 | 314 | eP | P | 23 28 12.7 | -0.4 |
| | comp=Z,7.7nm,0.6s | | | | | | |
| MAW | Mawson | 85.51 | 203 | P | P | 23 28 12.5 | -0.2 |
| | comp=Z,50nm,0.7s,baz=100,slow=5.5,SNR=132 | | | | | | |
| MAW | | | | LR | LR | 00 05 08.3 | |
| | comp=Z,31nm,18.6s,baz=62,slow=35 | | | | | | |
| MAW | Mawson | 85.51 | 203 | eP | P | 23 28 12.6 | -0.2 |
| MAW | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| MAW | Mawson | 85.51 | 203 | P | P | 23 28 12.5 | -0.2 |
| | baz=86,SNR=19 | | | | | | |
| MAW | Mawson | 85.51 | 203 | eP | P | 23 28 12.6 | -0.2 |
| | comp=Z,9.9nm,0.7s | | | | | | |
| FRU | Bishkek | 86.11 | 314 | eP | P | 23 28 14.0 | -2.3 |
| FRU | | | | e | | 23 28 45.0 | |
| AAK | Ala-Archa | 86.16 | 313 | P | P | 23 28 15.9 | -0.9 |
| | comp=Z,3.3nm,0.7s,baz=139,slow=6.0,SNR=10 | | | | | | |
| AAK | Ala-Archa | 86.16 | 313⇓ | eP | P | 23 28 16.3 | -0.4 |
| AAK | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| AAK | Ala-Archa | 86.16 | 313 | eP | P | 23 28 16.1 | -0.6 |
| EKS2 | Erkin-Say | 86.69 | 313 | eP | P | 23 28 18.9 | -0.3 |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| EKS2 | Erkin-Say | 86.69 | 313 | eP | P | 23 28 18.9 | -0.3 |
| | comp=Z,7.1nm,0.9s | | | | | | |
| DLBC | Dease Lake | 87.22 | 31 | P | P | 23 28 22.6 | +1.2 |
| | comp=Z,5.5nm,0.7s,baz=259,slow=2.7,SNR=7.6 | | | | | | |
| DLBC | Dease Lake | 87.22 | 31 | P | P | 23 28 22.6 | +1.2 |
| DLBC | | | | epP | pP | 23 28 55.0 | +0.9 |
| INK | Inuvik | 88.57 | 21 | P | P | 23 28 27.1 | -0.3 |
| | comp=Z,3.3nm,0.5s,baz=266,slow=4.9,SNR=24 | | | | | | |
| INK | Inuvik | 88.57 | 21 | P | P | 23 28 27.1 | -0.3 |
| INK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| INK | Inuvik | 88.57 | 21 | eP | P | 23 28 26.9 | -0.5 |
| | comp=Z,31nm,1.3s | | | | | | |
| LRV | Little Rabbit | 88.99 | 53 | eP | P | 23 28 31.2 | +1.0 |
| KKAR | Karatay Array | 89.13 | 313 | eP | P | 23 28 29.8 | -0.9 |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KKAR | Karatay Array | 89.13 | 313 | eP | P | 23 28 29.8 | -0.9 |
| | comp=Z,2.9nm,0.7s | | | | | | |
| BVAR | Borovoye Array | 90.63 | 323 | P | P | 23 28 35.6 | -1.8 |
| | comp=Z,6.3nm,0.6s,baz=111,slow=5.5,SNR=19 | | | | | | |
| BVAR | | | | LR | LR | 00 10 38.3 | |
| | comp=Z,61nm,18.1s,baz=75,slow=36 | | | | | | |
| BVAR | Borovoye Array | 90.63 | 323 | P | P | 23 28 35.6 | -1.8 |
| BVAR | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | |
| BVAR | | | | MLR | MLR | | |
| | comp=Z,61nm,18.1s | | | | | | |
| BRVK | Borovoye | 90.70 | 323 | eP | P | 23 28 37.7 | -0.1 |
| BRVK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| BRVK | Borovoye | 90.70 | 323 | eP | P | 23 28 37.7 | -0.1 |
| | comp=Z,5.3nm,0.7s | | | | | | |
| NV01 | Mina Array Sit | 91.37 | 52 | eP | P | 23 28 42.6 | +1.0 |
| NVAR | Mina Array Bea | 91.37 | 52 | P | P | 23 28 41.7 | +0.2 |
| | comp=Z,2.7nm,0.8s,baz=257,slow=6.7,SNR=10 | | | | | | |
| NVAR | | | | pP | pP | 23 29 12.3 | -2.0 |
| | comp=Z,4.0nm,0.9s,baz=260,slow=5.9,SNR=5.3 | | | | | | |
| NVAR | | | | LR | LR | 00 06 04.4 | |
| | comp=Z,71nm,18.8s,baz=267,slow=33 | | | | | | |
| NEW | Newport | 93.13 | 42 | pP | pP | 23 29 19.9 | -2.2 |
| | comp=Z,3.7nm,0.9s,baz=328,slow=4.1,SNR=4.4 | | | | | | |
| SYO | Syowa Base | 93.51 | 199⇓ | eP | P | 23 28 48.0 | -2.4 |
| YKA | Yellowknife Ar | 95.35 | 28 | P | P | 23 28 59.1 | +0.2 |
| | comp=Z,1.8nm,0.6s,baz=273,slow=4.6,SNR=9.1 | | | | | | |
| YKA | | | | pP | pP | 23 29 29.6 | -2.2 |
| | comp=Z,2.4nm,0.7s,baz=271,slow=4.6,SNR=3.6 | | | | | | |
| YKA | Yellowknife Ar | 95.35 | 28 | P | P | 23 28 59.1 | +0.2 |
| YKA | | | | *PP | pP | 23 29 29.6 | -2.2 |
| YKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| YKA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| NOQ | North Oquirrh | 96.29 | 50 | eP | P | 23 29 02.8 | -1.1 |
| GEYT | Alibeck | 98.16 | 307 | PP | PP | 23 33 12.9 | -0.4 |
| | comp=Z,2.4nm,0.8s,baz=68,slow=8.8,SNR=5.3 | | | | | | |
| PV10 | Paradox Valley | 98.64 | 52 | eP | P | 23 29 10.3 | -4.4 |
| RES | Resolute Bay | 100.69 | 15 | P | Pdif | 23 29 23.6 | +0.9 |
| | comp=Z,4.2nm,1.1s,baz=316,slow=15,SNR=5.7 | | | | | | |
| RES | Resolute Bay | 100.69 | 15 | P | Pdif | 23 29 23.6 | +0.9 |
| RES | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| SNAA | Sanae | 101.55 | 187 | P | Pdif | 23 29 25.8 | -1.0 |
| | comp=Z,0.3nm,0.6s,baz=214,slow=3.6,SNR=3.6 | | | | | | |
| TXAR | Lajitas Array | 103.20 | 61 | Pdiff | Pdif | 23 29 36.2 | +1.2 |
| | comp=Z,0.3nm,0.7s,baz=224,slow=5.0,SNR=2.4 | | | | | | |
| TXAR | | | | PP | PP | 23 33 52.1 | +0.4 |
| | comp=Z,0.6nm,1.0s,baz=258,slow=6.2,SNR=3.5 | | | | | | |
| TXAR | Lajitas Array | 103.20 | 61 | P | Pdif | 23 29 36.2 | +1.2 |
| TXAR | | | | | | 23 33 52.1 | |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| APA | Apatity | 106.45 | 340⇓ | iP | Pdif | 23 30 02.0 | +14 |
| ARCES | ARCESS Array B | 107.92 | 343 | PKiKP | PKiKP | 23 34 00.6 | -0.8 |
| | comp=Z,8.3nm,1.1s,baz=129,slow=0.9,SNR=8.1 | | | | | | |
| FINES | FINESS Array B | 112.25 | 336 | Pdiff | Pdif | 23 30 11.0 | -3.3 |
| | comp=Z,2.5nm,1.1s,baz=66,slow=6.8,SNR=4.4 | | | | | | |
| FINES | | | | PKiKP | PKiKP | 23 34 09.0 | -0.8 |
| | comp=Z,4.2nm,1.0s,baz=106,slow=4.9,SNR=5.3 | | | | | | |
| AKASG | Malin Array Be | 115.87 | 325 | PKP | PKPdf | 23 34 15.8 | -1.3 |
| | comp=Z,1.4nm,0.5s,baz=62,slow=2.0,SNR=6.5 | | | | | | |
| AKASG | | | | PP | PP | 23 35 19.8 | -2.4 |
| | comp=Z,1.6nm,0.8s,baz=58,slow=5.0,SNR=8.5 | | | | | | |
| AKASG | Malin Array Be | 115.87 | 325 | PKIKP | PKPdf | 23 34 15.8 | -1.3 |
| AKASG | | | | | | 23 35 19.8 | |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| AK11 | Malin Array Si | 115.91 | 325 | ePKPdf | PKPdf | 23 34 16.6 | -0.5 |
| ASF | Jabal al Asfar | 115.97 | 303 | PP | PP | 23 35 22.8 | -1.1 |
| | comp=Z,1.7nm,0.8s,baz=342,slow=6.4,SNR=3.7 | | | | | | |
| KMBO | Kilima Mbogo | 116.73 | 266 | i PKIKP | PKPdf | 23 34 20.2 | +0.1 |
| BRTR | Keskin Array B | 116.81 | 312 | PKP | PKPdf | 23 34 18.5 | -1.0 |
| | comp=Z,0.4nm,0.6s,baz=149,slow=4.8,SNR=3.8 | | | | | | |
| BRTR | | | | PP | PP | 23 35 27.4 | -2.1 |
| | comp=Z,1.7nm,0.8s,baz=100,slow=6.0,SNR=8.0 | | | | | | |
| BRTR | Keskin Array B | 116.81 | 312 | PKIKP | PKPdf | 23 34 18.5 | -1.0 |
| BRTR | | | | | | 23 35 27.4 | |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| HFS | Hagfors | 117.82 | 339 | PKP | PKPdf | 23 34 19.8 | -0.8 |
| | comp=Z,1.5nm,0.6s,baz=21,slow=8.7,SNR=9.6 | | | | | | |
| HFS | Hagfors | 117.82 | 339 | PKIKP | PKPdf | 23 34 19.8 | -0.8 |
| HFS | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| NB2 | NORSAR Subarra | 118.02 | 341 | PKPdf | PKPdf | 23 34 20.6 | -0.4 |
| | comp=Z,1.1nm,0.5s,baz=39,slow=1.9 | | | | | | |
| NOA | NORSAR Array B | 118.02 | 341 | PKP | PKPdf | 23 34 20.5 | -0.5 |
| | comp=Z,1.4nm,0.6s,baz=72,slow=1.8,SNR=7.0 | | | | | | |
| NOA | NORSAR Array B | 118.02 | 341 | PKIKP | PKPdf | 23 34 20.5 | -0.5 |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| BUR04 | Bucovina Ar. S | 119.59 | 323 | ePKPdf | PKPdf | 23 34 25.8 | +1.3 |
| MLR | Muntele Rosu | 120.08 | 320 | PKP | PKPdf | 23 34 25.6 | 0.0 |
| | comp=Z,0.3nm,0.7s,baz=94,slow=1.5,SNR=3.6 | | | | | | |
| BOSA | Boshof | 120.36 | 232 | PKP | PKPdf | 23 34 26.4 | -0.2 |
| | comp=Z,1.9nm,0.8s,baz=90,slow=2.3,SNR=3.6 | | | | | | |
| BOSA | Boshof | 120.36 | 232 | PKIKP | PKPdf | 23 34 26.4 | -0.2 |
| BOSA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| KOLS | Kolonicke sedl | 120.67 | 325 | ePKIKP | PKPdf | 23 34 24.8 | -1.6 |
| KOLS | Kolonicke sedl | 120.67 | 325 | ePKP | PKPdf | 23 34 24.8 | -1.6 |
| STHS | Stebnicka Huta | 121.00 | 326 | ePKIKP | PKPdf | 23 34 26.0 | -1.0 |
| STHS | Stebnicka Huta | 121.00 | 326 | ePKP | PKPdf | 23 34 26.0 | -1.0 |
| CLL | Collm | 124.12 | 332⇑ | iPKIKP | PKPdf | 23 34 33.2 | +0.3 |
| CLL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | |
| CLL | Collm | 124.12 | 332⇑ | iPKPdf | PKPdf | 23 34 33.2 | +0.3 |
| | comp=Z,5.0nm,0.5s | | | | | | |
| CLL | | | | LmV | | 00 29 00.0 | |
| | comp=Z,100nm,21.3s | | | | | | |
| GOPC | GO Pecny, Ondr | 124.14 | 329 | ePKIKP | PKPdf | 23 34 33.9 | +0.8 |
| GOPC | GO Pecny, Ondr | 124.14 | 329 | ePKPdf | PKPdf | 23 34 33.9 | +0.8 |
| PRU | Pruhonice | 124.22 | 330 | ePKIKP | PKPdf | 23 34 33.6 | +0.4 |
| PRU | Pruhonice | 124.22 | 330 | ePKPdf | PKPdf | 23 34 33.6 | +0.4 |
| CONA | Conrad Observa | 124.79 | 327⇓ | iPKiKP | PKiKP | 23 34 35.0 | +0.2 |
| | comp=Z,1.6nm,0.6s | | | | | | |
| NKC | Novy Kostel | 125.09 | 331 | ePKIKP | PKPdf | 23 34 35.4 | +0.5 |
| NKC | Novy Kostel | 125.09 | 331 | ePKPdf | PKPdf | 23 34 35.4 | +0.5 |
| KHC | Kasperske Hory | 125.25 | 329 | ePKIKP | PKPdf | 23 34 35.7 | +0.5 |
| KHC | Kasperske Hory | 125.25 | 329 | ePKPdf | PKPdf | 23 34 35.7 | +0.5 |
| GEC2 | GERESS Array S | 125.37 | 329 | ePKIKP | PKPdf | 23 34 35.6 | +0.1 |
| GEC2 | GERESS Array S | 125.37 | 329 | ePKPdf | PKPdf | 23 34 35.6 | +0.1 |
| GERES | GERESS Array B | 125.37 | 329 | PKP | PKPdf | 23 34 35.0 | -0.5 |
| | comp=Z,2.9nm,0.6s,baz=62,slow=1.7,SNR=35 | | | | | | |
| GERES | GERESS Array B | 125.37 | 329 | PKIKP | PKPdf | 23 34 35.1 | -0.5 |
| GERES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | |
| EKA | Eskdalemuir Ar | 127.07 | 344 | PKP | PKPdf | 23 34 38.7 | +0.2 |
| | comp=Z,0.9nm,0.5s,baz=18,slow=2.9,SNR=12 | | | | | | |
| EKA | Eskdalemuir Ar | 127.07 | 344 | PKIKP | PKPdf | 23 34 38.7 | +0.2 |
| EKA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| ABTA | Abfaltersbach | 127.31 | 328⇑ | iPKiKP | PKPdf | 23 34 39.4 | +0.1 |
| | comp=Z,2.6nm,0.6s | | | | | | |
| DAVOX | Davos/Dischmat | 128.67 | 329 | PKP | PKPdf | 23 34 42.7 | +0.7 |
| | comp=Z,3.9nm,0.6s,baz=230,slow=4.8,SNR=17 | | | | | | |
| DAVOX | Davos/Dischmat | 128.67 | 329 | PKIKP | PKPdf | 23 34 42.7 | +0.7 |
| DAVOX | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| TSUM | Tsumeb | 130.78 | 239 | SKPbc | SKPbc | 23 37 58.4 | -0.9 |
| | comp=Z,6.2nm,1.0s,baz=203,slow=2.7,SNR=4.1 | | | | | | |
| LPAZ | La Paz | 132.84 | 118 | PKhKP | PKPpre | 23 34 41.9 | |
| | comp=Z,0.5nm,0.7s,baz=220,slow=2.7,SNR=2.7 | | | | | | |
| LPAZ | | | | PKP | PKPdf | 23 34 51.2 | -0.1 |
| | comp=Z,1.1nm,0.6s,baz=309,slow=4.5,SNR=4.7 | | | | | | |
| LPAZ | | | | SKPab | SKPab | 23 38 08.3 | -0.7 |
| | comp=Z,3.4nm,1.0s,baz=245,slow=0.9,SNR=4.8 | | | | | | |
| LPAZ | La Paz | 132.84 | 118 | ePKIKP | PKPdf | 23 34 51.0 | -0.3 |
| SDV | Santo Domingo | 135.37 | 83 | ePKPdf | PKPdf | 23 34 54.8 | -0.8 |
| SDV | | | | eSKPbc | SKPbc | 23 38 15.6 | +0.5 |
| CPUP | Villa Florida | 136.01 | 137 | PKP | PKPdf | 23 34 56.4 | +0.2 |
| | comp=Z,1.4nm,0.9s,baz=198,slow=4.9,SNR=4.0 | | | | | | |
| CPUP | Villa Florida | 136.01 | 137 | PKIKP | PKPdf | 23 34 56.4 | +0.2 |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| ESDC | Sonseca Array | 140.68 | 333 | PKhKP | PKPpre | 23 34 57.6 | |
| | comp=Z,0.4nm,0.5s,baz=6.7,slow=2.9,SNR=4.2 | | | | | | |
| ESDC | | | | PP | PP | 23 38 03.6 | -0.8 |
| | comp=Z,1.9nm,0.8s,baz=17,slow=6.3,SNR=6.4 | | | | | | |
| PBEJ | Beja | 143.73 | 336 | ePKPdf | PKPbc | 23 35 07.5 | -0.2 |
| PNCL | Nicolau / Gran | 143.92 | 337 | ePKPdf | PKPbc | 23 35 08.6 | +0.3 |
| PCVE | Castro Verde | 144.14 | 336 | ePKPdf | PKPdf | 23 35 10.3 | -0.3 |
| PTEO | Sao Teotonio | 144.49 | 336 | ePKPdf | PKPbc | 23 35 10.0 | 0.0 |
| PFVI | Vila Bisbo | 144.89 | 336 | ePKPdf | PKPab | 23 35 11.3 | 0.0 |
| TAM | Tamanrasset | 145.24 | 303 | ePKIKP | PKPab | 23 35 13.6 | +0.3 |
| TAM | Tamanrasset | 145.24 | 303 | ePKPbc | PKPab | 23 35 13.6 | +0.3 |
| MDT | Midelt | 146.40 | 327 | PKPbc | PKPdf | 23 35 15.4 | +0.6 |
| | comp=Z,4.3nm,0.5s,baz=96,slow=2.0,SNR=22 | | | | | | |
| BDFB | Brasilia | 149.58 | 134 | PKP | PKPdf | 23 35 19.5 | -1.0 |
| | comp=Z,2.5nm,0.7s,baz=267,slow=2.3,SNR=3.5 | | | | | | |
| BDFB | | | | PKPbc | PKPbc | 23 35 25.3 | +0.2 |
| | comp=Z,4.3nm,0.7s,baz=254,slow=3.5,SNR=9.1 | | | | | | |
| BDFB | Brasilia | 149.58 | 134 | PKIKP | PKPdf | 23 35 19.5 | -1.0 |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| TOA0 | Torodi Ar. Sit | 151.87 | 288 | ePKPdf | PKPbc | 23 35 28.8 | -1.6 |
| TORD | Torodi Ar. Bea | 151.87 | 288 | PKPbc | PKPbc | 23 35 28.6 | -1.8 |
| | comp=Z,4.7nm,0.6s,baz=72,slow=1.9,SNR=42 | | | | | | |
| DBIC | Dimbokro | 159.18 | 274 | PKPab | PKPab | 23 36 10.7 | -0.6 |
| | comp=Z,4.5nm,0.7s,baz=63,slow=5.7,SNR=4.2 | | | | | | |
| DBIC | Dimbokro | 159.18 | 274 | PKP2 | PKPab | 23 36 10.7 | -0.6 |
| DBIC | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |

*ISK **24** 23:21:39.6, 39°.58N×38°.08E, h9km, MD2.8*
*ISCJB **24** 23:21:40.8±0.8, 39°.58N±0°.03×38°.05E±0°.04, h9km±7km, Error ellipse: s-maj=6.8km s-min=4.2km az=40.7*
*CSEM **24** 23:21:40.7±0.2, 39°.58N×38°.03E, h15km, MD2.7, Error ellipse: s-maj=4.7km s-min=3.8km az=91.0*
*DDA **24** 23:21:40.8, 39°.57N×38°.06E, h7km, Md2.7*
**ISC 24 23:21:41.0**±1.0, **39°.58N**±0°.03×**38°.05E**±0°.03, **h15**km±9km, **n24**, σ**0.s56**/40, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CUZAR** | **Zara_SIVAS** | **0.38** | **326** | **P** | **Pg** | **23 21 48.7** | **-0.1** |
| CUZAR | | | | S | Sg | 23 21 54.8 | +0.7 |
| **CUKAN** | **kangal_SIVAS** | **0.52** | **240** | P | Pg | 23 21 50.7 | -0.6 |
| CUKAN | | | | S | Sg | 23 21 58.9 | +0.6 |
| **SUSE** | **Susehri** | **0.64** | **11** | *i* P | **Pg** | 23 21 53.5 | -0.1 |
| SUSE | | | | *i* S | Sg | 23 22 02.2 | 0.0 |
| **SUSE** | **Susehri** | **0.64** | **11** | P | **Pg** | 23 21 53.5 | -0.1 |
| SUSE | | | | S | Sg | 23 22 02.2 | 0.0 |
| **SVSK** | **Karacayir** | **0.88** | **293** | *e*PG | **Pg** | 23 21 57.3 | -0.7 |
| SVSK | | | | *e*SG | **Sb** | 23 22 10.1 | +0.7 |
| **SVSK** | **Karacayir** | **0.88** | **293** | *e*Pg | **Pg** | 23 21 57.3 | -0.7 |
| SVSK | | | | *e*Sg | **Sb** | 23 22 10.1 | +0.7 |
| **CUALT** | **Altinyayla-SIV** | **1.04** | **253** | P | **Pb** | 23 22 00.2 | -0.6 |
| CUALT | | | | S | **Sn** | 23 22 16.2 | +0.6 |
| **KELT** | **Kelkit** | **1.09** | **58** | *i* P | **Pg** | 23 22 02.2 | 0.0 |
| KELT | | | | *i* S | **Sg** | 23 22 16.8 | +0.4 |
| **KELT** | **Kelkit** | **1.09** | **58** | P | **Pg** | 23 22 02.2 | 0.0 |
| KELT | | | | S | **Sg** | 23 22 16.8 | +0.4 |
| **DARE** | **Darende-Malaty** | **1.10** | **204** | *e*PN | **Pb** | 23 22 01.3 | -0.5 |
| DARE | | | | *e*SN | **Sn** | 23 22 17.1 | +0.2 |
| **DARE** | **Darende-Malaty** | **1.10** | **204** | *e*Pn | **Pb** | 23 22 01.3 | -0.5 |
| DARE | | | | *e*Sn | **Sn** | 23 22 17.1 | +0.2 |
| **PTK** | **Pertek** | **1.25** | **123** | *e*PN | **Pn** | 23 22 03.3 | -0.9 |
| PTK | | | | *e*SN | **Sn** | 23 22 21.0 | +0.2 |
| **PTK** | **Pertek** | **1.25** | **123** | *e*Pn | **Pn** | 23 22 03.3 | -0.9 |
| PTK | | | | *e*Sn | **Sn** | 23 22 21.0 | +0.2 |
| **AKCD** | **Akcadag** | **1.28** | **184** | *i* P | **Pn** | 23 22 04.9 | +0.3 |
| **AKCD** | **Akcadag** | **1.28** | **184** | P | **Pn** | 23 22 04.9 | +0.3 |
| AKCD | | | | S | **Sg** | 23 22 23.9 | +1.4 |
| **MALT** | **Malatya** | **1.30** | **167** | *e*PN | **Pn** | 23 22 03.7 | -1.0 |
| **MALT** | **Malatya** | **1.30** | **167** | *e*Pn | **Pn** | 23 22 03.7 | -1.0 |
| **ELZG** | **Elazig** | **1.30** | **146** | *i* P | **Pb** | 23 22 05.6 | +0.3 |
| ELZG | | | | *i* S | **Sg** | 23 22 23.1 | 0.0 |
| **ELZG** | **Elazig** | **1.30** | **146** | P | **Pb** | 23 22 05.6 | +0.3 |
| ELZG | | | | S | **Sg** | 23 22 23.1 | 0.0 |
| **GUMT** | **Gumushane** | **1.41** | **51** | *e*PN | **Pn** | 23 22 05.9 | -0.4 |
| **GUMT** | **Gumushane** | **1.41** | **51** | *e*Pn | **Pn** | 23 22 05.9 | -0.4 |
| **ESPY** | **Espiye-Giresun** | **1.44** | **21** | *e*PN | **Pn** | 23 22 06.1 | -0.4 |
| **ESPY** | **Espiye-Giresun** | **1.44** | **21** | *e*Pn | **Pn** | 23 22 06.1 | -0.4 |
| **SARI** | **SarD1z-Kayseri** | **1.73** | **228** | *e*PN | **Pn** | 23 22 10.9 | +0.3 |

*CSEM* ***24*** *23:26:48.3, 46°.11N×14°.95E, h0km, ML0.7, After LJU*
**LJU 24 23:26:48.3, 46°.11N×14°.95E, h7km, ML0.7, 2C,**
**Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PDKS** | **Podkum** | **0.06** | **146** | ⇑*i* Pg | Pg | 23 26 50.2 | +0.1 |
| PDKS | | | | *i* Sg | Sg | 23 26 51.4 | +0.1 |
| | comp=Z,19nm,0.1s | | | | | | |
| **PDKS** | **Podkum** | **0.06** | **146** | ⇑*i* Pg | Pg | 23 26 50.2 | +0.1 |
| PDKS | | | | *i* Sg | Sg | 23 26 51.4 | +0.1 |
| | comp=Z,19nm,0.1s | | | | | | |
| **VNDS** | **Vrh nad Dolski** | **0.17** | **268** | *i* Pg | Pg | 23 26 52.3 | +0.3 |
| | comp=Z,4.0nm,0.1s | | | | | | |
| **LEGS** | **Legarje** | **0.30** | **122** | *i* Pg | Pg | 23 26 54.5 | +0.3 |
| LEGS | | | | *i* Sg | Sg | 23 26 58.6 | +0.3 |
| **LEGS** | **Legarje** | **0.30** | **122** | *i* Pg | Pg | 23 26 54.5 | +0.3 |
| LEGS | | | | *i* Sg | Sg | 23 26 58.6 | +0.3 |
| **DOBS** | **Dobrina** | **0.36** | **83** | *i* Pg | Pg | 23 26 55.5 | +0.1 |
| DOBS | | | | *i* Sg | Sg | 23 27 01.0 | +0.7 |
| | comp=Z,2.0nm,0.1s | | | | | | |
| **DOBS** | **Dobrina** | **0.36** | **83** | *i* Pg | Pg | 23 26 55.5 | +0.1 |
| DOBS | | | | *i* Sg | Sg | 23 27 01.0 | +0.8 |
| | comp=Z,2.0nm,0.1s | | | | | | |
| **CRES** | **Cresnjev** | **0.45** | **128** | *i* Pg | Pg | 23 26 57.3 | +0.2 |
| **CRES** | **Cresnjev** | **0.45** | **128** | *i* Pg | Pg | 23 26 57.3 | +0.2 |
| **GOLS** | **Golise** | **0.48** | **101** | *i* Pg | Pg | 23 26 57.8 | +0.2 |
| **GOLS** | **Golise** | **0.48** | **101** | *i* Pg | Pg | 23 26 57.8 | +0.2 |
| **CRNS** | **Crni Vrh** | **0.48** | **267** | *i* Pg | Pg | 23 26 58.3 | +0.6 |
| **CEY** | **Cerknica** | **0.52** | **225** | *i* Pg | Pg | 23 26 58.5 | +0.1 |
| **CEY** | **Cerknica** | **0.52** | **225** | *i* Pg | Pg | 23 26 58.5 | +0.1 |
| **GROS** | **Grobnik** | **0.52** | **47** | *i* Pg | Pg | 23 26 58.3 | -0.2 |
| **GROS** | **Grobnik** | **0.52** | **47** | *i* Pg | Pg | 23 26 58.3 | -0.2 |

*ISK* ***24*** *23:33:51.9, 37°.06N×28°.56E, h8km, MD3.0*
*ATH* ***24*** *23:33:51.9, 37°.07N×28°.49E, h20km±2km, MD3.3/11*
*CSEM* ***24*** *23:33:52.8±0.1, 37°.04N×28°.53E, h10km, MD3.0, Error ellipse: s-maj=3.3km s-min=3.0km az=111.0*
*ISCJB* ***24*** *23:33:52.5±0.4, 37°.03N±0°.02×28°.51E±0°.02, h6km±3km, Error ellipse: s-maj=3.3km s-min=3.1km az=2.7*
*THE* ***24*** *23:33:52.6, 37°.06N×28°.54E, h0km±4km, ML3.4/2, Error ellipse: s-maj=9.8km s-min=1.5km az=62.0*
*DDA* ***24*** *23:33:53.3, 37°.10N×28°.52E, h24km, Md3.2*
**ISC 24 23:33:53.4±0.8, 37°.06N±0°.02×28°.50E±0°.02, h13km±6km,**
**n79, σ1s06/119, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.19** | **293** | PG | **Pg** | **23 33 57.0** | **-0.7** |
| YER | | | | *e*SG | **Sg** | 23 34 00.6 | -0.1 |
| **TURN** | **Turunc** | **0.20** | **156** | *i* P | **Pg** | 23 33 58.9 | +1.0 |
| **TURN** | **Turunc** | **0.20** | **156** | P | **Pg** | 23 33 58.9 | +1.0 |
| TURN | | | | S | **Sg** | 23 34 04.8 | +3.8 |
| **DALY** | **Dalyan (Mu¨la** | **0.27** | **153** | *e*PG | **Pg** | 23 33 57.5 | -1.6 |
| DALY | | | | *e*SG | **Sg** | 23 34 01.5 | -1.4 |
| **DALY** | **Dalyan (Mu¨la** | **0.27** | **153** | *e*Pg | **Pg** | 23 33 57.5 | -1.6 |
| DALY | | | | *e*Sg | **Sg** | 23 34 01.5 | -1.4 |
| **FETY** | **Fethiye** | **0.63** | **132** | *e*PG | **Pg** | 23 34 04.0 | -1.7 |
| FETY | | | | *e*SG | **Sg** | 23 34 12.7 | -1.4 |
| **FETY** | **Fethiye** | **0.63** | **132** | *e*Pg | **Pg** | 23 34 04.0 | -1.7 |
| FETY | | | | *e*Sg | **Sg** | 23 34 12.7 | -1.4 |
| **DNZL** | **Cakiroluk** | **0.76** | **34** | *i* P | **Pg** | 23 34 06.9 | -1.4 |
| DNZL | | | | *i* S | **Sb** | 23 34 19.7 | +0.7 |
| **DNZL** | **Cakiroluk** | **0.76** | **34** | P | **Pg** | 23 34 06.9 | -1.4 |
| DNZL | | | | S | **Sb** | 23 34 19.7 | +0.7 |
| **AYDN** | **Tasoluk** | **0.78** | **321** | *i* P | **Pn** | 23 34 09.7 | -0.4 |
| AYDN | | | | *i* S | **Sb** | 23 34 20.3 | +1.0 |
| **AYDN** | **Tasoluk** | **0.78** | **321** | P | **Pn** | 23 34 09.7 | -0.4 |
| AYDN | | | | S | **Sb** | 23 34 20.3 | +1.0 |
| **DENT** | **Denizli** | **0.81** | **31** | *e*PG | **Pg** | 23 34 07.5 | -1.7 |
| **DENT** | **Denizli** | **0.81** | **31** | *e*Pg | **Pg** | 23 34 07.5 | -1.7 |
| **GOLH** | **Golhisar** | **0.86** | **78** | *i* P | **Pg** | 23 34 08.7 | -1.5 |
| **GOLH** | **Golhisar** | **0.86** | **78** | P | **Pg** | 23 34 08.7 | -1.5 |
| GOLH | | | | S | **Sb** | 23 34 21.9 | +0.1 |
| **ARG** | **Arkhangelos** | **0.90** | **200** | *e*PB | **Pg** | 23 34 08.9 | -1.8 |
| ARG | | | | *e*SN | **Sg** | 23 34 22.3 | -0.1 |
| **ARG** | **Arkhangelos** | **0.90** | **200** | P | **Pg** | 23 34 09.7 | -1.0 |
| ARG | | | | S | **Sn** | 23 34 24.7 | +0.3 |
| **ARG** | **Arkhangelos** | **0.90** | **200** | *e*Pb | **Pg** | 23 34 08.9 | -1.8 |
| **ARG** | **Arkhangelos** | **0.90** | **200** | P | **Pg** | 23 34 09.7 | -1.0 |
| ARG | | | | *e*Sn | **Sg** | 23 34 22.3 | -0.1 |
| ARG | | | | S | **Sn** | 23 34 24.7 | +0.3 |
| **AYDB** | **Zeytinkoy-Aydi** | **1.01** | **331** | *e*PG | **Pg** | 23 34 12.1 | -0.8 |
| AYDB | | | | *e*SG | **Sb** | 23 34 26.9 | +0.9 |
| **AYDB** | **Zeytinkoy-Aydi** | **1.01** | **331** | *e*Pg | **Pg** | 23 34 12.1 | -0.8 |
| AYDB | | | | *e*Sg | **Sb** | 23 34 26.9 | +0.9 |
| **NIS1** | **Nisyros Isl.** | **1.16** | **247** | *e*PN | **Pn** | 23 34 15.5 | +0.3 |
| **NIS1** | **Nisyros Isl.** | **1.16** | **247** | *e*PN | **Pb** | 23 34 14.5 | -0.6 |
| **NIS1** | **Nisyros Isl.** | **1.16** | **247** | P | **Pb** | 23 34 14.6 | -0.6 |
| NIS1 | | | | S | **Sn** | 23 34 31.8 | +0.9 |
| **NIS1** | **Nisyros Isl.** | **1.16** | **247** | P | **Pb** | 23 34 14.6 | -0.6 |
| **NIS1** | **Nisyros Isl.** | **1.16** | **247** | *e*Pn | **Pn** | 23 34 15.5 | +0.3 |
| NIS1 | | | | S | **Sn** | 23 34 31.8 | +0.9 |
| **ELL** | **Elmali** | **1.17** | **105** | *e*PN | **Pb** | 23 34 14.0 | -1.5 |
| **ELL** | **Elmali** | **1.17** | **105** | *e*Pn | **Pb** | 23 34 14.0 | -1.5 |
| **NISR** | **Nisiros** | **1.19** | **248** | *e*PN | **Pb** | 23 34 14.3 | -1.4 |
| NISR | | | | *e*SN | **Sb** | 23 34 30.8 | -0.2 |
| **NISR** | **Nisiros** | **1.19** | **248** | P | **Pb** | 23 34 14.5 | -1.2 |
| NISR | | | | S | **Sn** | 23 34 32.9 | +1.3 |
| **NISR** | **Nisiros** | **1.19** | **248** | P | **Pb** | 23 34 14.5 | -1.2 |
| NISR | | | | *e*Sn | **Sb** | 23 34 30.8 | -0.2 |
| NISR | | | | S | **Sn** | 23 34 32.9 | +1.3 |
| **GCAM** | **G?zelcaml?** | **1.20** | **303** | *i* P | **Pb** | 23 34 15.6 | -0.2 |
| GCAM | | | | *i* S | **Sn** | 23 34 33.6 | +1.8 |
| **GCAM** | **G?zelcaml?** | **1.20** | **303** | P | **Pb** | 23 34 15.6 | -0.2 |
| GCAM | | | | S | **Sn** | 23 34 33.6 | +1.8 |
| **AKAS** | **Kas** | **1.21** | **133** | *i* P | **Pg** | 23 34 16.6 | -0.2 |
| **AKAS** | **Kas** | **1.21** | **133** | P | **Pg** | 23 34 16.6 | -0.2 |
| AKAS | | | | S | **Sn** | 23 34 35.0 | +2.6 |
| **KSL** | **Kastellorizon** | **1.26** | **136** | *e*PN | **Pn** | 23 34 16.2 | -0.4 |
| **MANT** | **Manisa** | **1.43** | **2** | *i* P | **Pn** | 23 34 19.1 | -0.1 |
| MANT | | | | *i* S | **Sg** | 23 34 38.8 | -0.7 |
| **MANT** | **Manisa** | **1.43** | **2** | P | **Pn** | 23 34 19.1 | -0.1 |
| MANT | | | | S | **Sg** | 23 34 38.8 | -0.7 |
| **KULA** | **Kula-Manisa** | **1.46** | **5** | *e*PN | **Pn** | **23 34 19.2** | **-0.3** |
| **KULA** | **Kula-Manisa** | **1.46** | **5** | *e*Pn | **Pn** | **23 34 19.2** | **-0.3** |
| **SMG** | **Samos** | **1.48** | **297** | *e*PN | **Pn** | 23 34 19.2 | -0.4 |
| **SMG** | **Samos** | **1.48** | **297** | P | **Pn** | 23 34 19.2 | -0.4 |
| **SMG** | **Samos** | **1.48** | **297** | P | **Pn** | 23 34 19.2 | -0.4 |
| **KORT** | **Korkueli** | **1.48** | **92** | *i* P | **Pg** | 23 34 21.8 | -0.1 |
| **KORT** | **Korkueli** | **1.48** | **92** | P | **Pg** | 23 34 21.8 | -0.1 |
| KORT | | | | S | **Sg** | 23 34 44.3 | +3.2 |
| **KHL** | **Karahalli** | **1.50** | **32** | *e*PN | **Pn** | 23 34 19.6 | -0.4 |
| **KHL** | **Karahalli** | **1.50** | **32** | *e*Pn | **Pn** | 23 34 19.6 | -0.4 |
| **KHAL** | **Karahalli** | **1.53** | **31** | *i* P | **Pn** | 23 34 20.1 | -0.3 |
| KHAL | | | | *i* S | **Sg** | 23 34 41.9 | -0.6 |
| **KHAL** | **Karahalli** | **1.53** | **31** | P | **Pn** | 23 34 20.1 | -0.3 |
| KHAL | | | | S | **Sg** | 23 34 41.9 | -0.6 |
| **BLCB** | **Balcova** | **1.76** | **319** | *e*PN | **Pn** | 23 34 23.8 | +0.3 |
| **BLCB** | **Balcova** | **1.76** | **319** | *e*Pn | **Pn** | 23 34 23.8 | +0.3 |
| **KARP** | **Karpathos** | **1.86** | **216** | *e*PN | **Pn** | 23 34 24.7 | -0.2 |
| **KARP** | **Karpathos** | **1.86** | **216** | P | **Pn** | 23 34 25.3 | +0.4 |
| KARP | | | | S | **Sb** | 23 34 50.2 | -0.1 |
| **KARP** | **Karpathos** | **1.86** | **216** | *e*Pn | **Pn** | 23 34 24.7 | -0.2 |
| **KARP** | **Karpathos** | **1.86** | **216** | P | **Pn** | 23 34 25.3 | +0.4 |
| KARP | | | | S | **Sb** | 23 34 50.2 | -0.1 |
| **AKS** | **Akhisar** | **1.90** | **344** | *e*PN | **Pn** | 23 34 25.1 | -0.3 |
| **AKS** | **Akhisar** | **1.90** | **344** | *e*Pn | **Pn** | 23 34 25.1 | -0.3 |
| **DEMI** | **Demirci** | **1.99** | **5** | *i* P | **Pn** | 23 34 27.2 | +0.5 |
| DEMI | | | | *i* S | **Sb** | 23 34 54.3 | +0.2 |
| **DEMI** | **Demirci** | **1.99** | **5** | P | **Pn** | 23 34 27.2 | +0.5 |
| DEMI | | | | S | **Sb** | 23 34 54.3 | +0.2 |
| **CHOS** | **Chios island** | **2.35** | **305** | *e*PB | **Pn** | 23 34 32.0 | +0.3 |
| **CHOS** | **Chios island** | **2.35** | **305** | *e*Pb | **Pn** | 23 34 32.0 | +0.3 |
| **APE** | **Apeiranthos** | **2.38** | **271** | *e*PN | **Pn** | 23 34 32.0 | 0.0 |
| **APE** | **Apeiranthos** | **2.38** | **271** | *e*Pn | **Pn** | 23 34 32.0 | 0.0 |
| **SANT** | **Santorini** | **2.54** | **255** | *e*PN | **Pn** | 23 34 34.3 | 0.0 |
| **SANT** | **Santorini** | **2.54** | **255** | *e*Pn | **Pn** | 23 34 34.3 | 0.0 |
| **ZKR** | **Zakros** | **2.68** | **224** | *e*PB | **Pn** | 23 34 37.4 | +1.2 |
| **ZKR** | **Zakros** | **2.68** | **224** | *e*Pb | **Pn** | 23 34 37.4 | +1.2 |
| **NPS** | **Neapolis** | **2.95** | **233** | *e*PN | **Pn** | 23 34 40.2 | +0.3 |
| **NPS** | **Neapolis** | **2.95** | **233** | *e*Pn | **Pn** | 23 34 40.2 | +0.3 |
| **LAST** | **Lasithi** | **3.10** | **233** | *e*PN | **Pn** | 23 34 42.8 | +0.8 |
| **LAST** | **Lasithi** | **3.10** | **233** | *e*Pn | **Pn** | 23 34 42.8 | +0.8 |
| **SIVA** | **Sivas** | **3.62** | **237** | *e*PN | **Pn** | 23 34 49.5 | +0.4 |
| **SIVA** | **Sivas** | **3.62** | **237** | *e*Pn | **Pn** | 23 34 49.5 | +0.4 |
| **VLY** | **Voula,Athens** | **3.83** | **283** | *e*PN | **Pn** | 23 34 52.5 | +0.5 |
| **VLY** | **Voula,Athens** | **3.83** | **283** | *e*Pn | **Pn** | 23 34 52.5 | +0.5 |
| **VLI** | **Veliai** | **4.47** | **267** | *e*PN | **Pn** | 23 35 01.1 | +0.3 |
| **VLI** | **Veliai** | **4.47** | **267** | P | **Pn** | 23 35 01.8 | +1.0 |
| **VLI** | **Veliai** | **4.47** | **267** | *e*Pn | **Pn** | 23 35 01.1 | +0.3 |
| **VLI** | **Veliai** | **4.47** | **267** | P | **Pn** | 23 35 01.8 | +1.0 |

*MOS* ***24*** *23:36:46.9±1.8, 44°.58N×146°.61E, h126km, mb3.9/1, Error ellipse: s-maj=34.5km s-min=18.0km az=50.9*
*ISCJB* ***24*** *23:36:47.5±0.6, 44°.34N±0°.06×146°.75E±0°.07, h124km±4km, mb3.4/5, Error ellipse: s-maj=10.6km s-min=6.2km az=143.1*
*JMA* ***24*** *23:36:48.5±0.3, 44°.34N×146°.77E, h112km±3km, M3.5*
*SKHL* ***24*** *23:36:48.6±0.4, 44°.24N×146°.76E, h126km±1km, mb4.3/3, msh4.8/4*
*IDC* ***24*** *23:36:51.1±3.0, 44°.91N×146°.33E, h135km±27km, mb3.2/5, mb1 3.5/6, mb1mx3.0/50, mbtmp3.6/6, Error ellipse: s-maj=51.3km s-min=24.4km az=149.0*
**ISC 24 23:36:47.9±0.8, 44°.34N±0°.06×146°.77E±0°.05, h122km±6km,**
**n31, σ1s06/40, mb3.4/5, 1C-3D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SHO** | **Shikotan** | **0.47** | **175** | *d*iPN | **Pn** | **23 37 06.1** | **+0.3** |
| SHO | | | | *i* S | **Sn** | **23 37 18.9** | **-0.4** |
| SHO | | | | pmax | pmax | | |
| | comp=Z,84nm,0.3s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=N,41nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,39nm,0.3s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,2μm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **0.47** | **175** | *e*P | **Pn** | **23 37 06.1** | **+0.3** |
| SHO | | | | AMB | AMB | 23 37 06.8 | |
| | comp=E,84nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sn** | **23 37 18.9** | **-0.4** |
| SHO | | | | A | A | 23 37 19.8 | |
| | comp=E,247nm,0.4s | | | | | | |
| SHO | | | | A | A | 23 37 19.8 | |
| | comp=E,320nm,0.4s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.72** | **245** | *c*iPN | **Pn** | **23 37 07.7** | **+0.2** |
| YUK | | | | *i* S | **Sn** | **23 37 22.9** | **+0.6** |
| YUK | | | | pmax | pmax | | |
| | comp=Z,242nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,151nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,82nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,288nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,499nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.72** | **245** | *i* P | **Pn** | **23 37 08.0** | **+0.5** |
| YUK | | | | AMB | AMB | 23 37 09.0 | |
| | comp=E,82nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 23 37 09.0 | |
| | comp=E,151nm,0.3s | | | | | | |
| YUK | | | | AMB | AMB | 23 37 09.0 | |
| | comp=E,242nm,0.3s | | | | | | |
| YUK | | | | *e*S | **Sn** | **23 37 22.9** | **+0.6** |
| YUK | | | | A | A | 23 37 26.2 | |
| | comp=E,288nm,0.6s | | | | | | |
| YUK | | | | A | A | 23 37 26.2 | |
| | comp=E,499nm,0.6s | | | | | | |
| **KUR** | **Kuril'sk** | **1.19** | **41** | *d*iPN | **Pn** | **23 37 12.4** | **+0.6** |
| KUR | | | | *i* S | **Sn** | **23 37 31.3** | **+1.2** |
| KUR | | | | pmax | pmax | | |
| | comp=Z,113nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,36nm,0.2s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,38nm,0.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,111nm,0.4s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,107nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **1.19** | **41** | *i* P | **Pn** | **23 37 12.4** | **+0.6** |
| KUR | | | | AMB | AMB | 23 37 13.5 | |
| | comp=E,56nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 23 37 13.5 | |
| | comp=E,42nm,0.4s | | | | | | |
| KUR | | | | AMB | AMB | 23 37 13.5 | |
| | comp=E,50nm,0.4s | | | | | | |
| KUR | | | | *i* S | **Sn** | **23 37 30.7** | **+0.6** |
| KUR | | | | A | A | 23 37 31.6 | |
| | comp=E,111nm,0.3s | | | | | | |
| KUR | | | | A | A | 23 37 31.6 | |
| | comp=E,107nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **1.23** | **218** | P | **Pn** | **23 37 12.4** | **+0.1** |
| NEM2 | | | | *e*S | **Sn** | **23 37 29.9** | **-0.9** |
| **JRA** | **Rausu** | **1.25** | **252** | P | **Pn** | **23 37 12.7** | **+0.1** |
| JRA | | | | *e*S | **Sn** | **23 37 31.4** | **+0.1** |
| **JNK** | **Nakash** | **1.66** | **244** | P | **Pn** | **23 37 17.6** | **+0.3** |
| **JAK** | **Akkeshi** | **2.02** | **229** | P | **Pn** | **23 37 22.0** | **+0.4** |
| JAK | | | | *e*S | **Sn** | **23 37 47.5** | **+0.2** |
| **JTKR** | **Abashiri--Toko** | **2.09** | **261** | P | **Pn** | **23 37 22.4** | **-0.1** |
| JTKR | | | | *e*S | **Sn** | **23 37 48.5** | **-0.5** |
| **JAR** | **Ashorobuto** | **2.41** | **245** | P | **Pn** | **23 37 27.7** | **+1.2** |
| **JMP** | **Maruseppu** | **2.48** | **263** | P | **Pn** | **23 37 27.4** | **0.0** |
| **JOB** | **Onbets** | **2.57** | **237** | P | **Pn** | **23 37 29.9** | **+1.3** |
| JOB | | | | *e*S | **Sn** | **23 38 00.7** | **+0.8** |
| **JKA** | **Kamikawa-asahi** | **3.01** | **267** | *e*P | **Pn** | **23 37 35.1** | **+0.9** |
| **ASAJ** | **Asahikawa** | **3.01** | **267** | P | **Pn** | **23 37 35.0** | **+0.8** |
| **ASAJ** | **Asahikawa** | **3.01** | **267** | P | **Pn** | **23 37 35.1** | **+0.8** |
| | comp=E,4.8nm,0.3s,baz=67,slow=7.7,SNR=11 | | | | | | |
| **ASAJ** | **Asahikawa** | **3.01** | **267** | PN | **Pn** | **23 37 35.1** | **+0.8** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | |
| **JCH** | **Churui** | **3.02** | **236** | P | **Pn** | **23 37 35.2** | **+0.8** |
| JCH | | | | *e*S | **Sn** | **23 38 10.0** | **-0.3** |
| **ERM** | **Erimo** | **3.52** | **230** | *de*PN | **Pn** | **23 37 42.8** | **+1.8** |
| **ERM** | **Erimo** | **3.52** | **230** | *e*P | **Pn** | **23 37 42.8** | **+1.8** |
| **YSS** | **Yuzh-Sakhalins** | **3.84** | **314** | *e*S | **Sn** | **23 38 30.7** | **+1.0** |
| YSS | | | | A | A | 23 38 50.9 | |
| | comp=Z,40nm,0.4s | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 30.70 141** | | | T | T | 00 15 05.9 | |
| | baz=330,slow=76,SNR=14 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 30.70 141** | | | T | T | 00 15 06.3 | |
| | baz=330,slow=76,SNR=12 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 30.71 141** | | | T | T | 00 15 04.7 | |
| | baz=330,slow=76,SNR=8.3 | | | | | | |
| **ILAR** | **Eielson Array** | **41.18** | **37** | P | **P** | **23 44 19.6** | **-0.2** |
| | comp=Z,0.3nm,0.5s,baz=277,slow=9.1,SNR=6.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.43** | **253** | P | **P** | **23 45 11.0** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=36,slow=6.8,SNR=3.1 | | | | | | |
| **FINES** | **FINESS Array B** | **64.22** | **333** | P | **P** | **23 47 06.6** | **-2.6** |
| | comp=Z,1.2nm,0.9s,baz=50,slow=9.3,SNR=4.4 | | | | | | |
| **FINES** | **FINESS Array B** | **64.22** | **333** | P | **P** | **23 47 06.6** | **-2.6** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **68.95** | **339** | P | **P** | **23 47 37.4** | **-2.0** |
| | comp=Z,0.5nm,0.8s,baz=39,slow=5.7,SNR=2.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **82.55** | **56** | P | **P** | **23 48 58.6** | **+1.3** |
| | comp=Z,0.2nm,0.5s,baz=300,slow=4.9,SNR=4.4 | | | | | | |

*ISCJB* ***24*** *23:42:05.7±0.4, 42°.25N±0°.02×8°.30W±0°.03, h10km, Error ellipse: s-maj=3.8km s-min=1.8km az=26.7*
*CSEM* ***24*** *23:42:06.3±0.2, 42°.35N×8°.52W, h15km, ML3.2/30, Error ellipse: s-maj=4.5km s-min=2.1km az=110.0*
*NEIC* ***24*** *23:42:07.8, 42°.34N×8°.56W, h10km, MN3.1(MDD), After MDD.*
*NEIC Felt at Marin and Nigran.*
*LDG* ***24*** *23:42:07.0±0.1, 42°.38N×8°.60W, h10km, Ml3.0/9, Error ellipse: s-maj=3.0km s-min=1.6km az=92.0*
*MDD* ***24*** *23:42:07.4±0.4, 42°.33N×8°.59W, h11km, mbLg2.8/39, Error ellipse: s-maj=4.2km s-min=2.5km az=95.0, PRXIMO*
*MDD EMS: III INTENSIDAD MAXIMA.*
*INMG* ***24*** *23:42:08.2±1.7, 42°.32N×8°.65W, h14km±3km, MD2.9, ML2.8, Error ellipse: s-maj=4.9km s-min=2.2km az=86.0*
*IGIL* ***24*** *23:42:08.0, 42°.33N×8°.58W, h11km*
**ISC 24 23:42:05.3±0.8, 42°.35N±0°.02×8°.57W±0°.03, h10km, n213,**
**σ1s79/344, 2C-4D, Spain**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** | **0.44** | **150** | ⇓*i* Pg | **Pb** | **23 42 16.8** | **+1.6** |
| PGAV | | | | *e*Sg | **Sb** | **23 42 23.2** | **+1.3** |
| PGAV | | | | A | A | 23 42 23.7 | |
| | 289nm,0.1s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **0.44** | **150** | ⇓*i* Pg | **Pb** | **23 42 16.8** | **+1.6** |
| **EAGO** | **Agolada(Pontev** | **0.57** | **38** | ⇑Pg | **Pb** | **23 42 19.2** | **+1.7** |
| | 202nm,0.1s,SNR=18 | | | | | | |
| EAGO | | | | Lg | Lg | 23 42 26.9 | |
| | 950nm,0.1s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **0.57** | **38** | Pg | **Pb** | **23 42 19.2** | **+1.7** |
| | 202nm,0.1s,SNR=18 | | | | | | |
| EAGO | | | | Lg | Lg | 23 42 26.9 | |
| | 950nm,0.1s,SNR=7.9 | | | | | | |
| **ELOB** | **Lobios** | **0.61** | **142** | ⇓Pg | **Pb** | **23 42 19.7** | **+1.6** |
| | 82nm,0.1s,SNR=18 | | | | | | |
| ELOB | | | | Lg | Lg | 23 42 27.4 | |
| | 258nm,0.1s | | | | | | |
| **ELOB** | **Lobios** | **0.61** | **142** | Pg | **Pb** | **23 42 19.7** | **+1.6** |
| ELOB | | | | Lg | Lg | 23 42 28.3 | |
| **ELOB** | **Lobios** | **0.61** | **142** | Pg | **Pb** | **23 42 19.7** | **+1.6** |
| | 82nm,0.1s,SNR=18 | | | | | | |
| ELOB | | | | Lg | Lg | 23 42 27.4 | |
| | 258nm,0.1s | | | | | | |
| **EMAZ** | **Mazaricos** | **0.67** | **333** | ⇓Pg | **Pb** | **23 42 20.3** | **+1.2** |
| | 31nm,0.1s,SNR=18 | | | | | | |
| EMAZ | | | | Lg | Lg | 23 42 29.5 | |
| | 1μm,0.2s,SNR=104 | | | | | | |
| **EMAZ** | **Mazaricos** | **0.67** | **333** | Pg | **Pb** | **23 42 20.3** | **+1.2** |
| | 31nm,0.1s,SNR=18 | | | | | | |
| EMAZ | | | | Lg | Lg | 23 42 29.5 | |
| | 1μm,0.2s,SNR=104 | | | | | | |
| **PCAB** | **Cabril** | **0.75** | **148** | *e*P | **Pb** | **23 42 22.0** | **+1.5** |
| PCAB | | | | *e*S | **Sb** | **23 42 32.3** | **+1.4** |
| PCAB | | | | A | A | 23 42 33.5 | |
| | 844nm,0.3s | | | | | | |
| **PCAB** | **Cabril** | **0.75** | **148** | Pg | **Pb** | **23 42 22.0** | **+1.5** |
| PCAB | | | | Lg | Lg | 23 42 32.3 | |
| | 422nm,0.3s | | | | | | |
| **PCAB** | **Cabril** | **0.75** | **148** | *e*P | **Pb** | **23 42 22.0** | **+1.5** |
| PCAB | | | | *e*S | **Sb** | **23 42 32.3** | **+1.4** |
| | 844nm,0.3s | | | | | | |
| **POLO** | **Lamas de Olo** | **1.13** | **149** | *e*P | **Pb** |

PVIS eSg Sg 23 43 00.7 +0.5
PVIS A A 23 43 05.8
106nm,0.1s
**PVIS Viseu 1.71 163** Pn Pn **23 42 35.2 0.0**
PVIS Lg Lg 23 43 00.7
53nm,0.1s
**PVIS Viseu 1.71 163** ePn Pn **23 42 35.2 0.0**
PVIS eSg Sg **23 43 00.7 +0.5**
106nm,0.1s
**MTE Manteigas 2.09 158** ePn Pn **23 42 40.5 0.0**
**MTE Manteigas 2.09 158** ePg Pb **23 42 45.1 +1.7**
MTE eSg Sg **23 43 12.9 +0.4**
MTE A A 23 43 15.2
60nm,0.6s
**MTE Manteigas 2.09 158** Pn Pn **23 42 40.5 0.0**
MTE Pg Pb **23 42 45.1 +1.7**
MTE Lg Lg 23 43 12.9
30nm,0.6s
**MTE Manteigas 2.09 158** ePn Pn **23 42 40.9 +0.4**
MTE eSg Sg **23 43 13.0 +0.4**
**MTE Manteigas 2.09 158** ePn Pn **23 42 40.9 +0.4**
**MTE Manteigas 2.09 158** ePg Pb **23 42 45.1 +1.7**
MTE Lg Lg 23 43 12.9
30nm,0.6s
MTE eSg Sg **23 43 13.0 +0.4**
**PCAS Casmilo, Conde 2.29 179** ePn Pn **23 42 44.2 +1.0**
**PCAS Casmilo, Conde 2.29 179** ePg Pb **23 42 47.7 +0.9**
PCAS eSg Sg **23 43 19.2 +0.2**
PCAS A A 23 43 29.3
36nm,0.7s
**PCAS Casmilo, Conde 2.29 179** ePn Pn **23 42 44.2 +1.0**
**PCAS Casmilo, Conde 2.29 179** ePg Pb **23 42 47.7 +0.9**
PCAS eSg Sg **23 43 19.2 +0.2**
36nm,0.7s
**PCBR Castelo Branco 2.64 161** ePn Pn **23 42 48.2 +0.3**
PCBR eSg Sb **23 43 27.6 +2.6**
PCBR A A 23 43 33.3
29nm,0.5s
**PCBR Castelo Branco 2.64 161** Pn Pn **23 42 48.2 +0.3**
**PCBR Castelo Branco 2.64 161** ePn Pn **23 42 48.2 +0.3**
**EARI Arriondas 2.65 68** Pn Pn **23 42 49.3 +1.2**
2.4nm,0.1s,SNR=13
EARI Pg Pg **23 42 55.7 -0.3**
3.9nm,0.7s,SNR=7.9
EARI Sn Sn **23 43 19.7 -0.5**
4.7nm,0.2s,SNR=7.9
EARI Lg Lg 23 43 31.3
8.6nm,0.2s
**EARI Arriondas 2.65 68** Pn Pn **23 42 49.7 +1.6**
EARI Sn Sn **23 43 19.7 -0.5**
EARI Lg Lg 23 43 31.3
**EARI Arriondas 2.65 68** Pn Pn **23 42 49.3 +1.2**
2.4nm,0.1s,SNR=13
**PTOM Tomar 2.73 177** ePn Pn **23 42 50.7 +1.5**
PTOM eSg Sg **23 43 31.5 -1.5**
PTOM A A 23 43 39.3
39nm,0.5s
**PTOM Tomar 2.73 177** Pn Pn **23 42 50.7 +1.5**
PTOM Lg Lg 23 43 31.5
20nm,0.5s
**PTOM Tomar 2.73 177** ePn Pn **23 42 50.7 +1.5**
PTOM eSg Sg **23 43 31.5 -1.5**
39nm,0.5s
**EPLA Plasencia 2.95 140** Pn Pn **23 42 53.1 +0.8**
1.7nm,0.1s,SNR=22
EPLA Pg Pg **23 43 00.7 -1.1**
5.1nm,0.3s,SNR=7.9
EPLA Sn Sn **23 43 26.4 -1.4**
17nm,0.2s,SNR=7.2
EPLA Lg Lg 23 43 39.9
7.1nm,0.1s
**EPLA Plasencia 2.95 140** Pn Pn **23 42 53.1 +0.8**
EPLA Sn Sn **23 43 26.4 -1.4**
EPLA Lg Lg 23 43 39.9
**EPLA Plasencia 2.95 140** Pn Pn **23 42 53.1 +0.8**
1.7nm,0.1s,SNR=22
**PMRV Marv??o 3.05 163** ePn Pn **23 42 54.3 +0.7**
PMRV eSg Sg **23 43 42.0 -1.3**
PMRV A A 23 43 49.8
22nm,0.4s
**PMRV Marv??o 3.05 163** Pn Pn **23 42 54.3 +0.7**
PMRV Lg Lg 23 43 42.0
22nm,0.4s
**PMRV Marv??o 3.05 163** ePn Pn **23 42 54.3 +0.7**
PMRV eSg Sg **23 43 42.0 -1.3**
22nm,0.4s
**PMTG Montargil 3.29 175** ePn Pn **23 42 57.2 +0.4**
PMTG eSn Sn **23 43 33.4 -2.6**
PMTG eSg Sg **23 43 50.8 0.0**
PMTG A A 23 43 56.3
12nm,0.4s
**PMTG Montargil 3.29 175** ePn Pn **23 42 57.2 +0.4**
PMTG eSn Sn **23 43 33.4 -2.6**
PMTG eSg Sg **23 43 50.8 0.0**
12nm,0.4s
**PMAFR Mafra 3.43 189** ePn Pn **23 42 59.2 +0.4**
PMAFR eSn Sn **23 43 36.4 -3.2**
PMAFR eSg Sg **23 43 55.6 +0.1**
PMAFR A A 23 44 08.1
22nm,0.6s
**PMAFR Mafra 3.43 189** Pn Pn **23 42 59.4 +0.4**
1.2nm,0.1s,SNR=7.9
PMAFR Pg Pb **23 43 08.1 +1.9**
44nm,2.0s,SNR=7.9
PMAFR Sn Sn **23 43 37.3 -2.3**
14nm,0.2s,SNR=60
PMAFR Lg Lg 23 43 55.6
9.3nm,0.1s,SNR=7.9
**PMAFR Mafra 3.43 189** Pn Pn **23 42 59.3 +0.4**
1.2nm,0.1s,SNR=7.9
**PMAFR Mafra 3.43 189** Pg Pb **23 43 08.1 +1.9**
44nm,2.0s,SNR=7.9
PMAFR Sn Sn **23 43 37.3 -2.3**
14nm,0.2s,SNR=60
PMAFR eSg Sg **23 43 55.6 +0.1**
22nm,0.6s
**GUD Guadarrama 3.73 116** Pn Pn **23 43 03.9 +0.9**
13nm,0.3s,SNR=50
GUD Sn Sn **23 43 46.3 -0.7**
3.1nm,0.1s,SNR=5.9
GUD Lg Lg 23 44 05.1
11nm,0.2s
**GUD Guadarrama 3.73 116** Pn Pn **23 43 04.3 +1.3**
GUD Sn Sn **23 43 46.3 -0.7**
GUD Lg Lg 23 44 05.0
**GUD Guadarrama 3.73 116** Pn Pn **23 43 03.9 +0.9**
13nm,0.3s,SNR=50
GUD Sn Sn **23 43 46.3 -0.7**
3.1nm,0.1s,SNR=5.9
GUD Lg Lg 23 44 05.1
11nm,0.2s
**EBAD Badajoz 3.78 161** Pn Pn **23 43 04.2 +0.6**
1.2nm,0.1s,SNR=12
EBAD Sn Sn **23 43 45.3 -2.8**
1.8nm,0.1s,SNR=7.9
EBAD Lg Lg 23 44 06.6
10nm,0.2s,SNR=5.0
**EBAD Badajoz 3.78 161** Pn Pn **23 43 04.2 +0.6**
**EBAD Badajoz 3.78 161** Pn Pn **23 43 04.2 +0.6**
1.2nm,0.1s,SNR=12
EBAD Sn Sn **23 43 45.3 -2.8**
1.8nm,0.1s,SNR=7.9
EBAD Lg Lg 23 44 06.6
10nm,0.2s,SNR=5.0
**EVOP Sao Brissos 3.83 175** ePn Pn **23 43 04.2 -0.1**
EVOP eSn Sn **23 43 45.6 -3.8**
EVOP eSg Sg **23 44 08.2 -0.1**
7.3nm,0.3s
**EVO Evora 3.84 174** ePn Pn **23 43 04.2 -0.2**
EVO eSn Sn **23 43 45.6 -3.9**
EVO eSg Sg **23 44 08.2 -0.3**
15nm,0.3s
**EVO Evora 3.84 174** ePn Pn **23 43 04.2 -0.2**
EVO eSn Sn **23 43 46.3 -3.2**
EVO eSg Sg **23 44 06.3 -2.2**
EVO A A 23 44 16.0
6.5nm,0.3s
**EVO Evora 3.84 174** Pn Pn **23 43 04.2 -0.2**
EVO Sn Sn **23 43 46.3 -3.2**
EVO Lg Lg 23 44 06.3
6.5nm,0.3s
**EVO Evora 3.84 174** ePn Pn **23 43 04.2 -0.2**
EVO Sn Sn **23 43 46.3 -3.2**
EVO Lg Lg 23 44 06.3
6.5nm,0.3s

**ELAN Lanestosa 3.88 75** Pn Pn **23 43 06.1 +1.2**
5.4nm,0.1s,SNR=84
ELAN Sn Sn **23 43 49.7 -0.8**
3.6nm,0.2s,SNR=7.9
ELAN Lg Lg 23 44 10.6
6.6nm,0.2s
**ELAN Lanestosa 3.88 75** Pn Pn **23 43 06.8 +1.9**
ELAN Lg Lg 23 44 15.8
**ELAN Lanestosa 3.88 75** Pn Pn **23 43 06.1 +1.2**
5.4nm,0.1s,SNR=84
ELAN Sn Sn **23 43 49.7 -0.8**
3.6nm,0.2s,SNR=7.9
ELAN Lg Lg 23 44 10.6
6.6nm,0.2s
**PNCL Nicolau / Gran 4.23 180** ePn Pn **23 43 10.1 +0.3**
PNCL eSn Sn **23 43 56.6 -2.7**
PNCL A A 23 44 24.2
3.9nm,0.7s
**PNCL Nicolau / Gran 4.23 180** ePn Pn **23 43 10.1 +0.3**
PNCL eSn Sn **23 43 56.6 -2.7**
3.9nm,0.7s
**PAB San Pablo 4.25 130** ePn Pn **23 43 11.0 +0.9**
PAB eSn Sn **23 43 57.2 -2.6**
PAB eSg Sg **23 44 21.2 -0.4**
**PAB San Pablo 4.25 130** ePn Pn **23 43 11.0 +0.9**
PAB eSn Sn **23 43 57.2 -2.6**
**PBAR Barrancos 4.33 164** ePn Pn **23 43 11.5 +0.3**
PBAR eSn Sn **23 43 58.4 -3.3**
PBAR eSg Sg **23 44 23.8 -0.5**
PBAR A A 23 44 28.5
23nm,0.5s
**PBAR Barrancos 4.33 164** Pn Pn **23 43 11.5 +0.3**
PBAR Sn Sn **23 43 58.4 -3.3**
PBAR Lg Lg 23 44 23.8
23nm,0.5s
**PBAR Barrancos 4.33 164** ePn Pn **23 43 11.5 +0.3**
PBAR Sn Sn **23 43 58.4 -3.3**
PBAR eSg Sg **23 44 23.8 -0.5**
23nm,0.5s
**PBEJ Beja 4.35 173** ePn Pn **23 43 12.0 +0.5**
PBEJ eSn Sn **23 43 58.4 -3.8**
PBEJ eSg Sg **23 44 23.5 -1.5**
PBEJ A A 23 44 34.5
7.3nm,0.5s
**PBEJ Beja 4.35 173** Pn Pn **23 43 12.0 +0.5**
PBEJ Sn Sn **23 43 58.4 -3.8**
PBEJ Lg Lg 23 44 23.5
3.7nm,0.5s
**PBEJ Beja 4.35 173** ePn Pn **23 43 12.0 +0.5**
PBEJ Sn Sn **23 43 58.4 -3.8**
PBEJ eSg Sg **23 44 23.5 -1.5**
7.3nm,0.5s
**ESDC Sonseca Array 4.39 126** Pn Pn **23 43 12.8 +0.8**
1.8nm,0.1s,baz=312,slow=13,SNR=8.4
ESDC Sn Sn **23 44 01.6 -1.6**
0.4nm,0.1s,baz=310,slow=24,SNR=11
ESDC Lg Lg 23 44 25.9
5.6nm,0.3s,baz=309,slow=30,SNR=19
**ESDC Sonseca Array 4.39 126** Pn Pn **23 43 12.9 +0.8**
ESDC Lg Lg 23 44 26.7
**ESDC Sonseca Array 4.39 126** Pn Pn **23 43 12.8 +0.8**
1.8nm,0.1s,SNR=8.4
ESDC Sn Sn **23 44 01.6 -1.6**
0.4nm,0.1s,SNR=11
ESDC Lg Lg 23 44 25.9
5.6nm,0.3s,SNR=19
**MESJ Messejana 4.51 177** eP Pn **23 43 14.0 +0.4**
**MESJ Messejana 4.51 177** ePn Pn **23 43 14.1 +0.4**
MESJ eSn Sn **23 44 01.6 -4.6**
MESJ A A 23 44 41.6
5.8nm,0.5s
**MESJ Messejana 4.51 177** Pn Pn **23 43 14.1 +0.4**
MESJ Sn Sn **23 44 01.6 -4.6**
5.8nm,0.5s
**MESJ Messejana 4.51 177** ePn Pn **23 43 14.1 +0.4**
MESJ Sn Sn **23 44 01.6 -4.6**
5.8nm,0.5s
**PCVE Castro Verde 4.73 175** ePn Pn **23 43 17.0 +0.4**
PCVE eSn Sn **23 44 07.7 -3.8**
PCVE A A 23 44 45.5
5.5nm,0.5s
**PCVE Castro Verde 4.73 175** Pn Pn **23 43 17.0 +0.4**
PCVE Sn Sn **23 44 07.7 -3.8**
5.5nm,0.5s
**PCVE Castro Verde 4.73 175** ePn Pn **23 43 17.0 +0.4**
PCVE Sn Sn **23 44 07.7 -3.8**
5.5nm,0.5s
**PTEO Sao Teotonio 4.80 182** ePn Pn **23 43 18.3 +0.7**
PTEO eSn Sn **23 44 09.0 -4.2**
PTEO A A 23 44 46.5
12nm,0.6s
**PTEO Sao Teotonio 4.80 182** Pn Pn **23 43 18.3 +0.7**
PTEO Sn Sn **23 44 09.0 -4.2**
6.2nm,0.6s
**PTEO Sao Teotonio 4.80 182** ePn Pn **23 43 18.3 +0.7**
PTEO Sn Sn **23 44 09.0 -4.2**
6.2nm,0.6s
**EMIN Mina Concepcio 4.80 162** Pn Pn **23 43 17.7 +0.1**
0.5nm,0.1s,SNR=10
EMIN Sn Sn **23 44 08.9 -4.4**
6.8nm,4.2s,SNR=7.9
EMIN Lg Lg 23 44 38.6
1.9nm,0.2s,SNR=7.9
**EMIN Mina Concepcio 4.80 162** Pn Pn **23 43 17.7 +0.1**
0.5nm,0.1s,SNR=10
EMIN Sn Sn **23 44 08.9 -4.4**
6.8nm,4.2s,SNR=7.9
EMIN Lg Lg 23 44 38.6
1.9nm,0.2s,SNR=7.9
**EGRO El Granado 4.88 170** Pn Pn **23 43 19.8 +1.1**
0.2nm,0.1s,SNR=7.9
EGRO Sn Sn **23 44 12.8 -2.5**
0.4nm,0.1s,SNR=7.9
EGRO Lg Lg 23 44 40.0
3.2nm,0.2s,SNR=7.9
**EGRO El Granado 4.88 170** Pn Pn **23 43 19.8 +1.1**
0.2nm,0.1s,SNR=7.9
EGRO Sn Sn **23 44 12.8 -2.5**
0.4nm,0.1s,SNR=7.9
EGRO Lg Lg 23 44 40.0
3.2nm,0.2s,SNR=7.9
**ECAB El Cabril 4.90 150** Pn Pn **23 43 19.3 +0.2**
0.0nm,0.1s,SNR=7.9
ECAB Sn Sn **23 44 13.2 -2.6**
0.3nm,0.1s,SNR=7.9
ECAB Lg Lg 23 44 40.7
19nm,0.6s,SNR=7.9
**ECAB El Cabril 4.90 150** Pn Pn **23 43 19.3 +0.2**
SNR=7.9
ECAB Sn Sn **23 44 13.2 -2.6**
0.3nm,0.1s,SNR=7.9
ECAB Lg Lg 23 44 40.7
19nm,0.6s,SNR=7.9
**PVAQ Vaqueiros 4.98 172** ePn Pn **23 43 20.5 +0.4**
PVAQ eSn Sn **23 44 13.1 -4.7**
PVAQ A A 23 44 55.6
6.8nm,0.7s
**PVAQ Vaqueiros 4.98 172** Pn Pn **23 43 20.5 +0.4**
PVAQ Sn Sn **23 44 13.1 -4.7**
6.8nm,0.7s
**PVAQ Vaqueiros 4.98 172** ePn Pn **23 43 20.5 +0.4**
PVAQ Sn Sn **23 44 13.1 -4.7**
6.8nm,0.7s
**MORF Marmelete 5.04 181** eP Pn **23 43 21.2 +0.3**
**MORF Marmelete 5.04 181** Pn Pn **23 43 21.2 +0.3**
**MORF Marmelete 5.04 181** Pn Pn **23 43 21.2 +0.3**
**ETOR Torete 5.12 105** Pn Pn **23 43 22.7 +0.6**
0.1nm,0.1s,SNR=7.9
ETOR Lg Lg 23 44 49.2
18nm,0.2s,SNR=7.9
**ETOR Torete 5.12 105** Pn Pn **23 43 22.7 +0.6**
0.1nm,0.1s,SNR=7.9
ETOR Lg Lg 23 44 49.2
18nm,0.2s,SNR=7.9
**PBDV Barranco-do-Ve 5.12 174** ePn Pn **23 43 23.0 +0.9**
PBDV eSn Sn **23 44 17.9 -3.4**
PBDV A A 23 45 03.3
9.1nm,0.5s
**PBDV Barranco-do-Ve 5.12 174** Pn Pn **23 43 23.0 +0.9**
PBDV Sn Sn **23 44 17.9 -3.4**
9.1nm,0.5s
**PBDV Barranco-do-Ve 5.12 174** ePn Pn **23 43 23.0 +0.9**
PBDV Sn Sn **23 44 17.9 -3.4**
9.1nm,0.5s
**EADA Adamuz 5.17 143** Pn Pn **23 43 23.3 +0.5**
0.1nm,0.1s,SNR=7.9

EADA Sn Sn **23 44 19.7 -2.8**
0.9nm,0.2s,SNR=7.9
EADA Lg Lg 23 44 49.3
1.2nm,0.1s,SNR=7.9
**EADA Adamuz 5.17 143** Pn Pn **23 43 23.3 +0.5**
0.1nm,0.1s,SNR=7.9
EADA Sn Sn **23 44 19.7 -2.8**
0.9nm,0.2s,SNR=7.9
EADA Lg Lg 23 44 49.3
1.2nm,0.1s,SNR=7.9
**IUSE Utxeti 5.21 81** Pn Pn **23 43 24.3 +1.0**
15nm,1.5s,SNR=7.9
**IUSE Utxeti 5.21 81** Pn Pn **23 43 24.3 +1.0**
15nm,1.5s,SNR=7.9
**IUNC Unciti 5.24 83** Pn Pn **23 43 23.9 +0.2**
12nm,2.9s,SNR=7.9
IUNC Sn Sn **23 44 21.4 -2.7**
0.9nm,1.4s,SNR=7.9
IUNC Lg Lg 23 44 53.2
74nm,4.8s,SNR=7.9
**IUNC Unciti 5.24 83** Pn Pn **23 43 23.9 +0.2**
12nm,2.9s,SNR=7.9
IUNC Sn Sn **23 44 21.4 -2.7**
0.9nm,1.4s,SNR=7.9
IUNC Lg Lg 23 44 53.2
74nm,4.8s,SNR=7.9
**ELIZ Elizondo 5.25 79** Pn Pn **23 43 24.7 +1.0**
0.2nm,0.1s,SNR=7.9
**ELIZ Elizondo 5.25 79** Pn Pn **23 43 24.7 +1.0**
0.2nm,0.1s,SNR=7.9
**EALK Alkurruntz 5.27 78** Pn Pn **23 43 24.5 +0.5**
0.1nm,0.1s,SNR=6.4
EALK Sn Sn **23 44 22.5 -2.2**
8.6nm,0.9s,SNR=7.9
EALK Lg Lg 23 44 53.5
5.7nm,1.1s,SNR=7.9
**EALK Alkurruntz 5.27 78** Pn Pn **23 43 24.5 +0.5**
0.1nm,0.1s,SNR=6.4
EALK Sn Sn **23 44 22.5 -2.2**
8.6nm,0.9s,SNR=7.9
EALK Lg Lg 23 44 53.5
5.7nm,1.1s,SNR=7.9
**IPRE Itoiz 5.34 83** Pn Pn **23 43 25.1 -0.1**
41nm,1.3s,SNR=7.9
**IPRE Itoiz 5.34 83** Pn Pn **23 43 25.0 -0.1**
41nm,1.3s,SNR=7.9
**IEPA Eparoz 5.41 83** Pn Pn **23 43 26.6 +0.6**
14nm,2.8s,SNR=7.9
IEPA Sn Sn **23 44 25.6 -2.7**
8.0nm,2.1s,SNR=7.9
**IEPA Eparoz 5.41 83** Pn Pn **23 43 26.6 +0.6**
14nm,2.8s,SNR=7.9
IEPA Sn Sn **23 44 25.6 -2.7**
8.0nm,2.1s,SNR=7.9
**IELO Elcoad 5.43 82** Pn Pn **23 43 26.8 +0.4**
0.5nm,0.1s,SNR=7.9
IELO Sn Sn **23 44 26.4 -2.6**
0.6nm,0.1s,SNR=7.9
**IELO Elcoad 5.43 82** Pn Pn **23 43 26.8 +0.4**
0.5nm,0.1s,SNR=7.9
IELO Sn Sn **23 44 26.4 -2.6**
0.6nm,0.1s,SNR=7.9
**SJPF Ste Jean 5.46 79** ePn Pn **23 43 27.2 +0.5**
SJPF eSn Sn **23 44 26.5 -3.1**
0.9nm,0.3s
**SJPF Ste Jean 5.46 79** Pn Pn **23 43 27.2 +0.5**
SJPF Sn Sn **23 44 26.5 -3.1**
0.4nm,0.3s
**SJPF Ste Jean 5.46 79** Pn Pn **23 43 27.2 +0.5**
**YARA Arangoiti 5.46 84** Pn Pn **23 43 27.5 +0.7**
1.1nm,1.4s,SNR=7.9
YARA Sn Sn **23 44 27.9 -1.9**
0.6nm,3.5s,SNR=7.9
YARA Lg Lg 23 44 58.9
1.7nm,2.0s,SNR=7.9
**YARA Arangoiti 5.46 84** Pn Pn **23 43 27.5 +0.7**
1.1nm,1.4s,SNR=7.9
YARA Sn Sn **23 44 27.9 -1.9**
0.6nm,3.5s,SNR=7.9
YARA Lg Lg 23 44 58.9
1.7nm,2.0s,SNR=7.9
**YASP Aspurt 5.48 84** Pn Pn **23 43 28.0 +1.0**
19nm,2.1s,SNR=7.9
YASP Sn Sn **23 44 27.7 -2.5**
89nm,2.8s,SNR=7.9
YASP Lg Lg 23 44 59.8
11nm,3.5s,SNR=7.9
**YASP Aspurt 5.48 84** Pn Pn **23 43 28.0 +1.0**
19nm,2.1s,SNR=7.9
YASP Sn Sn **23 44 27.7 -2.5**
89nm,2.8s,SNR=7.9
YASP Lg Lg 23 44 59.8
11nm,3.5s,SNR=7.9
**YSOS Sos del Rey Ca 5.49 86** Pn Pn **23 43 28.2 +1.0**
3.5nm,1.3s,SNR=7.9
YSOS Sn Sn **23 44 27.1 -3.4**
0.8nm,5.0s,SNR=7.9
YSOS Lg Lg 23 45 01.1
33nm,5.7s,SNR=7.9
**YSOS Sos del Rey Ca 5.49 86** Pn Pn **23 43 28.2 +1.0**
3.5nm,1.3s,SNR=7.9
YSOS Lg Lg 23 45 01.1
33nm,5.7s,SNR=7.9
**YUND Undues 5.50 85** Pn Pn **23 43 28.6 +1.3**
0.9nm,0.6s,SNR=7.9
**YUND Undues 5.50 85** Pn Pn **23 43 28.6 +1.3**
0.9nm,0.6s,SNR=7.9
**YMUS Pe˜–a Musera 5.59 85** Pn Pn **23 43 28.7 +0.2**
5.1nm,1.4s,SNR=7.9
YMUS Sn Sn **23 44 30.3 -2.4**
4.7nm,2.9s,SNR=7.9
YMUS Lg Lg 23 45 02.8
5.9nm,0.7s,SNR=7.9
**YMUS Pe˜–a Musera 5.59 85** Pn Pn **23 43 28.7 +0.2**
5.1nm,1.4s,SNR=7.9
YMUS Sn Sn **23 44 30.3 -2.4**
4.7nm,2.9s,SNR=7.9
YMUS Lg Lg 23 45 02.8
5.9nm,0.7s,SNR=7.9
**YSIG Sigues 5.61 84** Pn Pn **23 43 29.0 +0.3**
24nm,2.9s,SNR=7.9
YSIG Sn Sn **23 44 30.9 -2.3**
44nm,3.5s,SNR=7.9
YSIG Lg Lg 23 45 04.5
5.3nm,0.7s,SNR=7.9
**YSIG Sigues 5.61 84** Pn Pn **23 43 29.0 +0.3**
24nm,2.9s,SNR=7.9
YSIG Sn Sn **23 44 30.9 -2.3**
44nm,3.5s,SNR=7.9
YSIG Lg Lg 23 45 04.5
5.3nm,0.7s,SNR=7.9
**YBER Berdun 5.66 85** Pn Pn **23 43 29.7 +0.2**
12nm,1.5s,SNR=7.9
YBER Sn Sn **23 44 32.2 -2.4**
244nm,5.0s,SNR=7.9
YBER Lg Lg 23 45 06.5
5.6nm,1.4s,SNR=7.9
**YBER Berdun 5.66 85** Pn Pn **23 43 29.7 +0.2**
12nm,1.5s,SNR=7.9
YBER Sn Sn **23 44 32.2 -2.4**
244nm,5.0s,SNR=7.9
YBER Lg Lg 23 45 06.5
5.6nm,1.4s,SNR=7.9
**ATE Arette 5.84 80** Pn Pn **23 43 33.2 +1.2**
2.4nm,0.1s,SNR=7.9
ATE Sn Sn **23 44 36.5 -2.5**
0.1nm,0.1s,SNR=7.9
**ATE Arette 5.84 80** Pn Pn **23 43 33.2 +1.2**
2.4nm,0.1s,SNR=7.9
ATE Sn Sn **23 44 36.5 -2.5**
0.1nm,0.1s,SNR=7.9
**ETSF Etsaut 5.93 82** ePn Pn **23 43 33.7 +0.4**
ETSF eSn Sn **23 44 38.0 -3.3**
2.1nm,0.3s
**ETSF Etsaut 5.93 82** Pn Pn **23 43 33.7 +0.4**
ETSF Sn Sn **23 44 38.0 -3.3**
1.1nm,0.3s
**ETSF Etsaut 5.93 82** Pn Pn **23 43 33.7 +0.4**
**EQES Quesada 6.19 135** Pn Pn **23 43 37.6 +0.7**
0.0nm,0.1s,SNR=7.9
EQES Sn Sn **23 44 43.3 -4.5**
0.0nm,0.0s,SNR=7.9
EQES Lg Lg 23 45 22.7
13nm,1.8s,SNR=7.9
**EQES Quesada 6.19 135** Pn Pn **23 43 37.6 +0.7**
SNR=7.9
EQES Lg Lg 23 45 22.7
13nm,1.8s,SNR=7.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SESP** | **Santiago Espad** | **6.25** | **131** | Lg | Lg | 23 45 24.1 | | |
| | 15nm,0.8s,SNR=7.9 | | | | | | | |
| **SESP** | **Santiago Espad** | **6.25** | **131** | Lg | Lg | 23 45 24.1 | | |
| | 15nm,0.8s,SNR=7.9 | | | | | | | |
| **EMOS** | **Mosqueruela** | **6.41** | **105** | Pn | **Pn** | **23 43 41.2** | **+1.4** | |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | | |
| EMOS | | | | Sn | **Sn** | **23 44 49.4** | **-3.7** | |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | | |
| **EMOS** | **Mosqueruela** | **6.41** | **105** | Pn | **Pn** | **23 43 41.2** | **+1.4** | |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | | |
| **ETOB** | **Tobarra** | **6.50** | **122** | Pn | **Pn** | **23 43 42.1** | **+1.0** | |
| | 0.9nm,0.2s,SNR=7.9 | | | | | | | |
| ETOB | | | | Sn | **Sn** | **23 44 52.0** | **-3.4** | |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| ETOB | | | | Lg | Lg | 23 45 31.8 | | |
| | 1.4nm,0.3s,SNR=7.9 | | | | | | | |
| **ETOB** | **Tobarra** | **6.50** | **122** | Pn | **Pn** | **23 43 42.1** | **+1.0** | |
| | 0.9nm,0.2s,SNR=7.9 | | | | | | | |
| ETOB | | | | Lg | Lg | 23 45 31.8 | | |
| | 1.4nm,0.3s,SNR=7.9 | | | | | | | |
| **EPF** | **Esparros** | **6.60** | **81** | *e*Pn | **Pn** | **23 43 43.9** | **+1.5** | |
| EPF | | | | *e*Sn | **Sn** | **23 44 53.6** | **-4.1** | |
| | 1.3nm,0.3s | | | | | | | |
| **EPF** | **Esparros** | **6.60** | **81** | Pn | **Pn** | **23 43 43.9** | **+1.5** | |
| EPF | | | | Sn | **Sn** | **23 44 53.6** | **-4.1** | |
| | 0.6nm,0.3s | | | | | | | |
| **EPF** | **Esparros** | **6.60** | **81** | Pn | **Pn** | **23 43 43.9** | **+1.5** | |
| **QUIF** | **Quistinic** | **6.75** | **33** | *e*Pn | **Pn** | **23 43 43.1** | **-1.3** | |
| **QUIF** | **Quistinic** | **6.75** | **33** | *e*Pn | **Pn** | **23 43 43.1** | **-1.3** | |
| **ROSF** | **Rostrenen** | **7.05** | **30** | *e*Pn | **Pn** | **23 43 47.0** | **-1.5** | |
| **ROSF** | **Rostrenen** | **7.05** | **30** | *e*Pn | **Pn** | **23 43 47.0** | **-1.5** | |
| **CSOR** | **Sort** | **7.18** | **87** | Pn | **Pn** | **23 43 51.7** | **+1.2** | |
| | 0.1nm,0.1s,SNR=4.0 | | | | | | | |
| **CSOR** | **Sort** | **7.18** | **87** | Pn | **Pn** | **23 43 51.7** | **+1.2** | |
| | 0.1nm,0.1s,SNR=4.0 | | | | | | | |
| **LFF** | **La Frestale** | **7.23** | **66** | *e*Pn | **Pn** | **23 43 50.7** | **-0.3** | |
| **LFF** | **La Frestale** | **7.23** | **66** | Pn | **Pn** | **23 43 50.7** | **-0.3** | |
| **LFF** | **La Frestale** | **7.23** | **66** | Pn | **Pn** | **23 43 50.7** | **-0.3** | |
| **SGMF** | **Saint Gilles** | **7.26** | **34** | *e*Pn | **Pn** | **23 43 49.6** | **-1.8** | |
| **MFF** | **Saint Martin d** | **7.37** | **52** | *e*Pn | **Pn** | **23 43 51.5** | **-1.4** | |
| **MFF** | **Saint Martin d** | **7.37** | **52** | *e*Pn | **Pn** | **23 43 51.5** | **-1.4** | |
| **EMIR** | **Miracle** | **7.51** | **90** | Pn | **Pn** | **23 43 55.2** | **+0.2** | |
| | 5.3nm,5.6s,SNR=7.9 | | | | | | | |
| EMIR | | | | Sn | **Sn** | **23 45 15.7** | **-4.6** | |
| | 7.6nm,4.9s,SNR=7.9 | | | | | | | |
| **EMIR** | **Miracle** | **7.51** | **90** | Pn | **Pn** | **23 43 55.2** | **+0.2** | |
| | 5.3nm,5.6s,SNR=7.9 | | | | | | | |
| **CLLI** | **Llivia** | **7.80** | **86** | Pn | **Pn** | **23 43 59.6** | **+0.6** | |
| | 0.0nm,0.1s,SNR=4.0 | | | | | | | |
| **CLLI** | **Llivia** | **7.80** | **86** | Pn | **Pn** | **23 43 59.6** | **+0.6** | |
| | SNR=4.0 | | | | | | | |
| **RJF** | **Les Rejaudoux** | **7.87** | **65** | *e*Pn | **Pn** | **23 43 58.3** | **-1.4** | |
| **RJF** | **Les Rejaudoux** | **7.87** | **65** | *e*Pn | **Pn** | **23 43 58.3** | **-1.4** | |
| **MTLF** | **Montolieu** | **7.99** | **79** | *e*Pn | **Pn** | **23 44 01.1** | **-0.3** | |
| **MTLF** | **Montolieu** | **7.99** | **79** | Pn | **Pn** | **23 44 01.1** | **-0.3** | |
| **MTLF** | **Montolieu** | **7.99** | **79** | Pn | **Pn** | **23 44 01.1** | **-0.3** | |
| **GRR** | **Gorron** | **8.12** | **39** | *e*Pn | Pn | 23 43 59.8 | -3.3 | |
| **CAF** | **Calviac** | **8.13** | **68** | *e*Pn | **Pn** | **23 44 02.3** | **-1.1** | |
| CAF | | | | *e*Sn | **Sn** | **23 45 29.6** | **-5.7** | |
| | 0.8nm,0.3s | | | | | | | |
| **CAF** | **Calviac** | **8.13** | **68** | *e*Pn | **Pn** | **23 44 02.3** | **-1.1** | |
| **CFON** | **Fontmartina** | **8.21** | **90** | Pn | **Pn** | **23 44 05.1** | **+0.6** | |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | | |
| **CFON** | **Fontmartina** | **8.21** | **90** | Pn | **Pn** | **23 44 05.1** | **+0.6** | |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | | |
| **FLN** | **La Foliniere** | **8.56** | **39** | *e*Pn | **Pn** | **23 44 07.2** | **-2.0** | |
| | baz=223 | | | | | | | |
| **LDF** | **La Druitiere** | **8.61** | **41** | *e*Pn | **Pn** | **23 44 08.0** | **-1.9** | |
| **TCF** | **Toulx Ste Croi** | **8.67** | **59** | *e*Pn | **Pn** | **23 44 09.2** | **-1.6** | |
| TCF | | | | *e*Sn | Sn | 23 45 42.6 | -6.0 | |
| | 3.5nm,0.5s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **8.67** | **59** | *e*Pn | **Pn** | **23 44 09.2** | **-1.6** | |
| **BGF** | **Bois d'Agland** | **9.18** | **59** | *e*Pn | **Pn** | **23 44 17.0** | **-0.7** | |
| **BGF** | **Bois d'Agland** | **9.18** | **59** | Pn | **Pn** | **23 44 17.0** | **-0.7** | |
| **BGF** | **Bois d'Agland** | **9.18** | **59** | Pn | **Pn** | **23 44 17.0** | **-0.7** | |
| **HYF** | **Humbligny** | **9.36** | **54** | *e*Pn | **Pn** | **23 44 19.2** | **-1.0** | |
| **HYF** | **Humbligny** | **9.36** | **54** | *e*Pn | **Pn** | **23 44 19.2** | **-1.0** | |
| **AVF** | **Avril sur Loir** | **9.59** | **58** | *e*Pn | **Pn** | **23 44 21.6** | **-1.8** | |
| **AVF** | **Avril sur Loir** | **9.59** | **58** | *e*Pn | **Pn** | **23 44 21.6** | **-1.8** | |
| **SMF** | **Signal de Mont** | **9.85** | **60** | *e*Pn | **Pn** | **23 44 25.7** | **-1.2** | |
| **SMF** | **Signal de Mont** | **9.85** | **60** | *e*Pn | **Pn** | **23 44 25.7** | **-1.2** | |
| **VIVF** | **Saint-Julien-l** | **9.93** | **71** | *e*Pn | **Pn** | **23 44 27.0** | **-1.0** | |
| **VIVF** | **Saint-Julien-l** | **9.93** | **71** | *e*Pn | **Pn** | **23 44 27.0** | **-1.0** | |
| **LOR** | **Lormes** | **10.10** | **57** | *e*Pn | **Pn** | **23 44 29.3** | **-1.1** | |
| LOR | | | | *e*Sn | Sn | 23 46 16.6 | -7.1 | |
| | 1.1nm,0.4s | | | | | | | |
| **LOR** | **Lormes** | **10.10** | **57** | *e*Pn | **Pn** | **23 44 29.3** | **-1.1** | |

*ISCJB **24** 23:52:44.9±1.6,35°.53N±0°.06×22°.05E±0°.07, h22km±11km, Error ellipse: s-maj=12.9km s-min=6.5km az=42.6*
*THE **24** 23:52:46.2,35°.63N×22°.10E, h6km±3km, ML2.9/4, Error ellipse: s-maj=4.6km s-min=2.2km az=57.0*
*CSEM **24** 23:52:48.9±0.5,35°.67N×22°.25E, h60km, ML2.9, Error ellipse: s-maj=12.5km s-min=4.0km az=39.0*
*ATH **24** 23:52:48.2,35°.75N×22°.35E, h78km±3km*
**ISC 24 23:52:45.5±2.0,35°.61N±0°.07×22°.10E±0°.06, h10km±11km, n97,σ0°76/106, Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANKY** | **Antikythira Is** | **1.01** | **75** | *e*P | **Pg** | **23 53 05.3** | **+0.4** |
| ANKY | | | | *e*S | **Sg** | **23 53 17.9** | **-0.1** |
| **ANKY** | **Antikythira Is** | **1.01** | **75** | P | **Pg** | **23 53 05.4** | **+0.5** |
| ANKY | | | | S | **Sb** | **23 53 19.3** | **+0.9** |
| **ANKY** | **Antikythira Is** | **1.01** | **75** | *e*P | **Pg** | **23 53 05.3** | **+0.4** |
| ANKY | | | | *e*S | **Sg** | **23 53 17.9** | **-0.1** |
| **KYTH** | **Kithira** | **1.01** | **48** | *e*P | **Pg** | **23 53 04.7** | **-0.2** |
| **KYTH** | **Kithira** | **1.01** | **48** | P | **Pg** | **23 53 04.5** | **-0.4** |
| **KYTH** | **Kithira** | **1.01** | **48** | *e*P | **Pg** | **23 53 04.7** | **-0.2** |
| **DYR** | **Agios Nikonas** | **1.17** | **9** | *e*P | **Pg** | **23 53 07.7** | **-0.2** |
| DYR | | | | *e*S | **Sg** | **23 53 23.1** | **0.0** |
| **DYR** | **Agios Nikonas** | **1.17** | **9** | P | **Pg** | **23 53 07.5** | **-0.4** |
| DYR | | | | S | **Sg** | **23 53 23.1** | **0.0** |
| **DYR** | **Agios Nikonas** | **1.17** | **9** | *e*P | **Pg** | **23 53 07.7** | **-0.2** |
| DYR | | | | *e*S | **Sg** | **23 53 23.1** | **0.0** |
| **VLI** | **Veliai** | **1.30** | **31** | *e*P | **Pn** | **23 53 09.2** | **-0.5** |
| **VLI** | **Veliai** | **1.30** | **31** | P | **Pn** | **23 53 09.2** | **-0.5** |
| VLI | | | | S | **Sn** | **23 53 28.7** | **+1.6** |
| **VLI** | **Veliai** | **1.30** | **31** | *e*P | **Pn** | **23 53 09.2** | **-0.5** |
| VLI | | | | S | **Sn** | **23 53 28.7** | **+1.6** |
| **PYL** | **PYLOS** | **1.32** | **347** | *e*P | **Pn** | **23 53 10.2** | **+0.2** |
| **PYL** | **PYLOS** | **1.32** | **347** | P | **Pn** | **23 53 10.4** | **+0.4** |
| **PYL** | **PYLOS** | **1.32** | **347** | *e*P | **Pn** | **23 53 10.2** | **+0.2** |
| **IMMV** | **Iera Moni Meta** | **1.54** | **95** | *e*P | **Pn** | **23 53 12.7** | **-0.3** |
| **IMMV** | **Iera Moni Meta** | **1.54** | **95** | *e*P | **Pn** | **23 53 12.7** | **-0.3** |
| **ITM** | **Ithomi** | **1.57** | **355** | *e*P | **Pn** | **23 53 13.2** | **-0.3** |
| **ITM** | **Ithomi** | **1.57** | **355** | P | **Pn** | **23 53 13.5** | **0.0** |
| **ITM** | **Ithomi** | **1.57** | **355** | P | **Pn** | **23 53 13.5** | **0.0** |
| **VAM** | **Vamos** | **1.72** | **96** | *e*P | **Pn** | **23 53 15.4** | **-0.1** |
| **VAM** | **Vamos** | **1.72** | **96** | P | **Pn** | **23 53 15.4** | **-0.1** |
| **VAM** | **Vamos** | **1.72** | **96** | P | **Pn** | **23 53 15.4** | **-0.1** |
| **VLX** | **Vlachokerasia** | **1.77** | **7** | *e*P | **Pn** | **23 53 17.0** | **+0.7** |
| **VLX** | **Vlachokerasia** | **1.77** | **7** | P | **Pn** | **23 53 17.5** | **+1.2** |
| VLX | | | | S | **Sb** | **23 53 40.8** | **+0.3** |
| **VLX** | **Vlachokerasia** | **1.77** | **7** | *e*P | **Pn** | **23 53 17.0** | **+0.7** |
| **AMT** | **Artemida-Makis** | **1.95** | **351** | P | **Pn** | **23 53 19.6** | **+0.9** |
| **AMT** | **Artemida-Makis** | **1.95** | **351** | P | **Pn** | **23 53 19.6** | **+0.9** |
| **KRND** | **KRANIDI** | **1.96** | **25** | *e*P | **Pn** | **23 53 18.2** | **-0.6** |
| **KRND** | **KRANIDI** | **1.96** | **25** | P | **Pn** | **23 53 18.2** | **-0.6** |
| **KRND** | **KRANIDI** | **1.96** | **25** | *e*P | **Pn** | **23 53 18.2** | **-0.6** |
| **DID** | **Didima** | **2.10** | **25** | P | **Pn** | **23 53 20.1** | **-0.7** |
| **DID** | **Didima** | **2.10** | **25** | P | **Pn** | **23 53 20.1** | **-0.7** |
| **MHLO** | **Agia Marina, M** | **2.15** | **59** | *e*P | **Pn** | **23 53 19.9** | **-1.5** |
| **MHLO** | **Agia Marina, M** | **2.15** | **59** | P | **Pn** | **23 53 20.4** | **-1.0** |
| **MHLO** | **Agia Marina, M** | **2.15** | **59** | P | **Pn** | **23 53 20.4** | **-1.0** |
| **GUR** | **Goura** | **2.33** | **5** | *e*P | **Pn** | **23 53 24.9** | **+0.9** |
| **GUR** | **Goura** | **2.33** | **5** | P | **Pn** | **23 53 25.1** | **+0.9** |
| **GUR** | **Goura** | **2.33** | **5** | *e*P | **Pn** | **23 53 24.9** | **+0.9** |
| **DRO** | **Drossia** | **2.36** | **352** | *e*P | **Pn** | **23 53 25.1** | **+0.8** |
| **DRO** | **Drossia** | **2.36** | **352** | *e*P | **Pn** | **23 53 25.1** | **+0.8** |
| **KLV** | **Kalavryta, Ach** | **2.43** | **1** | *e*P | **Pn** | **23 53 25.8** | **+0.5** |
| **KLV** | **Kalavryta, Ach** | **2.43** | **1** | *e*P | **Pn** | **23 53 25.8** | **+0.5** |
| **THAL** | **Thalero** | **2.47** | **10** | *e*P | **Pn** | **23 53 26.5** | **+0.8** |
| **THAL** | **Thalero** | **2.47** | **10** | *e*P | **Pn** | **23 53 26.5** | **+0.8** |
| **SERI** | **Serifos** | **2.47** | **50** | *e*P | Pn | 23 53 23.5 | -2.3 |
| **SERI** | **Serifos** | **2.47** | **50** | *e*P | Pn | 23 53 23.5 | -2.3 |
| **RLS** | **Riolos of Patr** | **2.50** | **348** | *e*P | **Pn** | **23 53 26.3** | **+0.1** |
| **RLS** | **Riolos of Patr** | **2.50** | **348** | *e*P | **Pn** | **23 53 26.3** | **+0.1** |
| **LTK** | **Loutraki** | **2.51** | **16** | *e*P | **Pn** | **23 53 26.7** | **+0.3** |
| **LTK** | **Loutraki** | **2.51** | **16** | P | **Pn** | **23 53 26.9** | **+0.5** |
| **LTK** | **Loutraki** | **2.51** | **16** | *e*P | **Pn** | **23 53 26.7** | **+0.3** |
| **VLY** | **Voula,Athens** | **2.62** | **31** | *e*P | **Pn** | **23 53 26.9** | **-1.0** |
| **VLY** | **Voula,Athens** | **2.62** | **31** | *e*P | **Pn** | **23 53 26.9** | **-1.0** |
| **LAKA** | **Lakka** | **2.63** | **358** | *e*P | **Pn** | **23 53 29.0** | **+1.0** |
| **LAKA** | **Lakka** | **2.63** | **358** | *e*P | **Pn** | **23 53 29.0** | **+1.0** |
| **TRIZ** | **Trizonia** | **2.75** | **359** | P | **Pn** | **23 53 30.9** | **+1.2** |
| **TRIZ** | **Trizonia** | **2.75** | **359** | P | **Pn** | **23 53 30.9** | **+1.2** |
| **KALE** | **Kalithea** | **2.78** | **1** | *e*P | **Pn** | **23 53 30.0** | **-0.1** |
| **KALE** | **Kalithea** | **2.78** | **1** | *e*P | **Pn** | **23 53 30.0** | **-0.1** |
| **LAST** | **Lasithi** | **2.79** | **98** | *e*P | **Pn** | **23 53 30.2** | **-0.1** |
| **LAST** | **Lasithi** | **2.79** | **98** | *e*P | **Pn** | **23 53 30.2** | **-0.1** |
| **SERG** | **Sergoula** | **2.80** | **359** | P | **Pn** | **23 53 30.5** | **+0.1** |
| **SERG** | **Sergoula** | **2.80** | **359** | P | **Pn** | **23 53 30.5** | **+0.1** |
| **DSF** | **Desfina** | **2.82** | **7** | *e*P | **Pn** | **23 53 30.0** | **-0.7** |
| **DSF** | **Desfina** | **2.82** | **7** | *e*P | **Pn** | **23 53 30.0** | **-0.7** |
| **EFP** | **Efpalio** | **2.82** | **357** | *e*P | **Pn** | **23 53 31.6** | **+1.0** |
| **EFP** | **Efpalio** | **2.82** | **357** | *e*P | **Pn** | **23 53 31.6** | **+1.0** |
| **VLS** | **Valsamata** | **2.84** | **335** | P | **Pn** | **23 53 30.3** | **-0.6** |
| VLS | | | | S | **Sn** | **23 54 03.2** | **-1.9** |
| **VLS** | **Valsamata** | **2.84** | **335** | P | **Pn** | **23 53 30.3** | **-0.6** |
| VLS | | | | S | **Sn** | **23 54 03.2** | **-1.9** |
| **NPS** | **Neapolis** | **2.89** | **96** | *e*P | **Pn** | **23 53 31.1** | **-0.4** |
| **NPS** | **Neapolis** | **2.89** | **96** | *e*P | **Pn** | **23 53 31.1** | **-0.4** |
| **PDO** | **Prodromos** | **3.07** | **346** | P | **Pn** | **23 53 35.3** | **+1.2** |
| **PDO** | **Prodromos** | **3.07** | **346** | P | **Pn** | **23 53 35.3** | **+1.2** |
| **LKR** | **Lokris** | **3.12** | **13** | *e*P | **Pn** | **23 53 33.6** | **-1.1** |
| **LKR** | **Lokris** | **3.12** | **13** | P | **Pn** | **23 53 34.1** | **-0.6** |
| **LKR** | **Lokris** | **3.12** | **13** | P | **Pn** | **23 53 34.1** | **-0.6** |
| **AXAR** | **Agios Charalam** | **3.18** | **8** | *e*P | **Pn** | **23 53 36.4** | **+0.8** |
| **AXAR** | **Agios Charalam** | **3.18** | **8** | *e*P | **Pn** | **23 53 36.4** | **+0.8** |
| **EVR** | **Evrytania** | **3.31** | **356** | *e*P | **Pn** | **23 53 37.2** | **-0.3** |
| **EVR** | **Evrytania** | **3.31** | **356** | *e*P | **Pn** | **23 53 37.2** | **-0.3** |
| **SMIA** | **Simia** | **3.38** | **15** | *e*P | **Pn** | **23 53 37.8** | **-0.6** |
| **SMIA** | **Simia** | **3.38** | **15** | *e*P | **Pn** | **23 53 37.8** | **-0.6** |
| **MAKR** | **Makrakomi, Fth** | **3.40** | **0** | *e*P | **Pn** | **23 53 40.1** | **+1.5** |
| **MAKR** | **Makrakomi, Fth** | **3.40** | **0** | P | **Pn** | **23 53 40.2** | **+1.6** |
| **MAKR** | **Makrakomi, Fth** | **3.40** | **0** | *e*P | **Pn** | **23 53 40.1** | **+1.5** |
| **AGG** | **Agios Georgios** | **3.41** | **3** | *e*P | **Pn** | **23 53 38.1** | **-0.7** |
| **AGG** | **Agios Georgios** | **3.41** | **3** | P | **Pn** | **23 53 38.8** | **0.0** |
| **AGG** | **Agios Georgios** | **3.41** | **3** | P | **Pn** | **23 53 38.8** | **0.0** |
| **DSL** | **Palaion Diasel** | **3.61** | **347** | *e*P | **Pn** | **23 53 41.5** | **0.0** |
| **DSL** | **Palaion Diasel** | **3.61** | **347** | *e*P | **Pn** | **23 53 41.5** | **0.0** |
| **SKIA** | **Skiathos** | **3.71** | **17** | *e*P | **Pn** | **23 53 43.2** | **+0.3** |
| **SKIA** | **Skiathos** | **3.71** | **17** | *e*P | **Pn** | **23 53 43.2** | **+0.3** |
| **NEO** | **Neokhori** | **3.80** | **13** | *e*P | **Pn** | **23 53 43.7** | **-0.4** |
| **NEO** | **Neokhori** | **3.80** | **13** | *e*P | **Pn** | **23 53 43.7** | **-0.4** |
| **AOS** | **Alonnisos** | **3.83** | **21** | *e*P | **Pn** | **23 53 43.6** | **-0.9** |
| **AOS** | **Alonnisos** | **3.83** | **21** | *e*P | **Pn** | **23 53 43.6** | **-0.9** |

*ISK **25** 00:07:43.1,39°.04N×29°.39E, h19km, MD2.5*
*DDA **25** 00:07:44.1,39°.11N×29°.06E, h7km, Md2.6*
*CSEM **25** 00:07:44.4±0.2,39°.16N×29°.02E, h2km, MD2.6, Error ellipse: s-maj=6.4km s-min=3.8km az=117.0*
**ISC 25 00:07:44.1±1.1,39°.12N±0°.03×29°.07E±0°.03, h4km±11km, n21,σ0°40/30, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DEMI** | **Demirci** | **0.28** | **254** | *i* P | **Pg** | **00 07 49.8** | **+0.1** |
| DEMI | | | | *i* S | **Sg** | **00 07 53.5** | **+0.1** |
| **DEMI** | **Demirci** | **0.28** | **254** | P | **Pg** | **00 07 49.8** | **+0.1** |
| DEMI | | | | S | **Sg** | **00 07 53.5** | **+0.1** |
| **TVSB** | **Tavsanli** | **0.45** | **43** | *e*PG | **Pg** | **00 07 52.1** | **-0.7** |
| TVSB | | | | *e*SG | **Sg** | **00 07 58.6** | **-0.1** |
| **TVSB** | **Tavsanli** | **0.45** | **43** | *e*Pg | **Pg** | **00 07 52.1** | **-0.7** |
| TVSB | | | | *e*Sg | **Sg** | **00 07 58.6** | **-0.1** |
| **KULA** | **Kula-Manisa** | **0.69** | **208** | *e*PG | **Pb** | **00 07 58.8** | **+0.1** |
| **KULA** | **Kula-Manisa** | **0.69** | **208** | *e*Pg | **Pb** | **00 07 58.8** | **+0.1** |
| **MANT** | **Manisa** | **0.75** | **212** | *i* P | **Pg** | **00 07 58.6** | **+0.1** |
| MANT | | | | *i* S | **Sg** | **00 08 07.7** | **-0.5** |
| **MANT** | **Manisa** | **0.75** | **212** | P | **Pg** | **00 07 58.6** | **+0.1** |
| MANT | | | | S | **Sg** | **00 08 07.7** | **-0.5** |
| **KHAL** | **Karahalli** | **0.82** | **156** | *i* P | **Pn** | **00 08 02.0** | **-0.6** |
| KHAL | | | | *i* S | **Sg** | **00 08 11.1** | **+0.5** |
| **KHAL** | **Karahalli** | **0.82** | **156** | P | **Pn** | **00 08 02.0** | **-0.6** |
| KHAL | | | | S | **Sg** | **00 08 11.1** | **+0.5** |
| **KHL** | **Karahalli** | **0.88** | **156** | *e*PG | Pg | 00 07 57.5 | -3.4 |
| **KHL** | **Karahalli** | **0.88** | **156** | *e*Pg | Pg | 00 07 57.5 | -3.4 |
| **IGD** | **Bursa** | **1.14** | **5** | P | **Pb** | **00 08 06.2** | **-0.2** |
| IGD | | | | S | **Sn** | **00 08 22.9** | **-0.1** |
| **MDNY** | **Mudanya-Bursa** | **1.25** | **354** | *e*PN | **Pn** | **00 08 08.3** | **0.0** |
| **MDNY** | **Mudanya-Bursa** | **1.25** | **354** | *e*Pn | **Pn** | **00 08 08.3** | **0.0** |
| **KCTX** | **Karacabey (Bur** | **1.27** | **335** | *e*PN | **Pb** | **00 08 08.8** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **1.27** | **335** | *e*Pn | **Pb** | **00 08 08.8** | **+0.2** |
| **BORA** | **Eskisehir** | **1.31** | **54** | *i* P | **Pg** | **00 08 10.1** | **+0.8** |
| BORA | | | | *i* S | **Sn** | **00 08 27.4** | **+0.1** |
| **BORA** | **Eskisehir** | **1.31** | **54** | P | **Pg** | **00 08 10.1** | **+0.8** |
| BORA | | | | S | **Sn** | **00 08 27.4** | **+0.1** |
| **ARMT** | **Armutlu** | **1.45** | **354** | *e*PN | **Pn** | **00 08 11.0** | **-0.1** |
| **ARMT** | **Armutlu** | **1.45** | **354** | *e*Pn | **Pn** | **00 08 11.0** | **-0.1** |

**IDC 25 00:36:47.1±3.6,4°.37S×152°.91E, h0km, mb3.5/2, mb1 3.8/2, mb1mx3.4/21, mbtmp3.5/2, Error ellipse: s-maj=177.7km s-min=45.2km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **23.80** | **228** | P | P | 00 42 02.6 | +0.7 |
| | 0.7nm,0.6s,baz=54,slow=10,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **26.53** | **222** | P | P | 00 42 26.6 | -0.2 |
| | 0.7nm,0.7s,baz=58,slow=8.8,SNR=3.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.27** | **289** | PKPbc | PKPbc | 00 56 40.6 | -0.7 |
| | 0.3nm,0.4s,baz=65,slow=1.8,SNR=13 | | | | | | |

**WEL 25 00:49:44.6±0.4,37°.53S×176°.55E, h179km±3km, ML3.8/11, 10C-3D, Error ellipse: s-maj=2.7km s-min=2.3km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OPRZ** | **Ohinepanea** | **0.31** | **179** | ⇑PN | Pn | 00 50 08.8 | +0.2 |
| **TARZ** | **Mount Tarawera** | **0.70** | **183** | PN | Pn | 00 50 10.9 | +0.6 |
| **URZ** | **Urewera** | **0.85** | **149** | ⇑PN | Pn | 00 50 10.8 | -0.2 |
| URZ | | | | SN | Sn | 00 50 31.1 | -0.6 |
| URZ | | | | AML | AML | 00 50 34.5 | |
| **HAZ** | **Te Kaha** | **1.00** | **103** | PN | Pn | 00 50 11.9 | -0.2 |
| HAZ | | | | SN | Sn | 00 50 33.3 | -0.1 |
| **MWZ** | **Matawai** | **1.11** | **136** | PN | Pn | 00 50 12.7 | -0.4 |
| MWZ | | | | AML | AML | 00 50 45.3 | |
| MWZ | | | | AML | AML | 00 50 46.7 | |
| **RAGZ** | **Rawiri** | **1.18** | **145** | PN | Pn | 00 50 13.8 | +0.1 |
| **PKGZ** | **Pakihiroa** | **1.26** | **106** | PN | Pn | 00 50 14.4 | +0.2 |
| **TWGZ** | **Tauwhareparae** | **1.30** | **120** | PN | Pn | 00 50 14.7 | 0.0 |
| **MRHZ** | **Matea Rd** | **1.30** | **185** | PN | Pn | 00 50 14.5 | -0.2 |
| **TKGZ** | **Te Karaka** | **1.37** | **132** | PN | Pn | 00 50 15.2 | +0.1 |
| TKGZ | | | | SN | Sn | 00 50 38.4 | -0.5 |
| **SNGZ** | **Shannon Statio** | **1.39** | **154** | ⇓PN | Pn | 00 50 15.6 | +0.1 |
| SNGZ | | | | SN | Sn | 00 50 39.1 | -0.4 |
| **MXZ** | **Matakaoa Point** | **1.40** | **92** | PN | Pn | 00 50 15.6 | +0.2 |
| MXZ | | | | AML | AML | 00 50 48.5 | |
| **RAHZ** | **Arahi** | **1.45** | **163** | PN | Pn | 00 50 16.1 | +0.1 |
| **PUZ** | **Puketiti** | **1.46** | **112** | ⇓PN | Pn | 00 50 15.7 | -0.4 |
| PUZ | | | | AML | AML | 00 50 52.1 | |
| **WMGZ** | **Waiomatatini S** | **1.51** | **101** | PN | Pn | 00 50 16.5 | 0.0 |
| **RIGZ** | **Rimuhau** | **1.51** | **141** | ⇑PN | Pn | 00 50 16.8 | +0.2 |
| **NMHZ** | **Naumai** | **1.58** | **173** | ⇑PN | Pn | 00 50 17.4 | +0.2 |
| **CNGZ** | **Carnagh Statio** | **1.62** | **126** | PN | Pn | 00 50 18.0 | +0.5 |
| **BKZ** | **Black Stump Fm** | **1.63** | **182** | ⇑PN | Pn | 00 50 16.9 | -0.8 |
| BKZ | | | | AML | AML | 00 50 45.7 | |
| BKZ | | | | AML | AML | 00 50 49.2 | |
| **WHHZ** | **Waihua** | **1.63** | **161** | ⇑PN | Pn | 00 50 17.6 | -0.1 |
| **KRVZ** | **Karewarewa** | **1.72** | **204** | PN | Pn | 00 50 18.2 | -0.4 |
| **KNZ** | **Kokohu** | **1.73** | **150** | ⇑PN | Pn | 00 50 18.5 | -0.2 |
| **PRGZ** | **Paritu Road** | **1.74** | **143** | PN | Pn | 00 50 18.6 | -0.2 |
| **WTVZ** | **West Tongariro** | **1.75** | **205** | PN | Pn | 00 50 18.7 | -0.3 |
| **ARHZ** | **Aropaoanui** | **1.76** | **169** | PN | Pn | 00 50 18.9 | -0.1 |
| **OTVZ** | **Oturere** | **1.77** | **203** | PN | Pn | 00 50 19.1 | -0.2 |
| **NGZ** | **Ngauruhoe** | **1.80** | **204** | PN | Pn | 00 50 19.7 | +0.1 |
| **WHVZ** | **Whangaehu Hut** | **1.90** | **203** | PN | Pn | 00 50 20.1 | -0.7 |
| **MCHZ** | **McNeil Hill** | **1.91** | **177** | PN | Pn | 00 50 20.4 | -0.2 |
| **MHGZ** | **Mahia Peninsul** | **1.94** | **147** | PN | Pn | 00 50 20.6 | -0.3 |
| **WNVZ** | **Wahianoa** | **1.94** | **202** | PN | Pn | 00 50 20.4 | -0.7 |
| **MOVZ** | **Moawhango** | **1.97** | **198** | PN | Pn | 00 50 20.3 | -1.0 |
| **BHHZ** | **Black Hill Sta** | **1.99** | **191** | PN | Pn | 00 50 18.9 | -2.6 |
| **MTVZ** | **Mangateitei** | **2.04** | **204** | PN | Pn | 00 50 21.5 | -0.5 |
| **KRHZ** | **Kereru** | **2.11** | **184** | PN | Pn | 00 50 21.9 | -0.9 |
| **CKHZ** | **Cape Kidnapper** | **2.16** | **169** | ⇑PN | Pn | 00 50 22.8 | -0.5 |
| **KAHZ** | **Kahuranaki** | **2.27** | **174** | ⇑PN | Pn | 00 50 23.9 | -0.7 |
| **PXZ** | **Pawanui** | **2.51** | **175** | ⇑PN | Pn | 00 50 25.9 | -1.3 |
| PXZ | | | | AML | AML | 00 51 01.7 | |
| PXZ | | | | AML | AML | 00 51 01.8 | |
| PXZ | | | | AML | AML | 00 51 03.3 | |
| **WPHZ** | **Waipukurau** | **2.53** | **182** | PN | Pn | 00 50 25.9 | -1.6 |
| **WAZ** | **Wanganui** | **2.54** | **208** | PN | Pn | 00 50 26.2 | -1.4 |
| **TSZ** | **Takapari Road** | **2.56** | **190** | PN | Pn | 00 50 26.1 | -1.9 |
| **PRHZ** | **Porangahau** | **2.73** | **179** | PN | Pn | 00 50 28.0 | -1.9 |
| **DVHZ** | **Dannevirke** | **2.78** | **186** | PN | Pn | 00 50 28.3 | -2.2 |
| **POWZ** | **Post Office Ro** | **2.92** | **192** | PN | Pn | 00 50 30.2 | -2.0 |
| **ANWZ** | **Angora Road** | **2.92** | **181** | PN | Pn | 00 50 30.6 | -1.6 |
| **PRWZ** | **Pori Road** | **3.05** | **188** | PN | Pn | 00 50 31.3 | -2.4 |
| **MRZ** | **Mangatainoka R** | **3.21** | **193** | ⇓PN | Pn | 00 50 33.0 | -2.8 |
| MRZ | | | | AML | AML | 00 51 14.1 | |
| MRZ | | | | AML | AML | 00 51 15.0 | |
| **TIWZ** | **Tintock** | **3.28** | **189** | PN | Pn | 00 50 34.8 | -1.8 |
| TIWZ | | | | AML | AML | 00 51 16.0 | |
| TIWZ | | | | AML | AML | 00 51 17.1 | |
| **CPWZ** | **Castlepoint** | **3.38** | **184** | PN | Pn | 00 50 35.5 | -2.3 |
| **OGWZ** | **Otaki Gorge** | **3.45** | **198** | PN | Pn | 00 50 35.8 | -2.8 |
| **HOWZ** | **Holdsworth Sta** | **3.46** | **193** | PN | Pn | 00 50 35.6 | -3.2 |
| **KIW** | **Kapiti Island** | **3.56** | **200** | PN | Pn | 00 50 36.9 | -3.2 |
| **TMWZ** | **Te Maipa** | **3.61** | **188** | PN | Pn | 00 50 37.6 | -3.0 |
| **MTW** | **Mount Morrison** | **3.71** | **192** | PN | Pn | 00 50 38.4 | -3.6 |
| **CAW** | **Cannon Point** | **3.75** | **197** | PN | Pn | 00 50 39.0 | -3.5 |
| CAW | | | | AML | AML | 00 51 24.6 | |
| CAW | | | | AML

0.2nm,0.4s,baz=99,slow=4.5,SNR=2.0
SONM PKPab **PKPab 01 17 34.5 -0.6**
0.3nm,0.4s,baz=356,slow=4.3,SNR=3.2

*NIED **25** 00:59:00,26.70N×130.30E, h5km, Mw4.1 Best double couple: M○1.57000×10^15 NP1:φs59.00000°, δ37.00000°, λ-75.00000°. NP2:φ221.00000°, δ55.00000°, λ-101.00000°.*
*IDC **25** 00:59:27.7±1.1,26.74N×130.25E, h0km, mb3.7/4, mb1 3.9/5, mb1mx3.6/35, mbtmp3.7/5, ML3.7/1, MS2.7/2, Ms1 2.7/2, ms1mx2.4/35, Error ellipse: s-maj=32.0km s-min=22.4km az=85.0*
*JMA **25** 00:59:30.4,26.73N×130.29E, h46km, M3.9*
**ISC 25 00:59:27.3±1.6, 26.76N±0.04×130.24E±0.04, h4km±11km, n21, σ1♀25/34, mb3.7/4, Southeast of Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JMZ** | **Minamidaito 2** | **1.29** | **137** | P | | **Pb** | | **00 59 51.5** | **-0.7** |
| JMZ | | | | *e*S | | **Sb** | | **01 00 07.0** | **-2.1** |
| **JTK** | **Tokunoshima** | **1.53** | **312** | P | | **Pg** | | **00 59 57.0** | **+0.2** |
| JTK | | | | *e*S | | **Sb** | | **01 00 15.8** | **-0.4** |
| **JZK** | **Kikaishima** | **1.56** | **351** | P | | **Pg** | | **00 59 57.7** | **+0.3** |
| **JOKE** | **Okinoerabujima** | **1.60** | **292** | P | | **Pg** | | **00 59 58.0** | **-0.1** |
| JOKE | | | | *e*S | | **Sb** | | **01 00 17.9** | **-0.2** |
| **JAM** | **Amami Oshima** | **1.74** | **341** | P | | **Pb** | | **00 59 59.4** | **-0.4** |
| JAM | | | | *e*S | | **Sn** | | **01 00 19.6** | **-1.3** |
| **JAMN** | **Amaminishikomi** | **1.75** | **328** | P | | **Pb** | | **00 59 59.5** | **-0.6** |
| JAMN | | | | *e*S | | **Sn** | | **01 00 20.4** | **-0.9** |
| **JOW** | **Kunigami** | **1.76** | **273** | P | | **Pb** | | **01 00 00.1** | **-0.1** |
| JOW | | | | *e*S | | **Sn** | | **01 00 21.0** | **-0.4** |
| **JOW** | **Kunigami** | **1.76** | **273** | Pn | | **Pb** | | **00 59 59.8** | **-0.4** |
| | 6.2nm,0.3s,baz=360,slow=30,SNR=268 | | | | | | | | |
| JOW | | | | Sn | | **Sn** | | **01 00 20.6** | **-0.9** |
| | 4.1nm,0.3s,baz=176,slow=30,SNR=11 | | | | | | | | |
| **JNTH** | **Nagotoyohara** | **2.00** | **264** | P | | **Pb** | | **01 00 03.0** | **-1.3** |
| JNTH | | | | *e*S | | **Sn** | | **01 00 26.4** | **-1.0** |
| **JIH** | **Iheya** | **2.05** | **278** | P | | **Pb** | | **01 00 04.1** | **-1.0** |
| JIH | | | | *e*S | | **Sb** | | **01 00 29.0** | **-1.9** |
| **JJT2** | **Tamagusuku 2** | **2.32** | **255** | P | | **Pb** | | **01 00 08.0** | **-1.7** |
| JJT2 | | | | S | | **Sn** | | **01 00 35.5** | **+0.2** |
| **JTAJ** | **Takarajima** | **2.55** | **339** | P | | **Pn** | | **01 00 10.4** | **+0.9** |
| JTAJ | | | | *e*S | | **Sn** | | **01 00 38.6** | **-2.5** |
| **JAGN** | **Aguni-jima** | **2.69** | **267** | P | | **Pn** | | **01 00 12.9** | **+1.5** |
| JAGN | | | | *e*S | | **Sn** | | **01 00 43.5** | **-0.9** |
| **JKE** | **Kume jima 2** | **3.12** | **263** | P | | **Pn** | | **01 00 18.0** | **+0.6** |
| JKE | | | | *e*S | | **Sn** | | **01 00 53.7** | **-1.4** |
| **JTJ** | **Tarama** | **5.42** | **248** | P | | **Pn** | | **01 00 49.2** | **+0.2** |
| **JNU** | **Nakatsue** | **6.36** | **5** | Pn | | **Pn** | | **01 01 03.1** | **+1.1** |
| | 1.6nm,0.3s,baz=290,slow=3.3,SNR=9.5 | | | | | | | | |
| JNU | | | | Sn | | **Sn** | | **01 02 11.9** | **-3.2** |
| | 1.0nm,0.3s,baz=98,slow=17,SNR=4.9 | | | | | | | | |
| JNU | | | | LR | | LR | | 01 03 17.4 | |
| | comp=Z,26nm,20.6s,baz=119,slow=36 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.60** | **175** | P | | **P** | | **01 07 57.1** | **+0.4** |
| | 0.4nm,0.5s,baz=354,slow=8.5,SNR=7.3 | | | | | | | | |
| **AAK** | **Ala-Archa** | **47.65** | **304** | LR | | LR | | 01 29 44.8 | |
| | comp=Z,21nm,18.9s,baz=337,slow=38 | | | | | | | | |
| **ASAR** | **Alice Springs** | **50.26** | **176** | P | | **P** | | **01 08 25.9** | **+0.9** |
| | 0.4nm,0.6s,baz=4.5,slow=14,SNR=4.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **63.12** | **28** | P | | **P** | | **01 09 56.9** | **+1.0** |
| | 0.3nm,0.8s,baz=249,slow=7.3,SNR=4.1 | | | | | | | | |
| **FINES** | **FINESS Array B** | **73.28** | **331** | P | | **P** | | **01 11 00.6** | **+1.0** |
| | 3.2nm,1.0s,baz=85,slow=6.1,SNR=8.0 | | | | | | | | |

**IDC 25 01:05:34.4±2.9, 22.13S×180.00E, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.8/19, mbtmp3.8/3, Error ellipse: s-maj=272.6km s-min=35.6km az=163.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.35** | **259** | P | | P | | 01 13 29.5 | -1.1 |
| | 0.4nm,0.4s,baz=100,slow=7.3,SNR=7.3 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **42.55** | **264** | P | | P | | 01 13 32.9 | +0.6 |
| | 1.3nm,0.5s,baz=99,slow=8.3,SNR=34 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **89.50** | **59** | P | | P | | 01 18 33.9 | 0.0 |
| | 0.3nm,0.8s,baz=213,slow=6.5,SNR=3.6 | | | | | | | | |

*DDA **25** 01:10:00.5,37.05N×28.50E, h7km, Md2.8*
*ISK **25** 01:10:00.3,37.08N×28.58E, h7km, MD2.7*
*ISCJB **25** 01:10:01.2±0.5,37.07N±0.04×28.54E±0.05, h5km±8km, Error ellipse: s-maj=8.9km s-min=4.4km az=135.4*
*CSEM **25** 01:10:01.4±0.2,37.06N×28.54E, h10km, MD2.8, Error ellipse: s-maj=5.5km s-min=4.3km az=60.0*
**ISC 25 01:10:01.3±0.8, 37.08N±0.03×28.56E±0.03, h17km±7km, n24, σ0♀99/37, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TURN** | **Turunc** | **0.21** | **171** | *i* P | | **Pg** | | **01 10 07.5** | **+1.2** |
| **TURN** | **Turunc** | **0.21** | **171** | P | | **Pg** | | **01 10 07.5** | **+1.2** |
| TURN | | | | S | | **Sg** | | **01 10 12.8** | **+3.2** |
| **YER** | **Yerkesik** | **0.23** | **283** | *e*PG | | **Pg** | | **01 10 05.4** | **-1.2** |
| YER | | | | *e*SG | | **Sg** | | **01 10 09.3** | **-0.9** |
| **YER** | **Yerkesik** | **0.23** | **283** | *e*Pg | | **Pg** | | **01 10 05.4** | **-1.2** |
| YER | | | | *e*Sg | | **Sg** | | **01 10 09.3** | **-0.9** |
| **DALY** | **Dalyan (Mu¨la** | **0.28** | **165** | *e*PG | | **Pg** | | **01 10 06.2** | **-1.1** |
| DALY | | | | *e*SG | | **Sg** | | **01 10 10.4** | **-0.9** |
| **DALY** | **Dalyan (Mu¨la** | **0.28** | **165** | *e*Pg | | **Pg** | | **01 10 06.2** | **-1.1** |
| DALY | | | | *e*Sg | | **Sg** | | **01 10 10.4** | **-0.9** |
| **FETY** | **Fethiye** | **0.61** | **137** | *e*PG | | **Pg** | | **01 10 12.5** | **-0.9** |
| FETY | | | | *e*SG | | **Sb** | | **01 10 21.0** | **-0.9** |
| **FETY** | **Fethiye** | **0.61** | **137** | *e*Pg | | **Pg** | | **01 10 12.5** | **-0.9** |
| FETY | | | | *e*Sg | | **Sb** | | **01 10 21.0** | **-0.9** |
| **DNZL** | **Cakiroluk** | **0.72** | **32** | *i* P | | **Pb** | | **01 10 15.2** | **-0.3** |
| DNZL | | | | *i* S | | **Sn** | | **01 10 27.3** | **-0.3** |
| **DNZL** | **Cakiroluk** | **0.72** | **32** | P | | **Pb** | | **01 10 15.2** | **-0.3** |
| DNZL | | | | S | | **Sn** | | **01 10 27.3** | **-0.3** |
| **GOLH** | **Golhisar** | **0.81** | **79** | *i* S | | **Sn** | | **01 10 29.9** | **+0.1** |
| **GOLH** | **Golhisar** | **0.81** | **79** | P | | Pg | | 01 10 12.6 | -4.5 |
| GOLH | | | | S | | **Sn** | | **01 10 29.9** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.01** | **328** | *e*PG | | **Pb** | | **01 10 20.5** | **0.0** |
| AYDB | | | | *e*SG | | **Sb** | | **01 10 35.0** | **+1.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.01** | **328** | *e*Pg | | **Pb** | | **01 10 20.5** | **0.0** |
| AYDB | | | | *e*Sg | | **Sb** | | **01 10 35.1** | **+1.4** |
| **NIS1** | **Nisyros Isl.** | **1.21** | **247** | *e*PN | | **Pn** | | **01 10 24.4** | **+0.9** |
| **NIS1** | **Nisyros Isl.** | **1.21** | **247** | *e*Pn | | **Pn** | | **01 10 24.4** | **+0.9** |
| **KULA** | **Kula-Manisa** | **1.43** | **3** | *e*PN | | **Pb** | | **01 10 27.4** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.43** | **3** | *e*Pn | | **Pb** | | **01 10 27.4** | **-0.2** |
| **KHL** | **Karahalli** | **1.45** | **31** | *e*PN | | **Pb** | | **01 10 27.6** | **-0.3** |
| **KHL** | **Karahalli** | **1.45** | **31** | *e*Pn | | **Pb** | | **01 10 27.6** | **-0.3** |
| **KHAL** | **Karahalli** | **1.48** | **30** | *i* P | | **Pg** | | **01 10 29.6** | **-0.2** |
| KHAL | | | | *i* S | | **Sg** | | **01 10 49.2** | **+0.1** |
| **KHAL** | **Karahalli** | **1.48** | **30** | P | | **Pg** | | **01 10 29.6** | **-0.2** |
| KHAL | | | | S | | **Sg** | | **01 10 49.2** | **+0.1** |
| **BLCB** | **Balcova** | **1.77** | **318** | *e*PN | | **Pb** | | **01 10 32.8** | **-0.6** |
| **BLCB** | **Balcova** | **1.77** | **318** | *e*Pn | | **Pb** | | **01 10 32.8** | **-0.6** |

**IDC 25 01:16:32.1±4.5, 18.68S×171.25E, h0km, mb3.7/2, mb1 4.0/3, mb1mx3.6/22, mbtmp3.7/3, ML3.4/1, MS3.8/4, Ms1 3.8/4, ms1mx3.2/25, Error ellipse: s-maj=153.6km s-min=55.6km az=141.0, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **5.63** | **232** | Pn | | Pn | | 01 17 57.6 | +0.4 |
| | 1.0nm,0.3s,baz=1.7,slow=17,SNR=9.4 | | | | | | | | |
| **URZ** | **Urewera** | **20.17** | **167** | LR | | LR | | 01 27 29.9 | |
| | comp=Z,413nm,21.8s,baz=117,slow=33 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.82** | **262** | P | | P | | 01 23 25.6 | +0.6 |
| | 1.1nm,1.2s,baz=97,slow=9.4,SNR=3.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **35.11** | **255** | P | | P | | 01 23 26.8 | -0.8 |
| | 1.5nm,0.9s,baz=82,slow=8.9,SNR=11 | | | | | | | | |
| **GUMO** | **Guam** | **41.29** | **319** | LR | | LR | | 01 39 19.7 | |
| | comp=Z,92nm,19.2s,baz=94,slow=33 | | | | | | | | |
| **VNDA** | **Vanda** | **59.06** | **182** | LR | | LR | | 01 47 36.3 | |
| | comp=Z,43nm,18.4s,baz=14,slow=32 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **94.83** | **61** | LR | | LR | | 02 05 51.3 | |
| | comp=Z,61nm,18.1s,baz=0.0,slow=31 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **142.61** | **333** | *e*P | | PKPdf | | 01 36 07.8 | +0.6 |
| DPC | | | | *ex* | | x | | 01 36 11.6 | |
| DPC | | | | *ex* | | x | | 01 36 16.6 | |
| **BRG** | **Berggiesshubel** | **143.17** | **336** | *e*P | | PKPdf | | 01 36 12.9 | +4.9 |
| | 10nm,1.4s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **144.69** | **334** | *e*P | | PKPdf | | 01 36 12.7 | +1.9 |
| **GERES** | **GERESS Array B** | **144.86** | **334** | PKP | | PKPbc | | 01 36 10.8 | +0.5 |
| | 0.2nm,0.4s,baz=22,slow=3.2,SNR=2.7 | | | | | | | | |

**IDC 25 01:19:32.9±1.4, 30.58N×83.18E, h0km, mb3.4/4, mb1 3.6/5, mb1mx3.3/34, mbtmp3.4/5, ML3.2/1, Error ellipse: s-maj=48.1km s-min=28.1km az=69.0, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **16.20** | **358** | Pn | | Pn | | 01 23 20.1 | -1.9 |
| | 0.1nm,0.3s,baz=178,slow=13,SNR=3.2 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.32** | **351** | P | | P | | 01 24 10.2 | -0.3 |
| | 0.4nm,0.5s,baz=174,slow=10,SNR=4.8 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **23.38** | **2** | P | | P | | 01 24 43.3 | +0.2 |
| | 0.3nm,0.3s,baz=166,slow=7.4,SNR=2.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **70.29** | **129** | P | | P | | 01 30 48.5 | 0.0 |
| | 0.4nm,0.7s,baz=323,slow=6.4,SNR=6.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.19** | **277** | P | | P | | 01 31 23.5 | 0.0 |
| | 0.7nm,0.9s,baz=48,slow=5.3,SNR=4.2 | | | | | | | | |

*CSEM **25** 01:20:15.2,39.52N×29.66W, h10km, ML2.6, After PDA*
**PDA 25 01:20:15.2±0.5, 39.52N×29.66W, h10km, MD3.7, ML2.6, Error ellipse: s-maj=8.9km s-min=4.1km az=50.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PCED** | **Cedros** | **1.16** | **140** | *e*P | | Pb | | 01 20 33.0 | -4.4 |
| PCED | | | | *e*S | | Sb | | 01 20 46.0 | -6.6 |
| PCED | | | | A | | A | | 01 20 48.3 | |
| | 48nm,0.3s | | | | | | | | |
| **PCED** | **Cedros** | **1.16** | **140** | *e*P | | Pb | | 01 20 33.0 | -4.4 |
| PCED | | | | *e*S | | Sb | | 01 20 46.0 | -6.6 |
| **CALA** | **Caldeira** | **1.20** | **141** | *e*S | | Sb | | 01 20 47.1 | -6.7 |
| **CALA** | **Caldeira** | **1.20** | **141** | *e*S | | Sb | | 01 20 47.1 | -6.7 |
| **ROSA** | **Rosais** | **1.36** | **126** | *e*S | | Sb | | 01 20 50.9 | -7.5 |
| ROSA | | | | A | | A | | 01 20 56.4 | |
| | 28nm,0.5s | | | | | | | | |
| **ROSA** | **Rosais** | **1.36** | **126** | *e*S | | Sb | | 01 20 50.9 | -7.5 |
| **PCAN** | **Candelaria** | **1.40** | **139** | *e*P | | Pn | | 01 20 36.0 | -4.8 |
| PCAN | | | | *e*S | | Sn | | 01 20 52.0 | -7.3 |
| PCAN | | | | A | | A | | 01 20 53.7 | |
| | 79nm,0.3s | | | | | | | | |
| **PCAN** | **Candelaria** | **1.40** | **139** | *e*P | | Pn | | 01 20 36.0 | -4.8 |
| PCAN | | | | *e*S | | Sn | | 01 20 52.0 | -7.3 |
| **PICO** | **Pico** | **1.40** | **136** | *e*P | | Pn | | 01 20 36.3 | -4.6 |
| PICO | | | | *e*S | | Sn | | 01 20 52.0 | -7.5 |
| **PICO** | **Pico** | **1.40** | **136** | *e*P | | Pn | | 01 20 36.3 | -4.6 |
| PICO | | | | *e*S | | Sn | | 01 20 52.0 | -7.5 |
| **PMAN** | **Manadas** | **1.51** | **125** | *e*S | | Sn | | 01 20 54.5 | -7.6 |
| PMAN | | | | A | | A | | 01 21 01.4 | |
| | 24nm,0.4s | | | | | | | | |
| **PMAN** | **Manadas** | **1.51** | **125** | *e*S | | Sn | | 01 20 54.5 | -7.6 |

*SJA **25** 01:26:01.3±0.7, 33.48S×72.58W, h10km, ML3.9, MW3.4*
*GUC **25** 01:26:06.1±0.5, 33.52S×72.06W, h24km±15km, ML3.7*
**ISC 25 01:26:06.1±3.3, 33.57S±0.06×72.2W±0.1, h11km±28km, n22, σ1♀69/31, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.83** | **171** | *i* P | | **Pn** | | **01 26 22.5** | **-1.2** |
| CHPI | | | | *i* S | | **Sb** | | **01 26 35.2** | **+1.5** |
| **ROC1** | **El Roble** | **1.12** | **59** | *e*P | | **Pn** | | **01 26 25.5** | **-2.6** |
| ROC1 | | | | *i* S | | **Sb** | | **01 26 46.1** | **+3.6** |
| **SAN** | **Santiago** | **1.25** | **85** | *i* P | | **Pn** | | **01 26 27.8** | **-1.9** |
| SAN | | | | *i* S | | Sn | | 01 26 44.0 | -2.6 |
| **PEL** | **Peldehue** | **1.30** | **71** | *i* P | | **Pn** | | **01 26 28.6** | **-1.7** |
| PEL | | | | *i* S | | **Sn** | | **01 26 45.6** | **-2.2** |
| PEL | | | | AML | | AML | | 01 26 49.5 | |
| | comp=N,4μm,0.6s | | | | | | | | |
| **FSR** | **Penalolen** | **1.36** | **87** | *i* P | | **Pn** | | **01 26 30.8** | **-0.4** |
| FSR | | | | *i* S | | **Sn** | | **01 26 48.1** | **-1.2** |
| **CLCH** | **Cerro Calan** | **1.37** | **83** | *i* P | | **Pn** | | **01 26 29.6** | **-1.6** |
| CLCH | | | | *i* S | | **Sn** | | **01 26 47.7** | **-1.7** |
| CLCH | | | | AML | | AML | | 01 26 50.3 | |
| | comp=N,3μm,0.7s | | | | | | | | |
| **NICH** | **Los Niches** | **1.62** | **152** | *i* P | | **Pn** | | **01 26 33.9** | **-0.9** |
| NICH | | | | *i* S | | **Sn** | | **01 26 57.1** | **+1.5** |
| **YECH** | **El Yeso** | **1.73** | **94** | *i* P | | **Pn** | | **01 26 35.9** | **-0.6** |
| YECH | | | | AML | | AML | | 01 27 02.4 | |
| | comp=N,1μm,0.6s | | | | | | | | |
| **TALC** | **Talca** | **1.88** | **167** | *i* P | | **Pb** | | **01 26 38.5** | **-1.9** |
| TALC | | | | *i* S | | **Sb** | | **01 27 05.0** | **+1.1** |
| **AUSP** | **Uspallata** | **2.69** | **61** | *i* P | | **Pn** | | **01 26 51.5** | **+1.8** |
| AUSP | | | | *i* S | | **Sb** | | **01 27 28.7** | **+1.1** |
| **ARCO** | **CERRO ARCO** | **2.80** | **76** | *i* P | | **Pn** | | **01 26 53.1** | **+2.0** |
| ARCO | | | | *i* S | | **Sb** | | **01 27 32.2** | **+1.5** |
| ARCO | | | | IAML | | | | 01 27 37.6 | |
| | comp=Z,269nm,0.7s | | | | | | | | |
| ARCO | | | | AML | | AML | | 01 27 38.2 | |
| | comp=Z,285nm,0.7s | | | | | | | | |
| **AAGR** | **Agrelo** | **2.83** | **81** | *i* P | | **Pn** | | **01 26 54.2** | **+2.8** |
| **ASAL** | **Salagasta** | **2.96** | **72** | *e*P | | **Pb** | | **01 26 58.0** | **-0.9** |
| ASAL | | | | *e*S | | **Sb** | | **01 27 35.7** | **+0.6** |
| **RTLS** | **Leoncito** | **2.99** | **55** | *i* P | | Pb | | 01 26 55.9 | -3.7 |
| **RTCV** | **Cerro Valdivia** | **3.49** | **62** | *e*P | | **Pb** | | **01 27 06.7** | **-1.3** |
| RTCV | | | | *e*S | | **Sb** | | **01 27 50.9** | **+0.5** |
| **RTLL** | **Cerro Villicun** | **3.83** | **55** | *e*P | | **Pn** | | **01 27 06.0** | **+0.9** |
| **CFAA** | **Coronel Fontan** | **3.84** | **60** | *e*P | | **Pn** | | **01 27 06.6** | **+1.3** |
| **AMOG** | **MOGNA** | **4.06** | **51** | *e*P | | **Pn** | | **01 27 09.1** | **+0.8** |
| **ACAN** | **Cantantal** | **4.37** | **74** | *e*P | | **Pn** | | **01 27 13.0** | **+0.5** |
| **CANA** | **Caviahue** | **4.40** | **169** | *e*P | | **Pb** | | **01 27 24.8** | **+1.2** |
| **AGUA** | **GUANDACOL** | **5.13** | **39** | *e*P | | **Pn** | | **01 27 23.5** | **+0.4** |
| **VCA** | **Vinchina** | **5.89** | **36** | *e*P | | Pn | | 01 27 34.9 | +1.4 |
| VCA | | | | IAML | | | | 01 29 17.2 | |
| | comp=Z,42nm,0.8s | | | | | | | | |

*ISCJB **25** 01:26:37.7±0.5, 38.86N±0.02×26.82E±0.04, h7km±6km, Error ellipse: s-maj=5.9km s-min=4.1km az=4.7*
*CSEM **25** 01:26:37.9±0.2, 38.86N×26.82E, h10km, MD2.6, Error ellipse: s-maj=3.7km s-min=2.7km az=72.0*
*DDA **25** 01:26:37.5, 38.85N×26.77E, h7km, Md2.7*
*ISK **25** 01:26:37.5, 38.85N×26.85E, h9km, MD2.6*
**ISC 25 01:26:37.8±0.9, 38.85N±0.02×26.81E±0.03, h14km±9km, n27, σ0♀43/40, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DKL** | **Dikili** | **0.23** | **18** | *e*PG | | **Pg** | | **01 26 42.9** | **+0.1** |
| DKL | | | | *e*SG | | **Sg** | | **01 26 46.1** | **-0.1** |
| **DKL** | **Dikili** | **0.23** | **18** | *e*Pg | | **Pg** | | **01 26 42.9** | **+0.1** |
| DKL | | | | *e*Sg | | **Sg** | | **01 26 46.1** | **-0.1** |
| **AYVA** | **Ayvalik** | **0.47** | **348** | *i* P | | **Pg** | | **01 26 47.2** | **+0.2** |
| AYVA | | | | *i* S | | **Sg** | | **01 26 53.6** | **+0.3** |
| **AYVA** | **Ayvalik** | **0.47** | **348** | P | | **Pg** | | **01 26 47.2** | **+0.2** |
| AYVA | | | | S | | **Sg** | | **01 26 53.6** | **+0.3** |
| **BLCB** | **Balcova** | **0.50** | **159** | *e*PG | | **Pg** | | **01 26 47.3** | **-0.4** |
| BLCB | | | | *e*SG | | **Sg** | | **01 26 54.7** | **+0.4** |
| **BLCB** | **Balcova** | **0.50** | **159** | *e*Pg | | **Pg** | | **01 26 47.3** | **-0.4** |
| BLCB | | | | *e*Sg | | **Sg** | | **01 26 54.7** | **+0.4** |
| **ZEY** | **¨zmir** | **0.66** | **202** | P | | **Pg** | | **01 26 50.0** | **-0.6** |
| ZEY | | | | S | | **Sb** | | **01 27 01.1** | **+0.9** |
| **CHOS** | **Chios island** | **0.75** | **232** | *e*PG | | **Pb** | | **01 26 53.0** | **+0.2** |
| **CHOS** | **Chios island** | **0.75** | **232** | *e*Pg | | **Pb** | | **01 26 53.0** | **+0.2** |
| **AKS** | **Akhisar** | **0.78** | **88** | *e*PG | | **Pg** | | **01 26 52.5** | **-0.5** |
| AKS | | | | *e*SG | | **Sg** | | **01 27 02.9** | **-0.3** |
| **AKS** | **Akhisar** | **0.78** | **88** | *e*Pg | | **Pg** | | **01 26 52.5** | **-0.5** |
| AKS | | | | *e*Sg | | **Sg** | | **01 27 02.9** | **-0.3** |
| **AKHS** | **Akhisar** | **0.78** | **88** | *i* P | | **Pg** | | **01 26 53.0** | **0.0** |
| AKHS | | | | *i* S | | **Sb** | | **01 27 04.0** | **+0.3** |
| **AKHS** | **Akhisar** | **0.78** | **88** | P | | **Pg** | | **01 26 53.0** | **0.0** |
| AKHS | | | | S | | **Sb** | | **01 27 04.0** | **+0.3** |
| **EZN** | **Ezine** | **1.04** | **339** | *e*PG | | **Pb** | | **01 26 57.2** | **-0.5** |
| **EZN** | **Ezine** | **1.04** | **339** | *e*Pg | | **Pb** | | **01 26 57.2** | **-0.5** |
| **BALB** | **Balikesir** | **1.14** | **46** | *e*PN | | **Pg** | | **01 26 59.7** | **-0.1** |
| **BALB** | **Balikesir** | **1.14** | **46** | *e*Pn | | **Pg** | | **01 26 59.7** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **1.20** | **164** | *i* S | | **Sb** | | **01 27 14.8** | **-0.8** |
| **GCAM** | **G?zelcaml?** | **1.20** | **164** | P | | **Pn** | | **01 26 59.6** | **-0.5** |
| GCAM | | | | S | | **Sb** | | **01 27 14.8** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.24** | **137** | *e*PN | | **Pg** | | **01 27 01.6** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.24** | **137** | *e*Pn | | **Pg** | | **01 27 01.6** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **1.37** | **29** | *e*PN | | **Pb** | | **01 27 03.2** | **-0.1** |
| **GONE** | **Gonen-Balikesi** | **1.37** | **29** | *e*Pn | | **Pb** | | **01 27 03.2** | **-0.1** |
| **AYDN** | **Tasoluk** | **1.46** | **144** | *i* S | | **Sg** | | **01 27 25.4** | **+0.7** |
| **AYDN** | **Tasoluk** | **1.46** | **144** | P | | **Pb** | | **01 27 05.0** | **+0.3** |
| AYDN | | | | S | | **Sg** | | **01 27 25.4** | **+0.7** |
| **KULA** | **Kula-Manisa** | **1.48** | **103** | *e*PN | | **Pn** | | **01 27 04.6** | **+0.4** |
| **KULA** | **Kula-Manisa** | **1.48** | **103** | *e*Pn | | **Pn** | | **01 27 04.6** | **+0.4** |

*IDC **25** 01:53:53.1±2.2, 19.94S×172.10E, h0km, mb3.6/4, mb1 3.9/5, mb1mx3.7/29, mbtmp3.6/5, ML3.4/1, MS3.5/9, Ms1 3.5/9, ms1mx3.3/21, Error ellipse: s-maj=124.4km s-min=25.4km az=154.0*
*ISCJB **25** 01:53:57.5±1.6, 19.75S±0.6×171.9E±0.4, h33km, mb3.6/4, MS3.5/5, Error ellipse: s-maj=96.1km s-min=17.4km az=151.4*
**ISC 25 01:53:59.0±1.8, 19.75S±0.6×172.0E±0.4, h35km, n17, σ0♀95/7, mb3.5/4, MS3.5/5, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **5.69** | **245** | *e*Pn | | **Pn** | | **01 55 22.3** | **+1.2** |
| | 21nm,0.7s | | | | | | | | |
| DZM | | | | *e*LR | | LR | | 01 56 38.4 | |
| | 598nm,24.7s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **5.69** | **245** | Pn | | **Pn** | | **01 55 21.0** | **-0.1** |
| | 1.0nm,0.3s,baz=90,slow=20,SNR=11 | | | | | | | | |
| DZM | | | | LR | | LR | | 01 57 17.3 | |
| | comp=Z,256nm,21.2s,baz=27,slow=36 | | | | | | | | |
| **RAO** | **Raoul Island** | **13.18** | **138** | LR | | LR | | 02 00 22.1 | |
| | comp=Z,446nm,21.7s,baz=126,slow=30 | | | | | | | | |
| **HNR** | **Honiara** | **15.51** | **310** | LR | | LR | | 02 03 24.5 | |
| | comp=Z,108nm,18.4s,baz=157,slow=36 | | | | | | | | |
| **URZ** | **Urewera** | **18.98** | **168** | LR | | LR | | 02 03 21.8 | |
| | comp=Z,202nm,19.7s,baz=352,slow=30 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **23.92** | **182** | LR | | LR | | 02 05 58.0 | |
| | comp=Z,91nm,18.5s,baz=6.5,slow=31 | | | | | | | | |
| **PMG** | **Port Moresby** | **26.11** | **290** | LR | | LR | | 02 08 10.3 | |
| | comp=Z,124nm,18.4s,baz=86,slow=33 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **35.38** | **263** | P | | **P** | | **02 00 51.5** | **-0.1** |
| | 0.7nm,1.1s,baz=99,slow=8.1,SNR=3.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **35.54** | **257** | P | | **P** | | **02 00 51.8** | **-1.2** |
| | 1.6nm,0.9s,baz=86,slow=9.0,SNR=11 | | | | | | | | |
| ASAR | | | | LR | | LR | | 02 14 47.4 | |
| | comp=Z,116nm,19.4s,baz=92,slow=35 | | | | | | | | |
| **TBI** | **Tubuai** | **35.96** | **103** | *e*LR | | LR | | 02 10 35.5 | |
| | 115nm,30.8s | | | | | | | | |
| **PPT2** | **Papeete2** | **36.42** | **93** | *e*LR | | LR | | 02 10 50.5 | |
| | 90nm,25.8s | | | | | | | | |
| **PPT** | **Papeete** | **36.42** | **93** | LR | | LR | | 02 14 20.1 | |
| | comp=Z,30nm,19.8s,baz=356,slow=34 | | | | | | | | |
| **ILAR** | **Eielson Array** | **89.95** | **16** | P | | **P** | | **02 06 54.7** | **+0.6** |
| | 0.2nm,0.7s,baz=231,slow=4.3,SNR=3.2 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **94.73** | **61** | P | | **P** | | **02 07 17.2** | **0.0** |
| | 0.1nm,0.6s,baz=244,slow=5.3,SNR=2.2 | | | | | | | | |
| TXAR | | | | LR | | LR | | 02 41 40.3 | |
| | comp=Z,30nm,20.5s,baz=0.0,slow=30 | | | | | | | | |
| **BRG** | **Berggiesshubel** | **144.42** | **336** | *e*P | | PKPdf | | 02 13 37.0 | +5.6 |
| | 5.3nm,1.0s | | | | | | | | |
| **CLL** | **Collm** | **144.42** | **337** | *i* PKP | | PKPdf | | 02 13 37.1 | +5.7 |
| **GERES** | **GERESS Array B** | **146.12** | **334** | PKPbc | | **PKPbc** | | **02 13 34.9** | **-0.6** |
| | 0.3nm,0.6s,baz=33,slow=2.3,SNR=2.9 | | | | | | | | |

*KRNET **25** 02:01:39.0±0.1, 41.44N×72.82E, h3km, mb1.8*
*NNC **25** 02:01:42.5±3.8, 41.55N×72.68E, h0km, mb2.7, mpv2.2, Error ellipse: s-maj=27.0km s-min=14.1km az=34.0*
**ISC 25 02:01:40.1±2.1, 41.5N±0.1×72.78E±0.03, h13km±16km, n10, σ0♀79/19, 14C-5D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ARK** | **Arkit** | **0.70** | **299** | ⇓*i* P | | **Pg** | | **02 01 53.1** | **-0.7** |
| | baz=298 | | | | | | | | |
| ARK | | | | ⇓*i* S | | **Sg** | | **02 02 03.4** | **+0.4** |
| | baz=298 | | | | | | | | |
| **AML** | **Almayashu** | **0.96** | **45** | ⇑*i* P | | **Pg** | | **02 01 57.5** | **-1.1** |
| | baz=43 | | | | | | | | |
| AML | | | | ⇑*i* S | | **Sg** | | **02 02 11.6** | **+0.4** |
| | baz=43 | | | | | | | | |
| **MNAS** | **Manas** | **1.05** | **349** | ⇓P | | **Pb** | | **02 01 59.8** | **-0.4** |
| | 0.8nm,0.4s | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PETK | | | | | | | 02 06 53.1 | |
| PETK | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.3s | | | | | | | |
| PETK | | | | | smax | smax | | |
| | comp=N,7.0nm,0.3s | | | | | | | |
| PETK | | | | | MLR | MLR | | |
| | comp=Z,85nm,18.2s | | | | | | | |
| **NLC** | **Nalytchevo** | **3.45** | **6** | *eP* | **Pn** | | **02 06 11.4** | **-0.9** |
| NLC | | | | *eS* | **Sn** | | **02 06 49.3** | **-2.6** |
| **NLC** | **Nalytchevo** | **3.45** | **6** | PN | **Pn** | | **02 06 11.4** | **-0.9** |
| NLC | | | | S | **Sn** | | **02 06 49.3** | **-2.6** |
| **SPN** | **Mys Shipunski** | **3.45** | **13** | *eP* | **Pn** | | **02 06 11.7** | **-0.6** |
| SPN | | | | *eS* | **Sn** | | **02 06 50.3** | **-1.6** |
| **SPN** | **Mys Shipunski** | **3.45** | **13** | PN | **Pn** | | **02 06 11.7** | **-0.6** |
| SPN | | | | S | **Sn** | | **02 06 50.3** | **-1.6** |
| **UGLR** | **Uglovaya** | **3.47** | **1** | *eP* | **Pn** | | **02 06 12.3** | **-0.4** |
| UGLR | | | | *eS* | **Sn** | | **02 06 51.3** | **-1.3** |
| **SMAR** | **Somma** | **3.52** | **1** | *eP* | **Pn** | | **02 06 13.8** | **+0.3** |
| SMAR | | | | *eS* | **Sn** | | **02 06 53.8** | **-0.2** |
| **SMAR** | **Somma** | **3.52** | **1** | PN | **Pn** | | **02 06 13.8** | **+0.3** |
| SMAR | | | | S | **Sn** | | **02 06 53.8** | **-0.2** |
| **AVH** | **Avacha** | **3.52** | **360** | *eP* | **Pn** | | **02 06 13.6** | **+0.2** |
| AVH | | | | *eS* | **Sn** | | **02 06 54.3** | **+0.4** |
| **AVH** | **Avacha** | **3.52** | **360** | PN | **Pn** | | **02 06 13.6** | **+0.2** |
| AVH | | | | S | **Sn** | | **02 06 54.3** | **+0.4** |
| **SDLR** | **Sedlovina** | **3.54** | **1** | *eP* | **Pn** | | **02 06 12.9** | **-0.8** |
| SDLR | | | | *eS* | **Sn** | | **02 06 51.9** | **-2.4** |
| **SDLR** | **Sedlovina** | **3.54** | **1** | PN | **Pn** | | **02 06 12.9** | **-0.8** |
| SDLR | | | | S | **Sn** | | **02 06 51.9** | **-2.4** |
| **KOK** | **Koryaka** | **3.55** | **359** | *eP* | **Pn** | | **02 06 14.0** | **+0.2** |
| KOK | | | | *eS* | **Sn** | | **02 06 54.0** | **-0.6** |
| **KOK** | **Koryaka** | **3.55** | **359** | PN | **Pn** | | **02 06 14.0** | **+0.2** |
| KOK | | | | S | **Sn** | | **02 06 54.0** | **-0.6** |
| **KRX** | **Arik** | **3.62** | **359** | *eP* | **Pn** | | **02 06 14.6** | **-0.2** |
| KRX | | | | *eS* | **Sn** | | **02 06 55.0** | **-1.3** |
| **GNL** | **Ganaly** | **3.99** | **353** | *eP* | **Pn** | | **02 06 20.4** | **+0.6** |
| GNL | | | | *eS* | **Sn** | | **02 07 05.8** | **+0.5** |
| **GNL** | **Ganaly** | **3.99** | **353** | PN | **Pn** | | **02 06 20.4** | **+0.6** |
| GNL | | | | S | **Sn** | | **02 07 05.8** | **+0.5** |
| **KII** | **Karymskiy** | **4.32** | **6** | *eP* | **Pn** | | **02 06 25.1** | **+0.8** |
| KII | | | | *eS* | **Sn** | | **02 07 12.9** | **-0.6** |
| **KII** | **Karymskiy** | **4.32** | **6** | PN | **Pn** | | **02 06 25.1** | **+0.8** |
| KII | | | | S | **Sn** | | **02 07 12.9** | **-0.6** |
| **MKZ** | **Mys Kozlova** | **5.16** | **20** | *eP* | **Pn** | | **02 06 34.2** | **-1.5** |
| **MKZ** | **Mys Kozlova** | **5.16** | **20** | PN | **Pn** | | **02 06 34.2** | **-1.5** |
| **KZV** | **Kizimen** | **5.46** | **9** | *eP* | **Pn** | | **02 06 40.4** | **+0.3** |
| **TUMR** | **Tumrok** | **5.61** | **8** | *eP* | **Pn** | | **02 06 43.1** | **+1.0** |
| **TUMR** | **Tumrok** | **5.61** | **8** | PN | **Pn** | | **02 06 43.1** | **+1.0** |
| **KMNR** | **Kamenistaya** | **6.09** | **8** | *eP* | **Pn** | | **02 06 50.7** | **+2.1** |
| **KMNR** | **Kamenistaya** | **6.09** | **8** | PN | **Pn** | | **02 06 50.7** | **+2.1** |
| **SRDR** | **Sredinnyy** | **6.61** | **5** | *eP* | **Pn** | | **02 06 56.8** | **+1.0** |
| **SRDR** | **Sredinnyy** | **6.61** | **5** | PN | **Pn** | | **02 06 56.8** | **+1.0** |
| **KBTR** | **Krutoberegovo** | **6.92** | **19** | *eP* | **Pn** | | **02 06 59.4** | **-0.6** |
| KBTR | | | | *eS* | **Sn** | | **02 08 13.3** | **-4.1** |
| **KBTR** | **Krutoberegovo** | **6.92** | **19** | PN | **Pn** | | **02 06 59.4** | **-0.6** |
| **BDR** | **Baidarnaya** | **6.99** | **11** | *eP* | **Pn** | | **02 07 00.1** | **-0.9** |
| **SMKR** | **Semkarok** | **7.04** | **12** | *eP* | **Pn** | | **02 07 02.2** | **+0.5** |
| **SMKR** | **Semkarok** | **7.04** | **12** | PN | **Pn** | | **02 07 02.2** | **+0.5** |
| **SRKR** | **Sorokina** | **7.07** | **11** | *eP* | **Pn** | | **02 07 02.0** | **-0.1** |
| **SRKR** | **Sorokina** | **7.07** | **11** | PN | **Pn** | | **02 07 02.0** | **-0.1** |
| **SMY** | **Shemya** | **10.08** | **67** | *eP* | **Pn** | | **02 07 43.9** | **+0.6** |
| **SMY** | **Shemya** | **10.08** | **67** | *ePn* | **Pn** | | **02 07 43.9** | **+0.6** |
| **UGL** | **Uglegorsk** | **10.89** | **273** | *ePN* | **Pn** | | **02 07 53.0** | **-1.4** |
| UGL | | | | *eSS* | Sn | | 02 10 08.0 | +13 |
| **SEY** | **Seymchan** | **13.67** | **348** | Pn | **P** | | **02 08 39.0** | **-1.5** |
| | comp=Z,0.4nm,0.3s,baz=180,slow=19,SNR=5.0 | | | | | | | |
| **SEY** | **Seymchan** | **13.67** | **348** | P | **P** | | **02 08 39.0** | **-1.5** |
| **HABR** | **Khabarovsk** | **15.56** | **274** | *eP* | **Pn** | | **02 08 56.3** | **-1.3** |
| HABR | | | | *eS* | **Sn** | | **02 11 48.7** | **0.0** |
| HABR | | | | pmax | pmax | | | |
| | comp=Z,28nm,1.8s | | | | | | | |
| HABR | | | | MLR | MLR | | | |
| | comp=Z,166nm,18.0s | | | | | | | |
| **KLR** | **Kul'dur** | **17.52** | **279** | P | **P** | | **02 09 24.7** | **+1.4** |
| **BILL** | **Bilibino** | **18.73** | **9** | *c iP* | **Pn** | | **02 09 38.3** | **+1.3** |
| BILL | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.7s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **19.03** | **263** | P | **Pn** | | **02 09 40.1** | **-0.8** |
| | comp=Z,0.2nm,0.3s,baz=70,slow=12,SNR=5.2 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.88** | **236** | P | **P** | | **02 09 48.1** | **-1.3** |
| | comp=Z,0.3nm,0.3s,baz=37,slow=9.5,SNR=3.9 | | | | | | | |
| **YAK** | **Yakutsk** | **20.20** | **318** | P | **P** | | **02 09 50.9** | **-1.7** |
| | comp=Z,4.1nm,0.4s,baz=293,slow=22,SNR=8.8 | | | | | | | |
| YAK | | | | LR | LR | | 02 18 21.3 | |
| | comp=Z,89nm,20.9s,baz=84,slow=39 | | | | | | | |
| **YAK** | **Yakutsk** | **20.20** | **318** | *eP* | **P** | | **02 09 50.3** | **-2.2** |
| YAK | | | | pmax | pmax | | | |
| | comp=N,7.0nm,0.9s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,46nm,0.8s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,13nm,0.8s | | | | | | | |
| **HIA** | **Hailar** | **25.14** | **284** | P | **P** | | **02 10 42.7** | **-0.1** |
| **KSRS** | **Korea Array** | **25.29** | **253** | P | **P** | | **02 10 45.5** | **+1.4** |
| | comp=E,3.1nm,0.8s,baz=51,slow=9.9,SNR=4.5 | | | | | | | |
| **KSRS** | **Korea Array** | **25.29** | **253** | P | **P** | | **02 10 45.5** | **+1.4** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **25.32** | **253** | P | **P** | | **02 10 45.5** | **+1.1** |
| **KSAR** | **Wonju Array Be** | **25.32** | **253** | P | **P** | | **02 10 45.5** | **+1.1** |
| **H11N2** | **WAKE ISLAND Hy** | **30.65** | **165** | T | T | | 02 44 52.5 | |
| | baz=348,slow=76,SNR=4.0 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.66** | **165** | T | T | | 02 44 52.5 | |
| | baz=348,slow=76,SNR=4.0 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.66** | **165** | T | T | | 02 44 52.5 | |
| | baz=348,slow=76,SNR=3.3 | | | | | | | |
| **COLA** | **College** | **31.43** | **41** | *eP* | **P** | | **02 11 39.1** | **+0.5** |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **COLA** | **College** | **31.43** | **41** | *eP* | **P** | | **02 11 38.8** | **+0.2** |
| | comp=Z,5.9nm,0.9s | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **31.81** | **166** | T | T | | 02 46 22.3 | |
| | baz=351,slow=76,SNR=26 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.82** | **166** | T | T | | 02 46 22.3 | |
| | baz=351,slow=76,SNR=29 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.83** | **166** | T | T | | 02 46 22.3 | |
| | baz=351,slow=76,SNR=20 | | | | | | | |
| **ILAR** | **Eielson Array** | **31.83** | **41** | P | **P** | | **02 11 42.1** | **-0.1** |
| | comp=Z,0.6nm,0.7s,baz=246,slow=7.7,SNR=17 | | | | | | | |
| **ILAR** | **Eielson Array** | **31.83** | **41** | P | **P** | | **02 11 42.1** | **-0.1** |
| ILAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **33.55** | **287** | *i iP* | **P** | | **02 11 57.3** | **-0.3** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **33.87** | **273** | *eP* | **P** | | **02 11 58.8** | **-1.5** |
| HHC | | | | S | **S** | | **02 17 16.3** | **-6.0** |
| HHC | | | | PMZ | | | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,120nm,4.2s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,160nm,16.0s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,320nm,16.0s | | | | | | | |
| **SONM** | **Songino Array** | **33.97** | **287** | P | **P** | | **02 12 00.5** | **-0.7** |
| | comp=Z,0.4nm,0.4s,baz=76,slow=7.6,SNR=2.5 | | | | | | | |
| **INK** | **Inuvik** | **37.07** | **35** | P | **P** | | **02 12 28.2** | **+0.8** |
| | comp=Z,3.5nm,0.8s,baz=297,slow=7.3,SNR=11 | | | | | | | |
| **INK** | **Inuvik** | **37.07** | **35** | P | **P** | | **02 12 28.2** | **+0.8** |
| INK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **INK** | **Inuvik** | **37.07** | **35** | *eP* | **P** | | **02 12 28.0** | **+0.6** |
| | comp=Z,2.8nm,0.6s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.94** | **305** | P | **P** | | **02 13 23.0** | **-1.3** |
| | comp=Z,0.7nm,0.3s,baz=51,slow=4.6,SNR=3.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.94** | **305** | P | **P** | | **02 13 23.0** | **-1.3** |
| ZALV | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **NVS** | **Novosibirsk** | **44.38** | **307** | *eP* | **P** | | **02 13 28.0** | **+0.2** |
| **YKA** | **Yellowknife Ar** | **46.24** | **40** | P | **P** | | **02 13 43.1** | **+0.7** |
| | comp=Z,2.4nm,0.9s,baz=296,slow=7.5,SNR=3.3 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **46.24** | **40** | P | **P** | | **02 13 43.1** | **+0.7** |
| YKA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **RES** | **Resolute Bay** | **46.75** | **20** | P | **P** | | **02 13 47.1** | **+0.8** |
| | comp=Z,1.0nm,0.8s,baz=333,slow=6.8,SNR=3.3 | | | | | | | |
| **RES** | **Resolute Bay** | **46.75** | **20** | P | **P** | | **02 13 47.1** | **+0.8** |
| RES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **48.84** | **304** | *eP* | **P** | | **02 14 02.7** | **0.0** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.4s | | | | | | | |
| **KURK** | **Kurchatov** | **48.84** | **304** | *eP* | **P** | | **02 14 02.7** | **0.0** |
| | comp=Z,7.3nm,0.4s | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.90** | **298** | P | **P** | | **02 14 02.6** | **-0.8** |
| | comp=Z,2.8nm,0.7s,baz=58,slow=7.1,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **48.90** | **298** | *ceP* | **P** | | **02 14 03.4** | **+0.1** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **51.88** | **310** | *eP* | **P** | | **02 14 25.7** | **0.0** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **51.88** | **310** | *eP* | **P** | | **02 14 25.7** | **0.0** |
| | comp=Z,7.7nm,0.7s | | | | | | | |
| **ARU** | **Arti** | **55.31** | **318** | P | **P** | | **02 14 51.4** | **+0.6** |
| ARU | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **55.84** | **297** | *d iP* | **P** | | **02 14 55.4** | **+0.4** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.21** | **342** | P | **P** | | **02 14 56.9** | **-0.2** |
| | comp=Z,5.5nm,0.8s,baz=45,slow=8.7,SNR=7.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.21** | **342** | P | **P** | | **02 14 56.9** | **-0.2** |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.69** | **259** | P | **P** | | **02 15 02.5** | **+1.4** |
| | comp=Z,2.8nm,0.4s,baz=28,slow=7.8,SNR=5.1 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.69** | **259** | *i* P | **P** | | **02 15 02.5** | **+1.4** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **57.75** | **67** | P | **P** | | **02 15 09.8** | **+1.1** |
| | comp=Z,0.9nm,0.5s,baz=282,slow=7.0,SNR=3.9 | | | | | | | |
| **KKAR** | **Karatay Array** | **57.80** | **300** | *eP* | **P** | | **02 15 09.0** | **+0.2** |
| KKAR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **57.80** | **300** | *eP* | **P** | | **02 15 09.0** | **+0.2** |
| | comp=Z,2.6nm,0.8s | | | | | | | |
| **ABKAR** | **Akbulak array** | **59.34** | **311** | *eP* | **P** | | **02 15 19.7** | **+0.4** |
| | comp=Z,3.6nm,0.6s | | | | | | | |
| **KLMR** | **Klimovskoe** | **59.43** | **330** | *eP* | **P** | | **02 15 19.2** | **-0.5** |
| KLMR | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **FINES** | **FINESS Array B** | **62.86** | **337** | P | **P** | | **02 15 43.6** | **+0.7** |
| | comp=Z,5.9nm,0.7s,baz=46,slow=6.6,SNR=26 | | | | | | | |
| **FINES** | **FINESS Array B** | **62.86** | **337** | P | **P** | | **02 15 43.6** | **+0.7** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **OBN** | **Obninsk** | **64.89** | **328** | *i iP* | **P** | | **02 15 56.9** | **+0.6** |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **66.02** | **325** | *eP* | **P** | | **02 16 03.7** | **-0.1** |
| LPSR | | | | pmax | pmax | | | |
| | comp=N,3.0nm,0.7s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=E,4.0nm,0.7s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **VRH** | **Novokhopyorsk** | **66.04** | **322** | *eP* | **P** | | **02 16 03.5** | **-0.4** |
| VRH | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.7s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=E,6.0nm,0.7s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **66.52** | **343** | P | **P** | | **02 16 07.4** | **+0.5** |
| | comp=Z,10nm,1.1s,baz=23,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **66.52** | **343** | P | **P** | | **02 16 07.5** | **+0.7** |
| | comp=Z,4.9nm,0.8s,baz=24,slow=6.5,SNR=12 | | | | | | | |
| **NOA** | **NORSAR Array B** | **66.52** | **343** | P | **P** | | **02 16 07.6** | **+0.7** |
| NOA | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **HFS** | **Hagfors** | **66.88** | **342** | P | **P** | | **02 16 09.2** | **+0.1** |
| | comp=Z,7.3nm,0.9s,baz=56,slow=5.6,SNR=14 | | | | | | | |
| **HFS** | **Hagfors** | **66.88** | **342** | P | **P** | | **02 16 09.2** | **+0.1** |
| HFS | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **VSR** | **Storozhevoye** | **67.03** | **324** | *eP* | **P** | | **02 16 10.3** | **+0.1** |
| VSR | | | | pmax | pmax | | | |
| | comp=N,6.0nm,0.8s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=E,3.0nm,0.8s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **VORD** | **Divnogorie** | **67.18** | **323** | *eP* | **P** | | **02 16 11.2** | **+0.1** |
| VORD | | | | pmax | pmax | | | |
| | comp=N,10.0nm,1.0s | | | | | | | |
| VORD | | | | pmax | pmax | | | |
| | comp=E,7.0nm,1.0s | | | | | | | |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **GEYT** | **Alibeck** | **68.21** | **303** | P | **P** | | **02 16 18.5** | **+0.6** |
| | comp=Z,4.7nm,0.8s,baz=46,slow=6.4,SNR=8.4 | | | | | | | |
| **SCHQ** | **Schefferville** | **69.02** | **26** | P | **P** | | **02 16 23.1** | **+0.4** |
| | comp=Z,3.6nm,0.8s,baz=3.9,slow=7.0,SNR=4.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.04** | **329** | P | **P** | | **02 16 34.8** | **-0.4** |
| | comp=Z,7.8nm,0.8s,baz=31,slow=6.0,SNR=20 | | | | | | | |
| **AKASG** | **Malin Array Be** | **71.04** | **329** | *i* P | **P** | | **02 16 35.2** | **+0.1** |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **KIEV** | **Kiev** | **71.06** | **329** | *ieP* | **P** | | **02 16 35.0** | **-0.2** |
| KIEV | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **KIEV** | **Kiev** | **71.06** | **329** | *eP* | **P** | | **02 16 35.0** | **-0.2** |
| | comp=Z,11nm,1.2s | | | | | | | |
| **NCK** | **Nalchik** | **71.26** | **316** | P | **P** | | **02 16 37.6** | **+1.0** |
| **KBZ** | **Khabaz** | **71.39** | **316** | P | **P** | | **02 16 38.0** | **+0.7** |
| | comp=Z,7.7nm,0.8s,baz=71,slow=4.2,SNR=25 | | | | | | | |
| **KBZ** | **Khabaz** | **71.39** | **316** | P | **P** | | **02 16 38.0** | **+0.7** |
| KBZ | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **NEY** | **Neytrino** | **71.84** | **316** | *i* P | **P** | | **02 16 42.4** | **+2.1** |
| NEY | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.2s | | | | | | | |
| **WRA** | **Warramunga Arr** | **72.68** | **204** | P | **P** | | **02 16 43.8** | **-1.4** |
| | comp=Z,1.5nm,0.8s,baz=22,slow=6.6,SNR=9.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **72.68** | **204** | P | **P** | | **02 16 43.8** | **-1.4** |
| WRA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **TXAR** | **Lajitas Array** | **72.77** | **65** | P | **P** | | **02 16 46.5** | **+0.5** |
| | comp=Z,1.6nm,0.5s,baz=300,slow=5.0,SNR=37 | | | | | | | |
| **TXAR** | **Lajitas Array** | **72.77** | **65** | P | **P** | | **02 16 46.5** | **+0.5** |
| TXAR | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **GNI** | **Garni** | **73.35** | **313** | P | **P** | | **02 16 51.2** | **+1.9** |
| GNI | | | | pmax | pmax | | | |
| | comp=Z,89nm,2.0s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **74.20** | **349** | P | **P** | | **02 16 54.2** | **+0.4** |
| | comp=Z,0.8nm,0.5s,baz=15,slow=4.5,SNR=5.2 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **74.20** | **349** | P | **P** | | **02 16 54.2** | **+0.4** |
| EKA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **CLL** | **Collm** | **75.17** | **339** | *i* P | P | | 02 17 02.7 | +3.2 |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **CLL** | **Collm** | **75.17** | **339** | *eP* | **P** | | **02 17 00.0** | **+0.5** |
| CLL | | | | *i* Pmax | | | 02 17 02.7 | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **76.35** | **203** | P | **P** | | **02 17 06.7** | **+0.2** |
| | comp=Z,0.8nm,0.8s,baz=15,slow=4.9,SNR=8.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **76.35** | **203** | P | **P** | | **02 17 06.7** | **+0.2** |
| ASAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **KHC** | **Kasperske Hory** | **77.05** | **337** | *eP* | **P** | | **02 17 11.5** | **+1.2** |
| **KHC** | **Kasperske Hory** | **77.05** | **337** | *eP* | **P** | | **02 17 11.5** | **+1.2** |
| **GERES** | **GERESS Array B** | **77.28** | **337** | P | **P** | | **02 17 12.0** | **+0.3** |
| | comp=Z,0.8nm,0.7s,baz=35,slow=4.9,SNR=5.6 | | | | | | | |
| GERES | | | | LR | LR | | 02 58 10.3 | |
| | comp=Z,43nm,20.6s,baz=58,slow=41 | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.65** | **320** | P | **P** | | **02 17 19.2** | **-0.3** |
| | comp=Z,1.5nm,0.9s,baz=61,slow=5.8,SNR=6.5 | | | | | | | |
| **BRTR** | **Keskin Array B** | **78.65** | **320** | P | **P** | | **02 17 19.2** | **-0.3** |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **80.14** | **339** | P | **P** | | **02 17 28.8** | **+1.3** |
| | comp=Z,2.2nm,0.6s,baz=74,slow=18,SNR=2.2 | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **80.14** | **339** | P | **P** | | **02 17 28.8** | **+1.3** |
| DAVOX | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **LPAZ** | **La Paz** | **129.64** | **66** | PKP | **PKPdf** | | **02 24 26.6** | **-0.6** |
| | comp=Z,0.4nm,0.5s,baz=0.0,slow=5.1,SNR=3.8 | | | | | | | |

*IDC* ***25*** *02:38:59.2±3.5, 8°.25S×122°.31E, h226km±27km, mb3.1/2, mb1 3.3/4, mb1mx3.1/20, mbtmp3.8/4, Error ellipse: s-maj=139.6km s-min=14.4km az=59.0*
*DJA* ***25*** *02:39:16.1±2.6, 9°S×15°×12°.3E±1°.2, h146km±28km, M3.5/6, MLv3.5/6*
**ISC 25 02:38:56.8±1.3, 8°.4S±0°.2×122°.2E±0°.2, h200km, n10, σ1§95/10, Flores region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MMRI** | **Maumere** | **0.28** | **164** | P | | **Sn** | **02 39 43.3** | **-0.7** |
| **EDFI** | **Ende, Flores** | **0.60** | **230** | P | | **Sn** | **02 39 46.4** | **+0.5** |
| **WSI** | **Waingapu** | **2.25** | **235** | P | | Sn | 02 40 03.9 | -6.2 |
| **BATI** | **Baumata** | **2.36** | **141** | P | | **Pn** | **02 39 40.3** | **+1.1** |
| **BASI** | **Baing, Sumba** | **2.42** | **220** | P | | Sn | 02 40 09.4 | -4.0 |
| **SOEI** | **Soe** | **2.50** | **124** | P | | **Pn** | **02 39 42.6** | **+1.7** |
| **WRA** | **Warramunga Arr** | **16.48** | **136** | P | | **P** | **02 42 37.0** | **+0.8** |
| | 0.6nm,0.3s,baz=314,slow=11,SNR=26 | | | | | | | |
| WRA | | | | S | | **S** | **02 45 35.4** | **-3.1** |
| | 0.3nm,0.3s,baz=312,slow=25,SNR=5.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.93** | **145** | P | | **P** | **02 43 04.2** | **+1.4** |
| | 0.7nm,0.3s,baz=324,slow=9.2,SNR=46 | | | | | | | |
| ASAR | | | | S | | **S** | **02 46 26.5** | **-0.8** |
| | baz=317,slow=24,SNR=3.7 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **02 50 34.0** | **-2.9** |
| | baz=340,slow=2.3,SNR=4.0 | | | | | | | |
| **SONM** | **Songino Array** | **57.66** | **347** | P | | P | 02 48 25.0 | -1.3 |
| | 0.5nm,0.6s,baz=166,slow=7.4,SNR=2.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **65.36** | **331** | P | | **P** | **02 49 17.5** | **-0.3** |
| | 0.7nm,0.6s,baz=140,slow=6.6,SNR=3.6 | | | | | | | |

*ISCJB* ***25*** *02:39:08.3±0.6, 6°.86N±0°.06×73°.02W±0°.07, h166km, mb3.3/3, Error ellipse: s-maj=11.7km s-min=6.1km az=42.0*
*IDC* ***25*** *02:39:08.8±2.5, 6°.72N×72°.98W, h166km±25km, mb3.0/3, mb1 3.4/4, mb1mx3.1/30, mbtmp3.6/4, Error ellipse: s-maj=34.8km s-min=27.8km az=33.0*
*FUNV* ***25*** *02:39:11.4, 6°.90N×72°.99W, h168km, MW3.4*
**ISC 25 02:39:08.9±0.9, 6°.87N±0°.07×73°.01W±0°.08, h166km, n24, σ1§16/29, mb3.1/3, 8C, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CAPV** | **Capacho** | **1.20** | **35** | *i iP* | | **Pn** | **02 39 38.5** | **+1.3** |
| CAPV | | | | *eS* | | **Sn** | **02 39 59.3** | **+0.3** |
| **ROSC** | **El Rosal** | **2.39** | **213** | P | | **Pn** | **02 39 50.4** | **+0.5** |
| | 71nm,0.3s,baz=69,slow=8.6,SNR=202 | | | | | | | |
| ROSC | | | | S | | **Sn** | **02 40 19.4** | **-2.4** |
| | 56nm,0.3s,baz=86,slow=22,SNR=8.2 | | | | | | | |
| **VIGV** | **El Vigia** | **2.55** | **40** | *i iP* | | **Pn** | **02 39 52.9** | **+1.4** |
| VIGV | | | | *eS* | | **Sn** | **02 40 23.1** | **-1.4** |
| **SOCV** | **Socops** | **2.55** | **56** | *i iP* | | **Pn** | **02 39 53.1** | **+1.6** |
| SOCV | | | | *eS* | | **Sn** | **02 40 23.1** | **-1.4** |
| **ELOV** | **Elorza** | **3.50** | **88** | *i eP* | | **Pn** | **02 40 04.6** | **+1.4** |
| **VIRV** | **Villa del Rosa** | **3.66** | **9** | *eP* | | **Pn** | **02 40 05.3** | **+0.1** |
| VIRV | | | | *eS* | | **Sn** | **02 40 46.5** | **-2.7** |
| **QARV** | **Quebrada Arrib** | **4.13** | **36** | *i iP* | | **Pn** | **02 40 12.7** | **+1.4** |
| **SANV** | **Sanarito** | **4.32** | **53** | *eP* | | **Pn** | **02 40 14.7** | **+0.8** |
| **CURV** | **Curarigua** | **4.34** | **44** | *i iP* | | **Pn** | **02 40 14.9** | **+0.9** |
| **DABV** | **Dabajuro** | **4.66** | **30** | *eP* | | **Pn** | **02 40 19.1** | **+0.9** |
| **TEPV** | **Terepaima** | **4.87** | **51** | *i eP* | | **Pn** | **02 40 22.0** | **+1.1** |
| **SIQV** | **Siquisique** | **4.91** | **40** | *eP* | | **Pn** | **02 40 22.2** | **+0.7** |
| **BAUV** | **El Baul** | **5.33** | **67** | *i iP* | | **Pn** | **02 40 26.6** | **-0.4** |
| **MONV** | **Montecano** | **5.87** | **30** | *eP* | | **Pn** | **02 40 34.5** | **+0.4** |
| **TURV** | **Turiamo** | **6.22** | **55** | *eP* | | **Pn** | **02 40 38.6** | **-0.2** |
| **MERV** | **Las Mercedes** | **7.05** | **70** | *eP* | | **Pn** | **02 40 48.9** | **-0.9** |
| **BIRV** | **Birongo** | **7.56** | **61** | *eP* | | **Pn** | **02 40 55.7** | **-0.8** |
| **CUPV** | **Cœpira** | **7.81** | **66** | *eP* | | **Pn** | **02 40 59.5** | **-0.4** |
| **PCRV** | **Puerto La Cruz** | **8.91** | **68** | *eP* | | **Pn** | **02 41 14.9** | **+0.6** |
| **TXAR** | **Lajitas Array** | **36.51** | **312** | P | | **P** | **02 45 59.5** | **+0.9** |
| | 0.2nm,0.4s,baz=131,slow=9.3,SNR=4.7 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **63.26** | **340** | P | | **P** | **02 49 20.1** | **+0.6** |
| | 0.7nm,0.5s,baz=133,slow=7.2,SNR=4.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.62** | **78** | P | | **P** | **02 50 24.4** | **-0.3** |
| | 0.3nm,0.9s,baz=277,slow=6.3,SNR=3.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **149.23** | **234** | PKPbc | | **PKPbc** | **02 58 38.2** | **-0.6** |
| | 0.4nm,0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LZH** | **Lanzhou** | **5.18** | **4** | *e*Pg | **Pg** | **02 57 29.3** | **-1.3** |
| LZH | | | | Sn | Sb | 02 58 16.1 | -7.4 |
| LZH | | | | Sg | **Sg** | **02 58 35.6** | **-2.1** |
| LZH | | | | smax | smax | | |
| | comp=N,130nm,1.0s | | | | | | |
| LZH | | | | smax | smax | | |
| | comp=E,300nm,1.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=N,2μm,6.2s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=E,2μm,7.0s | | | | | | |
| LZH | | | | LR | LR | | |
| | comp=Z,1μm,8.0s | | | | | | |
| **GYA** | **Guiyang** | **5.28** | **146⇑** | *i*Pn | **Pn** | **02 57 08.4** | **-1.1** |
| GYA | | | | Sn | **Sn** | **02 58 09.8** | **-0.1** |
| GYA | | | | Sg | Sb | 02 58 32.9 | +6.6 |
| GYA | | | | SMN | | | |
| | comp=Z,700nm,0.9s | | | | | | |
| GYA | | | | SME | | | |
| | comp=Z,90nm,0.8s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,930nm,9.7s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,1μm,6.5s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,980nm,8.1s | | | | | | |
| **ENH** | **Enshi** | **5.28** | **95** | *e*Pn | **Pn** | **02 57 10.5** | **+1.0** |
| | comp=Z,70nm,0.4s | | | | | | |
| ENH | | | | *e*S | **Sn** | **02 58 11.1** | **+1.1** |
| **XAN** | **Xi'an** | **5.61** | **55** | Pn | **Pn** | **02 57 13.9** | **-0.1** |
| XAN | | | | Sn | **Sn** | **02 58 17.8** | **-0.3** |
| XAN | | | | Sg | **Sg** | **02 58 50.4** | **-1.1** |
| XAN | | | | SMN | | | |
| | comp=Z,770nm,1.1s | | | | | | |
| XAN | | | | SME | | | |
| | comp=Z,630nm,1.2s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,2μm,5.2s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,1μm,4.9s | | | | | | |
| **KMI** | **Kunming** | **5.79** | **186** | Pg | **Pn** | **02 57 16.8** | **+0.2** |
| KMI | | | | Sn | Pg | 02 57 52.5 | +10 |
| KMI | | | | Sg | **Sn** | **02 58 21.3** | **-1.5** |
| **GTA** | **Gaotai** | **8.98** | **342** | *e*P | **Pn** | **02 58 01.5** | **+1.2** |
| GTA | | | | pP | pP | 02 58 05.6 | |
| GTA | | | | sP | sP | 02 58 08.4 | |
| GTA | | | | S | **Sn** | **02 59 44.4** | **+3.4** |
| GTA | | | | sS | sS | 02 59 49.9 | |
| GTA | | | | PcP | **PcP** | **03 04 26.3** | **+2.2** |
| GTA | | | | PMZ | | | |
| | comp=Z,2.0nm,1.1s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,54nm,4.0s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,530nm,10.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,540nm,11.2s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,440nm,10.5s | | | | | | |
| **WHN** | **Wuhan** | **9.43** | **89** | P | **Pn** | **02 58 07.4** | **+1.0** |
| WHN | | | | S | Sn | 02 59 46.3 | -5.7 |
| WHN | | | | LN | | | |
| | comp=Z,4μm,9.2s | | | | | | |
| WHN | | | | LE | | | |
| | comp=Z,2μm,5.7s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,4μm,6.5s | | | | | | |
| **LSA** | **Lhasa** | **10.66** | **267** | P | **Pn** | **02 58 21.4** | **-2.3** |
| **LSA** | **Lhasa** | **10.66** | **267** | *e*Pn | **Pn** | **02 58 23.9** | **+0.2** |
| | comp=Z,14nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **12.70** | **200** | P | Pn | 02 58 58.6 | +7.4 |
| | comp=Z,45nm,0.8s | | | | | | |
| **NONG** | **Nongkai** | **12.79** | **181** | P | Pn | 02 58 59.3 | +6.9 |
| | comp=Z,9.4nm,1.2s,comp=Z,6μm | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **13.04** | **199** | Pn | **Pn** | **02 58 56.1** | **+0.3** |
| | comp=Z,0.5nm,0.3s,baz=9.7,slow=11,SNR=21 | | | | | | |
| CMAR | | | | LR | LR | 03 04 01.3 | |
| | comp=Z,61nm,21.0s,baz=355,slow=38 | | | | | | |
| **UTTA** | **Uttaradit** | **13.36** | **192** | P | P | 02 59 14.4 | +4.8 |
| | comp=Z,4.2nm,0.8s | | | | | | |
| **BJI** | **Beijing** | **13.82** | **45** | P | **Pn** | **02 59 08.8** | **+2.4** |
| BJI | | | | PMZ | | | |
| | comp=Z,14nm,2.1s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,480nm,15.9s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,580nm,13.9s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,100nm,26.1s | | | | | | |
| **SKNT** | **Sakolnakorn** | **13.88** | **178** | P | P | 02 59 12.6 | -2.9 |
| | comp=Z,28nm,0.8s | | | | | | |
| **TAPN** | **Taplejung** | **14.17** | **259** | *e*P | **Pn** | **02 59 11.3** | **-0.2** |
| | comp=Z,113nm,1.4s | | | | | | |
| **PBKT** | **Sadao Pong** | **14.44** | **189** | P | **P** | **02 59 21.7** | **0.0** |
| | comp=Z,36nm,0.7s | | | | | | |
| **KHON** | **Khomkaen** | **14.51** | **182** | P | **P** | **02 59 22.6** | **+0.1** |
| | comp=Z,27nm,0.7s,comp=Z,848nm | | | | | | |
| **ODAN** | **Odare** | **14.59** | **258** | *e*P | **Pn** | **02 59 17.6** | **+0.3** |
| | comp=Z,32nm,0.7s | | | | | | |
| **CHAI** | **Chaiyaphum** | **14.99** | **185** | P | **P** | **02 59 27.0** | **-0.8** |
| | comp=Z,16nm,0.8s,comp=Z,147nm | | | | | | |
| **UMPA** | **Umpang Tak** | **15.21** | **197** | P | **P** | **02 59 32.6** | **+2.3** |
| | comp=Z,7.5nm,0.8s,comp=Z,1μm | | | | | | |
| **RAMN** | **Ramite** | **15.23** | **259** | *e*P | **Pn** | **02 59 25.7** | **-0.1** |
| | comp=Z,40nm,1.0s | | | | | | |
| **GUN** | **Gumba** | **15.56** | **263** | *e*P | **Pn** | **02 59 29.0** | **-1.3** |
| | comp=Z,32nm,0.8s | | | | | | |
| **UBPT** | **Khong Chiam** | **15.67** | **173** | P | **P** | **02 59 35.5** | **+0.1** |
| | comp=Z,53nm,0.8s | | | | | | |
| **UTHA** | **Uthaitani** | **15.70** | **194** | P | **P** | **02 59 35.7** | **0.0** |
| | comp=Z,6.1nm,0.9s | | | | | | |
| **PKI** | **Pulchoki** | **16.05** | **263** | *e*P | **Pn** | **02 59 35.2** | **-1.4** |
| | comp=Z,29nm,0.7s | | | | | | |
| **PKIN** | **Phulchoki** | **16.06** | **263** | *e*P | **Pn** | **02 59 35.1** | **-1.6** |
| **KKN** | **Kakani** | **16.11** | **263** | *e*P | **Pn** | **02 59 36.7** | **-0.5** |
| | comp=Z,35nm,0.8s | | | | | | |
| **DMN** | **Daman** | **16.30** | **263** | *e*P | **Pn** | **02 59 39.7** | **0.0** |
| | comp=Z,18nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **16.60** | **265** | *e*P | **Pn** | **02 59 43.0** | **-0.4** |
| | comp=Z,53nm,0.8s | | | | | | |
| **NAYO** | **Nakonayok** | **16.62** | **187** | P | **P** | **02 59 46.3** | **+0.3** |
| | comp=Z,17nm,0.9s,comp=Z,1μm | | | | | | |
| **SRDT** | **SRDT** | **16.94** | **194** | P | **P** | **02 59 50.1** | **+0.6** |
| | comp=Z,41nm,1.4s | | | | | | |
| **SONM** | **Songino Array** | **17.06** | **7** | Pn | **P** | **02 59 50.1** | **-0.7** |
| | comp=Z,0.3nm,0.3s,baz=187,slow=11,SNR=15 | | | | | | |
| SONM | | | | LR | LR | 03 07 01.1 | |
| | comp=Z,79nm,21.2s,baz=24,slow=40 | | | | | | |
| **KOLN** | **Koldanda** | **17.55** | **265** | *e*P | **Pn** | **02 59 54.1** | **-1.2** |
| | comp=Z,22nm,0.8s | | | | | | |
| **PATY** | **Pattaya** | **18.05** | **188** | P | **P** | **03 00 06.3** | **+4.6** |
| | comp=Z,9.4nm,0.7s | | | | | | |
| **CHBT** | **CHBT** | **18.09** | **183** | P | **P** | **03 00 03.0** | **+0.8** |
| | comp=Z,29nm,0.9s | | | | | | |
| **PHET** | **Kaeng Krachan** | **18.25** | **192** | P | **P** | **03 00 05.8** | **+1.9** |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **TLY** | **Talaya** | **20.76** | **0** | LR | LR | 03 09 04.0 | |
| | comp=Z,133nm,18.1s,baz=174,slow=38 | | | | | | |
| **KSAR** | **Wonju Array Be** | **21.25** | **66** | P | **P** | **03 00 36.0** | **-0.5** |
| **KSRS** | **Korea Array** | **21.28** | **66** | P | **P** | **03 00 36.0** | **-0.8** |
| | comp=Z,9.5nm,0.8s,baz=250,slow=10,SNR=8.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **22.74** | **320** | P | **P** | **03 00 52.5** | **0.0** |
| | comp=Z,0.9nm,0.7s,baz=122,slow=13,SNR=4.2 | | | | | | |
| MKAR | | | | LR | LR | 03 09 47.0 | |
| | comp=Z,55nm,18.2s,baz=155,slow=37 | | | | | | |
| **JNU** | **Nakatsue** | **23.38** | **77** | LR | LR | 03 10 56.8 | |
| | comp=Z,457nm,20.5s,baz=131,slow=39 | | | | | | |
| **KSH** | **Kashi** | **23.93** | **299** | *e*P | **P** | **03 01 04.1** | **-0.5** |
| KSH | | | | *es*P | **sP** | **03 01 13.0** | **+0.9** |
| KSH | | | | PP | **PnPn** | **03 01 38.5** | **+5.5** |
| KSH | | | | *e*PcP | **PcP** | **03 04 47.8** | **+1.0** |
| KSH | | | | S | **S** | **03 05 15.8** | **-4.6** |
| KSH | | | | PMZ | | | |
| | comp=Z,49nm,3.7s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,140nm,4.6s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,130nm,5.1s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,110nm,6.0s | | | | | | |
| **TKM2** | **Tokmak 2** | **25.14** | **306** | *e*P | **P** | **03 01 15.9** | **+0.3** |
| | comp=Z,7.5nm,1.3s | | | | | | |
| **AAK** | **Ala-Archa** | **25.82** | **305** | P | **P** | **03 01 22.5** | **+0.7** |
| | comp=Z,2.8nm,0.8s,baz=133,slow=7.5,SNR=7.0 | | | | | | |
| AAK | | | | LR | LR | 03 12 24.5 | |
| | comp=Z,116nm,19.6s,baz=88,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **25.82** | **305** | *e*P | **P** | **03 01 22.8** | **+1.0** |
| | comp=Z,2.3nm,0.7s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **26.11** | **51** | P | **P** | **03 01 23.0** | **-1.2** |
| | comp=Z,1.3nm,0.7s,baz=253,slow=7.6,SNR=2.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.64** | **335** | P | **P** | **03 01 28.5** | **-0.4** |
| | comp=Z,2.1nm,0.6s,baz=143,slow=9.4,SNR=8.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **27.04** | **324** | P | **P** | **03 01 32.8** | **+0.3** |
| | comp=Z,2.6nm,0.7s,baz=128,slow=10,SNR=25 | | | | | | |
| KURBB | | | | PcP | **PcP** | **03 04 52.5** | **-0.9** |
| | comp=Z,0.4nm,0.3s,baz=132,slow=1.8,SNR=4.4 | | | | | | |
| **KURK** | **Kurchatov** | **27.05** | **324** | *e*P | **P** | **03 01 33.0** | **+0.4** |
| | comp=Z,3.7nm,0.6s | | | | | | |
| KURK | | | | PcP | **PcP** | **03 04 52.5** | **-1.0** |
| **BVAR** | **Borovoye Array** | **32.58** | **322** | P | **P** | **03 02 22.0** | **+0.5** |
| | comp=Z,0.8nm,0.6s,baz=97,slow=11,SNR=3.5 | | | | | | |
| BVAR | | | | PcP | **PcP** | **03 05 07.2** | **-0.4** |
| | comp=Z,2.0nm,0.7s,baz=157,slow=4.1,SNR=5.8 | | | | | | |
| **ABKAR** | **Akbulak array** | **37.36** | **312** | *e*P | **P** | **03 03 03.1** | **+0.3** |
| | comp=Z,0.5nm,0.5s | | | | | | |
| **GEYT** | **Alibeck** | **37.72** | **293** | P | **P** | **03 03 07.3** | **+1.2** |
| | comp=Z,4.5nm,0.4s,baz=199,slow=4.1,SNR=5.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **56.31** | **300** | P | **P** | **03 05 30.2** | **-1.2** |
| | comp=Z,1.3nm,0.9s,baz=94,slow=6.3,SNR=6.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **57.08** | **313** | P | **P** | **03 05 35.6** | **-0.8** |
| | comp=Z,0.9nm,0.5s,baz=67,slow=7.2,SNR=3.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **57.19** | **336** | P | **P** | **03 05 36.6** | **-0.4** |
| | comp=Z,4.0nm,0.9s,baz=36,slow=4.8,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **57.40** | **326** | P | **P** | **03 05 37.8** | **-0.6** |
| | comp=Z,3.4nm,0.8s,baz=76,slow=8.0,SNR=6.5 | | | | | | |
| **WRAB** | **Tennant Creek** | **58.65** | **145** | *e*P | **P** | **03 05 46.6** | **-1.1** |
| | comp=Z,9.4nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **58.65** | **146** | P | **P** | **03 05 46.8** | **-1.0** |
| | comp=Z,4.7nm,0.7s,baz=338,slow=7.5,SNR=32 | | | | | | |
| **ASAR** | **Alice Springs** | **61.64** | **148** | P | **P** | **03 06 07.7** | **-0.5** |
| | comp=Z,1.8nm,0.8s,baz=330,slow=6.2,SNR=18 | | | | | | |
| **NB2** | **NORSAR Subarra** | **64.50** | **327** | P | **P** | **03 06 25.7** | **-1.1** |
| | comp=Z,1.1nm,0.7s,baz=73,slow=6.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **64.50** | **327** | P | **P** | **03 06 25.8** | **-1.0** |
| | comp=Z,1.3nm,0.7s,baz=74,slow=6.5,SNR=4.3 | | | | | | |
| **GERES** | **GERESS Array B** | **67.25** | **314** | P | **P** | **03 06 44.3** | **-0.6** |
| | comp=Z,0.5nm,0.8s,baz=64,slow=6.1,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **70.27** | **25** | P | **P** | **03 07 02.1** | **-1.1** |
| | comp=Z,2.2nm,1.1s,baz=289,slow=6.0,SNR=13 | | | | | | |
| **KDAK** | **Kodiak Island** | **71.33** | **33** | P | **P** | **03 07 09.2** | **-0.6** |
| | comp=Z,8.0nm,0.9s,baz=311,slow=19,SNR=4.4 | | | | | | |
| **INK** | **Inuvik** | **72.54** | **19** | P | **P** | **03 07 16.4** | **-0.4** |
| | comp=Z,2.9nm,0.7s,baz=308,slow=3.2,SNR=6.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.06** | **17** | P | **P** | **03 08 10.0** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=329,slow=5.4,SNR=4.1 | | | | | | |
| **SCHQ** | **Schefferville** | **94.20** | **354** | LR | LR | 03 53 30.7 | |
| | comp=Z,150nm,21.1s,baz=348,slow=37 | | | | | | |
| **SYO** | **Syowa Base** | **109.88** | **200⇑** | *e*P | **PKiKP** | **03 14 24.7** | **+4.2** |
| **ROSC** | **El Rosal** | **144.37** | **356** | PKP | **PKPab** | **03 15 25.3** | **-0.5** |
| | comp=Z,4.7nm,0.8s,baz=91,slow=24,SNR=5.1 | | | | | | |

**MEX 25 02:56:32.1±0.4, 16.95N×100.08W, h12km±11km, MD3.9,**
**Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **CAIG** | **El Cayaco** | **0.20** | **299** | *i* P | | Pg | 02 56 36.3 | -0.3 |
| CAIG | | | | *i* S | | Sg | 02 56 39.2 | -0.4 |
| **MEIG** | **Mezcala** | **1.07** | **24** | *e*P | | Pb | 02 56 47.3 | -5.4 |
| MEIG | | | | *e*S | | Sb | 02 57 02.5 | -4.2 |
| **ARIG** | **Puente Sto Nin** | **1.35** | **349** | *e*P | | Pn | 02 56 53.0 | -3.8 |
| ARIG | | | | *e*S | | Sb | 02 57 10.2 | -4.5 |
| **ZIIG** | **Zihuatanejo** | **1.48** | **297** | *e*P | | Pn | 02 56 54.8 | -3.7 |
| ZIIG | | | | *i* S | | Sn | 02 57 12.7 | -5.1 |
| **PLIG** | **Platanillo** | **1.54** | **21** | *e*P | | Pn | 02 56 55.9 | -3.7 |
| PLIG | | | | *e*S | | Sn | 02 57 14.6 | -5.0 |
| **TLIG** | **Tlapa** | **1.57** | **67** | *e*P | | Pn | 02 56 56.3 | -3.7 |
| TLIG | | | | *e*S | | Sn | 02 57 15.8 | -4.7 |

*BJI* ***25*** *02:59:05.2, 19.01N×147.01E, h45km, mb5.0/52, mB5.0/36, Ms4.6/42, Ms7 4.3/43*
*MOS* ***25*** *02:59:10.0±1.0, 19.39N×146.41E, h43km, mb5.3/56, MS4.4/9, Error ellipse: s-maj=9.0km s-min=5.1km az=106.7*
*ISCJB* ***25*** *02:59:10.5±0.6, 19.36N±0.02×146.47E±0.02, h47km±5km, mb5.1/191, MS4.4/34, Error ellipse: s-maj=3.9km s-min=3.5km az=153.5*
*NEIC* ***25*** *02:59:12.6±0.6, 19.34N×146.46E, h52km±5km, mb5.2/105, Error ellipse: s-maj=4.3km s-min=3.1km az=106.0*
*GCMT* ***25*** *02:59:12.6±0.2, 19.47N×146.64E, h36km±1km, MW5.1/77, Moment Tensor Solution. s49,c67; s77,c108; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr3.60±.20; Mθθ-1.58±.13; Mφφ-2.02±.14; Mrθ-2.37±.15; Mθφ2.30±.09; Mφr2.66±.17; Best double couple: M05.24900×10¹⁶ NP1:φ318.00000°, δ66.00000°, λ90.00000°. NP2: φ137.00000°, δ24.00000°, λ89.00000°. Principal axes: T 4.9940, Plg69.0000°, Azm229.0000°; N 0.5100, Plg0.0000°, Azm138.0000°; P -5.5040, Plg21.0000°, Azm48.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*IDC* ***25*** *02:59:13.3±1.7, 19.36N×146.44E, h62km±14km, mb4.5/33, mb1 4.6/36, mb1mx4.5/46, mbtmp4.7/36, MS4.2/21, Ms1 4.3/21, ms1mx4.2/26 Error ellipse: s-maj=13.0km s-min=9.2km az=86.0*
**ISC 25 02:59:12.4±0.5, 19.35N±0.03×146.50E±0.04, h53km±3km, h52km:pP-P,n474,σ1821/506, mb5.1/195, MS4.3/34, 16C-7D, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **SARN** | **Sarigan** | **2.72** | **195** | *e*Pn | | **Pn** | **02 59 53.7** | **0.0** |
| **ANA2** | **Anatahan** | **3.08** | **194** | *e*Pn | | **Pn** | **02 59 58.9** | **+0.3** |
| **GUMO** | **Guam** | **5.93** | **196** | P | | **Pn** | **03 00 38.7** | **+0.9** |
| | 56nm,0.3s,baz=156,slow=4.0,SNR=16 | | | | | | | |
| GUMO | | | | S | | **Sn** | **03 01 47.2** | **+2.8** |
| | baz=31,slow=17,SNR=2.5 | | | | | | | |
| GUMO | | | | LR | | LR | 03 02 40.2 | |
| | comp=Z,4μm,20.7s,baz=22,slow=35 | | | | | | | |
| **CBIJ** | **Chichi jima** | **8.68** | **334** | *e*Pn | | **Pn** | **03 01 14.1** | **-1.3** |
| CBIJ | | | | *e*S | | Sn | 03 02 43.2 | -8.6 |
| **MJB4** | **Matsu-Nakagumi** | **18.53** | **339** | *e*Pn | | **Pn** | **03 03 26.0** | **+0.7** |
| **MJB3** | **Matsu-Daira** | **18.54** | **339** | *e*Pn | | **P** | **03 03 25.0** | **+0.2** |
| **MJB5** | **Matsu-Yatsubo** | **18.55** | **339** | *e*Pn | | **Pn** | **03 03 25.3** | **-0.2** |
| **MJA3** | **Matsu-Soehiyam** | **18.56** | **339** | *e*Pn | | **Pn** | **03 03 25.8** | **0.0** |
| **MJB7** | **Matsu-Wadaira** | **18.57** | **339** | *e*Pn | | **Pn** | **03 03 26.7** | **+0.9** |
| **MJA4** | **Matsu-Jizotoug** | **18.58** | **339** | *e*Pn | | **Pn** | **03 03 26.1** | **+0.2** |
| **MJB2** | **Matsu-Sugadair** | **18.58** | **339** | *e*Pn | | **P** | **03 03 25.4** | **+0.1** |
| **MJA1** | **Matsu-Toyosaka** | **18.60** | **339** | *e*Pn | | **P** | **03 03 25.5** | **+0.1** |
| MJA1 | | | | *e*Sn | | **S** | **03 06 59.6** | **+5.0** |
| **MJB8** | **Matsu-Inaba** | **18.60** | **339** | *e*Pn | | **Pn** | **03 03 26.4** | **+0.3** |
| **MJA0** | **Matsu Arr-Jizo** | **18.61** | **339** | *e*P | | **P** | **03 03 25.2** | **-0.3** |
| **MJA0** | **Matsu Arr-Jizo** | **18.61** | **339** | *e*Pn | | **P** | **03 03 25.2** | **-0.3** |
| **MJAR** | **Matsushiro Arr** | **18.62** | **339** | P | | **P** | **03 03 24.3** | **-1.3** |
| | 0.6nm,0.3s,baz=165,slow=10,SNR=15 | | | | | | | |
| MJAR | | | | S | | **Sn** | **03 06 50.8** | **-3.0** |
| | 0.3nm,0.3s,baz=195,slow=13,SNR=3.8 | | | | | | | |
| MJAR | | | | ScP | | **ScP** | **03 11 22.2** | **-1.8** |
| | 0.1nm,0.3s,baz=161,slow=4.9,SNR=3.7 | | | | | | | |
| **MAJO** | **Matsushiro** | **18.62** | **339** | *c* P | | **Pn** | **03 03 26.5** | **+0.1** |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,97nm,1.0s | | | | | | | |
| **MAJO** | **Matsushiro** | **18.62** | **339** | *e*Pn | | **Pn** | **03 03 26.5** | **+0.1** |
| | comp=Z,76nm,1.1s | | | | | | | |
| MAJO | | | | *e*S | | Sn | 03 06 44.4 | -9.4 |
| **MAT** | **Matsushiro** | **18.62** | **339** | P | | **P** | **03 03 24.2** | **-1.4** |
| MAT | | | | S | | **S** | **03 06 55.4** | **+0.3** |
| **MJB9** | **Matsu-Tunnel** | **18.62** | **339** | *e*Pn | | **Pn** | **03 03 26.6** | **+0.1** |
| **MJB1** | **Matsu-Takimoto** | **18.63** | **339** | *e*Pn | | P | 03 03 19.2 | -6.5 |
| **WAKE** | **Wake Island** | **19.02** | **87** | *e*P | | **Pn** | **03 03 30.9** | **-0.3** |
| | comp=Z,82nm,1.0s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **19.11** | **89** | P | | **P** | **03 03 31.5** | **+0.6** |
| | baz=137,slow=74,SNR=7.7 | | | | | | | |
| H11S3 | | | | T | | T | 03 24 38.8 | |
| | baz=275,slow=74,SNR=19 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **19.12** | **89** | P | | **P** | **03 03 28.3** | **-2.8** |
| | baz=137,slow=74,SNR=5.7 | | | | | | | |
| H11S1 | | | | T | | T | 03 24 41.0 | |
| | baz=275,slow=74,SNR=12 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **19.13** | **89** | P | | **Pn** | **03 03 31.9** | **-0.5** |
| | baz=137,slow=74,SNR=6.5 | | | | | | | |
| H11S2 | | | | T | | T | 03 24 41.7 | |
| | baz=275,slow=74,SNR=27 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **19.22** | **85** | P | | **Pn** | **03 03 32.9** | **-0.6** |
| | baz=255,slow=13,SNR=5.3 | | | | | | | |
| H11N1 | | | | T | | T | 03 24 49.0 | |
| | baz=274,slow=74,SNR=6.8 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **19.23** | **85** | P | | **Pn** | **03 03 34.3** | **+0.8** |
| | baz=255,slow=13,SNR=6.3 | | | | | | | |
| H11N2 | | | | T | | T | 03 24 49.0 | |
| | baz=274,slow=74,SNR=6.4 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **19.24** | **85** | P | | **P** | **03 03 32.9** | **+0.7** |
| | baz=255,slow=13,SNR=3.6 | | | | | | | |
| H11N3 | | | | T | | T | 03 24 49.0 | |
| | baz=274 | | | | | | | |
| **JNU** | **Nakatsue** | **19.58** | **318** | P | | **P** | **03 03 36.0** | **-0.2** |
| | comp=Z,1.0nm,0.3s,baz=97,slow=5.1,SNR=5.6 | | | | | | | |
| **JNU** | **Nakatsue** | **19.58** | **318** | *e*Pn | | **P** | **03 03 35.6** | **-0.6** |
| | comp=Z,35nm,1.0s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **22.37** | **287** | *e*P | | **P** | **03 04 08.5** | **+2.2** |
| YOJ | | | | pmax | | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **22.37** | **287** | *e*P | | **P** | **03 04 08.4** | **+2.2** |
| | comp=Z,26nm,0.9s | | | | | | | |
| **GENI** | **Genyem** | **22.67** | **197** | P | | **P** | **03 04 13.1** | **+3.6** |
| | comp=Z,130nm,1.2s | | | | | | | |
| **YULB** | **Yu-li** | **23.81** | **284** | *e*P | | **P** | **03 04 21.2** | **+0.6** |
| | comp=Z,27nm,1.0s | | | | | | | |
| **YHNB** | **Yeheng** | **23.88** | **287** | *e*P | | **P** | **03 04 21.5** | **+0.2** |
| | comp=Z,58nm,0.9s | | | | | | | |
| **TWG** | **Pinlang** | **23.97** | **283** | *e*P | | **P** | **03 04 23.7** | **+1.6** |
| | comp=Z,150nm,1.0s | | | | | | | |
| **SSLB** | **Suanglung** | **24.16** | **285** | *e*P | | **P** | **03 04 25.4** | **+1.5** |
| | comp=Z,101nm,1.0s | | | | | | | |
| **KSRS** | **Korea Array** | **24.27** | **322** | P | | **P** | **03 04 28.0** | **+3.4** |
| | comp=Z,32nm,0.8s,baz=147,slow=10.0,SNR=12 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **24.28** | **322** | P | | **P** | **03 04 28.0** | **+3.2** |
| **KSAR** | **Wonju Array Be** | **24.28** | **322** | P | | **P** | **03 04 28.0** | **+3.2** |
| **TPUB** | **Ta-pu** | **24.41** | **284** | *e*P | | **P** | **03 04 26.1** | **0.0** |
| | comp=Z,30nm,0.9s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **24.62** | **359** | P | | **P** | **03 04 27.7** | **-0.1** |
| YUK | | | | S | | **S** | **03 08 48.2** | **+2.8** |
| YUK | | | | MLR | | MLR | | |
| | comp=Z,651nm,20.0s | | | | | | | |
| **ASAJ** | **Asahikawa** | **24.91** | **353** | *e*P | | **P** | **03 04 32.6** | **+2.1** |
| | comp=Z,81nm,1.5s | | | | | | | |
| **SWI** | **Sorong** | **25.04** | **218** | P | | **P** | **03 04 32.5** | **+0.6** |
| | comp=Z,81nm,1.4s | | | | | | | |
| **SIJI** | **Sorong** | **25.05** | **218** | P | | **P** | **03 04 32.3** | **+0.3** |
| | comp=Z,24nm,0.5s,baz=63,slow=11,SNR=17 | | | | | | | |
| **SSE** | **Sheshan** | **25.65** | **302** | *e*P | | **P** | **03 04 36.3** | **-1.0** |
| SSE | | | | S | | **S** | **03 08 59.8** | **-2.3** |
| SSE | | | | PMZ | | | | |
| | comp=Z,19nm,0.6s | | | | | | | |
| SSE | | | | PMZ | | | | |
| | comp=Z,320nm,4.2s | | | | | | | |
| SSE | | | | LZ | | | | |
| | comp=Z,270nm,24.0s | | | | | | | |
| **KUR** | **Kuril'sk** | **25.84** | **2** | P | | P | 03 04 49.9 | +11 |
| KUR | | | | S | | **S** | **03 09 04.7** | **0.0** |
| KUR | | | | MLR | | MLR | | |
| | comp=N,684nm,20.0s | | | | | | | |
| KUR | | | | MLR | | MLR | | |
| | comp=Z,717nm,20.0s | | | | | | | |
| **FAKI** | **Fak Fak** | **26.19** | **214** | P | | **P** | **03 04 42.4** | **+0.1** |
| | comp=Z,86nm,1.2s,comp=Z,811nm | | | | | | | |
| **FAKI** | **Fak Fak** | **26.19** | **214** | *e*P | | **P** | **03 04 41.6** | **-0.7** |
| | comp=Z,149nm,1.4s | | | | | | | |
| **MSHR** | **Mys Shultsa** | **26.55** | **334** | P | | **P** | **03 04 46.6** | **+1.3** |
| **USRK** | **Ussuriysk Ar.** | **27.60** | **337** | P | | **P** | **03 04 55.5** | **+0.8** |
| | comp=Z,7.8nm,0.8s,baz=154,slow=7.8,SNR=13 | | | | | | | |
| **NJ2** | **Nanjing** | **27.85** | **302** | *e*P | | **P** | **03 04 58.3** | **+1.2** |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,100nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **28.58** | **179** | P | | **P** | **03 05 02.9** | **-0.7** |
| | comp=Z,22nm,0.6s,baz=358,slow=7.2,SNR=7.9 | | | | | | | |
| **PMG** | **Port Moresby** | **28.58** | **179** | *c* P | | **P** | **03 05 02.7** | **-0.9** |
| PMG | | | | pmax | | pmax | | |
| | comp=Z,290nm,1.2s | | | | | | | |
| **PMG** | **Port Moresby** | **28.58** | **179** | *e*P | | **P** | **03 05 02.6** | **-1.0** |
| | comp=Z,64nm,1.0s | | | | | | | |
| **MDJ** | **Mudanjiang** | **28.88** | **335** | P | | **P** | **03 05 07.4** | **+1.3** |
| MDJ | | | | S | | S | 03 09 46.5 | -6.1 |
| MDJ | | | | ScS | | **ScS** | **03 15 40.9** | **-4.2** |
| MDJ | | | | PMZ | | | | |
| | comp=Z,20nm,1.1s | | | | | | | |
| MDJ | | | | PMZ | | | | |
| | comp=Z,51nm,3.1s | | | | | | | |
| MDJ | | | | LN | | | | |
| | comp=Z,350nm,23.0s | | | | | | | |
| MDJ | | | | LE | | | | |
| | comp=Z,500nm,22.1s | | | | | | | |
| MDJ | | | | LZ | | | | |
| | comp=Z,480nm,20.9s | | | | | | | |
| **NLAI** | **Namlea** | **29.46** | **222** | P | | **P** | **03 05 12.2** | **+0.7** |
| | comp=Z,20nm,1.2s,comp=Z,1μm | | | | | | | |
| **HABR** | **Khabarovsk** | **30.50** | **345** | P | | **P** | **03 05 19.2** | **-1.2** |
| HABR | | | | *e**PP | | **pP** | **03 05 32.1** | **-1.7** |
| HABR | | | | *e**SP | | **sP** | **03 05 38.0** | **-2.0** |
| HABR | | | | *e* | | | 03 06 19.0 | |
| HABR | | | | *e*S | | **S** | **03 10 17.3** | **-0.7** |
| HABR | | | | *e**SS | | **sS** | **03 10 39.3** | **-1.4** |
| HABR | | | | *e* | | | 03 12 01.1 | |
| HABR | | | | pmax | | pmax | | |
| | comp=N,45nm,2.5s | | | | | | | |
| HABR | | | | pmax | | pmax | | |
| | comp=E,99nm,2.5s | | | | | | | |
| HABR | | | | pmax | | pmax | | |
| | comp=Z,65nm,2.5s | | | | | | | |
| HABR | | | | MLR | | MLR | | |
| | comp=Z,237nm,17.0s | | | | | | | |
| **MRSI** | **Marisa** | **30.52** | **235** | P | | **P** | **03 05 21.2** | **+0.3** |
| | comp=Z,45nm,1.0s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **30.70** | **246** | *e*P | | **P** | **03 05 24.6** | **+2.1** |
| | comp=Z,57nm,1.3s | | | | | | | |

SPSI **Sidrap Palu** 35.05 231 P **P** 03 06 00.9 +0.4
comp=N,72nm,1.0s
MTN **Manton Dam** 35.39 207 *e*P **P** 03 06 02.3 -1.0
comp=N,101nm,1.3s
BKSI **Bulukumba** 35.71 229 P **P** 03 06 07.4 +1.2
comp=N,32nm,1.1s,comp=N,309nm
KAPI **Kappang** 35.77 230 *e*P **P** 03 06 07.0 +0.3
comp=N,38nm,1.0s
SOEI **Soe** 36.28 219 P **P** 03 06 14.3 +3.1
SOEI **Soe** 36.28 219 *e*P **P** 03 06 09.2 -2.0
comp=N,120nm,1.2s
HHC **Hu-ho-hao-te** 36.70 313 *e*P **P** 03 06 15.6 +1.0
HHC S **S** 03 11 54.6 +0.1
HHC PMZ
comp=N,21nm,1.0s
HHC PMZ
comp=N,180nm,5.2s
HHC LN
comp=N,250nm,17.2s
HHC LE
comp=N,480nm,14.7s
HHC LZ
comp=N,290nm,16.1s
HIA **Hailar** 36.77 330⇑ *i*P **P** 03 06 14.6 -0.3
HIA pmax pmax
comp=Z,8.0nm,0.5s
GYA **Guiyang** 37.26 288 P **P** 03 06 20.0 +0.5
GYA pP **pP** 03 06 33.3 +0.2
GYA PP **PnPn** 03 07 47.3 +1.1
GYA S **S** 03 12 02.3 -1.1
GYA PMZ
comp=Z,20nm,0.8s
GYA PMZ
comp=Z,140nm,4.9s
GYA LN
comp=Z,740nm,17.8s
GYA LE
comp=Z,680nm,17.2s
GYA LZ
comp=Z,720nm,17.6s
DLV **T Lat** 37.28 264 *e*P **P** 03 06 21.0 +1.2
comp=Z,54nm,1.0s
SBUM **Sibu** 37.49 248 *e*P **P** 03 06 21.0 -0.4
comp=Z,59nm,1.1s
UBPT **Khong Chiam** 39.32 271 P P 03 06 43.3 +6.6
comp=Z,33nm,1.1s,comp=Z,970nm
STKI **Sintang** 39.32 245 P P 03 06 44.0 +7.2
KSM **Kuching** 39.63 248 *e*P **P** 03 06 39.2 -0.1
comp=Z,34nm,1.0s
CD2 **Chengdu** 40.16 295 P **P** 03 06 42.8 -0.8
CD2 PcS **PcS** 03 12 37.3 -0.5
CD2 S **S** 03 12 46.1 -0.6
CD2 SS **SS** 03 15 45.5 -0.6
CD2 PMZ
comp=Z,30nm,0.5s
CD2 PMZ
comp=Z,180nm,5.4s
CD2 LN
comp=Z,670nm,25.5s
CD2 LE
comp=Z,570nm,18.6s
CD2 LZ
comp=Z,520nm,21.6s
MA2 **Magadan** 40.30 3 *i*P **P** 03 06 45.6 +1.3
TWSI **Taliwang, Sumb** 40.38 229 P **P** 03 06 44.8 -0.7
comp=Z,106nm,0.9s,comp=Z,1µm
SKNT **Sakolnakorn** 40.40 274 P **P** 03 06 47.3 +1.6
comp=Z,40nm,1.1s
CLNS **Chul'man** 40.75 342 *e*P P 03 06 59.3 +11
CLNS pmax pmax
comp=Z,19nm,1.0s
CLNS pmax pmax
comp=N,19nm,1.2s
KMI **Kunming** 40.78 286 P **P** 03 06 49.8 +0.7
KMI pP **pP** 03 07 02.8 0.0
KMI S **S** 03 12 56.0 -0.6
KMI SS **SS** 03 15 58.8 -0.2
KMI PMZ
comp=N,9.0nm,0.5s
KMI PMZ
comp=N,79nm,5.1s
KMI LN
comp=N,140nm,7.4s
KMI LE
comp=N,96nm,5.5s
KMI LZ
comp=N,89nm,5.8s
WRAB **Tennant Creek** 40.81 198*d* *i*P **P** 03 06 48.9 -0.1
WRAB pmax pmax
comp=Z,84nm,1.0s
WRAB **Tennant Creek** 40.81 198 P **P** 03 06 48.3 -0.7
comp=Z,200nm,0.5s,SNR=22
WRAB **Tennant Creek** 40.81 198 *e*P **P** 03 06 49.4 +0.4
WRA **Warramunga Arr** 40.83 198 P **P** 03 06 48.1 -1.0
comp=Z,17nm,0.8s,baz=18,slow=8.9,SNR=53
WRA PcP **PcP** 03 08 49.3 0.0
comp=Z,1.8nm,0.7s,baz=20,slow=9.8,SNR=5.1
WRA ScP **ScP** 03 12 35.1 +0.5
comp=Z,1.1nm,1.0s,baz=13,slow=4.1,SNR=3.8
WRA LR LR 03 24 07.2
comp=Z,678nm,21.7s,baz=20,slow=37
WRA **Warramunga Arr** 40.83 198 *i*P **P** 03 06 49.5 +0.4
WRA pmax pmax
comp=Z,18nm,0.8s
LZH **Lanzhou** 40.93 303 *e*P P 03 06 55.0 +5.0
LZH PP **PnPn** 03 08 33.4 +3.7
LZH *e*S **S** 03 13 03.6 +5.3
LZH PMZ
comp=Z,65nm,1.4s
LZH PMZ
comp=Z,130nm,4.0s
LZH LN
comp=Z,400nm,15.9s
LZH LZ
comp=Z,610nm,16.9s
NONG **Nongkai** 41.01 276 P **P** 03 06 52.5 +1.8
comp=Z,39nm,1.2s
KHON **Khomkaen** 41.61 273 P **P** 03 06 58.5 +2.8
comp=Z,22nm,1.0s,comp=Z,721nm
JAGI **Jajag, Banyuwa** 42.19 232 *e*P **P** 03 06 59.8 -0.6
comp=Z,42nm,0.9s
CHAI **Chaiyaphum** 42.48 273 P **P** 03 07 03.0 +0.2
comp=Z,20nm,1.0s,comp=Z,167nm
ULN **Ulaanbaatar** 42.74 321*de*P **P** 03 07 04.8 +0.1
ULN pmax pmax
comp=Z,19nm,1.7s
ULN **Ulaanbaatar** 42.74 321 *e*P **P** 03 07 04.2 -0.5
comp=Z,7.1nm,0.7s
CHBT **CHBT** 42.87 268 P **P** 03 07 07.0 +1.1
comp=Z,46nm,1.0s
LOEI **Loei** 42.87 275 P **P** 03 07 04.0 -1.9
SONM **Songino Array** 43.12 321 P **P** 03 07 07.3 -0.4
comp=Z,4.3nm,0.6s,baz=134,slow=9.2,SNR=22
SONM PcP **PcP** 03 08 57.3 +0.5
comp=Z,3.7nm,0.7s,baz=154,slow=3.4,SNR=4.4
SONM LR LR 03 26 04.7
comp=Z,369nm,20.7s,baz=122,slow=37
PBKT **Sadao Pong** 43.31 274 P **P** 03 07 10.2 +0.7
comp=Z,46nm,1.1s,comp=Z,930nm
NAYO **Nakonayok** 43.45 271 P **P** 03 07 11.8 +1.2
comp=Z,23nm,1.1s,comp=Z,581nm
UTTA **Uttaradit** 43.50 276 P P 03 07 16.9 +5.9
comp=Z,8.5nm,1.0s,comp=Z,96nm
PWJI **Pagerwojo** 43.69 235 P **P** 03 07 12.3 -0.2
SEY **Seymchan** 43.74 4 P **P** 03 07 13.1 +0.8
comp=Z,5.7nm,0.6s,baz=156,slow=7.5,SNR=5.4
SEY **Seymchan** 43.74 4‖ *i*P **P** 03 07 14.0 +1.7
PATY **Pattaya** 44.20 269 P P 03 07 23.8 +7.1
comp=Z,8.7nm,0.9s,comp=Z,1µm
YAK **Yakutsk** 44.23 349 *e*P P 03 07 20.6 +4.4
YAK *e**PP pP 03 07 41.9 +12
YAK *e* 03 09 03.9
YAK *e*S **S** 03 13 48.5 +2.7
YAK *e*SS **ScS** 03 17 12.1 +2.6
YAK pmax pmax
comp=Z,55nm,1.0s
YAK pmax pmax
comp=N,23nm,1.2s
YAK pmax pmax
comp=E,8.0nm,0.9s
YAK pmax pmax
comp=Z,10.0nm,0.4s
YAK smax smax
comp=E,88nm,18.6s
YAK smax smax
comp=N,66nm,18.6s
YAK MLR MLR
comp=N,284nm,20.0s
YAK MLR MLR
comp=E,124nm,20.0s
LAMP **Lampang** 44.24 277 P P 03 07 24.0 +7.1
comp=E,4.9nm,0.9s,comp=E,147nm
ASAR **Alice Springs** 44.48 197 P **P** 03 07 17.9 -0.9
comp=E,5.1nm,0.7s,baz=16,slow=6.3,SNR=26
ASAR PcP **PcP** 03 09 01.4 -0.1
comp=E,2.0nm,0.6s,baz=15,slow=4.0,SNR=3.5
ASAR ScP **ScP** 03 12 48.2 -1.1
comp=E,0.8nm,0.8s,baz=17,slow=3.9,SNR=4.4
ASAR S **S** 03 13 50.5 +0.2
comp=E,0.5nm,0.8s,baz=16,slow=18,SNR=4.2
ASAR LR LR 03 26 20.6
comp=E,312nm,19.8s,baz=10.0,slow=37
CMAI **Chiengmai2** 44.58 279 P **P** 03 07 20.5 +0.6
comp=E,12nm,1.4s,comp=E,415nm
GTA **Gaotai** 44.77 307 P **P** 03 07 21.3 +0.2
GTA PcP **PcP** 03 09 03.5 +1.0
GTA PcS **PcS** 03 12 52.8 -3.4
GTA S **S** 03 13 53.4 -1.1
GTA PMZ
comp=E,17nm,1.5s
GTA PMZ
comp=E,84nm,4.5s
GTA LN
comp=E,320nm,19.0s
GTA LE
comp=E,210nm,17.1s
GTA LZ
comp=E,240nm,19.9s
CHTO **Chiang Mai** 44.84 278 P P 03 07 27.7 +6.0
comp=E,57nm,1.1s
CHTO **Chiang Mai** 44.84 278 *e*P **P** 03 07 22.1 +0.4
CHTO pmax pmax
comp=Z,17nm,1.2s
CHTO **Chiang Mai** 44.84 278 *e*P **P** 03 07 22.1 +0.4
comp=Z,17nm,1.2s
CMAR **Chiang Mai Arr** 44.89 277 P **P** 03 07 21.9 -0.2
comp=Z,3.3nm,0.3s,baz=65,slow=7.1,SNR=20
CMAR LR LR 03 23 33.4
comp=Z,134nm,21.8s,baz=91,slow=33
CMAR **Chiang Mai Arr** 44.89 277 *i*P **P** 03 07 23.0 +0.8
CMAR pmax pmax
comp=Z,3.0nm,0.3s
MYKOM **Kota Tinggi** 45.23 253 *e*P **P** 03 07 26.6 +1.8
comp=Z,65nm,0.9s
UMPA **Umpang Tak** 45.37 274 P **P** 03 07 27.9 +1.9
comp=Z,19nm,1.0s,comp=Z,641nm
PHET **Kaeng Krachan** 45.37 269 P P 03 07 32.4 +6.4
comp=Z,9.6nm,0.9s,comp=Z,126nm
SRDT **SRDT** 45.51 271 P **P** 03 07 28.0 +0.9
comp=Z,74nm,1.0s
DZM **Mont Dzumac** 45.55 154 *e*P **P** 03 07 28.6 +1.3
comp=Z,112nm,1.2s
DZM **Mont Dzumac** 45.55 154 *e*LR LR 03 20 14.1
comp=Z,901nm,22.2s
DZM **Mont Dzumac** 45.55 154 P **P** 03 07 28.0 +0.7
comp=Z,22nm,0.6s,baz=357,slow=2.9,SNR=31
KHLT **Khaolaem Dam** 45.92 272 P P 03 07 36.5 +6.2
comp=Z,11nm,1.1s
ZAK **Zakamensk** 46.10 323 *e*P **P** 03 07 30.1 -1.3
ZAK pmax pmax
comp=Z,45nm,0.9s
SKLT **Songkhla** 46.13 261 P P 03 07 38.5 +6.5
comp=Z,47nm,1.0s,comp=Z,984nm
TLY **Talaya** 46.48 324 *e*P **P** 03 07 32.2 -2.1
TLY *e*S **S** 03 14 24.2 +5.6
TLY *e*SS **SS** 03 17 43.3 -1.5
TLY pmax pmax
comp=Z,18nm,1.4s
TLY MLR MLR
comp=Z,470nm,23.0s
IPM **Ipoh** 46.72 258 *e*P **P** 03 07 37.4 +0.8
comp=Z,50nm,0.9s
KULM **Kulim** 46.76 259 *e*P **P** 03 07 38.0 +1.0
comp=Z,60nm,0.9s
TRTT **Trang** 46.77 262 P P 03 07 43.6 +6.6
comp=Z,37nm,1.1s,comp=Z,417nm
MBWA **Marble Bar** 48.03 214 *e*P **P** 03 07 46.3 -0.3
comp=Z,20nm,0.9s
PSI **Prapat** 49.29 257 P **P** 03 07 56.9 +0.3
comp=Z,11nm,1.0s,baz=107,slow=3.8,SNR=6.3
PSI **Prapat** 49.29 257 *e*P **P** 03 07 57.4 +0.7
PSI **Prapat** 49.29 257 *e*P **P** 03 07 57.4 +0.7
ARMA **Armidale** 49.72 174 *e*P **P** 03 07 58.7 -0.8
comp=Z,128nm,2.0s
BILL **Bilibino** 50.26 10*c* *i*P **P** 03 08 03.8 +0.8
BILL *i* 03 09 22.9
BILL *i*S **S** 03 15 16.4 +5.0
BILL pmax pmax
comp=Z,17nm,1.0s
BILL MLR MLR
comp=Z,222nm,19.0s
LSA **Lhasa** 51.00 293 P **P** 03 08 10.1 +0.3
LSA **Lhasa** 51.00 293 *e*P **P** 03 08 10.3 +0.5
LSA pmax pmax
comp=Z,17nm,0.8s
LSA **Lhasa** 51.00 293 *e*P **P** 03 08 10.3 +0.5
comp=Z,17nm,0.8s
GSI **Gunungsitoli** 51.12 255 *e*P **P** 03 08 10.7 +0.3
comp=Z,132nm,1.0s
HVS **Khovu-Aksy** 52.02 320 P **P** 03 08 17.6 +0.9
HVS pmax pmax
comp=Z,12nm,0.7s
BBOO **Buckleboo** 52.81 191 *e*P **P** 03 08 22.6 +0.1
comp=Z,23nm,1.1s
TAPN **Taplejung** 54.15 290 *e*P **P** 03 08 32.8 -0.2
WMQ **Urumqi** 54.47 310 P **P** 03 08 35.4 +0.7
WMQ PP **PP** 03 10 40.0 +2.8
WMQ S **S** 03 16 08.0 -1.9
WMQ ScS **ScS** 03 18 18.0 -1.6
WMQ SS **SS** 03 19 52.0 -0.7
WMQ PMZ
comp=Z,78nm,1.0s
WMQ PMZ
comp=Z,150nm,6.0s
WMQ LN
comp=Z,250nm,18.0s
WMQ LE
comp=Z,220nm,18.0s
WMQ LZ
comp=Z,170nm,18.0s
ODAN **Odare** 54.48 290 *e*P **P** 03 08 35.0 -0.3
comp=Z,21nm,0.8s
CHGN **Chignik** 54.92 34 *e*P **P** 03 08 37.1 -0.6
RAMN **Ramite** 55.17 290 *e*P **P** 03 08 39.8 -0.5
comp=Z,23nm,0.8s
GUN **Gumba** 55.72 291 *e*P **P** 03 08 44.2 -0.2
comp=Z,18nm,0.7s
PKI **Pulchoki** 56.17 291 *e*P **P** 03 08 46.7 -0.9
KKN **Kakani** 56.26 291 *e*P **P** 03 08 47.4 -0.7
comp=Z,24nm,0.8s
DMN **Daman** 56.43 291 *e*P **P** 03 08 48.9 -0.5
comp=Z,13nm,0.5s
GKN **Gorkha** 56.81 291 *e*P **P** 03 08 51.3 -0.6
comp=Z,50nm,1.0s
DANN **Dangsing** 57.54 292 *e*P **P** 03 08 56.9 -0.3
comp=Z,9.4nm,0.6s
KOLN **Koldanda** 57.74 291 *e*P **P** 03 08 57.7 -0.9
comp=Z,16nm,0.7s
ZALV **Zalesovo Beam** 57.97 322 P **P** 03 08 58.7 -0.7
comp=Z,8.2nm,0.6s,baz=102,slow=6.9,SNR=32
ZALV ScP **ScP** 03 13 42.3 -4.6
comp=Z,0.5nm,0.3s,baz=79,slow=7.5,SNR=2.5
ZALV LR LR 03 35 20.5
comp=Z,115nm,19.9s,baz=70,slow=37
KDAK **Kodiak Island** 58.40 33 P **P** 03 09 01.9 -0.4
comp=Z,19nm,1.0s,baz=358,slow=5.6,SNR=4.5
KDAK **Kodiak Island** 58.40 33 P **P** 03 09 02.0 -0.4
MK31 **Makanchi Array** 58.57 314 *i*P **P** 03 09 03.6 -0.2
MK31 pmax pmax
comp=Z,12nm,0.8s
MKAR **Makanchi Array** 58.57 314 P **P** 03 09 03.9 +0.1
comp=Z,9.3nm,0.9s,baz=91,slow=9.7,SNR=30
MKAR LR LR 03 36 42.8
comp=Z,95nm,18.4s,baz=74,slow=38
NWAO **Narrogin (SRO)** 59.03 209 *e*P **P** 03 09 06.8 -0.2
NWAO pmax pmax
comp=Z,22nm,0.8s
NWAO **Narrogin (SRO)** 59.03 209 *e*P **P** 03 09 06.8 -0.2
comp=Z,22nm,0.8s
NVS **Novosibirsk** 59.05 323 *e*P P 03 09 15.0 +8.1
NVS pmax pmax
comp=Z,36nm,1.6s
NVS pmax pmax
comp=N,11nm,1.4s
NVS pmax pmax
comp=E,16nm,1.6s
CNPM **China Poot** 59.52 32 *e*P **P** 03 09 10.8 +0.7
comp=E,54nm,1.1s
BRLK **Bradley Lake** 59.75 31 *e*P **P** 03 09 11.6 -0.1
comp=E,166nm,2.0s
PPLA **Purkeypile** 59.98 28 *e*P **P** 03 09 14.1 +0.7
comp=E,37nm,1.3s
SEW **Seward** 60.53 31 *e*P **P** 03 09 17.1 +0.2
comp=E,24nm,0.9s
RC01 **Rabbit Creek A** 60.62 30 *e*P **P** 03 09 17.6 0.0
comp=E,18nm,1.0s
KTH **Kantishna Hill** 60.72 27 *e*P **P** 03 09 18.7 +0.4
comp=E,42nm,1.2s
BPAW **Bear Paw Mtn.** 60.84 26 *e*P **P** 03 09 20.2 +1.0
comp=E,17nm,0.8s
TRF **Thorofare Moun** 60.96 27 *e*P **P** 03 09 20.2 +0.1
comp=E,25nm,1.0s
PMR **Palmer** 61.02 30 *e*P **P** 03 09 20.0 -0.3
PMR pmax pmax
comp=Z,16nm,1.1s
PMR **Palmer** 61.02 30 *e*P **P** 03 09 19.9 -0.3
comp=Z,16nm,1.1s
KURK **Kurchatov** 61.30 318 *e*P **P** 03 09 22.0 -0.4
KURK pmax pmax
comp=Z,68nm,0.9s
KURK **Kurchatov** 61.30 318 P **P** 03 09 22.8 +0.4
comp=Z,225nm,1.1s,SNR=9.5
KURK **Kurchatov** 61.30 318 *e*P **P** 03 09 22.0 -0.4
comp=Z,68nm,0.9s
KURBB **Kurchatov Arra** 61.35 318 P **P** 03 09 21.5 -1.2
comp=Z,16nm,0.6s,baz=96,slow=8.0,SNR=73
SML **Sawmill** 61.44 29 *e*P **P** 03 09 23.7 +0.5
SML pmax pmax
comp=Z,8.0nm,1.0s
SML **Sawmill** 61.44 29 *e*P **P** 03 09 23.7 +0.5
comp=Z,7.9nm,1.0s
BWN **Browne** 61.50 27 *e*P **P** 03 09 25.3 +1.8
comp=Z,51nm,0.9s
MCK **McKinley** 61.62 27 *e*P **P** 03 09 24.4 0.0
MCK pmax pmax
comp=Z,230nm,2.8s
MCK **McKinley** 61.62 27 *e*P **P** 03 09 24.4 0.0
comp=Z,230nm,2.8s
COLD **Coldfoot** 62.06 23 *e*P **P** 03 09 28.1 +0.8
comp=Z,12nm,0.9s
CCB **Clear Creek Bu** 62.32 26 *e*P **P** 03 09 29.4 +0.4
comp=Z,8.0nm,1.0s
COLA **College** 62.35 26 *e*P **P** 03 09 28.9 -0.3
COLA pmax pmax
comp=Z,16nm,1.0s
COLA **College** 62.35 26 *e*P **P** 03 09 28.9 -0.3
comp=Z,16nm,1.0s
EYAK **Cordova Ski Ar** 62.42 31 *e*P **P** 03 09 31.5 +1.8
comp=Z,25nm,1.0s
KLU **Klutina** 62.50 30 *e*P **P** 03 09 31.6 +1.2
comp=Z,48nm,1.7s
DIV **Divide** 62.51 30 *e*P **P** 03 09 31.7 +1.3
comp=Z,46nm,1.6s
HDA **Harding Lake** 62.62 27 *e*P **P** 03 09 30.8 -0.3
comp=Z,13nm,0.8s
ILAR **Eielson Array** 62.73 26 P **P** 03 09 30.9 -0.8
comp=Z,7.5nm,1.0s,baz=257,slow=4.9,SNR=33
ILAR LR LR 03 36 25.7
comp=Z,261nm,19.4s,baz=268,slow=36
ILAR **Eielson Array** 62.73 26 P **P** 03 09 31.0 -0.8
PAX **Paxson** 62.98 28 *e*P **P** 03 09 34.1 +0.5
PAX pmax pmax
comp=Z,12nm,1.0s
PAX **Paxson** 62.98 28 *e*P **P** 03 09 34.1 +0.5
comp=Z,12nm,1.0s
HARP **HAARP** 63.02 29 *e*P **P** 03 09 35.1 +1.3
comp=Z,28nm,0.9s
BMRM **Bremner River** 63.04 31 *e*P **P** 03 09 34.4 +0.4
comp=Z,63nm,1.5s
KSH **Kashi** 63.12 305 P **P** 03 09 38.0 +3.0
KSH *e*PP **PP** 03 11 59.0 +4.9
KSH PcS 03 14 16.6
KSH S **S** 03 18 00.5 -1.9
KSH ScS **ScS** 03 19 23.9 +0.1
KSH PMZ
comp=Z,17nm,1.2s
KSH LN
comp=Z,97nm,5.5s
KSH LE
comp=Z,95nm,5.1s
KSH LZ
comp=Z,200nm,6.4s
TKM2 **Tokmak 2** 63.24 309 *i*P **P** 03 09 36.3 +0.5
TKM2 pmax pmax
comp=Z,26nm,1.0s
TKM2 **Tokmak 2** 63.24 309 P **P** 03 09 36.5 +0.7
SNR=17
TKM2 **Tokmak 2** 63.24 309 *e*P **P** 03 09 36.3 +0.5
comp=Z,24nm,1.0s
DOT **Dot Lake** 63.72 28 *e*P **P** 03 09 38.9 +0.5
comp=Z,31nm,0.8s
KBK **Karagaybulak** 63.73 309 P **P** 03 09 39.5 +0.5
SNR=12
FRU **Bishkek** 63.96 309 *i*P **P** 03 09 40.0 -0.4
FRU *i* 03 09 56.0
FRU pmax pmax
comp=Z,45nm,2.0s
USP **Ospenovka** 64.03 309 P **P** 03 09 41.1 +0.3
SNR=7.0
AAK **Ala-Archa** 64.06 309 P **P** 03 09 41.3 +0.2
comp=Z,8.0nm,0.9s,baz=104,slow=7.3,SNR=18
AAK **Ala-Archa** 64.06 309 *e*P **P** 03 09 41.4 +0.2
AAK pmax pmax
comp=Z,18nm,1.2s
AAK **Ala-Archa** 64.06 309 P **P** 03 09 41.6 +0.4
comp=Z,75nm,1.1s,SNR=6.8
AAK **Ala-Archa** 64.06 309 P **P** 03 09 41.4 +0.2
SNR=9.0
AAK **Ala-Archa** 64.06 309 *e*P **P** 03 09 41.4 +0.2
comp=Z,18nm,1.2s
UCH **Uchtor** 64.07 308 P **P** 03 09 42.7 +1.1
SNR=29
URZ **Urewera** 64.11 154 P **P** 03 09 40.8 -0.3
comp=Z,4.1nm,0.6s,baz=302,slow=3.4,SNR=7.4
EKS2 **Erkin-Say** 64.59 309 *e*P **P** 03 09 44.8 +0.2
EKS2 pmax pmax
comp=Z,10.0nm,1.0s
EKS2 **Erkin-Say** 64.59 309 *e*P **P** 03 09 44.8 +0.2
comp=Z,10nm,1.0s
BKZ **Black Stump Fm** 64.62 155 *e*P **P** 03 09 45.1 +0.6
comp=Z,32nm,1.5s
AML **Almayashu** 64.68 308 P **P** 03 09 46.4 +0.8
SNR=19
EGAK **Eagle** 65.15 27 *e*P **P** 03 09 47.7 0.0
comp=Z,13nm,0.9s
VOSK **Vostochnaya** 66.11 320*ce*P **P** 03 09 53.5 -0.6
VOSK pmax pmax
comp=Z,32nm,1.3s
CHKZ **Chkalovo** 66.32 321 *i*P **P** 03 09 54.3 -1.1
CHKZ pmax pmax
comp=Z,35nm,1.1s
KHZ **Kahutara** 66.33 158 *e*P **P** 03 09 53.7 -1.7
comp=Z,55nm,1.5s
BRVK **Borovoye** 66.53 320*c* *i*P **P** 03 09 56.6 -0.1
BRVK pmax pmax
comp=Z,24nm,0.7s
BRVK **Borovoye** 66.53 320 P **P** 03 09 56.1 -0.6
comp=Z,208nm,0.8s,SNR=16
BRVK **Borovoye** 66.53 320 *e*P **P** 03 09 56.6 -0.1
comp=Z,55nm,1.0s
KK31 **Karatay Array** 66.95 309 P **P** 03 09 59.6 0.0
KK31 pmax pmax
comp=Z,32nm,0.8s
KKAR **Karatay Array** 66.95 309 *e*P **P** 03 09 59.7 +0.1
KKAR pmax pmax
comp=Z,21nm,0.7s
KKAR **Karatay Array** 66.95 309 *e*P **P** 03 09 59.7 +0.1
comp=Z,21nm,0.7s
ZRNK **Zerenda** 67.31 320 *i*P **P** 03 10 01.1 -0.6
ZRNK pmax pmax
comp=Z,50nm,1.2s
INK **Inuvik** 68.48 23 P **P** 03 10 09.0 +0.2
comp=Z,6.5nm,0.8s,baz=250,slow=6.4,SNR=9.2
INK **Inuvik** 68.48 23 *e*P **P** 03 10 08.9 +0.2
INK pmax pmax
comp=Z,8.0nm,0.8s
INK **Inuvik** 68.48 23 *e*P **P** 03 10 08.9 +0.2
comp=Z,8.2nm,0.8s
SVE **Sverdlovsk** 71.79 325 *e*P **P** 03 10 29.6 +0.4
SVE pmax pmax

comp=Z,30nm,1.0s
**PPT Papeete 72.71 116** LR LR 03 35 01.3
comp=Z,389nm,19.9s,baz=314,slow=30
**PPT2 Papeete2 72.72 116** *e*S **S** **03 19 55.2 -2.2**
comp=Z,112nm,32.0s
**PPT2 Papeete2 72.72 116** *e*LR LR 03 32 51.5
comp=Z,741nm,22.8s,baz=295
**AB31 Akbulak array 73.39 317** *i* P **P** **03 10 38.4 -0.5**
AB31 pmax pmax
comp=Z,26nm,0.8s
**ABKAR Akbulak array 73.39 317** *e*P **P** **03 10 38.5 -0.4**
**AKTO Aktyubinsk 74.39 318** P **P** **03 10 44.1 -0.6**
AKTO pmax pmax
comp=Z,11nm,0.8s
**TBI Tubuai 75.51 121** *e*LR LR 03 33 56.5
comp=Z,235nm,22.8s,baz=305
**IMYA Miami 75.99 304** *e*P **P** **03 10 54.8 +0.4**
**IMOG Moghan 76.64 304** *e*P **P** **03 10 58.7 +0.4**
**B05A Bryant 76.73 43** P **P** **03 10 59.1 +1.0**
baz=77
**IPAY Payeh 76.83 304** *e*P **P** **03 10 58.9 -0.4**
**YKA Yellowknife Ar 77.06 28** P **P** **03 11 00.1 +0.4**
comp=Z,8.3nm,0.8s,baz=290,slow=5.8,SNR=13
**IKRD Kardeh 77.12 305** *e*P P 03 10 56.9 -4.0
**GEYT Alibeck 77.14 306** P **P** **03 11 00.5 -0.3**
comp=Z,7.2nm,0.7s,baz=90,slow=1.5,SNR=8.8
GEYT LR LR 03 48 57.4
comp=Z,113nm,18.5s,baz=40,slow=39
**IKOO Kooshah 77.85 300** *e*P **P** **03 11 05.0 0.0**
**ITEG Tejag 77.93 301** *e*P **P** **03 11 05.2 -0.2**
**YBH Yreka Blue Hor 77.96 50** P **P** **03 11 05.7 +0.4**
comp=Z,7.1nm,0.9s,baz=0.0,slow=4.0
**J05D Fort Rock, OR 78.59 48** P **P** **03 11 09.4 +0.5**
baz=78
**RES Resolute Bay 78.62 14** *e*P **P** **03 11 08.7 +0.5**
RES pmax pmax
comp=Z,10.0nm,0.9s
**RES Resolute Bay 78.62 14** *e*P **P** **03 11 08.7 +0.5**
comp=Z,10nm,0.9s
**D08A Wollman Farm, 79.12 44** *e*P **P** **03 11 12.8 +1.3**
comp=Z,132nm,2.3s
**NEW Newport 79.92 42** *e*P **P** **03 11 16.6 +0.7**
NEW pmax pmax
comp=Z,98nm,2.3s
**NEW Newport 79.92 42** P **P** **03 11 15.1 -0.8**
baz=80
**NEW Newport 79.92 42** *e*P **P** **03 11 16.6 +0.7**
comp=Z,98nm,2.3s
**J08A Circle Bar Ran 80.50 47** *e*P **P** **03 11 20.3 +1.1**
comp=Z,228nm,2.6s
**EDM Edmonton 80.61 37** *e*P **P** **03 11 20.3 +0.8**
EDM pmax pmax
comp=Z,133nm,2.1s
**EDM Edmonton 80.61 37** *e*P **P** **03 11 20.3 +0.8**
comp=Z,133nm,2.1s
**APA Apatity 80.68 339**⇑ *i*P **P** **03 11 20.0 +0.5**
APA MLR MLR
comp=Z,1μm,12.0s
**IGLO Ghaloghah 80.82 305** *e*P **P** **03 11 21.0 -0.1**
**IBAF Bafgh 80.88 300** *e*P **P** **03 11 20.9 -0.6**
**KLMR Klimovskoe 81.25 332** *e*P **P** **03 11 20.9 -1.7**
KLMR pmax pmax
comp=Z,17nm,0.9s
**BSMT Bassoo Peak 81.54 42** *e*P **P** **03 11 25.9 +1.2**
comp=Z,18nm,1.2s
**IALA Alasht 81.73 305** *e*P **P** **03 11 25.0 -1.1**
**BLMT Blacktail Moun 81.76 42** *e*P **P** **03 11 27.1 +1.3**
**JTMT Jette 81.90 42** *e*P **P** **03 11 27.2 +0.7**
comp=Z,8.5nm,1.1s
**ARCES ARCESS Array B 82.11 342** P **P** **03 11 26.8 -0.2**
comp=Z,7.0nm,0.7s,baz=69,slow=6.6,SNR=14
ARCES LR LR 03 55 20.5
comp=Z,140nm,19.5s,baz=57,slow=41
**NVAR Mina Array Bea 82.14 52** P **P** **03 11 29.3 +1.2**
comp=Z,6.5nm,0.8s,baz=271,slow=5.8,SNR=10
NVAR LR LR 03 42 05.0
comp=Z,433nm,19.6s,baz=265,slow=31
**SWMT Swartz Lake 82.16 42** *e*P **P** **03 11 29.4 +1.6**
comp=Z,5.7nm,1.0s
**MFID Camas Ranch 82.32 47** *e*P **P** **03 11 29.8 +1.0**
comp=Z,20nm,1.3s
**UOSS Wadi Hilu 82.32 294** *e*P **P** **03 11 29.2 +0.1**
**VES Vestal, Richgr 82.36 55** P **P** **03 11 28.7 -0.3**
baz=82
**IDMV Damavand 82.49 305** *e*P **P** **03 11 29.8 -0.2**
**SLMT Seeley Lake 82.57 43** *e*P **P** **03 11 31.0 +0.9**
comp=Z,13nm,1.3s
**HLID Hailey 83.24 46** P **P** **03 11 33.9 +0.2**
baz=83
**HLID Hailey 83.24 46** *e*P **P** **03 11 34.9 +1.2**
comp=Z,91nm,3.0s
**MAK Makhachkala 83.39 313** *e*P **P** **03 11 33.7 -0.4**
MAK *e*S **S** **03 21 50.9 -0.5**
MAK MLR MLR
comp=Z,399nm,24.0s
**IRAM Rameshev 83.40 301** *e*P **P** **03 11 33.7 -1.1**
**IPAR Pars 83.48 299** *e*P **P** **03 11 34.1 -1.2**
**MPMC Manual Prospec 83.52 54** P **P** **03 11 35.7 +0.4**
baz=83
**IKLH Kolahrood 83.56 303** *e*P **P** **03 11 35.5 -0.1**
**IGZV Ghazvin 83.62 306** *e*P **P** **03 11 36.4 +0.5**
**LRM Limekiln Ridge 83.75 44** *e*P **P** **03 11 37.0 +0.7**
comp=Z,33nm,0.7s
**HRY Holter Researc 83.83 43** *e*P **P** **03 11 37.5 +1.0**
comp=Z,6.3nm,0.5s
**VRH Novokhopyorsk 84.01 322** *e*P **P** **03 11 36.4 -0.8**
VRH *e*S **S** **03 21 55.8 -1.5**
VRH pmax pmax
comp=N,7.0nm,0.6s
VRH pmax pmax
comp=E,5.0nm,0.6s
VRH pmax pmax
comp=Z,10.0nm,0.6s
VRH smax smax
comp=N,240nm,2.1s
VRH smax smax
comp=E,220nm,2.1s
VRH smax smax
comp=Z,80nm,2.1s
**IRAZ Razeghan 84.17 305** *e*P **P** **03 11 38.5 -0.2**
**R11A Troy Canyon, C 84.19 52** P **P** **03 11 38.9 +0.3**
baz=84
**R11A Troy Canyon, C 84.19 52** *e*P **P** **03 11 39.5 +0.9**
comp=Z,15nm,1.3s
**GSC Goldstone 84.29 55** P **P** **03 11 39.4 +0.3**
baz=84
**IPIR Pirpir 84.31 302** *e*P **P** **03 11 39.7 +0.2**
**MOS Moscow 84.33 327** *e*P **P** **03 11 37.5 -1.2**
MOS *e* 03 11 50.6
MOS *e* 03 15 02.1
MOS pmax pmax
comp=Z,57nm,0.8s
**BOZ Bozeman (W) 84.35 44** *e*P **P** **03 11 40.2 +1.0**
BOZ pmax pmax
comp=Z,19nm,1.5s
**BOZ Bozeman (W) 84.35 44** P **P** **03 11 39.7 +0.5**
baz=84
**BOZ Bozeman (W) 84.35 44** *e*P **P** **03 11 40.2 +1.0**
comp=Z,19nm,1.5s
**IKAZ Kazeroun 84.49 299** *e*P **P** **03 11 39.4 -1.2**
**EGMT Eagleton 84.64 41** P **P** **03 11 40.4 -0.1**
baz=84
**LPSR Galich'ya Gora 85.01 324** *e*P **P** **03 11 41.3 -0.9**
LPSR *e*S **S** **03 22 05.8 -1.4**
LPSR pmax pmax
comp=N,4.0nm,0.9s
LPSR pmax pmax
comp=E,6.0nm,0.9s
LPSR pmax pmax
comp=Z,8.0nm,0.9s
LPSR smax smax
comp=N,110nm,2.1s
LPSR smax smax
comp=Z,30nm,2.1s
LPSR smax smax
comp=E,110nm,2.0s
**PFO Pinyon Flat Ob 85.13 56** P **P** **03 11 42.9 -0.6**
comp=E,2.1nm,0.7s,baz=323,slow=9.9,SNR=2.7
**SHPR Sheep Range 85.14 53** *e*P **P** **03 11 44.6 +1.2**
**OBN Obninsk 85.15 327** *i*P **P** **03 11 42.6 -0.2**
OBN *i* 03 14 59.8
OBN *i* S S 03 21 52.6 -16
OBN pmax pmax
comp=Z,27nm,1.2s
OBN MLR MLR
comp=Z,215nm,21.0s

**YMR Madison River 85.15 44** *e*P **P** **03 11 45.3 +1.9**
comp=Z,25nm,0.7s
**YFT Old Faithful 85.32 45** *e*P **P** **03 11 45.5 +1.3**
comp=Z,34nm,1.1s
**YNR Norris Junctio 85.32 44** *e*P **P** **03 11 45.8 +1.5**
comp=Z,39nm,1.0s
**GMRC Granite Mounta 85.35 55** P **P** **03 11 44.8 +0.4**
baz=85
**DGRG David-gareji 85.41 312** P **P** **03 11 45.1 +0.6**
**DGRG David-gareji 85.41 312** P **P** **03 11 45.1 +0.6**
**VSR Storozhevoye 85.47 323** *e*P **P** **03 11 43.5 -1.0**
VSR *e*S S 03 22 05.8 -6.0
VSR pmax pmax
comp=N,6.0nm,0.6s
VSR pmax pmax
comp=E,4.0nm,0.6s
VSR pmax pmax
comp=Z,10.0nm,0.6s
VSR smax smax
comp=N,110nm,2.6s
VSR smax smax
comp=E,210nm,2.6s
VSR smax smax
comp=Z,70nm,2.6s
**DUG Dugway 85.55 49** *e*P **P** **03 11 46.6 +1.2**
DUG pmax pmax
comp=Z,34nm,1.6s
**DUG Dugway 85.55 49** P **P** **03 11 46.2 +0.8**
baz=85
**DUG Dugway 85.55 49** *e*P **P** **03 11 46.6 +1.2**
comp=Z,34nm,1.6s
**FLWY Flagg Ranch 85.55 45** *e*P **P** **03 11 45.1 -0.3**
comp=Z,14nm,0.8s
**GCMT Greycliff 85.56 43** *e*P **P** **03 11 45.9 +0.6**
comp=Z,7.4nm,0.9s
**TBLG Delisi 85.74 313** P **P** **03 11 45.8 -0.4**
**TBLG Delisi 85.74 313** P **P** **03 11 45.7 -0.4**
**AHID Auburn Hatcher 85.78 46** *e*P **P** **03 11 46.9 +0.3**
comp=Z,14nm,0.9s
**NCK Nalchik 85.85 315**⇓ *e*P **P** **03 11 46.6 0.0**
**DRV Dumont d'Urvil 85.89 183** SS SS 03 27 59.0 +5.2
DRV R 03 41 00.0
**HWUT Hardware Ranch 85.90 47** *e*P **P** **03 11 48.0 +0.8**
comp=Z,14nm,1.0s
**RLMT Red Lodge 86.09 43** P **P** **03 11 49.1 +1.1**
baz=86
**RLMT Red Lodge 86.09 43** *e*P **P** **03 11 49.2 +1.1**
comp=Z,12nm,0.8s
**FFC Flin Flon 86.14 33** *e*P **P** **03 11 48.2 +0.4**
FFC pmax pmax
comp=Z,30nm,1.2s
**FFC Flin Flon 86.14 33** P **P** **03 11 48.0 +0.2**
comp=Z,121nm,0.8s,SNR=6.7
**FFC Flin Flon 86.14 33** *e*P **P** **03 11 48.2 +0.4**
comp=Z,30nm,1.2s
**NLU North Lily Min 86.16 49** *e*P **P** **03 11 48.7 +0.2**
comp=Z,40nm,1.9s
**KBZ Khabaz 86.23 315** P **P** **03 11 47.2 -1.2**
comp=Z,7.0nm,0.8s,baz=67,slow=7.1,SNR=16
KBZ LR LR 03 53 57.5
comp=Z,232nm,20.9s,baz=53,slow=38
**KIV Kislovodsk 86.28 315** *e*P **P** **03 11 49.1 +0.3**
KIV *e* 03 22 09.8
KIV pmax pmax
comp=Z,8.0nm,0.9s
KIV MLR MLR
comp=Z,236nm,19.0s
**GNI Garni 86.33 311** *e*P **P** **03 11 49.5 +0.2**
GNI pmax pmax
comp=Z,92nm,1.7s
**GNI Garni 86.33 311** *e*P **P** **03 11 47.8 -1.5**
comp=Z,132nm,1.1s
**O16A Springville 86.48 49** *e*P P 03 11 55.1 +5.1
comp=Z,20nm,1.2s
**NEY Neytrino 86.53 315** P **P** **03 11 50.2 0.0**
NEY pmax pmax
comp=Z,2.0nm,0.8s
**FINES FINESS Array B 86.62 335** P **P** **03 11 48.2 -1.7**
comp=Z,4.8nm,0.4s,baz=87,slow=4.5,SNR=50
FINES LR LR 03 53 59.4
comp=Z,186nm,21.1s,baz=50,slow=38
**FINES FINESS Array B 86.62 335** *i*P **P** **03 11 48.7 -1.3**
FINES pmax pmax
comp=Z,5.0nm,0.4s
**PDMCI Parker Dam,Lak 86.70 55** P **P** **03 11 51.5 +0.6**
baz=87
**AKH Akhalkalaki 86.73 313** P **P** **03 11 51.6 +0.4**
**AKH Akhalkalaki 86.73 313** P **P** **03 11 51.6 +0.4**
**AKH Akhalkalaki 86.73 313**⇓ *i*P **P** **03 11 51.3 +0.1**
**BW06 Boulder Array 86.83 46** *e*P **P** **03 11 52.1 +0.3**
comp=Z,72nm,2.8s
**IVIS Veis 86.84 305** *e*P **P** **03 11 50.9 -1.0**
**P17A Butcher Ranch, 87.30 49** *e*P **P** **03 11 55.4 +1.4**
comp=Z,17nm,1.4s
**LAO LASA Array 87.37 41** P **P** **03 11 54.9 +0.8**
baz=87
**SRU San Rafael 87.59 49** *e*P **P** **03 11 56.1 +0.6**
SRU pmax pmax
comp=Z,7.0nm,0.8s
**SRU San Rafael 87.59 49** *e*P **P** **03 11 56.1 +0.6**
comp=Z,7.1nm,0.8s
**WUAZ Wupatki 88.36 53** P **P** **03 12 00.3 +1.1**
baz=88
**SOC Sochi 88.39 316** *e*P **P** **03 11 57.8 -1.1**
SOC *e* 03 15 25.5
SOC *e*S **SKSac** **03 22 22.1 -1.5**
SOC *e*SS **SS** **03 28 30.4 0.0**
SOC *e*SSS SSS 03 32 07.4
SOC pmax pmax
comp=Z,10.0nm,0.7s
SOC MLR MLR
comp=Z,322nm,20.0s
**214A Organ Pipe Nat 88.59 57** P **P** **03 12 00.9 +0.7**
baz=88
**C25A Freed Ranch, W 88.73 39** P **P** **03 12 00.4 0.0**
baz=89
**O20A White River Ci 88.80 48** P **P** **03 12 01.5 +0.2**
baz=89
**O20A White River Ci 88.80 48** *e*P **P** **03 12 01.4 +0.2**
comp=Z,77nm,2.1s
**ANN Anapa 89.34 318** *e*P **P** **03 12 01.3 -2.0**
ANN *e**PP **pP** **03 12 16.3 -2.2**
ANN pmax pmax
comp=Z,42nm,1.5s
**E26A Carlson Angus 89.79 40** P **P** **03 12 06.1 +0.6**
baz=90
**MICGM Minsk 89.79 329** *e* **P** **03 12 04.0 -1.2**
**MNK Minsk 89.82 329** *e*P **P** **03 12 04.0 -1.3**
**IZAR Zarasai 89.85 331** *e*P **P** **03 12 04.8 -0.6**
IZAR IAmb IAmb 03 12 06.5
comp=Z,7.9nm,0.6s
**IDID Didziasalis 89.87 330** *e*P **P** **03 12 04.7 -0.8**
IDID IAmb IAmb 03 12 14.1
comp=Z,8.5nm,1.0s
**H25A Fruitdale 89.94 42** P **P** **03 12 06.3 0.0**
baz=90
**F26A Lodgepole 89.95 41** P **P** **03 12 06.7 +0.5**
baz=90
**ISAL Salakas 90.01 331** *e*P **P** **03 12 05.6 -0.6**
ISAL IAmb IAmb 03 12 08.1
comp=Z,12nm,1.0s
**TUC Tucson 90.05 56** *e*P **P** **03 12 06.9 -0.1**
TUC pmax pmax
comp=Z,20nm,1.8s
**TUC Tucson 90.05 56** *e*P **P** **03 12 06.9 -0.1**
comp=Z,20nm,1.8s
**D27A Center 90.05 39** P **P** **03 12 07.1 +0.5**
baz=90
**B28A Dugan Ranch, T 90.08 38** P **P** **03 12 06.6 -0.1**
baz=90
**SMCO Snowmass 90.09 48** *e*P **P** **03 12 08.6 +1.1**
comp=Z,9.4nm,1.1s
**IIGN Ignalina 90.09 330** *e*P **P** **03 12 05.9 -0.7**
IIGN IAmb IAmb 03 12 07.0
comp=Z,4.7nm,0.8s
**I25A Rochford 90.13 43** P **P** **03 12 07.4 0.0**
baz=90
**G26A Maurine 90.26 41** P **P** **03 12 07.8 +0.1**
baz=90
**E27A Carson 90.35 40** P **P** **03 12 08.6 +0.5**
baz=90
**J25A Sunshine Ranch 90.38 43** P **P** **03 12 08.3 0.0**
baz=90
**H26A Fairpoint 90.47 42** P **P** **03 12 08.6 -0.1**
baz=90
**G27A Dupree 90.63 41** P **P** **03 12 09.5 +0.1**
baz=90

**ISCO Idaho Springs 90.77 47** *e*P **P** **03 12 12.1 +1.6**
ISCO pmax pmax
comp=Z,77nm,2.7s
**ISCO Idaho Springs 90.77 47** P **P** **03 12 10.1 -0.4**
baz=91
**ISCO Idaho Springs 90.77 47** *e*P **P** **03 12 12.1 +1.6**
comp=Z,76nm,2.7s
**S22A 4UR Ranch, Cre 90.80 49** P **P** **03 12 11.4 +0.7**
baz=91
**A30A Hoffart Farm, 91.00 37** P **P** **03 12 10.8 -0.2**
baz=91
**F28A McLaughlin 91.10 40** P **P** **03 12 11.4 -0.2**
baz=91
**I27A Quinn 91.18 42** P **P** **03 12 12.0 0.0**
baz=91
**AKASG Malin Array Be 91.21 326** P **P** **03 12 09.8 -2.1**
comp=Z,0.7nm,0.4s,baz=47,slow=4.6,SNR=5.7
AKASG LR LR 03 55 51.9
comp=Z,132nm,20.2s,baz=35,slow=37
**AKASG Malin Array Be 91.21 326** *ce*P **P** **03 12 12.5 +0.6**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**KIEV Kiev 91.22 326** *i*P **P** **03 12 13.3 +1.4**
KIEV pmax pmax
comp=Z,5.0nm,1.3s
**B30A Myrvik Farm, E 91.24 37** P **P** **03 12 12.3 +0.2**
baz=91
**SIM Simferopol' 91.35 319** *e*P **P** **03 12 12.0 -0.7**
SIM pmax pmax
comp=Z,10.0nm,0.8s
**G28A Parade 91.41 41** P **P** **03 12 12.8 -0.2**
baz=91
**C30A Mose, Pekin 91.54 38** P **P** **03 12 12.7 -0.9**
baz=91
**MALT Malatya 91.56 312**⇑ P **P** **03 12 13.8 -0.1**
**MALT Malatya 91.56 312**⇑ *i*P **P** **03 12 13.8 -0.1**
**ULM Lac du Bonnet 91.64 35** P **P** **03 12 12.6 -1.3**
comp=Z,6.6nm,0.9s,baz=297,slow=3.4,SNR=6.9
ULM LR LR 03 53 36.5
comp=Z,97nm,19.0s,baz=308,slow=36
**ULM Lac du Bonnet 91.64 35** *e*P **P** **03 12 14.4 +0.5**
**ULM Lac du Bonnet 91.64 35** *e*P **P** **03 12 14.3 +0.5**
**B31A Greenbush Farm 91.64 37** P **P** **03 12 13.4 -0.6**
baz=92
**D30A Buchanan 91.69 38** P **P** **03 12 14.0 -0.2**
baz=92
**SDCO Great Sand Dun 91.75 49** P **P** **03 12 14.9 -0.1**
baz=92
**I28A Midland 91.77 42** P **P** **03 12 14.5 -0.2**
baz=92
**E30A Jud 91.91 39** P **P** **03 12 14.7 -0.6**
baz=92
**C31A Landman Farms, 91.92 37** P **P** **03 12 15.1 -0.2**
baz=92
**G29A Hoven 91.96 40** P **P** **03 12 15.4 -0.1**
baz=92
**J28A Allard Ranch, 92.01 42** P **P** **03 12 16.5 +0.6**
baz=92
**A32A Rocking H Ranc 92.03 36** P **P** **03 12 15.6 -0.1**
baz=92
**NB2 NORSAR Subarra 92.23 340** P **P** **03 12 13.9 -2.6**
comp=Z,0.8nm,0.7s,baz=47,slow=5.3
**NOA NORSAR Array B 92.23 340** P **P** **03 12 15.0 -1.5**
comp=Z,1.4nm,0.7s,baz=39,slow=4.6,SNR=3.5
NOA LR LR 03 58 19.9
comp=Z,174nm,20.7s,baz=30,slow=38
**NOA NORSAR Array B 92.23 340** P **P** **03 12 15.0 -1.5**
**ANMO Albuquerque 92.27 52** *e*P **P** **03 12 18.4 +1.0**
ANMO pmax pmax
comp=Z,1.0nm,0.9s
**ANMO Albuquerque 92.27 52** *e*P **P** **03 12 18.4 +1.0**
comp=Z,1.3nm,0.9s
**121A Cookes Peak, D 92.28 54** P **P** **03 12 18.4 +1.0**
baz=92
**B32A Ashes, Strandq 92.28 36** P **P** **03 12 17.0 +0.1**
baz=92
**D31A Mcclaflin, Tow 92.32 38** P **P** **03 12 16.4 -0.7**
baz=92
**G30A Faulkton 92.47 40** P **P** **03 12 16.0 -1.9**
baz=92
**E31A Nome 92.48 39** P **P** **03 12 17.6 -0.3**
baz=92
**J29A Okreek 92.60 42** P **P** **03 12 17.9 -0.6**
baz=92
**A33A Warroad 92.62 36** P **P** **03 12 17.6 -0.9**
baz=92
**AGMN Agassiz Nation 92.71 36** P **P** **03 12 18.1 -0.9**
baz=92
**AGMN Agassiz Nation 92.71 36** *e*P **P** **03 12 19.8 +0.8**
comp=Z,9.6nm,1.0s
**T25A Trinidad 92.80 49** P **P** **03 12 18.7 -1.1**
baz=93
**SUSD South Dakota S 92.93 41** P **P** **03 12 20.2 +0.1**
baz=93
**J30A Dallas 93.16 42** P **P** **03 12 20.4 -0.7**
baz=93
**S26A Kim 93.24 48** P **P** **03 12 21.4 -0.4**
baz=93
**B34A Aery, Baudette 93.28 36** P **P** **03 12 20.5 -1.1**
baz=93
**T26A Comanche Natio 93.36 49** P **P** **03 12 22.7 +0.3**
baz=93
**G32A Webster 93.40 39** P **P** **03 12 21.6 -0.6**
baz=93
**D34A Park Rapids 93.76 37** P **P** **03 12 23.6 -0.2**
baz=94
**F33A 5 Mile Ranch, 93.80 39** P **P** **03 12 23.2 -0.8**
baz=94
**H33A Prehn Over Nor 94.16 40** P **P** **03 12 25.3 -0.4**
baz=94
**BRTR Keskin Array B 94.21 315** P **P** **03 12 24.7 -1.5**
comp=Z,6.7nm,0.9s,baz=91,slow=3.9,SNR=37
BRTR LR LR 03 59 18.6
comp=Z,61nm,20.4s,baz=40,slow=38
**S28A Manter 94.36 48** P **P** **03 12 26.7 -0.2**
baz=94
**T28A Walsh 94.43 48** P **P** **03 12 27.2 0.0**
baz=94
**K32A Verdigre 94.46 42** P **P** **03 12 26.7 -0.4**
baz=94
**MNTX Cornudas Mount 94.48 54** P **P** **03 12 27.3 -0.1**
baz=94
**TESR Tescani 94.96 323**⇓ *i*P P **03 12 28.5 -0.8**
**BURAR Bucovina Array 95.12 325**⇑ P P 03 12 33.4 +3.2
**BURAR Bucovina Array 95.12 325**⇑ *i*P P 03 12 33.4 +3.2
**R30A Dighton 95.15 47** P **P** **03 12 29.8 -0.6**
baz=95
**TLB Topalu 95.23 321**⇓ P **P** **03 12 31.3 +0.8**
**TLB Topalu 95.23 321**⇓ *i*P **P** **03 12 31.3 +0.8**
**VRI Vrincioaia 95.28 322**⇑ P **P** **03 12 31.7 +0.9**
**VRI Vrincioaia 95.28 322**⇑ *i*P **P** **03 12 31.7 +0.9**
**F36A Milaca 95.40 37** P **P** **03 12 31.0 -0.4**
baz=95
**X29A Tulia 95.99 50** P **P** **03 12 32.9 -1.5**
baz=96
**TRPA Tarpa 96.25 326**⇑ *i*P **P** **03 12 35.5 +0.4**
**Z29A Hungry Hill Ra 96.54 52** P **P** **03 12 36.2 -0.7**
baz=96
**TXAR Lajitas Array 96.84 56** P **P** **03 12 37.8 -0.6**
comp=Z,0.4nm,0.9s,baz=92,slow=3.8,SNR=3.5
TXAR PKKP **PKKPbc** **03 29 19.5 -0.5**
comp=Z,0.3nm,0.6s,baz=129,slow=4.0,SNR=5.1
TXAR LR LR 03 50 54.1
comp=Z,83nm,20.4s,baz=0.0,slow=32
**VNDA Vanda 97.08 177** P Pdif 03 12 38.2 +0.1
comp=Z,1.3nm,0.9s,baz=312,slow=3.0,SNR=8.6
VNDA LR LR 03 55 34.1
comp=Z,48nm,18.4s,baz=337,slow=35
**X31A McDonald Ranch 97.15 50** P **P** **03 12 39.3 -0.2**
baz=97
**CLL Collm 98.72 333** *e*P Pdif 03 12 49.0 +2.8
**CLL Collm 98.72 333** *e*Pdif Pdif 03 12 49.0 +2.8
CLL *e* 03 13 27.0
CLL *e*PP **PP** **03 16 48.0 +1.0**
CLL *e*SKSac **SKSac** **03 23 18.0 -1.9**
CLL *e*PS **PS** **03 25 41.0 -2.0**
CLL *e*SS SS 03 31 06.0 +9.0
CLL LmH 03 56 00.0
comp=N,100nm,20.9s
CLL LmH 03 56 00.0
comp=E,100nm,20.3s
CLL LmV 04 02 00.0
comp=Z,100nm,19.1s
**PRU Pruhonice 98.98 331** AMS AMS 04 01 40.0
comp=Z,300nm,20.1s
**KHC Kasperske Hory 100.03 331** AMS AMS 04 02 30.0

comp=Z,300nm,14.9s
GERES **GERESS Array B 100.17 330** P **Pdif** **03 12 52.0 -0.8**
comp=Z,0.2nm,0.5s,baz=85,slow=2.1,SNR=2.8
ESDC **Sonseca Array 115.13 335** PP **PP** **03 18 45.6 -1.9**
comp=Z,0.8nm,0.9s,baz=39,slow=7.4,SNR=4.4
LSZ **Lusaka 121.23 264** *e*PKIKP **PKPdf** **03 18 00.4 -0.2**
LSZ **Lusaka 121.23 264** *e*PKPdf **PKPdf** **03 18 00.3 -0.2**
TAM **Tamanrasset 123.38 316** *e*PKIKP **PKPdf** **03 18 05.3 +0.7**
TAM **Tamanrasset 123.38 316** *e*PKPdf **PKPdf** **03 18 05.3 +0.7**
SNAA **Sanae 124.70 191** P **PKPdf** **03 18 04.8 -0.8**
SNAA **Sanae 124.70 191** *e*PKIKP **PKPdf** **03 18 04.5 -1.0**
SNAA **Sanae 124.70 191** *e*PKPdf **PKPdf** **03 18 04.5 -1.0**
VNA2 **Neumayer--Watz 126.14 190** P **PKPdf** **03 18 08.3 +0.1**
baz=89,slow=0.5
VNA1 **Neumayer--Stat 126.52 190** P **PKPdf** **03 18 09.1 +0.2**
TORD **Torodi Ar. Bea 132.63 310** PKP **PKPdf** **03 18 21.5 -0.7**
comp=Z,3.6nm,0.8s,baz=14,slow=3.3,SNR=21
DBIC **Dimbokro 141.74 310** PKhKP PKPpre 03 18 32.2
comp=Z,6.1nm,0.9s,baz=337,slow=3.8,SNR=5.2
DBIC PKP **PKPdf** **03 18 37.9 -1.2**
comp=Z,6.1nm,0.9s,baz=57,slow=4.9,SNR=5.5
LCO **Las Campanas 144.85 113** *e*PKPdf **PKPdf** **03 18 44.5 0.0**
LVC **Limon Verde 146.82 102** *e*PKPbc **PKPbc** **03 18 50.2 +0.4**
LPAZ **La Paz 146.92 90** PKPbc **PKPbc** **03 18 49.8 -0.9**
comp=Z,3.3nm,0.6s,baz=319,slow=2.9,SNR=18
TRQA **Tornquist 149.01 133** *e*PKPdf **PKPdf** **03 18 51.0 +0.1**
TRQA *e*PKPdf **PKPbc** **03 18 55.1 +0.1**
SAML **Samuel 149.47 74** *e*PKPdf **PKPdf** **03 18 53.6 +1.4**
SAML *e*PKPbc **PKPbc** **03 18 56.9 +0.2**
CPUP **Villa Florida 156.98 112** PKP **PKPdf** **03 19 02.4 -0.3**
comp=Z,0.8nm,0.6s,baz=299,slow=5.7,SNR=3.2
CPUP PKPab **PKPab** **03 19 33.3 +0.3**
comp=Z,4.3nm,1.2s,baz=279,slow=3.2,SNR=3.6

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**IDC 25 03:06:36.9±3.6, 19°21S×174°55W, h0km, mb3.5/3, mb1 3.9/4, mb1mx3.6/25, mbtmp3.7/4, ML4.0/1, Error ellipse: s-maj=142.9km s-min=24.6km az=135.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **5.90** | **27** | Pn | Pn | 03 08 06.3 | +0.6 |
| | 4.2nm,0.3s,baz=298,slow=3.7,SNR=6.3 | | | | | | |
| AFI | | | | Sn | Sn | 03 09 14.8 | +0.6 |
| | 2.9nm,0.3s,baz=221,slow=19,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **47.98** | **255** | P | P | 03 15 17.9 | +0.1 |
| | 0.7nm,0.5s,baz=97,slow=7.6,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.01** | **260** | P | P | 03 15 18.3 | +0.2 |
| | 0.3nm,0.4s,baz=95,slow=7.7,SNR=10 | | | | | | |
| WRA | | | | PcP | PcP | 03 16 45.3 | -1.0 |
| | 0.3nm,0.8s,baz=106,slow=2.4,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **86.37** | **12** | P | P | 03 19 20.5 | 0.0 |
| | 0.1nm,0.6s,baz=213,slow=6.5,SNR=3.6 | | | | | | |

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**IDC 25 03:35:22.4±4.0, 7°21S×149°80E, h0km, mb2.9/1, mb1 3.5/2, mb1mx3.3/26, mbtmp3.2/2, ML3.5/1, Error ellipse: s-maj=140.2km s-min=52.0km az=118.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.41** | **230** | Sn | Sb | 03 37 02.1 | -3.5 |
| | 3.9nm,0.3s,baz=336,slow=21,SNR=7.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.62** | **228** | P | P | 03 39 52.5 | -0.2 |
| | 0.1nm,0.3s,baz=55,slow=12,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **22.38** | **221** | P | P | 03 40 22.9 | +0.4 |
| | 0.2nm,0.4s,baz=46,slow=9.9,SNR=5.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.07** | **283** | PKPbc | PKPbc | 03 55 10.2 | -0.9 |
| | 0.3nm,0.9s,baz=64,slow=3.4,SNR=3.8 | | | | | | |

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*JMA **25** 03:36:55.2±0.3, 34°35N×127°32E, h1km, M3.1*
*ISCJB **25** 03:36:57.7±1.0, 34°30N±0°04×127°39E±0°05, h9km±9km, Error ellipse: s-maj=7.2km s-min=6.4km az=0.5*
*KMA **25** 03:36:58.0±0.3, 34°31N×127°38E, h17km±1km, Error ellipse: s-maj=2.6km s-min=1.6km az=118.0*
**ISC 25 03:36:57.2±1.9, 34°31N±0°04×127°38E±0°04, h10km±18km, n12, σ0°46/18, 5C-3D, South Korea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KOHB** | **KOHEUNG** | **0.32** | **344** | ⇑P | **Pb** | **03 37 04.9** | **-0.2** |
| KOHB | | | | ⇑S | **Sb** | **03 37 09.6** | **-0.7** |
| **KSWAN** | **Wando** | **0.57** | **278** | ⇑P | **Pb** | **03 37 09.4** | **+0.1** |
| KSWAN | | | | ⇓S | **Sb** | **03 37 17.2** | **-0.2** |
| **KSMOK** | **Mokpo** | **0.70** | **311** | ⇓P | **Pb** | **03 37 11.8** | **+0.2** |
| **KSJDO** | **Jindo** | **0.90** | **281** | P | **Pb** | **03 37 15.2** | **+0.3** |
| | SNR=12 | | | | | | |
| **KSKWJ** | **Gwangju** | **0.91** | **339** | P | **Pb** | **03 37 15.4** | **+0.4** |
| | SNR=70 | | | | | | |
| KSKWJ | | | | ⇑S | **Sb** | **03 37 27.7** | **+0.5** |
| **KSGWJ** | **Gwangju-acc** | **0.95** | **335** | ⇓P | **Pn** | **03 37 16.4** | **-0.2** |
| | SNR=11 | | | | | | |
| **KSJIN** | **Jinju** | **1.00** | **32** | P | **Pg** | **03 37 16.5** | **-0.1** |
| | SNR=7.9 | | | | | | |
| **KSJJU** | **Jeju** | **1.12** | **219** | P | **Pb** | **03 37 18.5** | **-0.2** |
| | SNR=24 | | | | | | |
| **KSSGP** | **Seogwipo** | **1.28** | **215** | ⇑P | **Pn** | **03 37 21.2** | **0.0** |
| | SNR=9.4 | | | | | | |
| **JTU** | **Tsushima** | **1.68** | **82** | P | **Pn** | **03 37 26.5** | **-0.1** |
| JTU | | | | S | **Sb** | **03 37 49.2** | **-0.2** |
| **JFU** | **Fukue jima 2** | **2.01** | **145** | P | **Pn** | **03 37 31.8** | **+0.7** |
| JFU | | | | *e*S | **Sb** | **03 37 58.2** | **-0.6** |
| **JII** | **Iki** | **2.02** | **104** | P | **Pn** | **03 37 32.0** | **+0.7** |
| JII | | | | S | **Sb** | **03 37 58.5** | **-0.6** |

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*IDC **25** 03:49:47.1±0.7, 17°61N×145°03E, h0km, mb4.0/10, mb1 4.1/11, mb1mx3.9/51, mbtmp3.9/11, ML3.5/1, MS2.9/5, Ms1 2.9/5, ms1mx2.7/39, Error ellipse: s-maj=28.1km s-min=18.2km az=86.0*
*ISCJB **25** 03:49:48.9±0.8, 17°59N±0°09×145°0E±0°2, h25km, mb4.0/12, MS2.8/3, Error ellipse: s-maj=26.0km s-min=13.0km az=177.5*
*NEIC **25** 03:49:48.4±0.5, 17°57N×145°04E, h10km, mb4.1/2, Error ellipse: s-maj=18.5km s-min=10.6km az=87.0*
**ISC 25 03:49:50.9±0.8, 17°6N±0°1×145°0E±0°2, h25km, n25, σ0°79/20, mb4.0/12, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GUMO** | **Guam** | **4.01** | **182** | LR | LR | 03 52 08.1 | |
| | comp=Z,71nm,19.4s,baz=46,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **19.78** | **344** | P | **Pn** | **03 54 20.3** | **-0.7** |
| | 0.1nm,0.3s,baz=162,slow=8.4,SNR=4.1 | | | | | | |
| MJAR | | | | LR | LR | 04 00 58.7 | |
| | comp=Z,43nm,19.5s,baz=30,slow=34 | | | | | | |
| **JNU** | **Nakatsue** | **20.00** | **323** | LR | LR | 04 00 19.1 | |
| | comp=Z,45nm,21.9s,baz=310,slow=32 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy 20.62** | **84** | | T | T | 04 16 06.9 | |
| | baz=272,slow=75,SNR=107 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy 20.64** | **84** | | T | T | 04 16 03.6 | |
| | baz=272,slow=75,SNR=41 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy 20.64** | **84** | | T | T | 04 16 08.6 | |
| | baz=272,slow=75,SNR=46 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy 20.83** | **81** | | T | T | 04 16 08.6 | |
| | baz=267,slow=74,SNR=126 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy 20.84** | **81** | | T | T | 04 16 08.9 | |
| | baz=267,slow=74,SNR=31 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy 20.85** | **81** | | T | T | 04 16 09.2 | |
| | baz=267,slow=74,SNR=86 | | | | | | |
| **ASAJ** | **Asahikawa** | **26.49** | **356** | LR | LR | 04 03 14.5 | |
| | comp=Z,47nm,21.9s,baz=160,slow=30 | | | | | | |
| **WRAB** | **Tennant Creek** | **38.77** | **196** | *e*P | **P** | **03 57 12.8** | **-0.8** |
| | 3.6nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **38.78** | **196** | P | **P** | **03 57 13.0** | **-0.7** |
| | 1.9nm,0.8s,baz=15,slow=9.3,SNR=10 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 59 25.7** | **+0.7** |
| | 0.4nm,0.7s,baz=15,slow=3.3,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **42.45** | **195** | P | **P** | **03 57 43.5** | **-0.6** |
| | 0.5nm,0.6s,baz=17,slow=8.8,SNR=7.8 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 59 37.7** | **+0.9** |
| | 0.2nm,0.4s,baz=33,slow=3.5,SNR=3.9 | | | | | | |
| **SONM** | **Songino Array** | **43.58** | **322** | P | **P** | **03 57 53.8** | **+0.7** |
| | 0.6nm,0.8s,baz=113,slow=9.6,SNR=2.8 | | | | | | |
| SONM | | | | PcP | **PcP** | **03 59 41.5** | **+1.1** |
| | 1.1nm,1.0s,baz=101,slow=4.7,SNR=4.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **43.72** | **278** | P | **P** | **03 57 54.8** | **+0.3** |
| | 1.5nm,0.5s,baz=74,slow=7.4,SNR=5.2 | | | | | | |
| CMAR | | | | LR | LR | 04 13 42.7 | |
| | comp=Z,10nm,19.8s,baz=350,slow=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.74** | **314** | P | **P** | **03 59 45.9** | **-0.9** |
| | 0.3nm,0.3s,baz=96,slow=5.9,SNR=3.5 | | | | | | |
| MKAR | | | | PcP | **PcP** | **04 00 36.7** | **+0.3** |
| | 0.5nm,0.6s,baz=101,slow=1.5,SNR=3.6 | | | | | | |
| **KURK** | **Kurchatov** | **61.63** | **319** | P | **P** | **04 00 07.0** | **+0.5** |
| **KURBB** | **Kurchatov Arra** | **61.68** | **318** | P | **P** | **04 00 07.0** | **+0.2** |
| | 2.2nm,0.2s,baz=99,slow=7.4,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **64.89** | **26** | P | **P** | **04 00 26.9** | **-0.9** |
| | 0.6nm,0.6s,baz=252,slow=4.3,SNR=5.5 | | | | | | |
| **ABKAR** | **Akbulak array** | **73.68** | **317** | *e*P | **P** | **04 01 22.9** | **+0.4** |
| | 1.4nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.31** | **52** | P | **P** | **04 02 22.4** | **+1.0** |
| | 1.1nm,0.6s,baz=272,slow=6.8,SNR=3.3 | | | | | | |
| **FINES** | **FINESS Array B** | **87.58** | **335** | P | **P** | **04 02 35.7** | **-1.0** |
| | 3.9nm,1.0s,baz=29,slow=3.2,SNR=3.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **94.39** | **314** | P | **P** | **04 03 08.3** | **-0.8** |
| | 0.5nm,0.8s,baz=104,slow=5.2,SNR=3.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.61** | **308** | PKP | **PKPdf** | **04 09 05.3** | **+0.9** |
| | 0.5nm,1.0s,baz=73,slow=2.8,SNR=3.8 | | | | | | |
| **LPAZ** | **La Paz** | **148.29** | **93** | PKPbc | **PKPbc** | **04 09 36.2** | **-0.5** |
| | 1.0nm,0.9s,baz=248,slow=3.4,SNR=4.7 | | | | | | |

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**CASC 25 04:05:47.1±4.3, 9°34N×81°28W, h0km±16km, MD4.2, 1C-1D, Panama**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BRU2** | **Volcan** | **1.50** | **249** | *e*P | Pn | 04 06 13.1 | -2.4 |
| BRU2 | | | | *e*S | Sg | 04 06 34.8 | -0.9 |
| **AZU** | **Azuero** | **1.83** | **147** | ⇓*i*P | Pn | 04 06 20.1 | +0.3 |
| AZU | | | | *e*S | Sg | 04 06 45.5 | -0.4 |
| **BUS** | **Buena Vista** | **2.46** | **275** | ⇑*e*P | Pn | 04 06 29.1 | +0.1 |
| BUS | | | | *e*S | Sb | 04 07 04.5 | +0.4 |
| **CGA2** | **Cerro Gallo 2** | **3.22** | **282** | *e*P | Pn | 04 06 39.1 | 0.0 |
| **JCR** | **Jicaral** | **3.82** | **278** | *e*P | Pn | 04 06 43.9 | -3.4 |

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*IDC **25** 04:10:21.4±2.3, 3°62S×128°37E, h0km, mb3.7/2, mb1 4.0/4, mb1mx3.5/33, mbtmp3.7/4, ML3.5/2, MS3.1/3, Ms1 3.1/3, ms1mx2.6/43, Error ellipse: s-maj=71.7km s-min=27.1km az=115.0*
*ISCJB **25** 04:10:23.1±0.6, 3°77S±0°05×128°54E±0°03, h10km, mb3.4/1, MS3.5/2, Error ellipse: s-maj=7.1km s-min=4.7km az=171.7*
*DJA **25** 04:10:24.9±0.4, 4°S±4°×12°8E±°, h10km, M3.7/8, MLv3.7/7, MLv3.7/8*
**ISC 25 04:10:23.9±0.8, 3°75S±0°07×128°49E±0°04, h10km, n13, σ1°11/17, Seram**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AAI** | **Ambon** | **0.30** | **282** | P | **Pb** | **04 10 31.1** | **-0.2** |
| AAI | | | | S | **Sb** | **04 10 35.2** | **-1.1** |
| **MSAI** | **Masohi** | **0.60** | **48** | P | **Pg** | **04 10 35.2** | **-0.3** |
| MSAI | | | | S | **Sg** | **04 10 43.3** | **0.0** |
| **NLAI** | **Namlea** | **1.47** | **290** | P | **Pn** | **04 10 50.2** | **-0.3** |
| NLAI | | | | S | **Sg** | **04 11 12.6** | **+1.3** |
| **SANI** | **Sanana** | **3.01** | **304** | P | **Pn** | **04 11 12.3** | **+0.6** |
| SANI | | | | S | **Sn** | **04 11 46.6** | **-1.2** |
| **LBMI** | **Labuha** | **3.24** | **342** | P | **Pn** | **04 11 17.1** | **+2.2** |
| LBMI | | | | S | **Sn** | **04 11 53.5** | **-0.1** |
| **FAKI** | **Fak Fak** | **3.85** | **78** | P | **Pn** | **04 11 24.4** | **+1.2** |
| **SIJI** | **Sorong** | **3.99** | **44** | Pn | **Pn** | **04 11 24.7** | **-0.4** |
| | 12nm,0.3s,baz=240,slow=18,SNR=16 | | | | | | |
| SIJI | | | | Sn | **Sn** | **04 12 10.9** | **-1.0** |
| | 5.1nm,0.3s,baz=211,slow=23,SNR=6.3 | | | | | | |
| **KAPI** | **Kappang** | **8.80** | **261** | LR | LR | 04 16 44.7 | |
| | comp=Z,26nm,18.2s,baz=2.8,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.08** | **161** | P | **Pn** | **04 14 22.6** | **-0.3** |
| | 0.1nm,0.3s,baz=345,slow=12,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **20.48** | **166** | P | **P** | **04 15 04.0** | **+1.9** |
| | 5.3nm,0.8s,baz=344,slow=10.0,SNR=45 | | | | | | |
| ASAR | | | | PcP | **PcP** | **04 19 13.4** | **-0.7** |
| | 0.7nm,0.5s,baz=2.4,slow=1.5,SNR=8.9 | | | | | | |
| **VNDA** | **Vanda P** | **75.84** | **173** | P | **P** | **04 22 09.3** | **-0.6** |
| | 0.2nm,0.4s,baz=314,slow=7.0,SNR=4.1 | | | | | | |
| **AKTO** | **Aktyubinsk** | **80.59** | **322** | LR | LR | 05 00 16.4 | |
| | comp=Z,6.6nm,20.7s,baz=357,slow=37 | | | | | | |
| **DLBC** | **Dease Lake** | **99.19** | **31** | LR | LR | 05 09 35.1 | |
| | comp=Z,58nm,19.4s,baz=150,slow=36 | | | | | | |

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**DJA 25 04:14:32.5±1.0, 9°S±9°×11°3E±°, h68km±14km, M3.6/6, MLv3.6/6, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAGI** | **Jajag, Banyuwa** | **1.63** | **69** | P | Pn | 04 14 59.4 | +0.2 |
| JAGI | | | | S | Sn | 04 15 19.9 | +0.6 |
| **PCJI** | **Pacitan** | **1.65** | **301** | P | Pn | 04 14 57.6 | -1.8 |
| PCJI | | | | S | Sn | 04 15 16.1 | -3.7 |
| **NGJI** | **Ngawi** | **2.02** | **326** | P | Pn | 04 15 03.6 | -0.8 |
| NGJI | | | | S | Sn | 04 15 31.6 | +2.9 |

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*MOS **25** 04:33:23.9±1.4, 37°06N×71°76E, h94km, mb4.2/4, Error ellipse: s-maj=20.4km s-min=9.4km az=83.8*
*ISCJB **25** 04:33:27.9±0.5, 37°28N±0°03×72°00E±0°07, h142km, mb3.8/8, Error ellipse: s-maj=7.9km s-min=4.5km az=162.7*
*IDC **25** 04:33:28.4±5.3, 37°25N×71°96E, h123km±48km, mb3.3/4, mb1 3.5/9, mb1mx3.2/55, mbtmp3.9/9, Error ellipse: s-maj=40.7km s-min=24.9km az=10.0*
*NNC **25** 04:33:32.0±3.5, 37°68N×71°46E, h158km±47km, mb3.5, mpv4.5, Error ellipse: s-maj=33.6km s-min=27.4km az=56.0*
**ISC 25 04:33:29.1±0.8, 37°32N±0°07×71°93E±0°08, h142km, n50, σ1°65/54, mb4.0/8, 9C-5D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **2.96** | **24** | ⇓P | **Pn** | **04 34 15.9** | **+0.2** |
| | 25nm,0.2s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **04 34 54.4** | **+2.6** |
| | 204nm,0.4s | | | | | | |
| **KSH** | **Kashi** | **3.86** | **54** | Pn | **Pn** | **04 34 24.3** | **-3.0** |
| KSH | | | | Sn | Sn | 04 35 03.9 | -8.6 |
| KSH | | | | smax | smax | | |
| | comp=N,390nm,0.3s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,300nm,0.7s | | | | | | |
| **AML** | **Almayashu** | **4.99** | **15** | P | **Pn** | **04 34 42.6** | **0.0** |
| | SNR=195 | | | | | | |
| **MNAS** | **Manas** | **5.18** | **5** | ⇑P | **Pn** | **04 34 44.7** | **-0.1** |
| MNAS | comp=E,31nm,0.4s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **04 35 40.4** | **-3.5** |
| | comp=E,23nm,0.7s | | | | | | |
| **UCH** | **Uchtor** | **5.29** | **21** | P | **Pn** | **04 34 46.8** | **+0.2** |
| | SNR=49 | | | | | | |
| **EKS2** | **Erkin-Say** | **5.52** | **14** | P | **Pn** | **04 34 49.7** | **+0.4** |
| | SNR=57 | | | | | | |
| **AAK** | **Ala-Archa** | **5.66** | **20** | ⇓P | **Pn** | **04 34 52.0** | **+0.8** |
| AAK | comp=E,41nm,0.4s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **04 35 53.8** | **-1.6** |
| | comp=E,51nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **5.66** | **20** | P | **Pn** | **04 34 52.0** | **+0.8** |
| | comp=E,28nm,0.3s,baz=170,slow=5.9,SNR=260 | | | | | | |
| AAK | | | | S | **Sn** | **04 35 54.2** | **-1.1** |
| | comp=E,3.5nm,0.3s,baz=323,slow=20,SNR=13 | | | | | | |
| **AAK** | **Ala-Archa** | **5.66** | **20** | PN | **Pn** | **04 34 52.0** | **+0.8** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,28nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **5.66** | **20** | P | **Pn** | **04 34 51.7** | **+0.5** |
| | SNR=107 | | | | | | |
| **KBK** | **Karagaybulak** | **5.81** | **23** | P | **Pn** | **04 34 53.9** | **+0.6** |
| | SNR=14 | | | | | | |
| **KK31** | **Karatay Array** | **5.88** | **350** | ⇓P | **Pn** | **04 34 53.5** | **-0.5** |
| | comp=Z,41nm,0.3s,baz=179,slow=13 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **04 35 54.6** | **-5.7** |
| | comp=Z,5.4nm,0.2s,baz=172,slow=21,SNR=9.8 | | | | | | |
| **KK31** | **Karatay Array** | **5.88** | **350** | *e*PN | **Pn** | **04 34 53.5** | **-0.5** |
| **CHMS** | **Chumysh** | **6.07** | **20** | P | **Pn** | **04 34 57.0** | **+0.5** |
| | SNR=31 | | | | | | |
| **USP** | **Ospenovka** | **6.25** | **17** | P | **Pn** | **04 34 59.3** | **+0.2** |
| | SNR=14 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.26** | **26** | ⇑P | **Pn** | **04 34 59.9** | **+0.6** |
| | comp=Z,20nm,0.5s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **04 36 09.8** | **0.0** |
| | comp=Z,13nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.26** | **26** | PN | **Pn** | **04 34 59.8** | **+0.5** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,20nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.26** | **26** | P | **Pn** | **04 35 00.3** | **+1.0** |
| | SNR=7.0 | | | | | | |
| **SMLA** | **Simla** | **7.55** | **143** | *i* P | **Pn** | **04 35 15.5** | **-0.9** |
| SMLA | | | | *i* S | Sn | 04 36 33.2 | -7.3 |
| SMLA | | | | AML | AML | 04 36 38.1 | |
| | comp=E,1μm,0.3s | | | | | | |
| SMLA | | | | AML | AML | 04 36 38.8 | |
| | comp=N,1μm,0.3s | | | | | | |
| **MKAR** | **Makanchi Array** | **12.19** | **36** | P | **Pn** | **04 36 17.2** | **-0.7** |
| | comp=N,0.2nm,0.3s,baz=228,slow=14,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **12.19** | **36** | *e*P | **Pn** | **04 36 18.5** | **+0.6** |
| **KOLN** | **Koldanda** | **13.69** | **131** | *e*P | **Pn** | **04 36 35.2** | **-2.3** |
| | comp=N,6.8nm,0.3s | | | | | | |
| KOLN | | | | *e*S | Sn | 04 38 56.6 | -12 |
| **KURBB** | **Kurchatov Arra** | **14.11** | **17** | P | Pn | 04 36 39.2 | -3.3 |
| | comp=N,0.1nm,0.3s,baz=207,slow=12,SNR=5.8 | | | | | | |
| **GKN** | **Gorkha** | **14.16** | **127** | *e*P | **Pn** | **04 36 42.1** | **-1.4** |
| | comp=N,18nm,0.4s | | | | | | |
| GKN | | | | *e*S | Sn | 04 39 07.8 | -13 |
| **KURK** | **Kurchatov** | **14.22** | **18** | P | Pn | 04 36 39.2 | -4.7 |
| **KKN** | **Kakani** | **14.72** | **126** | *e*P | **Pn** | **04 36 49.0** | **-1.6** |
| | comp=N,7.2nm,0.4s | | | | | | |
| **DMN** | **Daman** | **14.73** | **127** | *e*P | **Pn** | **04 36 48.2** | **-2.6** |
| | comp=N,15nm,0.3s | | | | | | |
| **AB31** | **Akbulak array** | **14.76** | **328** | ⇑P | **Pn** | **04 36 49.5** | **-1.1** |
| | comp=N,1.3nm,0.3s,baz=133,slow=15,SNR=74 | | | | | | |
| AB31 | | | | ⇑S | Sn | 04 39 21.2 | -13 |
| | comp=N,2.6nm,0.6s,baz=150,slow=22,SNR=9.5 | | | | | | |
| **AB31** | **Akbulak array** | **14.76** | **328** | P | **Pn** | **04 36 49.7** | **-0.9** |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **14.94** | **127** | *e*P | **Pn** | **04 36 52.5** | **-0.9** |
| | comp=Z,4.4nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **14.95** | **127** | *e*P | **Pn** | **04 36 52.7** | **-0.9** |
| | comp=Z,8.0nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **15.03** | **125** | *e*P | **Pn** | **04 36 52.8** | **-1.7** |
| | comp=Z,7.4nm,0.3s | | | | | | |
| **BVAR** | **Borovoye Array** | **15.74** | **357** | P | **P** | **04 37 02.7** | **-1.1** |
| | comp=Z,0.4nm,0.3s,baz=175,slow=14,SNR=7.9 | | | | | | |
| BVAR | | | | S | **S** | **04 40 00.8** | **+0.9** |
| | comp=Z,0.6nm,0.3s,baz=176,slow=23,SNR=5.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.74** | **357** | P | **P** | **04 37 02.7** | **-1.1** |
| BVAR | | | | S | **S** | **04 40 00.8** | **+0.9** |
| BVAR | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| **RAMN** | **Ramite** | **16.15** | **126** | *e*P | **Pn** | **04 37 06.3** | **-2.0** |
| | comp=N,7.6nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.47** | **327** | ⇓P | **P** | **04 37 12.3** | **+0.4** |
| | comp=N,1.6nm,0.5s | | | | | | |
| AKTO | | | | ⇑S | Sn | 04 40 01.1 | -14 |
| | comp=N,1.8nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.47** | **327** | P | **P** | **04 37 12.8** | **+1.0** |
| | comp=N,0.6nm,0.3s,baz=130,slow=15,SNR=6.3 | | | | | | |
| AKTO | | | | S | Sn | 04 40 05.9 | -9.3 |
| | comp=N,0.3nm,0.3s,baz=78,slow=12,SNR=6.4 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.47** | **327** | P | **P** | **04 37 12.9** | **+1.0** |
| AKTO | | | | S | Sn | 04 40 05.9 | -9.3 |
| AKTO | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **TAPN** | **Taplejung** | **16.61** | **122** | *e*P | **Pn** | **04 37 13.1** | **-0.9** |
| | comp=Z,8.2nm,0.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.86** | **24** | P | **Pn** | **04 37 39.0** | **-1.2** |
| | comp=Z,0.6nm,0.3s,baz=217,slow=12,SNR=9.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.86** | **24** | *e*P | **Pn** | **04 37 39.7** | **-0.5** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **ARU** | **Arti** | **21.11** | **339** | *e*P | **P** | **04 38 06.1** | **+3.9** |
| ARU | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **KIV** | **Kislovodsk** | **23.08** | **296** | *e*P | **P** | **04 38 20.0** | **-2.3** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | |
| **OBN** | **Obninsk** | **29.81** | **318** | *i* P | **P** | **04 39 24.6** | **+2.3** |
| OBN | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **29.90** | **287** | P | P | 04 39 26.2 | +2.6 |
| | comp=Z,0.3nm,0.5s,baz=76,slow=6.1,SNR=2.9 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **30.78** | **71** | *e*P | **P** | **04 39 31.8** | **+0.5** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,19nm,1.1s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,100nm,4.1s | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.68** | **337** | P | **P** | **04 40 57.1** | **+2.1** |
| | comp=Z,4.2nm,1.0s,baz=117,slow=9.2,SNR=5.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.68** | **337** | *e*P | P | 04 40 57.6 | +2.6 |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.8s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.48** | **269** | P | **P** | **04 44 04.3** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=57,slow=5.4,SNR=10.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **81.80** | **123** | P | **P** | **04 45 33.8** | **+1.5** |
| | comp=Z,0.3nm,0.8s,baz=322,slow=5.2,SNR=5.2 | | | | | | |

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*NIED **25** 04:42:00, 45°80N×144°30E, h340km, Mw4.5 Best double couple: M0 5.46000×10^15 NP1:φ=311.00000°, δ=46.00000°, λ=9.00000°. NP2:φ=215.00000°, δ=84.00000°, λ=135.00000°.*
*ISCJB **25** 04:42:46.8±0.4, 45°88N±0°06×144°31E±0°09, h343km±5km, mb3.5/16, Error ellipse: s-maj=11.0km s-min=9.3km az=135.2*
*IDC **25** 04:42:47.8±1.3, 46°11N×144°21E, h329km±14km, mb3.3/16, mb1 3.4/20, mb1mx3.3/35, mbtmp4.0/20, Error ellipse: s-maj=16.2km s-min=12.5km az=146.0*
*JMA **25** 04:42:48.0±0.2, 45°81N×144°31E, h343km, M3.9*
**ISC 25 04:42:47.4±0.6, 45°77N±0°08×144°33E±0°08, h345km±7km, n36, σ1°21/45, mb3.6/16, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JSE** | **Soyaes** | **1.48** | **237** | P | **Pn** | **04 43 35.3** | **+0.4** |
| JSE | | | | *e*S | **S** | **04 44 11.8** | **-1.2** |
| **JWK2** | **Keihoku** | **1.77** | **256** | P | **Pn** | **04 43 37.1** | **+0.5** |
| JWK2 | | | | *e*S | **S** | **04 44 15.2** | **-1.0** |
| **JTKR** | **Abash

2.7nm,0.7s,baz=74,slow=5.9,SNR=9.5
**NB2 NORSAR Subarra 66.98 337 P P 04 53 03.3 -0.1**
comp=Z,1.8nm,0.7s,baz=32,slow=6.5
**NOA NORSAR Array B 66.98 337 P P 04 53 02.6 -0.8**
comp=Z,0.8nm,0.9s,baz=36,slow=5.5,SNR=4.3
**AKASG Malin Array Be 68.76 322 P P 04 53 14.6 +0.1**
comp=Z,1.4nm,0.6s,baz=39,slow=6.1,SNR=5.7
**ASAR Alice Springs 69.75 190 P P** 04 53 25.3 +4.5
comp=Z,0.3nm,0.6s,baz=8.5,slow=6.9,SNR=5.8
**BRTR Keskin Array B 74.70 312 P P 04 53 50.5 +0.5**
comp=Z,0.9nm,0.6s,baz=73,slow=4.5,SNR=5.8
**GERES GERESS Array B 76.41 329 P P 04 53 59.4 +0.1**
comp=Z,0.8nm,0.6s,baz=27,slow=6.1,SNR=5.4

**DJA 25 04:49:42.3±1.0, 0°S±5.5°×12°3E±°, h139km±9km, M3.7/5, MLv3.7/5, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GTOI** | **Gorontalo** | **0.84** | **12** | P | Pn | 04 50 06.6 | +1.9 |
| GTOI | | | | S | Sn | 04 50 24.5 | +2.8 |
| **LUWI** | **Luwuk** | **0.85** | **185** | P | Pn | 04 50 06.1 | +1.3 |
| LUWI | | | | S | Sn | 04 50 23.5 | +1.6 |
| **MRSI** | **Marisa** | **1.12** | **306** | P | Pn | 04 50 06.9 | -0.2 |
| MRSI | | | | S | Sn | 04 50 24.4 | -1.6 |
| **APSI** | **Ampana** | **1.39** | **239** | P | Pn | 04 50 10.8 | +1.0 |
| APSI | | | | S | Sn | 04 50 32.3 | +1.4 |
| **SANI** | **Sanana** | **3.65** | **120** | P | Pn | 04 50 37.5 | -0.2 |
| SANI | | | | S | Sn | 04 51 16.1 | -4.5 |

*IDC **25** 05:26:27.2±2.3, 10°.32N×85°.59W, h0km, mb3.8/6, mb1 4.1/7, mb1mx3.8/27, mbtmp3.8/7, ML3.4/1, MS3.1/3, Ms1 3.1/3, ms1mx2.8/32, Error ellipse: s-maj=53.7km s-min=40.8km az=19.0*
*ISCJB **25** 05:26:32.3±1.7, 10°.5N±0°.3×85°.9W±0°.1, h33km, mb3.8/7, MS3.0/3, Error ellipse: s-maj=41.9km s-min=8.2km az=22.9*
*NEIC **25** 05:26:33.3±1.7, 10°.25N×85°.84W, h43km±13km, mb4.3/1, Error ellipse: s-maj=29.7km s-min=13.8km az=199.0*
**ISC 25 05:26:32.6±1.5, 10°.3N±0°.3×85°.86W±0°.10, h33km, n13, σ1§01/13, mb3.9/7, MS3.0/3, Costa Rica**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JTS** | **JuntasAbangare** | **0.90** | **90** | *e*Pn | **Pn** | **05 26 49.5** | **+0.6** |
| JTS | | | | *e*Sn | **Sb** | **05 27 01.7** | **+0.3** |
| **CMIG** | **Matias Romero** | **11.07** | **309** | Pn | **Pn** | **05 29 09.0** | **+0.3** |
| | 0.3nm,0.3s,baz=111,slow=16,SNR=2.8 | | | | | | |
| **SJG** | **San Juan** | **20.62** | **66** | LR | LR | 05 39 50.6 | |
| | comp=Z,51nm,18.2s,baz=234,slow=40 | | | | | | |
| **KMSC** | **Kings Mountain** | **25.09** | **9** | *e*P | **P** | **05 31 55.4** | **+1.2** |
| | 7.5nm,0.8s | | | | | | |
| **TXAR** | **Lajitas Array** | **25.23** | **321** | P | **P** | **05 31 56.5** | **+0.9** |
| | 1.0nm,0.6s,baz=137,slow=10.0,SNR=23 | | | | | | |
| TXAR | | | | PcP | **PcP** | **05 35 29.3** | **+0.4** |
| | 0.2nm,0.7s,baz=139,slow=5.9,SNR=3.4 | | | | | | |
| TXAR | | | | LR | LR | 05 44 16.9 | |
| | comp=Z,46nm,18.7s,baz=0.0,slow=42 | | | | | | |
| **TKL** | **Tuckaleechee C** | **25.33** | **4** | P | **P** | **05 31 55.8** | **-0.7** |
| | 3.4nm,0.7s,baz=167,slow=11,SNR=5.1 | | | | | | |
| **ANMO** | **Albuquerque** | **30.91** | **326** | P | **P** | **05 32 47.6** | **+1.0** |
| | 0.3nm,0.3s,baz=146,slow=11,SNR=3.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **40.35** | **319** | P | **P** | **05 34 08.1** | **+0.6** |
| | 1.8nm,0.8s,baz=152,slow=6.7,SNR=5.0 | | | | | | |
| **RPN** | **Rapa Nui** | **43.61** | **211** | LR | LR | 05 47 22.6 | |
| | comp=Z,17nm,19.7s,baz=212,slow=29 | | | | | | |
| **SCHQ** | **Schefferville** | **46.92** | **15** | P | **P** | **05 34 58.2** | **-1.8** |
| | 3.0nm,0.9s,baz=164,slow=5.3,SNR=3.4 | | | | | | |
| **ILAR** | **Eielson Array** | **68.62** | **336** | P | **P** | **05 37 31.2** | **-1.0** |
| | 0.3nm,0.7s,baz=96,slow=5.5,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **140.11** | **251** | PKP | **PKPdf** | **05 45 57.6** | **-1.2** |
| | 0.6nm,1.0s,baz=100,slow=2.1,SNR=2.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **151.05** | **351** | PKPbc | **PKPbc** | **05 46 23.4** | **+0.2** |
| | 0.8nm,0.5s,baz=340,slow=3.0,SNR=4.5 | | | | | | |

*ISCJB **25** 05:45:36.7±0.6, 36°.15S±0°.05×73°.65W±0°.06, h10km, mb4.1/6, MS3.9/10, Error ellipse: s-maj=6.8km s-min=6.2km az=43.2*
*IDC **25** 05:45:37.7±1.0, 36°.15S×73°.31W, h0km, mb4.0/7, mb1 4.2/11, mb1mx4.0/30, mbtmp4.1/11, ML3.7/3, MS3.8/12, Ms1 3.8/12, ms1mx3.7/22, Error ellipse: s-maj=32.9km s-min=16.2km az=102.0*
*GUC **25** 05:45:38.4±0.7, 36°.14S×73°.51W, h15km±4km, ML4.1*
*NEIC **25** 05:45:38.0, 36°.14S×73°.51W, h15km, mb4.4/1, ML4.1(GUC), After GUC.*
*NEIC Felt [IV] at Cauquenes and [III] at Cobquecura, Concepcion, Linares, Parral, Penco, Quirihue, Talcahuano and Tome.*
**ISC 25 05:45:38.7±0.9, 36°.12S±0°.05×73°.48W±0°.07, h10km, n49, σ1§23/35, mb4.1/6, MS4.0/10, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **0.56** | **91** | *i* P | **Pb** | **05 45 50.6** | **0.0** |
| COCH | | | | *i* S | **Sb** | **05 45 59.0** | **+0.3** |
| COCH | | | | AML | AML | 05 46 01.6 | |
| | comp=N,36μm,0.7s | | | | | | |
| **CCHI** | **Chillan** | **1.23** | **113** | *i* P | **Pn** | **05 46 01.1** | **-0.9** |
| CCHI | | | | *i* S | **Sn** | **05 46 19.4** | **+0.7** |
| CCHI | | | | AML | AML | 05 46 23.7 | |
| | comp=N,659nm,0.6s | | | | | | |
| **TALC** | **Talca** | **1.67** | **65** | *i* P | **Pn** | **05 46 08.7** | **+0.7** |
| TALC | | | | *i* S | **Sb** | **05 46 32.0** | **+1.4** |
| TALC | | | | AML | AML | 05 46 35.1 | |
| | comp=E,23μm,0.5s | | | | | | |
| **NICH** | **Los Niches** | **2.15** | **59** | *i* P | **Pb** | **05 46 16.4** | **-1.3** |
| NICH | | | | *i* S | **Sb** | **05 46 45.6** | **+1.1** |
| **ROCH** | **El Roble** | **3.75** | **34** | *i* P | **Pn** | **05 46 36.2** | **-0.6** |
| ROCH | | | | *i* S | **Sb** | **05 47 32.9** | **+2.2** |
| **AAGR** | **Agrelo** | **4.89** | **53** | *i* P | **Pn** | **05 46 53.8** | **+1.4** |
| **ARCO** | **CERRO ARCO** | **4.99** | **50** | *i* P | **Pn** | **05 46 55.5** | **+1.8** |
| ARCO | | | | *i* S | Sg | 05 48 25.8 | +7.0 |
| ARCO | | | | AML | AML | 05 48 30.5 | |
| | comp=Z,70nm,0.7s | | | | | | |
| **AUSP** | **Uspallata** | **5.16** | **42** | *i* P | **Pn** | **05 46 57.7** | **+1.4** |
| **ASAL** | **Salagasta** | **5.21** | **49** | *i* P | **Pn** | **05 46 58.5** | **+1.7** |
| **RTLS** | **Leoncito** | **5.54** | **40** | *i* P | **Pn** | **05 47 02.9** | **+1.5** |
| **CFAA** | **Coronel Fontan** | **6.27** | **46** | Pn | **Pn** | **05 47 11.3** | **0.0** |
| | comp=Z,1.2nm,0.3s,baz=217,slow=11,SNR=224 | | | | | | |
| CFAA | | | | Sn | **Sn** | **05 48 22.0** | **-1.1** |
| | comp=Z,0.8nm,0.3s,baz=182,slow=12,SNR=4.2 | | | | | | |
| CFAA | | | | Lg | Lg | 05 48 51.1 | |
| | comp=Z,0.4nm,0.3s,baz=137,slow=18,SNR=5.1 | | | | | | |
| **LCO** | **Las Campanas** | **7.47** | **19** | *e*Pn | **Pn** | **05 47 26.8** | **-1.2** |
| | comp=Z,16nm,0.6s | | | | | | |
| LCO | | | | *e*Sn | **Sn** | **05 48 50.5** | **-2.4** |
| **TRQA** | **Tornquist** | **9.39** | **105** | *e*Pn | **Pn** | **05 47 55.2** | **+1.1** |
| | comp=Z,12nm,1.0s | | | | | | |
| TRQA | | | | *e*Sn | **Sn** | **05 49 37.5** | **-2.3** |
| **LVC** | **Limon Verde** | **14.04** | **18** | Pn | **Pn** | **05 48 59.6** | **+1.7** |
| | comp=Z,7.4nm,0.3s,baz=194,slow=4.2,SNR=3.7 | | | | | | |
| LVC | | | | LR | LR | 05 54 52.7 | |
| | comp=Z,1μm,21.0s,baz=204,slow=40 | | | | | | |
| **CPUP** | **Villa Florida** | **16.90** | **59** | Pn | **Pn** | **05 49 35.2** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=228,slow=12,SNR=6.5 | | | | | | |
| CPUP | | | | LR | LR | 05 55 26.4 | |
| | comp=Z,111nm,19.2s,baz=234,slow=35 | | | | | | |
| **USHA** | **Ushuaia** | **19.03** | **171** | P | **Pn** | **05 50 02.3** | **+0.9** |
| | comp=Z,0.3nm,0.3s,baz=12,slow=8.3,SNR=3.9 | | | | | | |
| **LPAZ** | **La Paz** | **20.32** | **15** | P | Pn | 05 50 17.6 | -0.3 |
| | comp=Z,3.6nm,0.7s,baz=207,slow=9.0,SNR=18 | | | | | | |
| **SIV** | **San Ignacio** | **22.90** | **32** | P | **P** | **05 50 42.7** | **0.0** |
| | comp=Z,6.6nm,0.9s,baz=226,slow=12,SNR=24 | | | | | | |
| SIV | | | | LR | LR | 06 01 27.1 | |
| | comp=Z,488nm,18.9s,baz=264,slow=42 | | | | | | |
| **NNA** | **Nana** | **24.22** | **352** | LR | LR | 05 58 16.9 | |
| | comp=Z,90nm,18.5s,baz=176,slow=31 | | | | | | |
| **ATAH** | **Atahualpa** | **29.20** | **350** | LR | LR | 06 01 37.0 | |
| | comp=Z,73nm,19.0s,baz=178,slow=33 | | | | | | |
| **BDFB** | **Brasilia** | **30.52** | **55** | P | **P** | **05 51 50.9** | **-1.4** |
| | comp=Z,0.9nm,0.4s,baz=218,slow=6.5,SNR=3.6 | | | | | | |
| BDFB | | | | LR | LR | 06 05 13.6 | |
| | comp=Z,342nm,20.3s,baz=224,slow=39 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **47.86** | **157** | P | **P** | **05 54 16.5** | **+0.2** |
| **VNA1** | **Neumayer--Stat** | **48.20** | **156** | P | **P** | **05 54 19.7** | **+0.8** |
| **VNA2** | **Neumayer--Watz** | **48.53** | **156** | P | **P** | **05 54 21.2** | **-0.2** |
| | baz=281,slow=8.5 | | | | | | |
| **SNAA** | **Sanae** | **50.08** | **157** | P | **P** | **05 54 32.5** | **-0.8** |
| **SNAA** | **Sanae** | **50.08** | **157** | P | **P** | **05 54 32.9** | **-0.5** |
| | comp=Z,3.2nm,0.8s,baz=273,slow=7.1,SNR=37 | | | | | | |
| **SNAA** | **Sanae** | **50.08** | **157** | *e*P | **P** | **05 54 32.3** | **-1.1** |
| | comp=Z,4.8nm,1.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **54.12** | **180** | P | **P** | **05 55 04.1** | **+0.6** |
| | comp=Z,4.1nm,0.9s,baz=142,slow=2.3,SNR=12 | | | | | | |
| **RKT** | **Rikitea** | **54.20** | **266** | *e*T | T | 06 53 21.9 | |
| | comp=Z,2.1nm,0.3s | | | | | | |
| **TBI** | **Tubuai** | **65.69** | **258** | *e*LR | LR | 06 16 08.4 | |
| | comp=Z,99nm,28.0s | | | | | | |
| **MEH** | **Mehetia** | **67.42** | **264** | *e*T | T | 07 09 50.1 | |
| | comp=Z,65nm,0.2s | | | | | | |
| **TVO** | **Taravao** | **68.42** | **263** | *e*T | T | 07 11 04.7 | |
| | comp=Z,0.8nm,0.3s | | | | | | |
| **TIAR** | **Tiarei** | **68.61** | **263** | *e*T | T | 07 11 19.4 | |
| | comp=Z,4.8nm,0.2s | | | | | | |
| **PAE** | **Paea** | **68.75** | **263** | *e*T | T | 07 11 29.1 | |
| | comp=Z,0.9nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **68.78** | **263** | *e*LR | LR | 06 17 42.3 | |
| | comp=Z,120nm,24.8s | | | | | | |
| **PPT** | **Papeete** | **68.79** | **263** | LR | LR | 06 18 24.6 | |
| | comp=Z,76nm,19.9s,baz=118,slow=28 | | | | | | |
| **TXAR** | **Lajitas Array** | **71.03** | **332** | P | **P** | **05 56 57.7** | **+0.8** |
| | comp=Z,0.7nm,0.7s,baz=157,slow=9.1,SNR=11 | | | | | | |
| **MAW** | **Mawson** | **71.48** | **164** | LR | LR | 06 29 41.9 | |
| | comp=Z,91nm,18.1s,baz=241,slow=37 | | | | | | |
| **DBIC** | **Dimbokro** | **76.98** | **72** | LR | LR | 06 30 32.7 | |
| | comp=Z,80nm,18.1s,baz=193,slow=35 | | | | | | |
| **BOSA** | **Boshof** | **80.13** | **118** | LR | LR | 06 29 28.7 | |
| | comp=Z,64nm,18.3s,baz=198,slow=33 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **86.04** | **71** | P | **P** | **05 58 19.5** | **-0.3** |
| | comp=Z,1.1nm,1.0s,baz=226,slow=3.8,SNR=3.5 | | | | | | |
| TORD | | | | LR | LR | 06 36 13.4 | |
| | comp=Z,90nm,18.1s,baz=170,slow=35 | | | | | | |
| **AFI** | **Afiamalu** | **88.46** | **254** | LR | LR | 06 28 56.9 | |
| | comp=Z,40nm,21.7s,baz=100,slow=29 | | | | | | |
| **DZM** | **Mont Dzumac** | **99.03** | **234** | *e*LR | LR | 06 31 19.3 | |
| | comp=Z,99nm,24.8s | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **24.54** | **268** | T | T | 08 21 42.4 | |
| | baz=118,slow=74,SNR=17 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **24.56** | **269** | T | T | 08 21 43.6 | |
| | baz=118,slow=74,SNR=8.0 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **24.56** | **268** | T | T | 08 21 41.9 | |
| | baz=118,slow=74,SNR=9.4 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **25.01** | **270** | T | T | 08 22 11.0 | |
| | baz=116 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **25.02** | **270** | T | T | 08 22 11.1 | |
| | baz=116 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **25.02** | **270** | T | T | 08 22 10.8 | |
| | baz=116 | | | | | | |

*IDC **25** 05:45:44.2±1.3, 39°.57N×74°.19E, h0km, mb3.8/5, mb1 3.8/8, mb1mx3.6/36, mbtmp3.7/8, ML3.2/3, Error ellipse: s-maj=28.8km s-min=21.1km az=83.0*
*KRNET **25** 05:45:46.5±0.1, 39°.73N×74°.02E, h10km, mb3.2*
*NNC **25** 05:45:51.3±2.0, 39°.92N×73°.87E, h0km, mb3.6, mpv3.2, Error ellipse: s-maj=17.6km s-min=13.0km az=4.0*
**ISC 25 05:45:44.7±1.8, 39.70N±0°.06×74.12E±0°.04, h1km±10km, n37, σ1§23/55, mb3.9/5, 39C-6D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **0.57** | **303** | ⇑*e*P | **Pg** | **05 45 56.2** | **+0.6** |
| | baz=306 | | | | | | |
| SFK | | | | ⇑*i*S | **Sg** | **05 46 03.3** | **+0.2** |
| | baz=306 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.57** | **303** | ⇑*i*P | **Pg** | **05 45 56.1** | **+0.5** |
| | baz=306 | | | | | | |
| SFK | | | | ⇑*i*S | **Sg** | **05 46 03.2** | **+0.2** |
| | baz=306 | | | | | | |
| **ARSB** | **Arslanbob** | **1.84** | **332** | ⇑*e*P | **Pg** | **05 46 20.2** | **+0.2** |
| | baz=334 | | | | | | |
| ARSB | | | | ⇑*e*S | **Sg** | **05 46 45.0** | **+1.2** |
| | baz=334 | | | | | | |
| **ARLS** | **Aral** | **2.17** | **4** | ⇓*e*P | **Pb** | **05 46 25.2** | **+0.4** |
| | baz=6.0 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sg** | **05 46 54.8** | **+0.6** |
| | baz=6.0 | | | | | | |
| **NRN** | **Naryn** | **2.25** | **39** | ⇑*e*P | **Pg** | **05 46 27.8** | **+0.1** |
| | baz=41 | | | | | | |
| NRN | | | | ⇑*i*S | **Sg** | **05 46 58.5** | **+1.7** |
| | baz=41 | | | | | | |
| **AML** | **Almayashu** | **2.45** | **353** | ⇑*i*P | **Pb** | **05 46 30.2** | **+0.4** |
| | baz=354 | | | | | | |
| AML | | | | ⇑*i*S | **Sg** | **05 47 03.2** | **-0.2** |
| | baz=354 | | | | | | |
| **AML** | **Almayashu** | **2.45** | **353** | P | **Pb** | **05 46 30.1** | **+0.4** |
| | SNR=45 | | | | | | |
| **UCH** | **Uchtor** | **2.54** | **7** | ⇑*i*P | **Pb** | **05 46 31.8** | **+0.4** |
| | baz=8.0 | | | | | | |
| UCH | | | | ⇑*i*S | **Sg** | **05 47 06.9** | **+0.5** |
| | baz=8.0 | | | | | | |
| **UCH** | **Uchtor** | **2.54** | **7** | P | **Pb** | **05 46 31.6** | **+0.3** |
| | SNR=71 | | | | | | |
| **BTK** | **Batken** | **2.57** | **279** | ⇑*e*P | **Pb** | **05 46 32.0** | **+0.4** |
| | baz=279 | | | | | | |
| BTK | | | | ⇑*i*S | **Sg** | **05 47 06.5** | **-0.7** |
| | baz=279 | | | | | | |
| **ARK** | **Arkit** | **2.66** | **323** | ⇑*e*P | **Pb** | **05 46 31.2** | **-2.0** |
| | baz=324 | | | | | | |
| ARK | | | | ⇑*e*S | **Sb** | **05 47 05.2** | **-1.3** |
| | baz=324 | | | | | | |
| **AAK** | **Ala-Archa** | **2.94** | **5** | ⇑Pn | **Pb** | **05 46 37.4** | **-0.7** |
| | 6.9nm,0.4s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 05 47 17.5 | |
| | 57nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **2.94** | **5** | Pn | **Pb** | **05 46 37.4** | **-0.7** |
| | 4.7nm,0.3s,baz=163,slow=6.7,SNR=32 | | | | | | |
| **AAK** | **Ala-Archa** | **2.94** | **5** | ⇑*i*P | **Pb** | **05 46 36.9** | **-1.2** |
| | baz=7.0 | | | | | | |
| AAK | | | | ⇑*i*S | **Sb** | **05 47 16.9** | **+2.3** |
| | baz=7.0 | | | | | | |
| **AAK** | **Ala-Archa** | **2.94** | **5** | P | **Pb** | **05 46 37.9** | **-0.1** |
| | SNR=14 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.97** | **355** | ⇑*i*P | **Pb** | **05 46 37.6** | **-0.9** |
| | baz=357 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **05 47 17.0** | **+1.6** |
| | baz=357 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.97** | **355** | P | **Pb** | **05 46 38.3** | **-0.2** |
| | SNR=26 | | | | | | |
| **KBK** | **Karagaybulak** | **3.02** | **12** | ⇑*i*P | **Pb** | **05 46 39.8** | **+0.5** |
| | baz=13 | | | | | | |
| KBK | | | | ⇑*i*S | **Sg** | **05 47 21.4** | **-0.3** |
| | baz=13 | | | | | | |
| **KBK** | **Karagaybulak** | **3.02** | **12** | P | **Pb** | **05 46 39.2** | **-0.2** |
| | SNR=6.5 | | | | | | |
| **MNAS** | **Manas** | **3.04** | **337** | ⇑Pn | **Pb** | **05 46 37.2** | **-2.6** |
| | 5.9nm,0.5s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 05 47 20.3 | |
| | 82nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **3.04** | **337** | ⇑*e*P | **Pb** | **05 46 37.1** | **-2.6** |
| | baz=338 | | | | | | |
| MNAS | | | | ⇑*e*S | **Sb** | **05 47 16.5** | **-0.9** |
| | baz=338 | | | | | | |
| **MNAS** | **Manas** | **3.04** | **337** | ⇑*i*P | **Pb** | **05 46 37.0** | **-2.7** |
| | baz=338 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **05 47 15.8** | **-1.6** |
| | baz=338 | | | | | | |
| **BOOM** | **Boomskoye usch** | **3.11** | **26** | ⇑*e*P | **Pb** | **05 46 39.5** | **-1.4** |
| | baz=27 | | | | | | |
| BOOM | | | | ⇑*e*S | **Sb** | **05 47 19.5** | **+0.2** |
| | baz=27 | | | | | | |
| **CHMS** | **Chumysh** | **3.33** | **8** | ⇑*i*P | **Pb** | **05 46 42.3** | **-2.3** |
| | baz=9.0 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sg** | **05 47 29.2** | **-2.4** |
| | baz=9.0 | | | | | | |
| **CHMS** | **Chumysh** | **3.33** | **8** | P | **Sg** | **05 47 31.3** | **-0.4** |
| | SNR=6.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.40** | **19** | ⇑Pn | **Pb** | **05 46 44.3** | **-1.6** |
| | 4.1nm,0.3s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 05 47 34.6 | |
| | 13nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.40** | **19** | ⇑*i*P | **Pb** | **05 46 44.7** | **-1.2** |
| | baz=20 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sg** | **05 47 33.4** | **-0.6** |
| | baz=20 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.40** | **19** | P | **Pb** | **05 46 45.0** | **-1.0** |
| | SNR=7.4 | | | | | | |
| **KK31** | **Karatay Array** | **4.35** | **323** | ⇓Pn | Pn | 05 46 54.6 | +2.6 |
| | 1.2nm,0.3s,baz=137,slow=17,SNR=6.3 | | | | | | |
| KK31 | | | | ⇑Pg | **Pb** | **05 47 04.3** | **+2.3** |
| | 2.9nm,0.5s,baz=222,slow=25,SNR=6.0 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **05 47 44.7** | **+1.3** |
| | 17nm,0.7s,baz=127,slow=20,SNR=4.0 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 05 48 01.6 | |
| | 8.8nm,0.4s,baz=0.0,slow=0.1,SNR=4.9 | | | | | | |
| **AB31** | **Akbulak array** | **13.90** | **318** | ⇓Pn | **Pn** | **05 49 01.7** | **-1.0** |
| | 0.2nm,0.2s,baz=124,slow=11,SNR=15 | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.61** | **319** | Pn | **Pn** | **05 49 26.0** | **+0.2** |
| | 0.2nm,0.3s,baz=123,slow=17,SNR=2.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **15.99** | **23** | Pn | **Pn** | **05 49 31.1** | **+0.4** |
| | 0.1nm,0.3s,baz=233,slow=12,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **36.31** | **323** | P | **P** | **05 52 50.5** | **+0.9** |
| | 3.2nm,1.0s,baz=116,slow=8.7,SNR=6.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.20** | **335** | P | **P** | **05 53 14.4** | **+0.5** |
| | 4.3nm,1.1s,baz=101,slow=9.3,SNR=5.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.38** | **321** | P | **P** | **05 53 48.9** | **+0.5** |
| | 0.6nm,0.5s,baz=93,slow=8.1,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.24** | **269** | P | **P** | **05 56 46.4** | **-0.9** |
| | 0.5nm,0.7s,baz=59,slow=4.4,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **81.67** | **124** | P | **P** | **05 58 04.4** | **-0.4** |
| | 0.3nm,0.9s,baz=334,slow=5.4,SNR=2.7 | | | | | | |

**MEX 25 05:57:51.1±0.6, 17°.32N×100°.48W, h41km±11km, MD3.8, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAIG** | **El Cayaco** | **0.33** | **143** | *i* P | Pn | 05 57 58.1 | -1.7 |
| CAIG | | | | *i* S | Sn | 05 58 04.1 | -1.8 |
| **ARIG** | **Puente Sto Nin** | **0.97** | **7** | *e*P | Pn | 05 58 06.8 | -1.5 |
| ARIG | | | | *e*S | Sn | 05 58 18.9 | -2.0 |
| **ZIIG** | **Zihuatanejo** | **0.99** | **287** | *e*P | Pn | 05 58 06.6 | -1.9 |
| ZIIG | | | | *e*S | Sn | 05 58 18.3 | -2.9 |
| **MEIG** | **Mezcala** | **1.02** | **53** | *i* P | Pn | 05 58 06.8 | -2.2 |
| MEIG | | | | *i* S | Sn | 05 58 19.5 | -2.7 |
| **PLIG** | **Platanillo** | **1.42** | **41** | *e*P | Pn | 05 58 13.0 | -1.5 |
| PLIG | | | | *e*S | Sn | 05 58 30.2 | -1.8 |
| **TLIG** | **Tlapa** | **1.84** | **82** | *e*P | Pn | 05 58 19.6 | -0.8 |
| TLIG | | | | *e*S | Sn | 05 58 40.5 | -2.1 |

*KRNET **25** 06:09:53.1±0.1, 41°.48N×72°.84E, h8km, mb2.4*
*NNC **25** 06:09:55.7±1.6, 41°.44N×72°.75E, h0km, mb3.1, mpv2.9, Error ellipse: s-maj=18.4km s-min=7.6km az=93.0*
**ISC 25 06:09:53.9±1.3, 41°.45N±0°.03×72°.80E±0°.05, h4km±14km, n10, σ1§53/18, 14C-6D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARSB** | **Arslanbob** | **0.19** | **131** | ⇓*i*P | **Pg** | **06 09 56.0** | **-1.5** |
| | baz=147 | | | | | | |
| ARSB | | | | ⇓*i*S | **Sg** | **06 09 59.4** | **-0.6** |
| | baz=147 | | | | | | |
| **MNAS** | **Manas** | **1.06** | **348** | ⇑*i*P | **Pg** | **06 10 13.6** | **-0.6** |
| | baz=346 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sg** | **06 10 28.8** | **+0.8** |
| | baz=346 | | | | | | |
| **ARLS** | **Aral** | **1.22** | **70** | ⇑*i*P | **Pn** | **06 10 16.1** | **-1.7** |
| | baz=70 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sb** | **06 10 33.5** | **-0.2** |
| | baz=70 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.53** | **159** | ⇑P | **Pb** | **06 10 22.8** | **-0.2** |
| | 3.8nm,0.3s | | | | | | |
| SFK | | | | ⇓S | **Sg** | **06 10 45.5** | **+2.4** |
| | 30nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.53** | **159** | ⇑*i*P | **Pg** | **06 10 23.2** | **0.0** |
| | baz=161 | | | | | | |
| SFK | | | | ⇑*i*S | **Sg** | **06 10 44.8** | **+1.8** |
| | baz=161 | | | | | | |
| **AAK** | **Ala-Archa** | **1.73** | **46** | ⇓Pn | **Pb** | **06 10 26.6** | **+0.2** |
| | 1.9nm,0.3s | | | | | | |
| AAK | | | | ⇓Sn | **Sg** | **06 10 52.8** | **+3.2** |
| | 10nm,0.7s | | | | | | |
| **KK31** | **Karatay Array** | **2.37** | **315** | ⇑Pn | **Pb** | **06 10 36.6** | **-0.5** |
| | 1.6nm,0.3s,baz=131,slow=16,SNR=43 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 06 11 09.4 | |
| | 13nm,0.6s,baz=130,slow=26,SNR=15 | | | | | | |
| **NRN** | **Naryn** | **2.41** | **89** | ⇑*e*P | **Pn** | **06 10 35.4** | **+1.1** |
| | baz=90 | | | | | | |
| NRN | | | | ⇑*i*S | **Sb** | **06 11 07.1** | **-1.0** |
| | baz=90 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.55** | **54** | ⇑Pn | **Pb** | **06 10 39.9** | **-0.4** |
| | 4.6nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 06 11 15.6 | |
| | 13nm,0.6s | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.57** | **65** | ⇑*e*P | **Pn** | **06 10 37.8** | **+1.4** |
| | baz=65 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sb** | **06 11 11.1** | **-1.4** |
| | baz=65 | | | | | | |

*ISCJB **25** 06:10:03.8±1.4, 36°.08S±0°.05×73°.63W±0°.07, h5km±8km, Error ellipse: s-maj=9.4km s-min=8.0km az=3.4*
*GUC **25** 06:10:07.6±0.6, 36°.14S×73°.42W, h20km±9km, ML4.7*
**ISC 25 06:10:06.0±3.1, 36°.12S±0°.05×73°.43W±0°.10, h3km±19km, n28, σ0§91/31, 5D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **0.52** | **91** | *e*P | **Pn** | **06 10 18.5** | **-1.8** |
| COCH | | | | *e*S | **Sb** | **06 10 26.1** | **+0.4** |
| COCH | | | | AML | AML | 06 10 27.4 | |
| | comp=N,36μm,0.3s | | | | | | |
| **CCHI** | **Chillan** | **1.19** | **114** | *e*P | **Pb** | **06 10 29.0** | **-0.2** |
| CCHI | | | | *e*S | **Sn** | **06 10 45.7** | **-0.6** |
| **TALC** | **Talca** | **1.63** | **64** | *e*P | **Pb** | **06 10 36.4** | **-0.3** |
| TALC | | | | *e*S | **Sb** | **06 10 57.8** | **+0.1** |
| TALC | | | | AML | AML | 06 11 02.2 | |
| | comp=E,18μm,0.7s | | | | | | |
| **NICH** | **Los Niches** | **2.11** | **59** | *e*P | **Pb** | **06 10 44.2** | **-0.8** |
| NICH | | | | *e*S | **Sb** | **06 11 11.7** | **0.0** |
| **CANA** | **Caviahue** | **2.59** | **134** | ⇓*e*P | **Pb** | **06 10 53.1** | **0.0** |
| CANA | | | | ⇓*e*S | **Sg** | **06 11 29.6** | **+0.4** |
| **CLCH** | **Cerro Calan** | **3.62** | **42** | AML | AML | 06 12 11.8 | |
| | comp=N,2μm,0.8s | | | | | | |
| **ROC1** | **El Roble** | **3.72** | **33** | *e*P | **Pn** | **06 11 04.0** | **-0.6** |
| ROC1 | | | | ⇓*

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PICO** | **Pico** | **1.38** | **130** | *e*P | Pn | 06 15 42.0 | -4.9 |
| PICO | | | | *e*S | Sb | 06 15 57.8 | -7.4 |
| **PICO** | **Pico** | **1.38** | **130** | *e*P | Pn | 06 15 42.0 | -4.9 |
| PICO | | | | *e*S | Sb | 06 15 57.8 | -7.4 |

*DDA* ***25*** *06:37:39.5,35°.29N×26°.86E,h12km,Md3.5*
*IDC* ***25*** *06:37:39.6±1.1,35°.11N×27°.04E,h0km,mb3.8/6, mb1 3.7/12,mb1mx3.6/37,mbtmp3.6/12,ML3.4/5,MS2.6/3, Ms1 2.6/3,ms1mx2.4/40,Error ellipse: s-maj=24.1km s-min=15.3km az=165.0*
*ISCJB* ***25*** *06:37:40.2±0.9,35°.13N±0°.04×26°.99E±0°.03,h12km±6km, mb3.8/6,MS2.7/1,Error ellipse: s-maj=6.8km s-min=3.5km az=162.2*
*ATH* ***25*** *06:37:40.4,35°.25N×26°.97E,h16km±1km,MD3.5/13*
*THE* ***25*** *06:37:41.0,35°.23N×26°.93E,h1km±2km,ML3.2/2,Error ellipse: s-maj=4.7km s-min=1.2km az=152.0*
*CSEM* ***25*** *06:37:41.7±0.3,35°.28N×26°.88E,h2km,MD3.5,Error ellipse: s-maj=10.6km s-min=3.8km az=157.0*

**ISC 25 06:37:40.7**±1.1,**35°.20N**±0°.04×**26°.96E**±0°.03,**h8**km±8km, **n119,**σ**1§32**/141,**mb3.9**/6,**Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KARP** | **Karpathos** | **0.39** | **26** | *e*PB | **Pg** | **06 37 47.9** | **-0.4** |
| KARP | | | | *e*SB | **Sg** | **06 37 52.0** | **-1.4** |
| **KARP** | **Karpathos** | **0.39** | **26** | P | **Pg** | **06 37 47.8** | **-0.5** |
| KARP | | | | S | **Sg** | **06 37 54.4** | **+1.0** |
| **KARP** | **Karpathos** | **0.39** | **26** | P | **Pg** | **06 37 47.8** | **-0.5** |
| KARP | | | | S | **Sg** | **06 37 54.4** | **+1.0** |
| **ZKR** | **Zakros** | **0.61** | **262** | *e*PB | **Pg** | **06 37 51.9** | **-0.6** |
| ZKR | | | | *e*SN | **Sg** | **06 38 01.3** | **+0.8** |
| **ZKR** | **Zakros** | **0.61** | **262** | P | **Pg** | **06 37 51.9** | **-0.6** |
| ZKR | | | | S | **Sb** | **06 38 02.0** | **-0.5** |
| **ZKR** | **Zakros** | **0.61** | **262** | P | **Pg** | **06 37 51.9** | **-0.6** |
| ZKR | | | | *e*Sn | **Sg** | **06 38 01.3** | **+0.8** |
| ZKR | | | | S | **Sb** | **06 38 02.0** | **-0.5** |
| **NPS** | **Neapolis** | **1.10** | **274** | *e*PN | **Pg** | **06 38 01.2** | **-0.7** |
| **NPS** | **Neapolis** | **1.10** | **274** | *e*Pn | **Pg** | **06 38 01.2** | **-0.7** |
| **LAST** | **Lasithi** | **1.21** | **269** | *e*PN | **Pg** | **06 38 03.3** | **-0.7** |
| **LAST** | **Lasithi** | **1.21** | **269** | *e*Pn | **Pg** | **06 38 03.3** | **-0.7** |
| **ARG** | **Arkhangelos** | **1.39** | **43** | *e*PN | **Pn** | **06 38 06.1** | **-0.5** |
| **ARG** | **Arkhangelos** | **1.39** | **43** | P | **Pn** | **06 38 06.0** | **-0.5** |
| ARG | | | | S | **Sb** | **06 38 25.4** | **+0.4** |
| **ARG** | **Arkhangelos** | **1.39** | **43** | P | **Pn** | **06 38 06.0** | **-0.5** |
| ARG | | | | S | **Sb** | **06 38 25.4** | **+0.4** |
| **NIS1** | **Nisyros Isl.** | **1.41** | **7** | *e*PN | **Pg** | **06 38 07.8** | **0.0** |
| **NIS1** | **Nisyros Isl.** | **1.41** | **7** | *e*PN | **Pn** | **06 38 06.6** | **-0.2** |
| **NIS1** | **Nisyros Isl.** | **1.41** | **7** | P | **Pn** | **06 38 06.2** | **-0.6** |
| **NIS1** | **Nisyros Isl.** | **1.41** | **7** | P | **Pn** | **06 38 06.2** | **-0.6** |
| **NIS1** | **Nisyros Isl.** | **1.41** | **7** | *e*Pn | **Pn** | **06 38 06.6** | **-0.2** |
| **NISR** | **Nisiros** | **1.42** | **6** | *e*PN | **Pn** | **06 38 06.6** | **-0.2** |
| **NISR** | **Nisiros** | **1.42** | **6** | *e*Pn | **Pn** | **06 38 06.6** | **-0.2** |
| **SANT** | **Santorini** | **1.69** | **314** | *e*PN | **Pb** | **06 38 12.1** | **0.0** |
| **SANT** | **Santorini** | **1.69** | **314** | *e*Pn | **Pb** | **06 38 12.1** | **0.0** |
| **IDI** | **Anoyia** | **1.69** | **274** | Pn | **Pg** | **06 38 12.6** | **-0.6** |
| | 12nm,0.3s,baz=46,slow=3.7,SNR=17 | | | | | | |
| IDI | | | | Sn | **Sg** | **06 38 38.5** | **+3.3** |
| | 23nm,0.3s,baz=65,slow=12,SNR=11 | | | | | | |
| **IDI** | **Anoyia** | **1.69** | **274** | *e*PN | **Pb** | **06 38 12.2** | **0.0** |
| **IDI** | **Anoyia** | **1.69** | **274** | P | **Pn** | **06 38 11.3** | **+0.6** |
| **IDI** | **Anoyia** | **1.69** | **274** | P | **Pn** | **06 38 11.3** | **+0.6** |
| **IDI** | **Anoyia** | **1.69** | **274** | *e*Pn | **Pb** | **06 38 12.2** | **0.0** |
| **THR6** | **Thira Island,** | **1.71** | **313** | P | **Pn** | **06 38 10.6** | **-0.3** |
| **THR6** | **Thira Island,** | **1.71** | **313** | P | **Pn** | **06 38 10.6** | **-0.3** |
| **THR3** | **Thira Island,** | **1.75** | **314** | P | **Pn** | **06 38 11.4** | **0.0** |
| **THR3** | **Thira Island,** | **1.75** | **314** | P | **Pn** | **06 38 11.4** | **0.0** |
| **SIVA** | **Sivas** | **1.77** | **265** | *e*PN | **Pb** | **06 38 13.2** | **-0.2** |
| **SIVA** | **Sivas** | **1.77** | **265** | *e*Pn | **Pb** | **06 38 13.2** | **-0.2** |
| **THR5** | **Thira Island,** | **1.79** | **313** | P | **Pn** | **06 38 10.7** | **-1.2** |
| **THR5** | **Thira Island,** | **1.79** | **313** | P | **Pn** | **06 38 10.7** | **-1.2** |
| **BDRM** | **Kayabasi** | **1.91** | **12** | *i* P | **Pn** | **06 38 14.1** | **+0.5** |
| **BDRM** | **Kayabasi** | **1.91** | **12** | P | **Pn** | **06 38 14.1** | **+0.5** |
| BDRM | | | | S | **Sg** | **06 38 44.2** | **+2.2** |
| **DALY** | **Dalyan (Mu˘la** | **2.12** | **40** | *e*PN | **Pn** | **06 38 17.3** | **+0.8** |
| **DALY** | **Dalyan (Mu˘la** | **2.12** | **40** | *e*Pn | **Pn** | **06 38 17.3** | **+0.8** |
| **TURN** | **Turunc** | **2.14** | **38** | *i* P | Pn | 06 38 13.8 | -3.0 |
| **TURN** | **Turunc** | **2.14** | **38** | P | Pn | 06 38 13.8 | -3.0 |
| TURN | | | | S | Sn | 06 38 36.1 | -7.4 |
| **APE** | **Apeiranthos** | **2.19** | **329** | *e*PB | **Pn** | **06 38 17.6** | **0.0** |
| **APE** | **Apeiranthos** | **2.19** | **329** | P | **Pn** | **06 38 17.2** | **-0.4** |
| APE | | | | S | **Sn** | **06 38 44.2** | **-0.8** |
| **APE** | **Apeiranthos** | **2.19** | **329** | P | **Pn** | **06 38 17.2** | **-0.4** |
| **APE** | **Apeiranthos** | **2.19** | **329** | *e*Pb | **Pn** | **06 38 17.6** | **0.0** |
| APE | | | | S | **Sn** | **06 38 44.2** | **-0.8** |
| **YER** | **Yerkesik** | **2.21** | **29** | *e*PN | **Pn** | **06 38 18.7** | **+0.9** |
| **YER** | **Yerkesik** | **2.21** | **29** | *e*Pn | **Pn** | **06 38 18.7** | **+0.9** |
| **FETY** | **Fethiye** | **2.24** | **50** | *e*PN | **Pn** | **06 38 19.9** | **+1.6** |
| **FETY** | **Fethiye** | **2.24** | **50** | *e*Pn | **Pn** | **06 38 19.9** | **+1.6** |
| **KSL** | **Kastellorizon** | **2.34** | **65** | *e*PB | **Pn** | **06 38 19.8** | **+0.3** |
| **KSL** | **Kastellorizon** | **2.34** | **65** | *e*Pb | **Pn** | **06 38 19.8** | **+0.3** |
| **AKAS** | **Kas** | **2.39** | **64** | *i* P | **Pn** | **06 38 20.6** | **+0.3** |
| **AKAS** | **Kas** | **2.39** | **64** | P | **Pn** | **06 38 20.6** | **+0.3** |
| AKAS | | | | S | **Sb** | **06 38 54.1** | **+0.2** |
| **IMMV** | **Iera Moni Meta** | **2.45** | **277** | *e*PN | **Pn** | **06 38 22.9** | **+1.9** |
| **IMMV** | **Iera Moni Meta** | **2.45** | **277** | *e*Pn | **Pn** | **06 38 22.9** | **+1.9** |
| **SMG** | **Samos** | **2.51** | **358** | *e*PB | **Pn** | **06 38 21.5** | **-0.4** |
| **SMG** | **Samos** | **2.51** | **358** | *e*Pb | **Pn** | **06 38 21.5** | **-0.4** |
| **AYDN** | **Tasoluk** | **2.57** | **17** | *i* P | **Pb** | **06 38 26.2** | **-0.9** |
| AYDN | | | | *i* S | **Sn** | **06 38 55.0** | **+0.8** |
| **AYDN** | **Tasoluk** | **2.57** | **17** | P | **Pb** | **06 38 26.2** | **-0.9** |
| AYDN | | | | S | **Sn** | **06 38 55.0** | **+0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.84** | **15** | *e*PN | **Pn** | **06 38 28.0** | **+1.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.84** | **15** | *e*Pn | **Pn** | **06 38 28.0** | **+1.4** |
| **ELL** | **Elmali** | **2.85** | **56** | *e*PN | **Pn** | **06 38 28.1** | **+1.4** |
| **ELL** | **Elmali** | **2.85** | **56** | *e*Pn | **Pn** | **06 38 28.1** | **+1.4** |
| **GOLH** | **Golhisar** | **2.93** | **45** | *i* P | **Pn** | **06 38 29.2** | **+1.5** |
| **GOLH** | **Golhisar** | **2.93** | **45** | P | **Pn** | **06 38 29.2** | **+1.5** |
| GOLH | | | | S | **Sb** | **06 39 09.0** | **-0.3** |
| **DNZL** | **Cakiroluk** | **3.00** | **34** | *i* P | **Pn** | **06 38 30.6** | **+1.7** |
| DNZL | | | | *i* S | **Sn** | **06 39 06.6** | **+1.5** |
| **DNZL** | **Cakiroluk** | **3.00** | **34** | P | **Pn** | **06 38 30.6** | **+1.7** |
| DNZL | | | | S | **Sn** | **06 39 06.6** | **+1.5** |
| **DENT** | **Denizli** | **3.05** | **33** | *e*PN | **Pn** | **06 38 30.7** | **+1.3** |
| **DENT** | **Denizli** | **3.05** | **33** | *e*PN | **Pn** | **06 38 30.7** | **+1.3** |
| **ANKY** | **Antikythira Is** | **3.06** | **284** | *e*PN | **Pn** | **06 38 30.1** | **+0.7** |
| **ANKY** | **Antikythira Is** | **3.06** | **284** | P | **Pn** | **06 38 29.5** | **+0.1** |
| **ANKY** | **Antikythira Is** | **3.06** | **284** | P | **Pn** | **06 38 29.5** | **+0.1** |
| **ANKY** | **Antikythira Is** | **3.06** | **284** | *e*Pn | **Pn** | **06 38 30.1** | **+0.7** |
| **ZEY** | **˙zmir** | **3.06** | **353** | P | **Pn** | **06 38 28.9** | **-0.5** |
| ZEY | | | | S | **Sg** | **06 39 16.6** | **-2.3** |
| **BLCB** | **Balcova** | **3.18** | **1** | *e*PN | **Pn** | **06 38 33.0** | **+1.9** |
| **BLCB** | **Balcova** | **3.18** | **1** | *e*Pn | **Pn** | **06 38 33.0** | **+1.9** |
| **CHOS** | **Chios island** | **3.26** | **347** | *e*PN | **Pn** | **06 38 32.4** | **+0.1** |
| **CHOS** | **Chios island** | **3.26** | **347** | *e*Pn | **Pn** | **06 38 32.4** | **+0.1** |
| **KORT** | **Korkueli** | **3.29** | **56** | *i* P | **Pn** | **06 38 35.4** | **+2.8** |
| KORT | | | | *i* S | **Sn** | **06 39 15.2** | **+3.2** |
| **KORT** | **Korkueli** | **3.29** | **56** | P | **Pn** | **06 38 35.4** | **+2.8** |
| KORT | | | | S | **Sn** | **06 39 15.2** | **+3.2** |
| **KYTH** | **Kithira** | **3.37** | **290** | *e*PN | **Pn** | **06 38 34.5** | **+0.8** |
| **KYTH** | **Kithira** | **3.37** | **290** | *e*Pn | **Pn** | **06 38 34.5** | **+0.8** |
| **MANT** | **Manisa** | **3.53** | **21** | *i* P | **Pn** | **06 38 38.6** | **+2.5** |
| MANT | | | | *i* S | **Sn** | **06 39 15.0** | **-3.2** |
| **MANT** | **Manisa** | **3.53** | **21** | P | **Pn** | **06 38 38.6** | **+2.5** |
| MANT | | | | S | **Sn** | **06 39 15.0** | **-3.2** |
| **KULA** | **Kula-Manisa** | **3.58** | **22** | *e*PN | **Pn** | **06 38 38.4** | **+1.7** |
| **KULA** | **Kula-Manisa** | **3.58** | **22** | *e*Pn | **Pn** | **06 38 38.4** | **+1.7** |
| **VLI** | **Veliai** | **3.60** | **296** | *e*PN | **Pn** | **06 38 37.9** | **+1.1** |
| **VLI** | **Veliai** | **3.60** | **296** | *e*Pn | **Pn** | **06 38 37.9** | **+1.1** |
| **AKS** | **Akhisar** | **3.74** | **10** | *e*PN | **Pn** | **06 38 40.8** | **+2.0** |
| **AKS** | **Akhisar** | **3.74** | **10** | *e*Pn | **Pn** | **06 38 40.8** | **+2.0** |
| **KHAL** | **Karahalli** | **3.76** | **32** | *i* P | **Pn** | **06 38 40.0** | **+0.8** |
| **KHAL** | **Karahalli** | **3.76** | **32** | P | **Pn** | **06 38 40.0** | **+0.8** |
| KHAL | | | | S | Sn | 06 39 13.5 | -10 |
| **ISP** | **Isparta** | **3.89** | **47** | *e*PN | **Pn** | **06 38 43.5** | **+2.6** |
| **ISP** | **Isparta** | **3.89** | **47** | *e*Pn | **Pn** | **06 38 43.5** | **+2.6** |
| **SUTC** | **Sutluce-Ispart** | **3.98** | **54** | *e*PN | **Pn** | **06 38 44.1** | **+1.9** |
| **SUTC** | **Sutluce-Ispart** | **3.98** | **54** | *e*Pn | **Pn** | **06 38 44.1** | **+1.9** |
| **DEMI** | **Demirci** | **4.09** | **20** | *i* P | **Pn** | **06 38 44.4** | **+0.7** |
| **DEMI** | **Demirci** | **4.09** | **20** | P | **Pn** | **06 38 44.4** | **+0.7** |
| **BAGO** | **Egridir - ISPA** | **4.16** | **47** | P | Pn | 06 38 41.2 | -3.4 |
| **GAZI** | **Gazipasa** | **4.48** | **75** | *i* P | **Pn** | **06 38 47.0** | **-2.0** |
| GAZI | | | | *i* S | **Sn** | **06 39 39.6** | **-1.7** |
| **GAZI** | **Gazipasa** | **4.48** | **75** | P | **Pn** | **06 38 47.0** | **-2.0** |
| GAZI | | | | S | **Sn** | **06 39 39.6** | **-1.7** |
| **TVSB** | **Tavsanli** | **4.69** | **24** | *e*PN | **Pn** | **06 38 53.2** | **+1.2** |
| **TVSB** | **Tavsanli** | **4.69** | **24** | *e*Pn | **Pn** | **06 38 53.2** | **+1.2** |
| **KLV** | **Kalavryta, Ach** | **4.80** | **308** | *e*PN | **Pn** | **06 38 55.4** | **+2.0** |
| **KLV** | **Kalavryta, Ach** | **4.80** | **308** | *e*Pn | **Pn** | **06 38 55.4** | **+2.0** |
| **AGG** | **Agios Georgios** | **5.31** | **317** | *e*P | Pn | 06 39 05.6 | +5.2 |
| **BRTR** | **Keskin Array B** | **6.97** | **48** | Pn | **Pn** | **06 39 24.1** | **+0.7** |
| | 0.1nm,0.3s,baz=226,slow=12,SNR=4.1 | | | | | | |
| BRTR | | | | Sn | **Sn** | **06 40 44.5** | **+1.6** |
| | 0.1nm,0.3s,baz=214,slow=23,SNR=2.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **7.34** | **105** | Pn | **Pn** | **06 39 27.8** | **-0.4** |
| | baz=303,slow=13,SNR=1.7 | | | | | | |
| MMAI | | | | Sn | **Sn** | **06 40 50.9** | **-0.9** |
| | 1.0nm,0.3s,baz=305,slow=28,SNR=2.1 | | | | | | |
| **MLR** | **Muntele Rosu** | **10.31** | **356** | Pn | Pn | 06 40 12.4 | +3.3 |
| | 0.0nm,0.3s,baz=189,slow=12,SNR=3.1 | | | | | | |
| MLR | | | | LR | LR | 06 44 34.2 | |
| | comp=Z,16nm,18.5s,baz=190,slow=40 | | | | | | |
| **KBZ** | **Khabaz** | **14.95** | **50** | Pn | **P** | **06 41 16.0** | **-2.0** |
| | 0.1nm,0.3s,baz=256,slow=12,SNR=2.7 | | | | | | |
| KBZ | | | | LR | LR | 06 47 56.3 | |
| | comp=Z,33nm,19.3s,baz=232,slow=41 | | | | | | |
| **AKASG** | **Malin Array Be** | **15.58** | **5** | Pn | **Pn** | **06 41 22.3** | **+1.6** |
| | 0.3nm,0.3s,baz=196,slow=11,SNR=3.4 | | | | | | |
| **GERES** | **GERESS Array B** | **16.79** | **328** | Pn | **P** | **06 41 38.8** | **+0.4** |
| | 0.2nm,0.3s,baz=134,slow=6.9,SNR=4.6 | | | | | | |
| **ESDC** | **Sonseca Array** | **24.89** | **290** | P | **P** | **06 43 04.5** | **+0.4** |
| | 0.3nm,0.4s,baz=80,slow=9.4,SNR=3.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **27.76** | **344** | LR | LR | 06 57 09.0 | |
| | comp=Z,19nm,18.9s,baz=280,slow=42 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **31.66** | **232** | P | **P** | **06 44 04.4** | **-0.3** |
| | 0.9nm,0.6s,baz=34,slow=8.1,SNR=9.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.40** | **359** | P | **P** | **06 44 27.3** | **-0.8** |
| | 2.2nm,0.9s,baz=179,slow=8.1,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.52** | **57** | P | **P** | **06 45 37.1** | **+0.4** |
| | 1.7nm,0.6s,baz=280,slow=7.6,SNR=10 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.92** | **46** | P | **P** | **06 45 48.0** | **+0.2** |
| | 1.0nm,0.4s,baz=266,slow=9.9,SNR=6.0 | | | | | | |
| **SONM** | **Songino Array** | **58.32** | **51** | P | **P** | **06 47 36.7** | **+0.4** |
| | 0.4nm,0.5s,baz=281,slow=8.7,SNR=3.6 | | | | | | |

*ISK* ***25*** *06:43:11.8,37°.24N×28°.18E,h5km,MD2.6*
*ISCJB* ***25*** *06:43:13.1±0.5,37°.23N±0°.03×28°.21E±0°.04,h0km,Error ellipse: s-maj=4.6km s-min=3.8km az=151.9*
*CSEM* ***25*** *06:43:13.2±0.2,37°.20N×28°.21E,h2km,MD2.7,Error ellipse: s-maj=4.8km s-min=3.6km az=60.0,Mining explosion.*
*DDA* ***25*** *06:43:13.0,37°.23N×28°.20E,h7km,Md2.7*

**ISC 25 06:43:13.1**±0.9,**37°.26N**±0°.03×**28°.18E**±0°.03,**h0**km,**n21,** σ**1§09**/33,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.15** | **145** | PG | **Pg** | **06 43 15.1** | **-0.9** |
| **YER** | **Yerkesik** | **0.15** | **145** | *i* Pg | **Pg** | **06 43 15.1** | **-0.9** |
| **AYDN** | **Tasoluk** | **0.47** | **330** | *i* P | **Pb** | **06 43 24.3** | **0.0** |
| AYDN | | | | *i* S | **Sb** | **06 43 31.6** | **-0.2** |
| **AYDN** | **Tasoluk** | **0.47** | **330** | P | **Pb** | **06 43 24.3** | **0.0** |
| AYDN | | | | S | **Sb** | **06 43 31.6** | **-0.2** |
| **TURN** | **Turunc** | **0.51** | **138** | *i* P | **Pg** | **06 43 21.4** | **-1.5** |
| TURN | | | | *i* S | **Sg** | **06 43 29.5** | **-0.1** |
| **TURN** | **Turunc** | **0.51** | **138** | P | **Pg** | **06 43 21.4** | **-1.5** |
| TURN | | | | S | **Sg** | **06 43 29.5** | **-0.1** |
| **BDRM** | **Kayabasi** | **0.62** | **252** | *i* S | **Sg** | **06 43 34.2** | **+1.3** |
| **BDRM** | **Kayabasi** | **0.62** | **252** | P | Pg | 06 43 19.6 | -5.3 |
| BDRM | | | | S | **Sg** | **06 43 34.2** | **+1.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.72** | **342** | *e*PG | **Pg** | **06 43 27.2** | **+0.2** |
| AYDB | | | | *e*SG | **Sb** | **06 43 38.5** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.72** | **342** | *e*Pg | **Pg** | **06 43 27.2** | **+0.2** |
| AYDB | | | | *e*Sg | **Sb** | **06 43 38.5** | **-0.8** |
| **DNZL** | **Cakiroluk** | **0.81** | **58** | *i* P | **Pg** | **06 43 29.5** | **+0.7** |
| DNZL | | | | *i* S | **Sg** | **06 43 39.6** | **+0.3** |
| **DNZL** | **Cakiroluk** | **0.81** | **58** | P | **Pg** | **06 43 29.5** | **+0.7** |
| DNZL | | | | S | **Sg** | **06 43 39.6** | **+0.3** |
| **FETY** | **Fethiye** | **0.95** | **130** | *e*PG | **Pg** | **06 43 31.0** | **-0.4** |
| **FETY** | **Fethiye** | **0.95** | **130** | *e*Pg | **Pg** | **06 43 31.0** | **-0.4** |
| **NIS1** | **Nisyros Isl.** | **1.03** | **231** | *e*PG | **Pg** | **06 43 32.4** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **1.03** | **231** | *e*Pg | **Pg** | **06 43 32.4** | **-0.5** |
| **MANT** | **Manisa** | **1.27** | **14** | *i* P | **Pb** | **06 43 38.3** | **+0.2** |
| **MANT** | **Manisa** | **1.27** | **14** | P | **Pb** | **06 43 38.3** | **+0.2** |
| MANT | | | | S | **Sg** | **06 43 52.3** | **-1.6** |
| **KHAL** | **Karahalli** | **1.52** | **43** | *i* P | **Pb** | **06 43 42.3** | **0.0** |
| KHAL | | | | *i* S | **Sg** | **06 44 01.8** | **-0.3** |
| **KHAL** | **Karahalli** | **1.52** | **43** | P | **Pb** | **06 43 42.3** | **0.0** |
| KHAL | | | | S | **Sg** | **06 44 01.8** | **-0.3** |
| **AKAS** | **Kas** | **1.54** | **131** | P | **Pg** | **06 43 43.7** | **+1.1** |
| AKAS | | | | S | **Sg** | **06 44 06.8** | **+4.3** |

*ISCJB* ***25*** *06:44:16.4±0.6,11°.22N±0°.03×61°.93W±0°.03,h68km±10km, Error ellipse: s-maj=6.3km s-min=4.1km az=38.5*
*TRN* ***25*** *06:44:17.4,11°.30N×61°.79W,h15km,MD3.4*
*FUNV* ***25*** *06:44:18.3,11°.08N×61°.76W,h54km,MW2.8*

**ISC 25 06:44:16.8**±1.3,**11°.21N**±0°.04×**61°.91W**±0°.04,**h69**km±14km, **n19,**σ**1§39**/34,**Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUIV** | **Guiria** | **0.64** | **209** | *e*P | **Pn** | **06 44 30.7** | **-0.2** |
| GUIV | | | | *e*S | **Sn** | **06 44 41.1** | **-0.2** |
| **TRN** | **Trinidad (W)** | **0.75** | **138** | *e*P | **Pn** | **06 44 32.2** | **0.0** |
| TRN | | | | *e*S | **Sn** | **06 44 42.9** | **-0.5** |
| **GRW** | **Mount Saint Ca** | **0.97** | **14** | *e*P | **Pn** | **06 44 34.5** | **-0.4** |
| GRW | | | | *e*S | **Sn** | **06 44 46.2** | **-2.3** |
| **GRHS** | **Sauteurs** | **1.04** | **14** | *e*P | **Pn** | **06 44 35.1** | **-0.7** |
| GRHS | | | | *e*S | **Sn** | **06 44 49.4** | **-0.5** |
| **TBH** | **Brigand Hill** | **1.10** | **131** | *e*P | **Pn** | **06 44 37.7** | **+1.2** |
| TBH | | | | *e*S | **Sn** | **06 44 53.9** | **+2.7** |
| **GRSS** | **Sisters** | **1.12** | **15** | *e*P | **Pn** | **06 44 36.8** | **+0.1** |
| GRSS | | | | *e*S | **Sn** | **06 44 51.5** | **-0.1** |
| **BOT** | **Bacolet** | **1.17** | **92** | *e*P | **Pn** | **06 44 37.4** | **+1.0** |
| BOT | | | | *e*S | **Sn** | **06 44 52.5** | **-0.2** |
| **TOSP** | **Speyside** | **1.35** | **86** | *e*P | **Pn** | **06 44 40.6** | **+0.9** |
| TOSP | | | | *e*S | **Sn** | **06 44 56.6** | **-0.3** |
| **CRUV** | **Carupano** | **1.41** | **248** | *e*P | **Pn** | **06 44 41.3** | **+0.8** |
| CRUV | | | | *e*S | **Sn** | **06 44 59.7** | **+1.3** |
| **GUNV** | **Guanoco** | **1.46** | **224** | *e*P | **Pn** | **06 44 41.8** | **+0.7** |
| GUNV | | | | *e*S | **Sn** | **06 44 59.3** | **-0.2** |
| **SVB** | **Belmont** | **2.15** | **17** | *e*P | **Pn** | **06 44 51.0** | **+0.6** |
| SVB | | | | *e*S | **Sn** | **06 45 16.6** | **+0.5** |
| **ORIV** | **Oritupano** | **2.59** | **215** | *e*P | **Pn** | **06 44 57.6** | **+1.1** |
| ORIV | | | | *e*S | **Sn** | **06 45 26.0** | **-0.9** |
| **PCRV** | **Puerto La Cruz** | **2.87** | **249** | *e*P | **Pn** | **06 45 02.1** | **+1.8** |
| PCRV | | | | *e*S | **Sn** | **06 45 34.3** | **+0.5** |
| **GURV** | **El Guri** | **3.62** | **199** | *e*P | **Pn** | **06 45 09.9** | **-0.6** |
| **PRGV** | **PARIAGUAN** | **3.63** | **228** | *e*S | **Sn** | **06 45 50.1** | **-2.2** |
| **CUPV** | **Cœpira** | **3.98** | **254** | *e*P | **Pn** | **06 45 17.5** | **+2.0** |
| CUPV | | | | *e*S | **Sn** | **06 45 59.8** | **-1.2** |
| **BIRV** | **Birongo** | **4.35** | **261** | *e*P | **Pn** | **06 45 23.0** | **+2.6** |
| **LUEV** | **Luepa** | **5.35** | **175** | *e*P | **Pn** | **06 45 32.3** | **-2.0** |
| LUEV | | | | *e*S | Sn | 06 46 26.8 | -7.9 |
| **BAUV** | **El Baul** | **6.45** | **250** | *e*P | **Pn** | **06 45 49.4** | **+0.2** |
| BAUV | | | | *e*S | **Sn** | **06 46 58.3** | **-3.0** |

*ISCJB* ***25*** *06:48:36.1±0.5,31°.24N±0°.04×115°.64W±0°.03,h10km±6km, Error ellipse: s-maj=6.9km s-min=4.2km az=14.0*
*MEX* ***25*** *06:48:36.3±0.4,30°.98N×115°.68W,h34km±10km,MD3.3*
*ECX* ***25*** *06:48:37.0±0.5,31°.24N×115°.64W,h5km,MD3.4,ML3.6*

**ISC 25 06:48:36.1**±0.9,**31°.24N**±0°.04×**115°.66W**±0°.03,**h15**km±9km, **n25,**σ**0§62**/42,**5C-9D,Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPIG** | **San Pedro Mart** | **0.25** | **139** | *e*P | **Pg** | **06 48 41.8** | **0.0** |
| SPIG | | | | *e*S | **Sg** | **06 48 46.1** | **+0.4** |
| **SPIG** | **San Pedro Mart** | **0.25** | **139** | ↓*e*P | **Pg** | **06 48 41.8** | **0.0** |
| SPIG | | | | *e*S | **Sg** | **06 48 45.6** | **-0.1** |
| **SPX** | **San Pedro Mart** | **0.26** | **139** | ↓*e*P | **Pg** | **06 48 41.8** | **0.0** |
| SPX | | | | *e*S | **Sg** | **06 48 45.7** | **-0.1** |
| SPX | | | | ⇓*e* | | 06 48 46.2 | |
| SPX | | | | IAML | | 06 48 46.2 | |
| | comp=N,6μm,0.3s | | | | | | |
| **ECBX** | **El Chinero** | **0.57** | **66** | ⇑*e*P | **Pg** | **06 48 46.8** | **-0.5** |
| ECBX | | | | *e*S | **Sg** | **06 48 54.3** | **-0.6** |
| ECBX | | | | IAML | | 06 48 57.5 | |
| | comp=E,2μm,0.3s | | | | | | |
| ECBX | | | | ⇓*e* | | 06 48 57.5 | |
| **ZAX** | **El Zacaton** | **0.59** | **298** | ⇑*e*P | **Pg** | **06 48 47.2** | **-0.6** |
| ZAX | | | | *e*S | **Sg** | **06 48 56.0** | **+0.3** |
| ZAX | | | | IAML | | 06 48 58.9 | |
| | comp=E,4μm,0.7s | | | | | | |
| ZAX | | | | ⇑*e* | | 06 48 58.9 | |
| **RDX** | **Rancho Dawling** | **0.73** | **341** | ↓*e*P | **Pg** | **06 48 49.8** | **-0.5** |
| RDX | | | | *e*S | **Sg** | **06 49 00.1** | **+0.1** |
| **ECNX** | **Esteban Cantu** | **0.90** | **298** | ⇑*e*P | **Pg** | **06 48 53.1** | **-0.6** |
| ECNX | | | | *e*S | **Sg** | **06 49 05.9** | **+0.4** |
| **PBX** | **Punta Banda** | **1.04** | **299** | ↓*e*P | **Pb** | **06 48 55.2** | **-0.6** |
| PBX | | | | *e*S | **Sb** | **06 49 09.3** | **0.0** |
| **CPBX** | **Cerro Prieto** | **1.21** | **14** | *e*P | **Pn** | **06 48 58.0** | **-0.6** |
| CPBX | | | | *e*S | **Sb** | **06 49 13.9** | **-0.4** |
| CPBX | | | | ⇑*e* | | 06 49 26.6 | |
| CPBX | | | | AML | AML | 06 49 26.6 | |
| | comp=E,4μm,0.3s | | | | | | |
| **MBIG** | **Mexicali** | **1.23** | **18** | *e*P | **Pb** | **06 48 59.2** | **+0.1** |
| MBIG | | | | *e*S | **Sg** | **06 49 16.8** | **+1.0** |
| **CBX** | **Cerro Bola** | **1.37** | **322** | *e*P | **Pn** | **06 49 00.3** | **-0.5** |
| CBX | | | | *e*S | **Sn** | **06 49 18.2** | **-0.6** |
| **CBX** | **Cerro Bola** | **1.37** | **322** | ↓*e*P | **Pn** | **06 49 00.9** | **0.0** |
| CBX | | | | IAML | | 06 49 24.6 | |
| | comp=N,1μm,0.5s | | | | | | |
| **RMX** | **La Rumorosa** | **1.41** | **345** | *e*P | **Pn** | **06 49 01.6** | **+0.2** |
| RMX | | | | *e*S | **Sn** | **06 49 19.6** | **-0.1** |
| **SGL** | **Mount Signal** | **1.41** | **358** | ↓*i*P | **Pn** | **06 49 01.3** | **+0.1** |
| **YUH** | **Yuha Desert** | **1.42** | **351** | ↓*i*P | **Pn** | **06 49 01.8** | **+0.4** |
| **IBP** | **Imperial Bould** | **1.46** | **346** | P | **Pb** | **06 49 02.9** | **-0.2** |
| | baz=1.4 | | | | | | |
| IBP | | | | S | **Sb** | **06 49 22.1** | **+0.5** |
| | baz=1.4 | | | | | | |
| **BAR** | **Barrett** | **1.68** | **329** | *e*P | **Pn** | **06 49 05.8** | **+0.9** |
| **SWSC** | **Sam W. Stewart** | **1.70** | **356** | P | **Pn** | **06 49 05.4** | **+0.2** |
| | baz=1.6 | | | | | | |
| **MONP** | **Monument Peak** | **1.77** | **339** | P | **Pb** | **06 49 07.8** | **-0.5** |
| | baz=1.7 | | | | | | |
| MONP | | | | S | **Sb** | **06 49 30.6** | **+0.2** |
| | baz=1.7 | | | | | | |
| **GLA** | **Glamis** | **1.94** | **21** | P | **Pn** | **06 49 08.5** | **-0.1** |
| | baz=1.8 | | | | | | |
| **109C** | **Camp Elliot, M** | **2.05** | **324** | P | **Pn** | **06 49 11.7** | **+1.6** |
| | baz=2.0 | | | | | | |
| 109C | | | | S | **Sb** | **06 49 38.0** | **-0.4** |
| | baz=2.0 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **2.46** | **344** | P | **Pn** | **06 49 16.5** | **+0.7** |
| | baz=2.4 | | | | | | |
| PFO | | | | Sb | **Sb** | **06 49 52.2** | **+2.0** |
| | baz=2.4 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.53** | **73** | P | **Pn** | **06 49 16.7** | **0.0** |
| | baz=2.4 | | | |

*az=31.8*
*IDC* ***25*** *07:14:06.8±1.2, 1.°43S×14.°80W, h0km, mb4.0/10, mb1 4.2/11, mb1mx3.8/43, mbtmp4.0/11, ML4.2/1, MS3.8/8, Ms1 3.7/8, ms1mx3.4/48, Error ellipse: s-maj=30.8km s-min=16.7km az=109.0*

**ISC 25 07:14:07.8±1.1, 1.°55S±0.°1×15.°0W±0.°2, h11km, n27, σ0.85/16, mb4.1/11, MS3.7/7, North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N2** | **ASCENSION HYDR** | **6.35** | **176** | T | T | 07 22 22.3 | |
| | baz=351,slow=74,SNR=106 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **6.37** | **176** | T | T | 07 22 20.0 | |
| | baz=351,slow=74,SNR=180 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **6.37** | **176** | T | T | 07 22 22.3 | |
| | baz=351,slow=74,SNR=84 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **7.45** | **178** | T | T | 07 23 42.1 | |
| | baz=0.1,slow=79 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **7.46** | **178** | T | T | 07 23 41.0 | |
| | baz=0.1,slow=79,SNR=120 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **7.47** | **178** | T | T | 07 23 41.0 | |
| | baz=0.1,slow=79,SNR=81 | | | | | | |
| **LIC** | **Lamto** | **12.50** | **52** | *e*P | Pn | 07 17 10.8 | +5.0 |
| | 34nm,0.7s | | | | | | |
| **TIC** | **Toumodi** | **12.76** | **51** | *e*P | **Pn** | **07 17 09.4** | **0.0** |
| **KIC** | **Kosan Boka** | **12.80** | **53** | *e*P | **Pn** | **07 17 11.4** | **+1.4** |
| | 50nm,0.9s | | | | | | |
| **DBIC** | **Dimbokro** | **12.90** | **51** | Pn | **Pn** | **07 17 11.5** | **+0.2** |
| | 1.2nm,0.3s,baz=226,slow=12,SNR=21 | | | | | | |
| DBIC | | | | Sn | **Sn** | **07 19 35.2** | **+0.2** |
| | 1.9nm,0.3s,baz=323,slow=20,SNR=5.2 | | | | | | |
| DBIC | | | | LR | LR | 07 21 21.6 | |
| | comp=Z,524nm,19.1s,baz=210,slow=34 | | | | | | |
| **RCBR** | **Riachuelo** | **21.36** | **258** | LR | LR | 07 24 38.4 | |
| | comp=Z,101nm,19.1s,baz=74,slow=29 | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **21.97** | **48** | *e*P | **P** | **07 19 00.5** | **-1.5** |
| **TORD** | **Torodi Ar. Bea** | **21.97** | **48** | P | **P** | **07 19 02.2** | **+0.2** |
| | 2.7nm,0.7s,baz=234,slow=10,SNR=16 | | | | | | |
| TORD | | | | S | **S** | **07 23 03.5** | **-1.2** |
| | 1.2nm,0.7s,baz=224,slow=22,SNR=4.2 | | | | | | |
| TORD | | | | LR | LR | 07 26 45.9 | |
| | comp=Z,461nm,18.8s,baz=260,slow=35 | | | | | | |
| **MDT** | **Midelt** | **35.45** | **15** | LR | LR | 07 34 30.7 | |
| | comp=Z,190nm,21.9s,baz=184,slow=35 | | | | | | |
| **BDFB** | **Brasilia** | **35.53** | **245** | LR | LR | 07 34 54.2 | |
| | comp=Z,63nm,18.2s,baz=55,slow=35 | | | | | | |
| **ESDC** | **Sonseca Array** | **42.15** | **13** | LR | LR | 07 40 02.9 | |
| | comp=Z,104nm,18.8s,baz=155,slow=37 | | | | | | |
| **LBTB** | **Lobatse** | **45.59** | **124** | P | **P** | **07 22 28.6** | **+0.2** |
| | 1.8nm,0.6s,baz=217,slow=3.3,SNR=4.3 | | | | | | |
| **MATP** | **Matopo** | **46.41** | **117** | P | **P** | **07 22 35.0** | **-0.1** |
| | 5.5nm,1.0s,baz=285,slow=5.4,SNR=6.4 | | | | | | |
| **BOSA** | **Boshof** | **46.90** | **129** | P | **P** | **07 22 37.7** | **-1.0** |
| | 3.7nm,0.7s,baz=300,slow=6.9,SNR=6.2 | | | | | | |
| BOSA | | | | LR | LR | 07 39 34.9 | |
| | comp=Z,60nm,18.4s,baz=297,slow=33 | | | | | | |
| **SAML** | **Samuel** | **48.57** | **259** | *e*P | P | 07 22 43.7 | -8.0 |
| | 2.2nm,1.2s | | | | | | |
| **GERES** | **GERESS Array B** | **55.90** | **22** | P | **P** | **07 23 45.6** | **-0.2** |
| | 0.3nm,0.6s,baz=231,slow=5.8,SNR=2.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **57.41** | **8** | P | **P** | **07 23 55.6** | **-0.7** |
| | 1.6nm,0.8s,baz=194,slow=8.0,SNR=2.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **60.40** | **42** | P | **P** | **07 24 17.8** | **+0.2** |
| | 0.5nm,0.7s,baz=232,slow=4.1,SNR=4.4 | | | | | | |
| **KBZ** | **Khabaz** | **68.38** | **41** | P | **P** | **07 25 10.9** | **+1.3** |
| | 0.6nm,0.4s,baz=252,slow=6.4,SNR=2.1 | | | | | | |
| **FINES** | **FINESS Array B** | **70.10** | **20** | P | **P** | **07 25 20.4** | **+0.5** |
| | 7.7nm,1.2s,baz=241,slow=14,SNR=2.3 | | | | | | |
| **SNAA** | **Sanae** | **70.54** | **176** | P | **P** | **07 25 22.6** | **+0.1** |
| | 0.4nm,0.9s,baz=324,slow=3.4,SNR=4.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **80.33** | **38** | LR | LR | 08 04 13.0 | |
| | comp=Z,113nm,21.4s,baz=263,slow=38 | | | | | | |

*CSEM* ***25*** *07:24:56.6, 36.°50N×25.°02E, h95km, After ATH*

**ATH 25 07:24:56.6, 36.°50N×25.°03E, h95km±8km, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APE** | **Apeiranthos** | **0.70** | **35** | *e*P | Pn | 07 25 14.9 | +1.3 |
| APE | | | | *e*S | Sn | 07 25 26.6 | +0.3 |
| **APE** | **Apeiranthos** | **0.70** | **35** | *e*P | Pn | 07 25 14.9 | +1.3 |
| APE | | | | *e*S | Sn | 07 25 26.6 | +0.3 |
| **SERI** | **Serifos** | **0.79** | **327** | *e*P | Pn | 07 25 15.8 | +1.3 |
| SERI | | | | *e*S | Sn | 07 25 28.6 | +0.7 |
| **SERI** | **Serifos** | **0.79** | **327** | *e*P | Pn | 07 25 15.8 | +1.3 |
| SERI | | | | *e*S | Sn | 07 25 28.6 | +0.7 |
| **KYTH** | **Kithira** | **1.62** | **263** | *e*P | Pn | 07 25 24.9 | +0.7 |
| **KYTH** | **Kithira** | **1.62** | **263** | *e*P | Pn | 07 25 24.9 | +0.7 |
| **ZKR** | **Zakros** | **1.69** | **145** | *e*P | Pn | 07 25 26.2 | +1.2 |
| **ZKR** | **Zakros** | **1.69** | **145** | *e*P | Pn | 07 25 26.2 | +1.2 |
| **VLI** | **Veliai** | **1.70** | **278** | *e*P | Pn | 07 25 25.4 | +0.3 |
| **VLI** | **Veliai** | **1.70** | **278** | *e*P | Pn | 07 25 25.4 | +0.3 |
| **KRND** | **KRANIDI** | **1.75** | **301** | *e*P | Pn | 07 25 26.5 | +0.8 |
| **KRND** | **KRANIDI** | **1.75** | **301** | *e*P | Pn | 07 25 26.5 | +0.8 |
| **DID** | **Didima** | **1.75** | **306** | *e*P | Pn | 07 25 26.4 | +0.6 |
| **DID** | **Didima** | **1.75** | **306** | *e*P | Pn | 07 25 26.4 | +0.6 |
| **KARP** | **Karpathos** | **1.97** | **118** | *e*P | Pn | 07 25 29.5 | +0.8 |
| **KARP** | **Karpathos** | **1.97** | **118** | *e*P | Pn | 07 25 29.5 | +0.8 |
| **DYR** | **Agios Nikonas** | **2.19** | **278** | *e*P | Pn | 07 25 32.9 | +1.5 |
| **DYR** | **Agios Nikonas** | **2.19** | **278** | *e*P | Pn | 07 25 32.9 | +1.5 |

*ISCJB* ***25*** *07:28:13.0±0.2, 6.°16S±0.°03×113.°17E±0.°04, h586km±2km, mb4.2/39, Error ellipse: s-maj=6.7km s-min=4.6km az=147.1*
*BJI* ***25*** *07:28:13.8, 6.°10S×113.°20E, h578km, mb4.7/9, mB4.6/7*
*IDC* ***25*** *07:28:13.8±1.0, 6.°06S×113.°22E, h582km±11km, mb3.5/24, mb1 3.6/27, mb1mx3.5/44, mbtmp4.4/27, Error ellipse: s-maj=14.2km s-min=7.1km az=61.0*
*NEIC* ***25*** *07:28:13.9±0.4, 6.°14S×113.°14E, h580km±5km, mb4.5/12, Error ellipse: s-maj=11.6km s-min=8.1km az=60.0*
*AUST* ***25*** *07:28:14.3±0.0, 6.°25S×113.°23E, h574km, Error ellipse: s-maj=1.2km s-min=1.0km az=247.0*
*DJA* ***25*** *07:28:14.3±0.3, 6.°3S×114.°3E±.°, h578km±5km, M4.4/25, mb4.4/10, mB4.5/3, MLv4.4/25, Mw(mB)3.7/3*
*KLM* ***25*** *07:28:14.4, 6.°06S×113.°18E, h556km, mb4.7, ML4.1, MS6.0*

**ISC 25 07:28:13.9±0.4, 6.°15S±0.°05×113.°19E±0.°06, h584km±4km, h585km:pP-P, n144, σ1.23/154, mb4.1/38, 7C-2D, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BWJI** | **Bawean** | **0.61** | **299** | P | **P** | **07 29 21.3** | **-1.6** |
| **KMMI** | **Kalianget** | **1.18** | **139** | P | **P** | **07 29 24.3** | **+0.3** |
| **TBJI** | **Tambak Boyo** | **1.49** | **243** | P | **P** | **07 29 24.5** | **-0.4** |
| **ABJI** | **Asem Bagus** | **1.94** | **148** | P | **P** | **07 29 26.6** | **+0.1** |
| **NGJI** | **Ngawi** | **2.10** | **235** | P | **P** | **07 29 27.9** | **+0.7** |
| **UWJI** | **Ujung Watu** | **2.25** | **263** | P | **P** | **07 29 27.1** | **-0.7** |
| **PWJI** | **Pagerwojo** | **2.31** | **216** | P | **P** | **07 29 27.1** | **-1.0** |
| **JAGI** | **Jajag, Banyuwa** | **2.50** | **158** | P | **P** | **07 29 27.4** | **-1.6** |
| | baz=2.4,SNR=85 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **2.50** | **158** | P | **P** | **07 29 27.4** | **-1.6** |
| **JAGI** | **Jajag, Banyuwa** | **2.50** | **158** | *e*P | **P** | **07 29 27.4** | **-1.6** |
| JAGI | | | | *e*S | **S** | **07 30 26.6** | **-3.6** |
| **SRBI** | **Singaraja** | **2.78** | **134** | P | **P** | **07 29 30.1** | **-0.4** |
| **WOJI** | **Wonogiri, Jawa** | **2.81** | **233** | P | **P** | **07 29 30.2** | **-0.5** |
| **PCJI** | **Pacitan** | **2.85** | **224** | P | **P** | **07 29 29.5** | **-1.4** |
| **SMRI** | **Semarang** | **2.88** | **252** | P | **P** | **07 29 30.9** | **-0.1** |
| | baz=2.9,SNR=17 | | | | | | |
| **SMRI** | **Semarang** | **2.88** | **252** | P | **P** | **07 29 30.8** | **-0.3** |
| **SMRI** | **Semarang** | **2.88** | **252** | *e*P | **P** | **07 29 30.9** | **-0.1** |
| **BBKI** | **Banjar Baru** | **3.13** | **32** | P | **P** | **07 29 31.9** | **-0.7** |
| **UGM** | **Wanagama** | **3.18** | **236** | P | **P** | **07 29 32.3** | **-0.6** |
| | baz=3.2,SNR=12 | | | | | | |
| **UGM** | **Wanagama** | **3.18** | **236** | P | **P** | **07 29 32.3** | **-0.6** |
| **UGM** | **Wanagama** | **3.18** | **236** | *e*P | **P** | **07 29 32.0** | **-0.9** |
| UGM | | | | *e*S | **S** | **07 30 33.9** | **-3.2** |
| **IGBI** | **Denpasar** | **3.28** | **144** | P | **P** | **07 29 32.2** | **-1.2** |
| **KBKI** | **Kotabaru** | **4.10** | **46** | P | **P** | **07 29 38.9** | **-0.1** |
| **TWSI** | **Taliwang, Sumb** | **4.47** | **125** | P | **P** | **07 29 39.7** | **-2.0** |
| **CMJI** | **Cimerak** | **4.98** | **251** | P | **P** | **07 29 43.5** | **-2.2** |
| **CISI** | **Cisompet, Garu** | **5.52** | **255** | P | **P** | **07 29 48.7** | **-1.5** |
| | baz=5.5,SNR=7.2 | | | | | | |
| **CISI** | **Cisompet, Garu** | **5.52** | **255** | *e*P | **P** | **07 29 48.6** | **-1.6** |
| CISI | | | | *e*S | **S** | **07 31 07.7** | **-1.1** |
| **LEM** | **Lembang** | **5.58** | **263** | P | **P** | **07 29 50.4** | **-0.4** |
| | 5.6nm,0.3s,baz=14,slow=7.4,SNR=6.2 | | | | | | |
| LEM | | | | S | S | 07 31 03.1 | -6.8 |
| | 5.5nm,0.3s,baz=9.5,slow=17,SNR=2.0 | | | | | | |
| **LEM** | **Lembang** | **5.58** | **263** | P | **P** | **07 29 51.1** | **+0.3** |
| **CNJI** | **Cibinong** | **6.13** | **259** | P | **P** | **07 29 53.4** | **-2.0** |
| | 112nm,1.1s,1.2nm | | | | | | |
| **STKI** | **Sintang** | **6.41** | **344** | P | **P** | **07 29 58.5** | **+0.6** |
| | 224nm,0.7s,1.1nm | | | | | | |
| **KAPI** | **Kappang** | **6.62** | **81** | P | **P** | **07 29 59.4** | **-0.4** |
| | 5.3nm,0.3s,baz=261,slow=3.2,SNR=11 | | | | | | |
| **KAPI** | **Kappang** | **6.62** | **81** | *e*P | **P** | **07 29 59.6** | **-0.2** |
| **BKSI** | **Bulukumba** | **6.95** | **84** | P | **P** | **07 30 02.8** | **0.0** |
| | 22nm,0.9s,331nm | | | | | | |
| **KSM** | **Kuching** | **8.10** | **339** | P | **P** | **07 30 14.3** | **+0.5** |
| | baz=8.3,SNR=32 | | | | | | |
| **KSM** | **Kuching** | **8.10** | **339** | *e*P | **P** | **07 30 14.3** | **+0.5** |
| **SBUM** | **Sibu** | **8.60** | **353** | *e*P | **P** | **07 30 19.4** | **+0.8** |
| **BATI** | **Baumata** | **11.12** | **112** | S | **S** | **07 32 43.3** | **-3.6** |
| | 12nm,0.3s,baz=279,slow=23,SNR=6.6 | | | | | | |
| **TSM** | **Tawau** | **11.38** | **24** | ⇑P | **P** | **07 30 47.4** | **+1.1** |
| **MYKOM** | **Kota Tinggi** | **12.21** | **310** | ⇑P | **P** | **07 30 55.7** | **+0.8** |
| **SDKM** | **Sandakan** | **12.38** | **19** | ⇑P | **P** | **07 30 57.0** | **+0.4** |
| **MYLDM** | **Lahad Datu** | **12.44** | **25** | *e*P | **P** | **07 30 59.3** | **+2.1** |
| **KKM** | **Kota Kinabalu** | **12.48** | **14** | P | **P** | **07 30 56.6** | **-1.1** |
| | baz=13,SNR=9.0 | | | | | | |
| **KKM** | **Kota Kinabalu** | **12.48** | **14** | ⇓P | **P** | **07 30 56.5** | **-1.2** |
| **KKM** | **Kota Kinabalu** | **12.48** | **14** | *e*P | **P** | **07 30 56.3** | **-1.4** |
| **KGM** | **Kluang** | **12.77** | **309** | ⇑P | **P** | **07 31 01.2** | **+0.7** |
| **KDM** | **Kudat** | **13.48** | **16** | ⇑P | **P** | **07 31 08.5** | **+0.7** |
| **FRIM** | **Kepong** | **14.84** | **309** | ⇓P | **P** | **07 31 22.9** | **+1.6** |
| **KTGM** | **Kuala Trenggan** | **15.19** | **318** | ⇑P | **P** | **07 31 26.1** | **+1.6** |
| **IPM** | **Ipoh** | **16.09** | **311** | ⇑P | **P** | **07 31 34.4** | **+1.3** |
| **IPM** | **Ipoh** | **16.09** | **311** | *e*P | **P** | **07 31 34.1** | **+1.0** |
| | 15nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **16.21** | **158** | *e*P | **P** | **07 31 34.2** | **+0.3** |
| | 24nm,0.8s | | | | | | |
| **GIRL** | **Giralia** | **16.43** | **177** | P | **P** | **07 31 37.4** | **+1.5** |
| | baz=16,SNR=6.8 | | | | | | |
| **PSI** | **Prapat** | **16.79** | **302** | P | **P** | **07 31 39.4** | **-0.2** |
| | 4.8nm,0.3s,baz=129,slow=2.1,SNR=11 | | | | | | |
| **PSI** | **Prapat** | **16.79** | **302** | P | P | **07 31 39.9** | **+0.3** |
| | baz=17,SNR=7.7 | | | | | | |
| **PSI** | **Prapat** | **16.79** | **302** | *e*P | **P** | **07 31 40.1** | **+0.6** |
| | 14nm,0.4s | | | | | | |
| **KNRA** | **Kununurra** | **17.97** | **123** | P | **P** | **07 31 50.3** | **+0.3** |
| | baz=18,SNR=28 | | | | | | |
| **MTN** | **Manton Dam** | **18.89** | **112** | P | **P** | **07 31 59.9** | **+1.4** |
| | baz=19,SNR=7.5 | | | | | | |
| **MEEK** | **Meekatharra** | **21.02** | **166** | P | **P** | **07 32 18.2** | **+0.6** |
| | baz=21,SNR=19 | | | | | | |
| **MORW** | **Morawa** | **22.95** | **174** | P | **P** | **07 32 35.9** | **+1.1** |
| | baz=23,SNR=7.3 | | | | | | |
| **WRKA** | **Warakurna** | **23.71** | **144** | P | **P** | **07 32 42.3** | **+0.7** |
| | baz=24,SNR=8.3 | | | | | | |
| **CHAI** | **Chaiyaphum** | **24.56** | **333** | P | **P** | **07 32 50.6** | **+1.4** |
| | 4.0nm,0.8s | | | | | | |
| **BLDU** | **Ballidu** | **24.56** | **173** | P | **P** | **07 32 49.5** | **+0.5** |
| | baz=25,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **24.70** | **126** | P | **P** | **07 32 51.0** | **+0.5** |
| | 0.6nm,0.3s,baz=272,slow=6.7,SNR=43 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 36 06.5** | **-0.5** |
| | 1.9nm,0.7s,baz=317,slow=1.8,SNR=8.7 | | | | | | |
| WRA | | | | S | **S** | **07 36 30.1** | **-2.2** |
| | 1.6nm,0.8s,baz=294,slow=17,SNR=6.6 | | | | | | |
| WRA | | | | ScP | **ScP** | **07 38 51.2** | **-0.2** |
| | 0.8nm,0.4s,baz=320,slow=2.3,SNR=8.5 | | | | | | |
| **WRAB** | **Tennant Creek** | **24.70** | **126** | *e*P | **P** | **07 32 51.2** | **+0.7** |
| | 1.2nm,0.4s | | | | | | |
| **SKNT** | **Sakolnakorn** | **24.71** | **339** | P | **P** | **07 32 51.1** | **+0.6** |
| | 18nm,0.9s | | | | | | |
| **QIZ** | **Qiongzhong** | **25.24** | **353** | P | **P** | **07 32 56.5** | **+1.4** |
| QIZ | | | | S | **S** | **07 36 43.5** | **+2.9** |
| QIZ | | | | PMZ | | | |
| | 10.0nm,1.1s | | | | | | |
| **UTHA** | **Uthaitani** | **25.51** | **328** | P | **P** | **07 32 54.8** | **-2.7** |
| | 4.3nm,0.7s,56nm | | | | | | |
| **KLBR** | **Kellerberrin** | **25.67** | **171** | P | **P** | **07 32 59.5** | **+0.7** |
| | baz=26,SNR=13 | | | | | | |
| **KMBL** | **Kambalda** | **26.38** | **163** | P | **P** | **07 33 05.6** | **+0.6** |
| | baz=26,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **26.46** | **133** | P | **P** | **07 33 06.5** | **+0.6** |
| | 1.5nm,0.3s,baz=314,slow=8.5,SNR=44 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 36 11.6** | **+0.4** |
| | 2.3nm,0.4s,baz=332,slow=1.9,SNR=18 | | | | | | |
| ASAR | | | | S | **S** | **07 36 58.2** | **-1.6** |
| | 2.2nm,0.5s,baz=312,slow=15,SNR=11 | | | | | | |
| ASAR | | | | ScP | **ScP** | **07 38 57.0** | **+0.5** |
| | 0.4nm,0.4s,baz=312,slow=2.9,SNR=4.8 | | | | | | |
| **AS01** | **Alice Springs** | **26.50** | **133** | *e*P | **P** | **07 33 06.7** | **+0.5** |
| AS01 | | | | *e*PcP | **PcP** | **07 36 11.7** | **+0.4** |
| **UTTA** | **Uttaradit** | **26.82** | **332** | P | **P** | **07 33 10.4** | **+1.3** |
| **NWAO** | **Narrogin (SRO)** | **26.91** | **172** | P | **P** | **07 33 09.5** | **-0.1** |
| | 6.6nm,0.5s,baz=314,slow=0.0,SNR=11 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **26.91** | **172** | P | **P** | **07 33 10.7** | **+1.0** |
| | baz=27.9,SNR=7.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.20** | **330** | P | **P** | **07 33 21.0** | **-0.1** |
| | 1.1nm,0.3s,baz=160,slow=8.3,SNR=11 | | | | | | |
| CMAR | | | | PcP | **PcP** | **07 36 16.4** | **+0.9** |
| | 0.7nm,0.5s,baz=185,slow=2.2,SNR=5.6 | | | | | | |
| **RKGY** | **Rocky Gully** | **28.54** | **173** | P | **P** | **07 33 25.5** | **+1.7** |
| | baz=29,SNR=12 | | | | | | |
| **BBOO** | **Buckleboo** | **34.01** | **144** | P | **P** | **07 34 11.0** | **+0.5** |
| | baz=34,SNR=22 | | | | | | |
| **HTT** | **Hallett** | **36.16** | **142** | P | P | 07 34 23.8 | -4.6 |
| | baz=36,SNR=4.0 | | | | | | |
| **CD2** | **Chengdu** | **37.94** | **347** | P | **P** | **07 34 43.8** | **+0.9** |
| **NJ2** | **Nanjing** | **38.37** | **8** | *e*P | **P** | **07 34 47.0** | **+0.7** |
| NJ2 | | | | PMZ | | | |
| | 40nm,0.5s | | | | | | |
| **HYB** | **Hyderabad** | **41.46** | **305** | *e*P | **P** | **07 35 09.0** | **-2.3** |
| **LZH** | **Lanzhou** | **42.92** | **349** | *e*P | P | 07 35 29.0 | +6.5 |
| LZH | | | | pP | pP | 07 37 10.0 | +4.9 |
| LZH | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **BJI** | **Beijing** | **46.04** | **3** | P | P | 07 35 57.3 | +11 |
| BJI | | | | pmax | pmax | | |
| | comp=Z,111nm,1.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **46.79** | **358** | *e*P | P | 07 35 57.0 | +5.0 |
| HHC | | | | pP | pP | 07 37 36.3 | -1.0 |
| HHC | | | | S | S | 07 42 09.0 | +8.8 |
| HHC | | | | PMZ | | | |
| | comp=Z,28nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,100nm,7.4s | | | | | | |
| **GTA** | **Gaotai** | **46.99** | **346** | *e*P | P | 07 36 01.5 | +8.0 |
| GTA | | | | pP | PP | 07 37 46.0 | -6.2 |
| GTA | | | | sP | sP | 07 38 46.5 | +3.0 |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **48.51** | **27** | P | **P** | **07 36 03.7** | **-1.0** |
| | comp=Z,1.5nm,0.7s,baz=208,slow=9.6,SNR=5.3 | | | | | | |
| **SONM** | **Songino Array** | **54.09** | **354** | P | **P** | **07 36 45.0** | **+0.1** |
| | comp=Z,1.8nm,0.4s,baz=172,slow=8.6,SNR=18 | | | | | | |
| SONM | | | | PcP | **PcP** | **07 37 39.9** | **-0.5** |
| | comp=Z,0.9nm,0.4s,baz=182,slow=4.1,SNR=7.9 | | | | | | |
| **WMQ** | **Urumqi** | **54.82** | **338** | *e*P | P | **07 36 49.0** | **-1.0** |
| **KSH** | **Kashi** | **56.97** | **326** | P | **P** | **07 37 04.5** | **-0.5** |
| KSH | | | | *e*pP | **pP** | **07 38 59.5** | **+2.7** |
| KSH | | | | *e*PP | **PP** | **07 39 23.0** | **+2.0** |
| KSH | | | | *e*sP | **sP** | **07 40 02.8** | **+3.4** |
| KSH | | | | S | **S** | **07 44 12.0** | **-3.8** |
| KSH | | | | PMZ | | | |
| | comp=Z,95nm,4.6s | | | | | | |
| **MK01** | **Makanchi Array** | **59.39** | **336** | *e*P | **P** | **07 37 20.8** | **-0.2** |
| **MKAR** | **Makanchi Array** | **59.41** | **336** | P | **P** | **07 37 21.0** | **-0.2** |
| | comp=Z,1.9nm,0.4s,baz=149,slow=6.6,SNR=27 | | | | | | |
| MKAR | | | | PcP | **PcP** | **07 37 60.0** | **-1.4** |
| | comp=Z,1.0nm,0.6s,baz=146,slow=6.4,SNR=4.2 | | | | | | |
| MKAR | | | | pP | **pP** | **07 39 16.1** | **+1.6** |
| | comp=Z,0.5nm,0.7s,baz=151,slow=8.5,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.41** | **336** | *e*P | **P** | **07 37 21.1** | **0.0** |
| **AAK** | **Ala-Archa** | **59.94** | **328** | P | **P** | **07 37 24.9** | **0.0** |
| | comp=Z,0.9nm,0.5s,baz=134,slow=9.0,SNR=5.8 | | | | | | |
| **EKS2** | **Erkin-Say** | **60.34** | **327** | *e*P | **P** | **07 37 27.9** | **+0.4** |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **THZ** | **Tophouse** | **63.53** | **134** | *e*P | **P** | **07 37 49.4** | **+1.2** |
| | comp=Z,148nm,2.4s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **64.45** | **342** | *e*P | **P** | **07 37 52.6** | **-1.0** |
| **ZALV** | **Zalesovo Beam** | **64.45** | **342** | P | **P** | **07 37 52.0** | **-1.6** |
| | comp=Z,1.2nm,0.3s,baz=143,slow=3.7,SNR=7.6 | | | | | | |
| ZALV | | | | pP | **pP** | **07 39 49.9** | **+0.3** |
| | comp=Z,1.9nm,0.7s,baz=154,slow=4.3,SNR=5.3 | | | | | | |
| **BKZ** | **Black Stump Fm** | **65.53** | **130** | *e*P | **P** | **07 38 01.3** | **+0.4** |
| | comp=Z,18nm,1.2s | | | | | | |
| **IEMG** | **Emamgholi** | **66.74** | **315** | *e*P | **P** | **07 38 08.7** | **+0.1** |
| **ISFR** | **Sfrayin** | **67.03** | **314** | *e*P | **P** | **07 38 10.7** | **+0.3** |
| **GEYT** | **Alibeck** | **67.36** | **315** | P | **P** | **07 38 10.8** | **-1.2** |
| | comp=Z,6.0nm,0.3s,baz=107,slow=5.0,SNR=8.0 | | | | | | |
| **ISHV** | **Shirvan** | **67.46** | **315** | *e*P | **P** | **07 38 13.5** | **+0.6** |
| **BVAR** | **Borovoye Array** | **69.15** | **334** | P | **P** | **07 38 22.2** | **-0.3** |
| | comp=Z,3.5nm,0.6s,baz=140,slow=8.4,SNR=19 | | | | | | |
| **PETK** | **Petropavlovsk-** | **69.96** | **27** | P | **P** | **07 38 27.5** | **+0.1** |
| | comp=Z,2.1nm,0.4s,baz=165,slow=3.5,SNR=5.3 | | | | | | |
| **MAW** | **Mawson** | **70.03** | **198** | P | **P** | **07 38 28.6** | **+1.1** |
| | comp=Z,2.8nm,0.5s,baz=69,slow=4.9,SNR=16 | | | | | | |
| **MAW** | **Mawson** | **70.03** | **198** | P | **P** | **07 38 28.7** | **+1.3** |
| | baz=70,SNR=9.2 | | | | | | |
| **MAW** | **Mawson** | **70.03** | **198** | *e*P | **P** | **07 38 28.8** | **+1.3** |
| | comp=Z,0.9nm,0.8s | | | | | | |
| **ABKAR** | **Akbulak array** | **71.98** | **326** | *e*P | **P** | **07 38 38.9** | **-0.3** |
| | comp=Z,6.3nm,0.5s | | | | | | |
| ABKAR | | | | *e*pP | **pP** | **07 40 38.5** | **-0.4** |
| **RAYN** | **Ar Rayn** | **72.29** | **297** | *e*P | **P** | **07 38 40.6** | **-1.0** |
| | comp=Z,4.6nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **73.66** | **327** | P | **P** | **07 38 48.6** | **-0.2** |
| | comp=Z,2.3nm,0.5s,baz=113,slow=6.6,SNR=14 | | | | | | |
| **VNDA** | **Vanda** | **75.72** | **170** | P | **P** | **07 39 00.8** | **+0.9** |
| | comp=Z,1.7nm,0.4s,baz=317,slow=6.5,SNR=45 | | | | | | |
| **VNDA** | **Vanda** | **75.72** | **170** | *e*P | **P** | **07 39 00.8** | **+0.9** |
| | comp=Z,13nm,1.6s | | | | | | |
| **KMBO** | **Kilima Mbogo** | **75.90** | **270** | P | **P** | **07 39 01.8** | **-0.7** |
| | comp=Z,1.3nm,0.4s,baz=53,slow=18,SNR=4.7 | | | | | | |
| **SBA** | **Scott Base** | **76.76** | **170** | *e*P | **P** | **07 39 07.6** | **+2.0** |
| | comp=Z,64nm,2.5s | | | | | | |
| **KBZ** | **Khabaz** | **80.23** | **316** | P | **P** | **07 39 24.0** | **-0.6** |
| | comp=Z,1.5nm,0.6s,baz=81,slow=5.1,SNR=4.7 | | | | | | |
| **ASF** | **Jabal al Asfar** | **81.76** | **304** | P | **P** | **07 39 31.9** | **-1.0** |
| | comp=Z,2.3nm,0.6s,baz=68,slow=6.0,SNR=5.4 | | | | | | |
| **EIL** | **Elat** | **82.88** | **301** | P | **P** | **07 39 38.8** | **+0.2** |
| | comp=Z,4.0nm,0.7s,baz=334,slow=12,SNR=3.1 | | | | | | |
| **LSZ** | **Lusaka** | **83.60** | **255** | *e*P | **P** | **07 39 43.0** | **+0.4** |
| | comp=Z,8.8nm,0.6s | | | | | | |
| **BOSA** | **Boshof** | **85.29** | **242** | P | **P** | **07 39 50.5** | **0.0** |
| | comp=Z,4.0nm,0.7s,baz=140,slow=2.3,SNR=4.9 | | | | | | |
| **BOSA** | **Boshof** | **85.29** | **242** | P | **P** | **07 39 51.1** | **+0.5** |
| | baz=85,SNR=3.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **85.91** | **311** | P | **P** | **07 39 52.6** | **-0.7** |
| | comp=Z,9nm,0.8s,baz=126,slow=6.3,SNR=16 | | | | | | |
| **BR231** | **Keskin MP Arra** | **86.59** | **310** | *e*P | P | 07 39 53.2 | -3.2 |
| **AKASG** | **Malin Array Be** | **90.90** | **321** | P | **P** | **07 40 14.2** | **-1.8** |
| | comp=Z,2.0nm,0.7s,baz=83,slow=3.9,SNR=7.3 | | | | | | |
| **SNAA** | **Sanae** | **92.13** | **197** | P | **P** | **07 40 22.1** | **+0.6** |
| **PUH** | **Pauahi** | **93.51** | **71** | *e*P | P | 07 40 33.2 | +4.3 |
| | comp=Z,4μm,1.3s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **93.78** | **196** | P | **P** | **07 40 30.1** | **+1.2** |
| | baz=92,slow=3.2 | | | | | | |
| **FINES** | **FINESS Array B** | **93.97** | **331** | P | **P** | **07 40 28.9** | **-1.0** |
| | comp=Z,3.6nm,0.9s,baz=134,slow=8.2,SNR=8.2 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **94.23** | **196** | P | **P** | **07 40 31.6** | **+0.6** |
| **ARCES** | **ARCESS Array B** | **94.90** | **339** | P | **P** | **07 40 32.1** | **-1.9** |
| | comp=Z,1.6nm,0.8s,baz=99,slow=7.5,SNR=4.7 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **97.38** | **348** | P | Pdif | 07 40 43.3 | -1.7 |
| | comp=Z,14nm,1.0s,baz=98,slow=6.0,SNR=6.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **112.27** | **282** | PKiKP | **PKiKP** | **07 45 44.4** | **-0.7** |
| | comp=Z,0.7nm,0.5s,baz=79,slow=1.8,SNR=12 | | | | | | |
| **YKA** | **Yellowknife Ar** | **113.85** | **22** | PKiKP | **PKiKP** | **07 45 46.4** | **-0.3** |
| | comp=Z,3.0nm,0.3s,baz=330,slow=0.5,SNR=7.2 | | | | | | |
| **DBIC** | **Dimbokro** | **118.47** | **274** | PKP | **PKPdf** | **07 45 56.0** | **-1.0** |
| | comp=Z,2.9nm,0.6s,baz=80,slow=2.3,SNR=5.2 | | | | | | |
| **SCHQ** | **Schefferville** | **131.46** | **0** | PKP | **PKPdf** | **07 46 21.4** | **+0.7** |
| | comp=Z,3.9nm,0.8s,baz=0.0,slow=7.1,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LAST | Lasithi | 1.62 | 78 | ePn | Pb | 07 41 14.5 | +1.1 | | |
| NPS | Neapolis | 1.75 | 75 | ePN | Pb | 07 41 15.2 | -0.3 | | |
| NPS | Neapolis | 1.75 | 75 | ePn | Pb | 07 41 15.2 | -0.3 | | |
| VLI | Veliai | 1.95 | 345 | ePB | Pn | 07 41 16.8 | +0.7 | | |
| VLI | Veliai | 1.95 | 345 | P | Pb | 07 41 17.6 | -1.4 | | |
| VLI | | | | S | Sb | 07 41 43.1 | +0.2 | | |
| VLI | Veliai | 1.95 | 345 | P | Pb | 07 41 17.6 | -1.4 | | |
| VLI | | | | S | Sb | 07 41 43.1 | +0.2 | | |
| VLI | Veliai | 1.95 | 345 | ePb | Pn | 07 41 16.8 | +0.7 | | |
| VLI | Veliai | 1.95 | 345 | P | Pb | 07 41 17.6 | -1.4 | | |
| VLI | | | | S | Sb | 07 41 43.1 | +0.2 | | |
| MHLO | Agia Marina, M | 1.99 | 20 | ePN | Pb | 07 41 18.1 | -1.4 | | |
| MHLO | Agia Marina, M | 1.99 | 20 | P | Pn | 07 41 17.6 | +1.1 | | |
| MHLO | Agia Marina, M | 1.99 | 20 | P | Pn | 07 41 17.6 | +1.1 | | |
| MHLO | Agia Marina, M | 1.99 | 20 | ePn | Pb | 07 41 18.1 | -1.4 | | |
| THR6 | Thira Island, | 2.15 | 44 | P | Pb | 07 41 20.5 | -1.8 | | |
| THR6 | Thira Island, | 2.15 | 44 | P | Pb | 07 41 20.5 | -1.8 | | |
| THR6 | Thira Island, | 2.15 | 44 | P | Pb | 07 41 20.5 | -1.8 | | |
| THR5 | Thira Island, | 2.16 | 42 | P | Pn | 07 41 20.6 | +1.7 | | |
| THR5 | Thira Island, | 2.16 | 42 | P | Pn | 07 41 20.6 | +1.7 | | |
| DYR | Agios Nikonas | 2.17 | 333 | ePN | Pb | 07 41 21.4 | -1.3 | | |
| DYR | Agios Nikonas | 2.17 | 333 | ePn | Pb | 07 41 21.4 | -1.3 | | |
| THR3 | Thira Island, | 2.19 | 43 | P | Pn | 07 41 20.7 | +1.5 | | |
| THR3 | Thira Island, | 2.19 | 43 | P | Pn | 07 41 20.7 | +1.5 | | |
| THR3 | Thira Island, | 2.19 | 43 | P | Pn | 07 41 20.7 | +1.5 | | |
| SANT | Santorini | 2.19 | 45 | ePB | Pb | 07 41 21.8 | -1.3 | | |
| SANT | Santorini | 2.19 | 45 | ePn | Pn | 07 41 21.2 | +1.8 | | |
| SANT | | | | eSn | Sn | 07 41 45.3 | -0.6 | | |
| SANT | Santorini | 2.19 | 45 | ePn | Pn | 07 41 21.2 | +1.8 | | |
| SANT | Santorini | 2.19 | 45 | ePb | Pb | 07 41 21.8 | -1.3 | | |
| SANT | | | | eSn | Sn | 07 41 45.3 | -0.6 | | |
| THR7 | Fira-Santorini | 2.21 | 43 | P | Pb | 07 41 21.9 | -1.5 | | |
| THR7 | Fira-Santorini | 2.21 | 43 | P | Pb | 07 41 21.9 | -1.5 | | |
| ZKR | Zakros | 2.21 | 82 | ePB | Pb | 07 41 22.6 | -0.8 | | |
| ZKR | Zakros | 2.21 | 82 | ePb | Pb | 07 41 22.6 | -0.8 | | |
| SERI | Serifos | 2.45 | 18 | ePN | Pn | 07 41 24.1 | +1.2 | | |
| SERI | Serifos | 2.45 | 18 | ePn | Pn | 07 41 24.1 | +1.2 | | |
| PYL | PYLOS | 2.53 | 325 | ePN | Pn | 07 41 25.4 | +1.4 | | |
| PYL | PYLOS | 2.53 | 325 | P | Pn | 07 41 25.5 | +1.4 | | |
| PYL | | | | S | Sb | 07 41 58.2 | -1.4 | | |
| PYL | PYLOS | 2.53 | 325 | P | Pn | 07 41 25.5 | +1.4 | | |
| PYL | | | | S | Sb | 07 41 58.2 | -1.4 | | |
| PYL | PYLOS | 2.53 | 325 | ePn | Pn | 07 41 25.4 | +1.4 | | |
| PYL | | | | S | Sb | 07 41 58.2 | -1.4 | | |
| KRND | KRANIDI | 2.57 | 353 | ePB | Pn | 07 41 26.6 | +2.0 | | |
| KRND | KRANIDI | 2.57 | 353 | P | Pn | 07 41 26.6 | +2.0 | | |
| KRND | KRANIDI | 2.57 | 353 | P | Pn | 07 41 26.6 | +2.0 | | |
| DID | Didima | 2.69 | 355 | ePN | Pn | 07 41 27.2 | +1.0 | | |
| DID | Didima | 2.69 | 355 | P | Pn | 07 41 27.1 | +0.9 | | |
| DID | | | | S | Sb | 07 42 00.7 | -3.4 | | |
| DID | Didima | 2.69 | 355 | P | Pn | 07 41 27.1 | +0.9 | | |
| DID | Didima | 2.69 | 355 | ePn | Pn | 07 41 27.2 | +1.0 | | |
| DID | | | | S | Sb | 07 42 00.7 | -3.4 | | |
| VLX | Vlachokerasia | 2.71 | 340 | P | Pn | 07 41 28.8 | +2.2 | | |
| VLX | Vlachokerasia | 2.71 | 340 | P | Pn | 07 41 28.8 | +2.2 | | |
| VLX | Vlachokerasia | 2.71 | 340 | P | Pn | 07 41 28.8 | +2.2 | | |
| APE | Apeiranthos | 2.76 | 35 | eP | Pn | 07 41 28.1 | +0.9 | | |
| APE | Apeiranthos | 2.76 | 35 | c/P | Pn | 07 41 28.2 | +1.0 | | |
| APE | Apeiranthos | 2.76 | 35 | ⇑i/P | Pn | 07 41 28.1 | +0.9 | | |
| APE | | | | S | Sn | 07 42 02.0 | +2.1 | | |
| APE | Apeiranthos | 2.76 | 35 | ePN | Pn | 07 41 28.1 | +0.9 | | |
| APE | Apeiranthos | 2.76 | 35 | P | Pn | 07 41 27.8 | +0.6 | | |
| APE | | | | S | Sb | 07 42 03.1 | -3.0 | | |
| APE | Apeiranthos | 2.76 | 35 | P | Pn | 07 41 27.8 | +0.6 | | |
| APE | Apeiranthos | 2.76 | 35 | P | Pn | 07 41 27.8 | +0.6 | | |
| APE | Apeiranthos | 2.76 | 35 | ePn | Pn | 07 41 28.1 | +0.9 | | |
| APE | | | | S | Sb | 07 42 03.1 | -3.0 | | |
| LTBQ | Tobruq | 2.78 | 173 | /P | Pn | 07 41 27.0 | -0.4 | | |
| | SNR=24 | | | | | | | | |
| LTBQ | | | | eS | Sn | 07 42 00.3 | 0.0 | | |
| | SNR=24 | | | | | | | | |
| NAIG | Nisos Aigina | 2.93 | 359 | ePN | Pn | 07 41 31.2 | +1.7 | | |
| NAIG | Nisos Aigina | 2.93 | 359 | ePn | Pn | 07 41 31.2 | +1.7 | | |
| VLY | Voula,Athens | 3.03 | 4 | ePN | Pn | 07 41 32.7 | +1.9 | | |
| VLY | Voula,Athens | 3.03 | 4 | P | Pn | 07 41 31.8 | +1.0 | | |
| VLY | Voula,Athens | 3.03 | 4 | P | Pn | 07 41 31.8 | +1.0 | | |
| VLY | Voula,Athens | 3.03 | 4 | P | Pn | 07 41 31.8 | +1.0 | | |
| VLY | Voula,Athens | 3.03 | 4 | ePn | Pn | 07 41 32.7 | +1.9 | | |
| KARP | Karpathos | 3.05 | 75 | ePN | Pn | 07 41 33.2 | +2.1 | | |
| KARP | Karpathos | 3.05 | 75 | P | Pn | 07 41 33.2 | +2.1 | | |
| KARP | Karpathos | 3.05 | 75 | P | Pn | 07 41 33.2 | +2.1 | | |
| KARP | Karpathos | 3.05 | 75 | P | Pn | 07 41 33.2 | +2.1 | | |
| AMT | Artemida-Makis | 3.08 | 332 | P | Pn | 07 41 34.1 | +2.5 | | |
| AMT | Artemida-Makis | 3.08 | 332 | P | Pn | 07 41 34.1 | +2.5 | | |
| ATH | Athens Observa | 3.14 | 2 | ePN | Pn | 07 41 34.9 | +2.5 | | |
| ATH | Athens Observa | 3.14 | 2 | ePn | Pn | 07 41 34.9 | +2.5 | | |
| LTK | Loutraki | 3.23 | 352 | ePN | Pn | 07 41 35.5 | +1.9 | | |
| LTK | Loutraki | 3.23 | 352 | ePn | Pn | 07 41 35.5 | +1.9 | | |
| PTL | Penteli | 3.23 | 4 | ePN | Pn | 07 41 35.6 | +2.0 | | |
| PTL | Penteli | 3.23 | 4 | ePn | Pn | 07 41 35.6 | +2.0 | | |
| GUR | Goura | 3.25 | 343 | ePN | Pn | 07 41 36.6 | +2.6 | | |
| GUR | Goura | 3.25 | 343 | ePn | Pn | 07 41 36.6 | +2.6 | | |
| VILL | Villia | 3.34 | 357 | ePn | Pn | 07 41 36.9 | +1.8 | | |
| VIL2 | Platees | 3.39 | 356 | ePN | Pn | 07 41 36.9 | +1.1 | | |
| KLV | Kalavryta, Ach | 3.40 | 341 | ePN | Pn | 07 41 38.4 | +2.3 | | |
| KLV | Kalavryta, Ach | 3.40 | 341 | P | Pn | 07 41 37.9 | +1.8 | | |
| KLV | Kalavryta, Ach | 3.40 | 341 | P | Pn | 07 41 37.9 | +1.8 | | |
| KLV | Kalavryta, Ach | 3.40 | 341 | P | Pn | 07 41 37.9 | +1.8 | | |
| KLV | Kalavryta, Ach | 3.40 | 341 | ePn | Pn | 07 41 38.4 | +2.3 | | |
| NISR | Nisiros | 3.42 | 58 | ePN | Pn | 07 41 38.6 | +2.4 | | |
| NISR | Nisiros | 3.42 | 58 | ePn | Pn | 07 41 38.6 | +2.4 | | |
| NIS1 | Nisyros Isl. | 3.45 | 58 | eP | Pn | 07 41 38.0 | +1.4 | | |
| NIS1 | Nisyros Isl. | 3.45 | 58 | ePN | Pn | 07 41 39.1 | +2.5 | | |
| NIS1 | Nisyros Isl. | 3.45 | 58 | P | Pn | 07 41 38.8 | +2.2 | | |
| NIS1 | Nisyros Isl. | 3.45 | 58 | P | Pn | 07 41 38.8 | +2.2 | | |
| NIS1 | Nisyros Isl. | 3.45 | 58 | eP | Pn | 07 41 38.0 | +1.4 | | |
| NIS1 | Nisyros Isl. | 3.45 | 58 | ePn | Pn | 07 41 39.1 | +2.5 | | |
| EREA | Eretria | 3.60 | 5 | ePN | Pn | 07 41 40.5 | +1.8 | | |
| EREA | Eretria | 3.60 | 5 | P | Pn | 07 41 40.1 | +1.4 | | |
| EREA | Eretria | 3.60 | 5 | P | Pn | 07 41 40.1 | +1.4 | | |
| EREA | Eretria | 3.60 | 5 | ePn | Pn | 07 41 40.5 | +1.8 | | |
| SLUM | | 3.61 | 157 | P | Pn | 07 41 38.6 | -0.2 | | |
| | baz=161 | | | | | | | | |
| SLUM | | 3.61 | 157 | P | Pn | 07 41 38.6 | -0.2 | | |
| LAKA | Lakka | 3.63 | 340 | ePN | Pn | 07 41 41.1 | +1.9 | | |
| LAKA | Lakka | 3.63 | 340 | ePn | Pn | 07 41 41.1 | +1.9 | | |
| RLS | Riolos of Patr | 3.64 | 333 | ePN | Pn | 07 41 41.3 | +2.1 | | |
| RLS | Riolos of Patr | 3.64 | 333 | ePn | Pn | 07 41 41.3 | +2.1 | | |
| DESF | Desfina | 3.67 | 347 | ePN | Pn | 07 41 41.7 | +1.9 | | |
| DESF | Desfina | 3.67 | 347 | ePn | Pn | 07 41 41.7 | +1.9 | | |
| DSF | Desfina | 3.67 | 347 | ePN | Pn | 07 41 41.3 | +1.6 | | |
| DSF | Desfina | 3.67 | 347 | P | Pn | 07 41 40.9 | +1.2 | | |
| DSF | Desfina | 3.67 | 347 | P | Pn | 07 41 40.9 | +1.2 | | |
| DSF | Desfina | 3.67 | 347 | P | Pn | 07 41 40.9 | +1.2 | | |
| DSF | Desfina | 3.67 | 347 | ePn | Pn | 07 41 41.3 | +1.6 | | |
| TRIZ | Trizonia | 3.73 | 342 | ePN | Pn | 07 41 42.8 | +2.4 | | |
| TRIZ | Trizonia | 3.73 | 342 | ePn | Pn | 07 41 42.8 | +2.4 | | |
| KALE | Kalithea | 3.73 | 343 | ePN | Pn | 07 41 42.4 | +1.8 | | |
| KALE | Kalithea | 3.73 | 343 | ePn | Pn | 07 41 42.4 | +1.8 | | |
| EFP | Efpalio | 3.83 | 340 | ePN | Pn | 07 41 45.1 | +3.3 | | |
| EFP | Efpalio | 3.83 | 340 | ePn | Pn | 07 41 45.1 | +3.3 | | |
| LKR | Lokris | 3.84 | 354 | ePN | Pn | 07 41 42.9 | +0.4 | | |
| LKR | Lokris | 3.84 | 354 | P | Pn | 07 41 43.3 | +1.3 | | |
| LKR | Lokris | 3.84 | 354 | P | Pn | 07 41 43.3 | +1.3 | | |
| LKR | Lokris | 3.84 | 354 | ePn | Pn | 07 41 42.4 | +0.4 | | |
| LKR | Lokris | 3.84 | 354 | P | Pn | 07 41 43.3 | +1.3 | | |
| BDRM | Kayabasi | 3.87 | 54 | /P | Pn | 07 41 43.3 | +0.8 | | |
| BDRM | Kayabasi | 3.87 | 54 | P | Pn | 07 41 43.3 | +0.8 | | |
| MRKA | Markates | 3.87 | 0 | ePN | Pn | 07 41 44.1 | +1.6 | | |
| MRKA | Markates | 3.87 | 0 | ePn | Pn | 07 41 44.1 | +1.6 | | |
| SMG | Samos | 3.92 | 42 | ePN | Pn | 07 41 44.9 | +1.8 | | |
| SMG | Samos | 3.92 | 42 | P | Pn | 07 41 44.6 | +1.5 | | |
| SMG | Samos | 3.92 | 42 | P | Pn | 07 41 44.6 | +1.5 | | |
| SMG | Samos | 3.92 | 42 | P | Pn | 07 41 44.6 | +1.5 | | |
| SMG | Samos | 3.92 | 42 | ePn | Pn | 07 41 44.9 | +1.8 | | |
| ARG | Arkhangelos | 3.98 | 68 | P | Pn | 07 41 45.8 | +1.8 | | |
| ARG | Arkhangelos | 3.98 | 68 | ePN | Pn | 07 41 46.7 | +2.7 | | |
| ARG | Arkhangelos | 3.98 | 68 | P | Pn | 07 41 45.8 | +1.8 | | |
| ARG | Arkhangelos | 3.98 | 68 | P | Pn | 07 41 45.8 | +1.8 | | |
| ARG | Arkhangelos | 3.98 | 68 | P | Pn | 07 41 45.8 | +1.8 | | |
| ARG | Arkhangelos | 3.98 | 68 | ePn | Pn | 07 41 46.7 | +2.7 | | |
| AXAR | Agios Charalam | 4.00 | 350 | ePN | Pn | 07 41 46.5 | +2.3 | | |
| AXAR | Agios Charalam | 4.00 | 350 | ePn | Pn | 07 41 46.5 | +2.3 | | |
| SMIA | Simia | 4.05 | 356 | ePN | Pn | 07 41 46.5 | +1.5 | | |
| SMIA | Simia | 4.05 | 356 | P | Pn | 07 41 46.8 | +1.8 | | |
| SMIA | Simia | 4.05 | 356 | ePn | Pn | 07 41 46.5 | +1.5 | | |
| SMIA | Simia | 4.05 | 356 | P | Pn | 07 41 46.8 | +1.8 | | |
| CHOS | Chios island | 4.09 | 29 | eP | Pn | 07 41 46.8 | +1.3 | | |
| CHOS | Chios island | 4.09 | 29 | ePN | Pn | 07 41 46.9 | +1.4 | | |
| CHOS | Chios island | 4.09 | 29 | ePn | Pn | 07 41 46.9 | +1.4 | | |
| GCAM | G?zelcaml? | 4.14 | 45 | /P | Pn | 07 41 47.8 | +1.8 | | |
| GCAM | G?zelcaml? | 4.14 | 45 | P | Pn | 07 41 47.8 | +1.8 | | |
| ZEY | ˜zmir | 4.16 | 34 | P | Pn | 07 41 47.4 | +1.1 | | |
| PDO | Prodromos | 4.22 | 334 | ePN | Pn | 07 41 49.2 | +2.0 | | |
| PDO | Prodromos | 4.22 | 334 | ePn | Pn | 07 41 49.2 | +2.0 | | |
| AGG | Agios Georgios | 4.30 | 347 | eP | Pn | 07 41 48.4 | 0.0 | | |
| AGG | Agios Georgios | 4.30 | 347 | eP | Pn | 07 41 50.5 | +2.1 | | |
| AGG | Agios Georgios | 4.30 | 347 | ePN | Pn | 07 41 50.2 | +1.8 | | |
| AGG | Agios Georgios | 4.30 | 347 | ePn | Pn | 07 41 50.5 | +2.1 | | |
| AGG | Agios Georgios | 4.30 | 347 | eP | Pn | 07 41 48.4 | 0.0 | | |
| AGG | Agios Georgios | 4.30 | 347 | ePn | Pn | 07 41 50.5 | +2.1 | | |
| EVR | Evrytania | 4.32 | 342 | ePN | Pn | 07 41 51.5 | +2.9 | | |
| EVR | Evrytania | 4.32 | 342 | ePn | Pn | 07 41 51.5 | +2.9 | | |
| MAKR | Makrakomi, Fth | 4.33 | 345 | ePN | Pn | 07 41 50.9 | +2.1 | | |
| MAKR | Makrakomi, Fth | 4.33 | 345 | ePn | Pn | 07 41 50.9 | +2.1 | | |
| SKIA | Skiathos | 4.33 | 359 | ePN | Pn | 07 41 50.4 | +1.6 | | |
| SKIA | Skiathos | 4.33 | 359 | ePn | Pn | 07 41 50.4 | +1.6 | | |
| AOS | Alonnisos | 4.34 | 3 | eP | Pn | 07 41 49.8 | +0.8 | | |
| AOS | Alonnisos | 4.34 | 3 | ePN | Pn | 07 41 49.9 | +1.0 | | |
| AOS | Alonnisos | 4.34 | 3 | ePn | Pn | 07 41 49.9 | +1.0 | | |
| YER | Yerkesik | 4.48 | 58 | eP | Pn | 07 41 52.4 | +1.5 | | |
| YER | Yerkesik | 4.48 | 58 | eP | Pn | 07 41 52.4 | +1.5 | | |
| NEO | Neokhori | 4.48 | 357 | ePN | Pn | 07 41 52.6 | +1.8 | | |
| NEO | Neokhori | 4.48 | 357 | ePn | Pn | 07 41 52.6 | +1.8 | | |
| AYDN | Tasoluk | 4.50 | 50 | /P | Pn | 07 41 55.2 | +4.0 | | |
| AYDN | Tasoluk | 4.50 | 50 | P | Pn | 07 41 55.2 | +4.0 | | |
| BLCB | Balcova | 4.53 | 37 | eP | Pn | 07 41 52.9 | +1.4 | | |
| BLCB | Balcova | 4.53 | 37 | eP | Pn | 07 41 52.9 | +1.4 | | |
| XOR | Xorichti | 4.54 | 357 | ePN | Pn | 07 41 53.6 | +1.9 | | |
| XOR | Xorichti | 4.54 | 357 | ePn | Pn | 07 41 53.6 | +1.9 | | |
| TURN | Turunc | 4.59 | 62 | /P | Pn | 07 41 50.0 | -2.2 | | |
| TURN | Turunc | 4.59 | 62 | P | Pn | 07 41 50.0 | -2.2 | | |
| TURN | | | | S | Sn | 07 42 37.7 | -7.2 | | |
| DALY | Dalyan (Mu˜la | 4.60 | 63 | eP | Pn | 07 41 54.7 | +2.3 | | |
| DALY | Dalyan (Mu˜la | 4.60 | 63 | eP | Pn | 07 41 54.7 | +2.3 | | |
| AYDB | Zeytinkoy-Aydi | 4.69 | 47 | eP | Pn | 07 41 55.4 | +1.6 | | |
| AYDB | Zeytinkoy-Aydi | 4.69 | 47 | eP | Pn | 07 41 55.4 | +1.6 | | |
| DSL | Palaion Diasel | 4.73 | 336 | ePN | Pn | 07 41 55.9 | +1.7 | | |
| DSL | Palaion Diasel | 4.73 | 336 | ePn | Pn | 07 41 55.9 | +1.7 | | |
| LJBD | Adjabya | 4.81 | 217 | /P | Pn | 07 41 53.6 | -1.7 | | |
| | SNR=23 | | | | | | | | |
| FETY | Fethiye | 4.85 | 67 | eP | Pn | 07 41 57.7 | +1.8 | | |
| FETY | Fethiye | 4.85 | 67 | eP | Pn | 07 41 57.7 | +1.8 | | |
| THL | Klokotos Trika | 4.89 | 346 | ePN | Pn | 07 41 58.2 | +1.8 | | |
| THL | Klokotos Trika | 4.89 | 346 | ePn | Pn | 07 41 58.2 | +1.8 | | |
| PRK | Paraskevi | 4.92 | 25 | ePN | Pn | 07 41 58.0 | +1.2 | | |
| PRK | Paraskevi | 4.92 | 25 | ePn | Pn | 07 41 58.0 | +1.2 | | |
| PAIG | Paliouri | 5.09 | 1 | ePN | Pn | 07 42 00.2 | +1.0 | | |
| PAIG | Paliouri | 5.09 | 1 | ePn | Pn | 07 42 00.2 | +1.0 | | |
| KSL | Kastellorizon | 5.10 | 73 | ePN | Pn | 07 42 01.2 | +1.9 | | |
| KSL | Kastellorizon | 5.10 | 73 | ePn | Pn | 07 42 01.2 | +1.9 | | |
| AKAS | Kas | 5.14 | 72 | /P | Pn | 07 42 01.5 | +1.5 | | |
| AKAS | | | | /S | Sn | 07 42 57.8 | -0.9 | | |
| AKAS | Kas | 5.14 | 72 | P | Pn | 07 42 01.5 | +1.5 | | |
| AKAS | | | | S | Sn | 07 42 57.8 | -0.9 | | |
| LIA | Limnos Island | 5.23 | 14 | ePN | Pn | 07 42 02.0 | +0.9 | | |
| LIA | Limnos Island | 5.23 | 14 | ePn | Pn | 07 42 02.0 | +0.9 | | |
| JAN | Janina | 5.28 | 337 | ePN | Pn | 07 42 03.1 | +1.3 | | |
| JAN | Janina | 5.28 | 337 | ePn | Pn | 07 42 03.1 | +1.3 | | |
| AKS | Akhisar | 5.30 | 39 | eP | Pn | 07 42 03.6 | +1.6 | | |
| AKS | Akhisar | 5.30 | 39 | eP | Pn | 07 42 03.6 | +1.6 | | |
| DENT | Denizli | 5.31 | 55 | eP | Pn | 07 42 03.9 | +1.7 | | |
| DENT | Denizli | 5.31 | 55 | eP | Pn | 07 42 03.9 | +1.7 | | |
| IGT | Igoumenitsa | 5.35 | 332 | eP | Pn | 07 42 01.9 | -0.9 | | |
| IGT | Igoumenitsa | 5.35 | 332 | eP | Pn | 07 42 01.9 | -0.9 | | |
| GOLH | Golhisar | 5.44 | 62 | /P | Pn | 07 42 06.7 | +2.7 | | |
| GOLH | Golhisar | 5.44 | 62 | P | Pn | 07 42 06.7 | +2.7 | | |
| GOLH | | | | S | Sn | 07 43 03.2 | -2.8 | | |
| MANT | Manisa | 5.44 | 46 | /P | Pn | 07 42 07.0 | +2.8 | | |
| MANT | Manisa | 5.44 | 46 | P | Pn | 07 42 07.0 | +2.8 | | |
| EZN | Ezine | 5.46 | 23 | eP | Pn | 07 42 05.8 | +1.6 | | |
| EZN | Ezine | 5.46 | 23 | eP | Pn | 07 42 05.8 | +1.6 | | |
| OUR | Ouranopolis | 5.51 | 3 | eP | Pn | 07 42 05.9 | +1.0 | | |
| OUR | Ouranopolis | 5.51 | 3 | eP | Pn | 07 42 05.9 | +1.0 | | |
| ELL | Elmali | 5.52 | 68 | eP | Pn | 07 42 06.9 | +1.8 | | |
| ELL | Elmali | 5.52 | 68 | eP | Pn | 07 42 06.9 | +1.8 | | |
| KULA | Kula-Manisa | 5.52 | 47 | eP | Pn | 07 42 07.2 | +2.1 | | |
| KULA | Kula-Manisa | 5.52 | 47 | eP | Pn | 07 42 07.3 | +2.1 | | |
| PLG | Polygyros | 5.54 | 359 | ePN | Pn | 07 42 06.8 | +1.4 | | |
| PLG | Polygyros | 5.54 | 359 | ePn | Pn | 07 42 06.8 | +1.4 | | |
| KZN | Kozani | 5.65 | 346 | ePN | Pn | 07 42 08.6 | +1.7 | | |
| KZN | Kozani | 5.65 | 346 | ePn | Pn | 07 42 08.6 | +1.7 | | |
| GADA | Gvkgeada | 5.67 | 19 | eP | Pn | 07 42 08.8 | +1.6 | | |
| GADA | Gvkgeada | 5.67 | 19 | eP | Pn | 07 42 08.8 | +1.6 | | |
| PENT | Pentalofos | 5.69 | 341 | ePN | Pn | 07 42 08.6 | +1.1 | | |
| PENT | Pentalofos | 5.69 | 341 | ePn | Pn | 07 42 08.6 | +1.1 | | |
| HORT | Hortiatis | 5.77 | 357 | eP | Pn | 07 42 09.2 | +0.5 | | |
| HORT | Hortiatis | 5.77 | 357 | ePN | Pn | 07 42 10.1 | +1.5 | | |
| HORT | Hortiatis | 5.77 | 357 | eP | Pn | 07 42 09.2 | +0.5 | | |
| HORT | Hortiatis | 5.77 | 357 | ePn | Pn | 07 42 10.1 | +1.5 | | |
| SWA2 | | 5.80 | 163 | P | Pn | 07 42 08.6 | -0.3 | | |
| | baz=166 | | | | | | | | |
| SWA2 | | 5.80 | 163 | P | Pn | 07 42 08.6 | -0.3 | | |
| DEMI | Demirci | 5.90 | 43 | /P | Pn | 07 42 12.9 | +2.5 | | |
| DEMI | Demirci | 5.90 | 43 | P | Pn | 07 42 12.9 | +2.5 | | |
| BALB | Balikesir | 5.92 | 34 | eP | Pn | 07 42 11.9 | +1.3 | | |
| BALB | Balikesir | 5.92 | 34 | eP | Pn | 07 42 11.9 | +1.3 | | |
| KORI | Korkueli | 5.93 | 67 | /P | Pn | 07 42 13.5 | +2.6 | | |
| KORT | | | | /S | Sn | 07 43 18.8 | +0.5 | | |
| KORT | Korkueli | 5.93 | 67 | P | Pn | 07 42 13.5 | +2.6 | | |
| KORT | | | | S | Sn | 07 43 18.9 | +0.5 | | |
| KHL | Karahalli | 5.94 | 52 | eP | Pn | 07 42 13.1 | +2.1 | | |
| KHL | Karahalli | 5.94 | 52 | eP | Pn | 07 42 13.1 | +2.1 | | |
| GELI | Tayfur-Gelibol | 6.03 | 22 | eP | Pn | 07 42 13.8 | +1.8 | | |
| GELI | Tayfur-Gelibol | 6.03 | 22 | eP | Pn | 07 42 13.8 | +1.8 | | |
| LPK | Lapseki | 6.10 | 24 | eP | Pn | 07 42 14.7 | +1.7 | | |
| LPK | Lapseki | 6.10 | 24 | eP | Pn | 07 42 14.7 | +1.7 | | |
| ANTB | Antalya | 6.13 | 68 | eP | Pn | 07 42 15.4 | +2.0 | | |
| ANTB | Antalya | 6.13 | 68 | eP | Pn | 07 42 15.4 | +2.0 | | |
| GRG | Griva | 6.19 | 352 | eP | Pn | 07 42 15.3 | +1.0 | | |
| GRG | Griva | 6.19 | 352 | eP | Pn | 07 42 15.3 | +1.0 | | |
| FNA | Florina | 6.19 | 345 | eP | Pn | 07 42 15.0 | +0.6 | | |
| FNA | Florina | 6.19 | 345 | eP | Pn | 07 42 15.0 | +0.6 | | |
| BCK | Bucak | 6.28 | 63 | eP | Pn | 07 42 17.4 | +1.9 | | |
| BCK | Bucak | 6.28 | 63 | eP | Pn | 07 42 17.4 | +1.9 | | |
| SRS | Serrai | 6.28 | 0 | ePN | Pn | 07 42 16.8 | +1.2 | | |
| SRS | Serrai | 6.28 | 0 | ePn | Pn | 07 42 16.8 | +1.2 | | |
| ERIK | Erikli-Kesan | 6.29 | 21 | eP | Pn | 07 42 17.3 | +1.7 | | |
| ERIK | Erikli-Kesan | 6.29 | 21 | eP | Pn | 07 42 17.3 | +1.7 | | |
| KRBG | Karabiga-Canak | 6.30 | 27 | eP | Pn | 07 42 17.4 | +1.6 | | |
| KRBG | Karabiga-Canak | 6.30 | 27 | eP | Pn | 07 42 17.4 | +1.6 | | |
| KNT | Kendrikon | 6.35 | 356 | eP | Pn | 07 42 17.5 | +1.0 | | |
| KNT | Kendrikon | 6.35 | 356 | ePN | Pn | 07 42 17.8 | +1.4 | | |
| KNT | Kendrikon | 6.35 | 356 | eP | Pn | 07 42 17.5 | +1.0 | | |
| KNT | Kendrikon | 6.35 | 356 | ePn | Pn | 07 42 17.8 | +1.4 | | |
| ALN | Alexandroupoli | 6.38 | 17 | eP | Pn | 07 42 17.8 | +1.0 | | |
| ALN | Alexandroupoli | 6.38 | 17 | eP | Pn | 07 42 17.8 | +1.0 | | |
| ISP | Isparta | 6.38 | 60 | eP | Pn | 07 42 18.6 | +1.6 | | |
| ISP | Isparta | 6.38 | 60 | eP | Pn | 07 42 18.4 | +1.4 | | |
| ISP | | | | e | | 07 43 32.5 | | | |
| ISP | Isparta | 6.38 | 60 | ⇑/P | Pn | 07 42 19.3 | +2.4 | | |
| ISP | Isparta | 6.38 | 60 | ePn | Pn | 07 42 18.4 | +1.4 | | |
| ISP | | | | eSn | Sn | 07 43 32.5 | +3.3 | | |
| ISP | Isparta | 6.38 | 60 | eP | Pn | 07 42 18.4 | +1.4 | | |
| ISP | | | | eS | Sn | 07 43 32.5 | +3.3 | | |
| EDC | Edincik | 6.49 | 31 | eP | Pn | 07 42 20.3 | +1.9 | | |
| EDC | Edincik | 6.49 | 31 | eP | Pn | 07 42 20.3 | +1.9 | | |
| NVR | Nevrokopi | 6.52 | 2 | ePN | Pn | 07 42 20.5 | +1.7 | | |
| NVR | Nevrokopi | 6.52 | 2 | ePn | Pn | 07 42 20.5 | +1.7 | | |
| RKY | Sarkoy-Tekirda | 6.52 | 25 | eP | Pn | 07 42 20.5 | +1.6 | | |
| RKY | Sarkoy-Tekirda | 6.52 | 25 | eP | Pn | 07 42 20.5 | +1.6 | | |
| SART | Tekirdag | 6.52 | 25 | /P | Pn | 07 42 21.0 | +2.1 | | |
| SART | Tekirdag | 6.52 | 25 | P | Pn | 07 42 21.0 | +2.1 | | |
| VAY | Valandovo | 6.53 | 354 | /P | Pn | 07 42 21.6 | +2.6 | | |
| VAY | | | | eSn | Sb | 07 44 01.6 | +7.1 | | |
| VAY | Valandovo | 6.53 | 354 | /P | Pn | 07 42 21.5 | +2.6 | | |
| SUTC | Sutluce-Ispart | 6.58 | 64 | eP | Pn | 07 42 21.4 | +1.5 | | |
| SUTC | Sutluce-Ispart | 6.58 | 64 | eP | Pn | 07 42 21.4 | +1.5 | | |
| MRMT | Marmara Adasi | 6.60 | 28 | eP | Pn | 07 42 21.7 | +1.7 | | |
| MRMT | Marmara Adasi | 6.60 | 28 | eP | Pn | 07 42 21.7 | +1.7 | | |
| TVSB | Tavsanli | 6.60 | 44 | eP | Pn | 07 42 21.8 | +1.8 | | |
| TVSB | Tavsanli | 6.60 | 44 | eP | Pn | 07 42 21.8 | +1.8 | | |
| OHR | Ohrid | 6.64 | 342 | /P | Pn | 07 42 22.3 | +1.7 | | |
| OHR | Ohrid | 6.64 | 342 | /P | Pn | 07 42 22.2 | +1.7 | | |
| SHUT | Suhut-Afyon | 6.75 | 54 | eP | Pn | 07 42 23.4 | +1.4 | | |
| SHUT | Suhut-Afyon | 6.75 | 54 | eP | Pn | 07 42 23.4 | +1.4 | | |
| MMB | Musomiste | 6.75 | 1 | P | Pn | 07 42 23.2 | +1.1 | | |
| MMB | Musomiste | 6.75 | 1 | P | Pn | 07 42 23.2 | +1.1 | | |
| TIP | Timpagrande | 6.95 | 311 | ePn | Pn | 07 42 24.1 | -0.7 | | |
| TIP | | | | eSn | Sn | 07 43 38.9 | -4.4 | | |
| TIP | Timpagrande | 6.95 | 311 | ePn | Pn | 07 42 24.1 | -0.7 | | |
| TIP | | | | eSn | Sn | 07 43 38.9 | -4.4 | | |
| KDZ | Kurdzhali | 6.97 | 12 | P | Pn | 07 42 27.9 | +2.9 | | |
| KDZ | Kurdzhali | 6.97 | 12 | P | Pn | 07 42 27.9 | +2.9 | | |
| KKB | Krupnik | 7.04 | 357 | P | Pn | 07 42 34.0 | +8.0 | | |
| ARMT | Armutlu | 7.11 | 35 | eP | Pn | 07 42 28.8 | +1.8 | | |
| ARMT | Armutlu | 7.11 | 35 | eP | Pn | 07 42 28.8 | +1.8 | | |
| TIR | Tirane | 7.13 | 337 | eP | Pn | 07 42 28.0 | +0.8 | | |
| TIR | | | | e | | 07 43 42.6 | | | |
| TIR | Tirane | 7.13 | 337 | ePn | Pn | 07 42 28.0 | +0.8 | | |
| TIR | | | | eSn | Sn | 07 43 42.6 | -4.9 | | |
| TIR | Tirane | 7.13 | 337 | eP | Pn | 07 42 28.0 | +0.8 | | |
| TIR | | | | eSn | Sn | 07 43 42.6 | -4.9 | | |
| AKMC | Akamas | 7.22 | 86 | P | Pn | 07 42 27.9 | -0.5 | | |
| | baz=270 | | | | | | | | |
| AKMC | Akamas | 7.22 | 86 | P | Pn | 07 42 27.9 | -0.5 | | |
| GAZI | Gazipasa | 7.29 | 76 | P | Pn | 07 42 27.7 | -1.6 | | |
| GAZI | | | | S | Sn | 07 43 44.3 | -7.2 | | |
| PLD | Plovdiv | 7.33 | 7 | P | Pn | 07 42 38.1 | +8.3 | | |
| SKO | Skopje | 7.33 | 348 | /P | Pn | 07 42 29.8 | 0.0 | | |
| SKO | | | | eSn | Sb | 07 44 23.9 | +6.5 | | |
| SKO | Skopje | 7.33 | 348 | /P | Pn | 07 42 29.8 | 0.0 | | |
| CAVI | Cavuskoy | 7.34 | 41 | eP | Pn | 07 42 31.8 | +1.8 | | |
| CAVI | Cavuskoy | 7.34 | 41 | eP | Pn | 07 42 31.8 | +1

**ANTO Ankara** 8.92 53 P Pn 07 42 55.2 +3.4
SNR=27
ANTO eS **Sn** **07 44 35.2 +3.6**
**BRY Bratogost** 8.96 336⇑iPn **Pn** **07 42 51.4 -1.0**
BRY eSn **Sn** **07 44 28.1 -4.6**
**BRY Bratogost** 8.96 336⇑iPn **Pn** **07 42 51.4 -1.0**
**NBNS Bani Suef** 9.04 131 P **Pn** **07 42 51.7 -1.7**
baz=132
**NBNS Bani Suef** 9.04 131 P **Pn** **07 42 51.7 -1.7**
**PLE Pljevlja** 9.09 340⇓iPn **Pn** **07 42 54.0 -0.1**
PLE eSn **Sn** **07 44 32.4 -3.4**
**PLE Pljevlja** 9.09 340⇓iPn **Pn** **07 42 54.0 -0.1**
**UPM Unac-Piva** 9.11 338 ePn **Pn** **07 42 53.8 -0.7**
UPM eSn **Sn** **07 44 33.2 -3.3**
**UPM Unac-Piva** 9.11 338 ePn **Pn** **07 42 53.8 -0.7**
**IVAS Ivanjica** 9.13 344⇑iPn **Pn** **07 42 53.7 -0.9**
**AMAG Maghara** 9.14 114 P **Pn** **07 42 52.3 -2.6**
baz=115
**RSH** 9.38 111 P **Pn** **07 42 55.9 -2.2**
baz=112
RSH S Sn 07 44 33.9 -9.2
baz=112
**BRTR Keskin Array B** 9.41 56 Pn **Pn** **07 43 00.7 +2.1**
comp=N,1.0nm,0.3s,baz=233,slow=14,SNR=57
**BRTR Keskin Array B** 9.41 56 P **Pn** **07 43 00.7 +2.1**
BRTR pmax pmax
comp=Z,1.0nm,0.3s
**NIG Nigde** 9.49 67 eP **Pn** **07 43 00.6 +0.7**
**NIG Nigde** 9.49 67 eP **Pn** **07 43 00.6 +0.7**
**ZNM** 9.60 122 P **Pn** **07 42 59.8 -1.2**
baz=123
**ZNM** 9.60 122 P **Pn** **07 42 59.8 -1.2**
**KARA Karaisali** 9.63 72 eP **Pn** **07 43 02.4 +0.9**
**KARA Karaisali** 9.63 72 eP **Pn** **07 43 02.4 +0.9**
**DIVS Divibare** 9.66 345⇓iP **Pn** **07 43 00.1 -1.8**
**DIVS Divibare** 9.66 345 S Sn 07 44 33.0 -17
**MSAB Monastry St. A** 9.82 18⇑iP **Pn** **07 43 04.5 +0.4**
**MSAB Monastry St. A** 9.82 18⇑iP **Pn** **07 43 04.5 +0.4**
**MMAI Mount Meron Ar** 10.02 97 Pn **Pn** **07 43 04.5 -2.4**
comp=Z,17nm,0.3s,baz=292,slow=12,SNR=19
MMAI Sn Sn 07 44 52.9 -5.8
comp=Z,7.4nm,0.3s,baz=297,slow=19,SNR=4.4
**ARNB Al Arnab** 10.20 81 *i* P **Pn** **07 43 09.4 -0.1**
**GRB Gharib** 10.23 127 P **Pn** **07 43 08.3 -1.5**
baz=128
**GRB Gharib** 10.23 127 P **Pn** **07 43 08.3 -1.5**
**HWQ Hawqa** 10.24 90 eP **Pn** **07 43 08.3 -1.7**
**RCY Rachaya** 10.27 94 eP **Pn** **07 43 08.1 -2.3**
**TIRR Tirgusor** 10.32 20 eP **Pn** **07 43 10.8 -0.1**
TIRR e 07 45 01.8
**TIRR Tirgusor** 10.32 20⇑iP **Pn** **07 43 10.9 -0.1**
**TIRR Tirgusor** 10.32 20 ePn **Pn** **07 43 10.8 -0.1**
TIRR eSn **Sn** **07 45 01.8 -4.1**
**TIRR Tirgusor** 10.32 20 eP **Pn** **07 43 10.8 -0.1**
TIRR eSn **Sn** **07 45 01.8 -4.1**
**TLB Topalu** 10.34 18⇑iP **Pn** **07 43 11.0 -0.2**
**TLB Topalu** 10.34 18⇑iP **Pn** **07 43 11.0 -0.2**
**BRBR Barbar** 10.38 94 *i* P **Pn** **07 43 10.0 -2.0**
**SLNF Slenfeh** 10.40 82 *i* P **Pn** **07 43 12.1 -0.1**
**BIDA Albida** 10.49 85 *i* P **Pn** **07 43 13.4 0.0**
**ISR Istrita** 10.53 12⇑iP **Pn** **07 43 15.0 +1.1**
**ISR Istrita** 10.53 12⇑iP **Pn** **07 43 15.0 +1.1**
**HDK1 Dakhla** 10.54 150 P **Pn** **07 43 13.7 -0.4**
baz=151
**HDK1 Dakhla** 10.54 150 P **Pn** **07 43 13.7 -0.4**
**WRDH Warideh** 10.56 83 *i* P **Pn** **07 43 13.2 -1.1**
**TCHB Talchebab** 10.56 98 *i* P **Pn** **07 43 12.2 -2.1**
**GZR Gura Zlata** 10.57 357⇑iP **Pn** **07 43 14.3 -0.1**
**GZR Gura Zlata** 10.57 357⇑iP **Pn** **07 43 14.3 -0.1**
**HAWK Haweek** 10.60 88 *i* P **Pn** **07 43 13.0 -1.8**
**LOT Lotru** 10.61 1⇑iP **Pn** **07 43 16.1 +1.1**
**LOT Lotru** 10.61 1⇑iP **Pn** **07 43 16.1 +1.1**
**VOIR** 10.66 6⇑iP Pn 07 43 11.2 -4.5
**TR2** 10.79 124 P **Pn** **07 43 15.6 -1.8**
baz=124
**TR2** 10.79 124 P **Pn** **07 43 15.6 -1.8**
**MLR Muntele Rosu** 10.81 9 Pn **Pn** **07 43 16.9 -0.8**
comp=Z,0.1nm,0.3s,baz=153,slow=4.5,SNR=3.3
MLR LR LR 07 48 08.9
comp=Z,435nm,18.2s,baz=190,slow=42
**MLR Muntele Rosu** 10.81 9⇑iP **Pn** **07 43 18.0 +0.3**
**BZS Buzias** 10.88 353⇑iP **Pn** **07 43 17.8 -0.7**
**BZS Buzias** 10.88 353⇑iP **Pn** **07 43 17.8 -0.7**
**CFR Carcaliu** 10.92 17⇑iP **Pn** **07 43 20.8 +1.7**
**CFR Carcaliu** 10.92 17⇑iP **Pn** **07 43 20.8 +1.7**
**EIL Elat** 10.94 115 Pn **Pn** **07 43 18.0 -1.4**
comp=Z,7.0nm,0.3s,baz=268,slow=2.6,SNR=39
EIL Sn **Sn** **07 45 18.2 -2.9**
comp=Z,6.2nm,0.3s,baz=331,slow=19,SNR=7.7
**HBST Basata** 11.02 117 P **Pn** **07 43 18.8 -1.7**
baz=118
**HBST Basata** 11.02 117 P **Pn** **07 43 18.8 -1.7**
**NUB** 11.06 118 P **Pn** **07 43 19.6 -1.4**
baz=119
**TR1** 11.19 125 P **Pn** **07 43 21.5 -1.3**
baz=125
**TR1** 11.19 125 P **Pn** **07 43 21.5 -1.3**
**DOPR Dopca** 11.22 7⇑iP **Pn** **07 43 25.1 +1.9**
**DOPR Dopca** 11.22 7⇑iP **Pn** **07 43 25.1 +1.9**
**PLOR Plostina** 11.26 11⇓iP **Pn** **07 43 24.4 +0.5**
**PLOR Plostina** 11.26 11⇓iP **Pn** **07 43 24.4 +0.5**
**VRI Vrincioaia** 11.29 11⇓iP **Pn** **07 43 26.2 +2.0**
**VRI Vrincioaia** 11.29 11⇓iP **Pn** **07 43 26.2 +2.0**
**ROOS tl_alroos** 11.36 89 *i* P **Pn** **07 43 24.9 -0.3**
**ASF Jabal al Asfar** 11.46 100 Pn **Pn** **07 43 24.6 -2.0**
comp=Z,1.1nm,0.3s,baz=222,slow=9.2,SNR=14
ASF Sn **Sn** **07 45 34.9 +0.9**
comp=Z,1.0nm,0.3s,baz=285,slow=20,SNR=4.6
**ASF Jabal al Asfar** 11.46 100 P **Pn** **07 43 24.6 -2.0**
ASF 07 45 34.9
ASF pmax pmax
comp=Z,1.0nm,0.3s
ASF smax smax
comp=N,1.0nm,0.3s
**HHRG Al Ghardaqah** 11.46 129 P **Pn** **07 43 25.7 -0.8**
baz=130
**HHRG Al Ghardaqah** 11.46 129 P **Pn** **07 43 25.7 -0.8**
**ZALF Zalf** 11.62 96 *i* P **Pn** **07 43 27.3 -1.5**
**KEST Kesra** 11.64 279 Pn **Pn** **07 43 27.1 -2.0**
comp=N,0.2nm,0.3s,baz=22,slow=6.7,SNR=4.8
KEST Sn Sn 07 45 32.1 -6.4
comp=N,0.2nm,0.3s,baz=126,slow=14,SNR=2.1
KEST LR LR 07 49 25.4
comp=N,231nm,18.3s,baz=16,slow=45
**KEST Kesra** 11.64 279 ePn **Pn** **07 43 30.5 +1.4**
KEST Sn Sn 07 45 32.1 -6.4
**KEST Kesra** 11.64 279 ePn **Pn** **07 43 30.5 +1.4**
KEST Sn Sn 07 45 32.1 -6.4
**DRGR** 11.97 357⇑iP **Pn** **07 43 34.6 +1.0**
**DRGR** 11.97 357⇑iP **Pn** **07 43 34.6 +1.0**
**MALT Malatya** 12.46 69⇑eP **Pn** **07 43 41.0 +0.7**
**MALT Malatya** 12.46 69⇑iP **Pn** **07 43 40.9 +0.7**
**MALT Malatya** 12.46 69 eP **Pn** **07 43 41.0 +0.7**
**KIS Kishinev** 12.79 17 eP P 07 43 50.0 -5.6
**KIS Kishinev** 12.79 17 ePP P 07 44 01.0 +5.4
KIS eS Sn 07 46 20.0 +14
KIS eLi 07 46 50.0
KIS eLQ LQ 07 47 56.0
KIS LRM MLR 07 49 10.0
comp=N,2µm,16.0s
**KIS Kishinev** 12.79 17 eP P 07 43 50.0 -5.6
KIS MLR MLR
comp=N,1µm,14.0s
KIS MLR MLR
comp=Z,2µm,14.0s
KIS MLR MLR
comp=Z,2µm,16.0s
**BURAR Bucovina Array** 12.84 5⇑iP **P** **07 43 56.3 +0.1**
**SIM Simferopol'** 12.95 36 eP P 07 44 02.9 +5.5
SIM pmax pmax
comp=Z,75nm,0.3s
SIM MLR MLR
comp=Z,300nm,14.0s
**PTK Pertek** 13.32 68 eP **Pn** **07 43 54.2 +2.0**
**PTK Pertek** 13.32 68 eP **Pn** **07 43 54.2 +2.0**
**PSZ Piszkesteto** 13.36 349 eP **Pn** **07 43 51.0 -1.6**
PSZ e 07 46 12.5
**PSZ Piszkesteto** 13.36 349⇓iP **Pn** **07 43 51.4 -1.2**
**PSZ Piszkesteto** 13.36 349 ePn **Pn** **07 43 51.0 -1.6**
PSZ eSn Sn 07 46 12.5 -8.0
**PSZ Piszkesteto** 13.36 349 ePn **Pn** **07 43 51.0 -1.6**
PSZ eSn Sn 07 46 12.5 -8.0
**ESPY Espiye-Giresun** 13.44 59 eP **Pn** **07 43 53.4 -0.2**
**ESPY Espiye-Giresun** 13.44 59 eP **Pn** **07 43 53.4 -0.2**
**ARSA Arzberg** 13.80 337⇑iPn **Pn** **07 43 57.8 -0.6**
**ARSA Arzberg** 13.80 337 Pn **Pn** **07 43 57.8 -0.6**
**UZH Uzhgorod** 13.83 357 eP P 07 44 02.9 -4.1
UZH eS Sn 07 46 37.7 +6.1
UZH MLR MLR
comp=Z,800nm,7.0s
**MAZI Mazidag** 13.91 74 eP **Pn** **07 44 02.2 +2.1**
**VYHS Vyhne** 14.10 347 eP **P** **07 44 10.8 +0.7**
**VYHS Vyhne** 14.10 347 eP **P** **07 44 10.8 +0.7**
**VYHS Vyhne** 14.10 347 eP **P** **07 44 10.8 +0.7**
**KOLS Kolonicke sedl** 14.13 357 eP **P** **07 44 08.3 -2.1**
**KOLS Kolonicke sedl** 14.13 357 eP **P** **07 44 08.3 -2.1**
**BNGB Bing℡** 14.32 68 eP **Pn** **07 44 07.6 +1.8**
**ABTA Abfaltersbach** 14.53 328⇓iPn **Pn** **07 44 07.9 -0.6**
SNR=7.7
**ABTA Abfaltersbach** 14.53 328 Pn **Pn** **07 44 07.9 -0.6**
SNR=7.7
**ANN Anapa** 14.58 43 eP **Pn** **07 44 10.9 +1.8**
ANN eS **Sn** **07 46 54.7 +4.7**
ANN pmax pmax
comp=Z,94nm,1.8s
**SVAN Silvan-Diyarba** 14.58 72 eP **Pn** **07 44 10.4 +1.2**
**STHS Stebnicka Huta** 14.68 354 eP Pn 07 44 13.0 +2.5
**STHS Stebnicka Huta** 14.68 354 ePN Pn 07 44 13.0 +2.5
**STHS Stebnicka Huta** 14.68 354 ePn Pn 07 44 13.0 +2.5
**MOA Molln** 14.75 335⇑iPn **Pn** **07 44 13.0 +1.6**
SNR=7.7
**MOA Molln** 14.75 335 Pn **Pn** **07 44 13.0 +1.6**
SNR=7.7
**VRTB Varto-Mus** 14.95 68 eP **Pn** **07 44 16.8 +2.5**
**EZM Erzurum** 15.04 65 eP Pn 07 44 10.0 -5.6
**SOC Sochi** 15.27 50 eP **Pn** **07 44 18.1 -0.2**
SOC e 07 47 09.2
SOC pmax pmax
comp=Z,24nm,1.0s
SOC MLR MLR
comp=Z,825nm,16.0s
SOC MLR MLR
comp=N,417nm,16.0s
SOC MLR MLR
comp=E,857nm,16.0s
**VRAC Vranov** 15.36 343 Pn **Pn** **07 44 19.3 -0.1**
comp=E,0.4nm,0.3s,baz=127,slow=5.1,SNR=4.1
VRAC LR LR 07 51 46.3
comp=E,2µm,20.6s,baz=166,slow=44
**VRAC Vranov** 15.36 343⇑iP **P** **07 44 22.4 -1.6**
**FUORN Ofenpass-Fuorn** 15.47 324 ePn **P** **07 44 28.3 +2.7**
comp=E,78nm,1.1s
**FUORN Ofenpass-Fuorn** 15.47 324 ePn **P** **07 44 28.3 +2.7**
comp=E,78nm,1.1s
**SIRT Sirnak** 15.49 75 eP **P** **07 44 25.1 -0.6**
**SIRT Sirnak** 15.49 75 eP **P** **07 44 25.1 -0.6**
**OKC Ostrava-Krasne** 15.52 347 eP **P** **07 44 26.4 +0.6**
OKC MLR MLR
comp=Z,2µm,12.0s
**OKC Ostrava-Krasne** 15.52 347 eP **P** **07 44 26.4 +0.6**
OKC epP **pP** **07 44 34.4 +2.8**
OKC AMS AMS 07 51 50.0
comp=Z,2µm,12.0s
**OKC Ostrava-Krasne** 15.52 347 eP **P** **07 44 26.4 +0.6**
comp=Z,2µm,12.0s
**FETA Feichten** 15.54 325⇑iP **P** **07 44 25.9 -0.4**
SNR=16
**FETA Feichten** 15.54 325 P **P** **07 44 25.9 -0.4**
SNR=16
**MORC Moravsky Berou** 15.58 345 eP **Pn** **07 44 22.4 0.0**
**MORC Moravsky Berou** 15.58 345⇓iP **Pn** **07 44 20.7 -1.7**
**MORC Moravsky Berou** 15.58 345 ePn **Pn** **07 44 22.4 0.0**
**MORC Moravsky Berou** 15.58 345 ePn **Pn** **07 44 22.4 0.0**
**OJC Ojcow** 15.63 351 eP **P** **07 44 25.6 -1.5**
OJC pmax pmax
comp=Z,12nm,0.9s
**OJC Ojcow** 15.63 351 ePn **P** **07 44 25.6 -1.5**
comp=Z,12nm,0.9s
**OJC Ojcow** 15.63 351 ePn **P** **07 44 25.6 -1.5**
comp=Z,12nm,0.9s
**TREC Trest** 15.63 340 eP **P** **07 44 26.3 -0.8**
TREC MLR MLR
comp=Z,2µm,22.4s
**TREC Trest** 15.63 340 eP **P** **07 44 26.3 -0.8**
TREC epP **pP** **07 44 32.5 -0.4**
TREC AMS AMS 07 51 30.0
comp=Z,2µm,22.4s
**TREC Trest** 15.63 340 eP **P** **07 44 26.3 -0.8**
comp=Z,2µm,22.4s
**BCA Borcka** 15.67 60 eP **Pn** **07 44 21.9 -1.7**
**DAVOX Davos/Dischmat** 15.77 323 Pn **Pn** **07 44 25.3 +0.2**
comp=E,0.2nm,0.3s,baz=158,slow=19,SNR=3.1
DAVOX LR LR 07 52 09.8
comp=Z,887nm,19.5s,baz=96,slow=44
**GEC2 GERESS Array S** 15.79 335 eP **Pn** **07 44 24.8 -0.4**
**GEC2 GERESS Array S** 15.79 335 eP **P** **07 44 29.5 +0.6**
comp=Z,24nm,1.1s,baz=144,slow=11
**GEC2 GERESS Array S** 15.79 335 ePn **Pn** **07 44 24.8 -0.4**
**GEC2 GERESS Array S** 15.79 335 ePn **Pn** **07 44 24.8 -0.4**
**GERES GERESS Array B** 15.79 335 Pn **Pn** **07 44 24.4 -0.8**
comp=E,0.4nm,0.3s,baz=149,slow=14,SNR=13
GERES LR LR 07 52 09.9
comp=Z,1µm,19.9s,baz=142,slow=44
**TUE Stuetta** 15.83 322 ePn **Pn** **07 44 25.8 0.0**
comp=Z,72nm,1.2s
**TUE Stuetta** 15.83 322 ePn **Pn** **07 44 25.8 0.0**
comp=Z,72nm,1.2s
**KHC Kasperske Hory** 16.08 336 eP **P** **07 44 31.2 -0.9**
KHC MLR MLR
comp=Z,2µm,17.1s
**KHC Kasperske Hory** 16.08 336 eP **P** **07 44 31.2 -0.9**
KHC ex x 07 44 33.7
KHC AMS AMS 07 52 00.0
comp=Z,2µm,17.1s
**KHC Kasperske Hory** 16.08 336 eP **P** **07 44 30.9 -1.1**
comp=Z,24nm,0.9s
**KHC Kasperske Hory** 16.08 336 eP **P** **07 44 31.0 -1.1**
comp=Z,24nm,0.9s
**DAVA Damuels** 16.13 325⇑iP **P** **07 44 31.9 -0.9**
SNR=7.2
**DAVA Damuels** 16.13 325 P **P** **07 44 31.9 -0.9**
SNR=7.2
**FUR Furstenfeldbru** 16.16 329 eP **P** **07 44 34.1 +1.0**
comp=Z,77nm,1.1s,baz=144,slow=11
**AGRB Hanur-Agry** 16.20 67 eP **Pn** **07 44 31.4 +0.8**
**WET Wettzell** 16.33 334 eP **P** **07 44 35.5 +0.6**
comp=Z,68nm,1.2s,baz=144,slow=11
**VANB Van** 16.35 71 eP **P** **07 44 34.2 -1.0**
**VANB Van** 16.35 71 eP **P** **07 44 34.2 -1.0**
**AK11 Malin Array Si** 16.36 13 ePn **P** **07 44 34.8 -0.4**
**AK11 Malin Array Si** 16.36 13 ePn **P** **07 44 34.8 -0.4**
**DPC Dobruska-Polom** 16.39 343 eP **P** **07 44 35.4 -0.1**
DPC MLR MLR
comp=Z,2µm,18.0s
**DPC Dobruska-Polom** 16.39 343 eP **P** **07 44 35.4 -0.1**
DPC ex x 07 44 44.0
DPC AMS AMS 07 52 00.0
comp=Z,2µm,18.0s
**DPC Dobruska-Polom** 16.39 343 eP **P** **07 44 35.4 -0.1**
comp=Z,2µm,18.0s
**KIEV Kiev** 16.39 13 eP **Pn** **07 44 29.7 -3.0**
KIEV e 07 47 31.8
KIEV pmax pmax
comp=Z,28nm,1.0s
**KIEV Kiev** 16.39 13 ePn **Pn** **07 44 29.7 -3.0**
comp=Z,28nm,1.0s
KIEV eSn **Sn** **07 47 31.8 -2.0**
**KIEV Kiev** 16.39 13 ePn **Pn** **07 44 29.7 -3.0**
comp=Z,28nm,1.0s
KIEV eSn **Sn** **07 47 31.8 -2.0**
**GOPC GO Pecny, Ondr** 16.39 340 eP **Pn** **07 44 31.2 -1.6**
**GOPC GO Pecny, Ondr** 16.39 340 eP **Pn** **07 44 31.2 -1.6**
GOPC ex x 07 44 36.4
GOPC AMS AMS 07 51 50.0
**AKASG Malin Array Be** 16.40 13 Pn **Pn** **07 44 30.8 -2.1**
comp=Z,1.2nm,0.3s,baz=200,slow=12,SNR=14
**AKASG Malin Array Be** 16.40 13 P **Pn** **07 44 30.8 -2.1**
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**CHVG Ch'k'valeri** 16.45 56 P **P** **07 44 38.1 +1.9**
**CHVG Ch'k'valeri** 16.45 56⇓iP **P** **07 44 39.0 +2.8**
**CHVG Ch'k'valeri** 16.45 56 P **P** **07 44 38.1 +1.9**
**PRU Pruhonice** 16.53 339 eP **Pn** **07 44 34.7 +0.2**
PRU MLR MLR
comp=Z,2µm,19.5s
**PRU Pruhonice** 16.53 339 eP **Pn** **07 44 34.7 +0.2**
PRU epP **pP** **07 44 42.3 -0.5**
PRU AMS AMS 07 52 20.0
comp=Z,2µm,19.5s
**UPC Upice** 16.61 343 eP **P** **07 44 36.5 -1.4**
UPC MLR MLR
comp=Z,2µm,18.0s
**UPC Upice** 16.61 343 eP **P** **07 44 36.5 -1.4**
UPC epP **pP** **07 44 46.5 +2.8**
UPC AMS AMS 07 52 00.0
comp=Z,2µm,18.0s
**UPC Upice** 16.61 343 eP **P** **07 44 36.5 -1.4**
comp=Z,2µm,18.0s
**PRA Prague** 16.63 339 eP **P** **07 44 38.1 -0.1**
PRA MLR MLR
comp=Z,2µm,21.3s
**PRA Prague** 16.63 339 eP **P** **07 44 38.1 -0.1**
PRA AMS AMS 07 52 20.0
comp=Z,2µm,21.3s
**PRA Prague** 16.63 339 eP **P** **07 44 38.1 -0.1**
comp=Z,2µm,21.3s
**CLDR Caldiran** 16.83 69 eP **Pn** **07 44 39.4 +0.7**
**CLDR Caldiran** 16.83 69 eP **Pn** **07 44 39.4 +0.7**
**SENIN Lac Senin/Sane** 16.85 318 ePn **P** **07 44 43.2 +2.4**
comp=Z,26nm,1.2s
**SENIN Lac Senin/Sane** 16.85 318 ePn **P** **07 44 43.2 +2.4**
comp=Z,26nm,1.2s
**KSP Ksiaz** 16.86 344 eP **P** **07 44 41.7 +1.1**
**KSP Ksiaz** 16.86 344 eP **P** **07 44 41.7 +1.1**
**KSP Ksiaz** 16.86 344 eP **P** **07 44 41.7 +1.1**
**AKH Akhalkalaki** 17.00 61 eP **P** **07 44 42.0 -0.5**
**AKH Akhalkalaki** 17.00 61 P **Pn** **07 44 41.0 +0.3**
**AKH Akhalkalaki** 17.00 61 P **Pn** **07 44 41.0 +0.3**
**AKH Akhalkalaki** 17.00 61 eP **P** **07 44 42.0 -0.5**
**PVCC Panska Ves** 17.00 340 eP **P** **07 44 42.4 +0.1**
PVCC MLR MLR
comp=Z,2µm,13.6s
**PVCC Panska Ves** 17.00 340 eP **P** **07 44 42.4 +0.1**
PVCC AMS AMS 07 52 50.0
comp=Z,2µm,13.6s
**PVCC Panska Ves** 17.00 340 eP **P** **07 44 42.4 +0.1**
comp=Z,2µm,13.6s
**NEY Neytrino** 17.08 55deP **P** **07 44 43.1 -0.3**
**NEY Neytrino** 17.08 55 eP **P** **07 44 43.1 -0.3**
**ROTZ Rotzenmuhle** 17.09 334 eP **P** **07 44 44.4 +1.0**
comp=Z,24nm,1.2s,baz=144,slow=11
**MANZ Manzenberg** 17.31 335 eP **P** **07 44 46.3 +0.6**
comp=Z,21nm,1.1s,baz=144,slow=11
**ONI Oni** 17.34 58 P **Pn** **07 44 44.6 -0.3**
**ONI Oni** 17.34 58 P **Pn** **07 44 44.5 -0.3**
**ONI Oni** 17.34 58 P **Pn** **07 44 44.6 -0.3**
**KIV Kislovodsk** 17.35 53 eP **P** **07 44 46.9 +0.7**
KIV eS **S** **07 48 01.7 -4.1**
KIV pmax pmax
comp=Z,104nm,1.1s
KIV MLR MLR
comp=Z,293nm,13.0s
**KIV Kislovodsk** 17.35 53 eP **P** **07 44 46.9 +0.7**
comp=Z,104nm,1.1s
**KBZ Khabaz** 17.39 53 P **Pn** **07 44 45.5 +0.1**
comp=Z,0.7nm,0.3s,baz=257,slow=8.3,SNR=44
KBZ LR LR 07 52 56.4
comp=Z,519nm,19.9s,baz=256,slow=42
**KBZ Khabaz** 17.39 53 P **Pn** **07 44 45.5 +0.1**
KBZ pmax pmax
comp=Z,1.0nm,0.3s
KBZ MLR MLR
comp=Z,519nm,19.9s
**GRF Grafenberg Arr** 17.40 332 eP **P** **07 44 48.0 +1.4**
comp=Z,108nm,1.3s,baz=144,slow=11
**GRFO Grafenberg** 17.40 332 eP **Pn** **07 44 44.5 -1.0**
GRFO pmax pmax
comp=Z,205nm,1.4s
**GRFO Grafenberg** 17.40 332 ePn **Pn** **07 44 44.5 -1.0**
comp=Z,205nm,1.4s
**GRFO Grafenberg** 17.40 332 ePn **Pn** **07 44 44.5 -1.0**
comp=Z,205nm,1.4s
**NKC Novy Kostel** 17.40 336 eP **P** **07 44 47.9 +1.2**
NKC MLR MLR
comp=Z,2µm,14.1s
**NKC Novy Kostel** 17.40 336 eP **P** **07 44 47.9 +1.2**
NKC epP **pP** **07 44 50.6 -1.9**
NKC esP **sP** **07 44 56.7 +1.4**
NKC AMS AMS 07 52 50.0
comp=Z,2µm,14.1s
**NKC Novy Kostel** 17.40 336 eP **P** **07 44 47.9 +1.2**
comp=Z,2µm,14.1s
**BBS Basel-Blauen** 17.43 321 eP **P** **07 44 47.8 +0.7**
**FELD Feldberg im Sc** 17.45 323⇓eP **Pn** **07 44 46.5 +0.2**
**WERN Wernitzgruen** 17.48 336 eP **P** **07 44 47.9 +0.4**
comp=Z,14nm,1.3s,baz=144,slow=11
**BRG Berggiesshubel** 17.49 339 *i* P **P** **07 44 48.4 +0.7**
comp=Z,22nm,1.1s
comp=N,2µm,24.3s
comp=E,820nm,14.8s
comp=Z,2µm,20.3s
**BRG Berggiesshubel** 17.49 339 *i* P **P** **07 44 48.4 +0.7**
BRG pmax pmax
comp=Z,22nm,1.1s
BRG MLR MLR
comp=N,2µm,24.3s
BRG MLR MLR
comp=E,820nm,14.8s
BRG MLR MLR
comp=Z,2µm,20.3s
**BRG Berggiesshubel** 17.49 339 eP **P** **07 44 48.4 +0.7**
comp=Z,22nm,1.1s,baz=144,slow=11
**BRG Berggiesshubel** 17.49 339 *i* P **P** **07 44 48.4 +0.7**
comp=Z,2µm,20.3s
**GUNZ Gunzen** 17.55 336 eP **P** **07 44 50.4 +2.0**
comp=Z,17nm,1.2s,baz=144,slow=11
**TANN Tannenbergstha** 17.55 336 eP **P** **07 44 50.0 +1.6**
comp=Z,40nm,1.7s,baz=144,slow=11
**BFO Black Forest** 17.61 325 *i* P **P** **07 44 49.6 +0.6**
**BFO Black Forest** 17.61 325 eP **P** **07 44 48.8 -0.2**
comp=Z,291nm,2.7s
**BFO Black Forest** 17.61 325 eP **P** **07 44 48.8 -0.2**
comp=Z,291nm,2.7s
**GNI Garni** 17.63 66ceP **Pn** **07 44 46.8 -1.8**
GNI pmax pmax
comp=Z,363nm,1.7s
**GNI Garni** 17.63 66 P **P** **07 44 49.5 +0.1**
SNR=16
**GNI Garni** 17.63 66 eP **P** **07 44 49.7 +0.3**
comp=Z,612nm,1.4s
**GNI Garni** 17.63 66 P **P** **07 44 49.5 +0.1**
SNR=16
**WERD Werda** 17.63 336 eP **P** **07 44 50.7 +1.4**
comp=Z,39nm,1.9s,baz=144,slow=11
**FBE Freiberg** 17.71 338 eP **P** **07 44 51.3 +1.3**
comp=Z,42nm,1.1s,baz=144,slow=11
**LOMF Lomont** 17.71 320⇓eP **Pn** **07 44 48.6 -0.9**
**PLN Plauen** 17.72 336 eP **P** **07 44 51.2 +1.0**
comp=Z,23nm,1.2s,baz=144,slow=11
**NCK Nalchik** 17.76 55 eP **P** **07 44 52.8 +2.0**
**NCK Nalchik** 17.76 55 eP **P** **07 44 52.8 +2.0**
**MOF Molkenrain** 17.88 322⇓eP **Pn** **07 44 51.2 -0.3**
**TBLG Delisi** 17.99 61 eP **P** **07 44 55.0 +1.8**
**TBLG Delisi** 17.99 61 P **P** **07 44 54.5 +1.2**
**TBLG Delisi** 17.99 61 P **P** **07 44 54.5 +1.2**
**TBLG Delisi** 17.99 61 P **P** **07 44 54.5 +1.2**
**MOX Moxa** 18.04 335 eP **P** **07 44 53.8 +0.1**
comp=Z,7.2nm,0.8s,baz=144,slow=11
**CLL Collm** 18.15 338 eP **P** **07 44 55.0 0.0**
CLL pmax pmax
comp=Z,15nm,1.0s
CLL MLR MLR
comp=Z,2µm,19.5s
**CLL Collm** 18.15 338 eP **P** **07 44 55.6 +0.6**
comp=Z,15nm,1.0s,baz=144,slow=11
**CLL Collm** 18.15 338 eP **P** **07 44 55.0 0.0**
comp=Z,15nm,1.0s
CLL e 07 44 58.0
CLL epP **pP** **07 45 00.0 -0.8**
CLL esP **sP** **07 45 03.0 -0.5**
CLL ePP **PnPn** **07 45 05.0 -1.0**
CLL e(S) **S** **07 48 25.0 +3.1**
CLL Lm MLR 07 53 00.0
comp=N,1µm,18.4s
CLL Lm MLR 07 53 00.0
comp=E,800nm,20.9s
CLL Lm MLR 07 53 00.0
comp=Z,2µm,19.5s
CLL Lmax 07 53 00.0
CLL LV 10 58 00.0
comp=Z,200nm,20.4s
**CLL Collm** 18.15 338 ePn **P** **07 44 55.9 +0.9**
comp=Z,62nm,1.2s
**CLL Collm** 18.15 338 eP **P** **07 44 55.0 0.0**

comp=Z,2µm,19.5s
**CLL Collm 18.15 338** *e*Pn **P** 07 44 55.9 +0.9
comp=Z,62nm,1.2s
**IAZR Azarshahr 18.31 75** *e*P Pn 07 45 02.0 +4.9
**LANF Langenberg 18.31 325** *e*P **P** 07 44 58.8 +2.0
**TOD Tromm 18.32 328** *e*P **P** 07 44 59.9 +3.1
**DGRG David-gareji 18.38 62** P **Pn** 07 44 58.1 +0.4
**DGRG David-gareji 18.38 62** P **Pn** 07 44 58.0 +0.4
**DGRG David-gareji 18.38 62** P **Pn** 07 44 58.0 +0.4
**KTD Kalmit 18.43 327** *e*P **Pn** 07 45 00.5 +2.3
**NEUB Neuenburg 18.46 336** *e*P **Pn** 07 44 59.7 +1.2
comp=Z,42nm,0.9s,baz=144,slow=11
**PLDF La Plantade 18.77 312** *e*P **P** 07 45 01.1 -0.8
**TNS Taunus Mts 18.93 329** *e*P **Pn** 07 45 06.1 +1.8
comp=Z,33nm,1.2s,baz=144,slow=11
**IBST Bostanabad 19.04 75** *e*P **Pn** 07 45 07.4 +1.5
**IBST Bostanabad 19.04 75** *e*P **Pn** 07 45 07.4 +1.5
**IVIS Veis 19.16 84** *e*P **Pn** 07 45 07.7 +0.4
**IVIS Veis 19.16 84** *e*P **Pn** 07 45 07.7 +0.4
**RUP Ruppelstein 19.17 326** *e*P **Pn** 07 45 07.2 +0.1
**IHRS Heris 19.18 73** *e*P **Pn** 07 45 07.7 +0.1
**IHRS Heris 19.18 73** *e*P **Pn** 07 45 07.7 +0.1
**CLZ Clausthal 19.47 335** *e*P **Pn** 07 45 10.3 -0.4
comp=Z,18nm,1.1s,baz=144,slow=11
**WLF Walferdange 19.57 325** *e*P **P** 07 45 10.2 -0.3
WLF pmax pmax
comp=Z,166nm,1.6s
**WLF Walferdange 19.57 325** *e*P **P** 07 45 10.2 -0.3
comp=Z,166nm,1.6s
**WLF Walferdange 19.57 325** *e*P **P** 07 45 10.2 -0.3
comp=Z,166nm,1.6s
**VORD Divnogorie 19.76 30** *e*P **P** 07 45 11.6 -1.0
VORD pmax pmax
comp=N,10.0nm,0.7s
VORD pmax pmax
comp=E,10.0nm,0.7s
VORD pmax pmax
comp=Z,10.0nm,0.7s
VORD pmax pmax
comp=N,20nm,1.0s
VORD pmax pmax
comp=Z,20nm,1.0s
VORD pmax pmax
comp=E,30nm,0.9s
**VORD Divnogorie 19.76 30** *e*P **P** 07 45 11.6 -1.0
**TAM Tamanrasset 19.79 237** *e*P **Pn** 07 45 14.4 -0.5
TAM pmax pmax
comp=Z,9.0nm,0.9s
**TAM Tamanrasset 19.79 237** *e*P **Pn** 07 45 14.4 -0.5
comp=Z,8.6nm,0.9s
**TAM Tamanrasset 19.79 237** *e*P **Pn** 07 45 14.4 -0.5
comp=Z,9.0nm,0.9s
**MNK Minsk 19.90 7**⇑ *e*P **P** 07 45 12.0 -2.1
MNK pmax pmax
comp=Z,120nm,1.0s
**VSR Storozhevoye 19.90 30** *e*P **P** 07 45 13.2 -0.9
VSR *e*S **Sn** 07 48 59.0 +0.2
VSR pmax pmax
comp=N,20nm,0.5s
VSR pmax pmax
comp=E,9.0nm,0.5s
VSR pmax pmax
comp=Z,10.0nm,0.5s
VSR pmax pmax
comp=N,20nm,0.6s
VSR pmax pmax
comp=E,10.0nm,0.6s
VSR pmax pmax
comp=Z,20nm,0.6s
VSR smax smax
comp=N,120nm,1.9s
VSR smax smax
comp=Z,60nm,1.9s
VSR smax smax
comp=E,40nm,1.5s
**VSR Storozhevoye 19.90 30** *e*P **P** 07 45 13.2 -0.9
VSR *e*S **Sn** 07 48 59.0 +0.2
**MICGM Minsk 19.91 7**⇑ *e*P **P** 07 45 12.0 -2.1
**IBZA Bozab 20.00 84** *e*P **P** 07 45 16.4 +0.8
**IBZA Bozab 20.00 84** *e*P **P** 07 45 16.4 +0.8
**NACGM Naroch 20.20 5** *e* **P** 07 45 15.0 -2.4
**MEM Membach 20.29 326** P **P** 07 45 18.9 +0.6
comp=Z,21nm,1.3s
**MEM Membach 20.29 326** P **P** 07 45 18.9 +0.6
comp=Z,21nm,1.3s
**MAK Makhachkala 20.29 59** *e*P **P** 07 45 17.5 -0.9
MAK *e* 07 45 36.6
MAK *e*S Sn 07 49 09.0 +0.6
MAK *e*SS **SnSn** 07 49 27.7 +4.8
MAK pmax pmax
comp=Z,234nm,1.5s
MAK MLR MLR
comp=Z,341nm,12.0s
**MAK Makhachkala 20.29 59** *e*P **P** 07 45 17.5 -0.9
comp=Z,234nm,1.5s
**BUG Bochum–Univer 20.34 330** *e*P Pn 07 45 20.6 -0.3
comp=Z,33nm,1.2s,baz=144,slow=11
**HGN Heimansgroeve 20.43 327** *e*P Pn 07 45 23.8 +1.8
comp=Z,27nm,1.0s
**BCLA Clavier 20.48 325** P Pn 07 45 22.7 +0.1
comp=Z,20nm,1.5s
**BCLA Clavier 20.48 325** P Pn 07 45 22.7 0.0
comp=Z,20nm,1.5s
**DOU Dourbes 20.61 324** P Pn 07 45 22.6 -1.5
comp=Z,22nm,1.4s
**DOU Dourbes 20.61 324** P Pn 07 45 22.6 -1.5
comp=Z,22nm,1.4s
**IIGN Ignalina 20.61 4** *e*P **P** 07 45 18.8 -3.0
IIGN IAmb IAmb 07 45 30.6
comp=Z,18nm,0.7s
**ISAL Salakas 20.82 4** *e*P **P** 07 45 20.9 -3.2
ISAL IAmb IAmb 07 45 32.8
comp=Z,18nm,1.0s
**LPSR Galich'ya Gora 20.88 27** *e*P **P** 07 45 23.0 -1.7
LPSR *e*S **S** 07 49 16.2 -0.3
LPSR pmax pmax
comp=N,10.0nm,0.9s
LPSR pmax pmax
comp=E,10.0nm,0.9s
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR smax smax
comp=N,150nm,2.3s
LPSR smax smax
comp=E,160nm,2.3s
LPSR smax smax
comp=Z,110nm,2.3s
**WTSB Winterswijk 20.93 330** *e*P **P** 07 45 21.0 -4.3
comp=Z,15nm,0.5s
**VRH Novokhopyorsk 20.99 33** *e*P **P** 07 45 24.6 -1.3
VRH *e* 07 45 38.3
VRH *e*S **S** 07 49 19.3 +0.6
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.6s
VRH pmax pmax
comp=Z,10.0nm,0.6s
VRH pmax pmax
comp=Z,30nm,0.7s
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.7s
VRH smax smax
comp=N,340nm,1.8s
VRH smax smax
comp=E,300nm,1.8s
VRH smax smax
comp=Z,50nm,1.8s
**VRH Novokhopyorsk 20.99 33** *e*P **P** 07 45 24.6 -1.3
VRH *e*S **S** 07 49 19.3 +0.6
**IZAR Zarasai 21.01 4** *e*P **P** 07 45 22.8 -3.2
IZAR IAmb IAmb 07 45 34.7
comp=Z,15nm,0.8s
**IZAR Zarasai 21.01 4** *e*P **P** 07 45 22.8 -3.2
SNR=29
**SNF Seneffe 21.03 324** P P 07 45 30.7 +4.3
**BSD Bornholm Skovb 21.16 346** *i*P **P** 07 45 26.6 -1.0
BSD pmax pmax
comp=Z,5.0nm,0.4s
**BSD Bornholm Skovb 21.16 346** *i*P **P** 07 45 26.6 -1.0
comp=Z,5.1nm,0.4s
**BSD Bornholm Skovb 21.16 346** *i*P **P** 07 45 26.6 -1.0
comp=Z,5.0nm,0.4s
**RAYN Ar Rayn 22.18 115** *e*P **P** 07 45 40.7 +1.6
comp=Z,13nm,0.9s
**RAYN Ar Rayn 22.18 115** *e*P **P** 07 45 40.7 +1.6
comp=Z,13nm,0.9s
**OBN Obninsk 22.21 20** P **P** 07 45 38.8 -0.2
comp=Z,26nm,0.4s,baz=212,slow=8.3,SNR=9.9
**OBN Obninsk 22.21 20**⇑ *i*P **P** 07 45 38.9 0.0
OBN *i* 07 45 47.6
OBN *i* 07 45 59.5
OBN pmax pmax
comp=Z,35nm,1.2s
OBN MLR MLR
comp=Z,518nm,15.0s
**ESDC Sonseca Array 22.39 291** P **P** 07 45 40.8 -0.4
comp=Z,7.5nm,0.8s,baz=84,slow=10.0,SNR=22
ESDC LR LR 07 55 16.9
comp=Z,173nm,19.9s,baz=45,slow=39
**PAB San Pablo 22.67 290** *e*P **P** 07 45 45.2 +1.0
PAB pmax pmax
comp=Z,46nm,1.3s
**PAB San Pablo 22.67 290** *e*P **P** 07 45 45.2 +1.0
comp=Z,46nm,1.3s
**PAB San Pablo 22.67 290** *e*P **P** 07 45 45.2 +1.0
comp=Z,46nm,1.3s
**IPIR Pirpir 22.81 88** *e*P **P** 07 45 46.2 +0.2
**IPIR Pirpir 22.81 88** *e*P **P** 07 45 46.2 +0.2
**MOS Moscow 23.05 21** *e*P **P** 07 45 45.5 -2.4
MOS *e* 07 45 59.5
MOS *e* 07 46 10.3
MOS *e* 07 46 31.1
MOS *e*S **S** **07 49 52.6 -4.9**
MOS pmax pmax
comp=Z,79nm,0.9s
MOS MLR MLR
comp=Z,1µm,15.0s
**IKLH Kolahrood 23.24 86** *e*P **P** 07 45 51.1 +0.8
**IKLH Kolahrood 23.24 86** *e*P **P** 07 45 51.1 +0.8
**MDT Midelt 23.45 273** P **P** 07 45 51.8 -0.5
comp=Z,7.0nm,1.1s,baz=101,slow=13,SNR=4.4
**LIJA Lijar 23.52 284** *i*P **P** 07 45 53.0 +0.2
**VSU Vasula 23.74 4**⇑ *i*P **P** 07 45 52.7 -1.9
VSU pmax pmax
comp=Z,146nm,1.7s
**IGAR Gharneh 23.82 88** *e*P **P** 07 45 56.9 +0.9
**IALA Alasht 23.84 78** *e*P **P** 07 45 57.3 +1.1
**IALA Alasht 23.84 78** *e*P **P** 07 45 57.3 +1.1
**IZEF Zefreh 23.95 86** *e*P **P** 07 45 58.1 +0.9
**IZEF Zefreh 23.95 86** *e*P **P** 07 45 58.1 +0.9
**IKAZ Kazeroun 24.40 94** *e*P **P** 07 46 02.5 +1.0
**IKAZ Kazeroun 24.40 94** *e*P **P** 07 46 02.5 +1.0
**IGLO Ghaloghah 24.62 77** *e*P **P** 07 46 04.0 +0.8
**PBAR Barrancos 24.76 287** *e*P **P** 07 46 04.2 -0.1
comp=Z,98nm,1.5s
**PBAR Barrancos 24.76 287** *e*P **P** 07 46 04.2 -0.1
comp=Z,98nm,1.5s
**MVO Moncorvo 24.83 294** *e*P **P** 07 46 05.2 +0.2
comp=Z,57nm,1.6s
MVO *e*LR LR 07 54 46.4
comp=Z,250nm,18.0s
**MVO Moncorvo 24.83 294** *e*P **P** 07 46 05.2 +0.2
comp=Z,57nm,1.6s
**PMRV Marv??o 25.02 290** *e*P **P** 07 46 02.8 -3.9
comp=Z,39nm,1.4s
PMRV *e*LR LR 07 55 53.4
comp=Z,198nm,18.0s
**PCBR Castelo Branco 25.10 291** *e*P **P** 07 46 08.4 +1.1
comp=Z,20nm,1.4s
**PCBR Castelo Branco 25.10 291** *e*P **P** 07 46 08.4 +1.1
comp=Z,20nm,1.4s
**CWF Charnwood Fore 25.15 323** *e*P **P** 07 46 07.9 +0.3
comp=Z,58nm,1.2s
**CWF Charnwood Fore 25.15 323** *e*P **P** 07 46 07.9 +0.3
comp=Z,58nm,1.2s
**MTE Manteigas 25.17 292** *e*LR LR 07 53 45.0
comp=Z,196nm,20.0s
**PVAQ Vaqueiros 25.33 285** *e*P **P** 07 46 09.4 0.0
comp=Z,42nm,1.8s
**PVAQ Vaqueiros 25.33 285** *e*P **P** 07 46 09.4 0.0
comp=Z,42nm,1.8s
**IPAR Pars 25.37 93** *e*P **P** 07 46 11.5 +1.3
**IPAR Pars 25.37 93** *e*P **P** 07 46 11.5 +1.3
**PBEJ Beja 25.41 286** *e*P **P** 07 46 10.7 +0.5
comp=Z,25nm,1.5s
**PBEJ Beja 25.41 286** *e*P **P** 07 46 10.7 +0.5
comp=Z,25nm,1.5s
**POLO Lamas de Olo 25.42 294** *e*P **P** 07 46 10.5 +0.1
comp=Z,16nm,1.6s
**POLO Lamas de Olo 25.42 294** *e*P **P** 07 46 10.5 +0.1
comp=Z,16nm,1.6s
**PVIS Viseu 25.45 293** *e*P **P** 07 46 10.8 +0.2
comp=Z,46nm,2.1s
**PVIS Viseu 25.45 293** *e*P **P** 07 46 10.8 +0.2
comp=Z,46nm,2.1s
**PBDV Barranco-do-Ve 25.51 285** *e*P **P** 07 46 09.7 -1.4
comp=Z,57nm,1.6s
**PBDV Barranco-do-Ve 25.51 285** *e*P **P** 07 46 09.7 -1.4
comp=Z,57nm,1.6s
**EVO Evora 25.51 288** *e*P **P** 07 46 11.8 +0.7
comp=Z,29nm,1.2s
**EVO Evora 25.51 288** *e*P **P** 07 46 11.8 +0.7
comp=Z,29nm,1.2s
**PCVE Castro Verde 25.57 286** *e*P **P** 07 46 11.6 0.0
comp=Z,53nm,1.1s
**PCVE Castro Verde 25.57 286** *e*P **P** 07 46 11.6 0.0
comp=Z,53nm,1.1s
**ISRV Sarvestan 25.58 94** *e*P **P** 07 46 12.9 +0.8
**ISRV Sarvestan 25.58 94** *e*P **P** 07 46 12.9 +0.8
**PCAB Cabril 25.63 295** *e*P **P** 07 46 12.0 -0.1
comp=Z,42nm,1.3s
**PCAB Cabril 25.63 295** *e*P **P** 07 46 12.0 -0.1
comp=Z,42nm,1.3s
**PMTG Montargil 25.67 289** *e*P **P** 07 46 12.5 0.0
comp=Z,30nm,1.6s
**PMTG Montargil 25.67 289** *e*P **P** 07 46 12.5 0.0
comp=Z,30nm,1.6s
**MESJ Messejana 25.70 286** *e*P **P** 07 46 13.0 +0.1
MESJ AMb AMB 07 46 17.9
comp=Z,44nm,1.4s
MESJ *e*S **S** 07 50 43.6 +3.2
**MESJ Messejana 25.70 286** *e*P **P** 07 46 12.6 -0.2
comp=Z,45nm,1.3s
**MESJ Messejana 25.70 286** *e*P **P** 07 46 12.9 +0.1
MESJ *e*S **S** 07 50 43.6 +3.2
MESJ pmax pmax
comp=Z,44nm,1.4s
**MESJ Messejana 25.70 286** *e*P **P** 07 46 12.6 -0.2
comp=Z,45nm,1.3s
**PTOM Tomar 25.81 290** *e*P **P** 07 46 14.0 +0.2
comp=Z,41nm,1.8s
**PTOM Tomar 25.81 290** *e*P **P** 07 46 14.0 +0.2
comp=Z,41nm,1.8s
**PGAV Gavieira, Arco 25.83 296** *e*P **P** 07 46 16.8 +2.7
comp=Z,46nm,1.9s
**PGAV Gavieira, Arco 25.83 296** *e*LR LR 07 57 38.2
comp=Z,336nm,18.0s
**PCAS Casmilo, Conde 25.89 291** *e*P **P** 07 46 14.6 +0.1
comp=Z,28nm,1.7s
**PCAS Casmilo, Conde 25.89 291** *e*P **P** 07 46 14.6 +0.1
comp=Z,28nm,1.7s
**SNART Snartemo 25.92 340** *i*P **P** 07 46 16.0 +1.4
SNR=28
**PNCL Nicolau / Gran 25.93 287** *e*P **P** 07 46 16.9 +2.0
comp=Z,56nm,1.3s
**PNCL Nicolau / Gran 25.93 287** *e*P **P** 07 46 16.9 +2.0
comp=Z,56nm,1.3s
**HFS Hagfors 26.12 349** P **P** 07 46 15.3 -1.1
comp=Z,7.5nm,0.4s,baz=156,slow=11,SNR=30
HFS LR LR 07 59 31.4
comp=Z,542nm,19.2s,baz=178,slow=43
**HFS Hagfors 26.12 349** P **P** 07 46 15.3 -1.1
HFS pmax pmax
comp=Z,8.0nm,0.4s
HFS MLR MLR
comp=Z,542nm,19.2s
**PFVI Vila Bisbo 26.23 285** *e*P **P** 07 46 17.6 0.0
comp=Z,66nm,2.1s
**PFVI Vila Bisbo 26.23 285** *e*P **P** 07 46 17.6 0.0
comp=Z,66nm,2.1s
**KONO Kongsberg 26.47 344** *e*P **P** 07 46 19.8 +0.3
KONO pmax pmax
comp=Z,9.0nm,0.8s
**KONO Kongsberg 26.47 344** *e*P **P** 07 46 19.8 +0.3
comp=Z,9.3nm,0.8s
**KONO Kongsberg 26.47 344** *e*P **P** 07 46 19.8 +0.3
comp=Z,9.0nm,0.8s
**FINES FINESS Array B 26.69 3** P **P** 07 46 18.9 -2.5
comp=Z,5.2nm,0.6s,baz=192,slow=12,SNR=7.6
FINES PcP **PcP** 07 49 44.6 0.0
comp=Z,0.8nm,0.5s,baz=123,slow=5.1,SNR=2.2
FINES LR LR 07 58 16.7
comp=Z,1µm,18.7s,baz=186,slow=40
**FINES FINESS Array B 26.69 3** P **P** 07 46 18.9 -2.5
FINES 07 49 44.6
FINES pmax pmax
comp=Z,5.0nm,0.6s
FINES pmax pmax
comp=Z,1.0nm,0.5s
FINES MLR MLR
comp=Z,1µm,18.7s
**NB2 NORSAR Subarra 27.41 347** P **P** 07 46 26.5 -1.5
comp=Z,6.9nm,0.8s,baz=156,slow=9.3
**NB2 NORSAR Subarra 27.41 347** P **P** 07 46 26.5 -1.5
comp=Z,6.9nm,0.8s,SNR=1.5
**NOA NORSAR Array B 27.41 347** P **P** 07 46 26.3 -1.7
comp=Z,3.7nm,0.8s,baz=150,slow=9.7,SNR=15
NOA LR LR 07 59 19.9
comp=Z,595nm,18.5s,baz=170,slow=41
**NOA NORSAR Array B 27.41 347** P **P** 07 46 26.3 -1.7
NOA pmax pmax
comp=Z,4.0nm,0.8s
NOA MLR MLR
comp=Z,595nm,18.5s
**NBO02 NORSAR Array S 27.48 347** *e*P **P** 07 46 31.2 +2.6
**NBO02 NORSAR Array S 27.48 347** *e*P **P** 07 46 31.2 +2.6
**EKA Eskdalemuir Ar 27.57 326** P **P** 07 46 28.9 -0.5
comp=Z,2.7nm,0.4s,baz=127,slow=7.5,SNR=24
**EKA Eskdalemuir Ar 27.57 326** P **P** 07 46 28.9 -0.5
EKA pmax pmax
comp=Z,3.0nm,0.4s
**ESK Eskdalemuir 27.58 326** *e*P **P** 07 46 30.5 +1.0
ESK pmax pmax
comp=Z,47nm,1.2s
**ESK Eskdalemuir 27.58 326** *e*P **P** 07 46 30.4 +1.0
comp=Z,47nm,1.2s
**ESK Eskdalemuir 27.58 326** *e*P **P** 07 46 30.5 +1.0
comp=Z,47nm,1.2s
**GEYT Ailbeck 27.91 73** P **P** 07 46 33.1 +0.3
comp=Z,7.5nm,0.3s,baz=285,slow=13,SNR=4.6
**KLMR Klimovskoe 28.01 17** *e*P **P** 07 46 29.9 -3.4
KLMR S **S** 07 51 15.4 -0.9
KLMR pmax pmax
comp=Z,27nm,1.2s
KLMR MLR MLR
comp=Z,595nm,12.0s
**TOA0 Torodi Ar. Sit 29.27 228** *e*P **P** 07 46 44.1 -0.9
**TOA0 Torodi Ar. Sit 29.27 228** *e*P **P** 07 46 44.5 -0.5
**TOA0 Torodi Ar. Sit 29.27 228** *e*P **P** 07 46 44.5 -0.5
**TORD Torodi Ar. Bea 29.27 228** P **P** 07 46 44.4 -0.6
comp=Z,16nm,1.0s,baz=36,slow=8.8,SNR=58
TORD LR LR 07 59 34.4
comp=Z,213nm,19.1s,baz=20,slow=39
**AKTK Aktyubinsk 29.45 47** P **P** 07 46 45.5 -0.8
comp=Z,12nm,1.3s
**AKTO Aktyubinsk 29.45 47** P **P** 07 46 45.1 -1.2
comp=Z,2.9nm,0.4s,baz=254,slow=9.3,SNR=17
**AKTO Aktyubinsk 29.45 47** P **P** 07 46 45.5 -0.8
AKTO pmax pmax
comp=Z,12nm,1.3s
**HATD Hatta, Dubai 29.86 101**⇑ P **P** 07 46 50.6 +0.4
SNR=8.1
**HATD Hatta, Dubai 29.86 101** P **P** 07 46 50.6 +0.4
SNR=8.1
**UOSS Wadi Hilu 29.86 100** *e*P **P** 07 46 50.8 +0.6
comp=Z,33nm,1.0s
**UOSS Wadi Hilu 29.86 100** *e*P **P** 07 46 50.8 +0.6
comp=Z,33nm,1.0s
**AB31 Akbulak array 30.31 50** *i*P **P** 07 46 53.4 -0.5
AB31 pmax pmax
comp=Z,4.0nm,0.7s
**AB31 Akbulak array 30.31 50** *i*P **P** 07 46 53.4 -0.5
comp=Z,4.0nm,0.7s
**ABKAR Akbulak array 30.31 50** *e*P **P** 07 46 53.6 -0.3
comp=Z,2.3nm,0.6s
**ABKAR Akbulak array 30.31 50** *e*P **P** 07 46 53.6 -0.3
comp=Z,2.3nm,0.6s
**ARQ Araqi 30.88 103**⇓ P **P** 07 47 00.2 +1.0
SNR=6.4
**ARQ Araqi 30.88 103** P **P** 07 47 00.2 +1.0
SNR=6.4
**HOQ Hoqain 31.39 102**⇑ P **P** 07 47 03.7 0.0
SNR=7.5
**HOQ Hoqain 31.39 102** P **P** 07 47 03.7 0.0
SNR=7.5
**BSY Bisya 31.71 103**⇓ P **P** 07 47 06.9 +0.3
SNR=7.8
**BSYO Bisya 31.75 103** P **P** 07 47 06.9 0.0
SNR=7.8
**SMDO Samad 32.24 102**⇑ P **P** 07 47 11.3 0.0
SNR=9.5
**SMDO Samad 32.24 102** P **P** 07 47 11.3 0.0
SNR=9.5
**JMDO Jabal Madar 32.62 103**⇓ P **P** 07 47 14.1 -0.4
SNR=6.8
**JMDO Jabal Madar 32.62 103** P **P** 07 47 14.1 -0.4
SNR=6.8
**WBK Wadi Bani Khal 33.20 102**⇑ P **P** 07 47 20.8 +1.2
SNR=8.1
**WBK Wadi Bani Khal 33.20 102** P **P** 07 47 20.8 +1.2
SNR=8.1
**SVE Sverdlovsk 33.32 37** *e*P **P** 07 47 19.9 -0.3
**SVE Sverdlovsk 33.32 37** *e*P **P** 07 47 19.9 -0.3
**ARCES ARCESS Array B 34.78 1** P **P** 07 47 30.8 -2.0
comp=Z,3.6nm,0.6s,baz=176,slow=10,SNR=22
ARCES PcP **PcP** 07 50 05.3 -0.4
comp=Z,0.8nm,0.6s,baz=152,slow=4.1,SNR=2.4
ARCES LR LR 08 02 46.7
comp=Z,818nm,20.3s,baz=190,slow=38
**ARCES ARCESS Array B 34.78 1** P **P** 07 47 30.8 -2.0
ARCES 07 50 05.3
ARCES pmax pmax
comp=Z,4.0nm,0.6s
ARCES pmax pmax
comp=Z,1.0nm,0.6s
ARCES MLR MLR
comp=Z,818nm,20.3s
**ZRNK Zerenda 36.70 46** *i*P **P** 07 47 49.1 -0.3
ZRNK pmax pmax
comp=Z,31nm,0.9s
**ZRNK Zerenda 36.70 46** *i*P **P** 07 47 49.1 -0.3
comp=Z,31nm,0.9s
**KK31 Karatay Array 37.03 63** *i*P **P** 07 47 53.1 +0.6
KK31 pmax pmax
comp=Z,69nm,1.4s
**KK31 Karatay Array 37.03 63** *i*P **P** 07 47 53.1 +0.6
comp=Z,69nm,1.4s
**KKAR Karatay Array 37.03 63** *e*P **P** 07 47 53.6 +1.1
KKAR pmax pmax
comp=Z,6.0nm,0.6s
**KKAR Karatay Array 37.03 63** *e*P **P** 07 47 53.6 +1.1
comp=Z,6.3nm,0.6s
**KKAR Karatay Array 37.03 63** *e*P **P** 07 47 53.6 +1.1
comp=Z,6.0nm,0.6s
**BVA0 Borovoye Array 37.54 46** *i*P **P** 07 47 56.1 -0.5
BVA0 pmax pmax
comp=Z,23nm,1.0s
**BVA0 Borovoye Array 37.54 46** *i*P **P** 07 47 56.1 -0.5
comp=Z,23nm,1.0s
**BVAR Borovoye Array 37.54 46** P **P** 07 47 56.3 -0.3
comp=Z,5.8nm,0.8s,baz=258,slow=7.1,SNR=29
**BVAR Borovoye Array 37.54 46** P **P** 07 47 56.3 -0.3
BVAR pmax pmax
comp=Z,6.0nm,0.8s
**CHKZ Chkalovo 37.79 45** *i*P **P** 07 47 58.2 -0.4
CHKZ pmax pmax
comp=Z,21nm,0.9s
**CHKZ Chkalovo 37.79 45** *i*P **P** 07 47 58.2 -0.4
comp=Z,21nm,0.9s
**KMBO Kilima Mbogo 38.00 157** LR LR 08 04 28.9
comp=Z,368nm,20.2s,baz=330,slow=38
**OTUK Ortayu 38.27 54** P **P** 07 48 02.7 -0.1
OTUK pmax pmax
comp=Z,40nm,1.2s
**OTUK Ortayu 38.27 54** P **P** 07 48 02.7 -0.1
comp=Z,40nm,1.2s
**DBIC Dimbokro 38.33 230** P **P** 07 48 02.3 -1.3
comp=Z,8.8nm,0.6s,baz=20,slow=9.3,SNR=9.3
DBIC LR LR 08 05 08.0
comp=Z,202nm,18.7s,baz=28,slow=38
**DBIC Dimbokro 38.33 230** P **P** 07 48 02.3 -1.3
DBIC pmax pmax
comp=Z,9.0nm,0.6s
DBIC MLR MLR
comp=Z,202nm,18.7s
**TIC Toumodi 38.45 230** *e*P **P** 07 48 03.8 -0.9
**KIC Kosan Boka 38.50 229** *e*P **P** 07 48 04.3 -0.7

comp=Z,62nm,1.2s
**MNAS Manas 38.54 64** P **P 07 48 06.0 +0.6**
MNAS pmax pmax
comp=Z,15nm,1.5s
**MNAS Manas 38.54 64** P **P 07 48 06.0 +0.6**
comp=Z,15nm,1.5s
**LIC Lamto 38.78 229** *e*P **P 07 48 06.7 -0.7**
comp=Z,42nm,0.8s
**EKS2 Erkin-Say 39.46 63** *e*P **P 07 48 14.3 +1.3**
EKS2 pmax pmax
comp=Z,8.0nm,0.6s
**EKS2 Erkin-Say 39.46 63** P **P 07 48 14.4 +1.4**
SNR=12
**EKS2 Erkin-Say 39.46 63** *e*P **P 07 48 14.3 +1.3**
comp=Z,7.6nm,0.6s
**EKS2 Erkin-Say 39.46 63** *e*P **P 07 48 14.3 +1.3**
comp=Z,8.0nm,0.6s
**SFK Sufi-Kurgan 39.59 67** P **P 07 48 15.1 +0.8**
SFK pmax pmax
comp=Z,20nm,0.9s
**SFK Sufi-Kurgan 39.59 67** P **P 07 48 15.1 +0.8**
comp=Z,20nm,0.9s
**AAK Ala-Archa 39.99 63** P **P 07 48 18.3 +0.8**
comp=Z,9.3nm,0.9s,baz=253,slow=7.7,SNR=20
**AAK Ala-Archa 39.99 63** P **P 07 48 18.3 +0.8**
AAK pmax pmax
comp=Z,9.0nm,1.0s
**AAK Ala-Archa 39.99 63** P **P 07 48 18.9 +1.4**
SNR=11
**UCH Uchtor 40.05 64** P **P 07 48 19.0 +0.7**
SNR=6.8
**CHMS Chumysh 40.14 62** P **P 07 48 19.6 +1.0**
SNR=6.0
**TKM2 Tokmak 2 40.77 63** *e*P **P 07 48 24.8 +0.9**
**TKM2 Tokmak 2 40.77 63** P **P 07 48 24.9 +0.9**
SNR=6.5
**TKM2 Tokmak 2 40.77 63** *e*P **P 07 48 24.8 +0.9**
**TKM2 Tokmak 2 40.77 63** *e*P **P 07 48 24.8 +0.9**
**KSH Kashi 41.55 68** P **P 07 48 29.5 -0.9**
KSH *e*pP **pP 07 48 35.8 -1.0**
KSH *e*sP **sP 07 48 38.5 -0.8**
KSH *e*ScP **ScP 07 54 16.5 +0.1**
KSH PcS **PcS 07 54 19.0 +0.1**
KSH S **S 07 54 39.5 -5.8**
KSH PMZ
comp=Z,19nm,1.2s
KSH LN
comp=Z,54nm,5.4s
KSH LE
comp=Z,150nm,4.9s
KSH LZ
comp=Z,170nm,5.6s
**KURBB Kurchatov Arra 42.36 51** P **P 07 48 36.4 -0.2**
comp=Z,9.3nm,0.4s,baz=274,slow=8.7,SNR=69
**KURK Kurchatov 42.42 51** P **P 07 48 36.4 -0.7**
KURK pmax pmax
comp=Z,9.0nm,0.4s
**KURK Kurchatov 42.42 51** *e*P **P 07 48 36.9 -0.2**
**KURK Kurchatov 42.42 51** *e*P **P 07 48 36.9 -0.2**
**PDGK Podgornoye 43.54 61** P **P 07 48 46.6 +0.4**
PDGK pmax pmax
comp=Z,10.0nm,0.9s
**PDGK Podgornoye 43.54 61** P **P 07 48 46.6 +0.4**
comp=Z,10.0nm,0.9s
**SPITS Spitsbergen Ar 43.57 358** P **P 07 48 45.7 -0.4**
comp=Z,2.5nm,0.5s,baz=164,slow=9.5,SNR=13
**SPITS Spitsbergen Ar 43.57 358** P **P 07 48 45.7 -0.4**
SPITS pmax pmax
comp=Z,3.0nm,0.5s
**MAKZ Makanchi 44.85 56** *e*P **P 07 48 57.1 +0.4**
**MAKZ Makanchi 44.85 56** *e*P **P 07 48 57.1 +0.4**
**MK31 Makanchi Array 45.06 56** *i* P **P 07 48 58.4 -0.1**
MK31 pmax pmax
comp=Z,5.0nm,0.3s
**MK31 Makanchi Array 45.06 56** *i* P **P 07 48 58.4 -0.1**
comp=Z,5.0nm,0.3s
**MKAR Makanchi Array 45.06 56** P **P 07 48 58.4 -0.1**
comp=Z,10nm,0.7s,baz=269,slow=7.2,SNR=73
MKAR LR LR 08 11 40.3
comp=Z,92nm,18.8s,baz=274,slow=41
**MKAR Makanchi Array 45.06 56** P **P 07 48 58.4 -0.1**
MKAR pmax pmax
comp=Z,4.0nm,0.3s
MKAR MLR MLR
comp=Z,92nm,18.8s
**NVS Novosibirsk 45.26 45** *e*P **P 07 49 00.3 +0.5**
NVS *e*S **S 07 55 37.4 -1.4**
NVS pmax pmax
comp=Z,61nm,1.7s
NVS pmax pmax
comp=N,15nm,1.8s
NVS pmax pmax
comp=E,16nm,1.6s
NVS smax smax
comp=N,17nm,1.7s
**NVS Novosibirsk 45.26 45** *e*P **P 07 49 00.3 +0.5**
comp=N,15nm,1.8s
NVS *e*S **S 07 55 37.4 -1.4**
comp=N,17nm,1.7s
**NDI New Delhi 45.60 82** *e*P **P 07 49 02.0 -0.9**
**ZALV Zalesovo Beam 46.19 46** P **P 07 49 06.5 -0.7**
comp=N,7.7nm,0.5s,baz=265,slow=9.9,SNR=16
**ZALV Zalesovo Beam 46.19 46** P **P 07 49 06.5 -0.7**
ZALV pmax pmax
comp=Z,8.0nm,0.5s
**WMQ Urumqi 49.31 59** P **P 07 49 32.3 +0.6**
WMQ sP **sP 07 49 41.0 +0.2**
WMQ PP **PP 07 51 27.0 +1.5**
WMQ S **S 07 56 36.0 -1.0**
WMQ ScS **ScS 07 59 20.0 -2.5**
WMQ SS **SS 08 00 05.0 -3.4**
WMQ PMZ
comp=Z,17nm,1.0s
WMQ PMZ
comp=Z,140nm,5.0s
WMQ LN
comp=Z,180nm,18.0s
WMQ LE
comp=Z,190nm,18.0s
WMQ LZ
comp=Z,180nm,18.0s
**LSZ Lusaka 50.02 174** P **P 07 49 37.5 +0.2**
comp=Z,4.5nm,0.6s,baz=15,slow=7.3,SNR=9.0
**LSZ Lusaka 50.02 174** *e*P **P 07 49 38.1 +0.8**
LSZ pmax pmax
comp=Z,4.0nm,0.6s
**LSZ Lusaka 50.02 174** *e*P **P 07 49 38.1 +0.8**
comp=Z,4.2nm,0.6s
**LSZ Lusaka 50.02 174** *e*P **P 07 49 38.1 +0.8**
comp=Z,4.0nm,0.6s
**DANN Dangsing 51.04 80** *e*P **P 07 49 46.2 +0.9**
**KOLN Koldanda 51.14 80** *e*P **P 07 49 45.9 0.0**
comp=Z,83nm,1.4s
**HYB Hyderabad 51.72 95** *i* P **P 07 49 49.5 -0.6**
**HVS Khovu-Aksy 51.87 49** *i* P **P 07 49 50.3 -0.6**
HVS pmax pmax
comp=Z,8.0nm,0.9s
**HVS Khovu-Aksy 51.87 49** *i* P **P 07 49 50.3 -0.6**
comp=Z,8.0nm,0.9s
**GKN Gorkha 51.89 80** *e*P **P 07 49 51.2 -0.3**
comp=Z,37nm,0.8s
**DMN Daman 52.43 80** *e*P **P 07 49 55.4 -0.2**
**KKN Kakani 52.50 80** *e*P **P 07 49 56.0 -0.1**
**PKIN Phulchoki 52.68 80** *e*P **P 07 49 57.3 -0.2**
comp=Z,8.8nm,0.5s
**PKI Pulchoki 52.69 80** *e*P **P 07 49 57.1 -0.5**
comp=Z,44nm,0.8s
**GUN Gumba 52.93 79** *e*P **P 07 49 59.4 0.0**
comp=Z,88nm,1.1s
**RAMN Ramite 53.91 80** *e*P **P 07 50 05.6 -0.9**
comp=Z,11nm,0.7s
**TAPN Taplejung 54.64 79** *e*P **P 07 50 11.3 -0.6**
**ZAK Zakamensk 57.96 48** *e*P **P 07 50 34.4 -0.6**
ZAK pmax pmax
comp=Z,11nm,1.1s
**ZAK Zakamensk 57.96 48** *e*P **P 07 50 34.4 -0.6**
comp=Z,11nm,1.1s
**GTA Gaotai 59.29 61** P **P 07 50 44.5 0.0**
GTA pP **pP 07 50 50.5 -0.6**
GTA sP **sP 07 50 53.5 -0.1**
GTA S **S 07 58 51.5 -0.2**
GTA sS **sS 07 59 04.0 +1.4**
GTA SS **SS 08 02 49.5 +3.5**
GTA PMZ
comp=Z,8.0nm,1.3s
GTA PMZ
comp=Z,75nm,4.2s
GTA LN
comp=Z,100nm,17.1s
GTA LE
comp=Z,220nm,17.1s
GTA LZ
comp=Z,200nm,18.1s
**SONM Songino Array 60.72 50** P **P 07 50 54.4 +0.2**
comp=Z,7.0nm,0.6s,baz=283,slow=8.7,SNR=52
SONM LR LR 08 21 21.7
comp=Z,138nm,18.6s,baz=296,slow=40
**SONM Songino Array 60.72 50** P **P 07 50 54.4 +0.2**
SONM pmax pmax
comp=Z,7.0nm,0.6s
SONM MLR MLR
comp=Z,138nm,18.6s
**ULN Ulaanbaatar 61.12 50***c i*P **P 07 50 56.7 -0.2**
ULN pmax pmax
comp=Z,17nm,0.8s
**ULN Ulaanbaatar 61.12 50** P **P 07 50 57.5 +0.6**
SNR=7.0
**ULN Ulaanbaatar 61.12 50** *e*P **P 07 50 57.0 +0.1**
comp=Z,10nm,0.7s
**ULN Ulaanbaatar 61.12 50** *e*P **P 07 50 57.0 +0.1**
comp=Z,10nm,0.7s
**BOD Bodaibo 61.53 38** *e*P **P 07 50 57.1 -2.2**
BOD pmax pmax
comp=Z,10.0nm,1.0s
**SCHQ Schefferville 62.58 319** P **P 07 51 05.6 -0.9**
comp=Z,8.0nm,0.8s,baz=70,slow=4.3,SNR=6.9
SCHQ LR LR 08 18 40.7
comp=Z,131nm,19.0s,baz=46,slow=36
**BOSA Boshof 63.12 178** P **P 07 51 10.3 +0.1**
comp=Z,1.7nm,0.6s,baz=330,slow=6.1,SNR=5.3
BOSA LR LR 08 21 16.1
comp=Z,182nm,18.3s,baz=356,slow=39
**BOSA Boshof 63.12 178** P **P 07 51 10.4 +0.1**
BOSA pmax pmax
comp=Z,2.0nm,0.6s
BOSA MLR MLR
comp=Z,183nm,18.3s
**LZH Lanzhou 63.53 63** *e*P **P 07 51 13.5 +0.2**
LZH pP **pP 07 51 20.0 +0.1**
LZH sP **sP 07 51 23.8 +1.3**
LZH PMZ
comp=Z,31nm,1.2s
LZH PMZ
comp=Z,180nm,5.6s
**CD2 Chengdu 65.75 68** *e*P **P 07 51 27.5 -0.2**
CD2 pP **pP 07 51 33.5 -0.8**
CD2 PP **PP 07 53 51.8 -0.4**
CD2 S **S 08 00 12.8 -0.2**
CD2 sS **sS 08 00 23.3 -0.8**
CD2 SKS **SKSac 08 01 21.8 -0.6**
CD2 SS **SS 08 04 28.0 +0.8**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**HHC Hu-ho-hao-te 66.92 55** *e*P **P 07 51 36.5 +1.4**
HHC S **S 08 00 26.3 -0.8**
HHC PMZ
comp=Z,30nm,0.7s
HHC PMZ
comp=Z,100nm,6.1s
HHC LN
comp=Z,130nm,13.6s
HHC LE
comp=Z,180nm,12.3s
HHC LZ
comp=Z,43nm,14.8s
**MHMT Maesarieng 67.25 83** P **P 07 51 38.0 +0.7**
comp=Z,10.0nm,1.1s,comp=Z,364nm
**CMAI Chiengmai2 67.27 81** P **P 07 51 37.4 -0.3**
comp=Z,9.1nm,1.3s,comp=Z,465nm
**KMI Kunming 67.67 74** P **P 07 51 40.3 0.0**
KMI PMZ
comp=Z,12nm,1.1s
**CHTO Chiang Mai 67.75 82** P **P 07 51 40.9 +0.4**
comp=Z,36nm,1.4s
**CHTO Chiang Mai 67.75 82** *e*P **P 07 51 40.6 +0.1**
CHTO pmax pmax
comp=Z,7.0nm,1.0s
**CHTO Chiang Mai 67.75 82** P **P 07 51 41.0 +0.4**
SNR=5.7
**CHTO Chiang Mai 67.75 82** *e*P **P 07 51 40.6 +0.1**
comp=Z,7.4nm,1.0s
**CHTO Chiang Mai 67.75 82** *e*P **P 07 51 40.6 +0.1**
comp=Z,7.0nm,1.0s
**CMAR Chiang Mai Arr 67.93 82** P **P 07 51 41.4 -0.3**
comp=Z,4.2nm,0.8s,baz=300,slow=8.1,SNR=24
CMAR LR LR 08 25 46.4
comp=Z,32nm,20.9s,baz=300,slow=40
**CMAR Chiang Mai Arr 67.93 82** P **P 07 51 41.4 -0.3**
CMAR pmax pmax
comp=Z,4.0nm,0.8s
CMAR MLR MLR
comp=Z,32nm,20.9s
**CRAI Chiangrai 68.19 80** P P 07 51 35.7 -7.6
**LAMP Lampang 68.46 82** P **P 07 51 45.8 +0.8**
comp=Z,6.4nm,0.9s
**UMPA Umpang Tak 69.02 84** P **P 07 51 49.7 +1.2**
comp=Z,3.9nm,1.0s,comp=Z,1μm
**UTTA Uttaradit 69.61 82** P **P 07 51 52.4 +0.3**
comp=Z,2.9nm,1.0s
**UTHA Uthaitani 69.84 85** P **P 07 51 53.8 +0.3**
comp=Z,5.1nm,1.0s,comp=Z,91nm
**GYA Guiyang 70.11 71***i i*P **P 07 51 54.5 -0.7**
GYA PP **PP 07 54 32.3 +2.1**
GYA S **S 08 01 04.5 -0.9**
GYA SKS **SKSac 08 01 51.5 -4.3**
GYA SS **SS 08 05 35.5 +0.6**
GYA PMZ
comp=Z,20nm,0.8s
GYA PMZ
comp=Z,110nm,5.0s
GYA LN
comp=Z,440nm,18.8s
GYA LE
comp=Z,380nm,18.2s
GYA LZ
comp=Z,420nm,19.0s
**LOEI Loei 70.31 82** P **P 07 51 58.0 +1.6**
comp=Z,5.1nm,1.3s
**BJI Beijing 70.41 54** P **P 07 51 55.3 -1.4**
BJI PMZ
comp=Z,6.0nm,0.9s
**PBKT Sadao Pong 70.56 83** P **P 07 51 58.1 +0.2**
comp=Z,9.8nm,1.2s
**PHET Kaeng Krachan 71.39 87** P **P 07 52 03.4 +0.4**
comp=Z,4.8nm,1.0s
**CHAI Chaiyaphum 71.73 83** P **P 07 52 05.0 -0.1**
comp=Z,6.8nm,0.9s
**NAYO Nakonayok 72.03 85** P **P 07 52 07.0 +0.1**
comp=Z,12nm,1.1s,comp=Z,514nm
**SKNT Sakolnakorn 72.80 81** P **P 07 52 11.3 -0.2**
comp=Z,30nm,1.2s,comp=Z,4μm
**BILL Bilibino 73.71 14** *e*P P 07 52 19.7 +3.7
BILL pmax pmax
comp=Z,5.0nm,1.1s
BILL MLR MLR
comp=Z,217nm,19.0s
**TRTT Trang 74.21 91** P **P 07 52 19.3 -0.5**
**SEY Seymchan 74.36 22** P **P 07 52 18.2 -1.7**
comp=Z,4.4nm,0.9s,baz=313,slow=4.8,SNR=7.1
**SEY Seymchan 74.36 22** P **P 07 52 18.2 -1.7**
SEY pmax pmax
comp=Z,4.0nm,0.9s
**KLR Kul'dur 74.88 40** *e*P P 07 52 19.8 -3.4
KLR pmax pmax
comp=Z,43nm,1.4s
**HABR Khabarovsk 77.08 39** *e*P **P 07 52 34.4 -1.3**
HABR *e**SP **sP 07 52 43.4 -1.5**
HABR *e* 07 52 45.0
HABR *e* 07 55 28.2
HABR *e*PPP PPP 07 57 15.4
HABR *e*S **S 08 02 23.9 +0.7**
HABR *e**SS **sS 08 02 34.8 +0.4**
HABR *e* 08 02 51.0
HABR pmax pmax
comp=Z,106nm,2.3s
HABR MLR MLR
comp=Z,115nm,22.0s
**HABR Khabarovsk 77.08 39** *e*P **P 07 52 34.4 -1.3**
comp=Z,106nm,2.3s
**HABR Khabarovsk 77.08 39** *e*PcP **PcP 07 52 45.0 -1.5**
**YKA Yellowknife Ar 77.35 341** P **P 07 52 36.6 -0.3**
comp=Z,1.2nm,0.6s,baz=26,slow=5.4,SNR=4.9
**YKA Yellowknife Ar 77.35 341** P **P 07 52 36.6 -0.3**
YKA pmax pmax
comp=Z,1.0nm,0.6s
**USRK Ussuriysk Ar. 78.01 44** P **P 07 52 40.2 -0.7**
comp=Z,9.6nm,0.9s,baz=282,slow=4.9,SNR=13
**COLD Coldfoot 78.15 358** *e*P **P 07 52 40.5 -0.9**
comp=Z,8.6nm,1.2s
**COLD Coldfoot 78.15 358** *e*P **P 07 52 40.5 -0.9**
comp=Z,8.6nm,1.2s
**COWI Conover 79.19 319** *e*P **P 07 52 47.8 +0.3**
comp=Z,5.5nm,0.9s
**COWI Conover 79.19 319** *e*P **P 07 52 47.8 +0.3**
comp=Z,5.5nm,0.9s
**KSAR Wonju Array Be 79.51 52** P **P 07 52 49.0 -0.4**
**KSAR Wonju Array Be 79.51 52** P **P 07 52 49.0 -0.4**
**KSAR Wonju Array Be 79.51 52** P **P 07 52 49.0 -0.4**
**KSRS Korea Array 79.53 52** P **P 07 52 49.0 -0.5**
comp=Z,4.7nm,0.7s,baz=312,slow=4.6,SNR=8.9
KSRS LR LR 08 33 10.0
comp=Z,144nm,19.4s,baz=307,slow=40
**KSRS Korea Array 79.53 52** P **P 07 52 49.0 -0.5**
KSRS pmax pmax
comp=Z,5.0nm,0.7s
**KSRS Korea Array 79.53 52** P **P 07 52 49.0 -0.5**
comp=Z,5.0nm,0.7s
**ULM Lac du Bonnet 79.84 325** P **P 07 52 49.6 -1.3**
comp=Z,3.2nm,0.8s,baz=56,slow=7.3,SNR=2.7
**ULM Lac du Bonnet 79.84 325** P **P 07 52 49.6 -1.3**
ULM pmax pmax
comp=Z,3.0nm,0.9s
**COLA College 80.40 356***ce*P **P 07 52 55.4 +1.8**
COLA pmax pmax
comp=Z,7.0nm,1.7s
**COLA College 80.40 356** *e*P **P 07 52 55.4 +1.8**
comp=Z,7.0nm,1.7s
**ILAR Eielson Array 80.45 356** P **P 07 52 53.8 -0.1**
comp=Z,1.6nm,1.1s,baz=1.3,slow=5.1,SNR=6.7
**ILAR Eielson Array 80.45 356** P **P 07 52 53.8 -0.1**
ILAR pmax pmax
comp=Z,1.0nm,1.1s
**ILAR Eielson Array 80.45 356** P **P 07 52 53.8 -0.1**
comp=Z,1.0nm,1.1s
**DAWY Dawson 80.52 352** *e*P **P 07 52 54.7 +0.3**
comp=Z,6.0nm,0.8s
**DAWY Dawson 80.52 352** *e*P **P 07 52 54.7 +0.3**
comp=Z,6.0nm,0.8s
**MCK McKinley 81.59 357** *e*P **P 07 52 59.8 -0.3**
MCK pmax pmax
comp=Z,20nm,1.4s
**MCK McKinley 81.59 357** *e*P **P 07 52 59.8 -0.3**
comp=Z,20nm,1.4s
**MCK McKinley 81.59 357** *e*P **P 07 52 59.8 -0.3**
comp=Z,20nm,1.4s
**MENT Mentasta 82.04 354** *e*P **P 07 53 02.5 0.0**
**MENT Mentasta 82.04 354** *e*P **P 07 53 02.5 0.0**
**PMR Palmer 83.74 356** *e*P **P 07 53 10.4 -0.8**
PMR pmax pmax
comp=Z,8.0nm,1.1s
**PMR Palmer 83.74 356** *e*P **P 07 53 10.4 -0.8**
comp=Z,8.3nm,1.1s
**PMR Palmer 83.74 356** *e*P **P 07 53 10.4 -0.8**
comp=Z,8.0nm,1.1s
**PETK Petropavlovsk- 83.80 26** LR LR 08 36 36.2
comp=Z,81nm,18.2s,baz=313,slow=40
**BDFB Brasilia 84.35 247** P **P 07 53 15.9 +0.7**
comp=Z,2.3nm,0.6s,baz=62,slow=6.7,SNR=3.2
BDFB LR LR 08 31 01.5
comp=Z,211nm,20.2s,baz=53,slow=36
**BDFB Brasilia 84.35 247** P **P 07 53 15.9 +0.7**
BDFB pmax pmax
comp=Z,2.0nm,0.6s
BDFB MLR MLR
comp=Z,211nm,20.2s
**ECSD EROS Data Cent 84.72 321** *e*P **P 07 53 16.6 0.0**
comp=Z,20nm,1.5s
**ECSD EROS Data Cent 84.72 321** *e*P **P 07 53 16.6 0.0**
comp=Z,20nm,1.5s
**MAT Matsushiro 86.53 47** P **P 07 53 23.2 -2.5**
**MJAR Matsushiro Arr 86.53 47** P **P 07 53 24.4 -1.4**
comp=Z,4.5nm,0.9s,baz=296,slow=5.3,SNR=9.2
MJAR LR LR 08 36 00.4
comp=Z,76nm,20.1s,baz=340,slow=38
**MJAR Matsushiro Arr 86.53 47** P **P 07 53 24.4 -1.4**
MJAR pmax pmax
comp=Z,5.0nm,0.9s
MJAR MLR MLR
comp=Z,76nm,20.1s
**EGMT Eagleton 87.56 331** *e*P **P 07 53 31.2 +0.6**
comp=Z,19nm,1.3s
**EGMT Eagleton 87.56 331** *e*P **P 07 53 31.2 +0.6**
comp=Z,19nm,1.3s
**SWMT Swartz Lake 89.63 333** *e*P **P 07 53 40.2 -0.2**
comp=Z,2.9nm,1.2s
**SWMT Swartz Lake 89.63 333** *e*P **P 07 53 40.2 -0.2**
comp=Z,2.9nm,1.2s
**ROSC El Rosal 93.70 278** LR LR 08 33 16.2
comp=Z,53nm,20.8s,baz=15,slow=34
**CPUP Villa Florida 97.68 243** LR LR 08 39 32.7
comp=Z,176nm,20.5s,baz=62,slow=36
**NVAR Mina Array Bea 98.99 331** LR LR 08 42 32.8
comp=Z,211nm,19.0s,baz=70,slow=38
**NVL N'lazarevskaya 105.63 184** *e*P **Pdif 07 54 59.9 +8.1**
NVL pmax pmax
comp=Z,8.0nm,0.8s
**WRA Warramunga Arr 117.87 96** PKP **PKPdf 07 59 28.5 -1.0**
comp=Z,0.6nm,0.9s,baz=316,slow=1.4,SNR=13
**WRA Warramunga Arr 117.87 96** PKIKP **PKPdf 07 59 28.5 -1.0**
WRA pmax pmax
comp=Z,1.0nm,0.9s
**ASAR Alice Springs 119.30 100** PKP **PKPdf 07 59 31.1 -1.1**
comp=Z,0.7nm,0.8s,baz=307,slow=1.2,SNR=11
**ASAR Alice Springs 119.30 100** PKIKP **PKPdf 07 59 31.1 -1.1**
ASAR pmax pmax
comp=Z,1.0nm,0.8s
**QSPA South Pole Qui 124.68 180** PKP **PKPdf 07 59 40.4 -0.8**
comp=Z,0.9nm,0.6s,baz=286,slow=1.4,SNR=3.3

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*IDC **25** 07:45:16.1±0.8,34.85S×72.72W,h0km,mb4.3/9,*
*mb1 4.3/12,mb1mx4.2/23,mbtmp4.2/12,ML3.7/3,MS3.8/8,*
*Ms1 3.8/8,ms1mx3.6/20,Error ellipse: s-maj=31.2km*
*s-min=16.5km az=97.0*
*ISCJB **25** 07:45:18.9±1.1,34.89S±0.03×72.72W±0.07,h24km±7km,*
*mb4.6/20,MS3.7/7,Error ellipse: s-maj=9.3km*
*s-min=4.7km az=11.4*
*BJI **25** 07:45:18.4,35.18S×72.93W,h25km,mB5.0/5,Ms5.2/3,*
*Ms7 5.1/3*
*GUC **25** 07:45:18.1±0.6,34.89S×72.74W,h25km±15km,ML4.2*
*NEIC **25** 07:45:18.0,34.89S×72.74W,h25km,mb4.7/13,*
*ML4.2(GUC),After GUC.*
*NEIC Felt [IV] at Constitucion, [III] at Cauquenes and [II] at*
*Linares and Maule.*

**ISC 25 07:45:19.2±1.4,34.89S±0.04×72.73W±0.06,h17km±8km,**
**n72,σ1s50/73,mb4.6/20,MS3.8/7,1C,Near coast of**
**central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.78** | **51** | *i* P | | **Pb** | **07 45 33.1** | **-1.2** |
| CHPI | | | | *i* S | | **Sb** | **07 45 44.4** | **-0.1** |
| **TALC** | **Talca** | **1.03** | **120** | *i* P | | **Pb** | **07 45 37.6** | **-1.0** |
| TALC | | | | *i* S | | **Sb** | **07 45 51.5** | **-0.4** |
| TALC | | | | | AML | AML | 07 45 52.8 | |
| **NICH** | **Los Niches** | **1.24** | **96** | *i* P | | **Pn** | **07 45 40.5** | **-1.2** |
| NICH | | | | *i* S | | **Sb** | **07 45 57.5** | **-0.3** |
| **COCH** | **Cobquecura** | **1.24** | **182** | *i* P | | **Pn** | **07 45 40.0** | **-1.8** |
| COCH | | | | *i* S | | **Sb** | **07 45 56.9** | **-1.0** |
| COCH | | | | | AML | AML | 07 46 00.6 | |
| **CCHI** | **Chillan** | **1.79** | **163** | *i* P | | **Pn** | **07 45 49.3** | **-0.1** |
| CCHI | | | | *i* S | | **Sb** | **07 46 12.7** | **-1.1** |
| CCHI | | | | | AML | AML | 07 46 14.9 | |
| **ROCH** | **El Roble** | **2.38** | **37** | *i* P | | **Pn** | **07 45 56.7** | **-1.0** |
| ROCH | | | | *i* S | | **Sb** | **07 46 30.5** | **-0.5** |
| **CFAA** | **Coronel Fontan** | **4.99** | **50** | Pn | | **Pn** | **07 46 33.3** | **0.0** |
| CFAA | | | | Sn | | **Sn** | **07 47 32.4** | **+1.8** |
| CFAA | | | | Lg | | Lg | 07 47 48.2 | |

comp=N,1.4nm,0.3s,baz=228,slow=9.4,SNR=136
comp=N,0.3nm,0.3s,baz=319,slow=18,SNR=2.4
comp=N,0.7nm,0.3s,baz=301,slow=19,SNR=3.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PLCA** | **Paso Flores** | **6.09** | **164** | *e*Pn | | **Pn** | **07 46 48.8** | **+0.3** |
| **LCO** | **Las Campanas** | **6.11** | **17** | *e*Pn | | **Pn** | **07 46 47.0** | **-1.9** |
| LCO | | | | *e*Sn | | **Sn** | **07 47 57.2** | **-1.3** |
| **TRQA** | **Tornquist** | **9.22** | **113** | *e*Pn | | **Pn** | **07 47 33.2** | **+1.8** |
| **LVC** | **Limon Verde** | **12.68** | **16** | Pn | | Pn | 07 48 22.8 | +3.8 |
| | comp=N,6.2nm,0.3s,baz=219,slow=6.5,SNR=2.1 | | | | | | | |
| **CPUP** | **Villa Florida** | **15.75** | **61** | Pn | | **Pn** | **07 49 00.4** | **+0.2** |
| | comp=N,0.1nm,0.3s,baz=260,slow=12,SNR=3.2 | | | | | | | |
| CPUP | | | | LR | | LR | 07 55 09.5 | |
| | comp=N,218nm,18.9s,baz=237,slow=38 | | | | | | | |
| **LPAZ** | **La Paz** | **18.97** | **14** | P | | **Pn** | **07 49 41.2** | **+0.1** |
| | comp=N,0.2nm,0.3s,baz=183,slow=8.0,SNR=14 | | | | | | | |
| **LPAZ** | **La Paz** | **18.97** | **14** | *e*P | | **Pn** | **07 49 41.6** | **+0.5** |
| | comp=N,9.9nm,1.0s | | | | | | | |
| **USHA** | **Ushuaia** | **20.17** | **173** | P | | **P** | **07 49 53.1** | **+0.6** |
| | comp=N,7.6nm,0.8s,baz=292,slow=5.4,SNR=2.9 | | | | | | | |
| USHA | | | | LR | | LR | 07 58 02.5 | |
| | comp=N,443nm,18.6s,baz=331,slow=38 | | | | | | | |
| **SIV** | **San Ignacio** | **21.53** | **32** | P | | **P** | **07 50 05.4** | **-2.1** |
| | comp=N,11nm,1.0s,baz=226,slow=11,SNR=24 | | | | | | | |
| SIV | | | | LR | | LR | 07 59 57.3 | |
| | comp=N,446nm,18.8s,baz=215,slow=41 | | | | | | | |
| **NNA** | **Nana** | **23.10** | **350** | LR | | LR | 07 57 14.9 | |
| | comp=N,151nm,21.6s,baz=180,slow=31 | | | | | | | |
| **SAML** | **Samuel** | **27.26** | **21** | *e*P | | **P** | **07 51 01.9** | **-0.6** |
| | comp=N,4.0nm,1.0s | | | | | | | |
| **ATAH** | **Atahualpa** | **28.11** | **348** | LR | | LR | 08 00 38.2 | |
| | comp=N,93nm,18.2s,baz=193,slow=33 | | | | | | | |
| **BDFB** | **Brasilia** | **29.30** | **55** | P | | | 07 51 17.4 | -3.7 |
| | comp=N,1.0nm,0.4s,baz=229,slow=9.2,SNR=3.3 | | | | | | | |
| BDFB | | | | LR | | LR | 08 03 50.6 | |
| | comp=N,221nm,18.3s,baz=226,slow=38 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **48.76** | **157** | P | | **P** | **07 54 02.6** | **0.0** |
| **VNA1** | **Neumayer--Stat** | **49.09** | **157** | P | | **P** | **07 54 06.0** | **+1.0** |
| **VNA2** | **Neumayer--Watz** | **49.42** | **157** | P | | **P** | **07 54 08.1** | **+0.4** |
| | baz=299,slow=9.9 | | | | | | | |
| **SNAA** | **Sanae** | **50.98** | **158** | P | | **P** | **07 54 19.3** | **-0.4** |
| **SNAA** | **Sanae** | **50.98** | **158** | P | | **P** | **07 54 19.6** | **0.0** |
| | comp=N,2.6nm,0.9s,baz=299,slow=6.5,SNR=24 | | | | | | | |
| **SNAA** | **Sanae** | **50.98** | **158** | *e*P | | **P** | **07 54 19.2** | **-0.4** |
| | comp=N,11nm,1.2s | | | | | | | |
| **QSPA** | **South Pole Qui** | **55.35** | **180** | P | | **P** | **07 54 51.7** | **-0.2** |
| | comp=N,1.0nm,0.5s,baz=138,slow=3.5,SNR=4.8 | | | | | | | |
| **SYO** | **Syowa Base** | **65.25** | **158**⇑ | *e*pP | | pP | 07 56 04.6 | -0.4 |
| **TBI** | **Tubuai** | **66.56** | **257** | *e*LR | | LR | 08 16 13.9 | |
| | comp=N,129nm,26.2s | | | | | | | |
| **MEH** | **Mehetia** | **68.17** | **263** | *e*T | | T | 09 10 33.6 | |
| | comp=N,11nm,0.2s | | | | | | | |
| **TVO** | **Taravao** | **69.18** | **262** | *e*T | | T | 09 11 37.6 | |
| | comp=N,0.4nm,0.2s | | | | | | | |
| **TIAR** | **Tiarei** | **69.38** | **263** | *e*T | | T | 09 11 52.7 | |
| | comp=N,2.6nm,0.2s | | | | | | | |
| **PPT2** | **Papeete2** | **69.55** | **262** | *e*LR | | LR | 08 17 33.8 | |
| | comp=N,81nm,23.8s | | | | | | | |
| **PPT** | **Papeete** | **69.56** | **262** | LR | | LR | 08 20 13.7 | |
| | comp=N,41nm,21.0s,baz=125,slow=30 | | | | | | | |
| **JCT** | **Junction City** | **69.84** | **335** | *e*P | | **P** | **07 56 30.7** | **+1.8** |
| | comp=N,4.3nm,0.8s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **70.23** | **332** | *e*P | | **P** | **07 56 31.8** | **+0.4** |
| **TXAR** | **Lajitas Array** | **70.23** | **332** | P | | **P** | **07 56 31.9** | **+0.6** |
| | comp=N,0.8nm,0.6s,baz=151,slow=8.8,SNR=12 | | | | | | | |
| **WVT** | **Waverly** | **72.04** | **347** | *e*P | | **P** | **07 56 42.2** | **+0.3** |
| | comp=N,34nm,1.9s | | | | | | | |
| **MAW** | **Mawson** | **72.49** | **164** | P | | **P** | **07 56 44.7** | **+0.3** |
| | comp=N,6.0nm,1.0s,baz=218,slow=8.8,SNR=10 | | | | | | | |
| **MAW** | **Mawson** | **72.49** | **164** | *e*P | | **P** | **07 56 44.2** | **-0.2** |
| | comp=N,1.8nm,1.1s | | | | | | | |
| **CCM** | **Cathedral Cave** | **74.58** | **345** | *e*P | | **P** | **07 56 57.1** | **+0.2** |
| | comp=N,46nm,2.1s | | | | | | | |
| **DBIC** | **Dimbokro** | **76.00** | **72** | P | | **P** | **07 57 05.4** | **-0.3** |
| | comp=N,7.1nm,0.9s,baz=241,slow=6.2,SNR=3.5 | | | | | | | |
| **ANMO** | **Albuquerque** | **76.29** | **332** | *e*P | | **P** | **07 57 08.8** | **+1.8** |
| | comp=N,6.1nm,1.4s | | | | | | | |
| **T25A** | **Trinidad** | **77.48** | **335** | *e*P | | **P** | **07 57 15.7** | **+1.9** |
| | comp=N,21nm,1.4s | | | | | | | |
| **BOSA** | **Boshof** | **80.16** | **118** | P | | **P** | **07 57 28.9** | **+0.1** |
| | comp=N,7.4nm,0.9s,baz=256,slow=5.1,SNR=6.0 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **81.22** | **343** | *e*P | | **P** | **07 57 34.5** | **+0.8** |
| | comp=N,87nm,2.7s | | | | | | | |
| **SHPR** | **Sheep Range** | **81.28** | **327** | *e*P | | **P** | **07 57 36.1** | **+1.7** |
| | comp=N,7.6nm,1.4s | | | | | | | |
| **CCUT** | **Cedar City** | **81.35** | **328** | *e*P | | **P** | **07 57 35.5** | **+0.5** |
| | comp=N,17nm,1.7s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **84.05** | **332** | *e*P | | **P** | **07 57 49.9** | **+1.1** |
| | comp=N,104nm,2.8s | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **85.05** | **70** | *e*P | | **P** | **07 57 53.6** | **-0.6** |
| **TORD** | **Torodi Ar. Bea** | **85.05** | **70** | P | | **P** | **07 57 53.9** | **-0.3** |
| | comp=N,3.4nm,0.8s,baz=259,slow=3.4,SNR=20 | | | | | | | |
| TORD | | | | LR | | LR | 08 34 40.9 | |
| | comp=N,72nm,18.0s,baz=265,slow=35 | | | | | | | |
| **COR** | **Corvallis** | **91.44** | **326** | *e*P | | **P** | **07 58 26.4** | **+2.3** |
| | comp=N,825nm,1.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **119.71** | **210** | PKP | | **PKPdf** | **08 04 07.6** | **-1.2** |
| | comp=N,0.5nm,0.9s,baz=167,slow=1.7,SNR=5.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **122.76** | **62** | PKP | | **PKPdf** | **08 04 12.8** | **-1.4** |
| | comp=N,0.8nm,0.7s,baz=299,slow=2.5,SNR=4.2 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.18** | **269** | T | | T | 10 22 00.5 | |
| | baz=111 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.20** | **269** | T | | T | 10 21 59.9 | |
| | baz=111 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.20** | **269** | T | | T | 10 22 01.0 | |
| | baz=111 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **25.62** | **270** | T | | T | 10 22 31.3 | |
| | baz=120 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **25.63** | **270** | T | | T | 10 22 32.9 | |
| | baz=120,slow=74,SNR=7.7 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **25.64** | **270** | T | | T | 10 22 33.3 | |
| | baz=120,slow=74,SNR=5.7 | | | | | | | |
| **BVAR** | **Borovoye Array** | **148.31** | **44** | PKPbc | | **PKPdf** | **08 05 01.1** | **+0.6** |
| | comp=N,1.5nm,0.7s,baz=306,slow=3.4,SNR=6.8 | | | | | | | |
| **AAK** | **Ala-Archa** | **153.42** | **63** | PKPbc | | **PKPbc** | **08 05 16.8** | **+0.3** |
| | comp=N,2.2nm,0.7s,baz=335,slow=15,SNR=6.6 | | | | | | | |
| **KSH** | **Kashi** | **154.72** | **70** | *e*PKPbc | | **PKPdf** | **08 05 10.0** | **-0.8** |
| KSH | | | | *e*PKP | | **PKiKP** | **08 05 20.8** | **+1.4** |
| KSH | | | | *e*sPKP | | | 08 05 24.8 | |
| KSH | | | | PKS | | **PKSdf** | **08 08 42.5** | **-2.5** |
| KSH | | | | *e*PP | | **PP** | **08 09 14.3** | **+3.8** |
| KSH | | | | SKS | | **SKSdf** | **08 12 10.8** | **-5.9** |
| KSH | | | | SS | | **SS** | **08 28 52.5** | **+0.4** |
| KSH | | | | PPMZ | | | | |
| | comp=N,54nm,4.9s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=N,96nm,6.2s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=N,150nm,5.0s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=N,140nm,5.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **155.28** | **33** | PKPbc | | PKPdf | 08 05 20.0 | +9.2 |
| | comp=N,0.6nm,0.3s,baz=318,slow=1.9,SNR=3.7 | | | | | | | |
| ZALV | | | | PKPab | | **PKPab** | **08 05 33.6** | **-2.4** |
| | comp=N,0.8nm,0.4s,baz=289,slow=4.4,SNR=2.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **157.77** | **50** | PKPab | | **PKPab** | **08 05 46.5** | **-0.6** |
| | comp=N,1.1nm,0.9s,baz=297,slow=3.9,SNR=4.8 | | | | | | | |
| **WMQ** | **Urumqi** | **162.46** | **54** | *e*PKP | | **PKPdf** | **08 05 17.8** | **-2.0** |
| **KMI** | **Kunming** | **169.51** | **157** | PKP | | **PKPdf** | **08 05 27.3** | **+1.1** |
| **NJ2** | **Nanjing** | **169.92** | **257** | *e*PKP | | **PKPdf** | **08 05 27.8** | **+1.8** |
| **GYA** | **Guiyang** | **171.59** | **176** | *e*PKP | | **PKPdf** | **08 05 27.3** | **+0.1** |
| GYA | | | | sPKP | | | 08 05 38.5 | |
| GYA | | | | PKPab | | **PKPab** | **08 06 50.0** | **+1.8** |
| GYA | | | | PKS | | **PKSdf** | **08 08 57.8** | **-1.9** |
| GYA | | | | PP | | **PP** | **08 10 41.3** | **+3.2** |
| GYA | | | | PPMZ | | | | |
| | comp=N,110nm,8.5s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **173.15** | **332** | *e*PKP | | **PKPdf** | **08 05 25.5** | **-1.9** |
| HHC | | | | PP | | **PP** | **08 10 48.5** | **+2.3** |
| HHC | | | | SS | | SS | 08 31 57.8 | -1.9 |
| HHC | | | | PPMZ | | | | |
| | comp=N,71nm,8.2s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=N,96nm,12.3s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=N,150nm,14.8s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=N,72nm,17.3s | | | | | | | |
| **CD2** | **Chengdu** | **175.06** | **142** | PKP | | **PKPdf** | **08 05 27.5** | **-0.8** |
| **LZH** | **Lanzhou** | **176.96** | **66** | *e*PKP | | **PKPdf** | **08 05 28.5** | **-0.2** |
| LZH | | | | pPKP | | **pPKPdf** | **08 05 34.0** | **-0.7** |
| LZH | | | | sPKP | | | 08 05 37.3 | |

*DDA **25** 08:02:46.5, 38.°88N×40.°07E, h7km, Md2.7*
*ISK **25** 08:02:46.1, 38.°88N×40.°10E, h12km, MD2.4*
*CSEM **25** 08:02:47.8±0.3, 38.°80N×40.°02E, h17km±3km, MD2.4,*
*Error ellipse: s-maj=9.3km s-min=6.4km az=174.0*
*ISCJB **25** 08:02:48.3±0.5, 38.°87N±0.°04×40.°04E±0.°03, h20km±13km,*

*Error ellipse: s-maj=6.4km s-min=4.1km az=11.3*
**ISC 25 08:02:46.9**±1.1, **38.°88N**±0.°03×**40.°05E**±0.°02, **h11**km±11km, **n17**,σ0**85**/30, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BINT** | **Bingol** | **0.34** | **90** | *e*Pg | **Pb** | **08 02 55.6** | **+0.5** |
| BINT | | | | *e*Sg | **Sb** | **08 03 02.7** | **+2.1** |
| **BNGB** | **Bing¶ll** | **0.50** | **77** | *e*PG | **Pg** | **08 02 55.6** | **-1.1** |
| BNGB | | | | *e*SG | **Sg** | **08 03 02.7** | **-0.7** |
| **PTK** | **Pertek** | **0.52** | **272** | *e*PG | **Pg** | **08 02 57.4** | **+0.4** |
| PTK | | | | *e*SG | **Sb** | **08 03 05.6** | **-0.1** |
| **PTK** | **Pertek** | **0.52** | **272** | *e*Pg | **Pg** | **08 02 57.4** | **+0.4** |
| PTK | | | | *e*Sg | **Sb** | **08 03 05.6** | **-0.1** |
| **ERZN** | **Erzincan** | **0.75** | **340** | *e*PG | **Pg** | **08 03 01.4** | **-0.1** |
| ERZN | | | | *e*SG | **Sb** | **08 03 12.6** | **+0.1** |
| **SVRC** | **Sivrice-ELAZID** | **0.77** | **230** | *e*PG | **Pb** | **08 03 02.0** | **-0.4** |
| **SVRC** | **Sivrice-ELAZID** | **0.77** | **230** | *e*Pg | **Pb** | **08 03 02.0** | **-0.4** |
| **BNGL** | **BINGOL** | **0.86** | **85** | P | **Pg** | **08 03 03.1** | **-0.5** |
| BNGL | | | | S | **Sn** | **08 03 17.4** | **-0.5** |
| **ELZG** | **Elazig** | **0.92** | **246** | *i* P | **Pg** | **08 03 03.4** | **-1.2** |
| ELZG | | | | *i* S | **Sb** | **08 03 18.2** | **+1.0** |
| **ELZG** | **Elazig** | **0.92** | **246** | P | **Pg** | **08 03 03.4** | **-1.2** |
| ELZG | | | | S | **Sb** | **08 03 18.2** | **+1.0** |
| **KEMA** | **Kemaliye** | **1.27** | **288** | *i* P | **Pn** | **08 03 10.5** | **-0.3** |
| KEMA | | | | *i* S | **Sg** | **08 03 29.4** | **+1.4** |
| **KEMA** | **Kemaliye** | **1.27** | **288** | P | **Pn** | **08 03 10.5** | **-0.3** |
| KEMA | | | | S | **Sg** | **08 03 29.4** | **+1.4** |
| **BEST** | **Besiri** | **1.37** | **135** | P | **Pg** | **08 03 13.8** | **+0.5** |
| BEST | | | | S | **Sg** | **08 03 32.0** | **+0.8** |
| **KELT** | **Kelkit** | **1.41** | **334** | *i* P | **Pg** | **08 03 13.7** | **-0.4** |
| KELT | | | | *i* S | **Sg** | **08 03 32.6** | **+0.2** |
| **KELT** | **Kelkit** | **1.41** | **334** | P | **Pg** | **08 03 13.7** | **-0.4** |
| KELT | | | | S | **Sg** | **08 03 32.6** | **+0.2** |
| **MAZI** | **Mazidag** | **1.45** | **167** | *e*PN | **Pn** | **08 03 12.6** | **-0.6** |
| **MAZI** | **Mazidag** | **1.45** | **167** | *e*Pn | **Pn** | **08 03 12.6** | **-0.6** |

*IDC **25** 08:10:29.0±2.7, 59.°46N×26.°88E, h0km, mb1 3.4/4,*
*mb1mx3.2/37, mbtmp3.3/4, ML2.6/4, Error ellipse:*
*s-maj=26.8km s-min=11.7km az=142.0*
**ISC 25 08:10:24.8**±1.4, **59.°32N**±0.°03×**27.°11E**±0.°05, **h8**km±11km, **n15**,σ1**84**/28, **Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VSU** | **Vasula** | **0.89** | **193** | *e*P | **Pb** | **08 10 42.2** | **-0.2** |
| VSU | | | | *e*S | **Sg** | **08 10 52.5** | **-0.8** |
| **VJF** | **Virojoki** | **1.24** | **10** | *e*P | **Pn** | **08 10 49.2** | **+0.8** |
| VJF | | | | *e*S | **Sg** | **08 11 04.8** | **+0.2** |
| **PVF** | **Pernaja** | **1.38** | **333** | *e*P | **Pb** | **08 10 51.9** | **+1.2** |
| PVF | | | | *e*S | **Sb** | **08 11 09.9** | **+1.4** |
| PVF | | | | MSG | | 08 11 15.2 | |
| | comp=Z,10nm,0.1s | | | | | | |
| **SRPE** | **Suurupi** | **1.40** | **277** | *e*P | **Pb** | **08 10 52.0** | **+0.8** |
| SRPE | | | | *e*S | **Sb** | **08 11 10.4** | **+1.1** |
| **MEF** | **Metsahovi** | **1.64** | **304** | *e*P | **Pg** | **08 10 56.6** | **+0.4** |
| MEF | | | | *e*SG | **Sg** | **08 11 17.8** | **+0.4** |
| MEF | | | | MSG | | 08 11 18.9 | |
| | comp=Z,6.9nm,0.1s | | | | | | |
| **MTSE** | **Matsula** | **1.81** | **252** | *e*P | **Pb** | **08 10 58.7** | **+0.5** |
| MTSE | | | | *e*S | **Sb** | **08 11 21.7** | **+0.8** |
| **FIA0** | **FINESS Array S** | **2.19** | **347** | *e*P | **Pb** | **08 11 04.3** | **-0.3** |
| FIA0 | | | | *e*PB | **Pg** | **08 11 05.7** | **-1.0** |
| FIA0 | | | | *e*SB | **Sb** | **08 11 33.4** | **+1.6** |
| FIA0 | | | | *e*SG | **Sg** | **08 11 35.0** | **0.0** |
| FIA0 | | | | MSG | | 08 11 35.9 | |
| | comp=Z,3.3nm,0.1s | | | | | | |
| **FINES** | **FINESS Array B** | **2.19** | **347** | Pn | **Pb** | **08 11 04.3** | **-0.3** |
| | comp=Z,2.2nm,0.3s,baz=166,slow=17,SNR=51 | | | | | | |
| FINES | | | | Sn | **Sb** | **08 11 32.1** | **+0.3** |
| | comp=Z,3.4nm,0.3s,baz=169,slow=29,SNR=19 | | | | | | |
| **KAF** | **Kangasniemi** | **2.83** | **352** | *e*P | **Pb** | **08 11 13.6** | **-1.9** |
| KAF | | | | *e*S | **Sn** | **08 11 48.5** | **+4.0** |
| **RAF** | **Rauma** | **3.17** | **305** | *e*P | **Pb** | **08 11 18.9** | **-2.4** |
| **AAL** | **Aland** | **3.70** | **286** | *e*S | **Sn** | **08 12 07.9** | **+2.0** |
| **JOF** | **Joensuu** | **4.14** | **28** | *e*P | **Pn** | **08 11 31.4** | **+3.1** |
| **HFS** | **Hagfors** | **6.83** | **283** | Pn | **Pn** | **08 12 06.9** | **+1.7** |
| | comp=Z,0.1nm,0.3s,baz=90,slow=17,SNR=2.9 | | | | | | |
| HFS | | | | Sn | **Sn** | **08 13 20.6** | **-2.5** |
| | comp=Z,0.1nm,0.3s,baz=95,slow=26,SNR=4.3 | | | | | | |
| HFS | | | | Lg | Lg | 08 13 56.3 | |
| | comp=Z,0.3nm,0.3s,baz=93,slow=29,SNR=3.4 | | | | | | |
| **NOA** | **NORSAR Array B** | **8.11** | **289** | Pn | **Pn** | **08 12 21.4** | **-1.3** |
| | comp=Z,0.2nm,0.3s,baz=84,slow=16,SNR=4.1 | | | | | | |
| NOA | | | | Lg | Lg | 08 14 33.5 | |
| | comp=Z,0.3nm,0.3s,baz=113,slow=18,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **10.28** | **357** | Pn | **Pn** | **08 12 52.9** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=174,slow=14,SNR=5.4 | | | | | | |
| ARCES | | | | Sn | **Sn** | **08 14 43.2** | **-4.4** |
| | comp=Z,0.1nm,0.3s,baz=174,slow=24,SNR=3.7 | | | | | | |

*ISCJB **25** 08:17:41.5±1.0, 63.°28S±0.°10×63.°3W±0.°3, h10km,*
*mb4.2/10, MS3.4/3, Error ellipse: s-maj=22.0km*
*s-min=11.0km az=28.4*
*IDC **25** 08:17:41.3±1.2, 63.°27S×63.°02W, h0km, mb4.3/8,*
*mb1 4.3/8, mb1mx4.0/23, mbtmp4.3/8, MS3.6/4, Ms1 3.6/4,*
*ms1mx3.2/21, Error ellipse: s-maj=39.5km s-min=27.4km*
*az=107.0*
*NEIC **25** 08:17:43.5±0.6, 63.°42S×62.°74W, h10km, mb4.3/3, Error*
*ellipse: s-maj=22.9km s-min=12.9km az=104.0*
**ISC 25 08:17:43.4**±0.8, **63.°4S**±0.°1×**63.°0W**±0.°2, **h10**km, **n25**,
σ1**19**/28, **mb4.2**/10, **MS3.7**/3, **South Shetland Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMSA** | **Palmer Station** | **1.47** | **198** | *e*Pn | **Pn** | **08 18 09.8** | **0.0** |
| PMSA | | | | *e*Sn | **Sn** | **08 18 29.0** | **-0.1** |
| **USHA** | **Ushuaia** | **9.02** | **340** | LR | LR | 08 22 39.6 | |
| | comp=Z,609nm,19.7s,baz=133,slow=34 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **21.28** | **134** | P | **P** | **08 22 30.6** | **+1.1** |
| **VNA1** | **Neumayer--Stat** | **21.81** | **133** | P | **P** | **08 22 38.1** | **+3.0** |
| **VNA2** | **Neumayer--Watz** | **22.06** | **134** | P | **P** | **08 22 39.5** | **+1.7** |
| | baz=249,slow=11 | | | | | | |
| **SNAA** | **Sanae** | **23.39** | **136** | P | **P** | **08 22 53.1** | **+1.3** |
| **SNAA** | **Sanae** | **23.39** | **136** | P | **P** | **08 22 53.1** | **+1.3** |
| | 9.0nm,1.0s,baz=256,slow=7.1,SNR=74 | | | | | | |
| SNAA | | | | LR | LR | 08 30 00.7 | |
| | comp=Z,30nm,19.9s,baz=266,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **23.39** | **136** | *e*P | **P** | **08 22 52.3** | **+0.5** |
| | 21nm,1.3s | | | | | | |
| **TRQA** | **Tornquist** | **25.37** | **2** | *e*P | **P** | **08 23 13.1** | **+2.7** |
| | 5.0nm,0.9s | | | | | | |
| **QSPA** | **South Pole Qui** | **26.83** | **180** | P | **P** | **08 23 25.4** | **+1.8** |
| | 7.2nm,0.9s,baz=154,slow=4.1,SNR=21 | | | | | | |
| QSPA | | | | LR | LR | 08 34 52.5 | |
| | comp=Z,204nm,20.7s,baz=148,slow=38 | | | | | | |
| **SBA** | **Scott Base** | **35.81** | **196** | *e*P | **P** | **08 24 42.5** | **+0.3** |
| | 5.2nm,1.3s | | | | | | |
| **VNDA** | **Vanda** | **36.68** | **195** | LR | LR | 08 37 54.6 | |
| | comp=Z,137nm,20.0s,baz=166,slow=33 | | | | | | |
| **MAW** | **Mawson** | **43.66** | **153** | P | **P** | **08 25 47.3** | **-0.1** |
| | 4.1nm,0.9s,baz=225,slow=12,SNR=9.9 | | | | | | |
| **BOSA** | **Boshof** | **64.07** | **102** | P | **P** | **08 28 15.9** | **-1.4** |
| | 3.5nm,0.8s,baz=211,slow=8.3,SNR=7.6 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **84.02** | **180** | P | **P** | **08 30 12.8** | **-0.9** |
| | 8.5nm,0.8s,baz=208,slow=0.0,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **90.82** | **62** | P | **P** | **08 30 46.3** | **-0.4** |
| | 0.4nm,0.7s,baz=213,slow=4.1,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **92.22** | **195** | P | **P** | **08 30 52.4** | **-0.8** |
| | 0.6nm,0.7s,baz=168,slow=4.5,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **95.84** | **196** | P | **P** | **08 31 09.3** | **-0.5** |
| | 0.5nm,0.9s,baz=175,slow=4.1,SNR=7.1 | | | | | | |
| **ILAR** | **Eielson Array** | **141.82** | **316** | PKP | **PKPdf** | **08 37 14.3** | **+0.9** |
| | 0.2nm,0.6s,baz=142,slow=1.9,SNR=4.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **146.27** | **39** | PKPbc | **PKPbc** | **08 37 21.7** | **-0.6** |
| | 3.2nm,0.9s,baz=227,slow=3.1,SNR=13 | | | | | | |
| **ABKAR** | **Akbulak array** | **146.62** | **88** | *e*PKPbc | **PKPdf** | **08 37 21.6** | **-0.6** |
| **KKAR** | **Karatay Array** | **146.62** | **105** | *e*PKPbc | **PKPbc** | **08 37 23.4** | **-0.7** |
| KKAR | | | | *e*PKPab | **PKPab** | **08 37 24.6** | **-0.6** |
| **AAK** | **Ala-Archa** | **147.95** | **110** | PKPbc | **PKPbc** | **08 37 27.5** | **-0.5** |
| | 2.9nm,0.6s,baz=180,slow=5.5,SNR=9.2 | | | | | | |
| **AAK** | **Ala-Archa** | **147.95** | **110** | *e*PKPdf | **PKPdf** | **08 37 24.4** | **-0.5** |
| AAK | | | | *e*PKPbc | **PKPbc** | **08 37 27.4** | **-0.5** |
| AAK | | | | PKPbc | **PKPbc** | **08 37 27.5** | **-0.5** |
| AAK | | | | *e*PKPab | **PKiKP** | **08 37 30.1** | **+0.3** |
| **MKAR** | **Makanchi Array** | **154.58** | **114** | PKPab | **PKPab** | **08 37 57.1** | **-0.8** |
| | 0.7nm,0.7s,baz=212,slow=5.1,SNR=3.2 | | | | | | |

*RSPR **25** 08:25:32.8, 19.°14N×64.°61W, h69km±5km, MD3.5/10*

*NEIC **25** 08:25:32.8, 19.°14N×64.°61W, h68km, MD3.5(RSPR),*
*After RSPR.*
**ISC 25 08:25:34.2**±3.3, **19.°1N**±0.°1×**64.°7W**±0.°1, **h42**km, **n48**,
σ0**84**/73, **35C-6D, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STVI** | **Saint Thomas** | **0.77** | **201**⇑ | *e*P | **Pn** | **08 25 47.2** | **-1.5** |
| **STVI** | **Saint Thomas** | **0.77** | **201** | *e*S | **Sn** | **08 26 01.2** | **+2.1** |
| **STVI** | **Saint Thomas** | **0.77** | **201**⇑ | *e*P | **Pn** | **08 25 47.2** | **-1.5** |
| STVI | | | | *e*S | **Sn** | **08 26 01.2** | **+2.1** |
| **STVI** | **Saint Thomas** | **0.77** | **201**⇑ | *e*P | **Pn** | **08 25 47.2** | **-1.5** |
| STVI | | | | *e*S | **Sn** | **08 26 01.2** | **+2.1** |
| **HUMP** | **Col San Antoni** | **1.46** | **231**⇑ | *e*P | **Pn** | **08 25 57.1** | **-1.0** |
| **HUMP** | **Col San Antoni** | **1.46** | **231** | *e*S | **Sn** | **08 26 16.8** | **+0.7** |
| **HUMP** | **Col San Antoni** | **1.46** | **231**⇑ | *e*P | **Pn** | **08 25 57.1** | **-1.0** |
| HUMP | | | | *e*S | **Sn** | **08 26 16.8** | **+0.7** |
| **HUMP** | **Col San Antoni** | **1.46** | **231**⇑ | *e*P | **Pn** | **08 25 57.1** | **-1.0** |
| HUMP | | | | *e*S | **Sn** | **08 26 16.8** | **+0.7** |
| **CPD** | **Cerro la Pandu** | **1.58** | **229**⇓ | *e*P | **Pn** | **08 25 59.1** | **-0.6** |
| **CPD** | **Cerro la Pandu** | **1.58** | **229** | *e*S | **Sn** | **08 26 19.4** | **+0.4** |
| **CPD** | **Cerro la Pandu** | **1.58** | **229**⇓ | *e*P | **Pn** | **08 25 59.1** | **-0.6** |
| CPD | | | | *e*S | **Sn** | **08 26 19.4** | **+0.4** |
| **CPD** | **Cerro la Pandu** | **1.58** | **229**⇓ | *e*P | **Pn** | **08 25 59.1** | **-0.6** |
| CPD | | | | *e*S | **Sn** | **08 26 19.4** | **+0.4** |
| **SJG** | **San Juan** | **1.71** | **236**⇑ | *e*P | **Pn** | **08 26 00.7** | **-0.8** |
| SJG | | | | *e*S | **Sn** | **08 26 22.9** | **+0.8** |
| **SJG** | **San Juan** | **1.71** | **236**⇑ | *e*P | **Pn** | **08 26 00.8** | **-0.7** |
| SJG | | | | *e*S | **Sn** | **08 26 23.0** | **+0.8** |
| **SJG** | **San Juan** | **1.71** | **236**⇑ | *e*P | **Pn** | **08 26 00.7** | **-0.8** |
| **SJG** | **San Juan** | **1.71** | **236**⇑ | *e*P | **Pn** | **08 26 00.8** | **-0.7** |
| SJG | | | | *e*S | **Sn** | **08 26 22.9** | **+0.8** |
| SJG | | | | *e*S | **Sn** | **08 26 23.0** | **+0.8** |
| **SJG** | **San Juan** | **1.71** | **236**⇑ | *e*P | **Pn** | **08 26 00.8** | **-0.7** |
| SJG | | | | *e*S | **Sn** | **08 26 22.9** | **+0.8** |
| **CELP** | **Cerrillos** | **2.08** | **242**⇓ | *e*P | **Pn** | **08 26 05.8** | **-0.8** |
| CELP | | | | *e*S | **Sn** | **08 26 31.6** | **+0.4** |
| **CELP** | **Cerrillos** | **2.08** | **242**⇓ | *e*P | **Pn** | **08 26 05.8** | **-0.8** |
| CELP | | | | *e*S | **Sn** | **08 26 31.6** | **+0.4** |
| **CELP** | **Cerrillos** | **2.08** | **242**⇓ | *e*P | **Pn** | **08 26 05.8** | **-0.8** |
| CELP | | | | *e*S | **Sn** | **08 26 31.6** | **+0.4** |
| **AOPR** | **Arecibo Observ** | **2.11** | **250** | *e*S | **Sn** | **08 26 31.8** | **-0.4** |
| **AOPR** | **Arecibo Observ** | **2.11** | **250**⇑ | *e*P | **Pn** | **08 26 06.1** | **-1.0** |
| **AOPR** | **Arecibo Observ** | **2.11** | **250**⇑ | *e*P | **Pn** | **08 26 06.1** | **-1.0** |
| AOPR | | | | *e*S | **Sn** | **08 26 31.8** | **-0.4** |
| **AOPR** | **Arecibo Observ** | **2.11** | **250**⇑ | *e*P | **Pn** | **08 26 06.1** | **-1.0** |
| AOPR | | | | *e*S | **Sn** | **08 26 31.8** | **-0.4** |
| **OBIP** | **Obispado Ponce** | **2.11** | **241** | *e*S | **Sn** | **08 26 32.2** | **+0.1** |
| **OBIP** | **Obispado Ponce** | **2.11** | **241**⇑ | *e*P | **Pn** | **08 26 06.2** | **-0.9** |
| **OBIP** | **Obispado Ponce** | **2.11** | **241**⇑ | *e*P | **Pn** | **08 26 06.2** | **-0.9** |
| OBIP | | | | *e*S | **Sn** | **08 26 32.2** | **+0.1** |
| **OBIP** | **Obispado Ponce** | **2.11** | **241**⇑ | *e*P | **Pn** | **08 26 06.2** | **-0.9** |
| OBIP | | | | *e*S | **Sn** | **08 26 32.2** | **+0.1** |
| **LRS** | **Lares** | **2.21** | **250**⇑ | *e*P | **Pn** | **08 26 07.9** | **-0.6** |
| LRS | | | | *e*S | **Sn** | **08 26 34.8** | **+0.1** |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BSO1 | Boso 1 | 1.81 | 208 | P | | Pn | 08 28 06.4 | -0.1 |
| BSO1 | | | | eS | | Sn | 08 28 29.9 | +1.3 |
| JFT | Otama | 1.83 | 314 | P | | Pn | 08 28 07.2 | 0.0 |
| JFT | | | | eS | | Sn | 08 28 30.1 | +0.3 |
| JMM | Marumori | 1.87 | 329 | P | | Pn | 08 28 07.1 | -0.6 |
| JMM | | | | eS | | Sn | 08 28 31.5 | +0.8 |
| JAG | Ashikaga | 2.06 | 275 | P | | Pn | 08 28 09.6 | -0.9 |
| JFY | Yanaizu | 2.17 | 302 | P | | Pn | 08 28 12.1 | +0.2 |
| JFY | | | | eS | | Sn | 08 28 39.0 | +0.9 |
| JRY | Ryogami san | 2.52 | 265 | P | | Pn | 08 28 15.8 | -1.0 |
| JRY | | | | eS | | Sn | 08 28 45.9 | -1.0 |
| JOD2 | Odawara 2 | 2.57 | 248 | P | | Pn | 08 28 17.3 | -0.2 |
| JOD2 | | | | eS | | Sn | 08 28 46.5 | -1.6 |
| JMK | Ichinoseki | 2.75 | 347 | S | | Sn | 08 28 52.0 | -0.5 |
| JYN | Shimob | 2.91 | 256 | P | | Pn | 08 28 22.5 | +0.3 |
| MJAR | Matsushiro Arr<br>4.0nm,0.3s,baz=90,slow=16,SNR=33 | 3.07 | 276 | Pn | | Pn | 08 28 24.0 | -0.4 |
| MJAR | | | | Sn | | Sn | 08 29 02.2 | +1.8 |
| | 1.5nm,0.3s,baz=123,slow=13,SNR=4.1 | | | | | | | |
| MAT | Matsushiro | 3.07 | 276 | P | | Pn | 08 28 24.7 | +0.3 |
| MAT | | | | S | | Sn | 08 29 02.1 | +1.6 |
| H11N2 | WAKE ISLAND Hy<br>baz=312 | 27.35 | 120 | T | | T | 09 02 38.6 | |
| H11N1 | WAKE ISLAND Hy<br>baz=312 | 27.36 | 120 | T | | T | 09 02 38.6 | |
| H11N3 | WAKE ISLAND Hy<br>baz=312 | 27.37 | 120 | T | | T | 09 02 36.3 | |
| H11S1 | WAKE ISLAND Hy<br>baz=314,slow=74 | 28.05 | 123 | T | | T | 09 02 59.4 | |
| H11S3 | WAKE ISLAND Hy<br>baz=314,slow=74 | 28.05 | 123 | T | | T | 09 02 59.4 | |
| H11S2 | WAKE ISLAND Hy<br>baz=314 | 28.06 | 123 | T | | T | 09 03 01.3 | |
| SONM | Songino Array<br>0.2nm,0.4s,baz=101,slow=8.7,SNR=3.8 | 28.61 | 305 | P | | P | 08 33 32.6 | +0.8 |
| KURBB | Kurchatov Arra<br>0.5nm,0.3s,baz=84,slow=8.2,SNR=4.7 | 46.85 | 309 | P | | P | 08 36 05.4 | +0.2 |
| WRA | Warramunga Arr<br>0.1nm,0.4s,baz=5.5,slow=7.8,SNR=4.6 | 56.37 | 189 | P | | P | 08 37 16.4 | -0.3 |
| ASAR | Alice Springs<br>0.2nm,0.5s,baz=22,slow=8.6,SNR=4.5 | 60.10 | 189 | P | | P | 08 37 42.2 | -0.6 |

**WEL 25 08:33:38.6±0.6, 35°23S×178°92E, h173km±9km, ML3.8/11, 1D, Error ellipse: s-maj=11.6km s-min=7.7km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MXZ | Matakaoa Point | 2.39 | 192 | PN | Pn | 08 34 19.3 | -0.2 |
| MXZ | | | | SN | Sn | 08 34 48.1 | -3.3 |
| WMGZ | Waiomatatini S | 2.62 | 189 | PN | Pn | 08 34 22.7 | +0.4 |
| WMGZ | | | | SN | Sn | 08 34 55.7 | -0.7 |
| HAZ | Te Kaha | 2.69 | 200 | PN | Pn | 08 34 24.0 | +1.0 |
| PKGZ | Pakihiroa | 2.72 | 194 | PN | Pn | 08 34 24.3 | +0.8 |
| PUZ | Puketiti | 2.89 | 190 | ∥PN | Pn | 08 34 25.5 | -0.1 |
| PUZ | | | | SN | Sn | 08 35 00.2 | -2.0 |
| TWGZ | Tauwhareparae | 3.04 | 194 | PN | Pn | 08 34 28.2 | +0.7 |
| TWGZ | | | | SN | Sn | 08 35 06.1 | +0.5 |
| MWZ | Matawai | 3.30 | 199 | PN | Pn | 08 34 31.2 | +0.6 |
| CNGZ | Carnagh Statio | 3.30 | 190 | PN | Pn | 08 34 30.9 | +0.3 |
| TKGZ | Te Karaka | 3.32 | 195 | PN | Pn | 08 34 30.8 | 0.0 |
| URZ | Urewera | 3.36 | 205 | PN | Pn | 08 34 31.6 | +0.3 |
| URZ | | | | SN | Sn | 08 35 13.0 | +0.5 |
| RAGZ | Rawiri | 3.48 | 200 | PN | Pn | 08 34 33.5 | +0.6 |
| RIGZ | Rimuhau | 3.60 | 195 | PN | Pn | 08 34 34.1 | -0.2 |
| SNGZ | Shannon Statio | 3.77 | 199 | PN | Pn | 08 34 37.1 | +0.6 |
| KNZ | Kokohu | 3.92 | 194 | PN | Pn | 08 34 37.5 | -0.8 |
| RAHZ | Arahi | 3.97 | 201 | PN | Pn | 08 34 39.2 | +0.2 |
| MHGZ | Mahia Peninsul | 4.00 | 191 | PN | Pn | 08 34 39.2 | -0.3 |
| MRHZ | Matea Rd | 4.12 | 208 | PN | Pn | 08 34 41.2 | +0.1 |
| NMHZ | Naumai | 4.22 | 203 | PN | Pn | 08 34 42.6 | +0.2 |
| ARHZ | Aropaoanui | 4.31 | 200 | PN | Pn | 08 34 43.1 | -0.4 |
| BKZ | Black Stump Fm | 4.39 | 206 | PN | Pn | 08 34 44.5 | 0.0 |
| MCHZ | McNeill Hill | 4.57 | 202 | PN | Pn | 08 34 46.9 | +0.1 |
| CKHZ | Cape Kidnapper | 4.66 | 198 | PN | Pn | 08 34 47.2 | -0.8 |
| BHHZ | Black Hill Sta | 4.83 | 207 | PN | Pn | 08 34 50.0 | -0.2 |
| FWVZ | Far West T-bar | 4.84 | 213 | PN | Pn | 08 34 51.4 | +0.9 |
| KAHZ | Kahuranaki | 4.84 | 199 | PN | Pn | 08 34 49.4 | -1.0 |
| KRHZ | Kereru | 4.86 | 204 | PN | Pn | 08 34 49.4 | -1.2 |
| WNVZ | Wahianoa | 4.88 | 212 | PN | Pn | 08 34 51.4 | +0.4 |
| PXZ | Pawanui | 5.07 | 198 | PN | Pn | 08 34 51.3 | -1.9 |
| PRHZ | Porangahau | 5.35 | 199 | PN | Pn | 08 34 55.0 | -1.9 |
| TSZ | Takapari Road | 5.37 | 205 | PN | Pn | 08 34 55.2 | -2.0 |
| BFZ | Birch Farm | 5.84 | 200 | PN | Pn | 08 35 01.1 | -2.2 |
| MRZ | Mangatainoka R | 6.04 | 205 | PN | Pn | 08 35 03.4 | -2.6 |
| TIWZ | Tintock | 6.04 | 202 | PN | Pn | 08 35 04.6 | -1.4 |
| OGWZ | Otaki Gorge | 6.32 | 207 | PN | Pn | 08 35 07.8 | -1.8 |
| KIW | Kapiti Island | 6.46 | 208 | PN | Pn | 08 35 09.2 | -2.2 |
| CAW | Cannon Point | 6.61 | 206 | PN | Pn | 08 35 10.8 | -2.7 |

*ISCJB **25** 08:45:02.5±0.4, 39°.11N±0°.03×27°.53E±0°.03, h0km, Error ellipse: s-maj=4.5km s-min=3.8km az=26.8*
*CSEM **25** 08:45:02.3±0.2, 39°.12N×27°.49E, h1km, MD2.9, Error ellipse: s-maj=5.0km s-min=3.9km az=55.0, Mining explosion.*
*DDA **25** 08:45:02.9, 39°.10N×27°.54E, h7km, Md2.8*
*ISK **25** 08:45:02.6, 39°.08N×27°.53E, h12km, MD2.9*
**ISC 25 08:45:02.6±0.8, 39°.11N±0°.03×27°.52E±0°.03, h0km, n28, σ0s59/38, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AKS | Akhisar | 0.33 | 135 | PG | Pg | 08 45 09.2 | +0.3 |
| AKS | | | | eSG | Sg | 08 45 14.0 | +0.9 |
| AKS | Akhisar | 0.33 | 135 | *i* Pg | Pg | 08 45 09.2 | +0.3 |
| AKS | | | | eSg | Sg | 08 45 14.0 | +0.9 |
| BLCB | Balcova | 0.81 | 207 | ePG | Pg | 08 45 18.2 | 0.0 |
| BLCB | | | | eSG | Sg | 08 45 29.7 | +0.9 |
| BLCB | Balcova | 0.81 | 207 | ePg | Pg | 08 45 18.2 | 0.0 |
| BLCB | | | | eSg | Sg | 08 45 29.7 | +0.9 |
| DEMI | Demirci | 0.94 | 94 | *i* P | Pg | 08 45 20.8 | +0.2 |
| DEMI | | | | *i* S | Sb | 08 45 34.5 | -0.3 |
| DEMI | Demirci | 0.94 | 94 | P | Pg | 08 45 20.8 | +0.2 |
| DEMI | | | | S | Sb | 08 45 34.5 | -0.3 |
| MANT | Manisa | 1.02 | 127 | *i* P | Pb | 08 45 23.4 | +0.1 |
| MANT | | | | *i* S | Sg | 08 45 36.2 | +0.7 |
| MANT | Manisa | 1.02 | 127 | P | Pb | 08 45 23.4 | +0.1 |
| MANT | | | | S | Sg | 08 45 36.2 | +0.7 |
| KULA | Kula-Manisa | 1.07 | 123 | ePG | Pg | 08 45 23.2 | 0.0 |
| KULA | Kula-Manisa | 1.07 | 123 | ePg | Pg | 08 45 23.2 | 0.0 |
| ZEY | ˙zmir | 1.18 | 223 | P | Pg | 08 45 25.2 | +0.1 |
| ZEY | | | | S | Sn | 08 45 42.4 | -0.7 |
| AYDB | Zeytinkoy-Aydi | 1.20 | 166 | ePN | Pg | 08 45 24.9 | -0.7 |
| AYDB | Zeytinkoy-Aydi | 1.20 | 166 | ePn | Pg | 08 45 24.9 | -0.7 |
| EDC | Edincik | 1.26 | 12 | ePN | Pg | 08 45 26.9 | +0.1 |
| EDC | Edincik | 1.26 | 12 | ePn | Pg | 08 45 27.0 | +0.1 |
| KRBG | Karabiga-Canak | 1.29 | 353 | ePN | Pb | 08 45 27.6 | -0.2 |
| KRBG | Karabiga-Canak | 1.29 | 353 | ePn | Pb | 08 45 27.6 | -0.2 |
| KCTX | Karacabey (Bur | 1.32 | 29 | ePN | Pg | 08 45 27.7 | -0.3 |
| KCTX | Karacabey (Bur | 1.32 | 29 | ePn | Pg | 08 45 27.7 | -0.3 |
| BOZC | Bozcaada | 1.35 | 303 | P | Pb | 08 45 29.4 | +0.6 |
| BOZC | | | | S | Sn | 08 45 48.7 | +1.4 |
| CHOS | Chios island | 1.35 | 238 | ePN | Pg | 08 45 27.9 | -0.6 |
| CHOS | Chios island | 1.35 | 238 | ePn | Pg | 08 45 27.9 | -0.6 |
| LPK | Lapseki | 1.39 | 335 | ePN | Pg | 08 45 29.1 | -0.2 |
| LPK | Lapseki | 1.39 | 335 | ePn | Pg | 08 45 29.1 | -0.2 |
| GELI | Tayfur-Gelibol | 1.52 | 328 | ePN | Pn | 08 45 30.7 | -0.3 |
| GELI | Tayfur-Gelibol | 1.52 | 328 | ePn | Pn | 08 45 30.7 | -0.3 |
| TVSB | Tavsanli | 1.55 | 77 | ePN | Pn | 08 45 30.5 | -1.1 |
| TVSB | Tavsanli | 1.55 | 77 | ePn | Pn | 08 45 30.5 | -1.1 |

**IDC 25 08:46:49.2±999.0, 51°57N×54°07E, h0km, Error ellipse: s-maj=503.0km s-min=58.7km az=112.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| I31KZ | AKTYUBINSK INF<br>baz=296,slow=332,SNR=6.1 | 2.77 | 113 | *i* | | 09 05 00.0 | |
| I46RU | ZALESOVO INFRA<br>baz=274,slow=321,SNR=2.7 | 18.69 | 71 | *i* | | 10 40 00.0 | |
| I34MN | SONGINO INFRAS<br>baz=298,slow=331,SNR=0.6 | 33.47 | 75 | *i* | | 12 11 20.0 | |

*ISCJB **25** 08:50:15.7±0.4, 39°.19N±0°.02×29°.37E±0°.04, h0km, Error ellipse: s-maj=5.0km s-min=2.8km az=24.4*
*CSEM **25** 08:50:15.8±0.1, 39°.20N×29°.38E, h1km, MD2.6, Error ellipse: s-maj=3.4km s-min=1.9km az=113.0, Mining explosion.*
*DDA **25** 08:50:15.9, 39°.17N×29°.39E, h7km, Md2.7*
*ISK **25** 08:50:15.5, 39°.20N×29°.38E, h6km, MD2.6*
**ISC 25 08:50:15.9±0.8, 39°.20N±0°.02×29°.37E±0°.03, h0km, n40, σ0s58/56, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| TVSB | Tavsanli | 0.26 | 15 | PG | Pg | 08 50 21.1 | +0.3 |
| TVSB | | | | eSG | Sg | 08 50 25.0 | +0.9 |
| TVSB | Tavsanli | 0.26 | 15 | *i* Pg | Pg | 08 50 21.1 | +0.3 |
| TVSB | | | | eSg | Sg | 08 50 25.0 | +0.9 |
| DEMI | Demirci | 0.54 | 253 | *i* P | Pg | 08 50 26.9 | +0.7 |
| DEMI | | | | *i* S | Sg | 08 50 34.2 | +1.0 |
| DEMI | Demirci | 0.54 | 253 | P | Pg | 08 50 26.9 | +0.7 |
| DEMI | | | | S | Sg | 08 50 34.2 | +1.0 |
| KHAL | Karahalli | 0.84 | 174 | *i* P | Pg | 08 50 32.1 | +0.1 |
| KHAL | | | | *i* S | Sg | 08 50 44.0 | +1.2 |
| KHAL | Karahalli | 0.84 | 174 | P | Pg | 08 50 32.1 | +0.1 |
| KHAL | | | | S | Sg | 08 50 44.0 | +1.2 |
| KULA | Kula-Manisa | 0.89 | 219 | ePG | Pg | 08 50 33.1 | +0.2 |
| KULA | | | | eSG | Sg | 08 50 44.6 | +0.2 |
| KULA | Kula-Manisa | 0.89 | 219 | ePg | Pg | 08 50 33.1 | +0.2 |
| KULA | | | | eSg | Sg | 08 50 44.6 | +0.2 |
| KHL | Karahalli | 0.89 | 172 | ePG | Pg | 08 50 33.1 | +0.2 |
| KHL | Karahalli | 0.89 | 172 | ePg | Pg | 08 50 33.1 | +0.2 |
| ORLT | Orhaneli | 0.92 | 336 | ePG | Pg | 08 50 34.1 | +0.5 |
| ORLT | Orhaneli | 0.92 | 336 | ePg | Pg | 08 50 34.1 | +0.5 |
| ULDT | Uludag | 0.95 | 349 | *i* P | Pb | 08 50 35.0 | -0.5 |
| ULDT | | | | *i* S | Sn | 08 50 50.4 | -0.8 |
| ULDT | Uludag | 0.95 | 349 | P | Pb | 08 50 35.0 | -0.5 |
| ULDT | | | | S | Sn | 08 50 50.4 | -0.8 |
| MANT | Manisa | 0.96 | 222 | *i* P | Pg | 08 50 34.3 | +0.1 |
| MANT | | | | *i* S | Sg | 08 50 46.7 | +0.1 |
| MANT | Manisa | 0.96 | 222 | P | Pg | 08 50 34.3 | +0.1 |
| MANT | | | | S | Sg | 08 50 46.7 | +0.1 |
| CAVI | Cavuskoy | 1.06 | 20 | ePG | Pg | 08 50 36.5 | +0.2 |
| CAVI | Cavuskoy | 1.06 | 20 | ePg | Pg | 08 50 36.5 | +0.2 |
| IGD | Bursa | 1.07 | 353 | P | Pg | 08 50 36.4 | 0.0 |
| IGD | | | | S | Sb | 08 50 52.5 | +0.7 |
| BORA | Eskisehir | 1.07 | 51 | *i* P | Pg | 08 50 36.0 | -0.5 |
| BORA | | | | *i* S | Sb | 08 50 51.5 | -0.6 |
| BORA | Eskisehir | 1.07 | 51 | P | Pg | 08 50 36.0 | -0.5 |
| BORA | | | | S | Sb | 08 50 51.5 | -0.6 |
| IZI | Iznik | 1.13 | 4 | ePN | Pg | 08 50 37.9 | +0.2 |
| IZI | Iznik | 1.13 | 4 | ePn | Pg | 08 50 37.9 | +0.2 |
| MDNY | Mudanya-Bursa | 1.22 | 342 | ePN | Pg | 08 50 39.5 | +0.1 |
| MDNY | Mudanya-Bursa | 1.22 | 342 | ePn | Pg | 08 50 39.5 | +0.1 |
| AKS | Akhisar | 1.26 | 256 | ePN | Pg | 08 50 39.9 | -0.1 |
| AKS | Akhisar | 1.26 | 256 | ePn | Pg | 08 50 39.9 | -0.1 |
| GPA | Golpazari | 1.30 | 33 | ePN | Pg | 08 50 41.1 | +0.2 |
| GPA | Golpazari | 1.30 | 33 | ePn | Pg | 08 50 41.1 | +0.2 |
| KCTX | Karacabey (Bur | 1.32 | 324 | ePN | Pg | 08 50 41.3 | +0.1 |
| KCTX | Karacabey (Bur | 1.32 | 324 | ePn | Pg | 08 50 41.3 | +0.1 |
| ARMT | Armutlu | 1.42 | 344 | ePN | Pn | 08 50 42.7 | -0.3 |
| ARMT | Armutlu | 1.42 | 344 | ePn | Pn | 08 50 42.7 | -0.3 |
| GULT | Gulveren | 1.51 | 35 | ePN | Pn | 08 50 44.0 | -0.3 |
| GULT | Gulveren | 1.51 | 35 | ePn | Pn | 08 50 44.0 | -0.3 |
| GONE | Gonen-Balikesi | 1.55 | 303 | ePN | Pn | 08 50 44.6 | -0.2 |
| GONE | Gonen-Balikesi | 1.55 | 303 | ePn | Pn | 08 50 44.6 | -0.2 |
| BNT | Bandirma | 1.61 | 316 | ePN | Pn | 08 50 45.5 | -0.1 |
| BNT | Bandirma | 1.61 | 316 | ePn | Pn | 08 50 45.5 | -0.1 |
| AUMIH | MIHALICIK | 1.76 | 67 | P | Pb | 08 50 49.2 | +0.1 |
| AUMIH | | | | S | Sg | 08 51 14.8 | +2.3 |

*CSEM **25** 08:51:00.9±0.3, 40°.56N×38°.26E, h8km, MD2.6, Error ellipse: s-maj=8.2km s-min=5.0km az=124.0*
*ISCJB **25** 08:51:01.6±0.8, 40°.55N±0°.04×38°.31E±0°.07, h10km, Error ellipse: s-maj=7.8km s-min=4.9km az=31.8*
*DDA **25** 08:51:03.9, 40°.43N×38°.38E, h8km, Md2.6*
**ISC 25 08:51:01.5±0.9, 40°.56N±0°.04×38°.29E±0°.05, h10km, n12, σ0s94/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SUSE | Susehri | 0.36 | 191 | *i* P | Pg | 08 51 07.5 | -1.2 |
| SUSE | | | | *i* S | Sg | 08 51 13.6 | +0.1 |
| SUSE | Susehri | 0.36 | 191 | P | Pg | 08 51 07.5 | -1.2 |
| SUSE | | | | S | Sg | 08 51 13.6 | +0.1 |
| ESPY | Espiye-Giresun | 0.48 | 43 | ePG | Pg | 08 51 10.4 | -0.6 |
| ESPY | | | | eSG | Sb | 08 51 18.2 | -1.1 |
| ESPY | Espiye-Giresun | 0.48 | 43 | ePg | Pg | 08 51 10.4 | -0.6 |
| ESPY | | | | eSg | Sb | 08 51 18.2 | -1.1 |
| RSDY | Resadiye-TOKAT | 0.75 | 258 | ePG | Pb | 08 51 18.5 | +1.8 |
| RSDY | Resadiye-TOKAT | 0.75 | 258 | ePg | Pb | 08 51 18.5 | +1.8 |
| KELT | Kelkit | 0.84 | 119 | *i* P | Pg | 08 51 17.5 | -0.3 |
| KELT | | | | *i* S | Sg | 08 51 28.9 | 0.0 |
| KELT | Kelkit | 0.84 | 119 | P | Pg | 08 51 17.5 | -0.3 |
| KELT | | | | S | Sg | 08 51 28.9 | 0.0 |
| SVSK | Karacayir | 1.18 | 237 | ePN | Pn | 08 51 23.4 | -0.6 |
| SVSK | Karacayir | 1.18 | 237 | ePn | Pn | 08 51 23.4 | -0.6 |
| KEMA | Kemaliye | 1.30 | 173 | *i* P | Pn | 08 51 26.4 | +0.5 |
| KEMA | | | | *i* S | Sb | 08 51 42.1 | -0.8 |
| KEMA | Kemaliye | 1.30 | 173 | P | Pn | 08 51 26.4 | +0.5 |
| KEMA | | | | S | Sb | 08 51 42.1 | -0.8 |

**WEL 25 08:59:43.6±0.3, 45°51S×166°42E, h12km, ML3.6/9, 1C-1D, Error ellipse: s-maj=3.5km s-min=1.5km az=90.0, Off west coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DCZ | Deep Cove | 0.51 | 87 | P* | Pg | 08 59 53.6 | 0.0 |
| DCZ | | | | AML | AML | 09 00 03.3 | |
| DCZ | | | | AML | AML | 09 00 07.3 | |
| PYZ | Puysegur Point | 0.69 | 165 | P* | Pg | 08 59 56.5 | -0.4 |
| PYZ | | | | S* | Sg | 09 00 05.0 | -1.0 |
| WHZ | Wether Hill Ro | 1.14 | 111 | P* | Pb | 09 00 04.1 | -1.1 |
| WHZ | | | | S* | Sb | 09 00 19.3 | -0.6 |
| WHZ | | | | AML | AML | 09 00 20.1 | |
| MLZ | Mavora Lakes | 1.24 | 83 | ∥P* | Pn | 09 00 05.3 | -1.5 |
| MLZ | | | | AML | AML | 09 00 24.6 | |
| MLZ | | | | AML | AML | 09 00 25.0 | |
| MSZ | Milford Sound | 1.35 | 53 | PN | Pn | 09 00 07.2 | -1.1 |
| MSZ | | | | AML | AML | 09 00 29.6 | |
| MSZ | | | | AML | AML | 09 00 32.5 | |
| APZ | The Paps | 1.72 | 141 | PN | Pn | 09 00 13.5 | +0.1 |
| APZ | | | | SN | Sn | 09 00 34.6 | -0.7 |
| APZ | | | | AML | AML | 09 00 34.9 | |
| WKZ | Wanaka | 1.96 | 71 | ∥PN | Pn | 09 00 17.5 | +0.9 |
| WKZ | | | | AML | AML | 09 00 48.4 | |
| WKZ | | | | AML | AML | 09 00 55.8 | |
| EAZ | Earnscleugh | 2.05 | 83 | PN | Pn | 09 00 18.9 | +1.0 |
| EAZ | | | | AML | AML | 09 00 49.5 | |
| EAZ | | | | AML | AML | 09 00 50.3 | |
| SYZ | Scrubby Hill | 2.16 | 120 | PN | Pb | 09 00 20.9 | -1.6 |
| JCZ | Jackson Bay | 2.19 | 50 | PN | Pb | 09 00 22.6 | -0.7 |
| JCZ | | | | AML | AML | 09 00 57.1 | |
| JCZ | | | | AML | AML | 09 01 02.0 | |
| TUZ | Tuapeka | 2.29 | 102 | PN | Pn | 09 00 22.5 | +1.3 |
| TUZ | | | | AML | AML | 09 00 56.0 | |
| TUZ | | | | AML | AML | 09 00 56.3 | |
| LBZ | Lake Benmore | 2.90 | 69 | PN | Pn | 09 00 29.5 | 0.0 |
| ODZ | Otahua Downs | 3.02 | 83 | PN | Pn | 09 00 30.9 | -0.2 |
| FOZ | Fox Glacier | 3.04 | 51 | PN | Pb | 09 00 35.0 | -2.5 |
| RPZ | Rata Peaks | 3.76 | 63 | PN | Pn | 09 00 42.4 | +1.0 |

*CSEM **25** 09:02:41.6±0.7, 34°.78N×23°.52E, h10km, MD3.5, Error ellipse: s-maj=15.2km s-min=5.4km az=20.0*
*THE **25** 09:02:41.0, 34°.77N×23°.52E, h0km±2km, ML2.9/1, Error ellipse: s-maj=4.4km s-min=1.0km az=205.0*
*ATH **25** 09:02:41.7, 34°.85N×23°.50E, h21km±2km, MD3.5/19*
**ISC 25 09:02:40.0±2.0, 34°.76N±0°.08×23°.48E±0°.05, h1km±12km, n70, σ0s60/84, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GVD | Gavdhos | 0.50 | 81 | ePB | Pb | 09 02 51.1 | -0.6 |
| GVD | | | | eSB | Sb | 09 02 59.0 | -0.5 |
| GVD | Gavdhos | 0.50 | 81 | ePb | Pb | 09 02 51.1 | -0.6 |
| GVD | | | | eSb | Sb | 09 02 59.0 | -0.5 |
| IMMV | Iera Moni Meta | 0.81 | 30 | ePN | Pg | 09 02 56.2 | +0.7 |
| IMMV | | | | eSN | Sg | 09 03 06.2 | +0.2 |
| IMMV | Iera Moni Meta | 0.81 | 30 | ePn | Pg | 09 02 56.2 | +0.7 |
| VAM | Vamos | 0.87 | 42 | ePN | Pg | 09 02 56.9 | +0.2 |
| VAM | | | | eSN | Sb | 09 03 09.1 | -1.1 |
| VAM | Vamos | 0.87 | 42 | P | Pg | 09 02 57.3 | +0.6 |
| VAM | | | | S | Sb | 09 03 10.1 | -0.1 |
| ANKY | Antikythira Is | 1.11 | 352 | ePN | Pg | 09 03 01.6 | +0.2 |
| ANKY | Antikythira Is | 1.11 | 352 | P | Pg | 09 03 01.8 | +0.4 |
| ANKY | | | | S | Sn | 09 03 18.6 | -0.2 |
| ANKY | Antikythira Is | 1.11 | 352 | P | Pg | 09 03 01.8 | +0.4 |
| ANKY | | | | S | Sn | 09 03 18.6 | -0.2 |
| SIVA | Sivas | 1.12 | 76 | ePN | Pb | 09 03 02.2 | 0.0 |
| SIVA | Sivas | 1.12 | 76 | P | Pb | 09 03 02.1 | -0.1 |
| SIVA | | | | S | Sb | 09 03 17.1 | -0.2 |
| SIVA | Sivas | 1.12 | 76 | ePn | Pb | 09 03 02.2 | 0.0 |
| SIVA | | | | S | Sb | 09 03 17.1 | -0.2 |
| IDI | Anoyia | 1.27 | 65 | ePN | Pg | 09 03 04.2 | -0.1 |
| IDI | Anoyia | 1.27 | 65 | P | Pg | 09 03 04.2 | -0.1 |
| IDI | | | | S | Sn | 09 03 23.2 | +0.5 |
| IDI | Anoyia | 1.27 | 65 | P | Pg | 09 03 04.2 | -0.1 |
| IDI | | | | S | Sn | 09 03 23.2 | +0.5 |
| KYTH | Kithira | 1.56 | 347 | ePN | Pn | 09 03 09.6 | +0.6 |
| KYTH | Kithira | 1.56 | 347 | P | Pn | 09 03 09.2 | +0.2 |
| KYTH | Kithira | 1.56 | 347 | P | Pn | 09 03 09.2 | +0.2 |
| KYTH | Kithira | 1.56 | 347 | ePn | Pn | 09 03 09.6 | +0.6 |
| LAST | Lasithi | 1.69 | 76 | ePN | Pg | 09 03 12.2 | -0.1 |
| LAST | Lasithi | 1.69 | 76 | ePn | Pg | 09 03 12.2 | -0.1 |
| VLI | Veliai | 2.00 | 347 | ePN | Pb | 09 03 16.6 | -0.7 |
| VLI | Veliai | 2.00 | 347 | P | Pn | 09 03 15.2 | +0.2 |
| VLI | Veliai | 2.00 | 347 | P | Pn | 09 03 15.2 | +0.2 |
| VLI | Veliai | 2.00 | 347 | ePn | Pb | 09 03 16.6 | -0.7 |
| MHLO | Agia Marina, M | 2.06 | 21 | ePN | Pn | 09 03 16.4 | +0.5 |
| MHLO | Agia Marina, M | 2.06 | 21 | P | Pn | 09 03 15.1 | -0.8 |
| MHLO | | | | S | Sn | 09 03 42.9 | +0.6 |
| MHLO | Agia Marina, M | 2.06 | 21 | P | Pn | 09 03 15.1 | -0.8 |
| MHLO | Agia Marina, M | 2.06 | 21 | ePn | Pn | 09 03 16.4 | +0.5 |
| MHLO | | | | S | Sn | 09 03 42.9 | +0.6 |
| DYR | Agios Nikonas | 2.20 | 335 | ePN | Pb | 09 03 19.8 | -0.9 |
| DYR | Agios Nikonas | 2.20 | 335 | ePn | Pb | 09 03 19.8 | -0.9 |
| THR5 | Thira Island, | 2.24 | 42 | P | Pn | 09 03 18.2 | -0.1 |
| THR5 | Thira Island, | 2.24 | 42 | P | Pn | 09 03 18.2 | -0.1 |
| THR3 | Thira Island, | 2.27 | 43 | P | Pn | 09 03 18.6 | -0.1 |
| THR3 | Thira Island, | 2.27 | 43 | P | Pn | 09 03 18.6 | -0.1 |
| ZKR | Zakros | 2.27 | 80 | ePB | Pb | 09 03 20.9 | -1.0 |
| SANT | Santorini | 2.27 | 45 | ePN | Pn | 09 03 19.4 | +0.6 |
| SANT | Santorini | 2.27 | 45 | ePn | Pn | 09 03 19.4 | +0.6 |
| SERI | Serifos | 2.53 | 18 | ePN | Pn | 09 03 21.8 | -0.5 |
| SERI | Serifos | 2.53 | 18 | ePn | Pn | 09 03 21.8 | -0.5 |
| DID | Didima | 2.75 | 356 | ePN | Pn | 09 03 26.0 | +0.7 |
| DID | Didima | 2.75 | 356 | ePn | Pn | 09 03 26.0 | +0.7 |
| VLX | Vlachokerasia | 2.75 | 341 | P | Pn | 09 03 25.8 | +0.4 |
| VLX | Vlachokerasia | 2.75 | 341 | P | Pn | 09 03 25.8 | +0.4 |
| APE | Apeiranthos | 2.84 | 35 | ePN | Pn | 09 03 26.5 | -0.1 |
| APE | Apeiranthos | 2.84 | 35 | ePn | Pn | 09 03 26.5 | -0.1 |
| KARP | Karpathos | 3.11 | 74 | ePN | Pn | 09 03 31.3 | +1.0 |
| KARP | Karpathos | 3.11 | 74 | ePn | Pn | 09 03 31.3 | +1.0 |
| GUR | Goura | 3.30 | 344 | ePN | Pn | 09 03 34.2 | +1.2 |
| GUR | Goura | 3.30 | 344 | ePn | Pn | 09 03 34.2 | +1.2 |
| VILL | Villia | 3.40 | 358 | ePn | Pn | 09 03 34.3 | 0.0 |
| KLV | Kalavryta, Ach | 3.45 | 342 | ePN | Pn | 09 03 34.8 | -0.2 |
| KLV | Kalavryta, Ach | 3.45 | 342 | ePn | Pn | 09 03 34.8 | -0.2 |
| VIL2 | Platees | 3.45 | 357 | ePN | Pn | 09 03 34.3 | -0.6 |
| EREA | Eretria | 3.67 | 6 | ePN | Pn | 09 03 38.0 | 0.0 |
| EREA | Eretria | 3.67 | 6 | ePn | Pn | 09 03 38.0 | 0.0 |
| DESF | Desfina | 3.72 | 348 | ePN | Pn | 09 03 39.1 | +0.4 |
| DESF | Desfina | 3.72 | 348 | ePn | Pn | 09 03 39.1 | +0.4 |
| KALE | Kalithea | 3.78 | 344 | ePN | Pn | 09 03 38.6 | -0.9 |
| KALE | Kalithea | 3.78 | 344 | ePn | Pn | 09 03 38.6 | -0.9 |
| LKR | Lokris | 3.90 | 354 | ePN | Pn | 09 03 40.9 | -0.2 |
| LKR | Lokris | 3.90 | 354 | ePn | Pn | 09 03 40.9 | -0.2 |
| AXAR | Agios Charalam | 4.05 | 351 | ePN | Pn | 09 03 44.7 | +1.5 |
| AXAR | Agios Charalam | 4.05 | 351 | ePn | Pn | 09 03 44.7 | +1.5 |
| MAKR | Makrakomi, Fth | 4.38 | 346 | ePN | Pn | 09 03 48.8 | +1.1 |
| MAKR | Makrakomi, Fth | 4.38 | 346 | ePn | Pn | 09 03 48.8 | +1.1 |
| SKIA | Skiathos | 4.40 | 360 | ePN | Pn | 09 03 48.0 | +0.1 |
| SKIA | Skiathos | 4.40 | 360 | ePn | Pn | 09 03 48.0 | +0.1 |

**IDC 25 09:11:35.7±2.2, 23°.69N×46°.73W, h0km, mb3.5/3, mb1 3.8/3, mb1mx3.5/26, mbtmp3.5/3, MS3.4/1, Ms1 3.4/1, ms1mx2.6/27, Error ellipse: s-maj=112.3km s-min=30.5km az=16.0, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| H10N3 | ASCENSION HYDR<br>baz=317,slow=75,SNR=22 | 44.42 | 131 | T | T | 10 07 07.5 | |
| H10N2 | ASCENSION HYDR<br>baz=317,slow=75,SNR=24 | 44.42 | 131 | T | T | 10 07 06.9 | |
| H10N1 | ASCENSION HYDR<br>baz=317,slow=75,SNR=22 | 44.44 | 131 | T | T | 10 07 08.4 | |
| H10S3 | ASCENSION HYDR<br>baz=318,slow=75,SNR=45 | 45.11 | 132 | T | T | 10 08 01.8 | |
| H10S1 | ASCENSION HYDR<br>baz=318,slow=75,SNR=38 | 45.13 | 132 | T | T | 10 08 01.3 | |
| H10S2 | ASCENSION HYDR<br>baz=318,slow=75,SNR=42 | 45.13 | 132 | T | T | 10 08 02.5 | |
| TORD | Torodi Ar. Bea<br>1.5nm,0.9s,baz=291,slow=7.3,SNR=6.1 | 46.93 | 94 | P | P | 09 20 08.3 | -0.1 |
| TXAR | Laita Array<br>0.1nm,0.7s,baz=91,slow=9.0,SNR=3.0 | 50.85 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PICO | | | | *e*S | Sn | 09 38 41.5 | -7.6 |
| **PGRA** | **Graciosa** | **1.47** | **109** | *e*P | Pn | 09 38 25.4 | -4.5 |
| PGRA | | | | *e*S | Sn | 09 38 40.2 | -9.0 |
| PGRA | | | | A | A | 09 38 41.0 | |
| | 216nm,0.3s | | | | | | |
| **PGRA** | **Graciosa** | **1.47** | **109** | *e*P | Pn | 09 38 25.4 | -4.5 |
| PGRA | | | | *e*S | Sn | 09 38 40.2 | -9.0 |
| **PPNO** | **Prainha do Nor** | **1.57** | **131** | *e*S | Sn | 09 38 44.3 | -7.5 |
| PPNO | | | | A | A | 09 38 47.3 | |
| | 125nm,0.1s | | | | | | |
| **PPNO** | **Prainha do Nor** | **1.57** | **131** | *e*S | Sn | 09 38 44.3 | -7.5 |
| **PMAN** | **Manadas** | **1.57** | **124** | *e*S | Sn | 09 38 44.1 | -7.8 |
| PMAN | | | | A | A | 09 38 45.3 | |
| | 77nm,0.1s | | | | | | |
| **PMAN** | **Manadas** | **1.57** | **124** | *e*S | Sn | 09 38 44.1 | -7.8 |

*DDA* ***25*** *09:45:50.9,39˚50N×38˚49E,h7km,Md2.7*
*ISCJB* ***25*** *09:45:51.9±1.0,39˚47N±0˚05×38˚45E±0˚06,h7km±7km, Error ellipse: s-maj=9.3km s-min=6.6km az=137.6*
*CSEM* ***25*** *09:45:51.8±0.3,39˚44N×38˚48E,h8km,MD2.7,Error ellipse: s-maj=9.9km s-min=7.2km az=80.0*
*ISK* ***25*** *09:45:51.8,39˚42N×38˚40E,h10km,MD2.7*
**ISC 25 09:45:52.0±1.1,39˚45N±0˚04×38˚48E±0˚04,h11km±7km, n15,σ0°80/26,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KEMA** | **Kemaliye** | **0.18** | **175** | *i* P | **Pg** | **09 45 55.7** | **-0.2** |
| KEMA | | | | *i* S | **Sg** | **09 45 59.3** | **+0.6** |
| **KEMA** | **Kemaliye** | **0.18** | **175** | P | **Pg** | **09 45 55.7** | **-0.2** |
| KEMA | | | | S | **Sg** | **09 45 59.3** | **+0.6** |
| **CUKAN** | **kangal_SIVAS** | **0.79** | **261** | P | **Pg** | **09 46 06.3** | **-1.1** |
| CUKAN | | | | S | **Sg** | **09 46 18.5** | **+0.8** |
| **PTK** | **Pertek** | **0.90** | **127** | *e*PG | **Pg** | **09 46 09.6** | **+0.2** |
| PTK | | | | *e*SG | **Sn** | **09 46 24.2** | **+0.3** |
| **PTK** | **Pertek** | **0.90** | **127** | *e*Pg | **Pg** | **09 46 09.6** | **+0.2** |
| PTK | | | | *e*Sg | **Sn** | **09 46 24.3** | **+0.3** |
| **ELZG** | **Elazig** | **1.03** | **157** | *i* P | **Pb** | **09 46 12.0** | **+0.1** |
| ELZG | | | | *i* S | **Sn** | **09 46 26.8** | **-0.2** |
| **ELZG** | **Elazig** | **1.03** | **157** | P | **Pb** | **09 46 12.0** | **+0.1** |
| ELZG | | | | S | **Sn** | **09 46 26.8** | **-0.2** |
| **MALT** | **Malatya** | **1.13** | **182** | *e*PN | **Pb** | **09 46 12.9** | **-0.8** |
| MALT | | | | *e*SN | **Sg** | **09 46 28.9** | **+0.4** |
| **MALT** | **Malatya** | **1.13** | **182** | *e*Pn | **Pb** | **09 46 12.9** | **-0.8** |
| MALT | | | | *e*Sn | **Sg** | **09 46 28.9** | **+0.4** |
| **AKCD** | **Akcadag** | **1.23** | **201** | *i* P | **Pn** | **09 46 14.4** | **-0.8** |
| AKCD | | | | *i* S | **Sn** | **09 46 33.8** | **+2.0** |
| **AKCD** | **Akcadag** | **1.23** | **201** | P | **Pn** | **09 46 14.4** | **-0.8** |
| AKCD | | | | S | **Sn** | **09 46 33.8** | **+2.0** |
| **SVSK** | **Karacayir** | **1.23** | **293** | *e*PN | **Pg** | **09 46 16.1** | **+0.4** |
| **SVSK** | **Karacayir** | **1.23** | **293** | *e*Pn | **Pg** | **09 46 16.1** | **+0.4** |
| **ESPY** | **Espiye-Giresun** | **1.48** | **7** | *e*PN | **Pb** | **09 46 19.3** | **-0.3** |
| **ESPY** | **Espiye-Giresun** | **1.48** | **7** | *e*Pn | **Pb** | **09 46 19.3** | **-0.3** |

*DDA* ***25*** *09:52:27.0,36˚62N×36˚40E,h6km,Md2.6*
*NSSC* ***25*** *09:52:36.8±1.5,35˚90N×37˚03E,h101km±16km,ML2.0*
*CSEM* ***25*** *09:52:36.8,35˚90N×37˚03E,h100km,ML2.0,After NSSC*
**ISC 25 09:52:28.0±1.4,36˚55N±0˚05×36˚6E±0˚2,h10km±13km, n11,σ2°44/15,Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAMA** | **Osmaniye** | **0.64** | **3** | P | Pg | 09 52 36.5 | -3.9 |
| KAMA | | | | S | **Sg** | **09 52 47.6** | **-1.3** |
| **YAYL** | **Yayladag** | **0.66** | **220** | P | Pg | 09 52 34.7 | -6.2 |
| YAYL | | | | S | **Sg** | **09 52 48.3** | **-1.3** |
| **AYKD** | **Aykdinkavak** | **0.88** | **9** | P | Pg | 09 52 38.4 | -6.6 |
| AYKD | | | | S | **Sb** | **09 52 55.7** | **-1.6** |
| **WRDH** | **Warideh** | **1.05** | **190** | *i* P | Pn | 09 52 52.8 | +3.9 |
| WRDH | | | | AML | AML | 09 52 57.9 | |
| | comp=E,11nm,0.5s | | | | | | |
| WRDH | | | | *e*S | **Sn** | **09 53 06.6** | **+2.9** |
| WRDH | | | | AML | AML | 09 53 14.7 | |
| | comp=N,28nm,0.3s | | | | | | |
| **WRDH** | **Warideh** | **1.05** | **190** | *i* P | Pn | 09 52 52.8 | +3.9 |
| WRDH | | | | *e*S | **Sn** | **09 53 06.6** | **+2.9** |
| | comp=N,28nm,0.3s | | | | | | |
| **KFRA** | **Kufra** | **1.34** | **174** | *i* P | **Pb** | **09 52 54.2** | **+0.9** |
| KFRA | | | | *e*S | **Sb** | **09 53 07.6** | **-2.9** |
| KFRA | | | | AML | AML | 09 53 11.7 | |
| | comp=N,267nm,0.3s | | | | | | |
| KFRA | | | | AML | AML | 09 53 18.0 | |
| | comp=E,167nm,0.9s | | | | | | |
| **KFRA** | **Kufra** | **1.34** | **174** | *i* P | **Pb** | **09 52 54.2** | **+0.9** |
| KFRA | | | | *e*S | **Sb** | **09 53 07.6** | **-2.9** |
| | comp=E,167nm,0.9s | | | | | | |
| **BIDA** | **Albida** | **1.55** | **189** | *i* P | **Pg** | **09 52 58.4** | **+0.6** |
| BIDA | | | | *e*S | **Sn** | **09 53 12.9** | **-3.1** |
| BIDA | | | | AML | AML | 09 53 15.3 | |
| | comp=N,34nm,0.3s | | | | | | |
| BIDA | | | | AML | AML | 09 53 15.5 | |
| | comp=E,143nm,0.3s | | | | | | |
| **BIDA** | **Albida** | **1.55** | **189** | *i* P | **Pg** | **09 52 58.4** | **+0.6** |
| BIDA | | | | *e*S | **Sn** | **09 53 12.9** | **-3.1** |
| | comp=E,143nm,0.3s | | | | | | |
| **HAWK** | **Haweek** | **2.03** | **185** | *i* P | **Pn** | **09 53 03.9** | **+1.5** |
| HAWK | | | | *e*S | Sn | 09 53 21.3 | -6.6 |
| HAWK | | | | AML | AML | 09 53 25.4 | |
| | comp=E,9.6nm,0.7s | | | | | | |
| HAWK | | | | AML | AML | 09 53 33.3 | |
| | comp=N,12nm,0.5s | | | | | | |
| **HAWK** | **Haweek** | **2.03** | **185** | *i* P | **Pn** | **09 53 03.9** | **+1.5** |
| HAWK | | | | *e*S | Sn | 09 53 21.3 | -6.6 |
| | comp=N,12nm,0.5s | | | | | | |

**IDC 25 09:55:16.7±4.1,5°82S×149°42E,h107km±35km,mb3.4/4, mb1 3.6/5,mb1mx3.3/29,mbtmp3.9/5,MS3.6/1,Ms1 3.6/1, ms1mx2.5/15,Error ellipse: s-maj=66.3km s-min=26.2km az=112.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.21** | **212** | P | Pn | 09 56 20.3 | +1.4 |
| | 10nm,0.3s,baz=0.7,slow=5.6,SNR=27 | | | | | | |
| PMG | | | | S | Sn | 09 57 07.2 | 0.0 |
| | 19nm,0.3s,baz=116,slow=18,SNR=18 | | | | | | |
| **JAY** | **Jayapura** | **9.29** | **290** | LR | LR | 10 01 57.1 | |
| | comp=Z,360nm,18.7s,baz=237,slow=43 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.30** | **225** | P | P | 09 59 44.7 | +0.4 |
| | 1.6nm,0.5s,baz=50,slow=11,SNR=24 | | | | | | |
| **ASAR** | **Alice Springs** | **23.20** | **219** | P | P | 10 00 14.8 | +0.4 |
| | 0.8nm,0.7s,baz=51,slow=9.3,SNR=18 | | | | | | |
| **KSRS** | **Korea Array** | **47.49** | **337** | P | P | 10 03 41.4 | +0.4 |
| | 1.8nm,0.6s,baz=153,slow=8.8,SNR=5.0 | | | | | | |
| **ILAR** | **Eielson Array** | **84.37** | **23** | P | P | 10 07 36.1 | -0.7 |
| | 0.6nm,0.7s,baz=254,slow=5.0,SNR=5.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.37** | **285** | PKPbc | PKPbc | 10 14 47.9 | -1.2 |
| | 0.2nm,0.3s,baz=92,slow=3.0,SNR=5.1 | | | | | | |

*IDC* ***25*** *10:06:12.5±0.5,24˚74N×109˚31W,h0km,mb4.5/14, mb1 4.6/18,mb1mx4.3/44,mbtmp4.5/18,ML3.5/4,MS4.1/16, Ms1 4.1/16,ms1mx4.0/23,Error ellipse: s-maj=12.0km s-min=10.0km az=137.0*
*BJI* ***25*** *10:06:12.1,24˚26N×110˚07W,h4km,mb5.0/1,Ms5.1/2, Ms7 4.7/3*
*ISCJB* ***25*** *10:06:13.0±0.3,24˚64N±0˚03×109˚12W±0˚02,h10km, mb4.8/72,MS4.2/14,Error ellipse: s-maj=4.1km s-min=2.3km az=9.8*
*GCMT* ***25*** *10:06:14.5±0.3,24˚82N×109˚23W,h22km±1km,MW5.1/88, Moment Tensor Solution. s45,c52; s88,c139; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr-1.46±.16; Mθθ-3.47±.12; Mφφ4.93±.14; Mrθ-1.99±.22; Mθφ-2.19±.11; Mφr0.58±.18; Best double couple: Mo5.29100×10^16^ NP1:φs128.00000°,δ64.00000°,λ-14.00000°. Principal axes: T 5.6260, Plg9.0000°, Azm255.0000°; N -0.6700, Plg61.0000°, Azm149.0000°; P -4.9560, Plg28.0000°, Azm349.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*MEX* ***25*** *10:06:14.8±0.8,24˚80N×109˚37W,h10km,MD4.8*
*NEIC* ***25*** *10:06:14.5±0.3,24˚59N×109˚20W,h10km,mb4.8/106, Error ellipse: s-maj=5.2km s-min=4.1km az=212.0*
**ISC 25 10:06:14.0±0.4,24°70N±0°04×109°30W±0°03,h10km, n520,σ1°34/467,mb4.9/71,MS4.1/14,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.09** | **237** | Pg | **Pb** | **10 06 33.2** | **-1.7** |
| | 167nm,0.3s,baz=50,slow=5.5,SNR=356 | | | | | | |
| LPIG | | | | Lg | Lg | 10 06 47.9 | |
| | 1μm,0.3s,baz=168,slow=19,SNR=23 | | | | | | |
| **LPIG** | **La Paz** | **1.09** | **237** | *e*P | **Pb** | **10 06 33.2** | **-1.7** |
| LPIG | | | | *i* S | **Sg** | **10 06 45.4** | **-3.8** |
| **LPIG** | **La Paz** | **1.09** | **237** | *e*P | **Pb** | **10 06 33.2** | **-1.7** |
| LPIG | | | | *i* S | **Sg** | **10 06 45.4** | **-3.8** |
| LPIG | | | | Lg | Lg | 10 06 47.9 | |
| **SLBS** | **Sierra La Lagu** | **1.17** | **210** | *e*Pg | **Pb** | **10 06 34.7** | **-1.6** |
| **MAIG** | **Mazatlaan** | **3.03** | **119** | *e*P | **Pn** | **10 07 01.7** | **-0.3** |
| MAIG | | | | *i* S | **Sn** | **10 07 38.2** | **-0.2** |
| **MAIG** | **Mazatlaan** | **3.03** | **119** | *e*P | **Pn** | **10 07 01.7** | **-0.3** |
| MAIG | | | | *i* S | **Sn** | **10 07 38.2** | **-0.2** |
| **SRIG** | **Santa Rosalia** | **3.72** | **315** | *e*P | Pn | 10 07 07.8 | -3.7 |
| SRIG | | | | *i* S | **Sn** | **10 07 49.9** | **-5.4** |
| **SRIG** | **Santa Rosalia** | **3.72** | **315** | *e*P | Pn | 10 07 07.8 | -3.7 |
| SRIG | | | | *i* S | **Sn** | **10 07 49.9** | **-5.4** |
| **HPIG** | | **3.96** | **55** | *e*P | **Pn** | **10 07 12.3** | **-2.7** |
| HPIG | | | | *e*S | **Sn** | **10 07 58.5** | **-3.2** |
| **HPIG** | | **3.96** | **55** | *e*P | **Pn** | **10 07 12.3** | **-2.7** |
| HPIG | | | | *e*S | **Sn** | **10 07 58.5** | **-3.2** |
| **HSIG** | | **4.55** | **341** | *e*P | **Pn** | **10 07 20.0** | **-2.9** |
| HSIG | | | | *e*S | Sn | 10 08 09.9 | -6.0 |
| **HSIG** | | **4.55** | **341** | *e*P | **Pn** | **10 07 20.0** | **-2.9** |
| HSIG | | | | *e*S | Sn | 10 08 09.9 | -6.0 |
| **TX31** | **Lajitas Ar. Si** | **6.82** | **46** | *e*Pn | **Pn** | **10 07 54.1** | **-0.2** |
| **TXAR** | **Lajitas Array** | **6.82** | **46** | Pn | **Pn** | **10 07 51.5** | **-2.8** |
| | 0.9nm,0.3s,baz=225,slow=14,SNR=47 | | | | | | |
| TXAR | | | | Sn | **Sn** | **10 09 07.0** | **-5.1** |
| | 3.3nm,0.3s,baz=215,slow=17,SNR=5.0 | | | | | | |
| TXAR | | | | Lg | Lg | 10 09 45.0 | |
| | 3.1nm,0.3s,baz=220,slow=29,SNR=6.2 | | | | | | |
| TXAR | | | | LR | LR | 10 10 17.6 | |
| | comp=Z,1μm,20.8s,baz=0.0,slow=36 | | | | | | |
| **TUC** | **Tucson** | **7.70** | **351** | *e*Pn | **Pn** | **10 08 05.8** | **-0.4** |
| **MNTX** | **Cornudas Mount** | **7.78** | **25** | P | **Pn** | **10 08 06.0** | **-1.3** |
| | baz=7.9,SNR=7.1 | | | | | | |
| **MNTX** | **Cornudas Mount** | **7.78** | **25** | *e*Pn | **Pn** | **10 08 06.4** | **-1.0** |
| **214A** | **Organ Pipe Nat** | **7.87** | **338** | P | **Pn** | **10 08 08.3** | **-0.2** |
| | baz=8.0,SNR=5.6 | | | | | | |
| **214A** | **Organ Pipe Nat** | **7.87** | **338** | *e*Pn | **Pn** | **10 08 08.9** | **+0.4** |
| | 36nm,0.8s | | | | | | |
| **121A** | **Cookes Peak, D** | **7.92** | **9** | P | **Pn** | **10 08 08.3** | **-1.1** |
| | baz=8.0,SNR=31 | | | | | | |
| **121A** | **Cookes Peak, D** | **7.92** | **9** | *e*Pn | **Pn** | **10 08 08.3** | **-1.1** |
| | 73nm,1.0s | | | | | | |
| **529A** | **Stev Forest Ra** | **8.29** | **48** | P | **Pn** | **10 08 12.3** | **-2.1** |
| | baz=8.3 | | | | | | |
| **GDL2** | **Guadalupe Moun** | **8.64** | **29** | *e*Pn | **Pn** | **10 08 18.7** | **-0.6** |
| **429A** | **Davenport Ranc** | **8.83** | **46** | P | **Pn** | **10 08 22.3** | **+0.6** |
| | baz=8.8,SNR=10 | | | | | | |
| **530A** | **J-C Ranch, Com** | **8.92** | **51** | P | **Pn** | **10 08 22.9** | **-0.1** |
| | baz=8.9 | | | | | | |
| **631A** | **Perdido Creek** | **9.08** | **57** | P | **Pn** | **10 08 24.7** | **-0.5** |
| | baz=9.1,SNR=52 | | | | | | |
| **832A** | **Faith Ranch, C** | **9.09** | **65** | P | **Pn** | **10 08 25.4** | **+0.2** |
| | baz=9.0,SNR=6.1 | | | | | | |
| **732A** | **Laxson Ranch,** | **9.26** | **62** | P | **Pn** | **10 08 26.8** | **-0.7** |
| | baz=9.2,SNR=9.6 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **9.35** | **42** | P | **Pn** | **10 08 29.9** | **+1.0** |
| | baz=9.4 | | | | | | |
| **430A** | **Baggett Ranch,** | **9.37** | **48** | P | **Pn** | **10 08 29.0** | **-0.1** |
| | baz=9.4 | | | | | | |
| **933A** | **Laredo** | **9.46** | **70** | P | **Pn** | **10 08 27.9** | **-2.5** |
| | baz=9.4,SNR=22 | | | | | | |
| **531A** | **Rocksprings** | **9.49** | **53** | P | **Pn** | **10 08 31.0** | **+0.2** |
| | baz=9.5,SNR=15 | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **9.57** | **12** | P | **Pn** | **10 08 33.5** | **+1.5** |
| | baz=9.7,SNR=7.0 | | | | | | |
| **833A** | **Chaparral WMA,** | **9.58** | **66** | P | **Pn** | **10 08 30.6** | **-1.3** |
| | baz=9.5,SNR=5.9 | | | | | | |
| **GLA** | **Glamis** | **9.63** | **331** | P | **Pn** | **10 08 34.5** | **+1.8** |
| | baz=9.8,SNR=6.1 | | | | | | |
| **GLA** | **Glamis** | **9.63** | **331** | *e*Pn | Pn | 10 08 35.6 | +2.9 |
| **BNM** | **Barren Site** | **9.70** | **13** | *e*Pn | **Pn** | **10 08 34.6** | **+0.7** |
| **632A** | **Uvalde** | **9.74** | **58** | P | **Pn** | **10 08 34.2** | **0.0** |
| | baz=9.7,SNR=15 | | | | | | |
| **431A** | **Sonora** | **9.74** | **50** | P | **Pn** | **10 08 35.9** | **+1.7** |
| | baz=9.7,SNR=14 | | | | | | |
| **733A** | **Divot King Ran** | **9.80** | **64** | P | **Pn** | **10 08 34.9** | **-0.2** |
| | baz=9.8 | | | | | | |
| **330A** | **Mertzon** | **9.80** | **45** | P | **Pn** | **10 08 35.4** | **+0.2** |
| | baz=9.8 | | | | | | |
| **034A** | **Hebbronville** | **9.85** | **74** | P | **Pn** | **10 08 34.9** | **-0.7** |
| | baz=9.8,SNR=13 | | | | | | |
| **LAZ** | **Ladron** | **9.85** | **11** | *e*Pn | **Pn** | **10 08 36.0** | **+0.1** |
| **LPM** | **Los Pinos Moun** | **9.86** | **13** | *e*Pn | **Pn** | **10 08 38.9** | **+3.0** |
| **532A** | **Rocksprings** | **9.95** | **55** | P | **Pn** | **10 08 38.0** | **+1.0** |
| | baz=9.9,SNR=13 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **9.99** | **327** | P | Pn | 10 08 41.1 | +3.5 |
| | baz=10 | | | | | | |
| **Y12C** | **Blythe** | **10.11** | **334** | P | Pn | 10 08 42.9 | +3.8 |
| | baz=10,SNR=12 | | | | | | |
| **934A** | **Benavides** | **10.11** | **71** | P | **Pn** | **10 08 38.3** | **-0.9** |
| | baz=10.0 | | | | | | |
| **230A** | **Sterling City** | **10.16** | **43** | P | **Pn** | **10 08 41.5** | **+1.4** |
| | baz=10 | | | | | | |
| **633A** | **Saathoff Ranch** | **10.19** | **60** | P | **Pn** | **10 08 41.0** | **+0.6** |
| | baz=10 | | | | | | |
| **JCT** | **Junction City** | **10.20** | **54** | P | **Pn** | **10 08 41.5** | **+0.9** |
| | baz=10,SNR=13 | | | | | | |
| **JCT** | **Junction City** | **10.20** | **54** | *e*Pn | **Pn** | **10 08 42.2** | **+1.6** |
| **834A** | **Tilden** | **10.22** | **68** | P | **Pn** | **10 08 41.6** | **+0.8** |
| | baz=10,SNR=10 | | | | | | |
| **331A** | **San Angelo** | **10.24** | **48** | P | **Pn** | **10 08 42.2** | **+1.1** |
| | baz=10,SNR=15 | | | | | | |
| **129A** | **Stewart Farms,** | **10.25** | **38** | P | **Pn** | **10 08 43.0** | **+1.8** |
| | baz=10 | | | | | | |
| **BAR** | **Barrett** | **10.25** | **323** | *e*Pn | Pn | 10 08 44.9 | +3.7 |
| **MONP** | **Monument Peak** | **10.27** | **324** | P | Pn | 10 08 45.2 | +3.5 |
| | baz=10,SNR=9.3 | | | | | | |
| **035Z** | **Hargill** | **10.29** | **78** | P | **Pn** | **10 08 41.8** | **0.0** |
| | baz=10 | | | | | | |
| **W18A** | **Petrified Fore** | **10.39** | **358** | P | **Pn** | **10 08 46.1** | **+2.8** |
| | baz=10,SNR=13 | | | | | | |
| **W18A** | **Petrified Fore** | **10.39** | **358** | *e*Pn | Pn | 10 08 46.5 | +3.2 |
| **BC3** | **Big Chuckawall** | **10.42** | **330** | P | Pn | 10 08 46.5 | +2.9 |
| | baz=11 | | | | | | |
| **432A** | **Menard** | **10.43** | **52** | P | **Pn** | **10 08 44.3** | **+0.7** |
| | baz=10,SNR=26 | | | | | | |
| **734A** | **La Parita Cree** | **10.45** | **64** | P | **Pn** | **10 08 44.7** | **+0.8** |
| | baz=10 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **10.45** | **337** | P | Pn | 10 08 47.1 | +3.2 |
| | baz=11 | | | | | | |
| **Z28A** | **Tucker Farm, M** | **10.48** | **34** | P | **Pn** | **10 08 46.3** | **+1.9** |
| | baz=10 | | | | | | |
| **ANMO** | **Albuquerque** | **10.51** | **13** | Pn | **Pn** | **10 08 45.5** | **+0.6** |
| | 0.1nm,0.3s,baz=194,slow=13,SNR=31 | | | | | | |
| ANMO | | | | Lg | Lg | 10 11 42.0 | |
| | 0.1nm,0.3s,baz=9.5,slow=18,SNR=2.5 | | | | | | |
| ANMO | | | | LR | LR | 10 12 56.6 | |
| | comp=Z,1μm,21.2s,baz=196,slow=39 | | | | | | |
| **ANMO** | **Albuquerque** | **10.51** | **13** | *e*Pn | **Pn** | **10 08 47.5** | **+2.6** |
| ANMO | | | | Lg | Lg | 10 11 42.0 | |
| **533A** | **Kerrville** | **10.57** | **57** | P | **Pn** | **10 08 47.2** | **+1.5** |
| | baz=11 | | | | | | |
| **109C** | **Camp Elliot, M** | **10.65** | **322** | P | Pn | 10 08 49.8 | +3.2 |
| | baz=11 | | | | | | |
| **231A** | **Bronte** | **10.70** | **46** | P | **Pn** | **10 08 47.8** | **+0.4** |
| | baz=11 | | | | | | |
| **IRM** | **Iron Mountain** | **10.72** | **333** | P | Pn | 10 08 50.5 | +2.9 |
| | baz=11,SNR=14 | | | | | | |
| **130A** | **Snyder** | **10.74** | **41** | P | **Pn** | **10 08 48.8** | **+0.8** |
| | baz=11 | | | | | | |
| **332A** | **Millersview** | **10.75** | **50** | P | **Pn** | **10 08 49.1** | **+1.1** |
| | baz=11,SNR=10 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **10.81** | **36** | P | **Pn** | **10 08 50.7** | **+1.7** |
| | baz=11 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.86** | **327** | Pn | **Pn** | **10 08 48.5** | **-1.1** |
| | 0.1nm,0.3s,baz=299,slow=10,SNR=2.9 | | | | | | |
| PFO | | | | LR | LR | 10 12 32.4 | |
| | comp=Z,1μm,20.2s,baz=145,slow=35 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.86** | **327** | Pn | **Pn** | **10 08 48.5** | **-1.1** |
| PFO | | | | *e*Pn | Pn | 10 08 53.5 | +3.9 |
| **433A** | **Art** | **10.87** | **54** | P | **Pn** | **10 08 50.1** | **+0.4** |
| | baz=11,SNR=14 | | | | | | |
| **835A** | **Beeville** | **10.88** | **68** | P | **Pn** | **10 08 50.4** | **+0.7** |
| | baz=11 | | | | | | |
| **WUAZ** | **Wupatki** | **10.93** | **351** | P | **Pn** | **10 08 52.2** | **+1.6** |
| | baz=11 | | | | | | |
| **WUAZ** | **Wupatki** | **10.93** | **351** | *e*Pn | **Pn** | **10 08 52.6** | **+1.9** |
| | 15nm,1.0s | | | | | | |
| **534A** | **Blanco** | **10.99** | **59** | P | **Pn** | **10 08 52.4** | **+1.1** |
| | baz=11 | | | | | | |
| **735A** | **Kenedy** | **11.07** | **66** | P | **Pn** | **10 08 53.2** | **+0.8** |
| | baz=11 | | | | | | |
| **232A** | **Coleman** | **11.12** | **48** | P | **Pn** | **10 08 53.2** | **+0.1** |
| | baz=11 | | | | | | |
| **131A** | **Roby** | **11.15** | **43** | P | **Pn** | **10 08 53.9** | **+0.4** |
| | baz=11 | | | | | | |
| **Z30A** | **Sanderson Ranc** | **11.15** | **38** | P | **Pn** | **10 08 54.5** | **+0.9** |
| | baz=11 | | | | | | |
| **MURC** | **Murrieta** | **11.24** | **324** | P | **Pn** | **10 08 56.8** | **+2.1** |
| | baz=11 | | | | | | |
| **333A** | **Richland Sprin** | **11.25** | **52** | P | **Pn** | **10 08 54.9** | **0.0** |
| | baz=11,SNR=13 | | | | | | |
| **635A** | **Leesville** | **11.29** | **63** | P | **Pn** | **10 08 55.4** | **+0.1** |
| | baz=11 | | | | | | |
| **GMRC** | **Granite Mounta** | **11.46** | **333** | P | **Pn** | **10 09 00.2** | **+2.3** |
| | baz=12 | | | | | | |
| **434A** | **Burnet** | **11.51** | **56** | P | **Pn** | **10 08 57.9** | **-0.5** |
| | baz=12 | | | | | | |
| **X28A** | **Dimmitt** | **11.57** | **31** | P | **Pn** | **10 09 00.4** | **+1.1** |
| | baz=12 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **11.58** | **45** | P | **Pn** | **10 08 59.1** | **-0.3** |
| | baz=12 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **11.58** | **45** | *e*Pn | **Pn** | **10 09 00.2** | **+0.7** |
| **535A** | **Dale** | **11.70** | **60** | P | **Pn** | **10 09 01.5** | **+0.6** |
| | baz=12 | | | | | | |
| **233A** | **Rising Star** | **11.70** | **49** | P | **Pn** | **10 09 00.6** | **-0.5** |
| | baz=12 | | | | | | |
| **736A** | **Circle Diamond** | **11.72** | **66** | P | **Pn** | **10 09 01.2** | **0.0** |
| | baz=12,SNR=9.2 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **11.74** | **41** | P | **Pn** | **10 09 01.8** | **+0.2** |
| | baz=12 | | | | | | |
| **X29A** | **Tulia** | **11.75** | **32** | P | **Pn** | **10 09 02.5** | **+0.7** |
| | baz=12 | | | | | | |
| **334A** | **Lometa** | **11.79** | **53** | P | **Pn** | **10 09 02.0** | **-0.3** |
| | baz=12,SNR=9.5 | | | | | | |
| **636A** | **Smothers Creek** | **11.90** | **64** | P | **Pn** | **10 09 04.3** | **+0.6** |
| | baz=12,SNR=7.2 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **11.97** | **325** | P | **Pn** | **10 09 05.2** | **+0.4** |
| | baz=12 | | | | | | |
| **435B** | **Jarrell** | **12.01** | **57** | P | **Pn** | **10 09 05.1** | **-0.2** |
| | baz=12 | | | | | | |
| **133A** | **Hamilton Ranch** | **12.05** | **47** | P | **Pn** | **10 09 05.5** | **-0.3** |
| | baz=12,SNR=6.8 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **12.13** | **38** | P | **Pn** | **10 09 07.7** | **+0.7** |
| | baz=12 | | | | | | |
| **Z32A** | **Haskell** | **12.14** | **43** | P | **Pn** | **10 09 06.4** | **-0.6** |
| | baz=12,SNR=12 | | | | | | |
| **MWC** | **Mount Wilson** | **12.17** | **323** | *e*Pn | Pn | 10 09 11.9 | +4.3 |
| **234A** | **Clairette** | **12.23** | **51** | P | **Pn** | **10 09 07.0** | **-1.2** |
| | baz=12,SNR=19 | | | | | | |
| **335A** | **Moody** | **12.37** | **55** | P | **Pn** | **10 09 08.8** | **-1.4** |
| | baz=12 | | | | | | |
| **GSC** | **Goldstone** | **12.40** | **330** | P | Pn | 10 09 13.9 | +3.2 |
| | baz=13,SNR=5.7 | | | | | | |
| **GSC** | **Goldstone** | **12.40** | **330** | *e*Pn | Pn | 10 09 15.6 | +4.9 |
| **637A** | **Eagle Lake** | **12.48** | **65** | P | **Pn** | **10 09 10.1** | **-1.6** |
| | baz=12 | | | | | | |
| **MVCO** | **Mesa Verde** | **12.49** | **3** | P | **Pn** | **10 09 14.1** | **+2.0** |
| | baz=13,SNR=8.0 | | | | | | |
| **MVCO** | **Mesa Verde** | **12.49** | **3** | *e*Pn | **Pn** | **10 09 14.4** | **+2.4** |
| **Z33A** | **Whitaker Ranch** | **12.57** | **45** | P | **Pn** | **10 09 12.7** | **-0.3** |
| | baz=13,SNR=12 | | | | | | |
| **134A** | **White-Moore Ra** | **12.59** | **49** | P | **Pn** | **10 09 12.3** | **-0.9** |
| | baz=13 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **12.64** | **325** | P | **Pn** | **10 09 15.2** | **+1.3** |
| | baz=13 | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **12.64** | **41** | P | **Pn** | **10 09 13.2** | **-0.6** |
| | baz=13 | | | | | | |
| **WHTX** | **Lake Whitney** | **12.71** | **52** | P | **Pn** | **10 09 14.0** | **-0.7** |
| | baz=13 | | | | | | |
| **WHTX** | **Lake Whitney** | **12.71** | **52** | *e*Pn | **Pn** | **10 09 14.1** | **-0.7** |
| | 43nm,1.3s | | | | | | |
| **X31A** | **McDonald Ranch** | **12.79** | **37** | P | **Pn** | **10 09 16.7** | **+0.9** |
| | baz=13 | | | | | | |
| **SHPR** | **Sheep Range** | **12.80** | **338** | *e*Pn | Pn | 10 09 20.2 | +4.0 |
| **336A** | **Riesel** | **12.86** | **56** | P | **Pn** | **10 09 16.7** | **-0.1** |
| | baz=13,SNR=8.7 | | | | | | |
| **U27A** | **Thompson Grove** | **12.94** | **24** | P | **Pn** | **10 09 18.3** | **+0.2** |
| | baz=13 | | | | | | |
| **LRMC** | **Laurel Mountai** | **12.96** | **328** | P | Pn | 10 09 21.8 | +3.4 |
| | baz=13,SNR=13 | | | | | | |
| **X32A** | **Elmer** | **13.03** | **40** | P | **Pn** | **10 09 19.3** | **+0.2** |
| | baz=13 | | | | | | |
| **135A** | **Vickery Place,** | **13.05** | **50** | P | **Pn** | **10 09 18.7** | **-0.7** |
| | baz=13 | | | | | | |
| **HKT** | **Hockley** | **13.06** | **63** | *e*Pn | **Pn** | **10 09 18.1** | **-1.4** |
| **T25A** | **Trinidad** | **13.09** | **18** | P | **Pn** | **10 09 22.4** | **+2.2** |
| | baz=13 | | | | | | |
| **T25A** | **Trinidad** | **13.09** | **18** | *e*Pn | **Pn** | **10 09 23.0** | **+2.8** |
| **Y33A** | **Hilltop Ranch,** | **13.13** | **43** | P | **Pn** | **10 09 20.9** | **+0.3** |
| | baz=13 | | | | | | |
| **U28A** | **Mallet** | **13.14** | **26** | P | **Pn** | **10 09 22.8** | **+2.0** |
| | baz=13 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **13.18** | **9** | P | **Pn** | **10 09 24.1** | **+2.6** |
| | baz=13 | | | | | | |
| **S22A** | **4UR Ranch, Cre** | **13.18** | **9** | *e*Pn | Pn | 10 09 24.9 | +3.4 |
| **W31A** | **Holland Ranch,** | **13.22** | **36** | P | **Pn** | **10 09 23.7** | **+1.8** |
| | baz=13 | | | | | | |
| **ARVC** | **Arvin** | **13.27** | **324** | P | Pn | 10 09 26.2 | +3.8 |
| | baz=13 | | | | | | |
| **CCUT** | **Cedar City** | **13.27** | **346** | *e*Pn | Pn | 10 09 27.8 | +5.1 |
| **MPMC** | **Manual Prospec** | **13.34** | **330** | P | Pn | 10 09 27.7 | +4.1 |
| | baz=14,SNR=23 | | | | | | |
| **PV05** | **Paradox

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 340A | Bronson baz=15 | 15.16 | 60 | P | Pn | 10 09 48.5 | +0.3 |
| 139A | Bunkhouse Ranc baz=15 | 15.30 | 55 | P | Pn | 10 09 50.3 | +0.3 |
| R29A | Marienthal baz=15 | 15.34 | 25 | P | Pn | 10 09 51.5 | +0.8 |
| KSCO | Kaye Shedlock' baz=16 | 15.35 | 20 | P | Pn | 10 09 52.3 | +1.5 |
| KSCO | Kaye Shedlock' 42nm,1.4s | 15.35 | 20 | ePn | Pn | 10 09 52.7 | +1.9 |
| W36A | Wetumka baz=15,SNR=8.9 | 15.37 | 44 | P | Pn | 10 09 50.8 | -0.2 |
| ISCO | Idaho Springs baz=16,SNR=12 | 15.38 | 11 | P | P | 10 09 54.1 | -2.0 |
| ISCO | Idaho Springs 51nm,1.4s | 15.38 | 11 | ePn | P | 10 09 54.2 | -1.8 |
| NLU | North Lily Min 71nm,2.0s | 15.39 | 352 | ePn | P | 10 09 54.5 | -1.6 |
| V35A | Meyer Ranch, C baz=15 | 15.40 | 41 | P | Pn | 10 09 52.4 | +1.1 |
| O20A | White River Ci baz=16,SNR=14 | 15.42 | 3 | P | Pn | 10 09 53.6 | +1.8 |
| O20A | White River Ci 89nm,1.1s | 15.42 | 3 | ePn | P | 10 09 54.8 | -1.7 |
| CMIG | Matias Romero 0.2nm,0.3s,baz=306,slow=9.6,SNR=17 | 15.44 | 117 | Pn | Pn | 10 09 52.2 | +0.2 |
| CMIG | comp=Z,1µm,18.2s,baz=270,slow=35 | | | LR | LR | 10 15 18.0 | |
| U34A | Anderson Ranch baz=16 | 15.46 | 38 | P | Pn | 10 09 52.9 | +0.7 |
| U34A | Anderson Ranch 219nm,2.3s | 15.46 | 38 | ePn | Pn | 10 09 54.4 | +2.2 |
| R30A | Dighton baz=16,SNR=12 | 15.57 | 27 | P | P | 10 09 55.8 | -2.1 |
| X37A | Clayton baz=16,SNR=11 | 15.60 | 48 | P | Pn | 10 09 54.8 | +0.8 |
| Q28A | Sharon Springs baz=16,SNR=6.5 | 15.65 | 22 | P | Pn | 10 09 56.4 | +1.7 |
| Y38A | Idabel baz=16,SNR=8.6 | 15.67 | 51 | P | Pn | 10 09 54.0 | -0.9 |
| NV01 | Mina Array Sit | 15.68 | 333 | ePn | P | 10 09 57.9 | -1.4 |
| NVAR | Mina Array Bea 0.7nm,0.3s,baz=151,slow=13,SNR=23 | 15.68 | 333 | Pn | P | 10 09 58.4 | -0.9 |
| NVAR | comp=Z,1µm,21.6s,baz=176,slow=37 | | | LR | LR | 10 15 42.9 | |
| DUG | Dugway baz=16,SNR=12 | 15.73 | 350 | P | Pn | 10 09 57.7 | +1.9 |
| DUG | Dugway 132nm,2.0s | 15.73 | 350 | ePn | P | 10 09 59.7 | -0.2 |
| Q29A | Oakley baz=16 | 15.81 | 24 | P | P | 10 09 58.7 | -1.9 |
| U35A | Pawnee baz=16 | 15.88 | 40 | P | Pn | 10 09 58.1 | +0.5 |
| W37A | Quinton baz=16,SNR=17 | 15.89 | 46 | P | Pn | 10 09 57.3 | -0.4 |
| R31A | Burdett baz=16 | 15.89 | 29 | P | Pn | 10 09 57.9 | +0.1 |
| V36A | Jenks baz=16,SNR=8.5 | 15.96 | 43 | P | Pn | 10 09 57.4 | -1.2 |
| X38A | Whitesboro baz=16 | 16.01 | 48 | P | Pn | 10 09 57.9 | -1.5 |
| S33A | Kaszmaul Farm, baz=16 | 16.07 | 34 | P | Pn | 10 10 01.2 | +1.1 |
| T34A | McClaskey Farm baz=16 | 16.08 | 37 | P | Pn | 10 10 00.2 | 0.0 |
| CTU | Camp Tracy 24nm,1.1s | 16.08 | 353 | ePn | P | 10 10 03.3 | -0.5 |
| Y39A | Lockesburg baz=16,SNR=9.1 | 16.13 | 52 | P | Pn | 10 10 00.9 | 0.0 |
| TUL1 | Tulsa baz=16 | 16.14 | 43 | P | Pn | 10 10 00.2 | -0.7 |
| TUL1 | Tulsa 45nm,1.2s | 16.14 | 43 | ePn | Pn | 10 10 01.3 | +0.4 |
| P28A | Saint Francis baz=16 | 16.14 | 21 | P | Pn | 10 10 02.6 | +1.6 |
| Q30A | Quinter baz=16 | 16.18 | 26 | P | Pn | 10 10 02.7 | +1.2 |
| CBKS | Cedar Bluff baz=16 | 16.24 | 28 | P | Pn | 10 10 03.8 | +1.5 |
| CBKS | Cedar Bluff 47nm,0.9s | 16.24 | 28 | ePn | P | 10 10 05.4 | +0.1 |
| CMB | Columbia Colle 18nm,1.2s | 16.30 | 327 | ePn | P | 10 10 05.7 | -0.4 |
| T35A | Sooner Cattle baz=16 | 16.38 | 39 | P | Pn | 10 10 04.1 | +0.1 |
| N23A | Red Feather La baz=16 | 16.39 | 9 | P | Pn | 10 10 05.9 | +1.4 |
| N23A | Red Feather La 57nm,1.5s | 16.39 | 9 | ePn | P | 10 10 07.7 | +0.4 |
| W38A | Poteau baz=16,SNR=21 | 16.45 | 48 | P | Pn | 10 10 05.6 | +0.7 |
| P29A | Atwood baz=16 | 16.45 | 23 | P | Pn | 10 10 06.3 | +1.3 |
| TCUT | Toone Canyon 27nm,1.1s | 16.47 | 354 | ePn | P | 10 10 07.7 | -0.5 |
| U36A | Oologah baz=16 | 16.49 | 42 | P | Pn | 10 10 05.6 | +0.2 |
| V37A | Hulbert baz=17,SNR=13 | 16.53 | 44 | P | Pn | 10 10 04.4 | -1.5 |
| O28A | Krutsinger Ran baz=17 | 16.63 | 21 | P | Pn | 10 10 08.3 | +1.0 |
| ELK | Elko 47nm,1.4s | 16.76 | 344 | ePn | P | 10 10 11.9 | +0.6 |
| MIAR | Mount Ida baz=17,SNR=26 | 16.81 | 51 | P | Pn | 10 10 10.4 | +0.9 |
| MIAR | Mount Ida | 16.81 | 51 | ePn | P | 10 10 11.5 | -0.2 |
| T36A | Boggs Farm, Ca baz=17,SNR=6.9 | 16.85 | 40 | P | Pn | 10 10 10.1 | +0.2 |
| PHWY | Pilot Hill 36nm,1.3s | 16.87 | 10 | ePn | Pn | 10 10 09.4 | -1.1 |
| U37A | Salina baz=17 | 16.87 | 43 | P | Pn | 10 10 09.4 | -0.9 |
| O29A | 4D Ranch, Culb baz=17 | 16.96 | 23 | P | P | 10 10 12.7 | -0.6 |
| HWUT | Hardware Ranch 50nm,1.3s | 16.97 | 354 | ePn | P | 10 10 13.6 | 0.0 |
| P31A | Stockton baz=17 | 16.98 | 27 | P | Pn | 10 10 12.1 | +0.4 |
| V38A | Canehill baz=17,SNR=9.7 | 16.99 | 46 | P | Pn | 10 10 09.9 | -1.9 |
| R34A | Isabella, Hill baz=17 | 16.99 | 34 | P | P | 10 10 12.8 | -0.9 |
| S35A | Otter Creek Ra baz=17 | 17.03 | 37 | P | Pn | 10 10 12.9 | +0.6 |
| N28A | Pribbeno Ranch baz=17 | 17.22 | 20 | P | P | 10 10 15.9 | -0.3 |
| Q33A | Connelly Farm, baz=17 | 17.25 | 32 | P | P | 10 10 15.8 | -0.7 |
| O30A | MW Ranch, Wils baz=17 | 17.28 | 24 | P | P | 10 10 16.9 | 0.0 |
| OGNE | Ogallala baz=17 | 17.30 | 19 | P | P | 10 10 17.2 | 0.0 |
| OGNE | Ogallala 20nm,0.8s | 17.30 | 19 | ePn | P | 10 10 19.6 | +2.4 |
| U38A | Gravette baz=17 | 17.35 | 44 | P | Pn | 10 10 16.0 | -0.3 |
| P32A | Huiting Farm, baz=18,SNR=7.4 | 17.40 | 29 | P | P | 10 10 17.6 | -0.6 |
| T37A | Cheneyville 18 baz=18 | 17.46 | 41 | P | Pn | 10 10 17.1 | -0.5 |
| S36A | Lake Cedric, C baz=18 | 17.47 | 39 | P | Pn | 10 10 18.2 | +0.4 |
| O31A | Woolen Ranch, baz=18 | 17.54 | 26 | P | P | 10 10 20.1 | +0.3 |
| R35A | Emporia Munici baz=18 | 17.56 | 36 | P | P | 10 10 19.8 | -0.2 |
| Q34A | Chapman baz=18 | 17.62 | 33 | P | P | 10 10 20.7 | 0.0 |
| N29A | Votaw Ranch, W baz=18 | 17.64 | 22 | P | P | 10 10 20.8 | 0.0 |
| UALR | University of 160nm,1.8s | 17.80 | 52 | ePn | P | 10 10 22.5 | -0.1 |
| KSU1 | Kansas State U 30nm,1.1s | 17.93 | 34 | ePn | Pn | 10 10 20.3 | -3.1 |
| S37A | Fort Scott baz=18 | 17.93 | 40 | P | Pn | 10 10 23.8 | +0.3 |
| R36A | Gordon, Harris baz=18 | 17.94 | 38 | P | Pn | 10 10 23.8 | +0.2 |
| BW06 | Boulder Array 136nm,2.1s | 18.02 | 359 | ePn | P | 10 10 26.0 | +0.7 |
| Q35A | Mercer Eighty, baz=18,SNR=7.8 | 18.04 | 35 | P | Pn | 10 10 25.0 | +0.2 |
| K22A | Casper baz=18,SNR=14 | 18.05 | 7 | P | P | 10 10 26.6 | +1.0 |
| K22A | Casper 67nm,1.4s | 18.05 | 7 | ePn | P | 10 10 26.6 | +1.0 |
| O32A | Brockman Farm, baz=18 | 18.07 | 28 | P | P | 10 10 26.1 | +0.6 |
| AHID | Auburn Hatcher 87nm,1.8s | 18.08 | 356 | ePn | P | 10 10 27.2 | +1.3 |
| VBMS | Vicksburg baz=18 | 18.12 | 61 | P | Pn | 10 10 25.6 | -0.2 |
| P34A | Walnut Farm, R baz=18,SNR=6.8 | 18.16 | 32 | P | P | 10 10 27.6 | +1.0 |
| M29A | Burnside Ranch baz=18 | 18.18 | 21 | P | P | 10 10 27.9 | +1.1 |
| O33A | Hebron baz=18,SNR=7.4 | 18.22 | 30 | P | P | 10 10 27.6 | +0.3 |
| R37A | Teagarden Farm baz=18 | 18.31 | 39 | P | P | 10 10 28.3 | +0.1 |
| Q36A | Arnold C. Orve baz=18 | 18.42 | 36 | P | Pn | 10 10 30.1 | +0.6 |
| P35A | Duane Minner, baz=19 | 18.55 | 34 | P | Pn | 10 10 31.4 | +0.4 |
| REDW | Red Top Meadow 23nm,1.2s | 18.66 | 356 | eP | Pn | 10 10 34.3 | +1.7 |
| M31A | Lambtecht Ranc baz=19 | 18.70 | 25 | P | Pn | 10 10 32.9 | 0.0 |
| O34A | Beatrice baz=19 | 18.72 | 31 | P | Pn | 10 10 33.4 | +0.3 |
| SNOW | Snow King Moun 49nm,1.6s | 18.76 | 357 | eP | Pn | 10 10 35.1 | +1.4 |
| O03D | Paynes Creek baz=19 | 18.76 | 329 | P | Pn | 10 10 35.3 | +1.7 |
| TPAW | Teton Pass 38nm,1.4s | 18.80 | 356 | eP | Pn | 10 10 36.2 | +2.0 |
| L29A | Maesberg Ranch baz=19 | 18.80 | 21 | P | Pn | 10 10 34.9 | +0.8 |
| LOHW | Long Hollow 229nm,2.8s | 18.90 | 357 | eP | Pn | 10 10 36.0 | +0.5 |
| FXWY | Fox Creek 164nm,2.4s | 18.95 | 356 | eP | Pn | 10 10 37.4 | +1.3 |
| L30A | Spencer Herefo baz=19 | 18.95 | 22 | P | Pn | 10 10 36.7 | +0.7 |
| P36A | Good Intent, A baz=19 | 19.04 | 35 | P | Pn | 10 10 37.0 | +0.1 |
| MOOW | Moose Ponds 55nm,1.6s | 19.04 | 357 | eP | Pn | 10 10 39.0 | +1.9 |
| BGNE | Belgrade baz=19 | 19.08 | 26 | P | Pn | 10 10 38.0 | +0.6 |
| BGNE | Belgrade 90nm,1.0s | 19.08 | 26 | eP | Pn | 10 10 38.7 | +1.3 |
| K28A | Ten Mile Ranch baz=19 | 19.13 | 18 | P | Pn | 10 10 38.5 | +0.4 |
| IMW | Indian Meadow 20nm,0.9s | 19.20 | 356 | eP | Pn | 10 10 40.4 | +1.2 |
| J26A | Sides Ranch, S baz=19,SNR=8.6 | 19.26 | 14 | P | Pn | 10 10 39.9 | +0.2 |
| HLID | Hailey baz=19,SNR=18 | 19.28 | 349 | P | Pn | 10 10 41.1 | +1.1 |
| HLID | Hailey 29nm,1.3s | 19.28 | 349 | eP | Pn | 10 10 41.2 | +1.1 |
| WVOR | Wild Horse Val 66nm,1.4s | 19.30 | 339 | eP | Pn | 10 10 41.5 | +1.2 |
| FLWY | Flagg Ranch 26nm,1.0s | 19.37 | 357 | eP | Pn | 10 10 41.2 | +0.1 |
| HBAR | Harrisburg | 19.39 | 52 | eP | Pn | 10 10 40.6 | -0.5 |
| MFID | Camas Ranch 42nm,1.4s | 19.43 | 346 | eP | Pn | 10 10 43.1 | +1.4 |
| MOD | Modoc 49nm,1.3s | 19.44 | 335 | eP | Pn | 10 10 43.3 | +1.4 |
| J27A | Elkhorn Farm, baz=20,SNR=6.5 | 19.46 | 16 | P | Pn | 10 10 42.9 | +0.8 |
| L31A | Butterfield Fa baz=20 | 19.47 | 24 | P | Pn | 10 10 42.5 | +0.4 |
| K29A | Lazy Trails An baz=20 | 19.48 | 20 | P | Pn | 10 10 43.0 | +0.7 |
| O36A | Bolckow baz=20 | 19.54 | 35 | P | Pn | 10 10 43.0 | +0.1 |
| K30A | Basset baz=20 | 19.63 | 22 | P | Pn | 10 10 44.5 | +0.4 |
| L32A | Elgin baz=20 | 19.64 | 26 | P | Pn | 10 10 44.3 | +0.1 |
| H17A | Grant Village baz=20 | 19.68 | 357 | P | Pn | 10 10 45.6 | +0.8 |
| H17A | Grant Village 91nm,2.0s | 19.68 | 357 | eP | Pn | 10 10 46.7 | +1.9 |
| YFT | Old Faithful 36nm,1.3s | 19.75 | 357 | eP | Pn | 10 10 49.1 | +3.5 |
| N35A | Tabor baz=20 | 19.75 | 32 | P | Pn | 10 10 45.4 | -0.1 |
| I25A | Rochford baz=20,SNR=6.3 | 19.81 | 12 | P | Pn | 10 10 46.3 | 0.0 |
| J28A | Allard Ranch, baz=20,SNR=6.1 | 19.82 | 18 | P | Pn | 10 10 47.0 | +0.7 |
| M34A | Aspy Farms, Fr baz=20 | 19.82 | 29 | P | Pn | 10 10 46.0 | -0.3 |
| OXF | Oxford 40nm,1.3s | 19.84 | 56 | eP | P | 10 10 45.3 | +0.3 |
| LKWY | Lake 35nm,1.0s | 19.84 | 358 | eP | Pn | 10 10 50.5 | +3.7 |
| RSSD | Black Hills 16nm,1.1s | 19.85 | 11 | eP | Pn | 10 10 47.5 | +0.6 |
| M04C | Macdoel baz=20,SNR=7.0 | 19.97 | 332 | P | Pn | 10 10 48.1 | -0.1 |
| I26A | New Underwood baz=20,SNR=6.9 | 19.99 | 14 | P | Pn | 10 10 48.6 | +0.1 |
| YNR | Norris Junctio 20nm,1.1s | 20.00 | 357 | eP | Pn | 10 10 51.6 | +2.9 |
| J29A | Okreek baz=20,SNR=7.5 | 20.07 | 19 | P | Pn | 10 10 48.9 | -0.3 |
| J08A | Circle Bar Ran 63nm,1.3s | 20.08 | 340 | eP | Pn | 10 10 50.3 | +0.7 |
| PBMO | Poplar Bluff 75nm,1.6s | 20.16 | 49 | eP | Pn | 10 10 50.2 | -0.1 |
| QLMT | Earthquake Lak | 20.16 | 356 | eP | Pn | 10 10 52.1 | +1.5 |
| M35A | Neola baz=20 | 20.20 | 31 | P | P | 10 10 49.7 | +0.8 |
| K32A | Verdigre baz=20 | 20.21 | 25 | P | Pn | 10 10 50.2 | -0.8 |
| I27A | Quinn baz=20,SNR=11 | 20.21 | 15 | P | Pn | 10 10 50.6 | -0.4 |
| J30A | Dallas baz=20 | 20.25 | 21 | P | Pn | 10 10 50.9 | -0.6 |
| MCMT | McKenzie Canyo | 20.29 | 353 | eP | Pn | 10 10 52.6 | +0.4 |
| YBH | Yreka Blue Hor comp=Z,408nm,20.0s,baz=163,slow=38 | 20.32 | 330 | LR | LR | 10 18 53.8 | |
| CCM | Cathedral Cave 20nm,1.1s | 20.32 | 45 | eP | P | 10 10 50.1 | -0.1 |
| K05A | Summer Lake 367nm,2.0s | 20.37 | 335 | eP | Pn | 10 10 54.6 | +1.5 |
| I28A | Midland baz=20,SNR=12 | 20.37 | 17 | P | Pn | 10 10 52.4 | -0.4 |
| RLMT | Red Lodge baz=20,SNR=7.3 | 20.38 | 0 | P | Pn | 10 10 52.2 | -0.9 |
| RLMT | Red Lodge 121nm,2.3s | 20.38 | 0 | eP | Pn | 10 10 52.8 | -0.3 |
| H25A | Fruitdale baz=20 | 20.41 | 12 | P | Pn | 10 10 52.8 | -0.6 |
| H26A | Fairpoint baz=21,SNR=12 | 20.57 | 13 | P | Pn | 10 10 54.2 | -1.0 |
| K04D | Chiloquin, OR baz=21 | 20.63 | 333 | P | Pn | 10 10 55.7 | -0.2 |
| I29A | Vivian Onida baz=21,SNR=6.3 | 20.63 | 19 | P | Pn | 10 10 54.9 | -1.0 |
| GLAT | Glass | 20.70 | 51 | eP | Pn | 10 10 56.0 | -0.8 |
| H27A | Howes baz=21,SNR=15 | 20.74 | 15 | P | Pn | 10 10 56.3 | -0.9 |
| L35A | Bielow Farm, R baz=21 | 20.77 | 30 | P | P | 10 10 55.7 | +0.6 |
| DLMT | Dillon 54nm,1.3s | 20.79 | 353 | eP | Pn | 10 10 57.8 | -0.1 |
| I30A | Oacoma baz=21 | 20.80 | 20 | P | Pn | 10 10 57.4 | -0.5 |
| J32A | Parkston baz=21 | 20.87 | 24 | P | Pn | 10 10 57.6 | -1.0 |
| J05D | Fort Rock, OR baz=21,SNR=8.4 | 20.98 | 335 | P | Pn | 10 10 59.1 | -0.9 |
| BOZ | Bozeman (W) baz=21,SNR=24 | 20.99 | 355 | P | Pn | 10 10 59.4 | -0.8 |
| BOZ | Bozeman (W) 36nm,1.3s | 20.99 | 355 | eP | Pn | 10 10 59.0 | -1.1 |
| K34A | Le Mars baz=21 | 20.99 | 28 | P | Pn | 10 10 59.4 | -0.7 |
| G25A | Newell baz=21,SNR=5.5 | 21.00 | 12 | P | Pn | 10 10 59.1 | -1.1 |
| H28A | Mission Ridge baz=21,SNR=5.8 | 21.04 | 17 | P | P | 10 10 59.2 | +1.2 |
| I07A | Izee 66nm,1.4s | 21.06 | 339 | eP | P | 10 11 00.3 | +2.0 |
| J33A | Davis baz=21,SNR=5.6 | 21.16 | 26 | P | P | 10 11 00.0 | +0.8 |
| LRAL | Lakeview Retre 59nm,1.5s | 21.20 | 62 | eP | P | 10 10 59.9 | +0.2 |
| H29A | Onida baz=21 | 21.21 | 18 | P | P | 10 11 01.0 | +1.2 |
| LRM | Limekiln Ridge | 21.23 | 354 | eP | P | 10 11 02.4 | +2.1 |
| G26A | Maurine baz=21,SNR=15 | 21.25 | 13 | P | P | 10 11 00.9 | +0.5 |
| J04D | Umpqua Nationa baz=21 | 21.28 | 333 | P | P | 10 11 02.3 | +1.5 |
| SUSD | South Dakota S baz=22 | 21.43 | 21 | P | P | 10 11 03.5 | +1.3 |
| G28A | Parade baz=22 | 21.44 | 16 | P | P | 10 11 03.5 | +1.2 |
| SIUC | Southern Illin 182nm,2.0s | 21.47 | 48 | eP | P | 10 11 03.1 | +0.5 |
| G27A | Dupree baz=22,SNR=12 | 21.48 | 14 | P | P | 10 11 03.6 | +0.9 |
| ECSD | EROS Data Cent baz=22 | 21.65 | 26 | P | P | 10 11 05.0 | +0.5 |
| ECSD | EROS Data Cent 66nm,1.7s | 21.65 | 26 | eP | P | 10 11 05.2 | +0.7 |
| WVT | Waverly 31nm,1.0s | 21.69 | 53 | eP | P | 10 11 04.7 | -0.3 |
| F25A | Bowman baz=22,SNR=6.7 | 21.70 | 11 | P | P | 10 11 06.4 | +1.3 |
| F26A | Lodgepole baz=22,SNR=16 | 21.77 | 13 | P | P | 10 11 06.8 | +0.9 |
| G29A | Hoven baz=22 | 21.82 | 18 | P | P | 10 11 07.3 | +1.0 |
| I05D | Terrebonne, OR baz=22 | 21.92 | 336 | P | P | 10 11 08.8 | +1.4 |
| F27A | Lemmon baz=22,SNR=14 | 21.93 | 14 | P | P | 10 11 07.8 | +0.3 |
| G08A | Pilot Rock 24nm,1.3s | 21.98 | 342 | eP | P | 10 11 10.0 | +1.8 |
| G30A | Faulkton baz=22 | 21.98 | 19 | P | P | 10 11 08.4 | +0.2 |
| H32A | Carlson Farm, baz=22 | 22.00 | 23 | P | P | 10 11 09.1 | +0.8 |
| HRY | Holter Researc | 22.06 | 355 | eP | P | 10 11 10.9 | +1.9 |
| LAO | LASA Array baz=22,SNR=9.6 | 22.08 | 6 | P | P | 10 11 08.3 | -0.9 |
| LAO | LASA Array 118nm,1.8s | 22.08 | 6 | eP | P | 10 11 09.6 | +0.3 |
| F10A | Beach Ranch, E 48nm,1.2s | 22.17 | 345 | eP | P | 10 11 10.9 | +0.8 |
| K37A | Belmond baz=22,SNR=7.0 | 22.17 | 32 | P | P | 10 11 10.4 | +0.3 |
| F28A | McLaughlin baz=22,SNR=5.3 | 22.19 | 16 | P | P | 10 11 10.3 | 0.0 |
| E25A | Miller Ranch, baz=22 | 22.27 | 11 | P | P | 10 11 12.5 | +1.3 |
| J36A | Seneca 1, Swea baz=22,SNR=5.4 | 22.28 | 30 | P | P | 10 11 12.5 | +1.2 |
| CHMT | Chamberlain Mo | 22.39 | 353 | eP | P | 10 11 14.2 | +1.5 |
| MSO | Missoula baz=23,SNR=30 | 22.39 | 352 | P | P | 10 11 14.1 | +1.5 |
| MSO | Missoula 69nm,1.3s | 22.39 | 352 | eP | P | 10 11 14.2 | +1.6 |
| H33A | Prehn Over Nor baz=22 | 22.40 | 24 | P | P | 10 11 13.5 | +0.9 |
| E26A | Carlson Angus baz=22,SNR=13 | 22.41 | 12 | P | P | 10 11 13.1 | +0.4 |
| F29A | Eureka baz=22 | 22.43 | 18 | P | P | 10 11 13.3 | +0.4 |
| K38A | Parkersburg baz=23 | 22.51 | 33 | P | P | 10 11 14.7 | +0.9 |
| E27A | Carson baz=23,SNR=9.0 | 22.56 | 14 | P | P | 10 11 15.4 | +1.1 |
| J37A | Redenius Farm, baz=23 | 22.63 | 31 | P | P | 10 11 15.7 | +0.7 |
| USIN | University of 109nm,1.5s | 22.66 | 49 | eP | P | 10 11 16.5 | +1.2 |
| SLMT | Seeley Lake | 22.75 | 353 | eP | P | 10 11 17.9 | +1.5 |
| SWET | Sewanee 117nm,1.6s | 22.75 | 57 | eP | P | 10 11 17.4 | +0.9 |
| OLIL | Olney 103nm,1.2s | 22.75 | 47 | eP | P | 10 11 17.3 | +0.9 |
| H34A | Spellman Lake, baz=23 | 22.76 | 26 | P | P | 10 11 17.7 | +1.4 |
| E28A | Huff baz=23 | 22.89 | 15 | P | P | 10 11 19.2 | +1.3 |
| D25A | Fairfield baz=23 | 22.91 | 11 | P | P | 10 11 19.3 | +1.3 |
| F31A | Hecla baz=23 | 22.92 | 20 | P | P | 10 11 19.2 | +1.2 |
| D26A | Manning baz=23,SNR=17 | 22.95 | 12 | P | P | 10 11 18.6 | +0.2 |
| G33A | Ortonville baz=23 | 22.95 | 24 | P | P | 10 11 19.4 | +1.0 |
| I36A | Fitzsimmons Fa baz=23 | 22.97 | 29 | P | P | 10 11 19.5 | +0.9 |
| HDIL | Hopedale baz=23,SNR=5.3 | 23.03 | 42 | P | P | 10 11 18.6 | -0.6 |
| HDIL | Hopedale 93nm,1.5s | 23.03 | 42 | eP | P | 10 11 19.3 | +0.1 |
| SWMT | Swartz Lake | 23.07 | 352 | eP | P | 10 11 20.6 | +0.9 |
| J38A | Wedel Dairy, R baz=23 | 23.15 | 33 | P | P | 10 11 20.6 | +0.2 |
| HAWA | Hanford 227nm,2.6s | 23.15 | 342 | eP | P | 10 11 21.4 | +0.9 |
| H35A | Sunnyside Ranc baz=23 | 23.16 | 27 | P | P | 10 11 21.2 | +0.6 |
| I37A | Lemond, Waseca baz=23 | 23.24 | 30 | P | P | 10 11 22.1 | +0.7 |
| EGMT | Eagleton baz=23,SNR=13 | 23.28 | 359 | P | P | 10 11 22.3 | +0.4 |
| EGMT | Eagleton 206nm,1.8s | 23.28 | 359 | eP | P | 10 11 22.5 | +0.7 |
| TGUH | Tegucigalpa,Un 89nm,1.4s | 23.29 | 113 | eP | P | 10 11 24.9 | +2.9 |
| E30A | Jud baz=23 | 23.30 | 18 | P | P | 10 11 22.5 | +0.5 |
| JTMT | Jette | 23.34 | 351 | eP | P | 10 11 23.2 | +0.7 |
| G03D | McMinnville, O baz=24 | 23.38 | 335 | P | P | 10 11 25.0 | +2.2 |
| E07A | Sunnyside 212nm,2.0s | 23.40 | 341 | eP | P | 10 11 23.8 | +0.8 |
| YBMT | Yellow Bay | 23.42 | 352 | eP | P | 10 11 25.2 | +1.9 |
| C25A | Freed Ranch, W baz=24 | 23.47 | 10 | P | P | 10 11 24.8 | +1.1 |
| D28A | Regan baz=24 | 23.50 | 15 | P | P | 10 11 25.3 | +1.2 |
| BSMT | Bassoo Peak | 23.52 | 351 | eP | P | 10 11 24.0 | -0.3 |
| D08A | Wollman Farm, 25nm,1.3s | 23.60 | 343 | eP | P | 10 11 25.6 | +0.7 |
| BLMT | Blacktail Moun | 23.61 | 351 | eP | P | 10 11 27.0 | +1.7 |
| TIGA | Tifton baz=24 | 23.63 | 68 | P | P | 10 11 25.1 | -0.3 |
| TIGA | Tifton 146nm,1.5s | 23.63 | 68 | eP | P | 10 11 26.1 | +0.7 |
| E31A | Nome baz=24 | 23.66 | 20 | P | P | 10 11 26.1 | +0.7 |
| WCI | Wyandotte Cave 77nm,1.6s | 23.73 | 50 | eP | P | 10 11 26.8 | +0.4 |
| I38A | Scanlan Farm, baz=24 | 23.76 | 31 | P | P | 10 11 27.0 | +0.5 |
| C26A | Wahner Farm, P baz=24 | 23.78 | 12 | P | P | 10 11 27.2 | +0.5 |
| C27A | Sayler Ranch, baz=24 | 23.79 | 13 | P | P | 10 11 27.6 | +0.7 |
| H37A | Dierke Farm, C baz=24 | 23.90 | 30 | P | P | 10 11 28.8 | +1.0 |
| JFWS | Jewell Farm 64nm,1.8s | 24.00 | 36 | eP | P | 10 11 32.6 | +3.8 |
| BLO | Bloomington 24nm,1.0s | 24.04 | 48 | eP | P | 10 11 29.9 | +0.8 |
| G36A | St. Michael baz=24 | 24.05 | 28 | P | P | 10 11 30.5 | +1.2 |
| DGMT | Dagmar baz=24,SNR=6.2 | 24.07 | 8 | P | P | 10 11 29.8 | +0.4 |
| DGMT | Dagmar 103nm,1.6s | 24.07 | 8 | eP | P | 10 11 30.6 | +1.2 |
| C09A | Chrisman Ranch 13nm,0.9s | 24.13 | 345 | eP | P | 10 11 30.2 | +0.2 |
| GOGA | Godfrey 30nm,1.3s | 24.15 | 63 | eP | P | 10 11 30.0 | -0.3 |
| LON | Longmire 112nm,1.8s | 24.18 | 339 | eP | P | 10 11 33.4 | +2.9 |
| LTY | Liberty 321nm,2.9s | 24.27 | 341 | eP | P | 10 11 32.5 | +1.1 |
| SFIN | Scholer Farm baz=24 | 24.29 | 45 | P | P | 10 11 31.8 | +0.2 |
| SFIN | Scholer Farm 35nm,1.0s | 24.29 | 45 | eP | P | 10 11 32.3 | +0.7 |
| NEW | Newport 34nm,1.0s,baz=165,slow=10,SNR=28 | 24.32 | 347 | P | P | 10 11 31.6 | -0.1 |
| NEW | comp=Z,514nm,18.6s,baz=168,slow=38 | | | LR | LR | 10 21 42.2 | |
| NEW | Newport baz=24,SNR=28 | 24.32 | 347 | P | P | 10 11 32.3 | +0.5 |
| NEW | Newport | 24.32 | 347 | eP | P | 10 11 32.4 | +0.6 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 83nm,1.2s | | | | | | |
| MDND | **Maddock** | **24.35** | **16** | P | **P** | **10 11 32.7** | **+0.7** |
| | baz=24 | | | | | | |
| MDND | **Maddock** | **24.35** | **16** | *e*P | **P** | **10 11 32.2** | **+0.1** |
| | 52nm,1.4s | | | | | | |
| SPMN | **St. Paul** | **24.45** | **29** | P | **P** | **10 11 33.2** | **+0.3** |
| | baz=24 | | | | | | |
| B27A | **Peters Farms,** | **24.50** | **13** | P | **P** | **10 11 33.6** | **+0.3** |
| | baz=25 | | | | | | |
| C30A | **Mose, Pekin** | **24.52** | **18** | P | **P** | **10 11 34.0** | **+0.5** |
| | baz=25 | | | | | | |
| TKL | **Tuckaleechee C** | **24.55** | **58** | P | **P** | **10 11 33.1** | **-0.9** |
| | 15nm,1.1s,baz=236,slow=6.9,SNR=11 | | | | | | |
| TKL | | | | LR | LR | 10 22 01.5 | |
| | comp=Z,1μm,19.1s,baz=258,slow=39 | | | | | | |
| TKL | **Tuckaleechee C** | **24.55** | **58** | *e*P | **P** | **10 11 33.9** | **-0.2** |
| WALA | **Waterton Lakes** | **24.59** | **353** | *e*P | **P** | **10 11 35.4** | **+1.1** |
| | 59nm,1.1s | | | | | | |
| F36A | **Milaca** | **24.65** | **27** | P | **P** | **10 11 34.7** | **0.0** |
| | baz=25 | | | | | | |
| A25A | **Svangstu Ranch** | **24.68** | **10** | P | **P** | **10 11 35.7** | **+0.7** |
| | baz=25 | | | | | | |
| B28A | **Dugan Ranch, T** | **24.73** | **14** | P | **P** | **10 11 35.7** | **+0.3** |
| | baz=25,SNR=19 | | | | | | |
| C31A | **Landman Farms,** | **24.81** | **19** | P | **P** | **10 11 35.8** | **-0.3** |
| | baz=25,SNR=7.4 | | | | | | |
| A26A | **Wade Farm, Ken** | **24.82** | **11** | P | **P** | **10 11 36.7** | **+0.4** |
| | baz=25 | | | | | | |
| E35A | **Pequot Lakes** | **24.86** | **25** | P | **P** | **10 11 37.1** | **+0.5** |
| | baz=25,SNR=8.0 | | | | | | |
| B29A | **Wagenman Farm,** | **24.99** | **16** | P | **P** | **10 11 38.5** | **+0.7** |
| | baz=25,SNR=6.3 | | | | | | |
| D34A | **Park Rapids** | **25.02** | **23** | P | **P** | **10 11 38.3** | **+0.3** |
| | baz=25 | | | | | | |
| A27A | **Ledoux Ranch,** | **25.03** | **13** | P | **P** | **10 11 38.4** | **+0.3** |
| | baz=25,SNR=9.0 | | | | | | |
| TZTN | **Tazewell** | **25.03** | **56** | *e*P | **P** | **10 11 39.2** | **+0.9** |
| | 35nm,1.1s | | | | | | |
| A28A | **Rude Farm, Bot** | **25.19** | **14** | P | **P** | **10 11 40.1** | **+0.5** |
| | baz=25,SNR=7.3 | | | | | | |
| B30A | **Myrvik Farm, E** | **25.24** | **17** | P | **P** | **10 11 40.5** | **+0.5** |
| | baz=25,SNR=12 | | | | | | |
| C33A | **Trail** | **25.39** | **22** | P | **P** | **10 11 42.8** | **+1.3** |
| | baz=26 | | | | | | |
| B31A | **Greenbush Farm** | **25.40** | **18** | P | **P** | **10 11 42.5** | **+1.0** |
| | baz=26 | | | | | | |
| D35A | **Remer** | **25.43** | **25** | P | **P** | **10 11 42.6** | **+0.7** |
| | baz=26 | | | | | | |
| A29A | **Manning Farm,** | **25.44** | **16** | P | **P** | **10 11 42.6** | **+0.8** |
| | baz=26,SNR=13 | | | | | | |
| A30A | **Hoffart Farm,** | **25.70** | **17** | P | **P** | **10 11 45.0** | **+0.8** |
| | baz=26,SNR=7.4 | | | | | | |
| B32A | **Ashes, Strandq** | **25.71** | **20** | P | **P** | **10 11 44.8** | **+0.5** |
| | baz=26 | | | | | | |
| AGMN | **Agassiz Nation** | **25.84** | **21** | P | **P** | **10 11 45.8** | **+0.4** |
| | baz=26 | | | | | | |
| C35A | **Jirik Farms, M** | **25.98** | **24** | P | **P** | **10 11 47.0** | **+0.2** |
| | baz=26 | | | | | | |
| KMSC | **Kings Mountain** | **26.30** | **60** | *e*P | **P** | **10 11 49.8** | **-0.1** |
| | 19nm,1.0s | | | | | | |
| COWI | **Conover** | **26.81** | **32** | *e*P | **P** | **10 11 53.8** | **-0.5** |
| | 18nm,1.1s | | | | | | |
| ACSO | **Alum Creek Sta** | **26.94** | **49** | *e*P | **P** | **10 11 57.0** | **+1.5** |
| ULM | **Lac du Bonnet** | **27.56** | **19** | P | **P** | **10 11 59.5** | **-1.5** |
| | 3.3nm,0.9s,baz=194,slow=9.2,SNR=4.1 | | | | | | |
| ULM | | | | LR | LR | 10 22 04.3 | |
| | comp=Z,557nm,19.0s,baz=206,slow=35 | | | | | | |
| ULM | **Lac du Bonnet** | **27.56** | **19** | *e*P | **P** | **10 12 01.0** | **0.0** |
| | 55nm,1.9s | | | | | | |
| C39A | **Grand Marais** | **27.62** | **29** | P | **P** | **10 12 03.2** | **+1.6** |
| | baz=28 | | | | | | |
| EDM | **Edmonton** | **28.65** | **355** | *e*P | **P** | **10 12 10.8** | **+0.1** |
| | 38nm,1.2s | | | | | | |
| FCC | **Fort Churchill** | **35.70** | **14** | *e*P | **P** | **10 13 12.3** | **-0.1** |
| | 20nm,1.0s | | | | | | |
| DLBC | **Dease Lake** | **36.79** | **342** | *e*P | **P** | **10 13 24.1** | **+2.3** |
| | 12nm,0.9s | | | | | | |
| YKA | **Yellowknife Ar** | **37.95** | **356** | P | **P** | **10 13 31.2** | **-0.2** |
| | 2.8nm,0.9s,baz=170,slow=7.9,SNR=9.6 | | | | | | |
| OTAV | **Otavalo** | **38.50** | **125** | *e*P | **P** | **10 13 40.1** | **+2.9** |
| | 56nm,1.8s | | | | | | |
| ROSC | **El Rosal** | **38.95** | **115** | P | **P** | **10 13 41.3** | **+0.3** |
| | 8.7nm,0.7s,baz=38,slow=1.6,SNR=10 | | | | | | |
| ROSC | | | | LR | LR | 10 31 17.8 | |
| | comp=Z,212nm,18.4s,baz=352,slow=39 | | | | | | |
| SDV | **Santo Domingo** | **40.05** | **106** | *e*P | **P** | **10 13 50.0** | **+0.1** |
| | 11nm,0.8s | | | | | | |
| SJG | **San Juan** | **40.58** | **91** | P | **P** | **10 13 53.9** | **-0.1** |
| | 23nm,0.2s,baz=321,slow=21,SNR=7.1 | | | | | | |
| SCHQ | **Schefferville** | **43.36** | **35** | LR | LR | 10 33 07.2 | |
| | comp=Z,578nm,18.7s,baz=338,slow=37 | | | | | | |
| ATAH | **Atahualpa** | **43.68** | **132** | P | **P** | **10 14 20.7** | **+0.9** |
| | 7.6nm,0.9s,baz=359,slow=5.8,SNR=5.0 | | | | | | |
| DAWY | **Dawson** | **44.01** | **341** | *e*P | **P** | **10 14 22.9** | **+1.5** |
| | 17nm,1.1s | | | | | | |
| EGAK | **Eagle** | **45.05** | **341** | *e*P | **P** | **10 14 30.9** | **+1.2** |
| | 7.1nm,0.9s | | | | | | |
| DOT | **Dot Lake** | **45.14** | **339** | *e*P | **P** | **10 14 32.2** | **+1.8** |
| | 55nm,1.3s | | | | | | |
| PMR | **Palmer** | **45.66** | **335** | *e*P | **P** | **10 14 35.5** | **+1.0** |
| | 9.1nm,1.0s | | | | | | |
| INK | **Inuvik** | **46.04** | **348** | P | **P** | **10 14 37.4** | **-0.1** |
| | 3.6nm,1.0s,baz=138,slow=12,SNR=4.3 | | | | | | |
| SUA | **Susitna One** | **46.22** | **334** | *e*P | **P** | **10 14 40.9** | **+1.8** |
| | 14nm,0.9s | | | | | | |
| RND | **Reindeer** | **46.63** | **337** | *e*P | **P** | **10 14 43.9** | **+1.6** |
| | 77nm,2.0s | | | | | | |
| IL1 | **Eielson Array** | **46.82** | **339** | *e*P | **P** | **10 14 44.1** | **+0.5** |
| ILAR | **Eielson Array** | **46.82** | **339** | P | **P** | **10 14 44.2** | **+0.6** |
| | 6.7nm,0.8s,baz=153,slow=6.5,SNR=56 | | | | | | |
| ILAR | | | | LR | LR | 10 37 15.2 | |
| | comp=Z,200nm,19.3s,baz=140,slow=40 | | | | | | |
| MCK | **McKinley** | **46.86** | **337** | *e*P | **P** | **10 14 45.5** | **+1.5** |
| | 17nm,1.0s | | | | | | |
| WRH | **Wood River Hil** | **47.02** | **338** | *e*P | **P** | **10 14 47.7** | **+2.5** |
| | 15nm,1.2s | | | | | | |
| CCB | **Clear Creek Bu** | **47.04** | **339** | *e*P | **P** | **10 14 46.0** | **+0.7** |
| | 16nm,1.6s | | | | | | |
| TRF | **Thorofare Moun** | **47.18** | **336** | *e*P | **P** | **10 14 47.5** | **+0.9** |
| | 43nm,1.0s | | | | | | |
| MDM | **Murphy Dome** | **47.38** | **339** | *e*P | **P** | **10 14 48.9** | **+0.8** |
| | 7.1nm,1.0s | | | | | | |
| KTH | **Kantishna Hill** | **47.47** | **336** | *e*P | **P** | **10 14 49.4** | **+0.6** |
| | 24nm,1.0s | | | | | | |
| PPLA | **Purkeypile** | **47.58** | **335** | *e*P | **P** | **10 14 50.5** | **+0.8** |
| | 55nm,1.3s | | | | | | |
| BPAW | **Bear Paw Mtn.** | **47.81** | **337** | *e*P | **P** | **10 14 51.6** | **+0.2** |
| | 20nm,1.0s | | | | | | |
| MLY | **Manley** | **48.27** | **338** | *e*P | **P** | **10 14 56.3** | **+1.4** |
| | 11nm,0.8s | | | | | | |
| COLD | **Coldfoot** | **49.43** | **340** | *e*P | **P** | **10 15 05.4** | **+1.6** |
| | 9.9nm,1.2s | | | | | | |
| SAML | **Samuel** | **56.03** | **121** | *e*P | **P** | **10 15 51.9** | **-1.4** |
| | 12nm,0.9s | | | | | | |
| LPAZ | **La Paz** | **57.20** | **131** | P | **P** | **10 16 01.9** | **-0.4** |
| | 1.9nm,1.1s,baz=319,slow=6.1,SNR=3.8 | | | | | | |
| PPT | **Papeete** | **57.50** | **227** | LR | LR | 10 33 57.7 | |
| | comp=Z,148nm,18.8s,baz=346,slow=29 | | | | | | |
| PPT2 | **Papeete2** | **57.51** | **227** | *e*S | **S** | **10 24 02.4** | **+0.8** |
| | 97nm,25.0s | | | | | | |
| PPT2 | | | | *e*LR | LR | 10 32 51.7 | |
| | 622nm,27.5s | | | | | | |
| TBI | **Tubuai** | **61.63** | **222** | *e*LR | LR | 10 34 41.2 | |
| | 323nm,29.0s | | | | | | |
| CPUP | **Villa Florida** | **71.36** | **132** | P | **P** | **10 17 34.1** | **-0.2** |
| | 5.0nm,0.8s,baz=320,slow=7.1,SNR=13 | | | | | | |
| CPUP | **Villa Florida** | **71.36** | **132** | *e*P | **P** | **10 17 35.2** | **+0.9** |
| BDFB | **Brasilia** | **71.96** | **117** | P | **P** | **10 17 38.4** | **+0.1** |
| | 1.9nm,0.4s,baz=2.9,slow=5.3,SNR=4.5 | | | | | | |
| PEA0 | **Petropavlovsk-** | **72.37** | **321** | *e*P | **P** | **10 17 41.2** | **+1.1** |
| PETK | **Petropavlovsk-** | **72.37** | **321** | P | **P** | **10 17 40.4** | **+0.3** |
| | 8.6nm,1.0s,baz=64,slow=13,SNR=5.8 | | | | | | |
| PETK | | | | LR | LR | 10 44 27.2 | |
| | comp=Z,30nm,21.9s,baz=70,slow=32 | | | | | | |
| PLCA | **Paso Flores** | **74.40** | **150** | *e*P | **P** | **10 17 54.2** | **+2.1** |
| | 13nm,1.1s | | | | | | |
| ARCES | **ARCESS Array B** | **80.59** | **15** | P | **P** | **10 18 25.2** | **-1.1** |
| | 2.8nm,0.7s,baz=356,slow=3.6,SNR=6.5 | | | | | | |
| FINES | **FINESS Array B** | **86.94** | **20** | P | **P** | **10 18 57.8** | **-1.2** |
| | 3.1nm,0.8s,baz=29,slow=4.4,SNR=6.0 | | | | | | |
| PRU | **Pruhonice** | **90.55** | **32** | AMS | AMS | 11 01 10.0 | |
| GOPC | **GO Pecny, Ondr** | **90.72** | **32** | AMS | AMS | 11 01 30.0 | |
| | comp=Z,400nm,15.5s | | | | | | |
| UPC | **Upice** | **90.91** | **31** | AMS | AMS | 11 01 50.0 | |
| | comp=Z,300nm,15.6s | | | | | | |
| DPC | **Dobruska-Polom** | **91.17** | **31** | AMS | AMS | 11 02 00.0 | |
| TREC | **Trest** | **91.47** | **33** | AMS | AMS | 11 02 40.0 | |
| | comp=Z,300nm,14.7s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KSRS | **Korea Array** | **98.06** | **317** | LR | LR | 10 57 25.5 | |
| | comp=Z,51nm,21.2s,baz=47,slow=31 | | | | | | |
| GUMO | **Guam** | **98.29** | **289** | LR | LR | 10 54 43.2 | |
| | comp=Z,74nm,21.1s,baz=74,slow=30 | | | | | | |
| SONM | **Songino Array** | **100.99** | **336** | P | **Pdif** | **10 20 04.3** | **+0.3** |
| | 0.2nm,0.3s,baz=52,slow=2.6,SNR=3.7 | | | | | | |
| WMQ | **Urumqi** | **110.06** | **347** | *e*Pdif | **Pdif** | **10 20 44.0** | **-0.4** |
| WMQ | | | | LN | | | |
| | 110nm,20.0s | | | | | | |
| WMQ | | | | LE | | | |
| | 110nm,20.0s | | | | | | |
| WMQ | | | | LZ | | | |
| | 100nm,20.0s | | | | | | |
| LZH | **Lanzhou** | **111.92** | **331** | *e*PKP | **PKiKP** | **10 24 46.0** | **-3.9** |
| LZH | | | | sPKP | | 10 24 50.8 | |
| KSH | **Kashi** | **115.93** | **355** | *e*PKP | **PKPdf** | **10 25 00.5** | **+3.0** |
| KSH | | | | *e*PP | PP | 10 26 09.5 | +10 |
| KSH | | | | PKS | **PKSdf** | **10 28 36.5** | **+2.2** |
| KSH | | | | SKS | **SKSdf** | **10 32 13.8** | **+3.8** |
| KSH | | | | SS | SS | 10 42 10.5 | +10 |
| KSH | | | | LN | | | |
| | 90nm,5.2s | | | | | | |
| KSH | | | | LE | | | |
| | 86nm,6.3s | | | | | | |
| KSH | | | | LZ | | | |
| | 87nm,8.7s | | | | | | |
| CD2 | **Chengdu** | **116.28** | **328** | PKP | **PKPdf** | **10 24 57.5** | **-0.8** |
| WRA | **Warramunga Arr** | **121.39** | **261** | PKP | **PKPdf** | **10 25 10.3** | **+2.1** |
| | 0.8nm,1.3s,baz=68,slow=2.2,SNR=3.0 | | | | | | |
| QIZ | **Qiongzhong** | **122.19** | **315** | PKP | **PKPdf** | **10 25 10.0** | **+0.2** |
| QIZ | | | | PP | PP | **10 26 43.0** | **-1.0** |
| QIZ | | | | SS | SS | 10 43 24.0 | +0.9 |
| QIZ | | | | LZ | | | |
| | 120nm,6.4s | | | | | | |
| ASAR | **Alice Springs** | **122.81** | **257** | PKP | **PKPdf** | **10 25 13.1** | **+2.1** |
| | 0.2nm,0.9s,baz=58,slow=2.3,SNR=3.5 | | | | | | |

*ISCJB **25** 10:07:58.6±0.3,24˚.59N±0˚.03×109˚.20W±0˚.03,h10km, mb4.7/30, Error ellipse: s-maj=4.4km s-min=3.6km az=151.7*
*BJI **25** 10:07:58.0,24˚.60N×109˚.20W,h10km,mB5.0/2,Ms4.8/1, Ms7 4.4/1*
*IDC **25** 10:07:58.6±0.7,24˚.67N×109˚.30W,h0km,mb4.4/10, mb1 4.6/14,mb1mx4.3/43,mbtmp4.4/14,ML3.6/4, Error ellipse: s-maj=16.6km s-min=10.5km az=142.0*
*NEIC **25** 10:08:00.6±0.4,24˚.56N×109˚.27W,h10km,mb4.6/38, MD4.6(MEX), Error ellipse: s-maj=7.6km s-min=6.2km az=65.0*
*NEIC Felt at Los Mochis, Sinaloa.*
*MEX **25** 10:08:03.7±0.5,24˚.83N×109˚.60W,h10km,MD4.6*
**ISC 25 10:08:00.3±0.4,24˚.62N±0˚.04×109˚.33W±0˚.04,h10km, n209,σ1§40/215,mb4.8/30,Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPIG | **La Paz** | **1.03** | **240** | Pg | **Pg** | **10 08 18.5** | **-1.6** |
| | 100nm,0.3s,baz=0.0,slow=7.1,SNR=12 | | | | | | |
| LPIG | | | | Lg | Lg | 10 08 33.8 | |
| | 442nm,0.3s,baz=336,slow=1.2,SNR=10.0 | | | | | | |
| LPIG | **La Paz** | **1.03** | **240** | *e*P | **Pg** | **10 08 19.3** | **-0.7** |
| LPIG | | | | *e*S | **Sg** | **10 08 32.1** | **-1.3** |
| SLBS | **Sierra La Lagu** | **1.08** | **211** | *e*P | **Pb** | **10 08 21.1** | **0.0** |
| SLBS | | | | *i* S | **Sg** | **10 08 35.4** | **+0.2** |
| SLBS | **Sierra La Lagu** | **1.08** | **211** | *e*Pn | **Pn** | **10 08 24.4** | **+2.8** |
| MAIG | **Mazatlaan** | **3.02** | **118** | *e*P | **Pb** | **10 08 54.0** | **-0.1** |
| MAIG | | | | *e*S | **Sb** | **10 09 32.2** | **+1.2** |
| MAIG | **Mazatlaan** | **3.02** | **118** | *e*P | **Pb** | **10 08 54.0** | **-0.1** |
| MAIG | | | | *e*S | **Sb** | **10 09 32.2** | **+1.2** |
| HPIG | | **4.03** | **54** | *e*P | **Pn** | **10 09 04.0** | **+1.7** |
| HPIG | | | | *e*S | **Sn** | **10 09 52.5** | **+2.8** |
| HPIG | | **4.03** | **54** | *e*P | **Pn** | **10 09 04.0** | **+1.7** |
| HPIG | | | | *e*S | **Sn** | **10 09 52.5** | **+2.8** |
| TX31 | **Lajitas Ar. Si** | **6.90** | **46** | *e*Pn | **Pn** | **10 09 44.5** | **+2.9** |
| TXAR | **Lajitas Array** | **6.90** | **46** | Sn | Sn | 10 10 53.6 | -6.7 |
| | 3.1nm,0.3s,baz=221,slow=24,SNR=3.1 | | | | | | |
| TXAR | | | | Lg | Lg | 10 11 34.9 | |
| | 3.4nm,0.3s,baz=236,slow=29,SNR=3.4 | | | | | | |
| TUC | **Tucson** | **7.77** | **351** | *e*Pn | **Pn** | **10 09 54.1** | **+0.6** |
| GLA | **Glamis** | **9.68** | **331** | P | **Pn** | **10 10 22.0** | **+2.2** |
| | baz=9.8,SNR=5.8 | | | | | | |
| GLA | **Glamis** | **9.68** | **331** | *e*Pn | **Pn** | **10 10 22.4** | **+2.7** |
| BNM | **Barren Site** | **9.79** | **13** | *e*Pn | **Pn** | **10 10 22.3** | **+1.0** |
| 034A | **Hebbronville** | **9.90** | **73** | P | **Pn** | **10 10 22.0** | **-0.7** |
| | baz=9.8 | | | | | | |
| LAZ | **Ladron** | **9.94** | **11** | *e*Pn | **Pn** | **10 10 22.2** | **-1.1** |
| LPM | **Los Pinos Moun** | **9.94** | **13** | *e*Pn | **Pn** | **10 10 24.1** | **+0.6** |
| Y12C | **Blythe** | **10.16** | **335** | P | **Pn** | **10 10 27.4** | **+1.2** |
| | baz=10 | | | | | | |
| MONP | **Monument Peak** | **10.32** | **325** | P | **Pn** | **10 10 31.5** | **+2.8** |
| | baz=10,SNR=7.7 | | | | | | |
| W18A | **Petrified Fore** | **10.47** | **358** | P | **Pn** | **10 10 32.4** | **+1.7** |
| | baz=11,SNR=12 | | | | | | |
| W18A | **Petrified Fore** | **10.47** | **358** | *e*Pn | **Pn** | **10 10 32.6** | **+1.9** |
| BC3 | **Big Chuckawall** | **10.47** | **331** | P | **Pn** | **10 10 32.8** | **+2.2** |
| | baz=11 | | | | | | |
| PDMCI | **Parker Dam,Lak** | **10.52** | **338** | P | **Pn** | **10 10 33.3** | **+2.2** |
| | baz=18 | | | | | | |
| ANMO | **Albuquerque** | **10.59** | **13** | Pn | **Pn** | **10 10 31.9** | **-0.4** |
| | 0.1nm,0.3s,baz=202,slow=14,SNR=8.0 | | | | | | |
| IRM | **Iron Mountain** | **10.77** | **333** | P | **Pn** | **10 10 36.9** | **+2.2** |
| | baz=11 | | | | | | |
| PFO | **Pinyon Flat Ob** | **10.91** | **327** | Pn | **Pn** | **10 10 38.9** | **+2.3** |
| | 0.2nm,0.3s,baz=150,slow=14,SNR=6.0 | | | | | | |
| PFO | **Pinyon Flat Ob** | **10.91** | **327** | *e*Pn | Pn | 10 10 40.4 | +3.8 |
| WUAZ | **Wupatki** | **11.01** | **351** | P | **Pn** | **10 10 40.2** | **+2.3** |
| | baz=11 | | | | | | |
| BELC | **Belle Mtn. Jos** | **11.01** | **330** | P | **Pn** | **10 10 40.7** | **+2.7** |
| | baz=11 | | | | | | |
| NEE2 | **Needles Airpor** | **11.11** | **337** | P | **Pn** | **10 10 41.9** | **+2.8** |
| | baz=11 | | | | | | |
| Z30A | **Sanderson Ranc** | **11.23** | **38** | P | **Pn** | **10 10 42.2** | **+1.3** |
| | baz=11 | | | | | | |
| MURC | **Murrieta** | **11.28** | **324** | P | **Pn** | **10 10 44.4** | **+2.8** |
| | baz=11 | | | | | | |
| GMRC | **Granite Mounta** | **11.52** | **333** | P | **Pn** | **10 10 47.3** | **+2.4** |
| | baz=12 | | | | | | |
| BFSC | **Mount Baldy Ra** | **12.02** | **325** | P | **Pn** | **10 10 54.6** | **+2.9** |
| | baz=12 | | | | | | |
| GSC | **Goldstone** | **12.46** | **330** | P | **Pn** | **10 10 59.9** | **+2.1** |
| | baz=13,SNR=6.5 | | | | | | |
| GSC | **Goldstone** | **12.46** | **330** | *e*Pn | Pn | 10 11 01.5 | +3.8 |
| EDW2 | **Edwards Air Fo** | **12.69** | **326** | P | **Pn** | **10 11 03.2** | **+2.4** |
| | baz=13 | | | | | | |
| SHPR | **Sheep Range** | **12.86** | **338** | *e*Pn | Pn | 10 11 09.1 | +5.7 |
| SHPR | | | | *e*Sn | Sn | 10 13 49.6 | +23 |
| 336A | **Riesel** | **12.93** | **56** | P | **Pn** | **10 11 03.4** | **-0.7** |
| | baz=13 | | | | | | |
| LRMC | **Laurel Mountai** | **13.01** | **328** | P | **Pn** | **10 11 07.7** | **+2.3** |
| | baz=13,SNR=7.0 | | | | | | |
| ARVC | **Arvin** | **13.32** | **324** | P | **Pn** | **10 11 12.2** | **+2.8** |
| | baz=13 | | | | | | |
| MPMC | **Manual Prospec** | **13.39** | **330** | P | **Pn** | **10 11 13.2** | **+2.5** |
| | baz=14,SNR=14 | | | | | | |
| FURC | **Furnace Creek,** | **13.47** | **333** | P | **Pn** | **10 11 14.2** | **+2.7** |
| | baz=14 | | | | | | |
| ISA | **Isabella** | **13.54** | **326** | P | **Pn** | **10 11 14.6** | **+2.1** |
| | baz=14,SNR=6.1 | | | | | | |
| ISA | **Isabella** | **13.54** | **326** | *e*Pn | **Pn** | **10 11 14.8** | **+2.2** |
| DAC | **Darwin (Calif)** | **13.62** | **330** | *e*Pn | **Pn** | **10 11 16.8** | **+3.1** |
| CWC | **Cottonwood Cre** | **13.98** | **329** | P | **Pn** | **10 11 21.2** | **+2.6** |
| | baz=14,SNR=5.4 | | | | | | |
| VES | **Vestal, Richgr** | **13.99** | **325** | P | **Pn** | **10 11 20.5** | **+1.9** |
| | baz=14 | | | | | | |
| MSU | **Marysvale** | **14.06** | **351** | *e*Pn | **Pn** | **10 11 19.4** | **-0.4** |
| GRAC | **Grapevine Rang** | **14.13** | **333** | P | **Pn** | **10 11 22.6** | **+2.0** |
| | baz=14 | | | | | | |
| W34A | **Bridge Creek,** | **14.56** | **41** | *e*Pn | **Pn** | **10 11 28.5** | **+2.0** |
| W34A | | | | *e*S | **S** | **10 14 22.8** | **-4.6** |
| SMCO | **Snowmass** | **14.65** | **7** | *e*Pn | **Pn** | **10 11 27.0** | **-1.0** |
| SMCO | | | | *e*P | **P** | **10 11 35.7** | **+1.2** |
| R11A | **Troy Canyon, C** | **14.68** | **340** | P | **Pn** | **10 11 30.6** | **+2.3** |
| | baz=15 | | | | | | |
| R11A | **Troy Canyon, C** | **14.68** | **340** | *e*Pn | **Pn** | **10 11 31.2** | **+3.0** |
| MTUM | **Tungsten Hills** | **14.95** | **330** | *e*Pn | **Pn** | **10 11 32.2** | **+0.4** |
| CMIG | **Matias Romero** | **15.44** | **116** | Pn | **Pn** | **10 11 37.6** | **-0.7** |
| | 0.1nm,0.3s,baz=294,slow=11,SNR=4.3 | | | | | | |
| ISCO | **Idaho Springs** | **15.46** | **11** | P | **Pn** | **10 11 40.1** | **+1.4** |
| | baz=16,SNR=6.2 | | | | | | |
| ISCO | **Idaho Springs** | **15.46** | **11** | *e*Pn | **Pn** | **10 11 38.9** | **+0.2** |
| ISCO | | | | *e*P | **P** | **10 11 44.3** | **+1.0** |
| O20A | **White River Ci** | **15.50** | **3** | P | **Pn** | **10 11 40.9** | **+1.8** |
| | baz=16,SNR=8.3 | | | | | | |
| O20A | **White River Ci** | **15.50** | **3** | *e*Pn | **P** | **10 11 44.6** | **+1.0** |
| | 59nm,1.1s | | | | | | |
| O20A | | | | *e*S | **S** | **10 14 43.7** | **-3.2** |
| NV01 | **Mina Array Sit** | **15.74** | **333** | *e*Pn | **Pn** | **10 11 44.1** | **+1.8** |
| NVAR | **Mina Array Bea** | **15.74** | **333** | Pn | **Pn** | **10 11 44.7** | **+2.4** |
| | 0.7nm,0.3s,baz=160,slow=13,SNR=11 | | | | | | |
| Y38A | **Idabel** | **15.75** | **51** | P | **Pn** | **10 11 42.6** | **+0.5** |
| | baz=16 | | | | | | |
| DUG | **Dugway** | **15.80** | **350** | P | **Pn** | **10 11 44.9** | **+1.9** |
| | baz=16 | | | | | | |
| CTU | **Camp Tracy** | **16.16** | **353** | *e*Pn | **Pn** | **10 11 49.1** | **+1.5** |
| | 17nm,1.1s | | | | | | |
| W38A | **Poteau** | **16.52** | **48** | P | **P** | **10 11 54.2** | **-0.5** |
| | baz=16,SNR=6.6 | | | | | | |
| V37A | **Hulbert** | **16.60** | **44** | P | **Pn** | **10 11 53.4** | **+0.2** |
| | baz=17 | | | | | | |
| P30A | **Selden** | **16.74** | **25** | P | **P** | **10 11 57.5** | **+0.2** |
| | baz=17 | | | | | | |
| ELK | **Elko** | **16.82** | **344** | *e*Pn | **P** | **10 11 58.1** | **-0.2** |
| | 23nm,1.3s | | | | | | |
| MIAR | **Mount Ida** | **16.89** | **51** | P | **P** | **10 11 58.3** | **-0.5** |
| | baz=17 | | | | | | |
| T36A | **Boggs Farm, Ca** | **16.93** | **40** | P | **P** | **10 11 59.2** | **0.0** |
| | baz=17 | | | | | | |
| PHWY | **Pilot Hill** | **16.95** | **10** | *e*Pn | **P** | **10 12 00.1** | **+0.3** |
| | 18nm,1.1s | | | | | | |
| HWUT | **Hardware Ranch** | **17.05** | **354** | *e*Pn | **Pn** | **10 11 59.8** | **+0.9** |
| | 22nm,1.1s | | | | | | |
| O29A | **4D Ranch, Culb** | **17.05** | **23** | P | **P** | **10 12 00.8** | **+0.2** |
| | baz=17 | | | | | | |
| R36A | **Gordon, Harris** | **18.02** | **37** | P | **Pn** | **10 12 10.9** | **0.0** |
| | baz=18 | | | | | | |
| BW06 | **Boulder Array** | **18.10** | **359** | *e*Pn | **Pn** | **10 12 10.9** | **-1.1** |
| BW06 | | | | *e*Pn | **P** | **10 12 12.0** | **-0.5** |
| Q35A | **Mercer Eighty,** | **18.12** | **35** | P | **Pn** | **10 12 10.5** | **-1.6** |
| | baz=18 | | | | | | |
| K22A | **Casper** | **18.14** | **7** | P | **Pn** | **10 12 12.8** | **+0.4** |
| | baz=18 | | | | | | |
| K22A | **Casper** | **18.14** | **7** | *e*Pn | **P** | **10 12 13.2** | **+0.4** |
| | 24nm,1.2s | | | | | | |
| O32A | **Brockman Farm,** | **18.15** | **28** | P | **Pn** | **10 12 11.7** | **-0.8** |
| | baz=18 | | | | | | |
| P34A | **Walnut Farm, R** | **18.24** | **32** | P | **Pn** | **10 12 12.8** | **-0.8** |
| | baz=18 | | | | | | |
| O33A | **Hebron** | **18.30** | **30** | P | **Pn** | **10 12 13.0** | **-1.3** |
| | baz=18 | | | | | | |
| SNOW | **Snow King Moun** | **18.83** | **357** | *e*P | **P** | **10 12 20.6** | **+0.1** |
| TPAW | **Teton Pass** | **18.87** | **356** | *e*P | **P** | **10 12 19.9** | **-1.1** |
| L29A | **Maesberg Ranch** | **18.89** | **21** | P | **Pn** | **10 12 21.3** | **-0.1** |
| | baz=19 | | | | | | |
| LOHW | **Long Hollow** | **18.98** | **357** | *e*P | **P** | **10 12 22.1** | **+0.1** |
| | 12nm,1.2s | | | | | | |
| FXWY | **Fox Creek** | **19.02** | **356** | *e*P | **Pn** | **10 12 24.7** | **+1.4** |
| | 12nm,0.9s | | | | | | |
| BGNE | **Belgrade** | **19.16** | **26** | P | **P** | **10 12 24.0** | **+0.2** |
| | baz=19 | | | | | | |
| K28A | **Ten Mile Ranch** | **19.21** | **18** | P | **P** | **10 12 24.5** | **0.0** |
| | baz=19 | | | | | | |
| IMW | **Indian Meadow** | **19.28** | **356** | *e*P | **Pn** | **10 12 26.7** | **+0.3** |
| | 19nm,1.0s | | | | | | |
| J26A | **Sides Ranch, S** | **19.34** | **14** | P | **P** | **10 12 26.0** | **+0.1** |
| | baz=19 | | | | | | |
| HLID | **Hailey** | **19.35** | **349** | *e*P | **P** | **10 12 26.4** | **+0.3** |
| | 9.9nm,0.9s | | | | | | |
| WVOR | **Wild Horse Val** | **19.36** | **339** | *e*P | **Pn** | **10 12 27.6** | **+0.3** |
| | 38nm,1.2s | | | | | | |
| FLWY | **Flagg Ranch** | **19.45** | **357** | *e*P | **P** | **10 12 28.2** | **+0.9** |
| | 14nm,1.0s | | | | | | |
| MOD | **Modoc** | **19.50** | **335** | *e*P | **Pn** | **10 12 29.6** | **+0.7** |
| | 38nm,1.2s | | | | | | |
| J27A | **Elkhorn Farm,** | **19.54** | **16** | P | **P** | **10 12 28.1** | **0.0** |
| | baz=20 | | | | | | |
| M33A | **Taylor Creek F** | **19.70** | **28** | P | **P** | **10 12 29.2** | **-0.5** |
| | baz=20 | | | | | | |
| N02D | **Trinity Center** | **19.77** | **329** | P | **Pn** | **10 12 32.3** | **+0.2** |
| | baz=20 | | | | | | |
| YFT | **Old Faithful** | **19.82** | **357** | *e*P | **Pn** | **10 12 34.1** | **+1.2** |
| | 26nm,1.3s | | | | | | |
| I25A | **Rochford** | **19.89** | **12** | P | **P** | **10 12 32.2** | **+0.2** |
| | baz=20 | | | | | | |
| J28A | **Allard Ranch,** | **19.90** | **18** | P | **P** | **10 12 32.3** | **+0.3** |
| | baz=20 | | | | | | |
| M04C | **Macdoel** | **20.02** | **332** | P | **P** | **10 12 34.6** | **+1.1** |
| | baz=20,SNR=6.4 | | | | | | |
| YMR | **Madison River** | **20.05** | **357** | *e*P | **P** | **10 12 34.9** | **+1.1** |
| | 19nm,0.9s | | | | | | |
| I26A | **New Underwood** | **20.08** | **14** | P | **P** | **10 12 34.4** | **+0.5** |
| | baz=20 | | | | | | |
| J08A | **Circle Bar Ran** | **20.15** | **340** | *e*P | Pn | 10 12 36.4 | -0.2 |
| | 40nm,1.1s | | | | | | |
| J29A | **Okreek** | **20.15** | **19** | P | **P** | **10 12 35.0** | **+0.4** |
| | baz=20 | | | | | | |
| QLMT | **Earthquake Lak** | **20.24** | **356** | *e*P | Pn | 10 12 38.8 | +1.0 |
| K32A | **Verdigre** | **20.29** | **25** | P | **P** | **10 12 36.6** | **+0.4** |
| | baz=20 | | | | | | |
| I27A | **Quinn** | **20.30** | **15** | P | **P** | **10 12 36.6** | **+0.3** |
| | baz=20 | | | | | | |
| MCMT | **McKenzie Canyo** | **20.36** | **353** | *e*P | Pn | 10 12 39.0 | -0.3 |
| I28A | **Midland** | **20.45** | **17** | P | **P** | **10 12 38.2** | **+0.2** |
| | baz=20 | | | | | | |
| RLMT | **Red Lodge** | **20.46** | **0** | P | **P** | **10 12 38.6** | **+0.4** |
| | baz=21 | | | | | | |
| H25A | **Fruitdale** | **20.50** | **12** | P | **P** | **10 12 38.9** | **+0.4** |
| | baz=21 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MSO** | **Missoula** 35nm,1.0s | **22.47** | **352** | *e*P | **P** | **10 13 00.2** | **+0.5** |
| **H33A** | **Prehn Over Nor** baz=22 | **22.48** | **24** | P | **P** | **10 12 58.5** | **-1.3** |
| **E26A** | **Carlson Angus** baz=23 | **22.49** | **12** | P | **P** | **10 12 59.2** | **-0.7** |
| **E27A** | **Carson** baz=23,SNR=5.1 | **22.64** | **14** | P | **P** | **10 13 00.8** | **-0.6** |
| **SLMT** | **Seeley Lake** | **22.82** | **353** | *e*P | **P** | **10 13 04.2** | **+0.7** |
| **OLIL** | **Olney** 25nm,0.8s | **22.83** | **47** | *e*P | **P** | **10 13 06.2** | **+2.8** |
| **E28A** | **Huff** baz=23 | **22.98** | **15** | P | **P** | **10 13 04.4** | **-0.6** |
| **D26A** | **Manning** baz=23,SNR=7.8 | **23.03** | **12** | P | **P** | **10 13 05.3** | **-0.3** |
| **SWMT** | **Swartz Lake** | **23.14** | **352** | *e*P | **P** | **10 13 07.2** | **+0.5** |
| **EGMT** | **Eagleton** baz=24,SNR=6.9 | **23.36** | **359** | P | **P** | **10 13 08.7** | **-0.3** |
| **EGMT** | **Eagleton** 46nm,1.2s | **23.36** | **359** | *e*P | **P** | **10 13 08.8** | **-0.2** |
| **E30A** | **Jud** baz=24 | **23.38** | **18** | P | **P** | **10 13 08.3** | **-0.8** |
| **C27A** | **Sayler Ranch,** baz=24 | **23.87** | **13** | P | **P** | **10 13 13.2** | **-0.7** |
| **G36A** | **St. Michael** baz=24 | **24.13** | **28** | P | **P** | **10 13 15.6** | **-0.7** |
| **DGMT** | **Dagmar** baz=24 | **24.15** | **8** | P | **P** | **10 13 15.6** | **-0.9** |
| **NEW** | **Newport** 24nm,0.8s,baz=173,slow=11,SNR=13 | **24.39** | **347** | P | **P** | **10 13 18.1** | **-0.6** |
| **NEW** | **Newport** baz=24,SNR=17 | **24.39** | **347** | P | **P** | **10 13 18.5** | **-0.3** |
| **NEW** | **Newport** 40nm,1.0s | **24.39** | **347** | *e*P | **P** | **10 13 18.8** | **+0.1** |
| **MDND** | **Maddock** baz=24 | **24.44** | **16** | P | **P** | **10 13 18.5** | **-0.6** |
| **B27A** | **Peters Farms,** baz=25 | **24.58** | **13** | P | **P** | **10 13 19.2** | **-1.2** |
| **C30A** | **Mose, Pekin** baz=25 | **24.60** | **18** | P | **P** | **10 13 19.9** | **-0.7** |
| **TKL** | **Tuckaleechee C** 7.1nm,0.9s,baz=213,slow=14,SNR=4.2 | **24.62** | **57** | P | **P** | **10 13 18.5** | **-2.4** |
| **WALA** | **Waterton Lakes** 42nm,1.0s | **24.66** | **353** | *e*P | **P** | **10 13 21.2** | **0.0** |
| **B28A** | **Dugan Ranch, T** baz=25,SNR=12 | **24.82** | **14** | P | **P** | **10 13 22.2** | **-0.4** |
| **C31A** | **Landman Farms,** baz=25 | **24.89** | **19** | P | **P** | **10 13 22.6** | **-0.6** |
| **A26A** | **Wade Farm, Ken** baz=25 | **24.90** | **11** | P | **P** | **10 13 23.0** | **-0.3** |
| **E35A** | **Pequot Lakes** baz=25 | **24.95** | **25** | P | **P** | **10 13 22.9** | **-0.9** |
| **B29A** | **Wagenman Farm,** baz=25 | **25.07** | **16** | P | **P** | **10 13 24.0** | **-0.9** |
| **A27A** | **Ledoux Ranch,** baz=25,SNR=7.3 | **25.11** | **13** | P | **P** | **10 13 24.3** | **-0.9** |
| **A28A** | **Rude Farm, Bot** baz=25 | **25.27** | **14** | P | **P** | **10 13 25.5** | **-1.2** |
| **B30A** | **Myrvik Farm, E** baz=25,SNR=6.0 | **25.32** | **17** | P | **P** | **10 13 26.5** | **-0.7** |
| **B31A** | **Greenbush Farm** baz=26 | **25.49** | **18** | P | **P** | **10 13 27.7** | **-0.9** |
| **A29A** | **Manning Farm,** baz=26,SNR=5.7 | **25.53** | **16** | P | **P** | **10 13 28.0** | **-1.0** |
| **A30A** | **Hoffart Farm,** baz=26 | **25.78** | **17** | P | **P** | **10 13 30.9** | **-0.4** |
| **B32A** | **Ashes, Strandq** baz=26 | **25.79** | **20** | P | **P** | **10 13 30.4** | **-1.0** |
| **C35A** | **Jirik Farms, M** baz=26 | **26.06** | **24** | P | **P** | **10 13 32.6** | **-1.2** |
| **D37A** | **Cotton** baz=26 | **26.22** | **27** | P | **P** | **10 13 34.4** | **-0.9** |
| **EYMN** | **Ely** baz=27 | **27.23** | **27** | P | **P** | **10 13 43.1** | **-1.3** |
| **EDM** | **Edmonton** 81nm,1.9s | **28.73** | **355** | *e*P | **P** | **10 13 57.0** | **-0.8** |
| **DLBC** | **Dease Lake** 16nm,1.0s | **36.85** | **342** | *e*P | **P** | **10 15 10.0** | **+1.4** |
| **YKA** | **Yellowknife Ar** 2.7nm,0.9s,baz=171,slow=8.1,SNR=5.2 | **38.03** | **356** | P | **P** | **10 15 17.2** | **-1.2** |
| **OTAV** | **Otavalo** 34nm,1.7s | **38.48** | **124** | *e*P | **P** | **10 15 25.0** | **+1.7** |
| **DAWY** | **Dawson** 7.1nm,0.9s | **44.07** | **342** | *e*P | **P** | **10 16 09.1** | **+0.8** |
| **IL1** | **Eielson Array** | **46.88** | **339** | *e*P | **P** | **10 16 30.3** | **-0.1** |
| **ILAR** | **Eielson Array** 5.9nm,0.9s,baz=150,slow=7.0,SNR=19 | **46.88** | **339** | P | **P** | **10 16 30.4** | **-0.1** |
| **MCK** | **McKinley** 10.0nm,1.0s | **46.92** | **337** | *e*P | **P** | **10 16 31.4** | **+0.6** |
| **TRF** | **Thorofare Moun** 30nm,0.8s | **47.24** | **336** | *e*P | **P** | **10 16 34.1** | **+0.6** |
| **KTH** | **Kantishna Hill** 16nm,1.0s | **47.53** | **336** | *e*P | **P** | **10 16 35.2** | **-0.4** |
| **PPLA** | **Purkeypile** 45nm,1.2s | **47.63** | **335** | *e*P | **P** | **10 16 37.2** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** 12nm,0.8s | **47.87** | **337** | *e*P | **P** | **10 16 37.8** | **-0.3** |
| **SAML** | **Samuel** 8.6nm,0.9s | **56.02** | **121** | *e*P | **P** | **10 17 38.2** | **-1.3** |
| **CPUP** | **Villa Florida** 3.7nm,0.8s,baz=324,slow=7.5,SNR=7.5 | **71.33** | **132** | P | **P** | **10 19 20.9** | **+0.5** |
| **BDFB** | **Brasilia** 2.0nm,0.4s,baz=344,slow=2.8,SNR=4.3 | **71.95** | **117** | P | **P** | **10 19 25.0** | **+0.5** |
| **PETK** | **Petropavlovsk-** 5.4nm,0.9s,baz=84,slow=14,SNR=4.7 | **72.42** | **321** | P | **P** | **10 19 26.3** | **-0.4** |
| **ARCES** | **ARCESS Array B** 6.1nm,1.1s,baz=316,slow=3.3,SNR=4.3 | **80.67** | **15** | P | **P** | **10 20 11.8** | **-1.3** |
| **ESDC** | **Sonseca Array** 0.2nm,0.3s,baz=305,slow=6.4,SNR=3.0 | **85.57** | **48** | P | **P** | **10 20 39.4** | **+0.3** |
| **FINES** | **FINESS Array B** 4.1nm,1.0s,baz=324,slow=4.6,SNR=3.7 | **87.03** | **20** | P | **P** | **10 20 43.5** | **-2.2** |
| **WMQ** | **Urumqi** | **110.13** | **347** | *e*Pdif | **Pdif** | **10 22 30.0** | **-1.0** |
| WMQ | | | | PP | **PP** | **10 27 08.0** | **+3.1** |
| WMQ | | | | SKS | **SKSdf** | **10 33 40.0** | **-4.8** |
| WMQ | | | | SS | **SS** | **10 42 30.0** | **0.0** |
| WMQ | 12nm,9.0s | | | PPMZ | | | |
| WMQ | 100nm,20.0s | | | LN | | | |
| WMQ | 110nm,20.0s | | | LE | | | |
| WMQ | 97nm,20.0s | | | LZ | | | |
| **KSH** | **Kashi** | **116.01** | **355** | *e*PKP | **PKPdf** | **10 26 45.8** | **+1.9** |
| KSH | | | | *e*PP | PP | 10 27 54.0 | +7.3 |
| KSH | 66nm,4.2s | | | PPMZ | | | |
| **CD2** | **Chengdu** | **116.34** | **328** | PKP | **PKPdf** | **10 26 43.5** | **-1.2** |
| **WRA** | **Warramunga Arr** 0.4nm,1.0s,baz=62,slow=1.8,SNR=3.6 | **121.35** | **261** | PKP | **PKPdf** | **10 26 55.5** | **+1.0** |
| **ASAR** | **Alice Springs** 0.2nm,0.8s,baz=90,slow=1.9,SNR=3.5 | **122.76** | **257** | PKP | **PKPdf** | **10 26 58.1** | **+1.0** |

*JMA **25** 10:12:16.4±0.2,22.°70N×121.°59E,h0km,M3.5*
*ISCJB **25** 10:12:17.4±0.4,22.°64N±0.°02×121.°25E±0.°02,h56km±5km,*
*Error ellipse: s-maj=3.7km s-min=3.1km az=9.0*
*TAP **25** 10:12:17.2,22.°65N×121.°14E,h60km,ML3.5,B*
**ISC 25 10:12:18.2±1.2,22.°64N±0.°03×121.°23E±0.°03,h51km±7km,**
**n57,σ0s84/102,6C-3D,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TTN** | **Taitung** baz=1.0 | **0.13** | **326** | *e*P | **Pn** | **10 12 26.3** | **0.0** |
| **TWG** | **Pinlang** baz=350 | **0.23** | **321** | ⇑*i*P | **Pn** | **10 12 26.6** | **-0.2** |
| TWG | | | | *i* S | **Sn** | **10 12 33.3** | **+0.2** |
| **ECL** | **Taimali** baz=250 | **0.26** | **260** | P | **Pn** | **10 12 26.6** | **-0.4** |
| ECL | | | | S | **Sn** | **10 12 33.2** | **-0.1** |
| **TAW** | **Tawu** baz=209 | **0.42** | **227** | *i* P | **Pn** | **10 12 28.2** | **-0.4** |
| TAW | | | | *i* S | **Sn** | **10 12 36.1** | **+0.1** |
| **EAST** | **Anshuo** baz=219 | **0.44** | **234** | ⇓*i*P | **Pn** | **10 12 28.6** | **-0.3** |
| EAST | | | | S | **Sn** | **10 12 36.3** | **-0.2** |
| **CHKT** | **Chengkung** baz=26 | **0.47** | **16** | ⇑*i*P | **Pn** | **10 12 29.3** | **+0.1** |
| CHKT | | | | S | **Sn** | **10 12 38.0** | **+1.0** |
| **SSD** | **Sandimen** baz=281 | **0.56** | **281** | *e*P | **Pn** | **10 12 29.9** | **-0.3** |
| SSD | | | | *e*S | **Sn** | **10 12 38.7** | **-0.2** |
| **ELDTW** | **Lidau** baz=356 | **0.58** | **340** | ⇑*i*P | **Pn** | **10 12 30.4** | **-0.2** |
| ELDTW | | | | *e*S | **Sn** | **10 12 41.4** | **+2.0** |
| **SCZT** | **Fangliau** baz=234 | **0.62** | **244** | ⇓*i*P | **Pn** | **10 12 30.4** | **-0.6** |
| SCZT | | | | *e*S | **Sn** | **10 12 39.2** | **-1.1** |
| **LAY** | **Lan-yu** baz=153 | **0.67** | **153** | *e*P | **Pn** | **10 12 30.7** | **-0.9** |
| LAY | | | | *e*S | **Sn** | **10 12 41.2** | **-0.2** |
| **STYT** | **Tauyuan** baz=326 | **0.67** | **320** | *e*P | **Pn** | **10 12 31.5** | **-0.2** |
| STYT | | | | *e*S | **Sn** | **10 12 41.9** | **+0.3** |
| **SGLT** | **Jiouru** baz=277 | **0.69** | **277** | *e*P | **Pn** | **10 12 32.0** | **+0.3** |
| **TWF1** | **Yuli** baz=17 | **0.71** | **5** | *e*P | **Pn** | **10 12 31.1** | **-1.0** |
| **SGST** | **Jiashian** baz=310 | **0.74** | **306** | P | **Pn** | **10 12 32.1** | **-0.4** |
| SGST | | | | *e*S | **Sn** | **10 12 43.1** | **+0.3** |
| **TWM1** | **Shoushan** baz=285 | **0.76** | **284** | *e*P | **Pn** | **10 12 33.2** | **+0.4** |
| TWM1 | | | | *e*S | **Sn** | **10 12 44.0** | **+0.4** |
| **HEN** | **Hengchun** baz=205 | **0.78** | **216** | *e*P | **Pn** | **10 12 32.7** | **-0.3** |
| HEN | | | | S | **Sn** | **10 12 43.8** | **0.0** |
| **TSEB** | **Hengchuen, Pin** baz=197 | **0.80** | **202** | *e*P | **Pn** | **10 12 33.6** | **+0.4** |
| TSEB | | | | *e*S | **Sn** | **10 12 45.5** | **+1.2** |
| **TWK1** | **Hengchun** baz=200 | **0.80** | **209** | ⇓P | **Pn** | **10 12 32.9** | **-0.4** |
| TWK1 | | | | *e*S | **Sn** | **10 12 44.4** | **+0.2** |
| **WTP** | **Ta-pu** baz=321 | **0.82** | **317** | ⇑*i*P | **Pn** | **10 12 33.2** | **-0.4** |
| WTP | | | | *e*S | **Sn** | **10 12 45.1** | **+0.2** |
| **CHN1** | **Nanshi** baz=314 | **0.84** | **310** | ⇑P | **Pn** | **10 12 33.3** | **-0.5** |
| CHN1 | | | | S | **Sn** | **10 12 45.1** | **-0.2** |
| **KAU** | **Kaohsiung** baz=263 | **0.85** | **265** | *e*P | **Pn** | **10 12 36.5** | **+2.5** |
| **TWP** | **Hsiaoliuchiu** baz=259 | **0.85** | **250** | *e*P | **Pn** | **10 12 35.4** | **+1.4** |
| TWP | | | | *e*S | **Sn** | **10 12 47.0** | **+1.4** |
| **EHY** | **Hungye** baz=19 | **0.86** | **6** | *e*P | **Pn** | **10 12 33.1** | **-1.1** |
| EHY | | | | *e*S | **Sn** | **10 12 44.7** | **-1.1** |
| **YUS** | **Yu-Shan** baz=349 | **0.88** | **343** | *e*P | **Pn** | **10 12 35.1** | **+0.3** |
| **CHN3** | **Shinhua** baz=301 | **0.90** | **299** | *e*P | **Pn** | **10 12 34.5** | **-0.2** |
| **CHN4** | **Tsaushan** baz=325 | **0.92** | **320** | ⇑*e*P | **Pn** | **10 12 34.3** | **-0.5** |
| CHN4 | | | | *e*S | **Sn** | **10 12 46.8** | **-0.2** |
| **TWK** | **Hsinying** baz=317 | **0.92** | **312** | *e*P | **Pn** | **10 12 34.1** | **-0.8** |
| TWK | | | | *e*S | **Sn** | **10 12 46.9** | **-0.3** |
| **ALS** | **Alishan** baz=341 | **0.95** | **336** | P | **Pn** | **10 12 35.4** | **-0.1** |
| ALS | | | | *e*S | **Sn** | **10 12 48.8** | **+0.6** |
| **TAI1** | **Yung-k'ang** baz=295 | **1.00** | **293** | *e*P | **Pn** | **10 12 35.7** | **-0.2** |
| **CHN5** | **Tsauling** baz=326 | **1.07** | **332** | *e*P | **Pn** | **10 12 36.6** | **-0.4** |
| CHN5 | | | | *e*S | **Sn** | **10 12 50.8** | **-0.2** |
| **SCLT** | **Jiali** baz=302 | **1.09** | **299** | *e*P | **Pn** | **10 12 36.1** | **-1.1** |
| SCLT | | | | *e*S | **Sn** | **10 12 51.1** | **0.0** |
| **WDT** | **Danda** baz=356 | **1.11** | **356** | *i* P | **Pn** | **10 12 38.0** | **+0.2** |
| WDT | | | | S | **Sn** | **10 12 52.5** | **+0.4** |
| **CHY** | **Chiayi** baz=323 | **1.13** | **319** | *e*P | **Pn** | **10 12 36.7** | **-1.0** |
| CHY | | | | *e*S | **Sn** | **10 12 51.2** | **-0.9** |
| **ESL** | **Shilin** baz=21 | **1.18** | **9** | *e*P | **Pn** | **10 12 37.1** | **-1.2** |
| ESL | | | | *e*S | **Sn** | **10 12 51.3** | **-2.1** |
| **SMLT** | **Sun Moon Lake** baz=350 | **1.27** | **346** | *e*P | **Pn** | **10 12 39.6** | **-0.1** |
| SMLT | | | | *e*S | **Sn** | **10 12 57.7** | **+2.0** |
| **TYC** | **Yuchr** baz=349 | **1.30** | **345** | *e*P | **Pn** | **10 12 39.8** | **-0.2** |
| TYC | | | | *e*S | **Sn** | **10 12 57.2** | **+0.9** |
| **WNT** | **Mingjian** baz=331 | **1.33** | **338** | *e*P | **Pn** | **10 12 41.2** | **+0.8** |
| WNT | | | | *e*S | **Sn** | **10 12 56.9** | **0.0** |
| **WSF** | **Szhu** baz=320 | **1.35** | **317** | *e*P | **Pn** | **10 12 39.5** | **-1.2** |
| WSF | | | | *e*S | **Sn** | **10 12 56.2** | **-1.4** |
| **HWA** | **Hwalien** baz=18 | **1.37** | **15** | *e*P | **Pn** | **10 12 40.3** | **-0.7** |
| **TWD** | **Chiawan** baz=17 | **1.47** | **13** | *e*P | **Pn** | **10 12 42.0** | **-0.3** |
| **WHF** | **Hehuan Shan** baz=12 | **1.49** | **1** | *e*P | **Pn** | **10 12 43.1** | **0.0** |
| WHF | | | | *e*S | **Sn** | **10 13 01.3** | **-0.3** |
| **WDGT** | **Dungji** baz=294 | **1.57** | **293** | *e*P | **Pn** | **10 12 41.2** | **-2.4** |
| **TWQ1** | **Liyutan** baz=338 | **1.75** | **346** | *e*P | **Pn** | **10 12 45.8** | **-0.3** |
| TWQ1 | | | | *e*S | **Sn** | **10 13 07.4** | **+0.2** |
| **NNS** | **Nan Shan** baz=17 | **1.79** | **4** | *e*P | **Pn** | **10 12 47.0** | **+0.1** |
| NNS | | | | *e*S | **Sn** | **10 13 08.3** | **-0.2** |
| **PNG** | **Penghu** baz=302 | **1.79** | **301** | *e*P | **Pn** | **10 12 44.7** | **-2.0** |
| **NSY** | **Sanyi** baz=338 | **1.81** | **346** | *e*P | **Pn** | **10 12 49.0** | **+2.0** |
| **NSTT** | **Nanjuang** baz=356 | **1.99** | **354** | *e*P | **Pn** | **10 12 51.2** | **+1.8** |
| NSTT | | | | *e*S | **Sn** | **10 13 15.2** | **+2.0** |
| **ENTT** | **Nioudou** baz=18 | **2.01** | **9** | *e*P | **Pn** | **10 12 49.9** | **+0.2** |
| ENTT | | | | *e*S | **Sn** | **10 13 13.6** | **-0.1** |
| **NSK** | **Sanguang** baz=351 | **2.03** | **3** | *e*P | **Pn** | **10 12 50.6** | **+0.6** |
| NSK | | | | *e*S | **Sn** | **10 13 14.2** | **+0.1** |
| **TWC** | **Suao** baz=10.0 | **2.04** | **16** | *e*P | **Pn** | **10 12 50.8** | **+0.8** |
| TWC | | | | *e*S | **Sn** | **10 13 14.5** | **+0.2** |
| **TWE** | **Neicheng** baz=19 | **2.11** | **11** | *e*P | **Pn** | **10 12 51.0** | **0.0** |
| TWE | | | | *e*S | **Sn** | **10 13 16.0** | **0.0** |
| **JYNG** | **Yonagunijimaku** | **2.39** | **41** | P | **Pn** | **10 12 55.6** | **+0.7** |
| JYNG | | | | *e*S | **Sn** | **10 13 22.3** | **-0.7** |
| **HATJ** | **Hateruma jima** | **2.75** | **59** | P | **Pn** | **10 12 59.8** | **-0.1** |
| HATJ | | | | *e*S | **Sn** | **10 13 31.9** | **0.0** |
| **JKRS** | **Kuro-shima** | **3.01** | **58** | P | **Pn** | **10 13 03.6** | **+0.3** |
| JKRS | | | | *e*S | **Sn** | **10 13 38.3** | **+0.2** |
| **JIJ** | **Ishigaki jima** | **3.18** | **57** | P | **Pn** | **10 13 05.5** | **-0.2** |
| JIJ | | | | *e*S | **Sn** | **10 13 41.8** | **-0.5** |
| **JISG** | **Ishigakijimahi** | **3.43** | **55** | P | **Pn** | **10 13 09.0** | **-0.1** |
| JISG | | | | *e*S | **Sn** | **10 13 48.6** | **+0.2** |
| **JTJ** | **Tarama** | **3.75** | **57** | P | **Pn** | **10 13 14.0** | **+0.4** |
| JTJ | | | | *e*S | **Sn** | **10 13 56.6** | **+0.1** |

*CSEM **25** 10:18:31.1,39.°53N×29.°64W,h5km,ML2.7,After PDA*
**PDA 25 10:18:31.1±0.7,39.°53N×29.°64W,h5km,MD3.6,ML2.7,**
**Error ellipse: s-maj=8.7km s-min=6.1km az=72.0,**
**Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCED** | **Cedros** | **1.16** | **141** | *e*S | Sg | 10 19 02.0 | -6.3 |
| PCED | 26nm,0.1s | | | A | A | 10 19 03.8 | |
| **PCED** | **Cedros** | **1.16** | **141** | *e*S | Sg | 10 19 02.0 | -6.3 |
| **CALA** | **Caldeira** | **1.19** | **142** | *e*S | Sg | 10 19 03.5 | -6.2 |
| **CALA** | **Caldeira** | **1.19** | **142** | *e*S | Sg | 10 19 03.5 | -6.2 |
| **ROSA** | **Rosais** | **1.35** | **126** | *e*P | Pn | 10 18 51.9 | -4.8 |
| ROSA | | | | *e*S | Sb | 10 19 07.2 | -7.4 |
| ROSA | 24nm,0.1s | | | A | A | 10 19 09.4 | |
| **ROSA** | **Rosais** | **1.35** | **126** | *e*P | Pn | 10 18 51.9 | -4.8 |
| ROSA | | | | *e*S | Sb | 10 19 07.2 | -7.4 |
| **PGRA** | **Graciosa** | **1.38** | **111** | *e*S | Sb | 10 19 07.8 | -7.5 |
| PGRA | 26nm,0.5s | | | A | A | 10 19 10.7 | |
| **PGRA** | **Graciosa** | **1.38** | **111** | *e*S | Sb | 10 19 07.8 | -7.5 |
| **PCAN** | **Candelaria** | **1.39** | **139** | *e*P | Pn | 10 18 52.1 | -5.1 |
| PCAN | | | | *e*S | Sb | 10 19 08.4 | -7.3 |
| PCAN | 79nm,0.1s | | | A | A | 10 19 10.4 | |
| **PCAN** | **Candelaria** | **1.39** | **139** | *e*P | Pn | 10 18 52.1 | -5.1 |
| PCAN | | | | *e*S | Sb | 10 19 08.4 | -7.3 |
| **PICO** | **Pico** | **1.39** | **137** | *e*P | Pn | 10 18 52.3 | -5.0 |
| PICO | | | | *e*S | Sb | 10 19 08.6 | -7.3 |
| **PICO** | **Pico** | **1.39** | **137** | *e*P | Pn | 10 18 52.3 | -5.0 |
| PICO | | | | *e*S | Sb | 10 19 08.6 | -7.3 |

**IDC 25 10:31:54.0±4.3,28.°08S×74.°83E,h0km,mb3.8/4,**
**mb1 4.0/4,mb1mx3.5/48,mbtmp3.8/4,Error ellipse:**
**s-maj=120.6km s-min=36.0km az=49.0,Mid-Indian**
**Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S2** | **Diego Garcia H** baz=176,slow=76,SNR=34 | **20.44** | **353** | T | T | 10 58 06.3 | |
| **H08S1** | **Diego Garcia H** baz=176,slow=76,SNR=30 | **20.45** | **353** | T | T | 10 58 04.9 | |
| **H08S3** | **Diego Garcia H** baz=176,slow=76,SNR=29 | **20.46** | **353** | T | T | 10 58 07.0 | |
| **H01W2** | **Cape Leeuwin H** baz=265 | **34.04** | **112** | T | T | 11 14 52.1 | |
| **H01W3** | **Cape Leeuwin H** baz=265 | **34.04** | **112** | T | T | 11 15 00.5 | |
| **H01W1** | **Cape Leeuwin H** baz=265 | **34.05** | **112** | T | T | 11 15 01.3 | |
| **CMAR** | **Chiang Mai Arr** 0.4nm,0.3s,baz=210,slow=7.1,SNR=2.6 | **51.81** | **30** | P | P | 10 41 03.8 | -0.1 |
| **ASAR** | **Alice Springs** 0.6nm,0.8s,baz=250,slow=6.3,SNR=14 | **52.90** | **100** | P | P | 10 41 11.7 | -0.4 |
| **WRA** | **Warramunga Arr** 1.1nm,0.8s,baz=252,slow=7.2,SNR=7.2 | **54.51** | **95** | P | P | 10 41 24.2 | +0.3 |
| **BVAR** | **Borovoye Array** 0.8nm,0.5s,baz=166,slow=7.3,SNR=5.2 | **80.85** | **357** | P | P | 10 44 09.4 | 0.0 |

*JMA **25** 11:10:07.9±0.3,44.°06N×148.°26E,h0km,M3.8*
*SKHL **25** 11:10:08.1±0.0,44.°47N×148.°57E,h38km±2km,mb3.8/3*
**ISC 25 11:10:05.0±3.8,44.°38N±0.°09×148.°8E±0.°2,h35km,n12,**
**σ1s91/21,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **1.08** | **323** | *i* P | **Pn** | **11 10 23.5** | **-0.1** |
| KUR | 31nm,0.3s | | | AMB | AMB | 11 10 25.6 | |
| KUR | 32nm,0.3s | | | AMB | AMB | 11 10 25.6 | |
| KUR | 78nm,0.3s | | | AMB | AMB | 11 10 25.6 | |
| KUR | | | | *i* S | **Sn** | **11 10 35.1** | **-2.2** |
| KUR | 240nm,0.2s | | | A | A | 11 10 36.0 | |
| KUR | 183nm,0.2s | | | A | A | 11 10 36.0 | |
| **SHO** | **Shikotan** | **1.50** | **251** | *e*P | **Pn** | **11 10 30.1** | **+0.7** |
| SHO | 14nm,0.4s | | | AMB | AMB | 11 10 31.3 | |
| SHO | | | | *i* S | **Sn** | **11 10 46.6** | **-1.1** |
| SHO | 232nm,0.4s | | | A | A | 11 10 47.7 | |
| SHO | 104nm,0.4s | | | A | A | 11 10 47.7 | |
| **YUK** | **Yuzh-Kuril'sk** | **2.13** | **262** | *i* P | **Pn** | **11 10 39.5** | **+1.4** |
| YUK | 20nm,0.2s | | | AMB | AMB | 11 10 45.7 | |
| YUK | 16nm,0.2s | | | AMB | AMB | 11 10 45.7 | |
| YUK | 38nm,0.2s | | | AMB | AMB | 11 10 45.7 | |
| YUK | | | | *i* S | **Sn** | **11 11 03.1** | **-0.2** |
| YUK | 175nm,0.4s | | | A | A | 11 11 08.4 | |
| YUK | 58nm,0.4s | | | A | A | 11 11 08.4 | |
| **NEM2** | **Nemuro 2** | **2.42** | **246** | P | **Pn** | **11 10 42.8** | **+0.7** |
| NEM2 | | | | *e*S | **Sn** | **11 11 08.6** | **-1.9** |
| **JRA** | **Rausu** | **2.68** | **262** | P | **Pn** | **11 10 47.3** | **+1.7** |
| **JNK** | **Nakash** | **3.04** | **256** | P | **Pn** | **11 10 52.3** | **+1.7** |
| JNK | | | | *e*S | **Sn** | **11 11 25.0** | **-0.8** |
| **JAK** | **Akkeshi** | **3.27** | **246** | P | **Pn** | **11 10 54.9** | **+1.1** |
| JAK | | | | *e*S | **Sn** | **11 11 29.1** | **-2.4** |
| **JAR** | **Ashorobuto** | **3.79** | **255** | P | **Pn** | **11 11 03.0** | **+2.1** |
| JAR | | | | *e*S | **Sn** | **11 11 44.0** | **-0.2** |
| **JCH** | **Churui** | **4.32** | **248** | P | **Pn** | **11 11 10.0** | **+1.8** |
| JCH | | | | *e*S | **Sn** | **11 11 56.4** | **-1.0** |
| **JNBK** | **Urakawa-nobuka** | **4.88** | **247** | P | **Pn** | **11 11 17.9** | **+2.1** |
| JNBK | | | | *e*S | **Sn** | **11 12 09.9** | **-1.1** |
| **YSS** | **Yuzh-Sakhalins** | **4.95** | **303** | *e*P | **Pn** | **11 11 19.0** | **+2.2** |
| **JANG** | **Nango** | **6.71** | **236** | *e*S | **Sn** | **11 12 51.7** | **-4.5** |

**KRSC 25 11:11:53.3±2.7,49.°84N×156.°11E,h148km±40km,ML3.7,**
**Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAU** | **Pauzhetka** | **1.69** | **15** | *e*P | Pn | 11 12 24.6 | 0.0 |
| PAU | | | | *e*S | Sn | 11 12 49.9 | +1.1 |
| **RUS** | **Russkaya** | **3.00** | **29** | *e*P | Pn | 11 12 41.7 | +1.2 |
| RUS | | | | *e*S | Sn | 11 13 17.7 | +0.6 |
| **KOK** | **Koryaka** | **3.80** | **24** | *e*P | Pn | 11 12 53.1 | +2.2 |
| **AVH** | **Avacha** | **3.80** | **25** | *e*P | Pn | 11 12 53.6 | +2.7 |
| **SMAR** | **Somma** | **3.82** | **25** | *e*P | Pn | 11 12 54.9 | +3.6 |
| **SDLR** | **Sedlovina** | **3.85** | **26** | *e*P | Pn | 11 12 53.6 | +2.0 |
| **KRX** | **Arik** | **3.86** | **23** | *e*P | Pn | 11 12 53.9 | +2.1 |
| **SPN** | **Mys Shipunski** | **4.08** | **35** | *e*P | Pn | 11 12 56.8 | +2.4 |
| SPN | | | | *e*S | Sn | 11 13 43.9 | +2.0 |
| **MKZ** | **Mys Kozlova** | **5.85** | **34** | *e*P | Pn | 11 13 19.5 | +1.7 |
| **KBTR** | **Krutoberegovo** | **7.55** | **30** | *e*P | Pn | 11 13 41.5 | +1.0 |

**IDC 25 11:23:20.2±3.4,3.°39S×102.°62E,h256km±35km,mb3.1/3,**
**mb1 3.4/5,mb1mx3.0/46,mbtmp3.9/5,Error ellipse:**
**s-maj=66.5km s-min=17.8km az=51.0,Southern**
**Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSI** | **Prapat** 1.2nm,0.3s,baz=158,slow=9.0,SNR=5.6 | **7.17** | **329** | P | Pn | 11 25 01.9 | -1.3 |
| **KAPI** | **Kappang** 1.0nm,0.3s,baz=252,slow=20,SNR=4.1 | **17.16** | **96** | P | P | 11 27 03.9 | +0.4 |
| **CMAR** | **Chiang Mai Arr** 0.8nm,0.5s,baz=182,slow=9.3,SNR=6.6 | **22.01** | **351** | P | P | 11 27 54.0 | +0.2 |
| **WRA** | **Warramunga Arr** 0.4nm,0.3s,baz=297,slow=9.5,SNR=28 | **35.04** | **121** | P | P | 11 29 48.2 | -1.0 |
| **ASAR** | **Alice Springs** 1.4nm,0.4s,baz=302,slow=7.6,SNR=57 | **36.33** | **127** | P | P | 11 30 00.5 | +0.4 |
| **TXAR** | **Lajitas Array** 0.1nm,0.4s,baz=309,slow=2.9,SNR=3.5 | **144.11** | **41** | PKP | PKPbc | 11 42 25.4 | +0.5 |

*BJI **25** 12:05:19.6,0.°73S×125.°31E,h26km,mb5.5/74,mB5.8/50,*
*Ms5.3/85,Ms7 5.2/77*

NEIC **25** 12:05:28.9±0.1, 0.°07S×125.°06E, *h*37km, mb5.9/125, ME5.7, MS5.3/167, MW5.7, Error ellipse: s-maj=4.3km s-min=3.7km az=57.0, Moment Tensor Solution. s23 Moment tensor: Scale $10^{17}$Nm; $M_rr$=1.88; $M_{\theta\theta}$=1.57; $M_{\phi\phi}$=3.44; $M_{r\theta}$=1.95; $M_{\theta\phi}$=1.57; $M_{r\phi}$=1.56; Best double couple: $M_o$=4.20000×$10^{17}$ NP1:$\phi_s$129.00000°,δ51.00000°, λ28.00000°. NP2:$\phi_s$20.00000°,δ69.00000°,λ138.00000°. Principal axes: T 4.3100, Plg45.0000°, Azm337.0000°; N -0.2300, Plg43.0000°, Azm178.0000°; P -4.0700, Plg11.0000°, Azm78.0000°; Broadband fault plane solution: P waves. NP1:$\phi_s$232.00000°,δ22.00000°, λ116.00000°. NP2:$\phi_s$25.00000°,δ70.00000°,λ80.00000°. Principal axes: T Plg64.0000°, Azm279.0000°; N Plg0.0000°, Azm0.0000°; P Plg24.0000°, Azm123.0000°; Depth from synthetics of broadband displacement seismograms. Energy computed from BB mechanism.

NEIC Felt [III] at Luwuk and Manado and [II] at Tondano, Indonesia. Also felt at Bitung.

IDC **25** 12:05:28.2±1.5, 0.°11S×125.°10E, *h*35km±10km, mb5.2/27, mb1 5.2/29, mb1mx5.2/30, mbtmp5.4/29, ML5.0/2, MS5.1/28, Ms1 5.1/28, ms1mx4.9/37 Error ellipse: s-maj=11.7km s-min=8.9km az=54.0

AUST **25** 12:05:28.6±0.8, 0.°13S×125.°28E, *h*47km±8km, Error ellipse: s-maj=6.9km s-min=4.3km az=42.0

ISCJB **25** 12:05:28.9±0.3, 0.°20S±0.°02×125.°11E±0.°02, *h*58km±2km, mb5.8/235, MS5.3/223, Error ellipse: s-maj=2.6km s-min=2.5km az=140.7

GCMT **25** 12:05:28.9±0.1, 0.°25S×125.°32E, *h*38km, MW5.8/106, Moment Tensor Solution. s106,c219; s104,c281; Duration: 2s0 Moment tensor: Scale $10^{17}$Nm; $M_rr$=5.04±.06; $M_{\theta\theta}$=-2.48±.05; $M_{\phi\phi}$=-2.56±.06; $M_{r\theta}$=1.94±.07; $M_{\theta\phi}$=-3.33±.04; $M_{r\phi}$=3.36±.08; Best double couple: $M_o$=6.69800×$10^{17}$ NP1:$\phi_s$35.00000°,δ63.00000°, λ80.00000°. NP2:$\phi_s$236.00000°,δ29.00000°,λ108.00000°. Principal axes: T 6.3670, Plg70.0000°, Azm285.0000°; N 0.6630, Plg9.0000°, Azm40.0000°; P -7.0300, Plg17.0000°, Azm132.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.

KLM **25** 12:05:28.3, 0.°08S×125.°21E, *h*10km, mb5.7, ML6.0, MS7.6

MOS **25** 12:05:28.4±0.9, 0.°27N×124.°82E, *h*33km, mb6.0/75, MS5.2/57, Error ellipse: s-maj=7.9km s-min=4.6km az=111.7

DJA **25** 12:05:30.9±0.2, 0.°S±2.°×125.°5E±.°, *h*65km±3km, M5.7/59, mb5.7/59, mB6.1/59, MLv5.9/21, Mw(mB)5.8/59, Mwp5.7/20

**ISC 25 12:05:28.6**±0.3, **0.°12S**±0.°02×**125.°13E**±0.°03, **h41**km±2km, **h41**km:**pP-P,n1511,**σ1**9**31/1503, **mb5.8**/249, **MS5.3**/225, **72C-38D, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SANI** | **Sanana** | **2.10** | **156** | P | | **Pn** | **12 06 00.0** | **-1.3** |
| SANI | | | | S | | **Sn** | **12 06 29.5** | **+3.2** |
| **TNTI** | **Ternate** | **2.40** | **68** | P | | **Pn** | **12 06 06.3** | **+0.8** |
| TNTI | | | | S | | **Sn** | **12 06 36.3** | **+2.6** |
| **TNTI** | **Ternate** | **2.40** | **68** | *e*Pn | | **Pn** | **12 06 06.2** | **+0.8** |
| **LBMI** | **Labuha** | **2.42** | **102** | P | | **Pn** | **12 06 04.7** | **-1.1** |
| LBMI | | | | S | | **Sn** | **12 06 34.7** | **+0.5** |
| **LUWI** | **Luwuk** baz=2.7,SNR=277 | **2.53** | **249** | P | | **Pn** | **12 06 09.4** | **+2.2** |
| **LUWI** | **Luwuk** | **2.53** | **249** | P | | **Pn** | **12 06 09.5** | **+2.2** |
| LUWI | | | | S | | Sn | 12 06 49.7 | +13 |
| **LUWI** | **Luwuk** | **2.53** | **249** | *e*Pn | | **Pn** | **12 06 10.2** | **+2.9** |
| **NLAI** | **Namlea** | **3.67** | **148** | P | | **Pn** | **12 06 21.4** | **-1.5** |
| NLAI | | | | S | | **Sn** | **12 07 01.7** | **-3.3** |
| **SGSI** | **Sangihe** | **3.80** | **6** | P | | **Pn** | **12 06 27.7** | **+3.0** |
| **KDI** | **Kendari** | **4.57** | **213** | P | | **Pn** | **12 06 36.1** | **+0.9** |
| **AAI** | **Ambon** | **4.68** | **139** | P | | **Pn** | **12 06 36.5** | **-0.3** |
| **MSAI** | **Masohi** | **4.97** | **130** | P | | **Pn** | **12 06 40.7** | **0.0** |
| **PCI** | **Palu** 12μm,1.0s,87μm91μm97nm | **5.35** | **262** | P | | Pn | 12 06 49.4 | +3.4 |
| **BBSI** | **Bau Bau** 733nm,1.0s,11μm41μm5.8nm | **5.92** | **206** | P | | **Pn** | **12 06 55.8** | **+2.0** |
| **GSPH** | **General Santos** | **6.17** | **358** | *e*P | | Pn | 12 07 01.9 | +4.5 |
| **SWI** | **Sorong** 562nm,1.2s,8μm2.0nm | **6.17** | **97** | P | | **Pn** | **12 06 57.6** | **+0.3** |
| **SIJI** | **Sorong** 26nm,0.3s,baz=290,slow=12,SNR=115 | **6.18** | **97** | Pn | | **Pn** | **12 06 58.1** | **+0.7** |
| SIJI | | | | | | Sn | | |
| | 22nm,0.3s,baz=90,slow=20,SNR=2.9 | | | | | **Sn** | **12 08 08.3** | **+1.4** |
| **BNDI** | **Bandanaira** 2μm,0.9s,23μm114μm11nm | **6.47** | **133** | P | | **Pn** | **12 06 59.8** | **-1.6** |
| **MATI** | **Mati** | **7.11** | **9** | *e*P | | Pn | 12 07 15.9 | +5.7 |
| **DAV** | **Davao City (W)** 38nm,0.3s,baz=120,slow=2.0,SNR=15 | **7.15** | **4** | Pn | | Pn | 12 07 15.3 | +4.6 |
| DAV | | | | LR | | LR | 12 10 23.9 | |
| | comp=Z,53μm,19.0s,baz=191,slow=41 | | | | | | | |
| **DAV** | **Davao City (W)** | **7.15** | **4** | ⇓*e*P | | Pn | 12 07 18.4 | +7.6 |
| **DAV** | **Davao City (W)** | **7.15** | **4** | *e*Pn | | Pn | 12 07 17.2 | +6.4 |
| **DMPH** | **Davao City--Mi** | **7.16** | **3** | *i* P | | Pn | 12 07 21.5 | +11 |
| **BKSI** | **Bulukumba** 750nm,0.7s,12μm6.6nm | **7.19** | **224** | P | | **Pn** | **12 07 13.8** | **+2.5** |
| **KAPI** | **Kappang** 100nm,0.3s,baz=22,slow=5.3,SNR=99 | **7.25** | **228** | Pn | | **Pn** | **12 07 14.9** | **+2.9** |
| KAPI | | | | | | Sn | | |
| | 107nm,0.3s,baz=45,slow=23,SNR=9.6 | | | | | **Sn** | **12 08 35.5** | **+2.4** |
| KAPI | | | | LR | | LR | 12 10 49.2 | |
| | comp=Z,43μm,20.1s,baz=75,slow=44 | | | | | | | |
| **KAPI** | **Kappang** 4μm,0.4s | **7.25** | **228** | Pn | | **Pn** | **12 07 15.0** | **+2.9** |
| **CTBH** | **Cotabato--PC H** | **7.34** | **353** | ⇑*e*P | | Pn | 12 07 17.9 | +4.6 |
| **FAKI** | **Fak Fak** baz=7.5,SNR=170 | **7.64** | **111** | P | | Pn | 12 07 14.7 | -2.7 |
| **FAKI** | **Fak Fak** 359nm,0.7s,4μm53μm1.1nm | **7.64** | **111** | P | | Pn | 12 07 14.7 | -2.7 |
| **FAKI** | **Fak Fak** | **7.64** | **111** | *e*Pn | | **Pn** | **12 07 15.9** | **-1.5** |
| **BUKP** | **Musuan** | **7.94** | **359** | *e*P | | Pn | 12 07 27.0 | +5.4 |
| **PAGZ** | **Pagadian** | **8.10** | **348** | *e*P | | **Pn** | **12 07 26.9** | **+3.1** |
| **IPIL** | **Ipil** | **8.26** | **342** | *e*P | | **Pn** | **12 07 29.0** | **+3.0** |
| **BKB** | **Balikpapan** 2μm,1.4s,22μm79μm | **8.31** | **262** | P | | Pn | 12 07 31.7 | +5.0 |
| **BIPH** | **Bislig** | **8.34** | **8** | ⇓*e*P | | Pn | 12 07 31.7 | +4.7 |
| BIPH | | | | *e*S | | **Sn** | **12 09 02.3** | **+2.4** |
| MYLDM | **Lahad Datu** | **8.46** | **309** | ⇑P | | Pn | 12 07 33.9 | +5.2 |
| MYLDM | **Lahad Datu** | **8.46** | **309** | *e*Pn | | Pn | 12 07 33.8 | +5.2 |
| **TSM** | **Tawau** | **8.47** | **301** | ⇓P | | **Pn** | **12 07 31.4** | **+2.5** |
| **DCPH** | **Dipolog City** | **8.82** | **348** | *e*P | | Pn | 12 07 40.2 | +6.5 |
| **MMRI** | **Maumere** 416nm,1.6s,6μm31μm | **8.94** | **199** | P | | **Pn** | **12 07 37.4** | **+2.1** |
| **MMRI** | **Maumere** | **8.94** | **199** | *e*Pn | | **Pn** | **12 07 37.0** | **+1.7** |
| **BUTP** | **Butuan** | **9.04** | **3** | *e*P | | Pn | 12 07 41.8 | +5.1 |
| **KBKI** | **Kotabaru** 1μm,1.6s,11μm23μm | **9.50** | **250** | P | | Pn | 12 07 46.8 | +3.8 |
| **SOEI** | **Soe** 685nm,1.9s,10μm | **9.61** | **185** | P | | Pn | 12 07 48.4 | +3.8 |
| **SOEI** | **Soe** | **9.61** | **185** | *e*Pn | | Pn | 12 07 49.9 | +5.3 |
| **SDKM** | **Sandakan** | **9.77** | **306** | ⇑P | | **Pn** | **12 07 49.6** | **+2.9** |
| **SCPH** | **Surigao** | **9.84** | **2** | ⇑*e*P | | Pn | 12 07 52.5 | +4.9 |
| **SAUI** | **Saumlaki** 363nm,1.1s,7μm | **9.94** | **142** | P | | **Pn** | **12 07 49.6** | **+0.6** |
| **SAUI** | **Saumlaki** | **9.94** | **142** | *e*Pn | | **Pn** | **12 07 49.8** | **+0.8** |
| **BATI** | **Baumata** 16nm,0.3s,baz=276,slow=0.7,SNR=20 | **10.13** | **188** | Pn | | Pn | 12 07 57.5 | +5.9 |
| BATI | | | | LR | | LR | 12 13 37.7 | |
| | comp=Z,12μm,18.8s,baz=359,slow=48 | | | | | | | |
| **BATI** | **Baumata** 260nm,1.2s,3μm1μm | **10.13** | **188** | P | | Pn | 12 07 57.3 | +5.7 |
| **MSLP** | **Maasin** | **10.19** | **358** | *e*P | | Pn | 12 07 55.9 | +3.5 |
| **LLP** | **Lapu-Lapu** | **10.43** | **354** | *e*P | | Pn | 12 08 00.4 | +4.7 |
| LLP | | | | *e*S | | Sn | 12 10 13.6 | +22 |
| **KKM** | **Kota Kinabalu** baz=11,SNR=21 | **10.80** | **305** | P | | Pn | 12 08 05.0 | +4.1 |
| **KKM** | **Kota Kinabalu** | **10.80** | **305** | *e*Pn | | Pn | 12 08 04.4 | +3.5 |
| **BBKI** | **Banjar Baru** 944nm,1.4s,11μm | **10.81** | **252** | P | | Pn | 12 08 05.1 | +4.2 |
| **KDM** | **Kudat** | **10.83** | **310** | ⇑P | | Pn | 12 08 06.9 | +5.7 |
| **GUIM** | **Jordan** | **10.97** | **347** | *e*P | | Pn | 12 08 09.3 | +6.3 |
| **OCLP** | **Ormoc** | **11.11** | **357** | *e*P | | Pn | 12 08 11.3 | +6.3 |
| **PLP** | **Palo** | **11.21** | **359** | ⇓*e*P | | Pn | 12 08 09.8 | +3.4 |
| **CUYO** | **Cuyo Island** | **11.64** | **340** | *e*P | | Pn | 12 08 17.7 | +5.4 |
| **RCP** | **Roxas** | **11.84** | **349** | ⇑*e*P | | Pn | 12 08 23.3 | +8.3 |
| **I39PW** | **PALAU INFRASON** baz=237,slow=318,SNR=0.7 | **12.08** | **51** | *i* | | | 13 21 50.0 | |
| **BTM** | **Bintulu** | **12.48** | **285** | ⇓P | | Pn | 12 08 28.1 | +4.3 |
| **ENPP** | **El Nido** | **12.60** | **333** | *e*P | | Pn | 12 08 29.7 | +4.4 |
| **SRBI** | **Singaraja** | **12.66** | **231** | P | | Pn | 12 08 30.5 | +4.2 |
| **DNP** | **Denpasar** | **13.04** | **229** | P | | P | 12 08 46.1 | +5.2 |
| **KMMI** | **Kalianget** | **13.09** | **238** | P | | P | 12 08 37.6 | -4.0 |
| **SBUM** | **Sibu** | **13.16** | **281** | *e*Pn | | **Pn** | **12 08 34.7** | **+1.6** |
| **IGBI** | **Denpasar** | **13.18** | **229** | P | | P | 12 08 45.9 | +3.4 |
| **STKI** | **Sintang** | **13.66** | **271** | P | | Pn | 12 08 43.3 | +3.5 |
| **BWJI** | **Bawean** | **13.69** | **245** | P | | **P** | **12 08 50.5** | **+2.3** |
| **PBKI** | **Pangkalan Bun** | **13.70** | **259** | P | | Pn | 12 08 44.0 | +3.5 |
| **SMPI** | **Sarmi** | **13.70** | **98** | P | | Pn | 12 08 43.8 | +3.3 |
| **JAGI** | **Jajag, Banyuwa** baz=14,SNR=4.3 | **13.73** | **233** | P | | Pn | 12 08 45.2 | +4.3 |
| **JAGI** | **Jajag, Banyuwa** | **13.73** | **233** | P | | **P** | **12 08 49.0** | **+0.3** |
| **JAGI** | **Jajag, Banyuwa** | **13.73** | **233** | *e*Pn | | Pn | 12 08 44.9 | +4.0 |
| **MTN** | **Manton Dam** baz=14,SNR=78 | **13.97** | **155** | P | | **Pn** | **12 08 42.9** | **-1.3** |
| **MTN** | **Manton Dam** | **13.97** | **155** | *e*Pn | | **Pn** | **12 08 43.1** | **-1.0** |
| **GQP** | **Guinayangan** | **14.18** | **349** | ⇑*e*P | | **P** | **12 08 52.7** | **-0.9** |
| **KDU** | **Kakadu** baz=14,SNR=78 | **14.46** | **150** | P | | **Pn** | **12 08 48.0** | **-2.7** |
| **LQP** | **Lukban** | **14.58** | **346** | *e*P | | **P** | **12 08 59.9** | **+1.7** |
| **TBJI** | **Tambak Boyo** | **14.83** | **243** | P | | **P** | **12 09 02.2** | **+1.3** |
| **KSM** | **Kuching** baz=15,SNR=15 | **14.91** | **276** | P | | **Pn** | **12 08 58.1** | **+1.4** |
| **KSM** | **Kuching** | **14.91** | **276** | *e*Pn | | **Pn** | **12 08 59.2** | **+2.5** |
| **GENI** | **Genyem** | **15.23** | **99** | P | | **Pn** | **12 09 00.7** | **-0.3** |
| **NGJI** | **Ngawi** 2μm,1.2s,20μm | **15.42** | **242** | P | | **P** | **12 09 06.9** | **-0.5** |
| **PWJI** | **Pagerwojo** 743nm,1.1s,15μm | **15.43** | **239** | P | | **P** | **12 09 06.9** | **-0.7** |
| **UWJI** | **Ujung Watu** 355nm,1.5s,5μm10μm | **15.48** | **246** | P | | **P** | **12 09 06.9** | **-1.2** |
| **JAY** | **Jayapura** baz=16,SNR=9.0 | **15.75** | **99** | P | | **Pn** | **12 09 04.5** | **-3.2** |
| **KNRA** | **Kununurra** baz=16,SNR=102 | **15.87** | **167** | P | | **Pn** | **12 09 07.8** | **-1.4** |
| **PCJI** | **Pacitan** 1μm,1.7s,22μm | **16.06** | **240** | P | | **P** | **12 09 15.5** | **+1.0** |
| **BALP** | **Baler** | **16.14** | **348** | *e*P | | **P** | **12 09 16.7** | **+1.3** |
| **SMRI** | **Semarang** baz=16,SNR=6.2 | **16.19** | **245** | P | | **Pn** | **12 09 15.1** | **+1.8** |
| **SMRI** | **Semarang** 1μm,1.4s,22μm | **16.19** | **245** | P | | **P** | **12 09 17.7** | **+1.7** |
| **SMRI** | **Semarang** 1μm,1.2s | **16.19** | **245** | *e*Pn | | **P** | **12 09 19.0** | **+3.0** |
| **UGM** | **Wanagama** baz=17,SNR=7.6 | **16.49** | **242** | P | | **P** | **12 09 21.9** | **+2.5** |
| **UGM** | **Wanagama** 830nm,1.6s,16μm | **16.49** | **242** | P | | **P** | **12 09 20.6** | **+1.2** |
| **UGM** | **Wanagama** 1μm,1.3s | **16.49** | **242** | *e*Pn | | **P** | **12 09 21.9** | **+2.5** |
| **BCPH** | **Baguio City Da** 284nm,1.4s,5μm | **17.00** | **345** | ⇓*i* P | | **Pn** | **12 09 21.6** | **-2.0** |
| BCPH | | | | *i* S | | S | 12 12 59.8 | +19 |
| **BOLP** | **Bolinao** | **17.18** | **343** | *e*P | | **P** | **12 09 29.3** | **+2.3** |
| **PALP** | **Palanan** | **17.28** | **351** | *e*P | | **P** | **12 09 29.3** | **+1.3** |
| **MMPI** | **Merauke** 2μm,1.3s,24μm | **17.31** | **119** | P | | **Pn** | **12 09 27.8** | **+0.4** |
| **TPI** | **Tanjungpandan** 284nm,1.4s,5μm | **17.67** | **261** | P | | **P** | **12 09 34.3** | **+1.9** |
| **SZP** | **Santa** 526nm,0.8s | **18.15** | **346** | *e*Pn | | **Pn** | **12 09 40.6** | **+2.9** |
| **ABRA** | **Dolores** | **18.18** | **346** | *e*P | | **P** | **12 09 38.3** | **+0.4** |
| **CMJI** | **Cimerak** 587nm,1.4s,10μm | **18.29** | **245** | P | | **P** | **12 09 38.6** | **-0.6** |
| **LEM** | **Lembang** 6.4nm,0.3s,baz=76,slow=10,SNR=51 | **18.70** | **249** | P | | **P** | **12 09 43.7** | **-0.2** |
| LEM | | | | LR | | LR | 12 17 28.9 | |
| | comp=Z,24μm,21.1s,baz=56,slow=39 | | | | | | | |
| **LEM** | **Lembang** | **18.70** | **249** | P | | **P** | **12 09 43.7** | **-0.2** |
| LEM | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.3s | | | | | | | |
| LEM | | | | MLR | | MLR | | |
| | comp=Z,24μm,21.1s | | | | | | | |
| **LEM** | **Lembang** comp=Z,9μm,1.2s,comp=Z,11μm | **18.70** | **249** | P | | **Pn** | **12 09 45.8** | **+1.2** |
| **CISI** | **Cisompet, Garu** baz=19,SNR=16 | **18.78** | **246** | P | | **Pn** | **12 09 45.7** | **+0.2** |
| **CISI** | **Cisompet, Garu** comp=Z,759nm,1.0s,comp=Z,12μmcomp=Z,24μm | **18.78** | **246** | P | | **P** | **12 09 45.1** | **+0.4** |
| **CISI** | **Cisompet, Garu** comp=Z,644nm,0.9s | **18.78** | **246** | *e*P | | **Pn** | **12 09 45.9** | **+0.4** |
| **PIP** | **Pasuquin** | **18.86** | **347** | ⇑*e*P | | **P** | **12 09 46.3** | **+0.9** |
| **CNJI** | **Cibinong** comp=Z,1μm,1.2s,comp=Z,10μm | **19.32** | **248** | P | | **Pn** | **12 09 52.3** | **+0.4** |
| **SKJI** | **Sukabumi** comp=Z,970nm,1.3s,comp=Z,15μmcomp=Z,15μm | **19.75** | **249** | P | | **Pn** | **12 09 58.8** | **+1.8** |
| **SBJI** | **Seng** comp=Z,544nm,1.6s,comp=Z,9μm | **19.88** | **252** | P | | **Pn** | **12 10 01.0** | **+2.5** |
| **DLV** | **T Lat** comp=Z,989nm,1.5s | **20.41** | **307** | *e*P | | **P** | **12 10 04.4** | **+1.8** |
| DLV | | | | LR | | LR | | |
| | comp=Z,11μm,20.0s | | | | | | | |
| **PMBI** | **Palembang** comp=Z,1μm,1.2s,comp=Z,15μm | **20.54** | **262** | P | | **P** | **12 10 05.3** | **+1.4** |
| MYKOM | **Kota Tinggi** comp=Z,432nm,1.2s | **21.36** | **275** | *e*P | | **P** | **12 10 14.0** | **+1.2** |
| MYKOM | | | | LR | | LR | | |
| | comp=Z,5μm,22.0s | | | | | | | |
| **MDSI** | **Maura Dua** comp=Z,161nm,1.1s,comp=Z,3μm | **21.38** | **258** | P | | **P** | **12 10 11.1** | **-1.8** |
| **BTDF** | **Bukit Timah Da** baz=22,SNR=22 | **21.41** | **274** | P | | **P** | **12 10 15.2** | **+2.0** |
| **JMBI** | **JAMBI** comp=Z,786nm,1.4s,comp=Z,12μm | **21.54** | **266** | P | | **P** | **12 10 14.7** | **+0.1** |
| **MBWA** | **Marble Bar** SNR=28 | **21.57** | **194** | P | | **P** | **12 10 15.4** | **+0.6** |
| **MBWA** | **Marble Bar** comp=Z,545nm,1.5s | **21.57** | **194** | *e*P | | **P** | **12 10 15.2** | **+0.4** |
| MBWA | | | | LR | | LR | | |
| | comp=Z,4μm,22.0s | | | | | | | |
| **LWLI** | **Liwa** comp=Z,304nm,0.9s,comp=Z,5μm | **21.60** | **257** | P | | **P** | **12 10 15.4** | **0.0** |
| **WRAB** | **Tennant Creek** | **21.66** | **156** | *d i* P | | **P** | **12 10 13.9** | **-2.0** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,190nm,1.2s | | | | | | | |
| WRAB | | | | MLR | | MLR | | |
| | comp=Z,12μm,22.0s | | | | | | | |
| **WRAB** | **Tennant Creek** comp=Z,1μm,1.0s,SNR=48 | **21.66** | **156** | P | | **P** | **12 10 13.3** | **-2.6** |
| **WRAB** | **Tennant Creek** comp=Z,300nm,1.1s | **21.66** | **156** | *e*P | | **P** | **12 10 13.7** | **-2.2** |
| WRAB | | | | LR | | LR | | |
| | comp=Z,8μm,21.0s | | | | | | | |
| **WRA** | **Warramunga Arr** comp=Z,48nm,0.8s,baz=333,slow=11,SNR=88 | **21.67** | **156** | P | | **P** | **12 10 13.8** | **-2.1** |
| WRA | | | | S | | **S** | **12 14 09.2** | **-4.6** |
| | comp=Z,8.9nm,0.9s,baz=330,slow=16,SNR=5.3 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **12 17 50.8** | **+0.3** |
| | comp=Z,9.0nm,1.0s,baz=327,slow=2.8,SNR=7.0 | | | | | | | |
| WRA | | | | LR | | LR | 12 20 19.4 | |
| | comp=Z,4μm,21.2s,baz=320,slow=41 | | | | | | | |
| WRA | | | | P3KPbc | | | 12 44 05.4 | |
| | comp=Z,1.1nm,1.1s,baz=157,slow=4.2,SNR=5.7 | | | | | | | |
| **XMI** | **Christmas Isla** baz=22,SNR=5.6 | **21.89** | **241** | P | | **P** | **12 10 19.0** | **+0.6** |
| **XMIS** | **Christmas Isla** baz=22,SNR=52 | **21.94** | **241** | P | | **P** | **12 10 19.3** | **+0.4** |
| **XMIS** | **Christmas Isla** comp=Z,3μm,1.1s | **21.94** | **241** | *e*P | | **P** | **12 10 18.3** | **-0.6** |
| XMIS | | | | LR | | LR | | |
| | comp=Z,10μm,22.0s | | | | | | | |
| **MANU** | **Manus Island** comp=Z,73nm,1.0s | **22.31** | **95** | *e*P | | **P** | **12 10 24.4** | **+1.5** |
| MANU | | | | LR | | LR | | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **COEN** | **Coen** baz=22,SNR=58 | **22.54** | **128** | P | | **P** | **12 10 23.5** | **-1.9** |
| **COEN** | **Coen** comp=Z,402nm,1.0s | **22.54** | **128** | *e*P | | **P** | **12 10 24.9** | **-0.5** |
| **MNAI** | **Manna** baz=23,SNR=6.9 | **22.55** | **259** | P | | **P** | **12 10 27.0** | **+1.5** |
| **MNAI** | **Manna** | **22.55** | **259** | PFAKE | | | 12 10 40.0 | +14 |
| MNAI | | | | LR | | LR | | |
| | comp=Z,9μm,21.0s | | | | | | | |
| **KSI** | **Kapahiang** comp=Z,421nm,1.5s,comp=Z,8μm | **22.80** | **261** | P | | **P** | **12 10 27.7** | **-0.4** |
| **TWG** | **Pinlang** comp=Z,902nm,1.3s | **23.14** | **350** | *e*P | | **P** | **12 10 29.0** | **-2.4** |
| TWG | | | | LR | | LR | | |
| | comp=Z,22μm,21.0s | | | | | | | |
| **YULB** | **Yu-li** comp=Z,161nm,1.3s | **23.66** | **351** | *e*P | | **P** | **12 10 34.4** | **-2.1** |
| YULB | | | | LR | | LR | | |
| | comp=Z,6μm,20.0s | | | | | | | |
| **TPUB** | **Ta-pu** comp=Z,286nm,0.9s | **23.68** | **350** | *e*P | | **P** | **12 10 35.0** | **-1.7** |
| TPUB | | | | LR | | LR | | |
| | comp=Z,8μm,21.0s | | | | | | | |
| **SDSI** | **Sungai Dareh** comp=Z,329nm,1.4s,comp=Z,28μm | **23.72** | **268** | P | | **P** | **12 10 39.2** | **+2.1** |
| **PMG** | **Port Moresby** | **23.79** | **113** | P | | **P** | **12 10 37.2** | **-0.6** |
| | comp=Z,60nm,1.0s,baz=323,slow=7.9,SNR=13 | | | | | | | |
| PMG | | | | S | | **S** | **12 14 47.2** | **-3.7** |
| | comp=Z,10nm,0.9s,baz=342,slow=19,SNR=2.5 | | | | | | | |
| PMG | | | | LR | | LR | 12 22 49.1 | |
| | comp=Z,3μm,21.3s,baz=302,slow=44 | | | | | | | |
| **PMG** | **Port Moresby** | **23.79** | **113** | P | | **P** | **12 10 37.2** | **-0.6** |
| PMG | | | | S | | **S** | **12 14 47.2** | **-3.7** |
| PMG | | | | pmax | | pmax | | |
| | comp=Z,60nm,1.0s | | | | | | | |
| PMG | | | | smax | | smax | | |
| | comp=N,10.0nm,0.9s | | | | | | | |
| PMG | | | | MLR | | MLR | | |
| | comp=Z,3μm,21.3s | | | | | | | |
| **PMG** | **Port Moresby** baz=24,SNR=6.3 | **23.79** | **113** | P | | **P** | **12 10 35.0** | **-2.8** |
| **PMG** | **Port Moresby** comp=Z,247nm,1.1s | **23.79** | **113** | *e*P | | **P** | **12 10 37.7** | **-0.1** |
| PMG | | | | S | | **S** | **12 14 47.2** | **-3.7** |
| **GUMO** | **Guam** comp=Z,127nm,0.9s,baz=201,slow=10,SNR=8.3 | **23.83** | **54** | P | | **P** | **12 10 38.1** | **0.0** |
| **GUMO** | **Guam** | **23.83** | **54** | P | | **P** | **12 10 38.1** | **0.0** |
| GUMO | | | | pmax | | pmax | | |
| | comp=Z,127nm,0.9s | | | | | | | |
| **BKNI** | **Bangkinang** baz=24 | **24.10** | **271** | P | | **P** | **12 10 41.0** | **+0.3** |
| **BKNI** | **Bangkinang** comp=Z,385nm,1.4s,comp=Z,7μm | **24.10** | **271** | P | | **P** | **12 10 40.0** | **-0.7** |
| **BKNI** | **Bangkinang** comp=Z,646nm,1.3s | **24.10** | **271** | *e*P | | **P** | **12 10 40.5** | **-0.2** |
| BKNI | | | | LR | | LR | | |
| | comp=Z,7μm,21.0s | | | | | | | |
| **SSLB** | **Suanglung** comp=Z,114nm,0.8s | **24.11** | **351** | *e*P | | **P** | **12 10 40.2** | **-0.5** |
| SSLB | | | | LR | | LR | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| **QIZ** | **Qiongzhong** | **24.23** | **323** | P | | **P** | **12 10 42.0** | **+0.1** |
| QIZ | | | | pP | | pP | 12 10 49.0 | -4.0 |
| QIZ | | | | sP | | sP | 12 10 52.3 | -5.6 |
| QIZ | | | | sS | | **sS** | **12 15 13.5** | **-2.7** |
| QIZ | | | | PMZ | | | | |
| | comp=Z,96nm,2.5s | | | | | | | |
| QIZ | | | | LN | | | | |
| | comp=Z,4μm,17.6s | | | | | | | |
| QIZ | | | | LZ | | | | |
| | comp=Z,8μm,19.2s | | | | | | | |
| **QIZ** | **Qiongzhong** comp=Z,933nm,2.3s | **24.23** | **323** | *e*P | | **P** | **12 10 41.6** | **-0.3** |
| QIZ | | | | LR | | LR | | |
| | comp=Z,8μm,19.0s | | | | | | | |
| **NACB** | **Ninganchiao** | **24.39** | **352** | PFAKE | | | 12 10 50.0 | +6.8 |
| NACB | | | | LR | | LR | | |
| | comp=Z,8μm,21.0s | | | | | | | |
| **IPM** | **Ipoh** comp=Z,367nm,1.1s | **24.51** | **281** | *e*P | | **P** | **12 10 44.4** | **-0.2** |
| IPM | | | | LR | | LR | | |
| | comp=Z,5μm,20.0s | | | | | | | |
| **YOJ** | **Yonaguni jima** | **24.52** | **355** | PFAKE | | | 12 11 00.0 | +16 |
| YOJ | | | | LR | | LR | | |
| | comp=Z,8μm,21.0s | | | | | | | |
| **HKC** | **Hong Kong Obse** | **24.71** | **335** | ⇑*i* P | | **P** | **12 10 48.0** | **+1.9** |
| **UBPT** | **Khong Chiam** comp=Z,256nm,0.8s,comp=Z,4μm | **24.73** | **309** | P | | **P** | **12 10 46.9** | **+0.5** |
| **PPI** | **Padang Panjang** baz=25,SNR=12 | **24.74** | **269** | P | | **P** | **12 10 46.3** | **-0.2** |
| **PPI** | **Padang Panjang** comp=Z,275nm,1.4s,comp=Z,4μmcomp=Z,20μm | **24.74** | **269** | P | | **P** | **12 10 44.3** | **-2.2** |
| **QIS** | **Mount Isa** baz=25,SNR=236 | **24.76** | **146** | P | | **P** | **12 10 46.2** | **-0.5** |
| **GIRL** | **Giralia** baz=25,SNR=7.0 | **24.78** | **205** | P | | **P** | **12 10 47.5** | **+0.8** |
| **YHNB** | **Yeheng** comp=Z,396nm,1.6s | **24.91** | **352** | *e*P | | **P** | **12 10 46.5** | **-1.4** |
| YHNB | | | | LR | | LR | | |
| | comp=Z,15μm,22.0s | | | | | | | |
| **ASAR** | **Alice Springs** comp=Z,69nm,1.1s,baz=341,slow=10.0,SNR=261 | **24.91** | **161** | P | | **P** | **12 10 47.3** | **-0.7** |
| ASAR | | | | PcP | | **PcP** | **12 14 23.2** | **0.0** |
| | comp=Z,6.6nm,0.6s,baz=346,slow=2.1,SNR=5.3 | | | | | | | |
| ASAR | | | | S | | **S** | **12 15 07.0** | **-1.8** |
| | comp=Z,11nm,0.9s,baz=341,slow=18,SNR=4.0 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **12 17 59.4** | **+0.2** |
| | comp=Z,13nm,1.1s,baz=350,slow=2.2,SNR=11 | | | | | | | |
| ASAR | | | | LR | | LR | 12 22 30.3 | |
| | comp=Z,3μm,21.0s,baz=296,slow=41 | | | | | | | |
| ASAR | | | | P3KPbc | | | 12 43 53.1 | |
| | comp=Z,1.1nm,1.0s,baz=158,slow=5.2,SNR=6.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **24.91** | **161** | P | | **P** | **12 10 47.3** | **-0.7** |
| ASAR | | | | | | | 12 14 23.2 | |
| ASAR | | | | S | | **S** | **12 15 07.0** | **-1.8** |
| ASAR | | | | pmax | | pmax | | |
| | comp=Z,69nm,1.1s | | | | | | | |
| ASAR | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| ASAR | | | | smax | | smax | | |
| | comp=N,11nm,1.0s | | | | | | | |
| ASAR | | | | pmax | | pmax | | |
| | comp=N,13nm,1.1s | | | | | | | |
| ASAR | | | | MLR | | MLR | | |
| | comp=Z,3μm,21.0s | | | | | | | |
| **AS01** | **Alice Springs** | **24.93** | **161** | *e*P | | **P** | **12 10 48.2** | **+0.1** |
| **WRKA** | **Warakurna** baz=25,SNR=215 | **24.96** | **173** | P | | **P** | **12 10 48.0** | **-0.5** |
| **KULM** | **Kulim** comp=Z,534nm,1.5s | **25.03** | **283** | *e*P | | **P** | **12 10 49.0** | **-0.2** |
| KULM | | | | LR | | LR | | |
| | comp=Z,12μm,22.0s | | | | | | | |
| **TATO** | **Taipei** | **25.19** | **352** | PFAKE | | | 12 11 00.0 | +10 |
| TATO | | | | LR | | LR | | |
| | comp=Z,11μm,22.0s | | | | | | | |
| **PPSI** | **Pulau Pagai** comp=Z,842nm,1.4s,comp=Z,11μm | **25.25** | **264** | P | | **P** | **12 10 52.9** | **+1.7** |
| **SKLT** | **Songkhla** comp=Z,240nm,0.8s,comp=Z,3μm | **25.50** | **287** | P | | **P** | **12 10 53.5** | **+0.1** |
| **MNSI** | **Mandailing Nat** comp=Z,84nm,0.8s,comp=Z,4μm | **25.57** | **272** | P | | **P

comp=Z,279nm,1.1s
**MEEK Meekatharra 27.11 193** P **P** **12 11 06.7 -1.2**
baz=27,SNR=12
**PATY Pattaya 27.33 299** P **P** **12 11 14.0 +4.1**
comp=Z,7.7nm,1.1s,comp=Z,651nm
**KHON Khomkaen 27.41 308** P **P** **12 11 11.0 +0.3**
comp=Z,69nm,1.1s,comp=Z,858nm
**KCSI Kotacane, Aceh 27.58 278** P **P** **12 11 11.5 -0.8**
**NAYO Nakonayok 27.58 302** P **P** **12 11 12.7 +0.5**
comp=Z,62nm,1.1s,comp=Z,1μm
**GSI Gunungsitoli 27.59 273** P **P** **12 11 10.5 -1.8**
baz=28
**GSI Gunungsitoli 27.59 273** P **P** **12 11 10.6 -1.8**
**GSI Gunungsitoli 27.59 273** *eP* **P** **12 11 10.0 -2.3**
comp=Z,223nm,1.0s
GSI LR LR
comp=Z,7μm,20.0s
**CHAI Chaiyaphum 27.84 306** P **P** **12 11 14.5 0.0**
comp=Z,32nm,1.1s,comp=Z,309nm
**PKDT Phuket 27.87 287** P **P** **12 11 14.7 -0.1**
comp=Z,127nm,2.1s,comp=Z,2μm
**NONG Nongkai 28.18 311** P **P** **12 11 16.9 -0.6**
comp=Z,140nm,1.2s
**PHET Kaeng Krachan 28.41 298** P **P** **12 11 20.1 +0.5**
comp=Z,18nm,1.0s,comp=Z,188nm
**LHMI Lhok Sumawe 28.64 281** P **P** **12 11 23.3 +1.6**
baz=29
**CTA Charters Tower 28.66 135** P **P** **12 11 21.9 +0.2**
comp=Z,14nm,0.9s,baz=313,slow=9.8,SNR=15
CTA S **S** **12 16 09.2 +1.1**
comp=Z,3.1nm,0.7s,baz=218,slow=19,SNR=2.0
CTA ScP **SS** **12 18 11.1 +0.5**
comp=Z,21nm,1.1s,baz=253,slow=5.0,SNR=6.7
**CTA Charters Tower 28.66 135** P **P** **12 11 22.0 +0.2**
CTA S **S** **12 16 09.2 +1.1**
CTA 12 18 11.1
CTA pmax pmax
comp=Z,14nm,0.9s
CTA smax smax
comp=N,3.0nm,0.7s
CTA pmax pmax
comp=N,21nm,1.1s
**CTAO Charters Tower 28.66 135** *eP* **P** **12 11 22.2 +0.4**
CTAO *e* 12 18 11.8
CTAO pmax pmax
comp=Z,210nm,1.7s
**CTAO Charters Tower 28.66 135** *eP* **P** **12 11 22.2 +0.4**
comp=Z,210nm,1.7s
CTAO LR LR
comp=Z,3μm,19.0s
**PBKT Sadao Pong 29.03 306** P **P** **12 11 24.9 -0.1**
comp=Z,80nm,1.5s,comp=Z,2μm
**MLSI Meulaboh, Aceh 29.03 279** P **P** **12 11 24.7 -0.5**
**LOEI Loei 29.30 308** P P 12 11 24.7 -2.8
comp=Z,174nm,1.2s,comp=Z,3μm
**SRDT SRDT 29.48 300** P **P** **12 11 30.2 +1.1**
comp=Z,211nm,1.7s
**SLVN Son La 29.74 317** *eP* **P** **12 11 32.4 +1.0**
**UTHA Uthaitani 29.77 303** P **P** **12 11 31.9 +0.3**
comp=Z,38nm,1.0s,comp=Z,344nm
**UTTA Uttaradit 30.00 308** P **P** **12 11 34.0 +0.4**
comp=Z,26nm,1.3s,comp=Z,305nm
**MORW Morawa 30.07 196** P **P** **12 11 33.0 -1.2**
baz=30,SNR=9.1
**KHLT Khaolaem Dam 30.14 301** P **P** **12 11 35.7 +0.8**
comp=Z,66nm,1.1s,comp=Z,1μm
**NANT Nan 30.48 309** P **P** **12 11 39.1 +1.2**
comp=Z,56nm,0.8s,comp=Z,438nm
**UMPA Umpang Tak 30.58 303** P **P** **12 11 38.6 -0.2**
comp=Z,22nm,1.2s,comp=Z,1μm
**LAMP Lampang 31.16 308** P **P** **12 11 44.6 +0.7**
comp=Z,30nm,1.1s,comp=Z,305nm
**KMBL Kambalda 31.23 185** P **P** **12 11 44.0 -0.4**
baz=31,SNR=9.1
**SSE Sheshan 31.27 353** *eP* P 12 11 48.0 +3.3
SSE pP pP 12 11 57.3 +1.5
SSE sP sP 12 12 00.3 -0.4
SSE S S 12 16 55.0 +6.4
SSE sS sS 12 17 08.5 +1.2
SSE PMZ
comp=Z,70nm,1.4s
SSE PMZ
comp=Z,610nm,4.1s
SSE LN
comp=Z,4μm,23.7s
SSE LE
comp=Z,1μm,23.6s
SSE LZ
comp=Z,6μm,23.8s
**BLDU Ballidu 31.37 194** P **P** **12 11 44.2 -1.4**
baz=32,SNR=26
**CM01 Chiang Mai Arr 31.64 307** *eP* **P** **12 11 47.1 -1.0**
**CBIJ Chichi jima 31.64 30** *eP* **P** **12 11 48.6 +0.6**
comp=Z,318nm,1.0s
**CMAR Chiang Mai Arr 31.67 307** P **P** **12 11 49.0 +0.7**
comp=Z,110nm,1.3s,baz=135,slow=7.0,SNR=234
CMAR PcP **PcP** **12 14 40.8 +0.9**
comp=Z,23nm,1.0s,baz=160,slow=1.7,SNR=9.6
CMAR ScP **ScP** **12 18 20.7 +0.6**
comp=Z,4.7nm,0.9s,baz=152,slow=2.4,SNR=6.6
CMAR LR LR 12 24 25.7
comp=Z,4μm,21.7s,baz=154,slow=36
**CMAR Chiang Mai Arr 31.67 307** P **P** **12 11 49.1 +0.7**
CMAR 12 14 40.8
CMAR pmax pmax
comp=Z,84nm,1.2s
CMAR pmax pmax
comp=Z,23nm,1.0s
CMAR pmax pmax
comp=N,5.0nm,0.9s
CMAR MLR MLR
comp=Z,4μm,21.7s
**GYA Guiyang 31.86 327**⇑ *iP* **P** **12 11 50.5 +0.4**
GYA sP **sP** **12 12 03.3 -2.9**
GYA PP **PnPn** **12 12 59.0 +3.3**
GYA PcP **PcP** **12 14 42.3 +1.9**
GYA S **S** **12 17 00.5 +2.3**
GYA ScS **ScS** **12 22 20.5 +1.2**
GYA PMZ
comp=Z,50nm,0.7s
GYA PMZ
comp=Z,670nm,11.8s
GYA LN
comp=Z,2μm,17.7s
GYA LE
comp=Z,2μm,17.7s
GYA LZ
comp=Z,3μm,15.2s
**CHTO Chiang Mai 31.86 308** P **P** **12 11 50.3 +0.2**
comp=Z,943nm,1.5s,comp=Z,14μm
**CHTO Chiang Mai 31.86 308** *eP* **P** **12 11 50.5 +0.4**
CHTO pmax pmax
comp=Z,390nm,1.4s
**CHTO Chiang Mai 31.86 308** P **P** **12 11 50.6 +0.4**
SNR=121
**CHTO Chiang Mai 31.86 308** *eP* **P** **12 11 50.5 +0.4**
comp=Z,387nm,1.4s
CHTO LR LR
comp=Z,4μm,21.0s
**CMBY CAMPBELL BAY 31.92 283** *eP* **P** **12 11 51.4 +0.7**
**KLBR Kellerberrin 32.07 192** P **P** **12 11 51.4 -0.4**
baz=32,SNR=6.2
**QLP Quilpie 32.10 147** P **P** **12 11 51.3 -0.9**
baz=32,SNR=11
**WHN Wuhan 32.17 342** P **P** **12 11 53.5 +0.9**
WHN S **S** **12 17 03.8 +1.1**
WHN LN
comp=Z,5μm,16.0s
WHN LE
comp=Z,2μm,8.7s
WHN LZ
comp=Z,11μm,24.9s
**MHMT Maesarieng 32.33 306** P **P** **12 11 54.5 +0.3**
comp=Z,97nm,1.4s
**CMAI Chiengmai2 32.40 309** P **P** **12 11 55.0 0.0**
comp=Z,128nm,1.3s,comp=Z,8μm
**NJ2 Nanjing 32.54 350** *eP* **P** **12 11 58.5 +2.6**
NJ2 sP sP 12 12 06.0 -5.9
NJ2 S **S** **12 17 12.5 +4.0**
NJ2 sS **sS** **12 17 24.5 -2.7**
NJ2 PMZ
comp=Z,170nm,0.6s
NJ2 PMZ
comp=Z,1μm,11.2s
NJ2 LN
comp=Z,6μm,26.5s
NJ2 LE
comp=Z,11μm,22.7s
NJ2 LZ
comp=Z,11μm,22.9s
**KMI Kunming 33.15 321** P **P** **12 12 02.5 +1.0**
KMI pP **pP** **12 12 10.8 -2.0**
KMI PP **PnPn** **12 13 15.3 +3.0**
KMI S **S** **12 17 21.0 +2.4**
KMI sS **sS** **12 17 34.5 -2.8**
KMI SS **SnSn** **12 19 23.5 +3.2**
KMI PMZ
comp=Z,73nm,1.5s
KMI LN
comp=Z,2μm,20.7s
KMI LE
comp=Z,2μm,20.7s
KMI LZ
comp=Z,3μm,22.7s
**NWAO Narrogin (SRO) 33.47 192** P **P** **12 12 03.4 -0.6**
comp=Z,16nm,0.7s,baz=82,slow=0.0,SNR=13
**NWAO Narrogin (SRO) 33.47 192** *eP* **P** **12 12 03.7 -0.3**
NWAO pmax pmax
comp=Z,34nm,1.0s
**NWAO Narrogin (SRO) 33.47 192** P **P** **12 12 04.1 +0.1**
baz=34,SNR=9.9
**NWAO Narrogin (SRO) 33.47 192** *eP* **P** **12 12 03.7 -0.3**
comp=Z,34nm,1.0s
NWAO LR LR
comp=Z,3μm,22.0s
**JNU Nakatsue 33.50 9** *eP* **P** **12 12 04.8 +0.5**
comp=Z,165nm,1.1s
JNU LR LR
comp=Z,3μm,21.0s
**ENH Enshi 33.69 335** *eP* **P** **12 12 07.8 +1.8**
comp=Z,45nm,1.0s
ENH LR LR
comp=Z,6μm,19.0s
**BBOO Buckleboo 34.11 163** P **P** **12 12 09.0 -0.6**
baz=34,SNR=13
**BBOO Buckleboo 34.11 163** *eP* **P** **12 12 09.4 -0.2**
comp=Z,119nm,1.5s
BBOO *eS* **S** **12 17 35.0 +2.1**
**PBA Port Blair 34.23 291** *ex* P 12 12 05.6 -5.2
**DGPR DIGLIPUR 34.54 294** *eP* **P** **12 12 13.6 +0.1**
**KSKOH Goheung 34.60 3** P **P** **12 12 15.5 +1.7**
SNR=12
**KSKOH Goheung 34.60 3** P **P** **12 12 15.5 +1.7**
SNR=12
**RMQ Roma 34.71 141** P **P** **12 12 14.8 -0.1**
baz=35,SNR=14
**KSNAH Namhae 34.85 4** P **P** **12 12 17.4 +1.5**
SNR=16
**KSNAH Namhae 34.85 4** P **P** **12 12 17.4 +1.5**
SNR=16
**KSKWJ Gwangju 35.14 3** P **P** **12 12 20.0 +1.6**
SNR=13
**KSKWJ Gwangju 35.14 3** P **P** **12 12 20.0 +1.6**
SNR=13
**RKGY Rocky Gully 35.15 192** P **P** **12 12 20.3 +1.8**
baz=35,SNR=4.9
**KSJIN Jinju 35.20 4** P **P** **12 12 20.2 +1.3**
SNR=19
**KSJIN Jinju 35.20 4** P **P** **12 12 20.2 +1.3**
SNR=19
**KSBUS Busan 35.38 6** P **P** **12 12 22.1 +1.7**
SNR=14
**KSBUS Busan 35.38 6** P **P** **12 12 22.1 +1.7**
SNR=14
**KSJEU Jeogeup 35.47 3** P **P** **12 12 22.4 +1.2**
SNR=12
**KSJEU Jeongeup 35.47 3** P **P** **12 12 22.4 +1.2**
SNR=12
**EIDS Eidsvold 35.48 137** P **P** **12 12 20.7 -0.8**
baz=36,SNR=5.0
**EIDS Eidsvold 35.48 137** *eP* **P** **12 12 20.9 -0.6**
comp=Z,35nm,1.0s
EIDS LR LR
comp=Z,700nm,19.0s
**HNR Honiara 35.87 106** P **P** **12 12 23.5 -1.4**
comp=Z,70nm,0.7s,baz=122,slow=9.4,SNR=5.8
**HNR Honiara 35.87 106** P **P** **12 12 23.5 -1.4**
HNR pmax pmax
comp=Z,70nm,0.7s
**HNR Honiara 35.87 106** *eP* **P** **12 12 23.4 -1.6**
HNR *ep*P **pP** **12 12 32.2 -4.1**
HNR LR LR
comp=Z,2μm,21.0s
**KSDAG Daegu 35.87 5** P **P** **12 12 26.4 +1.6**
SNR=11
**KSDAG Daegu 35.87 5** P **P** **12 12 26.4 +1.6**
SNR=11
**KSYOC YEONGCHEON 36.08 5** P **P** **12 12 28.1 +1.7**
SNR=6.0
**KSYOC YEONGCHEON 36.08 5** P **P** **12 12 28.1 +1.7**
SNR=6.0
**KSCPR CHUPUNGNYEONG 36.25 4** P **P** **12 12 29.2 +1.3**
SNR=15
**KSCPR CHUPUNGNYEONG 36.25 4** P **P** **12 12 29.2 +1.3**
SNR=15
**KSEUS ULSEONG 36.44 5** P **P** **12 12 30.8 +1.3**
SNR=11
**KSEUS ULSEONG 36.44 5** P **P** **12 12 30.8 +1.3**
SNR=11
**KSSAJ Sangju 36.45 4** P **P** **12 12 31.7 +2.1**
SNR=9.7
**KSBON Boeun 36.52 4** P **P** **12 12 32.6 +2.4**
SNR=8.9
**KSBON Boeun 36.52 4** P **P** **12 12 32.6 +2.4**
SNR=8.9
**KSSES Seosan 36.74 2** P **P** **12 12 33.6 +1.5**
SNR=6.8
**KSCEA Cheonan 36.81 3** P **P** **12 12 34.4 +1.7**
SNR=12
**CMSA Cobar Meteorol 36.82 150** P **P** **12 12 33.2 +0.4**
baz=37,SNR=63
**KSCHJ Chungju 36.90 4** P **P** **12 12 35.8 +2.4**
SNR=8.8
**KSCHJ Chungju 36.90 4** P **P** **12 12 35.1 +1.7**
SNR=5.5
**TIA Tai'an 36.90 349** ⇓ *iP* **P** **12 12 33.5 0.0**
TIA PP **PnPn** **12 14 04.5 +5.9**
TIA S **S** **12 18 11.3 -4.4**
TIA PMZ
comp=Z,50nm,1.0s
TIA LN
comp=Z,3μm,28.5s
TIA LE
comp=Z,2μm,17.8s
TIA LZ
comp=Z,5μm,24.9s
**CD2 Chengdu 36.93 329** P **P** **12 12 34.5 +0.6**
CD2 pP **pP** **12 12 45.5 +0.3**
CD2 PP **PnPn** **12 14 01.0 +1.9**
CD2 S **S** **12 18 21.0 +4.6**
CD2 sS **sS** **12 18 36.5 +1.3**
CD2 PMZ
comp=Z,140nm,1.2s
CD2 PMZ
comp=Z,890nm,7.0s
CD2 LN
comp=Z,4μm,21.5s
CD2 LE
comp=Z,4μm,20.6s
CD2 LZ
comp=Z,4μm,18.8s
**KSTBA Taebaek 37.22 5** P **P** **12 12 38.7 +2.4**
SNR=7.9
**XAN Xi'an 37.23 337** P **P** **12 12 35.0 -1.3**
XAN pP **pP** **12 12 45.0 -2.7**
XAN sP **sP** **12 12 49.3 -3.2**
XAN PMZ
comp=Z,71nm,1.4s
XAN LN
comp=Z,4μm,17.7s
XAN LE
comp=Z,2μm,18.8s
XAN LZ
comp=Z,3μm,17.7s
**KSYOW Yeongwol 37.23 4** P **P** **12 12 38.6 +2.4**
SNR=6.5
**KSSWO Suwon 37.24 2** P **P** **12 12 38.3 +2.0**
SNR=12
**KSICN Icheon 37.28 3** P **P** **12 12 38.6 +1.9**
SNR=17
**INCN Inchon 37.44 2** *eP* **P** **12 12 40.1 +2.0**
comp=Z,201nm,1.4s
INCN LR LR
comp=Z,3μm,20.0s
**KSSEO Seoul 37.45 2** P **P** **12 12 40.5 +2.4**
SNR=7.7
**KSAR Wonju Array Be 37.46 4** P **P** **12 12 39.2 +1.0**
KSAR 12 14 57.0
**KSAR Wonju Array Be 37.46 4** P **P** **12 12 39.2 +1.0**
KSAR PcP **PcP** **12 14 57.0 +0.9**
**KSRS Korea Array 37.47 4** P **P** **12 12 39.2 +0.9**
comp=Z,78nm,1.0s,baz=180,slow=10,SNR=88
KSRS PcP **PcP** **12 14 57.0 +0.8**
comp=Z,15nm,0.8s,baz=180,slow=2.8,SNR=9.7
KSRS ScP **ScP** **12 18 39.7 -0.7**
comp=Z,4.2nm,0.8s,baz=151,slow=2.9,SNR=5.7
KSRS LR LR 12 27 45.5
comp=Z,4μm,21.8s,baz=198,slow=36
**KSRS Korea Array 37.47 4** P **P** **12 12 39.2 +0.9**
KSRS 12 14 57.0
KSRS pmax pmax
comp=Z,78nm,1.0s
KSRS pmax pmax
comp=Z,15nm,0.8s
KSRS pmax pmax
comp=N,4.0nm,0.8s
KSRS MLR MLR
comp=Z,4μm,21.8s
**KS01 Wonju Array Si 37.49 4** *eP* **P** **12 12 38.1 -0.4**
**KSDGY Daegwallycong 37.76 5** P **P** **12 12 43.3 +2.5**
SNR=12
**KSCHC Chuncheon 37.79 3** P **P** **12 12 43.0 +2.0**
SNR=13
**KSMUS Musan 37.85 2** P **P** **12 12 44.1 +2.7**
SNR=9.9
**KSDDC Dongducheon 37.87 2** P **P** **12 12 44.0 +2.3**
SNR=22
**KSJMJ Jumunjin 37.96 5** P **P** **12 12 44.8 +2.4**
SNR=14
**YNCB YEONCHEON 38.01 2** P **P** **12 12 44.6 +1.8**
SNR=50
**KSIJA INJE 38.02 4** P **P** **12 12 45.5 +2.6**
SNR=11
**KSCWO Cheorwon 38.08 3** P **P** **12 12 45.8 +2.4**
SNR=15
**SEHB SEOHWA 38.31 4** P **P** **12 12 48.0 +2.6**
SNR=13
**KSSKC Sokcho 38.35 4** P **P** **12 12 48.3 +2.7**
SNR=17
**MJAR Matsushiro Arr 38.44 17** P **P** **12 12 45.9 -0.6**
comp=Z,52nm,0.8s,baz=191,slow=9.4,SNR=91
MJAR PcP **PcP** **12 14 60.0 +0.7**
comp=Z,18nm,0.9s,baz=171,slow=3.4,SNR=6.1
MJAR ScP **ScP** **12 18 44.2 0.0**
comp=Z,9.9nm,1.2s,baz=196,slow=5.7,SNR=6.7
MJAR LR LR 12 33 01.0
comp=Z,909nm,18.1s,baz=200,slow=43
**MJAR Matsushiro Arr 38.44 17** P **P** **12 12 45.9 -0.6**
MJAR 12 15 00.0
MJAR 12 18 44.2
MJAR pmax pmax
comp=Z,52nm,0.9s
MJAR pmax pmax
comp=Z,18nm,0.9s
MJAR pmax pmax
comp=N,10.0nm,1.2s
MJAR MLR MLR
comp=Z,909nm,18.1s
**MAJO Matsushiro 38.44 17** *eP* **P** **12 12 46.4 -0.1**
MAJO pmax pmax
comp=Z,480nm,1.7s
**MAJO Matsushiro 38.44 17** *eP* **P** **12 12 46.4 -0.1**
comp=Z,478nm,1.8s
MAJO LR LR
comp=Z,2μm,20.0s
**MAT Matsushiro 38.44 17** P **P** **12 12 46.1 -0.4**
MAT S S 12 18 31.4 -7.6
**ARMA Armidale 39.28 142** P **P** **12 12 53.4 -0.4**
baz=39,SNR=17
**ARMA Armidale 39.28 142** *eP* **P** **12 12 54.4 +0.6**
comp=Z,45nm,0.8s
**TIY Taiyuan 39.43 344** *eP* **P** **12 12 56.3 +1.5**
TIY PP **PnPn** **12 14 31.0 +2.0**
TIY S **S** **12 18 54.0 +0.1**
TIY PMZ
comp=Z,91nm,0.7s
TIY PMZ
comp=Z,520nm,5.7s
TIY LN
comp=Z,910nm,16.6s
TIY LE
comp=Z,2μm,18.8s
TIY LZ
comp=Z,3μm,22.6s
**ARPS Mount Arapiles 39.62 159** P **P** **12 12 56.6 +0.3**
baz=40,SNR=40
**YNG Young 40.39 150** P **P** **12 13 03.9 +1.1**
baz=40,SNR=21
**BJT Baijiatuau 40.77 349** *eP* **P** **12 13 05.3 -0.6**
BJT pmax pmax
comp=Z,313nm,1.7s
BJT MLR MLR
comp=Z,2μm,20.0s
**BJT Baijiatuau 40.77 349** *eP* **P** **12 13 05.3 -0.6**
comp=Z,313nm,1.7s
BJT LR LR
comp=Z,2μm,20.0s
**BJI Beijing 40.80 349** P **P** **12 13 05.3 -0.7**
BJI S **S** **12 19 11.3 -2.8**
BJI PMZ
comp=Z,89nm,1.6s
BJI PMZ
comp=Z,870nm,10.1s
BJI LN
comp=Z,2μm,29.9s
BJI LE
comp=Z,2μm,25.9s
BJI LZ
comp=Z,6μm,33.2s
**MGCD Mangrove Creek 41.00 146** P **P** **12 13 08.7 +0.9**
baz=41,SNR=6.2
**SHL Shillong 41.02 311** *eP* **P** **12 13 08.4 +0.1**
**LZH Lanzhou 41.10 333** *eP* **P** **12 13 09.8 +1.0**
LZH pP **pP** **12 13 16.5 -3.8**
LZH sP sP 12 13 20.0 -5.1
LZH PP **PnPn** **12 14 49.3 +0.4**
LZH *eS* **S** **12 19 20.5 +1.3**
LZH SS **SS** **12 22 21.0 -1.9**
LZH PMZ
comp=Z,570nm,1.6s
LZH PMZ
comp=Z,1μm,4.0s
LZH LN
comp=Z,2μm,16.1s
LZH LE
comp=Z,5μm,15.5s
LZH LZ
comp=Z,6μm,17.3s
**CAN Canberra 41.50 150** *eP* **P** **12 13 13.9 +1.9**
CAN pmax pmax
comp=Z,160nm,1.2s
**CAN Canberra 41.50 150** *eP* **P** **12 13 13.8 +1.9**
comp=Z,164nm,1.2s
CAN LR LR
comp=Z,2μm,20.0s
**CNB Canberra Magne 41.67 150** P **P** **12 13 15.5 +2.0**
baz=42,SNR=6.8
**TOO Toolangi 41.74 155** P **P** **12 13 15.5 +1.6**
baz=42,SNR=16
**HHC Hu-ho-hao-te 42.60 345** *eP* **P** **12 13 22.5 +1.6**
HHC pP **pP** **12 13 32.5 +0.1**
HHC sP **sP** **12 13 36.0 -1.2**
HHC S **S** **12 19 38.8 -2.3**
HHC sS **sS** **12 20 04.5 +4.3**
HHC SS **SS** **12 22 53.8 +1.5**
HHC PMZ
comp=Z,49nm,0.9s
HHC PMZ
comp=Z,460nm,5.1s
HHC LN
comp=Z,2μm,20.4s
HHC LE
comp=Z,2μm,21.0s
HHC LZ
comp=Z,2μm,23.4s
**MSHR Mys Shultsa 42.85 7** ⇓ *iP* **P** **12 13 24.5 +1.7**
**CN2 Changchun 43.73 0** *eP* P 12 13 39.5 +10
**LSA Lhasa 43.91 315** P **P** **12 13 32.5 +0.4**
LSA PMZ
comp=Z,50nm,2.0s

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LSA** | **Lhasa** | **43.91** | **315** | *e*P | **P** | **P** | **12** | **13** | **32.8** | **+0.7** |
| LSA | | | | pmax | pmax | | | | | |
| | comp=Z,88nm,0.8s | | | | | | | | | |
| LSA | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **LSA** | **Lhasa** | **43.91** | **315** | *e*P | **P** | **P** | **12** | **13** | **32.8** | **+0.7** |
| | comp=Z,88nm,0.8s | | | | | | | | | |
| LSA | | | | LR | LR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **CHLP** | **Challavanipeta** | **44.38** | **297** | *e*P | **P** | **P** | **12** | **13** | **35.2** | **-0.3** |
| CHLP | | | | IAmb | IAmb | | 12 | 13 | 36.5 | |
| | comp=Z,691nm,2.9s | | | | | | | | | |
| CHLP | | | | *e*S | **S** | | **12** | **20** | **07.7** | **+0.2** |
| CHLP | | | | IVMs_BB | IVMs_BB | | 12 | 32 | 34.5 | |
| | comp=Z,909nm,22.2s | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **44.55** | **7** | P | **P** | **P** | **12** | **13** | **37.2** | **+0.8** |
| | comp=Z,91nm,0.9s,baz=190,slow=7.4,SNR=50 | | | | | | | | | |
| USRK | | | | LR | LR | | 12 | 32 | 28.5 | |
| | comp=Z,2μm,21.3s,baz=172,slow=36 | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **44.72** | **5** | P | **P** | **P** | **12** | **13** | **38.5** | **+0.7** |
| MDJ | | | | pP | pP | | 12 | 13 | 44.3 | -5.0 |
| MDJ | | | | sP | sP | | 12 | 13 | 47.0 | -7.1 |
| MDJ | | | | PcS | PcS | | 12 | 19 | 08.0 | -5.0 |
| MDJ | | | | PMZ | | | | | | |
| | comp=Z,85nm,1.2s | | | | | | | | | |
| MDJ | | | | PMZ | | | | | | |
| | comp=Z,780nm,4.3s | | | | | | | | | |
| MDJ | | | | LN | | | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| MDJ | | | | LE | | | | | | |
| | comp=Z,1μm,22.4s | | | | | | | | | |
| MDJ | | | | LZ | | | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **44.72** | **5** | *e*P | **P** | **P** | **12** | **13** | **38.6** | **+0.9** |
| | comp=Z,83nm,0.9s | | | | | | | | | |
| MDJ | | | | LR | LR | | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | | |
| **VIS** | **Vishakhapatnam** | **44.77** | **296** | *e*P | **P** | **P** | **12** | **13** | **36.8** | **-1.9** |
| **LHI** | **Lord Howe Isla** | **44.80** | **137** | P | **P** | **P** | **12** | **13** | **37.8** | **-0.8** |
| | baz=45 | | | | | | | | | |
| **LHI** | **Lord Howe Isla** | **44.80** | **137** | PFAKE | | | 12 | 13 | 50.0 | +11 |
| LHI | | | | LR | LR | | | | | |
| | comp=Z,1μm,22.0s | | | | | | | | | |
| **BOK** | **Bokaro** | **44.88** | **305** | *e*P | **P** | **P** | **12** | **13** | **38.5** | **-0.9** |
| **PALK** | **Pallekele** | **44.91** | **280** | PFAKE | | | 12 | 13 | 50.0 | +10 |
| PALK | | | | LR | LR | | | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **ERM** | **Erimo** | **44.99** | **19** | *d i*P | **P** | **P** | **12** | **13** | **40.6** | **+0.7** |
| ERM | | | | pmax | pmax | | | | | |
| | comp=Z,71nm,1.1s | | | | | | | | | |
| **ERM** | **Erimo** | **44.99** | **19** | PFAKE | | | 12 | 13 | 50.0 | +10 |
| ERM | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **WAKE** | **Wake Island** | **45.05** | **62** | PFAKE | | | 12 | 13 | 50.0 | +9.2 |
| WAKE | | | | LR | LR | | | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **ODAN** | **Odare** | **45.13** | **310** | *e*P | **P** | **P** | **12** | **13** | **41.2** | **-0.5** |
| | comp=Z,246nm,1.0s | | | | | | | | | |
| **TAPN** | **Taplejung** | **45.13** | **310** | *e*P | **P** | **P** | **12** | **13** | **41.2** | **-0.5** |
| | comp=Z,146nm,0.8s | | | | | | | | | |
| **GTA** | **Gaotai** | **45.65** | **332** | ⇑P | **P** | **P** | **12** | **13** | **45.5** | **0.0** |
| GTA | | | | pP | pP | | 12 | 13 | 53.0 | -4.0 |
| GTA | | | | sP | sP | | 12 | 13 | 55.5 | -6.3 |
| GTA | | | | PcP | **PcP** | | **12** | **15** | **25.0** | **+1.8** |
| GTA | | | | PP | **PP** | | **12** | **15** | **33.8** | **+0.8** |
| GTA | | | | ScP | **ScP** | | **12** | **19** | **12.8** | **-0.3** |
| GTA | | | | PcS | **PcS** | | **12** | **19** | **14.3** | **-3.1** |
| GTA | | | | S | **S** | | **12** | **20** | **26.3** | **+0.6** |
| GTA | | | | ScS | **ScS** | | **12** | **23** | **37.0** | **-1.6** |
| GTA | | | | SS | SS | | 12 | 23 | 42.8 | -7.6 |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,14nm,1.1s | | | | | | | | | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,820nm,5.6s | | | | | | | | | |
| GTA | | | | LN | | | | | | |
| | comp=Z,3μm,20.4s | | | | | | | | | |
| GTA | | | | LE | | | | | | |
| | comp=Z,3μm,19.5s | | | | | | | | | |
| GTA | | | | LZ | | | | | | |
| | comp=Z,5μm,19.5s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **45.77** | **121** | *e*P | **P** | **P** | **12** | **13** | **47.0** | **+0.3** |
| | comp=Z,59nm,1.1s | | | | | | | | | |
| **DZM** | **Mont Dzumac** | **45.77** | **121** | *e*LR | LR | | 12 | 26 | 52.0 | |
| | comp=Z,5μm,24.6s | | | | | | | | | |
| **RAMN** | **Ramite** | **45.78** | **309** | *e*P | **P** | **P** | **12** | **13** | **46.6** | **-0.3** |
| | comp=Z,499nm,0.8s | | | | | | | | | |
| **PVM** | **Polavaram** | **46.17** | **294** | *e*P | **P** | **P** | **12** | **13** | **49.1** | **-0.7** |
| PVM | | | | IAmb | IAmb | | 12 | 13 | 51.7 | |
| | comp=Z,101nm,1.2s | | | | | | | | | |
| PVM | | | | *e*S | **S** | | **12** | **20** | **32.3** | **-1.2** |
| PVM | | | | IVMs_BB | IVMs_BB | | 12 | 36 | 04.2 | |
| | comp=Z,750nm,18.6s | | | | | | | | | |
| **MDRS** | **Chennai** | **46.37** | **288** | *e*P | **P** | **P** | **12** | **13** | **50.7** | **-0.7** |
| MDRS | | | | AMB | AMB | | 12 | 13 | 52.9 | |
| | comp=Z,98nm,0.8s | | | | | | | | | |
| MDRS | | | | *ex* | x | | 12 | 15 | 29.6 | |
| MDRS | | | | *ex* | x | | 12 | 49 | 26.6 | |
| **ASAJ** | **Asahikawa** | **46.71** | **17** | *e*P | **P** | **P** | **12** | **13** | **54.4** | **+0.8** |
| | comp=Z,180nm,1.2s | | | | | | | | | |
| **GUN** | **Gumba** | **46.82** | **310** | *e*P | **P** | **P** | **12** | **13** | **54.3** | **-0.8** |
| | comp=Z,194nm,0.4s | | | | | | | | | |
| **PKI** | **Pulchoki** | **47.01** | **309** | *e*P | **P** | **P** | **12** | **13** | **55.6** | **-1.0** |
| | comp=Z,108nm,0.7s | | | | | | | | | |
| **PKIN** | **Phulchoki** | **47.02** | **309** | *e*P | **P** | **P** | **12** | **13** | **55.8** | **-0.8** |
| | comp=Z,44nm,0.6s | | | | | | | | | |
| **TAU** | **Tasmania Unive** | **47.03** | **158** | PFAKE | | | 12 | 14 | 10.0 | +14 |
| TAU | | | | LR | LR | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **SKHT** | **Srikalahasti** | **47.03** | **289** | *e*P | **P** | **P** | **12** | **13** | **55.1** | **-1.4** |
| SKHT | | | | IAmb | IAmb | | 12 | 13 | 57.3 | |
| | comp=Z,176nm,1.3s | | | | | | | | | |
| SKHT | | | | *e*S | **S** | | **12** | **20** | **46.0** | **+0.1** |
| SKHT | | | | IVMs_BB | IVMs_BB | | 12 | 32 | 57.3 | |
| | comp=Z,1μm,24.3s | | | | | | | | | |
| **KKN** | **Kakani** | **47.22** | **309** | *e*P | **P** | **P** | **12** | **13** | **57.2** | **-0.9** |
| **DMN** | **Daman** | **47.27** | **309** | *e*P | **P** | **P** | **12** | **13** | **57.8** | **-0.7** |
| **ADKI** | **Addanki** | **47.31** | **292** | *e*P | **P** | **P** | **12** | **13** | **57.5** | **-1.1** |
| ADKI | | | | IAmb | IAmb | | 12 | 13 | 59.6 | |
| | comp=Z,147nm,1.2s | | | | | | | | | |
| ADKI | | | | *e*S | **S** | | **12** | **20** | **48.3** | **-1.4** |
| ADKI | | | | IVMs_BB | IVMs_BB | | 12 | 37 | 37.6 | |
| | comp=Z,1μm,18.6s | | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **47.69** | **20** | *c i*P | **P** | **P** | **12** | **14** | **01.4** | **+0.3** |
| YUK | | | | *e* | | | 12 | 15 | 52.1 | |
| YUK | | | | *e*S | **S** | | **12** | **20** | **56.3** | **+2.0** |
| YUK | | | | *i* | | | 12 | 23 | 53.1 | |
| YUK | | | | pmax | pmax | | | | | |
| | comp=Z,448nm,2.3s | | | | | | | | | |
| YUK | | | | MLR | MLR | | | | | |
| | comp=N,902nm,20.0s | | | | | | | | | |
| YUK | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **TARA** | **Tarawa** | **47.81** | **88** | PFAKE | | | 12 | 14 | 20.0 | +17 |
| TARA | | | | LR | LR | | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **GKN** | **Gorkha** | **47.82** | **309** | *e*P | **P** | **P** | **12** | **14** | **01.6** | **-1.1** |
| | comp=Z,226nm,0.8s | | | | | | | | | |
| **NJS** | **Nagarjunasagar** | **48.11** | **292** | *e*P | **P** | **P** | **12** | **14** | **03.4** | **-1.5** |
| NJS | | | | IAmb | IAmb | | 12 | 14 | 07.2 | |
| | comp=Z,56nm,0.8s | | | | | | | | | |
| NJS | | | | *e*S | **S** | | **12** | **20** | **59.6** | **-1.4** |
| NJS | | | | IVMs_BB | IVMs_BB | | 12 | 39 | 44.1 | |
| | comp=Z,570nm,21.1s | | | | | | | | | |
| **RCLA** | **Racherla** | **48.15** | **291** | *e*P | **P** | **P** | **12** | **14** | **03.4** | **-1.8** |
| RCLA | | | | IAmb | IAmb | | 12 | 14 | 05.5 | |
| | comp=Z,196nm,1.1s | | | | | | | | | |
| RCLA | | | | *e*S | **S** | | **12** | **21** | **00.7** | **-1.1** |
| RCLA | | | | IVMs_BB | IVMs_BB | | 12 | 32 | 36.1 | |
| | comp=Z,1μm,26.6s | | | | | | | | | |
| **SRLM** | **Srisailam** | **48.37** | **292** | *e*P | **P** | **P** | **12** | **14** | **05.4** | **-1.5** |
| SRLM | | | | IAmb | IAmb | | 12 | 14 | 07.2 | |
| | comp=Z,171nm,1.2s | | | | | | | | | |
| SRLM | | | | *e*S | **S** | | **12** | **21** | **04.5** | **-0.5** |
| SRLM | | | | IVMs_BB | IVMs_BB | | 12 | 32 | 31.7 | |
| | comp=Z,793nm,18.8s | | | | | | | | | |
| **KOLN** | **Koldanda** | **48.52** | **308** | *e*P | **P** | **P** | **12** | **14** | **07.6** | **-0.5** |
| | comp=Z,413nm,0.7s | | | | | | | | | |
| **DANN** | **Dangsing** | **48.66** | **309** | *e*P | **P** | **P** | **12** | **14** | **08.6** | **-0.7** |
| | comp=Z,64nm,0.7s | | | | | | | | | |
| **TRD** | **Trivandrum** | **48.75** | **281** | *e*P | **P** | **P** | **12** | **14** | **09.6** | **-0.3** |
| **RPR** | **Rampur** | **48.77** | **295** | *e*P | **P** | **P** | **12** | **14** | **09.0** | **-0.9** |
| RPR | | | | IAmb | IAmb | | 12 | 14 | 11.3 | |
| | comp=Z,121nm,1.1s | | | | | | | | | |
| RPR | | | | *e*S | **S** | | **12** | **21** | **10.0** | **-0.4** |
| RPR | | | | IVMs_BB | IVMs_BB | | 12 | 36 | 52.0 | |
| | comp=Z,752nm,21.5s | | | | | | | | | |
| **HYB** | **Hyderabad** | **49.03** | **293** | ⇑*i*P | **P** | **P** | **12** | **14** | **09.5** | **-2.5** |
| | comp=Z,200nm,1.0s | | | | | | | | | |
| HYB | | | | *e*PP | **PP** | | **12** | **16** | **08.0** | **+2.1** |
| HYB | | | | *e*PcS | **PcS** | | **12** | **19** | **30.0** | **-2.2** |
| HYB | | | | *e*S | **S** | | **12** | **21** | **12.0** | **-2.2** |
| **HYB** | **Hyderabad** | **49.03** | **293** | *e*P | **P** | | **12** | **14** | **10.2** | **-1.8** |
| HYB | | | | AMB | AMB | | 12 | 14 | 11.7 | |
| | comp=Z,188nm,0.9s | | | | | | | | | |
| **HYBB** | **Hyderabad (bro** | **49.03** | **293** | *e*P | **P** | | **12** | **14** | **09.8** | **-2.2** |
| HYBB | | | | IAmb | IAmb | | 12 | 14 | 13.0 | |
| | comp=Z,220nm,1.1s | | | | | | | | | |
| HYBB | | | | *e*S | **S** | | **12** | **21** | **12.8** | **-1.5** |
| HYBB | | | | IVMs_BB | IVMs_BB | | 12 | 37 | 29.6 | |
| | comp=Z,651nm,24.8s | | | | | | | | | |
| **HABR** | **Khabarovsk** | **49.16** | **9** | *c i*P | **P** | | **12** | **14** | **10.2** | **-2.1** |
| HABR | | | | *e*PP | pP | | 12 | 14 | 20.0 | -4.0 |
| HABR | | | | *e*SP | sP | | 12 | 14 | 24.2 | -4.6 |
| HABR | | | | *e* | | | 12 | 15 | 33.2 | |
| HABR | | | | *e* | | | 12 | 16 | 03.9 | |
| HABR | | | | *e*PPP | PPP | | 12 | 16 | 56.2 | |
| HABR | | | | *e*S | **S** | | **12** | **21** | **13.2** | **-1.7** |
| HABR | | | | *e*SS | sS | | 12 | 21 | 30.4 | -3.8 |
| HABR | | | | *e* | | | 12 | 23 | 59.5 | |
| HABR | | | | *e*SSS | SSS | | 12 | 26 | 04.6 | |
| HABR | | | | pmax | pmax | | | | | |
| | comp=E,92nm,2.4s | | | | | | | | | |
| HABR | | | | pmax | pmax | | | | | |
| | comp=N,61nm,1.8s | | | | | | | | | |
| HABR | | | | pmax | pmax | | | | | |
| | comp=Z,163nm,1.2s | | | | | | | | | |
| HABR | | | | pmax | pmax | | | | | |
| | comp=Z,517nm,2.1s | | | | | | | | | |
| HABR | | | | MLR | MLR | | | | | |
| | comp=Z,787nm,21.0s | | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **49.35** | **16** | ⇑*e*P | **P** | | **12** | **14** | **14.1** | **+0.2** |
| YSS | | | | *e* | | | 12 | 14 | 24.4 | |
| YSS | | | | *e*S | **S** | | **12** | **21** | **15.0** | **-2.7** |
| YSS | | | | *e* | | | 12 | 24 | 04.0 | |
| YSS | | | | *e*SS | **SS** | | **12** | **24** | **48.0** | **-1.9** |
| YSS | | | | pmax | pmax | | | | | |
| | comp=Z,80nm,1.1s | | | | | | | | | |
| YSS | | | | MLR | MLR | | | | | |
| | comp=N,1μm,19.0s | | | | | | | | | |
| YSS | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | | |
| YSS | | | | MLR | MLR | | | | | |
| | comp=E,600nm,17.0s | | | | | | | | | |
| **HIA** | **Hailar** | **49.41** | **355** | *e*P | **P** | | **12** | **14** | **14.9** | **+0.6** |
| HIA | | | | pmax | pmax | | | | | |
| | comp=Z,188nm,1.2s | | | | | | | | | |
| HIA | | | | MLR | MLR | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **HIA** | **Hailar** | **49.41** | **355** | *e*P | **P** | | **12** | **14** | **14.9** | **+0.6** |
| | comp=Z,188nm,1.2s | | | | | | | | | |
| HIA | | | | LR | LR | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **KUR** | **Kuril'sk** | **49.44** | **21** | *c i*P | **P** | | **12** | **14** | **14.3** | **-0.3** |
| KUR | | | | *i* S | **S** | | **12** | **21** | **19.6** | **+0.7** |
| KUR | | | | *i* SS | **SS** | | **12** | **24** | **51.8** | **+0.5** |
| KUR | | | | *i* SSS | SSS | | 12 | 26 | 07.1 | |
| KUR | | | | pmax | pmax | | | | | |
| | comp=N,39nm,1.7s | | | | | | | | | |
| KUR | | | | pmax | pmax | | | | | |
| | comp=E,40nm,1.7s | | | | | | | | | |
| KUR | | | | pmax | pmax | | | | | |
| | comp=Z,197nm,1.7s | | | | | | | | | |
| KUR | | | | pmax | pmax | | | | | |
| | comp=Z,875nm,4.8s | | | | | | | | | |
| **KLR** | **Kul'dur** | **49.49** | **6** | *e*P | P | | 12 | 14 | 11.8 | -3.1 |
| KLR | | | | *e* | | | 12 | 21 | 17.5 | |
| KLR | | | | *e* | | | 12 | 23 | 58.0 | |
| KLR | | | | pmax | pmax | | | | | |
| | comp=Z,200nm,1.6s | | | | | | | | | |
| **URV** | **Uravakonda** | **49.62** | **290** | *e*P | **P** | | **12** | **14** | **14.1** | **-2.4** |
| URV | | | | IAmb | IAmb | | 12 | 14 | 16.3 | |
| | comp=Z,100nm,1.1s | | | | | | | | | |
| URV | | | | *e*S | **S** | | **12** | **21** | **19.8** | **-2.7** |
| URV | | | | IVMs_BB | IVMs_BB | | 12 | 33 | 58.5 | |
| | comp=Z,1μm,27.7s | | | | | | | | | |
| **SRSP** | **Sriramsagar** | **49.65** | **295** | *e*P | **P** | | **12** | **14** | **14.7** | **-2.0** |
| SRSP | | | | IAmb | IAmb | | 12 | 14 | 17.7 | |
| | comp=Z,119nm,1.1s | | | | | | | | | |
| SRSP | | | | *e*S | **S** | | **12** | **21** | **20.8** | **-2.0** |
| SRSP | | | | IVMs_BB | IVMs_BB | | 12 | 37 | 47.2 | |
| | comp=Z,727nm,16.6s | | | | | | | | | |
| **NGP** | **Nagpur** | **49.70** | **298** | *e*P | **P** | | **12** | **14** | **16.0** | **-1.0** |
| **ULN** | **Ulaanbaatar** | **50.31** | **344** | *c i*P | **P** | | **12** | **14** | **21.1** | **-0.3** |
| ULN | | | | pmax | pmax | | | | | |
| | comp=Z,124nm,1.7s | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.31** | **344** | P | **P** | | **12** | **14** | **21.5** | **+0.1** |
| | SNR=28 | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.31** | **344** | *e*P | **P** | | **12** | **14** | **21.1** | **-0.3** |
| | comp=Z,51nm,0.9s | | | | | | | | | |
| ULN | | | | LR | LR | | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **SONM** | **Songino Array** | **50.47** | **344** | P | **P** | | **12** | **14** | **22.1** | **-0.4** |
| | comp=Z,34nm,0.8s,baz=158,slow=8.4,SNR=48 | | | | | | | | | |
| SONM | | | | PcP | **PcP** | | **12** | **15** | **41.0** | **+0.8** |
| | comp=Z,19nm,0.9s,baz=167,slow=7.4,SNR=3.7 | | | | | | | | | |
| SONM | | | | ScP | **ScP** | | **12** | **19** | **31.8** | **-1.5** |
| | comp=Z,3.4nm,0.9s,baz=149,slow=3.1,SNR=3.5 | | | | | | | | | |
| SONM | | | | LR | LR | | 12 | 36 | 59.2 | |
| | comp=Z,3μm,20.0s,baz=151,slow=38 | | | | | | | | | |
| **SONM** | **Songino Array** | **50.47** | **344** | P | **P** | | **12** | **14** | **22.1** | **-0.4** |
| SONM | | | | | | | 12 | 15 | 41.0 | |
| SONM | | | | pmax | pmax | | | | | |
| | comp=Z,34nm,0.8s | | | | | | | | | |
| SONM | | | | pmax | pmax | | | | | |
| | comp=Z,19nm,0.9s | | | | | | | | | |
| SONM | | | | pmax | pmax | | | | | |
| | comp=N,3.0nm,1.0s | | | | | | | | | |
| SONM | | | | MLR | MLR | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **SONA1** | **Songino Array** | **50.47** | **344** | *e*P | **P** | | **12** | **14** | **21.4** | **-1.2** |
| **KLRI** | **Killari** | **51.00** | **293** | *e*P | **P** | | **12** | **14** | **24.8** | **-2.2** |
| KLRI | | | | IAmb | IAmb | | 12 | 14 | 28.8 | |
| | comp=Z,212nm,1.3s | | | | | | | | | |
| KLRI | | | | *e*S | **S** | | **12** | **21** | **38.8** | **-2.9** |
| KLRI | | | | IVMs_BB | IVMs_BB | | 12 | 38 | 47.3 | |
| | comp=Z,1μm,20.6s | | | | | | | | | |
| **BHPL** | **Bhopal** | **51.82** | **300** | *e*P | **P** | | **12** | **14** | **32.6** | **-0.4** |
| **CIT** | **Chita** | **52.86** | **351** | *e*P | **P** | | **12** | **14** | **41.1** | **+0.9** |
| CIT | | | | *e* | | | 12 | 14 | 53.3 | |
| CIT | | | | *e* | | | 12 | 15 | 45.9 | |
| CIT | | | | pmax | pmax | | | | | |
| | comp=Z,272nm,1.6s | | | | | | | | | |
| **TYV** | **Tymovskoe** | **52.93** | **14** | *e*P | **P** | | **12** | **14** | **43.0** | **+2.3** |
| TYV | | | | *e*S | **S** | | **12** | **22** | **07.0** | **0.0** |
| TYV | | | | pmax | pmax | | | | | |
| | comp=E,26nm,1.0s | | | | | | | | | |
| TYV | | | | pmax | pmax | | | | | |
| | comp=Z,48nm,1.0s | | | | | | | | | |
| TYV | | | | pmax | pmax | | | | | |
| | comp=Z,2μm,4.0s | | | | | | | | | |
| TYV | | | | smax | smax | | | | | |
| | comp=N,2μm,13.0s | | | | | | | | | |
| **GOA** | **Goa** | **52.97** | **290** | *e*P | P | | 12 | 14 | 38.4 | -3.2 |
| **H08S2** | **Diego Garcia H** | **53.00** | **261** | P | **P** | | **12** | **14** | **40.3** | **-1.3** |
| | baz=53,slow=8.6,SNR=5.5 | | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **53.01** | **261** | P | **P** | | **12** | **14** | **40.2** | **-1.5** |
| | baz=53,slow=8.6,SNR=5.6 | | | | | | | | | |
| **DGAR** | **Diego Garcia** | **53.02** | **261** | ⇓*i*P | **P** | | **12** | **14** | **40.1** | **-1.9** |
| **DGAR** | **Diego Garcia** | **53.02** | **261** | *e*P | **P** | | **12** | **14** | **40.1** | **-1.9** |
| | comp=N,487nm,1.4s | | | | | | | | | |
| DGAR | | | | LR | LR | | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **53.02** | **261** | P | **P** | | **12** | **14** | **40.1** | **-1.6** |
| | baz=53,slow=8.6,SNR=6.2 | | | | | | | | | |
| **POO** | **Poona** | **53.64** | **293** | *e*P | **P** | | **12** | **14** | **46.1** | **-0.5** |
| POO | | | | AMB | AMB | | 12 | 14 | 46.8 | |
| | comp=Z,54nm,5.6s | | | | | | | | | |
| **ZAK** | **Zakamensk** | **53.66** | **343** | *e*P | **P** | | **12** | **14** | **45.7** | **-0.5** |
| ZAK | | | | *e* | | | 12 | 15 | 53.5 | |
| ZAK | | | | pmax | pmax | | | | | |
| | comp=Z,36nm,1.4s | | | | | | | | | |
| ZAK | | | | pmax | pmax | | | | | |
| | comp=Z,26nm,1.4s | | | | | | | | | |
| **NDI** | **New Delhi** | **53.99** | **306** | *e*P | P | | 12 | 14 | 45.5 | -3.4 |
| **DDI** | **Dehra Dun** | **54.00** | **308** | *e*P | **P** | | **12** | **14** | **47.6** | **-1.4** |
| DDI | | | | AMB | AMB | | 12 | 14 | 51.2 | |
| | comp=Z,166nm,0.3s | | | | | | | | | |
| **H08N1** | **Diego Carcia H** | **54.35** | **262** | P | **P** | | **12** | **14** | **51.5** | **+0.2** |
| | baz=102,slow=3.8,SNR=4.8 | | | | | | | | | |
| **H08N2** | **Diego Garcia H** | **54.37** | **262** | P | **P** | | **12** | **14** | **51.2** | **-0.2** |
| | baz=102,slow=3.8,SNR=5.0 | | | | | | | | | |
| **H08N3** | **Diego Garcia H** | **54.37** | **262** | P | **P** | | **12** | **14** | **52.7** | **+1.2** |
| | baz=102,slow=3.8,SNR=4.3 | | | | | | | | | |
| **NKL** | **Nikolayevsk** | **54.65** | **11** | *i* P | **P** | | **12** | **14** | **53.0** | **-0.1** |
| NKL | | | | *e*S | S | | 12 | 22 | 20.0 | -10 |
| NKL | | | | pmax | pmax | | | | | |
| | comp=N,80nm,1.0s | | | | | | | | | |
| NKL | | | | pmax | pmax | | | | | |
| | comp=Z,300nm,1.0s | | | | | | | | | |
| NKL | | | | pmax | pmax | | | | | |
| | comp=Z,1μm,5.0s | | | | | | | | | |
| NKL | | | | smax | smax | | | | | |
| | comp=N,1μm,9.0s | | | | | | | | | |
| **TLY** | **Talaya** | **54.71** | **344** | LR | LR | | 12 | 40 | 28.7 | |
| | comp=N,2μm,20.0s,baz=142,slow=38 | | | | | | | | | |
| **TLY** | **Talaya** | **54.71** | **344** | *c i*P | **P** | | **12** | **14** | **53.0** | **-0.7** |
| TLY | | | | *e* | | | 12 | 15 | 55.4 | |
| TLY | | | | *e*PPP | PPP | | 12 | 18 | 12.7 | |
| TLY | | | | *e*S | **S** | | **12** | **22** | **31.3** | **+0.2** |
| TLY | | | | pmax | pmax | | | | | |
| | comp=Z,140nm,1.3s | | | | | | | | | |
| TLY | | | | MLR | MLR | | | | | |
| | comp=Z,3μm,23.0s | | | | | | | | | |
| **TLY** | **Talaya** | **54.71** | **344** | P | **P** | | **12** | **14** | **54.4** | **+0.7** |
| | comp=Z,491nm,1.3s,SNR=13 | | | | | | | | | |
| **MSVF** | **Nonsavu** | **54.88** | **112** | *e*P | **P** | | **12** | **14** | **55.0** | **-0.6** |
| MSVF | | | | pmax | pmax | | | | | |
| | comp=Z,77nm,1.4s | | | | | | | | | |
| MSVF | | | | MLR | MLR | | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **MSVF** | **Nonsavu** | **54.88** | **112** | *e*P | **P** | | **12** | **14** | **55.0** | **-0.6** |
| | comp=Z,77nm,1.4s | | | | | | | | | |
| MSVF | | | | LR | LR | | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **WMQ** | **Urumqi** | **55.02** | **328** | P | **P** | | **12** | **14** | **58.5** | **+2.3** |
| WMQ | | | | pP | **pP** | | **12** | **15** | **06.0** | **-2.0** |
| WMQ | | | | S | **S** | | **12** | **22** | **36.0** | **+0.3** |
| WMQ | | | | ScS | **ScS** | | **12** | **24** | **41.0** | **-1.3** |
| WMQ | | | | SS | **SS** | | **12** | **26** | **20.0** | **0.0** |
| WMQ | | | | PMZ | | | | | | |
| | comp=Z,160nm,1.2s | | | | | | | | | |
| WMQ | | | | PMZ | | | | | | |
| | comp=Z,810nm,6.0s | | | | | | | | | |
| WMQ | | | | LN | | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| WMQ | | | | LE | | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| WMQ | | | | LZ | | | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | | |
| **SMLA** | **Simla** | **55.03** | **309** | *i* P | **P** | | **12** | **14** | **56.3** | **-0.1** |
| SMLA | | | | AMB | AMB | | 12 | 14 | 58.7 | |
| | comp=Z,772nm,2.4s | | | | | | | | | |
| SMLA | | | | *i* x | x | | 12 | 22 | 33.9 | |
| **IRK** | **Irkutsk** | **55.04** | **345** | *e*P | **P** | | **12** | **14** | **56.2** | **+0.1** |
| IRK | | | | *e* | | | 12 | 17 | 00.3 | |
| IRK | | | | pmax | pmax | | | | | |
| | comp=Z,178nm,1.7s | | | | | | | | | |
| **MOY** | **Mondy** | **55.48** | **342** | *e*P | **P** | | **12** | **14** | **59.2** | **-0.2** |
| MOY | | | | pmax | pmax | | | | | |
| | comp=Z,210nm,2.3s | | | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **56.17** | **310** | *e*P | **P** | | **12** | **15** | **04.4** | **-0.5** |
| DHRM | | | | AMB | AMB | | 12 | 15 | 06.5 | |
| | comp=Z,584nm,1.6s | | | | | | | | | |
| **CLNS** | **Chul'man** | **56.78** | **360** | *e*P | **P** | | **12** | **15** | **09.2** | **+0.7** |
| CLNS | | | | *e*PP | **pP** | | **12** | **15** | **21.9** | **+1.6** |
| CLNS | | | | *e* | | | 12 | 16 | 02.8 | |
| CLNS | | | | *e* | | | 12 | 17 | 15.9 | |
| CLNS | | | | *e*PPP | PPP | | 12 | 18 | 32.8 | |
| CLNS | | | | *e*S | **S** | | **12** | **22** | **59.5** | **+0.9** |
| CLNS | | | | *e* | | | 12 | 24 | 51.0 | |
| CLNS | | | | pmax | pmax | | | | | |
| | comp=Z,68nm,0.8s | | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | | |
| | comp=N,42nm,1.0s | | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | | |
| | comp=E,22nm,0.9s | | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | | |
| | comp=E,13nm,0.9s | | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | | |
| | comp=N,14nm,1.0s | | | | | | | | | |
| CLNS | | | | smax | smax | | | | | |
| | comp=N,348nm,13.0s | | | | | | | | | |
| CLNS | | | | smax | smax | | | | | |
| | comp=E,312nm,14.2s | | | | | | | | | |
| CLNS | | | | MLR | MLR | | | | | |
| | comp=E,462nm,15.0s | | | | | | | | | |
| CLNS | | | | MLR | MLR | | | | | |
| | comp=N,627nm,16.0s | | | | | | | | | |
| CLNS | | | | MLR | MLR | | | | | |
| | comp=Z,898nm,19.0s | | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **57.06** | **23** | *e*P | P | | 12 | 15 | 01.2 | -9.3 |
| SKR | | | | *e*PS | **PnS** | | **12** | **23** | **16.0** | **-1.4** |
| SKR | | | | *e* | | | 12 | 24 | 50.0 | |
| SKR | | | | *e*SSS | SSS | | 12 | 29 | 05.0 | |
| SKR | | | | pmax | pmax | | | | | |
| | comp=Z,180nm,1.0s | | | | | | | | | |
| SKR | | | | pmax | pmax | | | | | |
| | comp=Z,1μm,6.0s | | | | | | | | | |
| SKR | | | | MLR | MLR | | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | | |
| **HVS** | **Khovu-Aksy** | **57.59** | **337** | *e*P | **P** | | **12** | **15** | **14.4** | **0.0** |
| HVS | | | | pmax | pmax | | | | | |
| | comp=Z,242nm,1.0s | | | | | | | | | |
| **DCZ** | **Deep Cove** | **58.39** | **146** | *e*P | P | | 12 | 15 | 23.6 | +3.6 |
| | comp=Z,76nm,1.2s | | | | | | | | | |
| DCZ | | | | LR | LR | | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **BOD** | **Bodaibo** | **58.44** | **353** | ⇓*i*P | **P** | | **12** | **15** | **20.6** | **+0.5** |
| BOD | | | | *e* | | | 12 | 25 | 03.0 | |
| BOD | | | | pmax | pmax | | | | | |
| | comp=Z,233nm,1.3s | | | | | | | | | |
| **BHJ** | **Bhuj** | **58.64** | **297** | *e*P | **P** | | **12** | **15** | **21.6** | **-0.6** |
| **WKZ** | **Wanaka** | **59.05** | **145** | PFAKE | | | 12 | 15 | 40.0 | +15 |
| WKZ | | | | LR | LR | | | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **59.09** | **146** | *e*P | **P** | | **12** | **15** | **25.2** | **+0.4** |
| | comp=Z,58nm,1.0s | | | | | | | | | |
| WHZ | | | | LR | LR | | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **PDGK** | **Podgornoye** | **59

comp=Z,3.3nm,1.2s,baz=335,slow=2.0,SNR=5.4
**MKAR Makanchi Array 59.85 327** P **P 12 15 29.4 -0.7**
baz=60
**MKAR Makanchi Array 59.85 327** *e*P **P 12 15 29.4 -0.7**
**PET Petropavlovsk 59.87 23**α *i*P **P 12 15 31.6 +1.6**
PET *e*S **S 12 23 39.3 +0.5**
PET pmax pmax
comp=Z,1μm,8.4s
PET pmax pmax
comp=Z,173nm,1.5s
PET pmax pmax
comp=Z,700nm,15.9s
PET MLR MLR
comp=Z,700nm,20.0s
PET MLR MLR
comp=Z,900nm,15.0s
**OXZ Oxford 60.00 142** *e*P P 12 15 35.8 +4.6
comp=Z,14μm,0.4s
OXZ LR LR
comp=Z,2μm,21.0s
**MAKZ Makanchi 60.03 327** *e*P **P 12 15 30.5 -0.8**
MAKZ LR LR
comp=Z,9μm,19.0s
**KHZ Kahutara 60.47 140** *e*P P 12 15 37.3 +2.9
comp=Z,60nm,0.7s
**SNZO South Karori 60.67 139** *e*P **P 12 15 37.6 +1.9**
comp=Z,55nm,0.8s
SNZO LR LR
comp=Z,2μm,22.0s
**BKZ Black Stump Fm 60.88 136** *e*P **P 12 15 38.0 +0.7**
comp=Z,147nm,1.6s
**URZ Urewera 60.91 135** *e*P **P 12 15 39.9 +2.4**
comp=Z,150nm,0.5s
**AAA Alma-Ata 60.95 321** *e*P **P 12 15 37.4 -0.3**
AAA pmax pmax
comp=Z,400nm,1.4s
AAA MLR MLR
comp=Z,2μm,22.0s
**BFZ Birch Farm 61.40 138** PFAKE 12 15 50.0 +9.2
BFZ LR LR
comp=Z,2μm,21.0s
**RAO Raoul Island 61.47 124** PFAKE 12 16 00.0 +19
RAO LR LR
comp=Z,1μm,21.0s
**SFK Sufi-Kurgan 61.61 317** P **P 12 15 42.0 -0.5**
SFK pmax pmax
comp=Z,116nm,0.9s
**TKM2 Tokmak 2 61.62 321** *i*P **P 12 15 42.0 -0.5**
TKM2 pmax pmax
comp=Z,147nm,0.9s
**TKM2 Tokmak 2 61.62 321** P **P 12 15 44.5 +2.0**
SNR=120
**TKM2 Tokmak 2 61.62 321** *e*P **P 12 15 41.8 -0.6**
comp=Z,109nm,0.8s
TKM2 LR LR
comp=Z,2μm,22.0s
**KRAR Krasnoyarsk 61.76 340** *e*P **P 12 15 44.8 +2.0**
KRAR pmax pmax
comp=Z,52nm,1.1s
**KBK Karagaybulak 61.90 320** P **P 12 15 46.6 +2.3**
SNR=22
**UCH Uchtor 61.97 319** P **P 12 15 45.2 0.0**
SNR=133
**YAK Yakutsk 62.08 2***c* *i*P **P 12 15 45.4 +0.5**
YAK *e* 12 16 22.2
YAK *e* 12 18 06.6
YAK *e*S **S 12 24 02.0 -4.7**
YAK *e**SS sS 12 24 40.2 +14
YAK *i* 12 25 29.9
YAK pmax pmax
comp=Z,316nm,0.9s
YAK pmax pmax
comp=E,18nm,1.0s
YAK pmax pmax
comp=N,128nm,1.3s
YAK pmax pmax
comp=Z,199nm,2.2s
YAK pmax pmax
comp=N,133nm,1.7s
YAK pmax pmax
comp=E,51nm,1.3s
YAK smax smax
comp=N,1μm,3.7s
YAK smax smax
comp=E,646nm,3.1s
YAK MLR MLR
comp=Z,2μm,25.0s
YAK MLR MLR
comp=N,1μm,21.0s
**AAK Ala-Archa 62.18 320** LR LR 12 43 59.6
comp=N,2μm,21.5s,baz=95,slow=37
**AAK Ala-Archa 62.18 320** *e*P **P 12 15 45.9 -0.3**
AAK pmax pmax
comp=Z,110nm,1.0s
**AAK Ala-Archa 62.18 320** P **P 12 15 46.8 +0.6**
comp=Z,580nm,1.0s,SNR=18
**AAK Ala-Archa 62.18 320** P **P 12 15 46.0 -0.3**
SNR=80
**AAK Ala-Archa 62.18 320** *e*P **P 12 15 45.9 -0.3**
comp=Z,114nm,1.0s
**CHMS Chumysh 62.20 320** P **P 12 15 47.7 +1.6**
SNR=20
**FRU Bishkek 62.20 320** *e*P **P 12 15 44.0 -2.2**
FRU *i* 12 16 02.0
FRU *e*S **S 12 24 06.5 -2.6**
FRU pmax pmax
comp=Z,230nm,2.2s
FRU smax smax
comp=N,210nm,3.0s
FRU MLR MLR
comp=E,1μm,20.0s
**AML Almayashu 62.46 319** P **P 12 15 48.2 -0.1**
SNR=135
**USP Ospenovka 62.49 320** P **P 12 15 47.3 -0.8**
SNR=81
**KBL Kabul 62.65 310** *e*P **P 12 15 48.4 -1.2**
KBL pmax pmax
comp=Z,170nm,1.0s
**KBL Kabul 62.65 310** *e*P **P 12 15 48.4 -1.2**
comp=Z,174nm,0.9s
KBL LR LR
comp=Z,1μm,22.0s
**EKS2 Erkin-Say 62.66 320** *e*P **P 12 15 49.3 -0.1**
EKS2 pmax pmax
comp=Z,290nm,1.3s
**EKS2 Erkin-Say 62.66 320** P **P 12 15 49.3 -0.1**
SNR=134
**EKS2 Erkin-Say 62.66 320** *e*P **P 12 15 49.3 -0.1**
comp=Z,290nm,1.4s
EKS2 LR LR
comp=Z,1μm,19.0s
**MA2 Magadan 62.80 14** *i*P **P 12 15 51.4 +1.6**
**ZAA0 Zalesovo Array 63.31 335** *e*P **P 12 15 51.0 -2.2**
**ZALV Zalesovo Beam 63.31 335** P **P 12 15 51.8 -1.5**
comp=Z,53nm,0.9s,baz=121,slow=5.7,SNR=64
ZALV LR LR 12 45 54.9
comp=Z,2μm,18.1s,baz=81,slow=38
**ZALV Zalesovo Beam 63.31 335** P **P 12 15 51.8 -1.5**
ZALV pmax pmax
comp=Z,53nm,0.9s
ZALV MLR MLR
comp=Z,2μm,18.1s
**MNAS Manas 63.41 319** P **P 12 15 54.1 -0.3**
MNAS pmax pmax
comp=Z,188nm,1.0s
**AFI Afiamalu 63.90 105** PFAKE 12 16 10.0 +12
AFI LR LR
comp=Z,1μm,21.0s
**KURK Kurchatov 64.16 329** *e*P **P 12 15 58.0 -0.9**
KURK pmax pmax
comp=Z,379nm,0.8s
KURK MLR MLR
comp=Z,2μm,20.0s
**KURK Kurchatov 64.16 329** P **P 12 15 57.5 -1.4**
comp=Z,2μm,0.8s
**KURK Kurchatov 64.16 329** *e*P **P 12 15 58.0 -0.9**
comp=Z,379nm,0.8s
KURK LR LR
comp=Z,2μm,20.0s
**DZET Dzherino 64.39 314** P **P 12 15 59.7 -1.2**
DZET pmax pmax
comp=Z,247nm,1.0s
**NVS Novosibirsk 64.60 335**⇑ *i*P **P 12 16 00.3 -1.4**
NVS *e*S **S 12 24 37.9 -0.5**
NVS *e* 12 25 44.5
NVS pmax pmax
comp=N,7.0nm,1.1s
NVS pmax pmax
comp=E,74nm,1.1s
NVS pmax pmax
comp=Z,122nm,1.1s
NVS pmax pmax
comp=N,13nm,1.1s
NVS pmax pmax
comp=E,12nm,1.1s
NVS pmax pmax
comp=Z,18nm,1.1s
NVS smax smax
comp=N,45nm,2.1s
NVS smax smax
comp=E,80nm,2.1s
**KK31 Karatay Array 65.00 319** *i*P **P 12 16 04.0 -0.6**
KK31 pmax pmax
comp=Z,140nm,1.0s
**KKAR Karatay Array 65.00 319** *e*P **P 12 16 03.5 -1.1**
**KKAR Karatay Array 65.00 319** *e*P **P 12 16 03.5 -1.1**
**SEY Seymchan 66.12 13**⇑ *i*P **P 12 16 12.8 +1.4**
**OTUK Ortayu 66.25 324** P **P 12 16 11.9 -0.7**
OTUK pmax pmax
comp=Z,90nm,0.9s
**JOHN Johnston Islan 66.47 72** PFAKE 12 16 30.0 +15
JOHN LR LR
comp=Z,404nm,21.0s
**SMY Shemya 66.57 30** *e*P **P 12 16 16.8 +2.3**
SMY *e**PP **pP 12 16 23.9 -2.6**
SMY pmax pmax
comp=Z,170nm,1.0s
**SMY Shemya 66.57 30** *e*P **P 12 16 16.8 +2.3**
comp=Z,170nm,1.0s
SMY *e*pP **pP 12 16 23.9 -2.6**
**CASY Casey 66.84 186** *e*P **P 12 16 16.0 +0.1**
comp=Z,45nm,1.2s
CASY LR LR
comp=Z,2μm,22.0s
**DRV Dumont d'Urvil 67.24 174** P P 12 16 04.0 -14
DRV PP PP 12 18 34.0 -13
DRV S S 12 24 51.0 -19
DRV SS **SS 12 29 28.0 -2.3**
DRV L L 12 33 00.0
DRV R 12 37 00.0
**PAF Port-aux-Franc 67.83 215** PFAKE 12 16 40.0 +17
PAF LR LR
comp=Z,2μm,20.0s
**WBK Wadi Bani Khal 68.12 294**⇑P **P 12 16 22.8 -2.1**
SNR=9.8
**AMKA Amchitka 68.57 33** *e*P **P 12 16 29.5 +2.4**
**JMDO Jabal Madar 68.87 294**⇑P **P 12 16 27.4 -2.3**
SNR=11
**MRIV Mauritius Mete 69.03 248** *e*P **P 12 16 31.7 +1.0**
**IDAH Dahanechah 69.42 305** *e*P **P 12 16 32.9 -0.3**
**BVA0 Borovoye Array 69.69 328** *i*P **P 12 16 33.4 -0.7**
BVA0 pmax pmax
comp=Z,199nm,1.4s
**BVAR Borovoye Array 69.69 328** LR LR 12 49 56.8
comp=Z,284nm,18.1s,baz=114,slow=38
**BSY Bisya 69.75 294**⇑P **P 12 16 33.2 -2.0**
SNR=14
**CHKZ Chkalovo 69.90 329** *i*P **P 12 16 34.3 -1.0**
CHKZ pmax pmax
comp=Z,99nm,0.9s
**MIR Mirnyy 70.07 193**⇑ *i*P P 12 16 46.0 +10
MIR pmax pmax
comp=Z,100nm,1.0s
**ZRNK Zerenda 70.39 328** *i*P **P 12 16 37.2 -1.2**
ZRNK pmax pmax
comp=Z,144nm,0.9s
**ARQ Araqi 70.46 295**⇓P **P 12 16 37.3 -2.2**
SNR=13
**RER Riviere de l'E 70.77 248** *e*P **P 12 16 43.0 +1.6**
comp=Z,286nm,0.9s
RER LR LR
comp=Z,4μm,22.0s
**UOSS Wadi Hilu 71.00 296** *e*P **P 12 16 42.0 -0.6**
comp=Z,24nm,1.0s
**HATD Hatta, Dubai 71.05 296**⇑P **P 12 16 40.9 -2.1**
SNR=9.4
**HATD Hatta, Dubai 71.05 296**⇓ *i*P **P 12 16 41.0 -2.0**
SNR=10
**BANOM Banah 71.08 297**⇓P **P 12 16 41.1 -2.0**
**ASHO Ashiyiah 71.09 296**⇑P **P 12 16 41.4 -1.9**
SNR=6.6
**ASHO Ashiyiah 71.09 296**⇑ *i*P **P 12 16 42.7 -0.6**
SNR=8.4
**NAZ Nazwa, Dubai 71.50 296**⇑P **P 12 16 43.8 -1.8**
**FAQ Al Faqa, Dubai 71.52 296**⇓ *i*P **P 12 16 44.1 -1.7**
SNR=5.9
**ASUD Al Ashush, Dub 71.74 296**⇑P **P 12 16 46.0 -1.1**
SNR=9.3
**ASUD Al Ashush, Dub 71.74 296**⇓ *i*P **P 12 16 46.2 -0.9**
SNR=10
**RBK Rabkut 71.87 288**⇑P **P 12 16 45.4 -2.7**
SNR=6.3
**GEYT Alibeck 72.09 310** P **P 12 16 48.4 -0.6**
comp=Z,58nm,0.9s,baz=153,slow=4.3,SNR=34
GEYT LR LR 12 52 04.6
comp=Z,943nm,20.4s,baz=75,slow=39
**ATKA Atka Island 72.55 34** *e*P **P 12 16 52.9 +1.5**
comp=Z,153nm,0.9s
**ABTO Aybut 72.72 288**⇓P **P 12 16 51.0 -2.2**
SNR=6.6
**IBAF Bafgh 72.73 303** *e*P **P 12 16 51.9 -1.2**
**IMEH Mehriz 73.49 303** *e*P **P 12 16 55.8 -1.9**
**BILL Bilibino 73.66 15***c* *i*P **P 12 16 57.9 +0.3**
BILL *i* 12 17 05.8
BILL *i* 12 17 14.2
BILL *i* 12 19 51.5
BILL *e*S **SKiKP 12 26 21.0 -3.3**
BILL *i* SS **SS 12 31 02.3 -6.6**
BILL pmax pmax
comp=Z,27nm,1.3s
BILL MLR MLR
comp=Z,626nm,20.0s
**AB31 Akbulak array 74.13 322** P **P 12 17 00.1 -0.7**
AB31 pmax pmax
comp=Z,63nm,0.7s
**ABKAR Akbulak array 74.13 322** P **P 12 16 59.7 -1.0**
baz=74
**ABKAR Akbulak array 74.13 322** *e*P **P 12 16 59.0 -1.8**
**ISAD Sadrabad 74.36 303** *e*P **P 12 17 02.0 -0.9**
**ISRV Sarvestan 74.43 300** *e*P **P 12 17 02.1 -1.2**
**IPAR Pars 74.56 301** *e*P **P 12 17 02.6 -1.5**
**IGLO Ghaloghah 75.10 308** *e*P **P 12 17 06.0 -1.0**
**IKAZ Kazeroun 75.58 301** *e*P **P 12 17 08.2 -1.8**
**IZEF Zefreh 75.66 304** *e*P **P 12 17 09.8 -0.6**
**AKTO Aktyubinsk 75.69 323** P **P 12 17 08.9 -0.9**
AKTO pmax pmax
comp=Z,184nm,1.0s
**IGAR Gharneh 75.82 303** *e*P **P 12 17 09.7 -1.5**
**IALA Alasht 75.83 307** *e*P **P 12 17 10.2 -1.1**
**IPRN Peran 76.23 307** *e*P **P 12 17 12.0 -1.4**
**IKLH Kolahrood 76.35 304** *e*P **P 12 17 14.9 +0.6**
**IDMV Damavand 76.36 307** *e*P **P 12 17 13.2 -1.1**
**SVE Sverdlovsk 76.41 329***d* *i*P **P 12 17 13.1 -0.6**
SVE *e* 12 20 02.8
SVE *e*PPP PPP 12 21 59.7
SVE *e*S S 12 26 47.1 -8.9
SVE pmax pmax
comp=Z,225nm,1.2s
SVE MLR MLR
comp=Z,2μm,21.0s
**IPIR Pirpir 76.82 304** *e*P **P 12 17 15.3 -1.7**
**IMHD Mahdasht 77.47 307** *e*P **P 12 17 19.7 -0.7**
**AKUT Akutan 77.98 34** *e*P **P 12 17 23.8 +1.3**
comp=Z,338nm,1.0s
**IRAZ Razeghan 78.03 306** *e*P **P 12 17 22.8 -0.7**
**ABPO Ambohimpanom 78.53 251** *e*P **P 12 17 27.1 +0.6**
ABPO pmax pmax
comp=Z,760nm,1.7s
**ABPO Ambohimpanom 78.53 251** P **P 12 17 27.6 +1.0**
comp=Z,293nm,1.5s,SNR=12
**ABPO Ambohimpanom 78.53 251** *e*P **P 12 17 27.1 +0.6**
comp=Z,761nm,1.8s
ABPO LR LR
comp=Z,4μm,21.0s
**GAMB Gambell 78.54 24** *e*P **P 12 17 27.8 +2.4**
comp=Z,148nm,1.1s
**MAW Mawson 79.62 200** P **P 12 17 31.8 +0.5**
comp=Z,37nm,1.2s,baz=63,slow=6.7,SNR=43
MAW LR LR 12 51 20.9
comp=Z,532nm,19.1s,baz=58,slow=35
**MAW Mawson 79.62 200** P **P 12 17 32.0 +0.8**
baz=80,SNR=24
**MAW Mawson 79.62 200** *e*P **P 12 17 32.2 +0.9**
comp=Z,23nm,1.5s
**VNDA Vanda 79.84 172** P **P 12 17 32.2 -0.1**
comp=Z,5.2nm,0.8s,baz=319,slow=5.8,SNR=26
VNDA LR LR 12 50 38.8
comp=Z,1μm,22.0s,baz=334,slow=34
**VNDA Vanda 79.84 172** *e*P **P 12 17 32.4 0.0**
comp=Z,24nm,1.1s
**ISRB Sarab 80.18 308** *e*P **P 12 17 34.9 -0.3**
**IVIS Veis 80.41 305** *e*P **P 12 17 35.1 -1.4**
**RAYN Ar Rayn 80.54 294** P **P 12 17 36.9 -0.4**
comp=Z,571nm,0.8s,SNR=46
**RAYN Ar Rayn 80.54 294** *e*P **P 12 17 36.3 -1.0**
comp=Z,140nm,1.1s
RAYN LR LR
comp=Z,2μm,22.0s
**IGHG Ghaleghazi 80.62 305** *e*P **P 12 17 37.5 -0.3**
**IHRS Heris 80.73 309** *e*P **P 12 17 38.0 -0.3**
**TNA Tin City 80.73 23** *e*P **P 12 17 39.5 +2.2**
comp=Z,104nm,1.2s
**IBST Bostanabad 80.77 308** *e*P **P 12 17 38.0 -0.5**
**SBA Scott Base 80.77 172** *e*P **P 12 17 38.6 +1.2**
SBA pmax pmax
comp=Z,300nm,2.9s
**SBA Scott Base 80.77 172** *e*P **P 12 17 38.6 +1.2**
comp=Z,299nm,3.0s
SBA LR LR
comp=Z,2μm,19.0s
**IDHR Dehrash 80.81 305** *e*P **P 12 17 37.4 -1.4**
**MAK Makhachkala 81.03 313** *e*P **P 12 17 38.0 -1.4**
MAK *e* 12 17 49.7
MAK *e* 12 20 41.5
MAK *e*S **S 12 27 43.0 -2.9**
MAK pmax pmax
comp=Z,291nm,1.5s
**DAMY Dhamar 81.07 285** *e*P **P 12 17 41.7 +1.1**
comp=Z,125nm,1.3s
DAMY LR LR
comp=Z,1μm,22.0s
**SDPT Sand Point 81.26 34** *e*P **P 12 17 40.9 +0.6**
comp=Z,357nm,0.6s
**IAZR Azarshahr 81.48 308** *e*P **P 12 17 42.0 -0.3**
**IMRD Marand 81.82 309** *e*P **P 12 17 43.8 -0.1**
**ISHB Shabestar 81.84 309** *e*P **P 12 17 43.9 -0.2**
**DGRG David-gareji 82.40 312** P **P 12 17 47.6 +0.9**
**DGRG David-gareji 82.40 312** P **P 12 17 47.6 +0.9**
**CHGN Chignik 82.59 33** *e*P **P 12 17 47.9 +0.6**
**GNI Garni 82.72 310** *e*P **P 12 17 49.8 +1.2**
GNI pmax pmax
comp=Z,882nm,1.3s
GNI MLR MLR
comp=Z,822nm,22.0s
**GNI Garni 82.72 310** P **P 12 17 49.3 +0.7**
SNR=32
**GNI Garni 82.72 310**⇑ *i*P **P 12 17 48.7 0.0**
SNR=20
**GNI Garni 82.72 310** *e*P **P 12 17 49.8 +1.2**
comp=Z,882nm,1.3s
GNI LR LR
comp=Z,822nm,22.0s
**TBLG Delisi 82.90 312** *e*P **P 12 17 49.2 -0.1**
**TBLG Delisi 82.90 312** P **P 12 17 49.5 +0.1**
**TBLG Delisi 82.90 312** P **P 12 17 49.4 +0.1**
**DUS Dusheti 82.97 312** P **P 12 17 50.6 +0.9**
**DUS Dusheti 82.97 312** P **P 12 17 50.6 +0.9**
**CLDR Calderan 83.25 309** *e*P **P 12 17 51.7 +0.2**
**CUKT Cukurca 83.32 307** *e*P **P 12 17 50.8 -0.9**
**VANB Van 83.61 309** *e*P **P 12 17 53.0 -0.2**
**AKH Akhalkalaki 83.80 312** *e*P **P 12 17 55.0 +0.8**
**AKH Akhalkalaki 83.80 312** P **P 12 17 54.8 +0.6**
**AKH Akhalkalaki 83.80 312**⇑P **P 12 17 55.2 +1.0**
**AKH Akhalkalaki 83.80 312**⇑ *i*P **P 12 17 55.2 +1.0**
**ONI Oni 83.94 313** P **P 12 17 54.9 +0.2**
**ONI Oni 83.94 313** P **P 12 17 54.9 +0.2**
**AGRB Hanur-Agry 84.01 310** *e*P **P 12 17 56.2 +0.9**
**KARS Kars 84.04 311** *e*P **P 12 17 56.0 +0.6**
**SIRT Sirnak 84.27 308** *e*P **P 12 17 56.4 -0.1**
**KBZ Khabaz 84.46 314** P **P 12 17 57.0 -0.2**
comp=Z,74nm,0.9s,baz=86,slow=4.7,SNR=84
KBZ LR LR 13 01 42.9
comp=Z,319nm,18.3s,baz=74,slow=40
**KBZ Khabaz 84.46 314** P **P 12 17 57.0 -0.2**
KBZ pmax pmax
comp=Z,74nm,0.9s
**KIV Kislovodsk 84.63 314** *e*P **P 12 17 57.6 -0.6**
KIV *e* 12 21 12.7
KIV *e* 12 28 18.0
KIV pmax pmax
comp=Z,96nm,1.1s
KIV pmax pmax
comp=Z,361nm,4.4s
KIV MLR MLR
comp=Z,778nm,19.0s
**KIV Kislovodsk 84.63 314** P **P 12 17 58.9 +0.7**
comp=Z,488nm,1.2s,SNR=13
**SVW2 Sparrevohn 84.92 29** *e*P **P 12 18 01.0 +1.8**
comp=Z,104nm,1.4s
**SII Sitkinak Islan 84.96 33** *e*P **P 12 18 01.8 +2.3**
comp=Z,145nm,0.8s
**CHVG Ch'k'valeri 84.96 313** *e*P **P 12 18 00.7 +0.9**
**CHVG Ch'k'valeri 84.96 313** P **P 12 18 00.6 +0.8**
**CHVG Ch'k'valeri 84.96 313**⇓ *i*P **P 12 18 00.6 +0.8**
**TTA Tatalina 85.03 27** *e*P **P 12 18 00.9 +1.1**
**TTA Tatalina 85.03 27** *e*P **P 12 18 00.9 +1.1**
comp=Z,93nm,1.2s
**VRTB Varto-Mus 85.16 309** *e*P **P 12 18 01.2 +0.1**
**BCA Borcka 85.20 311** *e*P **P 12 17 59.8 -1.2**
**EZM Erzurum 85.29 310** *e*P **P 12 18 03.3 +1.4**
**PPT Papeete 85.47 108** LR LR 12 55 23.8
comp=Z,259nm,19.4s,baz=270,slow=35
**PPT2 Papeete2 85.47 108** *e*S **S 12 28 30.1 -1.9**
comp=Z,1μm,25.5s
**PPT2 Papeete2 85.47 108** *e*LR LR 12 45 10.0
comp=Z,2μm,26.2s
**OHAK Old Harbor 85.53 33** *e*P **P 12 18 03.7 +1.4**
comp=Z,91nm,0.7s
OHAK LR LR
comp=Z,1μm,20.0s
**TBI Tubuai 85.73 113** *e*S **S 12 28 33.0 -1.2**
comp=Z,3μm,27.8s
**TBI Tubuai 85.73 113** *e*LR LR 12 45 20.3
comp=Z,1μm,29.5s
**BNGB Bing**¶‖ **85.75 309** *e*P **P 12 18 04.9 +0.9**
**MAZI Mazidag 85.84 307** *e*P **P 12 18 04.7 +0.3**
**VRH Novokhopyorsk 85.95 321** *e*P **P 12 18 04.0 -0.5**
VRH *e*S **S 12 28 33.0 -2.2**
VRH pmax pmax
comp=Z,490nm,1.2s
VRH pmax pmax
comp=N,120nm,1.3s
VRH pmax pmax
comp=E,420nm,1.1s
VRH smax smax
comp=N,40nm,1.3s
VRH smax smax
comp=Z,20nm,2.0s
VRH smax smax
comp=E,40nm,1.5s
VRH MLR MLR
comp=Z,1μm,23.0s
VRH MLR MLR
comp=N,1μm,19.0s
VRH MLR MLR
comp=E,3μm,22.0s
**KDAK Kodiak Island 85.97 32** *e*P **P 12 18 06.2 +1.7**
**KDAK Kodiak Island 85.97 32** P **P 12 18 05.1 +0.6**
comp=E,465nm,0.8s,SNR=14
**KDAK Kodiak Island 85.97 32** *e*P **P 12 18 06.2 +1.7**
comp=E,88nm,1.0s
KDAK LR LR
comp=Z,1μm,18.0s
**DYBB Diyarbakir 86.11 308** *e*P **P 12 18 05.6 -0.2**
**BAYT Ayd¯ntepe-Bay 86.25 310** *e*P **P 12 18 07.1 +0.6**
**FURI Furi 86.51 279** *e*P P 12 18 12.0 +3.5
comp=Z,438nm,1.4s
FURI LR LR
comp=Z,800nm,21.0s
**KTUT Trabzon 86.57 311** *e*P **P 12 18 07.6 -0.2**
**PTK Pertek 86.75 309** *e*P **P 12 18 09.9 +0.9**
**SOC Sochi 86.75 313***c* *i*P **P 12 18 07.6 -1.0**
SOC *e**PP PcP 12 18 16.2 +5.3
SOC *e* 12 21 26.9
SOC *e*PPP PPP 12 23 22.5
SOC *e*S **SKSac 12 28 30.9 -1.6**
SOC *e*SS **SS 12 34 19.1 -6.5**

SOC pmax pmax
comp=Z,161nm,1.0s
SOC MLR MLR
comp=Z,939nm,22.0s
**PPLA Purkeypile 86.76 27** *eP* **P 12 18 09.3 +0.8**
comp=Z,74nm,1.4s
**GUMT Gumushane 86.76 310** *eP* **P 12 18 10.1 +1.2**
**SVRC Sivrice-ELAZID 86.79 308** *eP* **P 12 18 09.9 +0.7**
**CNPM China Poot 86.86 30** *eP* **P 12 18 09.7 +0.9**
comp=Z,398nm,2.1s
**CAST Castle Rocks 86.86 27** *eP* **P 12 18 11.0 +2.2**
comp=Z,17nm,0.7s
**BRLK Bradley Lake 87.06 30** *eP* **P 12 18 10.4 +0.6**
comp=Z,51nm,0.7s
**URFA Urfa 87.14 307** *eP* **P 12 18 10.4 -0.4**
**SUA Susitna One 87.28 29** *eP* **P 12 18 11.3 +0.3**
comp=Z,58nm,0.9s
**KTH Kantishna Hill 87.40 26** *eP* **P 12 18 11.8 +0.4**
comp=Z,92nm,1.5s
**VORD Divnogorie 87.46 321** *eP* **P 12 18 11.4 -0.5**
VORD pmax pmax
comp=Z,230nm,0.9s
VORD pmax pmax
comp=N,60nm,0.3s
VORD pmax pmax
comp=E,300nm,0.4s
VORD MLR MLR
comp=Z,1μm,22.0s
VORD MLR MLR
comp=N,1μm,23.0s
VORD MLR MLR
comp=E,1μm,20.0s
**VORR Voronezh 87.55 322** *eP* **P 12 18 11.0 -1.3**
VORR pmax pmax
comp=Z,750nm,1.4s
**VSR Storozhevoye 87.55 321** *eP* **P 12 18 11.5 -0.8**
VSR *eS* **S 12 28 48.6 -2.2**
VSR pmax pmax
comp=Z,330nm,1.3s
VSR pmax pmax
comp=N,10.0nm,1.1s
VSR pmax pmax
comp=E,120nm,1.2s
VSR smax smax
comp=N,30nm,1.1s
VSR smax smax
comp=E,30nm,1.3s
VSR smax smax
comp=Z,10.0nm,1.3s
VSR MLR MLR
comp=N,720nm,24.0s
VSR MLR MLR
comp=Z,2μm,24.0s
VSR MLR MLR
comp=E,750nm,26.0s
**MLY Manley 87.62 25** *eP* **P 12 18 13.2 +0.8**
comp=E,40nm,0.8s
**TRF Thorofare Moun 87.67 27** *eP* **P 12 18 12.8 -0.1**
comp=E,73nm,1.5s
**RC01 Rabbit Creek A 87.74 29** *eP* **P 12 18 12.7 -0.3**
comp=E,38nm,0.7s
**LPSR Galich'ya Gora 87.78 322** *eP* **P 12 18 12.8 -0.6**
LPSR *eS* **S 12 28 50.8 -2.1**
LPSR pmax pmax
comp=Z,270nm,1.1s
LPSR pmax pmax
comp=N,50nm,1.2s
LPSR pmax pmax
comp=E,190nm,1.6s
LPSR smax smax
comp=E,70nm,1.4s
LPSR smax smax
comp=Z,10.0nm,1.2s
LPSR smax smax
comp=N,50nm,1.4s
LPSR MLR MLR
comp=Z,1μm,27.0s
LPSR MLR MLR
comp=N,370nm,24.0s
LPSR MLR MLR
comp=E,660nm,14.0s
**SEW Seward 87.81 30** *eP* **P 12 18 14.1 +0.7**
comp=E,56nm,0.9s
**KMBO Kilima Mbogo 87.88 269** P **P 12 18 16.1 +1.0**
comp=E,127nm,1.1s,baz=64,slow=5.6,SNR=166
KMBO LR LR 12 56 33.9
comp=E,2μm,20.1s,baz=96,slow=35
**KMBO Kilima Mbogo 87.88 269** *i* P **P 12 18 16.6 +1.6**
KMBO pmax pmax
comp=Z,127nm,1.0s
**KMBO Kilima Mbogo 87.88 269** P **P 12 18 16.2 +1.1**
baz=88,SNR=4.3
**KMBO Kilima Mbogo 87.88 269** P **P 12 18 16.5 +1.4**
SNR=91
**KMBO Kilima Mbogo 87.88 269** *eP* **P 12 18 16.1 +1.0**
comp=Z,376nm,1.3s
**KLMR Klimovskoe 87.96 331** *d iP* **P 12 18 12.7 -1.3**
KLMR pmax pmax
comp=Z,224nm,1.2s
**COLD Coldfoot 88.03 23** *eP* **P 12 18 15.3 +1.0**
comp=Z,64nm,0.7s
**PMR Palmer 88.06 29** *eP* **P 12 18 14.8 +0.3**
**PMR Palmer 88.06 29** *eP* **P 12 18 14.8 +0.3**
comp=Z,52nm,1.2s
**DARE Darende-Malaty 88.23 308** *eP* **P 12 18 15.9 -0.1**
**SYO Syowa Base 88.29 201**⇓ *eP* **P 12 18 14.6 -0.8**
**MCK McKinley 88.30 26** *eP* **P 12 18 15.6 -0.1**
**MCK McKinley 88.30 26** *eP* **P 12 18 15.6 -0.1**
comp=E,68nm,1.0s
**RND Reindeer 88.31 27** *eP* **P 12 18 15.3 -0.5**
**RND Reindeer 88.31 27** *eP* **P 12 18 15.3 -0.5**
comp=Z,49nm,0.8s
**RSDY Resadiye-TOKAT 88.40 310** *eP* **P 12 18 17.3 +0.6**
**ANN Anapa 88.44 315** *c iP* **P 12 18 15.8 -0.9**
ANN *i* *PP PcP 12 18 24.3 +6.0
ANN *eS* **SKSac 12 28 39.8 -2.8**
ANN *e* 12 28 52.4
ANN pmax pmax
comp=Z,366nm,1.1s
ANN MLR MLR
comp=Z,600nm,22.0s
**SML Sawmill 88.46 28** *eP* **P 12 18 17.3 +0.8**
**SML Sawmill 88.46 28** *eP* **P 12 18 17.3 +0.8**
comp=Z,94nm,1.0s
**SVSK Karacayir 88.64 310** *eP* **P 12 18 17.9 +0.1**
**KMRS Kahramanmaras 88.66 307** *eP* **P 12 18 18.2 +0.2**
**MDM Murphy Dome 88.67 25** *eP* **P 12 18 17.5 +0.1**
comp=E,28nm,1.1s
**MOS Moscow 88.69 326** *eP* **P 12 18 16.7 -0.9**
MOS *e* 12 18 31.5
MOS *e* 12 21 44.2
MOS *e* 12 28 41.6
MOS *eS* **S 12 28 55.9 -5.4**
MOS pmax pmax
comp=Z,325nm,1.2s
MOS pmax pmax
comp=Z,500nm,1.4s
**WRH Wood River Hil 88.71 26** *eP* **P 12 18 17.4 -0.1**
comp=E,61nm,1.0s
**COLA College 88.83 25**⇓ *iP* **P 12 18 18.0 -0.1**
COLA pmax pmax
comp=Z,9.0nm,1.0s
**COLA College 88.83 25** *eP* **P 12 18 17.6 -0.5**
comp=Z,10nm,0.6s
COLA LR LR
comp=Z,696nm,19.0s
**TMCR Tamitsa 88.83 334** *eP* **P 12 18 16.5 -1.6**
TMCR *eS* **SKSac 12 28 41.7 -2.4**
TMCR pmax pmax
comp=Z,118nm,1.1s
**CCB Clear Creek Bu 88.84 25** *eP* **P 12 18 17.5 -0.7**
comp=Z,78nm,1.2s
**SCM Sheep Creek Mo 88.94 28** *eP* **P 12 18 19.3 +0.5**
**SCM Sheep Creek Mo 88.94 28** *eP* **P 12 18 19.3 +0.5**
comp=Z,92nm,1.2s
SCM *eS* S 12 29 09.4 +5.7
**TOKT Tokat 89.00 310** *eP* **P 12 18 19.6 +0.1**
**FKH Fakeheh 89.01 304** *eP* **P 12 18 20.7 +0.9**
**SARI SarD1z-Kayseri 89.06 308** *eP* **P 12 18 20.1 +0.1**
**TAHT Tahtakopru-Hat 89.22 306** *eP* **P 12 18 20.8 +0.2**
**IL1 Eielson Array 89.24 25** *eP* **P 12 18 17.9 -2.1**
**ILAR Eielson Array 89.24 25** P **P 12 18 18.8 -1.3**
comp=Z,9.5nm,0.6s,baz=248,slow=4.4,SNR=112
ILAR PP **PP 12 21 52.9 +2.1**
comp=Z,3.0nm,0.9s,baz=251,slow=7.2,SNR=4.9
**ILAR Eielson Array 89.24 25** P **P 12 18 18.8 -1.3**
ILAR 12 21 52.9
ILAR pmax pmax
comp=Z,10.0nm,0.6s
ILAR pmax pmax
comp=Z,3.0nm,0.9s
**OBN Obninsk 89.27 325** *c iP* **P 12 18 19.8 -0.5**
OBN pmax pmax
comp=Z,268nm,1.1s
OBN MLR MLR
comp=Z,2μm,24.0s
**OBN Obninsk 89.27 325** P **P 12 18 20.6 +0.3**
comp=Z,2μm,0.6s,SNR=7.8
**KVT Kavak 89.39 311** *eP* **P 12 18 21.3 0.0**
**HWQ Hawqa 89.39 304** *eP* **P 12 18 21.9 +0.3**
**RCY Rachaya 89.48 303** *eP* **P 12 18 22.7 +0.7**
**CEYT Ceyhan 89.58 307** *eP* **P 12 18 22.2 -0.1**
**KLU Klutina 89.60 29** *eP* **P 12 18 22.6 +0.7**
comp=Z,21nm,0.7s
**BHL Bhannes 89.63 304** *eP* **P 12 18 23.3 +0.6**
**DIV Divide 89.66 29** *eP* **P 12 18 23.1 +0.9**
comp=Z,121nm,1.3s
**EYAK Cordova Ski Ar 89.67 30** *eP* **P 12 18 23.6 +1.6**
comp=Z,63nm,1.5s
**PAX Paxson 89.83 27** *eP* **P 12 18 23.4 +0.4**
**PAX Paxson 89.83 27** *eP* **P 12 18 23.4 +0.4**
comp=Z,109nm,1.3s
**KRTS Karatas 89.87 306** *eP* **P 12 18 24.0 +0.4**
**FYU Fort Yukon 89.96 24** *eP* **P 12 18 24.8 +1.4**
comp=Z,125nm,1.4s
**HARP HAARP 89.97 28** *eP* **P 12 18 24.9 +1.4**
comp=Z,116nm,1.3s
**DIKM Dikmen 89.98 311** *eP* **P 12 18 22.6 -1.4**
**SNOP Sinop 90.02 312** *eP* **P 12 18 23.0 -1.2**
**KARA Karaisali 90.13 307** *eP* **P 12 18 24.3 -0.5**
**EIL Elat 90.22 300** P **P 12 18 25.1 -0.3**
baz=90,SNR=3.2
**BMRM Bremner River 90.23 29** *eP* **P 12 18 25.9 +1.1**
comp=Z,55nm,1.1s
**CORM Corum 90.46 310** *eP* **P 12 18 26.4 -0.1**
**DOT Dot Lake 90.46 27** *eP* **P 12 18 26.3 +0.5**
comp=Z,78nm,0.7s
**NIG Nigde 90.48 308** *eP* **P 12 18 26.8 0.0**
**MENT Mentasta 90.63 27** *eP* **P 12 18 27.3 +0.7**
**APA Apatity 90.77 337**⇑ *iP* **P 12 18 26.6 -0.5**
APA pmax pmax
comp=Z,768nm,1.5s
APA MLR MLR
comp=Z,2μm,14.0s
**SIM Simferopol' 90.80 315** *c eP* **P 12 18 27.7 -0.1**
SIM *eS* **S 12 29 21.0 -0.5**
SIM pmax pmax
comp=Z,110nm,8.6s
SIM pmax pmax
comp=Z,103nm,1.1s
**EREN Erenkoy 90.85 305** *eP* **P 12 18 28.9 +0.7**
**TOS Tosya 90.92 311** *eP* **P 12 18 28.2 -0.3**
**BZK Bozkurt 90.92 312** *eP* **P 12 18 27.6 -0.7**
**BRTR Keskin Array B 91.22 310** P **P 12 18 29.1 -1.0**
comp=Z,22nm,1.0s,baz=123,slow=4.6,SNR=79
BRTR LR LR 13 06 47.1
comp=Z,266nm,19.2s,baz=86,slow=40
**CSS Prodhromos 91.55 305** *eP* **P 12 18 31.2 -0.3**
comp=Z,41nm,1.0s
CSS LR LR
comp=Z,191nm,22.0s
**EGAK Eagle 91.69 25** *eP* **P 12 18 32.1 +0.6**
comp=Z,66nm,1.5s
EGAK LR LR
comp=Z,597nm,20.0s
**ANTO Ankara 91.87 310** *eP* **P 12 18 32.8 -0.2**
**ANTO Ankara 91.87 310** P **P 12 18 32.8 -0.2**
SNR=8.5
**ANTO Ankara 91.87 310** *eP* **P 12 18 32.8 -0.2**
comp=Z,84nm,1.5s
ANTO LR LR
comp=Z,600nm,22.0s
**BR231 Keskin MP Arra 91.89 310** *eP* P 12 18 29.8 -3.3
**PCA Pinnacle 92.41 30** *eP* **P 12 18 37.0 +2.0**
comp=Z,164nm,1.4s
**DAWY Dawson 92.51 26** *eP* **P 12 18 36.4 +1.1**
**KEV Kevo 92.93 340** PFAKE 12 18 50.0 +13
KEV LR LR
comp=Z,2μm,22.0s
**ARA0 ARCESS Array S 93.48 340** *eP* **P 12 18 38.5 -1.1**
**ARCES ARCESS Array B 93.48 340** P **P 12 18 38.3 -1.4**
comp=Z,14nm,0.8s,baz=84,slow=6.3,SNR=43
**ARCES ARCESS Array B 93.48 340** P **P 12 18 38.3 -1.4**
ARCES pmax pmax
comp=Z,14nm,0.8s
**ARE0 ARCESS Array S 93.48 340** *eP* **P 12 18 38.9 -0.7**
**ISP Isparta 93.72 308** PFAKE 12 18 50.0 +8.4
ISP LR LR
comp=Z,1μm,22.0s
**AKASG Malin Array Be 93.84 321** P **P 12 18 39.9 -1.8**
comp=Z,11nm,0.7s,baz=73,slow=4.2,SNR=96
AKASG PP PP 12 22 32.5 +5.1
comp=Z,0.4nm,0.4s,baz=77,slow=6.8,SNR=4.9
AKASG LR LR 13 07 14.3
comp=Z,537nm,18.4s,baz=70,slow=40
**KIEV Kiev 93.85 321** *i* P **P 12 18 40.4 -1.3**
KIEV pmax pmax
comp=Z,36nm,1.1s
**KIEV Kiev 93.85 321** *eP* **P 12 18 40.1 -1.6**
comp=Z,75nm,1.3s
KIEV LR LR
comp=Z,1μm,20.0s
**AK11 Malin Array Si 93.88 321** *eP* **P 12 18 40.7 -1.2**
**HAMF Hammerfest 93.90 341** *eP* **P 12 18 40.7 -0.9**
**SPB1 Spitsbergen Ar 93.91 349** *eP* **P 12 18 41.8 +0.3**
**SPA1 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.8 +0.3**
**SPB2 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.4 -0.1**
**SPB5 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.7 +0.2**
**SPA2 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.9 +0.3**
**SPA0 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.0 -0.6**
**SPA0 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.8 +0.3**
**SPA3 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.8 +0.3**
**SPB3 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.5 -0.1**
**SPB4 Spitsbergen Ar 93.92 349** *eP* **P 12 18 41.8 +0.3**
**INK Inuvik 94.30 21** *eP* **P 12 18 43.8 +0.4**
**INK Inuvik 94.30 21** *eP* **P 12 18 43.8 +0.4**
comp=Z,113nm,1.3s
**MICGM Minsk 94.31 325**⇓ *iP* **P 12 18 43.0 -0.8**
**MNK Minsk 94.34 325**⇓ *iP* **P 12 18 43.0 -0.9**
MNK pmax pmax
comp=Z,790nm,1.2s
**KTK1 Kautokeino 94.37 339** *eP* **P 12 18 42.8 -0.9**
**MBAR Mbarara 94.39 269** *eP* **P 12 18 45.3 0.0**
**MBAR Mbarara 94.39 269** *eP* **P 12 18 45.3 0.0**
comp=Z,20nm,1.2s
MBAR LR LR
comp=Z,1μm,22.0s
**KIS Kishinev 94.40 317** *eP* **P 12 18 44.0 -0.3**
comp=Z,200nm,1.0s
**KIS Kishinev 94.40 317** *e* PP PP 12 22 32.0 0.0
KIS LRM MLR 13 06 26.0
comp=Z,1μm,22.0s
**KIS Kishinev 94.40 317** *eP* **P 12 18 44.0 -0.3**
KIS *e* 12 22 32.0
KIS *e* 12 29 54.0
KIS pmax pmax
comp=Z,200nm,1.0s
**FINES FINESS Array B 94.44 332** P **P 12 18 43.0 -1.2**
comp=Z,11nm,0.7s,baz=94,slow=5.7,SNR=16
FINES LR LR 13 05 29.5
comp=Z,810nm,19.8s,baz=81,slow=38
**FINES FINESS Array B 94.44 332** *i* P **P 12 18 43.0 -1.2**
FINES pmax pmax
comp=Z,11nm,0.7s
**KBS Kingsbay 94.48 350** PFAKE 12 19 00.0 +16
KBS LR LR
comp=Z,2μm,18.0s
**VSU Vasula 94.50 329** *i* P **P 12 18 43.8 -0.7**
VSU pmax pmax
comp=Z,118nm,1.0s
**IDID Didziasalis 94.88 325** *eP* **P 12 18 45.8 -0.6**
IDID lAmb lAmb 12 18 47.9
comp=Z,68nm,1.3s
**TIRR Tirgusor 94.89 314**⇓ P **P 12 18 45.9 -0.7**
**TIRR Tirgusor 94.89 314**⇓ *iP* **P 12 18 45.9 -0.7**
**TIRR Tirgusor 94.89 314** *eP* **P 12 18 45.9 -0.7**
comp=Z,59nm,1.0s
**NACGM Naroch 94.91 325** *e* **P 12 18 45.0 -1.5**
**SKAG Skagway 94.95 30** *eP* **P 12 18 48.1 +1.5**
comp=Z,44nm,1.0s
**CFR Carcaliu 95.02 315**⇑ P **P 12 18 46.8 -0.4**
**CFR Carcaliu 95.02 315**⇑ *iP* **P 12 18 46.8 -0.4**
**IZAR Zarasai 95.11 326** *eP* **P 12 18 46.6 -0.7**
IZAR lAmb lAmb 12 18 48.7
comp=Z,17nm,0.8s
**TLB Topalu 95.14 315**⇓ P **P 12 18 47.2 -0.6**
**TLB Topalu 95.14 315**⇓ *iP* **P 12 18 47.2 -0.6**
**IIGN Ignalina 95.17 325** *eP* **P 12 18 46.9 -0.8**
IIGN lAmb lAmb 12 18 49.2
comp=Z,57nm,1.3s
**ISAL Salakas 95.20 326** *eP* **P 12 18 47.0 -0.7**
ISAL lAmb lAmb 12 18 49.2
comp=Z,49nm,1.4s
**TRO Tromso 95.72 340** *eP* **P 12 18 49.2 -0.6**
TRO *e* SKSac **SKSac 12 29 22.4 -0.1**
**PRD Provadia 95.73 313** P **P 12 18 49.7 -0.8**
**TESR Tescani 95.93 317**⇑ *iP* **P 12 18 51.0 -0.4**
**VRI Vrincioaia 95.94 316**⇑ P **P 12 18 51.8 +0.3**
**VRI Vrincioaia 95.94 316**⇑ *iP* **P 12 18 51.8 +0.3**
**PLOR Plostina 96.00 316**⇑ P **P 12 18 51.9 +0.2**
**PLOR Plostina 96.00 316**⇑ *iP* **P 12 18 51.8 +0.1**
**MLR Muntele Rosu 96.53 316**⇑ P **P 12 18 53.9 -0.4**
**MLR Muntele Rosu 96.53 316**⇑ *iP* **P 12 18 53.9 -0.4**
**LSZ Lusaka 96.67 255** *eP* **P 12 18 55.5 0.0**
**LSZ Lusaka 96.67 255** P **P 12 18 56.3 +0.8**
SNR=6.5
**LSZ Lusaka 96.67 255** *eP* **P 12 18 55.5 0.0**
comp=Z,31nm,1.0s
LSZ LR LR
comp=Z,3μm,21.0s
**BURAR Bucovina Array 96.78 318**⇑ P **P 12 18 55.4 +0.1**
**BURAR Bucovina Array 96.78 318**⇑ *iP* **P 12 18 55.4 +0.1**
**BUR04 Bucovina Ar. S 96.78 318** *eP* **P 12 18 54.6 -0.7**
**SZH Strazhica 96.79 313** P **P 12 18 54.6 -0.7**
**WRAK Wrangell Islan 97.02 33** *eP* Pdif 12 18 57.7 +1.6
comp=Z,30nm,1.3s
**SUW Suwalki 97.11 324** *eP* **P 12 18 55.7 -0.8**
**SUW Suwalki 97.11 324**⇑ *eP* **P 12 18 55.7 -0.8**
**VOIR 97.16 316**⇑ P **P 12 18 55.9 -1.2**
**VOIR 97.16 316**⇑ *iP* **P 12 18 55.9 -1.2**
**LVV L'vov 97.25 320** *i* P **P 12 18 56.6 -0.7**
LVV *eS* S 12 30 11.9 -6.2
**RDO Rodhopi 97.31 311** PFAKE 12 19 10.0 +12
RDO LR LR
comp=Z,18μm,22.0s
**KDZ Kurdzhali 97.34 312** P P 12 18 50.2 -7.7
**NVL N'lazarevskaya 97.42 198** *eP* P 12 18 51.0 -6.5
NVL pmax pmax
comp=Z,3.0nm,0.5s
**STEI Steigen 97.50 339** *eP* **P 12 18 56.2 -1.7**
STEI lAmb lAmb 12 18 57.3
comp=Z,42nm,1.0s
**APE Apeiranthos 97.74 307**⇓ P **P 12 18 59.5 -0.3**
**APE Apeiranthos 97.74 307**⇓ *iP* **P 12 18 59.5 -0.3**
**DLBC Dease Lake 97.84 31** *eP* Pdif 12 19 01.7 +1.8
comp=Z,120nm,2.3s
**SANT Santorini 97.86 307** *eP* **P 12 18 58.9 -1.5**
comp=Z,229nm,2.3s
SANT LR LR
comp=Z,546nm,21.0s
**LAST Lasithi 97.96 305** *eP* **P 12 19 00.5 -0.4**
comp=Z,74nm,1.1s
**LOT Lotru 98.06 316**⇑ *iP* **P 12 19 01.1 0.0**
**KWP Kalwaria Pacla 98.13 320** *eP* **P 12 19 01.1 -0.1**
**KWP Kalwaria Pacla 98.13 320**⇓ P Pdif 12 19 01.8 +0.5
**KWP Kalwaria Pacla 98.13 320**⇓ *iP* Pdif 12 19 01.8 +0.5
**MPEP Malo Peshtene 98.36 314** P **P 12 19 01.8 -0.6**
**IDI Anoyia 98.43 306** *eP* **P 12 19 00.2 -2.8**
comp=Z,126nm,1.7s
IDI LR LR
comp=Z,500nm,21.0s
**TRPA Tarpa 98.49 319**⇑ *e* Pdiff **P 12 19 02.6 -0.2**
**KOLS Kolonicke sedl 98.53 319** *eP* **P 12 19 03.1 +0.1**
**KOLS Kolonicke sedl 98.53 319** P PDIF **P 12 19 03.1 +0.1**
**UZH Uzhgorod 98.56 319** *eP* **P 12 19 02.7 -0.5**
UZH *e* 12 19 11.7
UZH *e* 12 19 16.1
**DRGR 98.58 317**⇑ P **P 12 19 03.1 -0.3**
**DRGR 98.58 317**⇑ *iP* **P 12 19 03.1 -0.3**
**MMB Musomiste 98.61 312** P **P 12 19 02.0 -1.6**
**BOSA Boshof 98.62 241** P **P 12 19 04.2 +0.2**
comp=Z,3.4nm,0.7s,baz=108,slow=5.0,SNR=5.5
BOSA LR LR 13 00 16.9
comp=Z,2μm,19.9s,baz=86,slow=33
**GZR Gura Zlata 98.75 316**⇑ P **P 12 19 03.8 -0.4**
**GZR Gura Zlata 98.75 316**⇑ *iP* **P 12 19 03.8 -0.4**
**VTS Vitosha 98.86 313** P **P 12 19 03.8 -1.0**
**BEL Belsk 98.93 323** *eP* **P 12 19 04.8 +0.1**
**BEL Belsk 98.93 323**⇑ *eP* **P 12 19 04.9 +0.2**
**KKB Krupnik 99.05 312** P **Pdif 12 19 03.5 -2.1**
**RKT Rikitea 99.06 113** *eLR* LR 12 51 30.5
comp=Z,1μm,30.2s
**STHS Stebnicka Huta 99.11 320** *eP* **Pdif 12 19 05.6 0.0**
**STHS Stebnicka Huta 99.11 320** PDIF **Pdif 12 19 05.6 0.0**
**SIRR Siria 99.39 317**⇓ *iP* **Pdif 12 19 07.1 +0.1**
**NIE Niedzica 99.71 320** *eP* **Pdif 12 19 08.9 +0.6**
**NIE Niedzica 99.71 320**⇑ *eP* **Pdif 12 19 09.0 +0.6**
**OJC Ojcow 99.87 321** *eP* **Pdif 12 19 08.7 -0.2**
**OJC Ojcow 99.87 321** *eP* **Pdif 12 19 08.8 -0.2**
**OJC Ojcow 99.87 321** *e* Pdif **Pdif 12 19 08.8 -0.2**
comp=Z,65nm,1.2s
**PSZ Piszkesteto 100.27 319**⇓ P **Pdif 12 19 11.1 +0.2**
**PSZ Piszkesteto 100.27 319**⇓ *iP* **Pdif 12 19 11.1 +0.2**
**PSZ Piszkesteto 100.27 319**⇑ *e* Pdiff **Pdif 12 19 10.8 -0.1**
**PSZ Piszkesteto 100.27 319** *e* Pdif **Pdif 12 19 10.8 -0.1**
PSZ LR LR
comp=Z,1μm,22.0s
**DAG Danmarks Havn 100.82 352** *i* P **Pdif 12 19 11.4 -1.3**
DAG pmax pmax
comp=Z,39nm,1.2s
**DAG Danmarks Havn 100.82 352** *i* P **Pdif 12 19 11.4 -1.3**
comp=Z,25nm,1.2s
**VYHS Vyhne 100.85 319** *eP* **Pdif 12 19 13.3 -0.1**
**VYHS Vyhne 100.85 319** P PDIF **Pdif 12 19 13.3 -0.1**
**DIVS Divibare 100.93 315**⇑ *iP* **Pdif 12 19 13.8 -0.2**
**OKC Ostrava-Krasne 100.99 321** *eP* **Pdif 12 19 14.3 +0.3**
OKC MLR MLR
comp=Z,800nm,17.2s
**OKC Ostrava-Krasne 100.99 321** *e* PDIFF **Pdif 12 19 14.3 +0.3**
OKC AMS AMS 13 11 50.0
comp=Z,800nm,17.2s
**SNAA Sanae 101.11 195** P **Pdif 12 19 14.5 +0.4**
**SNAA Sanae 101.11 195** *i* P **Pdif 12 19 15.0 +0.8**
SNAA pmax pmax
comp=Z,2.0nm,1.1s
**SNAA Sanae 101.11 195** *e* Pdif **Pdif 12 19 14.9 +0.8**
**MORC Moravsky Berou 101.39 321**⇓ P **Pdif 12 19 15.6 -0.2**
**MORC Moravsky Berou 101.39 321**⇓ *iP* **Pdif 12 19 15.6 -0.2**
**MORC Moravsky Berou 101.39 321** *e* Pdif **Pdif 12 19 15.3 -0.5**
**NB2 NORSAR Subarra 101.48 333** P **Pdif 12 19 13.5 -2.5**
comp=Z,20nm,1.1s,baz=70,slow=4.6
**NB2 NORSAR Subarra 101.48 333** P **Pdif 12 19 13.5 -2.5**
baz=70,slow=4.6
**NOA NORSAR Array B 101.48 333** P **Pdif 12 19 14.6 -1.4**
comp=Z,5.0nm,0.9s,baz=70,slow=4.6,SNR=7.8
**NOA NORSAR Array B 101.48 333** P **Pdif 12 19 14.6 -1.4**
NOA pmax pmax
comp=Z,5.0nm,0.9s
**TIR Tirane 101.51 312** PFAKE 12 19 30.0 +13
TIR LR LR
comp=Z,1μm,22.0s
**NBO02 NORSAR Array S 101.64 333** *e* Pdif **Pdif 12 19 15.6 -1.1**
**KRLC Kraliky 101.79 321** *eP* **Pdif 12 19 18.1 +0.5**
KRLC *e* 12 23 32.5
**KRLC Kraliky 101.79 321** *e* PDIFF **Pdif 12 19 18.1 +0.5**
KRLC *ex* x 12 19 22.2
KRLC *ep* P 12 19 30.5 +0.1
KRLC *e* PP **PP 12 23 32.5 +4.0**
**RES Resolute Bay 101.86 10** *eP* **Pdif 12 19 18.5 +1.2**
**RES Resolute Bay 101.86 10** *e* Pdif **Pdif 12 19 18.5 +1.2**
**KSP Ksiaz 101.91 322** *eP* **Pdif 12 19 18.5 +0.5**
**KSP Ksiaz 101.91 322** *e* P **Pdif 12 19 18.5 +0.5**
**DPC Dobruska-Polom 102.01 322** *eP* **Pdif 12 19 19.2 +0.6**
DPC *e* 12 23 32.7
DPC MLR MLR
comp=Z,1μm,22.2s
**DPC Dobruska-Polom 102.01 322** *e* PDIFF **Pdif 12 19 19.2 +0.6**
DPC *ex* x 12 19 23.1
DPC *ep* P 12 19 31.7
DPC *e* PP **PP 12 23 32.7 +2.6**
DPC *ex* x 12 32 48.1
DPC AMS AMS 13 07 30.0
comp=Z,1μm,22.2s
**SUR Sutherland 102.02 237** PFAKE 12 19 30.0 +11

SUR LR LR
comp=Z,4µm,20.0s
**UPC Upice 102.16 322** *e*P **Pdif 12 19 19.5 +0.3**
UPC MLR MLR
comp=Z,1µm,19.6s
**UPC Upice 102.16 322** *e*PDIFF **Pdif 12 19 19.5 +0.3**
UPC *ex* x 12 32 49.0
UPC AMS AMS 13 07 30.0
comp=Z,1µm,19.6s
**KONO Kongsberg 102.75 332** PFAKE 12 19 30.0 +8.5
KONO LR LR
comp=Z,3µm,22.0s
**TREC Trest 102.81 321** *e*P **Pdif 12 19 22.5 +0.4**
TREC MLR MLR
comp=Z,1µm,18.1s
**TREC Trest 102.81 321** *e*PDIFF **Pdif 12 19 22.5 +0.4**
TREC AMS AMS 13 07 50.0
comp=Z,1µm,18.1s
**PVCC Panska Ves 103.05 322** *e*P **Pdif 12 19 23.5 +0.4**
PVCC MLR MLR
comp=Z,1µm,20.9s
**PVCC Panska Ves 103.05 322** *e*PDIFF **Pdif 12 19 23.5 +0.4**
PVCC AMS AMS 13 14 00.0
comp=Z,1µm,20.9s
**VNA3 Neumayer Olymp 103.06 194** P **Pdif 12 19 23.6 +0.8**
**GOPC GO Pecny, Ondr 103.08 322** *e*P **Pdif 12 19 23.7 +0.4**
GOPC MLR MLR
comp=Z,1µm,20.7s
**GOPC GO Pecny, Ondr 103.08 322** *e*PDIFF **Pdif 12 19 23.7 +0.4**
GOPC *ex* x 12 39 03.2
GOPC AMS AMS 13 10 00.0
comp=Z,1µm,20.7s
**PRU Pruhonice 103.21 322** *e*P **Pdif 12 19 24.4 +0.5**
PRU *e* 12 23 42.5
PRU MLR MLR
comp=Z,1µm,17.4s
**PRU Pruhonice 103.21 322** *e*PDIFF **Pdif 12 19 24.4 +0.5**
PRU *e*PP **PKiKP 12 23 42.5 -0.7**
PRU *ex* x 12 33 03.1
PRU *ex* x 12 38 55.7
PRU AMS AMS 13 10 10.0
comp=Z,1µm,17.4s
**BRG Berggiesshubel 103.33 323** *i* PDIF **Pdif 12 19 24.6 +0.2**
comp=Z,41nm,1.2s
BRG PP PP 12 23 22.0 -18
BRG SDIFF 12 31 07.0
BRG SS SKKPbc 12 39 07.0 +7.4
comp=N,1µm,23.1s
comp=E,1µm,18.1s
comp=Z,944nm,20.8s
**BRG Berggiesshubel 103.33 323** *i* P **Pdif 12 19 24.6 +0.2**
BRG S **Sdif 12 31 07.0 -2.0**
BRG pmax pmax
comp=Z,41nm,1.2s
BRG MLR MLR
comp=N,1µm,23.1s
BRG MLR MLR
comp=E,1µm,18.1s
BRG MLR MLR
comp=Z,944nm,20.8s
**GOLS Golise 103.54 317** *e*Pdiff **Pdif 12 19 25.2 -0.2**
**YKA Yellowknife Ar 103.64 24** Pdiff **Pdif 12 19 25.4 0.0**
comp=Z,1.1nm,0.6s,baz=293,slow=4.3,SNR=6.3
YKA PKiKP **PKiKP 12 23 44.5 +0.9**
comp=Z,1.6nm,0.5s,baz=304,slow=1.8,SNR=16
**YKA Yellowknife Ar 103.64 24** P **Pdif 12 19 25.4 0.0**
YKA *i* 12 23 44.5
YKA pmax pmax
comp=Z,1.0nm,0.6s
YKA pmax pmax
comp=Z,2.0nm,0.5s
**PERS Pernice 103.73 318** *e*Pdiff **Pdif 12 19 25.6 -0.7**
PERS *e*PP **PKiKP 12 23 48.2 +3.9**
**CLL Collm 103.77 323** *i* P **Pdif 12 19 26.2 -0.1**
CLL *e* 12 23 42.0
CLL *e*S **Sdif 12 31 12.0 -0.6**
CLL pmax pmax
comp=Z,37nm,1.7s
CLL MLR MLR
comp=Z,800nm,21.9s
**CLL Collm 103.77 323** ⇑ *i*Pdif **Pdif 12 19 26.2 -0.1**
comp=Z,37nm,1.7s
CLL *e* 12 19 31.0
CLL *e*PP **PP 12 23 42.0 -1.1**
CLL *e*PKiKP **PKiKP 12 23 46.0 +1.8**
CLL *e*PPP PPP 12 25 55.0
CLL *e*Sdif Sdif 12 31 12.0 -0.6
CLL *e*PS **PS 12 32 56.0 +1.4**
CLL *e*PPS PPS 12 33 44.0
CLL *e*SS **SKKPbc 12 38 54.0 -4.4**
CLL *e* 12 41 24.0
CLL *e*SSS SSS 12 42 30.0
CLL *e*SSSS 12 45 48.0
CLL *e* 12 47 18.0
CLL LmV 13 11 00.0
comp=Z,800nm,21.9s
**SOKA Soboth 103.77 318** ⇑ *i*Pdiff **Pdif 12 19 26.5 -0.1**
comp=Z,8.8nm,1.2s
**MOA Molln 103.97 320** ⇑ *i*Pdiff **Pdif 12 19 27.4 0.0**
comp=Z,26nm,1.2s
**KHC Kasperske Hory 104.05 321** *e*P **Pdif 12 19 27.7 0.0**
KHC MLR MLR
comp=Z,2µm,21.9s
**KHC Kasperske Hory 104.05 321** *e*PDIFF **Pdif 12 19 27.7 0.0**
KHC AMS AMS 13 08 50.0
comp=Z,2µm,21.9s
**GEC2 GERESS Array S 104.06 321** *e*P **Pdif 12 19 28.3 +0.5**
GEC2 *e* 12 23 51.7
**GEC2 GERESS Array S 104.06 321** *e*Pdif **Pdif 12 19 28.3 +0.5**
GEC2 *e*PP PP 12 23 51.6 +6.1
**GERES GERESS Array B 104.06 321** Pdiff **Pdif 12 19 26.9 -0.9**
comp=Z,2.5nm,0.8s,baz=71,slow=4.8,SNR=21
GERES PKiKP **PP 12 23 46.2 +0.7**
comp=Z,0.5nm,0.4s,baz=90,slow=2.7,SNR=2.7
**GERES GERESS Array B 104.06 321** P **Pdif 12 19 26.9 -0.9**
GERES *i* 12 23 46.2
GERES pmax pmax
comp=Z,3.0nm,0.8s
GERES pmax pmax
comp=Z,1.0nm,0.4s
**TIP Timpagrande 104.26 310** PFAKE 12 19 40.0 +11
TIP LR LR
comp=Z,590nm,22.0s
**NKC Novy Kostel 104.43 322** AMS AMS 13 15 00.0
comp=Z,2µm,22.4s
**CUC Castrocucco 104.80 311** PFAKE 12 19 40.0 +8.8
CUC LR LR
comp=Z,461nm,20.0s
**GRB3 Grafenberg Arr 105.10 322** *e*Pdiff **Pdif 12 19 33.0 +0.7**
**GRB4 Grafenberg Arr 105.21 322** *e*Pdiff **Pdif 12 19 33.7 +0.9**
**GRB5 Grafenberg Arr 105.25 321** *e*Pdiff **Pdif 12 19 33.9 +0.9**
**I03D Drain, OR 105.51 44** PKiKP **PKiKP 12 23 49.1 +1.5**
baz=106
**WTTA Wattenberg 105.84 320** ⇑ *i*Pdiff **Pdif 12 19 35.5 -0.4**
comp=Z,28nm,1.3s
**FETA Feichten 106.51 319** ⇑ *i*Pdiff **Pdif 12 19 38.4 -0.4**
comp=Z,7.5nm,1.0s
**TSUM Tsumeb 106.52 250** PFAKE 12 24 00.0
TSUM LR LR
comp=Z,2µm,22.0s
**WDD Wield Dalam 106.68 307** PFAKE 12 24 00.0
WDD LR LR
comp=Z,925nm,20.0s
**FUORN Ofenpass-Fuorn 106.94 319** *e*Pdif **Pdif 12 19 41.6 +0.7**
**CLTB Caltabellotta 107.32 309** PFAKE 12 24 00.0
CLTB LR LR
comp=Z,507nm,22.0s
**TUE Stuetta 107.58 319** PFAKE 12 24 00.0
TUE LR LR
comp=Z,2µm,19.0s
**BFO Black Forest 107.60 321** PFAKE 12 24 00.0
BFO LR LR
comp=Z,843nm,20.0s
**VLC Villacollemand 107.62 317** PFAKE 12 24 00.0
VLC LR LR
comp=Z,668nm,19.0s
**NEW Newport 108.21 39** PKiKP **PKiKP 12 23 53.9 +1.4**
baz=108
**EDM Edmonton 108.42 33** *e*PKiKP **PKiKP 12 23 54.4 +1.6**
**WLF Walferdange 108.44 323** PFAKE 12 24 10.0
WLF LR LR
comp=Z,2µm,20.0s
**VSL Villasalto 109.72 312** PFAKE 12 24 10.0
VSL LR LR
comp=Z,1µm,20.0s
**BNI Bardonecchia 109.83 319** PFAKE 12 24 10.0
BNI LR LR
comp=Z,2µm,19.0s
**BLMT Blacktail Moun 110.02 38** *e*PKiKP PKiKP 12 24 03.6 +7.4
**NV01 Mina Array Sit 110.64 49** *e*PKiKP **PKiKP 12 23 59.1 +1.4**
**NVAR Mina Array Bea 110.64 49** PKiKP **PKiKP 12 23 59.3 +1.7**
comp=Z,1.8nm,0.7s,baz=285,slow=5.7,SNR=4.4
NVAR PKKPab **PKKPab 12 35 08.9 +1.3**
comp=Z,0.4nm,0.3s,baz=98,slow=4.5,SNR=4.2
**MSO Missoula 110.75 39** PKiKP **PKiKP 12 23 58.3 +0.9**
baz=111
**MSO Missoula 110.75 39** *e*PKiKP **PKiKP 12 23 58.4 +0.9**
**VES Vestal, Richgr 110.77 51** PKiKP **PKiKP 12 23 58.2 +0.5**
baz=111
**MFID Camas Ranch 110.80 43** *e*PKiKP **PKiKP 12 23 59.5 +1.8**
**SLMT Seeley Lake 110.87 39** *e*PKPdf **PKiKP 12 23 58.6 +0.8**
**ESK Eskdalemuir 110.87 331** PFAKE 12 24 10.0
ESK LR LR
comp=Z,2µm,20.0s
**SSB Saint Sauveur 111.14 319** PFAKE 12 24 10.0
SSB LR LR
comp=Z,1µm,20.0s
**CHMT Chamberlain Mo 111.15 39** *e*PKPdf **PKiKP 12 23 58.5 +0.1**
**ARVC Arvin 111.16 52** PKiKP **PKiKP 12 23 59.4 +1.0**
baz=111
**HLID Hailey 111.70 42** PKiKP **PKiKP 12 24 01.4 +1.9**
baz=112
**HLID Hailey 111.70 42** *e*PKiKP **PKiKP 12 24 01.1 +1.6**
HLID LR LR
comp=Z,1µm,22.0s
**GRAC Grapevine Rang 111.77 50** PKiKP **PKiKP 12 24 01.6 +2.0**
**EDW2 Edwards Air Fo 111.89 52** PKiKP **PKiKP 12 24 01.6 +1.6**
baz=112
**MPMC Manual Prospec 111.95 51** PKiKP **PKiKP 12 24 01.4 +1.2**
baz=112
**CIS Catalina Islan 111.95 54** PKiKP **PKiKP 12 24 00.9 +0.9**
baz=112
**LRMC Laurel Mountai 111.96 52** PKiKP **PKiKP 12 24 02.0 +1.8**
baz=112
**ELK Elko 112.14 45** *e*PKiKP **PKiKP 12 24 02.2 +1.7**
**ELK Elko 112.14 45** *e*PKiKP **PKiKP 12 24 02.2 +1.7**
**FURC Furnace Creek, 112.32 50** PKiKP **PKiKP 12 24 02.1 +1.6**
baz=112
**BFSC Mount Baldy Ra 112.33 53** PKiKP **PKiKP 12 24 02.0 +1.2**
baz=112
**R11A Troy Canyon, C 112.69 48** PKiKP **PKiKP 12 24 03.2 +1.7**
baz=113
**R11A Troy Canyon, C 112.69 48** *e*PKiKP **PKiKP 12 24 02.9 +1.4**
**BOZ Bozeman (W) 112.70 39** PKiKP **PKiKP 12 24 02.9 +1.6**
baz=113
**BOZ Bozeman (W) 112.70 39** PFAKE 12 24 10.0
BOZ LR LR
comp=Z,857nm,22.0s
**EGMT Eagleton 112.81 37** PKiKP **PKiKP 12 24 02.8 +1.5**
baz=113
**EGMT Eagleton 112.81 37** *e*PKiKP **PKiKP 12 24 03.0 +1.7**
EGMT LR LR
comp=Z,932nm,19.0s
**MURC Murrieta 112.87 53** PKiKP **PKiKP 12 24 03.1 +1.3**
baz=113
**SHOC Shoshone 112.94 51** PKiKP **PKiKP 12 24 04.0 +2.2**
baz=113
**FFC Flin Flon 113.36 28** PFAKE 12 24 10.0
FFC LR LR
comp=Z,947nm,19.0s
**PFO Pinyon Flat Ob 113.47 53** *e*PKiKP **PKiKP 12 24 04.9 +1.9**
PFO MLR MLR
comp=Z,1µm,21.0s
**PFO Pinyon Flat Ob 113.47 53** *e*PKiKP **PKiKP 12 24 04.9 +1.9**
PFO LR LR
comp=Z,1µm,21.0s
**SHPR Sheep Range 113.61 50** *e*PKiKP **PKiKP 12 24 05.6 +2.3**
**BELC Belle Mtn. Jos 113.72 53** PKiKP **PKiKP 12 24 05.5 +2.0**
baz=114
**GMRC Granite Mounta 113.75 52** PKiKP **PKiKP 12 24 05.5 +1.9**
baz=114
**FXWY Fox Creek 113.94 41** *e*PKiKP **PKiKP 12 24 05.4 +1.6**
**LKWY Lake 113.95 40** PFAKE 12 24 20.0
LKWY LR LR
comp=Z,1µm,22.0s
**DUG Dugway 114.07 45** *e*PKiKP **PKiKP 12 24 05.9 +1.8**
DUG MLR MLR
comp=Z,769nm,20.0s
**DUG Dugway 114.07 45** PKiKP **PKiKP 12 24 05.7 +1.6**
baz=114
**DUG Dugway 114.07 45** *e*PKiKP **PKiKP 12 24 05.8 +1.8**
DUG LR LR
comp=Z,769nm,20.0s
**REDW Red Top Meadow 114.17 41** *e*PKiKP **PKiKP 12 24 06.0 +1.7**
**LOHW Long Hollow 114.22 41** *e*P PKPdf 12 24 13.3 +8.9
**AHID Auburn Hatcher 114.25 42** PFAKE 12 24 20.0 +16
AHID LR LR
comp=Z,761nm,19.0s
**BC3 Big Chuckawall 114.25 53** PKiKP **PKiKP 12 24 06.2 +1.7**
baz=114
**IRM Iron Mountain 114.34 52** PKiKP **PKiKP 12 24 06.1 +1.5**
baz=114
**HWUT Hardware Ranch 114.40 43** PFAKE 12 24 20.0 +15
HWUT LR LR
comp=Z,1µm,19.0s
**RLMT Red Lodge 114.43 39** PKiKP PKPdf 12 24 06.3 +1.6
baz=114
**RLMT Red Lodge 114.43 39** PFAKE 12 24 20.0 +15
RLMT LR LR
comp=Z,439nm,19.0s
**CCUT Cedar City 114.62 48** *e*PKiKP PKPdf 12 24 08.3 +3.1
**NLU North Lily Min 114.68 45** *e*PKiKP PKPdf 12 24 07.7 +2.3
**GLA Glamis 114.93 53** PKiKP PKPdf 12 24 08.0 +2.2
baz=115
**Y12C Blythe 114.96 52** PKiKP PKPdf 12 24 07.8 +2.1
baz=115
**O16A Springville 114.99 45** *e*PKPdf PKPdf 12 24 09.7 +3.9
**PDMCI Parker Dam,Lak 115.10 52** PKiKP **PKPdf 12 24 07.9 +1.9**
**MSU Marysvale 115.15 47** *e*PKiKP **PKPdf 12 24 08.7 +2.4**
**MSU Marysvale 115.15 47** *e*PKiKP **PKPdf 12 24 08.7 +2.4**
**BW06 Boulder Array 115.28 42** *e*PKPdf **PKPdf 12 24 06.7 +0.3**
BW06 *e*PKPdf **PKiKP 12 24 07.4 +0.9**
BW06 *e*PKKPbc **PKKPab 12 34 46.4 -0.7**
BW06 LR LR
comp=Z,612nm,21.0s
**LAO LASA Array 115.55 37** PKiKP **PKPdf 12 24 08.3 +1.7**
baz=116
**LAO LASA Array 115.55 37** *e*PKPdf **PKPdf 12 24 08.6 +2.0**
LAO LR LR
comp=Z,881nm,19.0s
**TMUT Trail Mountain 115.55 46** *e*PKPdf **PKPdf 12 24 07.8 +0.6**
**DGMT Dagmar 115.80 34** PKiKP **PKPdf 12 24 08.1 +1.2**
baz=116
**DGMT Dagmar 115.80 34** *e*PKPdf **PKPdf 12 24 08.3 +1.3**
DGMT LR LR
comp=Z,1µm,22.0s
**P17A Butcher Ranch, 115.82 45** *e*PKPdf **PKPdf 12 24 09.7 +2.2**
**P18A Preston Nutter 116.11 45** *e*PKPdf **PKPdf 12 24 10.6 +2.4**
**A25A Svangstu Ranch 116.14 33** PKiKP **PKPdf 12 24 09.0 +1.4**
baz=116
**B25A Knox Farm, Ray 116.49 34** PKiKP **PKiKP 12 24 10.2 +1.9**
baz=116
**C25A Freed Ranch, W 116.74 34** PKiKP **PKiKP 12 24 10.7 +1.9**
baz=117
**A26A Wade Farm, Ken 116.75 33** PKiKP **PKiKP 12 24 09.6 +0.8**
baz=117
**WUAZ Wupatki 116.83 50** PKiKP **PKiKP 12 24 11.4 +1.8**
baz=117
**WUAZ Wupatki 116.83 50** PFAKE 12 24 20.0 +10
WUAZ LR LR
comp=Z,744nm,21.0s
**214A Organ Pipe Nat 116.89 54** PKiKP **PKiKP 12 24 11.0 +1.4**
baz=117
**B26A Jensen Ranch, 116.94 33** PKiKP **PKiKP 12 24 10.6 +1.4**
baz=117
**D25A Fairfield 117.01 35** PKiKP **PKiKP 12 24 11.0 +1.6**
baz=117
**A27A Ledoux Ranch, 117.15 32** PKiKP **PKiKP 12 24 11.1 +1.5**
baz=117
**TAM Tamanrasset 117.18 296** PFAKE 12 24 20.0 +9.5
TAM LR LR
comp=Z,710nm,22.0s
**O20A White River Ci 117.30 44** PKiKP **PKiKP 12 24 11.7 +1.3**
baz=117
**O20A White River Ci 117.30 44** *e*PKPdf **PKPdf 12 24 12.0 +1.7**
**E25A Miller Ranch, 117.31 36** PKiKP **PKiKP 12 24 11.4 +1.4**
baz=117
**K22A Casper 117.33 41** PKiKP **PKiKP 12 24 10.9 +0.6**
baz=117
**K22A Casper 117.33 41** *e*PKPdf **PKPdf 12 24 11.0 +0.7**
**C26A Wahner Farm, P 117.33 34** PKiKP **PKiKP 12 24 11.2 +1.2**
baz=117
**PV09 Paradox Valley 117.36 46** *e*PKPdf **PKPdf 12 24 12.8 +2.1**
**PV10 Paradox Valley 117.47 46** *e*PKPdf **PKPdf 12 24 11.8 +1.0**
**D26A Manning 117.58 35** PKiKP **PKiKP 12 24 11.6 +1.1**
baz=118
**F25A Bowman 117.59 36** PKiKP **PKiKP 12 24 11.7 +1.1**
baz=118
**A28A Rude Farm, Bot 117.70 32** PKiKP **PKiKP 12 24 11.6 +1.0**
baz=118
**C27A Sayler Ranch, 117.72 34** PKiKP **PKiKP 12 24 11.9 +1.2**
baz=118
**E26A Carlson Angus 117.88 35** PKiKP **PKiKP 12 24 12.2 +1.2**
baz=118
**B28A Dugan Ranch, T 117.92 33** PKiKP **PKiKP 12 24 11.9 +0.9**
baz=118
**G25A Newell 118.00 37** PKiKP **PKiKP 12 24 12.0 +0.6**
baz=118
**D27A Center 118.05 34** PKiKP **PKiKP 12 24 12.6 +1.2**
baz=118
**F26A Lodgepole 118.09 36** PKiKP **PKiKP 12 24 12.8 +1.3**
baz=118
**RSSD Black Hills 118.18 38** *e*PKIKP **PKPdf 12 24 12.1 +0.1**
**RSSD Black Hills 118.18 38** *e*PKPdf **PKPdf 12 24 12.1 +0.1**
**H25A Fruitdale 118.19 38** PKiKP **PKiKP 12 24 12.6 +0.8**
baz=118
**W18A Petrified Fore 118.22 50** PKiKP **PKiKP 12 24 13.6 +1.4**
baz=118
**W18A Petrified Fore 118.22 50** *e*PKPdf **PKPdf 12 24 14.3 +2.0**
**A29A Manning Farm, 118.23 32** PKiKP **PKiKP 12 24 12.4 +0.8**
baz=118
**MVCO Mesa Verde 118.34 47** PKiKP **PKiKP 12 24 14.2 +1.7**
baz=118
**MVCO Mesa Verde 118.34 47** *e*PKPdf **PKPdf 12 24 14.5 +2.0**
MVCO LR LR
comp=Z,850nm,20.0s
**TUC Tucson 118.40 53** *e*PKIKP **PKPdf 12 24 14.1 +1.6**
TUC MLR MLR
comp=Z,843nm,21.0s
**TUC Tucson 118.40 53** *e*PKPdf **PKPdf 12 24 14.1 +1.6**
TUC LR LR
comp=Z,843nm,21.0s
**E27A Carson 118.42 35** PKiKP **PKiKP 12 24 13.3 +1.1**
baz=118
**I25A Rochford 118.42 38** PKiKP **PKiKP 12 24 13.1 +0.7**
baz=118
**G26A Maurine 118.44 36** PKiKP **PKiKP 12 24 13.1 +0.9**
baz=118
**B29A Wagenman Farm, 118.45 32** PKiKP **PKiKP 12 24 12.9 +0.9**
baz=118
**F27A Lemmon 118.46 36** PKiKP **PKiKP 12 24 13.4 +1.1**
baz=118
**N23A Red Feather La 118.53 42** PKiKP **PKiKP 12 24 13.9 +1.1**
baz=118
**MDND Maddock 118.68 33** PKiKP **PKiKP 12 24 13.5 +1.0**
baz=119
**MDND Maddock 118.68 33** *e*PKPdf **PKPdf 12 24 13.9 +1.4**
**H26A Fairpoint 118.70 37** PKiKP **PKiKP 12 24 13.4 +0.7**
baz=119
**J25A Sunshine Ranch 118.70 39** PKiKP **PKiKP 12 24 14.0 +1.1**
baz=119
**A30A Hoffart Farm, 118.71 31** PKiKP **PKiKP 12 24 13.3 +0.7**
baz=119
**G27A Dupree 118.79 36** PKiKP **PKiKP 12 24 14.0 +1.1**
baz=119
**E28A Huff 118.83 34** PKiKP **PKiKP 12 24 13.7 +0.8**
baz=119
**I26A New Underwood 118.95 38** PKiKP **PKiKP 12 24 13.9 +0.7**
baz=119
**B30A Myrvik Farm, E 119.00 32** PKiKP **PKiKP 12 24 13.7 +0.6**
baz=119
**ULM Lac du Bonnet 119.08 29** PKP **PKPdf 12 24 13.4 +0.3**
comp=Z,6.4nm,0.5s,baz=253,slow=1.4,SNR=10
**ULM Lac du Bonnet 119.08 29** PKIKP **PKPdf 12 24 13.5 +0.3**
ULM pmax pmax
comp=Z,6.0nm,0.5s
**ULM Lac du Bonnet 119.08 29** *e*PKPdf **PKPdf 12 24 13.6 +0.4**
**H27A Howes 119.11 37** PKiKP **PKiKP 12 24 14.6 +1.1**
baz=119
**F28A McLaughlin 119.18 35** PKiKP **PKiKP 12 24 14.9 +1.2**
baz=119
**J26A Sides Ranch, S 119.20 39** PKiKP **PKiKP 12 24 14.8 +1.0**
baz=119
**ESDC Sonseca Array 119.21 317** PKP **PKPdf 12 24 14.5 +0.7**
comp=Z,0.2nm,0.3s,baz=116,slow=3.4,SNR=8.0
ESDC PP **PP 12 25 37.9 +3.7**
comp=Z,3.8nm,0.9s,baz=54,slow=7.2,SNR=5.4
**ISCO Idaho Springs 119.26 43** *e*PKIKP **PKPdf 12 24 15.7 +1.4**
ISCO MLR MLR
comp=Z,1µm,20.0s
**ISCO Idaho Springs 119.26 43** PKiKP **PKiKP 12 24 15.3 +1.0**
baz=119
**ISCO Idaho Springs 119.26 43** *e*PKPdf **PKPdf 12 24 15.7 +1.4**
ISCO LR LR
comp=Z,1µm,20.0s
**S22A 4UR Ranch, Cre 119.32 46** PKiKP **PKiKP 12 24 16.1 +1.6**
baz=119
**S22A 4UR Ranch, Cre 119.32 46** *e*PKPdf **PKPdf 12 24 16.6 +2.1**
**B31A Greenbush Farm 119.37 31** PKiKP **PKiKP 12 24 14.3 +0.5**
baz=119
**C30A Mose, Pekin 119.38 32** PKiKP **PKiKP 12 24 14.7 +0.8**
baz=119
**I27A Quinn 119.43 37** PKiKP **PKiKP 12 24 14.8 +0.7**
baz=119
**PAB San Pablo 119.53 317** PFAKE 12 24 30.0 +16
PAB LR LR
comp=Z,690nm,20.0s
**G28A Parade 119.55 36** PKiKP **PKiKP 12 24 15.1 +0.7**
baz=120
**D30A Buchanan 119.59 33** PKiKP **PKiKP 12 24 15.0 +0.7**
baz=120
**H28A Mission Ridge 119.71 36** PKiKP **PKiKP 12 24 15.4 +0.7**
baz=120
**C31A Landman Farms, 119.72 32** PKiKP **PKiKP 12 24 15.5 +0.9**
baz=120
**F29A Eureka 119.75 35** PKiKP **PKiKP 12 24 15.3 +0.6**
baz=120
**E30A Jud 119.87 34** PKiKP **PKiKP 12 24 15.5 +0.6**
baz=120
**J27A Elkhorn Farm, 119.89 38** PKiKP **PKiKP 12 24 16.1 +0.9**
baz=120
**B32A Ashes, Strandq 119.96 31** PKiKP **PKiKP 12 24 15.6 +0.6**
baz=120
**Q24A Divide 119.96 44** PKiKP **PKiKP 12 24 15.9 +0.2**
baz=120
**I28A Midland 120.00 37** PKiKP **PKiKP 12 24 16.1 +0.8**
baz=120
**G29A Hoven 120.06 35** PKiKP **PKiKP 12 24 15.8 +0.4**
baz=120
**D31A Mcclaflin, Tow 120.18 33** PKiKP **PKiKP 12 24 16.1 +0.6**
baz=120
**F30A Leola 120.20 34** PKiKP **PKiKP 12 24 16.2 +0.6**
baz=120
**H29A Onida 120.22 36** PKiKP **PKiKP 12 24 16.3 +0.7**
baz=120
**SDCO Great Sand Dun 120.27 45** PFAKE 12 24 30.0 +14
SDCO LR LR
comp=Z,876nm,19.0s
**J28A Allard Ranch, 120.27 38** PKiKP **PKiKP 12 24 16.6 +0.7**
baz=120
**AGMN Agassiz Nation 120.36 31** PKiKP **PKiKP 12 24 16.5 +0.7**
baz=120
**AGMN Agassiz Nation 120.36 31** *e*PKPdf **PKPdf 12 24 15.8 +0.1**
AGMN LR LR
comp=Z,884nm,19.0s
**E31A Nome 120.40 33** PKiKP **PKiKP 12 24 16.5 +0.6**
baz=120
**LAZ Ladron 120.47 49** *e*PKPdf **PKPdf 12 24 18.6 +2.0**
**I29A Vivian Onida 120.51 37** PKiKP **PKiKP 12 24 16.9 +0.6**
baz=120
**D32A Dogwood Acres, 120.51 32** PKiKP **PKiKP 12 24 17.1 +1.0**
baz=120
**G30A Faulkton 120.55 35** PKiKP **PKiKP 12 24 17.0 +0.7**
baz=120
**K28A Ten Mile Ranch 120.58 38** PKiKP **PKiKP 12 24 17.0 +0.5**
baz=120
**F31A Hecla 120.62 34** PKiKP **PKiKP 12 24 17.0 +0.6**
baz=120
**121A Cookes Peak, D 120.69 52** PKiKP **PKiKP 12 24 18.4 +1.2**
baz=121
**121A Cookes Peak, D 120.69 52** *e*PKPdf **PKPdf 12 24 18.5 +1.4**
**C33A Trail 120.76 31** PKiKP **PKiKP 12 24 17.3 +0.7**
baz=121
**ANMO Albuquerque 120.77 49** *e*PKIKP **PKPdf 12 24 18.5 +1.4**
ANMO MLR MLR
comp=Z,668nm,19.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ANMO | Albuquerque | 120.77 | 49 | ePKPdf | PKPdf | 12 24 18.5 | +1.4 |
| ANMO | | | | LR | LR | | |
| | comp=Z,668nm,19.0s | | | | | | |
| J29A | Okreek | 120.84 | 37 | PKiKP | PKiKP | 12 24 17.9 | +1.0 |
| | baz=121 | | | | | | |
| B34A | Aery, Baudette | 120.85 | 30 | PKiKP | PKiKP | 12 24 17.4 | +0.6 |
| | baz=121 | | | | | | |
| L28A | Connealy Angus | 120.86 | 39 | PKiKP | PKiKP | 12 24 17.8 | +0.7 |
| | baz=121 | | | | | | |
| LPM | Los Pinos Moun | 120.89 | 49 | ePKPdf | PKPdf | 12 24 19.2 | +1.8 |
| PGAV | Gavieira, Arco | 120.92 | 321 | ePKPdf | PKPdf | 12 24 17.2 | +0.1 |
| POLO | Lamas de Olo | 120.92 | 320 | ePKPdf | PKPdf | 12 24 18.2 | +1.1 |
| PVRL | Vila Real | 120.92 | 320 | ePKPdf | PKPdf | 12 24 17.2 | +0.1 |
| BNM | Barren Site | 120.96 | 49 | ePKPdf | PKPdf | 12 24 19.2 | +1.6 |
| SUSD | South Dakota S | 121.06 | 36 | PKiKP | PKiKP | 12 24 17.9 | +0.6 |
| | baz=121 | | | | | | |
| OGNE | Ogallala | 121.09 | 40 | PKiKP | PKiKP | 12 24 17.8 | +0.2 |
| | baz=121 | | | | | | |
| OGNE | Ogallala | 121.09 | 40 | PFAKE | | 12 24 30.0 | +13 |
| OGNE | | | | LR | LR | | |
| | comp=Z,870nm,20.0s | | | | | | |
| I30A | Oacoma | 121.09 | 36 | PKiKP | PKiKP | 12 24 17.8 | +0.4 |
| | baz=121 | | | | | | |
| D33A | AnnSam, Waubun | 121.12 | 32 | PKiKP | PKiKP | 12 24 17.7 | +0.3 |
| | baz=121 | | | | | | |
| K29A | Lazy Trails An | 121.20 | 38 | PKiKP | PKiKP | 12 24 18.1 | +0.4 |
| | baz=121 | | | | | | |
| MTE | Manteigas | 121.26 | 319 | ePKPdf | PKPdf | 12 24 19.0 | +1.2 |
| MTE | Manteigas | 121.26 | 319 | ePP | PP | 12 25 50.8 | +2.6 |
| MTE | Manteigas | 121.26 | 319 | PFAKE | | 12 24 30.0 | +12 |
| MTE | | | | LR | LR | | |
| | comp=Z,732nm,20.0s | | | | | | |
| M28A | Bar X Bar Ranc | 121.28 | 40 | PKiKP | PKiKP | 12 24 18.4 | +0.5 |
| | baz=121 | | | | | | |
| H31A | Wolsey | 121.31 | 35 | PKiKP | PKiKP | 12 24 18.6 | +0.7 |
| | baz=121 | | | | | | |
| T25A | Trinidad | 121.32 | 45 | PKiKP | PKiKP | 12 24 19.6 | +1.3 |
| | baz=121 | | | | | | |
| T25A | Trinidad | 121.32 | 45 | ePKPdf | PKPdf | 12 24 19.9 | +1.7 |
| J30A | Dallas | 121.39 | 37 | PKiKP | PKiKP | 12 24 18.7 | +0.7 |
| | baz=121 | | | | | | |
| E33A | Westby DABS, E | 121.44 | 32 | PKiKP | PKiKP | 12 24 18.7 | +0.7 |
| | baz=121 | | | | | | |
| L29A | Maesberg Ranch | 121.48 | 39 | PKiKP | PKPdf | 12 24 18.3 | +0.1 |
| | baz=121 | | | | | | |
| D34A | Park Rapids | 121.50 | 31 | PKiKP | PKiKP | 12 24 18.5 | +0.4 |
| | baz=121 | | | | | | |
| N28A | Pribbeno Ranch | 121.54 | 40 | PKiKP | PKiKP | 12 24 19.1 | +0.7 |
| | baz=122 | | | | | | |
| I31A | Royce, Wessing | 121.55 | 36 | PKiKP | PKiKP | 12 24 18.6 | +0.3 |
| | baz=121 | | | | | | |
| PMRV | Marv??o | 121.65 | 318 | ePKPdf | PKPdf | 12 24 18.4 | -0.1 |
| KSCO | Kaye Shedlock' | 121.67 | 43 | PKiKP | PKiKP | 12 24 19.9 | +1.1 |
| | baz=122 | | | | | | |
| KSCO | Kaye Shedlock' | 121.67 | 43 | ePKPdf | PKPdf | 12 24 20.1 | +1.4 |
| O28A | Krutsinger Ran | 121.68 | 41 | PKiKP | PKiKP | 12 24 19.4 | +0.7 |
| | baz=122 | | | | | | |
| K30A | Basset | 121.68 | 38 | PKiKP | PKiKP | 12 24 19.5 | +0.9 |
| | baz=122 | | | | | | |
| M29A | Burnside Ranch | 121.69 | 39 | PKiKP | PKiKP | 12 24 19.3 | +0.6 |
| | baz=122 | | | | | | |
| C35A | Jirik Farms, M | 121.71 | 30 | PKiKP | PKPdf | 12 24 18.5 | +0.2 |
| | baz=122 | | | | | | |
| F33A | 5 Mile Ranch, | 121.71 | 33 | PKiKP | PKiKP | 12 24 19.4 | +0.9 |
| | baz=122 | | | | | | |
| S26A | Kim | 121.76 | 44 | PKiKP | PKiKP | 12 24 20.0 | +0.9 |
| | baz=122 | | | | | | |
| J31A | Geddes | 121.85 | 37 | PKiKP | PKiKP | 12 24 19.6 | +0.7 |
| | baz=122 | | | | | | |
| T26A | Comanche Natio | 121.88 | 45 | PKiKP | PKiKP | 12 24 20.5 | +1.1 |
| | baz=122 | | | | | | |
| E34A | Wadena | 121.88 | 32 | PKiKP | PKiKP | 12 24 19.5 | +0.6 |
| | baz=122 | | | | | | |
| H32A | Carlson Farm, | 121.90 | 35 | PKiKP | PKiKP | 12 24 19.8 | +0.8 |
| | baz=122 | | | | | | |
| R27A | Eads | 121.91 | 43 | PKiKP | PKiKP | 12 24 20.0 | +0.7 |
| | baz=122 | | | | | | |
| P28A | Saint Francis | 121.97 | 42 | PKiKP | PKiKP | 12 24 20.1 | +0.7 |
| | baz=122 | | | | | | |
| L30A | Spencer Herefo | 122.02 | 38 | PKiKP | PKPdf | 12 24 19.4 | +0.3 |
| | baz=122 | | | | | | |
| PBAR | Barrancos | 122.03 | 316 | ePKPdf | PKPdf | 12 24 20.2 | +1.0 |
| G33A | Ortonville | 122.03 | 34 | PKiKP | PKiKP | 12 24 19.8 | +0.6 |
| | baz=122 | | | | | | |
| N29A | Votaw Ranch, W | 122.06 | 40 | PKiKP | PKiKP | 12 24 20.1 | +0.7 |
| | baz=122 | | | | | | |
| PCAS | Casmilo, Conde | 122.07 | 319 | ePKPdf | PKPdf | 12 24 20.6 | +1.4 |
| D35A | Remer | 122.09 | 31 | PKiKP | PKiKP | 12 24 19.6 | +0.4 |
| | baz=122 | | | | | | |
| S27A | Las Animas | 122.13 | 44 | PKiKP | PKiKP | 12 24 20.3 | +0.5 |
| | baz=122 | | | | | | |
| I32A | Karley and Nic | 122.17 | 35 | PKiKP | PKiKP | 12 24 20.2 | +0.7 |
| | baz=122 | | | | | | |
| Q28A | Sharon Springs | 122.18 | 42 | PKiKP | PKiKP | 12 24 21.0 | +1.2 |
| | baz=122 | | | | | | |
| H33A | Prehn Over Nor | 122.18 | 34 | PKiKP | PKiKP | 12 24 20.4 | +0.9 |
| | baz=122 | | | | | | |
| K31A | O'Neill | 122.23 | 37 | PKiKP | PKiKP | 12 24 20.3 | +0.6 |
| | baz=122 | | | | | | |
| PTOM | Tomar | 122.23 | 319 | ePKPdf | PKPdf | 12 24 21.6 | +2.0 |
| C36A | Pine Crest Far | 122.24 | 29 | PKiKP | PKiKP | 12 24 20.4 | +0.9 |
| | baz=122 | | | | | | |
| E35A | Pequot Lakes | 122.25 | 31 | PKiKP | PKiKP | 12 24 20.4 | +0.8 |
| | baz=122 | | | | | | |
| F34A | Alexandria | 122.30 | 32 | PKiKP | PKiKP | 12 24 20.3 | +0.6 |
| | baz=122 | | | | | | |
| O29A | 4D Ranch, Culb | 122.32 | 41 | PKiKP | PKiKP | 12 24 20.8 | +0.8 |
| | baz=122 | | | | | | |
| J32A | Parkston | 122.33 | 36 | PKiKP | PKiKP | 12 24 20.1 | +0.3 |
| | baz=122 | | | | | | |
| PMTG | Montargil | 122.39 | 318 | ePKPdf | PKPdf | 12 24 21.4 | +1.5 |
| N30A | Hueftle Ranch, | 122.41 | 40 | PKiKP | PKiKP | 12 24 20.9 | +0.8 |
| | baz=122 | | | | | | |
| L31A | Butterfield Fa | 122.43 | 38 | PKiKP | PKiKP | 12 24 20.3 | +0.2 |
| | baz=122 | | | | | | |
| G34A | Benson | 122.44 | 33 | PKiKP | PKiKP | 12 24 20.7 | +0.7 |
| | baz=122 | | | | | | |
| D36A | Goodland | 122.47 | 30 | PKiKP | PKiKP | 12 24 20.5 | +0.5 |
| | baz=122 | | | | | | |
| TOA0 | Torodi Ar. Sit | 122.50 | 285 | ePKP1 | PKPdf | 12 24 19.6 | -1.1 |
| TOA0 | Torodi Ar. Sit | 122.50 | 285 | ePKPdf | PKPdf | 12 24 19.7 | -1.0 |
| TORD | Torodi Ar. Bea | 122.50 | 285 | PKP | PKPdf | 12 24 20.2 | -0.5 |
| | comp=Z,18nm,0.8s,baz=60,slow=1.8,SNR=67 | | | | | | |
| TORD | | | | PKKPbc | PKKPab | 12 34 16.9 | +1.4 |
| | comp=Z,2.8nm,0.9s,baz=298,slow=4.3,SNR=11 | | | | | | |
| P29A | Atwood | 122.50 | 41 | PKiKP | PKiKP | 12 24 21.0 | +0.6 |
| | baz=122 | | | | | | |
| EVO | Evora | 122.52 | 317 | ePKPdf | PKPdf | 12 24 20.2 | +0.1 |
| I33A | Coleman | 122.54 | 35 | PKiKP | PKiKP | 12 24 21.3 | +1.0 |
| | baz=122 | | | | | | |
| T27A | Campo | 122.55 | 45 | PKiKP | PKiKP | 12 24 21.6 | +1.0 |
| | baz=122 | | | | | | |
| R28A | Tribune | 122.56 | 43 | PKiKP | PKiKP | 12 24 21.7 | +1.2 |
| | baz=122 | | | | | | |
| C37A | Embarrass | 122.58 | 29 | PKiKP | PKiKP | 12 24 20.7 | +0.5 |
| | baz=122 | | | | | | |
| F35A | Swanville | 122.62 | 32 | PKiKP | PKiKP | 12 24 21.0 | +0.7 |
| | baz=122 | | | | | | |
| MDT | Midelt | 122.65 | 310 | PKP | PKPdf | 12 24 21.3 | +0.5 |
| | comp=Z,6.1nm,0.9s,baz=56,slow=3.2,SNR=7.6 | | | | | | |
| PBEJ | Beja | 122.67 | 317 | ePKPdf | PKPdf | 12 24 21.8 | +1.3 |
| K32A | Verdigre | 122.68 | 37 | PKiKP | PKiKP | 12 24 21.0 | +0.5 |
| | baz=123 | | | | | | |
| H34A | Spellman Lake, | 122.73 | 34 | PKiKP | PKiKP | 12 24 21.1 | +0.5 |
| | baz=123 | | | | | | |
| EYMN | Ely | 122.75 | 28 | PKiKP | PKiKP | 12 24 21.4 | +0.8 |
| | baz=123 | | | | | | |
| EYMN | Ely | 122.75 | 28 | PFAKE | | 12 24 30.0 | +10 |
| EYMN | | | | LR | LR | | |
| | comp=Z,1μm,22.0s | | | | | | |
| O30A | MW Ranch, Wils | 122.77 | 40 | PKiKP | PKiKP | 12 24 21.5 | +0.6 |
| | baz=123 | | | | | | |
| U27A | Thompson Grove | 122.78 | 45 | PKiKP | PKiKP | 12 24 22.0 | +0.9 |
| | baz=123 | | | | | | |
| M31A | Lambtecht Ranc | 122.82 | 39 | PKiKP | PKiKP | 12 24 21.8 | +0.9 |
| | baz=123 | | | | | | |
| ECSD | EROS Data Cent | 122.83 | 35 | PKiKP | PKiKP | 12 24 21.6 | +0.7 |
| | baz=123 | | | | | | |
| ECSD | EROS Data Cent | 122.83 | 35 | ePKPdf | PKPdf | 12 24 20.9 | +0.2 |
| ECSD | | | | LR | LR | | |
| | comp=Z,995nm,20.0s | | | | | | |
| Q29A | Oakley | 122.84 | 42 | PKiKP | PKiKP | 12 24 21.9 | +0.8 |
| | baz=123 | | | | | | |
| D37A | Cotton | 122.85 | 30 | PKiKP | PKiKP | 12 24 21.6 | +0.8 |
| | baz=123 | | | | | | |
| S28A | Manter | 122.87 | 44 | PKiKP | PKiKP | 12 24 22.1 | +0.9 |
| | baz=123 | | | | | | |
| J33A | Davis | 122.88 | 36 | PKiKP | PKiKP | 12 24 21.5 | +0.6 |
| | baz=123 | | | | | | |
| MNTX | Cornudas Mount | 122.89 | 52 | PKiKP | PKiKP | 12 24 22.4 | +1.2 |
| | baz=123 | | | | | | |
| MNTX | Cornudas Mount | 122.89 | 52 | ePKPdf | PKiKP | 12 24 22.5 | +1.2 |
| MNTX | | | | LR | LR | | |
| | comp=Z,818nm,22.0s | | | | | | |
| T28A | Walsh | 122.94 | 44 | PKiKP | PKiKP | 12 24 22.4 | +1.0 |
| | baz=123 | | | | | | |
| R29A | Marienthal | 122.97 | 43 | PKiKP | PKiKP | 12 24 22.4 | +1.0 |
| | baz=123 | | | | | | |
| P30A | Selden | 122.98 | 41 | PKiKP | PKiKP | 12 24 22.2 | +0.8 |
| | baz=123 | | | | | | |
| PCVE | Castro Verde | 122.98 | 316 | ePKPdf | PKPdf | 12 24 22.6 | +1.5 |
| MESJ | Messejana | 123.01 | 317 | eP | PKPdf | 12 24 21.6 | +0.5 |
| MESJ | | | | ePP | PP | 12 26 00.7 | +0.7 |
| MESJ | | | | eSS | SS | 12 42 43.9 | +2.6 |
| MESJ | | | | AMS | AMS | 13 27 50.0 | |
| | comp=Z,731nm,21.1s | | | | | | |
| MESJ | Messejana | 123.01 | 317 | ePKPdf | PKPdf | 12 24 21.9 | +0.8 |
| MESJ | Messejana | 123.01 | 317 | ePP | PP | 12 26 02.5 | +2.5 |
| MESJ | Messejana | 123.01 | 317 | ePKIKP | PKPdf | 12 24 21.6 | +0.5 |
| MESJ | | | | e | | 12 26 00.7 | |
| MESJ | | | | eSS | SS | 12 42 43.9 | +2.6 |
| V27A | Dan Oppiter Fa | 123.08 | 46 | PKiKP | PKiKP | 12 24 22.6 | +0.9 |
| | baz=123 | | | | | | |
| PNCL | Nicolau / Gran | 123.08 | 317 | ePKPdf | PKPdf | 12 24 23.0 | +1.8 |
| G35A | Watkins | 123.08 | 33 | PKiKP | PKiKP | 12 24 22.3 | +1.0 |
| | baz=123 | | | | | | |
| PBDV | Barranco-do-Ve | 123.10 | 316 | ePKPdf | PKPdf | 12 24 23.4 | +2.1 |
| PBDV | Barranco-do-Ve | 123.10 | 316 | ePP | PP | 12 26 05.1 | +4.3 |
| F36A | Milaca | 123.17 | 31 | PKiKP | PKiKP | 12 24 22.2 | +0.8 |
| | baz=123 | | | | | | |
| LIS | Lisbon | 123.19 | 318 | ePP | PP | 12 26 02.1 | +0.9 |
| LIS | | | | AMS | AMS | 13 17 03.1 | |
| | comp=E,1μm,14.2s | | | | | | |
| U28A | Mallet | 123.22 | 45 | PKiKP | PKiKP | 12 24 22.6 | +0.7 |
| | baz=123 | | | | | | |
| H35A | Sunnyside Ranc | 123.23 | 33 | PKiKP | PKiKP | 12 24 22.4 | +0.9 |
| | baz=123 | | | | | | |
| O31A | Woolen Ranch, | 123.26 | 40 | PKiKP | PKiKP | 12 24 22.7 | +0.9 |
| | baz=123 | | | | | | |
| K33A | Hardington | 123.29 | 36 | PKiKP | PKiKP | 12 24 22.9 | +1.2 |
| | baz=123 | | | | | | |
| BGNE | Belgrade | 123.29 | 38 | PKiKP | PKiKP | 12 24 22.5 | +0.6 |
| | baz=123 | | | | | | |
| Q30A | Quinter | 123.30 | 42 | PKiKP | PKiKP | 12 24 22.9 | +0.9 |
| | baz=123 | | | | | | |
| L33A | Hoskins | 123.39 | 37 | PKiKP | PKiKP | 12 24 23.3 | +1.3 |
| | baz=123 | | | | | | |
| S29A | Ulysses | 123.39 | 43 | PKiKP | PKiKP | 12 24 23.4 | +1.2 |
| | baz=123 | | | | | | |
| G36A | St. Michael | 123.47 | 32 | PKiKP | PKiKP | 12 24 23.1 | +1.1 |
| | baz=123 | | | | | | |
| J34A | George | 123.49 | 35 | PKiKP | PKiKP | 12 24 22.8 | +0.7 |
| | baz=123 | | | | | | |
| C39A | Grand Marais | 123.49 | 28 | PKiKP | PKiKP | 12 24 23.3 | +1.3 |
| | baz=123 | | | | | | |
| T29A | Hugoton | 123.50 | 44 | PKiKP | PKiKP | 12 24 23.8 | +1.3 |
| | baz=123 | | | | | | |
| V28A | Channing | 123.52 | 46 | PKiKP | PKiKP | 12 24 23.5 | +0.9 |
| | baz=124 | | | | | | |
| P31A | Stockton | 123.56 | 41 | PKiKP | PKiKP | 12 24 23.3 | +0.8 |
| | baz=124 | | | | | | |
| MORF | Marmelete | 123.57 | 316 | eP | PKPdf | 12 24 22.8 | +0.5 |
| MORF | | | | AMS | AMS | 13 28 15.9 | |
| | comp=Z,704nm,20.8s | | | | | | |
| MORF | Marmelete | 123.57 | 316 | ePKPdf | PKPdf | 12 24 24.2 | +1.9 |
| MORF | Marmelete | 123.57 | 316 | ePKIKP | PKPdf | 12 24 22.7 | +0.5 |
| N32A | Stulken Farm, | 123.57 | 39 | PKiKP | PKiKP | 12 24 23.0 | +0.6 |
| | baz=124 | | | | | | |
| R30A | Dighton | 123.62 | 42 | PKiKP | PKiKP | 12 24 23.6 | +1.0 |
| | baz=124 | | | | | | |
| I35A | Creekview Farm | 123.68 | 34 | PKiKP | PKiKP | 12 24 23.3 | +0.8 |
| | baz=124 | | | | | | |
| HOPE | Hope Point | 123.70 | 193 | PFAKE | | 12 24 30.0 | +8.1 |
| HOPE | | | | LR | LR | | |
| | comp=Z,812nm,22.0s | | | | | | |
| CBKS | Cedar Bluff | 123.71 | 41 | PKiKP | PKiKP | 12 24 23.5 | +0.8 |
| | baz=124 | | | | | | |
| CBKS | Cedar Bluff | 123.71 | 41 | PFAKE | | 12 24 30.0 | +7.5 |
| CBKS | | | | LR | LR | | |
| | comp=Z,1μm,22.0s | | | | | | |
| K34A | Le Mars | 123.77 | 36 | PKiKP | PKiKP | 12 24 23.2 | +0.5 |
| | baz=124 | | | | | | |
| M33A | Taylor Creek F | 123.78 | 37 | PKiKP | PKiKP | 12 24 23.5 | +0.7 |
| | baz=124 | | | | | | |
| H36A | Jessenland, He | 123.80 | 33 | PKiKP | PKiKP | 12 24 23.8 | +1.1 |
| | baz=124 | | | | | | |
| S30A | Montezuma | 123.83 | 43 | PKiKP | PKiKP | 12 24 24.0 | +1.0 |
| | baz=124 | | | | | | |
| Q31A | Ellis | 123.83 | 41 | PKiKP | PKiKP | 12 24 23.6 | +0.7 |
| | baz=124 | | | | | | |
| RTC | Rabat Centre | 123.85 | 312 | PFAKE | | 12 24 40.0 | +17 |
| RTC | | | | LR | LR | | |
| | comp=Z,6μm,19.0s | | | | | | |
| O32A | Brockman Farm, | 123.86 | 39 | PKiKP | PKiKP | 12 24 23.4 | +0.4 |
| | baz=124 | | | | | | |
| V29A | Stinnett | 123.96 | 45 | PKiKP | PKiKP | 12 24 24.2 | +0.8 |
| | baz=124 | | | | | | |
| SPMN | St. Paul | 123.97 | 32 | PKiKP | PKiKP | 12 24 23.7 | +0.7 |
| | baz=124 | | | | | | |
| SPMN | St. Paul | 123.97 | 32 | ePKPdf | PKPdf | 12 24 23.4 | +0.7 |
| P32A | Huiting Farm, | 124.01 | 40 | PKiKP | PKiKP | 12 24 23.6 | +0.3 |
| | baz=124 | | | | | | |
| T30A | Plains | 124.08 | 44 | PKiKP | PKiKP | 12 24 24.8 | +1.2 |
| | baz=124 | | | | | | |
| X28A | Dimmitt | 124.11 | 47 | PKiKP | PKiKP | 12 24 24.6 | +0.8 |
| | baz=124 | | | | | | |
| I36A | Fitzsimmons Fa | 124.12 | 33 | PKiKP | PKiKP | 12 24 23.9 | +0.5 |
| | baz=124 | | | | | | |
| R31A | Burdett | 124.12 | 42 | PKiKP | PKiKP | 12 24 24.2 | +0.6 |
| | baz=124 | | | | | | |
| M34A | Aspy Farms, Fr | 124.20 | 37 | PKiKP | PKiKP | 12 24 23.8 | +0.2 |
| | baz=124 | | | | | | |
| K35A | Storm Lake | 124.25 | 35 | PKiKP | PKiKP | 12 24 24.0 | +0.4 |
| | baz=124 | | | | | | |
| U30A | WK&E Inc. Balk | 124.26 | 44 | PKiKP | PKiKP | 12 24 24.9 | +0.9 |
| | baz=124 | | | | | | |
| H37A | Dierke Farm, C | 124.34 | 32 | PKiKP | PKiKP | 12 24 24.4 | +0.7 |
| | baz=124 | | | | | | |
| Y28A | McKinney Farm, | 124.35 | 48 | PKiKP | PKiKP | 12 24 24.9 | +0.7 |
| | baz=124 | | | | | | |
| J36A | Seneca 1, Swea | 124.38 | 34 | PKiKP | PKiKP | 12 24 24.4 | +0.5 |
| | baz=124 | | | | | | |
| Q32A | Meitler Ranch, | 124.39 | 41 | PKiKP | PKPdf | 12 24 24.1 | +0.3 |
| | baz=124 | | | | | | |
| O33A | Hebron | 124.41 | 39 | PKiKP | PKPdf | 12 24 24.1 | +0.3 |
| | baz=124 | | | | | | |
| L35A | Bielow Farm, R | 124.45 | 36 | PKiKP | PKiKP | 12 24 24.6 | +0.6 |
| | baz=124 | | | | | | |
| I37A | Lemond, Waseca | 124.46 | 33 | PKiKP | PKiKP | 12 24 24.6 | +0.6 |
| | baz=124 | | | | | | |
| S31A | Mullinville | 124.50 | 43 | PKiKP | PKiKP | 12 24 24.8 | +0.4 |
| | baz=124 | | | | | | |
| X29A | Tulia | 124.51 | 47 | PKiKP | PKiKP | 12 24 25.4 | +0.8 |
| | baz=124 | | | | | | |
| Z28A | Tucker Farm, M | 124.53 | 49 | PKiKP | PKiKP | 12 24 25.2 | +0.5 |
| | baz=124 | | | | | | |
| SCHQ | Schefferville | 124.59 | 8 | PKP | PKPdf | 12 24 24.2 | +0.6 |
| | comp=Z,18nm,0.5s,baz=350,slow=1.9,SNR=31 | | | | | | |
| R32A | Long Quarter, | 124.59 | 41 | PKiKP | PKiKP | 12 24 25.2 | +0.7 |
| | baz=124 | | | | | | |
| V30A | Spur Ranch, Mi | 124.61 | 45 | PKiKP | PKiKP | 12 24 26.1 | +1.5 |
| | baz=124 | | | | | | |
| N34A | Lincoln | 124.64 | 38 | PKiKP | PKiKP | 12 24 24.9 | +0.4 |
| | baz=124 | | | | | | |
| P33A | Williams Farm, | 124.70 | 40 | PKiKP | PKiKP | 12 24 25.3 | +0.6 |
| | baz=125 | | | | | | |
| 128A | Castleberry Fa | 124.75 | 49 | PKiKP | PKiKP | 12 24 25.7 | +0.7 |
| | baz=125 | | | | | | |
| M35A | Neola | 124.75 | 37 | PKiKP | PKiKP | 12 24 25.4 | +0.7 |
| | baz=125 | | | | | | |
| Y29A | Porterfield Fa | 124.80 | 48 | PKiKP | PKiKP | 12 24 25.7 | +0.5 |
| | baz=125 | | | | | | |
| S32A | Newby Ranch, P | 124.83 | 42 | PKiKP | PKiKP | 12 24 25.4 | +0.4 |
| | baz=125 | | | | | | |
| J37A | Redenius Farm, | 124.83 | 34 | PKiKP | PKiKP | 12 24 25.1 | +0.3 |
| | baz=125 | | | | | | |
| Q33A | Connelly Farm, | 124.85 | 40 | PKiKP | PKiKP | 12 24 25.5 | +0.5 |
| | baz=125 | | | | | | |
| 228A | UT Block 9, Go | 124.88 | 50 | PKiKP | PKiKP | 12 24 25.6 | +0.3 |
| | baz=125 | | | | | | |
| O34A | Beatrice | 124.90 | 39 | PKiKP | PKiKP | 12 24 25.4 | +0.4 |
| | baz=125 | | | | | | |
| I38A | Scanlan Farm, | 125.02 | 32 | PKiKP | PKiKP | 12 24 25.5 | +0.3 |
| | baz=125 | | | | | | |
| Z29A | Hungry Hill Ra | 125.05 | 48 | PKiKP | PKiKP | 12 24 26.0 | +0.4 |
| | baz=125 | | | | | | |
| X30A | Coker Ranch, T | 125.11 | 47 | PKiKP | PKiKP | 12 24 26.2 | +0.6 |
| | baz=125 | | | | | | |
| T32A | Huddler Ranch, | 125.11 | 43 | PKiKP | PKiKP | 12 24 25.8 | +0.3 |
| | baz=125 | | | | | | |
| K37A | Belmond | 125.14 | 34 | PKiKP | PKiKP | 12 24 25.8 | +0.4 |
| | baz=125 | | | | | | |
| R33A | Olander Ranch, | 125.14 | 41 | PKiKP | PKiKP | 12 24 26.4 | +0.8 |
| | baz=125 | | | | | | |
| N35A | Tabor | 125.15 | 37 | PKiKP | PKiKP | 12 24 26.0 | +0.5 |
| | baz=125 | | | | | | |
| TX31 | Lajitas Ar. Si | 125.18 | 53 | ePKPdf | PKPdf | 12 24 26.5 | +0.8 |
| TXAR | Lajitas Array | 125.18 | 53 | PKP | PKPdf | 12 24 26.4 | +0.8 |
| | comp=Z,6.9nm,0.9s,baz=276,slow=1.1,SNR=46 | | | | | | |
| TXAR | Lajitas Array | 125.18 | 53 | PKiKP | PKPdf | 12 24 26.5 | +0.8 |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| P34A | Walnut Farm, R | 125.19 | 39 | PKiKP | PKiKP | 12 24 26.5 | +0.8 |
| | baz=125 | | | | | | |
| V31A | Spring Creek L | 125.20 | 45 | PKiKP | PKiKP | 12 24 26.3 | +0.5 |
| | baz=125 | | | | | | |
| COWI | Conover | 125.20 | 29 | ePKPdf | PKPdf | 12 24 25.6 | +0.5 |
| COWI | | | | LR | LR | | |
| | comp=Z,1μm,20.0s | | | | | | |
| 129A | Stewart Farms, | 125.21 | 49 | PKiKP | PKiKP | 12 24 26.3 | +0.4 |
| | baz=125 | | | | | | |
| O35A | Humboldt | 125.34 | 38 | PKiKP | PKiKP | 12 24 26.0 | +0.1 |
| | baz=125 | | | | | | |
| Y30A | Stafford Cattl | 125.36 | 47 | PKiKP | PKiKP | 12 24 26.6 | +0.4 |
| | baz=125 | | | | | | |
| J38A | Wedel Dairy, R | 125.42 | 33 | PKiKP | PKiKP | 12 24 26.5 | +0.5 |
| | baz=125 | | | | | | |
| W31A | Holland Ranch, | 125.42 | 45 | PKiKP | PKiKP | 12 24 27.1 | +0.8 |
| | baz=125 | | | | | | |
| Z30A | Sanderson Ranc | 125.47 | 48 | PKiKP | PKiKP | 12 24 26.6 | +0.1 |
| | baz=125 | | | | | | |
| Q34A | Chapman | 125.47 | 40 | PKiKP | PKiKP | 12 24 26.9 | +0.7 |
| | baz=125 | | | | | | |
| U32A | Winter Ranch, | 125.48 | 44 | PKiKP | PKiKP | 12 24 26.8 | +0.5 |
| | baz=125 | | | | | | |
| S33A | Kaszmaul Farm, | 125.51 | 42 | PKiKP | PKiKP | 12 24 26.8 | +0.5 |
| | baz=125 | | | | | | |
| 229A | Bryant Ranch, | 125.55 | 50 | PKiKP | PKiKP | 12 24 26.7 | +0.1 |
| | baz=126 | | | | | | |
| KSU1 | Kansas State U | 125.58 | 40 | PKiKP | PKPdf | 12 24 26.0 | -0.1 |
| | baz=126 | | | | | | |
| KSU1 | Kansas State U | 125.58 | 40 | ePKPdf | PKPdf | 12 24 26.7 | +0.6 |
| KSU1 | | | | LR | LR | | |
| | comp=Z,969nm,19.0s | | | | | | |
| R34A | Isabella, Hill | 125.62 | 41 | PKiKP | PKPdf | 12 24 26.4 | +0.3 |
| | baz=126 | | | | | | |
| 329A | Wagon Wheel Ra | 125.62 | 50 | PKiKP | PKiKP | 12 24 26.9 | +0.1 |
| | baz=126 | | | | | | |
| T33A | Patterson Ranc | 125.63 | 43 | PKiKP | PKPdf | 12 24 26.3 | +0.1 |
| | baz=126 | | | | | | |
| X31A | McDonald Ranch | 125.67 | 46 | PKiKP | PKiKP | 12 24 26.9 | +0.2 |
| | baz=126 | | | | | | |
| K38A | Parkersburg | 125.70 | 34 | PKiKP | PKiKP | 12 24 26.8 | +0.2 |
| | baz=126 | | | | | | |
| P35A | Duane Minner, | 125.71 | 39 | PKiKP | PKPdf | 12 24 26.4 | +0.2 |
| | baz=126 | | | | | | |
| Y31A | Rekieta Farm, | 125.79 | 47 | PKiKP | PKiKP | 12 24 27.0 | 0.0 |
| | baz=126 | | | | | | |
| V32A | Arapaho | 125.79 | 44 | PKiKP | PKiKP | 12 24 27.6 | +0.7 |
| | baz=126 | | | | | | |
| SCIA | State Center | 125.93 | 35 | ePKPdf | PKPdf | 12 24 27.6 | +1.1 |
| SCIA | | | | LR | LR | | |
| | comp=Z,646nm,22.0s | | | | | | |
| O36A | Bolckow | 126.00 | 38 | PKiKP | PKiKP | 12 24 27.4 | +0.2 |
| | baz=126 | | | | | | |
| 529A | Stev Forest Ra | 126.01 | 52 | PKiKP | PKiKP | 12 24 27.9 | +0.3 |
| | baz=126 | | | | | | |
| S34A | Willow Spring | 126.05 | 41 | PKiKP | PKiKP | 12 24 27.5 | +0.1 |
| | baz=126 | | | | | | |
| 429A | Davenport Ranc | 126.06 | 51 | PKiKP | PKPdf | 12 24 27.5 | +0.2 |
| | baz=126 | | | | | | |
| U33A | Lingo Farm, Me | 126.06 | 43 | PKiKP | PKiKP | 12 24 27.6 | +0.2 |
| | baz=126 | | | | | | |
| Q35A | Mercer Eighty, | 126.09 | 39 | PKiKP | PKPdf | 12 24 27.4 | +0.4 |
| | baz=126 | | | | | | |
| 230A | Sterling City | 126.11 | 50 | PKiKP | PKiKP | 12 24 27.8 | +0.1 |
| | baz=126 | | | | | | |
| P36A | Good Intent, A | 126.16 | 38 | PKiKP | PKPdf | 12 24 27.2 | +0.1 |
| | baz=126 | | | | | | |
| Z31A | Sharp Cattle R | 126.18 | 47 | PKiKP | PKiKP | 12 24 28.0 | +0.2 |
| | baz=126 | | | | | | |
| V33A | Lossen Ranch, | 126.26 | 44 | PKiKP | PKiKP | 12 24 28.2 | +0.3 |
| | baz=126 | | | | | | |
| X32A | Elmer | 126.27 | 46 | PKiKP | PKPdf | 12 24 27.8 | +0.3 |
| | baz=126 | | | | | | |
| 330A | Mertzon | 126.28 | 50 | PKiKP | PKPdf | 12 24 27.9 | +0.2 |
| | baz=126 | | | | | | |
| R35A | Emporia Munici | 126.29 | 40 | PKiKP | PKPdf | 12 24 27.8 | +0.4 |
| | baz=126 | | | | | | |
| 131A | Roby | 126.30 | 48 | PKiKP | PKPdf | 12 24 27.8 | +0.1 |
| | baz=126 | | | | | | |
| Y32A | R-V Farms, Ver | 126.36 | 46 | PKiKP | PKiKP | 12 24 28.1 | 0.0 |
| | baz=126 | | | | | | |
| T34A | McClaskey Farm | 126.37 | 42 | PKiKP | PKPdf | 12 24 27.8 | +0.3 |
| | baz=126 | | | | | | |
| Q36A | Arnold C. Orve | 126.39 | 39 | PKiKP | PKPdf | 12 24 28.0 | +0.4 |
| | baz=126 | | | | | | |
| U34A | Anderson Ranch | 126.45 | 43 | PKiKP | PKiKP | 12 24 28.5 | +0.3 |
| | baz=126 | | | | | | |
| U34A | Anderson Ranch | 126.45 | 43 | ePKPdf | PKPdf | 12 24 29.2 | +1.4 |
| WMOK | Wichita Mounta | 126.47 | 45 | ePKIKP | PKPdf | 12 24 28.7 | +0.8 |
| WMOK | | | | MLR | MLR | | |
| | comp=Z,726nm,19.0s | | | | | | |
| WMOK | Wichita Mounta | 126.47 | 45 | ePKPdf | PKPdf | 12 24 28.7 | +0.8 |
| WMOK | | | | LR | LR | | |
| | comp=Z,726nm,19.0s | | | | | | |
| W33A | Caddo, Fort Co | 126.48 | 45 | PKiKP | PKiKP | 12 24 29.0 | +0.6 |
| | baz=126 | | | | | | |
| 430A | Baggett Ranch, | 126.50 | 51 | PKiKP | PKiKP | 12 24 28.8 | +0.2 |
| | baz=126 | | | | | | |
| S35A | Otter Creek Ra | 126.58 | 41 | PKiKP | PKiKP | 12 24 28.6 | +0.2 |
| | baz=126 | | | | | | |
| Z32A | Haskell | 126.67 | 47 | PKiKP | PKiKP | 12 24 29.2 | +0.4 |
| | baz=127 | | | | | | |
| 231A | Bronte | 126.69 | 49 | PKiKP | PKiKP | 12 24 29.1 | +0.3 |
| | baz=127 | | | | | | |
| 530A | J-C Ranch, Com | 126.70 | 52 | PKiKP | PKiKP | 12 24 29.7 | +0.7 |
| | baz=127 | | | | | | |
| R36A | Gordon, Harris | 126.74 | 40 | PKiKP

baz=127
531A **Rocksprings** 127.31 51 PKiKP **PKiKP** 12 24 30.2 0.0
baz=127
332A **Millersview** 127.38 49 PKiKP **PKiKP** 12 24 30.5 +0.2
baz=127
133A **Hamilton Ranch** 127.42 48 PKiKP **PKiKP** 12 24 30.5 +0.2
baz=127
S37A **Fort Scott** 127.50 40 PKiKP **PKPdf** 12 24 30.0 +0.3
baz=127
432A **Menard** 127.57 50 PKiKP **PKiKP** 12 24 30.7 0.0
baz=128
W35A **Tecumseh** 127.59 44 PKiKP **PKiKP** 12 24 30.7 +0.1
baz=128
Y34A **Reagan Ranch,** 127.60 46 PKiKP **PKiKP** 12 24 30.7 +0.1
baz=128
631A **Perdido Creek** 127.61 52 PKiKP **PKiKP** 12 24 30.9 +0.2
baz=128
U36A **Oologah** 127.69 42 PKiKP **PKiKP** 12 24 30.7 +0.1
baz=128
233A **Rising Star** 127.72 48 PKiKP **PKiKP** 12 24 30.8 -0.1
baz=128
JCT **Junction City** 127.75 50 *e*PKIKP **PKPdf** 12 24 31.8 +1.3
JCT MLR MLR
comp=Z,908nm,21.0s
JCT **Junction City** 127.75 50 PKiKP **PKPdf** 12 24 30.9 +0.4
baz=128
JCT **Junction City** 127.75 50 *e*PKPdf **PKPdf** 12 24 31.8 +1.3
JCT LR LR
comp=Z,908nm,21.0s
Z34A **Collier Ranch,** 127.78 46 PKiKP **PKiKP** 12 24 31.1 +0.1
baz=128
T37A **Cheneyville 18** 127.81 41 PKiKP **PKPdf** 12 24 30.8 +0.5
baz=128
532A **Rocksprings** 127.82 51 PKiKP **PKPdf** 12 24 31.1 +0.4
baz=128
V36A **Jenks** 127.89 43 PKiKP **PKiKP** 12 24 31.1 0.0
baz=128
TUL1 **Tulsa** 127.92 42 PKiKP **PKPdf** 12 24 30.9 +0.3
baz=128
TUL1 **Tulsa** 127.92 42 *e*PKPdf **PKPdf** 12 24 31.7 +1.1
X35A **Drake** 127.92 45 PKiKP **PKPdf** 12 24 30.9 +0.3
baz=128
333A **Richland Sprin** 127.98 49 PKiKP **PKiKP** 12 24 31.5 0.0
baz=128
W36A **Wetumka** 128.05 43 PKiKP **PKiKP** 12 24 31.5 +0.1
baz=128
134A **White-Moore Ra** 128.06 47 PKiKP **PKiKP** 12 24 32.0 +0.4
baz=128
U37A **Salina** 128.09 41 PKiKP **PKiKP** 12 24 31.9 +0.4
baz=128
Y35A **Marietta** 128.14 45 PKiKP **PKiKP** 12 24 31.6 0.0
baz=128
433A **Art** 128.17 50 PKiKP **PKiKP** 12 24 31.9 +0.1
baz=128
632A **Uvalde** 128.19 52 PKiKP **PKiKP** 12 24 32.1 +0.2
baz=128
X36A **Centrahoma** 128.27 44 PKiKP **PKiKP** 12 24 31.8 -0.1
baz=128
Z35A **Perchaven, San** 128.28 46 PKiKP **PKiKP** 12 24 32.2 +0.3
baz=128
234A **Clairette** 128.29 48 PKiKP **PKiKP** 12 24 32.4 +0.4
baz=128
V37A **Hulbert** 128.37 42 PKiKP **PKiKP** 12 24 32.1 +0.1
baz=128
732A **Laxson Ranch,** 128.38 53 PKiKP **PKiKP** 12 24 32.4 +0.1
baz=128
533A **Kerrville** 128.52 51 PKiKP **PKiKP** 12 24 32.6 0.0
baz=128
334A **Lometa** 128.54 49 PKiKP **PKiKP** 12 24 32.5 0.0
baz=128
U38A **Gravette** 128.56 41 PKiKP **PKPdf** 12 24 32.2 +0.4
baz=128
135A **Vickery Place,** 128.56 47 PKiKP **PKiKP** 12 24 32.5 0.0
baz=128
832A **Faith Ranch, C** 128.57 53 PKiKP **PKiKP** 12 24 33.0 +0.3
baz=128
W37A **Quinton** 128.60 43 PKiKP **PKiKP** 12 24 32.8 +0.3
baz=128
Y36A **Durant** 128.67 45 PKiKP **PKiKP** 12 24 33.2 +0.5
baz=129
633A **Saathoff Ranch** 128.69 51 PKiKP **PKiKP** 12 24 33.4 +0.5
baz=129
434A **Burnet** 128.76 49 PKiKP **PKiKP** 12 24 33.2 +0.2
baz=129
WHTX **Lake Whitney** 128.80 48 PKiKP **PKiKP** 12 24 33.0 0.0
baz=129
V38A **Canehill** 128.87 42 PKiKP **PKiKP** 12 24 33.2 +0.1
baz=129
Z36A **Blue Ridge** 128.90 46 PKiKP **PKiKP** 12 24 33.3 +0.1
baz=129
733A **Divot King Ran** 128.92 52 PKiKP **PKiKP** 12 24 33.4 0.0
baz=129
X37A **Clayton** 128.94 44 PKiKP **PKiKP** 12 24 33.6 +0.4
baz=129
534A **Blanco** 128.97 50 PKiKP **PKiKP** 12 24 33.6 +0.1
baz=129
SHEL **Horse Pasture** 128.97 249 PFAKE 12 24 50.0 +17
SHEL LR LR
comp=Z,846nm,19.0s
833A **Chaparral WMA,** 129.01 53 PKiKP **PKiKP** 12 24 34.1 +0.5
baz=129
HDIL **Hopedale** 129.03 34 PKiKP **PKiKP** 12 24 33.2 0.0
baz=129
HDIL **Hopedale** 129.03 34 *e*PKPdf **PKPdf** 12 24 33.4 +0.8
HDIL LR LR
comp=Z,735nm,19.0s
Y37A **Hugo** 129.10 44 PKiKP **PKiKP** 12 24 33.5 0.0
baz=129
335A **Moody** 129.17 48 PKiKP **PKiKP** 12 24 33.8 0.0
baz=129
W38A **Poteau** 129.25 43 PKiKP **PKiKP** 12 24 34.2 +0.3
baz=129
X38A **Whitesboro** 129.26 43 PKiKP **PKiKP** 12 24 34.2 +0.3
baz=129
435B **Jarrell** 129.30 49 PKiKP **PKiKP** 12 24 34.3 +0.3
baz=129
933A **Laredo** 129.41 53 PKiKP **PKiKP** 12 24 34.7 +0.3
baz=129
734A **La Parita Cree** 129.44 52 PKiKP **PKiKP** 12 24 35.0 +0.6
baz=129
236A **Katherine and** 129.48 47 PKiKP **PKiKP** 12 24 34.5 +0.1
baz=129
Z37A **Pogue Cattle C** 129.51 45 PKiKP **PKiKP** 12 24 34.8 +0.4
baz=129
336A **Riesel** 129.56 48 PKiKP **PKiKP** 12 24 34.8 +0.2
baz=130
CCM **Cathedral Cave** 129.56 37 *e*PKIKP **PKPdf** 12 24 33.9 +0.3
CCM **Cathedral Cave** 129.56 37 *e*PKPdf **PKPdf** 12 24 33.9 +0.3
KIC **Kosan Boka** 129.60 278 *e*PKP1 **PKPdf** 12 24 34.9 +0.5
comp=Z,134nm,1.4s
DBIC **Dimbokro** 129.69 279 PKP **PKPdf** 12 25 35.4 +0.9
comp=Z,13nm,0.9s,baz=75,slow=1.7,SNR=12
DBIC **Dimbokro** 129.69 279 PKIKP **PKPdf** 12 25 35.4 +0.9
DBIC pmax pmax
comp=Z,13nm,0.9s
137A **Heron Place, G** 129.73 46 PKiKP **PKiKP** 12 24 35.7 +0.9
baz=130
834A **Tilden** 129.77 53 PKiKP **PKiKP** 12 24 36.0 +0.9
baz=130
635A **Leesville** 129.81 51 PKiKP **PKiKP** 12 24 35.9 +0.8
baz=130
TIC **Toumodi** 129.85 279 *e*PKP1 **PKPdf** 12 24 35.8 +0.9
LIC **Lamto** 129.90 278 *e*PKP1 **PKPdf** 12 24 35.5 +0.6
comp=Z,71nm,1.4s
436A **Wall Ranch, Ga** 129.90 49 PKiKP **PKiKP** 12 24 35.6 +0.3
baz=130
Z38A **Mt. Pleasant** 129.94 45 PKiKP **PKiKP** 12 24 35.9 +0.6
baz=130
237A **Washetta, Mont** 130.01 47 PKiKP **PKiKP** 12 24 36.0 +0.6
baz=130
934A **Benavides** 130.02 53 PKiKP **PKiKP** 12 24 35.8 +0.3
baz=130
735A **Kenedy** 130.03 51 PKiKP **PKiKP** 12 24 36.0 +0.4
baz=130
536A **Bastrop** 130.03 49 PKiKP **PKiKP** 12 24 35.8 +0.3
baz=130
034A **Hebbronville** 130.12 54 PKiKP **PKiKP** 12 24 35.8 0.0
baz=130
Y39A **Lockesburg** 130.18 43 PKiKP **PKiKP** 12 24 35.8 +0.1
baz=130
138A **Matatall Enter** 130.18 45 PKiKP **PKiKP** 12 24 35.8 +0.1
baz=130
MIAR **Mount Ida** 130.19 43 *e*PKIKP **PKPdf** 12 24 36.2 +1.3
MIAR MLR MLR
comp=Z,966nm,20.0s
MIAR **Mount Ida** 130.19 43 PKiKP **PKiKP** 12 24 35.9 +0.2
baz=130
MIAR **Mount Ida** 130.19 43 *e*PKPdf **PKPdf** 12 24 36.2 +1.3
MIAR LR LR
comp=Z,966nm,20.0s
835A **Beeville** 130.27 52 PKiKP **PKiKP** 12 24 36.3 +0.2
baz=130
337A **Centerville** 130.30 47 PKiKP **PKiKP** 12 24 36.4 +0.4
baz=130
636A **Smothers Creek** 130.32 50 PKiKP **PKPdf** 12 24 35.6 +0.3
baz=130
SFIN **Scholer Farm** 130.35 32 PKiKP **PKPdf** 12 24 35.7 +0.6
baz=130
SFIN **Scholer Farm** 130.35 32 *e*PKPdf **PKPdf** 12 24 36.8 +1.8
437A **Phantom Ranch,** 130.36 48 PKiKP **PKiKP** 12 24 36.4 +0.3
baz=130
Z39A **Irene McRaven,** 130.50 44 PKiKP **PKiKP** 12 24 36.9 +0.5
baz=130
238A **Jacksonville** 130.50 46 PKiKP **PKiKP** 12 24 36.7 +0.3
baz=130
KVTX **Kingsville** 130.54 53 PFAKE 12 24 50.0 +14
KVTX LR LR
comp=Z,678nm,19.0s
736A **Circle Diamond** 130.56 51 PKiKP **PKiKP** 12 24 37.3 +0.7
baz=130
537A **Green Hill Far** 130.60 49 PKiKP **PKiKP** 12 24 37.3 +0.6
baz=130
SADO **Sadowa** 130.60 23 *e*PKPdf **PKPdf** 12 24 36.2 +0.8
035A **Encino** 130.64 54 PKiKP **PKiKP** 12 24 37.1 +0.3
baz=131
AAM **Ann Arbor** 130.66 28 PFAKE 12 24 50.0 +14
AAM LR LR
comp=Z,942nm,19.0s
338A **Crockett** 130.70 47 PKiKP **PKiKP** 12 24 37.6 +0.7
baz=131
035Z **Hargill** 130.87 54 PKiKP **PKiKP** 12 24 37.3 0.0
baz=131
PBMO **Poplar Bluff** 130.87 38 *e*PKPdf **PKPdf** 12 24 37.7 +1.5
438A **Sam Houston St** 130.89 48 PKiKP **PKiKP** 12 24 37.2 -0.1
baz=131
OLIL **Olney** 130.96 35 *e*PKPdf **PKPdf** 12 24 38.2 +2.0
NATX **Nacogdoches** 130.96 46 PFAKE 12 24 50.0 +14
NATX LR LR
comp=Z,1μm,22.0s
HKT **Hockley** 131.02 49 *e*PKIKP **PKPdf** 12 24 39.5 +3.0
HKT **Hockley** 131.02 49 *e*PKPdf **PKPdf** 12 24 39.5 +3.0
339A **Huntington** 131.26 47 PKiKP **PKiKP** 12 24 37.9 -0.1
baz=131
439A **Center Grove,** 131.39 47 PKiKP **PKiKP** 12 24 38.2 0.0
baz=131
BLO **Bloomington** 131.53 33 *e*PKIKP **PKPdf** 12 24 39.1 +1.8
BLO **Bloomington** 131.53 33 *e*PKPdf **PKPdf** 12 24 39.1 +1.8
340A **Bronson** 131.70 46 PKiKP **PKiKP** 12 24 38.7 -0.2
baz=132
USIN **University of** 131.73 35 *e*PKPdf **PKPdf** 12 24 40.3 +2.5
540A **Vidor** 132.28 48 PKiKP **PKPdf** 12 24 39.5 +0.6
baz=132
WCI **Wyandotte Cave** 132.32 34 *e*PKIKP **PKPdf** 12 24 40.4 +1.5
WCI **Wyandotte Cave** 132.32 34 *e*PKPdf **PKPdf** 12 24 40.4 +1.5
LONY **Lake Ozonia** 132.35 19 *e*PKPdf **PKPdf** 12 24 40.0 +1.2
LONY LR LR
comp=Z,908nm,21.0s
ACSO **Alum Creek Sta** 132.57 29 *e*PKPdf **PKPdf** 12 24 41.2 +2.0
ACSO LR LR
comp=Z,1μm,21.0s
WVT **Waverly** 132.88 37 *e*PKIKP **PKPdf** 12 24 40.6 +0.7
WVT **Waverly** 132.88 37 *e*PKPdf **PKPdf** 12 24 40.6 +0.7
OXF **Oxford** 132.95 40 *e*PKIKP **PKPdf** 12 24 40.7 +0.6
OXF **Oxford** 132.95 40 *e*PKPdf **PKPdf** 12 24 40.7 +0.6
NCB **Newcomb** 133.05 19 *e*PKPdf **PKPdf** 12 24 40.5 +0.4
NCB LR LR
comp=Z,1μm,20.0s
MDV **Middlebury** 133.36 18 *e*PKPdf **PKPdf** 12 24 42.1 +1.5
LBNH **Lisbon** 133.51 17 *e*PKIKP **PKPdf** 12 24 42.5 +1.6
LBNH **Lisbon** 133.51 17 *e*PKPdf **PKPdf** 12 24 42.5 +1.6
WVL **Waterville** 133.83 15 *e*PKPdf **PKPdf** 12 24 42.7 +1.2
BINY **Binghamton** 133.99 22 *e*PKPdf **PKPdf** 12 24 42.9 +1.0
TRY **Troy** 134.34 19 *e*PKPdf **PKPdf** 12 24 45.9 +3.4
SSPA **Standing Stone** 134.57 25 *e*PKPdf **PKPdf** 12 24 43.1 +0.1
SWET **Sewanee** 134.63 36 *e*PKPdf **PKPdf** 12 24 44.2 +0.9
TZTN **Tazewell** 135.05 33 *e*PKPdf **PKPdf** 12 24 45.6 +1.6
LRAL **Lakeview Retre** 135.44 40 *e*PKPdf **PKPdf** 12 24 44.8 0.0
TKL **Tuckaleechee C** 135.57 34 *e*PKIKP **PKPdf** 12 24 46.3 +1.2
TKL **Tuckaleechee C** 135.57 34 *e*PKPdf **PKPdf** 12 24 46.2 +1.2
MVL **Millersville** 135.73 24 *e*PKPdf **PKPdf** 12 24 46.5 +1.3
PAL **Palisades** 135.79 21 *e*PKIKP **PKPdf** 12 24 46.8 +1.6
PAL **Palisades** 135.79 21 *e*PKPdf **PKPdf** 12 24 46.8 +1.6
BLA **Blacksburg** 136.18 30 PFAKE 12 25 00.0 +14
BLA LR LR
comp=Z,1μm,22.0s
BRAL **Brewton** 136.69 42 PFAKE 12 25 00.0 +13
BRAL LR LR
comp=Z,902nm,22.0s
CBN **Corbin** 136.81 26 PFAKE 12 25 00.0 +13
CBN LR LR
comp=Z,634nm,22.0s
PLCA **Paso Flores** 136.91 162 *e*PKIKP **PKPdf** 12 24 49.4 +1.9
PLCA **Paso Flores** 136.91 162 *e*PKPdf **PKPdf** 12 24 49.4 +1.9
KMSC **Kings Mountain** 137.29 33 PKiKP **PKPdf** 12 24 48.9 +0.7
baz=137
GOGA **Godfrey** 137.35 36 *e*PKIKP **PKPdf** 12 24 50.2 +1.8
GOGA MLR MLR
comp=Z,849nm,21.0s
GOGA **Godfrey** 137.35 36 *e*PKPdf **PKPdf** 12 24 50.2 +1.8
GOGA LR LR
comp=Z,849nm,21.0s
TIGA **Tifton** 138.65 38 PKiKP **PKPdf** 12 24 52.0 +1.1
baz=138
ASCN **Ascension** 138.84 258 PFAKE 12 25 00.0 +8.3
ASCN LR LR
comp=Z,2μm,20.0s
CNNC **Cliffs of the** 138.99 29 PFAKE 12 25 00.0 +8.7
CNNC LR LR
comp=Z,648nm,20.0s
NHSC **New Hope** 139.45 34 PFAKE 12 25 00.0 +7.8
NHSC LR LR
comp=Z,993nm,21.0s
TRQA **Tornquist** 141.45 171 PFAKE 12 25 10.0 +14
TRQA LR LR
comp=Z,656nm,22.0s
TEIG **Tepich** 141.69 57 PFAKE 12 25 10.0 +13
TEIG LR LR
comp=Z,462nm,19.0s
TGUH **Tegucigalpa,Un** 145.07 65 *e*PKPbc **PKPdf** 12 25 04.0 +1.3
CFAA **Coronel Fontan** 146.00 159 PKPbc **PKPab** 12 25 05.2 -0.1
comp=Z,1.9nm,0.6s,baz=205,slow=2.6,SNR=31
BBSR **BB Station** 146.60 15 *e*PKPdf **PKPbc** 12 25 06.3 -0.1
BBSR LR LR
comp=Z,609nm,19.0s
LCO **Las Campanas** 147.32 154 *e*PKPdf **PKPbc** 12 25 08.5 -0.4
LCO LR LR
comp=Z,660nm,20.0s
JTS **JuntasAbangare** 148.42 70 *e*PKIKP **PKPdf** 12 25 09.8 +1.4
JTS MLR MLR
comp=Z,815nm,19.0s
JTS **JuntasAbangare** 148.42 70 *e*PKPdf **PKPdf** 12 25 09.8 +1.4
JTS LR LR
comp=Z,815nm,19.0s
MTDJ **Mount Denham** 151.36 50 PFAKE 12 25 30.0 +2.8
MTDJ LR LR
comp=Z,472nm,21.0s
GTBY **Guantanamo Bay** 152.06 44 *e*PKPbc **PKPbc** 12 25 22.2 +1.7
GTBY LR LR
comp=Z,667nm,21.0s
GRTK **Grand Turk** 153.46 36 PFAKE 12 25 30.0 -5.8
GRTK LR LR
comp=Z,936nm,19.0s
BCIP **Isla Barro Col** 153.56 69 PFAKE 12 25 30.0 +6.0
BCIP LR LR
comp=Z,881nm,22.0s
LVC **Limon Verde** 153.59 150 PKPbc **PKPbc** 12 25 26.1 +1.9
comp=Z,20nm,0.5s,baz=252,slow=4.8,SNR=3.9
LVC **Limon Verde** 153.59 150 PKPbc **PKPbc** 12 25 26.1 +1.9
LVC LR LR
comp=Z,601nm,19.0s
CPUP **Villa Florida** 153.60 175 PKP **PKPdf** 12 25 17.2 +1.3
comp=Z,10.0nm,1.1s,baz=35,slow=1.8,SNR=11
CPUP PKPbc **PKiKP** 12 25 25.1 +1.3
comp=Z,25nm,1.1s,baz=167,slow=1.2,SNR=20
CPUP PKPab **PKPab** 12 25 37.3 +1.2
comp=Z,19nm,1.2s,baz=123,slow=3.4,SNR=5.6
CPUP **Villa Florida** 153.60 175 PKIKP **PKPdf** 12 25 17.3 +1.3
CPUP 12 25 25.1
CPUP 12 25 37.3
CPUP pmax pmax
comp=Z,10.0nm,1.1s
CPUP pmax pmax
comp=Z,25nm,1.1s
CPUP pmax pmax
comp=Z,19nm,1.2s
CPUP **Villa Florida** 153.60 175 *e*PKPdf **PKPdf** 12 25 17.6 +1.6
CPUP PKPbc **PKiKP** 12 25 25.1 +1.3
CPUP PKPab **PKPab** 12 25 37.3 +1.2
NNA **Nana** 155.09 120 PFAKE 12 25 30.0 +12
NNA LR LR
comp=Z,861nm,21.0s
SDDR **Presa de Saban** 155.28 40 PFAKE 12 25 30.0 +11
SDDR LR LR
comp=Z,642nm,22.0s
OTAV **Otavalo** 156.42 90 *e*PKPdf **PKPdf** 12 25 22.7 +1.9
OTAV LR LR
comp=Z,800nm,20.0s
SJG **San Juan** 158.96 31 PFAKE 12 25 40.0 +17
SJG LR LR
comp=Z,591nm,22.0s
LPAZ **La Paz** 159.10 142 PKP **PKPdf** 12 25 25.2 +1.0
comp=Z,13nm,1.2s,baz=21,slow=0.9,SNR=18
LPAZ **La Paz** 159.10 142 PKIKP **PKPdf** 12 25 25.2 +1.0
LPAZ pmax pmax
comp=Z,13nm,1.2s
LPAZ **La Paz** 159.10 142 *e*PKPdf **PKPdf** 12 25 26.3 +2.1
ROSC **El Rosal** 160.00 76 PKP **PKPdf** 12 25 25.7 +0.7
comp=Z,4.9nm,0.4s,baz=53,slow=4.2,SNR=9.0
RCBR **Riachuelo** 160.17 252 PKP **PKPdf** 12 25 25.1 +0.3
comp=Z,20nm,1.0s,baz=91,slow=2.9,SNR=6.4
RCBR **Riachuelo** 160.17 252 *e*PKPdf **PKPdf** 12 25 26.3 +1.5
RCBR LR LR
comp=Z,837nm,21.0s
ANWB **Willy Bob** 161.28 21 PFAKE 12 25 40.0 +14
ANWB LR LR
comp=Z,689nm,21.0s
SDV **Santo Domingo** 162.04 61 *e*PKPdf **PKPdf** 12 25 27.3 +0.3
SDV LR LR
comp=Z,887nm,21.0s
SIV **San Ignacio** 162.86 159 PKP **PKPdf** 12 25 27.7 +0.2
comp=Z,5.5nm,1.1s,baz=245,slow=2.0,SNR=9.1
BDFB **Brasilia** 162.94 203 PKP **PKPdf** 12 25 28.3 +0.6
comp=Z,2.8nm,0.4s,baz=92,slow=1.7,SNR=7.3
BDFB **Brasilia** 162.94 203 *e*PKIKP **PKPdf** 12 25 29.0 +1.3
BDFB e 12 26 18.6
BDFB **Brasilia** 162.94 203 *e*PKPdf **PKPdf** 12 25 29.0 +1.3
BDFB *e*PKPab **PKPab** 12 26 18.6 +1.7
FDF **Fort de France** 164.20 23 *e*PKIKP **PKPdf** 12 25 29.9 +1.1
FDF MLR MLR
comp=Z,544nm,20.0s
FDF **Fort de France** 164.20 23 *e*PKPdf **PKPdf** 12 25 29.9 +1.1
FDF LR LR
comp=Z,544nm,20.0s
GRGR **Grenville** 166.29 29 PFAKE 12 25 40.0 +9.5
GRGR LR LR
comp=Z,541nm,21.0s
SAML **Samuel** 167.76 138 PFAKE 12 25 40.0 +8.3
SAML LR LR
comp=Z,690nm,22.0s

**WEL 25 12:15:53.9±0.1, 43.48S×172.18E, h7km, ML3.5/11, 4C-1D, Error ellipse: s-maj=0.7km s-min=0.7km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| OXZ | **Oxford** | 0.18 | 327 | ↑↑P | Pg | 12 15 57.4 | -0.2 |
| OXZ | | | | S | Sg | 12 16 00.1 | -0.1 |
| CRLZ | **Canterbury Las** | 0.34 | 107 | ↑↑P | Pg | 12 16 00.9 | +0.4 |
| CRLZ | | | | S | Sg | 12 16 05.8 | +0.9 |
| CRLZ | | | | AML | AML | 12 16 06.8 | |
| MQZ | **McQueen's Vall** | 0.41 | 123 | ↑↑P | Pg | 12 16 02.2 | +0.3 |
| MQZ | | | | S | Sg | 12 16 08.2 | +0.8 |
| MQZ | | | | AML | AML | 12 16 08.7 | |
| LTZ | **Lake Taylor** | 0.70 | 6 | P* | Pg | 12 16 07.8 | +0.3 |
| LTZ | | | | AML | AML | 12 16 17.8 | |
| LTZ | | | | AML | AML | 12 16 19.7 | |
| RPZ | **Rata Peaks** | 0.85 | 254 | ↓↓P* | Pg | 12 16 10.0 | -0.2 |
| RPZ | | | | AML | AML | 12 16 23.1 | |
| RPZ | | | | AML | AML | 12 16 23.5 | |
| WVZ | **Waitaha Valley** | 1.13 | 291 | P* | Pg | 12 16 14.9 | -0.6 |
| WVZ | | | | AML | AML | 12 16 32.6 | |
| WVZ | | | | AML | AML | 12 16 35.9 | |
| KHZ | **Kahutara** | 1.46 | 44 | PN | Pn | 12 16 19.0 | -1.6 |
| LBZ | **Lake Benmore** | 1.70 | 237 | PN | Pn | 12 16 22.8 | -1.2 |
| LBZ | | | | AML | AML | 12 16 48.7 | |
| LBZ | | | | AML | AML | 12 16 52.3 | |
| DSZ | **Denniston Nort** | 1.75 | 351 | PN | Pn | 12 16 23.7 | -1.0 |
| DSZ | | | | AML | AML | 12 16 51.8 | |
| DSZ | | | | AML | AML | 12 16 53.5 | |
| THZ | **Tophouse** | 1.80 | 18 | PN | Pn | 12 16 23.6 | -1.8 |
| THZ | | | | AML | AML | 12 16 57.0 | |
| THZ | | | | AML | AML | 12 16 57.0 | |
| FOZ | **Fox Glacier** | 1.81 | 266 | PN | Pn | 12 16 23.6 | -1.8 |
| ODZ | **Otahua Downs** | 1.91 | 215 | ↑↑PN | Pn | 12 16 25.1 | -1.8 |
| ODZ | | | | AML | AML | 12 17 02.3 | |
| ODZ | | | | AML | AML | 12 17 02.4 | |
| BSWZ | **Blackbirch Sta** | 2.17 | 36 | PN | Pn | 12 16 29.3 | -1.0 |
| NNZ | **Nelson** | 2.43 | 22 | PN | Pn | 12 16 33.5 | -0.8 |
| JCZ | **Jackson Bay** | 2.54 | 255 | PN | Pn | 12 16 34.7 | -1.1 |
| WKZ | **Wanaka** | 2.64 | 238 | PN | Pn | 12 16 35.4 | -1.6 |
| EAZ | **Earnscleugh** | 2.70 | 229 | PN | Pn | 12 16 35.9 | -1.8 |
| EAZ | | | | AML | AML | 12 17 23.5 | |
| EAZ | | | | AML | AML | 12 17 26.4 | |
| TCW | **Tory Channel** | 2.75 | 35 | PN | Pn | 12 16 36.7 | -1.7 |
| WEL | **Wellington** | 2.92 | 42 | PN | Pn | 12 16 38.9 | -1.8 |
| PLWZ | **Palliser** | 2.97 | 51 | PN | Pn | 12 16 39.0 | -2.5 |
| TUZ | **Tuapeka** | 3.07 | 215 | PN | Pn | 12 16 41.1 | -1.6 |
| TUZ | | | | AML | AML | 12 17 37.3 | |
| TUZ | | | | AML | AML | 12 17 39.1 | |
| CAW | **Cannon Point** | 3.20 | 43 | PN | Pn | 12 16 42.1 | -2.4 |
| KIW | **Kapiti Island** | 3.31 | 39 | PN | Pn | 12 16 44.6 | -1.6 |
| OGWZ | **Otaki Gorge** | 3.47 | 41 | PN | Pn | 12 16 46.0 | -2.3 |
| SYZ | **Scrubby Hill** | 3.74 | 214 | PN | Pn | 12 16 50.8 | -1.1 |
| MRZ | **Mangatainoka R** | 3.79 | 43 | PN | Pn | 12 16 50.2 | -2.5 |
| BFZ | **Birch Farm** | 4.12 | 49 | PN | Pn | 12 16 54.8 | -2.4 |
| KHEZ | **Kahui Hut** | 4.41 | 19 | PN | Pn | 12 17 01.1 | -0.2 |

**IDC 25 12:32:52.5±1.2, 30.80N×84.19E, h0km, mb3.4/4, mb1 3.6/6, mb1mx3.3/47, mbtmp3.5/6, ML3.5/2, Error ellipse: s-maj=36.9km s-min=25.3km az=59.0, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MKAR | **Makanchi Arrav** | 16.04 | 355 | Pn | Pn | 12 36 39.5 | 0.0 |
| | 0.1nm,0.3s,baz=177,slow=13,SNR=7.7 | | | | | | |
| CMAR | **Chiang Mai Arr** | 18.17 | 129 | P | Pn | 12 37 04.5 | -1.8 |
| | 0.1nm,0.3s,baz=311,slow=11,SNR=7.3 | | | | | | |
| KURBB | **Kurchatov Arra** | 20.25 | 350 | P | P | 12 37 28.3 | -0.9 |
| | 1.3nm,1.0s,baz=168,slow=10.0,SNR=6.6 | | | | | | |
| SONM | **Songino Array** | 24.04 | 39 | P | P | 12 38 09.4 | 0.0 |
| | 0.5nm,0.7s,baz=224,slow=8.1,SNR=3.9 | | | | | | |
| ASAR | **Alice Springs** | 72.14 | 133 | P | P | 12 44 19.6 | +0.5 |
| | 0.3nm,0.9s,baz=322,slow=5.9,SNR=2.7 | | | | | | |
| TORD | **Torodi Ar. Bea** | 77.02 | 278 | P | P | 12 44 47.9 | +0.1 |
| | 0.8nm,0.7s,baz=47,slow=4.8,SNR=6.0 | | | | | | |

**DJA 25 12:35:40.8±0.2, 4°S±2°×12°8E±°, h10km, M4.0/18, mb4.6/6, mB6.0/1, MLv3.7/18, Mw(mB)5.7/1, Seram**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| AAI | **Ambon** | 0.27 | 251 | P | Pg | 12 35 46.4 | +0.1 |
| AAI | | | | S | Sg | 12 35 51.0 | +1.0 |
| AAI | **Ambon** | 0.27 | 251 | P | Pg | 12 35 43.6 | -2.7 |
| | 4μm,0.7s,106μm20nm | | | | | | |
| MSAI | **Masohi** | 0.54 | 62 | P | Pg | 12 35 51.0 | -0.3 |
| MSAI | | | | S | Sg | 12 35 58.6 | +0.1 |
| MSAI | **Masohi** | 0.54 | 62 | P | Pg | 12 35 50.6 | -0.7 |
| | 297nm,0.7s,8μm2.0nm | | | | | | |
| NLAI | **Namlea** | 1.40 | 285 | P | Pn | 12 36 06.5 | +0.2 |
| BNDI | **Bandanaira** | 1.72 | 122 | P | Pn | 12 36 09.3 | -1.5 |
| SANI | **Sanana** | 2.90 | 302 | P | Pn | 12 36 27.4 | +0.3 |
| LBMI | **Labuha** | 3.09 | 342 | P | Pn | 12 36 30.1 | +0.4 |
| FAKI | **Fak Fak** | 3.85 | 80 | P | Pn | 12 36 40.1 | -0.1 |
| SWI | **Sorong** | 3.91 | 46 | P | Pn | 12 36 41.1 | +0.2 |
| SWI | **Sorong** | 3.91 | 46 | P | Pn | 12 36 34.8 | -6.1 |
| | 43nm,0.6s | | | | | | |
| TNTI | **Ternate** | 4.48 | 346 | P | Pn | 12 36 47.9 | -0.9 |
| SAUI | **Saumlaki** | 5.20 | 147 | P | Pn | 12 36 58.8 | +0.1 |
| | 93nm,1.0s,0.4nm | | | | | | |
| KDI | **Kendari** | 5.83 | 266 | P | Pn | 12 37 07.2 | -0.2 |
| | 21nm,0.9s,0.1nm | | | | | | |
| RKPI | **Ransiki, Papua** | 6.09 | 70 | P | Pn | 12 37 11.5 | +0.6 |

113nm,0.8s,12µm0.8nm
**BBSI Bau Bau** 6.15 252 P Pn 12 37 12.0 +0.2
30nm,0.9s,0.1nm

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**DJA 25 12:50:22.0±0.3, 0°S±3′×12°5E±°, h10km, M4.0/14, mb4.3/1, MLv3.8/14, Southern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SANI** | **Sanana** | **2.04** | **164** | P | Pn | 12 50 54.9 | -1.5 |
| **TNTI** | **Ternate** | **2.10** | **67** | P | Pn | 12 50 57.6 | +0.3 |
| **LBMI** | **Labuha** | **2.14** | **105** | P | Pn | 12 50 58.3 | +0.5 |
| **GTOI** | **Gorontalo** | **2.53** | **286** | P | Pn | 12 51 05.1 | +2.0 |
| **LUWI** | **Luwuk** | **2.84** | **250** | P | Pn | 12 51 07.1 | -0.3 |
| LUWI | | | | S | Sn | 12 51 43.5 | +1.8 |
| **NLAI** | **Namlea** | **3.56** | **152** | P | Pn | 12 51 17.5 | +0.2 |
| **SGSI** | **Sangihe** | **3.73** | **1** | P | Pn | 12 51 19.8 | +0.1 |
| **AAI** | **Ambon** | **4.53** | **143** | P | Pn | 12 51 30.8 | +0.1 |
| **MSAI** | **Masohi** | **4.77** | **133** | P | Pn | 12 51 34.4 | +0.4 |
| **KDI** | **Kendari** | **4.78** | **216** | P | Pn | 12 51 33.8 | -0.4 |
| **BNDI** | **Bandanaira** | **6.28** | **135** | P | Pn | 12 51 53.8 | -1.0 |

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*IDC 25 12:55:40.6±2.5, 51°.88N×175°.42W, h0km, mb3.7/5, mb1 3.9/7, mb1mx3.6/61, mbtmp3.7/7, ML4.2/2, Error ellipse: s-maj=59.7km s-min=27.8km az=177.0*
*ISCJB 25 12:55:50.6±0.9, 51°.52N±0°.09×174°.68W±0°.06, h50km, mb3.7/5, Error ellipse: s-maj=12.6km s-min=4.7km az=165.2*
*NEIC 25 12:55:52.5, 51°.81N×174°.80W, h63km, ML3.5(AEIC), After AEIC.*

**ISC 25 12:55:50.2±1.3, 51°.6N±0°.1×174°.64W±0°.06, h50km, n34, σ1°35/28, mb3.6/5, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ATKA** | **Atka Island** | **0.71** | **23** | P | **Pn** | **12 56 05.0** | **+1.0** |
| ATKA | | | | S | **Sn** | **12 56 14.8** | **+0.7** |
| **KOFP** | **Korovin Flat P** | **0.80** | **25** | P | **Pn** | **12 56 07.1** | **+1.8** |
| **KOKL** | **Mount Kliuchef** | **0.82** | **19** | P | **Pn** | **12 56 06.9** | **+1.3** |
| **KOSE** | **Korovin Southe** | **0.88** | **24** | P | **Pn** | **12 56 07.8** | **+1.4** |
| **GSMY** | **Great Sitkin M** | **1.01** | **300** | P | **Pn** | **12 56 08.7** | **+0.6** |
| **GSCK** | **Great Sitkin C** | **1.05** | **297** | P | **Pn** | **12 56 09.4** | **+0.8** |
| **GSTD** | **Great Sitkin T** | **1.06** | **299** | P | **Pn** | **12 56 09.4** | **+0.5** |
| GSTD | | | | S | **Sn** | **12 56 21.9** | **-0.7** |
| **ETKA** | **Kagalaska Isla** | **1.14** | **287** | P | **Pn** | **12 56 11.3** | **+1.5** |
| ETKA | | | | S | **Sn** | **12 56 24.7** | **+0.3** |
| **ADAG** | **Mount Adagdak** | **1.29** | **290** | P | **Pn** | **12 56 13.4** | **+1.5** |
| **KIRH** | **Kanaga Island** | **1.56** | **284** | P | **Pn** | **12 56 17.1** | **+1.5** |
| KIRH | | | | S | **Sn** | **12 56 35.4** | **+0.6** |
| **KIKV** | **Kanaga Island** | **1.61** | **283** | P | **Pn** | **12 56 17.6** | **+1.4** |
| **KICM** | **Kanaga Island** | **1.63** | **284** | P | **Pn** | **12 56 17.8** | **+1.3** |
| **TAPA** | **Tanaga Point A** | **1.99** | **279** | P | **Pn** | **12 56 23.0** | **+1.5** |
| **TAFL** | **Tanaga Flats** | **2.04** | **277** | P | **Pn** | **12 56 23.7** | **+1.7** |
| **TAFP** | **Tanaga Falls P** | **2.11** | **281** | P | **Pn** | **12 56 23.9** | **+0.9** |
| TAFP | | | | S | **Sn** | **12 56 47.5** | **-0.6** |
| **GALAA** | **Gareloi Lava P** | **2.58** | **276** | P | **Pn** | **12 56 30.9** | **+1.4** |
| **GANE** | **Gareloi Northe** | **2.59** | **278** | P | **Pn** | **12 56 30.9** | **+1.3** |
| **CERAA** | **Semis' Rag'd T** | **3.55** | **278** | P | **Pn** | **12 56 43.6** | **+0.9** |
| **CESW** | **Semis' Southwe** | **3.62** | **278** | P | **Pn** | **12 56 44.5** | **+0.8** |
| **AMKA** | **Amchitka** | **3.79** | **270** | P | **Pn** | **12 56 47.1** | **+1.0** |
| **NIKH** | **Nikolski High** | **3.83** | **66** | P | Pn | 12 56 51.0 | +4.4 |
| **KDAK** | **Kodiak Island** 1.1nm,0.3s,baz=190,slow=1.2,SNR=14 | **14.17** | **55** | Pn | **Pn** | **12 59 08.1** | **+0.3** |
| **ILAR** | **Eielson Array** 0.3nm,0.3s,baz=228,slow=11,SNR=23 | **19.51** | **37** | P | P | 13 00 08.8 | -4.2 |
| **INK** | **Inuvik** 1.5nm,0.7s,baz=243,slow=9.0,SNR=5.3 | **25.84** | **34** | P | **P** | **13 01 12.9** | **-3.5** |
| **YKA** | **Yellowknife Ar** 0.5nm,0.7s,baz=280,slow=7.4,SNR=3.3 | **33.22** | **47** | P | P | 13 02 20.0 | -1.9 |
| **H11N2** | **WAKE ISLAND Hy** baz=20,slow=76,SNR=32 | **34.91** | **211** | T | T | 13 40 06.9 | |
| **H11N3** | **WAKE ISLAND Hy** baz=20,slow=76,SNR=19 | **34.92** | **211** | T | T | 13 40 03.6 | |
| **H11N1** | **WAKE ISLAND Hy** baz=20,slow=76,SNR=20 | **34.93** | **211** | T | T | 13 40 04.0 | |
| **H11S1** | **WAKE ISLAND Hy** baz=20,slow=76,SNR=70 | **36.12** | **211** | T | T | 13 41 43.0 | |
| **H11S2** | **WAKE ISLAND Hy** baz=20,slow=76,SNR=41 | **36.13** | **211** | T | T | 13 41 51.1 | |
| **H11S3** | **WAKE ISLAND Hy** baz=20,slow=76,SNR=16 | **36.13** | **211** | T | T | 13 41 48.4 | |
| **TXAR** | **Lajitas Array** 0.2nm,0.5s,baz=296,slow=4.7,SNR=4.2 | **56.05** | **84** | P | **P** | **13 05 24.1** | **0.0** |
| **MKAR** | **Makanchi Array** 0.2nm,0.4s,baz=32,slow=7.1,SNR=4.5 | **61.93** | **311** | P | P | 13 05 58.5 | -5.9 |
| **HFS** | **Hagfors** 3.4nm,1.0s,baz=0.0,slow=4.4,SNR=6.2 | **68.47** | **356** | P | P | 13 06 41.1 | -5.4 |

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*MOS 25 12:59:11.7±0.9, 49°.89N×28°.94W, h10km, mb4.8/35, Error ellipse: s-maj=17.3km s-min=7.4km az=55.0*
*IDC 25 12:59:12.1±0.6, 49°.90N×28°.89W, h0km, mb4.3/23, mb1 4.4/24, mb1mx4.2/49, mbtmp4.3/24, ML4.0/1, MS4.0/7, Ms1 4.1/7, ms1mx3.6/47, Error ellipse: s-maj=16.1km s-min=12.6km az=8.0*
*ISCJB 25 12:59:12.0±0.3, 49°.94N±0°.05×28°.94W±0°.07, h10km, mb4.5/61, MS4.1/9, Error ellipse: s-maj=8.3km s-min=5.6km az=30.3*
*CSEM 25 12:59:13.7±0.2, 50°.00N×28°.93W, h10km, mb4.7/33, Error ellipse: s-maj=9.0km s-min=6.5km az=39.0*
*NEIC 25 12:59:13.5±0.3, 49°.91N×28°.92W, h10km, mb4.8/13, Error ellipse: s-maj=8.5km s-min=5.5km az=4.0*
*BJI 25 12:59:14.9, 50°.00N×28°.90W, h10km, mb4.6/8, mB5.1/5, Ms4.9/1, Ms7 4.7/1*

**ISC 25 12:59:13.9±0.5, 49°.92N±0°.09×28°.93W±0°.07, h10km, n155, σ1°10/148, mb4.6/61, MS4.1/9, 7C, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGAV** | **Gavieira, Arco** 54nm,1.6s | **16.39** | **111** | *eP* | **Pn** | **13 03 02.4** | **-1.6** |
| **EKA** | **Eskdalemuir Ar** baz=262,slow=11,SNR=13 | **16.51** | **61** | Pn | **Pn** | **13 03 03.8** | **-1.5** |
| **PBRG** | **Braganca** 46nm,1.7s | **17.41** | **109** | *eP* | **P** | **13 03 18.3** | **+0.2** |
| **PBRG** | **Braganca** 46nm,1.7s | **17.41** | **109** | *eP* | **P** | **13 03 18.3** | **+0.2** |
| **MVO** | **Moncorvo** 30nm,1.7s | **17.61** | **111** | *eP* | **Pn** | **13 03 19.6** | **+0.2** |
| **MVO** | **Moncorvo** 30nm,1.7s | **17.61** | **111** | *eP* | **Pn** | **13 03 19.6** | **+0.2** |
| **MTE** | **Manteigas** 35nm,1.3s | **17.78** | **114** | *eP* | **P** | **13 03 22.2** | **0.0** |
| **MTE** | **Manteigas** 35nm,1.3s | **17.78** | **114** | *eP* | **P** | **13 03 22.2** | **0.0** |
| **PMTG** | **Montargil** 38nm,1.2s | **18.26** | **119** | *eP* | **P** | **13 03 27.7** | **+0.2** |
| **PMTG** | **Montargil** 38nm,1.2s | **18.26** | **119** | *eP* | **P** | **13 03 27.7** | **+0.2** |
| **PMRV** | **Marv??o** 30nm,1.4s | **18.50** | **116** | *eP* | **Pn** | **13 03 31.5** | **+1.3** |
| **PMRV** | **Marv??o** 30nm,1.4s | **18.50** | **116** | *eP* | **Pn** | **13 03 31.5** | **+1.3** |
| **PNCL** | **Nicolau / Gran** 28nm,1.4s | **18.76** | **121** | *eP* | **Pn** | **13 03 36.2** | **+2.8** |
| **MORF** | **Marmelete** 49nm,1.4s | **19.28** | **123** | *eP* | **P** | **13 03 37.6** | **-1.1** |
| **MORF** | **Marmelete** 49nm,1.4s | **19.28** | **123** | *eP* | **P** | **13 03 37.6** | **-1.1** |
| **PCVE** | **Castro Verde** 35nm,1.4s | **19.37** | **121** | *eP* | **Pn** | **13 03 41.3** | **+0.5** |
| **PCVE** | **Castro Verde** 35nm,1.4s | **19.37** | **121** | *eP* | **Pn** | **13 03 41.3** | **+0.5** |
| **PBAR** | **Barrancos** 44nm,1.5s | **19.55** | **119** | *eP* | **Pn** | **13 03 43.9** | **+1.0** |
| **PBAR** | **Barrancos** 44nm,1.5s | **19.55** | **119** | *eP* | **Pn** | **13 03 43.9** | **+1.0** |
| **PVAQ** | **Vaqueiros** 40nm,1.4s | **19.72** | **121** | *eP* | **P** | **13 03 44.1** | **+0.7** |
| **PVAQ** | **Vaqueiros** 40nm,1.4s | **19.72** | **121** | *eP* | **P** | **13 03 44.1** | **+0.7** |
| **ESDC** | **Sonseca Array** 8.5nm,1.0s,baz=309,slow=9.8,SNR=26 | **20.37** | **111** | P | **P** | **13 03 50.9** | **+0.3** |
| **SUMG** | **Summit** comp=Z,25nm,1.0s | **23.13** | **353** | *eP* | **P** | **13 04 19.7** | **-0.5** |
| SUMG | | | | pmax | pmax | | |
| **SUMG** | **Summit** comp=Z,25nm,1.0s | **23.13** | **353** | *eP* | **P** | **13 04 19.7** | **-0.5** |
| **SUMG** | **Summit** comp=Z,25nm,1.0s | **23.13** | **353** | *eP* | **P** | **13 04 19.7** | **-0.5** |
| **SCHQ** | **Schefferville** comp=Z,6.6nm,0.8s,baz=81,slow=8.7,SNR=6.2 | **23.45** | **297** | P | **P** | **13 04 24.1** | **+0.9** |
| **KONO** | **Kongsberg** | **23.92** | **51** | *eP* | **P** | **13 04 27.4** | **-0.3** |
| KONO | comp=Z,33nm,1.4s | | | pmax | pmax | | |
| **KONO** | **Kongsberg** comp=Z,33nm,1.4s | **23.92** | **51** | *eP* | **P** | **13 04 27.4** | **-0.3** |
| **KONO** | **Kongsberg** comp=Z,33nm,1.4s | **23.92** | **51** | *eP* | **P** | **13 04 27.4** | **-0.3** |
| **BFO** | **Black Forest** | **24.28** | **79** | *iP* | **P** | **13 04 33.7** | **+2.6** |
| **BFO** | **Black Forest** | **24.28** | **79** | *iP* | **P** | **13 04 33.7** | **+2.6** |
| **MDT** | **Midelt** comp=Z,4.6nm,0.9s,baz=315,slow=8.1,SNR=6.0 | **24.83** | **124** | P | **P** | **13 04 35.3** | **-1.0** |
| **NB2** | **NORSAR Subarra** comp=Z,10nm,1.0s,baz=260,slow=10 | **24.91** | **48** | P | **P** | **13 04 36.0** | **-0.7** |
| **NB2** | **NORSAR Subarra** comp=Z,10nm,1.0s,SNR=7.4 | **24.91** | **48** | P | **P** | **13 04 36.0** | **-0.7** |
| **NOA** | **NORSAR Array B** comp=Z,7.2nm,0.9s,baz=261,slow=9.3,SNR=7.3 | **24.91** | **48** | P | **P** | **13 04 35.9** | **-0.8** |
| **DAVOX** | **Davos/Dischmat** comp=Z,5.1nm,0.8s,baz=300,slow=16,SNR=5.9 | **25.79** | **82** | P | **P** | **13 04 45.3** | **+0.3** |
| **HFS** | **Hagfors** comp=Z,5.7nm,1.0s,baz=277,slow=9.4,SNR=4.9 | **26.03** | **51** | P | **P** | **13 04 47.0** | **+0.2** |
| **HFS** | **Hagfors** | **26.03** | **51** | P | **P** | **13 04 47.0** | **+0.2** |
| **HFS** | **Hagfors** | **26.03** | **51** | P | **P** | **13 04 47.0** | **+0.2** |
| **CLL** | **Collm** | **26.39** | **71** | *eP* | **P** | **13 04 49.0** | **-1.2** |
| CLL | | | | *e* | | 13 04 53.0 | |
| CLL | comp=Z,8.0nm,1.0s | | | pmax | pmax | | |
| **CLL** | **Collm** comp=Z,8.0nm,1.0s | **26.39** | **71** | *eP* | **P** | **13 04 49.0** | **-1.2** |
| CLL | | | | *es* | P | **sP** | **13 04 53.0** | **-1.5** |
| CLL | | | | *e* | | 13 04 59.0 | |
| CLL | | | | *e* | PPP | PPP | 13 05 34.0 | |
| **CLL** | **Collm** comp=Z,8.0nm,1.0s | **26.39** | **71** | *eP* | **P** | **13 04 49.0** | **-1.2** |
| **GERES** | **GERESS Array B** comp=Z,2.3nm,1.0s,baz=268,slow=6.5,SNR=8.3 | **27.50** | **76** | P | **P** | **13 05 00.5** | **+0.1** |
| **KEST** | **Kesra** comp=Z,9.5nm,0.9s,baz=289,slow=4.1,SNR=7.2 | **31.08** | **102** | P | **P** | **13 05 31.9** | **-0.3** |
| **FINES** | **FINESS Array B** comp=Z,13nm,0.9s,baz=262,slow=7.3,SNR=16 | **32.09** | **48** | P | **P** | **13 05 40.0** | **-0.6** |
| **ARCES** | **ARCESS Array B** comp=Z,5.3nm,0.8s,baz=289,slow=3.7,SNR=7.0 | **32.17** | **33** | P | **P** | **13 05 40.6** | **-0.8** |
| **ARCES** | **ARCESS Array B** | **32.17** | **33** | *eP* | **P** | **13 05 41.0** | **-0.4** |
| **KOLS** | **Kolonicke sedl** | **32.17** | **33** | *eP* | **P** | **13 05 41.0** | **-0.4** |
| **KOLS** | **Kolonicke sedl** | **32.79** | **72** | *eP* | **P** | **13 05 48.0** | **+1.0** |
| **KOLS** | **Kolonicke sedl** | **32.79** | **72** | *eP* | **P** | **13 05 48.0** | **+1.0** |
| **KOLS** | **Kolonicke sedl** | **32.79** | **72** | *eP* | **P** | **13 05 48.0** | **+1.0** |
| **LVZ** | **Lovozero** | **35.41** | **36** | *eP* | **P** | **13 06 09.8** | **+0.3** |
| LVZ | comp=Z,23nm,1.1s | | | pmax | pmax | | |
| **LVZ** | **Lovozero** comp=Z,23nm,1.1s | **35.41** | **36** | *eP* | **P** | **13 06 09.8** | **+0.3** |
| **KIEV** | **Kiev** | **36.31** | **66** | *eP* | **P** | **13 06 17.0** | **-0.4** |
| KIEV | comp=Z,6.0nm,1.0s | | | pmax | pmax | | |
| **KIEV** | **Kiev** comp=Z,6.0nm,1.0s | **36.31** | **66** | *eP* | **P** | **13 06 17.0** | **-0.4** |
| **AKASG** | **Malin Array Be** comp=Z,3.5nm,0.8s,baz=286,slow=8.9,SNR=6.8 | **36.32** | **66** | P | **P** | **13 06 16.3** | **-1.1** |
| AKASG | | | | | LR | LR | 13 22 50.6 | |
| **AKASG** | **Malin Array Be** comp=Z,409nm,18.4s,baz=30,slow=39 | **36.32** | **66** | *ce* | P | P | 13 06 22.7 | +5.2 |
| AKASG | comp=Z,4.0nm,0.9s | | | pmax | pmax | | | |
| **TMCR** | **Tamitsa** | **37.19** | **42** | *eP* | **P** | **13 06 24.0** | **-0.7** |
| TMCR | comp=Z,15nm,0.7s | | | pmax | pmax | | | |
| **TMCR** | **Tamitsa** comp=Z,15nm,0.7s | **37.19** | **42** | *eP* | **P** | **13 06 24.0** | **-0.7** |
| **KLMR** | **Klimovskoe** | **38.60** | **47** | *eP* | **P** | **13 06 35.5** | **-1.1** |
| KLMR | comp=Z,16nm,1.1s | | | pmax | pmax | | | |
| **KLMR** | **Klimovskoe** comp=Z,16nm,1.1s | **38.60** | **47** | *eP* | **P** | **13 06 35.5** | **-1.1** |
| **OBN** | **Obninsk** | **38.88** | **56** | *iP* | **P** | **13 06 38.6** | **-0.4** |
| OBN | | | | *i* | | 13 08 53.7 | |
| OBN | comp=Z,9.0nm,1.0s | | | pmax | pmax | | |
| OBN | comp=Z,277nm,17.0s | | | MLR | MLR | | |
| **OBN** | **Obninsk** comp=Z,9.0nm,1.0s | **38.88** | **56** | *iP* | **P** | **13 06 38.6** | **-0.4** |
| **EYMN** | **Ely** comp=Z,31nm,1.3s | **40.09** | **292** | *eP* | **P** | **13 06 48.6** | **-0.7** |
| **LPSR** | **Galich'ya Gora** | **41.13** | **59** | *eP* | **P** | **13 06 57.2** | **-0.6** |
| LPSR | comp=Z,4.0nm,0.5s | | | pmax | pmax | | | |
| LPSR | comp=N,4.0nm,0.6s | | | pmax | pmax | | | |
| LPSR | comp=E,8.0nm,0.7s | | | pmax | pmax | | | |
| **LPSR** | **Galich'ya Gora** comp=E,4.0nm,0.6s | **41.13** | **59** | *eP* | **P** | **13 06 57.2** | **-0.6** |
| **VSR** | **Storozhevoye** | **41.85** | **61** | *eP* | **P** | **13 07 02.4** | **-1.3** |
| VSR | comp=Z,5.0nm,0.7s | | | pmax | pmax | | | |
| VSR | comp=N,3.0nm,0.6s | | | pmax | pmax | | | |
| VSR | comp=E,10.0nm,1.5s | | | pmax | pmax | | | |
| **VSR** | **Storozhevoye** comp=E,3.0nm,0.6s | **41.85** | **61** | *eP* | **P** | **13 07 02.4** | **-1.3** |
| **VORD** | **Divnogorie** | **42.04** | **61** | *eP* | **P** | **13 07 04.0** | **-1.2** |
| VORD | comp=Z,3.0nm,0.5s | | | pmax | pmax | | | |
| VORD | comp=N,10.0nm,0.8s | | | pmax | pmax | | | |
| VORD | comp=E,10.0nm,0.8s | | | pmax | pmax | | | |
| **VORD** | **Divnogorie** comp=E,3.0nm,0.5s | **42.04** | **61** | *eP* | **P** | **13 07 04.0** | **-1.2** |
| **VRH** | **Novokhopyorsk** | **43.30** | **60** | *eP* | **P** | **13 07 14.4** | **-1.1** |
| VRH | comp=Z,3.0nm,0.4s | | | pmax | pmax | | | |
| VRH | comp=N,9.0nm,0.7s | | | pmax | pmax | | | |
| VRH | comp=E,10.0nm,1.7s | | | pmax | pmax | | | |
| **VRH** | **Novokhopyorsk** comp=E,9.0nm,0.7s | **43.30** | **60** | *eP* | **P** | **13 07 14.4** | **-1.1** |
| **BRTR** | **Keskin Array B** comp=E,2.1nm,0.8s,baz=296,slow=6.6,SNR=9.4 | **44.33** | **78** | P | **P** | **13 07 24.2** | **+0.1** |
| BRTR | | | | | LR | LR | 13 26 44.2 | |
| **BRTR** | **Keskin Array B** comp=E,158nm,20.0s,baz=230,slow=37 | **44.33** | **78** | *ce* | P | P | 13 07 30.2 | +6.1 |
| BRTR | comp=Z,2.0nm,0.8s | | | pmax | pmax | | | |
| **TORD** | **Torodi Ar. Bea** comp=Z,6.8nm,0.8s,baz=334,slow=7.6,SNR=29 | **44.41** | **135** | P | **P** | **13 07 23.2** | **-1.6** |
| **CCM** | **Cathedral Cave** | **45.13** | **279** | *eP* | **P** | **13 07 29.3** | **-1.0** |
| CCM | comp=Z,6.0nm,0.7s | | | pmax | pmax | | | |
| **CCM** | **Cathedral Cave** comp=Z,5.8nm,0.7s | **45.13** | **279** | *eP* | **P** | **13 07 29.3** | **-1.0** |
| **CCM** | **Cathedral Cave** comp=Z,6.0nm,0.7s | **45.13** | **279** | *eP* | **P** | **13 07 29.3** | **-1.0** |
| **KIV** | **Kislovodsk** | **47.55** | **68** | *eP* | **P** | **13 07 51.4** | **+2.0** |
| KIV | comp=Z,8.0nm,0.9s | | | pmax | pmax | | | |
| **KIV** | **Kislovodsk** comp=Z,8.0nm,0.9s | **47.55** | **68** | *eP* | **P** | **13 07 51.4** | **+2.0** |
| **DBIC** | **Dimbokro** comp=Z,3.5nm,0.7s,baz=315,slow=10.0,SNR=4.1 | **47.60** | **147** | P | **P** | **13 07 49.1** | **-0.8** |
| **KBZ** | **Khabaz** comp=Z,1.4nm,0.6s,baz=31,slow=5.9,SNR=3.4 | **47.80** | **68** | P | **P** | **13 07 51.6** | **+0.4** |
| **NEY** | **Neytrino** | **47.97** | **69** | *eP* | **P** | **13 07 55.7** | **+3.0** |
| NEY | comp=Z,1.0nm,1.0s | | | pmax | pmax | | | |
| **NEY** | **Neytrino** comp=Z,1.0nm,1.0s | **47.97** | **69** | *eP* | **P** | **13 07 55.7** | **+3.0** |
| **SVE** | **Sverdlovsk** comp=Z,10.0nm,0.9s | **50.21** | **46** | *eP* | **P** | **13 08 09.4** | **-0.1** |
| SVE | comp=Z,10.0nm,0.9s | | | pmax | pmax | | | |
| **SVE** | **Sverdlovsk** comp=Z,10.0nm,0.9s | **50.21** | **46** | *eP* | **P** | **13 08 09.4** | **-0.1** |
| **GNI** | **Garni** | **51.00** | **71** | *ce* | **P** | **13 08 17.0** | **+1.1** |
| GNI | comp=Z,28nm,0.9s | | | pmax | pmax | | | |
| **GNI** | **Garni** comp=Z,28nm,0.9s | **51.00** | **71** | *eP* | **P** | **13 08 17.0** | **+1.1** |
| **K22A** | **Casper** comp=Z,16nm,1.2s | **51.86** | **294** | *eP* | **P** | **13 08 21.2** | **-1.2** |
| **AKTK** | **Aktyubinsk** comp=Z,8.0nm,1.0s | **52.51** | **54** | P | **P** | **13 08 26.4** | **-0.5** |
| **AKTO** | **Aktyubinsk** | **52.51** | **54** | LR | LR | 13 29 40.3 | |
| **AKTO** | **Aktyubinsk** comp=Z,114nm,18.8s,slow=35 | **52.51** | **54** | P | **P** | **13 08 26.4** | **-0.5** |
| AKTO | comp=Z,8.0nm,1.0s | | | pmax | pmax | | | |
| **AMTX** | **Amarillo** comp=Z,9.5nm,0.7s | **53.70** | **283** | *eP* | **P** | **13 08 35.4** | **-0.6** |
| **AB31** | **Akbulak array** | **54.22** | **54** | *iP* | **P** | **13 08 38.9** | **-0.5** |
| AB31 | comp=Z,4.0nm,0.8s | | | pmax | pmax | | | |
| **AB31** | **Akbulak array** comp=Z,4.0nm,0.8s | **54.22** | **54** | *iP* | **P** | **13 08 38.9** | **-0.5** |
| **ABKAR** | **Akbulak array** comp=Z,3.0nm,0.8s | **54.22** | **54** | *eP* | **P** | **13 08 38.9** | **-0.5** |
| **ILAR** | **Eielson Array** comp=Z,1.0nm,0.9s,baz=43,slow=4.0,SNR=7.0 | **55.98** | **333** | P | **P** | **13 08 52.3** | **+0.4** |
| **ZRNK** | **Zerenda** | **56.40** | **46** | *iP* | **P** | **13 08 54.0** | **-1.0** |
| ZRNK | comp=Z,10.0nm,1.3s | | | pmax | pmax | | | |
| **ZRNK** | **Zerenda** comp=Z,10.0nm,1.3s | **56.40** | **46** | *iP* | **P** | **13 08 54.0** | **-1.0** |
| **ANMO** | **Albuquerque** | **56.65** | **286** | *ce* | P | P | 13 09 04.8 | +7.4 |
| ANMO | comp=Z,6.0nm,2.5s | | | pmax | pmax | | | |
| **CHKZ** | **Chkalovo** | **56.67** | **45** | *iP* | **P** | **13 08 56.4** | **-0.5** |
| CHKZ | comp=Z,12nm,1.1s | | | pmax | pmax | | | |
| **CHKZ** | **Chkalovo** comp=Z,12nm,1.1s | **56.67** | **45** | *iP* | **P** | **13 08 56.4** | **-0.5** |
| **BVA0** | **Borovoye Array** comp=Z,28nm,1.5s | **56.99** | **45** | *iP* | **P** | **13 08 59.1** | **-0.2** |
| BVA0 | | | | pmax | pmax | | | |
| **BVA0** | **Borovoye Array** comp=Z,28nm,1.5s | **56.99** | **45** | *iP* | **P** | **13 08 59.1** | **-0.2** |
| **BVAR** | **Borovoye Array** comp=Z,180nm,19.1s,baz=264,slow=35 | **56.99** | **45** | LR | LR | 13 32 44.8 | |
| **MSU** | **Marysvale** | **57.81** | **293** | *eP* | **P** | **13 09 05.8** | **+0.3** |
| MSU | comp=Z,5.0nm,0.8s | | | pmax | pmax | | | |
| **MSU** | **Marysvale** comp=Z,5.4nm,0.8s | **57.81** | **293** | *eP* | **P** | **13 09 05.8** | **+0.3** |
| **MSU** | **Marysvale** comp=Z,5.0nm,0.8s | **57.81** | **293** | *eP* | **P** | **13 09 05.8** | **+0.3** |
| **TXAR** | **Lajitas Array** comp=Z,1.8nm,0.7s,baz=67,slow=5.8,SNR=23 | **58.64** | **279** | P | **P** | **13 09 09.9** | **-1.4** |
| **GEYT** | **Alibeck** comp=Z,2.4nm,0.6s,baz=296,slow=11,SNR=4.9 | **60.44** | **65** | P | **P** | **13 09 23.1** | **-0.5** |
| **JTS** | **JuntasAbangare** | **60.60** | **250** | *eP* | P | 13 09 36.3 | +11 |
| JTS | comp=Z,8.0nm,1.1s | | | pmax | pmax | | | |
| **NVS** | **Novosibirsk** | **61.23** | **38** | *eP* | **P** | **13 09 28.2** | **-0.4** |
| NVS | comp=N,5.0nm,1.4s | | | pmax | pmax | | | |
| NVS | comp=E,6.0nm,1.4s | | | pmax | pmax | | | |
| NVS | comp=Z,13nm,1.4s | | | pmax | pmax | | | |
| **NVS** | **Novosibirsk** | **61.23** | **38** | *eP* | **P** | **13 09 28.2** | **-0.4** |
| **NVAR** | **Mina Array Bea** comp=Z,0.5nm,0.6s,baz=73,slow=6.1,SNR=3.0 | **61.46** | **297** | P | **P** | **13 09 31.8** | **+1.1** |
| **BILL** | **Bilibino** | **61.81** | **354** | *iP* | P | 13 09 36.5 | +4.1 |
| BILL | | | | *i* | | 13 09 44.5 | | |
| BILL | comp=Z,4.0nm,1.0s | | | pmax | pmax | | | |
| BILL | comp=Z,97nm,15.0s | | | MLR | MLR | | | |
| **KURK** | **Kurchatov** | **62.29** | **43** | *eP* | **P** | **13 09 34.1** | **-1.7** |
| KURK | comp=Z,14nm,0.8s | | | pmax | pmax | | | |
| **KURK** | **Kurchatov** comp=Z,14nm,0.8s | **62.29** | **43** | *eP* | **P** | **13 09 34.1** | **-1.7** |
| **KURK** | **Kurchatov** comp=Z,14nm,0.8s | **62.29** | **43** | *eP* | **P** | **13 09 34.1** | **-1.7** |
| **KKAR** | **Karatay Array** | **63.78** | **54** | *eP* | **P** | **13 09 45.7** | **-0.2** |
| KKAR | comp=Z,2.0nm,0.8s | | | pmax | pmax | | | |
| **KKAR** | **Karatay Array** comp=Z,2.2nm,0.8s | **63.78** | **54** | *eP* | **P** | **13 09 45.7** | **-0.2** |
| **KKAR** | **Karatay Array** comp=Z,2.2nm,0.8s | **63.78** | **54** | *eP* | **P** | **13 09 45.7** | **-0.2** |
| **EKS2** | **Erkin-Say** | **65.78** | **52** | *eP* | **P** | **13 09 59.6** | **+0.6** |
| EKS2 | comp=Z,24nm,1.2s | | | pmax | pmax | | | |
| **EKS2** | **Erkin-Say** comp=Z,24nm,1.2s | **65.78** | **52** | *eP* | **P** | **13 09 59.6** | **+0.6** |
| **EKS2** | **Erkin-Say** comp=Z,24nm,1.2s | **65.78** | **52** | *eP* | **P** | **13 09 59.6** | **+0.6** |
| **AAK** | **Ala-Archa** | **66.16** | **52** | *eP* | **P** | **13 10 02.2** | **+0.6** |
| AAK | comp=Z,10.0nm,1.2s | | | pmax | pmax | | | |
| **AAK** | **Ala-Archa** comp=Z,10nm,1.2s | **66.16** | **52** | *eP* | **P** | **13 10 02.1** | **+0.6** |
| **AAK** | **Ala-Archa** comp=Z,10nm,1.2s | **66.16** | **52** | *eP* | **P** | **13 10 02.2** | **+0.6** |
| **TKM2** | **Tokmak 2** | **66.51** | **51** | *eP* | **P** | **13 10 03.8** | **0.0** |
| TKM2 | comp=Z,14nm,1.3s | | | pmax | pmax | | | |
| **TKM2** | **Tokmak 2** comp=Z,14nm,1.3s | **66.51** | **51** | *eP* | **P** | **13 10 03.8** | **0.0** |
| **TKM2** | **Tokmak 2** comp=Z,14nm,1.3s | **66.51** | **51** | *eP* | **P** | **13 10 03.8** | **0.0** |
| **MK31** | **Makanchi Array** | **66.82** | **44** | *iP* | **P** | **13 10 05.0** | **-0.5** |
| MK31 | comp=Z,11nm,0.7s | | | pmax | pmax | | | |
| **MK31** | **Makanchi Array** comp=Z,11nm,0.7s | **66.82** | **44** | *iP* | **P** | **13 10 05.0** | **-0.5** |
| **MKAR** | **Makanchi Array** comp=Z,7.3nm,0.8s,baz=326,slow=5.5,SNR=27 | **66.82** | **44** | P | **P** | **13 10 04.9** | **-0.6** |
| MKAR | | | | | LR | LR | 13 38 29.5 | |
| **YAK** | **Yakutsk** | **67.10** | **11** | *eP* | **P** | **13 10 07.1** | **+0.1** |
| YAK | comp=Z,12nm,1.3s | | | pmax | pmax | | | |
| **YAK** | **Yakutsk** comp=Z,12nm,1.3s | **67.10** | **11** | *eP* | **P** | **13 10 07.1** | **+0.1** |
| **BDFB** | **Brasilia** comp=Z,2.7nm,0.5s,baz=24,slow=11,SNR=4.8 | **67.41** | **200** | P | **P** | **13 10 10.1** | **+0.5** |
| **SEY** | **Seymchan** comp=Z,2.2nm,0.7s,baz=270,slow=20,SNR=3.7 | **67.49** | **359** | P | **P** | **13 10 09.7** | **+0.2** |
| **KSH** | **Kashi** | **69.21** | **53** | P | **P** | **13 10 22.0** | **+1.2** |
| KSH | comp=Z,21nm,1.2s | | | PMZ | | | | |
| **SONM** | **Songino Array** comp=Z,3.1nm,1.0s,baz=329,slow=5.8,SNR=12 | **75.28** | **29** | P | **P** | **13 10 57.1** | **+0.1** |
| **ULN** | **Ulaanbaatar** | **75.46** | **29** | *ce* | **P** | **13 10 58.6** | **+0.6** |
| ULN | comp=Z,6.0nm,1.2s | | | pmax | pmax | | | |
| **ULN** | **Ulaanbaatar** comp=Z,6.0nm,1.2s | **75.46** | **29** | *eP* | **P** | **13 10 58.6** | **+0.6** |
| **KMBO** | **Kilima Mbogo** comp=Z,66nm,18.1s,baz=86,slow=37 | **75.75** | **109** | LR | LR | 13 46 24.9 | |
| **HIA** | **Hailar** | **77.60** | **20** | *eP* | **P** | **13 11 11.1** | **+1.2** |
| HIA | comp=Z,3.0nm,0.9s | | | pmax | pmax | | | |
| **HIA** | **Hailar** comp=Z,3.0nm,0.9s | **77.60** | **20** | *eP* | **P** | **13 11 11.1** | **+1.2** |
| **KLR** | **Kul'dur** | **79.85** | **13** | *eP* | **P** | **13 11 22.3** | **+0.1** |
| **KLR** | **Kul'dur** | **79.85** | **13** | *eP* | **P** | **13 11 22.3** | **+0.1** |
| **GTA** | **Gaotai** | **80.27** | **38** | *eP* | P | 13 11 30.5 | +5.6 |
| GTA | | | | pP | **PcP** | **13 11 37.0** | **+4.9** |
| GTA | | | | sP | sP | 13 11 40.0 | +11 |
| GTA | comp=

**IDC 25 13:00:34.8±7.0, 20°95S×172°17E, h99km±51km, mb3.6/4, mb1 3.8/5, mb1mx3.5/24, mbtmp3.9/5, MS3.6/3, Ms1 3.6/3, ms1mx3.2/27, Error ellipse: s-maj=60.5km s-min=35.3km az=51.0, Vanuatu Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **5.44** | **257** | P | Pn | 13 01 53.5 | -0.2 |
| | 1.2nm,0.3s,baz=360,slow=21,SNR=10 | | | | | | |
| DZM | | | | LR | LR | 13 03 18.8 | |
| | comp=Z,218nm,19.3s,baz=186,slow=30 | | | | | | |
| **RPZ** | **Rata Peaks** | **22.72** | **182** | LR | LR | 13 13 22.8 | |
| | comp=Z,322nm,20.4s,baz=314,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.41** | **265** | P | P | 13 07 21.3 | -0.2 |
| | 1.0nm,0.7s,baz=101,slow=8.4,SNR=11 | | | | | | |
| WRA | | | | LR | LR | 13 21 46.5 | |
| | comp=Z,159nm,21.4s,baz=320,slow=36 | | | | | | |
| **ASAR** | **Alice Springs** | **35.43** | **258** | P | P | 13 07 22.1 | +0.3 |
| | 2.5nm,0.7s,baz=84,slow=9.0,SNR=39 | | | | | | |
| **VNDA** | **Vanda** | **56.84** | **183** | P | P | 13 10 08.3 | -0.2 |
| | 0.6nm,0.6s,baz=31,slow=7.8,SNR=4.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **81.71** | **293** | P | P | 13 12 42.0 | -0.8 |
| | 0.6nm,0.5s,baz=132,slow=4.8,SNR=5.1 | | | | | | |
| **GERES** | **GERESS Array B** | **147.27** | **333** | PKPbc | PKPbc | 13 20 06.8 | -0.1 |
| | 0.3nm,0.3s,baz=336,slow=2.2,SNR=4.5 | | | | | | |

*NEIC **25** 13:01:30.3, 40°.96S×176°.08E, h33km, ML3.9(WEL), After WEL.*
*NEIC Felt in the Masterton area.*

**WEL 25 13:01:30.4±0.1, 40°.96S×176°.07E, h33km, ML3.9/38, 15C-12D, Error ellipse: s-maj=1.6km s-min=1.0km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPWZ** | **Castlepoint** | **0.11** | **65** | ↑P* | Pb | 13 01 36.2 | 0.0 |
| CPWZ | | | | S* | Sb | 13 01 41.0 | +0.8 |
| **CPWZ** | **Castlepoint** | **0.11** | **65** | P* | Pb | 13 01 36.2 | 0.0 |
| **TMWZ** | **Te Maipa** | **0.20** | **222** | ↑P* | Pb | 13 01 37.2 | +0.1 |
| TMWZ | | | | S* | Sb | 13 01 42.4 | +0.8 |
| **TMWZ** | **Te Maipa** | **0.20** | **222** | ↑P* | Pb | 13 01 37.2 | +0.1 |
| TMWZ | | | | S* | Sb | 13 01 42.4 | +0.8 |
| **TIWZ** | **Tintock** | **0.23** | **322** | ↓P* | Pn | 13 01 36.6 | -0.6 |
| TIWZ | | | | S* | Sn | 13 01 41.2 | +0.5 |
| TIWZ | | | | AML | AML | 13 01 41.3 | |
| **TIWZ** | **Tintock** | **0.23** | **322** | P* | Pn | 13 01 36.6 | -0.6 |
| **BFZ** | **Birch Farm** | **0.31** | **26** | ↑P* | Pb | 13 01 37.9 | -0.4 |
| BFZ | | | | S* | Sb | 13 01 43.5 | -0.1 |
| BFZ | | | | AML | AML | 13 01 43.9 | |
| BFZ | | | | AML | AML | 13 01 44.1 | |
| BFZ | | | | AML | AML | 13 01 44.1 | |
| **BFZ** | **Birch Farm** | **0.31** | **26** | P* | Pb | 13 01 37.9 | -0.4 |
| BFZ | | | | S* | Sb | 13 01 43.5 | -0.1 |
| **PRWZ** | **Pori Road** | **0.41** | **349** | P* | Pb | 13 01 39.4 | -0.2 |
| PRWZ | | | | S* | Sn | 13 01 46.3 | -0.1 |
| **PRWZ** | **Pori Road** | **0.41** | **349** | P* | Pb | 13 01 39.4 | -0.2 |
| **HOWZ** | **Holdsworth Sta** | **0.42** | **278** | ↓P* | Pb | 13 01 39.5 | -0.4 |
| **HOWZ** | **Holdsworth Sta** | **0.42** | **278** | P* | Pb | 13 01 39.5 | -0.4 |
| **MRZ** | **Mangatainoka R** | **0.47** | **308** | ↓P* | Pb | 13 01 40.0 | -0.6 |
| MRZ | | | | AML | AML | 13 01 47.1 | |
| MRZ | | | | AML | AML | 13 01 47.2 | |
| **MRZ** | **Mangatainoka R** | **0.47** | **308** | ↓P* | Pb | 13 01 40.0 | -0.6 |
| **MTW** | **Mount Morrison** | **0.47** | **245** | ↓P* | Pb | 13 01 40.6 | 0.0 |
| MTW | | | | AML | AML | 13 01 48.7 | |
| MTW | | | | AML | AML | 13 01 49.0 | |
| **MTW** | **Mount Morrison** | **0.47** | **245** | P* | Pb | 13 01 40.6 | 0.0 |
| **TRWZ** | **Traveller** | **0.53** | **213** | ↓P* | Pb | 13 01 41.5 | +0.1 |
| TRWZ | | | | AML | AML | 13 01 53.8 | |
| TRWZ | | | | AML | AML | 13 01 56.8 | |
| **TRWZ** | **Traveller** | **0.53** | **213** | P* | Pb | 13 01 41.5 | +0.1 |
| **ANWZ** | **Angora Road** | **0.58** | **32** | P* | Pb | 13 01 41.9 | -0.4 |
| **POWZ** | **Post Office Ro** | **0.61** | **338** | ↑P* | Pn | 13 01 42.3 | -0.3 |
| **POWZ** | **Post Office Ro** | **0.61** | **338** | P* | Pn | 13 01 42.4 | -0.3 |
| **PAWZ** | **Paruwai Farm** | **0.65** | **229** | ↓P* | Pn | 13 01 43.1 | -0.1 |
| PAWZ | | | | AML | AML | 13 01 53.8 | |
| PAWZ | | | | AML | AML | 13 01 55.6 | |
| **PAWZ** | **Paruwai Farm** | **0.65** | **229** | P* | Pn | 13 01 43.1 | -0.1 |
| **DVHZ** | **Dannevirke** | **0.66** | **6** | P* | Pn | 13 01 42.8 | -0.6 |
| **DVHZ** | **Dannevirke** | **0.66** | **6** | P* | Pn | 13 01 42.8 | -0.6 |
| **OGWZ** | **Otaki Gorge** | **0.70** | **281** | ↑P* | Pn | 13 01 43.7 | -0.2 |
| **OGWZ** | **Otaki Gorge** | **0.70** | **281** | P* | Pn | 13 01 43.7 | -0.2 |
| **MSWZ** | **Moikau Station** | **0.77** | **233** | ↓P* | Pn | 13 01 44.5 | -0.5 |
| MSWZ | | | | AML | AML | 13 01 55.4 | |
| MSWZ | | | | AML | AML | 13 01 56.1 | |
| **MSWZ** | **Moikau Station** | **0.77** | **233** | P* | Pn | 13 01 44.5 | -0.4 |
| **CAW** | **Cannon Point** | **0.77** | **258** | ↑P* | Pn | 13 01 44.9 | -0.1 |
| CAW | | | | AML | AML | 13 01 57.7 | |
| CAW | | | | AML | AML | 13 01 58.4 | |
| **CAW** | **Cannon Point** | **0.77** | **258** | P* | Pn | 13 01 44.9 | -0.1 |
| **PRHZ** | **Porangahau** | **0.81** | **32** | P* | Pn | 13 01 44.9 | -0.6 |
| **PRHZ** | **Porangahau** | **0.81** | **32** | P* | Pn | 13 01 44.5 | -0.6 |
| **PLWZ** | **Palliser** | **0.87** | **225** | ↓P* | Pn | 13 01 45.5 | -0.8 |
| **PLWZ** | **Palliser** | **0.87** | **225** | P* | Pn | 13 01 45.5 | -0.8 |
| **KIW** | **Kapiti Island** | **0.89** | **276** | ↑P* | Pn | 13 01 46.6 | +0.1 |
| KIW | | | | AML | AML | 13 02 00.0 | |
| KIW | | | | AML | AML | 13 02 00.1 | |
| **KIW** | **Kapiti Island** | **0.89** | **276** | P* | Pn | 13 01 46.6 | +0.1 |
| **TSZ** | **Takapari Road** | **0.90** | **355** | ↑P* | Pn | 13 01 46.4 | -0.4 |
| TSZ | | | | AML | AML | 13 01 59.4 | |
| TSZ | | | | AML | AML | 13 01 59.5 | |
| **TSZ** | **Takapari Road** | **0.90** | **355** | ↑P* | Pn | 13 01 46.4 | -0.4 |
| **WPHZ** | **Waipukurau** | **0.93** | **18** | ↑P* | Pn | 13 01 47.1 | -0.1 |
| **WPHZ** | **Waipukurau** | **0.93** | **18** | P* | Pn | 13 01 47.1 | -0.1 |
| **BHW** | **Baring Head** | **1.01** | **243** | ↓P* | Pn | 13 01 47.8 | -0.4 |
| BHW | | | | AML | AML | 13 02 04.2 | |
| BHW | | | | AML | AML | 13 02 05.0 | |
| **BHW** | **Baring Head** | **1.01** | **243** | P* | Pn | 13 01 47.8 | -0.4 |
| **WEL** | **Wellington** | **1.04** | **251** | P* | Pn | 13 01 48.4 | -0.2 |
| WEL | | | | AML | AML | 13 02 05.3 | |
| WEL | | | | AML | AML | 13 02 05.7 | |
| **WEL** | **Wellington** | **1.04** | **251** | P* | Pn | 13 01 48.4 | -0.2 |
| **PNHZ** | **Pukenui** | **1.05** | **5** | P* | Pn | 13 01 48.6 | -0.2 |
| **PNHZ** | **Pukenui** | **1.05** | **5** | P* | Pn | 13 01 48.6 | -0.2 |
| **PXZ** | **Pawanui** | **1.10** | **33** | P* | Pn | 13 01 48.7 | -0.8 |
| PXZ | | | | AML | AML | 13 02 10.9 | |
| PXZ | | | | AML | AML | 13 02 25.7 | |
| **PXZ** | **Pawanui** | **1.10** | **33** | P* | Pn | 13 01 48.7 | -0.8 |
| **KAHZ** | **Kahuranaki** | **1.31** | **28** | PN | Pn | 13 01 51.8 | -0.7 |
| **KAHZ** | **Kahuranaki** | **1.31** | **28** | Pn | Pn | 13 01 51.8 | -0.7 |
| **KRHZ** | **Kereru** | **1.33** | **10** | ↑PN | Pn | 13 01 52.5 | -0.2 |
| **TCW** | **Tory Channel** | **1.38** | **259** | PN | Pn | 13 01 53.0 | -0.3 |
| TCW | | | | AML | AML | 13 02 15.3 | |
| TCW | | | | AML | AML | 13 02 15.4 | |
| **TCW** | **Tory Channel** | **1.38** | **259** | Pn | Pn | 13 01 53.0 | -0.3 |
| **WAZ** | **Wanganui** | **1.46** | **325** | PN | Pb | 13 01 55.9 | -1.0 |
| WAZ | | | | AML | AML | 13 02 18.7 | |
| WAZ | | | | AML | AML | 13 02 19.0 | |
| **WAZ** | **Wanganui** | **1.46** | **325** | Pn | Pb | 13 01 56.3 | -0.6 |
| **BHHZ** | **Black Hill Sta** | **1.47** | **360** | ↑PN | Pn | 13 01 54.7 | +0.1 |
| **BHHZ** | **Black Hill Sta** | **1.47** | **360** | Pn | Pn | 13 01 54.7 | +0.1 |
| **CKHZ** | **Cape Kidnapper** | **1.51** | **31** | PN | Pn | 13 01 54.3 | -0.8 |
| **CKHZ** | **Cape Kidnapper** | **1.51** | **31** | Pn | Pn | 13 01 54.3 | -0.8 |
| **MOVZ** | **Moawhango** | **1.57** | **351** | PN | Pn | 13 01 56.4 | +0.4 |
| MOVZ | | | | AML | AML | 13 02 16.2 | |
| MOVZ | | | | AML | AML | 13 02 16.2 | |
| **MOVZ** | **Moawhango** | **1.57** | **351** | Pn | Pn | 13 01 56.5 | +0.6 |
| **MCHZ** | **McNeill Hill** | **1.59** | **18** | ↑PN | Pn | 13 01 55.9 | -0.3 |
| **MCHZ** | **McNeill Hill** | **1.59** | **18** | Pn | Pn | 13 01 55.9 | -0.3 |
| **MTVZ** | **Mangateitei** | **1.64** | **343** | PN | Pb | 13 01 58.6 | -1.4 |
| MTVZ | | | | AML | AML | 13 02 26.8 | |
| MTVZ | | | | AML | AML | 13 02 35.9 | |
| **MTVZ** | **Mangateitei** | **1.64** | **343** | Pn | Pb | 13 01 58.6 | -1.4 |
| **DUWZ** | **D'Urville Isla** | **1.64** | **275** | AML | AML | 13 02 31.6 | |
| DUWZ | | | | AML | AML | 13 02 32.5 | |
| **DUWZ** | **D'Urville Isla** | **1.64** | **275** | Pn | Pn | 13 01 57.5 | +0.6 |
| **WNVZ** | **Wahianoa** | **1.67** | **347** | PN | Pn | 13 01 58.2 | +0.8 |
| **WNVZ** | **Wahianoa** | **1.67** | **347** | Pn | Pn | 13 01 58.2 | +0.8 |
| **TUWZ** | **Tuamarina** | **1.67** | **253** | PN | Pn | 13 01 56.4 | -0.9 |
| TUWZ | | | | AML | AML | 13 02 24.6 | |
| TUWZ | | | | AML | AML | 13 02 28.0 | |
| **TUWZ** | **Tuamarina** | **1.67** | **253** | Pn | Pn | 13 01 56.5 | -0.9 |
| **TRVZ** | **Turoa** | **1.70** | **346** | PN | Pn | 13 01 58.7 | +0.6 |
| TRVZ | | | | AML | AML | 13 02 20.0 | |
| TRVZ | | | | AML | AML | 13 02 20.0 | |
| **WHVZ** | **Whangaehu Hut** | **1.71** | **347** | PN | Pn | 13 01 59.0 | +0.8 |
| **WHVZ** | **Whangaehu Hut** | **1.71** | **347** | Pn | Pn | 13 01 59.0 | +0.8 |
| **TUVZ** | **Tukino** | **1.72** | **349** | PN | Pn | 13 01 59.1 | +0.9 |
| TUVZ | | | | AML | AML | 13 02 21.0 | |
| TUVZ | | | | AML | AML | 13 02 24.4 | |
| **TUVZ** | **Tukino** | **1.72** | **349** | Pn | Pn | 13 01 59.1 | +1.0 |
| **DRZ** | **Dome Shelter** | **1.72** | **347** | PN | Pn | 13 01 59.4 | +1.0 |
| DRZ | | | | AML | AML | 13 02 23.6 | |
| DRZ | | | | AML | AML | 13 02 29.8 | |
| **DRZ** | **Dome Shelter** | **1.72** | **347** | Pn | Pn | 13 01 59.4 | +1.0 |
| **FWVZ** | **Far West T-bar** | **1.75** | **347** | PN | Pn | 13 01 59.5 | +0.8 |
| FWVZ | | | | AML | AML | 13 02 21.0 | |
| FWVZ | | | | AML | AML | 13 02 22.5 | |
| **FWVZ** | **Far West T-bar** | **1.75** | **347** | Pn | Pn | 13 01 59.5 | +0.8 |
| **WPVZ** | **Whakapapa** | **1.79** | **347** | PN | Pn | 13 02 00.2 | +1.0 |
| WPVZ | | | | AML | AML | 13 02 25.0 | |
| WPVZ | | | | AML | AML | 13 02 37.8 | |
| **WPVZ** | **Whakapapa** | **1.79** | **347** | Pn | Pn | 13 02 00.2 | +1.0 |
| **COVZ** | **Chateau Observ** | **1.80** | **347** | PN | Pn | 13 02 00.1 | +0.8 |
| **COVZ** | **Chateau Observ** | **1.80** | **347** | Pn | Pn | 13 02 00.1 | +0.8 |
| **NGZ** | **Ngauruhoe** | **1.81** | **348** | PN | Pn | 13 02 00.5 | +1.0 |
| NGZ | | | | AML | AML | 13 02 25.9 | |
| NGZ | | | | AML | AML | 13 02 27.9 | |
| **NGZ** | **Ngauruhoe** | **1.81** | **348** | Pn | Pn | 13 02 00.5 | +1.0 |
| **BKZ** | **Black Stump Fm** | **1.82** | **10** | PN | Pn | 13 01 58.9 | -0.5 |
| BKZ | | | | AML | AML | 13 02 37.1 | |
| BKZ | | | | AML | AML | 13 02 47.1 | |
| **BKZ** | **Black Stump Fm** | **1.82** | **10** | Pn | Pn | 13 01 58.9 | -0.5 |
| **BSWZ** | **Blackbirch Sta** | **1.82** | **245** | PN | Pn | 13 01 58.7 | -0.6 |
| **BSWZ** | **Blackbirch Sta** | **1.82** | **245** | Pn | Pn | 13 01 58.7 | -0.6 |
| **OTVZ** | **Oturere** | **1.82** | **350** | PN | Pn | 13 02 00.5 | +0.9 |
| OTVZ | | | | AML | AML | 13 02 31.1 | |
| OTVZ | | | | AML | AML | 13 02 42.8 | |
| **OTVZ** | **Oturere** | **1.82** | **350** | Pn | Pn | 13 02 00.5 | +0.9 |
| **ARHZ** | **Aropaoanui** | **1.83** | **23** | PN | Pn | 13 01 59.2 | -0.3 |
| **ARHZ** | **Aropaoanui** | **1.83** | **23** | Pn | Pn | 13 01 59.2 | -0.3 |
| **WTVZ** | **West Tongariro** | **1.88** | **348** | ↓PN | Pn | 13 02 01.3 | +1.0 |
| WTVZ | | | | AML | AML | 13 02 43.6 | |
| WTVZ | | | | AML | AML | 13 02 50.0 | |
| **WTVZ** | **West Tongariro** | **1.88** | **348** | Pn | Pn | 13 02 01.3 | +1.0 |
| **KRVZ** | **Karewarewa** | **1.89** | **350** | PN | Pn | 13 02 01.1 | +0.6 |
| KRVZ | | | | AML | AML | 13 02 44.6 | |
| KRVZ | | | | AML | AML | 13 02 50.3 | |
| **KRVZ** | **Karewarewa** | **1.89** | **350** | Pn | Pn | 13 02 01.7 | +1.2 |
| **NMHZ** | **Naumai** | **1.94** | **17** | PN | Pn | 13 02 00.8 | -0.4 |
| **NMHZ** | **Naumai** | **1.94** | **17** | Pn | Pn | 13 02 00.8 | -0.4 |
| **TWVZ** | **Taurewa** | **1.94** | **345** | PN | Pn | 13 02 02.1 | +0.9 |
| TWVZ | | | | AML | AML | 13 02 33.4 | |
| TWVZ | | | | AML | AML | 13 02 33.7 | |
| **TWVZ** | **Taurewa** | **1.94** | **345** | Pn | Pn | 13 02 02.1 | +0.9 |
| **LREZ** | **Lake Rotokare** | **1.97** | **319** | *e*PN | Pn | 13 02 03.4 | +2.0 |
| **RITZ** | **Rihia Road** | **1.98** | **355** | PN | Pn | 13 02 02.3 | +0.7 |
| RITZ | | | | AML | AML | 13 02 37.6 | |
| RITZ | | | | AML | AML | 13 02 52.5 | |
| **RITZ** | **Rihia Road** | **1.98** | **355** | Pn | Pn | 13 02 02.3 | +0.7 |
| **KATZ** | **Kakaramea** | **2.00** | **352** | PN | Pn | 13 02 02.9 | +0.8 |
| **KATZ** | **Kakaramea** | **2.00** | **352** | Pn | Pn | 13 02 02.9 | +0.8 |
| **NNZ** | **Nelson** | **2.05** | **262** | PN | Pn | 13 02 02.2 | -0.3 |
| NNZ | | | | AML | AML | 13 02 46.2 | |
| NNZ | | | | AML | AML | 13 02 46.8 | |
| **NNZ** | **Nelson** | **2.05** | **262** | Pn | Pn | 13 02 02.2 | -0.3 |
| **VRZ** | **Vera Road** | **2.09** | **331** | PN | Pn | 13 02 04.2 | +1.2 |
| VRZ | | | | AML | AML | 13 02 46.7 | |
| VRZ | | | | AML | AML | 13 02 50.1 | |
| **VRZ** | **Vera Road** | **2.09** | **331** | Pn | Pn | 13 02 04.2 | +1.2 |
| **MRHZ** | **Matea Rd** | **2.14** | **7** | PN | Pn | 13 02 03.5 | -0.3 |
| **RAHZ** | **Arahi** | **2.18** | **21** | PN | Pn | 13 02 03.2 | -1.2 |
| **RAHZ** | **Arahi** | **2.18** | **21** | Pn | Pn | 13 02 03.2 | -1.2 |
| **NEZ** | **North Egmont** | **2.26** | **317** | PN | Pn | 13 02 07.9 | +2.3 |
| **NEZ** | **North Egmont** | **2.26** | **317** | Pn | Pn | 13 02 07.9 | +2.3 |
| **NMEZ** | **Namu Road** | **2.28** | **312** | PN | Pn | 13 02 08.2 | +2.5 |
| **NMEZ** | **Namu Road** | **2.28** | **312** | Pn | Pn | 13 02 08.2 | +2.5 |
| **KNZ** | **Kokohu** | **2.29** | **33** | ↑PN | Pn | 13 02 04.2 | -1.6 |
| **KNZ** | **Kokohu** | **2.29** | **33** | Pn | Pn | 13 02 04.2 | -1.6 |
| **PKE** | **Pukeiti** | **2.38** | **317** | PN | Pn | 13 02 09.8 | +2.7 |
| **PKE** | **Pukeiti** | **2.38** | **317** | Pn | Pn | 13 02 09.8 | +2.7 |
| **NWEZ** | **Newall Road** | **2.38** | **314** | PN | Pn | 13 02 09.6 | +2.5 |
| **NWEZ** | **Newall Road** | **2.38** | **314** | Pn | Pn | 13 02 09.6 | +2.5 |
| **SNGZ** | **Shannon Statio** | **2.38** | **25** | PN | Pn | 13 02 06.2 | -1.0 |
| **SNGZ** | **Shannon Statio** | **2.38** | **25** | Pn | Pn | 13 02 06.2 | -1.0 |
| **KHZ** | **Kahutara** | **2.39** | **232** | ↓PN | Pn | 13 02 05.8 | -1.4 |
| **KHZ** | **Kahutara** | **2.39** | **232** | Pn | Pn | 13 02 05.8 | -1.4 |
| **WPRZ** | **Whakapapatarin** | **2.44** | **2** | PN | Pn | 13 02 07.5 | -0.4 |
| **PRGZ** | **Paritu Road** | **2.46** | **35** | PN | Pn | 13 02 06.3 | -1.9 |
| **PRGZ** | **Paritu Road** | **2.46** | **35** | Pn | Pn | 13 02 06.3 | -1.9 |
| **THZ** | **Tophouse** | **2.52** | **250** | PN | Pn | 13 02 08.1 | -0.9 |
| THZ | | | | AML | AML | 13 03 02.3 | |
| THZ | | | | AML | AML | 13 03 09.3 | |
| **THZ** | **Tophouse** | **2.52** | **250** | Pn | Pn | 13 02 08.1 | -0.9 |
| **RIGZ** | **Rimuhau** | **2.60** | **31** | PN | Pn | 13 02 08.8 | -1.3 |
| **HIZ** | **Hauiti** | **2.61** | **339** | AML | AML | 13 03 02.6 | |
| HIZ | | | | AML | AML | 13 03 13.5 | |
| **QRZ** | **Quartz Range** | **2.69** | **272** | PN | Pn | 13 02 11.5 | +0.2 |
| QRZ | | | | AML | AML | 13 03 08.6 | |
| QRZ | | | | AML | AML | 13 03 13.2 | |
| **QRZ** | **Quartz Range** | **2.69** | **272** | Pn | Pn | 13 02 11.5 | +0.2 |
| **TARZ** | **Mount Tarawera** | **2.74** | **7** | PN | Pn | 13 02 11.4 | -0.8 |
| **TARZ** | **Mount Tarawera** | **2.74** | **7** | Pn | Pn | 13 02 11.4 | -0.8 |
| **URZ** | **Urewera** | **2.81** | **17** | PN | Pn | 13 02 11.2 | -1.8 |
| URZ | | | | AML | AML | 13 02 49.2 | |
| URZ | | | | AML | AML | 13 02 51.2 | |
| **URZ** | **Urewera** | **2.81** | **17** | Pn | Pn | 13 02 11.2 | -1.8 |
| **MWZ** | **Matawai** | **2.85** | **24** | PN | Pn | 13 02 11.7 | -1.9 |
| MWZ | | | | AML | AML | 13 02 47.1 | |
| MWZ | | | | AML | AML | 13 02 50.6 | |
| **MWZ** | **Matawai** | **2.85** | **24** | Pn | Pn | 13 02 11.8 | -1.8 |
| **TWGZ** | **Tauwhareparae** | **3.15** | **29** | PN | Pn | 13 02 15.5 | -2.2 |
| **TWGZ** | **Tauwhareparae** | **3.15** | **29** | Pn | Pn | 13 02 15.5 | -2.2 |
| **HAZ** | **Te Kaha** | **3.46** | **23** | PN | Pn | 13 02 20.3 | -1.6 |
| **WMGZ** | **Waiomatatini S** | **3.62** | **31** | PN | Pn | 13 02 21.6 | -2.5 |
| **CRLZ** | **Canterbury Las** | **3.66** | **223** | PN | Pn | 13 02 23.1 | -1.6 |
| **CRLZ** | **Canterbury Las** | **3.66** | **223** | Pn | Pn | 13 02 23.1 | -1.6 |
| **MQZ** | **McQueen's Vall** | **3.74** | **222** | PN | Pn | 13 02 23.3 | -2.4 |
| **MQZ** | **McQueen's Vall** | **3.74** | **222** | Pn | Pn | 13 02 23.3 | -2.4 |
| **MXZ** | **Matakaoa Point** | **3.81** | **28** | PN | Pn | 13 02 25.0 | -1.7 |
| **MXZ** | **Matakaoa Point** | **3.81** | **28** | Pn | Pn | 13 02 25.0 | -1.7 |
| **OXZ** | **Oxford** | **3.82** | **230** | PN | Pn | 13 02 24.8 | -2.0 |
| **OXZ** | **Oxford** | **3.82** | **230** | Pn | Pn | 13 02 24.8 | -2.0 |
| **LBZ** | **Lake Benmore** | **5.53** | **230** | PN | Pn | 13 02 49.2 | -1.2 |
| **LBZ** | **Lake Benmore** | **5.53** | **230** | Pn | Pn | 13 02 49.2 | -1.2 |
| **ODZ** | **Otahua Downs** | **5.70** | **222** | PN | Pn | 13 02 50.5 | -2.2 |
| **ODZ** | **Otahua Downs** | **5.70** | **222** | Pn | Pn | 13 02 50.5 | -2.2 |
| **CTZ** | **Chatham Island** | **6.09** | **120** | PN | Pn | 13 02 57.5 | -0.5 |
| **CTZ** | **Chatham Island** | **6.09** | **120** | Pn | Pn | 13 02 57.5 | -0.5 |

*ISCJB **25** 13:19:55.5±1.1, 40°.23N±0°.06×31°.6E±0°.1, h8km, Error ellipse: s-maj=16.5km s-min=7.5km az=14.0*
*DDA **25** 13:19:56.4, 40°.22N×31°.60E, h7km, Md2.8*

**ISC 25 13:19:56.9±1.6, 40°.16N±0°.05×31°.69E±0°.07, h8km, n6, σ1ᵍ48/8, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUMIH** | **MIHALICIK** | **0.33** | **209** | P | **Pg** | **13 20 04.0** | **+0.5** |
| AUMIH | | | | S | **Sg** | **13 20 09.0** | **+1.1** |
| **MDUB** | **Mudurnu** | **0.49** | **310** | *e*PN | **Pg** | **13 20 06.8** | **+0.3** |
| **BCAM** | **Yenicaga** | **0.72** | **23** | P | **Pg** | **13 20 09.9** | **-0.9** |
| **SVRH** | **Sivrihisar-ESK** | **0.72** | **190** | *e*PN | **Pg** | **13 20 10.5** | **-0.4** |
| **ESKT** | **Eskisehir** | **0.91** | **226** | P | **Pg** | **13 20 12.2** | **-2.2** |
| **BORA** | **Eskisehir** | **0.99** | **254** | P | **Pg** | **13 20 14.4** | **-1.5** |
| BORA | | | | S | **Sn** | **13 20 32.5** | **+1.1** |

*ISCJB **25** 13:24:31.3±1.1, 50°.0N±0°.2×28°.9W±0°.3, h10km, mb3.7/8, Error ellipse: s-maj=30.6km s-min=25.3km az=156.4*
*IDC **25** 13:24:31.7±1.4, 49°.98N×28°.87W, h0km, mb3.7/8, mb1 3.8/8, mb1mx3.6/53, mbtmp3.7/8, Error ellipse: s-maj=38.4km s-min=30.7km az=155.0*

**ISC 25 13:24:33.2±1.2, 50°.0N±0°.2×28°.8W±0°.2, h10km, n8, σ0ˢ97/8, mb3.8/8, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FINES** | **FINESS Array B** | **31.99** | **48** | P | **P** | **13 30 57.4** | **-1.7** |
| | 2.5nm,0.9s,baz=255,slow=8.4,SNR=2.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.42** | **135** | P | **P** | **13 32 44.1** | **-0.1** |
| | 0.8nm,0.8s,baz=337,slow=6.7,SNR=4.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **52.41** | **54** | P | **P** | **13 33 46.1** | **+0.7** |
| | 0.6nm,0.6s,baz=284,slow=8.3,SNR=4.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **56.89** | **45** | P | **P** | **13 34 18.4** | **+0.5** |
| | 1.0nm,0.7s,baz=311,slow=5.7,SNR=6.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **58.69** | **279** | P | **P** | **13 34 30.6** | **-0.3** |
| | 0.2nm,0.6s,baz=60,slow=7.6,SNR=3.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.21** | **43** | P | **P** | **13 34 55.1** | **+0.6** |
| | 0.8nm,0.8s,baz=319,slow=7.4,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.72** | **44** | P | **P** | **13 35 24.8** | **+0.6** |
| | 0.9nm,0.7s,baz=329,slow=9.4,SNR=6.8 | | | | | | |
| **SONM** | **Songino Array** | **75.18** | **29** | P | **P** | **13 36 16.2** | **+0.6** |
| | 0.5nm,0.8s,baz=343,slow=4.5,SNR=3.4 | | | | | | |

*NEIC **25** 13:37:44.7, 43°.61S×172°.12E, h7km, ML3.8(WEL), After WEL.*
*NEIC Felt in Canterbury.*

**WEL 25 13:37:44.8±0.1, 43°.61S×172°.13E, h19km±1km, ML3.8/22, 5C-4D, Error ellipse: s-maj=1.6km s-min=1.1km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OXZ** | **Oxford** | **0.29** | **346** | ↓P* | Pg | 13 37 50.1 | -1.2 |
| OXZ | | | | S* | Sb | 13 37 56.3 | +0.4 |
| **OXZ** | **Oxford** | **0.29** | **346** | ↓Pg | Pg | 13 37 50.1 | -1.2 |
| **CRLZ** | **Canterbury Las** | **0.36** | **85** | ↑P* | Pg | 13 37 52.4 | 0.0 |
| CRLZ | | | | AML | AML | 13 38 00.4 | |
| CRLZ | | | | AML | AML | 13 38 04.1 | |
| **CRLZ** | **Canterbury Las** | **0.36** | **85** | ↑Pg | Pg | 13 37 52.4 | 0.0 |
| **MQZ** | **McQueen's Vall** | **0.39** | **105** | ↓P* | Pg | 13 37 52.9 | -0.1 |
| MQZ | | | | S* | Sb | 13 37 58.8 | -0.1 |
| MQZ | | | | AML | AML | 13 38 01.4 | |
| **MQZ** | **McQueen's Vall** | **0.39** | **105** | Pg | Pg | 13 37 52.9 | -0.1 |
| **RPZ** | **Rata Peaks** | **0.79** | **262** | ↑P* | Pb | 13 37 59.6 | -0.4 |
| RPZ | | | | AML | AML | 13 38 14.5 | |
| RPZ | | | | AML | AML | 13 38 14.8 | |
| **RPZ** | **Rata Peaks** | **0.79** | **262** | P* | Pb | 13 37 59.6 | -0.4 |
| **LTZ** | **Lake Taylor** | **0.83** | **7** | ↑P* | Pb | 13 38 00.7 | 0.0 |
| LTZ | | | | S* | Sb | 13 38 11.8 | +0.2 |
| LTZ | | | | AML | AML | 13 38 13.4 | |
| **LTZ** | **Lake Taylor** | **0.83** | **7** | P* | Pb | 13 38 00.7 | 0.0 |
| LTZ | | | | S* | Sb | 13 38 11.8 | +0.2 |
| **WVZ** | **Waitaha Valley** | **1.15** | **297** | PN | Pn | 13 38 05.9 | 0.0 |
| WVZ | | | | AML | AML | 13 38 23.5 | |
| WVZ | | | | AML | AML | 13 38 27.3 | |
| **WVZ** | **Waitaha Valley** | **1.15** | **297** | P* | Pn | 13 38 05.9 | 0.0 |
| **KHZ** | **Kahutara** | **1.57** | **41** | PN | Pn | 13 38 11.2 | -0.6 |
| KHZ | | | | AML | AML | 13 38 36.1 | |
| KHZ | | | | AML | AML | 13 38 36.3 | |
| **KHZ** | **Kahutara** | **1.57** | **41** | Pn | Pn | 13 38 11.2 | -0.6 |
| **LBZ** | **Lake Benmore** | **1.61** | **240** | PN | Pn | 13 38 12.1 | -0.2 |
| LBZ | | | | AML | AML | 13 38 39.9 | |
| LBZ | | | | AML | AML | 13 38 39.9 | |
| LBZ | | | | AML | AML | 13 38 40.3 | |
| **LBZ** | **Lake Benmore** | **1.61** | **240** | Pn | Pn | 13 38 12.1 | -0.2 |
| **FOZ** | **Fox Glacier** | **1.78** | **271** | PN | Pn | 13 38 14.3 | -0.2 |
| FOZ | | | | AML | AML | 13 38 47.8 | |
| FOZ | | | | AML | AML | 13 38 48.1 | |
| FOZ | | | | AML | AML | 13 38 48.1 | |
| FOZ | | | | AML | AML | 13 38 48.1 | |
| **FOZ** | **Fox Glacier** | **1.78** | **271** | Pn | Pn | 13 38 14.3 | -0.2 |
| **ODZ** | **Otahua Downs** | **1.79** | **216** | PN | Pn | 13 38 14.4 | -0.4 |
| ODZ | | | | AML | AML | 13 38 52.0 | |
| ODZ | | | | AML | AML | 13 38 52.0 | |
| ODZ | | | | AML | AML | 13 38 52.0 | |
| ODZ | | | | AML | AML | 13 38 52.0 | |
| **ODZ** | **Otahua Downs** | **1.79** | **216** | Pn | Pn | 13 38 14.2 | -0.6 |
| **DSZ** | **Denniston Nort** | **1.88** | **352** | ↑PN | Pn | 13 38 15.9 | 0.0 |
| DSZ | | | | AML | AML | 13 38 46.8 | |
| DSZ | | | | AML | AML | 13 38 46.9 | |
| DSZ | | | | AML | AML | 13 38 47.8 | |
| DSZ | | | | AML | AML | 13 38 47.9 | |
| **DSZ** | **Denniston Nort** | **1.88** | **352** | Pn | Pn | 13 38 15.9 | 0.0 |
| **THZ** | **Tophouse** | **1.93** | **17** | ↓PN | Pn | 13 38 16.1 | -0.6 |
| TH

*Also felt at Lamont, Los Angeles, Mira Loma, Oxnard, Taft, Valencia and Ventura.*

**ISC 25 13:45:34.9±1.0, 35°.04N±0°.02×119°.05W±0°.03, h17km±7km, n38, σ1ˢ22/70, Central California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARVC** | **Arvin** | **0.20** | **63** | P | **Pb** | **13 45 40.6** | **+0.5** |
| | baz=0.1,SNR=1000 | | | | | | |
| ARVC | | | | S | **Sg** | **13 45 44.0** | **+1.0** |
| | baz=0.1 | | | | | | |
| **OSI** | **Osito Adit** | **0.50** | **148** | P | **Pb** | **13 45 45.4** | **+0.1** |
| | baz=0.5,SNR=160 | | | | | | |
| OSI | | | | S | **Sg** | **13 45 52.3** | **+0.8** |
| | baz=0.5 | | | | | | |
| **OSI** | **Osito Adit** | **0.50** | **148** | *e*Pg | **Pb** | **13 45 45.3** | **+0.1** |
| OSI | | | | *e*Sg | **Sg** | **13 45 52.2** | **+0.6** |
| **ISA** | **Isabella** | **0.78** | **37** | P | **Pg** | **13 45 49.3** | **-0.9** |
| | baz=0.7 | | | | | | |
| **ISA** | **Isabella** | **0.78** | **37** | *e*P | **Pg** | **13 45 49.3** | **-0.9** |
| ISA | | | | *e*Sg | **Sg** | **13 45 58.8** | **-1.8** |
| **VES** | **Vestal, Richgr** | **0.81** | **358** | P | **Pg** | **13 45 50.0** | **-0.6** |
| | baz=0.8,SNR=633 | | | | | | |
| VES | | | | S | **Sg** | **13 46 00.6** | **-0.6** |
| | baz=0.8 | | | | | | |
| **SBC** | **Santa Barbara** | **0.81** | **223** | Pn | **Pn** | **13 45 52.3** | **+0.8** |
| | baz=0.9,SNR=29 | | | | | | |
| SBC | | | | Sn | **Sn** | **13 46 04.8** | **+1.6** |
| | baz=0.9 | | | | | | |
| **SMMC** | **Simmler** | **0.83** | **290** | P | **Pn** | **13 45 51.5** | **-0.4** |
| | baz=0.9,SNR=75 | | | | | | |
| SMMC | | | | S | **Sn** | **13 46 03.1** | **-0.6** |
| | baz=0.9 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **0.88** | **100** | P | **Pg** | **13 45 51.4** | **-0.6** |
| | baz=0.8,SNR=130 | | | | | | |
| EDW2 | | | | S | **Sg** | **13 46 02.7** | **-1.0** |
| | baz=0.8 | | | | | | |
| **BLG** | **Laguna Peak** | **0.92** | **181** | P | **Pn** | **13 45 53.2** | **+0.1** |
| | baz=1.0,SNR=53 | | | | | | |
| BLG | | | | S | **Sn** | **13 46 06.6** | **+0.6** |
| | baz=1.0 | | | | | | |
| **DECC** | **Green Verdugo** | **0.98** | **143** | P | **Pg** | **13 45 54.0** | **+0.1** |
| | baz=1.0,SNR=100 | | | | | | |
| DECC | | | | S | **Sb** | **13 46 07.2** | **+1.1** |
| | baz=1.0 | | | | | | |
| **PASC** | **Pasadena Art C** | **1.12** | **140** | *e*P | **Pb** | **13 45 55.9** | **+0.1** |
| PASC | | | | *e*S | **Sb** | **13 46 10.5** | **+0.5** |
| **BSC** | **Santa Cruz Isl** | **1.15** | **205** | P | **Pg** | **13 45 56.6** | **-0.5** |
| | baz=1.2,SNR=26 | | | | | | |
| BSC | | | | S | **Sn** | **13 46 12.2** | **+0.7** |
| | baz=1.2 | | | | | | |
| **MWC** | **Mount Wilson** | **1.15** | **135** | *e*Pn | **Pb** | **13 45 56.4** | **0.0** |
| MWC | | | | *e*Sn | **Sb** | **13 46 11.3** | **+0.2** |
| **LRMC** | **Laurel Mountai** | **1.19** | **68** | Pb | **Pn** | **13 45 56.9** | **0.0** |
| | baz=1.1,SNR=7.5 | | | | | | |
| LRMC | | | | S | **Sb** | **13 46 11.6** | **-0.8** |
| | baz=1.1 | | | | | | |
| **RCTC** | **Rector, Farmer** | **1.28** | **353** | P | **Pn** | **13 45 57.5** | **-0.5** |
| | baz=1.3,SNR=54 | | | | | | |
| RCTC | | | | S | **Sb** | **13 46 14.0** | **-0.8** |
| | baz=1.3 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **1.39** | **124** | P | **Pn** | **13 45 59.5** | **-0.1** |
| | baz=1.4,SNR=68 | | | | | | |
| BFSC | | | | S | **Sn** | **13 46 17.0** | **-0.8** |
| | baz=1.4 | | | | | | |
| **FMP** | **Fort Macarthur** | **1.46** | **155** | P | **Pn** | **13 46 01.2** | **+0.7** |
| | baz=1.5,SNR=5.9 | | | | | | |
| FMP | | | | S | **Sn** | **13 46 19.3** | **+0.2** |
| | baz=1.5 | | | | | | |
| **CWC** | **Cottonwood Cre** | **1.61** | **29** | Pb | **Pn** | **13 46 03.8** | **+1.2** |
| | baz=1.6,SNR=321 | | | | | | |
| CWC | | | | Sb | **Sn** | **13 46 24.3** | **+1.2** |
| | baz=1.6 | | | | | | |
| **MPMC** | **Manual Prospec** | **1.63** | **51** | P | **Pn** | **13 46 02.7** | **-0.3** |
| | baz=1.6,SNR=294 | | | | | | |
| MPMC | | | | Sb | **Sn** | **13 46 25.3** | **+1.6** |
| | baz=1.6 | | | | | | |
| **CIS** | **Catalina Islan** | **1.71** | **162** | P | **Pn** | **13 46 04.3** | **+0.3** |
| | baz=1.7 | | | | | | |
| CIS | | | | S | **Sn** | **13 46 24.7** | **-0.7** |
| | baz=1.7 | | | | | | |
| **DAC** | **Darwin (Calif)** | **1.71** | **43** | *e*P | **Pb** | **13 46 06.0** | **-0.1** |
| **GSC** | **Goldstone** | **1.85** | **81** | Pb | **Pb** | **13 46 08.1** | **-0.3** |
| | baz=1.8 | | | | | | |
| **GSC** | **Goldstone** | **1.85** | **81** | *e*Pn | **Pn** | **13 46 06.0** | **0.0** |
| GSC | | | | *e*Sg | **Sb** | **13 46 32.6** | **+1.3** |
| **BBRC** | **Big Bear Solar** | **1.91** | **113** | Pb | **Pb** | **13 46 09.3** | **-0.2** |
| | baz=1.9 | | | | | | |
| BBRC | | | | Sb | **Sb** | **13 46 34.5** | **+1.3** |
| | baz=1.9 | | | | | | |
| **SCI** | **San Clemente I** | **2.09** | **168** | Pb | **Pb** | **13 46 13.6** | **+1.2** |
| | baz=2.1,SNR=16 | | | | | | |
| SCI | | | | Sb | **Sg** | **13 46 41.0** | **-1.2** |
| | baz=2.1 | | | | | | |
| **MURC** | **Murrieta** | **2.09** | **133** | P | **Pn** | **13 46 09.0** | **-0.2** |
| | baz=2.1,SNR=33 | | | | | | |
| MURC | | | | Sb | **Sb** | **13 46 40.0** | **+1.8** |
| | baz=2.1 | | | | | | |
| **TIN** | **Tinemaha** | **2.12** | **18** | Pb | **Pb** | **13 46 12.8** | **-0.2** |
| | baz=2.1,SNR=49 | | | | | | |
| **MLAC** | **Mammoth Lakes** | **2.59** | **4** | Pb | **Pb** | **13 46 20.7** | **-0.4** |
| | baz=2.6 | | | | | | |
| **109C** | **Camp Elliot, M** | **2.68** | **142** | P | **Pn** | **13 46 17.3** | **0.0** |
| | baz=2.7 | | | | | | |
| 109C | | | | S | **Sn** | **13 46 48.1** | **-1.3** |
| | baz=2.7 | | | | | | |
| **GMRC** | **Granite Mounta** | **2.79** | **94** | P | **Pn** | **13 46 18.4** | **-0.5** |
| | baz=2.7,SNR=16 | | | | | | |
| **MONP** | **Monument Peak** | **3.06** | **134** | Sb | **Sb** | **13 47 08.3** | **+2.2** |
| | baz=3.0 | | | | | | |
| **BAR** | **Barrett** | **3.07** | **139** | *e*Pn | **Pn** | **13 46 22.9** | **+0.2** |
| **CMB** | **Columbia Colle** | **3.18** | **341** | *e*Pn | **Pn** | **13 46 25.5** | **+1.3** |
| **IRM** | **Iron Mountain** | **3.33** | **104** | P | **Pn** | **13 46 26.1** | **-0.1** |
| | baz=3.3 | | | | | | |
| **SHPR** | **Sheep Range** | **3.48** | **64** | *e*Pn | **Pn** | **13 46 29.8** | **+1.4** |
| SHPR | | | | *e*Sg | **Sb** | **13 47 23.0** | **+4.7** |
| **GLA** | **Glamis** | **4.02** | **118** | *e*Pn | **Pn** | **13 46 37.5** | **+1.7** |
| GLA | | | | *e*Pg | **Pg** | **13 46 49.6** | **-2.3** |
| **R11A** | **Troy Canyon, C** | **4.32** | **39** | *e*Pg | **Pb** | **13 46 53.7** | **+3.2** |

*ISCJB **25** 13:46:00.4±0.8, 64°.71S±0°.10×176°.8E±0°.4, h10km, mb4.3/10, MS4.0/8, Error ellipse: s-maj=22.8km s-min=12.3km az=159.7*

*IDC **25** 13:46:00.3±0.8, 64°.64S×177°.00E, h0km, mb4.2/7, mb1 4.4/8, mb1mx4.3/16, mbtmp4.2/8, ML3.4/1, MS4.1/9, Ms1 4.1/9, ms1mx3.9/24, Error ellipse: s-maj=34.0km s-min=20.6km az=56.0*

*NEIC **25** 13:46:01.6±0.6, 64°.69S×176°.96E, h10km, mb4.6/3, Error ellipse: s-maj=19.9km s-min=11.3km az=79.0*

**ISC 25 13:46:01.8±0.7, 64°.7S±0°.1×176°.9E±0°.2, h10km, n44, σ0ˢ82/29, mb4.3/10, MS4.0/8, Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SBA** | **Scott Base** | **13.58** | **189** | *e*P | **Pn** | **13 49 13.7** | **-0.5** |
| | 54nm,1.4s | | | | | | |
| **VNDA** | **Vanda** | **13.70** | **194** | Pn | **Pn** | **13 49 14.1** | **-1.6** |
| | 0.2nm,0.3s,baz=39,slow=17,SNR=24 | | | | | | |
| VNDA | | | | LR | LR | 13 53 10.0 | |
| | comp=Z,738nm,21.9s,baz=44,slow=31 | | | | | | |
| **RPZ** | **Rata Peaks** | **21.28** | **348** | LR | LR | 13 57 24.6 | |
| | comp=Z,619nm,20.0s,baz=200,slow=32 | | | | | | |
| **QSPA** | **South Pole Qui** | **25.40** | **180** | P | **P** | **13 51 29.9** | **+0.8** |
| | 3.4nm,1.2s,baz=61,slow=0.3,SNR=4.3 | | | | | | |
| QSPA | | | | PcP | **PcP** | **13 55 01.0** | **+0.3** |
| | 1.3nm,0.8s,baz=27,slow=4.5,SNR=5.1 | | | | | | |
| QSPA | | | | LR | LR | 14 00 35.7 | |
| | comp=Z,560nm,18.1s,baz=48,slow=34 | | | | | | |
| **CASY** | **Casey** | **26.45** | **236** | *e*P | **P** | **13 51 39.6** | **+1.3** |
| | 28nm,1.4s | | | | | | |
| **URZ** | **Urewera** | **26.47** | **0** | LR | LR | 14 01 05.4 | |
| | comp=Z,315nm,18.1s,baz=176,slow=34 | | | | | | |
| **MAW** | **Mawson** | **39.93** | **213** | P | **P** | **13 53 36.9** | **+1.4** |
| | 1.8nm,1.0s,baz=130,slow=9.3,SNR=4.1 | | | | | | |
| MAW | | | | LR | LR | 14 09 53.5 | |
| | comp=Z,273nm,19.7s,baz=236,slow=36 | | | | | | |
| **DZM** | **Mont Dzumac** | **43.17** | **346** | *e*LR | LR | 14 05 57.5 | |
| | 850nm,23.5s | | | | | | |
| **SNAA** | **Sanae** | **43.90** | **180** | P | **P** | **13 54 08.4** | **+0.4** |
| **SNAA** | **Sanae** | **43.90** | **180** | LR | LR | 14 11 20.9 | |
| | comp=Z,126nm,21.2s,baz=206,slow=35 | | | | | | |
| **SNAA** | **Sanae** | **43.90** | **180** | *e*P | **P** | **13 54 07.0** | **-0.9** |
| | 11nm,1.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **44.26** | **177** | P | **P** | **13 54 10.3** | **-0.4** |
| **VNA2** | **Neumayer--Watz** | **44.62** | **178** | P | **P** | **13 54 13.6** | **0.0** |
| | baz=185,slow=7.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **44.88** | **178** | P | **P** | **13 54 16.2** | **+0.5** |
| **TBI** | **Tubuai** | **46.77** | **44** | *e*LR | LR | 14 07 19.7 | |
| | 265nm,31.0s | | | | | | |
| **TBI** | **Tubuai** | **46.77** | **44** | *e*T | T | 14 44 11.4 | |
| | 24nm,0.3s | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **47.49** | **277** | T | T | 14 46 26.8 | |
| | baz=148,slow=76,SNR=24 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **47.49** | **277** | T | T | 14 46 27.2 | |
| | baz=148,slow=76,SNR=23 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **47.50** | **277** | T | T | 14 46 28.6 | |
| | baz=148,slow=76,SNR=24 | | | | | | |
| **ASAR** | **Alice Springs** | **49.57** | **305** | P | **P** | **13 54 52.8** | **0.0** |
| | 2.4nm,1.0s,baz=153,slow=7.8,SNR=11 | | | | | | |
| ASAR | | | | PcP | **PcP** | **13 56 13.3** | **-1.1** |
| | 0.6nm,0.7s,baz=150,slow=3.6,SNR=4.6 | | | | | | |
| ASAR | | | | LR | LR | 14 13 04.8 | |
| | comp=Z,50nm,19.9s,baz=156,slow=33 | | | | | | |
| **USHA** | **Ushuaia** | **50.74** | **137** | LR | LR | 14 10 28.9 | |
| | comp=Z,293nm,19.7s,baz=35,slow=29 | | | | | | |
| **RKT** | **Rikitea** | **51.91** | **61** | *e*T | T | 14 50 40.4 | |
| | 4.5nm,0.2s | | | | | | |
| **TVO** | **Taravao** | **52.09** | **42** | *e*T | T | 14 50 48.8 | |
| | 1.6nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **52.18** | **42** | *e*LR | LR | 14 09 46.8 | |
| | 268nm,27.5s | | | | | | |
| **PPT2** | **Papeete2** | **52.18** | **42** | *e*T | T | 14 50 55.5 | |
| | 2.4nm,0.3s | | | | | | |
| **MEH** | **Mehetia** | **52.35** | **44** | *e*T | T | 14 51 08.9 | |
| | 6.2nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **52.86** | **307** | P | **P** | **13 55 17.3** | **-0.1** |
| | 2.9nm,1.1s,baz=160,slow=6.4,SNR=9.0 | | | | | | |
| WRA | | | | PcP | **PcP** | **13 56 25.9** | **-0.7** |
| | 0.9nm,0.9s,baz=162,slow=3.7,SNR=4.4 | | | | | | |
| WRA | | | | LR | LR | 14 14 43.7 | |
| | comp=Z,406nm,21.9s,baz=155,slow=33 | | | | | | |
| **WRAB** | **Tennant Creek** | **52.86** | **307** | *e*P | **P** | **13 55 16.9** | **-0.6** |
| | 9.3nm,1.3s | | | | | | |
| **VAH** | **Vaihoa** | **54.98** | **43** | *e*T | T | 14 54 25.1 | |
| | 198nm,0.2s | | | | | | |
| **PMOR** | **Pomariorio Ree** | **55.12** | **43** | *e*T | T | 14 54 35.9 | |
| | 2.4nm,0.3s | | | | | | |
| **CPUP** | **Villa Florida** | **80.04** | **132** | P | **P** | **13 58 10.8** | **-0.5** |
| | 2.5nm,0.8s,baz=238,slow=4.2,SNR=7.9 | | | | | | |
| **BOSA** | **Boshof** | **84.41** | **205** | P | **P** | **13 58 33.4** | **-1.0** |
| | 10nm,1.2s,baz=146,slow=9.6,SNR=3.5 | | | | | | |
| **LPAZ** | **La Paz** | **85.55** | **119** | P | **P** | **13 58 41.0** | **+0.3** |
| | 3.5nm,0.9s,baz=160,slow=6.5,SNR=8.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.41** | **186** | PKP | **PKPdf** | **14 05 10.4** | **+2.0** |
| | 0.8nm,0.9s,baz=170,slow=2.9,SNR=2.6 | | | | | | |
| **ILAR** | **Eielson Array** | **131.84** | **20** | PKP | **PKPdf** | **14 05 13.4** | **0.0** |
| | 0.6nm,0.7s,baz=242,slow=3.5,SNR=5.7 | | | | | | |
| **KKAR** | **Karatay Array** | **134.73** | **279** | *e*PKPdf | **PKPdf** | **14 05 19.2** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **137.40** | **291** | PKhKP | PKPpre | 14 05 17.8 | |
| | 0.2nm,0.4s,baz=144,slow=3.5,SNR=3.3 | | | | | | |
| KURBB | | | | PKP | **PKPdf** | **14 05 24.6** | **+0.5** |
| | 1.1nm,0.9s,baz=132,slow=1.7,SNR=5.9 | | | | | | |
| **KURK** | **Kurchatov** | **137.43** | **292** | PKPpre | PKPpre | 14 05 17.8 | |
| KURK | | | | PKP | **PKPdf** | **14 05 24.6** | **+0.4** |
| **ABKAR** | **Akbulak array** | **144.09** | **276** | *e*PKPdf | **PKPab** | **14 05 34.0** | **+0.1** |
| **AKTO** | **Aktyubinsk** | **145.80** | **275** | PKPbc | **PKPdf** | **14 05 39.4** | **+0.1** |
| | 3.0nm,0.8s,baz=116,slow=2.9,SNR=15 | | | | | | |
| **KBZ** | **Khabaz** | **146.99** | **253** | PKPbc | **PKPbc** | **14 05 43.4** | **-0.1** |
| | 4.9nm,0.7s,baz=131,slow=2.1,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.20** | **208** | PKPbc | **PKPbc** | **14 05 44.3** | **-0.1** |
| | 5.4nm,0.9s,baz=145,slow=5.3,SNR=11 | | | | | | |
| **AKASG** | **Malin Array Be** | **158.11** | **246** | PKPab | **PKPab** | **14 06 30.2** | **-1.1** |
| | 0.2nm,0.3s,baz=148,slow=5.4,SNR=4.9 | | | | | | |
| **CLL** | **Collm** | **164.19** | **220** | *e*PKPab | PKPab | 14 07 04.0 | +6.1 |

**DJA 25 13:59:01.2±0.3, 0°.N±6°×124°.5E±°, h10km, M3.7/3, MLv3.7/3, Northern Moluccа Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMSI** | **Cibinong** | **1.49** | **285** | P | Pn | 13 59 26.0 | -2.1 |
| KMSI | | | | S | Sb | 13 59 47.9 | -0.1 |
| **TNTI** | **Ternate** | **2.03** | **73** | P | Pn | 13 59 36.2 | +0.7 |
| **LBMI** | **Labuha** | **2.23** | **111** | P | Pn | 13 59 37.3 | -1.0 |
| LBMI | | | | S | Sn | 14 00 06.6 | +0.6 |
| **SANI** | **Sanana** | **2.29** | **166** | P | Pn | 13 59 39.2 | +0.2 |
| **GTOI** | **Gorontalo** | **2.45** | **281** | P | Pn | 13 59 43.0 | +1.7 |
| GTOI | | | | S | Sb | 14 00 16.4 | +0.7 |
| **LUWI** | **Luwuk** | **2.91** | **245** | P | Pn | 13 59 47.4 | -0.2 |
| LUWI | | | | S | Sn | 14 00 23.1 | +0.4 |
| **MRSI** | **Marisa** | **3.49** | **275** | P | Pn | 13 59 55.5 | -0.1 |
| **NLAI** | **Namlea** | **3.79** | **154** | P | Pn | 13 59 59.7 | 0.0 |
| **APSI** | **Ampana** | **3.92** | **254** | P | Pn | 14 00 02.7 | +1.1 |
| APSI | | | | S | Sb | 14 00 57.4 | -0.7 |
| **MPSI** | **Mapaga** | **5.52** | **272** | P | Pn | 14 00 23.9 | +0.3 |

**IDC 25 14:01:28.8±2.4, 5°.24S×111°.34W, h0km, mb3.6/4, mb1 3.8/4, mb1mx3.5/28, mbtmp3.7/4, MS3.8/1, Ms1 3.8/1, ms1mx3.1/28, Error ellipse: s-maj=166.0km s-min=30.3km az=106.0, Ascension Island region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N2** | **ASCENSION HYDR** | **4.04** | **230** | T | T | 14 06 27.8 | |
| | baz=49,slow=74,SNR=374 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **4.05** | **230** | T | T | 14 06 33.7 | |
| | baz=49,slow=74,SNR=511 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **4.06** | **230** | T | T | 14 06 29.2 | |
| | baz=49,slow=74,SNR=466 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **4.92** | **222** | T | T | 14 07 41.1 | |
| | baz=41,slow=74,SNR=161 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **4.94** | **221** | T | T | 14 07 42.1 | |
| | baz=41,slow=74,SNR=163 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **4.94** | **222** | T | T | 14 07 42.5 | |
| | baz=41,slow=74,SNR=179 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.40** | **35** | P | P | 14 06 29.2 | +0.2 |
| | 3.0nm,1.0s,baz=213,slow=11,SNR=8.9 | | | | | | |
| **CPUP** | **Villa Florida** | **48.62** | **239** | LR | LR | 14 29 10.7 | |
| | comp=Z,113nm,21.1s,baz=221,slow=34 | | | | | | |
| **GERES** | **GERESS Array B** | **58.14** | **19** | P | P | 14 11 24.6 | +0.2 |
| | 0.7nm,0.2s,baz=165,slow=5.5,SNR=4.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **65.73** | **27** | P | P | 14 12 15.0 | -0.3 |
| | 0.6nm,0.5s,baz=227,slow=6.7,SNR=5.3 | | | | | | |
| **SNAA** | **Sanae** | **66.56** | **177** | P | P | 14 12 20.5 | 0.0 |
| | 0.3nm,0.9s,baz=315,slow=7.1,SNR=2.8 | | | | | | |

**IDC 25 14:02:34.7±2.3, 1°.52N×126°.62E, h0km, mb3.2/3, mb1 3.5/3, mb1mx3.2/32, mbtmp3.3/3, MS3.0/1, Ms1 3.0/1, ms1mx2.4/15, Error ellipse: s-maj=179.5km s-min=27.9km az=66.0, Northern Moluccа Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DAV** | **Davao City (W)** | **5.61** | **349** | LR | LR | 14 06 39.5 | |
| | comp=Z,140nm,18.1s,baz=18,slow=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.63** | **161** | P | P | 14 07 37.8 | +0.3 |
| | 0.8nm,0.5s,baz=340,slow=10,SNR=9.2 | | | | | | |
| **ASAR** | **Alice Springs** | **26.02** | **165** | P | P | 14 08 09.3 | -0.4 |
| | 0.1nm,0.3s,baz=344,slow=7.2,SNR=9.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.31** | **326** | P | P | 14 12 38.6 | +0.2 |
| | 0.2nm,0.4s,baz=126,slow=9.1,SNR=1.7 | | | | | | |

**IDC 25 14:05:41.7±5.1, 10°.02S×93°.17E, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.3/40, mbtmp3.6/3, Error ellipse: s-maj=158.7km s-min=35.0km az=57.0, South Indian Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **20.57** | **275** | T | T | 14 29 42.0 | |
| | baz=98,slow=73,SNR=5.7 | | | | | | |
| **H08S3** | **Diego Garcia H** | **20.58** | **275** | T | T | 14 29 48.9 | |
| | baz=98,slow=73,SNR=3.7 | | | | | | |
| **H08S1** | **Diego Carcia H** | **20.59** | **275** | T | T | 14 29 56.4 | |
| | baz=98,slow=73,SNR=3.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **28.86** | **11** | P | P | 14 11 42.1 | 0.0 |
| | 0.7nm,0.8s,baz=196,slow=9.2,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **41.12** | **115** | P | P | 14 13 27.8 | -0.1 |
| | 0.2nm,0.6s,baz=284,slow=8.0,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **64.11** | **355** | P | P | 14 16 17.5 | 0.0 |
| | 0.5nm,0.2s,baz=181,slow=5.8,SNR=4.4 | | | | | | |

*ISCJB **25** 14:05:47.0±0.9, 65°.05S±0°.1×176°.4E±0°.5, h10km, mb3.6/6, MS4.0/3, Error ellipse: s-maj=34.0km s-min=13.4km az=169.4*

*IDC **25** 14:05:47.0±1.1, 64°.93S×176°.86E, h0km, mb3.6/6, mb1 3.8/7, mb1mx3.7/23, mbtmp3.6/7, ML2.7/1, MS4.1/4, Ms1 4.1/4, ms1mx3.9/18, Error ellipse: s-maj=47.9km s-min=21.6km az=70.0*

**ISC 25 14:05:48.3±1.0, 64°.9S±0°.1×176°.8E±0°.3, h10km, n14, σ0ˢ28/10, mb3.7/6, MS4.0/3, Balleny Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNDA** | **Vanda** | **13.44** | **194** | Pn | **Pn** | **14 08 58.9** | **+0.2** |
| | 0.0nm,0.3s,baz=39,slow=18,SNR=2.8 | | | | | | |
| VNDA | | | | LR | LR | 14 13 08.2 | |
| | comp=Z,457nm,20.4s,baz=26,slow=33 | | | | | | |
| **RPZ** | **Rata Peaks** | **21.51** | **349** | P | **P** | **14 10 36.9** | **-0.1** |
| | 1.4nm,0.4s,baz=207,slow=2.3,SNR=2.1 | | | | | | |
| RPZ | | | | LR | LR | 14 16 51.7 | |
| | comp=Z,562nm,20.6s,baz=203,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **25.15** | **180** | P | **P** | **14 11 13.2** | **-0.2** |
| | 0.3nm,0.3s,baz=48,slow=12,SNR=1.1 | | | | | | |
| QSPA | | | | LR | LR | 14 20 23.8 | |
| | comp=Z,479nm,18.1s,baz=45,slow=35 | | | | | | |
| **MAW** | **Mawson** | **39.69** | **213** | LR | LR | 14 29 40.8 | |
| | comp=Z,305nm,19.8s,baz=239,slow=36 | | | | | | |
| **SNAA** | **Sanae** | **43.65** | **180** | P | **P** | **14 13 52.2** | **-0.3** |
| | 0.4nm,1.1s,baz=184,slow=19,SNR=2.0 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **47.45** | **278** | T | T | 15 06 14.4 | |
| | baz=148,slow=76,SNR=18 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **47.45** | **278** | T | T | 15 06 14.8 | |
| | baz=148,slow=76,SNR=18 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **47.46** | **278** | T | T | 15 06 15.7 | |
| | baz=148,slow=76,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **49.66** | **305** | P | **P** | **14 14 40.1** | **+0.2** |
| | 1.0nm,1.0s,baz=148,slow=7.1,SNR=4.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.95** | **307** | P | **P** | **14 15 04.6** | **0.0** |
| | 0.9nm,1.0s,baz=154,slow=5.8,SNR=5.8 | | | | | | |
| **LPAZ** | **La Paz** | **85.49** | **119** | P | **P** | **14 18 27.1** | **+0.1** |
| | 1.2nm,0.9s,baz=185,slow=5.7,SNR=3.3 | | | | | | |
| **ILAR** | **Eielson Array** | **132.10** | **20** | PKP | **PKPdf** | **14 25 00.6** | **+0.3** |
| | 0.4nm,0.9s,baz=235,slow=3.2,SNR=3.3 | | | | | | |
| **KBZ** | **Khabaz** | **146.84** | **253** | PKPbc | **PKPab** | **14 25 30.5** | **-0.4** |
| | 1.4nm,0.7s,baz=74,slow=3.1,SNR=5.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **147.00** | **238** | PKPbc | **PKPbc** | **14 25 30.7** | **+0.3** |
| | 1.1nm,0.8s,baz=134,slow=5.3,SNR=9.5 | | | | | | |

*JMA **25** 14:09:03.2±0.1, 23°.74N×121°.63E, h43km±3km, M3.2*
*ISCJB **25** 14:09:04.1±0.3, 23°.77N±0°.02×121°.71E±0°.02, h29km±2km, Error ellipse: s-maj=3.5km s-min=2.1km az=143.3*
*TAP **25** 14:09:04.2, 23°.79N×121°.63E, h40km, ML3.8, C*

**ISC 25 14:09:02.9±1.0, 23°.75N±0°.02×121°.71E±0°.02, h15km±9km, n63, σ0ˢ84/100, 13C-8D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TEGC** | **Jichi Village** | **0.16** | **256** | *e*P | Pb | 14 09 12.1 | +4.5 |
| | baz=223 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.23** | **303** | *e*P | Pb | 14 09 12.1 | +3.4 |
| | baz=304 | | | | | | |
| **HWA** | **Hwalien** | **0.25** | **337** | P | **Pb** | **14 09 11.8** | **+2.7** |
| | baz=3.0 | | | | | | |
| HWA | | | | *e*S | **Sb** | **14 09 18.1** | **+4.9** |
| | baz=3.0 | | | | | | |
| **ESL** | **Shilin** | **0.27** | **284** | ⇑*i*P | **Pn** | **14 09 11.3** | **-0.9** |
| | baz=277 | | | | | | |
| ESL | | | | *e*S | **Sn** | **14 09 16.1** | **-1.9** |
| | baz=277 | | | | | | |
| **TWD** | **Chiawan** | **0.35** | **342** | ⇓*i*P | **Pn** | **14 09 12.4** | **-1.0** |
| | baz=347 | | | | | | |
| TWD | | | | S | **Sn** | **14 09 19.2** | **-0.9** |
| | baz=347 | | | | | | |
| **EHY** | **Hungye** | **0.43** | **236** | ⇑*i*P | **Pb** | **14 09 13.2** | **+1.0** |
| | baz=224 | | | | | | |
| EHY | | | | *e*S | **Sb** | **14 09 19.6** | **+1.1** |
| | baz=224 | | | | | | |
| **WDT** | **Danda** | **0.53** | **271** | S | **Sb** | **14 09 22.0** | **+0.4** |
| | baz=259 | | | | | | |
| **TWF1** | **Yuli** | **0.55** | **224** | ⇑*i*P | **Pb** | **14 09 14.9** | **+0.7** |
| | baz=224 | | | | | | |
| TWF1 | | | | *e*S | **Sb** | **14 09 22.4** | **+0.5** |
| | baz=224 | | | | | | |
| **WHF** | **Hehuan Shan** | **0.57** | **314** | ⇓*i*P | **Pb** | **14 09 15.1** | **+0.3** |
| | baz=311 | | | | | | |
| WHF | | | | *i* S | **Sg** | **14 09 22.7** | **+0.7** |
| | baz=311 | | | | | | |
| **ENA** | **Nanau** | **0.68** | **2** | P | **Pb** | **14 09 16.9** | **+0.5** |
| | baz=20 | | | | | | |
| ENA | | | | *e*S | **Sb** | **14 09 26.1** | **+0.5** |
| | baz=20 | | | | | | |
| **TWT** | **Tachien** | **0.70** | **316** | ⇓*i*P | **Pb** | **14 09 17.4** | **+0.5** |
| | baz=316 | | | | | | |
| TWT | | | | *i* S | **Sg** | **14 09 25.9** | **-0.1** |
| | baz=316 | | | | | | |
| **CHKT** | **Chengkung** | **0.72** | **206** | *e*P | **Pn** | **14 09 18.2** | **-0.3** |
| | baz=187 | | | | | | |
| CHKT | | | | *e*S | **Sn** | **14 09 29.1** | **-0.2** |
| | baz=187 | | | | | | |
| **YUS** | **Yu-Shan** | **0.74** | **250** | ⇑*i*P | **Pb** | **14 09 18.5** | **+0.7** |
| | baz=238 | | | | | | |
| YUS | | | | S | **Sg** | **14 09 27.9** | **+0.5** |
| | baz=238 | | | | | | |
| **NNS** | **Nan Shan** | **0.76** | **336** | ⇑P | **Pb** | **14 09 17.9** | **+0.1** |
| | baz=346 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.76** | **280** | ⇑*i*P | **Pb** | **14 09 18.0** | **+0.2** |
| | baz=280 | | | | | | |
| SMLT | | | | *i* S | **Sg** | **14 09 27.3** | **-0.4** |
| | baz=280 | | | | | | |
| **TYC** | **Yuchr** | **0.80** | **281** | ⇑*i*P | **Pb** | **14 09 18.5** | **0.0** |
| | baz=283 | | | | | | |
| TYC | | | | *e*S | **Sg** | **14 09 28.2** | **-0.8** |
| | baz=283 | | | | | | |
| **ELDTW** | **Lidau** | **0.85** | **229** | ⇑P | **Pg** | **14 09 19.0** | **-0.4** |
| | baz=220 | | | | | | |
| ELDTW | | | | *e*S | **Sg** | **14 09 30.3** | **-0.2** |
| | baz=220 | | | | | | |
| **ALS** | **Alishan** | **0.86** | **254** | ⇑P | **Pb** | **14 09 20.2** | **+0.4** |
| | baz=250 | | | | | | |
| ALS | | | | *e*S | **Sb** | **14 09 32.4** | **+1.1** |
| | baz=250 | | | | | | |
| **TWC** | **Suao** | **0.87** | **8** | *e*P | **Pn** | **14 09 20.1** | **-0.4** |
| | baz=23 | | | | | | |
| TWC | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=241 | | | | | | | |
| WTP | | | | S | | Sn | 14 09 39.8 | +0.4 |
| | baz=241 | | | | | | | |
| **CHN2** | **Minshiung** | **1.16** | **260** | *e*P | | **Pb** | **14 09 24.8** | **+0.3** |
| | baz=257 | | | | | | | |
| CHN2 | | | | *e*S | | **Sg** | **14 09 40.5** | **+0.2** |
| | baz=257 | | | | | | | |
| **CHY** | **Chiayi** | **1.21** | **258** | *e*P | | **Pg** | **14 09 26.2** | **0.0** |
| | baz=256 | | | | | | | |
| **TWK** | **Hsinying** | **1.22** | **247** | *e*P | | **Pg** | **14 09 26.3** | **-0.1** |
| | baz=244 | | | | | | | |
| **CHN1** | **Nanshi** | **1.22** | **243** | ⇓*e*P | | **Pb** | **14 09 25.7** | **0.0** |
| | baz=241 | | | | | | | |
| CHN1 | | | | *e*S | | **Sn** | **14 09 42.1** | **+0.4** |
| | baz=241 | | | | | | | |
| **SGST** | **Jiashian** | **1.23** | **238** | ⇑*i*P | | **Pb** | **14 09 26.2** | **+0.4** |
| | baz=235 | | | | | | | |
| SGST | | | | *e*S | | **Sg** | **14 09 42.7** | **0.0** |
| | baz=235 | | | | | | | |
| **TWA** | **Mucha** | **1.23** | **355** | *e*P | | **Pn** | **14 09 25.4** | **-0.2** |
| | baz=356 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.32** | **275** | *e*P | | **Pn** | **14 09 26.8** | **+0.1** |
| | baz=273 | | | | | | | |
| WTCT | | | | *e*S | | **Sb** | **14 09 43.8** | **-0.2** |
| | baz=273 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.32** | **3** | *e*P | | **Pb** | **14 09 27.1** | **-0.2** |
| | baz=353 | | | | | | | |
| **JYNG** | **Yonagunijimaku** | **1.33** | **58** | P | | **Pb** | **14 09 27.3** | **-0.1** |
| JYNG | | | | *e*S | | **Sb** | **14 09 44.2** | **-0.1** |
| **ECL** | **Taimali** | **1.34** | **212** | *e*P | | **Pn** | **14 09 25.2** | **-1.8** |
| | baz=199 | | | | | | | |
| **WSF** | **Szhu** | **1.37** | **266** | *e*P | | **Pn** | **14 09 27.2** | **-0.2** |
| | baz=264 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **1.37** | **349** | *e*P | | **Pn** | **14 09 27.3** | **-0.2** |
| | baz=349 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.38** | **59** | P | | **Pb** | **14 09 28.3** | **-0.1** |
| YOJ | | | | *e*S | | **Sb** | **14 09 46.2** | **+0.3** |
| **CHN3** | **Shinhua** | **1.41** | **242** | *e*P | | **Pg** | **14 09 29.6** | **-0.4** |
| | baz=240 | | | | | | | |
| CHN3 | | | | *e*S | | **Sg** | **14 09 48.1** | **-0.2** |
| | baz=240 | | | | | | | |
| **SSD** | **Sandimen** | **1.41** | **225** | *e*P | | **Pn** | **14 09 27.9** | **0.0** |
| | baz=223 | | | | | | | |
| **TWM1** | **Shoushan** | **1.50** | **232** | ⇓*e*P | | **Pg** | **14 09 31.8** | **+0.1** |
| | baz=231 | | | | | | | |
| **SCLT** | **Jiali** | **1.51** | **248** | *e*P | | **Pn** | **14 09 29.8** | **+0.4** |
| | baz=247 | | | | | | | |
| SCLT | | | | *e*S | | **Sb** | **14 09 49.2** | **-0.2** |
| | baz=247 | | | | | | | |
| **TAI1** | **Yung-k'ang** | **1.54** | **243** | *e*P | | **Pn** | **14 09 30.2** | **+0.5** |
| | baz=241 | | | | | | | |
| **EAST** | **Anshuo** | **1.57** | **211** | *e*P | | **Pn** | **14 09 30.4** | **+0.1** |
| | baz=199 | | | | | | | |
| **SCZT** | **Fangliau** | **1.70** | **217** | *e*P | | **Pn** | **14 09 32.8** | **+0.8** |
| | baz=214 | | | | | | | |
| **LAY** | **Lan-yu** | **1.71** | **185** | *e*P | | **Pn** | **14 09 31.1** | **-1.0** |
| | baz=175 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.94** | **72** | *e*S | | **Sn** | **14 09 59.4** | **+0.2** |
| **HATJ** | **Hateruma jima** | **1.94** | **80** | P | | **Pn** | **14 09 36.1** | **+0.8** |
| HATJ | | | | *e*S | | **Sn** | **14 09 59.2** | **-0.2** |
| **TWK1** | **Hengchun** | **1.98** | **205** | *e*P | | **Pn** | **14 09 35.8** | **-0.1** |
| | baz=192 | | | | | | | |
| **PNG** | **Penghu** | **1.99** | **265** | *e*P | | **Pn** | **14 09 35.2** | **-0.7** |
| | baz=265 | | | | | | | |
| **JKRS** | **Kuro-shima** | **2.16** | **76** | P | | **Pn** | **14 09 39.5** | **+1.3** |
| JKRS | | | | *e*S | | **Sn** | **14 10 05.6** | **+0.9** |
| **JIJ** | **Ishigaki jima** | **2.31** | **74** | P | | **Pn** | **14 09 40.6** | **+0.3** |
| JIJ | | | | *e*S | | **Sn** | **14 10 07.8** | **-0.6** |
| **JISG** | **Ishigakijimahi** | **2.52** | **70** | P | | **Pn** | **14 09 43.4** | **+0.2** |
| JISG | | | | *e*S | | **Sn** | **14 10 12.2** | **-1.4** |
| **JTJ** | **Tarama** | **2.87** | **71** | P | | **Pn** | **14 09 48.8** | **+0.7** |
| JTJ | | | | *e*S | | **Sn** | **14 10 22.0** | **-0.4** |
| **JIRB** | **Irabujima** | **3.33** | **70** | *e*S | | **Sn** | **14 10 33.0** | **-0.8** |

**IGQ 25 14:22:56±0.3, 1°.51S×78°.20W, h2km±32km, Mb4.1, 27C-2D, Error ellipse: s-maj=2.0km s-min=0.7km az=10.5, Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ULBA** | **Ulba** | **0.22** | **286** | ⇑P | Pg | 14 23 02.1 | +1.3 |
| **BULB** | **Ulba Tungurahu** | **0.23** | **288** | ⇑P | Pg | 14 23 02.7 | +1.9 |
| **BULB** | **Ulba Tungurahu** | **0.23** | **288** | ⇑S | Sg | 14 23 05.1 | +1.0 |
| **BRUN** | **Tungurahua Vol** | **0.23** | **292** | ⇑P | Pg | 14 23 02.1 | +1.1 |
| **BPAT** | **Tungurahua Vol** | **0.24** | **271** | ⇑P | Pg | 14 23 02.9 | +1.7 |
| **PAT1** | **Patacocha** | **0.24** | **270** | ⇑P | Pg | 14 23 02.9 | +1.5 |
| **RUN5** | **Runtun** | **0.25** | **292** | ⇑P | Pg | 14 23 02.1 | +0.9 |
| **RETU** | **Refugio** | **0.26** | **283** | ⇑P | Pg | 14 23 02.2 | +0.5 |
| **ARRY** | **Arrayan** | **0.26** | **270** | ⇑P | Pb | 14 23 02.8 | -1.1 |
| **BMAS** | **Trigal station** | **0.28** | **271** | P | Pg | 14 23 02.2 | +0.2 |
| **JUI6** | **Juive** | **0.28** | **287** | ⇑P | Pg | 14 23 02.3 | +0.4 |
| **BBIL** | **Ulba Tungurahu** | **0.30** | **281** | ⇑P | Pb | 14 23 03.6 | -0.9 |
| **BBIL** | **Ulba Tungurahu** | **0.30** | **281** | ⇑S | Sg | 14 23 07.6 | +1.3 |
| **BIL2** | **Estacion Bilba** | **0.31** | **280** | P | Pb | 14 23 03.8 | -0.9 |
| **IGUA** | **Igualata** | **0.44** | **272** | ⇓P | Pb | 14 23 06.5 | -0.8 |
| **PISA** | **Pisayambo** | **0.49** | **337** | ⇑P | Pb | 14 23 07.8 | -0.1 |
| **RIOE** | **Riobamba** | **0.50** | **241** | ⇑S | Sg | 14 23 12.6 | -0.3 |
| **RIOE** | **Riobamba** | **0.50** | **241** | ⇑P | Pg | 14 23 05.3 | -0.7 |
| **MOV1** | **Cotopaxi Vol s** | **0.83** | **343** | ⇑P | Pb | 14 23 13.7 | -0.3 |
| **TAMB** | **Tambo** | **0.83** | **348** | ⇑P | Pb | 14 23 13.8 | -0.1 |
| **COV1** | **Cotopaxi Volc** | **0.85** | **350** | ⇑P | Pb | 14 23 14.9 | +0.5 |
| **BVC2** | **Cotopaxi Volca** | **0.87** | **346** | ⇑P | Pb | 14 23 14.7 | +0.1 |
| **BNAS** | **Cotopaxi Volca** | **0.88** | **341** | ⇑P | Pb | 14 23 15.0 | +0.3 |
| **CAMI** | **Rancho Maria** | **0.88** | **340** | ⇑P | Pg | 14 23 14.0 | +0.4 |
| **VC1** | **Cotopaxi 1** | **0.89** | **346** | ⇑P | Pb | 14 23 14.9 | +0.1 |
| **NAS2** | **Nasa** | **0.90** | **342** | ⇑P | Pb | 14 23 15.5 | +0.4 |
| **PAST** | **Pastocalle** | **0.92** | **331** | ⇑P | Pb | 14 23 15.9 | +0.5 |
| **PITA** | **Cotopaxi Volc** | **0.97** | **346** | ⇑P | Pb | 14 23 16.5 | +0.3 |
| **ANTI** | **Antisana** | **1.05** | **2** | ⇑P | Pg | 14 23 16.4 | -0.6 |
| **JUA2** | **San Juan 2** | **1.35** | **342** | P | Pn | 14 23 22.0 | -0.5 |
| **GGP** | **Refugio Guagua** | **1.38** | **343** | P | Pb | 14 23 23.7 | +0.3 |
| **PINO** | **Pino** | **1.40** | **343** | ⇑P | Pn | 14 23 23.1 | -0.3 |
| **CHAR** | **Charly** | **1.51** | **20** | P | Pg | 14 23 25.6 | +0.2 |
| **LAV4** | **Lava4-Reventad** | **1.52** | **22** | P | Pn | 14 23 24.4 | -0.2 |
| **CONE** | **Cono NE Rev Vo** | **1.53** | **21** | P | Pb | 14 23 25.7 | +0.1 |
| **CONE** | **Cono NE Rev Vo** | **1.53** | **21** | S | Sg | 14 23 46.4 | +0.3 |
| **CAYA** | **Cayambe** | **1.58** | **7** | ⇓P | Pn | 14 23 26.2 | +0.4 |
| **URCU** | **Urcuqui** | **1.94** | **358** | P | Pg | 14 23 33.8 | +0.1 |
| **PECV** | **Mancha de Ca P** | **1.99** | **291** | P | Pg | 14 23 35.7 | +1.4 |
| **MAG1** | **Magdalena** | **2.13** | **312** | P | Pb | 14 23 34.5 | -0.9 |
| **YANT** | **Yantaza** | **2.41** | **194** | P | Pb | 14 23 38.9 | -1.3 |
| **YANT** | **Yantaza** | **2.41** | **194** | S | Sb | 14 24 09.0 | -1.4 |
| **CHIS** | **Cerro-Chispas-** | **2.57** | **280** | P | Pn | 14 23 38.4 | -0.4 |

*BJI **25** 14:42:16.2, 4°.01S×100°.04E, h21km, mb6.1/61, mB6.9/68, Ms7.7/85, Ms7 7.5/86*
*IDC **25** 14:42:18.6±0.3, 3°.53S×100°.10E, h0km, mb5.3/48, mb1 5.3/51, mb1mx5.3/52, mbtmp5.3/51, ML5.1/2, MS7.1/31, Ms1 7.1/31, ms1mx6.9/44, Error ellipse: s-maj=8.9km s-min=7.1km az=39.0*
*ISCJB **25** 14:42:20.0±0.1, 3°.46S±0°.02×100°.13E±0°.01, h17km, mb6.1/243, MS7.3/228, Error ellipse: s-maj=2.6km s-min=1.6km az=25.5*
*AUST **25** 14:42:20.1±1.8, 3°.39S×100°.16E, h6km±11km, Error ellipse: s-maj=6.7km s-min=3.6km az=52.0*
*DJA **25** 14:42:21.4±0.5, 3°.S±1°×10°.0E±°, h19km±4km, M7.1/117, mb6.1/115, mB7.1/117, MLv7.0/26, Mw(mB)7.1/117, Mwp6.9/102*
*MOS **25** 14:42:21.6±1.2, 3°.40S×100°.11E, h26km, mb6.4/49, MS7.2/70, Error ellipse: s-maj=6.9km s-min=3.9km az=113.3 Broadband fault plane solution: P waves. M₀5.10000×10¹⁹ NP1:φs128.00000°, δ84.00000°, λ81.00000°. NP2:φs4.00000°, δ11.00000°, λ146.00000°. Principal axes: T Plg50.0000°, Azm27.0000°; N Plg9.0000°, Azm129.0000°; P Plg38.0000°, Azm226.0000°;*
*GCMT **25** 14:42:22.5±0.1, 3°.71S×99°.32E, h12km, MW7.8/130, Moment Tensor Solution. s45,c77; s130,c522; Duration: 19s9 Moment tensor: Scale 10²⁰Nm; Mrr1.91±.01; Mθθ-1.01±.01; Mφφ-0.90±.01; Mrθ5.03±.07; Mθφ0.80±.01; Mφr-4.15±.06; Best double couple: M₀6.77300×10²⁰ NP1:φs130.00000°, δ82.00000°, λ89.00000°. NP2:φs316.00000°, δ8.00000°, λ96.00000°. Principal axes: T 6.8540, Plg53.0000°, Azm39.0000°; N -0.1670, Plg1.0000°, Azm130.0000°; P -6.6930, Plg37.0000°, Azm220.0000°; nsta1 refers to body waves, cutoff=50s. nsta2 refers to surface/mantle waves, cutoff=150s.*
*NEIC **25** 14:42:22.5±0.5, 3°.49S×100°.08E, h20km±3km, mb6.5/110, ME7.3, MS7.3/143, MW7.7 Error ellipse: s-maj=4.7km s-min=3.7km az=212.0, Energy computed from BB mechanism.*
*NEIC At least 445 people killed, 498 injured and 58 missing from the earthquake and a tsunami which had maximum wave heights of 7 meters on Pulau Pagai Utara, 3-5 meters on Pulau Pagai Selatan and 3 meters on Pulau Sipura. Felt [V] on Pulau Pagai Selatan. Felt [IV] at Padang and Pariaman; [III] at Bengkulu, Bukittinggi, Ketaun and Sungaipenuh; [II] at Kapahiang, Sumatra. Felt at Petaling Jaya, Malaysia and [II] in Singapore. The following maximum tsunami amplitudes were recorded on the these selected tide gauges: 33 cm at Padang, 26 cm on Pulau Enggano and 23 cm on Pulau Tanahbala, Indonesia; 23 cm on Cocos Island and 8 cm at Hillarys Boat Harbor, Australia; 7 cm on Diego Garcia; 11 cm at Male, Maldives; 40 cm at Port Mathurin and 28 cm at Port Louis, Mauritius; 12 cm at Pointe Larue, Seychelles; 9 cm at Colombo, Sri Lanka.*
*NEIC **25** 14:42:22.0±0.0, 3°.46S×100°.08E, h25km, Moment Tensor Solution. s42 Moment tensor: Scale 10²⁰Nm; Mrr1.52; Mθθ-0.61; Mφφ-0.91; Mrθ2.66; Mθφ0.92; Mφr-2.55; Best double couple: M₀4.0000×10²⁰ NP1:φs134.00000°, δ78.00000°, λ87.00000°. NP2:φs326.00000°, δ12.00000°, λ101.00000°. Principal axes: T 3.9400, Plg57.0000°, Azm41.0000°; N 0.1600, Plg2.0000°, Azm135.0000°; P -4.1000, Plg33.0000°, Azm226.0000°;*
*KLM **25** 14:42:23.7, 3°.50S×99°.97E, h21km, mb5.9, ML6.7, MS7.6*
*SZGRF **25** 14:42:26.2, 3°.13S×99°.75E, h33km, mb6.4/20(BGR), Ms7.2/2(BGR)*

**ISC 25 14:42:22.2±0.3, 3°.53S±0°.02×100°.10E±0°.03, h20km±1km, h20km:pP-P, n2149, σ1981/2102, mb6.3/250, MS7.3/237, 103C-46D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.76** | **353** | P | **Pb** | **14 42 36.2** | **-0.6** |
| **SISI** | **Saibi** | **2.41** | **335** | P | **Pn** | **14 42 57.9** | **-2.6** |
| **KSI** | **Kapahiang** | **2.49** | **93** | P | **Pn** | **14 43 01.4** | **-0.2** |
| KSI | | | | S | **Sb** | **14 43 34.0** | **-2.5** |
| **PDSI** | **Padang** | **2.62** | **8** | P | **Pn** | **14 43 02.2** | **-1.2** |
| **SDSI** | **Sungai Dareh** | **2.90** | **27** | P | **Pn** | **14 43 07.6** | **+0.4** |
| SDSI | | | | S | **Sn** | **14 43 43.7** | **+2.3** |
| **MNAI** | **Manna** | **2.96** | **106** | P | **Pn** | **14 43 07.7** | **-0.4** |
| | baz=3.0,SNR=86 | | | | | | |
| **MNAI** | **Manna** | **2.96** | **106** | P | **Pn** | **14 43 07.7** | **-0.4** |
| MNAI | | | | S | **Sn** | **14 43 45.0** | **+1.9** |
| **MNAI** | **Manna** | **2.96** | **106** | *e*Pn | **Pn** | **14 43 08.6** | **+0.5** |
| **PPI** | **Padang Panjang** | **3.06** | **5** | P | **Pn** | **14 43 09.1** | **-0.4** |
| PPI | | | | S | **Sn** | **14 43 47.4** | **+1.9** |
| **LHSI** | **Lahat** | **3.42** | **95** | P | **Pn** | **14 43 14.8** | **+0.3** |
| **RGRI** | **Rengat** | **3.86** | **35** | P | **Pn** | **14 43 21.0** | **+0.5** |
| RGRI | | | | S | **Sn** | **14 44 06.7** | **+1.4** |
| **BKNI** | **Bangkinang** | **3.94** | **14** | P | **Pn** | **14 43 21.6** | **0.0** |
| | baz=3.8,SNR=11 | | | | | | |
| **BKNI** | **Bangkinang** | **3.94** | **14** | P | **Pn** | **14 43 21.7** | **+0.2** |
| **BKNI** | **Bangkinang** | **3.94** | **14** | *e*Pn | **Pn** | **14 43 22.1** | **+0.6** |
| **JMBI** | **JAMBI** | **4.00** | **62** | P | **Pn** | **14 43 22.8** | **+0.4** |
| **MDSI** | **Maura Dua** | **4.17** | **103** | P | **Pn** | **14 43 25.0** | **+0.2** |
| MDSI | | | | S | **Sn** | **14 44 16.1** | **+3.1** |
| **LWLI** | **Liwa** | **4.21** | **111** | P | **Pn** | **14 43 25.7** | **+0.3** |
| **MNSI** | **Mandailing Nat** | **4.32** | **353** | P | **Pn** | **14 43 25.1** | **-1.7** |
| **PMBI** | **Palembang** | **4.70** | **83** | P | **Pn** | **14 43 31.7** | **-0.3** |
| | baz=4.6,SNR=6.6 | | | | | | |
| **PMBI** | **Palembang** | **4.70** | **83** | P | **Pn** | **14 43 31.5** | **-0.5** |
| **KASI** | **Kota Agung** | **4.81** | **115** | P | **Pn** | **14 43 33.1** | **-0.4** |
| **KLI** | **Kotabumi** | **4.92** | **106** | P | **Pn** | **14 43 36.0** | **+0.9** |
| **GSI** | **Gunungsitoli** | **5.42** | **332** | P | **Pn** | **14 43 39.5** | **-2.4** |
| | baz=5.4 | | | | | | |
| **GSI** | **Gunungsitoli** | **5.42** | **332** | P | **Pn** | **14 43 39.3** | **-2.7** |
| | 3µm,0.8s,195µm332nm | | | | | | |
| **BTDF** | **Bukit Timah Da** | **6.08** | **37** | P | **Pn** | **14 43 50.7** | **-0.4** |
| | baz=6.0,SNR=16 | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.17** | **77** | P | **Pn** | **14 43 52.6** | **+0.3** |
| | 894nm,1.1s,138µm47nm | | | | | | |
| **TPRI** | **Tanjung Pinang** | **6.25** | **45** | P | **Pn** | **14 43 53.6** | **+0.3** |
| | 3µm,1.0s,192µm70nm | | | | | | |
| **CGJI** | **Cibinong** | **6.36** | **119** | P | **Pn** | **14 43 52.8** | **-2.0** |
| | 4µm,1.0s,134µm38nm | | | | | | |
| **KGM** | **Kluang** | **6.37** | **30** | ⇓P | Pn | 14 43 58.6 | +3.5 |
| **PSI** | **Prapat** | **6.39** | **349** | Pn | Pn | 14 43 51.5 | -4.0 |
| | 1.1nm,0.3s,baz=161,slow=12,SNR=24 | | | | | | |
| **PSI** | **Prapat** | **6.39** | **349** | P | Pn | 14 43 51.5 | -4.0 |
| PSI | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **PSI** | **Prapat** | **6.39** | **349** | P | Pn | 14 43 51.9 | -3.5 |
| | baz=6.2,SNR=13 | | | | | | |
| **MYKOM** | **Kota Tinggi** | **6.47** | **35** | ⇑P | **Pn** | **14 43 59.3** | **+3.0** |
| **MYKOM** | **Kota Tinggi** | **6.47** | **35** | *e*Pn | **Pn** | **14 43 56.5** | **+0.1** |
| **SBJI** | **Serang** | **6.53** | **113** | P | **Pn** | **14 43 57.1** | **-0.1** |
| | comp=Z,4µm,1.2s,comp=Z,154µmcomp=Z,82nm | | | | | | |
| **FRIM** | **Kepong** | **6.89** | **13** | ⇑P | **Pn** | **14 44 03.2** | **+1.1** |
| **TNG** | **Tangerang** | **7.03** | **112** | P | **Pn** | **14 44 05.2** | **+1.2** |
| **TSI** | **Tuntungan** | **7.15** | **348** | P | **Pn** | **14 44 05.7** | **0.0** |
| | comp=Z,3µm,1.5s,comp=Z,191µmcomp=Z,164nm | | | | | | |
| **SKJI** | **Sukabumi** | **7.30** | **119** | P | **Pn** | **14 44 06.3** | **-1.4** |
| | comp=Z,6µm,0.8s,comp=Z,138µmcomp=Z,41nm | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **7.38** | **342** | P | **Pn** | **14 44 05.7** | **-3.2** |
| | comp=Z,475nm,1.5s,comp=Z,118µmcomp=Z,78nm | | | | | | |
| **TPI** | **Tanjungpandan** | **7.58** | **84** | P | **Pn** | **14 44 11.4** | **-0.2** |
| | comp=Z,758nm,0.8s,comp=Z,96µmcomp=Z,36nm | | | | | | |
| **CNJI** | **Cibinong** | **7.94** | **119** | P | **Pn** | **14 44 15.1** | **-1.5** |
| | comp=Z,5µm,0.9s,comp=Z,99µmcomp=Z,26nm | | | | | | |
| **IPM** | **Ipoh** | **8.00** | **7** | *e*Pn | **Pn** | **14 44 17.5** | **+0.1** |
| **LEM** | **Lembang** | **8.17** | **114** | Pn | **Pn** | **14 44 20.6** | **+0.7** |
| | comp=Z,38nm,0.3s,baz=181,slow=8.3,SNR=40 | | | | | | |
| **LEM** | **Lembang** | **8.17** | **114** | P | **Pn** | **14 44 20.6** | **+0.7** |
| LEM | | | | pmax | pmax | | |
| | comp=Z,38nm,0.3s | | | | | | |
| **LEM** | **Lembang** | **8.17** | **114** | P | **Pn** | **14 44 21.2** | **+1.3** |
| **MLSI** | **Meulaboh, Aceh** | **8.58** | **334** | P | **Pn** | **14 44 25.0** | **-0.3** |
| | comp=Z,1.0s,comp=Z,99µm | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.66** | **118** | P | **Pn** | **14 44 24.2** | **-2.2** |
| | baz=8.7,SNR=71 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.66** | **118** | P | **Pn** | **14 44 24.0** | **-2.5** |
| | comp=Z,7µm,0.8s,comp=Z,102µm | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.66** | **118** | *e*Pn | **Pn** | **14 44 23.7** | **-2.8** |
| **KULM** | **Kulim** | **8.77** | **4** | *e*Pn | **Pn** | **14 44 26.4** | **-1.6** |
| **XMI** | **Christmas Isla** | **8.83** | **141** | P | **Pn** | **14 44 26.0** | **-2.9** |
| | baz=8.9,SNR=5.2 | | | | | | |
| **XMIS** | **Christmas Isla** | **8.83** | **142** | *e*P | Pn | 14 44 22.1 | -6.7 |
| **LHMI** | **Lhok Sumawe** | **9.25** | **340** | P | **Pn** | **14 44 32.5** | **-2.0** |
| | baz=9.2,SNR=8.3 | | | | | | |
| **LHMI** | **Lhok Sumawe** | **9.25** | **340** | P | **Pn** | **14 44 32.6** | **-2.0** |
| | comp=Z,655nm,0.9s,comp=Z,83µm | | | | | | |
| **LHMI** | **Lhok Sumawe** | **9.25** | **340** | Pn | Pn | 14 44 28.2 | -6.3 |
| **KTGM** | **Kuala Trenggan** | **9.30** | **19** | ⇑P | Pn | 14 44 39.3 | +4.1 |
| **CMJI** | **Cimerak** | **9.32** | **117** | P | **Pn** | **14 44 33.4** | **-2.1** |
| | comp=Z,3µm,1.1s,comp=Z,64µmcomp=Z,929µm | | | | | | |
| **SKLT** | **Songkhla** | **10.64** | **3** | P | **Pn** | **14 44 52.0** | **-1.6** |
| | comp=Z,1µm,1.9s,comp=Z,81µm | | | | | | |
| **SMRI** | **Semarang** | **10.87** | **109** | P | **Pn** | **14 44 57.0** | **+0.3** |
| | baz=11,SNR=5.5 | | | | | | |
| **SMRI** | **Semarang** | **10.87** | **109** | P | **Pn** | **14 44 57.2** | **+0.4** |
| | comp=Z,2µm,1.1s,comp=Z,145µm | | | | | | |
| **SMRI** | **Semarang** | **10.87** | **109** | *e*P | **Pn** | **14 44 56.9** | **+0.1** |
| **UWJI** | **Ujung Watu** | **11.18** | **105** | P | **Pn** | **14 45 01.8** | **+0.8** |
| | comp=Z,3µm,1.4s,comp=Z,81µmcomp=Z,932µm | | | | | | |
| **UGM** | **Wanagama** | **11.24** | **113** | P | **Pn** | **14 45 00.8** | **-1.2** |
| | baz=11,SNR=40 | | | | | | |
| **UGM** | **Wanagama** | **11.24** | **113** | P | **Pn** | **14 44 59.8** | **-2.1** |
| | comp=Z,2µm,1.0s,comp=Z,78µm | | | | | | |
| **UGM** | **Wanagama** | **11.24** | **113** | *e*Pn | **Pn** | **14 45 01.0** | **-0.9** |
| **TRTT** | **Trang** | **11.29** | **358** | P | **Pn** | **14 44 59.6** | **-3.0** |
| | comp=Z,476nm,1.4s,comp=Z,46µm | | | | | | |
| **KSM** | **Kuching** | **11.34** | **64** | P | **Pn** | **14 45 04.7** | **+1.5** |
| | baz=11,SNR=18 | | | | | | |
| **KSM** | **Kuching** | **11.34** | **64** | *e*P | **Pn** | **14 45 02.5** | **-0.8** |
| **PKDT** | **Phuket** | **11.48** | **351** | P | **Pn** | **14 45 04.5** | **-0.6** |
| | comp=Z,292nm,1.7s,comp=Z,49µm | | | | | | |
| **PBKI** | **Pangkalan Bun** | **11.58** | **86** | P | **Pn** | **14 45 06.2** | **-0.3** |
| | comp=Z,3µm,1.3s,comp=Z,109µm | | | | | | |
| **WOJI** | **Wonogiri, Jawa** | **11.59** | **112** | P | **Pn** | **14 45 05.3** | **-1.3** |
| | comp=Z,1µm,1.2s,comp=Z,56µmcomp=Z,969µm | | | | | | |
| **STKI** | **Sintang** | **11.91** | **73** | P | **Pn** | **14 45 14.0** | **+3.0** |
| | comp=Z,907nm,2.2s,comp=Z,104µm | | | | | | |
| **NGJI** | **Ngawi** | **11.93** | **109** | P | **Pn** | **14 45 12.4** | **+1.1** |
| | comp=Z,2µm,1.5s,comp=Z,135µm | | | | | | |
| **PCJI** | **Pacitan** | **11.95** | **113** | P | Pn | 14 45 07.6 | -3.9 |
| | comp=Z,938nm,1.5s,comp=Z,43µmcomp=Z,758µm | | | | | | |
| **TBJI** | **Tambak Boyo** | **12.14** | **106** | P | **Pn** | **14 45 15.1** | **+0.9** |
| | comp=Z,2µm,1.4s,comp=Z,94µmcomp=Z,915µm | | | | | | |
| **CMBY** | **CAMPBELL BAY** | **12.15** | **329** | *e*P | **Pn** | **14 45 12.4** | **-1.8** |
| CMBY | | | | AMB | AMB | 14 46 16.7 | |
| | comp=Z,795nm,3.1s | | | | | | |
| **PWJI** | **Pagerwojo** | **12.47** | **112** | P | **Pn** | **14 45 16.4** | **-2.2** |
| | comp=Z,995nm,1.4s,comp=Z,43µmcomp=Z,767µm | | | | | | |
| **BWJI** | **Bawean** | **12.72** | **101** | P | **Pn** | **14 45 22.4** | **+0.3** |
| | comp=Z,374nm,1.6s,comp=Z,26µm | | | | | | |
| **SBUM** | **Sibu** | **13.49** | **64** | *e*Pn | **Pn** | **14 45 34.8** | **+2.2** |
| **KMMI** | **Kalianget** | **14.24** | **105** | P | **Pn** | **14 45 42.1** | **-0.8** |
| | comp=Z,2µm,1.5s,comp=Z,109µm | | | | | | |
| **ABJI** | **Asem Bagus** | **14.69** | **107** | P | **Pn** | **14 45 46.9** | **-2.0** |
| | comp=Z,2µm,1.0s,comp=Z,108µmcomp=Z,731µm | | | | | | |
| **BBKI** | **Banjar Baru** | **14.71** | **90** | P | **Pn** | **14 45 48.9** | **-0.4** |
| | comp=Z,4µm,1.5s,comp=Z,138µm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **14.81** | **110** | P | **Pn** | **14 45 47.5** | **-3.1** |
| | baz=15,SNR=7.1 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **14.81** | **110** | P | Pn | 14 45 46.3 | -4.3 |
| | comp=Z,702nm,1.6s,comp=Z,42µmcomp=Z,730µm | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **14.81** | **110** | *e*Pn | Pn | 14 45 46.3 | -4.3 |
| **SRBI** | **Singaraja** | **15.70** | **107** | P | **Pn** | **14 45 57.9** | **-4.4** |
| **IGBI** | **Denpasar** | **15.85** | **110** | P | **Pn** | **14 46 04.2** | **-0.1** |
| | comp=Z,674nm,1.4s,comp=Z,28µmcomp=Z,363µm | | | | | | |
| **DNP** | **Denpasar** | **15.86** | **110** | P | **P** | **14 46 11.0** | **+2.9** |
| **KBKI** | **Kotabaru** | **16.04** | **90** | P | **Pn** | **14 46 05.6** | **-1.1** |
| | comp=Z,747nm,1.2s,comp=Z,73µm | | | | | | |
| **PATY** | **Pattaya** | **16.36** | **3** | P | **Pn** | **14 46 08.3** | **-2.5** |
| | comp=Z,61nm,1.2s,comp=Z,2µm | | | | | | |
| **PBA** | **Port Blair** | **16.77** | **334** | *e*P | Pn | 14 46 14.4 | -1.5 |
| PBA | | | | AMB | AMB | 14 46 40.4 | |
| | comp=Z,2µm,1.6s | | | | | | |
| **BKB** | **Balikpapan** | **16.93** | **83** | P | **P** | **14 46 19.5** | **-0.4** |
| | comp=Z,4µm,1.8s,comp=Z,242µm | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **17.46** | **108** | P | **Pn** | **14 46 21.9** | **-2.9** |
| | comp=Z,333nm,1.5s,comp=Z,34µmcomp=Z,491µm | | | | | | |
| **DLV** | **T Lat** | **17.48** | **28** | *e*Pn | **Pn** | **14 46 23.6** | **-1.5** |
| | comp=Z,3µm,1.5s | | | | | | |
| **NAYO** | **Nakonayok** | **17.77** | **4** | P | **Pn** | **14 46 25.6** | **-2.9** |
| | comp=Z,247nm,1.0s,comp=Z,32µm | | | | | | |
| **SRDT** | **SRDT** | **17.79** | **357** | P | **Pn** | **14 46 26.0** | **-2.7** |
| | comp=Z,694nm,0.8s,comp=Z,110µm | | | | | | |
| **DGPR** | **DIGLIPUR** | **18.06** | **337** | *e*P | **Pn** | **14 46 31.3** | **-0.8** |
| DGPR | | | | AMB | AMB | 14 47 00.6 | |
| | comp=Z,1µm,0.0s | | | | | | |
| **KHLT** | **Khaolaem Dam** | **18.27** | **355** | P | **Pn** | **14 46 32.2** | **-2.4** |
| | comp=Z,553nm,1.3s,comp=Z,23µm | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.69** | **59** | P | **P** | **14 46 39.4** | **-0.1** |
| | baz=19,SNR=64 | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.69** | **59** | *e*P | **P** | **14 46 39.1** | **-0.3** |
| | comp=Z,2µm,1.0s | | | | | | |
| **CHAI** | **Chaiyaphum** | **19.39** | **5** | P | **P** | **14 46 46.6** | **-0.5** |
| | comp=Z,151nm,1.5s,comp=Z,2µm | | | | | | |
| **UBPT** | **Khong Chiam** | **19.43** | **16** | P | **P** | **14 46 46.5** | **-0.9** |
| | comp=Z,1µm,0.9s,comp=Z,107µm | | | | | | |
| **SPSI** | **Sidrap Palu** | **19.63** | **92** | P | **P** | **14 46 48.0** | **-1.7** |
| | comp=Z,934nm,2.1s,comp=Z,124µmcomp=Z,908µm | | | | | | |
| **UMPA** | **Umpang Tak** | **19.64** | **356** | P | **P** | **14 46 47.7** | **-2.1** |
| | comp=Z,122nm,1.1s,comp=Z,2µm | | | | | | |
| **KAPI** | **Kappang** | **19.65** | **95** | P | **P** | **14 46 48.9** | **-1.0** |
| | comp=Z,3.4nm,0.3s,baz=268,slow=9.9,SNR=40 | | | | | | |
| KAPI | | | | S | **Sn** | **14 50 36.1** | **+4.4** |
| | comp=Z,0.4nm,0.3s,baz=197,slow=19,SNR=1.8 | | | | | | |
| **KAPI** | **Kappang** | **19.65** | **95** | P | **P** | **14 46 49.7** | **-0.2** |
| | comp=Z,4µm,1.3s,SNR=89 | | | | | | |
| **KAPI** | **Kappang** | **19.65** | **95** | *e*P | **P** | **14 46 49.5** | **-0.4** |
| | comp=Z,5µm,1.5s | | | | | | |
| KAPI | | | | S | **Sn** | **14 50 36.1** | **+4.4** |
| **TTSI** | **Tana Toraja** | **19.69** | **89** | P | **P** | **14 46 50.5** | **+0.1** |
| | comp=Z,1µm,1.8s,comp=Z,131µm | | | | | | |
| **PCI** | **

QIZ S **S** **14 52 00.5 +2.6**
QIZ sS **sS** **14 52 11.5 +3.6**
QIZ PMZ
comp=Z,1μm,1.9s
QIZ LN
comp=Z,1032μm,17.6s
QIZ LE
comp=Z,489μm,18.1s
QIZ LZ
comp=Z,901μm,17.9s
**QIZ Qiongzhong 24.38 23** *e*P **P** **14 47 38.9 -0.3**
comp=Z,7μm,1.9s
QIZ LR LR
comp=Z,913μm,19.0s
**SOEI Soe 24.77 106** P **P** **14 47 40.5 -2.6**
baz=25,SNR=10
**SOEI Soe 24.77 106** P **P** **14 47 38.9 -4.2**
comp=Z,1μm,1.3s,comp=Z,45μmcomp=Z,621μm
**SOEI Soe 24.77 106** *e*P **P** **14 47 39.8 -3.3**
comp=Z,959nm,0.9s
SOEI LR LR
comp=Z,98μm,18.0s
**SLVN Son La 24.98 8** *e*P **P** **14 47 44.6 -0.2**
**IPIL Ipil 25.07 63** *e*P **P** **14 47 46.6 +1.0**
**MDRS Chennai 25.70 310** *e*P **P** **14 47 50.5 -0.8**
MDRS *ex* x 14 48 07.8
**PAGZ Pagadian 25.82 64** *e*P **P** **14 47 53.3 +0.9**
**SANI Sanana 25.89 87** P **P** **14 47 52.1 -1.0**
comp=Z,538nm,1.5s,comp=Z,53μmcomp=Z,688μm
**MBWA Marble Bar 25.92 134** P **P** **14 47 57.4 +4.2**
SNR=20
**MBWA Marble Bar 25.92 134** *e*P **P** **14 47 51.9 -1.3**
comp=Z,2μm,1.8s
MBWA LR LR
comp=Z,671μm,22.0s
**TRD Trivandrum 25.99 297** *e*P **P** **14 47 54.5 +0.5**
**CTBH Cotabato--PC H 26.35 66**⇑ *e*P **P** **14 47 56.5 -0.7**
**SGSI Sangihe 26.40 75** P **P** **14 47 56.6 -1.1**
comp=Z,2μm,1.9s,comp=Z,76μm
**GUIM Jordan 26.43 58** *e*P **P** **14 47 58.3 +0.3**
**SKHT Srikalahasti 26.53 311** *e*P **P** **14 47 59.3 +0.5**
SKHT *e*S **S** **14 52 32.6 +0.4**
SKHT IVMs_BB IVMs_BB 15 00 22.2
comp=Z,396μm,16.6s
**VIS Vishakhapatnam 26.82 322** *e*P **P** **14 48 01.5 +0.1**
VIS AMB AMB 14 49 03.6
comp=Z,1μm,0.0s
**NLAI Namlea 26.95 90** P **P** **14 48 01.3 -1.3**
comp=Z,365nm,1.1s,comp=Z,40μmcomp=Z,498μm
**CHLP Challavanipeta 27.00 325** *e*P **P** **14 48 03.2 +0.2**
CHLP *e*S **S** **14 52 44.0 +4.3**
CHLP IVMs_BB IVMs_BB 15 00 49.5
comp=Z,319μm,17.5s
**KCP Kidapawan 27.05 67**‖ *e*P P 14 48 12.7 +9.1
**RCP Roxas 27.05 56**⇑ *e*P **P** **14 48 04.8 +1.3**
**BUKP Musuan 27.36 65** *e*P **P** **14 48 05.5 -0.8**
**LLP Lapu-Lapu 27.45 60**⇑ *e*P **P** **14 48 06.2 -1.0**
**DMPH Davao City--Mi 27.46 67** *e*P P 14 48 15.4 +8.2
**DAV Davao City (W) 27.52 68** P **P** **14 48 07.4 -0.3**
comp=Z,134nm,0.4s,baz=218,slow=17,SNR=2.6
DAV LR LR 15 01 07.3
comp=Z,421μm,19.3s,baz=244,slow=41
**DAV Davao City (W) 27.52 68**‖ *e*P **P** **14 48 07.7 0.0**
**LBMI Labuha 27.52 85** P **P** **14 48 07.1 -0.7**
comp=Z,2μm,1.5s,comp=Z,85μmcomp=Z,433μm
**LQP Lukban 27.55 50** *e*P **P** **14 48 08.8 +0.6**
**PVM Polavaram 27.55 319** *e*P **P** **14 48 08.2 +0.3**
PVM *e*S **S** **14 52 50.1 +1.8**
PVM IVMs_BB IVMs_BB 14 59 57.0
comp=Z,165μm,19.5s
**TNTI Ternate 27.58 82** P **P** **14 48 05.0 -3.3**
comp=Z,998nm,1.9s,comp=Z,44μmcomp=Z,647μm
**TNTI Ternate 27.58 82** *e*P **P** **14 48 05.5 -2.8**
comp=Z,6μm,1.8s
**ADKI Addanki 27.70 315** *e*P **P** **14 48 09.4 +0.2**
ADKI *e*S **S** **14 52 51.8 +1.1**
ADKI IVMs_BB IVMs_BB 15 01 41.5
comp=Z,227μm,16.4s
**H08S2 Diego Garcia H 27.78 260** P **P** **14 48 13.2 +3.5**
baz=45,slow=13,SNR=13
H08S2 T T 15 17 14.5
baz=82,slow=75,SNR=4619
**H08S3 Diego Garcia H 27.78 260** P **P** **14 48 11.8 +2.0**
baz=45,slow=13,SNR=15
H08S3 T T 15 17 17.4
baz=82,slow=75,SNR=9112
**DGAR Diego Garcia 27.79 261** *e*P P 14 48 16.6 +6.4
DGAR pmax pmax
comp=Z,3μm,1.6s
**DGAR Diego Garcia 27.79 261** *e*P **P** **14 48 08.4 -1.8**
comp=Z,4μm,1.9s
DGAR LR LR
comp=Z,415μm,22.0s
**H08S1 Diego Garcia H 27.80 260** P P 14 48 14.8 +4.8
baz=45,slow=13,SNR=14
H08S1 T T 15 17 18.3
baz=82,slow=75,SNR=9361
**AAI Ambon 28.04 91** P P 14 48 07.7 -4.7
comp=Z,214nm,1.9s,comp=Z,46μmcomp=Z,901μm
**MATI Mati 28.10 68** *e*P P 14 48 21.9 +9.0
**GQP Guinayangan 28.13 52**⇑ *e*P **P** **14 48 11.1 -2.1**
**MSLP Maasin 28.14 61** *e*P **P** **14 48 12.0 -1.3**
**RCLA Racherla 28.18 313** *e*P **P** **14 48 13.5 -0.1**
RCLA *e*S **S** **14 52 55.4 -2.9**
RCLA IVMs_BB IVMs_BB 15 01 37.9
comp=Z,222μm,17.1s
**BCPH Baguio City Da 28.30 45**⇓ *i*P **P** **14 48 13.2 -1.7**
BCPH *i* S S 14 53 07.5 +7.0
**BUTP Butuan 28.30 64** *e*P P 14 48 27.3 +13
**OCLP Ormoc 28.36 59** *e*P P 14 48 18.9 +3.7
**KMI Kunming 28.59 5** P **P** **14 48 18.5 +1.1**
KMI pP **pP** **14 48 24.3 +0.7**
KMI sP **sP** **14 48 28.0 +1.9**
KMI S **S** **14 53 07.5 +2.5**
KMI sS sS 14 53 25.5 +10
KMI PMZ
comp=Z,370nm,1.5s
KMI LN
comp=Z,762μm,15.8s
KMI LE
comp=Z,821μm,15.8s
KMI LZ
comp=Z,791μm,15.8s
**SRLM Srisailam 28.64 313** *e*P **P** **14 48 17.6 -0.2**
SRLM *e*S **S** **14 53 05.4 -0.3**
SRLM IVMs_BB IVMs_BB 15 02 18.6
comp=Z,275μm,16.1s
**NJS Nagarjunasagar 28.64 315** *e*P **P** **14 48 17.7 0.0**
NJS *e*S **S** **14 53 05.2 -0.4**
NJS IVMs_BB IVMs_BB 15 02 12.3
comp=Z,168μm,16.1s
**BIPH Bislig 28.66 66** *e*P **P** **14 48 17.1 -0.8**
**PLP Palo 28.73 59**‖ *e*P **P** **14 48 17.4 -1.2**
**MSAI Masohi 28.77 91** P P 14 48 13.3 -5.7
comp=Z,37nm,1.3s,comp=Z,7μmcomp=Z,84μm
**SZP Santa 29.01 43** *e*P **P** **14 48 21.5 +0.5**
comp=Z,5μm,1.7s
**MEEK Meekatharra 29.02 144** P **P** **14 48 22.4 +1.3**
baz=29,SNR=8.8
**H08N1 Diego Carcia H 29.11 263** P **P** **14 48 23.1 +1.5**
baz=93,slow=26,SNR=5.8
H08N1 T T 15 20 04.5
baz=305,slow=74,SNR=947
**HKC Hong Kong Obse 29.12 28**⇑ *i*P **P** **14 48 23.0 +1.1**
**H08N2 Diego Garcia H 29.13 263** P **P** **14 48 22.8 +1.1**
baz=93,slow=26,SNR=9.5
H08N2 T T 15 19 52.7
baz=305,slow=74,SNR=911
**H08N3 Diego Garcia H 29.14 263** P **P** **14 48 24.1 +2.3**
baz=93,slow=26,SNR=12
H08N3 T T 15 20 05.2
baz=305
**URV Uravakonda 29.14 310** *e*P **P** **14 48 22.1 -0.1**
URV *e*S **S** **14 53 14.7 +1.2**
URV IVMs_BB IVMs_BB 15 02 47.9
comp=Z,232μm,17.6s
**PVCP Virac 29.31 54**⇓‖ *i*P **P** **14 48 24.2 +0.5**
**GZH Guangzhou 29.44 25**⇑ *i*P P 14 48 30.0 +5.3
GZH pP pP 14 48 37.0 +6.2
GZH S S 14 53 28.8 +11
GZH LN
comp=Z,935μm,19.3s
GZH LE
comp=Z,859μm,17.4s
**MORW Morawa 29.57 151** P **P** **14 48 27.6 +1.7**
baz=30,SNR=4.6
**BNDI Bandanaira 29.74 93** P **P** **14 48 26.2 -1.4**
comp=Z,254nm,1.6s,comp=Z,34μmcomp=Z,517μm
**HYB Hyderabad 29.75 315** *e*P **P** **14 48 26.5 -1.2**
HYB *e**PP **pP** **14 48 31.0 -2.8**
HYB *e*S **S** **14 53 22.0 -1.2**
**HYB Hyderabad 29.75 315** *i*P **P** **14 48 30.5 +2.8**
comp=Z,300nm,1.0s
HYB LR LR 14 59 00.0
comp=Z,152nm,8.0s
**HYB Hyderabad 29.75 315** *e*P **P** **14 48 28.1 +0.4**
HYB AMB AMB 14 48 44.6
comp=Z,309nm,0.6s
**HYB Hyderabad 29.75 315** *e*P **P** **14 48 26.5 -1.2**
HYB *e*pP **pP** **14 48 31.0 -2.8**
HYB *e*S **S** **14 53 22.0 -1.2**
**HYBB Hyderabad (bro 29.76 315** *e*P **P** **14 48 27.2 -0.5**
HYBB *e*S **S** **14 53 27.6 +4.4**
HYBB IVMs_BB IVMs_BB 15 02 54.7
comp=Z,162μm,15.7s
**SHL Shillong 30.00 345** *e*P **P** **14 48 27.9 -2.0**
SHL AMB AMB 14 48 59.0
comp=Z,1μm,1.6s
**RPR Rampur 30.24 318** *e*P **P** **14 48 31.5 -0.4**
RPR *e*S **S** **14 53 35.5 +4.8**
RPR IVMs_BB IVMs_BB 15 06 29.4
comp=Z,191μm,15.8s
**GYA Guiyang 30.48 12**⇑ *i*P **P** **14 48 33.8 -0.2**
GYA sP **sP** **14 48 46.0 +3.4**
GYA PP **PP** **14 49 38.3 -4.7**
GYA S **S** **14 53 35.8 +1.4**
GYA sS **sS** **14 53 47.0 +2.5**
GYA SS **ScP** **14 55 19.8 +5.0**
GYA ScS **ScS** **14 59 11.0 -0.2**
GYA PMZ
comp=Z,620nm,1.1s
GYA LN
comp=Z,472μm,14.4s
GYA LE
comp=Z,935μm,12.2s
GYA LZ
comp=Z,649μm,11.6s
**BOK Bokaro 30.48 334** *e*P **P** **14 48 33.6 -0.4**
BOK AMB AMB 14 49 04.4
comp=Z,982nm,1.3s
**KNRA Kununurra 30.67 115** P **P** **14 48 34.9 -0.8**
baz=31,SNR=32
**SRSP Sriramsagar 30.93 317** *e*P **P** **14 48 37.8 -0.2**
SRSP *e*S **S** **14 53 41.6 +0.1**
SRSP IVMs_BB IVMs_BB 14 59 56.3
comp=Z,128μm,18.5s
**SWI Sorong 31.24 86** P **P** **14 48 39.6 -1.2**
baz=31,SNR=12
**SWI Sorong 31.24 86** P **P** **14 48 38.9 -1.9**
comp=Z,738nm,1.6s,comp=Z,22μmcomp=Z,620μm
**SIJI Sorong 31.25 86** P **P** **14 48 38.8 -2.1**
comp=Z,100nm,1.0s,baz=276,slow=5.7,SNR=16
SIJI S **S** **14 53 45.8 -0.9**
comp=Z,21nm,1.1s,baz=127,slow=20,SNR=1.8
**SAUI Saumlaki 31.34 100** P P 14 48 46.0 +4.3
comp=Z,274nm,1.4s,comp=Z,11μm
**KLRI Killari 31.58 314** *e*P **P** **14 48 43.4 -0.4**
KLRI *e*S **S** **14 53 50.5 -1.4**
KLRI IVMs_BB IVMs_BB 15 00 27.0
comp=Z,245μm,16.9s
**MTN Manton Dam 32.04 109** P **P** **14 48 46.1 -1.8**
baz=32,SNR=20
**MTN Manton Dam 32.04 109** *e*P **P** **14 48 45.9 -2.0**
comp=Z,691nm,1.3s
MTN LR LR
comp=Z,230μm,22.0s
**NGP Nagpur 32.05 321** *e*P **P** **14 48 46.7 -1.1**
NGP *ex* x 14 54 43.3
**FAKI Fak Fak 32.10 90** P **P** **14 48 46.2 -2.2**
baz=32,SNR=28
**FAKI Fak Fak 32.10 90** P P **14 48 46.6 -1.8**
comp=Z,497nm,1.1s,comp=Z,29μmcomp=Z,455μm
**FAKI Fak Fak 32.10 90** *e*P **P** **14 48 46.6 -1.8**
comp=Z,9μm,3.0s
FAKI LR LR
comp=Z,350μm,21.0s
**GOA Goa 32.15 307** *e*P **P** **14 48 49.9 +1.1**
**KLBR Kellerberrin 32.49 151** P **P** **14 48 53.1 +1.5**
baz=33,SNR=6.9
**ODAN Odare 32.61 339** *e*P **P** **14 48 52.1 -0.8**
comp=Z,2μm,1.0s
**TAPN Taplejung 32.94 339** *e*P **P** **14 48 55.8 -0.1**
comp=Z,2μm,0.9s
**RAMN Ramite 32.99 337** *e*P **P** **14 48 56.2 0.0**
comp=Z,2μm,1.3s
**TWG Pinlang 33.24 37** *e*P **P** **14 48 58.8 +0.6**
comp=Z,3μm,1.2s
**KDU Kakadu 33.27 108** P **P** **14 48 56.8 -1.9**
baz=33,SNR=15
**TPUB Ta-pu 33.34 36** *e*P **P** **14 48 57.9 -1.3**
comp=Z,2μm,1.5s
**NWAO Narrogin (SRO) 33.36 153** *e*P **P** **14 48 59.7 +0.5**
NWAO pmax pmax
comp=Z,825nm,1.5s
NWAO MLR MLR
comp=Z,400μm,20.0s
**NWAO Narrogin (SRO) 33.36 153** P **P** **14 49 00.4 +1.2**
baz=34,SNR=12
**NWAO Narrogin (SRO) 33.36 153** *e*P **P** **14 48 59.6 +0.5**
comp=Z,825nm,1.5s
NWAO LR LR
comp=Z,400μm,20.0s
**QZH Quanzhou 33.52 31**⇑ *i*P **P** **14 49 02.8 +2.2**
QZH S **S** **14 54 21.3 -0.4**
QZH PMZ
comp=Z,2μm,1.3s
QZH PMZ
comp=Z,27μm,5.2s
QZH LN
comp=Z,524μm,13.3s
QZH LE
comp=Z,1250μm,13.9s
QZH LZ
comp=Z,892μm,14.2s
**YULB Yu-li 33.81 37** *e*P **P** **14 49 04.8 +1.6**
comp=Z,497nm,1.2s
YULB LR LR
comp=Z,241μm,19.0s
**H01W3 Cape Leeuwin H 33.81 159** T T 15 25 10.5
baz=36,slow=74,SNR=2537
**H01W2 Cape Leeuwin H 33.83 159** T T 15 25 08.0
baz=338,slow=74,SNR=2270
**H01W1 Cape Leeuwin H 33.83 159** T T 15 26 19.8
SNR=1703
**POO Poona 33.90 311** *e*P **P** **14 49 05.1 +1.0**
POO *i* PCS **PcS** **14 55 29.0 +0.1**
POO *i* SCS 14 59 28.0
**SSLB Suanglung 33.91 36** *e*P **P** **14 49 04.6 +0.6**
comp=Z,807nm,1.3s
SSLB LR LR
comp=Z,207μm,19.0s
**PKI Pulchoki 34.01 336** *e*P **P** **14 49 04.5 -0.8**
comp=Z,2μm,1.4s
**PKIN Phulchoki 34.02 336** *e*P **P** **14 49 04.5 -0.8**
**RKPI Ransiki, Papua 34.10 88** P **P** **14 49 03.7 -2.2**
comp=Z,585nm,1.4s,comp=Z,25μm
**GUN Gumba 34.13 337** *e*P **P** **14 49 06.0 -0.3**
comp=Z,2μm,1.0s
**LSA Lhasa 34.13 346** P **P** **14 49 07.0 +0.6**
LSA S **S** **14 54 37.5 +5.5**
LSA LN
comp=Z,283μm,33.9s
LSA LE
comp=Z,649μm,55.3s
LSA LZ
comp=Z,354μm,56.5s
**LSA Lhasa 34.13 346** *e*P **P** **14 49 07.2 +0.7**
LSA pmax pmax
comp=Z,939nm,1.1s
LSA MLR MLR
comp=Z,367μm,20.0s
**LSA Lhasa 34.13 346** *e*P **P** **14 49 07.2 +0.7**
comp=Z,939nm,1.1s
LSA LR LR
comp=Z,367μm,20.0s
**DMN Daman 34.16 336** *e*P **P** **14 49 05.8 -0.7**
comp=Z,2μm,1.1s
**KKN Kakani 34.26 336** *e*P **P** **14 49 06.7 -0.6**
comp=Z,733nm,0.9s
**CD2 Chengdu 34.42 6**⇑ *i*P **P** **14 49 07.8 -0.6**
CD2 pP **pP** **14 49 16.5 +1.9**
CD2 PP **PP** **14 50 26.5 -0.2**
CD2 S **S** **14 54 36.0 +0.4**
CD2 sS **sS** **14 54 50.8 +5.0**
CD2 PcS **PcS** **14 55 28.3 -2.1**
CD2 PMZ
comp=Z,720nm,1.1s
CD2 PMZ
comp=Z,18μm,7.2s
CD2 LN
comp=Z,996μm,16.1s
CD2 LE
comp=Z,1515μm,20.6s
CD2 LZ
comp=Z,1223μm,13.5s
**KMBL Kambalda 34.46 146** P **P** **14 49 09.3 +0.5**
baz=35,SNR=7.9
**WRKA Warakurna 34.54 131** P **P** **14 49 09.9 +0.2**
baz=35,SNR=37
**NACB Ninganchiao 34.58 36** *e*P **P** **14 49 10.0 +0.2**
comp=Z,615nm,1.2s
NACB LR LR
comp=Z,257μm,19.0s
**BHPL Bhopal 34.60 321** *e*P **P** **14 49 10.3 +0.3**
**RKGY Rocky Gully 34.68 155** P **P** **14 49 12.8 +2.2**
baz=35,SNR=6.8
**GKN Gorkha 34.71 336** *e*P **P** **14 49 10.2 -0.9**
comp=Z,2μm,1.1s
**ENH Enshi 34.78 14** *e*P **P** **14 49 11.6 0.0**
comp=Z,630nm,1.1s
ENH LR LR
comp=Z,264μm,19.0s
**YHNB Yeheng 34.83 35** *e*P **P** **14 49 13.2 +1.1**
comp=Z,1μm,1.3s
YHNB LR LR
comp=Z,346μm,20.0s
**KOLN Koldanda 34.94 334** *e*P **P** **14 49 12.6 -0.6**
comp=Z,962nm,0.9s
**TATO Taipei 35.13 35** PFAKE 14 49 30.0 +15
TATO LR LR
comp=Z,264μm,20.0s
**DANN Dangsing 35.38 335** *e*P **P** **14 49 16.2 -0.8**
comp=Z,342nm,1.1s
**WHN Wuhan 36.51 21** P **P** **14 49 27.5 +1.2**
WHN S **S** **14 55 13.5 +5.9**
WHN PMZ
comp=Z,380nm,1.0s
WHN PMZ
comp=Z,14μm,5.8s
WHN LZ
comp=Z,2215μm,19.0s
**WRA Warramunga Arr 37.15 119** P **P** **14 49 30.9 -1.2**
comp=Z,31nm,0.9s,baz=288,slow=11,SNR=112
WRA S **S** **14 55 20.7 +2.8**
comp=Z,24nm,1.1s,baz=291,slow=14,SNR=3.4
WRA PKPPKP **P'P'df** **15 22 22.7 -3.1**
comp=Z,1.7nm,1.0s,baz=171,slow=1.6,SNR=2.6
**WRA Warramunga Arr 37.15 119** P **P** **14 49 30.9 -1.2**
WRA S **S** **14 55 20.7 +2.8**
WRA pmax pmax
comp=Z,47nm,1.0s
WRA smax smax
comp=N,24nm,1.1s
**WRAB Tennant Creek 37.16 119** *e*P **P** **14 49 31.1 -1.0**
WRAB pmax pmax
comp=Z,2μm,1.7s
**WRAB Tennant Creek 37.16 119** P **P** **14 49 32.9 +0.8**
comp=Z,1μm,0.9s,SNR=24
**WRAB Tennant Creek 37.16 119** *e*P **P** **14 49 31.1 -1.0**
comp=Z,2μm,1.8s
WRAB LR LR
comp=Z,400μm,22.0s
**XAN Xi'an 38.28 12** P **P** **14 49 40.5 -0.9**
XAN pP **pP** **14 49 50.5 +2.9**
XAN sP sP 14 49 56.0 +5.9
XAN S **ScP** **14 55 41.0 -1.3**
XAN SS **SnSn** **14 58 19.3 -0.7**
XAN PMZ
comp=Z,640nm,1.1s
XAN PMZ
comp=Z,5μm,5.6s
XAN LN
comp=Z,375μm,16.1s
XAN LE
comp=Z,1373μm,15.5s
XAN LZ
comp=Z,565μm,12.9s
**ASAR Alice Springs 38.29 125** P **P** **14 49 41.2 -0.5**
comp=Z,17nm,0.8s,baz=292,slow=7.8,SNR=97
ASAR S **S** **14 55 37.9 +2.8**
comp=Z,14nm,1.0s,baz=297,slow=10,SNR=4.1
**ASAR Alice Springs 38.29 125** P **P** **14 49 41.2 -0.5**
ASAR S **S** **14 55 37.9 +2.8**
ASAR smax smax
comp=N,15nm,1.0s
**AS16 Alice Springs 38.30 125** P **P** **14 49 41.7 -0.1**
baz=38
**AS01 Alice Springs 38.33 125** *e*P **P** **14 49 40.8 -1.2**
**NDI New Delhi 38.85 327** *e*P **P** **14 49 44.0 -2.2**
NDI *ex* x 19 50 58.0
**LZH Lanzhou 39.56 5**⇑‖ P **P** **14 49 52.8 +0.6**
LZH pP **pP** **14 49 58.3 -0.1**
LZH sP **sP** **14 50 02.0 +1.1**
LZH PP **PnPn** **14 51 28.8 +2.5**
LZH S **S** **14 55 56.3 +2.2**
LZH sS **sS** **14 56 05.0 +0.7**
LZH SS **SS** **14 58 44.5 -4.8**
LZH PMZ
comp=N,1μm,1.2s
LZH PMZ
comp=N,10μm,9.5s
LZH LN
comp=N,527μm,15.8s
LZH LE
comp=N,584μm,13.5s
LZH LZ
comp=N,566μm,16.4s
**NJ2 Nanjing 39.62 25** *e*P **P** **14 49 52.8 +0.3**
NJ2 pP **pP** **14 49 59.0 +0.3**
NJ2 sP **sP** **14 50 02.8 +1.6**
NJ2 S **S** **14 55 55.0 +0.4**
NJ2 sS sS 14 56 10.5 +5.6
NJ2 PMZ
comp=N,310nm,0.8s
NJ2 PMZ
comp=N,64μm,10.6s
NJ2 LN
comp=N,490μm,20.4s
NJ2 LE
comp=N,452μm,19.2s
NJ2 LZ
comp=N,362μm,22.1s
**DDI Dehra Dun 39.71 329** *e*P **P** **14 49 52.2 -1.3**
**SSE Sheshan 39.87 29**⇑‖ P **P** **14 49 55.5 +0.9**
SSE S **S** **14 55 59.8 +1.4**
SSE sS **sS** **14 56 10.3 +1.6**
SSE PMZ
comp=N,81nm,0.7s
SSE PMZ
comp=N,5μm,6.5s
SSE LN
comp=N,827μm,16.1s
SSE LE
comp=N,573μm,16.2s
SSE LZ
comp=N,653μm,13.6s
**BHJ Bhuj 39.88 313** *e*P **P** **14 49 52.5 -2.3**
**GENI Genyem 40.02 90** P P **14 49 53.6 -2.6**
comp=N,672nm,1.2s,comp=N,25μmcomp=N,298μm
**MMPI Merauke 40.34 99** P **P** **14 49 55.9 -2.9**
comp=N,728nm,1.5s,comp=N,25μm
**JAY Jayapura 40.55 90** S **S** **14 56 11.9 +2.5**
comp=N,47nm,0.5s,baz=42,slow=1.4,SNR=1.9
**JAY Jayapura 40.55 90** P **P** **14 49 58.4 -2.3**
baz=40,SNR=19
**SMLA Simla 40.81 329** *i*P **P** **14 50 02.7 +0.2**
SMLA AMB AMB 14 50 15.1
comp=Z,592nm,0.5s
SMLA *i* x x 14 56 25.4
**BHK Bhakra 41.43 329** *ex* **pP** **14 50 16.5 +2.7**
BHK *ex* x 14 50 51.5
**QIS Mount Isa 42.01 117** P **P** **14 50 12.2 -0.3**
baz=42,SNR=24
**DHRM DHARAMSHALA 42.15 329** *e*P **P** **14 50 10.9 -2.8**
DHRM AMB AMB 14 50 37.2
comp=N,934nm,0.9s
**TIY Taiyuan 42.60 14** *e*P **P** **14 50 18.3 +1.2**

TIY S **S** 14 56 41.3 +2.3
TIY SS **SS** 14 59 44.0 -5.5
TIY PMZ
comp=Z,740nm,1.4s
TIY PMZ
comp=Z,12μm,5.0s
TIY LN
comp=Z,313μm,12.7s
TIY LE
comp=Z,555μm,13.8s
TIY LZ
comp=Z,637μm,13.8s
**GTA Gaotai** 42.72 360 ⇑P **P** 14 50 18.0 -0.2
GTA pP **pP** 14 50 24.3 -0.1
GTA sP **sP** 14 50 27.0 +0.1
GTA PcS **PcS** 14 56 00.5 -1.4
GTA S **S** 14 56 43.5 +2.6
GTA sS **sS** 14 56 53.5 +2.3
GTA SS **SS** 14 59 50.8 -1.3
GTA ScS **ScS** 15 00 18.8 +0.1
GTA PMZ
comp=Z,9μm,8.0s
GTA LN
comp=Z,560μm,14.2s
GTA LE
comp=Z,849μm,16.6s
GTA LZ
comp=Z,504μm,14.2s
**COEN Coen** 43.74 106 P **P** 14 50 26.0 -0.6
baz=44,SNR=11
**COEN Coen** 43.74 106 *e*P **P** 14 50 27.8 +1.2
comp=Z,744nm,1.8s
**BBOO Buckleboo** 44.49 135 P **P** 14 50 32.7 +0.3
baz=45,SNR=14
**BBOO Buckleboo** 44.49 135 *e*P **P** 14 50 32.6 +0.2
comp=Z,4μm,3.0s
**MRIV Mauritius Mete** 44.71 245 *e*P **P** 14 50 35.5 +1.1
**BTO Baotou** 44.85 11 *e*P **P** 14 50 35.5 +0.3
**HHC Hu-ho-hao-te** 45.39 12 *e*P **P** 14 50 40.5 +1.0
HHC sP **sP** 14 50 48.0 -0.3
HHC PMZ
comp=Z,200nm,1.9s
HHC PMZ
comp=Z,15μm,5.5s
HHC LN
comp=Z,720μm,13.0s
HHC LE
comp=Z,478μm,14.9s
HHC LZ
comp=Z,550μm,13.1s
**MTSU Mount Surprise** 45.64 112 P **P** 14 50 41.2 -0.6
baz=46,SNR=19
**BJT Baijiatuau** 45.77 17 *e*P **P** 14 50 43.2 +0.8
BJT pmax pmax
comp=Z,1μm,1.3s
BJT MLR MLR
comp=Z,464μm,19.0s
**BJT Baijiatuau** 45.77 17 *e*P **P** 14 50 43.2 +0.8
comp=Z,1μm,1.3s
BJT LR LR
comp=Z,464μm,19.0s
**BJI Beijing** 45.80 17 P **P** 14 50 43.0 +0.4
BJI S S 14 57 34.5 +9.2
BJI PMZ
comp=Z,11μm,4.9s
BJI LN
comp=Z,282μm,17.3s
BJI LE
comp=Z,521μm,16.3s
BJI LZ
comp=Z,309μm,25.0s
**KSGWJ Gwangju-acc** 45.98 31 P **P** 14 50 45.4 +1.2
SNR=6.8
**RER Riviere de l'E** 46.53 244 PFAKE 14 51 00.0 +11
RER LR LR
comp=Z,158μm,19.0s
**KSGUS GUNSAN** 46.60 30 P **P** 14 50 50.0 +1.0
SNR=9.4
**JNU Nakatsue** 46.65 36 P **P** 14 50 48.0 -1.5
comp=Z,166nm,1.2s,baz=196,slow=4.8,SNR=20
JNU S S 14 57 30.0 -7.9
comp=Z,16nm,1.0s,baz=45,slow=20,SNR=2.7
JNU LR LR 15 13 25.2
comp=Z,181μm,18.0s,baz=248,slow=40
**JNU Nakatsue** 46.65 36 *e*P **P** 14 50 48.9 -0.6
comp=Z,2μm,1.4s
JNU S S 14 57 30.0 -7.9
**DL2 Dalian** 46.66 23 ⇑*i*P **P** 14 50 49.3 -0.1
DL2 S **S** 14 57 42.3 +4.4
DL2 PMZ
comp=Z,670nm,1.5s
DL2 PMZ
comp=Z,18μm,7.3s
DL2 LN
comp=Z,130μm,22.3s
DL2 LE
comp=Z,292μm,19.5s
DL2 LZ
comp=Z,313μm,15.1s
**PMG Port Moresby** 47.08 100 P **P** 14 50 52.2 -1.0
comp=Z,44nm,0.7s,baz=312,slow=1.7,SNR=9.9
**PMG Port Moresby** 47.08 100 *e*P **P** 14 50 52.8 -0.4
PMG pmax pmax
comp=Z,810nm,1.4s
**PMG Port Moresby** 47.08 100 P **P** 14 50 52.5 -0.7
baz=47,SNR=8.7
**PMG Port Moresby** 47.08 100 *e*P **P** 14 50 52.2 -1.0
comp=Z,810nm,1.4s
PMG LR LR
comp=Z,272μm,22.0s
**MANU Manus Island** 47.23 90 P **P** 14 50 53.4 -0.9
baz=47
**MANU Manus Island** 47.23 90 *e*P **P** 14 50 54.0 -0.3
comp=Z,2μm,2.5s
**KSCEA Cheonan** 47.45 30 P **P** 14 50 56.6 +1.0
SNR=7.7
**GUMO Guam** 47.56 68 P **P** 14 50 53.9 -2.9
comp=Z,32nm,0.5s,baz=336,slow=5.1,SNR=5.9
GUMO S S 14 58 00.4 +9.1
comp=Z,21nm,0.7s,baz=234,slow=19,SNR=1.6
**GUMO Guam** 47.56 68 P **P** 14 50 53.9 -2.9
GUMO S S 14 58 00.4 +9.1
GUMO pmax pmax
comp=Z,32nm,0.5s
**KSSAJ Sangju** 47.58 31 P **P** 14 50 57.6 +0.9
SNR=12
**INCN Inchon** 47.67 29 *e*P **P** 14 50 56.1 -1.3
comp=Z,4μm,2.7s
INCN LR LR
comp=Z,279μm,20.0s
**KBL Kabul** 47.83 325 *e*P **P** 14 51 01.0 +2.1
KBL pmax pmax
comp=Z,3μm,2.5s
**KBL Kabul** 47.83 325 *e*P **P** 14 51 01.0 +2.1
comp=Z,3μm,2.5s
**WBK Wadi Bani Khal** 47.83 305 ⇑P **P** 14 50 59.0 +0.1
SNR=50
**CTA Charters Tower** 47.87 114 P **P** 14 50 58.9 -0.4
comp=Z,72nm,1.0s,baz=284,slow=9.9,SNR=22
CTA S **S** 14 57 58.3 +2.5
comp=Z,6.9nm,0.9s,baz=338,slow=19,SNR=1.6
**CTA Charters Tower** 47.87 114 P **P** 14 50 58.9 -0.4
CTA S **S** 14 57 58.3 +2.5
CTA pmax pmax
comp=Z,72nm,1.0s
CTA smax smax
comp=N,7.0nm,0.9s
**CTAO Charters Tower** 47.87 114 *e*P **P** 14 50 58.8 -0.4
CTAO pmax pmax
comp=Z,711nm,1.1s
CTAO MLR MLR
comp=Z,495μm,22.0s
**CTAO Charters Tower** 47.87 114 *e*P **P** 14 50 58.8 -0.4
comp=Z,711nm,1.1s
CTAO LR LR
comp=Z,495μm,22.0s
**KSICN Icheon** 47.90 30 P **P** 14 51 00.9 +1.8
SNR=9.7
**QLP Quilpie** 48.03 123 P **P** 14 51 01.0 +0.7
baz=48,SNR=36
**KSMUS Musan** 48.05 29 P **P** 14 51 00.9 +0.6
SNR=7.5
**KSAR Wonju Array Be** 48.25 30 P **P** 14 51 02.6 +0.8
KSAR S **S** 14 57 58.5 -2.0
**KSAR Wonju Array Be** 48.25 30 P **P** 14 51 02.5 +0.8
KSAR S **S** 14 57 58.5 -2.0
**KSH Kashi** 48.25 335 ⇑*i*P **P** 14 51 00.5 -1.4
KSH *e*pP **pP** 14 51 06.5 -1.8
KSH *e*sP **sP** 14 51 09.5 -1.2
KSH *e*PcP **PcP** 14 52 30.0 +1.1
KSH S S 14 57 52.8 -7.9
KSH ScS **ScS** 15 00 49.0 -5.2
KSH PMZ
comp=Z,3μm,5.1s
KSH LN
comp=Z,159μm,18.9s
KSH LE
comp=Z,631μm,18.7s
KSH LZ
comp=Z,372μm,19.6s
**KSRS Korea Array** 48.28 30 P **P** 14 51 02.5 +0.6
comp=Z,110nm,1.2s,baz=223,slow=6.5,SNR=54
KSRS S **S** 14 57 58.5 -2.3
comp=Z,2.3nm,0.9s,baz=312,slow=14,SNR=2.9
**KSRS Korea Array** 48.28 30 P **P** 14 51 02.6 +0.6
KSRS S **S** 14 57 58.5 -2.3
KSRS pmax pmax
comp=Z,110nm,1.2s
KSRS smax smax
comp=N,2.0nm,1.0s
**KS01 Wonju Array Si** 48.28 30 *e*P **P** 14 51 01.3 -0.8
**JMDO Jabal Madar** 48.43 304 ⇑P **P** 14 51 03.9 +0.3
SNR=37
**WMQ Urumqi** 48.44 348 P **P** 14 51 04.0 +0.8
WMQ sP **sP** 14 51 10.0 -2.0
WMQ PP **PP** 14 52 55.0 -1.1
WMQ PcS **PcS** 14 56 23.0 -2.3
WMQ S **S** 14 58 05.0 +1.9
WMQ ScS **ScS** 15 00 54.0 -1.2
WMQ SS **SS** 15 01 28.0 -5.2
WMQ PMZ
comp=N,2μm,1.0s
WMQ PMZ
comp=N,21μm,5.0s
WMQ LN
comp=N,262μm,16.0s
WMQ LE
comp=N,578μm,20.0s
WMQ LZ
comp=N,175μm,16.0s
**KSULJ Uljin** 48.46 32 P **P** 14 51 06.0 +2.5
SNR=6.9
**KSJES JEONGSEON** 48.63 30 P **P** 14 51 06.3 +1.5
SNR=9.1
**KSIJA INJE** 48.78 30 P **P** 14 51 08.0 +2.1
SNR=8.8
**SMDO Samad** 48.79 305 ⇓P **P** 14 51 06.6 +0.3
SNR=57
**ANA2 Anatahan** 49.21 65 *e*P **P** 14 51 10.7 +1.2
**HOQ Hoqain** 49.63 305 ⇓P **P** 14 51 13.4 +0.7
SNR=32
**SFK Sufi-Kurgan** 49.73 333 P **P** 14 51 13.4 -0.1
SFK pmax pmax
comp=Z,3μm,2.3s
**RBK Rabkut** 49.87 296 ⇓P **P** 14 51 15.4 +0.8
SNR=21
**SNY Shenyang** 49.93 23 ⇑P **P** 14 51 13.8 -0.8
SNY PMZ
comp=Z,210nm,1.6s
SNY PMZ
comp=Z,23μm,7.1s
SNY LN
comp=Z,356μm,15.7s
SNY LE
comp=Z,403μm,16.5s
SNY LZ
comp=Z,537μm,15.7s
**ARQ Araqi** 50.17 304 ⇑P **P** 14 51 16.9 +0.1
SNR=25
**PDGK Podgornoye** 50.21 340 P **P** 14 51 17.3 +0.6
PDGK pmax pmax
comp=Z,2μm,1.4s
**ARPS Mount Arapiles** 50.62 136 P **P** 14 51 21.9 +1.9
baz=51,SNR=7.6
**ABTO Aybut** 50.63 296 ⇓P **P** 14 51 20.9 +0.5
SNR=18
**CBIJ Chichi jima** 50.75 50 P **P** 14 51 21.0 -0.1
comp=Z,1μm,1.0s
**AAA Alma-Ata** 51.05 338 *e*P **P** 14 51 23.3 +0.1
AAA *e*S **S** 14 58 42.7 +3.0
AAA pmax pmax
comp=Z,43μm,6.6s
AAA MLR MLR
comp=Z,329μm,18.0s
**DZET Dzherino** 51.07 329 P **P** 14 51 21.3 -2.1
DZET pmax pmax
comp=Z,629nm,1.3s
**CMSA Cobar Meteorol** 51.08 128 P **P** 14 51 24.1 +0.5
baz=51,SNR=37
**UCH Uchtor** 51.12 336 P **P** 14 51 24.1 -0.1
SNR=70
**ASHO Ashiyiah** 51.15 306 ⇑P **P** 14 51 25.0 +0.7
SNR=27
**ASHO Ashiyiah** 51.15 306 ⇑*i*P **P** 14 51 24.9 +0.7
SNR=6.6
**UOSS Wadi Hilu** 51.15 306 P **P** 14 51 24.2 0.0
comp=Z,282nm,1.0s,SNR=5.3
**UOSS Wadi Hilu** 51.15 306 *e*P **P** 14 51 24.2 0.0
comp=Z,240nm,1.3s
**HATD Hatta, Dubai** 51.16 306 ⇓P **P** 14 51 24.0 -0.2
SNR=44
**HATD Hatta, Dubai** 51.16 306 ⇓*i*P **P** 14 51 23.6 -0.6
SNR=45
**TKM2 Tokmak 2** 51.27 337 *e*P **P** 14 51 24.7 -0.3
TKM2 pmax pmax
comp=Z,830nm,1.0s
**TKM2 Tokmak 2** 51.27 337 P **P** 14 51 24.9 -0.1
SNR=133
**TKM2 Tokmak 2** 51.27 337 *e*P **P** 14 51 24.7 -0.3
comp=Z,829nm,1.0s
TKM2 LR LR
comp=Z,430μm,19.0s
**KBK Karagaybulak** 51.30 336 P **P** 14 51 25.7 +0.5
SNR=106
**AML Almayashu** 51.38 335 P **P** 14 51 25.8 -0.2
SNR=53
**SONM Songino Array** 51.44 5 P **P** 14 51 26.7 +0.6
comp=Z,119nm,0.8s,baz=189,slow=9.1,SNR=169
SONM S **S** 14 58 48.7 +3.7
comp=Z,3.2nm,1.0s,baz=183,slow=8.1,SNR=1.8
SONM LR LR 15 15 42.1
comp=Z,251μm,18.6s,baz=190,slow=39
SONM PKP2bc 15 22 15.2
comp=Z,2.8nm,1.1s,baz=297,slow=1.0,SNR=5.5
SONM PKP2ab 15 22 42.6
comp=Z,2.5nm,1.1s,baz=172,slow=3.0,SNR=4.0
**SONA1 Songino Array** 51.45 5 *e*P **P** 14 51 26.8 +0.6
**AAK Ala-Archa** 51.46 336 S **S** 14 58 44.6 -1.0
comp=Z,7.3nm,0.9s,baz=255,slow=18,SNR=1.7
AAK LR LR 15 16 58.8
comp=Z,418μm,18.3s,baz=146,slow=40
AAK PKPPKP **P'P'df** 15 22 03.5 -1.2
comp=Z,2.0nm,0.9s,baz=225,slow=1.4,SNR=3.4
**AAK Ala-Archa** 51.46 336 *e*P **P** 14 51 26.9 +0.5
AAK S **S** 14 58 44.6 -1.0
AAK pmax pmax
comp=Z,126nm,1.6s
**AAK Ala-Archa** 51.46 336 P **P** 14 51 26.3 -0.1
comp=Z,715nm,1.3s,SNR=31
**AAK Ala-Archa** 51.46 336 P **P** 14 51 26.3 -0.1
SNR=37
**AAK Ala-Archa** 51.46 336 *e*P **P** 14 51 26.9 +0.5
comp=Z,126nm,1.6s
AAK S **S** 14 58 44.6 -1.0
AAK P'P' 15 22 03.5
**ULN Ulaanbaatar** 51.54 6 *e*P **P** 14 51 27.5 +0.6
ULN pmax pmax
comp=Z,1μm,1.4s
**ULN Ulaanbaatar** 51.54 6 P **P** 14 51 27.8 +0.9
SNR=139
**ULN Ulaanbaatar** 51.54 6 *e*P **P** 14 51 27.5 +0.6
comp=Z,1μm,1.4s
ULN LR LR
comp=Z,179μm,21.0s
**FAQ Al Faqa, Dubai** 51.56 306 ⇓*i*P **P** 14 51 26.3 -0.9
SNR=48
**FRU Bishkek** 51.58 336 ⇑*i*P **P** 14 51 26.5 -0.6
FRU *e*S **S** 14 58 42.5 -4.5
FRU *i* 14 58 51.0
FRU pmax pmax
comp=Z,4μm,2.4s
FRU MLR MLR
comp=Z,485μm,18.5s
**NAZ Nazwa, Dubai** 51.61 306 ⇑P **P** 14 51 27.8 +0.2
SNR=26
**NAZ Nazwa, Dubai** 51.61 306 ⇑*i*P **P** 14 51 26.9 -0.7
SNR=25
**CHMS Chumysh** 51.66 336 P **P** 14 51 28.3 +0.5
SNR=39
**ASUD Al Ashush, Dub** 51.72 305 ⇑*i*P **P** 14 51 28.4 0.0
SNR=22
**EKS2 Erkin-Say** 51.78 335 *e*P **P** 14 51 28.9 +0.1
EKS2 pmax pmax
comp=Z,715nm,1.1s
EKS2 MLR MLR
comp=Z,283μm,20.0s
**EKS2 Erkin-Say** 51.78 335 P **P** 14 51 28.9 +0.1
SNR=111
**EKS2 Erkin-Say** 51.78 335 *e*P **P** 14 51 28.9 +0.1
comp=Z,715nm,1.1s
EKS2 LR LR
comp=Z,283μm,20.0s
**RMQ Roma** 51.83 121 P **P** 14 51 30.8 +1.5
baz=52,SNR=22
**USP Ospenovka** 51.99 336 P **P** 14 51 29.9 -0.3
SNR=129
**MNAS Manas** 52.18 334 P **P** 14 51 31.7 0.0
MNAS pmax pmax
comp=Z,878nm,1.5s
**PAF Port-aux-Franc** 52.26 204 P **P** 14 51 34.1 +2.1
PAF MLR MLR
comp=Z,209μm,21.0s
**PAF Port-aux-Franc** 52.26 204 P **P** 14 51 34.1 +2.1
PAF LR LR
comp=Z,209μm,21.0s
**JHJ2 Mitsune** 52.32 43 P **P** 14 51 34.4 +1.7
**CN2 Changchun** 52.34 23 *e*P **P** 14 51 32.0 -0.7
CN2 *es*P **sP** 14 51 39.0 -2.5
CN2 *e*S **S** 14 58 56.0 -1.2
CN2 SS **SS** 15 02 32.3 -3.0
CN2 PMZ
comp=Z,120nm,0.9s
**IDAH Dahanechah** 52.46 317 *e*P **P** 14 51 34.3 +0.1
**MK01 Makanchi Array** 52.49 345 *e*P **P** 14 51 32.3 -1.5
**MK31 Makanchi Array** 52.52 345 *i* P **P** 14 51 33.8 -0.2
MK31 pmax pmax
comp=Z,1μm,1.3s
**MKAR Makanchi Array** 52.52 345 P **P** 14 51 33.7 -0.2
comp=Z,129nm,1.0s,baz=154,slow=7.2,SNR=207
MKAR S **S** 14 59 01.6 +2.0
comp=Z,5.8nm,1.0s,baz=187,slow=22,SNR=2.1
MKAR LR LR 15 20 11.9
comp=Z,115μm,18.3s,baz=158,slow=43
MKAR PKP2bc 15 22 13.6
comp=Z,2.0nm,0.9s,baz=274,slow=1.9,SNR=3.7
**MKAR Makanchi Array** 52.52 345 P **P** 14 51 33.8 -0.2
baz=53
**MAKZ Makanchi** 52.61 344 *e*P **P** 14 51 35.2 +0.5
**IKOO Kooshah** 52.88 316 *e*P **P** 14 51 36.1 -1.1
**ITEG Tejag** 53.32 316 *e*P **P** 14 51 39.4 -1.0
**MAJO Matsushiro** 53.39 38 *e*P **P** 14 51 39.7 -1.0
MAJO pmax pmax
comp=Z,5μm,2.8s
**MAJO Matsushiro** 53.39 38 *e*P **P** 14 51 38.4 -2.2
comp=Z,5μm,2.8s
MAJO LR LR
comp=Z,151μm,20.0s
**MAT Matsushiro** 53.39 38 P **P** 14 51 38.9 -1.8
MAT S S 14 59 18.2 +6.3
**MJAR Matsushiro Arr** 53.39 38 P **P** 14 51 39.3 -1.4
comp=Z,22nm,0.9s,baz=215,slow=6.7,SNR=35
MJAR S **S** 14 59 17.5 +5.5
comp=Z,1.5nm,0.8s,baz=277,slow=15,SNR=2.3
MJAR LR LR 15 15 39.7
comp=Z,42μm,19.4s,baz=220,slow=38
**MJAR Matsushiro Arr** 53.39 38 P **P** 14 51 39.3 -1.4
MJAR S **S** 14 59 17.5 +5.5
MJAR pmax pmax
comp=Z,22nm,0.9s
MJAR smax smax
comp=N,2.0nm,0.8s
MJAR MLR MLR
comp=Z,42μm,19.4s
**EIDS Eidsvold** 53.52 119 P **P** 14 51 42.1 +0.3
baz=54,SNR=8.1
**EIDS Eidsvold** 53.52 119 *e*P **P** 14 51 42.6 +0.8
comp=Z,376nm,1.0s
**KK31 Karatay Array** 53.55 333 *i* P **P** 14 51 40.5 -1.2
KK31 pmax pmax
comp=Z,4μm,3.0s
**KKAR Karatay Array** 53.55 333 *e*P **P** 14 51 41.0 -0.7
**KKAR Karatay Array** 53.55 333 *e*P **P** 14 51 40.8 -0.9
**TOO Toolangi** 53.55 135 P **P** 14 51 43.9 +2.0
baz=54,SNR=4.9
**MUKL Al Mukalla** 53.67 291 ⇑*e*P **P** 14 51 44.0 +1.0
**ZAK Zakamensk** 53.76 3 *e*P **P** 14 51 43.6 +0.4
ZAK pmax pmax
comp=Z,186nm,1.4s
**MSHR Mys Shultsa** 53.81 28 *c i*P **P** 14 51 43.6 0.0
**OPO Ambohidratompo** 53.83 250 LR LR 15 10 56.7
comp=Z,319μm,20.2s,baz=64,slow=32
**ABPO Ambohimpanom** 53.86 249 *e*P **P** 14 51 44.9 +0.3
ABPO pmax pmax
comp=Z,4μm,2.1s
**ABPO Ambohimpanom** 53.86 249 P **P** 14 51 45.2 +0.6
comp=Z,759nm,1.5s,SNR=6.7
**ABPO Ambohimpanom** 53.86 249 *e*P **P** 14 51 43.7 -0.9
comp=Z,4μm,2.1s
ABPO LR LR
comp=Z,119μm,19.0s
**YNG Young** 54.27 130 P **P** 14 51 48.5 +1.4
baz=54,SNR=9.1
**IMYA Miami** 54.46 320 *e*P **P** 14 51 47.1 -1.6
**VLA Vladivostok** 54.57 28 *α i*P **P** 14 51 50.1 +1.0
VLA *e* 14 53 52.6
VLA *e*S **S** 14 59 29.6 +2.0
VLA pmax pmax
comp=Z,351nm,2.0s
VLA MLR MLR
comp=E,7117μm,16.0s
**MDJ Mudanjiang** 54.71 26 P **P** 14 51 50.5 +0.4
MDJ pP **pP** 14 51 56.5 0.0
MDJ sP **sP** 14 51 59.0 +0.1
MDJ PcP **PcP** 14 52 50.5 -2.1
MDJ PP **PP** 14 53 50.8 -2.1
MDJ S **S** 14 59 34.0 +4.6
MDJ ScS **ScS** 15 01 36.3 -2.1
MDJ SS **SS** 15 03 10.5 -2.2
MDJ PMZ
comp=E,17μm,9.0s
MDJ LN
comp=E,419μm,22.0s
MDJ LE
comp=E,250μm,22.0s
MDJ LZ
comp=E,554μm,15.7s
**MDJ Mudanjiang** 54.71 26 *e*P **P** 14 51 49.1 -0.9
comp=E,574nm,1.4s
MDJ LR LR
comp=Z,295μm,19.0s
**HVS Khovu-Aksy** 54.73 355 *d i*P **P** 14 51 49.5 -0.7
HVS pmax pmax
comp=Z,149nm,1.5s
HVS MLR MLR
comp=Z,254μm,13.0s
**IMOG Moghan** 54.81 320 *e*P **P** 14 51 50.2 -1.1
**MOY Mondy** 54.99 1 *e*P **P** 14 51 52.0 -0.1
**TLY Talaya** 55.08 3 S **S** 14 59 34.2 0.0
comp=Z,3.8nm,0.5s,baz=258,slow=20,SNR=2.0
**TLY Talaya** 55.08 3 *i* P **P** 14 51 53.3 +0.7
TLY *e* 14 52 47.4
TLY *e*PPP PPP 14 55 10.6
TLY *e*S S 14 59 41.0 +6.8
TLY pmax pmax
comp=Z,478nm,1.6s
TLY MLR MLR
comp=Z,383nm,17.0s
**TLY Talaya** 55.08 3 P **P** 14 51 53.6 +1.0
comp=Z,1μm,1.1s,SNR=38
**CAN Canberra** 55.13 131 *e*P **P** 14 51 52.7 -0.7
CAN pmax pmax
comp=Z,1μm,1.9s
CAN MLR MLR
comp=Z,443μm,20.0s
**CAN Canberra** 55.13 131 P **P** 14 51 54.5 +1.1
baz=55
**CAN Canberra** 55.13 131 *e*P **P** 14 51 52.7 -0.7
comp=Z,1μm,1.9s
CAN LR LR
comp=Z,443μm,20.0s

**IPAY Payeh 55.23 320** *e*P **P** **14 51 53.2 -1.1**
**HIA Hailar 55.27 16** *e*P **P** **14 51 52.7 -1.4**
HIA pmax pmax
comp=Z,405nm,1.3s
HIA MLR MLR
comp=Z,285μm,21.0s
**HIA Hailar 55.27 16** *e*P **P** **14 51 52.7 -1.4**
comp=Z,405nm,1.3s
HIA LR LR
comp=Z,285μm,21.0s
**CNB Canberra Magne 55.40 131** P **P** **14 51 56.3 +0.9**
baz=56,SNR=8.3
**ARMA Armidale 55.44 125** P **P** **14 51 57.4 +1.6**
baz=56,SNR=5.1
**ARMA Armidale 55.44 125** *e*P **P** **14 51 57.5 +1.6**
comp=Z,2μm,1.8s
**USRK Ussuriysk Ar. 55.45 27** P **P** **14 51 55.4 -0.1**
comp=Z,194nm,0.8s,baz=223,slow=6.6,SNR=135
USRK S **S** **14 59 41.3 +2.0**
comp=Z,1.5nm,0.6s,baz=173,slow=27,SNR=2.0
USRK LR LR 15 19 05.6
comp=Z,251μm,18.7s,baz=214,slow=40
**IMEH Mehriz 55.48 312** *e*P **P** **14 51 54.5 -1.7**
**IAKL Akhelmad 55.48 320** *e*P **P** **14 51 55.2 -1.0**
**ISRV Sarvestan 55.64 309** *e*P **P** **14 51 57.0 -0.5**
**IRK Irkutsk 55.67 3**⇑ *i*P **P** **14 51 57.0 +0.1**
IRK *e*S S 14 59 48.1 +6.1
IRK pmax pmax
comp=Z,2μm,2.0s
**IKRD Kardeh 55.74 320** *e*P P 14 51 52.7 -5.2
**IPAR Pars 55.90 310** *e*P **P** **14 51 58.9 -0.5**
**MGCD Mangrove Creek 55.95 128** P **P** **14 51 59.2 -0.1**
baz=56,SNR=4.8
**IEMG Emamgholi 56.03 321** *e*P **P** **14 51 59.2 -1.0**
**ICHK Chekchek 56.06 313** *e*P **P** **14 51 58.5 -1.8**
**ISFR Sfrayin 56.23 320** *e*P **P** **14 52 00.5 -1.0**
**ISAD Sadrabad 56.42 312** *e*P **P** **14 52 01.9 -1.2**
**CIT Chita 56.51 10** *e*P **P** **14 52 03.8 +0.9**
CIT *e* 14 54 06.4
CIT *e* 15 00 00.2
CIT pmax pmax
comp=Z,2μm,3.0s
**GEYT Alibeck 56.68 321** P **P** **14 52 03.5 -0.9**
comp=Z,18nm,0.8s,baz=145,slow=8.2,SNR=25
GEYT S **S** **14 59 54.0 -2.1**
comp=Z,2.3nm,0.8s,baz=138,slow=13,SNR=2.3
GEYT LR LR 15 17 12.3
comp=Z,173μm,18.8s,baz=150,slow=37
GEYT PKPPKP **P'P'df** **15 22 01.5 +3.4**
comp=Z,0.7nm,0.4s,baz=217,slow=1.4,SNR=2.7
GEYT PKP2ab 15 22 26.2
comp=Z,0.9nm,0.4s,baz=321,slow=2.0,SNR=3.1
**ISHV Shirvan 56.71 320** *e*P **P** **14 52 04.9 +0.1**
**BDHA Al Bayda' 56.80 289**⇑ *e*P **P** **14 52 06.9 +1.0**
**IKAZ Kazeroun 56.81 309** *e*P **P** **14 52 05.2 -0.7**
**OTUK Ortayu 56.98 338** P **P** **14 52 05.7 -0.6**
OTUK pmax pmax
comp=Z,1μm,1.6s
**KURBB Kurchatov Arra 57.03 344** PKPPKP **P'P'df** **15 21 57.9 +1.8**
comp=Z,0.9nm,0.5s,baz=294,slow=5.2,SNR=4.1
KURBB PKP2bc 15 22 14.8
comp=Z,2.9nm,0.9s,baz=336,slow=2.0,SNR=5.6
**LBOS 57.08 289**⇑ *e*P **P** **14 52 09.0 +1.0**
LBOS *i*S **S** **15 00 05.0 +2.5**
**KURK Kurchatov 57.09 344** *e*P **P** **14 52 06.3 -0.7**
**KURK Kurchatov 57.09 344** P **P** **14 52 06.9 -0.1**
comp=Z,1μm,1.1s,SNR=83
**KURK Kurchatov 57.09 344** *e*P **P** **14 52 06.3 -0.7**
comp=Z,9μm,2.1s
KURK P'P' 15 21 57.9
KURK ⇑*e* 15 22 14.8
**IRAM Ramesheh 57.34 312** *e*P **P** **14 52 07.9 -1.6**
**TAU Tasmania Unive 57.35 140** PFAKE 14 52 20.0 +11
TAU LR LR
comp=Z,219μm,20.0s
**IGAR Gharneh 57.88 312** *e*P **P** **14 52 12.1 -1.2**
**IZEF Zefreh 57.90 313** *e*P **P** **14 52 11.7 -1.8**
**TRBA At Turbah 58.01 288** *e*P **P** **14 52 15.5 +1.0**
**DAMY Dhamar 58.05 289** *e*P **P** **14 52 14.8 0.0**
comp=Z,399nm,1.1s
**DHBB Dhamar BB 58.05 289**⇑ *e*P **P** **14 52 15.8 +1.0**
DHBB AMb AMB 14 52 18.5
comp=Z,3μm,1.5s
**UDYN Al 'Udayn 58.31 289**⇑ *e*P **P** **14 52 17.3 +0.8**
**IKLH Kolahrood 58.66 313** *e*P **P** **14 52 17.9 -0.8**
**ZAA0 Zalesovo Array 58.68 349** *e*P **P** **14 52 17.0 -1.1**
**ZALV Zalesovo Beam 58.68 349** P **P** **14 52 17.7 -0.4**
comp=Z,477nm,1.1s,baz=180,slow=6.1,SNR=172
ZALV S **S** **15 00 21.1 -0.4**
comp=Z,5.3nm,1.0s,baz=186,slow=7.2,SNR=2.0
ZALV PKP2bc 15 22 07.0
comp=Z,6.1nm,1.0s,baz=318,slow=2.0,SNR=4.8
**ZALV Zalesovo Beam 58.68 349** P **P** **14 52 17.7 -0.4**
ZALV S **S** **15 00 21.1 -0.4**
ZALV pmax pmax
comp=Z,472nm,1.2s
ZALV smax smax
comp=N,5.0nm,1.0s
**IPIR Pirpir 58.87 312** *e*P **P** **14 52 19.8 -0.4**
**ATD Arta Tunnel 58.87 286** LR LR 15 12 52.0
comp=N,90μm,20.7s,baz=98,slow=31
**IFIR Firoozkooh 58.98 316** *e*P **P** **14 52 20.6 -0.3**
**PATS Pohnpei 59.01 80** P **P** **14 52 19.1 -2.1**
baz=59,SNR=4.7
**HAJJ Hajjah 59.06 291**⇑ *e*P **P** **14 52 22.8 +1.0**
HAJJ AMb AMB 14 52 25.6
comp=Z,3μm,1.6s
**KLR Kul'dur 59.28 24** *i*P **P** **14 52 21.4 -1.0**
**IDMV Damavand 59.45 315** *e*P **P** **14 52 22.5 -1.7**
**RAYN Ar Rayn 59.57 300** P **P** **14 52 24.9 -0.1**
comp=Z,185nm,1.1s,SNR=15
**KRAR Krasnoyarsk 59.63 355***c i*P **P** **14 52 24.7 +0.1**
KRAR pmax pmax
comp=Z,292nm,1.2s
KRAR MLR MLR
comp=Z,187μm,17.0s
**HNR Honiara 59.69 99** P **P** **14 52 24.6 -1.3**
comp=Z,81nm,0.6s,baz=174,slow=8.1,SNR=16
**HNR Honiara 59.69 99** P **P** **14 52 24.6 -1.3**
HNR pmax pmax
comp=Z,81nm,0.6s
**HNR Honiara 59.69 99** *e*P **P** **14 52 24.0 -1.9**
**HNR Honiara 59.69 99** *e*P **P** **14 52 24.4 -1.5**
HNR LR LR
comp=Z,100μm,22.0s
**IAFJ Afjeh 59.81 315** *e*P **P** **14 52 25.8 -1.0**
**ERM Erimo 59.81 36** *e*P **P** **14 52 27.1 +0.9**
ERM pmax pmax
comp=Z,102nm,0.9s
ERM MLR MLR
comp=Z,151μm,19.0s
**ERM Erimo 59.81 36** *e*P **P** **14 52 27.1 +0.9**
comp=Z,102nm,0.9s
ERM LR LR
comp=Z,151μm,19.0s
**NVS Novosibirsk 59.82 349**⇑ *i*P **P** **14 52 26.0 0.0**
NVS *e*S **S** **15 00 37.8 +1.5**
NVS pmax pmax
comp=N,961nm,2.0s
NVS pmax pmax
comp=E,439nm,2.0s
NVS pmax pmax
comp=Z,1μm,2.0s
NVS smax smax
comp=N,290nm,2.7s
NVS smax smax
comp=E,1μm,2.7s
**HABR Khabarovsk 60.08 26** *i*P **P** **14 52 24.9 -2.9**
HABR *e**PP **pP** **14 52 31.1 -3.2**
HABR *e**SP **sP** **14 52 33.7 -3.0**
HABR *e* 14 53 10.6
HABR *e* 14 54 37.3
HABR *e*S **S** **15 00 37.1 -2.7**
HABR *e**SS **sS** **15 00 48.1 -2.3**
HABR *e* 15 02 14.3
HABR *e*SS **SS** **15 04 35.4 -1.6**
HABR pmax pmax
comp=N,64nm,2.8s
HABR pmax pmax
comp=E,151nm,2.8s
HABR pmax pmax
comp=Z,150nm,2.8s
HABR pmax pmax
comp=Z,4μm,3.5s
HABR MLR MLR
comp=Z,398μm,19.0s
HABR MLR MLR
comp=E,224μm,19.0s
HABR MLR MLR
comp=N,239μm,19.0s
**IMHD Mahdasht 60.47 315** *e*P **P** **14 52 29.6 -1.4**
**ASAJ Asahikawa 60.81 34** P **P** **14 52 32.7 -0.3**
comp=N,32nm,0.7s,baz=233,slow=8.6,SNR=21
ASAJ S **S** **15 00 50.2 +0.8**
comp=N,8.9nm,0.8s,baz=217,slow=20,SNR=2.9
**ASAJ Asahikawa 60.81 34** P **P** **14 52 32.7 -0.3**
ASAJ S **S** **15 00 50.2 +0.8**
ASAJ pmax pmax
comp=Z,32nm,0.7s
ASAJ smax smax
comp=N,9.0nm,0.8s
**ASAJ Asahikawa 60.81 34** *e*P **P** **14 52 33.1 +0.1**
comp=N,1μm,1.3s
ASAJ S **S** **15 00 50.2 +0.8**
**IRAZ Razeghan 60.86 314** *e*P **P** **14 52 33.3 -0.5**
**IGZV Ghazvin 61.13 315** *e*P **P** **14 52 34.8 -0.9**
**BVA0 Borovoye Array 61.64 340** *i*P **P** **14 52 37.3 -1.2**
BVA0 pmax pmax
comp=Z,9μm,5.0s
**BVAR Borovoye Array 61.64 340** P **P** **14 52 37.0 -1.4**
comp=Z,24nm,0.6s,baz=144,slow=8.3,SNR=97
BVAR PKP2bc 15 21 57.4
comp=Z,0.5nm,0.7s,baz=343,slow=1.5,SNR=2.4
BVAR PKP2ab 15 22 06.6
comp=Z,2.9nm,1.0s,baz=259,slow=1.5,SNR=4.4
BVAR LR LR 15 23 38.8
comp=Z,268μm,19.4s,baz=148,slow=40
**ZRNK Zerenda 62.06 339** *i*P **P** **14 52 40.1 -1.2**
ZRNK pmax pmax
comp=Z,454nm,1.4s
**CHKZ Chkalovo 62.11 341** *i*P **P** **14 52 40.6 -0.9**
CHKZ pmax pmax
comp=Z,1μm,1.6s
**BOD Bodaibo 62.16 8**⇑ *i*P **P** **14 52 42.1 +0.2**
BOD pmax pmax
comp=Z,602nm,1.4s
**AAE Adis Abeba 62.40 282** *i*P P 14 52 50.5 +5.9
**FURI Furi 62.46 282** *e*P **P** **14 52 47.0 +1.9**
FURI *i*S S 15 01 30.9 +19
**YUK Yuzh-Kuril'sk 62.62 36***c i*P **P** **14 52 44.1 -1.0**
YUK *e* 14 55 05.4
YUK *i*S **S** **15 01 15.2 +3.0**
YUK pmax pmax
comp=Z,4μm,4.0s
YUK pmax pmax
comp=N,636nm,2.0s
YUK pmax pmax
comp=E,427nm,2.0s
YUK pmax pmax
comp=Z,1μm,2.0s
YUK MLR MLR
comp=N,50μm,18.0s
YUK MLR MLR
comp=E,3μm,18.0s
YUK MLR MLR
comp=Z,101μm,18.0s
**YSS Yuzh-Sakhalins 62.72 31**$\alpha$ *i*P **P** **14 52 46.0 +0.3**
YSS *e**SP **sP** **14 52 57.0 +2.3**
YSS *e* 14 53 21.0
YSS *e* 14 55 10.0
YSS *e*S S 15 01 06.0 -7.4
YSS *e*PPS PPS 15 01 32.0
YSS pmax pmax
comp=Z,340nm,1.0s
YSS pmax pmax
comp=Z,4μm,6.0s
YSS pmax pmax
comp=E,1μm,5.0s
YSS pmax pmax
comp=Z,28μm,22.0s
YSS pmax pmax
comp=N,12μm,19.0s
YSS pmax pmax
comp=E,12μm,23.0s
**KMBO Kilima Mbogo 62.84 271** P **P** **14 52 47.5 0.0**
comp=E,17nm,1.1s,baz=69,slow=7.5,SNR=35
KMBO S **S** **15 01 18.3 +1.7**
comp=E,0.5nm,0.3s,baz=66,slow=19,SNR=1.8
KMBO LR LR 15 16 36.8
comp=E,139μm,20.8s,baz=84,slow=33
**KMBO Kilima Mbogo 62.84 271** *e*P **P** **14 52 47.8 +0.3**
KMBO S **S** **15 01 18.3 +1.7**
KMBO pmax pmax
comp=Z,752nm,2.1s
**KMBO Kilima Mbogo 62.84 271** P **P** **14 52 47.2 -0.3**
baz=63,SNR=5.8
**KMBO Kilima Mbogo 62.84 271** P **P** **14 52 48.6 +1.0**
SNR=97
**KMBO Kilima Mbogo 62.84 271** *e*P **P** **14 52 47.8 +0.3**
comp=Z,752nm,2.1s
KMBO S **S** **15 01 18.3 +1.7**
**AB31 Akbulak array 63.02 332** *i*P **P** **14 52 46.3 -1.5**
AB31 pmax pmax
comp=Z,3μm,2.2s
**ABKAR Akbulak array 63.02 332** P **P** **14 52 46.6 -1.2**
baz=63
**ABKAR Akbulak array 63.02 332** *e*P **P** **14 52 46.3 -1.4**
**CASY Casey 63.07 175** *e*P **P** **14 52 47.7 -0.1**
comp=Z,1μm,1.9s
CASY LR LR
comp=Z,156μm,20.0s
**MIR Mirnyy 63.11 183**⇑ *i*P P 14 52 58.0 +10
MIR pmax pmax
comp=Z,180nm,2.0s
**CLNS Chul'man 63.45 15** *e*P **P** **14 52 50.2 -0.3**
CLNS *e**PP pP 14 53 05.7 +8.7
CLNS *e* 14 53 26.0
CLNS *e* 14 55 08.7
CLNS *e*PPP PPP 14 56 39.0
CLNS *e*S **S** **15 01 21.6 -0.8**
CLNS *e*SS **SS** **15 05 32.6 +2.9**
CLNS *e*SSS SSS 15 08 08.3
CLNS pmax pmax
comp=Z,119nm,1.0s
CLNS pmax pmax
comp=N,64nm,1.1s
CLNS pmax pmax
comp=N,71nm,0.9s
CLNS pmax pmax
comp=Z,52nm,1.2s
CLNS pmax pmax
comp=E,27nm,0.9s
CLNS smax smax
comp=N,14μm,11.9s
CLNS smax smax
comp=E,7μm,11.9s
CLNS MLR MLR
comp=E,170μm,14.0s
CLNS MLR MLR
comp=Z,197μm,19.0s
CLNS MLR MLR
comp=N,83μm,10.0s
**ISRB Sarab 63.60 316** *e*P **P** **14 52 51.5 -0.7**
**IBST Bostanabad 64.09 315** *e*P **P** **14 52 53.7 -1.7**
**DODT Dodoma, Tanzan 64.15 265** *i*P **P** **14 52 55.6 -0.5**
DODT 15 01 41.5
**IHRS Heris 64.27 316** *e*P **P** **14 52 55.0 -1.6**
**KUR Kuril'sk 64.48 35***c i*P **P** **14 52 57.0 -0.4**
KUR *i* 14 55 21.2
KUR *e*PPP PPP 14 56 50.3
KUR *i*S **S** **15 01 38.1 +2.7**
KUR *i*SS **SS** **15 05 51.6 +5.6**
KUR pmax pmax
comp=N,169nm,1.4s
KUR pmax pmax
comp=Z,980nm,1.4s
KUR pmax pmax
comp=E,55nm,0.7s
KUR pmax pmax
comp=Z,8μm,6.6s
KUR MLR MLR
comp=N,69μm,20.0s
KUR MLR MLR
comp=E,7μm,20.0s
KUR MLR MLR
comp=Z,95μm,20.0s
**AKTO Aktyubinsk 64.74 332** P **P** **14 52 58.0 -1.1**
comp=Z,33nm,1.1s,baz=130,slow=7.5,SNR=37
**AKTO Aktyubinsk 64.74 332** P **P** **14 52 58.0 -1.1**
AKTO pmax pmax
comp=Z,33nm,1.1s
**ITBZ Tabriz 64.86 315** *e*P **P** **14 53 03.4 +3.1**
**TYV Tymovskoe 65.25 28** *e*P **P** **14 53 03.5 +1.2**
TYV pmax pmax
comp=Z,960nm,2.0s
**ISHB Shabestar 65.25 315** *e*P **P** **14 53 02.4 -0.6**
**IMRD Marand 65.39 316** *e*P **P** **14 53 04.0 +0.2**
**NKL Nikolayevsk 65.93 25** *e*P **P** **14 53 06.0 -0.7**
NKL *e* 15 01 53.6
NKL *e* 15 02 11.0
NKL pmax pmax
comp=N,580nm,2.0s
NKL pmax pmax
comp=E,410nm,2.0s
NKL pmax pmax
comp=Z,1μm,2.0s
**MAK Makhachkala 66.20 320***c i*P **P** **14 53 08.2 -0.4**
MAK *i* 14 53 38.9
MAK *i*S **S** **15 01 54.7 -1.9**
MAK pmax pmax
comp=Z,342nm,1.8s
**CUKT Cukurca 66.24 313** *e*P **P** **14 53 10.8 +1.6**
**GNI Garni 66.69 317** *e*P **P** **14 53 12.3 +0.2**
GNI MLR MLR
comp=Z,133μm,22.0s
**GNI Garni 66.69 317** P P 14 53 16.1 +3.9
SNR=90
**GNI Garni 66.69 317**‖ *i*P **P** **14 53 11.7 -0.4**
SNR=50
**GNI Garni 66.69 317** *e*P **P** **14 53 12.3 +0.2**
comp=Z,3μm,1.4s
GNI LR LR
comp=Z,133μm,22.0s
**DZM Mont Dzumac 66.77 112** *e*P **P** **14 53 11.3 -1.6**
comp=Z,640nm,1.4s
DZM *e*S **S** **15 01 59.2 -5.4**
comp=Z,187μm,27.4s
**DZM Mont Dzumac 66.77 112** *e*LR LR 15 13 14.3
comp=Z,480μm,25.6s
**CLDR Caldiran 66.83 315** *e*P **P** **14 53 13.3 +0.2**
**DGRG David-gareji 66.86 318** P **P** **14 53 13.1 0.0**
**DGRG David-gareji 66.86 318** P **P** **14 53 13.0 0.0**
**VANB Van 66.96 315** *e*P **P** **14 53 12.8 -1.0**
**SIRT Sirnak 67.20 313** *e*P **P** **14 53 15.6 +0.3**
**SEAG Tbilisi Sea 67.38 318** P **PcP** **14 53 40.6 -3.2**
**TBLG Delisi 67.41 318** *e*P **P** **14 53 16.9 +0.4**
**TBLG Delisi 67.41 318** P **P** **14 53 16.0 -0.5**
**TBLG Delisi 67.41 318** P **P** **14 53 16.0 -0.5**
**DUS Dusheti 67.60 318** P **P** **14 53 18.0 +0.3**
**DUS Dusheti 67.60 318** P **P** **14 53 18.0 +0.3**
**AGRB Hanur-Agry 67.66 315** *e*P **P** **14 53 18.6 +0.4**
**KARS Kars 68.05 316** *e*P **P** **14 53 20.3 -0.3**
**AKH Akhalkalaki 68.10 317** *e*P **P** **14 53 23.8 +2.8**
**AKH Akhalkalaki 68.10 317** P **P** **14 53 20.9 -0.2**
**AKH Akhalkalaki 68.10 317** P **P** **14 53 20.8 -0.2**
**SVE Sverdlovsk 68.12 338***de*P **P** **14 53 20.4 -0.2**
SVE *e* 14 55 52.4
SVE *e*S **S** **15 02 16.2 -3.1**
SVE pmax pmax
comp=Z,23μm,20.7s
SVE pmax pmax
comp=Z,1μm,1.5s
SVE MLR MLR
comp=Z,252μm,19.0s
SVE MLR MLR
comp=E,163μm,19.0s
SVE MLR MLR
comp=N,113μm,17.0s
**SVAN Silvan-Diyarba 68.36 313** *e*P **P** **14 53 22.7 +0.1**
**KWAJ Kwajalein Atol 68.40 79** *e*P P 14 53 26.8 +3.6
KWAJ pmax pmax
comp=Z,334nm,1.1s
**KWAJ Kwajalein Atol 68.40 79** *e*P P 14 53 26.8 +3.6
comp=Z,334nm,1.1s
**VRTB Varto-Mus 68.57 315** *e*P **P** **14 53 27.0 +3.0**
**MAZI Mazidag 68.64 312** *e*P **P** **14 53 27.0 +2.6**
**ONI Oni 68.65 319** P **P** **14 53 24.5 +0.1**
**ONI Oni 68.65 319** P **P** **14 53 24.4 +0.1**
**DRV Dumont d'Urvil 68.84 164** P P 14 53 21.0 -3.9
DRV S **S** **15 02 24.0 -3.5**
DRV SP **SPn** **15 02 59.0 +8.8**
DRV SS **SS** **15 06 54.0 +1.3**
DRV L L 15 10 00.0
DRV R 15 15 00.0
**MAW Mawson 68.84 194** P **P** **14 53 24.3 -0.6**
comp=Z,28nm,0.9s,baz=27,slow=6.8,SNR=25
MAW S **S** **15 02 31.3 +3.8**
comp=Z,0.4nm,0.3s,baz=9.5,slow=12,SNR=1.8
MAW LR LR 15 17 17.8
comp=Z,205μm,21.4s,baz=36,slow=30
MAW PKP2bc 15 21 36.5
comp=Z,11nm,1.1s,baz=143,slow=3.8,SNR=8.4
**MAW Mawson 68.84 194** P **P** **14 53 24.3 -0.6**
MAW S **S** **15 02 31.3 +3.8**
MAW pmax pmax
comp=Z,37nm,1.1s
**MAW Mawson 68.84 194** P **P** **14 53 25.7 +0.8**
baz=69,SNR=28
**NCK Nalchik 68.97 319***c i*P **P** **14 53 25.9 -0.3**
**DYBB Diyarbakir 69.05 313** *e*P **P** **14 53 26.6 -0.3**
**BNGB Bing¶ll 69.06 314** *e*P **P** **14 53 27.1 +0.1**
**H11S3 WAKE ISLAND Hy 69.07 69** P **P** **14 53 29.1 +2.0**
baz=278,slow=3.8,SNR=7.6
**H11S1 WAKE ISLAND Hy 69.09 69** P **P** **14 53 26.3 -0.9**
baz=278,slow=3.8,SNR=7.9
**H11S2 WAKE ISLAND Hy 69.09 69** P **P** **14 53 25.8 -1.3**
baz=278,slow=3.8,SNR=5.3
**YAK Yakutsk 69.18 14** P **P** **14 53 25.9 -1.2**
comp=Z,19nm,0.8s,baz=36,slow=23,SNR=30
YAK S **S** **15 02 32.5 +0.8**
comp=Z,4.0nm,0.4s,baz=53,slow=20,SNR=2.0
**YAK Yakutsk 69.18 14***c i*P **P** **14 53 25.9 -1.2**
YAK *e**PP **pP** **14 53 33.9 +0.3**
YAK *e* 14 53 49.9
YAK *e* 14 56 04.5
YAK *e*S **S** **15 02 31.8 +0.1**
YAK *e**SS **SKSac** **15 03 23.9 -1.8**
YAK pmax pmax
comp=Z,334nm,1.0s
YAK pmax pmax
comp=E,140nm,1.5s
YAK pmax pmax
comp=N,126nm,1.2s
YAK pmax pmax
comp=N,1μm,2.1s
YAK pmax pmax
comp=Z,1μm,2.4s
YAK pmax pmax
comp=E,379nm,2.0s
YAK smax smax
comp=E,2μm,3.5s
YAK smax smax
comp=N,4μm,4.9s
YAK MLR MLR
comp=N,248μm,16.0s
YAK MLR MLR
comp=E,288μm,18.0s
YAK MLR MLR
comp=Z,307μm,17.0s
**WAKE Wake Island 69.20 68** PFAKE 14 53 40.0 +12
WAKE LR LR
comp=Z,40μm,21.0s
**MBAR Mbarara 69.37 271** LR LR 15 20 03.3
comp=Z,70μm,20.7s,baz=86,slow=33
**MBAR Mbarara 69.37 271** *e*P **P** **14 53 29.3 -0.2**
MBAR pmax pmax
comp=Z,2μm,2.4s
**MBAR Mbarara 69.37 271** P **P** **14 53 29.7 +0.2**
comp=Z,116nm,0.9s,SNR=11
**MBAR Mbarara 69.37 271** *e*P **P** **14 53 29.3 -0.2**
comp=Z,2μm,2.4s
**BCA Borcka 69.39 317** *e*P **P** **14 53 31.4 +2.5**
**NEY Neytrino 69.42 319***c i*P **P** **14 53 29.6 +0.4**
**ZALF Zalf 69.45 307** *i*P **P** **14 53 31.1 +1.7**
**MCQ Macquarie Isla 69.47 148** *e*P **P** **14 53 29.1 +0.1**
**MCQ Macquarie Isla 69.47 148** *e*P **P** **14 53 29.1 +0.1**
comp=Z,10μm,1.8s
**H11N1 WAKE ISLAND Hy 69.50 68** P **P** **14 53 29.3 -0.4**
baz=256,slow=8.7,SNR=12
**H11N2 WAKE ISLAND Hy 69.51 68** P **P** **14 53 29.3 -0.4**
baz=256,slow=8.7,SNR=6.6
**H11N3 WAKE ISLAND Hy 69.52 68** P **P** **14 53 31.5 +1.7**
baz=256,slow=8.7,SNR=11
**KBZ Khabaz 69.52 319** P **P** **14 53 29.3 -0.3**
comp=Z,36nm,0.8s,baz=122,slow=5.1,SNR=70
KBZ S **S** **15 02 36.2 -0.2**

comp=Z,3.7nm,0.9s,baz=61,slow=19,SNR=1.9
**KBZ Khabaz 69.52 319** P **P** **14 53 29.3 -0.3**
KBZ S **S** **15 02 36.2 -0.2**
KBZ pmax pmax
comp=Z,36nm,0.8s
KBZ smax smax
comp=N,4.0nm,0.9s
**ASF Jabal al Asfar 69.56 306** P **P** **14 53 30.6 +0.4**
comp=N,12nm,0.8s,baz=94,slow=3.0,SNR=13
ASF S **S** **15 02 38.1 +0.5**
comp=N,1.2nm,0.4s,baz=66,slow=20,SNR=2.1
ASF PKP2bc 15 21 37.5
comp=N,0.7nm,0.3s,baz=247,slow=7.7,SNR=1.9
ASF LR LR 15 24 59.0
comp=N,183µm,18.5s,baz=66,slow=37
**CHVG Ch'k'valeri 69.62 318** *eP* **P** **14 53 32.7 +2.5**
**CHVG Ch'k'valeri 69.62 318** P **P** **14 53 29.4 -0.8**
**KIV Kislovodsk 69.76 320** *eP* **P** **14 53 30.6 -0.6**
KIV *e* 14 53 53.9
KIV *e* 14 56 05.5
KIV *eS* **S** **15 02 39.4 0.0**
KIV pmax pmax
comp=Z,942nm,5.2s
KIV pmax pmax
comp=Z,82nm,1.1s
**KIV Kislovodsk 69.76 320** P **P** **14 53 31.8 +0.6**
comp=Z,408nm,0.9s,SNR=18
**SVRC Sivrice-ELAZID 69.82 313** *eP* **P** **14 53 30.4 -1.4**
**URFA Urfa 69.83 312** *eP* **P** **14 53 32.1 +0.3**
**SALA Sala 69.86 307** *i* P **P** **14 53 33.7 +1.5**
**ROOS tl_alroos 69.88 308** *i* P **P** **14 53 33.1 +1.0**
**PTK Pertek 69.95 314** *eP* **P** **14 53 36.1 +3.5**
**ERZN Erzincan 69.97 314** *eP* **P** **14 53 34.9 +2.3**
**BAYT Ayd¨–ntepe-Bay 69.99 315** *eP* **P** **14 53 33.0 +0.2**
**RABH Abou Rabah 70.03 308** *i* P **P** **14 53 34.8 +1.7**
**SLMH Al Salmeh 70.07 310** *i* P P 14 53 36.4 +3.2
**EIL Elat 70.43 303** P **P** **14 53 36.5 +1.1**
**EIL Elat 70.43 303** P **P** **14 53 35.7 +0.3**
comp=Z,26nm,0.8s,baz=137,slow=3.4,SNR=12
EIL LR LR 15 25 17.6
comp=Z,218µm,18.6s,baz=108,slow=37
**EIL Elat 70.43 303** P **P** **14 53 35.5 0.0**
baz=70,SNR=9.7
**HRFI Mount Harif 70.46 303** P **P** **14 53 36.1 +0.4**
**GUMT Gumushane 70.48 315** *eP* **P** **14 53 37.7 +2.0**
**KTUT Trabzon 70.48 316** *eP* **P** **14 53 34.5 -1.0**
**HAWK Haweek 70.69 308** *i* P **P** **14 53 40.2 +3.1**
**ILIC ilic-Erzincan 70.75 314** *eP* **P** **14 53 37.3 -0.1**
**MMLI Mount Malkishu 70.83 306** *eP* **P** **14 53 40.2 +2.3**
**WRDH Warideh 71.00 309** *i* P P 14 53 42.7 +3.8
**MMAI Mount Meron Ar 71.02 307** P **P** **14 53 38.7 -0.4**
comp=Z,30nm,1.0s,baz=92,slow=9.2,SNR=11
MMAI LR LR 15 25 29.2
comp=Z,248µm,19.4s,baz=110,slow=36
**BTCH Batrach 71.13 310** *i* P P 14 53 43.2 +3.5
**ESPY Espiye-Giresun 71.19 315** *eP* **P** **14 53 41.6 +1.8**
**DARE Darende-Malaty 71.22 313** *eP* **P** **14 53 38.1 -2.2**
**KZIT Kziot 71.23 304** *eP* **P** **14 53 40.5 +0.2**
**KMRS Kahramanmaras 71.29 311** *eP* **P** **14 53 41.6 +1.1**
**TAHT Tahtakopru-Hat 71.45 310** *eP* **P** **14 53 42.8 +1.3**
**DCZ Deep Cove 71.50 137** *eP* P 14 53 47.3 +5.7
comp=Z,877nm,1.9s
**MATP Matopo 71.54 250** P **P** **14 53 41.8 -0.7**
comp=Z,87nm,1.2s,baz=80,slow=5.6,SNR=20
MATP S S 15 02 53.9 -7.2
comp=Z,3.3nm,1.0s,baz=52,slow=12,SNR=1.7
MATP LR LR 15 21 11.2
comp=Z,150µm,21.0s,baz=76,slow=33
**SOC Sochi 71.55 318***c iP* **P** **14 53 40.0 -2.0**
SOC *e* 14 56 21.3
SOC *e*PPP PPP 14 58 05.0
SOC *eS* **S** **15 02 56.6 -3.5**
SOC pmax pmax
comp=Z,252nm,1.0s
SOC MLR MLR
comp=Z,94µm,19.0s
**LSZ Lusaka 71.64 255** LR LR 15 22 58.4
comp=Z,78µm,18.1s,baz=138,slow=34
**LSZ Lusaka 71.64 255** *eP* **P** **14 53 43.4 +0.2**
LSZ pmax pmax
comp=Z,300nm,1.5s
**LSZ Lusaka 71.64 255** P **P** **14 53 43.8 +0.6**
SNR=52
**LSZ Lusaka 71.64 255** *eP* **P** **14 53 42.3 -0.9**
comp=Z,300nm,1.5s
**RSDY Resadiye-TOKAT 71.98 314** *eP* **P** **14 53 46.0 +1.3**
**CEYT Ceyhan 71.99 311** *eP* **P** **14 53 47.6 +2.8**
**SVSK Karacayir 72.05 314** *eP* **P** **14 53 45.3 +0.3**
**SKR Severo-Kuril's 72.07 34**¶ *i*P P 14 53 36.0 -8.9
SKR *i* 14 53 48.0
SKR *i* S **S** **15 03 08.0 +2.2**
SKR *i* 15 03 26.0
SKR *i* PS PnS 15 03 49.0 +12
SKR pmax pmax
comp=N,180nm,1.0s
SKR pmax pmax
comp=Z,270nm,1.0s
SKR pmax pmax
comp=E,90nm,0.7s
SKR MLR MLR
comp=E,70µm,18.0s
SKR MLR MLR
comp=Z,156µm,18.0s
SKR MLR MLR
comp=N,68µm,26.0s
**KRTS Karatas 72.14 310** *eP* **P** **14 53 46.4 +0.8**
**WHZ Wether Hill Ro 72.14 137** *eP* **P** **14 53 47.3 +1.8**
comp=N,1µm,2.2s
**KARA Karaisali 72.60 311** *eP* **P** **14 53 46.4 -2.0**
**PHNC Paralimni 72.69 308** P P 14 54 01.9 +13
**TARA Tarawa 72.94 88** *eP* P 14 53 47.4 -3.5
comp=N,2µm,1.6s
TARA LR LR
comp=Z,68µm,22.0s
**KVT Kavak 73.14 315** *eP* **P** **14 53 49.9 -1.6**
**LFK Lefkose 73.17 308** *eP* **P** **14 53 54.7 +2.8**
**NIG Nigde 73.20 311** *eP* **P** **14 53 50.7 -1.5**
**CSS Prodhromos 73.23 308** P **P** **14 53 54.7 +2.5**
**CSS Prodhromos 73.23 308** *eP* **P** **14 53 52.0 -0.2**
**CSS Prodhromos 73.23 308** *eP* P 14 53 57.9 +5.7
**CSS Prodhromos 73.23 308** *eP* P 14 53 57.9 +5.7
**CSS Prodhromos 73.23 308** P **P** **14 53 52.1 -0.2**
**CSS Prodhromos 73.23 308** *eP* **P** **14 53 51.5 -0.8**
comp=Z,180nm,1.5s
CSS LR LR
comp=Z,49µm,21.0s
**SZAC Souni-Zanaja 73.53 308** P **P** **14 53 55.5 +1.5**
**ANN Anapa 73.54 319***c iP* **P** **14 53 51.7 -2.1**
ANN *i* 14 54 07.7
ANN *i* 14 56 36.8
ANN *eS* **SKiKP** **15 03 23.3 -0.2**
ANN *i* 15 03 58.1
ANN *i* SS SS 15 08 13.6 +7.7
ANN pmax pmax
comp=N,18nm,1.4s
ANN pmax pmax
comp=E,26nm,1.4s
ANN pmax pmax
comp=Z,41nm,1.3s
ANN pmax pmax
comp=N,628nm,6.8s
ANN pmax pmax
comp=Z,2µm,6.8s
ANN pmax pmax
comp=E,380nm,6.8s
ANN smax smax
comp=N,27µm,14.9s
ANN smax smax
comp=E,14µm,14.9s
**GULA Gulagac 73.55 312** *eP* **P** **14 53 56.4 +2.3**
**LEF Lefka 73.62 308** *eP* **P** **14 53 54.7 +0.2**
**VRH Novokhopyorsk 73.64 326** *eP* **P** **14 53 52.8 -1.4**
VRH *eS* **SKiKP** **15 03 17.5 -5.9**
VRH pmax pmax
comp=Z,70nm,0.7s
VRH pmax pmax
comp=N,30nm,0.9s
VRH pmax pmax
comp=E,70nm,1.6s
VRH smax smax
comp=E,9µm,10.0s
VRH smax smax
comp=Z,2µm,7.5s
VRH smax smax
comp=N,8µm,9.9s

**YESY Yesilyurt 73.75 311** *eP* **P** **14 53 54.6 -0.8**
**ODZ Otahua Downs 73.81 136** *eP* **P** **14 53 56.1 +0.7**
comp=N,308nm,1.8s
**RPZ Rata Peaks 73.84 134** *eP* **P** **14 53 56.1 +0.4**
comp=N,3µm,2.3s
**CORM Corum 73.85 313** *eP* **P** **14 53 53.5 -2.4**
**ALFC Alevga 73.86 308** P **P** **14 53 58.5 +2.5**
**DIKM Dikmen 73.89 315** *eP* **P** **14 53 55.9 -0.1**
**PPCY Paphos 73.99 308** P P 14 54 05.8 +9.2
**AKMC Akamas 74.04 308** P **P** **14 53 58.7 +1.7**
**SNOP Sinop 74.05 315** *eP* **P** **14 53 55.9 -1.0**
**PEA0 Petropavlovsk- 74.11 32** *eP* **P** **14 53 56.8 -0.2**
**PETK Petropavlovsk- 74.11 32** P **P** **14 53 56.6 -0.4**
comp=N,21nm,0.8s,baz=194,slow=2.2,SNR=16
PETK LR LR 15 27 09.3
comp=N,56µm,20.7s,baz=268,slow=36
**PETK Petropavlovsk- 74.11 32** P **P** **14 53 56.6 -0.4**
PETK pmax pmax
comp=Z,21nm,0.8s
PETK MLR MLR
comp=Z,56µm,20.7s
**BYBT Boyabat 74.17 315** *eP* **P** **14 53 57.7 +0.1**
**KAMT Kaman 74.26 312** *eP* **P** **14 53 56.7 -1.6**
**GRM Grahamstown 74.37 237** *i* P P 14 54 06.0 +7.0
**MA2 Magadan 74.37 24** *i* P **P** **14 53 58.2 -0.1**
**BRTR Keskin Array B 74.42 313** P **P** **14 53 58.2 -1.1**
comp=Z,16nm,0.7s,baz=132,slow=7.1,SNR=36
BRTR S **S** **15 03 31.4 -1.9**
comp=Z,0.7nm,0.6s,baz=60,slow=8.5,SNR=2.5
BRTR LR LR 15 26 50.6
comp=Z,95µm,20.7s,baz=98,slow=36
**BRTR Keskin Array B 74.42 313** P **P** **14 53 58.2 -1.1**
BRTR S **S** **15 03 31.4 -1.9**
BRTR pmax pmax
comp=Z,17nm,0.7s
BRTR smax smax
comp=N,1.0nm,0.6s
BRTR MLR MLR
comp=Z,95µm,20.7s
**HDMB Hadim 74.46 310** *eP* **P** **14 54 00.6 +0.9**
**OXZ Oxford 74.48 134** *eP* P 14 54 03.3 +3.9
comp=Z,143nm,0.9s
**LBTB Lobatse 74.48 245** P **P** **14 53 59.3 -0.6**
comp=Z,46nm,1.2s,baz=111,slow=8.2,SNR=11
LBTB S **S** **15 03 32.3 -2.1**
comp=Z,3.2nm,1.0s,baz=342,slow=20,SNR=1.4
**LBTB Lobatse 74.48 245** P **P** **14 53 59.3 -0.6**
LBTB S **S** **15 03 32.3 -2.1**
LBTB pmax pmax
comp=Z,46nm,1.2s
LBTB smax smax
comp=N,3.0nm,1.0s
**LBTB Lobatse 74.48 245** *eP* **P** **14 54 00.0 +0.1**
comp=N,578nm,1.7s
LBTB S **S** **15 03 32.3 -2.1**
**OUZ Omahuta 74.50 125** *eP* **P** **14 54 01.2 +1.6**
comp=N,361nm,1.5s
**TOS Tosya 74.56 314** *eP* P 14 53 55.4 -4.6
**PET Petropavlovsk 74.58 32***ceP* **P** **14 53 59.7 +0.1**
PET *e* 14 56 47.6
PET *eS* **S** **15 03 31.7 -2.4**
PET pmax pmax
comp=Z,25µm,18.8s
PET pmax pmax
comp=Z,17µm,17.3s
PET pmax pmax
comp=Z,344nm,1.7s
PET MLR MLR
comp=Z,156µm,19.0s
PET MLR MLR
comp=Z,132µm,19.0s
**CHBY Cihanbeyli 74.63 311** *eP* **P** **14 54 00.3 -0.1**
**KULU Kulu 74.69 312** *eP* **P** **14 54 00.2 -0.5**
**CANT Cankiri 74.72 314** *eP* **P** **14 54 01.4 +0.5**
**AFSR Af˙ar-Bala (A 74.76 312** *eP* **P** **14 53 58.1 -3.0**
**KONT Konya--Tatoy 74.84 311** *eP* **P** **14 54 01.8 +0.2**
**THZ Tophouse 74.85 132** *eP* **P** **14 54 04.2 +2.5**
comp=Z,3µm,2.6s
**BZK Bozkurt 74.88 315** *eP* **P** **14 54 01.6 0.0**
**VORD Divnogorie 74.90 325** *eP* **P** **14 54 00.4 -1.2**
VORD *eS* **SKiKP** **15 03 31.0 +5.6**
VORD pmax pmax
comp=Z,40nm,1.8s
VORD pmax pmax
comp=N,30nm,0.9s
VORD pmax pmax
comp=E,40nm,0.9s
VORD smax smax
comp=E,6µm,9.1s
VORD smax smax
comp=Z,6µm,8.1s
VORD smax smax
comp=N,2µm,5.4s
**BOSA Boshof 75.02 241** P **P** **14 54 02.5 -0.4**
comp=N,53nm,1.2s,baz=82,slow=8.0,SNR=15
BOSA S **S** **15 03 40.0 -0.4**
comp=N,0.9nm,0.6s,baz=72,slow=20,SNR=1.7
BOSA LR LR 15 24 06.9
comp=N,168µm,18.3s,baz=84,slow=33
**BOSA Boshof 75.02 241** P **P** **14 54 02.6 -0.4**
BOSA S **S** **15 03 40.0 -0.4**
BOSA pmax pmax
comp=Z,54nm,1.2s
BOSA smax smax
comp=N,1.0nm,0.6s
**BOSA Boshof 75.02 241** P **P** **14 54 04.0 +1.1**
baz=75,SNR=13
**BOSA Boshof 75.02 241** *eP* **P** **14 54 03.0 0.0**
comp=N,376nm,1.5s
BOSA S **S** **15 03 40.0 -0.4**
**VSR Storozhevoye 75.08 325** *eP* **P** **14 54 01.1 -1.5**
VSR *eS* **S** **15 03 36.1 -3.7**
VSR pmax pmax
comp=Z,50nm,0.8s
VSR pmax pmax
comp=N,10.0nm,0.7s
VSR pmax pmax
comp=E,20nm,0.7s
VSR smax smax
comp=N,8µm,10.4s
VSR smax smax
comp=Z,5µm,8.8s
VSR smax smax
comp=E,5µm,8.0s
**ANTO Ankara 75.09 313** *eP* **P** **14 54 02.3 -0.7**
ANTO pmax pmax
comp=Z,259nm,1.1s
ANTO MLR MLR
comp=Z,97µm,20.0s
**ANTO Ankara 75.09 313** P P 14 54 07.1 +4.1
SNR=51
**ANTO Ankara 75.09 313** *eP* **P** **14 54 02.3 -0.7**
comp=Z,259nm,1.1s
ANTO LR LR
comp=Z,97µm,20.0s
**VORR Voronezh 75.25 326** *eP* **P** **14 54 03.0 -0.6**
VORR pmax pmax
comp=Z,400nm,2.0s
**KHZ Kahutara 75.42 133** *eP* **P** **14 54 03.6 -1.1**
comp=Z,2µm,2.4s
**KIZT Kizilcal 75.47 312** *eP* **P** **14 54 07.7 +2.4**
**SAFT Safranbolu 75.58 314** *eP* **P** **14 54 07.7 +1.9**
**SUTC Sutluce-Ispart 75.75 310** *eP* **P** **14 54 06.1 -0.8**
**SIM Simferopol' 75.79 318***c iP* **P** **14 54 05.8 -1.1**
SIM *e* 14 56 53.0
SIM *eS* **S** **15 03 53.0 +5.0**
**LPSR Galich'ya Gora 75.81 327** *eP* **P** **14 54 04.7 -2.1**
LPSR *eS* **S** **15 03 42.1 -5.7**
LPSR pmax pmax
comp=Z,20nm,0.7s
LPSR smax smax
comp=N,10µm,9.8s
LPSR smax smax
comp=Z,2µm,7.3s
LPSR smax smax
comp=E,7µm,8.4s
**ANTB Antalya 75.86 309** *eP* **P** **14 54 10.5 +3.1**
**HIZ Hauiti 75.89 129** PN **P** **14 54 09.0 +1.4**
**HIZ Hauiti 75.89 129** *eP* **P** **14 54 09.8 +2.1**
comp=E,822nm,1.3s
**SVRH Sivrihisar-ESK 75.90 312** *eP* **P** **14 54 06.1 -1.6**
**MKAZ Moumakai 75.97 127** PN **P** **14 54 10.1 +2.0**
**BCK Bucak 76.06 310** *eP* **P** **14 54 06.5 -2.1**
**SNZO South Karori 76.12 132** P **P** **14 54 10.1 +1.3**
comp=E,209nm,1.0s

SNZO LR LR
comp=Z,313µm,20.0s
**WAZ Wanganui 76.14 130** PN **P** **14 54 10.4 +1.4**
**ISP Isparta 76.20 310** *eP* **P** **14 54 10.9 +1.4**
**ISP Isparta 76.20 310** P **P** **14 54 10.2 +0.7**
ISP pmax pmax
comp=Z,391nm,1.6s
ISP MLR MLR
comp=Z,187µm,19.0s
**ISP Isparta 76.20 310** P **P** **14 54 08.6 -0.9**
**ISP Isparta 76.20 310** P **P** **14 54 10.2 +0.7**
comp=Z,391nm,1.6s
ISP LR LR
comp=Z,187µm,19.0s
**SHUT Suhut-Afyon 76.38 311** *eP* **P** **14 54 08.5 -2.0**
**ELL Elmali 76.39 309** *eP* P 14 54 14.4 +3.8
**MDUB Mudurnu 76.44 313** *eP* **P** **14 54 09.7 -1.1**
**SYO Syowa Base 76.47 199**‖ *eX* **P** **14 54 09.0 -1.2**
**KSL Kastellorizon 76.50 308** *eP* P 14 54 15.3 +4.3
**KSL Kastellorizon 76.50 308** *eP* P 14 54 15.3 +4.3
**COVZ Chateau Observ 76.50 129** PN **P** **14 54 11.7 +0.5**
**KDZE Karadeniz Ereo 76.50 314** *eP* **P** **14 54 08.5 -2.5**
**WPVZ Whakapapa 76.50 129** PN **P** **14 54 12.0 +0.7**
**FWVZ Far West T-bar 76.51 129** PN **P** **14 54 12.0 +0.5**
**WTVZ West Tongariro 76.53 129** *e*PN **P** **14 54 12.0 +0.7**
**NGZ Ngauruhoe 76.54 129** PN **P** **14 54 12.1 +0.6**
**WHVZ Whangaehu Hut 76.55 129** PN **P** **14 54 12.1 +0.5**
**WNVZ Wahianoa 76.56 129** *e*PN **P** **14 54 12.0 +0.4**
**TUVZ Tukino 76.59 129** PN **P** **14 54 12.7 +1.0**
**GULT Gulveren 76.92 313** *eP* **P** **14 54 14.8 +1.3**
**SEY Seymchan 76.99 22** P **P** **14 54 13.2 0.0**
comp=Z,46nm,0.9s,baz=241,slow=3.8,SNR=36
SEY S **S** **15 03 58.3 -2.1**
comp=Z,0.8nm,0.7s,baz=18,slow=20,SNR=2.6
**SEY Seymchan 76.99 22** P **P** **14 54 13.3 0.0**
SEY S **S** **15 03 58.3 -2.1**
SEY pmax pmax
comp=Z,46nm,1.0s
SEY smax smax
comp=N,1.0nm,0.7s
**FETY Fethiye 77.01 309** *eP* **P** **14 54 11.7 -2.3**
**KHL Karahalli 77.10 310** *eP* **P** **14 54 16.6 +2.0**
**SPNC Sapanca-Adapaz 77.14 313** *eP* **P** **14 54 13.3 -1.4**
**KRHZ Kereru 77.19 130** PN **P** **14 54 15.5 +0.5**
**BFZ Birch Farm 77.20 131** PN **P** **14 54 15.4 +0.4**
**BFZ Birch Farm 77.20 131** *eP* **P** **14 54 15.9 +0.9**
comp=N,432nm,1.0s
**BKZ Black Stump Fm 77.23 129** PN **P** **14 54 14.6 -0.7**
**BKZ Black Stump Fm 77.23 129** *eP* **P** **14 54 14.9 -0.3**
comp=N,472nm,1.0s
**CAVI Cavuskoy 77.36 312** *eP* **P** **14 54 15.4 -0.4**
**DALY Dalyan (Mu¨la 77.39 309** *eP* **P** **14 54 15.6 -0.4**
**TVSB Tavsanli 77.44 312** *eP* **P** **14 54 16.0 -0.4**
**ADVT Abdulvahap 77.49 313** *eP* **P** **14 54 16.4 -0.2**
**PXZ Pawanui 77.60 130** PN **P** **14 54 17.6 +0.4**
**URZ Urewera 77.62 128** *eP* **P** **14 54 18.7 +1.4**
comp=N,2µm,2.2s
**HRT Hereke 77.65 313** *eP* **P** **14 54 16.8 -0.7**
**IZI Iznik 77.66 312** *eP* **P** **14 54 18.8 +1.1**
**YER Yerkesik 77.75 309** *eP* P 14 54 14.8 -3.4
**SILT Sile 77.76 313** *eP* **P** **14 54 16.4 -1.6**
**KULA Kula-Manisa 77.80 310** *eP* **P** **14 54 17.5 -1.0**
**MOS Moscow 77.85 329**¶ *iP* **P** **14 54 17.1 -1.1**
MOS *e*PPP PPP 14 59 05.1
MOS *i* S **S** **15 04 05.6 -4.4**
MOS *e* 15 04 33.2
MOS *eSS* **SS** **15 09 13.7 +2.9**
MOS pmax pmax
comp=Z,2µm,2.1s
MOS pmax pmax
comp=Z,643nm,1.7s
MOS smax smax
comp=N,12µm,8.4s
MOS smax smax
comp=E,9µm,9.2s
**GEMT Gemlik 77.90 312** *eP* **P** **14 54 17.2 -1.6**
**MWZ Matawai 77.96 128** PN **P** **14 54 19.2 -0.1**
**MDNY Mudanya-Bursa 78.11 312** *eP* **P** **14 54 17.6 -2.4**
**KNZ Kokohu 78.13 129** PN **P** **14 54 20.8 +0.6**
**OBN Obninsk 78.14 328***c iP* **P** **14 54 19.1 -0.7**
OBN *i* 14 54 29.5
OBN *i* S S 15 04 06.6 -6.5
OBN *i* SS SS 15 09 07.5 -7.6
OBN pmax pmax
comp=Z,956nm,2.0s
OBN pmax pmax
comp=Z,411nm,1.7s
**OBN Obninsk 78.14 328** P **P** **14 54 20.7 +0.9**
comp=Z,935nm,0.9s,SNR=8.9
**ISK Istanbul-Kandi 78.16 313** *eP* **P** **14 54 17.2 -3.1**
**ISK Istanbul-Kandi 78.16 313** P **P** **14 54 18.2 -2.1**
**ISK Istanbul-Kandi 78.16 313** P **P** **14 54 18.2 -2.1**
**ISK Istanbul-Kandi 78.16 313** P **P** **14 54 18.2 -2.1**
**ARMT Armutlu 78.17 313** *eP* **P** **14 54 20.0 -0.4**
**KLYT Kilyos 78.22 313** *eP* **P** **14 54 19.2 -1.4**
**AYDB Zeytinkoy-Aydi 78.25 310** *eP* **P** **14 54 20.4 -0.7**
**KARP Karpathos 78.26 307** *eP* **P** **14 54 22.0 +1.0**
**KARP Karpathos 78.26 307** *eP* **P** **14 54 22.0 +1.0**
**KARP Karpathos 78.26 307** P P 14 54 17.5 -3.5
**KARP Karpathos 78.26 307** P P 14 54 17.5 -3.5
**BGKT Bogazkoy 78.40 313** *eP* **P** **14 54 19.6 -2.0**
**KCTX Karacabey (Bur 78.47 312** *eP* **P** **14 54 20.0 -2.1**
**NIS1 Nisyros Isl. 78.49 308** *eP* P 14 54 28.1 +5.9
**NIS1 Nisyros Isl. 78.49 308** *eP* P 14 54 25.5 +3.3
**NIS1 Nisyros Isl. 78.49 308** *eP* P 14 54 25.5 +3.3
**NISR Nisiros 78.53 308** *eP* P 14 54 26.1 +3.7
**NISR Nisiros 78.53 308** *eP* P 14 54 26.1 +3.7
**AKS Akhisar 78.53 311** *eP* **P** **14 54 21.9 -0.5**
**BALB Balikesir 78.67 311** *eP* **P** **14 54 22.7 -0.4**
**CTYL Yal??k??y-??at 78.83 313** *eP* **P** **14 54 21.6 -2.4**
**IZM Izmir 78.84 310** *eP* P 14 54 28.7 +4.6
**EDC Edincik 78.86 312** *eP* **P** **14 54 23.1 -1.0**
**ZKR Zakros 78.92 307** P **P** **14 54 24.9 +0.3**
**ZKR Zakros 78.92 307** P **P** **14 54 24.9 +0.3**
**SMG Samos 79.00 309** *eP* P 14 54 29.6 +4.6
**SMG Samos 79.00 309** *eP* P 14 54 29.6 +4.6
**SMG Samos 79.00 309** P **P** **14 54 24.7 -0.3**
**SMG Samos 79.00 309** P **P** **14 54 24.7 -0.3**
**SUR Sutherland 79.08 238** P P 14 54 30.1 +4.3
comp=Z,996nm,1.4s,SNR=5.4
**SUR Sutherland 79.08 238** *eP* **P** **14 54 27.4 +1.6**
comp=Z,466nm,1.4s
SUR LR LR
comp=Z,367µm,20.0s
**MRMT Marmara Adasi 79.12 312** *eP* **P** **14 54 24.8 -0.9**
**KLMR Klimovskoe 79.24 334***c iP* **P** **14 54 25.3 -0.5**
KLMR *e* 14 57 32.0
KLMR *eS* **S** **15 04 23.1 -1.6**
KLMR pmax pmax
comp=Z,10µm,7.8s
KLMR pmax pmax
comp=Z,695nm,1.4s
**KRBG Karabiga-Canak 79.28 312** *eP* **P** **14 54 25.1 -1.4**
**PHSR Pinarhisar 79.42 313** *eP* **P** **14 54 25.9 -1.3**
**NPS Neapolis 79.44 307** *eP* **P** **14 54 29.8 +2.3**
**NPS Neapolis 79.44 307** *eP* **P** **14 54 29.8 +2.3**
**TLCR 79.44 317**¶ *iP* **P** **14 54 27.4 +0.2**
**RKY Sarkoy-Tekirda 79.44 312** *eP* **P** **14 54 27.5 +0.1**
**PSN Preselentsi 79.47 315** P P **14 54 27.5 +0.1**
**TIRR Tirgusor 79.52 316** *eP* **P** **14 54 27.2 -0.5**
**TIRR Tirgusor 79.52 316**¶ *iP* **P** **14 54 26.9 -0.8**
**TIRR Tirgusor 79.52 316** *eP* **P** **14 54 27.2 -0.5**
comp=Z,7.9nm,1.8s
**LAST Lasithi 79.53 307** *eP* **P** **14 54 30.9 +2.9**
**LAST Lasithi 79.53 307** *eP* **P** **14 54 30.9 +2.9**
**LAST Lasithi 79.53 307** P **P** **14 54 26.4 -1.6**
**LAST Lasithi 79.53 307** *eP* **P** **14 54 27.5 -0.5**
comp=Z,1µm,2.1s
**CHOS Chios island 79.76 310** *eP* **P** **14 54 30.8 +1.6**
**CHOS Chios island 79.76 310** *eP* **P** **14 54 32.3 +3.1**
**CHOS Chios island 79.76 310** *eP* **P** **14 54 32.3 +3.1**
**CHOS Chios island 79.76 310** P **P** **14 54 27.9 -1.3**
**CHOS Chios island 79.76 310** P **P** **14 54 27.9 -1.3**
**PRK Paraskevi 79.79 311** *eP* **P** **14 54 30.2 +1.0**
**PRK Paraskevi 79.79 311** *eP* **P** **14 54 30.2 +1.0**
**SANT Santorini 79.79 308** *eP* P 14 54 36.5 +7.1
**SANT Santorini 79.79 308** *eP* P 14 54 36.5 +7.1
**SANT Santorini 79.79 308** P **P** **14 54 30.2 +0.8**
**SANT Santorini 79.79 308** *eP* **P** **14 54 27.8 -1.6**
comp=Z,501nm,1.3s
SANT LR LR
comp=Z,88µm,20.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TLB | Topalu | 79.81 316⇑ | *i* | P | | P | 14 54 28.8 | -0.4 | |
| MSAB | Monastry St. A | 79.83 316⇓ | *i* | P | | P | 14 54 28.7 | -0.7 | |
| EZN | Ezine | 79.88 311 | *e* | P | | P | 14 54 30.2 | +0.5 | |
| APE | Apeiranthos | 79.88 308 | *e* | P | | P | 14 54 29.3 | -0.6 | |
| APE | Apeiranthos | 79.88 308 | *c* | *i* | P | P | 14 54 27.2 | -2.7 | |
| APE | comp=Z,60nm,1.3s | | | | pmax | pmax | | | |
| APE | comp=Z,103μm,20.0s | | | | MLR | MLR | | | |
| APE | Apeiranthos | 79.88 308⇑ | | *i* | P | P | 14 54 27.6 | -2.3 | |
| APE | Apeiranthos | 79.88 308 | | *e* | P | P | 14 54 35.8 | +5.9 | |
| APE | Apeiranthos | 79.88 308 | | *e* | P | P | 14 54 35.8 | +5.9 | |
| APE | Apeiranthos | 79.88 308 | | | P | P | 14 54 28.2 | -1.7 | |
| APE | Apeiranthos | 79.88 308 | | | P | P | 14 54 28.2 | -1.7 | |
| IACM | Heraklion | 79.88 307 | | *e* | P | P | 14 54 33.4 | +3.6 | |
| IACM | Heraklion | 79.88 307 | | *e* | P | P | 14 54 33.4 | +3.6 | |
| GELI | Tayfur-Gelibol | 79.90 312 | | *e* | P | P | 14 54 29.1 | -0.7 | |
| CFR | Carcaliu | 79.90 317⇓ | | *i* | P | P | 14 54 28.5 | -1.2 | |
| HARR | Harsova | 79.91 316⇑ | | *i* | P | P | 14 54 25.1 | -4.7 | |
| ERIK | Erikli-Kesan | 79.93 312 | | *e* | P | P | 14 54 29.5 | -0.5 | |
| KIS | Kishinev | 79.94 319⇑ | | *i* | P | P | 14 54 34.0 | +4.1 | |
| KIS | comp=Z,600nm,2.0s<br>Kishinev | 79.94 319 | | *i* | PcP | PcP | 14 54 54.0 | +17 | |
| KIS | Kishinev | 79.94 319 | | *i* | PP | PP | 14 57 34.0 | +2.2 | |
| KIS | comp=Z,9μm,10.0s<br>Kishinev | 79.94 319 | *c* | *i* | P | P | 14 54 29.0 | -0.9 | |
| KIS | | | | *i* | S | S | 15 04 40.0 | +7.3 | |
| KIS | comp=Z,1μm,6.0s | | | | pmax | pmax | | | |
| IDI | Anoyia | 80.02 307 | | | P | P | 14 54 29.4 | -1.3 | |
| IDI | Anoyia | 80.02 307 | | *e* | P | P | 14 54 30.3 | -0.4 | |
| SIVA | Sivas | 80.03 306 | | *e* | P | P | 14 54 36.5 | +5.8 | |
| SIVA | Sivas | 80.03 306 | | *e* | P | P | 14 54 36.5 | +5.8 | |
| SIVA | Sivas | 80.03 306 | | | P | P | 14 54 30.5 | -0.2 | |
| SIVA | Sivas | 80.03 306 | | | P | P | 14 54 30.5 | -0.2 | |
| EDRB | Edirne | 80.04 313 | | *e* | P | P | 14 54 28.3 | -2.3 | |
| SIGR | SIGRI | 80.09 311 | | *e* | P | P | 14 54 31.8 | +0.9 | |
| SIGR | SIGRI | 80.09 311 | | *e* | P | P | 14 54 30.3 | -0.6 | |
| SIGR | SIGRI | 80.09 311 | | *e* | P | P | 14 54 30.3 | -0.6 | |
| SIGR | SIGRI | 80.09 311 | | | P | P | 14 54 30.5 | -0.4 | |
| SIGR | SIGRI | 80.09 311 | | | P | P | 14 54 30.5 | -0.4 | |
| LEOM | Leova | 80.17 318⇑ | | *i* | P | P | 14 54 31.2 | +0.1 | |
| GADA | Gvkgeada | 80.28 312 | | *e* | P | P | 14 54 31.6 | -0.3 | |
| JMB | Yambol | 80.30 314 | | | P | P | 14 54 33.0 | +1.0 | |
| ALN | Alexandroupoli | 80.33 312 | | *e* | P | P | 14 54 35.5 | +3.4 | |
| ALN | Alexandroupoli | 80.33 312 | | | P | P | 14 54 27.9 | -4.2 | |
| ALN | Alexandroupoli | 80.33 312 | | | P | P | 14 54 27.9 | -4.2 | |
| ALN | Alexandroupoli | 80.33 312 | | | P | P | 14 54 27.9 | -4.2 | |
| SORM | Soroca | 80.56 320⇓ | | *i* | P | P | 14 54 33.9 | +0.7 | |
| GVD | Gavdhos | 80.58 306 | | *e* | P | P | 14 54 36.7 | +3.1 | |
| GVD | Gavdhos | 80.58 306 | | *e* | P | P | 14 54 36.7 | +3.1 | |
| VAM | Vamos | 80.60 307 | | | P | P | 14 54 35.1 | +1.4 | |
| VAM | Vamos | 80.60 307 | | | P | P | 14 54 35.1 | +1.4 | |
| VAM | Vamos | 80.60 307 | | | P | P | 14 54 35.1 | +1.4 | |
| SMTH | Samothraki Isl | 80.61 312 | | *e* | P | P | 14 54 38.2 | +4.5 | |
| SMTH | Samothraki Isl | 80.61 312 | | *e* | P | P | 14 54 38.2 | +4.5 | |
| SMTH | Samothraki Isl | 80.61 312 | | | P | P | 14 54 32.4 | -1.3 | |
| SMTH | Samothraki Isl | 80.61 312 | | | P | P | 14 54 32.4 | -1.3 | |
| VNDA | Vanda | 80.66 169 | | | P | P | 14 54 32.5 | -0.6 | |
| VNDA | comp=Z,31nm,1.2s,baz=300,slow=5.5,SNR=31 | | | | S | S | 15 04 37.2 | -2.0 | |
| VNDA | comp=Z,2.9nm,1.2s,baz=343,slow=11,SNR=2.2<br>Vanda | 80.66 169 | | | P | P | 14 54 32.6 | -0.6 | |
| VNDA | | | | | S | S | 15 04 37.2 | -2.0 | |
| VNDA | comp=Z,31nm,1.3s | | | | pmax | pmax | | | |
| VNDA | comp=N,3.0nm,1.2s | | | | smax | smax | | | |
| VNDA | Vanda | 80.66 169 | | *e* | P | P | 14 54 34.2 | +1.0 | |
| VNDA | comp=N,1μm,2.3s | | | | S | S | 15 04 37.2 | -2.0 | |
| MHLO | Agia Marina, M | 80.69 308 | | *e* | P | P | 14 54 42.5 | +8.3 | |
| MHLO | Agia Marina, M | 80.69 308 | | *e* | P | P | 14 54 42.5 | +8.3 | |
| GRER | | 80.75 317⇓ | | *i* | P | P | 14 54 40.5 | +6.2 | |
| AKASG | Malin Array Be | 80.75 323 | | | P | P | 14 54 32.9 | -1.3 | |
| AKASG | comp=N,3.6nm,0.6s,baz=90,slow=4.4,SNR=35 | | | | S | S | 15 04 36.7 | -4.3 | |
| AKASG | comp=N,0.2nm,0.3s,baz=185,slow=21,SNR=2.5 | | | | LR | LR | 15 33 42.8 | | |
| LIA | comp=N,60μm,21.4s,baz=105,slow=38<br>Limnos Island | 80.75 311 | | *e* | P | P | 14 54 39.5 | +5.1 | |
| LIA | Limnos Island | 80.75 311 | | *e* | P | P | 14 54 39.5 | +5.1 | |
| LIA | Limnos Island | 80.75 311 | | | P | P | 14 54 31.1 | -3.3 | |
| LIA | Limnos Island | 80.75 311 | | | P | P | 14 54 31.1 | -3.3 | |
| KIEV | Kiev | 80.76 322 | | *e* | P | P | 14 54 33.6 | -0.6 | |
| KIEV | comp=Z,130nm,1.1s | | | | pmax | pmax | | | |
| KIEV | Kiev | 80.76 322 | | *e* | P | P | 14 54 32.1 | -2.1 | |
| KIEV | comp=Z,130nm,1.1s | | | | LR | LR | | | |
| AK11 | comp=Z,78μm,19.0s<br>Malin Array Si | 80.78 322 | | *e* | P | P | 14 54 33.1 | -1.2 | |
| IMMV | Iera Moni Meta | 80.78 307 | | *e* | P | P | 14 54 36.7 | +2.0 | |
| IMMV | Iera Moni Meta | 80.78 307 | | *e* | P | P | 14 54 36.7 | +2.0 | |
| SZH | Strazhica | 80.96 315 | | | P | P | 14 54 35.1 | -0.4 | |
| KDZ | Kurdzhali | 80.96 313 | | | P | P | 14 54 36.2 | +0.7 | |
| ISR | Istrita | 80.97 317⇓ | | *i* | P | P | 14 54 34.8 | -0.8 | |
| SULR | | 81.07 316⇑ | | *i* | P | P | 14 54 41.0 | +5.0 | |
| PLOR | Plostina | 81.08 317⇑ | | *i* | P | P | 14 54 35.8 | -0.3 | |
| TESR | Tescani | 81.25 318⇓ | | *i* | P | P | 14 54 37.4 | +0.4 | |
| SECR | | 81.28 316⇓ | | *i* | P | P | 14 54 38.4 | +1.2 | |
| RAO | Raoul Island | 81.29 119 | | | PFAKE | | 14 54 50.0 | +12 | |
| RAO | comp=Z,180μm,21.0s | | | | LR | LR | | | |
| TMCR | Tamitsa | 81.38 337 | | *e* | P | P | 14 54 38.1 | +0.9 | |
| TMCR | | | | *e* | S | S | 15 04 49.9 | +3.0 | |
| TMCR | comp=Z,306nm,0.9s | | | | pmax | pmax | | | |
| ANKY | Antikythira Is | 81.40 307 | | *e* | P | P | 14 54 40.3 | +2.3 | |
| ANKY | Antikythira Is | 81.40 307 | | *e* | P | P | 14 54 40.3 | +2.3 | |
| ANKY | Antikythira Is | 81.40 307 | | | P | P | 14 54 38.5 | +0.5 | |
| ANKY | Antikythira Is | 81.40 307 | | | P | P | 14 54 38.5 | +0.5 | |
| ATH | Athens Observa | 81.47 309 | | *e* | P | P | 14 54 38.0 | -0.3 | |
| ATH | Athens Observa | 81.47 309 | | *e* | P | P | 14 54 38.0 | -0.3 | |
| MLR | Muntele Rosu | 81.47 317 | | | P | P | 14 54 37.6 | -0.8 | |
| MLR | comp=Z,5.7nm,0.9s,baz=150,slow=3.1,SNR=23<br>Muntele Rosu | 81.47 317 | ⇓ | *i* | P | P | 14 54 37.7 | -0.6 | |
| RZN | Rozhen | 81.48 313 | | | P | P | 14 54 37.9 | -0.6 | |
| KAVA | Kavala | 81.48 312 | | | P | P | 14 54 34.6 | -3.7 | |
| KAVA | Kavala | 81.48 312 | | | P | P | 14 54 34.6 | -3.7 | |
| PLD | Plovdiv | 81.58 313 | | | P | P | 14 54 38.7 | -0.1 | |
| AOS | Alonnisos | 81.58 310 | | *e* | P | P | 14 54 31.0 | -7.9 | |
| AOS | Alonnisos | 81.58 310 | | *e* | P | P | 14 54 31.0 | -7.9 | |
| OUR | Ouranopolis | 81.74 311 | | *e* | P | P | 14 54 39.2 | -0.5 | |
| OUR | Ouranopolis | 81.74 311 | | | P | P | 14 54 35.4 | -4.3 | |
| OUR | Ouranopolis | 81.74 311 | | | P | P | 14 54 35.4 | -4.3 | |
| OUR | Ouranopolis | 81.74 311 | | | P | P | 14 54 35.4 | -4.3 | |
| SBA | Scott Base | 81.75 169 | | *e* | P | P | 14 54 40.8 | +1.8 | |
| SBA | comp=Z,1μm,1.9s | | | | pmax | pmax | | | |
| SBA | Scott Base | 81.75 169 | | *e* | P | P | 14 54 40.8 | +1.8 | |
| SBA | comp=Z,1μm,1.9s | | | | LR | LR | | | |
| DID | comp=Z,97μm,21.0s<br>Didima | 81.76 309 | | | P | P | 14 54 37.9 | -2.0 | |
| DID | Didima | 81.76 309 | | | P | P | 14 54 37.9 | -2.0 | |
| TSUM | Tsumeb | 81.79 251 | | | P | P | 14 54 38.3 | -2.2 | |
| TSUM | comp=Z,4.5nm,0.8s,baz=106,slow=7.4,SNR=3.9 | | | | S | S | 15 04 45.3 | -8.1 | |
| TSUM | comp=Z,1.9nm,1.0s,baz=101,slow=16,SNR=2.1<br>Tsumeb | 81.79 251 | | *e* | P | P | 14 54 40.4 | -0.2 | |
| TSUM | comp=Z,99nm,1.1s | | | | S | S | 15 04 45.3 | -8.1 | |
| TSUM | comp=Z,180μm,21.0s | | | | LR | LR | | | |
| KRND | KRANIDI | 81.80 308 | | *e* | P | P | 14 54 41.0 | +0.9 | |
| KRND | KRANIDI | 81.80 308 | | *e* | P | P | 14 54 41.0 | +0.9 | |
| VILL | Villia | 81.83 309 | | | P | P | 14 54 38.5 | -1.8 | |
| VLI | Veliai | 81.85 308 | | *e* | P | P | 14 54 38.5 | -1.8 | |
| VLI | Veliai | 81.85 308 | | *e* | P | P | 14 54 38.5 | -1.8 | |
| PAIG | Paliouri | 81.89 311 | | | P | P | 14 54 36.9 | -3.6 | |
| PAIG | Paliouri | 81.89 311 | | *e* | P | P | 14 54 37.8 | -2.7 | |
| PAIG | Paliouri | 81.89 311 | | *e* | P | P | 14 54 37.8 | -2.7 | |
| PAIG | Paliouri | 81.89 311 | | | P | P | 14 54 36.9 | -3.6 | |
| PAIG | Paliouri | 81.89 311 | | | P | P | 14 54 36.9 | -3.6 | |
| DOPR | Dopca | 81.97 317⇑ | | *i* | P | P | 14 54 41.1 | +0.3 | |
| NVR | Nevrokopi | 82.04 312 | | *e* | P | P | 14 54 42.1 | +0.8 | |
| NVR | Nevrokopi | 82.04 312 | | *e* | P | P | 14 54 42.1 | +0.8 | |
| NVR | Nevrokopi | 82.04 312 | | | P | P | 14 54 39.7 | -1.6 | |
| NVR | Nevrokopi | 82.04 312 | | | P | P | 14 54 39.7 | -1.6 | |
| JOSR | Joseni | 82.06 318⇑ | | *i* | P | P | 14 54 49.3 | +8.0 | |
| PGB | Panagyurishte | 82.06 314 | | | P | P | 14 54 41.0 | -0.4 | |
| LTK | Loutraki | 82.07 309 | | *e* | P | P | 14 54 45.5 | +4.0 | |
| LTK | Loutraki | 82.07 309 | | *e* | P | P | 14 54 45.5 | +4.0 | |
| VOIR | | 82.08 317⇑ | | *i* | P | P | 14 54 40.8 | -0.7 | |
| ATAL | Atalanti | 82.15 310 | | | P | P | 14 54 37.6 | -4.3 | |
| ATAL | Atalanti | 82.15 310 | | | P | P | 14 54 37.6 | -4.3 | |
| PLG | Polygyros | 82.15 311 | | | P | P | 14 54 38.5 | -3.4 | |
| PLG | Polygyros | 82.15 311 | | *e* | P | P | 14 54 40.5 | -1.4 | |
| PLG | Polygyros | 82.15 311 | | *e* | P | P | 14 54 40.5 | -1.4 | |
| PLG | Polygyros | 82.15 311 | | | P | P | 14 54 38.5 | -3.4 | |
| PLG | Polygyros | 82.15 311 | | | P | P | 14 54 38.5 | -3.4 | |
| MMB | Musomiste | 82.19 313 | | | P | P | 14 54 39.9 | -2.2 | |
| SRS | Serrai | 82.19 312 | | | P | P | 14 54 39.7 | -2.4 | |
| SRS | Serrai | 82.19 312 | | *e* | P | P | 14 54 40.6 | -1.5 | |
| SRS | Serrai | 82.19 312 | | *e* | P | P | 14 54 40.6 | -1.5 | |
| SRS | Serrai | 82.19 312 | | | P | P | 14 54 39.7 | -2.4 | |
| SRS | Serrai | 82.19 312 | | | P | P | 14 54 39.7 | -2.4 | |
| SOH | Sokhos | 82.31 312 | | | P | P | 14 54 39.7 | -3.0 | |
| SOH | Sokhos | 82.31 312 | | *e* | P | P | 14 54 36.8 | -5.9 | |
| SOH | Sokhos | 82.31 312 | | *e* | P | P | 14 54 36.8 | -5.9 | |
| SOH | Sokhos | 82.31 312 | | | P | P | 14 54 39.7 | -3.0 | |
| SOH | Sokhos | 82.31 312 | | | P | P | 14 54 39.7 | -3.0 | |
| DYR | Agios Nikonas | 82.33 308 | | *e* | P | P | 14 54 41.1 | -1.8 | |
| DYR | Agios Nikonas | 82.33 308 | | *e* | P | P | 14 54 41.1 | -1.8 | |
| DYR | Agios Nikonas | 82.33 308 | | | P | P | 14 54 44.8 | +1.9 | |
| ARR | Arges | 82.34 316⇓ | | *i* | P | P | 14 54 42.1 | -0.7 | |
| HORT | Hortiatis | 82.45 312 | | *e* | P | P | 14 54 43.1 | -0.5 | |
| HORT | Hortiatis | 82.45 312 | | *e* | P | P | 14 54 40.4 | -3.1 | |
| HORT | Hortiatis | 82.45 312 | | *e* | P | P | 14 54 40.4 | -3.1 | |
| BURAR | Bucovina Array | 82.47 319⇑ | | *i* | P | P | 14 54 43.7 | +0.2 | |
| BUR04 | Bucovina Ar. S | 82.47 319 | | *e* | P | P | 14 54 43.1 | -0.4 | |
| DSF | Desfina | 82.48 309 | | *e* | P | P | 14 54 46.6 | +2.9 | |
| DSF | Desfina | 82.48 309 | | *e* | P | P | 14 54 46.6 | +2.9 | |
| DSF | Desfina | 82.48 309 | | | P | P | 14 54 42.0 | -1.7 | |
| DSF | Desfina | 82.48 309 | | | P | P | 14 54 42.0 | -1.7 | |
| GUR | Goura | 82.54 309 | | *e* | P | P | 14 54 43.1 | -1.0 | |
| GUR | Goura | 82.54 309 | | *e* | P | P | 14 54 43.1 | -1.0 | |
| GUR | Goura | 82.54 309 | | | P | P | 14 54 43.1 | -1.0 | |
| GUR | Goura | 82.54 309 | | | P | P | 14 54 43.1 | -1.0 | |
| MPEP | Malo Peshtene | 82.54 314 | | | P | P | 14 54 44.6 | +0.8 | |
| MICGM | Minsk | 82.64 326⇑ | | *e* | P | P | 14 54 44.0 | 0.0 | |
| MNK | Minsk | 82.66 326 | *c* | *e* | P | P | 14 54 44.0 | -0.2 | |
| MNK | | | | | S | S | 15 05 06.0 | +5.4 | |
| MNK | | | | | PS | PnS | 15 06 14.0 | +22 | |
| MNK | comp=E,540nm,2.0s | | | | pmax | pmax | | | |
| MNK | comp=Z,700nm,2.0s | | | | pmax | pmax | | | |
| MNK | comp=Z,29μm,20.0s | | | | smax | smax | | | |
| MNK | comp=N,36μm,24.0s | | | | | | | | |
| KLV | Kalavryta, Ach | 82.70 309 | | *e* | P | P | 14 54 46.1 | +1.2 | |
| KLV | Kalavryta, Ach | 82.70 309 | | *e* | P | P | 14 54 46.1 | +1.2 | |
| KLV | Kalavryta, Ach | 82.70 309 | | | P | P | 14 54 45.4 | +0.5 | |
| KLV | Kalavryta, Ach | 82.70 309 | | | P | P | 14 54 45.4 | +0.5 | |
| KKB | Krupnik | 82.71 313 | | | P | P | 14 54 44.1 | -0.7 | |
| KNT | Kendrikon | 82.71 312 | | *e* | P | P | 14 54 42.6 | -2.2 | |
| KNT | Kendrikon | 82.71 312 | | | P | P | 14 54 43.1 | -1.7 | |
| KNT | Kendrikon | 82.71 312 | | | P | P | 14 54 43.1 | -1.7 | |
| KNT | Kendrikon | 82.71 312 | | | P | P | 14 54 43.1 | -1.7 | |
| AGG | Agios Georgios | 82.74 310 | | *e* | P | P | 14 54 45.8 | +0.8 | |
| AGG | Agios Georgios | 82.74 310 | | *e* | P | P | 14 54 47.9 | +2.9 | |
| AGG | comp=Z,480nm,1.5s | | | | pmax | pmax | | | |
| AGG | Agios Georgios | 82.74 310 | | *e* | P | P | 14 54 43.0 | -2.0 | |
| AGG | Agios Georgios | 82.74 310 | | *e* | P | P | 14 54 43.0 | -2.0 | |
| AGG | Agios Georgios | 82.74 310 | | | P | P | 14 54 44.2 | -0.8 | |
| AGG | Agios Georgios | 82.74 310 | | *e* | P | P | 14 54 47.9 | +2.9 | |
| VTS | Vitosha | 82.77 314 | | | P | P | 14 54 44.1 | -1.1 | |
| KALE | Kalithea | 82.77 309 | | | P | P | 14 54 44.8 | -0.4 | |
| KALE | Kalithea | 82.77 309 | | | P | P | 14 54 44.8 | -0.4 | |
| LIT | Litokhoron | 82.82 311 | | | P | P | 14 54 41.4 | -4.0 | |
| LIT | Litokhoron | 82.82 311 | | | P | P | 14 54 41.4 | -4.0 | |
| LIT | Litokhoron | 82.82 311 | | | P | P | 14 54 41.4 | -4.0 | |
| PYL | PYLOS | 82.83 308 | | *e* | P | P | 14 54 48.1 | +2.7 | |
| PYL | PYLOS | 82.83 308 | | *e* | P | P | 14 54 48.1 | +2.7 | |
| SERG | Sergoula | 82.84 309 | | | P | P | 14 54 43.1 | -2.4 | |
| LAKA | Lakka | 82.87 309 | | | P | P | 14 54 44.8 | -0.9 | |
| LAKA | Lakka | 82.87 309 | | | P | P | 14 54 44.8 | -0.9 | |
| MAKR | Makrakomi, Fth | 82.89 310 | | | P | P | 14 54 43.1 | -2.7 | |
| MAKR | Makrakomi, Fth | 82.89 310 | | | P | P | 14 54 43.1 | -2.7 | |
| LOT | Lotru | 82.96 316⇓ | | *i* | P | P | 14 54 46.0 | -0.1 | |
| DRO | Drossia | 83.03 309 | | | P | P | 14 54 45.4 | -1.1 | |
| GRG | Griva | 83.04 312 | | *e* | P | P | 14 54 45.8 | -0.8 | |
| GRG | Griva | 83.04 312 | | | P | P | 14 54 44.2 | -2.3 | |
| GRG | Griva | 83.04 312 | | | P | P | 14 54 44.2 | -2.3 | |
| GRG | Griva | 83.04 312 | | | P | P | 14 54 44.2 | -2.3 | |
| EVR | Evrytania | 83.12 310 | | *e* | P | P | 14 54 44.3 | -2.8 | |
| EVR | Evrytania | 83.12 310 | | *e* | P | P | 14 54 44.3 | -2.8 | |
| SMY | Shemya | 83.17 36 | | *e* | P | P | 14 54 47.3 | +0.5 | |
| SMY | comp=Z,590nm,1.3s | | | | pmax | pmax | | | |
| SMY | Shemya | 83.17 36 | | *e* | P | P | 14 54 46.9 | +0.1 | |
| CJR | comp=Z,588nm,1.3s<br>Cluj-Napoca | 83.34 318⇓ | | *i* | P | P | 14 54 48.4 | +0.4 | |
| NACGM | Naroch | 83.36 326 | | *e* | P | P | 14 54 47.0 | -0.8 | |
| IDID | Didziasalis | 83.50 327 | | *e* | P | P | 14 54 48.3 | -0.2 | |
| IDID | comp=Z,217nm,1.2s | | | | IAmb | IAmb | 14 55 17.5 | | |
| PDO | Prodromos | 83.55 309 | | | P | P | 14 54 47.7 | -1.5 | |
| BMR | Baia Mare | 83.61 319⇑ | | *i* | P | P | 14 54 50.4 | +1.1 | |
| GZR | Gura Zlata | 83.63 316⇑ | | *i* | P | P | 14 54 49.3 | -0.2 | |
| DEV | Deva | 83.64 317⇑ | | *i* | P | P | 14 54 49.6 | +0.1 | |
| DSL | Palaion Diasel | 83.71 310 | | | P | P | 14 54 50.0 | 0.0 | |
| DSL | Palaion Diasel | 83.71 310 | | | P | P | 14 54 50.0 | 0.0 | |
| LVV | L'vov | 83.74 321 | | *e* | P | P | 14 54 53.0 | +3.1 | |
| LVV | | | | *e* | S | S | 15 05 16.0 | +4.2 | |
| FNA | Florina | 83.78 311 | | *e* | P | P | 14 54 46.6 | -3.7 | |
| IIGN | Ignalina | 83.79 327 | | *e* | P | P | 14 54 49.9 | -0.1 | |
| IIGN | comp=Z,239nm,1.1s | | | | IAmb | IAmb | 14 55 20.2 | | |
| IZAR | Zarasai | 83.89 327 | | *e* | P | P | 14 54 50.3 | -0.2 | |
| IZAR | comp=Z,168nm,1.3s | | | | IAmb | IAmb | 14 55 19.3 | | |
| ISAL | Salakas | 83.90 327 | | *e* | P | P | 14 54 50.6 | 0.0 | |
| ISAL | comp=Z,144nm,1.1s | | | | IAmb | IAmb | 14 55 20.7 | | |
| SKO | Skopje | 83.94 313 | | *i* | P | P | 14 54 53.8 | +2.7 | |
| VLS | Valsamata | 83.94 309 | | *e* | P | P | 14 54 52.1 | +0.9 | |
| VLS | Valsamata | 83.94 309 | | *e* | P | P | 14 54 52.1 | +0.9 | |
| DRGR | | 83.95 318⇑ | | *i* | P | P | 14 54 51.1 | 0.0 | |
| JAN | Janina | 83.98 310 | | *e* | P | P | 14 54 53.4 | +2.0 | |
| JAN | Janina | 83.98 310 | | *e* | P | P | 14 54 53.4 | +2.0 | |
| LKD2 | Lefkada island | 83.99 309 | | *e* | P | P | 14 54 56.4 | +5.0 | |
| LKD2 | Lefkada island | 83.99 309 | | *e* | P | P | 14 54 56.4 | +5.0 | |
| LVZ | Lovozero | 84.24 340 | *c* | *i* | P | P | 14 54 51.0 | -1.1 | |
| LVZ | comp=Z,36nm,1.4s | | | | pmax | pmax | | | |
| TRPA | Tarpa | 84.34 319⇑ | | *e* | P | P | 14 54 52.9 | 0.0 | |
| IGT | Igoumenitsa | 84.36 310 | | *e* | P | P | 14 55 01.9 | +8.6 | |
| IGT | Igoumenitsa | 84.36 310 | | *e* | P | P | 14 55 01.9 | +8.6 | |
| VSU | Vasula | 84.36 330 | *c* | *i* | P | P | 14 54 52.5 | -0.3 | |
| VSU | comp=Z,194nm,1.6s | | | | pmax | pmax | | | |
| VSU | comp=Z,290μm,21.0s | | | | MLR | MLR | | | |
| BZS | Buzias | 84.47 316⇓ | | *i* | P | P | 14 54 53.0 | -0.7 | |
| KWP | Kalwaria Pacla | 84.54 320 | | *e* | P | P | 14 54 56.7 | +2.8 | |
| KWP | | | | *i* | S | S | 15 05 18.9 | -0.8 | |
| KWP | | | | | LMZ | LR | 15 34 56.9 | | |
| KWP | Kalwaria Pacla | 84.54 320 | | *e* | P | P | 14 54 56.8 | +2.8 | |
| KWP | | | | *i* | S | S | 15 05 19.0 | -0.8 | |
| KWP | comp=Z,53μm,23.5s | | | | MLR | MLR | | | |
| KWP | Kalwaria Pacla | 84.54 320 | ⇑ | *i* | P | P | 14 54 56.7 | +2.8 | |
| APA | Apatity | 84.54 339 | ⇓ | *i* | P | P | 14 54 53.4 | -0.1 | |
| APA | | | | *i* | | | 14 58 10.0 | | |
| APA | | | | *i* | S | S | 15 05 17.0 | -2.1 | |
| APA | | | | *i* | SS | SS | 15 10 51.0 | +0.9 | |
| APA | comp=Z,126nm,1.0s | | | | pmax | pmax | | | |
| APA | comp=Z,132μm,22.0s | | | | MLR | MLR | | | |
| BILL | Bilibino | 84.54 20 | *c* | *i* | P | P | 14 54 52.7 | -0.9 | |
| BILL | | | | *i* | S | S | 15 05 25.0 | +5.9 | |
| BILL | comp=Z,33nm,1.1s | | | | pmax | pmax | | | |
| BILL | comp=Z,5μm,5.2s | | | | pmax | pmax | | | |
| SIRR | Siria | 84.56 317⇓ | | *i* | P | P | 14 54 53.7 | -0.5 | |
| UZH | Uzhgorod | 84.60 319 | | *e* | P | P | 14 54 58.1 | +3.8 | |
| UZH | | | | *e* | | | 14 55 08.7 | | |
| UZH | | | | *e* | SS | PP | 14 58 07.1 | -2.9 | |
| UZH | | | | *e* | S | S | 15 05 22.9 | +2.5 | |
| UZH | | | | *e* | PS | PnS | 15 06 30.3 | +14 | |
| UZH | | | | *e* | SSS | SSS | 15 14 15.9 | | |
| KOLS | Kolonicke sedl | 84.67 320 | | *e* | P | P | 14 54 52.9 | -1.8 | |
| KOLS | comp=Z,31nm,0.9s | | | | pmax | pmax | | | |
| KOLS | Kolonicke sedl | 84.67 320 | | *e* | P | P | 14 54 52.9 | -1.8 | |
| KOLS | Kolonicke sedl | 84.67 320 | | *e* | S | S | 15 05 20.5 | -0.7 | |
| KEK | Kerkira | 84.79 310 | | *e* | P | P | 14 54 59.4 | +3.9 | |
| KEK | Kerkira | 84.79 310 | | *e* | P | P | 14 54 59.4 | +3.9 | |
| TIR | Tirane | 85.00 312 | | | P | P | 14 54 59.0 | +2.6 | |
| TIR | comp=Z,603nm,1.8s | | | | pmax | pmax | | | |
| TIR | comp=Z,153μm,19.0s | | | | MLR | MLR | | | |
| TIR | Tirane | 85.00 312 | | *e* | P | P | 14 54 55.2 | -1.2 | |
| TIR | Tirane | 85.00 312 | | *e* | P | P | 14 54 55.2 | -1.2 | |
| TIR | Tirane | 85.00 312 | | | P | P | 14 54 59.0 | +2.6 | |
| TIR | comp=Z,603nm,1.8s | | | | LR | LR | | | |
| TIR | comp=Z,153μm,19.0s | | | | | | | | |
| MIDW | Midway | 85.08 61 | | | PFAKE | | 14 55 10.0 | +13 | |
| MIDW | comp=Z,34μm,20.0s | | | | LR | LR | | | |
| PVY | Plav | 85.13 313 | ⇓ | *i* | P | P | 14 54 57.0 | -0.2 | |
| SUW | Suwalki | 85.18 325 | | *e* | P | P | 14 54 56.3 | -0.8 | |
| SUW | | | | *e* | S | S | 15 05 22.3 | -3.6 | |
| SUW | | | | | LMZ | LR | 15 30 46.3 | | |
| SUW | Suwalki | 85.18 325 | | *e* | P | P | 14 54 56.4 | -0.7 | |
| SUW | | | | *e* | S | S | 15 05 22.3 | -3.6 | |
| IVA | Berane | 85.22 313 | ⇓ | *i* | P | P | 14 54 56.8 | -0.8 | |
| DIVS | Divibare | 85.35 315 | ⇓ | *i* | P | P | 14 54 56.8 | -1.5 | |
| DIVS | Divibare | 85.35 315 | | P | P | 14 54 53.3 | -5.0 | | |
| STHS | Stebnicka Huta | 85.43 320 | | *e* | P | P | 14 54 58.8 | +0.3 | |
| STHS | comp=Z,30nm,1.0s | | | | pmax | pmax | | | |
| STHS | Stebnicka Huta | 85.43 320 | | *e* | P | P | 14 54 58.8 | +0.3 | |
| FINES | FINESS Array B | 85.50 332 | | P | P | 14 54 58.2 | -0.3 | | |
| FINES | comp=Z,16nm,0.9s,baz=119,slow=5.6,SNR=15 | | | | LR | LR | 15 37 59.2 | | |
| ULC | comp=Z,65μm,19.1s,baz=108,slow=39<br>Ulcinj | 85.55 312 | ⇓ | *i* | P | P | 14 54 59.2 | 0.0 | |
| TTG | Podgorica | 85.61 313 | ⇓ | *i* | P | P | 14 54 58.9 | -0.6 | |
| DRME | Dracevica, Mon | 85.63 313 | ⇓ | *i* | P | P | 14 54 59.8 | +0.2 | |
| PLE | Pljevlja | 85.66 314 | ⇓ | *i* | P | P | 14 54 59.6 | -0.2 | |
| BUM | Brajici-Budva | 85.86 313 | ⇓ | *i* | P | P | 14 55 00.6 | -0.2 | |
| NKY | Niksic | 85.86 313 | ⇓ | *i* | P | P | 14 55 01.4 | +0.5 | |
| NKME | Niksic | 85.89 313 | ⇓ | *i* | P | P | 14 55 00.7 | -0.2 | |
| UPM | Unac-Piva | 85.98 314 | | *e* | P | P | 14 54 59.7 | +0.1 | |
| AMKA | Amchitka | 86.01 38 | | *e* | P | P | 14 55 00.6 | -0.6 | |
| NIE | Niedzica | 86.04 320 | | *e* | P | P | 14 55 01.7 | +0.2 | |
| NIE | | | | *e* | S | S | 15 05 35.0 | +0.3 | |
| NIE | | | | | LMZ | LR | 15 36 02.5 | | |
| NIE | Niedzica | 86.04 320 | | *e* | P | P | 14 55 01.7 | +0.2 | |
| NIE | | | | *e* | S | S | 15 05 35.0 | +0.3 | |
| NIE | comp=Z,55μm,23.3s | | | | MLR | MLR | | | |
| PSZ | Piszkesteto | 86.05 318 | | *e* | P | P | 14 55 01.7 | +0.1 | |
| PSZ | comp=Z,1μm,2.0s | | | | pmax | pmax | | | |
| PSZ | Piszkesteto | 86.05 318 | ⇑ | *i* | P | P | 14 55 01.1 | -0.5 | |
| PSZ | Piszkesteto | 86.05 318 | ⇑ | *e* | P | P | 14 55 01.4 | -0.2 | |
| PSZ | Piszkesteto | 86.05 318 | | *e* | P | P | 14 55 01.7 | +0.1 | |
| PSZ | comp=Z,1μm,2.0s | | | | LR | LR | | | |
| PSZ | comp=Z,58μm,20.0s | | | | | | | | |
| BEL | Belsk | 86.16 322 | | *e* | P | P | 14 55 01.1 | -0.9 | |
| BEL | | | | *e* | S | S | 15 05 34.3 | -1.4 | |
| BEL | | | | | LMZ | LR | 15 37 20.9 | | |
| BEL | Belsk | 86.16 322 | | *e* | P | P | 14 55 01.1 | -0.9 | |
| BEL | | | | *e* | S | S | 15 05 34.3 | -1.4 | |
| BEL | comp=Z,90μm,24.0s | | | | MLR | MLR | | | |
| HCY | Herceg Novi | 86.17 313 | ⇓ | *i* | P | P | 14 55 02.8 | +0.5 | |
| BRY | Bratogost | 86.21 313 | | *e* | P | P | 14 55 02.3 | -0.3 | |
| QSPA | South Pole Qui | 86.45 180 | | P | P | 14 55 02.5 | -0.8 | | |
| OJC | comp=Z,22nm,1.2s,baz=305,slow=1.8,SNR=1.9<br>Ojcow | 86.49 321 | | *e* | P | P | 14 55 03.6 | -0.1 | |
| OJC | | | | *e* | S | S | 15 05 37.5 | -1.5 | |
| OJC | | | | | LMZ | LR | 15 37 40.8 | | |
| OJC | Ojcow | 86.49 321 | | *e* | P | P | 14 55 03.6 | -0.1 | |
| OJC | | | | *e* | S | S | 15 05 37.6 | -1.5 | |
| OJC | comp=Z,58μm,19.9s | | | | MLR | MLR | | | |
| OJC | Ojcow | 86.49 321 | | *e* | P | P | 14 55 04.1 | +0.4 | |
| LANS | comp=Z,262nm,1.3s<br>Liptovska Anna | 86.53 320 | | *e* | P | P | 14 55 05.5 | +1.6 | |
| LANS | Liptovska Anna | 86.53 320 | | *e* | P | P | 14 55 05.5 | +1.6

KRLC e*PP **pP** **14 55 18.1 -1.5**
KRLC e 14 55 29.0
**KRLC Kraliky 88.39 320** eP **P** **14 55 13.9 +1.0**
KRLC ePCP **PcP** **14 55 15.8 +1.2**
KRLC epP **pP** **14 55 18.1 -1.5**
KRLC eS S 15 06 04.6 +7.2
**VRAC Vranov 88.42 319** P **P** **14 55 13.7 +0.7**
comp=Z,1.8nm,0.4s,baz=94,slow=9.7,SNR=3.5
**VRAC Vranov 88.42 319** ⇑*i*P **P** **14 55 12.8 -0.2**
**WDD Wield Dalam 88.46 306** PFAKE 14 55 20.0 +6.5
WDD LR LR
comp=Z,106µm,20.0s
**GKP Gorka Klasztor 88.53 323** eP **P** **14 55 13.3 -0.1**
GKP eS **S** **15 05 57.1 -1.3**
GKP LMZ LR 15 42 40.7
**GKP Gorka Klasztor 88.53 323** eP **P** **14 55 13.3 -0.1**
GKP eS **S** **15 05 57.2 -1.2**
**KTK1 Kautokeino 88.58 339** eP **P** **14 55 14.0 +0.6**
**DPC Dobruska-Polom 88.72 320** eP **P** **14 55 15.0 +0.6**
DPC e*PP **pP** **14 55 19.4 -1.7**
DPC e 14 55 30.7
DPC eS **S** **15 06 01.4 +0.9**
DPC MLR MLR
comp=Z,91µm,17.0s
**DPC Dobruska-Polom 88.72 320** eP **P** **14 55 15.0 +0.6**
DPC ePCP **PcP** **14 55 17.4 +1.4**
DPC epP **pP** **14 55 19.4 -1.7**
DPC eS S **15 06 01.4 +0.9**
DPC eSS SS 15 11 42.8 -9.4
DPC AMS AMS 15 45 00.0
comp=Z,91µm,17.0s
**CONA Conrad Observa 88.73 318**⇑*i*P **P** **14 55 15.2 +0.6**
comp=Z,4µm,5.1s,SNR=8.4
**KSP Ksiaz 88.80 321** eP **P** **14 55 15.1 +0.4**
KSP eS **S** **15 06 01.4 +0.4**
KSP LMZ LR 15 41 12.6
**KSP Ksiaz 88.80 321** eP **P** **14 55 15.1 +0.4**
KSP eS **S** **15 06 01.5 +0.4**
**HAMF Hammerfest 88.82 341** eP **P** **14 55 13.8 -0.6**
**BOJS Bojanci 88.88 316** eP **P** **14 55 14.9 +0.2**
BOJS *i* S **S** **15 06 00.4 -1.7**
BOJS e 15 19 08.0
**ARSA Arzberg 88.88 317**⇑*i*P **P** **14 55 15.6 +0.4**
comp=Z,5µm,4.4s,SNR=17
**UPC Upice 88.93 321** eP **P** **14 55 15.8 +0.4**
UPC e*PP **pP** **14 55 20.1 -2.0**
UPC e 14 55 31.2
UPC eS **S** **15 06 03.0 +0.6**
UPC MLR MLR
comp=Z,119µm,18.3s
**UPC Upice 88.93 321** eP **P** **14 55 15.8 +0.4**
UPC epP **pP** **14 55 20.1 -2.0**
UPC eS S **15 06 03.0 +0.6**
UPC AMS AMS 15 42 50.0
comp=Z,119µm,18.3s
**TREC Trest 89.13 319** eP **P** **14 55 17.2 +0.8**
TREC e*PP **pP** **14 55 21.0 -2.1**
TREC e 14 55 32.1
TREC eS **S** **15 06 06.8 +2.4**
TREC MLR MLR
comp=Z,60µm,17.0s
**TREC Trest 89.13 319** eP **P** **14 55 17.2 +0.8**
TREC epP **pP** **14 55 21.0 -2.1**
TREC eS **S** **15 06 06.8 +2.4**
TREC AMS AMS 15 48 10.0
comp=Z,60µm,17.0s
**SOKA Soboth 89.16 317**⇓*i*PcP **P** **14 55 17.5 +0.9**
comp=Z,4µm,4.1s,SNR=9.9
**LJU Ljubljana 89.44 316** eP **P** **14 55 18.4 +0.5**
LJU eS **S** **15 06 06.2 -1.1**
**OBKA Obir 89.47 316**⇑*i*P **P** **14 55 18.0 -0.1**
comp=Z,5µm,3.7s
**GOPC GO Pecny, Ondr 89.65 320** eP P 14 55 23.2 +4.4
GOPC e 14 55 34.6
GOPC eS **S** **15 06 09.7 +0.5**
GOPC MLR MLR
comp=Z,81µm,15.9s
**GOPC GO Pecny, Ondr 89.65 320** epP **P** **14 55 23.2 +4.4**
GOPC eS **S** **15 06 09.7 +0.5**
GOPC AMS AMS 15 46 10.0
comp=Z,81µm,15.9s
**CLTB Caltabellotta 89.66 308** eP **P** **14 55 19.0 -0.2**
comp=Z,187nm,1.5s
CLTB LR LR
comp=Z,26µm,19.0s
**MOA Molln 89.79 318**⇑*i*PcP P 14 55 22.9 +3.4
comp=Z,4µm,4.8s,SNR=9.6
**PRU Pruhonice 89.82 320** eP **P** **14 55 20.4 +0.9**
PRU e*PP **pP** **14 55 24.5 -1.7**
PRU e 14 55 35.3
PRU e 14 58 56.6
PRU eS **S** **15 06 10.1 -0.5**
PRU eSS **SS** **15 12 12.0 +4.0**
PRU MLR MLR
comp=Z,85µm,16.1s
**PRU Pruhonice 89.82 320** eP **P** **14 55 20.4 +0.9**
PRU epP **pP** **14 55 24.5 -1.7**
PRU ePP **PP** **14 58 56.6 +4.6**
PRU eS **S** **15 06 10.1 -0.5**
PRU eSS **SS** **15 12 12.0 +4.0**
PRU AMS AMS 15 46 20.0
comp=Z,85µm,16.1s
**PVCC Panska Ves 89.85 320** eP **P** **14 55 20.9 +1.2**
PVCC e*PP **pP** **14 55 24.9 -1.5**
PVCC eS **S** **15 06 10.4 -0.5**
PVCC MLR MLR
comp=Z,132µm,17.2s
**PVCC Panska Ves 89.85 320** eP **P** **14 55 20.9 +1.2**
PVCC epP **pP** **14 55 24.9 -1.5**
PVCC eS **S** **15 06 10.4 -0.5**
PVCC AMS AMS 15 46 20.0
comp=Z,132µm,17.2s
**PRA Prague 89.89 320** eP P 14 55 24.3 +4.4
PRA eS **S** **15 06 10.9 -0.4**
PRA eSS **SS** **15 12 11.4 +2.3**
PRA MLR MLR
comp=Z,99µm,16.7s
**PRA Prague 89.89 320** epP **P** **14 55 24.3 +4.4**
PRA eS **S** **15 06 10.9 -0.4**
PRA eSS **SS** **15 12 11.4 +2.3**
PRA AMS AMS 15 46 30.0
comp=Z,99µm,16.7s
**HOPEN Hopen 89.95 347** eP **P** **14 55 18.7 -0.9**
HOPEN e 15 06 07.3
HOPEN IAMs_20 IAMs_20 15 43 05.9
comp=Z,210µm,20.1s
HOPEN IVMs_BB IVMs_BB 15 43 20.1
comp=Z,72µm,15.7s
**MYKA Terra Mystica 90.10 317**⇑*i*pP P 14 55 25.1 +4.0
comp=Z,3µm,3.7s,SNR=13
**BSD Bornholm Skovb 90.11 325** *i* P P 14 55 33.0 +12
**ATKA Atka Island 90.12 38** eP **P** **14 55 21.7 +0.8**
comp=Z,902nm,1.3s
**TRO Tromso 90.21 340** eP **P** **14 55 21.3 +0.4**
TRO e 15 06 12.8
TRO IAMs_20 IAMs_20 15 40 16.6
comp=Z,191µm,21.1s
TRO IVMs_BB IVMs_BB 15 40 50.1
comp=Z,63µm,19.6s
**GEC2 GERESS Array S 90.26 319** eP **P** **14 55 21.5 -0.2**
**GEC2 GERESS Array S 90.26 319** eP **P** **14 55 21.6 -0.2**
comp=Z,681nm,1.6s,baz=93,slow=8.9
GEC2 eS **S** **15 06 10.4 -4.6**
**GEC2 GERESS Array S 90.26 319** eP **P** **14 55 22.3 +0.6**
**GERES GERESS Array B 90.26 319** P **P** **14 55 22.3 +0.6**
comp=Z,8.9nm,1.0s,baz=96,slow=5.4,SNR=30
GERES S **SKSac** **15 05 56.6 +4.5**
comp=Z,0.2nm,0.3s,baz=148,slow=24,SNR=2.9
**BRG Berggiesshubel 90.28 321** *i* P **P** **14 55 22.2 +0.5**
comp=Z,19nm,1.4s
BRG *i* 14 55 26.2
comp=Z,294nm,2.0s
BRG *i* 14 55 37.7
comp=Z,310nm,1.5s
**BRG Berggiesshubel 90.28 321** S **S** **15 06 15.0 +0.1**
BRG SS **SS** **15 12 16.0 +1.3**
**BRG Berggiesshubel 90.28 321** *i* P **P** **14 55 22.2 +0.5**
BRG *i* 14 55 26.2
BRG *i* 14 55 37.7
BRG S **S** **15 06 15.0 +0.1**
BRG SS **SS** **15 12 16.0 +1.3**
BRG pmax pmax
comp=Z,19nm,1.4s
BRG MLR MLR
comp=N,63µm,18.7s
BRG MLR MLR
comp=E,90µm,19.9s
BRG MLR MLR
comp=Z,131µm,20.5s
**BRG Berggiesshubel 90.28 321** eP **P** **14 55 21.7 +0.1**
comp=Z,648nm,1.9s,baz=93,slow=8.9
BRG eS **S** **15 06 12.1 -2.8**
**KBA Koelnbreinsper 90.34 317**⇑*i*P **P** **14 55 22.1 -0.2**
comp=Z,3µm,4.3s
**KHC Kasperske Hory 90.36 319** eP **P** **14 55 22.2 0.0**
KHC e*PP **pP** **14 55 26.3 -2.6**
KHC e 14 55 37.6
KHC eS **S** **15 06 14.4 -1.4**
KHC MLR MLR
comp=Z,79µm,16.8s
**KHC Kasperske Hory 90.36 319** eP **P** **14 55 22.2 0.0**
KHC epP **pP** **14 55 26.3 -2.6**
KHC eS S **15 06 14.4 -1.4**
KHC AMS AMS 15 45 30.0
comp=Z,79µm,16.8s
**KHC Kasperske Hory 90.36 319** eP **P** **14 55 21.9 -0.2**
comp=Z,249nm,2.2s
**SNAA Sanae 90.73 198** P **P** **14 55 24.1 +0.6**
**SNAA Sanae 90.73 198** P **P** **14 55 24.7 +1.2**
comp=Z,15nm,1.2s,baz=78,slow=2.5,SNR=21
**SNAA Sanae 90.73 198** P **P** **14 55 24.7 +1.2**
SNAA pmax pmax
comp=Z,15nm,1.2s
**SNAA Sanae 90.73 198** eP **P** **14 55 24.1 +0.6**
comp=Z,228nm,1.9s
**RJOB Jochberg 90.77 318** eP **P** **14 55 23.3 -0.8**
comp=Z,148nm,1.3s,baz=93,slow=8.9
RJOB eS S 15 06 13.6 -6.1
**WET Wettzell 90.82 319** eP **P** **14 55 24.2 -0.1**
comp=Z,442nm,1.6s,baz=93,slow=8.9
WET eS **S** **15 06 16.9 -3.1**
**ABTA Abfaltersbach 90.89 317**⇓*i*P **P** **14 55 24.9 +0.2**
comp=Z,2µm,4.2s
**CLL Collm 90.91 321** eP **P** **14 55 24.0 -0.6**
CLL *i* 14 55 27.9
CLL *i* 14 55 39.7
CLL eS **S** **15 06 25.0 +4.4**
CLL MLR MLR
comp=Z,85µm,19.7s
**CLL Collm 90.91 321** eP **P** **14 55 24.2 -0.4**
comp=Z,270nm,1.6s,baz=93,slow=8.9
CLL eS **S** **15 06 16.6 -4.1**
**CLL Collm 90.91 321** eP **P** **14 55 24.0 -0.6**
CLL *i* P(2) 14 55 27.9
comp=Z,181nm,2.0s
CLL *i* Pmax 14 55 39.7
comp=Z,591nm,2.3s
CLL *i* 14 55 47.9
CLL ePmax 14 55 58.0
CLL ePP PP 14 59 12.0 +11
CLL eS **S** **15 06 25.0 +4.4**
comp=N,78µm,30.2s
CLL eS **S** **15 06 25.0 +4.4**
comp=E,14µm,18.3s
CLL e 15 07 01.0
CLL ePS **PnS** **15 07 33.0 +1.8**
CLL ePPS PPS 15 07 55.0
CLL e 15 09 37.0
CLL eSS SS 15 12 12.0 -12
CLL e 15 14 29.0
CLL eSSS SSS 15 16 18.0
CLL eSSSS 15 19 11.0
CLL Lm MLR 15 44 00.0
comp=N,55µm,18.0s
CLL Lm MLR 15 44 00.0
comp=E,84µm,19.5s
CLL Lm MLR 15 44 00.0
comp=Z,85µm,19.7s
CLL Lmax 15 44 00.0
**CLL Collm 90.91 321** eP **P** **14 55 27.1 +2.5**
comp=Z,366nm,1.6s
**BJO Bjornoya 90.94 345** eP P 14 55 20.4 -3.8
BJO IVMs_BB IVMs_BB 15 45 14.9
comp=Z,46µm,16.7s
**NKC Novy Kostel 91.18 320** eP P 14 55 30.3 +4.4
NKC e 14 55 41.8
NKC eS **S** **15 06 20.8 -2.4**
NKC MLR MLR
comp=Z,127µm,18.1s
**NKC Novy Kostel 91.18 320** epP **P** **14 55 30.3 +4.4**
NKC eS **S** **15 06 20.8 -2.4**
NKC AMS AMS 15 47 10.0
comp=Z,127µm,18.1s
**TANN Tannenbergstha 91.18 320** eP **P** **14 55 25.8 -0.1**
comp=Z,257nm,1.8s,baz=93,slow=8.9
TANN eS **S** **15 06 21.1 -2.2**
**HFS Hagfors 91.24 330** P **P** **14 55 25.9 0.0**
comp=Z,10nm,1.0s,baz=82,slow=2.1,SNR=7.0
HFS S **SKSac** **15 06 00.8 +3.8**
comp=Z,2.1nm,0.9s,baz=204,slow=30,SNR=2.4
HFS LR LR 15 40 37.4
comp=Z,83µm,20.3s,baz=83,slow=38
**HFS Hagfors 91.24 330** P **P** **14 55 25.9 0.0**
HFS S **SKSac** **15 06 00.8 +3.8**
HFS pmax pmax
comp=Z,11nm,1.0s
HFS smax smax
comp=N,2.0nm,0.9s
**ROTZ Rotzenmuhle 91.30 320** eP **P** **14 55 26.9 +0.4**
comp=N,781nm,2.4s,baz=93,slow=8.9
ROTZ eS **S** **15 06 22.5 -1.9**
**STEI Steigen 91.30 338** eP **P** **14 55 26.6 +0.6**
**WTTA Wattenberg 91.52 317**⇑*i*P **P** **14 55 27.2 -0.5**
comp=N,2µm,4.4s,SNR=10.0
**COP Copenhagen 91.57 326** *i* P P 14 55 40.9 +13
**MOX Moxa 91.74 320** eP **P** **14 55 28.4 -0.1**
comp=N,308nm,1.8s,baz=93,slow=8.9
MOX eS **S** **15 06 25.6 -2.6**
MOX eL L 15 45 16.9
comp=N,119µm,20.5s
**FUR Furstenfeldbru 91.82 318** eP **P** **14 55 28.2 -0.7**
comp=N,564nm,1.9s,baz=93,slow=8.9
FUR eS **S** **15 06 23.9 -5.2**
**MOTA Moosalm 91.89 317**⇑*i*P **P** **14 55 28.5 -0.9**
comp=N,171nm,1.2s
**GRF Grafenberg Arr 91.94 319** eP **P** **14 55 29.6 +0.2**
comp=N,405nm,1.4s,baz=93,slow=8.9
GRF eS **S** **15 06 27.5 -2.6**
GRF eL L 15 43 10.1
comp=N,86µm,21.6s
**KONS Konsvik 92.00 336** eP **P** **14 55 32.0 +2.7**
**FETA Feichten 92.13 317**⇑*i*PcP **P** **14 55 30.6 0.0**
comp=N,4µm,4.6s,SNR=6.7
**RETA Reutte 92.13 317**⇑*i*PcP **PcP** **14 55 31.0 -0.2**
comp=N,4µm,5.4s,SNR=7.5
**SPB1 Spitsbergen Ar 92.13 348** eP **P** **14 55 30.8 +1.0**
**SPA1 Spitsbergen Ar 92.14 348** eP **P** **14 55 31.4 +1.7**
**SPA0 Spitsbergen Ar 92.14 348** eP **P** **14 55 27.4 -2.4**
SPA0 e 15 05 59.5
**SPB5 Spitsbergen Ar 92.14 348** eP **P** **14 55 32.7 +2.9**
**SPB4 Spitsbergen Ar 92.14 348** eP **P** **14 55 32.0 +2.2**
**HSPB Hornsund (broa 92.18 347** eP **P** **14 55 29.1 -0.8**
HSPB IVMs_BB IVMs_BB 15 39 60.0
comp=Z,51µm,25.5s
**VLC Villacollemand 92.23 314** PFAKE 14 55 40.0 +9.1
VLC LR LR
comp=Z,46µm,20.0s
**NC602 NORSAR Array S 92.34 331** eP **P** **14 55 30.7 -0.3**
NC602 e 15 06 01.6
NC602 e 15 06 33.9
NC602 IAMs_20 IAMs_20 15 46 48.5
comp=Z,128µm,18.2s
NC602 IVMs_BB IVMs_BB 15 47 02.2
comp=Z,49µm,16.2s
**VNA2 Neumayer--Watz 92.35 198** P **P** **14 55 32.9 +2.0**
baz=81,slow=4.5
**NSS Namsos 92.35 334** eP P 14 55 36.0 +5.1
NSS IVMs_BB IVMs_BB 15 42 18.5
comp=Z,69µm,18.6s
**FUORN Ofenpass-Fuorn 92.43 316** eP **P** **14 55 32.8 +0.7**
comp=Z,668nm,1.4s
**NB2 NORSAR Subarra 92.52 331** P **P** **14 55 32.3 +0.4**
comp=Z,280nm,2.0s,baz=94,slow=4.8
**NB2 NORSAR Subarra 92.52 331** P **P** **14 55 32.3 +0.4**
baz=94,slow=4.8
**NOA NORSAR Array B 92.52 331** P **P** **14 55 31.4 -0.5**
comp=Z,4.8nm,1.0s,baz=93,slow=4.6,SNR=5.4
NOA S **SKSac** **15 06 11.2 +6.9**
comp=Z,1.0nm,0.9s,baz=167,slow=11,SNR=2.9
NOA LR LR 15 42 27.0
comp=Z,60µm,18.0s,baz=95,slow=39
**CLZ Clausthal 92.58 322** eP **P** **14 55 32.2 -0.1**
comp=Z,135nm,1.3s,baz=93,slow=8.9
CLZ eS **S** **15 06 31.0 -4.8**
**KEST Kesra 92.65 305** P **P** **14 55 34.7 +1.5**
comp=Z,22nm,0.9s,baz=22,slow=1.9,SNR=14
KEST LR LR 15 40 06.5
comp=Z,78µm,19.7s,baz=46,slow=37
**NBO02 NORSAR Array S 92.69 331** eP **P** **14 55 34.7 +2.1**
**DAVOX Davos/Dischmat 92.70 317** P **P** **14 55 33.5 +0.2**
comp=Z,14nm,1.0s,baz=68,slow=5.8,SNR=13
**DAVOX Davos/Dischmat 92.70 317** P **P** **14 55 33.5 +0.2**
DAVOX pmax pmax
comp=Z,14nm,1.0s
**VNA1 Neumayer--Stat 92.71 198** P **P** **14 55 33.7 +1.2**
**OSL Oslo 92.71 330** eP P 14 55 42.0 +9.3
**DAVA Damuels 92.72 317**⇑*i*P **P** **14 55 32.2 -1.1**
comp=Z,4µm,5.2s,SNR=9.1
**NRDL Niedersach Rie 92.77 322** eP **P** **14 55 33.3 +0.3**
comp=Z,806nm,2.2s,baz=93,slow=8.9
NRDL eS **S** **15 06 32.3 -4.9**
**VSL Villasalto 92.78 309** PFAKE 14 55 40.0 +6.5
VSL LR LR
comp=Z,35µm,22.0s
**GTTG Gvttingen 92.82 321** eP **P** **14 55 33.1 -0.3**
comp=Z,828nm,2.6s,baz=93,slow=8.9
GTTG eS **S** **15 06 33.3 -4.6**
**VNA3 Neumayer Olymp 92.95 198** P **P** **14 55 34.9 +1.2**
**TBLU Trondheim 93.05 333** eP P 14 55 39.6 +5.4
TBLU e 15 06 38.6
**TUE Stuetta 93.05 316** P **P** **14 55 36.2 +1.3**
comp=Z,46nm,1.4s
TUE LR LR
comp=Z,75µm,19.0s
**KBS Kingsbay 93.08 349** eP **P** **14 55 33.9 -0.1**
KBS e 15 06 02.2
KBS e 15 13 05.2
**KBS Kingsbay 93.08 349** PFAKE 14 55 50.0 +16
KBS LR LR
comp=Z,222µm,19.0s
**STU Stuttgart 93.23 319** eP P 14 55 39.2 +3.8
STU pmax pmax
comp=Z,174nm,1.4s
**STU Stuttgart 93.23 319** eP **P** **14 55 34.6 -0.7**
comp=Z,328nm,1.7s,baz=93,slow=8.9
STU eS **S** **15 06 37.8 -3.8**
**STU Stuttgart 93.23 319** eP P 14 55 39.2 +3.8
comp=Z,174nm,1.4s
**KONO Kongsberg 93.27 329** eP **P** **14 55 35.1 -0.2**
KONO e 15 06 36.6
KONO IVMs_BB IVMs_BB 15 44 18.6
comp=Z,50µm,17.2s
KONO IAMs_20 IAMs_20 15 44 23.3
comp=Z,142µm,18.6s
**KONO Kongsberg 93.27 329** eP P 14 55 39.9 +4.6
KONO pmax pmax
comp=Z,530nm,2.1s
**KONO Kongsberg 93.27 329** P **P** **14 55 34.0 -1.3**
comp=Z,532nm,2.1s
KONO LR LR
comp=Z,144µm,19.0s
**NIKH Nikolski High 93.42 37** eP **P** **14 55 38.6 +2.5**
comp=Z,535nm,1.2s
**TNS Taunus Mts 93.75 320** eP **P** **14 55 37.6 -0.2**
comp=Z,192nm,1.4s,baz=93,slow=8.9
TNS eS **S** **15 06 43.1 -3.1**
**BFO Black Forest 93.79 318** eP P 14 55 42.4 +4.4
BFO pmax pmax
comp=Z,110nm,1.4s
**BFO Black Forest 93.79 318** eP **P** **14 55 36.9 -1.1**
comp=Z,79nm,1.5s,baz=93,slow=8.9
BFO eS **S** **15 06 42.8 -3.9**
**BFO Black Forest 93.79 318** eP **P** **14 55 37.9 -0.1**
comp=Z,109nm,1.4s
BFO LR LR
comp=Z,65µm,19.0s
**HOMB Homborsund 93.82 328** eP P 14 55 41.2 +3.4
HOMB e 15 06 45.1
HOMB IAMs_20 IAMs_20 15 44 21.6
comp=Z,166µm,21.5s
HOMB IVMs_BB IVMs_BB 15 44 37.0
comp=Z,55µm,18.7s
**ABSA Djebel Ababsia 94.18 306** P **P** **14 55 42.1 +1.9**
**IBBN Ibbenburen 94.20 322** eP **P** **14 55 39.5 -0.2**
comp=Z,284nm,1.9s,baz=93,slow=8.9
IBBN eS **S** **15 06 45.1 -4.8**
**CMAH Djebel Manchou 94.24 306** P **P** **14 55 43.3 +2.9**
**MOL Molde 94.29 332** *e* **S** **15 06 49.5 -0.8**
**SENIN Lac Senin/Sane 94.47 316** eP P 14 55 47.0 +5.5
comp=Z,366nm,1.9s
**SNART Snartemo 94.50 328** *e*SKSac **SKSac** **15 06 13.9 -1.2**
**BUG Bochum--Univer 94.50 321** eP **P** **14 55 40.8 -0.4**
comp=Z,65nm,1.2s,baz=93,slow=8.9
BUG eS **S** **15 06 48.8 -3.8**
**AKN Aaknes 94.55 332** eP P 14 55 46.7 +5.5
**ODD1 Odda 94.78 330** eP P 14 55 49.7 +7.5
**CKFL Kef-Lekhel 94.80 306** P P 14 55 50.2 +7.2
**BNI Bardonecchia 94.90 315** P P 14 55 47.2 +3.9
BNI pmax pmax
comp=Z,35nm,1.1s
BNI MLR MLR
comp=Z,88µm,22.0s
**BNI Bardonecchia 94.90 315** P P 14 55 47.2 +3.9
comp=Z,35nm,1.1s
BNI LR LR
comp=Z,88µm,22.0s
**CASM Ain Smara 94.98 306** P P 14 55 50.8 +7.0
**WLF Walferdange 95.23 319** P **P** **14 55 43.8 -0.7**
WLF pmax pmax
comp=Z,183nm,1.9s
WLF MLR MLR
comp=Z,109µm,19.0s
**WLF Walferdange 95.23 319** eP **P** **14 55 44.4 -0.2**
comp=Z,247nm,2.0s,baz=93,slow=8.9
WLF eS **S** **15 06 56.1 -2.9**
**WLF Walferdange 95.23 319** P **P** **14 55 43.8 -0.7**
comp=Z,183nm,1.9s
WLF LR LR
comp=Z,109µm,19.0s
**BER Bergen 95.41 330** eP **P** **14 55 43.8 -1.2**
BER e 15 06 56.6
BER IAMs_20 IAMs_20 15 45 29.9
comp=Z,166µm,20.7s
BER IVMs_BB IVMs_BB 15 45 44.0
comp=Z,52µm,19.3s
**ASK Askoy 95.47 330** eP **P** **14 55 45.3 -0.1**
**TAM Tamanrasset 95.57 292** eP P 14 55 51.2 +4.3
TAM pmax pmax
comp=Z,120nm,1.7s
**TAM Tamanrasset 95.57 292** eP **P** **14 55 48.4 +1.5**
comp=Z,119nm,1.7s
TAM LR LR
comp=Z,68µm,22.0s
**SUE Sulen 95.66 331** *e*SKSac **SKSac** **15 06 22.0 +0.9**
SUE e 15 07 02.5
**SSB Saint Sauveur 96.41 315** PFAKE 14 56 00.0 +10
SSB LR LR
comp=Z,35µm,20.0s
**ELSH Elham, Standar 98.36 321** eP P 14 55 54.3 -4.4
**LRW Lerwick 98.66 330** eP P 14 55 52.0 -7.7
**HMNX Herstmonceux 98.89 321** eP P 14 55 53.7 -7.3
HMNX AMS AMS 15 48 28.3
comp=Z,91µm,18.9s
**TOA0 Torodi Ar. Sit 98.97 283** eP Pdif 14 56 02.3 +0.1
**TORD Torodi Ar. Bea 98.97 283** P **P** **14 56 01.4 -0.8**
comp=Z,3.5nm,1.1s,baz=72,slow=5.2,SNR=8.5
TORD PP **PP** **15 00 01.8 -2.6**
comp=Z,2.0nm,0.9s,baz=104,slow=3.8,SNR=2.8
TORD PKKPbc **PKKPdf** **15 12 35.5 +2.9**
comp=Z,0.8nm,0.9s,baz=270,slow=2.5,SNR=1.9
TORD LR LR 15 36 53.1
comp=Z,97µm,21.9s,baz=80,slow=33
**LMK Market Rasen 99.03 323** eP **Pdif** **14 55 56.6 -5.0**
LMK AMS AMS 15 51 49.9
comp=Z,78µm,20.1s
**JMIC Jan Mayen 99.33 342** *e*PP PP 15 00 04.6 -0.9
**CWF Charnwood Fore 99.70 323** eP **Pdif** **14 55 58.2 -6.4**
CWF AMS AMS 15 49 27.7
comp=Z,82µm,19.8s
**HPK Haverah Park 99.74 324** eP **Pdif** **14 55 56.0 -8.7**
HPK AMS AMS 15 50 02.4
comp=Z,97µm,19.1s
**DAG Danmarks Havn 99.79 348** *i* P Pdif 14 56 18.6 +14

**DRUM Mains of Drumt 99.81 327** *e*P **Pdif** **14 55 59.0 -6.1**
DRUM AMS AMS 15 43 28.7
comp=Z,73µm,21.6s
**WOL Wolverton 99.82 321** *e*P **Pdif** **14 56 00.1 -5.1**
**SWN1 Swindon 100.16 322** *e*P **Pdif** **14 55 59.4 -7.3**
**STNC Stoke 100.20 323** *e*P **Pdif** **14 56 00.3 -6.5**
STNC AMS AMS 15 53 59.3
comp=Z,59µm,17.9s
**BIGH Upper Bighouse 100.31 329** *e*P **Pdif** **14 56 01.3 -5.8**
**EDI Edinburgh 100.35 326** *e*P **Pdif** **14 56 01.3 -6.1**
EDI AMS AMS 15 49 15.0
comp=Z,52µm,18.4s
**STRD Stroud 100.35 322** *e*P **Pdif** **14 56 00.1 -7.4**
STRD AMS AMS 15 52 56.9
comp=Z,77µm,17.4s
**ESK Eskdalemuir 100.45 326** *e*P **Pdif** **14 56 01.3 -6.6**
ESK AMS AMS 15 54 24.5
comp=Z,84µm,17.4s
**ESK Eskdalemuir 100.45 326** PFAKE 14 56 20.0 +12
ESK LR LR
comp=Z,68µm,20.0s
**BATH Bath 100.49 322** *e*P **Pdif** **14 56 01.3 -6.9**
BATH AMS AMS 15 55 57.4
comp=Z,68µm,15.1s
**KESW Keswick, Cumbr 100.51 325** *e*P **Pdif** **14 56 01.3 -6.9**
KESW AMS AMS 15 54 02.7
comp=Z,58µm,15.2s
**OLDB Oldbury-Upon-S 100.60 322** AMS AMS 15 49 28.6
comp=Z,88µm,21.4s
**JSA Saint Aubin 100.68 319** *e*P **Pdif** **14 56 00.5 -8.5**
JSA AMS AMS 15 54 58.9
comp=Z,59µm,18.1s
**MONM Monmouth 100.73 322** *e*P **Pdif** **14 55 59.7 -10**
MONM AMS AMS 15 50 02.9
comp=Z,85µm,19.2s
**COLD Coldfoot 100.79 22** *e*Pdif **Pdif** **14 56 07.0 -2.2**
**FOEL Foel Wylfa 100.82 323** *e*P **Pdif** **14 56 03.7 -6.0**
**MCH1 Michaelchurch 100.83 322** *e*P **Pdif** **14 56 03.1 -6.6**
MCH1 AMS AMS 15 51 51.6
comp=Z,82µm,18.4s
**SBD1 Bryn Du 100.86 323** *e*P **Pdif** **14 56 09.5 -0.3**
**SOFL Sornfelli, Far 101.06 333** AMS AMS 15 52 05.2
comp=Z,88µm,17.5s
**PGBU Glenifferbraes 101.09 326** *e*P **Pdif** **14 56 05.4 -5.3**
PGBU AMS AMS 15 54 12.9
comp=Z,83µm,17.1s
**BPAW Bear Paw Mtn. 101.36 25** *e*Pdif **Pdif** **14 56 09.4 -2.4**
**KPL Plockton 101.44 328** *e*P **Pdif** **14 56 02.4 -10**
KPL AMS AMS 15 51 28.1
comp=Z,90µm,18.3s
**KTH Kantishna Hill 101.53 26** Pdif **Pdif** **14 56 15.4 +2.8**
comp=Z,339nm,2.4s
**DYA Yadsworthy 101.64 321** AMS AMS 15 50 09.8
comp=Z,93µm,19.3s
**TRF Thorofare Moun 101.83 26** *e*Pdif **Pdif** **14 56 14.1 0.0**
**HTL Hartland 101.90 321** AMS AMS 15 54 32.2
comp=Z,106µm,16.0s
**KDAK Kodiak Island 102.16 32** P **Pdif** **14 56 16.5 +1.1**
comp=Z,7.2nm,1.0s,baz=337,slow=12,SNR=1.9
KDAK PP **PP** **15 00 30.2 +3.0**
comp=Z,33nm,1.2s,baz=288,slow=3.2,SNR=3.0
KDAK S **SKSac** **15 06 54.1 +0.2**
comp=Z,5.2nm,1.0s,baz=307,slow=5.1,SNR=2.0
**KDAK Kodiak Island 102.16 32** P **Pdif** **14 56 16.5 +1.1**
KDAK 15 00 30.2
KDAK
KDAK S **SKSac** **15 06 54.1 +0.2**
KDAK pmax pmax
comp=Z,7.0nm,1.0s
KDAK pmax pmax
comp=Z,33nm,1.2s
KDAK smax smax
comp=N,5.0nm,1.0s
**KDAK Kodiak Island 102.16 32** P **Pdif** **14 56 16.5 +1.1**
KDAK PP **PP** **15 00 30.2 +3.0**
KDAK S **SKSac** **15 06 54.1 +0.2**
KDAK LR LR
comp=Z,104µm,20.0s
**MCK McKinley 102.33 25** *e*P **Pdif** **14 56 16.1 0.0**
**MCK McKinley 102.33 25** *e*Pdif **Pdif** **14 56 14.2 -2.0**
**COLA College 102.43 24** PFAKE 14 56 30.0 +14
COLA LR LR
comp=Z,115µm,19.0s
**RND Reindeer 102.47 25** *e*P **Pdif** **14 56 17.4 +0.6**
**RND Reindeer 102.47 25** *e*Pdif **Pdif** **14 56 17.4 +0.6**
**CCA1 Carnmenellis 102.50 321** *e*P **Pdif** **14 56 13.1 -4.1**
CCA1 AMS AMS 15 50 34.2
comp=Z,80µm,19.1s
**CCB Clear Creek Bu 102.52 24** *e*Pdif **Pdif** **14 56 17.1 +0.2**
**IL1 Eielson Array 102.85 24** *e*Pdif **Pdif** **14 56 21.6 +3.2**
IL1 *e*PP PP 15 00 26.8 -5.4
**ILAR Eielson Array 102.85 24** P **Pdif** **14 56 18.4 0.0**
comp=Z,0.7nm,0.9s,baz=294,slow=6.5,SNR=5.9
ILAR PP **PP** **15 00 28.4 -3.8**
comp=Z,4.2nm,0.9s,baz=315,slow=9.0,SNR=6.2
ILAR PKKPbc **PKKPbc** **15 12 20.2 +1.2**
comp=Z,2.2nm,1.0s,baz=122,slow=1.3,SNR=6.8
**FYU Fort Yukon 102.86 22** *e*Pdif **Pdif** **14 56 21.5 +3.1**
FYU *e*PP PP 15 00 25.1 -7.1
**ESDC Sonseca Array 103.07 310** PP PP 15 00 40.3 +5.5
comp=Z,0.4nm,0.3s,baz=116,slow=5.9,SNR=4.2
**PAB San Pablo 103.38 310** PFAKE 14 56 30.0 +8.6
PAB LR LR
comp=Z,57µm,22.0s
**SCO Scoresbysund 103.62 343** *i* P Pdif 14 56 39.5 +18
**PAX Paxson 104.06 25** *e*P **Pdif** **14 56 22.5 -1.4**
PAX pmax pmax
comp=Z,28nm,2.0s
**PAX Paxson 104.06 25** *e*Pdif **Pdif** **14 56 22.5 -1.4**
comp=Z,28nm,2.0s
**POHA Pohakuloa 104.70 71** PFAKE 14 56 40.0 +12
POHA LR LR
comp=Z,35µm,22.0s
**MENT Mentasta 104.81 25** *e*Pdif **Pdif** **14 56 28.1 +0.9**
**PBRG Braganca 104.88 312** *e*Pdif **Pdif** **14 56 32.8 +4.8**
**PBRG Braganca 104.88 312** *e*PP PP 15 01 05.3 +17
**PBRG Braganca 104.88 312** *e*SS SS 15 15 45.7 +4.9
**PBRG Braganca 104.88 312** *e*LQ LQ 15 26 45.7
PBRG *e*LR LR 15 33 02.9
comp=Z,48µm,20.0s
**EGAK Eagle 105.12 23** *e*Pdif **Pdif** **14 56 29.8 +1.3**
comp=Z,22nm,1.6s
EGAK LR LR
comp=Z,111µm,20.0s
**BMRM Bremner River 105.15 27** *e*Pdif **Pdif** **14 56 29.9 +1.2**
**MVO Moncorvo 105.19 312** *e*Pdif **Pdif** **14 56 40.5 +11**
**MVO Moncorvo 105.19 312** *e*LQ LQ 15 25 55.9
MVO *e*LR LR 15 33 28.7
comp=Z,40µm,18.0s
**VAL Valentia 105.24 323** *e*P **Pdif** **14 56 29.4 +0.2**
**VAL Valentia 105.24 323** *ij* SS SS 15 15 59.2 +14
**TRIS Tristan da Cun 105.53 230** PFAKE 15 01 00.0
TRIS LR LR
comp=Z,77µm,20.0s
**PBAR Barrancos 105.63 309** *e*Pdif **Pdif** **14 56 34.6 +3.2**
**PBAR Barrancos 105.63 309** *e*SS SS 15 16 00.6 +9.4
**PBAR Barrancos 105.63 309** *e*LQ LQ 15 26 24.6
PBAR *e*LR LR 15 30 44.9
comp=Z,97µm,20.0s
**MTE Manteigas 105.70 311** *e*Pdif **Pdif** **14 56 38.6 +6.9**
**MTE Manteigas 105.70 311** *e*PP PP 15 00 52.8 -1.5
**MTE Manteigas 105.70 311** *e*SS SS 15 16 13.9 +22
MTE *e*LQ LQ 15 23 32.5
MTE *e*LR LR 15 28 11.2
comp=Z,54µm,18.0s
**MTE Manteigas 105.70 311** PFAKE 15 01 00.0
MTE LR LR
comp=Z,49µm,20.0s
**PMRV Marv??o 105.73 310** *e*Pdif Pdif 14 56 50.2 +18
**PMRV Marv??o 105.73 310** *e*PP PP 15 01 12.5 +18
**PMRV Marv??o 105.73 310** *e*SS SS 15 15 56.4 +3.9
**PMRV Marv??o 105.73 310** *e*LQ LQ 15 26 28.5
PMRV *e*LR LR 15 29 06.0
comp=Z,46µm,18.0s
**POLO Lamas de Olo 105.73 312** *e*Pdif **Pdif** **14 56 38.5 +6.6**
**POLO Lamas de Olo 105.73 312** *e*SS SS 15 16 04.7 +12
**POLO Lamas de Olo 105.73 312** *e*LQ LQ 15 27 09.3
POLO *e*LR LR 15 34 01.7
POLO A A 15 48 25.4
comp=Z,3.9nm,8.0s
**PCBR Castelo Branco 105.73 310** *e*Pdif **Pdif** **14 56 39.8 +8.0**
**PCBR Castelo Branco 105.73 310** *e*PP PP 15 01 07.1 +13
**PVIS Viseu 105.91 311** *e*PP PP 15 00 37.7 -18
**PESTR Estremoz 105.96 309** *e*Pdif **Pdif** **14 56 33.5 +0.7**
**PGAV Gavieira, Arco 105.98 313** *e*Pdif Pdif 14 56 46.4 +13
**PGAV Gavieira, Arco 105.98 313** *e*SS SS 15 16 06.1 +10
**PGAV Gavieira, Arco 105.98 313** *e*LQ LQ 15 26 58.6
PGAV *e*LR LR 15 33 51.3
comp=Z,34µm,18.0s
**RTC Rabat Centre 106.02 304** PFAKE 15 01 00.0
RTC LR LR
comp=Z,257µm,19.0s
**INK Inuvik 106.07 18** Pdiff **Pdif** **14 56 33.4 +0.8**
comp=Z,2.7nm,1.0s,baz=298,slow=7.1,SNR=2.8
INK PP **PP** **15 00 52.2 -3.7**
comp=Z,16nm,1.0s,baz=317,slow=9.2,SNR=4.0
INK PKKPbc PKKPdf 15 12 15.1 -5.5
comp=Z,2.3nm,0.9s,baz=118,slow=5.9,SNR=2.7
**INK Inuvik 106.07 18** P **Pdif** **14 56 33.4 +0.8**
INK 15 00 52.2
INK pmax pmax
comp=Z,3.0nm,1.0s
INK pmax pmax
comp=Z,16nm,1.0s
**DAWY Dawson 106.12 23** Pdif **Pdif** **14 56 32.9 -0.1**
comp=Z,29nm,1.4s
**BORG Borgarnes 106.17 338** PFAKE 15 01 00.0
BORG LR LR
comp=Z,107µm,21.0s
**PVAQ Vaqueiros 106.27 308** *e*Pdif **Pdif** **14 56 32.8 -1.4**
**PVAQ Vaqueiros 106.27 308** *e*SS SS 15 16 20.9 +21
**PVAQ Vaqueiros 106.27 308** *e*LR LR 15 30 50.4
comp=Z,46µm,18.0s
**EVO Evora 106.34 309** *e*Pdif **Pdif** **14 56 34.1 -0.4**
**EVO Evora 106.34 309** *e*PP PP 15 00 58.6 -0.4
**PTO Porto 106.37 312** *e*PP PP 15 00 41.0 -18
**PMTG Montargil 106.42 310** *e*Pdif **Pdif** **14 56 34.9 +0.1**
**PMTG Montargil 106.42 310** *e*SS SS 15 16 10.5 +8.6
**PMTG Montargil 106.42 310** *e*LQ LQ 15 26 24.0
PMTG *e*LR LR 15 29 24.6
comp=Z,42µm,16.0s
**PBDV Barranco-do-Ve 106.46 308** *e*Pdif **Pdif** **14 56 39.5 +4.4**
**PBDV Barranco-do-Ve 106.46 308** *e*PP PP 15 01 05.3 +5.3
**PBDV Barranco-do-Ve 106.46 308** *e*SS SS 15 15 59.4 -3.3
**PBDV Barranco-do-Ve 106.46 308** *e*LQ LQ 15 26 36.8
PBDV *e*LR LR 15 31 09.3
comp=Z,55µm,20.0s
**PCAS Casmilo, Conde 106.47 311** *e*Pdif Pdif 14 56 49.1 +14
**PCAS Casmilo, Conde 106.47 311** *e*PP PP 15 01 10.6 +11
**PCAS Casmilo, Conde 106.47 311** *e*SS SS 15 16 15.1 +13
**PCAS Casmilo, Conde 106.47 311** *e*LQ LQ 15 26 40.3
PCAS *e*LR LR 15 29 51.9
comp=Z,48µm,20.0s
**PTOM Tomar 106.48 310** *e*PP PP 15 00 41.3 -19
**SUMG Summit 106.48 348** *i* P Pdif 14 56 48.8 +14
**PCVE Castro Verde 106.49 308** *e*Pdif **Pdif** **14 56 44.4 +9.2**
**PCVE Castro Verde 106.49 308** *e*SS SS 15 16 09.9 +6.9
**PCVE Castro Verde 106.49 308** *e*LQ LQ 15 26 40.4
PCVE *e*LR LR 15 31 00.1
comp=Z,46µm,18.0s
**MESJ Messejana 106.60 308** *e*P **Pdif** **14 56 35.9 +0.2**
MESJ *e*SS SS 15 16 06.7 +2.2
MESJ AMS AMS 15 49 16.4
comp=N,45µm,17.8s
**MESJ Messejana 106.60 308** *e*Pdif **Pdif** **14 56 36.4 +0.7**
**MESJ Messejana 106.60 308** *e*PP PP 15 01 01.9 +0.9
**MESJ Messejana 106.60 308** *e*P **Pdif** **14 56 35.9 +0.2**
**PNCL Nicolau / Gran 106.80 309** *e*Pdif **Pdif** **14 56 34.5 -2.1**
**PNCL Nicolau / Gran 106.80 309** *e*PP PP 15 01 06.7 +4.3
**PNCL Nicolau / Gran 106.80 309** *e*SS SS 15 16 13.3 +6.2
**PNCL Nicolau / Gran 106.80 309** *e*LQ LQ 15 26 42.5
PNCL *e*LR LR 15 29 27.2
comp=N,51µm,20.0s
**MORF Marmelete 107.02 308** *e*P **Pdif** **14 56 38.1 +0.5**
MORF *e*S **SKSac** **15 07 17.9 +0.8**
MORF *e*SS **SS** **15 16 12.5 +2.2**
MORF AMS AMS 16 02 06.8
comp=Z,64µm,20.1s
**MORF Marmelete 107.02 308** *e*Pdif **Pdif** **14 56 35.6 -2.0**
**MORF Marmelete 107.02 308** *e*LQ LQ 15 29 43.6
MORF *e*LR LR 15 36 02.1
comp=Z,55µm,20.0s
**MORF Marmelete 107.02 308** *e*P **Pdif** **14 56 38.1 +0.5**
MORF *e*S **SKSac** **15 07 17.9 +0.8**
MORF *e*SS **SS** **15 16 12.5 +2.2**
**PTEO Sao Teotonio 107.04 308** *e*PP PP 15 01 02.2 -2.0
**PFVI Vila Bisbo 107.19 308** *e*Pdif **Pdif** **14 56 45.1 +6.8**
**PFVI Vila Bisbo 107.19 308** *e*PP PP 15 01 10.6 +5.3
**PFVI Vila Bisbo 107.19 308** *e*SS SS 15 16 19.7 +7.3
**PFVI Vila Bisbo 107.19 308** *e*LQ LQ 15 26 46.6
PFVI *e*LR LR 15 30 33.3
comp=Z,64µm,18.0s
**LIS Lisbon 107.19 309** *e*SS SS 15 16 14.5 +2.2
LIS AMS AMS 15 47 01.4
comp=E,63µm,20.7s
**LIS Lisbon 107.19 309** *e*Pdif **Pdif** **14 56 35.8 -2.5**
LIS *i* P PKiKP 15 00 40.3 -7.1
**TBI Tubuai 107.23 116** *e*Pdif **Pdif** **14 56 34.4 -4.4**
comp=E,3µm,35.2s
**TBI Tubuai 107.23 116** *e*PP PP 15 00 59.7 -6.2
comp=E,9µm,24.5s
TBI *e*Sdif Sdif 15 08 41.7 +0.5
comp=E,44µm,28.2s
**TBI Tubuai 107.23 116** *e*PS PS 15 10 26.5 -1.0
comp=E,13µm,31.8s
TBI *e*SS SS 15 16 11.5 -2.1
**TBI Tubuai 107.23 116** *e*LR LR 15 31 58.6
comp=E,142µm,23.5s
**PMAFR Mafra 107.25 310** *e*Pdif **Pdif** **14 56 43.2 +4.6**
**PMAFR Mafra 107.25 310** *e*SS SS 15 16 21.7 +8.5
**PMAFR Mafra 107.25 310** *e*LQ LQ 15 26 47.5
PMAFR *e*LR LR 15 30 10.8
comp=E,51µm,20.0s
**PPT2 Papeete2 108.19 110** *e*Pdif **Pdif** **14 56 39.7 -3.6**
comp=E,3µm,28.2s
**PPT2 Papeete2 108.19 110** *e*PP PP 15 01 08.4 -4.9
comp=E,7µm,26.2s
PPT2 *e*Sdif Sdif 15 09 05.3 +16
comp=E,30µm,36.8s
PPT2 *e*SP **SP** **15 10 28.2 -6.8**
comp=E,15µm,32.2s
**PPT2 Papeete2 108.19 110** *e*LR LR 15 32 27.6
comp=E,82µm,24.5s
**RES Resolute Bay 108.37 4** Pdiff **Pdif** **14 56 42.1 -0.6**
comp=E,1.6nm,0.9s,baz=347,slow=7.1,SNR=7.0
RES PP **PP** **15 01 17.6 +5.0**
comp=E,21nm,1.0s,baz=132,slow=23,SNR=8.3
**RES Resolute Bay 108.37 4** P **Pdif** **14 56 42.1 -0.6**
RES 15 01 17.6
RES pmax pmax
comp=Z,2.0nm,0.9s
RES pmax pmax
comp=Z,21nm,1.0s
**PMSA Palmer Station 110.87 187** PFAKE 15 01 10.0
PMSA LR LR
comp=Z,74µm,21.0s
**HOPE Hope Point 112.07 206** PFAKE 15 01 10.0
HOPE LR LR
comp=Z,94µm,21.0s
**DLBC Dease Lake 112.86 26** PP PP 15 01 51.6 +6.2
comp=Z,8.6nm,0.8s,baz=329,slow=10,SNR=5.2
DLBC PKKPbc **PKKPbc** **15 11 48.8 +1.4**
comp=Z,2.2nm,0.9s,baz=135,slow=2.9,SNR=2.5
**WRAK Wrangell Islan 112.88 29** PFAKE 15 01 10.0
WRAK LR LR
comp=Z,79µm,20.0s
**SFJD Kangerlussuaq 113.47 348** PFAKE 15 01 10.0
SFJD LR LR
comp=Z,109µm,20.0s
**ASCN Ascension 113.65 260** PFAKE 15 01 10.0
ASCN LR LR
comp=Z,84µm,20.0s
**PMPST Porto Santo, M 113.97 305** *e*Pdif **Pdif** **14 57 08.9 +0.3**
**PMPST Porto Santo, M 113.97 305** *e*PP PP 15 02 18.4 +24
**PMPST Porto Santo, M 113.97 305** *e*SS SS 15 17 51.8 +8.4
**PMPST Porto Santo, M 113.97 305** *e*LQ LQ 15 29 02.6
PMPST *e*LR LR 15 31 52.5
comp=Z,50µm,22.0s
**PMPS Porto Santo 113.98 305** *e*Pdif **Pdif** **14 57 13.6 +5.0**
**PMPS Porto Santo 113.98 305** *e*PP PP 15 02 16.1 +22
**PMOZ Porto Moniz, M 114.73 305** *e*Pdif **Pdif** **14 57 13.1 +1.0**
**PMOZ Porto Moniz, M 114.73 305** *e*PP PP 15 02 21.0 +21
**PMOZ Porto Moniz, M 114.73 305** *e*SS SS 15 17 59.1 +5.4
**PMOZ Porto Moniz, M 114.73 305** *e*LQ LQ 15 29 30.8
PMOZ *e*LR LR 15 32 43.9
comp=Z,63µm,20.0s
**YKA Yellowknife Ar 115.79 17** PKP **PKPdf** **15 01 02.7 -0.3**
comp=Z,1.4nm,0.8s,baz=314,slow=2.4,SNR=4.2
YKA PP **PP** **15 02 06.0 +0.2**
comp=Z,9.7nm,1.1s,baz=307,slow=1.6,SNR=5.3
YKA PKKPab **PKKPab** **15 11 42.7 +2.3**
comp=Z,2.6nm,0.9s,baz=140,slow=3.8,SNR=4.8
**YKA Yellowknife Ar 115.79 17** PKIKP **PKPdf** **15 01 02.7 -0.3**
YKA 15 02 06.0
YKA 15 11 42.7
YKA pmax pmax
comp=Z,10.0nm,1.1s
**TAOE Nuku Hiva Isla 118.69 102** *e*PP PP 15 02 25.1 -3.0
comp=Z,11µm,24.9s
TAOE *e*Sdif Sdif 15 10 07.4 -10
comp=Z,17µm,27.9s
**TAOE Nuku Hiva Isla 118.69 102** *e*PS PS 15 12 11.9 -4.0
comp=Z,60µm,26.3s
TAOE *e*SS SS 15 18 40.1 -6.3
comp=Z,65µm,25.8s
**TAOE Nuku Hiva Isla 118.69 102** *e*LQ LQ 15 32 18.5
comp=Z,86µm,33.3s
TAOE *e*LR LR 15 37 22.1
comp=Z,85µm,24.7s
**BART Pico Bartolome 119.60 312** *e*PP PP 15 02 33.9 +0.4
**PSMN Pico do Norte, 119.79 311** *e*PP PP 15 02 37.4 +2.7
**PSMN Pico do Norte, 119.79 311** *e*PKKP PS 15 12 42.6 +18
PSMN *e*SS SS 15 18 55.2 -3.7
**PSMN Pico do Norte, 119.79 311** *e*LQ LQ 15 32 41.2
PSMN *e*LR LR 15 40 17.5
comp=Z,6µm,21.5s
**PSMA Santa Maria 119.84 311** *e*PP PP 15 02 32.2 -2.8
**CMLA Cha da Macela 119.87 312** PFAKE 15 01 20.0 +8.3
CMLA LR LR
comp=Z,58µm,19.0s
**PSET Sete Cidades 120.00 312** *e*PKKP PS 15 12 42.6 +16
PSET *e*SS SS 15 19 04.3 +2.8
**PSET Sete Cidades 120.00 312** *e*LQ LQ 15 32 37.6
PSET *e*LR LR 15 40 10.4
comp=Z,7µm,20.6s
**RKT Rikitea 120.15 119** *e*PP PP 15 02 31.0 -6.5
comp=Z,8µm,24.5s
RKT *e*Sdif Sdif 15 10 45.4 +16
comp=Z,22µm,27.8s
RKT *e*SP **SP** **15 12 18.4 -7.1**
comp=Z,11µm,29.2s
RKT *e*SS **SS** **15 18 59.4 -4.7**
comp=Z,62µm,27.8s
**RKT Rikitea 120.15 119** *e*LQ LQ 15 33 00.1
comp=Z,89µm,37.2s
RKT *e*LR LR 15 38 06.8
comp=Z,159µm,28.0s
**USHA Ushuaia 121.08 188** PKP **PKPdf** **15 01 13.0 -0.4**
comp=Z,3.5nm,0.4s,baz=120,slow=8.1,SNR=3.0
**PGRA Graciosa 121.19 314** *e*PP PP 15 02 43.8 -0.4
**PGRA Graciosa 121.19 314** *e*PKKP PS 15 12 56.3 +19
PGRA *e*SS SS 15 19 08.9 -7.7
**PGRA Graciosa 121.19 314** *e*LQ LQ 15 32 46.0
PGRA *e*LR LR 15 40 32.9
comp=Z,12µm,21.5s
**PMAN Manadas 121.42 314** *e*P PP 15 02 59.8 +14
**ROSA Rosais 121.50 314** *e*PP PP 15 02 45.7 -0.6
**ROSA Rosais 121.50 314** *e*LQ LQ 15 32 51.9
ROSA *e*LR LR 15 41 01.5
comp=Z,5µm,18.8s
**PCAN Candelaria 121.77 314** *e*PP PP 15 02 47.1 -1.1
**PCED Cedros 121.86 314** *e*PP PP 15 02 49.0 +0.2
**EFI East Falkland 121.95 196** PFAKE 15 01 30.0 +15
EFI LR LR
comp=Z,63µm,22.0s
**NLWA Neilton Lookou 122.20 34** PFAKE 15 01 30.0 +14
NLWA LR LR
comp=Z,55µm,19.0s
**B05A Bryant 122.65 32** P **PKPdf** **15 01 15.2 -1.5**
baz=122
**EDM Edmonton 123.34 23** *e*PKIKP **PKPdf** **15 01 18.0 +0.1**
**EDM Edmonton 123.34 23** *e*PKPdf **PKPdf** **15 01 18.0 +0.1**
**F04D Rainier, OR 123.44 35** P **PKPdf** **15 01 18.1 -0.2**
baz=123
**PTCN Pitcairn Islan 123.62 123** PFAKE 15 01 30.0 +11
PTCN LR LR
comp=Z,88µm,20.0s
**G03D McMinnville, O 123.79 36** P **PKPdf** **15 01 19.2 +0.3**
baz=124
**LTY Liberty 124.03 32** *e*PKPdf **PKPdf** **15 01 21.5 +2.0**
**I03D Drain, OR 124.58 37** P **PKPdf** **15 01 20.9 +0.4**
baz=124
**H04A Detroit Lake 124.72 36** *e*pPKPdf pPKPdf 15 01 29.4 +1.7
**VFP Flag Point 124.76 35** P **PKPdf** **15 01 23.3 +2.2**
**G05D Wamic, OR 124.89 35** P **PKPdf** **15 01 21.1 0.0**
baz=125
**C09A Chrisman Ranch 124.93 31** *e*pPKPdf pPKPdf 15 01 27.9 -0.1
**OD2 Odessa Site #2 124.98 31** P PKPdf 15 01 27.5 +6.3
**D08A Wollman Farm, 125.08 32** *e*PKPdf **PKPdf** **15 01 22.4 +1.0**
**I04A Tendick Farm, 125.09 37** P **PKPdf** **15 01 21.4 -0.2**
baz=125
**HAWA Hanford 125.18 33** *e*PKPdf **PKPdf** **15 01 22.1 +0.5**
HAWA LR LR
comp=Z,58µm,20.0s
**NEW Newport 125.20 30** PKP **PKPdf** **15 01 21.3 -0.3**
comp=Z,4.0nm,0.8s,baz=333,slow=2.3,SNR=2.8
NEW PP **PP** **15 03 11.9 +1.2**
comp=Z,16nm,1.1s,baz=14,slow=4.6,SNR=3.4
**NEW Newport 125.20 30** PKIKP **PKPdf** **15 01 21.3 -0.3**
NEW 15 03 11.9
NEW pmax pmax
comp=Z,16nm,1.1s
**NEW Newport 125.20 30** P **PKPdf** **15 01 21.0 -0.6**
baz=125
**NEW Newport 125.20 30** *e*PKPdf **PKPdf** **15 01 20.6 -1.0**
NEW PP **PP** **15 03 11.9 +1.2**
NEW LR LR
comp=Z,91µm,20.0s
**L02D Cave Junction, 125.26 39** P **PKPdf** **15 01 21.2 -0.7**
baz=125
**I05D Terrebonne, OR 125.41 36** P **PKPdf** **15 01 21.5 -0.7**
baz=125
**J04D Umpqua Nationa 125.59 37** P **PKPdf** **15 01 21.9 -0.8**
baz=126
**KHMM Horse Mountain 125.86 40** *e*PKPdf **PKPdf** **15 01 25.1 +1.8**
**FFC Flin Flon 125.89 16** *e*PKIKP **PKPdf** **15 01 22.7 0.0**
FFC MLR MLR
comp=Z,88µm,19.0s
**FFC Flin Flon 125.89 16** *e*PKPdf **PKPdf** **15 01 22.7 0.0**
FFC LR LR
comp=Z,88µm,19.0s
**YBH Yreka Blue Hor 126.05 39** PKP **PKPdf** **15 01 23.8 +0.3**
comp=Z,2.9nm,0.8s,baz=270,slow=3.0,SNR=2.4
YBH PP **PP** **15 03 14.0 -2.7**
comp=Z,11nm,1.1s,baz=195,slow=7.9,SNR=2.1
**YBH Yreka Blue Hor 126.05 39** PKIKP **PKPdf** **15 01 23.8 +0.3**
YBH 15 03 14.0
YBH pmax pmax
comp=Z,11nm,1.1s
**J05D Fort Rock, OR 126.08 37** P **PKPdf** **15 01 22.5 -1.1**
baz=126
**M02C Callahan 126.15 39** P **PKPdf** **15 01 23.3 -0.4**
baz=126
**K04D Chiloquin, OR 126.15 38** P **PKPdf** **15 01 23.7 0.0**
baz=126
**WALA Waterton Lakes 126.17 27** *e*PKPdf **PKPdf** **15 01 24.6 +1.0**
**N02D Trinity Center 126.47 40** P **PKPdf** **15 01 22.6 -1.7**
baz=126
**M04C Macdoel 126.57 38** P **PKPdf** **15 01 22.2 -2.4**
baz=126
**I07A Izee 126.62 35** *e*PKPdf **PKPdf** **15 01 27.6 +3.0**
**BSMT Bassoo Peak 126.62 29** *e*PKPdf **PKPdf** **15 01 24.7 +0.1**
**F10A Beach Ranch, E 126.67 32** *e*PKPdf **PKPdf** **15 01 25.1 +0.6**
**BLMT Blacktail Moun 126.71 28** *e*PKPdf **PKPdf** **15 01 24.3 -0.4**
**WDC Whiskeytown Da 126.78 40** *e*PKIKP **PKPdf** **15 01 25.5 +0.7**
**WDC Whiskeytown Da 126.78 40** *e*PKPdf **PKPdf** **15 01 25.5 +0.7**
**JTMT Jette 126.94 28** PKPdf **PKPdf** **15 01 24.1 -1.0**
**SWMT Swartz Lake 127.24 29** *e*PKPdf **PKPdf** **15 01 23.8 -1.8**
**O03D Paynes Creek 127.41 40** P **PKPdf** **15 01 26.0 -0.2**
baz=127
**MOD Modoc 127.45 38** *e*PKPdf **PKPdf** **15 01 27.2 +0.9**
**J08A Circle Bar Ran 127.66 35** *e*PKPdf **PKPdf** **15 01 28.5 +2.0**
**SLMT Seeley Lake 127.67 28** *e*PKPdf **PKPdf** **15 01 26.6 0.0**
**MSO Missoula 127.75 29** P **PKPdf** **15 01 26.7 +0.1**
baz=128
**MSO Missoula 127.75 29** *e*PKPdf **PKPdf** **15 01 27.4 +0.8**
**SCHQ Schefferville 127.76 350** PKP **PKPdf** **15 01 26.6 +0.3**
comp=Z,6.2nm,1.0s,baz=8.3,slow=3.8,SNR=2.6
SCHQ PP **PP** **15 03 28.1 +1.1**
comp=Z,23nm,1.1s,baz=33,slow=12,SNR=1.9
**CHMT Chamberlain Mo 128.03 29** *e*PKPdf **PKPdf** **15 01 27.6 +0.3**
**WVOR Wild Horse Val 128.13 36** *e*PKIKP **PKPdf** **15 01 27.6 +0.1**
WVOR MLR MLR

comp=Z,58µm,19.0s
WVOR Wild Horse Val 128.13 36 ePKPdf PKPdf 15 01 27.6 +0.1
WVOR LR LR
comp=Z,58µm,19.0s
OHCM Honcut 128.13 41 ePKPdf PKPdf 15 01 29.6 +2.2
EGMT Eagleton 128.78 25 P PKPdf 15 01 28.2 -0.3
baz=129
EGMT Eagleton 128.78 25 ePKPdf PKPdf 15 01 28.6 0.0
HRY Holter Researc 128.84 28 PKPdf PKPdf 15 01 28.1 -0.7
MFID Camas Ranch 129.11 33 ePKPdf PKPdf 15 01 30.3 +1.0
LRM Limekiln Ridge 129.20 29 PKPdf PKPdf 15 01 36.3 +6.7
DLMT Dillon 129.46 30 ePKPdf PKPdf 15 01 31.1 +1.1
CMB Columbia Colle 129.56 42 ePKIKP PKPdf 15 01 30.8 +0.5
CMB Columbia Colle 129.56 42 ePKPdf PKPdf 15 01 30.8 +0.5
MCMT McKenzie Canyo 129.71 30 ePKPdf PKPdf 15 01 31.4 +0.8
BOZ Bozeman (W) 129.72 29 ePKIKP PKPdf 15 01 31.8 +1.3
BOZ MLR MLR
comp=Z,125µm,19.0s
BOZ Bozeman (W) 129.72 29 P PKPdf 15 01 29.1 -1.4
baz=130
BOZ Bozeman (W) 129.72 29 ePKPdf PKPdf 15 01 31.8 +1.3
BOZ LR LR
comp=Z,125µm,19.0s
HLID Hailey 129.78 32 P PKPdf 15 01 30.4 -0.3
baz=130
HLID Hailey 129.78 32 ePKPdf PKPdf 15 01 31.1 +0.4
HLID LR LR
comp=Z,92µm,20.0s
LRV Little Rabbit 129.98 44 ePKPdf PKPdf 15 01 34.0 +2.9
QLMT Earthquake Lak 130.41 29 ePKPdf PKPdf 15 01 33.7 +1.8
GCMT Greycliff 130.53 27 ePKPdf PKPdf 15 01 31.4 -0.6
A25A Svangstu Ranch 130.60 20 P PKPdf 15 01 32.0 +0.1
baz=130
DGMT Dagmar 130.62 21 P PKPdf 15 01 31.6 -0.4
baz=130
DGMT Dagmar 130.62 21 ePKPdf PKPdf 15 01 33.1 +1.2
DGMT LR LR
comp=Z,106µm,19.0s
NV01 Mina Array Sit 130.70 40 ePKPdf PKPdf 15 01 33.6 +1.0
NVAR Mina Array Bea 130.70 40 PKP PKPdf 15 01 30.9 -1.8
comp=Z,4.0nm,0.8s,baz=291,slow=2.0,SNR=13
YMR Madison River 130.75 29 ePKPdf PKPdf 15 01 34.1 +1.5
MLAC Mammoth Lakes 130.81 41 P PKPdf 15 01 31.9 -1.0
baz=131
YNR Norris Junctio 130.86 29 ePKPdf PKPdf 15 01 34.7 +1.9
YFT Old Faithful 130.98 29 ePKPdf PKPdf 15 01 35.6 +2.6
A26A Wade Farm, Ken 131.00 19 P PKPdf 15 01 31.7 -1.0
baz=131
LKWY Lake 131.10 29 ePKIKP PKPdf 15 01 35.1 +1.8
LKWY MLR MLR
comp=Z,168µm,21.0s
LKWY Lake 131.10 29 ePKPdf PKPdf 15 01 35.1 +1.8
LKWY LR LR
comp=Z,168µm,21.0s
MTUM Tungsten Hills 131.14 41 ePKPdf PKPdf 15 01 35.3 +1.8
H17A Grant Village 131.15 29 P PKPdf 15 01 32.7 -0.7
baz=131
H17A Grant Village 131.15 29 PKPdf PKPdf 15 01 34.8 +1.4
B25A Knox Farm, Ray 131.15 21 P PKPdf 15 01 32.4 -0.6
baz=131
ELK Elko 131.17 36 ePKIKP PKPdf 15 01 34.3 +0.8
ELK Elko 131.17 36 ePKPdf PKPdf 15 01 34.3 +0.8
A27A Ledoux Ranch, 131.20 19 P PKPdf 15 01 31.8 -1.2
baz=131
RLMT Red Lodge 131.22 27 P PKPdf 15 01 32.6 -0.9
baz=131
RLMT Red Lodge 131.22 27 ePKPdf PKPdf 15 01 36.6 +3.2
RLMT LR LR
comp=Z,133µm,19.0s
SMMC Simmler 131.26 44 P PKPdf 15 01 33.9 +0.4
baz=131
LAO LASA Array 131.31 24 P PKPdf 15 01 32.5 -0.9
baz=131
LAO LASA Array 131.31 24 ePKPdf PKPdf 15 01 34.6 +1.2
LAO LR LR
comp=Z,64µm,20.0s
IMW Indian Meadow 131.33 30 ePKPdf PKPdf 15 01 34.5 +0.7
B26A Jensen Ranch, 131.38 20 P PKPdf 15 01 33.7 +0.3
baz=131
FXWY Fox Creek 131.48 30 ePKPdf PKPdf 15 01 35.9 +1.9
ULM Lac du Bonnet 131.52 14 PKP PKPdf 15 01 34.1 +0.6
comp=Z,5.3nm,0.7s,baz=340,slow=3.2,SNR=6.2
ULM PP PP 15 03 58.8 +7.2
comp=Z,22nm,1.2s,baz=359,slow=5.7,SNR=2.4
ULM Lac du Bonnet 131.52 14 PKIKP PKPdf 15 01 34.1 +0.6
ULM 15 03 58.8
ULM pmax pmax
comp=Z,22nm,1.2s
TIN Tinemaha 131.53 42 P PKPdf 15 01 34.0 -0.1
baz=131
A28A Rude Farm, Bot 131.55 18 P PKPdf 15 01 33.6 -0.1
baz=131
C25A Freed Ranch, W 131.59 21 P PKPdf 15 01 33.0 -0.8
baz=131
VES Vestal, Richgr 131.62 43 P PKPdf 15 01 32.8 -1.3
baz=132
TPAW Teton Pass 131.62 30 ePKPdf PKPdf 15 01 34.1 -0.3
B27A Peters Farms, 131.68 19 P PKPdf 15 01 33.2 -0.8
baz=132
LOHW Long Hollow 131.71 30 ePKPdf PKPdf 15 01 35.1 +0.7
SNOW Snow King Moun 131.74 30 ePKPdf PKPdf 15 01 36.3 +1.8
REDW Red Top Meadow 131.76 30 ePKPdf PKPdf 15 01 35.5 +0.9
A29A Manning Farm, 131.84 17 P PKPdf 15 01 33.0 -1.2
baz=132
C26A Wahner Farm, P 131.90 20 P PKPdf 15 01 32.7 -1.7
baz=132
SBC Santa Barbara 131.91 45 P PKPdf 15 01 34.8 0.0
baz=132
B28A Dugan Ranch, T 131.93 18 P PKPdf 15 01 34.4 0.0
baz=132
CWC Cottonwood Cre 131.97 42 P PKPdf 15 01 35.4 +0.3
baz=132
D25A Fairfield 132.05 21 P PKPdf 15 01 35.3 +0.5
baz=132
AHID Auburn Hatcher 132.07 31 PKPdf PKPdf 15 01 35.0 -0.1
AHID LR LR
comp=Z,124µm,20.0s
A30A Hoffart Farm, 132.10 16 P PKPdf 15 01 33.9 -0.8
baz=132
GRAC Grapevine Rang 132.13 41 P PKPdf 15 01 33.8 -1.4
baz=132
C27A Sayler Ranch, 132.20 20 P PKPdf 15 01 33.9 -1.0
baz=132
B29A Wagenman Farm, 132.22 17 P PKPdf 15 01 33.7 -1.2
baz=132
DAC Darwin (Calif) 132.39 42 ePKIKP PKPdf 15 01 37.0 +1.1
DAC Darwin (Calif) 132.39 42 ePKPdf PKPdf 15 01 37.0 +1.1
R11A Troy Canyon, C 132.47 38 P PKPdf 15 01 35.5 -0.4
baz=132
R11A Troy Canyon, C 132.47 38 ePKPdf PKPdf 15 01 36.5 +0.5
D26A Manning 132.47 21 P PKPdf 15 01 35.3 -0.2
baz=132
OSI Osito Adit 132.52 45 P PKPdf 15 01 35.5 -0.4
baz=132
B30A Myrvik Farm, E 132.53 17 P PKPdf 15 01 34.3 -1.2
baz=132
BLG Laguna Peak 132.54 45 P PKPdf 15 01 34.8 -1.2
baz=132
C28A Hausauer Farms 132.56 19 P PKPdf 15 01 35.0 -0.6
baz=132
E25A Miller Ranch, 132.56 22 P PKPdf 15 01 35.6 -0.1
baz=132
MPMC Manual Prospec 132.58 42 P PKPdf 15 01 34.0 -2.3
baz=132
HWUT Hardware Ranch 132.65 32 ePKPdf PKPdf 15 01 37.0 +0.7
HWUT LR LR
comp=Z,122µm,20.0s
MDND Maddock 132.69 18 P PKPdf 15 01 35.7 -0.2
baz=132
MDND Maddock 132.69 18 PKPdf PKPdf 15 01 36.3 +0.5
D27A Center 132.72 20 P PKPdf 15 01 36.0 0.0
baz=132
B31A Greenbush Farm 132.75 16 P PKPdf 15 01 36.0 +0.1
baz=133
FURC Furnace Creek, 132.77 41 P PKPdf 15 01 36.5 +0.2
baz=133
LRMC Laurel Mountai 132.77 43 P PKPdf 15 01 36.6 +0.1
baz=133
BW06 Boulder Array 132.84 30 ePKPdf PKPdf 15 01 34.8 -1.9
BW06 ePKPdf PKiKP 15 01 35.0 -2.8
BW06 LR LR
comp=Z,72µm,20.0s
A33A Warroad 132.86 14 P PKPdf 15 01 36.6 +0.5
baz=133
EDW2 Edwards Air Fo 132.89 44 P PKPdf 15 01 36.2 -0.5
baz=133

DUG Dugway 132.93 35 ePKIKP PKPdf 15 01 38.5 +1.8
DUG MLR MLR
comp=Z,80µm,22.0s
DUG Dugway 132.93 35 P PKPdf 15 01 36.4 -0.4
baz=133
DUG Dugway 132.93 35 ePKPdf PKPdf 15 01 38.5 +1.8
DUG LR LR
comp=Z,80µm,22.0s
E26A Carlson Angus 132.94 21 P PKPdf 15 01 35.8 -0.6
baz=133
D28A Regan 132.97 19 P PKPdf 15 01 35.7 -0.7
baz=133
DECC Green Verdugo 132.99 45 P PKPdf 15 01 36.0 -0.8
baz=133
F25A Bowman 133.03 22 P PKPdf 15 01 36.1 -0.5
baz=133
TCUT Toone Canyon 133.07 33 ePKPdf PKPdf 15 01 37.5 +0.4
PASC Pasadena Art C 133.13 45 ePKPdf PKPdf 15 01 37.9 +0.7
C30A Mose, Pekin 133.16 17 P PKPdf 15 01 36.6 -0.2
baz=133
CTU Camp Tracy 133.18 33 PKPdf PKPdf 15 01 37.5 +0.2
MWC Mount Wilson 133.19 45 ePKIKP PKPdf 15 01 37.6 +0.1
MWC Mount Wilson 133.19 45 ePKPdf PKPdf 15 01 37.6 +0.1
E27A Carson 133.29 21 P PKPdf 15 01 35.7 -1.4
baz=133
C31A Landman Farms, 133.30 16 P PKPdf 15 01 36.6 -0.4
baz=133
FMP Fort Macarthur 133.30 45 P PKPdf 15 01 36.9 -0.5
baz=133
AGMN Agassiz Nation 133.33 15 P PKPdf 15 01 36.1 -0.9
baz=133
AGMN Agassiz Nation 133.33 15 ePKPdf PKPdf 15 01 35.0 -2.0
AGMN LR LR
comp=Z,85µm,21.0s
CIS Catalina Islan 133.38 46 P PKPdf 15 01 36.2 -1.5
baz=133
F26A Lodgepole 133.39 22 P PKPdf 15 01 35.6 -1.7
baz=133
D29A Pettibone, Tap 133.40 18 P PKPdf 15 01 36.5 -0.7
baz=133
B34A Aery, Baudette 133.45 13 P PKPdf 15 01 36.1 -1.2
baz=133
E28A Huff 133.46 20 P PKPdf 15 01 37.1 -0.2
baz=133
BFSC Mount Baldy Ra 133.47 44 P PKPdf 15 01 36.3 -1.6
baz=133
GSC Goldstone 133.47 43 ePKIKP PKPdf 15 01 38.4 +0.6
GSC Goldstone 133.47 43 P PKPdf 15 01 37.2 -0.6
baz=133
GSC Goldstone 133.47 43 ePKPdf PKPdf 15 01 38.4 +0.6
SHOC Shoshone 133.48 42 P PKPdf 15 01 37.7 0.0
baz=133
SCI San Clemente I 133.49 46 P PKPdf 15 01 37.3 -0.5
baz=133
NLU North Lily Min 133.51 34 ePKPdf PKPdf 15 01 39.4 +1.4
RRX Edison Barstow 133.57 43 P PKPdf 15 01 37.4 -0.5
baz=134
F27A Lemmon 133.61 21 P PKPdf 15 01 37.4 -0.3
baz=134
D30A Buchanan 133.61 18 P PKPdf 15 01 37.0 -0.6
baz=133
O16A Springville 133.65 34 epPKPdf pPKPdf 15 01 47.4 +2.4
G25A Newell 133.66 23 P PKPdf 15 01 38.0 +0.2
baz=134
MPU Maple Canyon 133.71 34 ePKPdf PKPdf 15 01 38.8 +0.5
E29A Napoleon 133.82 19 P PKPdf 15 01 37.9 -0.1
baz=134
SHPR Sheep Range 133.85 40 ePKPdf PKPdf 15 01 38.7 +0.1
C33A Trail 133.86 15 P PKPdf 15 01 37.1 -0.9
baz=134
G26A Maurine 133.88 22 P PKPdf 15 01 37.8 -0.4
baz=134
BBRC Big Bear Solar 133.97 44 P PKPdf 15 01 38.6 -0.4
baz=134
TUQ Turquoise Moun 133.98 42 P PKPdf 15 01 37.9 -1.0
baz=134
HEC Hector,Ludlow 134.05 43 P PKPdf 15 01 38.3 -0.7
baz=134
F28A McLaughlin 134.06 20 P PKPdf 15 01 38.1 -0.5
baz=134
H25A Fruitdale 134.06 24 P PKPdf 15 01 37.4 -1.2
baz=134
G27A Dupree 134.06 22 P PKPdf 15 01 37.0 -1.5
baz=134
E30A Jud 134.11 18 P PKPdf 15 01 37.9 -0.7
baz=134
MURC Murrieta 134.13 45 P PKPdf 15 01 39.2 +0.1
baz=134
RSSD Black Hills 134.30 24 ePKIKP PKPdf 15 01 37.5 -1.8
RSSD Black Hills 134.30 24 ePKPdf PKPdf 15 01 37.6 -1.6
CCUT Cedar City 134.33 38 ePKPdf PKPdf 15 01 40.6 +1.0
C35A Jirik Farms, M 134.35 13 P PKPdf 15 01 39.4 +0.4
baz=134
E31A Nome 134.37 17 P PKPdf 15 01 39.2 +0.1
baz=134
K22A Casper 134.39 28 P PKPdf 15 01 39.0 -0.4
baz=134
K22A Casper 134.39 28 ePKPdf PKPdf 15 01 40.3 +0.8
H26A Fairpoint 134.39 23 P PKPdf 15 01 39.4 +0.1
baz=134
F29A Eureka 134.40 19 P PKPdf 15 01 39.1 0.0
baz=134
D33A AnnSam, Waubun 134.41 15 P PKPdf 15 01 39.3 +0.1
baz=134
TMUT Trail Mountain 134.44 34 ePKPdf PKPdf 15 01 40.7 +0.8
I25A Rochford 134.50 24 P PKPdf 15 01 39.1 -0.5
baz=134
GMRC Granite Mounta 134.53 42 P PKPdf 15 01 38.7 -1.2
baz=134
C36A Pine Crest Far 134.54 12 P PKPdf 15 01 38.7 -0.6
baz=134
109C Camp Elliot, M 134.58 46 P PKPdf 15 01 39.9 +0.1
baz=134
E32A Braaten, Kindr 134.58 17 P PKPdf 15 01 39.4 0.0
baz=134
P17A Butcher Ranch, 134.59 34 ePKPdf PKPdf 15 01 42.9 +3.0
D34A Park Rapids 134.63 15 P PKPdf 15 01 38.4 -1.1
baz=134
EYMN Ely 134.63 11 P PKPdf 15 01 38.7 -0.8
baz=134
EYMN Ely 134.63 11 ePKPdf PKPdf 15 01 40.0 +0.5
EYMN LR LR
comp=Z,105µm,21.0s
H27A Howes 134.64 22 P PKPdf 15 01 38.6 -1.1
baz=134
PFO Pinyon Flat Ob 134.65 44 ePKIKP PKPdf 15 01 38.9 -1.2
PFO MLR MLR
comp=Z,47µm,20.0s
PFO Pinyon Flat Ob 134.65 44 ePKPdf PKPdf 15 01 38.9 -1.2
PFO LR LR
comp=Z,47µm,20.0s
F30A Leola 134.66 19 P PKPdf 15 01 39.0 -0.7
baz=134
G28A Parade 134.69 21 P PKPdf 15 01 39.1 -0.7
baz=134
C37A Embarrass 134.71 12 P PKPdf 15 01 39.7 0.0
baz=134
BELC Belle Mtn. Jos 134.75 44 P PKPdf 15 01 39.8 -0.5
baz=134
I26A New Underwood 134.84 23 P PKPdf 15 01 40.0 -0.1
baz=135
F31A Hecla 134.89 18 P PKPdf 15 01 40.3 +0.2
baz=135
C38A Sawbill Land. 134.89 11 P PKPdf 15 01 40.3 +0.3
baz=135
D35A Remer 134.91 14 P PKPdf 15 01 39.9 -0.1
baz=135
G29A Hoyen 134.93 20 P PKPdf 15 01 40.4 +0.2
baz=135
E33A Westby DABS, E 134.95 16 P PKPdf 15 01 39.4 -0.8
baz=135
SRU San Rafael 134.96 34 PKIKP PKPdf 15 01 43.4 +2.7
SRU San Rafael 134.96 34 PKPdf PKPdf 15 01 43.4 +2.7
J25A Sunshine Ranch 134.99 25 P PKPdf 15 01 39.0 -1.4
baz=135
BAR Barrett 135.00 46 ePKPdf PKPdf 15 01 43.4 +2.7
H28A Mission Ridge 135.00 21 P PKPdf 15 01 40.0 -0.3
baz=135
C39A Grand Marais 135.00 10 P PKPdf 15 01 40.5 +0.3
baz=135
D36A Goodland 135.02 13 P PKPdf 15 01 39.1 -1.1
baz=135
MONP Monument Peak 135.06 45 P PKPdf 15 01 40.0 -1.0
baz=135
RCBR Riachuelo 135.09 258 PKP PKPdf 15 01 41.1 -0.3
comp=Z,9.6nm,1.1s,baz=108,slow=4.6,SNR=2.3
RCBR PP PP 15 04 17.8 +1.1

comp=Z,5.3nm,0.9s,baz=180,slow=1.0,SNR=1.9
RCBR Riachuelo 135.09 258 PKP PKPdf 15 01 41.1 -0.3
RCBR PP PP 15 04 17.8 +1.1
RCBR LR LR
comp=Z,50µm,19.0s
I27A Quinn 135.13 23 P PKPdf 15 01 39.5 -1.1
baz=135
PLCA Paso Flores 135.13 190 ePKIKP PKPdf 15 01 40.1 -0.7
PLCA Paso Flores 135.13 190 ePKPdf PKPdf 15 01 40.1 -0.7
E34A Wadena 135.16 15 P PKPdf 15 01 40.3 -0.3
baz=135
D37A Cotton 135.20 12 P PKPdf 15 01 40.1 -0.5
baz=135
IRM Iron Mountain 135.24 43 P PKPdf 15 01 40.8 -0.2
baz=135
NEE2 Needles Airpor 135.24 42 P PKPdf 15 01 40.7 -0.3
baz=135
G30A Faulkton 135.25 19 P PKPdf 15 01 40.1 -0.7
baz=135
BC3 Big Chuckawall 135.31 44 P PKPdf 15 01 40.2 -1.1
baz=135
E35A Pequot Lakes 135.32 14 P PKPdf 15 01 40.6 -0.3
baz=135
H29A Onida 135.33 21 P PKPdf 15 01 40.4 -0.6
baz=135
J26A Sides Ranch, S 135.36 24 P PKPdf 15 01 40.1 -1.0
baz=135
TRQA Tornquist 135.42 200 ePKPdf PKPdf 15 01 39.5 -1.8
TRQA LR LR
comp=Z,63µm,20.0s
IBP Imperial Bould 135.42 45 P PKPdf 15 01 40.6 -1.0
baz=135
O20A White River Ci 135.45 31 P PKPdf 15 01 41.0 -0.5
baz=135
O20A White River Ci 135.45 31 ePKPdf PKPdf 15 01 40.8 -0.8
G31A Conde 135.47 18 P PKPdf 15 01 40.5 -0.7
baz=135
SWSC Sam W. Stewart 135.47 45 P PKPdf 15 01 40.3 -1.2
baz=135
F33A 5 Mile Ranch, 135.48 16 P PKPdf 15 01 41.4 +0.2
baz=135
I28A Midland 135.52 22 P PKPdf 15 01 40.4 -1.0
baz=135
G32A Webster 135.66 18 P PKPdf 15 01 41.2 -0.3
baz=136
F34A Alexandria 135.81 15 P PKPdf 15 01 41.7 0.0
baz=136
I29A Vivian Onida 135.82 21 P PKPdf 15 01 41.8 -0.1
baz=136
PDMCI Parker Dam,Lak 135.83 42 P PKPdf 15 01 42.0 -0.1
baz=136
J27A Elkhorn Farm, 135.84 23 P PKPdf 15 01 42.4 +0.4
baz=136
Y12C Blythe 135.90 43 P PKPdf 15 01 41.9 -0.3
baz=136
SUSD South Dakota S 135.92 20 P PKPdf 15 01 41.8 -0.2
baz=136
F35A Swanville 135.93 15 P PKPdf 15 01 41.6 -0.4
baz=136
J28A Allard Ranch, 135.99 22 P PKPdf 15 01 41.8 -0.4
baz=136
N23A Red Feather La 136.03 29 P PKPdf 15 01 42.3 -0.4
baz=136
N23A Red Feather La 136.03 29 ePKPdf PKPdf 15 01 44.8 +2.1
G33A Ortonville 136.03 17 P PKPdf 15 01 42.3 +0.1
baz=136
H31A Wolsey 136.05 19 P PKPdf 15 01 42.7 +0.4
baz=136
GLA Glamis 136.09 44 ePKIKP PKPdf 15 01 42.7 0.0
GLA Glamis 136.09 44 P PKPdf 15 01 41.0 -1.7
baz=136
GLA Glamis 136.09 44 ePKPdf PKPdf 15 01 42.6 0.0
F36A Milaca 136.18 14 P PKPdf 15 01 39.9 -2.5
baz=136
G34A Benson 136.22 16 P PKPdf 15 01 40.7 -1.8
baz=136
I30A Oacoma 136.22 20 P PKPdf 15 01 40.4 -2.2
baz=136
J29A Okreek 136.34 22 P PKPdf 15 01 41.7 -1.1
baz=136
H32A Carlson Farm, 136.36 18 P PKPdf 15 01 41.6 -1.2
baz=136
H33A Prehn Over Nor 136.41 17 P PKPdf 15 01 41.7 -1.2
baz=136
I31A Royce, Wessing 136.43 20 P PKPdf 15 01 40.8 -2.2
baz=136
PV05 Paradox Valley 136.48 34 eP PKPdf 15 01 49.2 +5.7
K28A Ten Mile Ranch 136.54 23 P PKPdf 15 01 41.1 -2.2
baz=136
G35A Watkins 136.54 15 P PKPdf 15 01 41.7 -1.4
baz=136
LPA La Plata 136.55 207 dePKIKP PKPdf 15 01 48.0 +4.6
LPA PP PP 15 04 24.0 +0.1
LPA PPP PPP 15 07 25.0
LPA PPP PPP 15 17 21.0
PV15 Paradox Valley 136.63 33 ePKPdf PKPdf 15 01 42.1 -1.7
H34A Spellman Lake, 136.70 17 P PKPdf 15 01 40.6 -2.8
baz=136
G36A St. Michael 136.72 14 P PKPdf 15 01 41.1 -2.3
baz=136
J30A Dallas 136.72 21 P PKPdf 15 01 40.1 -3.5
baz=136
PV01 Paradox Valley 136.73 34 PKPdf PKPdf 15 01 46.7 +2.7
I32A Karley and Nic 136.78 19 P PKPdf 15 01 40.3 -3.3
baz=137
COWI Conover 136.83 9 ePKPdf PKPdf 15 01 43.1 -0.6
COWI LR LR
comp=Z,132µm,19.0s
WUAZ Wupatki 136.87 39 P PKPdf 15 01 41.6 -2.7
baz=137
WUAZ Wupatki 136.87 39 ePKPdf PKPdf 15 01 46.1 +1.8
WUAZ LR LR
comp=Z,61µm,19.0s
K29A Lazy Trails An 136.90 22 P PKPdf 15 01 40.5 -3.4
baz=137
H35A Sunnyside Ranc 136.94 16 P PKPdf 15 01 41.3 -2.6
baz=137
SPMN St. Paul 136.95 13 P PKPdf 15 01 42.1 -1.8
baz=137
SPMN St. Paul 136.95 13 ePKPdf PKPdf 15 01 45.0 +1.1
I33A Coleman 136.97 18 P PKPdf 15 01 42.1 -1.9
baz=137
J31A Geddes 137.01 20 P PKPdf 15 01 41.1 -3.0
baz=137
ISCO Idaho Springs 137.03 29 ePKIKP PKPdf 15 01 42.0 -2.6
ISCO MLR MLR
comp=Z,107µm,19.0s
ISCO Idaho Springs 137.03 29 P PKPdf 15 01 41.8 -2.8
baz=137
ISCO Idaho Springs 137.03 29 ePKPdf PKPdf 15 01 42.0 -2.6
ISCO LR LR
comp=Z,107µm,19.0s
L28A Connealy Angus 137.08 24 P PKPdf 15 01 41.6 -2.8
baz=137
K30A Basset 137.24 21 P PKPdf 15 01 42.0 -2.6
baz=137
J32A Parkston 137.24 19 P PKPdf 15 01 41.3 -3.2
baz=137
I34A Hadley 137.26 17 P PKPdf 15 01 42.0 -2.5
baz=137
H36A Jessenland, He 137.29 15 P PKPdf 15 01 41.9 -2.6
baz=137
ECSD EROS Data Cent 137.31 18 P PKPdf 15 01 41.6 -3.0
baz=137
ECSD EROS Data Cent 137.31 18 ePKPdf PKPdf 15 01 44.5 -0.2
ECSD LR LR
comp=Z,119µm,19.0s
MVCO Mesa Verde 137.43 34 P PKPdf 15 01 41.6 -3.8
baz=137
MVCO Mesa Verde 137.43 34 ePKPdf PKPdf 15 01 46.1 +0.8
MVCO LR LR
comp=Z,94µm,22.0s
L29A Maesberg Ranch 137.44 23 P PKPdf 15 01 41.8 -3.2
baz=137
H37A Dierke Farm, C 137.53 14 P PKPdf 15 01 42.8 -2.2
baz=137
J33A Davis 137.57 19 P PKPdf 15 01 42.1 -3.0
baz=137
K31A O'Neill 137.59 21 P PKPdf 15 01 42.2 -3.0
baz=137
M28A Bar X Bar Ranc 137.65 24 P PKPdf 15 01 43.5 -1.9
baz=138
I35A Creekview Farm 137.67 16 P PKPdf 15 01 43.4 -1.9
baz=138
OGNE Ogallala 137.75 25 P PKPdf 15 01 42.5 -3.2
baz=138
OGNE Ogallala 137.75 25 ePKPdf PKPdf 15 01 47.7 +2.1

OGNE LR LR
comp=Z,101µm,20.0s
**I36A Fitzsimmons Fa 137.78 15** P **PKPdf 15 01 42.2 -3.2**
baz=138
**L30A Spencer Herefo 137.83 22** P **PKPdf 15 01 42.0 -3.7**
baz=138
**K32A Verdigre 137.83 20** P **PKPdf 15 01 42.1 -3.5**
baz=138
**M29A Burnside Ranch 137.88 23** P **PKPdf 15 01 43.3 -2.5**
baz=138
**Q24A Divide 137.90 30** P **PKPdf 15 01 43.5 -2.7**
baz=138
**J34A George 137.92 18** P **PKPdf 15 01 43.1 -2.6**
baz=138
**I37A Lemond, Waseca 137.95 15** P **PKPdf 15 01 44.1 -1.6**
baz=138
**L31A Butterfield Fa 137.95 21** P **PKPdf 15 01 42.6 -3.3**
baz=138
**S22A 4UR Ranch, Cre 137.96 32** P **PKPdf 15 01 42.4 -4.0**
baz=138
**J35A Milford 138.06 17** P **PKPdf 15 01 43.1 -2.9**
baz=138
**214A Organ Pipe Nat 138.11 44** P **PKPdf 15 01 45.0 -1.5**
baz=138
**214A Organ Pipe Nat 138.11 44** *e*PKPdf **PKPdf 15 01 47.7 +1.2**
**M30A Dale-Ortello V 138.12 23** P **PKPdf 15 01 43.1 -3.1**
baz=138
**W18A Petrified Fore 138.14 38** P **PKPdf 15 01 45.4 -1.3**
baz=138
**W18A Petrified Fore 138.14 38** PKPdf **PKPdf 15 01 47.9 +1.3**
**WVL Waterville 138.14 349** *e*PKPdf **PKPdf 15 01 47.7 +1.7**
**N28A Pribbeno Ranch 138.17 25** P **PKPdf 15 01 44.1 -2.3**
baz=138
**I38A Scanlan Farm, 138.18 13** P **PKPdf 15 01 43.6 -2.6**
baz=138
**K33A Hardington 138.20 19** P **PKPdf 15 01 45.3 -1.1**
baz=138
**J36A Seneca 1, Swea 138.34 16** P **PKPdf 15 01 45.6 -0.9**
baz=138
**L32A Elgin 138.40 20** P **PKPdf 15 01 45.6 -1.1**
baz=138
**K34A Le Mars 138.42 18** P **PKPdf 15 01 45.5 -1.2**
baz=138
**N29A Votaw Ranch, W 138.44 24** P **PKPdf 15 01 45.6 -1.3**
baz=138
**L33A Hoskins 138.51 20** P **PKPdf 15 01 45.6 -1.3**
baz=138
**O28A Krutsinger Ran 138.54 26** P **PKPdf 15 01 46.6 -0.5**
baz=138
**J37A Redenius Farm, 138.57 15** P **PKPdf 15 01 46.5 -0.4**
baz=138
**M31A Lambtecht Ranc 138.63 22** P **PKPdf 15 01 46.7 -0.5**
baz=138
**K35A Storm Lake 138.65 17** P **PKPdf 15 01 46.3 -0.8**
baz=138
**SDCO Great Sand Dun 138.66 31** P **PKPdf 15 01 45.3 -2.4**
baz=138
**SDCO Great Sand Dun 138.66 31** PFAKE 15 02 00.0 +12
SDCO LR LR
comp=Z,84µm,19.0s
**N30A Hueftle Ranch, 138.67 23** P **PKPdf 15 01 43.9 -3.4**
baz=138
**LONY Lake Ozonia 138.81 354** *e*PKPdf **PKPdf 15 01 47.5 +0.2**
LONY LR LR
comp=Z,72µm,20.0s
**J38A Wedel Dairy, R 138.83 14** P **PKPdf 15 01 45.1 -2.3**
baz=139
**BGNE Belgrade 138.87 21** P **PKPdf 15 01 45.6 -2.0**
baz=139
**SADO Sadowa 138.92 359** *e*PKPdf **PKPdf 15 01 47.5 0.0**
**O29A 4D Ranch, Culb 138.95 25** P **PKPdf 15 01 46.8 -1.1**
baz=139
**L34A Svendsen Farm, 138.98 19** P **PKPdf 15 01 45.8 -2.0**
baz=139
**P28A Saint Francis 139.00 26** P **PKPdf 15 01 45.0 -3.0**
baz=139
**K37A Belmond 139.05 15** P **PKPdf 15 01 46.5 -1.3**
baz=139
**M33A Taylor Creek F 139.06 20** P **PKPdf 15 01 46.3 -1.6**
baz=139
**KSCO Kaye Shedlock' 139.07 27** P **PKPdf 15 01 46.0 -2.2**
baz=139
**KSCO Kaye Shedlock' 139.07 27** *e*PKPpre PKPpre 15 01 37.8
**N31A Bailey Ranch, 139.09 22** P **PKPdf 15 01 46.4 -1.6**
baz=139
**L35A Bielow Farm, R 139.11 18** P **PKPdf 15 01 47.4 -0.6**
baz=139
**O30A MW Ranch, Wils 139.21 24** P **PKPdf 15 01 47.5 -0.8**
baz=139
**MDV Middlebury 139.26 353** *e*PKPdf **PKPdf 15 01 49.5 +1.4**
**TUC Tucson 139.27 42** *e*PKIKP PKPpre 15 01 43.3
TUC MLR MLR
comp=Z,55µm,19.0s
**TUC Tucson 139.27 42** *e*PKPpre PKPpre 15 01 43.3
TUC LR LR
comp=Z,55µm,19.0s
**M34A Aspy Farms, Fr 139.33 19** P **PKPdf 15 01 47.7 -0.7**
baz=139
**P29A Atwood 139.34 25** P **PKPdf 15 01 47.6 -1.0**
baz=139
**N32A Stulken Farm, 139.39 22** P **PKPdf 15 01 47.4 -1.1**
baz=139
**K38A Parkersburg 139.39 15** P **PKPdf 15 01 47.3 -1.2**
baz=139
**Q28A Sharon Springs 139.39 27** P **PKPdf 15 01 46.3 -2.4**
baz=139
**NCB Newcomb 139.41 354** *e*PKPdf **PKPdf 15 01 47.3 -1.2**
NCB LR LR
comp=Z,92µm,22.0s
**O31A Woolen Ranch, 139.53 23** P **PKPdf 15 01 48.4 -0.4**
baz=139
**R27A Eads 139.57 28** P **PKPdf 15 01 48.0 -1.0**
baz=139
**M35A Neola 139.65 18** P **PKPdf 15 01 48.6 -0.4**
baz=140
**P30A Selden 139.67 25** P **PKPdf 15 01 49.1 -0.1**
baz=140
**T25A Trinidad 139.68 31** P **PKPdf 15 01 49.6 +0.1**
baz=140
**T25A Trinidad 139.68 31** *e*PKPdf **PKPdf 15 01 49.5 +0.1**
**JFWS Jewell Farm 139.71 12** *e*PKPpre PKPpre 15 01 46.8
JFWS LR LR
comp=Z,98µm,20.0s
**N33A J Bar K, Exete 139.71 21** P **PKPdf 15 01 49.0 -0.1**
baz=140
**S26A Kim 139.78 29** P **PKPdf 15 01 49.5 0.0**
baz=140
**O32A Brockman Farm, 139.83 22** P **PKPdf 15 01 49.1 -0.3**
baz=140
**Q29A Oakley 139.91 26** P **PKPdf 15 01 49.6 0.0**
baz=140
**N34A Lincoln 139.95 20** P **PKPdf 15 01 49.3 -0.3**
baz=140
**SCIA State Center 139.97 16** PFAKE 15 02 00.0 +10
SCIA LR LR
comp=Z,97µm,19.0s
**R28A Tribune 139.99 27** P **PKPdf 15 01 49.4 -0.4**
baz=140
**S27A Las Animas 140.01 29** P **PKPdf 15 01 49.6 -0.4**
baz=140
**P31A Stockton 140.04 24** P **PKPdf 15 01 48.4 -1.4**
baz=140
**T26A Comanche Natio 140.06 30** P **PKPdf 15 01 48.8 -1.3**
baz=140
**Q30A Quinter 140.16 25** P **PKPdf 15 01 49.4 -0.6**
baz=140
**LAZ Ladron 140.18 36** *e*PKPdf **PKPdf 15 01 51.6 +1.2**
**ANMO Albuquerque 140.20 35** *e*PKIKP PKPpre 15 01 44.8
ANMO *e* 15 01 51.6
ANMO MLR MLR
comp=Z,91µm,19.0s
**ANMO Albuquerque 140.20 35** *e*PKPpre PKPpre 15 01 44.8
ANMO *e*PKPdf **PKPdf 15 01 51.6 +1.2**
ANMO LR LR
comp=Z,91µm,19.0s
**N35A Tabor 140.21 19** P **PKPdf 15 01 48.8 -1.3**
baz=140
**R29A Marienthal 140.22 26** P **PKPdf 15 01 48.9 -1.3**
baz=140
**O33A Hebron 140.25 21** P **PKPdf 15 01 49.0 -1.2**
baz=140
**P32A Huiting Farm, 140.26 23** P **PKPdf 15 01 48.9 -1.3**
baz=140
**O34A Beatrice 140.47 20** P **PKPdf 15 01 49.2 -1.3**
baz=140
**Q31A Ellis 140.48 24** P **PKPdf 15 01 49.4 -1.2**
baz=140

**CBKS Cedar Bluff 140.50 25** *e*PKIKP **PKPdf 15 01 51.1 +0.4**
CBKS MLR MLR
comp=Z,114µm,22.0s
**CBKS Cedar Bluff 140.50 25** P **PKPdf 15 01 49.7 -1.0**
baz=140
**CBKS Cedar Bluff 140.50 25** *e*PKPdf **PKPdf 15 01 51.1 +0.4**
CBKS LR LR
comp=Z,114µm,22.0s
**Y22D IRIS PASSCAL I 140.54 36** P **PKPdf 15 01 50.1 -0.9**
baz=140
**LPM Los Pinos Moun 140.55 36** *e*PKPdf **PKPdf 15 01 51.5 +0.5**
**S28A Manter 140.56 28** P **PKPdf 15 01 49.9 -0.9**
baz=140
**TRY Troy 140.57 353** *e*PKPdf **PKPdf 15 01 50.8 +0.3**
**T27A Campo 140.58 29** P **PKPdf 15 01 50.5 -0.5**
baz=140
**BNM Barren Site 140.66 36** *e*PKPdf **PKPdf 15 01 51.1 -0.2**
**O35A Humboldt 140.66 19** P **PKPdf 15 01 49.9 -0.9**
baz=140
**R30A Dighton 140.71 26** P **PKPdf 15 01 50.6 -0.5**
baz=141
**P33A Williams Farm, 140.77 22** P **PKPdf 15 01 49.0 -2.1**
baz=141
**Q32A Meitler Ranch, 140.82 23** P **PKPdf 15 01 49.9 -1.3**
baz=141
**T28A Walsh 140.83 29** P **PKPdf 15 01 50.3 -1.1**
baz=141
**S29A Ulysses 140.89 27** P **PKPdf 15 01 50.5 -0.9**
baz=141
**P34A Walnut Farm, R 140.99 21** P **PKPdf 15 01 50.2 -1.3**
baz=141
**R31A Burdett 141.03 25** P **PKPdf 15 01 50.3 -1.4**
baz=141
**U27A Thompson Grove 141.04 30** P **PKPdf 15 01 50.4 -1.4**
baz=141
**121A Cookes Peak, D 141.07 39** P **PKPdf 15 01 50.9 -1.2**
baz=141
**121A Cookes Peak, D 141.07 39** *e*PKPdf **PKPdf 15 01 50.8 -1.2**
**O36A Bolckow 141.09 19** P **PKPdf 15 01 50.3 -1.3**
baz=141
**Q33A Connelly Farm, 141.10 22** P **PKPdf 15 01 50.6 -1.1**
baz=141
**S30A Montezuma 141.17 26** P **PKPdf 15 01 50.8 -1.2**
baz=141
**T29A Hugoton 141.19 28** P **PKPdf 15 01 51.4 -0.6**
baz=141
**AAM Ann Arbor 141.25 4** PKIKP **PKPdf 15 01 50.8 -1.0**
AAM MLR MLR
comp=Z,125µm,21.0s
**AAM Ann Arbor 141.25 4** PKPdf **PKPdf 15 01 50.8 -1.0**
AAM LR LR
comp=Z,125µm,21.0s
**R32A Long Quarter, 141.25 24** P **PKPdf 15 01 51.0 -1.0**
baz=141
**P35A Duane Minner, 141.29 20** P **PKPdf 15 01 50.9 -1.1**
baz=141
**BINY Binghamton 141.34 355** *e*PKPdf **PKPdf 15 01 54.6 +2.6**
**U28A Mallet 141.37 29** P **PKPdf 15 01 51.0 -1.4**
baz=141
**KSU1 Kansas State U 141.46 21** P **PKPdf 15 01 50.3 -2.1**
baz=141
**KSU1 Kansas State U 141.46 21** *e*PKPdf **PKPdf 15 01 51.7 -0.6**
KSU1 LR LR
comp=Z,95µm,20.0s
**P36A Good Intent, A 141.48 19** P **PKPdf 15 01 50.5 -1.8**
baz=141
**Q34A Chapman 141.50 22** P **PKPdf 15 01 50.8 -1.6**
baz=141
**V27A Dan Oppiter Fa 141.55 31** P **PKPdf 15 01 50.9 -1.8**
baz=141
**S31A Mullinville 141.61 25** P PKPpre 15 01 47.7
baz=142
**T30A Plains 141.62 27** P PKPpre 15 01 47.5
baz=142
**R33A Olander Ranch, 141.64 23** P PKPpre 15 01 47.7
baz=142
**U29A Oasis Ranch, S 141.77 28** P PKPpre 15 01 47.8
baz=142
**S32A Newby Ranch, P 141.78 25** P PKPpre 15 01 48.4
baz=142
**V28A Channing 141.86 30** P PKPpre 15 01 48.6
baz=142
**Q35A Mercer Eighty, 141.88 21** P PKPpre 15 01 47.3
baz=142
**R34A Isabella, Hill 141.93 22** P PKPpre 15 01 48.0
baz=142
**KSPA Keystone Colle 141.95 355** *e*PKPdf **PKPdf 15 01 56.3 +3.2**
**Q36A Arnold C. Orve 141.99 20** P PKPpre 15 01 47.9
baz=142
**U30A WK&E Inc. Balk 142.00 28** P PKPpre 15 01 49.3
baz=142
**V29A Stinnett 142.11 29** P PKPpre 15 01 50.2
baz=142
**HDIL Hopedale 142.17 12** P PKPpre 15 01 50.0
baz=142
**HDIL Hopedale 142.17 12** *e*PKPdf **PKPdf 15 01 55.0 +1.5**
HDIL LR LR
comp=Z,107µm,21.0s
**T32A Huddler Ranch, 142.22 25** P PKPpre 15 01 50.5
baz=142
**S33A Kaszmaul Farm, 142.25 24** P PKPpre 15 01 50.6
baz=142
**W28A Vega 142.26 31** P PKPpre 15 01 48.6
baz=142
**R35A Emporia Munici 142.30 21** P PKPpre 15 01 48.3
baz=142
**Q37A Longview Farm, 142.40 19** P PKPpre 15 01 48.2
baz=142
**U31A Nine Bar Ranch 142.49 27** P PKPpre 15 01 49.4
baz=142
**S34A Willow Spring 142.51 23** P PKPpre 15 01 49.3
baz=142
**R36A Gordon, Harris 142.54 20** P PKPpre 15 01 48.8
baz=142
**T33A Patterson Ranc 142.59 24** P PKPpre 15 01 50.0
baz=142
**V30A Spur Ranch, Mi 142.60 28** P PKPpre 15 01 49.5
baz=142
**W29A Amraillo 142.65 30** P PKPpre 15 01 49.7
baz=142
**SFIN Scholer Farm 142.74 9** P PKPpre 15 01 49.7
baz=142
**SFIN Scholer Farm 142.74 9** *e*PKPpre PKPpre 15 01 49.5
**R37A Teagarden Farm 142.78 20** P PKPpre 15 01 49.6
baz=143
**AMTX Amarillo 142.82 30** P PKPpre 15 01 50.5
baz=143
**S35A Otter Creek Ra 142.82 22** P PKPpre 15 01 50.3
baz=143
**X28A Dimmitt 142.84 31** P PKPpre 15 01 51.1
baz=143
**U32A Winter Ranch, 142.86 26** P PKPpre 15 01 50.6
baz=143
**V31A Spring Creek L 142.99 27** P PKPpre 15 01 51.1
baz=143
**SSPA Standing Stone 143.01 357** *e*PKPdf **PKPdf 15 01 54.9 -0.1**
**S36A Lake Cedric, C 143.05 21** P PKPab 15 01 49.8 -0.6
baz=143,SNR=8.1
**T34A McClaskey Farm 143.07 23** P PKPab 15 01 50.9 +0.3
baz=143
**MNTX Cornudas Mount 143.12 38** P PKPbc 15 01 52.3 -0.1
baz=143
**MNTX Cornudas Mount 143.12 38** *e*PKPpre PKPbc 15 01 51.1 -1.2
MNTX LR LR
comp=Z,101µm,19.0s
**W30A Crocket Farms 143.13 29** P PKPab 15 01 51.5 +0.6
baz=143
**BDFB Brasilia 143.15 238** PKP PKPbc 15 01 53.8 +0.9
comp=Z,2.5nm,0.5s,baz=120,slow=5.1,SNR=4.7
**BDFB Brasilia 143.15 238** *e*PKPdf PKPbc 15 01 54.4 +1.4
**CPUP Villa Florida 143.15 215** PKP PKPbc 15 01 52.9 +0.4
comp=Z,5.9nm,0.9s,baz=124,slow=3.5,SNR=10.0
**X29A Tulia 143.16 31** P PKPbc 15 01 52.6 +0.1
baz=143
**U33A Lingo Farm, Me 143.20 25** P PKPab 15 01 50.7 -0.4
baz=143
**S37A Fort Scott 143.28 20** P PKPab 15 01 51.7 +0.3
baz=143
**Y28A McKinney Farm, 143.29 32** P PKPbc 15 01 52.8 0.0
baz=143
**ACSO Alum Creek Sta 143.35 4** *e*PKPpre PKPbc 15 01 52.1 -0.5
ACSO LR LR
comp=Z,102µm,21.0s
**V32A Arapaho 143.40 27** P PKPbc 15 01 52.7 -0.3
baz=143
**T35A Sooner Cattle 143.42 23** P PKPab 15 01 52.0 0.0
baz=143,SNR=6.8

**W31A Holland Ranch, 143.42 28** P PKPab 15 01 52.5 +0.4
baz=143
**U34A Anderson Ranch 143.44 24** P PKPbc 15 01 52.6 -0.4
baz=143
**U34A Anderson Ranch 143.44 24** *e*PKPpre PKPbc 15 01 52.6 -0.4
**T36A Boggs Farm, Ca 143.54 22** P PKPab 15 01 52.8 +0.4
baz=143
**MVL Millersville 143.55 355** *e*PKPdf **PKPdf 15 01 56.8 +0.8**
**X30A Coker Ranch, T 143.57 30** P PKPbc 15 01 53.1 -0.4
baz=143
**CLNB Carlsbad 143.62 35** *e*PKPpre **PKPdf 15 01 54.5 -1.9**
**Y29A Porterfield Fa 143.63 31** P PKPbc 15 01 53.5 -0.3
baz=144
**V33A Lossen Ranch, 143.64 26** P PKPab 15 01 53.1 +0.2
baz=144,SNR=6.0
**Z28A Tucker Farm, M 143.69 33** P PKPab 15 01 53.2 0.0
baz=144
**W32A Sentinel 143.80 27** P PKPab 15 01 53.5 0.0
baz=144,SNR=11
**U35A Pawnee 143.81 23** P PKPab 15 01 53.4 -0.1
baz=144,SNR=11
**T37A Cheneyville 18 143.83 21** P PKPab 15 01 52.5 -1.0
baz=144,SNR=21
**X31A McDonald Ranch 143.86 29** P PKPab 15 01 53.4 -0.4
baz=144,SNR=12
**V34A Guthrie 143.96 25** P PKPab 15 01 53.7 -0.4
baz=144,SNR=15
**V34A Guthrie 143.96 25** *e*PKPpre PKPbc 15 01 54.6 0.0
**BLO Bloomington 144.01 9** *e*PKIKP **PKPdf 15 01 56.1 -0.7**
**BLO Bloomington 144.01 9** *e*PKPdf **PKPab 15 01 54.3 +0.2**
**Y30A Stafford Cattl 144.01 30** P PKPbc 15 01 54.9 0.0
baz=144
**MCWV Mont Chateau 144.03 360** *e*PKPdf **PKPdf 15 01 56.5 -0.3**
**Z29A Hungry Hill Ra 144.07 32** P **PKPab 15 01 54.9 +0.2**
baz=144,SNR=27
**CCM Cathedral Cave 144.10 15** *e*PKIKP **PKPab 15 01 54.4 -0.1**
**CCM Cathedral Cave 144.10 15** *e*PKP **PKPab 15 01 54.4 -0.1**
**W33A Caddo, Fort Co 144.13 26** P PKPbc 15 01 55.2 0.0
baz=144,SNR=35
**128A Castleberry Fa 144.14 34** P **PKPab 15 01 55.0 +0.1**
baz=144
**OLIL Olney 144.17 11** *e*PKPpre PKPbc 15 01 55.0 -0.1
**U36A Oologah 144.18 22** P **PKPab 15 01 54.4 -0.4**
baz=144,SNR=9.3
**Y31A Rekieta Farm, 144.26 30** P **PKPab 15 01 54.8 -0.5**
baz=144
**V35A Meyer Ranch, C 144.30 24** P **PKPab 15 01 55.1 -0.2**
baz=144,SNR=23
**WMOK Wichita Mounta 144.33 27** *e*PKIKP **PKPab 15 01 54.7 -0.8**
WMOK MLR MLR
comp=Z,78µm,20.0s
**WMOK Wichita Mounta 144.33 27** *e*PKPpre **PKPab 15 01 54.7 -0.8**
WMOK LR LR
comp=Z,78µm,20.0s
**Z30A Sanderson Ranc 144.36 31** P **PKPab 15 01 55.0 -0.7**
baz=144,SNR=33
**X32A Elmer 144.36 28** P **PKPab 15 01 54.8 -0.9**
baz=144,SNR=27
**W34A Bridge Creek, 144.36 26** P **PKPab 15 01 55.0 -0.6**
baz=144,SNR=13
**U37A Salina 144.40 21** P **PKPab 15 01 54.8 -0.9**
baz=144,SNR=32
**228A UT Block 9, Go 144.46 34** P **PKPab 15 01 55.5 -0.7**
baz=144,SNR=11
**129A Stewart Farms, 144.47 33** P **PKPab 15 01 55.8 -0.3**
baz=144,SNR=22
**TUL1 Tulsa 144.58 23** P **PKPab 15 01 55.9 -0.5**
baz=144,SNR=24
**TUL1 Tulsa 144.58 23** *e*PKPdf PKPbc 15 01 56.5 -0.1
**X33A Lawton 144.62 27** P **PKPab 15 01 55.9 -0.6**
baz=144
**U38A Gravette 144.63 20** P **PKPab 15 01 55.3 -1.2**
baz=144,SNR=50
**Y32A R-V Farms, Ver 144.63 29** P **PKPab 15 01 55.8 -0.8**
baz=144,SNR=18
**V36A Jenks 144.63 23** P **PKPab 15 01 55.4 -1.1**
baz=144,SNR=50
**SLBS Sierra La Lagu 144.73 53** *e*PKPdf **PKPdf 15 01 59.3 +0.7**
**W35A Tecumseh 144.81 25** P **PKPab 15 01 56.8 -0.4**
baz=145,SNR=36
**Z31A Sharp Cattle R 144.84 30** P **PKPab 15 01 56.6 -0.8**
baz=145,SNR=60
**V37A Hulbert 144.85 22** P **PKPab 15 01 56.7 -0.6**
baz=145,SNR=46
**X34A Smith Ranch, M 144.87 26** P **PKPab 15 01 56.9 -0.5**
baz=145,SNR=30
**SIUC Southern Illin 144.92 13** *e*PKPdf **PKPab 15 01 57.2 -0.3**
**WCI Wyandotte Cave 144.97 9** *e*PKIKP **PKPab 15 01 57.2 -0.5**
**WCI Wyandotte Cave 144.97 9** *e*PKPdf **PKPab 15 01 57.2 -0.5**
**130A Snyder 144.98 32** P **PKPab 15 01 57.5 -0.5**
baz=145,SNR=20
**USIN University of 144.99 11** *e*PKPdf **PKPab 15 01 57.5 -0.3**
**229A Bryant Ranch, 145.01 34** P **PKPab 15 01 57.9 -0.3**
baz=145,SNR=12
**Y33A Hilltop Ranch, 145.01 28** P **PKPab 15 01 57.0 -1.0**
baz=145,SNR=10
**W36A Wetumka 145.09 24** P **PKPbc 15 01 57.8 -0.4**
baz=145,SNR=28
**V38A Canehill 145.14 21** P **PKPbc 15 01 57.4 -1.0**
baz=145,SNR=54
**Z32A Haskell 145.18 29** P **PKPbc 15 01 57.7 -0.8**
baz=145,SNR=46
**131A Roby 145.22 31** P **PKPbc 15 01 58.4 -0.4**
baz=145,SNR=25
**329A Wagon Wheel Ra 145.28 34** P **PKPbc 15 01 58.7 -0.3**
baz=145,SNR=30
**W37A Quinton 145.40 23** P **PKPbc 15 01 58.5 -0.7**
baz=145,SNR=31
**CBN Corbin 145.41 356** *e*PKP **PKPbc 15 01 59.1 0.0**
CBN LR LR
comp=Z,75µm,19.0s
**X35A Drake 145.42 25** P **PKPbc 15 01 58.5 -0.8**
baz=145,SNR=29
**Y34A Reagan Ranch, 145.45 27** P **PKPbc 15 01 58.6 -0.8**
baz=145,SNR=44
**230A Sterling City 145.45 33** P **PKPbc 15 01 59.3 -0.3**
baz=145,SNR=67
**PBMO Poplar Bluff 145.52 15** *e*PKPdf **PKPdf 15 01 58.7 -0.7**
**X36A Centrahoma 145.53 24** P **PKPdf 15 01 59.0 -0.6**
baz=145,SNR=37
**Z33A Whitaker Ranch 145.54 29** P **PKPdf 15 01 59.0 -0.6**
baz=145,SNR=19
**ABTX Abilene, Hawle 145.64 30** P **PKPdf 15 01 59.6 -0.3**
baz=146,SNR=19
**ABTX Abilene, Hawle 145.64 30** *e*PKP **PKPbc 15 02 00.2 +0.1**
**330A Mertzon 145.78 33** P **PKPdf 15 02 00.1 -0.1**
baz=146,SNR=27
**PARMO Parma 145.79 14** *e*PKP **PKPab 15 02 00.9 +0.2**
**W38A Poteau 145.81 22** P **PKPdf 15 02 00.0 0.0**
baz=146,SNR=25
**TX31 Lajitas Ar. Si 145.83 39** *e*PKPdf **PKPdf 15 02 00.6 +0.2**
**TXAR Lajitas Array 145.83 39** PKPbc **PKPab 15 02 01.7 +0.4**
comp=Z,27nm,0.7s,baz=285,slow=1.3,SNR=144
**TXAR Lajitas Array 145.83 39** PKP2 **PKPab 15 02 01.7 +0.4**
TXAR pmax pmax
comp=Z,27nm,0.7s
**231A Bronte 145.84 32** P **PKPdf 15 02 00.2 -0.1**
baz=146,SNR=26
**Z34A Collier Ranch, 145.87 27** P **PKPdf 15 01 59.9 -0.3**
baz=146,SNR=9.1
**X37A Clayton 145.91 23** P **PKPdf 15 02 00.4 +0.1**
baz=146,SNR=23
**429A Davenport Ranc 145.97 35** P **PKPbc 15 02 01.0 -0.2**
baz=146,SNR=36
**133A Hamilton Ranch 146.02 29** P **PKPdf 15 02 00.6 +0.1**
baz=146,SNR=34
**X38A Whitesboro 146.05 22** P **PKPdf 15 02 00.2 -0.3**
baz=146,SNR=27
**URVA University of 146.05 357** *e*PKPdf **PKPbc 15 02 01.4 +0.2**
**Y36A Durant 146.14 25** P **PKPdf 15 02 00.1 -0.5**
baz=146,SNR=22
**529A Stev Forest Ra 146.15 36** P **PKPdf 15 02 00.6 -0.3**
baz=146,SNR=41
**Z35A Perchaven, San 146.20 27** P **PKPdf 15 02 00.1 -0.7**
baz=146,SNR=9.2
**430A Baggett Ranch, 146.22 34** P **PKPdf 15 02 00.3 -0.7**
baz=146,SNR=30
**232A Coleman 146.23 31** P **PKPdf 15 02 00.3 -0.6**
baz=146,SNR=49
**331A San Angelo 146.27 33** P **PKPdf 15 02 00.1 -0.9**
baz=146,SNR=16
**GLAT Glass 146.28 14** *e*PKPdf **PKPdf 15 02 00.6 -0.2**
**UTMT University of 146.31 13** *e*PKPdf **PKPdf 15 02 00.6 -0.2**
**Y37A Hugo 146.34 24** P **PKPdf 15 02 01.3 +0.3**
baz=146
**134A White-Moore Ra 146.45 28** P **PKPdf 15 02 01.7 +0.4**
baz=146

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LCO | Las Campanas | 146.47 | 195 | ePKPbc | PKPbc | 15 02 03.3 | +0.3 |
| LCO | comp=Z,54μm,20.0s | | | LR | LR | | |
| BLA | Blacksburg | 146.47 | 1 | ePKP2 | PKPdf | 15 02 01.3 | +0.1 |
| BLA | comp=Z,97μm,20.0s | | | MLR | MLR | | |
| BLA | Blacksburg | 146.47 | 1 | ePKPdf | PKPdf | 15 02 01.3 | +0.1 |
| BLA | comp=Z,97μm,20.0s | | | LR | LR | | |
| 233A | Rising Star | 146.50 | 30 | P | PKPdf | 15 02 01.9 | +0.6 |
| | baz=146 | | | | | | |
| 332A | Millersview | 146.57 | 32 | P | PKPbc | 15 02 02.7 | -0.2 |
| | baz=146 | | | | | | |
| HBAR | Harrisburg | 146.61 | 16 | PKPdf | PKPbc | 15 02 02.2 | -0.6 |
| HALT | Halls | 146.61 | 14 | PKPdf | PKPdf | 15 02 01.8 | +0.4 |
| Z36A | Blue Ridge | 146.61 | 26 | P | PKPdf | 15 02 00.9 | -0.5 |
| | baz=146,SNR=6.1 | | | | | | |
| MIAR | Mount Ida | 146.62 | 21 | ePKP2 | PKPdf | 15 02 02.0 | +0.5 |
| MIAR | Mount Ida | 146.62 | 21 | P | PKPdf | 15 02 01.9 | +0.5 |
| | baz=146 | | | | | | |
| MIAR | Mount Ida | 146.62 | 21 | ePKPdf | PKPdf | 15 02 01.9 | +0.5 |
| MIAR | comp=Z,85μm,19.0s | | | LR | LR | | |
| 530A | J-C Ranch, Com | 146.64 | 35 | P | PKPdf | 15 02 01.2 | -0.5 |
| | baz=146,SNR=94 | | | | | | |
| 431A | Sonora | 146.65 | 34 | P | PKPdf | 15 02 01.5 | -0.2 |
| | baz=146,SNR=46 | | | | | | |
| WVT | Waverly | 146.74 | 12 | ePKP2 | PKPdf | 15 02 02.0 | +0.4 |
| WVT | Waverly | 146.74 | 12 | ePKPdf | PKPdf | 15 02 02.0 | +0.4 |
| Y38A | Idabel | 146.74 | 23 | P | PKPdf | 15 02 01.6 | 0.0 |
| | baz=147 | | | | | | |
| 135A | Vickery Place, | 146.78 | 28 | P | PKPdf | 15 02 02.2 | +0.4 |
| | baz=147 | | | | | | |
| UALR | University of | 146.83 | 19 | ePKPbc | PKPbc | 15 02 03.4 | -0.1 |
| 234A | Clairette | 146.89 | 29 | P | PKPdf | 15 02 02.4 | +0.4 |
| | baz=147 | | | | | | |
| 432A | Menard | 146.94 | 32 | P | PKPdf | 15 02 01.9 | -0.3 |
| | baz=147,SNR=30 | | | | | | |
| TZTN | Tazewell | 146.97 | 5 | ePKPdf | PKPdf | 15 02 02.5 | +0.5 |
| Y39A | Lockesburg | 146.97 | 22 | P | PKPdf | 15 02 02.9 | +0.8 |
| | baz=147 | | | | | | |
| 333A | Richland Sprin | 147.01 | 31 | P | PKPdf | 15 02 01.5 | -0.7 |
| | baz=147,SNR=56 | | | | | | |
| Z37A | Pogue Cattle C | 147.02 | 25 | P | PKPdf | 15 02 02.3 | +0.2 |
| | baz=147 | | | | | | |
| 531A | Rocksprings | 147.08 | 34 | P | PKPdf | 15 02 01.6 | -0.8 |
| | baz=147,SNR=53 | | | | | | |
| WHTX | Lake Whitney | 147.23 | 28 | P | PKPdf | 15 02 03.3 | +0.8 |
| | baz=147 | | | | | | |
| WHTX | Lake Whitney | 147.23 | 28 | ePKPbc | PKPbc | 15 02 05.2 | +0.5 |
| Z38A | Mt. Pleasant | 147.24 | 24 | P | PKPdf | 15 02 03.4 | +0.9 |
| | baz=147 | | | | | | |
| JCT | Junction City | 147.25 | 33 | ePKP2 | PKPdf | 15 02 03.6 | +0.9 |
| JCT | Junction City | 147.25 | 33 | P | PKPdf | 15 02 02.5 | -0.2 |
| | baz=147 | | | | | | |
| JCT | Junction City | 147.25 | 33 | ePKPdf | PKPdf | 15 02 03.6 | +0.9 |
| JCT | comp=Z,96μm,19.0s | | | LR | LR | | |
| 334A | Lometa | 147.39 | 30 | P | PKPdf | 15 02 02.6 | -0.2 |
| | baz=147 | | | | | | |
| 433A | Art | 147.41 | 32 | P | PKPdf | 15 02 03.4 | +0.5 |
| | baz=147 | | | | | | |
| 532A | Rocksprings | 147.46 | 33 | P | PKPdf | 15 02 03.1 | +0.1 |
| | baz=147 | | | | | | |
| 137A | Heron Place, G | 147.48 | 25 | P | PKPdf | 15 02 03.1 | +0.2 |
| | baz=147 | | | | | | |
| Z39A | Irene McRaven, | 147.56 | 23 | P | PKPdf | 15 02 03.5 | +0.4 |
| | baz=147 | | | | | | |
| 631A | Perdido Creek | 147.63 | 35 | P | PKPdf | 15 02 04.0 | +0.7 |
| | baz=148 | | | | | | |
| 236A | Katherine and | 147.65 | 27 | P | PKPdf | 15 02 03.6 | +0.4 |
| | baz=148 | | | | | | |
| 138A | Matatall Enter | 147.71 | 24 | P | PKPdf | 15 02 04.2 | +0.9 |
| | baz=148 | | | | | | |
| 434A | Burnet | 147.79 | 31 | P | PKPdf | 15 02 04.1 | +0.6 |
| | baz=148 | | | | | | |
| 335A | Moody | 147.82 | 29 | P | PKPdf | 15 02 04.2 | +0.6 |
| | baz=148 | | | | | | |
| TKL | Tuckaleechee C | 147.82 | 6 | ePKP2 | PKPbc | 15 02 06.3 | 0.0 |
| TKL | Tuckaleechee C | 147.82 | 6 | ePKPdf | PKPbc | 15 02 06.3 | 0.0 |
| OXF | Oxford | 147.92 | 15 | ePKP2 | PKPbc | 15 02 05.4 | -1.2 |
| OXF | Oxford | 147.92 | 15 | ePKPdf | PKPbc | 15 02 05.4 | -1.2 |
| CPCT | Cooper Cave | 147.94 | 7 | ePKPdf | PKPdf | 15 02 03.9 | +0.3 |
| CPCT | | | | ePKPbc | PKPbc | 15 02 06.8 | +0.1 |
| BBSR | BB Station | 147.96 | 335 | ePKPbc | PKPbc | 15 02 07.2 | +0.4 |
| BBSR | comp=Z,57μm,22.0s | | | LR | LR | | |
| 237A | Washetta, Mont | 147.97 | 26 | P | PKPdf | 15 02 04.5 | +0.8 |
| | baz=148 | | | | | | |
| 139A | Bunkhouse Ranc | 147.97 | 23 | P | PKPdf | 15 02 03.9 | +0.2 |
| | baz=148 | | | | | | |
| SWET | Sewanee | 147.97 | 9 | ePKPbc | PKPbc | 15 02 05.9 | -0.9 |
| 533A | Kerrville | 147.98 | 32 | P | PKPdf | 15 02 03.7 | -0.2 |
| | baz=148 | | | | | | |
| 632A | Uvalde | 148.01 | 34 | P | PKPdf | 15 02 04.1 | +0.2 |
| | baz=148 | | | | | | |
| 336A | Riesel | 148.02 | 28 | P | PKPdf | 15 02 03.9 | 0.0 |
| | baz=148 | | | | | | |
| 435B | Jarrell | 148.16 | 30 | P | PKPdf | 15 02 04.1 | 0.0 |
| | baz=148 | | | | | | |
| 534A | Blanco | 148.31 | 32 | P | PKPdf | 15 02 04.9 | +0.4 |
| | baz=148 | | | | | | |
| 633A | Saathoff Ranch | 148.38 | 33 | P | PKPdf | 15 02 05.0 | +0.5 |
| | baz=148 | | | | | | |
| CNNC | Cliffs of the | 148.39 | 357 | PKPbc | PKPbc | 15 02 08.5 | +0.7 |
| CNNC | comp=Z,80μm,22.0s | | | LR | LR | | |
| 732A | Laxson Ranch, | 148.49 | 35 | P | PKPdf | 15 02 05.3 | +0.6 |
| | baz=148 | | | | | | |
| KMSC | Kings Mountain | 148.51 | 2 | P | PKPdf | 15 02 04.9 | +0.3 |
| | baz=148 | | | | | | |
| KMSC | Kings Mountain | 148.51 | 2 | ePKPbc | PKPbc | 15 02 06.8 | -1.3 |
| 337A | Centerville | 148.52 | 27 | P | PKPdf | 15 02 05.3 | +0.6 |
| | baz=148 | | | | | | |
| 239A | Gary | 148.52 | 24 | P | PKPdf | 15 02 04.6 | -0.1 |
| | baz=148 | | | | | | |
| 436A | Wall Ranch, Ga | 148.55 | 29 | P | PKPdf | 15 02 05.4 | +0.6 |
| | baz=148 | | | | | | |
| NATX | Nacogdoches | 148.67 | 25 | P | PKPdf | 15 02 05.2 | +0.3 |
| | baz=148 | | | | | | |
| NATX | Nacogdoches | 148.67 | 25 | ePKPbc | PKPbc | 15 02 09.6 | +0.9 |
| NATX | comp=Z,70μm,19.0s | | | LR | LR | | |
| 338A | Crockett | 148.74 | 26 | P | PKPdf | 15 02 05.7 | +0.6 |
| | baz=149 | | | | | | |
| 535A | Dale | 148.78 | 31 | P | PKPdf | 15 02 05.1 | 0.0 |
| | baz=149 | | | | | | |
| 437A | Phantom Ranch, | 148.81 | 28 | P | PKPbc | 15 02 07.5 | -1.5 |
| | baz=149 | | | | | | |
| 832A | Faith Ranch, C | 148.82 | 36 | P | PKPdf | 15 02 06.1 | +0.8 |
| | baz=149 | | | | | | |
| 733A | Divot King Ran | 148.88 | 34 | P | PKPdf | 15 02 06.3 | +1.0 |
| | baz=149 | | | | | | |
| 634A | China Grove, S | 148.89 | 32 | P | PKPdf | 15 02 06.2 | +0.8 |
| | baz=149 | | | | | | |
| 536A | Bastrop | 148.99 | 30 | P | PKPdf | 15 02 06.1 | +0.6 |
| | baz=149 | | | | | | |
| 339A | Huntington | 149.08 | 25 | P | PKPdf | 15 02 05.8 | +0.3 |
| | baz=149 | | | | | | |
| 833A | Chaparral WMA, | 149.13 | 35 | P | PKPdf | 15 02 05.6 | -0.2 |
| | baz=149 | | | | | | |
| 438A | Sam Houston St | 149.18 | 27 | P | PKPdf | 15 02 06.1 | +0.4 |
| | baz=149 | | | | | | |
| 635A | Leesville | 149.19 | 32 | P | PKPdf | 15 02 06.3 | +0.5 |
| | baz=149 | | | | | | |
| 734A | La Parita Cree | 149.19 | 33 | P | PKPdf | 15 02 06.3 | +0.5 |
| | baz=149 | | | | | | |
| 340A | Bronson | 149.28 | 24 | P | PKPdf | 15 02 06.5 | +0.6 |
| | baz=149 | | | | | | |
| 537A | Green Hill Far | 149.35 | 29 | P | PKPdf | 15 02 06.0 | 0.0 |
| | baz=149 | | | | | | |
| 439A | Center Grove, | 149.46 | 26 | P | PKPdf | 15 02 07.1 | +0.9 |
| | baz=149 | | | | | | |
| 636A | Smothers Creek | 149.48 | 30 | P | PKPdf | 15 02 06.8 | +0.5 |
| | baz=149 | | | | | | |
| 735A | Kenedy | 149.59 | 32 | P | PKPdf | 15 02 06.7 | +0.2 |
| | baz=150 | | | | | | |
| 538A | Harpers Horsep | 149.62 | 27 | P | PKPdf | 15 02 06.0 | -0.5 |
| | baz=150 | | | | | | |
| HKT | Hockley | 149.69 | 28 | ePKP2 | PKPbc | 15 02 11.8 | +0.6 |
| HKT | Hockley | 149.69 | 28 | ePKPbc | PKPbc | 15 02 11.8 | +0.6 |
| 933A | Laredo | 149.73 | 36 | P | PKPdf | 15 02 06.4 | -0.3 |
| | baz=150 | | | | | | |
| 834A | Tilden | 149.76 | 34 | P | PKPdf | 15 02 05.6 | -1.2 |
| | baz=150 | | | | | | |
| VBMS | Vicksburg | 149.76 | 18 | P | PKPdf | 15 02 05.7 | -1.0 |
| | baz=150 | | | | | | |
| 440A | Kirbyville | 149.84 | 25 | P | PKPdf | 15 02 06.2 | -0.6 |
| | baz=150 | | | | | | |
| 637A | Eagle Lake | 149.88 | 29 | P | PKPdf | 15 02 06.5 | -0.4 |
| | baz=150 | | | | | | |
| LRAL | Lakeview Retre | 149.90 | 12 | ePKPdf | PKPdf | 15 02 07.2 | +0.4 |
| LRAL | | | | ePKPbc | PKPbc | 15 02 11.2 | -0.4 |
| 736A | Circle Diamond | 149.90 | 31 | P | PKPdf | 15 02 05.9 | -1.0 |
| | baz=150 | | | | | | |
| 835A | Beeville | 150.03 | 33 | P | PKPdf | 15 02 06.5 | -0.7 |
| | baz=150 | | | | | | |
| 539A | Cross D Ranch, | 150.06 | 26 | P | PKPdf | 15 02 06.3 | -0.9 |
| | baz=150 | | | | | | |
| GOGA | Godfrey | 150.08 | 6 | ePKP2 | PKPbc | 15 02 12.1 | 0.0 |
| GOGA | Godfrey | 150.08 | 6 | ePKPbc | PKPbc | 15 02 12.1 | 0.0 |
| GOGA | comp=Z,90μm,22.0s | | | LR | LR | | |
| 934A | Benavides | 150.18 | 35 | P | PKPdf | 15 02 06.4 | -1.1 |
| | baz=150 | | | | | | |
| 540A | Vidor | 150.30 | 25 | P | PKPdf | 15 02 06.8 | -0.8 |
| | baz=150 | | | | | | |
| 034A | Hebbronville | 150.49 | 36 | P | PKPdf | 15 02 05.1 | -2.8 |
| | baz=150 | | | | | | |
| NHSC | New Hope | 150.57 | 0 | ePKPbc | PKPbc | 15 02 14.1 | +0.8 |
| NHSC | comp=Z,106μm,20.0s | | | LR | LR | | |
| KVTX | Kingsville | 150.57 | 34 | ePKPbc | PKPbc | 15 02 15.3 | +1.8 |
| KVTX | comp=Z,83μm,19.0s | | | LR | LR | | |
| CSU | Charleston Sou | 150.69 | 0 | ePKPab | PKPab | 15 02 19.1 | -1.2 |
| 738A | Farr-Stevens R | 150.71 | 29 | P | PKPdf | 15 02 07.7 | -0.5 |
| | baz=151 | | | | | | |
| CJM | Chamela | 150.76 | 55 | P | PKPbc | 15 02 13.6 | -0.5 |
| CJM | | | | S | PKPab | 15 02 28.8 | +7.7 |
| RGRS | Roger Stewart | 150.77 | 1 | ePKPbc | PKPbc | 15 02 14.6 | +0.9 |
| 035A | Encino | 150.92 | 35 | P | PKPdf | 15 02 07.8 | -0.8 |
| | baz=151 | | | | | | |
| 035Z | Hargill | 151.30 | 36 | P | PKPdf | 15 02 09.4 | +0.2 |
| | baz=151 | | | | | | |
| BRAL | Brewton | 151.84 | 13 | ePKPbc | PKPbc | 15 02 17.2 | +0.9 |
| BRAL | comp=Z,97μm,20.0s | | | LR | LR | | |
| SFJM | Santa Fe | 151.85 | 51 | P | PKPbc | 15 02 20.4 | +3.5 |
| SFJM | | | | S | PKPab | 15 02 34.6 | +8.8 |
| LVC | Limon Verde | 151.89 | 202 | ePKPdf | PKPdf | 15 02 11.0 | +0.4 |
| LVC | | | | ePKPbc | PKiKP | 15 02 17.9 | +0.5 |
| LVC | | | | ePKPab | PKPab | 15 02 26.2 | +0.3 |
| LVC | comp=Z,42μm,20.0s | | | LR | LR | | |
| TIGA | Tifton | 152.02 | 7 | P | PKPdf | 15 02 10.5 | +0.3 |
| | baz=152 | | | | | | |
| TIGA | Tifton | 152.02 | 7 | ePKPbc | PKPbc | 15 02 15.9 | -0.8 |
| LPAZ | La Paz | 157.13 | 210 | PKP | PKPdf | 15 02 18.8 | +0.4 |
| LPAZ | comp=Z,4.2nm,1.1s,baz=41,slow=3.9,SNR=12 | | | PP | PP | 15 06 25.8 | -0.3 |
| LPAZ | comp=Z,3.5nm,1.0s,baz=169,slow=5.2,SNR=2.0 | | | PKIKP | PKPdf | 15 02 18.8 | +0.4 |
| LPAZ | La Paz | 157.13 | 210 | | | | |
| LPAZ | | | | pmax | pmax | 15 06 25.8 | |
| LPAZ | comp=Z,4.0nm,1.1s | | | pmax | pmax | | |
| LPAZ | comp=Z,4.0nm,1.0s | | | | | | |
| LPAZ | La Paz | 157.13 | 210 | ePKPdf | PKPdf | 15 02 19.2 | +0.8 |
| LPAZ | | | | PP | PP | 15 06 25.8 | -0.3 |
| ANWB | Willy Bob | 157.36 | 310 | PFAKE | | 15 02 30.0 | +12 |
| ANWB | comp=Z,52μm,21.0s | | | LR | LR | | |
| BBGH | Gun Hill | 157.75 | 297 | PFAKE | | 15 02 30.0 | +12 |
| BBGH | comp=Z,101μm,20.0s | | | LR | LR | | |
| FDF | Fort de France | 158.43 | 302 | PFAKE | | 15 02 30.0 | +11 |
| FDF | comp=Z,55μm,21.0s | | | LR | LR | | |
| SAML | Samuel | 159.24 | 233 | ePKPdf | PKPdf | 15 02 20.6 | +0.3 |
| SAML | comp=Z,88μm,20.0s | | | LR | LR | | |
| GRGR | Grenville | 160.02 | 296 | PFAKE | | 15 02 30.0 | +8.9 |
| GRGR | comp=Z,57μm,22.0s | | | LR | LR | | |
| GRTK | Grand Turk | 160.20 | 335 | PFAKE | | 15 02 30.0 | +8.9 |
| GRTK | comp=Z,72μm,22.0s | | | LR | LR | | |
| CELP | Cerrillos | 160.53 | 319 | PKPdf | PKPdf | 15 02 22.6 | +1.0 |
| SDDR | Presa de Saban | 162.48 | 332 | PFAKE | | 15 02 30.0 | +6.3 |
| SDDR | comp=Z,76μm,20.0s | | | LR | LR | | |
| GTBY | Guantanamo Bay | 163.04 | 344 | PFAKE | | 15 02 40.0 | +16 |
| GTBY | comp=Z,69μm,21.0s | | | LR | LR | | |
| NNA | Nana | 164.29 | 191 | ePKIKP | PKPdf | 15 02 26.1 | +0.6 |
| NNA | comp=Z,54μm,21.0s | | | MLR | MLR | | |
| NNA | Nana | 164.29 | 191 | ePKPdf | PKPdf | 15 02 26.1 | +0.6 |
| NNA | comp=Z,54μm,21.0s | | | LR | LR | | |
| MTDJ | Mount Denham | 165.21 | 351 | PFAKE | | 15 02 40.0 | +14 |
| MTDJ | comp=Z,67μm,20.0s | | | LR | LR | | |
| PAYG | Puerto Ayora | 168.81 | 112 | PFAKE | | 15 02 40.0 | +11 |
| PAYG | comp=Z,36μm,20.0s | | | LR | LR | | |
| SDV | Santo Domingo | 169.37 | 300 | PFAKE | | 15 02 40.0 | +10 |
| SDV | comp=Z,101μm,22.0s | | | LR | LR | | |
| ROSC | El Rosal | 174.29 | 284 | PKP | PKPdf | 15 02 31.9 | -0.3 |
| ROSC | comp=Z,16nm,0.8s,baz=102,slow=4.7,SNR=10.0 | | | PP | PP | 15 07 57.9 | +1.0 |
| BCIP | Isla Barro Col | 174.40 | 359 | ePKPdf | PKPdf | 15 02 31.7 | +0.1 |
| BCIP | comp=Z,3.4nm,0.3s,baz=80,slow=19,SNR=2.2 | | | LR | LR | | |
| OTAV | Otavalo | 176.43 | 204 | ePKPdf | PKPdf | 15 02 32.9 | 0.0 |
| OTAV | comp=Z,66μm,21.0s | | | LR | LR | | |
| | comp=Z,131μm,22.0s | | | | | | |

*IDC **25** 14:48:58.1±1.6,2.7°79S×99.7°71E,h26km±4km,mb4.5/11, mb1 4.5/11,mb1mx4.2/53,mbtmp4.6/11,Error ellipse: s-maj=37.4km s-min=36.4km az=81.0*

**ISC 25 14:48:58.9±1.9,2.7°S±0.3°×99.8°E±0.3°,h35km,n19, σ1°39/18,mb4.7/11,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMAR | Chiang Mai Arr | 21.07 | 358 | P | P | 14 53 40.6 | +0.3 |
| CMAR | 8.7nm,0.6s,baz=186,slow=9.9,SNR=7.0 | | | pP | pP | 14 53 49.5 | -0.1 |
| H08S2 | 17nm,0.8s,baz=188,slow=10,SNR=5.7 Diego Garcia H | 27.64 | 259 | T | T | 15 23 17.6 | |
| | baz=81,slow=75,SNR=20 | | | | | | |
| H08S3 | Diego Garcia H | 27.64 | 259 | T | T | 15 23 19.4 | |
| | baz=81,slow=75,SNR=17 | | | | | | |
| H08S1 | Diego Carcia H | 27.65 | 259 | T | T | 15 23 19.5 | |
| | baz=81,slow=75,SNR=22 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.65 | 159 | T | T | 15 31 57.6 | |
| | baz=331 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.66 | 159 | T | T | 15 31 58.6 | |
| | baz=331 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.67 | 159 | T | T | 15 31 59.0 | |
| | baz=331 | | | | | | |
| SONM | Songino Array | 50.69 | 6 | P | P | 14 57 56.2 | +1.1 |
| SONM | 7.7nm,0.8s,baz=198,slow=7.6,SNR=4.0 | | | pP | pP | 14 58 04.4 | -1.2 |
| MKAR | 12nm,0.7s,baz=186,slow=8.4,SNR=3.8 Makanchi Array | 51.68 | 345 | P | P | 14 58 03.4 | +1.0 |
| MKAR | 5.5nm,0.8s,baz=145,slow=8.8,SNR=3.6 | | | pP | pP | 14 58 11.7 | -1.3 |
| USRK | 38nm,0.9s,baz=151,slow=8.3,SNR=11 Ussuriysk Ar. | 54.88 | 28 | P | P | 14 58 26.9 | +0.9 |
| USRK | 6.4nm,0.6s,baz=228,slow=5.1,SNR=4.8 | | | pP | pP | 14 58 34.3 | -2.3 |
| ZALV | 8.2nm,0.6s,baz=213,slow=4.5,SNR=5.0 Zalesovo Beam | 57.85 | 350 | P | P | 14 58 47.6 | +0.7 |
| ZALV | 8.9nm,0.6s,baz=173,slow=14,SNR=4.6 | | | pP | pP | 14 58 55.6 | -1.9 |
| BVAR | 33nm,0.8s,baz=166,slow=8.9,SNR=9.2 Borovoye Array | 60.80 | 340 | P | P | 14 59 07.3 | -0.1 |
| BVAR | 2.8nm,0.7s,baz=133,slow=6.1,SNR=3.0 | | | pP | pP | 14 59 15.2 | -2.9 |
| KBZ | 12nm,0.8s,baz=137,slow=8.6,SNR=4.3 Khabaz | 68.74 | 319 | pP | pP | 15 00 06.9 | -3.2 |
| BRTR | 9.1nm,0.8s,baz=144,slow=7.0,SNR=2.7 Keskin Array B | 73.68 | 313 | P | P | 15 00 30.5 | +1.0 |
| AKASG | 2.2nm,0.8s,baz=140,slow=5.6,SNR=2.6 Malin Array Be | 79.95 | 322 | P | P | 15 01 05.5 | +1.1 |
| FINES | 2.5nm,0.8s,baz=81,slow=1.8,SNR=2.3 FINESS Array B | 84.67 | 332 | P | P | 15 01 29.4 | +0.6 |
| | 7.8nm,0.9s,baz=108,slow=8.9,SNR=3.0 | | | | | | |
| ARCES | ARCESS Array B | 87.09 | 340 | P | P | 15 01 40.9 | +0.2 |
| | 10nm,1.0s,baz=143,slow=12,SNR=2.3 | | | | | | |
| TORD | Torodi Ar. Bea | 98.52 | 283 | P | P | 15 02 33.5 | -1.2 |
| | 4.5nm,1.0s,baz=68,slow=4.3,SNR=2.5 | | | | | | |
| TXAR | Lajitas Array | 145.39 | 38 | PKPbc | PKPab | 15 08 35.0 | +0.8 |
| | 8.7nm,0.7s,baz=356,slow=0.2,SNR=6.3 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 15 08 42.8 | -2.7 |
| | 13nm,0.6s,baz=240,slow=0.8,SNR=9.7 | | | | | | |

*IDC **25** 14:54:24.5±1.4,3.°57S×100.°00E,h0km,mb4.1/9, mb1 4.3/10,mb1mx4.0/47,mbtmp4.2/10,ML4.3/1,Error ellipse: s-maj=51.7km s-min=19.9km az=50.0*

*NEIC **25** 14:54:25.5±1.0,3.°62S×99.°92E,h10km,mb4.7/2,Error ellipse: s-maj=36.9km s-min=8.9km az=43.0*

*ISCJB **25** 14:54:27.1±1.1,3.°6S±0.°2×99.°9E±0.°2,h33km,mb4.3/11, Error ellipse: s-maj=35.3km s-min=10.3km az=135.8*

**ISC 25 14:54:29.7±1.3,3.°5S±0.°2×99.°9E±0.°2,h35km,n20, σ0°94/15,mb4.3/11,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| MNAI | Manna | 3.18 | 106 | P | Pn | 14 55 17.4 | +0.1 |
| GSI | Gunungsitoli | 5.31 | 334 | ePn | Pn | 14 55 45.5 | -1.0 |
| LEM | Lembang | 8.38 | 113 | Pn | Pn | 14 56 24.9 | -4.0 |
| | 3.5nm,0.3s,baz=281,slow=19,SNR=3.1 | | | | | | |
| CISI | Cisompet, Garu | 8.86 | 117 | eP | Pn | 14 56 30.3 | -5.2 |
| | 139nm,0.6s | | | | | | |
| CMAR | Chiang Mai Arr | 21.85 | 358 | P | P | 14 59 19.9 | +0.5 |
| | 4.9nm,0.8s,baz=187,slow=10,SNR=11 | | | | | | |
| H01W3 | Cape Leeuwin H | 33.91 | 159 | T | T | 15 37 01.1 | |
| | baz=337 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.92 | 159 | T | T | 15 37 08.2 | |
| | baz=337 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.92 | 159 | T | T | 15 37 04.6 | |
| | baz=337 | | | | | | |
| WRA | Warramunga Arr | 37.35 | 119 | P | P | 15 01 37.8 | -1.5 |
| | 1.7nm,0.9s,baz=307,slow=8.5,SNR=2.4 | | | | | | |
| WRAB | Tennant Creek | 37.36 | 119 | eP | P | 15 01 39.1 | -0.3 |
| | 15nm,1.1s | | | | | | |
| ASAR | Alice Springs | 38.48 | 124 | P | P | 15 01 47.5 | -1.4 |
| | 1.7nm,0.8s,baz=300,slow=7.9,SNR=3.0 | | | | | | |
| SONM | Songino Array | 51.45 | 6 | P | P | 15 03 31.6 | 0.0 |
| | 2.1nm,0.7s,baz=190,slow=5.6,SNR=3.4 | | | | | | |
| MKAR | Makanchi Array | 52.44 | 345 | P | P | 15 03 39.4 | +0.4 |
| | 3.4nm,0.7s,baz=149,slow=8.7,SNR=5.4 | | | | | | |
| USRK | Ussuriysk Ar. | 55.54 | 28 | P | P | 15 04 01.7 | +0.2 |
| | 5.3nm,0.8s,baz=213,slow=7.8,SNR=6.0 | | | | | | |
| ZALV | Zalesovo Beam | 58.62 | 350 | P | P | 15 04 23.0 | -0.1 |
| | 4.6nm,0.6s,baz=150,slow=5.3,SNR=6.4 | | | | | | |
| ABKAR | Akbulak array | 62.90 | 332 | eP | P | 15 04 51.8 | -0.6 |
| | 5.7nm,0.8s | | | | | | |
| KBZ | Khabaz | 69.37 | 319 | P | P | 15 05 34.2 | +0.2 |
| | 2.1nm,0.7s,baz=141,slow=6.5,SNR=2.6 | | | | | | |
| AKASG | Malin Array Be | 80.60 | 323 | P | P | 15 06 40.7 | +2.0 |
| | 0.5nm,0.4s,baz=89,slow=4.8,SNR=3.2 | | | | | | |
| TXAR | Lajitas Array | 145.96 | 39 | PKPbc | PKPab | 15 14 06.5 | -0.5 |
| | 1.2nm,0.7s,baz=278,slow=1.0,SNR=4.3 | | | | | | |
| TKL | Tuckaleechee C | 147.83 | 6 | PKPbc | PKPbc | 15 14 11.9 | +0.3 |
| | 2.9nm,0.6s,baz=7.1,slow=8.1,SNR=2.6 | | | | | | |

*ISCJB **25** 14:55:51.8±3.1,2.°9S±0.°4×100.°3E±0.°6,h10km,mb3.8/6, Error ellipse: s-maj=104.4km s-min=14.0km az=145.7*

*IDC **25** 14:55:51.9±3.8,2.°93S×100.°19E,h0km,mb3.8/5, mb1 4.0/5,mb1mx3.6/47,mbtmp3.8/5,Error ellipse: s-maj=139.9km s-min=22.3km az=58.0*

*NEIC **25** 14:55:53.1±2.7,2.°94S×100.°14E,h10km,mb4.0/1,Error ellipse: s-maj=89.2km s-min=12.8km az=56.0*

**ISC 25 14:55:53.5±3.4,2.°9S±0.°5×100.°2E±0.°6,h10km,n7,σ1°19/7, mb3.8/6,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CISI | Cisompet, Garu | 8.87 | 122 | eP | Pn | 14 58 01.9 | 0.0 |
| CMAR | Chiang Mai Arr | 21.24 | 357 | P | P | 15 00 39.7 | -0.2 |
| | 1.1nm,0.9s,baz=185,slow=9.8,SNR=2.4 | | | | | | |
| WRA | Warramunga Arr | 37.36 | 120 | P | P | 15 03 05.7 | -0.9 |
| | 1.2nm,0.9s,baz=300,slow=8.7,SNR=3.7 | | | | | | |
| ASAR | Alice Springs | 38.56 | 125 | P | P | 15 03 17.6 | +0.9 |
| | 1.0nm,0.6s,baz=298,slow=7.4,SNR=1.6 | | | | | | |
| SONM | Songino Array | 50.79 | 5 | P | P | 15 04 55.9 | +1.8 |
| | 1.9nm,0.8s,baz=189,slow=7.3,SNR=2.9 | | | | | | |
| ULN | Ulaanbaatar | 50.89 | 6 | eP | P | 15 04 54.4 | -0.5 |
| | 1.0nm,0.4s | | | | | | |
| MKAR | Makanchi Array | 51.93 | 344 | P | P | 15 05 01.9 | -0.6 |
| | 0.7nm,0.5s,baz=151,slow=9.1,SNR=2.6 | | | | | | |

**IDC 25 14:59:33.4±4.3,3.°12S×100.°06E,h0km,mb3.8/5, mb1 3.9/5,mb1mx3.6/43,mbtmp3.8/5,Error ellipse: s-maj=185.5km s-min=22.2km az=55.0,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | Warramunga Arr | 37.38 | 119 | P | P | 15 06 48.2 | -0.2 |
| | 0.3nm,0.4s,baz=308,slow=8.8,SNR=4.8 | | | | | | |
| ASAR | Alice Springs | 38.55 | 125 | P | P | 15 06 58.0 | -0.2 |
| | 0.5nm,0.5s,baz=304,slow=8.2,SNR=8.0 | | | | | | |
| SONM | Songino Array | 51.05 | 5 | P | P | 15 08 37.5 | -0.1 |
| | 1.0nm,0.5s,baz=190,slow=9.1,SNR=4.5 | | | | | | |
| MKAR | Makanchi Array | 52.12 | 345 | P | P | 15 08 45.7 | +0.2 |
| | 1.2nm,0.6s,baz=152,slow=7.6,SNR=6.3 | | | | | | |
| ZALV | Zalesovo Beam | 58.27 | 349 | P | P | 15 09 29.1 | -0.7 |
| | 0.5nm,0.4s,baz=154,slow=8.0,SNR=3.5 | | | | | | |
| TXAR | Lajitas Array | 145.54 | 38 | PKPbc | PKPdf | 15 19 14.5 | -0.1 |
| | 0.6nm,0.6s,baz=249,slow=1.0,SNR=4.2 | | | | | | |

**IDC 25 15:01:21.1±3.8,3.°56S×99.°63E,h0km,mb3.7/6,mb1 3.9/6, mb1mx3.6/43,mbtmp3.8/6,Error ellipse: s-maj=149.3km s-min=23.4km az=58.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMAR | Chiang Mai Arr | 21.89 | 358 | P | P | 15 06 15.0 | -0.9 |
| | 3.2nm,0.8s,baz=184,slow=8.1,SNR=3.0 | | | | | | |
| H08S2 | Diego Garcia H | 27.30 | 260 | T | T | 15 36 46.2 | |
| | baz=82,slow=75,SNR=25 | | | | | | |
| H08S3 | Diego Garcia H | 27.31 | 260 | T | T | 15 36 46.6 | |
| | baz=82,slow=75,SNR=24 | | | | | | |
| H08S1 | Diego Carcia H | 27.32 | 260 | T | T | 15 36 47.5 | |
| | baz=82,slow=75,SNR=25 | | | | | | |
| H01W3 | Cape Leeuwin H | 33.95 | 158 | T | T | 15 44 43.3 | |
| | baz=335,slow=76,SNR=6.5 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.97 | 158 | T | T | 15 44 46.0 | |
| | baz=335,slow=76,SNR=7.3 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.97 | 158 | T | T | 15 44 44.4 | |
| | baz=335,slow=76,SNR=10.0 | | | | | | |
| WRA | Warramunga Arr | 37.55 | 118 | P | P | 15 08 37.0 | -0.5 |
| | 0.6nm,0.7s,baz=297,slow=8.9,SNR=2.9 | | | | | | |
| ASAR | Alice Springs | 38.66 | 124 | P | P | 15 08 46.3 | -0.6 |
| | 0.3nm,0.8s,baz=296,slow=7.9,SNR=4.2 | | | | | | |
| SONM | Songino Array | 51.52 | 6 | P | P | 15 10 29.6 | +0.8 |
| | 1.6nm,0.7s,baz=186,slow=6.8,SNR=2.9 | | | | | | |
| MKAR | Makanchi Array | 52.42 | 345 | P | P | 15 10 34.9 | -0.5 |
| | 0.8nm,0.7s,baz=176,slow=6.5,SNR=2.5 | | | | | | |
| ZALV | Zalesovo Beam | 58.62 | 350 | P | P | 15 11 19.1 | -0.8 |
| | 2.1nm,0.4s,baz=134,slow=6.2,SNR=2.9 

2.7nm,0.8s,baz=187,slow=8.6,SNR=7.5
SONM pP **pP** 15 11 11.3 -0.6
2.8nm,0.7s,baz=187,slow=9.6,SNR=5.6
**MKAR Makanchi Array 51.71 344** P **P** 15 11 12.9 +1.1
1.5nm,0.8s,baz=148,slow=8.4,SNR=4.7
MKAR pP **pP** 15 11 19.6 -0.4
2.9nm,0.7s,baz=141,slow=7.8,SNR=7.1
**USRK Ussuriysk Ar. 54.70 28** P **P** 15 11 33.4 -0.4
2.3nm,0.9s,baz=201,slow=7.7,SNR=4.1
USRK pP **pP** 15 11 40.8 -1.4
1.9nm,0.6s,baz=226,slow=4.9,SNR=2.5
**ZALV Zalesovo Beam 57.85 349** P **P** 15 11 55.6 -0.5
2.4nm,0.8s,baz=164,slow=5.7,SNR=5.2
ZALV pP **pP** 15 12 03.2 -1.2
3.9nm,0.8s,baz=164,slow=5.9,SNR=4.7
**PETK Petropavlovsk- 73.40 32** P **P** 15 13 37.5 +1.0
2.4nm,0.8s,baz=234,slow=12,SNR=2.3
**TXAR Lajitas Array 145.17 38** PKPbc **PKPbc** 15 21 41.5 -1.0
1.6nm,1.0s,baz=298,slow=2.7,SNR=6.1
TXAR pPKPbc **PKiKP** 15 21 47.1 +0.3
4.6nm,0.9s,baz=311,slow=1.0,SNR=12

**IDC 25 15:04:22.2±16.0, 3°45S×99°98E, h0km, mb3.5/2, mb1 3.6/2, mb1mx3.3/45, mbtmp3.5/2, Error ellipse: s-maj=841.7km s-min=36.4km az=53.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **27.67** | **260** | T | T | 15 39 14.8 | |
| | baz=82,slow=75,SNR=6.5 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.68** | **260** | T | T | 15 39 19.7 | |
| | baz=82,slow=75,SNR=7.9 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.69** | **260** | T | T | 15 39 16.4 | |
| | baz=82,slow=75,SNR=6.7 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.93** | **159** | T | T | 15 47 03.3 | |
| | baz=333 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.94** | **159** | T | T | 15 47 02.9 | |
| | baz=333 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.95** | **159** | T | T | 15 47 02.5 | |
| | baz=333 | | | | | | |
| **ASAR** | **Alice Springs** | **38.44** | **125** | P | P | 15 11 45.7 | -0.3 |
| | 0.4nm,0.8s,baz=300,slow=8.4,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.41** | **345** | P | P | 15 13 36.0 | -0.4 |
| | 0.7nm,0.6s,baz=153,slow=3.7,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.85** | **39** | PKPbc | PKPdf | 15 24 04.0 | +0.1 |
| | 0.5nm,0.6s,baz=270,slow=0.9,SNR=3.8 | | | | | | |

*CSEM **25** 15:05:05.8, 39°39N×20°56E, h31km, MD2.6, After ATH*
**ATH 25 15:05:05.8, 39°39N×20°56E, h31km, MD2.6/4, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IGT** | **Igoumenitsa** | **0.23** | **309** | *e*PB | Pb | 15 05 12.7 | +0.2 |
| IGT | | | | *e*SB | Sn | 15 05 17.6 | -0.1 |
| **IGT** | **Igoumenitsa** | **0.23** | **309** | *e*Pb | Pb | 15 05 12.7 | +0.2 |
| IGT | | | | *e*Sb | Sn | 15 05 17.6 | -0.1 |
| **SGD** | **Sagiada** | **0.34** | **312** | *e*PB | Pb | 15 05 14.0 | +0.1 |
| **SGD** | **Sagiada** | **0.34** | **312** | *e*Pb | Pb | 15 05 14.0 | +0.1 |
| **DSL** | **Palaion Diasel** | **0.49** | **121** | *e*PB | Pb | 15 05 16.4 | +0.2 |
| **DSL** | **Palaion Diasel** | **0.49** | **121** | *e*Pb | Pb | 15 05 16.4 | +0.2 |
| **LKD2** | **Lefkada island** | **0.60** | **173** | *e*PN | Pn | 15 05 18.3 | 0.0 |
| **LKD2** | **Lefkada island** | **0.60** | **173** | *e*Pn | Pn | 15 05 18.3 | 0.0 |

**IDC 25 15:08:42.7±4.1, 3°56S×99°77E, h0km, mb3.3/5, mb1 3.5/5, mb1mx3.3/46, mbtmp3.3/5, Error ellipse: s-maj=157.1km s-min=21.4km az=59.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.89** | **358** | P | P | 15 13 37.5 | 0.0 |
| | 0.2nm,0.4s,baz=185,slow=9.0,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.43** | **119** | P | P | 15 15 57.3 | -0.8 |
| | 0.3nm,0.6s,baz=297,slow=9.2,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **38.55** | **124** | P | P | 15 16 07.8 | +0.4 |
| | 0.2nm,0.7s,baz=300,slow=7.8,SNR=2.8 | | | | | | |
| **SONM** | **Songino Array** | **51.51** | **6** | P | P | 15 17 50.5 | +0.2 |
| | 0.5nm,0.7s,baz=182,slow=9.2,SNR=3.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.65** | **350** | P | P | 15 18 41.2 | -0.5 |
| | 0.4nm,0.3s,baz=161,slow=9.2,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.07** | **38** | PKPbc | PKPbc | 15 28 25.3 | -0.3 |
| | 0.3nm,0.6s,baz=212,slow=0.9,SNR=3.8 | | | | | | |

*ISCJB **25** 15:09:57.8±0.6, 3°51S±0°06×99°95E±0°07, h10km, mb4.5/23, Error ellipse: s-maj=11.7km s-min=5.6km az=139.4*
*BJI **25** 15:09:58.5, 3°40S×100°00E, h12km, mb5.3/3*
*IDC **25** 15:09:59.0±1.0, 3°35S×100°10E, h0km, mb4.4/16, mb1 4.5/19, mb1mx4.2/49, mbtmp4.4/19, ML4.2/3, Error ellipse: s-maj=29.9km s-min=15.1km az=45.0*
*NEIC **25** 15:10:02.9±2.6, 3°34S×100°12E, h26km±18km, mb4.8/6, Error ellipse: s-maj=17.4km s-min=6.2km az=49.0*
*DJA **25** 15:10:11.2±0.4, 3°S±3'×10°0E±°, h10km, M5.3/6, MLv5.3/6*
**ISC 25 15:10:00.5±0.7, 3°30S±0°07×100°18E±0°08, h10km, n63, σ1§44/49, mb4.7/22, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.56** | **343** | P | **Pn** | **15 10 15.1** | **+0.5** |
| **SISI** | **Saibi** | **2.24** | **331** | P | **Pn** | **15 10 37.6** | **-0.1** |
| SISI | | | | S | **Sn** | **15 11 03.0** | **-2.5** |
| **KSI** | **Kapahiang** | **2.44** | **98** | P | Pg | 15 10 53.4 | +6.1 |
| **SDSI** | **Sungai Dareh** | **2.67** | **28** | P | **Pb** | **15 10 45.9** | **-2.5** |
| **PPI** | **Padang Panjang** | **2.83** | **4** | P | **Pn** | **15 10 47.4** | **+1.5** |
| PPI | | | | S | **Sn** | **15 11 16.5** | **-3.6** |
| **MNAI** | **Manna** | **2.97** | **111** | P | Pg | 15 11 02.5 | +5.1 |
| **MNAI** | **Manna** | **2.97** | **111** | Pn | **Pb** | **15 10 50.8** | **-2.7** |
| **RGRI** | **Rengat** | **3.64** | **36** | P | Pb | 15 11 01.5 | -3.5 |
| **BKNI** | **Bangkinang** | **3.71** | **13** | P | Pn | 15 11 00.8 | +2.9 |
| **BKNI** | **Bangkinang** | **3.71** | **13** | *e*P | **Pn** | **15 10 59.2** | **+1.3** |
| **JMBI** | **JAMBI** | **3.84** | **65** | P | **Pb** | **15 11 08.0** | **-0.4** |
| **MNSI** | **Mandailing Nat** | **4.11** | **352** | P | **Pn** | **15 11 05.4** | **+1.9** |
| **MDSI** | **Maura Dua** | **4.16** | **107** | P | **Pn** | **15 11 06.6** | **+2.5** |
| **LWLI** | **Liwa** | **4.23** | **114** | P | **Pn** | **15 11 05.7** | **+0.5** |
| **PMBI** | **Palembang** | **4.61** | **85** | P | **Pb** | **15 11 20.0** | **-1.4** |
| **GSI** | **Gunungsitoli** | **5.26** | **330** | P | Pn | 15 11 22.4 | +3.1 |
| **GSI** | **Gunungsitoli** | **5.26** | **330** | *e*Pn | **Pn** | **15 11 20.5** | **+1.2** |
| **PSI** | **Prapat** | **6.19** | **348** | Pn | **Pn** | **15 11 31.2** | **-1.0** |
| | 0.8nm,0.3s,baz=180,slow=14,SNR=2.2 | | | | | | |
| **IPM** | **Ipoh** | **7.78** | **6** | *e*P | **Pn** | **15 11 55.1** | **+1.2** |
| **LEM** | **Lembang** | **8.20** | **116** | Pn | **Pn** | **15 12 02.1** | **+2.4** |
| | 4.4nm,0.3s,baz=162,slow=20,SNR=3.5 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.70** | **119** | *e*P | **Pn** | **15 12 05.6** | **-1.0** |
| | 91nm,0.6s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.51** | **60** | *e*P | **Pn** | **15 14 19.7** | **+2.3** |
| | 42nm,1.1s | | | | | | |
| **CHAI** | **Chaiyaphum** | **19.16** | **5** | P | Pn | 15 14 31.4 | +6.2 |
| | 22nm,0.8s | | | | | | |
| **UMPA** | **Umpang Tak** | **19.43** | **356** | P | Pn | 15 14 34.0 | +5.6 |
| | 22nm,1.1s | | | | | | |
| **KAPI** | **Kappang** | **19.60** | **96** | P | **Pn** | **15 14 29.8** | **-0.6** |
| | 4.5nm,0.3s,baz=272,slow=9.0,SNR=4.7 | | | | | | |
| **LOEI** | **Loei** | **20.71** | **3** | P | Pn | 15 14 46.5 | +3.0 |
| | 604nm,3.3s | | | | | | |
| **UTTA** | **Uttaradit** | **20.92** | **1** | P | Pn | 15 14 48.0 | +2.1 |
| | 4.3nm,1.3s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.66** | **357** | P | **P** | **15 14 51.8** | **+0.4** |
| | 8.1nm,0.9s,baz=186,slow=10.0,SNR=44 | | | | | | |
| **LAMP** | **Lampang** | **21.69** | **359** | P | P | 15 14 55.8 | +4.0 |
| | 8.8nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.01** | **357** | P | **P** | **15 14 58.5** | **+3.3** |
| **CMAI** | **Chiengmai2** | **23.12** | **357** | P | **P** | **15 15 09.0** | **+1.9** |
| **H08S2** | **Diego Garcia H** | **27.89** | **260** | T | T | 15 45 07.8 | |
| | baz=82,slow=75,SNR=141 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.89** | **260** | T | T | 15 45 09.6 | |
| | baz=82,slow=75,SNR=220 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.90** | **260** | T | T | 15 45 10.5 | |
| | baz=82,slow=75,SNR=179 | | | | | | |
| **FAKI** | **Fak Fak** | **32.03** | **90** | *e*P | **P** | **15 16 26.0** | **-1.6** |
| | 36nm,1.4s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.99** | **159** | T | T | 15 52 31.1 | |
| | baz=336,slow=76,SNR=24 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.01** | **159** | T | T | 15 52 39.7 | |
| | baz=336,slow=76,SNR=26 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.01** | **159** | T | T | 15 52 34.0 | |
| | baz=336,slow=76,SNR=20 | | | | | | |
| **ENH** | **Enshi** | **34.55** | **14** | *e*P | **P** | **15 16 50.1** | **+0.7** |
| | 13nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.20** | **119** | P | **P** | **15 17 12.0** | **-0.3** |
| | 3.3nm,1.0s,baz=296,slow=9.6,SNR=5.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.20** | **119** | *e*P | **P** | **15 17 12.5** | **+0.2** |
| **ASAR** | **Alice Springs** | **38.36** | **125** | P | **P** | **15 17 22.6** | **+0.4** |
| | 3.0nm,0.9s,baz=292,slow=7.9,SNR=16 | | | | | | |
| **JNU** | **Nakatsue** | **46.43** | **36** | P | **P** | **15 18 27.3** | **-0.4** |
| | 28nm,0.9s,baz=169,slow=3.1,SNR=6.9 | | | | | | |
| **JNU** | **Nakatsue** | **46.43** | **36** | *e*P | **P** | **15 18 28.2** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **48.02** | **30** | P | **P** | **15 18 40.6** | **+0.7** |
| **KSRS** | **Korea Array** | **48.05** | **30** | P | **P** | **15 18 40.6** | **+0.5** |
| | 14nm,1.1s,baz=223,slow=8.0,SNR=13 | | | | | | |
| **KSH** | **Kashi** | **48.08** | **335** | *e*P | **P** | **15 18 39.5** | **-1.0** |
| **TKM2** | **Tokmak 2** | **51.09** | **337** | *e*P | **P** | **15 19 04.9** | **+1.3** |
| | 23nm,1.3s | | | | | | |
| **SONM** | **Songino Array** | **51.22** | **5** | P | **P** | **15 19 05.7** | **+1.4** |
| | 14nm,1.0s,baz=188,slow=8.5,SNR=43 | | | | | | |
| **EKS2** | **Erkin-Say** | **51.61** | **335** | P | **P** | **15 19 07.3** | **-0.1** |
| | 8.7nm,0.9s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.32** | **345** | P | **P** | **15 19 13.7** | **+1.2** |
| | 8.1nm,1.0s,baz=150,slow=8.0,SNR=25 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.18** | **38** | P | **P** | **15 19 18.1** | **-0.9** |
| | 5.9nm,1.2s,baz=220,slow=8.9,SNR=7.9 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.22** | **27** | P | **P** | **15 19 34.7** | **+1.0** |
| | 15nm,0.8s,baz=224,slow=6.4,SNR=25 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.84** | **344** | P | **P** | **15 19 45.2** | **+0.1** |
| | 3.5nm,1.1s,baz=160,slow=7.0,SNR=13 | | | | | | |
| **KURK** | **Kurchatov** | **56.90** | **344** | P | **P** | **15 19 45.2** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **58.47** | **349** | P | **P** | **15 19 57.2** | **+0.6** |
| | 20nm,1.0s,baz=163,slow=5.7,SNR=44 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.46** | **340** | P | **P** | **15 20 16.7** | **-0.4** |
| | 1.0nm,0.7s,baz=140,slow=7.7,SNR=5.8 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.86** | **332** | *e*P | **P** | **15 20 26.1** | **-0.5** |
| | 4.4nm,0.7s | | | | | | |
| **YAK** | **Yakutsk** | **68.95** | **14** | P | **P** | **15 21 05.2** | **-0.4** |
| | 2.6nm,0.3s,baz=221,slow=3.9,SNR=3.1 | | | | | | |
| **KBZ** | **Khabaz** | **69.40** | **319** | P | **P** | **15 21 08.9** | **+0.2** |
| | 1.7nm,0.7s,baz=106,slow=6.4,SNR=5.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.33** | **313** | P | **P** | **15 21 37.9** | **-0.7** |
| | 1.3nm,0.8s,baz=128,slow=6.8,SNR=6.3 | | | | | | |
| **GERES** | **GERESS Array B** | **90.14** | **319** | P | **P** | **15 23 00.5** | **-0.7** |
| | 0.8nm,0.9s,baz=104,slow=3.3,SNR=3.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.61** | **39** | PKPbc | **PKPab** | **15 29 41.4** | **+0.9** |
| | 5.5nm,0.8s,baz=270,slow=1.3,SNR=44 | | | | | | |

**IDC 25 15:12:23.4±3.7, 3°40S×99°72E, h0km, mb3.6/5, mb1 3.8/5, mb1mx3.6/43, mbtmp3.7/5, Error ellipse: s-maj=142.2km s-min=21.5km az=58.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.73** | **358** | P | P | 15 17 16.6 | +0.1 |
| | 1.7nm,0.5s,baz=184,slow=10,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.55** | **119** | P | P | 15 19 39.7 | -0.1 |
| | 0.2nm,0.4s,baz=302,slow=9.1,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.67** | **124** | P | P | 15 19 49.0 | -0.2 |
| | 0.7nm,1.0s,baz=300,slow=7.3,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **51.35** | **6** | P | P | 15 21 29.7 | -0.2 |
| | 1.1nm,0.9s,baz=190,slow=9.4,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.30** | **345** | P | P | 15 21 36.6 | -0.2 |
| | 1.1nm,0.7s,baz=144,slow=9.2,SNR=3.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.97** | **38** | PKPbc | PKPdf | 15 32 05.4 | +0.1 |
| | 0.7nm,0.9s,baz=300,slow=1.8,SNR=4.5 | | | | | | |

*IDC **25** 15:13:12.5±1.3, 3°40S×99°60E, h0km, mb4.0/10, mb1 4.1/11, mb1mx3.9/44, mbtmp4.0/11, ML4.2/1, Error ellipse: s-maj=50.1km s-min=18.2km az=48.0*
*ISCJB **25** 15:13:13.2±0.9, 3°1S±0°1×100°0E±0°1, h10km, mb4.0/11, Error ellipse: s-maj=26.0km s-min=9.2km az=141.4*
*NEIC **25** 15:13:15.0±1.0, 3°08S×99°96E, h10km, mb4.0/1, Error ellipse: s-maj=30.8km s-min=11.3km az=52.0*
**ISC 25 15:13:15.0±1.0, 3°1S±0°1×99°9E±0°1, h10km, n24, σ1§47/17, mb4.0/11, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **3.31** | **112** | *e*Pn | Pn | 15 13 57.5 | -9.3 |
| **BKNI** | **Bangkinang** | **3.59** | **19** | *e*Pn | **Pn** | **15 14 07.9** | **-2.9** |
| **GSI** | **Gunungsitoli** | **4.95** | **332** | *e*Pn | **Pn** | **15 14 26.8** | **-2.7** |
| **LEM** | **Lembang** | **8.54** | **116** | Pn | **Pn** | **15 15 19.3** | **+0.3** |
| | 2.9nm,0.3s,baz=319,slow=19,SNR=3.2 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.04** | **120** | *e*P | **Pn** | **15 15 24.3** | **-1.5** |
| | 104nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.45** | **358** | P | **P** | **15 18 04.7** | **+1.2** |
| | 0.7nm,0.3s,baz=186,slow=9.8,SNR=3.1 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.64** | **259** | T | T | 15 47 58.0 | |
| | baz=82 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.64** | **260** | T | T | 15 47 44.5 | |
| | baz=82 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.66** | **259** | T | T | 15 48 09.0 | |
| | baz=82 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.28** | **159** | T | T | 15 56 17.6 | |
| | baz=336,slow=76,SNR=6.3 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.29** | **159** | T | T | 15 56 21.0 | |
| | baz=336,slow=76,SNR=7.0 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.30** | **159** | T | T | 15 56 28.7 | |
| | baz=336,slow=76,SNR=6.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.54** | **119** | P | **P** | **15 20 29.3** | **-0.4** |
| | 0.9nm,0.7s,baz=291,slow=9.0,SNR=4.6 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.55** | **119** | *e*P | **P** | **15 20 29.9** | **+0.2** |
| | 1.7nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **38.71** | **125** | P | **P** | **15 20 39.1** | **-0.3** |
| | 0.6nm,0.4s,baz=298,slow=7.5,SNR=9.2 | | | | | | |
| **SONM** | **Songino Array** | **51.05** | **6** | P | **P** | **15 22 19.5** | **+2.0** |
| | 0.8nm,0.6s,baz=192,slow=9.0,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.06** | **345** | P | **P** | **15 22 26.1** | **+1.2** |
| | 1.6nm,0.9s,baz=156,slow=9.5,SNR=4.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.18** | **28** | P | **P** | **15 22 49.4** | **+1.6** |
| | 2.0nm,0.8s,baz=220,slow=3.8,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.23** | **350** | P | **P** | **15 23 09.8** | **+0.5** |
| | 5.5nm,0.8s,baz=159,slow=5.7,SNR=6.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.18** | **340** | P | **P** | **15 23 29.8** | **+0.1** |
| | 1.8nm,0.8s,baz=129,slow=4.6,SNR=3.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **73.98** | **313** | P | **P** | **15 24 49.9** | **-1.3** |
| | 0.3nm,0.4s,baz=108,slow=4.7,SNR=3.0 | | | | | | |
| **FINES** | **FINESS Array B** | **85.03** | **332** | P | **P** | **15 25 50.8** | **+0.2** |
| | 1.7nm,0.8s,baz=117,slow=8.1,SNR=3.9 | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.06** | **27** | *e*PKPdf | **PKPab** | **15 32 48.9** | **0.0** |
| WMOK | | | | *e* | | 15 32 57.9 | |
| **TXAR** | **Lajitas Array** | **145.64** | **38** | PKPbc | **PKPab** | **15 32 55.3** | **+0.3** |
| | 0.9nm,0.6s,baz=315,slow=1.2,SNR=7.6 | | | | | | |

**KRSC 25 15:19:51.1±1.9, 52°76N×161°04E, h19km±13km, ML3.7, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SPN** | **Mys Shipunski** | **0.70** | **300** | *e*P | Pn | 15 20 05.6 | -0.3 |
| SPN | | | | *e*S | Sb | 15 20 12.8 | -1.1 |
| **NLC** | **Nalytchevo** | **1.10** | **293** | *e*P | Pb | 15 20 11.6 | +0.1 |
| NLC | | | | *e*S | Sb | 15 20 23.6 | -1.9 |
| **SDLR** | **Sedlovina** | **1.40** | **293** | *e*P | Pb | 15 20 16.6 | -0.2 |
| SDLR | | | | *e*S | Sn | 15 20 33.5 | -0.3 |
| **UGLR** | **Uglovaya** | **1.41** | **290** | *e*P | Pb | 15 20 17.5 | +0.6 |
| UGLR | | | | *e*S | Sb | 15 20 34.4 | -0.2 |
| **SMAR** | **Somma** | **1.44** | **292** | *e*P | Pb | 15 20 17.2 | -0.4 |
| **PET** | **Petropavlovsk** | **1.47** | **282** | *e*P | Pb | 15 20 17.3 | -0.4 |
| **AVH** | **Avacha** | **1.48** | **291** | *e*P | Pb | 15 20 18.1 | +0.1 |
| AVH | | | | *e*S | Sn | 15 20 35.6 | 0.0 |
| **KOK** | **Koryaka** | **1.55** | **291** | *e*P | Pb | 15 20 19.0 | -0.2 |
| KOK | | | | *e*S | Sb | 15 20 38.3 | -0.2 |
| **KRX** | **Arik** | **1.56** | **294** | *e*P | Pb | 15 20 19.0 | -0.5 |
| KRX | | | | *e*S | Sn | 15 20 38.0 | +0.2 |
| **RUS** | **Russkaya** | **1.57** | **259** | *e*P | Pb | 15 20 18.7 | -0.8 |
| RUS | | | | *e*S | Sn | 15 20 37.3 | -0.3 |
| **KII** | **Karymskiy** | **1.60** | **324** | *e*P | Pb | 15 20 21.0 | +1.0 |
| KII | | | | *e*S | Sb | 15 20 41.0 | +1.1 |
| **MTVR** | **Mutnovka** | **1.76** | **262** | *e*P | Pb | 15 20 21.9 | -1.0 |
| MTVR | | | | *e*S | Sb | 15 20 44.2 | -0.5 |
| **MKZ** | **Mys Kozlova** | **1.85** | **13** | *e*P | Pb | 15 20 24.0 | -0.2 |
| MKZ | | | | *e*S | Sb | 15 20 46.3 | -0.6 |
| **ASAK** | **Asacha** | **1.95** | **260** | *e*P | Pb | 15 20 25.5 | -0.5 |
| ASAK | | | | *e*S | Sn | 15 20 48.2 | +1.0 |
| **GNL** | **Ganaly** | **2.08** | **298** | *e*P | Pb | 15 20 27.9 | -0.5 |
| GNL | | | | *e*S | Sb | 15 20 53.6 | -0.4 |
| **APC** | **Apacha** | **2.36** | **276** | *e*P | Pb | 15 20 32.1 | -0.8 |
| APC | | | | *e*S | Sb | 15 21 00.0 | -1.5 |
| **KZV** | **Kizimen** | **2.40** | **350** | *e*P | Pb | 15 20 33.0 | -0.9 |
| KZV | | | | *e*S | Sb | 15 21 01.3 | -1.9 |
| **TUMR** | **Tumrok** | **2.59** | **349** | *e*P | Pb | 15 20 36.0 | -1.0 |
| TUMR | | | | *e*S | Sb | 15 21 06.4 | -2.0 |
| **PAU** | **Pauzhetka** | **2.91** | **245** | *e*P | Pn | 15 20 38.5 | +2.3 |
| **ESO** | **Esso** | **3.46** | **338** | *e*P | Pb | 15 20 48.2 | -3.5 |
| **KBTR** | **Krutoberegovo** | **3.61** | **16** | *e*P | Pn | 15 20 48.9 | +3.0 |
| KBTR | | | | *e*S | Sn | 15 21 30.9 | +2.9 |
| **SRDR** | **Sredinnyy** | **3.65** | **348** | *e*P | Pb | 15 20 51.6 | -3.4 |
| **BKI** | **Bering** | **3.81** | **48** | *e*P | Pn | 15 20 51.9 | +3.3 |
| BKI | | | | *e*S | Sn | 15 21 31.8 | -1.0 |
| **BDR** | **Baidarnaya** | **3.82** | **1** | *e*P | Pn | 15 20 53.3 | +4.4 |
| BDR | | | | *e*S | Sn | 15 21 38.2 | +4.8 |
| **SMKR** | **Semkarok** | **3.84** | **4** | *e*P | Pn | 15 20 53.2 | +4.0 |
| SMKR | | | | *e*S | Sn | 15 21 36.9 | +3.0 |
| **SRKR** | **Sorokina** | **3.91** | **1** | *e*P | Pb | 15 20 55.3 | -4.1 |
| SRKR | | | | *e*S | Sn | 15 21 40.6 | +5.2 |

*ISCJB **25** 15:21:07.7±1.4, 3°48S±0°03×99°85E±0°03, h9km±8km, mb4.8/74, MS6.3/1, Error ellipse: s-maj=6.6km s-min=4.1km az=142.1*
*IDC **25** 15:21:07.7±0.4, 3°43S×99°96E, h0km, mb4.6/36, mb1 4.7/39, mb1mx4.6/42, mbtmp4.6/39, ML4.4/3, Error ellipse: s-maj=13.1km s-min=10.3km az=40.0*
*DJA **25** 15:21:09.6±0.4, 4°S±3'×10°0E±°, h10km, M5.7/31, mb6.0/31, MLv5.6/16*
*BJI **25** 15:21:10.3, 3°40S×99°90E, h16km, mb5.0/31, mB5.1/6, Ms5.5/6, Ms7 5.4/6*
*MOS **25** 15:21:10.7±1.1, 3°34S×100°03E, h28km, mb5.0/29, Error ellipse: s-maj=10.8km s-min=5.7km az=114.6*
*NEIC **25** 15:21:12.0±0.2, 3°41S×99°94E, mb5.0/18, Error ellipse: s-maj=7.1km s-min=4.6km az=49.0*
*NEIC Felt in Singapore.*
*KLM **25** 15:21:12.2, 3°46S×99°76E, h42km, mb5.0, MS6.5*
**ISC 25 15:21:11.2±0.7, 3°50S±0°05×99°84E±0°06, h20km±5km, n350, σ1§16/335, mb4.9/74, 15C-13D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.75** | **13** | P | **Pb** | **15 21 24.1** | **-1.5** |
| **SISI** | **Saibi** | **2.28** | **341** | P | **Pn** | **15 21 45.2** | **-2.5** |
| SISI | | | | S | **Sn** | **15 22 14.2** | **-1.0** |
| **SDSI** | **Sungai Dareh** | **3.00** | **32** | P | **Pn** | **15 21 55.9** | **-1.8** |
| **PPI** | **Padang Panjang** | **3.07** | **11** | P | **Pn** | **15 21 56.7** | **-1.9** |
| **MNAI** | **Manna** | **3.23** | **106** | *e*Pn | **Pn** | **15 22 00.7** | **-0.1** |
| **BKNI** | **Bangkinang** | **3.98** | **18** | P | **Pn** | **15 22 09.8** | **-1.4** |
| **BKNI** | **Bangkinang** | **3.98** | **18** | Pn | **Pn** | **15 22 09.5** | **-1.6** |
| **RGRI** | **Rengat** | **4.00** | **39** | P | Pn | 15 22 12.8 | +1.4 |
| **JMBI** | **JAMBI** | **4.23** | **64** | P | **Pn** | **15 22 14.3** | **-0.2** |
| **MNSI** | **Mandailing Nat** | **4.27** | **357** | P | **Pn** | **15 22 13.4** | **-1.7** |
| **MDSI** | **Maura Dua** | **4.44** | **103** | P | **Pn** | **15 22 17.8** | **+0.3** |
| **LWLI** | **Liwa** | **4.47** | **110** | P | **Pn** | **15 22 18.1** | **+0.1** |
| **PMBI** | **Palembang** | **4.96** | **84** | P | Pb | 15 22 48.4 | +11 |
| **KASI** | **Kota Agung** | **5.07** | **114** | P | **Pn** | **15 22 25.4** | **-0.6** |
| **KLI** | **Kotabumi** | **5.19** | **105** | P | **Pn** | **15 22 28.0** | **+0.2** |
| | 272nm,0.9s,4.6nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.28** | **335** | P | **Pn** | **15 22 28.6** | **-0.3** |
| **GSI** | **Gunungsitoli** | **5.28** | **335** | *e*P | **Pn** | **15 22 26.2** | **-2.7** |
| | 13µm,3.3s | | | | | | |
| **PSI** | **Prapat** | **6.32** | **352** | Pn | Pn | 15 22 39.8 | -3.6 |
| | 1.6nm,0.3s,baz=164,slow=5.7,SNR=3.7 | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.43** | **78** | P | **Pn** | **15 22 45.6** | **+0.8** |
| **KGM** | **Kluang** | **6.49** | **33** | ⇓P | **Pn** | **15 22 45.3** | **-0.3** |
| **CGJI** | **Cibinong** | **6.61** | **118** | P | **Pn** | **15 22 45.3** | **-1.9** |
| | 373nm,0.9s | | | | | | |
| **MYKOM** | **Kota Tinggi** | **6.61** | **37** | ⇑P | **Pn** | **15 22 47.3** | **0.0** |
| **FRIM** | **Kepong** | **6.92** | **15** | ⇑P | **Pn** | **15 22 50.5** | **-1.1** |
| **TNG** | **Tangerang** | **7.29** | **112** | P | **Pn** | **15 22 58.1** | **+1.5** |
| | 1µm,0.7s,9.5nm | | | | | | |
| **SKJI** | **Sukabumi** | **7.55** | **118** | P | **Pn** | **15 23 00.0** | **-0.2** |
| | 347nm,0.6s | | | | | | |
| **CNJI** | **Cibinong** | **8.19** | **118** | P | **Pn** | **15 23 06.9** | **-2.1** |
| | 471nm,0.7s | | | | | | |
| **LEM** | **Lembang** | **8.43** | **113** | Pn | **Pn** | **15 23 11.5** | **-0.9** |
| | 20nm,0.3s,baz=25,slow=7.7,SNR=16 | | | | | | |
| **LEM** | **Lembang** | **8.43** | **113** | P | **Pn** | **15 23 13.3** | **+0.9** |
| | 4µm,1.4s | | | | | | |
| **KULM** | **Kulim** | **8.77** | **5** | ⇓P | **Pn** | **15 23 15.2** | **-1.7** |
| **KULM** | **Kulim** | **8.77** | **5** | *e*Pn | **Pn** | **15 23 15.5** | **-1.4** |
| | 46nm,1.2s | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.91** | **117** | P | **Pn** | **15 23 16.2** | **-2.7** |
| | 849nm,0.6s | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.91** | **117** | *e*Pn | **Pn** | **15 23 16.1** | **-2.9** |
| **KTGM** | **Kuala Trenggan** | **9.36** | **21

baz=80,slow=75
**H08S1 Diego Carcia H 27.54 260** T T 15 56 04.5
baz=80,slow=75
**LBMI Labuha 27.79 85** P P 15 27 03.2 +4.0
**KMI Kunming 28.59 6** P P 15 27 09.0 +2.6
KMI PMZ
comp=Z,9.0nm,0.5s
KMI LZ
comp=Z,10µm,16.2s
**GYA Guiyang 30.50 12**⇑ *i*P **P 15 27 25.0 +1.8**
GYA sP sP 15 27 33.5 +1.5
GYA PP **PnPn 15 28 25.5 +3.1**
GYA PcP **PcP 15 30 24.3 +2.0**
GYA S **S 15 32 25.0 +1.2**
GYA ScP **ScP 15 34 01.3 -2.6**
GYA SS **SnSn 15 34 06.8 +6.1**
GYA ScS **ScS 15 37 57.5 -2.8**
GYA PMZ
comp=Z,20nm,0.7s
**SIJI Sorong 31.51 86** P P 15 27 28.7 -3.5
comp=Z,12nm,0.9s,baz=265,slow=12,SNR=4.5
**ODAN Odare 32.49 339** *e*P **P 15 27 41.3 +0.5**
**TAPN Taplejung 32.82 340** *e*P **P 15 27 44.6 +0.7**
comp=Z,54nm,0.9s
**RAMN Ramite 32.86 338** *e*P **P 15 27 45.0 +0.9**
comp=Z,19nm,0.9s
**NWAO Narrogin (SRO) 33.51 153** P P **15 27 47.9 -1.5**
comp=Z,16nm,0.8s,baz=306,slow=0.0,SNR=4.7
**PKIN Phulchoki 33.88 337** *e*P **P 15 27 52.7 -0.4**
**H01W3 Cape Leeuwin H 33.94 159** T T 16 03 46.8
baz=334,slow=74
**H01W2 Cape Leeuwin H 33.95 159** T T 16 03 57.1
baz=334
**H01W1 Cape Leeuwin H 33.95 159** T T 16 03 41.8
baz=334,slow=74
**GUN Gumba 34.00 338** *e*P **P 15 27 54.5 +0.4**
comp=Z,19nm,0.8s
**LSA Lhasa 34.04 346** *e*P **P 15 27 55.0 +0.4**
LSA pmax pmax
comp=Z,18nm,0.9s
**LSA Lhasa 34.04 346** *e*P **P 15 27 55.0 +0.4**
comp=Z,18nm,0.9s
**KKN Kakani 34.12 337** *e*P **P 15 27 55.2 +0.1**
comp=Z,7.7nm,0.6s
**CD2 Chengdu 34.42 6** *e*P **P 15 27 58.0 +0.6**
CD2 pP pP 15 28 05.8 +2.1
CD2 PP **PP 15 29 16.5 +0.9**
CD2 S **S 15 33 26.0 +1.5**
CD2 sS sS 15 33 39.0 +4.1
CD2 PcS **PcS 15 34 19.0 -0.3**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,140nm,5.2s
**GKN Gorkha 34.57 336** *e*P **P 15 27 58.6 -0.3**
comp=Z,9.1nm,0.7s
**KOLN Koldanda 34.80 334** *e*P **P 15 28 00.9 -0.1**
comp=Z,30nm,0.8s
**WRA Warramunga Arr 37.40 119** P **P 15 28 21.7 -1.4**
comp=Z,10nm,0.8s,baz=298,slow=9.0,SNR=40
**WRAB Tennant Creek 37.41 119** *e*P **P 15 28 23.0 -0.2**
WRAB pmax pmax
comp=Z,55nm,0.8s
**WRAB Tennant Creek 37.41 119** P **P 15 28 22.6 -0.6**
comp=Z,153nm,0.7s,SNR=22
**WRAB Tennant Creek 37.41 119** *e*P **P 15 28 22.6 -0.6**
comp=Z,1µm,2.8s
**ASAR Alice Springs 38.53 124** P **P 15 28 32.2 -0.5**
comp=Z,10nm,0.8s,baz=292,slow=7.9,SNR=125
**AS01 Alice Springs 38.57 124** *e*P **P 15 28 31.7 -1.3**
**LZH Lanzhou 39.55 5** *e*P **P 15 28 41.5 +0.3**
LZH pP **pP 15 28 46.3 -1.2**
LZH sP **sP 15 28 49.5 -0.5**
LZH PMZ
comp=Z,130nm,1.5s
LZH PMZ
comp=Z,450nm,4.0s
**NJ2 Nanjing 39.70 26** *e*P **P 15 28 43.0 +0.8**
**JAY Jayapura 40.82 90** P **P 15 28 50.5 -1.4**
comp=Z,48nm,0.4s,baz=66,slow=0.5,SNR=6.0
**GTA Gaotai 42.69 360** *e*P **P 15 29 08.3 +1.4**
GTA pP pP 15 29 14.5 +1.2
GTA sP sP 15 29 17.0 +1.2
GTA PMZ
comp=Z,43nm,1.4s
**HHC Hu-ho-hao-te 45.42 13** *e*P P 15 29 31.0 +2.3
HHC S **S 15 36 10.0 +0.9**
HHC PMZ
comp=Z,68nm,1.2s
HHC LN
comp=Z,5µm,17.3s
HHC LE
comp=Z,5µm,14.8s
HHC LZ
comp=Z,16µm,17.3s
**BJI Beijing 45.85 18** P **P 15 29 32.3 +0.3**
BJI PMZ
comp=Z,21nm,0.9s
**JNU Nakatsue 46.78 36** P **P 15 29 38.4 -1.1**
comp=Z,4.5nm,0.6s,baz=194,slow=4.2,SNR=3.7
**JNU Nakatsue 46.78 36** *e*P **P 15 29 38.9 -0.7**
**PMG Port Moresby 47.35 100** *e*P **P 15 29 44.0 -0.3**
PMG pmax pmax
comp=Z,50nm,0.8s
**KSH Kashi 48.11 335** *e*P **P 15 29 48.8 -1.1**
KSH PcS **PcS 15 35 13.0 -0.2**
KSH S S 15 36 42.0 -5.7
**CTAO Charters Tower 48.13 114** *e*P **P 15 29 49.9 -0.3**
CTAO pmax pmax
comp=Z,171nm,2.3s
**CTAO Charters Tower 48.13 114** *e*P **P 15 29 49.9 -0.3**
comp=Z,171nm,2.3s
**WMQ Urumqi 48.35 348** P **P 15 29 53.0 +1.4**
WMQ pP pP 15 30 00.0 +2.0
WMQ PP **PP 15 31 47.0 +2.7**
WMQ S **S 15 36 50.0 -0.9**
WMQ ScS **ScS 15 39 41.0 -2.6**
WMQ SS **SS 15 40 15.0 -5.8**
WMQ PMZ
comp=Z,65nm,1.0s
WMQ PMZ
comp=Z,130nm,7.0s
WMQ LN
comp=Z,4µm,15.0s
WMQ LE
comp=Z,3µm,15.0s
WMQ LZ
comp=Z,2µm,16.0s
**KSAR Wonju Array Be 48.36 30** P **P 15 29 50.0 -1.6**
**KSAR Wonju Array Be 48.36 30** P **P 15 29 50.0 -1.6**
**KSRS Korea Array 48.38 30** P **P 15 29 50.0 -1.9**
comp=Z,5.4nm,0.9s,baz=225,slow=7.6,SNR=7.8
**KS01 Wonju Array Si 48.39 30** *e*P **P 15 29 52.0 +0.2**
**PDGK Podgornoye 50.09 341** P **P 15 30 05.4 +0.6**
PDGK pmax pmax
comp=Z,17nm,0.9s
**TKM2 Tokmak 2 51.13 337** *e*P **P 15 30 13.2 +0.2**
TKM2 *e* 15 30 21.0
TKM2 pmax pmax
comp=Z,28nm,1.1s
**TKM2 Tokmak 2 51.13 337** P **P 15 30 13.5 +0.6**
SNR=16
**TKM2 Tokmak 2 51.13 337** *e*P **P 15 30 13.2 +0.2**
comp=Z,28nm,1.1s
TKM2 *e* 15 30 20.9
**KBK Karagaybulak 51.16 337** P **P 15 30 14.0 +0.9**
SNR=6.6
**AML Almayashu 51.24 335** P **P 15 30 14.3 +0.3**
SNR=8.5
**AAK Ala-Archa 51.33 336** P **P 15 30 14.3 -0.1**
comp=Z,4.3nm,0.7s,baz=96,slow=9.2,SNR=5.0
**AAK Ala-Archa 51.33 336** *e*P **P 15 30 15.2 +0.8**
AAK pmax pmax
comp=Z,7.0nm,0.9s
**AAK Ala-Archa 51.33 336** *e*P **P 15 30 15.2 +0.8**
comp=Z,6.5nm,0.9s
**SONM Songino Array 51.44 6** P **P 15 30 15.3 +0.2**
comp=Z,12nm,0.7s,baz=188,slow=8.9,SNR=47
SONM PcP **PcP 15 31 29.4 0.0**
comp=Z,3.7nm,0.7s,baz=180,slow=3.9,SNR=4.4
**SONA1 Songino Array 51.45 6** *e*P **P 15 30 15.6 +0.4**
**CHMS Chumysh 51.53 337** P **P 15 30 15.7 0.0**
SNR=5.5
**ULN Ulaanbaatar 51.54 6** *e*P **P 15 30 16.5 +0.7**
ULN pmax pmax
comp=Z,28nm,1.7s
**ULN Ulaanbaatar 51.54 6** *e*P **P 15 30 16.2 +0.4**
comp=Z,15nm,1.0s
**EKS2 Erkin-Say 51.64 336** *e*P **P 15 30 17.2 +0.5**
EKS2 *e* 15 30 24.8
EKS2 pmax pmax
comp=Z,19nm,0.8s
**EKS2 Erkin-Say 51.64 336** P **P 15 30 17.4 +0.7**
**EKS2 Erkin-Say 51.64 336** *e*P **P 15 30 17.2 +0.5**
comp=Z,19nm,0.8s
EKS2 *e* 15 30 24.8
**USP Ospenovka 51.86 337** P **P 15 30 19.4 +1.3**
SNR=16
**MK01 Makanchi Array 52.39 345** *e*P **P 15 30 22.0 -0.1**
**CN2 Changchun 52.41 23** *e*P **P 15 30 20.8 -1.4**
CN2 *e*pP **pP 15 30 28.3 -0.4**
CN2 *e*S S 15 37 41.8 -5.4
CN2 PMZ
comp=Z,20nm,0.8s
CN2 PMZ
comp=Z,200nm,3.0s
**MK31 Makanchi Array 52.42 345** *i* P **P 15 30 22.1 -0.2**
MK31 pmax pmax
comp=Z,12nm,0.8s
**MKAR Makanchi Array 52.42 345** P **P 15 30 22.0 -0.2**
comp=Z,13nm,0.7s,baz=146,slow=8.5,SNR=43
**MKAR Makanchi Array 52.42 345** *e*P **P 15 30 22.5 +0.2**
**MKAR Makanchi Array 52.42 345** *e*P **P 15 30 22.5 +0.2**
**MAKZ Makanchi 52.51 345** *e*P **P 15 30 23.6 +0.6**
**MAT Matsushiro 53.54 38** P P 15 30 24.9 -5.8
**MJAR Matsushiro Arr 53.54 38** P **P 15 30 29.2 -1.5**
comp=Z,2.4nm,0.8s,baz=212,slow=6.9,SNR=5.4
**OPO Ambohidratompo 53.59 250** P **P 15 30 32.5 +1.0**
comp=Z,3.2nm,0.8s,baz=67,slow=7.7,SNR=2.8
**EIDS Eidsvold 53.77 119** *e*P **P 15 30 32.4 -0.2**
comp=Z,18nm,1.0s
**HVS Khovu-Aksy 54.67 355** *e*P **P 15 30 39.7 +0.9**
HVS pmax pmax
comp=Z,6.0nm,1.1s
**HIA Hailar 55.32 16** *e*P **P 15 30 42.6 -0.8**
HIA pmax pmax
comp=Z,6.0nm,1.1s
**USRK Ussuriysk Ar. 55.55 28** P **P 15 30 44.3 -0.8**
comp=Z,24nm,0.7s,baz=224,slow=5.9,SNR=45
**GEYT Alibeck 56.49 321** P **P 15 30 51.2 -0.8**
comp=Z,3.7nm,0.8s,baz=120,slow=8.8,SNR=6.9
**KURBB Kurchatov Arra 56.93 344** P **P 15 30 54.2 -0.6**
comp=Z,4.5nm,0.7s,baz=165,slow=7.3,SNR=8.1
**KURK Kurchatov 56.99 344** P **P 15 30 54.2 -1.1**
**KURK Kurchatov 56.99 344** *e*P **P 15 30 54.2 -1.1**
**ZAA0 Zalesovo Array 58.60 350** *e*P **P 15 31 05.7 -0.8**
ZAA0 *e*PP **PP 15 33 17.7 +1.3**
**ZALV Zalesovo Beam 58.60 350** P **P 15 31 05.8 -0.7**
comp=Z,30nm,0.8s,baz=193,slow=5.2,SNR=70
**ZALV Zalesovo Beam 58.60 350** *i* P **P 15 31 06.1 -0.4**
ZALV pmax pmax
comp=Z,30nm,0.8s
**KLR Kul'dur 59.36 24** *e*P **P 15 31 11.9 0.0**
**NVS Novosibirsk 59.74 349** *e*P **P 15 31 13.8 -0.6**
NVS *e* 15 33 25.8
NVS pmax pmax
comp=N,16nm,1.8s
NVS pmax pmax
comp=Z,29nm,1.8s
NVS pmax pmax
comp=E,7.0nm,0.9s
**BVA0 Borovoye Array 61.52 340** *i* P **P 15 31 25.5 -1.2**
BVA0 pmax pmax
comp=Z,6.0nm,0.7s
**BVAR Borovoye Array 61.52 340** P **P 15 31 25.4 -1.2**
comp=Z,6.9nm,0.7s,baz=140,slow=8.2,SNR=26
**ZRNK Zerenda 61.94 339** *i* P **P 15 31 28.1 -1.4**
ZRNK pmax pmax
comp=Z,7.0nm,0.9s
**CHKZ Chkalovo 61.99 341** *i* P **P 15 31 28.9 -0.8**
CHKZ pmax pmax
comp=Z,16nm,0.9s
**BOD Bodaibo 62.17 9** *e*P **P 15 31 28.4 -2.5**
BOD pmax pmax
comp=Z,15nm,1.1s
**KMBO Kilima Mbogo 62.57 271** P **P 15 31 35.5 +0.7**
comp=Z,0.9nm,0.3s,baz=62,slow=9.7,SNR=5.0
**AB31 Akbulak array 62.87 332** *i* P **P 15 31 34.7 -1.0**
AB31 pmax pmax
comp=Z,16nm,0.8s
**ABKAR Akbulak array 62.87 332** *e*P **P 15 31 34.3 -1.4**
**CASY Casey 63.12 175** *e*P **P 15 31 37.5 +0.4**
comp=Z,13nm,1.3s
**SVE Sverdlovsk 68.00 338** *e*P **P 15 32 08.7 -0.1**
**MAW Mawson 68.80 194** P **P 15 32 14.3 +0.6**
comp=Z,4.9nm,0.9s,baz=3.5,slow=7.0,SNR=8.5
**MAW Mawson 68.80 194** *e*P **P 15 32 15.4 +1.7**
MAW pmax pmax
comp=Z,2.0nm,1.1s
**MAW Mawson 68.80 194** *e*P **P 15 32 15.4 +1.7**
comp=Z,2.1nm,1.1s
**MBAR Mbarara 69.10 271** P **P 15 32 17.4 +0.7**
comp=Z,2.8nm,0.2s,baz=105,slow=9.6,SNR=4.9
**YAK Yakutsk 69.22 15** *e*P **P 15 32 15.2 -1.1**
YAK pmax pmax
comp=Z,35nm,0.8s
YAK pmax pmax
comp=N,15nm,1.1s
YAK pmax pmax
comp=E,19nm,1.4s
**KBZ Khabaz 69.33 320** P **P 15 32 17.1 -0.2**
comp=E,5.8nm,0.8s,baz=127,slow=6.8,SNR=15
**ASF Jabal al Asfar 69.33 306** P **P 15 32 18.5 +0.8**
comp=E,4.0nm,0.8s,baz=104,slow=3.2,SNR=4.6
**KIV Kislovodsk 69.56 320** *e*P **P 15 32 20.0 +1.0**
KIV pmax pmax
comp=Z,10.0nm,1.0s
**EIL Elat 70.19 303** P **P 15 32 23.3 +0.3**
comp=Z,5.5nm,0.7s,baz=143,slow=3.5,SNR=5.5
**MMAI Mount Meron Ar 70.79 307** P **P 15 32 27.3 +0.7**
comp=Z,3.8nm,0.8s,baz=103,slow=10,SNR=4.7
**VRH Novokhopyorsk 73.46 326** *e*P **P 15 32 40.9 -1.3**
VRH pmax pmax
comp=Z,10.0nm,0.9s
VRH pmax pmax
comp=N,10.0nm,0.7s
VRH pmax pmax
comp=E,10.0nm,0.6s
**BRTR Keskin Array B 74.21 313** P **P 15 32 46.0 -1.0**
comp=E,3.1nm,0.7s,baz=132,slow=7.4,SNR=20
**BRTR Keskin Array B 74.21 313***ce*P **P 15 32 46.0 -1.0**
BRTR pmax pmax
comp=Z,3.0nm,0.7s
**PETK Petropavlovsk- 74.23 32** P **P 15 32 45.6 -1.1**
comp=Z,3.6nm,0.8s,baz=222,slow=5.8,SNR=3.5
**VORD Divnogorie 74.72 325** *e*P **P 15 32 47.8 -1.7**
VORD pmax pmax
comp=Z,8.0nm,0.9s
VORD pmax pmax
comp=N,70nm,0.8s
VORD pmax pmax
comp=E,30nm,0.6s
**BOSA Boshof 74.80 241** P **P 15 32 51.5 +0.9**
comp=E,4.3nm,0.6s,baz=100,slow=8.1,SNR=5.3
**VSR Storozhevoye 74.90 325** *e*P **P 15 32 49.2 -1.4**
VSR pmax pmax
comp=Z,10.0nm,0.6s
VSR pmax pmax
comp=N,10.0nm,0.8s
VSR pmax pmax
comp=E,10.0nm,0.8s
**SEY Seymchan 77.07 22** *e*P **P 15 33 02.8 +0.1**
**BKZ Black Stump Fm 77.46 129** *e*P **P 15 33 05.8 +0.3**
comp=E,27nm,0.9s
**MOS Moscow 77.69 329** *e*P **P 15 33 05.8 -0.5**
**KLMR Klimovskoe 79.10 334** *e*P **P 15 33 13.3 -0.7**
KLMR pmax pmax
comp=Z,36nm,1.6s
**AKASG Malin Array Be 80.56 323** P **P 15 33 20.7 -1.4**
comp=Z,1.5nm,0.6s,baz=89,slow=3.9,SNR=9.1
**KIEV Kiev 80.57 323** *e*P **P 15 33 21.7 -0.5**
KIEV pmax pmax
comp=Z,4.0nm,1.0s
**VNDA Vanda 80.74 169** P **P 15 33 23.1 +0.5**
comp=Z,2.4nm,1.0s,baz=325,slow=5.4,SNR=8.3
**VNDA Vanda 80.74 169** *e*P **P 15 33 24.1 +1.5**
VNDA pmax pmax
comp=Z,25nm,2.1s
**VNDA Vanda 80.74 169** *e*P **P 15 33 24.1 +1.5**
comp=Z,25nm,2.1s
**VRI Vrincioaia 80.83 317**⇓ P **P 15 33 24.3 +0.6**
**VRI Vrincioaia 80.83 317**⇓ *i*P **P 15 33 24.3 +0.6**
**TESR Tescani 81.05 318**⇓ *i*P **P 15 33 25.7 +0.8**
**MLR Muntele Rosu 81.27 317**⇑ P **P 15 33 27.2 +1.0**
**MLR Muntele Rosu 81.27 317**⇑ *i*P **P 15 33 27.2 +1.0**
**BURAR Bucovina Array 82.27 319**⇓ P **P 15 33 32.3 +0.9**
**BURAR Bucovina Array 82.27 319**⇓ *i*P **P 15 33 32.3 +0.9**
**BUR04 Bucovina Ar. S 82.27 319** *e*P **P 15 33 32.0 +0.6**
**GZR Gura Zlata 83.42 316**⇑ P **P 15 33 39.0 +1.6**
**GZR Gura Zlata 83.42 316**⇑ *i*P **P 15 33 39.0 +1.6**
**DRGR 83.75 318**⇓ P **P 15 33 40.1 +1.0**
**DRGR 83.75 318**⇓ *i*P **P 15 33 40.1 +1.0**
**BZS Buzias 84.27 316**⇑ P **P 15 33 41.3 -0.3**
**BZS Buzias 84.27 316**⇑ *i*P **P 15 33 41.3 -0.3**
**APA Apatity 84.42 339**⇑ *i*P **P 15 33 39.8 -2.1**
APA MLR MLR
comp=Z,13µm,19.0s
**KOLS Kolonicke sedl 84.48 320** *e*P **P 15 33 43.5 +0.8**
KOLS pmax pmax
comp=Z,15nm,0.9s
**KOLS Kolonicke sedl 84.48 320** *e*P **P 15 33 43.5 +0.8**
**BILL Bilibino 84.61 20** *i* P **P 15 33 40.4 -2.5**
BILL pmax pmax
comp=Z,6.0nm,1.0s
**STHS Stebnicka Huta 85.23 320** *e*P **P 15 33 47.3 +0.8**
STHS pmax pmax
comp=Z,5.0nm,0.8s
**STHS Stebnicka Huta 85.23 320** *e*P **P 15 33 47.3 +0.8**
**FINES FINESS Array B 85.35 332** P **P 15 33 46.5 -0.2**
comp=Z,2.3nm,0.6s,baz=124,slow=6.2,SNR=12
**OJC Ojcow 86.30 321** *e*PP PP 15 37 15.0 +2.2
**VYHS Vyhne 86.64 319** *e*P **P 15 33 54.4 +1.0**
**VYHS Vyhne 86.64 319** *e*P **P 15 33 54.4 +1.0**
**OKC Ostrava-Krasne 87.29 320** *e*P **P 15 33 57.4 +0.9**
**OKC Ostrava-Krasne 87.29 320** *e*P **P 15 33 57.4 +0.9**
**MORC Moravsky Berou 87.67 320** *e*P **P 15 33 58.8 +0.3**
MORC pmax pmax
comp=Z,124nm,1.8s
**MORC Moravsky Berou 87.67 320** *e*P **P 15 33 58.8 +0.3**
comp=Z,124nm,1.8s
**ARCES ARCESS Array B 87.81 340** P **P 15 33 58.3 -0.4**
comp=Z,4.5nm,0.8s,baz=97,slow=4.2,SNR=9.7
**KRLC Kraliky 88.20 320** *e*P **P 15 34 01.8 +0.8**
KRLC *e* 15 34 09.5
**KRLC Kraliky 88.20 320** *e*P **P 15 34 01.8 +0.8**
KRLC *e*pP pP 15 34 09.5 +1.7
**DPC Dobruska-Polom 88.53 320** *e*P **P 15 34 03.5 +1.0**
**DPC Dobruska-Polom 88.53 320** *e*P **P 15 34 03.5 +1.0**
**GERES GERESS Array B 90.06 319** P **P 15 34 10.0 +0.2**
comp=Z,3.3nm,0.8s,baz=97,slow=5.5,SNR=18
**BRG Berggiesshubel 90.09 321** *e*P **P 15 34 10.9 +1.2**
comp=Z,10.0nm,1.2s
**BRG Berggiesshubel 90.09 321** *e*P **P 15 34 10.9 +1.2**
BRG pmax pmax
comp=Z,10.0nm,1.2s
**CLL Collm 90.72 321** *e*P **P 15 34 14.0 +1.3**
**NOA NORSAR Array B 92.36 331** P **P 15 34 20.0 -0.2**
comp=Z,1.9nm,0.9s,baz=94,slow=4.9,SNR=3.5
**NOA NORSAR Array B 92.36 331** P **P 15 34 20.0 -0.2**
**KEST Kesra 92.42 305** P **P 15 34 21.6 +0.6**
comp=Z,7.1nm,1.0s,baz=336,slow=11,SNR=5.9
**TORD Torodi Ar. Bea 98.71 283** P **P 15 34 49.7 -0.3**
comp=Z,0.3nm,0.6s,baz=68,slow=4.7,SNR=2.3
**GCMT Greyclift 130.62 27** *e*PKPpre PKPpre 15 40 13.6
**NV01 Mina Array Sit 130.85 40** *e*PKPdf **PKPdf 15 40 23.5 +1.6**
**NVAR Mina Array Bea 130.85 40** PKP **PKPdf 15 40 21.7 -0.2**
comp=Z,1.4nm,0.8s,baz=5.5,slow=1.3,SNR=3.7
**ULM Lac du Bonnet 131.55 13** PKP **PKPdf 15 40 21.4 -1.2**
comp=Z,3.4nm,0.7s,baz=6.7,slow=5.2,SNR=3.4
**R11A Troy Canyon, C 132.61 38** *e*PKPdf **PKPdf 15 40 26.9 +1.6**
**T25A Trinidad 139.79 31** *e*PP PP 15 43 33.1 -0.4
**CPUP Villa Florida 143.02 215** PKP PKPbc 15 40 41.6 +0.4
comp=Z,2.0nm,0.8s,baz=108,slow=1.5,SNR=5.4
**Y28A McKinney Farm, 143.40 32** P PKPbc 15 40 42.6 +0.4
baz=143
**W31A Holland Ranch, 143.52 28** P PKPbc 15 40 42.8 +0.4
baz=143
**T37A Cheneyville 18 143.89 20** P PKPab 15 40 42.4 -0.3
baz=144
**U35A Pawnee 143.89 23** P PKPab 15 40 42.9 +0.1
baz=144
**X31A McDonald Ranch 143.96 28** P PKPbc 15 40 43.6 -0.1
baz=144
**CCM Cathedral Cave 144.14 15** *e*PKIKP **PKPab 15 40 43.3 -0.3**
**CCM Cathedral Cave 144.14 15** *e*PKP **PKPab 15 40 43.3 -0.3**
**W33A Caddo, Fort Co 144.22 26** P PKPbc 15 40 44.5 +0.1
baz=144
**U36A Oologah 144.25 22** P PKPbc 15 40 44.8 +0.3
baz=144
**V35A Meyer Ranch, C 144.38 24** P **PKPab 15 40 44.5 -0.2**
baz=144
**WMOK Wichita Mounta 144.43 27** *e*PKIKP **PKPab 15 40 44.5 -0.3**
**WMOK Wichita Mounta 144.43 27** *e*PKPdf **PKPab 15 40 44.5 -0.3**
**W34A Bridge Creek, 144.45 25** P **PKPab 15 40 45.0 +0.1**
baz=144
**X32A Elmer 144.46 28** P **PKPab 15 40 44.4 -0.6**
baz=144
**U37A Salina 144.47 21** P **PKPab 15 40 44.7 -0.2**
baz=144
**Z30A Sanderson Ranc 144.47 31** P **PKPab 15 40 44.5 -0.6**
baz=144
**228A UT Block 9, Go 144.59 34** P **PKPab 15 40 43.9 -1.7**
baz=144
**TUL1 Tulsa 144.66 22** P **PKPab 15 40 45.1 -0.6**
baz=144
**TUL1 Tulsa 144.66 22** *e*PKPdf **PKPab 15 40 45.6 -0.1**
**U38A Gravette 144.69 20** P **PKPab 15 40 45.2 -0.6**
baz=144
**V36A Jenks 144.71 22** P **PKPab 15 40 45.8 0.0**
baz=144
**Y32A R-V Farms, Ver 144.73 28** P **PKPab 15 40 45.3 -0.6**
baz=144
**V37A Hulbert 144.92 21** P **PKPab 15 40 45.9 -0.6**
baz=145
**SLBS Sierra La Lagu 144.93 52** *e*PKPdf **PKPdf 15 40 48.8 +0.8**
**Z31A Sharp Cattle R 144.94 30** P **PKPab 15 40 46.5 -0.3**
baz=145
**X34A Smith Ranch, M 144.96 26** P **PKPab 15 40 46.4 -0.4**
baz=145
**WCI Wyandotte Cave 144.98 8** *e*PKIKP **PKPab 15 40 45.7 -1.0**
**WCI Wyandotte Cave 144.98 8** *e*PKPdf **PKPab 15 40 45.7 -1.0**
**Y33A Hilltop Ranch, 145.11 27** P **PKPbc 15 40 47.1 -0.2**
baz=145
**229A Bryant Ranch, 145.13 33** P **PKPbc 15 40 47.2 -0.3**
baz=145
**W36A Wetumka 145.17 23** P **PKPbc 15 40 47.0 -0.4**
baz=145
**V38A Canehill 145.21 20** P **PKPbc 15 40 46.4 -1.2**
baz=145
**Z32A Haskell 145.28 29** P **PKPbc 15 40 46.9 -1.0**
baz=145
**131A Roby 145.34 31** P **PKPbc 15 40 48.0 -0.2**
baz=145
**329A Wagon Wheel Ra 145.40 34** P **PKPbc 15 40 48.5 +0.1**
baz=145
**W37A Quinton 145.48 22** P **PKPbc 15 40 47.8 -0.7**
baz=145
**X35A Drake 145.50 25** P **PKPdf 15 40 47.8 -0.8**
baz=145
**Y34A Reagan Ranch, 145.54 26** P **PKPdf 15 40 48.5 -0.1**
baz=145
**PBMO Poplar Bluff 145.56 15** *e*PKPdf **PKPdf 15 40 48.0 -0.5**
**230A Sterling City 145.57 33** P **PKPdf 15 40 48.8 0.0**
baz=145
**X36A Centrahoma 145.61 24** P **PKPdf 15 40 48.0 -0.7**
baz=145
**ABTX Abilene, Hawle 145.75 30** P **PKPdf 15 40 49.2 +0.2**
baz=146
**ABTX Abilene, Hawle 145.75 30** *e*PKPdf **PKPbc 15 40 49.5 +0.1**
**W38A Poteau 145.88 21** P **PKPbc 15 40 49.5 -0.1**
baz=146
**330A Mertzon 145.91 33** P **PKPbc 15 40 49.8 -0.2**
baz=146
**231A Bronte 145.96 32** P **PKPdf 15 40 49.4 0.0**
baz=146
**TX31 Lajitas Ar. Si 145.97 38** *e*PKPdf **PKPbc 15 40 50.4 +0.1**
**TXAR Lajitas Array 145.97 38** PKPbc **PKPbc 15 40 50.3 0.0**
comp=Z,7.4nm,0.6s,baz=305,slow=1.2,SNR=98
**429A Davenport Ranc 146.10 35** P **PKPdf 15 40 50.1 +0.3**
baz=146
**X38A Whitesboro 146.12 22** P **PKPbc 15 40 50.7 +0.2**
baz=146
**133A Hamilton Ranch 146.12 29** P **PKPbc 15 40 50.5 -0.1**
baz=146
**529A Stev Forest Ra 146.28 36** P **PKPbc 15 40 51.2 0.0**
baz=146

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Z35A** | **Perchaven, San** baz=146 | **146.29** | **26** | P | **PKPbc** | **15 40 51.1** | **+0.1** |
| **232A** | **Coleman** baz=146 | **146.34** | **31** | P | **PKPbc** | **15 40 51.3** | **0.0** |
| **430A** | **Baggett Ranch,** baz=146 | **146.35** | **34** | P | **PKPbc** | **15 40 51.5** | **+0.2** |
| **331A** | **San Angelo** baz=146 | **146.39** | **32** | P | **PKPbc** | **15 40 51.8** | **+0.4** |
| **233A** | **Rising Star** baz=146 | **146.61** | **30** | P | **PKPab** | **15 40 52.6** | **-0.5** |
| **MIAR** | **Mount Ida** | **146.68** | **20** | *e*PKP2 | **PKPbc** | **15 40 52.0** | **-0.1** |
| **MIAR** | **Mount Ida** baz=146 | **146.68** | **20** | P | **PKPbc** | **15 40 51.7** | **-0.4** |
| **MIAR** | **Mount Ida** | **146.68** | **20** | *e*PKPdf | **PKPbc** | **15 40 52.0** | **-0.1** |
| **332A** | **Millersview** baz=146 | **146.69** | **31** | P | **PKPbc** | **15 40 52.6** | **+0.3** |
| **WVT** | **Waverly** | **146.76** | **11** | *e*PKP2 | **PKPbc** | **15 40 51.7** | **-0.6** |
| **WVT** | **Waverly** | **146.76** | **11** | *e*PKPdf | **PKPbc** | **15 40 51.7** | **-0.6** |
| **530A** | **J-C Ranch, Com** baz=146 | **146.77** | **35** | P | **PKPbc** | **15 40 52.0** | **-0.6** |
| **431A** | **Sonora** baz=146 | **146.77** | **33** | P | **PKPbc** | **15 40 52.0** | **-0.6** |
| **TZTN** | **Tazewell** | **146.96** | **5** | *e*PKPdf | **PKPdf** | **15 40 51.4** | **+0.4** |
| **234A** | **Clairette** baz=147 | **146.99** | **29** | P | **PKPbc** | **15 40 52.9** | **-0.2** |
| **Y39A** | **Lockesburg** baz=147 | **147.04** | **22** | P | **PKPbc** | **15 40 52.9** | **-0.3** |
| **432A** | **Menard** baz=147 | **147.06** | **32** | P | **PKPbc** | **15 40 52.6** | **-0.8** |
| **333A** | **Richland Sprin** baz=147 | **147.13** | **31** | P | **PKPbc** | **15 40 53.3** | **-0.2** |
| **531A** | **Rocksprings** baz=147 | **147.21** | **34** | P | **PKPbc** | **15 40 54.4** | **+0.6** |
| **Z38A** | **Mt. Pleasant** baz=147 | **147.31** | **23** | P | **PKPab** | **15 40 55.2** | **-0.5** |
| **JCT** | **Junction City** | **147.37** | **33** | *e*PKIKP | **PKPdf** | **15 40 50.5** | **-1.4** |
| **JCT** | **Junction City** baz=147 | **147.37** | **33** | P | **PKPbc** | **15 40 53.8** | **-0.5** |
| **JCT** | **Junction City** | **147.37** | **33** | *e*PKPdf | **PKPdf** | **15 40 50.5** | **-1.4** |
| **334A** | **Lometa** baz=147 | **147.49** | **30** | P | **PKPbc** | **15 40 53.7** | **-0.8** |
| **433A** | **Art** baz=147 | **147.53** | **31** | P | **PKPdf** | **15 40 53.0** | **+0.9** |
| **532A** | **Rocksprings** baz=147 | **147.59** | **33** | P | **PKPbc** | **15 40 54.4** | **-0.5** |
| **631A** | **Perdido Creek** baz=148 | **147.76** | **35** | P | **PKPbc** | **15 40 54.0** | **-1.4** |
| **138A** | **Matatall Enter** baz=148 | **147.79** | **24** | P | **PKPbc** | **15 40 54.4** | **-0.9** |
| **434A** | **Burnet** baz=148 | **147.90** | **30** | P | **PKPdf** | **15 40 53.5** | **+0.8** |
| **335A** | **Moody** baz=148 | **147.93** | **29** | P | **PKPbc** | **15 40 55.2** | **-0.5** |
| **OXF** | **Oxford** | **147.96** | **14** | *e*PKP2 | **PKPbc** | **15 40 56.3** | **+0.6** |
| **OXF** | **Oxford** | **147.96** | **14** | *e*PKPbc | **PKPbc** | **15 40 56.3** | **+0.6** |
| **533A** | **Kerrville** baz=148 | **148.10** | **32** | P | **PKPbc** | **15 40 56.8** | **+0.5** |
| **336A** | **Riesel** baz=148 | **148.12** | **28** | P | **PKPbc** | **15 40 56.4** | **+0.2** |
| **632A** | **Uvalde** baz=148 | **148.13** | **34** | P | **PKPbc** | **15 40 54.8** | **-1.5** |
| **534A** | **Blanco** baz=148 | **148.43** | **31** | P | **PKPbc** | **15 40 55.8** | **-1.3** |
| **KMSC** | **Kings Mountain** baz=148 | **148.49** | **2** | P | **PKPbc** | **15 40 56.5** | **-0.6** |
| **633A** | **Saathoff Ranch** baz=148 | **148.50** | **33** | P | **PKPbc** | **15 40 57.1** | **-0.2** |
| **732A** | **Laxson Ranch,** baz=148 | **148.62** | **35** | P | **PKPbc** | **15 40 57.9** | **+0.3** |
| **832A** | **Faith Ranch, C** baz=149 | **148.96** | **35** | P | **PKPdf** | **15 40 56.4** | **+1.9** |
| **733A** | **Divot King Ran** baz=149 | **149.01** | **34** | P | **PKPdf** | **15 40 56.5** | **+1.9** |
| **339A** | **Huntington** baz=149 | **149.17** | **25** | P | **PKPdf** | **15 40 56.0** | **+1.3** |
| **439A** | **Center Grove,** baz=149 | **149.55** | **25** | P | **PKPbc** | **15 41 00.0** | **+0.2** |
| **933A** | **Laredo** baz=150 | **149.87** | **35** | P | **PKPbc** | **15 41 01.2** | **+0.5** |
| **GOGA** | **Godfrey** | **150.08** | **6** | *e*PKP2 | **PKPbc** | **15 41 00.4** | **-0.7** |
| **GOGA** | **Godfrey** | **150.08** | **6** | *e*PKPbc | **PKPbc** | **15 41 00.4** | **-0.7** |
| **LVC** | **Limon Verde** | **151.82** | **202** | *e*PKPbc | **PKPbc** | **15 41 06.9** | **+1.1** |
| **LPAZ** | **La Paz** comp=Z,1.1nm,0.9s,baz=24,slow=12,SNR=3.8 | **157.02** | **211** | PKP | **PKPdf** | **15 41 07.5** | **+0.2** |

**KRSC 25 15:22:37.8±2.2, 48°50N×156°95E, h15km±7km, ML4.0, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PAU** | **Pauzhetka** | **2.97** | **358** | *e*P | Pn | 15 23 26.0 | +1.6 |
| PAU | | | | *e*S | Sn | 15 24 01.3 | +1.6 |
| **ASAK** | **Asacha** | **3.93** | **8** | *e*P | Pn | 15 23 41.8 | +4.1 |
| **RUS** | **Russkaya** | **4.06** | **14** | *e*P | Pn | 15 23 43.1 | +3.8 |
| **MTVR** | **Mutnovka** | **4.06** | **11** | *e*P | Pn | 15 23 43.8 | +4.2 |
| **PET** | **Petropavlovsk** | **4.66** | **13** | *e*P | Pn | 15 23 51.9 | +4.4 |
| **KOK** | **Koryaka** | **4.91** | **12** | *e*P | Pn | 15 23 55.9 | +4.7 |
| **SDLR** | **Sedlovina** | **4.94** | **14** | *e*P | Pn | 15 23 55.7 | +4.1 |
| **KRX** | **Arik** | **4.98** | **12** | *e*P | Pn | 15 23 56.6 | +4.4 |
| **SPN** | **Mys Shipunski** | **5.00** | **22** | *e*P | Pn | 15 23 57.9 | +5.7 |
| SPN | | | | *e*S | Sn | 15 24 56.6 | +7.0 |
| **GNL** | **Ganaly** | **5.24** | **6** | *e*P | Pn | 15 23 59.6 | +3.9 |
| **MKZ** | **Mys Kozlova** | **6.75** | **24** | *e*P | Pn | 15 24 21.3 | +5.0 |
| **KBTR** | **Krutoberegovo** | **8.51** | **23** | *e*P | Pn | 15 24 44.9 | +4.5 |
| **BKI** | **Bering** | **8.72** | **36** | *e*P | Pn | 15 24 47.3 | +4.0 |

*ISCJB **25** 15:23:16.7±0.6, 3.66S±0.09×100.02E±0.09, h10km, mb4.4/21, Error ellipse: s-maj=16.3km s-min=7.5km az=43.3*
*IDC **25** 15:23:16.9±0.8, 3.73S×99.96E, h0km, mb4.3/19, mb1 4.4/21, mb1mx4.2/45, mbtmp4.4/21, ML4.3/2, Error ellipse: s-maj=26.4km s-min=14.1km az=44.0*
*NEIC **25** 15:23:18.5±7.3, 3.78S×99.92E, h11km±44km, mb4.7/2, Error ellipse: s-maj=26.8km s-min=10.0km az=56.0*
**ISC 25 15:23:18.4±0.8, 3.8S±0.1×100.0E±0.1, h10km, n41, σ1°21/33, mb4.3/21, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **3.05** | **101** | *e*Pn | **Pn** | **15 24 07.6** | **+0.9** |
| **BKNI** | **Bangkinang** | **4.20** | **15** | P | Pn | 15 24 19.3 | -3.2 |
| **LEM** | **Lembang** 6.5nm,0.3s,baz=342,slow=20,SNR=2.9 | **8.21** | **112** | Pn | **Pn** | **15 25 19.5** | **+1.6** |
| **CISI** | **Cisompet, Garu** | **8.68** | **116** | *e*P | **Pn** | **15 25 22.5** | **-1.7** |
| **KAPI** | **Kappang** 0.6nm,0.3s,baz=80,slow=18,SNR=2.6 | **19.77** | **94** | P | **P** | **15 27 49.1** | **+0.2** |
| **KAPI** | **Kappang** | **19.77** | **94** | *e*P | **P** | **15 27 50.1** | **+1.2** |
| **CMAR** | **Chiang Mai Arr** 8.6nm,0.9s,baz=189,slow=9.1,SNR=5.9 | **22.10** | **357** | P | **P** | **15 28 14.2** | **+0.2** |
| **SLVN** | **Son La** 21nm,1.1s | **25.23** | **9** | *e*P | **P** | **15 28 45.4** | **+0.7** |
| **H08S2** | **Diego Garcia H** baz=82,slow=75,SNR=7.8 | **27.59** | **261** | T | T | 15 58 26.6 | |
| **H08S3** | **Diego Garcia H** baz=82,slow=75,SNR=7.9 | **27.60** | **261** | T | T | 15 58 24.6 | |
| **H08S1** | **Diego Garcia H** baz=82,slow=75,SNR=9.5 | **27.61** | **261** | T | T | 15 58 24.2 | |
| **SIJI** | **Sorong** 3.1nm,0.2s,baz=198,slow=20,SNR=5.1 | **31.41** | **86** | P | **P** | **15 29 38.3** | **-1.7** |
| **H01W3** | **Cape Leeuwin H** baz=338 | **33.65** | **159** | T | T | 16 05 47.7 | |
| **H01W2** | **Cape Leeuwin H** baz=338 | **33.66** | **159** | T | T | 16 05 57.9 | |
| **H01W1** | **Cape Leeuwin H** baz=338 | **33.66** | **159** | T | T | 16 05 48.5 | |
| **WRA** | **Warramunga Arr** 2.7nm,0.6s,baz=294,slow=8.9,SNR=4.8 | **37.17** | **118** | P | **P** | **15 30 30.2** | **+0.2** |
| **WRAB** | **Tennant Creek** | **37.18** | **118** | *e*P | **P** | **15 30 29.8** | **-0.1** |
| **ASAR** | **Alice Springs** 3.2nm,0.8s,baz=299,slow=8.1,SNR=4.0 | **38.28** | **124** | P | **P** | **15 30 39.0** | **-0.3** |
| **KSAR** | **Wonju Array Be** | **48.52** | **30** | P | **P** | **15 31 59.6** | **-2.1** |
| **KSRS** | **Korea Array** 2.2nm,0.9s,baz=219,slow=7.9,SNR=4.5 | **48.55** | **30** | P | **P** | **15 31 59.6** | **-2.3** |
| **TKM2** | **Tokmak 2** | **51.42** | **337** | *e*P | **P** | **15 32 24.0** | **0.0** |
| **SONM** | **Songino Array** 7.6nm,0.7s,baz=187,slow=8.8,SNR=8.3 | **51.69** | **6** | P | **P** | **15 32 27.2** | **+1.5** |
| **ULN** | **Ulaanbaatar** 9.2nm,0.8s | **51.78** | **6** | *e*P | **P** | **15 32 27.6** | **+1.2** |
| **EKS2** | **Erkin-Say** | **51.93** | **336** | *e*P | **P** | **15 32 28.7** | **+1.1** |
| **MKAR** | **Makanchi Array** 4.2nm,0.7s,baz=146,slow=8.8,SNR=4.5 | **52.70** | **345** | P | **P** | **15 32 33.9** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** 15nm,0.9s,baz=226,slow=6.2,SNR=7.7 | **55.72** | **27** | P | **P** | **15 32 56.0** | **+0.8** |
| **GEYT** | **Alibeck** 2.5nm,0.8s,baz=123,slow=9.7,SNR=3.9 | **56.77** | **321** | P | **P** | **15 33 02.6** | **-0.2** |
| **KURBB** | **Kurchatov Arra** 5.5nm,0.2s,baz=166,slow=7.3,SNR=6.0 | **57.22** | **344** | P | **P** | **15 33 03.6** | **-2.1** |
| **KURK** | **Kurchatov** | **57.27** | **344** | P | **P** | **15 33 03.6** | **-2.5** |
| **ZALV** | **Zalesovo Beam** 11nm,0.8s,baz=174,slow=5.7,SNR=6.1 | **58.88** | **350** | P | **P** | **15 33 17.8** | **+0.5** |
| **BVAR** | **Borovoye Array** 1.7nm,0.7s,baz=147,slow=8.8,SNR=4.0 | **61.81** | **340** | P | **P** | **15 33 36.8** | **-0.6** |
| **AKTO** | **Aktyubinsk** 1.2nm,0.6s,baz=104,slow=15,SNR=3.3 | **64.87** | **332** | P | **P** | **15 33 58.1** | **+0.4** |
| **YAK** | **Yakutsk** 2.9nm,0.3s,baz=292,slow=0.6,SNR=2.9 | **69.44** | **14** | P | **P** | **15 34 25.8** | **-0.7** |
| **KBZ** | **Khabaz** 3.0nm,0.9s,baz=102,slow=8.8,SNR=3.8 | **69.61** | **320** | P | **P** | **15 34 28.1** | **+0.3** |
| **BRTR** | **Keskin Array B** 1.0nm,0.6s,baz=126,slow=6.4,SNR=3.7 | **74.48** | **313** | P | **P** | **15 34 57.0** | **-0.4** |
| **VNDA** | **Vanda** 0.9nm,0.8s,baz=302,slow=5.5,SNR=2.1 | **80.45** | **169** | P | **P** | **15 35 30.5** | **+0.5** |
| **AKASG** | **Malin Array Be** 0.1nm,0.3s,baz=89,slow=3.9,SNR=5.5 | **80.84** | **323** | P | **P** | **15 35 31.1** | **-1.4** |
| **GERES** | **GERESS Array B** 0.7nm,0.7s,baz=109,slow=8.4,SNR=4.7 | **90.33** | **319** | P | **P** | **15 36 20.3** | **+0.3** |
| **NVAR** | **Mina Array Bea** 0.7nm,0.7s,baz=278,slow=2.6,SNR=2.9 | **130.97** | **40** | PKP | **PKPdf** | **15 42 32.7** | **+1.6** |
| **WMOK** | **Wichita Mounta** | **144.60** | **27** | *e*PKPdf | PKPbc | 15 42 54.8 | +0.2 |
| **TXAR** | **Lajitas Array** 3.8nm,0.7s,baz=298,slow=1.2,SNR=8.3 | **146.10** | **39** | PKPbc | **PKPbc** | **15 43 00.1** | **+0.5** |

**IDC 25 15:29:18.7±3.6, 3.14S×100.82E, h0km, mb3.3/4, mb1 3.5/4, mb1mx3.3/50, mbtmp3.3/4, Error ellipse: s-maj=152.1km s-min=22.8km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** 0.5nm,0.6s,baz=188,slow=11,SNR=5.5 | **21.54** | **355** | P | P | 15 34 08.9 | -0.8 |
| **H01W3** | **Cape Leeuwin H** baz=318,slow=75,SNR=8.3 | **33.92** | **160** | T | T | 16 12 04.7 | |
| **H01W2** | **Cape Leeuwin H** baz=318,slow=75,SNR=12 | **33.94** | **160** | T | T | 16 12 08.3 | |
| **H01W1** | **Cape Leeuwin H** baz=318,slow=75,SNR=9.8 | **33.94** | **160** | T | T | 16 12 25.7 | |
| **WRA** | **Warramunga Arr** 0.4nm,0.7s,baz=294,slow=8.4,SNR=2.1 | **36.72** | **120** | P | P | 15 36 27.9 | -0.1 |
| **ASAR** | **Alice Springs** 0.2nm,0.8s,baz=297,slow=7.0,SNR=3.6 | **37.93** | **125** | P | P | 15 36 38.2 | 0.0 |
| **MKAR** | **Makanchi Array** 0.3nm,0.4s,baz=156,slow=6.8,SNR=2.0 | **52.34** | **344** | P | P | 15 38 33.2 | +0.8 |
| **TXAR** | **Lajitas Array** 0.2nm,0.3s,baz=330,slow=3.2,SNR=4.7 | **145.08** | **39** | PKPbc | PKPbc | 15 48 56.8 | -1.6 |

*BJI **25** 15:31:00.2, 4.11S×100.66E, h10km, mb4.9/5*
*IDC **25** 15:31:07.7±0.9, 3.19S×100.20E, h0km, mb4.3/18, mb1 4.4/21, mb1mx4.1/53, mbtmp4.4/21, ML4.2/3, Error ellipse: s-maj=29.6km s-min=13.1km az=46.0*
*DJA **25** 15:31:10.6±0.6, 3.3°S±4°×10°0E±°, h31km±4km, M5.1/12, MLv5.1/12*
*ISCJB **25** 15:31:10.3±0.4, 3.28S±0.04×100.13E±0.05, h33km, mb4.4/22, Error ellipse: s-maj=8.9km s-min=4.0km az=146.2*
*NEIC **25** 15:31:11.5±3.1, 3.22S×100.22E, h26km±20km, mb4.5/4, Error ellipse: s-maj=21.5km s-min=6.0km az=53.0*
*AUST **25** 15:31:16.2, 2.88S×100.98E, h15km*
**ISC 25 15:31:12.4±0.6, 3.27S±0.07×100.12E±0.08, h35km, n83, σ1°08/64, mb4.4/22, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.52** | **347** | P | **Pn** | **15 31 21.9** | **-1.4** |
| PPSI | | | | S | **Sn** | **15 31 29.8** | **-1.2** |
| **SISI** | **Saibi** | **2.19** | **332** | P | **Pn** | **15 31 44.5** | **-1.9** |
| SISI | | | | S | **Sn** | **15 32 11.5** | **-0.8** |
| **PDSI** | **Padang** | **2.37** | **8** | S | **Sn** | **15 32 16.0** | **-0.7** |
| **KSI** | **Kapahiang** | **2.49** | **99** | P | **Pn** | **15 31 49.7** | **-0.9** |
| **SDSI** | **Sungai Dareh** | **2.67** | **29** | P | **Pn** | **15 31 52.3** | **-0.6** |
| **PPI** | **Padang Panjang** baz=2.5,SNR=29 | **2.81** | **6** | P | **Pn** | **15 31 54.2** | **-0.6** |
| **PPI** | **Padang Panjang** | **2.81** | **6** | P | **Pn** | **15 31 54.4** | **-0.5** |
| PPI | | | | S | **Sn** | **15 32 27.7** | **+0.1** |
| **MNAI** | **Manna** baz=2.5,SNR=8.7 | **3.02** | **111** | P | **Pn** | **15 31 57.5** | **-0.3** |
| **MNAI** | **Manna** | **3.02** | **111** | P | **Pn** | **15 31 57.4** | **-0.4** |
| **MNAI** | **Manna** | **3.02** | **111** | *e*P | **Pn** | **15 31 57.2** | **-0.7** |
| **RGRI** | **Rengat** | **3.65** | **37** | P | **Pn** | **15 32 05.8** | **-0.6** |
| **BKNI** | **Bangkinang** baz=3.2,SNR=4.6 | **3.69** | **14** | P | **Pn** | **15 32 06.7** | **-0.3** |
| **BKNI** | **Bangkinang** | **3.69** | **14** | P | **Pn** | **15 32 06.7** | **-0.3** |
| **BKNI** | **Bangkinang** | **3.69** | **14** | *e*P | **Pn** | **15 32 06.6** | **-0.3** |
| **JMBI** | **JAMBI** | **3.87** | **65** | P | **Pn** | **15 32 10.8** | **+1.3** |
| **MNSI** | **Mandailing Nat** | **4.08** | **352** | P | **Pn** | **15 32 10.7** | **-1.6** |
| **MDSI** | **Maura Dua** | **4.22** | **107** | P | **Pn** | **15 32 15.0** | **+0.7** |
| **LWLI** | **Liwa** | **4.29** | **114** | P | **Pn** | **15 32 15.3** | **0.0** |
| **KASI** | **Kota Agung** | **4.90** | **117** | P | **Pn** | **15 32 23.5** | **-0.1** |
| **GSI** | **Gunungsitoli** | **5.21** | **331** | P | Pn | 15 32 24.4 | -3.5 |
| **BTDF** | **Bukit Timah Da** baz=5.1,SNR=3.3 | **5.87** | **38** | P | Pn | 15 32 30.7 | -6.3 |
| **PSI** | **Prapat** 1.7nm,0.3s,baz=351,slow=8.8,SNR=4.7 | **6.15** | **349** | Pn | **Pn** | **15 32 39.6** | **-1.4** |
| **CGJI** | **Cibinong** | **6.46** | **121** | P | Pn | 15 32 35.3 | -10 |
| **IPM** | **Ipoh** | **7.75** | **7** | *e*P | **Pn** | **15 33 03.2** | **+0.3** |
| **LEM** | **Lembang** 6.9nm,0.3s,baz=326,slow=23,SNR=5.6 | **8.26** | **116** | Pn | **Pn** | **15 33 10.2** | **+0.3** |
| **LEM** | **Lembang** baz=7.7,SNR=3.4 | **8.26** | **116** | P | Pn | 15 33 13.2 | +3.3 |
| **CISI** | **Cisompet, Garu** baz=8.3,SNR=8.5 | **8.76** | **119** | P | **Pn** | **15 33 14.7** | **-2.0** |
| **CISI** | **Cisompet, Garu** | **8.76** | **119** | P | **Pn** | **15 33 13.7** | **-3.0** |
| **CISI** | **Cisompet, Garu** 100nm,0.6s | **8.76** | **119** | *e*P | **Pn** | **15 33 14.4** | **-2.3** |
| **KAPI** | **Kappang** 0.9nm,0.3s,baz=256,slow=11,SNR=5.2 | **19.65** | **96** | P | **P** | **15 35 38.0** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** 4.1nm,0.8s,baz=187,slow=10,SNR=26 | **21.62** | **357** | P | **P** | **15 35 57.6** | **-2.1** |
| **BATI** | **Baumata** 31nm,1.0s,baz=288,slow=19,SNR=2.7 | **24.36** | **108** | P | **P** | **15 36 25.7** | **-1.7** |
| **H08S2** | **Diego Garcia H** baz=82,slow=75,SNR=160 | **27.84** | **260** | T | T | 16 06 08.1 | |
| **H08S3** | **Diego Garcia H** baz=82,slow=75,SNR=173 | **27.84** | **260** | T | T | 16 06 09.9 | |
| **H08S1** | **Diego Garcia H** baz=82,slow=75,SNR=150 | **27.86** | **260** | T | T | 16 06 05.9 | |
| **H08N1** | **Diego Garcia H** baz=257,slow=76,SNR=32 | **29.16** | **263** | T | T | 16 08 17.4 | |
| **H08N2** | **Diego Garcia H** baz=257,slow=76,SNR=36 | **29.18** | **263** | T | T | 16 08 26.1 | |
| **H08N3** | **Diego Garcia H** baz=257,slow=76,SNR=32 | **29.18** | **263** | T | T | 16 08 19.1 | |
| **KNRA** | **Kununurra** baz=30,SNR=5.0 | **30.76** | **115** | P | **P** | **15 37 23.9** | **-0.9** |
| **ODAN** | **Odare** 18nm,0.5s | **32.38** | **338** | *e*P | **P** | **15 37 40.6** | **+1.4** |
| **TAPN** | **Taplejung** 26nm,0.8s | **32.72** | **339** | *e*P | **P** | **15 37 43.1** | **+0.9** |
| **RAMN** | **Ramite** 5.1nm,0.4s | **32.76** | **337** | *e*P | P | 15 37 45.8 | +3.3 |
| **PKI** | **Pulchoki** | **33.79** | **336** | *e*P | P | 15 37 56.1 | +4.5 |
| **PKIN** | **Phulchoki** | **33.80** | **336** | *e*P | P | 15 37 56.0 | +4.5 |
| **PKIN** | **Phulchoki** | **33.80** | **336** | *e*P | P | 15 37 56.1 | +4.5 |
| **GUN** | **Gumba** 42nm,0.7s | **33.90** | **337** | *e*P | P | 15 37 54.9 | +2.3 |
| **KKN** | **Kakani** 16nm,0.8s | **34.03** | **336** | *e*P | P | 15 37 57.6 | +4.0 |
| **H01W3** | **Cape Leeuwin H** baz=336,slow=76,SNR=17 | **34.04** | **159** | T | T | 16 13 53.4 | |
| **H01W2** | **Cape Leeuwin H** baz=336,slow=76,SNR=18 | **34.05** | **159** | T | T | 16 13 49.5 | |
| **H01W1** | **Cape Leeuwin H** baz=336,slow=76,SNR=9.7 | **34.05** | **159** | T | T | 16 13 55.5 | |
| **GKN** | **Gorkha** 8.1nm,0.5s | **34.49** | **335** | *e*P | P | 15 38 01.9 | +4.5 |
| **WRKA** | **Warakurna** baz=34,SNR=3.4 | **34.69** | **131** | P | P | 15 38 07.4 | +8.3 |
| **KOLN** | **Koldanda** 18nm,0.8s | **34.73** | **334** | *e*P | P | 15 38 05.6 | +6.0 |
| **WRA** | **Warramunga Arr** 1.6nm,0.4s,baz=303,slow=8.2,SNR=18 | **37.26** | **119** | P | **P** | **15 38 20.9** | **-0.2** |
| **WRAB** | **Tennant Creek** 3.5nm,0.4s | **37.26** | **119** | *e*P | **P** | **15 38 20.6** | **-0.6** |
| **ASAR** | **Alice Springs** 2.3nm,0.6s,baz=298,slow=7.5,SNR=19 | **38.42** | **125** | P | **P** | **15 38 31.2** | **+0.2** |
| ASAR | | | | PcP | **PcP** | **15 40 45.1** | **+1.1** |
| | 0.2nm,0.5s,baz=308,slow=2.4,SNR=4.5 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.14** | **12** | *e*P | **P** | **15 39 24.8** | **-0.9** |
| HHC | 16nm,0.8s | | | PMZ | | | |
| **MTSU** | **Mount Surprise** baz=45,SNR=3.9 | **45.71** | **112** | P | **P** | **15 39 30.6** | **+0.1** |
| **JNU** | **Nakatsue** 7.0nm,1.0s,baz=51,slow=13,SNR=3.0 | **46.44** | **36** | P | **P** | **15 39 35.0** | **-1.0** |
| **HTT** | **Hallett** baz=47,SNR=3.9 | **47.02** | **134** | P | P | 15 39 31.2 | -9.4 |
| **KSAR** | **Wonju Array Be** | **48.02** | **30** | P | **P** | **15 39 47.2** | **-1.0** |
| **KSRS** | **Korea Array** 2.7nm,1.0s,baz=234,slow=8.4,SNR=3.8 | **48.05** | **30** | P | **P** | **15 39 47.2** | **-1.2** |
| **TKM2** | **Tokmak 2** 3.2nm,0.7s | **51.04** | **337** | *e*P | **P** | **15 40 12.0** | **+0.5** |
| **SONM** | **Songino Array** 3.7nm,0.8s,baz=184,slow=9.1,SNR=22 | **51.19** | **5** | P | **P** | **15 40 13.4** | **+1.0** |
| SONM | 1.6nm,0.6s,baz=194,slow=3.3,SNR=5.5 | | | PcP | **PcP** | **15 41 28.1** | **+0.7** |
| **CMSA** | **Cobar Meteorol** baz=51,SNR=7.9 | **51.22** | **129** | P | **P** | **15 40 14.4** | **+1.7** |
| **EKS2** | **Erkin-Say** 4.5nm,0.8s | **51.56** | **335** | *e*P | **P** | **15 40 16.3** | **+1.1** |
| **MKAR** | **Makanchi Array** 5.3nm,0.7s,baz=150,slow=8.4,SNR=22 | **52.28** | **345** | P | **P** | **15 40 21.2** | **+0.8** |
| **USRK** | **Ussuriysk Ar.** 6.4nm,0.7s,baz=233,slow=7.2,SNR=13 | **55.22** | **28** | P | **P** | **15 40 41.9** | **0.0** |
| **KURBB** | **Kurchatov Arra** 3.0nm,0.4s,baz=160,slow=7.2,SNR=4.2 | **56.80** | **344** | P | **P** | **15 40 53.4** | **+0.3** |
| **KURK** | **Kurchatov** | **56.86** | **344** | P | **P** | **15 40 53.4** | **-0.1** |
| **ZALV** | **Zalesovo Beam** 5.5nm,0.9s,baz=175,slow=5.2,SNR=16 | **58.44** | **349** | P | **P** | **15 41 04.6** | **+0.1** |
| **BVAR** | **Borovoye Array** 0.9nm,0.6s,baz=124,slow=14,SNR=3.5 | **61.41** | **340** | P | **P** | **15 41 23.5** | **-1.5** |
| **ABKAR** | **Akbulak array** 4.5nm,0.9s | **62.81** | **332** | *e*P | **P** | **15 41 34.1** | **-0.3** |
| **AKTO** | **Aktyubinsk** 1.4nm,0.8s,baz=118,slow=11,SNR=4.1 | **64.53** | **332** | P | **P** | **15 41 45.6** | **-0.2** |
| **YAK** | **Yakutsk** 2.3nm,0.3s,baz=270,slow=1.0,SNR=2.1 | **68.94** | **14** | P | **P** | **15 42 12.6** | **-1.0** |
| **KBZ** | **Khabaz** 3.0nm,1.0s,baz=141,slow=7.6,SNR=5.0 | **69.35** | **319** | P | **P** | **15 42 17.1** | **+0.6** |
| **BRTR** | **Keskin Array B** 1.0nm,0.6s,baz=134,slow=7.6,SNR=7.4 | **74.27** | **313** | P | **P** | **15 42 46.4** | **0.0** |
| **FINES** | **FINESS Array B** 0.7nm,0.5s,baz=114,slow=4.6,SNR=9.7 | **85.29** | **332** | P | **P** | **15 43 46.4** | **+0.9** |
| **ARCES** | **ARCESS Array B** 1.3nm,0.7s,baz=93,slow=4.7,SNR=3.6 | **87.70** | **340** | P | **P** | **15 43 57.9** | **+0.8** |
| **NVAR** | **Mina Array Bea** 0.2nm,0.3s,baz=277,slow=2.4,SNR=2.2 | **130.50** | **40** | PKP | **PKPdf** | **15 50 22.2** | **+2.0** |
| **WMOK** | **Wichita Mounta** | **144.10** | **27** | *e*PKPdf | PKPbc | 15 50 42.5 | -0.5 |
| **TXAR** | **Lajitas Array** 5.3nm,0.7s,baz=311,slow=0.8,SNR=42 | **145.62** | **39** | PKPbc | **PKPab** | **15 50 49.4** | **+0.9** |
| **JCT** | **Junction City** | **147.03** | **33** | *e*PKPbc | **PKPab** | **15 50 52.7** | **-1.0** |
| JCT | | | | *e* | | 15 51 00.6 | |

**IDC 25 15:33:27.2±2.6, 3.48S×98.61E, h0km, mb3.8/7, mb1 4.0/7, mb1mx3.6/52, mbtmp3.8/7, Error ellipse: s-maj=103.7km s-min=23.0km az=57.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** 0.6nm,0.4s,baz=190,slow=9.1,SNR=5.0 | **21.80** | **1** | P | P | 15 38 21.2 | +0.1 |
| **H08S2** | **Diego Garcia H** baz=82 | **26.32** | **260** | T | T | 16 08 11.4 | |
| **H08S3** | **Diego Garcia H** baz=82 | **26.32** | **260** | T | T | 16 08 11.9 | |
| **H08S1** | **Diego Carcia H** baz=82 | **26.33** | **260** | T | T | 16 08 13.1 | |
| **H01W3** | **Cape Leeuwin H** baz=335 | **34.41** | **157** | T | T | 16 17 12.5 | |
| **H01W2** | **Cape Leeuwin H** baz=335 | **34.42** | **157** | T | T | 16 17 13.8 | |
| **H01W1** | **Cape Leeuwin H** baz=335 | **34.42** | **157** | T | T | 16 17 10.4 | |
| **WRA** | **Warramunga Arr** 0.3nm,0.5s,baz=287,slow=8.7,SNR=3.2 | **38.48** | **118** | P | P | 15 40 51.7 | +0.2 |
| **ASAR** | **Alice Springs** 0.4nm,0.5s,baz=297,slow=7.9,SNR=3.8 | **39.55** | **124** | P | P | 15 41 00.6 | +0.2 |
| **SONM** | **Songino Array** 0.7nm,0.7s,baz=187,slow=8.4,SNR=3.0 | **51.56** | **7** | P | P | 15 42 34.9 | -0.3 |
| **MKAR** | **Makanchi Array** 0.8nm,0.7s,baz=151,slow=5.8,SNR=4.2 | **52.10** | **346** | P | P | 15 42 40.2 | +1.1 |
| **ZALV** | **Zalesovo Beam** 1.3nm,0.7s,baz=183,slow=5.6,SNR=3.7 | **58.38** | **350** | P | P | 15 43 23.8 | -0.4 |
| **ARCES** | **ARCESS Array B** 5.5nm,1.0s,baz=138,slow=5.5,SNR=3.2 | **87.39** | **340** | P | P | 15 46 16.0 | 0.0 |
| **TXAR** | **Lajitas Array** 0.9nm,0.7s,baz=242,slow=1.9,SNR=4.2 | **146.72** | **37** | PKPbc | PKPdf | 15 53 09.7 | -0.7 |

**IDC 25 15:34:35.3±4.2, 2.87S×99.89E, h0km, mb3.4/4, mb1 3.6/4, mb1mx3.4/45, mbtmp3.5/4, Error ellipse: s-maj=170.9km s-min=30.3km az=61.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** 0.5nm,0.5s,baz=193,slow=7.4,SNR=2.5 | **21.21** | **358** | P | P | 15 39 23.5 | +0.6 |
| **ASAR** | **Alice Springs** 0.4nm,0.6s,baz=299,slow=8.0,SNR=3.3 | **38.84** | **125** | P | P | 15 42 02.9 | +0.4 |
| **SONM** | **Songino Array** 0.6nm,0.8s,baz=179,slow=7.2,SNR=2.9 | **50.82** | **6** | P | P | 15 43 37.5 | -0.2 |
| **MKAR** | **Makanchi Array** 0.3nm,0.4s,baz=148,slow=9.8,SNR=2.1 | **51.84** | **345** | P | P | 15 43 45.6 | +0.3 |
| **TXAR** | **Lajitas Array** 0.4nm,0.5s,baz=316,slow=2.5,SNR=3.9 | **145.45** | **38** | PKPbc | PKPbc | 15 54 14.1 | -2.1 |

*IDC **25** 15:35:38.1±1.4, 3.68S×99.55E, h0km, mb3.9/10, mb1 4.0/10, mb1mx3.8/44, mbtmp3.9/10, Error ellipse: s-maj=52.9km s-min=21.1km az=53.0*
*NEIC **25** 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TXAR** | **Lajitas Array** | **146.30** | **38** | PKPbc | **PKPab** | **15 55 22.1** | **+0.5** |
| | 0.8nm,0.6s,baz=301,slow=1.6,SNR=9.2 | | | | | | |
| **JCT** | **Junction City** | **147.69** | **32** | *e*PKPbc | **PKPbc** | **15 55 24.7** | **+0.1** |

*PRU **25** 15:37:06.1,50°.19N×19°.13E,h0km*
**CSEM 25 15:37:03.8±0.8,50°.27N×19°.21E,h1km,Error ellipse: s-maj=14.9km s-min=5.5km az=31.0,Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKC** | **Ostrava-Krasne** | **0.81** | **238** | *e*SG | Sg | 15 37 30.7 | +0.8 |
| **OKC** | **Ostrava-Krasne** | **0.81** | **238** | Sg | Sg | 15 37 30.7 | +0.8 |
| **LANS** | **Liptovska Anna** | **1.14** | **171** | *e*Pg | Pb | 15 37 26.0 | -0.3 |
| LANS | | | | *e*Sg | Sg | 15 37 39.5 | -1.0 |
| **LANS** | **Liptovska Anna** | **1.14** | **171** | *e*Pg | Pb | 15 37 26.0 | -0.3 |
| LANS | | | | *e*Sg | Sg | 15 37 39.5 | -1.0 |
| **MORC** | **Moravsky Berou** | **1.18** | **246** | *e*Pg | Pn | 15 37 27.9 | +0.3 |
| MORC | | | | *e*Sg | Sb | 15 37 42.8 | -0.2 |
| **KRLC** | **Kraliky** | **1.57** | **264** | *e*PG | Pb | 15 37 33.8 | 0.0 |
| KRLC | | | | *e*SG | Sg | 15 37 54.8 | +0.3 |
| **KRLC** | **Kraliky** | **1.57** | **264** | Pg | Pb | 15 37 33.8 | 0.0 |
| KRLC | | | | Sg | Sg | 15 37 54.8 | +0.3 |
| **VYHS** | **Vyhne** | **1.80** | **188** | *e*PN | Pn | 15 37 36.1 | +0.1 |
| VYHS | | | | *e*SN | Sn | 15 37 57.0 | -2.4 |
| **VYHS** | **Vyhne** | **1.80** | **188** | *e*Pn | Pn | 15 37 36.1 | +0.1 |
| VYHS | | | | *e*Sn | Sn | 15 37 57.0 | -2.4 |
| **DPC** | **Dobruska-Polom** | **1.85** | **273** | *e*PG | Pb | 15 37 38.8 | +0.3 |
| DPC | | | | *e*SG | Sg | 15 38 03.7 | +0.3 |
| **DPC** | **Dobruska-Polom** | **1.85** | **273** | Pg | Pb | 15 37 38.8 | +0.3 |
| DPC | | | | Sg | Sg | 15 38 03.7 | +0.3 |
| **GOPC** | **GO Pecny, Ondr** | **2.87** | **264** | *e*SG | Sg | 15 38 34.7 | -1.4 |
| **GOPC** | **GO Pecny, Ondr** | **2.87** | **264** | Sg | Sg | 15 38 34.7 | -1.4 |
| **PRU** | **Pruhonice** | **3.02** | **266** | *e*SG | Sg | 15 38 39.8 | -0.9 |
| **PRU** | **Pruhonice** | **3.02** | **266** | Sg | Sg | 15 38 39.8 | -0.9 |
| **KHC** | **Kasperske Hory** | **3.83** | **255** | *e*SG | Sg | 15 39 06.0 | -0.9 |
| **KHC** | **Kasperske Hory** | **3.83** | **255** | Sg | Sg | 15 39 06.0 | -0.9 |

**IDC 25 15:38:00.4±4.1,3°.17S×99°.54E,h0km,mb3.5/4,mb1 3.7/4, mb1mx3.4/43,mbtmp3.5/4,Error ellipse: s-maj=149.8km s-min=27.0km az=59.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.50** | **358** | P | P | 15 42 51.7 | +0.7 |
| | 0.6nm,0.7s,baz=185,slow=9.7,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.82** | **119** | P | P | 15 45 19.2 | +0.2 |
| | 0.6nm,0.6s,baz=309,slow=8.9,SNR=4.6 | | | | | | |
| **SONM** | **Songino Array** | **51.15** | **6** | P | P | 15 47 05.1 | -0.1 |
| | 0.5nm,0.7s,baz=194,slow=8.9,SNR=3.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.23** | **350** | P | P | 15 47 56.2 | -0.2 |
| | 0.5nm,0.5s,baz=160,slow=6.0,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.91** | **38** | PKPbc | PKPdf | 15 57 41.2 | -1.0 |
| | 0.4nm,0.7s,baz=299,slow=3.9,SNR=3.5 | | | | | | |

**IDC 25 15:39:14.3±3.6,3°.36S×99°.25E,h0km,mb3.5/6,mb1 3.6/6, mb1mx3.5/43,mbtmp3.5/6,Error ellipse: s-maj=142.5km s-min=22.0km az=57.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.68** | **359** | P | P | 15 44 07.3 | +0.5 |
| | 0.4nm,0.4s,baz=186,slow=12,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.98** | **119** | P | P | 15 46 34.7 | +0.3 |
| | 0.4nm,0.6s,baz=302,slow=8.7,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **39.04** | **124** | P | P | 15 46 43.3 | -0.3 |
| | 0.3nm,0.6s,baz=301,slow=7.6,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **51.36** | **6** | P | P | 15 48 20.1 | -0.7 |
| | 0.5nm,0.8s,baz=181,slow=9.4,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.13** | **345** | P | P | 15 48 27.2 | +0.7 |
| | 0.4nm,0.6s,baz=155,slow=7.8,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.36** | **350** | P | P | 15 49 10.9 | -0.3 |
| | 0.7nm,0.5s,baz=180,slow=4.3,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.23** | **38** | PKPbc | PKPdf | 15 58 56.1 | -0.5 |
| | 0.2nm,0.6s,baz=270,slow=0.9,SNR=3.6 | | | | | | |

*IDC **25** 15:40:28.7±1.0,2°.96S×100°.12E,h16km±3km,mb3.8/13, mb1 4.0/14,mb1mx3.8/43,mbtmp3.9/14,ML4.1/1,Error ellipse: s-maj=36.9km s-min=13.8km az=51.0*
*ISCJB **25** 15:40:29.5±0.8,2°.9S±0°.2×100°.4E±0°.2,h27km,mb4.0/17, Error ellipse: s-maj=32.1km s-min=8.3km az=44.9*
*NEIC **25** 15:40:29.9±1.0,3°.04S×100°.22E,mb4.4/4, Error ellipse: s-maj=44.9km s-min=10.6km az=225.0*
**ISC 25 15:40:30.7±0.9,2°.8S±0°.2×100°.5E±0°.2,h27km,n29, σ1=87/29,mb4.1/17,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **2.92** | **121** | P | **Pb** | **15 41 20.2** | **-1.9** |
| **GSI** | **Gunungsitoli** | **5.02** | **325** | *e*P | **Pn** | **15 41 46.8** | **+2.5** |
| **LEM** | **Lembang** | **8.16** | **119** | Pn | **Pn** | **15 42 29.7** | **+2.1** |
| | 2.3nm,0.3s,baz=306,slow=19,SNR=2.7 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.70** | **123** | *e*P | **Pn** | **15 42 36.1** | **+1.2** |
| | 68nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.21** | **356** | P | **P** | **15 45 16.4** | **+1.9** |
| | 4.0nm,0.8s,baz=185,slow=10.0,SNR=4.1 | | | | | | |
| CMAR | | | | pP | **pP** | **15 45 21.4** | **-0.5** |
| | 4.0nm,0.8s,baz=186,slow=10.0,SNR=14 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.24** | **259** | T | T | 16 15 35.2 | |
| | baz=82,slow=75,SNR=13 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.25** | **259** | T | T | 16 15 19.6 | |
| | baz=82,slow=75,SNR=11 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.26** | **259** | T | T | 16 15 22.8 | |
| | baz=82,slow=75,SNR=12 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.33** | **160** | T | T | 16 23 20.5 | |
| | baz=335,slow=76,SNR=7.4 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.34** | **160** | T | T | 16 23 28.6 | |
| | baz=335,slow=76,SNR=7.4 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.34** | **160** | T | T | 16 23 27.5 | |
| | baz=335,slow=76,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.18** | **120** | P | **P** | **15 47 41.5** | **+1.6** |
| | 1.0nm,0.5s,baz=303,slow=9.1,SNR=6.0 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.19** | **120** | *e*P | **P** | **15 47 41.0** | **+1.1** |
| | 3.9nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **38.40** | **126** | P | **P** | **15 47 50.7** | **+0.6** |
| | 1.1nm,0.8s,baz=297,slow=7.4,SNR=8.8 | | | | | | |
| ASAR | | | | pP | **pP** | **15 47 58.2** | **0.0** |
| | 1.4nm,0.7s,baz=302,slow=8.4,SNR=8.3 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 50 03.4** | **-0.1** |
| | 1.0nm,1.0s,baz=276,slow=3.9,SNR=4.9 | | | | | | |
| **SONM** | **Songino Array** | **50.73** | **5** | P | **P** | **15 49 29.2** | **+0.9** |
| | 0.5nm,0.7s,baz=186,slow=9.7,SNR=3.0 | | | | | | |
| SONM | | | | pP | **pP** | **15 49 35.1** | **-1.5** |
| | 3.7nm,0.8s,baz=187,slow=9.1,SNR=19 | | | | | | |
| **TKM2** | **Tokmak 2** | **50.78** | **337** | *e*P | P | 15 49 32.0 | +3.2 |
| | 7.4nm,1.0s | | | | | | |
| TKM2 | | | | *e* | | 15 49 41.4 | |
| **EKS2** | **Erkin-Say** | **51.31** | **335** | *e*P | P | 15 49 36.1 | +3.3 |
| | 3.4nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **51.95** | **344** | P | **P** | **15 49 36.1** | **-1.3** |
| | 1.0nm,0.9s,baz=153,slow=9.7,SNR=2.4 | | | | | | |
| MKAR | | | | pP | **pP** | **15 49 41.5** | **-4.2** |
| | 4.0nm,0.8s,baz=153,slow=8.7,SNR=14 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.68** | **27** | P | **P** | **15 49 58.4** | **+1.0** |
| | 1.2nm,0.6s,baz=222,slow=15,SNR=2.4 | | | | | | |
| USRK | | | | pP | **pP** | **15 50 04.5** | **-1.3** |
| | 6.0nm,0.8s,baz=217,slow=7.6,SNR=7.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.07** | **349** | P | **P** | **15 50 19.8** | **-1.5** |
| | 1.2nm,0.6s,baz=197,slow=4.6,SNR=4.6 | | | | | | |
| ZALV | | | | pP | **pP** | **15 50 25.2** | **-4.6** |
| | 12nm,0.9s,baz=183,slow=5.1,SNR=20 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.59** | **331** | *e*P | **P** | **15 50 53.6** | **+1.3** |
| | 5.7nm,0.9s | | | | | | |
| **KBZ** | **Khabaz** | **69.23** | **319** | P | **P** | **15 51 34.8** | **-0.4** |
| | 1.4nm,0.7s,baz=125,slow=7.2,SNR=5.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.22** | **313** | P | **P** | **15 52 03.9** | **-1.7** |
| | 0.8nm,0.7s,baz=141,slow=8.0,SNR=5.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **80.42** | **322** | P | **P** | **15 52 38.6** | **-1.3** |
| | 0.1nm,0.3s,baz=86,slow=4.7,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **85.06** | **332** | P | **P** | **15 53 05.1** | **+1.4** |
| | 2.1nm,0.8s,baz=122,slow=6.4,SNR=7.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.41** | **340** | P | **P** | **15 53 16.7** | **+1.5** |
| | 3.3nm,1.0s,baz=126,slow=5.9,SNR=3.1 | | | | | | |
| **GERES** | **GERESS Array B** | **89.97** | **319** | P | **P** | **15 53 28.5** | **+0.6** |
| | 0.4nm,0.6s,baz=90,slow=5.9,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.08** | **39** | PKPbc | **PKPbc** | **16 00 04.0** | **-2.0** |
| | 0.3nm,0.7s,baz=246,slow=0.1,SNR=3.6 | | | | | | |
| TXAR | | | | pPKPbc | **PKiKP** | **16 00 10.0** | **-0.4** |
| | 1.5nm,0.7s,baz=273,slow=1.3,SNR=14 | | | | | | |
| **JCT** | **Junction City** | **146.49** | **33** | *e*PKPbc | **PKPab** | **16 00 12.9** | **+1.8** |

*BJI **25** 15:55:46.3,4°.57S×99°.86E,h10km,mb4.7/10*
*KLM **25** 15:55:47.6,3°.69S×98°.27E,h100km,mb4.9,MS5.1*
*AUST **25** 15:55:48.5±8.9,3°.82S×99°.00E,h0km,Error ellipse: s-maj=3.0km s-min=1.2km az=237.0*
*DJA **25** 15:55:57.2±0.6,3°.S±4°×10°.0E±°,h49km±10km,M5.0/8, mb5.2/4,MLv4.8/8*
*ISCJB **25** 15:55:58.2±0.4,3°.46S×100°.04×99°.91E±0°.05,h33km, mb4.4/22,Error ellipse: s-maj=7.6km s-min=4.4km az=144.9*
*IDC **25** 15:55:59.9±0.7,3°.53S×99°.74E,h31km±3km,mb4.1/15, mb1 4.3/16,mb1mx4.0/41,mbtmp4.3/16,ML4.4/1,Error ellipse: s-maj=25.1km s-min=13.7km az=44.0*
*NEIC **25** 15:55:59.7±0.5,3°.46S×99°.88E,mb4.7/6, Error ellipse: s-maj=16.5km s-min=6.3km az=223.0*
**ISC 25 15:56:00.3±0.5,3°.42S±0°.07×99°.83E±0°.07,h35km,n93, σ1=34/85,mb4.5/22,12C,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.67** | **16** | P | **Pn** | **15 56 12.6** | **-0.7** |
| PPSI | | | | S | **Sn** | **15 56 23.8** | **+1.2** |
| **SISI** | **Saibi** | **2.20** | **340** | P | **Pn** | **15 56 32.7** | **-1.6** |
| SISI | | | | S | **Sn** | **15 56 56.4** | **-4.0** |
| **KSI** | **Kapahiang** | **2.77** | **95** | P | **Pn** | **15 56 40.6** | **-1.7** |
| **SDSI** | **Sungai Dareh** | **2.94** | **33** | P | **Pn** | **15 56 43.6** | **-0.9** |
| **PPI** | **Padang Panjang** | **2.99** | **11** | P | **Pn** | **15 56 44.8** | **-0.4** |
| | baz=3.6,SNR=9.2 | | | | | | |
| **PPI** | **Padang Panjang** | **2.99** | **11** | P | **Pn** | **15 56 43.2** | **-2.0** |
| PPI | | | | S | **Sn** | **15 57 20.5** | **+0.6** |
| **MNAI** | **Manna** | **3.26** | **107** | P | **Pn** | **15 56 49.0** | **0.0** |
| | baz=4.0,SNR=12 | | | | | | |
| **MNAI** | **Manna** | **3.26** | **107** | P | **Pn** | **15 56 48.4** | **-0.5** |
| **MNAI** | **Manna** | **3.26** | **107** | *e*P | **Pn** | **15 56 48.6** | **-0.3** |
| **BKNI** | **Bangkinang** | **3.91** | **18** | *e*P | **Pn** | **15 56 57.6** | **-0.2** |
| **RGRI** | **Rengat** | **3.94** | **40** | P | **Pn** | **15 56 57.9** | **-0.4** |
| **MNSI** | **Mandailing Nat** | **4.19** | **357** | P | **Pn** | **15 56 58.9** | **-2.8** |
| **JMBI** | **JAMBI** | **4.20** | **65** | P | **Pn** | **15 57 01.1** | **-0.8** |
| **MDSI** | **Maura Dua** | **4.47** | **104** | P | **Pn** | **15 57 05.1** | **-0.5** |
| **LWLI** | **Liwa** | **4.51** | **111** | P | **Pn** | **15 57 03.8** | **-2.4** |
| **SBSI** | **Sibolga** | **5.02** | **349** | P | **Pn** | 15 57 07.8 | -5.3 |
| **KASI** | **Kota Agung** | **5.11** | **114** | P | **Pn** | **15 57 11.8** | **-2.5** |
| | 139nm,0.9s,1.8nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.20** | **334** | P | Pn | 15 57 11.5 | -4.1 |
| **GSI** | **Gunungsitoli** | **5.20** | **334** | *e*P | **Pn** | **15 57 13.8** | **-1.8** |
| **CGJI** | **Cibinong** | **6.65** | **119** | P | Pn | 15 57 32.0 | -3.6 |
| | 152nm,0.8s | | | | | | |
| **FRIM** | **Kepong** | **6.85** | **15** | ⇑P | **Pn** | **15 57 36.4** | **-1.8** |
| **IPM** | **Ipoh** | **7.93** | **9** | ⇑P | Pn | 15 57 49.4 | -3.7 |
| **CNJI** | **Cibinong** | **8.24** | **118** | P | Pn | 15 57 53.6 | -3.7 |
| | 155nm,0.9s | | | | | | |
| **LEM** | **Lembang** | **8.47** | **114** | Pn | **Pn** | **15 58 00.1** | **-0.5** |
| | 4.5nm,0.3s,baz=126,slow=17,SNR=6.8 | | | | | | |
| **LEM** | **Lembang** | **8.47** | **114** | P | Pn | 15 58 04.7 | +4.0 |
| **KULM** | **Kulim** | **8.69** | **5** | ⇑P | Pn | 15 57 58.4 | -5.1 |
| **CISI** | **Cisompet, Garu** | **8.95** | **118** | P | Pn | 15 58 03.8 | -3.4 |
| | baz=9.5,SNR=23 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.95** | **118** | P | Pn | 15 58 03.4 | -3.8 |
| **CISI** | **Cisompet, Garu** | **8.95** | **118** | *e*P | Pn | 15 58 03.8 | -3.4 |
| | 171nm,0.6s | | | | | | |
| **KTGM** | **Kuala Trenggan** | **9.29** | **21** | ⇑P | **Pn** | **15 58 11.0** | **-0.8** |
| **SKLT** | **Songkhla** | **10.54** | **4** | P | Pn | 15 58 36.5 | +7.5 |
| | 672nm,1.1s | | | | | | |
| **UGM** | **Wanagama** | **11.54** | **113** | P | **Pn** | **15 58 41.6** | **-1.1** |
| | baz=12,SNR=4.4 | | | | | | |
| **KSM** | **Kuching** | **11.55** | **65** | ⇑P | Pn | 15 58 49.0 | +6.3 |
| **SBUM** | **Sibu** | **13.69** | **65** | ⇑P | **P** | **15 59 17.3** | **-3.0** |
| **BTM** | **Bintulu** | **14.79** | **64** | ⇑P | **P** | **15 59 30.9** | **-1.7** |
| **BBKI** | **Banjar Baru** | **14.99** | **91** | P | **P** | **15 59 34.5** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** | **15.10** | **110** | P | **Pn** | **15 59 27.8** | **-3.4** |
| | baz=16,SNR=5.3 | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.87** | **60** | ⇑P | **P** | **16 00 17.4** | **-0.4** |
| **CHAI** | **Chaiyaphum** | **19.31** | **6** | P | Pn | 16 00 31.2 | +7.5 |
| | 2.7nm,0.9s | | | | | | |
| **SDKM** | **Sandakan** | **19.54** | **63** | ⇑P | **P** | **16 00 25.2** | **0.0** |
| **TSM** | **Tawau** | **19.59** | **67** | ⇑P | **P** | **16 00 25.8** | **+0.2** |
| **KDM** | **Kudat** | **19.84** | **59** | ⇑P | **P** | **16 00 28.1** | **-0.1** |
| **PBKT** | **Sadao Pong** | **19.89** | **3** | P | Pn | 16 00 40.1 | +10 |
| **KAPI** | **Kappang** | **19.93** | **95** | P | **P** | **16 00 27.4** | **-2.0** |
| | 16nm,1.0s,baz=180,slow=1.0 | | | | | | |
| **BKSI** | **Bulukumba** | **20.32** | **96** | P | **P** | **16 00 34.0** | **+0.4** |
| **MPSI** | **Mapaga** | **20.41** | **80** | P | **P** | **16 00 35.2** | **+0.7** |
| **MYLDM** | **Lahad Datu** | **20.52** | **65** | ⇑P | **P** | **16 00 34.5** | **-1.1** |
| **SKNT** | **Sakolnakorn** | **20.67** | **11** | P | Pn | 16 00 50.0 | +10 |
| **NONG** | **Nongkai** | **21.59** | **9** | P | **P** | **16 00 50.0** | **+2.8** |
| **CMAR** | **Chiang Mai Arr** | **21.75** | **358** | P | **P** | **16 00 49.9** | **+0.9** |
| | 4.6nm,0.7s,baz=186,slow=10,SNR=43 | | | | | | |
| CMAR | | | | PcP | **PcP** | **16 04 50.4** | **+1.5** |
| | 0.6nm,0.5s,baz=194,slow=3.6,SNR=4.4 | | | | | | |
| CMAR | | | | pPcP | | 16 05 00.1 | |
| | 0.7nm,0.7s,baz=220,slow=3.5,SNR=4.5 | | | | | | |
| **LAMP** | **Lampang** | **21.80** | **360** | P | **P** | **16 00 53.3** | **+3.9** |
| | 6.0nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.11** | **358** | P | **P** | **16 00 55.5** | **+2.8** |
| **H08S2** | **Diego Garcia H** | **27.52** | **260** | T | T | 16 31 03.7 | |
| | baz=82,slow=75,SNR=145 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.53** | **260** | T | T | 16 31 04.2 | |
| | baz=82,slow=75,SNR=107 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.54** | **260** | T | T | 16 31 05.1 | |
| | baz=82,slow=75,SNR=130 | | | | | | |
| **H08N1** | **Diego Carcia H** | **28.85** | **263** | T | T | 16 33 13.8 | |
| | baz=138 | | | | | | |
| **H08N2** | **Diego Garcia H** | **28.86** | **263** | T | T | 16 33 14.7 | |
| | baz=138 | | | | | | |
| **H08N3** | **Diego Garcia H** | **28.87** | **263** | T | T | 16 33 18.7 | |
| | baz=138 | | | | | | |
| **LSA** | **Lhasa** | **33.96** | **346** | *e*P | **P** | **16 02 42.5** | **+1.5** |
| | 12nm,0.9s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.01** | **159** | T | T | 16 38 48.8 | |
| | baz=335,slow=76,SNR=10 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.03** | **159** | T | T | 16 38 49.7 | |
| | baz=335,slow=76,SNR=11 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.03** | **159** | T | T | 16 38 54.3 | |
| | baz=335,slow=76,SNR=9.3 | | | | | | |
| **WRKA** | **Warakurna** | **34.82** | **131** | P | **P** | **16 02 48.6** | **+0.5** |
| | baz=35,SNR=6.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.45** | **119** | P | **P** | **16 03 10.2** | **-0.5** |
| | 4.8nm,0.7s,baz=290,slow=8.7,SNR=20 | | | | | | |
| WRA | | | | PcP | **PcP** | **16 05 29.2** | **+0.3** |
| | 0.8nm,0.8s,baz=289,slow=2.7,SNR=3.7 | | | | | | |
| WRA | | | | pPcP | | 16 05 38.3 | |
| | 0.9nm,0.6s,baz=310,slow=1.9,SNR=5.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.46** | **119** | *e*P | **P** | **16 03 10.3** | **-0.4** |
| | 840nm,3.5s | | | | | | |
| **ASAR** | **Alice Springs** | **38.58** | **125** | P | **P** | **16 03 20.0** | **-0.2** |
| | 3.8nm,0.8s,baz=294,slow=7.9,SNR=55 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 05 32.8** | **+0.4** |
| | 1.2nm,0.7s,baz=299,slow=2.9,SNR=7.6 | | | | | | |
| ASAR | | | | pPcP | | 16 05 42.5 | |
| | 1.4nm,0.6s,baz=297,slow=2.5,SNR=8.9 | | | | | | |
| **QIS** | **Mount Isa** | **42.31** | **117** | P | **P** | **16 03 50.7** | **-0.3** |
| | baz=43,SNR=4.7 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.34** | **13** | *e*P | **P** | **16 04 16.3** | **+1.1** |
| HHC | | | | PMZ | | | |
| | 16nm,0.9s | | | | | | |
| **MTSU** | **Mount Surprise** | **45.93** | **112** | P | **P** | **16 04 20.3** | **+0.1** |
| | baz=47,SNR=5.1 | | | | | | |
| **QLP** | **Quilpie** | **48.32** | **123** | P | **P** | **16 04 39.6** | **+0.9** |
| | baz=49,SNR=8.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **51.06** | **337** | *e*P | **P** | **16 04 60.0** | **+0.6** |
| | 8.2nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **51.36** | **6** | P | **P** | **16 05 02.9** | **+1.4** |
| | 5.1nm,0.8s,baz=186,slow=8.6,SNR=26 | | | | | | |
| SONM | | | | pP | **pP** | **16 05 12.5** | **+0.6** |
| | 4.7nm,0.7s,baz=187,slow=7.5,SNR=12 | | | | | | |
| SONM | | | | PcP | **PcP** | **16 06 15.9** | **0.0** |
| | 1.4nm,0.8s,baz=179,slow=3.1,SNR=2.6 | | | | | | |
| SONM | | | | pPcP | | 16 06 26.2 | |
| | 1.1nm,0.6s,baz=188,slow=2.8,SNR=2.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **51.37** | **128** | P | **P** | **16 05 02.7** | **+1.0** |
| | baz=52,SNR=14 | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.46** | **6** | *e*P | **P** | **16 05 03.3** | **+1.0** |
| | 156nm,2.0s | | | | | | |
| **EKS2** | **Erkin-Say** | **51.57** | **336** | *e*P | **P** | **16 05 04.0** | **+0.9** |
| | 7.3nm,0.9s | | | | | | |
| EKS2 | | | | *e* | | 16 05 13.9 | |
| **MKAR** | **Makanchi Array** | **52.34** | **345** | P | **P** | **16 05 09.6** | **+0.9** |
| | 5.1nm,0.8s,baz=145,slow=8.7,SNR=27 | | | | | | |
| MKAR | | | | pP | **pP** | **16 05 19.0** | **-0.2** |
| | 4.7nm,0.6s,baz=144,slow=8.4,SNR=14 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.48** | **38** | P | **P** | **16 05 17.4** | **+0.1** |
| | 1.4nm,0.7s,baz=214,slow=7.3,SNR=2.9 | | | | | | |
| **EIDS** | **Eidsvold** | **53.81** | **119** | *e*P | **P** | **16 05 20.4** | **+0.5** |
| | 12nm,1.3s | | | | | | |
| EIDS | | | | *e* | | 16 05 30.0 | |
| **USRK** | **Ussuriysk Ar.** | **55.48** | **28** | P | **P** | **16 05 32.6** | **+1.0** |
| | 9.2nm,0.8s,baz=226,slow=6.6,SNR=16 | | | | | | |
| USRK | | | | pP | **pP** | **16 05 42.0** | **-0.3** |
| | 11nm,0.8s,baz=219,slow=6.8,SNR=11 | | | | | | |
| **GEYT** | **Alibeck** | **56.42** | **321** | P | **P** | **16 05 38.4** | **-0.2** |
| | 1.1nm,0.4s,baz=209,slow=15,SNR=3.7 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.52** | **350** | P | **P** | **16 05 53.5** | **+0.6** |
| | baz=59,SNR=6.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.52** | **350** | P | **P** | **16 05 53.5** | **+0.6** |
| | 12nm,0.8s,baz=180,slow=5.2,SNR=46 | | | | | | |
| ZALV | | | | pP | **pP** | **16 06 03.2** | **-0.4** |
| | 11nm,0.7s,baz=178,slow=6.1,SNR=15 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.79** | **332** | *e*P | **P** | **16 06 21.6** | **-0.5** |
| | 5.1nm,0.8s | | | | | | |
| ABKAR | | | | *e* | | 16 06 31.7 | |
| **KBZ** | **Khabaz** | **69.26** | **319** | P | **P** | **16 07 04.2** | **+0.4** |
| | 2.0nm,0.8s,baz=158,slow=4.3,SNR=6.8 | | | | | | |
| KBZ | | | | pP | **pP** | **16 07 13.9** | **-0.8** |
| | 1.5nm,0.7s,baz=124,slow=8.1,SNR=4.0 | | | | | | |
| **EIL** | **Elat** | **70.14** | **303** | P | **P** | **16 07 10.4** | **+0.8** |
| | 2.3nm,0.6s,baz=101,slow=16,SNR=2.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.15** | **313** | P | **P** | **16 07 32.9** | **-0.7** |
| | 0.8nm,0.7s,baz=132,slow=6.9,SNR=5.8 | | | | | | |
| BRTR | | | | pP | **pP** | **16 07 42.9** | **-1.6** |
| | 0.7nm,0.7s,baz=103,slow=5.6,SNR=3.4 | | | | | | |
| **BOSA** | **Boshof** | **74.83** | **241** | P | P | 16 07 20.0 | -18 |
| | baz=74,SNR=7.7 | | | | | | |
| **FINES** | **FINESS Array B** | **85.28** | **332** | P | **P** | **16 08 33.4** | **+0.2** |
| | 0.7nm,0.4s,baz=124,slow=6.3,SNR=9.1 | | | | | | |
| FINES | | | | pP | **pP** | **16 08 43.4** | **-0.9** |
| | 1.1nm,0.4s,baz=124,slow=5.7,SNR=2.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.74** | **340** | P | **P** | **16 08 45.8** | **+0.6** |
| | 2.2nm,0.8s,baz=111,slow=5.1,SNR=3.3 | | | | | | |
| ARCES | | | | pP | **pP** | **16 08 55.5** | **-0.7** |
| | 2.6nm,0.8s,baz=107,slow=5.8,SNR=2.3 | | | | | | |
| **GERES** | **GERESS Array B** | **89.99** | **319** | P | **P** | **16 08 56.9** | **+0.5** |
| | 1.3nm,0.9s,baz=122,slow=5.0,SNR=7.3 | | | | | | |
| GERES | | | | pP | **pP** | **16 09 06.7** | **-0.8** |
| | 1.4nm,0.9s,baz=64,slow=3.1,SNR=4.9 | | | | | | |
| **CLL** | **Collm** | **90.65** | **321** | *e*P | **P** | **16 08 58.0** | **-1.2** |
| **TXAR** | **Lajitas Array** | **145.92** | **38** | PKPbc | **PKPab** | **16 15 38.4** | **+0.9** |
| | 2.6nm,0.6s,baz=287,slow=1.3,SNR=33 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 16 15 47.8 | -0.5 |
| | 2.8nm,0.6s,baz=290,slow=0.9,SNR=12 | | | | | | |
| **JCT** | **Junction City** | **147.31** | **32** | *e*PKPdf | **PKPdf** | **16 15 37.7** | **-0.8** |
| JCT | | | | *e*PKPbc | **PKPbc** | **16 15 41.3** | **+0.4** |

*IDC **25** 16:03:02.0±1.5,3°.81S×99°.23E,h0km,mb3.4/7,mb1 3.5/7, mb1mx3.4/38,mbtmp3.4/7,Error ellipse: s-maj=60.8km s-min=20.1km az=52.0*
*ISCJB **25** 16:03:05.2±1.5,3°.7S±0°.2×99°.3E±0°.3,h33km,mb3.4/7, Error ellipse: s-maj=55.8km s-min=17.5km az=144.6*
**ISC 25 16:03:07.3±1.6,3°.7S±0°.3×99°.3E±0°.3,h35km,n8,σ1=08/8, mb3.5/7,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.06** | **359** | P | **P** | **16 07 57.9** | **-1.4** |
| | 0.4nm,0.5s,baz=198,slow=10,SNR=4.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.73** | **118** | P | **P** | **16 10 19.3** | **-0.8** |
| | 0.3nm,0.5s,baz=305,slow=9.5,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **38.81** | **124** | P | **P** | **16 10 29.4** | **+0.2** |
| | 0.3nm,0.6s,baz=299,slow=7.5,SNR=6.5 | | | | | | |
| **SONM** | **Songino Array** | **51.73** | **6** | P | **P** | **16 12 12.2** | **+1.0** |
| | 0.5nm,0.6s,baz=183,slow=8.3,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.52** | **345** | P | **P** | **16 12 18.0** | **+1.0** |
| | 0.3nm,0.5s,baz=156,slow=7.3,SNR=2.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.74** | **350** | P | **P** | **16 13 01.0** | **-0.5** |
| | 0.4nm,0.4s,baz=190,slow=5.1,SNR=3.8 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GEVA | | | | *i* S | **Sn** | **16 04 44.1** | **+0.6** |
| **GEVA** | **Gevas** | **1.16** | **6** | P | **Pb** | **16 04 26.7** | **+0.1** |
| GEVA | | | | S | **Sn** | **16 04 44.1** | **+0.6** |
| **BEST** | **Besiri** | **1.49** | **300** | P | **Pn** | **16 04 29.9** | **-1.5** |
| BEST | | | | S | **Sg** | **16 04 51.7** | **0.0** |
| **VANB** | **Van** | **1.49** | **15** | *e*PN | **Pn** | **16 04 31.0** | **-0.5** |
| **VANB** | **Van** | **1.49** | **15** | *e*Pn | **Pn** | **16 04 31.0** | **-0.5** |
| **BTMT** | **Batman** | **1.53** | **313** | *e*PN | **Pn** | **16 04 31.8** | **-0.1** |
| **BTMT** | **Batman** | **1.53** | **313** | *e*Pn | **Pn** | **16 04 31.8** | **-0.1** |
| **SVAN** | **Silvan-Diyarba** | **1.68** | **307** | *e*PN | **Pn** | **16 04 34.0** | **+0.1** |
| **SVAN** | **Silvan-Diyarba** | **1.68** | **307** | *e*Pn | **Pn** | **16 04 34.0** | **+0.1** |
| **MARD** | **Mardin** | **1.70** | **276** | P | **Pn** | **16 04 32.5** | **-1.8** |
| MARD | | | | S | **Sn** | **16 04 56.0** | **-0.6** |
| **MAZI** | **Mazidag** | **1.98** | **280** | *e*PN | **Pn** | **16 04 38.2** | **+0.1** |
| **MAZI** | **Mazidag** | **1.98** | **280** | *e*Pn | **Pn** | **16 04 38.3** | **+0.1** |
| **CLDR** | **Caldiran** | **2.14** | **22** | *e*PN | **Pn** | **16 04 40.2** | **-0.3** |
| **CLDR** | **Caldiran** | **2.14** | **22** | *e*Pn | **Pn** | **16 04 40.2** | **-0.3** |
| **DIY** | **Diyarbakir** | **2.25** | **290** | *e*PN | **Pn** | **16 04 43.4** | **+1.6** |
| **DYBB** | **Diyarbakir** | **2.33** | **291** | *e*PN | **Pn** | **16 04 43.4** | **+0.4** |
| **BNGB** | **Bing¶ll** | **2.54** | **317** | *e*PN | **Pn** | **16 04 46.2** | **+0.4** |
| **BINT** | **Bingol** | **2.56** | **313** | *e*Pn | **Pn** | **16 04 46.2** | **0.0** |
| **SVRC** | **Sivrice-ELAZID** | **3.10** | **294** | *e*PN | **Pn** | **16 04 54.3** | **+0.7** |
| **SVRC** | **Sivrice-ELAZID** | **3.10** | **294** | *e*Pn | **Pn** | **16 04 54.3** | **+0.7** |
| **URFA** | **Urfa** | **3.26** | **276** | *e*PN | **Pn** | **16 04 56.8** | **+1.0** |
| **URFA** | **Urfa** | **3.26** | **276** | *e*Pn | **Pn** | **16 04 56.8** | **+1.0** |
| **PTK** | **Pertek** | **3.27** | **303** | *e*PN | **Pn** | **16 04 56.7** | **+0.8** |
| **PTK** | **Pertek** | **3.27** | **303** | *e*Pn | **Pn** | **16 04 56.7** | **+0.8** |
| **MALT** | **Malatya** | **3.73** | **289** | *e*PN | **Pn** | **16 05 04.0** | **+1.8** |
| **MALT** | **Malatya** | **3.73** | **289** | *e*Pn | **Pn** | **16 05 04.0** | **+1.8** |

**IDC 25 16:06:00.1±3.1, 2.07S×100.26E, h0km, mb3.4/6, mb1 3.5/6, mb1mx3.4/41, mbtmp3.4/6, Error ellipse: s-maj=127.5km s-min=20.4km az=58.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **20.43** | **356** | P | P | 16 10 38.5 | -0.7 |
| | 0.1nm,0.3s,baz=191,slow=8.8,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.74** | **121** | P | P | 16 13 18.5 | +0.4 |
| | 0.2nm,0.4s,baz=302,slow=9.6,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **39.01** | **126** | P | P | 16 13 28.2 | -0.5 |
| | 0.5nm,0.5s,baz=302,slow=7.5,SNR=7.1 | | | | | | |
| **SONM** | **Songino Array** | **49.98** | **5** | P | P | 16 14 56.1 | -0.1 |
| | 0.2nm,0.3s,baz=178,slow=8.7,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.16** | **344** | P | P | 16 15 05.3 | +0.3 |
| | 0.7nm,0.7s,baz=136,slow=7.7,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.28** | **349** | P | P | 16 15 49.7 | +0.2 |
| | 0.7nm,0.6s,baz=174,slow=6.0,SNR=5.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **144.60** | **38** | PKP | PKPab | 16 25 37.9 | -0.2 |
| | 0.2nm,0.5s,baz=59,slow=2.3,SNR=2.6 | | | | | | |

**IDC 25 16:09:08.8±8.0, 3.55S×99.54E, h0km, mb3.5/4, mb1 3.6/4, mb1mx3.3/45, mbtmp3.6/4, Error ellipse: s-maj=182.8km s-min=132.9km az=116.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.88** | **358** | P | P | 16 14 03.6 | +0.1 |
| | 0.4nm,0.3s,baz=200,slow=9.7,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **51.52** | **6** | P | P | 16 18 16.0 | -0.5 |
| | 0.2nm,0.3s,baz=188,slow=7.3,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.40** | **345** | P | P | 16 18 22.9 | 0.0 |
| | 0.6nm,0.7s,baz=150,slow=9.8,SNR=3.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.60** | **350** | P | P | 16 19 07.6 | +0.2 |
| | 0.5nm,0.5s,baz=165,slow=6.0,SNR=3.9 | | | | | | |

**IDC 25 16:10:43.5±2.5, 3.71S×99.91E, h0km, mb3.6/8, mb1 3.7/8, mb1mx3.5/43, mbtmp3.6/8, Error ellipse: s-maj=103.7km s-min=19.2km az=54.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.05** | **358** | P | P | 16 15 39.0 | -1.0 |
| | 0.4nm,0.3s,baz=182,slow=11,SNR=3.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.24** | **118** | P | P | 16 17 56.9 | -0.3 |
| | 0.2nm,0.5s,baz=283,slow=8.5,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **38.35** | **124** | P | P | 16 18 06.6 | 0.0 |
| | 0.3nm,0.5s,baz=296,slow=7.4,SNR=6.9 | | | | | | |
| **SONM** | **Songino Array** | **51.64** | **6** | P | P | 16 19 52.7 | +0.6 |
| | 0.5nm,0.5s,baz=192,slow=7.9,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.64** | **345** | P | P | 16 19 59.7 | +0.3 |
| | 0.8nm,0.7s,baz=140,slow=7.2,SNR=5.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.16** | **344** | P | P | 16 20 32.0 | 0.0 |
| | 0.3nm,0.6s,baz=169,slow=7.0,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.82** | **350** | P | P | 16 20 44.0 | +0.3 |
| | 1.4nm,0.7s,baz=161,slow=6.0,SNR=7.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.75** | **340** | P | P | 16 21 03.1 | -0.6 |
| | 0.5nm,0.7s,baz=145,slow=8.8,SNR=3.4 | | | | | | |

**IDC 25 16:11:06.5±2.4, 3.21S×100.08E, h24km±5km, mb3.6/7, mb1 3.7/7, mb1mx3.4/43, mbtmp3.7/7, Error ellipse: s-maj=97.3km s-min=18.2km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.56** | **357** | P | P | 16 15 53.8 | -0.7 |
| | 0.8nm,0.3s,baz=185,slow=9.8,SNR=5.0 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.80** | **260** | T | T | 16 45 59.1 | |
| | baz=82,slow=75,SNR=41 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.81** | **260** | T | T | 16 45 59.4 | |
| | baz=82,slow=75,SNR=35 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.82** | **260** | T | T | 16 46 00.2 | |
| | baz=82,slow=75,SNR=40 | | | | | | |
| **H08N1** | **Diego Carcia H** | **29.12** | **263** | T | T | 16 48 13.9 | |
| | baz=204,slow=17,SNR=19 | | | | | | |
| **H08N2** | **Diego Garcia H** | **29.14** | **263** | T | T | 16 48 15.0 | |
| | baz=204,slow=17,SNR=16 | | | | | | |
| **H08N3** | **Diego Garcia H** | **29.14** | **263** | T | T | 16 48 15.4 | |
| | baz=204,slow=17,SNR=18 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.11** | **159** | T | T | 16 53 41.2 | |
| | baz=336,slow=76,SNR=20 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.13** | **159** | T | T | 16 53 41.6 | |
| | baz=336,slow=76,SNR=20 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.13** | **159** | T | T | 16 53 43.2 | |
| | baz=336,slow=76,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.33** | **119** | P | P | 16 18 16.8 | -0.5 |
| | 0.5nm,0.6s,baz=293,slow=9.9,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **38.49** | **125** | P | P | 16 18 26.9 | -0.3 |
| | 0.7nm,0.7s,baz=300,slow=7.8,SNR=7.1 | | | | | | |
| **SONM** | **Songino Array** | **51.13** | **5** | P | P | 16 20 08.1 | +0.5 |
| | 0.8nm,0.6s,baz=191,slow=9.7,SNR=4.8 | | | | | | |
| SONM | | | | pP | pP | 16 20 14.6 | -0.4 |
| | 1.8nm,0.7s,baz=183,slow=8.5,SNR=8.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.21** | **345** | P | P | 16 20 15.4 | 0.0 |
| | 1.1nm,0.6s,baz=145,slow=8.7,SNR=6.2 | | | | | | |
| MKAR | | | | pP | pP | 16 20 22.9 | 0.0 |
| | 1.1nm,0.7s,baz=150,slow=8.3,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.73** | **344** | P | P | 16 20 47.5 | -0.6 |
| | 0.4nm,0.7s,baz=163,slow=6.5,SNR=3.6 | | | | | | |
| KURBB | | | | pP | pP | 16 20 55.3 | -0.4 |
| | 0.6nm,0.9s,baz=165,slow=7.1,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.37** | **349** | P | P | 16 20 59.7 | +0.1 |
| | 1.8nm,0.8s,baz=160,slow=4.6,SNR=3.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.60** | **38** | PKPbc | PKPdf | 16 30 43.6 | -0.1 |
| | 0.8nm,0.5s,baz=290,slow=1.1,SNR=8.1 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 16 30 51.5 | -0.5 |
| | 1.1nm,0.6s,baz=222,slow=1.2,SNR=4.9 | | | | | | |

**IDC 25 16:12:38.6±2.8, 3.94S×100.13E, h0km, mb3.6/6, mb1 3.7/6, mb1mx3.5/43, mbtmp3.6/6, Error ellipse: s-maj=116.0km s-min=24.9km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.29** | **357** | P | P | 16 17 36.1 | -1.5 |
| | 1.0nm,0.5s,baz=186,slow=9.9,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.04** | **124** | P | P | 16 19 58.8 | -0.3 |
| | 0.3nm,0.5s,baz=297,slow=8.2,SNR=2.8 | | | | | | |
| **SONM** | **Songino Array** | **51.85** | **5** | P | P | 16 21 50.4 | +1.6 |
| | 0.4nm,0.5s,baz=197,slow=7.5,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.92** | **345** | P | P | 16 21 56.6 | 0.0 |
| | 0.8nm,0.7s,baz=148,slow=7.7,SNR=4.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.43** | **344** | P | P | 16 22 29.0 | -0.1 |
| | 0.4nm,0.6s,baz=166,slow=6.9,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.08** | **350** | P | P | 16 22 39.8 | -0.8 |
| | 0.9nm,0.4s,baz=165,slow=6.2,SNR=3.6 | | | | | | |

**IDC 25 16:18:57.5±3.9, 3.36S×100.24E, h0km, mb3.3/5, mb1 3.5/5, mb1mx3.3/37, mbtmp3.4/5, Error ellipse: s-maj=151.3km s-min=22.0km az=58.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.71** | **357** | P | P | 16 23 50.0 | -0.5 |
| | 0.5nm,0.7s,baz=182,slow=9.0,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.12** | **119** | P | P | 16 26 10.2 | 0.0 |
| | 0.2nm,0.4s,baz=291,slow=9.6,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **38.28** | **125** | P | P | 16 26 19.6 | -0.4 |
| | 0.3nm,0.7s,baz=299,slow=8.0,SNR=5.2 | | | | | | |
| **SONM** | **Songino Array** | **51.26** | **5** | P | P | 16 28 03.5 | +0.2 |
| | 0.5nm,0.6s,baz=191,slow=8.7,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.39** | **345** | P | P | 16 28 11.4 | -0.2 |
| | 0.6nm,0.6s,baz=161,slow=7.2,SNR=3.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.62** | **39** | PKPbc | PKPdf | 16 38 38.4 | -0.4 |
| | 0.7nm,0.7s,baz=8.1,slow=1.3,SNR=6.0 | | | | | | |

*IDC **25** 16:26:58.9±2.0, 5.98S×129.62E, h0km, mb3.9/1, mb1 4.2/4, mb1mx3.7/26, mbtmp4.1/4, ML4.2/3, Error ellipse: s-maj=54.3km s-min=30.1km az=77.0*
*AUST **25** 16:27:17.9, 6.98S×129.03E, h100km*
**ISC 25 16:27:00.4±1.6, 6.0S±0.2×129.7E±0.2, h10km, n11, σ2.8s4/8, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SWI** | **Sorong** | **5.34** | **17** | P | Pg | 16 28 52.0 | +9.3 |
| | baz=6.5,SNR=6.9 | | | | | | |
| **SOEI** | **Soe** | **6.52** | **235** | P | **Pn** | **16 28 38.9** | **+2.2** |
| | baz=5.5,SNR=3.6 | | | | | | |
| **BATI** | **Baumata** | **7.27** | **234** | Pn | **Pn** | **16 28 47.5** | **+0.6** |
| | 3.4nm,0.3s,baz=118,slow=6.3,SNR=6.0 | | | | | | |
| BATI | | | | Sn | Sn | 16 29 56.4 | -13 |
| | 7.4nm,0.3s,baz=95,slow=22,SNR=12 | | | | | | |
| **KNRA** | **Kununurra** | **9.67** | **185** | P | **Pn** | **16 29 21.4** | **+1.7** |
| | baz=8.7,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.60** | **162** | Pn | **Pn** | **16 30 27.8** | **+0.6** |
| | 1.2nm,0.3s,baz=339,slow=12,SNR=30 | | | | | | |
| WRA | | | | Sn | Sn | 16 32 59.1 | -10 |
| | 0.7nm,0.3s,baz=336,slow=22,SNR=5.9 | | | | | | |
| **COEN** | **Coen** | **15.48** | **122** | P | P | 16 30 52.4 | +8.9 |
| | baz=16,SNR=7.9 | | | | | | |
| **QIS** | **Mount Isa** | **17.40** | **147** | P | **P** | **16 31 07.6** | **+2.7** |
| | baz=17,SNR=5.9 | | | | | | |
| **ASAR** | **Alice Springs** | **18.04** | **167** | P | **Pn** | **16 31 10.2** | **-1.3** |
| | 0.8nm,0.3s,baz=340,slow=10,SNR=78 | | | | | | |
| ASAR | | | | Sn | Sn | 16 34 20.4 | -13 |
| | 0.1nm,0.3s,baz=348,slow=23,SNR=5.9 | | | | | | |
| **MTSU** | **Mount Surprise** | **18.72** | **131** | P | Pn | 16 31 29.1 | +9.3 |
| | baz=19,SNR=8.0 | | | | | | |
| **WRKA** | **Warakurna** | **18.99** | **184** | P | **P** | **16 31 17.5** | **-4.8** |
| | baz=18,SNR=9.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.20** | **327** | P | **P** | **16 37 54.7** | **-0.2** |
| | 0.5nm,0.4s,baz=122,slow=7.7,SNR=6.0 | | | | | | |

**MEX 25 16:30:22.9±0.5, 17.06N×100.19W, h51km±9km, MD3.5, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CAIG** | **El Cayaco** | **0.07** | **264** | *i* P | Pn | 16 30 29.4 | -1.4 |
| CAIG | | | | *e*P | Pn | 16 30 29.4 | -1.3 |
| **ACX** | **Acapulco** | **0.37** | **120** | *e*P | Pn | 16 30 33.3 | +0.5 |
| ACX | | | | *e*S | Sn | 16 30 40.0 | +0.1 |
| **MEIG** | **Mezcala** | **1.02** | **32** | *e*P | Pn | 16 30 39.6 | -1.5 |
| MEIG | | | | *e*S | Sn | 16 30 52.3 | -2.3 |
| **ARIG** | **Puente Sto Nin** | **1.23** | **353** | *e*P | Pn | 16 30 42.5 | -1.3 |
| ARIG | | | | *e*S | Sn | 16 30 57.2 | -2.1 |
| **ZIIG** | **Zihuatanejo** | **1.33** | **294** | *e*P | Pn | 16 30 43.8 | -1.3 |
| ZIIG | | | | *e*S | Sn | 16 30 59.7 | -2.1 |
| **TLIG** | **Tlapa** | **1.63** | **72** | *e*P | Pn | 16 30 50.1 | +0.7 |
| TLIG | | | | *e*S | Sn | 16 31 07.9 | -1.5 |

*IDC **25** 16:42:31.4±0.9, 59.95S×18.40W, h0km, mb3.9/6, mb1 4.0/7, mb1mx3.8/24, mbtmp4.0/7, ML4.1/1, Error ellipse: s-maj=37.4km s-min=19.9km az=78.0*
*AWI **25** 16:42:50.4, 61.40S×18.62W*
**ISC 25 16:42:34.4±1.2, 60.1S±0.1×17.4W±0.4, h10km, n12, σ1s85/12, mb4.0/6, East of South Sandwich Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VNA1** | **Neumayer--Stat** | **11.26** | **164** | P | **Pn** | **16 45 17.4** | **+2.3** |
| VNA1 | | | | S | **Sn** | **16 47 16.9** | **-3.8** |
| **VNA2** | **Neumayer--Watz** | **11.63** | **164** | P | **Pn** | **16 45 22.1** | **+1.9** |
| | baz=329,slow=16 | | | | | | |
| VNA2 | | | | S | Sn | 16 47 18.7 | -11 |
| **VNA3** | **Neumayer Olymp** | **11.64** | **168** | P | **Pn** | **16 45 20.3** | **-0.1** |
| VNA3 | | | | S | Sn | 16 47 18.9 | -11 |
| **SNAA** | **Sanae** | **13.01** | **159** | P | **Pn** | **16 45 40.1** | **+1.0** |
| **SNAA** | **Sanae** | **13.01** | **159** | Pn | **Pn** | **16 45 40.4** | **+1.3** |
| | 1.0nm,0.3s,baz=325,slow=14,SNR=87 | | | | | | |
| **QSPA** | **South Pole Qui** | **30.16** | **180** | P | **P** | **16 48 44.1** | **-0.2** |
| | 2.9nm,0.9s,baz=197,slow=2.6,SNR=4.9 | | | | | | |
| **MAW** | **Mawson** | **33.72** | **137** | P | **P** | **16 49 16.2** | **+1.0** |
| | 0.3nm,0.3s,baz=225,slow=5.7,SNR=1.8 | | | | | | |
| **VNDA** | **Vanda** | **42.66** | **180** | P | **P** | **16 50 31.3** | **+0.9** |
| | 0.5nm,0.7s,baz=209,slow=4.1,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **56.93** | **297** | P | P | 16 52 14.3 | -6.0 |
| | 1.7nm,0.8s,baz=168,slow=5.2,SNR=7.1 | | | | | | |
| **DBIC** | **Dimbokro** | **67.27** | **13** | P | **P** | **16 53 27.4** | **-1.6** |
| | 4.5nm,1.0s,baz=164,slow=10,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.56** | **19** | P | **P** | **16 54 12.9** | **-0.4** |
| | 0.7nm,0.7s,baz=196,slow=6.4,SNR=4.5 | | | | | | |
| **SONM** | **Songino Array** | **145.80** | **85** | PKPbc | **PKPdf** | **17 02 12.8** | **+0.6** |
| | 1.4nm,0.8s,baz=232,slow=1.6,SNR=9.1 | | | | | | |

**IDC 25 16:43:15.5±4.4, 3.66S×99.77E, h0km, mb3.4/5, mb1 3.6/5, mb1mx3.3/40, mbtmp3.4/5, Error ellipse: s-maj=165.7km s-min=22.0km az=60.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.99** | **358** | P | P | 16 48 11.0 | -0.5 |
| | 0.5nm,0.6s,baz=184,slow=11,SNR=6.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.38** | **118** | P | P | 16 50 30.4 | -0.1 |
| | 0.4nm,0.7s,baz=287,slow=9.8,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.49** | **124** | P | P | 16 50 39.2 | -0.6 |
| | 0.3nm,0.5s,baz=297,slow=7.4,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **51.61** | **6** | P | P | 16 52 24.2 | +0.3 |
| | 0.5nm,0.8s,baz=189,slow=5.4,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.75** | **350** | P | P | 16 53 14.2 | -1.0 |
| | 0.4nm,0.4s,baz=157,slow=7.8,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.14** | **39** | PKPbc | PKPab | 17 02 59.4 | +0.2 |
| | 0.2nm,0.6s,baz=292,slow=2.2,SNR=4.6 | | | | | | |

**IDC 25 16:49:03.5±2.3, 3.72S×99.49E, h0km, mb3.6/8, mb1 3.7/8, mb1mx3.5/56, mbtmp3.6/8, Error ellipse: s-maj=97.1km s-min=18.7km az=55.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.04** | **359** | P | P | 16 53 59.5 | -0.4 |
| | 1.0nm,0.7s,baz=186,slow=10,SNR=17 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.14** | **261** | T | T | 17 22 49.0 | |
| | baz=82,slow=76,SNR=14 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.15** | **261** | T | T | 17 22 48.9 | |
| | baz=82,slow=76,SNR=14 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.16** | **261** | T | T | 17 22 48.7 | |
| | baz=82,slow=76,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.60** | **118** | P | P | 16 56 20.0 | -0.3 |
| | 0.3nm,0.6s,baz=295,slow=9.2,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.69** | **124** | P | P | 16 56 29.1 | -0.4 |
| | 0.3nm,0.8s,baz=297,slow=6.8,SNR=3.5 | | | | | | |
| **SONM** | **Songino Array** | **51.69** | **6** | P | P | 16 58 12.7 | +0.1 |
| | 0.9nm,0.7s,baz=180,slow=9.3,SNR=6.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.54** | **345** | P | P | 16 58 18.5 | -0.3 |
| | 1.2nm,0.8s,baz=156,slow=9.2,SNR=6.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.05** | **344** | P | P | 16 58 51.2 | -0.1 |
| | 0.2nm,0.3s,baz=163,slow=6.8,SNR=3.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.76** | **350** | P | P | 16 59 03.2 | 0.0 |
| | 2.0nm,0.8s,baz=182,slow=5.4,SNR=9.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.62** | **340** | P | P | 16 59 22.5 | -0.4 |
| | 0.5nm,0.6s,baz=142,slow=7.3,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.36** | **38** | PKPbc | PKPab | 17 08 47.7 | -0.3 |
| | 0.3nm,0.6s,baz=240,slow=1.2,SNR=4.0 | | | | | | |

*ISCJB **25** 16:50:49.5±0.8, 49.8N±0.1×29.0W±0.1, h10km, mb3.9/16, Error ellipse: s-maj=19.1km s-min=13.0km az=11.8*
*IDC **25** 16:50:50.1±0.9, 49.89N×29.00W, h0km, mb3.8/16, mb1 4.0/17, mb1mx3.8/58, mbtmp3.9/17, ML4.1/1, Error ellipse: s-maj=25.3km s-min=17.5km az=2.0*
**ISC 25 16:50:51.4±0.9, 49.9N±0.2×29.0W±0.1, h10km, n20, σ0s93/20, mb4.1/16, Northern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EKA** | **Eskdalemuir Ar** | **16.55** | **61** | P | **Pn** | **16 54 42.0** | **-1.3** |
| | baz=254,slow=12,SNR=5.8 | | | | | | |
| **ESDC** | **Sonseca Array** | **20.40** | **111** | P | **P** | **16 55 27.2** | **-1.1** |
| | 0.2nm,0.3s,baz=308,slow=10,SNR=4.6 | | | | | | |
| **SUMG** | **Summit** | **23.16** | **353** | *i* P | **P** | **16 55 58.1** | **+0.2** |
| | 8.1nm,0.9s | | | | | | |
| **NOA** | **NORSAR Array B** | **24.95** | **48** | P | **P** | **16 56 13.7** | **-0.9** |
| | 0.9nm,0.8s,baz=262,slow=9.4,SNR=2.9 | | | | | | |
| **FINES** | **FINESS Array B** | **32.13** | **48** | P | **P** | **16 57 18.2** | **-0.2** |
| | 2.3nm,0.6s,baz=261,slow=8.4,SNR=14 | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.21** | **32** | P | **P** | **16 57 18.9** | **-0.2** |
| | 2.2nm,0.9s,baz=243,slow=8.0,SNR=3.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **36.36** | **66** | P | **P** | **16 57 55.0** | **-0.3** |
| | 0.5nm,0.6s,baz=293,slow=7.9,SNR=2.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **41.61** | **297** | P | **P** | **16 58 37.9** | **-1.3** |
| | 1.8nm,0.4s,baz=80,slow=8.8,SNR=3.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **44.37** | **78** | P | **P** | **16 59 02.5** | **+0.6** |
| | 0.7nm,0.6s,baz=292,slow=6.0,SNR=5.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **44.42** | **135** | P | **P** | **16 59 02.5** | **+0.2** |
| | 2.3nm,0.8s,baz=334,slow=8.1,SNR=12 | | | | | | |
| **AKTO** | **Aktyubinsk** | **52.55** | **54** | P | **P** | **17 00 05.4** | **+0.8** |
| | 2.3nm,0.9s,baz=297,slow=6.7,SNR=4.8 | | | | | | |
| **ILAR** | **Eielson Array** | **55.99** | **333** | P | **P** | **17 00 29.8** | **+0.4** |
| | 0.6nm,0.9s,baz=46,slow=5.6,SNR=5.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **57.03** | **45** | P | **P** | **17 00 38.1** | **+1.0** |
| | 3.9nm,0.9s,baz=306,slow=5.3,SNR=15 | | | | | | |
| **TXAR** | **Lajitas Array** | **58.61** | **279** | P | **P** | **17 00 49.0** | **+0.4** |
| | 0.8nm,0.8s,baz=66,slow=7.0,SNR=8.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.36** | **43** | P | **P** | **17 01 13.7** | **-0.1** |
| | 2.6nm,1.0s,baz=320,slow=7.2,SNR=15 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.55** | **38** | P | **P** | **17 01 15.2** | **+0.2** |
| | 0.3nm,0.3s,baz=340,slow=7.7,SNR=2.2 | | | | | | |
| **AAK** | **Ala-Archa** | **66.21** | **52** | P | **P** | **17 01 41.7** | **+2.4** |
| | 0.3nm,0.4s,baz=311,slow=9.3,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.86** | **44** | P | **P** | **17 01 44.1** | **+0.9** |
| | 1.5nm,0.6s,baz=324,slow=6.1,SNR=8.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **147.29** | **30** | PKPbc | **PKPbc** | **17 10 34.9** | **-0.2** |
| | 1.3nm,1.1s,baz=354,slow=3.2,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **150.60** | **33** | PKPbc | **PKPbc** | **17 10 42.9** | **-0.5** |
| | 1.4nm,1.0s,baz=356,slow=1.9,SNR=6.6 | | | | | | |

**IDC 25 16:51:45.0±5.4, 3.01S×99.94E, h0km, mb3.8/3, mb1 3.8/3, mb1mx3.3/58, mbtmp3.8/3, Error ellipse: s-maj=186.4km s-min=79.9km az=54.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **50.95** | **6** | P | P | 17 00 48.4 | -0.1 |
| | 0.9nm,0.8s,baz=184,slow=8.7,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.98** | **345** | P | P | 17 00 56.1 | +0.1 |
| | 1.0nm,0.7s,baz=161,slow=7.7,SNR=6.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.14** | **350** | P | P | 17 01 40.1 | -0.3 |
| | 0.4nm,0.4s,baz=157,slow=8.0,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.53** | **38** | PKPbc | PKPdf | 17 11 25.4 | -0.8 |
| | 0.3nm,0.5s,baz=354,slow=0.9,SNR=3.8 | | | | | | |

**IDC 25 16:55:26.3±2.5, 3.42S×99.44E, h0km, mb3.5/7, mb1 3.6/7, mb1mx3.4/57, mbtmp3.5/7, Error ellipse: s-maj=110.7km s-min=24.3km az=56.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.75** | **359** | P | P | 17 00 19.1 | -0.4 |
| | 0.4nm,0.7s,baz=187,slow=10,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.90** | **124** | P | P | 17 02 54.1 | +0.2 |
| | 0.2nm,0.5s,baz=310,slow=7.2,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **51.41** | **6** | P | P | 17 04 33.3 | +0.1 |
| | 0.8nm,0.8s,baz=187,slow=11,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.24** | **345** | P | P | 17 04 40.0 | +0.8 |
| | 0.8nm,0.7s,baz=141,slow=7.8,SNR=5.3 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.75** | **344** | P | P | 17 05 11.9 | -0.1 |
| | 0.1nm,0.3s,baz=168,slow=6.4,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.46** | **350** | P | P | 17 05 24.0 | +0.1 |
| | 1.1nm,0.7s,baz=183,slow=5.5,SNR=6.6 | | | | | | |
| **BVAR** | **Borovoye Array

*DJA **25** 17:02:12.6±1.2,3°S±8′×10°0E±1°1,h37km±9km,M4.4/8, MLv4.4/8*
*NEIC **25** 17:02:13.8±6.3,3°.46S×99°.97E,h26km±42km,mb4.8/1, Error ellipse: s-maj=38.1km s-min=8.3km az=58.0*
*IDC **25** 17:02:14.1±1.0,3°.36S×100°.06E,h25km±3km,mb3.9/12, mb1 4.0/13,mb1mx3.7/49,mbtmp4.1/13,ML4.4/1,Error ellipse: s-maj=35.4km s-min=14.8km az=48.0*
**ISC 25 17:02:13.5±0.9,3°.39S±0′.09×100°.0E±0°.1,h24km±5km, h24km:pP-P,n37,σ1s03/36,mb4.2/13,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.63** | **360** | P | | **Pb** | **17 02 25.9** | **+0.1** |
| **SISI** | **Saibi** | **2.25** | **336** | P | | **Pn** | **17 02 47.5** | **-1.8** |
| **PDSI** | **Padang** | **2.50** | **10** | P | | **Pn** | **17 02 51.0** | **-1.8** |
| **KSI** | **Kapahiang** | **2.59** | **90** | P | | **Pn** | **17 02 52.3** | **-1.7** |
| **SDSI** | **Sungai Dareh** | **2.82** | **30** | P | | **Pn** | **17 02 55.6** | **-1.6** |
| **PPI** | **Padang Panjang** | **2.94** | **7** | P | | **Pn** | **17 02 57.7** | **-1.1** |
| **MNAI** | **Manna** | **3.09** | **108** | P | | **Pn** | **17 02 59.4** | **-1.4** |
| **BKNI** | **Bangkinang** | **3.83** | **16** | P | | **Pn** | **17 03 09.6** | **-1.5** |
| **BKNI** | **Bangkinang** | **3.83** | **16** | *e*P | | **Pn** | **17 03 12.3** | **+1.2** |
| **MNSI** | **Mandailing Nat** | **4.18** | **354** | P | | **Pn** | **17 03 14.0** | **-1.9** |
| **MDSI** | **Maura Dua** | **4.29** | **105** | P | | **Pn** | **17 03 16.7** | **-0.7** |
| **LWLI** | **Liwa** | **4.34** | **112** | P | | **Pn** | **17 03 16.5** | **-1.7** |
| **KASI** | **Kota Agung** | **4.95** | **116** | P | | **Pn** | **17 03 24.5** | **-1.9** |
| **LEM** | **Lembang** | **8.30** | **115** | Pn | | **Pn** | **17 04 13.5** | **+0.8** |
| | 4.5nm,0.3s,baz=180,slow=20,SNR=3.9 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.74** | **357** | P | | **P** | **17 07 03.6** | **+0.3** |
| | 1.4nm,0.8s,baz=186,slow=10,SNR=14 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.71** | **260** | T | | T | 17 37 11.9 | |
| | baz=82,slow=76,SNR=365 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.72** | **260** | T | | T | 17 37 06.9 | |
| | baz=82,slow=76,SNR=391 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.73** | **260** | T | | T | 17 37 13.3 | |
| | baz=82,slow=76,SNR=358 | | | | | | | |
| **H08N1** | **Diego Carcia H** | **29.04** | **263** | T | | T | 17 39 28.0 | |
| | baz=130,slow=74,SNR=14 | | | | | | | |
| **H08N2** | **Diego Garcia H** | **29.05** | **263** | T | | T | 17 39 31.8 | |
| | baz=130,slow=74,SNR=14 | | | | | | | |
| **H08N3** | **Diego Garcia H** | **29.06** | **263** | T | | T | 17 39 20.5 | |
| | baz=130,slow=74,SNR=22 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.97** | **159** | T | | T | 17 44 44.5 | |
| | baz=335,slow=76,SNR=84 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.98** | **159** | T | | T | 17 44 45.5 | |
| | baz=335,slow=76,SNR=106 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.98** | **159** | T | | T | 17 44 45.7 | |
| | baz=335,slow=76,SNR=66 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.30** | **119** | P | | **P** | **17 09 23.6** | **-0.5** |
| | 1.0nm,0.5s,baz=305,slow=9.3,SNR=7.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.44** | **125** | P | | **P** | **17 09 33.5** | **-0.3** |
| | 1.4nm,0.5s,baz=298,slow=7.7,SNR=22 | | | | | | | |
| **SONM** | **Songino Array** | **51.32** | **6** | P | | **P** | **17 11 16.6** | **+0.6** |
| | 2.5nm,0.7s,baz=185,slow=9.2,SNR=20 | | | | | | | |
| SONM | | | | pP | | **pP** | **17 11 23.4** | **0.0** |
| | 2.3nm,0.6s,baz=188,slow=9.6,SNR=15 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **17 12 31.1** | **+0.4** |
| | 0.8nm,0.6s,baz=187,slow=5.4,SNR=2.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.37** | **345** | P | | **P** | **17 11 24.5** | **+0.8** |
| | 4.1nm,0.6s,baz=148,slow=8.5,SNR=31 | | | | | | | |
| MKAR | | | | pP | | **pP** | **17 11 31.5** | **+0.4** |
| | 2.8nm,0.7s,baz=150,slow=7.5,SNR=10.0 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.37** | **28** | P | | **P** | **17 11 44.9** | **-0.7** |
| | 7.2nm,0.8s,baz=222,slow=5.4,SNR=10 | | | | | | | |
| USRK | | | | pP | | **pP** | **17 11 53.0** | **-0.2** |
| | 2.9nm,0.7s,baz=230,slow=7.0,SNR=3.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.88** | **344** | P | | **P** | **17 11 56.8** | **+0.5** |
| | 2.1nm,0.8s,baz=160,slow=7.0,SNR=17 | | | | | | | |
| KURBB | | | | pP | | **pP** | **17 12 04.0** | **+0.2** |
| | 1.0nm,0.6s,baz=163,slow=7.1,SNR=6.7 | | | | | | | |
| **KURK** | **Kurchatov** | **56.94** | **344** | *e*P | | **P** | **17 11 56.9** | **+0.2** |
| | 9.5nm,0.9s | | | | | | | |
| KURK | | | | pP | | **pP** | **17 12 04.0** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **58.53** | **350** | P | | **P** | **17 12 07.8** | **0.0** |
| | 3.8nm,0.8s,baz=178,slow=5.2,SNR=17 | | | | | | | |
| ZALV | | | | pP | | **pP** | **17 12 15.2** | **-0.1** |
| | 3.4nm,0.8s,baz=182,slow=6.2,SNR=7.3 | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.49** | **340** | P | | **P** | **17 12 28.0** | **-0.2** |
| | 1.0nm,0.6s,baz=144,slow=11,SNR=5.7 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **64.58** | **332** | P | | **P** | **17 12 48.6** | **-0.2** |
| | 0.5nm,0.3s,baz=108,slow=3.2,SNR=3.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.27** | **313** | P | | **P** | **17 13 49.3** | **+0.2** |
| | 0.8nm,0.7s,baz=134,slow=8.7,SNR=5.9 | | | | | | | |
| BRTR | | | | pP | | **pP** | **17 13 57.5** | **+0.6** |
| | 0.6nm,0.7s,baz=131,slow=5.7,SNR=3.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **85.34** | **332** | P | | **P** | **17 14 49.5** | **+1.1** |
| | 1.2nm,0.8s,baz=142,slow=7.0,SNR=3.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.78** | **39** | PKPbc | | **PKPab** | **17 21 52.3** | **+0.5** |
| | 4.1nm,0.8s,baz=304,slow=0.9,SNR=41 | | | | | | | |
| TXAR | | | | pPKPbc | | pPKPbc | 17 22 00.1 | +0.6 |
| | 2.9nm,0.7s,baz=265,slow=1.3,SNR=15 | | | | | | | |

**GUC 25 17:04:05.7±0.3,29°.09S×69°.51W,h98km±11km,ML3.5,4C, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **VACH** | **Vallenar** | **1.21** | **295** | ⇑*i*P | | Pn | 17 04 30.0 | +1.6 |
| VACH | | | | *i* S | | Sn | 17 04 48.1 | +2.5 |
| **TLL** | **Tololo Astrono** | **1.56** | **226** | ⇑*i*P | | Pn | 17 04 33.5 | +0.5 |
| TLL | | | | *i* S | | Sn | 17 04 54.7 | +1.1 |
| TLL | | | | AML | | AML | 17 04 56.8 | |
| | comp=E,713nm,0.2s | | | | | | | |
| **LSCH** | **La Serena** | **1.72** | **241** | ⇑*i*P | | Pn | 17 04 34.7 | +0.1 |
| LSCH | | | | *i* S | | Sn | 17 04 56.9 | +0.4 |
| **CPCH** | **Copiapo** | **1.88** | **336** | ⇑*i*P | | Pn | 17 04 37.0 | +0.3 |
| CPCH | | | | *i* S | | Sn | 17 05 00.6 | +0.4 |
| **CDCH** | **Caldera** | **2.32** | **330** | *i* S | | Sn | 17 05 10.8 | +0.3 |

**IDC 25 17:08:33.1±3.8,3°.69S×99°.46E,h0km,mb3.7/4,mb1 3.8/4, mb1mx3.5/37,mbtmp3.7/4,Error ellipse: s-maj=151.4km s-min=64.0km az=70.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.01** | **359** | P | | P | 17 13 29.3 | 0.0 |
| | 0.5nm,0.3s,baz=190,slow=9.8,SNR=3.0 | | | | | | | |
| **SONM** | **Songino Array** | **51.67** | **6** | P | | P | 17 17 41.8 | -0.2 |
| | 0.6nm,0.6s,baz=176,slow=6.5,SNR=3.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.51** | **345** | P | | P | 17 17 48.2 | +0.1 |
| | 0.6nm,0.7s,baz=161,slow=7.7,SNR=3.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.72** | **350** | P | | P | 17 18 32.3 | -0.2 |
| | 1.3nm,0.6s,baz=164,slow=5.9,SNR=6.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.36** | **38** | PKPbc | | PKPdf | 17 28 16.0 | +0.3 |
| | 0.4nm,0.7s,baz=162,slow=1.8,SNR=4.6 | | | | | | | |

**IDC 25 17:19:53.2±3.2,3°.40S×99°.42E,h0km,mb3.7/5,mb1 3.8/5, mb1mx3.5/31,mbtmp3.7/5,Error ellipse: s-maj=131.1km s-min=25.1km az=59.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.72** | **359** | P | | P | 17 24 46.2 | 0.0 |
| | 1.3nm,0.6s,baz=185,slow=10.0,SNR=11 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.13** | **260** | T | | T | 17 53 22.8 | |
| | baz=81,slow=76,SNR=54 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.14** | **260** | T | | T | 17 53 25.6 | |
| | baz=81,slow=76,SNR=41 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.15** | **260** | T | | T | 17 53 24.3 | |
| | baz=81,slow=76,SNR=71 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.92** | **124** | P | | P | 17 27 21.2 | +0.1 |
| | 0.3nm,0.8s,baz=298,slow=8.0,SNR=3.9 | | | | | | | |
| **SONM** | **Songino Array** | **51.39** | **6** | P | | P | 17 28 59.9 | 0.0 |
| | 1.0nm,0.7s,baz=181,slow=8.4,SNR=8.1 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.22** | **345** | P | | P | 17 29 06.4 | +0.4 |
| | 1.0nm,0.7s,baz=153,slow=8.2,SNR=6.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.43** | **350** | P | | P | 17 29 50.4 | -0.3 |
| | 1.0nm,0.4s,baz=184,slow=5.9,SNR=12 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.15** | **38** | PKPbc | | PKPdf | 17 39 34.9 | -0.6 |
| | 0.4nm,0.6s,baz=345,slow=0.9,SNR=6.6 | | | | | | | |

*ISCJB **25** 17:29:10.6±0.6,37°.24N±0′.06×34°.96E±0°.05,h4km±8km, Error ellipse: s-maj=10.1km s-min=5.4km az=19.3*
*CSEM **25** 17:29:10.6±0.3,37°.25N×34°.94E,h2km,MD2.4,Error ellipse: s-maj=7.0km s-min=5.7km az=28.0*
*DDA **25** 17:29:10.1,37°.22N×34°.94E,h7km,Md2.8*
*ISK **25** 17:29:10.5,37°.28N×35°.01E,h4km,MD2.4*

**ISC 25 17:29:10.6±1.1,37°.22N±0′.04×34°.93E±0′.03,h3km±17km, n18,σ0s62/23,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KARA** | **Karaisali** | **0.11** | **65** | *e*PG | | **Pg** | **17 29 11.9** | **-0.9** |
| **KARA** | **Karaisali** | **0.11** | **65** | *e*Pg | | **Pg** | **17 29 11.9** | **-0.9** |
| **GULE** | **Gulek** | **0.14** | **299** | *i* S | | **Sg** | **17 29 16.3** | **+0.9** |
| **GULE** | **Gulek** | **0.14** | **299** | P | | **Pg** | **17 29 13.9** | **+0.4** |
| GULE | | | | S | | **Sg** | **17 29 16.3** | **+0.9** |
| **CEYT** | **Ceyhan** | **0.68** | **107** | *e*PG | | **Pg** | **17 29 23.8** | **0.0** |
| CEYT | | | | *e*SG | | **Sg** | **17 29 33.3** | **+0.7** |
| **CEYT** | **Ceyhan** | **0.68** | **107** | *e*Pg | | **Pg** | **17 29 23.8** | **0.0** |
| CEYT | | | | *e*Sg | | **Sg** | **17 29 33.3** | **+0.7** |
| **KRTS** | **Karatas** | **0.73** | **151** | *e*PG | | **Pb** | **17 29 25.7** | **-0.3** |
| **KRTS** | **Karatas** | **0.73** | **151** | *e*Pg | | **Pb** | **17 29 25.7** | **-0.3** |
| **NIG** | **Nigde** | **0.93** | **344** | *e*PG | | **Pg** | **17 29 28.1** | **-0.4** |
| **NIG** | **Nigde** | **0.93** | **344** | *e*Pg | | **Pg** | **17 29 28.1** | **-0.4** |
| **KIZK** | **Mersin** | **0.97** | **221** | *i* P | | **Pg** | **17 29 28.4** | **-0.8** |
| KIZK | | | | *i* S | | **Sb** | **17 29 43.5** | **+0.3** |
| **KIZK** | **Mersin** | **0.97** | **221** | P | | **Pg** | **17 29 28.4** | **-0.8** |
| KIZK | | | | S | | **Sb** | **17 29 43.5** | **+0.3** |
| **GULA** | **Gulagac** | **1.25** | **334** | *e*PN | | **Pg** | **17 29 34.7** | **0.0** |
| **GULA** | **Gulagac** | **1.25** | **334** | *e*Pn | | **Pg** | **17 29 34.7** | **0.0** |
| **TAHT** | **Tahtakopru-Hat** | **1.31** | **129** | *e*PN | | **Pg** | **17 29 36.0** | **+0.3** |
| **TAHT** | **Tahtakopru-Hat** | **1.31** | **129** | *e*Pn | | **Pg** | **17 29 36.0** | **+0.3** |
| **HDMB** | **Hadim** | **1.97** | **263** | *e*PN | | **Pb** | **17 29 46.7** | **-0.6** |
| **HDMB** | **Hadim** | **1.97** | **263** | *e*Pn | | **Pb** | **17 29 46.7** | **-0.6** |

*IDC **25** 17:30:44.0±1.5,3°.85S×99°.66E,h0km,mb3.6/7,mb1 3.7/7, mb1mx3.5/31,mbtmp3.6/7,Error ellipse: s-maj=59.3km s-min=20.2km az=52.0*
*ISCJB **25** 17:30:47.2±1.4,3°.8S±0′.2×99°.8E±0°.3,h33km,mb3.6/7, Error ellipse: s-maj=54.0km s-min=16.6km az=144.4*
**ISC 25 17:30:49.3±1.6,3°.8S±0′.3×99°.8E±0°.4,h35km,n14,σ0s74/8, mb3.6/7,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.12** | **358** | P | | **P** | **17 35 40.6** | **-1.3** |
| | 0.7nm,0.8s,baz=186,slow=10,SNR=7.6 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.39** | **261** | T | | T | 18 05 32.1 | |
| | baz=82,slow=75,SNR=33 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.39** | **261** | T | | T | 18 05 45.5 | |
| | baz=82,slow=75,SNR=43 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.40** | **261** | T | | T | 18 05 46.4 | |
| | baz=82,slow=75,SNR=39 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.70** | **158** | T | | T | 18 13 32.7 | |
| | baz=336,slow=76,SNR=8.4 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.71** | **158** | T | | T | 18 13 33.6 | |
| | baz=336,slow=76,SNR=11 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.71** | **158** | T | | T | 18 13 37.1 | |
| | baz=336,slow=76,SNR=8.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.34** | **118** | P | | **P** | **17 37 58.8** | **0.0** |
| | 0.3nm,0.6s,baz=305,slow=9.2,SNR=3.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.44** | **124** | P | | **P** | **17 38 07.6** | **-0.4** |
| | 0.3nm,0.8s,baz=295,slow=7.7,SNR=4.9 | | | | | | | |
| **SONM** | **Songino Array** | **51.74** | **6** | P | | **P** | **17 39 54.1** | **+0.8** |
| | 1.1nm,0.7s,baz=187,slow=8.7,SNR=8.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.68** | **345** | P | | **P** | **17 40 00.6** | **+0.4** |
| | 0.7nm,0.6s,baz=149,slow=9.6,SNR=5.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.87** | **350** | P | | **P** | **17 40 44.7** | **+0.3** |
| | 1.1nm,0.5s,baz=158,slow=4.3,SNR=6.0 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.34** | **313** | P | | **P** | **17 42 23.5** | **-0.2** |
| | 0.4nm,0.5s,baz=129,slow=6.2,SNR=3.1 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.26** | **39** | PKPbc | | **PKPab** | **17 50 27.9** | **+0.2** |
| | 0.6nm,0.7s,baz=336,slow=1.3,SNR=8.8 | | | | | | | |

*IDC **25** 17:34:33.2±1.4,3°.21S×100°.00E,h0km,mb3.8/8, mb1 3.8/8,mb1mx3.6/31,mbtmp3.8/8,Error ellipse: s-maj=51.0km s-min=18.9km az=53.0*
*ISCJB **25** 17:34:36.0±1.3,3°.1S±0′.2×100°.2E±0°.3,h27km,mb3.8/8, Error ellipse: s-maj=45.9km s-min=15.7km az=144.4*
**ISC 25 17:34:37.7±1.5,3°.2S±0′.2×100°.1E±0°.3,h27km,n15, σ1s14/11,mb3.9/8,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.53** | **357** | P | | **P** | **17 39 23.6** | **-1.4** |
| | 0.5nm,0.7s,baz=192,slow=8.6,SNR=6.8 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.87** | **260** | T | | T | 18 09 38.5 | |
| | baz=82 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.88** | **260** | T | | T | 18 09 39.2 | |
| **H08S1** | **Diego Carcia H** | **27.89** | **260** | T | | T | 18 09 36.2 | |
| | baz=82,SNR=8.7 | | | | | | | |
| **ODAN** | **Odare** | **32.30** | **338** | *e*P | | P | 17 41 09.3 | +4.5 |
| | 4.5nm,0.3s | | | | | | | |
| **TAPN** | **Tapejung** | **32.63** | **339** | *e*P | | **P** | **17 41 09.9** | **+2.1** |
| | 3.4nm,0.3s | | | | | | | |
| **RAMN** | **Ramite** | **32.68** | **337** | *e*P | | P | 17 41 18.1 | +10 |
| | 3.6nm,0.3s | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.29** | **119** | P | | **P** | **17 41 48.7** | **+0.8** |
| | 0.3nm,0.5s,baz=296,slow=8.5,SNR=2.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.46** | **125** | P | | **P** | **17 41 57.2** | **-0.4** |
| | 0.2nm,0.3s,baz=300,slow=8.1,SNR=12 | | | | | | | |
| **SONM** | **Songino Array** | **51.09** | **5** | P | | **P** | **17 43 38.5** | **+0.4** |
| | 2.1nm,0.7s,baz=188,slow=9.0,SNR=16 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **17 44 53.6** | **+0.1** |
| | 0.4nm,0.6s,baz=179,slow=4.3,SNR=2.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.19** | **345** | P | | **P** | **17 43 46.6** | **+0.5** |
| | 2.4nm,0.7s,baz=147,slow=8.5,SNR=16 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.13** | **28** | P | | **P** | **17 44 07.0** | **-0.7** |
| | 2.9nm,0.6s,baz=231,slow=9.5,SNR=4.7 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.34** | **349** | P | | **P** | **17 44 29.5** | **-0.8** |
| | 1.9nm,0.7s,baz=165,slow=6.2,SNR=7.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.22** | **313** | P | | **P** | **17 46 11.4** | **-1.2** |
| | 0.3nm,0.6s,baz=94,slow=10,SNR=3.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.54** | **39** | PKPbc | | **PKPab** | **17 54 15.1** | **+0.4** |
| | 1.1nm,0.7s,baz=319,slow=1.2,SNR=14 | | | | | | | |

*BJI **25** 17:36:36.2,3°.34S×99°.52E,h23km,mb4.7/19,mB5.4/1, Ms4.7/1,Ms7 4.6/1*
*AUST **25** 17:36:37.4±0.5,2°.87S×99°.36E,h0km,Error ellipse: s-maj=10.5km s-min=4.9km az=55.0*
*IDC **25** 17:36:38.2±0.7,2°.87S×99°.45E,h0km,mb4.3/20, mb1 4.5/22,mb1mx4.3/40,mbtmp4.4/22,ML3.8/2,Error ellipse: s-maj=22.7km s-min=13.9km az=43.0*
*NEIC **25** 17:36:38.6±4.6,2°.85S×99°.46E,h3km±28km,mb4.4/6, Error ellipse: s-maj=14.8km s-min=6.7km az=50.0*
*KLM **25** 17:36:39.4,2°.80S×99°.12E,h31km,mb4.6,ML4.6,MS5.2*
*ISCJB **25** 17:36:40.9±0.3,2°.89S±0′.03×99°.50E±0°.03,h33km, mb4.5/49,Error ellipse: s-maj=5.8km s-min=3.6km az=43.6*
*DJA **25** 17:36:40.6±0.9,3°S±4′×9°9E±°,h24km±7km,M4.7/2, mb5.0/2,mB5.6/2,MLv4.5/1,Mw(mB)5.1/2*
*MOS **25** 17:36:41.1±1.0,2°.80S×99°.54E,h32km,mb4.7/19,Error ellipse: s-maj=12.7km s-min=6.2km az=110.2*
**ISC 25 17:36:43.1±0.5,2°.88S±0′.07×99°.48E±0°.06,h35km,n159, σ1s07/146,mb4.6/49,23C,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.54** | **78** | P | | **Pn** | **17 36 54.0** | **-0.4** |
| PPSI | | | | S | | **Sn** | **17 37 03.0** | **+0.8** |
| **SISI** | **Saibi** | **1.59** | **346** | P | | **Pn** | **17 37 07.2** | **-1.5** |
| SISI | | | | S | | **Sn** | **17 37 28.5** | **+0.5** |
| **PPI** | **Padang Panjang** | **2.57** | **21** | P | | **Pn** | **17 37 21.8** | **-0.5** |
| | baz=2.6,SNR=42 | | | | | | | |
| **PPI** | **Padang Panjang** | **2.57** | **21** | P | | **Pn** | **17 37 21.8** | **-0.5** |
| PPI | | | | S | | **Sn** | **17 37 51.9** | **-0.5** |
| **SDSI** | **Sungai Dareh** | **2.74** | **45** | P | | **Pn** | **17 37 25.3** | **+0.7** |
| **BKNI** | **Bangkinang** | **3.54** | **26** | P | | **Pn** | **17 37 35.4** | **-0.2** |
| | baz=3.6,SNR=5.0 | | | | | | | |
| **BKNI** | **Bangkinang** | **3.54** | **26** | P | | **Pn** | **17 37 36.3** | **+0.6** |
| **MNSI** | **Mandailing Nat** | **3.65** | **2** | P | | **Pn** | **17 37 36.2** | **-0.9** |
| **MNAI** | **Manna** | **3.77** | **113** | P | | **Pn** | **17 37 38.1** | **-0.7** |
| | baz=3.9,SNR=5.1 | | | | | | | |
| **MNAI** | **Manna** | **3.77** | **113** | P | | **Pn** | **17 37 38.4** | **-0.4** |
| **SBSI** | **Sibolga** | **4.43** | **352** | P | | Pn | 17 37 38.6 | -9.3 |
| **GSI** | **Gunungsitoli** | **4.57** | **335** | P | | **Pn** | **17 37 47.2** | **-2.6** |
| | baz=4.5 | | | | | | | |
| **GSI** | **Gunungsitoli** | **4.57** | **335** | P | | **Pn** | **17 37 48.5** | **-1.3** |
| **MDSI** | **Maura Dua** | **4.96** | **109** | P | | **Pn** | **17 37 55.0** | **-0.1** |
| **LWLI** | **Liwa** | **5.04** | **115** | P | | **Pn** | **17 37 56.1** | **-0.3** |
| **PMBI** | **Palembang** | **5.29** | **91** | P | | **Pn** | **17 37 58.3** | **-1.4** |
| **KASI** | **Kota Agung** | **5.65** | **118** | P | | **Pn** | **17 38 04.3** | **-0.4** |
| | 260nm,0.7s,8μm | | | | | | | |
| **PSI** | **Prapat** | **5.67** | **354** | Pn | | Pn | 17 38 01.1 | -3.9 |
| | 0.9nm,0.3s,baz=169,slow=8.7,SNR=7.0 | | | | | | | |
| **PSI** | **Prapat** | **5.67** | **354** | P | | Pn | 17 38 00.8 | -4.2 |
| | baz=5.6,SNR=4.3 | | | | | | | |
| **KLI** | **Kotabumi** | **5.72** | **110** | P | | **Pn** | **17 38 04.9** | **-0.7** |
| **BTDF** | **Bukit Timah Da** | **6.01** | **46** | P | | **Pn** | **17 38 09.1** | **-0.5** |
| | baz=6.1 | | | | | | | |
| **KGM** | **Kluang** | **6.19** | **38** | ⇑P | | **Pn** | **17 38 11.7** | **-0.4** |
| **MYKOM** | **Kota Tinggi** | **6.37** | **43** | ⇑P | | **Pn** | **17 38 13.9** | **-0.6** |
| **TSI** | **Tuntungan** | **6.40** | **352** | P | | **Pn** | **17 38 13.5** | **-1.4** |
| **FRIM** | **Kepong** | **6.44** | **19** | ⇑P | | **Pn** | **17 38 13.6** | **-1.9** |
| **KCSI** | **Kotacane, Aceh** | **6.58** | **345** | P | | **Pn** | **17 38 16.1** | **-1.3** |
| **PPBI** | **Pangkal Pinang** | **6.69** | **84** | P | | **Pn** | **17 38 18.3** | **-0.6** |
| **CGJI** | **Cibinong** | **7.22** | **121** | P | | **Pn** | **17 38 24.3** | **-1.9** |
| **SBJI** | **Serang** | **7.37** | **116** | P | | **Pn** | **17 38 27.9** | **-0.4** |
| **KULM** | **Kulim** | **8.20** | **8** | ⇑P | | **Pn** | **17 38 36.8** | **-2.8** |
| **LHMI** | **Lhok Sumawe** | **8.44** | **343** | P | | **Pn** | **17 38 41.9** | **-1.0** |
| **CNJI** | **Cibinong** | **8.80** | **120** | P | | **Pn** | **17 38 47.6** | **-0.3** |
| **KTGM** | **Kuala Trenggan** | **8.93** | **24** | ⇑P | | **Pn** | **17 38 48.7** | **-1.0** |
| **LEM** | **Lembang** | **9.01** | **116** | Pn | | **Pn** | **17 38 50.7** | **-0.2** |
| | 2.9nm,0.3s,baz=157,slow=21,SNR=4.3 | | | | | | | |
| **LEM** | **Lembang** | **9.01** | **116** | P | | **Pn** | **17 38 50.5** | **-0.4** |
| **CISI** | **Cisompet, Garu** | **9.51** | **120** | P | | **Pn** | **17 38 54.9** | **-2.9** |
| | baz=9.6,SNR=7.1 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.51** | **120** | P | | **Pn** | **17 38 55.1** | **-2.7** |
| **CISI** | **Cisompet, Garu** | **9.51** | **120** | *e*P | | Pn | 17 38 54.5 | -3.3 |
| | 93nm,0.5s | | | | | | | |
| **SBUM** | **Sibu** | **13.79** | **68** | ⇑P | | **Pn** | **17 39 57.2** | **+1.0** |
| **BTM** | **Bintulu** | **14.88** | **66** | ⇑P | | **Pn** | **17 40 11.2** | **+0.2** |
| **KHLT** | **Khaolaem Dam** | **17.58** | **357** | P | | **P** | **17 40 46.1** | **-0.2** |
| | 49nm,1.1s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.92** | **62** | P | | **Pn** | **17 41 02.0** | **0.0** |
| | baz=19,SNR=6.3 | | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.92** | **62** | *e*P | | **Pn** | **17 41 02.3** | **+0.3** |
| | 12nm,0.7s | | | | | | | |
| **UMPA** | **Umpang Tak** | **18.97** | **358** | P | | Pn | 17 41 08.0 | +5.5 |
| **PBKT** | **Sadao Pong** | **19.38** | **4** | P | | **Pn** | **17 41 07.8** | **+0.5** |
| | 15nm,1.1s | | | | | | | |
| **SDKM** | **Sandakan** | **19.61** | **64** | ⇑P | | **P** | **17 41 09.1** | **+0.4** |
| **TSM** | **Tawau** | **19.71** | **69** | ⇑P | | **P** | **17 41 09.4** | **-0.4** |
| **KDM** | **Kudat** | **19.87** | **61** | ⇑P | | **P** | **17 41 11.3** | **-0.1** |
| **LOEI** | **Loei** | **20.33** | **5** | P | | Pn | 17 41 19.2 | +0.5 |
| | 40nm,2.1s | | | | | | | |
| **KAPI** | **Kappang** | **20.34** | **97** | P | | **P** | **17 41 16.0** | **-0.6** |
| | 31nm,1.0s,baz=252,slow=8.9,SNR=4.6 | | | | | | | |
| **UTTA** | **Uttaradit** | **20.52** | **3** | P | | Pn | 17 41 22.4 | +1.6 |
| | 2.1nm,0.8s | | | | | | | |
| **MHMT** | **Maesarieng** | **20.97** | **356** | P | | **P** | **17 41 24.1** | **+0.7** |
| | 19nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.20** | **359** | P | | **P** | **17 41 25.4** | **-0.4** |
| | 8.5nm,0.9s,baz=188,slow=10.0,SNR=24 | | | | | | | |
| **LAMP** | **Lampang** | **21.26** | **0** | P | | **P** | **17 41 30.5** | **+4.0** |
| | 9.7nm,0.9s | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.56** | **359** | P | | **P** | **17 41 30.9** | **+1.2** |
| **CHTO** | **Chiang Mai** | **21.56** | **359** | *e*P | | **P** | **17 41 29.0** | **-0.7** |
| CHTO | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.56** | **359** | *e*P | | **P** | **17 41 29.0** | **-0.7** |
| | comp=Z,6.5nm,0.6s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.28** | **259** | T | | T | 18 10 45.1 | |
| | baz=80,slow=74,SNR=75 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.28** | **259** | T | | T | 18 10 44.4 | |
| | baz=80,slow=74,SNR=76 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.30** | **259** | T | | T | 18 10 45.2 | |
| | baz=80,slow=74,SNR=222 | | | | | | | |
| **H08N1** | **Diego Carcia H** | **28.57** | **262** | T | | T | 18 13 00.5 | |
| | baz=146,slow=75,SNR=9.3 | | | | | | | |
| **H08N2** | **Diego Garcia H** | **28.59** | **262** | T | | T | 18 13 06.1 | |
| | baz=146,slow=75,SNR=7.9 | | | | | | | |
| **H08N3** | **Diego Garcia H** | **28.60** | **262** | T | | T | 18 13 07.7 | |
| | baz=146,slow=75,SNR=9.5 | | | | | | | |
| **KNRA** | **Kununurra** | **31.52** | **116** | P | | **P** | **17 43 01.0** | **-1.2** |
| | baz=32,SNR=3.2 | | | | | | | |
| **LSA** | **L

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **OPO** | **Ambohidratompo** | **53.47** | **249** | P | **P** | **17 46 01.8** | **+1.3** |
| | comp=Z,3.6nm,0.8s,baz=329,slow=5.9,SNR=3.3 | | | | | | |
| **HVS** | **Khovu-Aksy** | **54.03** | **356** | *eP* | **P** | **17 46 04.5** | **+0.5** |
| HVS | | | | pmax | pmax | | |
| | comp=Z,11nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **54.38** | **119** | P | **P** | **17 46 08.1** | **+1.2** |
| | baz=54 | | | | | | |
| **TLY** | **Talaya** | **54.47** | **3** | *eP* | **P** | **17 46 09.2** | **+2.2** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | |
| **HIA** | **Hailar** | **54.82** | **16** | *eP* | **P** | **17 46 09.3** | **-0.4** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.17** | **28** | P | **P** | **17 46 13.3** | **+1.1** |
| | comp=Z,20nm,0.8s,baz=218,slow=5.8,SNR=24 | | | | | | |
| **GEYT** | **Alibeck** | **55.79** | **321** | P | **P** | **17 46 16.5** | **-0.4** |
| | comp=Z,2.9nm,0.8s,baz=185,slow=7.4,SNR=6.0 | | | | | | |
| **OTUK** | **Ortayu** | **56.15** | **338** | P | **P** | **17 46 19.2** | **0.0** |
| OTUK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.24** | **344** | P | **P** | **17 46 19.9** | **+0.2** |
| | comp=Z,2.9nm,0.9s,baz=162,slow=6.8,SNR=18 | | | | | | |
| **KURK** | **Kurchatov** | **56.30** | **344** | P | **P** | **17 46 20.0** | **-0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **56.30** | **344** | *eP* | **P** | **17 46 20.1** | **-0.2** |
| **ZAA0** | **Zalesovo Array** | **57.93** | **350** | P | **P** | **17 46 32.5** | **+0.9** |
| | baz=58 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.93** | **350** | P | **P** | **17 46 32.2** | **+0.5** |
| | baz=58,SNR=6.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.93** | **350** | P | **P** | **17 46 32.0** | **+0.3** |
| | comp=Z,11nm,0.9s,baz=174,slow=5.4,SNR=38 | | | | | | |
| **KLR** | **Kul'dur** | **58.94** | **24** | *eP* | **P** | **17 46 36.7** | **-2.1** |
| KLR | | | | pmax | pmax | | |
| | comp=Z,64nm,1.8s | | | | | | |
| **NVS** | **Novosibirsk** | **59.07** | **349** | *eP* | **P** | **17 46 40.0** | **+0.4** |
| NVS | | | | pmax | pmax | | |
| | comp=N,7.0nm,1.5s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=E,8.0nm,1.5s | | | | | | |
| NVS | | | | pmax | pmax | | |
| | comp=Z,11nm,1.5s | | | | | | |
| **ZRNK** | **Zerenda** | **61.24** | **340** | P | **P** | **17 46 53.8** | **-0.7** |
| ZRNK | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **CHKZ** | **Chkalovo** | **61.29** | **341** | P | **P** | **17 46 54.2** | **-0.6** |
| CHKZ | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **BOD** | **Bodaibo** | **61.62** | **9** | *eP* | **P** | **17 46 57.4** | **+0.4** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **AB31** | **Akbulak array** | **62.16** | **332** | *i P* | **P** | **17 47 00.1** | **-0.7** |
| AB31 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **ABKAR** | **Akbulak array** | **62.16** | **332** | P | **P** | **17 47 00.8** | **0.0** |
| | baz=62 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.16** | **332** | *eP* | **P** | **17 47 00.3** | **-0.5** |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **SVE** | **Sverdlovsk** | **67.29** | **338** | *eP* | **P** | **17 47 34.3** | **+0.2** |
| SVE | | | | pmax | pmax | | |
| | comp=Z,13nm,1.0s | | | | | | |
| **KBZ** | **Khabaz** | **68.63** | **319** | P | **P** | **17 47 42.9** | **+0.2** |
| | comp=Z,3.2nm,0.9s,baz=195,slow=7.7,SNR=7.3 | | | | | | |
| **YAK** | **Yakutsk** | **68.72** | **15** | *eP* | **P** | **17 47 42.7** | **-0.2** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,21nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,9.0nm,1.3s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.4s | | | | | | |
| **KIV** | **Kislovodsk** | **68.86** | **320** | *eP* | **P** | **17 47 44.3** | **-0.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.1s | | | | | | |
| **VRH** | **Novokhopyorsk** | **72.75** | **326** | *eP* | **P** | **17 48 07.3** | **-0.4** |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=N,20nm,1.1s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.5s | | | | | | |
| **BRTR** | **Keskin Array B** | **73.53** | **313** | P | **P** | **17 48 12.1** | **-0.7** |
| | comp=E,1.4nm,0.8s,baz=131,slow=6.1,SNR=8.9 | | | | | | |
| **VORD** | **Divnogorie** | **74.01** | **325** | *eP* | **P** | **17 48 13.8** | **-1.4** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.5s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.6s | | | | | | |
| **VSR** | **Storozhevoye** | **74.19** | **325** | *eP* | **P** | **17 48 15.3** | **-0.9** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,5.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.6s | | | | | | |
| **LPSR** | **Galich'ya Gora** | **74.93** | **327** | *eP* | **P** | **17 48 20.1** | **-0.3** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,6.0nm,1.1s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=E,1.0nm,0.2s | | | | | | |
| **OBN** | **Obninsk** | **77.26** | **328** | *eP* | **P** | **17 48 32.9** | **-0.7** |
| OBN | | | | *i* | | 17 48 44.9 | |
| OBN | | | | *i* | | 17 51 22.6 | |
| OBN | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **TLB** | **Topalu** | **78.91** | **316** | *⇑P* | **P** | **17 48 39.9** | **-3.2** |
| **TLB** | **Topalu** | **78.91** | **316** | *⇑i P* | **P** | **17 48 39.9** | **-3.2** |
| **AKASG** | **Malin Array Be** | **79.86** | **323** | P | **P** | **17 48 48.0** | **-0.1** |
| | comp=Z,0.2nm,0.3s,baz=101,slow=3.0,SNR=5.7 | | | | | | |
| **KIEV** | **Kiev** | **79.86** | **323** | *eP* | **P** | **17 48 46.6** | **-1.5** |
| KIEV | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **VRI** | **Vrincioaia** | **80.14** | **317** | *⇑P* | **P** | **17 48 50.4** | **+0.6** |
| **VRI** | **Vrincioaia** | **80.14** | **317** | *⇑i P* | **P** | **17 48 50.3** | **+0.5** |
| **PLOR** | **Plostina** | **80.19** | **317** | *⇑P* | P | 17 48 45.3 | -4.8 |
| **PLOR** | **Plostina** | **80.19** | **317** | *⇑i P* | P | 17 48 45.3 | -4.8 |
| **TESR** | **Tescani** | **80.35** | **318** | *⇑i P* | **P** | **17 48 51.0** | **+0.1** |
| **MLR** | **Muntele Rosu** | **80.58** | **317** | *⇑P* | **P** | **17 48 53.4** | **+1.1** |
| **MLR** | **Muntele Rosu** | **80.58** | **317** | *⇑i P* | **P** | **17 48 53.4** | **+1.1** |
| **BURAR** | **Bucovina Array** | **81.57** | **319** | *⇑P* | **P** | **17 48 58.6** | **+1.1** |
| **BURAR** | **Bucovina Array** | **81.57** | **319** | *⇑i P* | **P** | **17 48 58.6** | **+1.1** |
| **BILL** | **Bilibino** | **84.15** | **20** | *i P* | **P** | **17 49 12.0** | **+1.7** |
| BILL | | | | *i* | | 17 52 30.4 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.2s | | | | | | |
| **FINES** | **FINESS Array B** | **84.64** | **332** | P | **P** | **17 49 13.4** | **+0.5** |
| | comp=Z,1.8nm,0.6s,baz=93,slow=7.6,SNR=5.8 | | | | | | |
| **FINES** | **FINESS Array B** | **84.64** | **332** | *ceP* | **P** | **17 49 13.3** | **+0.5** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.11** | **340** | P | **P** | **17 49 24.9** | **-0.1** |
| | comp=Z,10nm,1.0s,baz=120,slow=5.3,SNR=6.8 | | | | | | |
| **GERES** | **GERESS Array B** | **89.36** | **319** | P | **P** | **17 49 37.3** | **+1.1** |
| | comp=Z,0.4nm,0.5s,baz=64,slow=3.1,SNR=6.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.71** | **38** | PKPbc | **PKPab** | **17 56 20.2** | **+0.7** |
| | comp=Z,3.6nm,0.7s,baz=275,slow=0.6,SNR=33 | | | | | | |
| **JCT** | **Junction City** | **147.04** | **32** | *e*PKP2 | **PKPbc** | **17 56 22.3** | **-0.7** |
| **JCT** | **Junction City** | **147.04** | **32** | *eP* | **PKPbc** | **17 56 22.3** | **-0.7** |

*ISCJB **25** 17:40:54.3±2.5, 3.6°S±0.4°×98.9°E±0.6°, h33km, mb3.6/7, Error ellipse: s-maj=96.0km s-min=16.8km az=146.8*
*IDC **25** 17:40:57.2±2.4, 3.50°S×99.09°E, h36km±7km, mb3.4/7, mb1 3.5/7, mb1mx3.3/38, mbtmp3.6/7, Error ellipse: s-maj=87.7km s-min=18.6km az=56.0*

**ISC 25 17:40:56.6±2.6, 3.6°S±0.4°×99.0°E±0.6°, h35km, n7, σ0°63/11, mb3.6/7, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.88** | **360** | P | **P** | **17 45 46.4** | **-0.3** |
| | 1.0nm,0.7s,baz=188,slow=9.5,SNR=5.1 | | | | | | |
| CMAR | | | | pP | **pP** | 17 45 56.6 | +0.7 |
| | 1.4nm,0.7s,baz=186,slow=10.0,SNR=7.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **38.09** | **118** | P | **P** | **17 48 13.5** | **+1.0** |
| | 0.2nm,0.5s,baz=292,slow=8.9,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **39.17** | **124** | P | **P** | **17 48 20.7** | **-0.8** |
| | 0.3nm,0.7s,baz=301,slow=8.1,SNR=5.0 | | | | | | |
| **SONM** | **Songino Array** | **51.59** | **6** | P | **P** | **17 49 59.0** | **-0.6** |
| | 1.0nm,0.8s,baz=187,slow=8.1,SNR=5.3 | | | | | | |
| SONM | | | | pP | **pP** | **17 50 09.6** | **-0.5** |
| | 0.8nm,0.9s,baz=191,slow=7.3,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.27** | **346** | P | **P** | **17 50 04.7** | **+0.2** |
| | 1.0nm,0.8s,baz=145,slow=4.4,SNR=3.8 | | | | | | |
| MKAR | | | | pP | **pP** | **17 50 15.3** | **+0.2** |
| | 0.8nm,0.7s,baz=140,slow=9.6,SNR=4.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.77** | **345** | P | **P** | **17 50 37.6** | **+0.5** |
| | 0.5nm,0.8s,baz=161,slow=6.6,SNR=3.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.52** | **350** | P | **P** | **17 50 49.2** | **-0.2** |
| | 1.4nm,0.7s,baz=181,slow=6.9,SNR=6.5 | | | | | | |
| ZALV | | | | pP | **pP** | **17 51 00.2** | **+0.3** |
| | 2.2nm,0.8s,baz=164,slow=6.0,SNR=4.7 | | | | | | |

**IDC 25 17:43:15.6±3.5, 3.40°S×99.41°E, h0km, mb3.4/4, mb1 3.5/4, mb1mx3.3/37, mbtmp3.4/4, Error ellipse: s-maj=139.4km s-min=27.3km az=61.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.73** | **359** | P | P | 17 48 09.2 | +0.6 |
| | 0.4nm,0.6s,baz=187,slow=10.0,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **38.93** | **124** | P | P | 17 50 43.9 | +0.3 |
| | 0.6nm,1.1s,baz=299,slow=7.5,SNR=5.5 | | | | | | |
| **SONM** | **Songino Array** | **51.39** | **6** | P | P | 17 52 22.5 | +0.2 |
| | 0.5nm,0.7s,baz=188,slow=10,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.22** | **345** | P | P | 17 52 28.2 | -0.2 |
| | 0.5nm,0.7s,baz=160,slow=9.2,SNR=3.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.16** | **38** | PKPbc | PKPdf | 18 02 56.8 | -1.0 |
| | 0.3nm,0.7s,baz=316,slow=2.5,SNR=3.2 | | | | | | |

**IDC 25 18:00:21.7±5.9, 31.97°S×179.10°W, h0km, mb3.6/2, mb1 3.9/2, mb1mx3.6/27, mbtmp3.6/2, Error ellipse: s-maj=236.9km s-min=60.7km az=158.0, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **42.11** | **269** | P | P | 18 08 15.4 | -0.5 |
| | 0.5nm,0.6s,baz=111,slow=7.2,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.24** | **274** | P | P | 18 08 25.2 | +0.1 |
| | 0.5nm,0.3s,baz=115,slow=8.0,SNR=3.8 | | | | | | |
| **FINES** | **FINESS Array B** | **146.28** | **338** | PKPbc | PKPdf | 18 20 02.7 | +0.4 |
| | 0.8nm,0.5s,baz=70,slow=4.9,SNR=3.8 | | | | | | |

**MEX 25 18:00:51.1±1.0, 18.96N×104.52W, h10km, MD3.6, Near coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **R15V** | | **0.55** | **68** | *i* P | Pg | 18 00 60.0 | -2.0 |
| R15V | | | | *e*S | Sg | 18 01 07.7 | -1.5 |
| **CJM** | **Chamela** | **0.73** | **318** | *e*P | Pg | 18 01 04.5 | -0.7 |
| CJM | | | | *i* S | Sg | 18 01 14.5 | -0.3 |
| **EZ5V** | | **1.01** | **59** | *e*P | Pg | 18 01 08.6 | -2.4 |
| EZ5V | | | | *e*S | Sg | 18 01 20.6 | -3.8 |
| **MMIG** | **Aquila** | **1.30** | **121** | *e*P | Pn | 18 01 11.5 | -3.8 |
| MMIG | | | | *e*S | Sb | 18 01 27.9 | -4.5 |

**IDC 25 18:08:58.6±3.7, 2.72°S×99.60°E, h0km, mb3.3/4, mb1 3.4/4, mb1mx3.2/49, mbtmp3.3/4, Error ellipse: s-maj=165.1km s-min=26.6km az=58.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.05** | **358** | P | P | 18 13 44.4 | -0.1 |
| | 0.3nm,0.6s,baz=196,slow=9.7,SNR=4.4 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.43** | **259** | T | T | 18 43 36.8 | |
| | baz=80,slow=75,SNR=22 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.43** | **259** | T | T | 18 43 29.2 | |
| | baz=80,slow=75,SNR=17 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.44** | **259** | T | T | 18 43 30.4 | |
| | baz=80,slow=75,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **39.16** | **125** | P | P | 18 16 28.4 | -0.2 |
| | 0.2nm,0.8s,baz=300,slow=7.5,SNR=6.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.61** | **345** | P | P | 18 18 06.8 | 0.0 |
| | 0.4nm,0.7s,baz=164,slow=5.7,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.80** | **350** | P | P | 18 18 51.5 | -0.1 |
| | 0.4nm,0.4s,baz=148,slow=8.5,SNR=3.3 | | | | | | |

*ISCJB **25** 18:13:11.8±0.8, 2.80S±0.07°×99.98E±0.09, h27km, mb3.7/7, Error ellipse: s-maj=15.2km s-min=5.7km az=144.7*
*DJA **25** 18:13:11.5±0.4, 3°S±3°×10°E±°, h10km, M4.3/10, mb4.4/10, MLv4.3/6*
*IDC **25** 18:13:17.4±1.2, 3.10°S×99.93E, h26km±4km, mb3.6/7, mb1 3.7/7, mb1mx3.4/40, mbtmp3.8/7, Error ellipse: s-maj=46.7km s-min=17.4km az=52.0*

**ISC 25 18:13:17.0±0.9, 2.8S±0.1×100.1E±0.1, h27km, n39, σ1°39/24, mb3.5/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.14** | **302** | P | Pb | 18 13 09.3 | -1.3 |
| PPSI | | | | S | Sb | 18 13 16.6 | -9.2 |
| **SISI** | **Saibi** | **1.82** | **325** | P | Pn | 18 13 40.5 | -6.1 |
| SISI | | | | S | **Sb** | **18 14 12.1** | **0.0** |
| **PDSI** | **Padang** | **1.94** | **10** | P | Pn | 18 13 43.8 | -4.5 |
| **SDSI** | **Sungai Dareh** | **2.29** | **35** | P | Pn | 18 13 49.9 | -3.2 |
| **PPI** | **Padang Panjang** | **2.38** | **7** | P | Pn | 18 13 49.9 | -4.4 |
| **KSI** | **Kapahiang** | **2.59** | **108** | P | **Pn** | **18 13 56.5** | **-0.8** |
| **MNAI** | **Manna** | **3.20** | **118** | P | **Pn** | **18 14 04.8** | **-0.9** |
| **MNSI** | **Mandailing Nat** | **3.65** | **351** | P | Pn | 18 14 06.4 | -5.4 |
| **MDSI** | **Maura Dua** | **4.36** | **112** | P | **Pn** | **18 14 21.0** | **-0.6** |
| **LWLI** | **Liwa** | **4.48** | **119** | P | **Pn** | **18 14 22.3** | **-1.0** |
| **GSI** | **Gunungsitoli** | **4.84** | **328** | P | Pn | 18 14 21.9 | -6.3 |
| **KASI** | **Kota Agung** | **5.11** | **122** | P | **Pn** | **18 14 30.8** | **-1.1** |
| **KLI** | **Kotabumi** | **5.13** | **113** | P | **Pn** | **18 14 31.1** | **-1.1** |
| **TPRI** | **Tanjung Pinang** | **5.77** | **50** | P | **Pn** | **18 14 38.2** | **-2.7** |
| **PPBI** | **Pangkal Pinang** | **6.04** | **84** | P | **Pn** | **18 14 44.5** | **-0.2** |
| **CGJI** | **Cibinong** | **6.70** | **124** | P | **Pn** | **18 14 52.1** | **-1.6** |
| | 58nm,1.0s,0.3nm | | | | | | |
| **SKJI** | **Sukabumi** | **7.63** | **123** | P | **Pn** | **18 15 05.2** | **-1.3** |
| | 60nm,1.5s,0.5nm | | | | | | |
| **CNJI** | **Cibinong** | **8.27** | **123** | P | **Pn** | **18 15 13.4** | **-1.9** |
| | 79nm,1.4s | | | | | | |
| **LEM** | **Lembang** | **8.45** | **118** | P | **Pn** | **18 15 16.3** | **-1.6** |
| | 366nm,2.0s | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.98** | **122** | P | **Pn** | **18 15 23.2** | **-1.9** |
| | 73nm,1.5s | | | | | | |
| **CMJI** | **Cimerak** | **9.63** | **121** | P | **Pn** | **18 15 32.3** | **-1.7** |
| **BWJI** | **Bawean** | **12.85** | **104** | P | **Pn** | **18 16 16.9** | **-1.1** |
| **CMAR** | **Chiang Mai Arr** | **21.19** | **357** | P | **P** | **18 18 01.9** | **+1.2** |
| | 1.2nm,0.8s,baz=189,slow=9.7,SNR=9.3 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.92** | **259** | T | T | 18 48 07.2 | |
| | baz=82,slow=75,SNR=676 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.93** | **259** | T | T | 18 48 07.7 | |
| | baz=82,slow=75,SNR=653 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.94** | **259** | T | T | 18 48 08.6 | |
| | baz=82,slow=75,SNR=754 | | | | | | |
| **H08N1** | **Diego Carcia H** | **29.22** | **262** | T | T | 18 50 25.9 | |
| | baz=73,SNR=15 | | | | | | |
| **H08N2** | **Diego Garcia H** | **29.23** | **262** | T | T | 18 50 29.6 | |
| | baz=73,SNR=15 | | | | | | |
| **H08N3** | **Diego Garcia H** | **29.24** | **262** | T | T | 18 50 29.1 | |
| | baz=73,SNR=15 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.44** | **159** | T | T | 18 56 03.6 | |
| | baz=335,slow=76,SNR=28 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.46** | **159** | T | T | 18 56 05.1 | |
| | baz=335,slow=76,SNR=22 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.46** | **159** | T | T | 18 56 02.7 | |
| | baz=335,slow=76,SNR=26 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.47** | **120** | P | **P** | **18 20 28.8** | **+0.2** |
| | 0.5nm,0.7s,baz=305,slow=9.3,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **38.66** | **125** | P | **P** | **18 20 38.8** | **+0.1** |
| | 0.4nm,0.5s,baz=300,slow=7.6,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **50.76** | **5** | P | P | 18 22 17.7 | +2.8 |
| | 2.0nm,0.7s,baz=183,slow=9.6,SNR=13 | | | | | | |
| SONM | | | | pP | pP | 18 22 25.4 | +2.2 |
| | 1.3nm,0.7s,baz=187,slow=9.0,SNR=5.5 | | | | | | |
| SONM | | | | PcP | **PcP** | **18 23 33.2** | **+1.6** |
| | 0.3nm,0.6s,baz=187,slow=5.8,SNR=2.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.86** | **344** | P | P | 18 22 25.4 | +2.4 |
| | 2.3nm,0.7s,baz=150,slow=8.6,SNR=16 | | | | | | |
| MKAR | | | | pP | pP | 18 22 32.6 | +1.3 |
| | 2.6nm,0.7s,baz=156,slow=8.4,SNR=9.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.01** | **349** | P | **P** | **18 23 09.1** | **+1.8** |
| | 1.8nm,0.8s,baz=175,slow=5.2,SNR=7.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **73.98** | **313** | P | **P** | **18 24 51.0** | **+0.5** |
| | 0.2nm,0.5s,baz=107,slow=9.2,SNR=2.7 | | | | | | |
| BRTR | | | | pP | **pP** | **18 24 59.1** | **0.0** |
| | 0.6nm,0.8s,baz=141,slow=7.1,SNR=3.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.28** | **38** | PKPbc | **PKPdf** | **18 32 54.9** | **+1.7** |
| | 1.0nm,0.5s,baz=290,slow=0.6,SNR=15 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 18 33 02.7 | +0.7 |
| | 1.5nm,0.6s,baz=291,slow=1.1,SNR=10.0 | | | | | | |

*IDC **25** 18:17:55.8±1.2, 32.31°S×72.08W, h0km, mb3.9/3, mb1 4.0/5, mb1mx3.8/22, mbtmp3.9/5, ML3.6/2, MS4.4/1, Ms1 4.4/1, ms1mx3.4/23, Error ellipse: s-maj=37.6km s-min=30.0km az=127.0*
*SJA **25** 18:17:56.9±0.8, 32.55S×72.07W, h14km±8km, ML3.7*
*GUC **25** 18:18:00.4±0.7, 32.54S×71.92W, h13km±7km, ML3.7*

**ISC 25 18:17:55.5±1.9, 32.48S±0.04°×72.11W±0.07°, h2km±10km, n34, σ1°72/44, mb4.0/3, 2C-6D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ROC1** | **El Roble** | **1.05** | **118** | *i* P | **Pb** | **18 18 16.7** | **+0.2** |
| ROC1 | | | | *i* S | **Sg** | **18 18 30.0** | **+0.8** |
| **ROCH** | **El Roble** | **1.05** | **118** | *⇓i* P | **Pb** | **18 18 16.7** | **+0.2** |
| ROCH | | | | *eS* | **Sg** | **18 18 29.1** | **-0.1** |
| **PEL** | **Peldehue** | **1.37** | **119** | *⇑i* P | **Pg** | **18 18 21.9** | **+0.2** |
| PEL | | | | *i* S | **Sb** | **18 18 37.9** | **-2.0** |
| PEL | | | | AML | AML | 18 18 39.1 | |
| | comp=E,4μm,0.5s | | | | | | |
| **RCDM** | **Rinconada Maip** | **1.49** | **133** | *eP* | **Pb** | **18 18 23.2** | **-0.7** |
| RCDM | | | | *eS* | **Sn** | **18 18 41.4** | **-2.0** |
| **CLCH** | **Cerro Calan** | **1.61** | **125** | *⇑P* | **Pg** | **18 18 26.0** | **-0.3** |
| CLCH | | | | *i* S | **Sn** | **18 18 44.7** | **-1.7** |
| CLCH | | | | AML | AML | 18 18 57.0 | |
| | comp=E,2μm,0.7s | | | | | | |
| **ANTU** | **Antumapu** | **1.65** | **132** | *eP* | **Pb** | **18 18 26.1** | **-0.5** |
| ANTU | | | | AML | AML | 18 18 58.0 | |
| | comp=N,1μm,0.6s | | | | | | |
| **AUSP** | **Uspallata** | **2.32** | **84** | *i* P | **Pb** | **18 18 37.2** | **-1.1** |
| AUSP | | | | *i* S | **Sb** | **18 19 07.2** | **-0.3** |
| **RTLS** | **Leoncito** | **2.48** | **75** | *i* P | **Pb** | **18 18 39.4** | **-1.6** |
| **TLL** | **Tololo Astrono** | **2.56** | **26** | *eP* | **Pn** | **18 18 38.4** | **+0.1** |
| TLL | | | | *i* S | **Sn** | **18 19 10.7** | **+0.5** |
| **LSCH** | **La Serena** | **2.67** | **16** | *eP* | **Pb** | **18 18 44.2** | **+0.2** |
| LSCH | | | | *i* S | **Sb** | **18 19 17.4** | **+0.1** |
| **ARCO** | **CERRO ARCO** | **2.71** | **98** | *⇓eP* | **Pb** | **18 18 44.3** | **-0.5** |
| ARCO | | | | AML | AML | 18 19 25.6 | |
| | comp=Z,342nm,0.8s | | | | | | |
| **ASAL** | **Salagasta** | **2.77** | **93** | *i* P | **Pn** | **18 18 42.9** | **+1.9** |
| ASAL | | | | *i* S | **Sn** | **18 19 17.5** | **+2.4** |
| **AAGR** | **Agrelo** | **2.83** | **103** | *eP* | **Pb** | **18 18 46.4** | **-0.5** |
| **RTCV** | **Cerro Valdivia** | **3.09** | **79** | *⇓eP* | **Pb** | **18 18 49.1** | **-2.1** |
| RTCV | | | | *⇓eS* | **Sb** | **18 19 27.3** | **-2.1** |
| **RTLL** | **Cerro Villicun** | **3.30** | **71** | *eP* | **Pn** | **18 18 51.0** | **+2.7** |
| RTLL | | | | *⇓eS* | **Sn** | **18 19 31.1** | **+3.0** |
| **CFAA** | **Coronel Fontan** | **3.40** | **76** | Pn | **Pn** | **18 18 51.3** | **+1.6** |
| | comp=Z,1.2nm,0.3s,baz=357,slow=1.7,SNR=45 | | | | | | |
| CFAA | | | | Sn | **Sn** | **18 19 31.3** | **+0.6** |
| | comp=Z,1.5nm,0.3s,baz=46,slow=11,SNR=10 | | | | | | |
| **CFAA** | **Coronel Fontan** | **3.40** | **76** | *eP* | **Pn** | **18 18 52.2** | **+2.5** |
| **ACAN** | **Cantantal** | **4.17** | **88** | *eP* | **Pn** | **18 19 02.6** | **+2.4** |
| **AGUA** | **GUANDACOL** | **4.31** | **47** | *eP* | Pn | 18 19 05.7 | +3.6 |
| AGUA | | | | *eS* | **Sb** | **18 20 05.2** | **+0.6** |
| **ACHE** | **Chepes** | **4.82** | **76** | *⇓eP* | **Pn** | **18 19 11.5** | **+2.2** |
| **VCA** | **Vinchina** | **5.03** | **43** | *eP* | Pn | 18 19 16.3 | +4.2 |
| VCA | | | | *eS* | **Sb** | **18 20 20.2** | **-5.1** |
| **CYA** | **Choya** | **6.77** | **55** | *eP* | **Pn** | **18 19 35.1** | **-0.9** |
| **FSA** | **Cafayete** | **8.30** | **41** | *eP* | Pn | 18 20 02.2 | +5.1 |
| **CPUP** | **Villa Florida** | **14.26** | **68** | Pn | **Pn** | **18 21 21.4** | **+2.9** |
| | comp=Z,0.1nm,0.3s,baz=231,slow=14,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **16.52** | **14** | Pn | **Pn** | **18 21 49.0** | **0.0** |
| | comp=Z,0.3nm,0.3s,baz=178,slow=6.6,SNR=10.0 | | | | | | |
| **BDFB** | **Brasilia** | **27.56** | **58** | P | **P** | **18 23 41.9** | **-2.2** |
| | comp=Z,1.7nm,0.4s,baz=223,slow=3.0,SNR=4.4 | | | | | | |
| **ROSC** | **El Rosal** | **37.19** | **356** | LR | LR | 18 41 04.9 | |
| | comp=Z,502nm,18.5s,baz=186,slow=38 | | | | | | |
| **SNAA** | **Sanae** | **53.01** | **158** | P | **P** | **18 27 15.0** | **+1.6** |
| | comp=Z,0.3nm,0.7s,baz=270,slow=4.0,SNR=7.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **83.75** | **70** | P | **P** | **18 30 25.6** | **-0.9** |
| | comp=Z,0.6nm,0.8s,baz=236,slow=6.4,SNR=4.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **146.20** | **41** | PKPbc | **PKPab** | **18 37 37.0** | **-0.7** |
| | comp=Z,0.6nm,0.4s,baz=328,slow=5.2,SNR=6.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **151.79** | **41** | PKPbc | **PKPbc** | **18 37 51.9** | **+0.5** |
| | comp=Z,1.0nm,0.5s,baz=301,slow=3.3,SNR=14 | | | | | | |
| **AAK** | **Ala-Archa** | **151.81** | **59** | PKPbc | **PKPbc** | **18 37 52.9** | **+1.0** |
| | comp=Z,0.7nm,0.4s,baz=223,slow=2.2,SNR=6.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **152.97** | **31** | PKPbc | **PKPbc** | **18 37 53.0** | **-1.0** |
| | comp=Z,1.4nm,0.6s,baz=287,slow=3.3,SNR=7.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **155.79** | **46** | PKPab | **PKPab** | **18 38 17.6** | **+0.1** |
| | comp=Z,0.3nm,0.5s,baz=292,slow=4.5,SNR=3.3 | | | | | | |

**DJA 25 18:18:33.6±0.8, 3°S±6°×10°0E±°, h43km±7km, M4.5/17, mb5.1/3, mB6.3/1, MLv4.2/17, Mw(mB)6.0/1, Southern Sumatera**

| Code | Station Name | Δ° | AZ° |

**mb3.7/8, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.74** | **359** | P | **P** | **18 25 19.0** | **-1.0** |
| | 1.0nm,0.6s,baz=187,slow=10,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.87** | **118** | P | **P** | **18 27 43.9** | **-1.5** |
| | 0.2nm,0.3s,baz=294,slow=9.4,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **38.97** | **124** | P | **P** | **18 27 55.6** | **+0.9** |
| | 0.5nm,0.6s,baz=299,slow=7.5,SNR=6.0 | | | | | | |
| **SONM** | **Songino Array** | **51.41** | **6** | P | **P** | **18 29 33.8** | **+0.7** |
| | 1.0nm,0.7s,baz=188,slow=8.9,SNR=5.4 | | | | | | |
| SONM | | | | pP | **pP** | **18 29 43.6** | **0.0** |
| | 0.8nm,0.8s,baz=190,slow=7.1,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.22** | **345** | P | **P** | **18 29 39.8** | **+0.8** |
| | 1.6nm,0.6s,baz=140,slow=9.1,SNR=8.4 | | | | | | |
| MKAR | | | | pP | **pP** | **18 29 49.9** | **+0.3** |
| | 0.9nm,0.6s,baz=150,slow=9.0,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.44** | **350** | P | **P** | **18 30 24.1** | **+0.4** |
| | 1.9nm,0.6s,baz=192,slow=5.6,SNR=8.5 | | | | | | |
| ZALV | | | | pP | **pP** | **18 30 34.0** | **-0.3** |
| | 2.5nm,0.6s,baz=181,slow=5.5,SNR=6.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.29** | **341** | P | **P** | **18 30 42.9** | **-0.3** |
| | 1.2nm,0.7s,baz=140,slow=7.8,SNR=5.9 | | | | | | |
| BVAR | | | | pP | **pP** | **18 30 53.3** | **-0.7** |
| | 0.6nm,0.6s,baz=155,slow=11,SNR=3.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **73.80** | **313** | P | **P** | **18 32 02.4** | **-0.4** |
| | 0.3nm,0.6s,baz=144,slow=6.9,SNR=3.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.21** | **38** | PKPbc | **PKPab** | **18 40 10.6** | **+0.8** |
| | 0.7nm,0.6s,baz=299,slow=2.2,SNR=5.2 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 18 40 20.8 | +0.3 |
| | 0.5nm,0.5s,baz=346,slow=1.5,SNR=3.5 | | | | | | |

*IDC **25** 18:22:49.2±1.9, 3°.25S×99°.42E, h0km, mb3.7/8, mb1 3.9/9, mb1mx3.6/46, mbtmp3.8/9, ML4.3/1, MS4.4/1, Ms1 4.4/1, ms1mx3.4/41, Error ellipse: s-maj=77.7km s-min=17.7km az=52.0*

*DJA **25** 18:22:50.8±0.9, 3°.S±4°×9°.9E±°, h23km±8km, M4.1/5, mb3.9/5, mB5.3/3, MLv4.1/2, Mw(mB)4.7/3*

*ISCJB **25** 18:22:51.3±0.7, 3°.20S±0°.06×99°.57E±0°.07, h33km, mb3.7/8, MS4.4/1, Error ellipse: s-maj=12.9km s-min=4.9km az=142.5*

**ISC 25 18:22:53.7±1.0, 3°.2S±0°.1×99°.5E±0°.1, h35km, n45, σ1§53/37, mb3.8/8, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.65** | **51** | P | **Pn** | **18 23 04.3** | **-2.2** |
| **SISI** | **Saibi** | **1.89** | **347** | P | **Pn** | **18 23 22.2** | **-1.3** |
| **PDSI** | **Padang** | **2.45** | **23** | P | **Pn** | **18 23 29.5** | **-1.7** |
| **PPI** | **Padang Panjang** | **2.85** | **18** | P | **Pn** | **18 23 35.3** | **-1.4** |
| **SDSI** | **Sungai Dareh** | **2.95** | **41** | P | **Pn** | **18 23 37.5** | **-0.6** |
| **KSI** | **Kapahiang** | **3.12** | **99** | P | **Pn** | **18 23 39.4** | **-1.1** |
| **MNAI** | **Manna** | **3.64** | **109** | P | **Pn** | **18 23 46.7** | **-0.9** |
| **BKNI** | **Bangkinang** | **3.81** | **24** | P | **Pn** | **18 23 48.5** | **-1.4** |
| **MNSI** | **Mandailing Nat** | **3.95** | **1** | P | **Pn** | **18 23 50.3** | **-1.5** |
| **RGRI** | **Rengat** | **3.99** | **45** | P | **Pn** | **18 23 51.1** | **-1.3** |
| **SBSI** | **Sibolga** | **4.74** | **353** | P | Pn | 18 23 58.6 | -4.1 |
| **MDSI** | **Maura Dua** | **4.84** | **106** | P | **Pn** | **18 24 02.6** | **-1.5** |
| **GSI** | **Gunungsitoli** | **4.85** | **337** | P | **Pn** | **18 24 02.8** | **-1.5** |
| **LWLI** | **Liwa** | **4.90** | **112** | P | **Pn** | **18 24 03.8** | **-1.2** |
| **PMBI** | **Palembang** | **5.27** | **87** | P | **Pn** | **18 24 07.9** | **-2.1** |
| **KASI** | **Kota Agung** | **5.50** | **115** | P | **Pn** | **18 24 12.0** | **-1.1** |
| **KLI** | **Kotabumi** | **5.60** | **108** | P | **Pn** | **18 24 13.3** | **-1.2** |
| **CGJI** | **Cibinong** | **7.05** | **119** | P | **Pn** | **18 24 32.5** | **-1.9** |
| **SBJI** | **Serang** | **7.22** | **114** | P | **Pn** | **18 24 35.3** | **-1.5** |
| **TNG** | **Tangerang** | **7.71** | **113** | P | **Pn** | **18 24 42.5** | **-1.1** |
| **SKJI** | **Sukabumi** | **7.99** | **119** | P | **Pn** | **18 24 46.0** | **-1.4** |
| **CBJI** | **Citeko** | **8.00** | **114** | P | **Pn** | **18 24 48.7** | **+1.2** |
| **MLSI** | **Meulaboh, Aceh** | **8.02** | **337** | P | **Pn** | **18 24 46.0** | **-1.8** |
| **TPI** | **Tanjungpandan** | **8.15** | **87** | P | **Pn** | **18 24 48.2** | **-1.4** |
| | 23nm,2.2s,2μm | | | | | | |
| **CNJI** | **Cibinong** | **8.63** | **119** | P | **Pn** | **18 24 54.8** | **-1.4** |
| **LHMI** | **Lhok Sumawe** | **8.73** | **343** | P | **Pn** | **18 24 54.9** | **-2.7** |
| **LEM** | **Lembang** | **8.86** | **114** | Pn | **Pn** | **18 24 59.1** | **-0.4** |
| | 3.1nm,0.3s,baz=336,slow=20,SNR=2.9 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.35** | **118** | P | **Pn** | **18 25 03.0** | **-3.1** |
| **CMJI** | **Cimerak** | **10.01** | **118** | P | **Pn** | **18 25 13.4** | **-1.7** |
| **CMAR** | **Chiang Mai Arr** | **21.51** | **359** | P | **P** | **18 27 40.2** | **+0.5** |
| | 0.5nm,0.5s,baz=187,slow=10,SNR=6.0 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.24** | **260** | T | T | 18 57 11.2 | |
| | baz=80,slow=74,SNR=31 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.25** | **260** | T | T | 18 57 24.4 | |
| | baz=80,slow=74,SNR=40 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.26** | **260** | T | T | 18 57 24.7 | |
| | baz=80,slow=74,SNR=40 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.35** | **158** | T | T | 19 06 02.5 | |
| | baz=335,slow=76,SNR=15 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.36** | **158** | T | T | 19 05 59.1 | |
| | baz=335,slow=76,SNR=16 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.37** | **158** | T | T | 19 06 11.7 | |
| | baz=335,slow=76,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.84** | **119** | P | **P** | **18 30 07.4** | **0.0** |
| | 0.3nm,0.4s,baz=294,slow=8.2,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.98** | **125** | P | **P** | **18 30 17.9** | **+1.0** |
| | 0.7nm,0.4s,baz=300,slow=7.4,SNR=15 | | | | | | |
| **JNU** | **Nakatsue** | **46.73** | **37** | LR | LR | 18 50 42.4 | |
| | comp=Z,457nm,19.7s,slow=96 | | | | | | |
| **SONM** | **Songino Array** | **51.16** | **6** | P | **P** | **18 31 54.7** | **+1.2** |
| | 0.4nm,0.4s,baz=193,slow=5.9,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.03** | **345** | P | **P** | **18 32 01.4** | **+1.5** |
| | 0.6nm,0.5s,baz=148,slow=9.3,SNR=5.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.23** | **350** | P | **P** | **18 32 45.3** | **+0.9** |
| | 1.1nm,0.4s,baz=174,slow=5.7,SNR=5.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.12** | **340** | P | **P** | **18 33 04.9** | **+0.6** |
| | 0.4nm,0.5s,baz=153,slow=9.7,SNR=3.2 | | | | | | |
| **FINES** | **FINESS Array B** | **84.92** | **332** | P | **P** | **18 35 25.5** | **+0.7** |
| | 0.8nm,0.7s,baz=104,slow=5.9,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.93** | **38** | PKPbc | **PKPab** | **18 42 32.7** | **+1.8** |
| | 0.4nm,0.4s,baz=270,slow=0.9,SNR=6.8 | | | | | | |

**IDC 25 18:27:54.1±3.6, 3°.57S×99°.66E, h0km, mb3.4/4, mb1 3.5/4, mb1mx3.3/43, mbtmp3.4/4, Error ellipse: s-maj=143.0km s-min=27.0km az=60.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.89** | **358** | P | P | 18 32 48.5 | -0.4 |
| | 0.8nm,0.6s,baz=188,slow=9.6,SNR=8.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.64** | **124** | P | P | 18 35 19.3 | -0.3 |
| | 0.3nm,0.7s,baz=297,slow=8.8,SNR=5.8 | | | | | | |
| **SONM** | **Songino Array** | **51.52** | **6** | P | P | 18 37 02.3 | +0.5 |
| | 0.6nm,0.6s,baz=186,slow=8.4,SNR=4.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.44** | **345** | P | P | 18 37 08.1 | -0.4 |
| | 0.2nm,0.5s,baz=152,slow=9.4,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.14** | **38** | PKPbc | PKPdf | 18 47 36.5 | +0.3 |
| | 0.4nm,0.6s,baz=318,slow=1.7,SNR=4.5 | | | | | | |

*CSEM **25** 18:33:42.9, 33°.77N×25°.57E, h5km, MD3.6, After ATH*

**ATH 25 18:33:42.9, 33.77N×25.57E, h5km, MD3.6/6, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LAST** | **Lasithi** | **1.39** | **357** | *e*PB | Pb | 18 34 09.3 | -0.2 |
| LAST | | | | *e*SB | Sn | 18 34 28.6 | +0.7 |
| **LAST** | **Lasithi** | **1.39** | **357** | *e*Pb | Pb | 18 34 09.3 | -0.2 |
| LAST | | | | *e*Sb | Sn | 18 34 28.6 | +0.7 |
| **SIVA** | **Sivas** | **1.39** | **333** | *e*PB | Pg | 18 34 10.3 | +0.6 |
| **SIVA** | **Sivas** | **1.39** | **333** | *e*Pb | Pg | 18 34 10.3 | +0.6 |
| **NPS** | **Neapolis** | **1.49** | **1** | *e*PB | Pn | 18 34 10.3 | -0.1 |
| NPS | | | | *e*SB | Sb | 18 34 30.6 | +0.2 |
| **NPS** | **Neapolis** | **1.49** | **1** | *e*Pb | Pn | 18 34 10.3 | -0.1 |
| NPS | | | | *e*Sb | Sb | 18 34 30.6 | +0.2 |
| **IDI** | **Anoyia** | **1.61** | **340** | *e*PB | Pb | 18 34 13.2 | -0.1 |
| **IDI** | **Anoyia** | **1.61** | **340** | *e*Pb | Pb | 18 34 13.2 | -0.1 |
| **VAM** | **Vamos** | **1.99** | **326** | *e*PG | Pb | 18 34 19.3 | -0.3 |
| **VAM** | **Vamos** | **1.99** | **326** | *e*Pg | Pb | 18 34 19.3 | -0.3 |
| **IMMV** | **Iera Moni Meta** | **2.14** | **323** | *e*PN | Pb | 18 34 21.8 | -0.3 |
| **IMMV** | **Iera Moni Meta** | **2.14** | **323** | *e*Pn | Pb | 18 34 21.8 | -0.3 |
| **KARP** | **Karpathos** | **2.21** | **36** | *e*PN | Pb | 18 34 22.9 | -0.4 |
| **KARP** | **Karpathos** | **2.21** | **36** | *e*Pn | Pb | 18 34 22.9 | -0.4 |

*BER **25** 18:36:34.5±1.5, 73°.23N×8°.35E, h10km, MD2.2*

*ISCJB **25** 18:36:35.3±1.1, 73°.52N±0°.06×9°.3E±0°.4, h10km, mb3.5/4, MS4.2/1, Error ellipse: s-maj=15.7km s-min=7.7km az=164.6*

*IDC **25** 18:36:36.3±1.4, 73°.32N×7°.77E, h0km, mb3.5/4, mb1 3.7/6, mb1mx3.4/45, mbtmp3.6/6, ML3.0/2, MS4.3/1, Ms1 4.3/1, ms1mx3.5/32, Error ellipse: s-maj=31.2km s-min=20.0km az=46.0*

**ISC 25 18:36:37.1±1.2, 73°.53N±0°.08×9°.0E±0°.1, h10km, n11, σ1§33/10, mb3.5/4, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BJO** | **Bjornoya** | **2.98** | **66** | *e*P | **Pn** | **18 37 23.7** | **-0.5** |
| **HSPB** | **Hornsund (broa** | **3.86** | **22** | *e*P | **Pn** | **18 37 35.5** | **-0.9** |
| **SPA0** | **Spitsbergen Ar** | **5.00** | **18** | *e*P | **Pn** | **18 37 53.0** | **+0.9** |
| SPA0 | | | | *e*S | **Sn** | **18 38 49.6** | **-0.2** |
| **KBS** | **Kingsbay** | **5.47** | **6** | *e*P | **Pn** | **18 37 58.2** | **-0.3** |
| **ARCES** | **ARCESS Array B** | **6.58** | **119** | Pn | **Pn** | **18 38 16.4** | **+2.7** |
| | 0.9nm,0.3s,baz=325,slow=11,SNR=32 | | | | | | |
| ARCES | | | | Sn | **Sn** | **18 39 27.1** | **-1.5** |
| | 0.7nm,0.3s,baz=304,slow=18,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **13.69** | **143** | Pn | **Pn** | **18 39 50.5** | **-0.3** |
| | 0.1nm,0.3s,baz=332,slow=18,SNR=3.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **32.18** | **95** | P | P | 18 43 08.5 | +4.0 |
| | 1.1nm,1.0s,baz=339,slow=7.9,SNR=3.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **35.89** | **147** | LR | LR | 18 57 43.1 | |
| | comp=Z,418nm,18.6s,baz=70,slow=35 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **36.63** | **89** | P | P | 18 43 47.8 | +4.7 |
| | 0.5nm,0.8s,baz=336,slow=7.4,SNR=2.9 | | | | | | |
| **ILAR** | **Eielson Array** | **41.03** | **345** | P | **P** | **18 44 20.5** | **+0.8** |
| | 0.4nm,0.7s,baz=358,slow=8.1,SNR=7.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.51** | **188** | P | **P** | **18 46 46.5** | **-0.5** |
| | 0.6nm,0.9s,baz=12,slow=7.5,SNR=2.8 | | | | | | |

*IDC **25** 18:40:26.8±0.5, 2°.93S×99°.75E, h25km±2km, mb4.0/18, mb1 4.2/19, mb1mx4.0/42, mbtmp4.2/19, ML4.3/1, Error ellipse: s-maj=18.6km s-min=10.5km az=47.0*

*ISCJB **25** 18:40:27.0±1.4, 2°.91S±0°.05×99°.92E±0°.06, h30km±9km, mb4.6/52, Error ellipse: s-maj=11.9km s-min=4.6km az=139.0*

*NEIC **25** 18:40:26.9±0.4, 2°.86S×99°.78E, mb4.9/10, Error ellipse: s-maj=10.0km s-min=5.6km az=49.0*

*DJA **25** 18:40:26.4±0.6, 3°.S±3°×10°.0E±°, h17km±4km, M4.5/16, mb4.7/16, mB5.6/1, MLv4.5/4, Mw(mB)5.0/1*

*BJI **25** 18:40:27.4, 2°.60S×100°.20E, h12km, mb4.5/22, mB5.1/6, Ms4.9/1, Ms7 4.5/1*

*AUST **25** 18:40:27.9±3.8, 2°.73S×99°.95E, h29km±27km, Error ellipse: s-maj=29.6km s-min=7.2km az=56.0*

*MOS **25** 18:40:34.1±1.9, 2°.11S×101°.07E, h42km, mb4.9/22, Error ellipse: s-maj=15.6km s-min=6.4km az=116.4*

**ISC 25 18:40:26.3±0.5, 3°.01S±0°.06×99°.76E±0°.06, h22km±3km, h22km:pP-P, n198, σ1§29/144, mb4.7/52, 12C-6D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.35** | **46** | P | **Pb** | **18 40 34.4** | **+0.5** |
| **SISI** | **Saibi** | **1.80** | **338** | P | **Pn** | **18 40 53.7** | **-2.4** |
| **PPI** | **Padang Panjang** | **2.62** | **14** | P | **Pn** | **18 41 05.8** | **-1.5** |
| | baz=2.3,SNR=33 | | | | | | |
| **PPI** | **Padang Panjang** | **2.62** | **14** | P | **Pn** | **18 41 06.0** | **-1.3** |
| **SDSI** | **Sungai Dareh** | **2.66** | **39** | P | **Pn** | **18 41 07.0** | **-0.8** |
| **KSI** | **Kapahiang** | **2.90** | **103** | P | Pn | 18 41 15.0 | +3.7 |
| **MNAI** | **Manna** | **3.46** | **113** | P | **Pn** | **18 41 19.4** | **+0.4** |
| | baz=3.4,SNR=13 | | | | | | |
| **MNAI** | **Manna** | **3.46** | **113** | P | **Pn** | **18 41 20.5** | **+1.5** |
| **MNAI** | **Manna** | **3.46** | **113** | *e*P | **Pn** | **18 41 18.3** | **-0.7** |
| **BKNI** | **Bangkinang** | **3.55** | **21** | P | **Pn** | **18 41 19.2** | **-1.0** |
| **BKNI** | **Bangkinang** | **3.55** | **21** | *e*P | **Pn** | **18 41 19.0** | **-1.2** |
| **RGRI** | **Rengat** | **3.69** | **44** | P | **Pn** | **18 41 21.6** | **-0.5** |
| **MNSI** | **Mandailing Nat** | **3.78** | **357** | P | **Pn** | **18 41 22.7** | **-0.7** |
| **JMBI** | **JAMBI** | **4.12** | **71** | P | **Pn** | **18 41 27.2** | **-0.7** |
| **SBSI** | **Sibolga** | **4.61** | **349** | P | Pn | 18 41 30.2 | -4.6 |
| **MDSI** | **Maura Dua** | **4.65** | **109** | P | **Pn** | **18 41 35.8** | **+0.5** |
| **LWLI** | **Liwa** | **4.73** | **115** | P | **Pn** | **18 41 37.1** | **+0.5** |
| **GSI** | **Gunungsitoli** | **4.81** | **333** | P | **Pn** | **18 41 36.2** | **-1.3** |
| | baz=4.7 | | | | | | |
| **GSI** | **Gunungsitoli** | **4.81** | **333** | P | **Pn** | **18 41 36.4** | **-1.1** |
| **GSI** | **Gunungsitoli** | **4.81** | **333** | *e*P | **Pn** | **18 41 35.9** | **-1.5** |
| **PMBI** | **Palembang** | **5.01** | **89** | P | **Pn** | **18 41 39.2** | **-1.1** |
| **KASI** | **Kota Agung** | **5.35** | **118** | P | **Pn** | **18 41 45.7** | **+0.8** |
| **KLI** | **Kotabumi** | **5.41** | **110** | P | **Pn** | **18 41 46.5** | **+0.7** |
| **PSI** | **Prapat** | **5.83** | **352** | Pn | **Pn** | **18 41 52.8** | **+1.1** |
| | 1.1nm,0.3s,baz=176,slow=11,SNR=8.6 | | | | | | |
| **TPRI** | **Tanjung Pinang** | **6.16** | **51** | P | Pn | 18 41 51.1 | -5.0 |
| | 70nm,0.7s | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.43** | **83** | P | **Pn** | **18 41 59.6** | **-0.2** |
| **TSI** | **Tuntungan** | **6.58** | **350** | P | **Pn** | **18 42 00.7** | **-1.1** |
| | 64nm,1.0s | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **6.78** | **343** | P | **Pn** | **18 42 01.8** | **-2.9** |
| | 30nm,0.7s,4μm | | | | | | |
| **CGJI** | **Cibinong** | **6.92** | **121** | P | **Pn** | **18 42 07.3** | **+0.9** |
| **IPM** | **Ipoh** | **7.55** | **10** | *e*P | **Pn** | **18 42 14.3** | **-0.8** |
| | 30nm,1.0s | | | | | | |
| **SKJI** | **Sukabumi** | **7.85** | **121** | P | Pn | 18 42 22.9 | +3.6 |
| | 131nm,1.3s | | | | | | |
| **TPI** | **Tanjungpandan** | **7.89** | **88** | P | **Pn** | **18 42 22.4** | **+2.5** |
| | 21nm,0.9s,0.1nm | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **7.97** | **335** | P | **Pn** | **18 42 20.5** | **-0.4** |
| **KULM** | **Kulim** | **8.29** | **6** | *e*P | **Pn** | **18 42 22.9** | **-2.4** |
| | 26nm,1.2s | | | | | | |
| **CNJI** | **Cibinong** | **8.49** | **120** | P | **Pn** | **18 42 26.6** | **-1.5** |
| | 152nm,0.8s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **8.65** | **341** | P | **Pn** | **18 42 29.1** | **-1.2** |
| **LEM** | **Lembang** | **8.70** | **116** | Pn | **Pn** | **18 42 33.8** | **+2.6** |
| | 3.2nm,0.3s,baz=348,slow=22,SNR=5.1 | | | | | | |
| LEM | | | | Sn | **Sn** | **18 44 04.2** | **-4.5** |
| | 3.2nm,0.3s,baz=150,slow=20,SNR=1.8 | | | | | | |
| **LEM** | **Lembang** | **8.70** | **116** | P | **Pn** | **18 42 32.5** | **+1.4** |
| | 1μm,0.8s | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.21** | **120** | P | **Pn** | **18 42 36.3** | **-1.7** |
| **CISI** | **Cisompet, Garu** | **9.21** | **120** | *e*P | **Pn** | **18 42 35.6** | **-2.4** |
| | 193nm,0.6s | | | | | | |
| **CMJI** | **Cimerak** | **9.87** | **119** | P | **Pn** | **18 42 45.8** | **-1.2** |
| | 118nm,0.7s | | | | | | |
| **UBPT** | **Khong Chiam** | **19.03** | **17** | P | Pn | 18 44 53.8 | +5.9 |
| | 23nm,0.8s | | | | | | |
| **UMPA** | **Umpang Tak** | **19.11** | **357** | P | Pn | 18 44 53.0 | +4.1 |
| | 4.6nm,0.8s | | | | | | |
| **PBKT** | **Sadao Pong** | **19.49** | **3** | P | Pn | 18 44 58.1 | +4.8 |
| | 8.0nm,0.8s | | | | | | |
| **SPSI** | **Sidap Palu** | **20.00** | **93** | P | **P** | **18 44 58.1** | **+0.4** |
| **TTSI** | **Tana Toraja** | **20.04** | **91** | P | **P** | **18 44 58.1** | **0.0** |
| **KAPI** | **Kappang** | **20.05** | **96** | P | **P** | **18 44 58.8** | **+0.6** |
| | 19nm,0.9s,baz=271,slow=15,SNR=4.1 | | | | | | |
| **PCI** | **Palu** | **20.18** | **84** | P | **P** | **18 44 59.4** | **-0.2** |
| | 37nm,1.7s | | | | | | |
| **MPSI** | **Mapaga** | **20.41** | **81** | P | **P** | **18 45 02.5** | **+0.4** |
| **BKSI** | **Bulukumba** | **20.44** | **97** | P | **P** | **18 45 02.7** | **+0.2** |
| **LOEI** | **Loei** | **20.44** | **4** | P | Pn | 18 45 08.0 | +3.4 |
| | 21nm,0.8s | | | | | | |
| **UTTA** | **Uttaradit** | **20.64** | **2** | P | Pn | 18 45 12.2 | +5.3 |
| | 2.9nm,0.7s | | | | | | |
| **NONG** | **Nongkai** | **21.20** | **9** | P | P | 18 45 16.2 | +5.5 |
| | 8.0nm,0.9s | | | | | | |
| **CM11** | **Chiang Mai Arr** | **21.26** | **358** | P | **P** | **18 45 09.2** | **-2.1** |
| | baz=21 | | | | | | |
| **CM06** | **Chiang Mai Arr** | **21.30** | **358** | P | **P** | **18 45 10.0** | **-1.8** |
| | baz=21 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.35** | **358** | P | **P** | **18 45 09.9** | **-2.3** |
| | 6.9nm,0.9s,baz=186,slow=9.9,SNR=47 | | | | | | |
| **LAMP** | **Lampang** | **21.40** | **360** | P | **P** | **18 45 15.8** | **+3.1** |
| | 8.3nm,0.9s | | | | | | |
| **WSI** | **Waingapu** | **21.45** | **109** | P | **P** | **18 45 14.6** | **+1.2** |
| **PALK** | **Pallekele** | **21.59** | **298** | *i* P | **P** | **18 45 17.5** | **+2.6** |
| **CHTO** | **Chiang Mai** | **21.70** | **358** | P | **P** | **18 45 17.0** | **+1.0** |
| | 53nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.70** | **358** | *e*P | **P** | **18 45 12.8** | **-3.2** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.7s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.70** | **358** | *e*P | **P** | **18 45 12.8** | **-3.2** |
| | comp=Z,6.1nm,0.7s | | | | | | |
| **CMAI** | **Chiangmai2** | **22.81** | **358** | P | **P** | **18 45 28.0** | **0.0** |
| **MMRI** | **Maumere** | **23.05** | **105** | P | **P** | **18 45 30.7** | **+0.3** |
| **LUWI** | **Luwuk** | **23.08** | **86** | P | **P** | **18 45 31.2** | **+0.4** |
| **LUWI** | **Luwuk** | **23.08** | **86** | P | **P** | **18 45 30.9** | **+0.1** |
| | comp=Z,31nm,1.0s | | | | | | |
| **GTOI** | **Gorontalo** | **23.53** | **82** | P | **P** | **18 45 34.6** | **-0.6** |
| **KMSI** | **Cibinong** | **24.48** | **82** | P | **P** | **18 45 44.3** | **+0.2** |
| **BATI** | **Baumata** | **24.79** | **108** | P | **P** | **18 45 47.4** | **+0.4** |
| **SOEI** | **Soe** | **25.25** | **107** | P | **P** | **18 45 51.8** | **+0.5** |
| **H08S2** | **Diego Garcia H** | **27.52** | **259** | T | T | 19 15 12.0 | |
| | baz=81,slow=76,SNR=285 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.53** | **259** | T | T | 19 14 56.4 | |
| | baz=81,slow=76,SNR=696 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.54** | **259** | T | T | 19 14 55.5 | |
| | baz=81,slow=76,SNR=441 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08N1** | **Diego Garcia H** | **28.83** | **262** | T | T | 19 17 19.6 | |
| | baz=145,slow=74,SNR=19 | | | | | | |
| **H08N2** | **Diego Garcia H** | **28.84** | **262** | T | T | 19 17 15.3 | |
| | baz=145,slow=74,SNR=17 | | | | | | |
| **H08N3** | **Diego Garcia H** | **28.85** | **262** | T | T | 19 17 31.2 | |
| | baz=145,slow=74,SNR=21 | | | | | | |
| **ODAN** | **Odare** | **32.01** | **339** | *e*P | P | 18 46 55.5 | +4.0 |
| | comp=Z,15nm,0.7s | | | | | | |
| **TAPN** | **Taplejung** | **32.34** | **340** | *e*P | **P** | **18 46 56.0** | **+1.5** |
| | comp=Z,36nm,0.9s | | | | | | |
| **RAMN** | **Ramite** | **32.38** | **338** | *e*P | P | 18 46 59.8 | +5.0 |
| **GUN** | **Gumba** | **33.52** | **337** | *e*P | **P** | **18 47 06.4** | **+1.5** |
| | comp=Z,14nm,0.6s | | | | | | |
| **LSA** | **Lhasa** | **33.55** | **346** | *e*P | **P** | **18 47 04.9** | **-0.4** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **33.55** | **346** | *e*P | **P** | **18 47 04.9** | **-0.4** |
| | comp=Z,8.1nm,0.8s | | | | | | |
| **DMN** | **Daman** | **33.56** | **336** | *e*P | P | 18 47 09.2 | +4.1 |
| **KKN** | **Kakani** | **33.65** | **336** | *e*P | P | 18 47 09.0 | +3.1 |
| | comp=Z,20nm,1.0s | | | | | | |
| **GKN** | **Gorkha** | **34.10** | **336** | *e*P | P | 18 47 12.4 | +2.7 |
| | comp=Z,16nm,0.8s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.41** | **159** | T | T | 19 23 29.2 | |
| | baz=335,slow=76,SNR=66 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.43** | **159** | T | T | 19 23 33.4 | |
| | baz=335,slow=76,SNR=54 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.43** | **159** | T | T | 19 23 35.8 | |
| | baz=335,slow=76,SNR=56 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.71** | **119** | P | **P** | **18 47 40.0** | **-0.6** |
| | comp=Z,2.3nm,0.8s,baz=294,slow=9.6,SNR=10 | | | | | | |
| WRA | | | | pP | **pP** | **18 47 47.6** | **+0.2** |
| | comp=Z,4.4nm,0.9s,baz=294,slow=9.8,SNR=8.7 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.71** | **119** | *e*P | **P** | **18 47 40.2** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **37.71** | **119** | *e*P | **P** | **18 47 40.2** | **-0.5** |
| | comp=Z,6.2nm,0.9s | | | | | | |
| **AS13** | **Alice Springs** | **38.85** | **125** | P | **P** | **18 47 50.4** | **+0.1** |
| | baz=39 | | | | | | |
| **AS14** | **Alice Springs** | **38.87** | **125** | P | **P** | **18 47 50.8** | **+0.4** |
| | baz=39 | | | | | | |
| **AS12** | **Alice Springs** | **38.87** | **125** | P | **P** | **18 47 50.5** | **+0.1** |
| | baz=39 | | | | | | |
| **ASAR** | **Alice Springs** | **38.87** | **125** | P | **P** | **18 47 50.5** | **+0.1** |
| | comp=Z,2.5nm,0.8s,baz=298,slow=7.8,SNR=25 | | | | | | |
| ASAR | | | | pP | **pP** | **18 47 57.6** | **+0.5** |
| | comp=Z,5.3nm,0.8s,baz=300,slow=7.6,SNR=19 | | | | | | |
| **LZH** | **Lanzhou** | **39.08** | **5** | *e*P | **P** | **18 47 51.8** | **-0.3** |
| LZH | | | | pP | **pP** | **18 47 59.0** | **+0.1** |
| LZH | | | | sP | **sP** | **18 48 02.5** | **+0.9** |
| LZH | | | | PMZ | | | |
| | comp=Z,22nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,85nm,4.3s | | | | | | |
| **GTA** | **Gaotai** | **42.21** | **0** | *e*P | **P** | **18 48 18.3** | **+0.4** |
| GTA | | | | pP | **pP** | **18 48 23.8** | **-0.9** |
| GTA | | | | sP | **sP** | **18 48 26.3** | **-1.1** |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **44.96** | **13** | *e*P | P | 18 48 49.5 | +9.5 |
| HHC | | | | S | **S** | **18 55 22.0** | **+4.7** |
| **HTT** | **Hallett** | **47.46** | **134** | P | **P** | **18 49 02.2** | **+2.4** |
| | baz=48 | | | | | | |
| **PMG** | **Port Moresby** | **47.51** | **100** | *e*P | **P** | **18 49 00.3** | **-0.1** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,59nm,1.2s | | | | | | |
| **KSH** | **Kashi** | **47.64** | **335** | P | P | 18 49 07.3 | +6.2 |
| KSH | | | | PMZ | | | |
| | comp=Z,13nm,1.2s | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.98** | **30** | P | **P** | **18 49 03.1** | **-0.5** |
| KSAR | | | | *PP | **pP** | **18 49 10.6** | **+0.1** |
| **KSAR** | **Wonju Array Be** | **47.98** | **30** | P | **P** | **18 49 03.

OTUK pmax pmax
comp=Z,17nm,0.9s
**KURBB Kurchatov Arra 56.44 344** P **P** **18 50 06.6 +0.3**
comp=Z,1.4nm,0.9s,baz=159,slow=6.9,SNR=8.2
**KURK Kurchatov 56.50 344** P **P** **18 50 06.6 -0.1**
KURK pmax pmax
comp=Z,1.0nm,0.9s
**KURK Kurchatov 56.50 344** *eP* **P** **18 50 04.9 -1.8**
comp=Z,29nm,0.8s
**ZAA0 Zalesovo Array 58.11 350** P **P** **18 50 17.7 -0.3**
baz=58,SNR=4.8
**ZALV Zalesovo Beam 58.11 350** P **P** **18 50 17.1 -0.9**
comp=Z,5.9nm,0.7s,baz=176,slow=6.6,SNR=17
ZALV pP **pP** **18 50 24.9 0.0**
comp=Z,28nm,0.7s,baz=186,slow=5.8,SNR=36
**KLR Kul'dur 58.95 24** *eP* P 18 50 28.9 +5.0
**NVS Novosibirsk 59.25 349** *eP* P 18 50 32.9 +7.0
NVS pmax pmax
comp=Z,16nm,1.4s
NVS pmax pmax
comp=N,12nm,1.4s
NVS pmax pmax
comp=E,6.0nm,0.7s
**VOSK Vostochnaya 60.59 340** *i* P P 18 50 40.2 +5.0
VOSK pmax pmax
comp=Z,10.0nm,1.3s
**BVA0 Borovoye Array 61.04 340** P P 18 50 44.7 +6.4
BVA0 pmax pmax
comp=Z,11nm,1.4s
**BVAR Borovoye Array 61.04 340** P **P** **18 50 37.5 -0.7**
comp=Z,1.1nm,0.6s,baz=130,slow=8.1,SNR=6.6
BVAR pP **pP** **18 50 45.3 0.0**
comp=Z,4.6nm,0.7s,baz=142,slow=7.5,SNR=20
**CHKZ Chkalovo 61.51 341** *i* P P 18 50 47.9 +6.5
CHKZ pmax pmax
comp=Z,10.0nm,0.9s
**BOD Bodaibo 61.71 9** *eP* **P** **18 50 40.6 -2.1**
BOD pmax pmax
comp=Z,10.0nm,1.7s
**AB31 Akbulak array 62.41 332** *i* P P 18 50 54.0 +6.5
AB31 pmax pmax
comp=Z,34nm,1.1s
**ABKAR Akbulak array 62.41 332** *eP* **P** **18 50 45.8 -1.7**
comp=Z,18nm,0.9s
ABKAR *e*pP **pP** **18 50 53.5 -1.0**
**KMBO Kilima Mbogo 62.48 270** P **P** **18 50 49.9 +0.8**
comp=Z,2.0nm,0.9s,baz=44,slow=7.8,SNR=4.8
**KMBO Kilima Mbogo 62.48 270** *ceP* **P** **18 50 50.5 +1.4**
KMBO pmax pmax
comp=Z,2.0nm,0.9s
**AKTO Aktyubinsk 64.12 332** P **P** **18 50 57.2 -1.7**
comp=Z,1.2nm,0.7s,baz=135,slow=6.1,SNR=5.3
AKTO pP **pP** **18 51 05.5 -0.5**
comp=Z,6.7nm,0.9s,baz=122,slow=5.1,SNR=14
**AKTO Aktyubinsk 64.12 332** P P 18 51 04.9 +6.0
AKTO pmax pmax
comp=Z,10.0nm,1.0s
**KUR Kuril'sk 64.26 36** *eP* **P** **18 51 02.3 +2.4**
**SVE Sverdlovsk 67.52 338** ⇓ *iP* P 18 51 28.7 +8.1
SVE pmax pmax
comp=Z,19nm,1.0s
**YAK Yakutsk 68.77 15** *eP* P 18 51 24.5 -3.9
YAK pmax pmax
comp=N,11nm,1.5s
YAK pmax pmax
comp=Z,11nm,1.1s
YAK pmax pmax
comp=E,7.0nm,1.4s
**KBZ Khabaz 68.91 319** P **P** **18 51 29.4 -0.2**
comp=E,3.2nm,0.9s,baz=140,slow=8.3,SNR=8.8
KBZ pP **pP** **18 51 37.9 +1.1**
comp=E,8.5nm,0.8s,baz=131,slow=6.4,SNR=15
**KIV Kislovodsk 69.14 320** *eP* P 18 51 37.5 +6.3
KIV pmax pmax
comp=Z,16nm,1.1s
**MAW Mawson 69.25 194** P **P** **18 51 32.3 +1.0**
comp=Z,2.1nm,0.8s,baz=14,slow=9.4,SNR=6.5
**VRH Novokhopyorsk 73.02 326** *eP* P 18 52 01.3 +6.9
VRH pmax pmax
comp=Z,20nm,0.7s
VRH pmax pmax
comp=N,10.0nm,0.9s
VRH pmax pmax
comp=E,30nm,1.2s
**BRTR Keskin Array B 73.82 313** P **P** **18 51 58.2 -1.4**
comp=E,1.4nm,0.8s,baz=137,slow=5.9,SNR=10
BRTR pP **pP** **18 52 06.5 -0.3**
comp=E,4.3nm,0.7s,baz=134,slow=7.3,SNR=22
**VORD Divnogorie 74.28 325** *eP* P 18 52 07.6 +5.8
VORD pmax pmax
comp=Z,9.0nm,0.9s
VORD pmax pmax
comp=N,50nm,0.4s
VORD pmax pmax
comp=E,80nm,0.4s
**VSR Storozhevoye 74.46 325** *eP* P 18 52 09.6 +6.7
VSR pmax pmax
comp=Z,20nm,0.8s
VSR pmax pmax
comp=N,10.0nm,1.1s
VSR pmax pmax
comp=E,20nm,0.9s
**LPSR Galich'ya Gora 75.19 327** *eP* P 18 52 14.0 +6.9
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=N,4.0nm,0.8s
LPSR pmax pmax
comp=E,4.0nm,0.8s
**OBN Obninsk 77.52 328** *i* P P 18 52 26.9 +6.7
OBN *i* 18 52 34.5
OBN pmax pmax
comp=Z,43nm,2.5s
**KLMR Klimovskoe 78.63 334** *eP* P 18 52 32.1 +5.8
KLMR pmax pmax
comp=Z,17nm,1.1s
**MSAB Monastry St. A 79.22 316** ⇓ *iP* P 18 52 39.3 +9.4
**CFR Carcaliu 79.29 317** ⇓ *iP* P 18 52 38.2 +8.0
**CFR Carcaliu 79.29 317** ⇓ *iP* P 18 52 38.2 +8.0
**AKASG Malin Array Be 80.13 323** pP pP 18 52 41.3 -0.6
comp=Z,1.0nm,0.7s,baz=86,slow=4.1,SNR=2.7
**AKASG Malin Array Be 80.13 323** *ceP* P 18 52 42.0 +7.3
AKASG pmax pmax
comp=Z,1.0nm,0.7s
**VRI Vrincioaia 80.42 317** ⇑ *iP* P 18 52 45.2 +8.8
**VRI Vrincioaia 80.42 317** ⇑ *iP* P 18 52 45.2 +8.8
**PLOR Plostina 80.47 317** ⇑ *iP* P 18 52 44.3 +7.6
**TESR Tescani 80.64 318** ⇓ *iP* P 18 52 45.4 +7.9
**MLR Muntele Rosu 80.86 317** ⇑ *iP* P 18 52 45.8 +6.8
**MLR Muntele Rosu 80.86 317** ⇑ *iP* P 18 52 45.8 +6.8
**DOPR Dopca 81.35 317** ⇑ *iP* P 18 52 49.9 +8.5
**BURAR Bucovina Array 81.85 319** ⇑ P P 18 52 52.8 +8.7
**BURAR Bucovina Array 81.85 319** ⇑ *iP* P 18 52 52.8 +8.7
**BZS Buzias 83.86 316** ⇑ P P 18 53 02.6 +8.2
**BZS Buzias 83.86 316** ⇑ *iP* P 18 53 02.6 +8.2
**SIRR Siria 83.95 317** ⇓ *iP* P 18 53 02.1 +7.2
**KOLS Kolonicke sedl 84.06 320** *eP* P 18 53 03.9 +8.5
KOLS pmax pmax
comp=Z,8.0nm,1.0s
**KOLS Kolonicke sedl 84.06 320** *ep*P P 18 53 03.9 +8.5
**BILL Bilibino 84.18 20** *i* P **P** **18 52 56.1 +0.5**
BILL pmax pmax
comp=Z,3.0nm,1.0s
**FINES FINESS Array B 84.89 332** pP pP 18 53 07.0 +0.5
comp=Z,4.4nm,0.8s,baz=131,slow=5.7,SNR=5.0
**FINES FINESS Array B 84.89 332** *i* P P 18 53 05.5 +6.2
FINES pmax pmax
comp=Z,4.0nm,0.8s
**KRLC Kraliky 87.78 320** *eP* P 18 53 22.9 +9.1
**KRLC Kraliky 87.78 320** *eP* P 18 53 22.9 +9.1
**DPC Dobruska-Polom 88.10 320** *eP* P 18 53 24.2 +8.8
**DPC Dobruska-Polom 88.10 320** *eP* P 18 53 24.2 +8.8
**GERES GERESS Array B 89.64 319** pP pP 18 53 31.4 +1.4
comp=Z,1.7nm,0.8s,baz=76,slow=5.6,SNR=8.3
**CLL Collm 90.29 321** *eP* P 18 53 32.0 +6.5
**CLL Collm 90.29 321** *eP* **P** **18 53 25.0 -0.5**
CLL *ep*P **pP** **18 53 32.0 -0.8**
**TXAR Lajitas Array 145.65 38** PKPbc **PKPab** **19 00 04.8 +0.3**
comp=Z,3.1nm,0.6s,baz=316,slow=1.3,SNR=29
TXAR pPKPbc pPKPbc 19 00 13.2 +1.6
comp=Z,1.1nm,0.7s,baz=334,slow=0.8,SNR=32
**JCT Junction City 147.00 32** *e*PKP2 **PKPbc** **19 00 08.0 -0.1**
**JCT Junction City 147.00 32** *e*PKPbc **PKPbc** **19 00 08.0 -0.1**

***IDC 25** 18:41:55.5±3.2, 3°56S×99°58E, h0km, **mb4.0**/6, **mb1 4.1**/6, **mb1mx3.7**/44, **mbtmp4.0**/6, **Error ellipse: s-maj=127.3km s-min=20.9km az=57.0, Southwest of Sumatera***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.89** | **358** | P | P | 18 46 49.9 | -0.4 |
| | 1.8nm,0.7s,baz=191,slow=8.6,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.59** | **118** | P | P | 18 49 12.2 | -0.1 |
| | 1.8nm,0.6s,baz=292,slow=9.2,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.70** | **124** | P | P | 18 49 20.8 | -0.8 |
| | 0.7nm,0.5s,baz=300,slow=7.2,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **51.52** | **6** | P | P | 18 51 03.5 | +0.2 |
| | 1.5nm,0.7s,baz=189,slow=8.7,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.41** | **345** | P | P | 18 51 09.7 | 0.0 |
| | 1.5nm,0.6s,baz=151,slow=7.2,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.62** | **350** | P | P | 18 51 53.4 | -0.8 |
| | 3.0nm,0.7s,baz=167,slow=5.9,SNR=2.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.18** | **38** | PKPbc | PKPab | 19 01 39.2 | -0.1 |
| | 1.3nm,0.7s,baz=222,slow=1.2,SNR=4.0 | | | | | | |

*IDC **25** 18:48:32.7±2.3, 3°25S×100°55E, h0km, mb4.0/7, mb1 4.1/7, mb1mx3.8/37, mbtmp4.0/7, Error ellipse: s-maj=85.7km s-min=19.6km az=57.0*
*ISCJB **25** 18:48:36.3±0.9, 3°14S±0°08×100°26E±0°09, h28km, mb4.0/7, Error ellipse: s-maj=16.6km s-min=5.3km az=138.5*
*DJA **25** 18:48:39.2±0.5, 3°S±3°×10°0E±°, h27km±6km, M3.9/5, mb4.0/5, MLv3.8/4*

**ISC 25 18:48:38.7±1.0, 2°96S±0°09×100°37E±0°07, h28km, n36, σ1s10°27, mb4.2/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.41** | **299** | P | **Pn** | **18 48 49.4** | **+0.7** |
| **PDSI** | **Padang** | **2.04** | **3** | P | **Pb** | **18 49 13.5** | **-1.6** |
| **SISI** | **Saibi** | **2.06** | **322** | P | **Pn** | **18 49 13.1** | **+1.5** |
| **SDSI** | **Sungai Dareh** | **2.28** | **28** | P | **Pb** | **18 49 16.5** | **-2.7** |
| **KSI** | **Kapahiang** | **2.33** | **107** | P | **Pn** | **18 49 15.7** | **+0.5** |
| **PPI** | **Padang Panjang** | **2.49** | **1** | P | **Pn** | **18 49 19.1** | **+1.7** |
| **MNAI** | **Manna** | **2.94** | **118** | P | **Pn** | **18 49 24.1** | **+0.5** |
| **MDSI** | **Maura Dua** | **4.09** | **112** | P | Pn | 18 49 35.9 | -3.6 |
| **LWLI** | **Liwa** | **4.21** | **119** | P | **Pn** | **18 49 41.6** | **+0.4** |
| **PMBI** | **Palembang** | **4.40** | **90** | P | **Pn** | **18 49 43.8** | **+0.1** |
| **KASI** | **Kota Agung** | **4.84** | **122** | P | **Pn** | **18 49 50.0** | **+0.2** |
| **KLI** | **Kotabumi** | **4.86** | **113** | P | **Pn** | **18 49 50.4** | **+0.3** |
| **GSI** | **Gunungsitoli** | **5.07** | **327** | P | **Pn** | **18 49 53.7** | **+0.7** |
| **TPRI** | **Tanjung Pinang** | **5.67** | **47** | P | **Pn** | **18 50 02.9** | **+1.7** |
| **PPBI** | **Pangkal Pinang** | **5.82** | **82** | P | **Pn** | **18 50 04.4** | **+1.2** |
| **CGJI** | **Cibinong** | **6.43** | **125** | P | **Pn** | **18 50 11.8** | **+0.2** |
| **TNG** | **Tangerang** | **7.03** | **117** | P | **Pn** | **18 50 20.1** | **+0.3** |
| **CISI** | **Cisompet, Garu** | **8.71** | **122** | P | **Pn** | **18 50 43.0** | **0.0** |
| **LHMI** | **Lhok Sumawe** | **8.82** | **337** | P | **Pn** | **18 50 45.5** | **+1.0** |
| **CMJI** | **Cimerak** | **9.36** | **121** | P | **Pn** | **18 50 52.3** | **+0.4** |
| **SMRI** | **Semarang** | **10.82** | **112** | P | **Pn** | **18 51 12.6** | **+0.6** |
| **WSI** | **Waingapu** | **20.89** | **110** | P | Pn | 18 53 19.4 | -2.2 |
| **CMAR** | **Chiang Mai Arr** | **21.33** | **356** | P | **P** | **18 53 23.8** | **+0.1** |
| | 0.5nm,0.3s,baz=186,slow=9.8,SNR=4.8 | | | | | | |
| **MRSI** | **Marisa** | **21.84** | **81** | P | **P** | **18 53 30.2** | **+1.0** |
| **H08S2** | **Diego Garcia H** | **28.13** | **259** | T | T | 19 23 36.7 | |
| | baz=82,slow=75,SNR=215 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.14** | **259** | T | T | 19 23 37.1 | |
| | baz=82,slow=75,SNR=187 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.15** | **259** | T | T | 19 23 38.3 | |
| | baz=82,slow=75,SNR=219 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.24** | **160** | T | T | 19 30 53.2 | |
| | baz=336,slow=76,SNR=36 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.26** | **160** | T | T | 19 30 54.2 | |
| | baz=336,slow=76,SNR=56 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.26** | **160** | T | T | 19 30 54.4 | |
| | baz=336,slow=76,SNR=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.20** | **120** | P | P | 18 55 43.3 | -4.6 |
| | 0.3nm,0.5s,baz=306,slow=8.6,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.40** | **125** | P | P | 18 55 53.5 | -4.5 |
| | 1.0nm,0.4s,baz=299,slow=7.2,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **50.86** | **5** | P | **P** | **18 57 38.4** | **+1.2** |
| | 2.7nm,0.7s,baz=190,slow=9.3,SNR=18 | | | | | | |
| SONM | | | | PcP | **PcP** | **18 58 52.1** | **-1.4** |
| | 0.7nm,0.8s,baz=176,slow=4.3,SNR=2.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.05** | **344** | P | **P** | **18 57 46.5** | **+0.6** |
| | 2.2nm,0.7s,baz=157,slow=8.5,SNR=15 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.83** | **27** | P | **P** | **18 58 05.3** | **-1.1** |
| | 3.1nm,0.7s,baz=201,slow=4.6,SNR=6.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.17** | **349** | P | **P** | **18 58 30.5** | **+0.5** |
| | 2.8nm,0.8s,baz=160,slow=4.7,SNR=10 | | | | | | |

*GEN **25** 18:51:04.4, 44°60N×7°24E, h14km, ML0.9*
*LDG **25** 18:51:04.4±0.2, 44°61N×7°25E, h2km, Md1.9/3, Ml1.8/7, Error ellipse: s-maj=3.1km s-min=1.5km az=86.0*

**CSEM 25 18:51:03.9±0.1, 44°61N×7°25E, h10km, ML1.7/8, Error ellipse: s-maj=2.8km s-min=1.3km az=76.0, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PZZ** | **Stroppo** | **0.14** | **225** | P | Pg | 18 51 08.0 | +0.7 |
| PZZ | | | | S | Sg | 18 51 10.6 | +0.9 |
| **BHB** | **Bricherasio** | **0.24** | **2** | P | Pg | 18 51 09.5 | +0.7 |
| BHB | | | | S | Sg | 18 51 13.0 | +0.8 |
| **OG22** | **Abries** | **0.31** | **315** | Pg | Pg | 18 51 10.8 | +0.4 |
| OG22 | | | | Sg | Sg | 18 51 14.9 | +0.1 |
| **OG22** | **Abries** | **0.31** | **315** | Pg | Pg | 18 51 10.8 | +0.4 |
| OG22 | | | | Sg | Sg | 18 51 14.9 | +0.1 |
| **STV** | **Sant Anna di V** | **0.36** | **172** | P | Pg | 18 51 11.6 | +0.4 |
| STV | | | | S | Sg | 18 51 16.5 | +0.3 |
| **MBDF** | **Montbardon** | **0.36** | **289** | *e*Pg | Pg | 18 51 11.9 | +0.5 |
| MBDF | | | | *e*Sg | Sg | 18 51 16.5 | +0.1 |
| | 18nm,0.3s | | | | | | |
| **MBDF** | **Montbardon** | **0.36** | **289** | *e*Pg | Pg | 18 51 11.9 | +0.5 |
| MBDF | | | | *e*Sg | Sg | 18 51 16.5 | +0.1 |
| | 9.1nm,0.3s | | | | | | |
| **RRL** | **Rocca Remolon** | **0.46** | **314** | P | Pg | 18 51 13.5 | +0.3 |
| RRL | | | | S | Sg | 18 51 19.6 | +0.1 |
| **SBF** | **Sospel** | **0.75** | **170** | *e*Pg | Pg | 18 51 18.2 | -0.4 |
| SBF | | | | *e*Sg | Sg | 18 51 28.7 | +0.2 |
| | 3.2nm,0.3s | | | | | | |
| **SBF** | **Sospel** | **0.75** | **170** | *e*Pg | Pg | 18 51 18.2 | -0.4 |
| SBF | | | | *e*Sg | Sg | 18 51 28.7 | +0.2 |
| | 1.6nm,0.3s | | | | | | |
| **LPG** | **La Plagne** | **0.96** | **338** | *e*Pg | Pg | 18 51 22.4 | -0.4 |
| LPG | | | | *e*Sg | Sg | 18 51 35.5 | -0.1 |
| | 1.0nm,0.2s | | | | | | |
| **LPG** | **La Plagne** | **0.96** | **338** | *e*Pg | Pg | 18 51 22.4 | -0.4 |
| LPG | | | | *e*Sg | Sg | 18 51 35.5 | -0.1 |
| | 0.5nm,0.2s | | | | | | |
| **LPL** | **La Plagne** | **0.98** | **338** | *e*Pg | Pg | 18 51 22.8 | -0.4 |
| LPL | | | | *e*Sg | Sg | 18 51 35.2 | -1.0 |
| | 2.0nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.98** | **338** | *e*Pg | Pg | 18 51 22.8 | -0.4 |
| LPL | | | | *e*Sg | Sg | 18 51 35.2 | -1.0 |
| | 1.0nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.03** | **288** | *e*Pg | Pg | 18 51 23.5 | -0.3 |
| ORIF | | | | *e*Sg | Sg | 18 51 36.3 | -1.0 |
| | 2.2nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **1.03** | **288** | *e*Pg | Pg | 18 51 23.5 | -0.3 |
| ORIF | | | | *e*Sg | Sg | 18 51 36.3 | -1.0 |
| | 1.1nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.13** | **203** | *e*Pg | Pg | 18 51 25.7 | 0.0 |
| FRF | | | | *e*Sg | Sb | 18 51 40.1 | -0.3 |
| | 4.8nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.13** | **203** | *e*Pg | Pg | 18 51 25.7 | 0.0 |
| FRF | | | | *e*Sg | Sb | 18 51 40.1 | -0.3 |
| | 2.4nm,0.3s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.36** | **243** | *e*Pg | Pb | 18 51 29.7 | +0.2 |
| SMRF | | | | *e*Sg | Sg | 18 51 47.9 | +0.1 |
| | 0.7nm,0.2s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.36** | **243** | *e*Pg | Pb | 18 51 29.7 | +0.2 |
| SMRF | | | | *e*Sg | Sg | 18 51 47.9 | +0.1 |
| | 0.3nm,0.2s | | | | | | |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pg | Pg | 18 51 30.9 | +0.5 |
| LMR | | | | *e*Sg | Sg | 18 51 48.1 | -0.3 |
| | 6.1nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **1.38** | **203** | *e*Pg | Pg | 18 51 30.9 | +0.5 |
| LMR | | | | *e*Sg | Sg | 18 51 48.1 | -0.3 |
| | 3.0nm,0.3s | | | | | | |

*IDC **25** 19:04:47.9±4.6, 24°19N×108°96W, h0km, mb4.0/2, mb1 4.0/5, mb1mx3.7/41, mbtmp3.7/5, ML3.3/3, Error ellipse: s-maj=76.9km s-min=14.4km az=156.0*

*ISCJB **25** 19:04:50.9±0.6, 24°68N±0°05×109°25W±0°05, h10km, mb3.9/3, Error ellipse: s-maj=8.0km s-min=5.7km az=142.3*
*NEIC **25** 19:04:52.7±0.8, 24°46N×109°27W, h10km, mb4.0/1, MD3.8(MEX), Error ellipse: s-maj=13.4km s-min=10.8km az=154.0*
*MEX **25** 19:04:54.9±0.3, 24°75N×109°29W, h20km±51km, MD3.8*

**ISC 25 19:04:52.0±0.8, 24°69N±0°05×109°29W±0°05, h10km, n13, σ2s21/19, mb4.0/3, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.10** | **238** | Pg | **Pb** | **19 05 12.4** | **-0.7** |
| | 47nm,0.3s,baz=72,slow=9.6,SNR=47 | | | | | | |
| LPIG | | | | Lg | Lg | 19 05 26.9 | |
| | 113nm,0.3s,baz=149,slow=18,SNR=12 | | | | | | |
| **LPIG** | **La Paz** | **1.10** | **238** | *e*P | **Pb** | **19 05 12.3** | **-0.9** |
| LPIG | | | | *e*S | **Sb** | **19 05 25.8** | **-1.7** |
| **SLBS** | **Sierra La Lagu** | **1.17** | **211** | *e*P | **Pb** | **19 05 13.5** | **-0.8** |
| SLBS | | | | *e*S | **Sb** | **19 05 28.0** | **-1.5** |
| **MAIG** | **Mazatlaan** | **3.01** | **119** | *i* P | **Pn** | **19 05 39.0** | **-0.8** |
| MAIG | | | | *i* S | **Sn** | **19 06 15.2** | **-0.8** |
| **MAIG** | **Mazatlaan** | **3.01** | **119** | *i* P | **Pn** | **19 05 39.0** | **-0.8** |
| MAIG | | | | *i* S | **Sn** | **19 06 15.2** | **-0.8** |
| **HSIG** | | **4.56** | **341** | *e*P | **Pn** | **19 05 59.8** | **-1.3** |
| HSIG | | | | *e*S | **Sn** | **19 06 51.8** | **-2.4** |
| **HSIG** | | **4.56** | **341** | *e*P | **Pn** | **19 05 59.8** | **-1.3** |
| HSIG | | | | *e*S | **Sn** | **19 06 51.8** | **-2.4** |
| **TXAR** | **Lajitas Array** | **6.82** | **46** | Pn | **Pn** | **19 06 30.6** | **-1.7** |
| | 0.2nm,0.3s,baz=220,slow=14,SNR=4.1 | | | | | | |
| TXAR | | | | Sn | **Sn** | **19 07 45.7** | **-4.3** |
| | 0.6nm,0.3s,baz=221,slow=24,SNR=3.9 | | | | | | |
| TXAR | | | | Lg | Lg | 19 08 19.0 | |
| | 1.5nm,0.3s,baz=218,slow=30,SNR=4.3 | | | | | | |
| **ANMO** | **Albuquerque** | **10.51** | **13** | Pn | Pn | 19 07 27.5 | +4.5 |
| | 0.1nm,0.3s,baz=191,slow=15,SNR=2.9 | | | | | | |
| ANMO | | | | Lg | Lg | 19 10 26.5 | |
| | 0.2nm,0.3s,baz=230,slow=18,SNR=2.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.69** | **333** | Pn | **P** | **19 08 41.1** | **+3.6** |
| | 0.1nm,0.3s,baz=158,slow=12,SNR=6.1 | | | | | | |
| **SWMT** | **Swartz Lake** | **23.08** | **352** | *e*P | **P** | **19 10 01.2** | **+3.3** |
| | 3.4nm,0.7s | | | | | | |
| **NEW** | **Newport** | **24.33** | **347** | P | **P** | **19 10 11.8** | **+1.9** |
| | 3.7nm,0.7s,baz=165,slow=12,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **46.83** | **339** | P | **P** | **19 13 23.9** | **+2.1** |
| | 0.9nm,0.6s,baz=150,slow=7.2,SNR=16 | | | | | | |

**IDC 25 19:23:52.0±4.3, 2°28S×100°78E, h0km, mb3.4/4, mb1 3.5/4, mb1mx3.3/29, mbtmp3.4/4, Error ellipse: s-maj=177.2km s-min=25.0km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **28.67** | **258** | T | T | 19 58 35.7 | |
| | baz=81,slow=75,SNR=48 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.67** | **258** | T | T | 19 58 33.4 | |
| | baz=81,slow=75,SNR=37 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.68** | **258** | T | T | 19 58 32.4 | |
| | baz=81,slow=75,SNR=53 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.74** | **161** | T | T | 20 06 56.2 | |
| | baz=333 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.75** | **161** | T | T | 20 07 00.5 | |
| | baz=333 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.75** | **161** | T | T | 20 07 02.3 | |
| | baz=333 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.18** | **121** | P | P | 19 31 04.2 | -1.0 |
| | 0.4nm,0.5s,baz=298,slow=10,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **38.46** | **126** | P | P | 19 31 16.7 | +0.7 |
| | 0.2nm,0.7s,baz=305,slow=9.0,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **50.15** | **5** | P | P | 19 32 50.5 | +1.1 |
| | 0.8nm,0.9s,baz=195,slow=9.0,SNR=4.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.51** | **344** | P | P | 19 32 58.5 | -1.0 |
| | 0.7nm,0.6s,baz=164,slow=8.4,SNR=6.9 | | | | | | |

*BJI **25** 19:33:17.7, 4°35S×99°81E, h10km, mb4.6/17, mB4.8/2*
*ISCJB **25** 19:33:24.8±1.7, 3°52S±0°05×99°70E±0°06, h15km±11km, mb4.5/47, Error ellipse: s-maj=12.5km s-min=4.4km az=141.7*
*DJA **25** 19:33:25.9±0.4, 3°S±3°×10°0E±°, h10km, M5.4/7, mb4.2/7, mB4.7/2, MLv6.0/3, Mw(mB)4.0/2*
*NEIC **25** 19:33:26.0±0.3, 3°51S×99°75E, h10km, mb4.7/11, Error ellipse: s-maj=9.1km s-min=5.1km az=48.0*
*MOS **25** 19:33:27.1±0.9, 3°47S×99°79E, h29km, mb4.9/21, Error ellipse: s-maj=13.3km s-min=6.6km az=109.1*
*IDC **25** 19:33:30.1±0.8, 3°48S×99°77E, h37km±5km, mb4.2/20, mb1 4.3/23, mb1mx4.2/34, mbtmp4.4/23, ML4.1/3, Error ellipse: s-maj=19.3km s-min=11.5km az=39.0*

**ISC 25 19:33:29.8±0.7, 3°45S±0°06×99°77E±0°08, h35km±2km, h35km:pP-P, n133, σ0s96/131, mb4.6/47, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.72** | **19** | P | Pb | 19 33 41.3 | -2.9 |
| PPSI | | | | S | **Sb** | **19 33 51.2** | **-2.7** |
| **SISI** | **Saibi** | **2.22** | **342** | P | **Pn** | **19 34 02.8** | **-1.4** |
| **KSI** | **Kapahiang** | **2.83** | **94** | P | **Pn** | **19 34 14.0** | **+1.4** |
| **SDSI** | **Sungai Dareh** | **3.00** | **34** | P | **Pn** | **19 34 15.5** | **+0.5** |
| **PPI** | **Padang Panjang** | **3.04** | **12** | P | **Pn** | **19 34 15.1** | **-0.4** |
| **BKNI** | **Bangkinang** | **3.96** | **19** | P | **Pn** | **19 34 27.8** | **-0.4** |
| **BKNI** | **Bangkinang** | **3.96** | **19** | P | **Pn** | **19 34 27.9** | **-0.3** |
| **RGRI** | **Rengat** | **4.01** | **40** | P | **Pn** | **19 34 28.7** | **-0.1** |
| **MNSI** | **Mandailing Nat** | **4.22** | **357** | P | **Pn** | **19 34 30.8** | **-1.0** |
| **JMBI** | **JAMBI** | **4.27** | **65** | P | **Pn** | **19 34 32.6** | **+0.2** |
| **MDSI** | **Maura Dua** | **4.52** | **103** | P | **Pn** | **19 34 35.9** | **+0.1** |
| **LWLI** | **Liwa** | **4.55** | **110** | P | **Pn** | **19 34 36.1** | **-0.3** |
| **PMBI** | **Palembang** | **5.02** | **84** | P | **Pn** | **19 34 42.3** | **-0.5** |
| **SBSI** | **Sibolga** | **5.04** | **350** | P | Pn | 19 34 38.8 | -4.3 |
| **KASI** | **Kota Agung** | **5.14** | **114** | P | **Pn** | **19 34 44.4** | **0.0** |
| **GSI** | **Gunungsitoli** | **5.21** | **335** | P | **Pn** | **19 34 43.0** | **-2.3** |
| **GSI** | **Gunungsitoli** | **5.21** | **335** | *e*P | Pn | 19 34 41.3 | -4.0 |
| | 62nm,0.8s | | | | | | |
| **KLI** | **Kotabumi** | **5.27** | **106** | P | **Pn** | **19 34 46.2** | **+0.1** |
| **PSI** | **Prapat** | **6.27** | **352** | Pn | **Pn** | **19 34 58.3** | **-1.7** |
| | 0.9nm,0.3s,baz=170,slow=17,SNR=2.3 | | | | | | |
| **TPRI** | **Tanjung Pinang** | **6.44** | **48** | P | **Pn** | **19 35 02.4** | **+0.1** |
| **PPBI** | **Pangkal Pinang** | **6.49** | **79** | P | **Pn** | **19 35 03.2** | **+0.3** |
| **CGJI** | **Cibinong** | **6.69** | **118** | P | Pn | 19 35 03.4 | -2.2 |
| **SBJI** | **Serang** | **6.87** | **113** | P | **Pn** | **19 35 08.1** | **-0.1** |
| **TSI** | **Tuntungan** | **7.01** | **350** | P | **Pn** | **19 35 08.4** | **-1.7** |
| **KCSI** | **Kotacane, Aceh** | **7.21** | **344** | P | **Pn** | **19 35 11.0** | **-1.8** |
| **TNG** | **Tangerang** | **7.37** | **112** | P | **Pn** | **19 35 14.9** | **-0.1** |
| **SKJI** | **Sukabumi** | **7.63** | **118** | P | **Pn** | **19 35 18.3** | **-0.3** |
| **CBJI** | **Citeko** | **7.65** | **113** | P | **Pn** | **19 35 21.2** | **+2.4** |
| **TPI** | **Tanjunggpandan** | **7.90** | **85** | P | **Pn** | **19 35 22.8** | **+0.4** |
| | 23nm,1.8s | | | | | | |
| **CNJI** | **Cibinong** | **8.27** | **118** | P | **Pn** | **19 35 26.8** | **-0.6** |
| **MLSI** | **Meulaboh, Aceh** | **8.37** | **336** | P | **Pn** | **19 35 26.5** | **-2.3** |
| **LEM** | **Lembang** | **8.51** | **114** | Pn | **Pn** | **19 35 30.9** | **0.0** |
| | 7.7nm,0.3s,baz=270,slow=20,SNR=6.8 | | | | | | |
| **LEM** | **Lembang** | **8.51** | **114** | P | **Pn** | **19 35 30.8** | **0.0** |
| **CISI** | **Cisompet, Garu** | **8.99** | **117** | P | Pn | 19 35 34.3 | -3.0 |
| **CISI** | **Cisompet, Garu** | **8.99** | **117** | *e*P | Pn | 19 35 33.8 | -3.5 |
| | 145nm,0.6s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **9.07** | **342** | P | **Pn** | **19 35 36.3** | **-2.1** |
|

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BATI | Baumata | 24.64 | 107 | P | | P | | 19 38 45.7 | -1.8 | |
| | comp=Z,7.4nm,0.4s,baz=321,slow=6.5,SNR=4.3 | | | | | | | | | |
| SLVN | Son La | 24.96 | 9 | *e*P | | P | | 19 38 49.2 | -1.1 | |
| | comp=Z,8.6nm,0.9s | | | | | | | | | |
| H08S2 | Diego Garcia H | 27.46 | 260 | T | | T | | 20 08 19.7 | | |
| | baz=82,slow=75,SNR=47 | | | | | | | | | |
| H08S3 | Diego Garcia H | 27.46 | 260 | T | | T | | 20 08 19.7 | | |
| | baz=82,slow=75,SNR=13 | | | | | | | | | |
| H08S1 | Diego Carcia H | 27.48 | 260 | T | | T | | 20 08 19.7 | | |
| | baz=82,slow=75,SNR=50 | | | | | | | | | |
| ODAN | Odare | 32.42 | 339 | *e*P | | P | | 19 39 57.9 | +0.9 | |
| TAPN | Taplejung | 32.76 | 340 | *e*P | | P | | 19 40 01.0 | +1.0 | |
| | comp=Z,23nm,1.0s | | | | | | | | | |
| RAMN | Ramite | 32.79 | 338 | *e*P | | P | | 19 40 01.7 | +1.4 | |
| | comp=Z,5.9nm,0.6s | | | | | | | | | |
| GUN | Gumba | 33.93 | 338 | *e*P | | P | | 19 40 10.9 | +0.6 | |
| | comp=Z,8.9nm,0.5s | | | | | | | | | |
| LSA | Lhasa | 33.98 | 347 | *e*P | | P | | 19 40 12.3 | +1.4 | |
| LSA | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| LSA | Lhasa | 33.98 | 347 | *e*P | | P | | 19 40 12.3 | +1.4 | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| H01W3 | Cape Leeuwin H | 34.00 | 159 | T | | T | | 20 16 19.9 | | |
| H01W2 | Cape Leeuwin H | 34.02 | 159 | T | | T | | 20 16 37.2 | | |
| H01W1 | Cape Leeuwin H | 34.02 | 159 | T | | T | | 20 16 17.9 | | |
| KKN | Kakani | 34.05 | 337 | *e*P | | P | | 19 40 11.8 | +0.6 | |
| | comp=Z,6.7nm,0.7s | | | | | | | | | |
| GKN | Gorkha | 34.50 | 336 | *e*P | | P | | 19 40 15.6 | +0.6 | |
| | comp=Z,4.5nm,0.5s | | | | | | | | | |
| KOLN | Koldanda | 34.73 | 334 | *e*P | | P | | 19 40 18.0 | +0.9 | |
| | comp=Z,45nm,0.9s | | | | | | | | | |
| WRA | Warramunga Arr | 37.48 | 119 | P | | P | | 19 40 40.0 | -0.5 | |
| | comp=Z,7.3nm,0.7s,baz=304,slow=9.3,SNR=41 | | | | | | | | | |
| WRA | | | | PcP | | PcP | | 19 42 58.2 | -0.5 | |
| | comp=Z,1.5nm,0.7s,baz=306,slow=2.4,SNR=5.5 | | | | | | | | | |
| WRAB | Tennant Creek | 37.49 | 119 | *e*P | | P | | 19 40 40.7 | +0.1 | |
| WRAB | | | | pmax | | pmax | | | | |
| | comp=Z,28nm,0.8s | | | | | | | | | |
| WRAB | Tennant Creek | 37.49 | 119 | *e*P | | P | | 19 40 40.1 | -0.5 | |
| | comp=Z,15nm,0.8s | | | | | | | | | |
| XAN | Xi'an | 38.28 | 12 | P | | P | | 19 40 46.5 | -0.5 | |
| XAN | | | | pP | | pP | | 19 40 57.3 | +0.2 | |
| XAN | | | | sP | | sP | | 19 40 59.5 | -1.8 | |
| XAN | | | | PMZ | | | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | | |
| XAN | | | | PMZ | | | | | | |
| | comp=Z,98nm,5.3s | | | | | | | | | |
| ASAR | Alice Springs | 38.61 | 124 | P | | P | | 19 40 49.5 | -0.5 | |
| | comp=Z,3.5nm,0.7s,baz=298,slow=7.9,SNR=41 | | | | | | | | | |
| ASAR | | | | PcP | | PcP | | 19 43 02.5 | +0.4 | |
| | comp=Z,3.1nm,0.9s,baz=304,slow=2.8,SNR=14 | | | | | | | | | |
| GTA | Gaotai | 42.65 | 0 | *e*P | | P | | 19 41 24.0 | +0.8 | |
| GTA | | | | pP | | pP | | 19 41 33.5 | +0.1 | |
| GTA | | | | sP | | sP | | 19 41 37.5 | -0.1 | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,4.0nm,1.3s | | | | | | | | | |
| KSH | Kashi | 48.04 | 335 | P | | P | | 19 42 05.5 | -0.5 | |
| CTAO | Charters Tower | 48.21 | 114 | *e*P | | P | | 19 42 06.3 | -1.2 | |
| CTAO | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| CTAO | Charters Tower | 48.21 | 114 | *e*P | | P | | 19 42 06.3 | -1.2 | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| KSAR | Wonju Array Be | 48.35 | 30 | P | | P | | 19 42 08.2 | -0.1 | |
| KSAR | Wonju Array Be | 48.35 | 30 | P | | P | | 19 42 08.2 | -0.1 | |
| KSRS | Korea Array | 48.38 | 30 | P | | P | | 19 42 08.2 | -0.3 | |
| | comp=Z,6.4nm,0.9s,baz=223,slow=8.6,SNR=8.3 | | | | | | | | | |
| KSRS | Korea Array | 48.38 | 30 | P | | P | | 19 42 08.2 | -0.3 | |
| KSRS | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | | |
| PDGK | Podgornoye | 50.03 | 341 | P | | P | | 19 42 21.8 | +0.8 | |
| PDGK | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| TKM2 | Tokmak 2 | 51.07 | 337 | *e*P | | P | | 19 42 29.6 | +0.5 | |
| TKM2 | | | | pmax | | pmax | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| TKM2 | Tokmak 2 | 51.07 | 337 | *e*P | | P | | 19 42 29.6 | +0.5 | |
| | comp=Z,12nm,1.0s | | | | | | | | | |
| AAK | Ala-Archa | 51.26 | 336 | *e*P | | P | | 19 42 31.7 | +1.2 | |
| AAK | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | | |
| AAK | Ala-Archa | 51.26 | 336 | *e*P | | P | | 19 42 31.5 | +1.0 | |
| | comp=Z,5.5nm,1.2s | | | | | | | | | |
| SONM | Songino Array | 51.40 | 6 | P | | P | | 19 42 32.6 | +1.2 | |
| | comp=Z,10nm,0.8s,baz=187,slow=8.7,SNR=77 | | | | | | | | | |
| SONM | | | | pP | | pP | | 19 42 42.9 | +1.1 | |
| | comp=Z,3.3nm,0.6s,baz=191,slow=9.0,SNR=7.0 | | | | | | | | | |
| SONM | | | | PcP | | PcP | | 19 43 45.5 | -0.2 | |
| | comp=Z,2.2nm,0.8s,baz=197,slow=4.4,SNR=2.9 | | | | | | | | | |
| ULN | Ulaanbaatar | 51.50 | 6 | *e*P | | P | | 19 42 33.1 | +0.9 | |
| ULN | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| ULN | Ulaanbaatar | 51.50 | 6 | *e*P | | P | | 19 42 33.1 | +0.9 | |
| | comp=Z,9.8nm,0.9s | | | | | | | | | |
| EKS2 | Erkin-Say | 51.58 | 336 | *e*P | | P | | 19 42 32.7 | -0.1 | |
| EKS2 | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | | |
| EKS2 | Erkin-Say | 51.58 | 336 | *e*P | | P | | 19 42 32.7 | -0.1 | |
| | comp=Z,6.4nm,0.8s | | | | | | | | | |
| MNAS | Manas | 51.97 | 335 | P | | P | | 19 42 35.9 | +0.1 | |
| MNAS | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,1.4s | | | | | | | | | |
| MK31 | Makanchi Array | 52.36 | 345 | *i* P | | P | | 19 42 38.4 | 0.0 | |
| MK31 | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | | |
| MKAR | Makanchi Array | 52.36 | 345 | P | | P | | 19 42 38.5 | +0.1 | |
| | comp=Z,6.6nm,0.7s,baz=149,slow=8.7,SNR=38 | | | | | | | | | |
| MKAR | Makanchi Array | 52.36 | 345 | *i* P | | P | | 19 42 39.0 | +0.6 | |
| MKAR | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | | | |
| CN2 | Changchun | 52.40 | 23 | *e*P | | P | | 19 42 39.0 | +0.2 | |
| KK31 | Karatay Array | 53.34 | 333 | *i* P | | P | | 19 42 44.8 | -0.9 | |
| KK31 | | | | pmax | | pmax | | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | | |
| ZAK | Zakamensk | 53.71 | 3 | *e*P | | P | | 19 42 49.1 | +0.7 | |
| ZAK | | | | pmax | | pmax | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| HVS | Khovu-Aksy | 54.62 | 355 | *e*P | | P | | 19 42 57.7 | +2.6 | |
| HVS | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |
| TLY | Talaya | 55.02 | 3 | *e*P | | P | | 19 42 59.9 | +2.1 | |
| TLY | | | | pmax | | pmax | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | | |
| HIA | Hailar | 55.29 | 16 | *e*P | | P | | 19 42 59.5 | -0.4 | |
| HIA | | | | pmax | | pmax | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | | |
| USRK | Ussuriysk Ar. | 55.54 | 28 | P | | P | | 19 43 01.9 | +0.3 | |
| | comp=Z,15nm,0.8s,baz=221,slow=6.2,SNR=22 | | | | | | | | | |
| USRK | | | | pP | | pP | | 19 43 12.9 | +0.8 | |
| | comp=Z,13nm,0.7s,baz=226,slow=6.4,SNR=11 | | | | | | | | | |
| GEYT | Alibeck | 56.41 | 321 | P | | P | | 19 43 07.1 | -1.1 | |
| | comp=Z,3.5nm,0.9s,baz=147,slow=6.9,SNR=8.2 | | | | | | | | | |
| OTUK | Ortayu | 56.79 | 338 | P | | P | | 19 43 09.7 | -0.9 | |
| OTUK | | | | pmax | | pmax | | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | | |
| KURK | Kurchatov | 56.93 | 344 | *e*P | | P | | 19 43 11.7 | +0.2 | |
| KURK | | | | pmax | | pmax | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| KURK | Kurchatov | 56.93 | 344 | *e*P | | P | | 19 43 11.7 | +0.2 | |
| | comp=Z,9.9nm,0.9s | | | | | | | | | |
| ZALV | Zalesovo Beam | 58.54 | 350 | P | | P | | 19 43 22.9 | +0.1 | |
| | comp=Z,21nm,0.9s,baz=179,slow=5.1,SNR=64 | | | | | | | | | |
| ZALV | | | | pP | | pP | | 19 43 33.6 | +0.3 | |
| | comp=Z,9.2nm,0.8s,baz=185,slow=5.3,SNR=10.0 | | | | | | | | | |
| ZALV | Zalesovo Beam | 58.54 | 350 | *i* P | | P | | 19 43 22.8 | 0.0 | |
| ZALV | | | | pmax | | pmax | | | | |
| | comp=Z,20nm,0.9s | | | | | | | | | |
| KLR | Kul'dur | 59.34 | 24 | *e*P | | P | | 19 43 28.3 | -0.1 | |
| BOD | Bodaibo | 62.14 | 9 | *e*P | | P | | 19 43 46.6 | -0.7 | |
| BOD | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,1.1s | | | | | | | | | |
| KMBO | Kilima Mbogo | 62.50 | 271 | P | | P | | 19 43 51.4 | +0.6 | |
| | comp=Z,1.3nm,0.9s,baz=59,slow=18,SNR=3.3 | | | | | | | | | |
| AB31 | Akbulak array | 62.80 | 332 | *i* P | | P | | 19 43 51.4 | -0.4 | |
| AB31 | | | | pmax | | pmax | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | | |
| ABKAR | Akbulak array | 62.80 | 332 | *e*P | | P | | 19 43 51.1 | -0.8 | |
| | comp=Z,8.5nm,0.9s | | | | | | | | | |
| ABKAR | | | | *e* | | | | 19 44 02.6 | | |
| SVE | Sverdlovsk | 67.93 | 338 | *e*P | | P | | 19 44 24.7 | -0.2 | |
| SVE | | | | pmax | | pmax | | | | |
| | comp=Z,13nm,1.1s | | | | | | | | | |
| YAK | Yakutsk | 69.19 | 15 | *e*P | | P | | 19 44 32.8 | +0.1 | |
| YAK | | | | pmax | | pmax | | | | |
| | comp=Z,24nm,0.8s | | | | | | | | | |
| ASF | Jabal al Asfar | 69.25 | 306 | P | | P | | 19 44 34.3 | +0.5 | |
| | comp=Z,2.1nm,0.8s,baz=80,slow=12 | | | | | | | | | |
| KBZ | Khabaz | 69.25 | 320 | P | | P | | 19 44 33.2 | -0.2 | |
| | comp=Z,3.8nm,0.9s,baz=139,slow=4.1,SNR=8.9 | | | | | | | | | |
| KIV | Kislovodsk | 69.49 | 320 | *e*P | | P | | 19 44 34.9 | -0.1 | |
| KIV | | | | pmax | | pmax | | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | | |
| EIL | Elat | 70.11 | 303 | P | | P | | 19 44 39.4 | +0.3 | |
| | baz=79,slow=5.2 | | | | | | | | | |
| MMAI | Mount Meron Ar | 70.71 | 307 | P | | P | | 19 44 43.3 | +0.6 | |
| | comp=Z,2.4nm,0.8s,baz=110,slow=6.7,SNR=2.9 | | | | | | | | | |
| BRTR | Keskin Array B | 74.13 | 313 | P | | P | | 19 45 02.0 | -1.1 | |
| | comp=Z,1.4nm,0.7s,baz=141,slow=6.9,SNR=9.7 | | | | | | | | | |
| OBN | Obninsk | 77.90 | 328 | *i* P | | P | | 19 45 24.2 | +0.2 | |
| OBN | | | | *i* | | | | 19 45 34.7 | | |
| OBN | | | | pmax | | pmax | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | | |
| AKASG | Malin Array Be | 80.49 | 323 | P | | P | | 19 45 37.4 | -0.9 | |
| | comp=Z,0.3nm,0.3s,baz=83,slow=4.6,SNR=5.4 | | | | | | | | | |
| AKASG | Malin Array Be | 80.49 | 323 | *i* P | | P | | 19 45 37.7 | -0.6 | |
| VNDA | Vanda | 80.79 | 169 | P | | P | | 19 45 39.5 | +0.1 | |
| | comp=Z,0.9nm,0.9s,baz=323,slow=8.5,SNR=4.9 | | | | | | | | | |
| BILL | Bilibino | 84.59 | 20 | *e*P | | P | | 19 46 00.3 | +1.0 | |
| BILL | | | | pmax | | pmax | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | | |
| FINES | FINESS Array B | 85.28 | 332 | P | | P | | 19 46 02.7 | -0.2 | |
| | comp=Z,1.8nm,0.6s,baz=119,slow=6.4,SNR=14 | | | | | | | | | |
| FINES | FINESS Array B | 85.28 | 332 | *i* P | | P | | 19 46 03.0 | +0.1 | |
| FINES | | | | pmax | | pmax | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | | |
| ARCES | ARCESS Array B | 87.75 | 340 | P | | P | | 19 46 15.0 | +0.1 | |
| | comp=Z,8.7nm,1.0s,baz=72,slow=5.2,SNR=6.9 | | | | | | | | | |
| GERES | GERESS Array B | 89.98 | 319 | P | | P | | 19 46 25.9 | 0.0 | |
| | comp=Z,2.0nm,0.9s,baz=87,slow=4.7,SNR=12 | | | | | | | | | |
| GERES | | | | pP | | pP | | 19 46 37.5 | +0.6 | |
| | comp=Z,1.9nm,1.1s,baz=93,slow=5.5,SNR=3.1 | | | | | | | | | |
| CLL | Collm | 90.64 | 321 | *i* P | | P | | 19 46 30.0 | +1.2 | |
| CLL | | | | pmax | | pmax | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | | |
| CLL | Collm | 90.64 | 321 | *i* P | | P | | 19 46 30.0 | +1.2 | |
| | comp=Z,6.0nm,1.0s | | | | | | | | | |
| TXAR | Lajitas Array | 145.98 | 38 | PKPbc | | PKPbc | | 19 53 07.7 | +0.9 | |
| | comp=Z,5.4nm,0.7s,baz=284,slow=1.2,SNR=42 | | | | | | | | | |
| JCT | Junction City | 147.37 | 32 | *e*PKP2 | | PKPbc | | 19 53 11.4 | +0.7 | |
| JCT | Junction City | 147.37 | 32 | *e*PKPbc | | PKPbc | | 19 53 11.4 | +0.7 | |
| LVC | Limon Verde | 151.83 | 203 | *e*PKPdf | | PKPdf | | 19 53 15.5 | -0.4 | |

*ISCJB* ***25*** *19:37:26.9±0.6,2.96S±0.02×100.31E±0.02, h10km±3km, mb5.9/216,MS6.0/197, Error ellipse: s-maj=3.4km s-min=2.2km az=29.7*

*IDC* ***25*** *19:37:26.9±0.3,2.95S×100.36E, h0km, mb5.7/38, mb1 5.7/41,mb1mx5.7/42,mbtmp5.7/41,ML4.8/3,MS6.1/9, Ms1 6.1/9,ms1mx5.5/26,Error ellipse: s-maj=12.7km s-min=9.6km az=41.0*

*BJI* ***25*** *19:37:26.3,3.23S×100.34E, h23km, mb6.0/87, mB6.2/58, Ms6.4/93,Ms7 6.4/81*

*MOS* ***25*** *19:37:29.5±1.1,2.82S×100.40E, h25km, mb6.3/74, MS5.9/83, Error ellipse: s-maj=7.4km s-min=3.7km az=118.6*

*AUST* ***25*** *19:37:29.9±3.1,2.76S×100.44E, h19km±19km, Error ellipse: s-maj=8.7km s-min=4.4km az=54.0*

*DJA* ***25*** *19:37:31.8±0.6,3.S±2.×10.0E±.°, h38km±5km, M6.1/33, mb5.9/33, mB6.4/29, MLv6.3/5, Mw(mB)6.1/29, Mwp6.4/2*

*GCMT* ***25*** *19:37:31.2±0.2,3.37S×99.97E, h23km, MW6.3/107, Moment Tensor Solution. s92,c148; s107,c182; Duration: 3≈3 Moment tensor: Scale 1018Nm; Mrr1.95±.06; Mθθ-0.88±.04; Mφφ-1.07±.04; Mrθ 1.97±.10; Mθφ0.94±.03; Mφr-1.36±.09; Best double couple: M◎3.07600×1018 NP1◊s128.00000°, δ71.00000°, λ83.00000°. NP2◊s327.00000°, δ20.00000°, λ108.00000°. Principal axes: T 3.1230, Plg64.0000°, Azm27.0000°; N -0.0960, Plg6.0000°, Azm130.0000°; P -3.0280, Plg25.0000°, Azm223.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*

*NEIC* ***25*** *19:37:31.1±0.1,2.96S×100.37E, h26km, mb6.0/84, ME6.3, MS6.1/142 Error ellipse: s-maj=4.6km s-min=3.4km az=218.0,Depth from synthetics of broadband displacement seismograms. Energy computed from CMT mechanism.*

*NEIC Felt [III] at Bengkulu, Sumatra.*

*KLM* ***25*** *19:37:31.4,3.10S×100.11E, h42km, mb6.1, ML6.4, MS6.8*

*SZGRF* ***25*** *19:37:33.4,2.72S×99.98E, h28km, mb5.9/20(BGR), Ms5.8/2(BGR)*

***ISC 25 19:37:30.5±0.3,3.01S±0.03×100.37E±0.03, h23km±1km, h22km:pP-P,n1669,σ1944/1675,mb6.0/227,MS6.1/200, 134C-61D,Southern Sumatera***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PPSI | Pulau Pagai | 0.43 | 304 | P | Pb | 19 37 40.2 | +0.7 |
| PPSI | | | | S | Sb | 19 37 46.6 | +1.0 |
| SISI | Saibi | 2.10 | 322 | P | Pn | 19 38 04.1 | -0.2 |
| KSI | Kapahiang | 2.31 | 106 | P | Pb | 19 38 10.3 | -1.2 |
| SDSI | Sungai Dareh | 2.32 | 27 | P | Pb | 19 38 09.6 | -2.0 |
| PPI | Padang Panjang | 2.53 | 1 | P | Pn | 19 38 12.1 | +1.9 |
| MNAI | Manna | 2.91 | 118 | P | Pn | 19 38 18.4 | +3.0 |
| MNAI | Manna | 2.91 | 118 | *e*P | Pn | 19 38 16.3 | +0.9 |
| RGRI | Rengat | 3.29 | 37 | P | Pn | 19 38 23.6 | +2.9 |
| BKNI | Bangkinang | 3.38 | 11 | P | Pn | 19 38 23.8 | +1.9 |
| BKNI | Bangkinang | 3.38 | 11 | *e*P | Pn | 19 38 23.1 | +1.2 |
| JMBI | JAMBI | 3.54 | 67 | P | Pn | 19 38 27.1 | +3.0 |
| MNSI | Mandailing Nat | 3.86 | 348 | P | Pn | 19 38 28.9 | +0.4 |
| MDSI | Maura Dua | 4.07 | 111 | P | Pn | 19 38 34.6 | +3.1 |
| LWLI | Liwa | 4.19 | 119 | P | Pn | 19 38 36.0 | +2.9 |
| PMBI | Palembang | 4.40 | 89 | P | Pn | 19 38 38.6 | +2.7 |
| KASI | Kota Agung | 4.81 | 121 | P | Pn | 19 38 43.3 | +1.6 |
| KLI | Kotabumi | 4.84 | 113 | P | Pn | 19 38 45.0 | +3.0 |
| GSI | Gunungsitoli | 5.11 | 327 | P | Pn | 19 38 43.7 | -2.0 |
| | baz=5.0 | | | | | | |
| GSI | Gunungsitoli | 5.11 | 327 | P | Pn | 19 38 44.5 | -1.3 |
| GSI | Gunungsitoli | 5.11 | 327 | *e*Pn | Pn | 19 38 43.4 | -2.4 |
| TPRI | Tanjung Pinang | 5.70 | 47 | P | Pn | 19 38 56.4 | +2.6 |
| KGM | Kluang | 5.79 | 31 | ⇓P | Pn | 19 38 58.0 | +2.9 |
| PPBI | Pangkal Pinang | 5.82 | 82 | P | Pn | 19 38 58.7 | +3.2 |
| MYKOM | Kota Tinggi | 5.90 | 36 | ⇓P | Pn | 19 38 59.7 | +3.1 |
| MYKOM | Kota Tinggi | 5.90 | 36 | *e*Pn | Pn | 19 38 58.6 | +2.0 |
| PSI | Prapat | 5.95 | 346 | Pn | Pn | 19 38 54.4 | -3.0 |
| | 4.0nm,0.3s,baz=173,slow=12,SNR=14 | | | | | | |
| PSI | | | | Sn | Sn | 19 40 09.8 | +5.0 |
| | 18nm,0.3s,baz=270,slow=20,SNR=2.0 | | | | | | |
| PSI | Prapat | 5.95 | 346 | *e*P | Pn | 19 38 55.1 | -2.2 |
| PSI | | | | | | 19 40 09.9 | |
| PSI | Prapat | 5.95 | 346 | *e*Pn | Pn | 19 38 55.1 | -2.2 |
| PSI | | | | Sn | Sn | 19 40 09.8 | +5.0 |
| FRIM | Kepong | 6.33 | 11 | ⇑P | Pn | 19 39 04.3 | +1.9 |
| CGJI | Cibinong | 6.40 | 124 | P | Pn | 19 39 03.5 | 0.0 |
| SBJI | Serang | 6.52 | 119 | P | Pn | 19 39 07.8 | +2.7 |
| TSI | Tuntungan | 6.71 | 344 | P | Pn | 19 39 10.0 | +2.3 |
| KCSI | Kotacane, Aceh | 6.99 | 338 | P | Pn | 19 39 11.1 | -0.4 |
| TNG | Tangerang | 7.00 | 117 | P | Pn | 19 39 13.0 | +1.3 |
| TPI | Tanjungpandan | 7.28 | 88 | P | Pn | 19 39 17.9 | +2.4 |
| | 475nm,1.0s,12µm9.4nm | | | | | | |
| CBJI | Citeko | 7.29 | 118 | P | Pn | 19 39 20.3 | +4.6 |
| SKJI | Sukabumi | 7.33 | 123 | P | Pn | 19 39 17.3 | +1.0 |
| IPM | Ipoh | 7.46 | 5 | ⇓P | Pn | 19 39 20.0 | +1.9 |
| IPM | Ipoh | 7.46 | 5 | *e*Pn | Pn | 19 39 19.9 | +1.7 |
| CNJI | Cibinong | 7.97 | 123 | P | Pn | 19 39 24.2 | -0.9 |
| LEM | Lembang | 8.16 | 118 | Pn | Pn | 19 39 29.2 | +1.5 |
| | 37nm,0.3s,baz=182,slow=20,SNR=40 | | | | | | |
| LEM | | | | Sn | Sn | 19 40 57.9 | -1.5 |
| | baz=150,slow=20,SNR=2.0 | | | | | | |
| LEM | Lembang | 8.16 | 118 | P | Pn | 19 39 29.2 | +1.5 |
| LEM | | | | | | 19 40 57.9 | |
| LEM | Lembang | 8.16 | 118 | P | Pn | 19 39 30.3 | +2.6 |
| MLSI | Meulaboh, Aceh | 8.24 | 331 | P | Pn | 19 39 27.9 | -0.8 |
| KULM | Kulim | 8.25 | 2 | ⇑P | Pn | 19 39 29.7 | +0.9 |
| KULM | Kulim | 8.25 | 2 | *e*Pn | Pn | 19 39 28.7 | -0.1 |
| CISI | Cisompet, Garu | 8.68 | 122 | P | Pn | 19 39 34.3 | -0.5 |
| CISI | Cisompet, Garu | 8.68 | 122 | *e*P | Pn | 19 39 33.7 | -1.1 |
| | 3µm,0.6s | | | | | | |
| KTGM | Kuala Trenggan | 8.73 | 18 | ⇑P | Pn | 19 39 37.9 | +2.4 |
| LHMI | Lhok Sumawe | 8.87 | 337 | P | Pn | 19 39 36.6 | -0.7 |
| LHMI | Lhok Sumawe | 8.87 | 337 | *e*P | Pn | 19 39 38.0 | +0.6 |
| | 2µm,1.3s | | | | | | |
| XMIS | Christmas Isla | 9.09 | 145 | *e*Pn | Pn | 19 39 37.3 | -3.1 |
| CMJI | Cimerak | 9.34 | 121 | P | Pn | 19 39 43.1 | -0.7 |
| SKLT | Songkhla | 10.11 | 1 | P | Pn | 19 39 53.5 | -0.9 |
| | 686nm,1.8s,12µm | | | | | | |
| TRTT | Trang | 10.79 | 356 | P | Pn | 19 40 02.4 | -1.3 |
| | 712nm,1.2s,8µm | | | | | | |
| SMRI | Semarang | 10.80 | 112 | P | Pn | 19 40 05.7 | +1.8 |
| SMRI | Semarang | 10.80 | 112 | *e*P | Pn | 19 40 06.3 | +2.4 |
| | 2µm,1.0s | | | | | | |
| KSM | Kuching | 10.89 | 66 | *e*P | Pn | 19 40 06.8 | +1.8 |
| | 383nm,1.1s | | | | | | |
| PKDT | Phuket | 11.02 | 349 | P | Pn | 19 40 13.9 | +7.1 |
| UWJI | Ujung Watu | 11.07 | 108 | P | Pn | 19 40 09.4 | +1.8 |
| UGM | Wanagama | 11.22 | 116 | P | Pn | 19 40 10.2 | +0.6 |
| PBKI | Pangkalan Bun | 11.29 | 89 | P | Pn | 19 40 12.9 | +2.3 |
| STKI | Sintang | 11.51 | 75 | P | Pn | 19 40 18.3 | +4.7 |
| WOJI | Wonogiri, Jawa | 11.55 | 115 | P | Pn | 19 40 15.0 | +0.9 |
| CMBY | CAMPBELL BAY | 11.85 | 327 | *e*P | Pn | 19 40 16.3 | -1.9 |
| CMBY | | | | AMB | AMB | 19 40 43.6 | |
| | comp=Z,292nm,1.7s | | | | | | |
| NGJI | Ngawi | 11.86 | 112 | P | Pn | 19 40 21.9 | +3.5 |
| PCJI | Pacitan | 11.92 | 116 | P | Pn | 19 40 17.1 | -2.1 |
| TBJI | Tambak Boyo | 12.04 | 109 | P | Pn | 19 40 22.8 | +1.9 |
| PWJI | Pagerwojo | 12.42 | 114 | P | Pn | 19 40 26.6 | +0.6 |
| BWJI | Bawean | 12.57 | 103 | P | Pn | 19 40 30.5 | +2.4 |
| SBUM | Sibu | 13.03 | 66 | ⇑P | Pn | 19 40 38.3 | +4.0 |
| SBUM | Sibu | 13.03 | 66 | *e*Pn | Pn | 19 40 38.8 | +4.5 |
| KMMI | Kalianget | 14.12 | 107 | P | Pn | 19 40 50.6 | +1.3 |
| BBKI | Banjar Baru | 14.46 | 92 | P | Pn | 19 40 57.0 | +3.1 |
| ABJI | Asem Bagus | 14.60 | 110 | P | Pn | 19 40 57.6 | +1.8 |
| MTKI | Muara Teweh, K | 14.66 | 82 | P | Pn | 19 40 59.0 | +2.3 |
| JAGI | Jajag, Banyuwa | 14.74 | 112 | P | Pn | 19 40 56.2 | -1.6 |
| JAGI | Jajag, Banyuwa | 14.74 | 112 | *e*P | Pn | 19 40 55.6 | -2.2 |
| | comp=Z,438nm,0.6s | | | | | | |
| SRBI | Singaraja | 15.61 | 109 | P | Pn | 19 41 08.7 | -0.5 |
| KBKI | Kotabaru | 15.78 | 91 | P | Pn | 19 41 12.4 | +1.0 |
| CHBT | CHBT | 15.78 | 7 | P | Pn | 19 41 10.4 | -1.0 |
| | comp=Z,318nm,1.4s,comp=Z,8µm | | | | | | |
| IGBI | Denpasar | 15.79 | 112 | P | Pn | 19 41 09.3 | -2.2 |
| DNP | Denpasar | 15.80 | 112 | P | Pn | 19 41 10.9 | -0.8 |
| PATY | Pattaya | 15.83 | 2 | P | Pn | 19 41 09.8 | -2.3 |
| | comp=Z,196nm,1.4s,comp=Z,598nm | | | | | | |
| PBA | Port Blair | 16.42 | 333 | *e*P | Pn | 19 41 19.1 | -0.6 |
| PBA | | | | AMB | AMB | 19 41 25.5 | |
| | comp=Z,699nm,0.7s | | | | | | |
| BKB | Balikpapan | 16.61 | 84 | P | P | 19 41 25.2 | +0.9 |
| DLV | T Lat | 16.90 | 28 | *e*Pn | Pn | 19 41 25.9 | 0.0 |
| | comp=Z,491nm,1.1s | | | | | | |
| SRDT | SRDT | 17.29 | 356 | P | Pn | 19 41 28.7 | -1.9 |
| | comp=Z,360nm,1.1s | | | | | | |
| TWSI | Taliwang, Sumb | 17.38 | 110 | P | Pn | 19 41 29.0 | -2.7 |
| | comp=Z,392nm,1.2s,comp=Z,5µm | | | | | | |
| DGPR | DIGLIPUR | 17.69 | 335 | *e*P | Pn | 19 41 33.3 | -2.3 |
| KHLT | Khaolaem Dam | 17.78 | 354 | P | Pn | 19 41 34.2 | -2.4 |
| | comp=Z,123nm,1.6s,comp=Z,2µm | | | | | | |
| KKM | Kota Kinabalu | 18.20 | 60 | ⇓P | P | 19 41 43.7 | +1.6 |
| KKM | Kota Kinabalu | 18.20 | 60 | *e*P | P | 19 41 43.0 | +0.9 |
| | comp=Z,614nm,1.0s | | | | | | |
| UBPT | Khong Chiam | 18.86 | 15 | P | P | 19 41 47.7 | -1.5 |
| | comp=Z,505nm,1.4s,comp=Z,9µm | | | | | | |
| SDKM | Sandakan | 18.87 | 63 | ⇑P | Pn | 19 41 51.1 | +1.0 |
| TSM | Tawau | 18.93 | 68 | ⇑P | Pn | 19 41 52.2 | +1.4 |
| UMPA | Umpang Tak | 19.15 | 356 | P | P | 19 41 49.9 | -2.5 |
| | comp=Z,76nm,0.9s,comp=Z,656nm | | | | | | |
| KDM | Kudat | 19.16 | 59 | ⇑P | Pn | 19 41 54.7 | +1.2 |
| KHON | Khomkaen | 19.37 | 7 | P | P | 19 41 54.3 | -0.5 |
| | comp=Z,99nm,0.9s,comp=Z,894nm | | | | | | |
| SPSI | Sidrap Palu | 19.39 | 93 | P | Pn | 19 41 56.0 | -0.3 |
| TTSI | Tana Toraja | 19.42 | 91 | P | Pn | 19 41 57.7 | +1.0 |
| KAPI | Kappang | 19.44 | 97 | P | P | 19 41 55.4 | -0.2 |
| | comp=Z,8.3nm,0.3s,baz=277,slow=8.6,SNR=35 | | | | | | |
| KAPI | Kappang | 19.44 | 97 | Pn | Pn | 19 41 56.9 | +0.1 |
| | comp=Z,7µm,1.1s,SNR=48 | | | | | | |
| KAPI | Kappang | 19.44 | 97 | P | P | 19 41 55.4 | -0.2 |
| KAPI | | | | *e*Pn | Pn | 19 41 56.4 | -0.4 |
| PBKT | Sadao Pong | 19.46 | 2 | P | P | 19 41 54.3 | -1.5 |
| | comp=Z,188nm,1.1s,comp=Z,5µm | | | | | | |
| PCI | Palu | 19.57 | 84 | P | Pn | 19 41 59.6 | +1.2 |
| | comp=Z,2µm,1.9s,comp=Z,33µm | | | | | | |
| MPSI | Mapaga | 19.80 | 81 | P | Pn | 19 42 02.0 | +0.8 |
| BKSI | Bulukumba | 19.83 | 97 | P | Pn | 19 42 00.9 | -0.7 |
| MYLDM | Lahad Datu | 19.85 | 66 | ⇓P | Pn | 19 42 02.2 | +0.4 |
| MYLDM | Lahad Datu | 19.85 | 66 | *e*Pn | Pn | 19 42 02.1 | +0.2 |
| SKNT | Sakolnakorn | 20.17 | 10 | P | P | 19 42 01.7 | -1.9 |
| | comp=Z,340nm,1.8s,comp=Z,8µm | | | | | | |
| UTTA | Uttaradit | 20.62 | 0 | P | P | 19 42 07.2 | -1.2 |
| | comp=Z,78nm,0.9s,comp=Z,538nm | | | | | | |
| WSI | Waingapu | 20.87 | 109 | P | P | 19 42 

**MBWA Marble Bar** 26.09 135 P P 19 43 04.4 +1.7
SNR=13
**MBWA Marble Bar** 26.09 135 *e*P P 19 43 03.7 +1.0
comp=Z,440nm,1.5s
MBWA LR LR
comp=Z,97µm,20.0s
**SKHT Srikalahasti** 26.40 310 *e*P P 19 43 06.4 +0.8
SKHT *e*S S 19 47 37.9 0.0
SKHT IVMs_BB IVMs_BB 19 54 34.8
comp=Z,9µm,18.9s
**RCP Roxas** 26.54 57⇑ *e*P P 19 43 08.5 +1.6
**VIS Vishakhapatnam** 26.58 321 *e*P P 19 43 07.7 +0.5
VIS AMB AMB 19 43 29.3
comp=Z,222nm,0.7s
**NLAI Namlea** 26.69 91 P P 19 43 09.7 +1.4
**CHLP Challavanipeta** 26.74 324 *e*P P 19 43 08.8 +0.2
CHLP *e*S S 19 47 42.7 -0.5
CHLP IVMs_BB IVMs_BB 19 58 37.3
comp=Z,7µm,15.6s
**LLP Lapu-Lapu** 26.97 60 *e*P P 19 43 10.7 0.0
**LQP Lukban** 27.02 50 *e*P P 19 43 10.8 -0.5
**DAV Davao City (W)** 27.08 68 P P 19 43 11.4 -0.4
comp=Z,179nm,0.7s,baz=38,slow=3.1,SNR=9.8
DAV LR LR 19 54 16.5
comp=Z,38µm,21.9s,baz=225,slow=37
**DAV Davao City (W)** 27.08 68 P P 19 43 13.6 +1.8
SNR=12
**DAV Davao City (W)** 27.08 68⇑ *e*P P 19 43 12.2 +0.4
**DAV Davao City (W)** 27.08 68 *e*P P 19 43 13.8 +2.1
comp=Z,880nm,0.9s
**LBMI Labuha** 27.22 86 P P 19 43 13.9 +0.9
**TNTI Ternate** 27.25 82 P P 19 43 11.5 -1.8
**TNTI Ternate** 27.25 82 *e*P P 19 43 11.0 -2.3
comp=Z,1µm,1.3s
**PVM Polavaram** 27.34 318 *e*P P 19 43 14.1 +0.1
PVM *e*S S 19 47 51.2 -1.5
PVM IVMs_BB IVMs_BB 19 55 06.8
comp=Z,4µm,18.5s
**ADKI Addanki** 27.53 313 *e*P P 19 43 16.0 +0.3
ADKI *e*S S 19 47 55.7 -0.1
ADKI IVMs_BB IVMs_BB 19 55 28.4
comp=Z,10µm,21.8s
**GQP Guinayangan** 27.60 52⇑ *e*P P 19 43 14.8 -1.6
**BCPH Baguio City Da** 27.75 45⇓ *i*P P 19 43 15.0 -2.9
BCPH *i* S S 19 48 14.1 +14
**AAI Ambon** 27.79 92 P P 19 43 18.9 +0.8
**RCLA Racherla** 28.03 311 *e*P P 19 43 20.2 0.0
RCLA *e*S S 19 48 03.2 -0.5
RCLA IVMs_BB IVMs_BB 19 55 52.0
comp=Z,8µm,20.0s
**KMI Kunming** 28.06 5 P P 19 43 21.0 +0.4
KMI pP pP 19 43 28.0 +0.6
KMI sP sP 19 43 31.0 +0.8
KMI S S 19 48 08.0 +3.7
KMI sS sS 19 48 18.5 +2.9
KMI PMZ
comp=Z,220nm,1.2s
KMI LN
comp=Z,58µm,16.6s
KMI LE
comp=Z,15µm,13.4s
KMI LZ
comp=Z,61µm,15.5s
**H08S2 Diego Garcia H** 28.13 259 T T 20 12 32.5
baz=82,slow=75
**H08S3 Diego Garcia H** 28.14 259 T T 20 12 31.9
baz=82,slow=75
**DGAR Diego Garcia** 28.14 260 *e*P P 19 43 22.7 +1.5
**DGAR Diego Garcia** 28.14 260 PFAKE 19 43 30.0 +8.8
DGAR LR LR
comp=Z,30µm,20.0s
**H08S1 Diego Carcia H** 28.15 259 T T 20 12 29.2
baz=82,slow=75
**SZP Santa** 28.46 43 *e*P P 19 43 23.6 -0.4
comp=Z,1µm,1.5s
**NJS Nagarjunasagar** 28.48 314 *e*P P 19 43 24.0 -0.2
NJS *e*S S 19 48 09.2 -1.6
NJS IVMs_BB IVMs_BB 19 56 26.9
comp=Z,8µm,20.2s
**SRLM Srisailam** 28.48 312 *e*P P 19 43 24.5 +0.2
SRLM *e*S S 19 48 10.5 -0.4
SRLM IVMs_BB IVMs_BB 19 57 26.2
comp=Z,8µm,18.5s
**MSAI Masohi** 28.52 91 P P 19 43 25.4 +0.8
**HKC Hong Kong Obse** 28.54 28 *i* P P 19 43 27.0 +2.3
**PVCP Virac** 28.79 55⇑ *i*P P 19 43 26.4 -0.6
**GZH Guangzhou** 28.86 25 P P 19 43 31.8 +4.3
GZH sP sP 19 43 43.5 +6.4
GZH LN
comp=Z,34µm,13.5s
GZH LE
comp=Z,31µm,14.3s
**URV Uravakonda** 29.02 309 *e*P P 19 43 29.0 -0.1
URV *e*S S 19 48 18.2 -1.2
URV IVMs_BB IVMs_BB 19 56 53.2
comp=Z,6µm,15.2s
**BNDI Bandanaira** 29.51 94 P P 19 43 34.4 +1.0
**SHL Shillong** 29.57 344 *e*P P 19 43 33.7 -0.3
SHL AMB AMB 19 43 44.0
comp=Z,492nm,2.9s
**HYB Hyderabad** 29.58 314 *e*P P 19 43 33.0 -1.1
HYB *e*S S 19 48 26.0 -2.2
**HYB Hyderabad** 29.58 314 *i* P P 19 43 33.0 -1.1
HYB *e*S S 19 48 26.0 -2.2
**HYB Hyderabad** 29.58 314 *e*P P 19 43 33.6 -0.4
**HYB Hyderabad** 29.58 314 *e*P P 19 43 33.0 -1.1
HYB *e*S S 19 48 26.0 -2.2
**HYBB Hyderabad (bro** 29.59 314 *e*P P 19 43 33.8 -0.3
HYBB *e*S S 19 48 25.7 -2.6
HYBB IVMs_BB IVMs_BB 19 58 37.2
comp=Z,8µm,19.6s
**GYA Guiyang** 29.92 11⇑ *i*P P 19 43 36.3 -0.7
GYA sP sP 19 43 49.8 +3.2
GYA PcP PcP 19 46 42.3 +2.6
GYA S S 19 48 33.0 -0.4
GYA SS ScP 19 50 14.5 -6.1
GYA ScS ScS 19 54 14.5 -1.6
GYA PMZ
comp=Z,240nm,1.1s
GYA LN
comp=Z,26µm,13.6s
GYA LE
comp=Z,40µm,13.9s
GYA LZ
comp=Z,23µm,13.0s
**RPR Rampur** 30.04 317 *e*P P 19 43 37.5 -0.6
RPR *e*S S 19 48 33.1 -2.1
RPR IVMs_BB IVMs_BB 20 03 07.0
comp=Z,5µm,14.6s
**BOK Bokaro** 30.14 333 *e*P P 19 43 39.6 +0.7
**SRSP Sriramsagar** 30.74 316 *e*P P 19 43 43.9 -0.3
SRSP *e*S S 19 48 44.6 -1.7
SRSP IVMs_BB IVMs_BB 19 54 00.4
comp=Z,4µm,22.3s
**SWI Sorong** 30.94 87 P P 19 43 45.5 -0.6
**SAUI Saumlaki** 31.17 100 P P 19 43 48.5 +0.4
**KLRI Killari** 31.42 313 *e*P P 19 43 50.0 -0.3
KLRI *e*S S 19 48 55.3 -1.8
KLRI IVMs_BB IVMs_BB 19 59 40.9
comp=Z,10µm,17.4s
**NGP Nagpur** 31.82 320 *e*P P 19 43 53.0 -0.7
NGP ⇓ex x 19 49 10.7
**FAKI Fak Fak** 31.84 91 P P 19 43 52.8 -1.2
**FAKI Fak Fak** 31.84 91 *e*P P 19 43 52.6 -1.4
**MTN Manton Dam** 31.96 110 *e*P P 19 43 53.4 -1.7
comp=Z,485nm,1.4s
**GOA Goa** 32.06 306 *e*P P 19 43 55.2 -0.7
**ODAN Odare** 32.23 338 *e*P P 19 43 58.1 +0.5
comp=Z,2µm,1.1s
**TAPN Taplejung** 32.56 339 *e*P P 19 44 01.5 +1.0
comp=Z,1µm,1.0s
**RAMN Ramite** 32.62 337 *e*P P 19 44 01.7 +0.8
comp=Z,461nm,0.8s
**TWG Pinlang** 32.67 37 *e*P P 19 44 01.7 +0.6
comp=Z,1µm,1.2s
**TPUB Ta-pu** 32.77 36 *e*P P 19 44 02.1 +0.1
comp=Z,605nm,1.3s
**QZH Quanzhou** 32.94 31⇑ *i*P P 19 44 06.0 +2.5
QZH PMZ
comp=Z,710nm,1.2s
QZH PMZ
comp=Z,3µm,11.8s
**YULB Yu-li** 33.23 37 *e*P P 19 44 06.8 +0.7
comp=Z,261nm,1.2s

**SSLB Suanglung** 33.33 36 *e*P P 19 44 06.1 -0.9
comp=Z,345nm,1.3s
**PKI Pulchoki** 33.65 336 *e*P P 19 44 10.1 +0.1
comp=Z,645nm,1.1s
**PKIN Phulchoki** 33.66 336 *e*P P 19 44 10.2 +0.1
comp=Z,360nm,1.2s
**LSA Lhasa** 33.70 345 P P 19 44 11.5 +0.9
LSA pP pP 19 44 18.5 +1.0
LSA PP PP 19 45 25.5 -1.6
LSA S S 19 49 25.0 -8.0
LSA sS sS 19 49 44.5 +0.2
LSA PMZ
comp=Z,160nm,1.9s
LSA LN
comp=Z,11µm,27.1s
LSA LE
comp=Z,25µm,29.8s
LSA LZ
comp=Z,23µm,27.1s
**LSA Lhasa** 33.70 345 *e*P P 19 44 10.8 +0.2
LSA pmax pmax
comp=Z,694nm,1.2s
LSA MLR MLR
comp=Z,22µm,22.0s
**LSA Lhasa** 33.70 345 *e*P P 19 44 10.8 +0.2
comp=Z,694nm,1.2s
LSA LR LR
comp=Z,22µm,22.0s
**NWAO Narrogin (SRO)** 33.70 154 P P 19 44 10.3 +0.2
comp=Z,43nm,0.7s,baz=101,slow=0.0,SNR=30
NWAO LR LR 19 57 08.3
comp=Z,434nm,20.3s,baz=207,slow=35
**NWAO Narrogin (SRO)** 33.70 154 P P 19 44 12.4 +2.3
NWAO pmax pmax
comp=Z,270nm,1.2s
**NWAO Narrogin (SRO)** 33.70 154 P P 19 44 19.5 +9.5
SNR=12
**NWAO Narrogin (SRO)** 33.70 154 *e*P P 19 44 12.2 +2.1
comp=Z,269nm,1.2s
**GUN Gumba** 33.76 337 *e*P P 19 44 11.6 +0.6
comp=Z,993nm,0.7s
**POO Poona** 33.76 310 *e*P P 19 44 11.2 +0.3
POO AMB AMB 19 44 21.3
comp=Z,159nm,1.1s
**DMN Daman** 33.81 335 *e*P P 19 44 11.6 +0.2
comp=Z,651nm,1.0s
**RKPI Ransiki, Papua** 33.81 88 P P 19 44 11.9 +0.6
**CD2 Chengdu** 33.88 5⇑ *i*P P 19 44 10.5 -1.2
CD2 pP pP 19 44 17.5 -1.1
CD2 PP PP 19 45 27.8 -0.9
CD2 S S 19 49 35.5 +0.5
CD2 sS sS 19 49 47.5 +1.2
CD2 PMZ
comp=Z,430nm,1.0s
CD2 PMZ
comp=Z,4µm,9.3s
CD2 LN
comp=Z,45µm,14.2s
CD2 LE
comp=Z,60µm,19.6s
CD2 LZ
comp=Z,56µm,15.6s
**KKN Kakani** 33.89 336 *e*P P 19 44 12.3 +0.2
comp=Z,1µm,1.0s
**NACB Ninganchiao** 34.00 36 *e*P P 19 44 12.9 +0.1
comp=Z,240nm,1.0s
**H01W3 Cape Leeuwin H** 34.20 160 T T 20 20 03.3
baz=335,slow=76
**H01W2 Cape Leeuwin H** 34.21 160 T T 20 20 04.2
baz=335,slow=76
**H01W1 Cape Leeuwin H** 34.22 160 T T 20 20 05.9
baz=335,slow=76
**ENH Enshi** 34.22 14 *e*P P 19 44 13.7 -1.0
comp=Z,228nm,1.0s
ENH LR LR
comp=Z,17µm,21.0s
**YHNB Yeheng** 34.25 35 *e*P P 19 44 13.8 -1.3
comp=Z,318nm,1.2s
YHNB LR LR
comp=Z,14µm,19.0s
**GKN Gorkha** 34.35 335 *e*P P 19 44 16.2 +0.2
comp=Z,1µm,1.1s
**BHPL Bhopal** 34.37 321 *e*P P 19 44 15.4 -0.6
**TATO Taipei** 34.55 35 PFAKE 19 44 30.0 +12
TATO LR LR
comp=Z,11µm,19.0s
**KOLN Koldanda** 34.60 333 *e*P P 19 44 18.5 +0.3
comp=Z,1µm,1.1s
**WRKA Warakurna** 34.68 132 P P 19 44 19.1 +0.3
baz=35,SNR=36
**KMBL Kambalda** 34.74 147 P P 19 44 19.8 +0.7
baz=35,SNR=16
**DANN Dangsing** 35.03 334 *e*P P 19 44 22.2 +0.2
comp=Z,301nm,1.2s
**RKGY Rocky Gully** 35.03 156 P P 19 44 24.2 +2.5
baz=35,SNR=16
**WHN Wuhan** 35.93 21⇑ *i*P P 19 44 29.5 +0.2
WHN S S 19 50 07.0 +0.5
WHN PMZ
comp=Z,480nm,1.2s
WHN LN
comp=Z,85µm,14.8s
WHN LE
comp=Z,44µm,16.8s
WHN LZ
comp=Z,113µm,15.6s
**WRA Warramunga Arr** 37.17 120 P P 19 44 39.5 -0.7
comp=Z,86nm,1.0s,baz=292,slow=9.9,SNR=97
WRA S S 19 50 23.7 -2.2
comp=Z,15nm,1.0s,baz=290,slow=14,SNR=4.7
WRA LR LR 20 01 56.7
comp=Z,65µm,20.8s,baz=290,slow=40
**WRA Warramunga Arr** 37.17 120 P P 19 44 39.5 -0.7
WRA S S 19 50 23.7 -2.2
**WRAB Tennant Creek** 37.18 120 *e*P P 19 44 39.8 -0.4
WRAB pmax pmax
comp=Z,272nm,1.1s
WRAB MLR MLR
comp=Z,76µm,21.0s
**WRAB Tennant Creek** 37.18 120 P P 19 44 39.0 -1.2
comp=Z,657nm,1.0s
**WRAB Tennant Creek** 37.18 120 *e*P P 19 44 39.8 -0.4
comp=Z,272nm,1.1s
WRAB LR LR
comp=Z,76µm,21.0s
**XAN Xi'an** 37.72 12 P P 19 44 43.3 -1.3
XAN pP pP 19 44 54.0 +2.5
XAN PP PP 19 46 11.0 0.0
XAN S S 19 50 39.5 +5.7
XAN sS sS 19 50 46.5 +1.3
XAN PMZ
comp=Z,670nm,1.0s
XAN PMZ
comp=Z,2µm,11.0s
XAN LN
comp=Z,23µm,16.3s
XAN LE
comp=Z,33µm,18.8s
XAN LZ
comp=Z,46µm,14.6s
**SMPI Sarmi** 38.31 89 P P 19 44 50.1 +0.2
**AS13 Alice Springs** 38.35 125 P P 19 44 50.3 +0.2
baz=38
**ASAR Alice Springs** 38.37 125 P P 19 44 50.4 +0.1
comp=Z,111nm,0.9s,baz=298,slow=7.6,SNR=203
ASAR S S 19 50 42.4 -1.6
comp=Z,10nm,0.8s,baz=298,slow=14,SNR=4.7
ASAR P3KP 20 16 35.7
comp=Z,0.4nm,0.8s,baz=79,slow=2.0,SNR=2.8
**ASAR Alice Springs** 38.37 125 P P 19 44 50.4 +0.1
ASAR S S 19 50 42.4 -1.6
**NDI New Delhi** 38.57 326 *e*P P 19 44 49.0 -2.8
NDI *ex* x 19 50 56.0
**LZH Lanzhou** 39.03 4 ⇑P P 19 44 55.5 -0.2
LZH pP pP 19 45 02.5 -0.1
LZH sP sP 19 45 06.5 +1.1
LZH PP PnPn 19 46 30.5 +2.6
LZH *e*S S 19 50 56.5 +2.8
LZH *e*SS SnSn 19 53 40.0 -6.1
LZH PMZ
comp=Z,990nm,1.4s
LZH PMZ
comp=Z,2µm,4.1s
LZH LN
comp=Z,22µm,15.8s
LZH LE
comp=Z,35µm,14.5s
LZH LZ
comp=Z,47µm,16.9s
**NJ2 Nanjing** 39.04 25 *e*P P 19 44 55.8 +0.2
NJ2 pP pP 19 45 03.0 +0.5
NJ2 sP sP 19 45 06.0 +0.7
NJ2 PcP PcP 19 47 07.5 +1.9
NJ2 S S 19 50 57.0 +3.4
NJ2 sS sS 19 51 05.0 0.0
NJ2 PMZ
comp=Z,150nm,0.9s
NJ2 PMZ
comp=Z,5µm,7.5s
NJ2 LN
comp=Z,25µm,22.0s
NJ2 LE
comp=Z,11µm,23.1s
NJ2 LZ
comp=Z,48µm,17.9s
**SSE Sheshan** 39.29 29 ⇑P P 19 44 58.5 +0.8
SSE sP sP 19 45 08.0 +0.6
SSE S S 19 50 58.3 +0.8
SSE sS sS 19 51 10.8 +2.0
SSE PMZ
comp=Z,110nm,1.1s
SSE PMZ
comp=Z,2µm,7.3s
SSE LN
comp=Z,23µm,14.6s
SSE LE
comp=Z,6µm,14.6s
SSE LZ
comp=Z,27µm,13.5s
**DDI Dehra Dun** 39.41 329 *e*P P 19 44 59.1 +0.2
DDI AMB AMB 19 45 09.3
comp=Z,675nm,2.7s
**BHJ Bhuj** 39.72 313 *e*P P 19 45 02.5 +1.0
**GENI Genyem** 39.75 90 P P 19 44 59.7 -2.2
**JAY Jayapura** 40.29 90 P P 19 45 02.3 -4.1
baz=40,SNR=6.7
**SMLA Simla** 40.51 329 *i* P P 19 45 07.6 -0.3
SMLA AMB AMB 19 45 14.6
comp=Z,900nm,0.8s
**DHRM DHARAMSHALA** 41.85 329 *e*P P 19 45 18.8 -0.4
DHRM AMB AMB 19 45 29.6
comp=Z,593nm,1.4s
**QIS Mount Isa** 42.01 118 P P 19 45 20.2 -0.3
baz=42,SNR=54
**TIY Taiyuan** 42.03 14 *e*P P 19 45 20.5 +0.1
TIY S S 19 51 33.8 -4.6
TIY PMZ
comp=Z,260nm,0.8s
TIY PMZ
comp=Z,3µm,5.5s
TIY LN
comp=Z,19µm,13.3s
TIY LE
comp=Z,28µm,14.6s
TIY LZ
comp=Z,13µm,20.1s
**TIA Tai'an** 42.04 20 ⇑P P 19 45 19.8 -0.6
TIA pP pP 19 45 32.3 +4.9
TIA PMZ
comp=Z,110nm,0.9s
TIA PMZ
comp=Z,3µm,6.8s
TIA LN
comp=Z,8µm,27.4s
TIA LE
comp=Z,15µm,32.1s
**GTA Gaotai** 42.21 359 ⇑P P 19 45 22.0 +0.1
GTA pP pP 19 45 28.0 -0.9
GTA sP sP 19 45 31.0 -0.7
GTA PP PP 19 47 03.3 +3.3
GTA PcP PcP 19 47 17.8 +1.9
GTA ScP ScP 19 51 06.0 +0.7
GTA PcS PcS 19 51 07.5 -0.3
GTA S S 19 51 43.3 +2.2
GTA sS sS 19 51 54.0 +1.5
GTA SS SS 19 54 47.8 -1.9
GTA ScS ScS 19 55 19.8 -3.3
GTA PMZ
comp=Z,180nm,1.8s
GTA PMZ
comp=Z,3µm,6.0s
GTA LN
comp=Z,22µm,12.3s
GTA LE
comp=Z,36µm,17.6s
GTA LZ
comp=Z,25µm,14.3s
**COEN Coen** 43.63 107 P P 19 45 30.0 -3.7
baz=44,SNR=13
**COEN Coen** 43.63 107 *e*P P 19 45 32.4 -1.3
comp=Z,183nm,1.3s
**BTO Baotou** 44.29 11 *e*P P 19 45 38.3 -0.4
**KSJDO Jindo** 44.56 31 ⇓P P 19 45 40.7 -0.1
SNR=9.3
**KSJDO Jindo** 44.56 31 ⇓P P 19 45 40.7 -0.1
SNR=9.3
**BBOO Buckleboo** 44.67 136 P P 19 45 42.6 +0.8
baz=45,SNR=12
**BBOO Buckleboo** 44.67 136 *e*P P 19 45 42.5 +0.8
comp=Z,109nm,0.9s
**HHC Hu-ho-hao-te** 44.83 12 *e*P P 19 45 44.0 +1.0
HHC PP PP 19 47 33.0 +5.0
HHC S S 19 52 21.0 +1.7
HHC sS sS 19 52 39.3 +8.5
HHC PMZ
comp=Z,370nm,1.1s
HHC PMZ
comp=Z,4µm,5.3s
HHC LN
comp=Z,22µm,14.5s
HHC LE
comp=Z,20µm,15.1s
HHC LZ
comp=Z,22µm,14.6s
**MRIV Mauritius Mete** 45.17 244 *e*P P 19 45 46.4 +0.4
**BJT Baijiatuau** 45.20 17 *e*P P 19 45 46.0 +0.1
BJT pmax pmax
comp=Z,863nm,1.4s
BJT MLR MLR
comp=Z,21µm,20.0s
**BJT Baijiatuau** 45.20 17 *e*P P 19 45 46.0 +0.1
comp=Z,863nm,1.4s
BJT LR LR
comp=Z,21µm,20.0s
**BJI Beijing** 45.23 17 P P 19 45 46.3 +0.3
BJI PP PP 19 47 35.5 +3.4
BJI S S 19 52 29.0 +4.2
BJI PMZ
comp=Z,380nm,2.0s
BJI PMZ
comp=Z,4µm,6.5s
BJI LN
comp=Z,41µm,15.1s
BJI LE
comp=Z,36µm,15.7s
BJI LZ
comp=Z,36µm,17.7s
**KSGWJ Gwangju-acc** 45.40 31 P P 19 45 47.9 +0.4
SNR=9.8
**KSGWJ Gwangju-acc** 45.40 31 P P 19 45 47.9 +0.4
SNR=9.8
**KSKWJ Gwangju** 45.44 31 ⇓P P 19 45 46.6 -1.2
SNR=9.1
**KSKWJ Gwangju** 45.44 31 ⇓P P 19 45 46.6 -1.2
SNR=9.1
**MTSU Mount Surprise** 45.59 112 P P 19 45 48.5 -0.8
baz=46,SNR=75
**KSJEU Jeongeup** 45.67 31 ⇓P P 19 45 49.2 -0.4
SNR=10
**KSJEU Jeongeup** 45.67 31 ⇓P P 19 45 49.2 -0.4
SNR=10
**KSJIN Jinju** 45.98 32 P P 19 45 52.8 +0.7
SNR=6.5
**KSJIN Jinju** 45.98 32 P P 19 45 52.8 +0.7
SNR=6.5
**KSGUS GUNSAN** 46.02 30 ⇓P P 19 45 52.2 -0.2
SNR=17
**KSGUS GUNSAN** 46.02 30 ⇓P P 19 45 52.2 -0.2
SNR=17
**JNU Nakatsue** 46.08 36 *e*P P 19 45 52.7 -0.2
JNU *e*PP PP 19 47 47.8 +6.5
**DL2 Dalian** 46.09 23⇑ *i*P P 19 45 53.0 +0.2

DL2 S S 19 52 44.0 +6.7
DL2 PMZ
comp=Z,270nm,1.4s
DL2 PMZ
comp=Z,2µm,8.8s
DL2 LN
comp=Z,10µm,16.7s
DL2 LZ
comp=Z,14µm,13.8s
**KSSES Seosan** 46.45 29 P **P** **19 45 56.0 +0.2**
SNR=7.5
**KSSES Seosan** 46.45 29 P **P** **19 45 56.0 +0.2**
SNR=7.5
**KSCEA Cheonan** 46.87 30 P **P** **19 45 59.3 +0.3**
SNR=6.5
**KSCEA Cheonan** 46.87 30 P **P** **19 45 59.3 +0.3**
SNR=6.5
**KSBON Boeun** 46.89 31 P **P** **19 45 59.7 +0.5**
SNR=9.9
**KSBON Boeun** 46.89 31 P **P** **19 45 59.7 +0.5**
SNR=9.9
**PMG Port Moresby** 46.91 100 *e*P **P** **19 45 59.9 +0.2**
PMG pmax pmax
comp=Z,290nm,1.2s
**MANU Manus Island** 46.96 90 *e*P **P** **19 46 00.5 +0.3**
comp=Z,2µm,2.8s
**RER Riviere de l'E** 46.99 244 PFAKE 19 46 10.0 +10
RER LR LR
comp=Z,16µm,21.0s
**KSSAJ Sangju** 47.01 31 P **P** **19 46 00.3 +0.2**
SNR=15
**KSSAJ Sangju** 47.01 31 P **P** **19 46 00.3 +0.2**
SNR=15
**INCN Inchon** 47.09 29 *e*P **P** **19 45 58.3 -2.5**
INCN LR LR
comp=Z,8µm,20.0s
**KSICN Icheon** 47.32 30 P **P** **19 46 02.8 +0.3**
SNR=11
**KSMUS Musan** 47.47 29 P **P** **19 46 03.5 -0.2**
SNR=12
**KBL Kabul** 47.56 324 *e*P **P** **19 46 04.0 -0.8**
**KSAR Wonju Array Be** 47.67 30 P **P** **19 46 05.4 +0.1**
**KSAR Wonju Array Be** 47.67 30 P **P** **19 46 05.3 +0.1**
**YNCB YEONCHEON** 47.67 29 P **P** **19 46 04.8 -0.5**
SNR=12
**YNCB YEONCHEON** 47.67 29 P **P** **19 46 04.8 -0.5**
SNR=12
**KSRS Korea Array** 47.70 30 P **P** **19 46 05.3 -0.1**
comp=Z,177nm,1.1s,baz=226,slow=8.5,SNR=83
**WBK Wadi Bani Khal** 47.76 304 ⇓P **P** **19 46 06.3 +0.1**
SNR=18
**CTA Charters Tower** 47.84 114 S **S** **19 53 02.4 -0.7**
comp=Z,7.8nm,1.0s,baz=74,slow=20,SNR=5.1
**CTAO Charters Tower** 47.84 114 P **P** **19 46 06.9 0.0**
CTAO pmax pmax
comp=Z,420nm,1.2s
**CTAO Charters Tower** 47.84 114 *e*P **P** **19 46 06.7 -0.3**
comp=Z,419nm,1.2s
CTAO LR LR
comp=Z,54µm,20.0s
**KSULJ Uljin** 47.88 32 P **P** **19 46 08.4 +1.5**
SNR=5.9
**KSH Kashi** 47.90 334 ⇑*i*P **P** **19 46 05.8 -1.4**
KSH *e*pP **pP** **19 46 13.3 -0.9**
KSH *es*P **sP** **19 46 16.3 -0.6**
KSH *e*PP **PP** **19 47 56.0 -3.3**
KSH S S 19 52 55.8 -7.6
KSH sS **sS** **19 53 10.5 -4.5**
KSH PMZ
comp=Z,150nm,1.0s
KSH LN
comp=Z,6µm,18.2s
KSH LE
comp=Z,16µm,17.6s
KSH LZ
comp=Z,11µm,18.4s
**KSTBA Taebaek** 47.96 31 P **P** **19 46 08.3 +0.7**
SNR=15
**WMQ Urumqi** 47.99 348 P **P** **19 46 08.8 +1.1**
WMQ pP **pP** **19 46 17.0 +2.2**
WMQ PP **PP** **19 48 00.0 0.0**
WMQ ScP **ScP** **19 51 30.0 +1.0**
WMQ S **S** **19 53 08.0 +3.5**
WMQ ScS **ScS** **19 56 00.0 +0.2**
WMQ PMZ
comp=Z,700nm,1.0s
WMQ PMZ
comp=Z,3µm,5.0s
WMQ LN
comp=Z,17µm,16.0s
WMQ LE
comp=Z,20µm,16.0s
WMQ LZ
comp=Z,15µm,16.0s
**KSCWO Cheorwon** 47.99 29 P **P** **19 46 07.8 +0.1**
SNR=8.2
**KSJES JEONGSEON** 48.05 30 P **P** **19 46 09.0 +0.8**
SNR=8.4
**QLP Quilpie** 48.09 124 P **P** **19 46 09.6 +0.8**
baz=48,SNR=61
**KSIJA INJE** 48.21 30 P **P** **19 46 09.8 +0.4**
SNR=9.6
**JMDO Jabal Madar** 48.37 304 ⇑P **P** **19 46 10.7 -0.3**
SNR=19
**SMDO Samad** 48.72 304 ⇑P **P** **19 46 13.3 -0.4**
SNR=24
**SNY Shenyang** 49.36 23 ⇑P **P** **19 46 17.5 -0.7**
SNY S **S** **19 53 25.5 +1.9**
SNY PMZ
comp=Z,110nm,1.2s
SNY PMZ
comp=Z,3µm,8.8s
SNY LN
comp=Z,25µm,14.7s
SNY LE
comp=Z,13µm,13.7s
SNY LZ
comp=Z,29µm,15.2s
**SFK Sufi-Kurgan** 49.40 333 P **P** **19 46 19.3 +0.5**
SFK pmax pmax
comp=Z,516nm,1.4s
**HOQ Hoqain** 49.56 305 ⇓P **P** **19 46 20.2 +0.1**
SNR=34
**PDGK Podgornoye** 49.82 340 P **P** **19 46 22.5 +0.9**
PDGK pmax pmax
comp=Z,840nm,1.3s
**RBK Rabkut** 49.88 296 ⇓P **P** **19 46 21.4 -1.2**
SNR=9.1
**ULHL Ulahol** 50.07 337 P **P** **19 46 25.8 +1.9**
SNR=11
**ARQ Araqi** 50.10 304 ⇓P **P** **19 46 24.7 +0.4**
SNR=16
**CBIJ Chichi jima** 50.21 51 *e*P **P** **19 46 23.4 -1.6**
**KZA Kyzart** 50.33 336 P **P** **19 46 25.6 -0.5**
SNR=104
**ABTO Aybut** 50.65 295 ⇑P **P** **19 46 28.8 +0.4**
SNR=6.0
**AAA Alma-Ata** 50.67 338 *i* P **P** **19 46 28.5 +0.2**
AAA *i* S **PP** **19 48 19.5 -5.0**
AAA pmax pmax
comp=Z,3µm,4.2s
**UCH Uchtor** 50.76 335 P **P** **19 46 29.8 +0.4**
SNR=109
**DZET Dzherino** 50.77 328 P **P** **19 46 27.2 -1.9**
DZET pmax pmax
comp=Z,216nm,1.1s
**ARPS Mount Arapiles** 50.81 137 P **P** **19 46 31.4 +2.0**
baz=51,SNR=21
**TKM2 Tokmak 2** 50.90 337 *e*P **P** **19 46 30.4 +0.3**
TKM2 pmax pmax
comp=Z,18nm,0.7s
TKM2 MLR MLR
comp=Z,12µm,20.0s
**TKM2 Tokmak 2** 50.90 337 P **P** **19 46 30.5 +0.3**
SNR=198
**TKM2 Tokmak 2** 50.90 337 *e*P **P** **19 46 30.4 +0.3**
comp=Z,18nm,0.7s
TKM2 LR LR
comp=Z,12µm,20.0s
**SONM Songino Array** 50.90 5 P **P** **19 46 30.8 +0.8**
comp=Z,479nm,0.9s,baz=189,slow=7.3,SNR=421
SONM PcP **PcP** **19 47 46.7 +0.4**
comp=Z,97nm,1.1s,baz=194,slow=4.3,SNR=1.8
SONM PKPPKP **P'P'df** **20 17 14.9 +2.1**
comp=Z,0.8nm,0.9s,baz=330,slow=1.6,SNR=3.8
**SONM Songino Array** 50.90 5 P **P** **19 46 30.8 +0.8**
SONM 19 47 46.7

**KBK Karagaybulak** 50.94 336 P **P** **19 46 31.1 +0.7**
SNR=211
**ULN Ulaanbaatar** 51.00 6 *e*P **P** **19 46 31.4 +0.7**
ULN pmax pmax
comp=Z,948nm,1.3s
ULN MLR MLR
comp=Z,17µm,19.0s
**ULN Ulaanbaatar** 51.00 6 P **P** **19 46 31.8 +1.1**
SNR=205
**ULN Ulaanbaatar** 51.00 6 *e*P **P** **19 46 31.4 +0.7**
comp=Z,948nm,1.3s
ULN LR LR
comp=Z,17µm,19.0s
**AML Almayashu** 51.03 335 P **P** **19 46 31.6 +0.2**
SNR=99
**UOSS Wadi Hilu** 51.06 306 P **P** **19 46 31.9 +0.4**
comp=Z,180nm,1.2s,SNR=7.7
**UOSS Wadi Hilu** 51.06 306 *e*P **P** **19 46 31.3 -0.2**
comp=Z,522nm,2.7s
**ASHO Ashiyiah** 51.07 305 ⇑P **P** **19 46 31.4 -0.1**
SNR=18
**ASHO Ashiyiah** 51.07 305 ⇑*i*P **P** **19 46 31.3 -0.3**
SNR=11
**HATD Hatta, Dubai** 51.07 305 ⇓*i*P **P** **19 46 31.1 -0.4**
SNR=15
**AAK Ala-Archa** 51.10 336 LR LR 20 13 30.5
comp=Z,10µm,18.3s,baz=144,slow=42
**AAK Ala-Archa** 51.10 336 P **P** **19 46 31.4 -0.2**
AAK pmax pmax
comp=Z,298nm,1.3s
**AAK Ala-Archa** 51.10 336 P **P** **19 46 32.0 +0.4**
comp=Z,672nm,1.4s,SNR=95
**AAK Ala-Archa** 51.10 336 P **P** **19 46 32.2 +0.5**
SNR=64
**AAK Ala-Archa** 51.10 336 *e*P **P** **19 46 32.1 +0.5**
comp=Z,348nm,1.3s
**CMSA Cobar Meteorol** 51.20 129 P **P** **19 46 33.2 +0.9**
baz=51,SNR=198
**FRU Bishkek** 51.22 336 ⇑*i*P **P** **19 46 32.5 +0.2**
FRU *es*S **S** **19 53 50.0 +0.3**
FRU pmax pmax
comp=Z,890nm,1.8s
FRU smax smax
comp=E,2µm,4.0s
**CHMS Chumysh** 51.30 336 P **P** **19 46 33.0 0.0**
SNR=43
**EKS2 Erkin-Say** 51.43 335 *e*P **P** **19 46 33.8 -0.2**
EKS2 MLR MLR
comp=Z,11µm,22.0s
**EKS2 Erkin-Say** 51.43 335 P **P** **19 46 34.6 +0.6**
SNR=180
**EKS2 Erkin-Say** 51.43 335 *e*P **P** **19 46 33.8 -0.2**
EKS2 LR LR
comp=Z,11µm,22.0s
**FAQ Al Faqa, Dubai** 51.48 305 ⇑*i*P **P** **19 46 34.3 -0.2**
SNR=18
**NAZ Nazwa, Dubai** 51.52 305 ⇑*i*P **P** **19 46 34.5 -0.4**
SNR=11
**USP Ospenovka** 51.63 336 P **P** **19 46 35.5 +0.1**
SNR=195
**ASUD Al Ashush, Dub** 51.64 305 ⇓*i*P **P** **19 46 35.7 0.0**
SNR=15
**CN2 Changchun** 51.76 23 *e*P **P** **19 46 35.8 -0.5**
CN2 *es*P **sP** **19 46 46.5 +0.4**
CN2 *e*S S 19 53 46.5 -10
CN2 SS **SS** **19 57 31.3 -2.6**
CN2 PMZ
comp=Z,300nm,0.8s
CN2 PMZ
comp=Z,200nm,5.0s
CN2 LN
comp=Z,8µm,17.0s
CN2 LE
comp=Z,14µm,17.0s
**MNAS Manas** 51.83 334 P **P** **19 46 37.2 +0.1**
MNAS pmax pmax
comp=Z,502nm,1.1s
**RMQ Roma** 51.87 122 P **P** **19 46 38.9 +1.4**
baz=52,SNR=38
**MK07 Makanchi Array** 52.05 344 P **P** **19 46 38.4 0.0**
baz=52
**MK31 Makanchi Array** 52.09 344 *i* P **P** **19 46 38.6 -0.2**
MK31 pmax pmax
comp=Z,691nm,1.0s
**MKAR Makanchi Array** 52.09 344 P **P** **19 46 38.7 -0.1**
comp=Z,404nm,0.8s,baz=150,slow=6.1,SNR=195
**MKAR Makanchi Array** 52.09 344 *i* P **P** **19 46 38.7 -0.1**
MKAR pmax pmax
comp=Z,404nm,0.8s
**MAJO Matsushiro** 52.82 38 *c* iP **P** **19 46 43.1 -1.3**
MAJO pmax pmax
comp=Z,238nm,1.0s
MAJO MLR MLR
comp=Z,50µm,22.0s
**MAJO Matsushiro** 52.82 38 *e*P **P** **19 46 43.4 -1.0**
MAJO LR LR
comp=Z,8µm,22.0s
**MAT Matsushiro** 52.82 38 P **P** **19 46 43.0 -1.4**
MAT S **S** **19 54 17.0 +5.1**
**PAF Port-aux-Franc** 52.84 204 PFAKE 19 47 00.0 +16
PAF LR LR
comp=Z,30µm,20.0s
**KK31 Karatay Array** 53.21 333 *i* P **P** **19 46 46.4 -0.7**
KK31 pmax pmax
comp=Z,34nm,0.6s
**KKAR Karatay Array** 53.21 333 *e*P **P** **19 46 46.3 -0.8**
KKAR pmax pmax
comp=Z,56nm,0.8s
**KKAR Karatay Array** 53.21 333 *e*P **P** **19 46 46.3 -0.8**
comp=Z,56nm,0.8s
**MSHR Mys Shultsa** 53.24 28 *c* iP **P** **19 46 47.3 0.0**
**ZAK Zakamensk** 53.24 2 *e*P **P** **19 46 46.9 -0.4**
ZAK pmax pmax
comp=Z,95nm,1.7s
ZAK pmax pmax
comp=Z,58nm,1.4s
**EIDS Eidsvold** 53.54 119 P **P** **19 46 50.1 +0.2**
baz=54,SNR=34
**EIDS Eidsvold** 53.54 119 *e*P **P** **19 46 50.0 +0.2**
comp=Z,438nm,1.5s
**VLA Vladivostok** 53.99 28 *α* iP **P** **19 46 53.4 +0.6**
VLA *e* 19 47 58.9
VLA *e* 19 48 54.9
VLA S **S** **19 54 27.8 +0.4**
VLA pmax pmax
comp=Z,374nm,1.5s
VLA MLR MLR
comp=E,205µm,19.0s
**MDJ Mudanjiang** 54.13 25 P **P** **19 46 53.5 -0.3**
MDJ pP **pP** **19 46 59.5 -1.4**
MDJ sP **sP** **19 47 02.3 -1.3**
MDJ SS **SKiKP** **19 58 05.0 +0.2**
MDJ PMZ
comp=E,220nm,1.0s
MDJ PMZ
comp=E,2µm,10.0s
MDJ LN
comp=E,12µm,18.4s
MDJ LE
comp=E,16µm,20.4s
MDJ LZ
comp=E,17µm,22.5s
**MDJ Mudanjiang** 54.13 25 *e*P **P** **19 46 53.8 0.0**
comp=E,315nm,1.1s
MDJ LR LR
comp=Z,20µm,20.0s
**HVS Khovu-Aksy** 54.23 355 *d* iP **P** **19 46 53.7 -0.9**
HVS pmax pmax
comp=Z,149nm,1.1s
HVS MLR MLR
comp=Z,21µm,14.0s
**OPO Ambohidratompo** 54.26 249 P **P** **19 46 56.4 +1.0**
comp=Z,52nm,1.1s,baz=73,slow=7.8,SNR=25
OPO LR LR 20 07 13.6
comp=Z,28µm,18.2s,baz=86,slow=33
**ABPO Ambohimpanom** 54.30 249 *e*P **P** **19 46 55.6 -0.1**
ABPO MLR MLR
comp=Z,9µm,20.0s
**ABPO Ambohimpanom** 54.30 249 P **P** **19 46 56.3 +0.6**
comp=Z,183nm,1.1s,SNR=8.4
**ABPO Ambohimpanom** 54.30 249 *e*P **P** **19 46 55.6 -0.1**
ABPO LR LR
comp=Z,9µm,20.0s
**YNG Young** 54.40 131 P **P** **19 46 57.5 +1.4**
baz=55,SNR=41
**MOY Mondy** 54.47 0 *e*P **P** **19 46 56.1 -0.2**

MOY pmax pmax
comp=Z,434nm,3.6s
**TLY Talaya** 54.55 3 *i* P **P** **19 46 57.4 +0.6**
TLY *e*S S 19 54 48.1 +13
TLY *e* 19 56 34.2
TLY pmax pmax
comp=Z,338nm,1.6s
TLY MLR MLR
comp=Z,22µm,15.0s
**TLY Talaya** 54.55 3 P **P** **19 46 57.4 +0.6**
comp=Z,748nm,1.4s,SNR=39
**HIA Hailar** 54.71 15 *e*P **P** **19 46 57.4 -0.5**
HIA pmax pmax
comp=Z,272nm,1.1s
HIA MLR MLR
comp=Z,26µm,19.0s
**HIA Hailar** 54.71 15 *e*P **P** **19 46 57.4 -0.5**
comp=Z,272nm,1.1s
HIA LR LR
comp=Z,26µm,19.0s
**USRK Ussuriysk Ar.** 54.87 27 P **P** **19 46 59.3 +0.1**
comp=Z,574nm,1.0s,baz=222,slow=6.2,SNR=244
**IRK Irkutsk** 55.14 3 ⇑*i*P **P** **19 47 00.6 -0.4**
IRK *e*S S 19 54 52.6 +10
IRK *e* 19 56 41.8
IRK pmax pmax
comp=Z,628nm,1.8s
**CAN Canberra** 55.27 132 P **P** **19 47 03.5 +1.1**
CAN pmax pmax
comp=Z,410nm,1.3s
**CAN Canberra** 55.27 132 P **P** **19 47 03.8 +1.4**
baz=55
**CAN Canberra** 55.27 132 *e*P **P** **19 47 03.1 +0.8**
comp=Z,412nm,1.4s
CAN LR LR
comp=Z,72µm,21.0s
**ARMA Armidale** 55.52 125 P **P** **19 47 05.6 +1.3**
baz=56,SNR=36
**ARMA Armidale** 55.52 125 *e*P **P** **19 47 06.0 +1.7**
**CNB Canberra Magne** 55.54 132 P **P** **19 47 06.0 +1.7**
baz=56,SNR=9.3
**CIT Chita** 55.95 10 *e*P **P** **19 47 08.0 +1.1**
CIT *e* 19 47 22.6
CIT *e* 19 48 04.5
CIT *e* 19 54 56.8
CIT pmax pmax
comp=Z,990nm,1.9s
**MGCD Mangrove Creek** 56.07 129 P **P** **19 47 09.5 +1.4**
baz=56,SNR=9.7
**GEYT Alibeck** 56.45 320 P **P** **19 47 09.8 -0.9**
comp=Z,114nm,1.1s,baz=142,slow=7.4,SNR=103
GEYT PKP2bc 20 17 21.2
comp=Z,1.6nm,0.8s,baz=214,slow=7.2,SNR=4.4
**OTUK Ortayu** 56.60 338 P **P** **19 47 10.9 -0.7**
OTUK pmax pmax
comp=Z,350nm,1.4s
**KURBB Kurchatov Arra** 56.61 344 S **S** **19 55 04.2 +1.9**
comp=Z,4.0nm,1.0s,baz=151,slow=14,SNR=2.9
**KURK Kurchatov** 56.67 344 *e*P **P** **19 47 11.3 -0.7**
KURK S **S** **19 55 04.2 +1.2**
KURK pmax pmax
comp=Z,1µm,1.2s
KURK MLR MLR
comp=Z,28µm,20.0s
**KURK Kurchatov** 56.67 344 P **P** **19 47 11.1 -0.9**
comp=Z,3µm,1.3s
**KURK Kurchatov** 56.67 344 *e*P **P** **19 47 11.3 -0.7**
comp=Z,1µm,1.2s
KURK S **S** **19 55 04.2 +1.2**
KURK LR LR
comp=Z,28µm,20.0s
**MOO Moorlands** 57.26 140 P **P** **19 47 19.3 +2.9**
baz=58,SNR=4.4
**TAU Tasmania Unive** 57.58 141 P **P** **19 47 21.3 +2.7**
TAU pmax pmax
comp=Z,240nm,1.3s
**TAU Tasmania Unive** 57.58 141 *e*P **P** **19 47 20.6 +2.0**
comp=Z,237nm,1.4s
TAU LR LR
comp=Z,28µm,20.0s
**DAMY Dhamar** 58.13 289 *e*P **P** **19 47 25.1 +1.8**
**ZAA0 Zalesovo Array** 58.22 349 P **P** **19 47 22.5 -0.3**
baz=58,SNR=224
**ZALV Zalesovo Beam** 58.22 349 P **P** **19 47 22.4 -0.4**
comp=Z,743nm,1.0s,baz=173,slow=5.7,SNR=184
ZALV S **S** **19 55 23.2 -0.1**
comp=Z,3.8nm,0.8s,baz=151,slow=13,SNR=2.9
ZALV PKP2bc 20 17 11.8
comp=Z,4.9nm,1.0s,baz=306,slow=3.5,SNR=5.7
**ZALV Zalesovo Beam** 58.22 349 P **P** **19 47 22.4 -0.4**
ZALV S **S** **19 55 23.2 -0.1**
**ZAB5 Zalesovo Array** 58.23 349 P **P** **19 47 22.1 -0.8**
baz=58
**PATS Pohnpei** 58.66 80 P **P** **19 47 25.7 -1.0**
baz=59,SNR=4.8
**KLR Kul'dur** 58.70 24 ⇓*i*P P 19 47 23.0 -3.3
KLR *e*S **S** **19 55 29.0 -0.7**
KLR *e* 19 57 10.5
KLR pmax pmax
comp=N,150nm,1.6s
KLR pmax pmax
comp=E,380nm,1.6s
KLR pmax pmax
comp=Z,1µm,1.6s
**ATD Arta Tunnel** 58.99 285 P **P** **19 47 30.0 +1.0**
comp=Z,6.3nm,0.7s,baz=60,slow=5.6
ATD LR LR 20 08 44.5
comp=Z,8µm,21.9s,baz=100,slow=32
**KRAR Krasnoyarsk** 59.14 355 *c* iP **P** **19 47 28.2 -1.0**
KRAR pmax pmax
comp=Z,31nm,8.3s
KRAR MLR MLR
comp=Z,5µm,15.0s
**ERM Erimo** 59.24 36 *e*P **P** **19 47 30.6 +0.4**
ERM pmax pmax
comp=Z,203nm,1.1s
ERM MLR MLR
comp=Z,6µm,20.0s
**ERM Erimo** 59.24 36 *e*P **P** **19 47 30.6 +0.4**
comp=Z,204nm,1.1s
ERM LR LR
comp=Z,6µm,20.0s
**NVS Novosibirsk** 59.37 349 ⇑*i*P **P** **19 47 30.0 -0.8**
NVS *e*S **S** **19 55 39.3 +1.2**
NVS pmax pmax
comp=N,240nm,1.2s
NVS pmax pmax
comp=E,169nm,1.2s
NVS pmax pmax
comp=Z,388nm,1.2s
NVS smax smax
comp=N,89nm,1.9s
NVS smax smax
comp=E,98nm,1.9s
**HABR Khabarovsk** 59.50 26 *e*P P 19 47 28.3 -3.5
HABR *e**PP pP 19 47 34.8 -4.2
HABR *e**SP sP 19 47 37.3 -4.4
HABR *e* 19 48 16.1
HABR *e* 19 49 39.3
HABR *e*S **S** **19 55 36.1 -3.9**
HABR *e**SS sS 19 55 47.3 -4.5
HABR *e* 19 57 17.5
HABR *e*SS **SS** **19 59 32.6 -3.0**
HABR pmax pmax
comp=Z,232nm,1.1s
HABR pmax pmax
comp=Z,904nm,2.5s
HABR MLR MLR
comp=Z,20µm,23.0s
HABR MLR MLR
comp=E,22µm,23.0s
HABR MLR MLR
comp=N,5µm,17.0s
**HNR Honiara** 59.51 99 *e*P **P** **19 47 31.7 -0.9**
HNR pmax pmax
comp=Z,941nm,1.0s
HNR MLR MLR
comp=Z,14µm,21.0s
**HNR Honiara** 59.51 99 *e*P **P** **19 47 31.7 -0.9**
comp=Z,941nm,1.0s
HNR LR LR
comp=Z,14µm,21.0s
**RAYN Ar Rayn** 59.55 299 P **P** **19 47 32.0 -0.7**
comp=Z,272nm,1.3s,SNR=18
**RAYN Ar Rayn** 59.55 299 *e*P **P** **19 47 31.6 -1.1**
comp=Z,70nm,1.2s

RAYN LR LR
comp=Z,9μm,22.0s
**ASAJ Asahikawa 60.23 34** *e*P **P** **19 47 36.3 -0.6**
comp=Z,250nm,1.4s
**VOSK Vostochnaya 60.80 340** *i* P **P** **19 47 39.4 -1.3**
VOSK pmax pmax
comp=Z,225nm,1.4s
**BVA0 Borovoye Array 61.25 340** P **P** **19 47 42.4 -1.3**
BVA0 pmax pmax
comp=Z,225nm,1.4s
**BVAR Borovoye Array 61.25 340** PKP2bc 20 17 09.9
comp=Z,1.7nm,0.9s,baz=64,slow=3.4,SNR=3.9
**BOD Bodaibo 61.62 8** ⇓ *i*P **P** **19 47 45.8 -0.3**
BOD pmax pmax
comp=Z,367nm,1.7s
**ZRNK Zerenda 61.67 339** *i* P **P** **19 47 45.3 -1.3**
ZRNK pmax pmax
comp=Z,109nm,0.9s
**CHKZ Chkalovo 61.71 340** *i* P **P** **19 47 46.1 -0.7**
CHKZ pmax pmax
comp=Z,509nm,1.3s
**YUK Yuzh-Kuril'sk 62.04 36***c* *i*P **P** **19 47 47.9 -1.3**
YUK *e*S **S** **19 56 12.8 +0.1**
YUK *i* 19 57 37.6
YUK pmax pmax
comp=N,164nm,2.1s
YUK pmax pmax
comp=E,251nm,2.1s
YUK pmax pmax
comp=Z,709nm,2.1s
YUK pmax pmax
comp=Z,1μm,2.9s
YUK MLR MLR
comp=N,2μm,20.0s
YUK MLR MLR
comp=E,557nm,20.0s
YUK MLR MLR
comp=Z,5μm,20.0s
**YSS Yuzh-Sakhalins 62.14 31**α *i*P **P** **19 47 49.8 0.0**
YSS *e**SP **sP** **19 47 58.0 -1.7**
YSS *e* 19 48 30.0
YSS *e*PPP PPP 19 51 38.0
YSS *e*S S 19 56 26.0 +12
YSS *e*PS PnS 19 56 43.0 +13
YSS pmax pmax
comp=N,190nm,1.0s
YSS pmax pmax
comp=Z,810nm,1.0s
**AAE Adis Abeba 62.55 282** *i* P P 19 48 00.4 +6.8
**FURI Furi 62.62 282** *i* PN **P** **19 47 56.5 +2.5**
FURI *i* S S 19 56 28.4 +6.8
**AB31 Akbulak array 62.70 331** P **P** **19 47 52.5 -1.0**
AB31 pmax pmax
comp=Z,240nm,0.8s
**ABKAR Akbulak array 62.70 331** P **P** **19 47 52.6 -0.9**
baz=63
**ABKAR Akbulak array 62.70 331** *e*P **P** **19 47 52.2 -1.3**
comp=Z,0.4nm,0.4s
**KMBO Kilima Mbogo 63.10 270** P **P** **19 47 57.4 +0.2**
comp=Z,12nm,0.9s,baz=53,slow=8.9,SNR=22
KMBO PKP2ab 20 17 10.7
comp=Z,1.1nm,0.9s,baz=244,slow=6.3,SNR=3.3
**KMBO Kilima Mbogo 63.10 270** *e*P **P** **19 47 57.9 +0.7**
KMBO pmax pmax
comp=Z,114nm,1.6s
KMBO MLR MLR
comp=Z,9μm,22.0s
**KMBO Kilima Mbogo 63.10 270** P **P** **19 47 58.2 +1.0**
baz=63,SNR=3.5
**KMBO Kilima Mbogo 63.10 270** P **P** **19 47 58.6 +1.4**
SNR=25
**KMBO Kilima Mbogo 63.10 270** *e*P **P** **19 47 57.9 +0.7**
comp=Z,114nm,1.6s
KMBO P'P'ab **P'P'ab** **20 17 10.7 -2.2**
KMBO LR LR
comp=Z,9μm,22.0s
**CASY Casey 63.56 175** *e*P **P** **19 47 59.0 +0.1**
comp=Z,230nm,1.5s
CASY LR LR
comp=Z,40μm,21.0s
**MIR Mirnyy 63.63 183** ⇑ *i*P P 19 48 09.0 +10
MIR pmax pmax
comp=Z,120nm,2.0s
**KUR Kuril'sk 63.90 35***d* *i*P **P** **19 48 00.0 -1.6**
KUR *i* 19 48 33.6
KUR *i*S **S** **19 56 32.8 -3.2**
KUR pmax pmax
comp=N,194nm,1.8s
KUR pmax pmax
comp=Z,555nm,1.8s
KUR pmax pmax
comp=E,130nm,0.9s
KUR pmax pmax
comp=Z,899nm,2.2s
KUR MLR MLR
comp=N,2μm,20.0s
KUR MLR MLR
comp=E,589nm,20.0s
KUR MLR MLR
comp=Z,6μm,20.0s
**AKTO Aktyubinsk 64.41 331** P **P** **19 48 03.6 -1.2**
comp=Z,123nm,1.1s,baz=133,slow=7.0,SNR=84
AKTO PKP2ab 20 17 04.8
comp=Z,3.1nm,1.0s,baz=43,slow=1.6,SNR=3.9
**AKTO Aktyubinsk 64.41 331** P **P** **19 48 03.7 -1.2**
**DODT Dodoma, Tanzan 64.46 265** *i* P **P** **19 48 05.6 -0.4**
DODT 19 56 43.3
**TYV Tymovskoe 64.67 28** *e*P **P** **19 48 08.0 +1.5**
TYV pmax pmax
comp=E,462nm,1.8s
TYV pmax pmax
comp=Z,1μm,1.8s
TYV pmax pmax
comp=N,105nm,1.4s
**NKL Nikolayevsk 65.35 25** *i* P **P** **19 48 10.0 -0.8**
NKL *e* 19 57 07.0
NKL pmax pmax
comp=N,80nm,1.1s
NKL pmax pmax
comp=Z,370nm,1.1s
NKL pmax pmax
comp=E,520nm,2.0s
**MAK Makhachkala 65.97 320***c* *i*P **P** **19 48 14.9 -0.2**
MAK *e* 19 48 49.3
MAK *e* 19 50 35.8
MAK *e*PPP PPP 19 52 18.9
MAK *e*S **S** **19 56 59.4 -2.1**
MAK *e* 19 58 00.6
MAK *e*SS **SS** **20 01 19.9 +2.8**
MAK pmax pmax
comp=Z,274nm,1.3s
**CUKT Cukurca 66.08 313** *e*P **P** **19 48 14.2 -2.0**
**HKR Hakkari 66.12 313** *e*P **P** **19 48 16.5 0.0**
**HAKT HAKKARI 66.14 313** P **P** **19 48 16.7 +0.1**
**GNI Garni 66.50 316***c* *i*P **P** **19 48 18.4 -0.5**
GNI pmax pmax
comp=Z,1μm,1.6s
GNI MLR MLR
comp=Z,34μm,22.0s
**GNI Garni 66.50 316** P **P** **19 48 18.9 +0.1**
SNR=59
**GNI Garni 66.50 316** ⇓ *i*P **P** **19 48 18.7 -0.1**
SNR=37
**GNI Garni 66.50 316** *e*P **P** **19 48 18.3 -0.5**
comp=Z,2μm,1.3s
GNI LR LR
comp=Z,8μm,22.0s
**CLDR Caldiran 66.65 315** *e*P **P** **19 48 19.8 -0.1**
**DGRG David-gareji 66.66 318** P **P** **19 48 20.2 +0.6**
**DGRG David-gareji 66.66 318** P **P** **19 48 20.2 +0.6**
**DZM Mont Dzumac 66.72 113** *e*P **P** **19 48 20.7 +0.2**
comp=Z,243nm,1.4s
DZM *e*S **S** **19 57 08.1 -3.6**
comp=Z,17μm,26.6s
**DZM Mont Dzumac 66.72 113** *e*LR LR 20 08 25.9
comp=Z,36μm,21.9s
**DZM Mont Dzumac 66.72 113** *e*P **P** **19 48 21.2 +0.7**
comp=Z,106nm,1.1s
**VANB Van 66.79 314** *e*P **P** **19 48 19.4 -1.3**
**DYDN Diyadin 66.98 315** P **P** **19 48 23.1 +1.2**
**TBLG Delisi 67.21 318** *e*P **P** **19 48 23.1 0.0**
**DUS Dusheti 67.39 318** P **P** **19 48 24.2 -0.1**
**DUS Dusheti 67.39 318** P **P** **19 48 24.2 -0.1**
**AGRB Hanur-Agry 67.48 315** *e*P **P** **19 48 25.2 +0.1**
**EAK Akyaka 67.52 316** P **P** **19 48 25.8 +0.6**

**TUTA Tutak 67.53 315** P **P** **19 48 26.3 +0.8**
**SVE Sverdlovsk 67.75 338***d* *i*P **P** **19 48 25.8 -0.3**
SVE *e* 19 51 00.6
SVE *e*PPP PPP 19 52 37.4
SVE *e*S **S** **19 57 20.3 -2.2**
SVE pmax pmax
comp=Z,324nm,1.1s
SVE pmax pmax
comp=Z,3μm,23.9s
SVE MLR MLR
comp=Z,8μm,21.0s
SVE MLR MLR
comp=N,7μm,21.0s
SVE MLR MLR
comp=E,4μm,21.0s
**KARS Kars 67.86 316** *e*P **P** **19 48 27.3 -0.1**
**AKH Akhalkalaki 67.91 317** *e*P **P** **19 48 27.7 0.0**
**AKH Akhalkalaki 67.91 317** P **P** **19 48 28.2 +0.4**
**AKH Akhalkalaki 67.91 317** P **P** **19 48 28.1 +0.4**
**ENT Entebbe 67.93 271** *i* P **P** **19 48 31.4 +3.0**
ENT 19 57 10.4
**KWAJ Kwajalein Atol 68.04 79** P **P** **19 48 30.5 +1.7**
KWAJ pmax pmax
comp=Z,230nm,1.0s
**KWAJ Kwajalein Atol 68.04 79** *e*P **P** **19 48 28.2 -0.6**
comp=Z,235nm,1.0s
**SVAN Silvan-Diyarba 68.20 313** *e*P **P** **19 48 28.5 -0.9**
**ONI Oni 68.44 318** P **P** **19 48 31.1 +0.1**
**ONI Oni 68.44 318** P **P** **19 48 31.0 +0.1**
**MAZI Mazidag 68.49 312** *e*P **P** **19 48 30.8 -0.6**
**YAK Yakutsk 68.62 14***c* *i*P **P** **19 48 30.2 -1.3**
YAK *e* 19 48 52.5
YAK *e*S **S** **19 57 29.3 -3.4**
YAK *e**SS sS 19 57 56.4 +12
YAK pmax pmax
comp=E,191nm,1.3s
YAK pmax pmax
comp=Z,564nm,1.0s
YAK pmax pmax
comp=N,218nm,1.2s
YAK pmax pmax
comp=Z,592nm,1.5s
YAK pmax pmax
comp=N,447nm,2.2s
YAK pmax pmax
comp=E,365nm,2.0s
YAK smax smax
comp=E,311nm,1.8s
YAK smax smax
comp=N,687nm,4.2s
YAK MLR MLR
comp=N,12μm,17.0s
YAK MLR MLR
comp=Z,19μm,18.0s
**NCK Nalchik 68.75 319***ce* P **P** **19 48 32.6 -0.1**
**WAKE Wake Island 68.76 68** PFAKE 19 48 50.0 +17
WAKE LR LR
comp=Z,4μm,20.0s
**EZM Erzurum 68.76 315** *e*P **P** **19 48 34.1 +0.9**
**ARTV Artvin 68.88 316** P **P** **19 48 33.9 0.0**
**DDEM Demirkent 68.88 316** P **P** **19 48 33.9 +0.1**
**DYBB Diyarbakir 68.90 313** *e*P **P** **19 48 33.4 -0.5**
**DBAD Bademkaya 68.97 316** P **P** **19 48 34.7 +0.4**
**H11N1 WAKE ISLAND Hy 69.06 68** P **P** **19 48 35.7 +0.8**
baz=254,slow=8.8,SNR=4.6
**H11N2 WAKE ISLAND Hy 69.07 68** P **P** **19 48 34.1 -0.8**
baz=254,slow=8.8,SNR=3.2
**H11N3 WAKE ISLAND Hy 69.08 68** P **P** **19 48 35.5 +0.5**
baz=254,slow=8.8,SNR=7.1
**DBOC Borcka 69.13 316** P **P** **19 48 35.3 +0.1**
**BCA Borcka 69.20 317** *e*P **P** **19 48 34.9 -0.7**
**NEY Neytrino 69.21 319***c* *i*P **P** **19 48 36.2 +0.4**
**DRV Dumont d'Urvil 69.26 164** P P 19 48 40.0 +4.6
DRV PP **PP** **19 51 07.0 -1.6**
DRV S S 19 57 33.0 -7.2
DRV SS SS 20 01 54.0 -13
DRV L L 20 05 00.0
DRV R 20 11 00.0
**KBZ Khabaz 69.31 319** P **P** **19 48 35.6 -0.5**
comp=Z,140nm,1.0s,baz=112,slow=5.7,SNR=116
KBZ PKP2bc 20 16 47.9
comp=Z,2.6nm,1.0s,baz=235,slow=1.5,SNR=3.0
**KBZ Khabaz 69.31 319** P **P** **19 48 35.6 -0.5**
**ZALF Zalf 69.35 307** *e*P **P** **19 48 37.4 +0.7**
**MAW Mawson 69.41 194** P **P** **19 48 36.6 +0.4**
comp=Z,8.2nm,0.7s,baz=25,slow=5.9,SNR=29
MAW LR LR 20 12 26.4
comp=Z,23μm,21.6s,baz=34,slow=30
MAW PKP2ab 20 16 43.3
comp=Z,21nm,1.0s,baz=221,slow=4.8,SNR=26
**MAW Mawson 69.41 194** P **P** **19 48 36.6 +0.4**
**MAW Mawson 69.41 194** P **P** **19 48 36.7 +0.4**
baz=70,SNR=16
**CHVG Ch'k'valeri 69.41 318** *e*P **P** **19 48 36.9 0.0**
**CHVG Ch'k'valeri 69.41 318** P **P** **19 48 37.2 +0.4**
**CHVG Ch'k'valeri 69.41 318** ⇑ *i*P **P** **19 48 37.3 +0.4**
**ASF Jabal al Asfar 69.47 306** P **P** **19 48 37.5 -0.1**
comp=Z,56nm,1.2s,baz=89,slow=2.0,SNR=43
ASF PKP2bc 20 16 45.2
comp=Z,2.0nm,0.9s,baz=206,slow=2.4,SNR=5.5
ASF LR LR 20 20 55.6
comp=Z,8μm,18.0s,baz=61,slow=38
**ASF Jabal al Asfar 69.47 306** P **P** **19 48 37.5 -0.1**
**KIV Kislovodsk 69.54 319***c* *i*P **P** **19 48 36.9 -0.8**
KIV *e* 19 48 59.5
KIV *e*S **S** **19 57 43.5 -1.0**
KIV *e*SS **SS** **20 02 10.9 -1.7**
KIV pmax pmax
comp=Z,203nm,1.0s
KIV pmax pmax
comp=Z,313nm,4.8s
KIV MLR MLR
comp=Z,3μm,17.0s
**KIV Kislovodsk 69.54 319** P **P** **19 48 37.2 -0.5**
comp=Z,999nm,1.0s,SNR=46
**SVRC Sivrice-ELAZID 69.66 313** *e*P **P** **19 48 38.1 -0.6**
**URFA Urfa 69.69 312** *e*P **P** **19 48 37.7 -1.1**
**SALA Sala 69.77 306** *e*P P 19 48 36.1 -3.4
**PTK Pertek 69.79 313** *e*P **P** **19 48 37.8 -1.7**
**BAYT Ayd¨–ntepe-Bay 69.81 315** *e*P **P** **19 48 39.9 +0.3**
**TOTH TOTAH 70.21 307** *e*P **P** **19 48 43.4 +1.4**
**MALT Malatya 70.28 312** *e*P **P** **19 48 42.1 -0.4**
**MALT Malatya 70.28 312***ce* P **P** **19 48 43.7 +1.2**
**MALT Malatya 70.28 312** ⇑ *i*P **P** **19 48 42.3 -0.2**
**KTUT Trabzon 70.30 316** *e*P **P** **19 48 41.0 -1.4**
**GUMT Gumushane 70.31 315** *e*P **P** **19 48 42.1 -0.5**
**KELT Kelkit 70.35 315** P **P** **19 48 43.7 +0.8**
**TCHB Talchehebab 70.37 306** *e*P **P** **19 48 43.7 +0.7**
**EIL Elat 70.37 303** P **P** **19 48 42.4 -0.6**
**EIL Elat 70.37 303** P **P** **19 48 43.1 0.0**
comp=Z,144nm,1.1s,baz=104,slow=1.9,SNR=26
**EIL Elat 70.37 303** P **P** **19 48 43.3 +0.3**
baz=70,SNR=26
**HRFI Mount Harif 70.40 303** P **P** **19 48 43.8 +0.6**
**ILIC ilic-Erzincan 70.59 314** *e*P **P** **19 48 44.3 0.0**
**GZT Gaziantep 70.60 311** P **P** **19 48 45.2 +0.8**
**BRBR Barbar 70.60 307** *e*P **P** **19 48 46.4 +1.7**
**RCY Rachaya 70.72 307** *e*P **P** **19 48 46.2 +1.0**
**MMLI Mount Malkishu 70.75 306** P **P** **19 48 45.7 +0.4**
**HWQ Hawqa 70.86 308** *e*P **P** **19 48 45.2 -0.9**
**MMAI Mount Meron Ar 70.93 306** P **P** **19 48 46.9 +0.5**
comp=Z,78nm,1.1s,baz=96,slow=7.8,SNR=31
MMAI LR LR 20 19 45.6
comp=Z,12μm,20.7s,baz=110,slow=36
**BHL Bhannes 70.98 307** *e*P **P** **19 48 46.5 -0.3**
**DQRL Deir Qamar 70.99 307** *e*P **P** **19 48 47.0 +0.2**
**ESPY Espiye-Giresun 71.01 315** *e*P **P** **19 48 46.0 -0.7**
**DARE Darende-Malaty 71.07 312** *e*P **P** **19 48 45.9 -1.3**
**SUSE Susehri 71.12 314** P **P** **19 48 48.1 +0.5**
**KMRS Kahramanmaras 71.15 311** *e*P **P** **19 48 46.8 -0.9**
**KZIT Kziot 71.16 304** P **P** **19 48 48.0 +0.2**
**KZIT Kziot 71.16 304** *i* P **P** **19 48 48.0 +0.2**
**AYKD Aykdinkavak 71.19 311** P **P** **19 48 47.8 -0.1**
**KAMA Osmaniye 71.22 311** P **P** **19 48 48.6 +0.4**
**YAYL Yayladag 71.28 310** P **P** **19 48 49.1 +0.6**
**CUZAR Zara_SIVAS 71.32 314** P **P** **19 48 49.5 +0.7**
**TAHT Tahtakopru-Hat 71.33 310** *e*P **P** **19 48 48.4 -0.3**
**ARNB Al Arnab 71.33 309** *e*P **P** **19 48 48.9 +0.1**
**CUKAN kangal_SIVAS 71.34 313** P **P** **19 48 49.2 +0.3**
**SOC Sochi 71.34 318***c* *i*P **P** **19 48 46.9 -1.7**
SOC *e**PP **pP** **19 48 52.4 -3.5**
SOC *e* 19 51 21.1
SOC *e*PPP PPP 19 53 07.5

SOC *i*S **S** **19 58 00.4 -5.0**
SOC *e*SSS SSS 20 05 50.4
SOC pmax pmax
comp=Z,167nm,0.9s
SOC MLR MLR
comp=Z,5μm,20.0s
**SKR Severo-Kuril's 71.50 34** *e*P P 19 48 39.5 -10
SKR *e* 19 48 53.0
SKR *e*PPP PPP 19 53 16.0
SKR *e*S **S** **19 58 09.0 +2.2**
SKR *e* 19 58 28.0
SKR pmax pmax
comp=N,220nm,1.0s
SKR pmax pmax
comp=E,220nm,1.0s
SKR pmax pmax
comp=Z,1μm,1.0s
SKR pmax pmax
comp=Z,3μm,8.0s
SKR pmax pmax
comp=N,1μm,6.0s
SKR pmax pmax
comp=E,3μm,6.0s
SKR smax smax
comp=N,3μm,10.0s
SKR smax smax
comp=E,5μm,10.0s
SKR MLR MLR
comp=N,5μm,20.0s
SKR MLR MLR
comp=E,5μm,20.0s
SKR MLR MLR
comp=Z,8μm,20.0s
**RSDY Resadiye-TOKAT 71.81 314** *e*P **P** **19 48 50.9 -0.7**
**CEYT Ceyhan 71.86 310** *e*P **P** **19 48 51.2 -0.6**
**SVSK Karacayir 71.88 314** *e*P **P** **19 48 51.2 -0.7**
**KRTS Karatas 72.01 310** *e*P **P** **19 48 53.2 +0.5**
**LSZ Lusaka 72.03 255** *e*P **P** **19 48 53.6 +0.1**
LSZ pmax pmax
comp=Z,140nm,1.5s
LSZ MLR MLR
comp=Z,10μm,19.0s
**LSZ Lusaka 72.03 255** P **P** **19 48 54.2 +0.8**
SNR=13
**LSZ Lusaka 72.03 255** *e*P **P** **19 48 53.5 +0.1**
comp=Z,140nm,1.5s
LSZ LR LR
comp=Z,10μm,19.0s
**CUSAR Sarkisla-SIVAS 72.26 313** P **P** **19 48 54.3 -0.2**
**WHZ Wether Hill Ro 72.34 137** *e*P **P** **19 48 55.0 +0.4**
comp=Z,79nm,1.8s
**TOKT Tokat 72.35 314** *e*P **P** **19 48 55.1 +0.3**
**KARA Karaisali 72.46 311** *e*P **P** **19 48 54.7 -0.8**
**EREN Erenkoy 72.63 309** *e*P **P** **19 48 54.8 -1.7**
**TARA Tarawa 72.66 88** *e*P **P** **19 48 57.6 +0.5**
comp=Z,1μm,1.8s
TARA LR LR
comp=Z,7μm,22.0s
**KVT Kavak 72.96 315** *e*P **P** **19 48 57.8 -0.7**
**LFK Lefkose 73.06 308** *e*P **P** **19 48 59.5 +0.4**
**NIG Nigde 73.06 311** *e*P **P** **19 48 58.6 -0.8**
**CSS Prodhromos 73.13 308** P **P** **19 49 00.4 +0.9**
**CSS Prodhromos 73.13 308** *e*P **P** **19 48 59.6 +0.1**
**CSS Prodhromos 73.13 308** P **P** **19 48 59.3 -0.2**
**CSS Prodhromos 73.13 308** *e*P **P** **19 48 59.7 +0.1**
comp=Z,51nm,1.3s
CSS LR LR
comp=Z,2μm,20.0s
**HAVZ Havza 73.19 314** P **P** **19 49 00.1 +0.3**
**MAMC Mammari 73.27 308** P **P** **19 49 01.7 +1.3**
**ANN Anapa 73.33 319***c* *i*P **P** **19 48 58.0 -2.4**
ANN *i* 19 49 13.8
ANN *i* 19 51 42.2
ANN *i*S **S** **19 58 23.6 -4.4**
ANN *i* 19 59 03.6
ANN *i*SS **SS** **20 03 11.3 +0.9**
ANN pmax pmax
comp=Z,53nm,1.2s
ANN pmax pmax
comp=Z,548nm,7.0s
ANN MLR MLR
comp=N,4μm,23.0s
ANN MLR MLR
comp=Z,3μm,23.0s
ANN MLR MLR
comp=E,205nm,8.0s
**VRH Novokhopyorsk 73.36 326** *e*P **P** **19 48 59.3 -1.2**
VRH *e*S **S** **19 58 22.6 -5.5**
VRH pmax pmax
comp=N,250nm,1.8s
VRH pmax pmax
comp=Z,590nm,1.8s
VRH pmax pmax
comp=E,30nm,0.6s
VRH smax smax
comp=N,2μm,6.9s
VRH smax smax
comp=Z,300nm,3.9s
VRH smax smax
comp=E,2μm,6.3s
VRH MLR MLR
comp=Z,3μm,17.0s
VRH MLR MLR
comp=N,5μm,24.0s
VRH MLR MLR
comp=E,3μm,19.0s
**SZAC Souni-Zanaja 73.42 307** P **P** **19 49 02.2 +0.9**
**LEF Lefka 73.52 308** *e*P **P** **19 49 01.2 -0.6**
**PETK Petropavlovsk- 73.53 32** P **P** **19 49 00.9 -0.6**
comp=E,76nm,0.8s,baz=208,slow=4.3,SNR=26
**PETK Petropavlovsk- 73.53 32** P **P** **19 49 00.9 -0.6**
**YESY Yesilyurt 73.61 311** *e*P **P** **19 49 01.1 -1.3**
**CORM Corum 73.69 313** *e*P P 19 48 59.6 -3.3
**CDAG Cicekdag 73.70 313** P **P** **19 49 02.1 -0.8**
**DIKM Dikmen 73.71 315** *e*P **P** **19 49 01.2 -1.6**
**ALFC Alevga 73.76 308** P **P** **19 49 02.9 -0.4**
**MA2 Magadan 73.79 24** *i* P **P** **19 49 03.1 +0.2**
**SNOP Sinop 73.87 315** *e*P **P** **19 49 02.7 -1.0**
**PPCY Paphos 73.89 307** P **P** **19 49 03.9 0.0**
**YAYX Yaylak 73.91 312** *e*P **P** **19 49 03.3 -0.9**
**AKMC Akamas 73.94 308** P **P** **19 49 04.5 +0.2**
**ODZ Otahua Downs 74.00 136** *e*P **P** **19 49 04.8 +0.4**
comp=E,75nm,1.4s
**BYBT Boyabat 74.00 315** *e*P **P** **19 49 03.5 -1.0**
**PET Petropavlovsk 74.00 32***ce* P **P** **19 49 03.8 -0.4**
PET *e* 19 51 52.0
PET *e*PPP PPP 19 53 41.2
PET *e*S **S** **19 58 33.8 -1.5**
PET *e*SS **SS** **20 03 19.9 -0.4**
PET pmax pmax
comp=Z,2μm,10.1s
PET pmax pmax
comp=Z,281nm,1.3s
PET pmax pmax
comp=Z,2μm,18.3s
PET MLR MLR
comp=Z,6μm,19.0s
PET MLR MLR
comp=Z,4μm,19.0s
**RPZ Rata Peaks 74.01 135** PN **P** **19 49 05.5 +0.9**
**RPZ Rata Peaks 74.01 135** *e*P **P** **19 49 04.6 0.0**
comp=Z,2.4nm,0.5s
**SERE Serefikochisa 74.09 312** *e*P **P** **19 49 03.7 -1.5**
**KAMT Kaman 74.11 312** *e*P **P** **19 49 03.9 -1.4**
**BR131 Keskin Array S 74.27 313** P **P** **19 49 05.1 -1.2**
baz=74,SNR=7.6
**BRTR Keskin Array B 74.27 313** P **P** **19 49 04.8 -1.5**
comp=Z,96nm,1.1s,baz=133,slow=6.7,SNR=166
**BRTR Keskin Array B 74.27 313** P **P** **19 49 04.8 -1.5**
**GAZI Gazipasa 74.27 309** P **P** **19 49 05.9 -0.3**
**BR106 Keskin Array S 74.29 313** P **P** **19 49 05.1 -1.3**
baz=74
**HDMB Hadim 74.34 310** *e*P **P** **19 49 05.8 -1.0**
**TOS Tosya 74.39 314** *e*P **P** **19 49 06.8 -0.2**
**CANT Cankiri 74.55 313** *e*P **P** **19 49 06.9 -0.9**
**QRZ Quartz Range 74.57 131** PN **P** **19 49 09.0 +1.2**
**OUZ Omahuta 74.58 126** *e*P **P** **19 49 09.6 +1.5**
comp=Z,225nm,1.6s
**BBAL Bala 74.60 312** P **P** **19 49 07.7 -0.5**
**AFSR Af¨ar-Bala (A 74.61 312** *e*P **P** **19 49 07.3 -0.9**
**VORD Divnogorie 74.63 325** *e*P **P** **19 49 06.8 -1.1**
VORD *e*S **SKiKP** **19 58 35.8 +3.2**
VORD pmax pmax
comp=Z,220nm,1.1s
VORD pmax pmax

comp=N,60nm,0.9s
VORD pmax pmax
comp=E,60nm,0.7s
VORD smax smax
comp=E,1µm,7.1s
VORD smax smax
comp=Z,260nm,5.8s
VORD smax smax
comp=N,1µm,5.0s
VORD MLR MLR
comp=Z,4µm,23.0s
VORD MLR MLR
comp=N,7µm,22.0s
VORD MLR MLR
comp=E,3µm,17.0s
**OXZ Oxford 74.64 134** PN **P** **19 49 09.8 +1.5**
**KONT Konya--Tatoy 74.71 311** *e*P **P** **19 49 07.7 -1.0**
**VSR Storozhevoye 74.81 325** *e*P **P** **19 49 07.8 -1.2**
VSR *e*S **SKiKP** **19 58 37.8 +4.9**
VSR pmax pmax
comp=Z,580nm,2.0s
VSR pmax pmax
comp=N,50nm,0.8s
VSR pmax pmax
comp=E,140nm,0.9s
VSR smax smax
comp=N,1µm,5.0s
VSR smax smax
comp=Z,250nm,4.6s
VSR smax smax
comp=E,560nm,6.2s
VSR MLR MLR
comp=Z,2µm,21.0s
VSR MLR MLR
comp=N,5µm,20.0s
VSR MLR MLR
comp=E,2µm,15.0s
**ANTO Ankara 74.94 313** P **P** **19 49 09.6 -0.5**
ANTO pmax pmax
comp=Z,560nm,1.1s
**ANTO Ankara 74.94 313** P **P** **19 49 09.3 -0.8**
SNR=47
**ANTO Ankara 74.94 313** *e*P **P** **19 49 08.9 -1.2**
comp=Z,562nm,1.1s
ANTO LR LR
comp=Z,4µm,20.0s
**LOD Lodumlu 74.96 313** *e*P **P** **19 49 08.8 -1.5**
**VORR Voronezh 74.98 326** *e*P **P** **19 49 10.0 +0.1**
VORR pmax pmax
comp=Z,500nm,1.2s
**KIZT Kizilcal 75.33 311** *e*P **P** **19 49 11.4 -1.0**
**SAFT Safranbolu 75.42 314** *e*P **P** **19 49 12.3 -0.5**
**BOSA Boshof 75.50 241** P **P** **19 49 13.3 -0.4**
comp=Z,20nm,0.8s,baz=91,slow=5.7,SNR=26
**BOSA Boshof 75.50 241** P **P** **19 49 13.3 -0.4**
**BOSA Boshof 75.50 241** P **P** **19 49 13.6 0.0**
baz=76,SNR=18
**LPSR Galich'ya Gora 75.53 326** *e*P **P** **19 49 12.9 -0.2**
LPSR *e*S **S** **19 58 47.6 -4.8**
LPSR pmax pmax
comp=Z,400nm,2.1s
LPSR pmax pmax
comp=N,10.0nm,0.7s
LPSR pmax pmax
comp=E,180nm,1.7s
LPSR smax smax
comp=E,1µm,7.6s
LPSR smax smax
comp=Z,110nm,3.3s
LPSR smax smax
comp=N,1µm,4.7s
LPSR MLR MLR
comp=Z,4µm,23.0s
LPSR MLR MLR
comp=N,5µm,30.0s
LPSR MLR MLR
comp=E,6µm,25.0s
**KHZ Kahutara 75.58 133** *e*P **P** **19 49 13.6 0.0**
comp=E,176nm,1.2s
**SIM Simferopol' 75.59 318***c e*P **P** **19 49 12.6 -1.0**
SIM *e*S **S** **19 58 48.0 -5.4**
SIM pmax pmax
comp=Z,130nm,0.9s
SIM MLR MLR
comp=Z,4µm,22.0s
**SUTC Sutluce-Ispart 75.62 310** *e*P **P** **19 49 12.3 -1.8**
**SVRH Sivrihisar-ESK 75.75 312** *e*P **P** **19 49 13.6 -1.2**
**AUMIH MIHALICIK 75.90 312** P **P** **19 49 14.7 -1.0**
**BAGO Egridir - ISPA 75.92 310** P **P** **19 49 15.3 -0.4**
**KORT Korkueli 76.00 309** P **P** **19 49 15.9 -0.4**
**ISP Isparta 76.08 310** *e*P P 19 49 13.5 -3.2
**ISP Isparta 76.08 310** P **P** **19 49 18.2 +1.5**
ISP *e* 19 49 24.6
ISP pmax pmax
comp=Z,160nm,1.4s
**ISP Isparta 76.08 310** P **P** **19 49 13.7 -3.0**
**ISP Isparta 76.08 310** *e*P **P** **19 49 15.3 -1.4**
comp=Z,58nm,1.3s
ISP LR LR
comp=Z,6µm,19.0s
**SHUT Suhut-Afyon 76.24 311** *e*P **P** **19 49 16.2 -1.5**
**SNZO South Karori 76.27 132** *e*P **P** **19 49 17.4 -0.2**
comp=Z,289nm,1.4s
SNZO LR LR
comp=Z,51µm,21.0s
**ESKT Eskisehir 76.28 312** *e*P **P** **19 49 17.0 -0.8**
**ESKT Eskisehir 76.28 312** P **P** **19 49 18.0 +0.1**
**ELL Elmali 76.28 309** *e*P **P** **19 49 15.8 -2.1**
**MDUB Mudurnu 76.28 313** *e*P **P** **19 49 16.7 -1.1**
**KDZE Karadeniz Ereo 76.34 314** *e*P **P** **19 49 15.9 -2.1**
**AKAS Kas 76.39 308** P **P** **19 49 17.3 -1.2**
**SEY Seymchan 76.42 22***c i*P **P** **19 49 18.1 +0.2**
**GULT Gulveren 76.77 313** *e*P **P** **19 49 19.9 -0.6**
**FETY Fethiye 76.89 309** *e*P **P** **19 49 19.6 -1.7**
**SPNC Sapanca-Adapaz 76.99 313** *e*P **P** **19 49 20.3 -1.4**
**KHAL Karahalli 77.00 310** P **P** **19 49 20.2 -1.8**
**CAVI Cavuskoy 77.20 312** *e*P **P** **19 49 21.9 -1.1**
**DVHZ Dannevirke 77.23 131** PN **P** **19 49 23.7 +0.6**
**DALY Dalyan (Mu¨la 77.27 309** *e*P P 19 49 19.5 -3.8
**TVSB Tavsanlı 77.30 311** *e*P **P** **19 49 21.5 -2.1**
**TURN Turunc 77.32 309** P **P** **19 49 24.7 +1.1**
**CPWZ Castlepoint 77.33 131** PN **P** **19 49 25.1 +1.5**
**BFZ Birch Farm 77.34 131** PN **P** **19 49 24.0 +0.3**
**ADVT Abdulvahap 77.34 312** *e*P **P** **19 49 23.1 -0.6**
**MSVF Nonsavu 77.36 107** *e*P **P** **19 49 24.8 +0.5**
MSVF pmax pmax
comp=Z,255nm,1.4s
MSVF MLR MLR
comp=Z,13µm,19.0s
**MSVF Nonsavu 77.36 107** *e*P **P** **19 49 24.8 +0.5**
comp=Z,255nm,1.4s
MSVF LR LR
comp=Z,13µm,19.0s
**ANWZ Angora Road 77.49 131** PN **P** **19 49 25.0 +0.6**
**HRT Hereke 77.49 313** *e*P **P** **19 49 22.3 -2.3**
**IZI Iznik 77.51 312** *e*P **P** **19 49 24.3 -0.4**
**MOS Moscow 77.55 329** *e*P **P** **19 49 23.6 -0.8**
MOS *e* 19 49 35.5
MOS *e* 19 52 17.4
MOS *i*S **S** **19 59 10.6 -3.7**
MOS pmax pmax
comp=Z,573nm,1.3s
MOS pmax pmax
comp=Z,700nm,1.3s
**ARG Arkhangelos 77.55 308** P **P** **19 49 23.9 -1.0**
**SILT Sile 77.60 313** *e*P **P** **19 49 23.7 -1.4**
**YER Yerkesik 77.64 309** *e*P **P** **19 49 23.5 -2.0**
**KULA Kula-Manisa 77.67 310** *e*P **P** **19 49 25.0 -0.6**
**ULDT Uludag 77.71 312** P **P** **19 49 25.9 -0.1**
**URZ Urewera 77.73 128** *e*P **P** **19 49 24.8 -1.1**
comp=Z,503nm,1.7s
**GEMT Gemlik 77.75 312** *e*P **P** **19 49 24.2 -1.8**
**DEMI Demirci 77.75 311** P **P** **19 49 25.9 -0.2**
**OBN Obninsk 77.84 328** P **P** **19 49 25.5 -0.6**
comp=Z,261nm,1.1s,baz=101,slow=3.9,SNR=53
**OBN Obninsk 77.84 328***c i*P **P** **19 49 25.4 -0.6**
OBN *i* 19 49 33.1
OBN *i*S S 19 59 09.6 -7.9
OBN *i*SS **SS** **20 04 15.8 -2.5**
OBN pmax pmax
comp=Z,547nm,1.2s
OBN MLR MLR
comp=Z,4µm,22.0s
**OBN Obninsk 77.84 328** P **P** **19 49 25.2 -0.8**
comp=Z,2µm,1.2s,SNR=30

**MDNY Mudanya-Bursa 77.96 312** *e*P **P** **19 49 25.1 -2.0**
**DST Dursunbey 77.96 311** *e*P **P** **19 49 26.5 -0.7**
**ISK Istanbul-Kandi 78.00 313** *e*P **P** **19 49 26.0 -1.3**
**ISK Istanbul-Kandi 78.00 313** P **P** **19 49 25.9 -1.4**
**ARMT Armutlu 78.02 312** *e*P **P** **19 49 26.6 -0.9**
**KLYT Kilyos 78.06 313** *e*P **P** **19 49 26.5 -1.1**
**AYDN Tasoluk 78.07 309** P **P** **19 49 30.0 +2.2**
**MWZ Matawai 78.07 128** PN **P** **19 49 28.2 +0.4**
**AYDB Zeytinkoy-Aydi 78.12 310** *e*P **P** **19 49 27.1 -1.1**
**KARP Karpathos 78.16 307** P **P** **19 49 27.8 -0.6**
**BGKT Bogazkoy 78.24 313** *e*P **P** **19 49 26.5 -2.1**
**BDRM Kayabasi 78.27 309** P **P** **19 49 27.8 -1.1**
**KCTX Karacabey (Bur 78.32 312** *e*P **P** **19 49 27.9 -1.3**
**NIS1 Nisyros Isl. 78.38 308** *e*P **P** **19 49 27.5 -2.1**
**AKS Akhisar 78.40 311** *e*P **P** **19 49 27.1 -2.5**
**BALB Balikesir 78.53 311** *e*P **P** **19 49 29.3 -1.0**
**PUZ Puketiti 78.62 128** PN **P** **19 49 31.0 +0.2**
**CTYL Yal??k??y-??at 78.67 313** *e*P **P** **19 49 27.9 -3.1**
**EDC Edincik 78.71 312** *e*P **P** **19 49 31.0 -0.3**
**IZM Izmir 78.71 310** *e*P **P** **19 49 30.8 -0.5**
**SMG Samos 78.89 309** P **P** **19 49 31.2 -1.1**
**KLMR Klimovskoe 78.89 334***c i*P **P** **19 49 31.2 -0.6**
KLMR *e**SP **sP** **19 49 40.0 -1.8**
KLMR S S 19 59 20.1 -8.5
KLMR pmax pmax
comp=Z,481nm,1.3s
**MRMT Marmara Adasi 78.97 312** *e*P **P** **19 49 30.9 -1.8**
**MANR Mangalia 79.04 316**⇑ *i*P **P** **19 49 33.2 +0.2**
**TKR Tekirdag 79.10 313** *e*P **P** **19 49 32.2 -1.1**
**KRBG Karabiga-Canak 79.14 312** *e*P **P** **19 49 32.9 -0.7**
**TLCR 79.25 317**⇑ *i*P **P** **19 49 34.6 +0.6**
**TLCR 79.25 317**⇑ *i*P **P** **19 49 34.6 +0.6**
**ZEY ¨zmir 79.26 310** P **P** **19 49 34.7 +0.5**
**PHSR Pinarhisar 79.26 313** *e*P **P** **19 49 33.2 -1.0**
**PSN Preselentsi 79.29 315** *i*P **P** **19 49 33.7 -0.7**
**SART Tekirdag 79.29 312** P **P** **19 49 34.2 -0.4**
**RKY Sarkoy-Tekirda 79.30 312** *e*P **P** **19 49 33.0 -1.5**
**TIRR Tirgusor 79.33 316** *e*P **P** **19 49 33.5 -1.0**
TIRR pmax pmax
comp=Z,137nm,1.1s
**TIRR Tirgusor 79.33 316**⇑ *i*P **P** **19 49 33.7 -0.8**
**TIRR Tirgusor 79.33 316** *e*P **P** **19 49 33.5 -1.0**
comp=Z,137nm,1.1s
**LAST Lasithi 79.43 306** P **P** **19 49 35.0 -0.4**
**LAST Lasithi 79.43 306** P **P** **19 49 35.0 -0.4**
**LPK Lapseki 79.53 312** *e*P **P** **19 49 35.4 -0.4**
**SUR Sutherland 79.58 238** P **P** **19 49 37.0 +0.5**
comp=Z,549nm,0.8s,SNR=7.9
**SUR Sutherland 79.58 238** *e*P **P** **19 49 36.6 +0.1**
comp=Z,242nm,1.2s
SUR LR LR
comp=Z,35µm,19.0s
**TLB Topalu 79.62 316**⇑ *i*P **P** **19 49 34.4 -1.7**
**TLB Topalu 79.62 316**⇑ *i*P **P** **19 49 34.4 -1.7**
**CHOS Chios island 79.63 310** *e*P **P** **19 49 36.1 -0.3**
**CHOS Chios island 79.63 310** P **P** **19 49 36.2 -0.3**
**MSAB Monastry St. A 79.65 316**⇑ *i*P **P** **19 49 35.7 -0.6**
**PRK Paraskevi 79.65 311** P **P** **19 49 35.9 -0.5**
**SANT Santorini 79.69 308** *e*P **P** **19 49 35.3 -1.4**
comp=Z,170nm,1.0s
SANT LR LR
comp=Z,4µm,20.0s
**CFR Carcaliu 79.71 317** ⇓ *i*P **P** **19 49 35.6 -1.0**
**CFR Carcaliu 79.71 317** ⇓ *i*P **P** **19 49 35.6 -1.0**
**PRD Provadia 79.73 315** *i*P **P** **19 49 36.0 -0.7**
**KIS Kishinev 79.73 319** *e*P **P** **19 49 34.0 -2.7**
KIS *e*S **S** **19 59 43.0 +4.9**
**KIS Kishinev 79.73 319** *e*P **P** **19 49 34.0 -2.7**
KIS *i* 19 49 44.0
KIS *e*S **S** **19 59 43.0 +4.9**
**KIS Kishinev 79.73 319**⇑ *i*P **P** **19 49 37.1 +0.4**
**GELI Tayfur-Gelibol 79.75 312** *e*P **P** **19 49 35.8 -1.2**
**APE Apeiranthos 79.77 308** *e*P **P** **19 49 34.2 -3.0**
**APE Apeiranthos 79.77 308***c i*P **P** **19 49 34.8 -2.4**
APE pmax pmax
comp=Z,43nm,1.1s
**APE Apeiranthos 79.77 308**⇑ *i*P **P** **19 49 35.0 -2.2**
**ERIK Erikli-Kesan 79.78 312** *e*P **P** **19 49 35.4 -1.7**
**EDRB Edirne 79.88 313** *e*P **P** **19 49 36.9 -0.7**
**IDI Anoyia 79.93 306** P **P** **19 49 38.1 0.0**
comp=Z,78nm,1.0s,baz=91,slow=7.2,SNR=19
**IDI Anoyia 79.93 306** P **P** **19 49 37.1 -1.0**
**IDI Anoyia 79.93 306** *e*P **P** **19 49 38.3 +0.2**
**IDI Anoyia 79.93 306** P **P** **19 49 37.1 -1.0**
**SIVA Sivas 79.94 306** P **P** **19 49 37.6 -0.5**
**SIGR SIGRI 79.96 311** *e*P **P** **19 49 37.3 -0.8**
**LEOM Leova 79.97 318**⇑ *i*P **P** **19 49 37.3 -0.6**
**LEOM Leova 79.97 318**⇑ *i*P **P** **19 49 37.3 -0.6**
**GADA Gvkgeada 80.14 311** *e*P **P** **19 49 37.7 -1.3**
**ALN Alexandroupoli 80.18 312** *e*P P 19 49 34.8 -4.4
**ALN Alexandroupoli 80.18 312** P **P** **19 49 37.9 -1.3**
**SORM Soroca 80.34 320**⇑ P **P** **19 49 37.6 -2.3**
**SORM Soroca 80.34 320**⇑ *i*P **P** **19 49 37.6 -2.3**
**PGOR Pogoanele 80.43 316**⇑ *i*P **P** **19 49 42.0 +1.5**
**PETR Petresti 80.46 317** ⇓ *i*P **P** **19 49 37.8 -2.8**
**SMTH Samothraki Isl 80.47 312** P **P** **19 49 39.9 -1.0**
**AKASG Malin Array Be 80.50 322** P **P** **19 49 39.3 -1.5**
comp=Z,58nm,1.2s,baz=87,slow=4.5,SNR=86
AKASG PP **PP** **19 52 44.7 +0.5**
comp=Z,19nm,1.1s,baz=94,slow=6.2,SNR=4.4
AKASG S **S** **19 59 42.3 -3.8**
comp=Z,0.2nm,0.3s,baz=96,slow=8.7,SNR=4.1
**AKASG Malin Array Be 80.50 322** P **P** **19 49 39.3 -1.5**
AKASG 19 52 44.7
AKASG S **S** **19 59 42.3 -3.8**
**VAM Vamos 80.51 306** P **P** **19 49 41.1 0.0**
**KIEV Kiev 80.51 322***c e*P **P** **19 49 39.8 -1.0**
KIEV pmax pmax
comp=Z,82nm,1.2s
**KIEV Kiev 80.51 322** PFAKE 19 49 50.0 +9.2
KIEV LR LR
comp=Z,6µm,20.0s
**GRER 80.55 317**⇑ *i*P **P** **19 49 41.8 +0.6**
**LIA Limnos Island 80.61 311** P **P** **19 49 40.1 -1.5**
**ISR Istrita 80.78 316**⇑ P **P** **19 49 40.9 -1.6**
**ISR Istrita 80.78 316**⇑ *i*P **P** **19 49 40.9 -1.6**
**SZH Strazhica 80.78 315** *i*P **P** **19 49 41.4 -1.1**
**DIM Dimitrovgrad 80.81 313** P **P** **19 49 41.8 -0.8**
**KARY Karystos 80.81 309** P **P** **19 49 41.6 -1.1**
**VRI Vrincioaia 80.84 317**⇑ P **P** **19 49 42.7 0.0**
**VRI Vrincioaia 80.84 317**⇑ *i*P **P** **19 49 42.7 0.0**
**SULR 80.88 316** ⇓ *i*P **P** **19 49 43.3 +0.4**
**PLOR Plostina 80.89 317** ⇓ P **P** **19 49 42.4 -0.6**
**PLOR Plostina 80.89 317** ⇓ *i*P **P** **19 49 42.4 -0.6**
**TMCR Tamitsa 81.01 337** *e*P **P** **19 49 43.4 +0.3**
TMCR *e*S **S** **19 59 53.4 +2.6**
TMCR pmax pmax
comp=Z,350nm,1.0s
**TESR Tescani 81.05 318**⇑ *i*P **P** **19 49 43.2 -0.6**
**TESR Tescani 81.05 318**⇑ *i*P **P** **19 49 43.2 -0.6**
**SECR 81.09 316** ⇓ *i*P **P** **19 49 45.0 +0.9**
**VNDA Vanda 81.11 169** P **P** **19 49 43.9 +0.4**
comp=Z,17nm,1.1s,baz=303,slow=5.9,SNR=44
VNDA S **S** **19 59 52.1 +0.5**
comp=Z,0.6nm,1.0s,baz=194,slow=16,SNR=5.8
**VNDA Vanda 81.11 169** P **P** **19 49 43.9 +0.4**
VNDA S **S** **19 59 52.1 +0.5**
**PVL Pavlikeni 81.20 314** *i*P P 19 49 48.0 +3.3
**PTL Penteli 81.26 309** P **P** **19 49 43.8 -1.3**
**ZIMR 81.28 315**⇑ P **P** **19 49 44.3 -0.7**
**ZIMR 81.28 315**⇑ *i*P **P** **19 49 44.3 -0.7**
**MLR Muntele Rosu 81.28 317** P **P** **19 49 44.5 -0.8**
comp=Z,48nm,1.1s,baz=54,slow=2.4,SNR=74
**MLR Muntele Rosu 81.28 317** ⇓ P **P** **19 49 44.9 -0.3**
**MLR Muntele Rosu 81.28 317** ⇓ *i*P **P** **19 49 44.9 -0.3**
**RAO Raoul Island 81.31 119** PFAKE 19 50 00.0 +14
RAO LR LR
comp=Z,20µm,20.0s
**RZN Rozhen 81.33 313** *i*P **P** **19 49 44.8 -0.8**
**KAVA Kavala 81.33 312** P **P** **19 49 44.4 -1.0**
**PLD Plovdiv 81.42 313** *i*P **P** **19 49 44.8 -1.1**
**PRAR RASCA 81.53 319**⇑ P **P** **19 49 45.8 -0.5**
**OUR Ouranopolis 81.60 311** *e*P **P** **19 49 44.6 -2.1**
**HUMR Humele 81.73 316**⇑ *i*P **P** **19 49 47.5 0.0**
**PAIG Paliouri 81.75 311** P **P** **19 49 46.6 -1.0**
**DOPR Dopca 81.77 317** ⇓ *i*P **P** **19 49 47.1 -0.6**
**DOPR Dopca 81.77 317** ⇓ *i*P **P** **19 49 47.1 -0.6**
**MTUR Matau 81.83 316**⇑ P **P** **19 49 48.6 +0.5**
**MTUR Matau 81.83 316**⇑ *i*P **P** **19 49 48.6 +0.5**
**JOSR Joseni 81.85 318**⇑ *i*P **P** **19 49 48.5 +0.4**
**VOIR 81.88 317** ⇓ P **P** **19 49 48.1 -0.3**

**VOIR 81.88 317** ⇓ *i*P **P** **19 49 48.1 -0.3**
**VOIR 81.88 317** ⇓ *i*P **P** **19 49 48.1 -0.3**
**NVR Nevrokopi 81.89 312** P **P** **19 49 47.0 -1.4**
**PGB Panagyurishte 81.90 314** *i*P **P** **19 49 47.5 -1.0**
**PLG Polygyros 82.01 311** P **P** **19 49 47.4 -1.7**
**ATAL Atalanti 82.03 310** P **P** **19 49 47.4 -1.7**
**ATAL Atalanti 82.03 310** P **P** **19 49 47.4 -1.7**
**MMB Musomiste 82.03 313** *i*P **P** **19 49 47.5 -1.7**
**LKR Lokris 82.03 310** P **P** **19 49 47.9 -1.3**
**LKR Lokris 82.03 310** P **P** **19 49 47.9 -1.3**
**SRS Serrai 82.04 312** P **P** **19 49 47.7 -1.5**
**ARR Arges 82.16 316** ⇓ *i*P **P** **19 49 49.6 -0.2**
**ARR Arges 82.16 316** ⇓ *i*P **P** **19 49 49.6 -0.2**
**SOH Sokhos 82.16 312** P **P** **19 49 48.0 -1.9**
**SOH Sokhos 82.16 312** P **P** **19 49 48.0 -1.9**
**SBA Scott Base 82.20 169** *e*P **P** **19 49 50.8 +1.5**
SBA pmax pmax
comp=Z,68nm,1.0s
SBA MLR MLR
comp=Z,13µm,21.0s
**SBA Scott Base 82.20 169** *e*P **P** **19 49 50.8 +1.5**
comp=Z,68nm,1.0s
SBA LR LR
comp=Z,13µm,21.0s
**TSUM Tsumeb 82.21 251** *e*P **P** **19 49 51.2 +0.6**
comp=Z,44nm,1.0s
TSUM LR LR
comp=Z,15µm,20.0s
**BURAR Bucovina Array 82.25 319** ⇓ P **P** **19 49 49.9 -0.4**
**BURAR Bucovina Array 82.25 319** ⇓ *i*P **P** **19 49 49.9 -0.4**
**MICGM Minsk 82.36 326**⇑ *e*P **P** **19 49 50.0 -0.5**
**MPEP Malo Peshtene 82.37 314** *i*P **P** **19 49 50.5 -0.3**
**MPEP Malo Peshtene 82.37 314** *i*P **P** **19 49 50.5 -0.3**
**MNK Minsk 82.39 326**⇑ *i*P **P** **19 49 50.0 -0.6**
MNK *e*S **S** **20 00 06.0 +0.5**
MNK *e*PS **PnS** **20 01 00.0 +3.4**
MNK *e*SS **SS** **20 05 24.0 -2.5**
MNK pmax pmax
comp=E,630nm,1.5s
MNK pmax pmax
comp=Z,480nm,1.5s
**GUR Goura 82.42 309** P **P** **19 49 49.5 -1.9**
**KKB Krupnik 82.56 313** *i*P **P** **19 49 50.3 -1.6**
**KKB Krupnik 82.56 313** *i*P **P** **19 49 50.3 -1.6**
**KNT Kendrikon 82.56 312** P **P** **19 49 50.1 -1.8**
**KNT Kendrikon 82.56 312** P **P** **19 49 50.1 -1.8**
**KLV Kalavryta, Ach 82.59 309** P **P** **19 49 50.2 -2.0**
**VTS Vitosha 82.60 313** *i*P **P** **19 49 51.2 -1.1**
**VTS Vitosha 82.60 313** *i*P **P** **19 49 51.2 -1.1**
**LIT Litokhoron 82.68 311** P **P** **19 49 50.7 -1.9**
**ARCR ARCALIA 82.71 318**⇑ *i*P **P** **19 49 52.8 +0.3**
**LOT Lotru 82.77 316**⇑ *i*P **P** **19 49 53.1 +0.1**
**VAY Valandovo 82.84 312** *i*P **P** **19 49 53.6 +0.3**
**VAY Valandovo 82.84 312** *i*P **P** **19 49 53.6 +0.3**
**GRG Griva 82.90 312** *e*P **P** **19 49 52.3 -1.4**
**GRG Griva 82.90 312** P **P** **19 49 52.1 -1.6**
**NACGM Naroch 83.08 326** *e*P **P** **19 49 53.0 -1.3**
**CJR Cluj-Napoca 83.14 318** ⇓ P **P** **19 49 55.2 +0.4**
**CJR Cluj-Napoca 83.14 318** ⇓ *i*P **P** **19 49 55.2 +0.4**
**AXS Araxos 83.22 309** P **P** **19 49 55.8 +0.5**
**IDID Didziasalis 83.22 326** *e*P **P** **19 49 54.9 0.0**
IDID IAmb IAmb 19 49 59.6
comp=Z,108nm,1.1s
**BMR Baia Mare 83.40 319**⇑ P **P** **19 49 56.2 +0.1**
**BMR Baia Mare 83.40 319**⇑ *i*P **P** **19 49 56.2 +0.1**
**GZR Gura Zlata 83.44 316**⇑ P **P** **19 49 57.3 +0.9**
**GZR Gura Zlata 83.44 316**⇑ *i*P **P** **19 49 57.3 +0.9**
**DEV Deva 83.45 317**⇑ P **P** **19 49 57.8 +1.4**
**DEV Deva 83.45 317**⇑ *i*P **P** **19 49 57.8 +1.4**
**LVV L'vov 83.51 321** *e*P **P** **19 49 55.9 -0.7**
LVV *e* 19 49 58.8
LVV *e*S **S** **20 00 12.4 -4.7**
**IIGN Ignalina 83.51 326** *e*P **P** **19 49 56.5 0.0**
IIGN IAmb IAmb 19 50 00.1
comp=Z,112nm,1.0s
**IZAR Zarasai 83.60 327** *e*P **P** **19 49 56.9 0.0**
IZAR IAmb IAmb 19 50 00.5
comp=Z,62nm,1.0s
**ISAL Salakas 83.62 327** *e*P **P** **19 49 57.0 0.0**
ISAL IAmb IAmb 19 50 01.6
comp=Z,88nm,1.1s
**DRGR 83.75 318** ⇓ P **P** **19 49 58.0 0.0**
**DRGR 83.75 318** ⇓ *i*P **P** **19 49 58.0 0.0**
**SKO Skopje 83.78 313** *i*P **P** **19 49 58.1 -0.1**
**LVZ Lovozero 83.85 340***c i*P **P** **19 49 57.1 -0.9**
LVZ pmax pmax
comp=Z,277nm,1.4s
LVZ MLR MLR
comp=Z,5µm,23.0s
**LVZ Lovozero 83.85 340** P **P** **19 49 58.7 +0.7**
comp=Z,895nm,0.9s,SNR=9.3
**BILL Bilibino 83.97 20***c i*P **P** **19 49 57.7 -0.8**
BILL *i* 19 50 03.1
BILL *i*S **S** **20 00 24.0 +3.0**
BILL pmax pmax
comp=Z,115nm,1.5s
BILL MLR MLR
comp=Z,10µm,17.0s
**VSU Vasula 84.06 330***c i*P **P** **19 49 58.7 -0.4**
VSU pmax pmax
comp=Z,721nm,1.5s
VSU MLR MLR
comp=Z,12µm,24.0s
**OHR Ohrid 84.12 312** *i*P **P** **19 49 59.2 -0.8**
**TRPA Tarpa 84.13 319**⇑ *e*P **P** **19 49 59.9 +0.1**
**APA Apatity 84.15 339** ⇓ *i*P **P** **19 49 59.0 -0.5**
APA *i*S **S** **20 00 22.0 -0.9**
APA pmax pmax
comp=Z,18nm,1.2s
APA MLR MLR
comp=Z,7µm,19.0s
**BZS Buzias 84.28 316**⇑ P **P** **19 49 59.5 -1.2**
**BZS Buzias 84.28 316**⇑ *i*P **P** **19 49 59.5 -1.2**
**KWP Kalwaria Pacla 84.31 320** *e*P **P** **19 50 00.6 -0.1**
KWP *e*S **S** **20 00 23.0 -2.1**
KWP LMZ LR 20 28 54.6
**KWP Kalwaria Pacla 84.31 320**⇑ *e*P **P** **19 50 00.6 -0.1**
KWP *e*S **S** **20 00 23.1 -2.1**
KWP MLR MLR
comp=Z,4µm,27.6s
**SIRR Siria 84.37 317**⇑ *i*P **P** **19 50 01.3 +0.2**
**UZH Uzhgorod 84.38 319** *i*P P **19 49 59.8 -1.3**
UZH *e*PPP PPP 19 55 09.5
UZH *i*S **S** **20 00 21.0 -4.9**
UZH *e*SS **SS** **20 06 01.0 +4.7**
UZH *e*SSS SSS 20 09 15.5
**KOLS Kolonicke sedl 84.45 320** *e*P **P** **19 50 02.0 +0.5**
KOLS pmax pmax
comp=Z,277nm,1.4s
**KOLS Kolonicke sedl 84.45 320** *e*P **P** **19 50 02.0 +0.5**
**KOLS Kolonicke sedl 84.45 320** *e*S **S** **20 00 25.4 -1.3**
**BANR Banloc 84.58 316** ⇓ *i*P **P** **19 50 02.4 +0.3**
**MIDW Midway 84.60 61** PFAKE 19 50 10.0 +7.4
MIDW LR LR
comp=Z,4µm,20.0s
**TIR Tirane 84.85 312** PFAKE 19 50 10.0 +6.4
TIR LR LR
comp=Z,6µm,20.0s
**SUW Suwalki 84.92 325** *e*P **P** **19 50 03.0 -0.6**
SUW *e* 19 51 57.9
SUW *e*S **S** **20 00 27.3 -3.7**
SUW LMZ LR 20 34 17.5
**SUW Suwalki 84.92 325**⇑ *e*P **P** **19 50 03.0 -0.6**
SUW *e*S **S** **20 00 27.3 -3.7**
SUW MLR MLR
comp=Z,5µm,21.7s
**PVY Plav 84.97 313** *e*P **P** **19 50 03.1 -1.3**
**IVA Berane 85.06 313**⇑ *i*P **P** **19 50 03.9 -0.8**
**FINES FINESS Array B 85.17 332** P **P** **19 50 04.3 -0.4**
comp=Z,88nm,1.0s,baz=114,slow=5.2,SNR=78
FINES PKKPbc **PKKPbc** **20 08 13.2 -0.5**
comp=Z,2.9nm,1.0s,baz=202,slow=1.5,SNR=3.8
**FINES FINESS Array B 85.17 332** *i*P **P** **19 50 05.0 +0.3**
FINES pmax pmax
comp=Z,89nm,1.0s
**DIVS Divibare 85.17 315**⇑ *i*P **P** **19 50 03.8 -1.5**
**DIVS Divibare 85.17 315** P **P** **19 50 04.6 -0.7**
**STHS Stebnicka Huta 85.21 320** *e*P **P** **19 50 05.4 +0.2**
STHS pmax pmax
comp=Z,45nm,1.0s
**STHS Stebnicka Huta 85.21 320** *e*P **P** **19 50 05.4 +0.2**
**ULC Ulcinj 85.40 312**⇑ *i*P **P** **19 50 05.0 -1.4**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TTG** | **Podgorica** | **85.46 313** | ⇑ | *i*P | **P** | **19 50 06.1** | **-0.5** |
| **DRME** | **Dracevica, Mon** | **85.48 313** | ⇑ | *i*P | **P** | **19 50 06.1** | **-0.6** |
| **PLE** | **Pljevlja** | **85.49 314** | | *e*P | **P** | **19 50 06.8** | **-0.1** |
| **PKSN** | **Nyarlorinc** | **85.69 317** | ⇓ | *e*P | **P** | **19 50 08.5** | **+0.8** |
| **NKY** | **Níksic** | **85.70 313** | ⇑ | *i*P | **P** | **19 50 07.0** | **-1.0** |
| **BUM** | **Brajici-Budva** | **85.71 313** | ⇑ | *i*P | **P** | **19 50 07.5** | **-0.5** |
| **NKME** | **Niksic** | **85.73 313** | ⇑ | *i*P | **P** | **19 50 07.5** | **-0.5** |
| **NIE** | **Niedzica** | **85.81 320** | | *e*P | **P** | **19 50 08.3** | **0.0** |
| NIE | | | | *e*S | **S** | **20 00 39.4** | **-0.7** |
| NIE | | | | LMZ | LR | 20 32 36.5 | |
| **NIE** | **Niedzica** | **85.81 320** | | *e*P | **P** | **19 50 08.4** | **+0.1** |
| NIE | | | | *e*S | **S** | **20 00 39.5** | **-0.7** |
| NIE | | | | MLR | MLR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| **UPM** | **Unac-Piva** | **85.82 314** | ⇑ | *i*P | **P** | **19 50 07.1** | **-1.6** |
| **PSZ** | **Piszkesteto** | **85.84 318** | | *e*P | **P** | **19 50 07.8** | **-0.7** |
| PSZ | | | | pmax | pmax | | |
| | comp=Z,84nm,1.0s | | | | | | |
| PSZ | | | | MLR | MLR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **PSZ** | **Piszkesteto** | **85.84 318** | ⇑ | *i*P | **P** | **19 50 07.9** | **-0.6** |
| **PSZ** | **Piszkesteto** | **85.84 318** | ⇑ | *e*P | **P** | **19 50 08.2** | **-0.3** |
| **PSZ** | **Piszkesteto** | **85.84 318** | | *e*P | **P** | **19 50 07.8** | **-0.7** |
| | comp=Z,84nm,1.0s | | | | | | |
| PSZ | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| **PKS6** | **Bocsa** | **85.85 317** | ⇑ | *e*P | **P** | **19 50 08.7** | **+0.2** |
| **BEL** | **Belsk** | **85.92 322** | | *e*P | **P** | **19 50 08.6** | **-0.1** |
| BEL | | | | *e*S | **S** | **20 00 41.9** | **+1.0** |
| BEL | | | | LMZ | LR | 20 32 52.0 | |
| **BEL** | **Belsk** | **85.92 322** | ⇑ | *e*P | **P** | **19 50 08.7** | **0.0** |
| BEL | | | | *e*S | **S** | **20 00 42.0** | **+1.0** |
| BEL | | | | MLR | MLR | | |
| | comp=Z,7µm,24.4s | | | | | | |
| **HCY** | **Herceg Novi** | **86.02 313** | ⇑ | *i*P | **P** | **19 50 09.0** | **-0.4** |
| **BRY** | **Bratogost** | **86.05 313** | ⇑ | *i*P | **P** | **19 50 09.1** | **-0.6** |
| **PKS7** | **Kunszentmiklos** | **86.19 317** | ⇓ | *e*P | **P** | **19 50 10.7** | **+0.5** |
| **OJC** | **Ojcow** | **86.26 321** | | *e*P | **P** | **19 50 10.3** | **-0.2** |
| OJC | | | | *e*S | **S** | **20 00 42.2** | **-2.3** |
| OJC | | | | LMZ | LR | 20 36 16.6 | |
| **OJC** | **Ojcow** | **86.26 321** | ⇑ | *e*P | **P** | **19 50 10.4** | **-0.1** |
| OJC | | | | *e*S | **S** | **20 00 42.2** | **-2.3** |
| OJC | | | | MLR | MLR | | |
| | comp=Z,4µm,25.4s | | | | | | |
| **LANS** | **Liptovska Anna** | **86.31 319** | | *e*P | **P** | **19 50 11.9** | **+1.1** |
| **LANS** | **Liptovska Anna** | **86.31 319** | | *e*P | **P** | **19 50 11.9** | **+1.1** |
| **BUD** | **Budapest** | **86.35 318** | ⇑ | *e*P | **P** | **19 50 10.7** | **-0.2** |
| **VYHS** | **Vyhne** | **86.62 319** | | *e*P | **P** | **19 50 11.6** | **-0.7** |
| VYHS | | | | pmax | pmax | | |
| | comp=Z,65nm,1.6s | | | | | | |
| **VYHS** | **Vyhne** | **86.62 319** | | *e*P | **P** | **19 50 11.6** | **-0.7** |
| **VYHS** | **Vyhne** | **86.62 319** | | *e*S | **S** | **20 00 43.7** | **-4.4** |
| **NVL** | **N'lazarevskaya** | **86.70 199** | | *e*P | P | 19 50 06.7 | -5.5 |
| NVL | | | | *e* | | 19 50 13.3 | |
| NVL | | | | *e**PP | pP | 19 50 17.4 | -2.2 |
| NVL | | | | *e* | | 19 53 36.5 | |
| NVL | | | | *e*S | S | 20 00 39.3 | -8.6 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,38nm,1.1s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,6µm,17.0s | | | | | | |
| **KLNR** | **Kaliningrad** | **86.74 325** | | *e*P | **P** | **19 50 13.4** | **+0.8** |
| KLNR | | | | pmax | pmax | | |
| | comp=Z,772nm,1.3s | | | | | | |
| **PKSG** | | **86.76 318** | ⇓ | *e*P | **P** | **19 50 13.5** | **+0.5** |
| **CSKK** | **Cs˘ákako** | **86.85 318** | | *e*P | **P** | **19 50 13.3** | **-0.1** |
| **TIP** | **Timpagrande** | **86.93 309** | | *e*P | **P** | **19 50 15.0** | **+0.9** |
| | comp=Z,96nm,1.2s | | | | | | |
| TIP | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| **PKST** | **T''s** | **86.99 317** | ⇓ | *e*P | **P** | **19 50 14.5** | **+0.4** |
| **KEV** | **Kevo** | **87.09 340** | | *e*P | **P** | **19 50 13.8** | **-0.3** |
| KEV | | | | pmax | pmax | | |
| | comp=Z,237nm,1.4s | | | | | | |
| KEV | | | | MLR | MLR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| **KEV** | **Kevo** | **87.09 340** | | *e*P | **P** | **19 50 13.8** | **-0.3** |
| | comp=Z,237nm,1.4s | | | | | | |
| KEV | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| **AFI** | **Afiamalu** | **87.20 104** | | *e*P | **P** | **19 50 17.8** | **+1.9** |
| AFI | | | | pmax | pmax | | |
| | comp=Z,749nm,1.7s | | | | | | |
| AFI | | | | MLR | MLR | | |
| | comp=Z,7µm,22.0s | | | | | | |
| **AFI** | **Afiamalu** | **87.20 104** | | *e*P | **P** | **19 50 17.8** | **+1.9** |
| | comp=Z,749nm,1.7s | | | | | | |
| AFI | | | | LR | LR | | |
| | comp=Z,7µm,22.0s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **87.26 320** | | *e*P | **P** | **19 50 15.3** | **0.0** |
| OKC | | | | *e* | | 19 50 22.0 | |
| OKC | | | | *e*S | **S** | **20 00 53.4** | **-0.7** |
| OKC | | | | *e* | | 20 02 00.8 | |
| OKC | | | | MLR | MLR | | |
| | comp=Z,2µm,15.9s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **87.26 320** | | *e*P | **P** | **19 50 15.3** | **0.0** |
| OKC | | | | *e*pP | **pP** | **19 50 22.0** | **-0.8** |
| OKC | | | | *e*x | x | 19 50 31.9 | |
| OKC | | | | *e*S | **S** | **20 00 53.4** | **-0.7** |
| OKC | | | | *e*PS | **PnS** | **20 02 00.8** | **+4.7** |
| OKC | | | | AMS | AMS | 20 42 30.0 | |
| | comp=Z,2µm,15.9s | | | | | | |
| **RAC** | **Raciborz** | **87.26 320** | | *e*P | **P** | **19 50 15.8** | **+0.5** |
| RAC | | | | *e*S | **S** | **20 00 55.0** | **+0.9** |
| RAC | | | | MLR | MLR | | |
| | comp=Z,3µm,19.3s | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.54 340** | | P | **P** | **19 50 16.4** | **+0.1** |
| | comp=Z,86nm,1.0s,baz=104,slow=4.6,SNR=52 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.54 340** | | P | **P** | **19 50 16.4** | **+0.1** |
| **ARE0** | **ARCESS Array S** | **87.54 340** | | *e*P | **P** | **19 50 17.0** | **+0.7** |
| ARE0 | | | | IAMs_20 | IAMs_20 | 20 33 53.9 | |
| | comp=Z,6µm,21.6s | | | | | | |
| **MORC** | **Moravsky Berou** | **87.64 320** | | P | **P** | **19 50 17.1** | **-0.1** |
| MORC | | | | pmax | pmax | | |
| | comp=Z,440nm,1.3s | | | | | | |
| **MORC** | **Moravsky Berou** | **87.64 320** | ⇑ | *i*P | **P** | **19 50 16.7** | **-0.5** |
| **MORC** | **Moravsky Berou** | **87.64 320** | | *e*P | **P** | **19 50 16.9** | **-0.3** |
| | comp=Z,438nm,1.3s | | | | | | |
| **CUC** | **Castrocucco** | **87.74 310** | | *e*P | **P** | **19 50 17.7** | **-0.3** |
| | comp=Z,39nm,1.0s | | | | | | |
| CUC | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **BEHE** | **Becsehely** | **87.75 317** | ⇑ | *e*P | **P** | **19 50 18.5** | **+0.8** |
| **SOP** | **Sopron** | **88.03 318** | ⇑ | *e*P | **P** | **19 50 18.7** | **-0.4** |
| **KOGS** | **Kog** | **88.10 317** | | *i*P | **P** | **19 50 19.5** | **0.0** |
| KOGS | | | | *e*S | **S** | **20 01 01.1** | **-1.3** |
| **KRLC** | **Kraliky** | **88.17 320** | | *e*P | **P** | **19 50 20.1** | **+0.4** |
| KRLC | | | | *e* | | 19 50 26.7 | |
| **KRLC** | **Kraliky** | **88.17 320** | | *e*P | **P** | **19 50 20.1** | **+0.4** |
| KRLC | | | | *e*pP | **pP** | **19 50 26.7** | **-0.5** |
| KRLC | | | | *e*x | x | 19 50 36.1 | |
| **KTK1** | **Kautokeino** | **88.19 339** | | *e*P | **P** | **19 50 19.9** | **+0.5** |
| KTK1 | | | | IAmb | IAmb | 19 50 22.2 | |
| | comp=Z,182nm,1.1s | | | | | | |
| **VRAC** | **Vranov** | **88.20 319** | | P | **P** | **19 50 19.8** | **-0.1** |
| | comp=Z,22nm,1.2s,baz=88,slow=5.0,SNR=18 | | | | | | |
| **VRAC** | **Vranov** | **88.20 319** | | P | **P** | **19 50 19.8** | **-0.1** |
| **VRAC** | **Vranov** | **88.20 319** | ⇑ | *i*P | **P** | **19 50 19.1** | **-0.8** |
| **GKP** | **Gorka Klasztor** | **88.28 323** | | *e*P | **P** | **19 50 20.0** | **-0.1** |
| GKP | | | | *e*S | **S** | **20 01 05.8** | **+2.2** |
| GKP | | | | LMZ | LR | 20 34 56.1 | |
| **GKP** | **Gorka Klasztor** | **88.28 323** | | *e*P | **P** | **19 50 20.0** | **-0.1** |
| GKP | | | | *e*S | **S** | **20 01 05.8** | **+2.2** |
| GKP | | | | MLR | MLR | | |
| | comp=Z,3µm,24.1s | | | | | | |
| **WDD** | **Wield Dalam** | **88.38 306** | | PFAKE | | 19 50 30.0 | +9.0 |
| WDD | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| **HAMF** | **Hammerfest** | **88.42 341** | | *e*P | **P** | **19 50 20.5** | **+0.1** |
| **DPC** | **Dobruska-Polom** | **88.49 320** | | *e*P | **P** | **19 50 21.9** | **+0.6** |
| DPC | | | | *e* | | 19 50 28.5 | |
| DPC | | | | *e*S | **S** | **20 01 03.3** | **-2.7** |
| DPC | | | | MLR | MLR | | |
| | comp=Z,4µm,17.0s | | | | | | |
| **DPC** | **Dobruska-Polom** | **88.49 320** | | *e*P | **P** | **19 50 21.9** | **+0.6** |
| DPC | | | | *e*pP | **pP** | **19 50 28.5** | **-0.2** |
| DPC | | | | *e*x | x | 19 50 38.0 | |
| DPC | | | | *e*S | **S** | **20 01 03.3** | **-2.7** |
| DPC | | | | *e*x | x | 20 02 18.9 | |
| DPC | | | | AMS | AMS | 20 41 20.0 | |
| | comp=Z,4µm,17.0s | | | | | | |
| **CONA** | **Conrad Observa** | **88.53 318** | | *i*P | **P** | **19 50 22.0** | **+0.5** |
| | comp=Z,46nm,1.3s,SNR=13 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **88.56 321** | | *e*P | **P** | **19 50 21.7** | **+0.2** |
| KSP | | | | *e*S | **S** | **20 01 05.0** | **-1.5** |
| KSP | | | | LMZ | LR | 20 33 40.8 | |
| **KSP** | **Ksiaz** | **88.56 321** | ⇑ | *e*P | **P** | **19 50 21.7** | **+0.2** |
| KSP | | | | *e*S | **S** | **20 01 05.1** | **-1.5** |
| KSP | | | | MLR | MLR | | |
| | comp=Z,4µm,24.1s | | | | | | |
| **VAE** | **Valguarnera** | **88.60 307** | | P | **P** | **19 50 23.8** | **+1.7** |
| | comp=Z,36nm,1.0s,baz=68,slow=8.7,SNR=5.2 | | | | | | |
| **ARSA** | **Arzberg** | **88.68 317** | | *i* PcP | **P** | **19 50 23.1** | **+0.9** |
| | comp=Z,120nm,1.4s,SNR=19 | | | | | | |
| **BOJS** | **Bojanci** | **88.70 316** | | *i* P | **P** | **19 50 22.3** | **0.0** |
| BOJS | | | | *e*S | **S** | **20 01 06.2** | **-1.8** |
| BOJS | | | | *e* | | 20 03 01.7 | |
| **UPC** | **Upice** | **88.70 321** | | *e*P | **P** | **19 50 22.6** | **+0.4** |
| UPC | | | | *e* | | 19 50 29.3 | |
| UPC | | | | *e* | | 19 53 54.8 | |
| UPC | | | | *e*S | **S** | **20 01 04.7** | **-3.2** |
| UPC | | | | MLR | MLR | | |
| | comp=Z,6µm,20.3s | | | | | | |
| **UPC** | **Upice** | **88.70 321** | | *e*P | **P** | **19 50 22.6** | **+0.4** |
| UPC | | | | *e*pP | **pP** | **19 50 29.3** | **-0.4** |
| UPC | | | | *e*x | x | 19 50 38.1 | |
| UPC | | | | *e*PP | **PP** | **19 53 54.8** | **+3.7** |
| UPC | | | | *e*S | **S** | **20 01 04.7** | **-3.2** |
| UPC | | | | AMS | AMS | 20 40 00.0 | |
| | comp=Z,6µm,20.3s | | | | | | |
| **TREC** | **Trest** | **88.92 319** | | *e*P | **P** | **19 50 23.2** | **-0.1** |
| TREC | | | | *e* | | 19 50 29.9 | |
| TREC | | | | *e*S | **S** | **20 01 06.4** | **-3.6** |
| TREC | | | | MLR | MLR | | |
| | comp=Z,3µm,18.5s | | | | | | |
| **TREC** | **Trest** | **88.92 319** | | *e*P | **P** | **19 50 23.2** | **-0.1** |
| TREC | | | | *e*pP | **pP** | **19 50 29.9** | **-0.8** |
| TREC | | | | *e*x | x | 19 50 39.5 | |
| TREC | | | | *e*PP | PP | 19 54 02.1 | +9.3 |
| TREC | | | | *e*S | S | **20 01 06.4** | **-3.6** |
| TREC | | | | AMS | AMS | 20 43 00.0 | |
| | comp=Z,3µm,18.5s | | | | | | |
| **SOKA** | **Soboth** | **88.96 317** | | *i* PcP | **P** | **19 50 24.5** | **+0.9** |
| | comp=Z,160nm,1.2s,SNR=18 | | | | | | |
| **LJU** | **Ljubljana** | **89.25 316** | | *e*P | **P** | **19 50 25.2** | **+0.3** |
| LJU | | | | *e* | | 19 52 35.7 | |
| LJU | | | | *e*S | **S** | **20 01 11.8** | **-1.4** |
| LJU | | | | *e* | | 20 03 07.7 | |
| LJU | | | | *e* | | 20 03 23.2 | |
| **OBKA** | **Obir** | **89.28 316** | | *i* PcP | **P** | **19 50 26.1** | **+1.0** |
| | comp=Z,116nm,1.6s,SNR=7.5 | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **89.43 320** | | *e*P | **P** | **19 50 25.8** | **+0.2** |
| GOPC | | | | *e* | | 19 50 32.4 | |
| GOPC | | | | *e* | | 19 54 02.5 | |
| GOPC | | | | *e*S | **S** | **20 01 12.8** | **-1.9** |
| GOPC | | | | *e* | | 20 02 28.3 | |
| GOPC | | | | MLR | MLR | | |
| | comp=Z,4µm,18.1s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **89.43 320** | | *e*P | **P** | **19 50 25.8** | **+0.2** |
| GOPC | | | | *e*pP | **pP** | **19 50 32.4** | **-0.7** |
| GOPC | | | | *e*x | x | 19 50 42.3 | |
| GOPC | | | | *e*PP | PP | 19 54 02.5 | +5.6 |
| GOPC | | | | *e*S | **S** | **20 01 12.8** | **-1.9** |
| GOPC | | | | *e*x | x | 20 02 28.3 | |
| GOPC | | | | AMS | AMS | 20 42 00.0 | |
| | comp=Z,4µm,18.1s | | | | | | |
| **HOPEN** | **Hopen** | **89.51 347** | | *e*P | **P** | **19 50 25.9** | **+0.5** |
| HOPEN | | | | IAMs_20 | IAMs_20 | 20 36 46.3 | |
| | comp=Z,11µm,21.9s | | | | | | |
| **CLTB** | **Caltabellotta** | **89.56 307** | | *e*P | **P** | **19 50 26.8** | **+0.2** |
| | comp=Z,118nm,1.4s | | | | | | |
| CLTB | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **MOA** | **Molln** | **89.59 318** | | *i* P | **P** | **19 50 26.8** | **+0.3** |
| | comp=Z,67nm,1.4s,SNR=11 | | | | | | |
| **PRU** | **Pruhonice** | **89.59 320** | | *e*P | **P** | **19 50 26.5** | **+0.1** |
| PRU | | | | *e* | | 19 50 33.3 | |
| PRU | | | | *e* | | 19 54 00.5 | |
| PRU | | | | *e*S | **S** | **20 01 12.7** | **-3.5** |
| PRU | | | | *e* | | 20 02 30.7 | |
| PRU | | | | MLR | MLR | | |
| | comp=Z,3µm,17.8s | | | | | | |
| **PRU** | **Pruhonice** | **89.59 320** | | *e*P | **P** | **19 50 26.5** | **+0.1** |
| PRU | | | | *e*pP | **pP** | **19 50 33.3** | **-0.5** |
| PRU | | | | *e*PP | **PP** | **19 54 00.5** | **+2.3** |
| PRU | | | | *e*S | **S** | **20 01 12.7** | **-3.5** |
| PRU | | | | *e*x | x | 20 02 30.7 | |
| PRU | | | | AMS | AMS | 20 45 50.0 | |
| | comp=Z,3µm,17.8s | | | | | | |
| **PVCC** | **Panska Ves** | **89.62 320** | | *e*P | **P** | **19 50 26.9** | **+0.4** |
| PVCC | | | | *e* | | 19 54 02.8 | |
| PVCC | | | | *e*S | **S** | **20 01 17.2** | **+0.7** |
| PVCC | | | | *e* | | 20 02 29.7 | |
| PVCC | | | | MLR | MLR | | |
| | comp=Z,5µm,18.7s | | | | | | |
| **PVCC** | **Panska Ves** | **89.62 320** | | *e*P | **P** | **19 50 26.9** | **+0.4** |
| PVCC | | | | *e*PP | **PP** | **19 54 02.8** | **+4.4** |
| PVCC | | | | *e*S | **S** | **20 01 17.2** | **+0.7** |
| PVCC | | | | *e*PS | **PS** | **20 02 29.7** | **+5.1** |
| PVCC | | | | AMS | AMS | 20 40 40.0 | |
| | comp=Z,5µm,18.7s | | | | | | |
| **PRA** | **Prague** | **89.67 320** | | *e*P | **P** | **19 50 26.8** | **+0.1** |
| PRA | | | | *e* | | 19 50 33.5 | |
| PRA | | | | *e* | | 19 54 02.9 | |
| PRA | | | | *e*S | **S** | **20 01 14.3** | **-2.6** |
| PRA | | | | MLR | MLR | | |
| | comp=Z,4µm,18.0s | | | | | | |
| **PRA** | **Prague** | **89.67 320** | | *e*P | **P** | **19 50 26.8** | **+0.1** |
| PRA | | | | *e*pP | **pP** | **19 50 33.5** | **-0.7** |
| PRA | | | | *e*x | x | 19 50 42.9 | |
| PRA | | | | *e*PP | **PP** | **19 54 02.9** | **+4.1** |
| PRA | | | | *e*S | **S** | **20 01 14.3** | **-2.6** |
| PRA | | | | AMS | AMS | 20 45 50.0 | |
| | comp=Z,4µm,18.0s | | | | | | |
| **TRI** | **Trieste** | **89.76 316** | | P | **P** | **19 50 28.6** | **+1.4** |
| **TRI** | **Trieste** | **89.76 316** | | P | **P** | **19 50 28.6** | **+1.4** |
| **TRO** | **Tromso** | **89.81 340** | | *e*P | **P** | **19 50 25.9** | **-1.0** |
| TRO | | | | *e*SKSac | SKSac | 20 00 46.0 | -10 |
| TRO | | | | IAMs_20 | IAMs_20 | 20 38 21.9 | |
| | comp=Z,6µm,19.8s | | | | | | |
| **CADS** | **Cadrg** | **89.82 316** | | *i* P | **P** | **19 50 27.2** | **-0.3** |
| CADS | | | | *e* | | 19 52 37.7 | |
| CADS | | | | *e*S | **S** | **20 01 17.2** | **-1.4** |
| **CADS** | **Cadrg** | **89.82 316** | | S | **S** | **20 01 17.2** | **-1.4** |
| **BSD** | **Bornholm Skovb** | **89.84 325** | ⇑ | *i*P | **P** | **19 50 27.9** | **+0.5** |
| BSD | | | | pmax | pmax | | |
| | comp=Z,130nm,1.1s | | | | | | |
| **BSD** | **Bornholm Skovb** | **89.84 325** | ⇑ | *i*P | **P** | **19 50 27.9** | **+0.5** |
| | comp=Z,128nm,1.1s | | | | | | |
| **MYKA** | **Terra Mystica** | **89.91 317** | ⇓ | *i* PcP | **PcP** | **19 50 28.7** | **-0.6** |
| | comp=Z,116nm,1.6s | | | | | | |
| **GEC2** | **GERESS Array S** | **90.04 319** | | *e*P | **P** | **19 50 28.6** | **0.0** |
| | comp=Z,256nm,1.5s,baz=93,slow=4.7 | | | | | | |
| GEC2 | | | | *e*pP | **pP** | **19 50 36.8** | **+0.7** |
| GEC2 | | | | *e*S | **S** | **20 01 17.7** | **-3.0** |
| | baz=93,slow=8.9 | | | | | | |
| **GERES** | **GERESS Array B** | **90.04 319** | | P | **P** | **19 50 27.5** | **-1.2** |
| | comp=Z,72nm,1.1s,baz=92,slow=4.3,SNR=101 | | | | | | |
| **GERES** | **GERESS Array B** | **90.04 319** | | P | **P** | **19 50 27.5** | **-1.2** |
| **BRG** | **Berggiesshubel** | **90.05 321** | | *i* P | **P** | **19 50 28.6** | **+0.2** |
| | comp=Z,166nm,1.4s | | | | | | |
| BRG | | | | *e*PP | **PP** | **19 54 03.0** | **+1.2** |
| | comp=Z,33nm,1.3s | | | | | | |
| BRG | | | | S | **S** | **20 01 23.0** | **+2.6** |
| BRG | | | | PS | **PnS** | **20 02 29.0** | **-0.2** |
| BRG | | | | *e* | | 20 07 54.8 | |
| | comp=Z,36nm,2.1s | | | | | | |
| | comp=N,3µm,27.9s | | | | | | |
| | comp=E,3µm,26.9s | | | | | | |
| | comp=Z,4µm,20.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **90.05 321** | | *i* P | **P** | **19 50 28.6** | **+0.2** |
| BRG | | | | *e* | | 19 54 03.0 | |
| BRG | | | | S | **S** | **20 01 23.0** | **+2.6** |
| BRG | | | | PS | **PnS** | **20 02 29.0** | **-0.2** |
| BRG | | | | pmax | pmax | | |
| | comp=Z,166nm,1.4s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,33nm,1.3s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,36nm,2.1s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=N,3µm,27.9s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=E,3µm,26.9s | | | | | | |
| BRG | | | | MLR | MLR | | |
| | comp=Z,4µm,20.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **90.05 321** | | *e*P | **P** | **19 50 28.7** | **+0.2** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,162nm,1.4s,baz=93,slow=4.7 | | | | | | |
| BRG | | | | *e*S | **S** | **20 01 19.1** | **-1.4** |
| | baz=93,slow=8.9 | | | | | | |
| **KHC** | **Kasperske Hory** | **90.15 319** | | *e*P | **P** | **19 50 29.0** | **-0.1** |
| KHC | | | | *e* | | 19 50 44.3 | |
| KHC | | | | *e* | | 19 54 05.1 | |
| KHC | | | | *e*S | **S** | **20 01 20.3** | **-1.2** |
| KHC | | | | *e* | | 20 02 34.4 | |
| KHC | | | | MLR | MLR | | |
| | comp=Z,3µm,16.1s | | | | | | |
| **KHC** | **Kasperske Hory** | **90.15 319** | | *e*P | **P** | **19 50 29.0** | **-0.1** |
| KHC | | | | *e*x | x | 19 50 44.3 | |
| KHC | | | | *e*PP | **PP** | **19 54 05.1** | **+2.4** |
| KHC | | | | *e*S | **S** | **20 01 20.3** | **-1.2** |
| KHC | | | | *e*PS | **PS** | **20 02 34.4** | **+3.8** |
| KHC | | | | AMS | AMS | 20 45 50.0 | |
| | comp=Z,3µm,16.1s | | | | | | |
| **KHC** | **Kasperske Hory** | **90.15 319** | | *e*P | **P** | **19 50 28.8** | **-0.3** |
| | comp=Z,86nm,1.9s | | | | | | |
| **KBA** | **Koelnbreinsper** | **90.15 317** | | *i* P | **P** | **19 50 29.3** | **0.0** |
| | comp=Z,65nm,1.1s,SNR=9.4 | | | | | | |
| **RJOB** | **Jochberg** | **90.57 318** | | *e*P | **P** | **19 50 30.3** | **-0.8** |
| | comp=Z,98nm,1.7s,baz=93,slow=4.7 | | | | | | |
| RJOB | | | | *e*S | **S** | **20 01 21.1** | **-4.4** |
| | baz=93,slow=8.9 | | | | | | |
| **WET** | **Wettzell** | **90.61 319** | | *e*P | **P** | **19 50 31.2** | **0.0** |
| | comp=Z,192nm,1.6s,baz=93,slow=4.7 | | | | | | |
| WET | | | | *e*S | **S** | **20 01 24.1** | **-1.6** |
| | baz=93,slow=8.9 | | | | | | |
| **CLL** | **Collm** | **90.67 321** | ⇑ | *i*P | **P** | **19 50 31.1** | **-0.3** |
| CLL | | | | *i* | | 19 50 39.0 | |
| CLL | | | | *e*S | **S** | **20 01 24.0** | **-2.1** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,129nm,1.6s | | | | | | |
| CLL | | | | MLR | MLR | | |
| | comp=Z,3µm,21.7s | | | | | | |
| **CLL** | **Collm** | **90.67 321** | | *e*P | **P** | **19 50 31.2** | **-0.1** |
| | comp=Z,132nm,1.6s,baz=93,slow=4.7 | | | | | | |
| CLL | | | | *e*S | **S** | **20 01 23.6** | **-2.5** |
| | baz=93,slow=8.9 | | | | | | |
| **CLL** | **Collm** | **90.67 321** | ⇑ | *i*P | **P** | **19 50 31.1** | **-0.3** |
| | comp=Z,129nm,1.6s | | | | | | |
| CLL | | | | *i* pP | **pP** | **19 50 39.0** | **+0.1** |
| CLL | | | | *e*Pmax | | 19 50 42.0 | |
| CLL | | | | *i* | | 19 50 46.0 | |
| CLL | | | | *e* | | 19 52 37.0 | |
| CLL | | | | *e*PP | **PP** | **19 54 08.0** | **+1.3** |
| CLL | | | | *e*PPP | PPP | 19 55 54.0 | |
| CLL | | | | *e*S | **S** | **20 01 24.0** | **-2.1** |
| | comp=N,6µm,28.8s | | | | | | |
| CLL | | | | *e*S | **S** | **20 01 24.0** | **-2.1** |
| | comp=E,1µm,19.2s | | | | | | |
| CLL | | | | *e*PS | **PS** | **20 02 33.0** | **-3.2** |
| CLL | | | | *e*PPS | PPS | 20 03 11.0 | |
| CLL | | | | *e*(SS) | | 20 07 06.0 | |
| CLL | | | | *e* | | 20 10 15.0 | |
| CLL | | | | *e*SSS | SSS | 20 11 18.0 | |
| CLL | | | | *e*SSSS | | 20 14 21.0 | |
| CLL | | | | LmV | | 20 39 00.0 | |
| | comp=Z,3µm,21.7s | | | | | | |
| CLL | | | | Lmax | | 20 47 00.0 | |
| **ABTA** | **Abfaltersbach** | **90.70 317** | ⇓ | *i*P | **P** | **19 50 30.6** | **-1.1** |
| | comp=Z,50nm,1.2s,SNR=8.8 | | | | | | |
| **STEI** | **Steigen** | **90.93 338** | | *e*P | **P** | **19 50 33.3** | **+1.2** |
| **JOHN** | **Johnston Islan** | **90.95 73** | | PFAKE | | 19 50 40.0 | +6.6 |
| JOHN | | | | LR | LR | | |
| | comp=Z,412nm,20.0s | | | | | | |
| **NKC** | **Novy Kostel** | **90.96 320** | | *e*P | **P** | **19 50 33.2** | **+0.4** |
| NKC | | | | *e* | | 19 54 10.9 | |
| NKC | | | | *e*S | **S** | **20 01 27.3** | **-1.5** |
| NKC | | | | MLR | MLR | | |
| | comp=Z,4µm,17.2s | | | | | | |
| **NKC** | **Novy Kostel** | **90.96 320** | | *e*P | **P** | **19 50 33.2** | **+0.4** |
| NKC | | | | *e*PP | **PP** | **19 54 10.9** | **+1.9** |
| NKC | | | | *e*S | **S** | **20 01 27.3** | **-1.5** |
| NKC | | | | AMS | AMS | 20 42 30.0 | |
| | comp=Z,4µm,17.2s | | | | | | |
| **TANN** | **Tannenbergstha** | **90.96 320** | | *e*P | **P** | **19 50 32.8** | **0.0** |
| | comp=Z,93nm,1.6s,baz=93,slow=4.7 | | | | | | |
| TANN | | | | *e*S | **S** | **20 01 28.0** | **-1.0** |
| | baz=93,slow=8.9 | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **91.08 320** | | *e*P | **P** | **19 50 33.9** | **+0.5** |
| | comp=Z,120nm,1.6s,baz=93,slow=4.7 | | | | | | |
| ROTZ | | | | *e*S | **S** | **20 01 29.4** | **-0.6** |
| | baz=93,slow=8.9 | | | | | | |
| **SNAA** | **Sanae** | **91.31 198** | | P | **P** | **19 50 36.0** | **+2.0** |
| **SNAA** | **Sanae** | **91.31 198** | *d* | *i*P | **P** | **19 50 36.6** | **+2.6** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **SNAA** | **Sanae** | **91.31 198** | | *e*P | **P** | **19 50 34.5** | **+0.4** |
| | comp=Z,48nm,1.4s | | | | | | |
| **WTTA** | **Wattenberg** | **91.33 317** | | *i* P | **P** | **19 50 34.7** | **-0.1** |
| | comp=Z,94nm,1.1s,SNR=16 | | | | | | |
| **WATA** | **Walderalm** | **91.37 317** | ⇓ | *i*P | **P** | **19 50 34.8** | **-0.1** |
| | comp=Z,135nm,1.5s,SNR=14 | | | | | | |
| **MOX** | **Moxa** | **91.51 320** | | *e*P | **P** | **19 50 35.4** | **+0.1** |
| | comp=Z,102nm,1.5s,baz=93,slow=4.7 | | | | | | |
| MOX | | | | *e*S | **S** | **20 01 32.4** | **-1.4** |
| | baz=93,slow=8.9 | | | | | | |
| MOX | | | | *e*L | L | 20 38 25.9 | |
| | comp=Z,3µm,21.4s | | | | | | |
| **FUR** | **Furstenfeldbru** | **91.61 318** | | *e*P | **P** | **19 50 35.6** | **-0.3** |
| | comp=Z,92nm,1.4s,baz=93,slow=4.7 | | | | | | |
| FUR | | | | *e*S | **S** | **20 01 30.9** | **-4.0** |
| | baz=93,slow=8.9 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **91.69 348** | | *e*P | **P** | **19 50 35.8** | **+0.2** |
| **MOTA** | **Moosalm** | **91.69 317** | ⇓ | *i* PcP | **P** | **19 50 36.5** | **0.0** |
| | comp=Z,55nm,1.0s,SNR=26 | | | | | | |
| **GRF** | **Grafenberg Arr** | **91.72 319** | | *e*P | **P** | **19 50 36.6** | **+0.3** |
| | comp=Z,162nm,1.5s,baz=93,slow=4.7 | | | | | | |
| GRF | | | | *e*pP | **pP** | **19 50 44.9** | **+1.1** |
| GRF | | | | *e*S | **S** | **20 01 34.9** | **-0.9** |
| | baz=93,slow=8.9 | | | | | | |
| GRF | | | | *e*L | L | 20 42 18.5 | |
| | comp=Z,4µm,19.2s | | | | | | |
| **GRFO** | **Grafenberg** | **91.72 319** | | P | **P** | **19 50 37.3** | **+1.0** |
| GRFO | | | | pmax | pmax | | |
| | comp=Z,75nm,1.1s | | | | | | |
| **GRFO** | **Grafenberg** | **91.72 319** | | *e*P | **P** | **19 50 36.9** | **+0.6** |
| | comp=Z,75nm,1.1s | | | | | | |
| **HSPB** | **Hornsund (broa** | **91.74 347** | | *e*P | **P** | **19 50 35.5** | **-0.3** |
| HSPB | | | | *e*SKSac | SKSac | 20 00 58.4 | -8.5 |
| **RETA** | **Reutte** | **91.93 317** | | *i* PcP | **P** | **19 50 37.7** | **+0.3** |
| | comp=Z,72nm,1.1s,SNR=16 

**VSL Villasalto 92.66 309** *e*P P 19 50 37.1 -3.8
comp=Z,33nm,0.9s
VSL LR LR
comp=Z,3μm,19.0s
**TUE Stuetta 92.86 316** *e*P **P** **19 50 42.0 +0.1**
comp=Z,58nm,1.4s
TUE LR LR
comp=Z,3μm,20.0s
**VNA2 Neumayer--Watz 92.92 198** P **P** **19 50 42.7 +1.3**
baz=86,slow=4.5
**KONO Kongsberg 92.96 329** *e*P **P** **19 50 41.4 -0.4**
**KONO Kongsberg 92.96 329** *e*P **P** **19 50 41.0 -0.8**
KONO pmax pmax
comp=Z,88nm,1.2s
KONO MLR MLR
comp=Z,5μm,19.0s
**KONO Kongsberg 92.96 329** *e*P **P** **19 50 41.0 -0.8**
comp=Z,88nm,1.2s
KONO LR LR
comp=Z,5μm,19.0s
**STU Stuttgart 93.02 319** P **P** **19 50 43.2 +0.9**
STU pmax pmax
comp=Z,31nm,1.1s
**STU Stuttgart 93.02 319** *e*P **P** **19 50 43.0 +0.7**
comp=Z,57nm,1.2s,baz=93,slow=4.7
STU *e*S **S** **20 01 45.1 -2.3**
baz=93,slow=8.9
**STU Stuttgart 93.02 319** *e*P **P** **19 50 42.7 +0.4**
comp=Z,31nm,1.1s
**MUD Monsted U'grnd 93.15 326** *e*P **P** **19 50 43.9 +1.2**
MUD pmax pmax
comp=Z,150nm,1.5s
**MUD Monsted U'grnd 93.15 326** *i* P **P** **19 50 43.9 +1.2**
comp=Z,154nm,1.5s
**VNA1 Neumayer--Stat 93.28 198** P **P** **19 50 45.5 +2.5**
**HOMB Homborsund 93.52 328** *e*P P 19 50 49.6 +5.2
HOMB IAMs_20 IAMs_20 20 42 23.6
comp=Z,5μm,19.4s
**VNA3 Neumayer Olymp 93.52 198** P **P** **19 50 45.9 +1.7**
**TNS Taunus Mts 93.52 320** *e*P **P** **19 50 44.8 +0.1**
comp=Z,63nm,1.2s,baz=93,slow=4.7
TNS *e*S **S** **20 01 50.0 -1.9**
baz=93,slow=8.9
**BFO Black Forest 93.58 318** *e*P **P** **19 50 43.9 -1.1**
BFO pmax pmax
comp=Z,36nm,1.3s
BFO MLR MLR
comp=Z,4μm,20.0s
**BFO Black Forest 93.58 318** *e*P **P** **19 50 44.7 -0.3**
comp=Z,87nm,1.8s,baz=93,slow=4.7
BFO *e*S **S** **20 01 49.9 -2.6**
baz=93,slow=8.9
**BFO Black Forest 93.58 318** P **P** **19 50 45.7 +0.7**
comp=Z,106nm,1.4s,SNR=6.9
**BFO Black Forest 93.58 318** *e*P **P** **19 50 43.9 -1.1**
comp=Z,36nm,1.3s
BFO LR LR
comp=Z,4μm,20.0s
**IBBN Ibbenburen 93.96 322** *e*P **P** **19 50 46.7 +0.2**
comp=Z,95nm,1.6s,baz=93,slow=4.7
IBBN *e*S **S** **20 01 52.4 -3.1**
baz=93,slow=8.9
**AKN Aaknes 94.22 332** *e*P **P** **19 50 46.6 -0.9**
**BUG Bochum--Univer 94.27 321** *e*P **P** **19 50 47.7 -0.3**
comp=Z,113nm,2.0s,baz=93,slow=4.7
BUG *e*S **S** **20 01 55.9 -2.3**
baz=93,slow=8.9
**BLS5 Blasjo 94.57 329** *e*P **P** **19 50 49.5 +0.3**
**BNI Bardonecchia 94.72 315** *e*P **P** **19 50 52.1 +1.7**
BNI pmax pmax
comp=Z,24nm,1.3s
BNI MLR MLR
comp=Z,4μm,21.0s
**BNI Bardonecchia 94.72 315** *e*P **P** **19 50 52.1 +1.7**
comp=Z,24nm,1.3s
BNI LR LR
comp=Z,4μm,21.0s
**WLF Walferdange 95.01 319** P **P** **19 50 52.3 +0.8**
comp=Z,24nm,1.7s
**WLF Walferdange 95.01 319** *e*P **P** **19 50 49.6 -1.8**
WLF pmax pmax
comp=Z,33nm,1.3s
WLF MLR MLR
comp=Z,3μm,20.0s
**WLF Walferdange 95.01 319** *e*P **P** **19 50 52.3 +0.8**
comp=Z,48nm,1.4s,baz=93,slow=4.7
WLF *e*S **S** **20 02 03.1 -1.7**
baz=93,slow=8.9
**WLF Walferdange 95.01 319** *e*P **P** **19 50 49.6 -1.8**
comp=Z,33nm,1.3s
WLF LR LR
comp=Z,3μm,20.0s
**MEM Membach 95.08 320** P **P** **19 50 52.5 +0.7**
comp=Z,14nm,1.6s
**BER Bergen 95.09 330** *e*P **P** **19 50 52.3 +0.7**
**SUE Sulen 95.34 331** *e*P **P** **19 50 52.3 -0.4**
**BCLA Clavier 95.54 320** P **P** **19 50 54.0 +0.2**
comp=Z,17nm,1.4s
**TAM Tamanrasset 95.62 292** *e*P **P** **19 50 55.9 +0.9**
TAM pmax pmax
comp=Z,30nm,1.6s
TAM MLR MLR
comp=Z,4μm,20.0s
**TAM Tamanrasset 95.62 292** *e*P **P** **19 50 55.9 +0.9**
comp=Z,30nm,1.6s
TAM LR LR
comp=Z,4μm,20.0s
**DOU Dourbes 96.00 320** P **P** **19 50 55.5 -0.5**
comp=Z,16nm,1.9s
**SSB Saint Sauveur 96.23 315** *e*P **P** **19 50 57.0 -0.2**
SSB pmax pmax
comp=Z,17nm,1.4s
SSB MLR MLR
comp=Z,3μm,22.0s
**SSB Saint Sauveur 96.23 315** *e*P **P** **19 50 57.0 -0.2**
comp=Z,17nm,1.4s
SSB LR LR
comp=Z,3μm,22.0s
**TOC2 Torodi Ar. Sit 99.09 283** P **Pdif** **19 51 09.7 -1.0**
baz=99
**TORD Torodi Ar. Bea 99.12 283** P **Pdif** **19 51 09.7 -1.1**
comp=Z,4.8nm,1.1s,baz=76,slow=7.6,SNR=14
TORD PP **PP** **19 55 15.4 +1.9**
comp=Z,2.0nm,1.0s,baz=110,slow=6.8,SNR=3.1
TORD PKKP **PKKPdf** **20 07 38.8 -1.5**
comp=Z,1.1nm,0.5s,baz=298,slow=3.8,SNR=18
**DAG Danmarks Havn 99.34 348** *i* P **Pdif** **19 51 10.1 -0.3**
DAG pmax pmax
comp=Z,50nm,1.1s
**DAG Danmarks Havn 99.34 348** *i* P **Pdif** **19 51 10.1 -0.3**
comp=Z,40nm,1.1s
**DAG Danmarks Havn 99.34 348** *i* P **PP** **19 55 08.2 -5.1**
**ESK Eskdalemuir 100.18 326** PFAKE 19 51 30.0 +15
ESK LR LR
comp=Z,4μm,21.0s
**COLD Coldfoot 100.21 22** *e*Pdif **Pdif** **19 51 14.3 -0.2**
comp=Z,89nm,2.0s
**KDAK Kodiak Island 101.58 32** PFAKE 19 51 30.0 +9.2
KDAK LR LR
comp=Z,5μm,20.0s
**COLA College 101.85 24** PFAKE 19 51 30.0 +8.2
COLA LR LR
comp=Z,5μm,21.0s
**ILAR Eielson Array 102.27 24** PP PP 19 55 32.9 -2.8
comp=Z,8.6nm,1.0s,baz=295,slow=8.2,SNR=4.7
ILAR PKKPbc **PKKPbc** **20 07 28.2 -0.4**
comp=Z,1.6nm,0.9s,baz=126,slow=2.4,SNR=7.6
**SEW Seward 102.57 29** P **Pdif** **19 51 29.4 +4.3**
**ESDC Sonseca Array 102.94 310** P **Pdif** **19 51 27.7 +0.4**
comp=Z,0.2nm,0.4s,baz=43,slow=5.2,SNR=3.0
ESDC PP **PKiKP** **19 55 47.4 -0.1**
comp=Z,1.2nm,0.7s,baz=79,slow=6.9,SNR=4.2
**PAB San Pablo 103.25 310** PFAKE 19 51 40.0 +11
PAB LR LR
comp=Z,2μm,20.0s
**POHA Pohakuloa 104.28 70** PFAKE 19 51 50.0 +16
POHA LR LR
comp=Z,5μm,21.0s
**EGAK Eagle 104.54 23** PFAKE 19 51 50.0 +16
EGAK LR LR
comp=Z,7μm,20.0s
**SHEL Horse Pasture 104.62 253** PFAKE 19 51 50.0 +15
SHEL LR LR
comp=Z,5μm,20.0s
**PBRG Braganca 104.73 312** *e*PP PP 19 55 33.8 -21
**MVO Moncorvo 105.05 312** *e*PP PP 19 56 15.6 +18
**INK Inuvik 105.50 18** PP PP 19 56 03.7 +4.1
comp=Z,19nm,1.1s,baz=282,slow=5.6,SNR=5.6
**PBAR Barrancos 105.52 309** *e*PP PP 19 56 18.9 +18
**MTE Manteigas 105.56 311** *e*PP PP 19 56 21.5 +20
**MTE Manteigas 105.56 311** PFAKE 19 56 00.0
MTE LR LR
comp=Z,2μm,21.0s
**POLO Lamas de Olo 105.58 312** *e*PP PP 19 56 19.5 +18
**PGAV Gavieira, Arco 105.83 313** *e*PP PP 19 56 13.8 +11
**RTC Rabat Centre 105.95 304** PFAKE 19 56 00.0
RTC LR LR
comp=Z,22μm,19.0s
**SUMG Summit 106.03 348** *i* P **Pdif** **19 51 48.5 +7.7**
SUMG pmax pmax
comp=Z,33nm,1.3s
**SUMG Summit 106.03 348** *i* P **Pdif** **19 51 48.5 +7.7**
comp=Z,33nm,1.3s
**SUMG Summit 106.03 348** *i* P **PP** **19 56 05.6 +1.7**
comp=Z,54nm,1.3s
**H09N1 TRISTAN DA CUN 106.07 230** T T 21 49 39.3
SNR=11
**TRIS Tristan da Cun 106.07 230** PFAKE 19 56 10.0
TRIS LR LR
comp=Z,7μm,20.0s
**H09W1 TRISTAN DA CUN 106.08 230** T T 21 49 46.4
SNR=52
**PVAQ Vaqueiros 106.17 308** *e*PP PP 19 56 12.4 +6.7
**PMTG Montargil 106.30 310** *e*PP PP 19 56 26.4 +20
**PCAS Casmilo, Conde 106.34 311** *e*PP PP 19 56 18.5 +12
**PBDV Barranco-do-Ve 106.36 308** *e*PP PP 19 56 22.7 +16
**PCVE Castro Verde 106.38 308** *e*PP PP 19 56 09.5 +2.2
**PNCL Nicolau / Gran 106.69 309** *e*PP PP 19 56 27.6 +18
**MORF Marmelete 106.92 308** *e*PP PP 19 56 29.6 +18
**PFVI Vila Bisbo 107.08 308** *e*PP PP 19 56 28.3 +16
**PFVI Vila Bisbo 107.08 308** *e*PP PP 19 56 28.3 +16
**PMAFR Mafra 107.13 310** *e*PP PP 19 56 31.6 +19
**TBI Tubuai 107.21 115** *e*PP PP 19 56 09.3 -4.4
comp=Z,679nm,28.2s
TBI *e*Sdif Sdif 20 03 43.1 -5.6
comp=Z,4μm,28.5s
**TBI Tubuai 107.21 115** *e*PS PS 20 05 33.9 -1.4
comp=Z,3μm,27.5s
TBI *e*SS SS 20 11 18.8 -2.2
comp=Z,7μm,27.5s
**TBI Tubuai 107.21 115** *e*LR LR 20 27 13.1
comp=Z,20μm,23.8s
**PPT2 Papeete2 108.12 109** *e*PP PP 19 56 11.8 -8.8
comp=Z,910nm,27.0s
PPT2 *e*Sdif Sdif 20 03 31.9 -25
comp=Z,7μm,26.5s
**PPT2 Papeete2 108.12 109** *e*PS PS 20 05 43.5 -1.5
comp=Z,2μm,30.2s
**PPT2 Papeete2 108.12 109** *e*LR LR 20 27 32.5
comp=Z,17μm,24.2s
**PMSA Palmer Station 111.42 187** PFAKE 19 56 10.0
PMSA LR LR
comp=Z,12μm,22.0s
**WRAK Wrangell Islan 112.30 29** PFAKE 19 56 20.0
WRAK LR LR
comp=Z,5μm,20.0s
**HOPE Hope Point 112.65 206** PFAKE 19 56 20.0
HOPE LR LR
comp=Z,7μm,19.0s
**SFJD Kangerlussuaq 113.03 348** PFAKE 19 56 20.0
SFJD LR LR
comp=Z,4μm,19.0s
**ASCN Ascension 114.00 260** PFAKE 19 56 20.0
ASCN LR LR
comp=Z,10μm,20.0s
**PMOZ Porto Moniz, M 114.66 305** *e*PP PP 19 57 15.6 +8.4
**YKA Yellowknife Ar 115.22 17** PKP **PKPdf** **19 56 08.6 -1.2**
comp=Z,7.1nm,0.9s,baz=318,slow=2.2,SNR=12
YKA PP **PP** **19 57 10.0 +0.4**
comp=Z,12nm,1.1s,baz=321,slow=6.2,SNR=5.9
YKA PKKP **PKKPdf** **20 07 06.7 -4.3**
comp=Z,1.3nm,0.8s,baz=136,slow=4.3,SNR=4.0
**YKA Yellowknife Ar 115.22 17** PKIKP **PKPdf** **19 56 08.6 -1.2**
YKA 19 57 10.1
**PSMN Pico do Norte, 119.65 311** *e*PP PP 19 57 38.2 -3.5
**PSMN Pico do Norte, 119.65 311** *e*SKKP SS 20 13 51.3 -13
**CMLA Cha da Macela 119.72 312** PFAKE 19 56 30.0 +11
CMLA LR LR
comp=Z,3μm,20.0s
**PSET Sete Cidades 119.84 312** *e*PP PP 19 57 46.3 +3.3
**RKT Rikitea 120.16 119** *e*PP PP 19 57 42.2 -3.4
comp=Z,806nm,28.2s
RKT *e*Sdif Sdif 20 05 35.6 -1.1
comp=Z,3μm,27.2s
**RKT Rikitea 120.16 119** *e*PS PS 20 07 34.3 -2.1
comp=Z,3μm,26.5s
RKT *e*SS SS 20 14 08.0 -4.1
comp=Z,7μm,28.5s
**RKT Rikitea 120.16 119** *e*LR LR 20 33 06.2
comp=Z,20μm,26.2s
**PGRA Graciosa 121.02 315** *e*SKKP SS 20 14 09.6 -12
**ROSA Rosais 121.33 314** *e*PP PP 19 57 50.8 -2.2
**ROSA Rosais 121.33 314** *e*SKKP **SS** **20 14 21.9 -4.2**
**NLWA Neilton Lookou 121.62 34** PFAKE 19 56 30.0 +7.3
NLWA LR LR
comp=Z,5μm,21.0s
**B05A Bryant 122.07 32** P **PKPdf** **19 56 23.9 +0.4**
baz=122
**EFI East Falkland 122.52 196** PFAKE 19 56 40.0 +16
EFI LR LR
comp=Z,7μm,22.0s
**EDM Edmonton 122.76 23** *e*PKIKP **PKPdf** **19 56 24.5 -0.2**
**EDM Edmonton 122.76 23** *e*PKPdf **PKPdf** **19 56 24.5 -0.2**
**PTCN Pitcairn Islan 123.68 123** PFAKE 19 56 40.0 +13
PTCN LR LR
comp=Z,19μm,21.0s
**I03D Drain, OR 124.01 37** P **PKPdf** **19 56 27.5 +0.2**
baz=124
**I04A Tendick Farm, 124.52 37** P **PKPdf** **19 56 29.0 +0.7**
baz=124
**HAWA Hanford 124.60 33** PFAKE 19 56 40.0 +12
HAWA LR LR
comp=Z,5μm,21.0s
**NEW Newport 124.62 30** PP PP 19 58 17.2 +2.5
comp=Z,13nm,1.1s,baz=0.3,slow=6.8,SNR=6.2
**NEW Newport 124.62 30** P **PKPdf** **19 56 28.8 +0.4**
baz=124
**NEW Newport 124.62 30** PFAKE 19 56 40.0 +12
NEW LR LR
comp=Z,4μm,20.0s
**L02D Cave Junction, 124.69 39** P **PKPdf** **19 56 30.2 +1.5**
baz=125
**I05D Terrebonne, OR 124.84 36** P **PKPdf** **19 56 29.4 +0.4**
baz=125
**HUMO Hull Mountain 124.85 38** *e*PKPdf **PKPdf** **19 56 30.3 +1.3**
**J04D Umpqua Nationa 125.02 37** P **PKPdf** **19 56 30.0 +0.4**
baz=125
**FFC Flin Flon 125.33 16** *e*PKIKP **PKPdf** **19 56 29.7 +0.2**
FFC MLR MLR
comp=Z,6μm,22.0s
**FFC Flin Flon 125.33 16** *e*PKPdf **PKPdf** **19 56 29.7 +0.2**
FFC LR LR
comp=Z,6μm,22.0s
**J05D Fort Rock, OR 125.51 37** P **PKPdf** **19 56 30.1 -0.4**
baz=125
**M02C Callahan 125.58 39** P **PKPdf** **19 56 30.7 +0.2**
baz=126
**N02D Trinity Center 125.90 40** P **PKPdf** **19 56 31.8 +0.7**
baz=126
**M04C Macdoel 126.00 38** P **PKPdf** **19 56 30.9 -0.5**
baz=126
**BSMT Bassoo Peak 126.05 29** *e*PKPdf **PKPdf** **19 56 30.8 -0.6**
**YBMT Yellow Bay 126.41 28** *e*PKPdf **PKPdf** **19 56 32.3 +0.3**
**SWMT Swartz Lake 126.66 28** *e*PKPdf **PKPdf** **19 56 32.3 -0.2**
**O03D Paynes Creek 126.85 40** P **PKPdf** **19 56 32.7 -0.2**
baz=127
**MOD Modoc 126.88 37** *e*PKPdf **PKPdf** **19 56 33.4 +0.3**
**SLMT Seeley Lake 127.10 28** *e*PKPdf **PKPdf** **19 56 33.3 -0.1**
**MSO Missoula 127.17 29** P **PKPdf** **19 56 33.4 0.0**
baz=127
**SCHQ Schefferville 127.30 351** PKP **PKPdf** **19 56 33.2 -0.1**
comp=Z,32nm,1.1s,baz=40,slow=4.4,SNR=8.6
SCHQ PP **PP** **19 58 35.5 +3.6**
comp=Z,24nm,1.0s,baz=23,slow=9.4,SNR=4.5
**CHMT Chamberlain Mo 127.44 29** *e*PKPdf **PKPdf** **19 56 33.7 -0.4**
**WVOR Wild Horse Val 127.55 36** *e*PKIKP **PKPdf** **19 56 34.6 +0.3**
WVOR MLR MLR
comp=Z,5μm,19.0s
**WVOR Wild Horse Val 127.55 36** *e*PKPdf **PKPdf** **19 56 34.6 +0.3**
WVOR LR LR
comp=Z,5μm,19.0s
**EGMT Eagleton 128.20 25** P **PKPdf** **19 56 35.7 +0.4**
baz=128
**EGMT Eagleton 128.20 25** *e*PKPdf **PKPdf** **19 56 33.9 -1.5**
EGMT LR LR
comp=Z,3μm,20.0s
**MFID Camas Ranch 128.53 33** *e*PKPdf **PKPdf** **19 56 36.3 +0.1**
**LRM Limekiln Ridge 128.62 29** *e*PKPdf **PKPdf** **19 56 37.2 +0.8**
**DLMT Dillon 128.88 30** *e*PKPdf **PKPdf** **19 56 37.7 +1.0**
**MCMT McKenzie Canyo 129.13 30** *e*PKPdf **PKPdf** **19 56 37.8 +0.4**
**BOZ Bozeman (W) 129.14 29** *e*PKIKP **PKPdf** **19 56 37.4 +0.1**
BOZ MLR MLR
comp=Z,4μm,19.0s
**BOZ Bozeman (W) 129.14 29** P **PKPdf** **19 56 37.7 +0.4**
baz=129
**BOZ Bozeman (W) 129.14 29** *e*PKPdf **PKPdf** **19 56 37.4 +0.1**
BOZ LR LR
comp=Z,4μm,19.0s
**HLID Hailey 129.20 32** P **PKPdf** **19 56 38.1 +0.6**
baz=129
**HLID Hailey 129.20 32** *e*PKPdf **PKPdf** **19 56 38.4 +0.9**
HLID LR LR
comp=Z,7μm,22.0s
**QLMT Earthquake Lak 129.83 29** *e*PKPdf **PKPdf** **19 56 40.4 +1.7**
**GCMT Greycliff 129.95 27** *e*PKPdf **PKPdf** **19 56 39.8 +1.0**
**A25A Svangstu Ranch 130.02 20** P **PKPdf** **19 56 39.0 +0.3**
baz=130
**DGMT Dagmar 130.04 21** P **PKPdf** **19 56 38.9 +0.2**
baz=130
**DGMT Dagmar 130.04 21** *e*PKPdf **PKPdf** **19 56 39.9 +1.1**
DGMT LR LR
comp=Z,4μm,20.0s
**NVAR Mina Array Bea 130.13 40** PKP **PKPdf** **19 56 39.2 -0.3**
comp=Z,14nm,1.0s,baz=269,slow=1.9,SNR=21
NVAR PP **PP** **19 58 51.6 -0.1**
comp=Z,6.1nm,1.0s,baz=297,slow=4.5,SNR=4.0
**YMR Madison River 130.18 29** *e*PKPdf **PKPdf** **19 56 39.8 +0.4**
**YNR Norris Junctio 130.28 29** *e*PKPdf **PKPdf** **19 56 41.4 +1.8**
**YFT Old Faithful 130.40 29** *e*PKPdf **PKPdf** **19 56 42.5 +2.6**
**A26A Wade Farm, Ken 130.42 19** P **PKPdf** **19 56 39.4 -0.1**
baz=130
**LKWY Lake 130.53 29** PFAKE 19 56 50.0 +10
LKWY LR LR
comp=Z,8μm,22.0s
**H17A Grant Village 130.57 29** P **PKPdf** **19 56 41.7 +1.6**
baz=130
**B25A Knox Farm, Ray 130.58 21** P **PKPdf** **19 56 40.4 +0.6**
baz=130
**ELK Elko 130.60 36** *e*PKIKP **PKPdf** **19 56 40.8 +0.5**
**ELK Elko 130.60 36** *e*PKPdf **PKPdf** **19 56 40.8 +0.5**
**A27A Ledoux Ranch, 130.63 19** P **PKPdf** **19 56 40.4 +0.5**
baz=130
**RLMT Red Lodge 130.64 27** P **PKPdf** **19 56 40.8 +0.5**
baz=130
**RLMT Red Lodge 130.64 27** *e*PKPdf **PKPdf** **19 56 39.7 -0.6**
RLMT LR LR
comp=Z,5μm,20.0s
**LAO LASA Array 130.73 24** PFAKE 19 56 50.0 +10
LAO LR LR
comp=Z,4μm,19.0s
**ULM Lac du Bonnet 130.95 14** PKP **PKPdf** **19 56 39.5 -0.9**
comp=Z,35nm,1.0s,baz=343,slow=2.9,SNR=16
ULM PP **PP** **19 58 55.5 -0.4**
comp=Z,15nm,1.0s,baz=360,slow=2.9,SNR=4.8
**ULM Lac du Bonnet 130.95 14** PKIKP **PKPdf** **19 56 39.5 -0.9**
ULM 19 58 55.5
**A28A Rude Farm, Bot 130.97 18** P **PKPdf** **19 56 40.8 +0.3**
baz=131
**C25A Freed Ranch, W 131.02 21** P **PKPdf** **19 56 41.0 +0.3**
baz=131
**TPAW Teton Pass 131.04 30** *e*PKPdf **PKPdf** **19 56 42.1 +1.0**
**VES Vestal, Richgr 131.06 43** P **PKPdf** **19 56 41.3 +0.3**
baz=131
**LOHW Long Hollow 131.13 30** *e*PKPdf PKPpre 19 56 30.3
**SNOW Snow King Moun 131.16 30** *e*PKPdf **PKPdf** **19 56 41.4 0.0**
**REDW Red Top Meadow 131.19 30** *e*PKPdf **PKPdf** **19 56 42.1 +0.7**
**C26A Wahner Farm, P 131.33 20** P **PKPdf** **19 56 42.2 +0.9**
baz=131
**B28A Dugan Ranch, T 131.35 18** P **PKPdf** **19 56 41.7 +0.5**
baz=131
**CWC Cottonwood Cre 131.41 42** P **PKPdf** **19 56 42.8 +0.9**
baz=131
**AHID Auburn Hatcher 131.49 31** PFAKE 19 56 50.0 +8.1
AHID LR LR
comp=Z,5μm,20.0s
**GRAC Grapevine Rang 131.56 41** P **PKPdf** **19 56 42.8 +0.8**
baz=131
**ISA Isabella 131.58 43** *e*PKIKP **PKPdf** **19 56 43.6 +1.5**
**ISA Isabella 131.58 43** P **PKPdf** **19 56 43.0 +0.9**
baz=132
**ISA Isabella 131.58 43** *e*PKPdf **PKPdf** **19 56 43.6 +1.5**
**ARVC Arvin 131.62 44** P **PKPdf** **19 56 42.6 +0.5**
baz=132
**C27A Sayler Ranch, 131.63 20** P **PKPdf** **19 56 42.6 +0.8**
baz=131
**BGU Big Grassy Mou 131.74 34** *e*PKPdf **PKPdf** **19 56 43.3 +0.9**
**DAC Darwin (Calif) 131.83 42** *e*PKIKP **PKPdf** **19 56 40.3 -2.4**
**DAC Darwin (Calif) 131.83 42** *e*PKPdf **PKPdf** **19 56 40.3 -2.4**
**D26A Manning 131.89 21** P **PKPdf** **19 56 42.7 +0.4**
baz=132
**R11A Troy Canyon, C 131.90 38** P **PKPdf** **19 56 44.2 +1.4**
baz=132
**R11A Troy Canyon, C 131.90 38** *e*P **PKPdf** **19 56 43.6 +0.9**
**B30A Myrvik Farm, E 131.96 17** P **PKPdf** **19 56 42.3 -0.1**
baz=132
**E25A Miller Ranch, 131.99 22** P **PKPdf** **19 56 43.0 +0.5**
baz=132
**MPMC Manual Prospec 132.02 42** P **PKPdf** **19 56 43.5 +0.4**
baz=132
**A32A Rocking H Ranc 132.03 15** P **PKPdf** **19 56 42.1 -0.3**
baz=132
**HWUT Hardware Ranch 132.07 32** *e*PKPdf **PKPdf** **19 56 42.5 -0.5**
HWUT LR LR
comp=Z,4μm,20.0s
**MDND Maddock 132.12 18** P **PKPdf** **19 56 42.1 -0.6**
baz=132
**MDND Maddock 132.12 18** *e*PKPdf **PKPdf** **19 56 43.3 +0.6**
**B31A Greenbush Farm 132.18 16** P **PKPdf** **19 56 42.2 -0.6**
baz=132
**BW06 Boulder Array 132.27 30** *e*PKPdf **PKPdf** **19 56 42.5 -0.9**
BW06 LR LR
comp=Z,4μm,20.0s
**A33A Warroad 132.29 14** P **PKPdf** **19 56 43.0 0.0**
baz=132
**TPNV Topopah Spring 132.32 40** P **PKPdf** **19 56 41.7 -1.9**
baz=132
**EDW2 Edwards Air Fo 132.33 44** P **PKPdf** **19 56 44.3 +0.8**
baz=132
**DUG Dugway 132.35 35** *e*PKIKP **PKPdf** **19 56 44.5 +1.0**
DUG MLR MLR
comp=Z,5μm,22.0s
**DUG Dugway 132.35 35** P **PKPdf** **19 56 43.7 +0.1**
baz=132
**DUG Dugway 132.35 35** *e*PKPdf **PKPdf** **19 56 44.5 +1.0**
DUG LR LR
comp=Z,5μm,22.0s
**E26A Carlson Angus 132.36 21** P **PKPdf** **19 56 43.3 0.0**
baz=132
**TCUT Toone Canyon 132.50 33** *e*PKPdf **PKPdf** **19 56 45.2 +1.3**
**B32A Ashes, Strandq 132.50 15** P **PKPdf** **19 56 43.3 -0.1**
baz=132
**CTU Camp Tracy 132.61 33** *e*PKPdf **PKPdf** **19 56 44.7 +0.7**
**MWC Mount Wilson 132.64 44** *e*PKIKP **PKPdf** **19 56 46.0 +1.7**
**MWC Mount Wilson 132.64 44** *e*PKPdf **PKPdf** **19 56 46.0 +1.7**
**C31A Landman Farms, 132.73 17** P **PKPdf** **19 56 43.7 -0.1**
baz=132
**AGMN Agassiz Nation 132.77 15** P **PKPdf** **19 56 44.6 +0.7**
baz=133
**AGMN Agassiz Nation 132.77 15** *e*PKPdf **PKPdf** **19 56 42.6 -1.3**
AGMN LR LR
comp=Z,4μm,19.0s
**D29A Pettibone, Tap 132.82 19** P **PKPdf** **19 56 43.4 -0.7**
baz=133
**B34A Aery, Baudette 132.89 14** P **PKPdf** **19 56 43.3 -0.8**
baz=133
**E28A Huff 132.89 20** P **PKPdf** **19 56 44.1 -0.1**
baz=133
**GSC Goldstone 132.91 42** *e*PKIKP **PKPdf** **19 56 43.7 -0.9**
**GSC Goldstone 132.91 42** P **PKPdf** **19 56 46.1 +1.4**
baz=133
**GSC Goldstone 132.91 42** *e*PKPdf **PKPdf** **19 56 43.7 -0.9**
**NLU North Lily Min 132.93 34** *e*PKPdf **PKPdf** **19 56 46.1 +1.4**
**D30A Buchanan 133.04 18** P **PKPdf** **19 56 45.4 +0.9**
baz=133
**G25A Newell 133.08 23** P **PKPdf** **19 56 45.9 +1.3**
baz=133
**MPU Maple Canyon 133.14 34** *e*PKPdf PKPpre 19 56 36.6
**B35A Bob, Littlefor 133.22 13** P **PKPdf** **19 56 44.7 0.0**
baz=133

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SHPR | Sheep Range | 133.29 | 40 | ePKPdf | PKPdf | 19 56 43.4 | -2.0 | |
| D31A | Mcclaflin, Tow | 133.41 | 17 | P | PKPdf | 19 56 46.0 | +0.9 | |
| | baz=133 | | | | | | | |
| TUQ | Turquoise Moun | 133.42 | 42 | P | PKPdf | 19 56 46.8 | +1.1 | |
| | baz=133 | | | | | | | |
| G27A | Dupree | 133.48 | 22 | P | PKPdf | 19 56 45.6 | +0.2 | |
| | baz=133 | | | | | | | |
| F28A | McLaughlin | 133.49 | 20 | P | PKPdf | 19 56 47.2 | +1.8 | |
| | baz=133 | | | | | | | |
| E30A | Jud | 133.54 | 18 | P | PKPdf | 19 56 45.4 | 0.0 | |
| | baz=133 | | | | | | | |
| RSSD | Black Hills | 133.72 | 24 | ePKHKP | PKPpre | 19 56 33.3 | | |
| RSSD | Black Hills | 133.72 | 24 | ePKPpre | PKPpre | 19 56 33.3 | | |
| CCUT | Cedar City | 133.76 | 38 | ePKPdf | PKPdf | 19 56 45.8 | -0.6 | |
| C35A | Jirik Farms, M | 133.78 | 13 | P | PKPdf | 19 56 46.7 | +0.9 | |
| | baz=134 | | | | | | | |
| E31A | Nome | 133.80 | 17 | P | PKPdf | 19 56 46.4 | +0.5 | |
| | baz=134 | | | | | | | |
| K22A | Casper | 133.81 | 28 | P | PKPdf | 19 56 46.5 | +0.2 | |
| | baz=134 | | | | | | | |
| K22A | Casper | 133.81 | 28 | ePKPdf | PKPdf | 19 56 46.8 | +0.5 | |
| TMUT | Trail Mountain | 133.87 | 34 | ePKPdf | PKPdf | 19 56 48.3 | +1.7 | |
| I25A | Rochford | 133.93 | 24 | P | PKPdf | 19 56 47.9 | +1.4 | |
| | baz=134 | | | | | | | |
| GMRC | Granite Mounta | 133.98 | 42 | P | PKPdf | 19 56 47.5 | +0.7 | |
| | baz=134 | | | | | | | |
| C36A | Pine Crest Far | 133.98 | 12 | P | PKPdf | 19 56 46.0 | -0.2 | |
| | baz=134 | | | | | | | |
| D34A | Park Rapids | 134.06 | 15 | P | PKPdf | 19 56 46.6 | +0.3 | |
| | baz=134 | | | | | | | |
| EYMN | Ely | 134.08 | 11 | P | PKPdf | 19 56 46.1 | -0.3 | |
| | baz=134 | | | | | | | |
| EYMN | Ely | 134.08 | 11 | ePKPdf | PKPdf | 19 56 46.7 | +0.3 | |
| EYMN | | | | LR | LR | | | |
| | comp=Z,6µm,21.0s | | | | | | | |
| F30A | Leola | 134.09 | 19 | P | PKPdf | 19 56 47.6 | +1.1 | |
| | baz=134 | | | | | | | |
| PFO | Pinyon Flat Ob | 134.09 | 44 | PKP | PKPdf | 19 56 48.7 | +1.7 | |
| | comp=Z,25nm,1.0s,baz=296,slow=2.3 | | | | | | | |
| PFO | Pinyon Flat Ob | 134.09 | 44 | PKIKP | PKPdf | 19 56 48.7 | +1.7 | |
| PFO | | | | MLR | MLR | | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| PFO | Pinyon Flat Ob | 134.09 | 44 | PKP | PKPdf | 19 56 48.7 | +1.7 | |
| PFO | | | | LR | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| G28A | Parade | 134.11 | 21 | P | PKPdf | 19 56 47.2 | +0.7 | |
| | baz=134 | | | | | | | |
| C37A | Embarrass | 134.15 | 12 | P | PKPdf | 19 56 46.8 | +0.3 | |
| | baz=134 | | | | | | | |
| D35A | Remer | 134.35 | 14 | P | PKPdf | 19 56 46.3 | -0.6 | |
| | baz=134 | | | | | | | |
| G29A | Hoven | 134.36 | 20 | P | PKPdf | 19 56 47.2 | +0.2 | |
| | baz=134 | | | | | | | |
| SRU | San Rafael | 134.38 | 34 | ePKIKP | PKPdf | 19 56 47.5 | +0.1 | |
| SRU | San Rafael | 134.38 | 34 | ePKPdf | PKPdf | 19 56 47.5 | +0.1 | |
| J25A | Sunshine Ranch | 134.41 | 25 | P | PKPdf | 19 56 46.9 | -0.4 | |
| | baz=134 | | | | | | | |
| C39A | Grand Marais | 134.45 | 10 | P | PKPdf | 19 56 45.2 | -1.8 | |
| | baz=134 | | | | | | | |
| D36A | Goodland | 134.46 | 13 | P | PKPdf | 19 56 45.1 | -2.0 | |
| | baz=134 | | | | | | | |
| I27A | Quinn | 134.55 | 23 | P | PKPdf | 19 56 45.3 | -2.1 | |
| | baz=134 | | | | | | | |
| D37A | Cotton | 134.64 | 12 | P | PKPdf | 19 56 46.6 | -0.8 | |
| | baz=134 | | | | | | | |
| G30A | Faulkton | 134.68 | 19 | P | PKPdf | 19 56 48.8 | +1.2 | |
| | baz=134 | | | | | | | |
| E35A | Pequot Lakes | 134.75 | 14 | P | PKPdf | 19 56 49.0 | +1.3 | |
| | baz=134 | | | | | | | |
| H29A | Onida | 134.75 | 21 | P | PKPdf | 19 56 46.3 | -1.5 | |
| | baz=135 | | | | | | | |
| BC3 | Big Chuckawall | 134.76 | 43 | P | PKPdf | 19 56 46.2 | -2.0 | |
| | baz=135 | | | | | | | |
| J26A | Sides Ranch, S | 134.78 | 24 | P | PKPdf | 19 56 47.1 | -0.9 | |
| | baz=135 | | | | | | | |
| O20A | White River Ci | 134.88 | 31 | P | PKPdf | 19 56 44.8 | -3.6 | |
| | baz=135 | | | | | | | |
| O20A | White River Ci | 134.88 | 31 | ePKPdf | PKPdf | 19 56 44.5 | -3.9 | |
| SWSC | Sam W. Stewart | 134.92 | 44 | P | PKPdf | 19 56 46.0 | -2.4 | |
| | baz=135 | | | | | | | |
| I28A | Midland | 134.94 | 22 | P | PKPdf | 19 56 43.5 | -4.6 | |
| | baz=135 | | | | | | | |
| E36A | McGregor | 135.06 | 13 | P | PKPdf | 19 56 47.5 | -0.7 | |
| | baz=135 | | | | | | | |
| I29A | Vivian Onida | 135.24 | 21 | P | PKPdf | 19 56 48.0 | -0.7 | |
| | baz=135 | | | | | | | |
| PDMCI | Parker Dam,Lak | 135.27 | 42 | P | PKPdf | 19 56 48.1 | -0.9 | |
| | baz=135 | | | | | | | |
| SUSD | South Dakota S | 135.35 | 20 | P | PKPdf | 19 56 48.1 | -0.8 | |
| | baz=135 | | | | | | | |
| J28A | Allard Ranch, | 135.41 | 22 | P | PKPdf | 19 56 44.9 | -4.2 | |
| | baz=135 | | | | | | | |
| N23A | Red Feather La | 135.45 | 29 | P | PKPdf | 19 56 47.2 | -2.3 | |
| | baz=135 | | | | | | | |
| RCBR | Riachuelo | 135.46 | 259 | PFAKE | | 19 57 00.0 | +10 | |
| RCBR | | | | LR | LR | | | |
| | comp=Z,8µm,19.0s | | | | | | | |
| GLA | Glamis | 135.53 | 44 | ePKIKP | PKPdf | 19 56 48.9 | -0.7 | |
| GLA | Glamis | 135.53 | 44 | P | PKPdf | 19 56 49.9 | +0.3 | |
| | baz=135 | | | | | | | |
| GLA | Glamis | 135.53 | 44 | ePKPdf | PKPdf | 19 56 48.9 | -0.7 | |
| I30A | Oacoma | 135.65 | 20 | P | PKPdf | 19 56 49.6 | +0.2 | |
| | baz=136 | | | | | | | |
| J29A | Okreek | 135.77 | 22 | P | PKPdf | 19 56 45.3 | -4.4 | |
| | baz=136 | | | | | | | |
| PV04 | Paradox Valley | 135.78 | 33 | ePKPdf | PKPdf | 19 56 50.1 | 0.0 | |
| G35A | Watkins | 135.98 | 15 | P | PKPdf | 19 56 50.3 | +0.3 | |
| | baz=136 | | | | | | | |
| TRQA | Tornquist | 135.99 | 200 | ePKPdf | PKPdf | 19 56 49.2 | -1.1 | |
| TRQA | | | | LR | LR | | | |
| | comp=Z,7µm,19.0s | | | | | | | |
| H34A | Spellman Lake, | 136.13 | 17 | P | PKPdf | 19 56 48.3 | -2.0 | |
| | baz=136 | | | | | | | |
| J30A | Dallas | 136.14 | 21 | P | PKPdf | 19 56 46.8 | -3.6 | |
| | baz=136 | | | | | | | |
| PV01 | Paradox Valley | 136.15 | 33 | ePKPdf | PKPdf | 19 56 52.2 | +1.3 | |
| COWI | Conover | 136.28 | 10 | ePKPdf | PKPdf | 19 56 48.4 | -2.2 | |
| COWI | | | | LR | LR | | | |
| | comp=Z,4µm,19.0s | | | | | | | |
| WUAZ | Wupatki | 136.30 | 38 | P | PKPdf | 19 56 52.0 | +0.9 | |
| | baz=136 | | | | | | | |
| WUAZ | Wupatki | 136.30 | 38 | ePKPdf | PKPdf | 19 56 52.0 | +0.9 | |
| WUAZ | | | | LR | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| K29A | Lazy Trails An | 136.33 | 22 | P | PKPdf | 19 56 51.2 | +0.4 | |
| | baz=136 | | | | | | | |
| H35A | Sunnyside Ranc | 136.37 | 16 | P | PKPdf | 19 56 51.5 | +0.8 | |
| | baz=136 | | | | | | | |
| SPMN | St. Paul | 136.39 | 14 | ePKPdf | PKPdf | 19 56 51.4 | +0.6 | |
| I33A | Coleman | 136.40 | 18 | P | PKPdf | 19 56 49.3 | -1.5 | |
| | baz=136 | | | | | | | |
| J31A | Geddes | 136.44 | 20 | P | PKPdf | 19 56 51.2 | +0.3 | |
| | baz=136 | | | | | | | |
| ISCO | Idaho Springs | 136.45 | 29 | ePKIKP | PKPdf | 19 56 54.0 | +2.5 | |
| ISCO | | | | MLR | MLR | | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| ISCO | Idaho Springs | 136.45 | 29 | P | PKPdf | 19 56 46.2 | -5.2 | |
| | baz=136 | | | | | | | |
| ISCO | Idaho Springs | 136.45 | 29 | ePKPdf | PKPdf | 19 56 54.0 | +2.5 | |
| ISCO | | | | LR | LR | | | |
| | comp=Z,3µm,20.0s | | | | | | | |
| K30A | Basset | 136.66 | 22 | P | PKPdf | 19 56 48.5 | -2.9 | |
| | baz=136 | | | | | | | |
| ECSD | EROS Data Cent | 136.74 | 18 | P | PKPdf | 19 56 49.0 | -2.5 | |
| | baz=136 | | | | | | | |
| ECSD | EROS Data Cent | 136.74 | 18 | ePKPpre | PKPpre | 19 56 41.6 | | |
| ECSD | | | | LR | LR | | | |
| | comp=Z,6µm,21.0s | | | | | | | |
| MVCO | Mesa Verde | 136.85 | 34 | P | PKPdf | 19 56 50.6 | -1.6 | |
| | baz=137 | | | | | | | |
| MVCO | Mesa Verde | 136.85 | 34 | ePKPdf | PKPdf | 19 56 51.6 | -0.6 | |
| MVCO | | | | LR | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| J33A | Davis | 137.00 | 19 | P | PKPdf | 19 56 49.8 | -2.1 | |
| | baz=137 | | | | | | | |
| K31A | O'Neill | 137.02 | 21 | P | PKPdf | 19 56 49.8 | -2.2 | |
| | baz=137 | | | | | | | |
| OGNE | Ogallala | 137.17 | 25 | PFAKE | | 19 57 00.0 | +7.5 | |
| OGNE | | | | LR | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| K32A | Verdigre | 137.26 | 20 | P | PKPdf | 19 56 50.2 | -2.3 | |
| | baz=137 | | | | | | | |
| L31A | Butterfield Fa | 137.38 | 21 | P | PKPdf | 19 56 49.2 | -3.5 | |
| | baz=137 | | | | | | | |
| S22A | 4UR Ranch, Cre | 137.38 | 32 | P | PKPdf | 19 56 51.9 | -1.3 | |
| | baz=137 | | | | | | | |
| I37A | Lemond, Waseca | 137.38 | 15 | P | PKPdf | 19 56 50.6 | -2.0 | |
| | baz=137 | | | | | | | |
| 214A | Organ Pipe Nat | 137.55 | 44 | ePKPpre | PKPpre | 19 56 44.9 | | |
| W18A | Petrified Fore | 137.57 | 38 | P | PKPdf | 19 56 54.4 | +0.9 | |
| | baz=137 | | | | | | | |
| W18A | Petrified Fore | 137.57 | 38 | ePKPdf | PKPdf | 19 56 54.2 | +0.8 | |
| N28A | Pribbeno Ranch | 137.59 | 25 | P | PKPdf | 19 56 54.0 | +0.8 | |
| | baz=137 | | | | | | | |
| I38A | Scanlan Farm, | 137.62 | 14 | P | PKPdf | 19 56 53.0 | -0.1 | |
| | baz=137 | | | | | | | |
| WVL | Waterville | 137.69 | 349 | ePKPdf | PKPdf | 19 56 52.0 | -1.2 | |
| K34A | Le Mars | 137.84 | 18 | P | PKPdf | 19 56 53.9 | +0.3 | |
| | baz=138 | | | | | | | |
| FRNY | Flat Rock | 138.00 | 354 | ePKPdf | PKPdf | 19 56 53.7 | -0.1 | |
| SDCO | Great Sand Dun | 138.08 | 31 | PFAKE | | 19 57 10.0 | +16 | |
| SDCO | | | | LR | LR | | | |
| | comp=Z,6µm,21.0s | | | | | | | |
| BGNE | Belgrade | 138.30 | 21 | ePKPdf | PKPdf | 19 56 54.2 | -0.2 | |
| LONY | Lake Ozonia | 138.32 | 355 | ePKPpre | PKPpre | 19 56 43.7 | | |
| LONY | | | | LR | LR | | | |
| | comp=Z,6µm,22.0s | | | | | | | |
| SADO | Sadowa | 138.41 | 359 | PKP | PKPdf | 19 56 53.3 | -1.1 | |
| | comp=Z,32nm,1.1s,baz=304,slow=1.8,SNR=7.9 | | | | | | | |
| SADO | | | | PP | PP | 19 59 42.2 | -0.7 | |
| | comp=Z,19nm,1.0s,baz=330,slow=7.5,SNR=5.8 | | | | | | | |
| TUC | Tucson | 138.71 | 42 | ePKHKP | PKPpre | 19 56 48.0 | | |
| TUC | | | | MLR | MLR | | | |
| | comp=Z,5µm,20.0s | | | | | | | |
| TUC | Tucson | 138.71 | 42 | ePKPpre | PKPpre | 19 56 48.0 | | |
| TUC | | | | LR | LR | | | |
| | comp=Z,5µm,20.0s | | | | | | | |
| MDV | Middlebury | 138.78 | 353 | ePKPdf | PKPdf | 19 56 55.9 | +0.8 | |
| NCB | Newcomb | 138.93 | 354 | PFAKE | | 19 57 10.0 | +15 | |
| NCB | | | | LR | LR | | | |
| | comp=Z,4µm,19.0s | | | | | | | |
| R27A | Eads | 139.00 | 28 | P | PKPpre | 19 56 47.6 | | |
| | baz=139 | | | | | | | |
| T25A | Trinidad | 139.10 | 31 | P | PKPpre | 19 56 49.5 | | |
| | baz=139 | | | | | | | |
| JFWS | Jewell Farm | 139.15 | 12 | ePKHKP | PKPpre | 19 56 47.2 | | |
| JFWS | | | | MLR | MLR | | | |
| | comp=Z,5µm,19.0s | | | | | | | |
| JFWS | Jewell Farm | 139.15 | 12 | ePKPpre | PKPpre | 19 56 47.2 | | |
| JFWS | | | | LR | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | |
| Q29A | Oakley | 139.33 | 26 | P | PKPpre | 19 56 48.7 | | |
| | baz=139 | | | | | | | |
| SCIA | State Center | 139.40 | 16 | PFAKE | | 19 57 10.0 | +14 | |
| SCIA | | | | LR | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | |
| P31A | Stockton | 139.47 | 24 | P | PKPpre | 19 56 48.9 | | |
| | baz=139 | | | | | | | |
| T26A | Comanche Natio | 139.49 | 30 | P | PKPpre | 19 56 49.1 | | |
| | baz=139 | | | | | | | |
| Q30A | Quinter | 139.58 | 25 | P | PKPpre | 19 56 49.4 | | |
| | baz=139 | | | | | | | |
| LAZ | Ladron | 139.61 | 36 | ePKPdf | PKPdf | 19 57 00.1 | +2.9 | |
| ANMO | Albuquerque | 139.62 | 35 | PKhKP | PKPpre | 19 56 49.1 | | |
| | comp=Z,11nm,1.0s,baz=246,slow=0.9,SNR=13 | | | | | | | |
| ANMO | Albuquerque | 139.62 | 35 | ePKHKP | PKPpre | 19 56 49.0 | | |
| ANMO | | | | MLR | MLR | | | |
| | comp=Z,4µm,21.0s | | | | | | | |
| ANMO | Albuquerque | 139.62 | 35 | ePKPpre | PKPpre | 19 56 49.0 | | |
| ANMO | | | | PKPpre | PKPpre | 19 56 49.1 | | |
| ANMO | | | | LR | LR | | | |
| | comp=Z,4µm,21.0s | | | | | | | |
| O33A | Hebron | 139.67 | 21 | P | PKPpre | 19 56 50.1 | | |
| | baz=140 | | | | | | | |
| P32A | Huiting Farm, | 139.69 | 23 | P | PKPpre | 19 56 49.4 | | |
| | baz=140 | | | | | | | |
| O34A | Beatrice | 139.90 | 20 | P | PKPpre | 19 56 49.3 | | |
| | baz=140 | | | | | | | |
| Q31A | Ellis | 139.90 | 24 | P | PKPpre | 19 56 50.5 | | |
| | baz=140 | | | | | | | |
| CBKS | Cedar Bluff | 139.92 | 25 | ePKIKP | PKPpre | 19 56 52.3 | | |
| CBKS | | | | MLR | MLR | | | |
| | comp=Z,4µm,19.0s | | | | | | | |
| CBKS | Cedar Bluff | 139.92 | 25 | ePKPpre | PKPpre | 19 56 52.3 | | |
| CBKS | | | | LR | LR | | | |
| | comp=Z,4µm,19.0s | | | | | | | |
| T27A | Campo | 140.00 | 29 | P | PKPpre | 19 56 52.1 | | |
| | baz=140 | | | | | | | |
| TRY | Troy | 140.09 | 353 | ePKPdf | PKPdf | 19 56 58.2 | +0.6 | |
| Q32A | Meitler Ranch, | 140.25 | 23 | P | PKPpre | 19 56 50.9 | | |
| | baz=140 | | | | | | | |
| P34A | Walnut Farm, R | 140.41 | 21 | P | PKPpre | 19 56 50.1 | | |
| | baz=140 | | | | | | | |
| R31A | Burdett | 140.45 | 25 | P | PKPpre | 19 56 52.5 | | |
| | baz=140 | | | | | | | |
| 121A | Cookes Peak, D | 140.50 | 39 | P | PKPpre | 19 56 54.9 | | |
| | baz=140 | | | | | | | |
| 121A | Cookes Peak, D | 140.50 | 39 | ePKPpre | PKPpre | 19 56 55.3 | | |
| S30A | Montezuma | 140.59 | 26 | P | PKPpre | 19 56 54.2 | | |
| | baz=140 | | | | | | | |
| R32A | Long Quarter, | 140.67 | 24 | P | PKPpre | 19 56 54.4 | | |
| | baz=140 | | | | | | | |
| AAM | Ann Arbor | 140.71 | 5 | ePKHKP | PKPpre | 19 56 52.0 | | |
| AAM | | | | MLR | MLR | | | |
| | comp=Z,8µm,22.0s | | | | | | | |
| AAM | Ann Arbor | 140.71 | 5 | ePKPdf | PKPpre | 19 56 52.0 | | |
| AAM | | | | LR | LR | | | |
| | comp=Z,8µm,22.0s | | | | | | | |
| P35A | Duane Minner, | 140.71 | 20 | P | PKPpre | 19 56 53.1 | | |
| | baz=140 | | | | | | | |
| U28A | Mallet | 140.79 | 29 | P | PKPpre | 19 56 53.1 | | |
| | baz=141 | | | | | | | |
| KSU1 | Kansas State U | 140.89 | 21 | P | PKPpre | 19 56 54.1 | | |
| | baz=141 | | | | | | | |
| KSU1 | Kansas State U | 140.89 | 21 | ePKPdf | PKPdf | 19 56 58.8 | -0.4 | |
| KSU1 | | | | LR | LR | | | |
| | comp=Z,5µm,21.0s | | | | | | | |
| P36A | Good Intent, A | 140.91 | 19 | P | PKPpre | 19 56 53.2 | | |
| | baz=141 | | | | | | | |
| Q34A | Chapman | 140.93 | 22 | P | PKPpre | 19 56 53.9 | | |
| | baz=141 | | | | | | | |
| S31A | Mullinville | 141.03 | 25 | P | PKPpre | 19 56 54.1 | | |
| | baz=141 | | | | | | | |
| R33A | Olander Ranch, | 141.06 | 23 | P | PKPpre | 19 56 53.8 | | |
| | baz=141 | | | | | | | |
| S32A | Newby Ranch, P | 141.20 | 25 | P | PKPpre | 19 56 54.8 | | |
| | baz=141 | | | | | | | |
| Q35A | Meer Eighty, | 141.31 | 21 | P | PKPpre | 19 56 53.5 | | |
| | baz=141 | | | | | | | |
| R34A | Isabella, Hill | 141.35 | 22 | P | PKPpre | 19 56 52.9 | | |
| | baz=141 | | | | | | | |
| Q36A | Arnold C. Orve | 141.41 | 20 | P | PKPpre | 19 56 53.3 | | |
| | baz=141 | | | | | | | |
| U30A | WK&E Inc. Balk | 141.42 | 28 | P | PKPpre | 19 56 55.9 | | |
| | baz=141 | | | | | | | |
| HDIL | Hopedale | 141.61 | 12 | P | PKPpre | 19 56 55.7 | | |
| | baz=141 | | | | | | | |
| HDIL | Hopedale | 141.61 | 12 | ePKPpre | PKPpre | 19 56 53.9 | | |
| HDIL | | | | LR | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | |
| T32A | Huddler Ranch, | 141.64 | 25 | P | PKPpre | 19 56 55.2 | | |
| | baz=142 | | | | | | | |
| S33A | Kaszmaul Farm, | 141.67 | 24 | P | PKPpre | 19 56 55.3 | | |
| | baz=142 | | | | | | | |
| R35A | Emporia Munici | 141.72 | 21 | P | PKPpre | 19 56 55.8 | | |
| | baz=142 | | | | | | | |
| Q37A | Longview Farm, | 141.82 | 19 | P | PKPpre | 19 56 56.2 | | |
| | baz=142 | | | | | | | |
| U31A | Nine Bar Ranch | 141.91 | 27 | P | PKPpre | 19 56 55.8 | | |
| | baz=142 | | | | | | | |
| S34A | Willow Spring | 141.93 | 23 | P | PKPpre | 19 56 56.4 | | |
| | baz=142 | | | | | | | |
| R36A | Gordon, Harris | 141.97 | 20 | P | PKPpre | 19 56 55.3 | | |
| | baz=142 | | | | | | | |
| SFIN | Scholer Farm | 142.19 | 9 | P | PKPpre | 19 56 56.2 | | |
| | baz=142 | | | | | | | |
| SFIN | Scholer Farm | 142.19 | 9 | ePKPpre | PKPpre | 19 56 56.1 | | |
| R37A | Teagarden Farm | 142.21 | 20 | P | PKPpre | 19 56 55.8 | | |
| | baz=142 | | | | | | | |
| S35A | Otter Creek Ra | 142.25 | 22 | P | PKPpre | 19 56 56.5 | | |
| | baz=142 | | | | | | | |
| U32A | Winter Ranch, | 142.28 | 26 | P | PKPpre | 19 56 57.1 | | |
| | baz=142 | | | | | | | |
| V31A | Spring Creek L | 142.41 | 27 | P | PKPpre | 19 56 57.8 | | |
| | baz=142 | | | | | | | |
| S36A | Lake Cedric, C | 142.47 | 21 | P | PKPpre | 19 56 57.5 | | |
| | baz=142 | | | | | | | |
| T34A | McClaskey Farm | 142.49 | 23 | P | PKPpre | 19 56 57.4 | | |
| | baz=142 | | | | | | | |
| MNTX | Cornudas Mount | 142.56 | 38 | P | PKPpre | 19 57 00.0 | | |
| | baz=142 | | | | | | | |
| MNTX | Cornudas Mount | 142.56 | 38 | ePKPdf | PKPpre | 19 56 59.7 | | |
| MNTX | | | | LR | LR | | | |
| | comp=Z,6µm,21.0s | | | | | | | |
| X29A | Tulia | 142.58 | 31 | P | PKPpre | 19 57 00.6 | | |
| | baz=142 | | | | | | | |
| U33A | Lingo Farm, Me | 142.62 | 25 | P | PKPpre | 19 56 57.9 | | |
| | baz=142 | | | | | | | |
| S37A | Fort Scott | 142.71 | 20 | P | PKPpre | 19 56 57.3 | | |
| | baz=142 | | | | | | | |
| Y28A | McKinney Farm, | 142.71 | 32 | P | PKPpre | 19 56 59.5 | | |
| | baz=142 | | | | | | | |
| V32A | Arapaho | 142.82 | 27 | P | PKPpre | 19 56 59.1 | | |
| | baz=143 | | | | | | | |
| ACSO | Alum Creek Sta | 142.82 | 4 | ePKPpre | PKPpre | 19 56 58.4 | | |
| ACSO | | | | LR | LR | | | |
| | comp=Z,6µm,22.0s | | | | | | | |
| W31A | Holland Ranch, | 142.84 | 28 | P | PKPpre | 19 56 59.4 | | |
| | baz=143 | | | | | | | |
| T35A | Sooner Cattle | 142.85 | 23 | P | PKPpre | 19 56 59.4 | | |
| | baz=143 | | | | | | | |
| U34A | Anderson Ranch | 142.86 | 24 | P | PKPpre | 19 56 58.9 | | |
| | baz=143 | | | | | | | |
| U34A | Anderson Ranch | 142.86 | 24 | ePKPpre | PKPpre | 19 56 59.1 | | |
| T36A | Boggs Farm, Ca | 142.96 | 22 | P | PKPpre | 19 56 59.3 | | |
| | baz=143 | | | | | | | |
| X30A | Coker Ranch, T | 142.99 | 30 | P | PKPdf | 19 57 00.7 | -2.4 | |
| | baz=143 | | | | | | | |
| CLNB | Carlsbad | 143.04 | 35 | ePKPdf | PKPbc | 19 57 01.0 | +0.9 | |
| Y29A | Porterfield Fa | 143.05 | 31 | P | PKPbc | 19 57 00.7 | +0.6 | |
| | baz=143 | | | | | | | |
| V33A | Lossen Ranch, | 143.06 | 26 | P | PKPbc | 19 56 59.5 | -0.4 | |
| | baz=143 | | | | | | | |
| Z28A | Tucker Farm, M | 143.11 | 33 | P | PKPbc | 19 57 00.4 | +0.1 | |
| | baz=143 | | | | | | | |
| W32A | Sentinel | 143.22 | 27 | P | PKPab | 19 56 59.6 | +0.4 | |
| | baz=143 | | | | | | | |
| U35A | Pawnee | 143.24 | 23 | P | PKPab | 19 56 59.7 | +0.6 | |
| | baz=143 | | | | | | | |
| T37A | Cheneyville 18 | 143.25 | 21 | P | PKPab | 19 56 58.7 | -0.5 | |
| | baz=143 | | | | | | | |
| X31A | McDonald Ranch | 143.28 | 29 | P | PKPbc | 19 57 00.1 | -0.5 | |
| | baz=143 | | | | | | | |
| V34A | Guthrie | 143.38 | 25 | P | PKPab | 19 56 60.0 | +0.2 | |
| | baz=143 | | | | | | | |
| V34A | Guthrie | 143.38 | 25 | ePKPpre | PKPab | 19 57 00.0 | +0.3 | |
| Y30A | Stafford Cattl | 143.43 | 30 | P | PKPab | 19 57 00.3 | +0.2 | |
| | baz=143 | | | | | | | |
| BLO | Bloomington | 143.46 | 9 | ePKIKP | PKPbc | 19 57 00.9 | 0.0 | |
| BLO | Bloomington | 143.46 | 9 | ePKPpre | PKPbc | 19 57 00.9 | 0.0 | |
| Z29A | Hungry Hill Ra | 143.50 | 32 | P | PKPbc | 19 57 01.4 | 0.0 | |
| | baz=143 | | | | | | | |
| CCM | Cathedral Cave | 143.53 | 16 | ePKIKP | PKPab | 19 57 00.0 | -0.2 | |
| CCM | Cathedral Cave | 143.53 | 16 | ePKPpre | PKPab | 19 57 00.0 | -0.2 | |
| W33A | Caddo, Fort Co | 143.55 | 26 | P | PKPbc | 19 57 01.0 | -0.3 | |
| | baz=143 | | | | | | | |
| 128A | Castleberry Fa | 143.56 | 33 | P | PKPab | 19 57 00.9 | +0.2 | |
| | baz=143 | | | | | | | |
| U36A | Oologah | 143.60 | 22 | P | PKPab | 19 57 00.6 | 0.0 | |
| | baz=143 | | | | | | | |
| OLIL | Olney | 143.61 | 11 | ePKPpre | PKPbc | 19 57 01.1 | -0.2 | |
| BDFB | Brasilia | 143.65 | 238 | PKP | PKPdf | 19 57 03.7 | -1.1 | |
| | comp=Z,23nm,1.1s,baz=163,slow=4.6,SNR=10 | | | | | | | |
| BDFB | Brasilia | 143.65 | 238 | PKIKP | PKPdf | 19 57 03.7 | -1.1 | |
| SDMD | Soldier's Deli | 143.68 | 356 | ePKPpre | PKPab | 19 57 01.2 | +0.5 | |
| Y31A | Rekieta Farm, | 143.68 | 30 | P | PKPab | 19 57 01.2 | +0.2 | |
| | baz=144 | | | | | | | |
| LPIG | La Paz | 143.71 | 52 | PKP | PKPdf | 19 57 03.7 | -0.9 | |
| | comp=Z,30nm,0.3s,baz=353,slow=2.9,SNR=8.2 | | | | | | | |
| V35A | Meyer Ranch, C | 143.72 | 24 | P | PKPab | 19 57 01.1 | 0.0 | |
| | baz=144 | | | | | | | |
| CPUP | Villa Florida | 143.73 | 215 | PKP | PKPbc | 19 57 03.0 | +0.9 | |
| | comp=Z,19nm,0.8s,baz=125,slow=3.2,SNR=36 | | | | | | | |
| CPUP | Villa Florida | 143.73 | 215 | PKIKP | PKPbc | 19 57 03.0 | +1.0 | |
| WMOK | Wichita Mounta | 143.75 | 27 | ePKIKP | PKPab | 19 57 00.4 | -0.8 | |
| WMOK | | | | MLR | MLR | | | |
| | comp=Z,4µm,19.0s | | | | | | | |
| WMOK | Wichita Mounta | 143.75 | 27 | ePKPpre | PKPab | 19 57 00.4 | -0.8 | |
| WMOK | | | | LR | LR | | | |
| | comp=Z,4µm,19.0s | | | | | | | |
| X32A | Elmer | 143.78 | 28 | P | PKPab | 19 57 00.7 | -0.7 | |
| | baz=144 | | | | | | | |
| Z30A | Sanderson Ranc | 143.78 | 31 | P | PKPab | 19 57 01.4 | -0.1 | |
| | baz=144 | | | | | | | |
| W34A | Bridge Creek, | 143.78 | 26 | P | PKPab | 19 57 01.3 | 0.0 | |
| | baz=144 | | | | | | | |
| W34A | Bridge Creek, | 143.78 | 26 | ePKPpre | PKPab | 19 57 01.9 | +0.6 | |
| U37A | Salina | 143.82 | 21 | P | PKPab | 19 57 01.3 | -0.1 | |
| | baz=144 | | | | | | | |
| 228A | UT Block 9, Go | 143.88 | 34 | P | PKPab | 19 57 02.0 | +0.1 | |
| | baz=144 | | | | | | | |
| 129A | Stewart Farms, | 143.90 | 33 | P | PKPab | 19 57 01.9 | 0.0 | |
| | baz=144 | | | | | | | |
| TUL1 | Tulsa | 144.01 | 23 | P | PKPab | 19 57 01.9 | -0.3 | |
| | baz=144 | | | | | | | |
| TUL1 | Tulsa | 144.01 | 23 | ePKPpre | PKPab | 19 57 01.8 | -0.3 | |
| X33A | Lawton | 144.04 | 27 | P | PKPab | 19 57 01.5 | -0.8 | |
| | baz=144 | | | | | | | |
| Y32A | R-V Farms, Ver | 144.05 | 29 | P | PKPab | 19 57 01.9 | -0.5 | |
| | baz=144 | | | | | | | |
| U38A | Gravette | 144.05 | 20 | P | PKPab | 19 57 01.4 | -0.9 | |
| | baz=144 | | | | | | | |
| V36A | Jenks | 144.06 | 23 | P | PKPab | 19 57 02.0 | -0.3 | |
| | baz=144 | | | | | | | |
| W35A | Tecumseh | 144.23 | 25 | P | PKPab | 19 57 02.4 | -0.6 | |
| | baz=144 | | | | | | | |
| Z31A | Sharp Cattle R | 144.26 | 30 | P | PKPab | 19 57 02.7 | -0.4 | |
| | baz=144 | | | | | | | |
| V37A | Hulbert | 144.28 | 22 | P | PKPab | 19 57 03.0 | -0.1 | |
| | baz=144 | | | | | | | |
| X34A | Smith Ranch, M | 144.29 | 26 | P | PKPab | 19 57 03.0 | -0.2 | |
| | baz=144 | | | | | | | |
| SIUC | Southern Illin | 144.35 | 13 | ePKPpre | PKPbc | 19 57 04.0 | +0.3 | |
| 130A | Snyder | 144.40 | 32 | P | PKPab | 19 57 03.7 | -0.1 | |
| | baz=144 | | | | | | | |
| WCI | Wyandotte Cave | 144.42 | 9 | ePKIKP | PKPab | 19 57 03.1 | -0.5 | |
| WCI | Wyandotte Cave | 144.42 | 9 | ePKPpre | PKPpre | 19 57 03.0 | | |
| Y33A | Hilltop Ranch, | 144.43 | 28 | P | PKPab | 19 57 02.9 | -0.9 | |
| | baz=144 | | | | | | | |
| 229A | Bryant Ranch, | 144.43 | 33 | P | PKPab | 19 57 03.9 | 0.0 | |
| | baz=144 | | | | | | | |
| USIN | University of | 144.44 | 11 | ePKPpre | PKPdf | 19 57 04.0 | -1.5 | |
| W36A | Wetumka | 144.51 | 24 | P | PKPab | 19 57 03.6 | -0.5 | |
| | baz=144 | | | | | | | |
| V38A | Canehill | 144.56 | 21 | P | PKPab | 19 57 03.0 | -1.2 | |
| | baz=144 | | | | | | | |
| Z32A | Haskell | 144.60 | 29 | P | PKPab | 19 57 04.0 | -0.4 | |
| | baz=144 | | | | | | | |
| 131A | Roby | 144.64 | 31 | P | PKPab | 19 57 04.6 | -0.1 | |
| | baz=144 | | | | | | | |
| 329A | Wagon Wheel Ra | 144.70 | 34 | P | PKPbc | 19 57 05.2 | +0.1 | |
| | baz=144 | | | | | | | |
| W37A | Quinton | 144.83 | 23 | P | PKPab | 19 57 04.7 | -0.4 | |
| | baz=145 | | | | | | | |
| X35A | Drake | 144.84 | 25 | P | PKPab | 19 57 04.4 | -0.9 | |
| | baz=145 | | | | | | | |
| Y34A | Reagan Ranch, | 144.87 | 27 | P | PKPab | 19 57 04.8 | -0.5 | |
| | baz=145 | | | | | | | |
| 230A | Sterling City | 144.87 | 33 | P | PKPbc | 19 57 05.7 | +0.1 | |
| | baz=145 | | | | | | | |
| CBN | Corbin | 144.91 | 357 | ePKPdf | PKPab | 19 57 04.7 | -0.6 | |
| CBN | | | | LR | LR | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=145 | | | | | | | | |
| Y36A | **Durant** | 145.56 | 25 | P | | PKPdf | 19 57 07.0 | -0.6 | |
| | baz=145 | | | | | | | | |
| 529A | **Stev Forest Ra** | 145.57 | 36 | P | | PKPbc | 19 57 08.0 | +0.1 | |
| | baz=145 | | | | | | | | |
| Z35A | **Perchaven, San** | 145.62 | 27 | P | | PKPdf | 19 57 07.1 | -0.6 | |
| | baz=145 | | | | | | | | |
| 430A | **Baggett Ranch,** | 145.65 | 34 | P | | PKPdf | 19 57 07.8 | -0.1 | |
| | baz=146 | | | | | | | | |
| 232A | **Coleman** | 145.65 | 31 | P | | PKPdf | 19 57 07.8 | 0.0 | |
| | baz=146 | | | | | | | | |
| 331A | **San Angelo** | 145.69 | 33 | P | | PKPdf | 19 57 08.0 | 0.0 | |
| | baz=146 | | | | | | | | |
| GLAT | **Glass** | 145.72 | 14 | *e*PKPdf | | PKPab | 19 57 08.4 | 0.0 | |
| UTMT | **University of** | 145.75 | 13 | *e*PKPdf | | PKPdf | 19 57 07.9 | +0.1 | |
| Y37A | **Hugo** | 145.76 | 24 | P | | PKPdf | 19 57 07.4 | -0.5 | |
| | baz=146 | | | | | | | | |
| GNAR | **Gosnell** | 145.82 | 15 | *e*PKPdf | | PKPab | 19 57 09.1 | +0.3 | |
| 134A | **White-Moore Ra** | 145.87 | 28 | P | | PKPdf | 19 57 08.2 | 0.0 | |
| | baz=146 | | | | | | | | |
| 233A | **Rising Star** | 145.92 | 30 | P | | PKPbc | 19 57 08.6 | -0.3 | |
| | baz=146 | | | | | | | | |
| BLA | **Blacksburg** | 145.95 | 1 | *e*PKP2 | | PKPdf | 19 57 07.9 | -0.3 | |
| BLA | | | | MLR | | MLR | | | |
| | comp=Z,5µm,22.0s | | | | | | | | |
| BLA | **Blacksburg** | 145.95 | 1 | *e*PKPdf | | PKPdf | 19 57 07.9 | -0.3 | |
| BLA | | | | LR | | LR | | | |
| | comp=Z,5µm,22.0s | | | | | | | | |
| 332A | **Millersview** | 146.00 | 32 | P | | PKPbc | 19 57 09.0 | -0.2 | |
| | baz=146 | | | | | | | | |
| Z36A | **Blue Ridge** | 146.03 | 26 | P | | PKPdf | 19 57 08.4 | +0.1 | |
| | baz=146 | | | | | | | | |
| HBAR | **Harrisburg** | 146.04 | 16 | *e*PKPdf | | PKPab | 19 57 09.9 | +0.3 | |
| MIAR | **Mount Ida** | 146.04 | 21 | *e*PKP2 | | PKPbc | 19 57 08.9 | -0.3 | |
| MIAR | | | | MLR | | MLR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| MIAR | **Mount Ida** | 146.04 | 21 | P | | PKPdf | 19 57 08.7 | +0.3 | |
| | baz=146 | | | | | | | | |
| MIAR | **Mount Ida** | 146.04 | 21 | *e*PKPdf | | PKPbc | 19 57 08.8 | -0.3 | |
| MIAR | | | | LR | | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| HALT | **Halls** | 146.05 | 14 | *e*PKPdf | | PKPab | 19 57 09.7 | 0.0 | |
| 530A | **J-C Ranch, Com** | 146.07 | 35 | P | | PKPab | 19 57 09.8 | -0.2 | |
| | baz=146 | | | | | | | | |
| 431A | **Sonora** | 146.07 | 34 | P | | PKPbc | 19 57 09.0 | -0.4 | |
| | baz=146 | | | | | | | | |
| Y38A | **Idabel** | 146.16 | 23 | P | | PKPdf | 19 57 08.2 | -0.3 | |
| | baz=146 | | | | | | | | |
| WVT | **Waverly** | 146.18 | 12 | *e*PKP2 | | PKPdf | 19 57 08.5 | -0.1 | |
| WVT | **Waverly** | 146.18 | 12 | *e*PKPdf | | PKPdf | 19 57 08.5 | -0.1 | |
| 135A | **Vickery Place,** | 146.20 | 28 | P | | PKPdf | 19 57 09.1 | +0.4 | |
| | baz=146 | | | | | | | | |
| UALR | **University of** | 146.25 | 19 | *e*PKPdf | | PKPdf | 19 57 09.1 | +0.4 | |
| 234A | **Clairette** | 146.31 | 29 | P | | PKPdf | 19 57 09.1 | +0.2 | |
| | baz=146 | | | | | | | | |
| 432A | **Menard** | 146.37 | 32 | P | | PKPdf | 19 57 09.1 | 0.0 | |
| | baz=146 | | | | | | | | |
| Y39A | **Lockesburg** | 146.40 | 22 | P | | PKPdf | 19 57 09.5 | +0.5 | |
| | baz=146 | | | | | | | | |
| TZTN | **Tazewell** | 146.43 | 6 | *e*PKPdf | | PKPdf | 19 57 09.1 | +0.1 | |
| 333A | **Richland Sprin** | 146.44 | 31 | P | | PKPdf | 19 57 09.1 | -0.1 | |
| | baz=146 | | | | | | | | |
| Z37A | **Pogue Cattle C** | 146.44 | 25 | P | | PKPdf | 19 57 09.1 | +0.1 | |
| | baz=146 | | | | | | | | |
| 531A | **Rocksprings** | 146.50 | 34 | P | | PKPdf | 19 57 09.4 | +0.1 | |
| | baz=146 | | | | | | | | |
| WHTX | **Lake Whitney** | 146.65 | 28 | P | | PKPdf | 19 57 09.4 | 0.0 | |
| | baz=146 | | | | | | | | |
| WHTX | **Lake Whitney** | 146.65 | 28 | *e*PKPdf | | PKPbc | 19 57 10.8 | -0.2 | |
| Z38A | **Mt. Pleasant** | 146.66 | 24 | P | | PKPdf | 19 57 09.8 | +0.4 | |
| | baz=146 | | | | | | | | |
| 136A | **Ennis** | 146.67 | 27 | P | | PKPdf | 19 57 09.9 | +0.5 | |
| | baz=146 | | | | | | | | |
| JCT | **Junction City** | 146.67 | 33 | *e*PKP2 | | PKPdf | 19 57 10.2 | +0.6 | |
| JCT | | | | MLR | | MLR | | | |
| | comp=Z,6µm,22.0s | | | | | | | | |
| JCT | **Junction City** | 146.67 | 33 | P | | PKPdf | 19 57 09.7 | +0.1 | |
| | baz=146 | | | | | | | | |
| JCT | **Junction City** | 146.67 | 33 | *e*PKPbc | | PKPdf | 19 57 10.2 | +0.6 | |
| JCT | | | | LR | | LR | | | |
| | comp=Z,6µm,22.0s | | | | | | | | |
| 334A | **Lometa** | 146.81 | 30 | P | | PKPdf | 19 57 09.6 | -0.2 | |
| | baz=147 | | | | | | | | |
| 433A | **Art** | 146.84 | 32 | P | | PKPdf | 19 57 09.4 | -0.4 | |
| | baz=147 | | | | | | | | |
| 532A | **Rocksprings** | 146.89 | 33 | P | | PKPdf | 19 57 09.9 | -0.1 | |
| | baz=147 | | | | | | | | |
| 137A | **Heron Place, G** | 146.90 | 25 | P | | PKPdf | 19 57 10.6 | +0.7 | |
| | baz=147 | | | | | | | | |
| Z39A | **Irene McRaven,** | 146.98 | 23 | P | | PKPbc | 19 57 11.7 | -0.2 | |
| | baz=147 | | | | | | | | |
| LCO | **Las Campanas** | 147.03 | 194 | *e*PKPdf | | PKPdf | 19 57 11.4 | +0.9 | |
| LCO | | | | LR | | LR | | | |
| | comp=Z,8µm,20.0s | | | | | | | | |
| 631A | **Perdido Creek** | 147.06 | 35 | P | | PKPdf | 19 57 10.3 | 0.0 | |
| | baz=147 | | | | | | | | |
| 236A | **Katherine and** | 147.07 | 27 | P | | PKPdf | 19 57 10.8 | +0.6 | |
| | baz=147 | | | | | | | | |
| 138A | **Matatall Enter** | 147.13 | 24 | P | | PKPdf | 19 57 11.3 | +1.0 | |
| | baz=147 | | | | | | | | |
| 434A | **Burnet** | 147.21 | 31 | P | | PKPdf | 19 57 10.3 | -0.2 | |
| | baz=147 | | | | | | | | |
| 335A | **Moody** | 147.25 | 29 | P | | PKPdf | 19 57 11.4 | +0.9 | |
| | baz=147 | | | | | | | | |
| TKL | **Tuckaleechee C** | 147.28 | 6 | PKPbc | | PKPdf | 19 57 11.2 | +0.8 | |
| | comp=Z,372nm,1.2s,baz=141,slow=0.2,SNR=39 | | | | | | | | |
| TKL | **Tuckaleechee C** | 147.28 | 6 | PKP2 | | PKPdf | 19 57 11.2 | +0.8 | |
| OXF | **Oxford** | 147.36 | 15 | *e*PKP2 | | PKPdf | 19 57 10.9 | +0.3 | |
| OXF | **Oxford** | 147.36 | 15 | *e*PKPdf | | PKPdf | 19 57 10.9 | +0.3 | |
| 237A | **Washetta, Mont** | 147.39 | 26 | P | | PKPbc | 19 57 12.3 | -0.8 | |
| | baz=147 | | | | | | | | |
| 139A | **Bunkhouse Ranc** | 147.39 | 24 | P | | PKPbc | 19 57 12.2 | -0.9 | |
| | baz=147 | | | | | | | | |
| CPCT | **Cooper Cave** | 147.40 | 7 | *e*PKPdf | | PKPdf | 19 57 11.0 | +0.4 | |
| 533A | **Kerrville** | 147.40 | 32 | P | | PKPdf | 19 57 10.9 | +0.1 | |
| | baz=147 | | | | | | | | |
| SWET | **Sewanee** | 147.42 | 10 | *e*PKPdf | | PKPdf | 19 57 10.0 | -0.7 | |
| 632A | **Uvalde** | 147.43 | 34 | P | | PKPdf | 19 57 11.2 | +0.4 | |
| | baz=147 | | | | | | | | |
| 336A | **Riesel** | 147.44 | 28 | P | | PKPdf | 19 57 10.9 | +0.1 | |
| | baz=147 | | | | | | | | |
| 435B | **Jarrell** | 147.58 | 30 | P | | PKPdf | 19 57 11.2 | +0.1 | |
| | baz=147 | | | | | | | | |
| BBSR | **BB Station** | 147.59 | 336 | *e*PKPdf | | PKPdf | 19 57 11.7 | +0.7 | |
| BBSR | | | | LR | | LR | | | |
| | comp=Z,4µm,21.0s | | | | | | | | |
| 238A | **Jacksonville** | 147.68 | 25 | P | | PKPbc | 19 57 12.7 | -1.2 | |
| | baz=148 | | | | | | | | |
| 534A | **Blanco** | 147.73 | 32 | P | | PKPdf | 19 57 11.4 | 0.0 | |
| | baz=148 | | | | | | | | |
| 633A | **Saathoff Ranch** | 147.80 | 33 | P | | PKPdf | 19 57 11.9 | +0.4 | |
| | baz=148 | | | | | | | | |
| CNNC | **Cliffs of the** | 147.89 | 357 | *e*PKPdf | | PKPdf | 19 57 12.8 | +1.5 | |
| CNNC | | | | LR | | LR | | | |
| | comp=Z,5µm,20.0s | | | | | | | | |
| 732A | **Laxson Ranch,** | 147.92 | 35 | P | | PKPdf | 19 57 12.2 | +0.5 | |
| | baz=148 | | | | | | | | |
| 337A | **Centerville** | 147.94 | 27 | P | | PKPdf | 19 57 12.2 | +0.6 | |
| | baz=148 | | | | | | | | |
| 239A | **Gary** | 147.94 | 24 | P | | PKPdf | 19 57 11.7 | +0.1 | |
| | baz=148 | | | | | | | | |
| 436A | **Wall Ranch, Ga** | 147.97 | 29 | P | | PKPbc | 19 57 14.6 | -0.1 | |
| | baz=148 | | | | | | | | |
| KMSC | **Kings Mountain** | 147.99 | 3 | P | | PKPbc | 19 57 13.3 | -1.4 | |
| | baz=148 | | | | | | | | |
| KMSC | **Kings Mountain** | 147.99 | 3 | *e*PKPdf | | PKPdf | 19 57 12.3 | +0.7 | |
| NATX | **Nacogdoches** | 148.09 | 25 | P | | PKPbc | 19 57 15.0 | -0.1 | |
| | baz=148 | | | | | | | | |
| NATX | **Nacogdoches** | 148.09 | 25 | *e*PKPbc | | PKPbc | 19 57 16.4 | +1.3 | |
| NATX | | | | LR | | LR | | | |
| | comp=Z,3µm,20.0s | | | | | | | | |
| 338A | **Crockett** | 148.16 | 26 | P | | PKPbc | 19 57 15.1 | -0.1 | |
| | baz=148 | | | | | | | | |
| 535A | **Dale** | 148.20 | 30 | P | | PKPbc | 19 57 15.2 | -0.2 | |
| | baz=148 | | | | | | | | |
| 437A | **Phantom Ranch,** | 148.23 | 28 | P | | PKPbc | 19 57 15.4 | 0.0 | |
| | baz=148 | | | | | | | | |
| 832A | **Faith Ranch, C** | 148.25 | 36 | P | | PKPdf | 19 57 12.9 | +0.7 | |
| | baz=148 | | | | | | | | |
| 634A | **China Grove, S** | 148.31 | 32 | P | | PKPdf | 19 57 13.9 | +1.6 | |
| | baz=148 | | | | | | | | |
| 733A | **Divot King Ran** | 148.31 | 34 | P | | PKPdf | 19 57 13.0 | +0.7 | |
| | baz=148 | | | | | | | | |
| 536A | **Bastrop** | 148.41 | 30 | P | | PKPbc | 19 57 16.4 | +0.5 | |
| | baz=148 | | | | | | | | |
| 339A | **Huntington** | 148.50 | 25 | P | | PKPbc | 19 57 16.3 | +0.2 | |
| | baz=148 | | | | | | | | |
| 833A | **Chaparral WMA,** | 148.56 | 35 | P | | PKPdf | 19 57 13.6 | +0.8 | |
| | baz=148 | | | | | | | | |
| 438A | **Sam Houston St** | 148.60 | 27 | P | | PKPbc | 19 57 16.9 | +0.6 | |
| | baz=148 | | | | | | | | |
| 635A | **Leesville** | 148.61 | 31 | P | | PKPbc | 19 57 17.1 | +0.7 | |
| | baz=148 | | | | | | | | |
| 734A | **La Parita Cree** | 148.62 | 33 | P | | PKPbc | 19 57 17.1 | +0.6 | |
| | baz=148 | | | | | | | | |
| 340A | **Bronson** | 148.71 | 24 | P | | PKPbc | 19 57 16.8 | +0.2 | |
| | baz=148 | | | | | | | | |
| 537A | **Green Hill Far** | 148.78 | 29 | P | | PKPbc | 19 57 17.7 | +0.9 | |
| | baz=149 | | | | | | | | |
| 439A | **Center Grove,** | 148.88 | 26 | P | | PKPbc | 19 57 17.6 | +0.5 | |
| | baz=149 | | | | | | | | |
| 636A | **Smothers Creek** | 148.90 | 30 | P | | PKPbc | 19 57 18.6 | +1.4 | |
| | baz=149 | | | | | | | | |
| 735A | **Kenedy** | 149.02 | 32 | P | | PKPbc | 19 57 18.3 | +0.8 | |
| | baz=149 | | | | | | | | |
| 538A | **Harpers Horsep** | 149.04 | 27 | P | | PKPbc | 19 57 18.6 | +1.1 | |
| | baz=149 | | | | | | | | |
| HKT | **Hockley** | 149.11 | 28 | *e*PKIKP | | PKPdf | 19 57 14.2 | +0.7 | |
| HKT | **Hockley** | 149.11 | 28 | *e*PKPdf | | PKPdf | 19 57 14.2 | +0.7 | |
| 933A | **Laredo** | 149.16 | 36 | P | | PKPdf | 19 57 15.0 | +1.3 | |
| | baz=149 | | | | | | | | |
| 834A | **Tilden** | 149.18 | 34 | P | | PKPbc | 19 57 18.7 | +0.8 | |
| | baz=149 | | | | | | | | |
| 440A | **Kirbyville** | 149.26 | 25 | P | | PKPbc | 19 57 18.4 | +0.4 | |
| | baz=149 | | | | | | | | |
| 637A | **Eagle Lake** | 149.30 | 29 | P | | PKPbc | 19 57 19.5 | +1.3 | |
| | baz=149 | | | | | | | | |
| 736A | **Circle Diamond** | 149.32 | 31 | P | | PKPbc | 19 57 19.8 | +1.5 | |
| | baz=149 | | | | | | | | |
| LRAL | **Lakeview Retre** | 149.34 | 12 | *e*PKPdf | | PKPdf | 19 57 14.0 | +0.2 | |
| 835A | **Beeville** | 149.45 | 33 | P | | PKPbc | 19 57 20.1 | +1.5 | |
| | baz=149 | | | | | | | | |
| GOGA | **Godfrey** | 149.54 | 6 | *e*PKPdf | | PKPdf | 19 57 14.9 | +0.7 | |
| GOGA | | | | LR | | LR | | | |
| | comp=Z,5µm,20.0s | | | | | | | | |
| 934A | **Benavides** | 149.60 | 35 | P | | PKPbc | 19 57 20.3 | +1.3 | |
| | baz=150 | | | | | | | | |
| 540A | **Vidor** | 149.72 | 25 | P | | PKPbc | 19 57 20.4 | +1.2 | |
| | baz=150 | | | | | | | | |
| 737A | **Port Lavaca** | 149.80 | 30 | P | | PKPbc | 19 57 20.3 | +0.9 | |
| | baz=150 | | | | | | | | |
| 034A | **Hebbronville** | 149.92 | 36 | P | | PKPbc | 19 57 20.7 | +0.9 | |
| | baz=150 | | | | | | | | |
| KVTX | **Kingsville** | 150.00 | 34 | *e*PKPbc | | PKPab | 19 57 22.8 | -2.8 | |
| KVTX | | | | LR | | LR | | | |
| | comp=Z,5µm,21.0s | | | | | | | | |
| NHSC | **New Hope** | 150.05 | 1 | *e*PKPbc | | PKPbc | 19 57 20.3 | +0.4 | |
| NHSC | | | | LR | | LR | | | |
| | comp=Z,7µm,21.0s | | | | | | | | |
| CSU | **Charleston Sou** | 150.17 | 1 | *e*PKPbc | | PKPbc | 19 57 20.0 | -0.2 | |
| RGRS | **Roger Stewart** | 150.25 | 1 | *e*PKPbc | | PKPbc | 19 57 21.1 | +0.7 | |
| 035A | **Encino** | 150.35 | 35 | P | | PKPbc | 19 57 22.3 | +1.4 | |
| | baz=150 | | | | | | | | |
| 035Z | **Hargill** | 150.73 | 35 | P | | PKPbc | 19 57 22.9 | +1.2 | |
| | baz=151 | | | | | | | | |
| BRAL | **Brewton** | 151.28 | 13 | *e*PKPdf | | PKPdf | 19 57 18.7 | +1.8 | |
| BRAL | | | | LR | | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| TIGA | **Tifton** | 151.47 | 7 | P | | PKPbc | 19 57 23.2 | -0.1 | |
| | baz=151 | | | | | | | | |
| TIGA | **Tifton** | 151.47 | 7 | *e*PKPdf | | PKPdf | 19 57 18.5 | +1.3 | |
| LVC | **Limon Verde** | 152.47 | 202 | PFAKE | | | 19 57 30.0 | +3.8 | |
| LVC | | | | LR | | LR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| ANWB | **Willy Bob** | 157.22 | 311 | PFAKE | | | 19 57 40.0 | +14 | |
| ANWB | | | | LR | | LR | | | |
| | comp=Z,4µm,21.0s | | | | | | | | |
| LPAZ | **La Paz** | 157.71 | 210 | PKP | | PKPdf | 19 57 27.0 | 0.0 | |
| | comp=Z,13nm,1.1s,baz=75,slow=1.0,SNR=23 | | | | | | | | |
| LPAZ | | | | PKPab | | PKPab | 19 58 00.8 | +1.6 | |
| | comp=Z,9.4nm,0.8s,baz=189,slow=6.1,SNR=7.4 | | | | | | | | |
| LPAZ | **La Paz** | 157.71 | 210 | PKIKP | | PKPdf | 19 57 27.0 | 0.0 | |
| BBGH | **Gun Hill** | 157.75 | 298 | PFAKE | | | 19 57 40.0 | +14 | |
| BBGH | | | | LR | | LR | | | |
| | comp=Z,9µm,20.0s | | | | | | | | |
| FDF | **Fort de France** | 158.37 | 304 | PFAKE | | | 19 57 40.0 | +13 | |
| FDF | | | | LR | | LR | | | |
| | comp=Z,3µm,20.0s | | | | | | | | |
| CMIG | **Matias Romero** | 159.50 | 46 | PKP | | PKPdf | 19 57 27.9 | -0.5 | |
| | comp=Z,13nm,1.1s,baz=235,slow=1.2,SNR=12 | | | | | | | | |
| SAML | **Samuel** | 159.75 | 234 | *e*PKPdf | | PKPdf | 19 57 28.3 | -0.5 | |
| SAML | | | | LR | | LR | | | |
| | comp=Z,11µm,19.0s | | | | | | | | |
| GRTK | **Grand Turk** | 159.83 | 336 | PFAKE | | | 19 57 40.0 | +11 | |
| GRTK | | | | LR | | LR | | | |
| | comp=Z,5µm,21.0s | | | | | | | | |
| SJG | **San Juan** | 160.00 | 320 | PFAKE | | | 19 57 40.0 | +11 | |
| SJG | | | | LR | | LR | | | |
| | comp=Z,5µm,21.0s | | | | | | | | |
| GRGR | **Grenville** | 160.02 | 298 | PFAKE | | | 19 57 40.0 | +11 | |
| GRGR | | | | LR | | LR | | | |
| | comp=Z,4µm,20.0s | | | | | | | | |
| CELP | **Cerrillos** | 160.31 | 320 | *e*PKPdf | | PKPdf | 19 57 29.8 | +0.5 | |
| OBIP | **Obispado Ponce** | 160.35 | 320 | *e*PKPdf | | PKPdf | 19 57 28.7 | -0.6 | |
| SDDR | **Presa de Saban** | 162.15 | 333 | PFAKE | | | 19 57 40.0 | +8.7 | |
| SDDR | | | | LR | | LR | | | |
| | comp=Z,5µm,20.0s | | | | | | | | |
| GTBY | **Guantanamo Bay** | 162.61 | 346 | PFAKE | | | 19 57 40.0 | +8.4 | |
| GTBY | | | | LR | | LR | | | |
| | comp=Z,6µm,21.0s | | | | | | | | |
| MTDJ | **Mount Denham** | 164.74 | 352 | PFAKE | | | 19 57 40.0 | +6.2 | |
| MTDJ | | | | LR | | LR | | | |
| | comp=Z,5µm,21.0s | | | | | | | | |
| NNA | **Nana** | 164.85 | 190 | PFAKE | | | 19 57 40.0 | +6.1 | |
| NNA | | | | LR | | LR | | | |
| | comp=Z,9µm,20.0s | | | | | | | | |
| PAYG | **Puerto Ayora** | 168.74 | 109 | PFAKE | | | 19 57 50.0 | +13 | |
| PAYG | | | | LR | | LR | | | |
| | comp=Z,6µm,22.0s | | | | | | | | |
| SDV | **Santo Domingo** | 169.32 | 304 | *e*PKPdf | | PKPdf | 19 57 36.1 | -1.3 | |
| SDV | | | | LR | | LR | | | |
| | comp=Z,10µm,20.0s | | | | | | | | |
| JTS | **JuntasAbangare** | 171.04 | 36 | PFAKE | | | 19 57 50.0 | +12 | |
| JTS | | | | LR | | LR | | | |
| | comp=Z,9µm,22.0s | | | | | | | | |
| BCIP | **Isla Barro Col** | 173.88 | 2 | *e*PKPdf | | PKPdf | 19 57 37.9 | -1.4 | |
| BCIP | | | | LR | | LR | | | |
| | comp=Z,5µm,20.0s | | | | | | | | |
| ROSC | **El Rosal** | 174.40 | 289 | PKP | | PKPdf | 19 57 39.6 | -0.5 | |
| | comp=Z,5.1nm,0.4s,baz=103,slow=2.6,SNR=8.7 | | | | | | | | |
| OTAV | **Otavalo** | 177.01 | 203 | *e*PKPdf | | PKPdf | 19 57 40.6 | -0.2 | |
| OTAV | | | | LR | | LR | | | |
| | comp=Z,9µm,21.0s | | | | | | | | |

*IDC **25** 19:39:22.4±0.8,2.˚98S×100.˚46E,h0km,mb5.3/22, mb1 5.4/23,mb1mx5.1/48,mbtmp5.3/23,ML4.7/1,MS5.8/3, Ms1 5.8/3,ms1mx5.0/26,Error ellipse: s-maj=27.6km s-min=14.3km az=33.0*

*ISCJB **25** 19:39:25.1±0.6,2.˚90S±0.˚09×100.˚57E±0.˚09,h28km, mb5.4/30,MS5.8/3,Error ellipse: s-maj=16.5km s-min=8.8km az=42.0*

*NEIC **25** 19:39:27.3±4.8,2.˚96S×100.˚50E,h32km±33km,mb5.7/8, Error ellipse: s-maj=15.2km s-min=6.6km az=54.0*

**ISC 25 19:39:26.4±0.7,3.0S±0.˚1×100.˚5E±0.˚1,h28km,n92, σ0s83/76,mb5.4/30,MS5.7/3,Southern Sumatera**

| Code | Station | Time | Δ° | AZ° | Phase | ID | ISC | h | m | s | ISC | Res |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Op | | | | | | |
| KAPI | **Kappang** | 19.32 | 97 | | P | P | | 19 | 43 | 49.5 | -0.1 | |
| | 2.4nm,0.3s,baz=248,slow=5.4,SNR=2.7 | | | | | | | | | | | |
| CMAR | **Chiang Mai Arr** | 21.40 | 356 | | P | P | | 19 | 44 | 12.1 | 0.0 | |
| | 49nm,0.8s,baz=185,slow=9.2,SNR=2.6 | | | | | | | | | | | |
| MBWA | **Marble Bar** | 26.00 | 135 | | P | P | | 19 | 44 | 58.4 | +1.2 | |
| | 50nm,0.9s | | | | | | | | | | | |
| H08S2 | **Diego Garcia H** | 28.24 | 260 | | T | T | | 20 | 14 | 17.3 | | |
| | baz=82,slow=76,SNR=45 | | | | | | | | | | | |
| H08S3 | **Diego Garcia H** | 28.25 | 260 | | T | T | | 20 | 14 | 21.9 | | |
| | baz=82,slow=76,SNR=50 | | | | | | | | | | | |
| H08S1 | **Diego Garcia H** | 28.26 | 260 | | T | T | | 20 | 14 | 21.9 | | |
| | baz=82,slow=76,SNR=51 | | | | | | | | | | | |
| SIJI | **Sorong** | 30.83 | 87 | | P | P | | 19 | 45 | 40.4 | -0.1 | |
| | 75nm,1.1s,baz=294,slow=7.8,SNR=2.6 | | | | | | | | | | | |
| SIJI | | | | | | LR | | 20 | 01 | 57.4 | | |
| | comp=Z,14µm,18.5s,baz=262,slow=44 | | | | | | | | | | | |
| LSA | **Lhasa** | 33.74 | 345 | | *e*P | P | | 19 | 46 | 06.0 | -0.2 | |
| | 188nm,1.2s | | | | | | | | | | | |
| H01W3 | **Cape Leeuwin H** | 34.15 | 160 | | T | T | | 20 | 22 | 00.1 | | |
| | baz=333 | | | | | | | | | | | |
| H01W2 | **Cape Leeuwin H** | 34.16 | 160 | | T | T | | 20 | 21 | 58.1 | | |
| | baz=333 | | | | | | | | | | | |
| H01W1 | **Cape Leeuwin H** | 34.16 | 160 | | T | T | | 20 | 21 | 59.6 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=333 | | | | | | | | |
| ENH | **Enshi** | 34.20 | 14 | *e*P | | P | 19 46 09.8 | +0.1 | |
| | 75nm,1.0s | | | | | | | | |
| WRA | **Warramunga Arr** | 37.06 | 120 | P | | P | 19 46 35.3 | +0.8 | |
| | 9.7nm,0.4s,baz=304,slow=9.0,SNR=2.6 | | | | | | | | |
| WRAB | **Tennant Creek** | 37.07 | 120 | P | | P | 19 46 34.3 | -0.2 | |
| | 81nm,0.9s | | | | | | | | |
| ASAR | **Alice Springs** | 38.27 | 125 | P | | P | 19 46 45.1 | +0.4 | |
| | 21nm,0.8s,baz=295,slow=8.4,SNR=2.3 | | | | | | | | |
| BJT | **Baijiatuau** | 45.18 | 17 | *e*P | | P | 19 47 41.5 | +0.6 | |
| | 109nm,0.9s | | | | | | | | |
| PMG | **Port Moresby** | 46.79 | 100 | LR | | LR | 20 09 58.8 | | |
| | comp=Z,18µm,21.9s,baz=274,slow=39 | | | | | | | | |
| KSAR | **Wonju Array Be** | 47.62 | 30 | P | | P | 19 48 00.3 | +0.2 | |
| KSRS | **Korea Array** | 47.65 | 30 | P | | P | 19 48 00.3 | 0.0 | |
| | 80nm,1.1s,baz=222,slow=7.7,SNR=4.6 | | | | | | | | |
| SONM | **Songino Array** | 50.91 | 5 | P | | P | 19 48 26.0 | +0.8 | |
| | 94nm,0.8s,baz=190,slow=5.7,SNR=7.6 | | | | | | | | |
| MKAR | **Makanchi Array** | 52.14 | 344 | P | | P | 19 48 34.5 | +0.2 | |
| | 80nm,0.8s,baz=154,slow=9.5,SNR=5.6 | | | | | | | | |
| MDJ | **Mudanjiang** | 54.09 | 25 | *e*P | | P | 19 48 48.5 | -0.2 | |
| | 68nm,1.1s | | | | | | | | |
| HIA | **Hailar** | 54.69 | 15 | *e*P | | P | 19 48 52.4 | -0.6 | |
| | 137nm,1.3s | | | | | | | | |
| USRK | **Ussuriysk Ar.** | 54.83 | 27 | P | | P | 19 48 54.2 | +0.2 | |
| | 117nm,0.8s,baz=221,slow=7.6,SNR=6.2 | | | | | | | | |
| GEYT | **Aibeck** | 56.54 | 320 | P | | P | 19 49 06.6 | 0.0 | |
| | 36nm,1.0s,baz=100,slow=7.9,SNR=2.7 | | | | | | | | |
| KURBB | **Kurchatov Arra** | 56.66 | 343 | P | | P | 19 49 06.6 | -0.5 | |
| | 62nm,0.9s,baz=160,slow=6.7,SNR=4.5 | | | | | | | | |
| KURK | **Kurchatov** | 56.72 | 344 | *e*P | | P | 19 49 06.9 | -0.6 | |
| | 560nm,1.3s | | | | | | | | |
| ZALV | **Zalesovo Beam** | 58.25 | 349 | P | | P | 19 49 18.3 | +0.1 | |
| | 113nm,0.9s,baz=174,slow=5.0,SNR=3.8 | | | | | | | | |
| ZALV | | | | | | S | 19 57 20.1 | +1.6 | |
| | 6.4nm,1.0s,baz=173,slow=13,SNR=2.6 | | | | | | | | |
| BVAR | **Borovoye Array** | 61.30 | 340 | P | | P | 19 49 37.9 | -1.3 | |
| | 13nm,0.6s,baz=146,slow=8.7,SNR=3.3 | | | | | | | | |
| KBZ | **Khabaz** | 69.39 | 319 | P | | P | 19 50 32.7 | +0.8 | |
| | 28nm,0.9s,baz=109,slow=9.3,SNR=2.4 | | | | | | | | |
| MMAI | **Mount Meron Ar** | 71.03 | 306 | P | | P | 19 50 43.3 | +1.1 | |
| | 16nm,0.9s,baz=94,slow=8.7,SNR=2.8 | | | | | | | | |
| PETK | **Petropavlovsk-** | 73.48 | 32 | P | | P | 19 50 55.8 | -0.6 | |
| | 13nm,0.8s,baz=201,slow=5.8,SNR=4.1 | | | | | | | | |
| BRTR | **Keskin Array B** | 74.37 | 313 | P | | P | 19 51 01.2 | -0.8 | |
| | 18nm,0.7s,baz=130,slow=6.7,SNR=4.5 | | | | | | | | |
| IDI | **Anoyia** | 80.03 | 306 | P | | P | 19 51 33.8 | 0.0 | |
| | 29nm,0.7s,baz=100,slow=8.9,SNR=3.1 | | | | | | | | |
| AKASG | **Malin Array Be** | 80.58 | 322 | P | | P | 19 51 35.3 | -1.0 | |
| | 12nm,0.9s,baz=89,slow=4.6,SNR=2.9 | | | | | | | | |
| FINES | **FINESS Array B** | 85.23 | 332 | P | | P | 19 52 00.6 | +0.4 | |
| | 10.0nm,0.5s,baz=115,slow=6.2,SNR=5.4 | | | | | | | | |
| ARCES | **ARCESS Array B** | 87.59 | 340 | P | | P | 19 52 12.0 | +0.3 | |
| | 43nm,1.6s,baz=92,slow=8.6,SNR=4.3 | | | | | | | | |
| GERES | **GERESS Array B** | 90.13 | 319 | P | | P | 19 52 25.2 | +0.9 | |
| | 6.3nm,0.9s,baz=104,slow=4.1,SNR=2.7 | | | | | | | | |
| CLL | **Collm** | 90.76 | 321 | *e*P | | P | 19 52 29.0 | +2.1 | |
| NOA | **NORSAR Array B** | 92.27 | 331 | P | | P | 19 52 34.0 | +0.2 | |
| | 9.5nm,1.0s,baz=93,slow=4.8,SNR=3.1 | | | | | | | | |
| NOA | | | | | LR | LR | 20 38 05.0 | | |
| | comp=Z,3µm,20.3s,baz=95,slow=38 | | | | | | | | |
| NVAR | **Mina Array Bea** | 130.07 | 40 | PKP | | PKPdf | 19 58 35.5 | +1.0 | |
| | 2.8nm,0.7s,baz=278,slow=2.8,SNR=3.5 | | | | | | | | |
| ULM | **Lac du Bonnet** | 130.94 | 14 | PKP | | PKPdf | 19 58 35.5 | +0.1 | |
| | 6.0nm,0.6s,baz=55,slow=2.6,SNR=4.3 | | | | | | | | |
| Y32A | **R-V Farms, Ver** | 144.00 | 29 | P | | PKPbc | 19 58 57.0 | -0.9 | |
| | baz=144 | | | | | | | | |
| U38A | **Gravette** | 144.02 | 21 | P | | PKPab | 19 58 56.7 | -0.6 | |
| | baz=144 | | | | | | | | |
| V36A | **Jenks** | 144.02 | 23 | P | | PKPbc | 19 58 57.4 | -0.4 | |
| | baz=144 | | | | | | | | |
| W35A | **Tecumseh** | 144.19 | 25 | P | | PKPbc | 19 58 58.2 | -0.2 | |
| | baz=144 | | | | | | | | |
| Z31A | **Sharp Cattle R** | 144.21 | 30 | P | | PKPbc | 19 58 58.1 | -0.5 | |
| | baz=144 | | | | | | | | |
| V37A | **Hulbert** | 144.24 | 22 | P | | PKPab | 19 58 57.5 | -0.6 | |
| | baz=144 | | | | | | | | |
| X34A | **Smith Ranch, M** | 144.25 | 26 | P | | PKPbc | 19 58 58.4 | -0.2 | |
| | baz=144 | | | | | | | | |
| 130A | **Snyder** | 144.35 | 32 | P | | PKPbc | 19 58 58.8 | -0.3 | |
| | baz=144 | | | | | | | | |
| 229A | **Bryant Ranch,** | 144.38 | 34 | P | | PKPdf | 19 58 59.3 | -1.5 | |
| | baz=144 | | | | | | | | |
| W36A | **Wetumka** | 144.47 | 24 | P | | PKPbc | 19 58 58.7 | -0.5 | |
| | baz=144 | | | | | | | | |
| V38A | **Canehill** | 144.53 | 21 | P | | PKPab | 19 58 58.5 | -0.7 | |
| | baz=144 | | | | | | | | |
| Z32A | **Haskell** | 144.55 | 30 | P | | PKPbc | 19 58 59.0 | -0.6 | |
| | baz=144 | | | | | | | | |
| 329A | **Wagon Wheel Ra** | 144.64 | 34 | P | | PKPdf | 19 59 00.0 | -1.3 | |
| | baz=144 | | | | | | | | |
| W37A | **Quinton** | 144.79 | 23 | P | | PKPab | 19 58 59.5 | -0.7 | |
| | baz=145 | | | | | | | | |
| X35A | **Drake** | 144.80 | 25 | P | | PKPbc | 19 58 59.9 | -0.5 | |
| | baz

*CSEM **25** 19:46:42.6±0.3, 38.˚53N×39.˚83E, h10km, MD2.8, Error ellipse: s-maj=7.6km s-min=6.5km az=19.0*

**DDA 25 19:46:42.2, 38.˚68N×39.˚95E, h6km, Md2.9, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BINT** | **Bingol** | **0.47** | **65** | *e*Pg | Pn | 19 46 55.0 | -0.6 |
| **PTK** | **Pertek** | **0.49** | **296** | *e*Pg | Pg | 19 46 50.7 | -1.2 |
| PTK | | | | *e*Sg | Sg | 19 46 59.1 | +0.7 |
| **PTK** | **Pertek** | **0.49** | **296** | *e*Pg | Pg | 19 46 50.7 | -1.2 |
| PTK | | | | *e*Sg | Sg | 19 46 59.1 | +0.6 |
| **SVRC** | **Sivrice-ELAZID** | **0.59** | **240** | *e*PG | Pg | 19 46 53.0 | -0.8 |
| SVRC | | | | *e*SG | Sg | 19 47 00.8 | -0.8 |
| **SVRC** | **Sivrice-ELAZID** | **0.59** | **240** | *e*Pg | Pg | 19 46 53.0 | -0.8 |
| **BNGB** | **Bing¯ll** | **0.65** | **61** | *e*PG | Pg | 19 46 55.0 | +0.1 |
| **DYBB** | **Diyarbakir** | **0.74** | **168** | *e*PG | Pg | 19 46 56.3 | -0.2 |
| **ELZG** | **Elazig** | **0.78** | **257** | *i* P | Pg | 19 46 54.8 | -2.6 |
| ELZG | | | | *i* S | Sg | 19 47 08.0 | +0.3 |
| **ELZG** | **Elazig** | **0.78** | **257** | P | Pg | 19 46 54.8 | -2.6 |
| ELZG | | | | S | Sg | 19 47 08.0 | +0.2 |
| **DIY** | **Diyarbakir** | **0.81** | **164** | *e*Pg | Pg | 19 46 56.3 | -1.6 |
| **BNGL** | **BINGOL** | **0.98** | **73** | P | Pg | 19 47 00.6 | -0.7 |
| BNGL | | | | S | Sn | 19 47 20.2 | +3.1 |
| **SVAN** | **Silvan-Diyarba** | **1.11** | **118** | *e*PN | Pb | 19 47 04.0 | 0.0 |
| **SVAN** | **Silvan-Diyarba** | **1.11** | **118** | *e*Pn | Pb | 19 47 04.0 | +0.1 |
| **MALT** | **Malatya** | **1.25** | **254** | *e*PN | Pb | 19 47 04.6 | -1.7 |
| **MALT** | **Malatya** | **1.25** | **254** | *e*Pn | Pb | 19 47 04.6 | -1.7 |
| **MAZI** | **Mazidag** | **1.28** | **162** | *e*PN | Pn | 19 47 06.3 | -0.4 |
| **MAZI** | **Mazidag** | **1.28** | **162** | *e*Pn | Pn | 19 47 06.3 | -0.5 |
| **BEST** | **Besiri** | **1.30** | **127** | P | Pg | 19 47 07.3 | 0.0 |
| BEST | | | | S | Sn | 19 47 26.1 | +1.3 |
| **BTMT** | **Batman** | **1.30** | **111** | *e*PN | Pg | 19 47 07.5 | +0.2 |
| **BTMT** | **Batman** | **1.30** | **111** | *e*Pn | Pg | 19 47 07.5 | +0.2 |
| **ILIC** | **ilic-Erzincan** | **1.32** | **306** | *e*PN | Pn | 19 47 07.3 | -0.2 |
| **ILIC** | **ilic-Erzincan** | **1.32** | **306** | *e*Pn | Pn | 19 47 07.3 | -0.2 |
| **MARD** | **Mardin** | **1.51** | **154** | P | Pb | 19 47 10.6 | -0.3 |
| MARD | | | | S | Sg | 19 47 31.3 | +0.2 |
| **URFA** | **Urfa** | **1.52** | **216** | *e*PN | Pn | 19 47 09.8 | -0.3 |
| **URFA** | **Urfa** | **1.52** | **216** | *e*Pn | Pn | 19 47 09.8 | -0.3 |
| **KELT** | **Kelkit** | **1.56** | **340** | *i* P | Pg | 19 47 12.6 | 0.0 |
| KELT | | | | *i* S | Sg | 19 47 33.6 | +0.5 |
| **KELT** | **Kelkit** | **1.56** | **340** | P | Pg | 19 47 12.6 | +0.1 |
| KELT | | | | S | Sg | 19 47 33.6 | +0.5 |
| **EZM** | **Erzurum** | **1.65** | **41** | *e*PN | Pb | 19 47 13.1 | -0.3 |
| **ERZM** | **Erzurum** | **1.65** | **41** | *i* P | Pg | 19 47 14.5 | +0.3 |
| **ERZM** | **Erzurum** | **1.65** | **41** | P | Pg | 19 47 14.5 | +0.3 |
| **BAYT** | **Ayd¯–ntepe-Bay** | **1.72** | **5** | *e*PN | Pb | 19 47 13.9 | -0.6 |
| **BAYT** | **Ayd¯–ntepe-Bay** | **1.72** | **5** | *e*Pn | Pb | 19 47 13.9 | -0.6 |
| **SUSE** | **Susehri** | **2.04** | **319** | *i* P | Pb | 19 47 20.1 | +0.1 |
| SUSE | | | | *i* S | Sb | 19 47 46.8 | +1.0 |
| **SUSE** | **Susehri** | **2.04** | **319** | P | Pb | 19 47 20.1 | +0.1 |
| SUSE | | | | S | Sb | 19 47 46.8 | +1.1 |
| **ESPY** | **Espiye-Giresun** | **2.43** | **338** | *e*PN | Pn | 19 47 23.7 | +1.2 |
| **ESPY** | **Espiye-Giresun** | **2.43** | **338** | *e*Pn | Pn | 19 47 23.7 | +1.2 |
| **SVSK** | **Karacayir** | **2.60** | **299** | *e*PN | Pn | 19 47 25.8 | +0.9 |
| **SVSK** | **Karacayir** | **2.60** | **299** | *e*Pn | Pn | 19 47 25.8 | +1.0 |

*IDC **25** 19:54:20.0±0.5, 1.˚94S×127.˚85E, h0km, mb4.3/19, mb1 4.4/21, mb1mx4.2/49, mbtmp4.3/21, ML4.7/2, Error ellipse: s-maj=22.2km s-min=12.5km az=70.0*

*ISCJB **25** 19:54:23.4±0.3, 1.˚97S±0.˚04×127.˚95E±0.˚03, h33km, mb4.3/24, Error ellipse: s-maj=5.8km s-min=4.2km az=12.1*

*NEIC **25** 19:54:25.4±1.0, 1.˚95S×127.˚99E, h38km±10km, mb4.6/5, Error ellipse: s-maj=11.4km s-min=7.1km az=56.0*

*DJA **25** 19:54:25.9±0.8, 2.˚5S×12.˚8E±˚, h30km±9km, M4.8/5, mb4.8/5*

**ISC 25 19:54:25.0±0.4, 1.˚98S±0.˚05×127.˚91E±0.˚05, h33km, n65, σ0s99/63, mb4.4/24, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LBMI** | **Labuha** | **1.39** | **343** | P | **Pn** | **19 54 48.4** | **+0.3** |
| **NLAI** | **Namlea** | **1.50** | **213** | P | **Pn** | **19 54 50.8** | **+1.3** |
| **MSAI** | **Masohi** | **1.70** | **143** | P | **Pb** | **19 54 55.0** | **-0.6** |
| **AAI** | **Ambon** | **1.72** | **171** | P | **Pb** | **19 54 55.3** | **-0.7** |
| **SANI** | **Sanana** | **1.93** | **268** | P | **Pn** | **19 54 54.9** | **-0.5** |
| **TNTI** | **Ternate** | **2.78** | **349** | P | **Pn** | **19 55 08.7** | **+1.4** |
| **TNTI** | **Ternate** | **2.78** | **349** | *e*Pn | **Pn** | **19 55 08.1** | **+0.8** |
| **BNDI** | **Bandanaira** | **3.22** | **142** | P | **Pn** | **19 55 14.4** | **+1.2** |
| **SWI** | **Sorong** | **3.52** | **72** | P | **Pn** | **19 55 19.0** | **+1.6** |
| **SIJI** | **Sorong** | **3.53** | **72** | Pn | **Pn** | **19 55 17.4** | **-0.1** |
| | 54nm,0.3s,baz=61,slow=17,SNR=107 | | | | | | |
| SIJI | | | | Sn | **Sn** | **19 55 57.7** | **-0.4** |
| | 27nm,0.3s,baz=118,slow=23,SNR=11 | | | | | | |
| **FAKI** | **Fak Fak** | **4.43** | **102** | P | **Pn** | **19 55 29.4** | **-0.5** |
| **FAKI** | **Fak Fak** | **4.43** | **102** | *e*Pn | **Pn** | **19 55 28.9** | **-1.1** |
| **KMSI** | **Cibinong** | **4.68** | **303** | P | **Pn** | **19 55 33.8** | **+0.5** |
| **LUWI** | **Luwuk** | **5.22** | **280** | P | **Pn** | **19 55 41.7** | **+0.9** |
| **LUWI** | **Luwuk** | **5.22** | **280** | *e*Pn | **Pn** | **19 55 39.8** | **-1.0** |
| | 106nm,0.6s | | | | | | |
| **GTOI** | **Gorontalo** | **5.55** | **298** | P | Pn | 19 55 49.1 | +3.8 |
| **SGSI** | **Sangihe** | **6.11** | **337** | P | **Pn** | **19 55 53.4** | **+0.4** |
| **RKPI** | **Ransiki, Papua** | **6.28** | **94** | P | **Pn** | **19 55 57.0** | **+1.7** |
| **APSI** | **Ampana** | **6.35** | **279** | P | **Pn** | **19 55 57.0** | **+0.7** |
| **MRSI** | **Marisa** | **6.45** | **292** | P | **Pn** | **19 55 58.2** | **+0.5** |
| **SPSI** | **Sidrap Palu** | **8.37** | **256** | P | **Pn** | **19 56 26.4** | **+2.3** |
| | 57nm,1.1s | | | | | | |
| **KAPI** | **Kappang** | **8.69** | **249** | Pn | Pn | 19 56 32.4 | +4.0 |
| | 2.8nm,0.3s,baz=68,slow=5.2,SNR=6.7 | | | | | | |
| **GENI** | **Genyem** | **12.26** | **93** | P | **Pn** | **19 57 18.0** | **+0.6** |
| **KKM** | **Kota Kinabalu** | **14.14** | **304** | *e*Pn | **P** | **19 57 48.5** | **-1.8** |
| **WRAB** | **Tennant Creek** | **18.92** | **161** | *e*P | **P** | **19 58 41.4** | **-1.8** |
| **WRA** | **Warramunga Arr** | **18.93** | **161** | P | **P** | **19 58 41.5** | **-1.7** |
| | 2.9nm,0.3s,baz=342,slow=12,SNR=67 | | | | | | |
| WRA | | | | S | Sn | 20 02 05.8 | -9.4 |
| | 0.3nm,0.3s,baz=340,slow=20,SNR=4.1 | | | | | | |
| **COEN** | **Coen** | **19.22** | **129** | *e*P | **P** | **19 58 46.4** | **-0.1** |
| | 36nm,0.8s | | | | | | |
| **CISI** | **Cisompet, Garu** | **20.77** | **254** | P | Pn | 19 59 06.7 | +0.7 |
| **ASAR** | **Alice Springs** | **22.33** | **165** | P | **P** | **19 59 19.2** | **-0.8** |
| | 20nm,0.6s,baz=348,slow=11,SNR=239 | | | | | | |
| ASAR | | | | S | S | 20 03 14.6 | -9.2 |
| | 1.7nm,0.8s,baz=350,slow=24,SNR=5.1 | | | | | | |
| **KASI** | **Kota Agung** | **23.63** | **261** | P | **P** | **19 59 34.1** | **+0.7** |
| **MNAI** | **Manna** | **25.03** | **264** | P | **P** | **19 59 46.8** | **+0.4** |
| **CTA** | **Charters Tower** | **25.40** | **136** | P | **P** | **19 59 50.9** | **+1.2** |
| | 9.4nm,0.6s,baz=320,slow=12,SNR=20 | | | | | | |
| **CTAO** | **Charters Tower** | **25.40** | **136** | *e*P | **P** | **19 59 50.7** | **+1.0** |
| **RGRI** | **Rengat** | **25.62** | **273** | P | **P** | **19 59 52.1** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** | **32.38** | **197** | P | **P** | **20 00 51.1** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **35.00** | **307** | P | **P** | **20 01 15.3** | **+0.7** |
| | 2.2nm,0.8s,baz=137,slow=8.0,SNR=17 | | | | | | |
| **CHTO** | **Chiang Mai** | **35.19** | **307** | *e*P | **P** | **20 01 17.3** | **+1.0** |
| | 7.8nm,0.9s | | | | | | |
| **KSAR** | **Wonju Array Be** | **39.22** | **360** | P | **P** | **20 01 49.6** | **-0.5** |
| **KSRS** | **Korea Array** | **39.23** | **0** | P | **P** | **20 01 49.6** | **-0.6** |
| | 4.0nm,0.8s,baz=182,slow=11,SNR=7.4 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.16** | **342** | *e*P | **P** | **20 02 39.8** | **+1.1** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,1μm,4.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **46.12** | **4** | P | **P** | **20 02 46.3** | **+0.3** |
| | comp=Z,4.7nm,0.5s,baz=183,slow=7.9,SNR=11 | | | | | | |
| **MDJ** | **Mudanjiang** | **46.41** | **2** | *e*P | **P** | **20 02 48.7** | **+0.3** |
| **LSA** | **Lhasa** | **47.18** | **315** | *e*P | **P** | **20 02 56.5** | **+1.3** |
| | comp=Z,2.8nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **48.45** | **310** | *e*P | **P** | **20 03 05.4** | **+0.5** |
| | comp=Z,3.4nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **50.14** | **309** | *e*P | **P** | **20 03 18.4** | **+0.5** |
| | comp=Z,5.2nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **51.84** | **308** | *e*P | **P** | **20 03 31.4** | **+0.8** |
| | comp=Z,10.0nm,0.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **52.88** | **342** | *e*P | **P** | **20 03 37.6** | **-0.2** |
| **SONM** | **Songino Array** | **53.05** | **342** | P | **P** | **20 03 38.2** | **-0.8** |
| | comp=Z,3.5nm,0.8s,baz=151,slow=8.5,SNR=19 | | | | | | |
| **PETK** | **Petropavlovsk-** | **60.29** | **20** | P | **P** | **20 04 31.7** | **+1.5** |
| | comp=Z,2.2nm,0.8s,baz=193,slow=5.9,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.91** | **327** | P | **P** | **20 04 47.5** | **-0.6** |
| | comp=Z,0.7nm,0.4s,baz=115,slow=8.2,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **65.39** | **319** | P | **P** | **20 05 05.4** | **+0.8** |
| | comp=Z,0.9nm,0.5s,baz=120,slow=8.1,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **66.19** | **334** | P | **P** | **20 05 07.9** | **-1.4** |
| | comp=Z,0.7nm,0.4s,baz=116,slow=3.4,SNR=3.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **67.17** | **328** | P | **P** | **20 05 14.9** | **-0.7** |
| | comp=Z,2.1nm,0.6s,baz=126,slow=5.6,SNR=21 | | | | | | |
| **KURK** | **Kurchatov** | **67.17** | **328** | *e*P | **P** | **20 05 14.5** | **-1.1** |
| | comp=Z,12nm,0.9s | | | | | | |
| **BVAR** | **Borovoye Array** | **72.73** | **328** | P | **P** | **20 05 49.0** | **-0.8** |
| | comp=Z,2.7nm,0.8s,baz=140,slow=7.2,SNR=10 | | | | | | |
| **GEYT** | **Alibeck** | **75.41** | **310** | P | **P** | **20 06 05.5** | **-0.3** |
| | comp=Z,2.1nm,0.7s,baz=131,slow=6.1,SNR=6.1 | | | | | | |
| **ABKAR** | **Akbulak array** | **77.31** | **321** | *e*P | **P** | **20 06 15.2** | **-1.1** |
| | comp=Z,3.2nm,0.5s | | | | | | |
| **VNDA** | **Vanda** | **77.66** | **173** | P | **P** | **20 06 18.6** | **+0.9** |
| | comp=Z,1.4nm,0.8s,baz=316,slow=7.6,SNR=8.3 | | | | | | |
| **AKTO** | **Aktyubinsk** | **78.85** | **322** | P | **P** | **20 06 24.2** | **-0.6** |
| | comp=Z,6.3nm,0.6s,baz=106,slow=7.6,SNR=23 | | | | | | |
| **MAW** | **Mawson** | **78.86** | **201** | P | **P** | **20 06 25.0** | **+0.6** |
| | comp=Z,1.2nm,0.8s,baz=34,slow=6.8,SNR=3.3 | | | | | | |
| **OPO** | **Ambohidratompo** | **80.58** | **252** | P | **P** | **20 06 35.9** | **+0.8** |
| | comp=Z,2.7nm,0.7s,baz=109,slow=3.9,SNR=4.4 | | | | | | |
| **ILAR** | **Eielson Array** | **89.72** | **25** | P | **P** | **20 07 18.4** | **-1.3** |
| | comp=Z,0.2nm,0.6s,baz=245,slow=5.7,SNR=4.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **96.18** | **340** | P | **P** | **20 07 47.9** | **-1.4** |
| | comp=Z,1.5nm,0.7s,baz=75,slow=6.5,SNR=4.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **125.66** | **285** | PKP | **PKPdf** | **20 13 24.4** | **+0.3** |
| | comp=Z,0.3nm,0.6s,baz=87,slow=1.6,SNR=3.1 | | | | | | |
| **CPUP** | **Villa Florida** | **151.41** | **170** | PKPbc | **PKPbc** | **20 14 17.1** | **+0.9** |
| | comp=Z,1.6nm,0.7s,baz=140,slow=2.6,SNR=5.0 | | | | | | |

*DJA **25** 19:56:33.8±5.5, 4.˚5S±46.˚6×10.˚0E±1.˚0, h29km±11km, M5.0/4, mb5.1/1, MLv5.0/4*

*IDC **25** 19:56:36.8±1.4, 3.˚25S×100.˚23E, h0km, mb4.1/11, mb1 4.1/12, mb1mx3.8/58, mbtmp4.1/12, ML3.6/1, Error ellipse: s-maj=45.5km s-min=16.3km az=51.0*

*ISCJB **25** 19:56:38.9±0.8, 3.˚30S±0.˚08×100.˚1E±0.˚1, h33km, mb4.1/11, Error ellipse: s-maj=17.4km s-min=7.9km az=143.9*

**ISC 25 19:56:41.1±1.0, 3.˚3S±0.˚1×100.˚0E±0.˚1, h35km, n31, σ1s01/25, mb4.2/11, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.53** | **357** | P | **Pn** | **19 56 51.2** | **-1.0** |
| **SISI** | **Saibi** | **2.17** | **334** | P | **Pn** | **19 57 14.5** | **-0.3** |
| **SDSI** | **Sungai Dareh** | **2.72** | **31** | P | **Pn** | **19 57 21.6** | **-0.8** |
| **PPI** | **Padang Panjang** | **2.84** | **7** | P | **Pn** | **19 57 23.1** | **-0.9** |
| **BKNI** | **Bangkinang** | **3.73** | **16** | P | **Pn** | **19 57 36.4** | **+0.1** |
| **MNSI** | **Mandailing Nat** | **4.08** | **354** | P | **Pn** | **19 57 40.3** | **-0.8** |
| **GSI** | **Gunungsitoli** | **5.18** | **332** | P | **Pn** | **19 57 54.3** | **-2.0** |
| **PSI** | **Prapat** | **6.15** | **350** | Pn | **Pn** | **19 58 08.7** | **-1.0** |
| | 1.4nm,0.3s,baz=153,slow=11,SNR=3.1 | | | | | | |
| **LEM** | **Lembang** | **8.33** | **115** | Pn | **Pn** | **19 58 39.8** | **+0.2** |
| | 1.9nm,0.3s,baz=323,slow=20,SNR=2.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.64** | **357** | P | **P** | **20 01 28.0** | **-0.5** |
| | 2.6nm,0.8s,baz=186,slow=8.8,SNR=14 | | | | | | |
| **BATI** | **Baumata** | **24.43** | **107** | P | **P** | **20 01 54.8** | **-2.0** |
| | 12nm,0.7s,baz=297,slow=2.3,SNR=2.6 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.75** | **260** | T | T | 20 31 32.9 | |
| | baz=84 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.76** | **260** | T | T | 20 31 33.4 | |
| | baz=84 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.77** | **260** | T | T | 20 31 34.2 | |
| | baz=84 | | | | | | |
| **ODAN** | **Odare** | **32.37** | **339** | *e*P | **P** | **20 03 06.1** | **-1.7** |
| | 9.6nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **32.75** | **337** | *e*P | **P** | **20 03 11.1** | **0.0** |
| | 7.1nm,0.4s | | | | | | |
| **DMN** | **Daman** | **33.93** | **336** | *e*P | **P** | **20 03 21.9** | **+0.5** |
| | 2.3nm,0.4s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.05** | **159** | T | T | 20 39 19.7 | |
| | baz=334,slow=76 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.07** | **159** | T | T | 20 39 20.0 | |
| | baz=334,slow=76 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.07** | **159** | T | T | 20 39 21.5 | |
| | baz=334,slow=76 | | | | | | |
| **GKN** | **Gorkha** | **34.47** | **335** | *e*P | **P** | **20 03 25.7** | **-0.3** |
| | 2.5nm,0.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.32** | **119** | P | **P** | **20 03 50.4** | **0.0** |
| | 0.9nm,0.5s,baz=292,slow=8.1,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.48** | **125** | P | **P** | **20 03 59.8** | **-0.4** |
| | 1.0nm,0.7s,baz=300,slow=7.3,SNR=3.2 | | | | | | |
| **SONM** | **Songino Array** | **51.22** | **5** | P | **P** | **20 05 42.2** | **+0.9** |
| | 1.8nm,0.6s,baz=189,slow=10,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.27** | **345** | P | **P** | **20 05 50.3** | **+1.3** |
| | 3.4nm,0.8s,baz=146,slow=7.5,SNR=6.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.27** | **28** | P | **P** | **20 06 10.6** | **-0.4** |
| | 2.8nm,0.6s,baz=229,slow=5.5,SNR=5.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.79** | **344** | P | **P** | **20 06 22.6** | **+0.8** |
| | 1.3nm,0.8s,baz=156,slow=6.2,SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.44** | **350** | P | **P** | **20 06 33.8** | **+0.5** |
| | 1.1nm,0.4s,baz=159,slow=4.5,SNR=8.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.95** | **32** | P | **P** | **20 08 13.1** | **+0.3** |
| | 5.3nm,0.9s,baz=266,slow=9.8,SNR=2.9 | | | | | | |
| **BRTR** | **Kevkin Array B** | **74.22** | **313** | P | **P** | **20 08 16.2** | **+1.3** |
| | 0.4nm,0.7s,baz=131,slow=6.5,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.69** | **39** | PKPbc | **PKPab** | **20 16 18.6** | **+1.1** |
| | 1.5nm,0.6s,baz=315,slow=1.7,SNR=11 | | | | | | |

*ISCJB **25** 19:57:54.4±0.3, 3.˚24S±0.˚04×100.˚24E±0.˚04, h28km, mb4.6/47, MS5.0/1, Error ellipse: s-maj=7.7km s-min=2.9km az=42.3*

*NEIC **25** 19:57:54.0±0.4, 3.˚15S×100.˚27E, h10km, mb4.8/7, Error ellipse: s-maj=11.1km s-min=5.6km az=52.0*

*MOS **25** 19:57:55.6±1.1, 3.˚08S×100.˚35E, h34km, mb4.9/21, Error ellipse: s-maj=15.4km s-min=7.0km az=110.8*

*DJA **25** 19:57:56.1±0.6, 3.˚5S±3.˚×10.˚0E±˚, h22km±7km, M4.9/7, mb4.5/7, MLv5.1/6*

*IDC **25** 19:57:56.5±0.8, 3.˚12S×100.˚30E, h25km±4km, mb4.3/25, mb1 4.5/28, mb1mx4.2/60, mbtmp4.5/28, ML4.4/3, MS5.0/1, Ms1 5.0/1, ms1mx3.3/41, Error ellipse: s-maj=20.0km s-min=11.2km az=40.0*

*BJI **25** 19:57:57.8, 3.˚47S×100.˚47E, h79km, mb4.8/24, mB5.5/4, Ms5.4/3, Ms7 5.2/2*

**ISC 25 19:57:56.3±0.5, 3.˚23S±0.˚07×100.˚30E±0.˚06, h28km, n140, σ1s23/137, mb4.7/47, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.55** | **328** | P | **Pb** | **19 58 06.9** | **-0.5** |
| **SISI** | **Saibi** | **2.25** | **327** | P | **Pn** | **19 58 31.8** | **+0.2** |
| **KSI** | **Kapahiang** | **2.33** | **100** | P | **Pb** | **19 58 36.0** | **-1.6** |
| **SDSI** | **Sungai Dareh** | **2.55** | **26** | P | **Pn** | **19 58 37.2** | **+1.4** |
| **PPI** | **Padang Panjang** | **2.76** | **7** | P | **Pn** | **19 58 38.8** | **+0.1** |
| **MNAI** | **Manna** | **2.88** | **113** | P | **Pn** | **19 58 41.6** | **+1.3** |
| **BKNI** | **Bangkinang** | **3.61** | **12** | P | **Pn** | **19 58 51.2** | **+0.8** |
| **JMBI** | **JAMBI** | **3.70** | **65** | P | **Pn** | **19 58 53.1** | **+1.5** |
| **MNSI** | **Mandailing Nat** | **4.07** | **350** | P | **Pn** | **19 58 56.9** | **+0.2** |
| **MDSI** | **Maura Dua** | **4.07** | **108** | P | **Pn** | **19 58 58.2** | **+1.5** |
| **LWLI** | **Liwa** | **4.15** | **115** | P | **Pn** | **19 58 59.7** | **+1.8** |
| **PMBI** | **Palembang** | **4.48** | **86** | P | **Pn** | **19 59 02.9** | **+0.6** |
| **KASI** | **Kota Agung** | **4.76** | **119** | P | **Pn** | **19 59 07.9** | **+1.6** |
| **KLI** | **Kotabumi** | **4.83** | **110** | P | **Pn** | **19 59 08.8** | **+1.7** |
| **GSI** | **Gunungsitoli** | **5.26** | **329** | P | **Pn** | **19 59 13.1** | **-0.1** |
| **TPRI** | **Tanjung Pinang** | **5.91** | **46** | P | **Pn** | **19 59 23.3** | **+1.3** |
| **PPBI** | **Pangkal Pinang** | **5.93** | **80** | P | **Pn** | **19 59 24.8** | **+2.5** |
| **PSI** | **Prapat** | **6.15** | **347** | Pn | **Pn** | **19 59 22.8** | **-2.6** |
| | 3.9nm,0.3s,baz=160,slow=10,SNR=9.4 | | | | | | |
| **CGJI** | **Cibinong** | **6.34** | **122** | P | **Pn** | **19 59 29.1** | **+1.2** |
| **SBJI** | **Serang** | **6.48** | **116** | P | **Pn** | **19 59 31.1** | **+1.2** |
| **TSI** | **Tuntungan** | **6.91** | **345** | P | **Pn** | **19 59 35.4** | **-0.4** |
| **TNG** | **Tangerang** | **6.97** | **115** | P | **Pn** | **19 59 38.1** | **+1.5** |
| **KCSI** | **Kotacane, Aceh** | **7.17** | **339** | P | **Pn** | **19 59 40.3** | **+0.9** |
| **CBJI** | **Citeko** | **7.26** | **116** | P | Pn | 19 59 44.8 | +4.3 |
| **SKJI** | **Sukabumi** | **7.27** | **121** | P | **Pn** | **19 59 42.0** | **+1.2** |
| **TPI** | **Tanjungpandan** | **7.36** | **87** | P | **Pn** | **19 59 44.1** | **+2.1** |
| | 46nm,2.0s,1.1nm | | | | | | |
| **IPM** | **Ipoh** | **7.70** | **5** | *e*Pn | **Pn** | **19 59 47.0** | **+0.4** |
| | 18nm,0.6s | | | | | | |
| **CNJI** | **Cibinong** | **7.92** | **121** | P | **Pn** | **19 59 50.6** | **+1.0** |
| **LEM** | **Lembang** | **8.12** | **116** | Pn | **Pn** | **19 59 54.8** | **+2.3** |
| | 5.2nm,0.3s,baz=322,slow=17,SNR=5.3 | | | | | | |
| LEM | | | | Sn | **Sn** | **20 01 23.1** | **-0.5** |
| | 1.6nm,0.3s,baz=348,slow=20,SNR=1.3 | | | | | | |
| **LEM** | **Lembang** | **8.12** | **116** | P | **Pn** | **19 59 54.2** | **+1.7** |
| **MLSI** | **Meulaboh, Aceh** | **8.40** | **332** | P | **Pn** | **19 59 56.0** | **-0.3** |
| **KULM** | **Kulim** | **8.47** | **2** | *e*Pn | **Pn** | **19 59 55.5** | **-1.8** |
| | 35nm,1.0s | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.63** | **120** | P | **Pn** | **20 00 00.6** | **+1.2** |
| **CISI** | **Cisompet, Garu** | **8.63** | **120** | *e*Pn | **Pn** | **19 59 58.6** | **-0.8** |
| | 161nm,0.6s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **9.05** | **338** | P | **Pn** | **20 00 04.4** | **-0.7** |
| **CMJI** | **Cimerak** | **9.29** | **119** | P | **Pn** | **20 00 09.8** | **+1.4** |
| **SMRI** | **Semarang** | **10.79** | **111** | P | **Pn** | **20 00 30.5** | **+1.5** |
| **UWJI** | **Ujung Watu** | **11.07** | **107** | P | **Pn** | **20 00 34.4** | **+1.5** |
| **UGM** | **Wanagama** | **11.19** | **115** | P | **Pn** | **20 00 35.9** | **+1.4** |
| **PBKI** | **Pangkalan Bun** | **11.37** | **88** | P | **Pn** | **20 00 38.6** | **+1.6** |
| **WOJI** | **Wonogiri, Jawa** | **11.52** | **114** | P | **Pn** | **20 00 40.5** | **+1.5** |
| **STKI** | **Sintang** | **11.64** | **74** | P | **Pn** | **20 00 42.4** | **+1.7** |
| **NGJI** | **Ngawi** | **11.85** | **111** | P | **Pn** | **20 00 44.9** | **+1.4** |
| **PCJI** | **Pacitan** | **11.89** | **115** | P | **Pn** | **20 00 45.5** | **+1.4** |
| **KKM** | **Kota Kinabalu** | **18.37** | **60** | *e*P | **Pn** | **20 02 09.6** | **+0.2** |
| | 33nm,1.1s | | | | | | |
| **UMPA** | **Umpang Tak** | **19.37** | **356** | P | **Pn** | **20 02 25.5** | **+4.3** |
| | 4.9nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **19.48** | **96** | P | **Pn** | **20 02 23.3** | **+0.7** |
| | 2.1nm,0.3s,baz=249,slow=9.7,SNR=7.3 | | | | | | |
| **PBKT** | **Sadao Pong** | **19.69** | **2** | P | **Pn** | **20 02 28.7** | **+3.7** |
| | 67nm,1.5s | | | | | | |
| **SKNT** | **Sakolnakorn** | **20.41** | **10** | P | **P** | **20 02 29.9** | **-1.4** |
| **UTTA** | **Uttaradit** | **20.85** | **1** | P | Pn | 20 02 38.1 | -0.5 |
| | 4.3nm,0.8s | | | | | | |
| **MHMT** | **Maesariang** | **21.40** | **354** | P | **P** | **20 02 42.1** | **+0.1** |
| | 107nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.59** | **357** | P | **P** | **20 02 42.6** | **-1.5** |
| | 10nm,0.7s,baz=186,slow=10,SNR=25 | | | | | | |
| **LAMP** | **Lampang** | **21.63** | **358** | P | **P** | **20 02 47.0** | **+2.6** |
| | 10nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.95** | **357** | P | **P** | **20 02 50.0** | **+2.1** |
| | 1μm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.95** | **357** | *e*P | **P** | **20 02 45.4** | **-2.5** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.95** | **357** | *e*P | **P** | **20 02 45.4** | **-2.5** |
| | comp=Z,11nm,0.9s | | | | | | |
| **CMAI** | **Chiengmai2** | **23.05** | **357** | P | **P** | **20 02 59.5** | **-0.3** |
| | comp=Z,104nm,2.2s | | | | | | |
| **BATI** | **Baumata** | **24.20** | **108** | P | **P** | **20 03 10.4** | **-0.4** |
| | comp=Z,15nm,0.5s,baz=179,slow=7.4,SNR=4.7 | | | | | | |
| **SLVN** | **Son La** | **24.67** | **8** | *e*P | **P** | **20 03 14.2** | **-0.8** |
| | comp=Z,17nm,1.1s | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.02** | **260** | T | T | 20 32 52.8 | |
| | baz=82,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.02** | **260** | T | T | 20 32 53.3 | |
| | baz=82,slow=75 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.04** | **260** | T | T | 20 32 52.9 | |
| | baz=82,slow=75 | | | | | | |
| **SIJI** | **Sorong** | **31.04** | **86** | P | **P** | **20 04 11.2** | **-0.8** |
| | comp=Z,4.1nm,0.5s,baz=281,slow=20,SNR=6.2 | | | | | | |
| **ODAN** | **Odare** | **32.41** | **338** | *e*P | **P** | **20 04 25.1** | **+0.9** |
| | comp=Z,48nm,0.8s | | | | | | |
| **TAPN** | **Taplejung** | **32.74** | **339** | *e*P | **P** | **20 04 28.4** | **+1.2** |
| | comp=Z,56nm,0.9s | | | | | | |
| **RAMN** | **Ramite** | **32.79** | **337** | *e*P | **P** | **20 04 28.8** | **+1.2** |
| | comp=Z,16nm,0.5s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **33.53** | **154** | *e*P | **P** | **20 04 33.4** | **-0.3** |
| **NWAO** | **Narrogin (SRO)** | **33.53** | **154** | *

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,8.0nm,2.0s | | | | | | | | |
| ABKAR | **Akbulak array** | **62.86** | **332** | *e*P | | **P** | **20 08 18.9** | **-0.7** |
| | comp=Z,12nm,0.9s | | | | | | | | |
| AKTO | **Aktyubinsk** | **64.58** | **332** | P | | **P** | **20 08 29.7** | **-1.3** |
| | comp=Z,2.5nm,0.9s,baz=123,slow=8.0,SNR=5.2 | | | | | | | | |
| SVE | **Sverdlovsk** | **67.93** | **338** | *e*P | | **P** | **20 08 52.2** | **-0.1** |
| SVE | | | | pmax | pmax | | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| KBZ | **Khabaz** | **69.43** | **319** | P | | **P** | **20 09 01.6** | **-0.4** |
| | comp=Z,5.2nm,0.9s,baz=94,slow=5.3,SNR=8.4 | | | | | | | | |
| KIV | **Kislovodsk** | **69.67** | **319** | *e*P | | **P** | **20 09 04.8** | **+1.3** |
| KIV | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | |
| MATP | **Matopo** | **71.82** | **250** | P | | **P** | **20 09 18.6** | **+1.4** |
| | comp=Z,3.2nm,1.1s,baz=94,slow=13,SNR=2.8 | | | | | | | | |
| VRH | **Novokhopyorsk** | **73.50** | **326** | *e*P | | **P** | **20 09 25.7** | **-0.7** |
| VRH | | | | pmax | pmax | | | | |
| | comp=N,8.0nm,0.7s | | | | | | | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | | |
| VRH | | | | pmax | pmax | | | | |
| | comp=E,10.0nm,1.4s | | | | | | | | |
| PETK | **Petropavlovsk-** | **73.76** | **32** | P | | **P** | **20 09 27.4** | **-0.5** |
| | comp=E,3.4nm,0.6s,baz=210,slow=5.0,SNR=2.9 | | | | | | | | |
| BRTR | **Keskin Array B** | **74.37** | **313** | P | | **P** | **20 09 30.6** | **-1.4** |
| | comp=E,1.8nm,0.7s,baz=134,slow=6.7,SNR=9.3 | | | | | | | | |
| VORD | **Divnogorie** | **74.77** | **325** | *e*P | | **P** | **20 09 32.0** | **-1.8** |
| VORD | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| VORD | | | | pmax | pmax | | | | |
| | comp=N,10.0nm,0.8s | | | | | | | | |
| VORD | | | | pmax | pmax | | | | |
| | comp=E,10.0nm,0.8s | | | | | | | | |
| VSR | **Storozhevoye** | **74.95** | **325** | *e*P | | **P** | **20 09 33.7** | **-1.1** |
| VSR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=N,6.0nm,0.7s | | | | | | | | |
| VSR | | | | pmax | pmax | | | | |
| | comp=E,10.0nm,0.9s | | | | | | | | |
| LPSR | **Galich'ya Gora** | **75.68** | **326** | *e*P | | **P** | **20 09 38.2** | **-0.7** |
| LPSR | | | | pmax | pmax | | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=N,4.0nm,0.6s | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | |
| | comp=E,5.0nm,1.0s | | | | | | | | |
| OBN | **Obninsk** | **77.99** | **328** | *i* P | | **P** | **20 09 50.5** | **-1.4** |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.4s | | | | | | | | |
| TMCR | **Tamitsa** | **81.19** | **337** | *e*P | | **P** | **20 10 09.8** | **+0.7** |
| TMCR | | | | pmax | pmax | | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| MLR | **Muntele Rosu** | **81.40** | **317** | P | | **P** | **20 10 11.4** | **+0.5** |
| | comp=Z,0.9nm,0.9s,baz=144,slow=5.1,SNR=4.2 | | | | | | | | |
| FINES | **FINESS Array B** | **85.33** | **332** | P | | **P** | **20 10 30.8** | **+0.3** |
| | comp=Z,1.5nm,0.6s,baz=122,slow=6.9,SNR=7.4 | | | | | | | | |
| FINES | | | | pP | | **pP** | **20 10 38.1** | **-1.4** |
| | comp=Z,1.2nm,0.5s,baz=120,slow=6.3,SNR=3.0 | | | | | | | | |
| FINES | **FINESS Array B** | **85.33** | **332** | *i* P | | **P** | **20 10 31.3** | **+0.7** |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| ARCES | **ARCESS Array B** | **87.73** | **340** | P | | **P** | **20 10 42.8** | **+0.6** |
| | comp=Z,2.9nm,0.7s,baz=92,slow=4.0,SNR=4.4 | | | | | | | | |
| GERES | **GERESS Array B** | **90.17** | **319** | P | | **P** | **20 10 54.6** | **+0.4** |
| | comp=Z,0.9nm,0.9s,baz=151,slow=3.0,SNR=4.7 | | | | | | | | |
| TXAR | **Lajitas Array** | **145.48** | **39** | PKPbc | | **PKPab** | **20 17 33.8** | **+0.9** |
| | comp=Z,11nm,0.7s,baz=319,slow=1.1,SNR=42 | | | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | | 20 17 41.2 | -0.8 | |
| | comp=Z,4.0nm,0.6s,baz=292,slow=1.7,SNR=8.2 | | | | | | | | |
| MIAR | **Mount Ida** | **146.28** | **21** | *e*PKP2 | | **PKPdf** | **20 17 34.1** | **+0.4** |
| MIAR | **Mount Ida** | **146.28** | **21** | *e*PKPdf | | **PKPdf** | **20 17 34.1** | **+0.4** |
| JCT | **Junction City** | **146.90** | **33** | *e*PKP2 | | **PKPbc** | **20 17 37.3** | **+0.4** |
| JCT | **Junction City** | **146.90** | **33** | *e*PKPdf | | **PKPbc** | **20 17 37.2** | **+0.4** |
| CPCT | **Cooper Cave** | **147.63** | **7** | *e*PKPdf | | **PKPbc** | **20 17 38.4** | **-0.3** |

*ISCJB* ***25*** *20:00:02.5±0.4, 39.°88N±0.°01×23.°78E±0.°03, h10km±3km, Error ellipse: s-maj=3.3km s-min=2.4km az=13.2*
*ATH* ***25*** *20:00:02.6, 39.°90N×23.°77E, h27km±1km, MD3.1/21*
*CSEM* ***25*** *20:00:03.0±0.1, 39.°89N×23.°75E, h15km, ML2.8, Error ellipse: s-maj=3.3km s-min=2.5km az=110.0*
*THE* ***25*** *20:00:03.7, 39.°90N×23.°74E, h7km, ML2.8/12, Error ellipse: s-maj=1.0km s-min=0.4km az=258.0*
*SOF* ***25*** *20:00:03.0, 41.°36N×21.°61E, h5km, MD3.0*

**ISC 25 20:00:03.0±0.8, 39.°90N±0.°01×23.°74E±0.°02, h12km±5km, n126, σ0§61/173, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAIG** | **Paliouri** | **0.05** | **300** | *e*PB | | **Pg** | **20 00 05.3** | **-0.1** |
| **PAIG** | **Paliouri** | **0.05** | **300** | P | | **Pg** | **20 00 05.3** | **-0.1** |
| PAIG | | | | S | | **Sg** | **20 00 06.8** | **-0.2** |
| **PAIG** | **Paliouri** | **0.05** | **300** | P | | **Pg** | **20 00 05.3** | **-0.1** |
| **OUR** | **Ouranopolis** | **0.47** | **23** | *e*PB | | **Pb** | **20 00 13.1** | **-0.2** |
| OUR | | | | *e*SB | | **Sb** | **20 00 19.9** | **-0.3** |
| **OUR** | **Ouranopolis** | **0.47** | **23** | P | | **Pb** | **20 00 13.1** | **-0.2** |
| OUR | | | | S | | **Sb** | **20 00 19.9** | **-0.3** |
| **OUR** | **Ouranopolis** | **0.47** | **23** | P | | **Pb** | **20 00 13.1** | **-0.2** |
| OUR | | | | S | | **Sb** | **20 00 19.9** | **-0.3** |
| **PLG** | **Polygyros** | **0.52** | **335** | *e*PN | | **Pg** | **20 00 13.1** | **-0.2** |
| PLG | | | | *e*SN | | **Sg** | **20 00 20.9** | **+0.6** |
| **PLG** | **Polygyros** | **0.52** | **335** | P | | **Pg** | **20 00 13.2** | **-0.1** |
| PLG | | | | S | | **Sg** | **20 00 20.8** | **+0.5** |
| **PLG** | **Polygyros** | **0.52** | **335** | P | | **Pg** | **20 00 13.2** | **-0.1** |
| PLG | | | | S | | **Sg** | **20 00 20.8** | **+0.5** |
| **XOR** | **Xorichti** | **0.68** | **219** | *e*PN | | **Pb** | **20 00 16.8** | **-0.1** |
| XOR | | | | *e*SN | | **Sb** | **20 00 26.7** | **+0.4** |
| **XOR** | **Xorichti** | **0.68** | **219** | P | | **Pb** | **20 00 17.1** | **+0.2** |
| XOR | | | | S | | **Sb** | **20 00 26.4** | **+0.1** |
| **XOR** | **Xorichti** | **0.68** | **219** | *e*Pn | | **Pb** | **20 00 16.8** | **-0.1** |
| **XOR** | **Xorichti** | **0.68** | **219** | P | | **Pb** | **20 00 17.1** | **+0.2** |
| XOR | | | | S | | **Sb** | **20 00 26.4** | **+0.1** |
| XOR | | | | *e*Sn | | **Sb** | **20 00 26.7** | **+0.4** |
| **NEO** | **Neokhori** | **0.71** | **214** | *e*PN | | **Pb** | **20 00 17.8** | **+0.3** |
| NEO | | | | *e*SN | | **Sb** | **20 00 27.3** | **+0.1** |
| **NEO** | **Neokhori** | **0.71** | **214** | P | | **Pb** | **20 00 17.7** | **+0.3** |
| NEO | | | | S | | **Sb** | **20 00 28.1** | **+0.9** |
| **NEO** | **Neokhori** | **0.71** | **214** | *e*Pn | | **Pb** | **20 00 17.8** | **+0.3** |
| NEO | | | | *e*Sn | | **Sb** | **20 00 27.3** | **+0.1** |
| NEO | | | | S | | **Sb** | **20 00 28.1** | **+0.9** |
| **AOS** | **Alonnisos** | **0.74** | **171** | *e*PG | | **Pb** | **20 00 17.8** | **0.0** |
| **AOS** | **Alonnisos** | **0.74** | **171** | *e*PN | | **Pg** | **20 00 17.4** | **+0.1** |
| AOS | | | | *e*SN | | **Sb** | **20 00 28.1** | **+0.3** |
| **AOS** | **Alonnisos** | **0.74** | **171** | P | | **Pg** | **20 00 17.1** | **-0.2** |
| AOS | | | | S | | **Sn** | **20 00 29.0** | **-1.4** |
| **AOS** | **Alonnisos** | **0.74** | **171** | P | | **Pg** | **20 00 17.1** | **-0.2** |
| **AOS** | **Alonnisos** | **0.74** | **171** | *e*Pn | | **Pg** | **20 00 17.4** | **+0.1** |
| **AOS** | **Alonnisos** | **0.74** | **171** | *e*Pg | | **Pb** | **20 00 17.8** | **0.0** |
| AOS | | | | *e*Sn | | **Sb** | **20 00 28.1** | **+0.3** |
| AOS | | | | S | | **Sn** | **20 00 29.0** | **-1.4** |
| **SKIA** | **Skiathos** | **0.76** | **196** | *e*PN | | **Pg** | **20 00 17.2** | **-0.6** |
| SKIA | | | | *e*SN | | **Sg** | **20 00 28.2** | **+0.4** |
| **SKIA** | **Skiathos** | **0.76** | **196** | P | | **Pb** | **20 00 18.4** | **+0.1** |
| SKIA | | | | S | | **Sb** | **20 00 29.1** | **+0.5** |
| **FYTO** | **Fytoko, Volos** | **0.79** | **232** | P | | **Pb** | **20 00 18.8** | **+0.1** |
| FYTO | | | | S | | **Sn** | **20 00 30.4** | **-1.3** |
| **FYTO** | **Fytoko, Volos** | **0.79** | **232** | P | | **Pb** | **20 00 18.8** | **+0.1** |
| FYTO | | | | S | | **Sn** | **20 00 30.4** | **-1.3** |
| **HORT** | **Hortiatis** | **0.85** | **325** | *e*PN | | **Pb** | **20 00 19.1** | **-0.8** |
| HORT | | | | *e*SN | | **Sg** | **20 00 31.2** | **+0.5** |
| **HORT** | **Hortiatis** | **0.85** | **325** | P | | **Pb** | **20 00 19.0** | **-0.8** |
| HORT | | | | S | | **Sn** | **20 00 32.4** | **-1.0** |
| **HORT** | **Hortiatis** | **0.85** | **325** | P | | **Pb** | **20 00 19.0** | **-0.8** |
| HORT | | | | *e*Sn | | **Sg** | **20 00 31.2** | **+0.5** |
| HORT | | | | S | | **Sn** | **20 00 32.4** | **-1.0** |
| **THE** | **Thessaloniki** | **0.94** | **321** | *e*PN | | **Pg** | **20 00 21.3** | **+0.1** |
| **THE** | **Thessaloniki** | **0.94** | **321** | P | | **Pb** | **20 00 21.1** | **-0.2** |
| **THE** | **Thessaloniki** | **0.94** | **321** | P | | **Pb** | **20 00 21.1** | **-0.2** |
| **SOH** | **Sokhos** | **0.97** | **342** | *e*PN | | **Pb** | **20 00 21.0** | **-0.8** |
| SOH | | | | *e*SN | | **Sn** | **20 00 35.1** | **-1.1** |
| **SOH** | **Sokhos** | **0.97** | **342** | P | | **Pg** | **20 00 21.8** | **+0.1** |
| SOH | | | | S | | **Sn** | **20 00 35.6** | **-0.6** |
| **SOH** | **Sokhos** | **0.97** | **342** | *e*Pn | | **Pb** | **20 00 21.0** | **-0.8** |
| **SOH** | **Sokhos** | **0.97** | **342** | P | | **Pg** | **20 00 21.8** | **+0.1** |
| SOH | | | | *e*Sn | | **Sn** | **20 00 35.1** | **-1.1** |
| SOH | | | | S | | **Sn** | **20 00 35.6** | **-0.6** |
| **LIT** | **Litokhoron** | **0.98** | **282** | *e*PN | | **Pn** | **20 00 22.3** | **-0.4** |
| **LIT** | **Litokhoron** | **0.98** | **282** | P | | **Pb** | **20 00 21.9** | **-0.1** |
| LIT | | | | S | | **Sn** | **20 00 36.7** | **+0.2** |
| **LIT** | **Litokhoron** | **0.98** | **282** | P | | **Pb** | **20 00 21.9** | **-0.1** |
| **LIT** | **Litokhoron** | **0.98** | **282** | *e*Pn | | **Pn** | **20 00 22.3** | **-0.4** |
| LIT | | | | S | | **Sn** | **20 00 36.7** | **+0.2** |
| **SMIA** | **Simia** | **1.10** | **202** | *e*PN | | **Pn** | **20 00 24.0** | **-0.3** |
| SMIA | | | | *e*SN | | **Sn** | **20 00 39.2** | **-0.2** |
| **SMIA** | **Simia** | **1.10** | **202** | P | | **Pn** | **20 00 23.9** | **-0.3** |
| **SMIA** | **Simia** | **1.10** | **202** | *e*Pn | | **Pn** | **20 00 24.0** | **-0.3** |
| SMIA | | | | *e*Sn | | **Sn** | **20 00 39.2** | **-0.2** |
| **LIA** | **Limnos Island** | **1.11** | **90** | *e*PN | | **Pn** | **20 00 23.9** | **-0.5** |
| LIA | | | | *e*SN | | **Sb** | **20 00 38.3** | **-0.3** |
| **LIA** | **Limnos Island** | **1.11** | **90** | P | | **Pn** | **20 00 23.9** | **-0.5** |
| LIA | | | | S | | **Sn** | **20 00 40.6** | **+1.0** |
| **LIA** | **Limnos Island** | **1.11** | **90** | P | | **Pn** | **20 00 23.9** | **-0.5** |
| LIA | | | | *e*Sn | | **Sb** | **20 00 38.3** | **-0.3** |
| LIA | | | | S | | **Sn** | **20 00 40.6** | **+1.0** |
| **MRKA** | **Markates** | **1.20** | **186** | *e*PN | | **Pn** | **20 00 25.1** | **-0.6** |
| MRKA | | | | *e*SN | | **Sg** | **20 00 42.0** | **+0.3** |
| **MRKA** | **Markates** | **1.20** | **186** | *e*Pn | | **Pn** | **20 00 25.1** | **-0.6** |
| MRKA | | | | *e*Sn | | **Sg** | **20 00 42.0** | **+0.3** |
| **SRS** | **Serrai** | **1.22** | **355** | *e*PN | | **Pg** | **20 00 26.2** | **-0.3** |
| **SRS** | **Serrai** | **1.22** | **355** | P | | **Pg** | **20 00 26.2** | **-0.3** |
| SRS | | | | S | | **Sg** | **20 00 43.5** | **+1.1** |
| **SRS** | **Serrai** | **1.22** | **355** | P | | **Pg** | **20 00 26.2** | **-0.3** |
| SRS | | | | S | | **Sg** | **20 00 43.5** | **+1.1** |
| **KAVA** | **Kavala** | **1.25** | **28** | P | | **Pb** | **20 00 26.1** | **-0.4** |
| KAVA | | | | S | | **Sg** | **20 00 44.5** | **+1.3** |
| **KAVA** | **Kavala** | **1.25** | **28** | P | | **Pb** | **20 00 26.1** | **-0.4** |
| **THL** | **Klokotos Trika** | **1.37** | **256** | *e*PB | | **Pn** | **20 00 27.5** | **-0.5** |
| **THL** | **Klokotos Trika** | **1.37** | **256** | P | | **Pn** | **20 00 27.8** | **-0.2** |
| **THL** | **Klokotos Trika** | **1.37** | **256** | *e*Pb | | **Pn** | **20 00 27.5** | **-0.5** |
| **THL** | **Klokotos Trika** | **1.37** | **256** | P | | **Pn** | **20 00 27.8** | **-0.2** |
| **LKR** | **Lokris** | **1.37** | **205** | *e*PB | | **Pn** | **20 00 27.2** | **-0.8** |
| **LKR** | **Lokris** | **1.37** | **205** | *e*Pb | | **Pn** | **20 00 27.2** | **-0.8** |
| **AGG** | **Agios Georgios** | **1.40** | **232** | *e*PN | | **Pn** | **20 00 28.2** | **-0.2** |
| **AGG** | **Agios Georgios** | **1.40** | **232** | P | | **Pn** | **20 00 28.1** | **-0.3** |
| **AGG** | **Agios Georgios** | **1.40** | **232** | P | | **Pn** | **20 00 28.1** | **-0.3** |
| **AXAR** | **Agios Charalam** | **1.41** | **217** | *e*PN | | **Pn** | **20 00 28.1** | **-0.4** |
| **AXAR** | **Agios Charalam** | **1.41** | **217** | *e*Pn | | **Pn** | **20 00 28.1** | **-0.4** |
| **KNT** | **Kendrikon** | **1.41** | **333** | *e*PN | | **Pg** | **20 00 30.3** | **+0.1** |
| **KNT** | **Kendrikon** | **1.41** | **333** | *e*PN | | **Pb** | **20 00 29.4** | **0.0** |
| **KNT** | **Kendrikon** | **1.41** | **333** | *e*Pn | | **Pb** | **20 00 29.4** | **0.0** |
| **NVR** | **Nevrokopi** | **1.45** | **4** | *e*PB | | **Pn** | **20 00 28.0** | **-1.2** |
| **NVR** | **Nevrokopi** | **1.45** | **4** | P | | **Pb** | **20 00 29.6** | **-0.4** |
| **NVR** | **Nevrokopi** | **1.45** | **4** | *e*Pb | | **Pn** | **20 00 28.0** | **-1.2** |
| **NVR** | **Nevrokopi** | **1.45** | **4** | P | | **Pb** | **20 00 29.6** | **-0.4** |
| **GRG** | **Griva** | **1.47** | **316** | *e*PN | | **Pb** | **20 00 29.7** | **-0.6** |
| **GRG** | **Griva** | **1.47** | **316** | P | | **Pb** | **20 00 30.6** | **+0.3** |
| **GRG** | **Griva** | **1.47** | **316** | *e*Pn | | **Pb** | **20 00 29.7** | **-0.6** |
| **GRG** | **Griva** | **1.47** | **316** | P | | **Pb** | **20 00 30.6** | **+0.3** |
| **EREA** | **Eretria** | **1.49** | **174** | *e*PN | | **Pn** | **20 00 29.3** | **-0.3** |
| **EREA** | **Eretria** | **1.49** | **174** | *e*Pn | | **Pn** | **20 00 29.3** | **-0.3** |
| **SMTH** | **Samothraki Isl** | **1.49** | **67** | *e*PB | | **Pn** | **20 00 28.5** | **-1.1** |
| **SMTH** | **Samothraki Isl** | **1.49** | **67** | *e*Pb | | **Pn** | **20 00 28.5** | **-1.1** |
| **MAKR** | **Makrakomi, Fth** | **1.53** | **235** | *e*PN | | **Pb** | **20 00 30.8** | **-0.5** |
| **MAKR** | **Makrakomi, Fth** | **1.53** | **235** | *e*Pn | | **Pb** | **20 00 30.8** | **-0.5** |
| **KZN** | **Kozani** | **1.56** | **286** | *e*PN | | **Pb** | **20 00 31.6** | **-0.4** |
| **KZN** | **Kozani** | **1.56** | **286** | *e*Pn | | **Pb** | **20 00 31.6** | **-0.4** |
| **VAY** | **Valandovo** | **1.68** | **328** | *i* Pn | | **Pg** | **20 00 37.4** | **+2.2** |
| VAY | | | | *i* Sn | | **Sg** | **20 00 57.6** | **+0.6** |
| **GADA** | **Gvkgeada** | **1.68** | **79** | *e*PN | | **Pn** | **20 00 31.9** | **-0.4** |
| **GADA** | **Gvkgeada** | **1.68** | **79** | *e*Pn | | **Pn** | **20 00 31.9** | **-0.4** |
| **MMB** | **Musomiste** | **1.69** | **360** | *i* P | | **Pn** | **20 00 32.6** | **+0.2** |
| **MMB** | **Musomiste** | **1.69** | **360** | *i* P | | **Pn** | **20 00 32.6** | **+0.2** |
| **VIL2** | **Platees** | **1.73** | **192** | *e*PB | | **Pn** | **20 00 33.1** | **+0.2** |
| **DESF** | **Desfina** | **1.76** | **213** | *e*PB | | **Pn** | **20 00 31.8** | **-1.6** |
| **DESF** | **Desfina** | **1.76** | **213** | *e*Pn | | **Pn** | **20 00 31.8** | **-1.6** |
| **DSF** | **Desfina** | **1.76** | **213** | *e*PB | | **Pn** | **20 00 32.9** | **-0.5** |
| **DSF** | **Desfina** | **1.76** | **213** | *e*Pb | | **Pn** | **20 00 32.9** | **-0.5** |
| **VILL** | **Villia** | **1.77** | **191** | *e*Pb | | **Pn** | **20 00 33.1** | **-0.4** |
| **SIGR** | **SIGRI** | **1.77** | **112** | *e*PN | | **Pn** | **20 00 33.9** | **+0.4** |
| **SIGR** | **SIGRI** | **1.77** | **112** | *e*Pn | | **Pn** | **20 00 33.9** | **+0.4** |
| **EVR** | **Evrytania** | **1.79** | **237** | *e*PN | | **Pn** | **20 00 34.1** | **+0.2** |
| **EVR** | **Evrytania** | **1.79** | **237** | *e*Pn | | **Pn** | **20 00 34.1** | **+0.2** |
| **EZN** | **Ezine** | **1.99** | **91** | *e*PN | | **Pn** | **20 00 36.8** | **+0.3** |
| **EZN** | **Ezine** | **1.99** | **91** | *e*Pn | | **Pn** | **20 00 36.8** | **+0.3** |
| **PENT** | **Pentalofos** | **2.02** | **279** | *e*PB | | **Pn** | **20 00 38.1** | **+1.1** |
| **PENT** | **Pentalofos** | **2.02** | **279** | *e*Pb | | **Pn** | **20 00 38.1** | **+1.1** |
| **ALN** | **Alexandroupoli** | **2.02** | **60** | *e*PN | | **Pn** | **20 00 36.7** | **-0.3** |
| **ALN** | **Alexandroupoli** | **2.02** | **60** | *e*Pn | | **Pn** | **20 00 36.7** | **-0.3** |
| **VLY** | **Voula,Athens** | **2.04** | **179** | *e*PN | | **Pn** | **20 00 36.7** | **-0.6** |
| **VLY** | **Voula,Athens** | **2.04** | **179** | *e*Pn | | **Pn** | **20 00 36.7** | **-0.6** |
| **PRK** | **Paraskevi** | **2.06** | **108** | *e*PB | | **Pn** | **20 00 37.8** | **+0.3** |
| **PRK** | **Paraskevi** | **2.06** | **108** | *e*Pb | | **Pn** | **20 00 37.8** | **+0.3** |
| **GELI** | **Tayfur-Gelibol** | **2.15** | **76** | *e*PN | | **Pn** | **20 00 38.4** | **-0.4** |
| **GELI** | **Tayfur-Gelibol** | **2.15** | **76** | *e*Pn | | **Pn** | **20 00 38.4** | **-0.4** |
| **KLV** | **Kalavryta, Ach** | **2.23** | **214** | *e*PN | | **Pn** | **20 00 39.7** | **-0.2** |
| **KLV** | **Kalavryta, Ach** | **2.23** | **214** | *e*Pn | | **Pn** | **20 00 39.7** | **-0.2** |
| **GUR** | **Goura** | **2.24** | **210** | *e*PN | | **Pn** | **20 00 40.2** | **+0.1** |
| **GUR** | **Goura** | **2.24** | **210** | *e*Pn | | **Pn** | **20 00 40.2** | **+0.1** |
| **ERIK** | **Erikli-Kesan** | **2.26** | **69** | *e*PN | | **Pn** | **20 00 39.5** | **-0.7** |
| **ERIK** | **Erikli-Kesan** | **2.26** | **69** | *e*Pn | | **Pn** | **20 00 39.5** | **-0.7** |
| **RKY** | **Sarkoy-Tekirda** | **2.75** | **72** | *e*PN | | **Pn** | **20 00 47.6** | **+0.6** |
| **RKY** | **Sarkoy-Tekirda** | **2.75** | **72** | *e*Pn | | **Pn** | **20 00 47.6** | **+0.6** |
| **KRBG** | **Karabiga-Canak** | **2.77** | **79** | *e*PN | | **Pn** | **20 00 47.8** | **+0.5** |
| **KRBG** | **Karabiga-Canak** | **2.77** | **79** | *e*Pn | | **Pn** | **20 00 47.8** | **+0.5** |
| **EDRB** | **Edirne** | **3.00** | **49** | *e*P | | **Pn** | **20 00 51.4** | **+1.1** |
| **EDRB** | **Edirne** | **3.00** | **49** | *e*P | | **Pn** | **20 00 51.4** | **+1.1** |
| **MRMT** | **Marmara Adasi** | **3.03** | **75** | *e*PN | | **Pn** | **20 00 51.3** | **+0.4** |
| **MRMT** | **Marmara Adasi** | **3.03** | **75** | *e*Pn | | **Pn** | **20 00 51.3** | **+0.4** |

*ISCJB* ***25*** *20:00:29.8±0.2, 47.°31N±0.°01×9.°56E±0.°02, h12km±1km, Error ellipse: s-maj=2.2km s-min=1.7km az=164.9*
*LDG* ***25*** *20:00:30.7±0.1, 47.°25N×9.°52E, h3km, Md3.2/4, Ml3.1/37, Error ellipse: s-maj=1.5km s-min=1.4km az=3.0*
*VIE* ***25*** *20:00:30.4±0.2, 47.°26N×9.°53E, h6km, mb2.2/6, ml3.1/8, Error ellipse: s-maj=1.2km s-min=1.2km az=16.0, felt 5 ems98 at Feldkirch / Tyrol*
*ZUR* ***25*** *20:00:30.8, 47.°24N×9.°56E, h3km±1km, ML3.0/35*
*GEN* ***25*** *20:00:31.0, 47.°28N×9.°61E, h4km, ML2.8*
*CSEM* ***25*** *20:00:31.0±0.1, 47.°26N×9.°58E, h10km, ML3.0, Error ellipse: s-maj=2.5km s-min=2.0km az=158.0*
*BGR* ***25*** *20:00:31.7±0.5, 47.°27N×9.°53E, h10km, ML3.1/16, Error ellipse: s-maj=10.0km s-min=4.4km az=22.0*
*BGR Felt in Feldkirch, acoustic observation of a big bang, some reports of fissures in the plastering.*
*PRU* ***25*** *20:00:32.5, 47.°37N×9.°62E, h6km*
*BNS* ***25*** *20:00:32.8±0.6, 47.°25N×9.°52E, h5km, ML2.5*

**ISC 25 20:00:29.6±0.7, 47.°25N±0.°01×9.°49E±0.°01, h14km±5km, n252, σ1§44/363, 40C-41D, Germany**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LIENZ** | **Kamor/St.Gall** | **0.04** | **6** | ⇑*i*Pg | | **Pg** | **20 00 32.5** | **0.0** |
| | 29µm,0.5s | | | | | | | |
| **LIENZ** | **Kamor/St.Gall** | **0.04** | **6** | ⇑*i*Pg | | **Pg** | **20 00 32.5** | **0.0** |
| | 29µm,0.5s | | | | | | | |
| **SBUB** | **Buchserberg Ma** | **0.11** | **198** | ⇓*i*Pg | | **Pb** | **20 00 33.9** | **+0.2** |
| **SBUB** | **Buchserberg Ma** | **0.11** | **198** | ⇓*i*Pg | | **Pb** | **20 00 33.9** | **+0.2** |
| **PLONS** | **Plons/SG** | **0.22** | **199** | ⇓*i*Pg | | **Pb** | **20 00 35.7** | **+0.3** |
| | 4µm,0.4s | | | | | | | |
| **PLONS** | **Plons/SG** | **0.22** | **199** | Pg | | **Pb** | **20 00 35.9** | **+0.5** |
| PLONS | | | | Sg | | **Sb** | **20 00 39.8** | **+0.6** |
| **DAVA** | **Damuels** | **0.27** | **83** | *e*Pg | | **Pg** | **20 00 35.3** | **0.0** |
| DAVA | | | | *e*Sg | | **Sg** | **20 00 39.3** | **-0.1** |
| **DAVA** | **Damuels** | **0.27** | **83** | ⇓*i*Pg | | **Pg** | **20 00 35.4** | **0.0** |
| | 5µm,0.5s | | | | | | | |
| DAVA | | | | *e*Sg | | **Sg** | **20 00 39.1** | **-0.3** |
| | 5µm,0.5s | | | | | | | |
| **DAVA** | **Damuels** | **0.27** | **83** | *e*Pg | | **Pg** | **20 00 35.4** | **0.0** |
| | 105nm,0.1s,SNR=209 | | | | | | | |
| DAVA | | | | ⇑*i*Sg | | **Sg** | **20 00 39.1** | **-0.3** |
| | 977nm,0.2s | | | | | | | |
| **DAVA** | **Damuels** | **0.27** | **83** | Pg | | **Pg** | **20 00 35.4** | **0.0** |
| | 105nm,0.1s,SNR=209 | | | | | | | |
| DAVA | | | | Sg | | **Sg** | **20 00 39.1** | **-0.3** |
| | 977nm,0.2s | | | | | | | |
| **WILA** | **Wila** | **0.42** | **292** | ⇓*i*Pg | | **Pn** | **20 00 40.9** | **-0.5** |
| | 3µm,0.6s | | | | | | | |
| WILA | | | | *e*Sg | | **Sn** | **20 00 48.2** | **-0.8** |
| | 3µm,0.6s | | | | | | | |
| **WILA** | **Wila** | **0.42** | **292** | ⇓*i*Pg | | **Pn** | **20 00 40.9** | **-0.5** |
| | 3µm,0.6s | | | | | | | |
| WILA | | | | *e*Sg | | **Sn** | **20 00 48.2** | **-0.8** |
| | 3µm,0.6s | | | | | | | |
| **WEIN** | **Weingarten** | **0.44** | **309** | ⇓*i*Pg | | **Pn** | **20 00 41.0** | **-0.5** |
| | 1µm,0.2s | | | | | | | |
| WEIN | | | | *i* Sg | | **Sn** | **20 00 48.5** | **-0.8** |
| | 1µm,0.2s | | | | | | | |
| **WEIN** | **Weingarten** | **0.44** | **309** | ⇓*i*Pg | | **Pn** | **20 00 41.0** | **-0.5** |
| | 1µm,0.2s | | | | | | | |
| WEIN | | | | *i* Sg | | **Sn** | **20 00 48.5** | **-0.8** |
| | 1µm,0.2s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **0.55** | **150** | ⇓*i*Pg | | **Pg** | **20 00 41.3** | **+0.9** |
| | 2µm,0.4s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **0.55** | **150** | ⇓*i*Pg | | **Pg** | **20 00 41.3** | **+0.9** |
| | 2µm,0.4s | | | | | | | |
| DAVOX | | | | Sg | | **Sb** | **20 00 49.9** | **+1.1** |
| **STEIN** | **Stein am Rhein** | **0.59** | **315** | ⇓*i*Pg | | **Pn** | **20 00 43.8** | **+0.2** |
| | 401nm,0.5s | | | | | | | |
| **STEIN** | **Stein am Rhein** | **0.59** | **315** | ⇓*i*Pg | | **Pn** | **20 00 43.8** | **+0.2** |
| | 401nm,0.5s | | | | | | | |
| **ZUR** | **Degenried** | **0.63** | **281** | ⇓*i*Pg | | **Pn** | **20 00 44.6** | **+0.5** |
| | 4µm,0.2s | | | | | | | |
| **ZUR** | **Degenried** | **0.63** | **281** | ⇓*i*Pg | | **Pn** | **20 00 44.6** | **+0.5** |
| | 4µm,0.2s | | | | | | | |
| **MUO** | **Muotathal** | **0.65** | **244** | ⇑*i*Pg | | **Pn** | **20 00 44.6** | **+0.1** |
| | 955nm,0.5s | | | | | | | |
| **MUO** | **Muotathal** | **0.65** | **244** | ⇑*i*Pg | | **Pn** | **20 00 44.6** | **+0.1** |
| | 955nm,0.5s | | | | | | | |
| **TRULL** | **Truellikon** | **0.67** | **306** | ⇓*i*Pg | | **Pn** | **20 00 45.4** | **+0.7** |
| | 2µm,0.2s | | | | | | | |
| **TRULL** | **Truellikon** | **0.67** | **306** | ⇓*i*Pg | | **Pn** | **20 00 45.4** | **+0.7** |
| | 2µm,0.2s | | | | | | | |
| **EWZT2** | **Wettswil, ZR** | **0.68** | **277** | ⇓*i*Pg | | **Pn** | **20 00 45.5** | **+0.6** |
| | 9µm,0.3s | | | | | | | |
| **FLACH** | **Flaach** | **0.70** | **297** | ⇓*i*Pg | | **Pn** | **20 00 45.7** | **+0.6** |
| | 2µm,0.2s | | | | | | | |
| **FLACH** | **Flaach** | **0.70** | **297** | ⇓*i*Pg | | **Pn** | **20 00 45.7** | **+0.6** |
| | 2µm,0.2s | | | | | | | |
| **CUNA** | **Curaglia** | **0.73** | **217** | ⇑*i*Pg | | **Pn** | **20 00 47.2** | **+1.6** |
| | 455nm,0.3s | | | | | | | |
| **CUNA** | **Curaglia** | **0.73** | **217** | ⇑*i*Pg | | **Pn** | **20 00 47.2** | **+1.6** |
| | 455nm,0.3s | | | | | | | |
| **VDL** | **Val di Lei** | **0.77** | **182** | ⇓*i*Pg | | **Pb** | **20 00 45.9** | **+1.0** |
| | 312nm,0.3s | | | | | | | |
| **VDL** | **Val di Lei** | **0.77** | **182** | ⇓*i*Pg | | **Pb** | **20 00 45.9** | **+1.0** |
| | 312nm,0.3s | | | | | | | |
| **TUE** | **Stuetta** | **0.79** | **187** | ⇓*i*Pg | | **Pb** | **20 00 46.0** | **+0.9** |
| | 375nm,0.4s | | | | | | | |
| **TUE** | **Stuetta** | **0.79** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | 66nm,0.2s | | | | | | |
| LKBD2 | Leukerbad 2 | 1.54 | 236 | ⇑iPn | Pg | 20 00 59.7 | +0.5 |
| | 66nm,0.2s | | | | | | |
| LKBD | Leukerbad | 1.54 | 236 | ⇑iPn | Pg | 20 01 00.5 | +1.2 |
| | 152nm,0.3s | | | | | | |
| LKBD | Leukerbad | 1.54 | 236 | ⇑iPn | Pg | 20 01 00.5 | +1.2 |
| | 152nm,0.3s | | | | | | |
| SENIN | Lac Senin/Sane | 1.75 | 240 | ⇑iPn | Pg | 20 01 03.1 | 0.0 |
| | 236nm,0.4s | | | | | | |
| SENIN | Lac Senin/Sane | 1.75 | 240 | ⇑iPn | Pg | 20 01 03.1 | 0.0 |
| | 236nm,0.4s | | | | | | |
| SATI | Passo dei Sala | 1.77 | 220 | P | Pg | 20 01 04.6 | +0.9 |
| SATI | | | | S | Sg | 20 01 27.6 | +0.9 |
| TORNY | Torny/Romont | 1.79 | 255 | ⇑iPn | Pg | 20 01 03.4 | -0.6 |
| | 446nm,0.4s | | | | | | |
| TORNY | Torny/Romont | 1.79 | 255 | ⇑iPn | Pg | 20 01 03.4 | -0.6 |
| | 446nm,0.4s | | | | | | |
| HINF | Hinteralfeld | 1.87 | 288 | eP | Pb | 20 01 03.8 | +0.2 |
| HINF | | | | eSn | Sn | 20 01 24.9 | +0.3 |
| | 48nm,0.3s | | | | | | |
| HINF | | | | eSg | Sg | 20 01 30.7 | +0.9 |
| | 58nm,0.3s | | | | | | |
| HINF | Hinteralfeld | 1.87 | 288 | eP | Pb | 20 01 03.8 | +0.2 |
| HINF | | | | eSn | Sn | 20 01 24.9 | +0.3 |
| | 24nm,0.3s | | | | | | |
| HINF | | | | eSg | Sg | 20 01 30.7 | +0.9 |
| | 29nm,0.3s | | | | | | |
| CDF | Champ du Feu | 1.89 | 309 | eP | Pb | 20 01 04.1 | +0.2 |
| CDF | | | | eSg | Sg | 20 01 30.9 | +0.6 |
| | 59nm,0.3s | | | | | | |
| CDF | Champ du Feu | 1.89 | 309 | eP | Pb | 20 01 04.1 | +0.2 |
| CDF | | | | eSg | Sg | 20 01 30.9 | +0.6 |
| | 30nm,0.3s | | | | | | |
| BRANT | Les Verrieres | 2.08 | 262 | ⇑iPn | Pb | 20 01 07.2 | 0.0 |
| | 322nm,0.3s | | | | | | |
| BRANT | Les Verrieres | 2.08 | 262 | ⇑iPn | Pb | 20 01 07.2 | 0.0 |
| | 322nm,0.3s | | | | | | |
| TRAV | Traversella | 2.12 | 215 | P | Pb | 20 01 07.1 | -0.7 |
| TRAV | | | | S | Sn | 20 01 31.2 | +0.4 |
| CIRO | Champorcher | 2.12 | 219 | P | Pb | 20 01 09.4 | +1.5 |
| ABTA | Abfaltersbach | 2.13 | 103 | ⇓iPn | Pn | 20 01 06.5 | +1.6 |
| ABTA | | | | ⇓iPg | Pg | 20 01 10.7 | +0.2 |
| | 26nm,0.3s | | | | | | |
| ABTA | | | | ⇑iSn | Sb | 20 01 33.7 | -0.7 |
| ABTA | | | | ⇓iSg | Sg | 20 01 39.4 | +1.2 |
| | 28nm,0.4s | | | | | | |
| ABTA | Abfaltersbach | 2.13 | 103 | Pn | Pn | 20 01 06.5 | +1.6 |
| HAU | Haudompre | 2.25 | 291 | eP | Pb | 20 01 09.3 | -0.7 |
| HAU | | | | eSg | Sg | 20 01 42.1 | +0.1 |
| | 148nm,0.4s | | | | | | |
| HAU | Haudompre | 2.25 | 291 | eP | Pb | 20 01 09.3 | -0.7 |
| HAU | | | | eSg | Sg | 20 01 42.1 | +0.1 |
| | 74nm,0.4s | | | | | | |
| RJOB | Jochberg | 2.30 | 77 | ePg | Pb | 20 01 10.4 | -0.4 |
| RJOB | | | | eSg | Sg | 20 01 44.1 | +0.7 |
| RJOB | Jochberg | 2.30 | 77 | Pg | Pb | 20 01 10.4 | -0.4 |
| RJOB | | | | Sg | Sg | 20 01 44.1 | +0.7 |
| CABF | La Chapelle | 2.42 | 256 | eP | Pb | 20 01 11.7 | -1.2 |
| CABF | | | | eSg | Sg | 20 01 47.6 | +0.4 |
| | 30nm,0.3s | | | | | | |
| CABF | La Chapelle | 2.42 | 256 | eP | Pb | 20 01 11.7 | -1.2 |
| CABF | | | | eSg | Sg | 20 01 47.6 | +0.4 |
| | 15nm,0.3s | | | | | | |
| LPL | La Plagne | 2.58 | 229 | eP | Pn | 20 01 13.0 | +1.9 |
| LPL | La Plagne | 2.58 | 229 | ePg | Pg | 20 01 19.1 | +0.1 |
| LPL | | | | eSg | Sg | 20 01 52.1 | -0.4 |
| | 11nm,0.3s | | | | | | |
| LPL | La Plagne | 2.58 | 229 | eP | Pn | 20 01 13.0 | +1.9 |
| LPL | La Plagne | 2.58 | 229 | ePg | Pg | 20 01 19.1 | +0.1 |
| LPL | | | | eSg | Sg | 20 01 52.1 | -0.4 |
| | 5.3nm,0.3s | | | | | | |
| LPG | La Plagne | 2.58 | 228 | eP | Pb | 20 01 14.3 | -1.5 |
| LPG | La Plagne | 2.58 | 228 | ePg | Pg | 20 01 18.7 | -0.4 |
| LPG | | | | eSn | Sn | 20 01 41.9 | -0.6 |
| LPG | | | | eSg | Sg | 20 01 52.5 | -0.1 |
| | 22nm,0.4s | | | | | | |
| LPG | La Plagne | 2.58 | 228 | eP | Pb | 20 01 14.3 | -1.5 |
| LPG | La Plagne | 2.58 | 228 | ePg | Pg | 20 01 18.7 | -0.4 |
| LPG | | | | eSn | Sn | 20 01 41.9 | -0.6 |
| LPG | | | | eSg | Sg | 20 01 52.5 | -0.1 |
| | 11nm,0.4s | | | | | | |
| KBA | Koelnbreinsper | 2.64 | 92 | eSg | Sg | 20 01 53.7 | -0.7 |
| KBA | Koelnbreinsper | 2.64 | 92 | Sg | Sg | 20 01 53.7 | -0.7 |
| GRA1 | Grafenberg Arr | 2.70 | 25 | Pn | Pn | 20 01 12.8 | +0.2 |
| GRF | Grafenberg Arr | 2.70 | 25 | ePn | Pn | 20 01 12.8 | +0.2 |
| PAGF | Fort de Pagny | 2.84 | 299 | eP | Pb | 20 01 17.8 | -2.3 |
| PAGF | Fort de Pagny | 2.84 | 299 | ePg | Pg | 20 01 23.6 | -0.5 |
| | baz=116 | | | | | | |
| PAGF | | | | eSn | Sn | 20 01 48.0 | -0.6 |
| PAGF | | | | eSg | Sg | 20 02 00.6 | -0.4 |
| | 5.3nm,0.3s,baz=111 | | | | | | |
| PAGF | Fort de Pagny | 2.84 | 299 | eP | Pb | 20 01 17.8 | -2.3 |
| PAGF | Fort de Pagny | 2.84 | 299 | ePg | Pg | 20 01 23.6 | -0.5 |
| PAGF | | | | eSn | Sn | 20 01 48.0 | -0.6 |
| PAGF | | | | eSg | Sg | 20 02 00.6 | -0.4 |
| | 2.7nm,0.3s | | | | | | |
| WET | Wettzell | 2.95 | 49 | ePn | Pn | 20 01 17.1 | +1.0 |
| WET | | | | eSn | Sn | 20 01 51.5 | +0.2 |
| WET | | | | eSg | Sg | 20 02 02.5 | -2.0 |
| WET | Wettzell | 2.95 | 49 | Pn | Pn | 20 01 17.1 | +1.0 |
| WET | | | | Sn | Sn | 20 01 51.5 | +0.2 |
| WET | | | | Sg | Sg | 20 02 02.5 | -2.0 |
| TNS | Taunus Mts | 3.05 | 347 | ePn | Pn | 20 01 19.7 | +2.3 |
| TNS | | | | eSn | Sn | 20 01 53.3 | -0.4 |
| TNS | Taunus Mts | 3.05 | 347 | Pn | Pn | 20 01 19.7 | +2.3 |
| TNS | | | | Sn | Sn | 20 01 53.3 | -0.4 |
| ROTZ | Rotzenmuhle | 3.10 | 35 | ePn | Pn | 20 01 18.3 | +0.2 |
| ROTZ | | | | eSn | Sn | 20 01 55.6 | +0.8 |
| ROTZ | Rotzenmuhle | 3.10 | 35 | Pn | Pn | 20 01 18.3 | +0.2 |
| ROTZ | | | | Sn | Sn | 20 01 55.6 | +0.8 |
| SFTF | Sexfontaines | 3.15 | 289 | eP | Pn | 20 01 21.7 | +3.0 |
| | baz=118 | | | | | | |
| SFTF | | | | eSn | Sn | 20 01 55.7 | -0.4 |
| SFTF | | | | eSg | Sg | 20 02 10.3 | -0.4 |
| | 15nm,0.3s | | | | | | |
| SFTF | Sexfontaines | 3.15 | 289 | eP | Pn | 20 01 21.7 | +3.0 |
| SFTF | | | | eSn | Sn | 20 01 55.7 | -0.4 |
| SFTF | | | | eSg | Sg | 20 02 10.3 | -0.4 |
| | 7.3nm,0.3s | | | | | | |
| MBDF | Montbardon | 3.16 | 218 | ePn | Pn | 20 01 19.4 | +0.4 |
| MBDF | Montbardon | 3.16 | 218 | ePg | Pg | 20 01 29.5 | -0.6 |
| MBDF | | | | eSg | Sg | 20 02 09.9 | -1.1 |
| | 13nm,0.4s | | | | | | |
| MBDF | Montbardon | 3.16 | 218 | ePn | Pn | 20 01 19.4 | +0.4 |
| MBDF | Montbardon | 3.16 | 218 | ePg | Pg | 20 01 29.5 | -0.6 |
| MBDF | | | | eSg | Sg | 20 02 09.9 | -1.1 |
| | 6.7nm,0.4s | | | | | | |
| MEZF | Maizieres J'vi | 3.23 | 294 | eP | Pb | 20 01 23.4 | -3.4 |
| MEZF | Maizieres J'vi | 3.23 | 294 | ePg | Pg | 20 01 30.8 | -0.8 |
| MEZF | | | | eSg | Sg | 20 02 12.8 | -0.7 |
| | 24nm,0.5s | | | | | | |
| MEZF | Maizieres J'vi | 3.23 | 294 | eP | Pb | 20 01 23.4 | -3.4 |
| MEZF | Maizieres J'vi | 3.23 | 294 | ePg | Pg | 20 01 30.8 | -0.8 |
| MEZF | | | | eSg | Sg | 20 02 12.8 | -0.7 |
| | 12nm,0.5s | | | | | | |
| GEC2 | GERESS Array S | 3.25 | 59 | ePn | Pn | 20 01 21.9 | +1.7 |
| GEC2 | | | | ePg | Pg | 20 01 30.7 | -1.0 |
| GEC2 | GERESS Array S | 3.25 | 59 | Pn | Pn | 20 01 21.9 | +1.7 |
| WLF | Walferdange | 3.28 | 319 | P | Pb | 20 01 24.7 | -2.8 |
| WLF | Walferdange | 3.28 | 319 | ePn | Pb | 20 01 24.7 | -2.8 |
| WLF | | | | ePg | Pg | 20 01 33.8 | +1.5 |
| WLF | Walferdange | 3.28 | 319 | P | Pb | 20 01 24.7 | -2.8 |
| BGG | Burgeitz | 3.28 | 335 | ePn | Pn | 20 01 23.6 | +3.1 |
| BGG | | | | eSn | Sn | 20 02 02.2 | +2.9 |
| | 9.6nm,0.4s | | | | | | |
| BGG | Burgeitz | 3.28 | 335 | Pn | Pn | 20 01 23.6 | +3.1 |
| BGG | | | | Sn | Sn | 20 02 02.2 | +2.9 |
| | 9.6nm,0.4s | | | | | | |
| MOA | Molln | 3.29 | 78 | ePn | Pn | 20 01 23.4 | +2.7 |
| MOA | Molln | 3.29 | 78 | Pn | Pn | 20 01 23.4 | +2.7 |
| KHC | Kasperske Hory | 3.32 | 54 | ePN | Pn | 20 01 23.0 | +1.9 |
| KHC | | | | ex | x | 20 01 24.8 | |
| KHC | | | | ePG | Pg | 20 01 33.4 | +0.2 |
| KHC | | | | eSN | Sn | 20 02 00.3 | -0.1 |
| KHC | | | | eSG | Sg | 20 02 13.7 | -2.5 |
| | comp=Z,28nm,0.3s | | | | | | |
| KHC | Kasperske Hory | 3.32 | 54 | Pn | Pn | 20 01 23.0 | +1.9 |
| KHC | | | | Sn | Sn | 20 02 00.3 | -0.1 |
| KHC | | | | Sg | Sg | 20 02 13.7 | -2.5 |
| | 28nm,0.3s | | | | | | |
| ORIF | Oris-en-Rattie | 3.43 | 228 | eP | Pn | 20 01 26.6 | +3.9 |
| ORIF | Oris-en-Rattie | 3.43 | 228 | ePg | Pg | 20 01 34.4 | -0.9 |
| ORIF | | | | eSg | Sg | 20 02 19.7 | 0.0 |
| | 20nm,0.7s | | | | | | |
| ORIF | Oris-en-Rattie | 3.43 | 228 | eP | Pn | 20 01 26.6 | +3.9 |
| ORIF | Oris-en-Rattie | 3.43 | 228 | ePg | Pg | 20 01 34.4 | -0.9 |
| ORIF | | | | eSg | Sg | 20 02 19.7 | 0.0 |
| | 10nm,0.7s | | | | | | |
| HILG | Hillesheim | 3.56 | 330 | ePn | Pn | 20 01 27.5 | +3.1 |
| HILG | Hillesheim | 3.56 | 330 | Pn | Pn | 20 01 27.5 | +3.1 |
| NKC | Novy Kostel | 3.57 | 32 | ePN | Pn | 20 01 26.3 | +1.8 |
| NKC | | | | ePG | Pg | 20 01 39.6 | +1.7 |
| NKC | | | | ex | x | 20 01 41.5 | |
| NKC | | | | eSN | Sn | 20 02 06.0 | -0.5 |
| NKC | | | | ex | x | 20 02 07.3 | |
| NKC | | | | eSG | Sg | 20 02 22.9 | -1.2 |
| | comp=Z,18nm,0.3s | | | | | | |
| NKC | Novy Kostel | 3.57 | 32 | Pn | Pn | 20 01 26.3 | +1.8 |
| NKC | | | | Sn | Sn | 20 02 06.0 | -0.5 |
| NKC | | | | Sg | Sg | 20 02 22.9 | -1.2 |
| | 18nm,0.3s | | | | | | |
| MOX | Moxa | 3.67 | 22 | ePn | Pn | 20 01 25.6 | -0.3 |
| MOX | Moxa | 3.67 | 22 | Pn | Pn | 20 01 25.6 | -0.3 |
| TANN | Tannenbergstha | 3.72 | 31 | ePn | Pn | 20 01 26.1 | -0.6 |
| TANN | | | | eSn | Sn | 20 02 09.6 | -0.8 |
| TANN | | | | eSg | Sg | 20 02 29.0 | -0.1 |
| TANN | Tannenbergstha | 3.72 | 31 | Pn | Pn | 20 01 26.1 | -0.6 |
| TANN | | | | Sn | Sn | 20 02 09.6 | -0.8 |
| TANN | | | | Sg | Sg | 20 02 29.0 | -0.1 |
| STB | Steinbach | 3.77 | 333 | ePn | Pn | 20 01 30.3 | +3.0 |
| STB | Steinbach | 3.77 | 333 | Pn | Pn | 20 01 30.3 | +3.0 |
| LOR | Lormes | 3.83 | 272 | eP | Pn | 20 01 31.7 | +3.6 |
| | baz=84 | | | | | | |
| LOR | Lormes | 3.83 | 272 | ePg | Pg | 20 01 42.1 | -0.9 |
| | baz=86 | | | | | | |
| LOR | | | | eSg | Sg | 20 02 31.8 | -0.8 |
| | 17nm,0.2s,baz=104 | | | | | | |
| LOR | Lormes | 3.83 | 272 | eP | Pn | 20 01 31.7 | +3.6 |
| LOR | Lormes | 3.83 | 272 | ePg | Pg | 20 01 42.1 | -0.9 |
| LOR | | | | eSg | Sg | 20 02 31.8 | -0.8 |
| | 8.5nm,0.2s | | | | | | |
| SMF | Signal de Mont | 3.91 | 263 | eP | Pn | 20 01 32.4 | +3.1 |
| SMF | Signal de Mont | 3.91 | 263 | ePg | Pg | 20 01 43.4 | -1.1 |
| SMF | | | | eSn | Sn | 20 02 13.8 | -1.2 |
| SMF | | | | eSg | Sg | 20 02 34.4 | -0.8 |
| | 20nm,0.2s | | | | | | |
| SMF | Signal de Mont | 3.91 | 263 | eP | Pn | 20 01 32.4 | +3.1 |
| SMF | Signal de Mont | 3.91 | 263 | ePg | Pg | 20 01 43.4 | -1.1 |
| SMF | | | | eSn | Sn | 20 02 13.8 | -1.2 |
| SMF | | | | eSg | Sg | 20 02 34.4 | -0.8 |
| | 10nm,0.2s | | | | | | |
| KLL | Kalltalsperre | 3.99 | 330 | ePn | Pn | 20 01 33.7 | +3.4 |
| KLL | Kalltalsperre | 3.99 | 330 | Pn | Pn | 20 01 33.7 | +3.4 |
| HOBG | Hohbusch | 3.99 | 340 | ePn | Pn | 20 01 33.3 | +3.0 |
| HOBG | Hohbusch | 3.99 | 340 | Pn | Pn | 20 01 33.3 | +3.0 |
| DREG | Dreilaegerbach | 4.03 | 329 | ePn | Pn | 20 01 34.2 | +3.4 |
| DREG | Dreilaegerbach | 4.03 | 329 | Pn | Pn | 20 01 34.2 | +3.4 |
| MEM | Membach | 4.07 | 327 | P | Pn | 20 01 34.9 | +3.5 |
| MEM | Membach | 4.07 | 327 | P | Pn | 20 01 34.8 | +3.5 |
| SSF | Saint Saulge | 4.08 | 269 | eP | Pn | 20 01 35.4 | +3.8 |
| SSF | | | | eSn | Sn | 20 02 17.8 | -1.4 |
| SSF | | | | eSg | Sg | 20 02 39.4 | -1.3 |
| | 7.5nm,0.3s | | | | | | |
| SSF | Saint Saulge | 4.08 | 269 | eP | Pn | 20 01 35.4 | +3.8 |
| SSF | | | | eSg | Sg | 20 02 39.4 | -1.3 |
| | 3.8nm,0.3s | | | | | | |
| VIVF | Saint-Julien-l | 4.12 | 236 | ePn | Pn | 20 01 32.3 | +0.2 |
| VIVF | | | | eSg | Sg | 20 02 40.6 | -1.2 |
| | 6.4nm,0.4s | | | | | | |
| VIVF | Saint-Julien-l | 4.12 | 236 | ePn | Pn | 20 01 32.3 | +0.2 |
| VIVF | | | | eSg | Sg | 20 02 40.6 | -1.2 |
| | 3.2nm,0.4s | | | | | | |
| FRF | La Foret Royal | 4.20 | 209 | eP | Pn | 20 01 36.9 | +3.7 |
| FRF | | | | eSn | Sn | 20 02 19.9 | -2.1 |
| | 4.3nm,0.2s | | | | | | |
| FRF | La Foret Royal | 4.20 | 209 | eP | Pn | 20 01 36.9 | +3.7 |
| FRF | | | | eSn | Sn | 20 02 19.9 | -2.1 |
| | 2.2nm,0.2s | | | | | | |
| BCLA | Clavier | 4.20 | 320 | P | Pn | 20 01 37.0 | +3.7 |
| BCLA | Clavier | 4.20 | 320 | P | Pn | 20 01 36.9 | +3.7 |
| GIVF | Givet | 4.20 | 314 | eP | Pn | 20 01 37.2 | +4.0 |
| GIVF | | | | eSn | Sn | 20 02 20.5 | -1.6 |
| | 8.0nm,0.2s | | | | | | |
| GIVF | Givet | 4.20 | 314 | eP | Pn | 20 01 37.2 | +4.0 |
| AVF | Avril sur Loir | 4.22 | 266 | eP | Pn | 20 01 36.7 | +3.2 |
| AVF | | | | eSn | Sn | 20 02 21.0 | -1.5 |
| AVF | | | | eSg | Sg | 20 02 43.6 | -1.4 |
| | 5.9nm,0.3s | | | | | | |
| AVF | Avril sur Loir | 4.22 | 266 | eP | Pn | 20 01 36.7 | +3.2 |
| SMRF | Simiane la Rot | 4.28 | 221 | eP | Pn | 20 01 38.0 | +3.7 |
| SMRF | | | | eSn | Sn | 20 02 22.1 | -1.8 |
| | 2.8nm,0.3s | | | | | | |
| SMRF | Simiane la Rot | 4.28 | 221 | eP | Pn | 20 01 38.0 | +3.7 |
| SMRF | | | | eSn | Sn | 20 02 22.1 | -1.8 |
| | 1.4nm,0.3s | | | | | | |
| DOU | Dourbes | 4.31 | 313 | P | Pn | 20 01 38.9 | +4.2 |
| DOU | Dourbes | 4.31 | 313 | P | Pn | 20 01 38.9 | +4.2 |
| PRA | Prague | 4.32 | 47 | eSG | Sg | 20 02 45.2 | -3.1 |
| | comp=Z,12nm,0.4s | | | | | | |
| PRA | Prague | 4.32 | 47 | Sg | Sg | 20 02 45.2 | -3.1 |
| | 12nm,0.4s | | | | | | |
| PRU | Pruhonice | 4.33 | 49 | ePN | Pn | 20 01 36.3 | +1.4 |
| PRU | | | | ePG | Pg | 20 01 53.2 | +0.8 |
| PRU | | | | eSN | Sn | 20 02 24.0 | -1.1 |
| PRU | | | | eSG | Sg | 20 02 45.0 | -3.5 |
| | comp=Z,6.7nm,0.4s | | | | | | |
| PRU | Pruhonice | 4.33 | 49 | Pn | Pn | 20 01 36.3 | +1.4 |
| PRU | | | | Sn | Sn | 20 02 24.0 | -1.1 |
| PRU | | | | Sg | Sg | 20 02 45.0 | -3.5 |
| | 6.7nm,0.4s | | | | | | |
| GOPC | GO Pecny, Ondr | 4.41 | 51 | ePN | Pn | 20 01 37.7 | +1.6 |
| GOPC | | | | ePG | Pg | 20 01 54.9 | +0.9 |
| GOPC | | | | eSN | Sn | 20 02 26.2 | -1.1 |
| GOPC | | | | ex | x | 20 02 38.7 | |
| GOPC | | | | eSG | Sg | 20 02 48.7 | -2.5 |
| | comp=Z,7.5nm,0.5s | | | | | | |
| GOPC | GO Pecny, Ondr | 4.41 | 51 | Pn | Pn | 20 01 37.7 | +1.6 |
| GOPC | | | | Sn | Sn | 20 02 26.2 | -1.1 |
| GOPC | | | | Sg | Sg | 20 02 48.7 | -2.5 |
| | 7.5nm,0.5s | | | | | | |
| LMR | La Mourre | 4.45 | 209 | eP | Pn | 20 01 41.4 | +4.8 |
| LMR | | | | eSn | Sn | 20 02 26.1 | -2.0 |
| | 3.0nm,0.4s | | | | | | |
| LMR | La Mourre | 4.45 | 209 | eP | Pn | 20 01 41.4 | +4.8 |
| LMR | | | | eSn | Sn | 20 02 26.1 | -2.0 |
| | 1.5nm,0.4s | | | | | | |
| BAIF | Baives | 4.49 | 311 | eP | Pn | 20 01 41.1 | +4.0 |
| BAIF | | | | eSn | Sn | 20 02 27.1 | -1.9 |
| | 4.6nm,0.5s | | | | | | |
| BAIF | Baives | 4.49 | 311 | eP | Pn | 20 01 41.1 | +4.0 |
| TREC | Trest | 4.50 | 61 | eSN | Sn | 20 02 28.9 | -0.5 |
| TREC | | | | eSG | Sg | 20 02 50.4 | -3.5 |
| | comp=Z,8.7nm,0.3s | | | | | | |
| TREC | Trest | 4.50 | 61 | Sn | Sn | 20 02 28.9 | -0.5 |
| TREC | | | | Sg | Sg | 20 02 50.4 | -3.5 |
| | 8.7nm,0.3s | | | | | | |
| BGF | Bois d'Agland | 4.60 | 264 | eP | Pn | 20 01 41.2 | +2.5 |
| BGF | | | | eSn | Sn | 20 02 30.5 | -1.5 |
| BGF | | | | eSg | Sg | 20 02 55.6 | -1.7 |
| | 19nm,0.3s | | | | | | |
| BGF | Bois d'Agland | 4.60 | 264 | eP | Pn | 20 01 41.2 | +2.5 |
| BRG | Berggiesshubel | 4.66 | 37 | i | Sn | 20 02 32.5 | -0.8 |
| BRG | Berggiesshubel | 4.66 | 37 | SG | Sg | 20 02 57.4 | -1.7 |
| | 7.8nm,0.4s | | | | | | |
| BRG | Berggiesshubel | 4.66 | 37 | i | Sn | 20 02 32.5 | -0.8 |
| BRG | | | | | Sg | 20 02 57.4 | -1.7 |
| HYF | Humbligny | 4.66 | 273 | eP | Pn | 20 01 43.6 | +4.1 |
| HYF | | | | eSg | Sg | 20 02 57.6 | -1.6 |
| HYF | Humbligny | 4.66 | 273 | eP | Pn | 20 01 43.6 | +4.1 |
| CLL | Collm | 4.66 | 28 | ePn | Pn | 20 01 39.0 | -0.5 |
| CLL | | | | eSg | Sg | 20 02 58.0 | -1.2 |
| | comp=Z,19nm,0.9s | | | | | | |
| PVCC | Panska Ves | 4.69 | 44 | ePN | Pn | 20 01 42.2 | +2.3 |
| PVCC | | | | ePG | Pg | 20 02 00.1 | +0.8 |
| PVCC | | | | eSG | Sg | 20 02 57.7 | -2.3 |
| | comp=Z,18nm,0.3s | | | | | | |
| PVCC | Panska Ves | 4.69 | 44 | Pn | Pn | 20 01 42.2 | +2.3 |
| PVCC | | | | Sg | Sg | 20 02 57.7 | -2.3 |
| | comp=Z,18nm,0.3s | | | | | | |
| PGF | Pioggiola | 4.72 | 184 | ePn | Pn | 20 01 40.4 | 0.0 |
| PGF | | | | eSn | Sn | 20 02 32.4 | -2.6 |
| | comp=Z,1.5nm,0.3s | | | | | | |
| PGF | Pioggiola | 4.72 | 184 | ePn | Pn | 20 01 40.4 | 0.0 |
| PGF | | | | eSn | Sn | 20 02 32.4 | -2.6 |
| | comp=Z,0.8nm,0.3s | | | | | | |
| LASF | Ste Croix | 5.07 | 233 | ePn | Pn | 20 01 46.2 | +1.1 |
| LASF | Ste Croix | 5.07 | 233 | ePn | Pn | 20 01 46.2 | +1.1 |
| TCF | Toulx Ste Croi | 5.09 | 262 | ePn | Pn | 20 01 46.2 | +0.7 |
| TCF | | | | eSn | Sn | 20 02 41.6 | -2.4 |
| TCF | | | | eSg | Sg | 20 03 10.9 | -2.1 |
| | comp=Z,6.3nm,0.4s | | | | | | |
| TCF | Toulx Ste Croi | 5.09 | 262 | ePn | Pn | 20 01 46.2 | +0.7 |
| VRAC | Vranov | 5.17 | 64 | ePn | Pn | 20 01 48.0 | +1.5 |
| VRAC | | | | eSg | Sg | 20 03 10.7 | -4.8 |
| UPC | Upice | 5.40 | 50 | eSG | Sg | 20 03 19.7 | -3.0 |
| | comp=Z,9.5nm,0.4s | | | | | | |
| UPC | Upice | 5.40 | 50 | Sg | Sg | 20 03 19.7 | -3.0 |
| | comp=Z,9.5nm,0.4s | | | | | | |
| DPC | Dobruska-Polom | 5.48 | 53 | eSG | Sg | 20 03 21.4 | -3.9 |
| | comp=Z,8.2nm,0.5s | | | | | | |
| KRLC | Kraliky | 5.60 | 57 | ePN | Pn | 20 01 54.5 | +2.1 |
| KRLC | | | | ePG | Pg | 20 02 16.6 | -0.1 |
| KRLC | | | | eSN | Sn | 20 02 55.4 | -1.1 |
| KRLC | | | | eSG | Sg | 20 03 26.3 | -2.8 |
| KRLC | Kraliky | 5.60 | 57 | Pn | Pn | 20 01 54.5 | +2.1 |
| KRLC | | | | Sn | Sn | 20 02 55.4 | -1.1 |
| CAF | Calviac | 5.66 | 248 | ePn | Pn | 20 01 53.4 | +0.1 |
| CAF | Calviac | 5.66 | 248 | eP | Pn | 20 01 57.8 | +4.5 |
| CAF | | | | eSn | Sn | 20 02 55.6 | -2.5 |
| | comp=Z,1.2nm,0.3s | | | | | | |
| CAF | Calviac | 5.66 | 248 | eP | Pn | 20 01 57.8 | +4.5 |
| RJF | Les Rejaudoux | 5.86 | 253 | ePn | Pn | 20 01 56.5 | +0.5 |
| RJF | | | | eSn | Sn | 20 03 00.2 | -2.7 |
| | comp=Z,1.8nm,0.4s | | | | | | |
| RJF | Les Rejaudoux | 5.86 | 253 | ePn | Pn | 20 01 56.5 | +0.5 |
| VYHS | Vyhne | 6.41 | 75 | ePN | Pn | 20 02 04.4 | +0.8 |
| VYHS | Vyhne | 6.41 | 75 | ePn | Pn | 20 02 04.4 | +0.8 |
| LDF | La Druitiere | 6.59 | 285 | ePn | Pn | 20 02 06.9 | +0.8 |
| LDF | | | | eSn | Sn | 20 03 17.9 | -3.1 |
| | comp=Z,2.8nm,0.6s | | | | | | |
| LDF | La Druitiere | 6.59 | 285 | ePn | Pn | 20 02 06.9 | +0.8 |
| MFF | Saint Martin d | 6.63 | 268 | ePn | Pn | 20 02 08.1 | +1.6 |
| MFF | | | | eSn | Sn | 20 03 19.3 | -2.5 |
| | comp=Z,2.3nm,0.4s | | | | | | |
| MFF | Saint Martin d | 6.63 | 268 | ePn | Pn | 20 02 08.1 | +1.6 |
| FLN | La Foliniere | 6.86 | 286 | ePn | Pn | 20 02 10.4 | +0.8 |
| FLN | La Foliniere | 6.86 | 286 | eP | Pn | 20 02 13.3 | +3.7 |
| | baz=104 | | | | | | |
| FLN | | | | eSn | Sn | 20 03 23.9 | -3.5 |
| | comp=Z,2.5nm,0.3s | | | | | | |
| FLN | La Foliniere | 6.86 | 286 | ePn | Pn | 20 02 10.4 | +0.8 |
| FLN | La Foliniere | 6.86 | 286 | eP | Pn | 20 02 13.3 | +3.7 |
| GRR | Gorron | 7.06 | 283 | ePn | Pn | 20 02 14.7 | +2.3 |
| GRR | | | | eSn | Sn | 20 03 29.0 | -3.4 |
| | comp=Z,4.2nm,0.3s | | | | | | |
| GRR | Gorron | 7.06 | 283 | ePn | Pn | 20 02 14.7 | +2.3 |
| SGMF | Saint Gilles | 8.18 | 281 | ePn | Pn | 20 02 29.3 | +1.5 |
| SGMF | Saint Gilles | 8.18 | 281 | ePn | Pn | 20 02 29.3 | +1.5 |
| QUIF | Quistinic | 8.58 | 279 | ePn | Pn | 20 02 34.1 | +0.8 |
| QUIF | Quistinic | 8.58 | 279 | ePn | Pn | 20 02 34.1 | +0.8 |

*BJI **25** 20:03:59.3, 4°.02S×99°.70E, h10km, mb4.6/11*
*IDC **25** 20:04:02.9±0.6, 3°.65S×99°.77E, h0km, mb4.3/22, mb1 4.4/24, mb1mx4.2/56, mbtmp4.3/24, ML4.2/2, Error ellipse: s-maj=25.5km s-min=12.5km az=49.0*
*NEIC **25** 20:04:04.6±0.4, 3°.59S×99°.89E, h10km, mb4.4/4, Error ellipse: s-maj=12.2km s-min=5.7km az=52.0*
*DJA **25** 20:04:05.9±0.4, 3°S±4°×10°0E±°, h58km±8km, M4.8/5, mb4.2/4, MLv5.1/5*
*ISCJB **25** 20:04:06.2±0.4, 3°.53S±0°.05×100°.00E±0°.05, h33km, mb4.3/27, Error ellipse: s-maj=9.2km s-min=4.0km az=40.6*
**ISC 25 20:04:08.4**±0.6, **3°.50S**±0°.08×**100°.02E**±0°.08, **h35km, n84,** σ**1ˢ33**/78, **mb4.3**/27, **Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PPSI | Pulau Pagai | 0.73 | 359 | P | Pn | 20 04 21.8 | -0.4 |
| SISI | Saibi | 2.35 | 337 | P | Pn | 20 04 42.0 | -2.5 |
| SDSI | Sungai Dareh | 2.91 | 29 | P | Pn | 20 04 53.1 | +0.8 |
| PPI | Padang Panjang | 3.04 | 7 | P | Pn | 20 04 52.0 | -2.1 |
| BKNI | Bangkinang | 3.93 | 15 | P | Pn | 20 05 03.3 | -3.0 |
| BKNI | Bangkinang | 3.93 | 15 | P | Pn | 20 05 04.5 | -1.9 |
| JMBI | JAMBI | 4.07 | 63 | P | Pn | 20 05 08.7 | +0.5 |
| MDSI | Maura Dua | 4.27 | 103 | P | Pn | 20 05 12.0 | +1.1 |
| MNSI | Mandailing Nat | 4.29 | 354 | P | Pn | 20 05 05.3 | -5.9 |
| LWLI | Liwa | 4.30 | 111 | P | Pn | 20 05 12.0 | +0.5 |
| PMBI | Palembang | 4.78 | 83 | P | Pn | 20 05 17.9 | -0.1 |
| KASI | Kota Agung | 4.90 | 114 | P | Pn | 20 05 20.2 | +0.6 |
| KLI | Kotabumi | 5.01 | 106 | P | Pn | 20 05 22.1 | +0.9 |
| GSI | Gunungsitoli | 5.36 | 333 | P | Pn | 20 05 20.8 | -5.1 |
| PPBI | Pangkal Pinang | 6.25 | 78 | P | Pn | 20 05 38.8 | +0.6 |
| TPRI | Tanjung Pinang | 6.29 | 46 | P | Pn | 20 05 38.4 | -0.3 |
| PSI | Prapat | 6.35 | 350 | Pn | Pn | 20 05 38.7 | -1.0 |
| | 1.2nm,0.3s,baz=170,slow=14,SNR=2.8 | | | | | | |
| CGJI | Cibinong | 6.45 | 119 | P | Pn | 20 05 41.0 | +0.1 |
| SBJI | Serang | 6.63 | 113 | P | Pn | 20 05 43.8 | +0.5 |
| TSI | Tuntungan | 7.10 | 348 | P | Pn | 20 05 45.5 | -4.4 |
| TNG | Tangerang | 7.12 | 112 | P | Pn | 20 05 50.5 | +0.4 |
| KCSI | Kotacane, Aceh | 7.33 | 342 | P | Pn | 20 05 48.2 | -4.8 |
| SKJI | Sukabumi | 7.39 | 118 | P | Pn | 20 05 54.0 | +0.2 |
| CBJI | Citeko | 7.40 | 113 | P | Pn | 20 05 57.8 | +3.8 |
| TPI | Tanjungpandan | 7.66 | 85 | P | Pn | 20 05 58.2 | +0.6 |
| CNJI | Cibinong | 8.03 | 118 | P | Pn | 20 06 02.7 | +0.1 |
| LEM | Lembang | 8.26 | 114 | Pn | Pn | 20 06 06.6 | +0.6 |
| | 11nm,0.3s,baz=331,slow=18,SNR=7.5 | | | | | | |
| LEM | | | | Sn | Sn | 20 07 35.0 | -3.2 |
| | 0.9nm,0.3s,baz=0.0,slow=20,SNR=1.6 | | | | | | |
| LEM | Lembang | 8.26 | 114 | P | Pn | 20 06 05.9 | 0.0 |
| MLSI | Meulaboh, Aceh | 8.52 | 335 | P | Pn | 20 06 03.9 | -5.4 |
| CISI | Cisompet, Garu | 8.75 | 118 | P | Pn | 20 06 11.8 | -0.7 |
| CISI | Cisompet, Garu | 8.75 | 118 | eP | Pn | 20 06 10.7 | -1.9 |
| | 132nm,0.4s | | | | | | |
| LHMI | Lhok Sumawe | 9.20 | 341 | P | Pn | 20 06 14.7 | -3.9 |
| CMJI | Cimerak | 9.41 | 117 | P | Pn | 20 06 21.6 | +0.1 |
| BBKI | Banjar Baru | 14.80 | 90 | P | Pn | 20 07 34.3 | -0.9 |
| JAGI | Jajag, Banyuwa | 14.90 | 110 | P | Pn | 20 07 35.6 | -1.0 |
| KBKI | Kotabaru | 16.12 | 90 | P | Pn | 20 07 51.0 | -1.5 |
| CMAR | Chiang Mai Arr | 21.84 | 357 | P | P | 20 08 58.1 | +0.1 |
| | 6.5nm,0.7s,baz=186,slow=10,SNR=44 | | | | | | |
| CMAR | | | | PcP | PcP | 20 12 58.6 | +1.4 |
| | 1.0nm,0.8s,baz=211,slow=3.7,SNR=4.6 | | | | | | |
| LAMP | Lampang | 21.89 | 359 | P | P | 20 09 02.2 | +3.7 |
| | 9.3nm,0.9s | | | | | | |
| CHTO | Chiang Mai | 22.20 | 357 | eP | P | 20 09 01.8 | 0.0 |
| | 4.3nm,0.8s | | | | | | |
| SLVN | Son La | 24.97 | 9 | eP | P | 20 09 30.1 | +1.2 |
| | 4.3nm,0.6s | | | | | | |
| H08S2 | Diego Garcia H | 27.69 | 260 | T | T | 20 39 06.8 | |
| | baz=82,slow=75,SNR=18 | | | | | | |
| H08S3 | Diego Garcia H | 27.70 | 260 | T | T | 20 39 06.8 | |
| | baz=82,slow=75,SNR=18 | | | | | | |
| H08S1 | Diego Carcia H | 27.71 | 260 | T | T | 20 39 08.2 | |
| | baz=82,slow=75,SNR=22 | | | | | | |
| ODAN | Odare | 32.55 | 339 | eP | P | 20 10 37.7 | +1.0 |
| TAPN | Taplejung | 32.89 | 340 | eP | P | 20 10 41.0 | +1.4 |
| H01W3 | Cape Leeuwin H | 33.87 | 159 | T | T | 20 46 44.2 | |
| | baz=336,slow=76,SNR=10 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.88 | 159 | T | T | 20 46 44.2 | |
| | baz=336,slow=76,SNR=9.6 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.88 | 159 | T | T | 20 46 44.2 | |
| | baz=336,slow=76,SNR=9.3 | | | | | | |
| GUN | Gumba | 34.07 | 337 | eP | P | 20 10 50.8 | +0.8 |
| LSA | Lhasa | 34.09 | 346 | eP | P | 20 10 51.8 | +1.6 |
| ENH | Enshi | 34.78 | 14 | eP | P | 20 10 56.2 | +0.5 |
| KOLN | Koldanda | 34.88 | 334 | eP | P | 20 10 57.2 | +0.3 |
| WRA | Warramunga Arr | 37.24 | 119 | P | P | 20 11 17.2 | +0.2 |
| | 1.7nm,0.7s,baz=307,slow=9.1,SNR=10 | | | | | | |
| WRA | | | | PcP | PcP | 20 13 36.7 | +0.3 |
| | 1.0nm,0.8s,baz=318,slow=2.0,SNR=5.1 | | | | | | |
| WRAB | Tennant Creek | 37.25 | 119 | eP | P | 20 11 17.7 | +0.6 |
| ASAR | Alice Springs | 38.38 | 125 | P | P | 20 11 27.1 | +0.5 |
| | 2.9nm,0.9s,baz=300,slow=8.4,SNR=12 | | | | | | |
| ASAR | | | | PcP | PcP | 20 13 40.9 | +1.0 |
| | 1.1nm,0.7s,baz=303,slow=2.4,SNR=7.2 | | | | | | |
| GTA | Gaotai | 42.70 | 360 | eP | P | 20 12 03.3 | +1.2 |
| GTA | | | | pP | pP | 20 12 09.0 | -3.4 |
| GTA | | | | sP | sP | 20 12 11.8 | -4.8 |
| GTA | | | | PMZ | | | |
| | 6.0nm,1.2s | | | | | | |
| CTA | Charters Tower | 47.96 | 114 | P | P | 20 12 45.0 | +0.8 |
| | 5.0nm,0.9s,baz=320,slow=8.4,SNR=4.5 | | | | | | |
| CTAO | Charters Tower | 47.96 | 114 | eP | P | 20 12 45.3 | +1.2 |
| KSH | Kashi | 48.19 | 335 | P | P | 20 12 44.3 | -1.3 |
| KSH | | | | PMZ | | | |
| | 4.0nm,1.0s | | | | | | |
| KSAR | Wonju Array Be | 48.27 | 30 | P | P | 20 12 47.3 | +1.2 |
| KSRS | Korea Array | 48.30 | 30 | P | P | 20 12 47.3 | +1.0 |

2.2nm,0.8s,baz=210,slow=9.6,SNR=3.9
**AAK Ala-Archa 51.40 336** P **P 20 13 10.2 +0.1**
2.0nm,0.8s,baz=144,slow=6.3,SNR=7.0
**AAK Ala-Archa 51.40 336** *eP* **P 20 13 10.7 +0.6**
**SONM Songino Array 51.42 5** P **P 20 13 11.6 +1.6**
7.7nm,0.9s,baz=186,slow=8.4,SNR=37
SONM PcP **PcP 20 14 24.7 +0.5**
1.2nm,0.5s,baz=193,slow=4.5,SNR=7.9
**ULN Ulaanbaatar 51.52 6** *eP* **P 20 13 12.5 +1.7**
6.4nm,1.1s
**MKAR Makanchi Array 52.47 345** P **P 20 13 18.3 +0.6**
6.6nm,0.8s,baz=151,slow=8.6,SNR=31
**USRK Ussuriysk Ar. 55.47 28** P **P 20 13 40.8 +1.1**
10nm,0.8s,baz=224,slow=6.1,SNR=15
**GEYT Alibeck 56.60 321** P **P 20 13 47.3 -0.7**
2.3nm,0.8s,baz=144,slow=10,SNR=6.5
**KURK Kurchatov 57.04 344** *eP* **P 20 13 51.1 +0.4**
**ZALV Zalesovo Beam 58.63 350** P **P 20 14 02.4 +0.5**
14nm,0.8s,baz=178,slow=5.3,SNR=47
**BVAR Borovoye Array 61.59 340** P **P 20 14 21.5 -0.6**
4.0nm,0.8s,baz=138,slow=7.8,SNR=8.5
**ABKAR Abkulak array 62.96 332** *eP* **P 20 14 30.8 -0.6**
9.4nm,0.8s
**AKTO Aktyubinsk 64.67 332** P **P 20 14 41.8 -1.0**
3.0nm,0.9s,baz=85,slow=4.0,SNR=6.6
**KBZ Khabaz 69.44 319** P **P 20 15 13.2 +0.1**
4.2nm,0.9s,baz=117,slow=7.7,SNR=9.7
**EIL Elat 70.34 303** P **P 20 15 19.3 +0.3**
4.3nm,0.6s,baz=110,slow=9.1,SNR=3.6
**BRTR Keskin Array B 74.34 313** P **P 20 15 41.8 -1.1**
1.5nm,0.8s,baz=127,slow=7.3,SNR=9.1
**AKASG Malin Array Be 80.67 323** P **P 20 16 16.7 -1.1**
0.4nm,0.4s,baz=89,slow=4.7,SNR=4.6
**VNDA Vanda 80.70 169** P **P 20 16 15.8 -1.7**
2.5nm,1.2s,baz=330,slow=6.5,SNR=3.8
**MLR Muntele Rosu 81.39 317** P **P 20 16 21.7 -0.2**
1.1nm,0.9s,baz=122,slow=1.8,SNR=6.4
**FINES FINESS Array B 85.44 332** P **P 20 16 42.1 0.0**
0.5nm,0.4s,baz=134,slow=6.7,SNR=10.0
**ARCES ARCESS Array B 87.88 340** P **P 20 16 54.2 +0.3**
6.5nm,1.1s,baz=98,slow=3.6,SNR=6.5
**GERES GERESS Array B 90.18 319** P **P 20 17 05.8 +0.5**
1.3nm,0.8s,baz=76,slow=5.6,SNR=9.9
**TXAR Lajitas Array 145.86 39** PKPbc **PKPab 20 23 46.2 +0.9**
3.1nm,0.7s,baz=298,slow=1.2,SNR=24
**JCT Junction City 147.27 33** *e*PKPbc **PKPab 20 23 50.2 -0.5**

*IDC **25** 20:07:27.1±1.5,3˚.26S×100˚.11E,h0km,mb3.6/7,*
*mb1 3.8/7,mb1mx3.6/53,mbtmp3.7/7,Error ellipse:*
*s-maj=62.5km s-min=19.9km az=52.0*
*ISCJB **25** 20:07:29.3±0.7,3˚.20S±0˚.07×100˚.21E±0˚.07,h27km,*
*mb3.6/7,Error ellipse: s-maj=13.0km s-min=5.1km*
*az=137.1*
*DJA **25** 20:07:31.0±0.6,3˚S±4˚×10˚0E±˚,h29km±6km,M4.4/4,*
*mb4.1/1,MLv4.6/4*
**ISC 25 20:07:31.5±0.9,3˚.17S±0˚.09×100˚.24E±0˚.09,h27km,n35,**
**σ0s63/30,mb3.7/7,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.46** | **330** | P | **Pb** | **20 07 41.4** | **+0.2** |
| PPSI | | | | S | **Sn** | **20 07 50.4** | **+0.7** |
| **SISI** | **Saibi** | **2.16** | **328** | P | **Pn** | **20 08 05.5** | **-0.2** |
| **PDSI** | **Padang** | **2.25** | **6** | P | **Pn** | **20 08 07.3** | **+0.2** |
| **SDSI** | **Sungai Dareh** | **2.52** | **28** | P | **Pn** | **20 08 10.0** | **-0.7** |
| **PPI** | **Padang Panjang** | **2.70** | **3** | P | **Pn** | **20 08 13.7** | **+0.5** |
| **MNAI** | **Manna** | **2.96** | **114** | P | **Pn** | **20 08 16.7** | **-0.1** |
| **RGRI** | **Rengat** | **3.50** | **37** | P | **Pn** | **20 08 24.2** | **0.0** |
| **JMBI** | **JAMBI** | **3.73** | **66** | P | **Pn** | **20 08 27.4** | **+0.1** |
| **MDSI** | **Maura Dua** | **4.14** | **109** | P | **Pn** | **20 08 33.3** | **+0.2** |
| **LWLI** | **Liwa** | **4.23** | **116** | P | **Pn** | **20 08 34.4** | **0.0** |
| **PMBI** | **Palembang** | **4.53** | **87** | P | **Pn** | **20 08 37.8** | **-0.6** |
| **KASI** | **Kota Agung** | **4.85** | **119** | P | **Pn** | **20 08 42.8** | **+0.1** |
| **KLI** | **Kotabumi** | **4.91** | **110** | P | **Pn** | **20 08 43.5** | **0.0** |
| **GSI** | **Gunungsitoli** | **5.18** | **329** | P | **Pn** | **20 08 46.0** | **-1.3** |
| **TPRI** | **Tanjung Pinang** | **5.90** | **47** | P | **Pn** | **20 08 57.0** | **-0.3** |
| **PPBI** | **Pangkal Pinang** | **5.98** | **81** | P | **Pn** | **20 08 58.5** | **+0.2** |
| **CGJI** | **Cibinong** | **6.42** | **122** | P | **Pn** | **20 09 04.2** | **-0.2** |
| **SBJI** | **Serang** | **6.56** | **117** | P | **Pn** | **20 09 06.5** | **+0.2** |
| **TSI** | **Tuntungan** | **6.83** | **346** | P | **Pn** | **20 09 09.2** | **-0.8** |
| **TNG** | **Tangerang** | **7.05** | **115** | P | **Pn** | **20 09 13.2** | **+0.2** |
| **KCSI** | **Kotacane, Aceh** | **7.09** | **340** | P | **Pn** | **20 09 13.0** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **21.53** | **357** | P | **P** | **20 12 17.0** | **-1.7** |
| | 0.9nm,0.7s,baz=188,slow=10,SNR=4.4 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.98** | **260** | T | T | 20 42 22.7 | |
| | baz=82,slow=75,SNR=73 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.98** | **260** | T | T | 20 42 24.6 | |
| | baz=82,slow=75,SNR=71 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.99** | **260** | T | T | 20 42 25.0 | |
| | baz=82,slow=75,SNR=62 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.10** | **159** | T | T | 20 50 10.9 | |
| | baz=335,slow=76,SNR=19 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.11** | **159** | T | T | 20 50 07.5 | |
| | baz=335,slow=76,SNR=21 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.11** | **159** | T | T | 20 50 08.9 | |
| | baz=335,slow=76,SNR=22 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.21** | **119** | P | **P** | **20 14 40.2** | **-0.7** |
| | 0.4nm,0.5s,baz=311,slow=8.7,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.38** | **125** | P | **P** | **20 14 51.1** | **+0.3** |
| | 0.5nm,0.6s,baz=299,slow=7.7,SNR=5.4 | | | | | | |
| **SONM** | **Songino Array** | **51.08** | **5** | P | **P** | **20 16 32.7** | **+1.0** |
| | 0.8nm,0.6s,baz=186,slow=10,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.21** | **344** | P | **P** | **20 16 40.6** | **+0.5** |
| | 1.5nm,0.7s,baz=143,slow=8.4,SNR=6.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.73** | **344** | P | **P** | **20 17 13.3** | **+0.5** |
| | 1.0nm,0.9s,baz=156,slow=7.0,SNR=5.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.28** | **313** | P | **P** | **20 19 06.1** | **-0.7** |
| | 0.5nm,0.7s,baz=140,slow=5.4,SNR=3.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.47** | **39** | PKPbc | **PKPab** | **20 27 08.9** | **+0.7** |
| | 1.0nm,0.7s,baz=323,slow=0.6,SNR=6.9 | | | | | | |

*CSEM **25** 20:09:17.5,45˚.54N×14˚.27E,h0km,ML0.8,After LJU*
**LJU 25 20:09:17.5,45˚.54N×14˚.27E,h5km,ML0.8,Northwestern**
**Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KNDS** | **Knezji Dol** | **0.08** | **98** | *i* Sg | Sg | 20 09 20.7 | 0.0 |
| **KNDS** | **Knezji Dol** | **0.08** | **98** | *i* Sg | Sg | 20 09 20.7 | -0.1 |
| **SKDS** | **Skadanscina** | **0.18** | **272** | *i* Pg | Pg | 20 09 20.9 | -0.2 |
| SKDS | | | | *i* Sg | Sg | 20 09 23.8 | +0.3 |
| | comp=Z,4.0nm,0.0s | | | | | | |
| **SKDS** | **Skadanscina** | **0.18** | **272** | *i* Pg | Pg | 20 09 20.9 | -0.2 |
| SKDS | | | | *i* Sg | Sg | 20 09 23.8 | +0.3 |
| | comp=Z,4.0nm,0.0s | | | | | | |
| **CEY** | **Cerknica** | **0.23** | **29** | *i* Sg | Sg | 20 09 25.3 | +0.1 |
| | comp=Z,4.0nm,0.1s | | | | | | |
| **CEY** | **Cerknica** | **0.23** | **29** | *i* Sg | Sg | 20 09 25.3 | +0.1 |
| | comp=Z,4.0nm,0.1s | | | | | | |
| **GBRS** | **Gornja Briga** | **0.38** | **91** | *i* Pg | Pg | 20 09 25.0 | 0.0 |
| GBRS | | | | *i* Sg | Sg | 20 09 30.5 | +0.4 |
| | comp=Z,4.0nm,0.1s | | | | | | |

**IDC 25 20:13:06.9±6.4,3˚.13S×100˚.94E,h0km,mb3.2/3,**
**mb1 3.4/3,mb1mx3.1/51,mbtmp3.2/3,Error ellipse:**
**s-maj=318.3km s-min=26.6km az=52.0,Southern**
**Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **36.61** | **120** | P | P | 20 20 15.0 | -0.2 |
| | 0.2nm,0.6s,baz=302,slow=9.5,SNR=6.6 | | | | | | |
| **ASAR** | **Alice Springs** | **37.83** | **126** | P | P | 20 20 25.6 | 0.0 |
| | 0.1nm,0.5s,baz=301,slow=7.4,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.37** | **344** | P | P | 20 22 20.7 | -0.1 |
| | 0.1nm,0.3s,baz=148,slow=8.1,SNR=2.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.00** | **39** | PKPbc | PKPab | 20 32 45.4 | -0.9 |
| | 0.5nm,0.8s,baz=329,slow=1.1,SNR=2.1 | | | | | | |

**IDC 25 20:17:17.3±3.2,3˚.79S×99˚.90E,h0km,mb3.3/5,mb1 3.6/6,**
**mb1mx3.4/50,mbtmp3.5/6,ML4.1/1,Error ellipse:**
**s-maj=107.4km s-min=20.4km az=56.0,Southwest of**
**Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LEM** | **Lembang** | **8.26** | **112** | Pn | Pn | 20 19 20.1 | +1.4 |
| | 2.6nm,0.3s,baz=311,slow=20,SNR=3.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.13** | **359** | P | P | 20 22 13.4 | -1.3 |
| | 0.6nm,0.6s,baz=191,slow=10,SNR=5.7 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.53** | **261** | T | T | 20 52 40.9 | |
| | baz=82,slow=76,SNR=33 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.54** | **261** | T | T | 20 52 41.4 | |
| | baz=82,slow=76,SNR=33 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.55** | **261** | T | T | 20 52 40.5 | |
| | baz=82,slow=76,SNR=31 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.64** | **159** | T | T | 21 00 12.9 | |
| | baz=336,slow=76,SNR=3.6 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.65** | **159** | T | T | 21 00 12.9 | |
| | baz=336,slow=76,SNR=4.3 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.66** | **159** | T | T | 21 00 12.9 | |
| | baz=336,slow=76,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.21** | **118** | P | P | 20 24 30.3 | -0.5 |
| | 0.4nm,0.8s,baz=295,slow=9.1,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.31** | **124** | P | P | 20 24 39.6 | -0.4 |
| | 0.3nm,0.6s,baz=294,slow=8.0,SNR=7.2 | | | | | | |
| **SONM** | **Songino Array** | **51.72** | **6** | P | P | 20 26 26.7 | +0.2 |
| | 0.3nm,0.8s,baz=185,slow=6.5,SNR=3.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.72** | **345** | P | P | 20 26 34.5 | +0.7 |
| | 0.5nm,0.6s,baz=144,slow=7.2,SNR=4.3 | | | | | | |

**IDC 25 20:17:43.2±4.4,3˚.05S×100˚.57E,h0km,mb3.6/4,**
**mb1 3.7/4,mb1mx3.4/48,mbtmp3.6/4,Error ellipse:**
**s-maj=180.7km s-min=27.3km az=53.0,Southern**
**Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **36.98** | **120** | P | P | 20 24 54.3 | -0.5 |
| | 0.2nm,0.4s,baz=299,slow=8.6,SNR=4.6 | | | | | | |
| **SONM** | **Songino Array** | **50.93** | **5** | P | P | 20 26 47.0 | +0.5 |
| | 0.6nm,0.6s,baz=182,slow=7.5,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.18** | **344** | P | P | 20 26 55.2 | -0.6 |
| | 0.8nm,0.6s,baz=151,slow=6.6,SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.30** | **349** | P | P | 20 27 39.3 | -0.4 |
| | 0.7nm,0.7s,baz=177,slow=5.8,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.17** | **39** | PKPbc | PKPbc | 20 37 23.3 | 0.0 |
| | 0.8nm,0.7s,baz=238,slow=0.9,SNR=5.3 | | | | | | |

*IDC **25** 20:22:10.9±0.5,3˚.43S×99˚.92E,h0km,mb4.2/20,*
*mb1 4.3/23,mb1mx4.2/40,mbtmp4.2/23,ML4.0/2,MS4.8/2,*
*Ms1 4.8/2,ms1mx4.0/45,Error ellipse: s-maj=19.3km*
*s-min=11.9km az=51.0*
*DJA **25** 20:22:11.4±0.4,4˚S±3˚×10˚0E±˚,h10km,M4.8/7,mb4.4/7,*
*MLv5.0/4*
*BJI **25** 20:22:12.7,3˚.83S×99˚.76E,h36km,mb4.5/16*
*NEIC **25** 20:22:12.5±0.4,3˚.46S×99˚.92E,h10km,mb4.9/6,Error*
*ellipse: s-maj=11.4km s-min=6.4km az=50.0*
*ISCJB **25** 20:22:14.3±0.3,3˚.47S±0˚.04×99˚.97E±0˚.03,h33km,*
*mb4.5/47,MS4.8/2,Error ellipse: s-maj=6.4km*
*s-min=3.1km az=43.2*
*MOS **25** 20:22:14.9±1.3,3˚.39S×100˚.03E,h33km,mb4.9/21,Error*
*ellipse: s-maj=13.9km s-min=7.4km az=109.6*
*AUST **25** 20:22:26.7±8.6,3˚.93S×100˚.41E,h112km±1km,Error*
*ellipse: s-maj=6.3km s-min=1.0km az=230.0*
**ISC 25 20:22:16.8±0.5,3˚.41S±0˚.06×99˚.87E±0˚.07,h35km,n147,**
**σ1s62/132,mb4.5/47,1C,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.66** | **13** | P | **Pn** | **20 22 27.6** | **-2.0** |
| PPSI | | | | S | **Sn** | **20 22 34.9** | **-3.8** |
| **SISI** | **Saibi** | **2.21** | **339** | P | **Pn** | **20 22 48.5** | **-2.5** |
| **KSI** | **Kapahiang** | **2.73** | **95** | P | **Pn** | **20 22 59.8** | **+1.6** |
| **SDSI** | **Sungai Dareh** | **2.91** | **32** | P | **Pn** | **20 23 00.0** | **-0.6** |
| **PPI** | **Padang Panjang** | **2.98** | **10** | P | **Pn** | **20 23 00.2** | **-1.4** |
| | baz=3.5,SNR=16 | | | | | | |
| **PPI** | **Padang Panjang** | **2.98** | **10** | P | **Pn** | **20 23 00.4** | **-1.2** |
| **MNAI** | **Manna** | **3.22** | **107** | P | **Pn** | **20 23 07.1** | **+2.1** |
| | baz=2.6,SNR=5.5 | | | | | | |
| **MNAI** | **Manna** | **3.22** | **107** | P | **Pn** | **20 23 03.0** | **-2.0** |
| **MNAI** | **Manna** | **3.22** | **107** | *eP* | **Pn** | **20 23 02.6** | **-2.3** |
| **BKNI** | **Bangkinang** | **3.89** | **18** | P | **Pn** | **20 23 15.6** | **+1.5** |
| **BKNI** | **Bangkinang** | **3.89** | **18** | *eP* | **Pn** | **20 23 14.3** | **+0.2** |
| **RGRI** | **Rengat** | **3.91** | **39** | P | **Pn** | **20 23 13.6** | **-0.8** |
| **JMBI** | **JAMBI** | **4.16** | **65** | P | **Pn** | **20 23 17.9** | **0.0** |
| **MNSI** | **Mandailing Nat** | **4.18** | **356** | P | **Pn** | **20 23 17.0** | **-1.2** |
| **MDSI** | **Maura Dua** | **4.43** | **104** | P | **Pn** | **20 23 20.2** | **-1.4** |
| **LWLI** | **Liwa** | **4.48** | **111** | P | **Pn** | **20 23 21.5** | **-0.8** |
| **PMBI** | **Palembang** | **4.92** | **85** | P | **Pn** | **20 23 26.2** | **-2.1** |
| **KASI** | **Kota Agung** | **5.07** | **115** | P | **Pn** | **20 23 28.1** | **-2.3** |
| **KLI** | **Kotabumi** | **5.18** | **106** | P | **Pn** | **20 23 30.2** | **-1.7** |
| **GSI** | **Gunungsitoli** | **5.21** | **334** | P | **Pn** | **20 23 29.9** | **-2.4** |
| **GSI** | **Gunungsitoli** | **5.21** | **334** | *eP* | Pn | 20 23 29.2 | -3.1 |
| | 58nm,0.7s | | | | | | |
| **PSI** | **Prapat** | **6.24** | **351** | Pn | **Pn** | **20 23 43.6** | **-2.9** |
| | 0.8nm,0.3s,baz=142,slow=12,SNR=3.4 | | | | | | |
| PSI | | | | Sn | **Sn** | **20 24 59.4** | **+2.6** |
| | 0.4nm,0.3s,baz=133,slow=19,SNR=2.2 | | | | | | |
| **TPRI** | **Tanjung Pinang** | **6.34** | **47** | P | **Pn** | **20 23 47.3** | **-0.5** |
| **PPBI** | **Pangkal Pinang** | **6.38** | **79** | P | **Pn** | **20 23 47.4** | **-1.0** |
| **CGJI** | **Cibinong** | **6.62** | **119** | P | **Pn** | **20 23 49.8** | **-1.9** |
| **SBJI** | **Serang** | **6.80** | **114** | P | **Pn** | **20 23 52.1** | **-2.0** |
| **TSI** | **Tuntungan** | **6.98** | **349** | P | **Pn** | **20 23 54.6** | **-2.1** |
| **KCSI** | **Kotacane, Aceh** | **7.19** | **343** | P | **Pn** | **20 23 57.3** | **-2.3** |
| **TNG** | **Tangerang** | **7.29** | **112** | P | **Pn** | **20 23 58.4** | **-2.5** |
| **SKJI** | **Sukabumi** | **7.56** | **118** | P | **Pn** | **20 24 02.1** | **-2.5** |
| **TPI** | **Tanjungpandan** | **7.80** | **85** | P | **Pn** | **20 24 06.8** | **-1.1** |
| | 21nm,1.1s,0.4nm | | | | | | |
| **IPM** | **Ipoh** | **7.92** | **8** | *eP* | Pn | 20 24 19.3 | +10 |
| | 29nm,0.9s | | | | | | |
| **CNJI** | **Cibinong** | **8.20** | **118** | P | **Pn** | **20 24 11.1** | **-2.3** |
| **MLSI** | **Meulaboh, Aceh** | **8.37** | **336** | P | **Pn** | **20 24 13.2** | **-2.5** |
| **LEM** | **Lembang** | **8.43** | **114** | Pn | **Pn** | **20 24 14.9** | **-1.8** |
| | 8.1nm,0.3s,baz=203,slow=23,SNR=3.6 | | | | | | |
| **LEM** | **Lembang** | **8.43** | **114** | P | Pn | 20 24 20.3 | +3.5 |
| | baz=7.7,SNR=4.3 | | | | | | |
| **LEM** | **Lembang** | **8.43** | **114** | P | **Pn** | **20 24 14.5** | **-2.2** |
| **CISI** | **Cisompet, Garu** | **8.92** | **118** | P | Pn | 20 24 18.8 | -4.5 |
| | baz=8.2,SNR=24 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.92** | **118** | P | Pn | 20 24 19.2 | -4.1 |
| **CISI** | **Cisompet, Garu** | **8.92** | **118** | *eP* | Pn | 20 24 18.6 | -4.7 |
| | 358nm,0.6s | | | | | | |
| **CMJI** | **Cimerak** | **9.58** | **117** | P | **Pn** | **20 24 30.5** | **-1.8** |
| **SMRI** | **Semarang** | **11.13** | **109** | P | **Pn** | **20 24 51.6** | **-2.0** |
| **UWJI** | **Ujung Watu** | **11.44** | **106** | P | **Pn** | **20 24 55.9** | **-1.9** |
| **UGM** | **Wanagama** | **11.51** | **113** | P | **Pn** | **20 25 00.4** | **+1.6** |
| | baz=11,SNR=4.0 | | | | | | |
| **PBKI** | **Pangkalan Bun** | **11.81** | **87** | P | **Pn** | **20 25 02.5** | **-0.3** |
| **WOJI** | **Wonogiri, Jawa** | **11.85** | **112** | P | **Pn** | **20 25 01.6** | **-1.8** |
| **STKI** | **Siong** | **12.11** | **74** | P | **Pn** | **20 25 05.9** | **-1.0** |
| **NGJI** | **Ngawi** | **12.19** | **109** | P | **Pn** | **20 25 05.9** | **-2.2** |
| **PCJI** | **Pacitan** | **12.21** | **113** | P | **Pn** | **20 25 06.7** | **-1.7** |
| **TBJI** | **Tambak Boyo** | **12.40** | **106** | P | **Pn** | **20 25 08.7** | **-2.3** |
| **PWJI** | **Pagerwojo** | **12.73** | **112** | P | **Pn** | **20 25 14.9** | **-0.5** |
| **KMMI** | **Kalianget** | **14.50** | **105** | P | **Pn** | **20 25 37.1** | **-2.5** |
| **ABJI** | **Asem Bagus** | **14.95** | **108** | P | **Pn** | **20 25 43.7** | **-1.9** |
| **BBKI** | **Banjar Baru** | **14.95** | **91** | P | **Pn** | **20 25 44.8** | **-0.9** |
| **JAGI** | **Jajag, Banyuwa** | **15.07** | **110** | P | **Pn** | **20 25 43.6** | **-3.6** |
| | baz=14,SNR=7.4 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **15.07** | **110** | P | **Pn** | **20 25 45.7** | **-1.6** |
| **MTKI** | **Muara Teweh, K** | **15.21** | **81** | P | **Pn** | **20 25 47.7** | **-1.5** |
| **KHLT** | **Khaolaem Dam** | **18.13** | **356** | P | **P** | **20 26 29.0** | **+2.9** |
| **KAPI** | **Kappang** | **19.89** | **95** | P | **P** | **20 26 44.5** | **-0.9** |
| | baz=281,slow=16,SNR=3.3 | | | | | | |
| **UTTA** | **Uttaradit** | **21.03** | **2** | P | P | 20 27 06.5 | +8.8 |
| | 2.9nm,0.8s | | | | | | |
| **MHMT** | **Maesarieng** | **21.53** | **355** | P | **P** | **20 27 04.1** | **+1.0** |
| | 26nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.75** | **358** | P | **P** | **20 27 04.5** | **-0.8** |
| | 6.0nm,0.6s,baz=187,slow=10,SNR=47 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.75** | **358** | *i* P | **P** | **20 27 03.9** | **-1.5** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.10** | **358** | P | **P** | **20 27 09.9** | **+0.7** |
| | comp=Z,252nm,1.0s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.10** | **358** | *eP* | **P** | **20 27 07.9** | **-1.3** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,31nm,1.6s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.10** | **358** | *eP* | **P** | **20 27 07.9** | **-1.3** |
| | comp=Z,31nm,1.6s | | | | | | |
| **BATI** | **Baumata** | **24.56** | **107** | P | **P** | **20 27 31.6** | **-2.1** |
| | comp=Z,7.0nm,0.4s,baz=284,slow=4.2,SNR=2.6 | | | | | | |
| **SLVN** | **Son La** | **24.90** | **9** | *eP* | **P** | **20 27 37.0** | **+0.2** |
| | comp=Z,17nm,1.0s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.56** | **260** | T | T | 20 57 23.1 | |
| | baz=82,slow=75,SNR=59 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.57** | **260** | T | T | 20 57 22.0 | |
| | baz=82,slow=75,SNR=62 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.58** | **260** | T | T | 20 57 23.1 | |
| | baz=82,slow=75,SNR=44 | | | | | | |
| **ODAN** | **Odare** | **32.42** | **339** | *eP* | **P** | **20 28 43.6** | **-0.3** |
| | comp=Z,31nm,1.0s | | | | | | |
| **TAPN** | **Taplejung** | **32.75** | **340** | *eP* | **P** | **20 28 48.1** | **+1.2** |
| | comp=Z,46nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **32.79** | **338** | *eP* | **P** | **20 28 46.9** | **-0.2** |
| **PKI** | **Pulchoki** | **33.81** | **337** | *eP* | **P** | **20 28 57.3** | **+1.2** |
| **PKIN** | **Phulchoki** | **33.82** | **337** | *eP* | **P** | **20 28 57.5** | **+1.4** |
| **LSA** | **Lhasa** | **33.96** | **346** | P | **P** | **20 28 58.3** | **+0.7** |
| **LSA** | **Lhasa** | **33.96** | **346** | *eP* | **P** | **20 28 58.0** | **+0.4** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | **33.96** | **346** | *eP* | **P** | **20 28 58.0** | **+0.4** |
| | comp=Z,17nm,1.1s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.01** | **159** | T | T | 21 04 54.6 | |
| | baz=336,slow=76,SNR=61 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.02** | **159** | T | T | 21 04 54.1 | |
| | baz=336,slow=76,SNR=58 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.02** | **159** | T | T | 21 04 54.6 | |
| | baz=336,slow=76,SNR=54 | | | | | | |
| **GKN** | **Gorkha** | **34.50** | **336** | *eP* | **P** | **20 29 02.7** | **+0.8** |
| | comp=Z,19nm,0.9s | | | | | | |
| **KOLN** | **Koldanda** | **34.73** | **334** | *eP* | **P** | **20 29 04.9** | **+0.9** |
| **WRA** | **Warramunga Arr** | **37.42** | **119** | P | **P** | **20 29 23.9** | **-3.0** |
| | comp=Z,1.1nm,0.8s,baz=289,slow=8.5,SNR=9.2 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.42** | **119** | *ce*P | P | 20 29 31.3 | +4.4 |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,31nm,1.2s | | | | | | |
| **ASAR** | **Alice Springs** | **38.55** | **125** | P | **P** | **20 29 34.9** | **-1.6** |
| | comp=Z,1.6nm,0.8s,baz=297,slow=7.2,SNR=13 | | | | | | |
| ASAR | | | | S | **S** | **20 35 35.3** | **+4.9** |
| | comp=Z,0.4nm,0.8s,baz=289,slow=15,SNR=2.7 | | | | | | |
| **GTA** | **Gaotai** | **42.61** | **360** | *eP* | **P** | **20 30 11.5** | **+1.7** |
| GTA | | | | PMZ | | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.33** | **12** | *eP* | **P** | **20 30 33.5** | **+1.9** |
| HHC | | | | S | **S** | **20 37 10.8** | **+0.8** |
| HHC | | | | PMZ | | | |
| | comp=Z,27nm,1.0s | | | | | | |
| **PMG** | **Port Moresby** | **47.34** | **100** | *eP* | P | 20 30 52.5 | +4.8 |
| PMG | | | | pmax | pmax | | |
| | comp=Z,58nm,1.0s | | | | | | |
| **KSH** | **Kashi** | **48.04** | **335** | P | **P** | **20 30 52.5** | **-0.4** |
| KSH | | | | PMZ | | | |
| | comp=Z,18nm,1.6s | | | | | | |
| **CTA** | **Charters Tower** | **48.14** | **114** | P | **P** | **20 30 53.9** | **+0.1** |
| | comp=Z,6.6nm,1.2s,baz=321,slow=8.1,SNR=3.5 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.26** | **30** | P | **P** | **20 30 56.5** | **+2.0** |
| **KSAR** | **Wonju Array Be** | **48.26** | **30** | P | **P** | **20 30 56.5** | **+2.0** |
| **KSRS** | **Korea Array** | **48.29** | **30** | P | **P** | **20 30 56.5** | **+1.8** |
| | comp=Z,3.5nm,1.0s,baz=230,slow=7.3,SNR=3.2 | | | | | | |
| **KSRS** | **Korea Array** | **48.29** | **30** | P | **P** | **20 30 56.5** | **+1.8** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **AAK** | **Ala-Archa** | **51.26** | **336** | P | **P** | **20 31 17.6** | **+0.2** |
| | baz=160,slow=8.2 | | | | | | |
| AAK | | | | LR | LR | 20 55 40.4 | |
| | comp=Z,1μm,18.7s,baz=98,slow=39 | | | | | | |
| **AAK** | **Ala-Archa** | **51.26** | **336** | *eP* | **P** | **20 31 17.2** | **-0.2** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **51.35** | **6** | P | **P** | **20 31 18.1** | **+0.2** |
| | comp=Z,3.1nm,0.7s,baz=188,slow=8.5,SNR=20 | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.45** | **6** | *eP* | **P** | **20 31 19.0** | **+0.3** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,30nm,1.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.45** | **6** | *eP* | **P** | **20 31 19.0** | **+0.3** |
| | comp=Z,30nm,1.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.34** | **345** | P | **P** | **20 31 24.6** | **-0.6** |
| | comp=Z,3.6nm,0.6s,baz=144,slow=8.0,SNR=20 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.34** | **345** | *i* P | **P** | **20 31 25.0** | **-0.2** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.45** | **38** | LR | LR | 20 54 08.4 | |
| | comp=Z,450nm,19.8s,baz=40,slow=36 | | | | | | |
| **ZAK** | **Zakamensk** | **53.66** | **3** | *eP* | **P** | **20 31 36.4** | **+1.4** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.45** | **28** | P | **P** | **20 31 47.9** | **-0.1** |
| | comp=Z,7.0nm,0.7s,baz=221,slow=5.2,SNR=12 | | | | | | |
| **GEYT** | **Alibeck** | **56.44** | **321** | P | **P** | **20 31 54.9** | **-0.3** |
| | comp=Z,3.3nm,1.0s,baz=154,slow=8.2,SNR=5.7 | | | | | | |
| **KURBB** | **Kurchat

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KIEV** | **Kiev** | **80.52** | **323** | *e*P | | **P** | **20** | **34** | **25.8 +0.5** |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,1.1s | | | | | | | | |
| **VNDA** | **Vanda** | **80.81** | **169** | P | | **P** | **20** | **34** | **24.5 -2.0** |
| | comp=Z,0.5nm,0.9s,baz=275,slow=4.5,SNR=3.1 | | | | | | | | |
| **TMCR** | **Tamitsa** | **81.17** | **337** | *e*P | | **P** | **20** | **34** | **28.2 -0.3** |
| TMCR | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **84.43** | **320** | *e*P | | **P** | **20** | **34** | **47.7 +1.9** |
| KOLS | | | | pmax | | pmax | | | |
| | comp=Z,60nm,2.8s | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **84.43** | **320** | *e*P | | **P** | **20** | **34** | **47.7 +1.9** |
| **BILL** | **Bilibino** | **84.51** | **20** | P | | **P** | **20** | **34** | **45.9 +0.1** |
| BILL | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | | |
| **FINES** | **FINESS Array B** | **85.29** | **332** | P | | **P** | **20** | **34** | **49.5 -0.4** |
| | comp=Z,3.2nm,1.1s,baz=131,slow=5.3,SNR=7.4 | | | | | | | | |
| **FINES** | **FINESS Array B** | **85.29** | **332** | *i* P | | **P** | **20** | **34** | **49.0 -0.8** |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | |
| **VYHS** | **Vyhne** | **86.59** | **319** | *e*P | | **P** | **20** | **34** | **59.1 +2.5** |
| **VYHS** | **Vyhne** | **86.59** | **319** | *e*P | | **P** | **20** | **34** | **59.1 +2.5** |
| **GERES** | **GERESS Array B** | **90.01** | **319** | P | | **P** | **20** | **35** | **13.3 +0.3** |
| | comp=Z,1.4nm,0.9s,baz=119,slow=4.7,SNR=9.6 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.89** | **38** | PKPbc | | **PKPab** | **20** | **41** | **54.2 +0.4** |
| | comp=Z,1.1nm,0.6s,baz=290,slow=1.1,SNR=15 | | | | | | | | |
| **JCT** | **Junction City** | **147.28** | **33** | *e*PKP2 | | **PKPdf** | **20** | **41** | **54.9 -0.2** |
| **JCT** | **Junction City** | **147.28** | **33** | *e*PKPdf | | **PKPdf** | **20** | **41** | **54.9 -0.2** |

**MAN 25 20:22:53,12.16N×125.97E, h31km, mb5.1, ML4.0, MS4.1, 2C-2D, Samar**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OCLP** | **Ormoc** | **1.73** | **231** | *e*P | | Pb | 20 23 22.6 | -1.5 |
| **PVCP** | **Virac** | **2.28** | **309** | *i* P | | Pn | 20 23 30.0 | +1.6 |
| PVCP | | | | *i* S | | Sb | 20 24 09.2 | +8.0 |
| **MSLP** | **Maasin** | **2.29** | **209** | *e*P | | Pn | 20 23 30.6 | +2.0 |
| MSLP | | | | *e*S | | Sn | 20 23 58.3 | +2.5 |
| **SCPH** | **Surigao** | **2.41** | **191** | *e*P | | Pn | 20 23 31.0 | +0.7 |
| **BUTP** | **Butuan** | **3.19** | **186** | *e*P | | Pn | 20 23 43.0 | +2.0 |
| **TBP** | **Tagbilaran** | **3.21** | **220** | *e*P | | Pn | 20 23 44.0 | +2.6 |
| TBP | | | | *e*S | | Pn | 20 23 49.7 | +8.3 |
| **RCP** | **Roxas** | **3.21** | **260** | *e*P | | Pn | 20 23 45.2 | +3.8 |
| **GUIM** | **Jordan** | **3.65** | **246** | *e*P | | Pn | 20 23 48.9 | +1.5 |
| **BUKP** | **Musuan** | **4.34** | **192** | *e*P | | Pn | 20 23 59.8 | +2.8 |

*ISCJB **25** 20:33:44.8±0.5, 32.2°32N±0.04°×115.36W±0.03, h6km±8km, Error ellipse: s-maj=7.2km s-min=4.9km az=5.7*
*MEX **25** 20:33:44.1±0.5, 32.54N×115.03W, h11km±4km, MD3.7*
*ECX **25** 20:33:45.7±0.5, 32.33N×115.33W, h5km, MD2.6, ML2.8*
**ISC 25 20:33:44.3±0.9, 32.35N±0.04°×115.33W±0.03, h16km±6km, n17, σ0s31/25, 4C-1D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPBX** | **Cerro Prieto** | **0.07** | **17** | *e*P | | **Pg** | **20** | **33** | **47.4 0.0** |
| CPBX | | | | *e*S | | **Sg** | **20** | **33** | **49.2 -0.2** |
| CPBX | | | | IAML | | | 20 | 33 | 50.8 |
| | comp=E,15μm,0.2s | | | | | | | | |
| CPBX | | | | *e* | | | 20 | 33 | 50.8 |
| **MBIG** | **Mexicali** | **0.13** | **62** | *e*P | | **Pb** | **20** | **33** | **48.4 0.0** |
| MBIG | | | | *e*S | | **Sb** | **20** | **33** | **50.7 -0.3** |
| **MBIG** | **Mexicali** | **0.13** | **62** | *i* P | | **Pb** | **20** | **33** | **48.6 +0.3** |
| **SGL** | **Mount Signal** | **0.45** | **312** | *i* P | | **Pb** | **20** | **33** | **54.1 +0.2** |
| **EMSC** | **East Mesa** | **0.49** | **37** | *e*P | | **Pb** | **20** | **33** | **55.1 +0.6** |
| **COA** | **Coachella** | **0.54** | **19** | *e*P | | **Pb** | **20** | **33** | **56.0 +0.5** |
| **YUH** | **Yuha Desert** | **0.58** | **301** | *i* P | | **Pb** | **20** | **33** | **56.2 0.0** |
| **RDX** | **Rancho Dawling** | **0.67** | **231** | *e*P | | **Pg** | **20** | **33** | **57.3 -0.1** |
| RDX | | | | *e*S | | **Sg** | **20** | **34** | **06.3 +0.1** |
| RDX | | | | IAML | | | 20 | 34 | 07.6 |
| | comp=N,260nm,0.4s | | | | | | | | |
| RDX | | | | *e* | | | 20 | 34 | 07.6 |
| **RMX** | **La Rumorosa** | **0.68** | **292** | *e*P | | **Pg** | **20** | **33** | **57.6 -0.1** |
| RMX | | | | *e*S | | **Sg** | **20** | **34** | **06.6 -0.2** |
| **ECBX** | **El Chinero** | **0.90** | **165** | *e*P | | **Pg** | **20** | **34** | **01.7 -0.1** |
| ECBX | | | | *e*S | | **Sg** | **20** | **34** | **13.7 0.0** |
| ECBX | | | | *e* | | | 20 | 34 | 15.5 |
| ECBX | | | | IAML | | | 20 | 34 | 15.5 |
| | comp=E,366nm,0.1s | | | | | | | | |
| **CBX** | **Cerro Bola** | **1.13** | **269** | *e*P | | **Pb** | **20** | **34** | **06.0 +0.4** |
| CBX | | | | *i* S | | **Sg** | **20** | **34** | **21.3 +0.4** |
| **CBX** | **Cerro Bola** | **1.13** | **269** | IAML | | | 20 | 34 | 21.9 |
| | comp=E,147nm,0.2s | | | | | | | | |
| CBX | | | | *e* | | | 20 | 34 | 21.9 |
| **ZAX** | **El Zacaton** | **1.16** | **224** | *e*P | | **Pn** | **20** | **34** | **05.8 -0.2** |
| ZAX | | | | *e*S | | **Sn** | **20** | **34** | **21.1 -0.4** |
| **ECNX** | **Esteban Cantu** | **1.28** | **238** | *e*P | | **Pn** | **20** | **34** | **07.5 -0.1** |
| ECNX | | | | *e*S | | **Sn** | **20** | **34** | **24.9 +0.3** |
| **SPIG** | **San Pedro Mart** | **1.30** | **185** | *e*P | | **Pn** | **20** | **34** | **07.9 -0.3** |
| SPIG | | | | *e*S | | **Sg** | **20** | **34** | **26.9 +0.5** |
| **SPIG** | **San Pedro Mart** | **1.30** | **185** | *e*P | | **Pn** | **20** | **34** | **07.9 -0.3** |
| **SPX** | **San Pedro Mart** | **1.30** | **185** | *e*P | | **Pn** | **20** | **34** | **07.9 -0.2** |

*IDC **25** 20:39:03.2±1.5, 3.36S×99.87E, h0km, mb3.5/8, mb1 3.6/8, mb1mx3.5/46, mbtmp3.5/8, Error ellipse: s-maj=59.6km s-min=19.8km az=52.0*
*ISCJB **25** 20:39:06.6±1.4, 3.2S±0.2°×100.0E±0.3°, h33km, mb3.5/8, Error ellipse: s-maj=53.9km s-min=16.1km az=144.2*
**ISC 25 20:39:08.5±1.6, 3.3S±0.3°×100.0E±0.4, h35km, n14, σ0s83/8, mb3.6/8, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.64** | **357** | P | | **P** | **20** | **43** | **54.6 -1.3** |
| | 0.2nm,0.5s,baz=187,slow=7.0,SNR=2.5 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.67** | **260** | T | | T | 21 | 14 | 01.0 |
| | baz=82,slow=75,SNR=120 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.68** | **260** | T | | T | 21 | 14 | 01.5 |
| | baz=82,slow=75,SNR=130 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.69** | **260** | T | | T | 21 | 14 | 02.4 |
| | baz=82,slow=75,SNR=139 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.08** | **159** | T | | T | 21 | 21 | 49.8 |
| | baz=334 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.09** | **159** | T | | T | 21 | 21 | 50.9 |
| | baz=334 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.09** | **159** | T | | T | 21 | 21 | 49.1 |
| | baz=334 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.39** | **119** | P | | **P** | **20** | **46** | **18.9 +0.5** |
| | 0.3nm,0.5s,baz=299,slow=8.7,SNR=3.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **38.54** | **125** | P | | **P** | **20** | **46** | **27.4 -0.7** |
| | 0.1nm,0.5s,baz=299,slow=8.3,SNR=4.1 | | | | | | | | |
| **SONM** | **Songino Array** | **51.23** | **6** | P | | **P** | **20** | **48** | **09.2 +0.5** |
| | 1.4nm,0.8s,baz=188,slow=8.9,SNR=9.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.26** | **345** | P | | **P** | **20** | **48** | **17.0 +0.7** |
| | 1.3nm,0.7s,baz=156,slow=8.1,SNR=9.9 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.77** | **344** | P | | **P** | **20** | **48** | **49.5 +0.5** |
| | 0.5nm,0.7s,baz=162,slow=7.3,SNR=5.3 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.42** | **350** | P | | **P** | **20** | **49** | **00.8 +0.2** |
| | 0.4nm,0.3s,baz=156,slow=7.6,SNR=4.2 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.16** | **313** | P | | **P** | **20** | **50** | **41.6 -0.3** |
| | 0.3nm,0.5s,baz=137,slow=11,SNR=3.3 | | | | | | | | |

**IDC 25 20:43:34.1±3.0, 3.61S×99.72E, h0km, mb3.3/5, mb1 3.6/6, mb1mx3.4/50, mbtmp3.5/6, ML4.2/1, Error ellipse: s-maj=102.5km s-min=22.3km az=54.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LEM** | **Lembang** | **8.49** | **112** | Pn | | Pn | 20 | 45 | 37.9 -0.7 |
| | 3.0nm,0.3s,baz=323,slow=20,SNR=2.8 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.94** | **358** | P | | P | 20 | 48 | 28.5 -0.9 |
| | 0.3nm,0.5s,baz=190,slow=10,SNR=3.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **38.56** | **124** | P | | P | 20 | 50 | 58.9 -0.1 |
| | 0.5nm,0.5s,baz=300,slow=8.3,SNR=7.4 | | | | | | | | |
| **SONM** | **Songino Array** | **51.56** | **6** | P | | P | 20 | 52 | 43.1 +1.0 |
| | 1.4nm,0.8s,baz=176,slow=8.7,SNR=3.1 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.49** | **345** | P | | P | 20 | 52 | 48.9 0.0 |
| | 0.1nm,0.3s,baz=163,slow=7.4,SNR=2.7 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.69** | **350** | P | | P | 20 | 53 | 32.6 -0.6 |
| | 0.3nm,0.4s,baz=181,slow=7.2,SNR=2.5 | | | | | | | | |

*IDC **25** 20:44:39.5±1.2, 3.56S×99.52E, h0km, mb4.0/11, mb1 4.2/12, mb1mx3.9/50, mbtmp4.1/12, ML4.1/1, Error ellipse: s-maj=44.3km s-min=17.0km az=49.0*
*NEIC **25** 20:44:41.1±0.9, 3.52S×99.66E, h10km, mb4.0/3, Error ellipse: s-maj=33.5km s-min=8.7km az=47.0*
*ISCJB **25** 20:44:42.6±1.0, 3.5S±0.2°×99.7E±0.2, h33km, mb4.0/14, Error ellipse: s-maj=34.0km s-min=10.1km az=138.0*
**ISC 25 20:44:44.5±1.3, 3.6S±0.2°×99.7E±0.2, h35km, n25, σ1s113/19, mb4.1/14, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LEM** | **Lembang** | **8.55** | **113** | Pn | | **Pn** | **20** | **46** | **47.6 +1.5** |
| | 2.2nm,0.3s,baz=330,slow=20,SNR=2.0 | | | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.02** | **116** | *e*P | | **Pn** | **20** | **46** | **50.0 -2.5** |
| | 63nm,0.6s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.90** | **358** | P | | **P** | **20** | **49** | **33.0 -1.8** |
| | 2.3nm,0.6s,baz=186,slow=10.0,SNR=18 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.25** | **358** | *e*P | | **P** | **20** | **49** | **36.9 -1.7** |
| | 2.3nm,1.0s | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.34** | **260** | T | | T | 21 | 19 | 15.0 |
| | baz=81,slow=75,SNR=4.4 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.36** | **260** | T | | T | 21 | 19 | 15.0 |
| | baz=81,slow=75,SNR=7.0 | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.36** | **260** | T | | T | 21 | 19 | 15.0 |
| | baz=81,slow=75,SNR=3.9 | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.93** | **158** | T | | T | 21 | 27 | 40.0 |
| | baz=336,slow=76,SNR=4.3 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.94** | **158** | T | | T | 21 | 27 | 39.5 |
| | baz=336,slow=76,SNR=4.1 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.95** | **158** | T | | T | 21 | 27 | 35.7 |
| | baz=336,slow=76,SNR=3.9 | | | | | | | | |
| **LSA** | **Lhasa** | **34.07** | **347** | *e*P | | **P** | **20** | **51** | **26.8 +0.5** |
| | 1.1nm,0.5s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.52** | **119** | P | | **P** | **20** | **51** | **55.5 +0.1** |
| | 1.2nm,0.6s,baz=304,slow=9.3,SNR=6.6 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.52** | **118** | *e*P | | **P** | **20** | **51** | **54.6 -0.9** |
| **ASAR** | **Alice Springs** | **38.63** | **124** | P | | **P** | **20** | **52** | **06.0 +1.2** |
| | 1.3nm,0.7s,baz=299,slow=7.5,SNR=7.2 | | | | | | | | |
| **SONM** | **Songino Array** | **51.53** | **6** | P | | **P** | **20** | **53** | **47.5 +0.6** |
| | 2.4nm,0.8s,baz=188,slow=9.3,SNR=17 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.44** | **345** | P | | **P** | **20** | **53** | **54.2 +0.5** |
| | 1.6nm,0.6s,baz=146,slow=8.6,SNR=10 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.69** | **28** | P | | **P** | **20** | **54** | **17.6 +0.2** |
| | 4.8nm,0.7s,baz=240,slow=8.1,SNR=9.6 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.95** | **344** | P | | **P** | **20** | **54** | **25.9 -0.3** |
| | 0.8nm,0.7s,baz=163,slow=7.0,SNR=7.9 | | | | | | | | |
| **KURK** | **Kurchatov** | **57.01** | **344** | *e*P | | **P** | **20** | **54** | **27.0 +0.3** |
| **ZALV** | **Zalesovo Beam** | **58.64** | **350** | P | | **P** | **20** | **54** | **38.4 +0.4** |
| | 4.1nm,0.7s,baz=180,slow=5.2,SNR=19 | | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.54** | **340** | P | | **P** | **20** | **54** | **57.5 -0.4** |
| | 0.9nm,0.5s,baz=139,slow=9.2,SNR=6.4 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.85** | **332** | *e*P | | **P** | **20** | **55** | **06.8 0.0** |
| | 2.4nm,0.9s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.14** | **313** | P | | **P** | **20** | **56** | **16.7 -1.0** |
| | 0.5nm,0.7s,baz=121,slow=5.6,SNR=3.1 | | | | | | | | |
| **FINES** | **FINESS Array B** | **85.34** | **332** | P | | **P** | **20** | **57** | **18.5 +0.7** |
| | 0.9nm,0.5s,baz=108,slow=6.2,SNR=11 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.13** | **38** | PKPbc | | **PKPab** | **21** | **04** | **23.5 +1.0** |
| | 1.4nm,0.6s,baz=267,slow=1.0,SNR=11 | | | | | | | | |

*IDC **25** 20:47:12.9±0.9, 3.92N×126.33E, h0km, mb3.6/7, mb1 3.8/8, mb1mx3.6/50, mbtmp3.7/8, ML3.9/1, Error ellipse: s-maj=65.8km s-min=16.7km az=61.0*
*ISCJB **25** 20:47:16.5±0.6, 4.0N±0.2°×126.7E±0.2, h45km, mb3.7/9, Error ellipse: s-maj=37.4km s-min=8.2km az=142.7*
*NEIC **25** 20:47:17.9±0.7, 3.94N×126.43E, h35km, mb4.2/2, Error ellipse: s-maj=50.8km s-min=10.2km az=65.0*
**ISC 25 20:47:18.7±0.8, 4.0N±0.2°×126.5E±0.3, h45km, n12, σ0s80/13, mb3.6/9, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **6.75** | **135** | Pn | | **Pn** | **20** | **48** | **56.3 +1.0** |
| | 2.4nm,0.3s,baz=334,slow=10,SNR=7.7 | | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **20** | **50** | **09.4 -1.5** |
| | 0.2nm,0.3s,baz=180,slow=20,SNR=3.7 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **24.97** | **162** | *e*P | | **P** | **20** | **52** | **38.6 +0.4** |
| | 2.5nm,0.7s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **24.98** | **162** | P | | **P** | **20** | **52** | **38.3 0.0** |
| | 1.3nm,0.7s,baz=344,slow=10,SNR=4.1 | | | | | | | | |
| **ASAR** | **Alice Springs** | **28.40** | **166** | P | | **P** | **20** | **53** | **09.3 +0.3** |
| | 0.3nm,0.5s,baz=341,slow=7.9,SNR=2.5 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.57** | **300** | P | | **P** | **20** | **53** | **27.9 -0.5** |
| | 0.2nm,0.6s,baz=96,slow=7.3,SNR=4.0 | | | | | | | | |
| **SONM** | **Songino Array** | **47.01** | **342** | P | | **P** | **20** | **55** | **45.4 -0.2** |
| | 0.4nm,0.5s,baz=156,slow=7.1,SNR=3.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.24** | **325** | P | | **P** | **20** | **57** | **02.0 +0.4** |
| | 0.7nm,0.4s,baz=123,slow=7.9,SNR=9.6 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **57.24** | **325** | P | | **P** | **20** | **57** | **02.0 +0.4** |
| **KURBB** | **Kurchatov Arra** | **61.43** | **327** | P | | **P** | **20** | **57** | **29.8 -0.6** |
| | 0.8nm,0.6s,baz=130,slow=6.4,SNR=7.2 | | | | | | | | |
| **KURK** | **Kurchatov** | **61.43** | **328** | *e*P | | **P** | **20** | **57** | **30.4 0.0** |
| | 3.1nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **67.01** | **327** | P | | **P** | **20** | **58** | **08.2 +1.3** |
| | 0.4nm,0.7s,baz=122,slow=5.2,SNR=2.4 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.65** | **288** | PKP | | **PKPdf** | **21** | **06** | **10.2 -0.4** |
| | 0.6nm,1.1s,baz=59,slow=3.1,SNR=3.4 | | | | | | | | |

**IDC 25 20:49:15.5±3.3, 3.47S×100.36E, h0km, mb3.3/6, mb1 3.5/6, mb1mx3.3/50, mbtmp3.3/6, Error ellipse: s-maj=135.6km s-min=20.0km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.83** | **356** | P | | P | 20 | 54 | 10.1 +0.4 |
| | 0.4nm,0.6s,baz=187,slow=11,SNR=5.7 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.03** | **260** | T | | T | 21 | 24 | 38.9 |
| | baz=85 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.04** | **260** | T | | T | 21 | 24 | 42.5 |
| | baz=85 | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.05** | **260** | T | | T | 21 | 24 | 51.7 |
| | baz=85 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **36.96** | **119** | P | | P | 20 | 56 | 26.4 -0.4 |
| | 0.2nm,0.5s,baz=301,slow=9.3,SNR=2.6 | | | | | | | | |
| **ASAR** | **Alice Springs** | **38.12** | **125** | P | | P | 20 | 56 | 36.7 +0.1 |
| | 0.2nm,0.5s,baz=306,slow=7.9,SNR=2.3 | | | | | | | | |
| **SONM** | **Songino Array** | **51.36** | **5** | P | | P | 20 | 58 | 21.9 -0.2 |
| | 0.2nm,0.4s,baz=181,slow=6.9,SNR=2.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.53** | **344** | P | | P | 20 | 58 | 31.5 +0.8 |
| | 0.3nm,0.6s,baz=152,slow=6.5,SNR=2.5 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.67** | **349** | P | | P | 20 | 59 | 13.2 -1.4 |
| | 0.3nm,0.4s,baz=151,slow=6.7,SNR=2.4 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.63** | **39** | PKPbc | | PKPdf | 21 | 08 | 56.6 -0.2 |
| | 0.2nm,0.6s,baz=324,slow=2.4,SNR=3.2 | | | | | | | | |

*ISK **25** 20:52:03.8, 39.10N×29.08E, h5km, MD2.9*
*CSEM **25** 20:52:04.4±0.1, 39.11N×29.05E, h2km, MD2.9, Error ellipse: s-maj=1.5km s-min=1.2km az=108.0*
*DDA **25** 20:52:04.3, 39.13N×29.04E, h7km, Md2.9*
**ISC 25 20:52:04.5±1.1, 39.10N±0.02×29.07E±0.02, h5km±10km, n49, σ0s29/68, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DEMI** | **Demirci** | **0.28** | **258** | *i* P | | **Pg** | **20** | **52** | **10.2 +0.2** |
| DEMI | | | | *i* S | | **Sg** | **20** | **52** | **13.9 +0.2** |
| **DEMI** | **Demirci** | **0.28** | **258** | P | | **Pg** | **20** | **52** | **10.2 +0.2** |
| DEMI | | | | S | | **Sg** | **20** | **52** | **13.9 +0.2** |
| **TVSB** | **Tavsanli** | **0.46** | **41** | *e*PG | | **Pg** | **20** | **52** | **13.4 0.0** |
| TVSB | | | | *e*SG | | **Sg** | **20** | **52** | **19.7 +0.2** |
| **TVSB** | **Tavsanli** | **0.46** | **41** | *e*Pg | | **Pg** | **20** | **52** | **13.4 0.0** |
| TVSB | | | | *e*Sg | | **Sg** | **20** | **52** | **19.7 +0.2** |
| **DST** | **Dursunbey** | **0.61** | **325** | *e*PG | | **Pg** | **20** | **52** | **16.1 -0.1** |
| **DST** | **Dursunbey** | **0.61** | **325** | *e*Pg | | **Pg** | **20** | **52** | **16.1 -0.1** |
| **KULA** | **Kula-Manisa** | **0.67** | **209** | *e*PG | | **Pg** | **20** | **52** | **17.4 +0.1** |
| KULA | | | | *e*SG | | **Sg** | **20** | **52** | **26.2 +0.2** |
| **KULA** | **Kula-Manisa** | **0.67** | **209** | *e*Pg | | **Pg** | **20** | **52** | **17.4 +0.1** |
| KULA | | | | *e*Sg | | **Sg** | **20** | **52** | **26.2 +0.2** |
| **DURS** | **Dursunbey** | **0.68** | **317** | *i* P | | **Pg** | **20** | **52** | **17.2 -0.4** |
| DURS | | | | *i* S | | **Sg** | **20** | **52** | **26.1 -0.3** |
| **DURS** | **Dursunbey** | **0.68** | **317** | P | | **Pg** | **20** | **52** | **17.2 -0.4** |
| DURS | | | | S | | **Sg** | **20** | **52** | **26.1 -0.3** |
| **MANT** | **Manisa** | **0.73** | **213** | *i* P | | **Pg** | **20** | **52** | **18.8 +0.3** |
| MANT | | | | *i* S | | **Sg** | **20** | **52** | **28.1 +0.1** |
| **MANT** | **Manisa** | **0.73** | **213** | P | | **Pg** | **20** | **52** | **18.8 +0.3** |
| MANT | | | | S | | **Sg** | **20** | **52** | **28.1 +0.1** |
| **KHAL** | **Karahalli** | **0.80** | **156** | *i* P | | **Pb** | **20** | **52** | **20.8 -0.1** |
| KHAL | | | | *i* S | | **Sb** | **20** | **52** | **31.6 -0.5** |
| **KHAL** | **Karahalli** | **0.80** | **156** | P | | **Pb** | **20** | **52** | **20.8 -0.1** |
| KHAL | | | | S | | **Sb** | **20** | **52** | **31.6 -0.5** |
| **KHL** | **Karahalli** | **0.85** | **155** | *e*PG | | **Pg** | **20** | **52** | **20.6 -0.3** |
| **KHL** | **Karahalli** | **0.85** | **155** | *e*Pg | | **Pg** | **20** | **52** | **20.6 -0.3** |
| **AKHS** | **Akhisar** | **1.00** | **258** | *i* P | | **Pg** | **20** | **52** | **23.1 -0.6** |
| AKHS | | | | *i* S | | **Sg** | **20** | **52** | **36.9 +0.1** |
| **AKHS** | **Akhisar** | **1.00** | **258** | P | | **Pg** | **20** | **52** | **23.1 -0.6** |
| AKHS | | | | S | | **Sg** | **20** | **52** | **36.9 +0.1** |
| **AKS** | **Akhisar** | **1.00** | **258** | *e*PG | | **Pg** | **20** | **52** | **23.3 -0.4** |
| **AKS** | **Akhisar** | **1.00** | **258** | *e*Pg | | **Pg** | **20** | **52** | **23.3 -0.4** |
| **ULDT** | **Uludag** | **1.04** | **3** | *i* P | | **Pg** | **20** | **52** | **24.4 0.0** |
| ULDT | | | | *i* S | | **Sg** | **20** | **52** | **37.8 -0.2** |
| **ULDT** | **Uludag** | **1.04** | **3** | P | | **Pg** | **20** | **52** | **24.4 0.0** |
| ULDT | | | | S | | **Sg** | **20** | **52** | **37.8 -0.2** |
| **BALB** | **Balikesir** | **1.07** | **301** | *e*PG | | **Pg** | **20** | **52** | **24.6 -0.4** |
| **BALB** | **Balikesir** | **1.07** | **301** | *e*Pg | | **Pg** | **20** | **52** | **24.6 -0.4** |
| **IGD** | **Bursa** | **1.17** | **5** | P | | **Pg** | **20** | **52** | **26.6 -0.3** |
| IGD | | | | S | | **Sb** | **20** | **52** | **42.7 +0.2** |
| **CAVI** | **Cavuskoy** | **1.25** | **28** | *e*PN | | **Pn** | **20** | **52** | **29.1 +0.5** |
| **CAVI** | **Cavuskoy** | **1.25** | **28** | *e*Pn | | **Pn** | **20** | **52** | **29.1 +0.5** |
| **MDNY** | **Mudanya-Bursa** | **1.27** | **354** | *e*PN | | **Pg** | **20** | **52** | **28.8 -0.1** |
| **MDNY** | **Mudanya-Bursa** | **1.27** | **354** | *e*Pn | | **Pg** | **20** | **52** | **28.8 -0.1** |
| **KCTX** | **Karacabey (Bur** | **1.28** | **335** | *e*PN | | **Pg** | **20** | **52** | **29.1 -0.1** |
| **KCTX** | **Karacabey (Bur** | **1.28** | **335** | *e*Pn | | **Pg** | **20** | **52** | **29.1 -0.1** |
| **BORA** | **Eskisehir** | **1.32** | **54** | *i* P | | **Pn** | **20** | **52** | **29.6 -0.1** |
| BORA | | | | *i* S | | **Sn** | **20** | **52** | **48.0 +0.3** |
| **BORA** | **Eskisehir** | **1.32** | **54** | P | | **Pn** | **20** | **52** | **29.6 -0.1** |
| BORA | | | | S | | **Sn** | **20** | **52** | **48.0 +0.3** |
| **GONE** | **Gonen-Balikesi** | **1.43** | **312** | *e*PN | | **Pn** | **20** | **52** | **31.1 +0.1** |
| **GONE** | **Gonen-Balikesi** | **1.43** | **312** | *e*Pn | | **Pn** | **20** | **52** | **31.1 +0.1** |
| **ARMT** | **Armutlu** | **1.47** | **354** | *e*PN | | **Pb** | **20** | **52** | **32.2 -0.1** |
| **ARMT** | **Armutlu** | **1.47** | **354** | *e*Pn | | **Pb** | **20** | **52** | **32.2 -0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.48** | **219** | *e*PN | | **Pn** | **20** | **52** | **31.9 +0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.48** | **219** | *e*Pn | | **Pn** | **20** | **52** | **31.9 +0.1** |
| **EDC** | **Edincik** | **1.55** | **324** | *e*PN | | **Pn** | **20** | **52** | **33.0 +0.3** |
| **EDC** | **Edincik** | **1.55** | **324** | *e*Pn | | **Pn** | **20** | **52** | **33.0 +0.3** |
| **GULT** | **Gulveren** | **1.73** | **40** | *e*PN | | **Pn** | **20** | **52** | **35.4 +0.1** |
| **GULT** | **Gulveren** | **1.73** | **40** | *e*Pn | | **Pn** | **20** | **52** | **35.4 +0.1** |
| **KRBG** | **Karabiga-Canak** | **1.88** | **314** | *e*PN | | **Pn** | **20** | **52** | **37.4 +0.2** |
| **KRBG** | **Karabiga-Canak** | **1.88** | **314** | *e*Pn | | **Pn** | **20** | **52** | **37.4 +0.2** |
| **MRMT** | **Marmara Adasi** | **1.88** | **323** | *e*PN | | **Pn** | **20** | **52** | **37.6 +0.3** |
| **MRMT** | **Marmara Adasi** | **1.88** | **323** | *e*Pn | | **Pn** | **20** | **52** | **37.6 +0.3** |
| **GELI** | **Tayfur-Gelibol** | **2.38** | **304** | *e*PN | | **Pn** | **20** | **52** | **44.8 +0.7** |
| **GELI** | **Tayfur-Gelibol** | **2.38** | **304** | *e*Pn | | **Pn** | **20** | **52** | **44.8 +0.7** |

*BJI **25** 20:52:15.4, 3.91S×99.63E, h15km, mb4.5/10*
*NEIC **25** 20:52:21.6±0.4, 3.18S×99.33E, h10km, mb4.6/5, Error ellipse: s-maj=13.1km s-min=6.8km az=55.0*
*DJA **25** 20:52:22.5±0.9, 3.3°S×9.9°E±.°, h29km±7km, M4.4/8, mb4.2/8, mB5.7/2, MLv4.5/4, Mw(mB)5.2/2*
*IDC **25** 20:52:25.9±0.7, 3.15S×99.32E, h38km±3km, mb3.9/19, mb1 4.0/21, mb1mx3.8/51, mbtmp4.2/21, ML3.9/2, Error ellipse: s-maj=22.4km s-min=14.3km az=53.0*
**ISC 25 20:52:25.3±0.7, 3.23S±0.07°×99.45E±0.07, h35km±1km, h35km:pP-P, n100, σ1s18/100, mb4.4/27,

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GTA** | **Gaotai** | **42.43** | **0** | *eP* | **P** | **21 00 19.8** | **+2.9** |
| GTA | | | | pP | **pP** | **21 00 27.0** | **-0.1** |
| GTA | | | | sP | **sP** | **21 00 30.8** | **-0.4** |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.3s | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.32** | **30** | P | **P** | **21 01 03.1** | **-0.3** |
| KSAR | | | | pP | **pP** | **21 01 13.8** | **0.0** |
| **KSRS** | **Korea Array** | **48.35** | **31** | P | **P** | **21 01 03.1** | **-0.6** |
| | 3.3nm,0.9s,baz=230,slow=8.6,SNR=4.0 | | | | | | |
| KSRS | | | | pP | **pP** | **21 01 13.8** | **-0.2** |
| | 3.1nm,0.8s,baz=226,slow=8.5,SNR=3.8 | | | | | | |
| **TKM2** | **Tokmak 2** | **50.74** | **337** | *eP* | **P** | **21 01 22.4** | **+0.3** |
| | 7.4nm,0.9s | | | | | | |
| **AAK** | **Ala-Archa** | **50.93** | **336** | P | **P** | **21 01 23.5** | **+0.1** |
| | 0.7nm,0.4s,baz=170,slow=8.3,SNR=5.2 | | | | | | |
| **SONM** | **Songino Array** | **51.21** | **6** | P | **P** | **21 01 26.0** | **+0.5** |
| | 4.4nm,0.8s,baz=188,slow=9.7,SNR=33 | | | | | | |
| SONM | | | | pP | **pP** | **21 01 37.1** | **+1.2** |
| | 5.6nm,0.6s,baz=189,slow=9.2,SNR=16 | | | | | | |
| **EKS2** | **Erkin-Say** | **51.24** | **336** | *eP* | **P** | **21 01 25.8** | **0.0** |
| | 4.5nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.06** | **345** | P | **P** | **21 01 31.8** | **+0.1** |
| | 5.0nm,0.7s,baz=155,slow=9.3,SNR=31 | | | | | | |
| MKAR | | | | sP | **sP** | **21 01 47.3** | **+1.1** |
| | 7.0nm,0.7s,baz=146,slow=8.4,SNR=15 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.49** | **28** | P | **P** | **21 01 57.1** | **+0.3** |
| | 2.2nm,0.7s,baz=205,slow=6.4,SNR=5.2 | | | | | | |
| USRK | | | | pP | **pP** | **21 02 07.5** | **+0.3** |
| | 4.9nm,0.7s,baz=220,slow=5.8,SNR=6.9 | | | | | | |
| **GEYT** | **Alibeck** | **56.04** | **321** | P | **P** | **21 01 60.0** | **-0.9** |
| | 0.8nm,0.5s,baz=174,slow=4.3,SNR=2.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.56** | **344** | P | **P** | **21 02 03.8** | **-0.5** |
| | 1.6nm,0.6s,baz=164,slow=7.0,SNR=16 | | | | | | |
| KURBB | | | | pP | **pP** | **21 02 13.6** | **-1.3** |
| | 0.7nm,0.4s,baz=178,slow=6.6,SNR=4.3 | | | | | | |
| KURBB | | | | sP | **sP** | **21 02 19.1** | **+0.2** |
| | 3.7nm,0.9s,baz=161,slow=7.0,SNR=9.2 | | | | | | |
| **KURK** | **Kurchatov** | **56.62** | **344** | *eP* | **P** | **21 02 03.7** | **-1.1** |
| | 10nm,1.0s | | | | | | |
| KURK | | | | pP | **pP** | **21 02 13.6** | **-1.7** |
| KURK | | | | sP | **sP** | **21 02 19.1** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **58.27** | **350** | P | **P** | **21 02 16.0** | **-0.3** |
| | 11nm,0.8s,baz=185,slow=5.5,SNR=43 | | | | | | |
| ZALV | | | | sP | **sP** | **21 02 30.8** | **0.0** |
| | 6.8nm,0.8s,baz=162,slow=6.2,SNR=8.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.14** | **340** | P | **P** | **21 02 34.7** | **-1.5** |
| | 2.9nm,0.7s,baz=134,slow=8.5,SNR=17 | | | | | | |
| BVAR | | | | pP | **pP** | **21 02 46.5** | **-0.2** |
| | 2.7nm,0.9s,baz=134,slow=6.4,SNR=6.4 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.45** | **332** | *eP* | **P** | **21 02 43.7** | **-1.3** |
| | 7.1nm,0.9s | | | | | | |
| **AKTO** | **Aktyubinsk** | **64.17** | **332** | P | **P** | **21 02 54.5** | **-1.9** |
| | 1.4nm,0.7s,baz=74,slow=4.1,SNR=4.4 | | | | | | |
| **KBZ** | **Khabaz** | **68.87** | **320** | P | **P** | **21 03 25.7** | **-0.8** |
| | 2.8nm,0.8s,baz=128,slow=5.7,SNR=7.7 | | | | | | |
| **MAW** | **Mawson** | **68.97** | **194** | P | **P** | **21 03 27.5** | **+0.9** |
| | 0.7nm,0.3s,baz=354,slow=9.3,SNR=3.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **73.74** | **313** | P | **P** | **21 03 54.8** | **-1.5** |
| | 1.0nm,0.7s,baz=130,slow=7.0,SNR=8.1 | | | | | | |
| BRTR | | | | sP | **sP** | **21 04 12.3** | **+1.2** |
| | 1.6nm,0.7s,baz=138,slow=7.4,SNR=8.1 | | | | | | |
| **FINES** | **FINESS Array B** | **84.94** | **332** | P | **P** | **21 04 56.0** | **-0.5** |
| | 0.8nm,0.5s,baz=117,slow=5.6,SNR=13 | | | | | | |
| FINES | | | | pP | **pP** | **21 05 07.5** | **-0.1** |
| | 1.3nm,0.8s,baz=134,slow=8.2,SNR=1.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.43** | **340** | P | **P** | **21 05 08.9** | **+0.1** |
| | 2.4nm,0.7s,baz=123,slow=4.5,SNR=7.4 | | | | | | |
| **GERES** | **GERESS Array B** | **89.60** | **319** | P | **P** | **21 05 19.2** | **-0.4** |
| | 0.4nm,0.5s,baz=64,slow=3.1,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.00** | **38** | PKPbc | **PKPdf** | **21 12 03.0** | **+1.4** |
| | 1.4nm,0.8s,baz=310,slow=1.5,SNR=11 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 21 12 15.1 | +1.5 |
| | 2.4nm,0.6s,baz=258,slow=0.7,SNR=16 | | | | | | |

**IDC 25 20:56:46.0±2.4, 3°.17S×100°.14E, h0km, mb3.8/6, mb1 3.9/6, mb1mx3.5/41, mbtmp3.8/6, Error ellipse: s-maj=106.3km s-min=21.0km az=53.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **27.87** | **260** | T | T | 21 31 41.8 | |
| | baz=82,slow=75,SNR=18 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.88** | **260** | T | T | 21 31 41.8 | |
| | baz=82,slow=75,SNR=14 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.89** | **260** | T | T | 21 31 44.2 | |
| | baz=82,slow=75,SNR=16 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.13** | **159** | T | T | 21 39 27.8 | |
| | baz=336 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.14** | **159** | T | T | 21 39 31.0 | |
| | baz=336 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.14** | **159** | T | T | 21 39 31.0 | |
| | baz=336 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.30** | **119** | P | P | 21 03 59.4 | -0.8 |
| | 0.2nm,0.4s,baz=293,slow=8.4,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.46** | **125** | P | P | 21 04 10.3 | +0.2 |
| | 0.3nm,0.7s,baz=296,slow=8.0,SNR=3.9 | | | | | | |
| **SONM** | **Songino Array** | **51.09** | **5** | P | P | 21 05 50.5 | 0.0 |
| | 1.1nm,0.6s,baz=189,slow=9.3,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.19** | **345** | P | P | 21 05 58.5 | -0.1 |
| | 1.3nm,0.7s,baz=141,slow=8.6,SNR=8.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.34** | **349** | P | P | 21 06 42.1 | -0.7 |
| | 1.5nm,0.8s,baz=142,slow=5.1,SNR=4.3 | | | | | | |
| **FINES** | **FINESS Array B** | **85.41** | **332** | P | P | 21 09 24.2 | 0.0 |
| | 3.1nm,1.1s,baz=99,slow=9.1,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.54** | **39** | PKPbc | PKPab | 21 16 27.5 | 0.0 |
| | 0.8nm,0.7s,baz=343,slow=1.5,SNR=3.9 | | | | | | |

**IDC 25 20:59:07.5±3.4, 3°.23S×100°.11E, h0km, mb3.4/6, mb1 3.6/6, mb1mx3.4/34, mbtmp3.4/6, Error ellipse: s-maj=140.6km s-min=20.6km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.58** | **357** | P | P | 21 03 59.0 | 0.0 |
| | 0.4nm,0.8s,baz=189,slow=8.8,SNR=4.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.83** | **260** | T | T | 21 34 06.5 | |
| | baz=81,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.84** | **260** | T | T | 21 34 01.8 | |
| | baz=81,slow=75 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.85** | **260** | T | T | 21 34 06.6 | |
| | baz=81,slow=75 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.09** | **159** | T | T | 21 41 48.7 | |
| | baz=336 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.10** | **159** | T | T | 21 41 49.4 | |
| | baz=336 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.10** | **159** | T | T | 21 41 49.6 | |
| | baz=336 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.29** | **119** | P | P | 21 06 21.4 | -0.2 |
| | 0.4nm,0.5s,baz=298,slow=8.5,SNR=5.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.46** | **125** | P | P | 21 06 31.4 | -0.1 |
| | 0.4nm,0.5s,baz=300,slow=8.6,SNR=2.6 | | | | | | |
| **SONM** | **Songino Array** | **51.15** | **5** | P | P | 21 08 12.2 | -0.1 |
| | 0.5nm,0.8s,baz=178,slow=10,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.23** | **345** | P | P | 21 08 20.2 | -0.1 |
| | 0.6nm,0.7s,baz=154,slow=8.8,SNR=3.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.38** | **349** | P | P | 21 09 04.3 | -0.2 |
| | 0.7nm,0.7s,baz=176,slow=5.8,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.59** | **39** | PKPbc | PKPdf | 21 18 48.5 | -0.2 |
| | 0.2nm,0.4s,baz=318,slow=1.2,SNR=3.7 | | | | | | |

**IDC 25 21:00:18.3±3.9, 2°.51S×100°.34E, h0km, mb3.3/5, mb1 3.5/5, mb1mx3.3/34, mbtmp3.3/5, Error ellipse: s-maj=146.7km s-min=21.4km az=59.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **20.89** | **356** | P | P | 21 05 02.7 | +0.4 |
| | 0.4nm,0.8s,baz=181,slow=9.0,SNR=3.6 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.20** | **259** | T | T | 21 34 58.8 | |
| | baz=81,slow=75,SNR=5.4 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.20** | **259** | T | T | 21 34 60.0 | |
| | baz=81,slow=75,SNR=4.7 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.21** | **259** | T | T | 21 35 01.0 | |
| | baz=81,slow=75,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.44** | **120** | P | P | 21 07 34.6 | +0.9 |
| | 0.2nm,0.4s,baz=303,slow=9.0,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **38.67** | **126** | P | P | 21 07 43.0 | -1.2 |
| | 0.2nm,0.5s,baz=304,slow=8.1,SNR=3.7 | | | | | | |
| **SONM** | **Songino Array** | **50.42** | **5** | P | P | 21 09 18.1 | +0.4 |
| | 0.2nm,0.4s,baz=189,slow=8.2,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.61** | **344** | P | P | 21 09 25.7 | -0.9 |
| | 0.5nm,0.4s,baz=155,slow=8.7,SNR=5.2 | | | | | | |

*ISCJB **25** 21:09:17.3±1.8, 3°.5S±0°.3×99°.8E±0°.4, h33km, mb3.6/7, Error ellipse: s-maj=72.8km s-min=16.7km az=146.3*
*IDC **25** 21:09:18.6±2.2, 3°.54S×99°.73E, h30km±6km, mb3.4/7, mb1 3.6/7, mb1mx3.4/39, mbtmp3.6/7, Error ellipse: s-maj=82.1km s-min=19.2km az=55.0*
**ISC 25 21:09:19.3±1.9, 3°.5S±0°.3×99°.8E±0°.5, h35km, n14, σ0s92/12, mb3.7/7, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.80** | **358** | P | P | **21 14 08.9** | **+0.4** |
| | 0.6nm,0.6s,baz=186,slow=10,SNR=7.2 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.49** | **260** | T | T | 21 44 12.5 | |
| | baz=80 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.50** | **260** | T | T | 21 44 12.4 | |
| | baz=80 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.51** | **260** | T | T | 21 44 12.4 | |
| | baz=80 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.97** | **159** | T | T | 21 52 18.4 | |
| | baz=334 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.99** | **159** | T | T | 21 52 13.1 | |
| | baz=334 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.99** | **159** | T | T | 21 52 17.2 | |
| | baz=334 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.45** | **119** | P | P | **21 16 28.3** | **-1.3** |
| | 0.5nm,0.8s,baz=286,slow=9.1,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.57** | **124** | P | P | **21 16 40.2** | **+1.1** |
| | 0.2nm,0.6s,baz=302,slow=8.7,SNR=3.4 | | | | | | |
| **SONM** | **Songino Array** | **51.41** | **6** | P | P | **21 18 22.0** | **+1.0** |
| | 0.6nm,0.6s,baz=193,slow=8.1,SNR=7.4 | | | | | | |
| SONM | | | | pP | **pP** | **21 18 30.8** | **-0.6** |
| | 0.6nm,0.8s,baz=179,slow=8.9,SNR=4.0 | | | | | | |
| SONM | | | | PcP | **PcP** | **21 19 35.4** | **+0.3** |
| | 0.2nm,0.6s,baz=184,slow=2.7,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.38** | **345** | P | P | **21 18 28.3** | **+0.3** |
| | 0.4nm,0.4s,baz=152,slow=10,SNR=4.7 | | | | | | |
| MKAR | | | | pP | **pP** | **21 18 37.5** | **-1.1** |
| | 0.5nm,0.6s,baz=152,slow=7.9,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.57** | **350** | P | P | **21 19 11.9** | **-0.4** |
| | 1.1nm,0.6s,baz=172,slow=3.0,SNR=5.5 | | | | | | |
| ZALV | | | | pP | **pP** | **21 19 21.9** | **-1.1** |
| | 1.0nm,0.6s,baz=190,slow=4.5,SNR=3.5 | | | | | | |
| **FINES** | **FINESS Array B** | **85.31** | **332** | P | P | **21 21 52.5** | **0.0** |
| | 0.8nm,0.7s,baz=132,slow=5.4,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.97** | **38** | PKPbc | **PKPab** | **21 28 57.0** | **+0.3** |
| | 0.4nm,0.7s,baz=311,slow=2.5,SNR=4.3 | | | | | | |

**IDC 25 21:14:58.8±3.8, 3°.29S×100°.47E, h0km, mb3.3/4, mb1 3.5/4, mb1mx3.3/39, mbtmp3.4/4, Error ellipse: s-maj=143.9km s-min=26.7km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.66** | **356** | P | P | 21 19 52.4 | +1.2 |
| | 0.3nm,0.3s,baz=185,slow=9.8,SNR=4.1 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.18** | **260** | T | T | 21 50 07.3 | |
| | baz=83,slow=75,SNR=106 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.19** | **260** | T | T | 21 50 07.8 | |
| | baz=83,slow=75,SNR=69 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.20** | **260** | T | T | 21 50 08.7 | |
| | baz=83,slow=75,SNR=95 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.90** | **160** | T | T | 21 57 15.5 | |
| | baz=335,slow=76,SNR=14 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.92** | **160** | T | T | 21 57 14.3 | |
| | baz=335,slow=76,SNR=14 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.92** | **160** | T | T | 21 57 14.9 | |
| | baz=335,slow=76,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.95** | **119** | P | P | 21 22 09.9 | -0.1 |
| | 0.3nm,0.9s,baz=296,slow=9.4,SNR=3.5 | | | | | | |
| **SONM** | **Songino Array** | **51.17** | **5** | P | P | 21 24 03.2 | -0.7 |
| | 0.6nm,0.6s,baz=198,slow=8.5,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.39** | **344** | P | P | 21 24 12.4 | -0.4 |
| | 0.2nm,0.4s,baz=147,slow=9.1,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.41** | **39** | PKPbc | PKPbc | 21 34 38.9 | -0.7 |
| | 0.3nm,0.5s,baz=320,slow=1.4,SNR=3.3 | | | | | | |

*ATH **25** 21:15:49.8, 40°.48N×21°.60E, h21km, MD3.0/17*
*ISCJB **25** 21:15:50.6±0.4, 40°.48N±0°.02×21°.60E±0°.03, h18km±4km, Error ellipse: s-maj=4.1km s-min=3.3km az=141.4*
*CSEM **25** 21:15:50.1±0.2, 40°.49N×21°.61E, h12km, ML2.3, Error ellipse: s-maj=3.9km s-min=3.1km az=150.0*
*THE **25** 21:15:50.6, 40°.46N×21°.58E, h4km±3km, ML2.3/7, Error ellipse: s-maj=3.7km s-min=0.7km az=63.0*
**ISC 25 21:15:50.2±0.9, 40°.49N±0°.02×21°.58E±0°.02, h15km±6km, n55, σ0s51/90, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZN** | **Kozani** | **0.23** | **141** | *e*PB | **Pg** | **21 15 55.5** | **0.0** |
| KZN | | | | *e*SB | **Sb** | **21 15 59.6** | **-0.6** |
| **KZN** | **Kozani** | **0.23** | **141** | P | **Pg** | **21 15 55.4** | **0.0** |
| KZN | | | | S | **Sg** | **21 15 58.8** | **-0.1** |
| **KZN** | **Kozani** | **0.23** | **141** | *e*Pb | **Pg** | **21 15 55.5** | **0.0** |
| KZN | | | | S | **Sg** | **21 15 58.8** | **-0.1** |
| KZN | | | | *e*Sb | **Sb** | **21 15 59.6** | **-0.7** |
| **FNA** | **Florina** | **0.33** | **333** | *e*PB | **Pg** | **21 15 57.1** | **-0.1** |
| FNA | | | | *e*SB | **Sb** | **21 16 02.8** | **-0.3** |
| **FNA** | **Florina** | **0.33** | **333** | P | **Pg** | **21 15 57.0** | **-0.1** |
| FNA | | | | S | **Sb** | **21 16 02.9** | **-0.2** |
| **FNA** | **Florina** | **0.33** | **333** | *e*Pb | **Pg** | **21 15 57.1** | **-0.1** |
| FNA | | | | S | **Sb** | **21 16 02.9** | **-0.2** |
| **NEST** | **Nestorio** | **0.41** | **260** | P | **Pg** | **21 15 58.2** | **-0.3** |
| NEST | | | | S | **Sb** | **21 16 04.8** | **-0.5** |
| **NEST** | **Nestorio** | **0.41** | **260** | P | **Pg** | **21 15 58.2** | **-0.3** |
| NEST | | | | S | **Sb** | **21 16 04.8** | **-0.5** |
| **PENT** | **Pentalofos** | **0.45** | **229** | *e*PB | **Pg** | **21 15 58.8** | **-0.3** |
| PENT | | | | *e*SB | **Sg** | **21 16 05.4** | **+0.2** |
| **PENT** | **Pentalofos** | **0.45** | **229** | *e*Pb | **Pg** | **21 15 58.8** | **-0.3** |
| PENT | | | | *e*Sb | **Sg** | **21 16 05.4** | **+0.2** |
| **GRG** | **Griva** | **0.78** | **53** | *e*PN | **Pg** | **21 16 05.0** | **-0.4** |
| GRG | | | | *e*SN | **Sb** | **21 16 16.1** | **+0.1** |
| **GRG** | **Griva** | **0.78** | **53** | P | **Pg** | **21 16 05.0** | **-0.4** |
| GRG | | | | S | **Sb** | **21 16 17.0** | **+1.0** |
| **GRG** | **Griva** | **0.78** | **53** | P | **Pg** | **21 16 05.0** | **-0.4** |
| GRG | | | | *e*Sn | **Sb** | **21 16 16.1** | **+0.1** |
| GRG | | | | S | **Sb** | **21 16 17.0** | **+1.0** |
| **LIT** | **Litokhoron** | **0.80** | **119** | *e*PN | **Pg** | **21 16 05.2** | **-0.5** |
| LIT | | | | *e*SN | **Sb** | **21 16 16.4** | **0.0** |
| **LIT** | **Litokhoron** | **0.80** | **119** | P | **Pb** | **21 16 05.7** | **-0.1** |
| LIT | | | | S | **Sb** | **21 16 17.0** | **+0.6** |
| **LIT** | **Litokhoron** | **0.80** | **119** | *e*Pn | **Pg** | **21 16 05.2** | **-0.5** |
| **LIT** | **Litokhoron** | **0.80** | **119** | P | **Pb** | **21 16 05.7** | **-0.1** |
| LIT | | | | *e*Sn | **Sb** | **21 16 16.4** | **0.0** |
| LIT | | | | S | **Sb** | **21 16 17.0** | **+0.6** |
| **OHR** | **Ohrid** | **0.86** | **317** | *i* Pg | **Pg** | **21 16 06.3** | **-0.6** |
| OHR | | | | *i* Sg | **Sn** | **21 16 20.2** | **0.0** |
| **OHR** | **Ohrid** | **0.86** | **317** | *i* Pg | **Pg** | **21 16 06.3** | **-0.6** |
| OHR | | | | *i* Sg | **Sn** | **21 16 20.2** | **0.0** |
| **THL** | **Klokotos Trika** | **0.98** | **160** | *e*PB | **Pb** | **21 16 07.6** | **-1.3** |
| THL | | | | *e*SN | **Sn** | **21 16 22.5** | **-0.5** |
| **THL** | **Klokotos Trika** | **0.98** | **160** | P | **Pb** | **21 16 07.8** | **-1.1** |
| THL | | | | S | **Sg** | **21 16 22.3** | **+0.3** |
| **THL** | **Klokotos Trika** | **0.98** | **160** | P | **Pb** | **21 16 07.8** | **-1.1** |
| THL | | | | *e*Sn | **Sn** | **21 16 22.5** | **-0.5** |
| **JAN** | **Janina** | **1.00** | **214** | *e*PN | **Pn** | **21 16 09.6** | **-0.1** |
| JAN | | | | *e*SN | **Sb** | **21 16 22.2** | **0.0** |
| **JAN** | **Janina** | **1.00** | **214** | P | **Pb** | **21 16 09.3** | **+0.1** |
| JAN | | | | S | **Sg** | **21 16 22.6** | **0.0** |
| **JAN** | **Janina** | **1.00** | **214** | P | **Pb** | **21 16 09.3** | **+0.1** |
| **JAN** | **Janina** | **1.00** | **214** | *e*Pn | **Pn** | **21 16 09.6** | **-0.1** |
| JAN | | | | *e*Sn | **Sb** | **21 16 22.2** | **0.0** |
| JAN | | | | S | **Sg** | **21 16 22.6** | **0.0** |
| **THE** | **Thessaloniki** | **1.07** | **82** | *e*PN | **Pb** | **21 16 10.1** | **-0.3** |
| THE | | | | *e*SN | **Sb** | **21 16 23.8** | **-0.3** |
| **THE** | **Thessaloniki** | **1.07** | **82** | *e*Pn | **Pb** | **21 16 10.1** | **-0.3** |
| THE | | | | *e*Sn | **Sb** | **21 16 23.8** | **-0.3** |
| **VAY** | **Valandovo** | **1.12** | **42** | *i* Pg | **Pb** | **21 16 12.5** | **-8.8** |
| VAY | | | | *i* Sg | **Sn** | **21 16 28.2** | **+1.6** |
| **KNT** | **Kendrikon** | **1.21** | **56** | *e*PN | **Pn** | **21 16 12.3** | **-0.3** |
| KNT | | | | *e*SN | **Sn** | **21 16 28.9** | **+0.2** |
| **KNT** | **Kendrikon** | **1.21** | **56** | *e*Pn | **Pn** | **21 16 12.3** | **-0.3** |
| KNT | | | | *e*Sn | **Sn** | **21 16 28.9** | **+0.2** |
| **IGT** | **Igoumenitsa** | **1.35** | **225** | *e*PN | **Pg** | **21 16 16.0** | **-0.2** |
| IGT | | | | *e*SN | **Sg** | **21 16 34.7** | **+0.9** |
| **IGT** | **Igoumenitsa** | **1.35** | **225** | P | **Pb** | **21 16 15.3** | **+0.1** |
| **IGT** | **Igoumenitsa** | **1.35** | **225** | P | **Pb** | **21 16 15.3** | **+0.1** |
| **IGT** | **Igoumenitsa** | **1.35** | **225** | *e*Pn | **Pg** | **21 16 16.0** | **-0.2** |
| IGT | | | | *e*Sn | **Sg** | **21 16 34.7** | **+0.9** |
| **SOH** | **Sokhos** | **1.39** | **76** | *e*PN | **Pn** | **21 16 15.5** | **+0.4** |
| SOH | | | | *e*SN | **Sg** | **21 16 34.9** | **-0.2** |
| **SOH** | **Sokhos** | **1.39** | **76** | *e*Pn | **Pn** | **21 16 15.5** | **+0.4** |
| SOH | | | | *e*Sn | **Sg** | **21 16 34.9** | **-0.2** |
| **PLG** | **Polygyros** | **1.43** | **94** | *e*PN | **Pn** | **21 16 15.7** | **0.0** |
| **PLG** | **Polygyros** | **1.43** | **94** | *e*Pn | **Pn** | **21 16 15.7** | **0.0** |
| **MAKR** | **Makrakomi, Fth** | **1.53** | **164** | *e*PN | **Pn** | **21 16 17.4** | **+0.3** |
| **MAKR** | **Makrakomi, Fth** | **1.53** | **164** | *e*Pn | **Pn** | **21 16 17.4** | **+0.3** |
| **AGG** | **Agios Georgios** | **1.57** | **158** | *e*PN | **Pn** | **21 16 18.0** | **+0.4** |
| **AGG** | **Agios Georgios** | **1.57** | **158** | *e*Pn | **Pn** | **21 16 18.0** | **+0.4** |
| **EVR** | **Evrytania** | **1.58** | **173** | *e*PN | **Pn** | **21 16 18.5** | **+0.7** |
| **EVR** | **Evrytania** | **1.58** | **173** | *e*Pn | **Pn** | **21 16 18.5** | **+0.7** |
| **SRS** | **Serrai** | **1.65** | **67** | *e*PN | **Pn** | **21 16 19.1** | **+0.4** |
| **SRS** | **Serrai** | **1.65** | **67** | *e*Pn | **Pn** | **21 16 19.1** | **+0.4** |
| **XOR** | **Xorichti** | **1.67** | **132** | *e*PN | **Pn** | **21 16 19.6** | **+0.6** |
| **XOR** | **Xorichti** | **1.67** | **132** | *e*Pn | **Pn** | **21 16 19.6** | **+0.6** |
| **LKD2** | **Lefkada island** | **1.84** | **203** | *e*PN | **Pb** | **21 16 23.1** | **-0.5** |
| **LKD2** | **Lefkada island** | **1.84** | **203** | *e*Pn | **Pb** | **21 16 23.1** | **-0.5** |
| **PDO** | **Prodromos** | **1.91** | **189** | *e*PN | **Pn** | **21 16 23.5** | **+1.3** |
| **PDO** | **Prodromos** | **1.91** | **189** | *e*Pn | **Pn** | **21 16 23.5** | **+1.3** |
| **NVR** | **Nevrokopi** | **1.93** | **63** | *e*PB | **Pn** | **21 16 22.9** | **+0.3** |
| **NVR** | **Nevrokopi** | **1.93** | **63** | *e*Pb | **Pn** | **21 16 22.9** | **+0.3** |

**IDC 25 21:19:47.6±4.0, 3°.28S×99°.96E, h0km, mb3.7/5, mb1 3.7/5, mb1mx3.4/34, mbtmp3.7/5, Error ellipse: s-maj=167.3km s-min=21.6km az=55.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **27.68** | **260** | T | T | 21 54 38.8 | |
| | baz=82,slow=75,SNR=100 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.68** | **260** | T | T | 21 54 43.1 | |
| | baz=82,slow=75,SNR=120 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.70** | **260** | T | T | 21 54 43.9 | |
| | baz=82,slow=75,SNR=150 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.09** | **159** | T | T | 22 02 33.9 | |
| | baz=335,slow=76,SNR=18 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.11** | **159** | T | T | 22 02 34.8 | |
| | baz=335,slow=76,SNR=18 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.11** | **159** | T | T | 22 02 35.0 | |
| | baz=335,slow=76,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.40** | **119** | P | P | 21 27 02.0 | -0.6 |
| | 0.2nm,0.5s,baz=302,slow=8.9,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.55** | **125** | P | P | 21 27 12.4 | 0.0 |
| | 0.2nm,0.6s,baz=299,slow=8.4,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **51.21** | **6** | P | P | 21 28 52.9 | 0.0 |
| | 1.1nm,0.6s,baz=185,slow=10.0,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.24** | **345** | P | P | 21 29 00.2 | -0.3 |
| | 1.4nm,0.7s,baz=156,slow=7.9,SNR=8.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.41** | **350** | P | P | 21 29 44.3 | -0.5 |
| | 0.7nm,0.5s,baz=161,slow=5.2,SNR=4.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.73** | **38** | PKPbc | PKPbc | 21 39 29.5 | +0.2 |
| | 0.7nm,0.7s,baz=274,slow=0.6,SNR=6.0 | | | | | | |

*IDC **25** 21:20:01.6±1.0, 38°.08N×20°.38E, h0km, mb3.8/8, mb1 3.7/16, mb1mx3.6/44, mbtmp3.6/16, ML3.0/7, Error ellipse: s-maj=17.4km s-min=16.6km az=179.0*
*ISCJB **25** 21:20:03.2±0.5, 38°.07N±0°.02×20°.33E±0°.02, h10km±3km, mb3.7/8, Error ellipse: s-maj=3.8km s-min=2.8km az=31.3*
*CSEM **25** 21:20:03.7±0.2, 38°.09N×20°.39E, h2km, ML3.6, Error ellipse: s-maj=4.7km s-min=2.7km az=46.0*
*ATH **25** 21:20:03.5, 38°.04N×20°.37E, h18km, MD3.4/37, ML3.6*
*THE **25** 21:20:06.6, 38°.15N×20°.56E, h6km, ML3.6/8, Error ellipse: s-maj=1.3km s-min=0.6km az=59.0*
**ISC 25 21:20:03.5±0.9, 38°.06N±0°.02×20°.37E±0°.03, h13km±6km, n209, σ1s17/279, mb3.8/8, 1D, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VLS** | **Valsamata** | **0.21** | **56** | *e*PB | **Pg** | **21 20 08.8** | **+0.6** |
| VLS | | | | *e*SB | **Sb** | **21 20 12.7** | **-0.4** |
| **VLS** | **Valsamata** | **0.21** | **56** | P | **Pg** | **21 20 08.6** | **+0.4** |
| VLS | | | | S | **Sg** | **21 20 09.7** | **-1.7** |
| **VLS** | **Valsamata** | **0.21** | **56** | P | **Pg** | **21 20 08.7** | **+0.6** |
| VLS | | | | S | **Sg** | **21 20 12.1** | **+0.7** |
| VLS | | | | *e*Sb | **Sb** | **21 20 12.7** | **-0.4** |
| **KFL** | **Anninata**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| EVR | | | | *e*SN | Sg | 21 20 50.2 | +1.0 |
| **EVR** | **Evrytania** | **1.42** | **52** | P | Pn | 21 20 29.5 | +0.4 |
| EVR | | | | S | Sn | 21 20 47.8 | +0.1 |
| **EVR** | **Evrytania** | **1.42** | **52** | P | Pn | 21 20 29.5 | +0.4 |
| **EVR** | **Evrytania** | **1.42** | **52** | *e*Pn | Pg | 21 20 31.4 | +0.6 |
| EVR | | | | S | Sn | 21 20 47.8 | +0.1 |
| EVR | | | | *e*SN | Sg | 21 20 50.2 | +1.0 |
| **KALE** | **Kalithea** | **1.44** | **76** | *e*PN | Pg | 21 20 31.4 | +0.3 |
| KALE | | | | *e*SN | Sg | 21 20 50.2 | +0.4 |
| **KALE** | **Kalithea** | **1.44** | **76** | P | Pn | 21 20 29.7 | +0.5 |
| **KALE** | **Kalithea** | **1.44** | **76** | P | Pn | 21 20 29.7 | +0.5 |
| **KALE** | **Kalithea** | **1.44** | **76** | *e*Pn | Pg | 21 20 31.4 | +0.3 |
| KALE | | | | *e*SN | Sg | 21 20 50.2 | +0.4 |
| **IGT** | **Igoumenitsa** | **1.47** | **359** | *e*PN | Pg | 21 20 31.5 | -0.2 |
| IGT | | | | *e*SN | Sg | 21 20 52.4 | +1.5 |
| **IGT** | **Igoumenitsa** | **1.47** | **359** | P | Pb | 21 20 31.1 | +0.4 |
| IGT | | | | S | Sg | 21 20 50.8 | -0.1 |
| **IGT** | **Igoumenitsa** | **1.47** | **359** | P | Pb | 21 20 31.1 | +0.4 |
| **IGT** | **Igoumenitsa** | **1.47** | **359** | *e*Pn | Pg | 21 20 31.5 | -0.2 |
| IGT | | | | S | Sg | 21 20 50.8 | -0.1 |
| IGT | | | | *e*Sn | Sg | 21 20 52.4 | +1.5 |
| **ITM** | **Ithomi** | **1.52** | **125** | *e*PN | Pb | 21 20 31.4 | -0.1 |
| ITM | | | | *e*SN | Sg | 21 20 52.5 | +0.1 |
| **ITM** | **Ithomi** | **1.52** | **125** | P | Pg | 21 20 32.6 | -0.1 |
| ITM | | | | S | Sb | 21 20 51.9 | +1.2 |
| **ITM** | **Ithomi** | **1.52** | **125** | *e*Pn | Pb | 21 20 31.4 | -0.1 |
| **ITM** | **Ithomi** | **1.52** | **125** | P | Pg | 21 20 32.6 | -0.1 |
| ITM | | | | S | Sb | 21 20 51.9 | +1.2 |
| ITM | | | | *e*Sn | Sg | 21 20 52.5 | +0.1 |
| **SGD** | **Sagiada** | **1.55** | **356** | *e*PN | Pg | 21 20 32.8 | -0.5 |
| **SGD** | **Sagiada** | **1.55** | **356** | P | Pb | 21 20 32.6 | +0.5 |
| **SGD** | **Sagiada** | **1.55** | **356** | P | Pb | 21 20 32.6 | +0.5 |
| **GUR** | **Goura** | **1.57** | **94** | *e*PN | Pb | 21 20 32.5 | +0.2 |
| **GUR** | **Goura** | **1.57** | **94** | P | Pb | 21 20 32.6 | +0.2 |
| GUR | | | | S | Sb | 21 20 52.6 | +0.5 |
| **GUR** | **Goura** | **1.57** | **94** | *e*Pn | Pb | 21 20 32.5 | +0.2 |
| GUR | | | | S | Sb | 21 20 52.6 | +0.5 |
| **PYL** | **PYLOS** | **1.60** | **136** | *e*PN | Pn | 21 20 31.9 | +0.5 |
| **PYL** | **PYLOS** | **1.60** | **136** | P | Pb | 21 20 33.6 | +0.8 |
| PYL | | | | S | Sg | 21 20 56.0 | +1.1 |
| **PYL** | **PYLOS** | **1.60** | **136** | *e*Pn | Pn | 21 20 31.9 | +0.5 |
| **PYL** | **PYLOS** | **1.60** | **136** | P | Pb | 21 20 33.6 | +0.8 |
| PYL | | | | S | Sg | 21 20 56.0 | +1.1 |
| **JAN** | **Janina** | **1.64** | **13** | *e*PN | Pb | 21 20 34.0 | +0.4 |
| **JAN** | **Janina** | **1.64** | **13** | P | Pb | 21 20 33.6 | 0.0 |
| **JAN** | **Janina** | **1.64** | **13** | P | Pb | 21 20 33.6 | 0.0 |
| **JAN** | **Janina** | **1.64** | **13** | *e*Pn | Pb | 21 20 34.0 | +0.4 |
| **MAKR** | **Makrakomi, Fth** | **1.68** | **55** | *e*PN | Pb | 21 20 34.8 | +0.5 |
| **MAKR** | **Makrakomi, Fth** | **1.68** | **55** | *e*Pn | Pb | 21 20 34.8 | +0.5 |
| **KEK** | **Kerkira** | **1.71** | **345** | *e*PN | Pb | 21 20 34.8 | +0.1 |
| **KEK** | **Kerkira** | **1.71** | **345** | *e*Pn | Pb | 21 20 34.8 | +0.1 |
| **DSF** | **Desfina** | **1.74** | **78** | *e*PN | Pb | 21 20 35.6 | +0.3 |
| **DSF** | **Desfina** | **1.74** | **78** | P | Pn | 21 20 34.1 | +0.7 |
| **DSF** | **Desfina** | **1.74** | **78** | P | Pn | 21 20 34.1 | +0.7 |
| **DSF** | **Desfina** | **1.74** | **78** | *e*Pn | Pb | 21 20 35.6 | +0.3 |
| **VLX** | **Vlachokerasia** | **1.74** | **113** | *e*PN | Pb | 21 20 35.1 | -0.2 |
| **VLX** | **Vlachokerasia** | **1.74** | **113** | *e*Pn | Pb | 21 20 35.1 | -0.2 |
| **DESF** | **Desfina** | **1.74** | **78** | *e*PN | Pb | 21 20 35.6 | +0.3 |
| **DESF** | **Desfina** | **1.74** | **78** | *e*Pn | Pb | 21 20 35.6 | +0.3 |
| **THAL** | **Thalero** | **1.81** | **90** | *e*PN | Pb | 21 20 36.8 | +0.3 |
| **THAL** | **Thalero** | **1.81** | **90** | P | Pb | 21 20 35.9 | -0.6 |
| **THAL** | **Thalero** | **1.81** | **90** | P | Pb | 21 20 35.9 | -0.6 |
| **THAL** | **Thalero** | **1.81** | **90** | *e*Pn | Pb | 21 20 36.8 | +0.3 |
| **AGG** | **Agios Georgios** | **1.82** | **57** | *e*PN | Pb | 21 20 36.9 | +0.3 |
| **AGG** | **Agios Georgios** | **1.82** | **57** | *e*Pn | Pb | 21 20 36.9 | +0.3 |
| **AXAR** | **Agios Charalam** | **1.94** | **68** | *e*PN | Pb | 21 20 38.7 | +0.1 |
| **AXAR** | **Agios Charalam** | **1.94** | **68** | *e*Pn | Pb | 21 20 38.7 | +0.1 |
| **THL** | **Klokotos Trika** | **1.98** | **40** | *e*PN | Pb | 21 20 39.4 | +0.1 |
| **THL** | **Klokotos Trika** | **1.98** | **40** | *e*Pn | Pb | 21 20 39.4 | +0.1 |
| **LTK** | **Loutraki** | **2.06** | **90** | *e*PN | Pn | 21 20 39.0 | +1.3 |
| **LTK** | **Loutraki** | **2.06** | **90** | P | Pn | 21 20 39.0 | +1.3 |
| **LTK** | **Loutraki** | **2.06** | **90** | P | Pn | 21 20 39.0 | +1.3 |
| **LKR** | **Lokris** | **2.15** | **73** | *e*PB | Pn | 21 20 40.3 | +1.3 |
| **LKR** | **Lokris** | **2.15** | **73** | *e*Pb | Pn | 21 20 40.3 | +1.3 |
| **ATAL** | **Atalanti** | **2.18** | **72** | P | Pn | 21 20 40.9 | +1.5 |
| **ATAL** | **Atalanti** | **2.18** | **72** | P | Pn | 21 20 40.9 | +1.5 |
| **PENT** | **Pentalofos** | **2.22** | **16** | *e*PN | Pb | 21 20 42.7 | -0.7 |
| **PENT** | **Pentalofos** | **2.22** | **16** | *e*Pn | Pb | 21 20 42.7 | -0.7 |
| **VIL2** | **Platees** | **2.29** | **85** | *e*PB | Pn | 21 20 42.9 | +1.9 |
| **KRND** | **KRANIDI** | **2.31** | **106** | *e*PN | Pn | 21 20 43.3 | +2.1 |
| **KRND** | **KRANIDI** | **2.31** | **106** | P | Pn | 21 20 42.9 | +1.7 |
| **KRND** | **KRANIDI** | **2.31** | **106** | P | Pn | 21 20 42.9 | +1.7 |
| **KRND** | **KRANIDI** | **2.31** | **106** | *e*Pn | Pn | 21 20 43.3 | +2.1 |
| **VILL** | **Villia** | **2.33** | **87** | P | Pn | 21 20 42.6 | +1.1 |
| **VILL** | **Villia** | **2.33** | **87** | P | Pn | 21 20 42.6 | +1.1 |
| **VILL** | **Villia** | **2.33** | **87** | *e*Pb | Pn | 21 20 42.9 | +1.4 |
| **DID** | **Didima** | **2.34** | **103** | *e*PN | Pb | 21 20 44.2 | -1.3 |
| **DID** | **Didima** | **2.34** | **103** | P | Pn | 21 20 42.5 | +0.8 |
| **DID** | **Didima** | **2.34** | **103** | P | Pn | 21 20 42.5 | +0.8 |
| **DID** | **Didima** | **2.34** | **103** | *e*Pn | Pb | 21 20 44.2 | -1.3 |
| **SMIA** | **Simia** | **2.38** | **69** | *e*PB | Pn | 21 20 44.0 | +1.9 |
| **SMIA** | **Simia** | **2.38** | **69** | *e*Pb | Pn | 21 20 44.0 | +1.9 |
| **NEST** | **Nestorio** | **2.41** | **13** | P | Pb | 21 20 45.3 | -1.5 |
| **NEST** | **Nestorio** | **2.41** | **13** | P | Pb | 21 20 45.3 | -1.5 |
| **VLI** | **Veliai** | **2.45** | **122** | *e*PB | Pn | 21 20 45.5 | +2.4 |
| **VLI** | **Veliai** | **2.45** | **122** | P | Pb | 21 20 45.7 | -1.6 |
| **VLI** | **Veliai** | **2.45** | **122** | P | Pb | 21 20 45.7 | -1.6 |
| **KZN** | **Kozani** | **2.50** | **26** | *e*PN | Pn | 21 20 45.9 | +2.1 |
| **KZN** | **Kozani** | **2.50** | **26** | P | Pn | 21 20 46.0 | +2.1 |
| **KZN** | **Kozani** | **2.50** | **26** | *e*Pn | Pn | 21 20 45.9 | +2.1 |
| **NEO** | **Neokhori** | **2.56** | **60** | *e*PN | Pn | 21 20 46.3 | +1.6 |
| **NEO** | **Neokhori** | **2.56** | **60** | P | Pn | 21 20 46.1 | +1.4 |
| **NEO** | **Neokhori** | **2.56** | **60** | P | Pn | 21 20 46.1 | +1.4 |
| **XOR** | **Xorichti** | **2.57** | **59** | *e*PN | Pn | 21 20 46.2 | +1.4 |
| **XOR** | **Xorichti** | **2.57** | **59** | P | Pn | 21 20 46.2 | +1.4 |
| **XOR** | **Xorichti** | **2.57** | **59** | P | Pn | 21 20 46.2 | +1.4 |
| **MRKA** | **Markates** | **2.61** | **75** | *e*PN | Pn | 21 20 46.5 | +1.1 |
| **MRKA** | **Markates** | **2.61** | **75** | *e*Pn | Pn | 21 20 46.5 | +1.1 |
| **LIT** | **Litokhoron** | **2.62** | **38** | *e*PB | Pb | 21 20 48.6 | -1.8 |
| **LIT** | **Litokhoron** | **2.62** | **38** | *e*Pb | Pb | 21 20 48.6 | -1.8 |
| **ATH** | **Athens Observa** | **2.65** | **91** | *e*PN | Pn | 21 20 47.3 | +1.5 |
| ATH | | | | *e*SN | Sn | 21 21 19.8 | +2.0 |
| **ATH** | **Athens Observa** | **2.65** | **91** | *e*Pn | Pn | 21 20 47.3 | +1.5 |
| ATH | | | | *e*Sn | Sn | 21 21 19.8 | +2.0 |
| **SKIA** | **Skiathos** | **2.67** | **65** | *e*PN | Pn | 21 20 47.3 | +1.2 |
| **SKIA** | **Skiathos** | **2.67** | **65** | *e*Pn | Pn | 21 20 47.3 | +1.2 |
| **VLY** | **Voula,Athens** | **2.72** | **93** | *e*PN | Pn | 21 20 47.8 | +1.0 |
| VLY | | | | *e*SN | Sn | 21 21 22.2 | +2.7 |
| **VLY** | **Voula,Athens** | **2.72** | **93** | P | Pn | 21 20 47.8 | +1.0 |
| **VLY** | **Voula,Athens** | **2.72** | **93** | P | Pn | 21 20 47.8 | +1.0 |
| VLY | | | | *e*Sn | Sn | 21 21 22.2 | +2.7 |
| **PTL** | **Penteli** | **2.76** | **89** | *e*PN | Pn | 21 20 48.4 | +1.0 |
| PTL | | | | *e*SN | Sn | 21 21 22.5 | +1.8 |
| **PTL** | **Penteli** | **2.76** | **89** | *e*Pn | Pn | 21 20 48.4 | +1.0 |
| PTL | | | | *e*Sn | Sn | 21 21 22.5 | +1.8 |
| **KYTH** | **Kithira** | **2.78** | **129** | *e*PN | Pn | 21 20 49.6 | +2.0 |
| **KYTH** | **Kithira** | **2.78** | **129** | P | Pn | 21 20 50.5 | +2.9 |
| **KYTH** | **Kithira** | **2.78** | **129** | *e*Pn | Pn | 21 20 49.6 | +2.0 |
| **KYTH** | **Kithira** | **2.78** | **129** | P | Pn | 21 20 50.5 | +2.9 |
| **EREA** | **Eretria** | **2.83** | **82** | *e*PN | Pn | 21 20 49.9 | +1.5 |
| **EREA** | **Eretria** | **2.83** | **82** | P | Pn | 21 20 49.7 | +1.3 |
| **EREA** | **Eretria** | **2.83** | **82** | P | Pn | 21 20 49.7 | +1.3 |
| **FNA** | **Florina** | **2.83** | **16** | *e*PN | Pn | 21 20 50.4 | +2.0 |
| **FNA** | **Florina** | **2.83** | **16** | P | Pn | 21 20 50.3 | +1.9 |
| **FNA** | **Florina** | **2.83** | **16** | P | Pn | 21 20 50.3 | +1.9 |
| **AOS** | **Alonnisos** | **2.97** | **67** | *e*PN | Pn | 21 20 51.6 | +1.4 |
| **AOS** | **Alonnisos** | **2.97** | **67** | *e*Pn | Pn | 21 20 51.6 | +1.4 |
| **OHR** | **Ohrid** | **3.07** | **6** | *e*PN | Pn | 21 20 53.9 | +2.3 |
| **OHR** | **Ohrid** | **3.07** | **6** | *e*Pn | Pn | 21 20 53.9 | +2.3 |
| **PAIG** | **Paliouri** | **3.19** | **53** | *e*PN | Pn | 21 20 55.0 | +1.8 |
| **PAIG** | **Paliouri** | **3.19** | **53** | *e*Pn | Pn | 21 20 55.0 | +1.8 |
| **GRG** | **Griva** | **3.29** | **28** | *e*PN | Pn | 21 20 56.2 | +1.4 |
| **GRG** | **Griva** | **3.29** | **28** | *e*Pn | Pn | 21 20 56.2 | +1.4 |
| **PLG** | **Polygyros** | **3.33** | **45** | *e*PN | Pn | 21 20 56.4 | +1.2 |
| **PLG** | **Polygyros** | **3.33** | **45** | *e*Pn | Pn | 21 20 56.4 | +1.2 |
| **TAR1** | **Taranto** | **3.43** | **317** | *e*Pn | Pn | 21 20 58.0 | +1.4 |
| **PE1** | **Pezze di Greco** | **3.56** | **321** | *e*Pn | Pn | 21 20 59.0 | +0.6 |
| **OUR** | **Ouranopolis** | **3.61** | **50** | *e*PN | Pn | 21 21 01.4 | +2.3 |
| **OUR** | **Ouranopolis** | **3.61** | **50** | *e*Pn | Pn | 21 21 01.4 | +2.3 |
| **KNT** | **Kendrikon** | **3.66** | **31** | *e*PN | Pn | 21 21 01.9 | +2.1 |
| **KNT** | **Kendrikon** | **3.66** | **31** | *e*Pn | Pn | 21 21 01.9 | +2.1 |
| **IMMV** | **Iera Moni Meta** | **3.89** | **131** | *e*PN | Pn | 21 21 04.6 | +1.6 |
| **IMMV** | **Iera Moni Meta** | **3.89** | **131** | *e*Pn | Pn | 21 21 04.6 | +1.6 |
| **SRS** | **Serrai** | **3.94** | **38** | *e*PN | Pn | 21 21 05.7 | +2.1 |
| **SRS** | **Serrai** | **3.94** | **38** | *e*Pn | Pn | 21 21 05.7 | +2.1 |
| **SG1** | **Sgolgore (BA)** | **3.98** | **315** | *e*Pn | Pn | 21 21 05.5 | +1.3 |
| **BAI** | **Bari** | **4.06** | **320** | *e*Pn | Pn | 21 21 06.5 | +1.2 |
| **LIA** | **Limnos Island** | **4.18** | **62** | *e*PN | Pn | 21 21 08.7 | +1.8 |
| **LIA** | **Limnos Island** | **4.18** | **62** | *e*Pn | Pn | 21 21 08.7 | +1.8 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **APE** | **Apeiranthos** | **4.22** | **102** | *e*PN | Pn | 21 21 10.0 | +2.5 |
| **APE** | **Apeiranthos** | **4.22** | **102** | *e*Pn | Pn | 21 21 10.0 | +2.5 |
| **NVR** | **Nevrokopi** | **4.25** | **38** | *e*PN | Pn | 21 21 09.7 | +1.8 |
| **NVR** | **Nevrokopi** | **4.25** | **38** | *e*Pn | Pn | 21 21 09.7 | +1.8 |
| **CDT** | **Castel del Mon** | **4.37** | **315** | *e*Pn | Pn | 21 21 10.4 | +0.9 |
| **IDI** | **Anoyia** | **4.57** | **126** | Pn | Pn | 21 21 14.3 | +1.9 |
| | 0.5nm,0.3s,baz=309,slow=18,SNR=4.1 | | | | | | |
| IDI | | | | Sn | Sn | 21 22 04.0 | -1.3 |
| | 9.6nm,0.3s,baz=323,slow=20,SNR=21 | | | | | | |
| **VAE** | **Valguarnera** | **4.75** | **265** | Pn | Pn | 21 21 16.1 | +1.2 |
| | 0.1nm,0.3s,baz=131,slow=20,SNR=3.0 | | | | | | |
| VAE | | | | Sn | Sn | 21 22 08.2 | -1.6 |
| | 0.3nm,0.3s,baz=133,slow=19,SNR=6.6 | | | | | | |
| **BARS** | **Barje** | **4.88** | **13** | *i*Pn | Pn | 21 21 17.0 | +0.5 |
| **SJES** | **Sjenica** | **5.21** | **357** | *e*Pn | Pn | 21 21 21.8 | +0.7 |
| **BOVS** | **Bovan** | **5.66** | **10** | *e*Pn | Pn | 21 21 26.8 | -0.4 |
| **DIVS** | **Divibare** | **6.04** | **357** | *e*Pn | Pn | 21 21 33.2 | +0.7 |
| **TRUS** | **Trudelj** | **6.16** | **0** | *e*Pn | Pn | 21 21 33.0 | -1.1 |
| **KUBS** | **Kucevo** | **6.42** | **8** | *e*Pn | Pn | 21 21 36.1 | -1.6 |
| **TEKS** | **Tekeris** | **6.51** | **355** | *e*Pn | Pn | 21 21 38.7 | -0.3 |
| **MLR** | **Muntele Rosu** | **8.51** | **28** | Pn | Pn | 21 22 08.9 | +2.4 |
| | baz=214,slow=7.3 | | | | | | |
| **KEST** | **Kesra** | **9.13** | **259** | Pn | Pn | 21 22 16.5 | +1.6 |
| | 0.2nm,0.3s,baz=40,slow=9.4,SNR=4.0 | | | | | | |
| KEST | | | | Sn | Sn | 21 23 56.2 | -1.3 |
| | 0.1nm,0.3s,baz=311,slow=19,SNR=5.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **10.48** | **77** | Pn | Pn | 21 22 36.6 | +3.1 |
| | 0.1nm,0.3s,baz=266,slow=12,SNR=3.0 | | | | | | |
| **GERES** | **GERESS Array B** | **11.81** | **338** | Pn | Pn | 21 22 51.2 | -0.4 |
| | 0.2nm,0.3s,baz=162,slow=13,SNR=3.9 | | | | | | |
| GERES | | | | Sn | Sn | 21 24 55.1 | -8.2 |
| | 0.1nm,0.3s,baz=150,slow=24,SNR=2.6 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **13.24** | **108** | Pn | Pn | 21 23 09.5 | -1.7 |
| | 0.0nm,0.3s,baz=310,slow=11,SNR=2.5 | | | | | | |
| **KBZ** | **Khabaz** | **17.93** | **64** | P | P | 21 24 13.3 | +0.4 |
| | 0.1nm,0.3s,baz=285,slow=8.4,SNR=2.9 | | | | | | |
| **HFS** | **Hagfors** | **22.50** | **351** | P | P | 21 25 02.9 | +0.4 |
| | 1.6nm,0.6s,baz=156,slow=11,SNR=8.2 | | | | | | |
| **FINES** | **FINESS Array B** | **23.68** | **7** | P | P | 21 25 15.2 | +0.8 |
| | 1.8nm,0.7s,baz=172,slow=11,SNR=4.7 | | | | | | |
| **NOA** | **NORSAR Array B** | **23.71** | **349** | P | P | 21 25 15.3 | +0.4 |
| | 1.2nm,1.0s,baz=158,slow=9.2,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.86** | **219** | P | P | 21 26 10.3 | -0.3 |
| | 0.4nm,0.6s,baz=32,slow=8.7,SNR=6.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **31.66** | **3** | P | P | 21 26 25.4 | -0.7 |
| | 1.9nm,1.0s,baz=187,slow=14,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **45.47** | **58** | P | P | 21 28 20.3 | -1.8 |
| | 0.7nm,0.4s,baz=275,slow=7.5,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.86** | **48** | P | P | 21 28 23.6 | -1.5 |
| | 1.8nm,0.4s,baz=268,slow=8.5,SNR=10 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **70.03** | **82** | P | P | 21 31 16.5 | +1.3 |
| | 0.3nm,0.4s,baz=301,slow=7.0,SNR=3.7 | | | | | | |

***IDC 25** 21:25:48.9±2.9,3°31.S×100°31.E,h0km,mb3.6/7,*
***mb1 3.8/7,mb1mx3.5/38,mbtmp3.7/7,Error ellipse:***
***s-maj=120.6km s-min=19.4km az=56.0,Southern Sumatera***

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.67** | **356** | P | P | 21 30 40.0 | -1.2 |
| | 0.5nm,0.6s,baz=182,slow=9.2,SNR=3.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.01** | **260** | T | T | 22 00 51.9 | |
| | baz=82,slow=75,SNR=283 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.02** | **260** | T | T | 22 00 55.4 | |
| | baz=82,slow=75,SNR=208 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.03** | **260** | T | T | 22 00 53.3 | |
| | baz=82,slow=75,SNR=301 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.95** | **159** | T | T | 22 08 17.7 | |
| | baz=335,slow=76,SNR=11 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.96** | **159** | T | T | 22 08 17.6 | |
| | baz=335,slow=76,SNR=18 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.96** | **159** | T | T | 22 08 16.8 | |
| | baz=335,slow=76,SNR=8.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.08** | **119** | P | P | 21 33 00.6 | -0.7 |
| | 0.4nm,0.3s,baz=307,slow=8.7,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.25** | **125** | P | P | 21 33 11.1 | -0.1 |
| | 0.7nm,0.6s,baz=305,slow=7.9,SNR=5.5 | | | | | | |
| **SONM** | **Songino Array** | **51.21** | **5** | P | P | 21 34 55.0 | +0.8 |
| | 1.1nm,0.6s,baz=190,slow=9.8,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.36** | **344** | P | P | 21 35 02.8 | 0.0 |
| | 1.2nm,0.6s,baz=159,slow=7.7,SNR=7.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.88** | **344** | P | P | 21 35 34.8 | -0.6 |
| | 0.4nm,0.6s,baz=162,slow=6.7,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.50** | **349** | P | P | 21 35 46.4 | -0.4 |
| | 1.1nm,0.7s,baz=145,slow=5.4,SNR=5.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.53** | **39** | PKPbc | PKPbc | 21 45 30.1 | +0.1 |
| | 1.0nm,0.5s,baz=242,slow=0.8,SNR=11 | | | | | | |

*IDC **25** 21:33:22.4±1.9,25°.96N×65°.70E,h0km,mb3.7/9,*
*mb1 3.7/10,mb1mx3.5/43,mbtmp3.7/10,ML3.7/1,Error*
*ellipse: s-maj=42.9km s-min=24.0km az=159.0*
*ISCJB **25** 21:33:25.5±0.4,26°.02N±0°.08×65°.79E±0°.04,h33km,*
*mb3.6/9,Error ellipse: s-maj=11.8km s-min=4.3km*
*az=165.2*
*CSEM **25** 21:33:39.5±1.9,25°.72N×64°.73E,h10km,mb3.9,Ms4.2,*
*Error ellipse: s-maj=43.7km s-min=27.4km az=105.0*
*OMAN **25** 21:33:39.5±0.2,25°.42N×64°.85E,h10km,Error ellipse:*
*s-maj=19.9km s-min=9.4km az=327.0*
*DSN **25** 21:33:51.4±2.0,26°.34N×63°.82E,h30km,mb3.9/8,Ms4.2/8,*
*Error ellipse: s-maj=58.8km s-min=12.8km az=6.0*

**ISC 25 21:33:27.5±0.8,26.0N±0°.1×65.9E±0°.06,h35km,n53,**
**σ1§84/52,mb3.6/9,8C-6D,Pakistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WBK** | **Wadi Bani Khal** | **7.21** | **244** | ⇓P | Pn | 21 35 09.2 | -1.2 |
| | SNR=6.3 | | | | | | |
| WBK | | | | ⇑S | Sn | 21 36 19.6 | -12 |
| **WBK** | **Wadi Bani Khal** | **7.21** | **244** | P | Pn | 21 35 09.2 | -1.2 |
| | SNR=6.3 | | | | | | |
| **WBK** | **Wadi Bani Khal** | **7.21** | **244** | P | Pn | 21 35 09.2 | -1.2 |
| | SNR=6.3 | | | | | | |
| WBK | | | | S | Sn | 21 36 19.6 | -12 |
| **SMDO** | **Samad** | **7.77** | **250** | ⇑P | Pn | 21 35 17.0 | -1.2 |
| | SNR=18 | | | | | | |
| SMDO | | | | ⇓S | Sn | 21 36 31.7 | -13 |
| **SMDO** | **Samad** | **7.77** | **250** | P | Pn | 21 35 17.0 | -1.2 |
| | SNR=18 | | | | | | |
| **SMDO** | **Samad** | **7.77** | **250** | P | Pn | 21 35 17.0 | -1.2 |
| | SNR=18 | | | | | | |
| SMDO | | | | S | Sn | 21 36 31.7 | -13 |
| **JMDO** | **Jabal Madar** | **8.02** | **245** | ⇑P | Pn | 21 35 21.3 | -0.4 |
| | SNR=15 | | | | | | |
| JMDO | | | | ⇓S | Sn | 21 36 40.5 | -11 |
| **JMDO** | **Jabal Madar** | **8.02** | **245** | P | Pn | 21 35 21.3 | -0.4 |
| | SNR=15 | | | | | | |
| **JMDO** | **Jabal Madar** | **8.02** | **245** | P | Pn | 21 35 21.3 | -0.4 |
| | SNR=15 | | | | | | |
| JMDO | | | | S | Sn | 21 36 40.5 | -11 |
| **THW** | **Thamme Wali** | **8.45** | **35** | P | Pn | 21 35 28.4 | +0.9 |
| **BANOM** | **Banah** | **8.69** | **272** | *i*P | Pn | 21 35 28.3 | -2.5 |
| | SNR=17 | | | | | | |
| BANOM | | | | ⇑S | Sn | 21 36 45.6 | -22 |
| **BANOM** | **Banah** | **8.69** | **272** | P | Pn | 21 35 28.3 | -2.5 |
| | SNR=17 | | | | | | |
| BANOM | | | | S | Sn | 21 36 45.6 | -22 |
| **HATD** | **Hatta, Dubai** | **8.95** | **265** | *i*P | Pn | 21 35 32.1 | -2.3 |
| | SNR=14 | | | | | | |
| **HATD** | **Hatta, Dubai** | **8.95** | **265** | P | Pn | 21 35 32.1 | -2.3 |
| | SNR=14 | | | | | | |
| **ASHO** | **Ashiyiah** | **9.04** | **264** | ⇓P | Pn | 21 35 36.6 | +0.9 |
| | SNR=29 | | | | | | |
| **ASHO** | **Ashiyiah** | **9.04** | **264** | ⇓*i*P | Pn | 21 35 33.6 | -2.1 |
| | SNR=29 | | | | | | |
| **ASHO** | **Ashiyiah** | **9.04** | **264** | P | Pn | 21 35 33.6 | -2.1 |
| | SNR=29 | | | | | | |
| **ASHO** | **Ashiyiah** | **9.04** | **264** | P | Pn | 21 35 36.6 | +0.9 |
| | SNR=29 | | | | | | |
| **ASHO** | **Ashiyiah** | **9.04** | **264** | P | Pn | 21 35 36.6 | +0.9 |
| | SNR=29 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **9.35** | **266** | ⇑*i*P | Pn | 21 35 39.5 | -0.3 |
| | SNR=11 | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **9.35** | **266** | P | Pn | 21 35 39.5 | -0.3 |
| | SNR=11 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **9.45** | **265** | ⇓*i*P | Pn | 21 35 40.9 | -0.3 |
| | SNR=51 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **9.45** | **265** | P | Pn | 21 35 40.9 | -0.3 |
| | SNR=51 | | | | | | |
| **KUDL** | **Kundal** | **9.63** | **75** | *e*P | Pn | 21 35 46.4 | +2.7 |
| KUDL | | | | *e*S | Sn | 21 37 26.5 | -4.2 |
| KUDL | | | | AML | AML | 21 37 30.9 | |
| | comp=N,18nm,0.5s | | | | | | |
| KUDL | | | | AML | AML | 21 37 33.2 | |
| | comp=E,25nm,0.5s | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **9.71** | **264** | ⇑*i*P | Pn | 21 35 44.7 | -0.1 |
| | SNR=26 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **9.71** | **264** | P | Pn | 21 35 44.7 | -0.1 |
| | SNR=26 | | | | | | |
| **CHCP** | **Chirah Chowk** | **9.93** | **38** | P | Pn | 21 35 48.9 | +1.1 |
| **BHGR** | **Bahadurgarh** | **10.13** | **72** | *e*S | Sn | 21 37 39.3 | -3.5 |
| **NDI** | **New Delhi** | **10.37** | **73** | *e*P | Pn | 21 35 54.0 | +0.2 |
| NDI | | | | *e*S | Sn | 21 37 43.0 | -5.7 |
| **SMLA** | **Simla** | **11.10** | **60** | *i*P | Pn | 21 36 06.2 | +2.4 |
| SMLA | | | | *i*S | Sn | 21 38 00.9 | -5.8 |
| SMLA | | | | AML | AML | 21 38 08.0 | |
| | comp=N,163nm,0.4s | | | | | | |
| SMLA | | | | AML | AML | 21 38 08.3 | |
| | comp=E,114nm,0.5s | | | | | | |
| **KOLN** | **Koldanda** | **15.85** | **80** | *e*P | P | 21 37 09.8 | -1.9 |
| **GKN** | **Gorkha** | **16.77** | **79** | *e*P | P | 21 37 22.1 | +0.2 |
| **DMN** | **Daman** | **17.18** | **80** | *e*P | P | 21 37 25.7 | -0.8 |
| | comp=E,14nm,0.5s | | | | | | |
| DMN | | | | *e*S | Sn | 21 40 28.3 | -7.0 |
| **KKN** | **Kakani** | **17.34** | **80** | *e*P | P | 21 37 27.9 | -0.3 |
| | comp=E,4.9nm,0.2s | | | | | | |
| **PKIN** | **Phulchoki** | **17.43** | **80** | *e*P | P | 21 37 29.1 | -0.2 |
| | comp=E,6.8nm,0.2s | | | | | | |
| **PKI** | **Pulchoki** | **17.45** | **80** | *e*P | P | 21 37 29.3 | -0.2 |
| | comp=E,9.9nm,0.3s | | | | | | |
| PKI | | | | *e*S | Sn | 21 40 34.1 | -7.8 |
| **GUN** | **Gumba** | **17.87** | **79** | *e*P | P | 21 37 36.1 | +1.9 |
| | comp=E,26nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **18.02** | **21** | P | P | 21 37 34.5 | -1.0 |
| | comp=E,0.3nm,0.3s,baz=213,slow=0.9,SNR=5.0 | | | | | | |
| **RAMN** | **Ramite** | **18.51** | **82** | *e*P | Pn | 21 37 42.3 | +0.8 |
| | comp=E,27nm,0.6s | | | | | | |
| **ODAN** | **Odare** | **19.22** | **83** | *e*P | Pn | 21 37 51.7 | +1.6 |
| | comp=E,17nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **19.49** | **81** | *e*P | Pn | 21 37 55.2 | +1.8 |
| | comp=E,12nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **24.48** | **28** | P | P | 21 38 44.1 | +0.8 |
| | comp=E,1.1nm,0.4s,baz=217,slow=10,SNR=7.8 | | | | | | |
| **AKTO** | **Aktyubinsk** | **25.16** | **348** | P | P | 21 38 50.0 | +0.7 |
| | comp=E,0.3nm,0.3s,baz=148,slow=5.7,SNR=2.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **26.42** | **18** | P | P | 21 39 01.5 | +0.7 |
| | comp=E,0.3nm,0.5s,baz=209,slow=9.0,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **31.24** | **22** | P | P | 21 39 44.4 | +0.8 |
| | comp=E,0.4nm,0.4s,baz=222,slow=12,SNR=3.0 | | | | | | |
| **H08N2** | **Diego Garcia H** | **32.50** | **171** | T | T | 22 13 07.4 | |
| | baz=350,slow=75,SNR=13 | | | | | | |
| **H08N1** | **

*mb4.0/3,MLv3.9/4*

**ISC 25 21:45:20.4±1.0, 3°2S±0°1×100°07E±0°10, h27km, n36, σ1ᵗ05/31, mb4.1/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PPSI | Pulau Pagai | 0.40 | 352 | P | Pn | 21 45 29.8 | -0.6 |
| SISI | Saibi | 2.06 | 332 | P | Pn | 21 45 51.7 | -1.6 |
| PDSI | Padang | 2.27 | 10 | P | Pn | 21 45 55.2 | -0.9 |
| SDSI | Sungai Dareh | 2.59 | 32 | P | Pn | 21 45 59.5 | -1.1 |
| PPI | Padang Panjang | 2.70 | 7 | P | Pn | 21 46 02.5 | +0.4 |
| MNAI | Manna | 3.12 | 113 | P | Pn | 21 46 07.0 | -0.9 |
| RGRI | Rengat | 3.59 | 39 | P | Pn | 21 46 13.7 | -0.7 |
| BKNI | Bangkinang | 3.59 | 16 | P | Pn | 21 46 13.2 | -1.2 |
| JMBI | JAMBI | 3.88 | 67 | P | Pn | 21 46 17.6 | -0.7 |
| MNSI | Mandailing Nat | 3.96 | 353 | P | Pn | 21 46 18.1 | -1.3 |
| MDSI | Maura Dua | 4.31 | 108 | P | Pn | 21 46 23.4 | -0.8 |
| LWLI | Liwa | 4.39 | 115 | P | Pn | 21 46 24.5 | -1.0 |
| PMBI | Palembang | 4.70 | 87 | P | Pn | 21 46 28.0 | -1.7 |
| KASI | Kota Agung | 5.00 | 118 | P | Pn | 21 46 33.1 | -0.7 |
| KLI | Kotabumi | 5.07 | 110 | P | Pn | 21 46 34.2 | -0.5 |
| GSI | Gunungsitoli | 5.08 | 331 | P | Pn | 21 46 33.0 | -1.9 |
| TPRI | Tanjung Pinang | 6.02 | 48 | P | Pn | 21 46 47.0 | -0.8 |
| PPBI | Pangkal Pinang | 6.14 | 81 | P | Pn | 21 46 48.9 | -0.6 |
| CGJI | Cibinong | 6.57 | 122 | P | Pn | 21 46 54.7 | -0.7 |
| SBJI | Serang | 6.72 | 116 | P | Pn | 21 46 56.7 | -0.7 |
| TSI | Tuntungan | 6.78 | 347 | P | Pn | 21 46 56.6 | -1.6 |
| KCSI | Kotacane, Aceh | 7.02 | 341 | P | Pn | 21 46 59.9 | -1.6 |
| CMAR | Chiang Mai Arr | 21.51 | 357 | P | P | 21 50 07.2 | -0.2 |
| | 0.4nm,0.3s,baz=188,slow=9.8,SNR=4.2 | | | | | | |
| H08S2 | Diego Garcia H | 27.80 | 260 | T | T | 22 20 11.4 | |
| | baz=80 | | | | | | |
| H08S3 | Diego Garcia H | 27.81 | 260 | T | T | 22 20 11.5 | |
| | baz=80 | | | | | | |
| H08S1 | Diego Garcia H | 27.82 | 260 | T | T | 22 20 12.4 | |
| | baz=80 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.17 | 159 | T | T | 22 28 01.5 | |
| | baz=333 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.18 | 159 | T | T | 22 28 02.7 | |
| | baz=333 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.18 | 159 | T | T | 22 27 59.4 | |
| | baz=333 | | | | | | |
| WRA | Warramunga Arr | 37.36 | 119 | P | P | 21 52 30.2 | -0.9 |
| | 0.2nm,0.5s,baz=300,slow=8.8,SNR=2.6 | | | | | | |
| ASAR | Alice Springs | 38.53 | 125 | P | P | 21 52 40.2 | -0.8 |
| | 0.5nm,0.8s,baz=302,slow=7.2,SNR=4.5 | | | | | | |
| SONM | Songino Array | 51.08 | 5 | P | P | 21 54 21.5 | +0.8 |
| | 1.8nm,0.7s,baz=186,slow=9.7,SNR=16 | | | | | | |
| SONM | | | | PcP | PcP | 21 55 37.0 | +0.7 |
| | 0.6nm,0.8s,baz=187,slow=3.7,SNR=3.6 | | | | | | |
| MKAR | Makanchi Array | 52.16 | 345 | P | P | 21 54 29.3 | +0.7 |
| | 2.8nm,0.7s,baz=147,slow=8.8,SNR=19 | | | | | | |
| ZALV | Zalesovo Beam | 58.31 | 349 | P | P | 21 55 13.4 | +0.6 |
| | 1.1nm,0.6s,baz=176,slow=4.5,SNR=9.3 | | | | | | |
| FINES | FINESS Array B | 85.16 | 332 | P | P | 21 57 54.6 | +0.7 |
| | 2.1nm,0.9s,baz=131,slow=9.8,SNR=4.6 | | | | | | |
| TXAR | Lajitas Array | 145.57 | 38 | PKPbc | PKPab | 22 04 58.3 | +0.8 |
| | 0.9nm,0.6s,baz=337,slow=1.6,SNR=10 | | | | | | |

**IDC 25 21:46:56.4±2.5, 2°89S×100°06E, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.6/39, mbtmp3.7/7, Error ellipse: s-maj=103.7km s-min=19.7km az=55.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMAR | Chiang Mai Arr | 21.24 | 357 | P | P | 21 51 43.6 | -0.7 |
| | 1.5nm,0.6s,baz=186,slow=10,SNR=12 | | | | | | |
| H08S2 | Diego Garcia H | 27.84 | 259 | T | T | 22 21 25.0 | |
| | baz=81,slow=75,SNR=13 | | | | | | |
| H08S3 | Diego Garcia H | 27.85 | 259 | T | T | 22 21 27.7 | |
| | baz=81,slow=75,SNR=12 | | | | | | |
| H08S1 | Diego Garcia H | 27.86 | 259 | T | T | 22 21 25.1 | |
| | baz=81,slow=75,SNR=12 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.42 | 159 | T | T | 22 30 03.2 | |
| | baz=335,slow=76,SNR=17 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.43 | 159 | T | T | 22 30 01.7 | |
| | baz=335,slow=76,SNR=20 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.43 | 159 | T | T | 22 30 04.4 | |
| | baz=335,slow=76,SNR=18 | | | | | | |
| WRA | Warramunga Arr | 37.50 | 119 | P | P | 21 54 11.4 | -1.0 |
| | 0.5nm,0.9s,baz=292,slow=9.3,SNR=3.9 | | | | | | |
| ASAR | Alice Springs | 38.69 | 125 | P | P | 21 54 22.9 | +0.5 |
| | 0.6nm,0.8s,baz=290,slow=7.6,SNR=4.6 | | | | | | |
| SONM | Songino Array | 50.82 | 6 | P | P | 21 55 59.6 | +0.7 |
| | 1.0nm,0.9s,baz=180,slow=12,SNR=6.2 | | | | | | |
| AAK | Ala-Archa | 50.87 | 336 | P | P | 21 55 59.3 | -0.1 |
| | 0.5nm,0.3s,baz=153,slow=6.8,SNR=3.5 | | | | | | |
| MKAR | Makanchi Array | 51.90 | 345 | P | P | 21 56 06.6 | -0.3 |
| | 1.0nm,0.7s,baz=156,slow=8.6,SNR=5.4 | | | | | | |
| ZALV | Zalesovo Beam | 58.05 | 349 | P | P | 21 56 50.8 | -0.4 |
| | 1.7nm,0.6s,baz=184,slow=5.1,SNR=9.6 | | | | | | |
| TXAR | Lajitas Array | 145.37 | 38 | PKPbc | PKPbc | 22 06 36.6 | -0.4 |
| | 1.0nm,0.6s,baz=329,slow=1.8,SNR=8.4 | | | | | | |

*ISCJB 25 21:55:55.0±0.8, 23°48S±0°09×179°9W±0°1, h550km, mb4.1/7, Error ellipse: s-maj=15.9km s-min=11.2km az=160.1*

*IDC 25 21:55:55.3±2.4, 23°26S×179°83W, h538km±28km, mb3.6/7, mb1 3.8/7, mb1mx3.3/25, mbtmp4.4/7, Error ellipse: s-maj=25.1km s-min=20.2km az=9.0*

*AUST 25 21:56:13.5±16.0, 23°77S×178°50E, h627km±4km, Error ellipse: s-maj=5.6km s-min=2.8km az=322.0*

**ISC 25 21:55:56.0±0.8, 23°53S±0°10×179°9W±0°1, h550km, n24, σ1ᵗ80/26, mb4.0/7, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RAO | Raoul Island | 5.97 | 163 | P | P | 21 57 34.4 | +0.2 |
| | 161nm,0.3s,baz=36,slow=18,SNR=5.4 | | | | | | |
| RAO | | | | S | S | 21 58 58.3 | +3.7 |
| | 22nm,0.3s,baz=73,slow=19,SNR=2.3 | | | | | | |
| DZM | Mont Dzumac | 12.67 | 274 | P | P | 21 58 46.0 | +4.4 |
| | 0.5nm,0.3s,baz=360,slow=22,SNR=5.5 | | | | | | |
| URZ | Urewera | 14.90 | 189 | P | P | 21 59 02.2 | -2.1 |
| | 2.9nm,0.3s,baz=60,slow=2.3,SNR=10.0 | | | | | | |
| URZ | | | | S | S | 22 01 35.6 | -3.7 |
| | 0.9nm,0.3s,baz=52,slow=19,SNR=5.6 | | | | | | |
| RPZ | Rata Peaks | 21.46 | 198 | P | P | 22 00 08.6 | +3.5 |
| | 8.5nm,0.5s,baz=261,slow=2.9,SNR=8.8 | | | | | | |
| EIDS | Eidsvold | 26.45 | 260 | P | P | 22 00 51.5 | +1.9 |
| | baz=25,SNR=3.5 | | | | | | |
| CMSA | Cobar Meteorol | 31.43 | 248 | P | P | 22 01 34.4 | +1.7 |
| | baz=30,SNR=10 | | | | | | |
| CTA | Charters Tower | 31.55 | 270 | P | P | 22 01 35.2 | +1.2 |
| | 9.9nm,0.3s,baz=92,slow=11,SNR=29 | | | | | | |
| MTSU | Mount Surprise | 33.80 | 272 | P | P | 22 01 54.4 | +1.4 |
| | baz=32,SNR=6.3 | | | | | | |
| ASAR | Alice Springs | 42.17 | 260 | P | P | 22 03 01.7 | +0.6 |
| | 2.1nm,0.4s,baz=96,slow=7.4,SNR=41 | | | | | | |
| ASAR | | | | pP | pP | 22 04 36.1 | -2.7 |
| | 0.7nm,0.7s,baz=83,slow=7.9,SNR=2.8 | | | | | | |
| ASAR | | | | S | S | 22 08 40.8 | -1.0 |
| | 0.8nm,0.7s,baz=98,slow=15,SNR=9.0 | | | | | | |
| WRA | Warramunga Arr | 42.52 | 266 | P | P | 22 03 03.4 | -0.4 |
| | 2.3nm,0.5s,baz=90,slow=6.0,SNR=33 | | | | | | |
| WRKA | Warakurna | 46.99 | 257 | P | P | 22 03 38.7 | +0.5 |
| | baz=46,SNR=15 | | | | | | |
| MTN | Manton Dam | 47.51 | 274 | P | P | 22 03 41.8 | -0.2 |
| | baz=46,SNR=3.5 | | | | | | |
| KNRA | Kununurra | 48.77 | 269 | P | P | 22 03 51.9 | +0.5 |
| | baz=47,SNR=6.1 | | | | | | |
| KLBR | Kellerberrin | 55.20 | 247 | P | P | 22 04 38.0 | +0.6 |
| | baz=54,SNR=4.6 | | | | | | |
| MEEK | Meekatharra | 55.29 | 253 | P | P | 22 04 38.7 | +0.5 |
| | baz=54,SNR=4.4 | | | | | | |
| MORW | Morawa | 57.08 | 250 | P | P | 22 04 50.9 | +0.5 |
| | baz=56,SNR=4.3 | | | | | | |
| JAGI | Jajag, Banyuwa | 64.64 | 272 | P | P | 22 05 38.4 | -1.9 |
| | baz=63,SNR=3.1 | | | | | | |
| PETK | Petropavlovsk- | 78.76 | 346 | P | P | 22 07 00.9 | -0.7 |
| | 3.1nm,0.5s,baz=134,slow=8.3,SNR=3.0 | | | | | | |
| CMAR | Chiang Mai Arr | 89.47 | 290 | P | P | 22 07 57.0 | +1.9 |
| | 1.0nm,0.8s,baz=139,slow=3.4,SNR=7.0 | | | | | | |
| TXAR | Lajitas Array | 90.17 | 58 | P | P | 22 07 57.6 | -0.7 |
| | 0.6nm,0.7s,baz=224,slow=5.0,SNR=4.1 | | | | | | |
| NOA | NORSAR Array B | 141.73 | 351 | PKhKP | PKPpre | 22 14 20.6 | |
| | 0.7nm,0.8s,baz=15,slow=3.7,SNR=2.7 | | | | | | |
| AKASG | Malin Array Be | 144.71 | 328 | PKP | PKPdf | 22 14 28.8 | -1.4 |
| | 2.1nm,0.5s,baz=43,slow=4.1,SNR=13 | | | | | | |
| BRTR | Keskin Array B | 147.42 | 308 | PKPbc | PKPbc | 22 14 37.8 | -0.9 |
| | 1.0nm,0.6s,baz=129,slow=5.3,SNR=4.7 | | | | | | |
| TORD | Torodi Ar. Bea | 169.56 | 189 | PKPab | PKPab | 22 16 18.7 | +0.3 |
| | 0.2nm,0.8s,baz=180,slow=4.0,SNR=3.0 | | | | | | |

*CSEM 25 22:01:42.7±0.8, 36°31N×28°54E, h8km, MD2.5, Error ellipse: s-maj=14.9km s-min=8.9km az=0.9*

*DDA 25 22:01:44.9, 36°43N×28°50E, h7km, Md2.6*

*ISK 25 22:01:44.4, 36°47N×28°57E, h23km, MD2.5*

**ISC 25 22:01:43.2±2.0, 36°35N±0°09×28°54E±0°03, h9km±11km, n18, σ0ᵗ79/31, Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DALY | Dalyan (Muˇla | 0.48 | 11 | ePG | Pg | 22 01 52.5 | 0.0 |
| DALY | | | | eSG | Sg | 22 01 58.4 | -0.5 |
| DALY | Dalyan (Muˇla | 0.48 | 11 | ePg | Pg | 22 01 52.5 | 0.0 |
| DALY | | | | eSg | Sg | 22 01 58.4 | -0.5 |
| FETY | Fethiye | 0.53 | 57 | ePG | Pg | 22 01 54.1 | +0.7 |
| FETY | | | | eSG | Sg | 22 02 01.1 | +0.8 |
| FETY | Fethiye | 0.53 | 57 | ePg | Pg | 22 01 54.1 | +0.7 |
| FETY | | | | eSg | Sg | 22 02 01.2 | +0.8 |
| TURN | Turunc | 0.53 | 6 | iP | Pg | 22 01 53.4 | -0.1 |
| TURN | | | | iS | Sg | 22 02 00.3 | -0.1 |
| TURN | Turunc | 0.53 | 6 | P | Pg | 22 01 53.4 | -0.1 |
| TURN | | | | S | Sg | 22 02 00.3 | -0.1 |
| YER | Yerkesik | 0.81 | 346 | ePG | Pg | 22 01 58.8 | -0.1 |
| YER | | | | eSG | Sg | 22 02 09.1 | -0.4 |
| YER | Yerkesik | 0.81 | 346 | ePg | Pg | 22 01 58.8 | -0.1 |
| YER | | | | eSg | Sg | 22 02 09.1 | -0.4 |
| BDRM | Kayabasi | 1.14 | 310 | iP | Pb | 22 02 05.1 | +0.1 |
| BDRM | | | | iS | Sg | 22 02 20.0 | +0.3 |
| BDRM | Kayabasi | 1.14 | 310 | P | Pb | 22 02 05.1 | +0.1 |
| BDRM | | | | S | Sg | 22 02 20.0 | +0.3 |
| ELL | Elmali | 1.18 | 70 | ePN | Pb | 22 02 04.9 | -0.9 |
| ELL | Elmali | 1.18 | 70 | ePn | Pb | 22 02 04.9 | -0.9 |
| GOLH | Golhisar | 1.21 | 42 | iS | Sn | 22 02 24.3 | +1.2 |
| GOLH | Golhisar | 1.21 | 42 | P | Pb | 22 02 06.8 | +0.5 |
| GOLH | | | | S | Sn | 22 02 24.3 | +1.2 |
| AYDN | Tasoluk | 1.41 | 338 | iP | Pg | 22 02 11.6 | +1.2 |
| AYDN | | | | iS | Sg | 22 02 29.7 | +1.0 |
| AYDN | Tasoluk | 1.41 | 338 | P | Pg | 22 02 11.6 | +1.2 |
| AYDN | | | | S | Sg | 22 02 29.7 | +1.0 |
| AYDB | Zeytinkoy-Aydi | 1.68 | 342 | ePN | Pn | 22 02 11.5 | -1.4 |
| AYDB | Zeytinkoy-Aydi | 1.68 | 342 | ePn | Pn | 22 02 11.5 | -1.4 |

*BJI 25 22:10:01.0, 2°80S×100°00E, h20km, mb4.9/49, mB5.1/27, Ms4.8/29, Ms7 4.5/27*

*KLM 25 22:10:02.4, 2°91S×99°94E, h20km, mb5.0, MS5.7*

*DJA 25 22:10:02.2±0.4, 3°S±2°×10°0E±°, h15km±3km, M4.7/22, mb4.8/22, mB5.0/8, MLv5.0/4, Mw(mB)4.4/8*

*ISCJB 25 22:10:02.3±0.5, 2°83S±0°03×100°05E±0°03, h28km±3km, mb4.9/77, MS4.4/3, Error ellipse: s-maj=6.3km s-min=2.8km az=43.0*

*NEIC 25 22:10:03.0±0.6, 2°81S×100°09E, h19km±3km, mb5.0/25, Error ellipse: s-maj=7.4km s-min=4.2km az=50.0*

*MOS 25 22:10:03.7±0.9, 2°73S×100°23E, h38km, mb5.2/38, Error ellipse: s-maj=11.5km s-min=5.2km az=111.7*

*IDC 25 22:10:03.9±0.5, 2°80S×100°16E, h26km±2km, mb4.6/19, mb1 4.7/22, mb1mx4.5/30, mbtmp4.7/22, ML4.4/3, MS4.4/4, Ms1 4.4/4, ms1mx3.7/36, Error ellipse: s-maj=18.0km s-min=8.8km az=50.0*

*AUST 25 22:10:04.6±1.4, 2°87S×100°21E, h25km, Error ellipse: s-maj=1.7km s-min=0.6km az=237.0*

**ISC 25 22:10:03.4±0.4, 2°88S±0°04×100°01E±0°05, h25km±2km, h24km:pP-P,n320,σ1ᵗ36/346, mb4.9/78, MS4.5/3, 9C-6D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PPSI | Pulau Pagai | 0.11 | 359 | P | Pb | 22 10 08.5 | +0.4 |
| PPSI | | | | S | Sb | 22 10 10.7 | -0.5 |
| SISI | Saibi | 1.79 | 329 | P | Pn | 22 10 32.6 | -0.2 |
| SDSI | Sungai Dareh | 2.39 | 36 | P | Pn | 22 10 41.9 | +0.8 |
| PPI | Padang Panjang | 2.43 | 9 | P | Pn | 22 10 41.8 | +0.1 |
| | baz=2.4,SNR=231 | | | | | | |
| PPI | Padang Panjang | 2.43 | 9 | P | Pn | 22 10 42.0 | +0.4 |
| KSI | Kapahiang | 2.69 | 107 | P | Pn | 22 10 46.4 | +1.2 |
| MNAI | Manna | 3.29 | 117 | P | Pn | 22 10 54.0 | +0.6 |
| | baz=3.1,SNR=49 | | | | | | |
| MNAI | Manna | 3.29 | 117 | P | Pn | 22 10 54.1 | +0.6 |
| MNAI | Manna | 3.29 | 117 | ePn | Pn | 22 10 54.0 | +0.6 |
| MNAI | | | | eSn | Sn | 22 11 30.2 | -1.5 |
| BKNI | Bangkinang | 3.34 | 18 | P | Pn | 22 10 54.7 | +0.6 |
| | baz=3.3,SNR=8.5 | | | | | | |
| BKNI | Bangkinang | 3.34 | 18 | P | Pn | 22 10 54.8 | +0.6 |
| BKNI | Bangkinang | 3.34 | 18 | ePn | Pn | 22 10 54.5 | +0.3 |
| BKNI | | | | eSn | Sn | 22 11 26.4 | -6.7 |
| RGRI | Rengat | 3.42 | 43 | P | Pn | 22 10 56.0 | +0.8 |
| MNSI | Mandailing Nat | 3.67 | 353 | P | Pn | 22 10 57.9 | -0.8 |
| JMBI | JAMBI | 3.83 | 71 | P | Pn | 22 11 01.5 | +0.6 |
| MDSI | Maura Dua | 4.45 | 111 | P | Pn | 22 11 11.5 | +2.1 |
| LWLI | Liwa | 4.56 | 118 | P | Pn | 22 11 12.3 | +1.3 |
| PMBI | Palembang | 4.75 | 91 | P | Pn | 22 11 13.2 | -0.4 |
| GSI | Gunungsitoli | 4.81 | 330 | P | Pn | 22 11 13.3 | -1.1 |
| GSI | Gunungsitoli | 4.81 | 330 | ePn | Pn | 22 11 13.3 | -1.1 |
| GSI | | | | eSn | Sn | 22 12 02.8 | -6.6 |
| KASI | Kota Agung | 5.19 | 121 | P | Pn | 22 11 20.1 | +0.6 |
| KLI | Kotabumi | 5.22 | 112 | P | Pn | 22 11 20.4 | +0.4 |
| BTDF | Bukit Timah Da | 5.64 | 42 | P | Pn | 22 11 26.3 | +0.5 |
| | baz=5.5,SNR=12 | | | | | | |
| PSI | Prapat | 5.74 | 349 | Pn | Pn | 22 11 24.2 | -3.0 |
| | 4.9nm,0.3s,baz=161,slow=3.6,SNR=12 | | | | | | |
| PSI | | | | LR | LR | 22 14 14.8 | |
| | comp=Z,3µm,18.3s,baz=241,slow=45 | | | | | | |
| PSI | Prapat | 5.74 | 349 | eP | Pn | 22 11 24.7 | -2.6 |
| PSI | Prapat | 5.74 | 349 | P | Pn | 22 11 28.0 | +0.7 |
| | baz=5.7,SNR=3.6 | | | | | | |
| PSI | Prapat | 5.74 | 349 | ePn | Pn | 22 11 24.7 | -2.6 |
| PSI | | | | eSn | Sn | 22 12 13.3 | -19 |
| KGM | Kluang | 5.88 | 34 | ⇓P | Pn | 22 11 30.0 | +1.0 |
| TPRI | Tanjung Pinang | 5.88 | 50 | P | Pn | 22 11 29.8 | +0.7 |
| MYKOM | Kota Tinggi | 6.02 | 40 | ⇑P | Pn | 22 11 31.6 | +0.7 |
| MYKOM | Kota Tinggi | 6.02 | 40 | ePn | Pn | 22 11 30.3 | -0.6 |
| MYKOM | | | | eSn | Sn | 22 12 02.0 | -8.4 |
| PPBI | Pangkal Pinang | 6.16 | 84 | P | Pn | 22 11 33.6 | +0.7 |
| TSI | Tuntungan | 6.50 | 347 | P | Pn | 22 11 36.4 | -1.2 |
| KCSI | Kotacane, Aceh | 6.74 | 341 | P | Pn | 22 11 39.3 | -1.6 |
| CGJI | Cibinong | 6.77 | 123 | P | Pn | 22 11 40.9 | -0.4 |
| IPM | Ipoh | 7.38 | 8 | ⇑P | Pn | 22 11 50.8 | +1.1 |
| IPM | Ipoh | 7.38 | 8 | ePn | Pn | 22 11 49.1 | -0.5 |
| SKJI | Sukabumi | 7.70 | 122 | P | Pn | 22 11 54.1 | 0.0 |
| MLSI | Meulaboh, Aceh | 7.96 | 333 | P | Pn | 22 11 55.8 | -1.8 |
| KULM | Kulim | 8.14 | 4 | ⇓P | Pn | 22 11 59.9 | -0.2 |
| KULM | Kulim | 8.14 | 4 | ePn | Pn | 22 11 59.5 | -0.6 |
| CNJI | Cibinong | 8.34 | 122 | P | Pn | 22 12 02.7 | -0.2 |
| LEM | Lembang | 8.53 | 118 | Pn | Pn | 22 12 05.1 | -0.5 |
| | 3.1nm,0.3s,baz=329,slow=18,SNR=3.7 | | | | | | |
| LEM | Lembang | 8.53 | 118 | P | Pn | 22 12 05.6 | -0.1 |
| LHMI | Lhok Sumawe | 8.61 | 339 | P | Pn | 22 12 08.9 | +2.3 |
| | baz=8.7,SNR=3.0 | | | | | | |
| LHMI | Lhok Sumawe | 8.61 | 339 | P | Pn | 22 12 05.2 | -1.4 |
| LHMI | Lhok Sumawe | 8.61 | 339 | ePn | Pn | 22 12 06.2 | -0.5 |
| KTGM | Kuala Trenggan | 8.73 | 21 | ⇓P | Pn | 22 12 10.2 | +2.0 |
| CISI | Cisompet, Garu | 9.05 | 121 | P | Pn | 22 12 11.2 | -1.5 |
| | baz=8.9,SNR=19 | | | | | | |
| CISI | Cisompet, Garu | 9.05 | 121 | P | Pn | 22 12 11.8 | -0.9 |
| CISI | Cisompet, Garu | 9.05 | 121 | ePn | Pn | 22 12 11.2 | -1.5 |
| CISI | | | | eSn | Sn | 22 13 38.7 | -15 |
| XMIS | Christmas Isla | 9.40 | 144 | P | Pn | 22 12 13.1 | -4.4 |
| | baz=9.3,SNR=4.2 | | | | | | |
| XMIS | Christmas Isla | 9.40 | 144 | ePn | Pn | 22 12 13.4 | -4.0 |
| XMIS | | | | eSn | Sn | 22 13 50.2 | -12 |
| CMJI | Cimerak | 9.71 | 120 | P | Pn | 22 12 22.6 | +0.9 |
| SKLT | Songkhla | 10.00 | 3 | P | Pn | 22 12 26.3 | +0.7 |
| | 37nm,0.7s | | | | | | |
| SMRI | Semarang | 11.18 | 112 | P | Pn | 22 12 44.5 | +2.6 |
| UWJI | Ujung Watu | 11.45 | 108 | P | Pn | 22 12 45.4 | -0.1 |
| UGM | Wanagama | 11.60 | 116 | P | Pn | 22 12 48.0 | +0.5 |
| | baz=11,SNR=10 | | | | | | |
| UGM | Wanagama | 11.60 | 116 | P | Pn | 22 12 48.5 | +1.0 |
| UGM | Wanagama | 11.60 | 116 | ePn | Pn | 22 12 46.4 | -1.2 |
| PBKI | Pangkalan Bun | 11.64 | 89 | P | Pn | 22 12 48.7 | +0.5 |
| STKI | Sintang | 11.83 | 76 | P | Pn | 22 12 51.5 | +0.8 |
| WOJI | Wonogiri, Jawa | 11.93 | 115 | P | Pn | 22 12 52.4 | +0.4 |
| NGJI | Ngawi | 12.24 | 112 | P | Pn | 22 12 56.7 | +0.3 |
| PCJI | Pacitan | 12.30 | 116 | P | Pn | 22 12 57.4 | +0.2 |
| TBJI | Tambak Boyo | 12.43 | 109 | P | Pn | 22 12 59.2 | +0.4 |
| PWJI | Pagerwojo | 12.80 | 114 | P | Pn | 22 13 04.6 | +0.6 |
| BWJI | Bawean | 12.95 | 104 | P | Pn | 22 13 06.4 | +0.4 |
| SBUM | Sibu | 13.30 | 67 | ePn | Pn | 22 13 13.3 | +2.4 |
| BBKI | Banjar Baru | 14.82 | 93 | P | P | 22 13 37.4 | +0.2 |
| ABJI | Asem Bagus | 14.98 | 110 | P | Pn | 22 13 35.0 | +1.3 |
| CHBT | CHBT | 15.70 | 8 | P | P | 22 13 51.3 | +4.4 |
| PATY | Pattaya | 15.72 | 3 | P | P | 22 13 49.0 | +1.8 |
| SRBI | Singaraja | 15.99 | 109 | P | Pn | 22 13 48.2 | +1.4 |
| KBKI | Kotabaru | 16.14 | 92 | P | Pn | 22 13 48.9 | +0.1 |
| IGBI | Denpasar | 16.16 | 112 | P | Pn | 22 13 50.0 | +0.9 |
| DNP | Denpasar | 16.18 | 112 | P | P | 22 13 51.0 | -1.3 |
| BKB | Balikpapan | 16.95 | 85 | P | P | 22 14 00.8 | -0.1 |
| KHLT | Khaolaem Dam | 17.62 | 355 | P | Pn | 22 14 07.5 | +0.1 |
| | 9.4nm,1.2s | | | | | | |
| TWSI | Taliwang, Sumb | 17.76 | 110 | P | P | 22 14 09.9 | +0.1 |
| KKM | Kota Kinabalu | 18.45 | 61 | P | P | 22 14 17.5 | -0.1 |
| | baz=18,SNR=7.1 | | | | | | |
| KKM | Kota Kinabalu | 18.45 | 61 | ⇑P | Pn | 22 14 17.8 | 0.0 |
| KKM | Kota Kinabalu | 18.45 | 61 | eP | P | 22 14 17.1 | -0.5 |
| | 25nm,0.8s | | | | | | |
| UBPT | Khong Chiam | 18.83 | 17 | P | P | 22 14 20.8 | -0.8 |
| | 28nm,0.9s | | | | | | |
| UMPA | Umpang Tak | 19.00 | 357 | P | P | 22 14 22.4 | -1.0 |
| | 5.4nm,1.0s,792nm | | | | | | |
| SDKM | Sandakan | 19.14 | 64 | ⇑P | Pn | 22 14 25.6 | -0.4 |
| TSM | Tawau | 19.22 | 68 | ⇑P | P | 22 14 25.9 | +0.1 |
| PBKT | Sadao Pong | 19.35 | 3 | P | P | 22 14 26.6 | -0.6 |
| | 9.5nm,0.8s | | | | | | |
| SPSI | Sidrap Palu | 19.75 | 94 | P | P | 22 14 32.0 | +0.3 |
| TTSI | Tana Toraja | 19.78 | 91 | P | Pn | 22 14 33.3 | -0.4 |
| KAPI | Kappang | 19.81 | 97 | P | P | 22 14 32.3 | 0.0 |
| | 4.7nm,0.3s,baz=274,slow=13,SNR=9.1 | | | | | | |
| KAPI | Kappang | 19.81 | 97 | eP | P | 22 14 32.3 | 0.0 |
| | 16nm,0.9s | | | | | | |
| PCI | Palu | 19.91 | 85 | P | P | 22 14 34.3 | +0.8 |
| | 62nm,1.2s,917nm | | | | | | |
| SKNT | Sakolnkorn | 20.11 | 11 | P | P | 22 14 34.1 | -1.5 |
| | 21nm,0.9s | | | | | | |
| MYLDM | Lahad Datu | 20.13 | 67 | ⇓P | Pn | 22 14 37.6 | -0.2 |
| MYLDM | Lahad Datu | 20.13 | 67 | eP | P | 22 14 36.7 | +0.8 |
| | 174nm,1.7s | | | | | | |
| MPSI | Mapaga | 20.13 | 81 | P | P | 22 14 36.2 | +0.3 |
| BKSI | Bulukumba | 20.20 | 98 | P | P | 22 14 36.8 | +0.1 |
| LOEI | Loei | 20.29 | 3 | P | P | 22 14 37.5 | -0.1 |
| | 41nm,1.0s | | | | | | |
| UTTA | Uttaradit | 20.50 | 1 | P | P | 22 14 39.1 | -0.7 |
| | 4.3nm,0.9s,51nm | | | | | | |
| MHMT | Maesarieng | 21.02 | 354 | P | P | 22 14 44.7 | -0.7 |
| | 27nm,0.8s,254nm | | | | | | |
| CM01 | Chiang Mai Arr | 21.19 | 357 | eP | P | 22 14 45.9 | -1.4 |
| CM31 | Chiang Mai Arr | 21.23 | 357 | eP | P | 22 14 45.9 | -1.8 |
| CMAR | Chiang Mai Arr | 21.23 | 357 | P | P | 22 14 45.9 | -1.8 |
| | 8.8nm,0.5s,baz=186,slow=9.5,SNR=47 | | | | | | |
| LAMP | Lampang | 21.27 | 359 | P | P | 22 14 47.6 | -0.5 |
| | 6.6nm,0.8s | | | | | | |
| CHTO | Chiang Mai | 21.58 | 357 | P | P | 22 14 50.1 | -1.4 |
| | 65nm,1.1s | | | | | | |
| CHTO | Chiang Mai | 21.58 | 357 | eP | P | 22 14 49.7 | -1.7 |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,26nm,1.4s | | | | | | |
| CHTO | Chiang Mai | 21.58 | 357 | eP | P | 22 14 49.7 | -1.7 |
| | comp=Z,26nm,1.4s | | | | | | |
| BASI | Baing, Sumba | 21.68 | 111 | P | P | 22 14 53.6 | +1.0 |
| APSI | Ampana | 21.71 | 85 | P | P | 22 14 53.1 | +0.1 |
| | comp=Z,113nm,1.2s,comp=Z,1µm | | | | | | |
| PALK | Pallekele | 21.75 | 298 | iP | P | 22 14 57.4 | +4.0 |
| MRSI | Marisa | 22.17 | 82 | P | P | 22 14 58.8 | +0.9 |
| | comp=Z,65nm,1.3s | | | | | | |
| EDFI | Ende, Flores | 22.33 | 106 | P | P | 22 14 59.7 | -0.1 |
| KDI | Kendari | 22.59 | 93 | P | P | 22 15 03.0 | +0.6 |
| | comp=Z,53nm,1.0s | | | | | | |
| BBSI | Bau Bau | 22.64 | 97 | P | P | 22 15 03.7 | +0.7 |
| CMAI | Chiengmai2 | 22.69 | 358 | P | P | 22 15 01.6 | -1.9 |
| | comp=Z,44nm,1.3s | | | | | | |
| LUWI | Luwuk | 22.82 | 86 | P | P | 22 15 05.4 | +0.6 |
| LUWI | Luwuk | 22.82 | 86 | eP | P | 22 15 08.4 | +3.6 |
| | comp=Z,62nm,1.0s | | | | | | |
| MMRI | Maumere | 22.83 | 105 | P | P | 22 15 05.3 | +0.3 |
| GTOI | Gorontalo | 23.25 | 82 | P | P | 22 15 08.5 | -0.8 |
| | comp=Z,33nm,0.8s,comp=Z,423nm | | | | | | |
| QIZ | Qiongzhong | 23.82 | 24 | P | P | 22 15 17.5 | +2.8 |
| SLVN | Son La | 24.36 | 9 | eP | P | 22 15 19.1 | -0.7 |
| BATI | Baumata | 24.58 | 108 | P | P | 22 15 21.3 | -0.5 |
| | comp=Z,24nm,0.4s,baz=256,slow=4.2,SNR=3.9 | | | | | | |
| BATI | Baumata | 24.58 | 108 | P | P | 22 15 22.5 | +0.6 |
| SOEI | Soe | 25.04 | 107 | P | P | 22 15 26.7 | +0.6 |
| SANI | Sanana | 25.96 | 89 | P | P | 22 15 33.6 | -0.8 |
| SGSI | Sangihe | 26.32 | 76 | P | P | 22 15 38.5 | +0.9 |
| MBWA | Marble Bar | 26.43 | 135 | eP | P | 22 15 37.5 | -1.0 |
| | comp=Z,34nm,1.4s | | | | | | |
| NLAI | Namlea | 27.05 | 91 | P | P | 22 15 43.7 | -0.5 |
| LBMI | Labuha | 27.56 | 86 | P | P | 22 15 50.4 | +1.6 |
| H08S2 | Diego Garcia H | 27.80 | 259 | T | T | 22 44 51.4 | |
| | baz=81,slow=75,SNR=3437 | | | | | | |
| H08S3 | Diego Garcia H | 27.81 | 259 | T | T | 22 44 50.5 | |
| | baz=81,slow=75,SNR=2283 | | |

baz=335,slow=76,SNR=95
**WRKA Warakurna 35.03 132 P P 22 16 55.6 +1.1**
baz=35,SNR=14
**WRA Warramunga Arr 37.55 119 P P 22 17 15.4 -0.6**
comp=Z,2.8nm,0.4s,baz=300,slow=8.8,SNR=24
WRA PcP PcP 22 19 34.9 +0.9
comp=Z,2.3nm,0.6s,baz=299,slow=2.5,SNR=5.7
WRA pPcP 22 19 42.3
comp=Z,2.2nm,0.7s,baz=314,slow=2.1,SNR=5.1
WRA S S 22 22 59.8 -4.3
comp=Z,2.6nm,1.0s,baz=295,slow=16,SNR=7.2
**WRAB Tennant Creek 37.55 119** *de*P P 22 17 15.7 -0.4
WRAB pmax pmax
comp=Z,14nm,1.7s
**WRAB Tennant Creek 37.55 119** *e*P P 22 17 12.4 -3.6
comp=Z,15nm,0.7s
**XAN Xi'an 37.67 12** P P 22 17 15.3 -1.5
XAN pP pP 22 17 25.5 +1.3
XAN sP sP 22 17 30.0 +2.8
XAN PMZ
comp=Z,20nm,1.0s
**AS12 Alice Springs 38.73 125** *e*P P 22 17 26.3 +0.3
AS12 *e*PcP PcP 22 19 38.6 +1.0
AS12 *e*S S 22 23 21.4 -0.6
**ASAR Alice Springs 38.73 125** P P 22 17 26.3 +0.3
comp=Z,6.1nm,0.6s,baz=302,slow=7.9,SNR=45
ASAR PcP PcP 22 19 38.6 +1.0
comp=Z,1.7nm,0.7s,baz=313,slow=2.2,SNR=4.4
ASAR pPcP 22 19 45.5
comp=Z,1.6nm,0.6s,baz=305,slow=2.2,SNR=4.4
ASAR S S 22 23 21.4 -0.6
comp=Z,1.8nm,1.1s,baz=300,slow=18,SNR=8.2
ASAR LR LR 22 35 16.1
comp=Z,685nm,20.5s,baz=42,slow=39
**AS01 Alice Springs 38.77 125** *e*P P 22 17 26.3 0.0
**LZH Lanzhou 38.93 5** ⇓P P 22 17 27.5 0.0
LZH pP pP 22 17 35.0 0.0
LZH sP sP 22 17 38.3 +0.3
LZH PMZ
comp=Z,19nm,1.0s
LZH PMZ
comp=Z,85nm,4.3s
LZH LN
comp=Z,540nm,13.3s
LZH LE
comp=Z,490nm,14.0s
LZH LZ
comp=Z,530nm,18.4s
**GTA Gaotai 42.08 360** *e*P P 22 17 53.5 0.0
GTA pP pP 22 17 58.8 -2.2
GTA sP sP 22 18 02.3 -1.7
GTA PP PP 22 19 35.3 +4.0
GTA S S 22 24 13.0 +1.3
GTA sS sS 22 24 23.0 -1.0
GTA SS SS 22 27 14.0 -5.7
GTA PMZ
comp=Z,12nm,0.9s
GTA PMZ
comp=Z,170nm,4.7s
GTA LN
comp=Z,750nm,15.7s
GTA LE
comp=Z,390nm,17.1s
GTA LZ
comp=Z,700nm,17.1s
**QIS Mount Isa 42.39 118** P P 22 17 55.9 -0.3
baz=42,SNR=8.4
**HHC Hu-ho-hao-te 44.78 12** *e*P P 22 18 18.0 +2.7
HHC S S 22 24 54.5 +3.4
HHC PMZ
comp=Z,22nm,1.0s
HHC PMZ
comp=Z,210nm,7.4s
HHC LN
comp=Z,510nm,15.9s
HHC LE
comp=Z,590nm,13.7s
HHC LZ
comp=Z,430nm,19.3s
**BBOO Buckleboo 45.02 136** *e*P P 22 18 16.9 -0.4
comp=Z,56nm,1.9s
**BJT Baijiatuan 45.19 18** *e*P P 22 18 18.9 +0.5
BJT pmax pmax
comp=Z,22nm,0.8s
**BJT Baijiatuan 45.19 18** *e*P P 22 18 18.9 +0.5
comp=Z,22nm,0.8s
**BJI Beijing 45.21 18** P P 22 18 17.8 -0.7
BJI PMZ
comp=Z,28nm,0.8s
BJI PMZ
comp=Z,460nm,14.2s
**KBL Kabul 47.25 325** *e*P P 22 18 35.9 +0.9
**KBL Kabul 47.25 325** *es*P sP 22 18 43.8 -1.7
**PMG Port Moresby 47.28 100** *e*P P 22 18 37.9 +2.6
PMG pmax pmax
comp=Z,68nm,1.2s
**HTT Hallett 47.37 134** P P 22 18 31.3 -4.5
baz=47,SNR=5.7
**KSH Kashi 47.63 335**⇑ *i*P P 22 18 37.0 -0.7
KSH *ep*P pP 22 18 43.0 -2.3
KSH *e*PcP PcP 22 20 08.5 +1.3
KSH S S 22 25 26.8 -5.3
KSH ScS ScS 22 28 26.8 -3.4
KSH PMZ
comp=Z,12nm,0.5s
KSH PMZ
comp=Z,140nm,5.3s
KSH LN
comp=Z,120nm,5.5s
KSH LE
comp=Z,190nm,6.4s
KSH LZ
comp=Z,660nm,15.6s
**KS15 Wonju Array Si 47.74 30** *e*P P 22 18 38.0 -0.4
**KSAR Wonju Array Be 47.74 30** P P 22 18 38.0 -0.4
**KSAR Wonju Array Be 47.74 30** P P 22 18 38.0 -0.4
**KSRS Korea Array 47.77 30** P P 22 18 38.0 -0.6
comp=Z,10nm,0.9s,baz=225,slow=9.0,SNR=11
**KS01 Wonju Array Si 47.77 30** *e*P P 22 18 38.0 -0.7
**WMQ Urumqi 47.79 348** P P 22 18 40.0 +1.2
WMQ sP sP 22 18 51.0 +1.7
WMQ PP PP 22 20 32.0 +1.1
WMQ S S 22 25 34.0 -0.1
WMQ SS SS 22 28 57.0 -5.9
WMQ PMZ
comp=Z,38nm,1.0s
WMQ PMZ
comp=Z,140nm,5.0s
WMQ LN
comp=Z,460nm,16.0s
WMQ LE
comp=Z,270nm,16.0s
WMQ LZ
comp=Z,410nm,16.0s
**CTAO Charters Tower 48.22 114** *e*P P 22 18 42.4 -0.1
CTAO *e**SP sP 22 18 50.5 -2.6
CTAO pmax pmax
comp=Z,15nm,0.9s
**CTAO Charters Tower 48.22 114** *e*P P 22 18 42.4 -0.1
comp=Z,15nm,0.9s
CTAO *es*P sP 22 18 50.5 -2.6
**SFK Sufi-Kurgan 49.12 333** *i*P P 22 18 50.4 +1.0
SFK pmax pmax
comp=Z,25nm,0.9s
**PDGK Podgornoye 49.57 340** *i*P P 22 18 53.1 +0.7
PDGK pmax pmax
comp=Z,52nm,1.0s
**KZA Kyzart 50.07 336** P P 22 18 57.9 +1.1
SNR=5.3
**UCH Uchtor 50.49 336** P P 22 19 01.3 +1.2
SNR=16
**TKM2 Tokmak 2 50.64 337** *e*P P 22 19 01.8 +1.0
TKM2 pmax pmax
comp=Z,24nm,0.7s
**TKM2 Tokmak 2 50.64 337** P P 22 19 01.9 +1.0
SNR=26
**TKM2 Tokmak 2 50.64 337** *e*P P 22 19 01.8 +1.0
comp=Z,24nm,0.7s
**KBK Karagaybulak 50.67 336** P P 22 19 02.6 +1.5
SNR=13
**AML Almayashu 50.76 335** P P 22 19 03.1 +1.2
SNR=23
**SONA0 Songino Array 50.81 6** *e*P P 22 19 02.5 +0.5
SONA0 *e*PcP PcP 22 20 18.7 +0.1
**SONM Songino Array 50.81 6** P P 22 19 02.5 +0.5
comp=Z,28nm,0.9s,baz=188,slow=8.9,SNR=177
SONM PcP PcP 22 20 18.7 +0.1
comp=Z,4.6nm,0.8s,baz=191,slow=4.3,SNR=5.7
**SONA1 Songino Array 50.82 6** *e*P P 22 19 02.4 +0.4
**AAK Ala-Archa 50.84 336** *ci*P P 22 19 02.7 +0.4
AAK pmax pmax
comp=Z,14nm,0.9s
**AAK Ala-Archa 50.84 336** P P 22 19 03.7 +1.3
SNR=6.4
**AAK Ala-Archa 50.84 336** *e*P P 22 19 03.6 +1.3
comp=Z,1nm,0.8s
**ULN Ulaanbaatar 50.91 6** *e*P P 22 19 03.2 +0.5
ULN pmax pmax
comp=Z,28nm,1.0s
**ULN Ulaanbaatar 50.91 6** *e*P P 22 19 03.2 +0.5
comp=Z,28nm,1.0s
**FRU Bishkek 50.95 336** *e*P P 22 19 03.0 0.0
**CHMS Chumysh 51.04 336** P P 22 19 04.4 +0.8
SNR=7.3
**EKS2 Erkin-Say 51.16 335** *e*P P 22 19 06.0 +1.3
EKS2 pmax pmax
comp=Z,29nm,0.7s
**EKS2 Erkin-Say 51.16 335** P P 22 19 05.8 +1.2
SNR=40
**EKS2 Erkin-Say 51.16 335** *e*P P 22 19 06.0 +1.3
comp=Z,29nm,0.7s
**USP Ospenovka 51.36 336** P P 22 19 07.0 +0.9
SNR=22
**CMSA Cobar Meteorol 51.55 129** P P 22 19 09.1 +1.4
baz=52,SNR=20
**MNAS Manas 51.56 334** *i*P P 22 19 08.5 +0.8
MNAS pmax pmax
comp=Z,19nm,0.7s
**CN2 Changchun 51.78 23** *e*P P 22 19 08.0 -1.1
CN2 *ep*P pP 22 19 15.0 -1.7
CN2 *e*S S 22 26 29.0 -0.8
CN2 PMZ
comp=Z,50nm,0.7s
CN2 PMZ
comp=Z,100nm,3.0s
CN2 LN
comp=Z,300nm,10.0s
CN2 LE
comp=Z,400nm,10.0s
CN2 LZ
comp=Z,400nm,14.0s
**MK01 Makanchi Array 51.85 345** *e*P P 22 19 09.9 +0.3
**MK31 Makanchi Array 51.87 345** *i*P P 22 19 10.2 +0.4
MK31 pmax pmax
comp=Z,20nm,0.5s
**MK32 Makanchi Array 51.87 345** *e*P P 22 19 10.3 +0.5
**MKAR Makanchi Array 51.87 345** P P 22 19 10.3 +0.5
comp=Z,34nm,0.7s,baz=157,slow=8.4,SNR=225
**MKAR Makanchi Array 51.87 345** *i*P P 22 19 10.3 +0.5
MKAR pmax pmax
comp=Z,34nm,0.7s
**MAKZ Makanchi 51.97 344** *e*P P 22 19 10.9 +0.4
comp=Z,15nm,0.8s
**KK31 Karatay Array 52.94 333** *i*P P 22 19 17.7 -0.1
KK31 pmax pmax
comp=Z,3.0nm,0.5s
**KKAR Karatay Array 52.94 333** *e*P P 22 19 18.0 +0.2
**KKAR Karatay Array 52.94 333** *e*P P 22 19 18.0 +0.2
**MAJO Matsushiro 52.95 39** *e*P P 22 19 17.2 -0.8
MAJO pmax pmax
comp=Z,20nm,1.7s
**MAJO Matsushiro 52.95 39** *e*P P 22 19 16.3 -1.7
comp=Z,345nm,2.7s
**MAT Matsushiro 52.95 39** P P 22 19 15.9 -2.1
**MJAR Matsushiro Arr 52.95 39** P P 22 19 16.3 -1.7
comp=Z,9.3nm,0.9s,baz=217,slow=7.6,SNR=18
**ZAK Zakamensk 53.12 3** *e*P P 22 19 17.0 -2.1
ZAK pmax pmax
comp=Z,4.0nm,1.2s
ZAK pmax pmax
comp=Z,3.0nm,1.0s
**EIDS Eidsvold 53.91 119** P P 22 19 26.0 +0.7
baz=54,SNR=3.3
**EIDS Eidsvold 53.91 119** *e*P P 22 19 26.0 +0.7
comp=Z,22nm,1.4s
**HVS Khovu-Aksy 54.08 355** *e*P P 22 19 27.8 +1.7
HVS pmax pmax
comp=Z,6.0nm,0.8s
**MOY Mondy 54.34 1** *e*P P 22 19 28.3 +0.3
**TLY Talaya 54.44 3** *e*P P 22 19 29.2 +0.6
TLY pmax pmax
comp=Z,8.0nm,0.8s
**HIA Hailar 54.68 16** *e*P P 22 19 30.2 -0.2
HIA pmax pmax
comp=Z,13nm,0.8s
**HIA Hailar 54.68 16** *e*P P 22 19 30.2 -0.2
comp=Z,13nm,0.8s
**USRK Ussuriysk Ar. 54.92 28** P P 22 19 31.9 -0.3
comp=Z,49nm,0.8s,baz=228,slow=6.3,SNR=59
**GEYT Alibeck 56.13 321** P P 22 19 41.2 +0.2
comp=Z,4.8nm,0.8s,baz=142,slow=7.5,SNR=12
GEYT pP pP 22 19 49.4 +0.6
comp=Z,7.5nm,0.9s,baz=148,slow=8.6,SNR=11
**OTUK Ortayu 56.35 338** *i*P P 22 19 42.3 -0.1
OTUK pmax pmax
comp=Z,15nm,0.9s
**KURK Kurchatov 56.45 344** *e*P P 22 19 43.3 +0.3
KURK pmax pmax
comp=Z,81nm,0.9s
**KURK Kurchatov 56.45 344** *e*P P 22 19 43.3 +0.3
comp=Z,81nm,0.9s
**ZAA0 Zalesovo Array 58.03 349** P P 22 19 54.1 0.0
baz=58,SNR=8.5
**ZAA0 Zalesovo Array 58.03 349** *e*P P 22 19 54.0 -0.2
**ZALV Zalesovo Beam 58.03 349** P P 22 19 54.1 -0.1
comp=Z,20nm,0.8s,baz=176,slow=5.8,SNR=78
**ZALV Zalesovo Beam 58.03 349** *i*P P 22 19 54.0 -0.1
ZALV pmax pmax
comp=Z,20nm,0.8s
**ZAA1 Zalesovo Array 58.03 349** *e*P P 22 19 54.1 -0.1
**KLR Kul'dur 58.72 24** *e*P P 22 19 55.2 -3.9
KLR pmax pmax
comp=Z,57nm,1.6s
**NVS Novosibirsk 59.17 349** *e*P P 22 20 01.7 -0.4
NVS pmax pmax
comp=N,9.0nm,1.0s
NVS pmax pmax
comp=Z,10.0nm,1.0s
NVS pmax pmax
comp=E,2.0nm,0.5s
**RAYN Ar Rayn 59.17 300** *e*P P 22 20 03.8 +1.0
comp=E,2.6nm,0.8s
**HNR Honiara 59.88 99** LR LR 22 48 20.0
comp=E,207nm,18.0s,baz=38,slow=38
**VOSK Vostochnaya 60.56 340** *i*P P 22 20 11.0 -0.7
VOSK pmax pmax
comp=Z,8.0nm,0.4s
**ZRNK Zerenda 61.43 339** *i*P P 22 20 16.7 -0.9
ZRNK pmax pmax
comp=Z,4.0nm,0.5s
**CHKZ Chkalovo 61.47 341** *i*P P 22 20 17.2 -0.6
CHKZ pmax pmax
comp=Z,10.0nm,0.5s
**BOD Bodaibo 61.54 8** *e*P P 22 20 18.0 -0.2
BOD pmax pmax
comp=Z,22nm,0.9s
**YSS Yuzh-Sakhalins 62.22 32** *e*P P 22 20 22.9 -0.1
YSS pmax pmax
comp=Z,106nm,2.5s
**AB31 Akbulak array 62.41 332** *i*P P 22 20 24.1 -0.2
AB31 pmax pmax
comp=Z,12nm,0.5s
**ABKAR Akbulak array 62.41 332** *e*P P 22 20 24.1 -0.2
**GNI Garni 66.17 316** *e*P P 22 20 48.3 -1.0
GNI pmax pmax
comp=Z,32nm,1.2s
**DGRG David-gareji 66.32 318** P P 22 20 51.6 +1.5
**DGRG David-gareji 66.32 318** P P 22 20 51.6 +1.5
**TBLG Delisi 66.87 318** P P 22 20 54.6 +0.9
**TBLG Delisi 66.87 318** P P 22 20 54.5 +0.9
**DZM Mont Dzumac 67.11 113** LR LR 22 52 16.5
comp=Z,307nm,18.5s,baz=258,slow=38
**SVE Sverdlovsk 67.49 338**⇑ *i*P P 22 20 57.7 +0.5
SVE pmax pmax
comp=Z,23nm,1.1s
**ONI Oni 68.11 318** P P 22 20 51.6 -10
**NCK Nalchik 68.42 319** *e*P P 22 21 04.4 +1.1
**YAK Yakutsk 68.58 15** *e*P P 22 21 01.3 -2.6
YAK pmax pmax
comp=Z,44nm,0.9s
YAK pmax pmax
comp=E,10.0nm,1.1s
YAK pmax pmax
comp=N,19nm,1.3s
**NEY Neytrino 68.88 319** *e*P P 22 21 06.6 +0.2
**KBZ Khabaz 68.97 319** P P 22 21 07.5 +0.8
comp=N,6.9nm,0.8s,baz=113,slow=6.0,SNR=17
KBZ pP pP 22 21 15.4 +0.9
comp=N,9.9nm,0.9s,baz=152,slow=6.0,SNR=14
**KIV Kislovodsk 69.21 319** *e*P P 22 21 09.1 +0.7
KIV pmax pmax
comp=Z,11nm,1.0s
**MAW Mawson 69.44 194** P P 22 21 10.6 +1.4
comp=Z,1.1nm,0.5s,baz=185,slow=6.6,SNR=4.0
**MAW Mawson 69.44 194** *e*P P 22 21 10.6 +1.4
MAW pmax pmax
comp=Z,1.0nm,0.9s
**MALT Malatya 69.94 313** *ce*P P 22 21 14.5 +1.5
**VRH Novokhopyorsk 73.05 326** *e*P P 22 21 31.0 -0.3
VRH pmax pmax
comp=Z,10.0nm,0.6s
VRH pmax pmax
comp=N,10.0nm,0.7s
VRH pmax pmax
comp=E,20nm,1.3s
**PETK Petropavlovsk- 73.61 32** P P 22 21 34.0 -0.7
comp=E,3.1nm,0.7s,baz=248,slow=7.7,SNR=4.8
**PETK Petropavlovsk- 73.61 32** P P 22 21 34.0 -0.7
**PEA2 Petropavlovsk- 73.62 32** *e*P P 22 21 34.0 -0.7
**BR101 Keskin Array S 73.92 313** *e*P P 22 21 36.8 -0.2
**BR131 Keskin Array S 73.92 313** P P 22 21 45.4 +8.5
baz=74,SNR=3.1
**BRTR Keskin Array B 73.92 313** P P 22 21 36.8 -0.2
comp=E,4.1nm,0.8s,baz=132,slow=7.2,SNR=28
BRTR pP pP 22 21 45.0 +0.3
comp=E,6.9nm,0.9s,baz=126,slow=6.3,SNR=16
**VSR Storozhevoye 74.50 325** *e*P P 22 21 39.3 -0.5
VSR pmax pmax
comp=Z,10.0nm,0.7s
VSR pmax pmax
comp=N,3.0nm,0.5s
VSR pmax pmax
comp=E,6.0nm,0.8s
**BR231 Keskin MP Arra 74.59 313** *e*P P 22 21 36.4 -4.4
**LPSR Galich'ya Gora 75.22 326** *e*P P 22 21 43.8 -0.2
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=N,7.0nm,1.5s
LPSR pmax pmax
comp=E,3.0nm,0.6s
**SEY Seymchan 76.43 22** *e*P P 22 21 50.9 +0.2
**OBN Obninsk 77.54 328** *i*P P 22 21 57.6 +0.6
OBN *i* 22 22 07.1
OBN pmax pmax
comp=Z,16nm,1.7s
**BKZ Black Stump Fm 77.71 129** *e*P P 22 21 59.6 +1.1
comp=Z,24nm,1.0s
**KLMR Klimovskoe 78.62 334** *e*P P 22 21 52.3 -11
KLMR pmax pmax
comp=Z,21nm,1.6s
**AKASG Malin Array Be 80.18 322** P P 22 22 11.0 -0.7
comp=Z,1.1nm,0.6s,baz=99,slow=3.0,SNR=5.2
AKASG pP pP 22 22 19.1 -0.5
comp=Z,0.7nm,0.4s,baz=88,slow=4.7,SNR=2.9
**AKBB Malin Array Si 80.18 322** *e*P P 22 22 11.0 -0.7
**AKBB Malin Array Si 80.18 322** *e*P P 22 22 11.0 -0.7
**KIEV Kiev 80.19 322** *e*P P 22 22 11.6 -0.1
KIEV pmax pmax
comp=Z,2.0nm,1.1s
**VNDA Vanda 81.30 169** P P 22 22 18.1 +0.8
comp=Z,0.3nm,0.6s,baz=7.2,slow=5.0,SNR=3.3
VNDA pP pP 22 22 26.8 +1.6
comp=Z,3.4nm,1.1s,baz=291,slow=6.3,SNR=11
**VNDA Vanda 81.30 169** *e*P P 22 22 18.1 +0.8
VNDA *e*PcP PcP 22 22 18.4 -4.9
VNDA pP pP 22 22 26.8 +1.6
**BUR04 Bucovina Ar. S 81.93 319** *e*P P 22 22 22.4 +1.2
**BILL Bilibino 83.97 20** *i*P P 22 22 31.3 +0.1
BILL *i* 22 25 40.4
BILL pmax pmax
comp=Z,15nm,1.8s
**KOLS Kolonicke sedl 84.12 320** *e*P P 22 22 33.8 +1.4
KOLS pmax pmax
comp=Z,9.0nm,1.1s
**KOLS Kolonicke sedl 84.12 320** *e*P P 22 22 33.8 +1.4
**FIA0 FINESS Array S 84.89 332** *e*P P 22 22 36.4 +0.4
**FIA0 FINESS Array S 84.89 332** *e*P P 22 22 36.4 +0.4
**FINES FINESS Array B 84.89 332** P P 22 22 36.4 +0.4
comp=Z,2.0nm,0.5s,baz=113,slow=6.3,SNR=27
**VYHS Vyhne 86.29 319** *e*P P 22 22 42.9 -0.4
**VYHS Vyhne 86.29 319** *e*P P 22 22 42.8 -0.5
**ARA0 ARCESS Array S 87.30 340** *e*P P 22 22 48.6 +0.9
**ARCES ARCESS Array B 87.30 340** P P 22 22 48.6 +0.9
comp=Z,6.4nm,0.8s,baz=116,slow=4.1,SNR=16
**GEC2 GERESS Array S 89.71 319** *e*P P 22 23 00.2 +0.5
**GEC2 GERESS Array S 89.71 319** *e*P P 22 23 00.2 +0.5
**GERES GERESS Array B 89.71 319** P P 22 23 00.2 +0.5
comp=Z,1.5nm,0.9s,baz=107,slow=4.6,SNR=8.2
GERES pP pP 22 23 08.5 +0.7
comp=Z,1.0nm,0.6s,baz=86,slow=5.6,SNR=5.6
**ELK Elko 130.70 35** *e*PKIKP **PKPdf 22 29 09.8 -3.4**
**ELK Elko 130.70 35** *e*PKPdf **PKPdf 22 29 09.8 -3.4**
**O16A Springville 133.17 33** *e*PKPdf **PKPdf 22 29 18.1 +0.4**
**CPUP Villa Florida 143.62 216** PKP **PKPdf 22 29 36.1 -0.9**
comp=Z,0.5nm,0.4s,baz=146,slow=3.6,SNR=1.9
**TX31 Lajitas Ar. Si 145.38 38** *e*PKPbc **PKPab 22 29 40.5 +0.3**
**TXAR Lajitas Array 145.38 38** PKPbc **PKPab 22 29 40.9 +0.7**
comp=Z,17nm,0.8s,baz=270,slow=1.1,SNR=119
TXAR pPKPbc pPKPbc 22 29 49.0 +0.7
comp=Z,12nm,0.7s,baz=270,slow=0.9,SNR=21
**URVA University of 145.40 357** *e*PKPbc **PKPdf 22 29 40.0 +0.2**
**TZTN Tazewell 146.34 5** *e*PKPdf **PKPdf 22 29 41.4 -0.1**
**JCT Junction City 146.75 32** *e*PKP2 **PKPbc 22 29 44.6 +0.5**
**JCT Junction City 146.75 32** *e*PKPdf **PKPbc 22 29 44.6 +0.5**
**TKL Tuckaleechee C 147.19 6** PKPbc **PKPbc 22 29 44.5 -0.6**
comp=Z,5.2nm,0.5s,baz=278,slow=4.0,SNR=15
TKL pPKPbc **pPKPbc 22 29 52.4 -0.9**
comp=Z,6.2nm,0.6s,baz=102,slow=8.2,SNR=4.4
**OXF Oxford 147.32 14** *e*PKP2 **PKPbc 22 29 45.4 -0.1**
**OXF Oxford 147.32 14** *e*PKPdf **PKPbc 22 29 45.4 -0.1**
**SWET Sewanee 147.35 9** *e*PKPdf **PKPbc 22 29 44.8 -0.8**

**IDC 25 22:13:55.5**±1.3,**34.80S**×**72.68W**,**h0**km,**mb3.9**/3,
**mb1 4.0**/4,**mb1mx3.9**/19,**mbtmpg3.8**/4,**ML3.5**/1,**Error ellipse: s-maj=63.5km s-min=30.1km az=78.0,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LPAZ** | **La Paz** | **18.88** | **14** | P | P | P | 22 18 16.8 | -1.2 |
| | 0.1nm,0.3s,baz=202,slow=9.8,SNR=5.5 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **48.83** | **157** | P | P | P | 22 22 43.7 | +1.6 |
| **VNA1** | **Neumayer--Stat** | **49.15** | **157** | P | P | P | 22 22 47.2 | +2.7 |
| **VNA2** | **Neumayer--Watz** | **49.49** | **157** | P | P | P | 22 22 48.8 | +1.6 |
| | baz=279,slow=9.2 | | | | | | | |
| **SNAA** | **Sanae** | **51.05** | **158** | P | P | P | 22 23 00.1 | +1.0 |
| **TXAR** | **Lajitas Array** | **70.17** | **331** | P | P | P | 22 25 10.3 | +0.3 |
| | 0.7nm,0.5s,baz=157,slow=8.0,SNR=6.9 | | | | | | | |
| **MAW** | **Mawson** | **72.57** | **164** | P | P | P | 22 25 23.7 | -0.3 |
| | 0.4nm,0.3s,baz=194,slow=4.2,SNR=2.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.98** | **70** | P | P | P | 22 26 33.7 | +0.7 |
| | 0.6nm,0.8s,baz=239,slow=4.6,SNR=3.4 | | | | | | | |

*BJI* **25** *22:16:40.9,5˙.40S×102˙.59E,h55km,mb4.8/15,mB5.1/4*
*AUST* **25** *22:16:42.6,4˙.84S×101˙.94E,h20km*
*ISCJB* **25** *22:16:49.6±0.5,4˙.53S±0˙.04×102˙.49E±0˙.04,h63km±4km, mb4.7/39,Error ellipse: s-maj=9.2km s-min=3.2km az=43.2*
*IDC* **25** *22:16:50.4±2.9,4˙.44S×102˙.60E,h54km±24km,mb4.3/18, mb1 4.4/19,mb1mx4.2/33,mbtmp4.5/19,ML3.8/1,Error ellipse: s-maj=27.3km s-min=11.6km az=49.0*
*DJA* **25** *22:16:51.0±0.5,5˚S±3˙×10˙2E±˙,h29km±4km,M4.5/12, mb4.4/12,mB4.9/1,MLv4.5/5,Mw(mB)4.2/1*
*NEIC* **25** *22:16:51.3±0.7,4˙.45S×102˙.62E,h63km±5km,mb4.9/20, Error ellipse: s-maj=12.5km s-min=4.4km az=51.0*
**ISC 25 22:16:51.1**±0.9,**4.50S**±0˙.07×**102˙.54E**±0˙.06,**h62**km±7km, **n240,σ1s04/230,mb4.6**/38,**1C-4D,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **0.43** | **72** | P | **Pn** | | **22 17 01.9** | **-0.7** |
| | baz=1.1,SNR=274 | | | | | | | |
| **MNAI** | **Manna** | **0.43** | **72** | P | **Pn** | | **22 17 02.3** | **-0.3** |

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| MNAI | Manna | 0.43 | 72 | ePn | Pn | 22 17 02.0 | -0.6 |
| MNAI | | | | eSn | Sn | 22 17 09.0 | -2.0 |
| KSI | Kapahiang | 0.84 | 3 | P | Pn | 22 17 08.4 | +1.1 |
| LWLI | Liwa | 1.60 | 109 | P | Pn | 22 17 18.0 | +0.7 |
| MDSI | Maura Dua | 1.63 | 90 | P | Pn | 22 17 17.5 | -0.1 |
| KASI | Kota Agung | 2.20 | 118 | P | Pn | 22 17 25.5 | +0.2 |
| KLI | Kotabumi | 2.33 | 99 | P | Pn | 22 17 27.7 | +0.5 |
| PMBI | Palembang | 2.71 | 55 | P | Pn | 22 17 32.1 | -0.3 |
| JMBI | JAMBI | 3.05 | 21 | P | Pn | 22 17 38.3 | +1.4 |
| CGJI | Cibinong | 3.78 | 124 | P | Pn | 22 17 47.3 | +0.4 |
| SBJI | Serang | 3.92 | 114 | P | Pn | 22 17 49.1 | +0.2 |
| RGRI | Rengat | 4.12 | 357 | P | Pn | 22 17 49.8 | -1.9 |
| PPBI | Pangkal Pinang | 4.27 | 57 | P | Pn | 22 17 54.5 | +0.8 |
| TNG | Tangerang | 4.41 | 112 | P | Pn | 22 17 56.1 | +0.5 |
| PPI | Padang Panjang | 4.55 | 332 | P | Pn | 22 17 57.5 | 0.0 |
| SISI | Saibi | 4.67 | 312 | P | Pn | 22 17 59.7 | +0.6 |
| CBJI | Citeko | 4.70 | 114 | P | Pn | 22 18 03.0 | +3.5 |
| SKJI | Sukabumi | 4.71 | 122 | P | Pn | 22 18 05.0 | +5.3 |
| BKNI | Bangkinang | 5.02 | 343 | P | Pn | 22 18 04.6 | +0.6 |
| CNJI | Cibinong | 5.35 | 122 | P | Pn | 22 18 09.3 | +0.8 |
| TPI | Tanjungpandan | 5.38 | 71 | P | Pn | 22 18 09.4 | +0.5 |
| | 32nm,1.5s,0.3nm | | | | | | |
| LEM | Lembang | 5.56 | 115 | P | Pn | 22 18 15.1 | +3.7 |
| | 3.9nm,0.3s,baz=114,slow=23,SNR=3.6 | | | | | | |
| LEM | Lembang | 5.56 | 115 | P | Pn | 22 18 12.0 | +0.6 |
| TPRI | Tanjung Pinang | 5.73 | 20 | P | Pn | 22 18 14.6 | +0.9 |
| MNSI | Mandailing Nat | 6.03 | 331 | P | Pn | 22 18 18.7 | +0.9 |
| CISI | Cisompet, Garu | 6.06 | 120 | P | Pn | 22 18 17.6 | -0.7 |
| | baz=6.4,SNR=20 | | | | | | |
| CISI | Cisompet, Garu | 6.06 | 120 | P | Pn | 22 18 18.9 | +0.6 |
| CISI | Cisompet, Garu | 6.06 | 120 | ePn | Pn | 22 18 17.4 | -0.9 |
| CISI | | | | eSn | Sn | 22 19 18.5 | -7.8 |
| MYKOM | Kota Tinggi | 6.38 | 12 | ePn | Pn | 22 18 24.4 | +1.8 |
| XMIS | Christmas Isla | 6.70 | 153 | P | Pn | 22 18 20.6 | -6.4 |
| | baz=6.7,SNR=6.1 | | | | | | |
| XMIS | Christmas Isla | 6.70 | 153 | ePn | Pn | 22 18 20.5 | -6.4 |
| XMIS | | | | eSn | Sn | 22 19 27.9 | -14 |
| CMJI | Cimerak | 6.72 | 119 | P | Pn | 22 18 27.6 | +0.4 |
| GSI | Gunungsitoli | 7.60 | 319 | P | Pn | 22 18 40.0 | +0.6 |
| GSI | Gunungsitoli | 7.60 | 319 | ePn | Pn | 22 18 39.0 | -0.3 |
| GSI | | | | eSn | Sn | 22 20 01.2 | -2.9 |
| PSI | Prapat | 8.10 | 333 | P | Pn | 22 18 44.5 | -1.8 |
| | 1.2nm,0.3s,baz=344,slow=20,SNR=3.1 | | | | | | |
| UGM | Wanagama | 8.63 | 114 | P | Pn | 22 18 54.9 | +1.4 |
| | baz=9.1,SNR=5.5 | | | | | | |
| UGM | Wanagama | 8.63 | 114 | P | Pn | 22 18 53.4 | 0.0 |
| UGM | Wanagama | 8.63 | 114 | ePn | Pn | 22 18 53.9 | +0.4 |
| TSI | Tuntungan | 8.88 | 333 | P | Pn | 22 18 57.7 | +0.8 |
| WOJI | Wonogiri, Jawa | 8.97 | 112 | P | Pn | 22 18 58.6 | +0.6 |
| PBKI | Pangkalan Bun | 9.28 | 79 | P | Pn | 22 19 03.3 | +1.0 |
| KCSI | Kotacane, Aceh | 9.28 | 329 | P | Pn | 22 19 03.5 | +1.2 |
| PCJI | Pacitan | 9.33 | 114 | P | Pn | 22 19 03.7 | +0.7 |
| TBJI | Tambak Boyo | 9.54 | 104 | P | Pn | 22 19 06.8 | +0.9 |
| PWJI | Pagerwojo | 9.85 | 111 | P | Pn | 22 19 11.3 | +1.2 |
| KULM | Kulim | 9.90 | 349 | ePn | Pn | 22 19 09.8 | -1.1 |
| STKI | Sintang | 10.01 | 63 | P | Pn | 22 19 13.4 | +1.1 |
| BWJI | Bawean | 10.16 | 98 | P | Pn | 22 19 15.2 | +0.8 |
| MLSI | Meulaboh, Aceh | 10.65 | 325 | P | Pn | 22 19 20.4 | -0.6 |
| LHMI | Lhok Sumawe | 11.16 | 330 | P | Pn | 22 19 28.6 | +0.6 |
| KMMI | Kalianget | 11.64 | 103 | P | Pn | 22 19 34.8 | +0.2 |
| ABJI | Asem Bagus | 12.08 | 106 | P | Pn | 22 19 41.0 | +0.5 |
| BBKI | Banjar Baru | 12.31 | 86 | P | Pn | 22 19 44.7 | +0.9 |
| MTKI | Muara Teweh, K | 12.83 | 74 | P | Pn | 22 19 51.9 | +1.0 |
| SRBI | Singaraja | 13.09 | 106 | P | Pn | 22 19 55.0 | +0.7 |
| IGBI | Denpasar | 13.23 | 110 | P | Pn | 22 19 56.9 | +0.6 |
| DNP | Denpasar | 13.25 | 109 | P | Pn | 22 19 57.5 | +1.0 |
| KBKI | Kotabaru | 13.64 | 85 | P | Pn | 22 20 02.4 | +0.5 |
| BKB | Balikpapan | 14.69 | 78 | P | Pn | 22 20 17.2 | +1.6 |
| TWSI | Taliwang, Sumb | 14.85 | 107 | P | Pn | 22 20 18.7 | +1.0 |
| SPSI | Sidrap Palu | 17.19 | 89 | P | P | 22 20 48.8 | +0.8 |
| KKM | Kota Kinabalu | 17.20 | 53 | ePn | Pn | 22 20 42.5 | -5.1 |
| | 24nm,1.5s | | | | | | |
| TTSI | Tana Toraja | 17.30 | 86 | P | P | 22 20 50.6 | +1.3 |
| PATY | Pattaya | 17.38 | 355 | P | P | 22 20 51.9 | +1.7 |
| | 4.1nm,0.9s,455nm | | | | | | |
| BKSI | Bulukumba | 17.53 | 93 | P | P | 22 20 53.3 | +1.4 |
| PCI | Palu | 17.64 | 79 | P | P | 22 20 54.5 | +1.5 |
| | 35nm,0.5s | | | | | | |
| MPSI | Mapaga | 17.99 | 75 | P | Pn | 22 20 59.5 | +2.4 |
| WSI | Waingapu | 18.35 | 107 | P | Pn | 22 21 03.2 | +1.8 |
| | 173nm,1.2s | | | | | | |
| MYLDM | Lahad Datu | 18.61 | 59 | eP | Pn | 22 21 07.0 | +2.4 |
| | 18nm,0.8s | | | | | | |
| NAYO | Nakonayok | 18.73 | 356 | P | Pn | 22 21 06.0 | 0.0 |
| | 154nm,0.8s,9μm | | | | | | |
| BASI | Baing, Sumba | 18.76 | 109 | P | Pn | 22 21 07.9 | +1.5 |
| LUWI | Luwuk | 20.49 | 81 | P | P | 22 21 23.5 | -0.7 |
| | baz=21,SNR=3.4 | | | | | | |
| LUWI | Luwuk | 20.49 | 81 | eP | P | 22 21 17.2 | -7.0 |
| | 35nm,0.9s | | | | | | |
| UMPA | Umpang Tak | 20.89 | 350 | P | P | 22 21 29.6 | +1.1 |
| | 4.0nm,1.1s,237nm | | | | | | |
| PBKT | Sadao Pong | 20.99 | 356 | P | Pn | 22 21 32.1 | -0.6 |
| | 15nm,1.0s | | | | | | |
| BATI | Baumata | 21.69 | 106 | P | P | 22 21 36.5 | -0.6 |
| | 25nm,0.5s,baz=274,slow=0.9,SNR=3.7 | | | | | | |
| BATI | | | | S | S | 22 25 28.8 | -5.4 |
| | 14nm,0.5s,baz=108,slow=19,SNR=3.4 | | | | | | |
| LOEI | Loei | 21.90 | 357 | P | P | 22 21 39.8 | +0.5 |
| | 8.1nm,0.8s | | | | | | |
| UTTA | Uttaradit | 22.18 | 355 | P | P | 22 21 42.5 | +0.2 |
| | 4.6nm,1.0s,41nm | | | | | | |
| MHMT | Maesarieng | 22.98 | 349 | P | P | 22 21 50.7 | 0.0 |
| | 5.6nm,0.8s | | | | | | |
| CM01 | Chiang Mai Arr | 23.04 | 351 | eP | P | 22 21 51.0 | -0.4 |
| LAMP | Lampang | 23.05 | 353 | P | P | 22 21 52.3 | +0.9 |
| | 4.9nm,0.9s | | | | | | |
| CM31 | Chiang Mai Arr | 23.08 | 351 | eP | P | 22 21 51.0 | -0.7 |
| CM31 | | | | ePcP | PcP | 22 25 39.7 | +0.5 |
| CMAR | Chiang Mai Arr | 23.08 | 351 | P | P | 22 21 51.0 | -0.7 |
| | 7.3nm,0.5s,baz=180,slow=9.6,SNR=56 | | | | | | |
| CMAR | | | | PcP | PcP | 22 25 39.7 | +0.6 |
| | 0.9nm,0.7s,baz=213,slow=3.1,SNR=4.9 | | | | | | |
| CHTO | Chiang Mai | 23.43 | 351 | P | P | 22 21 54.4 | -0.7 |
| | 50nm,1.2s | | | | | | |
| CHTO | Chiang Mai | 23.43 | 351 | eP | P | 22 21 54.4 | -0.7 |
| | 7.8nm,0.8s | | | | | | |
| MBWA | Marble Bar | 23.52 | 136 | eP | P | 22 21 54.2 | -1.7 |
| | 40nm,1.5s | | | | | | |
| KNRA | Kununurra | 28.06 | 115 | P | P | 22 22 35.9 | -1.1 |
| | baz=28,SNR=8.1 | | | | | | |
| MTN | Manton Dam | 29.43 | 108 | P | P | 22 22 50.8 | +1.6 |
| | baz=30,SNR=3.3 | | | | | | |
| H08S2 | Diego Garcia H | 30.04 | 263 | T | T | 22 54 06.8 | |
| | baz=82 | | | | | | |
| H08S3 | Diego Garcia H | 30.05 | 263 | T | T | 22 54 07.4 | |
| | baz=82 | | | | | | |
| H08S1 | Diego Carcia H | 30.06 | 263 | T | T | 22 54 06.8 | |
| | baz=82 | | | | | | |
| WRKA | Warakurna | 32.08 | 132 | P | P | 22 23 13.1 | +0.6 |
| | baz=32,SNR=6.9 | | | | | | |
| H01W3 | Cape Leeuwin H | 32.09 | 162 | T | T | 22 57 00.4 | |
| | baz=339,slow=76,SNR=7.3 | | | | | | |
| H01W2 | Cape Leeuwin H | 32.10 | 162 | T | T | 22 56 59.9 | |
| | baz=339,slow=76,SNR=12 | | | | | | |
| H01W1 | Cape Leeuwin H | 32.10 | 162 | T | T | 22 56 59.8 | |
| | baz=339,slow=76,SNR=10 | | | | | | |
| ODAN | Odare | 34.45 | 336 | eP | P | 22 23 33.9 | +0.6 |
| | 21nm,0.4s | | | | | | |
| WRA | Warramunga Arr | 34.56 | 119 | P | P | 22 23 33.5 | -0.7 |
| | 2.8nm,0.4s,baz=302,slow=9.2,SNR=14 | | | | | | |
| WRA | | | | PcP | PcP | 22 26 07.8 | -0.1 |
| | 0.8nm,0.7s,baz=306,slow=2.0,SNR=3.8 | | | | | | |
| WRAB | Tennant Creek | 34.56 | 119 | eP | P | 22 23 33.3 | -0.9 |
| | 4.8nm,0.6s | | | | | | |
| WRAB | | | | eS | S | 22 28 59.3 | +0.1 |
| TAPN | Taplejung | 34.75 | 336 | eP | P | 22 23 36.6 | +0.6 |
| | 41nm,0.8s | | | | | | |
| RAMN | Ramite | 34.86 | 335 | eP | P | 22 23 37.7 | +0.8 |
| | 13nm,0.4s | | | | | | |
| LSA | Lhasa | 35.71 | 343 | eP | P | 22 23 44.8 | +0.4 |
| | 5.3nm,1.0s | | | | | | |
| AS12 | Alice Springs | 35.74 | 125 | eP | P | 22 23 44.2 | -0.2 |
| AS12 | | | | ePcP | PcP | 22 26 11.1 | -0.3 |
| ASAR | Alice Springs | 35.74 | 125 | P | P | 22 23 44.2 | -0.2 |
| | 3.8nm,0.6s,baz=296,slow=7.8,SNR=24 | | | | | | |
| ASAR | | | | PcP | PcP | 22 26 11.1 | -0.3 |
| | 1.4nm,0.6s,baz=312,slow=2.2,SNR=7.1 | | | | | | |
| ASAR | | | | ScP | ScP | 22 29 51.9 | -0.5 |
| | 0.2nm,0.6s,baz=315,slow=3.7,SNR=5.4 | | | | | | |
| AS01 | Alice Springs | 35.78 | 125 | ePcP | PcP | 22 26 10.3 | -1.1 |
| PKI | Pulchoki | 35.91 | 334 | eP | P | 22 23 46.2 | +0.2 |
| PKIN | Phulchoki | 35.92 | 334 | eP | P | 22 23 46.1 | 0.0 |
| | 12nm,0.4s | | | | | | |
| GUN | Gumba | 36.00 | 334 | eP | P | 22 23 47.5 | +0.7 |
| | 70nm,0.4s | | | | | | |
| DMN | Daman | 36.08 | 333 | eP | P | 22 23 47.7 | +0.3 |
| KKN | Kakani | 36.16 | 334 | eP | P | 22 23 48.4 | +0.4 |
| | 32nm,0.4s | | | | | | |
| GKN | Gorkha | 36.63 | 333 | eP | P | 22 23 52.4 | +0.4 |
| | 36nm,0.5s | | | | | | |
| KOLN | Koldanda | 36.92 | 331 | eP | P | 22 23 55.2 | +0.8 |
| | 62nm,0.8s | | | | | | |
| DANN | Dangsing | 37.33 | 332 | eP | P | 22 23 58.7 | +0.7 |
| QIS | Mount Isa | 39.40 | 117 | P | P | 22 24 14.9 | -0.4 |
| | baz=40,SNR=7.6 | | | | | | |
| NDI | New Delhi | 41.01 | 325 | eP | P | 22 24 26.0 | -2.4 |
| BBOO | Buckleboo | 42.10 | 136 | P | P | 22 24 37.6 | +0.3 |
| | baz=42,SNR=7.3 | | | | | | |
| MTSU | Mount Surprise | 43.02 | 112 | P | P | 22 24 44.9 | -0.1 |
| | baz=44,SNR=5.7 | | | | | | |
| GTA | Gaotai | 43.76 | 357 | eP | P | 22 24 50.8 | +0.1 |
| GTA | | | | PMZ | | | |
| | 6.0nm,1.0s | | | | | | |
| HTT | Hallett | 44.45 | 135 | P | P | 22 24 51.3 | -5.0 |
| | baz=45,SNR=5.0 | | | | | | |
| CTA | Charters Tower | 45.26 | 114 | P | P | 22 25 02.7 | -0.2 |
| | 12nm,0.8s,baz=293,slow=7.7,SNR=14 | | | | | | |
| CTAO | Charters Tower | 45.26 | 114 | eP | P | 22 25 02.9 | 0.0 |
| | 13nm,0.8s | | | | | | |
| JNU | Nakatsue | 46.05 | 34 | eP | P | 22 25 05.8 | -3.1 |
| | 80nm,1.5s | | | | | | |
| KS15 | Wonju Array Si | 47.93 | 27 | eP | P | 22 25 23.2 | -0.3 |
| KSRS | Korea Array | 47.96 | 27 | P | P | 22 25 23.2 | -0.5 |
| | 2.2nm,0.6s,baz=221,slow=7.1,SNR=4.4 | | | | | | |
| CMSA | Cobar Meteorol | 48.58 | 129 | P | P | 22 25 29.8 | +1.1 |
| | baz=49,SNR=6.2 | | | | | | |
| KSH | Kashi | 50.18 | 333 | P | P | 22 25 39.5 | -1.3 |
| KSH | | | | PMZ | | | |
| | 9.0nm,0.8s | | | | | | |
| SONA0 | Songino Array | 52.22 | 3 | eP | P | 22 25 55.9 | 0.0 |
| SONA0 | | | | ePcP | PcP | 22 27 06.5 | -0.3 |
| SONM | Songino Array | 52.22 | 3 | P | P | 22 25 55.9 | 0.0 |
| | 13nm,0.7s,baz=185,slow=9.2,SNR=83 | | | | | | |
| SONM | | | | PcP | PcP | 22 27 06.5 | -0.3 |
| | 1.6nm,0.4s,baz=189,slow=4.1,SNR=10.0 | | | | | | |
| SONA1 | Songino Array | 52.23 | 3 | eP | P | 22 25 56.3 | +0.2 |
| ULN | Ulaanbaatar | 52.29 | 4 | eP | P | 22 25 56.4 | -0.1 |
| | 5.1nm,0.8s | | | | | | |
| TKM2 | Tokmak 2 | 53.13 | 335 | P | P | 22 26 03.3 | +0.4 |
| | SNR=16 | | | | | | |
| TKM2 | Tokmak 2 | 53.13 | 335 | eP | P | 22 26 03.3 | +0.4 |
| | 14nm,0.8s | | | | | | |
| KBK | Karagaybulak | 53.19 | 335 | P | P | 22 26 03.9 | +0.6 |
| | SNR=7.0 | | | | | | |
| AML | Almayashu | 53.31 | 333 | P | P | 22 26 04.9 | +0.5 |
| | SNR=12 | | | | | | |
| AAK | Ala-Archa | 53.36 | 334 | eP | P | 22 26 04.9 | +0.4 |
| | 3.2nm,0.8s | | | | | | |
| AAK | | | | eP | P | 22 26 05.1 | +0.6 |
| EKS2 | Erkin-Say | 53.70 | 334 | P | P | 22 26 07.8 | +0.8 |
| | SNR=18 | | | | | | |
| EKS2 | Erkin-Say | 53.70 | 334 | eP | P | 22 26 07.6 | +0.6 |
| | 13nm,0.8s | | | | | | |
| USP | Ospenovka | 53.87 | 335 | P | P | 22 26 08.2 | +0.1 |
| | SNR=5.5 | | | | | | |
| MK01 | Makanchi Array | 54.10 | 343 | eP | P | 22 26 09.0 | -0.7 |
| MK32 | Makanchi Array | 54.12 | 343 | eP | P | 22 26 09.3 | -0.5 |
| MKAR | Makanchi Array | 54.12 | 343 | P | P | 22 26 09.3 | -0.5 |
| | 8.0nm,0.5s,baz=150,slow=8.5,SNR=95 | | | | | | |
| MKAR | Makanchi Array | 54.12 | 343 | eP | P | 22 26 09.8 | -0.1 |
| USRK | Ussuriysk Ar. | 55.23 | 25 | P | P | 22 26 17.1 | -0.7 |
| | 11nm,0.7s,baz=218,slow=6.3,SNR=19 | | | | | | |
| KKAR | Karatay Array | 55.53 | 332 | eP | P | 22 26 20.0 | -0.1 |
| KURK | Kurchatov | 58.72 | 342 | eP | P | 22 26 42.0 | -0.4 |
| | 26nm,0.8s | | | | | | |
| GEYT | Alibeck | 58.98 | 320 | P | P | 22 26 44.4 | -0.1 |
| | 6.6nm,0.8s,baz=142,slow=7.5,SNR=14 | | | | | | |
| ERM | Erimo | 59.20 | 34 | eP | P | 22 26 45.0 | -0.9 |
| | 58nm,1.0s | | | | | | |
| ZAA0 | Zalesovo Array | 60.10 | 348 | P | P | 22 26 51.1 | -0.7 |
| | baz=60,SNR=19 | | | | | | |
| ZAA0 | Zalesovo Array | 60.10 | 348 | eP | P | 22 26 51.0 | -0.8 |
| ZALV | Zalesovo Beam | 60.10 | 348 | P | P | 22 26 51.1 | -0.7 |
| | 20nm,0.4s,baz=168,slow=5.7,SNR=104 | | | | | | |
| ZAA1 | Zalesovo Array | 60.10 | 348 | eP | P | 22 26 51.1 | -0.7 |
| RAYN | Ar Rayn | 62.16 | 299 | eP | P | 22 27 07.0 | +0.5 |
| | 40nm,2.8s | | | | | | |
| ABKAR | Akbulak array | 65.04 | 331 | eP | P | 22 27 24.4 | -0.5 |
| KBZ | Khabaz | 71.84 | 319 | P | P | 22 28 08.1 | +0.6 |
| | 5.0nm,0.9s,baz=122,slow=5.2,SNR=11 | | | | | | |
| THZ | Tophouse | 72.40 | 132 | eP | P | 22 28 09.8 | -1.2 |
| | 107nm,2.1s | | | | | | |
| KHZ | Kahutara | 72.98 | 133 | eP | P | 22 28 14.2 | -0.1 |
| | 235nm,2.9s | | | | | | |
| BKZ | Black Stump Fm | 74.74 | 129 | eP | P | 22 28 24.9 | +0.1 |
| | 18nm,0.6s | | | | | | |
| URZ | Urewera | 75.12 | 128 | eP | P | 22 28 27.6 | +0.7 |
| | 26nm,1.6s | | | | | | |
| BR101 | Keskin Array S | 76.87 | 312 | eP | P | 22 28 36.7 | -0.3 |
| BRTR | Keskin Array B | 76.87 | 312 | P | P | 22 28 36.7 | -0.3 |
| | 3.1nm,0.8s,baz=136,slow=6.5,SNR=18 | | | | | | |
| BR231 | Keskin MP Arra | 77.54 | 312 | eP | P | 22 28 37.2 | -3.5 |
| VNDA | Vanda | 79.24 | 169 | P | P | 22 28 49.6 | +0.4 |
| | 0.5nm,0.6s,baz=300,slow=4.2,SNR=4.8 | | | | | | |
| AKASG | Malin Array Be | 83.00 | 322 | P | P | 22 29 09.3 | -0.3 |
| | 1.1nm,0.4s,baz=86,slow=4.5,SNR=6.7 | | | | | | |
| AKBB | Malin Array Si | 83.00 | 322 | eP | P | 22 29 09.3 | -0.3 |
| VRI | Vrincioaia | 83.40 | 317 | ⇓iP | P | 22 29 13.4 | +1.5 |
| PLOR | Plostina | 83.44 | 317 | ⇑iP | P | 22 29 11.9 | -0.2 |
| TESR | Tescani | 83.60 | 318 | ⇓iP | P | 22 29 14.3 | +1.4 |
| MLR | Muntele Rosu | 83.85 | 317 | ⇓iP | P | 22 29 15.6 | +1.3 |
| BURAR | Bucovina Array | 84.80 | 318 | ⇓iP | P | 22 29 20.8 | +1.7 |
| BUR04 | Bucovina Ar. S | 84.80 | 318 | eP | P | 22 29 20.4 | +1.3 |
| FIA0 | FINESS Array S | 87.49 | 332 | eP | P | 22 29 32.0 | +0.2 |
| FINES | FINESS Array B | 87.49 | 332 | P | P | 22 29 32.0 | +0.2 |
| | 1.9nm,0.4s,baz=120,slow=5.7,SNR=31 | | | | | | |
| ARA0 | ARCESS Array S | 89.67 | 340 | eP | P | 22 29 42.1 | +0.2 |
| ARCES | ARCESS Array B | 89.67 | 340 | P | P | 22 29 42.1 | +0.2 |
| | 0.9nm,0.6s,baz=103,slow=5.3,SNR=10 | | | | | | |
| GEC2 | GERESS Array S | 92.59 | 319 | eP | P | 22 29 56.5 | +0.4 |
| GERES | GERESS Array B | 92.59 | 319 | P | P | 22 29 56.5 | +0.4 |
| | 0.6nm,0.7s,baz=101,slow=4.2,SNR=4.3 | | | | | | |
| NV01 | Mina Array Sit | 129.83 | 42 | ePKPdf | PKPdf | 22 35 55.7 | +1.3 |
| NVAR | Mina Array Bea | 129.83 | 42 | PKP | PKPdf | 22 35 55.7 | +1.3 |
| | 0.5nm,0.6s,baz=318,slow=1.2,SNR=2.5 | | | | | | |
| AMTX | Amarillo | 142.35 | 34 | P | PKPdf | 22 36 22.0 | +4.6 |
| | baz=142 | | | | | | |
| AMTX | Amarillo | 142.35 | 34 | ePKPdf | PKPdf | 22 36 21.6 | +4.2 |
| CPUP | Villa Florida | 143.68 | 211 | PKP | PKPdf | 22 36 20.8 | +0.8 |
| | 0.8nm,0.6s,baz=153,slow=4.5,SNR=2.2 | | | | | | |
| Y31A | Rekieta Farm, | 143.82 | 33 | P | PKPbc | 22 36 17.5 | -0.3 |
| | baz=144 | | | | | | |
| W33A | Caddo, Fort Co | 143.83 | 30 | P | PKPab | 22 36 17.3 | +0.3 |
| | baz=144 | | | | | | |
| Z30A | Sanderson Ranc | 143.84 | 35 | P | PKPab | 22 36 17.4 | +0.2 |
| | baz=144 | | | | | | |
| X32A | Elmer | 143.99 | 32 | P | PKPab | 22 36 17.7 | 0.0 |
| | baz=144 | | | | | | |
| WMOK | Wichita Mounta | 144.00 | 31 | ePKPdf | PKPab | 22 36 17.6 | -0.2 |
| U37A | Salina | 144.33 | 25 | P | PKPab | 22 36 17.6 | -1.3 |
| | baz=144 | | | | | | |
| Z31A | Sharp Cattle R | 144.37 | 34 | P | PKPab | 22 36 19.0 | -0.1 |
| | baz=144 | | | | | | |
| 130A | Snyder | 144.44 | 35 | P | PKPab | 22 36 18.8 | -0.7 |
| | baz=144 | | | | | | |
| TUL1 | Tulsa | 144.46 | 26 | P | PKPab | 22 36 18.7 | -0.6 |
| | baz=144 | | | | | | |
| V36A | Jenks | 144.50 | 26 | P | PKPab | 22 36 19.0 | -0.5 |
| | baz=144 | | | | | | |
| W35A | Tecumseh | 144.60 | 28 | P | PKPab | 22 36 19.0 | -0.9 |
| | baz=144 | | | | | | |
| U38A | Gravette | 144.60 | 24 | P | PKPab | 22 36 19.2 | -0.7 |
| | baz=144 | | | | | | |
| 329A | Wagon Wheel Ra | 144.62 | 38 | P | PKPab | 22 36 19.8 | -0.4 |
| | baz=144 | | | | | | |
| BDFB | Brasilia | 144.65 | 235 | PKP | PKPdf | 22 36 22.7 | +0.7 |
| | 3.3nm,0.6s,baz=94,slow=4.4,SNR=5.7 | | | | | | |
| Y33A | Hilltop Ranch, | 144.65 | 31 | P | PKPab | 22 36 16.9 | -3.2 |
| | baz=144 | | | | | | |
| 131A | Roby | 144.71 | 35 | P | PKPbc | 22 36 20.5 | -0.1 |
| | baz=144 | | | | | | |
| Z32A | Haskell | 144.74 | 33 | P | PKPab | 22 36 19.1 | -1.4 |
| | baz=145 | | | | | | |
| V37A | Hulbert | 144.76 | 25 | P | PKPab | 22 36 19.6 | -0.8 |
| | baz=145,SNR=8.9 | | | | | | |
| 230A | Sterling City | 144.86 | 36 | P | PKPab | 22 36 21.1 | 0.0 |
| | baz=145 | | | | | | |
| W36A | Wetumka | 144.91 | 27 | P | PKPab | 22 36 20.1 | -0.9 |
| | baz=145 | | | | | | |
| TX31 | Lajitas Ar. Si | 144.98 | 42 | ePKPbc | PKPbc | 22 36 21.5 | -0.2 |
| TXAR | Lajitas Array | 144.98 | 42 | PKP | PKPab | 22 36 21.7 | +0.1 |
| | 3.2nm,0.5s,baz=274,slow=1.3,SNR=36 | | | | | | |
| V38A | Canehill | 145.09 | 24 | P | PKPbc | 22 36 20.4 | -1.2 |
| | baz=145 | | | | | | |
| Y34A | Reagan Ranch, | 145.13 | 30 | P | PKPbc | 22 36 21.0 | -0.9 |
| | baz=145 | | | | | | |
| ABTX | Abilene, Hawle | 145.16 | 34 | P | PKPbc | 22 36 21.7 | -0.3 |
| | baz=145 | | | | | | |
| X35A | Drake | 145.16 | 29 | P | PKPbc | 22 36 20.9 | -1.0 |
| | baz=145,SNR=8.1 | | | | | | |
| 330A | Mertzon | 145.17 | 37 | P | PKPbc | 22 36 21.1 | -1.0 |
| | baz=145 | | | | | | |
| W37A | Quinton | 145.27 | 26 | P | PKPbc | 22 36 21.6 | -0.6 |
| | baz=145 | | | | | | |
| 429A | Davenport Ranc | 145.27 | 39 | P | PKPbc | 22 36 22.0 | -0.4 |
| | baz=145 | | | | | | |
| 231A | Bronte | 145.29 | 35 | P | PKPbc | 22 36 21.8 | -0.7 |
| | baz=145 | | | | | | |
| X36A | Centrahoma | 145.32 | 28 | P | PKPbc | 22 36 21.5 | -0.9 |
| | baz=145,SNR=5.4 | | | | | | |
| 529A | Stev Forest Ra | 145.41 | 40 | P | PKPbc | 22 36 22.6 | -0.3 |
| | baz=145,SNR=5.6 | | | | | | |
| WCI | Wyandotte Cave | 145.47 | 12 | ePKPdf | PKPdf | 22 36 22.4 | -0.4 |
| 430A | Baggett Ranch, | 145.57 | 38 | P | PKPdf | 22 36 22.8 | -0.4 |
| | baz=145 | | | | | | |
| 133A | Hamilton Ranch | 145.57 | 33 | P | PKPab | 22 36 23.5 | -0.1 |
| | baz=145 | | | | | | |
| 232A | Coleman | 145.71 | 35 | P | PKPbc | 22 36 23.6 | -0.2 |
| | baz=146,SNR=8.7 | | | | | | |
| Z35A | Perchaven, San | 145.88 | 30 | P | PKPdf | 22 36 23.3 | -0.3 |
| | baz=146 | | | | | | |
| Y36A | Durant | 145.90 | 29 | P | PKPdf | 22 36 23.7 | +0.1 |
| | baz=146 | | | | | | |
| X38A | Whitesboro | 145.93 | 26 | P | PKPab | 22 36 24.7 | -0.1 |
| | baz=146 | | | | | | |
| 530A | J-C Ranch, Com | 145.95 | 39 | P | PKPbc | 22 36 24.7 | +0.1 |
| | baz=146,SNR=18 | | | | | | |
| 431A | Sonora | 146.02 | 37 | P | PKPbc | 22 36 24.8 | 0.0 |
| | baz=146 | | | | | | |
| 233A | Rising Star | 146.03 | 34 | P | PKPbc | 22 36 24.5 | -0.2 |
| | baz=146,SNR=7.3 | | | | | | |
| 134A | White-Moore Ra | 146.05 | 32 | P | PKPdf | 22 36 24.0 | +0.1 |
| | baz=146 | | | | | | |
| 432A | Menard | 146.37 | 36 | P | PKPdf | 22 36 24.9 | +0.4 |
| | baz=146 | | | | | | |
| 531A | Rocksprings | 146.43 | 38 | P | PKPbc | 22 36 25.7 | -0.3 |
| | baz=146 | | | | | | |
| 234A | Clairette | 146.46 | 33 | P | PKPbc | 22 36 25.8 | -0.2 |
| | baz=146 | | | | | | |
| 333A | Richland Sprin | 146.51 | 35 | P | PKPdf | 22 36 25.3 | +0.6 |
| | baz=146,SNR=5.5 | | | | | | |
| MIAR | Mount Ida | 146.57 | 25 | P | PKPbc | 22 36 26.4 | +0.2 |
| | baz=146 | | | | | | |
| MIAR | Mount Ida | 146.57 | 25 | ePKPdf | PKPbc | 22 36 25.9 | -0.3 |
| JCT | Junction City | 146.65 | 37 | P | PKPbc | 22 36 26.1 | -0.5 |
| | baz=146,SNR=7.5 | | | | | | |
| JCT | Junction City | 146.65 | 37 | ePKPdf | PKPdf | 22 36 25.8 | +0.8 |
| 532A | Rocksprings | 146.84 | 37 | P | PKPab | 22 36 28.6 | 0.0 |
| | baz=147 | | | | | | |
| 334A | Lometa | 146.92 | 34 | P | PKPdf | 22 36 24.8 | -0.6 |
| | baz=147 | | | | | | |
| WVT | Waverly | 147.10 | 16 | ePKPdf | PKPbc | 22 36 26.8 | -0.8 |
| 434A | Burnet | 147.29 | 34 | P | PKPdf | 22 36 27.1 | +1.1 |
| | baz=147 | | | | | | |
| 632A | Uvalde | 147.36 | 38 | P | PKPbc | 22 36 29.0 | +0.4 |
| | baz=147 | | | | | | |
| 533A | Kerrville | 147.40 | 36 | P | PKPbc | 22 36 28.8 | +0.1 |
| | baz=147 | | | | | | |
| 832A | Faith Ranch, C | 148.09 | 40 | P | PKPbc | 22 36 31.5 | +0.8 |
| | baz=148 | | | | | | |
| TKL | Tuckaleechee C | 148.44 | 10 | PKPbc | PKPbc | 22 36 30.8 | -0.6 |
| | baz=279,slow=2.2 | | | | | | |

**IDC 25 22:18:26.6±14.0, 9°.80N×143°.85E, h0km, mb4.0/4, mb1 4.2/4, mb1mx3.8/31, mbtmp4.0/4, Error ellipse: s-maj=423.0km s-min=65.5km az=173.0, Eastern Caroline Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MKAR | Makanchi Array | 63.55 | 318 | P | P | 22 28 59.1 | 0.0 |
| | 0.5nm,0.6s,baz=102,slow=6.9,SNR=3.3 | | | | | | |
| ILAR | Eielson Array | 72.41 | 25 | P | P | 22 29 54.5 | 0.0 |
| | 0.3nm,0.5s,baz=252,slow=5.7,SNR=6.2 | | | | | | |
| ARCES | ARCESS Array B | 90.36 | 342 | P | P | 22 31 29.6 | +0.1 |
| | 1.4nm,0.8s,baz=52,slow=5.8,SNR=5.1 | | | | | | |
| FINES | FINESS Array B | 94.15 | 335 | P | P | 22 31 47.0 | -0.2 |
| | 0.7nm,0.3s,baz=74,slow=4.9,SNR=8.1 | | | | | | |

**NNC 25 22:34:24.1±7.1, 37°.28N×71°.44E, h0km, mb3.5, mpv3.2, 2C-5D, Error ellipse: s-maj=61.2km s-min=22.8km az=167.0, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DZET | Dzherino | 2.56 | 307 | ⇑P | Pn | 22 35 06.6 | -0.5 |
| | 16nm,0.4s | | | | | | |
| DZET | | | | ⇑S | Sb | 22 35 41.4 | -2.0 |
| | 14nm,0.2s | | | | | | |
| SFK | Sufi-Kurgan | 3.17 | 30 | ⇓P | Pn | 22 35 15.4 | -0.2 |
| | 6.3nm,0.5s | | | | | | |
| SFK | | | | ⇓S | Sn | 22 35 56.4 | +2.0 |
| | 5.0nm,0.3s | | | | | | |
| MNAS | Manas | 5.26 | 9 | ⇓P | Pn | 22 35 42.5 | -1.8 |
| | 0.5nm,0.3s | | | | | | |
| MNAS | | | | ⇓S | Sn | 22 36 44.9 | -0.9 |
| | 4.8nm,0.5s | | | | | | |
| KK31 | Karatay Array | 5.86 | 353 | ⇓P | Pn | 22 35 50.8 | -1.4 |
| | 0.2nm,0.2s,baz=181,slow=14,SNR=21 | | | | | | |
| KK31 | | | | S | Sn | 22 36 59.5 | -0.6 |
| | 5.0nm,0.5s,baz=182,slow=24,SNR=28 | | | | | | |

*BJI **25** 22:48:59.4, 4°.10S×99°.52E, h10km, mb4.6/10, mB4.9/2*
*NEIC **25** 22:49:04.5±0.3, 3°.66S×99°.81E, h10km, mb4.6/10, Error ellipse: s-maj=11.4km s-min=4.9km az=45.0*
*DJA **25** 22:49:07.9±0.4, 3°S±3°×9°9E±°, h10km, M4.2/9, mb4.1/9, mB4.8/1, MLv4.3/5, Mw(mB)4.1/1*
*IDC **25** 22:49:08.6±0.7, 3°.64S×99°.71E, h35km±3km, mb4.1/16, mb1 4.2/18, mb1mx4.0/37, mbtmp4.3/18, ML3.9/2, Error ellipse: s-maj=23.0km s-min=12.1km az=47.0*
**ISC 25 22:49:08.3±0.5, 3°.62S±0°.08×99°.61E±0°.07, h35km, n118, σ1s.69/100, mb4.4/25, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PPSI | Pulau Pagai | 0.94 | 25 | P | Pn | 22 49 22.6 | -2.5 |
| SISI | Saibi | 2.34 | 347 | P | Pn | 22 49 42.4 | -1.9 |
| PDSI | Padang | 2.82 | 18 | P | Pn | 22 49 48.1 | -2.9 |
| KSI | Kapahiang | 2.98 | 91 | P | Pn | 22 49 56.6 | +3.4 |
| SDSI | Sungai Dareh | 3.23 | 34 | P | Pn | 22 49 56.5 | -0.1 |
| PPI | Padang Panjang | 3.24 | 14 | P | Pn | 22 49 55.2 | -1.5 |
| MNAI | Manna | 3.42 | 102 | P | Pn | 22 50 03.5 | +4.3 |
| MNAI | Manna | 3.42 | 102 | ePn | Pn | 22 49 54.9 | -4.3 |
| MNAI | | | | eSn | Sn | 22 50 30.6 | -8.0 |
| BKNI | Bangkinang | 4.17 | 20 | P | Pn | 22 50 12.4 | +2.8 |
| RGRI | Rengat | 4.24 | 40 | P | Pn | 22 50 10.8 | +0.3 |
| MNSI | Mandailing Nat | 4.39 | 360 | P | Pn | 22 50 12.8 | +0.3 |
| JMBI | JAMBI | 4.49 | 64 | P | Pn | 22 50 15.8 | +1.9 |
| MDSI | Maura Dua | 4.64 | 101 | P | Pn | 22 50 13.4 | -2.6 |
| LWLI | Liwa | 4.65 | 107 | P | Pn | 22 50 13.0 | -3.2 |
| PMBI | Palembang | 5.20 | 83 | P | Pn | 22 50 25.5 | +1.8 |
| KASI | Kota Agung | 5.23 | 111 | P | Pn | 22 50 28.8 | +4.7 |
| GSI | Gunungsitoli | 5.30 | 337 | P | Pn | 22 50 22.2 | -2.8 |
| GSI | Gunungsitoli | 5.30 | 337 | ePn | Pn | 22 50 22.9 | -2.2 |
| GSI | | | | eSn | Sn | 22 51 19.3 | -5.6 |
| KLI | Kotabumi | 5.38 | 103 | P | Pn | 22 50 30.2 | +4.1 |
| PSI | Prapat | 6.42 | 354 | Pn | Pn | 22 50 38.9 | -1.6 |
| | 0.9nm,0.3s,baz=203,slow=7.7,SNR=2.2 | | | | | | |
| TPRI | Tanjung Pinang | 6.67 | 48 | P | Pn | 22 50 44.2 | +0.3 |
| PPBI | Pangkal Pinang | 6.68 | 78 | P | Pn | 22 50 46.9 | +2.9 |
| CGJI | Cibinong | 6.75 | 116 | P | Pn | 22 50 49.6 | +4.6 |
| SBJI | Serang | 6.96 | 111 | P | Pn | 22 50 52.4 | +4.6 |
| TSI | Tuntungan | 7.15 | 352 | P | Pn | 22 50 48.4 | -2.1 |
| KCSI | Kotacane, Aceh | 7.33 | 345 | P | Pn | 22 50 50.8 | -2.2 |
| TNG | Tangerang | 7.46 | 110 | P | Pn | 22 50 59.5 | +4.8 |
| SKJI | Sukabumi | 7.69 | 116 | P | Pn | 22 51 02.6 | +4.7 |
| CBJI | Citeko | 7.73 | 111 | P | Pn | 22 51 05.5 | +7.0 |
| TPI | Tanjungpandan | 8.08 | 84 | P | Pn | 22 51 06.0 | +2.7 |
| | 19nm,1.4s | | | | | | |
| CNJI | Cibinong | 8.34 | 116 | P | Pn | 22 51 11.5 | +4.7 |
| MLSI | Meulaboh, Aceh | 8.46 | 338 | P | Pn | 22 51 05.8 | -2.8 |
| LEM | Lembang | 8.59 | 112 | Pn | Pn | 22 51 09.0 | -1.4 |

4.7nm,0.3s,baz=315,slow=19,SNR=3.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LEM** | **Lembang** | **8.59** | **112** | P | | Pn | 22 51 14.6 | +4.2 |
| **CISI** | **Cisompet, Garu** | **9.05** | **116** | P | | Pn | 22 51 12.0 | -4.7 |
| **CISI** | **Cisompet, Garu** | **9.05** | **116** | *e*Pn | | Pn | 22 51 11.0 | -5.7 |
| **LHMI** | **Lhok Sumawe** | **9.19** | **343** | P | | **Pn** | **22 51 15.8** | **-2.6** |
| **CMJI** | **Cimerak** | **9.72** | **116** | P | | Pn | 22 51 30.5 | +4.7 |
| **SMRI** | **Semarang** | **11.31** | **108** | P | | Pn | 22 51 51.9 | +4.3 |
| **UWJI** | **Ujung Watu** | **11.63** | **104** | P | | Pn | 22 51 56.2 | +4.2 |
| **UGM** | **Wanagama** | **11.66** | **112** | P | | Pn | 22 51 56.8 | +4.3 |
| **UGM** | **Wanagama** | **11.66** | **112** | *e*Pn | | Pn | 22 51 48.5 | -3.9 |
| **WOJI** | **Wonogiri, Jawa** | **12.01** | **111** | P | | Pn | 22 52 01.5 | +4.3 |
| **PBKI** | **Pangkalan Bun** | **12.08** | **86** | P | | **Pn** | **22 52 01.1** | **+3.0** |
| **PCJI** | **Pacitan** | **12.37** | **112** | P | | Pn | 22 52 06.6 | +4.5 |
| **NGJI** | **Ngawi** | **12.37** | **108** | P | | Pn | 22 52 06.6 | +4.5 |
| **STKI** | **Sintang** | **12.41** | **73** | P | | **Pn** | **22 52 05.0** | **+2.3** |
| **TBJI** | **Tambak Boyo** | **12.60** | **105** | P | | Pn | 22 52 09.3 | +4.1 |
| **PWJI** | **Pagerwojo** | **12.89** | **110** | P | | P | 22 52 14.6 | -4.9 |
| **BWJI** | **Bawean** | **13.19** | **100** | P | | Pn | 22 52 17.2 | +3.9 |
| **KMMI** | **Kalianget** | **14.70** | **104** | P | | **P** | **22 52 37.5** | **-2.0** |
| **ABJI** | **Asem Bagus** | **15.13** | **107** | P | | **P** | **22 52 43.9** | **-0.5** |
| **BBKI** | **Banjar Baru** | **15.21** | **90** | P | | **P** | **22 52 43.9** | **-1.3** |
| **MTKI** | **Muara Teweh, K** | **15.51** | **80** | P | | **P** | **22 52 47.5** | **-1.1** |
| **SRBI** | **Singaraja** | **16.14** | **107** | P | | **P** | **22 52 57.6** | **+2.0** |
| **IGBI** | **Denpasar** | **16.28** | **109** | P | | **P** | **22 52 59.0** | **+1.8** |
| **DNP** | **Denpasar** | **16.30** | **109** | P | | **P** | **22 52 59.2** | **+1.8** |
| **KBKI** | **Kotabaru** | **16.53** | **89** | P | | **P** | **22 53 01.4** | **+1.4** |
| **BKB** | **Balikpapan** | **17.43** | **83** | P | | **P** | **22 53 12.5** | **+2.6** |
| **TWSI** | **Taliwang, Sumb** | **17.91** | **107** | P | | **P** | **22 53 19.1** | **+3.9** |
| **KHLT** | **Khaolaem Dam** | **18.33** | **357** | P | | **Pn** | **22 53 22.6** | **+2.7** |

4.5nm,1.4s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KKM** | **Kota Kinabalu** | **19.16** | **60** | *e*P | | **P** | **22 53 25.2** | **-3.9** |

53nm,1.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **20.14** | **95** | P | | **P** | **22 53 37.4** | **-2.2** |

3.2nm,0.4s,baz=281,slow=10,SNR=4.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KAPI | | | | pP | | **pP** | **22 53 48.2** | **-0.6** |

12nm,0.8s,baz=281,slow=16,SNR=3.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MHMT** | **Maesarieng** | **21.72** | **356** | P | | **P** | **22 53 57.1** | **+0.4** |

7.8nm,1.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CM31** | **Chiang Mai Arr** | **21.95** | **358** | *e*P | | **P** | **22 53 58.7** | **-0.4** |
| **CMAR** | **Chiang Mai Arr** | **21.95** | **358** | P | | **P** | **22 53 58.7** | **-0.4** |

3.2nm,0.6s,baz=186,slow=10,SNR=21

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CMAR | | | | pP | | **pP** | **22 54 09.4** | **+1.0** |

3.7nm,0.6s,baz=186,slow=10,SNR=3.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CHTO** | **Chiang Mai** | **22.30** | **358** | P | | **P** | **22 54 06.0** | **+3.1** |

30nm,1.5s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CHTO** | **Chiang Mai** | **22.30** | **358** | *e*P | | **P** | **22 54 05.0** | **+2.1** |

5.2nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **27.27** | **260** | T | | T | 23 24 09.9 | |

baz=82,slow=75,SNR=172

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H08S3** | **Diego Garcia H** | **27.28** | **260** | T | | T | 23 24 12.9 | |

baz=82,slow=75,SNR=120

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H08S1** | **Diego Carcia H** | **27.29** | **260** | T | | T | 23 24 08.6 | |

baz=82,slow=75,SNR=282

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H01W3** | **Cape Leeuwin H** | **33.90** | **158** | T | | T | 23 31 41.4 | |

baz=334,SNR=60

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H01W2** | **Cape Leeuwin H** | **33.92** | **158** | T | | T | 23 31 37.9 | |

baz=334,slow=74

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H01W1** | **Cape Leeuwin H** | **33.92** | **158** | T | | T | 23 31 37.3 | |

baz=334,slow=74,SNR=51

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LSA** | **Lhasa** | **34.11** | **347** | *e*P | | **P** | **22 55 52.1** | **+1.7** |

8.6nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **37.54** | **118** | P | | **P** | **22 56 18.0** | **-1.5** |

0.8nm,0.5s,baz=290,slow=9.1,SNR=5.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WRA | | | | PcP | | **PcP** | **22 58 37.3** | **0.0** |

0.7nm,0.8s,baz=297,slow=2.2,SNR=3.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS12** | **Alice Springs** | **38.65** | **124** | *e*P | | **P** | **22 56 27.8** | **-1.0** |
| AS12 | | | | *e*PcP | | **PcP** | **22 58 40.8** | **+0.2** |
| **ASAR** | **Alice Springs** | **38.65** | **124** | P | | **P** | **22 56 27.8** | **-1.0** |

0.9nm,0.4s,baz=299,slow=7.4,SNR=12

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | PcP | | **PcP** | **22 58 40.8** | **+0.2** |

0.6nm,0.5s,baz=299,slow=2.4,SNR=4.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ASAR | | | | pPcP | | | 22 58 51.1 | |

0.5nm,0.5s,baz=305,slow=2.7,SNR=5.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AS01** | **Alice Springs** | **38.68** | **124** | *e*P | | **P** | **22 56 27.0** | **-2.1** |
| **GTA** | **Gaotai** | **42.82** | **0** | *e*P | | P | 22 57 15.0 | +12 |
| GTA | | | | pP | | pP | 22 57 18.8 | +5.4 |
| GTA | | | | sP | | sP | 22 57 21.0 | +3.4 |
| GTA | | | | pmax | | pmax | | |

comp=Z,4.0nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **47.56** | **99** | *e*P | | **P** | **22 57 39.0** | **-1.9** |

comp=Z,23nm,1.1s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KSH** | **Kashi** | **48.13** | **335** | P | | **P** | **22 57 43.8** | **-1.3** |
| KSH | | | | PMZ | | | | |

comp=Z,3.0nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CTA** | **Charters Tower** | **48.29** | **114** | P | | **P** | **22 57 45.6** | **-1.0** |

comp=Z,2.9nm,0.8s,baz=297,slow=6.8,SNR=2.6

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WMQ** | **Urumqi** | **48.43** | **348** | P | | **P** | **22 57 49.0** | **+1.7** |
| WMQ | | | | PMZ | | | | |

comp=Z,12nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TKM2** | **Tokmak 2** | **51.16** | **337** | *e*P | | **P** | **22 58 09.5** | **+1.3** |

comp=Z,9.7nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SONA0** | **Songino Array** | **51.59** | **6** | *e*P | | **P** | **22 58 11.9** | **+0.6** |
| SONA0 | | | | *e*PcP | | **PcP** | **22 59 25.1** | **+0.3** |
| **SONM** | **Songino Array** | **51.59** | **6** | P | | **P** | **22 58 11.9** | **+0.6** |

comp=Z,5.7nm,0.8s,baz=189,slow=8.4,SNR=40

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SONM | | | | PcP | | **PcP** | **22 59 25.1** | **+0.3** |

comp=Z,0.5nm,0.4s,baz=191,slow=4.0,SNR=6.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SONM | | | | pPcP | | | 22 59 35.7 | |

comp=Z,0.6nm,0.6s,baz=184,slow=4.4,SNR=2.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SONA1** | **Songino Array** | **51.60** | **6** | *e*P | | **P** | **22 58 12.0** | **+0.6** |
| **EKS2** | **Erkin-Say** | **51.66** | **336** | *e*P | | **P** | **22 58 13.2** | **+1.3** |

comp=Z,4.1nm,0.7s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MK01** | **Makanchi Array** | **52.46** | **345** | *e*P | | **P** | **22 58 18.1** | **+0.5** |
| **MK32** | **Makanchi Array** | **52.48** | **345** | *e*P | | **P** | **22 58 18.6** | **+0.8** |
| **MKAR** | **Makanchi Array** | **52.48** | **345** | P | | **P** | **22 58 18.6** | **+0.8** |

comp=Z,2.7nm,0.4s,baz=153,slow=8.8,SNR=60

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| MKAR | | | | pP | | **pP** | **22 58 28.9** | **+0.6** |

comp=Z,2.9nm,0.6s,baz=151,slow=8.2,SNR=9.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **USRK** | **Ussuriysk Ar.** | **55.76** | **28** | P | | **P** | **22 58 41.5** | **-0.3** |

comp=Z,6.5nm,0.7s,baz=257,slow=7.2,SNR=12

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GEYT** | **Alibeck** | **56.44** | **321** | P | | **P** | **22 58 47.7** | **+0.9** |

comp=Z,1.4nm,0.6s,baz=167,slow=7.0,SNR=6.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KURK** | **Kurchatov** | **57.05** | **344** | *e*P | | **P** | **22 58 51.0** | **+0.2** |

comp=Z,14nm,1.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **58.68** | **350** | *e*P | | **P** | **22 59 02.5** | **+0.3** |
| **ZALV** | **Zalesovo Beam** | **58.68** | **350** | P | | **P** | **22 59 02.4** | **+0.2** |

comp=Z,5.5nm,0.3s,baz=158,slow=7.6,SNR=39

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ZALV | | | | pP | | **pP** | **22 59 12.8** | **0.0** |

comp=Z,5.2nm,0.7s,baz=178,slow=4.5,SNR=7.5

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZAA1** | **Zalesovo Array** | **58.69** | **350** | *e*P | | **P** | **22 59 02.4** | **+0.2** |
| **RAYN** | **Ar Rayn** | **59.19** | **300** | *e*P | | **P** | **22 59 07.9** | **+1.5** |

comp=Z,2.0nm,0.9s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ABKAR** | **Akbulak array** | **62.87** | **332** | *e*P | | **P** | **22 59 30.6** | **-0.2** |
| **MAW** | **Mawson** | **68.63** | **194** | P | | **P** | **23 00 08.3** | **+0.8** |

comp=Z,0.4nm,0.3s,baz=309,slow=7.5,SNR=1.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MAW** | **Mawson** | **68.63** | **194** | *e*P | | **P** | **23 00 08.3** | **+0.8** |

comp=Z,2.9nm,1.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KBZ** | **Khabaz** | **69.27** | **320** | P | | **P** | **23 00 12.7** | **+0.6** |

comp=Z,2.6nm,0.9s,baz=161,slow=5.8,SNR=5.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KBZ | | | | pP | | **pP** | **23 00 23.5** | **+0.7** |

comp=Z,1.8nm,0.7s,baz=117,slow=4.3,SNR=3.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BR101** | **Keskin Array S** | **74.13** | **313** | *e*P | | **P** | **23 00 41.5** | **0.0** |
| **BRTR** | **Keskin Array B** | **74.13** | **313** | P | | **P** | **23 00 41.5** | **0.0** |

comp=Z,1.3nm,0.7s,baz=116,slow=5.6,SNR=8.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRTR | | | | pP | | **pP** | **23 00 51.9** | **-0.6** |

comp=Z,1.0nm,0.6s,baz=130,slow=6.6,SNR=6.9

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MQZ** | **McQueen's Vall** | **75.27** | **134** | *e*P | | **P** | **23 00 45.0** | **-2.9** |

comp=Z,94nm,1.8s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BUR04** | **Bucovina Ar. S** | **82.22** | **319** | *e*P | | **P** | **23 01 27.6** | **+1.5** |
| **FIA0** | **FINESS Array S** | **85.36** | **332** | *e*P | | **P** | **23 01 42.4** | **+0.7** |
| **FINES** | **FINESS Array B** | **85.36** | **332** | P | | **P** | **23 01 42.4** | **+0.7** |

comp=Z,1.1nm,0.4s,baz=118,slow=5.9,SNR=24

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FINES | | | | pP | | **pP** | **23 01 53.3** | **+0.5** |

comp=Z,1.3nm,0.5s,baz=128,slow=6.5,SNR=2.4

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARA0** | **ARCESS Array S** | **87.86** | **340** | *e*P | | **P** | **23 01 54.6** | **+0.7** |
| **ARCES** | **ARCESS Array B** | **87.86** | **340** | P | | **P** | **23 01 54.6** | **+0.7** |

comp=Z,3.5nm,0.9s,baz=100,slow=4.8,SNR=8.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ARCES | | | | pP | | **pP** | **23 02 05.1** | **+0.2** |

comp=Z,1.8nm,0.7s,baz=108,slow=6.1,SNR=1.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **GEC2** | **GERESS Array S** | **90.00** | **319** | *e*P | | **P** | **23 02 05.2** | **+0.7** |
| **GERES** | **GERESS Array B** | **90.00** | **319** | P | | **P** | **23 02 05.2** | **+0.7** |

comp=Z,1.9nm,1.0s,baz=76,slow=5.2,SNR=7.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GERES | | | | pP | | **pP** | **23 02 16.6** | **+0.9** |

comp=Z,0.7nm,0.6s,baz=94,slow=5.4,SNR=4.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WMOK** | **Wichita Mounta** | **144.64** | **27** | *e*PKPdf | | **PKPab** | **23 08 40.6** | **0.0** |
| **WCI** | **Wyandotte Cave** | **145.14** | **8** | *e*PKPbc | | **PKPab** | **23 08 42.3** | **0.0** |
| **TX31** | **Lajitas Ar. Si** | **146.21** | **38** | *e*PKPdf | | **PKPab** | **23 08 46.4** | **-0.3** |
| **TXAR** | **Lajitas Array** | **146.22** | **38** | PKPbc | | **PKPab** | **23 08 46.6** | **-0.1** |

comp=Z,2.3nm,0.7s,baz=259,slow=0.9,SNR=22

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TXAR | | | | pPKPbc | | pPKPbc | 23 08 57.6 | +0.3 |

comp=Z,2.8nm,0.6s,baz=302,slow=0.8,SNR=16

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **JCT** | **Junction City** | **147.60** | **32** | *e*PKPbc | | **PKPbc** | **23 08 50.5** | **+0.7** |

*KLM* ***25*** *22:59:47.4, 3.°67S×99.°55E, h22km, mb6.0, MS6.4*



*BJI* ***25*** *22:59:49.5, 3.°52S×100.°47E, h21km, mb5.8/83, mB6.0/66, Ms6.2/91, Ms7 6.1/81*

*IDC* ***25*** *22:59:49.9±0.3, 3.°31S×100.°47E, h0km, mb5.1/43, mb1 5.1/45, mb1mx5.1/46, mbtmp5.1/45, ML4.8/3, MS5.5/31, Ms1 5.5/31, ms1mx5.4/44, Error ellipse: s-maj=9.6km s-min=8.3km az=31.0*

*ISCJB* ***25*** *22:59:51.3±0.5, 3.°28S±0.°02×100.°40E±0.°02, h19km±3km, mb5.6/188, MS5.8/312, Error ellipse: s-maj=3.4km s-min=2.2km az=37.7*

*NEIC* ***25*** *22:59:53.4±0.1, 3.°30S×100.°46E, h19km, mb5.8/84, ME5.8, MS5.9/242, MW5.8, Error ellipse: s-maj=4.7km s-min=3.3km az=222.0, Moment Tensor Solution. s58 Moment tensor: Scale 10^17 Nm; Mrr 3.49; Mθθ -0.31; Mφφ -3.19; Mrθ 3.89; Mrφ 2.58; Mθr -2.68; Best double couple: M0 6.30000×10^17 NP1: φs 129.00000°, δ71.00000°, λ72.00000°. NP2: φs 354.00000°, δ26.00000°, λ132.00000°. Principal axes: T 6.0300, Plg60.0000°, Azm13.0000°; N 0.5800, Plg17.0000°, Azm135.0000°; P -6.6100, Plg24.0000°, Azm233.0000°; Depth from synthetics of broadband displacement seismograms. Energy computed from CMT mechanism.*

*GCMT* ***25*** *22:59:53.4±0.2, 3.°55S×100.°12E, h14km±1km, MW5.9/60, Moment Tensor Solution. s60, c86; s57, c76; Duration: 2s8 Moment tensor: Scale 10^18 Nm; Mrr 0.41±.02; Mθθ -0.25±.01; Mφφ -0.16±.01; Mrθ 0.74±.10; Mθφ 0.19±.01; Mφr -0.50±.07; Best double couple: M0 0.98000×10^18 NP1: φs 124.00000°, δ78.00000°, λ88.00000°. NP2: φs 312.00000°, δ12.00000°, λ98.00000°. Principal axes: T 0.9850, Plg57.0000°, Azm32.0000°; N -0.0100, Plg2.0000°, Azm125.0000°; P -0.9750, Plg33.0000°, Azm216.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*MOS* ***25*** *22:59:54.0±1.2, 3.°17S×100.°47E, h33km, mb6.0/69, MS5.7/74 Error ellipse: s-maj=7.7km s-min=4.2km az=115.1*

*DJA* ***25*** *22:59:55.8±0.5, 3.°5±2.°×10.°0E±.°, h39km±4km, M5.7/66, mb5.5/66, mB6.0/43, MLv6.1/7, Mw(mB)5.6/43, Mwp6.0/3*

*AUST* ***25*** *22:59:56.1±0.7, 3.°22S×100.°46E, h42km±7km, Error ellipse: s-maj=8.5km s-min=4.4km az=48.0*

*SZGRF* ***25*** *22:59:57.8, 2.°21S×100.°63E, h29km, mb5.6/18(BGR), Ms5.6/2(BGR)*

**ISC 25 22:59:53.7±0.3, 3.°28S±0.°03×100.°43E±0.°03, h25km±1km, h25km:pP-P, n1438, σ1948/1448, mb5.7/191, MS5.8/314, 77C-29D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.67** | **321** | P | **Pn** | **23 00 08.2** | **+0.7** |
| **KSI** | **Kapahiang** | **2.19** | **100** | P | **Pb** | **23 00 34.5** | **+1.8** |
| **PDSI** | **Padang** | **2.36** | **1** | P | **Pn** | **23 00 31.9** | **+1.0** |
| **SISI** | **Saibi** | **2.36** | **325** | P | **Pn** | **23 00 31.4** | **+0.5** |
| **SDSI** | **Sungai Dareh** | **2.54** | **23** | P | **Pb** | **23 00 36.3** | **-2.3** |
| **MNAI** | **Manna** | **2.74** | **113** | P | **Pn** | **23 00 37.0** | **+0.8** |

baz=2.7,SNR=73

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **2.74** | **113** | P | **Pn** | **23 00 37.7** | **+1.6** |
| **MNAI** | **Manna** | **2.74** | **113** | *e*Pn | **Pn** | **23 00 36.4** | **+0.3** |
| MNAI | | | | *e*Sn | Sn | 23 01 00.2 | -8.3 |
| **PPI** | **Padang Panjang** | **2.81** | **359** | P | **Pn** | **23 00 38.4** | **+1.3** |

baz=2.8,SNR=170

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PPI** | **Padang Panjang** | **2.81** | **359** | P | **Pn** | **23 00 39.0** | **+1.9** |
| **JMBI** | **JAMBI** | **3.60** | **63** | P | **Pn** | **23 00 50.5** | **+2.5** |
| **BKNI** | **Bangkinang** | **3.64** | **10** | P | **Pn** | **23 00 50.4** | **+2.0** |

baz=3.6,SNR=8.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BKNI** | **Bangkinang** | **3.64** | **10** | P | **Pn** | **23 00 51.3** | **+2.8** |
| **BKNI** | **Bangkinang** | **3.64** | **10** | *e*Pn | **Pn** | **23 00 49.8** | **+1.3** |
| BKNI | | | | *e*Sn | **Sn** | **23 01 28.6** | **-2.1** |
| **MDSI** | **Maura Dua** | **3.93** | **108** | P | **Pn** | **23 00 55.2** | **+2.7** |
| **LWLI** | **Liwa** | **4.01** | **116** | P | **Pn** | **23 00 56.3** | **+2.6** |
| **MNSI** | **Mandailing Nat** | **4.14** | **348** | P | **Pn** | **23 00 56.4** | **+1.0** |
| **PMBI** | **Palembang** | **4.35** | **85** | P | **Pn** | **23 00 59.9** | **+1.6** |

baz=4.3,SNR=5.8

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PMBI** | **Palembang** | **4.35** | **85** | P | **Pn** | **23 00 59.6** | **+1.3** |
| **KASI** | **Kota Agung** | **4.63** | **119** | P | **Pn** | **23 01 03.1** | **+1.0** |
| **KLI** | **Kotabumi** | **4.69** | **110** | P | **Pn** | **23 01 05.9** | **+3.0** |
| **GSI** | **Gunungsitoli** | **5.38** | **328** | P | **Pn** | **23 01 12.0** | **-0.4** |
| **GSI** | **Gunungsitoli** | **5.38** | **328** | *e*Pn | **Pn** | **23 01 11.2** | **-1.2** |
| GSI | | | | *e*Sn | **Sn** | **23 02 13.0** | **-0.5** |
| **BTDF** | **Bukit Timah Da** | **5.70** | **36** | P | **Pn** | **23 01 19.3** | **+2.5** |

baz=5.7,SNR=14

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PPBI** | **Pangkal Pinang** | **5.81** | **79** | P | **Pn** | **23 01 21.2** | **+2.8** |
| **TPRI** | **Tanjung Pinang** | **5.85** | **45** | P | **Pn** | **23 01 21.9** | **+3.0** |
| **KGM** | **Kluang** | **6.00** | **29** | ⇑P | **Pn** | **23 01 23.4** | **+2.3** |
| **MYKOM** | **Kota Tinggi** | **6.09** | **34** | ⇑P | **Pn** | **23 01 24.5** | **+2.3** |
| **MYKOM** | **Kota Tinggi** | **6.09** | **34** | *e*Pn | **Pn** | **23 01 23.8** | **+1.6** |
| **CGJI** | **Cibinong** | **6.20** | **122** | P | **Pn** | **23 01 23.5** | **-0.2** |
| **PSI** | **Prapat** | **6.23** | **346** | Pn | **Pn** | **23 01 22.5** | **-1.7** |

7.3nm,0.3s,baz=166,slow=12,SNR=22

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| PSI | | | | Sn | **Sn** | **23 02 36.6** | **+1.9** |

4.8nm,0.3s,baz=142,slow=18,SNR=2.1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **6.23** | **346** | *e*P | **Pn** | **23 01 22.9** | **-1.3** |
| PSI | | | | | | 23 02 36.7 | |
| **PSI** | **Prapat** | **6.23** | **346** | P | **Pn** | **23 01 21.9** | **-2.3** |

baz=6.1,SNR=14

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PSI** | **Prapat** | **6.23** | **346** | *e*Pn | **Pn** | **23 01 22.9** | **-1.3** |
| PSI | | | | Sn | **Sn** | **23 02 36.6** | **+1.9** |
| **SBJI** | **Serang** | **6.34** | **117** | P | **Pn** | **23 01 26.9** | **+1.2** |
| **TNG** | **Tangerang** | **6.83** | **115** | P | **Pn** | **23 01 34.6** | **+2.2** |
| **TSI** | **Tuntungan** | **6.99** | **345** | P | **Pn** | **23 01 37.4** | **+2.8** |
| **SKJI** | **Sukabumi** | **7.13** | **121** | P | **Pn** | **23 01 37.9** | **+1.3** |
| **TPI** | **Tanjungpandan** | **7.23** | **86** | P | **Pn** | **23 01 40.0** | **+2.1** |

190nm,1.0s,5μm4.2nm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KCSI** | **Kotacane, Aceh** | **7.26** | **339** | P | **Pn** | **23 01 39.5** | **+1.2** |

419nm,1.5s,11μm11nm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **IPM** | **Ipoh** | **7.73** | **4** | ⇓P | **Pn** | **23 01 47.3** | **+2.4** |
| **IPM** | **Ipoh** | **7.73** | **4** | *e*Pn | **Pn** | **23 01 47.0** | **+2.2** |
| **CNJI** | **Cibinong** | **7.78** | **121** | P | **Pn** | **23 01 44.9** | **-0.5** |
| **LEM** | **Lembang** | **7.98** | **116** | Pn | **Pn** | **23 01 47.7** | **-0.6** |

27nm,0.3s,baz=190,slow=14,SNR=34

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LEM | | | | Sn | **Sn** | **23 03 14.3** | **-3.6** |

baz=256,slow=17,SNR=1.5

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| LEM | | | | LR | LR | 23 05 31.1 | |

comp=Z,37μm,20.9s,baz=258,slow=43

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LEM** | **Lembang** | **7.98** | **116** | P | Pn | 23 01 51.7 | +3.3 |

baz=8.0,SNR=7.6

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LEM** | **Lembang** | **7.98** | **116** | P | **Pn** | **23 01 50.6** | **+2.3** |
| **CISI** | **Cisompet, Garu** | **8.49** | **120** | P | **Pn** | **23 01 54.4** | **-0.8** |
| **CISI** | **Cisompet, Garu** | **8.49** | **120** | *e*Pn | **Pn** | **23 01 53.8** | **-1.4** |
| **KULM** | **Kulim** | **8.52** | **1** | ⇓P | **Pn** | **23 01 56.5** | **+0.9** |
| **KULM** | **Kulim** | **8.52** | **1** | *e*Pn | **Pn** | **23 01 56.0** | **+0.4** |
| **XMIS** | **Christmas Isla** | **8.83** | **144** | *e*Pn | Pn | 23 01 56.2 | -3.6 |
| XMIS | | | | *e*Sn | Sn | 23 03 22.9 | -16 |
| **KTGM** | **Kuala Trenggan** | **8.97** | **18** | ⇑P | **Pn** | **23 02 04.1** | **+2.4** |
| **LHMI** | **Lhok Sumawe** | **9.14** | **338** | P | **Pn** | **23 02 05.4** | **+1.3** |

baz=9.1,SNR=6.4

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **LHMI** | **Lhok Sumawe** | **9.14** | **338** | P | **Pn** | **23 02 04.9** | **+0.8** |
| **LHMI** | **Lhok Sumawe** | **9.14** | **338** | *e*Pn | **Pn** | **23 02 05.7** | **+1.5** |
| **CMJI** | **Cimerak** | **9.15** | **120** | P | **Pn** | **23 02 03.6** | **-0.6** |

689nm,0.9s,7μm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SMRI** | **Semarang** | **10.65** | **111** | P | **Pn** | **23 02 27.0** | **+2.2** |
| **SMRI** | **Semarang** | **10.65** | **111** | *e*Pn | **Pn** | **23 02 25.0** | **+0.2** |
| **UWJI** | **Ujung Watu** | **10.93** | **107** | P | **Pn** | **23 02 31.6** | **+2.9** |
| **KSM** | **Kuching** | **10.95** | **65** | P | **Pn** | **23 02 29.8** | **+0.9** |

baz=11,SNR=10

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KSM** | **Kuching** | **10.95** | **65** | ⇑P | **Pn** | **23 02 32.0** | **+3.1** |
| **KSM** | **Kuching** | **10.95** | **65** | *e*Pn | **Pn** | **23 02 30.0** | **+1.1** |
| **UGM** | **Wanagama** | **11.05** | **115** | P | **Pn** | **23 02 30.0** | **-0.2** |

baz=11,SNR=10.0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **11.05** | **115** | P | **Pn** | **23 02 30.1** | **-0.2** |
| **UGM** | **Wanagama** | **11.05** | **115** | *e*Pn | **Pn** | **23 02 29.5** | **-0.8** |
| **TRTT** | **Trang** | **11.07** | **356** | P | **Pn** | **23 02 29.9** | **-0.7** |

214nm,1.0s,4μm

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PBKI** | **Pangkalan Bun** | **11.24** | **87** | P | Pn | 23 02 37.2 | +4.3 |
| **PKDT** | **Phuket** | **11.30** | **349** | P | Pn | 23 02 38.7 | +5.0 |
| **WOJI** | **Wonogiri, Jawa** | **11.38** | **114** | P | **Pn** | **23 02 34.8** | **0.0** |
| **STKI** | **Sintang** | **11.53** | **73** | P | Pn | 23 02 41.8 | +4.9 |
| **NGJI** | **Ngawi** | **11.71** | **111** | P | **Pn** | **23 02 41.3** | **+2.0** |
| **PCJI** | **Pacitan** | **11.75** | **115** | P | **Pn** | **23 02 40.9** | **+1.0** |
| **TBJI** | **Tambak Boyo** | **11.90** | **108** | P | **Pn** | **23 02 43.7** | **+1.7** |
| **CMBY** | **CAMPBELL BAY** | **12.11** | **328** | *e*P | **Pn** | **23 02 44.3** | **-0.5** |
| CMBY | | | | AMB | AMB | 23 03 09.0 | |

comp=Z,130nm,3.0s

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PWJI** | **Pagerwojo** | **12.26** | **113** | P | **Pn** | **23 02 46.1** | **-0.7** |
| **BWJI** | **Bawean** | **12.45** | **102** | P | **Pn** | **23 02 51.3** | **+1.8** |
| **SBUM** | **Sibu** | **13.09** | **64** | ⇑P | Pn | 23 03 01.5 | +3.3 |
| **SBUM** | **Sibu** | **13.09** | **64** | *e*Pn | Pn | 23 03 02.0 | +3.7 |
| **KMMI** | **Kalianget** | **13.99** | **106** | P | **Pn** | **23 03 11.6** | **+1.1** |
| **BBKI** | **Banjar Baru** | **14.39** | **91** | P | Pn | 23 03 19.3 | +3.3 |



| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ABJI** | **Asem Bagus** | **14.45** | **109** | P | | **Pn** | **23 03 17.8** | **+1.0** |
| **MTKI** | **Muara Teweh, K** | **14.64** | **81** | P | | **Pn** | **23 03 20.9** | **+1.5** |
| **IGBI** | **Denpasar** | **15.63** | **111** | P | | Pn | 23 03 23.6 | -8.9 |
| **DNP** | **Denpasar** | **15.64** | **111** | P | | **Pn** | **23 03 33.4** | **+0.7** |
| **KBKI** | **Kotabaru** | **15.71** | **91** | P | | **P** | **23 03 35.8** | **-1.6** |
| **CHBT** | **CHBT** | **16.04** | **7** | P | | **Pn** | **23 03 37.9** | **+0.1** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,5µm,17.3s | | | | | | | | |
| **NLAI** | **Namlea** | **26.63** | **91** | P | **P** | **23 05 31.8** | **+1.2** |
| **RCP** | **Roxas** | **26.65** | **56**⇑ | *e*P | **P** | **23 05 32.7** | **+1.9** |
| **VIS** | **Vishakhapatnam** | **26.83** | **322** | *e*P | **P** | **23 05 31.7** | **-0.7** |
| **CHLP** | **Challavanipeta** | **27.00** | **324** | *e*P | **P** | **23 05 34.7** | **+0.8** |
| CHLP | | | | *e*S | **S** | **23 10 10.7** | **+0.6** |
| CHLP | | | | IVMs_BB | IVMs_BB | 23 19 08.4 | |
| | comp=Z,4µm,21.2s | | | | | | |
| **DAV** | **Davao City (W)** | **27.13** | **68** | P | **P** | **23 05 35.8** | **+0.6** |
| | comp=Z,74nm,0.4s,baz=32,slow=5.3,SNR=7.5 | | | | | | |
| DAV | | | | S | **S** | **23 10 06.9** | **-5.4** |
| | comp=Z,69nm,0.4s,baz=59,slow=18,SNR=1.7 | | | | | | |
| **DAV** | **Davao City (W)** | **27.13** | **68** | *e*P | **P** | **23 05 33.1** | **-2.0** |
| | comp=Z,2µm,2.1s | | | | | | |
| DAV | | | | S | **S** | **23 10 06.9** | **-5.4** |
| **LBMI** | **Labuha** | **27.18** | **85** | P | **P** | **23 05 35.9** | **+0.3** |
| **TNTI** | **Ternate** | **27.23** | **82** | P | **P** | **23 05 34.8** | **-1.2** |
| **TNTI** | **Ternate** | **27.23** | **82** | *e*P | **P** | **23 05 34.0** | **-2.0** |
| | comp=Z,327nm,1.2s | | | | | | |
| **PVM** | **Polavaram** | **27.58** | **318** | *e*P | **P** | **23 05 40.0** | **+0.9** |
| PVM | | | | *e*S | **S** | **23 10 18.8** | **-0.5** |
| PVM | | | | IVMs_BB | IVMs_BB | 23 17 41.8 | |
| | comp=Z,4µm,19.6s | | | | | | |
| **AAI** | **Ambon** | **27.72** | **92** | P | **P** | **23 05 40.5** | **+0.1** |
| **ADKI** | **Addanki** | **27.76** | **314** | *e*P | **P** | **23 05 42.1** | **+1.3** |
| ADKI | | | | *e*S | **S** | **23 10 23.4** | **+1.2** |
| ADKI | | | | IVMs_BB | IVMs_BB | 23 16 13.4 | |
| | comp=Z,5µm,20.8s | | | | | | |
| **BCPH** | **Baguio City Da** | **27.90** | **45**⇓ | *i*P | **P** | **23 05 40.4** | **-1.8** |
| BCPH | | | | *i* S | S | 23 10 44.2 | +19 |
| **H08S2** | **Diego Garcia H** | **28.14** | **260** | T | T | 23 34 58.3 | |
| | baz=82,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.14** | **260** | T | T | 23 34 57.2 | |
| | baz=82,slow=75 | | | | | | |
| **DGAR** | **Diego Garcia** | **28.15** | **260** | PFAKE | | 23 06 00.0 | +16 |
| DGAR | | | | LR | LR | | |
| | comp=Z,10µm,18.0s | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.16** | **260** | T | T | 23 34 57.1 | |
| | baz=82,slow=75 | | | | | | |
| **RCLA** | **Racherla** | **28.26** | **312** | *e*P | **P** | **23 05 46.0** | **+0.8** |
| RCLA | | | | *e*S | **S** | **23 10 29.8** | **-0.2** |
| RCLA | | | | IVMs_BB | IVMs_BB | 23 18 15.6 | |
| | comp=Z,5µm,19.7s | | | | | | |
| **KMI** | **Kunming** | **28.33** | **4** | P | **P** | **23 05 47.3** | **+1.4** |
| KMI | | | | pP | **pP** | **23 05 53.5** | **+0.2** |
| KMI | | | | sP | **sP** | **23 05 56.5** | **+0.1** |
| KMI | | | | PP | **PnPn** | **23 06 41.8** | **+6.7** |
| KMI | | | | S | **S** | **23 10 35.3** | **+4.0** |
| KMI | | | | PMZ | | | |
| | comp=Z,85nm,1.3s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,2µm,14.3s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,21µm,14.2s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,14µm,12.4s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,24µm,13.9s | | | | | | |
| **MSAI** | **Masohi** | **28.45** | **91** | P | **P** | **23 05 46.8** | **-0.2** |
| **SZP** | **Santa** | **28.62** | **43** | *e*P | **P** | **23 05 49.4** | **+1.0** |
| | comp=Z,496nm,1.3s | | | | | | |
| SZP | | | | LR | LR | | |
| | comp=Z,11µm,18.0s | | | | | | |
| **NJS** | **Nagarjunasagar** | **28.71** | **314** | *e*P | **P** | **23 05 50.0** | **+0.9** |
| NJS | | | | *e*S | **S** | **23 10 37.5** | **+0.4** |
| NJS | | | | IVMs_BB | IVMs_BB | 23 18 39.0 | |
| | comp=Z,5µm,20.8s | | | | | | |
| **SRLM** | **Srisailam** | **28.71** | **313** | *e*P | **P** | **23 05 50.1** | **+0.8** |
| SRLM | | | | *e*S | **S** | **23 10 37.6** | **+0.4** |
| SRLM | | | | IVMs_BB | IVMs_BB | 23 17 48.8 | |
| | comp=Z,4µm,20.5s | | | | | | |
| **HKC** | **Hong Kong Obse** | **28.76** | **27** | *i* P | **P** | **23 05 47.0** | **-2.6** |
| **MEEK** | **Meekatharra** | **29.03** | **145** | P | **P** | **23 05 53.2** | **+1.2** |
| | baz=29,SNR=11 | | | | | | |
| **GZH** | **Guangzhou** | **29.08** | **25** | P | **P** | **23 05 52.5** | **+0.1** |
| GZH | | | | LN | | | |
| | comp=Z,29µm,15.4s | | | | | | |
| GZH | | | | LE | | | |
| | comp=Z,28µm,16.8s | | | | | | |
| **URV** | **Uravakonda** | **29.24** | **309** | *e*P | **P** | **23 05 54.8** | **+0.9** |
| URV | | | | *e*S | **S** | **23 10 45.1** | **-0.4** |
| URV | | | | IVMs_BB | IVMs_BB | 23 18 28.4 | |
| | comp=Z,4µm,20.7s | | | | | | |
| **BNDI** | **Bandanaira** | **29.43** | **93** | P | **P** | **23 05 55.6** | **-0.1** |
| **MORW** | **Morawa** | **29.63** | **152** | P | **P** | **23 05 57.7** | **+0.5** |
| | baz=30,SNR=4.6 | | | | | | |
| **HYB** | **Hyderabad** | **29.82** | **314** | *e*P | **P** | **23 05 58.5** | **-0.6** |
| HYB | | | | *e* | | 23 06 06.0 | |
| **HYB** | **Hyderabad** | **29.82** | **314** | *i* P | **P** | **23 05 58.5** | **-0.6** |
| HYB | | | | *e* | | 23 06 06.0 | |
| HYB | | | | *e*S | **S** | **23 10 54.0** | **-0.6** |
| HYB | | | | LR | LR | 23 18 00.0 | |
| | comp=Z,14nm,20.0s | | | | | | |
| **HYB** | **Hyderabad** | **29.82** | **314** | *e*P | **P** | **23 05 60.0** | **+0.9** |
| HYB | | | | AMB | AMB | 23 06 07.9 | |
| | comp=Z,172nm,1.0s | | | | | | |
| **HYB** | **Hyderabad** | **29.82** | **314** | *e*P | **P** | **23 05 58.5** | **-0.6** |
| HYB | | | | *e* | | 23 06 06.0 | |
| **HYBB** | **Hyderabad (bro** | **29.82** | **314** | *e*P | **P** | **23 05 59.5** | **+0.4** |
| HYBB | | | | *e*S | **S** | **23 10 53.6** | **-1.1** |
| HYBB | | | | IVMs_BB | IVMs_BB | 23 19 00.8 | |
| | comp=Z,4µm,18.2s | | | | | | |
| **SHL** | **Shillong** | **29.85** | **344** | *e*P | **P** | **23 05 59.7** | **+0.3** |
| **GYA** | **Guiyang** | **30.18** | **11**⇑ | *i*P | **P** | **23 06 02.0** | **-0.2** |
| GYA | | | | sP | **sP** | **23 06 14.5** | **+1.8** |
| GYA | | | | PP | **PnPn** | **23 07 04.8** | **+4.6** |
| GYA | | | | PcP | **PcP** | **23 09 05.5** | **+2.3** |
| GYA | | | | S | S | 23 11 07.8 | +7.6 |
| GYA | | | | SS | **ScP** | **23 12 42.0** | **-2.1** |
| GYA | | | | ScS | **ScS** | **23 16 39.8** | **-0.2** |
| GYA | | | | PMZ | | | |
| | comp=Z,80nm,1.0s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,22µm,14.2s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,25µm,16.1s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,32µm,14.5s | | | | | | |
| **RPR** | **Rampur** | **30.28** | **317** | *e*P | **P** | **23 06 03.5** | **+0.4** |
| RPR | | | | *e*S | **S** | **23 11 01.1** | **-0.6** |
| RPR | | | | IVMs_BB | IVMs_BB | 23 25 57.5 | |
| | comp=Z,2µm,15.6s | | | | | | |
| **BOK** | **Bokaro** | **30.41** | **333** | *e*P | **P** | **23 06 05.9** | **+1.6** |
| BOK | | | | AMB | AMB | 23 06 13.5 | |
| | comp=Z,220nm,1.1s | | | | | | |
| **KNRA** | **Kununurra** | **30.48** | **116** | P | **P** | **23 06 04.1** | **-0.8** |
| | baz=30,SNR=23 | | | | | | |
| **SWI** | **Sorong** | **30.90** | **86** | P | **P** | **23 06 08.2** | **-0.5** |
| | baz=31,SNR=5.8 | | | | | | |
| **SWI** | **Sorong** | **30.90** | **86** | P | **P** | **23 06 07.8** | **-0.9** |
| **SRSP** | **Sriramsagar** | **30.98** | **316** | *e*P | **P** | **23 06 09.9** | **+0.6** |
| SRSP | | | | *e*S | **S** | **23 11 12.7** | **-0.1** |
| SRSP | | | | IVMs_BB | IVMs_BB | 23 18 34.7 | |
| | comp=Z,3µm,17.7s | | | | | | |
| **SAUI** | **Saumlaki** | **31.07** | **100** | P | **P** | **23 06 09.9** | **-0.2** |
| **SAUI** | **Saumlaki** | **31.07** | **100** | PFAKE | | 23 06 20.0 | +10 |
| SAUI | | | | LR | LR | | |
| | comp=Z,42µm,18.0s | | | | | | |
| **KLRI** | **Killari** | **31.65** | **313** | *e*P | **P** | **23 06 15.9** | **+0.6** |
| KLRI | | | | *e*S | **S** | **23 11 23.2** | **-0.2** |
| KLRI | | | | IVMs_BB | IVMs_BB | 23 20 04.8 | |
| | comp=Z,6µm,20.9s | | | | | | |
| **FAKI** | **Fak Fak** | **31.77** | **90** | P | **P** | **23 06 15.1** | **-1.3** |
| | baz=32,SNR=20 | | | | | | |
| **FAKI** | **Fak Fak** | **31.77** | **90** | P | **P** | **23 06 15.3** | **-1.1** |
| **FAKI** | **Fak Fak** | **31.77** | **90** | *e*P | **P** | **23 06 15.2** | **-1.3** |
| | comp=Z,125nm,1.0s | | | | | | |
| FAKI | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| **MTN** | **Manton Dam** | **31.81** | **109** | P | **P** | **23 06 15.0** | **-1.7** |
| | baz=32,SNR=20 | | | | | | |
| **MTN** | **Manton Dam** | **31.81** | **109** | *e*P | **P** | **23 06 15.0** | **-1.7** |
| | comp=Z,164nm,1.3s | | | | | | |
| MTN | | | | LR | LR | | |
| | comp=Z,10µm,21.0s | | | | | | |
| **NGP** | **Nagpur** | **32.07** | **320** | *e*P | **P** | **23 06 19.3** | **+0.5** |
| NGP | | | | *e*S | **S** | **23 11 29.8** | **0.0** |
| **GOA** | **Goa** | **32.27** | **306** | *e*P | **P** | **23 06 19.9** | **-0.7** |
| **ODAN** | **Odare** | **32.51** | **338** | *e*P | **P** | **23 06 24.4** | **+1.5** |
| | comp=Z,227nm,0.8s | | | | | | |
| **KLBR** | **Kellerberrin** | **32.54** | **152** | P | **P** | **23 06 23.9** | **+1.0** |
| | baz=33,SNR=5.4 | | | | | | |
| **TAPN** | **Taplejung** | **32.83** | **339** | *e*P | **P** | **23 06 27.8** | **+2.0** |
| | comp=Z,1µm,1.4s | | | | | | |
| **TWG** | **Pinlang** | **32.85** | **37** | PFAKE | | 23 06 40.0 | +14 |
| TWG | | | | LR | LR | | |
| | comp=Z,28µm,18.0s | | | | | | |
| **RAMN** | **Ramite** | **32.89** | **337** | *e*P | **P** | **23 06 28.1** | **+1.8** |
| | comp=Z,753nm,1.5s | | | | | | |
| **TPUB** | **Ta-pu** | **32.96** | **36** | *e*P | **P** | **23 06 27.8** | **+1.2** |
| | comp=Z,1µm,2.6s | | | | | | |
| TPUB | | | | LR | LR | | |
| | comp=Z,7µm,18.0s | | | | | | |
| **KDU** | **Kakadu** | **33.04** | **108** | P | **P** | **23 06 26.1** | **-1.4** |
| | baz=33,SNR=4.9 | | | | | | |
| **QZH** | **Quanzhou** | **33.14** | **31** | P | **P** | **23 06 31.0** | **+2.8** |
| QZH | | | | S | S | 23 11 55.0 | +8.7 |
| QZH | | | | PMZ | | | |
| | comp=Z,1µm,2.0s | | | | | | |
| QZH | | | | LN | | | |
| | comp=Z,18µm,13.2s | | | | | | |
| QZH | | | | LE | | | |
| | comp=Z,39µm,14.4s | | | | | | |
| QZH | | | | LZ | | | |
| | comp=Z,35µm,17.7s | | | | | | |
| **YULB** | **Yu-li** | **33.42** | **36** | PFAKE | | 23 06 40.0 | +9.3 |
| YULB | | | | LR | LR | | |
| | comp=Z,5µm,18.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **33.43** | **154** | P | **P** | **23 06 30.6** | **0.0** |
| | comp=Z,19nm,1.0s,baz=342,slow=0.0,SNR=5.0 | | | | | | |
| NWAO | | | | LR | LR | 23 19 21.2 | |
| | comp=Z,97nm,20.3s,baz=195,slow=35 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **33.43** | **154** | *e*P | **P** | **23 06 27.7** | **-2.9** |
| NWAO | | | | *e*PP | **pP** | **23 06 37.3** | **-0.8** |
| NWAO | | | | pmax | pmax | | |
| | comp=Z,46nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **33.43** | **154** | P | **P** | **23 06 31.8** | **+1.2** |
| | baz=34,SNR=4.9 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **33.43** | **154** | *e*P | **P** | **23 06 27.7** | **-2.9** |
| | comp=Z,46nm,1.0s | | | | | | |
| NWAO | | | | *e*pP | **pP** | **23 06 37.3** | **-0.8** |
| **SSLB** | **Suanglung** | **33.52** | **36** | *e*P | **P** | **23 06 32.8** | **+1.2** |
| | comp=Z,318nm,1.9s | | | | | | |
| SSLB | | | | LR | LR | | |
| | comp=Z,7µm,22.0s | | | | | | |
| **RKPI** | **Ransiki, Papua** | **33.76** | **88** | P | **P** | **23 06 33.6** | **-0.2** |
| **H01W3** | **Cape Leeuwin H** | **33.92** | **160** | T | T | 23 42 12.1 | |
| | baz=335,slow=76,SNR=1088 | | | | | | |
| **PKI** | **Pulchoki** | **33.92** | **336** | *e*P | **P** | **23 06 36.4** | **+1.0** |
| **PKIN** | **Phulchoki** | **33.93** | **336** | *e*P | **P** | **23 06 36.4** | **+1.0** |
| **H01W2** | **Cape Leeuwin H** | **33.94** | **160** | T | T | 23 42 13.2 | |
| | baz=335,slow=76,SNR=933 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.94** | **160** | T | T | 23 42 14.2 | |
| | baz=335,slow=76,SNR=999 | | | | | | |
| **LSA** | **Lhasa** | **33.98** | **345** | P | **P** | **23 06 37.3** | **+1.3** |
| LSA | | | | pP | **pP** | **23 06 43.8** | **+0.4** |
| LSA | | | | PP | **PP** | **23 07 54.0** | **+0.8** |
| LSA | | | | S | **S** | **23 12 00.5** | **+0.4** |
| LSA | | | | sS | **sS** | **23 12 11.5** | **-0.9** |
| LSA | | | | PMZ | | | |
| | comp=Z,120nm,1.3s | | | | | | |
| LSA | | | | PMZ | | | |
| | comp=Z,2µm,13.1s | | | | | | |
| LSA | | | | LN | | | |
| | comp=Z,7µm,20.6s | | | | | | |
| LSA | | | | LE | | | |
| | comp=Z,9µm,22.4s | | | | | | |
| LSA | | | | LZ | | | |
| | comp=Z,10µm,18.7s | | | | | | |
| **LSA** | **Lhasa** | **33.98** | **345** | *e*P | **P** | **23 06 37.5** | **+1.5** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,278nm,1.4s | | | | | | |
| LSA | | | | MLR | MLR | | |
| | comp=Z,9µm,21.0s | | | | | | |
| **LSA** | **Lhasa** | **33.98** | **345** | *e*P | **P** | **23 06 37.5** | **+1.5** |
| | comp=Z,278nm,1.4s | | | | | | |
| LSA | | | | LR | LR | | |
| | comp=Z,9µm,21.0s | | | | | | |
| **POO** | **Poona** | **33.98** | **311** | *e*P | **P** | **23 06 35.7** | **0.0** |
| POO | | | | *i* PP | **PnPn** | **23 07 48.0** | **-1.2** |
| POO | | | | *e*PCP | **PcP** | **23 09 14.0** | **+0.3** |
| **GUN** | **Gumba** | **34.03** | **337** | *e*P | **P** | **23 06 37.8** | **+1.4** |
| | comp=Z,265nm,0.4s | | | | | | |
| **DMN** | **Daman** | **34.08** | **335** | *e*P | **P** | **23 06 38.0** | **+1.3** |
| **CD2** | **Chengdu** | **34.15** | **5**⇑ | *i*P | **P** | **23 06 37.0** | **0.0** |
| CD2 | | | | pP | **pP** | **23 06 43.5** | **-0.9** |
| CD2 | | | | PP | **PP** | **23 07 55.8** | **+1.2** |
| CD2 | | | | S | **S** | **23 12 05.5** | **+3.6** |
| CD2 | | | | sS | **sS** | **23 12 16.0** | **+1.8** |
| CD2 | | | | SS | **SnSn** | **23 14 15.8** | **+4.8** |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,0.8s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,2µm,5.9s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,21µm,16.2s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,26µm,14.7s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,25µm,17.0s | | | | | | |
| **KKN** | **Kakani** | **34.17** | **336** | *e*P | **P** | **23 06 38.6** | **+1.2** |
| | comp=Z,428nm,1.3s | | | | | | |
| **NACB** | **Ninganchiao** | **34.19** | **36** | *e*P | **P** | **23 06 38.5** | **+1.1** |
| | comp=Z,117nm,1.2s | | | | | | |
| NACB | | | | LR | LR | | |
| | comp=Z,8µm,21.0s | | | | | | |
| **YHNB** | **Yeheng** | **34.45** | **35** | PFAKE | | 23 06 50.0 | +10 |
| YHNB | | | | LR | LR | | |
| | comp=Z,9µm,22.0s | | | | | | |
| **WRKA** | **Warakurna** | **34.46** | **131** | P | **P** | **23 06 40.3** | **+0.6** |
| | baz=34,SNR=13 | | | | | | |
| **ENH** | **Enshi** | **34.47** | **14** | *e*P | **P** | **23 06 39.6** | **-0.2** |
| | comp=Z,154nm,1.6s | | | | | | |
| ENH | | | | LR | LR | | |
| | comp=Z,11µm,20.0s | | | | | | |
| **KMBL** | **Kambalda** | **34.48** | **146** | P | **P** | **23 06 40.4** | **+0.5** |
| | baz=35,SNR=11 | | | | | | |
| **BHPL** | **Bhopal** | **34.62** | **321** | *e*P | **P** | **23 06 41.0** | **-0.1** |
| BHPL | | | | AMB | AMB | 23 06 42.3 | |
| | comp=Z,54nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **34.62** | **335** | *e*P | **P** | **23 06 42.4** | **+1.1** |
| | comp=Z,372nm,1.3s | | | | | | |
| **TATO** | **Taipei** | **34.75** | **35** | PFAKE | | 23 06 50.0 | +7.9 |
| TATO | | | | LR | LR | | |
| | comp=Z,11µm,19.0s | | | | | | |
| **RKGY** | **Rocky Gully** | **34.76** | **156** | P | **P** | **23 06 43.3** | **+1.1** |
| | baz=35,SNR=4.9 | | | | | | |
| **KOLN** | **Kolanda** | **34.87** | **333** | *e*P | **P** | **23 06 44.8** | **+1.3** |
| | comp=Z,547nm,1.4s | | | | | | |
| **YOJ** | **Yonaguni jima** | **35.25** | **37** | PFAKE | | 23 07 00.0 | +13 |
| YOJ | | | | LR | LR | | |
| | comp=Z,11µm,19.0s | | | | | | |
| **WHN** | **Wuhan** | **36.17** | **21** | P | **P** | **23 06 55.0** | **+0.7** |
| WHN | | | | S | **S** | **23 12 38.5** | **+5.6** |
| WHN | | | | PMZ | | | |
| | comp=Z,760nm,1.6s | | | | | | |
| WHN | | | | PMZ | | | |
| | comp=Z,4µm,5.4s | | | | | | |
| WHN | | | | LN | | | |
| | comp=Z,60µm,13.7s | | | | | | |
| WHN | | | | LE | | | |
| | comp=Z,20µm,11.3s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,95µm,14.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **36.99** | **119** | P | **P** | **23 07 00.9** | **-0.6** |
| | comp=Z,74nm,1.1s,baz=293,slow=10,SNR=82 | | | | | | |
| WRA | | | | S | **S** | **23 12 41.3** | **-4.5** |
| | comp=Z,44nm,0.9s,baz=293,slow=16,SNR=14 | | | | | | |
| WRA | | | | LR | LR | 23 24 20.0 | |
| | comp=Z,11µm,20.5s,baz=290,slow=40 | | | | | | |
| **WRAB** | **Tennant Creek** | **36.99** | **119** | *e*P | **P** | **23 07 01.6** | **0.0** |
| WRAB | | | | *e*S | **S** | **23 12 45.3** | **-0.6** |
| **WRAB** | **Tennant Creek** | **36.99** | **119** | P | **P** | **23 07 01.0** | **-0.6** |
| | comp=Z,448nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **36.99** | **119** | *e*P | **P** | **23 06 59.7** | **-1.9** |
| | comp=Z,87nm,1.1s | | | | | | |
| WRAB | | | | LR | LR | | |
| | comp=Z,16µm,22.0s | | | | | | |
| **WB2** | **Warramunga Arr** | **37.00** | **119** | PFAKE | | 23 07 10.0 | +8.4 |
| WB2 | | | | LR | LR | | |
| | comp=Z,12µm,21.0s | | | | | | |
| **XAN** | **Xi'an** | **37.98** | **11** | P | **P** | **23 07 09.5** | **-0.2** |
| XAN | | | | pP | **pP** | **23 07 19.5** | **+2.3** |
| XAN | | | | sP | **sP** | **23 07 23.5** | **+3.3** |
| XAN | | | | S | **S** | **23 12 57.3** | **-3.2** |
| XAN | | | | SS | **SnSn** | **23 15 37.3** | **-6.3** |
| XAN | | | | PMZ | | | |
| | comp=Z,290nm,1.3s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,2µm,13.0s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,15µm,15.3s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,18µm,14.3s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,30µm,15.3s | | | | | | |
| **AS12** | **Alice Springs** | **38.16** | **125** | *e*P | **P** | **23 07 11.5** | **0.0** |
| AS12 | | | | *e*PcP | **PcP** | **23 09 26.2** | **+0.2** |
| **AS31** | **Alice Springs** | **38.16** | **125** | PFAKE | | 23 07 20.0 | +8.5 |
| AS31 | | | | LR | LR | | |
| | comp=Z,200nm,21.0s | | | | | | |
| **ASAR** | **Alice Springs** | **38.16** | **125** | P | **P** | **23 07 11.5** | **0.0** |
| | comp=Z,110nm,1.0s,baz=300,slow=7.8,SNR=452 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 09 26.2** | **+0.2** |
| | comp=Z,5.4nm,0.5s,baz=297,slow=2.1,SNR=3.5 | | | | | | |
| ASAR | | | | S | **S** | **23 12 59.1** | **-4.5** |
| | comp=Z,5.1nm,0.8s,baz=296,slow=15,SNR=5.6 | | | | | | |
| ASAR | | | | LR | LR | 23 24 39.2 | |
| | comp=Z,14µm,21.6s,baz=296,slow=39 | | | | | | |
| **AS01** | **Alice Springs** | **38.20** | **125** | *e*P | **P** | **23 07 10.7** | **-1.1** |
| **SMPI** | **Sarmi** | **38.26** | **89** | P | **P** | **23 07 12.3** | **-0.1** |
| **NDI** | **New Delhi** | **38.83** | **326** | *e*P | **P** | **23 07 15.0** | **-1.9** |
| NDI | | | | *ex* | x | 23 13 20.0 | |
| **NJ2** | **Nanjing** | **39.26** | **25** | *e*P | **P** | **23 07 21.3** | **+0.9** |
| NJ2 | | | | sP | **sP** | **23 07 29.0** | **-1.9** |
| NJ2 | | | | PP | **PP** | **23 08 51.3** | **+0.5** |
| NJ2 | | | | PcP | **PcP** | **23 09 29.3** | **+0.1** |
| NJ2 | | | | S | **S** | **23 13 21.0** | **+1.3** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,120nm,1.2s | | | | | | |
| NJ2 | | | | PMZ | | | |
| | comp=Z,2µm,6.4s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=Z,21µm,20.0s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=Z,21µm,21.1s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=Z,18µm,18.8s | | | | | | |
| **LZH** | **Lanzhou** | **39.30** | **4**⇑ | P | **P** | **23 07 21.8** | **+0.9** |
| LZH | | | | pP | **pP** | **23 07 28.8** | **+0.4** |
| LZH | | | | sP | **sP** | **23 07 32.8** | **+1.4** |
| LZH | | | | PP | **PnPn** | **23 08 58.0** | **+3.9** |
| LZH | | | | *e*S | **S** | **23 13 21.3** | **+0.8** |
| LZH | | | | sS | **sS** | **23 13 33.3** | **+0.4** |
| LZH | | | | SS | **SS** | **23 16 09.0** | **-5.7** |
| LZH | | | | ScS | **ScS** | **23 17 28.0** | **-0.5** |
| LZH | | | | PMZ | | | |
| | comp=Z,710nm,1.8s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,2µm,5.2s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,12µm,13.0s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,24µm,13.8s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,28µm,17.1s | | | | | | |
| **SSE** | **Sheshan** | **39.50** | **29**⇑ | P | **P** | **23 07 23.5** | **+1.1** |
| SSE | | | | pP | **pP** | **23 07 29.5** | **-0.4** |
| SSE | | | | sP | **sP** | **23 07 31.8** | **-1.2** |
| SSE | | | | PP | **PP** | **23 08 53.8** | **+0.4** |
| SSE | | | | S | **S** | **23 13 25.0** | **+1.6** |
| SSE | | | | sS | **sS** | **23 13 35.5** | **-0.2** |
| SSE | | | | PMZ | | | |
| | comp=Z,72nm,1.3s | | | | | | |
| SSE | | | | PMZ | | | |
| | comp=Z,2µm,5.8s | | | | | | |
| SSE | | | | LN | | | |
| | comp=Z,22µm,15.0s | | | | | | |
| SSE | | | | LE | | | |
| | comp=Z,3µm,15.0s | | | | | | |
| SSE | | | | LZ | | | |
| | comp=Z,22µm,15.4s | | | | | | |
| **DDI** | **Dehra Dun** | **39.67** | **329** | *e*P | **P** | **23 07 23.3** | **-0.7** |
| **GENI** | **Genyem** | **39.69** | **90** | P | **P** | **23 07 23.2** | **-1.2** |
| **BHJ** | **Bhuj** | **39.95** | **313** | *e*P | **P** | **23 07 26.0** | **-0.3** |
| **JAY** | **Jayapura** | **40.23** | **90** | P | **P** | **23 07 27.0** | **-1.9** |
| | baz=40,SNR=4.7 | | | | | | |
| **SMLA** | **Simla** | **40.77** | **329** | *i* P | **P** | **23 07 33.6** | **+0.6** |
| SMLA | | | | *i* x | x | 23 13 41.0 | |
| **QIS** | **Mount Isa** | **41.83** | **117** | P | **P** | **23 07 41.8** | **-0.2** |
| | baz=42,SNR=26 | | | | | | |
| **DHRM** | **DHARAMSHALA** | **42.11** | **329** | *e*P | **P** | **23 07 43.8** | **-0.5** |
| **TIA** | **Tai'an** | **42.28** | **20**⇑ | P | **P** | **23 07 45.0** | **-0.3** |
| TIA | | | | pP | **pP** | **23 07 56.0** | **+3.2** |
| TIA | | | | S | **S** | **23 14 00.8** | **-3.8** |
| TIA | | | | sS | **sS** | **23 14 17.0** | **0.0** |
| TIA | | | | PMZ | | | |
| | comp=Z,60nm,1.3s | | | | | | |
| TIA | | | | PMZ | | | |
| | comp=Z,2µm,4.8s | | | | | | |
| TIA | | | | LN | | | |
| | comp=Z,28µm,14.9s | | | | | | |
| TIA | | | | LE | | | |
| | comp=Z,15µm,15.5s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=Z,41µm,13.7s | | | | | | |
| **TIY** | **Taiyuan** | **42.28** | **14** | *e*P | **P** | **23 07 46.5** | **+1.1** |
| TIY | | | | pP | **pP** | **23 07 52.8** | **-0.2** |
| TIY | | | | PP | **PP** | **23 09 26.0** | **+2.3** |
| TIY | | | | S | **S** | **23 14 05.0** | **+0.2** |
| TIY | | | | sS | **sS** | **23 14 18.8** | **+1.5** |
| TIY | | | | PMZ | | | |
| | comp=Z,110nm,0.9s | | | | | | |
| TIY | | | | PMZ | | | |
| | comp=Z,2µm,5.2s | | | | | | |
| TIY | | | | LN | | | |
| | comp=Z,23µm,14.5s | | | | | | |
| TIY | | | | LE | | | |
| | comp=Z,8µm,14.6s | | | | | | |
| TIY | | | | LZ | | | |
| | comp=Z,21µm,14.5s | | | | | | |
| **GTA** | **Gaotai** | **42.49** | **359** | *e*P | **P** | **23 07 48.0** | **+0.9** |
| GTA | | | | pP | **pP** | **23 07 53.5** | **-1.2** |
| GTA | | | | sP | **sP** | **23 07 56.5** | **-1.2** |
| GTA | | | | PcP | **PcP** | **23 09 38.0** | **-1.7** |
| GTA | | | | ScP | **ScP** | **23 13 30.0** | **+0.9** |
| GTA | | | | PcS | **PcS** | **23 13 31.8** | **0.0** |
| GTA | | | | S | **S** | **23 14 09.5** | **+1.6** |
| GTA | | | | sS | **sS** | **23 14 19.8** | **-0.5** |
| GTA | | | | SS | **SS** | **23 17 13.8** | **-4.2** |
| GTA | | | | ScS | **ScS** | **23 17 44.8** | **-2.7** |
| GTA | | | | PMZ | | | |
| | comp=Z,99nm,1.4s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,2µm,4.7s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,12µm,15.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,22µm,18.0s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,12µm,15.2s | | | | | | |
| **COEN** | **Coen** | **43.49** | **107** | P | **P** | **23 07 54.0** | **-1.5** |
| | baz=44,SNR=6.3 | | | | | | |
| **COEN** | **Coen** | **43.49** | **107** | *e*P | **P** | **23 07 52.8** | **-2.8** |
| | comp=Z,62nm,1.1s | | | | | | |
| COEN | | | | LR | LR | | |
| | comp=Z,13µm,20.0s | | | | | | |
| **BBOO** | **Buckleboo** | **44.44** | **136** | P | **P** | **23 08 03.3** | **+0.4** |
| | baz=44,SNR=6.1 | | | | | | |
| **BBOO** | **Buckleboo** | **44.44** | **136** | PFAKE | | 23 08 10.0 | +7.2 |
| BBOO | | | | LR | LR | | |
| | comp=Z,21µm,21.0s | | | | | | |
| **BTO** | **Baotou** | **44.55** | **10** | *e*P | **P** | **23 08 04.8** | **+1.1** |
| **KSJD** | **Jindo** | **44.76** | **31** | P | **P** | **23 08 06.3** | **+0.9** |
| | SNR=8.9 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.09** | **12** | *e*P | **P** | **23 08 09.5** | **+1.5** |
| HHC | | | | PP | **PcP** | **23 09 50.0** | **+1.5** |
| HHC | | | | S | S | 23 14 56.0 | +10 |
| HHC | | | | sS | **sS** | **23 15 03.3** | **+5.0** |
| HHC | | | | PMZ | | | |
| | comp=Z,220nm,1.3s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,2µm,5.3s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,16µm,14.7s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,14µm,13.9s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,10µm,14.5s | | | | | | |
| **MTSU** | **Mount Surprise** | **45.43** | **112** | P | **P** | **23 08 10.9** | **-0.1** |
| | baz=45,SNR=77 | | | | | | |
| **BJT** | **Baijiatuau** | **45.45** | **17** | *e*P | **P** | **23 08 11.8** | **+1.1** |
| BJT | | | | pmax | pmax | | |
| | comp=Z,239nm,1.3s | | | | | | |
| BJT | | | | MLR | MLR | | |
| | comp=Z,42µm,18.0s | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BJT** | **Baijiatuau** | **45.45** | **17** | *e*P | | **P** | | **23 08 11.8** | **+1.1** |
| | comp=Z,239nm,1.3s | | | | | | | | |
| BJT | | | | LR | | LR | | | |
| | comp=Z,42µm,18.0s | | | | | | | | |
| **BJI** | **Beijing** | **45.47** | **17** | P | | **P** | | **23 08 11.5** | **+0.6** |
| BJI | | | | PP | | **PP** | | **23 10 01.5** | **+3.9** |
| BJI | | | | S | | **S** | | **23 14 49.0** | **-2.1** |
| BJI | | | | PMZ | | | | | |
| | comp=Z,150nm,1.5s | | | | | | | | |
| BJI | | | | PMZ | | | | | |
| | comp=Z,3µm,4.3s | | | | | | | | |
| BJI | | | | LN | | | | | |
| | comp=Z,34µm,16.9s | | | | | | | | |
| BJI | | | | LE | | | | | |
| | comp=Z,20µm,19.3s | | | | | | | | |
| BJI | | | | LZ | | | | | |
| | comp=Z,26µm,19.3s | | | | | | | | |
| **KSJEU** | **Jeongeup** | **45.88** | **30** | P | | **P** | | **23 08 14.8** | **+0.6** |
| | SNR=6.7 | | | | | | | | |
| **KSGUS** | **GUNSAN** | **46.23** | **30** | P | | **P** | | **23 08 17.6** | **+0.7** |
| | SNR=8.1 | | | | | | | | |
| **JNU** | **Nakatsue** | **46.27** | **36** | LR | | LR | | 23 27 57.6 | |
| | comp=Z,8µm,21.4s,baz=239,slow=36 | | | | | | | | |
| **JNU** | **Nakatsue** | **46.27** | **36** | *e*P | | **P** | | **23 08 17.8** | **+0.5** |
| | comp=Z,381nm,1.1s | | | | | | | | |
| **DL2** | **Dalian** | **46.32** | **23** | P | | **P** | | **23 08 18.3** | **+0.7** |
| DL2 | | | | PP | | **PP** | | **23 10 05.3** | **-1.4** |
| DL2 | | | | S | | **S** | | **23 15 06.3** | **+3.0** |
| DL2 | | | | PMZ | | | | | |
| | comp=Z,130nm,1.5s | | | | | | | | |
| DL2 | | | | PMZ | | | | | |
| | comp=Z,1µm,6.6s | | | | | | | | |
| DL2 | | | | LN | | | | | |
| | comp=Z,12µm,15.2s | | | | | | | | |
| DL2 | | | | LE | | | | | |
| | comp=Z,6µm,14.0s | | | | | | | | |
| DL2 | | | | LZ | | | | | |
| | comp=Z,17µm,15.3s | | | | | | | | |
| **PMG** | **Port Moresby** | **46.81** | **100** | *e*P | | **P** | | **23 08 21.3** | **-0.5** |
| PMG | | | | pmax | | pmax | | | |
| | comp=Z,116nm,1.0s | | | | | | | | |
| PMG | | | | MLR | | MLR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **PMG** | **Port Moresby** | **46.81** | **100** | P | | **P** | | **23 08 21.1** | **-0.8** |
| | baz=47,SNR=4.7 | | | | | | | | |
| **PMG** | **Port Moresby** | **46.81** | **100** | *e*P | | **P** | | **23 08 21.3** | **-0.5** |
| | comp=Z,116nm,1.0s | | | | | | | | |
| PMG | | | | LR | | LR | | | |
| | comp=Z,2µm,20.0s | | | | | | | | |
| **MANU** | **Manus Island** | **46.90** | **90** | *e*P | | **P** | | **23 08 22.1** | **-0.6** |
| | comp=Z,97nm,1.4s | | | | | | | | |
| **RER** | **Riviere de l'E** | **46.92** | **244** | PFAKE | | | | 23 08 40.0 | +17 |
| RER | | | | LR | | LR | | | |
| | comp=Z,5µm,18.0s | | | | | | | | |
| **KSBON** | **Boeun** | **47.10** | **30** | P | | **P** | | **23 08 24.6** | **+0.8** |
| | SNR=6.7 | | | | | | | | |
| **GUMO** | **Guam** | **47.17** | **68** | LR | | LR | | 23 29 28.6 | |
| | comp=Z,731nm,21.6s,baz=227,slow=38 | | | | | | | | |
| **KSSAJ** | **Sangju** | **47.21** | **31** | P | | **P** | | **23 08 25.3** | **+0.7** |
| | SNR=9.0 | | | | | | | | |
| **INCN** | **Inchon** | **47.30** | **29** | PFAKE | | | | 23 08 40.0 | +15 |
| INCN | | | | LR | | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **KSICN** | **Icheon** | **47.53** | **29** | P | | **P** | | **23 08 27.5** | **+0.4** |
| | SNR=6.9 | | | | | | | | |
| **CTA** | **Charters Tower** | **47.67** | **114** | S | | **S** | | **23 15 20.6** | **-2.8** |
| | comp=Z,11nm,1.1s,baz=262,slow=7.1,SNR=12 | | | | | | | | |
| **CTAO** | **Charters Tower** | **47.67** | **114** | *e*P | | **P** | | **23 08 28.6** | **0.0** |
| CTAO | | | | pmax | | pmax | | | |
| | comp=Z,141nm,1.1s | | | | | | | | |
| CTAO | | | | MLR | | MLR | | | |
| | comp=Z,7µm,20.0s | | | | | | | | |
| **CTAO** | **Charters Tower** | **47.67** | **114** | *e*P | | **P** | | **23 08 28.6** | **0.0** |
| | comp=Z,142nm,1.1s | | | | | | | | |
| CTAO | | | | LR | | LR | | | |
| | comp=Z,7µm,20.0s | | | | | | | | |
| **KSMUS** | **Musan** | **47.69** | **28** | P | | **P** | | **23 08 28.6** | **+0.3** |
| | SNR=6.5 | | | | | | | | |
| **KBL** | **Kabul** | **47.82** | **325** | *e*P | | **P** | | **23 08 29.8** | **+0.1** |
| KBL | | | | pmax | | pmax | | | |
| | comp=Z,79nm,1.4s | | | | | | | | |
| KBL | | | | MLR | | MLR | | | |
| | comp=Z,5µm,21.0s | | | | | | | | |
| **KBL** | **Kabul** | **47.82** | **325** | *e*P | | **P** | | **23 08 29.8** | **+0.1** |
| | comp=Z,79nm,1.4s | | | | | | | | |
| KBL | | | | LR | | LR | | | |
| | comp=Z,5µm,21.0s | | | | | | | | |
| **KS15** | **Wonju Array Si** | **47.88** | **30** | *e*P | | **P** | | **23 08 30.3** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **47.88** | **30** | P | | **P** | | **23 08 30.3** | **+0.5** |
| **KSAR** | **Wonju Array Be** | **47.88** | **30** | P | | **P** | | **23 08 30.3** | **+0.5** |
| **QLP** | **Quilpie** | **47.89** | **123** | P | | **P** | | **23 08 31.0** | **+0.8** |
| | baz=48,SNR=56 | | | | | | | | |
| **KSRS** | **Korea Array** | **47.91** | **30** | P | | **P** | | **23 08 30.3** | **+0.3** |
| | comp=Z,166nm,1.2s,baz=219,slow=8.1,SNR=84 | | | | | | | | |
| KSRS | | | | LR | | LR | | 23 30 53.9 | |
| | comp=Z,6µm,18.1s,baz=246,slow=39 | | | | | | | | |
| **KS01** | **Wonju Array Si** | **47.91** | **30** | *e*P | | **P** | | **23 08 29.6** | **-0.4** |
| **KSH** | **Kashi** | **48.17** | **335** | ⇑P | | **P** | | **23 08 31.5** | **-0.7** |
| KSH | | | | *es*P | | **pP** | | **23 08 37.8** | **-2.0** |
| KSH | | | | *es*P | | **sP** | | **23 08 40.3** | **-2.5** |
| KSH | | | | *e*PP | | **PP** | | **23 10 22.8** | **-1.9** |
| KSH | | | | *e*ScP | | **ScP** | | **23 13 53.5** | **+0.9** |
| KSH | | | | PcS | | **PcS** | | **23 13 55.3** | **0.0** |
| KSH | | | | S | | **S** | | **23 15 26.5** | **-3.5** |
| KSH | | | | ScS | | **ScS** | | **23 18 21.5** | **-2.5** |
| KSH | | | | PMZ | | | | | |
| | comp=Z,42nm,1.0s | | | | | | | | |
| KSH | | | | PMZ | | | | | |
| | comp=Z,1µm,4.5s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,4µm,18.4s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,13µm,20.1s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,9µm,19.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **48.27** | **348** | P | | **P** | | **23 08 34.0** | **+1.2** |
| WMQ | | | | pP | | **pP** | | **23 08 41.0** | **+0.6** |
| WMQ | | | | PP | | **PP** | | **23 10 26.0** | **+0.5** |
| WMQ | | | | S | | **S** | | **23 15 32.0** | **+0.8** |
| WMQ | | | | ScS | | **ScS** | | **23 18 21.0** | **-3.4** |
| WMQ | | | | SS | | **SS** | | **23 18 57.0** | **-4.0** |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,250nm,1.0s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,1µm,5.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,7µm,18.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,7µm,18.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,7µm,18.0s | | | | | | | | |
| **KSIJA** | **INJE** | **48.42** | **29** | P | | **P** | | **23 08 34.8** | **+0.9** |
| | SNR=8.3 | | | | | | | | |
| **SMDO** | **Samad** | **48.92** | **305** | ⇓P | | **P** | | **23 08 39.1** | **+0.9** |
| | SNR=15 | | | | | | | | |
| **SNY** | **Shenyang** | **49.59** | **23** | ⇑P | | **P** | | **23 08 42.5** | **-0.3** |
| SNY | | | | S | | **S** | | **23 15 51.5** | **+1.9** |
| SNY | | | | PMZ | | | | | |
| | comp=Z,78nm,1.3s | | | | | | | | |
| SNY | | | | PMZ | | | | | |
| | comp=Z,3µm,7.3s | | | | | | | | |
| SNY | | | | LN | | | | | |
| | comp=Z,8µm,13.9s | | | | | | | | |
| SNY | | | | LE | | | | | |
| | comp=Z,14µm,15.5s | | | | | | | | |
| SNY | | | | LZ | | | | | |
| | comp=Z,14µm,14.7s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **49.67** | **333** | *i* P | | **P** | | **23 08 44.8** | **+1.0** |
| SFK | | | | pmax | | pmax | | | |
| | comp=Z,116nm,0.9s | | | | | | | | |
| **RBK** | **Rabkut** | **50.05** | **296** | ⇑P | | P | | 23 08 52.7 | +5.9 |
| | SNR=7.1 | | | | | | | | |
| **PDGK** | **Podgornoye** | **50.09** | **340** | *i* P | | **P** | | **23 08 48.3** | **+1.6** |
| PDGK | | | | pmax | | pmax | | | |
| | comp=Z,227nm,1.0s | | | | | | | | |
| **ARQ** | **Araqi** | **50.30** | **304** | ⇑P | | **P** | | **23 08 49.5** | **+0.8** |
| | SNR=5.7 | | | | | | | | |
| **CBIJ** | **Chichi jima** | **50.34** | **50** | *e*P | | **P** | | **23 08 46.0** | **-2.9** |
| | comp=Z,142nm,0.6s | | | | | | | | |
| **ARPS** | **Mount Arapiles** | **50.57** | **137** | P | | **P** | | **23 08 52.0** | **+1.6** |
| | baz=51,SNR=5.6 | | | | | | | | |
| **ABTO** | **Aybut** | **50.82** | **295** | ⇓P | | P | | 23 08 59.3 | +6.6 |
| | SNR=5.6 | | | | | | | | |
| **AAA** | **Alma-Ata** | **50.95** | **338** | *e*P | | **P** | | **23 08 54.2** | **+0.9** |
| AAA | | | | *e*S | | **S** | | **23 16 11.7** | **+3.0** |
| AAA | | | | pmax | | pmax | | | |
| | comp=Z,3µm,3.8s | | | | | | | | |
| AAA | | | | MLR | | MLR | | | |
| | comp=Z,6µm,19.0s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **50.98** | **129** | P | | **P** | | **23 08 54.6** | **+0.9** |
| | baz=51,SNR=61 | | | | | | | | |
| **DZET** | **Dzherino** | **51.03** | **328** | *i* P | | **P** | | **23 08 52.5** | **-1.5** |
| DZET | | | | pmax | | pmax | | | |
| | comp=Z,47nm,0.6s | | | | | | | | |
| **UCH** | **Uchtor** | **51.03** | **335** | P | | **P** | | **23 08 55.5** | **+1.1** |
| | SNR=50 | | | | | | | | |
| **SONA0** | **Songino Array** | **51.17** | **5** | *e*P | | **P** | | **23 08 56.4** | **+1.5** |
| **SONM** | **Songino Array** | **51.17** | **5** | P | | **P** | | **23 08 56.4** | **+1.5** |
| | comp=Z,114nm,0.7s,baz=189,slow=9.2,SNR=876 | | | | | | | | |
| SONM | | | | PcP | | **PcP** | | **23 10 10.8** | **+0.6** |
| | comp=Z,17nm,0.7s,baz=190,slow=4.0,SNR=3.1 | | | | | | | | |
| SONM | | | | S | | **S** | | **23 16 11.0** | **-0.8** |
| | comp=Z,0.4nm,0.8s,baz=181,slow=7.2,SNR=2.5 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.17** | **337** | *e*P | | **P** | | **23 08 56.1** | **+1.0** |
| TKM2 | | | | pmax | | pmax | | | |
| | comp=Z,250nm,1.4s | | | | | | | | |
| TKM2 | | | | MLR | | MLR | | | |
| | comp=Z,10µm,20.0s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.17** | **337** | P | | **P** | | **23 08 56.2** | **+1.1** |
| | SNR=82 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.17** | **337** | *e*P | | **P** | | **23 08 56.1** | **+1.0** |
| | comp=Z,250nm,1.4s | | | | | | | | |
| TKM2 | | | | LR | | LR | | | |
| | comp=Z,10µm,20.0s | | | | | | | | |
| **SONA1** | **Songino Array** | **51.19** | **5** | *e*P | | **P** | | **23 08 54.5** | **-0.6** |
| **KBK** | **Karagaybulak** | **51.21** | **336** | P | | **P** | | **23 08 57.1** | **+1.7** |
| | SNR=60 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.27** | **6** | *e*P | | **P** | | **23 08 57.0** | **+1.4** |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,2µm,2.5s | | | | | | | | |
| ULN | | | | MLR | | MLR | | | |
| | comp=Z,14µm,19.0s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.27** | **6** | P | | **P** | | **23 08 57.4** | **+1.7** |
| | SNR=81 | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.27** | **6** | *e*P | | **P** | | **23 08 57.0** | **+1.4** |
| | comp=Z,2µm,2.5s | | | | | | | | |
| ULN | | | | LR | | LR | | | |
| | comp=Z,14µm,19.0s | | | | | | | | |
| **UOSS** | **Wadi Hilu** | **51.27** | **306** | P | | **P** | | **23 08 55.4** | **-0.5** |
| | comp=Z,103nm,1.3s,SNR=6.1 | | | | | | | | |
| **UOSS** | **Wadi Hilu** | **51.27** | **306** | *e*P | | **P** | | **23 08 57.2** | **+1.2** |
| | comp=Z,42nm,1.3s | | | | | | | | |
| UOSS | | | | LR | | LR | | | |
| | comp=Z,3µm,19.0s | | | | | | | | |
| **ASHO** | **Ashiyiah** | **51.27** | **305** | ⇓*i* P | | **P** | | **23 08 56.7** | **+0.7** |
| | SNR=5.9 | | | | | | | | |
| **HATD** | **Hatta, Dubai** | **51.28** | **306** | ⇓*i* P | | **P** | | **23 08 56.8** | **+0.8** |
| | SNR=18 | | | | | | | | |
| **AML** | **Almayashu** | **51.30** | **335** | P | | **P** | | **23 08 57.5** | **+1.1** |
| | SNR=45 | | | | | | | | |
| **AAK** | **Ala-Archa** | **51.38** | **336** | P | | **P** | | **23 08 57.4** | **+0.7** |
| | comp=Z,21nm,1.0s,baz=140,slow=6.5,SNR=50 | | | | | | | | |
| AAK | | | | S | | **S** | | **23 16 13.2** | **-1.7** |
| | comp=Z,0.4nm,0.3s,baz=200,slow=12,SNR=1.7 | | | | | | | | |
| AAK | | | | LR | | LR | | 23 33 34.6 | |
| | comp=Z,8µm,19.7s,baz=144,slow=39 | | | | | | | | |
| **AAK** | **Ala-Archa** | **51.38** | **336** | *e*P | | **P** | | **23 08 57.7** | **+1.1** |
| AAK | | | | S | | **S** | | **23 16 13.2** | **-1.7** |
| AAK | | | | pmax | | pmax | | | |
| | comp=Z,114nm,1.2s | | | | | | | | |
| **AAK** | **Ala-Archa** | **51.38** | **336** | P | | **P** | | **23 08 57.3** | **+0.7** |
| | comp=Z,266nm,1.3s,SNR=23 | | | | | | | | |
| **AAK** | **Ala-Archa** | **51.38** | **336** | P | | **P** | | **23 08 58.0** | **+1.3** |
| | SNR=31 | | | | | | | | |
| **AAK** | **Ala-Archa** | **51.38** | **336** | *e*P | | **P** | | **23 08 57.7** | **+1.1** |
| | comp=Z,114nm,1.2s | | | | | | | | |
| AAK | | | | S | | **S** | | **23 16 13.2** | **-1.7** |
| **FRU** | **Bishkek** | **51.49** | **336** | ⇑*i* P | | **P** | | **23 08 58.5** | **+1.2** |
| FRU | | | | *i* S | | **S** | | **23 16 16.5** | **+0.3** |
| FRU | | | | pmax | | pmax | | | |
| | comp=Z,450nm,2.0s | | | | | | | | |
| FRU | | | | smax | | smax | | | |
| | comp=E,690nm,3.0s | | | | | | | | |
| FRU | | | | MLR | | MLR | | | |
| | comp=E,7µm,18.0s | | | | | | | | |
| **CHMS** | **Chumysh** | **51.58** | **336** | P | | **P** | | **23 08 58.7** | **+0.7** |
| | SNR=19 | | | | | | | | |
| **RMQ** | **Roma** | **51.67** | **121** | P | | **P** | | **23 09 00.1** | **+1.2** |
| | baz=52,SNR=26 | | | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **51.68** | **305** | ⇑*i* P | | **P** | | **23 08 59.6** | **+0.6** |
| | SNR=15 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **51.70** | **335** | *e*P | | **P** | | **23 09 00.3** | **+1.3** |
| EKS2 | | | | pmax | | pmax | | | |
| | comp=Z,1µm,2.5s | | | | | | | | |
| EKS2 | | | | MLR | | MLR | | | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **51.70** | **335** | P | | **P** | | **23 09 00.3** | **+1.3** |
| | SNR=76 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **51.70** | **335** | *e*P | | **P** | | **23 09 00.2** | **+1.3** |
| | comp=Z,1µm,2.5s | | | | | | | | |
| EKS2 | | | | LR | | LR | | | |
| | comp=Z,6µm,20.0s | | | | | | | | |
| **NAZ** | **Nazwa, Dubai** | **51.73** | **306** | ⇓*i* P | | **P** | | **23 09 00.0** | **+0.7** |
| | SNR=14 | | | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **51.84** | **305** | ⇓*i* P | | **P** | | **23 09 01.2** | **+1.0** |
| | SNR=7.7 | | | | | | | | |
| **USP** | **Ospenovka** | **51.90** | **336** | P | | **P** | | **23 09 01.2** | **+0.8** |
| | SNR=78 | | | | | | | | |
| **CN2** | **Changchun** | **51.99** | **23** | *e*P | | **P** | | **23 09 00.8** | **-0.1** |
| CN2 | | | | *es*P | | **sP** | | **23 09 09.8** | **-1.8** |
| CN2 | | | | *e*S | | **S** | | **23 16 21.5** | **-1.4** |
| CN2 | | | | PMZ | | | | | |
| | comp=Z,270nm,1.3s | | | | | | | | |
| CN2 | | | | PMZ | | | | | |
| | comp=Z,1µm,5.0s | | | | | | | | |
| CN2 | | | | LN | | | | | |
| | comp=Z,4µm,16.0s | | | | | | | | |
| CN2 | | | | LE | | | | | |
| | comp=Z,6µm,16.0s | | | | | | | | |
| CN2 | | | | LZ | | | | | |
| | comp=Z,4µm,17.0s | | | | | | | | |
| **MNAS** | **Manas** | **52.10** | **334** | *i* P | | **P** | | **23 09 02.9** | **+0.9** |
| MNAS | | | | pmax | | pmax | | | |
| | comp=Z,108nm,0.9s | | | | | | | | |
| **MK01** | **Makanchi Array** | **52.35** | **344** | *e*P | | **P** | | **23 09 03.4** | **-0.2** |
| **MK31** | **Makanchi Array** | **52.37** | **344** | *e*P | | **P** | | **23 09 04.5** | **+0.7** |
| MK31 | | | | pmax | | pmax | | | |
| | comp=Z,123nm,0.7s | | | | | | | | |
| **MK32** | **Makanchi Array** | **52.37** | **344** | *e*P | | **P** | | **23 09 04.5** | **+0.8** |
| **MKAR** | **Makanchi Array** | **52.37** | **344** | P | | **P** | | **23 09 04.5** | **+0.7** |
| | comp=Z,94nm,0.7s,baz=146,slow=8.1,SNR=544 | | | | | | | | |
| MKAR | | | | S | | **S** | | **23 16 28.1** | **0.0** |
| | comp=Z,0.5nm,0.8s,baz=88,slow=18,SNR=2.9 | | | | | | | | |
| MKAR | | | | LR | | LR | | 23 36 13.6 | |
| | comp=Z,4µm,19.5s,baz=159,slow=42 | | | | | | | | |
| **MAKZ** | **Makanchi** | **52.47** | **344** | *e*P | | **P** | | **23 09 04.9** | **+0.4** |
| | comp=Z,1µm,2.6s | | | | | | | | |
| MAKZ | | | | LR | | LR | | | |
| | comp=Z,13µm,19.0s | | | | | | | | |
| **IDAH** | **Dahanechah** | **52.51** | **316** | *e*P | | **P** | | **23 09 05.5** | **+0.2** |
| **PAF** | **Port-aux-Franc** | **52.61** | **204** | PFAKE | | | | 23 09 20.0 | +15 |
| PAF | | | | LR | | LR | | | |
| | comp=Z,8µm,19.0s | | | | | | | | |
| **IMON** | **Monand** | **52.91** | **317** | *e*P | | **P** | | **23 09 08.4** | **+0.2** |
| **IKOO** | **Kooshah** | **52.93** | **315** | *e*P | | **P** | | **23 09 08.0** | **-0.5** |
| **MAJO** | **Matsushiro** | **53.00** | **38** | *e*P | | **P** | | **23 09 08.3** | **-0.3** |
| MAJO | | | | pmax | | pmax | | | |
| | comp=Z,105nm,1.3s | | | | | | | | |
| MAJO | | | | MLR | | MLR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **MAJO** | **Matsushiro** | **53.00** | **38** | *e*P | | **P** | | **23 09 08.3** | **-0.3** |
| | comp=Z,105nm,1.3s | | | | | | | | |
| MAJO | | | | LR | | LR | | | |
| | comp=Z,5µm,19.0s | | | | | | | | |
| **MAT** | **Matsushiro** | **53.00** | **38** | P | | **P** | | **23 09 07.4** | **-1.2** |
| MAT | | | | S | | **S** | | **23 16 40.6** | **+3.5** |
| **MJAR** | **Matsushiro Arr** | **53.01** | **38** | P | | **P** | | **23 09 08.0** | **-0.6** |
| | comp=Z,48nm,1.1s,baz=218,slow=7.9,SNR=64 | | | | | | | | |
| **EIDS** | **Eidsvold** | **53.35** | **119** | P | | **P** | | **23 09 11.8** | **+0.4** |
| | baz=53,SNR=20 | | | | | | | | |
| **EIDS** | **Eidsvold** | **53.35** | **119** | *e*P | | **P** | | **23 09 11.8** | **+0.4** |
| | comp=Z,76nm,0.9s | | | | | | | | |
| EIDS | | | | LR | | LR | | | |
| | comp=Z,8µm,22.0s | | | | | | | | |
| **ITEG** | **Tejag** | **53.37** | **316** | *e*P | | **P** | | **23 09 11.2** | **-0.5** |
| **MSHR** | **Mys Shultsa** | **53.45** | **28***c* | *i* P | | **P** | | **23 09 12.3** | **+0.6** |
| **KK31** | **Karatay Array** | **53.48** | **333** | *e*P | | **P** | | **23 09 12.0** | **0.0** |
| KK31 | | | | pmax | | pmax | | | |
| | comp=Z,65nm,1.1s | | | | | | | | |
| **KKAR** | **Karatay Array** | **53.48** | **333** | *e*P | | **P** | | **23 09 11.9** | **-0.2** |
| **KKAR** | **Karatay Array** | **53.48** | **333** | *e*P | | **P** | | **23 09 11.9** | **-0.2** |
| **TOO** | **Toolangi** | **53.50** | **136** | P | | **P** | | **23 09 14.7** | **+2.4** |
| | baz=54,SNR=4.1 | | | | | | | | |
| **ZAK** | **Zakamensk** | **53.51** | **2** | *e*P | | **P** | | **23 09 11.5** | **-0.7** |
| ZAK | | | | *e* | | | | 23 16 53.0 | |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,46nm,1.9s | | | | | | | | |
| **YNG** | **Young** | **54.17** | **131** | P | | **P** | | **23 09 18.8** | **+1.4** |
| | baz=54,SNR=18 | | | | | | | | |
| **VLA** | **Vladivostok** | **54.21** | **28**α | *i* P | | **P** | | **23 09 17.9** | **+0.6** |
| VLA | | | | *i* | | | | 23 10 19.4 | |
| VLA | | | | *e*S | | **S** | | **23 16 52.8** | **-0.3** |
| VLA | | | | pmax | | pmax | | | |
| | comp=Z,102nm,1.2s | | | | | | | | |
| VLA | | | | MLR | | MLR | | | |
| | comp=E,150µm,18.0s | | | | | | | | |
| **OPO** | **Ambohidratompo** | **54.21** | **250** | P | | **P** | | **23 09 18.6** | **+0.6** |
| | comp=E,7.0nm,0.9s,baz=72,slow=7.6,SNR=6.4 | | | | | | | | |
| OPO | | | | LR | | LR | | 23 27 01.6 | |
| | comp=E,6µm,21.5s,baz=70,slow=30 | | | | | | | | |
| **ABPO** | **Ambohimpanom** | **54.25** | **249** | *e*P | | **P** | | **23 09 19.2** | **+0.9** |
| ABPO | | | | pmax | | pmax | | | |
| | comp=Z,731nm,2.0s | | | | | | | | |
| **ABPO** | **Ambohimpanom** | **54.25** | **249** | *e*P | | **P** | | **23 09 19.2** | **+0.9** |
| | comp=Z,731nm,2.0s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **54.35** | **25** | P | | **P** | | **23 09 18.8** | **+0.5** |
| MDJ | | | | pP | | **pP** | | **23 09 25.3** | **-0.7** |
| MDJ | | | | sP | | **sP** | | **23 09 27.5** | **-1.5** |
| MDJ | | | | PcP | | **PcP** | | **23 10 19.5** | **-2.6** |
| MDJ | | | | PP | | **PP** | | **23 11 22.5** | **+1.9** |
| MDJ | | | | S | | **S** | | **23 16 58.8** | **+3.8** |
| MDJ | | | | ScS | | **ScS** | | **23 19 04.5** | **-1.6** |
| MDJ | | | | PMZ | | | | | |
| | comp=Z,65nm,1.1s | | | | | | | | |
| MDJ | | | | PMZ | | | | | |
| | comp=Z,2µm,8.6s | | | | | | | | |
| MDJ | | | | LN | | | | | |
| | comp=Z,13µm,15.5s | | | | | | | | |
| MDJ | | | | LE | | | | | |
| | comp=Z,11µm,16.5s | | | | | | | | |
| MDJ | | | | LZ | | | | | |
| | comp=Z,17µm,17.4s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **54.35** | **25** | *e*P | | **P** | | **23 09 19.0** | **+0.7** |
| | comp=Z,77nm,1.1s | | | | | | | | |
| MDJ | | | | LR | | LR | | | |
| | comp=Z,16µm,18.0s | | | | | | | | |
| **IMYA** | **Miami** | **54.48** | **320** | *e*P | | **P** | | **23 09 19.2** | **-0.5** |
| **HVS** | **Khovu-Aksy** | **54.51** | **355***c* | *i* P | | **P** | | **23 09 19.6** | **+0.1** |
| HVS | | | | pmax | | pmax | | | |
| | comp=Z,36nm,1.1s | | | | | | | | |
| HVS | | | | MLR | | MLR | | | |
| | comp=Z,11µm,15.0s | | | | | | | | |
| **MOY** | **Mondy** | **54.74** | **0** | *e*P | | **P** | | **23 09 22.1** | **+0.9** |
| MOY | | | | pmax | | pmax | | | |
| | comp=Z,239nm,3.5s | | | | | | | | |
| **TLY** | **Talaya** | **54.82** | **2** | P | | **P** | | **23 09 22.8** | **+1.2** |
| | comp=Z,22nm,0.6s,baz=206,slow=7.3,SNR=17 | | | | | | | | |
| TLY | | | | S | | **S** | | **23 17 03.4** | **+2.2** |
| | comp=Z,1.8nm,0.7s,baz=233,slow=20,SNR=2.7 | | | | | | | | |
| **TLY** | **Talaya** | **54.82** | **2** | *i* P | | **P** | | **23 09 23.0** | **+1.3** |
| TLY | | | | *e*S | | **S** | | **23 17 00.9** | **-0.3** |
| TLY | | | | *e* | | | | 23 19 08.2 | |
| TLY | | | | pmax | | pmax | | | |
| | comp=Z,172nm,1.9s | | | | | | | | |
| TLY | | | | MLR | | MLR | | | |
| | comp=Z,12µm,16.0s | | | | | | | | |
| **TLY** | **Talaya** | **54.82** | **2** | P | | **P** | | **23 09 23.0** | **+1.3** |
| | comp=Z,266nm,0.8s,SNR=18 | | | | | | | | |
| **IMOG** | **Moghan** | **54.83** | **319** | *e*P | | **P** | | **23 09 21.8** | **-0.5** |
| **ISRO** | **Mashad** | **54.87** | **320** | *e*P | | **P** | | **23 09 22.0** | **-0.4** |
| **HIA** | **Hailar** | **54.96** | **15** | *e*P | | **P** | | **23 09 22.2** | **-0.5** |
| HIA | | | | pmax | | pmax | | | |
| | comp=Z,126nm,1.3s | | | | | | | | |
| HIA | | | | MLR | | MLR | | | |
| | comp=Z,16µm,18.0s | | | | | | | | |
| **HIA** | **Hailar** | **54.96** | **15** | *e*P | | **P** | | **23 09 22.2** | **-0.5** |
| | comp=Z,126nm,1.3s | | | | | | | | |
| HIA | | | | LR | | LR | | | |
| | comp=Z,16µm,18.0s | | | | | | | | |
| **CAN** | **Canberra** | **55.04** | **132** | *e*P | | **P** | | **23 09 24.7** | **+1.1** |
| CAN | | | | pmax | | pmax | | | |
| | comp=Z,112nm,1.0s | | | | | | | | |
| CAN | | | | MLR | | MLR | | | |
| | comp=Z,14µm,21.0s | | | | | | | | |
| **CAN** | **Canberra** | **55.04** | **132** | *e*P | | **P** | | **23 09 24.7** | **+1.1** |
| | comp=Z,112nm,1.0s | | | | | | | | |
| CAN | | | | LR | | LR | | | |
| | comp=Z,14µm,21.0s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.09** | **27** | P | | **P** | | **23 09 24.2** | **+0.6** |
| | comp=Z,95nm,0.6s,baz=221,slow=6.2,SNR=148 | | | | | | | | |
| USRK | | | | LR | | LR | | 23 35 16.3 | |
| | comp=Z,11µm,18.8s,baz=216,slow=39 | | | | | | | | |
| **IPAY** | **Payeh** | **55.26** | **320** | *e*P | | **P** | | **23 09 24.9** | **-0.5** |
| **CNB** | **Canberra Magne** | **55.31** | **131** | P | | **P** | | **23 09 26.5** | **+0.8** |
| | baz=55,SNR=6.7 | | | | | | | | |
| **ARMA** | **Armidale** | **55.32** | **125** | P | | **P** | | **23 09 27.5** | **+1.8** |
| | baz=55,SNR=32 | | | | | | | | |
| **ARMA** | **Armidale** | **55.32** | **125** | *e*P | | **P** | | **23 09 27.4** | **+1.6** |
| | comp=Z,77nm,1.0s | | | | | | | | |
| ARMA | | | | LR | | LR | | | |
| | comp=Z,8µm,21.0s | | | | | | | | |
| **IRK** | **Irkutsk** | **55.41** | **3** | *e*P | | **P** | | **23 09 25.9** | **0.0** |
| IRK | | | | *e*S | | **S** | | **23 17 13.5** | **+4.5** |
| IRK | | | | pmax | | pmax | | | |
| | comp=Z,323nm,2.1s | | | | | | | | |
| **IAKL** | **Akhelmad** | **55.51** | **320** | *e*P | | **P** | | **23 09 26.7** | **-0.5** |
| **IKRD** | **Kardeh** | **55.76** | **320** | *e*P | | P | | 23 09 24.6 | -4.4 |
| **MGCD** | **Mangrove Creek** | **55.85** | **128** | P | | **P** | | **23 09 30.5** | **+1.1** |
| | baz=56,SNR=5.7 | | | | | | | | |
| **IEMG** | **Emamgholi** | **56.05** | **320** | *e*P | | **P** | | **23 09 31.4** | **+0.2** |
| **CIT** | **Chita** | **56.21** | **10** | *e*P | | **P** | | **23 09 32.9** | **+1.2** |
| CIT | | | | *e* | | | | 23 09 39.7 | |
| CIT | | | | *e* | | | | 23 09 44.8 | |
| CIT | | | | *e* | | | | 23 17 25.2 | |
| CIT | | | | pmax | | pmax | | | |
| | comp=Z,493nm,3.2s | | | | | | | | |
| **ISFR** | **Sfrayin** | **56.26** | **320** | *e*P | | **P** | | **23 09 32.4** | **-0.2** |
| **GEYT** | **Alibeck** | **56.70** | **320** | P | | **P** | | **23 09 35.7** | **+0.3** |
| | comp=Z,38nm,1.0s,baz=145,slow=5.3,SNR=55 | | | | | | | | |
| GEYT | | | | S | | **S** | | **23 17 21.6** | **-5.2** |
| | comp=Z,0.4nm,0.3s,baz=20,slow=17,SNR=1.8 | | | | | | | | |
| GEYT | | | | LR | | LR | | 23 36 15.3 | |
| | comp=Z,5µm,21.4s,baz=140,slow=38 | | | | | | | | |
| **ISHV** | **Shirvan** | **56.73** | **320** | *e*P | | **P** | | **23 09 36.1** | **+0.3** |
| **OTUK** | **Ortayu** | **56.88** | **338** | *i* P | | **P** | | **23 09 36.6** | **+0.1** |
| OTUK | | | | pmax | | pmax | | | |
| | comp=Z,152nm,1.3s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.89** | **344** | P | | **P** | | **23 09 37.0** | **+0.5** |
| | comp=Z,46nm,0.8s,baz=162,slow=6.8,SNR=327 | | | | | | | | |
| KURBB | | | | S | | **S** | | **23 17 28.7** | **+0.1** |
| | comp=Z,0.5nm,0.9s,baz=156,slow=7.1,SNR=

IGLO Ghaloghah 58.73 317 eP P 23 09 52.3 +2.3
IKLH Kolahrood 58.74 312 eP P 23 09 49.7 -0.4
KLR Kul'dur 58.93 23 ⇓iP P 23 09 48.0 -2.8
KLR eS S 23 17 53.5 -1.9
KLR e 23 19 34.0
KLR pmax pmax
comp=N,92nm,1.8s
KLR pmax pmax
comp=E,160nm,1.8s
KLR pmax pmax
comp=Z,580nm,1.8s
KLR pmax pmax
comp=Z,2µm,7.5s
KLR MLR MLR
comp=Z,41µm,13.0s
IPIR Pirpir 58.95 312 eP P 23 09 51.6 -0.1
IFIR Firoozkooh 59.03 315 eP P 23 09 52.1 -0.1
QAM Ghamsar 59.05 313 eP P 23 09 51.7 -0.5
ATD Arta Tunnel 59.12 285 P P 23 09 53.1 +0.3
comp=Z,9.3nm,1.1s,baz=108,slow=6.6,SNR=2.8
ATD S S 23 18 01.0 +1.8
comp=Z,3.8nm,0.9s,baz=53,slow=20,SNR=2.0
ATD LR LR 23 32 29.5
comp=Z,3µm,18.6s,baz=100,slow=33
IALA Alasht 59.22 316 eP P 23 09 53.5 0.0
HNR Honiara 59.41 99 eP P 23 09 54.4 -0.4
HNR pmax pmax
comp=Z,515nm,0.8s
HNR MLR MLR
comp=Z,2µm,19.0s
HNR Honiara 59.41 99 eP P 23 09 54.4 -0.4
comp=Z,514nm,0.8s
HNR LR LR
comp=Z,2µm,19.0s
ERM Erimo 59.43 36 eP P 23 09 54.5 +0.1
IDMV Damavand 59.51 315 eP P 23 09 55.0 -0.4
IPRN Peran 59.63 316 eP P 23 09 55.3 -0.8
NVS Novosibirsk 59.65 349 ⇑iP P 23 09 55.7 +0.1
NVS e 23 12 06.6
NVS eS S 23 18 06.0 +1.5
NVS pmax pmax
comp=N,132nm,2.0s
NVS pmax pmax
comp=E,100nm,2.0s
NVS pmax pmax
comp=Z,171nm,2.0s
NVS pmax pmax
comp=N,37nm,1.9s
NVS pmax pmax
comp=E,22nm,1.9s
NVS pmax pmax
comp=Z,47nm,1.9s
NVS smax smax
comp=N,56nm,1.7s
NVS smax smax
comp=E,54nm,1.7s
HABR Khabarovsk 59.72 26 ceP P 23 09 53.8 -2.4
HABR e*SP sP 23 10 02.7 -4.3
HABR e 23 10 40.4
HABR eS S 23 18 04.1 -1.5
HABR e*SS sS 23 18 14.9 -3.5
HABR e 23 19 42.9
HABR pmax pmax
comp=N,36nm,2.0s
HABR pmax pmax
comp=Z,225nm,2.0s
HABR pmax pmax
comp=E,102nm,2.0s
HABR pmax pmax
comp=Z,958nm,2.9s
HABR MLR MLR
comp=Z,11µm,19.0s
HABR MLR MLR
comp=E,8µm,16.0s
HABR MLR MLR
comp=N,9µm,17.0s
RAYN Ar Rayn 59.73 300 P P 23 09 57.0 +0.1
comp=N,157nm,1.9s,SNR=12
RAYN Ar Rayn 59.73 300 eP P 23 09 57.0 +0.1
comp=N,198nm,2.0s
RAYN LR LR
comp=Z,7µm,19.0s
IAFJ Afjeh 59.87 315 eP P 23 09 58.4 +0.4
IR3 Iran Long-Peri 60.17 314 eP P 23 09 59.9 +0.2
IR5 Iran Long-Peri 60.36 314 eP P 23 10 01.2 +0.1
ASAJ Asahikawa 60.43 34 PFAKE 23 10 10.0 +8.8
ASAJ LR LR
comp=Z,3µm,18.0s
IRAZ Razeghan 60.92 314 eP P 23 10 05.4 +0.3
IGZV Ghazvin 61.19 315 eP P 23 10 06.4 -0.5
BVAR Borovoye Array 61.53 340 P P 23 10 08.2 -0.4
comp=Z,24nm,0.8s,baz=134,slow=8.5,SNR=158
BVAR S S 23 18 26.4 -2.3
comp=Z,0.3nm,0.7s,baz=134,slow=8.3,SNR=2.3
LHI Lord Howe Isla 61.75 124 eP P 23 10 12.3 +1.8
comp=Z,239nm,1.1s
LHI LR LR
comp=Z,5µm,20.0s
BOD Bodaibo 61.88 8 ⇓iP P 23 10 11.2 +0.4
BOD e 23 18 40.5
BOD pmax pmax
comp=Z,99nm,1.8s
IBZA Bozab 62.01 312 eP P 23 10 11.1 -1.4
IKOM Komasi 62.14 312 eP P 23 10 12.0 -1.3
YUK Yuzh-Kuril'sk 62.23 36 ciP P 23 10 13.0 -0.4
YUK i 23 10 51.6
YUK e 23 12 27.7
YUK eS S 23 18 40.2 +2.4
YUK e 23 20 03.2
YUK i SS SS 23 22 43.4 +1.9
YUK pmax pmax
comp=Z,836nm,2.7s
YUK pmax pmax
comp=N,403nm,1.7s
YUK pmax pmax
comp=E,149nm,1.7s
YUK pmax pmax
comp=Z,340nm,1.7s
YUK MLR MLR
comp=N,2µm,20.0s
YUK MLR MLR
comp=Z,4µm,20.0s
YSS Yuzh-Sakhalins 62.34 31 αiP P 23 10 14.3 +0.2
YSS e*SP sP 23 10 26.7 +1.8
YSS eS S 23 18 42.0 +2.9
YSS pmax pmax
comp=Z,210nm,1.2s
YSS MLR MLR
comp=N,3µm,16.0s
YSS MLR MLR
comp=Z,3µm,16.0s
YSS MLR MLR
comp=E,2µm,14.0s
FURI Furi 62.73 282 eP P 23 10 10.6 -7.1
FURI iS S 23 18 52.9 +7.1
FURI Furi 62.73 282 PFAKE 23 10 30.0 +12
FURI LR LR
comp=Z,5µm,19.0s
IVIS Veis 62.79 312 eP P 23 10 16.4 -1.1
ILIN Lien 62.87 312 eP P 23 10 17.6 -0.6
IGHG Ghaleghazi 62.91 311 eP P 23 10 17.3 -1.2
AB31 Akbulak array 62.96 331 eP P 23 10 17.7 -0.5
AB31 pmax pmax
comp=Z,12nm,0.4s
ABKAR Akbulak array 62.96 331 eP P 23 10 18.0 -0.2
KMBO Kilima Mbogo 63.16 270 P P 23 10 20.8 +0.3
comp=Z,5.4nm,0.2s,baz=49,slow=10,SNR=8.2
KMBO S S 23 18 51.6 +0.6
comp=Z,2.8nm,0.2s,baz=351,slow=19,SNR=2.7
KMBO LR LR 23 34 39.5
comp=Z,3µm,19.7s,baz=84,slow=33
KMBO Kilima Mbogo 63.16 270 eP P 23 10 19.4 -1.1
KMBO S S 23 18 51.6 +0.6
KMBO pmax pmax
comp=Z,227nm,2.3s
KMBO Kilima Mbogo 63.16 270 P P 23 10 27.2 +6.7
SNR=14
KMBO Kilima Mbogo 63.16 270 eP P 23 10 19.4 -1.1
comp=Z,227nm,2.3s
KMBO S S 23 18 51.6 +0.6
IDHR Dehrash 63.21 312 eP P 23 10 18.9 -1.5
CASY Casey 63.28 175 PFAKE 23 10 30.0 +10
CASY LR LR
comp=Z,8µm,20.0s
MIR Mirnyy 63.36 183 ⇑iP P 23 10 29.0 +8.5
MIR pmax pmax
comp=Z,60nm,1.5s
KUR Kuril'sk 64.09 35 ciP P 23 10 25.2 -0.5
KUR i 23 11 02.9
KUR i 23 12 51.0
KUR eS S 23 18 58.1 -3.0
KUR pmax pmax
comp=Z,699nm,5.5s
KUR pmax pmax
comp=N,156nm,2.0s
KUR pmax pmax
comp=E,126nm,2.0s
KUR pmax pmax
comp=Z,188nm,2.0s
IHRS Heris 64.33 316 eP P 23 10 27.3 -0.5
AKTO Aktyubinsk 64.68 332 P P 23 10 29.1 -0.4
comp=Z,6.5nm,0.4s,baz=131,slow=8.6,SNR=48
AKTO S S 23 19 03.6 -4.6
comp=Z,1.2nm,0.8s,baz=226,slow=22,SNR=7.0
IAZR Azarshahr 64.79 314 eP P 23 10 30.8 0.0
TYV Tymovskoe 64.88 28 eP P 23 10 32.5 +1.7
TYV eS S 23 19 17.0 +6.4
TYV pmax pmax
comp=Z,491nm,1.8s
TYV pmax pmax
comp=Z,2µm,17.0s
TYV pmax pmax
comp=E,2µm,19.0s
TYV smax smax
comp=E,2µm,10.0s
TYV MLR MLR
comp=N,8µm,15.0s
TYV MLR MLR
comp=Z,24µm,15.0s
TYV MLR MLR
comp=E,17µm,14.0s
ITBZ Tabriz 64.92 315 eP P 23 10 31.6 +0.1
ISHB Shabestar 65.31 315 eP P 23 10 34.1 -0.1
IMRD Marand 65.44 315 eP P 23 10 35.3 +0.4
NKL Nikolayevsk 65.57 25 eP P 23 10 32.0 -3.2
NKL eS S 23 19 19.0 0.0
NKL pmax pmax
comp=Z,2µm,16.0s
NKL smax smax
comp=N,2µm,19.0s
NKL smax smax
comp=E,2µm,19.0s
NKL MLR MLR
comp=N,7µm,19.0s
NKL MLR MLR
comp=Z,17µm,19.0s
NKL MLR MLR
comp=E,8µm,18.0s
MAK Makhachkala 66.22 320 ciP P 23 10 39.5 -0.1
MAK e 23 11 07.9
MAK ePPP PPP 23 14 45.1
MAK eS S 23 19 24.8 -2.5
MAK e 23 20 32.2
MAK pmax pmax
comp=Z,235nm,1.5s
CUKT Cukurca 66.31 313 eP P 23 10 40.1 -0.5
DZM Mont Dzumac 66.57 113 eP P 23 10 42.9 +0.5
comp=Z,120nm,1.2s
DZM eS S 23 19 28.8 -3.7
comp=Z,4µm,26.2s
DZM Mont Dzumac 66.57 113 eLR LR 23 30 40.7
comp=Z,7µm,23.9s
DZM Mont Dzumac 66.57 113 eP P 23 10 42.8 +0.5
comp=Z,61nm,1.2s
DZM LR LR
comp=Z,5µm,20.0s
GNI Garni 66.74 316 ceP P 23 10 43.4 +0.1
GNI pmax pmax
comp=Z,664nm,2.5s
GNI MLR MLR
comp=Z,13µm,22.0s
GNI Garni 66.74 316 P P 23 10 44.4 +1.2
SNR=24
GNI Garni 66.74 316 ⇑iP P 23 10 44.1 +0.8
SNR=7.4
CLDR Caldiran 66.88 315 eP P 23 10 45.0 +0.8
DGRG David-gareji 66.90 318 P P 23 10 45.4 +1.3
DGRG David-gareji 66.90 318 P P 23 10 45.3 +1.3
VANB Van 67.03 314 eP P 23 10 43.6 -1.4
TBLG Delisi 67.45 318 eP P 23 10 47.9 +0.4
TBLG Delisi 67.45 318 P P 23 10 48.2 +0.7
TBLG Delisi 67.45 318 P P 23 10 48.2 +0.7
DUS Dusheti 67.64 318 P P 23 10 57.6 +8.8
DUS Dusheti 67.64 318 P P 23 10 57.5 +8.8
AGRB Hanur-Agry 67.72 315 eP P 23 10 48.8 -0.7
SVE Sverdlovsk 68.03 338 diP P 23 10 51.1 +0.3
SVE e 23 13 19.7
SVE ePPP PPP 23 14 58.1
SVE eS S 23 19 45.2 -3.3
SVE e 23 20 49.9
SVE eSS SS 23 24 07.7 -3.5
SVE pmax pmax
comp=Z,166nm,1.8s
SVE pmax pmax
comp=Z,829nm,14.1s
SVE MLR MLR
comp=Z,7µm,21.0s
KARS Kars 68.09 316 eP P 23 10 52.4 +0.6
AKH Akhalkalaki 68.15 317 eP P 23 10 52.4 +0.3
AKH Akhalkalaki 68.15 317 P P 23 10 52.8 +0.7
AKH Akhalkalaki 68.15 317 P P 23 10 52.8 +0.7
AKH Akhalkalaki 68.15 317 ⇓iP P 23 10 53.5 +1.4
SVAN Silvan-Diyarba 68.43 313 eP P 23 10 53.6 -0.2
VRTB Varto-Mus 68.64 314 eP P 23 10 56.0 +0.8
ONI Oni 68.69 318 P P 23 10 56.4 +1.0
ONI Oni 68.69 318 P P 23 10 56.3 +1.0
MAZI Mazidag 68.72 312 eP P 23 10 55.9 +0.2
YAK Yakutsk 68.87 14 P P 23 10 55.7 -0.2
comp=Z,4.0nm,0.4s,baz=176,slow=4.9,SNR=14
YAK Yakutsk 68.87 14 ciP P 23 10 55.4 -0.5
YAK e 23 11 20.1
YAK ePPP PPP 23 15 06.2
YAK eS S 23 19 57.4 -0.9
YAK pmax pmax
comp=Z,203nm,1.0s
YAK pmax pmax
comp=E,62nm,1.2s
YAK pmax pmax
comp=N,79nm,1.3s
YAK pmax pmax
comp=Z,480nm,15.9s
YAK pmax pmax
comp=N,318nm,15.9s
YAK pmax pmax
comp=E,163nm,14.8s
YAK smax smax
comp=N,1µm,14.2s
YAK smax smax
comp=E,272nm,11.8s
YAK MLR MLR
comp=Z,21µm,17.0s
YAK MLR MLR
comp=E,9µm,20.0s
YAK MLR MLR
comp=N,15µm,17.0s
DRV Dumont d'Urvil 68.98 164 S S 23 19 48.0 -12
DRV L L 23 27 00.0
DRV R 23 34 00.0
DRV SS
NCK Nalchik 68.99 319 ciP P 23 10 57.9 +0.7
EZM Erzurum 69.00 315 eP P 23 10 58.5 +0.9
DYBB Diyarbakir 69.12 313 eP P 23 10 58.1 -0.1
BNGB Bing˜‖l 69.13 314 eP P 23 10 59.0 +0.8
MAW Mawson 69.16 194 P P 23 10 57.8 +0.2
comp=N,11nm,1.0s,baz=38,slow=7.8,SNR=18
MAW S S 23 20 04.8 +3.2
comp=N,0.9nm,0.9s,baz=310,slow=7.9,SNR=1.7
MAW LR LR 23 38 35.5
comp=N,4µm,18.0s,baz=38,slow=34
MAW Mawson 69.16 194 eP P 23 10 58.3 +0.7
MAW S S 23 20 04.8 +3.2
MAW pmax pmax
comp=Z,18nm,1.6s
MAW Mawson 69.16 194 P P 23 10 59.2 +1.5
baz=69,SNR=20
MAW Mawson 69.16 194 eP P 23 10 58.3 +0.7
comp=Z,18nm,1.6s
MAW S S 23 20 04.8 +3.2
MAW eP'P'df P'P'df 23 39 06.3 -2.4
BCA Borcka 69.44 317 eP P 23 10 59.9 -0.1
NEY Neytrino 69.46 319 ciP P 23 11 01.4 +1.1
KBZ Khabaz 69.55 319 P P 23 11 01.0 +0.5
comp=Z,14nm,0.9s,baz=118,slow=4.6,SNR=37
KBZ S S 23 20 06.9 -0.2
comp=Z,2.5nm,1.1s,baz=106,slow=7.4,SNR=7.9
ZALF Zalf 69.56 307 eP P 23 11 01.4 +0.5
CHVG Ch'k'valeri 69.65 318 eP P 23 11 02.1 +0.9
CHVG Ch'k'valeri 69.65 318 P P 23 11 02.2 +0.9
CHVG Ch'k'valeri 69.65 318 ⇓iP P 23 11 03.7 +2.4
ASF Jabal al Asfar 69.68 306 S S 23 20 09.5 +0.2
comp=Z,0.5nm,0.4s,baz=353,slow=4.7,SNR=2.1
MBAR Mbarara 69.69 271 P P 23 11 02.8 +0.6
comp=Z,3.3nm,0.2s,baz=118,slow=5.9,SNR=6.0
MBAR S S 23 20 09.8 -0.5
comp=Z,2.2nm,0.2s,baz=233,slow=20,SNR=2.0
MBAR LR LR 23 38 08.4
comp=Z,2µm,19.9s,baz=112,slow=33
MBAR Mbarara 69.69 271 eP P 23 11 03.3 +1.0
MBAR S S 23 20 09.8 -0.5
MBAR pmax pmax
comp=Z,96nm,1.6s
MBAR Mbarara 69.69 271 eP P 23 11 03.3 +1.0
comp=Z,96nm,1.6s
MBAR S S 23 20 09.8 -0.5
KIV Kislovodsk 69.79 319 eP P 23 11 02.0 -0.2
KIV e 23 11 24.1
KIV ePPP PPP 23 15 19.0
KIV eS S 23 20 10.8 +0.6
KIV eSS SS 23 24 41.1 +1.9
KIV pmax pmax
comp=Z,64nm,1.1s
KIV pmax pmax
comp=Z,187nm,3.8s
KIV MLR MLR
comp=Z,2µm,17.0s
KIV Kislovodsk 69.79 319 P P 23 11 02.2 0.0
comp=Z,382nm,1.0s,SNR=17
SVRC Sivrice-ELAZID 69.89 313 eP P 23 11 02.9 -0.1
URFA Urfa 69.91 312 eP P 23 11 03.6 +0.5
ROOS tl_alroos 69.99 308 eP P 23 11 04.2 +0.6
PTK Pertek 70.02 313 eP P 23 11 03.9 0.0
ERZN Erzincan 70.04 314 eP P 23 11 02.9 -0.9
BAYT Ayd¯–ntepe-Bay 70.05 315 eP P 23 11 04.2 +0.2
MALT Malatya 70.51 313 eP P 23 11 06.5 -0.3
MALT Malatya 70.51 313 ⇑iP P 23 11 07.5 +0.7
GUMT Gumushane 70.54 315 eP P 23 11 06.9 0.0
KTUT Trabzon 70.54 316 eP P 23 11 07.0 +0.3
EIL Elat 70.57 303 eP P 23 11 07.2 +0.1
EIL Elat 70.57 303 P P 23 11 08.2 +1.1
comp=Z,18nm,0.9s,baz=19,slow=4.3,SNR=10
EIL S S 23 20 21.0 +1.3
comp=Z,2.0nm,0.7s,baz=38,slow=17,SNR=2.1
EIL Elat 70.57 303 P P 23 11 08.4 +1.2
baz=71,SNR=7.0
HRFI Mount Harif 70.60 303 eP P 23 11 08.2 +0.9
HAWK Haweek 70.79 308 eP P 23 11 07.7 -0.9
BRBR Barbar 70.81 307 eP P 23 11 08.7 -0.1
MMLI Mount Malkishu 70.95 306 eP P 23 11 16.1 +6.6
MMAI Mount Meron Ar 71.14 306 P P 23 11 12.2 +1.5
comp=Z,5.9nm,0.7s,baz=88,slow=7.8,SNR=16
MMAI S S 23 20 27.1 +0.8
comp=Z,1.4nm,0.8s,baz=330,slow=8.3,SNR=2.4
BTCH Batrach 71.23 310 eP P 23 11 11.4 +0.3
ESPY Espiye-Giresun 71.24 315 eP P 23 11 10.8 -0.3
DRWC Darouich 71.26 310 eP P 23 11 11.6 +0.3
DARE Darende-Malaty 71.30 313 eP P 23 11 12.3 +0.8
KZIT Kziot 71.36 304 eP P 23 11 13.0 +1.0
KMRS Kahramanmaras 71.37 311 eP P 23 11 11.5 -0.4
DCZ Deep Cove 71.46 137 eP P 23 11 14.3 +2.1
comp=Z,486nm,2.6s
DCZ LR LR
comp=Z,3µm,22.0s
TAHT Tahtakopru-Hat 71.55 310 eP P 23 11 13.2 +0.3
SOC Sochi 71.59 318 ciP P 23 11 12.5 -0.5
SOC e 23 11 29.3
SOC e 23 13 49.4
SOC ePPP PPP 23 15 31.1
SOC iS S 23 20 28.0 -2.9
SOC eSS SS 23 25 02.8 -3.8
SOC pmax pmax
comp=Z,51nm,0.9s
SOC MLR MLR
comp=Z,2µm,18.0s
SKR Severo-Kuril's 71.69 34 P P 23 11 03.0 -10
SKR e 23 13 58.0
SKR ePPP PPP 23 15 32.0
SKR eS S 23 20 34.0 +2.2
SKR e 23 20 54.0
SKR pmax pmax
comp=Z,220nm,1.0s
SKR pmax pmax
comp=Z,2µm,12.0s
SKR pmax pmax
comp=N,2µm,10.0s
SKR smax smax
comp=N,2µm,10.0s
SKR smax smax
comp=E,3µm,10.0s
SKR MLR MLR
comp=N,4µm,18.0s
SKR MLR MLR
comp=Z,5µm,18.0s
MATP Matopo 71.93 250 P P 23 11 15.7 0.0
comp=Z,14nm,0.8s,baz=88,slow=5.9,SNR=24
MATP S S 23 20 36.0 0.0
comp=Z,3.5nm,1.1s,baz=74,slow=19,SNR=2.0
MATP LR LR 23 37 37.3
comp=Z,5µm,22.0s,baz=80,slow=32
LSZ Lusaka 72.01 255 P P 23 11 16.3 0.0
comp=Z,4.6nm,0.9s,baz=67,slow=9.3,SNR=7.8
LSZ S S 23 20 33.5 -3.5
comp=Z,0.3nm,0.3s,baz=41,slow=15,SNR=2.5
LSZ Lusaka 72.01 255 eP P 23 11 16.7 +0.4
LSZ S S 23 20 33.5 -3.5
LSZ pmax pmax
comp=Z,126nm,2.0s
LSZ MLR MLR
comp=Z,4µm,18.0s
LSZ Lusaka 72.01 255 P P 23 11 24.5 +8.2
SNR=5.6
LSZ Lusaka 72.01 255 eP P 23 11 16.7 +0.4
comp=Z,126nm,2.0s
LSZ S S 23 20 33.5 -3.5
LSZ LR LR
comp=Z,4µm,18.0s
SARI SarD1z-Kayseri 72.03 312 eP P 23 11 15.3 -0.7
RSDY Resadiye-TOKAT 72.05 314 eP P 23 11 17.0 +1.1
CEYT Ceyhan 72.08 310 eP P 23 11 16.1 0.0
WHZ Wether Hill Ro 72.10 137 PFAKE 23 11 30.0 +14
WHZ LR LR
comp=Z,4µm,21.0s
WKZ Wanaka 72.58 136 PFAKE 23 11 30.0 +11
WKZ LR LR
comp=Z,9µm,20.0s
TARA Tarawa 72.61 88 eP P 23 11 21.4 +1.6
comp=Z,94nm,0.8s
KARA Karaisali 72.69 311 eP P 23 11 19.2 -0.6
KVT Kavak 73.20 315 eP P 23 11 22.4 -0.3
LFK Lefkose 73.27 308 eP P 23 11 20.5 -2.9
NIG Nigde 73.28 311 eP P 23 11 26.0 +2.4
CSS Prodhromos 73.34 308 eP P 23 11 23.6 -0.1
CSS Prodhromos 73.34 308 P P 23 11 23.2 -0.5
CSS Prodhromos 73.34 308 eP P 23 11 24.6 +0.9
comp=Z,28nm,1.2s
CSS LR LR
comp=Z,1µm,18.0s
ANN Anapa 73.57 319 ciP P 23 11 23.7 -1.1
ANN i 23 11 38.9
ANN iS S 23 20 47.9 -5.6
ANN i 23 21 29.6
ANN eSS SS 23 25 38.0 +1.1
ANN pmax pmax
comp=Z,20nm,0.7s
ANN pmax pmax
comp=Z,319nm,7.0s
ANN MLR MLR
comp=N,1µm,21.0s
ANN MLR MLR
comp=E,1µm,21.0s
ANN MLR MLR
comp=Z,2µm,21.0s
VRH Novokhopyorsk 73.62 326 eP P 23 11 24.4 -0.5
VRH eS SKiKP 23 20 45.4 -8.3
VRH pmax pmax
comp=Z,90nm,0.9s

VRH pmax pmax
comp=N,20nm,0.8s
VRH pmax pmax
comp=E,10.0nm,0.8s
VRH smax smax
comp=N,950nm,3.6s
VRH smax smax
comp=Z,210nm,4.7s
VRH smax smax
comp=E,490nm,3.1s
VRH MLR MLR
comp=Z,3µm,23.0s
VRH MLR MLR
comp=N,3µm,19.0s
VRH MLR MLR
comp=E,3µm,18.0s
**LEF Lefka 73.73 308** *eP* **P 23 11 26.1 +0.2**
**PEA0 Petropavlovsk- 73.74 32** *eP* **P 23 11 25.3 -0.3**
**PETK Petropavlovsk- 73.74 32** P **P 23 11 25.6 0.0**
comp=E,23nm,0.9s,baz=211,slow=3.8,SNR=11
PETK S **S 23 20 56.8 +1.7**
comp=E,5.6nm,1.0s,baz=152,slow=12,SNR=2.1
PETK LR LR 23 45 46.5
comp=E,1µm,19.3s,baz=251,slow=37
**PEA2 Petropavlovsk- 73.74 32** *eP* **P 23 11 25.6 0.0**
**ODZ Otahua Downs 73.76 136** PFAKE 23 11 40.0 +14
ODZ LR LR
comp=Z,5µm,20.0s
**RPZ Rata Peaks 73.78 135** *eP* **P 23 11 26.9 +0.8**
comp=Z,59nm,0.9s
RPZ LR LR
comp=Z,11µm,22.0s
**CORM Corum 73.92 313** *eP* **P 23 11 26.7 -0.5**
**SNOP Sinop 74.11 315** *eP* **P 23 11 27.9 -0.1**
**PET Petropavlovsk 74.20 32** *eP* **P 23 11 27.7 -0.6**
PET *e* 23 14 15.1
PET *eS* **S 23 21 03.7 +3.5**
PET pmax pmax
comp=Z,139nm,1.3s
PET pmax pmax
comp=Z,1µm,10.3s
PET pmax pmax
comp=Z,1µm,16.3s
PET pmax pmax
comp=Z,1µm,18.0s
PET MLR MLR
comp=Z,4µm,19.0s
PET MLR MLR
comp=Z,3µm,19.0s
**BYBT Boyabat 74.23 315** *eP* **P 23 11 27.5 -1.2**
**SERE Sereflikochisa 74.32 312** *eP* **P 23 11 28.5 -1.0**
**KAMT Kaman 74.34 312** *eP* **P 23 11 27.7 -1.8**
**OUZ Omahuta 74.37 126** *eP* **P 23 11 31.1 +1.4**
comp=Z,41nm,1.1s
OUZ LR LR
comp=Z,11µm,21.0s
**OXZ Oxford 74.41 134** *eP* **P 23 11 30.6 +0.8**
comp=Z,43nm,1.0s
OXZ LR LR
comp=Z,10µm,22.0s
**BR101 Keskin Array S 74.50 313** *eP* **P 23 11 29.9 -0.6**
**BR131 Keskin Array S 74.50 313** P **P 23 11 30.3 -0.3**
baz=74,SNR=6.8
**BRTR Keskin Array B 74.50 313** P **P 23 11 29.9 -0.6**
comp=Z,8.6nm,0.8s,baz=134,slow=7.3,SNR=68
BRTR S **SKiKP 23 20 56.9 +1.3**
comp=Z,5.2nm,0.6s,baz=263,slow=16,SNR=17
BRTR LR LR 23 46 32.4
comp=Z,2µm,20.9s,baz=114,slow=38
**HDMB Hadim 74.56 310** *eP* **P 23 11 30.4 -0.6**
**TOS Tosya 74.63 314** *eP* **P 23 11 31.6 +0.4**
**THZ Tophouse 74.77 132** *eP* **P 23 11 32.5 +0.5**
comp=Z,121nm,1.5s
THZ LR LR
comp=Z,8µm,22.0s
**CANT Cankiri 74.78 314** *eP* **P 23 11 32.0 -0.1**
**AFSR Af˙ar-Bala (A 74.83 312** *eP* **P 23 11 31.6 -0.9**
**VORD Divnogorie 74.89 325** *eP* **P 23 11 31.8 -0.5**
VORD pmax pmax
comp=Z,40nm,1.0s
VORD pmax pmax
comp=N,50nm,1.5s
VORD pmax pmax
comp=E,40nm,1.2s
**MQZ McQueen's Vall 74.92 134** PFAKE 23 11 40.0 +7.3
MQZ LR LR
comp=Z,7µm,22.0s
**KONT Konya--Tatoy 74.93 311** *eP* **P 23 11 31.1 -1.8**
**BZK Bozkurt 74.94 315** *eP* **P 23 11 32.9 +0.1**
**VSR Storozhevoye 75.07 325** *eP* **P 23 11 32.9 -0.5**
VSR *eS* **SKiKP 23 20 59.9 +4.0**
VSR pmax pmax
comp=Z,70nm,0.9s
VSR pmax pmax
comp=N,10.0nm,0.8s
VSR pmax pmax
comp=E,40nm,0.9s
VSR smax smax
comp=N,1µm,4.8s
VSR smax smax
comp=Z,390nm,5.3s
VSR smax smax
comp=E,720nm,6.1s
VSR MLR MLR
comp=Z,3µm,24.0s
VSR MLR MLR
comp=N,3µm,22.0s
VSR MLR MLR
comp=E,1µm,19.0s
**ANTO Ankara 75.16 313** *eP* **P 23 11 34.6 +0.3**
ANTO pmax pmax
comp=Z,306nm,2.0s
ANTO MLR MLR
comp=Z,3µm,21.0s
**ANTO Ankara 75.16 313** P **P 23 11 34.1 -0.2**
SNR=30
**ANTO Ankara 75.16 313** *eP* **P 23 11 34.6 +0.3**
comp=Z,306nm,2.0s
ANTO LR LR
comp=Z,3µm,21.0s
**BR231 Keskin MP Arra 75.17 313** *eP* P 23 11 30.5 -3.9
**VORR Voronezh 75.24 326** *eP* **P 23 11 34.0 -0.3**
VORR pmax pmax
comp=Z,250nm,1.4s
**KHZ Kahutara 75.34 133** *eP* **P 23 11 35.7 +0.5**
comp=Z,82nm,1.3s
KHZ LR LR
comp=Z,9µm,22.0s
**BOSA Boshof 75.42 241** P **P 23 11 35.9 -0.2**
comp=Z,7.5nm,0.8s,baz=76,slow=5.2,SNR=9.8
BOSA LR LR 23 40 23.9
comp=Z,3µm,18.3s,baz=88,slow=32
**BOSA Boshof 75.42 241** *eP* **P 23 11 36.2 +0.1**
**BOSA Boshof 75.42 241** P **P 23 11 36.1 +0.1**
baz=76,SNR=9.1
**BOSA Boshof 75.42 241** *eP* **P 23 11 36.2 +0.1**
**KIZT Kizilcal 75.56 311** *eP* **P 23 11 36.5 -0.1**
**SAFT Safranbolu 75.65 314** *eP* **P 23 11 37.0 0.0**
**HIZ Hauiti 75.79 129** *eP* **P 23 11 39.7 +1.9**
comp=Z,192nm,1.2s
HIZ LR LR
comp=Z,6µm,20.0s
**LPSR Galich'ya Gora 75.79 326** *eP* **P 23 11 37.2 -0.3**
LPSR *eS* S 23 21 09.2 -8.8
LPSR pmax pmax
comp=Z,40nm,1.0s
LPSR pmax pmax
comp=N,6.0nm,1.1s
LPSR pmax pmax
comp=E,20nm,1.1s
LPSR smax smax
comp=N,820nm,3.1s
LPSR smax smax
comp=Z,210nm,5.4s
LPSR smax smax
comp=E,800nm,4.4s
LPSR MLR MLR
comp=N,1µm,20.0s
LPSR MLR MLR
comp=Z,2µm,20.0s
LPSR MLR MLR
comp=E,1µm,17.0s
**SIM Simferopol' 75.83 318***ceP* **P 23 11 37.9 0.0**
SIM *eS* **S 23 21 16.0 -2.8**
SIM pmax pmax
comp=Z,177nm,1.9s

**SUTC Sutluce-Ispart 75.84 310** *eP* **P 23 11 37.2 -1.1**
**SVRH Sivrihisar-ESK 75.98 312** *eP* **P 23 11 39.0 0.0**
**SNZO South Karori 76.04 132** PFAKE 23 11 50.0 +11
SNZO LR LR
comp=Z,10µm,22.0s
**BCK Bucak 76.15 310** *eP* **P 23 11 41.2 +1.2**
**ISP Isparta 76.30 310** *eP* **P 23 11 40.5 -0.4**
**ISP Isparta 76.30 310** P **P 23 11 39.2 -1.7**
**ISP Isparta 76.30 310** PFAKE 23 11 50.0 +9.1
ISP LR LR
comp=Z,2µm,19.0s
**SHUT Suhut-Afyon 76.47 311** *eP* P 23 11 45.4 +3.5
**ELL Elmali 76.50 309** *eP* **P 23 11 41.5 -0.6**
**MDUB Mudurnu 76.51 313** *eP* **P 23 11 42.0 0.0**
**KDZE Karadeniz Ereo 76.57 314** *eP* **P 23 11 40.5 -1.8**
**SEY Seymchan 76.65 22***ceP* **P 23 11 42.8 +0.6**
**SYO Syowa Base 76.80 199**‖*eX* **P 23 11 42.0 -0.9**
**SYO Syowa Base 76.80 199**‖*epP* pP 23 11 50.4 -0.5
**GULT Gulveren 77.00 313** *eP* P 23 11 41.1 -3.6
**FETY Fethiye 77.11 309** *eP* **P 23 11 44.2 -1.1**
**BFZ Birch Farm 77.12 131** *eP* **P 23 11 46.4 +1.0**
comp=Z,158nm,1.2s
BFZ LR LR
comp=Z,11µm,22.0s
**BKZ Black Stump Fm 77.13 129** *eP* **P 23 11 45.9 +0.4**
comp=Z,152nm,1.0s
BKZ LR LR
comp=Z,9µm,20.0s
**SPNC Sapanca-Adapaz 77.22 313** *eP* **P 23 11 43.2 -2.7**
**MSVF Nonsavu 77.22 107** *eP* **P 23 11 47.1 +0.7**
MSVF pmax pmax
comp=Z,92nm,1.2s
**MSVF Nonsavu 77.22 107** P **P 23 11 47.8 +1.4**
comp=Z,284nm,1.2s,SNR=7.0
**MSVF Nonsavu 77.22 107** *eP* **P 23 11 47.1 +0.7**
comp=Z,92nm,1.2s
**CAVI Cavuskoy 77.43 312** *eP* P 23 11 42.2 -4.9
**DALY Dalyan (Mu˙la 77.49 309** *eP* P 23 11 44.2 -3.2
**URZ Urewera 77.52 128** *eP* **P 23 11 48.2 +0.6**
comp=Z,148nm,1.5s
URZ LR LR
comp=Z,5µm,20.0s
**TVSB Tavsanli 77.52 311** *eP* **P 23 11 47.6 -0.1**
**ADVT Abdulvahap 77.57 312** *eP* **P 23 11 47.3 -0.6**
**HRT Hereke 77.72 313** *eP* **P 23 11 47.3 -1.4**
**ARG Arkhangelos 77.76 308** P **P 23 11 48.6 -0.4**
**MOS Moscow 77.81 329** *eP* **P 23 11 48.4 -0.4**
MOS *i* 23 11 55.9
MOS *e* 23 12 07.2
MOS *e* 23 14 50.7
MOS *i* S **S 23 21 37.5 -2.4**
MOS *i* 23 21 51.5
MOS pmax pmax
comp=Z,183nm,1.6s
MOS pmax pmax
comp=Z,600nm,2.2s
MOS smax smax
comp=E,1µm,3.4s
MOS smax smax
comp=N,1µm,3.4s
MOS MLR MLR
comp=N,4µm,20.0s
MOS MLR MLR
comp=E,2µm,20.0s
MOS MLR MLR
comp=Z,3µm,20.0s
**YER Yerkesik 77.85 309** *eP* **P 23 11 47.3 -2.3**
**OBN Obninsk 78.10 328** S **S 23 21 40.1 -2.9**
comp=Z,5.8nm,0.4s,baz=24,slow=19,SNR=3.9
**OBN Obninsk 78.10 328***c iP* **P 23 11 50.4 0.0**
OBN *i* 23 11 57.3
OBN *i* 23 14 47.4
OBN *i* S S 23 21 36.5 -6.5
OBN pmax pmax
comp=Z,55nm,1.0s
**OBN Obninsk 78.10 328** P **P 23 11 50.9 +0.5**
comp=Z,642nm,1.0s,SNR=8.8
**ISK Istanbul-Kandi 78.23 313** *eP* **P 23 11 51.5 +0.1**
**ISK Istanbul-Kandi 78.23 313** P **P 23 11 48.5 -3.0**
**ARMT Armutlu 78.25 312** *eP* **P 23 11 50.4 -1.2**
**KLYT Kilyos 78.29 313** *eP* **P 23 11 51.1 -0.7**
**AYDB Zeytinkoy-Aydi 78.34 310** *eP* P 23 11 45.3 -7.1
**BGKT Bogazkoy 78.47 313** *eP* **P 23 11 50.8 -2.0**
**KCTX Karacabey (Bur 78.55 312** *eP* **P 23 11 52.2 -1.1**
**BALB Balikesir 78.75 311** *eP* P 23 11 45.6 -8.8
**KLMR Klimovskoe 79.16 334***c iP* **P 23 11 56.4 +0.2**
KLMR *e**PP **pP 23 12 03.3 -0.9**
KLMR 23 14 53.1
KLMR S **S 23 21 51.1 -3.1**
KLMR pmax pmax
comp=Z,189nm,1.6s
**CRLT Corlu 79.22 313** *eP* **P 23 11 55.6 -1.3**
**TKR Tekirdag 79.33 313** *eP* **P 23 11 56.8 -0.8**
**KRBG Karabiga-Canak 79.36 312** *eP* P 23 11 48.0 -10
**SUR Sutherland 79.48 238** *eP* **P 23 12 00.9 +2.1**
comp=Z,62nm,1.1s
SUR LR LR
comp=Z,5µm,18.0s
**TIRR Tirgusor 79.57 316** *eP* **P 23 11 59.3 +0.5**
TIRR pmax pmax
comp=Z,96nm,1.3s
TIRR MLR MLR
comp=Z,2µm,19.0s
**TIRR Tirgusor 79.57 316**‖*iP* **P 23 11 57.4 -1.3**
**TIRR Tirgusor 79.57 316** *eP* **P 23 11 59.3 +0.5**
comp=Z,96nm,1.3s
TIRR LR LR
comp=Z,2µm,19.0s
**LAST Lasithi 79.64 306** *eP* **P 23 11 59.7 +0.2**
comp=Z,59nm,1.1s
LAST LR LR
comp=Z,3µm,20.0s
**LPK Lapseki 79.76 312** *eP* **P 23 12 00.6 +0.7**
**TLB Topalu 79.86 316**⇑*iP* **P 23 12 00.4 +0.1**
**MSAB Monastry St. A 79.88 316**⇑*iP* **P 23 12 00.5 0.0**
**SANT Santorini 79.90 308** PFAKE 23 12 10.0 +9.2
SANT LR LR
comp=Z,2µm,20.0s
**CFR Carcaliu 79.95 317**⇑*iP* **P 23 12 00.8 0.0**
**PRD Provadia 79.96 315** *i* P **P 23 12 01.2 +0.3**
**KIS Kishinev 79.97 319** *eP* **P 23 12 00.0 -0.9**
KIS *eS* **S 23 22 04.0 +0.6**
**KIS Kishinev 79.97 319** *ePS* 23 22 25.0
KIS LRM MLR 23 57 00.0
comp=Z,2µm,20.0s
**KIS Kishinev 79.97 319** *eP* **P 23 12 00.0 -0.9**
KIS *e* 23 12 09.0
KIS *e* 23 15 02.0
KIS *eS* **S 23 22 04.0 +0.6**
KIS *ePS* **ScS 23 22 25.0 +0.8**
**KIS Kishinev 79.97 319**⇑*iP* P 23 12 08.3 +7.4
**ERIK Erikli-Kesan 80.01 312** *eP* **P 23 12 00.9 -0.4**
**EDRB Edirne 80.11 313** *eP* P 23 11 55.6 -6.2
**IDI Anoyia 80.14 306** P **P 23 12 02.7 +0.5**
comp=Z,10nm,0.8s,baz=98,slow=10,SNR=4.0
IDI S **S 23 22 01.1 -4.7**
comp=Z,16nm,1.2s,baz=249,slow=12,SNR=2.1
**IDI Anoyia 80.14 306** *eP* **P 23 12 03.1 +1.0**
comp=Z,95nm,1.3s
IDI S **S 23 22 01.1 -4.7**
IDI LR LR
comp=Z,3µm,22.0s
**LEOM Leova 80.21 318**‖*iP* **P 23 12 02.8 +0.6**
**ALN Alexandroupoli 80.41 312** *eP* **P 23 12 02.9 -0.4**
**ALN Alexandroupoli 80.41 312** P **P 23 12 02.6 -0.8**
**AKASG Malin Array Be 80.75 322** P **P 23 12 04.9 -0.1**
comp=Z,8.7nm,1.0s,baz=87,slow=5.0,SNR=34
AKASG PP **PP 23 15 08.8 -0.5**
comp=Z,0.9nm,0.5s,baz=94,slow=5.6,SNR=3.7
AKASG S **S 23 22 09.0 -2.4**
comp=Z,0.3nm,0.3s,baz=230,slow=4.3,SNR=3.6
AKASG LR LR 23 52 01.6
comp=Z,3µm,21.7s,baz=130,slow=39
**AKBB Malin Array Si 80.75 322** *eP* **P 23 12 04.9 -0.1**
AKBB *e* 23 15 08.8
**AKBB Malin Array Si 80.75 322** *eP* **P 23 12 04.9 -0.1**
AKBB *ePP* **PP 23 15 08.8 -0.5**
**KIEV Kiev 80.76 322** *eP* **P 23 12 04.3 -0.8**
KIEV pmax pmax
comp=Z,171nm,2.1s
KIEV MLR MLR
comp=Z,3µm,22.0s
**KIEV Kiev 80.76 322** *eP* **P 23 12 04.2 -0.8**
comp=Z,171nm,2.1s

KIEV LR LR
comp=Z,3µm,22.0s
**AK11 Malin Array Si 80.78 322** *eP* **P 23 12 05.0 -0.1**
**VNDA Vanda 80.83 169** P **P 23 12 05.0 +0.1**
comp=Z,5.0nm,1.0s,baz=295,slow=6.0,SNR=15
VNDA S **S 23 22 11.0 -0.3**
comp=Z,0.2nm,0.6s,baz=180,slow=2.0,SNR=4.4
VNDA LR LR 23 46 28.0
comp=Z,2µm,18.3s,baz=310,slow=35
**VNDA Vanda 80.83 169** *eP* **P 23 12 05.4 +0.5**
VNDA S **S 23 22 11.0 -0.3**
VNDA pmax pmax
comp=Z,42nm,1.3s
**VNDA Vanda 80.83 169** *eP* **P 23 12 05.4 +0.5**
comp=Z,42nm,1.3s
VNDA S **S 23 22 11.0 -0.3**
**RDO Rodhopi 80.84 312** PFAKE 23 12 20.0 +14
RDO LR LR
comp=Z,12µm,18.0s
**SZH Strazhica 81.02 315** *i* P **P 23 12 05.8 -0.8**
**ISR Istrita 81.02 316**⇑*iP* P 23 11 57.4 -9.3
**VRI Vrincioaia 81.08 317**⇑*iP* **P 23 12 07.8 +0.9**
**RAO Raoul Island 81.12 119** PFAKE 23 12 20.0 +13
RAO LR LR
comp=Z,4µm,21.0s
**PLOR Plostina 81.13 317**‖*iP* **P 23 12 08.3 +1.1**
**TMCR Tamitsa 81.28 337** *eP* **P 23 12 08.5 +1.0**
TMCR *eS* S 23 22 25.0 +8.7
TMCR pmax pmax
comp=Z,86nm,1.1s
**TESR Tescani 81.29 318**‖*iP* **P 23 12 08.5 +0.5**
**PVL Pavlikeni 81.44 314** *i* P **P 23 12 09.3 +0.5**
**MLR Muntele Rosu 81.52 317**‖*iP* **P 23 12 09.9 +0.5**
**RZN Rozhen 81.56 313** *i* P **P 23 12 09.7 0.0**
**KAVA Kavala 81.56 312** P **P 23 12 10.1 +0.6**
**KAVA Kavala 81.56 312** P **P 23 12 10.1 +0.6**
**HUMR Humele 81.97 316**⇑*iP* **P 23 12 10.9 -0.7**
**DOPR Dopca 82.01 317**‖*iP* **P 23 12 11.8 0.0**
**NVR Nevrokopi 82.11 312** P **P 23 12 11.3 -1.2**
**VOIR 82.12 317**⇑*iP* **P 23 12 14.0 +1.5**
**VOIR 82.12 317** S **S 23 22 25.0 -1.0**
**PGB Panagyurishte 82.13 314** *i* P P 23 12 09.3 -3.3
**TSUM Tsumeb 82.18 251** *eP* **P 23 12 14.7 +1.3**
comp=Z,100nm,2.0s
TSUM LR LR
comp=Z,4µm,21.0s
**MMB Musomiste 82.26 313** *i* P **P 23 12 12.3 -1.0**
**SRS Serrai 82.27 312** P **P 23 12 12.6 -0.7**
**ARR Arges 82.39 316**‖*iP* P 23 12 21.8 +7.9
**BURAR Bucovina Array 82.50 319**⇑*iP* **P 23 12 16.0 +1.5**
**BUR04 Bucovina Ar. S 82.50 319** *eP* **P 23 12 14.7 +0.2**
**MPEP Malo Peshtene 82.60 314** *i* P **P 23 12 14.4 -0.6**
**MICGM Minsk 82.62 326**⇑*eP* **P 23 12 14.0 -0.8**
**GUR Goura 82.64 309** P **P 23 12 13.9 -1.5**
**GUR Goura 82.64 309** P **P 23 12 13.9 -1.5**
**MNK Minsk 82.65 326**⇑*eP* **P 23 12 14.0 -0.9**
MNK pmax pmax
comp=Z,220nm,2.0s
**KKB Krupnik 82.79 313** *i* P P 23 12 10.1 -5.9
**KLV Kalavryta, Ach 82.81 309** P P 23 12 20.6 +4.4
**AGG Agios Georgios 82.83 310** PFAKE 23 12 30.0 +14
AGG LR LR
comp=Z,2µm,20.0s
**VTS Vitosha 82.83 313** *i* P P 23 12 11.5 -4.9
**VTS Vitosha 82.83 313** *i* P P 23 12 11.5 -4.9
**KALE Kalithea 82.87 309** P **P 23 12 13.9 -2.7**
**LIT Litokhoron 82.90 311** P P 23 12 22.6 +6.0
**ARCR ARCALIA 82.95 318**⇑*iP* **P 23 12 17.9 +1.2**
**LOT Lotru 83.01 316**⇑*iP* **P 23 12 16.8 -0.4**
**VAY Valandovo 83.06 312** *i* P P 23 12 25.4 +8.0
**DRO Drossia 83.13 309** P P 23 12 21.6 +3.7
**NACGM Naroch 83.34 326** *eP* P 23 12 26.0 +7.5
**CJR Cluj-Napoca 83.38 318**‖*iP* **P 23 12 20.1 +1.1**
**IDID Didziasalis 83.48 326** *eP* **P 23 12 20.1 +1.0**
IDID IAmb IAmb 23 12 28.9
comp=Z,34nm,0.9s
**BMR Baia Mare 83.65 319**⇑*iP* **P 23 12 21.7 +1.4**
**GZR Gura Zlata 83.68 316**⇑*iP* **P 23 12 21.4 +0.8**
**DEV Deva 83.69 317**⇑*iP* **P 23 12 21.5 +1.0**
**LVV L'vov 83.76 321** *eP* **P 23 12 20.9 +0.1**
LVV *e* 23 15 28.9
LVV *eS* **S 23 22 40.7 -1.6**
**IIGN Ignalina 83.77 326** *eP* **P 23 12 21.6 +1.0**
IIGN IAmb IAmb 23 12 30.5
comp=Z,42nm,1.0s
**IZAR Zarasai 83.86 327** *eP* **P 23 12 22.1 +0.9**
IZAR IAmb IAmb 23 12 30.7
comp=Z,20nm,0.7s
**ISAL Salakas 83.88 327** *eP* **P 23 12 22.1 +0.9**
ISAL IAmb IAmb 23 12 30.9
comp=Z,27nm,0.9s
**DRGR 84.00 318**⇑*iP* **P 23 12 23.2 +1.0**
**SKO Skopje 84.01 313** *i* P P 23 12 29.9 +7.6
**BOVS Bovan 84.11 314** *eP* **P 23 12 22.7 0.0**
**LVZ Lovozero 84.12 340***ceP* **P 23 12 20.8 -1.5**
LVZ pmax pmax
comp=Z,89nm,1.7s
LVZ MLR MLR
comp=Z,6µm,21.0s
**BILL Bilibino 84.20 20***c iP* **P 23 12 22.6 -0.1**
BILL *i* 23 12 33.0
BILL *i* 23 15 40.0
BILL pmax pmax
comp=Z,23nm,1.0s
**VSU Vasula 84.32 330***ceP* **P 23 12 23.0 -0.4**
VSU pmax pmax
comp=Z,166nm,1.7s
**OHR Ohrid 84.34 312** *i* P **P 23 12 26.7 +2.6**
**APA Apatity 84.43 339**⇑*iP* **P 23 12 25.4 +1.6**
APA *i* S **S 23 22 48.0 -0.3**
APA MLR MLR
comp=Z,6µm,20.0s
**BZS Buzias 84.52 316**‖*iP* **P 23 12 25.4 +0.6**
**KWP Kalwaria Pacla 84.56 320** *eP* **P 23 12 23.8 -1.1**
KWP *eS* **S 23 22 49.5 -0.8**
KWP LMZ LR 23 53 44.5
**KWP Kalwaria Pacla 84.56 320** *eP* **P 23 12 23.8 -1.1**
KWP *eS* **S 23 22 49.6 -0.8**
KWP MLR MLR
comp=Z,2µm,22.8s
**UZH Uzhgorod 84.63 319** *eP* **P 23 12 25.0 -0.2**
UZH *e* 23 12 36.6
UZH *e* 23 15 48.1
UZH *eS* **S 23 22 48.0 -3.0**
UZH *ePS* **PnS 23 23 52.1 +4.8**
**KOLS Kolonicke sedl 84.70 320** *eP* **P 23 12 26.7 +1.1**
KOLS pmax pmax
comp=Z,43nm,1.1s
**KOLS Kolonicke sedl 84.70 320** *eP* **P 23 12 26.7 +1.1**
**BANR Banloc 84.81 316**⇑*iP* P 23 12 34.6 +8.4
**GRUS Gruza 84.86 314** *eP* **P 23 12 26.5 0.0**
**TIR Tirane 85.08 312** PFAKE 23 12 40.0 +12
TIR LR LR
comp=Z,2µm,20.0s
**TRUS Trudelj 85.13 315** *eP* **P 23 12 27.1 -0.8**
**SUW Suwalki 85.17 325** *eP* **P 23 12 27.6 -0.2**
SUW *eS* **S 23 22 54.1 -2.1**
SUW LMZ LR 23 56 42.7
**SUW Suwalki 85.17 325**⇑*eP* **P 23 12 27.7 -0.1**
SUW *eS* **S 23 22 54.2 -2.0**
SUW MLR MLR
comp=Z,3µm,22.3s
**DIVS Divibare 85.41 315**⇑*iP* **P 23 12 29.5 +0.1**
**DIVS Divibare 85.41 315**⇑*iP* **P 23 12 29.5 +0.1**
**FIA0 FINESS Array S 85.44 332** *eP* **P 23 12 29.9 +0.9**
**FIA0 FINESS Array S 85.44 332** *eP* **P 23 12 29.9 +0.9**
**FINES FINESS Array B 85.44 332** P **P 23 12 29.9 +0.9**
comp=Z,11nm,1.0s,baz=119,slow=5.6,SNR=35
FINES LR LR 23 55 24.1
comp=Z,3µm,20.2s,baz=108,slow=39
**STHS Stebnicka Huta 85.45 320** *eP* **P 23 12 30.3 +0.9**
STHS pmax pmax
comp=Z,10.0nm,0.9s
**STHS Stebnicka Huta 85.45 320** *eP* **P 23 12 30.3 +0.9**
**BBLS Lazići 85.79 314** *eP* **P 23 12 32.1 +0.8**
**PKSN Nyarlorinc 85.94 317**‖*eS* **P 23 12 33.2 +1.4**
**NIE Niedzica 86.06 320** *eP* **P 23 12 33.4 +1.0**
NIE *eS* **S 23 23 09.9 +4.7**
NIE LMZ LR 23 54 58.4
**NIE Niedzica 86.06 320** *eP* **P 23 12 33.4 +1.0**
NIE *eS* **S 23 23 10.0 +4.7**
NIE MLR MLR

comp=Z,2µm,21.1s
**PSZ Piszkesteto 86.08 318** *e*P **P** **23 12 32.9 +0.3**
PSZ pmax pmax
comp=Z,313nm,2.3s
**PSZ Piszkesteto 86.08 318**⇓ *i*P **P** **23 12 33.4 +0.8**
**PSZ Piszkesteto 86.08 318**⇑ *e*SKSac **P** **23 12 33.1 +0.5**
**PSZ Piszkesteto 86.08 318** *e*P **P** **23 12 32.9 +0.3**
comp=Z,314nm,2.3s
**BEL Belsk 86.17 322** *e*P **P** **23 12 33.7 +0.9**
BEL LMZ LR 23 55 16.4
**BEL Belsk 86.17 322** *e*P **P** **23 12 33.7 +0.9**
BEL MLR MLR
comp=Z,5µm,22.8s
**NVL N'lazarevskaya 86.46 199** *e*P **P** **23 12 35.4 +1.5**
**OJC Ojcow 86.51 321** *e*P **P** **23 12 35.2 +0.6**
OJC *e*S **S** **23 23 09.9 +0.4**
OJC LMZ LR 23 58 55.7
**OJC Ojcow 86.51 321** *e*P **P** **23 12 35.2 +0.6**
OJC *e*S **S** **23 23 10.0 +0.4**
OJC MLR MLR
comp=Z,2µm,22.1s
**OJC Ojcow 86.51 321** *e*P **P** **23 12 35.0 +0.4**
comp=Z,236nm,2.2s
**VYHS Vyhne 86.87 319** *e*P **P** **23 12 36.6 +0.2**
VYHS pmax pmax
comp=Z,29nm,1.9s
**VYHS Vyhne 86.87 319** *e*P **P** **23 12 36.6 +0.2**
**KLNR Kaliningrad 87.00 325** *e*P **P** **23 12 38.4 +1.6**
KLNR pmax pmax
comp=Z,131nm,1.1s
**PKSG 87.01 318**⇑ *e*SKSac **P** **23 12 37.5 +0.5**
**AFI Afiamalu 87.08 104** *e*P **P** **23 12 39.8 +1.6**
AFI pmax pmax
comp=Z,108nm,1.1s
**AFI Afiamalu 87.08 104** *e*P **P** **23 12 39.8 +1.6**
comp=Z,108nm,1.1s
**TIP Timpagrande 87.15 309** PFAKE 23 12 50.0 +12
TIP LR LR
comp=Z,1µm,20.0s
**KEV Kevo 87.37 340** *e*P **P** **23 12 39.5 +1.2**
KEV pmax pmax
comp=Z,78nm,1.3s
KEV MLR MLR
comp=Z,4µm,21.0s
**KEV Kevo 87.37 340** *e*P **P** **23 12 39.5 +1.2**
comp=Z,78nm,1.3s
KEV LR LR
comp=Z,4µm,21.0s
**OKC Ostrava-Krasne 87.51 320** *e*P **P** **23 12 40.1 +0.7**
OKC *e**PP **pP** **23 12 47.8 +0.3**
OKC *e* 23 16 01.7
OKC *e*S **S** **23 23 19.2 0.0**
OKC MLR MLR
comp=Z,2µm,16.3s
**OKC Ostrava-Krasne 87.51 320** *e*P **P** **23 12 40.1 +0.7**
OKC *e*pP **pP** **23 12 47.8 +0.3**
OKC *e*PP **PP** **23 16 01.7 -2.7**
OKC *e*S **S** **23 23 19.2 0.0**
OKC AMS AMS 00 03 20.0
comp=Z,2µm,16.3s
**RAC Raciborz 87.51 320** *e*P **P** **23 12 40.5 +1.1**
**ARA0 ARCESS Array S 87.82 340** *e*P **P** **23 12 41.3 +0.8**
**ARCES ARCESS Array B 87.82 340** P **P** **23 12 41.3 +0.8**
comp=Z,29nm,1.1s,baz=93,slow=4.9,SNR=22
ARCES LR LR 23 56 23.8
comp=Z,6µm,20.4s,baz=103,slow=39
**MORC Moravsky Berou 87.89 320** *e*P **P** **23 12 42.0 +0.7**
MORC pmax pmax
comp=Z,906nm,2.2s
**MORC Moravsky Berou 87.89 320**⇑ *i*P **P** **23 12 41.8 +0.5**
**MORC Moravsky Berou 87.89 320** *e*P **P** **23 12 42.0 +0.7**
comp=Z,906nm,2.2s
**CUC Castrococco 87.96 310** PFAKE 23 12 50.0 +8.1
CUC LR LR
comp=Z,2µm,19.0s
**KOGS Kog 88.34 317** *e*P **P** **23 12 44.0 +0.6**
**KRLC Kraliky 88.41 320** *e*P **P** **23 12 44.8 +1.0**
KRLC *e**PP **pP** **23 12 52.7 +0.8**
KRLC *e* 23 16 10.9
**KRLC Kraliky 88.41 320** *e*P **P** **23 12 44.8 +1.0**
KRLC *e*pP **pP** **23 12 52.7 +0.8**
KRLC *e*PP **PP** **23 16 10.9 -0.9**
**VRAC Vranov 88.44 319**⇑ *i*P P 23 12 52.3 +8.4
**GKP Gorka Klasztor 88.53 323** *e*P P 23 12 52.3 +8.1
GKP LMZ LR 23 59 10.2
**GKP Gorka Klasztor 88.53 323** *e*P P 23 12 52.3 +8.1
GKP MLR MLR
comp=Z,2µm,21.4s
**WDD Wield Dalam 88.58 306** PFAKE 23 13 00.0 +15
WDD LR LR
comp=Z,2µm,18.0s
**DPC Dobruska-Polom 88.74 320** *e*P **P** **23 12 46.4 +1.1**
DPC *e**PP **pP** **23 12 54.2 +0.8**
DPC *e*S **S** **23 23 30.9 -0.1**
DPC *e* 23 24 36.7
DPC MLR MLR
comp=Z,2µm,18.1s
**DPC Dobruska-Polom 88.74 320** *e*P **P** **23 12 46.4 +1.1**
DPC *e*pP **pP** **23 12 54.2 +0.8**
DPC *e*PP PP 23 16 07.2 -7.2
DPC *e*S **S** **23 23 30.9 -0.1**
DPC *e*PS **PnS** **23 24 36.7 -0.1**
DPC AMS AMS 00 02 20.0
comp=Z,2µm,18.1s
**KSP Ksiaz 88.81 321** *e*P **P** **23 12 46.8 +1.2**
KSP *e*S **S** **23 23 31.2 -0.4**
KSP LMZ LR 23 56 17.7
**KSP Ksiaz 88.81 321** *e*P **P** **23 12 46.8 +1.2**
KSP *e*S **S** **23 23 31.2 -0.4**
KSP MLR MLR
comp=Z,2µm,25.2s
**ARSA Arzberg 88.92 317**⇑ *i*P **P** **23 12 47.2 +1.0**
comp=Z,46nm,1.3s
**BOJS Bojanci 88.93 316** *e*P **P** **23 12 45.9 -0.4**
**UPC Upice 88.95 321** *e*P **P** **23 12 47.3 +1.0**
UPC *e**PP **pP** **23 12 54.9 +0.5**
UPC *e* 23 13 06.0
UPC *e*S **S** **23 23 32.1 -0.8**
UPC MLR MLR
comp=Z,3µm,18.6s
**UPC Upice 88.95 321** *e*P **P** **23 12 47.3 +1.0**
UPC *e*pP **pP** **23 12 54.9 +0.5**
UPC *e*S **S** **23 23 32.1 -0.8**
UPC AMS AMS 00 00 30.0
comp=Z,3µm,18.6s
**TREC Trest 89.16 319** *e*P **P** **23 12 48.0 +0.7**
TREC *e**PP **pP** **23 12 56.0 +0.6**
TREC *e* 23 13 00.5
TREC MLR MLR
comp=Z,2µm,18.2s
**TREC Trest 89.16 319** *e*P **P** **23 12 48.0 +0.7**
TREC *e*pP **pP** **23 12 56.0 +0.6**
TREC *e*sP **sP** **23 13 00.5 +2.2**
TREC AMS AMS 00 01 30.0
comp=Z,2µm,18.2s
**SOKA Soboth 89.20 317**⇑ *i*P **P** **23 12 44.6 -3.0**
comp=Z,54nm,1.3s
**LJU Ljubljana 89.49 316** *e*P **P** **23 12 49.9 +1.0**
**GOPC GO Pecny, Ondr 89.68 320** *e*P **P** **23 12 50.6 +0.9**
GOPC *e**PP **pP** **23 12 58.5 +0.7**
GOPC *e*S **S** **23 23 41.3 +1.6**
GOPC MLR MLR
comp=Z,2µm,18.8s
**GOPC GO Pecny, Ondr 89.68 320** *e*P **P** **23 12 50.6 +0.9**
GOPC *e*pP **pP** **23 12 58.5 +0.7**
GOPC *e*S **S** **23 23 41.3 +1.6**
GOPC AMS AMS 00 01 10.0
comp=Z,2µm,18.8s
**PRU Pruhonice 89.84 320** *e*P **P** **23 12 51.8 +1.4**
PRU *e* 23 13 02.4
PRU *e* 23 13 09.8
PRU *e*S **S** **23 23 41.3 +0.1**
PRU MLR MLR
comp=Z,2µm,17.9s
**PRU Pruhonice 89.84 320** *e*P **P** **23 12 51.8 +1.4**
PRU *e*pP **pP** **23 12 59.3 +0.8**
PRU *e*sP **sP** **23 13 02.4 +1.0**
PRU *e*S **S** **23 23 41.3 +0.1**
PRU AMS AMS 00 01 10.0
comp=Z,2µm,17.9s
**PVCC Panska Ves 89.87 320** *e*P **P** **23 12 51.8 +1.2**
PVCC *e**PP **pP** **23 12 59.5 +0.8**
PVCC MLR MLR
comp=Z,2µm,17.1s
**PVCC Panska Ves 89.87 320** *e*P **P** **23 12 51.8 +1.2**
PVCC *e*pP **pP** **23 12 59.5 +0.8**
PVCC AMS AMS 00 04 00.0
comp=Z,2µm,17.1s
**PRA Prague 89.92 320** *e*P **P** **23 12 51.5 +0.7**
PRA *e**PP **pP** **23 12 59.3 +0.4**
PRA *e* 23 13 04.0
PRA *e*S **S** **23 23 43.4 +1.5**
PRA MLR MLR
comp=Z,2µm,19.4s
**PRA Prague 89.92 320** *e*P **P** **23 12 51.5 +0.7**
PRA *e*pP **pP** **23 12 59.3 +0.4**
PRA *e*sP **sP** **23 13 04.0 +2.2**
PRA *e*S **S** **23 23 43.4 +1.5**
PRA AMS AMS 00 03 20.0
comp=Z,2µm,19.4s
**TRI Trieste 89.99 316** PFAKE 23 13 00.0 +8.8
TRI LR LR
comp=Z,2µm,19.0s
**GEC2 GERESS Array S 90.29 319** *e*P **P** **23 12 53.2 +0.5**
**GEC2 GERESS Array S 90.29 319** *e*P **P** **23 12 52.5 -0.2**
comp=Z,119nm,2.0s,baz=94,slow=4.7
GEC2 *e*pP **pP** **23 13 01.0 +0.2**
GEC2 *e*S **S** **23 23 42.5 -3.1**
baz=91,slow=9.1
**GEC2 GERESS Array S 90.29 319** *e*P **P** **23 12 53.5 +0.8**
**GERES GERESS Array B 90.29 319** P **P** **23 12 53.2 +0.5**
comp=Z,3.0nm,0.7s,baz=90,slow=5.3,SNR=27
GERES LR LR 23 58 55.3
comp=Z,1µm,19.5s,baz=84,slow=39
**BRG Berggiesshubel 90.30 321** *e*P **P** **23 12 53.4 +0.8**
comp=Z,71nm,1.8s
BRG *i* 23 13 01.1
comp=Z,227nm,2.2s
**BRG Berggiesshubel 90.30 321** S **S** **23 23 48.0 +2.6**
BRG SS **SS** **23 29 47.0 +1.6**
**BRG Berggiesshubel 90.30 321** *e*P **P** **23 12 53.4 +0.8**
BRG *i* 23 13 01.1
BRG S **S** **23 23 48.0 +2.6**
BRG SS **SS** **23 29 47.0 +1.6**
BRG pmax pmax
comp=Z,71nm,1.8s
BRG pmax pmax
comp=Z,227nm,2.2s
**BRG Berggiesshubel 90.30 321** *e*P **P** **23 12 53.0 +0.5**
comp=Z,70nm,1.8s,baz=94,slow=4.7
BRG *e*S **S** **23 23 42.7 -2.7**
baz=91,slow=9.1
**KHC Kasperske Hory 90.39 319** *e*P **P** **23 12 53.6 +0.5**
KHC *e**PP **pP** **23 13 01.6 +0.4**
KHC *e* 23 13 12.3
KHC *e*S **S** **23 23 44.2 -2.3**
KHC MLR MLR
comp=Z,2µm,19.0s
**KHC Kasperske Hory 90.39 319** *e*P **P** **23 12 53.6 +0.5**
KHC *e*pP **pP** **23 13 01.6 +0.4**
KHC *e*S **S** **23 23 44.2 -2.3**
KHC AMS AMS 00 00 20.0
comp=Z,2µm,19.0s
**KHC Kasperske Hory 90.39 319** *e*P **P** **23 12 53.7 +0.6**
comp=Z,11nm,1.4s
KHC LR LR
comp=Z,1µm,22.0s
**RJOB Jochberg 90.81 318** *e*P **P** **23 12 54.9 -0.2**
comp=Z,46nm,1.9s,baz=94,slow=4.7
RJOB *e*S **S** **23 23 45.4 -5.0**
baz=91,slow=9.1
**WET Wettzell 90.85 319** *e*P **P** **23 12 55.6 +0.4**
comp=Z,163nm,2.4s,baz=94,slow=4.7
WET *e*S **S** **23 23 48.7 -2.0**
baz=91,slow=9.1
**CLL Collm 90.92 321** *i* P **P** **23 12 55.6 +0.2**
CLL *i* 23 13 07.1
CLL *e*S **SKKSac** **23 23 45.0 +4.3**
CLL pmax pmax
comp=Z,189nm,2.8s
**CLL Collm 90.92 321** *e*P **P** **23 12 55.8 +0.3**
comp=Z,190nm,2.7s,baz=94,slow=4.7
CLL *e*S **S** **23 23 46.9 -4.2**
baz=91,slow=9.1
**CLL Collm 90.92 321** *i* P **P** **23 12 55.6 +0.2**
comp=Z,189nm,2.8s
CLL *i* sP **sP** **23 13 03.5 -3.0**
CLL *i* 23 13 07.1
CLL *i* 23 13 14.4
CLL *e*PP **PP** **23 16 36.0 +4.4**
CLL *e*PPP PPP 23 18 36.0
CLL *e*S **SKKSac** **23 23 45.0 +4.3**
comp=N,2µm,23.1s
CLL *e*S **SKKSac** **23 23 45.0 +4.3**
comp=E,400nm,22.1s
CLL *e* 23 24 36.0
CLL *e*PS **PS** **23 24 56.0 -6.0**
CLL *e*PPS PPS 23 25 31.0
CLL *e* 23 26 01.0
CLL *e*SS SS 23 29 36.0 -18
CLL *e*SSS SSS 23 33 30.0
CLL *e*SSSS 23 36 46.0
**CLL Collm 90.92 321** *e*P **P** **23 12 56.2 +0.8**
comp=E,66nm,1.7s
CLL LR LR
comp=Z,3µm,21.0s
**RGN Rugen 90.97 324** PFAKE 23 13 10.0 +14
RGN LR LR
comp=Z,3µm,20.0s
**SNAA Sanae 91.06 198** P **P** **23 12 57.7 +1.9**
**SNAA Sanae 91.06 198** *e*P **P** **23 12 56.7 +0.9**
SNAA pmax pmax
comp=Z,30nm,1.6s
SNAA MLR MLR
comp=Z,1µm,19.0s
**SNAA Sanae 91.06 198** *e*P **P** **23 12 56.7 +0.9**
comp=Z,30nm,1.6s
SNAA LR LR
comp=Z,1µm,19.0s
**NKC Novy Kostel 91.20 320** *e*P **P** **23 12 57.6 +0.8**
NKC *e* 23 13 09.3
NKC *e* 23 13 16.2
NKC *e*S **S** **23 23 53.7 -0.1**
NKC MLR MLR
comp=Z,2µm,17.2s
**NKC Novy Kostel 91.20 320** *e*P **P** **23 12 57.6 +0.8**
NKC *e*pP **pP** **23 13 05.4 +0.5**
NKC *e*sP **sP** **23 13 09.3 +1.5**
NKC *e*S **S** **23 23 53.7 -0.1**
NKC AMS AMS 00 04 50.0
comp=Z,2µm,17.2s
**TANN Tannenbergstha 91.21 320** *e*P **P** **23 12 57.1 +0.3**
comp=Z,49nm,1.9s,baz=94,slow=4.7
TANN *e*S **S** **23 23 53.2 -0.7**
baz=91,slow=9.1
**ROTZ Rotzenmuhle 91.33 320** *e*P **P** **23 12 58.1 +0.7**
comp=Z,67nm,1.9s,baz=94,slow=4.7
ROTZ *e*S **S** **23 23 52.8 -2.1**
baz=91,slow=9.1
**WTTA Wattenberg 91.56 317**⇑ *i*P **P** **23 12 58.8 0.0**
comp=Z,31nm,1.0s
**MOX Moxa 91.76 320** *e*P **P** **23 12 59.8 +0.4**
comp=Z,49nm,1.7s,baz=94,slow=4.7
MOX *e*S **S** **23 23 56.7 -2.1**
baz=91,slow=9.1
MOX *e*L L 00 01 55.2
comp=Z,2µm,21.1s
**FUR Furstenfeldbru 91.86 318** *e*P **P** **23 13 00.2 +0.3**
comp=Z,72nm,1.8s,baz=94,slow=4.7
FUR *e*S **S** **23 23 55.7 -4.1**
baz=91,slow=9.1
**GRF Grafenberg Arr 91.97 319** *e*P **P** **23 13 00.6 +0.2**
comp=Z,91nm,1.9s,baz=94,slow=4.7
GRF *e*pP **pP** **23 13 09.2 +0.7**
GRF *e*sP **sP** **23 13 16.3 +4.9**
GRF *e*S **S** **23 24 00.3 -0.4**
baz=91,slow=9.1
GRF *e*L L 00 02 41.6
comp=Z,2µm,18.8s
**GRFO Grafenberg 91.97 319** *e*P **P** **23 13 02.0 +1.6**
GRFO pmax pmax
comp=Z,67nm,1.5s
GRFO MLR MLR
comp=Z,2µm,19.0s
**GRFO Grafenberg 91.97 319** *e*P **P** **23 13 02.0 +1.6**
comp=Z,67nm,1.5s
GRFO LR LR
comp=Z,2µm,19.0s
**SPB1 Spitsbergen Ar 91.97 348** *e*P **P** **23 13 00.1 +0.3**
**SPA1 Spitsbergen Ar 91.97 348** *e*P **P** **23 13 00.3 +0.5**
**SPB5 Spitsbergen Ar 91.97 348** *e*P P 23 13 05.0 +5.2
**SPB3 Spitsbergen Ar 91.97 348** *e*P **P** **23 13 00.2 +0.4**
**GAMB Gambell 91.98 26** PFAKE 23 13 10.0 +10
GAMB LR LR
comp=Z,4µm,18.0s
**VLC Villacollemand 92.29 314** PFAKE 23 13 10.0 +8.0
VLC LR LR
comp=Z,1µm,20.0s
**NB2 NORSAR Subarra 92.47 331** P **P** **23 13 02.4 0.0**
comp=Z,10nm,0.9s,baz=92,slow=4.6
**NB2 NORSAR Subarra 92.47 331** P **P** **23 13 02.4 0.0**
baz=92,slow=4.6
**NB200 NORSAR Array S 92.47 331** *e*P **P** **23 13 02.7 +0.3**
NB200 *e*PP **PP** **23 16 43.3 -0.3**
**NOA NORSAR Array B 92.47 331** P **P** **23 13 02.7 +0.3**
comp=Z,6.1nm,1.0s,baz=92,slow=4.7,SNR=6.0
NOA PP **PP** **23 16 43.3 -0.3**
comp=Z,1.6nm,0.8s,baz=91,slow=7.5,SNR=2.7
NOA LR LR 00 00 18.8
comp=Z,1µm,18.6s,baz=100,slow=39
**FUORN Ofenpass-Fuorn 92.48 316** *e*P **P** **23 13 04.3 +1.3**
comp=Z,82nm,1.5s
**CLZ Clausthal 92.59 322** *e*P **P** **23 13 03.9 +0.6**
comp=Z,26nm,1.6s,baz=94,slow=4.7
CLZ *e*S **S** **23 24 02.2 -4.0**
baz=91,slow=9.1
**NBO02 NORSAR Array S 92.64 331** *e*P **P** **23 13 03.6 +0.4**
NBO02 *e*sP **sP** **23 13 11.4 -2.9**
**VNA2 Neumayer--Watz 92.68 198** P **P** **23 13 04.6 +1.3**
baz=76,slow=4.5
**DAVOX Davos/Dischmat 92.75 317** P **P** **23 13 04.7 +0.5**
comp=Z,2.8nm,0.6s,baz=83,slow=4.4
**KEST Kesra 92.78 305** P **P** **23 13 05.1 +0.6**
comp=Z,14nm,1.1s,baz=102,slow=6.5,SNR=4.7
KEST LR LR 00 00 27.4
comp=Z,2µm,18.6s,baz=30,slow=39
**KEST Kesra 92.78 305** *e*P **P** **23 13 06.7 +2.2**
**NRDL Niedersach Rie 92.78 322** *e*P **P** **23 13 05.0 +1.1**
comp=Z,114nm,2.4s,baz=94,slow=4.7
NRDL *e*S **S** **23 24 04.0 -3.6**
baz=91,slow=9.1
**GTTG Gvttingen 92.84 321** *e*P **P** **23 13 05.0 +0.7**
comp=Z,85nm,2.3s,baz=94,slow=4.7
GTTG *e*S **S** **23 24 04.3 -4.0**
baz=91,slow=9.1
**KBS Kingsbay 92.91 349** PFAKE 23 13 20.0 +16
KBS LR LR
comp=Z,5µm,19.0s
**NIKH Nikolski High 93.03 37** PFAKE 23 13 20.0 +15
NIKH LR LR
comp=Z,1µm,20.0s
**VNA1 Neumayer--Stat 93.04 198** P **P** **23 13 07.1 +2.2**
**KONO Kongsberg 93.23 329** PFAKE 23 13 20.0 +14
KONO LR LR
comp=Z,3µm,20.0s
**STU Stuttgart 93.26 319** *e*S **S** **23 24 09.9 -2.4**
baz=91,slow=9.1
**STU Stuttgart 93.26 319** PFAKE 23 13 20.0 +14
STU LR LR
comp=Z,3µm,20.0s
**VNA3 Neumayer Olymp 93.28 198** P **P** **23 13 07.4 +1.4**
**TNA Tin City 93.65 25** PFAKE 23 13 20.0 +12
TNA LR LR
comp=Z,4µm,18.0s
**TNS Taunus Mts 93.77 320** *e*P **P** **23 13 09.3 +0.6**
comp=Z,18nm,1.0s,baz=94,slow=4.7
TNS *e*S **S** **23 24 15.0 -1.8**
baz=91,slow=9.1
**BFO Black Forest 93.83 318** *e*P **P** **23 13 09.0 0.0**
comp=Z,84nm,2.1s,baz=94,slow=4.7
BFO *e*S **S** **23 24 14.8 -2.5**
baz=91,slow=9.1
**IBBN Ibbenburen 94.21 322** *e*P **P** **23 13 11.3 +0.7**
comp=Z,41nm,1.5s,baz=94,slow=4.7
IBBN *e*S **S** **23 24 15.9 -4.5**
baz=91,slow=9.1
**SENIN Lac Senin/Sane 94.52 316** PFAKE 23 13 20.0 +7.5
SENIN LR LR
comp=Z,2µm,22.0s
**BUG Bochum--Univer 94.52 321** *e*P **P** **23 13 12.6 +0.6**
comp=Z,56nm,1.9s,baz=94,slow=4.7
BUG *e*S **S** **23 24 20.6 -2.5**
baz=91,slow=9.1
**WLF Walferdange 95.26 319** PFAKE 23 13 30.0 +15
WLF LR LR
comp=Z,3µm,20.0s
**TAM Tamanrasset 95.78 292** *e*sP **sP** **23 13 27.8 -1.9**
TAM LR LR
comp=Z,2µm,19.0s
**FALS False Pass 96.22 35** PFAKE 23 13 30.0 +10
FALS LR LR
comp=Z,2µm,22.0s
**RAR Rarotonga 97.94 112** LR LR 23 58 02.0
comp=Z,2µm,20.6s,baz=250,slow=36
**TTA Tatalina 99.07 27** *e*P **Pdif** **23 13 33.5 +1.0**
TTA MLR MLR
comp=Z,4µm,19.0s
**TTA Tatalina 99.07 27** *e*P **Pdif** **23 13 33.5 +1.0**
TTA LR LR
comp=Z,4µm,19.0s
**TOA0 Torodi Ar. Sit 99.24 283** *e*P **Pdif** **23 13 34.3 +0.1**
TOA0 *e*PP PP 23 17 49.8 +12
**TORD Torodi Ar. Bea 99.24 283** P **Pdif** **23 13 34.3 0.0**
comp=Z,0.7nm,1.0s,baz=90,slow=6.3,SNR=3.4
TORD PKKPbc **PKKPbc** **23 29 57.3 -1.4**
comp=Z,1.1nm,1.1s,baz=308,slow=3.7,SNR=3.7
TORD LR LR 23 54 15.1
comp=Z,2µm,21.8s,baz=65,slow=33
**COLD Coldfoot 100.45 22** PFAKE 23 13 50.0 +12
COLD LR LR
comp=Z,5µm,18.0s
**CAST Castle Rocks 100.71 26** *e*Pdif **Pdif** **23 13 41.2 +1.5**
CAST LR LR
comp=Z,3µm,21.0s
**PPLA Purkeypile 100.79 26** PFAKE 23 13 50.0 +10
PPLA LR LR
comp=Z,3µm,21.0s
**MLY Manley 100.85 24** *e*PP PP 23 17 50.3 +2.2
MLY LR LR
comp=Z,3µm,19.0s
**BPAW Bear Paw Mtn. 101.00 25** *e*Pdif **Pdif** **23 13 41.6 +0.6**
BPAW *e*PP **PP** **23 17 50.8 +1.6**
BPAW LR LR
comp=Z,3µm,19.0s
**TRF Thorofare Moun 101.48 26** *e*PP PP 23 17 56.1 +3.0
TRF LR LR
comp=Z,3µm,20.0s
**OHAK Old Harbor 101.54 32** PFAKE 23 14 00.0 +17
OHAK LR LR
comp=Z,5µm,18.0s
**BWN Browne 101.62 25** PFAKE 23 14 00.0 +16
BWN LR LR
comp=Z,3µm,20.0s
**KDAK Kodiak Island 101.79 32** PFAKE 23 14 00.0 +15
KDAK LR LR
comp=Z,3µm,20.0s
**SUA Susitna One 101.81 28** PFAKE 23 14 00.0 +15
SUA LR LR
comp=Z,2µm,19.0s
**HOM Homer 101.83 30** PFAKE 23 14 00.0 +15
HOM LR LR
comp=Z,3µm,18.0s
**MDM Murphy Dome 101.89 24** PFAKE 23 14 00.0 +15
MDM LR LR
comp=Z,3µm,19.0s
**MCK McKinley 101.98 25** *e*P **Pdif** **23 13 45.5 +0.1**
MCK MLR MLR
comp=Z,3µm,18.0s
**MCK McKinley 101.98 25** *e*Pdif **Pdif** **23 13 45.5 +0.1**
MCK LR LR
comp=Z,3µm,18.0s
**CNPM China Poot 102.06 30** PFAKE 23 14 00.0 +14
CNPM LR LR
comp=Z,3µm,21.0s
**COLA College 102.08 24** PFAKE 23 14 00.0 +14
COLA LR LR
comp=Z,3µm,19.0s
**WRH Wood River Hil 102.11 24** *e*PP PP 23 17 52.5 -5.0
WRH LR LR
comp=Z,2µm,20.0s
**RND Reindeer 102.11 26** PFAKE 23 14 00.0 +14
RND LR LR
comp=Z,3µm,21.0s
**CCB Clear Creek Bu 102.17 24** *e*PP PP 23 17 57.7 -0.2

CCB LR LR
comp=Z,2µm,21.0s
**BRLK Bradley Lake 102.18 29** PFAKE 23 14 00.0 +14
BRLK LR LR
comp=Z,3µm,18.0s
**RC01 Rabbit Creek A 102.38 28** PFAKE 23 14 00.0 +13
RC01 LR LR
comp=Z,3µm,20.0s
**IL1 Eielson Array 102.50 24** *e*PP PP 23 17 59.5 -0.9
**ILAR Eielson Array 102.50 24** P **Pdif 23 13 47.5 -0.1**
comp=Z,0.6nm,1.0s,baz=285,slow=3.5,SNR=5.0
ILAR PP PP 23 17 44.0 -16
comp=Z,0.7nm,0.8s,baz=294,slow=8.2,SNR=4.2
ILAR PKKPbc **PKKPbc 23 29 48.1 -2.8**
comp=Z,0.4nm,0.7s,baz=152,slow=2.0,SNR=5.1
**ILB Eielson Array 102.50 24** *e*Pdif **Pdif 23 13 47.5 -0.1**
**FYU Fort Yukon 102.52 22** PFAKE 23 14 00.0 +12
FYU LR LR
comp=Z,4µm,18.0s
**PMR Palmer 102.52 27** PFAKE 23 14 00.0 +12
PMR LR LR
comp=Z,4µm,18.0s
**HDA Harding Lake 102.59 24** PFAKE 23 14 00.0 +12
HDA LR LR
comp=Z,3µm,20.0s
**SEW Seward 102.78 29** PFAKE 23 14 00.0 +11
SEW LR LR
comp=Z,3µm,20.0s
**SML Sawmill 102.82 27** PFAKE 23 14 00.0 +11
SML LR LR
comp=Z,2µm,20.0s
**DHY Denali Highway 102.85 26** PFAKE 23 14 00.0 +11
DHY LR LR
comp=Z,2µm,20.0s
**SCM Sheep Creek Mo 103.26 27** PFAKE 23 14 00.0 +8.8
SCM LR LR
comp=Z,3µm,20.0s
**PAX Paxson 103.70 25** PFAKE 23 14 10.0 +17
PAX LR LR
comp=Z,3µm,20.0s
**KLU Klutina 104.01 27** PFAKE 23 14 10.0 +15
KLU LR LR
comp=Z,2µm,18.0s
**HARP HAARP 104.03 26** PFAKE 23 14 10.0 +15
HARP LR LR
comp=Z,4µm,20.0s
**EYAK Cordova Ski Ar 104.40 28** PFAKE 23 14 10.0 +14
EYAK LR LR
comp=Z,4µm,19.0s
**EGAK Eagle 104.77 23** PFAKE 23 14 10.0 +12
EGAK LR LR
comp=Z,3µm,20.0s
**PBRG Braganca 104.96 312** *e*PP PP 23 18 23.1 +3.5
**RAGM Ragged Mountai 104.96 28** PFAKE 23 14 10.0 +11
RAGM LR LR
comp=Z,7µm,18.0s
**MVO Moncorvo 105.27 312** *e*PP PP 23 18 25.7 +3.7
**MTE Manteigas 105.78 311** *e*PP PP 23 18 31.3 +5.5
**MTE Manteigas 105.78 311** PFAKE 23 18 30.0
MTE LR LR
comp=Z,1µm,19.0s
**POLO Lamas de Olo 105.81 312** *e*PP PP 23 18 30.8 +4.8
**H09W1 TRISTAN DA CUNI 105.94 230** T T 01 12 05.8
SNR=45
**PGAV Gavieira, Arco 106.06 313** *e*PP PP 23 18 31.3 +3.5
**PVAQ Vaqueiros 106.38 308** *e*PP PP 23 18 33.2 +3.0
**PMTG Montargil 106.52 310** *e*PP PP 23 18 33.0 +1.9
**PCAS Casmilo, Conde 106.56 311** *e*PP PP 23 18 37.3 +5.9
**PBDV Barranco-do-Ve 106.57 308** *e*PP PP 23 18 40.0 +8.4
**PCVE Castro Verde 106.60 308** *e*PP PP 23 18 39.2 +7.4
**PNCL Nicolau / Gran 106.91 309** *e*PP PP 23 18 35.8 +1.8
**TBI Tubuai 107.04 115** *e*Sdif Sdif 23 26 02.3 -7.6
comp=Z,1µm,28.8s
TBI *e*SS **SS 23 33 37.5 -3.9**
comp=Z,2µm,26.8s
**TBI Tubuai 107.04 115** *e*LR LR 23 49 30.2
comp=Z,5µm,23.2s
**PCA Pinnacle 107.11 27** PFAKE 23 18 30.0
PCA LR LR
comp=Z,4µm,19.0s
**MORF Marmelete 107.13 308** *e*PP PP 23 18 43.1 +7.3
**PFVI Vila Bisbo 107.30 308** *e*PP PP 23 18 33.2 -3.7
**PFVI Vila Bisbo 107.30 308** PFAKE 23 18 30.0
PFVI LR LR
comp=Z,1µm,19.0s
**PMAFR Mafra 107.35 310** *e*PP PP 23 18 40.9 +3.7
**PPT2 Papeete2 107.97 110** *e*Sdif Sdif 23 26 09.6 -8.4
comp=Z,2µm,25.2s
**PPT2 Papeete2 107.97 110** *e*LR LR 23 49 56.9
comp=Z,3µm,24.2s
**SKAG Skagway 109.62 27** PFAKE 23 18 30.0
SKAG LR LR
comp=Z,4µm,20.0s
**DLBC Dease Lake 112.50 26** PFAKE 23 18 40.0
DLBC LR LR
comp=Z,3µm,18.0s
**PMPST Porto Santo, M 114.10 305** *e*PP **PP 23 19 21.1 -5.0**
**PMOZ Porto Moniz, M 114.86 305** *e*PP PP 23 19 45.7 +14
**YKA Yellowknife Ar 115.46 17** PKP **PKPdf 23 18 32.5 -0.7**
comp=Z,2.7nm,1.0s,baz=313,slow=2.5,SNR=4.0
YKA PP **PP 23 19 30.5 -3.8**
comp=Z,2.9nm,1.1s,baz=322,slow=6.4,SNR=2.9
**YKB5 Yellowknife Ar 115.46 17** *e*PKPdf **PKPdf 23 18 32.5 -0.7**
YKB5 *e*PP **PP 23 19 30.5 -3.8**
**RKT Rikitea 119.98 119** *e*Sdif Sdif 23 27 46.8 -11
comp=Z,685nm,28.2s
**RKT Rikitea 119.98 119** *e*PS PS 23 29 53.5 -4.2
comp=Z,866nm,27.0s
RKT *e*SS SS 23 36 28.7 -3.7
comp=Z,2µm,28.2s
**RKT Rikitea 119.98 119** *e*LR LR 23 55 28.5
comp=Z,4µm,26.2s
**A05A Maple Falls 121.84 32** *e*PKPdf **PKPdf 23 18 46.4 +0.5**
**EDM Edmonton 122.99 23** *e*PKIKP **PKPdf 23 18 48.4 +0.4**
**EDM Edmonton 122.99 23** *e*PKPdf **PKPdf 23 18 48.4 +0.4**
**FCC Fort Churchill 123.52 9** PFAKE 23 19 00.0 +11
FCC LR LR
comp=Z,4µm,22.0s
**I03D Drain, OR 124.20 37** P **PKPdf 23 18 51.2 +0.7**
baz=124
**HAWA Hanford 124.80 33** *e*PKPdf **PKPdf 23 18 53.0 +1.3**
**NEW Newport 124.83 30** *e*PKIKP **PKPdf 23 18 53.0 +1.3**
**NEW Newport 124.83 30** P **PKPdf 23 18 52.8 +1.1**
baz=125
**NEW Newport 124.83 30** *e*PKPdf **PKPdf 23 18 53.0 +1.3**
**G06A Carlson Farm, 124.90 34** *e*PKPdf **PKPdf 23 18 53.5 +1.6**
**I05D Terrebonne, OR 125.03 36** P **PKPdf 23 18 53.4 +1.1**
baz=125
**J04D Umpqua Nationa 125.20 37** P **PKPdf 23 18 53.6 +0.8**
baz=125
**FFC Flin Flon 125.58 16** PFAKE 23 19 10.0 +17
FFC LR LR
comp=Z,4µm,20.0s
**J05D Fort Rock, OR 125.70 37** P **PKPdf 23 18 54.4 +0.8**
baz=126
**M02C Callahan 125.75 39** P **PKPdf 23 18 54.3 +0.5**
baz=126
**WALA Waterton Lakes 125.81 27** *ep*PKPdf **pPKPdf 23 19 01.9 -0.1**
WALA LR LR
comp=Z,4µm,19.0s
**M04C Macdoel 126.18 39** P **PKPdf 23 18 55.2 +0.5**
baz=126
**K05A Summer Lake 126.23 37** *e*PKPdf **PKPdf 23 18 56.2 +1.5**
**BSMT Bassoo Peak 126.26 29** *e*PKPdf **PKPdf 23 18 55.1 +0.4**
BSMT *e*PP **PP 23 20 51.0 +2.3**
**F10A Beach Ranch, E 126.30 32** *e*PKPdf **PKPdf 23 18 55.9 +1.2**
**WDC Whiskeytown Da 126.39 40** *e*PKIKP **PKPdf 23 18 56.0 +1.1**
**WDC Whiskeytown Da 126.39 40** *e*PKPdf **PKPdf 23 18 56.0 +1.1**
**SWMT Swartz Lake 126.88 29** *e*PKPdf **PKPdf 23 18 56.0 +0.2**
SWMT *e*PP **PP 23 20 52.9 +0.2**
**O03D Paynes Creek 127.02 40** P **PKPdf 23 18 56.5 +0.3**
baz=127
**MOD Modoc 127.06 38** *e*PKPdf **PKPdf 23 18 57.7 +1.4**
**J08A Circle Bar Ran 127.27 35** *e*PKPdf **PKPdf 23 18 58.2 +1.6**
**SLMT Seeley Lake 127.31 29** *e*PKPdf **PKPdf 23 18 56.8 +0.1**
SLMT *e*PP **PP 23 20 57.0 +1.4**
**MSO Missoula 127.39 29** P **PKPdf 23 18 56.8 +0.1**
baz=127
**MSO Missoula 127.39 29** *e*PKPdf **PKPdf 23 18 57.0 +0.2**
**NSHM Saint Helena R 127.42 42** *e*PKPdf **PKPdf 23 18 58.6 +1.7**
**SCHQ Schefferville 127.58 351** PKP **PKPdf 23 18 57.1 +0.4**
comp=Z,6.7nm,1.0s,baz=36,slow=1.6,SNR=3.6
**SCHQ Schefferville 127.58 351** *e*PKPdf **PKPdf 23 18 57.1 +0.4**
SCHQ LR LR
comp=Z,4µm,22.0s

**CHMT Chamberlain Mo 127.66 29** *e*PKPdf **PKPdf 23 18 57.7 +0.3**
**OHCM Honcut 127.74 41** *e*PKPdf **PKPdf 23 18 57.4 0.0**
**WVOR Wild Horse Val 127.74 36** *e*PKIKP **PKPdf 23 18 59.0 +1.4**
**WVOR Wild Horse Val 127.74 36** *e*PKPdf **PKPdf 23 18 59.0 +1.4**
**EGMT Eagleton 128.43 26** P **PKPdf 23 18 59.2 +0.5**
baz=128
**EGMT Eagleton 128.43 26** *e*PKPdf **PKPdf 23 18 59.3 +0.6**
**MFID Camas Ranch 128.73 34** *e*PKPdf **PKPdf 23 19 00.7 +1.3**
**DLMT Dillon 129.09 30** *e*PKPdf **PKPdf 23 19 01.2 +1.2**
**CMB Columbia Colle 129.16 42** *e*PKIKP **PKPdf 23 19 01.9 +1.6**
**CMB Columbia Colle 129.16 42** *e*PKPdf **PKPdf 23 19 01.9 +1.6**
**BOZ Bozeman (W) 129.35 29** *e*PKIKP **PKPdf 23 19 01.6 +1.0**
BOZ MLR MLR
comp=Z,3µm,20.0s
**BOZ Bozeman (W) 129.35 29** P **PKPdf 23 19 01.5 +1.0**
baz=129
**BOZ Bozeman (W) 129.35 29** *e*PKPdf **PKPdf 23 19 01.6 +1.0**
BOZ LR LR
comp=Z,3µm,20.0s
**HLID Hailey 129.40 33** P **PKPdf 23 19 01.9 +1.1**
baz=129
**HLID Hailey 129.40 33** *e*PKPdf **PKPdf 23 19 01.9 +1.1**
**QLMT Earthquake Lak 130.04 29** *e*PKPdf **PKPdf 23 19 04.4 +2.4**
**DGMT Dagmar 130.28 21** PFAKE 23 19 10.0 +7.9
DGMT LR LR
comp=Z,2µm,19.0s
**NV01 Mina Array Sit 130.31 40** *e*PKPdf **PKPdf 23 19 03.5 +0.8**
NV01 *e*SKPbc **SKPbc 23 22 25.1 +0.6**
**NVAR Mina Array Bea 130.31 40** PKP **PKPdf 23 19 03.0 +0.2**
comp=Z,3.5nm,0.9s,baz=298,slow=1.9,SNR=15
NVAR SKPbc **SKPbc 23 22 25.1 +0.6**
comp=Z,4.2nm,1.0s,baz=279,slow=3.3,SNR=6.0
**YMR Madison River 130.39 29** *e*PKPdf **PKPdf 23 19 05.2 +2.6**
**YNR Norris Junctio 130.49 29** *e*PKPdf **PKPdf 23 19 05.9 +3.0**
**YFT Old Faithful 130.61 29** PFAKE 23 19 20.0 +17
YFT LR LR
comp=Z,6µm,19.0s
**A26A Wade Farm, Ken 130.66 19** P **PKPdf 23 19 04.1 +1.3**
baz=130
**LKWY Lake 130.74 29** PFAKE 23 19 20.0 +17
LKWY LR LR
comp=Z,5µm,20.0s
**MTUM Tungsten Hills 130.75 41** *e*PKPdf **PKPdf 23 19 05.4 +1.9**
MTUM *e*SKPbc **SKPab 23 22 26.6 +0.5**
**H17A Grant Village 130.78 29** PFAKE 23 19 20.0 +17
H17A LR LR
comp=Z,4µm,18.0s
**ELK Elko 130.79 36** *e*PKIKP **PKPdf 23 19 04.6 +1.0**
**ELK Elko 130.79 36** *e*PKPdf **PKPdf 23 19 04.6 +1.0**
ELK *e*SKPbc **SKPab 23 22 27.4 +1.1**
**LAO LASA Array 130.96 24** PFAKE 23 19 20.0 +17
LAO LR LR
comp=Z,3µm,20.0s
**IMW Indian Meadow 130.96 30** *e*SKPbc **SKPab 23 22 28.1 +1.1**
**FXWY Fox Creek 131.11 30** *e*PKPdf **PKPdf 23 19 05.2 +1.1**
**ULM Lac du Bonnet 131.21 14** PKP **PKPdf 23 19 03.5 -0.2**
comp=Z,8.9nm,1.0s,baz=35,slow=2.5,SNR=5.6
**ULM Lac du Bonnet 131.21 14** *e*PKIKP **PKPdf 23 19 03.8 +0.1**
ULM MLR MLR
comp=Z,4µm,19.0s
**ULM Lac du Bonnet 131.21 14** *e*PKPdf **PKPdf 23 19 03.8 +0.1**
ULM LR LR
comp=Z,4µm,19.0s
**TPAW Teton Pass 131.25 30** *e*PKPdf **PKPdf 23 19 05.9 +1.5**
**LOHW Long Hollow 131.34 30** *e*PKPdf **PKPdf 23 19 05.6 +1.1**
**REDW Red Top Meadow 131.39 30** *e*PKPdf **PKPdf 23 19 05.8 +1.2**
**A30A Hoffart Farm, 131.77 16** P **PKPdf 23 19 05.1 +0.3**
baz=132
**BGU Big Grassy Mou 131.93 34** *e*PKPdf **PKPdf 23 19 08.0 +2.3**
**R11A Troy Canyon, C 132.08 39** P **PKPdf 23 19 07.1 +1.1**
baz=132
**R11A Troy Canyon, C 132.08 39** *e*PKPdf **PKPdf 23 19 07.0 +1.0**
**MPMC Manual Prospec 132.19 42** P **PKPdf 23 19 06.5 +0.2**
baz=132
**B30A Myrvik Farm, E 132.21 17** P **PKPdf 23 19 05.5 -0.2**
baz=132
**HWUT Hardware Ranch 132.27 32** *e*PKPdf **PKPdf 23 19 07.2 +0.9**
**MDND Maddock 132.37 18** PFAKE 23 19 20.0 +14
MDND LR LR
comp=Z,4µm,21.0s
**LRMC Laurel Mountai 132.37 43** P **PKPdf 23 19 06.4 -0.2**
baz=132
**BW06 Boulder Array 132.48 30** *e*PKPdf **PKPdf 23 19 02.4 -4.3**
**EDW2 Edwards Air Fo 132.49 44** P **PKPdf 23 19 07.1 +0.3**
baz=132
**TPNV Topopah Spring 132.49 40** PFAKE 23 19 20.0 +13
TPNV LR LR
comp=Z,1µm,20.0s
**DUG Dugway 132.55 35** *e*PKIKP **PKPdf 23 19 07.7 +0.9**
**DUG Dugway 132.55 35** P **PKPdf 23 19 07.3 +0.6**
baz=132
**DUG Dugway 132.55 35** *e*PKPdf **PKPdf 23 19 07.7 +0.9**
**AGMN Agassiz Nation 133.02 15** PFAKE 23 19 20.0 +13
AGMN LR LR
comp=Z,3µm,19.0s
**BFSC Mount Baldy Ra 133.07 44** P **PKPdf 23 19 08.3 +0.3**
baz=133
**GSC Goldstone 133.07 43** *e*PKIKP **PKPdf 23 19 09.2 +1.3**
**GSC Goldstone 133.07 43** P **PKPdf 23 19 07.3 -0.5**
baz=133
**GSC Goldstone 133.07 43** *e*PKPdf **PKPdf 23 19 09.2 +1.3**
**NLU North Lily Min 133.13 34** *e*PKPdf **PKPdf 23 19 09.9 +1.9**
**B34A Aery, Baudette 133.14 14** P **PKPdf 23 19 07.5 0.0**
baz=133
**O16A Springville 133.28 34** *e*PKPdf **PKPdf 23 19 13.3 +5.1**
O16A LR LR
comp=Z,2µm,20.0s
**MPU Maple Canyon 133.33 34** *e*PKPdf **PKPdf 23 19 09.7 +1.4**
**SHPR Sheep Range 133.46 40** *e*PKPdf **PKPdf 23 19 10.0 +1.4**
**D31A Mcclaflin, Tow 133.65 17** P **PKPdf 23 19 08.7 +0.3**
baz=134
**F28A McLaughlin 133.72 20** P **PKPdf 23 19 08.7 0.0**
baz=134
**E30A Jud 133.78 18** P **PKPdf 23 19 08.9 +0.1**
baz=134
**RSSD Black Hills 133.94 24** *e*PKIKP **PKPdf 23 19 08.8 -0.6**
**RSSD Black Hills 133.94 24** *e*PKPdf **PKPdf 23 19 08.8 -0.6**
**CCUT Cedar City 133.95 38** *e*PKPdf **PKPdf 23 19 11.6 +2.0**
**K22A Casper 134.03 28** P **PKPdf 23 19 09.4 -0.2**
baz=134
**K22A Casper 134.03 28** *e*PKPdf **PKPdf 23 19 09.5 0.0**
K22A LR LR
comp=Z,2µm,20.0s
**MSU Marysvale 134.03 36** *e*PKIKP **PKPdf 23 19 11.2 +1.4**
**MSU Marysvale 134.03 36** *e*PKPdf **PKPdf 23 19 11.2 +1.4**
**C35A Jirik Farms, M 134.04 14** P **PKPdf 23 19 09.2 +0.1**
baz=134
**GMRC Granite Mounta 134.14 43** P **PKPdf 23 19 11.1 +1.2**
baz=134
**I25A Rochford 134.15 24** P **PKPdf 23 19 09.7 -0.1**
baz=134
**P17A Butcher Ranch, 134.21 34** *e*PKPdf **PKPdf 23 19 11.9 +1.9**
**PFO Pinyon Flat Ob 134.25 44** *e*PKIKP **PKPdf 23 19 11.8 +1.7**
**PFO Pinyon Flat Ob 134.25 44** P **PKPdf 23 19 10.9 +0.8**
baz=134
**PFO Pinyon Flat Ob 134.25 44** *e*PKPdf **PKPdf 23 19 11.8 +1.7**
PFO *e*SKPbc **SKPab 23 22 40.1 -1.1**
**EYMN Ely 134.34 11** P **PKPdf 23 19 10.8 +1.1**
baz=134
**EYMN Ely 134.34 11** *e*PKPdf **PKPdf 23 19 11.5 +1.8**
EYMN LR LR
comp=Z,4µm,20.0s
**P18A Preston Nutter 134.37 33** *e*PKPdf **PKPdf 23 19 11.8 +1.3**
P18A LR LR
comp=Z,3µm,20.0s
**SRU San Rafael 134.58 34** *e*PKIKP **PKPdf 23 19 13.8 +3.1**
SRU MLR MLR
comp=Z,2µm,18.0s
**SRU San Rafael 134.58 34** *e*PKPdf **PKPdf 23 19 13.8 +3.1**
SRU LR LR
comp=Z,2µm,18.0s
**J25A Sunshine Ranch 134.64 25** P **PKPdf 23 19 10.8 +0.2**
baz=134
**MONP Monument Peak 134.66 45** P **PKPdf 23 19 12.2 +1.2**
baz=135
**I27A Quinn 134.78 23** P **PKPdf 23 19 10.7 0.0**
baz=135
**IRM Iron Mountain 134.84 43** P **PKPdf 23 19 11.6 +0.5**
baz=135
**E34A Wadena 134.85 15** P **PKPdf 23 19 11.1 +0.3**
baz=135
**D37A Cotton 134.90 12** P **PKPdf 23 19 11.1 +0.3**
baz=135
**G30A Faulkton 134.92 20** P **PKPdf 23 19 11.4 +0.5**
baz=135

**E35A Pequot Lakes 135.00 14** P **PKPdf 23 19 11.1 +0.1**
baz=135
**J26A Sides Ranch, S 135.00 24** P **PKPdf 23 19 11.4 +0.1**
baz=135
**O20A White River Ci 135.08 31** P **PKPdf 23 19 11.7 +0.1**
baz=135
**O20A White River Ci 135.08 31** *e*PKPdf **PKPdf 23 19 12.7 +1.0**
**F33A 5 Mile Ranch, 135.16 17** P **PKPdf 23 19 11.3 0.0**
baz=135
**I28A Midland 135.18 22** P **PKPdf 23 19 11.8 +0.3**
baz=135
**LMQ La Malbaie 135.19 351** PFAKE 23 19 20.0 +8.7
LMQ LR LR
comp=Z,3µm,20.0s
**E36A McGregor 135.32 13** P **PKPdf 23 19 11.9 +0.3**
baz=135
**G32A Webster 135.33 18** P **PKPdf 23 19 12.4 +0.7**
baz=135
**PDMCI Parker Dam,Lak 135.44 42** P **PKPdf 23 19 12.1 0.0**
baz=135
**RCBR Riachuelo 135.46 258** PFAKE 23 19 30.0 +17
RCBR LR LR
comp=Z,2µm,18.0s
**I29A Vivian Onida 135.48 21** P **PKPdf 23 19 10.7 -1.3**
baz=135
**PHWY Pilot Hill 135.57 28** PFAKE 23 19 20.0 +7.4
PHWY LR LR
comp=Z,2µm,18.0s
**J28A Allard Ranch, 135.64 23** P **PKPdf 23 19 12.4 +0.1**
baz=136
**GLA Glamis 135.69 44** *e*PKIKP **PKPdf 23 19 15.2 +2.5**
**GLA Glamis 135.69 44** P **PKPdf 23 19 13.6 +0.9**
baz=136
**GLA Glamis 135.69 44** *e*PKPdf **PKPdf 23 19 15.2 +2.5**
**TRQA Tornquist 135.75 200** PFAKE 23 19 20.0 +7.3
TRQA LR LR
comp=Z,2µm,18.0s
**F36A Milaca 135.87 14** P **PKPdf 23 19 12.8 +0.2**
baz=136
**PV10 Paradox Valley 135.92 34** *e*PKPdf **PKPdf 23 19 15.2 +1.9**
**H32A Carlson Farm, 136.03 18** P **PKPdf 23 19 12.6 -0.4**
baz=136
**PV05 Paradox Valley 136.10 34** *e*PKPdf **PKPdf 23 19 15.7 +2.1**
**PV01 Paradox Valley 136.35 34** *e*PKPdf **PKPdf 23 19 16.0 +1.9**
**WUAZ Wupatki 136.48 39** P **PKPdf 23 19 14.8 +0.5**
baz=136
**WUAZ Wupatki 136.48 39** *e*PKPdf **PKPdf 23 19 16.2 +1.9**
**COWI Conover 136.54 10** PFAKE 23 19 30.0 +16
COWI LR LR
comp=Z,3µm,19.0s
**H35A Sunnyside Ranc 136.62 16** P **PKPdf 23 19 14.1 0.0**
baz=136
**I33A Coleman 136.64 18** P **PKPdf 23 19 13.2 -1.0**
baz=136
**SPMN St. Paul 136.64 14** PFAKE 23 19 30.0 +16
SPMN LR LR
comp=Z,3µm,22.0s
**ISCO Idaho Springs 136.66 30** *e*PKIKP **PKPdf 23 19 16.1 +1.4**
**ISCO Idaho Springs 136.66 30** *e*PKPdf **PKPdf 23 19 16.1 +1.4**
**K30A Basset 136.90 22** P **PKPdf 23 19 15.2 +0.5**
baz=137
**ECSD EROS Data Cent 136.98 18** P **PKPdf 23 19 14.9 +0.1**
baz=137
**ECSD EROS Data Cent 136.98 18** *e*PKPdf **PKPdf 23 19 11.4 -3.4**
ECSD LR LR
comp=Z,3µm,20.0s
**MVCO Mesa Verde 137.04 35** P **PKPdf 23 19 15.4 -0.1**
baz=137
**MVCO Mesa Verde 137.04 35** *e*PKPdf **PKPdf 23 19 17.0 +1.6**
**J33A Davis 137.24 19** P **PKPdf 23 19 14.8 -0.5**
baz=137
**EMMW East Machias 137.38 347** PFAKE 23 19 30.0 +15
EMMW LR LR
comp=Z,8µm,22.0s
**OGNE Ogallala 137.40 25** PFAKE 23 19 30.0 +14
OGNE LR LR
comp=Z,3µm,21.0s
**K32A Verdigre 137.50 20** P **PKPdf 23 19 15.1 -0.7**
baz=137
**S22A 4UR Ranch, Cre 137.58 33** *e*PKPdf **PKPdf 23 19 17.8 +1.3**
**I37A Lemond, Waseca 137.63 15** P **PKPdf 23 19 14.9 -1.1**
baz=138
**214A Organ Pipe Nat 137.71 44** P **PKPdf 23 19 15.2 -1.3**
baz=138
**W18A Petrified Fore 137.75 38** *e*PKPdf **PKPdf 23 19 19.3 +2.6**
**WVL Waterville 137.97 349** PFAKE 23 19 30.0 +13
WVL LR LR
comp=Z,2µm,19.0s
**SDCO Great Sand Dun 138.28 31** PFAKE 23 19 30.0 +12
SDCO LR LR
comp=Z,2µm,21.0s
**BGNE Belgrade 138.53 21** PFAKE 23 19 30.0 +12
BGNE LR LR
comp=Z,4µm,20.0s
**LONY Lake Ozonia 138.60 355** PFAKE 23 19 30.0 +12
LONY LR LR
comp=Z,3µm,20.0s
**LBNH Lisbon 138.66 352** PFAKE 23 19 30.0 +12
LBNH LR LR
comp=Z,4µm,18.0s
**SADO Sadowa 138.68 360** PFAKE 23 19 30.0 +12
SADO LR LR
comp=Z,3µm,21.0s
**PTN Potsdam (NY) 138.69 355** PFAKE 23 19 30.0 +12
PTN LR LR
comp=Z,4µm,22.0s
**KSCO Kaye Shedlock' 138.71 28** PFAKE 23 19 30.0 +12
KSCO LR LR
comp=Z,4µm,19.0s
**TUC Tucson 138.88 42** *e*PKIKP **PKPdf 23 19 15.1 -3.6**
TUC MLR MLR
comp=Z,2µm,20.0s
**TUC Tucson 138.88 42** *e*PKPdf **PKPdf 23 19 15.1 -3.6**
TUC *e*SKPbc **SKiKP 23 22 54.2 -1.5**
TUC LR LR
comp=Z,2µm,20.0s
**NCB Newcomb 139.21 354** PFAKE 23 19 30.0 +11
NCB LR LR
comp=Z,3µm,20.0s
**T25A Trinidad 139.31 31** *e*PKPdf **PKPdf 23 19 19.0 -0.6**
**JFWS Jewell Farm 139.41 12** *e*PKIKP **PKPdf 23 19 21.3 +2.1**
JFWS MLR MLR
comp=Z,3µm,19.0s
**JFWS Jewell Farm 139.41 12** *e*PKPdf **PKPdf 23 19 21.3 +2.1**
JFWS LR LR
comp=Z,3µm,19.0s
**S26A Kim 139.41 30** P PKPpre 23 19 14.7
baz=139
**Q29A Oakley 139.55 26** P PKPpre 23 19 13.4
baz=139
**SCIA State Center 139.65 16** PFAKE 23 19 30.0 +10
SCIA LR LR
comp=Z,3µm,19.0s
**T26A Comanche Natio 139.69 30** P PKPpre 23 19 12.1
baz=140
**ACCN Adirondack Com 139.73 353** PFAKE 23 19 30.0 +10
ACCN LR LR
comp=Z,1µm,19.0s
**Q30A Quinter 139.80 25** P PKPpre 23 19 12.1
baz=140
**ANMO Albuquerque 139.81 35** *e*PKHKP PKPpre 23 19 12.9
ANMO MLR MLR
comp=Z,3µm,20.0s
**ANMO Albuquerque 139.81 35** *e*PKPpre PKPpre 23 19 12.9
ANMO LR LR
comp=Z,3µm,20.0s
**Q31A Ellis 140.13 24** P PKPpre 23 19 14.7
baz=140
**CBKS Cedar Bluff 140.15 25** PFAKE 23 19 30.0 +9.2
CBKS LR LR
comp=Z,3µm,20.0s
**BNM Barren Site 140.28 36** *e*PKPdf **PKPdf 23 19 23.0 +1.5**
**HRV Adam Dziewonsk 140.30 351** PFAKE 23 19 30.0 +9.1
HRV LR LR
comp=Z,4µm,19.0s
**Q32A Meitler Ranch, 140.48 23** P PKPpre 23 19 14.6
baz=140
**P34A Walnut Farm, R 140.65 21** P PKPpre 23 19 14.4
baz=140
**R31A Burdett 140.68 25** P PKPpre 23 19 15.5
baz=140
**121A Cookes Peak, D 140.68 39** P PKPpre 23 19 16.4
baz=141
**MMNY Mt. Morris Dam 140.69 358** PFAKE 23 19 30.0 +8.4
MMNY LR LR
comp=Z,3µm,19.0s

R32A Long Quarter, 140.90 24 P PKPpre 23 19 16.8
baz=141
P35A Duane Minner, 140.95 20 P PKPpre 23 19 16.9
baz=141
AAM Ann Arbor 140.98 5 PFAKE 23 19 30.0 +7.9
AAM LR LR
comp=Z,4µm,20.0s
BINY Binghamton 141.12 356 ePKPdf PKPdf 23 19 23.4 +1.0
BINY LR LR
comp=Z,3µm,21.0s
KSU1 Kansas State U 141.12 21 P PKPpre 23 19 18.0
baz=141
KSU1 Kansas State U 141.12 21 ePKPdf PKPdf 23 19 22.0 -0.5
KSU1 LR LR
comp=Z,2µm,20.0s
P36A Good Intent, A 141.15 19 P PKPpre 23 19 17.8
baz=141
Q34A Chapman 141.16 22 P PKPpre 23 19 19.0
baz=141
S31A Mullinville 141.26 26 P PKPpre 23 19 17.2
baz=141
R33A Olander Ranch, 141.29 23 P PKPpre 23 19 17.2
baz=141
Q35A Mercer Eighty, 141.54 21 P PKPpre 23 19 18.1
baz=141
R34A Isabella, Hill 141.59 23 P PKPpre 23 19 18.6
baz=141
U30A WK&E Inc. Balk 141.63 28 P PKPpre 23 19 17.1
baz=142
Q36A Arnold C. Orve 141.65 20 P PKPpre 23 19 17.7
baz=142
KSPA Keystone Colle 141.74 355 ePKPdf PKPdf 23 19 24.4 +0.9
ALLY Alegheny Colle 141.80 1 PFAKE 23 19 40.0 +16
ALLY LR LR
comp=Z,2µm,20.0s
T32A Huddler Ranch, 141.87 25 P PKPpre 23 19 19.5
baz=142
HDIL Hopedale 141.87 12 PFAKE 23 19 40.0 +16
HDIL LR LR
comp=Z,3µm,20.0s
S33A Kaszmaul Farm, 141.90 24 P PKPpre 23 19 19.1
baz=142
PAL Palisades 142.10 353 PFAKE 23 19 40.0 +16
PAL LR LR
comp=Z,3µm,18.0s
U31A Nine Bar Ranch 142.13 27 P PKPpre 23 19 20.8
baz=142
R36A Gordon, Harris 142.21 21 P PKPpre 23 19 19.8
baz=142
T33A Patterson Ranc 142.24 25 P PKPpre 23 19 20.7
baz=142
R37A Teagarden Farm 142.45 20 P PKPpre 23 19 19.6
baz=142
SFIN Scholer Farm 142.45 9 P PKPpre 23 19 19.8
baz=142
SFIN Scholer Farm 142.45 9 ePKPpre PKPpre 23 19 20.3
SFIN LR LR
comp=Z,2µm,21.0s
S35A Otter Creek Ra 142.48 22 P PKPpre 23 19 20.6
baz=142
BRNJ Basking Ridge 142.50 354 PFAKE 23 19 40.0 +15
BRNJ LR LR
comp=Z,3µm,19.0s
U32A Winter Ranch, 142.50 26 P PKPpre 23 19 21.4
baz=142
LUPA Lehigh Univers 142.66 355 PFAKE 23 19 40.0 +15
LUPA LR LR
comp=Z,2µm,22.0s
S36A Lake Cedric, C 142.71 21 P PKPpre 23 19 21.0
baz=143
T34A McClaskey Farm 142.72 24 P PKPpre 23 19 20.4
baz=143
MNTX Cornudas Mount 142.74 38 P PKPdf 23 19 23.7 -1.9
baz=143
MNTX Cornudas Mount 142.74 38 ePKPdf PKPdf 23 19 24.0 -1.6
MNTX LR LR
comp=Z,2µm,20.0s
X29A Tulia 142.78 31 P PKPpre 23 19 22.7
baz=143
U33A Lingo Farm, Me 142.84 25 P PKPpre 23 19 21.6
baz=143
S37A Fort Scott 142.95 20 P PKPpre 23 19 21.5
baz=143
W31A Holland Ranch, 143.06 28 P PKPbc 23 19 22.2 -0.7
baz=143
T35A Sooner Cattle 143.08 23 P PKPab 23 19 21.8 +0.4
baz=143
U34A Anderson Ranch 143.08 24 P PKPab 23 19 21.5 +0.1
baz=143
U34A Anderson Ranch 143.08 24 ePKPpre PKPpre 23 19 23.0
U34A LR LR
comp=Z,3µm,20.0s
ACSO Alum Creek Sta 143.09 4 ePKPpre PKPpre 23 19 22.1
ACSO LR LR
comp=Z,3µm,20.0s
T36A Boggs Farm, Ca 143.19 22 P PKPab 23 19 22.3 +0.5
baz=143
X30A Coker Ranch, T 143.20 30 P PKPbc 23 19 23.0 -0.3
baz=143
V33A Lossen Ranch, 143.29 26 P PKPab 23 19 22.8 +0.5
baz=143
Z28A Tucker Farm, M 143.31 33 P PKPbc 23 19 23.3 -0.4
baz=143
W32A Sentinel 143.44 28 P PKPab 23 19 23.4 +0.5
baz=143
U35A Pawnee 143.47 24 P PKPab 23 19 23.4 +0.5
baz=143
T37A Cheneyville 18 143.49 21 P PKPab 23 19 23.0 0.0
baz=143
SLM Saint Louis 143.49 14 PFAKE 23 19 40.0 +13
SLM LR LR
comp=Z,3µm,22.0s
X31A McDonald Ranch 143.49 29 P PKPbc 23 19 23.9 -0.2
baz=143
CPUP Villa Florida 143.53 215 PKP PKPbc 23 19 24.4 0.0
comp=Z,4.9nm,0.8s,baz=128,slow=4.0,SNR=13
CPUP Villa Florida 143.53 215 ePKIKP PKPbc 23 19 24.8 +0.4
CPUP Villa Florida 143.53 215 ePKPpre PKPbc 23 19 24.8 +0.5
BDFB Brasilia 143.55 238 PKP PKPdf 23 19 27.6 +0.1
comp=Z,4.7nm,0.8s,baz=117,slow=1.9,SNR=7.8
BDFB Brasilia 143.55 238 ePKIKP PKPdf 23 19 26.5 -1.1
BDFB MLR MLR
comp=Z,4µm,18.0s
BDFB Brasilia 143.55 238 ePKPdf PKPdf 23 19 26.5 -1.1
BDFB LR LR
comp=Z,4µm,18.0s
V34A Guthrie 143.60 25 P PKPab 23 19 23.8 +0.3
baz=144
V34A Guthrie 143.60 25 ePKPpre PKPbc 23 19 24.6 +0.3
V34A LR LR
comp=Z,3µm,20.0s
Y30A Stafford Cattl 143.64 31 P PKPbc 23 19 24.4 -0.2
baz=144
Z29A Hungry Hill Ra 143.70 32 P PKPbc 23 19 24.7 -0.1
baz=144
BLO Bloomington 143.72 9 PFAKE 23 19 40.0 +13
BLO LR LR
comp=Z,4µm,21.0s
128A Castleberry Fa 143.76 34 P PKPab 23 19 24.7 +0.3
baz=144
W33A Caddo, Fort Co 143.77 27 P PKPbc 23 19 24.9 +0.1
baz=144
CCM Cathedral Cave 143.78 16 ePKIKP PKPab 23 19 23.6 -0.5
CCM MLR MLR
comp=Z,2µm,20.0s
CCM Cathedral Cave 143.78 16 ePKPpre PKPab 23 19 23.6 -0.5
CCM LR LR
comp=Z,2µm,20.0s
MCWV Mont Chateau 143.79 0 PFAKE 23 19 40.0 +13
MCWV LR LR
comp=Z,2µm,21.0s
U36A Oologah 143.84 22 P PKPab 23 19 24.7 +0.3
baz=144
OLIL Olney 143.87 11 ePKPpre PKPpre 23 19 25.1
OLIL LR LR
comp=Z,3µm,22.0s
Y31A Rekieta Farm, 143.89 30 P PKPab 23 19 24.9 +0.2
baz=144
V35A Meyer Ranch, C 143.95 24 P PKPab 23 19 25.0 +0.1
baz=144
SDMD Soldier's Deli 143.95 356 PFAKE 23 19 40.0 +13
SDMD LR LR
comp=Z,2µm,21.0s
WMOK Wichita Mounta 143.97 27 ePKIKP PKPab 23 19 25.0 0.0
WMOK MLR MLR
comp=Z,2µm,19.0s
WMOK Wichita Mounta 143.97 27 ePKPpre PKPab 23 19 25.0 0.0
WMOK LR LR
comp=Z,2µm,19.0s
Z30A Sanderson Ranc 143.98 32 P PKPab 23 19 25.2 +0.1
baz=144
X32A Elmer 144.00 28 P PKPab 23 19 25.0 -0.1
baz=144
W34A Bridge Creek, 144.00 26 P PKPbc 23 19 25.5 -0.1
baz=144
W34A Bridge Creek, 144.00 26 ePKPdf PKPbc 23 19 25.8 +0.2
U37A Salina 144.06 22 P PKPab 23 19 25.3 +0.1
baz=144
228A UT Block 9, Go 144.08 34 P PKPbc 23 19 26.1 +0.1
baz=144
129A Stewart Farms, 144.09 33 P PKPbc 23 19 26.1 +0.1
baz=144
TUL1 Tulsa 144.24 23 P PKPab 23 19 26.0 +0.2
baz=144
TUL1 Tulsa 144.24 23 ePKPdf PKPbc 23 19 26.2 0.0
TUL1 LR LR
comp=Z,3µm,18.0s
Y32A R-V Farms, Ver 144.26 29 P PKPab 23 19 25.9 -0.2
baz=144
X33A Lawton 144.26 27 P PKPab 23 19 25.6 -0.4
baz=144
V36A Jenks 144.29 23 P PKPbc 23 19 26.3 -0.1
baz=144
U38A Gravette 144.29 21 P PKPab 23 19 25.9 -0.2
baz=144
SLBS Sierra La Lagu 144.33 53 ePKPdf PKPdf 23 19 28.5 -0.2
W35A Tecumseh 144.46 25 P PKPab 23 19 26.8 +0.1
baz=144
Z31A Sharp Cattle R 144.47 30 P PKPab 23 19 26.9 +0.1
baz=144
V37A Hulbert 144.51 22 P PKPab 23 19 26.7 -0.1
baz=144
X34A Smith Ranch, M 144.51 26 P PKPbc 23 19 27.4 +0.2
baz=144
130A Snyder 144.61 32 P PKPbc 23 19 27.7 +0.1
baz=144
SIUC Southern Illin 144.61 13 ePKPdf PKPab 23 19 27.0 -0.2
SIUC LR LR
comp=Z,4µm,20.0s
229A Bryant Ranch, 144.63 34 P PKPbc 23 19 28.0 +0.3
baz=144
Y33A Hilltop Ranch, 144.65 28 P PKPab 23 19 27.1 -0.3
baz=144
WCI Wyandotte Cave 144.68 9 ePKIKP PKPab 23 19 27.3 -0.2
WCI MLR MLR
comp=Z,4µm,22.0s
WCI Wyandotte Cave 144.68 9 ePKPdf PKPab 23 19 27.3 -0.2
WCI LR LR
comp=Z,4µm,22.0s
USIN University of 144.70 11 ePKPdf PKPbc 23 19 27.8 +0.2
USIN LR LR
comp=Z,3µm,21.0s
W36A Wetumka 144.74 24 P PKPab 23 19 27.8 +0.1
baz=145
V38A Canehill 144.80 21 P PKPab 23 19 27.6 -0.4
baz=145
Z32A Haskell 144.81 30 P PKPab 23 19 28.1 0.0
baz=145
131A Roby 144.85 31 P PKPbc 23 19 28.8 +0.4
baz=145
329A Wagon Wheel Ra 144.89 34 P PKPdf 23 19 29.1 -0.4
baz=145
W37A Quinton 145.06 23 P PKPab 23 19 28.9 0.0
baz=145
X35A Drake 145.06 26 P PKPbc 23 19 28.3 -0.6
baz=145
230A Sterling City 145.07 33 P PKPdf 23 19 29.6 -0.2
baz=145
Y34A Reagan Ranch, 145.09 27 P PKPbc 23 19 28.7 -0.3
baz=145
Z33A Whitaker Ranch 145.17 29 P PKPbc 23 19 29.1 -0.2
baz=145
X36A Centrahoma 145.18 25 P PKPbc 23 19 29.3 0.0
baz=145
CBN Corbin 145.19 357 ePKPbc PKPdf 23 19 29.8 +0.1
CBN LR LR
comp=Z,4µm,21.0s
PBMO Poplar Bluff 145.20 15 ePKPbc PKPbc 23 19 28.7 -0.6
PBMO LR LR
comp=Z,3µm,18.0s
ABTX Abilene, Hawle 145.27 31 P PKPbc 23 19 29.7 0.0
baz=145
ABTX Abilene, Hawle 145.27 31 ePKPbc PKPdf 23 19 30.1 0.0
ABTX LR LR
comp=Z,3µm,20.0s
330A Mertzon 145.41 34 P PKPdf 23 19 30.4 0.0
baz=145
TX31 Lajitas Ar. Si 145.44 39 ePKPbc PKPbc 23 19 30.2 -0.2
TXAR Lajitas Array 145.44 39 PKPbc PKPab 23 19 31.1 +0.5
comp=Z,89nm,0.8s,baz=276,slow=1.3,SNR=525
Y35A Marietta 145.45 26 P PKPbc 23 19 29.6 -0.6
baz=145
W38A Pteau 145.46 22 P PKPbc 23 19 30.2 0.0
baz=145
231A Bronte 145.46 32 P PKPbc 23 19 30.3 -0.1
baz=145
PARMO Parma 145.48 15 ePKPdf PKPab 23 19 30.8 +0.4
Z34A Collier Ranch, 145.50 28 P PKPdf 23 19 30.1 -0.3
baz=145
X37A Clayton 145.56 23 P PKPdf 23 19 30.4 0.0
baz=145
429A Davenport Ranc 145.59 35 P PKPbc 23 19 30.9 +0.1
baz=146
133A Hamilton Ranch 145.65 30 P PKPab 23 19 31.2 0.0
baz=146
X38A Whitesboro 145.70 23 P PKPab 23 19 31.2 -0.1
baz=146
529A Stev Forest Ra 145.76 36 P PKPab 23 19 32.2 +0.4
baz=146
Y36A Durant 145.78 25 P PKPdf 23 19 30.7 -0.1
baz=146
URVA University of 145.82 357 ePKPdf PKPbc 23 19 31.4 +0.2
430A Baggett Ranch, 145.84 34 P PKPbc 23 19 31.6 -0.1
baz=146
Z35A Perchaven, San 145.84 27 P PKPdf 23 19 30.8 -0.2
baz=146
232A Coleman 145.85 31 P PKPbc 23 19 31.7 +0.1
baz=146
331A San Angelo 145.89 33 P PKPbc 23 19 31.9 +0.2
baz=146
GLAT Glass 145.97 14 ePKPdf PKPab 23 19 32.5 +0.3
Y37A Hugo 145.99 24 P PKPdf 23 19 31.2 +0.1
baz=146
UTMT University of 146.00 13 ePKPdf PKPab 23 19 32.4 +0.1
GNAR Gosnell 146.07 15 ePKPdf PKPab 23 19 32.9 +0.2
134A White-Moore Ra 146.08 29 P PKPbc 23 19 32.0 -0.2
baz=146
233A Rising Star 146.13 30 P PKPbc 23 19 32.1 -0.3
baz=146
332A Millersview 146.20 32 P PKPdf 23 19 32.1 +0.4
baz=146
BLA Blacksburg 146.23 1 ePKP2 PKPbc 23 19 32.3 -0.3
BLA MLR MLR
comp=Z,3µm,19.0s
BLA Blacksburg 146.23 1 ePKPdf PKPbc 23 19 32.2 -0.3
BLA LR LR
comp=Z,3µm,19.0s
Z36A Blue Ridge 146.25 26 P PKPbc 23 19 32.4 -0.3
baz=146
530A J-C Ranch, Com 146.26 35 P PKPab 23 19 33.7 +0.1
baz=146
431A Sonora 146.27 34 P PKPbc 23 19 33.3 +0.3
baz=146
MIAR Mount Ida 146.28 21 ePKP2 PKPbc 23 19 32.4 -0.3
MIAR MLR MLR
comp=Z,3µm,19.0s
MIAR Mount Ida 146.28 21 P PKPbc 23 19 32.7 0.0
baz=146
MIAR Mount Ida 146.28 21 ePKPdf PKPbc 23 19 32.4 -0.3
MIAR LR LR
comp=Z,3µm,19.0s
HBAR Harrisburg 146.29 16 ePKPdf PKPab 23 19 33.7 +0.3
Y38A Idabel 146.39 23 P PKPbc 23 19 32.6 -0.4
baz=146
135A Vickery Place, 146.41 28 P PKPbc 23 19 33.3 +0.1
baz=146
WVT Waverly 146.44 12 ePKP2 PKPdf 23 19 32.2 +0.3
WVT MLR MLR
comp=Z,2µm,20.0s
WVT Waverly 146.44 12 ePKPdf PKPdf 23 19 32.2 +0.3
WVT LR LR
comp=Z,2µm,20.0s
UALR University of 146.49 19 ePKPdf PKPdf 23 19 32.6 +0.6
234A Clairette 146.52 29 P PKPbc 23 19 33.7 +0.2
baz=146
432A Menard 146.57 33 P PKPbc 23 19 34.0 +0.3
baz=146
Y39A Lockesburg 146.63 22 P PKPbc 23 19 33.4 -0.4
baz=146
333A Richland Sprin 146.64 31 P PKPbc 23 19 34.2 +0.3
baz=146
Z37A Pogue Cattle C 146.66 25 P PKPbc 23 19 33.9 0.0
baz=146
531A Rocksprings 146.70 34 P PKPbc 23 19 34.7 +0.5
baz=147
TZTN Tazewell 146.70 6 ePKPdf PKPbc 23 19 33.4 -0.6
LCO Las Campanas 146.78 194 ePKPdf PKPab 23 19 37.9 +2.1
LCO LR LR
comp=Z,3µm,19.0s
WHTX Lake Whitney 146.86 29 P PKPbc 23 19 34.6 +0.1
baz=147
WHTX Lake Whitney 146.86 29 ePKPdf PKPab 23 19 35.3 -0.5
WHTX LR LR
comp=Z,2µm,20.0s
JCT Junction City 146.87 33 ePKP2 PKPdf 23 19 33.5 +0.7
JCT MLR MLR
comp=Z,2µm,21.0s
JCT Junction City 146.87 33 P PKPbc 23 19 35.1 +0.4
baz=147
JCT Junction City 146.87 33 ePKPdf PKPdf 23 19 33.5 +0.7
JCT LR LR
comp=Z,2µm,21.0s
Z38A Mt. Pleasant 146.88 24 P PKPbc 23 19 34.7 +0.2
baz=147
136A Ennis 146.89 27 P PKPbc 23 19 34.6 0.0
baz=147
MET Memphis--Engin 146.89 16 PFAKE 23 19 40.0 +4.2
MET LR LR
comp=Z,2µm,19.0s
334A Lometa 147.02 30 P PKPbc 23 19 35.1 +0.1
baz=147
433A Art 147.04 32 P PKPbc 23 19 35.6 +0.5
baz=147
532A Rocksprings 147.09 34 P PKPbc 23 19 35.6 +0.3
baz=147
137A Heron Place, G 147.12 26 P PKPbc 23 19 35.8 +0.6
baz=147
Z39A Irene McRaven, 147.21 23 P PKPbc 23 19 35.7 +0.3
baz=147
631A Perdido Creek 147.25 35 P PKPbc 23 19 36.1 +0.4
baz=147
236A Katherine and 147.29 27 P PKPbc 23 19 36.0 +0.3
baz=147
138A Matatall Enter 147.35 25 P PKPbc 23 19 36.6 +0.7
baz=147
434A Burnet 147.42 31 P PKPbc 23 19 35.9 -0.3
baz=147
335A Moody 147.46 29 P PKPbc 23 19 36.5 +0.3
baz=147
TKL Tuckaleechee C 147.55 6 ePKIKP PKPdf 23 19 34.4 +0.6
TKL Tuckaleechee C 147.55 6 ePKPdf PKPdf 23 19 34.4 +0.6
533A Kerrville 147.60 33 P PKPbc 23 19 36.8 +0.1
baz=148
OXF Oxford 147.61 15 ePKIKP PKPdf 23 19 34.1 +0.2
OXF MLR MLR
comp=Z,3µm,21.0s
OXF Oxford 147.61 15 ePKPdf PKPdf 23 19 34.1 +0.2
OXF LR LR
comp=Z,3µm,21.0s
237A Washetta, Mont 147.61 26 P PKPbc 23 19 37.1 +0.5
baz=148
139A Bunkhuse Ranc 147.62 24 P PKPbc 23 19 36.9 +0.3
baz=148
632A Uvalde 147.63 34 P PKPbc 23 19 37.2 +0.4
baz=148
336A Riesel 147.65 28 P PKPbc 23 19 37.0 +0.3
baz=148
CPCT Cooper Cave 147.67 8 ePKPdf PKPdf 23 19 34.7 +0.8
SWET Sewanee 147.68 10 ePKPdf PKPdf 23 19 34.6 +0.6
SWET LR LR
comp=Z,5µm,21.0s
435B Jarrell 147.79 30 P PKPbc 23 19 37.3 +0.2
baz=148
BBSR BB Station 147.87 336 ePKPbc PKPbc 23 19 38.2 +1.0
BBSR LR LR
comp=Z,2µm,21.0s
238A Jacksonville 147.91 25 P PKPbc 23 19 38.1 +0.7
baz=148
534A Blanco 147.94 32 P PKPbc 23 19 37.6 0.0
baz=148
633A Saathoff Ranch 148.00 34 P PKPbc 23 19 38.3 +0.5
baz=148
732A Laxson Ranch, 148.11 35 P PKPbc 23 19 38.4 +0.4
baz=148
337A Centerville 148.16 27 P PKPbc 23 19 38.9 +0.8
baz=148
CNNC Cliffs of the 148.16 357 ePKPbc PKPbc 23 19 39.0 +1.1
CNNC LR LR
comp=Z,2µm,18.0s
239A Gary 148.17 24 P PKPbc 23 19 38.6 +0.6
baz=148
436A Wall Ranch, Ga 148.19 29 P PKPbc 23 19 38.9 +0.7
baz=148
KMSC Kings Mountain 148.26 3 P PKPbc 23 19 37.8 -0.4
baz=148
KMSC Kings Mountain 148.26 3 ePKPdf PKPdf 23 19 35.5 +0.5
KMSC LR LR
comp=Z,4µm,20.0s
NATX Nacogdoches 148.31 25 P PKPbc 23 19 38.8 +0.3
baz=148
338A Crockett 148.38 26 P PKPbc 23 19 39.2 +0.5
baz=148
535A Dale 148.41 31 P PKPbc 23 19 39.5 +0.7
baz=148
832A Faith Ranch, C 148.44 36 P PKPbc 23 19 39.5 +0.5
baz=148
437A Phantom Ranch, 148.45 28 P PKPbc 23 19 39.5 +0.6
baz=148
733A Divot King Ran 148.50 35 P PKPbc 23 19 39.6 +0.6
baz=148
634A China Grove, S 148.51 33 P PKPbc 23 19 39.6 +0.5
baz=148
536A Bastrop 148.62 30 P PKPbc 23 19 39.8 +0.5
baz=148
339A Huntington 148.73 25 P PKPbc 23 19 39.9 +0.3
baz=149
833A Chaparral WMA, 148.75 35 P PKPbc 23 19 40.8 +1.1
baz=149
635A Leesville 148.81 32 P PKPbc 23 19 41.0 +1.2
baz=149
734A La Parita Cree 148.82 33 P PKPbc 23 19 41.0 +1.2
baz=149
438A Sam Houston St 148.82 27 P PKPbc 23 19 41.0 +1.1
baz=149
340A Bronson 148.93 24 P PKPbc 23 19 40.4 +0.3
baz=149
537A Green Hill Far 148.99 29 P PKPbc 23 19 41.7 +1.4
baz=149
439A Center Grove, 149.10 26 P PKPbc 23 19 41.4 +0.8
baz=149
636A Smothers Creek 149.11 31 P PKPbc 23 19 42.2 +1.6
baz=149
735A Kenedy 149.22 32 P PKPbc 23 19 42.4 +1.5
baz=149
538A Harpers Horsep 149.26 28 P PKPbc 23 19 42.5 +1.6
baz=149
HKT Hockley 149.33 28 ePKPdf PKPdf 23 19 38.1 +1.4
HKT LR LR
comp=Z,3µm,20.0s
933A Laredo 149.35 36 P PKPbc 23 19 42.6 +1.4
baz=149
834A Tilden 149.38 34 P PKPbc 23 19 42.5 +1.2
baz=149
VBMS Vicksburg 149.43 18 P PKPbc 23 19 41.9 +0.6
baz=149
VBMS Vicksburg 149.43 18 PFAKE 23 19 50.0 +4.0
VBMS LR LR
comp=Z,3µm,20.0s
637A Eagle Lake 149.51 30 P PKPbc 23 19 43.5 +1.9
baz=149
736A Circle Diamond 149.53 31 P PKPbc 23 19 43.5 +1.9
baz=149
LRAL Lakeview Retre 149.60 12 ePKPdf PKPdf 23 19 37.7 +0.6
LRAL LR LR
comp=Z,3µm,20.0s
835A Beeville 149.65 33 P PKPbc 23 19 43.8 +1.8
baz=150
539A Cross D Ranch, 149.71 27 P PKPbc 23 19 43.9 +1.8
baz=150
934A Benavides 149.80 35 P PKPbc 23 19 44.0 +1.6
baz=150

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **GOGA** | **Godfrey** | **149.81** | **6** | *e*PKP2 | **PKPbc** | **23 19 42.5** | **+0.3** | | |
| GOGA | | | | MLR | MLR | | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **GOGA** | **Godfrey** | **149.81** | **6** | *e*PKPbc | **PKPbc** | **23 19 42.5** | **+0.3** | | |
| GOGA | | | | LR | LR | | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **540A** | **Vidor** | **149.95** | **25** | P | **PKPbc** | **23 19 44.4** | **+1.7** | | |
| | baz=150 | | | | | | | | |
| **034A** | **Hebbronville** | **150.11** | **36** | P | **PKPbc** | **23 19 45.0** | **+1.8** | | |
| | baz=150 | | | | | | | | |
| **KVTX** | **Kingsville** | **150.19** | **34** | *e*PKPbc | **PKPbc** | **23 19 46.1** | **+2.8** | | |
| **NHSC** | **New Hope** | **150.32** | **1** | PFAKE | | 23 19 50.0 | +0.4 | | |
| NHSC | | | | LR | LR | | | | |
| | comp=Z,3μm,21.0s | | | | | | | | |
| **035A** | **Encino** | **150.54** | **35** | P | **PKPbc** | **23 19 45.9** | **+1.8** | | |
| | baz=150 | | | | | | | | |
| **035Z** | **Hargill** | **150.92** | **36** | P | **PKPbc** | **23 19 47.0** | **+1.9** | | |
| | baz=151 | | | | | | | | |
| **BRAL** | **Brewton** | **151.53** | **14** | *e*PKPdf | **PKPdf** | **23 19 42.3** | **+2.1** | | |
| BRAL | | | | LR | LR | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | |
| **TIGA** | **Tifton** | **151.74** | **7** | P | **PKPbc** | **23 19 47.3** | **+0.5** | | |
| | baz=152 | | | | | | | | |
| **TIGA** | **Tifton** | **151.74** | **7** | *e*PKPbc | **PKPbc** | **23 19 47.5** | **+0.7** | | |
| TIGA | | | | LR | LR | | | | |
| | comp=Z,4μm,20.0s | | | | | | | | |
| **LVC** | **Limon Verde** | **152.24** | **202** | *e*PKPbc | **PKPbc** | **23 19 50.1** | **+1.5** | | |
| LVC | | | | LR | LR | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| **ANWB** | **Willy Bob** | **157.45** | **311** | PFAKE | | 23 20 00.0 | +11 | | |
| ANWB | | | | LR | LR | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **LPAZ** | **La Paz** | **157.50** | **210** | PKP | **PKPdf** | **23 19 49.5** | **-0.2** | | |
| | comp=Z,2.5nm,1.0s,baz=44,slow=2.9,SNR=6.9 | | | | | | | | |
| **LPAZ** | **La Paz** | **157.50** | **210** | *e*PKIKP | **PKPdf** | **23 19 50.5** | **+0.8** | | |
| **LPAZ** | **La Paz** | **157.50** | **210** | *e*PKPdf | **PKPdf** | **23 19 50.5** | **+0.8** | | |
| **SMRT** | **St. Maarten** | **158.17** | **313** | PFAKE | | 23 20 00.0 | +10 | | |
| SMRT | | | | LR | LR | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | |
| **SEUS** | **St. Eustatius** | **158.45** | **312** | PFAKE | | 23 20 00.0 | +10 | | |
| SEUS | | | | LR | LR | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | |
| **SABA** | **Saba** | **158.56** | **313** | PFAKE | | 23 20 00.0 | +10 | | |
| SABA | | | | LR | LR | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **FDF** | **Fort de France** | **158.57** | **303** | PFAKE | | 23 20 00.0 | +10 | | |
| FDF | | | | LR | LR | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **STVI** | **Saint Thomas** | **159.28** | **317** | PFAKE | | 23 20 00.0 | +9.1 | | |
| STVI | | | | LR | LR | | | | |
| | comp=Z,2μm,22.0s | | | | | | | | |
| **SAML** | **Samuel** | **159.64** | **233** | *e*PKPdf | **PKPdf** | **23 19 52.2** | **+0.7** | | |
| SAML | | | | LR | LR | | | | |
| | comp=Z,900nm,19.0s | | | | | | | | |
| **SDDR** | **Presa de Saban** | **162.42** | **333** | *e*pPKPab | pPKPab | 23 20 50.6 | +0.7 | | |
| **OTAV** | **Otavalo** | **176.77** | **200** | *e*PKPdf | **PKPdf** | **23 20 04.1** | **+0.4** | | |

**DDA 25 23:09:19.3, 38°20N×30°97E, h7km, Md2.7, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BAGO** | **Egridir - ISPA** | **0.26** | **214** | P | Pg | 23 09 24.5 | 0.0 |
| BAGO | | | | S | Sg | 23 09 28.9 | +0.8 |
| **BOLV** | **Bolvadin** | **0.52** | **358** | P | Pg | 23 09 29.8 | +0.4 |
| BOLV | | | | S | Sg | 23 09 36.8 | +0.4 |
| **KHAL** | **Karahalli** | **1.18** | **279** | P | Pg | 23 09 41.9 | -0.2 |
| KHAL | | | | S | Sn | 23 09 58.5 | -0.3 |

**IDC 25 23:10:30.6±35.0, 4°61S×99°54E, h0km, mb3.8/4, mb1 3.8/4, mb1mx3.4/53, mbtmp3.8/4, Error ellipse: s-maj=728.4km s-min=161.1km az=165.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **52.57** | **6** | P | P | 23 19 46.0 | -0.1 |
| | 0.5nm,0.7s,baz=194,slow=8.3,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.41** | **345** | P | P | 23 19 52.2 | 0.0 |
| | 0.6nm,0.7s,baz=164,slow=8.3,SNR=4.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.64** | **350** | P | P | 23 20 36.1 | -0.2 |
| | 1.2nm,0.5s,baz=160,slow=6.8,SNR=3.6 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.47** | **341** | P | P | 23 20 55.6 | 0.0 |
| | 0.4nm,0.5s,baz=139,slow=9.0,SNR=1.8 | | | | | | |

*ISCJB **25** 23:11:33.6±0.6, 40°46N±0°03×21°54E±0°04, h9km±7km, Error ellipse: s-maj=6.5km s-min=4.7km az=40.3*
*CSEM **25** 23:11:33.0±0.3, 40°51N×21°61E, h5km, MD2.5, Error ellipse: s-maj=8.8km s-min=5.5km az=60.0*
*ATH **25** 23:11:33.8, 40°47N×21°55E, h5km±3km, MD2.5/6*
*SKO **25** 23:11:34.1, 40°42N×21°50E, h2km, M1.4, ML1.9*

**ISC 25 23:11:33.4±1.1, 40°48N±0°03×21°56E±0°03, h19km±2km, n17, σ0°27/28, Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KZN** | **Kozani** | **0.24** | **137** | *e*PG | **Pb** | **23 11 38.8** | **-0.1** |
| KZN | | | | *e*SG | **Sb** | **23 11 42.3** | **-0.2** |
| **KZN** | **Kozani** | **0.24** | **137** | *e*Pg | **Pb** | **23 11 38.8** | **-0.1** |
| KZN | | | | *e*Sg | **Sb** | **23 11 42.3** | **-0.2** |
| **FNA** | **Florina** | **0.33** | **336** | *e*P | **Pg** | **23 11 40.1** | **-0.6** |
| **FNA** | **Florina** | **0.33** | **336** | *e*PG | **Pg** | **23 11 40.4** | **-0.3** |
| FNA | | | | *e*SB | **Sg** | **23 11 45.6** | **0.0** |
| **FNA** | **Florina** | **0.33** | **336** | *e*P | **Pg** | **23 11 40.1** | **-0.6** |
| **FNA** | **Florina** | **0.33** | **336** | *e*Pg | **Pg** | **23 11 40.4** | **-0.3** |
| FNA | | | | *e*Sg | **Sg** | **23 11 45.6** | **0.0** |
| **PENT** | **Pentalofos** | **0.43** | **229** | *e*PB | **Pg** | **23 11 42.0** | **-0.3** |
| PENT | | | | *e*SB | **Sb** | **23 11 48.7** | **0.0** |
| **PENT** | **Pentalofos** | **0.43** | **229** | *e*Pg | **Pg** | **23 11 42.0** | **-0.3** |
| PENT | | | | *e*Sg | **Sb** | **23 11 48.7** | **0.0** |
| **GRG** | **Griva** | **0.80** | **53** | *e*PB | **Pn** | **23 11 49.7** | **0.0** |
| GRG | | | | *e*SB | **Sn** | **23 12 01.3** | **+0.2** |
| **GRG** | **Griva** | **0.80** | **53** | *e*Pb | **Pn** | **23 11 49.7** | **0.0** |
| GRG | | | | *e*Sg | **Sn** | **23 12 01.3** | **+0.2** |
| **LIT** | **Litokhoron** | **0.81** | **118** | *e*PG | **Pb** | **23 11 49.0** | **+0.1** |
| LIT | | | | *e*SB | **Sg** | **23 12 00.3** | **+0.3** |
| **LIT** | **Litokhoron** | **0.81** | **118** | *e*Pg | **Pb** | **23 11 49.0** | **+0.1** |
| LIT | | | | *e*Sg | **Sg** | **23 12 00.3** | **+0.3** |
| **OHR** | **Ohrid** | **0.85** | **318** | *i* Pg | **Pb** | **23 11 50.0** | **+0.2** |
| OHR | | | | *i* Sg | **Sn** | **23 12 02.7** | **+0.2** |
| OHR | | | | *e*Lg | Lg | 23 12 04.0 | |
| | comp=N,18nm,0.7s | | | | | | |
| OHR | | | | *e*Lg | Lg | 23 12 04.5 | |
| | comp=E,30nm,0.5s | | | | | | |
| **OHR** | **Ohrid** | **0.85** | **318** | *i* Pg | **Pb** | **23 11 49.9** | **+0.2** |
| OHR | | | | *i* Sg | **Sn** | **23 12 02.7** | **+0.2** |
| OHR | | | | *e*Lg | Lg | 23 12 03.9 | |
| | comp=E,18nm,0.7s | | | | | | |
| **THL** | **Klokotos Trika** | **0.98** | **159** | *e*PB | **Pg** | **23 11 52.2** | **-0.3** |
| **THL** | **Klokotos Trika** | **0.98** | **159** | *e*Pg | **Pg** | **23 11 52.2** | **-0.3** |
| **KNT** | **Kendrikon** | **1.22** | **56** | P | Pg | 23 12 01.5 | +4.4 |

*TRN **25** 23:12:54.3, 18°81N×64°60W, h28km*
*NEIC **25** 23:12:56.1, 18°91N×64°52W, h28km, MD3.5(RSPR), After RSPR.*

**RSPR 25 23:12:56.1, 18°91N×64°52W, h28km±7km, MD3.5/6, 10C-12D, Virgin Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **STVI** | **Saint Thomas** | **0.70** | **217** | *e*P | Pb | 23 13 08.1 | -1.6 |
| **STVI** | **Saint Thomas** | **0.70** | **217** | *e*S | Sb | 23 13 17.2 | -1.7 |
| **STVI** | **Saint Thomas** | **0.70** | **217** | *e*P | Pb | 23 13 08.1 | -1.6 |
| STVI | | | | *e*S | Sb | 23 13 17.2 | -1.7 |
| **STVI** | **Saint Thomas** | **0.70** | **217** | *e*P | Pb | 23 13 08.1 | -1.6 |
| STVI | | | | *e*S | Sb | 23 13 17.2 | -1.7 |
| **HUMP** | **Col San Antoni** | **1.48** | **239** | *e*P | Pn | 23 13 18.9 | -2.0 |
| **HUMP** | **Col San Antoni** | **1.48** | **239** | *e*S | Sn | 23 13 37.2 | -2.1 |
| **HUMP** | **Col San Antoni** | **1.48** | **239** | *e*P | Pn | 23 13 18.9 | -2.0 |
| HUMP | | | | *e*S | Sn | 23 13 37.2 | -2.1 |
| **HUMP** | **Col San Antoni** | **1.48** | **239** | *e*P | Pn | 23 13 18.9 | -2.0 |
| HUMP | | | | *e*S | Sn | 23 13 37.2 | -2.1 |
| **CPD** | **Cerro la Pandu** | **1.59** | **237** | *e*P | Pn | 23 13 20.7 | -1.7 |
| **CPD** | **Cerro la Pandu** | **1.59** | **237** | *e*S | Sn | 23 13 39.6 | -2.5 |
| **CPD** | **Cerro la Pandu** | **1.59** | **237** | *e*P | Pn | 23 13 20.7 | -1.7 |
| CPD | | | | *e*S | Sn | 23 13 39.6 | -2.5 |
| **CPD** | **Cerro la Pandu** | **1.59** | **237** | *e*P | Pn | 23 13 20.7 | -1.7 |
| CPD | | | | *e*S | Sn | 23 13 39.6 | -2.5 |
| **SJG** | **San Juan** | **1.74** | **243** | *e*P | Pn | 23 13 22.8 | -1.7 |
| SJG | | | | *e*S | Sn | 23 13 43.7 | -2.1 |
| **SJG** | **San Juan** | **1.74** | **243** | *e*P | Pn | 23 13 22.8 | -1.7 |
| SJG | | | | *e*S | Sn | 23 13 43.7 | -2.1 |
| **CELP** | **Cerrillos** | **2.13** | **247** | *i* P | Pn | 23 13 28.1 | -1.7 |
| CELP | | | | *e*S | Sn | 23 13 53.1 | -2.2 |
| **CELP** | **Cerrillos** | **2.13** | **247** | *i* P | Pn | 23 13 28.1 | -1.7 |
| CELP | | | | *e*S | Sn | 23 13 53.1 | -2.2 |
| **CELP** | **Cerrillos** | **2.13** | **247** | *i* Pu | Pn | 23 13 28.1 | -1.7 |
| CELP | | | | *e*S | Sn | 23 13 53.1 | -2.2 |
| **OBIP** | **Obispado Ponce** | **2.16** | **247** | *e*P | Pn | 23 13 28.7 | -1.6 |
| **OBIP** | **Obispado Ponce** | **2.16** | **247** | *e*S | Sn | 23 13 54.1 | -2.1 |
| **OBIP** | **Obispado Ponce** | **2.16** | **247** | *e*P | Pn | 23 13 28.7 | -1.6 |
| OBIP | | | | *e*S | Sn | 23 13 54.1 | -2.1 |
| **OBIP** | **Obispado Ponce** | **2.16** | **247** | *e*P | Pn | 23 13 28.7 | -1.6 |
| OBIP | | | | *e*S | Sn | 23 13 54.1 | -2.1 |
| **AOPR** | **Arecibo Observ** | **2.19** | **255** | *e*P | Pn | 23 13 29.1 | -1.7 |
| **AOPR** | **Arecibo Observ** | **2.19** | **255** | *e*S | Sn | 23 13 54.8 | -2.2 |
| **AOPR** | **Arecibo Observ** | **2.19** | **255** | *e*P | Pn | 23 13 29.1 | -1.7 |
| AOPR | | | | *e*S | Sn | 23 13 54.8 | -2.2 |
| **AOPR** | **Arecibo Observ** | **2.19** | **255** | *e*P | Pn | 23 13 29.1 | -1.7 |
| AOPR | | | | *e*S | Sn | 23 13 54.8 | -2.2 |
| **CRPR** | **Cabo Rojo, PR** | **2.62** | **250** | *e*P | Pn | 23 13 35.1 | -1.5 |
| **CRPR** | **Cabo Rojo, PR** | **2.62** | **250** | *e*S | Sn | 23 14 05.5 | -2.0 |
| **CRPR** | **Cabo Rojo, PR** | **2.62** | **250** | *e*P | Pn | 23 13 35.1 | -1.5 |
| CRPR | | | | *e*S | Sn | 23 14 05.5 | -2.0 |
| **CRPR** | **Cabo Rojo, PR** | **2.62** | **250** | *e*P | Pn | 23 13 35.1 | -1.5 |
| CRPR | | | | *e*S | Sn | 23 14 05.5 | -2.0 |

*ISCJB **25** 23:12:56.0±0.3, 3°47S±0°04×99°36E±0°04, h10km, mb4.5/35, Error ellipse: s-maj=6.8km s-min=4.0km az=40.8*
*IDC **25** 23:12:56.7±0.6, 3°40S×99°34E, h0km, mb4.4/27, mb1 4.5/29, mb1mx4.3/56, mbtmp4.4/29, ML4.1/2, Error ellipse: s-maj=19.6km s-min=13.1km az=42.0*
*DJA **25** 23:12:57.4±1.3, 4°S±3°×9°E±°, h19km±12km, M5.1/29, mb4.9/29, mB6.3/3, MLv5.0/25, Mw(mB)6.0/3*
*NEIC **25** 23:12:58.0±0.4, 3°41S×99°48E, h10km, mb5.0/7, Error ellipse: s-maj=11.0km s-min=5.7km az=47.0*

**ISC 25 23:12:57.9±0.5, 3°48S±0°06×99°35E±0°06, h10km, n121, σ1°40/108, mb4.6/36, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.97** | **43** | P | **Pn** | **23 13 16.0** | **-1.6** |
| PPSI | | | | S | **Sn** | **23 13 32.4** | **+0.9** |
| **SISI** | **Saibi** | **2.15** | **353** | P | **Pn** | **23 13 32.0** | **-1.9** |
| SISI | | | | S | **Sn** | **23 13 59.5** | **-1.2** |
| **PDSI** | **Padang** | **2.78** | **24** | P | **Pn** | **23 13 41.2** | **-1.4** |
| **PPI** | **Padang Panjang** | **3.18** | **19** | P | **Pn** | **23 13 46.8** | **-1.2** |
| **KSI** | **Kapahiang** | **3.24** | **93** | P | **Pn** | **23 13 49.6** | **+0.6** |
| **SDSI** | **Sungai Dareh** | **3.27** | **39** | P | **Pn** | **23 13 48.2** | **-1.1** |
| **MNAI** | **Manna** | **3.71** | **104** | P | **Pn** | **23 13 55.3** | **0.0** |
| **MNAI** | **Manna** | **3.71** | **104** | *e*Pn | **Pn** | **23 13 55.2** | **0.0** |
| MNAI | | | | *e*Sn | **Sn** | **23 14 34.5** | **-4.5** |
| **BKNI** | **Bangkinang** | **4.14** | **24** | P | **Pn** | **23 14 01.8** | **+0.5** |
| **BKNI** | **Bangkinang** | **4.14** | **24** | *e*Pn | **Pn** | **23 13 59.8** | **-1.5** |
| **MNSI** | **Mandailing Nat** | **4.25** | **3** | P | **Pn** | **23 14 01.4** | **-1.4** |
| **MDSI** | **Maura Dua** | **4.92** | **102** | P | **Pn** | **23 14 11.2** | **-0.8** |
| | 147nm,0.8s,0.6nm | | | | | | |
| **LWLI** | **Liwa** | **4.94** | **108** | P | **Pn** | **23 14 11.7** | **-0.7** |
| | 438nm,0.7s,3.0nm | | | | | | |
| **SBSI** | **Sibolga** | **5.01** | **355** | P | **Pg** | **23 14 31.0** | **-3.1** |
| **GSI** | **Gunungsitoli** | **5.07** | **340** | P | **Pn** | **23 14 12.1** | **-1.9** |
| | 177nm,3.7s,2.3nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.07** | **340** | *e*Pn | **Pn** | **23 14 12.3** | **-1.7** |
| GSI | | | | *e*Sn | **Sn** | **23 15 07.1** | **-5.6** |
| **PMBI** | **Palembang** | **5.44** | **84** | P | **Pn** | **23 14 19.1** | **-0.1** |
| | 369nm,0.6s,33μm2.0nm | | | | | | |
| **KASI** | **Kota Agung** | **5.52** | **112** | P | **Pn** | **23 14 18.4** | **-1.9** |
| | 280nm,0.7s,1.2nm | | | | | | |
| **KLI** | **Kotabumi** | **5.67** | **104** | P | **Pn** | **23 14 22.6** | **+0.4** |
| | 118nm,0.9s,1.0nm | | | | | | |
| **PSI** | **Prapat** | **6.25** | **356** | Pn | Pn | 23 14 26.4 | -4.0 |
| | 1.9nm,0.3s,baz=176,slow=10,SNR=5.1 | | | | | | |
| **PSI** | **Prapat** | **6.25** | **356** | *e*Pn | Pn | 23 14 26.6 | -3.8 |
| **TPRI** | **Tanjung Pinang** | **6.77** | **50** | P | **Pn** | **23 14 38.1** | **+0.6** |
| | 78nm,0.6s,37μm3.6nm | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.91** | **79** | P | **Pn** | **23 14 39.3** | **0.0** |
| | 20nm,3.2s,0.4nm | | | | | | |
| **TSI** | **Tuntungan** | **6.98** | **354** | P | **Pn** | **23 14 40.2** | **0.0** |
| | 124nm,1.8s,1.1nm | | | | | | |
| **CGJI** | **Cibinong** | **7.05** | **116** | P | **Pn** | **23 14 38.5** | **-2.7** |
| | 224nm,0.7s,0.8nm | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **7.13** | **347** | P | **Pn** | **23 14 42.2** | **-0.2** |
| | 44nm,1.0s,0.6nm | | | | | | |
| **SBJI** | **Serang** | **7.25** | **111** | P | **Pn** | **23 14 44.5** | **+0.5** |
| | 148nm,1.1s,0.8nm | | | | | | |
| **IPM** | **Ipoh** | **8.08** | **12** | *e*Pn | **Pn** | **23 14 55.5** | **+0.1** |
| **CNJI** | **Cibinong** | **8.63** | **116** | P | **Pn** | **23 15 00.0** | **-3.0** |
| | 268nm,1.0s | | | | | | |
| **KULM** | **Kulim** | **8.81** | **9** | *e*Pn | **Pn** | **23 15 03.1** | **-2.3** |
| **LEM** | **Lembang** | **8.88** | **112** | Pn | **Pn** | **23 15 06.6** | **-0.1** |
| | 5.9nm,0.3s,baz=216,slow=12,SNR=6.4 | | | | | | |
| **LEM** | **Lembang** | **8.88** | **112** | P | **Pn** | **23 15 06.5** | **-0.1** |
| | 2μm,1.3s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **8.97** | **344** | P | **Pn** | **23 15 07.3** | **-0.4** |
| | 114nm,1.5s | | | | | | |
| **LHMI** | **Lhok Sumawe** | **8.97** | **344** | *e*Pn | **Pn** | **23 15 07.9** | **+0.2** |
| **CISI** | **Cisompet, Garu** | **9.35** | **116** | P | **Pn** | **23 15 09.9** | **-3.0** |
| | 306nm,0.6s | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.35** | **116** | *e*Pn | Pn | 23 15 09.7 | -3.3 |
| **CMJI** | **Cimerak** | **10.02** | **116** | P | **Pn** | **23 15 19.3** | **-2.7** |
| | 149nm,1.5s,7μm | | | | | | |
| **SMRI** | **Semarang** | **11.60** | **108** | *e*Pn | Pn | 23 15 39.6 | -4.1 |
| **UWJI** | **Ujung Watu** | **11.92** | **105** | P | **Pn** | **23 15 48.6** | **+0.5** |
| | 110nm,2.1s | | | | | | |
| **UGM** | **Wanagama** | **11.96** | **112** | *e*Pn | **Pn** | **23 15 45.9** | **-2.8** |
| **BBKI** | **Banjar Baru** | **15.47** | **90** | P | P | 23 16 52.2 | +11 |
| **KHLT** | **Khalaem Dam** | **18.17** | **358** | P | **P** | **23 17 13.3** | **+2.5** |
| | 89nm,1.6s | | | | | | |
| **UMPA** | **Umpang Tak** | **19.56** | **359** | P | **Pn** | **23 17 27.7** | **+0.3** |
| | 4.9nm,0.9s | | | | | | |
| **KAPI** | **Kappang** | **20.41** | **95** | P | Pn | 23 17 35.8 | -1.6 |
| | 11nm,0.7s,baz=294,slow=7.7,SNR=4.5 | | | | | | |
| **BKSI** | **Bulukumba** | **20.79** | **96** | P | Pn | 23 17 42.0 | 0.0 |
| **UTTA** | **Uttaradit** | **21.12** | **3** | P | P | 23 17 48.1 | +5.1 |
| | 4.2nm,0.8s | | | | | | |
| **PALK** | **Pallekele** | **21.45** | **300** | P | **P** | **23 17 46.9** | **+0.2** |
| | 23nm,1.0s,baz=114,slow=13,SNR=3.9 | | | | | | |
| **MHMT** | **Maesarieng** | **21.56** | **356** | P | **P** | **23 17 49.0** | **+1.2** |
| | 81nm,1.0s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.76** | **359** | *e*P | **P** | **23 17 50.2** | **+0.3** |
| **CM31** | **Chiang Mai Arr** | **21.80** | **359** | *e*P | **P** | **23 17 50.6** | **+0.3** |
| **CMAR** | **Chiang Mai Arr** | **21.80** | **359** | P | **P** | **23 17 50.6** | **+0.3** |
| | 23nm,1.0s,baz=188,slow=9.6,SNR=87 | | | | | | |
| **CHTO** | **Chiang Mai** | **22.15** | **359** | *e*P | **P** | **23 17 54.6** | **+0.5** |
| | 227nm,3.0s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.04** | **260** | T | T | 23 48 08.6 | |
| | baz=80,slow=75,SNR=8.6 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.05** | **260** | T | T | 23 48 08.6 | |
| | baz=80,slow=75,SNR=8.7 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.06** | **260** | T | T | 23 48 08.6 | |
| | baz=80,slow=75,SNR=11 | | | | | | |
| **LSA** | **Lhasa** | **33.91** | **347** | *e*P | **P** | **23 19 43.2** | **+1.4** |
| | 12nm,1.0s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.13** | **158** | T | T | 23 56 23.6 | |
| | baz=335,slow=76,SNR=11 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.15** | **158** | T | T | 23 56 20.9 | |
| | baz=335,slow=76,SNR=9.7 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.15** | **158** | T | T | 23 56 23.4 | |
| | baz=335,slow=76,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.84** | **118** | P | **P** | **23 20 14.9** | **-0.3** |
| | 1.4nm,0.5s,baz=292,slow=8.8,SNR=5.1 | | | | | | |
| **AS12** | **Alice Springs** | **38.94** | **124** | *e*P | **P** | **23 20 24.1** | **-0.3** |
| **ASAR** | **Alice Springs** | **38.94** | **124** | P | **P** | **23 20 24.1** | **-0.3** |
| | 1.1nm,0.6s,baz=293,slow=7.8,SNR=12 | | | | | | |
| **AS01** | **Alice Springs** | **38.98** | **124** | *e*P | **P** | **23 20 24.5** | **-0.2** |
| **GTA** | **Gaotai** | **42.68** | **1** | *e*P | **P** | **23 20 57.8** | **+2.7** |
| GTA | | | | pP | **pP** | **23 21 01.0** | **+2.8** |
| GTA | | | | sP | **sP** | **23 21 03.5** | **+4.0** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | |
| **JNU** | **Nakatsue** | **47.06** | **37** | P | **P** | **23 21 29.5** | **-0.5** |
| | comp=Z,21nm,1.1s,baz=309,slow=6.5,SNR=2.6 | | | | | | |
| **JNU** | **Nakatsue** | **47.06** | **37** | *e*P | **P** | **23 21 29.5** | **-0.5** |
| | comp=Z,812nm,2.7s | | | | | | |
| **KSH** | **Kashi** | **47.89** | **336** | P | **P** | **23 21 35.3** | **-1.2** |
| KSH | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **UCH** | **Uchtor** | **50.77** | **336** | P | **P** | **23 21 59.0** | **+0.2** |
| | SNR=6.9 | | | | | | |
| **TKM2** | **Tokmak 2** | **50.93** | **338** | P | **P** | **23 22 00.2** | **+0.4** |
| | SNR=15 | | | | | | |
| **TKM2** | **Tokmak 2** | **50.93** | **338** | *e*P | **P** | **23 22 00.2** | **+0.4** |
| | comp=Z,21nm,1.0s | | | | | | |
| **KBK** | **Karagaybulak** | **50.96** | **337** | P | **P** | **23 22 00.8** | **+0.8** |
| | SNR=9.3 | | | | | | |
| **AAK** | **Ala-Archa** | **51.12** | **337** | P | **P** | **23 22 00.7** | **-0.4** |
| | comp=Z,1.6nm,0.3s,baz=155,slow=7.2,SNR=8.0 | | | | | | |
| **AAK** | **Ala-Archa** | **51.12** | **337** | *e*P | **P** | **23 22 02.1** | **+0.9** |
| | comp=Z,9.0nm,0.4s | | | | | | |
| **EKS2** | **Erkin-Say** | **51.43** | **336** | P | **P** | **23 22 04.0** | **+0.6** |
| | SNR=9.2 | | | | | | |
| **EKS2** | **Erkin-Say** | **51.43** | **336** | *e*P | **P** | **23 22 03.9** | **+0.4** |
| | comp=Z,12nm,0.9s | | | | | | |
| **SONA0** | **Songino Array** | **51.47** | **6** | *e*P | **P** | **23 22 04.2** | **+0.5** |
| **SONM** | **Songino Array** | **51.47** | **6** | P | **P** | **23 22 04.2** | **+0.5** |
| | comp=Z,4.8nm,0.9s,baz=190,slow=8.5,SNR=22 | | | | | | |
| **SONA1** | **Songino Array** | **51.48** | **6** | *e*P | **P** | **23 22 04.2** | **+0.4** |
| **USP** | **Ospenovka** | **51.65** | **337** | P | **P** | **23 22 04.9** | **-0.1** |
| | SNR=17 | | | | | | |
| **MK01** | **Makanchi Array** | **52.25** | **345** | *e*P | **P** | **23 22 09.2** | **-0.1** |
| **MK32** | **Makanchi Array** | **52.27** | **345** | *e*P | **P** | **23 22 09.6** | **+0.1** |
| **MKAR** | **Makanchi Array** | **52.27** | **345** | P | **P** | **23 22 09.6** | **+0.1** |
| | comp=Z,8.9nm,0.8s,baz=152,slow=9.4,SNR=56 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.27** | **345** | *e*P | **P** | **23 22 10.0** | **+0.4** |
| **KKAR** | **Karatay Array** | **53.17** | **334** | *e*P | **P** | **23 22 16.3** | **0.0** |
| **EIDS** | **Eidsvold** | **54.20** | **119** | *e*P | P | 23 22 28.6 | +4.4 |
| | comp=Z,29nm,1.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.76** | **28** | P | **P** | **23 22 36.0** | **+1.0** |
| | comp=Z,6.4nm,0.9s,baz=210,slow=3.9,SNR=7.5 | | | | | | |
| **GEYT** | **Alibeck** | **56.17** | **321** | P | **P** | **23 22 37.5** | **-0.6** |
| | comp=Z,4.3nm,0.9s,baz=146,slow=8.2,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.78** | **344** | P | **P** | **23 22 41.8** | **-0.4** |
| | comp=Z,4.8nm,0.9s,baz=164,slow=7.0,SNR=26 | | | | | | |
| **KURK** | **Kurchatov** | **56.84** | **344** | *e*P | **P** | **23 22 42.6** | **0.0** |
| **ZAA0** | **Zalesovo Array** | **58.50** | **350** | *e*P | **P** | **23 22 53.9** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **58.50** | **350** | P | **P** | **23 22 53.9** | **-0.2** |
| | comp=Z,15nm,0.8s,baz=175,slow=5.4,SNR=41 | | | | | | |
| **ZAA1** | **Zalesovo Array** | **58.50** | **350** | *e*P | **P** | **23 22 53.9** | **-0.3** |
| **BVAR** | **Borovoye Array** | **61.34** | **341** | P | **P** | **23 23 12.9** | **-0.9** |
| | comp=Z,5.8nm,0.8s,baz=134,slow=8.5,SNR=25 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.62** | **332** | *e*P | **P** | **23 23 21.5** | **-1.0** |
| **AKTO** | **Aktyubinsk** | **64.34** | **332** | P | **P** | **23 23 33.1** | **-0.7** |
| | comp=Z,5.7nm,1.0s,baz=124,slow=5.5,SNR=11 | | | | | | |
| **ASF** | **Jabal al Asfar** | **68.92** | **306** | P | **P** | **23 24 04.2** | **+0.5** |
| | comp=Z,4.1nm,0.9s,baz=346,slow=4.4,SNR=6.7 | | | | | | |
| **KBZ** | **Khabaz** | **69.00** | **320** | P | **P** | **23 24 03.7** | **0.0** |
| | comp=Z,8.4nm,0.9s,baz=133,slow=5.2,SNR=18 | | | | | | |
| **EIL** | **Elat** | **69.77** | **303** | P | **P** | **23 24 09.2** | **+0.3** |
| | comp=Z,8.5nm,0.8s,baz=133,slow=1.1,SNR=7.3 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **70.38** | **307** | P | **P** | **23 24 13.7** | **+1.1** |
| | comp=Z,2.8nm,0.7s,baz=134,slow=8.4,SNR=6.0 | | | | | | |
| **MATP** | **Matopo** | **70.85** | **250** | P | **P** | **23 24 16.4** | **+0.7** |
| | comp=Z,1.6nm,0.8s,baz=92,slow=7.5,SNR=3.1 | | | | | | |
| **BR101** | **Keskin Array S** | **73.84** | **313** | *e*P | **P** | **23 24 31.9** | **-1.4** |
| **BRTR** | **Keskin Array B** | **73.84** | **313** | P | **P** | **23 24 31.9** | **-1.4** |
| | comp=Z,2.5nm,0.8s,baz=127,slow=7.9,SNR=9.4 | | | | | | |
| **BR231** | **Keskin MP Arra** | **74.51** | **313** | *e*P | P | 23 24 33.0 | -4.1 |
| **BKZ** | **Black Stump Fm** | **77.85** | **129** | *e*P | P | 23 25 00.4 | +4.3 |
| | comp=Z,22nm,1.4s | | | | | | |
| **AKASG** | **Malin Array Be** | **80.25** | **323** | P | **P** | **23 25 08.1** | **-0.8** |
| | comp=Z,0.3nm,0.3s,baz=95,slow=5.3,SNR=5.0 | | | | | | |
| **AKBB** | **Malin Array Si** | **80.25** | **323** | *e*P | **P** | **23 25 08.1** | **-0.8** |
| **VNDA** | **Vanda** | **80.85** | **169** | P | **P** | **23 25 13.8** | **+2.2** |
| | comp=Z,0.3nm,0.3s,baz=272,slow=11,SNR=6.0 | | | | | | |
| **MLR** | **Muntele Rosu** | **80.92** | **317** | P | **P** | **23 25 12.6** | **-0.2** |
| | comp=Z,1.4nm,1.0s,baz=260,slow=0.5,SNR=5.7 | | | | | | |
| **BUR04** | **Bucovina Ar. S** | **81.94** | **319** | *e*P | **P** | **23 25 17.2** | **-0.9** |
| **FIA0** | **FINESS Array S** | **85.11** | **332** | *e*P | **P** | **23 25 33.7** | **-

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ORLT** | **Orhaneli** | **1.42** | **244** | *e*Pn | **Pb** | **23** | **20** | **30.8** | **-0.1** |
| **BGKT** | **Bogazkoy** | **1.43** | **291** | *e*PN | **Pb** | **23** | **20** | **30.9** | **-0.1** |
| **BGKT** | **Bogazkoy** | **1.43** | **291** | *e*Pn | **Pb** | **23** | **20** | **31.0** | **-0.1** |
| **SVRH** | **Sivrihisar-ESK** | **1.45** | **149** | *e*PN | **Pb** | **23** | **20** | **31.0** | **-0.3** |
| **SVRH** | **Sivrihisar-ESK** | **1.45** | **149** | *e*Pn | **Pb** | **23** | **20** | **31.0** | **-0.3** |
| **TVSB** | **Tavsanli** | **1.49** | **214** | *e*PN | **Pb** | **23** | **20** | **32.0** | **-0.2** |
| **TVSB** | **Tavsanli** | **1.49** | **214** | *e*Pn | **Pb** | **23** | **20** | **32.0** | **-0.2** |
| **SAFT** | **Safranbolu** | **1.71** | **71** | *e*PN | **Pn** | **23** | **20** | **34.5** | **+0.4** |
| **SAFT** | **Safranbolu** | **1.71** | **71** | *e*Pn | **Pn** | **23** | **20** | **34.5** | **+0.4** |
| **KCTX** | **Karacabey (Bur** | **1.73** | **257** | *e*PN | **Pb** | **23** | **20** | **35.4** | **-0.7** |
| **KCTX** | **Karacabey (Bur** | **1.73** | **257** | *e*Pn | **Pb** | **23** | **20** | **35.4** | **-0.7** |
| **DST** | **Dursunbey** | **1.83** | **234** | *e*PN | **Pn** | **23** | **20** | **36.8** | **+0.9** |
| **DST** | **Dursunbey** | **1.83** | **234** | *e*Pn | **Pn** | **23** | **20** | **36.8** | **+0.9** |
| **LOD** | **Lodumlu** | **1.87** | **115** | *e*PN | **Pn** | **23** | **20** | **36.8** | **+0.4** |
| **LOD** | **Lodumlu** | **1.87** | **115** | *e*Pn | **Pn** | **23** | **20** | **36.8** | **+0.4** |
| **CTYL** | **Yal??k??y-??at** | **1.88** | **295** | *e*PN | **Pn** | **23** | **20** | **37.3** | **+0.9** |
| **CTYL** | **Yal??k??y-??at** | **1.88** | **295** | *e*Pn | **Pn** | **23** | **20** | **37.3** | **+0.9** |
| **DURS** | **Dursunbey** | **1.93** | **236** | *i* P | **Pn** | **23** | **20** | **36.9** | **-0.3** |
| DURS | | | | *i* S | **Sn** | **23** | **21** | **02.1** | **+0.7** |
| **DURS** | **Dursunbey** | **1.93** | **236** | P | **Pn** | **23** | **20** | **36.9** | **-0.3** |
| DURS | | | | S | **Sn** | **23** | **21** | **02.1** | **+0.7** |
| **BOLV** | **Bolvadin** | **1.99** | **171** | *i* P | **Pn** | **23** | **20** | **38.8** | **+0.7** |
| **BOLV** | **Bolvadin** | **1.99** | **171** | P | **Pn** | **23** | **20** | **38.8** | **+0.7** |
| **EDC** | **Edincik** | **2.08** | **261** | *e*PN | **Pn** | **23** | **20** | **40.2** | **+1.1** |
| **EDC** | **Edincik** | **2.08** | **261** | *e*Pn | **Pn** | **23** | **20** | **40.3** | **+1.1** |
| **KIZT** | **Kizilcal** | **2.08** | **150** | *e*PN | **Pn** | **23** | **20** | **39.8** | **+0.6** |
| **KIZT** | **Kizilcal** | **2.08** | **150** | *e*Pn | **Pn** | **23** | **20** | **39.8** | **+0.6** |
| **SHUT** | **Suhut-Afyon** | **2.13** | **180** | *e*PN | **Pn** | **23** | **20** | **41.0** | **+1.0** |
| **SHUT** | **Suhut-Afyon** | **2.13** | **180** | *e*Pn | **Pn** | **23** | **20** | **41.0** | **+1.0** |
| **CRLT** | **Corlu** | **2.18** | **283** | *e*PN | **Pn** | **23** | **20** | **41.6** | **+1.1** |
| **CRLT** | **Corlu** | **2.18** | **283** | *e*Pn | **Pn** | **23** | **20** | **41.6** | **+1.1** |
| **MRMT** | **Marmara Adasi** | **2.25** | **269** | *e*PN | **Pn** | **23** | **20** | **43.1** | **+1.5** |
| **MRMT** | **Marmara Adasi** | **2.25** | **269** | *e*Pn | **Pn** | **23** | **20** | **43.1** | **+1.5** |
| **AFSR** | **Af˘ar-Bala (A** | **2.30** | **122** | *e*PN | **Pn** | **23** | **20** | **43.1** | **+0.8** |
| **AFSR** | **Af˘ar-Bala (A** | **2.30** | **122** | *e*Pn | **Pn** | **23** | **20** | **43.1** | **+0.8** |
| **BALB** | **Balikesir** | **2.30** | **244** | *e*PN | **Pn** | **23** | **20** | **43.4** | **+1.2** |
| **BALB** | **Balikesir** | **2.30** | **244** | *e*Pn | **Pn** | **23** | **20** | **43.4** | **+1.2** |
| **PHSR** | **Pinarhisar** | **2.47** | **293** | *e*PN | **Pn** | **23** | **20** | **45.7** | **+1.1** |
| **PHSR** | **Pinarhisar** | **2.47** | **293** | *e*Pn | **Pn** | **23** | **20** | **45.7** | **+1.1** |
| **KRBG** | **Karabiga-Canak** | **2.50** | **264** | *e*PN | **Pn** | **23** | **20** | **46.2** | **+1.3** |
| **KRBG** | **Karabiga-Canak** | **2.50** | **264** | *e*Pn | **Pn** | **23** | **20** | **46.2** | **+1.3** |
| **KULU** | **Kulu** | **2.50** | **130** | *e*PN | **Pn** | **23** | **20** | **46.1** | **+1.0** |
| **KULU** | **Kulu** | **2.50** | **130** | *e*Pn | **Pn** | **23** | **20** | **46.1** | **+1.0** |
| **RKY** | **Sarkoy-Tekirda** | **2.56** | **271** | *e*PN | **Pn** | **23** | **20** | **47.1** | **+1.2** |
| **RKY** | **Sarkoy-Tekirda** | **2.56** | **271** | *e*Pn | **Pn** | **23** | **20** | **47.1** | **+1.2** |
| **KULA** | **Kula-Manisa** | **2.62** | **215** | *e*PN | **Pn** | **23** | **20** | **47.9** | **+1.3** |
| **KULA** | **Kula-Manisa** | **2.62** | **215** | *e*Pn | **Pn** | **23** | **20** | **47.9** | **+1.3** |
| **BAGO** | **Egridir - ISPA** | **2.70** | **176** | P | **Pn** | **23** | **20** | **48.0** | **+0.2** |
| BAGO | | | | S | **Sn** | **23** | **21** | **19.6** | **-1.0** |
| **KAMT** | **Kaman** | **2.76** | **117** | *e*PN | **Pn** | **23** | **20** | **49.7** | **+1.0** |
| **KAMT** | **Kaman** | **2.76** | **117** | *e*Pn | **Pn** | **23** | **20** | **49.7** | **+1.0** |
| **CHBY** | **Cihanbeyli** | **2.77** | **139** | *e*PN | **Pn** | **23** | **20** | **50.0** | **+1.2** |
| **CHBY** | **Cihanbeyli** | **2.77** | **139** | *e*Pn | **Pn** | **23** | **20** | **50.0** | **+1.2** |
| **AKHS** | **Akhisar** | **2.78** | **230** | P | **Pg** | **23** | **20** | **56.0** | **-1.6** |
| AKHS | | | | S | **Sg** | **23** | **21** | **34.1** | **+0.6** |
| **BZK** | **Bozkurt** | **2.89** | **63** | *e*PN | **Pn** | **23** | **20** | **51.5** | **+1.1** |
| **BZK** | **Bozkurt** | **2.89** | **63** | *e*Pn | **Pn** | **23** | **20** | **51.5** | **+1.1** |
| **YAYX** | **Yaylak** | **3.06** | **124** | *e*PN | **Pn** | **23** | **20** | **54.4** | **+1.7** |
| **YAYX** | **Yaylak** | **3.06** | **124** | *e*Pn | **Pn** | **23** | **20** | **54.4** | **+1.7** |
| **ERIK** | **Erikli-Kesan** | **3.07** | **271** | *e*PN | **Pn** | **23** | **20** | **54.4** | **+1.6** |
| **ERIK** | **Erikli-Kesan** | **3.07** | **271** | *e*Pn | **Pn** | **23** | **20** | **54.4** | **+1.6** |
| **KONT** | **Konya--Tatoy** | **3.08** | **152** | *e*PN | **Pn** | **23** | **20** | **54.5** | **+1.6** |
| **KONT** | **Konya--Tatoy** | **3.08** | **152** | *e*Pn | **Pn** | **23** | **20** | **54.5** | **+1.6** |
| **GELI** | **Tayfur-Gelibol** | **3.12** | **266** | *e*PN | **Pn** | **23** | **20** | **55.2** | **+1.7** |
| **GELI** | **Tayfur-Gelibol** | **3.12** | **266** | *e*Pn | **Pn** | **23** | **20** | **55.2** | **+1.7** |
| **CORM** | **Corum** | **3.15** | **98** | *e*PN | **Pn** | **23** | **20** | **55.3** | **+1.2** |
| **CORM** | **Corum** | **3.15** | **98** | *e*Pn | **Pn** | **23** | **20** | **55.3** | **+1.2** |
| **SUTC** | **Sutluce-Ispart** | **3.23** | **174** | *e*PN | **Pn** | **23** | **20** | **56.6** | **+1.5** |
| **SUTC** | **Sutluce-Ispart** | **3.23** | **174** | *e*Pn | **Pn** | **23** | **20** | **56.6** | **+1.5** |
| **TIRR** | **Tirgusor** | **4.08** | **338** | ⇑ *i*P | **Pn** | **23** | **21** | **07.9** | **+1.2** |
| **TIRR** | **Tirgusor** | **4.08** | **338** | S | **Sn** | **23** | **21** | **52.3** | **-2.2** |
| **TIRR** | **Tirgusor** | **4.08** | **338** | ⇑ *i*P | **Pn** | **23** | **21** | **07.9** | **+1.2** |
| TIRR | | | | S | **Sn** | **23** | **21** | **52.3** | **-2.2** |
| **TLB** | **Topalu** | **4.31** | **335** | ⇓ *i*P | **Pn** | **23** | **21** | **11.2** | **+1.4** |
| **TLB** | **Topalu** | **4.31** | **335** | S | **Sn** | **23** | **21** | **56.9** | **-3.2** |
| **TLB** | **Topalu** | **4.31** | **335** | ⇓ *i*P | **Pn** | **23** | **21** | **11.2** | **+1.4** |
| **HARR** | **Harsova** | **4.44** | **335** | ⇓ *i*P | **Pn** | **23** | **21** | **12.8** | **+1.2** |
| **HARR** | **Harsova** | **4.44** | **335** | ⇓ *i*P | **Pn** | **23** | **21** | **12.8** | **+1.2** |
| **TLCR** | | **4.67** | **345** | ⇓ *i*P | **Pn** | **23** | **21** | **16.2** | **+1.4** |
| **TLCR** | | **4.67** | **345** | ⇓ *i*P | **Pn** | **23** | **21** | **16.2** | **+1.4** |
| **CFR** | **Carcaliu** | **4.82** | **339** | ⇓ *i*P | **Pn** | **23** | **21** | **17.9** | **+1.0** |
| **CFR** | **Carcaliu** | **4.82** | **339** | S | **Sn** | **23** | **22** | **12.4** | **-0.3** |
| **CFR** | **Carcaliu** | **4.82** | **339** | ⇓ *i*P | **Pn** | **23** | **21** | **17.9** | **+1.0** |
| CFR | | | | S | **Sn** | **23** | **22** | **12.4** | **-0.3** |
| **MLR** | **Muntele Rosu** | **5.87** | **326** | ⇓ *i*P | **Pn** | **23** | **21** | **33.7** | **+2.4** |
| **MLR** | **Muntele Rosu** | **5.87** | **326** | ⇓ *i*P | **Pn** | **23** | **21** | **33.7** | **+2.4** |
| **VRI** | **Vrincioaia** | **5.88** | **333** | ⇑ *i*P | **Pn** | **23** | **21** | **33.2** | **+1.8** |
| **VRI** | **Vrincioaia** | **5.88** | **333** | S | **Sn** | **23** | **22** | **36.8** | **-2.0** |
| **VRI** | **Vrincioaia** | **5.88** | **333** | ⇑ *i*P | **Pn** | **23** | **21** | **33.2** | **+1.8** |
| **PLOR** | **Plostina** | **5.89** | **332** | ⇓ *i*P | **Pn** | **23** | **21** | **31.8** | **+0.2** |
| **PLOR** | **Plostina** | **5.89** | **332** | S | **Sn** | **23** | **22** | **42.0** | **+2.8** |
| **PLOR** | **Plostina** | **5.89** | **332** | ⇓ *i*P | **Pn** | **23** | **21** | **31.8** | **+0.2** |
| PLOR | | | | S | **Sn** | **23** | **22** | **42.0** | **+2.8** |
| **VOIR** | | **6.22** | **321** | ⇓ *i*P | **Pn** | **23** | **21** | **38.2** | **+2.0** |
| **VOIR** | | **6.22** | **321** | ⇓ *i*P | **Pn** | **23** | **21** | **38.2** | **+2.0** |
| **TESR** | **Tescani** | **6.47** | **335** | ⇓ *i*P | **Pn** | **23** | **21** | **40.6** | **+1.1** |
| **TESR** | **Tescani** | **6.47** | **335** | S | **Sn** | **23** | **22** | **51.8** | **-1.6** |
| **TESR** | **Tescani** | **6.47** | **335** | ⇓ *i*P | **Pn** | **23** | **21** | **40.6** | **+1.1** |
| **DOPR** | **Dopca** | **6.48** | **326** | ⇑ *i*P | **Pn** | **23** | **21** | **41.5** | **+1.9** |
| **DOPR** | **Dopca** | **6.48** | **326** | ⇑ *i*P | **Pn** | **23** | **21** | **41.5** | **+1.9** |
| **LOT** | **Lotru** | **6.88** | **316** | ⇓ *i*P | **Pn** | **23** | **21** | **46.2** | **+1.0** |
| **LOT** | **Lotru** | **6.88** | **316** | S | **Sn** | **23** | **23** | **00.1** | **-3.3** |
| **LOT** | **Lotru** | **6.88** | **316** | ⇓ *i*P | **Pn** | **23** | **21** | **46.2** | **+1.0** |

*CSEM* ***25*** *23:20:19.5, 37˚.42N×24˚.72W, h3km, ML2.6, After PDA*
**PDA 25 23:20:19.5±0.4, 37˚.42N×24˚.72W, h3km±10km, MD3.9, ML2.6, Error ellipse: s-maj=11.0km s-min=1.8km az=86.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSMN** | **Pico do Norte,** | **0.50** | **214** | *i* P | Pg | 23 20 28.3 | -0.8 |
| PSMN | | | | *e*S | Sg | 23 20 34.9 | -0.7 |
| PSMN | | | | A | A | 23 20 41.3 | |
| | 66nm,0.2s | | | | | | |
| **PSMN** | **Pico do Norte,** | **0.50** | **214** | *i* P | Pg | 23 20 28.3 | -0.8 |
| PSMN | | | | *e*S | Sg | 23 20 34.9 | -0.7 |
| **BART** | **Pico Bartolome** | **0.51** | **315** | *e*P | Pg | 23 20 28.4 | -1.0 |
| BART | | | | *e*S | Sg | 23 20 35.2 | -0.9 |
| BART | | | | A | A | 23 20 37.1 | |
| | 229nm,0.3s | | | | | | |
| **BART** | **Pico Bartolome** | **0.51** | **315** | *e*P | Pg | 23 20 28.4 | -1.0 |
| BART | | | | *e*S | Sg | 23 20 35.2 | -0.9 |
| **PSMA** | **Santa Maria** | **0.54** | **218** | *i* P | Pg | 23 20 28.8 | -1.0 |
| PSMA | | | | *e*S | Sg | 23 20 35.8 | -0.9 |
| PSMA | | | | A | A | 23 20 37.1 | |
| | 98nm,0.1s | | | | | | |
| **GRON** | **Grota Negra** | **0.74** | **299** | *e*P | Pg | 23 20 30.5 | -3.2 |
| GRON | | | | *e*S | Sg | 23 20 38.6 | -4.8 |
| GRON | | | | A | A | 23 20 39.6 | |
| | 56nm,0.2s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.82** | **294** | *e*P | Pg | 23 20 33.1 | -2.1 |
| PDA | | | | *e*S | Sg | 23 20 43.1 | -2.8 |
| PDA | | | | A | A | 23 20 45.3 | |
| | 176nm,0.5s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.82** | **294** | *e*P | Pg | 23 20 33.1 | -2.1 |
| PDA | | | | *e*S | Sg | 23 20 43.1 | -2.8 |
| **PSET** | **Sete Cidades** | **0.89** | **297** | *e*P | Pg | 23 20 34.1 | -2.6 |
| PSET | | | | *e*S | Sg | 23 20 45.0 | -3.4 |
| PSET | | | | A | A | 23 20 50.9 | |
| | 129nm,0.3s | | | | | | |
| **PSET** | **Sete Cidades** | **0.89** | **297** | *e*P | Pg | 23 20 34.1 | -2.6 |
| PSET | | | | *e*S | Sg | 23 20 45.0 | -3.4 |
| **ROSA** | **Rosais** | **3.07** | **296** | *e*P | Pn | 23 21 04.1 | -4.9 |
| ROSA | | | | *e*S | Sn | 23 21 37.8 | -8.4 |
| ROSA | | | | A | A | 23 21 49.4 | |
| | 24nm,0.5s | | | | | | |
| **ROSA** | **Rosais** | **3.07** | **296** | *e*P | Pn | 23 21 04.1 | -4.9 |
| ROSA | | | | *e*S | Sn | 23 21 37.8 | -8.4 |
| **PICO** | **Pico** | **3.12** | **291** | *e*P | Pn | 23 21 05.2 | -4.6 |
| PICO | | | | *e*S | Sn | 23 21 39.2 | -8.5 |
| **PICO** | **Pico** | **3.12** | **291** | *e*P | Pn | 23 21 05.2 | -4.6 |
| PICO | | | | *e*S | Sn | 23 21 39.2 | -8.5 |

*IDC* ***25*** *23:27:31.8±1.2, 3˚.49S×99˚.30E, h0km, mb3.8/10, mb1 3.9/11, mb1mx3.7/41, mbtmp3.8/11, ML3.2/1, Error ellipse: s-maj=47.4km s-min=17.9km az=51.0*
*ISCJB* ***25*** *23:27:34.8±0.6, 3˚.35S±0˚.06×99˚.48E±0˚.06, h33km, mb3.7/10, Error ellipse: s-maj=9.7km s-min=6.4km az=136.3*
*DJA* ***25*** *23:27:35.2×1.2, 3˚S×9˚E×˚, h30km×8km, M4.3/20, mb4.0/6, mB6.0/1, MLv4.4/20, Mw(mB)5.6/1*
**ISC 25 23:27:37.5±0.9, 3˚.29S±0˚.08×99.52E±0˚.09, h35km, n33, σ0s92/27, mb3.8/10, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.71** | **43** | P | **Pn** | **23 27 50.5** | **-0.7** |
| PPSI | | | | S | **Sn** | **23 28 01.1** | **+0.2** |
| **SISI** | **Saibi** | **1.99** | **348** | P | **Pn** | **23 28 08.0** | **-0.7** |
| **PDSI** | **Padang** | **2.54** | **22** | P | **Pn** | **23 28 15.4** | **-0.9** |
| **PPI** | **Padang Panjang** | **2.94** | **17** | P | **Pn** | **23 28 21.1** | **-0.7** |
| **SDSI** | **Sungai Dareh** | **3.02** | **39** | P | **Pn** | **23 28 22.5** | **-0.4** |
| **KSI** | **Kapahiang** | **3.09** | **97** | P | **Pn** | **23 28 23.0** | **-0.9** |
| **MNAI** | **Manna** | **3.59** | **107** | P | **Pn** | **23 28 30.7** | **-0.1** |
| **BKNI** | **Bangkinang** | **3.90** | **23** | P | **Pn** | **23 28 34.1** | **-0.9** |
| **MNSI** | **Mandailing Nat** | **4.05** | **1** | P | **Pn** | **23 28 36.1** | **-1.0** |
| **MDSI** | **Maura Dua** | **4.80** | **105** | P | **Pn** | **23 28 46.5** | **-0.9** |
| **LWLI** | **Liwa** | **4.84** | **111** | P | **Pn** | **23 28 47.0** | **-1.1** |
| **GSI** | **Gunungsitoli** | **4.96** | **337** | P | **Pn** | **23 28 48.4** | **-1.1** |
| **KASI** | **Kota Agung** | **5.44** | **114** | P | **Pn** | **23 28 55.0** | **-1.2** |
| | 75nm,2.1s,0.6nm | | | | | | |
| **PSI** | **Prapat** | **6.08** | **354** | Pn | **Pn** | **23 29 03.0** | **-2.1** |
| | 0.6nm,0.3s,baz=115,slow=23,SNR=1.6 | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.71** | **81** | P | **Pn** | **23 29 12.8** | **-0.8** |
| | 17nm,1.6s,11μm0.8nm | | | | | | |
| **CGJI** | **Cibinong** | **6.98** | **118** | P | Pn | 23 29 13.5 | -3.9 |
| **CMAR** | **Chiang Mai Arr** | **21.61** | **359** | P | **P** | **23 32 24.8** | **+0.1** |
| | 1.2nm,0.6s,baz=187,slow=10,SNR=14 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.24** | **260** | T | T | 00 02 19.2 | |
| | baz=84,slow=75,SNR=5.1 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.25** | **260** | T | T | 00 02 18.5 | |
| | SNR=6.9 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.26** | **260** | T | T | 00 02 03.3 | |
| | baz=96,slow=75,SNR=5.6 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.25** | **158** | T | T | 00 10 54.8 | |
| | baz=335,slow=76,SNR=3.9 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.26** | **158** | T | T | 00 10 58.4 | |
| | baz=335,slow=76,SNR=4.2 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.26** | **158** | T | T | 00 10 54.1 | |
| | baz=335,slow=76,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.78** | **119** | P | **P** | **23 34 50.3** | **-0.4** |
| | 0.3nm,0.7s,baz=304,slow=9.1,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.91** | **124** | P | **P** | **23 34 59.9** | **-0.3** |
| | 0.2nm,0.3s,baz=296,slow=8.2,SNR=3.5 | | | | | | |
| **AAK** | **Ala-Archa** | **51.01** | **336** | P | **P** | **23 36 36.5** | **+0.2** |
| | 0.3nm,0.3s,baz=179,slow=6.0,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **51.26** | **6** | P | **P** | **23 36 39.4** | **+1.4** |
| | 1.1nm,0.8s,baz=185,slow=8.9,SNR=8.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.13** | **345** | P | **P** | **23 36 45.5** | **+1.1** |
| | 3.0nm,1.0s,baz=139,slow=8.1,SNR=8.0 | | | | | | |
| **GEYT** | **Alibeck** | **56.13** | **321** | P | **P** | **23 37 13.7** | **0.0** |
| | 0.6nm,0.4s,baz=165,slow=12,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.34** | **350** | P | **P** | **23 37 29.9** | **+0.9** |
| | 2.1nm,0.6s,baz=187,slow=6.0,SNR=11 | | | | | | |
| **KBZ** | **Khabaz** | **68.96** | **320** | P | **P** | **23 38 38.6** | **-0.6** |
| | 1.8nm,0.9s,baz=55,slow=3.1,SNR=4.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **73.83** | **313** | P | **P** | **23 39 08.1** | **-0.9** |
| | 0.2nm,0.5s,baz=118,slow=6.4,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.01** | **38** | PKPbc | **PKPab** | **23 47 15.5** | **+0.5** |
| | 0.8nm,0.7s,baz=294,slow=1.4,SNR=9.3 | | | | | | |

*IDC* ***25*** *23:36:02.1±2.7, 24˚.52N×109˚.08W, h0km, mb4.2/2, mb1 4.2/6, mb1mx3.9/41, mbtmp3.9/6, ML3.4/4, MS3.6/2, Ms1 3.6/2, ms1mx3.4/28, Error ellipse: s-maj=47.3km s-min=17.6km az=142.0*
*MEX* ***25*** *23:36:06.1±0.3, 25˚.01N×109˚.66W, h10km, MD4.1*
**ISC 25 23:36:04.1±0.8, 24˚.59N±0˚.07×109˚.25W±0˚.04, h10km, n11, σ2s08/15, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.08** | **244** | Pn | **Pn** | **23 36 25.4** | **+0.1** |
| | 39nm,0.3s,baz=284,slow=11,SNR=13 | | | | | | |
| LPIG | | | | Sn | **Sb** | **23 36 39.4** | **+0.4** |
| | 175nm,0.3s,baz=270,slow=12,SNR=7.2 | | | | | | |
| **LPIG** | **La Paz** | **1.08** | **244** | *e*P | **Pg** | **23 36 23.5** | **-1.4** |
| LPIG | | | | *e*S | **Sg** | **23 36 37.0** | **-1.9** |
| **MAIG** | **Mazatlaan** | **2.93** | **118** | *e*P | **Pb** | **23 36 57.5** | **+1.1** |
| MAIG | | | | *e*S | **Sg** | **23 37 37.9** | **-0.5** |
| **HPIG** | | **3.99** | **53** | *i* P | **Pn** | **23 37 05.9** | **+0.5** |
| HPIG | | | | *e*S | **Sn** | **23 37 52.4** | **0.0** |
| **HSIG** | | **4.67** | **341** | *i* P | Pn | 23 37 07.1 | -7.6 |
| HSIG | | | | *i* S | Sn | 23 37 52.2 | -17 |
| **TXAR** | **Lajitas Array** | **6.87** | **45** | Pn | **Pn** | **23 37 43.0** | **-1.9** |
| | 0.3nm,0.3s,baz=225,slow=14,SNR=15 | | | | | | |
| TXAR | | | | Sn | **Sn** | **23 38 57.9** | **-5.4** |
| | 1.8nm,0.3s,baz=211,slow=28,SNR=1.4 | | | | | | |
| TXAR | | | | Lg | Lg | 23 39 35.2 | |
| | 2.8nm,0.3s,baz=137,slow=13,SNR=5.1 | | | | | | |
| TXAR | | | | LR | LR | 23 40 33.4 | |
| | comp=Z,581nm,19.8s,baz=0.0,slow=40 | | | | | | |
| **ANMO** | **Albuquerque** | **10.61** | **13** | Pn | **Pn** | **23 38 37.7** | **+1.4** |
| | 0.1nm,0.3s,baz=187,slow=9.4,SNR=4.0 | | | | | | |
| ANMO | | | | LR | LR | 23 42 59.0 | |
| | comp=Z,264nm,20.9s,baz=236,slow=39 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **10.98** | **327** | Pn | **Pn** | **23 38 43.4** | **+2.1** |
| | 0.1nm,0.3s,baz=149,slow=10,SNR=3.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **15.80** | **333** | Pn | **P** | **23 39 49.5** | **-1.3** |
| | 0.1nm,0.3s,baz=159,slow=11,SNR=15 | | | | | | |
| **NEW** | **Newport** | **24.44** | **347** | P | **P** | **23 41 23.9** | **+0.9** |
| | 8.8nm,1.1s,baz=155,slow=7.2,SNR=8.5 | | | | | | |
| **ILAR** | **Eielson Array** | **46.94** | **339** | P | **P** | **23 44 36.5** | **+1.8** |
| | 2.5nm,1.1s,baz=146,slow=7.1,SNR=11 | | | | | | |

*CSEM* ***25*** *23:36:17.1±0.2, 67˚.80N×20˚.23E, h2km, ML0.6, Error ellipse: s-maj=6.4km s-min=5.9km az=174.0, Mining explosion.*
**UPP 25 23:36:17.1, 67˚.84N×20˚.20E, h0km, ML0.6, Mining explosion., Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUA** | **Kurravaara** | **0.13** | **24** | P | Pg | 23 36 19.8 | +0.2 |
| KUA | | | | S | Sg | 23 36 21.8 | +0.5 |
| **NIKU** | **Nikkaluokta** | **0.44** | **275** | P | Pg | 23 36 25.5 | -0.1 |
| **LANU** | **Lannavaara** | **0.71** | **72** | P | Pg | 23 36 30.4 | -0.3 |
| **DUNU** | **Dundret** | **0.79** | **169** | P | Pg | 23 36 30.8 | -0.4 |
| **MASU** | **Masugnsbyn** | **0.79** | **118** | P | Pg | 23 36 31.9 | -0.3 |
| **SALU** | **Saltoluokta** | **0.79** | **236** | P | Pg | 23 36 32.1 | -0.3 |
| **KIF** | **Kilpisjarvi** | **1.20** | **10** | *e*P | Pn | 23 36 42.1 | +1.1 |
| **KIF** | **Kilpisjarvi** | **1.20** | **10** | P | Pn | 23 36 42.1 | +1.1 |
| **PAJU** | **Pajala** | **1.39** | **125** | P | Pn | 23 36 42.5 | -1.2 |
| **HEF** | **Hetta** | **1.42** | **64** | *e*P | Pn | 23 36 43.0 | -1.2 |
| **HEF** | **Hetta** | **1.42** | **64** | P | Pn | 23 36 42.9 | -1.2 |
| **ERTU** | **Ertsjaerv** | **1.50** | **148** | P | Pn | 23 36 44.8 | -0.5 |

*UPP* ***25*** *23:36:30.0, 67˚.85N×20˚.26E, h0km, ML0.9, Mining explosion.*
*CSEM* ***25*** *23:36:30.0, 67˚.85N×20˚.26E, h0km, ML0.9, Mining explosion. After UPP*
**HEL 25 23:36:27.3±0.1, 68˚.23N×20˚.48E, h0km, ML0.9 (UPP), Explosion, Sweden**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUA** | **Kurravaara** | **0.28** | **191** | *i* P | Pg | 23 36 32.5 | -0.2 |
| KUA | | | | *i* S | Sg | 23 36 34.4 | -2.0 |
| **KUA** | **Kurravaara** | **0.28** | **191** | P | Pg | 23 36 32.5 | -0.2 |
| KUA | | | | S | Sg | 23 36 34.4 | -2.0 |
| **NIKU** | **Nikkaluokta** | **0.65** | **237** | *i* P | Pg | 23 36 38.9 | -0.9 |
| **NIKU** | **Nikkaluokta** | **0.65** | **237** | P | Pg | 23 36 38.9 | -0.9 |
| **PAJU** | **Pajala** | **1.58** | **139** | *e*P | Pn | 23 36 55.3 | -1.2 |
| **PAJU** | **Pajala** | **1.58** | **139** | P | Pn | 23 36 55.3 | -1.2 |
| **KALU** | **Kalix** | **2.63** | **153** | *e*P | Pn | 23 37 10.7 | -0.3 |
| **KALU** | **Kalix** | **2.63** | **153** | P | Pn | 23 37 10.7 | -0.3 |

**IDC 25 23:41:45.5±3.5, 3˚.59S×99˚.98E, h0km, mb3.8/6, mb1 3.9/6, mb1mx3.6/44, mbtmp3.8/6, Error ellipse: s-maj=150.9km s-min=21.1km az=54.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **27.64** | **260** | T | T | 00 16 52.1 | |
| | baz=82,slow=75,SNR=498 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.65** | **260** | T | T | 00 16 52.6 | |
| | baz=82,slow=75,SNR=421 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.66** | **260** | T | T | 00 16 53.5 | |
| | baz=82,slow=75,SNR=587 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.80** | **159** | T | T | 00 24 13.0 | |
| | baz=336,slow=76,SNR=34 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.81** | **159** | T | T | 00 24 13.9 | |
| | baz=336,slow=76,SNR=33 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.81** | **159** | T | T | 00 24 15.1 | |
| | baz=336,slow=76,SNR=26 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.23** | **119** | P | P | 23 48 59.2 | 0.0 |
| | 0.4nm,0.3s,baz=287,slow=8.6,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.36** | **124** | P | P | 23 49 08.1 | -0.7 |
| | 0.6nm,0.5s,baz=293,slow=8.9,SNR=4.5 | | | | | | |
| **SONM** | **Songino Array** | **51.52** | **6** | P | P | 23 50 53.0 | -0.2 |
| | 1.7nm,0.6s,baz=190,slow=9.6,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.55** | **345** | P | P | 23 51 01.2 | +0.4 |
| | 1.3nm,0.6s,baz=151,slow=8.2,SNR=7.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.06** | **344** | P | P | 23 51 32.7 | -0.7 |
| | 0.2nm,0.3s,baz=162,slow=7.5,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.72** | **350** | P | P | 23 51 44.4 | -0.6 |
| | 0.9nm,0.7s,baz=153,slow=5.0,SNR=5.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.96** | **39** | PKPbc | PKPbc | 00 01 28.1 | +0.1 |
| | 0.9nm,0.5s,baz=231,slow=0.7,SNR=9.9 | | | | | | |

*SZGRF* ***25*** *23:44:04.0, 24˚.03S×179˚.87W, h33km*
*ISCJB* ***25*** *23:45:08.9±0.4, 22˚.85S±0˚.06×179˚.66W±0˚.08, h600km, mb4.7/34, Error ellipse: s-maj=9.5km s-min=7.8km az=22.3*
*NEIC* ***25*** *23:45:08.4±0.8, 22˚.77S×179˚.60W, h582km±8km, mb4.8/26, Error ellipse: s-maj=11.4km s-min=9.1km az=101.0*
*AUST* ***25*** *23:45:13.0, 22˚.17S×179˚.72E, h600km*
*IDC* ***25*** *23:45:12.1±2.2, 22˚.67S×179˚.75W, h616km±24km, mb3.8/12, mb1 3.9/12, mb1mx3.6/30, mbtmp4.8/12, Error ellipse: s-maj=14.2km s-min=12.5km az=169.0*
**ISC 25 23:45:09.9±0.5, 22.77S±0˚.08×179˚.66W±0˚.09, h600km, n154, σ1s13/154, mb4.7/35, 19C-11D, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **5.45** | **336** | *e*P | **P** | **23 46 43.9** | **-2.8** |
| **RAO** | **Raoul Island** | **6.64** | **167** | P | **P** | **23 46 56.0** | **-0.5** |
| | 78nm,0.3s,baz=294,slow=19,SNR=3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 3.4nm,0.7s,baz=158,slow=5.8,SNR=5.5 | | | | | | | |
| **SUA** | **Susitna One** | **87.11** | **13** | *e*P | | **P** | **23 56 52.8** | **+0.1** |
| | 10nm,0.6s | | | | | | | |
| **SRU** | **San Rafael** | **89.20** | **47** | *e*P | | P | 23 56 58.7 | -4.4 |
| | 3.7nm,0.7s | | | | | | | |
| **RND** | **Reindeer** | **89.24** | **13** | *e*P | | **P** | **23 57 03.1** | **+0.6** |
| | 9.3nm,1.0s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **89.40** | **290** | *e*P | | P | 23 57 06.6 | +2.4 |
| **BPAW** | **Bear Paw Mtn.** | **89.43** | **12** | *e*P | | **P** | **23 57 04.0** | **+0.7** |
| | 5.5nm,0.6s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **89.43** | **290** | *e*P | | P | 23 57 06.5 | +2.1 |
| **CMAR** | **Chiang Mai Arr** | **89.43** | **290** | P | | P | 23 57 06.5 | +2.1 |
| | 6.3nm,0.9s,baz=131,slow=3.1,SNR=30 | | | | | | | |
| **MCK** | **McKinley** | **89.52** | **13** | *e*P | | **P** | **23 57 04.2** | **+0.5** |
| | 110nm,3.0s | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **89.57** | **58** | *e*P | | **P** | **23 57 05.2** | **+0.3** |
| **TXAR** | **Lajitas Array** | **89.57** | **58** | P | | **P** | **23 57 04.6** | **-0.3** |
| | 0.8nm,0.6s,baz=251,slow=6.5,SNR=10 | | | | | | | |
| TXAR | | | | PKKPbc | | **PKKPbc** | **00 14 36.3** | **+0.6** |
| | 0.4nm,0.8s,baz=128,slow=2.1,SNR=3.9 | | | | | | | |
| **CHTO** | **Chiang Mai** | **89.58** | **291** | *e*P | | P | 23 57 07.5 | +2.5 |
| | 10.0nm,0.8s | | | | | | | |
| **ZAA1** | **Zalesovo Array** | **111.28** | **321** | *e*PKiKP | | **PKiKP** | **00 02 35.0** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **111.28** | **321** | PKiKP | | **PKiKP** | **00 02 35.0** | **-1.2** |
| | 0.6nm,0.4s,baz=235,slow=1.2,SNR=4.5 | | | | | | | |
| **MK32** | **Makanchi Array** | **111.62** | **313** | *e*PKiKP | | **PKiKP** | **00 02 36.4** | **-0.7** |
| **MKAR** | **Makanchi Array** | **111.62** | **313** | PKiKP | | **PKiKP** | **00 02 36.4** | **-0.7** |
| | 0.8nm,0.5s,baz=146,slow=0.2,SNR=8.6 | | | | | | | |
| **KURK** | **Kurchatov** | **114.60** | **317** | *e*PKPdf | | PKPdf | 00 02 41.8 | -0.8 |
| KURK | | | | *e*PP | | PP | 00 03 56.4 | +4.6 |
| **KURBB** | **Kurchatov Arra** | **114.64** | **317** | PKP | | PKPdf | 00 02 41.8 | -0.9 |
| | 0.9nm,0.5s,baz=98,slow=1.9,SNR=9.8 | | | | | | | |
| KURBB | | | | PP | | PP | 00 03 56.4 | +4.3 |
| | 0.3nm,0.8s,baz=88,slow=6.9,SNR=4.1 | | | | | | | |
| **KBL** | **Kabul** | **119.60** | **298** | *e*PKPdf | | **PKPdf** | **00 02 54.0** | **+0.9** |
| **BVAR** | **Borovoye Array** | **119.80** | **319** | PKP | | **PKPdf** | **00 02 52.5** | **0.0** |
| | 1.6nm,0.4s,baz=107,slow=1.2,SNR=14 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **127.69** | **317** | PKP | | **PKPdf** | **00 03 08.6** | **+0.8** |
| | 1.6nm,0.6s,baz=70,slow=3.2,SNR=8.0 | | | | | | | |
| **GEYT** | **Alibeck** | **128.66** | **301** | PKP | | **PKPdf** | **00 03 11.3** | **+1.2** |
| | 2.8nm,0.8s,baz=56,slow=2.7,SNR=6.6 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **130.84** | **349** | *e*PKPdf | | **PKPdf** | **00 03 12.4** | **-0.9** |
| **ARCES** | **ARCESS Array B** | **130.84** | **349** | PKP | | **PKPdf** | **00 03 12.4** | **-0.9** |
| | 3.4nm,0.7s,baz=82,slow=2.1,SNR=12 | | | | | | | |
| **FIA0** | **FINESS Array S** | **137.47** | **342** | *e*PKPpre | | PKPpre | 00 03 15.2 | |
| **FINES** | **FINESS Array B** | **137.47** | **342** | PKhKP | | PKPpre | 00 03 15.2 | |
| | 0.7nm,0.4s,baz=116,slow=4.4,SNR=7.2 | | | | | | | |
| FINES | | | | SKP | | | 00 06 06.3 | |
| | 1.7nm,1.0s,baz=62,slow=4.5,SNR=3.7 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **141.01** | **352** | PKP | | PKPpre | 00 03 27.0 | |
| | comp=Z,1.6nm,0.6s,baz=16,slow=3.0 | | | | | | | |
| **NB200** | **NORSAR Array S** | **141.01** | **352** | *e*PKPpre | | PKPpre | 00 03 27.4 | |
| **NOA** | **NORSAR Array B** | **141.01** | **352** | PKhKP | | PKPpre | 00 03 27.4 | |
| | comp=Z,0.9nm,0.7s,baz=59,slow=1.5,SNR=9.1 | | | | | | | |
| **MALT** | **Malatya** | **144.00** | **304** | ↑*i* P | | **PKPab** | **00 03 39.2** | **+0.9** |
| **KSRV** | **Kasrt alli** | **144.08** | **300** | *e*P | | PKPbc | 00 03 34.2 | -4.0 |
| **AKASG** | **Malin Array Be** | **144.19** | **328** | PKP | | **PKPab** | **00 03 37.7** | **-0.7** |
| | comp=Z,4.3nm,0.3s,baz=43,slow=4.0,SNR=26 | | | | | | | |
| **AKBB** | **Malin Array Si** | **144.19** | **328** | *e*PKPbc | | **PKPab** | **00 03 37.7** | **-0.7** |
| **KIEV** | **Kiev** | **144.20** | **328** | *e*PKPbc | | **PKPab** | **00 03 37.7** | **-0.7** |
| **AK11** | **Malin Array Si** | **144.23** | **328** | *e*PKPbc | | **PKPab** | **00 03 38.0** | **-0.6** |
| **ZALF** | **Zalf** | **145.91** | **295** | *e*P | | **PKPab** | **00 03 43.5** | **-2.3** |
| **BTCH** | **Batrach** | **146.07** | **301** | *e*P | | **PKPab** | **00 03 44.9** | **-1.5** |
| **SORM** | **Soroca** | **146.26** | **326** | ↓*i* P | | **PKPab** | **00 03 44.3** | **-2.3** |
| **BIDA** | **Albida** | **146.40** | **299** | *e*P | | **PKPab** | **00 03 45.7** | **-2.1** |
| **MILM** | **Milestii Mici** | **146.76** | **323** | ↓*i* P | | **PKPbc** | **00 03 45.2** | **-0.3** |
| **BRBR** | **Barbar** | **146.99** | **297** | *e*P | | **PKPab** | **00 03 48.2** | **-2.1** |
| **BR101** | **Keskin Array S** | **147.13** | **309** | *e*PKPbc | | **PKPbc** | **00 03 47.1** | **+0.2** |
| **BRTR** | **Keskin Array B** | **147.13** | **309** | PKPbc | | **PKPbc** | **00 03 47.1** | **+0.2** |
| | comp=Z,4.2nm,0.7s,baz=143,slow=5.1,SNR=32 | | | | | | | |
| **LEOM** | **Leova** | **147.34** | **323** | ↑*i* P | | **PKPbc** | **00 03 47.5** | **+0.5** |
| **BR231** | **Keskin MP Arra** | **147.71** | **309** | *e*PKPbc | | **PKPbc** | **00 03 47.8** | **-0.6** |
| **TLCR** | | **147.76** | **321** | ↓*i* P | | **PKPbc** | **00 03 48.9** | **+0.8** |
| **CFR** | **Carcaliu** | **148.16** | **321** | ↓*i* P | | **PKPbc** | **00 03 48.9** | **-0.2** |
| **TESR** | **Tescani** | **148.18** | **325** | ↓*i* P | | **PKPbc** | **00 03 48.8** | **-0.4** |
| **BUR04** | **Bucovina Ar. S** | **148.20** | **327** | *e*PKPbc | | **PKPbc** | **00 03 50.1** | **+0.8** |
| **BURAR** | **Bucovina Array** | **148.20** | **327** | ↑*i* P | | **PKPbc** | **00 03 48.3** | **-1.0** |
| **VRI** | **Vrincioaia** | **148.54** | **323** | ↑*i* P | | **PKPbc** | **00 03 50.8** | **+0.7** |
| **PLOR** | **Plostina** | **148.59** | **324** | ↓*i* P | | **PKPbc** | **00 03 50.3** | **0.0** |
| **KOLS** | **Kolonicke sedl** | **148.64** | **332** | *e*PKP | | **PKPbc** | **00 03 51.5** | **+1.3** |
| **ARCR** | **ARCALIA** | **148.99** | **327** | ↓*i* P | | **PKPbc** | **00 03 50.1** | **-1.0** |
| **DOPR** | **Dopca** | **149.20** | **325** | ↑*i* P | | **PKPbc** | **00 03 53.0** | **+1.3** |
| **MLR** | **Muntele Rosu** | **149.21** | **324** | ↓*i* P | | **PKPbc** | **00 03 49.5** | **-2.4** |
| **SECR** | | **149.42** | **323** | ↑*i* P | | **PKPbc** | **00 03 52.7** | **+0.5** |
| **OKC** | **Ostrava-Krasne** | **149.57** | **337** | ↑*e*PKP | | **PKPbc** | **00 03 53.2** | **+0.8** |
| OKC | | | | *ex* | | x | 00 03 57.7 | |
| OKC | | | | *e*PKPAB | | **PKPab** | **00 04 01.4** | **+1.3** |
| **CJR** | **Cluj-Napoca** | **149.62** | **328** | ↑*i* P | | **PKPbc** | **00 03 52.3** | **-0.4** |
| **LANS** | **Liptovska Anna** | **149.63** | **335** | *e*PKP | | **PKPbc** | **00 03 54.5** | **+1.8** |
| **UPC** | **Upice** | **149.72** | **340** | ↑↓*i* P | | **PKPbc** | **00 03 53.8** | **+1.0** |
| **VOIR** | | **149.73** | **324** | ↓*i* P | | **PKPbc** | **00 03 53.4** | **+0.4** |
| **DPC** | **Dobruska-Polom** | **149.76** | **340** | ↑*e*PKP | | **PKPbc** | **00 03 54.1** | **+1.2** |
| DPC | | | | *e*PKPAB | | **PKPab** | **00 04 02.2** | **+1.2** |
| **MORC** | **Moravsky Berou** | **149.84** | **338** | ↓*i* P | | **PKPbc** | **00 03 53.2** | **+0.1** |
| **MORC** | **Moravsky Berou** | **149.84** | **338** | *e*PKPbc | | **PKPbc** | **00 03 53.2** | **+0.1** |
| **KRLC** | **Kraliky** | **149.84** | **339** | ↑*e*PKP | | **PKPbc** | **00 03 54.1** | **+1.0** |
| **CLL** | **Collm** | **149.86** | **344** | *e*PKPbc | | **PKPbc** | **00 03 53.6** | **+0.5** |
| | baz=23,slow=2.3 | | | | | | | |
| **CLL** | **Collm** | **149.86** | **344** | *i* PKPbc | | **PKPbc** | **00 03 53.3** | **+0.3** |
| | comp=Z,21nm,1.0s | | | | | | | |
| CLL | | | | *i* PKPab | | **PKPab** | **00 04 01.7** | **+0.4** |
| **CLL** | **Collm** | **149.86** | **344** | *e*PKPbc | | **PKPbc** | **00 03 53.6** | **+0.5** |
| **CLZ** | **Clausthal** | **149.96** | **348** | *e*PKPbc | | **PKPbc** | **00 03 54.3** | **+1.0** |
| | baz=23,slow=2.3 | | | | | | | |
| **ARR** | **Arges** | **149.99** | **325** | ↑*i* P | | **PKPbc** | **00 03 55.4** | **+1.7** |
| **DRGR** | | **150.00** | **328** | ↑*i* P | | **PKPbc** | **00 03 53.4** | **-0.2** |
| **BRG** | **Berggiesshubel** | **150.01** | **343** | *i* PKP | | **PKPbc** | **00 03 54.2** | **+0.8** |
| | comp=Z,15nm,1.0s | | | | | | | |
| BRG | | | | *e* | | | 00 04 02.6 | |
| | comp=Z,6.7nm,0.8s | | | | | | | |
| **BRG** | **Berggiesshubel** | **150.01** | **343** | *e*PKPbc | | **PKPbc** | **00 03 54.2** | **+0.8** |
| | baz=23,slow=2.3 | | | | | | | |
| **WIMM** | **Wimmelburg** | **150.02** | **346** | *e*PKPbc | | **PKPbc** | **00 03 54.4** | **+1.1** |
| | baz=23,slow=2.3 | | | | | | | |
| **FBE** | **Freiberg** | **150.12** | **343** | *e*PKPbc | | **PKPbc** | **00 03 54.8** | **+1.1** |
| | baz=23,slow=2.3 | | | | | | | |
| **PVCC** | **Panska Ves** | **150.14** | **342** | ↑*e*PKP | | **PKPbc** | **00 03 54.9** | **+1.2** |
| PVCC | | | | *e*PKPAB | | **PKPab** | **00 04 03.6** | **+1.1** |
| **NEUB** | **Neuenburg** | **150.25** | **345** | *e*PKPbc | | **PKPbc** | **00 03 54.7** | **+0.8** |
| | baz=23,slow=2.3 | | | | | | | |
| **LOT** | **Lotru** | **150.40** | **325** | ↑*i* P | | **PKPbc** | **00 03 54.2** | **-0.5** |
| **VYHS** | **Vyhne** | **150.41** | **335** | *e*PKP | | **PKPbc** | **00 03 54.9** | **+0.5** |
| VYHS | | | | *e* | | | 00 04 04.8 | |
| **TAUT** | **Tautenburg** | **150.48** | **345** | *e*PKPbc | | **PKPbc** | **00 03 55.3** | **+0.8** |
| | baz=23,slow=2.3 | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **150.62** | **341** | ↑*e*PKP | | **PKPbc** | **00 03 55.5** | **+0.6** |
| **PRU** | **Pruhonice** | **150.63** | **341** | ↑*e*PKP | | **PKPbc** | **00 03 55.6** | **+0.7** |
| PRU | | | | *e*PKPAB | | **PKPab** | **00 04 06.0** | **+1.5** |
| **TANN** | **Tannenbergstha** | **150.82** | **344** | *e*PKPbc | | **PKPbc** | **00 03 56.0** | **+0.7** |
| | baz=23,slow=2.3 | | | | | | | |
| **GZR** | **Gura Zlata** | **150.95** | **326** | ↓*i* P | | **PKPbc** | **00 03 55.5** | **-0.3** |
| **BZS** | **Buzias** | **151.37** | **328** | ↑*i* P | | **PKPbc** | **00 03 56.7** | **0.0** |
| **KHC** | **Kasperske Hory** | **151.68** | **342** | ↑*e*PKP | | **PKPbc** | **00 03 58.0** | **+0.7** |
| KHC | | | | *e*PKPAB | | **PKPab** | **00 04 10.2** | **+1.1** |
| **TNS** | **Taunus Mts** | **151.87** | **349** | *e*PKPbc | | **PKPbc** | **00 03 58.7** | **+1.0** |
| | baz=23,slow=2.3 | | | | | | | |
| **GEC2** | **GERESS Array S** | **151.90** | **341** | *e*PKPbc | | **PKPbc** | **00 03 58.4** | **+0.5** |
| GEC2 | | | | *e*PKPab | | **PKPab** | **00 04 09.1** | **-1.0** |
| **GERES** | **GERESS Array B** | **151.90** | **341** | PKPbc | | **PKPbc** | **00 03 58.4** | **+0.5** |
| | comp=Z,1.4nm,0.7s,baz=36,slow=2.5,SNR=12 | | | | | | | |
| GERES | | | | PKPab | | **PKPab** | **00 04 09.1** | **-1.0** |
| | comp=Z,0.7nm,0.6s,baz=31,slow=3.1,SNR=5.1 | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **154.89** | **344** | *e*PKPab | | **PKPab** | **00 04 24.3** | **+1.2** |
| **ESDC** | **Sonseca Array** | **162.75** | **11** | PKPab | | **PKPab** | **00 04 56.9** | **-0.4** |
| | comp=Z,0.2nm,0.5s,baz=350,slow=7.5,SNR=4.8 | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **170.35** | **188** | *e*PKPdf | | **PKPdf** | **00 04 10.2** | **-0.5** |
| TOA0 | | | | *e*PKPab | | **PKPab** | **00 05 31.6** | **+0.3** |
| **TORD** | **Torodi Ar. Bea** | **170.35** | **188** | PKP | | **PKPdf** | **00 04 10.3** | **-0.3** |
| | comp=Z,1.3nm,0.8s,baz=203,slow=0.3,SNR=8.5 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **00 05 31.6** | **+0.3** |
| | comp=Z,1.3nm,0.6s,baz=180,slow=4.3,SNR=14 | | | | | | | |

*IDC **26** 00:09:07.6±6.3,35°.90N×70°.76E,h90km±47km,mb3.2/2, mb1 3.4/8,mb1mx3.1/35,mbtmp3.7/8,Error ellipse: s-maj=70.4km s-min=21.0km az=155.0*
*ISCJB **26** 00:09:10.8±1.0,36°.29N±0°.08×70°.63E±0°.06,h110km, mb3.3/1,Error ellipse: s-maj=11.0km s-min=6.3km az=165.7*
*NNC **26** 00:09:15.2±1.9,36°.56N×70°.66E,h147km±16km,mb3.1, mpv3.9,Error ellipse: s-maj=16.7km s-min=8.1km az=169.0*

**ISC 26 00:09:12.1±1.5,36°.3N±0°.1×70°.63E±0°.07,h110km,n25, σ1§31/36,5C-9D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.85** | **330** | ↓P | **Pn** | **00 09 57.3** | **+1.1** |
| | 7.6nm,0.4s | | | | | | |
| DZET | | | | ↓S | **Sn** | **00 10 32.6** | **+2.4** |
| | 25nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.31** | **31** | ↓P | **Pn** | **00 10 17.5** | **+1.7** |
| | 43nm,0.4s | | | | | | |
| SFK | | | | ↑S | **Sn** | **00 11 06.4** | **+1.2** |
| | 18nm,0.3s | | | | | | |
| **AML** | **Almayashu** | **6.25** | **21** | P | **Pn** | **00 10 42.6** | **+0.5** |
| | SNR=24 | | | | | | |
| **MNAS** | **Manas** | **6.31** | **13** | ↑P | **Pn** | **00 10 43.7** | **+1.0** |
| | 3.3nm,0.4s | | | | | | |
| MNAS | | | | ↑S | **Sn** | **00 11 51.6** | **-1.8** |
| | 12nm,0.5s | | | | | | |
| **UCH** | **Uchtor** | **6.60** | **26** | P | **Pn** | **00 10 47.3** | **+0.3** |
| | SNR=11 | | | | | | |
| **KK31** | **Karatay Array** | **6.76** | **359** | P | **Pn** | **00 10 49.7** | **+1.0** |
| | 8.3nm,0.3s,baz=182,slow=13,SNR=149 | | | | | | |
| KK31 | | | | ↓S | **Sn** | **00 12 03.2** | **-0.9** |
| | 1.4nm,0.2s,baz=6.9,slow=29,SNR=4.4 | | | | | | |
| **KZA** | **Kyzart** | **6.76** | **31** | P | **Pn** | **00 10 49.5** | **+0.5** |
| | SNR=8.3 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.76** | **20** | P | **Pn** | **00 10 49.9** | **+1.0** |
| | SNR=6.8 | | | | | | |
| **AAK** | **Ala-Archa** | **6.96** | **24** | ↑P | **Pn** | **00 10 51.9** | **+0.4** |
| | 3.5nm,0.5s | | | | | | |
| AAK | | | | ↓S | **Sn** | **00 12 07.4** | **-1.8** |
| | 20nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **6.96** | **24** | P | **Pn** | **00 10 52.2** | **+0.7** |
| | 2.8nm,0.3s,baz=165,slow=4.5,SNR=34 | | | | | | |
| AAK | | | | S | **Sn** | **00 12 08.5** | **-0.7** |
| | 1.6nm,0.3s,baz=120,slow=20,SNR=18 | | | | | | |
| **AAK** | **Ala-Archa** | **6.96** | **24** | P | **Pn** | **00 10 52.2** | **+0.7** |
| | SNR=11 | | | | | | |
| **KBK** | **Karagaybulak** | **7.13** | **27** | P | **Pn** | **00 10 55.6** | **+1.7** |
| | SNR=7.4 | | | | | | |
| **CHMS** | **Chumysh** | **7.37** | **24** | P | **Pn** | **00 10 57.9** | **+1.0** |
| | SNR=8.6 | | | | | | |
| **USP** | **Ospenovka** | **7.53** | **22** | P | **Pn** | **00 10 59.7** | **+0.6** |
| | SNR=7.2 | | | | | | |
| **TKM2** | **Tokmak 2** | **7.61** | **29** | ↓P | **Pn** | **00 11 00.6** | **+0.2** |
| | 5.1nm,0.7s | | | | | | |
| TKM2 | | | | ↓S | **Sn** | **00 12 22.8** | **-2.2** |
| | 2.1nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.61** | **29** | P | **Pn** | **00 11 00.3** | **0.0** |
| | SNR=7.5 | | | | | | |
| **GEYT** | **Alibeck** | **10.12** | **283** | P | **Pn** | **00 11 33.5** | **-0.9** |
| | 0.4nm,0.3s,baz=103,slow=13,SNR=4.2 | | | | | | |
| GEYT | | | | S | **Sn** | **00 13 25.8** | **-0.1** |
| | 1.0nm,0.3s,baz=208,slow=30,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **13.59** | **36** | P | **Pn** | **00 12 20.9** | **+0.6** |
| | 0.1nm,0.3s,baz=220,slow=13,SNR=4.4 | | | | | | |
| **AB31** | **Akbulak array** | **15.08** | **332** | P | **Pn** | **00 12 39.9** | **+0.6** |
| | 1.2nm,0.3s,baz=153,slow=12,SNR=76 | | | | | | |
| AB31 | | | | ↓S | **Sn** | **00 15 23.7** | **-2.1** |
| | 0.8nm,0.6s,baz=156,slow=22,SNR=4.4 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.37** | **19** | P | **Pn** | **00 12 43.1** | **+0.3** |
| | 0.1nm,0.3s,baz=206,slow=11,SNR=3.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **16.68** | **359** | P | **Pn** | **00 12 59.8** | **+0.7** |
| | 0.3nm,0.3s,baz=168,slow=9.0,SNR=4.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.77** | **331** | ↑P | **Pn** | **00 13 00.4** | **+0.2** |
| | 1.5nm,0.6s | | | | | | |
| AKTO | | | | ↓S | **Sn** | **00 16 04.2** | **-2.3** |
| | 2.0nm,1.1s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.77** | **331** | P | **P** | **00 13 03.6** | **+3.0** |
| | 0.2nm,0.3s,baz=160,slow=12,SNR=6.4 | | | | | | |
| AKTO | | | | S | **Sn** | **00 16 06.7** | **+0.2** |
| | 0.1nm,0.3s,baz=51,slow=16,SNR=1.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **20.18** | **25** | P | **P** | **00 13 38.4** | **+0.7** |
| | 1.8nm,0.5s,baz=221,slow=11,SNR=9.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.42** | **268** | P | **P** | **00 19 41.8** | **-1.6** |
| | 0.4nm,0.8s,baz=46,slow=6.5,SNR=6.7 | | | | | | |

*ISK **26** 00:12:12.3,39°.02N×38°.28E,h4km,MD3.0*
*CSEM **26** 00:12:13.1±0.1,39°.01N×38°.27E,h2km,MD3.0,Error ellipse: s-maj=3.2km s-min=2.9km az=100.0*
*DDA **26** 00:12:13.0,39°.01N×38°.27E,h12km,Md2.7*

**ISC 26 00:12:13.2±1.1,39°.01N±0°.02×38°.29E±0°.02,h4km±10km, n57,σ0§60/83,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILIC** | **ilic-Erzincan** | **0.49** | **26** | *e*PG | **Pg** | **00 12 22.1** | **-0.6** |
| ILIC | | | | *e*SG | **Sg** | **00 12 29.6** | **+0.6** |
| **ILIC** | **ilic-Erzincan** | **0.49** | **26** | *e*Pg | **Pg** | **00 12 22.1** | **-0.6** |
| ILIC | | | | *e*Sg | **Sg** | **00 12 29.6** | **+0.6** |
| **CUKAN** | **kangal_SIVAS** | **0.70** | **296** | P | **Pg** | **00 12 26.2** | **-0.5** |
| CUKAN | | | | S | **Sg** | **00 12 36.8** | **+0.8** |
| **MALT** | **Malatya** | **0.71** | **171** | *e*PG | **Pg** | **00 12 26.4** | **-0.4** |
| **MALT** | **Malatya** | **0.71** | **171** | *e*Pg | **Pg** | **00 12 26.4** | **-0.4** |
| **ELZG** | **Elazig** | **0.75** | **133** | *i* P | **Pg** | **00 12 27.6** | **0.0** |
| ELZG | | | | *i* S | **Sb** | **00 12 39.1** | **-0.5** |
| **ELZG** | **Elazig** | **0.75** | **133** | P | **Pg** | **00 12 27.6** | **0.0** |
| ELZG | | | | S | **Sb** | **00 12 39.1** | **-0.5** |
| **DARE** | **Darende-Malaty** | **0.77** | **235** | *e*PG | **Pg** | **00 12 27.2** | **-0.7** |
| DARE | | | | *e*SG | **Sb** | **00 12 39.1** | **-0.8** |
| **DARE** | **Darende-Malaty** | **0.77** | **235** | *e*Pg | **Pg** | **00 12 27.2** | **-0.7** |
| DARE | | | | *e*Sg | **Sb** | **00 12 39.1** | **-0.8** |
| **AKCD** | **Akcadag** | **0.77** | **202** | *i* P | **Pg** | **00 12 27.4** | **-0.6** |
| AKCD | | | | *i* S | **Sb** | **00 12 40.0** | **-0.1** |
| **AKCD** | **Akcadag** | **0.77** | **202** | P | **Pg** | **00 12 27.4** | **-0.6** |
| AKCD | | | | S | **Sb** | **00 12 40.0** | **-0.1** |
| **CUGUR** | **Gurin_S¨VAS** | **0.84** | **250** | P | **Pg** | **00 12 28.8** | **-0.6** |
| CUGUR | | | | S | **Sb** | **00 12 41.2** | **-1.0** |
| **PTK** | **Pertek** | **0.87** | **98** | *e*PG | **Pg** | **00 12 29.8** | **-0.1** |
| PTK | | | | *e*SG | **Sb** | **00 12 42.3** | **-0.8** |
| **PTK** | **Pertek** | **0.87** | **98** | *e*Pg | **Pg** | **00 12 29.8** | **-0.1** |
| PTK | | | | *e*Sg | **Sb** | **00 12 42.3** | **-0.8** |
| **CUZAR** | **Zara_SIVAS** | **0.96** | **336** | P | **Pg** | **00 12 31.6** | **0.0** |
| CUZAR | | | | S | **Sb** | **00 12 45.7** | **+0.1** |
| **SVRC** | **Sivrice-ELAZID** | **1.02** | **128** | *e*PG | **Pb** | **00 12 33.0** | **-0.5** |
| **SVRC** | **Sivrice-ELAZID** | **1.02** | **128** | *e*Pg | **Pb** | **00 12 33.0** | **-0.5** |
| **EZC** | **Erzincan** | **1.11** | **48** | *e*Pn | **Pn** | **00 12 37.0** | **+1.3** |
| **SUSE** | **Susehri** | **1.20** | **357** | *i* P | **Pg** | **00 12 35.7** | **-0.4** |
| SUSE | | | | *i* S | **Sn** | **00 12 54.0** | **+0.4** |
| **SUSE** | **Susehri** | **1.20** | **357** | P | **Pg** | **00 12 35.7** | **-0.4** |
| SUSE | | | | S | **Sn** | **00 12 54.0** | **+0.4** |
| **CUALT** | **Altinyayla-SIV** | **1.22** | **283** | P | **Pg** | **00 12 35.5** | **-1.0** |
| CUALT | | | | S | **Sb** | **00 12 53.3** | **+0.3** |
| **SCER** | **sogukcermik** | **1.23** | **314** | *i* P | **Pg** | **00 12 36.1** | **-0.8** |
| SCER | | | | *i* S | **Sb** | **00 12 53.4** | **0.0** |
| **SCER** | **sogukcermik** | **1.23** | **314** | P | **Pg** | **00 12 36.1** | **-0.8** |
| SCER | | | | S | **Sb** | **00 12 53.5** | **0.0** |
| **ERZN** | **Erzincan** | **1.25** | **62** | *e*PN | **Pg** | **00 12 37.0** | **-0.3** |
| **EUZM** | **Uzumlu** | **1.30** | **57** | *i* P | **Pg** | **00 12 37.8** | **-0.3** |
| EUZM | | | | *i* S | **Sn** | **00 12 56.3** | **+0.3** |
| **EUZM** | **Uzumlu** | **1.30** | **57** | P | **Pg** | **00 12 37.8** | **-0.3** |
| EUZM | | | | S | **Sn** | **00 12 56.3** | **+0.3** |
| **SVSK** | **Karacayir** | **1.34** | **313** | *e*PN | **Pg** | **00 12 39.2** | **+0.2** |
| **SVSK** | **Karacayir** | **1.34** | **313** | *e*Pn | **Pg** | **00 12 39.2** | **+0.2** |
| **KELT** | **Kelkit** | **1.36** | **33** | *i* P | **Pn** | **00 12 38.8** | **-0.4** |
| KELT | | | | *i* S | **Sg** | **00 12 56.6** | **-0.3** |
| **KELT** | **Kelkit** | **1.36** | **33** | P | **Pn** | **00 12 38.8** | **-0.4** |
| KELT | | | | S | **Sg** | **00 12 56.6** | **-0.3** |
| **PINB** | **Pinarbasi** | **1.51** | **258** | *i* P | **Pn** | **00 12 41.2** | **0.0** |
| PINB | | | | *i* S | **Sg** | **00 13 03.7** | **+2.0** |
| **PINB** | **Pinarbasi** | **1.51** | **258** | P | **Pn** | **00 12 41.2** | **0.0** |
| PINB | | | | S | **Sg** | **00 13 03.7** | **+2.0** |
| **RSDY** | **Resadiye-TOKAT** | **1.57** | **332** | *e*PN | **Pn** | **00 12 42.2** | **+0.4** |
| **RSDY** | **Resadiye-TOKAT** | **1.57** | **332** | *e*Pn | **Pn** | **00 12 42.2** | **+0.4** |
| **SARI** | **SarD1z-Kayseri** | **1.58** | **248** | *e*PN | **Pn** | **00 12 42.4** | **+0.3** |
| **URFA** | **Urfa** | **1.62** | **165** | *e*PN | **Pn** | **00 12 42.9** | **+0.2** |
| **URFA** | **Urfa** | **1.62** | **165** | *e*Pn | **Pn** | **00 12 42.9** | **+0.2** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.64** | **285** | P | **Pb** | **00 12 43.5** | **-0.5** |
| CUSAR | | | | S | **Sg** | **00 13 06.4** | **+0.6** |
| **GUMT** | **Gumushane** | **1.71** | **32** | *e*PN | **Pn** | **00 12 44.0** | **+0.1** |
| **GUMT** | **Gumushane** | **1.71** | **32** | *e*Pn | **Pn** | **00 12 44.1** | **+0.1** |
| **BINT** | **Bingol** | **1.72** | **94** | *e*Pn | **Pg** | **00 12 46.5** | **+0.3** |
| **DYBB** | **Diyarbakir** | **1.80** | **125** | *e*PN | **Pn** | **00 12 45.4** | **+0.3** |
| **KMRS** | **Kahramanmaras** | **1.86** | **216** | *e*PN | **Pn** | **00 12 46.1** | **+0.2** |
| **KMRS** | **Kahramanmaras** | **1.86** | **216** | *e*Pn | **Pn** | **00 12 46.1** | **+0.2** |
| **BNGB** | **Bing¨ll** | **1.86** | **90** | *e*PN | **Pn** | **00 12 46.5** | **+0.5** |
| **TOKT** | **Tokat** | **1.87** | **315** | *e*PN | **Pn** | **00 12 46.1** | **0.0** |
| **TOKT** | **Tokat** | **1.87** | **315** | *e*Pn | **Pn** | **00 12 46.1** | **0.0** |
| **DIY** | **Diyarbakir** | **1.89** | **126** | *e*Pn | **Pn** | **00 12 45.4** | **-0.9** |
| **ESPY** | **Espiye-Giresun** | **1.93** | **10** | *e*PN | **Pn** | **00 12 47.1** | **+0.3** |
| **ESPY** | **Espiye-Giresun** | **1.93** | **10** | *e*Pn | **Pn** | **00 12 47.1** | **+0.3** |
| **AYKD** | **Aykdinkavak** | **1.98** | **217** | P | **Pg** | **00 12 50.6** | **-0.5** |
| AYKD | | | | S | **Sg** | **00 13 17.3** | **+0.7** |
| **BAYT** | **Ayd¨¨ntepe-Bay** | **1.99** | **45** | *e*PN | **Pn** | **00 12 47.9** | **+0.2** |
| **BAYT** | **Ayd¨¨ntepe-Bay** | **1.99** | **45** | *e*Pn | **Pn** | **00 12 47.9** | **+0.2** |
| **MAZI** | **Mazidag** | **2.30** | **132** | *e*PN | **Pn** | **00 12 52.6** | **+0.6** |
| **MAZI** | **Mazidag** | **2.30** | **132** | *e*Pn | **Pn** | **00 12 52.7** | **+0.6** |
| **VRTB** | **Varto-Mus** | **2.47** | **86** | *e*PN | **Pn** | **00 12 55.0** | **+0.6** |
| **VRTB** | **Varto-Mus** | **2.47** | **86** | *e*Pn | **Pn** | **00 12 55.0** | **+0.6** |

**GUC 26 00:17:04.2±0.7,34°.51S×71°.80W,h41km±1km,ML3.5, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.20** | **304** | *i* P | Pn | 00 17 11.5 | -0.1 |
| CHPI | | | | *i* S | Sn | 00 17 17.3 | +0.5 |
| **NICH** | **Los Niches** | **0.68** | **137** | *i* P | Pn | 00 17 17.5 | 0.0 |
| NICH | | | | *i* S | Sn | 00 17 27.7 | +0.8 |
| **TALC** | **Talca** | **0.90** | **171** | AML | AML | 00 17 36.3 | |
| | comp=N,1μm,0.2s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.52** | **44** | *i* P | Pn | 00 17 30.0 | +0.9 |
| CLCH | | | | *i* S | Sn | 00 17 50.4 | +2.6 |
| CLCH | | | | AML | AML | 00 17 55.0 | |
| | comp=N,1μm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **1.65** | **35** | *i* P | Pn | 00 17 31.9 | +1.2 |
| PEL | | | | *i* S | Sn | 00 17 52.8 | +2.1 |
| PEL | | | | AML | AML | 00 17 56.5 | |
| | comp=N,1μm,0.4s | | | | | | |
| **ROCH** | **El Roble** | **1.67** | **23** | *i* P

0.6nm,0.6s,baz=182,slow=8.6,SNR=4.6
**MKAR Makanchi Array 54.99 343** P **P 01 07 15.4 -0.4**
0.7nm,0.4s,baz=151,slow=8.3,SNR=8.0
MKAR pP **pP 01 07 26.5 +0.5**
0.9nm,0.7s,baz=141,slow=8.5,SNR=5.1
**ZALV Zalesovo Beam 60.97 348** P **P 01 07 56.9 -0.6**
1.4nm,0.4s,baz=177,slow=5.3,SNR=8.4
ZALV pP **pP 01 08 08.6 +0.7**
0.8nm,0.4s,baz=145,slow=7.3,SNR=3.5
**TXAR Lajitas Array 145.50 43** PKPbc **PKPab 01 17 23.9 +0.4**
1.2nm,0.8s,baz=278,slow=1.3,SNR=12

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**IDC 26 01:00:19.8±15.0, 18°51'S×178°35'W, h267km±142km, mb3.2/5, mb1 3.5/5, mb1mx3.2/25, mbtmp3.8/5, Error ellipse: s-maj=43.6km s-min=28.5km az=49.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.59** | **260** | P | | P | 01 08 06.2 | 0.0 |
| | 0.4nm,0.3s,baz=96,slow=8.5,SNR=4.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **44.69** | **255** | P | | P | 01 08 06.5 | -0.5 |
| | 1.2nm,0.5s,baz=94,slow=8.4,SNR=25 | | | | | | | |
| **VNDA** | **Vanda** | **59.85** | **185** | P | | P | 01 09 57.3 | +0.2 |
| | 1.0nm,0.4s,baz=350,slow=6.1,SNR=10 | | | | | | | |
| **TXAR** | **Lajitas Array** | **86.26** | **58** | P | | P | 01 12 30.6 | -1.4 |
| | 0.4nm,0.8s,baz=205,slow=5.5,SNR=4.4 | | | | | | | |
| **ILAR** | **Eielson Array** | **86.46** | **13** | P | | P | 01 12 33.6 | +1.6 |
| | 0.2nm,0.6s,baz=220,slow=5.7,SNR=4.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **145.25** | **314** | PKPbc | | PKPdf | 01 19 25.6 | -0.5 |
| | 0.3nm,0.6s,baz=7.1,slow=3.5,SNR=3.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **148.20** | **345** | PKPbc | | PKPbc | 01 19 33.4 | -1.0 |
| | 0.7nm,0.7s,baz=11,slow=2.0,SNR=6.9 | | | | | | | |

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**IDC 26 01:03:08.6±7.4, 3°57'S×99°38'E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.3/43, mbtmp3.3/3, Error ellipse: s-maj=273.0km s-min=31.6km az=60.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **H01W3** | **Cape Leeuwin H** | **34.04** | **158** | T | | T | 01 45 38.7 | |
| | baz=336,slow=76,SNR=12 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.05** | **158** | T | | T | 01 45 39.7 | |
| | baz=336,slow=76,SNR=18 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.05** | **158** | T | | T | 01 45 35.9 | |
| | baz=336,slow=76,SNR=12 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.77** | **118** | P | | P | 01 10 27.9 | +1.2 |
| | 0.3nm,0.4s,baz=300,slow=10,SNR=2.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.86** | **124** | P | | P | 01 10 34.5 | -1.5 |
| | 0.1nm,0.3s,baz=303,slow=7.6,SNR=2.8 | | | | | | | |
| **SONM** | **Songino Array** | **51.56** | **6** | P | | P | 01 12 16.2 | -0.4 |
| | 0.3nm,0.5s,baz=192,slow=8.4,SNR=3.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.31** | **38** | PKPbc | | PKPbc | 01 22 51.7 | -0.5 |
| | 0.2nm,0.7s,baz=289,slow=1.4,SNR=3.8 | | | | | | | |

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*ISCJB **26** 01:03:32.6±0.4, 38°.08N±0°.02×23°.88E±0°.04, h9km±3km, Error ellipse: s-maj=4.8km s-min=3.7km az=18.8*
*CSEM **26** 01:03:32.1±0.2, 38°.06N×23°.93E, h10km, MD2.7, Error ellipse: s-maj=4.7km s-min=2.8km az=91.0*
*THE **26** 01:03:32.9, 38°.07N×23°.87E, h10km±3km, ML2.3/5, Error ellipse: s-maj=3.5km s-min=0.6km az=202.0*
*ATH **26** 01:03:33.0, 38°.07N×23°.89E, h10km±1km, MD2.7/20, ML2.5*
**ISC 26 01:03:32.8±0.9, 38°.07N±0°.02×23°.89E±0°.03, h8km±5km, n59, σ0°53/78, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PTL** | **Penteli** | **0.03** | **216** | *e*PG | | **Pg** | **01 03 34.5** | **+0.2** |
| PTL | | | | *e*SG | | **Sg** | **01 03 35.3** | **-0.1** |
| **PTL** | **Penteli** | **0.03** | **216** | *e*Pg | | **Pg** | **01 03 34.5** | **+0.2** |
| PTL | | | | *e*Sg | | **Sg** | **01 03 35.3** | **-0.1** |
| **ATHU** | **Athens Univers** | **0.13** | **217** | P | | **Pg** | **01 03 36.0** | **+0.3** |
| ATHU | | | | S | | **Sg** | **01 03 37.6** | **-0.1** |
| **ATHU** | **Athens Univers** | **0.13** | **217** | P | | **Pg** | **01 03 36.0** | **+0.3** |
| ATHU | | | | S | | **Sg** | **01 03 37.6** | **-0.1** |
| **ATH** | **Athens Observa** | **0.17** | **233** | *e*PG | | **Pg** | **01 03 36.7** | **+0.4** |
| ATH | | | | *e*SG | | **Sg** | **01 03 39.3** | **+0.6** |
| **ATH** | **Athens Observa** | **0.17** | **233** | P | | **Pg** | **01 03 36.7** | **+0.4** |
| ATH | | | | S | | **Sg** | **01 03 39.2** | **+0.6** |
| **ATH** | **Athens Observa** | **0.17** | **233** | P | | **Pg** | **01 03 36.7** | **+0.4** |
| ATH | | | | *e*Sg | | **Sg** | **01 03 39.3** | **+0.6** |
| **VLY** | **Voula,Athens** | **0.23** | **198** | *e*PG | | **Pg** | **01 03 38.0** | **+0.6** |
| **VLY** | **Voula,Athens** | **0.23** | **198** | P | | **Pg** | **01 03 38.0** | **+0.6** |
| VLY | | | | S | | **Sg** | **01 03 41.1** | **+0.5** |
| **VLY** | **Voula,Athens** | **0.23** | **198** | P | | **Pg** | **01 03 38.0** | **+0.6** |
| VLY | | | | S | | **Sg** | **01 03 41.1** | **+0.5** |
| **EREA** | **Eretria** | **0.35** | **6** | *e*PB | | **Pg** | **01 03 40.3** | **+0.6** |
| EREA | | | | *e*SB | | **Sg** | **01 03 45.6** | **+1.2** |
| **EREA** | **Eretria** | **0.35** | **6** | P | | **Pg** | **01 03 40.3** | **+0.6** |
| EREA | | | | S | | **Sg** | **01 03 45.5** | **+1.2** |
| **EREA** | **Eretria** | **0.35** | **6** | P | | **Pg** | **01 03 40.3** | **+0.6** |
| EREA | | | | S | | **Sg** | **01 03 45.5** | **+1.2** |
| **KARY** | **Karystos** | **0.44** | **95** | P | | **Pg** | **01 03 41.0** | **-0.3** |
| KARY | | | | S | | **Sb** | **01 03 48.3** | **-1.2** |
| **NAIG** | **Nisos Aigina** | **0.45** | **225** | *e*PB | | **Pg** | **01 03 41.8** | **+0.4** |
| **NAIG** | **Nisos Aigina** | **0.45** | **225** | *e*Pb | | **Pg** | **01 03 41.8** | **+0.4** |
| **VILL** | **Villia** | **0.46** | **282** | *e*Pb | | **Pg** | **01 03 42.0** | **+0.2** |
| VILL | | | | *e*Sb | | **Sg** | **01 03 49.0** | **+1.1** |
| **VIL2** | **Platees** | **0.51** | **286** | *e*PB | | **Pg** | **01 03 42.0** | **-0.6** |
| VIL2 | | | | *e*SB | | **Sg** | **01 03 49.0** | **-0.3** |
| **MRKA** | **Markates** | **0.67** | **340** | P | | **Pg** | **01 03 46.1** | **+0.3** |
| MRKA | | | | S | | **Sg** | **01 03 55.1** | **+0.5** |
| **MRKA** | **Markates** | **0.67** | **340** | P | | **Pg** | **01 03 46.1** | **+0.3** |
| MRKA | | | | S | | **Sg** | **01 03 55.1** | **+0.5** |
| **LTK** | **Loutraki** | **0.73** | **266** | *e*PB | | **Pb** | **01 03 47.3** | **-0.5** |
| **LTK** | **Loutraki** | **0.73** | **266** | *e*Pb | | **Pb** | **01 03 47.3** | **-0.5** |
| **KRND** | **KRANIDI** | **0.90** | **221** | *e*PN | | **Pb** | **01 03 50.7** | **0.0** |
| **KRND** | **KRANIDI** | **0.90** | **221** | *e*Pn | | **Pn** | **01 03 50.7** | **0.0** |
| **LKR** | **Lokris** | **0.91** | **310** | *e*PB | | **Pg** | **01 03 49.4** | **-0.7** |
| **LKR** | **Lokris** | **0.91** | **310** | P | | **Pg** | **01 03 49.5** | **-0.7** |
| LKR | | | | S | | **Sb** | **01 04 02.7** | **-0.3** |
| **LKR** | **Lokris** | **0.91** | **310** | P | | **Pg** | **01 03 49.5** | **-0.7** |
| LKR | | | | S | | **Sb** | **01 04 02.7** | **-0.3** |
| **SMIA** | **Simia** | **0.96** | **327** | *e*PN | | **Pb** | **01 03 51.9** | **+0.1** |
| **SMIA** | **Simia** | **0.96** | **327** | *e*Pn | | **Pb** | **01 03 51.9** | **+0.1** |
| **SERI** | **Serifos** | **1.03** | **152** | *e*PN | | **Pn** | **01 03 53.0** | **-0.5** |
| **SERI** | **Serifos** | **1.03** | **152** | *e*Pn | | **Pn** | **01 03 53.0** | **-0.5** |
| **AOS** | **Alonnisos** | **1.10** | **360** | *e*PN | | **Pb** | **01 03 54.0** | **0.0** |
| **AOS** | **Alonnisos** | **1.10** | **360** | *e*Pn | | **Pb** | **01 03 54.0** | **0.0** |
| **DSF** | **Desfina** | **1.12** | **288** | *e*PN | | **Pb** | **01 03 54.2** | **-0.3** |
| **DSF** | **Desfina** | **1.12** | **288** | *e*Pn | | **Pb** | **01 03 54.2** | **-0.3** |
| **SKIA** | **Skiathos** | **1.14** | **343** | *e*PG | | **Pb** | **01 03 54.1** | **-0.7** |
| **SKIA** | **Skiathos** | **1.14** | **343** | *e*Pn | | **Pb** | **01 03 54.1** | **-0.7** |
| **AXAR** | **Agios Charalam** | **1.19** | **306** | *e*PN | | **Pb** | **01 03 54.5** | **-1.1** |
| **AXAR** | **Agios Charalam** | **1.19** | **306** | *e*Pn | | **Pb** | **01 03 54.5** | **-1.1** |
| **GUR** | **Goura** | **1.23** | **264** | *e*PB | | **Pg** | **01 03 56.7** | **+0.3** |
| **GUR** | **Goura** | **1.23** | **264** | *e*Pb | | **Pg** | **01 03 56.7** | **+0.3** |
| **NEO** | **Neokhori** | **1.34** | **337** | *e*PG | | **Pn** | **01 03 57.7** | **-0.1** |
| **NEO** | **Neokhori** | **1.34** | **337** | *e*Pg | | **Pn** | **01 03 57.7** | **-0.1** |
| **KLV** | **Kalavryta, Ach** | **1.37** | **269** | *e*PB | | **Pb** | **01 03 58.8** | **+0.1** |
| **KLV** | **Kalavryta, Ach** | **1.37** | **269** | *e*Pb | | **Pb** | **01 03 58.8** | **+0.1** |
| **XOR** | **Xorichti** | **1.40** | **337** | *e*PG | | **Pb** | **01 03 59.0** | **-0.2** |
| **XOR** | **Xorichti** | **1.40** | **337** | *e*Pg | | **Pb** | **01 03 59.0** | **-0.2** |
| **KALE** | **Kalithea** | **1.41** | **284** | *e*PB | | **Pg** | **01 04 00.1** | **+0.2** |
| **KALE** | **Kalithea** | **1.41** | **284** | *e*Pb | | **Pg** | **01 04 00.1** | **+0.2** |
| **TRIZ** | **Trizonia** | **1.46** | **282** | *e*PB | | **Pg** | **01 04 00.9** | **+0.1** |
| **TRIZ** | **Trizonia** | **1.46** | **282** | *e*Pb | | **Pg** | **01 04 00.9** | **+0.1** |
| **LAKA** | **Lakka** | **1.51** | **277** | *e*PB | | **Pg** | **01 04 01.7** | **-0.1** |
| **LAKA** | **Lakka** | **1.51** | **277** | *e*Pb | | **Pg** | **01 04 01.7** | **-0.1** |
| **AGG** | **Agios Georgios** | **1.54** | **308** | *e*PB | | **Pb** | **01 04 01.9** | **+0.2** |
| **AGG** | **Agios Georgios** | **1.54** | **308** | *e*Pg | | **Pb** | **01 04 01.9** | **+0.2** |
| **VLI** | **Veliai** | **1.55** | **210** | *e*PN | | **Pn** | **01 04 00.8** | **+0.1** |
| **VLI** | **Veliai** | **1.55** | **210** | *e*Pg | | **Pn** | **01 04 00.8** | **+0.1** |
| **KYTH** | **Kithira** | **1.91** | **201** | *e*PB | | **Pn** | **01 04 06.3** | **+0.6** |
| **KYTH** | **Kithira** | **1.91** | **201** | *e*Pb | | **Pn** | **01 04 06.3** | **+0.6** |

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*IDC **26** 01:07:36.0±1.8, 3°.61S×99°.71E, h0km, mb4.0/8, mb1 4.1/8, mb1mx3.8/45, mbtmp4.0/8, Error ellipse: s-maj=67.0km s-min=20.1km az=56.0*
*ISCJB **26** 01:07:39.4±1.7, 3°.55S±0°.2×99°.8E±0°.3, h33km, mb4.0/8, Error ellipse: s-maj=59.0km s-min=16.6km az=146.7*
**ISC 26 01:07:41.3±2.0, 3°.6S±0°.3×99°.8E±0°.4, h35km, n15, σ0°41/9, mb4.0/8, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.92** | **358** | P | | **P** | **01 12 31.0** | **-0.7** |
| | 0.9nm,0.3s,baz=186,slow=9.7,SNR=4.8 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.43** | **260** | T | | T | 01 42 44.4 | |
| | baz=83,slow=75,SNR=56 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.44** | **260** | T | | T | 01 42 45.2 | |
| | baz=83,slow=75,SNR=41 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.45** | **260** | T | | T | 01 42 45.8 | |
| | baz=83,slow=75,SNR=64 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.88** | **159** | T | | T | 01 49 59.2 | |
| | baz=335,slow=76,SNR=14 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.89** | **159** | T | | T | 01 50 00.4 | |
| | baz=335,slow=76,SNR=14 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.89** | **159** | T | | T | 01 50 00.9 | |
| | baz=335,slow=76,SNR=14 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.42** | **119** | P | | **P** | **01 14 51.2** | **-0.2** |
| | 1.2nm,0.8s,baz=296,slow=8.9,SNR=5.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.53** | **124** | P | | **P** | **01 15 00.7** | **-0.1** |
| | 0.6nm,0.4s,baz=293,slow=7.7,SNR=8.3 | | | | | | | |
| **SONM** | **Songino Array** | **51.54** | **6** | P | | **P** | **01 16 44.4** | **+0.6** |
| | 1.3nm,0.8s,baz=195,slow=8.3,SNR=10.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.49** | **345** | P | | **P** | **01 16 50.8** | **0.0** |
| | 1.3nm,0.8s,baz=153,slow=8.7,SNR=6.5 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.66** | **28** | P | | **P** | **01 17 14.0** | **+0.1** |
| | 2.0nm,0.6s,baz=237,slow=5.0,SNR=3.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.68** | **350** | P | | **P** | **01 17 35.0** | **-0.1** |
| | 4.8nm,1.0s,baz=150,slow=6.1,SNR=10 | | | | | | | |
| **FINES** | **FINESS Array B** | **85.40** | **332** | P | | **P** | **01 20 14.8** | **0.0** |
| | 1.9nm,1.0s,baz=111,slow=7.6,SNR=2.8 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.09** | **38** | PKPbc | | **PKPab** | **01 27 19.4** | **+0.3** |
| | 0.8nm,0.8s,baz=299,slow=1.9,SNR=9.6 | | | | | | | |

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*IDC **26** 01:11:05.6±1.1, 17°.57S×167°.76E, h0km, mb3.9/7, mb1 4.1/8, mb1mx3.9/35, mbtmp3.9/8, ML3.7/1, MS3.8/3, Ms1 3.8/3, ms1mx3.3/21, Error ellipse: s-maj=29.6km s-min=26.3km az=106.0*
*ISCJB **26** 01:11:08.8±1.1, 17°.75S±0°.08×167°.6E±0°.2, h27km, mb4.0/6, MS3.8/3, Error ellipse: s-maj=22.5km s-min=10.8km az=179.0*
**ISC 26 01:11:09.8±1.0, 17°.70S±0°.10×167°.7E±0°.2, h27km, n12, σ1°15/12, mb4.0/6, MS3.7/3, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **4.52** | **195** | Pn | | **Pn** | **01 12 17.6** | **+1.1** |
| | 3.4nm,0.3s,baz=355,slow=8.8,SNR=21 | | | | | | | |
| DZM | | | | Sn | | **Sn** | **01 13 06.3** | **-1.9** |
| | 4.2nm,0.3s,baz=181,slow=23,SNR=3.8 | | | | | | | |
| **CTA** | **Charters Tower** | **20.46** | **260** | P | | **P** | **01 15 45.6** | **+0.2** |
| | 0.7nm,0.3s,baz=74,slow=7.4,SNR=2.1 | | | | | | | |
| **URZ** | **Urewera** | **22.07** | **160** | P | | **P** | **01 16 03.8** | **+1.2** |
| | 6.2nm,0.7s,baz=330,slow=8.1,SNR=4.7 | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.66** | **261** | P | | **P** | **01 17 30.3** | **-0.8** |
| | 0.4nm,0.3s,baz=89,slow=9.3,SNR=4.8 | | | | | | | |
| WRA | | | | LR | | LR | 01 28 59.7 | |
| | comp=Z,114nm,21.2s,baz=40,slow=34 | | | | | | | |
| **ASAR** | **Alice Springs** | **32.15** | **254** | P | | **P** | **01 17 35.4** | **0.0** |
| | 1.3nm,0.7s,baz=78,slow=9.0,SNR=18 | | | | | | | |
| ASAR | | | | LR | | LR | 01 30 16.9 | |
| | comp=Z,151nm,19.7s,baz=122,slow=36 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **60.73** | **333** | LR | | LR | 01 45 00.6 | |
| | comp=Z,178nm,21.7s,baz=275,slow=34 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.57** | **355** | P | | **P** | **01 22 59.4** | **+1.2** |
| | 0.8nm,0.4s,baz=130,slow=4.7,SNR=4.8 | | | | | | | |
| **SONM** | **Songino Array** | **85.14** | **324** | P | | **P** | **01 23 44.2** | **+0.7** |
| | 1.7nm,0.9s,baz=124,slow=4.1,SNR=7.3 | | | | | | | |
| **ILAR** | **Eielson Array** | **89.20** | **18** | P | | **P** | **01 24 01.2** | **-1.4** |
| | 0.4nm,0.7s,baz=233,slow=5.4,SNR=6.0 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **123.22** | **345** | PKP | | **PKPdf** | **01 30 02.9** | **-0.5** |
| | 3.0nm,0.9s,baz=68,slow=2.4,SNR=4.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **142.46** | **332** | PKP | | **PKPdf** | **01 30 40.1** | **-0.1** |
| | 0.6nm,0.7s,baz=145,slow=1.4,SNR=5.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **165.80** | **253** | PKP | | **PKPdf** | **01 31 12.2** | **-0.8** |
| | 1.0nm,0.9s,baz=97,slow=1.1,SNR=5.8 | | | | | | | |

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*IDC **26** 01:18:25.4±1.3, 3°.77S×99°.59E, h0km, mb3.9/9, mb1 4.0/9, mb1mx3.8/37, mbtmp3.9/9, Error ellipse: s-maj=48.4km s-min=19.2km az=52.0*
*ISCJB **26** 01:18:28.9±1.2, 3°.75S±0°.2×99°.7E±0°.3, h33km, mb3.9/9, Error ellipse: s-maj=43.8km s-min=16.9km az=143.7*
**ISC 26 01:18:30.8±1.4, 3.7S±0°.2×99.7E±0°.3, h35km, n10, σ0°43/10, mb4.1/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **22.05** | **358** | P | | **P** | **01 23 22.3** | **-0.3** |
| | 1.2nm,0.3s,baz=186,slow=11,SNR=7.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.44** | **118** | P | | **P** | **01 25 40.5** | **-0.5** |
| | 0.8nm,0.9s,baz=300,slow=9.0,SNR=2.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.53** | **124** | P | | **P** | **01 25 50.7** | **+0.4** |
| | 0.2nm,0.3s,baz=304,slow=8.7,SNR=4.1 | | | | | | | |
| **SONM** | **Songino Array** | **51.68** | **6** | P | | **P** | **01 27 34.8** | **+0.4** |
| | 1.4nm,0.6s,baz=189,slow=9.1,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.59** | **345** | P | | **P** | **01 27 41.4** | **+0.3** |
| | 1.2nm,0.5s,baz=152,slow=9.0,SNR=9.2 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.82** | **28** | P | | **P** | **01 28 04.4** | **-0.2** |
| | 2.1nm,0.7s,baz=174,slow=4.8,SNR=4.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.79** | **350** | P | | **P** | **01 28 25.3** | **-0.1** |
| | 2.6nm,0.5s,baz=169,slow=5.1,SNR=9.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.24** | **313** | P | | **P** | **01 30 04.2** | **-0.5** |
| | 0.4nm,0.7s,baz=120,slow=8.5,SNR=3.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **85.48** | **332** | P | | **P** | **01 31 05.0** | **+0.3** |
| | 1.3nm,0.8s,baz=164,slow=7.1,SNR=5.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.25** | **39** | PKPbc | | **PKPab** | **01 38 09.4** | **+0.2** |
| | 0.4nm,0.5s,baz=259,slow=0.9,SNR=4.1 | | | | | | | |

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*IDC **26** 01:18:57.0±1.8, 3°.36S×99°.75E, h0km, mb4.0/8, mb1 4.2/9, mb1mx3.8/37, mbtmp4.1/9, ML4.3/1, Error ellipse: s-maj=64.2km s-min=18.4km az=54.0*
*ISCJB **26** 01:19:00.5±1.6, 3°.2S±0°.2×100°.0E±0°.3, h33km, mb4.0/8, Error ellipse: s-maj=51.4km s-min=12.8km az=140.8*
**ISC 26 01:19:02.4±1.9, 3°.3S±0°.3×99°.9E±0°.3, h35km, n16, σ0°77/10, mb4.1/8, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **LEM** | **Lembang** | **8.49** | **115** | Pn | | **Pn** | **01 21 03.1** | **0.0** |
| | 3.9nm,0.3s,baz=163,slow=19,SNR=3.5 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.64** | **358** | P | | **P** | **01 23 48.5** | **-1.4** |
| | 1.4nm,0.6s,baz=187,slow=9.0,SNR=5.5 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.56** | **260** | T | | T | 01 53 27.2 | |
| | baz=82,slow=75,SNR=52 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.57** | **260** | T | | T | 01 53 23.3 | |
| | baz=82,slow=75,SNR=52 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.58** | **260** | T | | T | 01 53 26.2 | |
| | baz=82,slow=75,SNR=72 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.11** | **159** | T | | T | 02 01 53.4 | |
| | baz=336,slow=76,SNR=21 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.12** | **159** | T | | T | 02 01 57.2 | |
| | baz=336,slow=76,SNR=23 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.12** | **159** | T | | T | 02 01 57.7 | |
| | baz=336,slow=76,SNR=20 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.48** | **119** | P | | **P** | **01 26 12.1** | **-1.0** |
| | 0.6nm,0.4s,baz=290,slow=9.1,SNR=6.5 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.62** | **125** | P | | **P** | **01 26 22.9** | **+0.2** |
| | 2.0nm,0.5s,baz=296,slow=7.9,SNR=20 | | | | | | | |
| **SONM** | **Songino Array** | **51.25** | **6** | P | | **P** | **01 28 03.6** | **+0.8** |
| | 0.9nm,0.7s,baz=196,slow=10,SNR=4.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.24** | **345** | P | | **P** | **01 28 10.1** | **0.0** |
| | 1.1nm,0.6s,baz=149,slow=8.7,SNR=4.4 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.37** | **28** | P | | **P** | **01 28 33.5** | **+0.6** |
| | 1.8nm,0.6s,baz=235,slow=6.3,SNR=3.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.42** | **350** | P | | **P** | **01 28 54.2** | **-0.1** |
| | 2.4nm,0.5s,baz=157,slow=6.2,SNR=5.8 | | | | | | | |
| **FINES** | **FINESS Array B** | **85.19** | **332** | P | | **P** | **01 31 34.8** | **-0.1** |
| | 0.6nm,0.4s,baz=130,slow=4.8,SNR=7.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.82** | **38** | PKPbc | | **PKPab** | **01 38 39.7** | **+0.5** |
| | 2.3nm,0.4s,baz=304,slow=0.7,SNR=5.6 | | | | | | | |

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*ISCJB **26** 01:24:16.4±0.2, 43°.63N×0°.01×110°.45W±0°.02, h10km, mb3.8/3, Error ellipse: s-maj=2.3km s-min=1.5km az=177.3*
*NEIC **26** 01:24:17.0±0.2, 43°.63N×110°.46W, h5km, MW3.8, ML3.8(BUT), Error ellipse: s-maj=3.1km s-min=1.9km az=88.0, Moment Tensor Solution. s13 Moment tensor: Scale $10^{14}$Nm; $M_{rr}$=5.09; $M_{\theta\theta}$=0.00; $M_{\phi\phi}$=5.09; $M_{r\theta}$=2.33; $M_{\theta\phi}$=-2.77; $M_{r\phi}$=-0.90; Best double couple: $M_{0}$6.30000×$10^{14}$ NP1:ϕs=0.00000°, δ50.00000°, λ=-55.00000°. NP2: ϕs=133.00000°, δ51.00000°, λ=-124.00000°. Principal axes: T 6.3100, Plg1.0000°, Azm246.0000°; N 0.0000, Plg26.0000°, Azm156.0000°; P -6.3100, Plg64.0000°, Azm337.0000°;*
*NEIC Felt [II] at Jackson and Wilson. Also felt at Alta, Bondurant and Cora. Felt at Tetonia, Idaho.*
*IDC **26** 01:24:21.2±2.2, 43°.52N×110°.42W, h35km±21km, mb3.6/3, mb1 3.9/6, mb1mx3.5/29, mbtmp3.8/6, ML3.1/3, MS3.5/1, Ms1 3.6/1, ms1mx2.9/39 Error ellipse: s-maj=40.5km s-min=13.6km az=138.0*
**ISC 26 01:24:17.1±0.5, 43.64N±0°.01×110°.41W±0°.02, h10km, n138, σ1°81/193, mb3.8/3, Wyoming**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **LOHW** | **Long Hollow** | **0.14** | **261** | *e*Pg | | **Pg** | **01 24 19.1** | **-1.5** |
| LOHW | | | | *e*Sg | | **Sg** | **01 24 21.0** | **-2.0** |
| **MOOW** | **Moose Ponds** | **0.27** | **295** | *e*Pg | | **Pg** | **01 24 21.4** | **-1.3** |
| MOOW | | | | *e*Sg | | **Sg** | **01 24 24.4** | **-1.9** |
| **SNOW** | **Snow King Moun** | **0.30** | **236** | *e*Pg | | **Pg** | **01 24 22.2** | **-1.2** |
| SNOW | | | | *e*Sg | | **Sg** | **01 24 25.1** | **-2.4** |
| **TPAW** | **Teton Pass** | **0.42** | **250** | *e*Pg | | **Pg** | **01 24 24.0** | **-1.5** |
| TPAW | | | | *e*Sg | | **Sg** | **01 24 28.0** | **-3.0** |
| **REDW** | **Red Top Meadow** | **0.42** | **230** | *e*Pg | | **Pg** | **01 24 24.1** | **-1.4** |
| REDW | | | | *e*Sg | | **Sg** | **01 24 28.8** | **-2.3** |
| **FXWY** | **Fox Creek** | **0.45** | **271** | *e*Pg | | **Pg** | **01 24 24.3** | **-1.7** |
| FXWY | | | | *e*Sg | | **Sg** | **01 24 30.1** | **-1.8** |
| **IMW** | **Indian Meadow** | **0.46** | **304** | *e*Pg | | **Pg** | **01 24 25.1** | **-1.2** |
| IMW | | | | *e*S | | **Sg** | **01 24 31.3** | **-1.2** |
| **FLWY** | **Flagg Ranch** | **0.49** | **335** | *e*Pg | | **Pg** | **01 24 26.0** | **-0.8** |
| FLWY | | | | *e*Sg | | **Sg** | **01 24 31.2** | **-2.2** |
| **YMS** | **Mount Sheridan** | **0.63** | **352** | *e*Pg | | **Pg** | **01 24 28.8** | **-0.8** |
| **YTP** | **The Promontory** | **0.76** | **7** | *e*Pg | | **Pg** | **01 24 31.1** | **-0.7** |
| **H17A** | **Grant Village** | **0.77** | **351** | P | | **Pg** | **01 24 31.1** | **-0.9** |
| | baz=0.8 | | | | | | | |
| H17A | | | | S | | **Sg** | **01 24 41.3** | **-0.8** |
| | baz=0.8 | | | | | | | |
| **H17A** | **Grant Village** | **0.77** | **351** | *e*Pg | | **Pg** | **01 24 31.1** | **-0.9** |
| H17A | | | | *e*Sg | | **Sg** | **01 24 40.9** | **-1.2** |
| **MCID** | **Moose Creek** | **0.79** | **315** | *e*Pg | | **Pg** | **01 24 31.5** | **-0.9** |
| **YLT** | **Little Thumb C** | **0.81** | **351** | *e*Pg | | **Pg** | **01 24 32.1** | **-0.7** |
| **YFT** | **Old Faithful** | **0.87** | **340** | *e*Pg | | **Pg** | **01 24 33.2** | **-0.7** |
| YFT | | | | *e*Sg | | **Sg** | **01 24 44.9** | **-0.4** |
| **LKWY** | **Lake** | **0.93** | **0** | *e*Pg | | **Pg** | **01 24 34.3** | **-0.8** |
| LKWY | | | | *e*S | | **Sg** | **01 24 45.7** | **-1.5** |
| **YML** | **Mary Lake** | **0.98** | **350** | *e*Pg | | **Pg** | **01 24 35.4** | **-0.8** |
| **AHID** | **Auburn Hatcher** | **1.00** | **210** | *e*Pg | | **Pg** | **01 24 34.4** | **-2.1** |
| AHID | | | | *e*Sg | | **Sg** | **01 24 48.1** | **-1.5** |
| **BW06** | **Boulder Array** | **1.07** | **144** | *e*Pg | | **Pg** | **01 24 35.2** | **-2.2** |
| BW06 | | | | *e*Pn | | **Pb** | **01 24 36.2** | **-1.6** |
| BW06 | | | | *e*Sg | | **Sg** | **01 24 49.4** | **-2.3** |
| BW06 | | | | *e*Sg | | **Sb** | **01 24 49.7** | **-2.3** |
| **YPM** | **Purple Mountai** | **1.07** | **342** | *e*Pg | | **Pb** | **01 24 37.0** | **-1.0** |
| **YNR** | **Norris Junctio** | **1.10** | **350** | *e*Pg | | **Pb** | **01 24 37.4** | **-1.0** |
| **YMR** | **Madison River** | **1.11** | **339** | *e*Pg | | **Pb** | **01 24 37.3** | **-1.3** |
| YMR | | | | *e*S | | **Sn** | **01 24 54.0** | **-0.4** |
| **YMP** | **Mirror Lake Pl** | **1.12** | **9** | *e*Pg | | **Pb** | **01 24 37.9** | **-0.9** |
| **YJC** | **Joseph's Coat** | **1.12** | **2** | *e*Pg | | **Pb** | **01 24 37.9** | **-0.9** |
| **YHH** | **Holmes Hill** | **1.20** | **345** | *e*Pg | | **Pn** | **01 24 39.0** | **-1.2** |
| **Y

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **EGMT** | **Eagleton** | **4.41** | **6** | *e*Pn | **Pn** | **01 25 25.7** | **+1.4** |
| EGMT | | | | *e*S | **Sb** | **01 26 26.7** | **-1.4** |
| **SRU** | **San Rafael** | **4.52** | **181** | *e*Pn | **Pn** | **01 25 27.7** | **+1.9** |
| SRU | | | | *e*Pg | **Pb** | **01 25 38.0** | **+1.3** |
| SRU | | | | *e*S | **Sg** | **01 26 37.4** | **-4.9** |
| **ELK** | **Elko** | **4.61** | **233** | *e*Pn | **Pn** | **01 25 28.0** | **+0.9** |
| ELK | | | | *e*S | **Sb** | **01 26 35.6** | **+1.8** |
| **SWMT** | **Swartz Lake** | **4.62** | **328** | *e*P | **Pn** | **01 25 29.1** | **+1.9** |
| SWMT | | | | *e*Pg | Pb | 01 25 41.3 | +3.0 |
| SWMT | | | | *e*S | **Sg** | **01 26 40.3** | **-5.2** |
| **RSSD** | **Black Hills** | **4.63** | **82** | *e*Pn | **Pn** | **01 25 29.9** | **+2.5** |
| RSSD | | | | *e*S | **Sb** | **01 26 36.0** | **+1.4** |
| **YBMT** | **Yellow Bay** | **4.92** | **330** | *e*Pn | **Pn** | **01 25 32.3** | **+1.0** |
| YBMT | | | | *e*S | Sb | 01 26 48.6 | +5.9 |
| **JTMT** | **Jette** | **4.92** | **328** | *e*Pn | **Pn** | **01 25 33.4** | **+2.1** |
| JTMT | | | | *e*S | **Sg** | **01 26 51.4** | **-3.9** |
| **SMCO** | **Snowmass** | **5.15** | **149** | *e*Pn | **Pn** | **01 25 35.7** | **+1.1** |
| SMCO | | | | *e*S | **Sb** | **01 26 54.0** | **+4.4** |
| **BLMT** | **Blacktail Moun** | **5.17** | **329** | *e*Pn | **Pn** | **01 25 36.6** | **+1.8** |
| **BSMT** | **Bassoo Peak** | **5.21** | **326** | *e*Pn | **Pn** | **01 25 36.9** | **+1.6** |
| BSMT | | | | *e*S | **Sb** | **01 26 54.8** | **+3.7** |
| **PV09** | **Paradox Valley** | **5.22** | **169** | *e*Pn | Pn | 01 25 41.0 | +5.4 |
| **ISCO** | **Idaho Springs** | **5.25** | **135** | *e*Pn | **Pn** | **01 25 37.2** | **+1.2** |
| ISCO | | | | *e*Pg | **Pb** | **01 25 51.6** | **+2.4** |
| ISCO | | | | *e*S | **Sb** | **01 26 56.6** | **+4.2** |
| **MSU** | **Marysvale** | **5.29** | **195** | *e*Pn | **Pn** | **01 25 36.7** | **+0.3** |
| MSU | | | | *e*S | **Sn** | **01 26 38.5** | **+0.9** |
| **PV10** | **Paradox Valley** | **5.36** | **168** | *e*Pn | Pn | 01 25 40.5 | +3.1 |
| **PV04** | **Paradox Valley** | **5.36** | **167** | *e*Pn | **Pn** | **01 25 37.3** | **0.0** |
| PV04 | | | | *e*S | **Sb** | **01 26 58.8** | **+3.4** |
| **F10A** | **Beach Ranch, E** | **5.38** | **298** | *e*Pn | **Pn** | **01 25 40.1** | **+2.5** |
| **MMU** | **Miners Mountai** | **5.47** | **187** | *e*Pn | **Pn** | **01 25 39.3** | **+0.3** |
| **PV05** | **Paradox Valley** | **5.64** | **169** | *e*Pn | **Pn** | **01 25 42.3** | **+1.1** |
| **PV01** | **Paradox Valley** | **5.67** | **165** | *e*Pn | **Pn** | **01 25 42.2** | **+0.5** |
| PV01 | | | | *e*S | Sb | 01 27 09.6 | +5.2 |
| **J08A** | **Circle Bar Ran** | **5.87** | **270** | *e*Pn | **Pn** | **01 25 45.0** | **+0.7** |
| **WALA** | **Waterton Lakes** | **5.94** | **337** | *e*Pn | **Pn** | **01 25 47.2** | **+2.0** |
| WALA | | | | *e*S | Sb | 01 27 19.5 | +7.4 |
| **BMN** | **Battle Mountai** | **6.00** | **240** | *e*Pn | **Pn** | **01 25 47.6** | **+1.6** |
| BMN | | | | *e*S | **Sb** | **01 27 10.1** | **-3.7** |
| **WVOR** | **Wild Horse Val** | **6.15** | **262** | *e*Pn | Pn | 01 25 51.1 | +3.0 |
| WVOR | | | | *e*S | Sb | 01 27 24.7 | +6.7 |
| **CCUT** | **Cedar City** | **6.48** | **201** | *e*Pn | Pn | 01 25 57.1 | +4.3 |
| **S22A** | **4UR Ranch, Cre** | **6.48** | **154** | *e*Pn | Pn | 01 25 55.6 | +2.8 |
| **DGMT** | **Dagmar** | **6.49** | **40** | *e*Pn | **Pn** | **01 25 54.6** | **+1.9** |
| DGMT | | | | *e*S | Sb | 01 27 34.7 | +7.1 |
| **R11A** | **Troy Canyon, C** | **6.57** | **218** | *e*Pn | **Pn** | **01 25 56.3** | **+2.3** |
| R11A | | | | *e*S | Sg | 01 27 40.9 | -7.2 |
| **MVCO** | **Mesa Verde** | **6.58** | **167** | *e*Pn | **Pn** | **01 25 54.0** | **-0.2** |
| MVCO | | | | *e*S | **Sg** | **01 27 42.5** | **-5.9** |
| **NEW** | **Newport** | **6.58** | **317** | *e*Pn | **Pn** | **01 25 55.0** | **+1.0** |
| NEW | | | | *e*S | **Sn** | **01 27 13.8** | **+4.8** |
| **OGNE** | **Ogallala** | **6.77** | **111** | *e*Pn | **Pn** | **01 25 56.3** | **-0.3** |
| **C09A** | **Chrisman Ranch** | **6.90** | **310** | *e*Pg | Pg | 01 26 23.4 | -5.9 |
| C09A | | | | *e*Sg | Sg | 01 27 50.5 | -8.0 |
| **SDCO** | **Great Sand Dun** | **6.96** | **146** | *e*Pn | **Pn** | **01 25 59.6** | **+0.1** |
| SDCO | | | | *e*Pg | Pg | 01 26 25.5 | -5.0 |
| SDCO | | | | *e*S | **Sg** | **01 27 54.9** | **-5.8** |
| **KSCO** | **Kaye Shedlock'** | **7.46** | **126** | *e*Pn | **Pn** | **01 26 07.3** | **+1.2** |
| KSCO | | | | *e*Pg | Pb | 01 26 29.8 | +3.2 |
| KSCO | | | | *e*S | Sg | 01 28 06.9 | -10 |
| **NVAR** | **Mina Array Bea** | **7.91** | **232** | Pn | Pn | 01 26 15.0 | +2.6 |
| | 0.2nm,0.3s,baz=48,slow=12,SNR=10.0 | | | | | | |
| NVAR | | | | Pg | **Pb** | **01 26 36.1** | **+1.6** |
| | 0.8nm,0.3s,baz=40,slow=18,SNR=10 | | | | | | |
| NVAR | | | | Lg | Lg | 01 28 26.6 | |
| | 0.3nm,0.3s,baz=44,slow=25,SNR=3.4 | | | | | | |
| NVAR | | | | LR | LR | 01 29 55.5 | |
| | comp=Z,327nm,18.1s,baz=216,slow=43 | | | | | | |
| **SHPR** | **Sheep Range** | **8.00** | **209** | *e*Pn | **Pn** | **01 26 15.2** | **+1.7** |
| **WUAZ** | **Wupatki** | **8.14** | **186** | *e*Pn | **Pn** | **01 26 16.4** | **+0.9** |
| WUAZ | | | | *e*S | Sg | 01 28 29.8 | -8.6 |
| **EDM** | **Edmonton** | **9.79** | **350** | *e*Pn | **Pn** | **01 26 37.5** | **-0.4** |
| **ECSD** | **EROS Data Cent** | **10.00** | **85** | *e*Pn | **Pn** | **01 26 40.7** | **-0.1** |
| **AGMN** | **Agassiz Nation** | **11.14** | **60** | *e*Pn | **Pn** | **01 26 57.6** | **+1.1** |
| **ULM** | **Lac du Bonnet** | **11.93** | **51** | Pn | **Pn** | **01 27 07.5** | **+0.4** |
| | 0.9nm,0.3s,baz=244,slow=14,SNR=5.4 | | | | | | |
| ULM | | | | Lg | Lg | 01 30 26.4 | |
| | 1.0nm,0.3s,baz=158,slow=18,SNR=4.0 | | | | | | |
| **WMOK** | **Wichita Mounta** | **12.65** | **131** | *e*Pn | Pn | 01 27 12.5 | -4.7 |
| **YKA** | **Yellowknife Ar** | **19.05** | **354** | P | **Pn** | **01 28 40.8** | **+0.8** |
| | 0.2nm,0.3s,baz=167,slow=11,SNR=6.4 | | | | | | |
| **ILAR** | **Eielson Array** | **29.37** | **329** | P | **P** | **01 30 22.4** | **+2.5** |
| | 0.5nm,0.6s,baz=124,slow=7.9,SNR=8.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **79.69** | **25** | P | **P** | **01 36 24.3** | **-0.4** |
| | 0.4nm,0.4s,baz=332,slow=5.2,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **89.26** | **351** | P | **P** | **01 37 12.6** | **-0.6** |
| | 0.8nm,0.8s,baz=349,slow=5.1,SNR=4.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **121.64** | **272** | PKP | **PKPdf** | **01 43 11.2** | **-0.1** |
| | 0.4nm,0.5s,baz=44,slow=2.1,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **124.26** | **269** | PKP | **PKPdf** | **01 43 15.9** | **-0.3** |
| | 0.2nm,0.5s,baz=60,slow=2.2,SNR=3.6 | | | | | | |

**MEX 26 01:30:39.8±1.0, 17°.23N×91°.64W, h10km, MD4.0, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCIG** | **Comitan** | **1.06** | **207** | *e*P | Pg | 01 30 56.6 | -3.8 |
| CCIG | | | | *i* S | Sg | 01 31 10.6 | -3.8 |
| **TGIG** | | **1.49** | **253** | *e*P | Pn | 01 31 03.7 | -3.1 |
| TGIG | | | | *i* S | Sn | 01 31 21.0 | -5.4 |
| **PCIG** | | **2.15** | **225** | *e*P | Pn | 01 31 12.6 | -3.0 |
| PCIG | | | | *i* S | Sn | 01 31 37.5 | -4.9 |

*CSEM* ***26*** *01:31:02.0, 38°.06N×25°.91W, h8km, ML2.6, After PDA*
**PDA 26 01:31:02.0±1.3, 38°.06N×25°.91W, h8km±8km, MD3.6, ML2.6, Error ellipse: s-maj=7.2km s-min=5.0km az=45.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PSET** | **Sete Cidades** | **0.28** | **148** | *i* P | Pg | 01 31 07.0 | -0.6 |
| PSET | | | | *e*S | Sg | 01 31 11.1 | -0.3 |
| PSET | | | | A | A | 01 31 12.2 | |
| | 761nm,0.2s | | | | | | |
| **PSET** | **Sete Cidades** | **0.28** | **148** | *i* P | Pg | 01 31 07.0 | -0.6 |
| PSET | | | | *e*S | Sg | 01 31 11.1 | -0.3 |
| **PDA** | **Ponta Delgada** | **0.37** | **148** | *e*P | Pg | 01 31 08.3 | -0.9 |
| PDA | | | | *e*S | Sg | 01 31 13.8 | -0.3 |
| PDA | | | | A | A | 01 31 13.9 | |
| | 490nm,0.2s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.37** | **148** | *e*P | Pg | 01 31 08.3 | -0.9 |
| PDA | | | | *e*S | Sg | 01 31 13.8 | -0.3 |
| **GRON** | **Grota Negra** | **0.42** | **134** | *e*P | Pg | 01 31 10.4 | +0.2 |
| GRON | | | | *e*S | Sg | 01 31 17.0 | +1.2 |
| GRON | | | | A | A | 01 31 21.2 | |
| | 94nm,0.2s | | | | | | |
| **BART** | **Pico Bartolome** | **0.65** | **116** | *e*P | Pg | 01 31 12.5 | -2.2 |
| BART | | | | *e*S | Sg | 01 31 21.1 | -2.2 |
| BART | | | | A | A | 01 31 26.4 | |
| | 111nm,0.5s | | | | | | |
| **BART** | **Pico Bartolome** | **0.65** | **116** | *e*P | Pg | 01 31 12.5 | -2.2 |
| BART | | | | *e*S | Sg | 01 31 21.1 | -2.2 |
| **ADH** | **Angra Heroismo** | **1.20** | **300** | *i* P | Pb | 01 31 20.4 | -4.6 |
| ADH | | | | *e*S | Sg | 01 31 34.3 | -6.3 |
| ADH | | | | A | A | 01 31 35.3 | |
| | 92nm,0.2s | | | | | | |
| **ADH** | **Angra Heroismo** | **1.20** | **300** | *i* P | Pb | 01 31 20.4 | -4.6 |
| ADH | | | | *e*S | Sg | 01 31 34.3 | -6.3 |
| **PSMA** | **Santa Maria** | **1.23** | **149** | *e*P | Pb | 01 31 21.3 | -4.3 |
| PSMA | | | | *e*S | Sb | 01 31 34.6 | -7.0 |
| PSMA | | | | A | A | 01 31 35.6 | |
| | 44nm,0.1s | | | | | | |
| **PSMN** | **Pico do Norte,** | **1.25** | **147** | *e*P | Pn | 01 31 20.9 | -4.9 |
| PSMN | | | | *e*S | Sb | 01 31 35.0 | -7.2 |
| PSMN | | | | A | A | 01 31 39.3 | |
| | 19nm,0.6s | | | | | | |
| **PSMN** | **Pico do Norte,** | **1.25** | **147** | *e*P | Pn | 01 31 20.9 | -4.9 |
| PSMN | | | | *e*S | Sb | 01 31 35.0 | -7.2 |
| **PMAN** | **Manadas** | **1.81** | **289** | *e*S | Sn | 01 31 48.8 | -7.8 |
| PMAN | | | | A | A | 01 31 51.3 | |
| | 28nm,0.2s | | | | | | |
| **PMAN** | **Manadas** | **1.81** | **289** | *e*S | Sn | 01 31 48.8 | -7.8 |
| **ROSA** | **Rosais** | **1.95** | **290** | *e*P | Pn | 01 31 30.8 | -4.6 |
| ROSA | | | | *e*S | Sn | 01 31 52.1 | -8.0 |
| | 23nm,0.2s | | | | | | |
| **ROSA** | **Rosais** | **1.95** | **290** | *e*P | Pn | 01 31 30.8 | -4.6 |
| ROSA | | | | *e*S | Sn | 01 31 52.1 | -8.0 |
| **PICO** | **Pico** | **2.03** | **283** | *e*P | Pn | 01 31 32.0 | -4.6 |
| PICO | | | | *e*S | Sn | 01 31 53.9 | -8.3 |
| **PICO** | **Pico** | **2.03** | **283** | *e*P | Pn | 01 31 32.0 | -4.6 |
| PICO | | | | *e*S | Sn | 01 31 53.9 | -8.3 |

*CSEM* ***26*** *01:41:52.1, 37°.50N×24°.70W, h5km, ML1.7, After PDA*
**PDA 26 01:41:52.1±0.8, 37°.50N×24°.70W, h5km, MD3.6, ML1.7, Error ellipse: s-maj=8.4km s-min=2.0km az=79.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BART** | **Pico Bartolome** | **0.46** | **307** | *i* P | Pg | 01 42 00.0 | -1.2 |
| BART | | | | *e*S | Sg | 01 42 06.0 | -1.3 |
| BART | | | | A | A | 01 42 08.0 | |
| | 39nm,0.1s | | | | | | |
| **BART** | **Pico Bartolome** | **0.46** | **307** | *i* P | Pg | 01 42 00.0 | -1.2 |
| BART | | | | *e*S | Sg | 01 42 06.0 | -1.3 |
| **PSMN** | **Pico do Norte,** | **0.57** | **210** | *e*P | Pg | 01 42 02.2 | -1.0 |
| PSMN | | | | *e*S | Sg | 01 42 09.2 | -1.4 |
| PSMN | | | | A | A | 01 42 16.4 | |
| | 9.0nm,0.3s | | | | | | |
| **PSMN** | **Pico do Norte,** | **0.57** | **210** | *e*P | Pg | 01 42 02.2 | -1.0 |
| PSMN | | | | *e*S | Sg | 01 42 09.2 | -1.4 |
| **PSMA** | **Santa Maria** | **0.61** | **214** | *e*P | Pg | 01 42 02.4 | -1.4 |
| PSMA | | | | *e*S | Sg | 01 42 09.9 | -1.8 |
| PSMA | | | | A | A | 01 42 12.6 | |
| | 8.1nm,0.1s | | | | | | |
| **GRON** | **Grota Negra** | **0.71** | **292** | *e*P | Pg | 01 42 02.4 | -3.5 |
| GRON | | | | *e*S | Sg | 01 42 10.3 | -4.9 |
| GRON | | | | A | A | 01 42 11.0 | |
| | 12nm,0.1s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.80** | **288** | *e*P | Pg | 01 42 05.3 | -2.2 |
| PDA | | | | *e*S | Sg | 01 42 15.2 | -2.7 |
| PDA | | | | A | A | 01 42 16.0 | |
| | 26nm,0.2s | | | | | | |
| **PDA** | **Ponta Delgada** | **0.80** | **288** | *e*P | Pg | 01 42 05.3 | -2.2 |
| PDA | | | | *e*S | Sg | 01 42 15.2 | -2.7 |

**IDC 26 01:53:53.9±2.4, 3°.68S×99°.63E, h0km, mb3.8/5, mb1 3.9/5, mb1mx3.5/52, mbtmp3.8/5, MS3.8/1, Ms1 3.8/1, ms1mx2.9/31, Error ellipse: s-maj=105.8km s-min=23.3km az=53.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **37.50** | **118** | P | P | 02 01 09.1 | -0.7 |
| | 0.5nm,0.5s,baz=289,slow=8.9,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.60** | **124** | P | P | 02 01 19.0 | -0.1 |
| | 0.2nm,0.4s,baz=296,slow=8.0,SNR=5.5 | | | | | | |
| **SONM** | **Songino Array** | **51.64** | **6** | P | P | 02 03 02.3 | -0.2 |
| | 0.8nm,0.8s,baz=187,slow=7.1,SNR=4.1 | | | | | | |
| **OPO** | **Ambohidratompo** | **53.32** | **250** | LR | LR | 02 22 52.6 | |
| | comp=Z,82nm,19.5s,baz=182,slow=33 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.74** | **350** | P | P | 02 03 52.8 | -0.6 |
| | 1.0nm,0.6s,baz=183,slow=5.8,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **85.42** | **332** | P | P | 02 06 32.8 | -0.3 |
| | 0.5nm,0.4s,baz=327,slow=35,SNR=3.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.25** | **38** | PKPbc | PKPab | 02 13 37.7 | -0.2 |
| | 0.5nm,0.6s,baz=283,slow=1.3,SNR=10.0 | | | | | | |

*ISCJB* ***26*** *02:04:11.4±0.6, 3°.71S±0°.07×99°.68E±0°.08, h10km, mb4.4/16, MS4.5/1, Error ellipse: s-maj=13.8km s-min=5.9km az=138.7*
*IDC* ***26*** *02:04:12.4±1.0, 3°.60S×99°.68E, h0km, mb4.3/10, mb1 4.4/12, mb1mx4.0/44, mbtmp4.3/12, ML4.0/2, Error ellipse: s-maj=40.1km s-min=15.6km az=53.0*
*NEIC* ***26*** *02:04:13.9±0.6, 3°.56S×99°.75E, h10km, mb4.5/5, Error ellipse: s-maj=23.2km s-min=7.1km az=49.0*
*DJA* ***26*** *02:04:13.9±2.0, 4°S±12°×10°E±1°6, h29km±13km, M4.7/8, mb5.0/5, mB6.0/1, MLv4.5/8, Mw(mB)5.7/1*
**ISC 26 02:04:13.5±0.7, 3°.68S±0°.08×99°.66E±0°.10, h10km, n41, σ1§08/37, mb4.4/16, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.98** | **21** | P | **Pb** | **02 04 30.8** | **-1.7** |
| **SISI** | **Saibi** | **2.41** | **346** | P | **Pn** | **02 04 50.9** | **-2.1** |
| **KSI** | **Kapahiang** | **2.93** | **90** | P | **Pb** | **02 05 05.4** | **-0.5** |
| **SDSI** | **Sungai Dareh** | **3.25** | **33** | P | **Pn** | **02 05 04.9** | **+0.3** |
| **PPI** | **Padang Panjang** | **3.29** | **13** | P | **Pn** | **02 05 02.9** | **-2.2** |
| **MNAI** | **Manna** | **3.36** | **102** | P | **Pn** | **02 05 04.6** | **-1.5** |
| **MNSI** | **Mandailing Nat** | **4.45** | **359** | P | **Pg** | **02 05 40.2** | **+1.4** |
| **MDSI** | **Maura Dua** | **4.58** | **100** | P | **Pn** | **02 05 23.6** | **+0.7** |
| **LWLI** | **Liwa** | **4.58** | **107** | P | **Pb** | **02 05 33.9** | **-0.2** |
| **KASI** | **Kota Agung** | **5.16** | **111** | P | **Pn** | **02 05 31.1** | **+0.3** |
| | 99nm,2.0s,0.8nm | | | | | | |
| **PSI** | **Prapat** | **6.48** | **353** | Pn | Pn | 02 05 45.7 | -3.4 |
| | 1.3nm,0.3s,baz=180,slow=6.1,SNR=2.2 | | | | | | |
| **CGJI** | **Cibinong** | **6.68** | **116** | P | **Pn** | **02 05 50.7** | **-1.0** |
| | 116nm,1.1s,0.6nm | | | | | | |
| **CNJI** | **Cibinong** | **8.26** | **116** | P | **Pn** | **02 06 11.7** | **-1.8** |
| | 117nm,0.7s | | | | | | |
| **LEM** | **Lembang** | **8.52** | **112** | Pn | **Pn** | **02 06 17.1** | **0.0** |
| | 4.5nm,0.3s,baz=162,slow=20,SNR=2.5 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.98** | **116** | P | **Pn** | **02 06 21.6** | **-1.8** |
| | 233nm,0.7s,8μm | | | | | | |
| **CMJI** | **Cimerak** | **9.65** | **115** | P | **Pn** | **02 06 31.3** | **-1.2** |
| **CMAR** | **Chiang Mai Arr** | **22.01** | **358** | P | **P** | **02 09 07.0** | **-1.1** |
| | 1.7nm,0.3s,baz=187,slow=10,SNR=4.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.31** | **261** | T | T | 02 38 14.4 | |
| | baz=82,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.32** | **261** | T | T | 02 38 10.2 | |
| | baz=82 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.33** | **261** | T | T | 02 38 16.1 | |
| | baz=82,slow=75 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.83** | **158** | T | T | 02 46 59.1 | |
| | baz=336,slow=76,SNR=22 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.84** | **158** | T | T | 02 46 58.0 | |
| | baz=336,slow=76,SNR=48 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.84** | **158** | T | T | 02 46 60.0 | |
| | baz=336,slow=76,SNR=44 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.47** | **118** | P | **P** | **02 11 27.2** | **-0.4** |
| | 4.5nm,0.7s,baz=288,slow=8.6,SNR=37 | | | | | | |
| WRA | | | | PcP | **PcP** | **02 13 47.0** | **+0.8** |
| | 0.3nm,0.8s,baz=304,slow=2.4,SNR=4.7 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.48** | **118** | *e*P | **P** | **02 11 27.9** | **+0.2** |
| | 0.6nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **38.57** | **124** | P | **P** | **02 11 37.7** | **+0.9** |
| | 4.5nm,0.8s,baz=296,slow=7.8,SNR=44 | | | | | | |
| ASAR | | | | PcP | **PcP** | **02 13 49.9** | **+0.3** |
| | 1.4nm,0.8s,baz=298,slow=2.7,SNR=8.7 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.64** | **13** | *e*P | **P** | **02 12 36.3** | **+1.9** |
| HHC | | | | S | **S** | **02 19 18.5** | **+1.3** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,20nm,1.0s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,160nm,3.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,230nm,11.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,180nm,11.1s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,140nm,9.8s | | | | | | |
| **CTAO** | **Charters Tower** | **48.22** | **114** | *e*P | **P** | **02 12 55.2** | **+0.4** |
| **TKM2** | **Tokmak 2** | **51.24** | **337** | *e*P | **P** | **02 13 18.3** | **+0.6** |
| | comp=Z,4.9nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **51.64** | **6** | P | **P** | **02 13 20.7** | **+0.2** |
| | comp=Z,3.7nm,0.8s,baz=189,slow=8.7,SNR=22 | | | | | | |
| **EKS2** | **Erkin-Say** | **51.74** | **336** | *e*P | **P** | **02 13 22.5** | **+1.2** |
| | comp=Z,4.7nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.55** | **345** | P | **P** | **02 13 27.2** | **+0.1** |
| | comp=Z,2.8nm,0.7s,baz=149,slow=8.7,SNR=13 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.79** | **28** | P | **P** | **02 13 50.4** | **-0.4** |
| | comp=Z,8.8nm,0.8s,baz=216,slow=4.6,SNR=9.4 | | | | | | |
| **KURK** | **Kurchatov** | **57.12** | **344** | *e*P | **P** | **02 13 60.0** | **-0.1** |
| | comp=Z,6.5nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.75** | **350** | P | **P** | **02 14 11.2** | **-0.3** |
| | comp=Z,7.0nm,0.7s,baz=180,slow=5.2,SNR=27 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.95** | **332** | *e*P | **P** | **02 14 39.8** | **-0.4** |
| | comp=Z,3.7nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.20** | **313** | P | **P** | **02 15 50.7** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=108,slow=7.5,SNR=4.1 | | | | | | |
| **FINES** | **FINESS Array B** | **85.44** | **332** | P | **P** | **02 16 51.9** | **+0.8** |
| | comp=Z,0.9nm,0.5s,baz=121,slow=6.4,SNR=12 | | | | | | |
| **GERES** | **GERESS Array B** | **90.08** | **319** | P | **P** | **02 17 13.6** | **-0.3** |
| | comp=Z,0.6nm,0.7s,baz=78,slow=7.0,SNR=4.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.23** | **38** | PKPbc | **PKPab** | **02 23 56.1** | **+0.3** |
| | comp=Z,2.8nm,0.6s,baz=260,slow=1.1,SNR=28 | | | | | | |
| **JCT** | **Junction City** | **147.62** | **32** | *e*PKPdf | **PKPdf** | **02 23 55.0** | **-1.3** |

*MOS* ***26*** *02:08:28.3±1.5, 41°.36S×85°.79W, h10km, mb5.4/36, MS4.8/12, Error ellipse: s-maj=16.4km s-min=8.7km az=95.2*
*ISCJB* ***26*** *02:08:28.5±0.2, 41°.48S±0°.04×85°.72W±0°.06, h10km, mb5.2/126, MS5.0/125, Error ellipse: s-maj=7.2km s-min=5.2km az=44.5*
*BJI* ***26*** *02:08:28.9, 41°.50S×85°.80W, h10km, mB5.2/13, Ms5.5/14, Ms7 5.3/14*
*IDC* ***26*** *02:08:28.0±0.5, 41°.47S×85°.86W, h0km, mb4.7/15, mb1 4.7/17, mb1mx4.7/19, mbtmp4.7/17, ML3.9/2, MS4.9/15, Ms1 4.9/15, ms1mx4.9/15, Error ellipse: s-maj=21.0km s-min=14.3km az=106.0*
*GCMT* ***26*** *02:08:29.2±0.2, 41°.42S×86°.21W, h21km, MW5.6/110, Moment Tensor Solution. s77,c113; s110,c223; Duration: 1§6 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.10±.07; $M_{\theta\theta}$0.86±.05; $M_{\phi\phi}$-0.76±.06; $M_{r\theta}$0.20±.10; $M_{\theta\phi}$-3.26±.05; $M_{\phi r}$0.10±.12; Best double couple: $M_o$3.36700×$10^{17}$ NP1:$\phi_s$263.00000°, $\delta$89.00000°, $\lambda$-176.00000°. NP2:$\phi_s$173.00000°, $\delta$86.00000°, $\lambda$-1.00000°. Principal axes: T 3.4100, Plg2.0000°, Azm38.0000°; N -0.0860, Plg86.0000°, Azm283.0000°; P -3.3230, Plg4.0000°, Azm128.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC* ***26*** *02:08:29.2±0.2, 41°.49S×85°.76W, h10km, mb5.4/116, MS5.0/107 Error ellipse: s-maj=7.8km s-min=6.2km az=71.0*

**ISC 26 02:08:29.2±0.3, 41°.48S±0°.06×85°.89W±0°.06, h10km, n713, σ1§50/631, mb5.3/126, MS5.0/126, 3C-1D, West Chile Rise**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLCA** | **Paso Flores** | **11.60** | **91** | *e*P | Pn | 02 11 18.4 | +3.5 |
| PLCA | | | | *e* | | 02 13 27.0 | |
| **PLCA** | **Paso Flores** | **11.60** | **91** | *e*Pn | Pn | 02 11 18.4 | +3.5 |
| PLCA | | | | *e*Sn | **Sn** | **02 13 27.0** | **+2.6** |
| **CFAA** | **Coronel Fontan** | **17.24** | **61** | P | **Pn** | **02 12 29.9** | **-0.3** |
| | 0.8nm,0.3s,baz=223,slow=12,SNR=46 | | | | | | |
| CFAA | | | | LR | LR | 02 17 50.7 | |
| | comp=Z,961nm,20.9s,baz=230,slow=33 | | | | | | |
| **LCO** | **Las Campanas** | **17.53** | **50** | *e*Pn | **Pn** | **02 12 32.8** | **-1.2** |
| | 545nm,2.0s | | | | | | |
| **USHA** | **Ushuaia** | **17.66** | **145** | P | **P** | **02 12 35.5** | **-0.5** |
| | 0.2nm,0.3s,baz=250,slow=11,SNR=3.8 | | | | | | |
| USHA | | | | LR | LR | 02 18 17.5 | |
| | comp=Z,6μm,18.4s,baz=286,slow=33 | | | | | | |
| **TRQA** | **Tornquist** | **18.68** | **87** | *e*Pn | **Pn** | **02 12 48.2** | **+0.4** |
| | 72nm,0.9s | | | | | | |
| **EFI** | **East Falkland** | **21.55** | **128** | *ce*P | **P** | **02 13 20.2** | **+1.7** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,176nm,1.0s | | | | | | |
| **EFI** | **East Falkland** | **21.55** | **128** | P | **P** | **02 13 20.8** | **+2.3** |
| | comp=Z,892nm,1.2s,SNR=7.6 | | | | | | |
| **EFI** | **East Falkland** | **21.55** | **128** | *e*P | **P** | **02 13 18.2** | **-0.3** |
| | comp=Z,158nm,1.0s | | | | | | |
| EFI | | | | LR | LR | | |
| | comp=Z,7μm,20.0s | | | | | | |
| **LPA** | **La Plata** | **22.87** | **82** | *e*P | **P** | **02 13 30.0** | **-2.7** |
| LPA | | | | PPP | PPP | 02 14 03.0 | |
| LPA | | | | PS | PcP | 02 17 48.0 | +25 |
| LPA | | | | sS | Sn | 02 18 01.0 | +3.6 |
| LPA | | | | SSS | SSS | 02 18 27.0 | |
| LPA | | | | SSS | SSS | 02 19 55.0 | |
| LPA | | | | SSS | SSS | 02 21 03.0 | |
| **LVC** | **Limon Verde** | **23.60** | **42** | P | **P** | **02 13 40.5** | **0.0** |
| | comp=Z,82nm,0.6s,baz=226,slow=10,SNR=26 | | | | | | |
| LVC | | | | LR | LR | 02 20 38.5 | |
| | comp=Z,20μm,19.5s,baz=238,slow=31 | | | | | | |
| **LVC** | **Limon Verde** | **23.60** | **42** | *e*P | **P** | **02 13 40.8** | **+0.3** |
| **ARE** | **Arequipa** | **27.85** | **31** | *e*P | **P** | **02 14 19.0** | **-0.3** |
| **ARE** | **Arequipa** | **27.85** | **31** | *e*P | **P** | **02 14 19.0** | **-0.3** |
| **CPUP** | **Villa Florida** | **27.95** | **66** | P | **P** | **02 14 19.5** | **-0.3** |
| | comp=Z,16nm,1.0s,baz=244,slow=8.2,SNR=15 | | | | | | |
| CPUP | | | | LR | LR | 02 24 45.9 | |
| | comp=Z,6μm,19.2s,baz=238,slow=35 | | | | | | |
| **CPUP** | **Villa Florida** | **27.95** | **66** | *e*P | **P** | **02 14 18.1** | **-1.7** |
| **CPUP** | **Villa Florida** | **27.95** | **66** | *e*P | **P** | **02 14 18.1** | **-1.7** |
| **LPAZ** | **La Paz** | **29.41** | **37** | P | **P** | **02 14 34.0** | **+0.5** |
| | comp=Z,19nm,1.0s,baz=198,slow=9.3,SNR=25 | | | | | | |
| LPAZ | | | | LR | LR | 02 24 10.3 | |
| | comp=Z,2μm,19.0s,baz=190,slow=32 | | | | | | |
| **LPAZ** | **La Paz** | **29.41** | **37** | *e*P | **P** | **02 14 33.1** | **-0.4** |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,168nm,1.9s | | | | | | |
| **LPAZ** | **La Paz** | **29.41** | **37** | *e*P | **P** | **02 14 33.1** | **-0.4** |
| | comp=Z,168nm,1.9s | | | | | | |
| **NNA** | **Nana** | **30.43** | **18** | *e*P | **P** | **02 14 40.7** | **-1.2** |
| NNA | | | | pmax | p

NVL pmax pmax
comp=Z,6.0nm,0.6s
NVL MLR MLR
comp=Z,329nm,11.0s
**VNDA Vanda 54.40 194** P **P 02 17 56.2 +0.4**
comp=Z,3.4nm,1.2s,baz=121,slow=6.4,SNR=8.3
VNDA LR LR 02 36 42.3
comp=Z,2µm,20.6s,baz=124,slow=31
**VNDA Vanda 54.40 194** eP **P 02 17 55.5 -0.3**
VNDA pmax pmax
comp=Z,10.0nm,0.9s
**VNDA Vanda 54.40 194** eP **P 02 17 55.5 -0.3**
comp=Z,9.9nm,0.9s
**TGUH Tegucigalpa,Un 55.27 358** eP **P 02 18 01.4 -1.3**
comp=Z,38nm,1.0s
**TBI Tubuai 55.43 268** eS **S 02 25 45.5 -3.3**
comp=Z,667nm,27.6s
TBI eLQ LQ 02 31 54.5
comp=Z,2µm,30.5s
TBI eLR LR 02 33 50.7
comp=Z,1µm,27.5s,baz=136
**TRIS Tristan da Cun 55.53 111** PFAKE 02 18 20.0 +16
TRIS LR LR
comp=Z,801nm,20.0s
**RCBR Riachuelo 56.82 66** PFAKE 02 18 30.0 +16
RCBR LR LR
comp=Z,2µm,20.0s
**GRGR Grenville 57.84 28** P P 02 18 17.6 -3.4
GRGR LR LR
comp=Z,2µm,20.0s
**BBGH Gun Hill 59.54 30** PFAKE 02 18 40.0 +7.2
BBGH LR LR
comp=Z,3µm,19.0s
**MTDJ Mount Denham 59.90 9** PFAKE 02 18 50.0 +15
MTDJ LR LR
comp=Z,526nm,20.0s
**FDF Fort de France 60.42 28** PFAKE 02 18 50.0 +11
FDF LR LR
comp=Z,929nm,21.0s
**TEIG Tepich 61.43 357** PFAKE 02 19 00.0 +14
TEIG LR LR
comp=Z,132nm,19.0s
**SDDR Presa de Saban 61.66 16** PFAKE 02 19 00.0 +13
SDDR LR LR
comp=Z,739nm,20.0s
**CELP Cerrillos 61.89 21** eP **P 02 18 46.8 -2.0**
**GTBY Guantanamo Bay 61.90 12** PFAKE 02 19 00.0 +11
GTBY LR LR
comp=Z,489nm,19.0s
**ANWB Willy Bob 62.94 26** PFAKE 02 19 10.0 +14
ANWB LR LR
comp=Z,849nm,22.0s
**GRTK Grand Turk 64.14 15** PFAKE 02 19 20.0 +16
GRTK LR LR
comp=Z,1µm,21.0s
**DRV Dumont d'Urvil 66.62 198** S **S 02 28 10.0 -0.1**
DRV SP **SPn 02 28 28.0 -0.7**
DRV L L 02 36 00.0
DRV R 02 40 00.0
**035Z Hargill 68.53 348** P **P 02 19 33.3 +1.6**
baz=69
**SLBS Sierra La Lagu 68.56 336** eP **P 02 19 32.5 +0.3**
comp=Z,96nm,1.8s
**MAW Mawson 68.70 168** P **P 02 19 32.2 -0.2**
comp=Z,1.4nm,0.7s,baz=216,slow=6.7,SNR=4.8
MAW LR LR 02 48 28.1
comp=Z,559nm,18.8s,baz=212,slow=35
**MAW Mawson 68.70 168** eP **P 02 19 31.5 -0.9**
MAW pmax pmax
comp=Z,2.0nm,1.0s
**MAW Mawson 68.70 168** eP **P 02 19 31.4 -0.9**
comp=Z,1.9nm,1.0s
**035A Encino 69.00 348** P **P 02 19 36.6 +2.0**
baz=69
**034A Hebbronville 69.22 348** P **P 02 19 38.6 +2.6**
baz=70
**BFZ Birch Farm 69.50 234** eP **P 02 19 37.5 -0.3**
comp=Z,61nm,1.4s
**934A Benavides 69.72 348** P **P 02 19 40.7 +1.6**
baz=70
**933A Laredo 69.85 347** P **P 02 19 40.9 +1.0**
baz=70
**SNZO South Karori 70.04 232** PFAKE 02 19 50.0 +8.9
SNZO LR LR
comp=Z,943nm,21.0s
**834A Tilden 70.24 348** P **P 02 19 43.5 +1.2**
baz=71
**833A Chaparral WMA, 70.57 347** P **P 02 19 45.4 +1.1**
baz=71
**832A Faith Ranch, C 70.62 347** P **P 02 19 45.5 +0.8**
baz=71,SNR=11
**THZ Tophouse 70.82 231** eP **P 02 19 43.9 -2.1**
comp=Z,43nm,1.3s
**736A Circle Diamond 70.84 350** P **P 02 19 47.5 +1.6**
baz=71
**735A Kenedy 70.84 349** P **P 02 19 47.3 +1.4**
baz=71
**733A Divot King Ran 70.94 348** P **P 02 19 48.5 +2.0**
baz=71
**734A La Parita Cree 70.95 348** P **P 02 19 48.2 +1.6**
baz=71
**WHZ Wether Hill Ro 70.97 225** eP **P 02 19 44.4 -2.4**
comp=Z,47nm,1.2s
**732A Laxson Ranch, 71.06 347** P **P 02 19 48.3 +1.0**
baz=71,SNR=7.9
**637A Eagle Lake 71.22 350** P **P 02 19 50.0 +1.8**
baz=72
**636A Smothers Creek 71.35 350** P **P 02 19 51.0 +2.0**
baz=72
**635A Leesville 71.36 349** P **P 02 19 50.8 +1.8**
baz=72
**633A Saathoff Ranch 71.64 348** P **P 02 19 52.4 +1.6**
baz=72,SNR=11
**HIZ Hauiti 71.68 235** eP P 02 19 48.2 -3.0
comp=Z,80nm,1.2s
**540A Vidor 71.72 353** P **P 02 19 53.0 +1.8**
baz=72
**632A Uvalde 71.79 347** P **P 02 19 53.2 +1.5**
baz=72,SNR=7.9
**631A Perdido Creek 71.83 347** P **P 02 19 52.9 +1.0**
baz=72,SNR=8.9
**CASY Casey 71.83 187** eP **P 02 19 50.4 -1.2**
comp=Z,9.3nm,0.9s
CASY LR LR
comp=Z,2µm,22.0s
**537A Green Hill Far 71.85 350** P **P 02 19 54.0 +2.0**
baz=72
**536A Bastrop 71.94 350** P **P 02 19 53.9 +1.4**
baz=72
**534A Blanco 72.09 349** P **P 02 19 54.9 +1.3**
baz=72
**BRAL Brewton 72.14 359** PFAKE 02 20 10.0 +16
BRAL LR LR
comp=Z,567nm,20.0s
**533A Kerrville 72.22 348** P **P 02 19 55.5 +1.2**
baz=73,SNR=8.4
**TX31 Lajitas Ar. Si 72.35 344** eP **P 02 19 54.5 -0.7**
**TXAR Lajitas Array 72.35 344** P **P 02 19 54.5 -0.7**
comp=Z,5.7nm,0.8s,baz=166,slow=8.5,SNR=36
TXAR LR LR 02 46 31.5
comp=Z,718nm,18.2s,baz=0.0,slow=32
**438A Sam Houston St 72.41 351** P **P 02 19 57.0 +1.6**
baz=73
**532A Rocksprings 72.42 347** P **P 02 19 56.5 +1.0**
baz=73,SNR=12
**531A Rocksprings 72.56 347** P **P 02 19 57.8 +1.4**
baz=73,SNR=24
**TIGA Tifton 72.58 2** P **P 02 19 56.9 +0.5**
baz=73
**436A Wall Ranch, Ga 72.59 350** P **P 02 19 57.7 +1.3**
baz=73
**530A J-C Ranch, Com 72.69 346** P **P 02 19 58.4 +1.3**
baz=73,SNR=18
**435B Jarrell 72.71 349** P **P 02 19 58.5 +1.4**
baz=73
**JCT Junction City 72.74 347** eP **P 02 19 58.1 +0.7**
JCT pmax pmax
comp=Z,29nm,1.1s
JCT MLR MLR
comp=Z,269nm,19.0s
**JCT Junction City 72.74 347** P **P 02 19 58.9 +1.4**
baz=73,SNR=9.3
**JCT Junction City 72.74 347** eP **P 02 19 58.1 +0.7**
comp=Z,29nm,1.1s
JCT LR LR
comp=Z,269nm,19.0s
**529A Stev Forest Ra 72.83 345** P **P 02 19 58.6 +0.7**
baz=73
**434A Burnet 72.83 349** P **P 02 19 59.3 +1.3**
baz=73,SNR=9.6
**433A Art 72.90 348** P **P 02 19 59.4 +1.1**
baz=73,SNR=13
**338A Crockett 72.99 352** P **P 02 19 59.5 +0.6**
baz=73
**337A Centerville 73.02 351** P **P 02 20 00.2 +1.3**
baz=73
**431A Sonora 73.08 347** P **P 02 20 00.6 +1.2**
baz=74,SNR=14
**432A Menard 73.13 348** P **P 02 20 00.8 +1.1**
baz=74,SNR=5.4
**335A Moody 73.18 350** P **P 02 20 01.4 +1.5**
baz=74
**336A Riesel 73.20 350** P **P 02 20 01.1 +1.0**
baz=74
**429A Davenport Ranc 73.25 346** P **P 02 20 01.0 +0.5**
baz=74
**430A Baggett Ranch, 73.29 346** P **P 02 20 01.2 +0.5**
baz=74
**NATX Nacogdoches 73.32 352** P **P 02 20 01.4 +0.6**
baz=74
**NATX Nacogdoches 73.32 352** PFAKE 02 20 10.0 +9.2
NATX LR LR
comp=Z,2µm,21.0s
**334A Lometa 73.34 349** P **P 02 20 02.0 +1.1**
baz=74,SNR=13
**333A Richland Sprin 73.44 348** P **P 02 20 02.5 +1.0**
baz=74,SNR=11
**VBMS Vicksburg 73.45 356** P **P 02 20 02.3 +0.8**
baz=74
**239A Gary 73.56 352** P **P 02 20 03.2 +1.0**
baz=74
**238A Jacksonville 73.61 352** P **P 02 20 03.5 +1.0**
baz=74
**332A Millersview 73.62 348** P **P 02 20 02.4 -0.1**
baz=74
**331A San Angelo 73.66 347** P **P 02 20 03.8 +1.0**
baz=74,SNR=9.1
**WHTX Lake Whitney 73.88 350** P **P 02 20 04.8 +0.8**
baz=74
**WHTX Lake Whitney 73.88 350** eP **P 02 20 05.1 +1.1**
comp=Z,27nm,0.9s
**330A Mertzon 73.88 346** P **P 02 20 05.3 +1.2**
baz=74,SNR=6.9
**234A Clairette 73.98 349** P **P 02 20 06.3 +1.6**
baz=74,SNR=9.8
**232A Coleman 74.10 348** P **P 02 20 06.7 +1.3**
baz=74,SNR=9.6
**329A Wagon Wheel Ra 74.11 346** P **P 02 20 07.0 +1.5**
baz=74,SNR=6.4
**233A Rising Star 74.11 349** P **P 02 20 06.5 +1.1**
baz=74,SNR=7.2
**LRAL Lakeview Retre 74.15 359** eP **P 02 20 05.0 -0.6**
comp=Z,16nm,0.9s
**139A Bunkhouse Ranc 74.21 353** P **P 02 20 06.9 +1.0**
baz=75
**136A Ennis 74.24 351** P **P 02 20 07.1 +1.0**
baz=75
**231A Bronte 74.25 347** P **P 02 20 07.5 +1.2**
baz=75
**138A Matatall Enter 74.26 352** P **P 02 20 07.1 +0.9**
baz=75
**137A Heron Place, G 74.27 351** P **P 02 20 07.6 +1.3**
baz=75
**230A Sterling City 74.34 347** P **P 02 20 08.1 +1.3**
baz=75
**NHSC New Hope 74.40 5** PFAKE 02 20 20.0 +13
NHSC LR LR
comp=Z,587nm,20.0s
**134A White-Moore Ra 74.54 349** P **P 02 20 09.0 +1.1**
baz=75,SNR=9.4
**OUZ Omahuta 74.54 237** eP P 02 20 04.2 -3.9
comp=Z,64nm,1.6s
**229A Bryant Ranch, 74.54 346** P **P 02 20 09.2 +1.2**
baz=75,SNR=6.2
**GOGA Godfrey 74.55 2** eP **P 02 20 07.6 -0.3**
GOGA pmax pmax
comp=Z,63nm,1.7s
GOGA MLR MLR
comp=Z,553nm,19.0s
**GOGA Godfrey 74.55 2** eP **P 02 20 07.6 -0.3**
comp=Z,63nm,1.7s
GOGA LR LR
comp=Z,553nm,19.0s
**133A Hamilton Ranch 74.69 349** P **P 02 20 09.4 +0.6**
baz=75
**Z39A Irene McRaven, 74.74 353** P **P 02 20 09.7 +0.7**
baz=75
**ABTX Abilene, Hawle 74.82 348** P **P 02 20 09.9 +0.4**
baz=75
**ABTX Abilene, Hawle 74.82 348** eP **P 02 20 10.4 +0.9**
comp=Z,152nm,2.2s
**Z38A Mt. Pleasant 74.83 352** P **P 02 20 09.8 +0.3**
baz=75
**228A UT Block 9, Go 74.83 345** P **P 02 20 10.1 +0.4**
baz=75
**131A Roby 74.99 347** P **P 02 20 11.6 +1.1**
baz=75,SNR=6.4
**MNTX Cornudas Mount 75.00 343** P **P 02 20 11.5 +0.9**
baz=75
**MNTX Cornudas Mount 75.00 343** eP **P 02 20 11.2 +0.6**
comp=Z,5.2nm,0.8s
MNTX LR LR
comp=Z,875nm,20.0s
**130A Snyder 75.01 347** P **P 02 20 11.6 +1.0**
baz=75
**Z36A Blue Ridge 75.01 351** P **P 02 20 12.2 +1.7**
baz=75,SNR=6.8
**Z35A Perchaven, San 75.17 350** P **P 02 20 12.7 +1.2**
baz=76
**129A Stewart Farms, 75.20 346** P **P 02 20 12.8 +1.0**
baz=76
**Z34A Collier Ranch, 75.30 350** P **P 02 20 13.0 +0.8**
baz=76
**128A Castleberry Fa 75.30 346** P **P 02 20 13.1 +0.7**
baz=76
**Z33A Whitaker Ranch 75.33 349** P **P 02 20 13.5 +1.0**
baz=76,SNR=7.4
**Y39A Lockesburg 75.42 353** P **P 02 20 13.4 +0.4**
baz=76
**Z32A Haskell 75.46 348** P **P 02 20 13.7 +0.5**
baz=76
**Y38A Idabel 75.48 352** P **P 02 20 14.8 +1.5**
baz=76
**Z31A Sharp Cattle R 75.58 348** P **P 02 20 14.4 +0.5**
baz=76,SNR=16
**Y36A Durant 75.61 351** P **P 02 20 15.2 +1.2**
baz=76
**Y37A Hugo 75.62 352** P **P 02 20 15.4 +1.3**
baz=76
**OXF Oxford 75.69 357** eP **P 02 20 13.3 -1.1**
OXF pmax pmax
comp=Z,30nm,0.8s
**OXF Oxford 75.69 357** eP **P 02 20 13.3 -1.1**
comp=Z,30nm,0.8s
**Z30A Sanderson Ranc 75.71 347** P **P 02 20 15.8 +1.1**
baz=76
**Y35A Marietta 75.71 350** P **P 02 20 15.9 +1.3**
baz=76
**Z29A Hungry Hill Ra 75.78 346** P **P 02 20 16.3 +1.2**
baz=76
**Y34A Reagan Ranch, 75.86 350** P **P 02 20 16.7 +1.3**
baz=76
**MIAR Mount Ida 75.98 353** eP **P 02 20 17.2 +1.1**
MIAR pmax pmax
comp=Z,18nm,1.2s
MIAR MLR MLR
comp=Z,490nm,19.0s
**MIAR Mount Ida 75.98 353** P **P 02 20 17.4 +1.3**
baz=76
**MIAR Mount Ida 75.98 353** eP **P 02 20 17.2 +1.1**
comp=Z,18nm,1.2s
MIAR LR LR
comp=Z,490nm,19.0s
**Y33A Hilltop Ranch, 76.02 349** P **P 02 20 17.6 +1.2**
baz=76
**BBSR BB Station 76.04 18** PFAKE 02 20 30.0 +14
BBSR LR LR
comp=Z,412nm,22.0s
**Y32A R-V Farms, Ver 76.14 348** P **P 02 20 18.0 +0.9**
baz=76
**X35A Drake 76.19 351** P **P 02 20 18.2 +0.9**
baz=77
**X37A Clayton 76.20 352** P **P 02 20 18.6 +1.3**
baz=77
**X38A Whitesboro 76.22 352** P **P 02 20 18.6 +1.2**
baz=77
**Y31A Rekieta Farm, 76.23 348** P **P 02 20 18.6 +1.0**
baz=77,SNR=6.5
**Y30A Stafford Cattl 76.25 347** P **P 02 20 18.2 +0.5**
baz=77
**X36A Centrahoma 76.28 351** P **P 02 20 18.3 +0.4**
baz=77,SNR=9.7
**SWET Sewanee 76.32 360** eP **P 02 20 16.5 -1.6**
comp=Z,29nm,1.0s
**121A Cookes Peak, D 76.36 341** P **P 02 20 19.3 +0.8**
baz=77
**121A Cookes Peak, D 76.36 341** eP **P 02 20 18.7 +0.1**
comp=Z,7.7nm,1.0s
**KMSC Kings Mountain 76.36 4** P **P 02 20 18.8 +0.5**
baz=77
**KMSC Kings Mountain 76.36 4** eP **P 02 20 18.7 +0.5**
comp=Z,26nm,1.0s
**Y29A Porterfield Fa 76.36 347** P **P 02 20 19.7 +1.3**
baz=77
**X34A Smith Ranch, M 76.50 350** P **P 02 20 20.1 +1.0**
baz=77,SNR=6.8
**Y28A McKinney Farm, 76.51 346** P **P 02 20 20.2 +0.9**
baz=77
**X32A Elmer 76.53 349** P **P 02 20 20.5 +1.3**
baz=77
**X33A Lawton 76.53 349** P **P 02 20 20.3 +1.0**
baz=77
**CPCT Cooper Cave 76.56 1** eP **P 02 20 18.5 -0.9**
**W38A Poteau 76.59 353** P **P 02 20 20.8 +1.3**
baz=77
**CNNC Cliffs of the 76.70 7** PFAKE 02 20 30.0 +10
CNNC LR LR
comp=Z,627nm,20.0s
**WMOK Wichita Mounta 76.76 349** eP **P 02 20 20.8 +0.2**
WMOK pmax pmax
comp=Z,34nm,1.6s
WMOK MLR MLR
comp=Z,388nm,21.0s
**WMOK Wichita Mounta 76.76 349** eP **P 02 20 20.8 +0.2**
comp=Z,34nm,1.6s
WMOK LR LR
comp=Z,388nm,21.0s
**TKL Tuckaleechee C 76.79 2** eP **P 02 20 19.1 -1.6**
**TKL Tuckaleechee C 76.79 2** eP **P 02 20 19.1 -1.6**
**X30A Coker Ranch, T 76.80 347** P **P 02 20 21.8 +1.0**
baz=77,SNR=9.0
**W36A Wetumka 76.83 351** P **P 02 20 22.4 +1.4**
baz=77
**X31A McDonald Ranch 76.84 348** P **P 02 20 22.4 +1.4**
baz=77
**W35A Tecumseh 76.92 351** P **P 02 20 22.7 +1.3**
baz=77
**TUC Tucson 76.93 339** eP **P 02 20 22.3 +0.6**
TUC pmax pmax
comp=Z,95nm,2.5s
**TUC Tucson 76.93 339** eP **P 02 20 22.3 +0.6**
comp=Z,95nm,2.5s
**X29A Tulia 76.94 347** P **P 02 20 23.2 +1.5**
baz=77
**X28A Dimmitt 77.10 346** P **P 02 20 23.7 +1.1**
baz=78
**W34A Bridge Creek, 77.12 350** P **P 02 20 23.7 +1.1**
baz=78,SNR=5.5
**W34A Bridge Creek, 77.12 350** eP **P 02 20 22.9 +0.3**
comp=Z,104nm,1.6s
**W33A Caddo, Fort Co 77.13 349** P **P 02 20 23.8 +1.1**
baz=78,SNR=7.1
**214A Organ Pipe Nat 77.17 337** P **P 02 20 24.3 +1.3**
baz=78
**214A Organ Pipe Nat 77.17 337** eP **P 02 20 23.5 +0.5**
comp=Z,53nm,0.9s
**W32A Sentinel 77.21 349** P **P 02 20 24.6 +1.5**
baz=78,SNR=8.9
**WVT Waverly 77.25 358** eP **P 02 20 22.3 -0.9**
WVT pmax pmax
comp=Z,16nm,1.0s
**WVT Waverly 77.25 358** eP **P 02 20 22.3 -0.9**
comp=Z,16nm,1.0s
**AMTX Amarillo 77.36 347** P **P 02 20 25.5 +1.4**
baz=78
**AMTX Amarillo 77.36 347** eP **P 02 20 24.3 +0.3**
comp=Z,37nm,1.0s
**V38A Canehill 77.36 353** P **P 02 20 25.3 +1.4**
baz=78
**W31A Holland Ranch, 77.38 348** P **P 02 20 25.2 +1.1**
baz=78
**GLAT Glass 77.43 357** eP **P 02 20 22.7 -1.6**
**V36A Jenks 77.44 352** P **P 02 20 25.8 +1.4**
baz=78,SNR=6.5
**V37A Hulbert 77.45 352** P **P 02 20 25.6 +1.2**
baz=78,SNR=7.3
**V35A Meyer Ranch, C 77.52 351** P **P 02 20 26.0 +1.2**
baz=78
**TUL1 Tulsa 77.55 352** P **P 02 20 25.7 +0.8**
baz=78,SNR=7.9
**TUL1 Tulsa 77.55 352** eP **P 02 20 24.9 0.0**
comp=Z,27nm,0.8s
**W29A Amraillo 77.59 347** P **P 02 20 26.6 +1.3**
baz=78
**Y22D IRIS PASSCAL I 77.63 342** P **P 02 20 26.8 +1.2**
baz=78
**BNM Barren Site 77.64 343** eP **P 02 20 28.2 +2.4**
**V34A Guthrie 77.67 350** P **P 02 20 27.2 +1.5**
baz=78
**V34A Guthrie 77.67 350** eP **P 02 20 26.1 +0.4**
comp=Z,289nm,2.4s
**TZTN Tazewell 77.67 2** eP **P 02 20 25.8 +0.1**
comp=Z,18nm,1.3s
**V33A Lossen Ranch, 77.76 350** P **P 02 20 27.7 +1.5**
baz=78
**V32A Arapaho 77.77 349** P **P 02 20 27.3 +1.1**
baz=78,SNR=7.5
**LPM Los Pinos Moun 77.79 343** eP **P 02 20 27.2 +0.6**
**U38A Gravette 77.93 353** P **P 02 20 28.2 +1.1**
baz=78,SNR=8.1
**V31A Spring Creek L 77.94 348** P **P 02 20 28.4 +1.2**
baz=78
**U37A Salina 77.97 352** P **P 02 20 28.3 +1.0**
baz=78,SNR=6.5
**PBMO Poplar Bluff 77.99 356** eP **P 02 20 27.1 -0.3**
comp=Z,15nm,0.9s
**LAZ Ladron 78.00 342** eP **P 02 20 27.9 +0.2**
**U36A Ologah 78.02 352** P **P 02 20 29.0 +1.4**
baz=78,SNR=6.2
**U35A Pawnee 78.11 351** P **P 02 20 29.2 +1.2**
baz=78
**U34A Anderson Ranch 78.27 350** P **P 02 20 30.4 +1.4**
baz=79,SNR=6.1
**U34A Anderson Ranch 78.27 350** eP **P 02 20 29.5 +0.6**
comp=Z,101nm,1.6s
**V28A Channing 78.30 346** P **P 02 20 30.8 +1.5**
baz=79
**ANMO Albuquerque 78.36 343** eP **P 02 20 30.1 +0.4**
ANMO pmax pmax
comp=Z,25nm,0.9s
ANMO MLR MLR
comp=Z,346nm,19.0s
**ANMO Albuquerque 78.36 343** eP **P 02 20 30.1 +0.4**
comp=Z,26nm,0.9s
ANMO LR LR
comp=Z,346nm,19.0s
**U32A Winter Ranch, 78.41 349** P **P 02 20 31.5 +1.8**
baz=79
**V27A Dan Oppiter Fa 78.42 346** P **P 02 20 31.7 +1.8**
baz=79
**BLA Blacksburg 78.47 4** PFAKE 02 20 40.0 +10
BLA LR LR
comp=Z,590nm,22.0s
**T35A Sooner Cattle 78.62 351** P **P 02 20 32.8 +1.9**
baz=79,SNR=9.6
**T37A Cheneyville 18 78.66 353** P **P 02 20 32.5 +1.4**
baz=79,SNR=9.2
**T36A Boggs Farm, Ca 78.69 352** P **P 02 20 32.9 +1.7**
baz=79,SNR=11
**U30A WK&E Inc. Balk 78.80 348** P **P 02 20 33.4 +1.4**
baz=79
**T34A McClaskey Farm 78.81 351** P **P 02 20 33.4 +1.5**
baz=79
**GLA Glamis 78.81 336** eP **P 02 20 31.8 -0.2**
GLA pmax pmax
comp=Z,18nm,1.0s
**GLA Glamis 78.81 336** P **P 02 20 33.4 +1.4**
baz=79
**GLA Glamis 78.81 336** eP **P 02 20 31.8 -0.2**
comp=Z,18nm,1.0s
**U29A Oasis Ranch, S 78.82 347** P **P 02 20 33.5 +1.4**
baz=79
**SIUC Southern Illin 78.87 357** eP **P 02 20 32.2 -0.1**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,64nm,1.6s | | | | | | | | |
| T33A | **Patterson Ranc** | 79.00 | 350 | P | | P | | 02 20 34.7 | +1.8 |
| | baz=79 | | | | | | | | |
| SWSC | **Sam W. Stewart** | 79.01 | 335 | P | | P | | 02 20 34.6 | +1.5 |
| | baz=79 | | | | | | | | |
| BAR | **Barrett** | 79.06 | 334 | eP | | P | | 02 20 34.0 | +0.6 |
| | comp=Z,17nm,1.1s | | | | | | | | |
| U27A | **Thompson Grove** | 79.06 | 346 | P | | P | | 02 20 35.2 | +1.7 |
| | baz=80,SNR=7.3 | | | | | | | | |
| USIN | **University of** | 79.08 | 359 | eP | | P | | 02 20 32.6 | -0.7 |
| | comp=Z,31nm,0.8s | | | | | | | | |
| MONP | **Monument Peak** | 79.17 | 334 | P | | P | | 02 20 35.5 | +1.3 |
| | baz=80 | | | | | | | | |
| S37A | **Fort Scott** | 79.28 | 353 | P | | P | | 02 20 35.9 | +1.4 |
| | baz=80 | | | | | | | | |
| T30A | **Plains** | 79.29 | 348 | P | | P | | 02 20 36.5 | +1.8 |
| | baz=80 | | | | | | | | |
| CCM | **Cathedral Cave** | 79.31 | 356 | eP | | P | | 02 20 33.1 | -1.5 |
| CCM | | | | pmax | | pmax | | | |
| | comp=Z,29nm,0.9s | | | | | | | | |
| CCM | **Cathedral Cave** | 79.31 | 356 | eP | | P | | 02 20 33.1 | -1.5 |
| | comp=Z,29nm,0.9s | | | | | | | | |
| W18A | **Petrified Fore** | 79.31 | 340 | P | | P | | 02 20 35.9 | +1.0 |
| | baz=80 | | | | | | | | |
| W18A | **Petrified Fore** | 79.31 | 340 | eP | | P | | 02 20 30.9 | -4.1 |
| | comp=Z,15nm,0.9s | | | | | | | | |
| S36A | **Lake Cedric, C** | 79.32 | 352 | P | | P | | 02 20 36.1 | +1.4 |
| | baz=80,SNR=12 | | | | | | | | |
| WCI | **Wyandotte Cave** | 79.33 | 360 | eP | | P | | 02 20 32.9 | -1.9 |
| WCI | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| WCI | **Wyandotte Cave** | 79.33 | 360 | eP | | P | | 02 20 32.9 | -1.9 |
| | comp=Z,14nm,0.8s | | | | | | | | |
| S35A | **Otter Creek Ra** | 79.36 | 352 | P | | P | | 02 20 36.1 | +1.2 |
| | baz=80 | | | | | | | | |
| Y12C | **Blythe** | 79.36 | 336 | P | | P | | 02 20 37.2 | +2.2 |
| | baz=80,SNR=7.5 | | | | | | | | |
| S34A | **Willow Spring** | 79.47 | 351 | P | | P | | 02 20 37.5 | +2.0 |
| | baz=80 | | | | | | | | |
| S33A | **Kaszmaul Farm,** | 79.47 | 350 | P | | P | | 02 20 37.3 | +1.8 |
| | baz=80 | | | | | | | | |
| T29A | **Hugoton** | 79.52 | 348 | P | | P | | 02 20 37.7 | +1.8 |
| | baz=80 | | | | | | | | |
| BC3 | **Big Chuckawall** | 79.56 | 335 | P | | P | | 02 20 37.4 | +1.2 |
| | baz=80 | | | | | | | | |
| T28A | **Walsh** | 79.62 | 347 | P | | P | | 02 20 38.1 | +1.6 |
| | baz=80,SNR=10 | | | | | | | | |
| T27A | **Campo** | 79.67 | 346 | P | | P | | 02 20 38.6 | +1.8 |
| | baz=80,SNR=8.7 | | | | | | | | |
| CBN | **Corbin** | 79.68 | 7 | PFAKE | | | | 02 20 50.0 | +13 |
| CBN | | | | LR | | LR | | | |
| | comp=Z,484nm,20.0s | | | | | | | | |
| S31A | **Mullinville** | 79.69 | 349 | P | | P | | 02 20 38.5 | +1.7 |
| | baz=80 | | | | | | | | |
| S32A | **Newby Ranch, P** | 79.70 | 350 | P | | P | | 02 20 38.7 | +1.9 |
| | baz=80 | | | | | | | | |
| PDMCI | **Parker Dam,Lak** | 79.75 | 337 | P | | P | | 02 20 38.9 | +1.7 |
| | baz=80 | | | | | | | | |
| R37A | **Teagarden Farm** | 79.83 | 353 | P | | P | | 02 20 39.0 | +1.5 |
| | baz=80 | | | | | | | | |
| PFO | **Pinyon Flat Ob** | 79.84 | 334 | eP | | P | | 02 20 38.5 | +0.7 |
| PFO | | | | pmax | | pmax | | | |
| | comp=Z,25nm,1.3s | | | | | | | | |
| PFO | | | | MLR | | MLR | | | |
| | comp=Z,763nm,21.0s | | | | | | | | |
| PFO | **Pinyon Flat Ob** | 79.84 | 334 | eP | | P | | 02 20 38.5 | +0.7 |
| | comp=Z,25nm,1.3s | | | | | | | | |
| PFO | | | | LR | | LR | | | |
| | comp=Z,763nm,21.0s | | | | | | | | |
| OLIL | **Olney** | 79.86 | 358 | eP | | P | | 02 20 36.6 | -1.0 |
| | comp=Z,30nm,1.0s | | | | | | | | |
| S30A | **Montezuma** | 79.86 | 348 | P | | P | | 02 20 38.9 | +1.2 |
| | baz=80 | | | | | | | | |
| R36A | **Gordon, Harris** | 79.91 | 352 | P | | P | | 02 20 39.1 | +1.3 |
| | baz=80 | | | | | | | | |
| IRM | **Iron Mountain** | 79.93 | 336 | P | | P | | 02 20 39.6 | +1.5 |
| | baz=80 | | | | | | | | |
| T26A | **Comanche Natio** | 79.93 | 346 | P | | P | | 02 20 40.2 | +1.9 |
| | baz=80,SNR=15 | | | | | | | | |
| S29A | **Ulysses** | 79.94 | 348 | P | | P | | 02 20 39.6 | +1.4 |
| | baz=80 | | | | | | | | |
| R35A | **Emporia Munici** | 79.98 | 352 | P | | P | | 02 20 39.9 | +1.6 |
| | baz=80 | | | | | | | | |
| S28A | **Manter** | 80.04 | 347 | P | | P | | 02 20 40.4 | +1.6 |
| | baz=80,SNR=9.4 | | | | | | | | |
| BELC | **Belle Mtn. Jos** | 80.05 | 335 | P | | P | | 02 20 40.3 | +1.4 |
| | baz=80 | | | | | | | | |
| T25A | **Trinidad** | 80.05 | 345 | P | | P | | 02 20 41.2 | +2.2 |
| | baz=80,SNR=19 | | | | | | | | |
| T25A | **Trinidad** | 80.05 | 345 | eP | | P | | 02 20 39.8 | +0.8 |
| | comp=Z,231nm,2.1s | | | | | | | | |
| MURC | **Murrieta** | 80.07 | 334 | P | | P | | 02 20 40.4 | +1.5 |
| | baz=80 | | | | | | | | |
| R34A | **Isabella, Hill** | 80.07 | 351 | P | | P | | 02 20 40.2 | +1.4 |
| | baz=80 | | | | | | | | |
| WUAZ | **Wupatki** | 80.11 | 339 | P | | P | | 02 20 41.5 | +2.2 |
| | baz=80,SNR=8.9 | | | | | | | | |
| WUAZ | **Wupatki** | 80.11 | 339 | eP | | P | | 02 20 40.2 | +0.9 |
| | comp=Z,28nm,1.3s | | | | | | | | |
| R33A | **Olander Ranch,** | 80.17 | 350 | P | | P | | 02 20 41.2 | +1.9 |
| | baz=81 | | | | | | | | |
| BLO | **Bloomington** | 80.27 | 360 | eP | | P | | 02 20 38.8 | -1.0 |
| BLO | | | | pmax | | pmax | | | |
| | comp=Z,32nm,0.8s | | | | | | | | |
| BLO | **Bloomington** | 80.27 | 360 | eP | | P | | 02 20 38.8 | -1.0 |
| | comp=Z,32nm,0.8s | | | | | | | | |
| SUR | **Sutherland** | 80.27 | 125 | PFAKE | | | | 02 20 50.0 | +9.4 |
| SUR | | | | LR | | LR | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| S26A | **Kim** | 80.35 | 346 | P | | P | | 02 20 42.5 | +2.1 |
| | baz=81,SNR=9.4 | | | | | | | | |
| Q37A | **Longview Farm,** | 80.35 | 353 | P | | P | | 02 20 41.2 | +0.9 |
| | baz=81 | | | | | | | | |
| R31A | **Burdett** | 80.36 | 349 | P | | P | | 02 20 42.1 | +1.7 |
| | baz=81 | | | | | | | | |
| R32A | **Long Quarter,** | 80.38 | 350 | P | | P | | 02 20 42.1 | +1.6 |
| | baz=81 | | | | | | | | |
| R30A | **Dighton** | 80.46 | 349 | P | | P | | 02 20 42.4 | +1.4 |
| | baz=81 | | | | | | | | |
| Q35A | **Mercer Eighty,** | 80.49 | 352 | P | | P | | 02 20 42.5 | +1.5 |
| | baz=81 | | | | | | | | |
| Q36A | **Arnold C. Orve** | 80.53 | 352 | P | | P | | 02 20 42.8 | +1.5 |
| | baz=81 | | | | | | | | |
| Q34A | **Chapman** | 80.65 | 351 | P | | P | | 02 20 43.3 | +1.4 |
| | baz=81 | | | | | | | | |
| GMRC | **Granite Mounta** | 80.66 | 336 | P | | P | | 02 20 43.4 | +1.1 |
| | baz=81,SNR=16 | | | | | | | | |
| R29A | **Marienthal** | 80.73 | 348 | P | | P | | 02 20 44.1 | +1.7 |
| | baz=81 | | | | | | | | |
| R28A | **Tribune** | 80.76 | 347 | P | | P | | 02 20 44.6 | +2.0 |
| | baz=81,SNR=8.8 | | | | | | | | |
| KSU1 | **Kansas State U** | 80.79 | 352 | P | | P | | 02 20 44.3 | +1.6 |
| | baz=81 | | | | | | | | |
| KSU1 | **Kansas State U** | 80.79 | 352 | eP | | P | | 02 20 42.6 | 0.0 |
| | comp=Z,81nm,1.6s | | | | | | | | |
| KSU1 | | | | LR | | LR | | | |
| | comp=Z,454nm,20.0s | | | | | | | | |
| BFSC | **Mount Baldy Ra** | 80.81 | 334 | P | | P | | 02 20 44.4 | +1.3 |
| | baz=81 | | | | | | | | |
| Q33A | **Connelly Farm,** | 80.83 | 351 | P | | P | | 02 20 44.5 | +1.6 |
| | baz=81 | | | | | | | | |
| SDCO | **Great Sand Dun** | 80.86 | 344 | P | | P | | 02 20 45.0 | +1.6 |
| | baz=81,SNR=16 | | | | | | | | |
| SDCO | **Great Sand Dun** | 80.86 | 344 | eP | | P | | 02 20 43.5 | +0.2 |
| | comp=Z,94nm,2.3s | | | | | | | | |
| SDCO | | | | LR | | LR | | | |
| | comp=Z,646nm,21.0s | | | | | | | | |
| R27A | **Eads** | 80.87 | 347 | P | | P | | 02 20 45.0 | +1.7 |
| | baz=81,SNR=6.8 | | | | | | | | |
| CBKS | **Cedar Bluff** | 80.90 | 349 | P | | P | | 02 20 45.0 | +1.7 |
| | baz=81 | | | | | | | | |
| CBKS | **Cedar Bluff** | 80.90 | 349 | PFAKE | | | | 02 20 50.0 | +6.7 |
| CBKS | | | | LR | | LR | | | |
| | comp=Z,566nm,20.0s | | | | | | | | |
| Q32A | **Meitler Ranch,** | 80.92 | 350 | P | | P | | 02 20 44.8 | +1.5 |
| | baz=81 | | | | | | | | |
| HEC | **Hector,Ludlow** | 80.92 | 335 | P | | P | | 02 20 45.2 | +1.7 |
| | baz=81 | | | | | | | | |
| MVCO | **Mesa Verde** | 81.00 | 342 | P | | P | | 02 20 46.4 | +2.3 |
| | baz=81,SNR=8.9 | | | | | | | | |
| MVCO | **Mesa Verde** | 81.00 | 342 | eP | | P | | 02 20 43.3 | -0.8 |
| | comp=Z,145nm,2.1s | | | | | | | | |
| MVCO | | | | LR | | LR | | | |
| | comp=Z,688nm,20.0s | | | | | | | | |
| Q31A | **Ellis** | 81.04 | 349 | P | | P | | 02 20 45.4 | +1.3 |
| | baz=82 | | | | | | | | |
| Q30A | **Quinter** | 81.13 | 349 | P | | P | | 02 20 45.8 | +1.3 |
| | baz=82 | | | | | | | | |
| S22A | **4UR Ranch, Cre** | 81.14 | 343 | P | | P | | 02 20 46.6 | +1.7 |
| | baz=82,SNR=20 | | | | | | | | |
| S22A | **4UR Ranch, Cre** | 81.14 | 343 | eP | | P | | 02 20 45.7 | +0.8 |
| | comp=Z,204nm,2.1s | | | | | | | | |
| P35A | **Duane Minner,** | 81.15 | 352 | P | | P | | 02 20 45.9 | +1.4 |
| | baz=82 | | | | | | | | |
| BLG | **Laguna Peak** | 81.17 | 333 | P | | P | | 02 20 45.6 | +0.8 |
| | baz=82 | | | | | | | | |
| P33A | **Williams Farm,** | 81.25 | 351 | P | | P | | 02 20 46.7 | +1.6 |
| | baz=82 | | | | | | | | |
| P34A | **Walnut Farm, R** | 81.26 | 351 | P | | P | | 02 20 46.2 | +1.1 |
| | baz=82,SNR=15 | | | | | | | | |
| BSC | **Santa Cruz Isl** | 81.26 | 332 | P | | P | | 02 20 46.7 | +1.5 |
| | baz=82 | | | | | | | | |
| TUQ | **Turquoise Moun** | 81.35 | 336 | P | | P | | 02 20 47.2 | +1.4 |
| | baz=82 | | | | | | | | |
| ACSO | **Alum Creek Sta** | 81.37 | 2 | eP | | P | | 02 20 44.8 | -0.9 |
| | comp=Z,107nm,1.9s | | | | | | | | |
| ACSO | | | | LR | | LR | | | |
| | comp=Z,820nm,20.0s | | | | | | | | |
| SFIN | **Scholer Farm** | 81.48 | 359 | P | | P | | 02 20 47.1 | +0.9 |
| | baz=82 | | | | | | | | |
| SFIN | **Scholer Farm** | 81.48 | 359 | eP | | P | | 02 20 45.3 | -1.0 |
| | comp=Z,142nm,2.5s | | | | | | | | |
| EDW2 | **Edwards Air Fo** | 81.50 | 334 | P | | P | | 02 20 48.3 | +1.7 |
| | baz=82 | | | | | | | | |
| GSC | **Goldstone** | 81.51 | 335 | eP | | P | | 02 20 47.5 | +0.9 |
| GSC | | | | pmax | | pmax | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| GSC | **Goldstone** | 81.51 | 335 | P | | P | | 02 20 49.3 | +2.6 |
| | baz=82,SNR=6.4 | | | | | | | | |
| GSC | **Goldstone** | 81.51 | 335 | eP | | P | | 02 20 47.5 | +0.9 |
| | comp=Z,16nm,1.0s | | | | | | | | |
| P32A | **Huiting Farm,** | 81.54 | 350 | P | | P | | 02 20 48.6 | +2.0 |
| | baz=82 | | | | | | | | |
| P31A | **Stockton** | 81.55 | 349 | P | | P | | 02 20 48.6 | +2.0 |
| | baz=82 | | | | | | | | |
| KSCO | **Kaye Shedlock'** | 81.55 | 347 | P | | P | | 02 20 48.9 | +2.1 |
| | baz=82 | | | | | | | | |
| KSCO | **Kaye Shedlock'** | 81.55 | 347 | eP | | P | | 02 20 49.3 | +2.5 |
| | comp=Z,45nm,1.4s | | | | | | | | |
| O36A | **Bolckow** | 81.65 | 353 | P | | P | | 02 20 48.4 | +1.3 |
| | baz=82 | | | | | | | | |
| P30A | **Selden** | 81.69 | 349 | P | | P | | 02 20 49.2 | +1.7 |
| | baz=82 | | | | | | | | |
| HDIL | **Hopedale** | 81.71 | 357 | PFAKE | | | | 02 21 00.0 | +13 |
| HDIL | | | | LR | | LR | | | |
| | comp=Z,521nm,20.0s | | | | | | | | |
| P29A | **Atwood** | 81.85 | 348 | P | | P | | 02 20 49.9 | +1.5 |
| | baz=82 | | | | | | | | |
| O33A | **Hebron** | 81.86 | 351 | P | | P | | 02 20 49.9 | +1.6 |
| | baz=82 | | | | | | | | |
| O34A | **Beatrice** | 81.87 | 352 | P | | P | | 02 20 49.5 | +1.1 |
| | baz=82 | | | | | | | | |
| O35A | **Humboldt** | 81.87 | 352 | P | | P | | 02 20 50.0 | +1.6 |
| | baz=82 | | | | | | | | |
| SHOC | **Shoshone** | 81.89 | 335 | P | | P | | 02 20 49.8 | +1.2 |
| | baz=82 | | | | | | | | |
| PV01 | **Paradox Valley** | 81.89 | 342 | eP | | P | | 02 20 49.6 | +0.8 |
| LRMC | **Laurel Mountai** | 81.95 | 334 | P | | P | | 02 20 50.5 | +1.5 |
| | baz=82 | | | | | | | | |
| Q24A | **Divide** | 81.96 | 345 | P | | P | | 02 20 51.2 | +2.0 |
| | baz=82,SNR=9.3 | | | | | | | | |
| Q24A | **Divide** | 81.96 | 345 | eP | | P | | 02 20 47.7 | -1.6 |
| | comp=Z,148nm,2.3s | | | | | | | | |
| PV05 | **Paradox Valley** | 81.97 | 342 | eP | | P | | 02 20 51.9 | +2.7 |
| SHPR | **Sheep Range** | 82.11 | 337 | eP | | P | | 02 20 50.4 | +0.5 |
| O32A | **Brockman Farm,** | 82.13 | 350 | P | | P | | 02 20 51.7 | +2.0 |
| | baz=82 | | | | | | | | |
| O31A | **Woolen Ranch,** | 82.16 | 350 | P | | P | | 02 20 51.9 | +2.0 |
| | baz=83 | | | | | | | | |
| PV04 | **Paradox Valley** | 82.22 | 342 | eP | | P | | 02 20 50.8 | +0.3 |
| O30A | **MW Ranch, Wils** | 82.29 | 349 | P | | P | | 02 20 52.9 | +2.3 |
| | baz=83 | | | | | | | | |
| O29A | **4D Ranch, Culb** | 82.34 | 349 | P | | P | | 02 20 53.3 | +2.4 |
| | baz=83 | | | | | | | | |
| PV09 | **Paradox Valley** | 82.37 | 342 | eP | | P | | 02 20 55.5 | +4.1 |
| ISA | **Isabella** | 82.38 | 334 | eP | | P | | 02 20 51.6 | +0.4 |
| ISA | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| ISA | **Isabella** | 82.38 | 334 | P | | P | | 02 20 52.0 | +0.8 |
| | baz=83 | | | | | | | | |
| ISA | **Isabella** | 82.38 | 334 | eP | | P | | 02 20 51.6 | +0.4 |
| | comp=Z,14nm,1.1s | | | | | | | | |
| MPMC | **Manual Prospec** | 82.42 | 335 | P | | P | | 02 20 52.2 | +0.6 |
| | baz=83 | | | | | | | | |
| N35A | **Tabor** | 82.43 | 353 | P | | P | | 02 20 52.6 | +1.4 |
| | baz=83 | | | | | | | | |
| O28A | **Krutsinger Ran** | 82.50 | 348 | P | | P | | 02 20 53.9 | +2.1 |
| | baz=83 | | | | | | | | |
| N34A | **Lincoln** | 82.50 | 352 | P | | P | | 02 20 53.5 | +1.9 |
| | baz=83 | | | | | | | | |
| CCUT | **Cedar City** | 82.56 | 338 | eP | | P | | 02 20 53.4 | +1.1 |
| | comp=Z,177nm,2.2s | | | | | | | | |
| FURC | **Furace Creek,** | 82.60 | 335 | P | | P | | 02 20 53.9 | +1.7 |
| | baz=83 | | | | | | | | |
| DAC | **Darwin (Calif)** | 82.65 | 335 | eP | | P | | 02 20 52.9 | +0.1 |
| DAC | | | | pmax | | pmax | | | |
| | comp=Z,20nm,1.3s | | | | | | | | |
| DAC | **Darwin (Calif)** | 82.65 | 335 | eP | | P | | 02 20 52.9 | +0.1 |
| | comp=Z,20nm,1.3s | | | | | | | | |
| ISCO | **Idaho Springs** | 82.86 | 345 | eP | | P | | 02 20 55.9 | +2.0 |
| ISCO | | | | pmax | | pmax | | | |
| | comp=Z,107nm,2.5s | | | | | | | | |
| ISCO | | | | MLR | | MLR | | | |
| | comp=Z,394nm,19.0s | | | | | | | | |
| ISCO | **Idaho Springs** | 82.86 | 345 | P | | P | | 02 20 55.5 | +1.6 |
| | baz=83 | | | | | | | | |
| ISCO | **Idaho Springs** | 82.86 | 345 | eP | | P | | 02 20 55.9 | +2.0 |
| | comp=Z,108nm,2.5s | | | | | | | | |
| ISCO | | | | LR | | LR | | | |
| | comp=Z,394nm,19.0s | | | | | | | | |
| N30A | **Hueftle Ranch,** | 82.90 | 349 | P | | P | | 02 20 54.9 | +1.2 |
| | baz=83 | | | | | | | | |
| CWC | **Cottonwood Cre** | 82.96 | 334 | P | | P | | 02 20 55.2 | +0.9 |
| | baz=83 | | | | | | | | |
| N29A | **Votaw Ranch, W** | 83.00 | 349 | P | | P | | 02 20 55.3 | +1.0 |
| | baz=83 | | | | | | | | |
| M35A | **Neola** | 83.04 | 353 | P | | P | | 02 20 55.8 | +1.4 |
| | baz=83 | | | | | | | | |
| MSU | **Marysvale** | 83.14 | 340 | eP | | P | | 02 20 56.3 | +1.0 |
| MSU | **Marysvale** | 83.14 | 340 | eP | | P | | 02 20 56.3 | +1.0 |
| M34A | **Aspy Farms, Fr** | 83.16 | 352 | P | | P | | 02 20 56.3 | +1.2 |
| | baz=84 | | | | | | | | |
| RCTC | **Rector, Farmer** | 83.22 | 333 | P | | P | | 02 20 56.6 | +1.1 |
| | baz=84 | | | | | | | | |
| GRAC | **Grapevine Rang** | 83.24 | 335 | P | | P | | 02 20 56.9 | +1.3 |
| | baz=84 | | | | | | | | |
| BGNE | **Belgrade** | 83.25 | 351 | P | | P | | 02 20 57.1 | +1.6 |
| | baz=84 | | | | | | | | |
| BGNE | **Belgrade** | 83.25 | 351 | eP | | P | | 02 20 55.6 | +0.1 |
| | comp=Z,117nm,1.3s | | | | | | | | |
| SCIA | **State Center** | 83.27 | 354 | eP | | P | | 02 20 53.8 | -1.7 |
| | comp=Z,38nm,0.9s | | | | | | | | |
| SCIA | | | | LR | | LR | | | |
| | comp=Z,521nm,21.0s | | | | | | | | |
| M31A | **Lambtecht Ranc** | 83.29 | 350 | P | | P | | 02 20 57.2 | +1.4 |
| | baz=84 | | | | | | | | |
| SRU | **San Rafael** | 83.29 | 341 | eP | | P | | 02 20 55.6 | -0.4 |
| SRU | | | | pmax | | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| SRU | **San Rafael** | 83.29 | 341 | eP | | P | | 02 20 55.6 | -0.4 |
| | comp=Z,16nm,1.0s | | | | | | | | |
| M33A | **Taylor Creek F** | 83.30 | 351 | P | | P | | 02 20 57.4 | +1.6 |
| | baz=84 | | | | | | | | |
| OGNE | **Ogallala** | 83.34 | 348 | P | | P | | 02 20 57.6 | +1.5 |
| | baz=84 | | | | | | | | |
| OGNE | **Ogallala** | 83.34 | 348 | PFAKE | | | | 02 21 10.0 | +14 |
| OGNE | | | | LR | | LR | | | |
| | comp=Z,529nm,19.0s | | | | | | | | |
| AAM | **Ann Arbor** | 83.42 | 2 | PFAKE | | | | 02 21 10.0 | +14 |
| AAM | | | | LR | | LR | | | |
| | comp=Z,926nm,20.0s | | | | | | | | |
| TIN | **Tinemaha** | 83.57 | 334 | P | | P | | 02 20 58.6 | +1.2 |
| | baz=84 | | | | | | | | |
| M29A | **Burnside Ranch** | 83.62 | 349 | P | | P | | 02 20 58.8 | +1.3 |
| | baz=84 | | | | | | | | |
| L35A | **Bielow Farm, R** | 83.66 | 353 | P | | P | | 02 20 58.7 | +1.1 |
| | baz=84 | | | | | | | | |
| P17A | **Butcher Ranch,** | 83.69 | 341 | eP | | P | | 02 20 56.1 | -1.9 |
| | comp=Z,19nm,1.0s | | | | | | | | |
| P18A | **Preston Nutter** | 83.71 | 341 | eP | | P | | 02 20 59.4 | +1.1 |
| | comp=Z,14nm,0.9s | | | | | | | | |
| O20A | **White River Ci** | 83.73 | 343 | P | | P | | 02 20 59.2 | +1.0 |
| | baz=84 | | | | | | | | |
| O20A | **White River Ci** | 83.73 | 343 | eP | | P | | 02 20 57.6 | -0.6 |
| | comp=Z,42nm,1.2s | | | | | | | | |
| L32A | **Elgin** | 83.82 | 351 | P | | P | | 02 20 59.0 | +0.6 |
| | baz=84 | | | | | | | | |
| R11A | **Troy Canyon, C** | 83.94 | 337 | P | | P | | 02 21 00.8 | +1.4 |
| | baz=84 | | | | | | | | |
| R11A | **Troy Canyon, C** | 83.94 | 337 | eP | | P | | 02 20 59.8 | +0.4 |
| | comp=Z,140nm,2.1s | | | | | | | | |
| MTUM | **Tungsten Hills** | 83.95 | 334 | eP | | P | | 02 20 59.8 | +0.4 |
| L30A | **Spencer Herefo** | 83.98 | 350 | P | | P | | 02 21 01.1 | +1.8 |
| | baz=84 | | | | | | | | |
| N23A | **Red Feather La** | 83.98 | 345 | P | | P | | 02 21 01.1 | +1.5 |
| | baz=84 | | | | | | | | |
| N23A | **Red Feather La** | 83.98 | 345 | eP | | P | | 02 21 02.8 | +3.1 |
| | comp=Z,26nm,1.1s | | | | | | | | |
| L31A | **Butterfield Fa** | 84.09 | 350 | P | | P | | 02 21 01.6 | +1.8 |
| | baz=84 | | | | | | | | |
| JFWS | **Jewell Farm** | 84.10 | 357 | eP | | P | | 02 20 59.3 | -0.5 |
| JFWS | | | | pmax | | pmax | | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| JFWS | | | | MLR | | MLR | | | |
| | comp=Z,235nm,19.0s | | | | | | | | |
| JFWS | **Jewell Farm** | 84.10 | 357 | eP | | P | | 02 20 59.3 | -0.5 |
| | comp=Z,20nm,0.9s | | | | | | | | |
| JFWS | | | | LR | | LR | | | |
| | comp=Z,235nm,19.0s | | | | | | | | |
| L29A | **Maesberg Ranch** | 84.20 | 349 | P | | P | | 02 21 01.7 | +1.3 |
| | baz=85 | | | | | | | | |
| K35A | **Storm Lake** | 84.24 | 353 | P | | P | | 02 21 02.5 | +2.0 |
| | baz=85 | | | | | | | | |
| K34A | **Le Mars** | 84.29 | 352 | P | | P | | 02 21 02.4 | +1.6 |
| | baz=85 | | | | | | | | |
| MLAC | **Mammoth Lakes** | 84.29 | 334 | P | | P | | 02 21 02.4 | +1.2 |
| | baz=85 | | | | | | | | |
| MPU | **Maple Canyon** | 84.42 | 340 | eP | | P | | 02 21 01.6 | -0.1 |
| | comp=Z,57nm,1.0s | | | | | | | | |
| K32A | **Verdigre** | 84.46 | 351 | P | | P | | 02 21 02.7 | +1.1 |
| | baz=85 | | | | | | | | |
| NLU | **North Lily Min** | 84.48 | 340 | eP | | P | | 02 21 03.2 | +1.1 |
| | comp=Z,93nm,2.0s | | | | | | | | |
| K31A | **O'Neill** | 84.52 | 350 | P | | P | | 02 21 03.3 | +1.3 |
| | baz=85 | | | | | | | | |
| O16A | **Springville** | 84.57 | 341 | eP | | P | | 02 20 55.9 | -6.6 |
| | comp=Z,162nm,2.1s | | | | | | | | |
| K30A | **Basset** | 84.68 | 350 | P | | P | | 02 21 04.2 | +1.4 |
| | baz=85 | | | | | | | | |
| J37A | **Redenius Farm,** | 84.69 | 354 | P | | P | | 02 21 04.1 | +1.3 |
| | baz=85 | | | | | | | | |
| J36A | **Seneca 1, Swea** | 84.77 | 354 | P | | P | | 02 21 05.1 | +2.0 |
| | baz=85 | | | | | | | | |
| NV01 | **Mina Array Sit** | 84.85 | 335 | eP | | P | | 02 21 03.8 | -0.2 |
| NVAR | **Mina Array Bea** | 84.85 | 335 | P | | P | | 02 21 04.6 | +0.6 |
| | comp=Z,4.5nm,0.7s,baz=164,slow=6.1,SNR=28 | | | | | | | | |
| NVAR | | | | LR | | LR | | 02 51 46.8 | |
| | comp=Z,284nm,18.2s,baz=155,slow=31 | | | | | | | | |
| DUG | **Dugway** | 84.89 | 340 | eP | | P | | 02 21 05.0 | +0.9 |
| DUG | | | | pmax | | pmax | | | |
| | comp=Z,25nm,1.1s | | | | | | | | |
| DUG | | | | MLR | | MLR | | | |
| | comp=Z,623nm,22.0s | | | | | | | | |
| DUG | **Dugway** | 84.89 | 340 | P | | P | | 02 21 05.3 | +1.2 |
| | baz=85 | | | | | | | | |
| DUG | **Dugway** | 84.89 | 340 | eP | | P | | 02 21 05.0 | +0.9 |
| | comp=Z,25nm,1.1s | | | | | | | | |
| DUG | | | | LR | | LR | | | |
| | comp=Z,623nm,22.0s | | | | | | | | |
| K28A | **Ten Mile Ranch** | 84.96 | 349 | P | | P | | 02 21 06.4 | +2.1 |
| | baz=85 | | | | | | | | |
| J33A | **Davis** | 85.00 | 352 | P | | P | | 02 21 05.6 | +1.2 |
| | baz=85 | | | | | | | | |
| CMB | **Columbia Colle** | 85.17 | 333 | eP | | P | | 02 21 06.5 | +1.1 |
| CMB | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | | |
| CMB | **Columbia Colle** | 85.17 | 333 | eP | | P | | 02 21 06.5 | +1.1 |
| | comp=Z,12nm,1.1s | | | | | | | | |
| J31A | **Geddes** | 85.18 | 351 | P | | P | | 02 21 06.8 | +1.6 |
| | baz=86 | | | | | | | | |
| J30A | **Dallas** | 85.30 | 350 | P | | P | | 02 21 08.0 | +2.0 |
| | baz=86 | | | | | | | | |
| I38A | **Scanlan Farm,** | 85.33 | 355 | P | | P | | 02 21 07.1 | +1.1 |
| | baz=86 | | | | | | | | |
| ECSD | **EROS Data Cent** | 85.37 | 352 | P | | P | | 02 21 07.4 | +1.2 |
| | baz=86 | | | | | | | | |
| ECSD | **EROS Data Cent** | 85.37 | 352 | eP | | P | | 02 21 05.3 | -0.9 |
| | comp=Z,134nm,1.9s | | | | | | | | |
| ECSD | | | | LR | | LR | | | |
| | comp=Z,590nm,20.0s | | | | | | | | |
| I37A | **Lemond, Waseca** | 85.38 | 355 | P | | P | | 02 21 07.4 | +1.2 |
| | baz=86 | | | | | | | | |
| J29A | **Okreek** | 85.49 | 349 | P | | P | | 02 21 08.3 | +1.4 |
| | baz=86 | | | | | | | | |
| J27A | **Elkhorn Farm,** | 85.59 | 348 | P | | P | | 02 21 08.7 | +1.3 |
| | baz=86 | | | | | | | | |
| BOSA | **Boshof** | 85.64 | 125 | P | | P | | 02 21 08.0 | -0.4 |
| | comp=Z,6.7nm,0.8s,baz=234,slow=4.9,SNR=5.7 | | | | | | | | |
| BOSA | **Boshof** | 85.64 | 125 | eP | | P | | 02 21 08.4 | 0.0 |
| BOSA | **Boshof** | 85.64 | 125 | eP | | P | | 02 21 08.4 | 0.0 |
| J28A | **Allard Ranch,** | 85.64 | 349 | P | | P | | 02 21 08.9 | +1.3 |
| | baz=86 | | | | | | | | |
| I33A | **Coleman** | 85.70 | 352 | P | | P | | 02 21 09.5 | +1.7 |
| | baz=86 | | | | | | | | |
| NCB | **Newcomb** | 85.71 | 8 | PFAKE | | | | 02 21 20.0 | +12 |
| NCB | | | | LR | | LR | | | |
| | comp=Z,555nm,20.0s | | | | | | | | |
| I32A | **Karley and Nic** | 85.75 | 352 | P | | P | | 02 21 09.7 | +1.6 |
| | baz=86 | | | | | | | | |
| K22A | **Casper** | 85.79 | 345 | P | | P | | 02 21 09.8 | +1.2 |
| | baz=86 | | | | | | | | |
| K22A | **Casper** | 85.79 | 345 | eP | | P | | 02 21 08.2 | -0.3 |
| | comp=Z,72nm,1.2s | | | | | | | | |
| J26A | **Sides Ranch, S** | 85.81 | 348 | P | | P | | 02 21 10.0 | +1.5 |
| | baz=86 | | | | | | | | |
| HWUT | **Hardware Ranch** | 85.91 | 341 | eP | | P | | 02 21 10.4 | +1.3 |
| | comp=Z,80nm,2.0s | | | | | | | | |
| H36A | **Jessenland, He** | 85.97 | 354 | P | | P | | 02 21 10.7 | +1.6 |
| | baz=86 | | | | | | | | |
| J25A | **Sunshine Ranch** | 86.01 | 347 | P | | P | | 02 21 11.0 | +1.4 |
| | baz=86 | | | | | | | | |
| ELK | **Elko** | 86.06 | 338 | eP | | P | | 02 21 10.0 | 0.0 |
| ELK | | | | pmax | | pmax | | | |
| | comp=Z,21nm,1.1s | | | | | | | | |
| ELK | **Elko** | 86.06 | 338 | eP | | P | | 02 21 10.0 | 0.0 |
| | comp=Z,21nm,1.1s | | | | | | | | |
| SADO | **Sadowa** | 86.08 | 5 | eP | | P | | 02 21 08.4 | -1.2 |
| | comp=Z,12nm,0.7s | | | | | | | | |
| H35A | **Sunnyside Ranc** | 86.17 | 354 | P | | P | | 02 21 11.2 | +1.1 |
| | baz=87 | | | | | | | | |
| I28A | **Midland** | 86.19 | 349 | P | | P | | 02 21 11.2 | +0.9 |
| | baz=87 | | | | | | | | |
| H34A | **Spellman Lake,** | 86.22 | 353 | P | | P | | 02 21 11.7 | +1.3 |
| | baz=87 | | | | | | | | |
| H32A | **Carlson Farm,** | 86.22 | 352 | P | | P | | 02 21 11.7 | +1.3 |
| | baz=87 | | | | | | | | |
| LONY | **Lake Ozonia** | 86.31 | 8 | PFAKE | | | | 02 21 20.0 | +9.2 |
| LONY | | | | LR | | LR | | | |
| | comp=Z,553nm,21.0s | | | | | | | | |
| H33A | **Prehn Over Nor** | 86.33 | 352 | P | | P | | 02 21 12.2 | +1.3 |
| | baz=87 | | | | | | | | |
| I27A | **Quinn** | 86.39 | 348 | P | | P | | 02 21 12.9 | +1.6 |
| | baz=87 | | | | | | | | |
| I26A | **New Underwood** | 86.48 | 348 | P | | P | | 02 21 13.9 | +2.1 |
| | baz=87 | | | | | | | | |
| BW06

**F36A Milaca 87.22 355** P **P** **02 21 16.4 +1.2**
baz=88
**COWI Conover 87.24 358** PFAKE 02 21 30.0 +15
COWI LR LR
comp=Z,611nm,21.0s
**F35A Swanville 87.30 354** P **P** **02 21 16.8 +1.2**
baz=88
**REDW Red Top Meadow 87.40 342** *e*P **P** **02 21 16.0 -0.5**
comp=Z,40nm,1.4s
**F33A 5 Mile Ranch, 87.43 353** P **P** **02 21 17.5 +1.3**
baz=88
**TPAW Teton Pass 87.54 342** *e*P **P** **02 21 17.4 +0.2**
comp=Z,23nm,1.2s
**LOHW Long Hollow 87.58 342** *e*P **P** **02 21 15.8 -1.5**
comp=Z,26nm,1.5s
**G27A Dupree 87.66 349** P **P** **02 21 19.0 +1.6**
baz=88
**G26A Maurine 87.67 348** P **P** **02 21 19.0 +1.4**
baz=88
**DBIC Dimbokro 87.70 79** P **P** **02 21 17.8 -0.6**
comp=Z,5.1nm,1.0s,baz=236,slow=7.1,SNR=2.7
DBIC LR LR 02 57 13.9
comp=Z,324nm,19.1s,baz=208,slow=33
**FXWY Fox Creek 87.70 342** *e*P **P** **02 21 17.6 -0.3**
comp=Z,16nm,1.4s
**G25A Newell 87.70 348** P **P** **02 21 19.1 +1.4**
baz=88
**MOOW Moose Ponds 87.74 342** *e*P **P** **02 21 18.7 +0.6**
comp=Z,45nm,2.0s
**IMW Indian Meadow 87.92 342** *e*P **P** **02 21 19.3 +0.2**
comp=Z,39nm,1.5s
**F28A McLaughlin 87.96 350** P **P** **02 21 19.2 +0.4**
baz=88
**DZM Mont Dzumac 88.00 242** *e*LR LR 02 49 22.7
comp=Z,3µm,29.0s
**FLWY Flagg Ranch 88.05 342** *e*P **P** **02 21 20.7 +1.1**
comp=Z,115nm,1.8s
**F27A Lemmon 88.15 349** P **P** **02 21 21.1 +1.3**
baz=89
**F26A Lodgepole 88.23 348** P **P** **02 21 21.5 +1.3**
baz=89
**H17A Grant Village 88.31 343** P **P** **02 21 22.1 +1.3**
baz=89
**LBTB Lobatse 88.41 122** *e*P **P** **02 21 19.9 -1.9**
**LBTB Lobatse 88.41 122** *e*P **P** **02 21 19.9 -1.9**
**YFT Old Faithful 88.43 342** *e*P **P** **02 21 21.9 +0.6**
comp=Z,131nm,2.1s
**HLID Hailey 88.46 340** P **P** **02 21 22.1 +0.6**
baz=89
**HLID Hailey 88.46 340** *e*P **P** **02 21 21.4 0.0**
comp=Z,103nm,2.1s
**D35A Remer 88.47 354** P **P** **02 21 22.3 +1.1**
baz=89
**CAN Canberra 88.49 222** PFAKE 02 21 30.0 +8.0
CAN LR LR
comp=Z,391nm,19.0s
**WVOR Wild Horse Val 88.61 336** *e*P **P** **02 21 22.1 0.0**
WVOR pmax pmax
comp=Z,100nm,2.2s
**WVOR Wild Horse Val 88.61 336** *e*P **P** **02 21 22.1 0.0**
comp=Z,100nm,2.2s
**E27A Carson 88.63 349** P **P** **02 21 23.1 +1.1**
baz=89
**YNR Norris Junctio 88.64 343** *e*P **P** **02 21 23.3 +0.9**
comp=Z,19nm,1.1s
**E28A Huff 88.66 350** P **P** **02 21 23.2 +1.1**
baz=89
**YMR Madison River 88.66 342** *e*P **P** **02 21 23.7 +1.2**
comp=Z,130nm,1.7s
**MFID Camas Ranch 88.70 339** *e*P **P** **02 21 23.4 +0.9**
comp=Z,12nm,1.1s
**RLMT Red Lodge 88.72 344** P **P** **02 21 23.7 +1.0**
baz=89
**RLMT Red Lodge 88.72 344** *e*P **P** **02 21 23.8 +1.1**
comp=Z,23nm,1.2s
RLMT LR LR
comp=Z,389nm,19.0s
**E26A Carlson Angus 88.80 349** P **P** **02 21 24.3 +1.4**
baz=89
**QLMT Earthquake Lak 88.92 342** *e*P **P** **02 21 26.0 +2.3**
**D30A Buchanan 88.94 351** P **P** **02 21 24.5 +1.1**
baz=89
**C36A Pine Crest Far 89.07 355** P **P** **02 21 24.6 +0.6**
baz=90
**EYMN Ely 89.18 356** PFAKE 02 21 40.0 +15
EYMN LR LR
comp=Z,351nm,19.0s
**D28A Regan 89.25 350** P **P** **02 21 26.6 +1.7**
baz=90
**MCMT McKenzie Canyo 89.25 341** *e*P **P** **02 21 26.8 +1.5**
**D26A Manning 89.34 349** P **P** **02 21 26.8 +1.5**
baz=90
**J08A Circle Bar Ran 89.40 337** *e*P **P** **02 21 25.6 -0.2**
comp=Z,35nm,1.4s
**C31A Landman Farms, 89.50 352** P **P** **02 21 27.2 +1.1**
baz=90
**LAO LASA Array 89.63 346** PFAKE 02 21 40.0 +13
LAO LR LR
comp=Z,831nm,22.0s
**DLMT Dillon 89.70 342** *e*P **P** **02 21 28.2 +1.0**
comp=Z,61nm,1.8s
**BOZ Bozeman (W) 89.74 342** *e*P **P** **02 21 26.8 -0.6**
BOZ pmax pmax
comp=Z,102nm,2.3s
**BOZ Bozeman (W) 89.74 342** P **P** **02 21 28.4 +1.0**
baz=90
**BOZ Bozeman (W) 89.74 342** *e*P **P** **02 21 26.8 -0.6**
comp=Z,102nm,2.3s
**AGMN Agassiz Nation 89.83 353** *e*P **P** **02 21 27.6 +0.1**
comp=Z,178nm,2.9s
AGMN LR LR
comp=Z,620nm,19.0s
**LRM Limekiln Ridge 90.09 342** *e*P **P** **02 21 30.5 +1.4**
**J05D Fort Rock, OR 90.18 335** P **P** **02 21 30.8 +1.3**
baz=91
**B30A Myrvik Farm, E 90.22 352** P **P** **02 21 31.0 +1.6**
baz=91
**B29A Wagenman Farm, 90.35 351** P **P** **02 21 31.6 +1.6**
baz=91
**I07A Izee 90.37 336** *e*P **P** **02 21 33.3 +3.0**
comp=Z,34nm,1.3s
**A33A Warroad 90.42 354** P **P** **02 21 31.4 +1.1**
baz=91
**B28A Dugan Ranch, T 90.45 350** P **P** **02 21 32.7 +2.2**
baz=91
**A29A Manning Farm, 90.78 351** P **P** **02 21 34.6 +2.6**
baz=91
**HRY Holter Researc 90.79 342** *e*P **P** **02 21 34.5 +2.3**
comp=Z,3.2nm,0.4s
**DGMT Dagmar 91.02 348** PFAKE 02 21 40.0 +6.9
DGMT LR LR
comp=Z,735nm,22.0s
**I05D Terrebonne, OR 91.16 335** P **P** **02 21 35.0 +1.1**
baz=92
**CHMT Chamberlain Mo 91.31 342** *e*P **P** **02 21 35.6 +0.8**
**MSO Missoula 91.40 341** P **P** **02 21 36.2 +1.2**
baz=92
**MSO Missoula 91.40 341** *e*P **P** **02 21 34.6 -0.4**
comp=Z,57nm,2.0s
**EGMT Eagleton 91.59 344** P **P** **02 21 37.2 +1.4**
baz=92
**EGMT Eagleton 91.59 344** PFAKE 02 21 50.0 +14
EGMT LR LR
comp=Z,389nm,19.0s
**SLMT Seeley Lake 91.67 342** *e*P **P** **02 21 35.9 -0.5**
**ULM Lac du Bonnet 91.77 354** P **P** **02 21 36.0 -0.4**
comp=Z,4.1nm,0.7s,baz=187,slow=4.3,SNR=4.2
ULM LR LR 02 59 43.0
comp=Z,396nm,19.7s,baz=156,slow=34
**SWMT Swartz Lake 92.05 341** *e*P **P** **02 21 40.5 +2.5**
**WALA Waterton Lakes 93.48 342** *e*P P 02 21 48.0 +3.4
comp=Z,95nm,2.3s
**NEW Newport 93.53 340** *e*P P 02 21 49.8 +5.0
NEW pmax pmax
comp=Z,62nm,2.1s
**NEW Newport 93.53 340** P **P** **02 21 46.5 +1.7**
baz=94
**NEW Newport 93.53 340** *e*P P 02 21 49.8 +5.0
comp=Z,62nm,2.1s
**EIDS Eidsvold 95.13 230** *e*P **P** **02 21 54.9 +2.0**
comp=Z,6.8nm,0.8s
**TOA0 Torodi Ar. Sit 96.79 79** *e*P **P** **02 21 59.4 -1.1**
**TORD Torodi Ar. Bea 96.79 79** P **P** **02 21 59.4 -1.0**
comp=Z,1.4nm,0.9s,baz=204,slow=6.7,SNR=6.4
TORD LR LR 03 04 18.0
comp=Z,299nm,18.8s,baz=225,slow=35
**LSZ Lusaka 97.07 117** PFAKE 02 22 10.0 +7.9
LSZ LR LR
comp=Z,887nm,20.0s
**SCHQ Schefferville 97.31 11** LR LR 03 02 57.7
comp=Z,447nm,19.9s,baz=235,slow=34
**HNR Honiara 101.31 247** PFAKE 02 22 30.0 +9.2
HNR LR LR
comp=Z,412nm,20.0s
**CTAO Charters Tower 102.01 229** PFAKE 02 22 40.0 +16
CTAO LR LR
comp=Z,644nm,20.0s
**NWAO Narrogin (SRO) 102.96 200** PFAKE 02 22 40.0 +12
NWAO LR LR
comp=Z,663nm,19.0s
**RTC Rabat Centre 104.38 57** PFAKE 02 22 40.0 +6.2
RTC LR LR
comp=Z,8µm,19.0s
**ASAR Alice Springs 105.43 218** Pdiff **Pdif** **02 22 41.4 +2.3**
comp=Z,0.3nm,0.4s,baz=159,slow=5.5,SNR=3.4
**TAM Tamanrasset 105.74 73** PFAKE 02 27 00.0
TAM LR LR
comp=Z,533nm,20.0s
**ABPO Ambohimpanom 105.79 134** PFAKE 02 27 00.0
ABPO LR LR
comp=Z,194nm,20.0s
**MTE Manteigas 108.06 52** PFAKE 02 27 10.0
MTE LR LR
comp=Z,920nm,19.0s
**WRAB Tennant Creek 108.42 220** PFAKE 02 27 10.0
WRAB LR LR
comp=Z,1µm,20.0s
**MBAR Mbarara 109.26 109** PFAKE 02 27 10.0
MBAR LR LR
comp=Z,513nm,21.0s
**PAB San Pablo 109.45 54** PFAKE 02 27 10.0
PAB LR LR
comp=Z,422nm,20.0s
**PMG Port Moresby 109.79 237** PFAKE 02 27 10.0
PMG LR LR
comp=Z,1µm,22.0s
**MBWA Marble Bar 113.31 206** PFAKE 02 27 20.0
MBWA LR LR
comp=Z,615nm,19.0s
**KMBO Kilima Mbogo 113.44 114** PFAKE 02 27 20.0
KMBO LR LR
comp=Z,733nm,21.0s
**KDAK Kodiak Island 113.45 328** PFAKE 02 27 20.0
KDAK LR LR
comp=Z,961nm,21.0s
**H11S2 WAKE ISLAND Hyl 114.92 273** T T 04 32 01.8
baz=131
**H11S1 WAKE ISLAND Hyl 114.93 273** T T 04 32 04.3
baz=131
**H11S3 WAKE ISLAND Hyl 114.93 273** T T 04 32 02.8
baz=131
**ILAR Eielson Array 116.10 335** PKP **PKPdf** **02 27 15.0 +3.7**
comp=Z,0.3nm,0.7s,baz=127,slow=2.4,SNR=3.5
**COLA College 116.48 335** PFAKE 02 27 20.0 +8.0
COLA LR LR
comp=Z,263nm,19.0s
**SSB Saint Sauveur 118.12 53** PFAKE 02 27 30.0 +14
SSB LR LR
comp=Z,264nm,22.0s
**BNI Bardonecchia 119.29 54** PFAKE 02 27 30.0 +12
BNI LR LR
comp=Z,865nm,20.0s
**CLTB Caltabellotta 119.68 65** PFAKE 02 27 30.0 +11
CLTB LR LR
comp=Z,398nm,20.0s
**WDD Wield Dalam 119.68 67** PFAKE 02 27 30.0 +11
WDD LR LR
comp=Z,2µm,20.0s
**VLC Villacollemand 121.14 57** PFAKE 02 27 30.0 +8.2
VLC LR LR
comp=Z,156nm,19.0s
**WLF Walferdange 121.26 49** PFAKE 02 27 30.0 +8.2
WLF LR LR
comp=Z,1µm,20.0s
**TUE Stuetta 121.62 54** PFAKE 02 27 30.0 +7.2
TUE LR LR
comp=Z,862nm,19.0s
**BFO Black Forest 121.89 52** PFAKE 02 27 30.0 +6.9
BFO LR LR
comp=Z,521nm,21.0s
**CUC Castrocucco 122.65 63** PFAKE 02 27 40.0 +15
CUC LR LR
comp=Z,336nm,20.0s
**TIP Timpagrande 122.89 65** PFAKE 02 27 40.0 +15
TIP LR LR
comp=Z,525nm,21.0s
**GERES GERESS Array B 125.31 53** PKP **PKPdf** **02 27 31.0 +1.3**
comp=Z,2.1nm,0.8s,baz=236,slow=1.1,SNR=12
**GERES GERESS Array B 125.31 53** PKIKP **PKPdf** **02 27 31.0 +1.3**
**CLL Collm 125.91 50** *e*(PKPdf) **PKPdf** **02 27 34.0 +3.4**
CLL *e*SPP SPP 02 40 58.0
CLL *e*PSPS 02 47 00.0
CLL L L 03 19 00.0
comp=Z,500nm,20.9s
**TIR Tirane 126.00 64** PFAKE 02 27 40.0 +8.9
TIR LR LR
comp=Z,869nm,20.0s
**PVCC Panska Ves 126.51 51** AMS AMS 03 18 30.0
comp=Z,600nm,18.1s
**KONO Kongsberg 127.22 39** PFAKE 02 27 40.0 +7.1
KONO LR LR
comp=Z,672nm,20.0s
**UPC Upice 127.35 52** AMS AMS 03 18 40.0
comp=Z,500nm,17.4s
**SANT Santorini 127.61 72** PFAKE 02 27 50.0 +16
SANT LR LR
comp=Z,252nm,19.0s
**KAPI Kappang 128.14 213** PFAKE 02 27 50.0 +14
KAPI LR LR
comp=Z,894nm,20.0s
**VYHS Vyhne 128.29 55** *e*PKIKP **PKPdf** **02 27 38.9 +3.6**
**VYHS Vyhne 128.29 55** *e*PKP **PKPdf** **02 27 38.9 +3.6**
**PSZ Piszkesteto 128.74 56** PFAKE 02 27 50.0 +14
PSZ LR LR
comp=Z,550nm,20.0s
**KBS Kingsbay 131.85 15** PFAKE 02 27 50.0 +8.8
KBS LR LR
comp=Z,395nm,19.0s
**ISP Isparta 131.88 72** PFAKE 02 27 50.0 +7.4
ISP LR LR
comp=Z,479nm,22.0s
**CSS Prodhromos 132.66 77** PFAKE 02 28 00.0 +16
CSS LR LR
comp=Z,54nm,21.0s
**BILL Bilibino 134.26 330** PKIKP **PKPdf** **02 27 47.3 +1.3**
BILL pmax pmax
comp=Z,3.0nm,1.4s
**BR231 Keskin MP Arra 134.31 71** *e*PKPdf **PKPdf** **02 27 46.7 -0.4**
**ANTO Ankara 134.34 71** PFAKE 02 28 00.0 +13
ANTO LR LR
comp=Z,321nm,22.0s
**BRTR Keskin Array B 134.88 71** PKP **PKPdf** **02 27 49.7 +1.4**
comp=Z,1.6nm,0.8s,baz=206,slow=2.7,SNR=7.7
**KIEV Kiev 135.39 55** PFAKE 02 28 00.0 +11
KIEV LR LR
comp=Z,342nm,20.0s
**AKASG Malin Array Be 135.40 55** PKP **PKPdf** **02 27 47.5 -1.1**
comp=Z,0.3nm,0.4s,baz=264,slow=0.9,SNR=2.9
**RAYN Ar Rayn 135.88 98** *e*PKPdf **PKPdf** **02 27 49.0 -1.5**
RAYN LR LR
comp=Z,342nm,19.0s
**KEV Kevo 136.08 28** PFAKE 02 28 00.0 +11
KEV LR LR
comp=Z,420nm,22.0s
**KSM Kuching 137.58 204** PFAKE 02 28 10.0 +16
KSM LR LR
comp=Z,1µm,22.0s
**MALT Malatya 137.78 75** *c i*PKIKP **PKPdf** **02 27 58.1 +4.5**
**KKM Kota Kinabalu 139.59 215** PFAKE 02 28 10.0 +12
KKM LR LR
comp=Z,1µm,19.0s
**OBN Obninsk 140.51 50** ‖ *e i*PKIKP **PKPdf** **02 27 56.0 -1.8**
OBN 02 27 59.7
OBN pmax pmax
comp=Z,5.0nm,0.8s
OBN pmax pmax
comp=Z,4.0nm,0.5s
OBN MLR MLR
comp=Z,349nm,19.0s
**VSR Storozhevoye 141.67 56** *e*PKIKP **PKPdf** **02 28 03.9 +3.8**
VSR pmax pmax
comp=N,9.0nm,1.4s
VSR pmax pmax
comp=Z,10.0nm,1.4s
VSR pmax pmax
comp=E,4.0nm,1.1s
**LPSR Galich'ya Gora 141.68 54** *e*PKIKP **PKPdf** **02 27 56.6 -3.4**
LPSR pmax pmax
comp=N,4.0nm,0.9s
LPSR pmax pmax
comp=E,3.0nm,0.9s
LPSR pmax pmax
comp=Z,8.0nm,0.9s
**KLMR Klimovskoe 142.04 40** *e*PKHKP PKPpre 02 27 53.1
KLMR pmax pmax
comp=Z,32nm,1.4s
**KIV Kislovodsk 142.63 68** *i* PKIKP **PKPdf** **02 28 04.1 +1.9**
KIV pmax pmax
comp=Z,10.0nm,1.0s
**KBZ Khabaz 142.72 69** PKP **PKPdf** **02 28 02.9 +0.7**
comp=Z,4.5nm,1.0s,baz=243,slow=0.9,SNR=7.7
**GNI Garni 143.02 75** PFAKE 02 28 10.0 +6.9
GNI LR LR
comp=Z,357nm,21.0s
**NCK Nalchik 143.16 69** *c i*PKIKP **PKPdf** **02 28 04.3 +1.3**
**VRH Novokhopyorsk 143.26 56** *e*PKIKP PKPbc 02 28 01.0 +1.0
VRH pmax pmax
comp=N,20nm,0.8s
VRH pmax pmax
comp=E,10.0nm,0.8s
VRH pmax pmax
comp=Z,30nm,0.8s
**KULM Kulim 143.50 191** PFAKE 02 28 20.0 +15
KULM LR LR
comp=Z,2µm,21.0s
**ERM Erimo 143.81 288** PFAKE 02 28 20.0 +16
ERM LR LR
comp=Z,593nm,20.0s
**TYV Tymovskoe 145.66 303** *e*PKIKP **PKPab** **02 28 09.0 +1.2**
TYV pmax pmax
comp=Z,48nm,1.2s
**MAJO Matsushiro 145.67 277** PKP2 **PKPdf** **02 28 07.4 -0.3**
**MAJO Matsushiro 145.67 277** PKPdf **PKPdf** **02 28 07.4 -0.3**
**MAT Matsushiro 145.67 277** PKP **PKPdf** **02 28 05.3 -2.3**
**MAK Makhachkala 145.79 72** *e*PKIKP **PKPdf** **02 28 05.2 -2.4**
MAK *e* 02 31 25.1
MAK *e* 02 35 16.9
MAK SS SS 02 50 26.7 +2.6
MAK pmax pmax
comp=Z,108nm,1.5s
**SKHT Srikalahasti 149.65 151** *e*PKPdf **PKPdf** **02 28 14.3 -0.5**
**URV Uravakonda 149.80 146** *e*PKPdf **PKPdf** **02 28 15.3 +0.3**
**YAK Yakutsk 150.46 326** *e*PKIKP **PKPbc** **02 28 22.7 +2.8**
YAK pmax pmax
comp=Z,70nm,1.3s
YAK pmax pmax
comp=N,10.0nm,1.3s
YAK pmax pmax
comp=E,14nm,1.2s
**RCLA Racherla 150.94 149** *e*PKPbc **PKPbc** **02 28 21.0 -1.5**
**POO Poona 151.31 137** *e*P **PKPdf** **02 28 20.0 +2.6**
**SRLM Srisailam 151.50 148** *e*PKPdf **PKPdf** **02 28 17.8 +0.1**
**ADKI Addanki 151.69 150** *e*PKPdf **PKPdf** **02 28 18.2 +0.3**
**NJS Nagarjunasagar 152.08 148** *e*PKPbc **PKPbc** **02 28 23.9 -1.2**
**GEYT Alibeck 152.21 85** PKPbc **PKPbc** **02 28 23.9 -1.0**
comp=E,3.9nm,0.8s,baz=224,slow=4.0,SNR=5.1
**USRK Uesuriysk Ar. 152.25 288** PKPbc **PKPbc** **02 28 25.4 +0.7**
comp=E,3.6nm,0.7s,baz=135,slow=0.6,SNR=6.5
**KLRI Killari 152.26 142** *e*PKPbc **PKPbc** **02 28 24.2 -1.3**
**HYB Hyderabad 152.55 146** *i* PKP **PKPbc** **02 28 25.0 -1.2**
**HYBB Hyderabad (bro 152.55 146** *e*PKPbc **PKPdf** **02 28 19.2 0.0**
**KLR Kul'dur 152.66 299** *e*PKIKP **PKPbc** **02 28 30.0 +4.5**
**PVM Polavaram 153.58 152** *e*PKPdf **PKPdf** **02 28 19.9 -0.7**
**AKTO Aktyubinsk 153.58 58** PKP **PKPdf** **02 28 18.3 -1.4**
comp=E,0.3nm,0.4s,baz=214,slow=3.6,SNR=1.9
AKTO PKPbc **PKiKP** **02 28 29.6 +2.1**
comp=E,4.9nm,1.1s,baz=290,slow=1.7,SNR=7.5
**SVE Sverdlovsk 153.60 43** *i* PKIKP **PKPbc** **02 28 31.5 +4.2**
SVE pmax pmax
comp=Z,23nm,1.4s
**KSRS Korea Array 153.69 272** PKPbc **PKPbc** **02 28 29.1 +1.0**
comp=Z,2.1nm,0.8s,baz=96,slow=2.0,SNR=2.9
**KSAR Wonju Array Be 153.71 272** PKIKP **PKPbc** **02 28 29.1 +1.0**
**KSAR Wonju Array Be 153.71 272** PKPbc **PKPbc** **02 28 29.1 +1.0**
**SRSP Sriramsagar 153.80 144** *e*PKPbc **PKPbc** **02 28 26.9 -2.0**
**QIZ Qiongzhong 153.91 216** PKPbc **PKPdf** **02 28 16.8 -4.3**
QIZ PP **PP** **02 32 20.5 +4.5**
QIZ SS SS 02 51 49.8 -3.3
QIZ LN
comp=Z,660nm,14.0s
QIZ LZ
comp=Z,690nm,14.0s
**QIZ Qiongzhong 153.91 216** PFAKE 02 28 30.0 +0.9
QIZ LR LR
comp=Z,474nm,20.0s
**MDJ Mudanjiang 154.01 289** PKPbc **PKPdf** **02 28 20.0 -0.5**
**MDJ Mudanjiang 154.01 289** PFAKE 02 28 30.0 +1.5
MDJ LR LR
comp=Z,421nm,21.0s
**INCN Inchon 154.67 272** PFAKE 02 28 30.0 -0.2
INCN LR LR
comp=Z,509nm,22.0s
**ABKAR Akbulak array 154.93 60** *e*PKPdf **PKPdf** **02 28 23.6 +2.0**
**CHLP Challavanipeta 155.54 156** *e*PKPdf **PKPdf** **02 28 22.3 -1.1**
**CMAR Chiang Mai Arr 156.69 192** PKP **PKPdf** **02 28 29.6 +4.7**
comp=Z,1.1nm,0.3s,baz=234,slow=1.4,SNR=5.6
**CN2 Changchun 156.90 286** *e*PKP **PKPdf** **02 28 22.3 -2.1**
CN2 *e*PP **PP** **02 32 34.0 +0.5**
CN2 PPMZ
comp=Z,370nm,5.0s
**CHTO Chiang Mai 157.04 192** *e*PKIKP **PKPdf** **02 28 22.8 -2.6**
CHTO MLR MLR
comp=Z,733nm,19.0s
**CHTO Chiang Mai 157.04 192** *e*PKPdf **PKPdf** **02 28 22.8 -2.6**
CHTO LR LR
comp=Z,733nm,19.0s
**NJ2 Nanjing 158.12 253** *e*PKP **PKPdf** **02 28 26.3 0.0**
**BVAR Borovoye Array 160.28 46** PKP **PKPdf** **02 28 30.1 +1.9**
comp=Z,0.3nm,0.5s,baz=236,slow=36,SNR=2.9
**HIA Hailar 160.45 302** PFAKE 02 28 40.0 +11
HIA LR LR
comp=Z,511nm,19.0s
**GYA Guiyang 161.79 219** *e*PKP **PKPdf** **02 28 30.3 -0.5**
GYA PKPab **PKPab** **02 29 18.0 +1.8**
GYA PKS **PKSdf** **02 32 01.5 -2.7**
GYA PP **PP** **02 33 02.0 +2.6**
GYA PPMZ
comp=Z,140nm,8.2s
**KMI Kunming 162.18 206** PKP **PKPdf** **02 28 30.5 -0.9**
KMI pPKP **pPKPdf** **02 28 34.0 -0.8**
KMI sPKP 02 28 35.5
**BJI Beijing 163.22 272** PKP **PKPdf** **02 28 31.3 -0.3**
BJI SS SS 02 53 35.5 +1.6
BJI LN
comp=Z,350nm,26.2s
BJI LE
comp=Z,240nm,27.0s
BJI LZ
comp=Z,400nm,33.1s
**BJT Baijiatuau 163.22 272** PFAKE 02 28 40.0 +8.4
BJT LR LR
comp=Z,1µm,19.0s
**ENH Enshi 163.29 233** PFAKE 02 28 40.0 +7.9
ENH LR LR
comp=Z,344nm,21.0s
**KOLN Koldanda 163.84 144** *e*P **PKPab** **02 29 24.1 -1.2**
**RAMN Ramite 164.25 155** *e*P **PKPab** **02 29 24.6 -2.5**
comp=Z,17nm,0.8s
**DMN Daman 164.32 149** *e*P **PKPab** **02 29 26.2 -1.2**
comp=Z,6.1nm,0.4s
**ODAN Odare 164.40 157** *e*P **PKPab** **02 29 26.5 -1.3**
comp=Z,22nm,1.0s
**EKS2 Erkin-Say 164.85 79** PFAKE 02 28 40.0 +6.8
EKS2 LR LR
comp=Z,449nm,21.0s
**GUN Gumba 164.88 151** *e*P **PKPab** **02 29 29.5 -0.5**
comp=Z,30nm,1.1s
**TAPN Taplejung 164.96 158** *e*P **PKPab** **02 29 29.7 -0.6**
comp=Z,8.1nm,0.8s
**AAK Ala-Archa 165.38 79** PFAKE 02 28 40.0 +6.3
AAK LR LR
comp=Z,340nm,20.0s
**KURK Kurchatov 165.85 44** PFAKE 02 28 40.0 +6.4
KURK LR LR
comp=Z,1µm,22.0s
**KSH Kashi 166.06 92** *e*PKP **PKPdf** **02 28 33.8 -0.5**
KSH SKS **SKSdf** **02 35 35.0 -3.4**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KSH | | | | SKKS | **SKKSac** | **02 40 05.5** | **-4.5** | |
| KSH | | | | PPMZ | | | | |
| | comp=Z,71nm,5.6s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,120nm,6.5s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,140nm,6.2s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,280nm,8.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **166.06** | **23** | PKP | **PKPdf** | **02 28 33.7** | **+0.1** | |
| | comp=Z,0.5nm,0.4s,baz=318,slow=1.9,SNR=2.7 | | | | | | | |
| ZALV | | | | PKPab | **PKPab** | **02 29 35.0** | **+0.9** | |
| | comp=Z,2.5nm,0.8s,baz=306,slow=4.8,SNR=3.7 | | | | | | | |
| **TKM2** | **Tokmak 2** | **166.19** | **78** | PFAKE | | 02 28 50.0 | +16 | |
| TKM2 | | | | LR | LR | | | |
| | comp=Z,352nm,19.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **166.83** | **273** | *e*PKP | **PKPdf** | **02 28 31.0** | **-3.8** | |
| HHC | | | | PP | **PP** | **02 33 26.0** | **-0.8** | |
| HHC | | | | SS | SS | 02 54 05.0 | -6.1 | |
| HHC | | | | PPMZ | | | | |
| | comp=Z,140nm,8.0s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,300nm,14.8s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,220nm,16.0s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,300nm,15.9s | | | | | | | |
| **CD2** | **Chengdu** | **166.90** | **219** | PKP | **PKPdf** | **02 28 34.5** | **-0.6** | |
| CD2 | | | | pPKP | **pPKPdf** | **02 28 38.0** | **-0.6** | |
| CD2 | | | | sPKP | | 02 28 39.3 | | |
| CD2 | | | | PP | **PP** | **02 33 26.8** | **+0.6** | |
| CD2 | | | | SKS | **SKSdf** | **02 35 38.8** | **-0.4** | |
| CD2 | | | | SKKS | **SKKSac** | **02 40 13.8** | **-0.2** | |
| CD2 | | | | SS | **SS** | **02 54 12.3** | **+2.3** | |
| CD2 | | | | PPMZ | | | | |
| | comp=Z,120nm,5.2s | | | | | | | |
| **LSA** | **Lhasa** | **168.01** | **168** | PFAKE | | 02 28 50.0 | +13 | |
| LSA | | | | LR | LR | | | |
| | comp=Z,375nm,20.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **168.79** | **309** | PFAKE | | 02 28 50.0 | +14 | |
| ULN | | | | LR | LR | | | |
| | comp=Z,354nm,21.0s | | | | | | | |
| **ZAK** | **Zakamensk** | **169.05** | **328** | *e*PKP2 | **PKPab** | **02 29 46.2** | **-1.4** | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.4s | | | | | | | |
| **SONA1** | **Songino Array** | **169.18** | **310** | *e*PKPab | **PKPab** | **02 29 46.6** | **-1.7** | |
| **SONM** | **Songino Array** | **169.19** | **310** | PKP | **PKPdf** | **02 28 38.0** | **+1.7** | |
| | comp=Z,0.3nm,0.7s,baz=336,slow=1.7,SNR=2.7 | | | | | | | |
| SONM | | | | PKPab | **PKPab** | **02 29 47.0** | **-1.4** | |
| | comp=Z,2.1nm,0.9s,baz=54,slow=2.5,SNR=5.6 | | | | | | | |
| **SONM** | **Songino Array** | **169.19** | **310** | PKIKP | **PKPdf** | **02 28 38.0** | **+1.7** | |
| SONM | | | | | | 02 29 47.0 | | |
| **MKAR** | **Makanchi Array** | **169.98** | **54** | PKP | **PKPdf** | **02 28 37.3** | **+0.7** | |
| | comp=Z,0.3nm,0.5s,baz=164,slow=2.7,SNR=2.4 | | | | | | | |
| MKAR | | | | PKPab | **PKPab** | **02 29 51.0** | **-0.8** | |
| | comp=Z,0.6nm,0.8s,baz=261,slow=2.8,SNR=2.0 | | | | | | | |
| **LZH** | **Lanzhou** | **170.69** | **238** | PKP | **PKPdf** | **02 28 33.0** | **-4.6** | |
| LZH | | | | pPKP | **pPKPdf** | **02 28 36.8** | **-4.2** | |
| LZH | | | | sPKP | | 02 28 38.3 | | |
| LZH | | | | LN | | | | |
| | comp=Z,880nm,15.3s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,500nm,12.6s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| **WMQ** | **Urumqi** | **174.72** | **62** | *e*PKP | **PKPdf** | **02 28 41.0** | **+2.1** | |
| WMQ | | | | PP | **PP** | **02 34 10.0** | **+4.2** | |
| WMQ | | | | SKKS | | 02 40 56.0 | | |
| WMQ | | | | SS | **SS** | **02 55 28.0** | **-0.2** | |
| WMQ | | | | LN | | | | |
| | comp=Z,210nm,28.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | comp=Z,290nm,26.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | comp=Z,210nm,25.0s | | | | | | | |
| **GTA** | **Gaotai** | **175.18** | **246** | *e*PKP | **PKPdf** | **02 28 41.5** | **+2.3** | |
| GTA | | | | PP | PP | 02 34 14.0 | +5.8 | |
| GTA | | | | SKS | **SKSdf** | **02 35 42.8** | **+0.5** | |
| GTA | | | | SKKS | **SKKSac** | **02 40 58.5** | **+4.2** | |
| GTA | | | | SS | **SS** | **02 55 36.5** | **+3.5** | |
| GTA | | | | PPMZ | | | | |
| | comp=Z,120nm,5.1s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,210nm,20.4s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,360nm,23.3s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,590nm,20.0s | | | | | | | |

**GUC 26 02:15:23.3±0.8, 34.76S×72.07W, h13km±6km, ML3.8, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.37** | **9** | *i* P | Pb | 02 15 31.4 | -0.4 |
| CHPI | | | | *i* S | Sb | 02 15 37.0 | -0.4 |
| **TALC** | **Talca** | **0.73** | **151** | *i* P | Pb | 02 15 37.8 | -0.1 |
| TALC | | | | *i* S | Sb | 02 15 48.3 | +0.5 |
| TALC | | | | AML | AML | 02 15 49.5 | |
| | comp=E,19μm,0.1s | | | | | | |
| **NICH** | **Los Niches** | **0.73** | **110** | *i* P | Pb | 02 15 38.0 | 0.0 |
| NICH | | | | *i* S | Sb | 02 15 49.0 | +1.1 |
| **CLCH** | **Cerro Calan** | **1.86** | **44** | *i* P | Pb | 02 15 56.8 | -0.5 |
| CLCH | | | | *i* S | Sb | 02 16 21.7 | +1.1 |
| CLCH | | | | AML | AML | 02 16 27.5 | |
| | comp=N,985nm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **1.98** | **36** | *i* P | Pb | 02 15 58.8 | -0.5 |
| PEL | | | | *i* S | Sg | 02 16 25.7 | -1.5 |
| PEL | | | | AML | AML | 02 16 28.1 | |
| | comp=E,631nm,0.3s | | | | | | |

*CSEM **26** 02:31:06.0, 37.00N×24.33W, h10km, ML2.0, After PDA*
**PDA 26 02:31:06.0±0.6, 37.00N×24.33W, h10km, MD3.8, ML2.0, Error ellipse: s-maj=5.2km s-min=2.9km az=102.0, Azores Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSMN** | **Pico do Norte,** | **0.59** | **270** | *e*P | Pg | 02 31 15.9 | -1.6 |
| PSMN | | | | *e*S | Sg | 02 31 23.1 | -2.3 |
| PSMN | | | | A | A | 02 31 25.4 | |
| | 22nm,0.1s | | | | | | |
| **PSMN** | **Pico do Norte,** | **0.59** | **270** | *e*P | Pg | 02 31 15.9 | -1.6 |
| PSMN | | | | *e*S | Sg | 02 31 23.1 | -2.3 |
| **PSMA** | **Santa Maria** | **0.64** | **270** | *e*P | Pg | 02 31 16.4 | -2.1 |
| PSMA | | | | *e*S | Sg | 02 31 24.1 | -2.8 |
| PSMA | | | | A | A | 02 31 25.7 | |
| | 25nm,0.1s | | | | | | |
| **BART** | **Pico Bartolome** | **1.02** | **319** | *e*P | Pg | 02 31 21.5 | -4.4 |
| BART | | | | *e*S | Sg | 02 31 33.7 | -5.6 |
| BART | | | | A | A | 02 31 34.8 | |
| | 28nm,0.2s | | | | | | |
| **BART** | **Pico Bartolome** | **1.02** | **319** | *e*P | Pg | 02 31 21.5 | -4.4 |
| BART | | | | *e*S | Sg | 02 31 33.7 | -5.6 |
| **GRON** | **Grota Negra** | **1.23** | **309** | *e*P | Pn | 02 31 23.4 | -5.9 |
| GRON | | | | *e*S | Sb | 02 31 36.6 | -8.8 |
| GRON | | | | A | A | 02 31 39.2 | |
| | 5.1nm,0.1s | | | | | | |
| **PDA** | **Ponta Delgada** | **1.30** | **305** | *e*P | Pn | 02 31 25.6 | -4.6 |
| PDA | | | | *e*S | Sb | 02 31 40.0 | -7.3 |
| PDA | | | | A | A | 02 31 44.1 | |
| | 19nm,0.3s | | | | | | |
| **PDA** | **Ponta Delgada** | **1.30** | **305** | *e*P | Pn | 02 31 25.6 | -4.6 |
| PDA | | | | *e*S | Sb | 02 31 40.0 | -7.3 |

*AUST **26** 02:32:26.6, 6.98S×129.54E, h100km*
**IDC 26 02:32:17.3±2.2, 6.93S×129.25E, h0km, mb4.1/1, mb1 4.0/3, mb1mx3.6/27, mbtmp3.8/3, ML3.9/2, MS3.8/2, Ms1 3.8/2, ms1mx3.0/28, Error ellipse: s-maj=159.3km s-min=31.4km az=68.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **4.98** | **37** | P | Pb | 02 33 40.5 | -5.0 |
| | baz=4.9,SNR=12 | | | | | | |
| **MTN** | **Manton Dam** | **6.16** | **163** | P | Pn | 02 33 56.4 | +6.8 |
| | baz=6.1,SNR=79 | | | | | | |
| **KDU** | **Kakadu** | **6.54** | **151** | P | Pn | 02 34 00.4 | +5.5 |
| | baz=6.4,SNR=44 | | | | | | |
| **KNRA** | **Kununurra** | **8.70** | **183** | P | Pn | 02 34 31.7 | +7.1 |
| | baz=8.7,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **13.85** | **160** | Pn | Pn | 02 35 34.5 | -0.6 |
| | 0.6nm,0.3s,baz=342,slow=13,SNR=14 | | | | | | |
| WRA | | | | Sn | Sn | 02 37 58.4 | -11 |
| | 1.3nm,0.3s,baz=335,slow=22,SNR=8.6 | | | | | | |
| **ASAR** | **Alice Springs** | **17.23** | **165** | P | Pn | 02 36 20.1 | +0.4 |
| | 0.5nm,0.3s,baz=347,slow=9.5,SNR=20 | | | | | | |
| ASAR | | | | S | Sn | 02 39 19.4 | -13 |
| | 0.3nm,0.3s,baz=343,slow=24,SNR=5.5 | | | | | | |
| **WRKA** | **Warakurna** | **18.03** | **183** | P | P | 02 36 31.7 | +1.7 |
| | baz=18,SNR=7.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.12** | **311** | LR | LR | 02 56 08.7 | |
| | comp=Z,45nm,22.0s,baz=150,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **67.76** | **327** | P | P | 02 43 16.9 | 0.0 |
| | 0.7nm,0.3s,baz=117,slow=7.5,SNR=6.8 | | | | | | |
| **KBZ** | **Khabaz** | **92.11** | **314** | LR | LR | 03 35 36.2 | |
| | comp=Z,119nm,18.2s,baz=272,slow=41 | | | | | | |

*ISCJB **26** 02:42:10.0±0.8, 49.80N±0.06×18.55E±0.05, h0km, Error ellipse: s-maj=8.8km s-min=4.0km az=166.7*
*CSEM **26** 02:42:10.9±0.3, 49.80N×18.55E, h1km, ML2.5/4, Error ellipse: s-maj=8.2km s-min=3.6km az=165.0*
*IPEC **26** 02:42:11.5±0.2, 49.83N×18.57E, h0km, ML1.4/3, Error ellipse: s-maj=2.1km s-min=1.1km az=161.0*
*PRU **26** 02:42:11.6, 49.81N×18.55E, h0km*
**ISC 26 02:42:10.9±1.1, 49.79N±0.07×18.55E±0.03, h0km, n15, σ0s82/26, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKC** | **Ostrava-Krasne** | **0.27** | **281** | *e*PG | **Pg** | **02 42 17.0** | **+1.0** |
| OKC | | | | *e*SG | **Sg** | **02 42 20.3** | **+0.8** |
| | comp=Z,19nm,0.5s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.27** | **281** | Pg | **Pg** | **02 42 17.0** | **+1.0** |
| OKC | | | | Sg | **Sg** | **02 42 20.3** | **+0.8** |
| | 19nm,0.5s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.66** | **269** | *e*Pg | **Pg** | **02 42 24.3** | **+0.9** |
| MORC | | | | *e*Sg | **Sg** | **02 42 32.8** | **+0.9** |
| | 5.3nm,0.1s,baz=85 | | | | | | |
| **OJC** | **Ojcow** | **0.91** | **61** | *e*Pg | **Pg** | **02 42 28.6** | **+0.3** |
| OJC | | | | *e*Sg | **Sg** | **02 42 40.2** | **0.0** |
| **OJC** | **Ojcow** | **0.91** | **61** | *e*Pg | **Pg** | **02 42 28.6** | **+0.3** |
| OJC | | | | *e*Sg | **Sg** | **02 42 40.2** | **0.0** |
| **KRLC** | **Kraliky** | **1.18** | **285** | *e*PG | **Pg** | **02 42 32.5** | **-1.0** |
| KRLC | | | | *e*SG | **Sg** | **02 42 49.2** | **+0.4** |
| **KRLC** | **Kraliky** | **1.18** | **285** | Pg | **Pg** | **02 42 32.5** | **-1.0** |
| KRLC | | | | Sg | **Sg** | **02 42 49.2** | **+0.4** |
| **VRAC** | **Vranov** | **1.36** | **250** | *e*Pg | **Pg** | **02 42 37.1** | **+0.1** |
| VRAC | | | | *e*Sg | **Sb** | **02 42 55.3** | **+0.1** |
| | 5.0nm,0.1s,baz=67 | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.54** | **292** | *e*PG | **Pn** | **02 42 39.7** | **0.0** |
| DPC | | | | *e*SG | **Sn** | **02 42 59.7** | **-0.8** |
| | comp=Z,2.8nm,0.2s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.54** | **292** | Pg | **Pn** | **02 42 39.7** | **0.0** |
| DPC | | | | Sg | **Sn** | **02 42 59.7** | **-0.8** |
| | 2.8nm,0.2s | | | | | | |
| **KRUC** | **Moravsky** | **1.58** | **244** | *e*Pg | **Pn** | **02 42 40.7** | **+0.5** |
| | baz=61 | | | | | | |
| KRUC | | | | *e*Sg | **Sg** | **02 43 02.0** | **+0.2** |
| | 4.4nm,0.2s,baz=61 | | | | | | |
| **UPC** | **Upice** | **1.79** | **295** | *e*SG | **Sg** | **02 43 08.5** | **+0.3** |
| **UPC** | **Upice** | **1.79** | **295** | Sg | **Sg** | **02 43 08.5** | **+0.3** |
| **KHC** | **Kasperske Hory** | **3.31** | **260** | *e*SG | **Sg** | **02 43 55.4** | **-1.8** |
| **KHC** | **Kasperske Hory** | **3.31** | **260** | Sg | **Sg** | **02 43 55.4** | **-1.8** |

*NNC **26** 02:52:23.3±0.5, 42.89N×77.97E, h0km, mb4.1, mpv3.8, Error ellipse: s-maj=8.9km s-min=1.9km az=171.0*
*BJI **26** 02:52:24.5, 43.02N×77.89E, h5km, ML3.4/8*
*KRNET **26** 02:52:24.8±0.1, 42.78N×77.77E, h11km, mb4.2*
**ISC 26 02:52:24.6±1.5, 42.91N±0.04×77.94E±0.04, h11km±12km, n40, σ1s82/52, 44C-13D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KNDC** | **Almaty** | **0.78** | **294** | ⇑P | **Pg** | **02 52 39.0** | **-0.7** |
| KNDC | | | | ⇑S | **Sb** | **02 52 50.6** | **-0.3** |
| **PDGK** | **Podgornoye** | **1.20** | **69** | ⇓P | **Pn** | **02 52 46.1** | **-1.2** |
| | 101nm,0.4s | | | | | | |
| PDGK | | | | ⇓S | **Sb** | **02 53 02.3** | **-0.7** |
| | 176nm,0.3s | | | | | | |
| **ULHL** | **Ulahol** | **1.42** | **243** | ⇑*i*P | **Pn** | **02 52 49.1** | **-1.4** |
| | baz=245 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sn** | **02 53 07.1** | **-2.3** |
| | baz=245 | | | | | | |
| **ULHL** | **Ulahol** | **1.42** | **243** | P | **Pn** | **02 52 49.2** | **-1.4** |
| | SNR=2774 | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.54** | **255** | ⇑*i*P | **Pn** | **02 52 51.5** | **-0.6** |
| | baz=259 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sn** | **02 53 11.5** | **-0.6** |
| | baz=259 | | | | | | |
| **TKM2** | **Tokmak 2** | **1.72** | **271** | ⇓P | **Pb** | **02 52 55.3** | **-1.2** |
| | 52nm,0.3s | | | | | | |
| TKM2 | | | | ⇑S | **Sb** | **02 53 18.5** | **+0.3** |
| | 638nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **1.72** | **271** | ⇑*i*P | **Pb** | **02 52 55.4** | **-1.0** |
| | baz=276 | | | | | | |
| TKM2 | | | | ⇑*i*S | **Sb** | **02 53 17.8** | **-0.4** |
| | baz=276 | | | | | | |
| **TKM2** | **Tokmak 2** | **1.72** | **271** | P | **Pb** | **02 52 55.2** | **-1.2** |
| | SNR=206 | | | | | | |
| **NRN** | **Naryn** | **2.06** | **225** | ⇑*i*P | **Pn** | **02 53 00.5** | **+1.0** |
| | baz=225 | | | | | | |
| NRN | | | | ⇑*i*S | **Sb** | **02 53 27.7** | **-0.3** |
| | baz=225 | | | | | | |
| **KBK** | **Karagaybulak** | **2.22** | **264** | ⇑*i*P | **Pb** | **02 53 03.9** | **-0.9** |
| | baz=268 | | | | | | |
| KBK | | | | ⇑*i*S | **Sb** | **02 53 32.3** | **-0.1** |
| | baz=268 | | | | | | |
| **KBK** | **Karagaybulak** | **2.22** | **264** | P | **Pb** | **02 53 03.9** | **-0.9** |
| | SNR=331 | | | | | | |
| **CHMS** | **Chumysh** | **2.34** | **273** | ⇑*i*P | **Pb** | **02 53 05.6** | **-1.3** |
| | baz=277 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sb** | **02 53 36.3** | **+0.4** |
| | baz=277 | | | | | | |
| **CHMS** | **Chumysh** | **2.34** | **273** | P | **Pb** | **02 53 05.7** | **-1.2** |
| | SNR=43 | | | | | | |
| **FRU** | **Bishkek** | **2.45** | **269** | ⇑*i*P | **Pb** | **02 53 07.3** | **-1.3** |
| | baz=273 | | | | | | |
| FRU | | | | ⇑*i*S | **Sb** | **02 53 36.6** | **-2.2** |
| | baz=273 | | | | | | |
| **USP** | **Ospenovka** | **2.55** | **279** | ⇑*i*P | **Pb** | **02 53 08.5** | **-1.9** |
| | baz=283 | | | | | | |
| USP | | | | ⇑*i*S | **Sb** | **02 53 42.3** | **+0.6** |
| | baz=283 | | | | | | |
| **USP** | **Ospenovka** | **2.55** | **279** | P | **Pb** | **02 53 08.4** | **-2.0** |
| | SNR=109 | | | | | | |
| **AAK** | **Ala-Archa** | **2.55** | **265** | ⇑Pg | **Pb** | **02 53 08.4** | **-2.2** |
| | 78nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 02 53 43.2 | |
| | 311nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **2.55** | **265** | ⇑*i*P | **Pb** | **02 53 08.2** | **-2.3** |
| | baz=268 | | | | | | |
| AAK | | | | ⇑*i*S | **Sb** | **02 53 41.3** | **-0.7** |
| | baz=268 | | | | | | |
| **AAK** | **Ala-Archa** | **2.55** | **265** | P | **Pb** | **02 53 08.3** | **-2.2** |
| | SNR=199 | | | | | | |
| **UCH** | **Uchtor** | **2.62** | **256** | ⇓*i*P | **Pb** | **02 53 09.8** | **-2.1** |
| | baz=258 | | | | | | |
| UCH | | | | ⇓*i*S | **Sb** | **02 53 44.5** | **+0.2** |
| | baz=258 | | | | | | |
| **UCH** | **Uchtor** | **2.62** | **256** | P | **Pb** | **02 53 09.9** | **-2.0** |
| | SNR=131 | | | | | | |
| **ARLS** | **Aral** | **2.88** | **250** | ⇑*i*P | **Pn** | **02 53 12.7** | **+2.1** |
| | baz=252 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **02 53 47.1** | **+1.8** |
| | baz=252 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.08** | **267** | ⇑*i*P | Pb | 02 53 16.0 | -3.4 |
| | baz=269 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **02 53 58.1** | **+1.1** |
| | baz=269 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.08** | **267** | P | **Pn** | **02 53 15.5** | **+2.2** |
| | SNR=43 | | | | | | |
| **AML** | **Almayashu** | **3.24** | **258** | ⇑*i*P | Pn | 02 53 18.7 | +3.0 |
| | baz=259 | | | | | | |
| AML | | | | ⇑*i*S | **Sb** | **02 54 03.2** | **+1.4** |
| | baz=259 | | | | | | |
| **AML** | **Almayashu** | **3.24** | **258** | P | Pn | 02 53 18.7 | +3.0 |
| | SNR=40 | | | | | | |
| **KSH** | **Kashi** | **3.70** | **204** | Pn | **Pb** | **02 53 30.5** | **+0.5** |
| KSH | | | | Sn | **Sg** | **02 54 24.8** | **+1.4** |
| KSH | | | | SMN | | | |
| | 58nm,0.9s | | | | | | |
| KSH | | | | SME | | | |
| | 120nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **4.03** | **266** | Pn | **Pn** | **02 53 28.0** | **+1.6** |
| MNAS | | | | ⇑Pg | **Pb** | **02 53 37.3** | **+1.6** |
| | 12nm,0.4s | | | | | | |
| MNAS | | | | ⇑Lg | Lg | 02 54 27.8 | |
| | 41nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **4.03** | **266** | ⇑*e*P | Pn | 02 53 29.4 | +3.0 |
| | baz=268 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **02 54 20.5** | **-4.0** |
| | baz=268 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.42** | **231** | ⇑Pg | **Pb** | **02 53 45.1** | **+2.8** |
| | 7.5nm,0.5s | | | | | | |
| SFK | | | | ⇓Lg | Lg | 02 54 43.3 | |
| | 22nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.42** | **231** | ⇑*e*P | Pn | **02 53 33.1** | **+1.3** |
| | baz=231 | | | | | | |
| SFK | | | | ⇑*i*S | **Sb** | **02 54 29.8** | **-5.8** |
| | baz=231 | | | | | | |
| **MK31** | **Makanchi Array** | **4.96** | **37** | ⇓Pn | **Pn** | **02 53 41.6** | **+2.5** |
| | 1.1nm,0.2s,baz=219,slow=14,SNR=54 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 02 54 58.9 | |
| | 6.3nm,0.4s,baz=220,slow=28,SNR=7.8 | | | | | | |
| **KK31** | **Karatay Array** | **5.45** | **275** | ⇑Pg | **Pb** | **02 54 01.6** | **+1.7** |
| | 4.2nm,0.4s,baz=91,slow=16,SNR=32 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 02 55 13.1 | |
| | 26nm,0.5s,baz=93,slow=27,SNR=16 | | | | | | |
| **OTUK** | **Ortayu** | **6.63** | **326** | ⇑Pn | **Pn** | **02 54 02.7** | **+0.8** |
| | 2.4nm,0.6s | | | | | | |
| OTUK | | | | ⇓Pg | Pb | 02 54 23.3 | +3.5 |
| | 3.5nm,0.6s | | | | | | |
| OTUK | | | | ⇑Lg | Lg | 02 55 51.3 | |
| | 17nm,0.5s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.73** | **3** | ⇓Lg | Lg | 02 56 29.9 | |
| | 64nm,0.7s | | | | | | |
| **KURK** | **Kurchatov** | **7.82** | **3** | ⇓Lg | Lg | 02 56 30.0 | |
| | 53nm,0.7s | | | | | | |
| **VOSK** | **Vostochnaya** | **10.87** | **337** | ⇑Lg | Lg | 02 58 09.8 | |
| | 16nm,1.1s | | | | | | |
| **BVA0** | **Borovoye Array** | **11.31** | **336** | ⇑Lg | Lg | 02 58 22.8 | |
| | 7.4nm,0.7s,baz=142,slow=29,SNR=4.7 | | | | | | |
| **ZRNK** | **Zerenda** | **11.69** | **332** | ⇑Pn | **Pn** | **02 55 10.7** | **-0.5** |
| | 2.8nm,1.1s | | | | | | |
| ZRNK | | | | ⇓Lg | Lg | 02 58 35.5 | |
| | 9.4nm,0.9s | | | | | | |
| **CHKZ** | **Chkalovo** | **11.82** | **338** | ⇑Pn | **Pn** | **02 55 15.4** | **+2.4** |
| | 1.7nm,1.1s | | | | | | |
| CHKZ | | | | ⇓Lg | Lg | 02 58 39.4 | |
| | 11nm,0.9s | | | | | | |

*ISCJB **26** 03:04:37.5±0.4, 32.26N±0.02×115.32W±0.02, h9km±3km, Error ellipse: s-maj=3.2km s-min=2.9km az=144.1*
*NEIC **26** 03:04:38.9, 32.23N×115.32W, h5km, ML3.0(ECX), ML3.0(PAS), After ECX.*
*ECX **26** 03:04:38.8±0.6, 32.23N×115.31W, h5km, MD2.9, ML3.1*
*MEX **26** 03:04:39.0±0.8, 32.39N×115.13W, h23km±6km, MD3.8*
**ISC 26 03:04:37.5±0.8, 32.23N±0.02×115.32W±0.02, h14km±6km, n46, σ1s37/75, 3C-7D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPBX** | **Cerro Prieto** | **0.19** | **3** | *e*P | **Pg** | **03 04 42.1** | **0.0** |
| CPBX | | | | *e*S | **Sg** | **03 04 45.5** | **+0.4** |
| **CPBX** | **Cerro Prieto** | **0.19** | **3** | *e*P | **Pg** | **03 04 42.0** | **0.0** |
| CPBX | | | | *i* S | **Sg** | **03 04 43.8** | **-1.2** |
| **MBIG** | **Mexicali** | **0.21** | **29** | *e*P | **Pg** | **03 04 42.6** | **+0.4** |
| MBIG | | | | *e*S | **Sg** | **03 04 44.8** | **-0.6** |
| **MBIG** | **Mexicali** | **0.21** | **29** | *e*P | **Pg** | **03 04 42.8** | **+0.5** |
| **SGL** | **Mount Signal** | **0.55** | **321** | ⇓*i*P | **Pg** | **03 04 48.3** | **0.0** |
| **EMSC** | **East Mesa** | **0.58** | **29** | ⇑*i*P | **Pb** | **03 04 49.5** | **0.0** |
| **DREC** | **Desert Rsrch C** | **0.59** | **349** | ⇓*i*P | **Pb** | **03 04 49.6** | **+0.1** |
| **RDX** | **Rancho Dawling** | **0.61** | **241** | ⇑*e*P | **Pg** | **03 04 49.5** | **0.0** |
| RDX | | | | *e*S | **Sg** | **03 04 58.0** | **+0.3** |
| RDX | | | | *e* | | 03 05 00.1 | |
| RDX | | | | IAML | | 03 05 00.1 | |
| | comp=N,432nm,0.4s | | | | | | |
| **WESC** | **Westside Schoo** | **0.64** | **327** | ⇓*i*P | **Pg** | **03 04 50.3** | **+0.3** |
| **COA** | **Coachella** | **0.66** | **14** | ⇑*i*P | **Pg** | **03 04 50.4** | **0.0** |
| **YUH** | **Yuha Desert** | **0.66** | **309** | ⇓*i*P | **Pg** | **03 04 50.2** | **-0.3** |
| **COK** | **Cook Ranch** | **0.71** | **331** | ⇓*i*P | **Pg** | **03 04 51.4** | **0.0** |
| **RMX** | **La Rumorosa** | **0.75** | **300** | ⇓*e*P | **Pg** | **03 04 51.3** | **-0.8** |
| RMX | | | | *e*S | **Sg** | **03 05 01.1** | **-0.8** |
| RMX | | | | *e* | | 03 05 02.8 | |
| RMX | | | | IAML | | 03 05 02.8 | |
| | comp=N,1μm,0.1s | | | | | | |
| **ECBX** | **El Chinero** | **0.79** | **163** | *e*P | **Pg** | **03 04 52.5** | **-0.3** |
| ECBX | | | | *e*S | **Sb** | **03 05 03.8** | **+0.4** |
| **IBP** | **Imperial Bould** | **0.79** | **304** | P | **Pg** | **03 04 52.4** | **-0.5** |
| | baz=0.8,SNR=9.9 | | | | | | |
| IBP | | | | S | **Sg** | **03 05 03.1** | **-0.2** |
| | baz=0.8 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **0.82** | **331** | P | **Pg** | **03 04 52.5** | **-0.9** |
| | baz=0.8,SNR=37 | | | | | | |
| SWSC | | | | S | **Sg** | **03 05 03.7** | **-0.6** |
| | baz=0.8 | | | | | | |
| **GLA** | **Glamis** | **0.92** | **26** | P | **Pg** | **03 04 54.0** | **-1.4** |
| | baz=0.9,SNR=73 | | | | | | |
| GLA | | | | S | **Sg** | **03 05 06.0** | **-1.5** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.92** | **26** | *e*Pg | **Pg** | **03 04 54.0** | **-1.4** |
| GLA | | | | *e*S | **Sg** | **03 05 05.5** | **-2.0** |
| **ZAX** | **El Zacaton** | **1.08** | **229** | *e*P | **Pg** | **03 04 57.6** | **-0.8** |
| ZAX | | | | *e*S | **Sb** | **03 05 12.6** | **+0.5** |
| **MONP** | **Monument Peak** | **1.14** | **306** | Pb | **Pg** | **03 04 58.7** | **-0.9** |
| | baz=1.1,SNR=34 | | | | | | |
| MONP | | | | S | **Sg** | **03 05 13.2** | **-1.3** |
| | baz=1.1 | | | | | | |
| **CBX** | **Cerro Bola** | **1.15** | **275** | *e*P | **Pg** | **03 04 58.9** | **-0.7** |
| CBX | | | | *e*S | **Sg** | **03 05 14.5** | **-0.1** |
| **CBX** | **Cerro Bola** | **1.15** | **275** | *e*P | **Pg** | **03 04 59.0** | **-0.7** |
| CBX | | | | IAML | | 03 05 15.6 | |
| | comp=N,584nm,0.4s | | | | | | |
| CBX | | | | ⇓*e* | | 03 05 15.6 | |
| **CBX** | **Cerro Bola** | **1.15** | **275** | *e*P | **Pg** | **03 04 58.9** | **-0.7** |
| CBX | | | | *e*S | **Sg** | **03 05 14.5** | **-0.1** |
| **SPIG** | **San Pedro Mart** | **1.18** | **186** | *e*P | **Pb** | **03 04 59.8** | **-0.1** |
| SPIG | | | | *e*S | **Sn** | **03 05 17.4** | **+1.4** |
| **SPIG** | **San Pedro Mart** | **1.18** | **186** | *e*P | **Pb** | **03 04 59.8** | **-0.1** |
| **SPIG** | **San Pedro Mart** | **1.18** | **186** | *e*P | **Pb** | **03 04 59.8** | **-0.1** |
| SPIG | | | | *e*S | **Sn** | **03 05 17.4** | **+1.4** |
| **SPX** | **San Pedro Mart** | **1.18** | **186** | *e*P | **Pb** | **03 04 59.8** | **-0.1** |
| **SPX** | **San Pedro Mart** | **1.18** | **186** | *e*P | **Pb** | **03 04 59.7** | **-0.3** |
| SPX | | | | *i* S | **Sb** | **03 05 15.9** | **+0.7** |
| **ECNX** | **Esteban Cantu** | **1.23** | **243** | *e*P | **Pn** | **03 04 59.9** | **-0.4** |
| ECNX | | | | *e*S | **Sb** | **03 05 16.8** | **+0.5** |
| **BAR** | **Barrett** | **1.23** | **292** | *e*P | **Pn** | **03 05 00.3** | **-0.1** |
| **BAR** | **Barrett** | **1.23** | **292** | *e*Pn | **Pn** | **03 05 00.2** | **-0.1** |
| BAR | | | | *e*S | **Sb** | **03 05 16.1** | **-0.3** |
| **PBX** | **Punta Banda** | **1.29** | **248** | *e*P | **Pn** | **03 05 01.2** | **+0.1** |
| PBX | | | | *e*S |

**IDC 26 03:23:56.0±5.6, 3.79S×146.03E, h0km, mb3.3/1, mb1 4.0/2, mb1mx3.5/25, mbtmpg3.7/2, ML3.6/1, MS3.4/4, Ms1 3.4/4, ms1mx3.1/18, Error ellipse: s-maj=269.2km s-min=69.8km az=113.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **14.91** | **113** | LR | LR | 03 32 58.0 | |
| | comp=Z,102nm,18.7s,baz=286,slow=36 | | | | | | |
| **GUMO** | **Guam** | **17.30** | **356** | LR | LR | 03 34 25.3 | |
| | comp=Z,85nm,18.7s,baz=259,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.69** | **214** | P | Pn | 03 28 27.8 | -0.6 |
| | 0.2nm,0.3s,baz=36,slow=11,SNR=31 | | | | | | |
| WRA | | | | LR | LR | 03 37 03.7 | |
| | comp=Z,123nm,19.7s,baz=40,slow=40 | | | | | | |
| **ASAR** | **Alice Springs** | **22.97** | **210** | P | P | 03 29 01.8 | -0.5 |
| | 1.0nm,0.7s,baz=38,slow=9.2,SNR=12 | | | | | | |
| **DZM** | **Mont Dzumac** | **26.88** | **134** | LR | LR | 03 38 40.0 | |
| | comp=Z,158nm,18.7s,baz=332,slow=33 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.08** | **42** | T | T | 04 00 09.0 | |
| | baz=223,slow=76,SNR=12 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.08** | **42** | T | T | 04 00 08.9 | |
| | baz=223,slow=76,SNR=12 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.09** | **42** | T | T | 04 00 10.5 | |
| | baz=223,slow=76,SNR=12 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **31.08** | **41** | T | T | 04 01 28.6 | |
| | baz=218 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **31.10** | **41** | T | T | 04 01 27.0 | |
| | baz=218 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **31.10** | **41** | T | T | 04 01 31.7 | |
| | baz=218 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **143.57** | **287** | PKP | PKPdf | 03 43 33.2 | -0.7 |
| | 0.6nm,0.9s,baz=90,slow=1.4,SNR=3.6 | | | | | | |

*PRU **26** 03:24:34.0, 50.14N×19.16E, h0km*
**CSEM 26 03:24:33.3±0.3, 50.14N×19.16E, h1km, Error ellipse: s-maj=7.4km s-min=4.3km az=1.0, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OJC** | **Ojcow** | **0.42** | **79** | *e*Pg | Pg | 03 24 41.6 | +0.2 |
| OJC | | | | *e*Sg | Sg | 03 24 47.3 | +0.5 |
| **OJC** | **Ojcow** | **0.42** | **79** | *e*Pg | Pg | 03 24 41.6 | +0.2 |
| OJC | | | | *e*Sg | Sg | 03 24 47.3 | +0.5 |
| **OKC** | **Ostrava-Krasne** | **0.72** | **245** | *e*SG | Sb | 03 24 58.1 | -1.0 |
| | comp=Z,4.1nm,0.3s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.72** | **245** | Sg | Sb | 03 24 58.1 | -1.0 |
| | 4.1nm,0.3s | | | | | | |
| **LANS** | **Liptovska Anna** | **1.01** | **169** | *e*PG | Pg | 03 24 53.1 | +0.3 |
| LANS | | | | *e*SG | Sg | 03 25 05.6 | -0.4 |
| **LANS** | **Liptovska Anna** | **1.01** | **169** | *e*Pg | Pg | 03 24 53.1 | +0.3 |
| LANS | | | | *e*Sg | Sg | 03 25 05.6 | -0.4 |
| **MORC** | **Moravsky Berou** | **1.11** | **251** | *e*Pg | Pb | 03 24 55.3 | 0.0 |
| MORC | | | | *e*Sg | Sb | 03 25 10.2 | -0.1 |
| **KRLC** | **Kraliky** | **1.53** | **268** | *e*SG | Sn | 03 25 22.4 | -0.1 |
| **KRLC** | **Kraliky** | **1.53** | **268** | Sg | Sn | 03 25 22.4 | -0.1 |
| **VYHS** | **Vyhne** | **1.66** | **187** | *e*PN | Pn | 03 25 03.1 | -0.5 |
| VYHS | | | | *e*SN | Sn | 03 25 24.1 | -1.5 |
| **VYHS** | **Vyhne** | **1.66** | **187** | *e*Pn | Pn | 03 25 03.1 | -0.5 |
| VYHS | | | | *e*Sn | Sn | 03 25 24.2 | -1.4 |
| **DPC** | **Dobruska-Polom** | **1.83** | **278** | *e*PG | Pb | 03 25 07.5 | -0.2 |
| DPC | | | | *e*SG | Sg | 03 25 32.4 | 0.0 |
| | comp=Z,2.5nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.83** | **278** | Pg | Pb | 03 25 07.5 | -0.2 |
| DPC | | | | Sg | Sg | 03 25 32.4 | 0.0 |
| | 2.5nm,0.3s | | | | | | |

**IDC 26 03:25:04.9±6.6, 3.33S×145.55E, h0km, mb3.2/1, mb1 3.8/2, mb1mx3.4/26, mbtmpg3.5/2, ML3.3/1, Error ellipse: s-maj=365.3km s-min=76.8km az=111.0, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **19.80** | **213** | P | Pn | 03 29 38.1 | -0.4 |
| | 0.1nm,0.3s,baz=40,slow=11,SNR=6.5 | | | | | | |
| **ASAR** | **Alice Springs** | **23.14** | **208** | P | P | 03 30 12.3 | -0.6 |
| | 0.8nm,0.9s,baz=31,slow=11,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **142.97** | **287** | PKP | PKPdf | 03 44 40.9 | -0.9 |
| | 0.2nm,0.8s,baz=85,slow=2.6,SNR=2.1 | | | | | | |

*BJI **26** 03:28:25.5, 3.91S×100.26E, h35km, mb5.0/55, mB5.1/32, Ms4.8/33, Ms7 4.6/33*
*AUST **26** 03:28:26.1±7.5, 3.63S×99.78E, h10km, Error ellipse: s-maj=3.2km s-min=0.9km az=236.0*
*NEIC **26** 03:28:28.8±0.3, 3.26S×100.26E, h10km, mb5.0/16, Error ellipse: s-maj=8.5km s-min=4.1km az=51.0*
*ISCJB **26** 03:28:30.1±0.2, 3.25S±0.03×100.32E±0.03, h29km, mb4.8/63, MS4.3/11, Error ellipse: s-maj=5.4km s-min=2.6km az=41.2*
*DJA **26** 03:28:31.0±0.6, 3.3S±4°×10°0E±°, h26km±5km, M4.8/40, mb5.0/40, mB5.2/21, MLv5.1/23, Mw(mB)4.6/21*
*MOS **26** 03:28:32.1±1.0, 3.03S×100.52E, h38km, mb5.2/26, Error ellipse: s-maj=12.7km s-min=6.0km az=115.5*
*IDC **26** 03:28:32.4±3.0, 3.19S×100.35E, h32km±20km, mb4.5/22, mb1 4.6/25, mb1mx4.3/48, mbtmpg4.7/25, ML4.1/3, MS4.3/9, Ms1 4.3/9, ms1mx3.9/34, Error ellipse: s-maj=24.0km s-min=9.9km az=39.0*
*KLM **26** 03:28:34.0, 3.09S×99.69E, h107km, mb5.0, ML5.0, MS5.4*
**ISC 26 03:28:31.8±0.4, 3.31S±0.05×100.28E±0.05, h29km, n425, σ1s34/423, mb4.9/63, MS4.3/11, 17C-12D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.61** | **334** | P | **Pb** | **03 28 42.6** | **-1.4** |
| **MASI** | **Maura Aman, Be** | **1.96** | **85** | P | **Pn** | **03 29 02.6** | **-0.6** |
| **SISI** | **Saibi** | **2.30** | **329** | P | **Pn** | **03 29 06.1** | **-1.8** |
| **KSI** | **Kapahiang** | **2.33** | **98** | P | **Pn** | **03 29 08.7** | **+0.4** |
| **SDSI** | **Sungai Dareh** | **2.63** | **26** | P | **Pn** | **03 29 11.6** | **-0.7** |
| **PPI** | **Padang Panjang** | **2.84** | **2** | P | **Pn** | **03 29 14.5** | **-0.8** |
| | baz=3.2,SNR=22 | | | | | | |
| **PPI** | **Padang Panjang** | **2.84** | **2** | P | **Pn** | **03 29 14.4** | **-0.8** |
| **MNAI** | **Manna** | **2.87** | **111** | P | **Pn** | **03 29 16.5** | **+0.9** |
| | baz=3.2,SNR=18 | | | | | | |
| **MNAI** | **Manna** | **2.87** | **111** | P | **Pn** | **03 29 15.6** | **0.0** |
| **MNAI** | **Manna** | **2.87** | **111** | *e*Pn | **Pn** | **03 29 15.9** | **+0.3** |
| MNAI | | | | *e*S | **Sn** | **03 29 48.6** | **-0.6** |
| **BKNI** | **Bangkinang** | **3.69** | **12** | P | **Pb** | **03 29 36.4** | **0.0** |
| | baz=4.1,SNR=4.1 | | | | | | |
| **BKNI** | **Bangkinang** | **3.69** | **12** | P | **Pn** | **03 29 26.1** | **-0.8** |
| **BKNI** | **Bangkinang** | **3.69** | **12** | *e*Pn | **Pn** | **03 29 26.2** | **-0.8** |
| BKNI | | | | *e*S | Sn | 03 29 59.0 | -11 |
| **JMBI** | **JAMBI** | **3.75** | **64** | P | **Pn** | **03 29 27.4** | **-0.4** |
| **MDSI** | **Maura Dua** | **4.06** | **107** | P | **Pn** | **03 29 33.2** | **+1.1** |
| **LWLI** | **Liwa** | **4.13** | **114** | P | **Pn** | **03 29 34.6** | **+1.4** |
| **MNSI** | **Mandailing Nat** | **4.14** | **350** | P | **Pn** | **03 29 32.5** | **-0.6** |
| **PMBI** | **Palembang** | **4.50** | **85** | P | **Pn** | **03 29 38.4** | **+0.3** |
| **KASI** | **Kota Agung** | **4.74** | **118** | P | **Pn** | **03 29 42.7** | **+1.2** |
| **KLI** | **Kotabumi** | **4.82** | **109** | P | **Pn** | **03 29 44.5** | **+2.0** |
| **GSI** | **Gunungsitoli** | **5.32** | **329** | P | **Pn** | **03 29 47.1** | **-2.3** |
| | 118nm,1.2s,1.2nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.32** | **329** | *e*Pn | **Pn** | **03 29 46.7** | **-2.7** |
| GSI | | | | *e*Sn | Sn | 03 30 38.5 | -11 |
| **PPBI** | **Pangkal Pinang** | **5.96** | **79** | P | **Pn** | **03 29 59.8** | **+1.6** |
| **TPRI** | **Tanjung Pinang** | **5.97** | **45** | P | **Pn** | **03 29 59.0** | **+0.6** |
| **KGM** | **Kluang** | **6.10** | **30** | ⇓P | Pn | 03 30 05.7 | +5.6 |
| **MYKOM** | **Kota Tinggi** | **6.20** | **35** | *e*Pn | **Pn** | **03 30 00.9** | **-0.6** |
| **PSI** | **Prapat** | **6.22** | **347** | Pn | **Pn** | **03 29 58.9** | **-3.0** |
| | 1.5nm,0.3s,baz=190,slow=11,SNR=9.3 | | | | | | |
| PSI | | | | LR | LR | 03 32 56.5 | |
| | comp=Z,4μm,19.9s,baz=194,slow=44 | | | | | | |
| **PSI** | **Prapat** | **6.22** | **347** | *e*P | **Pn** | **03 30 00.2** | **-1.7** |
| **PSI** | **Prapat** | **6.22** | **347** | P | **Pn** | **03 30 00.3** | **-1.7** |
| | baz=6.4,SNR=6.4 | | | | | | |
| **PSI** | **Prapat** | **6.22** | **347** | *e*Pn | **Pn** | **03 30 00.2** | **-1.7** |
| **CGJI** | **Cibinong** | **6.31** | **122** | P | **Pn** | **03 30 02.0** | **-1.0** |
| | 196nm,1.1s,0.9nm | | | | | | |
| **FRIM** | **Kepong** | **6.64** | **12** | ⇑P | **Pn** | **03 30 07.5** | **-0.1** |
| **KCSI** | **Kotacane, Aceh** | **7.24** | **340** | P | **Pn** | **03 30 15.7** | **0.0** |
| **CBJI** | **Citeko** | **7.24** | **116** | P | Pn | 03 30 20.1 | +4.3 |
| | 1μm,0.9s,4.7nm | | | | | | |
| **SKJI** | **Sukabumi** | **7.25** | **121** | P | **Pn** | **03 30 17.0** | **+1.1** |
| | 251nm,0.8s,1.3nm | | | | | | |
| **IPM** | **Ipoh** | **7.77** | **6** | ⇓P | **Pn** | **03 30 24.4** | **+1.3** |
| **IPM** | **Ipoh** | **7.77** | **6** | *e*Pn | **Pn** | **03 30 23.5** | **+0.3** |
| IPM | | | | *e*S | **Sn** | **03 31 52.5** | **+2.2** |
| **CNJI** | **Cibinong** | **7.89** | **120** | P | **Pn** | **03 30 23.8** | **-0.9** |
| | 224nm,0.8s,2μm0.7nm | | | | | | |
| **LEM** | **Lembang** | **8.10** | **116** | Pn | **Pn** | **03 30 28.4** | **+0.7** |
| | 5.0nm,0.3s,baz=174,slow=18,SNR=5.7 | | | | | | |
| LEM | | | | Sn | Sn | 03 32 05.4 | +6.9 |
| | baz=338,slow=19,SNR=1.6 | | | | | | |
| **LEM** | **Lembang** | **8.10** | **116** | P | **Pn** | **03 30 29.2** | **+1.5** |
| | 2μm,0.8s | | | | | | |
| **KULM** | **Kulim** | **8.55** | **2** | ⇓P | **Pn** | **03 30 32.9** | **-0.8** |
| **KULM** | **Kulim** | **8.55** | **2** | *e*Pn | **Pn** | **03 30 31.9** | **-1.8** |
| **CISI** | **Cisompet, Garu** | **8.61** | **120** | P | **Pn** | **03 30 32.9** | **-1.7** |
| | baz=8.9,SNR=7.9 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.61** | **120** | P | **Pn** | **03 30 33.3** | **-1.3** |
| | 327nm,0.8s,5μm | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.61** | **120** | *e*Pn | **Pn** | **03 30 32.8** | **-1.8** |
| CISI | | | | *e*S | Sn | 03 32 03.7 | -7.0 |
| **CMJI** | **Cimerak** | **9.26** | **119** | P | **Pn** | **03 30 42.3** | **-1.3** |
| | 181nm,0.8s | | | | | | |
| **SKLT** | **Songkhla** | **10.42** | **2** | P | Pn | 03 31 07.3 | +7.9 |
| **SMRI** | **Semarang** | **10.78** | **111** | P | **Pn** | **03 31 06.1** | **+1.8** |
| **SMRI** | **Semarang** | **10.78** | **111** | *e*Pn | **Pn** | **03 31 03.8** | **-0.5** |
| **UWJI** | **Ujung Watu** | **11.07** | **107** | P | **Pn** | **03 31 09.9** | **+1.6** |
| **KSM** | **Kuching** | **11.09** | **65** | *e*Pn | Pn | 03 31 02.3 | -6.3 |
| **NGJI** | **Ngawi** | **11.84** | **110** | P | **Pn** | **03 31 20.4** | **+1.6** |
| | 89nm,1.7s | | | | | | |
| **SBUM** | **Sibu** | **13.24** | **65** | *e*Pn | **Pn** | **03 31 40.3** | **+2.3** |
| **BBKI** | **Banjar Baru** | **14.54** | **91** | P | **Pn** | **03 31 57.1** | **+1.3** |
| | 120nm,1.0s,6μm | | | | | | |
| **ABJI** | **Asem Bagus** | **14.58** | **108** | P | **Pn** | **03 31 56.1** | **-0.3** |
| | 133nm,0.7s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **14.72** | **111** | P | **Pn** | **03 31 58.4** | **+0.2** |
| | 57nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **14.72** | **111** | *e*Pn | Pn | 03 31 54.0 | -4.2 |
| JAGI | | | | *e*S | **Sn** | **03 34 39.1** | **-1.3** |
| **KBKI** | **Kotabaru** | **15.86** | **90** | P | **Pn** | **03 32 14.7** | **+1.5** |
| | 34nm,1.2s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.43** | **60** | P | **Pn** | **03 32 45.3** | **-0.1** |
| | baz=19,SNR=10 | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.43** | **60** | ⇓P | **P** | **03 32 44.8** | **-0.4** |
| **KKM** | **Kota Kinabalu** | **18.43** | **60** | *e*P | **P** | **03 32 44.4** | **-0.8** |
| | 33nm,0.9s | | | | | | |
| **SDKM** | **Sandakan** | **19.09** | **62** | ⇓P | **Pn** | **03 32 53.3** | **-0.2** |
| **TSM** | **Tawau** | **19.13** | **67** | ⇑P | **Pn** | **03 32 53.7** | **-0.1** |
| **CHAI** | **Chaiyaphum** | **19.16** | **5** | P | **Pn** | **03 32 53.8** | **-0.4** |
| | 6.0nm,0.9s | | | | | | |
| **UBPT** | **Khng Chiam** | **19.17** | **15** | P | **P** | **03 32 52.8** | **-0.5** |
| | 27nm,1.1s | | | | | | |
| **KDM** | **Kudat** | **19.40** | **58** | ⇓P | **P** | **03 32 55.5** | **-0.3** |
| **SPSI** | **Sidrap Palu** | **19.46** | **93** | P | **P** | **03 32 55.3** | **-1.2** |
| | 42nm,1.0s,632nm | | | | | | |
| **KAPI** | **Kappang** | **19.49** | **96** | P | **Pn** | **03 32 57.6** | **-0.6** |
| | 1.2nm,0.3s,baz=275,slow=12,SNR=16 | | | | | | |
| **KAPI** | **Kappang** | **19.49** | **96** | *e*P | **P** | **03 32 56.0** | **-0.9** |
| | 113nm,1.1s | | | | | | |
| **TTSI** | **Tana Toraja** | **19.51** | **90** | P | **Pn** | **03 32 58.3** | **-0.1** |
| | 52nm,0.9s,1μm | | | | | | |
| **PCI** | **Palu** | **19.69** | **83** | P | **Pn** | **03 32 59.9** | **-0.6** |
| | 109nm,1.4s,1μm | | | | | | |
| **PBKT** | **Sadao Pong** | **19.77** | **2** | P | **Pn** | **03 33 00.9** | **-0.4** |
| | 11nm,0.9s | | | | | | |
| **BKSI** | **Bulukumba** | **19.89** | **96** | P | **P** | **03 33 00.6** | **-0.5** |
| | 208nm,1.2s,2μm | | | | | | |
| **MPSI** | **Mapaga** | **19.94** | **80** | P | **P** | **03 33 01.7** | **0.0** |
| | 110nm,1.1s,1μm | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.06** | **65** | *e*P | **P** | **03 33 03.3** | **+0.3** |
| | 122nm,1.0s | | | | | | |
| **SKNT** | **Sakolnakorn** | **20.48** | **10** | P | **P** | **03 33 05.4** | **-2.2** |
| | 33nm,1.2s | | | | | | |
| **LOEI** | **Loei** | **20.71** | **3** | P | **P** | **03 33 08.9** | **-1.1** |
| | 36nm,1.0s,2μm | | | | | | |
| **UTTA** | **Uttaradit** | **20.92** | **1** | P | Pn | 03 33 13.9 | -1.0 |
| | 3.2nm,1.3s | | | | | | |
| **NONG** | **Nongkai** | **21.43** | **7** | P | **P** | **03 33 14.7** | **-3.0** |
| | 63nm,0.7s,8μm | | | | | | |
| **APSI** | **Ampana** | **21.48** | **84** | P | **P** | **03 33 18.5** | **+0.1** |
| | 104nm,1.4s,1μm | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.63** | **357** | *e*P | **P** | **03 33 17.4** | **-2.5** |
| **CMAR** | **Chiang Mai Arr** | **21.67** | **357** | P | **P** | **03 33 18.1** | **-2.2** |
| | 10nm,0.8s,baz=186,slow=10,SNR=37 | | | | | | |
| CMAR | | | | LR | LR | 03 43 13.1 | |
| | comp=Z,746nm,18.6s,baz=183,slow=41 | | | | | | |
| **LAMP** | **Lampang** | **21.70** | **358** | P | **P** | **03 33 23.1** | **+2.4** |
| | 8.7nm,0.9s,76nm | | | | | | |
| **MRSI** | **Marisa** | **21.98** | **81** | P | **P** | **03 33 22.0** | **-1.7** |
| | 42nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.02** | **357** | P | **P** | **03 33 22.8** | **-1.3** |
| | 78nm,1.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.02** | **357** | *e*P | **P** | **03 33 21.9** | **-2.2** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.02** | **357** | *e*P | **P** | **03 33 21.9** | **-2.2** |
| | comp=Z,9.5nm,0.9s | | | | | | |
| **LUWI** | **Luwuk** | **22.59** | **85** | P | **P** | **03 33 29.7** | **-0.6** |
| | comp=Z,218nm,0.5s,comp=Z,7μm | | | | | | |
| **GTOI** | **Gorontalo** | **23.06** | **81** | P | **P** | **03 33 32.0** | **-3.2** |
| | comp=Z,68nm,0.9s,comp=Z,657nm | | | | | | |
| **CMAI** | **Chiengmai2** | **23.13** | **357** | P | **P** | **03 33 34.1** | **-1.9** |
| | comp=Z,26nm,1.2s | | | | | | |
| **QIZ** | **Qiongzhong** | **24.11** | **23** | P | **P** | **03 33 46.3** | **+1.0** |
| QIZ | | | | pP | **pP** | **03 33 55.0** | **+1.3** |
| QIZ | | | | sP | **sP** | **03 33 59.0** | **+1.7** |
| QIZ | | | | S | **S** | **03 37 58.0** | **-3.4** |
| QIZ | | | | sS | **sS** | **03 38 19.5** | **+4.3** |
| QIZ | | | | PMZ | | | |
| | comp=Z,13nm,1.0s | | | | | | |
| QIZ | | | | LN | | | |
| | comp=Z,660nm,14.6s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,710nm,13.5s | | | | | | |
| **SOEI** | **Soe** | **24.66** | **106** | P | P | 03 33 55.8 | +5.2 |
| **SOEI** | **Soe** | **24.66** | **106** | *e*P | **P** | **03 33 47.2** | **-3.4** |
| **SLVN** | **Son La** | **24.75** | **8** | *e*P | **P** | **03 33 46.5** | **-4.6** |
| **SANI** | **Sanana** | **25.71** | **88** | P | **P** | **03 33 59.4** | **-0.5** |
| | comp=Z,26nm,1.4s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.99** | **260** | T | T | 04 03 29.4 | |
| | baz=82,slow=75,SNR=2820 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.99** | **260** | T | T | 04 03 30.0 | |
| | baz=82,slow=75,SNR=2002 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.00** | **260** | T | T | 04 03 30.6 | |
| | baz=82,slow=75,SNR=2774 | | | | | | |
| **KMI** | **Kunming** | **28.36** | **5** | P | **P** | **03 34 24.0** | **+0.1** |
| KMI | | | | pP | **pP** | **03 34 34.5** | **+2.1** |
| KMI | | | | sP | **sP** | **03 34 39.8** | **+3.9** |
| KMI | | | | S | **S** | **03 39 07.5** | **-1.7** |
| KMI | | | | sS | **sS** | **03 39 25.3** | **+2.1** |
| KMI | | | | PMZ | | | |
| | comp=Z,17nm,1.2s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,160nm,4.8s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,680nm,16.1s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,540nm,17.1s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,690nm,19.8s | | | | | | |
| **GYA** | **Guiyang** | **30.23** | **11** | *e*P | **P** | **03 34 42.5** | **+2.2** |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **KNRA** | **Kununurra** | **30.61** | **116** | P | **P** | **03 34 42.6** | **-1.0** |
| | baz=31,SNR=5.8 | | | | | | |
| **SIJI** | **Sorong** | **31.06** | **86** | P | **P** | **03 34 45.6** | **-2.1** |
| | comp=Z,13nm,0.6s,baz=276,slow=8.5,SNR=10 | | | | | | |
| **ODAN** | **Odare** | **32.48** | **338** | *e*P | **P** | **03 35 00.7** | **+0.5** |
| | comp=Z,53nm,1.1s | | | | | | |
| **TAPN** | **Taplejung** | **32.81** | **339** | *e*P | **P** | **03 35 04.2** | **+1.0** |
| | comp=Z,77nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **32.86** | **337** | *e*P | **P** | **03 35 04.5** | **+0.9** |
| | comp=Z,50nm,1.1s | | | | | | |
| **PKI** | **Pulchoki** | **33.89** | **336** | *e*P | **P** | **03 35 12.7** | **+0.1** |
| **PKIN** | **Phulchoki** | **33.90** | **336** | *e*P | **P** | **03 35 12.8** | **+0.1** |
| | comp=Z,7.2nm,0.6s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.95** | **159** | T | T | 04 11 00.4 | |
| | baz=335,slow=76,SNR=294 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.96** | **159** | T | T | 04 11 00.1 | |
| | baz=335,slow=76,SNR=328 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.96** | **159** | T | T | 04 10 59.1 | |
| | baz=335,slow=76,SNR=258 | | | | | | |
| **LSA** | **Lhasa** | **33.97** | **346** | P | **P** | **03 35 13.5** | **0.0** |
| LSA | | | | PMZ | | | |
| | comp=Z,17nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | **33.97** | **346** | *e*P | **P** | **03 35 13.5** | **0.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **33.97** | **346** | *e*P | **P** | **03 35 13.5** | **0.0** |
| | comp=Z,14nm,0.9s | | | | | | |
| **GUN** | **Gumba** | **34.00** | **337** | *e*P | **P** | **03 35 14.1** | **+0.5** |
| | comp=Z,58nm,0.8s | | | | | | |
| **DMN** | **Daman** | **34.04** | **335** | *e*P | **P** | **03 35 14.6** | **+0.7** |
| **KKN** | **Kakani** | **34.13** | **336** | *e*P | **P** | **03 35 14.9** | **+0.2** |
| **CD2** | **Chengdu** | **34.19** | **5** | P | **P** | **03 35 14.8** | **-0.1** |
| CD2 | | | | pP | **pP** | **03 35 25.8** | **+2.3** |
| CD2 | | | | PP | **PP** | **03 36 32.8** | **+0.1** |
| CD2 | | | | S | **S** | **03 40 39.5** | **-0.3** |
| CD2 | | | | sS | **sS** | **03 40 58.5** | **+4.6** |
| CD2 | | | | PMZ | | | |
| | comp=Z,20nm,0.7s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.2s | | | | | | |
| CD2 | | | | LN | | | |
| | comp=Z,1μm,12.2s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,1μm,19.6s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,1μm,12.2s | | | | | | |
| **WRKA** | **Warakurna** | **34.55** | **131** | P | **P** | **03 35 19.2** | **+1.1** |
| | baz=35,SNR=7.1 | | | | | | |
| **GKN** | **Gorkha** | **34.59** | **335** | *e*P | **P** | **03 35 18.9** | **+0.4** |
| **KOLN** | **Koldanda** | **34.83** | **334** | *e*P | **P** | **03 35 21.2** | **+0.5** |
| | comp=Z,72nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.10** | **119** | P | **P** | **03 35 39.5** | **-0.5** |
| | comp=Z,4.9nm,0.6s,baz=300,slow=9.2,SNR=44 | | | | | | |
| WRA | | | | S | **S** | **03 41 23.3** | **-1.5** |
| | comp=Z,1.9nm,1.0s,baz=284,slow=14,SNR=6.7 | | | | | | |
| WRA | | | | LR | LR | 03 53 00.7 | |
| | comp=Z,407nm,20.5s,baz=260,slow=40 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.11** | **119** | *c i*P | **P** | **03 35 39.7** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| **WRAB** | **Tennant Creek** | **37.11** | **119** | *e*P | **P** | **03 35 39.6** | **-0.5** |
| | comp=Z,17nm,1.1s | | | | | | |
| **XAN** | **Xi'an** | **38.03** | **12** | P | **P** | **03 35 46.0** | **-1.8** |
| XAN | | | | pP | **pP** | **03 35 54.3** | **-2.1** |
| XAN | | | | PMZ | | | |
| | comp=Z,53nm,0.9s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,680nm,13.3s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,760nm,16.4s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,1μm,16.4s | | | | | | |
| **ASAR** | **Alice Springs** | **38.27** | **125** | P | **P** | **03 35 50.2** | **+0.3** |
| | comp=Z,13nm,0.8s,baz=300,slow=8.0,SNR=110 | | | | | | |
| ASAR | | | | S | **S** | **03 41 44.5** | **+2.0** |
| | comp=Z,2.0nm,0.9s,baz=297,slow=16,SNR=9.2 | | | | | | |
| ASAR | | | | LR | LR | 03 53 29.9 | |
| | comp=Z,659nm,20.8s,baz=296,slow=39 | | | | | | |
| **AS01** | **Alice Springs** | **38.31** | **125** | *e*P | **P** | **03 35 50.2** | **0.0** |
| **LZH** | **Lanzhou** | **39.33** | **5** | *e*P | **P** | **03 35 58.8** | **0.0** |
| LZH | | | | pP | **pP** | **03 36 10.0** | **+2.6** |
| LZH | | | | sP | **sP** | **03 36 14.3** | **+3.4** |
| LZH | | | | PMZ | | | |
| | comp=Z,49nm,1.3s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,160nm,4.0s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,880nm,15.3s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,500nm,12.6s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,1μm,20.0s | | | | | | |
| **NJ2** | **Nanjing** | **39.35** | **25** | *e*P | **P** | **03 35 58.5** | **-0.2** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,24nm,1.1s | | | | | | |
| **QIS** | **Mount Isa** | **41.95** | **117** | P | **P** | **03 36 20.2** | **-0.3** |
| | baz=42,SNR=8.1 | | | | | | |
| **GTA** | **Gaotai** | **42.51** | **359** | P | **P** | **03 36 24.5** | **-0.4** |
| GTA | | | | pP | **pP** | **03 36 35.8** | **+2.2** |
| GTA | | | | sP | **sP** | **03 36 40.3** | **+3.2** |
| GTA | | | | PcP | **PcP** | **03 38 16.0** | **-1.3** |
| GTA | | | | PcS | **PcS** | **03 42 05.0** | **-4.4** |
| GTA | | | | S | **S** | **03 42 44.8** | **-0.7** |
| GTA | | | | sS | sS | 03 43 06.8 | +7.0 |
| GTA | | | | SS | **SS** | **03 45 50.0** | **-5.8** |
| GTA | | | | ScS | **ScS** | **03 46 23.8** | **-0.9** |
| GTA | | | | PMZ | | | |
| | comp=Z,19nm,1.3s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,290nm,4.3s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,550nm,14.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,590nm,17.6s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,680nm,16.1s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.14** | **12** | *e*P | **P** | **03 36 48.5** | **+2.5** |
| HHC | | | | S | **S** | **03 43 25.5** | **+1.7** |
| HHC | | | | PMZ | | | |
| | comp=Z,24nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,140nm,6.2s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,410nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,490nm,14.1s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,390nm,16.3s | | | | | | |
| **BJI** | **Beijing** | **45.54** | **17** | P | **P** | **03 36 48.3** | **-0.7** |
| BJI | | | | S | **S** | **03 43 31.0** | **+1.7** |
| BJI | | | | PMZ | | | |
| | comp=Z,25nm,1.2s | | | | | | |
| BJI | | | | PMZ | | | |
| | comp=Z,290nm,4.3s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,920nm,16.8s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,650nm,14.4s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,710nm,18.8s | | | | | | |
| **MTSU** | **Mount Surprise** | **45.55** | **112** | P | **P** | **03 36 49.6** | **+0.1** |
| | baz=46,SNR=9.0 | | | | | | |
| **JNU** | **Nakatsue** | **46.37** | **36** | *e*P | **P** | **03 36 53.4** | **-2.4** |
| | comp=Z,70nm,1.1s | | | | | | |
| **CTA** | **Charters Tower** | **47.80** | **114** | P | **P** | **03 37 07.2** | **+0.1** |
| | comp=Z,7.0nm,0.8s,baz=289,slow=11,SNR=7.7 | | | | | | |
| **CTAO** | **Charters Tower** | **47.80** | **114** | *e*P | **P**

SONM PcP **PcP** 03 38 48.1 +0.2
comp=Z,4.3nm,0.9s,baz=187,slow=5.8,SNR=3.6
**SONA1 Songino Array 51.23 5** *e*P **P** 03 37 32.7 -0.2
**ULN Ulaanbaatar 51.31 6***c i*P **P** 03 37 33.7 +0.2
ULN pmax pmax
comp=Z,56nm,1.2s
**ULN Ulaanbaatar 51.31 6** *e*P **P** 03 37 32.5 -1.0
comp=Z,40nm,1.0s
**AAK Ala-Archa 51.34 336***d i*P **P** 03 37 34.8 +0.9
AAK pmax pmax
comp=Z,24nm,2.5s
**AAK Ala-Archa 51.34 336** *e*P **P** 03 37 34.6 +0.7
comp=Z,15nm,1.3s
**FRU Bishkek 51.46 336** *e*P **P** 03 37 33.0 -1.6
FRU *e* 03 37 50.0
FRU pmax pmax
comp=Z,40nm,1.4s
**EKS2 Erkin-Say 51.66 335** *e*P **P** 03 37 36.9 +0.6
EKS2 pmax pmax
comp=Z,19nm,0.9s
**EKS2 Erkin-Say 51.66 335** *e*P **P** 03 37 36.9 +0.6
comp=Z,19nm,0.9s
**RMQ Roma 51.79 121** P **P** 03 37 39.0 +1.7
baz=52,SNR=4.2
**CN2 Changchun 52.07 23** *e*P **P** 03 37 36.8 -2.3
CN2 *e*pP **pP** 03 37 49.3 +1.3
CN2 *e*PP **PP** 03 39 36.0 -1.6
CN2 *e*S **S** 03 44 55.5 -5.7
CN2 PMZ
comp=Z,40nm,1.0s
CN2 PMZ
comp=Z,100nm,3.0s
CN2 LN
comp=Z,990nm,14.0s
CN2 LE
comp=Z,660nm,14.0s
CN2 LZ
comp=Z,550nm,15.0s
**MK01 Makanchi Array 52.33 344** *e*P **P** 03 37 40.8 -0.2
**MKAR Makanchi Array 52.36 344** P **P** 03 37 41.1 -0.1
comp=Z,25nm,0.8s,baz=148,slow=8.4,SNR=92
**MKAR Makanchi Array 52.36 344** *e*P **P** 03 37 41.6 +0.3
**MKAR Makanchi Array 52.36 344** *e*P **P** 03 37 41.6 +0.3
**MAKZ Makanchi 52.46 344** *e*P **P** 03 37 42.1 +0.2
**MAJO Matsushiro 53.12 38***ce*P **P** 03 37 45.3 -1.7
MAJO pmax pmax
comp=Z,37nm,1.7s
**MAT Matsushiro 53.12 38** P **P** 03 37 44.6 -2.4
**EIDS Eidsvold 53.47 119** *e*P **P** 03 37 49.6 -0.2
comp=Z,8.7nm,0.8s
**ZAK Zakamensk 53.54 2** *e*P **P** 03 37 48.3 -1.7
ZAK *e* 03 38 56.1
ZAK pmax pmax
comp=Z,3.0nm,1.2s
ZAK pmax pmax
comp=Z,4.0nm,1.4s
**TLY Talaya 54.86 3** *e*P **P** 03 37 57.2 -2.3
TLY pmax pmax
comp=Z,12nm,1.1s
TLY MLR MLR
comp=Z,513nm,15.0s
**HIA Hailar 55.02 15** *e*P **P** 03 37 59.7 -1.0
HIA pmax pmax
comp=Z,13nm,0.8s
**USRK Ussuriysk Ar. 55.18 27** P **P** 03 38 01.4 -0.4
comp=Z,42nm,0.8s,baz=222,slow=5.6,SNR=48
**ARMA Armidale 55.42 125** P P 03 38 11.4 +7.3
baz=56,SNR=3.9
**ARMA Armidale 55.42 125** *e*P **P** 03 38 05.5 +1.4
comp=Z,16nm,1.1s
**GEYT Alibeck 56.63 321** P **P** 03 38 12.3 -0.1
comp=Z,2.4nm,0.4s,baz=145,slow=5.4,SNR=5.7
**KURK Kurchatov 56.94 344** *e*P **P** 03 38 13.8 -0.5
KURK pmax pmax
comp=Z,65nm,1.0s
**KURK Kurchatov 56.94 344** *e*P **P** 03 38 13.8 -0.5
comp=Z,65nm,1.0s
**ZAA0 Zalesovo Array 58.50 349** P **P** 03 38 25.1 -0.1
baz=59,SNR=12
**ZALV Zalesovo Beam 58.50 349** P **P** 03 38 24.7 -0.5
comp=Z,31nm,0.9s,baz=163,slow=5.6,SNR=84
**ZALV Zalesovo Beam 58.50 349** *i* P **P** 03 38 24.7 -0.5
ZALV pmax pmax
comp=Z,30nm,0.9s
**KLR Kul'dur 59.01 24** *e*P P 03 38 25.0 -3.9
KLR pmax pmax
comp=Z,76nm,1.4s
**BOD Bodaibo 61.93 8** *e*P **P** 03 38 46.9 -1.8
BOD pmax pmax
comp=Z,18nm,1.0s
**YSS Yuzh-Sakhalins 62.44 31** *e*P **P** 03 38 52.4 +0.1
YSS pmax pmax
comp=Z,44nm,1.1s
**ABKAR Akbulak array 62.92 332** *e*P **P** 03 38 54.7 -0.8
comp=Z,18nm,0.8s
**AKTO Aktyubinsk 64.64 332** P **P** 03 39 05.0 -1.8
comp=Z,6.6nm,1.0s,baz=130,slow=7.3,SNR=12
**AKTO Aktyubinsk 64.64 332** P **P** 03 39 05.0 -1.8
**GNI Garni 66.66 317** *e*P **P** 03 39 20.5 +0.2
**SVE Sverdlovsk 67.99 338**⇑ *e*P **P** 03 39 28.4 +0.3
SVE pmax pmax
comp=Z,26nm,1.2s
**ARU Arti 68.51 337** *e*P **P** 03 39 31.1 -0.3
**NCK Nalchik 68.92 319** *e*P **P** 03 39 35.6 +1.4
**YAK Yakutsk 68.93 14** *e*P **P** 03 39 32.3 -1.6
YAK pmax pmax
comp=Z,40nm,0.9s
YAK pmax pmax
comp=E,21nm,1.3s
YAK pmax pmax
comp=N,16nm,0.9s
**MAW Mawson 69.09 194** LR LR 04 03 32.9
comp=N,177nm,21.3s,baz=60,slow=30
**NEY Neytrino 69.38 319** *e*P **P** 03 39 37.8 +0.5
NEY pmax pmax
comp=Z,1.0nm,1.0s
**KBZ Khabaz 69.48 319** P **P** 03 39 38.1 +0.5
comp=Z,8.6nm,0.9s,baz=108,slow=7.2,SNR=16
**KIV Kislovodsk 69.71 319** *e*P **P** 03 39 39.8 +0.6
KIV pmax pmax
comp=Z,14nm,1.1s
**MALT Malatya 70.42 313***ce*P **P** 03 39 45.2 +1.4
**MATP Matopo 71.78 250** LR LR 04 06 35.8
comp=Z,206nm,21.4s,slow=32
**PETK Petropavlovsk- 73.84 32** P **P** 03 40 01.9 -1.9
comp=Z,5.7nm,1.0s,baz=228,slow=3.7,SNR=2.4
**BRTR Keskin Array B 74.41 313** P **P** 03 40 06.8 -0.7
comp=Z,3.6nm,0.8s,baz=134,slow=6.9,SNR=24
**VORD Divnogorie 74.83 325** *e*P **P** 03 40 08.3 -1.2
VORD pmax pmax
comp=N,9.0nm,1.1s
VORD pmax pmax
comp=E,10.0nm,1.1s
VORD pmax pmax
comp=Z,10.0nm,1.1s
**VSR Storozhevoye 75.00 325** *e*P **P** 03 40 09.5 -1.0
VSR pmax pmax
comp=N,6.0nm,0.9s
VSR pmax pmax
comp=E,10.0nm,0.9s
VSR pmax pmax
comp=Z,20nm,0.9s
**BOSA Boshof 75.28 241** LR LR 04 10 14.8
comp=Z,135nm,18.2s,baz=118,slow=33
**LPSR Galich'ya Gora 75.73 326** *e*P **P** 03 40 14.0 -0.7
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=N,6.0nm,0.8s
LPSR pmax pmax
comp=E,5.0nm,0.6s
**SEY Seymchan 76.73 22** *e*P **P** 03 40 20.6 +0.5
**BKZ Black Stump Fm 77.23 129** *e*P **P** 03 40 24.6 +1.0
**MOS Moscow 77.76 329** *e*P **P** 03 40 25.9 -0.1
**OBN Obninsk 78.05 328**⇓ *e*P **P** 03 40 27.9 +0.3
OBN 03 40 38.0
OBN pmax pmax
comp=Z,39nm,1.7s
OBN MLR MLR
comp=Z,77nm,15.0s
**KLMR Klimovskoe 79.12 334** *e*P **P** 03 40 31.3 -2.2
KLMR pmax pmax
comp=Z,29nm,1.4s
**AKASG Malin Array Be 80.69 322** P **P** 03 40 41.3 -0.8
comp=Z,0.4nm,0.3s,baz=86,slow=5.0,SNR=8.4
**AKASG Malin Array Be 80.69 322** *i* P **P** 03 40 41.7 -0.5

**KIEV Kiev 80.69 322** *e*P **P** 03 40 41.4 -0.8
KIEV pmax pmax
comp=Z,4.0nm,1.0s
**VNDA Vanda 80.83 169** P **P** 03 40 43.9 +1.4
comp=Z,0.7nm,0.9s,baz=320,slow=6.0,SNR=3.8
**VRI Vrincioaia 81.00 317**⇑ P **P** 03 40 44.1 +0.1
**VRI Vrincioaia 81.00 317**⇑ *i*P **P** 03 40 44.1 +0.1
**PLOR Plostina 81.05 317**⇑ P **P** 03 40 45.3 +1.0
**PLOR Plostina 81.05 317**⇑ *i*P **P** 03 40 45.3 +1.0
**TESR Tescani 81.21 318**⇓ *i*P **P** 03 40 45.5 +0.4
**TMCR Tamitsa 81.25 337** *e*P **P** 03 40 45.0 +0.2
TMCR pmax pmax
comp=E,28nm,1.1s
**MLR Muntele Rosu 81.44 317** P **P** 03 40 46.9 +0.4
comp=Z,2.3nm,1.1s,baz=135,slow=7.1,SNR=8.2
**MLR Muntele Rosu 81.44 317**⇑ P **P** 03 40 47.2 +0.7
**MLR Muntele Rosu 81.44 317**⇑ *i*P **P** 03 40 47.2 +0.7
**BURAR Bucovina Array 82.42 319**⇓ P **P** 03 40 52.7 +1.1
**BURAR Bucovina Array 82.42 319**⇓ *i*P **P** 03 40 52.7 +1.1
**DRGR 83.92 318**⇑ P **P** 03 41 00.3 +1.0
**DRGR 83.92 318**⇑ *i*P **P** 03 41 00.3 +1.0
**BILL Bilibino 84.28 20**⇓ *e*P **P** 03 41 02.7 +2.1
BILL *e* 03 41 09.7
BILL pmax pmax
comp=Z,5.0nm,1.0s
BILL MLR MLR
comp=Z,217nm,17.0s
**BZS Buzias 84.44 316**⇑ P **P** 03 41 02.4 +0.5
**BZS Buzias 84.44 316**⇑ *i*P **P** 03 41 02.4 +0.5
**KOLS Kolonicke sedl 84.62 320** *e*P **P** 03 41 03.9 +1.1
KOLS *e* 03 41 12.1
KOLS pmax pmax
comp=Z,13nm,1.1s
**KOLS Kolonicke sedl 84.62 320** *e*P **P** 03 41 03.9 +1.1
KOLS *e* 03 41 12.0
**SUW Suwalki 85.11 325** *e*P **P** 03 41 05.3 +0.3
**SUW Suwalki 85.11 325** *e*P **P** 03 41 05.4 +0.4
**FINES FINESS Array B 85.39 332** P **P** 03 41 06.2 -0.1
comp=Z,5.6nm,1.0s,baz=97,slow=3.5,SNR=6.4
**FINES FINESS Array B 85.39 332** *i* P **P** 03 41 06.8 +0.5
FINES pmax pmax
comp=Z,6.0nm,1.0s
**VYHS Vyhne 86.79 319** *e*P **P** 03 41 14.3 +0.8
**VYHS Vyhne 86.79 319** *e*P **P** 03 41 14.3 +0.8
**ARCES ARCESS Array B 87.79 340** P **P** 03 41 17.6 -0.3
comp=Z,7.1nm,0.9s,baz=98,slow=5.0,SNR=9.2
ARCES LR LR 04 24 03.8
comp=Z,159nm,21.8s,baz=102,slow=38
**GERES GERESS Array B 90.21 319** P **P** 03 41 28.9 -0.9
comp=Z,1.6nm,0.9s,baz=90,slow=5.5,SNR=10.0
**BRG Berggiesshubel 90.23 321** *e*PKP **P** 03 41 30.7 +1.0
comp=Z,30nm,1.8s
**BRG Berggiesshubel 90.23 321** *e*P **P** 03 41 30.7 +1.0
BRG pmax pmax
comp=Z,30nm,1.8s
**HFS Hagfors 91.14 330** P **P** 03 41 33.7 0.0
comp=Z,4.2nm,1.0s,baz=128,slow=6.1,SNR=3.6
**TORD Torodi Ar. Bea 99.10 283** LR LR 04 23 02.4
comp=Z,62nm,21.2s,baz=150,slow=33
**B05A Bryant 122.38 32** P **PKPdf** 03 47 25.1 +0.7
baz=122
**G03D McMinnville, O 123.51 36** P **PKPdf** 03 47 26.9 +0.2
baz=123
**J04D Umpqua Nationa 125.31 37** P **PKPdf** 03 47 30.6 +0.1
baz=125
**J05D Fort Rock, OR 125.81 37** P **PKPdf** 03 47 32.0 +0.6
baz=126
**MSO Missoula 127.48 29** P **PKPdf** 03 47 34.6 +0.2
baz=127
**EGMT Eagleton 128.51 25** P **PKPdf** 03 47 37.0 +0.6
baz=128
**BOZ Bozeman (W) 129.45 29** P **PKPdf** 03 47 38.5 +0.2
baz=129
**HLID Hailey 129.50 32** P **PKPdf** 03 47 39.1 +0.6
baz=129
**NVAR Mina Array Bea 130.42 40** PKP **PKPdf** 03 47 40.9 +0.5
comp=Z,0.8nm,0.7s,baz=270,slow=2.2,SNR=5.4
**VES Vestal, Richgr 131.34 43** P **PKPdf** 03 47 42.6 +0.7
baz=131
**A29A Manning Farm, 131.59 17** P **PKPdf** 03 47 42.9 +0.8
baz=131
**SBC Santa Barbara 131.64 45** P **PKPdf** 03 47 43.4 +0.9
baz=132
**C26A Wahner Farm, P 131.64 20** P **PKPdf** 03 47 43.1 +0.9
baz=132
**R11A Troy Canyon, C 132.19 38** P **PKPdf** 03 47 44.4 +0.7
baz=132
**BLG Laguna Peak 132.27 45** P **PKPdf** 03 47 44.2 +0.4
baz=132
**B30A Myrvik Farm, E 132.28 17** P **PKPdf** 03 47 44.4 +1.1
baz=132
**MPMC Manual Prospec 132.30 42** P **PKPdf** 03 47 44.6 +0.6
baz=132
**A33A Warroad 132.61 14** P **PKPdf** 03 47 44.8 +0.8
baz=132
**F25A Bowman 132.76 23** P **PKPdf** 03 47 44.4 0.0
baz=133
**B32A Ashes, Strandq 132.82 15** P **PKPdf** 03 47 44.3 -0.1
baz=133
**C31A Landman Farms, 133.04 17** P **PKPdf** 03 47 45.3 +0.5
baz=133
**D30A Buchanan 133.36 18** P **PKPdf** 03 47 46.2 +0.7
baz=133
**TUQ Turquoise Moun 133.71 42** P **PKPdf** 03 47 47.5 +0.9
baz=134
**I25A Rochford 134.24 24** P **PKPdf** 03 47 48.1 +0.6
baz=134
**EYMN Ely 134.39 11** P **PKPdf** 03 47 48.2 +0.9
baz=134
**C37A Embarrass 134.46 12** P **PKPdf** 03 47 48.6 +1.1
baz=134
**I27A Quinn 134.86 23** P **PKPdf** 03 47 47.7 -0.7
baz=135
**E35A Pequot Lakes 135.07 14** P **PKPdf** 03 47 49.7 +1.1
baz=135
**F33A 5 Mile Ranch, 135.23 16** P **PKPdf** 03 47 49.8 +0.8
baz=135
**E37A Wrenshall 135.52 12** P **PKPdf** 03 47 50.9 +1.5
baz=135
**I29A Vivian Onida 135.56 21** P **PKPdf** 03 47 50.6 +1.0
baz=135
**G33A Ortonville 135.78 17** P **PKPdf** 03 47 51.2 +1.2
baz=136
**F36A Milaca 135.93 14** P **PKPdf** 03 47 50.9 +0.7
baz=136
**I30A Oacoma 135.96 21** P **PKPdf** 03 47 50.8 +0.3
baz=136
**H32A Carlson Farm, 136.10 18** P **PKPdf** 03 47 51.5 +0.8
baz=136
**H35A Sunnyside Ranc 136.69 16** P **PKPdf** 03 47 52.6 +0.9
baz=136
**ECSD EROS Data Cent 137.05 18** P **PKPdf** 03 47 53.2 +0.8
baz=137
**S22A 4UR Ranch, Cre 137.68 32** P **PKPdf** 03 47 55.5 +1.4
baz=138
**P29A Atwood 139.07 25** P **PKPdf** 03 47 57.8 +1.5
baz=139
**K38A Parkersburg 139.14 15** P **PKPdf** 03 47 57.8 +1.5
baz=139
**T25A Trinidad 139.41 31** P **PKPdf** 03 47 58.2 +0.9
baz=139
**S26A Kim 139.50 30** P **PKPdf** 03 47 58.5 +1.2
baz=139
**P31A Stockton 139.78 24** P **PKPdf** 03 47 59.6 +2.0
baz=140
**T26A Comanche Natio 139.79 30** P **PKPdf** 03 47 59.4 +1.5
baz=140
**Q32A Meitler Ranch, 140.56 23** P **PKPdf** 03 48 01.5 +2.5
baz=140
**T28A Wash 140.56 29** P **PKPdf** 03 48 01.1 +1.9
baz=140
**P34A Walnut Farm, R 140.73 21** P **PKPdf** 03 48 02.0 +2.7
baz=140
**121A Cookes Peak, D 140.79 39** P **PKPdf** 03 48 01.4 +1.6
baz=141
**Q34A Chapman 141.24 22** P **PKPdf** 03 48 02.3 +2.1
baz=141
**S32A Newby Ranch, P 141.51 25** P **PKPdf** 03 48 03.3 +2.5
baz=141
**U30A WK&E Inc. Balk 141.73 28** P **PKPdf** 03 48 03.8 +2.6
baz=142
**R36A Gordon, Harris 142.28 20** P **PKPdf** 03 48 04.4 +2.3
baz=142
**V30A Spur Ranch, Mi 142.33 28** P **PKPdf** 03 48 04.9 +2.5
baz=142
**MNTX Cornudas Mount 142.85 38** P **PKPdf** 03 48 01.1 -2.2
baz=143

**T36A Boggs Farm, Ca 143.27 22** P PKPbc 03 48 01.6 +0.7
baz=143
**W32A Sentinel 143.53 27** P PKPbc 03 48 02.3 +0.6
baz=143
**U35A Pawnee 143.55 23** P PKPbc 03 48 01.7 0.0
baz=143
**T37A Cheneyville 18 143.56 21** P PKPbc 03 48 01.8 +0.1
baz=143
**X31A McDonald Ranch 143.59 29** P PKPbc 03 48 02.1 +0.2
baz=143
**V34A Guthrie 143.69 25** P PKPbc 03 48 02.7 +0.6
baz=144
**Z29A Hungry Hill Ra 143.80 32** P PKPbc 03 48 02.8 +0.1
baz=144
**W33A Caddo, Fort Co 143.86 27** P PKPbc 03 48 03.0 +0.3
baz=144
**U36A Oologah 143.92 22** P PKPbc 03 48 03.7 +0.9
baz=144
**Y31A Rekieta Farm, 143.99 30** P PKPbc 03 48 03.3 +0.2
baz=144
**V35A Meyer Ranch, C 144.03 24** P PKPbc 03 48 03.5 +0.4
baz=144
**Z30A Sanderson Ranc 144.08 31** P PKPbc 03 48 03.7 +0.3
baz=144
**X32A Elmer 144.09 28** P PKPbc 03 48 03.5 +0.1
baz=144
**W34A Bridge Creek, 144.09 26** P PKPbc 03 48 03.9 +0.5
baz=144
**U37A Salina 144.13 21** P PKPbc 03 48 03.9 +0.5
baz=144
**228A UT Block 9, Go 144.18 34** P PKPbc 03 48 04.5 +0.7
baz=144
**129A Stewart Farms, 144.20 33** P PKPbc 03 48 04.4 +0.6
baz=144
**TUL1 Tulsa 144.32 23** P **PKPab** 03 48 03.5 -0.2
baz=144
**Y32A R-V Farms, Ver 144.36 29** P **PKPab** 03 48 03.6 -0.3
baz=144
**U38A Gravette 144.37 21** P PKPbc 03 48 04.0 -0.2
baz=144
**V36A Jenks 144.37 23** P **PKPab** 03 48 03.7 -0.2
baz=144,SNR=7.1
**W35A Tecumseh 144.54 25** P PKPbc 03 48 04.5 -0.2
baz=144,SNR=6.3
**Z31A Sharp Cattle R 144.56 30** P **PKPab** 03 48 04.4 -0.3
baz=144,SNR=15
**V37A Hulbert 144.59 22** P **PKPab** 03 48 04.0 -0.7
baz=144,SNR=8.2
**X34A Smith Ranch, M 144.60 26** P PKPbc 03 48 05.0 0.0
baz=144
**SIUC Southern Illin 144.67 13** *e*PKPdf **PKPab** 03 48 04.7 -0.2
**130A Snyder 144.71 32** P PKPbc 03 48 05.2 -0.2
baz=145
**WCI Wyandotte Cave 144.73 9** *e*PKIKP **PKPab** 03 48 04.9 -0.3
**WCI Wyandotte Cave 144.73 9** *e*PKPdf **PKPab** 03 48 04.9 -0.3
**229A Bryant Ranch, 144.73 34** P PKPbc 03 48 05.7 +0.2
baz=145
**Y33A Hilltop Ranch, 144.74 28** P PKPbc 03 48 05.2 -0.2
baz=145
**W36A Wetumka 144.82 24** P PKPbc 03 48 05.6 0.0
baz=145
**V38A Canehill 144.88 21** P **PKPab** 03 48 04.8 -0.9
baz=145,SNR=15
**Z32A Haskell 144.90 29** P **PKPab** 03 48 05.4 -0.5
baz=145,SNR=7.8
**131A Roby 144.95 31** P **PKPab** 03 48 06.0 -0.2
baz=145
**329A Wagon Wheel Ra 145.00 34** P PKPbc 03 48 06.4 0.0
baz=145,SNR=17
**W37A Quinton 145.14 23** P **PKPbc** 03 48 06.3 -0.3
baz=145,SNR=8.4
**X35A Drake 145.15 25** P **PKPbc** 03 48 06.1 -0.6
baz=145,SNR=5.3
**230A Sterling City 145.18 33** P **PKPab** 03 48 06.9 -0.2
baz=145,SNR=14
**Y34A Reagan Ranch, 145.18 27** P **PKPbc** 03 48 06.4 -0.5
baz=145,SNR=15
**X36A Centrahoma 145.26 24** P **PKPbc** 03 48 06.8 -0.3
baz=145,SNR=11
**Z33A Whitaker Ranch 145.27 29** P **PKPbc** 03 48 06.5 -0.6
baz=145,SNR=5.3
**ABTX Abilene, Hawle 145.37 30** P **PKPbc** 03 48 07.3 -0.3
baz=145,SNR=5.5
**ABTX Abilene, Hawle 145.37 30** *e*PKPdf **PKPbc** 03 48 07.2 -0.3
**330A Mertzon 145.51 34** P **PKPdf** 03 48 07.6 -0.4
baz=145,SNR=19
**Y35A Marietta 145.54 26** P **PKPbc** 03 48 07.8 -0.2
baz=145
**W38A Poteau 145.54 22** P **PKPbc** 03 48 07.8 -0.2
baz=145
**TXAR Lajitas Array 145.55 39** PKPbc **PKPab** 03 48 08.9 +0.3
comp=Z,21nm,0.8s,baz=299,slow=1.3,SNR=220
**231A Bronte 145.57 32** P **PKPdf** 03 48 07.9 -0.2
baz=145,SNR=9.1
**Z34A Collier Ranch, 145.59 28** P **PKPab** 03 48 08.2 -0.3
baz=145
**X37A Clayton 145.64 23** P **PKPdf** 03 48 07.9 -0.2
baz=146,SNR=7.4
**429A Davenport Ranc 145.69 35** P **PKPbc** 03 48 08.6 -0.1
baz=146,SNR=11
**133A Hamilton Ranch 145.74 30** P **PKPbc** 03 48 08.5 -0.3
baz=146,SNR=23
**X38A Whitesboro 145.78 22** P **PKPbc** 03 48 08.7 -0.1
baz=146,SNR=13
**Y36A Durant 145.87 25** P **PKPdf** 03 48 08.3 -0.1
baz=146,SNR=7.4
**529A Stev Forest Ra 145.87 36** P **PKPab** 03 48 09.4 -0.3
baz=146,SNR=20
**Z35A Perchaven, San 145.93 27** P **PKPdf** 03 48 08.8 +0.2
baz=146,SNR=5.1
**430A Baggett Ranch, 145.95 34** P **PKPbc** 03 48 09.3 -0.2
baz=146,SNR=7.3
**232A Coleman 145.95 31** P **PKPbc** 03 48 09.2 -0.2
baz=146,SNR=24
**331A San Angelo 145.99 33** P **PKPbc** 03 48 09.4 -0.2
baz=146,SNR=12
**Y37A Hugo 146.08 24** P **PKPab** 03 48 09.9 -0.3
baz=146
**134A White-Moore Ra 146.18 29** P **PKPbc** 03 48 09.6 -0.5
baz=146,SNR=6.6
**332A Millersview 146.30 32** P **PKPab** 03 48 10.8 -0.5
baz=146
**Z36A Blue Ridge 146.34 26** P **PKPab** 03 48 10.7 -0.6
baz=146
**MIAR Mount Ida 146.36 21** *e*PKP2 **PKPbc** 03 48 10.2 -0.3
**MIAR Mount Ida 146.36 21** P **PKPab** 03 48 10.8 -0.4
baz=146
**MIAR Mount Ida 146.36 21** *e*PKPbc **PKPbc** 03 48 10.2 -0.3
**530A J-C Ranch, Com 146.37 35** P **PKPbc** 03 48 10.6 -0.1
baz=146,SNR=26
**431A Sonora 146.38 34** P **PKPbc** 03 48 10.4 -0.4
baz=146,SNR=12
**Y38A Idabel 146.47 23** P **PKPbc** 03 48 10.9 +0.1
baz=146
**WVT Waverly 146.49 12** *e*PKP2 **PKPdf** 03 48 09.9 +0.5
**WVT Waverly 146.49 12** *e*PKPbc **PKPdf** 03 48 09.9 +0.5
**135A Vickery Place, 146.51 28** P **PKPab** 03 48 11.6 -0.3
baz=146
**234A Clairette 146.62 29** P **PKPbc** 03 48 11.0 -0.3
baz=146,SNR=7.2
**432A Menard 146.67 32** P **PKPbc** 03 48 11.3 -0.3
baz=146,SNR=9.1
**Y39A Lockesburg 146.71 22** P **PKPab** 03 48 11.9 -0.7
baz=146
**TZTN Tazewell 146.74 6** *e*PKPdf **PKPdf** 03 48 09.1 -0.8
TZTN *e*PKPbc **PKPbc** 03 48 10.9 -0.7
**333A Richland Sprin 146.74 31** P **PKPbc** 03 48 11.9 +0.1
baz=147,SNR=29
**531A Rocksprings 146.80 34** P **PKPbc** 03 48 11.9 -0.1
baz=147,SNR=23
**Z38A Mt. Pleasant 146.97 24** P **PKPab** 03 48 13.2 -0.4
baz=147
**JCT Junction City 146.97 33** *e*PKP2 **PKPdf** 03 48 11.2 +0.7
**JCT Junction City 146.97 33** P **PKPbc** 03 48 12.6 +0.2
baz=147,SNR=47
**JCT Junction City 146.97 33** *e*PKPdf **PKPdf** 03 48 11.2 +0.7
JCT *e*PKPbc **PKPbc** 03 48 12.6 +0.2
**334A Lometa 147.11 30** P **PKPbc** 03 48 12.5 -0.3
baz=147,SNR=13
**433A Art 147.14 32** P **PKPbc** 03 48 12.8 -0.1
baz=147,SNR=10
**532A Rocksprings 147.19 33** P **PKPbc** 03 48 13.1 0.0
baz=147,SNR=7.2
**Z39A Irene McRaven, 147.29 23** P **PKPbc** 03 48 13.3 +0.1
baz=147
**631A Perdido Creek 147.35 35** P **PKPbc** 03 48 13.6 +0.1
baz=147,SNR=11
**138A Matatall Enter 147.44 25** P **PKPbc** 03 48 13.8 +0.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=147 | | | | | | | |
| **434A** | **Burnet** | **147.52** | **31** | P | | **PKPbc** | **03 48 13.5** | **-0.4** |
| | baz=147,SNR=12 | | | | | | | |
| **335A** | **Moody** | **147.55** | **29** | P | | **PKPbc** | **03 48 14.0** | **0.0** |
| | baz=147,SNR=6.1 | | | | | | | |
| **237A** | **Washetta, Mont** | **147.70** | **26** | P | | **PKPbc** | **03 48 14.9** | **+0.6** |
| | baz=148 | | | | | | | |
| **533A** | **Kerrville** | **147.71** | **32** | P | | **PKPbc** | **03 48 15.0** | **+0.5** |
| | baz=148 | | | | | | | |
| **139A** | **Bunkhouse Ranc** | **147.71** | **24** | P | | **PKPbc** | **03 48 15.1** | **+0.7** |
| | baz=148 | | | | | | | |
| **CPCT** | **Cooper Cave** | **147.71** | **7** | *e*PKPbc | | **PKPbc** | **03 48 13.8** | **-0.5** |
| **632A** | **Uvalde** | **147.73** | **34** | P | | **PKPbc** | **03 48 14.8** | **+0.2** |
| | baz=148,SNR=12 | | | | | | | |
| **336A** | **Riesel** | **147.75** | **28** | P | | **PKPbc** | **03 48 14.8** | **+0.3** |
| | baz=148 | | | | | | | |
| **435B** | **Jarrell** | **147.88** | **30** | P | | **PKPbc** | **03 48 15.7** | **+0.8** |
| | baz=148 | | | | | | | |
| **534A** | **Blanco** | **148.04** | **32** | P | | **PKPbc** | **03 48 15.6** | **+0.3** |
| | baz=148 | | | | | | | |
| **633A** | **Saathoff Ranch** | **148.11** | **33** | P | | **PKPbc** | **03 48 16.2** | **+0.7** |
| | baz=148 | | | | | | | |
| **732A** | **Laxson Ranch,** | **148.22** | **35** | P | | **PKPbc** | **03 48 16.3** | **+0.5** |
| | baz=148 | | | | | | | |
| **239A** | **Gary** | **148.25** | **24** | P | | **PKPbc** | **03 48 16.7** | **+0.9** |
| | baz=148 | | | | | | | |
| **436A** | **Wall Ranch, Ga** | **148.28** | **29** | P | | **PKPbc** | **03 48 16.8** | **+0.8** |
| | baz=148 | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.29** | **3** | P | | **PKPbc** | **03 48 15.7** | **-0.2** |
| | baz=148 | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.29** | **3** | *e*PKPbc | | **PKPbc** | **03 48 15.1** | **-0.7** |
| **338A** | **Crockett** | **148.47** | **26** | P | | **PKPbc** | **03 48 15.7** | **-0.7** |
| | baz=148 | | | | | | | |
| **535A** | **Dale** | **148.50** | **31** | P | | **PKPbc** | **03 48 17.4** | **+0.8** |
| | baz=148 | | | | | | | |
| **437A** | **Phantom Ranch,** | **148.54** | **28** | P | | **PKPbc** | **03 48 17.7** | **+1.1** |
| | baz=148 | | | | | | | |
| **832A** | **Faith Ranch, C** | **148.55** | **36** | P | | **PKPbc** | **03 48 17.7** | **+1.0** |
| | baz=148 | | | | | | | |
| **733A** | **Divot King Ran** | **148.61** | **34** | P | | **PKPbc** | **03 48 17.8** | **+0.9** |
| | baz=148 | | | | | | | |
| **634A** | **China Grove, S** | **148.61** | **32** | P | | **PKPbc** | **03 48 17.9** | **+1.1** |
| | baz=148 | | | | | | | |
| **536A** | **Bastrop** | **148.72** | **30** | P | | **PKPbc** | **03 48 18.0** | **+0.9** |
| | baz=149 | | | | | | | |
| **339A** | **Huntington** | **148.81** | **25** | P | | **PKPbc** | **03 48 18.1** | **+0.8** |
| | baz=149 | | | | | | | |
| **833A** | **Chaparral WMA,** | **148.85** | **35** | P | | **PKPbc** | **03 48 18.6** | **+1.1** |
| | baz=149 | | | | | | | |
| **635A** | **Leesville** | **148.91** | **32** | P | | **PKPbc** | **03 48 18.8** | **+1.2** |
| | baz=149 | | | | | | | |
| **734A** | **La Parita Cree** | **148.92** | **33** | P | | **PKPbc** | **03 48 18.9** | **+1.3** |
| | baz=149 | | | | | | | |
| **340A** | **Bronson** | **149.02** | **24** | P | | **PKPbc** | **03 48 19.1** | **+1.3** |
| | baz=149 | | | | | | | |
| **537A** | **Green Hill Far** | **149.08** | **29** | P | | **PKPbc** | **03 48 19.2** | **+1.2** |
| | baz=149 | | | | | | | |
| **636A** | **Smothers Creek** | **149.21** | **31** | P | | **PKPbc** | **03 48 19.8** | **+1.4** |
| | baz=149 | | | | | | | |
| **735A** | **Kenedy** | **149.32** | **32** | P | | **PKPbc** | **03 48 19.8** | **+1.2** |
| | baz=149 | | | | | | | |
| **538A** | **Harpers Horsep** | **149.35** | **27** | P | | **PKPbc** | **03 48 19.7** | **+1.1** |
| | baz=149 | | | | | | | |
| **933A** | **Laredo** | **149.46** | **36** | P | | **PKPbc** | **03 48 20.2** | **+1.1** |
| | baz=149 | | | | | | | |
| **834A** | **Tilden** | **149.48** | **34** | P | | **PKPbc** | **03 48 19.8** | **+0.8** |
| | baz=149 | | | | | | | |
| **VBMS** | **Vicksburg** | **149.51** | **18** | P | | **PKPbc** | **03 48 20.0** | **+1.0** |
| | baz=149 | | | | | | | |
| **440A** | **Kirbyville** | **149.58** | **25** | P | | **PKPbc** | **03 48 20.8** | **+1.6** |
| | baz=149 | | | | | | | |
| **637A** | **Eagle Lake** | **149.60** | **30** | P | | **PKPbc** | **03 48 20.9** | **+1.6** |
| | baz=150 | | | | | | | |
| **736A** | **Circle Diamond** | **149.63** | **31** | P | | **PKPbc** | **03 48 21.2** | **+1.8** |
| | baz=150 | | | | | | | |
| **539A** | **Cross D Ranch,** | **149.80** | **26** | P | | **PKPbc** | **03 48 21.8** | **+2.0** |
| | baz=150 | | | | | | | |
| **934A** | **Benavides** | **149.90** | **35** | P | | **PKPbc** | **03 48 21.9** | **+1.7** |
| | baz=150 | | | | | | | |
| **034A** | **Hebbronville** | **150.22** | **36** | P | | **PKPbc** | **03 48 23.0** | **+2.1** |
| | baz=150 | | | | | | | |
| **035A** | **Encino** | **150.65** | **35** | P | | **PKPbc** | **03 48 24.7** | **+2.7** |
| | baz=150 | | | | | | | |

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*BJI **26** 03:50:07.4, 3˚.70S×100˚.20E, h15km, mb4.7/31, mB5.2/15, Ms4.8/16, Ms7 4.5/15*
*ISCJB **26** 03:50:14.6±0.7, 3˚.09S±0˚.05×100˚.12E±0˚.05, h35km±5km, mb4.5/41, MS4.0/10, Error ellipse: s-maj=10.6km s-min=5.0km az=140.0*
*NEIC **26** 03:50:14.5±0.9, 3˚.10S×100˚.14E, h20km±5km, mb4.8/10, Error ellipse: s-maj=10.6km s-min=5.9km az=58.0*
*DJA **26** 03:50:14.4±0.9, 3˚S±6˚×10˚0E±˚, h26km±6km, M4.9/13, mb4.9/4, mB5.0/1, MLv4.9/13, Mw(mB)4.4/1*
*AUST **26** 03:50:15.8, 2˚.87S×100˚.48E, h0km*
*MOS **26** 03:50:15.2±1.6, 2˚.99S×100˚.18E, h33km, mb4.9/22, Error ellipse: s-maj=14.5km s-min=7.1km az=106.3*
*IDC **26** 03:50:16.7±2.9, 3˚.15S×100˚.13E, h40km±24km, mb4.0/15, mb1 4.1/17, mb1mx3.9/42, mbtmp4.2/17, ML3.7/2, MS3.9/10, Ms1 3.9/10, ms1mx3.6/35, Error ellipse: s-maj=18.7km s-min=12.7km az=47.0*

**ISC 26 03:50:13.3±0.5, 3˚.17S±0˚.05×100˚.05E±0˚.05, h16km±2km, h16km:pP-P, n163, σ1°69/163, mb4.7/41, MS4.0/10, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.41** | **355** | P | **Pn** | **03 50 23.7** | **-0.8** |
| **SISI** | **Saibi** | **2.06** | **332** | P | **Pn** | **03 50 46.2** | **-1.2** |
| **MASI** | **Maura Aman, Be** | **2.19** | **89** | P | **Pn** | **03 50 48.8** | **-0.3** |
| **KSI** | **Kapahiang** | **2.58** | **101** | P | **Pb** | **03 50 59.4** | **0.0** |
| **SDSI** | **Sungai Dareh** | **2.62** | **32** | P | **Pn** | **03 50 55.2** | **+0.3** |
| **PPI** | **Padang Panjang** | **2.72** | **7** | P | **Pn** | **03 50 56.2** | **-0.1** |
| | baz=2.4,SNR=23 | | | | | | |
| **PPI** | **Padang Panjang** | **2.72** | **7** | P | **Pn** | **03 50 56.0** | **-0.3** |
| **MNAI** | **Manna** | **3.13** | **112** | P | **Pn** | **03 51 01.5** | **-0.6** |
| | baz=2.9,SNR=12 | | | | | | |
| **MNAI** | **Manna** | **3.13** | **112** | *e*Pn | **Pn** | **03 51 01.3** | **-0.8** |
| MNAI | | | | *e*Sn | **Sn** | **03 51 35.6** | **-3.6** |
| **BKNI** | **Bangkinang** | **3.61** | **16** | P | **Pg** | **03 51 23.2** | **+0.6** |
| | baz=3.2,SNR=3.6 | | | | | | |
| **BKNI** | **Bangkinang** | **3.61** | **16** | P | **Pn** | **03 51 08.3** | **-0.4** |
| **BKNI** | **Bangkinang** | **3.61** | **16** | *e*Pn | **Pn** | **03 51 08.3** | **-0.4** |
| **JMBI** | **JAMBI** | **3.90** | **67** | P | **Pn** | **03 51 13.3** | **+0.7** |
| **MNSI** | **Mandailing Nat** | **3.96** | **353** | P | **Pn** | **03 51 13.7** | **+0.2** |
| **MDSI** | **Maura Dua** | **4.32** | **108** | P | **Pn** | **03 51 18.9** | **+0.5** |
| **LWLI** | **Liwa** | **4.40** | **115** | P | Pn | 03 51 23.7 | +4.1 |
| **KASI** | **Kota Agung** | **5.01** | **118** | P | **Pn** | **03 51 28.2** | **+0.3** |
| | 293nm,0.7s,1.1nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.08** | **331** | P | **Pn** | **03 51 27.7** | **-1.2** |
| | 79nm,1.2s,2.µm0.6nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.08** | **331** | *e*Pn | **Pn** | **03 51 27.4** | **-1.5** |
| GSI | | | | *e*S | **Sn** | **03 52 22.6** | **-4.7** |
| **PSI** | **Prapat** | **6.04** | **349** | Pn | **Pn** | **03 51 41.5** | **-0.6** |
| | 1.0nm,0.3s,baz=142,slow=6.6,SNR=4.7 | | | | | | |
| PSI | | | | Sn | **Sn** | **03 52 55.5** | **+4.6** |
| | baz=149,slow=19,SNR=1.8 | | | | | | |
| PSI | | | | LR | LR | 03 53 59.5 | |
| | comp=Z,231nm,21.3s,baz=160,slow=38 | | | | | | |
| **PSI** | **Prapat** | **6.04** | **349** | P | Pn | 03 51 46.9 | +4.8 |
| | baz=5.8,SNR=4.7 | | | | | | |
| **TPRI** | **Tanjung Pinang** | **6.04** | **48** | P | **Pb** | **03 51 58.3** | **0.0** |
| **PPBI** | **Pangkal Pinang** | **6.16** | **81** | P | Pb | 03 52 04.3 | +3.9 |
| **MYKOM** | **Kota Tinggi** | **6.22** | **38** | *e*Pn | **Pn** | **03 51 44.4** | **-0.2** |
| **CGJI** | **Cibinong** | **6.58** | **122** | P | **Pn** | **03 51 51.7** | **+2.2** |
| | 228nm,0.9s,0.7nm | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **7.03** | **341** | P | Pb | 03 52 19.8 | +4.7 |
| **IPM** | **Ipoh** | **7.66** | **7** | *e*Pn | **Pn** | **03 52 06.0** | **+1.6** |
| **CNJI** | **Cibinong** | **8.16** | **121** | P | Pn | 03 52 16.7 | +5.5 |
| **LEM** | **Lembang** | **8.37** | **116** | Pn | Pn | 03 52 19.3 | +5.1 |
| | 14nm,0.3s,baz=311,slow=19,SNR=5.5 | | | | | | |
| **LEM** | **Lembang** | **8.37** | **116** | P | Pn | 03 52 24.1 | +10 |
| **KULM** | **Kulim** | **8.42** | **4** | *e*Pn | **Pn** | **03 52 13.1** | **-1.7** |
| | 22nm,0.8s | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.88** | **120** | P | **Pn** | **03 52 19.0** | **-2.1** |
| | baz=8.7,SNR=13 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.88** | **120** | P | **Pn** | **03 52 20.3** | **-0.8** |
| **CISI** | **Cisompet, Garu** | **8.88** | **120** | *e*Pn | **Pn** | **03 52 18.0** | **-3.1** |
| **KKM** | **Kota Kinabalu** | **18.56** | **60** | *e*P | **P** | **03 54 28.2** | **-1.5** |
| | 4.2nm,0.5s | | | | | | |
| **CHAI** | **Chaiyaphum** | **19.05** | **6** | P | Pn | 03 54 42.4 | +6.7 |
| | 4.0nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **19.74** | **96** | P | **Pn** | **03 54 43.9** | **-0.2** |
| | 0.5nm,0.3s,baz=280,slow=11,SNR=3.5 | | | | | | |
| **KAPI** | **Kappang** | **19.74** | **96** | *e*P | **P** | **03 54 42.5** | **-0.1** |
| **MYLDM** | **Lahad Datu** | **20.21** | **66** | *e*P | Pn | 03 54 50.9 | +1.1 |
| | 136nm,1.6s | | | | | | |
| **LOEI** | **Loei** | **20.58** | **3** | P | Pn | 03 54 55.6 | +1.6 |
| | 10nm,1.4s,2µm | | | | | | |
| **NONG** | **Nongkai** | **21.32** | **8** | P | **P** | **03 55 02.7** | **+3.1** |
| | 38nm,1.1s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.52** | **357** | P | **P** | **03 55 01.3** | **-0.5** |
| | 1.9nm,0.4s,baz=187,slow=10,SNR=13 | | | | | | |
| CMAR | | | | LR | LR | 04 03 42.3 | |
| | comp=Z,302nm,21.1s,baz=355,slow=38 | | | | | | |
| **CHTO** | **Chiang Mai** | **21.87** | **357** | P | **P** | **03 55 10.1** | **+4.5** |
| | 52nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.87** | **357** | *e*P | **P** | **03 55 04.4** | **-1.2** |
| **CHTO** | **Chiang Mai** | **21.87** | **357** | *e*P | **P** | **03 55 04.3** | **-1.2** |
| CHTO | | | | *es*P | **sP** | **03 55 09.4** | **-3.0** |
| **CMAI** | **Chiengmai2** | **22.98** | **358** | P | **P** | **03 55 18.7** | **+1.1** |
| | 11nm,1.3s | | | | | | |
| **GTOI** | **Gorontalo** | **23.26** | **81** | P | **P** | **03 55 19.2** | **-1.2** |
| **QIZ** | **Qiongzhong** | **24.07** | **23** | P | **P** | **03 55 31.5** | **+3.3** |
| QIZ | | | | S | **S** | **03 59 51.0** | **+5.9** |
| QIZ | | | | PMZ | | | |
| | 20nm,1.7s | | | | | | |
| QIZ | | | | LN | | | |
| | 850nm,14.0s | | | | | | |
| QIZ | | | | LZ | | | |
| | 570nm,16.3s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.78** | **260** | T | T | 04 25 08.3 | |
| | baz=82,slow=75,SNR=748 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.79** | **260** | T | T | 04 24 59.7 | |
| | baz=82,slow=75,SNR=804 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.80** | **260** | T | T | 04 25 00.6 | |
| | baz=82,slow=75,SNR=694 | | | | | | |
| **KMI** | **Kunming** | **28.24** | **5** | P | **P** | **03 56 06.0** | **-0.1** |
| KMI | | | | pP | pP | 03 56 18.0 | +7.0 |
| KMI | | | | PP | **PP** | **03 57 03.8** | **-6.2** |
| KMI | | | | S | S | 04 00 58.5 | +6.8 |
| KMI | | | | PMZ | | | |
| | 10.0nm,1.2s | | | | | | |
| KMI | | | | PMZ | | | |
| | 220nm,5.8s | | | | | | |
| KMI | | | | LN | | | |
| | 370nm,14.8s | | | | | | |
| KMI | | | | LE | | | |
| | 670nm,12.1s | | | | | | |
| KMI | | | | LZ | | | |
| | 620nm,11.4s | | | | | | |
| **GYA** | **Guiyang** | **30.14** | **12** | *e*P | **P** | **03 56 25.5** | **+2.7** |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **LSA** | **Lhasa** | **33.77** | **346** | *e*P | **P** | **03 56 56.3** | **+1.2** |
| **LSA** | **Lhasa** | **33.77** | **346** | *e*P | **P** | **03 56 56.3** | **+1.2** |
| **H01W3** | **Cape Leeuwin H** | **34.16** | **159** | T | T | 04 32 57.7 | |
| | baz=335,slow=76,SNR=181 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.18** | **159** | T | T | 04 32 58.7 | |
| | baz=335,slow=76,SNR=188 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.18** | **159** | T | T | 04 32 58.8 | |
| | baz=335,slow=76,SNR=133 | | | | | | |
| **WRKA** | **Warakurna** | **34.82** | **131** | P | P | 03 57 10.9 | +7.1 |
| | baz=35,SNR=4.7 | | | | | | |
| **WRA** | **Warrumunga Arr** | **37.37** | **119** | P | **P** | **03 57 24.6** | **-1.1** |
| | 0.8nm,0.4s,baz=300,slow=8.2,SNR=22 | | | | | | |
| WRA | | | | PcP | **PcP** | **03 59 44.8** | **+0.1** |
| | 0.5nm,0.8s,baz=307,slow=2.4,SNR=2.3 | | | | | | |
| WRA | | | | S | **S** | **04 03 10.7** | **-2.7** |
| | 0.6nm,0.9s,baz=265,slow=15,SNR=4.8 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.38** | **119** | *e*P | **P** | **03 57 27.2** | **+1.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,19nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **37.38** | **119** | *e*P | **P** | **03 57 26.2** | **+0.5** |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **XAN** | **Xi'an** | **37.94** | **12** | P | **P** | **03 57 29.0** | **-1.3** |
| XAN | | | | pP | **pP** | **03 57 36.0** | **+0.7** |
| XAN | | | | PMZ | | | |
| | comp=Z,23nm,0.7s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,440nm,17.4s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,590nm,15.3s | | | | | | |
| **ASAR** | **Alice Springs** | **38.54** | **125** | P | **P** | **03 57 35.0** | **-0.5** |
| | comp=Z,0.7nm,0.3s,baz=301,slow=8.1,SNR=13 | | | | | | |
| ASAR | | | | PcP | **PcP** | **03 59 48.3** | **+0.1** |
| | comp=Z,0.3nm,0.6s,baz=287,slow=1.8,SNR=3.0 | | | | | | |
| ASAR | | | | S | **S** | **04 03 28.3** | **-2.7** |
| | comp=Z,0.1nm,0.4s,baz=296,slow=17,SNR=2.9 | | | | | | |
| ASAR | | | | LR | LR | 04 16 00.6 | |
| | comp=Z,221nm,19.9s,baz=298,slow=40 | | | | | | |
| **AS01** | **Alice Springs** | **38.58** | **125** | *e*P | **P** | **03 57 37.5** | **+1.7** |
| **LZH** | **Lanzhou** | **39.21** | **5** | *e*P | **P** | **03 57 43.0** | **+1.9** |
| LZH | | | | pP | **pP** | **03 57 45.5** | **-0.6** |
| LZH | | | | sP | **sP** | **03 57 46.8** | **-1.3** |
| LZH | | | | PMZ | | | |
| | comp=Z,15nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,68nm,4.3s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,590nm,14.7s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,410nm,13.6s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,370nm,17.1s | | | | | | |
| **MMPI** | **Merauke** | **40.45** | **99** | P | **P** | **03 57 49.0** | **-2.5** |
| | baz=40,SNR=3.2 | | | | | | |
| **QIS** | **Mount Isa** | **42.22** | **117** | P | P | 03 58 12.7 | +6.7 |
| | baz=42,SNR=3.6 | | | | | | |
| **GTA** | **Gaotai** | **42.37** | **360** | *e*P | **P** | **03 58 07.8** | **+0.8** |
| GTA | | | | pP | **pP** | **03 58 12.3** | **+0.2** |
| GTA | | | | sP | **sP** | **03 58 15.0** | **+0.9** |
| GTA | | | | S | **S** | **04 04 30.5** | **+2.6** |
| GTA | | | | SS | **SS** | **04 07 34.0** | **-3.1** |
| GTA | | | | PMZ | | | |
| | comp=Z,6.0nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,68nm,4.3s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,400nm,14.7s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,390nm,15.7s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,310nm,14.3s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.05** | **12** | *e*P | **P** | **03 58 28.8** | **+0.2** |
| HHC | | | | S | **S** | **04 05 05.0** | **-2.0** |
| HHC | | | | PMZ | | | |
| | comp=Z,29nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,210nm,4.7s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,360nm,11.1s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,340nm,9.9s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,270nm,14.8s | | | | | | |
| **MTSU** | **Mount Surprise** | **45.82** | **112** | P | P | 03 58 41.6 | +6.7 |
| | baz=46,SNR=4.6 | | | | | | |
| **HTT** | **Hallett** | **47.14** | **134** | P | **P** | **03 58 46.6** | **+1.4** |
| | baz=47,SNR=3.5 | | | | | | |
| **KSH** | **Kashi** | **47.90** | **335** | *e*P | **P** | **03 58 49.8** | **-1.2** |
| KSH | | | | *ep*P | **pP** | **03 58 54.5** | **-1.7** |
| KSH | | | | *es*P | **sP** | **03 58 57.0** | **-1.1** |
| KSH | | | | PcS | **PcS** | **04 04 13.8** | **-1.3** |
| KSH | | | | S | **S** | **04 05 42.5** | **-5.5** |
| KSH | | | | PMZ | | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,150nm,7.0s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,120nm,5.7s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,140nm,6.1s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,190nm,5.9s | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.97** | **30** | P | **P** | **03 58 51.1** | **-0.3** |
| **KSAR** | **Wonju Array Be** | **47.97** | **30** | P | **P** | **03 58 51.1** | **-0.3** |
| **KSRS** | **Korea Array** | **48.00** | **30** | P | **P** | **03 58 51.1** | **-0.5** |
| | comp=Z,3.4nm,0.7s,baz=224,slow=8.1,SNR=6.6 | | | | | | |
| KSRS | | | | LR | LR | 04 21 32.0 | |
| | comp=Z,74nm,18.3s,baz=250,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **48.00** | **30** | P | **P** | **03 58 51.1** | **-0.5** |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.7s | | | | | | |
| KSRS | | | | MLR | MLR | | |
| | comp=Z,74nm,18.3s | | | | | | |
| **KS01** | **Wonju Array Si** | **48.00** | **30** | *e*P | **P** | **03 58 50.8** | **-0.8** |
| **TKM2** | **Tokmak 2** | **50.92** | **337** | *e*P | **P** | **03 59 14.9** | **+0.8** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **TKM2** | **Tokmak 2** | **50.92** | **337** | *e*P | **P** | **03 59 14.9** | **+0.8** |
| | comp=Z,9.3nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **51.09** | **5** | P | **P** | **03 59 15.6** | **+0.3** |
| | comp=Z,8.6nm,0.8s,baz=184,slow=8.7,SNR=46 | | | | | | |
| SONM | | | | PcP | **PcP** | **04 00 31.2** | **+0.3** |
| | comp=Z,1.3nm,0.9s,baz=197,slow=1.5,SNR=2.1 | | | | | | |
| **SONA1** | **Songino Array** | **51.11** | **5** | *e*P | **P** | **03 59 15.8** | **+0.4** |
| **AAK** | **Ala-Archa** | **51.12** | **336** | *e*P | **P** | **03 59 18.1** | **+2.5** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,12nm,1.1s | | | | | | |
| **AAK** | **Ala-Archa** | **51.12** | **336** | *e*P | **P** | **03 59 16.9** | **+1.3** |
| | comp=Z,4.2nm,0.9s | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.19** | **6** | *e*P | **P** | **03 59 16.9** | **+0.9** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.19** | **6** | *e*P | **P** | **03 59 16.9** | **+0.9** |
| | comp=Z,12nm,1.0s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **51.34** | **129** | P | **P** | **03 59 18.0** | **+0.7** |
| | baz=51,SNR=11 | | | | | | |
| **EKS2** | **Erkin-Say** | **51.44** | **335** | *e*P | **P** | **03 59 18.6** | **+0.7** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **EKS2** | **Erkin-Say** | **51.44** | **335** | *e*P | **P** | **03 59 18.6** | **+0.7** |
| | comp=Z,13nm,0.9s | | | | | | |
| **CN2** | **Changchun** | **52.03** | **23** | *e*P | **P** | **03 59 20.8** | **-1.4** |
| CN2 | | | | *ep*P | **pP** | **03 59 29.8** | **+2.5** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,130nm,3.0s | | | | | | |
| **MK01** | **Makanchi Array** | **52.14** | **345** | *e*P | **P** | **03 59 22.9** | **0.0** |
| **MKAR** | **Makanchi Array** | **52.16** | **345** | P | **P** | **03 59 23.1** | **-0.1** |
| | comp=Z,5.4nm,0.8s,baz=151,slow=8.3,SNR=22 | | | | | | |
| MKAR | | | | LR | LR | 04 26 03.9 | |
| | comp=Z,102nm,19.9s,baz=154,slow=41 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.16** | **345** | *i* P | **P** | **03 59 23.6** | **+0.5** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **ZAK** | **Zakamensk** | **53.41** | **3** | *e*P | **P** | **03 59 31.5** | **-0.9** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.6s | | | | | | |
| **TLY** | **Talaya** | **54.73** | **3** | *e*P | P | 03 59 50.3 | +8.4 |
| TLY | | | | pmax | pmax | | |
| | comp=Z,11nm,1.6s | | | | | | |
| TLY | | | | MLR | MLR | | |
| | comp=Z,304nm,15.0s | | | | | | |
| **HIA** | **Hailar** | **54.95** | **16** | *e*P | **P** | **03 59 43.6** | **+0.1** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.16** | **28** | P | **P** | **03 59 44.4** | **-0.7** |
| | comp=Z,9.7nm,0.8s,baz=218,slow=6.9,SNR=12 | | | | | | |
| USRK | | | | LR | LR | 04 27 51.3 | |
| | comp=Z,221nm,18.0s,baz=245,slow=41 | | | | | | |
| **ARMA** | **Armidale** | **55.69** | **125** | P | P | 03 59 56.4 | +7.0 |
| | baz=56,SNR=4.0 | | | | | | |
| **ARMA** | **Armidale** | **55.69** | **125** | *e*P | **P** | **03 59 51.2** | **+1.8** |
| ARMA | | | | *es*P | **sP** | **03 59 56.6** | **+0.1** |
| **KURK** | **Kurchatov** | **56.74** | **344** | *e*P | **P** | **03 59 56.1** | **-0.2** |
| KURK | | | | pmax | pmax | | |
| | comp=Z,29nm,0.9s | | | | | | |
| **KURK** | **Kurchatov** | **56.74** | **344** | *e*P | **P** | **03 59 56.0** | **-0.2** |
| | comp=Z,29nm,0.9s | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.32** | **349** | P | **P** | **04 00 10.3** | **+3.0** |
| | baz=58,SNR=3.7 | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.32** | **349** | *e*P | **P** | **04 00 07.0** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **58.32** | **349** | P | **P** | **04 00 07.0** | **-0.3** |
| | comp=Z,7.3nm,0.8s,baz=174,slow=5.5,SNR=23 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.32** | **349** | *i* P | **P** | **04 00 07.0** | **-0.3** |
| ZALV | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **KLR** | **Kul'dur** | **58.97** | **24** | *e*P | **P** | **04 00 11.8** | **-0.2** |
| **NVS** | **Novosibirsk** | **59.46** | **349** | *e*P | **P** | **04 00 14.9** | **-0.4** |
| **BOD** | **Bodaibo** | **61.82** | **8** | *e*P | **P** | **04 00 29.8** | **-1.5** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **62.44** | **32** | *e*P | P | 04 00 28.1 | -7.6 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,55nm,1.3s | | | | | | |
| **ABKAR** | **Akbulak array** | **62.68** | **332** | *e*P | **P** | **04 00 36.8** | **-0.5** |
| **YAK** | **Yakutsk** | **68.85** | **14** | *e*P | **P** | **04 01 15.7** | **-1.1** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | |
| **MAW** | **Mawson** | **69.17** | **194** | P | **P** | **04 01 19.1** | **+0.4** |
| | comp=Z,3.0nm,0.9s,baz=12,slow=8.4,SNR=4.9 | | | | | | |
| MAW | | | | LR | LR | 04 27 35.3 | |
| | comp=Z,78nm,19.5s,baz=62,slow=32 | | | | | | |
| **KBZ** | **Khabaz** | **69.22** | **319** | P | **P** | **04 01 19.8** | **+0.4** |
| | comp=Z,2.7nm,0.9s,baz=145,slow=2.0,SNR=4.9 | | | | | | |
| **MATP** | **Matopo** | **71.61** | **250** | P | **P** | **04 01 35.3** | **+0.5** |
| | comp=Z,4.4nm,0.7s,baz=91,slow=6.4,SNR=9.7 | | | | | | |
| MATP | | | | LR | LR | 04 28 00.1 | |
| | comp=Z,80nm,21.0s,baz=68,slow=32 | | | | | | |
| **VRH** | **Novokhopyorsk** | **73.31** | **326** | *e*P | P | 04 01 50.8 | +6.7 |
| VRH | | | | pmax | pmax | | |
| | comp=N,10.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=E,6.0nm,0.6s | | | | | | |
| VRH | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.14** | **313** | P | **P** | **04 01 48.7** | **-0.7** |
| | comp=Z,1.0nm,0.9s,baz=132,slow=7.3,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.14** | **313** | *i* P | **P** | **04 01 49.2** | **-0.2** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | |
| **VORD** | **Divnogorie** | **74.58** | **325** | *e*P | **P** | **04 01 51.1** | **-0.4** |
| VORD | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.0s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.0s | | | | | | |
| **VSR** | **Storozhevoye** | **74.76** | **325** | *e*P | **P** | **04 01 53.1** | **+0.6** |
| VSR | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.6s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,10.0nm,0.9s | | | | | | |
| **OXZ** | **Oxford** | **74.76** | **134** | *e*P | **P** | **04 01 55.7** | **+2.9** |
| | comp=E,16nm,0.5s | | | | | | |
| **BR231** | **Keskin MP Arra** | **74.81** | **313** | *e*P | P | 04 01 49.5 | -3.7 |
| **BOSA** | **Boshof** | **75.14** | **241** | LR | LR | 04 31 24.6 | |
| | comp=E,59nm,18.1s,baz=3.0,slow=33 | | | | | | |
| **LPSR**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **STHS** | **Stebnicka Huta** | **85.12** | **320** | *e*P | | **P** | **04 02 51.1** | **+2.4** |
| **STHS** | **Stebnicka Huta** | **85.12** | **320** | *e*PCP | | **P** | **04 02 51.1** | **+2.4** |
| **FINES** | **FINESS Array B** | **85.16** | **332** | P | | **P** | **04 02 48.1** | **-0.4** |
| | comp=Z,1.5nm,0.9s,baz=106,slow=6.8,SNR=3.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **85.16** | **332** | *i* P | | **P** | **04 02 48.7** | **+0.1** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **VYHS** | **Vyhne** | **86.53** | **319** | *e*P | | P | 04 02 59.1 | +3.4 |
| VYHS | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.9s | | | | | | | |
| **VYHS** | **Vyhne** | **86.53** | **319** | *e*PCP | | P | 04 02 59.1 | +3.4 |
| **GERES** | **GERESS Array B** | **89.95** | **319** | P | | **P** | **04 03 12.7** | **+0.6** |
| | comp=Z,0.2nm,0.6s,baz=138,slow=3.7,SNR=3.4 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **91.78** | **348** | LR | | LR | 04 52 38.8 | |
| | comp=Z,100nm,19.6s,baz=125,slow=41 | | | | | | | |
| **CAST** | **Castle Rocks** | **100.77** | **26** | *e*PP | | PP | 04 08 05.8 | -2.6 |
| **R11A** | **Troy Canyon, C** | **132.22** | **38** | *ep*PKPdf | pPKPdf | | 04 09 35.1 | +2.2 |
| **MNTX** | **Cornudas Mount** | **142.88** | **37** | *e*PKPpre | PKPpre | | 04 09 44.7 | |
| MNTX | | | | *e*PKPdf | **PKiKP** | | **04 09 50.6** | **+0.5** |
| **WMOK** | **Wichita Mounta** | **144.04** | **27** | *e*PKPdf | **PKPab** | | **04 09 44.8** | **-1.4** |
| WMOK | | | | *ep*PKPdf | **PKiKP** | | **04 09 51.9** | **-0.5** |
| **TUL1** | **Tulsa** | **144.28** | **22** | *e*PKPdf | **PKPab** | | **04 09 46.2** | **-0.8** |
| TUL1 | | | | *ep*PKPdf | **pPKPdf** | | **04 09 54.3** | **-0.4** |
| **WCI** | **Wyandotte Cave** | **144.63** | **9** | *e*PKIKP | **PKPab** | | **04 09 47.7** | **-0.6** |
| WCI | | | | *e* | | | 04 09 53.5 | |
| **WCI** | **Wyandotte Cave** | **144.63** | **9** | *e*PKPdf | **PKPab** | | **04 09 47.7** | **-0.6** |
| WCI | | | | *ep*PKPdf | **PKiKP** | | **04 09 53.5** | **0.0** |
| **ABTX** | **Abilene, Hawle** | **145.36** | **30** | *e*PKPbc | **PKPbc** | | **04 09 49.9** | **-1.1** |
| ABTX | | | | *ep*PKPab | pPKPab | | 04 09 58.3 | +1.7 |
| **TX31** | **Lajitas Ar. Si** | **145.59** | **38** | *e*PKPdf | **PKPab** | | **04 09 52.2** | **+0.1** |
| **TXAR** | **Lajitas Array** | **145.59** | **38** | PKPbc | **PKPab** | | **04 09 52.5** | **+0.3** |
| | comp=Z,3.9nm,1.0s,baz=306,slow=0.8,SNR=23 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.31** | **21** | *e*PKP2 | **PKPab** | | **04 09 54.3** | **-0.2** |
| **MIAR** | **Mount Ida** | **146.31** | **21** | *e*PKPdf | **PKPab** | | **04 09 54.3** | **-0.2** |
| **WVT** | **Waverly** | **146.40** | **12** | *e*PKP2 | **PKPab** | | **04 09 54.6** | **-0.3** |
| **WVT** | **Waverly** | **146.40** | **12** | *e*PKPdf | **PKPab** | | **04 09 54.6** | **-0.3** |
| **TZTN** | **Tazewell** | **146.62** | **5** | *e*PKPdf | **PKPdf** | | **04 09 53.3** | **+0.1** |
| TZTN | | | | *ep*PKPab | pPKPab | | 04 10 01.1 | -0.1 |
| **JCT** | **Junction City** | **146.98** | **33** | *e*PKP2 | **PKPbc** | | **04 09 56.3** | **+0.3** |
| **JCT** | **Junction City** | **146.98** | **33** | *e*PKPdf | **PKPbc** | | **04 09 56.2** | **+0.3** |
| **TKL** | **Tuckaleechee C** | **147.48** | **6** | *e*PKIKP | **PKPdf** | | **04 09 55.1** | **+0.4** |
| TKL | | | | *e* | | | 04 10 04.0 | |
| **TKL** | **Tuckaleechee C** | **147.48** | **6** | *e*PKPdf | **PKPdf** | | **04 09 55.1** | **+0.4** |
| TKL | | | | *ep*PKPab | **pPKPab** | | **04 10 04.0** | **-0.6** |
| **SWET** | **Sewanee** | **147.63** | **9** | *e*PKPdf | **PKPdf** | | **04 09 55.3** | **+0.3** |
| SWET | | | | *ep*PKPab | **pPKPab** | | **04 10 04.0** | **-1.2** |

**IDC 26 03:55:55.6±3.5, 27.°30N×140.°31E, h451km±41km, mb3.1/7, mb1 3.2/8, mb1mx2.9/28, mbtmp3.8/8, Error ellipse: s-maj=45.2km s-min=14.9km az=84.0, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **9.39** | **350** | P | P | 03 58 05.7 | -0.3 |
| | 0.1nm,0.3s,baz=174,slow=7.4,SNR=2.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **47.32** | **188** | P | P | 04 03 47.2 | 0.0 |
| | 0.7nm,0.3s,baz=5.9,slow=7.6,SNR=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **49.06** | **310** | P | P | 04 04 00.2 | +0.2 |
| | 0.4nm,0.4s,baz=88,slow=10,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **51.04** | **188** | P | P | 04 04 14.5 | -0.4 |
| | 0.3nm,0.5s,baz=1.4,slow=6.0,SNR=5.2 | | | | | | |
| **YKA** | **Yellowknife Ar** | **72.75** | **28** | P | P | 04 06 36.9 | +0.3 |
| | 0.9nm,0.8s,baz=284,slow=10,SNR=1.2 | | | | | | |
| **ARCES** | **ARCESS Array B** | **72.80** | **340** | P | P | 04 06 37.2 | +0.5 |
| | 3.0nm,1.0s,baz=83,slow=8.3,SNR=1.6 | | | | | | |
| **FINES** | **FINESS Array B** | **77.02** | **333** | P | P | 04 07 00.3 | -0.2 |
| | 1.1nm,0.4s,baz=72,slow=4.5,SNR=12 | | | | | | |
| **NOA** | **NORSAR Array B** | **82.80** | **338** | P | P | 04 07 30.5 | -0.7 |
| | 0.8nm,0.8s,baz=47,slow=4.5,SNR=2.6 | | | | | | |

*IDC **26** 04:17:46.9±1.5, 3.°95S×99.°17E, h0km, mb3.9/9, mb1 4.1/11, mb1mx3.9/41, mbtmp4.0/11, ML3.9/2, MS3.0/1, Ms1 3.0/1, ms1mx2.5/37, Error ellipse: s-maj=47.5km s-min=17.9km az=54.0*

*ISCJB **26** 04:17:47.3±0.9, 3.°73S±0.°07×99.°43E±0.°10, h10km, mb3.9/9, Error ellipse: s-maj=15.8km s-min=6.7km az=149.0*

*DJA **26** 04:17:50.9±2.1, 4.°S±12.°×9.°9E±1.°9, h48km±54km, M4.5/6, mb4.6/1, MLv4.4/6*

**ISC 26 04:17:49.9±1.0, 3.°65S±0.°08×99.°5E±0.°1, h10km, n27, σ1s24/21, mb3.8/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **1.03** | **31** | P | **Pb** | **04 18 09.9** | **0.0** |
| **SISI** | **Saibi** | **2.34** | **351** | P | **Pn** | **04 18 27.5** | **-1.0** |
| SISI | | | | S | **Sn** | **04 18 56.5** | **-0.9** |
| **KRJI** | **Kerinci** | **2.52** | **52** | P | Pg | 04 18 49.7 | +11 |
| **PDSI** | **Padang** | **2.90** | **20** | P | **Pn** | **04 18 35.3** | **-0.9** |
| **PPI** | **Padang Panjang** | **3.31** | **16** | P | **Pn** | **04 18 41.2** | **-0.6** |
| PPI | | | | S | **Sn** | **04 19 18.5** | **-2.7** |
| **SDSI** | **Sungai Dareh** | **3.33** | **36** | P | **Pg** | **04 18 54.7** | **+0.8** |
| **MNAI** | **Manna** | **3.54** | **102** | P | **Pn** | **04 18 43.9** | **-1.2** |
| **MDSI** | **Maura Dua** | **4.77** | **103** | P | **Pn** | **04 19 01.4** | **-0.5** |
| **KASI** | **Kota Agung** | **5.34** | **111** | P | Pn | 04 19 08.2 | -1.6 |
| **PSI** | **Prapat** | **6.43** | **355** | Pn | **Pn** | **04 19 24.2** | **-0.7** |
| | 0.6nm,0.3s,baz=220,slow=16,SNR=2.4 | | | | | | |
| PSI | | | | Sn | Sn | 04 20 31.8 | -6.8 |
| | 0.3nm,0.3s,baz=317,slow=16,SNR=3.2 | | | | | | |
| PSI | | | | LR | LR | 04 22 11.1 | |
| | comp=Z,137nm,20.5s,baz=40,slow=40 | | | | | | |
| **LEM** | **Lembang** | **8.70** | **112** | Pn | **Pn** | **04 19 55.5** | **-0.6** |
| | 6.3nm,0.3s,baz=342,slow=19,SNR=2.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.98** | **359** | P | **P** | **04 22 45.1** | **+0.9** |
| | 3.7nm,0.7s,baz=187,slow=10.0,SNR=22 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.13** | **260** | T | T | 04 52 30.5 | |
| | baz=75,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.14** | **260** | T | T | 04 52 31.8 | |
| | baz=75,slow=74 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.15** | **260** | T | T | 04 52 33.1 | |
| | baz=75 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.92** | **158** | T | T | 05 00 58.5 | |
| | baz=336,slow=76,SNR=3.5 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.94** | **158** | T | T | 05 00 56.2 | |
| | baz=336,slow=76,SNR=4.3 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.94** | **158** | T | T | 05 00 54.5 | |
| | baz=336,slow=76,SNR=3.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.65** | **118** | P | **P** | **04 25 04.4** | **-1.2** |
| | 0.2nm,0.3s,baz=287,slow=8.8,SNR=7.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.74** | **124** | P | **P** | **04 25 14.1** | **-0.7** |
| | 0.7nm,0.7s,baz=297,slow=7.5,SNR=9.4 | | | | | | |
| **SONM** | **Songino Array** | **51.63** | **6** | P | **P** | **04 26 57.9** | **+1.0** |
| | 0.5nm,0.4s,baz=179,slow=7.4,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.48** | **345** | P | **P** | **04 27 03.3** | **+0.3** |
| | 0.6nm,0.6s,baz=144,slow=8.5,SNR=3.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.85** | **28** | P | **P** | **04 27 29.6** | **+1.9** |
| | 3.5nm,0.6s,baz=236,slow=4.3,SNR=7.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.69** | **350** | P | **P** | **04 27 47.3** | **-0.3** |
| | 1.1nm,0.4s,baz=192,slow=4.1,SNR=4.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.05** | **313** | P | **P** | **04 29 24.5** | **-2.0** |
| | 0.5nm,0.6s,baz=122,slow=5.4,SNR=4.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.55** | **32** | P | **P** | **04 29 30.0** | **+1.0** |
| | 11nm,1.0s,baz=203,slow=11,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.32** | **38** | PKPbc | **PKPdf** | **04 37 32.1** | **+1.4** |
| | 0.8nm,0.9s,baz=300,slow=1.7,SNR=6.7 | | | | | | |

*BYKL **26** 04:33:10.9±0.2, 53.°31N×108.°50E*
*MOS **26** 04:33:10.4±1.6, 53.°23N×108.°51E, h10km, mb4.3/1, Error ellipse: s-maj=28.7km s-min=19.7km az=50.9*

**ISC 26 04:33:10.2±0.7, 53.°35N±0.°02×108.°51E±0.°02, h10km, n29, σ2s14/69, 2C-2D, Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OGRR** | **Ongureny** | **0.62** | **299** | ↑*i*Pg | **Pb** | **04 33 23.1** | **0.0** |
| OGRR | | | | *e* | | 04 33 31.9 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,197nm,0.3s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=E,441nm,0.3s | | | | | | |
| **OGRR** | **Ongureny** | **0.62** | **299** | ↑*i*Pg | **Pb** | **04 33 23.2** | **+0.1** |
| OGRR | | | | *e*Sg | **Sb** | **04 33 31.9** | **0.0** |
| OGRR | | | | Pmax | | | |
| | comp=E,199nm,0.2s | | | | | | |
| OGRR | | | | Smax | | | |
| | comp=E,354nm,0.3s | | | | | | |
| **SYVR** | **Suvo** | **0.94** | **70** | *e*PG | **Pg** | **04 33 27.8** | **-0.5** |
| SYVR | | | | *e* | | 04 33 41.7 | |
| SYVR | | | | pmax | pmax | | |
| | comp=Z,100nm,0.2s | | | | | | |
| SYVR | | | | smax | smax | | |
| | comp=N,337nm,0.2s | | | | | | |
| **SYVR** | **Suvo** | **0.94** | **70** | ↓*i*Pg | **Pb** | **04 33 28.5** | **-0.1** |
| SYVR | | | | *e*Sg | **Sb** | **04 33 41.7** | **+0.5** |
| SYVR | | | | *e*Sb | **Sn** | **04 33 46.1** | **+3.1** |
| SYVR | | | | Pmax | | | |
| | comp=N,55nm,0.2s | | | | | | |
| SYVR | | | | max | | | |
| | comp=N,300nm,0.1s | | | | | | |
| **ZRHB** | **Zarechye** | **1.14** | **227** | *e*Pg | **Pg** | **04 33 31.4** | **-0.6** |
| ZRHB | | | | *e*Sg | **Sn** | **04 33 47.0** | **-0.9** |
| ZRHB | | | | Pmax | | | |
| | comp=N,287nm,0.2s | | | | | | |
| ZRHB | | | | Smax | | | |
| | comp=N,1μm,0.7s | | | | | | |
| **TRG** | **Tyrgan** | **1.43** | **247** | *e*PG | **Pn** | **04 33 36.0** | **-0.1** |
| TRG | | | | *e* | | 04 33 55.1 | |
| TRG | | | | pmax | pmax | | |
| | comp=Z,137nm,0.3s | | | | | | |
| TRG | | | | smax | smax | | |
| | comp=N,658nm,0.3s | | | | | | |
| **TRG** | **Tyrgan** | **1.43** | **247** | *e*Pg | **Pn** | **04 33 36.1** | **-0.1** |
| TRG | | | | *e*Pb | **Pg** | **04 33 37.2** | **-0.4** |
| TRG | | | | *e*Sg | **Sg** | **04 33 55.8** | **-0.3** |
| TRG | | | | max | | | |
| | comp=N,138nm,0.3s | | | | | | |
| TRG | | | | Smax | | | |
| | comp=N,664nm,0.3s | | | | | | |
| **UUDB** | **Ulan-Yde** | **1.57** | **200** | ↓*i*Pg | **Pb** | **04 33 38.6** | **-0.6** |
| UUDB | | | | *e*Sg | **Sg** | **04 33 58.9** | **-1.6** |
| UUDB | | | | *e*Sb | **Sb** | **04 34 01.1** | **+2.0** |
| UUDB | | | | Pmax | | | |
| | comp=N,112nm,0.4s | | | | | | |
| UUDB | | | | max | | | |
| | comp=N,788nm,0.2s | | | | | | |
| **KAB** | **Kabansk** | **1.72** | **222** | *e*Pg | **Pg** | **04 33 42.1** | **-1.0** |
| KAB | | | | *e*Sg | **Sg** | **04 34 04.6** | **-0.8** |
| KAB | | | | Pmax | | | |
| | comp=N,248nm,0.3s | | | | | | |
| KAB | | | | Smax | | | |
| | comp=N,573nm,0.4s | | | | | | |
| **YLYR** | **Ulyunkhan** | **2.19** | **44** | *e*Pn | **Pb** | **04 33 48.4** | **-1.4** |
| YLYR | | | | *e*Pg | **Pg** | **04 33 50.3** | **-1.8** |
| YLYR | | | | *e*Sn | **Sn** | **04 34 15.3** | **+1.5** |
| YLYR | | | | *e*Sg | **Sg** | **04 34 20.1** | **-0.4** |
| YLYR | | | | Pmax | | | |
| | comp=N,59nm,0.4s | | | | | | |
| YLYR | | | | Smax | | | |
| | comp=N,57nm,0.3s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **2.51** | **13** | *e*PN | **Pg** | **04 33 57.0** | **-1.2** |
| **NIZ** | **Nizh Angarsk** | **2.51** | **13** | *e*Pn | **Pn** | **04 33 52.2** | **+1.2** |
| NIZ | | | | *e*Pg | **Pg** | **04 33 57.0** | **-1.2** |
| NIZ | | | | *e*Sn | **Sn** | **04 34 22.6** | **+1.0** |
| NIZ | | | | *e*Sg | **Sg** | **04 34 29.5** | **-1.2** |
| NIZ | | | | Pmax | | | |
| | comp=N,32nm,0.3s | | | | | | |
| NIZ | | | | Smax | | | |
| | comp=N,149nm,0.5s | | | | | | |
| **LSTR** | **Listvyanka** | **2.69** | **238** | *e*Pn | **Pn** | **04 33 53.3** | **-0.1** |
| LSTR | | | | *e*Pg | **Pb** | **04 33 58.2** | **-0.1** |
| LSTR | | | | *e*Sn | **Sn** | **04 34 26.3** | **+0.3** |
| LSTR | | | | *e*Sg | **Sb** | **04 34 32.4** | **+1.1** |
| LSTR | | | | Pmax | | | |
| | comp=N,20nm,0.4s | | | | | | |
| LSTR | | | | Smax | | | |
| | comp=N,51nm,0.3s | | | | | | |
| **KMO** | **Kumora** | **2.99** | **30** | *e*Pn | **Pn** | **04 33 59.3** | **+1.7** |
| KMO | | | | *e*Pg | **Pb** | **04 34 04.8** | **+1.3** |
| KMO | | | | *e*Sn | **Sn** | **04 34 34.1** | **+0.6** |
| KMO | | | | *e*Sg | **Sg** | **04 34 45.0** | **-1.1** |
| KMO | | | | Pmax | | | |
| | comp=N,70nm,0.4s | | | | | | |
| KMO | | | | Smax | | | |
| | comp=N,117nm,1.0s | | | | | | |
| **CIT** | **Chita** | **3.34** | **111** | *e*Sg | **Sg** | **04 34 54.3** | **-3.2** |
| CIT | | | | Smax | | | |
| | comp=N,211nm,0.2s | | | | | | |
| **TLY** | **Talaya** | **3.41** | **243** | *e*Pn | **Pn** | **04 34 04.0** | **+0.7** |
| TLY | | | | *e*Pg | **Pb** | **04 34 11.1** | **+0.5** |
| TLY | | | | *e* | | 04 34 16.5 | |
| TLY | | | | *e*Sn | **Sn** | **04 34 42.9** | **-0.9** |
| TLY | | | | *e*Sg | **Sb** | **04 34 55.0** | **+3.0** |
| TLY | | | | max | | | |
| | comp=N,13nm,0.5s | | | | | | |
| TLY | | | | Smax | | | |
| | comp=N,57nm,0.3s | | | | | | |
| **UKT** | **Uakit** | **3.68** | **52** | *e*Pn | **Pn** | **04 34 09.1** | **+1.9** |
| UKT | | | | *e* | | 04 34 13.9 | |
| UKT | | | | *e*Pg | **Pb** | **04 34 17.6** | **+2.3** |
| UKT | | | | *e*Sn | **Sn** | **04 34 51.5** | **+0.8** |
| UKT | | | | *e*Sg | **Sg** | **04 35 05.8** | **-2.5** |
| UKT | | | | Pmax | | | |
| | comp=N,24nm,0.7s | | | | | | |
| UKT | | | | Smax | | | |
| | comp=N,35nm,0.5s | | | | | | |
| **ARS** | **Arshan** | **3.97** | **251** | *e*Pn | **Pn** | **04 34 13.3** | **+2.1** |
| ARS | | | | *e*Pg | **Pb** | **04 34 21.8** | **+1.6** |
| ARS | | | | *e*Sn | **Sn** | **04 34 55.9** | **-1.9** |
| ARS | | | | *e*Sg | **Sb** | **04 35 12.5** | **+4.2** |
| ARS | | | | Pmax | | | |
| | comp=N,20nm,0.4s | | | | | | |
| ARS | | | | Smax | | | |
| | comp=N,329nm,0.4s | | | | | | |
| **KPC** | **Khapcheranga** | **4.37** | **145** | *e*Pn | **Pn** | **04 34 16.3** | **-0.4** |
| KPC | | | | *e*Pg | **Pb** | **04 34 29.3** | **+2.2** |
| KPC | | | | *e*Sn | **Sn** | **04 35 06.7** | **-1.0** |
| KPC | | | | *e*Sg | **Sb** | **04 35 24.0** | **+4.1** |
| KPC | | | | Pmax | | | |
| | comp=N,12nm,0.2s | | | | | | |
| KPC | | | | Smax | | | |
| | comp=N,59nm,0.4s | | | | | | |
| **ZAK** | **Zakamensk** | **4.39** | **230** | *e*Pg | **Pb** | **04 34 28.8** | **+1.4** |
| ZAK | | | | *e*Sg | **Sg** | **04 35 26.0** | **-5.1** |
| ZAK | | | | Pmax | | | |
| | comp=N,11nm,0.3s | | | | | | |
| ZAK | | | | Smax | | | |
| | comp=N,22nm,0.3s | | | | | | |
| **MOY** | **Mondy** | **4.89** | **253** | *e*Pn | **Pn** | **04 34 24.6** | **+0.8** |
| MOY | | | | *e*Pg | **Pb** | **04 34 36.9** | **+1.0** |
| MOY | | | | *e* | | 04 35 24.4 | |
| MOY | | | | *e*Sg | **Sg** | **04 35 41.2** | **-5.8** |
| MOY | | | | Pmax | | | |
| | comp=N,15nm,0.8s | | | | | | |
| MOY | | | | Smax | | | |
| | comp=N,65nm,0.9s | | | | | | |
| **NLYR** | **Nelyaty** | **5.21** | **50** | *e*PN | **Pg** | **04 34 46.9** | **-3.0** |
| NLYR | | | | *e* | | 04 35 53.0 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,29nm,3.5s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,76nm,3.2s | | | | | | |
| **NLYR** | **Nelyaty** | **5.21** | **50** | *e*Pn | **Pn** | **04 34 28.8** | **+0.7** |
| NLYR | | | | *e*Pg | Pb | 04 34 44.4 | +3.1 |
| NLYR | | | | *e*Sg | **Sg** | **04 35 52.5** | **-4.8** |
| NLYR | | | | Pmax | | | |
| | comp=N,14nm,0.9s | | | | | | |
| NLYR | | | | Smax | | | |
| | comp=N,64nm,1.1s | | | | | | |
| **ORL** | **Orlik** | **5.32** | **265** | *e*PN | **Pn** | **04 34 32.5** | **+2.7** |
| ORL | | | | *e* | | 04 34 46.3 | |
| ORL | | | | *e*S | **Sn** | **04 35 30.1** | **-1.0** |
| **ORL** | **Orlik** | **5.32** | **265** | *e*Pn | **Pn** | **04 34 32.4** | **+2.7** |
| ORL | | | | *e*Sn | **Sn** | **04 35 30.1** | **-1.0** |
| ORL | | | | *e*Sg | Sg | 04 35 54.6 | -6.3 |
| ORL | | | | Smax | | | |
| | comp=N,60nm,1.1s | | | | | | |
| **BOD** | **Bodaibo** | **5.46** | **33** | *e*Pg | Pb | 04 34 49.3 | +3.8 |
| BOD | | | | *e*Sg | **Sg** | **04 36 00.8** | **-4.5** |
| BOD | | | | Pmax | | | |
| | comp=N,3.0nm,0.2s | | | | | | |
| BOD | | | | Smax | | | |
| | comp=N,12nm,0.5s | | | | | | |
| **ULN** | **Ulaanbaatar** | **5.56** | **190** | *e*Pn | **Pn** | **04 34 35.4** | **+2.3** |
| ULN | | | | *e*Pg | Pg | 04 34 51.6 | -5.1 |
| ULN | | | | *e*Sg | **Sg** | **04 36 03.0** | **-5.7** |
| **TUP** | **Tupik** | **6.85** | **76** | *e*PN | **Pn** | **04 34 52.1** | **+1.4** |
| TUP | | | | *e* | | 04 35 13.9 | |
| TUP | | | | *e*S | **Sn** | **04 36 07.9** | **-0.8** |
| TUP | | | | *e* | | 04 36 42.7 | |
| TUP | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.4s | | | | | | |
| TUP | | | | smax | smax | | |
| | comp=N,97nm,0.9s | | | | | | |
| **TUP** | **Tupik** | **6.85** | **76** | *e*Pg | Pb | 04 35 14.3 | +5.0 |
| TUP | | | | *e*Sg | Sg | 04 36 43.3 | -6.7 |
| TUP | | | | Pmax | | | |
| | comp=N,1.0nm,0.3s | | | | | | |
| TUP | | | | Smax | | | |
| | comp=N,116nm,1.1s | | | | | | |

*DDA **26** 04:35:21.0, 39.°64N×38.°74E, h7km, Md2.8*
*ISK **26** 04:35:20.2, 39.°68N×38.°72E, h9km, MD2.7*
*ISCJB **26** 04:35:21.2±0.5, 39.°67N±0.°03×38.°76E±0.°04, h7km±6km, Error ellipse: s-maj=5.1km s-min=4.4km az=5.6*
*CSEM **26** 04:35:21.1±0.2, 39.°66N×38.°75E, h12km, MD2.7, Error ellipse: s-maj=5.9km s-min=3.9km az=96.0*

**ISC 26 04:35:21.0±1.1, 39.°67N±0.°02×38.°75E±0.°03, h8km±9km, n26, σ0s67/40, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILIC** | **ilic-Erzincan** | **0.26** | **214** | *e*PG | **Pg** | **04 35 25.8** | **-0.3** |
| ILIC | | | | *e*SG | **Sg** | **04 35 29.9** | **+0.3** |
| **ILIC** | **ilic-Erzincan** | **0.26** | **214** | *e*Pg | **Pg** | **04 35 25.8** | **-0.3** |
| ILIC | | | | *e*Sg | **Sg** | **04 35 29.9** | **+0.3** |
| **KELT** | **Kelkit** | **0.62** | **39** | *i* P | **Pb** | **04 35 34.1** | **-0.1** |
| KELT | | | | *i* S | **Sb** | **04 35 43.1** | **0.0** |
| **KELT** | **Kelkit** | **0.62** | **39** | P | **Pb** | **04 35 34.1** | **-0.1** |
| KELT | | | | S | **Sb** | **04 35 43.1** | **0.0** |
| **SUSE** | **Susehri** | **0.69** | **322** | *i* P | **Pb** | **04 35 35.0** | **-0.3** |
| SUSE | | | | *i* S | **Sb** | **04 35 45.5** | **+0.5** |
| **SUSE** | **Susehri** | **0.69** | **322** | P | **Pb** | **04 35 35.0** | **-0.3** |
| SUSE | | | | S | **Sb** | **04 35 45.5** | **+0.5** |
| **ERZN** | **Erzincan** | **0.75** | **96** | *e*PG | **Pg** | **04 35 35.8** | **+0.3** |
| ERZN | | | | *e*SG | **Sb** | **04 35 47.1** | **+0.2** |
| **PTK** | **Pertek** | **0.92** | **147** | *e*PG | **Pg** | **04 35 38.8** | **+0.1** |
| PTK | | | | *e*SG | **Sb** | **04 35 52.3** | **+0.6** |
| **PTK** | **Pertek** | **0.92** | **147** | *e*Pg | **Pg** | **04 35 38.8** | **+0.1** |
| PTK | | | | *e*Sg | **Sb** | **04 35 52.3** | **+0.6** |
| **GUMT** | **Gumushane** | **0.97** | **35** | *e*PG | **Pg** | **04 35 39.4** | **-0.2** |
| **GUMT** | **Gumushane** | **0.97** | **35** | *e*Pg | **Pg** | **04 35 39.4** | **-0.2** |
| **CUKAN** | **kangal_SIVAS** | **1.05** | **251** | P | **Pg** | **04 35 40.7** | **-0.5** |
| CUKAN | | | | S | **Sn** | **04 35 58.4** | **+1.3** |
| **ELZG** | **Elazig** | **1.18** | **171** | *i* P | **Pb** | **04 35 42.0** | **-1.7** |
| ELZG | | | | *i* S | **Sn** | **04 35 59.9** | **-0.3** |
| **ELZG** | **Elazig** | **1.18** | **171** | P | **Pb** | **04 35 42.0** | **-1.7** |
| ELZG | | | | S | **Sn** | **04 35 59.9** | **-0.3** |
| **ESPY** | **Espiye-Giresun** | **1.25** | **359** | *e*PN | **Pn** | **04 35 44.2** | **-0.6** |
| **ESPY** | **Espiye-Giresun** | **1.25** | **359** | *e*Pn | **Pn** | **04 35 44.2** | **-0.6** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.29** | **55** | *e*PN | **Pn** | **04 35 45.2** | **-0.3** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.29** | **55** | *e*Pn | **Pn** | **04 35 45.2** | **-0.3** |
| **SVRC** | **Sivrice-ELAZID** | **1.36** | **161** | *e*PN | **Pn** | **04 35 46.3** | **-0.1** |
| **SVRC** | **Sivrice-ELAZID** | **1.36** | **161** | *e*Pn | **Pn** | **04 35 46.3** | **-0.1** |
| **MALT** | **Malatya** | **1.37** | **191** | *e*PN | **Pn** | **04 35 46.7** | **+0.2** |
| **MALT** | **Malatya** | **1.37** | **191** | *e*Pn | **Pn** | **04 35 46.7** | **+0.2** |
| **SVSK** | **Karacayir** | **1.37** | **281** | *e*PN | **Pn** | **04 35 45.9** | **-0.5** |
| **SVSK** | **Karacayir** | **1.37** | **281** | *e*Pn | **Pn** | **04 35 45.9** | **-0.5** |
| **AKCD** | **Akcadag** | **1.51** | **206** | *i* P | **Pb** | **04 35 49.1** | **-0.3** |
| AKCD | | | | *i* S | **Sg** | **04 36 11.1** | **+1.5** |
| **AKCD** | **Akcadag** | **1.51** | **206** | P | **Pb** | **04 35 49.1** | **-0.3** |
| AKCD | | | | S | **Sg** | **04 36 11.1** | **+1.5** |

*BJI **26** 04:54:45.6, 5.°20S×133.°70E, h10km, mb4.6/7, mB4.9/3, Ms4.9/1, Ms7 4.5/1*
*AUST **26** 04:54:45.7±3.9, 5.°17S×133.°94E, h0km, Error ellipse: s-maj=1.5km s-min=0.7km az=244.0*
*ISCJB **26** 04:54:45.4±0.3, 5.°29S±0.°03×133.°77E±0.°04, h10km, mb4.5/22, MS3.3/1, Error ellipse: s-maj=6.2km s-min=4.3km az=172.0*
*IDC **26** 04:54:45.6±0.6, 5.°25S×133.°75E, h0km, mb4.2/11, mb1 4.3/16, mb1mx4.1/33, mbtmp4.2/16, ML4.3/6, MS3.4/3, Ms1 3.4/3, ms1mx2.8/39, Error ellipse: s-maj=25.3km s-min=14.9km az=63.0*
*NEIC **26** 04:54:47.1±0.4, 5.°28S×133.°82E, h10km, mb4.7/9, Error ellipse: s-maj=8.9km s-min=6.3km az=57.0*
*DJA **26** 04:54:48.7±2.1, 5.°S±5.°×13.°4E±1.°3, h22km±31km, M4.6/5, mb4.9/4, mB5.2/3, MLv4.4/5, Mw(mB)4.7/3*

**ISC 26 04:54:47.1±0.4, 5.°30S±0.°05×133.°79E±0.°05, h10km, n79, σ1s74/85, mb4.5/22, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMPI** | **Kaimana, Papua** | **1.63** | **357** | P | **Pn** | **04 55 13.6** | **-2.3** |
| **FAKI** | **Fak Fak** | **2.82** | **327** | P | **Pn** | **04 55 31.2** | **-1.1** |
| | baz=2.8,SNR=43 | | | | | | |
| **FAKI** | **Fak Fak** | **2.82** | **327** | P | **Pn** | **04 55 31.1** | **-1.2** |
| FAKI | | | | S | **Sn** | **04 56 01.8** | **-4.6** |
| **FAKI** | **Fak Fak** | **2.82** | **327** | *e*Pn | **Pn** | **04 55 30.9** | **-1.3** |
| FAKI | | | | *e*S | **Sn** | **04 56 02.2** | **-4.2** |
| **RKPI** | **Ransiki, Papua** | **3.78** | **6** | P | **Pn** | **04 55 45.3** | **-0.2** |
| **BNDI** | **Bandanaira** | **3.95** | **281** | P | **Pn** | **04 55 50.2** | **+2.4** |
| BNDI | | | | S | Sn | 04 56 13.2 | -21 |
| **SIJI** | **Sorong** | **5.07** | **330** | Pn | **Pn** | **04 56 02.5** | **-0.8** |
| | 14nm,0.3s,baz=240,slow=23,SNR=16 | | | | | | |
| SIJI | | | | Sn | Sn | 04 56 54.0 | -8.0 |
| | 8.7nm,0.3s,baz=301,slow=19,SNR=4.1 | | | | | | |
| **SWI** | **Sorong** | **5.08** | **330** | P | **Pn** | **04 56 02.9** | **-0.5** |
| | baz=5.1,SNR=8.1 | | | | | | |
| **SWI** | **Sorong** | **5.08** | **330** | P | **Pn** | **04 56 02.9** | **-0.5** |
| | 62nm,0.8s,2μm0.7nm | | | | | | |
| **MSAI** | **Masohi** | **5.22** | **292** | P | Pn | 04 56 00.7 | -4.6 |
| **AAI** | **Ambon** | **5.81** | **286** | P | **Pn** | **04 56 14.7** | **+1.4** |
| | baz=5.9,SNR=9.5 | | | | | | |
| **AAI** | **Ambon** | **5.81** | **286** | P | **Pn** | **04 56 15.0** | **+1.6** |
| **JAY** | **Jayapura** | **7.43** | **68** | Pn | **Pn** | **04 56 37.5** | **+1.7**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SBUM** | **Sibu** | **22.88 289** | *eP* | | **P** | **04 59 52.8** | **+1.6** |
| | 28nm,1.4s | | | | | | |
| **KSM** | **Kuching** | **24.40 285** | P | | **P** | **05 00 08.3** | **+2.3** |
| | baz=24,SNR=3.6 | | | | | | |
| **KSM** | **Kuching** | **24.40 285** | *eP* | | **P** | **05 00 08.0** | **+1.9** |
| | 49nm,1.4s | | | | | | |
| **HNR** | **Honiara** | **26.25 101** | P | | **P** | **05 00 21.3** | **-1.5** |
| | 82nm,0.4s | | | | | | |
| **JNU** | **Nakatsue** | **38.31 356** | *eP* | | **P** | **05 02 06.5** | **-1.6** |
| | 161nm,1.7s | | | | | | |
| **LOEI** | **Loei** | **39.31 306** | P | | **P** | **05 02 14.2** | **-2.5** |
| | 10nm,1.4s,361nm | | | | | | |
| **SRDT** | **SRDT** | **39.54 300** | P | | **P** | **05 02 21.1** | **+2.5** |
| | 43nm,0.9s | | | | | | |
| **LAMP** | **Lampang** | **41.16 306** | P | | **P** | **05 02 33.3** | **+1.3** |
| | 3.5nm,0.8s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **41.65 305** | *eP* | | **P** | **05 02 36.1** | **+0.1** |
| **CMAR** | **Chiang Mai Arr** | **41.69 305** | P | | **P** | **05 02 35.9** | **-0.5** |
| | 2.6nm,0.7s,baz=132,slow=5.2,SNR=15 | | | | | | |
| **CHTO** | **Chiang Mai** | **41.87 306** | P | | **P** | **05 02 38.9** | **+1.1** |
| | 30nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **41.87 306** | *eP* | | **P** | **05 02 37.8** | **-0.1** |
| | 4.7nm,0.8s | | | | | | |
| **CMAI** | **Chiengmai2** | **42.38 307** | P | | **P** | **05 02 43.0** | **+0.8** |
| **KMI** | **Kunming** | **42.73 316** | P | | **P** | **05 02 48.0** | **+3.0** |
| KMI | | | PMZ | | | | |
| | 7.0nm,1.3s | | | | | | |
| **KSAR** | **Wonju Array Be** | **42.88 353** | P | | **P** | **05 02 45.8** | **0.0** |
| **KSRS** | **Korea Array** | **42.88 353** | P | | **P** | **05 02 45.8** | **0.0** |
| | 4.8nm,0.9s,baz=172,slow=9.5,SNR=6.6 | | | | | | |
| KSRS | | | LR | | LR | 05 22 32.6 | |
| | comp=Z,40nm,18.4s,baz=160,slow=39 | | | | | | |
| **XAN** | **Xi'an** | **45.65 331** | P | | **P** | **05 03 07.3** | **-0.8** |
| XAN | | | pP | | **pP** | **05 03 14.5** | **+3.3** |
| XAN | | | PMZ | | | | |
| | 8.0nm,1.6s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.30 358** | P | | **P** | **05 03 35.7** | **-0.5** |
| | 4.0nm,0.8s,baz=181,slow=10,SNR=5.8 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.25 338** | *eP* | | P | 05 03 38.3 | -5.4 |
| HHC | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | |
| HHC | | | pmax | | pmax | | |
| | comp=Z,210nm,4.7s | | | | | | |
| **GTA** | **Gaotai** | **54.43 328** | *eP* | | **P** | **05 04 15.5** | **+0.7** |
| GTA | | | pP | | **pP** | **05 04 20.0** | **+2.0** |
| GTA | | | sP | | **sP** | **05 04 22.8** | **+3.6** |
| GTA | | | PMZ | | | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **58.14 339** | P | | **P** | **05 04 40.9** | **-0.2** |
| | comp=Z,0.6nm,0.9s,baz=90,slow=3.0,SNR=4.5 | | | | | | |
| **SONA1** | **Songino Array** | **58.15 339** | *eP* | | **P** | **05 04 43.4** | **+2.2** |
| **MK01** | **Makanchi Array** | **68.93 325** | *eP* | | **P** | **05 05 52.6** | **+0.2** |
| **MKAR** | **Makanchi Array** | **68.95 325** | P | | **P** | **05 05 52.8** | **+0.2** |
| | comp=Z,4.5nm,0.8s,baz=118,slow=7.6,SNR=19 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.95 325** | *eP* | | **P** | **05 05 53.1** | **+0.5** |
| **TKM2** | **Tokmak 2** | **71.14 319** | *eP* | | **P** | **05 06 06.9** | **+0.6** |
| | comp=Z,3.3nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **71.74 318** | P | | **P** | **05 06 07.8** | **-2.1** |
| | comp=Z,0.8nm,0.4s,baz=114,slow=8.6,SNR=3.6 | | | | | | |
| **AAK** | **Ala-Archa** | **71.74 318** | *eP* | | **P** | **05 06 10.4** | **+0.5** |
| **ZAA0** | **Zalesovo Array** | **71.80 332** | *eP* | | **P** | **05 06 08.5** | **-1.3** |
| **ZALV** | **Zalesovo Beam** | **71.80 332** | P | | **P** | **05 06 08.1** | **-1.6** |
| | comp=Z,0.7nm,0.3s,baz=100,slow=4.5,SNR=4.9 | | | | | | |
| **KURK** | **Kurchatov** | **73.10 327** | *eP* | | **P** | **05 06 17.3** | **-0.3** |
| | comp=Z,14nm,1.1s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.10 327** | P | | **P** | **05 06 17.0** | **-0.6** |
| | comp=Z,3.6nm,1.0s,baz=127,slow=5.1,SNR=24 | | | | | | |
| **VNDA** | **Vanda** | **73.70 174** | P | | **P** | **05 06 21.5** | **+0.8** |
| | comp=Z,0.2nm,0.5s,baz=328,slow=5.9,SNR=6.2 | | | | | | |
| **KKAR** | **Karatay Array** | **74.61 317** | *eP* | | **P** | **05 06 27.2** | **+0.6** |
| **BVAR** | **Borovoye Array** | **75.69 327** | P | | **P** | **05 06 49.3** | **-0.2** |
| | comp=Z,2.2nm,0.7s,baz=121,slow=5.7,SNR=10 | | | | | | |
| **GEYT** | **Alibeck** | **82.03 309** | P | | **P** | **05 07 08.2** | **+0.3** |
| | comp=Z,2.9nm,0.3s,baz=76,slow=18,SNR=2.7 | | | | | | |
| **ABKAR** | **Akbulak array** | **83.56 321** | *eP* | | **P** | **05 07 14.6** | **-0.9** |
| **QSPA** | **South Pole Qui** | **84.67 180** | *eP* | | **P** | **05 07 21.8** | **+0.8** |
| **TORD** | **Torodi Ar. Bea** | **132.15 283** | PKP | | **PKPdf** | **05 14 02.3** | **0.0** |
| | comp=Z,0.7nm,1.1s,baz=98,slow=3.2,SNR=2.9 | | | | | | |
| **CPUP** | **Villa Florida** | **146.76 162** | PKPbc | | **PKPab** | **05 14 31.0** | **-0.3** |
| | comp=Z,3.4nm,0.7s,baz=266,slow=2.1,SNR=9.5 | | | | | | |
| **LPAZ** | **La Paz** | **149.50 135** | PKP | | **PKPdf** | **05 14 31.8** | **-2.2** |
| | comp=Z,0.5nm,0.5s,baz=277,slow=14,SNR=2.5 | | | | | | |
| LPAZ | | | PKPbc | | **PKPbc** | **05 14 37.7** | **-0.8** |
| | comp=Z,2.6nm,1.1s,baz=25,slow=2.6,SNR=4.1 | | | | | | |
| LPAZ | | | PKPab | | **PKPab** | **05 14 44.3** | **+1.0** |
| | comp=Z,2.4nm,1.0s,baz=209,slow=5.0,SNR=5.4 | | | | | | |

**IDC 26 05:05:32.3±1.9, 5.07S×133.89E, h0km, mb4.1/2, mb1 4.2/4, mb1mx3.8/35, mbtmp4.1/4, ML3.6/2, Error ellipse: s-maj=102.3km s-min=27.0km az=66.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.93** | **328** | Pn | Pn | 05 06 47.1 | -0.6 |
| | 3.1nm,0.3s,baz=240,slow=20,SNR=10 | | | | | | |
| SIJI | | | | Sn | Sn | 05 07 40.6 | -4.9 |
| | 4.1nm,0.3s,baz=180,slow=20,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.79** | **178** | Pn | Pn | 05 08 59.7 | -3.2 |
| | 0.1nm,0.3s,baz=360,slow=12,SNR=3.1 | | | | | | |
| WRA | | | | Sn | Sn | 05 11 35.6 | -12 |
| | 0.1nm,0.3s,baz=358,slow=23,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **18.49** | **180** | P | P | 05 09 49.5 | -0.6 |
| | 0.1nm,0.3s,baz=1.4,slow=11,SNR=12 | | | | | | |
| ASAR | | | | S | Sn | 05 13 05.7 | -12 |
| | 0.0nm,0.3s,baz=358,slow=29,SNR=2.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.63** | **305** | P | P | 05 13 22.7 | 0.0 |
| | 0.7nm,0.4s,baz=131,slow=9.0,SNR=6.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.82** | **325** | P | P | 05 16 38.6 | 0.0 |
| | 1.3nm,0.6s,baz=109,slow=7.8,SNR=7.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.19** | **283** | PKP | PKPdf | 05 24 49.1 | -0.2 |
| | 0.2nm,0.7s,baz=60,slow=3.5,SNR=2.2 | | | | | | |
| **CPUP** | **Villa Florida** | **146.94** | **161** | PKPbc | PKPbc | 05 25 16.9 | -0.7 |
| | 1.7nm,0.8s,baz=247,slow=7.7,SNR=4.4 | | | | | | |

**IDC 26 05:08:44.0±3.5, 2.80S×100.50E, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.6/53, mbtmp3.7/6, Error ellipse: s-maj=143.8km s-min=20.3km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.18** | **356** | P | P | 05 13 30.1 | -1.0 |
| | 0.5nm,0.3s,baz=187,slow=13,SNR=3.4 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.30** | **259** | T | T | 05 43 35.1 | |
| | baz=82,slow=75,SNR=202 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.30** | **259** | T | T | 05 43 35.9 | |
| | baz=82,slow=75,SNR=221 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.32** | **259** | T | T | 05 43 34.8 | |
| | baz=82,slow=75,SNR=286 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.35** | **160** | T | T | 05 51 26.4 | |
| | baz=335,slow=76,SNR=18 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.36** | **160** | T | T | 05 51 24.2 | |
| | baz=335,slow=76,SNR=31 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.37** | **160** | T | T | 05 51 24.9 | |
| | baz=335,slow=76,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.16** | **120** | P | P | 05 15 57.0 | 0.0 |
| | 0.2nm,0.7s,baz=301,slow=8.1,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.38** | **126** | P | P | 05 16 06.9 | -0.4 |
| | 0.4nm,0.7s,baz=303,slow=7.8,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **50.68** | **5** | P | P | 05 17 45.6 | +0.3 |
| | 0.7nm,0.6s,baz=186,slow=9.3,SNR=5.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.93** | **344** | P | P | 05 17 54.9 | +0.3 |
| | 0.5nm,0.4s,baz=139,slow=8.0,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.04** | **349** | P | P | 05 18 38.4 | -0.3 |
| | 1.6nm,0.3s,baz=173,slow=3.8,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.02** | **39** | PKPbc | PKPbc | 05 28 23.0 | -0.5 |
| | 0.5nm,0.6s,baz=257,slow=0.9,SNR=8.4 | | | | | | |

*IDC **26** 05:13:55.1±0.9, 3.43S×99.55E, h0km, mb4.3/15, mb1 4.4/17, mb1mx4.1/55, mbtmp4.3/17, ML3.9/2, MS3.1/3, Ms1 3.2/3, ms1mx2.7/48, Error ellipse: s-maj=30.4km s-min=14.2km az=48.0*

*NEIC **26** 05:13:56.6±0.5, 3.45S×99.57E, h10km, mb4.3/1, Error ellipse: s-maj=17.1km s-min=6.4km az=48.0*

*DJA **26** 05:13:57.4±1.0, 3°S±4°×10°E±°, h32km±10km, M4.6/8, mb5.1/3, mB6.2/1, MLv4.4/8, Mw(mB)5.8/1*

*ISCJB **26** 05:13:58.2±0.6, 3.33S±0.05×99.62E±0.06, h33km, mb4.3/15, MS3.0/3, Error ellipse: s-maj=9.7km s-min=4.9km az=143.6*

**ISC 26 05:14:00.7±0.8, 3.29S±0.08×99.62E±0.10, h35km, n44, σ1§15/38, mb4.3/15, MS3.2/3, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.66** | **37** | P | **Pn** | **05 14 11.6** | **-1.9** |
| **SISI** | **Saibi** | **2.02** | **345** | P | **Pn** | **05 14 30.9** | **-1.4** |
| SISI | | | | S | **Sn** | **05 14 56.9** | **+0.5** |
| **PDSI** | **Padang** | **2.51** | **20** | P | **Pn** | **05 14 37.3** | **-1.8** |
| **PPI** | **Padang Panjang** | **2.92** | **15** | P | **Pn** | **05 14 43.4** | **-1.3** |
| PPI | | | | S | **Sn** | **05 15 18.3** | **-0.4** |
| **SDSI** | **Sungai Dareh** | **2.96** | **38** | P | **Pn** | **05 14 44.2** | **-1.1** |
| **KSI** | **Kapahiang** | **2.99** | **97** | P | **Pn** | **05 14 46.5** | **+0.8** |
| KSI | | | | S | **Sn** | **05 15 21.3** | **+0.9** |
| **MNAI** | **Manna** | **3.50** | **108** | P | **Pn** | **05 14 50.7** | **-1.9** |
| **BKNI** | **Bangkinang** | **3.87** | **22** | P | **Pn** | **05 14 56.6** | **-1.1** |
| **MNSI** | **Mandailing Nat** | **4.06** | **359** | P | **Pn** | **05 14 59.2** | **-1.2** |
| **MDSI** | **Maura Dua** | **4.70** | **105** | P | **Pn** | **05 15 07.2** | **-2.0** |
| **LWLI** | **Liwa** | **4.75** | **111** | P | **Pn** | **05 15 10.6** | **+0.6** |
| **KASI** | **Kota Agung** | **5.35** | **115** | P | **Pn** | **05 15 15.7** | **-2.4** |
| | 117nm,1.1s,0.5nm | | | | | | |
| **PSI** | **Prapat** | **6.09** | **353** | Pn | **Pn** | **05 15 27.4** | **-1.0** |
| | 1.0nm,0.3s,baz=157,slow=13,SNR=3.0 | | | | | | |
| **CBJI** | **Citeko** | **7.85** | **114** | P | **Pn** | **05 15 53.0** | **+0.6** |
| **LEM** | **Lembang** | **8.71** | **114** | Pn | **Pn** | **05 16 02.6** | **-1.8** |
| | 4.8nm,0.3s,baz=315,slow=20,SNR=2.6 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.19** | **118** | P | Pn | 05 16 06.2 | -4.8 |
| | 159nm,0.6s,11μm | | | | | | |
| **CMJI** | **Cimerak** | **9.86** | **117** | P | Pn | 05 16 15.6 | -4.4 |
| **KAPI** | **Kappang** | **20.15** | **96** | P | Pn | 05 18 32.2 | -2.0 |
| | 8.9nm,0.3s,baz=331,slow=19,SNR=2.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.62** | **358** | P | **P** | **05 18 48.0** | **0.0** |
| | 3.4nm,0.7s,baz=188,slow=10.0,SNR=16 | | | | | | |
| CMAR | | | | LR | LR | 05 26 14.9 | |
| | comp=Z,22nm,20.1s,baz=173,slow=34 | | | | | | |
| **BATI** | **Baumata** | **24.83** | **107** | LR | LR | 05 31 34.3 | |
| | comp=Z,88nm,20.9s,baz=134,slow=43 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.34** | **260** | T | T | 05 48 50.2 | |
| | baz=81,slow=75,SNR=129 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.34** | **260** | T | T | 05 48 51.2 | |
| | baz=81,slow=75,SNR=102 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.36** | **260** | T | T | 05 48 48.9 | |
| | baz=81,slow=75,SNR=106 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.20** | **158** | T | T | 05 57 00.2 | |
| | baz=335,slow=76,SNR=35 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.22** | **159** | T | T | 05 56 59.1 | |
| | baz=335,slow=76,SNR=32 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.22** | **158** | T | T | 05 56 58.9 | |
| | baz=335,slow=76,SNR=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.69** | **119** | P | **P** | **05 21 11.7** | **-1.4** |
| | 2.6nm,0.7s,baz=290,slow=9.1,SNR=13 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 23 29.8** | **-0.2** |
| | 0.6nm,0.6s,baz=318,slow=2.2,SNR=4.9 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.70** | **119** | *eP* | **P** | **05 21 11.5** | **-1.7** |
| | 3.9nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **38.82** | **125** | P | **P** | **05 21 21.8** | **-0.9** |
| | 4.3nm,0.8s,baz=296,slow=7.6,SNR=26 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 23 34.0** | **+0.4** |
| | 0.7nm,0.5s,baz=262,slow=2.9,SNR=5.5 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.29** | **30** | P | **P** | **05 22 39.2** | **+0.6** |
| **KSRS** | **Korea Array** | **48.32** | **30** | P | **P** | **05 22 39.2** | **+0.4** |
| | 1.3nm,0.5s,baz=141,slow=42,SNR=4.0 | | | | | | |
| **SONM** | **Songino Array** | **51.26** | **6** | P | **P** | **05 23 02.3** | **+1.1** |
| | 3.1nm,0.8s,baz=189,slow=9.2,SNR=18 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.17** | **345** | P | **P** | **05 23 08.8** | **+1.0** |
| | 3.6nm,0.7s,baz=151,slow=8.9,SNR=19 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.47** | **28** | P | **P** | **05 23 32.2** | **+0.2** |
| | 7.0nm,0.7s,baz=228,slow=6.2,SNR=12 | | | | | | |
| **GEYT** | **Alibeck** | **56.20** | **321** | P | **P** | **05 23 36.9** | **-0.5** |
| | 2.0nm,0.4s,baz=184,slow=13,SNR=2.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.36** | **350** | P | **P** | **05 23 52.8** | **+0.5** |
| | 5.0nm,0.4s,baz=186,slow=5.9,SNR=28 | | | | | | |
| **KBZ** | **Khabaz** | **69.03** | **320** | P | **P** | **05 25 02.9** | **0.0** |
| | 1.4nm,0.5s,baz=161,slow=3.9,SNR=4.8 | | | | | | |
| **MATP** | **Matopo** | **71.17** | **250** | LR | | 05 49 34.4 | |
| | comp=Z,19nm,20.8s,baz=328,slow=30 | | | | | | |
| **BRTR** | **Keskin Array B** | **73.91** | **313** | P | **P** | **05 25 32.4** | **-0.3** |
| | 0.6nm,0.4s,baz=135,slow=5.9,SNR=5.1 | | | | | | |
| **SEY** | **Seymchan** | **76.96** | **22** | P | **P** | **05 25 49.6** | **+0.2** |
| | 1.5nm,0.3s,baz=0.0,slow=20,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **85.07** | **332** | P | **P** | **05 26 33.0** | **+0.4** |
| | 0.7nm,0.4s,baz=119,slow=6.7,SNR=9.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.55** | **340** | P | **P** | **05 26 45.4** | **+0.7** |
| | 1.4nm,0.7s,baz=104,slow=3.8,SNR=4.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.84** | **40** | PKP | **PKPdf** | **05 33 10.4** | **+1.3** |
| | 0.3nm,0.5s,baz=300,slow=2.0,SNR=2.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.95** | **38** | PKPbc | **PKPab** | **05 33 38.3** | **+0.3** |
| | 3.2nm,0.7s,baz=301,slow=1.1,SNR=39 | | | | | | |

**DJA 26 05:14:17.3±0.4, 1°S±3°×12°2E±°, h10km, M3.6/6, MLv3.6/6, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LUWI** | **Luwuk** | **0.51** | **136** | P | Pg | 05 14 27.7 | +0.4 |
| LUWI | | | | S | Sb | 05 14 35.2 | -0.6 |
| **APSI** | **Ampana** | **0.81** | **253** | P | Pg | 05 14 31.6 | -1.3 |
| APSI | | | | S | Sn | 05 14 47.6 | +0.8 |
| **MRSI** | **Marisa** | **1.24** | **337** | P | Pn | 05 14 38.7 | -2.0 |
| **GTOI** | **Gorontalo** | **1.43** | **24** | P | Pn | 05 14 42.7 | -0.6 |
| **PCI** | **Palu** | **2.59** | **265** | S | Sn | 05 15 32.8 | +1.8 |
| **MPSI** | **Mapaga** | **2.71** | **292** | P | Pn | 05 15 03.2 | +2.2 |
| **TTSI** | **Tana Toraja** | **3.51** | **228** | P | Pn | 05 15 12.4 | +0.4 |
| TTSI | | | | S | Sn | 05 15 54.5 | +0.9 |
| **SPSI** | **Sidrap Palu** | **4.21** | **219** | P | Pn | 05 15 21.9 | +0.3 |

*BJI **26** 05:16:52.9, 21.90S×179.50W, h580km, mb4.7/14, mB5.2/7*

*NEIC **26** 05:16:54.9±0.5, 21.90S×179.45W, h587km±6km, mb4.9/35, Error ellipse: s-maj=8.2km s-min=5.4km az=138.0*

*MOS **26** 05:16:54.1±3.0, 21.77S×179.42W, h558km, mb4.8/13, Error ellipse: s-maj=11.9km s-min=9.5km az=62.3*

*ISCJB **26** 05:16:54.3±0.6, 21.97S±0.05×179.51W±0.04, h588km±7km, mb4.7/67, Error ellipse: s-maj=8.0km s-min=4.8km az=151.7*

*IDC **26** 05:16:54.0±0.9, 21.87S×179.41W, h573km±9km, mb4.1/26, mb1 4.2/29, mb1mx4.1/41, mbtmp5.0/29, Error ellipse: s-maj=10.4km s-min=9.1km az=121.0*

*AUST **26** 05:16:58.3±0.8, 21.83S×179.36W, h638km, Error ellipse: s-maj=1.4km s-min=1.2km az=333.0*

**ISC 26 05:16:54.8±0.4, 21.93S±0.05×179.47W±0.06, h584km±4km, h585km: pP-P, n472, σ0§87/496, mb4.7/66, 44C-5D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.78** | **330** | *eP* | **P** | **05 18 26.0** | **+0.8** |
| **MSVF** | **Nonsavu** | **4.78** | **330** | *eP* | **P** | **05 18 25.9** | **+0.8** |
| **RAO** | **Raoul Island** | **7.43** | **169** | P | **P** | **05 18 46.4** | **-1.6** |
| | 171nm,0.3s,baz=102,slow=23,SNR=5.3 | | | | | | |
| RAO | | | | S | S | 05 20 11.3 | -10 |
| | 61nm,0.3s,baz=75,slow=20,SNR=2.6 | | | | | | |
| **RAO** | **Raoul Island** | **7.43** | **169** | *eP* | **P** | **05 18 47.8** | **-0.2** |
| RAO | | | | S | S | 05 20 11.3 | -10 |
| **RAO** | **Raoul Island** | **7.43** | **169** | *eP* | **P** | **05 18 47.8** | **-0.2** |
| RAO | | | | S | S | 05 20 11.3 | -10 |
| **NIUE** | **Niue** | **9.38** | **74** | P | **P** | **05 19 06.6** | **-0.6** |
| | baz=9.3,SNR=4.3 | | | | | | |
| **AFI** | **Afiamalu** | **10.82** | **44** | P | P | 05 19 18.4 | -3.3 |
| | 14nm,0.3s,baz=152,slow=2.9,SNR=18 | | | | | | |
| AFI | | | | S | S | 05 21 09.9 | -13 |
| | 1.9nm,0.3s,baz=62,slow=17,SNR=2.7 | | | | | | |
| **AFI** | **Afiamalu** | **10.82** | **44** | P | P | 05 19 18.4 | -3.3 |
| AFI | | | | S | S | 05 21 09.9 | -13 |
| AFI | | | | pmax | pmax | | |
| | comp=Z,15nm,0.3s | | | | | | |
| AFI | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **13.07** | **267** | P | **P** | **05 19 44.6** | **0.0** |
| | comp=N,3.7nm,0.3s,baz=354,slow=0.9,SNR=35 | | | | | | |
| **OUZ** | **Omahuta** | **14.57** | **203** | *eP* | **P** | **05 20 01.4** | **+2.1** |
| **URZ** | **Urewera** | **16.55** | **189** | P | **P** | **05 20 15.2** | **-2.5** |
| | comp=N,3.5nm,0.3s,baz=252,slow=3.5,SNR=21 | | | | | | |
| URZ | | | | S | S | 05 22 53.9 | -8.9 |
| | comp=N,2.1nm,0.3s,baz=162,slow=20,SNR=13 | | | | | | |
| **URZ** | **Urewera** | **16.55** | **189** | *eP* | **P** | **05 20 16.5** | **-1.1** |
| | comp=N,19nm,0.8s | | | | | | |
| URZ | | | | S | S | 05 22 53.9 | -8.9 |
| **THZ** | **Tophouse** | **20.80** | **196** | *eP* | **P** | **05 20 56.3** | **0.0** |
| | comp=N,14nm,0.8s | | | | | | |
| THZ | | | | *eS* | **S** | **05 24 09.8** | **-1.4** |
| **OXZ** | **Oxford** | **22.48** | **196** | *eP* | **P** | **05 21 10.1** | **-1.2** |
| | comp=N,17nm,0.8s | | | | | | |
| **RPZ** | **Rata Peaks** | **23.11** | **198** | P | **P** | **05 21 16.3** | **-0.6** |
| | comp=N,7.6nm,0.7s,baz=160,slow=0.9,SNR=6.9 | | | | | | |
| **WHZ** | **Wether Hill Ro** | **26.02** | **200** | *eP* | **P** | **05 21 43.8** | **+1.3** |
| | comp=N,50nm,0.9s | | | | | | |
| **EIDS** | **Eidsvold** | **27.17** | **257** | P | **P** | **05 21 53.8** | **+0.9** |
| | baz=27,SNR=5.9 | | | | | | |
| **EIDS** | **Eidsvold** | **27.17** | **257** | *eP* | **P** | **05 21 53.6** | **+0.6** |
| | comp=N,14nm,0.8s | | | | | | |
| **ARMA** | **Armidale** | **27.22** | **246** | P | **P** | **05 21 55.3** | **+1.8** |
| | baz=27,SNR=6.3 | | | | | | |
| **ARMA** | **Armidale** | **27.22** | **246** | *eP* | **P** | **05 21 55.2** | **+1.8** |
| | comp=N,17nm,1.0s | | | | | | |
| **RMQ** | **Roma** | **29.29** | **255** | P | **P** | **05 22 13.1** | **+1.8** |
| | baz=29,SNR=6.6 | | | | | | |
| **CNB** | **Canberra Magne** | **30.30** | **237** | P | **P** | **05 22 21.6** | **+1.7** |
| | baz=30,SNR=24 | | | | | | |
| **CAN** | **Canberra** | **30.58** | **237** | *eP* | **P** | **05 22 23.2** | **+0.8** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | |
| **CAN** | **Canberra** | **30.58** | **237** | *eP* | **P** | **05 22 23.1** | **+0.8** |
| | comp=Z,18nm,1.0s | | | | | | |
| **CTA** | **Charters Tower** | **32.01** | **267** | P | **P** | **05 22 35.4** | **+0.6** |
| | comp=Z,25nm,0.5s,baz=95,slow=11,SNR=35 | | | | | | |
| CTA | | | | PcP | **PcP** | **05 25 06.8** | **+0.3** |
| | comp=Z,6.5nm,0.8s,baz=100,slow=4.8,SNR=3.9 | | | | | | |
| CTA | | | | ScP | **ScP** | **05 27 56.4** | **+1.2** |
| | comp=Z,8.1nm,0.8s,baz=118,slow=2.2,SNR=8.6 | | | | | | |
| **CTAO** | **Charters Tower** | **32.01** | **267** | *eP* | **P** | **05 22 35.4** | **+0.6** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,30nm,0.6s | | | | | | |
| **CTAO** | **Charters Tower** | **32.01** | **267** | *eP* | **P** | **05 22 35.4** | **+0.6** |
| | comp=Z,30nm,0.6s | | | | | | |
| **XMAS** | **Kiritimati** | **32.10** | **45** | *eP* | **P** | **05 22 35.3** | **-0.3** |
| | comp=Z,83nm,0.8s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **32.44** | **245** | P | **P** | **05 22 39.1** | **+0.9** |
| | baz=32,SNR=11 | | | | | | |
| **QLP** | **Quilpie** | **33.34** | **255** | P | **P** | **05 22 46.5** | **+0.6** |
| | baz=33,SNR=5.0 | | | | | | |
| **TOO** | **Toolangi** | **33.95** | **235** | P | **P** | **05 22 52.0** | **+1.1** |
| | baz=34,SNR=7.5 | | | | | | |
| **PMG** | **Port Moresby** | **34.37** | **286** | P | **P** | **05 22 54.8** | **+0.2** |
| | comp=Z,60nm,0.7s,baz=94,slow=5.9,SNR=14 | | | | | | |
| **PMG** | **Port Moresby** | **34.37** | **286** | *eP* | **P** | **05 22 54.8** | **+0.2** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,66nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **34.37** | **286** | P | **P** | **05 22 55.0** | **+0.4** |
| | baz=34,SNR=4.7 | | | | | | |
| **PMG** | **Port Moresby** | **34.37** | **286** | *eP* | **P** | **05 22 54.8** | **+0.2** |
| | comp=Z,66nm,0.8s | | | | | | |
| **COEN** | **Coen** | **36.34** | **276** | P | **P** | **05 23 11.7** | **+0.8** |
| | baz=36,SNR=13 | | | | | | |
| **COEN** | **Coen** | **36.34** | **276** | *eP* | **P** | **05 23 11.5** | **+0.6** |
| | comp=Z,34nm,0.8s | | | | | | |
| **HTT** | **Hallett** | **38.36** | **243** | P | P | 05 23 21.8 | -5.4 |
| | baz=38,SNR=8.3 | | | | | | |
| **BBOO** | **Buckleboo** | **40.69** | **245** | P | **P** | **05 23 45.7** | **-0.1** |
| | baz=41,SNR=46 | | | | | | |
| **BBOO** | **Buckleboo** | **40.69** | **245** | *eP* | **P** | **05 23 45.9** | **+0.1** |
| | comp=Z,34nm,1.3s | | | | | | |
| **AS01** | **Alice Springs** | **42.83** | **258** | *eP* | **P** | **05 24 02.6** | **-0.2** |
| **ASAR** | **Alice Springs** | **42.87** | **258** | P | **P** | **05 24 03.1** | **+0.1** |
| | comp=Z,20nm,0.8s,baz=89,slow=8.4,SNR=133 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 25 40.1** | **-0.3** |
| | comp=Z,3.8nm,0.6s,baz=95,slow=5.7,SNR=4.8 | | | | | | |
| ASAR | | | | ScP | **ScP** | **05 28 37.6** | **+1.2** |
| | comp=Z,3.6nm,0.8s,baz=106,slow=3.9,SNR=12 | | | | | | |
| ASAR | | | | S | **S** | **05 29 43.8** | **-2.7** |
| | comp=Z,2.8nm,0.8s,baz=98,slow=15,SNR=12 | | | | | | |
| **WRAB** | **Tennant Creek** | **43.06** | **264** | *eP* | **P** | **05 24 04.0** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,44nm,1.1s | | | | | | |
| **WRAB** | **Tennant Creek** | **43.06** | **264** | *eP* | **P** | **05 24 04.0** | **-0.5** |
| | comp=Z,44nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.06** | **264** | P | **P** | **05 24 04.0** | **-0.6** |
| | comp=Z,21nm,0.9s,baz=97,slow=7.8,SNR=89 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 25 41.1** | **-0.1** |
| | comp=Z,2.9nm,1.1s,baz=94,slow=5.4,SNR=3.9 | | | | | | |
| WRA | | | | ScP | **ScP** | **05 28 38.8** | **+1.6** |
| | comp=Z,5.9nm,0.9s,baz=100,slow=4.2,SNR=16 | | | | | | |
| WRA | | | | S | **S** | **05 29 43.9** | **-5.4** |
| | comp=Z,3.2nm,1.1s,baz=98,slow=13,SNR=7.8 | | | | | | |
| **KDU** | **Kakadu** | **46.63** | **273** | P | **P** | **05 24 31.6** | **-0.3** |
| | baz=47,SNR=7.5 | | | | | | |
| **WRKA** | **Warakurna** | **47.77** | **256** | P

HABR eSSS SSS 05 46 39.5
HABR pmax pmax
comp=Z,14nm,1.1s
HABR MLR MLR
comp=Z,119nm,18.0s
**MURC Murrieta 81.02 48** P **P** **05 28 10.4 +0.6**
baz=81
**BFSC Mount Baldy Ra 81.06 48** P **P** **05 28 10.4 +0.4**
baz=81
**RCTC Rector, Farmer 81.17 45** P **P** **05 28 11.3 +0.9**
baz=81
**MONP Monument Peak 81.17 49** P **P** **05 28 11.6 +0.8**
baz=81,SNR=7.9
**EDW2 Edwards Air Fo 81.19 47** P **P** **05 28 11.1 +0.5**
baz=81,SNR=7.5
**ISA Isabella 81.31 46** *e*P **P** **05 28 11.8 +0.6**
**ISA Isabella 81.31 46** P **P** **05 28 11.9 +0.6**
baz=82,SNR=10
**ISA Isabella 81.31 46** *e*P **P** **05 28 11.8 +0.6**
**CMB Columbia Colle 81.44 43** *e*P **P** **05 28 12.1 +0.3**
**CMB Columbia Colle 81.44 43** *e*P **P** **05 28 12.1 +0.3**
**OHCM Honcut 81.53 42** *e*P **P** **05 28 12.8 +0.7**
**PFO Pinyon Flat Ob 81.54 49** P **P** **05 28 12.9 +0.3**
comp=Z,4.0nm,0.7s,baz=225,slow=4.6,SNR=5.4
**BBRC Big Bear Solar 81.58 48** P **P** **05 28 13.3 +0.5**
baz=82
**SWSC Sam W. Stewart 81.64 50** P **P** **05 28 14.0 +1.1**
baz=82
**LRMC Laurel Mountai 81.73 47** P **P** **05 28 13.9 +0.5**
baz=82,SNR=6.1
**N02D Trinity Center 81.79 40** P **P** **05 28 15.0 +1.5**
baz=82,SNR=8.8
**O03D Paynes Creek 81.91 41** P **P** **05 28 15.2 +0.9**
baz=82,SNR=8.5
**M02C Callahan 81.96 39** P **P** **05 28 15.5 +1.1**
baz=82,SNR=8.2
**L02D Cave Junction, 82.00 38** P **P** **05 28 15.5 +1.0**
baz=82
**CWC Cottonwood Cre 82.01 46** P **P** **05 28 15.4 +0.5**
baz=82,SNR=14
**BELC Belle Mtn. Jos 82.07 49** P **P** **05 28 15.9 +0.7**
baz=82,SNR=9.1
**MPMC Manual Prospec 82.19 46** P **P** **05 28 16.3 +0.5**
baz=82,SNR=12
**MLAC Mammoth Lakes 82.19 44** P **P** **05 28 17.0 +1.1**
baz=82
**MTUM Tungsten Hills 82.21 45** *e*P **P** **05 28 16.6 +0.6**
**GSC Goldstone 82.23 47** *e*P **P** **05 28 16.0 +0.1**
**GSC Goldstone 82.23 47** P **P** **05 28 16.1 +0.2**
baz=82,SNR=6.9
**GSC Goldstone 82.23 47** *e*P **P** **05 28 16.0 +0.1**
**DAC Darwin (Calif) 82.24 46** *e*P **P** **05 28 16.7 +0.6**
**DAC Darwin (Calif) 82.24 46** *e*P **P** **05 28 16.7 +0.6**
**YBH Yreka Blue Hor 82.25 39** P **P** **05 28 17.0 +1.1**
comp=Z,16nm,0.8s,baz=193,slow=2.6,SNR=28
**TIN Tinemaha 82.26 45** P **P** **05 28 16.5 +0.4**
baz=82,SNR=5.1
**BC3 Big Chuckawall 82.27 49** P **P** **05 28 16.9 +0.7**
baz=82,SNR=7.2
**HEC Hector,Ludlow 82.30 48** P **P** **05 28 16.7 +0.4**
baz=82,SNR=5.6
**GLA Glamis 82.39 50** *e*P **P** **05 28 17.9 +1.2**
**GLA Glamis 82.39 50** P **P** **05 28 17.6 +0.9**
baz=82,SNR=9.0
**GLA Glamis 82.39 50** *e*P **P** **05 28 17.9 +1.2**
**KDAK Kodiak Island 82.52 14** *i* P **P** **05 28 16.7 0.0**
**HUMO Hull Mountain 82.66 38** *e*P **P** **05 28 18.9 +1.1**
comp=Z,172nm,1.2s
**GMRC Granite Mounta 82.73 48** P **P** **05 28 19.0 +0.5**
baz=83,SNR=6.8
**IRM Iron Mountain 82.75 49** P **P** **05 28 19.6 +1.1**
baz=83,SNR=9.2
**GRAC Grapevine Rang 82.80 45** P **P** **05 28 19.3 +0.5**
baz=83,SNR=7.9
**M04C Macdoel 82.80 40** P **P** **05 28 19.6 +0.9**
baz=83
**FURC Furnace Creek, 82.84 46** P **P** **05 28 19.4 +0.6**
baz=83,SNR=6.4
**TUQ Turquoise Moun 82.91 47** P **P** **05 28 19.9 +0.5**
baz=83,SNR=11
**SHOC Shoshone 82.92 47** P **P** **05 28 20.0 +0.7**
baz=83
**Y12C Blythe 82.97 50** P **P** **05 28 20.3 +0.7**
baz=83,SNR=7.4
**NVAR Mina Array Bea 83.00 44** P **P** **05 28 20.2 +0.3**
comp=Z,13nm,0.8s,baz=225,slow=8.6,SNR=62
**I03D Drain, OR 83.12 37** P **P** **05 28 21.1 +1.1**
baz=83
**214A Organ Pipe Nat 83.27 52** P **P** **05 28 22.2 +1.1**
baz=83
**K04D Chiloquin, OR 83.36 39** P **P** **05 28 22.5 +1.1**
baz=84
**PDMCI Parker Dam,Lak 83.53 49** P **P** **05 28 23.2 +0.9**
baz=84,SNR=9.6
**J04D Umpqua Nationa 83.54 38** P **P** **05 28 23.8 +1.3**
baz=84
**I04A Tendick Farm, 83.71 38** P **P** **05 28 23.6 +0.6**
baz=84
**J05D Fort Rock, OR 84.07 39** P **P** **05 28 26.0 +1.0**
baz=84,SNR=12
**SKNT Sakolnakorn 84.32 291** P **P** **05 28 28.4 +1.8**
comp=Z,36nm,1.0s
**I05D Terrebonne, OR 84.65 38** P **P** **05 28 28.3 +0.7**
baz=85
**R11A Troy Canyon, C 84.72 45** P **P** **05 28 28.6 +0.2**
baz=85
**RSO Redoubt South 84.92 13** *e*P **P** **05 28 28.4 -0.4**
**TUC Tucson 84.93 52** *e*P **P** **05 28 29.6 +0.2**
TUC pmax pmax
comp=Z,14nm,0.9s
**TUC Tucson 84.93 52** *e*P **P** **05 28 29.6 +0.2**
comp=Z,14nm,0.9s
**SYO Syowa Base 85.04 193** *i**e*P **P** **05 28 27.2 -1.9**
**WVOR Wild Horse Val 85.10 40** *e*P **P** **05 28 30.5 +0.5**
**WVOR Wild Horse Val 85.10 40** *e*P **P** **05 28 30.5 +0.5**
**WUAZ Wupatki 86.11 49** P **P** **05 28 35.1 +0.1**
baz=86
**RC01 Rabbit Creek A 86.14 14** *e*P **P** **05 28 33.6 -0.7**
**GYA Guiyang 86.17 300** *e*P **P** **05 28 37.0 +1.5**
GYA pP **pP** **05 30 42.5 +1.4**
GYA sP **sP** **05 31 39.5 -0.3**
GYA SKS **SKSac** **05 38 06.0 -0.7**
GYA S **S** **05 38 22.5 0.0**
GYA PMZ
comp=Z,10.0nm,1.0s
**ELK Elko 86.25 43** *e*P **P** **05 28 35.6 -0.1**
ELK pmax pmax
comp=Z,5.0nm,0.8s
**ELK Elko 86.25 43** *e*P **P** **05 28 35.6 -0.1**
comp=Z,5.4nm,0.8s
**BBB Bella Bella 86.30 29** P **P** **05 28 35.6 +0.4**
comp=Z,49nm,1.3s,baz=270,slow=4.0,SNR=3.0
**SNAA Sanae 86.62 179** P **P** **05 28 35.4 -1.3**
**SNAA Sanae 86.62 179** PKKPbc PKKPbc 05 46 26.5 -4.2
comp=Z,0.3nm,0.7s,baz=214,slow=3.6,SNR=7.4
**SNAA Sanae 86.62 179** *e*P **P** **05 28 35.2 -1.5**
SNAA pmax pmax
comp=Z,2.0nm,0.9s
**SNAA Sanae 86.62 179** *e*P **P** **05 28 35.2 -1.5**
comp=Z,1.8nm,0.9s
**A04D Lummi Island 86.63 34** P **P** **05 28 38.1 +1.2**
baz=87
**EBG Ellensburg 86.64 36** P **P** **05 28 38.0 +0.9**
**B05A Bryant 86.66 34** P **P** **05 28 38.4 +1.3**
baz=87
**PMR Palmer 86.72 14** *e*P **P** **05 28 36.1 -0.9**
**PMR Palmer 86.72 14** *e*P **P** **05 28 36.1 -0.9**
**VNA3 Neumayer Olymp 86.81 177** P **P** **05 28 36.8 -0.8**
**H2OWA Water 86.97 37** P **P** **05 28 39.5 +1.0**
**MSU Marysvale 87.08 46** *e*P **P** **05 28 40.1 +0.5**
MSU pmax pmax
comp=Z,7.0nm,1.1s
**MSU Marysvale 87.08 46** *e*P **P** **05 28 40.1 +0.5**
comp=Z,6.6nm,1.1s
**C06D Leavenworth 87.08 35** P **P** **05 28 39.7 +0.6**
baz=87
**ETW Entiat 87.19 36** P **P** **05 28 40.1 +0.3**
**NVL N'lazarevskaya 87.22 184** *e*P P 05 28 30.4 -9.0
NVL pmax pmax
comp=Z,11nm,0.6s
**VNA2 Neumayer--Watz 87.23 177** P **P** **05 28 39.5 0.0**
baz=193,slow=3.7
**121A Cookes Peak, D 87.26 53** P **P** **05 28 41.7 +1.1**
baz=87
**BMRM Bremner River 87.28 16** *e*P **P** **05 28 38.9 -0.9**
comp=Z,18nm,0.7s

**WTV Waterville 87.45 36** P **P** **05 28 41.0 +0.1**
**SEY Seymchan 87.45 348** P **P** **05 28 40.3 -0.1**
comp=Z,6.7nm,0.6s,baz=124,slow=4.5,SNR=8.0
**SEY Seymchan 87.45 348** *e*P **P** **05 28 40.7 +0.3**
**VNA1 Neumayer--Stat 87.47 177** P **P** **05 28 40.7 +0.1**
**DUG Dugway 87.53 45** P **P** **05 28 41.8 +0.2**
baz=88
**SAW Saint Andrews 87.75 36** P **P** **05 28 42.5 +0.2**
**OD2 Odessa Site #2 87.95 36** P **P** **05 28 43.5 +0.3**
**KTH Kantishna Hill 88.09 12** *e*P **P** **05 28 42.1 -1.5**
**TMUT Trail Mountain 88.13 46** *e*P **P** **05 28 45.3 +0.7**
comp=Z,87nm,1.1s
**TRF Thorofare Moun 88.13 13** *e*P **P** **05 28 42.4 -1.5**
**HLID Hailey 88.30 41** P **P** **05 28 45.9 +0.8**
baz=88,SNR=21
**SRU San Rafael 88.50 47** *e*P **P** **05 28 46.1 -0.1**
SRU pmax pmax
comp=Z,32nm,1.2s
**SRU San Rafael 88.50 47** *e*P **P** **05 28 46.1 -0.1**
comp=Z,32nm,1.2s
**BPAW Bear Paw Mtn. 88.57 12** *e*P **P** **05 28 44.1 -1.6**
**MCK McKinley 88.66 13** *e*P **P** **05 28 44.9 -1.2**
**MCK McKinley 88.66 13** *e*P **P** **05 28 44.9 -1.2**
**MNTX Cornudas Mount 88.69 55** P **P** **05 28 47.5 +0.5**
baz=89
**MNTX Cornudas Mount 88.69 55** *e*P **P** **05 28 47.1 0.0**
comp=Z,16nm,0.8s
**KMI Kunming 88.78 298** P **P** **05 28 45.3 -2.5**
KMI PMZ
comp=Z,8.0nm,0.9s
**TCUT Toone Canyon 88.92 45** *e*P **P** **05 28 48.4 +0.3**
comp=Z,32nm,0.8s
**MVCO Mesa Verde 88.96 49** P **P** **05 28 48.5 +0.1**
baz=89
**TXAR Lajitas Array 88.97 58** P **P** **05 28 49.2 +0.8**
comp=Z,9.8nm,0.8s,baz=215,slow=5.8,SNR=69
TXAR PKKPbc **PKKPbc** **05 46 24.4 +0.7**
comp=Z,0.5nm,0.7s,baz=99,slow=3.1,SNR=6.5
**HWUT Hardware Ranch 89.06 44** *e*P **P** **05 28 48.1 -0.6**
comp=Z,11nm,0.7s
**MENT Mentasta 89.17 16** *e*P **P** **05 28 48.1 -0.4**
**PLCA Paso Flores 89.28 134** P **P** **05 28 51.0 +1.1**
baz=89,SNR=6.3
**CMAR Chiang Mai Arr 89.31 290** P **P** **05 28 52.1 +2.0**
comp=Z,4.3nm,0.9s,baz=134,slow=3.4,SNR=28
CMAR PP **PP** **05 32 32.8 +0.7**
comp=Z,0.9nm,0.4s,baz=119,slow=5.2,SNR=3.4
**CMAR Chiang Mai Arr 89.31 290** *i* P **P** **05 28 52.5 +2.4**
CMAR pmax pmax
comp=Z,5.0nm,0.8s
**NEW Newport 89.33 36** P **P** **05 28 49.1 -0.5**
comp=Z,2.5nm,0.6s,baz=245,slow=4.7,SNR=7.5
**NEW Newport 89.33 36** P **P** **05 28 49.7 +0.1**
baz=90
**PV01 Paradox Valley 89.35 48** *e*P **P** **05 28 49.8 -0.4**
comp=Z,560nm,1.0s
**ANMO Albuquerque 89.36 52** *e*P **P** **05 28 50.2 -0.1**
ANMO pmax pmax
comp=Z,14nm,1.2s
**ANMO Albuquerque 89.36 52** *e*P **P** **05 28 50.2 -0.1**
comp=Z,14nm,1.2s
**HHC Hu-ho-hao-te 89.37 315** *e*P P 05 28 54.5 +4.4
HHC S S 05 38 57.8 +6.4
HHC PMZ
comp=Z,21nm,0.7s
HHC PMZ
comp=Z,180nm,5.9s
**CHTO Chiang Mai 89.44 290** P **P** **05 28 52.7 +1.9**
comp=Z,50nm,0.8s
**CMAI Chiengmai2 89.80 291** P **P** **05 28 55.2 +2.6**
**COLA College 89.89 13** *d**i*P **P** **05 28 50.8 -0.9**
COLA pmax pmax
comp=Z,13nm,1.0s
**COLA College 89.89 13** *e*P **P** **05 28 50.5 -1.2**
**DLBC Dease Lake 89.90 24** P **P** **05 28 52.3 +0.3**
comp=Z,4.0nm,0.9s,baz=216,slow=3.3,SNR=5.0
**MCMT McKenzie Canyo 89.92 41** *e*P **P** **05 28 53.0 +0.3**
comp=Z,7.0nm,1.1s
**AHID Auburn Hatcher 89.95 43** *e*P **P** **05 28 53.1 +0.3**
comp=Z,17nm,0.8s
**ILAR Eielson Array 90.01 13** P **P** **05 28 50.9 -1.4**
comp=Z,4.0nm,0.7s,baz=218,slow=4.8,SNR=22
**BILL Bilibino 90.31 355** *jj**e*P **P** **05 28 53.6 0.0**
BILL *i* SS SS 05 45 15.6 -1.8
BILL pmax pmax
comp=Z,12nm,1.0s
**MSO Missoula 90.33 39** P **P** **05 28 54.0 -0.4**
baz=90
**S22A 4UR Ranch, Cre 90.38 49** P **P** **05 28 55.8 +0.7**
baz=90
**REDW Red Top Meadow 90.41 43** *e*P **P** **05 28 54.7 -0.2**
comp=Z,22nm,1.1s
**CD2 Chengdu 90.41 303** P **P** **05 28 55.0 0.0**
CD2 pP **pP** **05 31 01.0 -0.9**
CD2 sP **sP** **05 31 59.3 -0.9**
CD2 SKS **SKSac** **05 38 30.8 -0.3**
CD2 S **S** **05 39 01.5 +0.5**
CD2 sS **sS** **05 42 47.5 -0.3**
CD2 SS **SS** **05 45 21.8 +1.5**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**529A Stev Forest Ra 90.45 58** P **P** **05 28 55.5 +0.2**
baz=91
**SNOW Snow King Moun 90.52 43** *e*P **P** **05 28 55.6 0.0**
comp=Z,17nm,0.9s
**O20A White River Ci 90.53 47** P **P** **05 28 55.9 +0.3**
baz=91,SNR=6.9
**O20A White River Ci 90.53 47** *e*P **P** **05 28 55.4 -0.2**
comp=Z,7.9nm,0.7s
**IMW Indian Meadow 90.62 42** *e*P **P** **05 28 55.6 -0.5**
comp=Z,14nm,1.1s
**LOHW Long Hollow 90.69 43** *e*P **P** **05 28 55.9 -0.4**
comp=Z,7.5nm,1.1s
**429A Davenport Ranc 90.92 57** P **P** **05 28 57.6 +0.2**
baz=91,SNR=31
**228A UT Block 9, Go 91.01 56** P **P** **05 28 58.4 +0.6**
baz=91
**BOZ Bozeman (W) 91.08 41** P **P** **05 28 58.6 +0.7**
baz=91
**530A J-C Ranch, Com 91.15 58** P **P** **05 28 58.7 +0.2**
baz=91
**329A Wagon Wheel Ra 91.21 57** P **P** **05 28 58.9 +0.1**
baz=91,SNR=6.4
**128A Castleberry Fa 91.30 55** P **P** **05 28 59.3 +0.1**
baz=91
**SDCO Great Sand Dun 91.32 50** P **P** **05 28 59.8 +0.4**
baz=92,SNR=7.7
**631A Perdido Creek 91.45 59** P **P** **05 29 00.0 +0.2**
baz=92,SNR=23
**832A Fain Ranch, C 91.47 60** P **P** **05 29 00.2 +0.3**
baz=92,SNR=11
**430A Baggett Ranch, 91.50 57** P **P** **05 29 00.0 -0.1**
baz=92
**229A Bryant Ranch, 91.54 56** P **P** **05 29 00.3 0.0**
baz=92
**732A Laxson Ranch, 91.66 60** P **P** **05 29 00.8 +0.1**
baz=92,SNR=6.0
**933A Laredo 91.77 61** P **P** **05 29 01.7 +0.4**
baz=92
**531A Rocksprings 91.78 58** P **P** **05 29 01.3 -0.1**
baz=92,SNR=7.1
**330A Mertzon 91.80 57** P **P** **05 29 00.8 -0.7**
baz=92
**T25A Trinidad 91.83 51** P **P** **05 29 01.8 +0.1**
baz=92
**431A Sonora 91.95 58** P **P** **05 29 02.2 +0.1**
baz=92
**833A Chaparral WMA, 91.96 60** P **P** **05 29 02.2 0.0**
baz=92
**Y28A McKinney Farm, 92.03 54** P **P** **05 29 03.0 +0.5**
baz=92
**034A Hebbronville 92.03 62** P **P** **05 29 03.5 +1.0**
baz=92
**Q24A Divide 92.11 49** P **P** **05 29 03.2 +0.2**
baz=92
**632A Uvalde 92.12 59** P **P** **05 29 03.5 +0.5**
baz=92,SNR=10
**Z29A Hungry Hill Ra 92.16 55** P **P** **05 29 03.2 +0.1**
baz=92
**ISCO Idaho Springs 92.17 48** P **P** **05 29 03.5 +0.2**
baz=92
**733A Divot King Ran 92.20 60** P **P** **05 29 04.0 +0.8**
baz=92
**RLMT Red Lodge 92.27 42** P **P** **05 29 04.0 +0.5**
baz=92

**532A Rocksprings 92.28 59** P **P** **05 29 03.7 0.0**
baz=92
**X28A Dimmitt 92.32 54** P **P** **05 29 03.7 -0.1**
baz=92
**331A San Angelo 92.34 57** P **P** **05 29 03.8 -0.2**
baz=92
**934A Benavides 92.38 61** P **P** **05 29 03.9 -0.2**
baz=92
**T26A Comanche Natio 92.43 51** P **P** **05 29 04.0 -0.4**
baz=93
**N23A Red Feather La 92.44 47** P **P** **05 29 05.1 +0.7**
baz=93
**Y29A Porterfield Fa 92.44 54** P **P** **05 29 04.0 -0.4**
baz=93,SNR=6.3
**035A Encino 92.46 62** P **P** **05 29 04.5 0.0**
baz=93
**JCT Junction City 92.50 58** P **P** **05 29 04.5 -0.2**
baz=93
**LZH Lanzhou 92.55 308** *e*P P 05 29 09.5 +4.6
LZH pP pP 05 31 14.3 +2.3
LZH sP sP 05 32 10.3 +0.1
LZH PMZ
comp=Z,16nm,1.0s
**834A Tilden 92.56 61** P **P** **05 29 05.4 +0.5**
baz=93
**633A Saathoff Ranch 92.59 59** P **P** **05 29 05.6 +0.5**
baz=93
**Z30A Sanderson Ranc 92.61 55** P **P** **05 29 05.3 +0.1**
baz=93
**X29A Tulia 92.66 54** P **P** **05 29 05.1 -0.2**
baz=93
**U27A Thompson Grove 92.66 52** P **P** **05 29 04.8 -0.6**
baz=93
**432A Menard 92.67 58** P **P** **05 29 05.3 -0.1**
baz=93
**231A Bronte 92.69 57** P **P** **05 29 05.0 -0.5**
baz=93,SNR=9.5
**S26A Kim 92.71 50** P **P** **05 29 05.5 -0.1**
baz=93,SNR=8.1
**734A La Parita Cree 92.84 60** P **P** **05 29 06.9 +0.7**
baz=93
**K22A Casper 92.85 45** P **P** **05 29 06.5 +0.3**
baz=93
**AMTX Amarillo 92.86 54** P **P** **05 29 06.4 +0.1**
baz=93
**131A Roby 92.93 56** P **P** **05 29 06.7 +0.1**
baz=93
**533A Kerrville 92.94 59** P **P** **05 29 06.6 -0.1**
baz=93,SNR=7.4
**W29A Amraillo 92.98 53** P **P** **05 29 07.2 +0.4**
baz=93
**T27A Campo 93.01 51** P **P** **05 29 07.4 +0.4**
baz=93
**Y30A Stafford Cattl 93.03 55** P **P** **05 29 07.4 +0.4**
baz=93
**433A Art 93.17 58** P **P** **05 29 07.3 -0.4**
baz=93,SNR=10
**232A Coleman 93.19 57** P **P** **05 29 07.5 -0.3**
baz=93
**534A Blanco 93.37 59** P **P** **05 29 08.4 -0.2**
baz=94,SNR=11
**Z31A Sharp Cattle R 93.38 56** P **P** **05 29 08.0 -0.6**
baz=94
**R27A Eads 93.48 50** P **P** **05 29 08.5 -0.5**
baz=94,SNR=5.4
**T28A Walsh 93.48 51** P **P** **05 29 09.0 -0.1**
baz=94
**333A Richland Sprin 93.48 58** P **P** **05 29 08.7 -0.4**
baz=94
**Y31A Rekieta Farm, 93.55 55** P **P** **05 29 09.9 +0.5**
baz=94
**635A Leesville 93.68 60** P **P** **05 29 10.3 +0.3**
baz=94
**S28A Manter 93.83 51** P **P** **05 29 11.0 +0.3**
baz=94
**434A Burnet 93.84 58** P **P** **05 29 10.3 -0.5**
baz=94
**Z32A Haskell 93.89 56** P **P** **05 29 10.8 -0.1**
baz=94,SNR=5.5
**KSCO Kaye Shedlock' 93.90 49** P **P** **05 29 11.1 +0.1**
baz=94
**X31A McDonald Ranch 94.03 54** P **P** **05 29 11.3 -0.2**
baz=94
**133A Hamilton Ranch 94.04 57** P **P** **05 29 11.6 0.0**
baz=94
**334A Lometa 94.07 58** P **P** **05 29 11.8 0.0**
baz=94
**736A Circle Diamond 94.08 61** P **P** **05 29 11.9 0.0**
baz=94
**T29A Hugoton 94.09 52** P **P** **05 29 12.4 +0.6**
baz=94
**Y32A R-V Farms, Ver 94.19 55** P **P** **05 29 12.3 0.0**
baz=94
**R28A Tribune 94.20 50** P **P** **05 29 12.3 -0.1**
baz=94,SNR=5.6
**Z33A Whitaker Ranch 94.43 56** P **P** **05 29 13.1 -0.3**
baz=94
**134A White-Moore Ra 94.68 57** P **P** **05 29 14.3 -0.2**
baz=95
**P28A Saint Francis 94.75 49** P **P** **05 29 15.1 +0.3**
baz=95
**W32A Sentinel 94.78 54** P **P** **05 29 15.3 +0.4**
baz=95
**Q29A Oakley 95.02 50** P **P** **05 29 16.2 +0.2**
baz=95
**I25A Rochford 95.28 45** P **P** **05 29 17.4 +0.2**
baz=95
**R30A Dighton 95.28 51** P **P** **05 29 17.5 +0.3**
baz=95
**P29A Atwood 95.35 50** P **P** **05 29 17.9 +0.5**
baz=96
**Q30A Quinter 95.60 50** P **P** **05 29 19.1 +0.6**
baz=96
**P30A Selden 95.81 50** P **P** **05 29 20.7 +1.2**
baz=96
**SONM Songino Array 95.93 319** P **P** **05 29 19.3 -0.6**
comp=Z,0.2nm,0.4s,baz=116,slow=3.4,SNR=2.5
**INK Inuvik 96.00 16** P P **05 29 18.3 -1.3**
comp=Z,1.6nm,0.6s,baz=268,slow=3.0,SNR=7.2
**R32A Long Quarter, 96.47 51** Pdiff **P** **05 29 23.2 +0.8**
baz=97
**Y36A Durant 96.57 56** Pdiff **P** **05 29 23.6 +0.7**
baz=97
**O31A Woolen Ranch, 96.70 49** Pdiff **P** **05 29 24.3 +0.8**
baz=97
**Q32A Meitler Ranch, 96.80 51** Pdiff **P** **05 29 24.6 +0.7**
baz=97
**Y37A Hugo 97.11 56** Pdiff **P** **05 29 26.2 +0.8**
baz=97
**U35A Pawnee 97.15 54** Pdiff **P** **05 29 25.9 +0.3**
baz=97
**239A Gary 97.30 59** Pdiff Pdif 05 29 25.9 -0.4
baz=97
**Z38A Mt. Pleasant 97.34 57** Pdiff **P** **05 29 27.2 +0.7**
baz=98
**O32A Brockman Farm, 97.48 50** Pdiff **P** **05 29 27.7 +0.8**
baz=98
**J30A Dallas 97.81 46** Pdiff **P** **05 29 29.9 +1.5**
baz=98
**O33A Hebron 97.90 50** Pdiff **P** **05 29 29.1 +0.3**
baz=98
**C26A Wahner Farm, P 97.91 42** Pdiff **P** **05 29 29.3 +0.7**
baz=98
**U36A Oologah 97.91 54** Pdiff **P** **05 29 29.3 +0.4**
baz=98
**X38A Whitesboro 97.97 56** Pdiff **P** **05 29 29.2 0.0**
baz=98
**BGNE Belgrade 98.00 49** Pdiff **P** **05 29 30.4 +1.2**
baz=98
**YKA Yellowknife Ar 98.38 25** P Pdif 05 29 28.3 -2.0
comp=Z,1.0nm,0.7s,baz=242,slow=4.8,SNR=5.6
**ECSD EROS Data Cent 99.91 47** Pdiff **Pdif** **05 29 38.0 +0.4**
baz=100
**A29A Manning Farm, 100.09 41** Pdiff **Pdif** **05 29 38.9 +0.6**
baz=100
**F36A Milaca 102.69 46** Pdiff **Pdif** **05 29 51.0 +1.0**
baz=103
**B34A Aery, Baudette 102.79 43** Pdiff **Pdif** **05 29 51.3 +1.0**
baz=103
**C35A Jirik Farms, M 102.97 44** Pdiff **Pdif** **05 29 52.0 +0.8**
baz=103
**D36A Goodland 103.33 44** Pdiff **Pdif** **05 29 53.3 +0.6**
baz=104
**C36A Pine Crest Far 103.72 44** Pdiff **Pdif** **05 29 54.9 +0.5**
baz=104
**ZALV Zalesovo Beam 110.74 321** PKiKP **PKiKP** **05 34 19.9 -1.6**
comp=Z,1.6nm,0.5s,baz=129,slow=3.9,SNR=9.4
**ZALV Zalesovo Beam 110.74 321** PKIKP **PKiKP** **05 34 20.0 -1.6**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MKAR** | **Makanchi Array** | **111.17** | **313** | PKiKP | **PKiKP** | 05 34 21.2 | -1.5 | | |
| | comp=Z,1.1nm,0.5s,baz=155,slow=0.8,SNR=6.1 | | | | | | | | |
| MKAR | | | | PKKPbc | **PKKPbc** | 05 45 20.9 | -0.7 | | |
| | comp=Z,1.4nm,0.8s,baz=280,slow=5.9,SNR=4.9 | | | | | | | | |
| **KSH** | **Kashi** | **114.57** | **305** | *e*PKP | PKPdf | 05 34 28.8 | -0.8 | | |
| KSH | | | | *e*PP | PP | 05 35 45.3 | +7.0 | | |
| KSH | | | | PKS | **PKSdf** | 05 38 05.3 | -1.1 | | |
| KSH | | | | SKS | **SKSdf** | 05 40 46.5 | -0.5 | | |
| KSH | | | | SKKS | **SKKSac** | 05 41 36.0 | -2.8 | | |
| KSH | | | | PPMZ | | | | | |
| | comp=Z,59nm,5.3s | | | | | | | | |
| **AAK** | **Ala-Archa** | **116.09** | **308** | PKKPbc | PKKPbc | 05 45 04.7 | -0.5 | | |
| | comp=Z,1.3nm,0.6s,baz=263,slow=6.0,SNR=5.5 | | | | | | | | |
| **KKAR** | **Karatay Array** | **119.05** | **308** | *e*PKiKP | **PKPdf** | 05 34 35.7 | -2.3 | | |
| **KKAR** | **Karatay Array** | **119.05** | **308** | *e*PKPdf | **PKPdf** | 05 34 35.7 | -2.3 | | |
| **BDFB** | **Brasilia** | **119.52** | **124** | PKP | **PKPdf** | 05 34 38.6 | -1.3 | | |
| | comp=Z,1.1nm,0.5s,baz=101,slow=7.1,SNR=3.3 | | | | | | | | |
| **SCHQ** | **Schefferville** | **120.64** | **38** | PKP | **PKPdf** | 05 34 38.9 | -1.8 | | |
| | comp=Z,4.4nm,0.9s,baz=224,slow=3.4,SNR=3.7 | | | | | | | | |
| **DAG** | **Danmarks Havn** | **124.28** | **5** | *i* PKiKP | **PKPdf** | 05 34 45.1 | -1.9 | | |
| DAG | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **124.28** | **5** | *i* P | **PKPdf** | 05 34 45.1 | -1.9 | | |
| | comp=Z,5.8nm,0.6s | | | | | | | | |
| **BOSA** | **Boshof** | **124.38** | **206** | PKP | **PKPdf** | 05 34 47.7 | -1.2 | | |
| | comp=Z,5.5nm,0.9s,baz=95,slow=3.1,SNR=4.0 | | | | | | | | |
| **SUMG** | **Summit** | **124.85** | **13** | *i* PKiKP | **PKPdf** | 05 34 48.9 | +0.2 | | |
| **SUMG** | **Summit** | **124.85** | **13** | *i* P | **PKPdf** | 05 34 48.9 | +0.2 | | |
| **GEYT** | **Alibeck** | **128.38** | **302** | PKP | **PKPdf** | 05 34 55.6 | -0.5 | | |
| | comp=Z,4.6nm,0.5s,baz=243,slow=1.0,SNR=3.6 | | | | | | | | |
| **MATP** | **Matopo** | **129.82** | **215** | SKPbc | SKPbc | 05 37 27.1 | -0.9 | | |
| | comp=Z,21nm,0.9s,baz=156,slow=4.0,SNR=19 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.06** | **349** | PKhKP | PKPpre | 05 34 44.9 | | | |
| | comp=Z,4.0nm,1.0s,baz=48,slow=1.3,SNR=5.3 | | | | | | | | |
| ARCES | | | | PKP | **PKPdf** | 05 34 57.2 | -1.0 | | |
| | comp=Z,6.9nm,0.6s,baz=13,slow=1.1,SNR=33 | | | | | | | | |
| ARCES | | | | SKPbc | **SKPab** | 05 37 27.3 | -0.2 | | |
| | comp=Z,16nm,1.2s,baz=16,slow=9.0,SNR=4.9 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **130.06** | **349** | PKHKP | PKPpre | 05 34 44.9 | | | |
| ARCES | | | | | | 05 34 57.3 | | | |
| ARCES | | | | | | 05 37 27.3 | | | |
| ARCES | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | | |
| ARCES | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| ARCES | | | | pmax | pmax | | | | |
| | comp=N,16nm,1.2s | | | | | | | | |
| **KLMR** | **Klimovskoe** | **132.61** | **335** | *e*PKiKP | **PKPdf** | 05 35 02.2 | -1.1 | | |
| KLMR | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **LSZ** | **Lusaka** | **134.15** | **219** | SKPbc | **SKPbc** | 05 37 43.6 | +0.5 | | |
| | comp=Z,2.2nm,0.8s,baz=153,slow=4.5,SNR=2.9 | | | | | | | | |
| **FINES** | **FINESS Array B** | **136.73** | **342** | PKhKP | PKPpre | 05 34 57.7 | | | |
| | comp=Z,1.4nm,0.6s,baz=100,slow=5.9,SNR=6.1 | | | | | | | | |
| FINES | | | | PKP | **PKPdf** | 05 35 11.7 | +0.8 | | |
| | comp=Z,3.1nm,0.4s,baz=98,slow=2.9,SNR=11 | | | | | | | | |
| FINES | | | | SKPbc | **SKPbc** | 05 37 49.2 | -0.1 | | |
| | comp=Z,3.6nm,0.8s,baz=88,slow=4.8,SNR=6.0 | | | | | | | | |
| **FINES** | **FINESS Array B** | **136.73** | **342** | PKHKP | PKPpre | 05 34 57.7 | | | |
| FINES | | | | | | 05 35 11.7 | | | |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.4s | | | | | | | | |
| FINES | | | | pmax | pmax | | | | |
| | comp=N,4.0nm,0.8s | | | | | | | | |
| **OBN** | **Obninsk** | **137.33** | **330** | *e*PKiKP | **PKPdf** | 05 35 14.0 | +1.8 | | |
| OBN | | | | pmax | pmax | | | | |
| | comp=Z,16nm,0.7s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **137.47** | **242** | PKP | **PKPdf** | 05 35 16.2 | +2.1 | | |
| | comp=Z,1.5nm,0.3s,baz=58,slow=1.8,SNR=5.9 | | | | | | | | |
| KMBO | | | | SKPbc | **SKPbc** | 05 37 54.3 | +1.0 | | |
| | comp=Z,0.7nm,0.3s,baz=74,slow=4.0,SNR=5.0 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **140.21** | **352** | PKP | PKPpre | 05 35 09.5 | | | |
| | comp=Z,3.2nm,0.6s,baz=11,slow=2.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **140.21** | **352** | PKhKP | PKPpre | 05 35 09.2 | | | |
| | comp=Z,0.9nm,0.5s,baz=42,slow=1.2,SNR=14 | | | | | | | | |
| NOA | | | | PKP | **PKPdf** | 05 35 18.6 | +1.3 | | |
| | comp=Z,2.3nm,0.6s,baz=16,slow=4.1,SNR=9.2 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **140.21** | **352** | PKHKP | PKPpre | 05 35 09.2 | | | |
| NOA | | | | | | 05 35 18.6 | | | |
| NOA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| NOA | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **AKASG** | **Malin Array Be** | **143.56** | **329** | PKP | PKPab | 05 35 21.2 | -1.2 | | |
| | comp=Z,8.4nm,0.3s,baz=42,slow=4.2,SNR=77 | | | | | | | | |
| AKASG | | | | SKPbc | **SKPbc** | 05 38 07.0 | -0.6 | | |
| | comp=Z,0.2nm,0.3s,baz=40,slow=2.4,SNR=4.7 | | | | | | | | |
| **KIEV** | **Kiev** | **143.57** | **329** | *e*PKPdf | PKPab | 05 35 21.1 | -1.4 | | |
| **SUW** | **Suwalki** | **143.65** | **337** | PKP | PKPbc | 05 35 22.0 | -0.6 | | |
| **MALT** | **Malatya** | **143.67** | **305** | ⇑PKiKP | **PKPdf** | 05 35 24.1 | -0.2 | | |
| **MALT** | **Malatya** | **143.67** | **305** | ⇑*i*P | **PKPdf** | 05 35 24.1 | -0.2 | | |
| **SIM** | **Simferopol'** | **144.16** | **318** | *e*PKHKP | PKPbc | 05 35 24.6 | +0.1 | | |
| SIM | | | | pmax | pmax | | | | |
| | comp=Z,21nm,0.7s | | | | | | | | |
| **KAC** | **Achnashellach** | **144.21** | **5** | *e*P | PKPbc | 05 35 23.4 | -0.9 | | |
| KAC | | | | *e*P | **PKPdf** | 05 35 23.6 | -0.9 | | |
| **MCD** | **Coleburn Disti** | **144.28** | **3** | *e*P | PKPbc | 05 35 23.2 | -1.2 | | |
| **KPL** | **Plockton** | **144.34** | **6** | *e*P | PKPbc | 05 35 23.3 | -1.4 | | |
| **KSB** | **Sheil Bridge** | **144.49** | **6** | *e*P | **PKPdf** | 05 35 22.8 | -2.2 | | |
| **BSD** | **Bornholm Skovb** | **145.15** | **346** | *i* PKiKP | **PKPdf** | 05 35 26.5 | +0.4 | | |
| BSD | | | | pmax | pmax | | | | |
| | comp=Z,12nm,0.4s | | | | | | | | |
| **BSD** | **Bornholm Skovb** | **145.15** | **346** | *i* P | **PKPdf** | 05 35 26.5 | +0.4 | | |
| | comp=Z,12nm,0.4s | | | | | | | | |
| **EAB** | **Aberfoyle** | **145.59** | **5** | *e*P | **PKPdf** | 05 35 27.5 | +0.6 | | |
| **PGBU** | **Glenifferbraes** | **145.95** | **5** | *e*P | **PKPdf** | 05 35 28.2 | +0.7 | | |
| **MILM** | **Milestii Mici** | **146.18** | **324** | ⇑*i*P | **PKPdf** | 05 35 29.2 | +1.1 | | |
| **BEL** | **Belsk** | **146.27** | **337** | *e*PKP | **PKPbc** | 05 35 30.5 | +0.1 | | |
| **BEL** | **Belsk** | **146.27** | **337** | *e*PKiKP | **PKPbc** | 05 35 30.6 | +0.1 | | |
| **ESK** | **Eskdalemuir** | **146.54** | **4** | *e*P | **PKPbc** | 05 35 29.9 | -1.2 | | |
| **LVV** | **L'vov** | **146.55** | **332** | *e*PKiKP | **PKPdf** | 05 35 29.7 | +1.0 | | |
| **BRTR** | **Keskin Array B** | **146.74** | **310** | PKPbc | **PKPbc** | 05 35 31.6 | -0.7 | | |
| | comp=Z,8.3nm,0.6s,baz=135,slow=4.7,SNR=43 | | | | | | | | |
| **KWP** | **Kalwaria Pacla** | **147.26** | **333** | *e*PKP | **PKPbc** | 05 35 33.0 | -0.2 | | |
| **KWP** | **Kalwaria Pacla** | **147.26** | **333** | *e*PKiKP | **PKPbc** | 05 35 33.1 | -0.2 | | |
| **BURAR** | **Bucovina Array** | **147.58** | **328** | ⇑PKiKP | **PKPbc** | 05 35 35.0 | +0.8 | | |
| **BURAR** | **Bucovina Array** | **147.58** | **328** | ⇑*i*P | **PKPbc** | 05 35 35.0 | +0.8 | | |
| **CFR** | **Carcaliu** | **147.61** | **322** | ⇑PKiKP | **PKPbc** | 05 35 33.7 | -0.5 | | |
| **CFR** | **Carcaliu** | **147.61** | **322** | ⇑*i*P | **PKPbc** | 05 35 33.7 | -0.5 | | |
| **TIRR** | **Tirgusor** | **147.87** | **321** | ⇓*i*P | **PKPbc** | 05 35 34.8 | -0.1 | | |
| **OJC** | **Ojcow** | **147.95** | **336** | *e*PKP | **PKPbc** | 05 35 34.5 | -0.4 | | |
| **VRI** | **Vrincioaia** | **147.97** | **324** | ⇑*i*P | **PKPbc** | 05 35 34.5 | -0.7 | | |
| **HPK** | **Haverah Park** | **147.98** | **2** | *e*P | **PKPbc** | 05 35 33.7 | -1.2 | | |
| **HARR** | **Harsova** | **148.02** | **322** | ⇑*i*P | **PKPbc** | 05 35 35.5 | +0.2 | | |
| **STHS** | **Stebnicka Huta** | **148.03** | **334** | *e*PKP | **PKPbc** | 05 35 35.5 | +0.3 | | |
| **UZH** | **Uzhgorod** | **148.20** | **332** | *e*PKHKP | **PKPbc** | 05 35 35.6 | 0.0 | | |
| UZH | | | | *e* | | 05 35 43.6 | | | |
| **LHO** | **Holmfirth** | **148.38** | **3** | *e*P | **PKPbc** | 05 35 35.2 | -0.7 | | |
| **NIE** | **Niedzica** | **148.41** | **335** | *e*PKP | **PKPbc** | 05 35 36.4 | +0.2 | | |
| **ISR** | **Istrita** | **148.54** | **323** | ⇓*i*P | **PKPbc** | 05 35 37.2 | +0.6 | | |
| **NRDL** | **Niedersach Rie** | **148.60** | **349** | *e*PKPbc | **PKPbc** | 05 35 36.0 | -0.4 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **KSP** | **Ksiaz** | **148.61** | **341** | *e*PKP | **PKPbc** | 05 35 36.6 | 0.0 | | |
| **DOPR** | **Dopca** | **148.61** | **326** | ⇑*i*P | **PKPbc** | 05 35 37.0 | +0.2 | | |
| **MLR** | **Muntele Rosu** | **148.63** | **325** | ⇑*i*P | **PKPbc** | 05 35 36.3 | -0.7 | | |
| **OKC** | **Ostrava-Krasne** | **148.86** | **338** | ⇑*e*PKP | **PKPbc** | 05 35 37.1 | -0.1 | | |
| OKC | | | | *e*PKPAB | **PKPab** | 05 35 44.0 | +0.5 | | |
| **LANS** | **Liptovska Anna** | **148.94** | **336** | *e*PKP | **PKPbc** | 05 35 38.4 | +0.9 | | |
| LANS | | | | *e* | | 05 35 44.2 | | | |
| **FOEL** | **Foel Wylfa** | **148.96** | **4** | *e*P | **PKPbc** | 05 35 36.7 | -0.6 | | |
| **UPC** | **Upice** | **148.99** | **341** | ⇑*e*PKP | **PKPbc** | 05 35 37.6 | +0.1 | | |
| UPC | | | | *e*PKPAB | **PKPab** | 05 35 44.5 | +0.4 | | |
| **CJR** | **Cluj-Napoca** | **149.00** | **328** | ⇑*i*P | **PKPbc** | 05 35 37.8 | +0.1 | | |
| **DPC** | **Dobruska-Polom** | **149.03** | **340** | ⇑*e*PKP | **PKPbc** | 05 35 37.9 | +0.2 | | |
| DPC | | | | *e*PKPAB | **PKPab** | 05 35 44.7 | +0.4 | | |
| **CLL** | **Collm** | **149.10** | **345** | *e*PKPdf | **PKPdf** | 05 35 34.0 | +1.2 | | |
| CLL | | | | ⇑*i*PKPbc | **PKPbc** | 05 35 37.5 | -0.2 | | |
| | comp=Z,47nm,1.0s | | | | | | | | |
| CLL | | | | *i* PKPab | **PKPab** | 05 35 43.9 | -0.6 | | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **KRLC** | **Kraliky** | **149.12** | **339** | ⇑*e*PKP | **PKPbc** | 05 35 38.0 | +0.1 | | |
| KRLC | | | | *e*PKPAB | **PKPab** | 05 35 44.9 | +0.2 | | |
| **MORC** | **Moravsky Berou** | **149.12** | **338** | ⇑*i*P | **PKPbc** | 05 35 38.1 | +0.2 | | |
| **VOIR** | | **149.14** | **325** | ⇑*i*P | **PKPbc** | 05 35 37.6 | -0.5 | | |
| **IBBN** | **Ibbenburen** | **149.16** | **351** | *e*PKPbc | **PKPbc** | 05 35 37.8 | 0.0 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **CLZ** | **Clausthal** | **149.18** | **348** | *e*PKPbc | **PKPbc** | 05 35 38.0 | 0.0 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **CWF** | **Charnwood Fore** | **149.21** | **2** | *e*P | **PKPbc** | 05 35 36.7 | -1.2 | | |
| **BRG** | **Berggiesshubel** | **149.26** | **343** | *i* PKP | **PKPbc** | 05 35 38.0 | -0.1 | | |
| | comp=Z,30nm,0.7s | | | | | | | | |
| BRG | | | | *i* | | 05 35 45.0 | | | |
| | comp=Z,17nm,0.8s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **149.26** | **343** | *e*PKPbc | **PKPbc** | 05 35 37.9 | -0.3 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **HLM1** | **Long Mynd** | **149.35** | **4** | *e*P | **PKPbc** | 05 35 37.4 | -0.9 | | |
| **DRGR** | | **149.37** | **329** | ⇑*i*P | **PKPbc** | 05 35 38.2 | -0.4 | | |
| **PVCC** | **Panska Ves** | **149.40** | **342** | ⇑*e*PKP | **PKPbc** | 05 35 38.6 | +0.1 | | |
| **GTTG** | **Gvttingen** | **149.54** | **348** | *e*PKPbc | **PKPbc** | 05 35 38.6 | -0.1 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **WTSB** | **Winterswijk** | **149.62** | **352** | *e*PKPbc | **PKPbc** | 05 35 38.5 | -0.4 | | |
| | comp=Z,55nm,0.6s | | | | | | | | |
| **VYHS** | **Vyhne** | **149.72** | **336** | *e*PKP | **PKPbc** | 05 35 39.2 | -0.1 | | |
| VYHS | | | | *e* | | 05 35 47.4 | | | |
| **PSZ** | **Piszkesteto** | **149.76** | **334** | ⇑*i*P | **PKPbc** | 05 35 39.1 | -0.4 | | |
| **LOT** | **Lotru** | **149.80** | **326** | ⇑*i*P | **PKPbc** | 05 35 38.8 | -0.9 | | |
| **VRAC** | **Vranov** | **149.85** | **339** | ⇑*i*P | **PKPbc** | 05 35 39.5 | -0.1 | | |
| **PRA** | **Prague** | **149.85** | **342** | ⇑*e*PKP | **PKPbc** | 05 35 39.2 | -0.3 | | |
| **MCH1** | **Michaelchurch** | **149.86** | **4** | *e*P | **PKPbc** | 05 35 38.2 | -1.3 | | |
| **GOPC** | **GO Pecny, Ondr** | **149.88** | **341** | ⇑*e*PKP | **PKPbc** | 05 35 39.7 | 0.0 | | |
| **PRU** | **Pruhonice** | **149.89** | **342** | ⇑*e*PKP | **PKPbc** | 05 35 39.5 | -0.1 | | |
| **SSW** | **Stow on the Wo** | **149.96** | **3** | *e*P | **PKPbc** | 05 35 38.9 | -0.8 | | |
| **MONM** | **Monmouth** | **150.03** | **4** | *e*P | **PKPbc** | 05 35 38.9 | -1.0 | | |
| **MOX** | **Moxa** | **150.04** | **346** | *e*PKPbc | **PKPbc** | 05 35 39.5 | -0.5 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **TANN** | **Tannenbergstha** | **150.06** | **345** | *e*PKPbc | **PKPbc** | 05 35 39.8 | -0.3 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **BUG** | **Bochum--Univer** | **150.07** | **352** | *e*PKPbc | **PKPbc** | 05 35 39.7 | -0.2 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **STRD** | **Stroud** | **150.13** | **3** | *e*P | **PKPbc** | 05 35 39.1 | -1.1 | | |
| **TREC** | **Trest** | **150.22** | **340** | *e*PKiKP | **PKPbc** | 05 35 40.2 | -0.3 | | |
| **TREC** | **Trest** | **150.22** | **340** | ⇑*e*PKP | **PKPbc** | 05 35 40.2 | -0.3 | | |
| **NKC** | **Novy Kostel** | **150.23** | **345** | *e*PKiKP | **PKPbc** | 05 35 40.4 | -0.1 | | |
| NKC | | | | *e* | | 05 35 42.5 | | | |
| NKC | | | | *e* | | 05 35 49.6 | | | |
| **NKC** | **Novy Kostel** | **150.23** | **345** | ⇑*e*PKP | **PKPbc** | 05 35 40.4 | -0.1 | | |
| NKC | | | | *e*PKPAB | **PKPab** | 05 35 49.6 | +0.3 | | |
| **SKP1** | **Kophill** | **150.24** | **2** | *e*P | **PKPbc** | 05 35 38.8 | -1.6 | | |
| **SIRR** | **Siria** | **150.25** | **330** | ⇑*i*P | **PKPbc** | 05 35 40.4 | -0.2 | | |
| **GZR** | **Gura Zlata** | **150.34** | **327** | ⇑PKiKP | **PKPbc** | 05 35 40.3 | -0.6 | | |
| **GZR** | **Gura Zlata** | **150.34** | **327** | ⇑*i*P | **PKPbc** | 05 35 40.3 | -0.6 | | |
| **SRE** | **Strehaia** | **150.63** | **326** | ⇑PKiKP | **PKPbc** | 05 35 42.2 | +0.7 | | |
| **SRE** | **Strehaia** | **150.63** | **326** | ⇑*i*P | **PKPbc** | 05 35 42.2 | +0.7 | | |
| **WOL** | **Wolverton** | **150.64** | **2** | *e*P | **PKPbc** | 05 35 40.5 | -0.8 | | |
| **HEX** | **Exmoor** | **150.72** | **6** | *e*P | **PKPbc** | 05 35 40.7 | -0.9 | | |
| **BZS** | **Buzias** | **150.75** | **329** | ⇑PKiKP | **PKPbc** | 05 35 41.5 | -0.3 | | |
| **BZS** | **Buzias** | **150.75** | **329** | ⇑*i*P | **PKPbc** | 05 35 41.5 | -0.3 | | |
| **HGN** | **Heimansgroeve** | **150.91** | **353** | *e*PKPbc | **PKPbc** | 05 35 41.1 | -0.8 | | |
| | comp=Z,22nm,0.9s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **150.94** | **342** | *e*PKiKP | **PKPbc** | 05 35 41.9 | -0.3 | | |
| KHC | | | | *e* | | 05 35 43.5 | | | |
| KHC | | | | *e* | | 05 35 52.6 | | | |
| **KHC** | **Kasperske Hory** | **150.94** | **342** | ⇑*e*PKP | **PKPbc** | 05 35 41.9 | -0.3 | | |
| KHC | | | | *e*PKPAB | **PKPab** | 05 35 52.6 | +0.3 | | |
| **MEM** | **Membach** | **151.05** | **353** | PKPbc | **PKPbc** | 05 35 41.8 | -0.5 | | |
| **TNS** | **Taunus Mts** | **151.08** | **349** | *e*PKPbc | **PKPbc** | 05 35 41.8 | -0.6 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **HMNX** | **Herstmonceux** | **151.11** | **0** | *e*P | **PKPbc** | 05 35 42.2 | -0.2 | | |
| **GEC2** | **GERESS Array S** | **151.16** | **342** | *e*PKPbc | **PKPbc** | 05 35 42.0 | -0.7 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **GERES** | **GERESS Array B** | **151.16** | **342** | PKP | **PKPdf** | 05 35 35.8 | -0.4 | | |
| | comp=Z,0.3nm,0.3s,baz=75,slow=1.5,SNR=3.9 | | | | | | | | |
| GERES | | | | PKPbc | **PKPbc** | 05 35 42.2 | -0.6 | | |
| | comp=Z,10nm,0.8s,baz=48,slow=2.0,SNR=38 | | | | | | | | |
| GERES | | | | PKPab | **PKPab** | 05 35 53.0 | -0.3 | | |
| | comp=Z,2.5nm,0.7s,baz=28,slow=6.0,SNR=4.4 | | | | | | | | |
| **CONA** | **Conrad Observa** | **151.28** | **338** | ⇑*i*PKiKP | **PKPbc** | 05 35 42.9 | -0.1 | | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **BCLA** | **Clavier** | **151.31** | **354** | PKPbc | **PKPbc** | 05 35 42.4 | -0.5 | | |
| BCLA | | | | APKP | **PKPab** | 05 35 53.0 | -0.8 | | |
| **SNF** | **Seneffe** | **151.32** | **355** | PKPbc | **PKPbc** | 05 35 42.9 | 0.0 | | |
| **DOU** | **Dourbes** | **151.70** | **354** | PKPbc | **PKPbc** | 05 35 42.7 | -1.0 | | |
| **WLF** | **Walferdange** | **151.96** | **352** | PKPbc | **PKPbc** | 05 35 44.8 | +0.4 | | |
| **WLF** | **Walferdange** | **151.96** | **352** | *e*PKPbc | **PKPbc** | 05 35 44.7 | +0.3 | | |
| | baz=21,slow=2.1 | | | | | | | | |
| **DIVS** | **Divibare** | **152.65** | **328** | ⇑*i*P | **PKPbc** | 05 35 45.7 | -0.5 | | |
| **PERS** | **Pernice** | **152.65** | **338** | *i* PKPbc | **PKPbc** | 05 35 44.8 | -1.2 | | |
| **WATA** | **Walderalm** | **153.12** | **343** | ⇑*i*PKPbc | **PKPbc** | 05 35 46.2 | -1.0 | | |
| | comp=Z,4.3nm,0.5s | | | | | | | | |
| **WTTA** | **Wattenberg** | **153.18** | **343** | ⇑*i*PKPbc | **PKPbc** | 05 35 46.5 | -0.8 | | |
| | comp=Z,7.6nm,0.4s | | | | | | | | |
| **CRES** | **Cresnjev** | **153.22** | **336** | *e*PKPbc | **PKPbc** | 05 35 46.5 | -0.8 | | |
| **ABTA** | **Abfaltersbach** | **153.40** | **341** | ⇑*i*PKPbc | **PKPbc** | 05 35 46.2 | -1.4 | | |
| | comp=Z,7.3nm,0.5s | | | | | | | | |
| **BOJS** | **Bojanci** | **153.57** | **336** | *i* PKPbc | **PKPbc** | 05 35 47.8 | -0.2 | | |
| **FETA** | **Feichten** | **153.64** | **344** | ⇑*i*PKPdf | **PKPdf** | 05 35 39.6 | -0.4 | | |
| | comp=Z,6.8nm,0.8s | | | | | | | | |
| **JAVS** | **Javornik** | **153.66** | **338** | *i* PKPbc | **PKPbc** | 05 35 47.0 | -1.3 | | |
| JAVS | | | | *i* | | 05 35 55.6 | | | |
| **ESDC** | **Sonseca Array** | **161.90** | **11** | PKPab | **PKPab** | 05 36 38.6 | -1.3 | | |
| | comp=Z,0.1nm,0.3s,baz=344,slow=4.5,SNR=9.7 | | | | | | | | |
| **DBIC** | **Dimbokro** | **163.97** | **160** | PKP | **PKPdf** | 05 35 51.6 | -1.1 | | |
| | comp=Z,3.9nm,0.6s,baz=271,slow=1.0,SNR=7.3 | | | | | | | | |
| DBIC | | | | PKPab | **PKPab** | 05 36 49.6 | +0.1 | | |
| | comp=Z,3.5nm,0.7s,baz=204,slow=6.4,SNR=6.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **171.20** | **187** | PKP | **PKPdf** | 05 35 55.9 | -1.7 | | |
| | comp=Z,3.7nm,0.8s,baz=325,slow=0.4,SNR=26 | | | | | | | | |
| TORD | | | | PKPab | **PKPab** | 05 37 21.1 | -0.3 | | |
| | comp=Z,2.7nm,0.7s,baz=176,slow=3.8,SNR=14 | | | | | | | | |
| TORD | | | | PP | **PP** | 05 41 11.7 | 0.0 | | |
| | comp=Z,0.8nm,0.7s,baz=166,slow=6.0,SNR=4.2 | | | | | | | | |

*ISCJB* ***26*** *05:21:19.5±0.3,60.18N±0.02×152.82W±0.05, h119km±3km, mb4.2/4, Error ellipse: s-maj=4.5km s-min=3.4km az=27.0*

*IDC* ***26*** *05:21:19.6±1.8, 60.10N×152.86W, h96km±29km, mb3.6/2, mb1 3.8/7, mb1mx3.4/51, mbtmp4.0/7, Error ellipse: s-maj=29.5km s-min=14.3km az=122.0*

*NEIC* ***26*** *05:21:21.6, 60.19N×152.96W, h108km, MG3.6(AEIC), After AEIC.*

**ISC 26 05:21:20.3±0.8, 60.18N±0.03×152.79W±0.05, h113km±6km, n124, σ1⁄9 01/139, mb4.1/4, Southern Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **ILIM** | **Iliamna** | **0.13** | **221** | P | P | **Pn** | 05 21 35.8 | -0.2 |
| **IVE** | **Iliamna Volcan** | **0.20** | **215** | P | P | **Pn** | 05 21 35.9 | -0.3 |
| IVE | | | | | S | **Sn** | 05 21 47.8 | -0.4 |
| **ILW** | **Iliamna West** | **0.21** | **236** | P | P | **Pn** | 05 21 36.1 | -0.3 |
| **RED** | **Redoubt Volcan** | **0.24** | **2** | P | P | **Pn** | 05 21 36.1 | -0.2 |
| **RSO** | **Redoubt South** | **0.29** | **4** | *e*Pn | P | **Pn** | 05 21 36.3 | -0.3 |
| **RDWB** | **Redoubt West** | **0.31** | **355** | P | P | **Pn** | 05 21 36.3 | -0.4 |
| RDWB | | | | | S | **Sn** | 05 21 48.0 | -1.0 |
| **RDN** | **Redoubt North** | **0.34** | **2** | P | P | **Pn** | 05 21 36.7 | -0.1 |
| **RDJH** | **Redoubt Jeurge** | **0.42** | **359** | P | P | **Pn** | 05 21 36.8 | -0.3 |
| RDJH | | | | | S | **Sn** | 05 21 49.0 | -0.9 |
| **DFR** | **Drift River** | **0.42** | **7** | P | P | **Pn** | 05 21 36.9 | -0.3 |
| **OPT** | **Oil Point** | **0.57** | **203** | P | P | **Pn** | 05 21 38.2 | +0.2 |
| **NNL** | **Ninilchik** | **0.76** | **100** | P | P | **Pn** | 05 21 41.2 | +1.7 |
| **HOM** | **Homer** | **0.78** | **131** | P | P | **Pn** | 05 21 40.5 | +0.9 |
| HOM | | | | S | S | **Sn** | 05 21 55.9 | +1.7 |
| **AUL** | **Augustine Lava** | **0.86** | **203** | P | P | **Pn** | 05 21 40.6 | +0.2 |
| AUL | | | | S | S | **Sn** | 05 21 56.1 | +0.6 |
| **AUE** | **Augustine Isla** | **0.87** | **200** | P | P | **Pn** | 05 21 40.5 | 0.0 |
| **AUW** | **Augustine West** | **0.88** | **203** | P | P | **Pn** | 05 21 40.8 | +0.3 |
| **AUI** | **Augustine Isla** | **0.90** | **201** | P | P | **Pn** | 05 21 40.8 | 0.0 |
| AUI | | | | S | S | **Sn** | 05 21 56.5 | +0.3 |
| **CNPM** | **China Poot** | **1.02** | **129** | P | P | **Pn** | 05 21 42.6 | +0.6 |
| CNPM | | | | S | S | **Sn** | 05 21 59.1 | +0.8 |
| **BRLK** | **Bradley Lake** | **1.04** | **113** | P | P | **Pn** | 05 21 42.5 | +0.3 |
| BRLK | | | | S | S | **Sn** | 05 21 59.3 | +0.6 |
| **CKL** | **Chakachamna La** | **1.05** | **12** | P | P | **Pn** | 05 21 42.7 | +0.4 |
| **SPCR** | **Spurr Chakacha** | **1.07** | **15** | P | P | **Pn** | 05 21 42.8 | +0.3 |
| SPCR | | | | S | S | **Sn** | 05 22 00.6 | +1.3 |
| **CKN** | **Chakachatna No** | **1.09** | **16** | P | P | **Pn** | 05 21 43.3 | +0.6 |
| **SPBG** | **Spurr Blockage** | **1.11** | **11** | P | P | **Pn** | 05 21 43.5 | +0.6 |
| SPBG | | | | S | S | **Sn** | 05 22 00.3 | +0.2 |
| **BGL** | **Barrier Glacie** | **1.11** | **10** | P | P | **Pn** | 05 21 43.5 | +0.6 |
| **SPCG** | **Spurr Capps Gl** | **1.18** | **18** | P | P | **Pn** | 05 21 44.2 | +0.5 |
| **MCNL** | **McNeil River** | **1.27** | **219** | P | P | **Pn** | 05 21 44.5 | -0.1 |
| **SLKM** | **Skilak Lake** | **1.32** | **74** | P | P | **Pn** | 05 21 45.5 | +0.3 |
| **CDD** | **Cape Douglas** | **1.32** | **200** | P | P | **Pn** | 05 21 45.1 | -0.2 |
| **STLK** | **Strandline Lak** | **1.41** | **19** | P | P | **Pn** | 05 21 46.8 | +0.5 |
| **FOSS** | **Fourpeaked Sta** | **1.46** | **199** | P | P | **Pn** | 05 21 46.9 | +0.1 |
| **FOPK** | **Fourpeaked Vol** | **1.47** | **194** | P | P | **Pn** | 05 21 46.5 | -0.3 |
| **FIB** | **Fire Island** | **1.63** | **51** | P | P | **Pn** | 05 21 50.7 | +2.0 |
| **SUA** | **Susitna One** | **1.64** | **37** | P | P | **Pn** | 05 21 49.9 | +0.9 |
| **SVW2** | **Sparrevohn** | **1.66** | **305** | P | P | **Pn** | 05 21 48.4 | -0.8 |
| **SEW** | **Seward** | **1.67** | **91** | P | P | **Pn** | 05 21 50.3 | +1.0 |
| **RC01** | **Rabbit Creek A** | **1.76** | **57** | P | P | **Pn** | 05 21 50.7 | +0.3 |
| **KAPH** | **Katmai Pasha** | **1.77** | **207** | P | P | **Pn** | 05 21 51.0 | +0.4 |
| **KAHC** | **Katmai Hardscr** | **1.91** | **217** | P | P | **Pn** | 05 21 52.3 | 0.0 |
| **KAHG** | **Katmai Hook Gl** | **1.91** | **209** | P | P | **Pn** | 05 21 52.8 | +0.4 |
| **SKT** | **Skwentna** | **1.91** | **18** | P | P | **Pn** | 05 21 52.8 | +0.5 |
| **PTE** | **Portage** | **1.99** | **68** | P | P | **Pn** | 05 21 53.5 | +0.3 |
| **KAKN** | **Katmai Knife C** | **2.22** | **213** | P | P | **Pn** | 05 21 56.4 | +0.2 |
| **PMR** | **Palmer** | **2.29** | **50** | P | P | **Pn** | 05 21 56.9 | 0.0 |
| **KELA** | **Mount Kelaz** | **2.31** | **222** | P | P | **Pn** | 05 21 57.3 | -0.1 |
| **PWL** | **Port Wells** | **2.31** | **71** | P | P | **Pn** | 05 21 57.2 | -0.1 |
| **KABR** | **Katmai Barrier** | **2.34** | **210** | P | P | **Pn** | 05 21 58.0 | +0.2 |
| **KDAK** | **Kodiak Island** | **2

**IDC 26 05:33:52.7±4.5, 3°20S×101°02E, h0km, mb3.2/4, mb1 3.3/4, mb1mx3.2/43, mbtmp3.2/4, Error ellipse: s-maj=187.8km s-min=27.6km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** baz=78 | **28.73** | **260** | T | T | 06 09 09.2 | |
| **H08S3** | **Diego Garcia H** baz=78 | **28.74** | **260** | T | T | 06 09 09.2 | |
| **H08S1** | **Diego Garcia H** baz=78 | **28.75** | **260** | T | T | 06 09 09.2 | |
| **H01W3** | **Cape Leeuwin H** baz=336,slow=76,SNR=7.1 | **33.80** | **160** | T | T | 06 16 18.7 | |
| **H01W2** | **Cape Leeuwin H** baz=336,slow=76,SNR=9.0 | **33.82** | **160** | T | T | 06 16 14.8 | |
| **H01W1** | **Cape Leeuwin H** baz=336,slow=76,SNR=6.3 | **33.82** | **160** | T | T | 06 16 15.3 | |
| **WRA** | **Warramunga Arr** 0.1nm,0.6s,baz=295,slow=8.7,SNR=3.1 | **36.52** | **120** | P | P | 05 40 59.7 | -0.5 |
| **ASAR** | **Alice Springs** 0.2nm,0.6s,baz=306,slow=7.9,SNR=3.3 | **37.73** | **126** | P | P | 05 41 11.0 | +0.4 |
| **SONM** | **Songino Array** 0.2nm,0.5s,baz=192,slow=8.2,SNR=1.6 | **51.04** | **5** | P | P | 05 42 57.4 | +0.7 |
| **MKAR** | **Makanchi Array** 0.1nm,0.3s,baz=141,slow=9.3,SNR=1.1 | **52.45** | **344** | P | P | 05 43 06.7 | -0.5 |
| **TXAR** | **Lajitas Array** 0.2nm,0.7s,baz=335,slow=4.0,SNR=2.4 | **145.00** | **39** | PKPbc | PKPab | 05 53 30.6 | -1.5 |

**IDC 26 05:36:04.1±3.7, 3°32S×99°13E, h0km, mb3.9/4, mb1 4.1/4, mb1mx3.6/40, mbtmp4.0/4, MS3.3/1, Ms1 3.3/1, ms1mx2.4/45, Error ellipse: s-maj=122.5km s-min=66.0km az=69.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** 2.8nm,0.7s,baz=189,slow=10,SNR=15 | **21.64** | **360** | P | P | 05 40 56.8 | +0.6 |
| **H08S2** | **Diego Garcia H** baz=81,slow=75 | **26.86** | **260** | T | T | 06 11 07.4 | |
| **H08S3** | **Diego Garcia H** baz=81,slow=75,SNR=20 | **26.86** | **260** | T | T | 06 11 08.9 | |
| **H08S1** | **Diego Garcia H** baz=81,slow=75,SNR=1.7 | **26.88** | **260** | T | T | 06 11 07.7 | |
| **SIJI** | **Sorong** comp=Z,48nm,18.4s,baz=320,slow=38 | **32.20** | **86** | LR | LR | 05 56 34.2 | |
| **H01W3** | **Cape Leeuwin H** baz=335,slow=76,SNR=4.6 | **34.36** | **158** | T | T | 06 19 25.9 | |
| **H01W2** | **Cape Leeuwin H** baz=335,slow=76,SNR=4.6 | **34.38** | **158** | T | T | 06 19 27.0 | |
| **H01W1** | **Cape Leeuwin H** baz=335,slow=76,SNR=3.0 | **34.38** | **158** | T | T | 06 19 27.5 | |
| **SONM** | **Songino Array** 1.1nm,0.8s,baz=188,slow=9.0,SNR=5.4 | **51.33** | **6** | P | P | 05 45 10.0 | -0.4 |
| **MKAR** | **Makanchi Array** 1.3nm,0.7s,baz=152,slow=8.1,SNR=6.1 | **52.06** | **345** | P | P | 05 45 15.6 | -0.1 |
| **ZALV** | **Zalesovo Beam** 1.4nm,0.4s,baz=191,slow=4.4,SNR=6.7 | **58.30** | **350** | P | P | 05 46 00.2 | -0.4 |
| **TXAR** | **Lajitas Array** 0.3nm,0.7s,baz=288,slow=0.9,SNR=3.5 | **146.27** | **38** | PKPbc | PKPbc | 05 55 47.0 | -0.5 |

*AUST **26** 05:39:05.7±99.0, 5°12S×134°45E, h0km, Error ellipse: s-maj=2.1km s-min=1.0km az=287.0*
*IDC **26** 05:39:09.8±2.4, 5°47S×133°12E, h0km, mb4.0/1, mb1 3.9/4, mb1mx3.6/25, mbtmp3.8/4, ML3.5/3, MS3.8/1, Ms1 3.8/1, ms1mx2.5/28, Error ellipse: s-maj=172.6km s-min=26.1km az=74.0*
**ISC 26 05:39:10.8±1.5, 5°55S±0°2×132°8E±0°8, h10km, n11, σ2§06/7, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** baz=3.1,SNR=21 | **2.63** | **348** | P | **Pn** | **05 39 54.5** | **+1.1** |
| **SIJI** | **Sorong** 4.4nm,0.3s,baz=253,slow=22,SNR=12 | **4.86** | **342** | Pn | **Pn** | **05 40 24.9** | **+0.9** |
| SIJI | | | | Sn | **Sn** | **05 41 17.4** | **-3.0** |
| | 2.0nm,0.3s,baz=117,slow=6.8,SNR=2.5 | | | | | | |
| **SWI** | **Sorong** baz=5.3,SNR=3.3 | **4.86** | **342** | P | Pn | 05 40 28.9 | +4.7 |
| **KDU** | **Kakadu** baz=7.8,SNR=8.3 | **7.14** | **183** | P | Pn | 05 41 01.4 | +6.0 |
| **MTN** | **Manton Dam** baz=8.4,SNR=19 | **7.47** | **193** | P | Pn | 05 41 08.4 | +8.5 |
| **KNRA** | **Kununurra** baz=12,SNR=3.4 | **10.85** | **201** | P | Pn | 05 41 55.7 | +9.3 |
| **WRA** | **Warramunga Arr** 0.2nm,0.3s,baz=353,slow=14,SNR=9.5 | **14.43** | **174** | Pn | **Pn** | **05 42 34.5** | **-0.8** |
| WRA | | | | Sn | Sn | 05 45 08.4 | -7.0 |
| | 0.2nm,0.3s,baz=360,slow=22,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** 0.1nm,0.3s,baz=5.2,slow=11,SNR=6.1 | **18.08** | **177** | P | **P** | **05 43 23.2** | **+0.5** |
| ASAR | | | | S | Sn | 05 46 36.5 | -7.8 |
| | 0.1nm,0.3s,baz=2.0,slow=29,SNR=2.3 | | | | | | |
| **AFI** | **Afiamalu** comp=Z,95nm,21.2s,baz=211,slow=34 | **55.16** | **103** | LR | LR | 06 10 05.9 | |
| **MKAR** | **Makanchi Array** 0.8nm,0.6s,baz=131,slow=7.9,SNR=5.5 | **68.55** | **325** | P | **P** | **05 50 15.5** | **+1.7** |
| **CPUP** | **Villa Florida** 0.9nm,0.7s,baz=194,slow=2.9,SNR=3.2 | **146.86** | **163** | PKPbc | **PKPab** | **05 58 54.0** | **-1.4** |

**TAP 26 05:46:46.6, 22°45N×120°62E, h18km, ML3.5, 1C, A, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCZT** | **Fangliau** baz=171 | **0.08** | **177** | ⇑P | Pg | 05 46 50.2 | +0.2 |
| SCZT | | | | *e*S | Sg | 05 46 53.3 | +1.0 |
| | baz=171 | | | | | | |
| **EAST** | **Anshuo** baz=107 | **0.23** | **107** | *e*P | Pb | 05 46 52.7 | +0.6 |
| EAST | | | | *e*S | Sb | 05 46 57.1 | +1.2 |
| | baz=107 | | | | | | |
| **TWP** | **Hsiaoliuchiu** baz=245 | **0.26** | **246** | *e*P | Pb | 05 46 53.4 | +0.8 |
| **TAW** | **Tawu** baz=109 | **0.28** | **110** | *e*P | Pb | 05 46 53.4 | +0.4 |
| TAW | | | | *e*S | Sb | 05 46 58.4 | +1.1 |
| | baz=109 | | | | | | |
| **SSD** | **Sandimen** baz=4.0 | **0.29** | **3** | *e*P | Pb | 05 46 53.5 | +0.1 |
| SSD | | | | *e*S | Sb | 05 46 58.9 | +0.9 |
| | baz=4.0 | | | | | | |
| **SGLT** | **Jiouru** baz=338 | **0.30** | **337** | *e*P | Pb | 05 46 54.1 | +0.7 |
| **KAU** | **Kaohsiung** baz=292 | **0.31** | **292** | *e*P | Pb | 05 46 53.7 | +0.2 |
| **ECL** | **Taimali** baz=65 | **0.34** | **65** | *e*P | Pb | 05 46 54.6 | +0.3 |
| ECL | | | | *e*S | Sb | 05 47 00.7 | +1.3 |
| | baz=65 | | | | | | |
| **TWM1** | **Shoushan** baz=335 | **0.41** | **334** | *e*P | Pb | 05 46 56.3 | +0.9 |
| **HEN** | **Hengchun** baz=164 | **0.46** | **166** | *e*P | Pb | 05 46 56.5 | +0.3 |
| HEN | | | | *e*S | Sb | 05 47 03.7 | +1.1 |
| | baz=164 | | | | | | |
| **TWK1** | **Hengchun** baz=160 | **0.54** | **161** | *e*P | Pb | 05 46 57.5 | 0.0 |
| TWK1 | | | | *e*S | Sb | 05 47 06.2 | +1.4 |
| | baz=160 | | | | | | |
| **TWG** | **Pinlang** baz=49 | **0.56** | **49** | *e*P | Pb | 05 46 58.3 | +0.4 |
| TWG | | | | *e*S | Sb | 05 47 06.5 | +0.9 |
| | baz=49 | | | | | | |
| **TSEB** | **Hengchuen, Pin** baz=157 | **0.61** | **154** | *e*S | Sb | 05 47 08.1 | +1.2 |
| **SGST** | **Jiashian** baz=357 | **0.63** | **357** | *e*P | Pb | 05 46 59.5 | +0.5 |
| SGST | | | | *e*S | Sn | 05 47 09.9 | -0.4 |
| | baz=357 | | | | | | |
| **CHN3** | **Shinhua** baz=339 | **0.66** | **340** | *e*S | Sn | 05 47 10.7 | -0.4 |
| **TAI1** | **Yung-k'ang** baz=329 | **0.69** | **329** | *e*P | Pn | 05 47 01.1 | -0.3 |
| TAI1 | | | | *e*S | Sn | 05 47 11.4 | -0.2 |
| | baz=329 | | | | | | |
| **STYT** | **Tauyuan** baz=11 | **0.72** | **10** | *e*P | Pn | 05 47 01.4 | -0.6 |
| STYT | | | | *e*S | Sn | 05 47 12.5 | -0.1 |
| | baz=11 | | | | | | |
| **CHN1** | **Nanshi** baz=353 | **0.73** | **354** | *e*P | Pg | 05 47 01.5 | +0.4 |
| CHN1 | | | | *e*S | Sn | 05 47 12.9 | 0.0 |
| | baz=353 | | | | | | |
| **WTP** | **Ta-pu** | **0.79** | **360** | *e*P | Pg | 05 47 02.2 | 0.0 |
| WTP | | | | *e*S | Sn | 05 47 14.1 | -0.3 |
| **SCLT** | **Jiali** baz=332 | **0.82** | **332** | *e*S | Sn | 05 47 15.0 | +0.1 |
| **TWK** | **Hsinying** baz=352 | **0.82** | **352** | *e*P | Pn | 05 47 03.4 | 0.0 |
| TWK | | | | *e*S | Sn | 05 47 14.6 | -0.5 |
| | baz=352 | | | | | | |
| **ELDTW** | **Lidau** baz=27 | **0.82** | **27** | *e*P | Pg | 05 47 02.9 | +0.1 |
| ELDTW | | | | *e*S | Sn | 05 47 15.0 | -0.3 |
| | baz=27 | | | | | | |
| **CHN4** | **Tsaushan** baz=358 | **0.90** | **359** | *e*P | Pb | 05 47 03.6 | -0.1 |
| CHN4 | | | | *e*S | Sn | 05 47 16.6 | -0.2 |
| | baz=358 | | | | | | |
| **CHY** | **Chiayi** baz=350 | **1.06** | **350** | *e*P | Pb | 05 47 06.0 | -0.4 |
| CHY | | | | *e*S | Sg | 05 47 21.1 | +0.1 |
| | baz=350 | | | | | | |
| **ALS** | **Alishan** baz=9.0 | **1.07** | **9** | *e*P | Pb | 05 47 06.6 | -0.4 |
| ALS | | | | *e*S | Sg | 05 47 22.2 | +0.2 |
| | baz=9.0 | | | | | | |
| **YUS** | **Yu-Shan** baz=17 | **1.08** | **17** | *e*P | Pb | 05 47 07.1 | -0.3 |
| YUS | | | | *e*S | Sg | 05 47 22.7 | -0.1 |
| | baz=17 | | | | | | |
| **CHN2** | **Minshiung** baz=353 | **1.08** | **353** | *e*S | Sn | 05 47 21.2 | -0.3 |
| **TWF1** | **Yuli** baz=35 | **1.09** | **35** | *e*P | Pn | 05 47 07.2 | +0.1 |
| TWF1 | | | | *e*S | Sg | 05 47 22.7 | +0.4 |
| | baz=35 | | | | | | |
| **CHN5** | **Tsauling** baz=2.0 | **1.14** | **3** | *e*S | Sn | 05 47 23.2 | 0.0 |
| **WGK** | **Gukeng** baz=358 | **1.23** | **358** | *e*S | Sb | 05 47 24.6 | -0.3 |
| **EHY** | **Hungye** baz=32 | **1.24** | **32** | *e*P | Pb | 05 47 09.3 | -0.1 |
| EHY | | | | *e*S | Sg | 05 47 26.5 | -0.2 |
| | baz=32 | | | | | | |
| **WSF** | **Szhu** baz=343 | **1.24** | **343** | *e*S | Sb | 05 47 24.4 | -0.6 |
| **WDT** | **Danda** baz=20 | **1.38** | **20** | *e*P | Pn | 05 47 10.7 | -0.8 |
| WDT | | | | *e*S | Sn | 05 47 29.8 | +0.2 |
| | baz=20 | | | | | | |
| **SMLT** | **Sun Moon Lake** baz=10.0 | **1.45** | **10** | *e*P | Pn | 05 47 11.8 | -0.3 |
| SMLT | | | | *e*S | Sb | 05 47 31.2 | -0.2 |
| | baz=10.0 | | | | | | |
| **TYC** | **Yuchr** baz=9.0 | **1.46** | **9** | *e*P | Pn | 05 47 12.0 | -0.1 |
| TYC | | | | *e*S | Sb | 05 47 32.0 | +0.4 |
| | baz=9.0 | | | | | | |
| **ESL** | **Shilin** baz=29 | **1.55** | **29** | *e*S | Sb | 05 47 34.1 | -0.1 |
| **WHF** | **Hehuan Shan** baz=19 | **1.79** | **19** | *e*P | Pn | 05 47 17.1 | -0.1 |
| WHF | | | | *e*S | Sn | 05 47 38.7 | -1.2 |
| | baz=19 | | | | | | |
| **TWQ1** | **Liyutan** baz=4.0 | **1.89** | **4** | *e*P | Pn | 05 47 17.9 | -0.2 |
| TWQ1 | | | | *e*S | Sn | 05 47 41.3 | -0.2 |
| | baz=4.0 | | | | | | |
| **NNS** | **Nan Shan** baz=19 | **2.10** | **19** | *e*P | Pn | 05 47 21.5 | +0.4 |
| NNS | | | | *e*S | Sn | 05 47 45.3 | -1.6 |
| | baz=19 | | | | | | |
| **NSK** | **Sanguang** baz=17 | **2.32** | **17** | *e*S | Sn | 05 47 52.2 | +0.1 |
| **ENTT** | **Nioudou** baz=22 | **2.35** | **22** | *e*P | Pn | 05 47 26.2 | +1.9 |
| ENTT | | | | *e*S | Sn | 05 47 52.8 | 0.0 |
| | baz=22 | | | | | | |

**IDC 26 05:57:06.3±5.3, 5°22S×133°68E, h0km, mb3.7/1, mb1 3.6/4, mb1mx3.4/38, mbtmp3.4/4, ML2.9/3, MS2.5/1, Ms1 2.5/1, ms1mx2.2/24, Error ellipse: s-maj=289.5km s-min=27.4km az=76.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** 0.8nm,0.3s,baz=127,slow=20,SNR=1.5 | **4.95** | **331** | Pn | Pn | 05 58 21.1 | -0.8 |
| **PMG** | **Port Moresby** comp=Z,20nm,21.4s,baz=237,slow=41 | **14.00** | **108** | LR | LR | 06 06 37.2 | |
| **WRA** | **Warramunga Arr** 0.1nm,0.3s,baz=356,slow=12,SNR=3.8 | **14.65** | **178** | Pn | Pn | 06 00 33.0 | -2.1 |
| WRA | | | | Sn | Sn | 06 03 12.6 | -5.7 |
| | 0.1nm,0.3s,baz=6.6,slow=23,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** 0.0nm,0.3s,baz=4.9,slow=11,SNR=7.2 | **18.34** | **179** | P | P | 06 01 22.9 | +0.4 |
| ASAR | | | | S | Sn | 06 04 41.4 | -6.7 |
| | baz=2.2,slow=27,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** 0.5nm,0.5s,baz=104,slow=8.0,SNR=3.3 | **68.82** | **325** | P | P | 06 08 12.8 | +0.2 |

*ISCJB **26** 06:07:27.6±0.6, 0°28S±0°06×82°5E±0°1, h10km, mb4.1/12, MS3.1/3, Error ellipse: s-maj=17.4km s-min=6.2km az=160.7*
*IDC **26** 06:07:28.2±0.7, 0°36S×82°48E, h0km, mb4.0/11, mb1 4.1/11, mb1mx3.9/46, mbtmp4.0/11, ML5.6/1, MS3.2/4, Ms1 3.2/4, ms1mx2.8/30, Error ellipse: s-maj=21.1km s-min=18.2km az=60.0*
*NEIC **26** 06:07:29.7±0.5, 0°32S×82°43E, h10km, mb4.5/1, Error ellipse: s-maj=16.0km s-min=12.0km az=62.0*
**ISC 26 06:07:29.9±0.7, 0°23S±0°07×82°5E±0°1, h10km, n32, σ1§32/44, mb4.2/12, MS3.1/3, South Indian Ocean**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALK** | **Pallekele** 76nm,0.3s,baz=116,slow=9.9,SNR=180 | **7.67** | **346** | Pn | **Pn** | **06 09 21.1** | **-0.7** |
| PALK | | | | Sn | Sn | 06 10 41.2 | -7.6 |
| | 28nm,0.3s,baz=114,slow=20,SNR=4.8 | | | | | | |
| PALK | | | | LR | LR | 06 12 12.2 | |
| | comp=Z,153nm,19.8s,baz=116,slow=36 | | | | | | |
| **PALK** | **Pallekele** | **7.67** | **346** | *e*Pn | **Pn** | **06 09 20.9** | **-0.9** |
| PALK | | | | *e*Sn | Sn | 06 10 40.7 | -8.1 |
| **SKHT** | **Srikalahasti** | **14.15** | **349** | *e*Pn | **Pn** | **06 10 49.5** | **-1.1** |
| SKHT | | | | IAmb | IAmb | 06 10 51.9 | |
| | comp=Z,87nm,0.4s | | | | | | |
| SKHT | | | | *e* | | 06 13 17.8 | |
| SKHT | | | | *e*Sn | **Sn** | **06 13 30.7** | **+2.8** |
| **URV** | **Uravakonda** | **15.95** | **341** | *e*Pn | **Pn** | **06 11 12.3** | **-2.3** |
| URV | | | | IAmb | IAmb | 06 11 15.0 | |
| | comp=Z,21nm,0.3s | | | | | | |
| URV | | | | *e* | | 06 14 02.8 | |
| URV | | | | *e*Sn | **Sn** | **06 14 12.8** | **+1.1** |
| **RCLA** | **Racherla** | **15.98** | **347** | *e*Pn | **Pn** | **06 11 13.8** | **-1.1** |
| RCLA | | | | IAmb | IAmb | 06 11 16.2 | |
| | comp=Z,18nm,0.7s | | | | | | |
| RCLA | | | | *e* | | 06 14 03.3 | |
| RCLA | | | | *e*Sn | **Sn** | **06 14 12.2** | **-0.1** |
| **ADKI** | **Addanki** | **16.17** | **351** | *e*Pn | **Pn** | **06 11 16.1** | **-1.2** |
| ADKI | | | | IAmb | IAmb | 06 11 19.9 | |
| | comp=Z,85nm,0.8s | | | | | | |
| ADKI | | | | *e* | | 06 14 04.2 | |
| ADKI | | | | *e*Sn | **Sn** | **06 14 14.7** | **-2.2** |
| **SRLM** | **Srisailam** | **16.61** | **348** | *e*Pn | **Pn** | **06 11 22.2** | **-1.0** |
| SRLM | | | | IAmb | IAmb | 06 11 23.7 | |
| | comp=Z,64nm,0.5s | | | | | | |
| SRLM | | | | *e* | | 06 14 18.2 | |
| SRLM | | | | *e*Sn | **Sn** | **06 14 29.8** | **+1.9** |
| **NJS** | **Nagarjunasagar** | **16.98** | **349** | *e*Pn | **Pn** | **06 11 27.5** | **-0.1** |
| NJS | | | | IAmb | IAmb | 06 11 31.0 | |
| | comp=Z,32nm,0.7s | | | | | | |
| NJS | | | | *e*Sn | **Sn** | **06 14 38.3** | **+1.8** |
| **PVM** | **Polavaram** | **17.39** | **357** | *e*Pn | **Pn** | **06 11 29.9** | **-2.9** |
| PVM | | | | IAmb | IAmb | 06 11 31.9 | |
| | comp=Z,26nm,0.6s | | | | | | |
| PVM | | | | *e* | | 06 14 25.7 | |
| **HYBB** | **Hyderabad (bro** | **17.97** | **348** | *e*Pn | **P** | **06 11 40.3** | **-0.3** |
| HYBB | | | | IAmb | IAmb | 06 11 44.6 | |
| | comp=Z,15nm,0.7s | | | | | | |
| HYBB | | | | *e*Sn | **S** | **06 15 05.6** | **-1.3** |
| **CHLP** | **Challavanipeta** | **18.68** | **5** | *e*Pn | **P** | **06 11 46.1** | **-2.2** |
| CHLP | | | | IAmb | IAmb | 06 11 47.4 | |
| | comp=Z,27nm,1.1s | | | | | | |
| CHLP | | | | *e* | | 06 14 58.2 | |
| CHLP | | | | *e*Sn | **S** | **06 15 19.9** | **-1.3** |
| **KLRI** | **Killari** | **19.09** | **343** | *e*Pn | **Pn** | **06 11 54.8** | **+1.0** |
| KLRI | | | | IAmb | IAmb | 06 11 57.6 | |
| | comp=Z,12nm,0.5s | | | | | | |
| KLRI | | | | *e*Sn | **S** | **06 15 29.4** | **-0.4** |
| **RPR** | **Rampur** | **19.23** | **351** | *e*Pn | **P** | **06 11 52.3** | **-2.1** |
| RPR | | | | IAmb | IAmb | 06 11 59.7 | |
| | comp=Z,23nm,0.8s | | | | | | |
| RPR | | | | *e*Sn | **Sn** | **06 15 31.5** | **+0.4** |
| **SRSP** | **Sriramsagar** | **19.47** | **348** | *e*Pn | **Pn** | **06 11 59.4** | **+1.0** |
| SRSP | | | | IAmb | IAmb | 06 12 01.8 | |
| | comp=Z,32nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** comp=Z,4.1nm,0.6s,baz=236,slow=10,SNR=21 | **24.60** | **40** | P | **P** | **06 12 52.6** | **+2.1** |
| CMAR | | | | LR | LR | 06 22 47.0 | |
| | comp=Z,52nm,18.3s,baz=182,slow=37 | | | | | | |
| **GEYT** | **Alibeck** comp=Z,34nm,19.5s,baz=350,slow=37 | **44.14** | **332** | LR | LR | 06 34 27.1 | |
| **MKAR** | **Makanchi Array** comp=Z,1.4nm,0.7s,baz=189,slow=6.9,SNR=7.8 | **46.83** | **360** | P | **P** | **06 16 01.5** | **+1.5** |
| **SONM** | **Songino Array** comp=Z,1.3nm,0.7s,baz=204,slow=7.1,SNR=7.0 | **52.18** | **20** | P | **P** | **06 16 42.3** | **+1.4** |
| SONM | | | | LR | LR | 06 39 23.7 | |
| | comp=Z,14nm,20.9s,baz=168,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** comp=Z,1.2nm,0.4s,baz=193,slow=5.6,SNR=4.0 | **54.02** | **2** | P | **P** | **06 16 55.0** | **+0.7** |
| **WRA** | **Warramunga Arr** comp=Z,2.6nm,0.8s,baz=296,slow=6.9,SNR=30 | **54.35** | **114** | P | **P** | **06 16 57.0** | **-0.3** |
| WRA | | | | PcP | **PcP** | **06 18 00.0** | **-1.2** |
| | comp=Z,0.4nm,0.6s,baz=307,slow=2.4,SNR=3.6 | | | | | | |
| **WRAB** | **Tennant Creek** comp=Z,2.2nm,0.4s | **54.35** | **114** | *e*P | **P** | **06 16 57.0** | **-0.3** |
| **ASAR** | **Alice Springs** comp=Z,1.3nm,0.8s,baz=294,slow=7.3,SNR=13 | **54.98** | **119** | P | **P** | **06 17 01.4** | **-0.4** |
| ASAR | | | | PcP | **PcP** | **06 18 02.7** | **-0.9** |
| | comp=Z,0.5nm,0.8s,baz=314,slow=4.8,SNR=3.4 | | | | | | |
| **MATP** | **Matopo** comp=Z,3.4nm,1.0s,baz=37,slow=5.1,SNR=3.1 | **56.47** | **246** | P | **P** | **06 17 12.7** | **0.0** |
| **USRK** | **Ussuriysk Ar.** comp=Z,2.1nm,0.7s,baz=174,slow=19,SNR=3.1 | **52.31** | **38** | P | **P** | **06 17 52.4** | **-0.1** |
| **AKASG** | **Malin Array Be** comp=Z,0.3nm,0.3s,baz=107,slow=5.1,SNR=4.4 | **67.85** | **327** | P | **P** | **06 18 28.2** | **-0.1** |
| **FINES** | **FINESS Array B** comp=Z,1.2nm,0.8s,baz=125,slow=5.6,SNR=4.9 | **74.80** | **335** | P | **P** | **06 19 10.1** | **-0.1** |
| **TORD** | **Torodi Ar. Bea** comp=Z,0.9nm,1.0s,baz=112,slow=5.2,SNR=4.9 | **81.12** | **283** | P | **P** | **06 19 46.0** | **-0.3** |
| **NVAR** | **Mina Array Bea** comp=Z,3.3nm,0.6s,baz=270,slow=0.9,SNR=3.0 | **137.44** | **24** | PKP | **PKPdf** | **06 26 56.3** | **+1.6** |
| **ANMO** | **Albuquerque** | **144.46** | **13** | *e*PKPdf | PKPbc | 06 27 05.9 | +0.1 |
| **W34A** | **Bridge Creek,** | **145.17** | **0** | *e*PKPdf | **PKPdf** | **06 27 08.2** | **-0.2** |
| **LPAZ** | **La Paz** comp=Z,0.8nm,0.7s,baz=161,slow=0.4,SNR=3.6 | **146.72** | **239** | PKPbc | **PKPdf** | **06 27 12.8** | **+0.5** |
| **TXAR** | **Lajitas Array** comp=Z,0.2nm,0.8s,baz=51,slow=2.9,SNR=2.7 | **150.46** | **11** | PKP | **PKPdf** | **06 27 17.2** | **-0.2** |
| TXAR | | | | PKPbc | **PKPbc** | **06 27 22.7** | **0.0** |
| | comp=Z,1.8nm,0.7s,baz=348,slow=0.5,SNR=24 | | | | | | |
| TXAR | | | | PKPab | **PKPab** | **06 27 29.1** | **+0.1** |
| | comp=Z,0.7nm,0.7s,baz=338,slow=1.0,SNR=6.0 | | | | | | |

**IDC 26 06:09:55.2±3.4, 3°47S×99°26E, h0km, mb4.1/5, mb1 4.1/5, mb1mx3.7/42, mbtmp4.1/5, MS3.2/2, Ms1 3.2/2, ms1mx2.6/34, Error ellipse: s-maj=95.6km s-min=57.2km az=60.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** comp=Z,39nm,18.7s,baz=278,slow=40 | **20.49** | **95** | LR | LR | 06 23 42.0 | |
| **CMAR** | **Chiang Mai Arr** 1.8nm,0.6s,baz=189,slow=10,SNR=12 | **21.80** | **359** | P | P | 06 14 49.5 | +0.4 |
| **H08S2** | **Diego Garcia H** baz=82,slow=75,SNR=25 | **26.95** | **260** | T | T | 06 45 00.8 | |
| **H08S3** | **Diego Garcia H** baz=82,slow=75,SNR=18 | **26.96** | **260** | T | T | 06 45 01.9 | |
| **H08S1** | **Diego Carcia H** baz=82,slow=75,SNR=22 | **26.97** | **260** | T | T | 06 45 01.4 | |
| **H01W3** | **Cape Leeuwin H** baz=336,slow=76,SNR=5.2 | **34.17** | **158** | T | T | 06 52 55.9 | |
| **H01W2** | **Cape Leeuwin H** baz=336,slow=76,SNR=5.4 | **34.18** | **158** | T | T | 06 52 57.0 | |
| **H01W1** | **Cape Leeuwin H** baz=336,slow=76,SNR=4.5 | **34.18** | **158** | T | T | 06 52 57.0 | |
| **SONM** | **Songino Array** 1.1nm,0.7s,baz=191,slow=6.8,SNR=5.4 | **51.48** | **6** | P | P | 06 19 02.5 | 0.0 |
| **MKAR** | **Makanchi Array** 0.7nm,0.6s,baz=147,slow=9.0,SNR=5.1 | **52.25** | **345** | P | P | 06 19 08.6 | +0.4 |
| **TLY** | **Talaya** comp=Z,32nm,19.7s,baz=136,slow=39 | **55.07** | **3** | LR | LR | 06 45 54.3 | |
| **USRK** | **Ussuriysk Ar.** 1.0nm,0.6s,baz=11,slow=1.9,SNR=4.1 | **55.80** | **28** | P | P | 06 19 33.8 | -0.4 |
| **ZALV** | **Zalesovo Beam** 2.5nm,0.3s,baz=150,slow=6.1,SNR=4.6 | **58.48** | **350** | P | P | 06 19 52.1 | -0.8 |
| **TXAR** | **Lajitas Array** 1.0nm,0.7s,baz=297,slow=1.4,SNR=10 | **146.31** | **38** | PKPbc | PKPbc | 06 29 38.2 | -0.5 |

*SJA **26** 06:35:54.2±1.0, 27°07S×71°09W, h13km±29km, ML3.7*
*ISCJB **26** 06:36:03.2±0.7, 27°43S±0°03×70°77W±0°09, h54km, mb3.6/3, Error ellipse: s-maj=11.4km s-min=4.7km az=178.7*
*IDC **26** 06:36:05.3±2.7, 27°48S×70°51W, h56km±22km, mb3.4/3, mb1 3.7/6, mb1mx3.5/19, mbtmp3.7/6, ML3.8/3, MS2.7/4, Ms1 2.7/4, ms1mx2.6/10, Error ellipse: s-maj=42.0km s-min=11.4km az=83.0*
**ISC 26 06:36:04.9±0.8, 27°41S±0°05×70°71W±0°09, h54km, n31, σ1§63/37, mb3.6/3, 9D, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LCO** | **Las Campanas** | **1.60** | **180** | *i* P | **Pn** | **06 36 29.6** | **-1.4** |
| LCO | | | | *i* S | **Sn** | **06 36 56.4** | **+5.6** |
| **VCA** | **Vinchina** | **2.58** | **122** | *i* P | **Pn** | **06 36 45.6** | **+1.3** |
| VCA | | | | *e*P | **Pn** | **06 36 45.9** | **+1.6** |
| VCA | | | | *i* S | Sn | 06 37 24.8 | +10 |
| **AGUA** | **GUANDACOL** | **2.84** | **137** | *i* P | **Pn** | **06 36 49.5** | **+1.5** |
| AGUA | | | | *i* S | Sn | 06 37 29.1 | +8.1 |
| **AMOG** | **MOGNA** | **4.01** | **152** | ⇓P | **Pn** | **06 37 04.5** | **+0.5** |
| **AVFE** | **Valle Fertil** | **4.31** | **139** | *e*P | **Pn** | **06 37 08.3** | **+0.2** |
| **RTLL** | **Cerro Villicun** | **4.37** | **154** | *e*P | **Pn** | **06 37 09.2** | **+0.4** |
| **CYA** | **Choya** | **4.46** | **104** | *i* P | **Pn** | **06 37 10.4** | **+0.4** |
| CYA | | | | AML | AML | 06 38 06.8 | |
| | comp=Z,60nm,0.7s | | | | | | |
| **RTLS** | **Leoncito** | **4.54** | **165** | *e*P | **Pn** | **06 37 12.7** | **+1.3** |
| **CFAA** | **Coronel Fontan** comp=Z,1.1nm,0.3s,baz=329,slow=13,SNR=93 | **4.70** | **153** | P | **Pn** | **06 37 13.7** | **+0.3** |
| CFAA | | | | S | **Sn** | **06 38 04.0** | **-2.6** |
| | comp=Z,3.5nm,0.3s,baz=236,slow=18,SNR=10 | | | | | | |
| CFAA | | | | LR | LR | 06 39 14.0 | |
| | comp=Z,11nm,18.8s,baz=336,slow=41 | | | | | | |
| **CFAA** | **Coronel Fontan** | **4.70** | **153** | ⇓*e*P | **Pn** | **06 37 13.7** | **+0.3** |
| **RTCV** | **Cerro Valdivia** | **4.82** | **158** | *e*P | **Pn** | **06 37 15.8** | **+0.8** |
| RTCV | | | | *e*S | **Sn** | **06 38 10.1** | **+0.5** |
| **AHML** | **Horco Molle** | **4.83** | **84** | *i* P | **Pn** | **06 37 14.9** | **-0.2** |
| AHML | | | | ⇓*e*P | **Pn** | **06 37 16.9** | **+1.8** |
| **AUSP** | **Uspallata** | **4.93** | **167** | ⇓*e*P | **Pn** | **06 37 19.1** | **+2.3** |
| **LVC** | **Limon Verde** comp=Z,435nm,0.3s,baz=157,slow=9.6,SNR=110 | **5.04** | **19** | P | **Pn** | **06 37 18.5** | **+0.3** |
| LVC | | | | S | **Sn** | **06 38 18.0** | **+2.6** |
| | comp=Z,652nm,0.3s,baz=298,slow=8.8,SNR=3.4 | | | | | | |
| LVC | | | | LR | LR | 06 39 27.5 | |
| | comp=Z,395nm,21.9s,baz=205,slow=40 | | | | | | |
| **LVC** | **Limon Verde** | **5.04** | **19** | ⇓*e*P | **Pn** | **06 37 18.6** | **+0.3** |
| **ACHE** | **Chepes** | **5.15** | **138** | *i* P | **Pn** | **06 37 19.0** | **-0.5** |
| ACHE | | | | *e*S | **Sn** | **06 38 17.3** | **-0.4** |
| **ACAN** | **Cantantal** | **5.73** | **149** | ⇓*e*P | **Pn** | **06 37 27.2** | **-0.3** |
| **AZAP** | **Zapla** | **5.99** | **59** | ⇓*e*P | **Pn** | **06 37 33.0** | **+1.8** |
| **HJA** | **Humahuaca** | **6.36** | **50** | ⇓*e*P | **Pn** | **06 37 38.7** | **+2.3** |
| **YJA** | **Y

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SNAA** | **Sanae** | **57.29** | **160** | P | **P** | 06 45 45.6 | **-1.2** |
| **TXAR** | **Lajitas Array** | **64.65** | **328** | P | **P** | 06 46 38.1 | **+1.0** |
| | comp=Z,0.2nm,0.5s,baz=151,slow=9.4,SNR=4.5 | | | | | | |
| **MAW** | **Mawson** | **79.16** | **164** | P | **P** | 06 48 03.0 | **-0.5** |
| | comp=Z,1.1nm,0.6s,baz=194,slow=8.3,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **80.89** | **70** | P | **P** | 06 48 13.2 | **-0.5** |
| | comp=Z,0.5nm,0.6s,baz=246,slow=4.4,SNR=5.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **147.95** | **27** | PKPbc | **PKPbc** | 06 55 43.0 | **-0.7** |
| | comp=Z,1.8nm,0.3s,baz=305,slow=4.5,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **151.27** | **40** | PKPbc | **PKPbc** | 06 55 52.4 | **+0.1** |
| | comp=Z,0.6nm,0.5s,baz=283,slow=1.9,SNR=5.4 | | | | | | |

*IDC **26** 06:45:50.6±2.1,3.°83S×99.°87E,h0km,mb4.0/7,mb1 4.1/7, mb1mx3.8/41,mbtmp4.0/7,Error ellipse: s-maj=81.5km s-min=19.1km az=59.0*

*ISCJB **26** 06:45:53.9±2.4,3.°8S±0.°3×99.°9E±0.°5,h33km,mb4.0/7, Error ellipse: s-maj=83.1km s-min=16.8km az=148.2*

**ISC 26 06:45:56.1±2.3,3.°8S±0.°3×100.°0E±0.5,h35km,n14, σ0s46/9,mb4.0/7,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **22.12** | **357** | P | **P** | **06 50 48.3** | **-0.4** |
| | 1.1nm,0.4s,baz=188,slow=11,SNR=6.3 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.58** | **261** | T | T | 07 21 02.9 | |
| | baz=82,slow=75,SNR=15 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.59** | **261** | T | T | 07 21 04.6 | |
| | baz=82,slow=75,SNR=15 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.60** | **261** | T | T | 07 21 03.5 | |
| | baz=82,slow=75,SNR=19 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.63** | **159** | T | T | 07 28 30.0 | |
| | baz=333 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.64** | **159** | T | T | 07 28 32.1 | |
| | baz=333 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.65** | **159** | T | T | 07 28 28.6 | |
| | baz=333 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.17** | **118** | P | **P** | **06 53 03.9** | **-0.2** |
| | 0.8nm,0.8s,baz=292,slow=8.5,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **38.28** | **124** | P | **P** | **06 53 13.8** | **+0.4** |
| | 0.6nm,0.7s,baz=298,slow=7.7,SNR=7.4 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 55 26.9** | **-0.3** |
| | 0.4nm,0.7s,baz=299,slow=2.6,SNR=4.6 | | | | | | |
| **SONM** | **Songino Array** | **51.71** | **6** | P | **P** | **06 55 00.6** | **+0.7** |
| | 1.7nm,0.7s,baz=189,slow=8.6,SNR=9.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.72** | **345** | P | **P** | **06 55 07.6** | **+0.3** |
| | 1.3nm,0.8s,baz=145,slow=8.6,SNR=8.4 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.75** | **27** | P | **P** | **06 55 29.2** | **-0.1** |
| | 3.3nm,0.8s,baz=242,slow=8.2,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.90** | **350** | P | **P** | **06 55 50.9** | **-0.5** |
| | 1.6nm,0.3s,baz=176,slow=4.3,SNR=2.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.13** | **39** | PKPbc | **PKPbc** | **07 05 33.2** | **-0.2** |
| | 1.1nm,0.7s,baz=283,slow=0.9,SNR=12 | | | | | | |

*CSEM **26** 06:48:05.4±0.2,40.°60N×30.°36E,h5km,MD2.6,Error ellipse: s-maj=4.5km s-min=3.0km az=23.0*

*DDA **26** 06:48:05.2,40.°66N×30.°27E,h7km,Md2.6*

**ISC 26 06:48:05.7±1.2,40.°63N±0.°05×30.°33E±0.°03,h8km±9km, n19,σ0s67/23,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SPNC** | **Sapanca-Adapaz** | **0.06** | **342** | *e*PG | **Pg** | **06 48 07.4** | **-0.1** |
| **SPNC** | **Sapanca-Adapaz** | **0.06** | **342** | *e*Pg | **Pg** | **06 48 07.4** | **-0.1** |
| **GULT** | **Gulveren** | **0.24** | **144** | *e*PG | **Pg** | **06 48 09.8** | **-0.6** |
| **GULT** | **Gulveren** | **0.24** | **144** | *e*Pg | **Pg** | **06 48 09.8** | **-0.6** |
| **ADVT** | **Abdulvahap** | **0.49** | **247** | *e*PG | **Pg** | **06 48 15.1** | **-0.1** |
| **ADVT** | **Abdulvahap** | **0.49** | **247** | *e*Pg | **Pg** | **06 48 15.1** | **-0.1** |
| **CAVI** | **Cavuskoy** | **0.56** | **222** | *e*PG | **Pg** | **06 48 16.3** | **-0.3** |
| **CAVI** | **Cavuskoy** | **0.56** | **222** | *e*Pg | **Pg** | **06 48 16.3** | **-0.3** |
| **MDUB** | **Mudurnu** | **0.68** | **103** | *e*PG | **Pg** | **06 48 18.2** | **-0.6** |
| **MDUB** | **Mudurnu** | **0.68** | **103** | *e*Pg | **Pg** | **06 48 18.2** | **-0.6** |
| **IZI** | **Iznik** | **0.72** | **247** | *e*PG | **Pg** | **06 48 19.4** | **-0.1** |
| **IZI** | **Iznik** | **0.72** | **247** | *e*Pg | **Pg** | **06 48 19.4** | **-0.1** |
| **BORA** | **Eskisehir** | **0.75** | **173** | *i* P | **Pg** | **06 48 19.3** | **-0.8** |
| **BORA** | **Eskisehir** | **0.75** | **173** | P | **Pg** | **06 48 19.3** | **-0.8** |
| BORA | | | | S | **Sb** | **06 48 33.1** | **+1.6** |
| **BUY** | **Buyukada** | **0.95** | **284** | *i* P | **Pg** | **06 48 23.5** | **-0.5** |
| BUY | | | | *i* S | **Sn** | **06 48 38.4** | **-0.8** |
| **BUY** | **Buyukada** | **0.95** | **284** | P | **Pg** | **06 48 23.5** | **-0.5** |
| BUY | | | | S | **Sn** | **06 48 38.4** | **-0.8** |
| **AUMIH** | **MIHALICIK** | **1.16** | **130** | P | **Pn** | **06 48 28.6** | **+0.2** |
| AUMIH | | | | S | **Sn** | **06 48 45.6** | **+1.0** |
| **TVSB** | **Tavsanli** | **1.35** | **210** | *e*PN | **Pn** | **06 48 30.9** | **-0.1** |
| **TVSB** | **Tavsanli** | **1.35** | **210** | *e*Pn | **Pn** | **06 48 30.9** | **-0.1** |

**MEX 26 06:58:55.2±0.3,14.°90N×93.°44W,h45km±135km,MD3.6, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.82** | **15** | *e*P | Pn | 06 59 08.8 | -1.7 |
| PCIG | | | | *e*S | Sn | 06 59 19.4 | -2.1 |

*IDC **26** 06:59:18.5±1.4,30.°95S×179.°94W,h406km±23km,mb3.5/2, mb1 3.9/4,mb1mx3.3/25,mbtmp4.5/4,Error ellipse: s-maj=45.4km s-min=21.6km az=118.0*

**ISC 26 06:59:16.0±1.2,30.°79S±0.°10×179.°7W±0.°2,h400km,n44, σ1s94/49,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **2.17** | **46** | P | Pn | 07 00 17.8 | +4.8 |
| | 95nm,0.3s,baz=85,slow=8.4,SNR=8.1 | | | | | | |
| RAO | | | | S | **S** | **07 00 55.9** | **-3.2** |
| | 48nm,0.3s,baz=75,slow=20,SNR=2.6 | | | | | | |
| **MXZ** | **Matakaoa Point** | **6.96** | **193** | *e*PN | **P** | **07 01 01.9** | **+2.3** |
| MXZ | | | | *e*SN | **S** | **07 02 21.7** | **-1.5** |
| **WMGZ** | **Waiomatatini S** | **7.18** | **192** | *e*PN | **P** | **07 01 05.0** | **+2.9** |
| **HAZ** | **Te Kaha** | **7.26** | **196** | *e*PN | **P** | **07 01 05.0** | **+2.1** |
| HAZ | | | | SN | **S** | **07 02 27.5** | **-1.9** |
| **PKGZ** | **Pakihiroa** | **7.29** | **194** | *e*PN | **P** | **07 01 05.8** | **+2.4** |
| **PUZ** | **Puketiti** | **7.46** | **193** | *e*PN | **P** | **07 01 07.2** | **+1.9** |
| PUZ | | | | SN | **S** | **07 02 30.3** | **-3.4** |
| **TWGZ** | **Tauwhareparae** | **7.62** | **194** | PN | **P** | **07 01 08.5** | **+1.5** |
| **MWZ** | **Matawai** | **7.87** | **196** | *e*PN | **P** | **07 01 10.2** | **+0.5** |
| **URZ** | **Urewera** | **7.91** | **199** | P | **P** | **07 01 11.2** | **+1.1** |
| | 7.3nm,0.3s,baz=250,slow=4.3,SNR=87 | | | | | | |
| URZ | | | | S | **S** | **07 02 39.1** | **-3.8** |
| | 10nm,0.3s,baz=47,slow=21,SNR=20 | | | | | | |
| **URZ** | **Urewera** | **7.91** | **199** | *e*PN | **Pn** | **07 01 09.8** | **+0.1** |
| URZ | | | | SN | **S** | **07 02 40.6** | **-2.2** |
| **RAGZ** | **Rawiri** | **8.05** | **196** | *e*PN | **P** | **07 01 13.4** | **+1.6** |
| **RIGZ** | **Rimuhau** | **8.17** | **194** | PN | **P** | **07 01 14.6** | **+1.5** |
| **KNZ** | **Kokohu** | **8.49** | **194** | PN | **P** | **07 01 17.9** | **+1.3** |
| **RAHZ** | **Arahi** | **8.53** | **197** | *e*PN | **P** | **07 01 18.0** | **+1.9** |
| **NMHZ** | **Naumai** | **8.77** | **198** | *e*PN | **P** | **07 01 22.3** | **+2.5** |
| **ARHZ** | **Aropaoanui** | **8.88** | **197** | PN | P | 07 01 24.3 | +3.3 |
| **BKZ** | **Black Stump Fm** | **8.92** | **199** | PN | **P** | **07 01 23.0** | **+1.4** |
| **MCHZ** | **McNeill Hill** | **9.13** | **198** | PN | **Pn** | **07 01 26.7** | **+3.0** |
| **CKHZ** | **Cape Kidnapper** | **9.23** | **196** | *e*PN | **Pn** | **07 01 27.7** | **+2.8** |
| **FWVZ** | **Far West T-bar** | **9.30** | **203** | *e*PN | **Pn** | **07 01 28.1** | **+2.1** |
| **TRVZ** | **Turoa** | **9.34** | **203** | *e*PN | **Pn** | **07 01 28.0** | **+1.6** |
| **BHHZ** | **Black Hill Sta** | **9.35** | **201** | *e*PN | **Pn** | **07 01 28.0** | **+1.7** |
| **WNVZ** | **Wahianoa** | **9.35** | **203** | *e*PN | **Pn** | **07 01 27.9** | **+1.4** |
| **MOVZ** | **Moawhango** | **9.37** | **202** | *e*PN | **Pn** | **07 01 28.5** | **+1.9** |
| **KAHZ** | **Kahuranaki** | **9.41** | **196** | *e*PN | **Pn** | **07 01 29.1** | **+2.0** |
| **PXZ** | **Pawanui** | **9.64** | **196** | *e*PN | **Pn** | **07 01 30.7** | **+1.1** |
| PXZ | | | | *e*SN | **S** | **07 03 14.7** | **-4.5** |
| **PNHZ** | **Pukenui** | **9.70** | **199** | PN | **Pn** | **07 01 31.1** | **+0.7** |
| **PRHZ** | **Porangahau** | **9.92** | **197** | PN | **Pn** | **07 01 35.1** | **+2.3** |
| **DVHZ** | **Dannevirke** | **10.07** | **198** | *e*PN | **Pn** | **07 01 36.0** | **+1.3** |
| **ANWZ** | **Angora Road** | **10.14** | **197** | PN | **Pn** | **07 01 37.4** | **+1.9** |
| **BFZ** | **Birch Farm** | **10.41** | **197** | *e*PN | **Pn** | **07 01 39.6** | **+1.1** |
| **MRZ** | **Mangatainoka R** | **10.57** | **200** | *e*PN | **Pn** | **07 01 40.7** | **+0.2** |
| **HOWZ** | **Holdsworth Sta** | **10.81** | **200** | *e*PN | **Pn** | **07 01 43.9** | **+0.7** |
| **OGWZ** | **Otaki Gorge** | **10.84** | **201** | *e*PN | **Pn** | **07 01 43.7** | **+0.1** |
| **TMWZ** | **Te Maipa** | **10.90** | **198** | *e*PN | **Pn** | **07 01 46.0** | **+1.8** |
| **KIW** | **Kapiti Island** | **10.96** | **202** | *e*PN | **Pn** | **07 01 45.0** | **0.0** |
| **MTW** | **Mount Morrison** | **11.05** | **199** | *e*PN | **Pn** | **07 01 47.2** | **+1.2** |
| **CAW** | **Cannon Point** | **11.13** | **201** | *e*PN | **Pn** | **07 01 47.3** | **+0.3** |
| **TCW** | **Tory Channel** | **11.49** | **203** | *e*PN | **Pn** | **07 01 51.2** | **+0.2** |
| **NNZ** | **Nelson** | **11.82** | **206** | PN | **Pn** | **07 01 54.4** | **-0.5** |
| **QRZ** | **Quartz Range** | **11.83** | **210** | *e*PN | **Pn** | **07 01 54.4** | **-0.7** |
| **ASAR** | **Alice Springs** | **41.63** | **268** | P | **P** | **07 06 27.8** | **+0.4** |
| | 1.3nm,0.3s,baz=105,slow=7.4,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.66** | **273** | P | **P** | **07 06 35.8** | **+0.3** |
| | 2.9nm,0.5s,baz=112,slow=8.0,SNR=79 | | | | | | |
| **FINES** | **FINESS Array B** | **144.99** | **339** | PKPbc | **PKPab** | **07 18 06.9** | **+0.5** |
| | 0.6nm,0.5s,baz=52,slow=3.1,SNR=4.6 | | | | | | |

**IDC 26 07:02:09.4±749.0,49.°12N×52.°41E,h0km,Error ellipse: s-maj=362.2km s-min=84.5km az=68.0,Western Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **3.87** | **68** | *i* | | 07 26 10.0 | |
| | baz=253,slow=324,SNR=2.3 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **20.62** | **64** | *i* | | 09 09 30.0 | |
| | baz=270,slow=330,SNR=0.7 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **35.20** | **71** | *i* | | 10 37 50.0 | |
| | baz=291,slow=325,SNR=0.5 | | | | | | |

*IDC **26** 07:11:42.2±3.8,37.°52N×72.°10E,h187km±29km,mb3.3/5, mb1 3.4/11,mb1mx3.2/54,mbtmp3.9/11,Error ellipse: s-maj=35.9km s-min=22.0km az=158.0*

*ISCJB **26** 07:11:43.1±0.9,37.°66N±0.°07×72.°11E±0.°07,h200km, mb3.5/5,Error ellipse: s-maj=9.7km s-min=7.3km az=156.4*

*NNC **26** 07:11:46.1±1.7,37.°82N×72.°05E,h185km±12km,mb2.7, mpv3.7,Error ellipse: s-maj=15.9km s-min=7.0km az=153.0*

**ISC 26 07:11:44.9±1.2,37.°77N±0.°09×72.°03E±0.°07,h200km,n20, σ1s15/30,mb3.6/5,11C-4D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **2.52** | **27** | ⇑P | **Pn** | **07 12 28.7** | **-0.5** |
| | 42nm,0.3s | | | | | | |
| SFK | | | | ⇑S | **Sn** | **07 13 02.6** | **-1.4** |
| | 117nm,0.3s | | | | | | |
| **DZET** | **Dzherino** | **2.72** | **293** | ⇑P | **Pn** | **07 12 31.3** | **-0.1** |
| | 11nm,0.4s | | | | | | |
| DZET | | | | ⇑S | **Sn** | **07 13 08.0** | **+0.3** |
| **MNAS** | **Manas** | **4.73** | **4** | ⇑P | **Pn** | **07 12 56.7** | **+0.8** |
| | 4.4nm,0.3s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **07 13 51.4** | **-0.6** |
| | 54nm,0.4s | | | | | | |
| **AAK** | **Ala-Archa** | **5.21** | **20** | ⇑P | **Pn** | **07 13 02.6** | **+0.4** |
| | 4.4nm,0.4s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **07 14 03.2** | **+0.1** |
| | 30nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **5.21** | **20** | P | **Pn** | **07 13 02.9** | **+0.8** |
| | 3.1nm,0.3s,baz=166,slow=5.2,SNR=29 | | | | | | |
| AAK | | | | S | **Sn** | **07 14 03.8** | **+0.7** |
| | 3.4nm,0.3s,baz=336,slow=23,SNR=28 | | | | | | |
| **KK31** | **Karatay Array** | **5.45** | **348** | ⇑P | **Pn** | **07 13 06.2** | **+1.2** |
| | 1.7nm,0.2s,baz=151,slow=47,SNR=39 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **07 14 08.2** | **-0.3** |
| | 14nm,0.3s,baz=161,slow=15,SNR=32 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.83** | **27** | ⇑P | **Pn** | **07 13 10.1** | **+0.1** |
| | 1.9nm,0.4s | | | | | | |
| TKM2 | | | | ⇑S | **Sn** | **07 14 17.4** | **+0.1** |
| | 5.4nm,0.7s | | | | | | |
| **MKAR** | **Makanchi Array** | **11.79** | **37** | P | **Pn** | **07 14 26.6** | **-0.4** |
| | 0.1nm,0.3s,baz=201,slow=9.7,SNR=2.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **13.66** | **18** | P | **Pn** | **07 14 50.3** | **-0.1** |
| | 0.3nm,0.3s,baz=200,slow=11,SNR=14 | | | | | | |
| **AB31** | **Akbulak array** | **14.43** | **327** | P | **P** | **07 15 01.4** | **+0.2** |
| | 0.6nm,0.3s,baz=133,slow=12,SNR=19 | | | | | | |
| AB31 | | | | ⇑S | **S** | **07 17 36.5** | **-3.7** |
| | 0.8nm,0.5s,baz=150,slow=23,SNR=10 | | | | | | |
| **BVA0** | **Borovoye Array** | **15.30** | **356** | P | **Pn** | **07 15 10.4** | **-0.1** |
| | 2.5nm,0.8s,baz=333,slow=13,SNR=8.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **15.30** | **356** | P | **P** | **07 15 12.1** | **+1.3** |
| | 0.3nm,0.3s,baz=163,slow=10,SNR=6.9 | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.14** | **326** | ⇓P | **Pn** | **07 15 23.1** | **+2.4** |
| | 3.0nm,0.8s | | | | | | |
| AKTO | | | | ⇓S | **Sn** | **07 18 21.4** | **-0.5** |
| | 2.2nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.14** | **326** | P | **Pn** | **07 15 22.4** | **+1.8** |
| | 0.6nm,0.3s,baz=123,slow=10,SNR=8.1 | | | | | | |
| AKTO | | | | S | **S** | **07 18 18.3** | **-0.7** |
| | 0.1nm,0.3s,baz=54,slow=9.0,SNR=1.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **18.42** | **24** | P | **P** | **07 15 45.5** | **+0.4** |
| | 2.1nm,0.3s,baz=220,slow=9.9,SNR=9.7 | | | | | | |
| **SONM** | **Songino Array** | **26.95** | **57** | P | **P** | **07 17 07.1** | **-0.7** |
| | 0.2nm,0.4s,baz=238,slow=10.0,SNR=2.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **40.30** | **337** | P | **P** | **07 19 03.7** | **+1.5** |
| | 10nm,1.2s,baz=105,slow=7.6,SNR=6.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.57** | **269** | P | **P** | **07 22 12.3** | **-1.5** |
| | 0.5nm,0.4s,baz=48,slow=5.7,SNR=19 | | | | | | |
| **ILAR** | **Eielson Array** | **73.34** | **16** | P | **P** | **07 22 53.9** | **-0.3** |
| | 0.2nm,0.3s,baz=335,slow=4.1,SNR=5.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.94** | **3** | P | **P** | **07 23 31.1** | **0.0** |
| | 1.0nm,0.8s,baz=344,slow=5.2,SNR=3.1 | | | | | | |

**IDC 26 07:13:49.7±4.5,5.°42S×132.°76E,h0km,mb3.6/1, mb1 3.5/4,mb1mx3.4/34,mbtmp3.4/4,ML3.0/3,Error ellipse: s-maj=290.3km s-min=27.1km az=77.0,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.76** | **342** | Pn | Pn | 07 15 03.5 | +0.8 |
| | 2.4nm,0.3s,baz=174,slow=18,SNR=3.3 | | | | | | |
| SIJI | | | | Sn | Sn | 07 15 55.6 | -3.1 |
| | 0.7nm,0.3s,baz=198,slow=20,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.52** | **174** | Pn | Pn | 07 17 16.4 | -0.2 |
| | 0.0nm,0.3s,baz=353,slow=13,SNR=3.4 | | | | | | |
| WRA | | | | Sn | Sn | 07 20 03.9 | +5.5 |
| | 0.1nm,0.3s,baz=15,slow=24,SNR=4.2 | | | | | | |
| **ASAR** | **Alice Springs** | **18.18** | **177** | P | P | 07 18 03.9 | -0.1 |
| | 0.1nm,0.3s,baz=0.5,slow=11,SNR=8.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.46** | **325** | P | P | 07 24 53.5 | -0.2 |
| | 0.3nm,0.4s,baz=117,slow=8.3,SNR=3.3 | | | | | | |

**IDC 26 07:21:52.5±7.4,2.°47S×100.°11E,h0km,mb3.3/3, mb1 3.6/3,mb1mx3.3/52,mbtmp3.3/3,Error ellipse: s-maj=269.8km s-min=29.3km az=62.0,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **20.82** | **357** | P | P | 07 26 35.9 | +0.1 |
| | 0.4nm,0.3s,baz=184,slow=12,SNR=2.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.98** | **258** | T | T | 07 56 07.0 | |
| | baz=81,slow=75,SNR=19 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.98** | **258** | T | T | 07 56 14.1 | |
| | baz=81,slow=75,SNR=21 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.00** | **258** | T | T | 07 56 08.5 | |
| | baz=81,slow=75,SNR=23 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.79** | **160** | T | T | 08 05 30.5 | |
| | baz=333,slow=74 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.80** | **160** | T | T | 08 05 32.8 | |
| | baz=333 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.81** | **160** | T | T | 08 05 25.2 | |
| | baz=333,slow=74 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.66** | **120** | P | P | 07 29 09.2 | -0.5 |
| | 0.3nm,0.8s,baz=309,slow=9.2,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **38.89** | **126** | P | P | 07 29 20.3 | +0.2 |
| | 0.2nm,0.4s,baz=304,slow=7.9,SNR=3.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.00** | **38** | PKPbc | PKPab | 07 41 31.1 | -0.8 |
| | 0.1nm,0.6s,baz=226,slow=1.1,SNR=3.6 | | | | | | |

*ISCJB **26** 07:31:18.1±0.4,5.°55S±0.°04×149.°83E±0.°07,h35km, mb4.3/18,MS3.5/4,Error ellipse: s-maj=9.7km s-min=5.6km az=2.9*

*AUST **26** 07:31:18.5,5.°72S×149.°61E,h0km*

*IDC **26** 07:31:20.8±2.1,5.°63S×149.°95E,h53km±18km,mb4.0/14, mb1 4.1/16,mb1mx3.9/39,mbtmp4.3/16,ML3.3/2,MS3.4/6, Ms1 3.4/6,ms1mx3.1/31,Error ellipse: s-maj=16.7km s-min=10.5km az=116.0*

*NEIC **26** 07:31:22.8±2.4,5.°61S×149.°83E,h66km±21km,mb4.7/8, Error ellipse: s-maj=17.3km s-min=12.1km az=57.0*

*BJI **26** 07:31:27.2,5.°62S×149.°11E,h71km,mb4.7/22,mB5.1/13, Ms5.1/8,Ms7 4.7/6*

**ISC 26 07:31:19.5±0.6,5.°54S±0.°06×149.°95E±0.°08,h35km,n69, σ1s74/64,mb4.4/18,MS3.3/4,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.74** | **216** | P | **Pn** | **07 32 29.0** | **+0.5** |
| | 35nm,0.3s,baz=36,slow=4.6,SNR=67 | | | | | | |
| PMG | | | | S | **Sn** | **07 33 22.8** | **+0.6** |
| | 24nm,0.3s,baz=31,slow=22,SNR=12 | | | | | | |
| **PMG** | **Port Moresby** | **4.74** | **216** | P | **Pn** | **07 32 30.0** | **+1.5** |
| | baz=4.4,SNR=46 | | | | | | |
| **PMG** | **Port Moresby** | **4.74** | **216** | *e*Pn | **Pn** | **07 32 30.5** | **+2.0** |
| **HNR** | **Honiara** | **10.63** | **112** | LR | LR | 07 38 00.6 | |
| | comp=Z,75nm,18.9s,baz=290,slow=38 | | | | | | |
| **COEN** | **Coen** | **10.70** | **218** | P | **Pn** | **07 33 51.8** | **+1.4** |
| | baz=10,SNR=7.5 | | | | | | |
| **COEN** | **Coen** | **10.70** | **218** | *e*Pn | **Pn** | **07 33 51.1** | **+0.7** |
| **CTA** | **Charters Tower** | **14.90** | **194** | P | **Pn** | **07 34 49.9** | **+2.2** |
| | 0.3nm,0.3s,baz=359,slow=7.6,SNR=2.4 | | | | | | |
| **CTAO** | **Charters Tower** | **14.90** | **194** | *e*P | P | 07 34 56.5 | +3.5 |
| | 5.8nm,0.6s | | | | | | |
| **QIS** | **Mount Isa** | **18.00** | **213** | P | **Pn** | **07 35 26.8** | **-0.3** |
| | baz=18,SNR=9.8 | | | | | | |
| **KDU** | **Kakadu** | **18.66** | **246** | P | **P** | **07 35 31.4** | **-3.1** |
| | baz=18,SNR=3.9 | | | | | | |
| **SIJI** | **Sorong** | **19.22** | **283** | P | **P** | **07 35 39.3** | **-1.6** |
| | 0.3nm,0.3s,baz=108,slow=10,SNR=4.0 | | | | | | |
| SIJI | | | | LR | LR | 07 45 32.1 | |
| | comp=Z,104nm,18.2s,baz=260,slow=44 | | | | | | |
| **EIDS** | **Eidsvold** | **19.75** | **177** | P | **Pn** | **07 35 47.7** | **-0.4** |
| | baz=20,SNR=4.3 | | | | | | |
| **EIDS** | **Eidsvold** | **19.75** | **177** | *e*P | **Pn** | **07 35 47.6** | **-0.5** |
| | 11nm,0.8s | | | | | | |
| **MTN** | **Manton Dam** | **19.93** | **247** | P | **P** | **07 35 47.1** | **-1.5** |
| | baz=20,SNR=5.6 | | | | | | |
| **MTN** | **Manton Dam** | **19.93** | **247** | *e*P | **P** | **07 35 46.3** | **-2.3** |
| | 33nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **20.86** | **225** | *e*P | **P** | **07 35 57.3** | **-1.3** |
| | 82nm,0.6s | | | | | | |
| **RMQ** | **Roma** | **20.86** | **183** | P | **P** | **07 35 60.0** | **+1.4** |
| | baz=21,SNR=9.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.87** | **225** | P | **P** | **07 35 57.3** | **-1.5** |
| | 73nm,0.9s,baz=48,slow=11,SNR=80 | | | | | | |
| WRA | | | | S | **S** | **07 39 47.1** | **-2.7** |
| | 1.7nm,1.1s,baz=39,slow=20,SNR=4.7 | | | | | | |
| **QLP** | **Quilpie** | **21.62** | **194** | P | **P** | **07 36 09.6** | **+2.8** |
| | baz=22,SNR=12 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.90** | **137** | P | **P** | **07 36 21.0** | **+0.5** |
| | 12nm,0.6s,baz=350,slow=3.1,SNR=11 | | | | | | |
| DZM | | | | LR | LR | 07 44 21.6 | |
| | comp=Z,110nm,18.7s,baz=15,slow=34 | | | | | | |
| **KNRA** | **Kununurra** | **23.11** | **243** | P | **P** | **07 36 20.5** | **-2.1** |
| | baz=23,SNR=18 | | | | | | |
| **AS01** | **Alice Springs** | **23.71** | **219** | *e*P | **P** | **07 36 26.4** | **-2.0** |
| **ASAR** | **Alice Springs** | **23.74** | **219** | P | **P** | **07 36 27.3** | **-1.4** |
| | 10.0nm,0.6s,baz=53,slow=9.1,SNR=44 | | | | | | |
| ASAR | | | | S | **S** | **07 40 41.2** | **-0.7** |
| | 2.6nm,1.0s,baz=36,slow=21,SNR=3.3 | | | | | | |
| **ARMA** | **Armidale** | **24.80** | **177** | *e*P | **P** | **07 36 41.3** | **+2.8** |
| | 4.6nm,0.9s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.17** | **188** | P | **P** | **07 36 51.4** | **+0.7** |
| | baz=26,SNR=9.5 | | | | | | |
| **LUWI** | **Luwuk** | **27.50** | **278** | P | P | 07 37 08.6 | +5.7 |
| | baz=27,SNR=4.0 | | | | | | |
| **WRKA** | **Warakurna** | **28.41** | **225** | P | **P** | **07 37 08.6** | **-2.4** |
| | baz=28,SNR=25 | | | | | | |
| **KAPI** | **Kappang** | **30.08** | **270** | LR | LR | 07 53 09.7 | |
| | comp=Z,42nm,18.1s,baz=143,slow=44 | | | | | | |
| **MBWA** | **Marble Bar** | **33.15** | **239** | *e*P | **P** | **07 37 52.1** | **-0.7** |
| | 17nm,0.8s | | | | | | |
| **MEEK** | **Meekatharra** | **36.51** | **231** | P | **P** | **07 38 19.6** | **-2.2** |
| | baz=36,SNR=61 | | | | | | |
| **KMBL** | **Kambalda** | **36.78** | **222** | P | **P** | **07 38 24.4** | **+0.3** |
| | baz=36,SNR=6.5 | | | | | | |
| **SBUM** | **Sibu** | **38.52** | **281** | *e*P | P | 07 38 37.0 | -1.9 |
| | 16nm,1.2s | | | | | | |
| **MORW** | **Morawa** | **39.69** | **230** | P | **P** | **07 38 48.9** | **+0.3** |
| | baz=39,SNR=3.1 | | | | | | |
| **KLBR** | **Kellerberrin** | **39.76** | **225** | P | **P** | **07 38 49.0** | **0.0** |
| | baz=40,SNR=7.9 | | | | | | |
| **URZ** | **Urewera** | **40.85** | **147** | P | **P** | **07 38 56.1** | **-1.9** |
| | 2.1nm,0.7s,baz=333,slow=2.3,SNR=2.4 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **40.87** | **224** | P | **P** | **07 38 56.9** | **-1.4** |
| | 6.6nm,0.9s,baz=117,slow=0.8,SNR=3.2 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **40.87** | **224** | *e*P | **P** | **07 38 58.3** | **0.0** |
| | 12nm,1.2s | | | | | | |
| **RPZ** | **Rata Peaks** | **42.32** | **157** | P | **P** | **07 39 08.5** | **-1.5** |
| | 9.0nm,0.8s,baz=326,slow=3.6,SNR=3.7 | | | | | | |
| **JNU** | **Nakatsue** | **42.50** | **336** | LR | LR | 07 56 01.8 | |
| | comp=Z,39nm,19.4s,baz=117,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.28** | **346** | LR | LR | 07 56 58.2 | |
| | comp=Z,233nm,19.8s,baz=340,slow=36 | | | | | | |
| **QIZ** | **Qiongzhong** | **46.44** | **303** | P | **P** | **07 39 42.5** | **-0.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| QSPA | South Pole Qui | 84.42 | 180 | *e*P | P | 07 43 49.6 | +1.2 |
| | 5.5nm,0.9s | | | | | | |
| BVAR | Borovoye Array | 88.14 | 324 | P | P | 07 44 04.7 | -2.0 |
| | 0.4nm,0.4s,baz=108,slow=4.7,SNR=2.5 | | | | | | |
| TXAR | Lajitas Array | 106.97 | 61 | PP | PP | 07 49 51.5 | -7.8 |
| | 0.5nm,1.0s,baz=235,slow=5.8,SNR=3.5 | | | | | | |
| STHS | Stebnicka Huta | 118.63 | 325 | *e*PKP | PKPdf | 07 50 04.1 | +0.1 |
| TORD | Torodi Ar. Bea | 147.81 | 286 | PKPbc | PKPdf | 07 51 01.5 | +2.6 |
| | 1.1nm,0.9s,baz=95,slow=3.1,SNR=5.7 | | | | | | |

**IDC *26*** 07:32:14.8±1.8, 5.6°S×150.2°E, *h*0km, **mb4.0**/6, **mb1 4.3**/7, **mb1mx3.9**/39, **mbtmp4.1**/7, **ML2.7**/1, **MS3.6**/1, **Ms1 3.6**/1, **ms1mx2.7**/30, **Error ellipse: s-maj=56.3km s-min=20.9km az=116.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.81 | 219 | Pn | Pn | 07 33 26.6 | -1.9 |
| | 23nm,0.3s,baz=19,slow=18,SNR=9.2 | | | | | | |
| PMG | | | | Sn | Sn | 07 34 25.6 | +0.5 |
| | baz=34,slow=15,SNR=2.1 | | | | | | |
| PMG | Port Moresby | 4.81 | 219 | *e*Sn | Pn | 07 33 27.0 | -1.6 |
| WRA | Warramunga Arr | 20.99 | 226 | P | P | 07 36 59.8 | -0.1 |
| | 22nm,0.9s,baz=48,slow=11,SNR=6.6 | | | | | | |
| ASAR | Alice Springs | 23.83 | 220 | P | P | 07 37 30.6 | +0.8 |
| | 2.4nm,0.8s,baz=40,slow=10,SNR=2.4 | | | | | | |
| BATI | Baumata | 26.68 | 259 | LR | LR | 07 51 05.4 | |
| | comp=Z,137nm,20.1s,baz=178,slow=42 | | | | | | |
| CMAR | Chiang Mai Arr | 55.93 | 297 | P | P | 07 41 55.6 | +0.5 |
| | 1.0nm,0.3s,baz=116,slow=4.1,SNR=2.7 | | | | | | |
| SONM | Songino Array | 65.70 | 329 | P | P | 07 43 01.8 | +0.5 |
| | 0.7nm,0.6s,baz=115,slow=6.8,SNR=2.8 | | | | | | |
| ILAR | Eielson Array | 83.91 | 23 | P | P | 07 44 45.6 | -0.8 |
| | 0.5nm,0.8s,baz=245,slow=5.4,SNR=3.3 | | | | | | |
| BVAR | Borovoye Array | 88.38 | 324 | P | P | 07 45 08.3 | -0.3 |
| | 0.3nm,0.4s,baz=110,slow=6.3,SNR=2.8 | | | | | | |

*IDC **26** 07:44:03.1±1.2, 3.4°S×147.4°E, h0km, mb4.1/6, mb1 4.3/7, mb1mx4.0/31, mbtmp4.1/7, ML1.7/1, MS3.8/15, Ms1 3.8/15, ms1mx3.6/27, Error ellipse: s-maj=42.4km s-min=22.8km az=94.0*
*ISCJB **26** 07:44:08.0±0.8, 3.4°S±0.0°×147.0°E±0.1°, 1, h35km, mb4.1/7, MS3.8/14, Error ellipse: s-maj=17.5km s-min=12.6km az=173.7*
*NEIC **26** 07:44:11.0±2.5, 3.4°S×147.0°E±9.1km, h51km±21km, mb4.5/3, Error ellipse: s-maj=20.0km s-min=15.8km az=46.0*
*AUST **26** 07:44:46.6±2.5, 5.6°S×145.6°E±3.8km, h185km±1km, Error ellipse: s-maj=2.8km s-min=1.3km az=246.0*
**ISC 26 07:44:09.3±0.9, 3.4°S±0.1°×147.2°E±0.2°, h35km, n39, σ1§56/22, mb4.2/7, MS3.9/14, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 6.00 | 180 | Pn | Pn | 07 45 34.4 | -1.2 |
| | 1.2nm,0.3s,baz=0.0,slow=15,SNR=2.4 | | | | | | |
| PMG | | | | Sn | Sn | 07 46 51.7 | +8.6 |
| | baz=360,slow=19,SNR=1.9 | | | | | | |
| PMG | Port Moresby | 6.00 | 180 | *e*Pn | Pn | 07 45 35.1 | -0.5 |
| PMG | | | | Sn | Sn | 07 46 51.7 | +8.6 |
| COEN | Coen | 11.23 | 200 | P | Pn | 07 46 47.9 | +0.3 |
| | baz=8.6,SNR=6.6 | | | | | | |
| COEN | Coen | 11.23 | 200 | *e*Pn | Pn | 07 46 47.6 | 0.0 |
| | 9.6nm,0.6s | | | | | | |
| HNR | Honiara | 14.05 | 116 | LR | LR | 07 52 16.3 | |
| | comp=Z,157nm,18.6s,baz=318,slow=36 | | | | | | |
| SIJI | Sorong | 16.09 | 279 | Pn | P | 07 48 02.2 | +6.2 |
| | 0.4nm,0.3s,baz=94,slow=11,SNR=5.0 | | | | | | |
| CTA | Charters Tower | 16.64 | 183 | Pn | P | 07 48 04.1 | +2.0 |
| | 1.1nm,0.3s,baz=350,slow=14,SNR=26 | | | | | | |
| CTAO | Charters Tower | 16.64 | 183 | *e*P | P | 07 48 03.9 | +1.8 |
| | 5.8nm,0.6s | | | | | | |
| WRAB | Tennant Creek | 20.68 | 216 | *e*P | P | 07 48 45.1 | -1.3 |
| | 32nm,0.8s | | | | | | |
| WRA | Warramunga Arr | 20.69 | 216 | P | P | 07 48 45.4 | -1.2 |
| | 21nm,0.8s,baz=40,slow=11,SNR=86 | | | | | | |
| WRA | | | | LR | LR | 07 57 11.7 | |
| | comp=Z,362nm,19.5s,baz=15,slow=38 | | | | | | |
| KNRA | Kununurra | 21.86 | 235 | P | P | 07 48 57.0 | -2.2 |
| | baz=19,SNR=5.4 | | | | | | |
| EIDS | Eidsvold | 22.19 | 171 | *e*P | P | 07 49 02.5 | -0.2 |
| RMQ | Roma | 23.03 | 176 | P | P | 07 49 13.6 | +2.1 |
| | baz=21,SNR=5.3 | | | | | | |
| QLP | Quilpie | 23.25 | 187 | P | P | 07 49 14.3 | +0.6 |
| | baz=21,SNR=15 | | | | | | |
| ASAR | Alice Springs | 23.91 | 211 | P | P | 07 49 19.5 | -0.6 |
| | 6.4nm,0.8s,baz=38,slow=9.3,SNR=63 | | | | | | |
| ASAR | | | | LR | LR | 07 59 23.4 | |
| | comp=Z,502nm,19.4s,baz=36,slow=38 | | | | | | |
| DZM | Mont Dzumac | 26.37 | 136 | P | P | 07 49 44.1 | +1.5 |
| | 13nm,1.1s,baz=0.2,slow=23,SNR=3.1 | | | | | | |
| ARMA | Armidale | 27.23 | 172 | P | P | 07 49 53.6 | +3.4 |
| | baz=25,SNR=4.0 | | | | | | |
| ARMA | Armidale | 27.23 | 172 | *e*P | P | 07 49 50.1 | -0.2 |
| | 18nm,1.3s | | | | | | |
| WRKA | Warakurna | 28.18 | 218 | P | P | 07 49 57.6 | -1.2 |
| | baz=26,SNR=7.0 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 29.01 | 41 | T | T | 08 20 25.7 | |
| | baz=223,slow=76,SNR=34 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 29.02 | 41 | T | T | 08 20 26.3 | |
| | baz=223,slow=76,SNR=27 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 29.03 | 41 | T | T | 08 20 27.0 | |
| | baz=223,slow=76,SNR=29 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 30.03 | 39 | T | T | 08 21 46.7 | |
| | baz=220 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 30.05 | 39 | T | T | 08 21 47.4 | |
| | baz=220 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 30.05 | 39 | T | T | 08 21 47.5 | |
| | baz=220 | | | | | | |
| KSRS | Korea Array | 44.38 | 338 | LR | LR | 08 07 20.0 | |
| | comp=Z,149nm,20.2s,baz=154,slow=31 | | | | | | |
| USRK | Ussuriysk Ar. | 49.28 | 346 | LR | LR | 08 10 37.4 | |
| | comp=Z,49nm,22.0s,baz=162,slow=32 | | | | | | |
| CMAR | Chiang Mai Arr | 52.20 | 296 | P | P | 07 53 18.9 | +1.6 |
| | 1.2nm,0.3s,baz=110,slow=5.4,SNR=6.0 | | | | | | |
| CMAR | | | | LR | LR | 08 16 12.4 | |
| | comp=Z,37nm,18.4s,baz=126,slow=37 | | | | | | |
| SONM | Songino Array | 62.22 | 330 | LR | LR | 08 20 00.4 | |
| | comp=Z,120nm,21.3s,baz=142,slow=35 | | | | | | |
| PPT | Papeete | 63.50 | 108 | LR | LR | 08 17 54.0 | |
| | comp=Z,42nm,20.0s,baz=360,slow=32 | | | | | | |
| VNDA | Vanda | 74.51 | 177 | P | P | 07 55 42.4 | -1.4 |
| | 1.2nm,0.8s,baz=339,slow=7.4,SNR=8.0 | | | | | | |
| VNDA | | | | LR | LR | 08 26 16.4 | |
| | comp=Z,60nm,19.2s,baz=1.5,slow=34 | | | | | | |
| MKAR | Makanchi Array | 75.60 | 320 | P | P | 07 55 50.6 | -0.1 |
| | 0.4nm,0.7s,baz=117,slow=5.0,SNR=2.6 | | | | | | |
| MKAR | | | | LR | LR | 08 28 42.2 | |
| | comp=Z,66nm,19.7s,baz=40,slow=35 | | | | | | |
| ZALV | Zalesovo Beam | 76.90 | 327 | LR | LR | 08 28 05.9 | |
| | comp=Z,54nm,21.8s,baz=70,slow=34 | | | | | | |
| KDAK | Kodiak Island | 77.52 | 28 | LR | LR | 08 29 51.6 | |
| | comp=Z,91nm,18.0s,baz=257,slow=36 | | | | | | |
| ILAR | Eielson Array | 83.01 | 23 | P | P | 07 56 30.4 | -0.4 |
| | 1.2nm,0.9s,baz=250,slow=4.7,SNR=5.1 | | | | | | |
| ILAR | | | | LR | LR | 08 26 37.6 | |
| | comp=Z,50nm,22.0s,baz=264,slow=31 | | | | | | |
| MAW | Mawson | 84.72 | 203 | LR | LR | 08 31 48.5 | |
| | comp=Z,32nm,21.9s,baz=63,slow=34 | | | | | | |
| NVAR | Mina Array Bea | 95.62 | 52 | LR | LR | 08 33 50.6 | |
| | comp=Z,97nm,19.4s,baz=252,slow=31 | | | | | | |
| TORD | Torodi Ar. Bea | 144.53 | 288 | PKP | PKPbc | 08 03 41.6 | -0.2 |
| | 1.5nm,1.1s,baz=75,slow=4.7,SNR=4.9 | | | | | | |
| SAML | Samuel | 147.36 | 112 | *e*PKPbc | PKPab | 08 03 50.4 | -2.0 |

*IDC **26** 07:44:17.9±3.4, 3.5°S×100.1°E, h0km, mb3.7/6, mb1 3.9/6, mb1mx3.7/40, mbtmp3.8/6, Error ellipse: s-maj=137.7km s-min=20.2km az=57.0*
*ISCJB **26** 07:44:19.7±1.2, 3.5°S±0.1°×99.9°E±0.1°, 1, h33km, mb3.7/6, Error ellipse: s-maj=19.7km s-min=10.2km az=144.8*
*DJA **26** 07:44:25.7±2.4, 3.2°S±20.1°×10.0°E±1.1°, 6, h33km±8km, M3.9/4, MLv3.9/4*
**ISC 26 07:44:21.9±1.3, 3.5°S±0.1°×99.8°E±0.1°, 1, h35km, n24, σ1§94/16, mb3.8/6, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PPSI | Pulau Pagai | 0.76 | 18 | P | Pn | 07 44 35.1 | -1.0 |
| SISI | Saibi | 2.26 | 342 | P | Pn | 07 44 56.6 | -0.2 |
| SISI | | | | S | Sn | 07 45 07.0 | -16 |
| MASI | Maura Aman, Be | 2.48 | 82 | P | Pn | 07 45 02.1 | +2.2 |
| PDSI | Padang | 2.65 | 15 | P | Pn | 07 45 00.8 | -1.4 |
| KSI | Kapahiang | 2.81 | 93 | P | Pn | 07 45 09.9 | +5.5 |
| SDSI | Sungai Dareh | 3.03 | 33 | P | Pn | 07 45 04.2 | -3.2 |
| PPI | Padang Panjang | 3.08 | 12 | P | Pn | 07 45 08.1 | +0.1 |
| MNAI | Manna | 3.28 | 105 | P | Pn | 07 45 18.3 | +7.4 |
| MNSI | Mandailing Nat | 4.26 | 357 | P | Pn | 07 45 21.5 | -2.8 |
| JMBI | JAMBI | 4.28 | 65 | P | Pn | 07 45 24.7 | +0.2 |
| MDSI | Maura Dua | 4.50 | 103 | P | Pn | 07 45 25.2 | -2.4 |
| CMAR | Chiang Mai Arr | 21.82 | 358 | P | P | 07 49 11.8 | +0.4 |
| | 1.3nm,0.4s,baz=186,slow=10,SNR=6.6 | | | | | | |
| H08S2 | Diego Garcia H | 27.46 | 260 | T | T | 08 19 36.3 | |
| | baz=82,slow=75 | | | | | | |
| H08S3 | Diego Garcia H | 27.47 | 260 | T | T | 08 19 35.2 | |
| | baz=82 | | | | | | |
| H08S1 | Diego Carcia H | 27.48 | 260 | T | T | 08 19 35.2 | |
| | baz=82,slow=75 | | | | | | |
| H01W3 | Cape Leeuwin H | 33.96 | 159 | T | T | 08 26 34.5 | |
| | baz=336,slow=76,SNR=66 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.98 | 159 | T | T | 08 26 40.9 | |
| | baz=336,slow=76,SNR=68 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.98 | 159 | T | T | 08 26 35.8 | |
| | baz=336,slow=76,SNR=62 | | | | | | |
| WRA | Warramunga Arr | 37.45 | 119 | P | P | 07 51 30.3 | -2.0 |
| | 0.4nm,0.6s,baz=295,slow=8.8,SNR=6.6 | | | | | | |
| ASAR | Alice Springs | 38.58 | 124 | P | P | 07 51 39.7 | -2.1 |
| | 0.2nm,0.5s,baz=300,slow=7.4,SNR=2.4 | | | | | | |
| SONM | Songino Array | 51.44 | 6 | P | P | 07 53 25.2 | +1.5 |
| | 0.6nm,0.6s,baz=188,slow=8.7,SNR=3.6 | | | | | | |
| MKAR | Makanchi Array | 52.40 | 345 | P | P | 07 53 32.6 | +1.9 |
| | 0.9nm,0.7s,baz=141,slow=7.8,SNR=7.9 | | | | | | |
| ZALV | Zalesovo Beam | 58.58 | 350 | P | P | 07 54 16.5 | +1.5 |
| | 1.3nm,0.3s,baz=161,slow=5.7,SNR=3.3 | | | | | | |
| TXAR | Lajitas Array | 146.00 | 38 | PKPbc | PKPab | 08 04 00.1 | +0.7 |
| | 0.4nm,0.7s,baz=285,slow=1.1,SNR=5.6 | | | | | | |

*IDC **26** 07:45:23.4±2.2, 3.4°S×99.7°E, h0km, mb3.9/6, mb1 4.1/6, mb1mx3.8/40, mbtmp3.9/6, Error ellipse: s-maj=88.6km s-min=21.0km az=56.0*
*ISCJB **26** 07:45:27.1±1.9, 3.3°S±0.3°×100.0°E±0.5°, h33km, mb3.9/6, Error ellipse: s-maj=76.8km s-min=17.6km az=146.7*
**ISC 26 07:45:28.8±2.1, 3.4°S±0.3°×99.9°E±0.5°, h35km, n10, σ0§88/7, mb3.9/6, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 21.70 | 358 | P | P | 07 50 15.6 | -1.2 |
| | 1.2nm,0.3s,baz=183,slow=9.0,SNR=2.8 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.05 | 159 | T | T | 08 28 30.7 | |
| | baz=332 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.06 | 159 | T | T | 08 28 32.1 | |
| | baz=332 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.07 | 159 | T | T | 08 28 26.5 | |
| | baz=332 | | | | | | |
| WRA | Warramunga Arr | 37.44 | 119 | P | P | 07 52 38.8 | -0.3 |
| | 0.7nm,0.3s,baz=225,slow=12,SNR=7.6 | | | | | | |
| ASAR | Alice Springs | 38.58 | 125 | P | P | 07 52 48.5 | -0.2 |
| | 0.7nm,0.5s,baz=295,slow=7.6,SNR=2.9 | | | | | | |
| SONM | Songino Array | 51.30 | 6 | P | P | 07 54 30.4 | +0.8 |
| | 1.4nm,0.7s,baz=193,slow=10,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 52.29 | 345 | P | P | 07 54 37.1 | +0.2 |
| | 0.8nm,0.5s,baz=143,slow=8.3,SNR=4.4 | | | | | | |
| FINES | FINESS Array B | 85.25 | 332 | P | P | 07 58 01.3 | -0.3 |
| | 0.6nm,0.4s,baz=127,slow=5.0,SNR=6.7 | | | | | | |
| TXAR | Lajitas Array | 145.84 | 38 | PKPbc | PKPab | 08 05 06.5 | +0.7 |
| | 1.0nm,0.7s,baz=289,slow=1.1,SNR=7.8 | | | | | | |

*IDC **26** 07:48:54.4±1.9, 15.8°S×172.5°W, h0km, mb3.8/4, mb1 4.1/5, mb1mx3.8/25, mbtmp3.8/5, ML4.3/1, MS3.4/7, Ms1 3.4/7, ms1mx3.1/40, Error ellipse: s-maj=83.0km s-min=23.0km az=139.0*
*ISCJB **26** 07:48:58.3±1.5, 15.4°S±0.3°×172.8°W±0.3, h35km, mb3.7/4, MS3.5/5, Error ellipse: s-maj=63.1km s-min=10.3km az=44.0*
**ISC 26 07:48:60.0±1.7, 15.4°S±0.3°×172.7°W±0.4, h35km, n22, σ1§55/7, mb3.7/4, MS3.5/5, Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| AFI | Afiamalu | 1.76 | 30 | Pn | Pn | 07 49 29.0 | +0.9 |
| | 102nm,0.3s,baz=246,slow=10.0,SNR=101 | | | | | | |
| AFI | | | | Sn | Sn | 07 49 47.8 | -1.6 |
| | 462nm,0.3s,baz=180,slow=18,SNR=20 | | | | | | |
| AFI | | | | LR | LR | 07 50 01.5 | |
| | comp=Z,349nm,19.6s,baz=175,slow=32 | | | | | | |
| RAR | Rarotonga | 13.54 | 117 | LR | LR | 07 55 37.7 | |
| | comp=Z,89nm,18.4s,baz=295,slow=30 | | | | | | |
| PPT | Papeete | 22.27 | 99 | LR | LR | 08 00 26.7 | |
| | comp=Z,65nm,20.8s,baz=308,slow=31 | | | | | | |
| PPT2 | Papeete2 | 22.27 | 99 | *e*T | T | 08 17 07.3 | |
| | 2.2nm,0.4s | | | | | | |
| TBI | Tubuai | 23.26 | 113 | *e*LR | LR | 07 59 57.5 | |
| | 223nm,25.5s | | | | | | |
| TBI | Tubuai | 23.26 | 113 | *e*T | T | 08 18 33.1 | |
| | 4.8nm,0.2s | | | | | | |
| PMOR | Pomariorio Ree | 23.93 | 92 | *e*T | T | 08 19 05.5 | |
| | 2.6nm,0.2s | | | | | | |
| HNR | Honiara | 27.36 | 279 | LR | LR | 08 03 33.4 | |
| | comp=Z,69nm,18.1s,baz=220,slow=32 | | | | | | |
| RKT | Rikitea | 36.34 | 108 | *e*T | T | 08 34 48.1 | |
| | 3.7nm,0.4s | | | | | | |
| H11S2 | WAKE ISLAND Hy | 39.35 | 328 | T | T | 08 38 15.8 | |
| | baz=147,slow=76,SNR=16 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.36 | 328 | T | T | 08 38 13.9 | |
| | baz=147,slow=76,SNR=18 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.37 | 328 | T | T | 08 38 16.7 | |
| | baz=147,slow=76,SNR=15 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 40.29 | 329 | T | T | 08 39 05.7 | |
| | baz=150,slow=76,SNR=9.9 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.29 | 329 | T | T | 08 39 01.1 | |
| | baz=150,slow=76,SNR=9.3 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 40.30 | 329 | T | T | 08 39 05.6 | |
| | baz=150,slow=76,SNR=16 | | | | | | |
| WRA | Warramunga Arr | 50.50 | 257 | P | P | 07 57 54.2 | -0.9 |
| | 0.8nm,0.8s,baz=96,slow=7.8,SNR=8.1 | | | | | | |
| WRA | | | | LR | LR | 08 17 02.1 | |
| | comp=Z,47nm,20.0s,baz=210,slow=33 | | | | | | |
| ASAR | Alice Springs | 50.74 | 252 | P | P | 07 57 55.9 | -1.0 |
| | 3.5nm,0.7s,baz=86,slow=8.2,SNR=46 | | | | | | |
| ASAR | | | | LR | LR | 08 17 33.8 | |
| | comp=Z,84nm,19.9s,baz=97,slow=34 | | | | | | |
| TXAR | Lajitas Array | 80.07 | 56 | P | P | 08 01 06.0 | -0.6 |
| | 0.3nm,1.0s,baz=190,slow=4.3,SNR=1.9 | | | | | | |
| ILAR | Eielson Array | 82.36 | 11 | P | P | 08 01 20.4 | +2.5 |
| | 0.4nm,0.7s,baz=228,slow=6.3,SNR=7.9 | | | | | | |
| LVC | Limon Verde | 96.38 | 115 | LR | LR | 08 34 35.0 | |
| | comp=Z,84nm,21.4s,baz=204,slow=28 | | | | | | |
| GERES | GERESS Array B | 146.28 | 352 | PKPbc | PKPab | 08 08 39.5 | +1.7 |
| | 0.3nm,0.5s,baz=316,slow=2.7,SNR=1.5 | | | | | | |
| BRTR | Keskin Array B | 146.61 | 322 | PKPbc | PKPab | 08 08 40.5 | +1.1 |
| | 0.7nm,0.5s,baz=66,slow=3.1,SNR=5.0 | | | | | | |

*ISCJB **26** 07:49:48.5±0.3, 44.6°N±0.0°×7.2°E±0.0°, 3, h12km±3km, Error ellipse: s-maj=3.8km s-min=2.6km az=161.3*
*CSEM **26** 07:49:48.9±0.1, 44.6°N×7.2°E, h12km, ML2.8/14, Error ellipse: s-maj=2.1km s-min=1.4km az=70.0*
*LDG **26** 07:49:49.4±0.1, 44.6°N×7.2°E, h2km, Md2.5/3, Ml2.8/9, Error ellipse: s-maj=2.5km s-min=1.6km az=77.0*
*GEN **26** 07:49:49.5, 44.6°N×7.2°E, h12km, ML2.1*
**ISC 26 07:49:48.8±0.8, 44.6°N±0.0°×7.2°E±0.0°, 2, h16km±6km, n33, σ0§48/63, Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| DOI | San Damiano | 0.12 | 195 | Pg | Pg | 07 49 52.7 | +0.2 |
| DOI | | | | Sg | Sg | 07 49 54.6 | -0.3 |
| | 1um,0.2s | | | | | | |
| BHB | Bricherasio | 0.23 | 355 | P | Pg | 07 49 54.3 | +0.3 |
| BHB | | | | S | Sg | 07 49 57.4 | -0.1 |
| BHB | | | | Sg | Sb | 07 49 57.8 | -0.7 |
| | 252nm,0.1s | | | | | | |
| STV | Sant Anna di V | 0.37 | 176 | P | Pg | 07 49 56.6 | +0.1 |
| STV | | | | Sg | Sg | 07 50 01.5 | -0.2 |
| | 116nm,0.1s | | | | | | |
| MBDF | Montbardon | 0.39 | 287 | *e*Pg | Pg | 07 49 56.8 | 0.0 |
| MBDF | | | | *e*Sg | Sg | 07 50 01.5 | -0.7 |
| | 222nm,0.2s | | | | | | |
| MBDF | Montbardon | 0.39 | 287 | *e*Pg | Pg | 07 49 56.8 | 0.0 |
| | | | | *e*Sg | Sg | 07 50 01.5 | -0.7 |
| | 111nm,0.2s | | | | | | |
| RRL | Rocca Remolon | 0.47 | 311 | P | Pg | 07 49 58.3 | 0.0 |
| RRL | | | | Sg | Sg | 07 50 04.3 | -0.4 |
| RSP | Reno Superiore | 0.53 | 358 | P | Pg | 07 49 59.4 | -0.1 |
| RSP | | | | Sg | Sg | 07 50 07.3 | +0.7 |
| | 57nm,0.1s | | | | | | |
| BNI | Bardonecchia | 0.61 | 315 | Pg | Pg | 07 50 01.1 | +0.1 |
| BNI | | | | Sg | Sg | 07 50 08.7 | -0.5 |
| RORO | Rocca Rossa | 0.75 | 132 | P | Pb | 07 50 03.7 | +0.1 |
| RORO | | | | S | Sg | 07 50 13.5 | +0.1 |
| IMI | Imperia | 0.83 | 148 | P | Pb | 07 50 04.8 | -0.1 |
| IMI | | | | S | Sb | 07 50 15.8 | -0.1 |
| LSD | Lago del Serru | 0.85 | 353 | Pg | Pb | 07 50 05.0 | -0.4 |
| LSD | Lago del Serru | 0.85 | 353 | P | Pn | 07 50 06.7 | +0.2 |
| LSD | | | | Sg | Sb | 07 50 16.4 | -0.3 |
| LSD | | | | S | Sn | 07 50 18.2 | -0.5 |
| PCP | Piancastagn | 0.90 | 94 | P | Pn | 07 50 06.9 | -0.1 |
| PCP | | | | Sg | Sg | 07 50 19.0 | +0.8 |
| LPG | La Plagne | 0.96 | 337 | *e*Pg | Pb | 07 50 07.6 | +0.3 |
| LPG | | | | *e*Sg | Sg | 07 50 20.7 | +0.5 |
| | 23nm,0.3s | | | | | | |
| LPG | La Plagne | 0.96 | 337 | *e*Pg | Pb | 07 50 07.6 | +0.3 |
| LPG | | | | *e*Sg | Sg | 07 50 20.7 | +0.5 |
| | 11nm,0.3s | | | | | | |
| LPL | La Plagne | 0.98 | 337 | *e*Pg | Pg | 07 50 08.1 | +0.2 |
| LPL | | | | *e*Sg | Sb | 07 50 20.4 | -0.1 |
| | 27nm,0.3s | | | | | | |
| LPL | La Plagne | 0.98 | 337 | *e*Pg | Pg | 07 50 08.1 | +0.2 |
| LPL | | | | *e*Sg | Sb | 07 50 20.4 | -0.1 |
| | 13nm,0.3s | | | | | | |
| ORIF | Oris-en-Rattie | 1.05 | 287 | *e*Pg | Pb | 07 50 08.7 | 0.0 |
| ORIF | | | | *e*Sg | Sb | 07 50 21.4 | -0.8 |
| | 28nm,0.3s | | | | | | |
| ORIF | Oris-en-Rattie | 1.05 | 287 | *e*Pg | Pb | 07 50 08.7 | 0.0 |
| ORIF | | | | *e*Sg | Sb | 07 50 21.4 | -0.8 |
| | 14nm,0.3s | | | | | | |
| FRF | La Foret Royal | 1.15 | 204 | *e*Pg | Pb | 07 50 10.6 | +0.2 |
| FRF | | | | *e*Sg | Sb | 07 50 25.2 | +0.1 |
| | 63nm,0.2s | | | | | | |
| FRF | La Foret Royal | 1.15 | 204 | *e*Pg | Pb | 07 50 10.6 | +0.2 |
| FRF | | | | *e*Sg | Sb | 07 50 25.2 | +0.1 |
| | 32nm,0.2s | | | | | | |
| SMRF | Simiane la Rot | 1.39 | 243 | *e*Pg | Pb | 07 50 14.8 | +0.4 |
| SMRF | | | | *e*Sg | Sg | 07 50 33.0 | -0.6 |
| | 11nm,0.3s | | | | | | |
| SMRF | Simiane la Rot | 1.39 | 243 | *e*Pg | Pb | 07 50 14.8 | +0.4 |
| SMRF | | | | *e*Sg | Sg | 07 50 33.0 | -0.6 |
| | 5.4nm,0.3s | | | | | | |
| LMR | La Mourre | 1.40 | 204 | *e*Pn | Pb | 07 50 14.4 | -0.2 |
| LMR | La Mourre | 1.40 | 204 | *e*Pg | Pg | 07 50 16.0 | +0.2 |
| LMR | | | | *e*Sg | Sb | 07 50 33.2 | +1.0 |
| | 83nm,0.3s | | | | | | |
| LMR | La Mourre | 1.40 | 204 | *e*Pn | Pb | 07 50 14.4 | -0.2 |
| LMR | La Mourre | 1.40 | 204 | *e*Pg | Pg | 07 50 16.0 | +0.2 |
| LMR | | | | *e*Sg | Sb | 07 50 33.2 | +1.0 |
| | 42nm,0.3s | | | | | | |
| VIVF | Saint-Julien-l | 1.88 | 278 | *e*Pn | Pn | 07 50 21.4 | +1.0 |
| VIVF | Saint-Julien-l | 1.88 | 278 | *e*Pg | Pg | 07 50 24.7 | -0.2 |
| VIVF | | | | *e*Sn | Sn | 07 50 44.3 | +0.5 |
| | 7.4nm,0.3s | | | | | | |
| VIVF | Saint-Julien-l | 1.88 | 278 | *e*Pn | Pn | 07 50 21.4 | +1.0 |
| VIVF | Saint-Julien-l | 1.88 | 278 | *e*Pg | Pg | 07 50 24.7 | -0.2 |
| VIVF | | | | *e*Sn | Sn | 07 50 44.3 | +0.5 |
| | 3.7nm,0.3s | | | | | | |
| PGF | Pioggiola | 2.41 | 148 | *e*Pn | Pn | 07 50 27.1 | -0.7 |
| PGF | | | | *e*Sn | Sn | 07 50 56.5 | -0.5 |
| | 1.4nm,0.2s | | | | | | |
| PGF | Pioggiola | 2.41 | 148 | *e*Pn | Pn | 07 50 27.1 | -0.7 |
| PGF | | | | *e*Sn | Sn | 07 50 56.5 | -0.5 |
| | 0.7nm,0.2s | | | | | | |

**IDC 26 07:58:56.8±4.1, 3.3°S×100.1°E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.3/41, mbtmp3.4/3, Error ellipse: s-maj=164.1km s-min=27.9km az=55.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 21.69 | 357 | P | P | 08 03 50.1 | +0.7 |
| | 0.8nm,0.3s,baz=199,slow=8.2,SNR=4.7 | | | | | | |
| H01W3 | Cape Leeuwin H | 33.96 | 159 | T | T | 08 41 46.2 | |
| | baz=330 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.98 | 159 | T | T | 08 42 03.9 | |
| | baz=330 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.98 | 159 | T | T | 08 42 00.0 | |
| | baz=330 | | | | | | |
| WRA | Warramunga Arr | 37.18 | 119 | P | P | 08 06 09.9 | -0.1 |
| | 0.2nm,0.7s,baz=301,slow=9.1,SNR=3.4 | | | | | | |
| MKAR | Makanchi Array | 52.35 | 345 | P | P | 08 08 10.2 | -0.4 |
| | 0.3nm,0.6s,baz=173,slow=6.5,SNR=2.8 | | | | | | |
| TXAR | Lajitas Array | 145.63 | 39 | PKPbc | PKPdf | 08 18 37.4 | -0.8 |
| | 0.4nm,0.8s,baz=300,slow=2.0,SNR=3.8 | | | | | | |

**IDC 26 08:05:49.5±3.3, 2.9°S×99.8°E, h0km, mb3.7/6, mb1 3.9/6, mb1mx3.6/42, mbtmp3.7/6, Error ellipse: s-maj=145.9km s-min=20.0km az=55.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 21.30 | 358 | P | P | 08 10 37.7 | -0.3 |
| | 1.1nm,0.3s,baz=186,slow=10,SNR=6.5 | | | | | | |
| H08S2 | Diego Garcia H | 27.59 | 259 | T | T | 08 40 17.5 | |
| | baz=82,slow=75,SNR=111 | | | | | | |
| H08S3 | Diego Garcia H | 27.60 | 259 | T | T | 08 40 18.0 | |
| | baz=82,slow=75,SNR=118 | | | | | | |
| H08S1 | Diego Carcia H | 27.61 | 259 | T | T | 08 40 16.1 | |
| | baz=82,slow=75,SNR=123 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.44 | 159 | T | T | 08 48 50.8 | |
| | baz=335,slow=76,SNR=48 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.45 | 159 | T | T | 08 48 52.7 | |
| | baz=335,slow=76,SNR=39 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.45 | 159 | T | T | 08 48 51.3 | |
| | baz=335,slow=76,SNR=34 | | | | | | |
| WRA | Warramunga Arr | 37.67 | 119 | P | P | 08 13 06.8 | -0.1 |
| | 0.5nm,0.8s,baz=306,slow=9.3,SNR=7.8 | | | | | | |
| ASAR | Alice Springs | 38.84 | 125 | P | P | 08 13 16.3 | -0.5 |
| | 0.4nm,0.8s,baz=276,slow=8.2,SNR=3.3 | | | | | | |
| MKAR | Makanchi Array | 51.90 | 345 | P | P | 08 15 00.5 | +0.5 |
| | 1.0nm,0.6s,baz=145,slow=8.7,SNR=7.4 | | | | | | |
| KURBB | Kurchatov Arra | 56.42 | 344 | P | P | 08 15 31.8 | -1.0 |
| | 0.2nm,0.3s,baz=148,slow=5.5,SNR=3.0 | | | | | | |
| ZALV | Zalesovo Beam | 58.

*mb3.3/3, Error ellipse: s-maj=24.6km s-min=10.8km az=17.0*

*IDC* ***26*** *08:19:35.4±1.2,21°.16S×68°.82W, h114km±12km, mb3.2/4, mb1 3.4/6, mb1mx3.3/26, mbtmp3.7/6, Error ellipse: s-maj=26.1km s-min=15.2km az=100.0*

**ISC 26 08:19:34.8±1.0, 21°.09S±0°.06×68°.7W±0°.2, h112km, n7, σ2§95/8, mb3.3/3, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **1.53** | **189** | P | **Pn** | **08 20 02.1** | **-0.2** |
| | baz=358,slow=10 | | | | | | |
| LVC | | | | S | **Sn** | **08 20 22.3** | **-1.0** |
| | 1µm,0.3s,baz=131,slow=19,SNR=6.0 | | | | | | |
| **LPAZ** | **La Paz** | **4.80** | **6** | P | **Pn** | **08 20 48.6** | **+3.0** |
| | 0.9nm,0.3s,baz=194,slow=5.6,SNR=21 | | | | | | |
| LPAZ | | | | S | **Sn** | **08 21 35.0** | **-5.5** |
| | 0.3nm,0.3s,baz=194,slow=7.7,SNR=5.9 | | | | | | |
| **SIV** | **San Ignacio** | **8.79** | **56** | P | **Pn** | **08 21 40.4** | **+1.2** |
| | 2.8nm,0.3s,baz=254,slow=11,SNR=45 | | | | | | |
| **BDFB** | **Brasilia** | **20.31** | **78** | P | Pn | 08 24 05.5 | +0.2 |
| | 2.8nm,0.5s,baz=241,slow=13,SNR=4.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **60.44** | **325** | P | **P** | **08 29 32.7** | **-0.1** |
| | 0.2nm,0.6s,baz=152,slow=9.8,SNR=3.5 | | | | | | |
| **SNAA** | **Sanae** | **62.58** | **161** | P | **P** | **08 29 47.3** | **+0.6** |
| | 0.4nm,1.0s,baz=288,slow=3.2,SNR=4.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.99** | **70** | P | **P** | **08 31 16.7** | **+1.0** |
| | 0.3nm,0.4s,baz=248,slow=4.5,SNR=6.7 | | | | | | |

**IDC 26 08:23:35.1±4.0, 2°.83S×100°.46E, h0km, mb3.5/3, mb1 3.8/3, mb1mx3.4/49, mbtmp3.5/3, Error ellipse: s-maj=161.9km s-min=27.6km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.20** | **356** | P | P | 08 28 24.4 | +1.8 |
| | 1.2nm,0.5s,baz=187,slow=8.9,SNR=7.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.18** | **120** | P | P | 08 30 48.4 | +0.1 |
| | 0.1nm,0.5s,baz=305,slow=9.0,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.94** | **344** | P | P | 08 32 44.9 | -0.9 |
| | 0.3nm,0.5s,baz=164,slow=7.7,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.06** | **39** | PKPbc | PKPbc | 08 43 13.5 | -1.2 |
| | 0.3nm,0.7s,baz=339,slow=2.2,SNR=4.4 | | | | | | |

**IDC 26 08:24:17.1±999.0, 51°.55N×54°.10E, h0km, Error ellipse: s-maj=533.1km s-min=59.3km az=112.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **2.74** | **113** | *i* | | 08 42 20.0 | |
| | baz=296,slow=328,SNR=14 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **18.68** | **71** | *i* | | 10 19 40.0 | |
| | baz=274,slow=322,SNR=2.8 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **33.46** | **75** | *i* | | 11 48 00.0 | |
| | baz=296,slow=294,SNR=1.0 | | | | | | |

*ISCJB* ***26*** *08:27:44.4±0.5, 73°.50N±0°.03×8°.8E±0°.2, h10km, mb3.8/13, MS3.4/8, Error ellipse: s-maj=6.3km s-min=4.2km az=172.1*

*IDC* ***26*** *08:27:44.8±0.7, 73°.39N×7°.68E, h0km, mb3.8/11, mb1 4.0/16, mb1mx3.8/53, mbtmp3.8/16, ML3.6/4, MS3.4/12, Ms1 3.4/12, ms1mx3.1/46, Error ellipse: s-maj=16.4km s-min=10.7km az=73.0*

*NEIC* ***26*** *08:27:46.2±0.5, 73°.44N×7°.88E, h10km, mb4.1/2, Error ellipse: s-maj=13.1km s-min=7.6km az=80.0*

*BER* ***26*** *08:27:47.9±3.5, 73°.49N×8°.25E, h12km±22km, MD2.4, ML2.4, ML4.2(NAO)*

*CSEM* ***26*** *08:27:47.1±0.2, 73°.50N×8°.34E, h20km, ML2.4, Error ellipse: s-maj=6.9km s-min=4.0km az=84.0*

*NAO* ***26*** *08:27:47.7±5.2, 73°.46N×7°.97E, h29km±65km, ML4.2*

**ISC 26 08:27:46.4±0.7, 73°.50N±0°.04×8°.43E±0°.0, h10km, n78, σ1§38/88, mb3.8/13, MS3.4/8, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BJO1** | **Bjornoya** | **3.10** | **66** | Pn | **Pn** | **08 28 35.2** | **0.0** |
| **BJO** | **Bjornoya** | **3.15** | **66** | *e*P | **Pn** | **08 28 35.2** | **-0.6** |
| **BJO** | **Bjornoya** | **3.15** | **66** | *e*P | **Pn** | **08 28 35.2** | **-0.6** |
| | SNR=50 | | | | | | |
| **HSPB** | **Hornsund (broa** | **3.96** | **24** | *e*P | **Pn** | **08 28 44.7** | **-2.3** |
| HSPB | | | | | IAML | 08 29 30.8 | |
| | comp=Z,4.4nm,0.4s | | | | | | |
| **HSPB** | **Hornsund (broa** | **3.96** | **24** | Pn | **Pn** | **08 28 44.8** | **-2.3** |
| **HSP** | **Hornsund** | **3.97** | **24** | Pn | **Pn** | **08 28 44.8** | **-2.3** |
| **SPA0** | **Spitsbergen Ar** | **5.09** | **19** | Pn | **Pn** | **08 29 02.3** | **-0.2** |
| | baz=195,slow=16 | | | | | | |
| SPA0 | | | | | Sn | **Sn** | **08 29 59.5** | **-1.7** |
| | baz=205,slow=22 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **5.09** | **19** | Pn | **Pn** | **08 29 02.3** | **-0.2** |
| | baz=195,slow=16 | | | | | | |
| SPA0 | | | | | Sn | **Sn** | **08 29 59.5** | **-1.7** |
| | baz=205,slow=22 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **5.09** | **19** | Pn | **Pn** | **08 29 02.3** | **-0.2** |
| | baz=195,slow=14,SNR=50 | | | | | | |
| SPA0 | | | | | Sn | **Sn** | **08 29 59.5** | **-1.7** |
| | baz=205,slow=19,SNR=50 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **5.09** | **19** | Pn | **Pn** | **08 29 02.3** | **-0.2** |
| | baz=196,slow=14,SNR=434 | | | | | | |
| SPITS | | | | | Sn | **Sn** | **08 30 00.0** | **-1.2** |
| | baz=216,slow=30,SNR=1.6 | | | | | | |
| SPITS | | | | | LR | LR | 08 30 50.3 | |
| | comp=Z,261nm,19.6s,baz=230,slow=35 | | | | | | |
| **TRO** | **Tromso** | **5.11** | **134** | *e*Pn | **Pn** | **08 29 04.0** | **+1.2** |
| TRO | | | | *e*Sn | **Sn** | **08 29 57.3** | **-4.4** |
| TRO | | | | | IAML | 08 30 02.9 | |
| | comp=Z,24nm,0.4s | | | | | | |
| **TRO** | **Tromso** | **5.11** | **134** | *e*Pn | **Pn** | **08 29 04.0** | **+1.2** |
| | SNR=50 | | | | | | |
| **HOPEN** | **Hopen** | **5.25** | **47** | Pn | **Pn** | **08 29 04.3** | **-0.4** |
| HOPEN | | | | Sn | **Sn** | **08 30 03.4** | **-1.7** |
| **HOPEN** | **Hopen** | **5.25** | **47** | *e*P | **Pn** | **08 29 04.2** | **-0.4** |
| HOPEN | | | | Pn | **Pn** | **08 29 04.3** | **-0.4** |
| HOPEN | | | | Sn | **Sn** | **08 30 03.4** | **-1.7** |
| HOPEN | | | | IAML | | 08 30 06.2 | |
| | comp=Z,11nm,0.3s | | | | | | |
| **HOPEN** | **Hopen** | **5.25** | **47** | *e*P | **Pn** | **08 29 04.2** | **-0.4** |
| | SNR=49 | | | | | | |
| HOPEN | | | | Sn | **Sn** | **08 30 03.3** | **-1.7** |
| | SNR=50 | | | | | | |
| **HAMF** | **Hammerfest** | **5.50** | **114** | *e*P | **Pn** | **08 29 08.5** | **+0.3** |
| HAMF | | | | *e*S | Sn | 08 30 03.7 | -7.8 |
| HAMF | | | | IAML | | 08 30 13.6 | |
| | comp=Z,16nm,0.4s | | | | | | |
| **HAMF** | **Hammerfest** | **5.50** | **114** | *e*P | **Pn** | **08 29 08.5** | **+0.3** |
| | SNR=49 | | | | | | |
| **KBS** | **Kingsbay** | **5.52** | **7** | Pn | **Pn** | **08 29 07.1** | **-1.3** |
| **KBS** | **Kingsbay** | **5.52** | **7** | Pn | **Pn** | **08 29 07.1** | **-1.3** |
| **KBS** | **Kingsbay** | **5.52** | **7** | *e*Pn | **Pn** | **08 29 07.7** | **-0.8** |
| **KBS** | **Kingsbay** | **5.52** | **7** | *e*Pn | **Pn** | **08 29 07.7** | **-0.8** |
| **LOF** | **Lofoten** | **5.65** | **160** | *e*P | **Pn** | **08 29 09.7** | **-0.5** |
| LOF | | | | | IAML | 08 30 09.9 | |
| | comp=Z,28nm,0.5s | | | | | | |
| **LOF** | **Lofoten** | **5.65** | **160** | *e*P | **Pn** | **08 29 09.7** | **-0.5** |
| | SNR=49 | | | | | | |
| **STEI** | **Steigen** | **6.03** | **155** | *e*P | **Pn** | **08 29 16.4** | **+1.0** |
| STEI | | | | | IAML | 08 30 25.1 | |
| | comp=Z,5.4nm,0.6s | | | | | | |
| **STEI** | **Steigen** | **6.03** | **155** | *e*P | **Pn** | **08 29 16.4** | **+1.0** |
| | SNR=49 | | | | | | |
| **KTK1** | **Kautokeino** | **6.54** | **126** | *e*Pn | **Pn** | **08 29 24.2** | **+1.7** |
| KTK1 | | | | | IAML | 08 30 42.9 | |
| | comp=Z,4.7nm,0.3s | | | | | | |
| **KTK1** | **Kautokeino** | **6.54** | **126** | *e*Pn | **Pn** | **08 29 24.2** | **+1.7** |
| | SNR=50 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.71** | **118** | Pn | **Pn** | **08 29 25.7** | **+0.9** |
| | baz=309,slow=12 | | | | | | |
| ARA0 | | | | | Sn | **Sn** | **08 30 38.6** | **-2.5** |
| | baz=309,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.71** | **118** | Pn | **Pn** | **08 29 25.7** | **+0.9** |
| | baz=309,slow=12 | | | | | | |
| ARA0 | | | | | Sn | **Sn** | **08 30 38.6** | **-2.5** |
| | baz=309,slow=22 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.71** | **118** | Pn | **Pn** | **08 29 25.7** | **+0.9** |
| | baz=309,slow=12,SNR=50 | | | | | | |
| ARA0 | | | | | Sn | **Sn** | **08 30 38.6** | **-2.5** |
| | baz=309,slow=20,SNR=50 | | | | | | |
| **ARCES** | **ARCESS Array B** | **6.71** | **118** | Pn | **Pn** | **08 29 25.7** | **+0.9** |
| | comp=Z,2.7nm,0.3s,baz=324,slow=11,SNR=61 | | | | | | |
| ARCES | | | | | Sn | **Sn** | **08 30 38.3** | **-2.8** |
| | comp=Z,3.5nm,0.3s,baz=316,slow=20,SNR=8.3 | | | | | | |
| ARCES | | | | | LR | LR | 08 32 31.9 | |
| | comp=Z,128nm,18.1s,baz=272,slow=42 | | | | | | |
| **ARE0** | **ARCESS Array S** | **6.71** | **118** | *e*Pn | **Pn** | **08 29 25.6** | **+0.9** |
| ARE0 | | | | *e*Sn | **Sn** | **08 30 39.0** | **-2.1** |
| ARE0 | | | | | IAML | 08 30 42.5 | |
| | comp=Z,5.1nm,0.4s | | | | | | |
| **ARE0** | **ARCESS Array S** | **6.71** | **118** | *e*Pn | **Pn** | **08 29 25.6** | **+0.9** |
| | SNR=50 | | | | | | |
| ARE0 | | | | *e*Sn | **Sn** | **08 30 39.0** | **-2.1** |
| | SNR=50 | | | | | | |
| **KEV** | **Kevo** | **6.95** | **113** | *e*Pn | **Pn** | **08 29 28.5** | **+0.5** |
| KEV | | | | *e*Sn | **Sn** | **08 30 45.1** | **-1.8** |
| **KEV** | **Kevo** | **6.95** | **113** | *e*Pn | **Pn** | **08 29 28.5** | **+0.5** |
| KEV | | | | *e*Sn | **Sn** | **08 30 45.1** | **-1.8** |
| **KONS** | **Konsvik** | **7.21** | **165** | *e*P | **Pn** | **08 29 31.2** | **-0.4** |
| KONS | | | | *e*S | Sn | 08 30 45.1 | -8.3 |
| KONS | | | | IAML | | 08 30 47.0 | |
| | comp=Z,5.8nm,0.4s | | | | | | |
| **KONS** | **Konsvik** | **7.21** | **165** | *e*P | **Pn** | **08 29 31.2** | **-0.4** |
| | SNR=47 | | | | | | |
| **STOK** | **Stokkvaagen** | **7.37** | **165** | *e*Pn | **Pn** | **08 29 33.3** | **-0.5** |
| STOK | | | | | IAML | 08 30 52.1 | |
| | comp=N,5.1nm,0.3s | | | | | | |
| **STOK** | **Stokkvaagen** | **7.37** | **165** | *e*Pn | **Pn** | **08 29 33.3** | **-0.5** |
| | SNR=50 | | | | | | |
| **MOR8** | **Moi Rana** | **7.64** | **161** | *e*P | **Pn** | **08 29 36.7** | **-0.9** |
| MOR8 | | | | *e*S | Sn | 08 30 53.7 | -10 |
| MOR8 | | | | IAML | | 08 30 57.9 | |
| | comp=Z,12nm,0.3s | | | | | | |
| **MOR8** | **Moi Rana** | **7.64** | **161** | *e*P | **Pn** | **08 29 36.7** | **-0.9** |
| | SNR=47 | | | | | | |
| **APA0** | **Apatity Array** | **10.02** | **114** | Pn | **Pn** | **08 30 09.5** | **-0.5** |
| | baz=326,slow=16 | | | | | | |
| **APA0** | **Apatity Array** | **10.02** | **114** | Pn | **Pn** | **08 30 09.5** | **-0.5** |
| | baz=326,slow=16 | | | | | | |
| **APA0** | **Apatity Array** | **10.02** | **114** | Pn | **Pn** | **08 30 09.5** | **-0.5** |
| | baz=326,slow=15,SNR=50 | | | | | | |
| **NB2** | **NORSAR Subarra** | **12.56** | **174** | Pn | **Pn** | **08 30 44.1** | **-0.7** |
| | baz=354,slow=14 | | | | | | |
| **NB2** | **NORSAR Subarra** | **12.56** | **174** | Pn | **Pn** | **08 30 44.1** | **-0.7** |
| | baz=354,slow=14 | | | | | | |
| **NB2** | **NORSAR Subarra** | **12.56** | **174** | Pn | **Pn** | **08 30 44.1** | **-0.7** |
| | baz=354,slow=13,SNR=50 | | | | | | |
| **NOA** | **NORSAR Array B** | **12.56** | **174** | Pn | **Pn** | **08 30 43.4** | **-1.5** |
| | comp=Z,0.4nm,0.3s,baz=351,slow=13,SNR=5.2 | | | | | | |
| NOA | | | | | LR | LR | 08 35 15.6 | |
| | comp=Z,94nm,21.0s,baz=350,slow=36 | | | | | | |
| **HFS** | **Hagfors** | **13.57** | **169** | Pn | **Pn** | **08 30 57.2** | **-1.4** |
| | baz=350,slow=16 | | | | | | |
| **HFS** | **Hagfors** | **13.57** | **169** | Pn | **Pn** | **08 30 57.2** | **-1.4** |
| | baz=350,slow=16 | | | | | | |
| **HFS** | **Hagfors** | **13.57** | **169** | Pn | **Pn** | **08 30 57.2** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=359,slow=12,SNR=8.9 | | | | | | |
| HFS | | | | | LR | LR | 08 35 47.9 | |
| | comp=Z,164nm,18.5s,baz=42,slow=36 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.76** | **142** | Pn | **Pn** | **08 31 00.6** | **-0.6** |
| | baz=342,slow=11 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.76** | **142** | Pn | **Pn** | **08 31 00.6** | **-0.6** |
| | baz=342,slow=11 | | | | | | |
| **FIA0** | **FINESS Array S** | **13.76** | **142** | Pn | **Pn** | **08 31 00.6** | **-0.6** |
| | baz=342,slow=11,SNR=50 | | | | | | |
| **FINES** | **FINESS Array B** | **13.76** | **142** | Pn | **Pn** | **08 31 00.0** | **-1.2** |
| | comp=Z,0.3nm,0.3s,baz=350,slow=9.7,SNR=11 | | | | | | |
| **KONO** | **Kongsberg** | **13.92** | **178** | *e*Pn | **Pn** | **08 31 04.2** | **+0.9** |
| **KONO** | **Kongsberg** | **13.92** | **178** | *e*Pn | **Pn** | **08 31 04.2** | **+0.9** |
| **AKASG** | **Malin Array Be** | **24.56** | **147** | P | **P** | **08 33 06.0** | **+0.1** |
| | comp=Z,1.5nm,0.4s,baz=343,slow=9.7,SNR=4.0 | | | | | | |
| AKASG | | | | | LR | LR | 08 42 29.6 | |
| | comp=Z,139nm,21.4s,baz=285,slow=36 | | | | | | |
| **AKASG** | **Malin Array Be** | **24.56** | **147** | P | **P** | **08 33 06.0** | **+0.1** |
| **GERES** | **GERESS Array B** | **24.84** | **172** | P | **P** | **08 33 08.4** | **-0.2** |
| | comp=Z,1.5nm,0.8s,baz=358,slow=9.3,SNR=7.4 | | | | | | |
| **RES** | **Resolute Bay** | **25.00** | **322** | LR | LR | 08 42 13.0 | |
| | comp=Z,76nm,19.5s,baz=256,slow=35 | | | | | | |
| **AKTO** | **Aktyubinsk** | **31.21** | **110** | LR | LR | 08 47 05.4 | |
| | comp=Z,52nm,19.6s,slow=37 | | | | | | |
| **BVAR** | **Borovoye Array** | **32.34** | **95** | P | **P** | **08 34 17.5** | **+2.2** |
| | comp=Z,1.7nm,0.8s,baz=332,slow=8.2,SNR=2.7 | | | | | | |
| **ABKAR** | **Akbulak array** | **32.81** | **109** | *e*P | **P** | **08 34 21.5** | **+2.2** |
| | comp=Z,0.8nm,0.6s | | | | | | |
| **KBZ** | **Khabaz** | **33.81** | **132** | LR | LR | 08 48 46.6 | |
| | comp=Z,73nm,20.3s,baz=30,slow=37 | | | | | | |
| **BRTR** | **Keskin Array B** | **35.96** | **146** | P | **P** | **08 34 47.8** | **+0.9** |
| | comp=Z,0.5nm,0.4s,baz=345,slow=4.3,SNR=3.7 | | | | | | |
| **KURK** | **Kurchatov** | **36.75** | **89** | *e*P | P | 08 34 56.8 | +3.5 |
| | comp=Z,6.4nm,0.9s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **36.80** | **89** | P | **P** | **08 34 56.0** | **+2.2** |
| | comp=Z,0.6nm,0.2s,baz=330,slow=6.8,SNR=3.7 | | | | | | |
| **YAK** | **Yakutsk** | **39.18** | **40** | LR | LR | 08 52 54.8 | |
| | comp=Z,30nm,18.5s,baz=36,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **41.02** | **344** | P | **P** | **08 35 29.8** | **+0.8** |
| | comp=Z,0.8nm,0.9s,baz=6.3,slow=7.2,SNR=12 | | | | | | |
| **SEY** | **Seymchan** | **41.72** | **24** | P | **P** | **08 35 36.4** | **+1.7** |
| | comp=Z,3.2nm,1.0s,baz=126,slow=10.0,SNR=3.8 | | | | | | |
| **GEYT** | **Alibeck** | **42.88** | **118** | LR | LR | 08 55 12.0 | |
| | comp=Z,93nm,19.0s,baz=40,slow=38 | | | | | | |
| **SONM** | **Songino Array** | **47.04** | **66** | P | **P** | **08 36 19.5** | **+1.9** |
| | comp=Z,0.5nm,0.7s,baz=328,slow=5.2,SNR=3.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.45** | **188** | P | **P** | **08 37 54.6** | **-1.3** |
| | comp=Z,0.9nm,0.8s,baz=349,slow=6.7,SNR=6.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **62.69** | **315** | P | **P** | **08 38 10.4** | **-0.6** |
| | comp=Z,0.7nm,0.9s,baz=28,slow=4.1,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **68.09** | **299** | P | **P** | **08 38 44.6** | **-1.4** |
| | comp=Z,0.4nm,1.0s,baz=21,slow=3.0,SNR=2.9 | | | | | | |
| TXAR | | | | | LR | LR | 09 06 38.4 | |
| | comp=Z,18nm,19.6s,baz=0.0,slow=34 | | | | | | |
| **OPO** | **Ambohidratompo** | **95.27** | **143** | LR | LR | 09 23 54.2 | |
| | comp=Z,40nm,18.1s,baz=254,slow=35 | | | | | | |
| **MAW** | **Mawson** | **145.23** | **147** | PKPbc | **PKPdf** | **08 47 22.8** | **+0.8** |
| | comp=Z,1.4nm,0.8s,baz=273,slow=8.2,SNR=4.6 | | | | | | |

**IDC 26 08:29:22.5±2.9, 3°.29S×99°.92E, h0km, mb3.7/5, mb1 3.9/5, mb1mx3.6/45, mbtmp3.7/5, Error ellipse: s-maj=102.1km s-min=22.8km az=58.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **37.43** | **119** | P | P | 08 36 37.5 | -0.3 |
| | 0.8nm,0.8s,baz=303,slow=9.4,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **38.58** | **125** | P | P | 08 36 47.0 | -0.5 |
| | 0.5nm,0.6s,baz=300,slow=8.0,SNR=9.2 | | | | | | |
| **SONM** | **Songino Array** | **51.23** | **6** | P | P | 08 38 28.0 | -0.1 |
| | 0.5nm,0.6s,baz=198,slow=9.3,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.25** | **345** | P | P | 08 38 34.6 | -0.9 |
| | 0.4nm,0.5s,baz=150,slow=10,SNR=3.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.33** | **28** | P | P | 08 38 57.9 | -0.2 |
| | 3.3nm,0.9s,baz=224,slow=10,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.77** | **38** | PKPbc | PKPab | 08 49 05.1 | +0.3 |
| | 0.6nm,0.7s,baz=260,slow=1.4,SNR=9.7 | | | | | | |

*IDC* ***26*** *08:30:58.8±0.9, 59°.87S×26°.83W, h0km, mb4.0/7, mb1 4.1/8, mb1mx4.0/22, mbtmp4.0/8, ML4.4/1, MS2.6/1, Ms1 2.6/1, ms1mx2.5/18, Error ellipse: s-maj=34.5km s-min=19.6km az=67.0*

**ISC 26 08:31:00.1±0.8, 60°.4S±0°.2×27°.0W±0°.3, h19km, n13, σ1§61/11, mb4.0/7, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNA1** | **Neumayer--Stat** | **12.85** | **151** | P | **P** | **08 34 09.8** | **-2.4** |
| **VNA3** | **Neumayer Olymp** | **12.96** | **155** | P | P | 08 34 10.1 | -3.4 |
| **VNA2** | **Neumayer--Watz** | **13.25** | **151** | P | **P** | **08 34 14.3** | **-2.3** |
| | baz=310,slow=16 | | | | | | |
| **SNAA** | **Sanae** | **14.85** | **150** | P | **P** | **08 34 35.5** | **+1.0** |
| **SNAA** | **Sanae** | **14.85** | **150** | Pn | **P** | **08 34 35.9** | **+1.4** |
| | 1.4nm,0.3s,baz=318,slow=13,SNR=180 | | | | | | |
| SNAA | | | | | Sn | **Sn** | **08 37 12.3** | **-0.3** |
| | 0.1nm,0.3s,baz=241,slow=5.7,SNR=5.9 | | | | | | |
| SNAA | | | | | LR | LR | 08 39 57.1 | |
| | comp=Z,23nm,18.5s,baz=205,slow=35 | | | | | | |
| **QSPA** | **South Pole Qui** | **29.89** | **180** | P | P | 08 37 13.0 | +6.7 |
| | 1.1nm,0.5s,baz=214,slow=4.9,SNR=3.5 | | | | | | |
| **CFAA** | **Coronel Fontan** | **39.51** | **298** | P | **P** | **08 38 28.9** | **-0.4** |
| | 0.2nm,0.3s,baz=152,slow=10,SNR=5.5 | | | | | | |
| **CPUP** | **Villa Florida** | **39.83** | **315** | P | **P** | **08 38 31.6** | **-0.4** |
| | 2.9nm,0.8s,baz=147,slow=7.3,SNR=7.7 | | | | | | |
| **VNDA** | **Vanda** | **42.27** | **183** | P | P | 08 38 57.3 | +5.7 |
| | 1.0nm,0.7s,baz=176,slow=6.1,SNR=7.3 | | | | | | |
| **LPAZ** | **La Paz** | **53.02** | **308** | P | **P** | **08 40 16.6** | **+0.2** |
| | 0.8nm,0.4s,baz=116,slow=6.4,SNR=8.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.78** | **29** | P | **P** | **08 42 49.9** | **-0.2** |
| | 1.8nm,0.5s,baz=199,slow=6.3,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **94.85** | **162** | P | **P** | **08 44 23.1** | **+2.4** |
| | 0.3nm,0.5s,baz=182,slow=3.5,SNR=7.0 | | | | | | |
| **FINES** | **FINESS Array B** | **128.12** | **29** | PKP | **PKPdf** | **08 50 02.7** | **-0.5** |
| | 1.1nm,0.7s,baz=98,slow=2.8,SNR=3.0 | | | | | | |

**NNC 26 08:34:52.9±2.8, 38°.97N×73°.18E, h0km, mb3.7, mpv3.3, 8C-7D, Error ellipse: s-maj=32.0km s-min=11.4km az=132.0, Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **1.07** | **13** | ⇓P | Pg | 08 35 11.5 | -2.3 |
| SFK | | | | ⇑S | Sg | 08 35 27.4 | -0.6 |
| **DZET** | **Dzherino** | **3.40** | **269** | ⇑Pn | Pn | 08 35 47.3 | -0.1 |
| DZET | | | | ⇓Pg | Pb | 08 35 53.3 | -0.9 |
| DZET | | | | ⇓Lg | Lg | 08 36 40.2 | |
| **MNAS** | **Manas** | **3.55** | **352** | ⇑Pn | Pn | 08 35 50.4 | +1.0 |
| MNAS | | | | ⇓Lg | Lg | 08 36 45.9 | |
| | 12nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.79** | **15** | ⇑Pn | Pn | 08 35 53.3 | +0.5 |
| | 1.7nm,0.6s | | | | | | |
| AAK | | | | ⇓Pg | Pb | 08 35 59.5 | -1.4 |
| | 15nm,0.8s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 08 36 42.1 | +3.8 |
| | 29nm,0.8s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 08 36 55.3 | |
| | 33nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.35** | **24** | ⇓Pn | Pn | 08 36 01.9 | +1.4 |
| | 2.3nm,0.5s | | | | | | |
| TKM2 | | | | ⇓Pg | Pb | 08 36 13.2 | +2.7 |
| | 5.5nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 08 37 09.5 | |
| | 14nm,0.9s | | | | | | |
| **KK31** | **Karatay Array** | **4.60** | **335** | Pn | Pn | 08 36 05.5 | +1.8 |
| | 1.6nm,0.3s,baz=151,slow=14,SNR=27 | | | | | | |
| KK31 | | | | ⇑Sn | Sn | 08 37 02.0 | +4.2 |
| | 13nm,0.5s,baz=151,slow=25,SNR=4.5 | | | | | | |

*DJA* ***26*** *08:38:16.8±3.8, 3°.S±15°.×9°.9E±2°.1, h16km±22km, M4.5/8, mb4.5/2, MLv4.5/8*

*IDC* ***26*** *08:38:17.1±1.4, 3°.52S×99°.11E, h0km, mb3.9/9, mb1 4.1/9, mb1mx3.8/53, mbtmp3.9/9, MS4.3/1, Ms1 4.3/1, ms1mx2.6/39, Error ellipse: s-maj=60.0km s-min=17.5km az=52.0*

*ISCJB* ***26*** *08:38:20.4±0.9, 3°.35S±0°.09×99°.37E±0°.09, h33km, mb3.9/9, MS4.3/1, Error ellipse: s-maj=16.0km s-min=7.6km az=43.4*

**ISC 26 08:38:22.9±1.0, 3°.3S±0°.1×99°.4E±0°.1, h35km, n28, σ1§24/21, mb3.9/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.84** | **50** | P | **Pn** | **08 38 36.5** | **-1.7** |
| **SISI** | **Saibi** | **1.98** | **352** | P | **Pn** | **08 38 52.2** | **-1.8** |
| **MASI** | **Maura Aman, Be** | **2.88** | **87** | P | **Pn** | **08 39 06.0** | **-0.3** |
| **PPI** | **Padang Panjang** | **3.01** | **20** | P | **Pn** | **08 39 06.5** | **-1.6** |
| **SDSI** | **Sungai Dareh** | **3.13** | **41** | P | **Pn** | **08 39 09.0** | **-0.8** |
| **KSI** | **Kapahiang** | **3.24** | **96** | P | **Pn** | **08 39 10.7** | **-0.7** |
| **MNAI** | **Manna** | **3.74** | **106** | P | **Pn** | **08 39 15.9** | **-2.2** |
| **MDSI** | **Maura Dua** | **4.95** | **104** | P | **Pn** | **08 39 33.5** | **-1.2** |
| | 40nm,0.7s,0.2nm | | | | | | |
| **LWLI** | **Liwa** | **4.98** | **110** | P | **Pn** | **08 39 35.3** | **0.0** |
| **KASI** | **Kota Agung** | **5.57** | **113** | P | **Pn** | **08 39 41.0** | **-2.3** |
| **CMAR** | **Chiang Mai Arr** | **21.63** | **359** | P | **P** | **08 43 11.4** | **+1.2** |
| | 2.2nm,0.6s,baz=188,slow=11,SNR=9.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.08** | **260** | T | T | 09 13 17.2 | |
| | baz=81,slow=75,SNR=53 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.09** | **260** | T | T | 09 13 13.7 | |
| | baz=81,slow=75,SNR=40 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.10** | **260** | T | T | 09 13 15.2 | |
| | baz=81,slow=75,SNR=44 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.28** | **158** | T | T | 09 21 56.8 | |
| | baz=335,slow=76,SNR=13 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.30** | **158** | T | T | 09 21 36.9 | |
| | baz=335,slow=76,SNR=12 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.30** | **158** | T | T | 09 21 43.9 | |
| | baz=335,slow=76,SNR=10.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.91** | **119** | P | **P** | **08 45 36.8** | **-0.3** |
| | 1.3nm,0.6s,baz=291,slow=8.9,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **39.03** | **124** | P | **P** | **08 45 46.6** | **+0.1** |
| | 1.3nm,0.7s,baz=295,slow=8.0,SNR=23 | | | | | | |
| **SONM** | **Songino Array** | **51.30** | **6** | P | **P** | **08 47 24.5** | **+0.9** |
| | 1.1nm,0.8s,baz=194,slow=9.0,SNR=7.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.11** | **345** | P | **P** | **08 47 30.2** | **+0.5** |
| | 0.8nm,0.6s,baz=108,slow=9.3,SNR=3.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.69** | **39** | LR | LR | 09 12 06.5 | |
| | comp=Z,251nm,18.5s,baz=345,slow=38 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.62** | **344** | P | **P** | **08 48 03.3** | **+1.1** |
| | 0.2nm,0.3s,baz=170,slow=7.4,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.33** | **350** | P | **P** | **08 48 15.0** | **+0.7** |
| | 1.5nm,0.4s,baz=167,slow

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **NB2** | **NORSAR Subarra** | **12.56** | **174** | Pn | | **Pn** | **08 44 20.1** | **+0.1** | |
| **NOA** | **NORSAR Array B** | **12.56** | **174** | Pn | | **Pn** | **08 44 18.9** | **-1.1** | |
| | 0.2nm,0.3s,baz=356,slow=13,SNR=2.5 | | | | | | | | |
| NOA | | | | LR | | LR | 08 48 50.3 | | |
| | comp=Z,32nm,18.3s,baz=50,slow=36 | | | | | | | | |
| **HFS** | **Hagfors** | **13.57** | **169** | Pn | | **Pn** | **08 44 31.8** | **-1.9** | |
| | 0.1nm,0.3s,baz=335,slow=9.7,SNR=4.3 | | | | | | | | |
| **BORG** | **Borgarnes** | **13.60** | **245** | LR | | LR | 08 48 19.1 | | |
| | comp=Z,49nm,18.1s,baz=306,slow=31 | | | | | | | | |
| **FIA0** | **FINESS Array S** | **13.75** | **142** | Pn | | **Pn** | **08 44 37.2** | **+1.2** | |
| | baz=339,slow=12 | | | | | | | | |
| **FIA0** | **FINESS Array S** | **13.75** | **142** | Pn | | **Pn** | **08 44 37.2** | **+1.2** | |
| | baz=339,slow=12 | | | | | | | | |
| **FIA0** | **FINESS Array S** | **13.75** | **142** | Pn | | **Pn** | **08 44 37.2** | **+1.2** | |
| | baz=339,slow=12 | | | | | | | | |
| **FINES** | **FINESS Array B** | **13.75** | **142** | Pn | | **Pn** | **08 44 34.9** | **-1.2** | |
| | 0.1nm,0.3s,baz=337,slow=13,SNR=4.3 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **24.55** | **147** | P | | **P** | **08 46 40.3** | **-0.6** | |
| | 0.7nm,0.4s,baz=346,slow=9.6,SNR=3.8 | | | | | | | | |
| **ILAR** | **Eielson Array** | **41.02** | **344** | P | | **P** | **08 49 05.7** | **+1.6** | |
| | 0.2nm,0.8s,baz=26,slow=6.3,SNR=3.9 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **60.46** | **188** | P | | **P** | **08 51 30.5** | **-0.5** | |
| | 0.6nm,0.8s,baz=357,slow=6.1,SNR=3.8 | | | | | | | | |

**NNC 26 08:42:32.7±1.3, 50.60N×75.22E, h0km, mb3.5, mpv3.0, 10C-8D, Error ellipse: s-maj=20.0km s-min=4.4km az=19.0, Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KURBB** | **Kurchatov Arra** | **2.11** | **88** | ⇓Pg | Pb | 08 43 11.8 | +0.1 |
| | 9.6nm,0.2s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 08 43 38.8 | |
| | 57nm,0.6s | | | | | | |
| **KURK** | **Kurchatov** | **2.17** | **86** | ⇑Pg | Pb | 08 43 11.6 | -1.1 |
| | 8.7nm,0.7s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 08 43 40.0 | |
| | 25nm,0.4s | | | | | | |
| **VOSK** | **Vostochnaya** | **3.39** | **311** | ⇓Pg | Pb | 08 43 34.6 | +1.0 |
| VOSK | | | | ⇑Lg | Lg | 08 44 19.1 | |
| | 4.7nm,0.5s | | | | | | |
| **BVA0** | **Borovoye Array** | **3.86** | **311** | ⇑Pg | Pb | 08 43 43.0 | +1.3 |
| | 0.4nm,0.3s,baz=132,slow=15,SNR=3.0 | | | | | | |
| BVA0 | | | | ⇑Lg | Lg | 08 44 36.4 | |
| | 7.3nm,1.2s,baz=130,slow=29,SNR=4.9 | | | | | | |
| **BRVK** | **Borovoye** | **3.93** | **311** | ⇑Pg | Pb | 08 43 43.6 | +0.8 |
| | 6.6nm,1.2s | | | | | | |
| BRVK | | | | ⇑Lg | Lg | 08 44 36.3 | |
| | 9.6nm,0.8s | | | | | | |
| **CHKZ** | **Chkalovo** | **4.19** | **319** | ⇓Pn | Pn | 08 43 40.0 | +2.2 |
| CHKZ | | | | ⇑Pg | Pb | 08 43 48.5 | +1.3 |
| CHKZ | | | | ⇓Sn | Sn | 08 44 28.0 | +0.6 |
| | 1.0nm,0.5s | | | | | | |
| CHKZ | | | | ⇓Lg | Lg | 08 44 43.3 | |
| | 3.7nm,0.6s | | | | | | |
| **ZRNK** | **Zerenda** | **4.52** | **304** | ⇓Pn | Pn | 08 43 43.2 | +0.9 |
| ZRNK | | | | ⇓Pg | Pg | 08 43 56.2 | -3.2 |
| ZRNK | | | | ⇓Lg | Lg | 08 44 57.4 | |
| | 6.7nm,0.9s | | | | | | |
| **MK31** | **Makanchi Array** | **6.03** | **126** | ⇑Lg | Lg | 08 45 47.0 | |
| | 2.7nm,0.7s | | | | | | |

*DJA **26** 08:53:10.9±1.3, 4.5S±8.×10.0E±1.3, h10km, M4.9/7, mb5.0/5, mB5.2/2, MLv4.9/7, Mw(mB)4.6/2*
*IDC **26** 08:53:12.3±0.5, 3.54S×99.85E, h0km, mb4.7/21, mb1 4.8/24, mb1mx4.6/36, mbtmp4.7/24, ML4.5/3, MS3.6/13, Ms1 3.6/13, ms1mx3.4/35, Error ellipse: s-maj=21.9km s-min=11.8km az=52.0*
*AUST **26** 08:53:12.6, 3.84S×99.96E, h0km*
*ISCJB **26** 08:53:13.5±1.1, 3.57S±0.03×99.84E±0.04, h20km±7km, mb4.8/69, MS3.7/17, Error ellipse: s-maj=7.2km s-min=3.8km az=139.8*
*BJI **26** 08:53:13.9, 3.60S×99.80E, h19km, mb4.9/49, mB5.1/32, Ms4.8/23, Ms7 4.4/19*
*NEIC **26** 08:53:14.6±2.7, 3.59S×99.81E, h16km±16km, mb4.9/24, Error ellipse: s-maj=10.7km s-min=4.4km az=53.0*
*MOS **26** 08:53:15.1±1.0, 3.46S×99.92E, h30km, mb5.1/39, Error ellipse: s-maj=11.8km s-min=5.5km az=112.5*
*KLM **26** 08:53:17.3, 3.36S×99.40E, h80km, mb4.9, MS5.2*

**ISC 26 08:53:16.2±0.5, 3.63S±0.04×99.78E±0.05, h27km±2km, n457, σ1°28/457, mb4.9/70, MS3.8/17, 19C-22D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.89** | **15** | P | **Pn** | **08 53 30.6** | **-2.4** |
| **SISI** | **Saibi** | **2.39** | **343** | P | **Pn** | **08 53 50.9** | **-2.7** |
| SISI | | | | S | **Sn** | **08 54 19.1** | **-2.9** |
| **MASI** | **Maura Aman, Be** | **2.50** | **79** | P | **Pn** | **08 53 53.7** | **-1.5** |
| **PDSI** | **Padang** | **2.79** | **14** | P | **Pn** | **08 53 56.2** | **-2.9** |
| **KSI** | **Kapahiang** | **2.81** | **90** | P | **Pn** | **08 54 00.0** | **+0.6** |
| **SDSI** | **Sungai Dareh** | **3.15** | **32** | P | **Pn** | **08 54 02.3** | **-1.7** |
| **PPI** | **Padang Panjang** | **3.21** | **11** | P | **Pn** | **08 54 03.0** | **-1.9** |
| | baz=3.4,SNR=33 | | | | | | |
| **PPI** | **Padang Panjang** | **3.21** | **11** | P | **Pn** | **08 54 02.7** | **-2.2** |
| PPI | | | | S | **Sn** | **08 54 39.6** | **-2.7** |
| **MNAI** | **Manna** | **3.25** | **103** | P | **Pn** | **08 54 05.9** | **+0.5** |
| | baz=3.0,SNR=12 | | | | | | |
| **MNAI** | **Manna** | **3.25** | **103** | P | **Pn** | **08 54 04.2** | **-1.2** |
| **MNAI** | **Manna** | **3.25** | **103** | *e*Pn | **Pn** | **08 54 05.0** | **-0.4** |
| MNAI | | | | *e*Sn | **Sn** | **08 54 40.8** | **-2.5** |
| **BKNI** | **Bangkinang** | **4.13** | **18** | P | Pn | 08 54 21.3 | +3.8 |
| | baz=4.3,SNR=3.1 | | | | | | |
| **BKNI** | **Bangkinang** | **4.13** | **18** | P | Pb | 08 54 24.1 | -4.1 |
| **BKNI** | **Bangkinang** | **4.13** | **18** | *e*Pn | **Pn** | **08 54 19.0** | **+1.5** |
| **MNSI** | **Mandailing Nat** | **4.40** | **357** | P | **Pn** | **08 54 20.5** | **-0.8** |
| **MDSI** | **Maura Dua** | **4.47** | **101** | P | **Pn** | **08 54 21.3** | **-0.9** |
| **LWLI** | **Liwa** | **4.48** | **108** | P | **Pn** | **08 54 22.7** | **+0.2** |
| **KASI** | **Kota Agung** | **5.06** | **112** | P | **Pn** | **08 54 31.1** | **+0.7** |
| **GSI** | **Gunungsitoli** | **5.38** | **336** | *e*Pn | **Pn** | **08 54 34.2** | **-0.5** |
| **PSI** | **Prapat** | **6.45** | **352** | Pn | Pn | 08 54 44.9 | -4.6 |
| | 1.6nm,0.3s,baz=191,slow=6.2,SNR=6.2 | | | | | | |
| **PSI** | **Prapat** | **6.45** | **352** | P | Pn | 08 54 44.9 | -4.6 |
| PSI | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **PSI** | **Prapat** | **6.45** | **352** | *e*Pn | Pn | 08 54 44.6 | -5.0 |
| **PPBI** | **Pangkal Pinang** | **6.51** | **77** | P | **Pn** | **08 54 49.8** | **-0.5** |
| **CGJI** | **Cibinong** | **6.59** | **117** | P | **Pn** | **08 54 48.8** | **-2.6** |
| | comp=Z,188nm,0.8s,comp=Z,3μmcomp=Z,0.6nm | | | | | | |
| **KGM** | **Kluang** | **6.63** | **32** | ⇑P | **Pn** | **08 54 53.0** | **+1.1** |
| **MYKOM** | **Kota Tinggi** | **6.75** | **37** | ⇑P | **Pn** | **08 54 54.5** | **+0.9** |
| **MYKOM** | **Kota Tinggi** | **6.75** | **37** | *e*Pn | **Pn** | **08 54 52.0** | **-1.6** |
| **FRIM** | **Kepong** | **7.07** | **15** | ⇑P | **Pn** | **08 54 58.8** | **+0.8** |
| **IPM** | **Ipoh** | **8.15** | **9** | ⇓P | **Pn** | **08 55 10.6** | **-2.3** |
| **IPM** | **Ipoh** | **8.15** | **9** | *e*Pn | **Pn** | **08 55 13.2** | **+0.3** |
| **CNJI** | **Cibinong** | **8.18** | **117** | P | **Pn** | **08 55 10.4** | **-2.7** |
| **LEM** | **Lembang** | **8.42** | **112** | Pn | **Pn** | **08 55 16.4** | **-0.3** |
| | comp=Z,12nm,0.3s,baz=171,slow=18,SNR=6.5 | | | | | | |
| **LEM** | **Lembang** | **8.42** | **112** | P | **Pn** | **08 55 16.7** | **0.0** |
| **CISI** | **Cisompet, Garu** | **8.89** | **116** | P | **Pn** | **08 55 20.2** | **-2.9** |
| | baz=8.7,SNR=24 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.89** | **116** | P | **Pn** | **08 55 20.1** | **-3.0** |
| **CISI** | **Cisompet, Garu** | **8.89** | **116** | *e*Pn | **Pn** | **08 55 20.2** | **-2.9** |
| CISI | | | | *e*Sn | **Sn** | **08 56 57.3** | **-5.2** |
| **KULM** | **Kulim** | **8.90** | **6** | ⇓P | **Pn** | **08 55 20.1** | **-3.0** |
| **KULM** | **Kulim** | **8.90** | **6** | *e*Pn | **Pn** | **08 55 20.3** | **-2.9** |
| **KTGM** | **Kuala Trenggan** | **9.51** | **21** | ⇓P | **Pn** | **08 55 29.2** | **-2.3** |
| **CMJI** | **Cimerak** | **9.56** | **116** | P | **Pn** | **08 55 29.0** | **-3.1** |
| | comp=Z,128nm,0.8s | | | | | | |
| **UGM** | **Wanagama** | **11.50** | **112** | P | **Pn** | **08 55 56.5** | **-2.3** |
| | baz=11,SNR=9.7 | | | | | | |
| **UGM** | **Wanagama** | **11.50** | **112** | *e*Pn | **Pn** | **08 55 56.8** | **-2.0** |
| **SBUM** | **Sibu** | **13.82** | **64** | ⇓P | **Pn** | **08 56 32.3** | **+1.8** |
| **SBUM** | **Sibu** | **13.82** | **64** | *e*Pn | **Pn** | **08 56 31.0** | **+0.5** |
| **BBKI** | **Banjar Baru** | **15.03** | **90** | P | **P** | **08 56 50.8** | **-1.3** |
| **JAGI** | **Jajag, Banyuwa** | **15.07** | **109** | *e*P | **Pn** | **08 56 48.4** | **+0.9** |
| | comp=Z,22nm,0.8s | | | | | | |
| **DLV** | **T Lat** | **17.73** | **29** | *e*P | **P** | **08 57 21.9** | **-0.3** |
| | comp=Z,15nm,0.7s | | | | | | |
| **KHLT** | **Khaolaem Dam** | **18.35** | **356** | P | **Pn** | **08 57 29.5** | **+0.6** |
| | comp=Z,6.7nm,1.1s | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.02** | **60** | P | **P** | **08 57 35.4** | **-0.9** |
| | baz=19,SNR=7.1 | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.02** | **60** | ⇑P | **P** | **08 57 35.3** | **-0.9** |
| **KKM** | **Kota Kinabalu** | **19.02** | **60** | *e*P | **P** | **08 57 35.1** | **-1.1** |
| | comp=Z,100nm,1.4s | | | | | | |
| **CHAI** | **Chaiyaphum** | **19.53** | **6** | P | **Pn** | **08 57 45.4** | **+2.3** |
| | comp=Z,9.3nm,0.8s | | | | | | |
| **UBPT** | **Khong Chiam** | **19.62** | **17** | P | **P** | **08 57 41.6** | **-1.1** |
| | comp=Z,56nm,0.8s | | | | | | |
| **SDKM** | **Sandakan** | **19.68** | **62** | ⇓P | **P** | **08 57 42.8** | **-0.7** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TSM** | **Tawau** | **19.72** | **67** | ⇑P | | **P** | **08 57 43.6** | **-0.2** | |
| **UMPA** | **Umpang Tak** | **19.73** | **357** | P | | **Pn** | **08 57 46.3** | **+0.7** | |
| | comp=Z,6.0nm,0.8s,comp=Z,722nm | | | | | | | | |
| **SPSI** | **Sidrap Palu** | **19.95** | **92** | P | | **Pn** | **08 57 47.3** | **-0.8** | |
| **KAPI** | **Kappang** | **19.96** | **95** | P | | **P** | **08 57 44.9** | **-1.6** | |
| | comp=Z,5.5nm,0.3s,baz=288,slow=9.6,SNR=5.9 | | | | | | | | |
| KAPI | | | | LR | | LR | 09 06 43.3 | | |
| | comp=Z,251nm,18.0s,baz=290,slow=41 | | | | | | | | |
| **KAPI** | **Kappang** | **19.96** | **95** | *e*P | | **P** | **08 57 45.2** | **-1.2** | |
| | comp=Z,77nm,1.4s | | | | | | | | |
| **KDM** | **Kudat** | **19.99** | **58** | ⇓P | | **P** | **08 57 46.0** | **-0.8** | |
| **TTSI** | **Tana Toraja** | **20.01** | **89** | P | | **P** | **08 57 46.3** | **-0.8** | |
| **PBKT** | **Sadao Pong** | **20.11** | **3** | P | | Pn | 08 57 49.6 | -0.3 | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| **BKSI** | **Bulukumba** | **20.35** | **95** | P | | **P** | **08 57 49.4** | **-1.3** | |
| | comp=Z,59nm,1.1s,comp=Z,725nm | | | | | | | | |
| **MPSI** | **Mapaga** | **20.49** | **79** | P | | **P** | **08 57 51.3** | **-0.9** | |
| **MYLDM** | **Lahad Datu** | **20.65** | **65** | ⇓P | | **P** | **08 57 53.3** | **-0.6** | |
| **MYLDM** | **Lahad Datu** | **20.65** | **65** | *e*P | | **P** | **08 57 54.0** | **0.0** | |
| | comp=Z,110nm,1.3s | | | | | | | | |
| **SKNT** | **Sakolnakorn** | **20.89** | **11** | P | | **P** | **08 57 57.0** | **+0.5** | |
| | comp=Z,30nm,1.3s,comp=Z,2μm | | | | | | | | |
| **LOEI** | **Loei** | **21.06** | **4** | P | | **P** | **08 57 57.2** | **-1.1** | |
| | comp=Z,15nm,1.0s | | | | | | | | |
| **MHMT** | **Maesarieng** | **21.75** | **355** | P | | P | 08 58 14.7 | +9.0 | |
| **NONG** | **Nongkai** | **21.81** | **9** | P | | **P** | **08 58 05.6** | **-0.8** | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| **PALK** | **Pallekele** | **21.91** | **300** | LR | | LR | 09 06 28.3 | | |
| | comp=Z,150nm,18.4s,baz=116,slow=36 | | | | | | | | |
| **PALK** | **Pallekele** | **21.91** | **300** | *e*P | | **P** | **08 58 07.7** | **+0.2** | |
| PALK | | | | pmax | | pmax | | | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| **PALK** | **Pallekele** | **21.91** | **300** | *e*P | | **P** | **08 58 07.7** | **+0.2** | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.93** | **358** | *e*P | | **P** | **08 58 06.3** | **-1.3** | |
| **CMAR** | **Chiang Mai Arr** | **21.97** | **358** | P | | **P** | **08 58 07.2** | **-0.8** | |
| | comp=Z,18nm,0.8s,baz=187,slow=9.9,SNR=67 | | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **09 02 07.3** | **+0.9** | |
| | comp=Z,1.3nm,0.3s,baz=219,slow=2.5,SNR=6.8 | | | | | | | | |
| CMAR | | | | LR | | LR | 09 08 03.2 | | |
| | comp=Z,252nm,18.4s,baz=185,slow=41 | | | | | | | | |
| **APSI** | **Ampana** | **22.02** | **83** | P | | P | 08 58 14.3 | +5.6 | |
| **LAMP** | **Lampang** | **22.02** | **360** | P | | **P** | **08 58 10.6** | **+2.0** | |
| | comp=Z,18nm,0.9s,comp=Z,147nm | | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.32** | **358** | P | | **P** | **08 58 11.1** | **-0.8** | |
| | comp=Z,79nm,1.3s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.32** | **358** | *e*P | | **P** | **08 58 11.1** | **-0.8** | |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.32** | **358** | *e*P | | **P** | **08 58 11.1** | **-0.8** | |
| | comp=Z,15nm,0.9s | | | | | | | | |
| **CMAI** | **Chiengmai2** | **23.43** | **358** | P | | **P** | **08 58 23.2** | **-0.3** | |
| | comp=Z,38nm,0.9s | | | | | | | | |
| **GTOI** | **Gorontalo** | **23.60** | **80** | P | | **P** | **08 58 22.3** | **-2.8** | |
| **CRAI** | **Chiangrai** | **23.72** | **1** | P | | P | 08 58 17.5 | -8.7 | |
| **KMSI** | **Cibinong** | **24.54** | **81** | P | | **P** | **08 58 35.0** | **+1.1** | |
| **QIZ** | **Qiongzhong** | **24.60** | **23** | P | | **P** | **08 58 35.0** | **+0.7** | |
| QIZ | | | | S | | **S** | **09 02 57.5** | **+3.5** | |
| QIZ | | | | PMZ | | | | | |
| | comp=Z,20nm,1.3s | | | | | | | | |
| QIZ | | | | PMZ | | | | | |
| | comp=Z,310nm,8.6s | | | | | | | | |
| QIZ | | | | LZ | | | | | |
| | comp=Z,420nm,12.0s | | | | | | | | |
| **SOEI** | **Soe** | **25.06** | **105** | *e*P | | **P** | **08 58 38.8** | **+0.1** | |
| | comp=Z,17nm,0.6s | | | | | | | | |
| **SLVN** | **Son La** | **25.14** | **9** | *e*P | | **P** | **08 58 38.2** | **-1.0** | |
| | comp=Z,60nm,1.1s | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.44** | **260** | T | | T | 09 28 18.3 | | |
| | baz=82,slow=75,SNR=483 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.45** | **260** | T | | T | 09 28 23.9 | | |
| | baz=82,slow=75,SNR=340 | | | | | | | | |
| **DGAR** | **Diego Garcia** | **27.45** | **261** | ⇑*e*P | | **P** | **08 58 57.1** | **-3.1** | |
| **H08S1** | **Diego Garcia H** | **27.46** | **260** | T | | T | 09 28 19.6 | | |
| | baz=82,slow=75,SNR=489 | | | | | | | | |
| **KMI** | **Kunming** | **28.73** | **6** | P | | **P** | **08 59 12.5** | **+0.8** | |
| KMI | | | | pP | | **pP** | **08 59 22.0** | **+2.2** | |
| KMI | | | | sP | | **sP** | **08 59 27.0** | **+3.9** | |
| KMI | | | | S | | **S** | **09 04 02.3** | **+2.7** | |
| KMI | | | | SS | | **SnSn** | **09 05 29.3** | **+7.6** | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,18nm,1.3s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,170nm,5.3s | | | | | | | | |
| KMI | | | | LN | | | | | |
| | comp=Z,370nm,11.8s | | | | | | | | |
| KMI | | | | LE | | | | | |
| | comp=Z,440nm,13.2s | | | | | | | | |
| KMI | | | | LZ | | | | | |
| | comp=Z,210nm,20.6s | | | | | | | | |
| **GYA** | **Guiyang** | **30.65** | **12** | *e*P | | **P** | **08 59 30.8** | **+2.2** | |
| GYA | | | | sP | | **sP** | **08 59 42.0** | **+2.0** | |
| GYA | | | | PP | | **PnPn** | **09 00 32.3** | **+3.7** | |
| GYA | | | | S | | **S** | **09 04 29.8** | **+0.3** | |
| GYA | | | | sS | | **sS** | **09 04 44.3** | **+1.4** | |
| GYA | | | | ScP | | **ScP** | **09 06 07.5** | **0.0** | |
| GYA | | | | SS | | **SnSn** | **09 06 14.0** | **+5.7** | |
| GYA | | | | PMZ | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| GYA | | | | PMZ | | | | | |
| | comp=Z,120nm,5.0s | | | | | | | | |
| GYA | | | | LN | | | | | |
| | comp=Z,520nm,17.8s | | | | | | | | |
| GYA | | | | LE | | | | | |
| | comp=Z,470nm,18.2s | | | | | | | | |
| GYA | | | | LZ | | | | | |
| | comp=Z,490nm,17.9s | | | | | | | | |
| **ODAN** | **Odare** | **32.59** | **339** | *e*P | | **P** | **08 59 46.4** | **+0.6** | |
| **TAPN** | **Taplejung** | **32.93** | **340** | *e*P | | **P** | **08 59 49.5** | **+0.6** | |
| | comp=Z,25nm,0.7s | | | | | | | | |
| **RAMN** | **Ramite** | **32.96** | **338** | *e*P | | **P** | **08 59 50.1** | **+1.0** | |
| **H01W3** | **Cape Leeuwin H** | **33.83** | **159** | T | | T | 09 35 55.3 | | |
| | baz=336,slow=76,SNR=42 | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.84** | **159** | T | | T | 09 36 08.8 | | |
| | baz=336,slow=76,SNR=47 | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.84** | **159** | T | | T | 09 36 10.6 | | |
| | baz=336,slow=76,SNR=47 | | | | | | | | |
| **GUN** | **Gumba** | **34.10** | **338** | *e*P | | **P** | **08 59 59.5** | **+0.4** | |
| | comp=Z,43nm,0.4s | | | | | | | | |
| **LSA** | **Lhasa** | **34.16** | **347** | P | | **P** | **09 00 00.3** | **+0.6** | |
| LSA | | | | PMZ | | | | | |
| | comp=Z,31nm,1.1s | | | | | | | | |
| **LSA** | **Lhasa** | **34.16** | **347** | *e*P | | **P** | **09 00 00.8** | **+1.1** | |
| LSA | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.6s | | | | | | | | |
| **LSA** | **Lhasa** | **34.16** | **347** | *e*P | | **P** | **09 00 00.8** | **+1.1** | |
| | comp=Z,14nm,0.6s | | | | | | | | |
| **KKN** | **Kakani** | **34.23** | **337** | *e*P | | **P** | **09 00 00.4** | **+0.4** | |
| | comp=Z,6.7nm,0.3s | | | | | | | | |
| **CD2** | **Chengdu** | **34.56** | **6** | P | | **P** | **09 00 03.3** | **+0.6** | |
| CD2 | | | | pP | | **pP** | **09 00 11.5** | **+0.7** | |
| CD2 | | | | PP | | **PP** | **09 01 22.0** | **+0.6** | |
| CD2 | | | | S | | **S** | **09 05 32.0** | **+1.8** | |
| CD2 | | | | sS | | **sS** | **09 05 46.0** | **+2.4** | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,120nm,5.0s | | | | | | | | |
| **GKN** | **Gorkha** | **34.67** | **336** | *e*P | | **P** | **09 00 04.3** | **+0.5** | |
| | comp=Z,19nm,0.4s | | | | | | | | |
| **WRKA** | **Warakurna** | **34.72** | **131** | P | | **P** | **09 00 04.5** | **+0.3** | |
| | baz=34,SNR=6.7 | | | | | | | | |
| **KOLN** | **Koldanda** | **34.90** | **334** | *e*P | | **P** | **09 00 06.4** | **+0.5** | |
| **ENH** | **Enshi** | **34.97** | **15** | *e*P | | **P** | **09 00 05.4** | **-0.8** | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.39** | **118** | P | | **P** | **09 00 26.2** | **-0.8** | |
| | comp=Z,5.1nm,0.9s,baz=285,slow=8.0,SNR=40 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | **09 02 46.1** | **+0.3** | |
| | comp=Z,1.6nm,0.6s,baz=308,slow=2.1,SNR=6.1 | | | | | | | | |
| WRA | | | | S | | **S** | **09 06 16.8** | **+3.0** | |
| | comp=Z,0.9nm,0.9s,baz=294,slow=16,SNR=5.2 | | | | | | | | |
| WRA | | | | LR | | LR | 09 17 09.4 | | |
| | comp=Z,54nm,19.2s,baz=240,slow=38 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.39** | **118** | *e*P | | **P** | **09 00 26.8** | **-0.3** | |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,31nm,1.2s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.39** | **118** | *e*P | | **P** | **09 00 26.3** | **-0.8** | |
| | comp=Z,9.9nm,0.9s | | | | | | | | |
| **XAN** | **Xi'an** | **38.45** | **12** | P | | **P** | **09 00 34.5** | **-1.3** | |
| XAN | | | | pP | | **pP** | **09 00 42.3** | **-1.7** | |
| XAN | | | | PMZ | | | | | |
| | comp=Z,55nm,0.8s | | | | | | | | |
| XAN | | | | LN | | | | | |
| | comp=Z,540nm,9.2s | | | | | | | | |
| XAN | | | | LZ | | | | | |
| | comp=Z,620nm,12.3s | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **38.50** | **124** | P | | **P** | **09 00 36.5** | **0.0** | |
| | comp=Z,4.4nm,0.9s,baz=296,slow=8.2,SNR=39 | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **09 02 49.8** | **+0.6** | |
| | comp=Z,2.7nm,0.7s,baz=307,slow=2.1,SNR=8.6 | | | | | | | | |
| ASAR | | | | S | | S | 09 06 37.9 | +7.2 | |
| | comp=Z,0.5nm,0.8s,baz=292,slow=17,SNR=5.3 | | | | | | | | |
| **AS01** | **Alice Springs** | **38.53** | **124** | *e*P | | **P** | **09 00 36.4** | **-0.3** | |
| **LZH** | **Lanzhou** | **39.69** | **5** | *e*P | | **P** | **09 00 46.5** | **+0.1** | |
| LZH | | | | pP | | **pP** | **09 00 53.8** | **-0.8** | |
| LZH | | | | sP | | **sP** | **09 00 58.5** | **+0.6** | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,32nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,180nm,4.0s | | | | | | | | |
| **NJ2** | **Nanjing** | **39.85** | **26** | *e*P | | **P** | **09 00 47.3** | **-0.2** | |
| NJ2 | | | | PMZ | | | | | |
| | comp=Z,13nm,0.5s | | | | | | | | |
| **QIS** | **Mount Isa** | **42.25** | **117** | P | | **P** | **09 01 07.2** | **-0.3** | |
| | baz=42,SNR=4.4 | | | | | | | | |
| **GTA** | **Gaotai** | **42.83** | **0** | *e*P | | **P** | **09 01 12.3** | **+0.3** | |
| GTA | | | | pP | | **pP** | **09 01 19.3** | **-1.0** | |
| GTA | | | | sP | | **sP** | **09 01 23.5** | **-0.2** | |
| GTA | | | | S | | **S** | **09 07 35.0** | **+0.1** | |
| GTA | | | | sS | | **sS** | **09 07 47.3** | **-1.2** | |
| GTA | | | | SS | | **SS** | **09 10 40.5** | **-6.3** | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,120nm,4.2s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | comp=Z,280nm,10.5s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | comp=Z,270nm,14.7s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | comp=Z,230nm,11.9s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.56** | **13** | *e*P | | **P** | **09 01 34.5** | **+0.6** | |
| HHC | | | | PP | | **PP** | **09 03 20.5** | **-0.4** | |
| HHC | | | | S | | **S** | **09 08 18.5** | **+3.9** | |
| HHC | | | | SS | | **ScS** | **09 11 27.3** | **-1.3** | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,36nm,0.9s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,100nm,4.3s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | comp=Z,510nm,14.8s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | comp=Z,230nm,14.8s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | comp=Z,270nm,18.5s | | | | | | | | |
| **BJT** | **Baijiatuau** | **45.97** | **18** | *e*P | | **P** | **09 01 37.2** | **+0.2** | |
| BJT | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **BJT** | **Baijiatuau** | **45.97** | **18** | *e*P | | **P** | **09 01 37.2** | **+0.2** | |
| | comp=Z,8.5nm,0.6s | | | | | | | | |
| **BJI** | **Beijing** | **46.00** | **18** | P | | **P** | **09 01 37.3** | **+0.1** | |
| BJI | | | | S | | **S** | **09 08 24.0** | **+3.5** | |
| BJI | | | | PMZ | | | | | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| BJI | | | | PMZ | | | | | |
| | comp=Z,260nm,4.2s | | | | | | | | |
| BJI | | | | LN | | | | | |
| | comp=Z,380nm,26.1s | | | | | | | | |
| BJI | | | | LE | | | | | |
| | comp=Z,270nm,25.8s | | | | | | | | |
| **CTA** | **Charters Tower** | **48.12** | **114** | P | | **P** | **09 01 53.3** | **-0.9** | |
| | comp=Z,9.9nm,0.9s,baz=274,slow=11,SNR=9.3 | | | | | | | | |
| **CTAO** | **Charters Tower** | **48.12** | **114** | *e*P | | **P** | **09 01 53.8** | **-0.4** | |
| CTAO | | | | pmax | | pmax | | | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **CTAO** | **Charters Tower** | **48.12** | **114** | *e*P | | **P** | **09 01 53.8** | **-0.4** | |
| | comp=Z,16nm,1.0s | | | | | | | | |
| **KSH** | **Kashi** | **48.21** | **335** | P | | **P** | **09 01 53.5** | **-1.1** | |
| KSH | | | | *e*pP | | **pP** | **09 02 01.0** | **-2.0** | |
| KSH | | | | PP | | **PP** | **09 03 44.5** | **-2.7** | |
| KSH | | | | S | | S | 09 08 45.0 | -7.5 | |
| KSH | | | | PMZ | | | | | |
| | comp=Z,100nm,5.1s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,160nm,5.0s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,150nm,7.2s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,170nm,5.9s | | | | | | | | |
| **WMQ** | **Urumqi** | **48.47** | **348** | P | | **P** | **09 01 58.0** | **+1.5** | |
| WMQ | | | | pP | | **pP** | **09 02 06.0** | **+1.1** | |
| WMQ | | | | S | | **S** | **09 08 56.0** | **0.0** | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,75nm,1.0s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,130nm,5.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,47nm,15.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,64nm,15.0s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.50** | **30** | P | | **P** | **09 01 55.6** | **-1.2** | |
| **KSAR** | **Wonju Array Be** | **48.50** | **30** | P |

MKAR pmax pmax
comp=Z,13nm,0.6s
MKAR MLR MLR
comp=Z,39nm,20.0s
**CN2 Changchun 52.56 23** *e*P **P 09 02 26.0 -1.3**
CN2 *es*P **sP 09 02 35.8 -3.3**
CN2 *e*PP **PP 09 04 24.8 -1.8**
CN2 PMZ
comp=Z,30nm,0.8s
CN2 PMZ
comp=Z,70nm,3.0s
**MAKZ Makanchi 52.63 345** *e*P **P 09 02 27.6 -0.3**
**KKAR Karatay Array 53.50 334** *e*P **P 09 02 33.5 -0.8**
**KKAR Karatay Array 53.50 334** *e*P **P 09 02 33.5 -0.8**
**EIDS Eidsvold 53.75 119** P **P 09 02 37.3 +0.9**
baz=54,SNR=4.4
**EIDS Eidsvold 53.75 119** *e*P **P 09 02 37.1 +0.7**
comp=Z,15nm,1.0s
**ZAK Zakamensk 53.88 3** *e*P **P 09 02 36.9 -0.2**
ZAK pmax pmax
comp=Z,4.0nm,1.0s
**TLY Talaya 55.20 3** *e*P **P 09 02 47.5 +1.0**
TLY *e*S **S 09 10 22.3 -5.8**
TLY pmax pmax
comp=Z,13nm,1.3s
TLY MLR MLR
comp=Z,152nm,16.0s
**ARMA Armidale 55.65 125** P **P 09 02 52.3 +2.0**
baz=55,SNR=4.4
**ARMA Armidale 55.65 125** *e*P **P 09 02 51.9 +1.6**
comp=Z,6.8nm,0.8s
**USRK Ussuriysk Ar. 55.69 28** P **P 09 02 49.7 -0.5**
comp=Z,30nm,0.8s,baz=225,slow=6.3,SNR=50
USRK LR LR 09 31 03.5
comp=Z,94nm,18.1s,baz=197,slow=41
**GEYT Alibeck 56.56 321** P **P 09 02 56.7 +0.1**
comp=Z,5.8nm,0.7s,baz=158,slow=9.6,SNR=4.2
**OTUK Ortayu 56.96 338** P **P 09 02 58.5 -0.7**
OTUK pmax pmax
comp=Z,13nm,0.7s
**KURK Kurchatov 57.10 344** *e*P **P 09 02 59.6 -0.5**
KURK pmax pmax
comp=Z,21nm,0.8s
**KURK Kurchatov 57.10 344** *e*P **P 09 02 59.6 -0.5**
comp=Z,21nm,0.8s
**ZAA0 Zalesovo Array 58.72 350** P **P 09 03 11.2 -0.1**
baz=59,SNR=9.9
**ZALV Zalesovo Beam 58.72 350** P **P 09 03 11.2 -0.2**
comp=Z,32nm,0.7s,baz=180,slow=5.8,SNR=66
ZALV LR LR 09 32 23.4
comp=Z,24nm,18.8s,baz=68,slow=40
**ZALV Zalesovo Beam 58.72 350** *i*P **P 09 03 11.1 -0.3**
ZALV pmax pmax
comp=Z,32nm,0.7s
**KLR Kul'dur 59.50 24** *i*P **P 09 03 16.7 -0.2**
**KRAR Krasnoyarsk 59.71 356** *de*P **P 09 03 18.2 0.0**
KRAR pmax pmax
comp=Z,34nm,1.3s
**BVA0 Borovoye Array 61.63 340** *i*P **P 09 03 29.8 -1.6**
BVA0 pmax pmax
comp=Z,9.0nm,0.6s
**BVAR Borovoye Array 61.63 340** P **P 09 03 30.6 -0.7**
comp=Z,7.7nm,0.6s,baz=145,slow=8.5,SNR=32
**BRVK Borovoye 61.70 340** *e*P **P 09 03 31.2 -0.6**
BRVK pmax pmax
comp=Z,25nm,1.5s
**BRVK Borovoye 61.70 340** *e*P **P 09 03 31.2 -0.6**
comp=Z,25nm,1.5s
**ZRNK Zerenda 62.05 339** P **P 09 03 32.6 -1.6**
ZRNK pmax pmax
comp=Z,14nm,1.3s
**CHKZ Chkalovo 62.10 341** P **P 09 03 33.1 -1.4**
CHKZ pmax pmax
comp=Z,9.0nm,0.8s
**BOD Bodaibo 62.32 9** *e*P **P 09 03 34.9 -0.9**
BOD pmax pmax
comp=Z,21nm,1.0s
**AB31 Akbulak array 62.96 332** *i*P **P 09 03 39.3 -1.0**
AB31 pmax pmax
comp=Z,15nm,0.7s
**ABKAR Akbulak array 62.96 332** *e*P **P 09 03 39.5 -0.8**
comp=Z,19nm,0.8s
**YSS Yuzh-Sakhalins 62.98 32** *e*P **P 09 03 40.2 -0.2**
YSS pmax pmax
comp=Z,32nm,1.0s
**AKTO Aktyubinsk 64.68 332** P **P 09 03 50.7 -0.9**
comp=Z,4.6nm,0.7s,baz=129,slow=6.7,SNR=11
**AKTO Aktyubinsk 64.68 332** P **P 09 03 50.2 -1.4**
AKTO pmax pmax
comp=Z,11nm,1.0s
**SVE Sverdlovsk 68.10 338**⇑ *e*P **P 09 04 13.0 -0.4**
SVE pmax pmax
comp=Z,21nm,1.0s
**MAW Mawson 68.66 194** P **P 09 04 18.6 +1.9**
comp=Z,2.0nm,0.9s,baz=31,slow=8.4,SNR=4.8
MAW LR LR 09 27 37.8
comp=Z,77nm,20.7s,baz=61,slow=30
**NEY Neytrino 69.29 319**⇑ *e*P **P 09 04 22.4 +1.0**
NEY pmax pmax
comp=Z,2.0nm,1.0s
**YAK Yakutsk 69.37 15** *e*P **P 09 04 20.3 -0.8**
YAK *e* 09 06 53.1
YAK *e*S S 09 13 16.6 -9.5
YAK *e* 09 14 09.0
YAK *e*SS **SS 09 17 53.5 -0.1**
YAK pmax pmax
comp=Z,61nm,0.9s
YAK pmax pmax
comp=E,11nm,1.1s
YAK pmax pmax
comp=N,22nm,1.2s
YAK pmax pmax
comp=Z,466nm,4.0s
YAK pmax pmax
comp=N,180nm,3.2s
YAK pmax pmax
comp=E,295nm,3.8s
YAK smax smax
comp=N,24nm,4.0s
YAK smax smax
comp=E,15nm,4.0s
YAK MLR MLR
comp=Z,82nm,16.0s
YAK MLR MLR
comp=E,62nm,15.0s
YAK MLR MLR
comp=N,46nm,14.0s
**KBZ Khabaz 69.39 320** P **P 09 04 21.9 +0.2**
comp=N,8.9nm,0.8s,baz=121,slow=6.4,SNR=18
**KIV Kislovodsk 69.63 320** *e*P **P 09 04 23.5 +0.2**
KIV pmax pmax
comp=Z,18nm,1.0s
KIV MLR MLR
comp=Z,30nm,17.0s
**VRH Novokhopyorsk 73.55 326** *e*P **P 09 04 45.9 -0.7**
VRH pmax pmax
comp=N,10.0nm,0.7s
VRH pmax pmax
comp=E,4.0nm,0.7s
VRH pmax pmax
comp=Z,40nm,0.7s
**BRTR Keskin Array B 74.26 313** P **P 09 04 50.4 -0.9**
comp=Z,2.7nm,0.9s,baz=143,slow=7.7,SNR=5.7
**BRTR Keskin Array B 74.26 313** P **P 09 04 50.4 -0.9**
BRTR pmax pmax
comp=Z,3.0nm,0.9s
**BOSA Boshof 74.69 241** LR LR 09 29 26.0
comp=Z,62nm,20.0s,baz=51,slow=29
**VORD Divnogorie 74.80 325** *e*P **P 09 04 53.1 -0.9**
VORD pmax pmax
comp=N,20nm,0.7s
VORD pmax pmax
comp=E,9.0nm,0.7s
VORD pmax pmax
comp=Z,8.0nm,0.7s
**VSR Storozhevoye 74.98 325** *e*P **P 09 04 53.8 -1.2**
VSR pmax pmax
comp=Z,20nm,0.8s
VSR pmax pmax
comp=N,9.0nm,0.6s
VSR pmax pmax
comp=E,9.0nm,0.8s
**LPSR Galich'ya Gora 75.72 327** *e*P **P 09 04 58.3 -0.9**
LPSR pmax pmax
comp=N,3.0nm,0.7s
LPSR pmax pmax
comp=E,5.0nm,0.7s
LPSR pmax pmax
comp=Z,10.0nm,0.7s
**SEY Seymchan 77.21 22**⇑ *e*P **P 09 05 07.6 +0.2**
**BKZ Black Stump Fm 77.41 129** *e*P **P 09 05 09.7 +0.4**
**OBN Obninsk 78.06 328**⇓ *e*P **P 09 05 12.4 +0.1**
OBN pmax pmax
comp=Z,9.0nm,0.5s
OBN MLR MLR
comp=Z,48nm,16.0s
**KLMR Klimovskoe 79.19 334** *e*P **P 09 05 16.6 -1.9**
KLMR pmax pmax
comp=Z,36nm,1.5s
**TIRR Tirgusor 79.37 316**⇑ P **P 09 05 19.2 -0.6**
**TIRR Tirgusor 79.37 316**⇑ *i*P **P 09 05 19.2 -0.6**
**VNDA Vanda 80.61 169** P **P 09 05 26.1 +0.2**
comp=Z,2.2nm,1.2s,baz=302,slow=5.1,SNR=4.1
VNDA LR LR 09 36 46.4
comp=Z,23nm,20.7s,baz=324,slow=32
**AKASG Malin Array Be 80.64 323** P **P 09 05 25.7 -0.8**
comp=Z,1.3nm,0.6s,baz=87,slow=4.4,SNR=5.5
**KIEV Kiev 80.64 323**⇓ *e*P **P 09 05 26.5 0.0**
KIEV pmax pmax
comp=Z,5.0nm,1.0s
**VRI Vrincioaia 80.89 317**⇓ P **P 09 05 28.8 +0.8**
**VRI Vrincioaia 80.89 317**⇓ *i*P **P 09 05 28.8 +0.8**
**TESR Tescani 81.11 318**⇑ *i*P **P 09 05 29.3 +0.1**
**MLR Muntele Rosu 81.33 317**⇓ P **P 09 05 31.0 +0.5**
**MLR Muntele Rosu 81.33 317**⇓ *i*P **P 09 05 31.0 +0.5**
**TMCR Tamitsa 81.35 337** *e*P **P 09 05 28.2 -1.8**
TMCR pmax pmax
comp=Z,5.0nm,0.3s
**VOIR 81.93 317**⇓ P **P 09 05 33.7 +0.1**
**VOIR 81.93 317**⇓ *i*P **P 09 05 33.7 +0.1**
**BURAR Bucovina Array 82.33 319**⇓ P **P 09 05 36.9 +1.2**
**BURAR Bucovina Array 82.33 319**⇓ *i*P **P 09 05 36.9 +1.2**
**GZR Gura Zlata 83.48 316**⇑ P **P 09 05 41.5 -0.2**
**GZR Gura Zlata 83.48 316**⇑ *i*P **P 09 05 41.5 -0.2**
**DRGR 83.82 318**⇑ P **P 09 05 44.3 +0.9**
**DRGR 83.82 318**⇑ *i*P **P 09 05 44.3 +0.9**
**BZS Buzias 84.33 316**⇓ P **P 09 05 46.3 +0.4**
**BZS Buzias 84.33 316**⇓ *i*P **P 09 05 46.3 +0.4**
**BILL Bilibino 84.75 20**⇑ *i*P **P 09 05 50.1 +2.5**
BILL pmax pmax
comp=Z,14nm,2.5s
BILL MLR MLR
comp=Z,49nm,14.0s
**DIVS Divibare 85.19 315**⇑ *i*P **P 09 05 51.4 +1.0**
**FINES FINESS Array B 85.45 332** P **P 09 05 51.5 +0.4**
comp=Z,2.6nm,0.6s,baz=118,slow=6.2,SNR=12
**FINES FINESS Array B 85.45 332** *i*P **P 09 05 51.5 +0.4**
FINES pmax pmax
comp=Z,3.0nm,0.6s
**VYHS Vyhne 86.70 319** *e*P **P 09 05 58.3 +0.6**
VYHS pmax pmax
comp=Z,7.0nm,1.7s
**VYHS Vyhne 86.70 319** *e*P **P 09 05 58.3 +0.6**
**ARCES ARCSS Array B 87.92 340** P **P 09 06 03.7 +0.6**
comp=Z,5.2nm,1.0s,baz=134,slow=3.5,SNR=7.8
ARCES LR LR 09 49 41.6
comp=Z,44nm,19.2s,baz=108,slow=39
**DPC Dobruska-Polom 88.59 320** *e*P **P 09 06 07.4 +0.6**
**DPC Dobruska-Polom 88.59 320** *e*P **P 09 06 07.4 +0.6**
**GERES GERESS Array B 90.12 319** P **P 09 06 15.0 +0.9**
comp=Z,2.7nm,0.7s,baz=99,slow=4.5,SNR=20
**GERES GERESS Array B 90.12 319** P **P 09 06 15.0 +0.9**
**SNAA Sanae 90.53 198** *e*P **P 09 06 16.7 +1.2**
SNAA pmax pmax
comp=Z,2.0nm,1.4s
**SNAA Sanae 90.53 198** *e*P **P 09 06 16.7 +1.2**
comp=Z,1.8nm,1.4s
**KEST Kesra 92.45 305** P **P 09 06 26.6 +1.5**
comp=Z,111nm,1.0s,baz=177,slow=4.9,SNR=5.0
**I04A Tendick Farm, 125.37 37** P **PKPdf 09 12 14.9 -0.1**
baz=125
**NEW Newport 125.46 30** P **PKPdf 09 12 14.9 -0.1**
baz=125
**L02D Cave Junction, 125.55 39** P **PKPdf 09 12 15.0 -0.3**
baz=125
**J05D Fort Rock, OR 126.36 37** P **PKPdf 09 12 17.9 +0.8**
baz=126
**M02C Callahan 126.43 39** P **PKPdf 09 12 16.4 -0.7**
baz=126
**N02D Trinity Center 126.75 40** P **PKPdf 09 12 17.0 -0.7**
baz=127
**M04C Macdoel 126.85 38** P **PKPdf 09 12 17.5 -0.5**
baz=127
**O03D Paynes Creek 127.70 40** P **PKPdf 09 12 19.2 -0.4**
baz=128
**MSO Missoula 128.00 29** P **PKPdf 09 12 19.7 -0.3**
baz=128
**EGMT Eagleton 129.02 25** P **PKPdf 09 12 22.5 +0.6**
baz=129
**BOZ Bozeman (W) 129.97 28** P **PKPdf 09 12 23.9 +0.1**
baz=130
**HLID Hailey 130.04 32** P **PKPdf 09 12 24.7 +0.6**
baz=130
**NVAR Mina Array Bea 130.99 40** PKP **PKPdf 09 12 27.4 +1.3**
comp=Z,1.2nm,0.6s,baz=285,slow=1.9,SNR=11
**RLMT Red Lodge 131.46 27** P **PKPdf 09 12 25.4 -1.4**
baz=131
**SNOW Snow King Moun 131.99 30** *e*PKPdf **PKPdf 09 12 28.7 +0.8**
**REDW Red Top Meadow 132.02 30** *e*PKPdf **PKPdf 09 12 29.0 +1.1**
**A30A Hoffart Farm, 132.29 16** P **PKPdf 09 12 28.3 +0.3**
baz=132
**B30A Myrvik Farm, E 132.72 16** P **PKPdf 09 12 29.1 +0.3**
baz=132
**R11A Troy Canyon, C 132.75 38** P **PKPdf 09 12 30.0 +0.7**
baz=133
**BLG Laguna Peak 132.85 45** P **PKPdf 09 12 30.0 +0.5**
baz=133
**MPMC Manual Prospec 132.88 42** P **PKPdf 09 12 30.1 +0.4**
baz=133
**DUG Dugway 133.20 34** P **PKPdf 09 12 29.3 -0.9**
baz=133
**D29A Pettibone, Tap 133.60 18** P **PKPdf 09 12 29.7 -0.8**
baz=133
**B34A Aery, Baudette 133.63 13** P **PKPdf 09 12 30.0 -0.5**
baz=133
**BBRC Big Bear Solar 134.27 44** P **PKPdf 09 12 31.2 -1.3**
baz=134
**TUQ Turquoise Moun 134.28 42** P **PKPdf 09 12 32.3 0.0**
baz=134
**K22A Casper 134.63 27** P **PKPdf 09 12 32.9 +0.1**
baz=134
**MSU Marysvale 134.69 36** *e*PKIKP **PKPdf 09 12 34.7 +1.6**
**MSU Marysvale 134.69 36** *e*PKPdf **PKPdf 09 12 34.6 +1.6**
**I25A Rochford 134.73 24** P **PKPdf 09 12 33.1 +0.1**
baz=134
**J25A Sunshine Ranch 135.22 24** P **PKPdf 09 12 34.2 +0.5**
baz=135
**MONP Monument Peak 135.37 45** P **PKPdf 09 12 35.2 +0.7**
baz=135
**J26A Sides Ranch, S 135.59 24** P **PKPdf 09 12 34.0 -0.4**
baz=135
**Y12C Blythe 136.19 43** P **PKPdf 09 12 35.7 0.0**
baz=136
**F36A Milaca 136.36 13** P **PKPdf 09 12 36.4 +0.8**
baz=136
**H32A Carlson Farm, 136.56 18** P **PKPdf 09 12 37.2 +1.1**
baz=136
**H35A Sunnyside Ranc 137.13 15** P **PKPdf 09 12 38.0 +0.8**
baz=137
**SPMN St. Paul 137.13 13** P **PKPdf 09 12 38.2 +1.1**
baz=137
**ISCO Idaho Springs 137.28 29** P **PKPdf 09 12 38.2 +0.2**
baz=137
**ECSD EROS Data Cent 137.51 18** P **PKPdf 09 12 38.4 +0.5**
baz=137
**MVCO Mesa Verde 137.70 34** P **PKPdf 09 12 38.7 0.0**
baz=138
**I37A Lemond, Waseca 138.13 14** P **PKPdf 09 12 39.7 +0.7**
baz=138
**S22A 4UR Ranch, Cre 138.22 32** P **PKPdf 09 12 40.1 +0.4**
baz=138
**N28A Pribbeno Ranch 138.41 25** P **PKPdf 09 12 40.8 +1.1**
baz=138
**M31A Lambtecht Ranc 138.85 22** P **PKPdf 09 12 41.2 +0.8**
baz=139
**SDCO Great Sand Dun 138.91 31** P **PKPdf 09 12 40.8 -0.3**
baz=139
**P28A Saint Francis 139.24 26** P **PKPdf 09 12 41.5 +0.2**
baz=139
**R27A Eads 139.82 28** P **PKPdf 09 12 43.1 +0.7**
baz=140
**T25A Trinidad 139.94 31** P **PKPdf 09 12 43.6 +0.8**
baz=140
**S26A Kim 140.03 29** P **PKPdf 09 12 43.8 +0.9**
baz=140
**Q29A Oakley 140.14 26** P **PKPdf 09 12 44.0 +1.0**
baz=140
**R28A Tribune 140.23 27** P **PKPdf 09 12 44.5 +1.3**
baz=140
**T26A Comanche Natio 140.32 30** P **PKPdf 09 12 44.3 +0.8**
baz=140
**Q30A Quinter 140.39 25** P **PKPdf 09 12 44.5 +1.2**
baz=140
**ANMO Albuquerque 140.47 35**⇓ *i*PKIKP **PKPdf 09 12 44.3 +0.5**
ANMO pmax pmax
comp=Z,7.0nm,2.5s
**ANMO Albuquerque 140.47 35** *e*PKPdf **PKPdf 09 12 44.1 +0.3**
**P32A Huiting Farm, 140.49 23** P **PKPdf 09 12 44.8 +1.3**
baz=140
**Y22D IRIS PASSCAL I 140.82 36** P **PKPdf 09 12 45.2 +0.8**
baz=141
**R30A Dighton 140.95 25** P **PKPdf 09 12 44.9 +0.5**
baz=141
**R31A Burdett 141.26 25** P **PKPdf 09 12 46.3 +1.4**
baz=141
**Q33A Connelly Farm, 141.32 22** P **PKPdf 09 12 46.2 +1.2**
baz=141
**121A Cookes Peak, D 141.35 39** P **PKPdf 09 12 46.3 +0.8**
baz=141
**S30A Montezuma 141.41 26** P **PKPdf 09 12 46.1 +0.8**
baz=141
**R32A Long Quarter, 141.48 24** P **PKPdf 09 12 46.3 +1.0**
baz=141
**P35A Duane Minner, 141.50 20** P **PKPdf 09 12 46.6 +1.3**
baz=141
**Q34A Chapman 141.72 21** P **PKPdf 09 12 47.0 +1.3**
baz=142
**V27A Dan Oppiter Fa 141.81 30** P **PKPdf 09 12 46.6 +0.5**
baz=142
**Q35A Mercer Eighty, 142.09 20** P **PKPdf 09 12 46.7 +0.3**
baz=142
**CPUP Villa Florida 142.88 215** PKP **PKPdf 09 12 47.2 -0.8**
comp=Z,1.6nm,0.8s,baz=117,slow=2.6,SNR=3.4
**X28A Dimmitt 143.10 31** P PKPbc 09 12 46.2 +1.0
baz=143
**S36A Lake Cedric, C 143.26 21** P PKPbc 09 12 45.8 +0.3
baz=143
**T34A McClaskey Farm 143.29 23** P PKPbc 09 12 45.9 +0.4
baz=143
**MNTX Cornudas Mount 143.41 37** P PKPbc 09 12 46.4 +0.4
baz=143
**U33A Lingo Farm, Me 143.43 25** P PKPbc 09 12 45.9 0.0
baz=143
**S37A Fort Scott 143.50 20** P PKPbc 09 12 46.2 +0.1
baz=143
**Y28A McKinney Farm, 143.55 32** P PKPbc 09 12 47.0 +0.5
baz=143
**V32A Arapaho 143.63 26** P PKPbc 09 12 47.2 +0.6
baz=144
**T35A Sooner Cattle 143.65 22** P PKPbc 09 12 47.4 +0.9
baz=144
**U34A Anderson Ranch 143.66 24** P PKPbc 09 12 47.4 +0.8
baz=144
**W31A Holland Ranch, 143.67 28** P PKPbc 09 12 47.5 +0.7
baz=144
**T36A Boggs Farm, Ca 143.75 21** P PKPbc 09 12 47.8 +1.0
baz=144
**V33A Lossen Ranch, 143.88 25** P PKPbc 09 12 47.8 +0.5
baz=144
**Y29A Porterfield Fa 143.89 31** P PKPbc 09 12 47.9 +0.4
baz=144
**Z28A Tucker Farm, M 143.95 32** P PKPbc 09 12 48.3 +0.6
baz=144
**T37A Cheneyville 18 144.04 20** P **PKPab 09 12 47.0 -0.2**
baz=144,SNR=6.5
**U35A Pawnee 144.04 23** P PKPbc 09 12 47.5 -0.3
baz=144,SNR=10
**W32A Sentinel 144.04 27** P PKPbc 09 12 47.7 -0.1
baz=144,SNR=8.8
**X31A McDonald Ranch 144.11 28** P PKPbc 09 12 48.5 +0.4
baz=144
**V34A Guthrie 144.19 24** P PKPbc 09 12 48.0 -0.2
baz=144,SNR=9.7
**V34A Guthrie 144.19 24** *e*PKPdf PKPbc 09 12 48.0 -0.2
**Y30A Stafford Cattl 144.27 30** P PKPbc 09 12 48.9 +0.3
baz=144
**Z29A Hungry Hill Ra 144.34 32** P PKPbc 09 12 49.3 +0.4
baz=144
**W33A Caddo, Fort Co 144.37 26** P PKPbc 09 12 49.2 +0.3
baz=144,SNR=19
**U36A Oologah 144.40 22** P **PKPab 09 12 48.5 -0.1**
baz=144,SNR=6.1
**128A Castleberry Fa 144.41 33** P PKPbc 09 12 49.4 +0.2
baz=144
**Y31A Rekieta Farm, 144.51 29** P PKPbc 09 12 49.6 +0.2
baz=144
**V35A Meyer Ranch, C 144.53 24** P **PKPab 09 12 49.1 0.0**
baz=144,SNR=15
**WMOK Wichita Mounta 144.57 27** *e*PKIKP **PKPab 09 12 48.8 -0.5**
**WMOK Wichita Mounta 144.57 27** *e*PKPdf **PKPab 09 12 48.8 -0.5**
**W34A Bridge Creek, 144.60 25** P PKPbc 09 12 49.9 +0.4
baz=144
**W34A Bridge Creek, 144.60 25** *e*PKPdf PKPbc 09 12 49.7 +0.2
**X32A Elmer 144.60 28** P **PKPab 09 12 49.0 -0.5**
baz=144,SNR=13
**U37A Salina 144.61 21** P **PKPab 09 12 49.3 0.0**
baz=144,SNR=12
**Z30A Sanderson Ranc 144.62 31** P **PKPab 09 12 49.5 -0.1**
baz=144,SNR=17
**228A UT Block 9, Go 144.73 34** P PKPbc 09 12 50.6 +0.4
baz=145
**129A Stewart Farms, 144.74 33** P **PKPab 09 12 49.9 -0.1**
baz=145,SNR=17
**TUL1 Tulsa 144.81 22** P **PKPab 09 12 49.5 -0.5**
baz=145,SNR=14
**TUL1 Tulsa 144.81 22** *e*PKPdf **PKPab 09 12 50.0 0.0**
**U38A Gravette 144.84 20** P **PKPab 09 12 49.5 -0.7**
baz=145,SNR=23
**V36A Jenks 144.86 23** P **PKPab 09 12 50.1 -0.2**
baz=145,SNR=16
**X33A Lawton 144.87 27** P **PKPab 09 12 49.9 -0.5**
baz=145,SNR=6.7
**Y32A R-V Farms, Ver 144.88 28** P **PKPab 09 12 50.1 -0.4**
baz=145,SNR=12
**W35A Tecumseh 145.04 24** P **PKPbc 09 12 50.5 -0.5**
baz=145,SNR=10
**V37A Hulbert 145.07 21** P **PKPbc 09 12 50.6 -0.5**
baz=145,SNR=21
**Z31A Sharp Cattle R 145.09 30** P **PKPbc 09 12 50.9 -0.3**
baz=145,SNR=30
**SIUC Southern Illin 145.09 13** *e*PKPdf **PKPbc 09 12 50.6 -0.4**
**X34A Smith Ranch, M 145.11 26** P **PKPab 09 12 51.2 0.0**
baz=145,SNR=8.4
**WCI Wyandotte Cave 145.12 8** *e*PKIKP **PKPbc 09 12 50.5 -0.6**
**WCI Wyandotte Cave 145.12 8** *e*PKPdf **PKPbc 09 12 50.5 -0.6**
**130A Snyder 145.24 32** P **PKPbc 09 12 51.7 -0.1**
baz=145,SNR=7.8
**Y33A Hilltop Ranch, 145.25 27** P **PKPab 09 12 51.8 0.0**
baz=145
**229A Bryant Ranch, 145.28 33** P **PKPab 09 12 52.0 0.0**
baz=145
**W36A Wetumka 145.31 23** P **PKPbc 09 12 51.7 -0.1**
baz=145,SNR=11
**V38A Canehill 145.35 20** P **PKPbc 09 12 51.2 -0.7**
baz=145,SNR=18
**Z32A Haskell 145.43 29** P **PKPbc 09 12 51.9 -0.4**
baz=145,SNR=13
**131A Roby 145.48 31** P **PKPab 09 12 52.7 0.0**
baz=145,SNR=12
**329A Wagon Wheel Ra 145.54 34** P **PKPab 09 12 52.9 -0.1**
baz=145,SNR=22
**W37A Quinton 145.63 22** P **PKPbc 09 12 52.9 0.0**
baz=145,SNR=6.9
**X35A Drake 145.65 25** P **PKPdf 09 12 52.1 -0.6**
baz=146,SNR=11
**Y34A Reagan Ranch, 145.69 26** P **PKPdf 09 12 52.3 -0.4**
baz=146,SNR=9.0
**230A Sterling City 145.72 33** P **PKPab 09 12 53.4 -0.2**
baz=146,SNR=9.5
**X36A Centrahoma 145.76 24** P **PKPbc 09 12 53.1 -0.2**
baz=146,SNR=11
**Z33A Whitaker Ranch 145.78 28** P **PKPdf 09 12 53.0 0.0**
baz=146,SNR=7.8
**ABTX Abilene, Hawle 145.90 30** P **PKPbc 09 12 53.8 -0.1**
baz=146,SNR=12
**ABTX Abilene, Hawle 145.90 30** *e*PKPdf **PKPbc 09 12 53.7 -0.1**
**W38A Poteau 146.02 21** P **PKPab 09 12 54.6 0.0**
baz=146
**Y35A Marietta 146.04 26** P **PKPab 09 12 54.6 -0.1**
baz=146

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 330A | Mertzon | 146.05 | 33 | P | PKPbc | 09 12 54.4 | +0.1 |
| | baz=146,SNR=13 | | | | | | |
| 231A | Bronte | 146.10 | 32 | P | PKPbc | 09 12 54.4 | -0.1 |
| | baz=146,SNR=11 | | | | | | |
| Z34A | Collier Ranch, | 146.11 | 27 | P | PKPbc | 09 12 54.6 | +0.2 |
| | baz=146 | | | | | | |
| TXAR | Lajitas Array | 146.12 | 39 | PKPbc | PKPab | 09 12 54.9 | -0.3 |
| | comp=Z,9.2nm,0.6s,baz=300,slow=1.1,SNR=133 | | | | | | |
| X37A | Clayton | 146.13 | 23 | P | PKPbc | 09 12 54.5 | +0.1 |
| | baz=146 | | | | | | |
| 429A | Davenport Ranc | 146.24 | 35 | P | PKPbc | 09 12 54.7 | -0.2 |
| | baz=146,SNR=5.1 | | | | | | |
| 133A | Hamilton Ranch | 146.27 | 29 | P | PKPbc | 09 12 54.8 | -0.1 |
| | baz=146,SNR=10 | | | | | | |
| X38A | Whitesboro | 146.27 | 22 | P | PKPbc | 09 12 54.9 | +0.1 |
| | baz=146,SNR=7.1 | | | | | | |
| Y36A | Durant | 146.37 | 25 | P | PKPbc | 09 12 54.9 | -0.2 |
| | baz=146,SNR=12 | | | | | | |
| 529A | Stev Forest Ra | 146.42 | 36 | P | PKPbc | 09 12 55.4 | -0.1 |
| | baz=146,SNR=8.5 | | | | | | |
| Z35A | Perchaven, San | 146.44 | 26 | P | PKPbc | 09 12 55.7 | +0.3 |
| | baz=146,SNR=5.2 | | | | | | |
| 232A | Coleman | 146.48 | 31 | P | PKPbc | 09 12 55.9 | +0.3 |
| | baz=146 | | | | | | |
| 430A | Baggett Ranch, | 146.49 | 34 | P | PKPbc | 09 12 55.8 | +0.1 |
| | baz=146,SNR=8.2 | | | | | | |
| 331A | San Angelo | 146.53 | 32 | P | PKPbc | 09 12 55.8 | +0.1 |
| | baz=146,SNR=9.8 | | | | | | |
| Y37A | Hugo | 146.57 | 24 | P | PKPbc | 09 12 55.6 | -0.1 |
| | baz=146 | | | | | | |
| 134A | White-Moore Ra | 146.70 | 28 | P | PKPbc | 09 12 56.5 | +0.3 |
| | baz=146 | | | | | | |
| MIAR | Mount Ida | 146.83 | 20 | *e*PKP2 | PKPbc | 09 12 56.5 | 0.0 |
| MIAR | Mount Ida | 146.83 | 20 | P | PKPbc | 09 12 56.7 | +0.2 |
| | baz=147 | | | | | | |
| MIAR | Mount Ida | 146.83 | 20 | *e*PKPbc | PKPbc | 09 12 56.5 | 0.0 |
| Z36A | Blue Ridge | 146.85 | 25 | P | PKPbc | 09 12 56.6 | +0.1 |
| | baz=147 | | | | | | |
| 530A | J-C Ranch, Com | 146.91 | 35 | P | PKPbc | 09 12 57.4 | +0.5 |
| | baz=147,SNR=20 | | | | | | |
| 431A | Sonora | 146.92 | 33 | P | PKPbc | 09 12 56.9 | 0.0 |
| | baz=147,SNR=11 | | | | | | |
| Y38A | Idabel | 146.96 | 22 | P | PKPbc | 09 12 57.0 | +0.2 |
| | baz=147 | | | | | | |
| 135A | Vickery Place, | 147.02 | 27 | P | PKPbc | 09 12 57.3 | +0.2 |
| | baz=147 | | | | | | |
| TZTN | Tazewell | 147.10 | 5 | *e*PKPbc | PKPbc | 09 12 56.7 | -0.5 |
| 234A | Clairette | 147.14 | 29 | P | PKPbc | 09 12 57.5 | 0.0 |
| | baz=147 | | | | | | |
| Y39A | Lockesburg | 147.19 | 22 | P | PKPbc | 09 12 57.4 | -0.1 |
| | baz=147 | | | | | | |
| 432A | Menard | 147.21 | 32 | P | PKPbc | 09 12 57.5 | -0.2 |
| | baz=147 | | | | | | |
| Z37A | Pogue Cattle C | 147.25 | 24 | P | PKPbc | 09 12 58.1 | +0.5 |
| | baz=147 | | | | | | |
| 333A | Richland Sprin | 147.27 | 31 | P | PKPbc | 09 12 57.6 | -0.3 |
| | baz=147,SNR=22 | | | | | | |
| 531A | Rocksprings | 147.35 | 34 | P | PKPbc | 09 12 58.2 | +0.1 |
| | baz=147,SNR=9.0 | | | | | | |
| Z38A | Mt. Pleasant | 147.46 | 23 | P | PKPbc | 09 12 58.6 | +0.4 |
| | baz=147 | | | | | | |
| WHTX | Lake Whitney | 147.47 | 28 | P | PKPbc | 09 12 58.6 | +0.3 |
| | baz=147 | | | | | | |
| 136A | Ennis | 147.49 | 26 | P | PKPbc | 09 12 58.4 | +0.1 |
| | baz=147 | | | | | | |
| JCT | Junction City | 147.51 | 33 | *e*PKP2 | PKPdf | 09 12 56.4 | +0.4 |
| JCT | Junction City | 147.51 | 33 | P | PKPbc | 09 12 58.5 | -0.1 |
| | baz=147,SNR=20 | | | | | | |
| JCT | Junction City | 147.51 | 33 | *e*PKPdf | PKPdf | 09 12 56.4 | +0.4 |
| JCT | | | | *e*PKPbc | PKPbc | 09 12 58.9 | +0.3 |
| 334A | Lometa | 147.64 | 30 | P | PKPbc | 09 12 58.7 | -0.2 |
| | baz=148,SNR=8.7 | | | | | | |
| 433A | Art | 147.67 | 31 | P | PKPbc | 09 12 58.9 | -0.1 |
| | baz=148,SNR=5.4 | | | | | | |
| 532A | Rocksprings | 147.73 | 33 | P | PKPbc | 09 12 59.2 | 0.0 |
| | baz=148,SNR=6.1 | | | | | | |
| 631A | Perdido Creek | 147.90 | 35 | P | PKPbc | 09 12 59.7 | +0.1 |
| | baz=148 | | | | | | |
| 138A | Matatall Enter | 147.94 | 24 | P | PKPbc | 09 12 59.9 | +0.3 |
| | baz=148 | | | | | | |
| 434A | Burnet | 148.04 | 30 | P | PKPbc | 09 13 00.1 | +0.1 |
| | baz=148 | | | | | | |
| 335A | Moody | 148.07 | 29 | P | PKPbc | 09 13 00.1 | +0.1 |
| | baz=148 | | | | | | |
| CPCT | Cooper Cave | 148.09 | 7 | *e*PKPbc | PKPbc | 09 12 59.5 | -0.4 |
| 139A | Bunkhouse Ranc | 148.20 | 23 | P | PKPbc | 09 13 00.4 | +0.2 |
| | baz=148 | | | | | | |
| 533A | Kerrville | 148.24 | 32 | P | PKPbc | 09 13 00.3 | -0.2 |
| | baz=148 | | | | | | |
| 336A | Riesel | 148.26 | 28 | P | PKPbc | 09 13 00.7 | +0.2 |
| | baz=148 | | | | | | |
| 632A | Uvalde | 148.28 | 34 | P | PKPbc | 09 13 00.6 | 0.0 |
| | baz=148 | | | | | | |
| 435B | Jarrell | 148.41 | 29 | P | PKPbc | 09 13 00.9 | 0.0 |
| | baz=148 | | | | | | |
| 534A | Blanco | 148.57 | 31 | P | PKPbc | 09 13 01.6 | +0.2 |
| | baz=148 | | | | | | |
| KMSC | Kings Mountain | 148.63 | 2 | P | PKPbc | 09 13 01.3 | -0.1 |
| | baz=148 | | | | | | |
| KMSC | Kings Mountain | 148.63 | 2 | *e*PKPbc | PKPbc | 09 13 01.2 | -0.1 |
| 239A | Gary | 148.75 | 24 | P | PKPbc | 09 13 02.2 | +0.5 |
| | baz=149 | | | | | | |
| 337A | Centerville | 148.76 | 26 | P | PKPbc | 09 13 02.3 | +0.6 |
| | baz=149 | | | | | | |
| 732A | Laxson Ranch, | 148.76 | 35 | P | PKPbc | 09 13 02.4 | +0.5 |
| | baz=149 | | | | | | |
| 436A | Wall Ranch, Ga | 148.80 | 28 | P | PKPbc | 09 13 02.4 | +0.5 |
| | baz=149 | | | | | | |
| 338A | Crockett | 148.97 | 26 | P | PKPbc | 09 13 02.8 | +0.5 |
| | baz=149 | | | | | | |
| 535A | Dale | 149.03 | 30 | P | PKPbc | 09 13 02.9 | +0.4 |
| | baz=149 | | | | | | |
| 437A | Phantom Ranch, | 149.06 | 27 | P | PKPbc | 09 13 03.0 | +0.4 |
| | baz=149 | | | | | | |
| 832A | Faith Ranch, C | 149.10 | 35 | P | PKPbc | 09 13 03.3 | +0.6 |
| | baz=149 | | | | | | |
| 733A | Divot King Ran | 149.15 | 34 | P | PKPbc | 09 13 03.6 | +0.8 |
| | baz=149 | | | | | | |
| 635A | Leesville | 149.45 | 31 | P | PKPbc | 09 13 04.5 | +0.9 |
| | baz=149 | | | | | | |
| 734A | La Parita Cree | 149.46 | 33 | P | PKPbc | 09 13 03.9 | +0.3 |
| | baz=149 | | | | | | |
| 340A | Bronson | 149.51 | 23 | P | PKPbc | 09 13 04.3 | +0.7 |
| | baz=149 | | | | | | |
| 636A | Smothers Creek | 149.74 | 30 | P | PKPbc | 09 13 04.9 | +0.7 |
| | baz=150 | | | | | | |
| 735A | Kenedy | 149.85 | 32 | P | PKPbc | 09 13 05.5 | +0.9 |
| | baz=150 | | | | | | |
| VBMS | Vicksburg | 149.96 | 18 | P | PKPbc | 09 13 05.8 | +1.0 |
| | baz=150 | | | | | | |
| 933A | Laredo | 150.01 | 35 | P | PKPbc | 09 13 06.2 | +1.2 |
| | baz=150 | | | | | | |
| 834A | Tilden | 150.03 | 34 | P | PKPbc | 09 13 06.3 | +1.2 |
| | baz=150 | | | | | | |
| 637A | Eagle Lake | 150.13 | 29 | P | PKPbc | 09 13 06.4 | +1.2 |
| | baz=150 | | | | | | |
| 736A | Circle Diamond | 150.16 | 31 | P | PKPbc | 09 13 07.2 | +1.9 |
| | baz=150 | | | | | | |
| GOGA | Godfrey | 150.22 | 5 | *e*PKIKP | PKPbc | 09 13 03.8 | -1.5 |
| GOGA | Godfrey | 150.22 | 5 | *e*PKPbc | PKPbc | 09 13 03.8 | -1.5 |
| 835A | Beeville | 150.29 | 33 | P | PKPbc | 09 13 07.5 | +1.9 |
| | baz=150 | | | | | | |
| 934A | Benavides | 150.45 | 34 | P | PKPbc | 09 13 07.5 | +1.5 |
| | baz=150 | | | | | | |
| 034A | Hebbronville | 150.76 | 35 | P | PKPbc | 09 13 08.9 | +2.1 |
| | baz=151 | | | | | | |
| LVC | Limon Verde | 151.67 | 202 | *e*PKPbc | PKPbc | 09 13 10.5 | +1.1 |

*ISCJB **26** 08:55:09.1±1.1, 73°.57N±0°.05×8°.5E±0°.4, h10km, Error ellipse: s-maj=16.2km s-min=6.9km az=0.1*
*CSEM **26** 08:55:10.6±0.3, 73°.58N×8°.35E, h5km, ML3.6, Error ellipse: s-maj=9.3km s-min=4.0km az=91.0*
*BER **26** 08:55:13.4±2.5, 73°.59N×8°.21E, h10km, ML2.0, ML3.6(NAO)*
*NAO **26** 08:55:15.6±3.9, 73°.57N×8°.66E, h40km±555km, ML3.6*
**ISC 26 08:55:11.2**±1.5,**73°.53N**±0°.07×**8°.6E**±0°.1,**h10**km,**n26,**
σ1¶**19**/31,**Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HSPB** | **Hornsund (broa** | **3.91** | **24** | Pn | **Pn** | **08 56 09.9** | **-1.3** |
| **HSPB** | **Hornsund (broa** | **3.91** | **24** | Pn | **Pn** | **08 56 09.9** | **-1.3** |
| **HSP** | **Hornsund** | **3.92** | **24** | Pn | **Pn** | **08 56 09.9** | **-1.4** |
| **SPA0** | **Spitsbergen Ar** | **5.04** | **19** | Pn | **Pn** | **08 56 27.2** | **+0.4** |
| | baz=210,slow=12 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **5.04** | **19** | Pn | **Pn** | **08 56 27.2** | **+0.4** |
| | baz=210,slow=12,SNR=238 | | | | | | |
| **HOPEN** | **Hopen** | **5.19** | **47** | Pn | **Pn** | **08 56 29.4** | **+0.6** |
| HOPEN | | | | Sn | **Sn** | **08 57 28.5** | **-0.2** |
| **HOPEN** | **Hopen** | **5.19** | **47** | Pn | **Pn** | **08 56 29.4** | **+0.6** |
| HOPEN | | | | Sn | **Sn** | **08 57 28.1** | **-0.6** |
| **HOPEN** | **Hopen** | **5.19** | **47** | Pn | **Pn** | **08 56 29.4** | **+0.6** |
| HOPEN | | | | Sn | **Sn** | **08 57 28.5** | **-0.2** |
| **KBS** | **Kingsbay** | **5.48** | **7** | Pn | **Pn** | **08 56 32.5** | **-0.3** |
| **KBS** | **Kingsbay** | **5.48** | **7** | Pn | **Pn** | **08 56 32.5** | **-0.3** |
| **KBS** | **Kingsbay** | **5.48** | **7** | Pn | **Pn** | **08 56 32.5** | **-0.3** |
| **KTK1** | **Kautokeino** | **6.54** | **127** | *e*Pn | **Pn** | **08 56 49.2** | **+1.9** |
| **KTK1** | **Kautokeino** | **6.54** | **127** | *e*Pn | **Pn** | **08 56 49.2** | **+1.9** |
| | SNR=50 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.69** | **118** | Pn | **Pn** | **08 56 50.6** | **+1.2** |
| | baz=321,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **08 58 03.2** | **-2.4** |
| | baz=309,slow=18 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.69** | **118** | Pn | **Pn** | **08 56 50.6** | **+1.2** |
| | baz=321,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **08 58 03.2** | **-2.4** |
| | baz=309,slow=18 | | | | | | |
| **ARA0** | **ARCESS Array S** | **6.69** | **118** | Pn | **Pn** | **08 56 50.6** | **+1.2** |
| | baz=321,slow=13,SNR=9.5 | | | | | | |
| **ARE0** | **ARCESS Array S** | **6.69** | **118** | *e*P | **Pn** | **08 56 51.1** | **+1.7** |
| ARE0 | | | | IAML | | 08 58 09.3 | |
| | comp=Z,2.7nm,0.8s | | | | | | |
| **ARE0** | **ARCESS Array S** | **6.69** | **118** | *e*P | **Pn** | **08 56 51.1** | **+1.7** |
| | SNR=47 | | | | | | |
| **KONS** | **Konsvik** | **7.24** | **165** | *e*P | **Pn** | **08 56 57.4** | **+0.6** |
| **KONS** | **Konsvik** | **7.24** | **165** | *e*P | **Pn** | **08 56 57.4** | **+0.6** |
| | SNR=47 | | | | | | |
| **STOK** | **Stokkvaagen** | **7.39** | **166** | *e*P | **Pn** | **08 56 59.8** | **+0.8** |
| **STOK** | **Stokkvaagen** | **7.39** | **166** | *e*P | **Pn** | **08 56 59.8** | **+0.8** |
| | SNR=47 | | | | | | |
| **APA0** | **Apatity Array** | **10.00** | **114** | Pn | **Pn** | **08 57 35.2** | **+0.5** |
| | baz=326,slow=8.6 | | | | | | |
| **APA0** | **Apatity Array** | **10.00** | **114** | P | **Pn** | **08 57 35.2** | **+0.5** |
| | baz=326,slow=8.6 | | | | | | |
| **APA0** | **Apatity Array** | **10.00** | **114** | P | **Pn** | **08 57 35.2** | **+0.5** |
| | baz=326,slow=8.0,SNR=47 | | | | | | |

*IDC **26** 09:14:24.1±1.3, 3°.28S×100°.24E, h0km, mb4.0/8, mb1 4.1/9, mb1mx3.8/41, mbtmp4.0/9, ML3.0/1, Error ellipse: s-maj=49.9km s-min=17.6km az=55.0*
*ISCJB **26** 09:14:25.8±0.8, 3°.34S±0°.10×100°.2E±0°.1, h27km, mb4.2/12, Error ellipse: s-maj=20.0km s-min=6.7km az=139.3*
*NEIC **26** 09:14:25.7±0.9, 3°.23S×100°.28E, h10km, mb4.2/3, Error ellipse: s-maj=34.9km s-min=9.3km az=54.0*
*DJA **26** 09:14:29.0±1.8, 3°S±23°×10°E±2°1, h38km±5km, M4.0/4, MLv4.0/4*
**ISC 26 09:14:28.2**±1.0,**3°.2S**±0°.1×**100°.2E**±0°.1,**h27**km,**n26,**
σ1¶**00**/23,**mb4.2**/12,**Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.51** | **335** | P | **Pn** | **09 14 39.9** | **+0.2** |
| PPSI | | | | S | **Sn** | **09 14 49.7** | **+2.1** |
| **SISI** | **Saibi** | **2.20** | **329** | P | **Pn** | **09 15 03.3** | **+0.2** |
| SISI | | | | S | **Sn** | **09 15 29.8** | **+0.4** |
| **KSI** | **Kapahiang** | **2.40** | **100** | P | **Pn** | **09 15 05.7** | **-0.1** |
| **SDSI** | **Sungai Dareh** | **2.58** | **28** | P | **Pn** | **09 15 08.4** | **+0.2** |
| **MNSI** | **Mandailing Nat** | **4.05** | **351** | P | **Pn** | **09 15 28.3** | **-0.2** |
| **MDSI** | **Mana Dua** | **4.14** | **108** | P | **Pn** | **09 15 30.4** | **+0.7** |
| **PSI** | **Prapat** | **6.13** | **348** | Pn | **Pn** | **09 15 54.5** | **-2.6** |
| | 0.3nm,0.3s,baz=148,slow=18,SNR=2.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.59** | **357** | P | **P** | **09 19 15.9** | **-0.2** |
| | 1.4nm,0.3s,baz=186,slow=8.8,SNR=5.3 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.95** | **260** | T | T | 09 49 24.4 | |
| | baz=82,slow=75,SNR=419 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.95** | **260** | T | T | 09 49 28.2 | |
| | baz=82,slow=75,SNR=430 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.96** | **260** | T | T | 09 49 29.1 | |
| | baz=82,slow=75,SNR=301 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.04** | **159** | T | T | 09 56 53.8 | |
| | baz=336,slow=76,SNR=20 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.06** | **159** | T | T | 09 56 54.8 | |
| | baz=336,slow=76,SNR=22 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.06** | **159** | T | T | 09 56 55.0 | |
| | baz=336,slow=76,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.19** | **119** | P | **P** | **09 21 36.4** | **-1.1** |
| | 0.5nm,0.4s,baz=300,slow=9.0,SNR=15 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.20** | **119** | *e*P | **P** | **09 21 38.2** | **+0.6** |
| | 1.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **38.36** | **125** | P | **P** | **09 21 47.1** | **-0.2** |
| | 0.9nm,0.6s,baz=302,slow=8.1,SNR=14 | | | | | | |
| **SONM** | **Songino Array** | **51.14** | **5** | P | **P** | **09 23 29.9** | **+1.1** |
| | 2.4nm,0.6s,baz=186,slow=9.5,SNR=17 | | | | | | |
| SONM | | | | PcP | **PcP** | **09 24 44.7** | **+0.4** |
| | 0.6nm,0.8s,baz=174,slow=5.8,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.27** | **344** | P | **P** | **09 23 37.9** | **+0.7** |
| | 3.1nm,0.7s,baz=146,slow=8.5,SNR=19 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.13** | **27** | P | **P** | **09 23 57.5** | **-0.7** |
| | 4.4nm,0.8s,baz=251,slow=6.1,SNR=5.9 | | | | | | |
| **KURK** | **Kurchatov** | **56.84** | **344** | *e*P | **P** | **09 24 10.5** | **+0.2** |
| | 3.0nm,0.6s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.41** | **349** | P | **P** | **09 24 21.4** | **+0.2** |
| | 1.9nm,0.6s,baz=174,slow=4.5,SNR=6.9 | | | | | | |
| **HNR** | **Honiara** | **59.62** | **99** | *e*P | **P** | **09 24 28.7** | **-1.8** |
| | 21nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **62.82** | **332** | *e*P | **P** | **09 24 51.6** | **+0.1** |
| | 1.2nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.31** | **313** | P | **P** | **09 26 03.6** | **-0.1** |
| | 0.4nm,0.5s,baz=125,slow=3.5,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.53** | **39** | PKPbc | **PKPab** | **09 34 05.8** | **+0.7** |
| | 2.5nm,0.7s,baz=224,slow=1.0,SNR=37 | | | | | | |

*IDC **26** 09:55:47.4±1.9, 3°.43S×99°.59E, h0km, mb3.8/9, mb1 3.9/9, mb1mx3.7/41, mbtmp3.8/9, Error ellipse: s-maj=82.0km s-min=18.0km az=53.0*
*NEIC **26** 09:55:49.1±0.8, 3°.36S×99°.66E, h10km, mb4.1/3, Error ellipse: s-maj=38.7km s-min=8.9km az=54.0*
*ISCJB **26** 09:55:50.7±1.2, 3°.3S±0°.2×99°.7E±0°.3, h33km, mb3.8/12, Error ellipse: s-maj=56.7km s-min=12.3km az=143.9*
**ISC 26 09:55:52.9**±1.5,**3°.3S**±0°.3×**99°.7E**±0°.4,**h35**km,**n20,**
σ0¶**64**/14,**mb3.9**/12,**Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.66** | **358** | P | **P** | **10 00 39.5** | **-1.0** |
| | 0.6nm,0.4s,baz=176,slow=14,SNR=3.1 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.38** | **260** | T | T | 10 29 16.6 | |
| | baz=82,slow=75,SNR=52 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.39** | **260** | T | T | 10 29 17.1 | |
| | baz=82,slow=75,SNR=49 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.40** | **260** | T | T | 10 29 18.0 | |
| | baz=82,slow=75,SNR=60 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.15** | **159** | T | T | 10 38 57.6 | |
| | baz=35,slow=74,SNR=9.4 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.16** | **159** | T | T | 10 38 49.2 | |
| | baz=339,slow=74,SNR=9.0 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.17** | **159** | T | T | 10 38 47.8 | |
| **WRA** | **Warramunga Arr** | **37.63** | **119** | P | **P** | **10 03 04.0** | **-0.8** |
| | 0.5nm,0.4s,baz=287,slow=9.3,SNR=13 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.63** | **119** | *e*P | **P** | **10 03 04.2** | **-0.6** |
| | 1.2nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **38.76** | **125** | P | **P** | **10 03 13.9** | **-0.3** |
| | 0.4nm,0.5s,baz=298,slow=7.5,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **51.29** | **6** | P | **P** | **10 04 54.5** | **+1.0** |
| | 0.9nm,0.7s,baz=194,slow=8.9,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.22** | **345** | P | **P** | **10 05 00.6** | **+0.2** |
| | 0.7nm,0.4s,baz=153,slow=8.4,SNR=5.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.73** | **344** | P | **P** | **10 05 33.3** | **+0.3** |
| | 0.3nm,0.5s,baz=168,slow=6.3,SNR=3.1 | | | | | | |
| **KURK** | **Kurchatov** | **56.78** | **344** | P | **P** | **10 05 33.3** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **58.41** | **350** | P | **P** | **10 05 45.5** | **+0.7** |
| | 2.7nm,0.7s,baz=145,slow=5.3,SNR=2.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.31** | **340** | P | **P** | **10 06 05.0** | **+0.2** |
| | 0.5nm,0.5s,baz=131,slow=4.4,SNR=2.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.65** | **332** | *e*P | **P** | **10 06 13.3** | **-0.5** |
| | 0.4nm,0.4s | | | | | | |
| **URZ** | **Urewera** | **78.08** | **128** | *e*P | **P** | **10 07 49.2** | **+0.7** |
| | 4.9nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **85.13** | **332** | P | **P** | **10 08 24.8** | **-0.3** |
| | 0.5nm,0.6s,baz=46,slow=14,SNR=4.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.95** | **38** | PKPbc | **PKPab** | **10 15 30.3** | **+0.1** |
| | 0.7nm,0.6s,baz=1.8,slow=0.9,SNR=12 | | | | | | |

*IDC **26** 10:00:08.3±0.7, 2°.73S×99°.75E, h0km, mb4.3/17, mb1 4.4/18, mb1mx4.2/42, mbtmp4.3/18, ML3.5/1, MS3.5/5, Ms1 3.5/5, ms1mx3.0/39, Error ellipse: s-maj=30.3km s-min=14.0km az=59.0*
*NEIC **26** 10:00:09.8±0.4, 2°.79S×99°.78E, h10km, mb4.6/8, Error ellipse: s-maj=11.6km s-min=5.4km az=59.0*
*BJI **26** 10:00:10.0, 2°.80S×99°.90E, h22km, mb4.9/26, mB5.0/12, Ms4.8/4, Ms7 4.4/4*
*DJA **26** 10:00:11.7±0.8, 3°S±6°×10°0E±°, h18km±6km, M4.5/12, mb4.6/3, mB4.7/1, MLv4.5/12, Mw(mB)3.9/1*
*ISCJB **26** 10:00:11.5±0.4, 2°.70S±0°.05×99°.80E±0°.06, h30km, mb4.4/24, MS3.4/5, Error ellipse: s-maj=9.7km s-min=4.4km az=143.6*
*AUST **26** 10:00:22.2±1.2, 2°.08S×100°.90E, h81km, Error ellipse: s-maj=2.4km s-min=1.0km az=237.0*
**ISC 26 10:00:12.5**±0.6,**2°.74S**±0°.07×**99°.76E**±0°.08,**h30**km,**n88,**
σ1¶**76**/96,**mb4.5**/24,**MS3.4**/5,**Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.25** | **96** | P | **Pb** | **10 00 18.3** | **-1.1** |
| **SISI** | **Saibi** | **1.55** | **334** | P | **Pn** | **10 00 38.0** | **-0.1** |
| **PDSI** | **Padang** | **1.94** | **21** | P | **Pn** | **10 00 42.6** | **-1.0** |
| **PPI** | **Padang Panjang** | **2.35** | **16** | P | **Pn** | **10 00 49.1** | **0.0** |
| | baz=1.7,SNR=66 | | | | | | |
| **PPI** | **Padang Panjang** | **2.35** | **16** | P | **Pn** | **10 00 49.1** | **0.0** |
| **SDSI** | **Sungai Dareh** | **2.45** | **43** | P | **Pn** | **10 00 50.5** | **0.0** |
| **KSI** | **Kapahiang** | **2.97** | **108** | P | **Pn** | **10 00 57.6** | **-0.1** |
| **BKNI** | **Bangkinang** | **3.30** | **23** | P | **Pn** | **10 01 03.5** | **+1.3** |
| | baz=2.4,SNR=3.1 | | | | | | |
| **BKNI** | **Bangkinang** | **3.30** | **23** | P | **Pn** | **10 01 03.0** | **+0.8** |
| **BKNI** | **Bangkinang** | **3.30** | **23** | *e*Pn | **Pn** | **10 01 02.8** | **+0.5** |
| **MNSI** | **Mandailing Nat** | **3.51** | **357** | P | **Pn** | **10 01 06.1** | **+1.0** |
| **MNAI** | **Manna** | **3.58** | **117** | P | **Pn** | **10 01 06.0** | **0.0** |
| | baz=3.1,SNR=11 | | | | | | |
| **MNAI** | **Manna** | **3.58** | **117** | P | **Pn** | **10 01 06.4** | **+0.4** |
| **MNAI** | **Manna** | **3.58** | **117** | *e*Pn | **Pn** | **10 01 06.6** | **+0.6** |
| **GSI** | **Gunungsitoli** | **4.57** | **331** | P | **Pn** | **10 01 19.2** | **-0.5** |
| **GSI** | **Gunungsitoli** | **4.57** | **331** | *e*Pn | **Pn** | **10 01 19.9** | **+0.3** |
| **MDSI** | **Maura Dua** | **4.74** | **112** | P | **Pn** | **10 01 22.9** | **+0.9** |
| **LWLI** | **Liwa** | **4.85** | **118** | P | **Pn** | **10 01 27.7** | **+4.0** |
| **KASI** | **Kota Agung** | **5.48** | **121** | P | **Pn** | **10 01 32.3** | **+0.2** |
| | 94nm,0.8s,0.5nm | | | | | | |
| **PSI** | **Prapat** | **5.56** | **351** | Pn | **Pn** | **10 01 31.7** | **-1.8** |
| | 1.6nm,0.3s,baz=159,slow=14,SNR=6.2 | | | | | | |
| **PSI** | **Prapat** | **5.56** | **351** | P | **Pn** | **10 01 33.9** | **+0.5** |
| | baz=5.2,SNR=3.8 | | | | | | |
| **PSI** | **Prapat** | **5.56** | **351** | *e*Pn | **Pn** | **10 01 32.8** | **-0.7** |
| **MYKOM** | **Kota Tinggi** | **6.08** | **42** | *e*Pn | **Pn** | **10 01 40.4** | **0.0** |
| **IPM** | **Ipoh** | **7.28** | **10** | *e*Pn | **Pn** | **10 01 57.9** | **+1.0** |
| **KULM** | **Kulim** | **8.02** | **6** | *e*Pn | **Pn** | **10 02 06.6** | **-0.5** |
| **CISI** | **Cisompet, Garu** | **9.34** | **121** | *e*Pn | **Pn** | **10 02 23.1** | **-2.2** |
| **XMIS** | **Christmas Isla** | **9.67** | **143** | *e*Pn | Pn | 10 02 26.2 | -3.5 |
| **CM01** | **Chiang Mai Arr** | **21.04** | **358** | *e*P | **P** | **10 04 53.1** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **21.07** | **358** | P | **P** | **10 04 53.2** | **-1.3** |
| | 7.7nm,0.6s,baz=185,slow=10,SNR=41 | | | | | | |
| CMAR | | | | LR | LR | 10 13 14.0 | |
| | comp=Z,106nm,19.1s,baz=186,slow=37 | | | | | | |
| **CHTO** | **Chiang Mai** | **21.43** | **358** | *e*P | **P** | **10 04 57.7** | **-0.6** |
| | 49nm,2.4s | | | | | | |
| **PALK** | **Pallekele** | **21.46** | **298** | LR | LR | 10 12 42.8 | |
| | comp=Z,112nm,19.4s,baz=116,slow=35 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.58** | **259** | T | T | 10 34 48.2 | |
| | baz=81,slow=75,SNR=1351 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.59** | **259** | T | T | 10 34 52.0 | |
| | baz=81,slow=75,SNR=1601 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.60** | **259** | T | T | 10 34 53.3 | |
| | baz=81,slow=75,SNR=1367 | | | | | | |
| **KMI** | **Kunming** | **27.84** | **6** | P | **P** | **10 06 03.5** | **+3.7** |
| KMI | | | | pP | **pP** | **10 06 07.0** | **-1.5** |
| KMI | | | | S | **S** | **10 10 47.0** | **+5.6** |
| KMI | | | | PMZ | | | |
| | 8.0nm,0.7s | | | | | | |
| KMI | | | | PMZ | | | |
| | 220nm,6.5s | | | | | | |
| **ODAN** | **Odare** | **31.75** | **339** | *e*P | **P** | **10 06 36.3** | **+1.8** |
| | 14nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **32.09** | **340** | *e*P | **P** | **10 06 39.7** | **+2.2** |
| | 12nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **32.13** | **338** | *e*P | **P** | **10 06 40.0** | **+2.2** |
| | 6.7nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **33.27** | **337** | *e*P | **P** | **10 06 49.6** | **+1.7** |
| | 25nm,0.6s | | | | | | |
| **KOLN** | **Koldanda** | **34.09** | **334** | *e*P | **P** | **10 06 56.6** | **+1.8** |
| | 9.5nm,0.7s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.67** | **159** | T | T | 10 43 21.4 | |
| | baz=335,slow=76,SNR=77 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.68** | **159** | T | T | 10 43 22.4 | |
| | baz=335,slow=76,SNR=83 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.68** | **159** | T | T | 10 43 22.7 | |
| | baz=335,slow=76,SNR=78 | | | | | | |
| **WRKA** | **Warakurna** | **35.32** | **131** | P | **P** | **10 07 06.4** | **+1.0** |
| | baz=35,SNR=7.3 | | | | | | |
| **XAN** | **Xi'an** | **37.58** | **13** | P | **P** | **10 07 23.5** | **-1.0** |
| XAN | | | | pP | **pP** | **10 07 31.8** | **-1.6** |
| XAN | | | | PMZ | | | |
| | 15nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.84** | **119** | P | **P** | **10 07 26.5** | **-0.3** |
| | 2.8n

baz=47,SNR=3.6
KSAR Wonju Array Be 47.74 30 P P 10 08 45.9 -1.0
KSRS Korea Array 47.77 30 P P 10 08 45.9 -1.2
4.3nm,0.3s,baz=226,slow=7.9,SNR=16
QLP Quilpie 48.75 123 P P 10 08 56.0 +1.1
baz=48,SNR=3.9
TKM2 Tokmak 2 50.41 337 eP P 10 09 09.4 +1.9
6.3nm,0.7s
AAK Ala-Archa 50.61 336 P P 10 09 10.2 +1.2
2.0nm,0.6s,baz=107,slow=6.1,SNR=4.1
AAK Ala-Archa 50.61 336 eP P 10 09 11.2 +2.2
1.1nm,0.6s
SONM Songino Array 50.70 6 P P 10 09 10.7 +1.2
8.1nm,0.7s,baz=187,slow=9.3,SNR=38
SONA1 Songino Array 50.71 6 eP P 10 09 10.5 +0.9
ULN Ulaanbaatar 50.80 6 eP P 10 09 11.5 +1.3
2.2nm,0.4s
EKS2 Erkin-Say 50.93 335 eP P 10 09 13.3 +2.0
MKAR Makanchi Array 51.67 345 P P 10 09 17.2 +0.5
9.0nm,0.8s,baz=150,slow=8.2,SNR=34
CN2 Changchun 51.75 24 eP P 10 09 16.5 -0.8
CN2 PMZ
20nm,0.8s
MAKZ Makanchi 51.77 345 eP P 10 09 18.8 +1.4
CMSA Cobar Meteorol 51.84 129 P P 10 09 19.9 +1.7
baz=51,SNR=13
KKAR Karatay Array 52.70 333 eP P 10 09 25.2 +0.9
0.8nm,0.4s
USRK Ussurisky Ar. 54.91 28 P P 10 09 40.9 +0.4
14nm,0.6s,baz=225,slow=5.8,SNR=30
KURBB Kurchatov Arra 56.18 344 P P 10 09 49.9 +0.4
4.3nm,0.9s,baz=159,slow=6.5,SNR=9.6
KURK Kurchatov 56.24 344 eP P 10 09 51.3 +1.3
16nm,0.9s
ZALV Zalesovo Beam 57.84 350 P P 10 10 01.4 +0.2
9.1nm,0.7s,baz=174,slow=6.0,SNR=7.1
BVAR Borovoye Array 60.79 340 P P 10 10 21.3 -0.4
1.4nm,0.6s,baz=120,slow=8.5,SNR=3.5
ABKAR Akbulak array 62.17 332 eP P 10 10 31.4 +0.4
5.8nm,0.6s
AKTO Aktyubinsk 63.88 332 P P 10 10 42.5 +0.1
1.1nm,0.7s,baz=18,slow=18,SNR=3.4
KBZ Khabaz 68.70 319 P P 10 11 14.3 +1.0
1.6nm,0.7s,baz=44,slow=16,SNR=3.6
MAW Mawson 69.52 194 LR LR 10 34 42.4
comp=Z,24nm,19.8s,baz=61,slow=30
BRTR Keskin Array B 73.64 313 P P 10 11 42.6 -1.0
0.5nm,0.4s,baz=145,slow=8.9,SNR=4.1
VNDA Vanda 81.49 169 P P 10 12 27.1 +0.6
0.4nm,0.5s,baz=14,slow=11,SNR=5.3
FINES FINESS Array B 84.65 332 P P 10 12 43.4 +0.3
1.0nm,0.5s,baz=97,slow=9.8,SNR=5.2
ARCES ARCESS Array B 87.08 340 P P 10 12 55.6 +0.6
1.0nm,0.6s,baz=198,slow=0.4,SNR=4.7
EGMT Eagleton 128.22 25 ePdif Pdif 10 16 02.7 +2.1
TXAR Lajitas Array 145.43 38 PKPbc PKPab 10 19 49.9 +1.2
11nm,0.7s,baz=285,slow=0.9,SNR=117
MIAR Mount Ida 146.00 20 ePKPbc PKPab 10 19 50.5 +0.1
JCT Junction City 146.77 32 ePKPbc PKPab 10 19 53.5 -0.1

**IDC 26 10:07:10.2±2.6, 54°27.N×86°22.E, h0km, mb1 3.2/2, mb1mx3.1/37, mbtmp3.2/2, ML3.0/2, Error ellipse: s-maj=19.6km s-min=12.1km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| I46RU | ZALESOVO INFRA | 0.89 | 249 | *i* | | | 10 12 00.0 | |
| | baz=69,slow=330,SNR=32 | | | | | | | |
| ZALV | Zalesovo Beam | 0.89 | 249 | Pg | | Pg | 10 07 25.4 | -1.8 |
| | 2.6nm,0.3s,baz=69,slow=16,SNR=7.8 | | | | | | | |
| ZALV | | | | Lg | | Lg | 10 07 40.2 | |
| | 8.6nm,0.3s,baz=69,slow=30,SNR=28 | | | | | | | |
| ZALV | | | | Rg | | Rg | 10 07 42.1 | |
| | 29nm,0.4s,baz=60,slow=26,SNR=29 | | | | | | | |
| KURBB | Kurchatov Arra | 5.95 | 235 | Pn | | Pn | 10 08 40.1 | +0.6 |
| | 0.3nm,0.3s,baz=51,slow=14,SNR=5.6 | | | | | | | |
| KURBB | | | | Lg | | Lg | 10 10 21.4 | |
| | 0.1nm,0.3s,baz=55,slow=32,SNR=4.5 | | | | | | | |
| MKAR | Makanchi Array | 7.89 | 200 | Pn | | Pn | 10 09 07.6 | +1.4 |
| | 0.3nm,0.3s,baz=22,slow=15,SNR=5.9 | | | | | | | |
| MKAR | | | | Lg | | Lg | 10 11 20.6 | |
| | 0.1nm,0.3s,baz=29,slow=34,SNR=3.9 | | | | | | | |

*ISCJB **26** 10:37:10.2±0.4, 59°.73N×0°.03×23°.08E±0°.04, h0km, Error ellipse: s-maj=4.4km s-min=3.0km az=172.5*
*CSEM **26** 10:37:11.4±0.2, 59°.72N×23°.11E, h2km, ML1.8, Error ellipse: s-maj=4.8km s-min=3.2km az=2.0, Mining explosion.*
*HEL **26** 10:37:11.7±0.1, 59°.71N×23°.01E, h0km, ML1.8, ML2.0(UPP), Explosion*
*IDC **26** 10:37:12.4±2.0, 59°.83N×22°.95E, h0km, mb1 2.9/4, mb1mx2.8/45, mbtmp2.8/4, ML2.3/4, Error ellipse: s-maj=28.7km s-min=7.4km az=155.0*
*UPP **26** 10:37:15.3, 59°.87N×22°.57E, h0km, ML2.0, Suspected Mining explosion.*

**ISC 26 10:37:10.3±0.8, 59°.72N±0°.03×23°.03E±0°.03, h0km, n37, σ1s05/56, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| SRPE | Suurupi | 0.74 | 110 | eP | | Pg | 10 37 24.9 | +0.5 |
| SRPE | | | | eS | | Sg | 10 37 33.9 | -0.1 |
| SRPE | Suurupi | 0.74 | 110 | P | | Pg | 10 37 24.8 | +0.4 |
| SRPE | | | | S | | Sg | 10 37 33.8 | -0.1 |
| MEF | Metsahovi | 0.85 | 54 | eP | | Pg | 10 37 27.0 | +0.4 |
| MEF | | | | eS | | Sg | 10 37 38.6 | +1.0 |
| MEF | Metsahovi | 0.85 | 54 | P | | Pg | 10 37 27.0 | +0.4 |
| MEF | | | | S | | Sg | 10 37 38.6 | +0.9 |
| MTSE | Matsula | 1.09 | 158 | eP | | Pg | 10 37 31.3 | +0.2 |
| MTSE | | | | eS | | Sg | 10 37 45.0 | -0.2 |
| MTSE | Matsula | 1.09 | 158 | P | | Pg | 10 37 31.3 | +0.2 |
| MTSE | | | | S | | Sg | 10 37 45.0 | -0.2 |
| RAF | Rauma | 1.45 | 335 | eP | | Pn | 10 37 37.7 | -0.1 |
| RAF | | | | eS | | Sb | 10 37 57.0 | -0.1 |
| RAF | Rauma | 1.45 | 335 | P | | Pn | 10 37 37.7 | -0.1 |
| RAF | | | | S | | Sb | 10 37 57.0 | -0.1 |
| AAL | Aland | 1.59 | 288 | eP | | Pn | 10 37 39.4 | -0.3 |
| AAL | | | | eS | | Sn | 10 38 00.0 | -1.0 |
| AAL | Aland | 1.59 | 288 | P | | Pn | 10 37 39.7 | 0.0 |
| AAL | | | | S | | Sn | 10 37 59.7 | -1.3 |
| PVF | Pernaja | 1.64 | 59 | eP | | Pn | 10 37 41.1 | +0.7 |
| PVF | | | | eS | | Sn | 10 38 02.1 | -0.1 |
| PVF | Pernaja | 1.64 | 59 | P | | Pn | 10 37 41.1 | +0.7 |
| PVF | | | | S | | Sn | 10 38 02.1 | -0.1 |
| NRTU | Norrtaelje | 2.23 | 271 | eP | | Pn | 10 37 49.8 | +1.3 |
| NRTU | | | | eS | | Sn | 10 38 17.5 | +0.9 |
| NRTU | Norrtaelje | 2.23 | 271 | P | | Pn | 10 37 49.7 | +1.2 |
| NRTU | | | | S | | Sn | 10 38 17.5 | +0.9 |
| FIA0 | FINESS Array S | 2.29 | 40 | ePB | | Pb | 10 37 52.3 | -0.2 |
| FIA0 | | | | eSG | | Sg | 10 38 23.5 | -0.4 |
| FIA0 | | | | MSG | | | 10 38 24.2 | |
| | comp=Z,5.9nm,0.1s | | | | | | | |
| FINES | FINESS Array B | 2.29 | 40 | Pn | | Pb | 10 37 51.5 | -1.1 |
| | comp=Z,0.8nm,0.3s,baz=221,slow=15,SNR=40 | | | | | | | |
| FINES | | | | Lg | | Lg | 10 38 21.9 | |
| | comp=Z,1.5nm,0.3s,baz=225,slow=27,SNR=19 | | | | | | | |
| GRAU | Graesoe | 2.33 | 287 | eP | | Pn | 10 37 51.3 | +1.4 |
| GRAU | Graesoe | 2.33 | 287 | P | | Pn | 10 37 51.3 | +1.4 |
| VJF | Virojoki | 2.41 | 68 | eP | | Pn | 10 37 51.6 | +0.6 |
| VJF | | | | eSG | | Sg | 10 38 27.0 | -0.7 |
| VJF | | | | MSG | | | 10 38 29.5 | |
| | comp=Z,3.3nm,0.1s | | | | | | | |
| VJF | Virojoki | 2.41 | 68 | P | | Pn | 10 37 51.6 | +0.6 |
| VJF | | | | Sg | | Sg | 10 38 26.9 | -0.8 |
| FORU | Forsmark | 2.52 | 287 | eP | | Pn | 10 37 54.8 | +2.3 |
| FORU | Forsmark | 2.52 | 287 | P | | Pn | 10 37 54.7 | +2.3 |
| KEF | Keuruu | 2.62 | 19 | ePB | | Pb | 10 37 57.6 | -0.5 |
| KEF | | | | eSG | | Sb | 10 38 32.2 | +1.6 |
| KEF | | | | MSG | | | 10 38 34.8 | |
| | comp=Z,2.9nm,0.1s | | | | | | | |
| FLYU | Flymyra | 2.62 | 281 | eP | | Pn | 10 37 55.6 | +1.7 |
| FLYU | Flymyra | 2.62 | 281 | P | | Pn | 10 37 55.5 | +1.7 |
| NYNU | Nynaeshamn | 2.67 | 257 | eP | | Pb | 10 37 57.8 | -1.1 |
| NYNU | Nynaeshamn | 2.67 | 257 | P | | Pb | 10 37 57.7 | -1.2 |
| KAF | Kangasniemi | 2.89 | 32 | ePB | | Pb | 10 38 00.7 | -1.9 |
| KAF | | | | eSB | | Sb | 10 38 38.3 | -0.1 |
| KAF | | | | MSG | | | 10 38 39.5 | |
| | comp=Z,2.5nm,0.2s | | | | | | | |
| OSTU | Oestervaala | 3.00 | 282 | eP | | Pn | 10 38 00.6 | +1.5 |
| OSTU | Oestervaala | 3.00 | 282 | P | | Pn | 10 38 00.6 | +1.5 |
| IGGU | Iggoen | 3.07 | 295 | eP | | Pn | 10 38 01.5 | +1.5 |
| IGGU | Iggoen | 3.07 | 295 | P | | Pn | 10 38 01.4 | +1.4 |
| ARNU | Arnoeviken | 3.41 | 308 | eP | | Pn | 10 38 05.8 | +1.2 |
| ARNU | Arnoeviken | 3.41 | 308 | P | | Pn | 10 38 05.8 | +1.2 |
| HFS | Hagfors | 4.71 | 279 | Pn | | Pn | 10 38 23.9 | +1.3 |
| | comp=Z,0.2nm,0.3s,baz=102,slow=13,SNR=5.1 | | | | | | | |
| HFS | | | | Lg | | Lg | 10 39 34.9 | |
| | comp=Z,0.3nm,0.3s,baz=93,slow=32,SNR=5.5 | | | | | | | |
| NOA | NORSAR Array B | 6.01 | 288 | Pn | | Pn | 10 38 39.1 | -1.3 |
| | comp=Z,0.1nm,0.3s,baz=83,slow=14,SNR=2.5 | | | | | | | |
| ARCES | ARCESS Array B | 9.91 | 5 | Pn | | Pn | 10 39 33.5 | -0.4 |
| | comp=Z,0.1nm,0.3s,baz=183,slow=14,SNR=5.8 | | | | | | | |

**NNC 26 10:38:30.9±0.8, 50°.80N×73°.59E, h0km, mb3.0, mpv2.7, 10C-6D, Error ellipse: s-maj=9.8km s-min=6.3km az=32.0, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| VOSK | Vostochnaya | 2.52 | 321 | ↑Lg | | Lg | 10 39 48.4 | |
| | 31nm,1.0s | | | | | | | |
| OTUK | Ortayu | 2.69 | 198 | ↓Pg | | Pb | 10 39 18.6 | -1.3 |
| | 2.7nm,0.8s | | | | | | | |
| OTUK | | | | ↑Lg | | Lg | 10 39 57.7 | |
| | 7.0nm,0.7s | | | | | | | |
| BVA0 | Borovoye Array | 2.98 | 320 | ↑Pg | | Pb | 10 39 23.1 | -1.9 |
| | 1.0nm,0.3s,baz=138,slow=17,SNR=9.2 | | | | | | | |
| BVA0 | | | | ↓Lg | | Lg | 10 40 05.5 | |
| | 11nm,0.8s,baz=129,slow=28,SNR=8.1 | | | | | | | |
| KURBB | Kurchatov Arra | 3.15 | 91 | ↑Pn | | Pn | 10 39 22.1 | +0.4 |
| | 2.6nm,0.7s | | | | | | | |
| KURBB | | | | ↑Pg | | Pb | 10 39 28.6 | +0.9 |
| | 3.9nm,0.7s | | | | | | | |
| KURBB | | | | ↓Lg | | Lg | 10 40 09.5 | |
| | 32nm,0.8s | | | | | | | |
| KURK | Kurchatov | 3.20 | 90 | ↑Pn | | Pn | 10 39 22.8 | +0.4 |
| | 3.4nm,1.4s | | | | | | | |
| KURK | | | | ↑Pg | | Pb | 10 39 28.8 | +0.2 |
| | 2.9nm,0.9s | | | | | | | |
| KURK | | | | ↑Lg | | Lg | 10 40 10.7 | |
| | 22nm,0.8s | | | | | | | |
| CHKZ | Chkalovo | 3.41 | 329 | ↑Pn | | Pn | 10 39 27.2 | +1.9 |
| | 1.2nm,0.5s | | | | | | | |
| CHKZ | | | | ↑Lg | | Lg | 10 40 19.1 | |
| | 15nm,1.0s | | | | | | | |
| ZRNK | Zerenda | 3.56 | 309 | ↓Pn | | Pn | 10 39 29.0 | +1.5 |
| | 0.7nm,0.5s | | | | | | | |
| ZRNK | | | | ↓Lg | | Lg | 10 40 24.0 | |
| | 18nm,0.8s | | | | | | | |
| MK31 | Makanchi Array | 7.01 | 122 | ↓Lg | | Lg | 10 42 13.6 | |
| | 3.8nm,0.8s,baz=318,slow=26,SNR=4.2 | | | | | | | |

*IDC **26** 10:39:34.1±0.8, 15°.12N×120°.16E, h0km, mb3.9/8, mb1 4.2/8, mb1mx3.8/51, mbtmp4.0/8, MS4.1/2, Ms1 4.1/2, ms1mx2.9/42, Error ellipse: s-maj=52.1km s-min=17.1km az=63.0*
*MAN **26** 10:39:39, 14°.99N×119°.60E, h25km, mb4.8, ML3.7, MS3.7*
*NEIC **26** 10:39:44.4±1.7, 14°.95N×119°.95E, h80km±18km, mb4.2/3, Error ellipse: s-maj=26.1km s-min=11.4km az=70.0*

**ISC 26 10:39:39.6±1.8, 15°.01N±0°.04×119°.66E±0°.07, h29km±14km, n31, σ1s78/31, mb4.2/9, 3C-1D, Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| SCZP | Santa Cruz | 0.81 | 18 | eP | | Pn | 10 39 55.3 | +0.3 |
| LUBP | Lubang | 1.39 | 156 | eP | | Pb | 10 40 09.2 | +4.3 |
| BOLP | Bolinao | 1.39 | 10 | eP | | Pn | 10 40 03.8 | +0.7 |
| BOLP | | | | eS | | Sn | 10 40 21.8 | +1.3 |
| PCPH | Palayan | 1.50 | 68 | ↑eP | | Pn | 10 40 04.2 | -0.3 |
| TGY | Tagaytay City | 1.53 | 126 | ↑iP | | Pn | 10 40 06.2 | +1.2 |
| TGY | | | | *i* S | | Sb | 10 40 27.1 | +0.7 |
| BCPH | Baguio City Da | 1.63 | 33 | ↑iP | | Pn | 10 40 08.0 | +1.4 |
| BCPH | | | | *i* S | | Sn | 10 40 28.4 | +1.7 |
| BALP | Baler | 1.99 | 68 | eP | | Pn | 10 40 11.8 | +0.5 |
| BALP | | | | eS | | Sn | 10 40 31.8 | -3.6 |
| SZP | Santa | 2.65 | 17 | ePn | | Pb | 10 40 25.2 | -1.1 |
| SZP | | | | eSn | | Sn | 10 40 46.2 | -5.3 |
| ABRA | Dolores | 2.82 | 21 | eP | | Pn | 10 40 25.5 | +2.7 |
| CAUP | Cauayan | 2.84 | 47 | eP | | Pn | 10 40 26.1 | +3.1 |
| GQP | Guinayangan | 2.91 | 112 | ↓eP | | Pn | 10 40 25.5 | +1.5 |
| GQP | | | | eS | | Sn | 10 41 01.6 | +3.5 |
| BUSP | Coron | 3.03 | 170 | eP | | Pn | 10 40 27.9 | +2.3 |
| APYP | Conner | 3.22 | 28 | eP | | Pb | 10 40 32.6 | -3.5 |
| ENPP | El Nido | 3.78 | 183 | eP | | Pn | 10 40 36.5 | +0.5 |
| CUYO | Cuyo Island | 4.34 | 162 | eP | | Pn | 10 40 44.3 | +0.6 |
| DAV | Davao City (W) | 9.79 | 143 | LR | | LR | 10 46 26.5 | |
| | comp=Z,314nm,18.2s,baz=33,slow=43 | | | | | | | |
| KAPI | Kappang | 19.89 | 180 | eP | | P | 10 44 09.0 | +0.1 |
| | 8.1nm,0.7s | | | | | | | |
| CMAR | Chiang Mai Arr | 20.13 | 283 | P | | Pn | 10 44 15.7 | +2.1 |
| | 1.1nm,0.5s,baz=94,slow=9.6,SNR=6.5 | | | | | | | |
| SONM | Songino Array | 34.53 | 344 | P | | P | 10 46 24.2 | -1.4 |
| | 0.2nm,0.4s,baz=170,slow=8.8,SNR=2.9 | | | | | | | |
| WRAB | Tennant Creek | 37.61 | 157 | eP | | P | 10 46 49.7 | -2.3 |
| | 3.6nm,0.4s | | | | | | | |
| WRA | Warramunga Arr | 37.61 | 157 | P | | P | 10 46 49.3 | -2.7 |
| | 2.9nm,0.5s,baz=331,slow=10.0,SNR=44 | | | | | | | |
| ASAR | Alice Springs | 40.88 | 160 | P | | P | 10 47 17.6 | -1.7 |
| | 2.8nm,0.5s,baz=336,slow=6.6,SNR=57 | | | | | | | |
| MKAR | Makanchi Array | 44.39 | 323 | P | | P | 10 47 46.6 | -1.0 |
| | 0.2nm,0.4s,baz=120,slow=8.5,SNR=2.6 | | | | | | | |
| KURBB | Kurchatov Arra | 48.55 | 326 | P | | P | 10 48 20.4 | +0.2 |
| | 0.7nm,0.2s,baz=124,slow=7.7,SNR=3.8 | | | | | | | |
| KURK | Kurchatov | 48.55 | 326 | eP | | P | 10 48 21.1 | +1.0 |
| ABKAR | Akbulak array | 59.09 | 319 | P | | P | 10 49 39.2 | +1.9 |
| | 0.3nm,0.3s | | | | | | | |
| ARCES | ARCESS Array B | 77.51 | 339 | P | | P | 10 51 31.7 | -0.6 |
| | 1.3nm,0.6s,baz=82,slow=8.7,SNR=5.8 | | | | | | | |
| KMBO | Kilima Mbogo | 82.95 | 267 | LR | | LR | 11 27 43.0 | |
| | comp=Z,276nm,18.6s,baz=92,slow=35 | | | | | | | |
| NB2 | NORSAR Subarra | 85.64 | 332 | P | | P | 10 52 16.3 | +0.8 |
| | comp=Z,2.2nm,0.7s,baz=66,slow=5.1 | | | | | | | |
| NOA | NORSAR Array B | 85.64 | 332 | P | | P | 10 52 16.1 | +0.6 |
| | comp=Z,2.3nm,0.8s,baz=65,slow=4.9,SNR=6.2 | | | | | | | |
| TXAR | Lajitas Array | 119.24 | 43 | PKP | | PKPdf | 10 58 26.3 | -0.5 |
| | comp=Z,0.5nm,0.8s,baz=282,slow=1.6,SNR=6.3 | | | | | | | |

*DJA **26** 10:51:21.6±0.6, 4°S±5°×10°E±°, h10km, M5.3/23, mb5.6/23, mB5.7/20, MLv5.6/18, Mw(mB)5.2/20, Mwp5.7/1*
*IDC **26** 10:51:21.5±0.3, 3°.64S×99°.74E, h0km, mb5.3/37, mb1 5.4/40, mb1mx5.3/45, mbtmp5.3/40, ML4.7/3, MS4.4/26, Ms1 4.4/26, ms1mx4.3/40, Error ellipse: s-maj=13.2km s-min=8.1km az=45.0*
*GCMT **26** 10:51:23.1±0.2, 3°.81S×99°.68E, h12km, MW5.2/84, Moment Tensor Solution. s53,c79; s84,c155; Duration: 1s0 Moment tensor: Scale 10^17 Nm; Mrr-0.61±.01; Mθθ0.50±.01; Mφφ0.10±.02; Mrθ-0.40±.04; Mrφ-0.56±.01; Mθφ-0.19±.04; Best double couple: M0.90400×10^17 NP1:φ97.00000°, δ61.00000°, λ-127.00000°. NP2: φ334.00000°, δ46.00000°, λ-43.00000°. Principal axes: T 0.9240, Plg9.0000°, Azm213.0000°; N -0.0410, Plg32.0000°, Azm117.0000°; P -0.8840, Plg57.0000°, Azm316.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*BJI **26** 10:51:23.7, 3°.80S×99°.80E, h30km, mb5.4/70, mB5.5/51, Ms5.2/65, Ms7 5.0/62*
*AUST **26** 10:51:23.3±2.4, 3°.62S×99°.84E, h11km±14km, Error ellipse: s-maj=7.8km s-min=4.2km az=48.0*
*NEIC **26** 10:51:23.1±0.1, 3°.70S×99°.75E, h10km, mb5.5/64, MS4.8/69, Error ellipse: s-maj=4.5km s-min=3.2km az=220.0*
*ISCJB **26** 10:51:25.1±0.1, 3°.64S±0°.02×99°.84E±0°.02, h37km, mb5.5/153, MS4.7/99, Error ellipse: s-maj=3.3km s-min=2.4km az=29.6*
*MOS **26** 10:51:25.6±1.2, 3°.53S×99°.76E, h33km, mb5.9/66, MS4.7/21, Error ellipse: s-maj=9.2km s-min=4.3km az=118.2*
*KLM **26** 10:51:27.2, 3°.72S×99°.69E, h41km, mb5.2, ML5.5, MS6.0*

**ISC 26 10:51:26.9±0.3, 3°.67S±0°.03×99°.74E±0°.04, h35km±1km, h35km:pP-P, n1117, σ1s24/1127, mb5.5/172, MS4.6/100, 45C-70D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| SISI | Saibi | 2.41 | 344 | P | | Pn | 10 52 01.8 | -2.2 |
| KSI | Kapahiang | 2.85 | 90 | P | | Pn | 10 52 08.8 | -1.2 |
| SDSI | Sungai Dareh | 3.20 | 32 | P | | Pn | 10 52 13.8 | -1.0 |
| PPI | Padang Panjang | 3.26 | 12 | P | | Pn | 10 52 14.3 | -1.3 |
| | baz=3.2,SNR=45 | | | | | | | |
| PPI | Padang Panjang | 3.26 | 12 | P | | Pn | 10 52 14.3 | -1.3 |
| MNAI | Manna | 3.28 | 102 | P | | Pn | 10 52 13.6 | -2.3 |
| | baz=3.2,SNR=42 | | | | | | | |
| MNAI | Manna | 3.28 | 102 | P | | Pn | 10 52 13.7 | -2.3 |
| MNAI | Manna | 3.28 | 102 | ePn | | Pn | 10 52 14.5 | -1.5 |
| MNAI | | | | eSn | | Sn | 10 52 43.7 | -10 |
| BKNI | Bangkinang | 4.17 | 18 | P | | Pn | 10 52 27.4 | -0.8 |
| | baz=2.1,SNR=5.7 | | | | | | | |
| BKNI | Bangkinang | 4.17 | 18 | P | | Pn | 10 52 26.8 | -1.4 |
| BKNI | Bangkinang | 4.17 | 18 | ePn | | Pn | 10 52 28.2 | 0.0 |
| BKNI | | | | eSn | | Sn | 10 53 10.9 | -4.9 |
| JMBI | JAMBI | 4.39 | 63 | P | | Pn | 10 52 29.6 | -1.6 |
| MNSI | Mandailing Nat | 4.43 | 358 | P | | Pn | 10 52 30.5 | -1.3 |
| MDSI | Maura Dua | 4.50 | 101 | P | | Pn | 10 52 31.0 | -1.7 |
| LWLI | Liwa | 4.51 | 107 | P | | Pn | 10 52 30.6 | -2.4 |
| PMBI | Palembang | 5.08 | 82 | P | | Pn | 10 52 39.8 | -0.8 |
| KASI | Kota Agung | 5.09 | 111 | P | | Pn | 10 52 38.3 | -2.5 |
| | 909nm,0.8s,16µm4.9nm | | | | | | | |
| KLI | Kotabumi | 5.24 | 103 | P | | Pn | 10 52 40.7 | -2.2 |
| SBSI | Sibolga | 5.25 | 351 | P | | Pn | 10 52 38.1 | -4.9 |
| GSI | Gunungsitoli | 5.39 | 336 | P | | Pn | 10 52 42.5 | -2.4 |
| | 604nm,0.9s,9µm4.0nm | | | | | | | |
| GSI | Gunungsitoli | 5.39 | 336 | ePn | | Pn | 10 52 42.3 | -2.6 |
| GSI | | | | eSn | | Sn | 10 53 41.6 | -4.2 |
| BTDF | Bukit Timah Da | 6.42 | 39 | P | | Pn | 10 52 57.1 | -2.0 |
| | baz=6.3,SNR=4.0 | | | | | | | |
| PSI | Prapat | 6.48 | 353 | Pn | | Pn | 10 52 55.6 | -4.4 |
| | 5.0nm,0.3s,baz=173,slow=12,SNR=16 | | | | | | | |
| PSI | Prapat | 6.48 | 353 | eP | | Pn | 10 52 55.9 | -4.1 |
| PSI | | | | *e* | | | 10 54 02.3 | |
| PSI | Prapat | 6.48 | 353 | P | | Pn | 10 52 56.3 | -3.7 |
| | baz=6.4,SNR=6.6 | | | | | | | |
| PSI | Prapat | 6.48 | 353 | ePn | | Pn | 10 52 55.9 | -4.1 |
| PSI | | | | eSn | | Sn | 10 54 02.3 | -11 |
| PPBI | Pangkal Pinang | 6.56 | 77 | P | | Pn | 10 52 59.8 | -1.2 |
| CGJI | Cibinong | 6.61 | 117 | P | | Pn | 10 52 58.1 | -3.6 |
| | 1µm,0.8s,10µm3.3nm | | | | | | | |
| MYKOM | Kota Tinggi | 6.80 | 37 | ePn | | Pn | 10 53 02.4 | -1.9 |
| MYKOM | | | | eSn | | Sn | 10 54 19.1 | -1.5 |
| SBJI | Serang | 6.82 | 111 | P | | Pn | 10 52 58.4 | -6.2 |
| SNSI | Sinabang, Aceh | 6.93 | 330 | P | | Pn | 10 53 05.4 | -0.7 |
| | 578nm,1.0s,7µm2.2nm | | | | | | | |
| FRIM | Kepong | 7.11 | 15 | ↑P | | Pn | 10 53 10.1 | +1.5 |
| TSI | Tuntungan | 7.22 | 351 | P | | Pn | 10 53 09.3 | -0.7 |
| KCSI | Kotacane, Aceh | 7.41 | 345 | P | | Pn | 10 53 11.5 | -1.2 |
| SKJI | Sukabumi | 7.55 | 116 | P | | Pn | 10 53 11.9 | -2.8 |
| | 1µm,0.7s,14µm4.1nm | | | | | | | |
| CBJI | Citeko | 7.59 | 111 | P | | Pn | 10 53 16.8 | +1.6 |
| | 4µm,0.6s,17nm | | | | | | | |
| TPI | Tanjungpandan | 7.95 | 84 | P | | Pn | 10 53 18.8 | -1.4 |
| | 56nm,0.9s,797nm | | | | | | | |
| IPM | Ipoh | 8.19 | 9 | ↓P | | Pn | 10 53 25.1 | +1.7 |
| IPM | Ipoh | 8.19 | 9 | ePn | | Pn | 10 53 24.3 | +0.8 |
| IPM | | | | eSn | | Sn | 10 54 52.6 | -2.3 |
| CNJI | Cibinong | 8.20 | 117 | P | | Pn | 10 53 19.4 | -4.1 |
| | 2µm,0.8s,16µm | | | | | | | |
| LEM | Lembang | 8.45 | 112 | Pn | | Pn | 10 53 24.6 | -2.5 |
| | 46nm,0.3s,baz=32,slow=5.3,SNR=19 | | | | | | | |
| LEM | Lembang | 8.45 | 112 | P | | Pn | 10 53 26.5 | -0.6 |
| | 8µm,0.7s,82µm | | | | | | | |
| MLSI | Meulaboh, Aceh | 8.56 | 337 | P | | Pn | 10 53 28.1 | -0.3 |
| CISI | Cisompet, Garu | 8.92 | 116 | P | | Pn | 10 53 29.7 | -3.7 |
| | baz=8.9,SNR=32 | | | | | | | |
| CISI | Cisompet, Garu | 8.92 | 116 | P | | Pn | 10 53 29.6 | -3.9 |
| | 4µm,0.6s,31µm | | | | | | | |
| CISI | Cisompet, Garu | 8.92 | 116 | ePn | | Pn | 10 53 29.5 | -3.9 |
| CISI | | | | eSn | | Sn | 10 55 06.4 | -6.4 |
| KULM | Kulim | 8.94 | 6 | ↓P | | Pn | 10 53 34.6 | +0.9 |
| KULM | Kulim | 8.94 | 6 | ePn | | Pn | 10 53 32.0 | -1.8 |
| KULM | | | | eSn | | Sn | 10 55 10.9 | -2.4 |
| XMIS | Christmas Isla | 8.96 | 139 | ePn | | Pn | 10 53 26.4 | -7.5 |
| XMIS | | | | eSn | | Sn | 10 55 01.7 | -12 |
| LHMI | Lhok Sumawe | 9.27 | 342 | ePn | | Pn | 10 53 33.4 | -4.8 |
| KTGM | Kuala Trenggan | 9.56 | 21 | ↑P | | Pn | 10 53 43.4 | +1.2 |
| CMJI | Cimerak | 9.58 | 116 | P | | Pn | 10 53 38.5 | -4.0 |
| | 1µm,0.7s,9µm | | | | | | | |
| SKLT | Songkhla | 10.80 | 5 | P | | Pn | 10 53 58.6 | -0.6 |
| | 82nm,1.1s | | | | | | | |
| SMRI | Semarang | 11.17 | 108 | ePn | | Pn | 10 54 03.4 | -0.9 |
| SMRI | | | | eSn | | Sn | 10 56 13.1 | +5.0 |
| TRTT | Trang | 11.43 | 360 | P | | Pn | 10 54 05.8 | -2.0 |
| | 33nm,1.2s,858nm | | | | | | | |
| UGM | Wanagama | 11.53 | 112 | P | | Pn | 10 54 06.9 | -2.3 |
| | baz=12,SNR=8.4 | | | | | | | |
| UGM | Wanagama | 11.53 | 112 | ePn | | Pn | 10 54 06.3 | -2.8 |
| KSM | Kuching | 11.73 | 64 | ePn | | Pn | 10 54 11.9 | -0.1 |
| KSM | | | | eSn | | Sn | 10 56 11.0 | -11 |
| SBUM | Sibu | 13.88 | 64 | ↓P | | Pn | 10 54 42.4 | +1.1 |
| SBUM | Sibu | 13.88 | 64 | ePn | | Pn | 10 54 41.7 | +0.4 |
| BTM | Bintulu | 14.98 | 63 | ↓P | | Pn | 10 54 56.2 | -0.1 |
| JAGI | Jajag, Banyuwa | 15.10 | 109 | ePn | | Pn | 10 54 51.9 | -6.0 |
| | 80nm,0.6s | | | | | | | |
| CHBT | CHBT | 16.51 | 9 | P | | Pn | 10 55 14.9 | -1.1 |
| | 70nm,1.1s | | | | | | | |
| PATY | Pattaya | 16.52 | 4 | P | | Pn | 10 55 13.9 | -2.2 |
| | 16nm,0.8s | | | | | | | |
| DLV | T Lat | 17.78 | 29 | ePn | | Pn | 10 55 31.7 | -0.4 |
| | 45nm,0.9s | | | | | | | |
| SRDT | SRDT | 17.91 | 358 | P | | P | 10 55 37.9 | +4.1 |
| KHLT | Khaolaem Dam | 18.38 | 356 | P | | P | 10 55 38.6 | -0.4 |
| | 44nm,0.8s,428nm | | | | | | | |
| KKM | Kota Kinabalu | 19.07 | 60 | P | | P | 10 55 45.5 | -1.3 |
| | baz=19,SNR=12 | | | | | | | |
| KKM | Kota Kinabalu | 19.07 | 60 | ↓P | | P | 10 55 46.5 | -0.2 |
| KKM | Kota Kinabalu | 19.07 | 60 | eP | | P | 10 55 45.1 | -1.7 |
| | 117nm,1.1s | | | | | | | |
| CHAI | Chaiyaphum | 19.57 | 6 | P | | P | 10 55 51.3 | -0.7 |
| | 33nm,0.7s,335nm | | | | | | | |
| UBPT | Khong Chiam | 19.66 | 17 | P | | P | 10 55 53.3 | +0.3 |
| | 148nm,0.7s,2µm | | | | | | | |
| SDKM | Sandakan | 19.73 | 62 | ↓P | | P | 10 55 54.2 | +0.3 |
| TSM | Tawau | 19.77 | 67 | ↓P | | P | 10 55 54.5 | +0.3 |
| SPSI | Sidrap Palu | 19.99 | 92 | P | | P | 10 55 55.7 | -0.9 |
| | 113nm,0.9s,1µm | | | | | | | |
| KAPI | Kappang | 20.00 | 95 | P | | P | 10 55 55.0 | -1.8 |
| | 1.8nm,0.3s,baz=294,slow=4.5,SNR=13 | | | | | | | |
| KA

comp=Z,67nm,0.9s,comp=Z,467nm
**CHTO Chiang Mai 22.35 358** P **P** **10 56 21.9 -0.1**
comp=Z,262nm,0.9s,comp=Z,6μm
**CHTO Chiang Mai 22.35 358** *e*P **P** **10 56 22.0 -0.1**
CHTO *e* 11 00 17.9
CHTO pmax pmax
comp=Z,135nm,1.4s
CHTO MLR MLR
comp=Z,2μm,19.0s
**CHTO Chiang Mai 22.35 358** P **P** **10 56 22.4 +0.3**
SNR=29
**CHTO Chiang Mai 22.35 358** *e*P **P** **10 56 22.0 -0.1**
comp=Z,135nm,1.4s
CHTO *e*PcP **PcP** **11 00 17.9 +1.1**
CHTO LR LR
comp=Z,2μm,19.0s
**LUWI Luwuk 23.16 84** P **P** **10 56 28.9 -1.6**
baz=23,SNR=3.7
**LUWI Luwuk 23.16 84** *e*P **P** **10 56 29.5 -1.1**
comp=Z,174nm,1.0s
**CMAI Chiengmai2 23.46 358** P **P** **10 56 34.3 +0.6**
comp=Z,100nm,2.0s,comp=Z,3μm
**BATI Baumata 24.61 107** P **P** **10 56 43.9 -0.4**
comp=Z,40nm,0.5s,baz=46,slow=2.6,SNR=4.2
**QIZ Qiongzhong 24.65 23** P **P** **10 56 47.0 +2.5**
QIZ pP **pP** **10 56 53.3 -1.2**
QIZ sP **sP** **10 56 56.3 -2.4**
QIZ S **S** **11 01 02.0 -1.9**
QIZ sS sS 11 01 14.8 -5.5
QIZ PMZ
comp=Z,67nm,1.2s
QIZ PMZ
comp=Z,540nm,9.2s
QIZ LN
comp=Z,2μm,13.7s
QIZ LZ
comp=Z,3μm,13.7s
**QIZ Qiongzhong 24.65 23** *e*P **P** **10 56 45.3 +0.8**
comp=Z,734nm,2.1s
QIZ LR LR
comp=Z,2μm,19.0s
**SOEI Soe 25.09 105** P **P** **10 56 47.5 -1.2**
baz=25,SNR=4.4
**SOEI Soe 25.09 105** *e*P **P** **10 56 47.8 -0.9**
comp=Z,101nm,0.8s
**SLVN Son La 25.18 9** *e*P **P** **10 56 49.2 -0.2**
comp=Z,63nm,0.8s
**TRD Trivandrum 25.74 298**⇑ *e*P P 10 57 02.6 +8.1
TRD *e*S S 11 02 04.6 +43
**MBWA Marble Bar 26.08 133** *e*P **P** **10 56 56.9 -0.6**
comp=Z,46nm,0.9s
MBWA LR LR
comp=Z,1μm,21.0s
**SKHT Srikalahasti 26.35 311** *e*P **P** **10 57 00.8 +0.9**
SKHT IAmb IAmb 10 57 05.1
comp=Z,65nm,1.0s
SKHT IVMs_BB IVMs_BB 11 06 49.7
comp=Z,593nm,19.5s
**CHLP Challavanipeta 26.91 325** *e*P **P** **10 57 04.5 -0.5**
CHLP IAmb IAmb 10 57 06.1
comp=Z,50nm,0.9s
CHLP IVMs_BB IVMs_BB 11 11 17.4
comp=Z,504nm,13.9s
**H08S2 Diego Garcia H 27.39 261** T T 11 26 35.3
baz=82,slow=75,SNR=634
**H08S3 Diego Garcia H 27.40 261** T T 11 26 47.8
baz=82,slow=75,SNR=790
**DGAR Diego Garcia 27.41 261** PFAKE 10 57 20.0 +10
DGAR LR LR
comp=Z,1μm,19.0s
**H08S1 Diego Carcia H 27.41 261** T T 11 26 38.1
baz=82,slow=75,SNR=946
**PVM Polavaram 27.42 320** *e*P **P** **10 57 09.6 0.0**
PVM IAmb IAmb 10 57 10.7
comp=Z,26nm,0.8s
PVM IVMs_BB IVMs_BB 11 13 14.1
comp=Z,260nm,19.2s
**ADKI Addanki 27.54 315** *e*P **P** **10 57 09.9 -0.8**
ADKI IAmb IAmb 10 57 12.7
comp=Z,47nm,0.9s
ADKI IVMs_BB IVMs_BB 11 07 02.2
comp=Z,556nm,15.6s
**DAV Davao City (W) 27.91 68** LR LR 11 08 54.3
comp=Z,934nm,19.8s,baz=298,slow=38
**DAV Davao City (W) 27.91 68** PFAKE 10 57 30.0 +16
DAV LR LR
comp=Z,935nm,20.0s
**RCLA Racherla 28.01 313** *e*P **P** **10 57 14.6 -0.3**
RCLA IAmb IAmb 10 57 15.9
comp=Z,39nm,0.8s
RCLA IVMs_BB IVMs_BB 11 06 05.5
comp=Z,429nm,23.4s
**SRLM Srisailam 28.48 314** *e*P **P** **10 57 18.8 -0.3**
SRLM IAmb IAmb 10 57 20.1
comp=Z,38nm,0.8s
SRLM IVMs_BB IVMs_BB 11 07 02.7
comp=Z,241nm,18.0s
**NJS Nagarjunasagar 28.49 315** *e*P **P** **10 57 19.0 -0.2**
NJS IAmb IAmb 10 57 20.2
comp=Z,41nm,0.8s
NJS IVMs_BB IVMs_BB 11 08 50.6
comp=Z,482nm,14.9s
**KMI Kunming 28.77 6** P **P** **10 57 23.0 +1.2**
KMI pP **pP** **10 57 33.5 +1.7**
KMI sP **sP** **10 57 37.8 +1.8**
KMI PP **PnPn** **10 58 18.3 +4.9**
KMI S **S** **11 02 13.0 +3.7**
KMI sS **sS** **11 02 28.0 +2.1**
KMI PMZ
comp=Z,37nm,0.9s
KMI PMZ
comp=Z,470nm,5.4s
KMI LN
comp=Z,750nm,19.9s
KMI LE
comp=Z,3μm,17.7s
KMI LZ
comp=Z,2μm,14.6s
**URV Uravakonda 28.95 310** *e*P **P** **10 57 22.8 -0.5**
URV IAmb IAmb 10 57 24.3
comp=Z,23nm,0.8s
URV IVMs_BB IVMs_BB 11 09 00.8
comp=Z,436nm,22.0s
**MEEK Meekatharra 29.13 143** P **P** **10 57 24.6 -0.2**
baz=29,SNR=8.6
**HYB Hyderabad 29.60 316** *e*P **P** **10 57 28.0 -1.1**
**HYB Hyderabad 29.60 316**⇓ *i*P **P** **10 57 28.0 -1.1**
**HYB Hyderabad 29.60 316** *e*P **P** **10 57 28.0 -1.1**
**HYBB Hyderabad (bro 29.60 316** *e*P **P** **10 57 28.7 -0.4**
HYBB IAmb IAmb 10 57 30.2
comp=Z,40nm,0.8s
HYBB IVMs_BB IVMs_BB 11 08 02.7
comp=Z,472nm,22.1s
**RPR Rampur 30.10 319** *e*P **P** **10 57 33.5 0.0**
RPR IAmb IAmb 10 57 34.6
comp=Z,55nm,1.0s
**GYA Guiyang 30.69 12**⇑ *i*P **P** **10 57 39.3 +0.6**
GYA pP **pP** **10 57 51.0 +2.3**
GYA PcP **PcP** **11 00 37.5 +1.2**
GYA S **S** **11 02 42.5 +3.2**
GYA sS **sS** **11 02 58.3 +2.4**
GYA SS **SnSn** **11 04 27.3 +8.3**
GYA PMZ
comp=Z,60nm,1.0s
GYA PMZ
comp=Z,360nm,6.3s
GYA LN
comp=Z,2μm,14.9s
GYA LE
comp=Z,620nm,14.0s
GYA LZ
comp=Z,3μm,17.8s
**SRSP Sriramsagar 30.79 318** *e*P **P** **10 57 39.1 -0.4**
SRSP IAmb IAmb 10 57 40.6
comp=Z,80nm,0.8s
SRSP IVMs_BB IVMs_BB 11 08 42.6
comp=Z,384nm,17.8s
**KNRA Kununurra 30.95 115** P **P** **10 57 39.1 -1.9**
baz=31,SNR=12
**KLRI Killari 31.42 314** *e*P **P** **10 57 44.7 -0.5**
KLRI IAmb IAmb 10 57 45.9
comp=Z,65nm,0.8s
KLRI IVMs_BB IVMs_BB 11 10 37.0
comp=Z,641nm,14.8s
**SIJI Soronq 31.62 86** LR LR 11 11 56.8
comp=Z,398nm,18.3s,baz=356,slow=39

**MTN Manton Dam 32.34 108** P **P** **10 57 50.9 -2.3**
baz=32,SNR=5.9
**MTN Manton Dam 32.34 108** *e*P **P** **10 57 51.0 -2.3**
comp=Z,34nm,0.7s
**FAKI Fak Fak 32.46 90** P **P** **10 57 52.0 -2.4**
baz=32,SNR=26
**FAKI Fak Fak 32.46 90** *e*P **P** **10 57 54.4 0.0**
comp=Z,229nm,0.9s
FAKI *ep*P **pP** **10 58 04.7 +0.3**
FAKI *es*P **sP** **10 58 09.7 +1.1**
**KLBR Kellerberrin 32.54 151** P **P** **10 57 55.3 +0.4**
baz=33,SNR=4.1
**ODAN Odare 32.61 339** *e*P **P** **10 57 56.5 +0.8**
comp=Z,105nm,0.7s
**TAPN Taplejung 32.95 340** *e*P **P** **10 57 59.8 +1.0**
comp=Z,184nm,0.8s
**RAMN Ramite 32.98 338** *e*P **P** **10 58 00.0 +1.0**
**NWAO Narrogin (SRO) 33.40 153** P **P** **10 58 01.4 -0.9**
comp=Z,32nm,1.0s,baz=134,slow=0.1,SNR=11
NWAO LR LR 11 10 34.7
comp=Z,6.1nm,18.8s,baz=198,slow=34
**NWAO Narrogin (SRO) 33.40 153** *e*P **P** **10 58 02.2 -0.1**
NWAO pmax pmax
comp=Z,31nm,1.0s
NWAO MLR MLR
comp=Z,1μm,19.0s
**NWAO Narrogin (SRO) 33.40 153** P **P** **10 58 01.8 -0.5**
baz=34,SNR=9.9
**NWAO Narrogin (SRO) 33.40 153** *e*P **P** **10 58 02.2 -0.1**
comp=Z,31nm,1.0s
NWAO LR LR
comp=Z,1μm,19.0s
**KDU Kakadu 33.58 107** P **P** **10 58 01.9 -2.2**
baz=34,SNR=4.5
**TPUB Ta-pu 33.67 36** *e*P **P** **10 58 05.4 +0.6**
comp=Z,83nm,1.1s
**H01W3 Cape Leeuwin H 33.81 158** T T 11 34 05.1
baz=336,slow=76,SNR=377
**H01W2 Cape Leeuwin H 33.83 158** T T 11 34 26.5
baz=336,slow=76,SNR=349
**H01W1 Cape Leeuwin H 33.83 158** T T 11 34 11.2
baz=336,slow=76,SNR=274
**PKI Pulchoki 33.99 337** *e*P **P** **10 58 08.3 +0.4**
**PKIN Phulchoki 34.00 337** *e*P **P** **10 58 08.2 +0.3**
**GUN Gumba 34.12 338** *e*P **P** **10 58 09.8 +0.8**
comp=Z,158nm,0.6s
**DMN Daman 34.15 336** *e*P **P** **10 58 09.7 +0.5**
comp=Z,54nm,0.7s
**LSA Lhasa 34.18 347** P **P** **10 58 11.0 +1.4**
LSA PMZ
comp=Z,120nm,0.9s
LSA LN
comp=Z,480nm,26.7s
LSA LE
comp=Z,870nm,28.4s
LSA LZ
comp=Z,600nm,30.1s
**LSA Lhasa 34.18 347** *e*P **P** **10 58 11.1 +1.4**
LSA *e**PP **pP** **10 58 22.7 +2.9**
LSA pmax pmax
comp=Z,86nm,0.8s
LSA MLR MLR
comp=Z,724nm,20.0s
**LSA Lhasa 34.18 347** *e*P **P** **10 58 11.1 +1.4**
comp=Z,86nm,0.8s
LSA *ep*P **pP** **10 58 22.7 +2.9**
LSA LR LR
comp=Z,724nm,20.0s
**SSLB Suanglung 34.23 36** *e*P **P** **10 58 08.3 -1.4**
comp=Z,55nm,1.0s
**KKN Kakani 34.24 337** *e*P **P** **10 58 10.4 +0.5**
comp=Z,76nm,0.8s
**CD2 Chengdu 34.60 6** P **P** **10 58 12.5 -0.3**
CD2 pP **pP** **10 58 21.3 -1.6**
CD2 PP **PP** **10 59 32.0 +0.3**
CD2 S **S** **11 03 42.5 +2.6**
CD2 sS **sS** **11 03 57.5 +1.0**
CD2 PMZ
comp=Z,100nm,0.7s
CD2 PMZ
comp=Z,160nm,5.2s
CD2 LN
comp=Z,2μm,13.7s
CD2 LE
comp=Z,4μm,18.1s
CD2 LZ
comp=Z,3μm,14.2s
**GKN Gorkha 34.69 336** *e*P **P** **10 58 14.3 +0.6**
comp=Z,64nm,0.6s
**WRKA Warakurna 34.73 130** P **P** **10 58 13.3 -0.7**
baz=35,SNR=38
**KOLN Koldanda 34.91 335** *e*P **P** **10 58 16.6 +0.9**
comp=Z,338nm,0.8s
**ENH Enshi 35.01 15** *e*P **P** **10 58 16.5 +0.1**
comp=Z,46nm,0.8s
**DANN Dangsing 35.35 335** *e*P **P** **10 58 20.3 +0.7**
**WHN Wuhan 36.77 21**⇑ P **P** **10 58 32.3 +0.9**
WHN S **S** **11 04 17.3 +4.2**
WHN LN
comp=Z,12μm,16.7s
WHN LE
comp=Z,11μm,18.0s
WHN LZ
comp=Z,9μm,17.4s
**WRA Warramunga Arr 37.41 118** P **P** **10 58 35.5 -1.5**
comp=Z,27nm,0.8s,baz=291,slow=9.0,SNR=116
WRA PcP **PcP** **11 00 54.3 -1.2**
comp=Z,11nm,0.8s,baz=296,slow=2.8,SNR=6.3
WRA S **S** **11 04 28.8 +5.6**
comp=Z,1.7nm,0.8s,baz=292,slow=16,SNR=5.1
WRA LR LR 11 15 17.0
comp=Z,656nm,20.3s,baz=295,slow=38
**WRAB Tennant Creek 37.41 118** *de*P **P** **10 58 35.8 -1.2**
WRAB pmax pmax
comp=Z,105nm,0.7s
WRAB MLR MLR
comp=Z,2μm,19.0s
**WRAB Tennant Creek 37.41 118** P **P** **10 58 35.0 -2.0**
comp=Z,332nm,0.8s,SNR=34
**WRAB Tennant Creek 37.41 118** *e*P **P** **10 58 35.8 -1.2**
comp=Z,45nm,0.8s
WRAB LR LR
comp=Z,981nm,21.0s
**XAN Xi'an 38.49 12** P **P** **10 58 45.8 -0.1**
XAN pP **pP** **10 58 56.0 -0.1**
XAN S **S** **11 04 36.5 -2.8**
XAN PMZ
comp=Z,130nm,0.9s
XAN LE
comp=Z,3μm,20.5s
XAN LZ
comp=Z,3μm,14.3s
**AS12 Alice Springs 38.51 124** *e*P **P** **10 58 45.5 -0.8**
AS12 *e*PcP **PcP** **11 00 58.7 -0.2**
AS12 *e*S S 11 04 46.4 +6.4
**ASAR Alice Springs 38.51 124** P **P** **10 58 45.5 -0.8**
comp=Z,16nm,0.8s,baz=299,slow=7.4,SNR=115
ASAR PcP **PcP** **11 00 58.7 -0.2**
comp=Z,16nm,0.8s,baz=300,slow=3.4,SNR=11
ASAR S S 11 04 46.4 +6.4
comp=Z,1.9nm,0.8s,baz=292,slow=14,SNR=5.4
ASAR LR LR 11 15 35.6
comp=Z,959nm,20.7s,baz=294,slow=38
**AS01 Alice Springs 38.55 124** *e*P **P** **10 58 45.4 -1.2**
**NDI New Delhi 38.77 327** *e*P **P** **10 58 46.5 -1.8**
**LZH Lanzhou 39.73 5**⇑ P **P** **10 58 57.5 +1.1**
LZH pP **pP** **10 59 07.5 +0.9**
LZH sP **sP** **10 59 12.8 +2.0**
LZH PcP **PcP** **11 01 03.8 +1.2**
LZH S **S** **11 05 01.0 +2.9**
LZH sS **sS** **11 05 15.3 +0.4**
LZH SS **SS** **11 07 54.0 -0.8**
LZH PMZ
comp=Z,110nm,1.1s
LZH PMZ
comp=Z,570nm,6.9s
LZH LN
comp=Z,2μm,15.6s
LZH LE
comp=Z,1μm,14.0s
LZH LZ
comp=Z,2μm,15.5s
**NJ2 Nanjing 39.90 26** *e*P **P** **10 58 58.5 +0.8**
NJ2 pP **pP** **10 59 05.0 -2.9**
NJ2 S **S** **11 05 03.0 +2.6**
NJ2 sS **sS** **11 05 17.5 +0.3**

NJ2 PMZ
comp=Z,16nm,0.7s
NJ2 PMZ
comp=Z,840nm,5.3s
NJ2 LN
comp=Z,2μm,19.1s
NJ2 LE
comp=Z,2μm,20.1s
NJ2 LZ
comp=Z,3μm,23.0s
**SSE Sheshan 40.17 29** *e*P **P** **10 59 01.8 +1.9**
SSE sP **sP** **10 59 14.0 -0.3**
SSE S **S** **11 05 07.0 +2.6**
SSE sS **sS** **11 05 22.0 +0.8**
SSE PMZ
comp=Z,55nm,0.7s
SSE PMZ
comp=Z,500nm,9.8s
SSE LN
comp=Z,1μm,14.8s
SSE LE
comp=Z,790nm,14.7s
SSE LZ
comp=Z,2μm,13.5s
**QIS Mount Isa 42.27 117** P **P** **10 59 16.9 -0.5**
baz=42,SNR=18
**GTA Gaotai 42.86 0**⇓ P **P** **10 59 22.8 +0.7**
GTA pP **pP** **10 59 32.5 +0.2**
GTA sP **sP** **10 59 36.5 0.0**
GTA PcP **PcP** **11 01 13.5 +0.8**
GTA S **S** **11 05 47.0 +2.5**
GTA sS **sS** **11 06 02.8 +1.4**
GTA SS **SS** **11 08 53.5 -3.3**
GTA PMZ
comp=Z,28nm,1.1s
GTA PMZ
comp=Z,380nm,4.2s
GTA LN
comp=Z,950nm,15.7s
GTA LE
comp=Z,2μm,16.1s
GTA LZ
comp=Z,1μm,16.6s
**TIA Tai'an 42.87 21**⇓ P **P** **10 59 21.8 -0.2**
TIA PMZ
comp=Z,40nm,0.9s
**COEN Coen 44.05 106** P **P** **10 59 30.1 -1.8**
baz=44,SNR=5.0
**COEN Coen 44.05 106** *e*P **P** **10 59 30.1 -1.8**
comp=Z,20nm,1.0s
COEN *ep*P **pP** **10 59 42.2 0.0**
**BBOO Buckleboo 44.65 135** P **P** **10 59 35.6 -0.8**
baz=45,SNR=5.2
**BBOO Buckleboo 44.65 135** *e*P **P** **10 59 35.3 -1.1**
comp=Z,17nm,0.9s
**HHC Hu-ho-hao-te 45.60 13** *e*P **P** **10 59 45.0 +1.0**
HHC S **S** **11 06 25.8 +1.5**
HHC PMZ
comp=Z,72nm,1.1s
HHC PMZ
comp=Z,550nm,4.9s
HHC LN
comp=Z,2μm,15.3s
HHC LE
comp=Z,1μm,13.1s
HHC LZ
comp=Z,1μm,15.7s
**BJT Baijiatuau 46.02 18** *e*P **P** **10 59 47.5 +0.4**
BJT *e**PP **pP** **10 59 58.5 +1.1**
BJT pmax pmax
comp=Z,71nm,0.9s
BJT MLR MLR
comp=Z,1μm,19.0s
**BJT Baijiatuau 46.02 18** *e*P **P** **10 59 47.5 +0.4**
comp=Z,70nm,0.9s
BJT *ep*P **pP** **10 59 58.5 +1.1**
BJT LR LR
comp=Z,1μm,19.0s
**BJI Beijing 46.04 18** P **P** **10 59 48.0 +0.8**
BJI S **S** **11 06 35.5 +5.2**
BJI PMZ
comp=Z,78nm,1.1s
BJI PMZ
comp=Z,570nm,5.5s
BJI LN
comp=Z,2μm,16.3s
BJI LE
comp=Z,960nm,12.7s
BJI LZ
comp=Z,1μm,17.9s
**JNU Nakatsue 46.98 36** P **P** **10 59 53.5 -1.3**
comp=Z,51nm,0.9s,baz=142,slow=5.4,SNR=8.8
JNU LR LR 11 21 25.3
comp=Z,458nm,18.6s,baz=283,slow=38
**JNU Nakatsue 46.98 36** *e*P **P** **10 59 54.7 -0.1**
comp=Z,82nm,1.0s
JNU *ep*P **pP** **11 00 03.6 -1.6**
**PMG Port Moresby 47.42 99** P **P** **10 59 56.9 -1.6**
comp=Z,39nm,0.7s,baz=276,slow=3.6,SNR=10
PMG LR LR 11 23 32.2
comp=Z,503nm,19.4s,baz=282,slow=41
**PMG Port Moresby 47.42 99** *e*P **P** **10 59 57.2 -1.3**
PMG *e**PP **pP** **11 00 09.7 +0.8**
PMG pmax pmax
comp=Z,44nm,0.8s
PMG MLR MLR
comp=Z,547nm,21.0s
**PMG Port Moresby 47.42 99** P **P** **10 59 57.6 -0.9**
baz=47,SNR=6.4
**PMG Port Moresby 47.42 99** *e*P **P** **10 59 57.2 -1.3**
comp=Z,44nm,0.8s
PMG *ep*P **pP** **11 00 09.7 +0.8**
PMG LR LR
comp=Z,547nm,21.0s
**WBK Wadi Bani Khal 47.61 305**⇑ P **P** **11 00 00.7 +0.8**
SNR=7.7
**INCN Inchon 47.97 29** PFAKE 11 00 10.0 +7.6
INCN LR LR
comp=Z,434nm,19.0s
**CTAO Charters Tower 48.15 114** *e*P **P** **11 00 03.6 -0.5**
CTAO pmax pmax
comp=Z,55nm,0.9s
CTAO MLR MLR
comp=Z,737nm,20.0s
**CTAO Charters Tower 48.15 114** *e*P **P** **11 00 03.6 -0.5**
comp=Z,55nm,0.9s
CTAO LR LR
comp=Z,737nm,20.0s
**JMDO Jabal Madar 48.21 304**⇑ P **P** **11 00 05.0 +0.4**
SNR=7.5
**KSH Kashi 48.22 335**⇓ *i*P **P** **11 00 03.0 -1.5**
KSH *ep*P **pP** **11 00 13.0 -1.9**
KSH *es*P **sP** **11 00 16.8 -2.2**
KSH *e*PcP **PcP** **11 01 31.3 0.0**
KSH *e*PP **PP** **11 01 56.8 -0.3**
KSH PcS **PcS** **11 05 24.8 -2.4**
KSH S **S** **11 06 56.5 -5.2**
KSH sS **sS** **11 07 14.3 -4.5**
KSH PMZ
comp=Z,47nm,0.8s
KSH PMZ
comp=Z,290nm,3.3s
KSH LN
comp=Z,500nm,16.0s
KSH LE
comp=Z,430nm,12.5s
KSH LZ
comp=Z,400nm,15.1s
**QLP Quilpie 48.26 123** P **P** **11 00 05.1 +0.3**
baz=48,SNR=14
**WMQ Urumqi 48.50 348**⇓ *i*P **P** **11 00 08.0 +1.5**
WMQ sP **sP** **11 00 19.0 -2.0**
WMQ PP **PP** **11 02 00.0 +0.5**
WMQ S **S** **11 07 08.0 +2.6**
WMQ ScS **ScS** **11 09 56.0 -0.6**
WMQ SS **SS** **11 10 33.0 -2.8**
WMQ PMZ
comp=Z,310nm,1.0s
WMQ PMZ
comp=Z,960nm,5.0s
WMQ LN
comp=Z,450nm,16.0s
WMQ LE
comp=Z,670nm,16.0s
WMQ LZ
comp=Z,340nm,15.0s

**SHAO Shalim** 48.53 298 ⇑P P 11 00 07.9 +0.9
SNR=6.8
**KS15 Wonju Array Si** 48.55 30 *e*P P 11 00 07.0 +0.1
**SMDO Samad** 48.57 305 ⇑P P 11 00 08.2 +0.8
SNR=18
**KSRS Korea Array** 48.58 30 P P 11 00 07.0 -0.1
comp=Z,52nm,0.9s,baz=222,slow=8.2,SNR=67
KSRS LR 11 22 37.7
comp=Z,476nm,18.2s,baz=225,slow=39
**KS01 Wonju Array Si** 48.58 30 *e*P P 11 00 07.0 -0.1
KS01 *e*pP **pP** 11 00 18.1 +0.5
**BSY Bisya** 49.13 304 ⇑P P 11 00 12.5 +0.9
SNR=17
**HOQ Hoqain** 49.42 305 ⇓P P 11 00 14.5 +0.7
SNR=10
**RBK Rabkut** 49.60 297 ⇓P P 11 00 16.0 +0.7
SNR=14
**SFK Sufi-Kurgan** 49.70 334 P P 11 00 16.0 +0.1
SFK pmax pmax
comp=Z,94nm,1.3s
**ARQ Araqi** 49.95 305 ⇑P P 11 00 18.4 +0.6
SNR=8.8
**SNY Shenyang** 50.21 23 ⇑P P 11 00 18.5 -0.9
SNY S S 11 07 21.0 -8.2
SNY PMZ
comp=Z,28nm,1.4s
SNY PMZ
comp=Z,290nm,4.3s
SNY LN
comp=Z,510nm,11.0s
SNY LE
comp=Z,2μm,14.5s
SNY LZ
comp=Z,1μm,15.0s
**PDGK Podgornoye** 50.22 341 P P 11 00 20.3 +0.8
PDGK pmax pmax
comp=Z,145nm,0.9s
**ABTO Aybut** 50.36 296 ⇑P P 11 00 21.3 +0.2
SNR=11
**ARPS Mount Arapiles** 50.77 136 P P 11 00 23.5 -0.3
baz=51,SNR=6.8
**ASHO Ashiyiah** 50.94 306 ⇑P P 11 00 25.8 +0.5
SNR=8.2
**ASHO Ashiyiah** 50.94 306 *i* P P 11 00 25.8 +0.5
SNR=18
**UOSS Wadi Hilu** 50.94 306 *e*P P 11 00 25.6 +0.3
UOSS *e*pP **pP** 11 00 35.1 -0.7
**HATD Hatta, Dubai** 50.94 306 ⇓*i*P P 11 00 26.0 +0.6
SNR=9.8
**UCH Uchtor** 51.10 336 P P 11 00 26.9 +0.2
SNR=58
**TKM2 Tokmak 2** 51.26 337 *e*P P 11 00 28.0 +0.4
TKM2 pmax pmax
comp=Z,142nm,0.8s
**TKM2 Tokmak 2** 51.26 337 P P 11 00 28.1 +0.4
SNR=155
**TKM2 Tokmak 2** 51.26 337 *e*P P 11 00 28.0 +0.4
comp=Z,142nm,0.8s
**CMSA Cobar Meteorol** 51.28 128 P P 11 00 27.9 +0.1
baz=51,SNR=37
**KBK Karagaybulak** 51.28 337 P P 11 00 28.8 +1.0
SNR=13
**FAQ Al Faqa, Dubai** 51.34 306 ⇓*i*P P 11 00 28.9 +0.6
SNR=18
**AML Almayashu** 51.35 335 P P 11 00 29.0 +0.4
SNR=75
**NAZ Nazwa, Dubai** 51.40 306 ⇑*i*P P 11 00 29.1 +0.4
SNR=7.4
**AAK Ala-Archa** 51.45 336 P P 11 00 29.6 +0.7
comp=Z,28nm,0.7s,baz=140,slow=5.7,SNR=90
**AAK Ala-Archa** 51.45 336 *d*iP P 11 00 29.4 +0.4
AAK pmax pmax
comp=Z,63nm,0.8s
**AAK Ala-Archa** 51.45 336 P P 11 00 29.0 0.0
comp=Z,258nm,0.7s,SNR=27
**AAK Ala-Archa** 51.45 336 P P 11 00 29.7 +0.7
SNR=36
**AAK Ala-Archa** 51.45 336 PFAKE 11 00 40.0 +11
AAK LR LR
comp=Z,423nm,19.0s
**ASUD Al Ashush, Dub** 51.50 306 ⇑*i*P P 11 00 30.5 +1.0
SNR=5.2
**FRU Bishkek** 51.56 337 ⇓*i*P P 11 00 30.0 +0.3
FRU *i* 11 00 46.0
FRU pmax pmax
comp=Z,180nm,2.0s
**SONA0 Songino Array** 51.62 6 *e*P P 11 00 31.1 +1.0
SONA0 *e*PcP **PcP** 11 01 43.8 +0.2
**SONM Songino Array** 51.62 6 P P 11 00 31.1 +1.0
comp=Z,66nm,0.8s,baz=188,slow=9.1,SNR=355
SONM PcP **PcP** 11 01 43.8 +0.2
comp=Z,16nm,0.8s,baz=199,slow=3.6,SNR=3.8
SONM LR LR 11 24 33.2
comp=Z,495nm,21.1s,baz=187,slow=39
**SONA1 Songino Array** 51.63 6 *e*P P 11 00 31.1 +0.8
**CHMS Chumysh** 51.65 337 P P 11 00 30.5 +0.2
SNR=29
**ULN Ulaanbaatar** 51.72 6 *e*P P 11 00 31.5 +0.6
ULN *e**PP **pP** 11 00 42.4 +1.0
ULN pmax pmax
comp=Z,76nm,0.9s
ULN MLR MLR
comp=Z,634nm,19.0s
**ULN Ulaanbaatar** 51.72 6 P P 11 00 32.1 +1.2
SNR=31
**ULN Ulaanbaatar** 51.72 6 *e*P P 11 00 31.5 +0.6
comp=Z,76nm,0.9s
ULN *e*pP **pP** 11 00 42.4 +1.0
ULN LR LR
comp=Z,634nm,19.0s
**EKS2 Erkin-Say** 51.76 336 *e*P P 11 00 31.9 +0.6
EKS2 *e**PP **pP** 11 00 42.5 +0.7
EKS2 pmax pmax
comp=Z,117nm,0.8s
EKS2 MLR MLR
comp=Z,492nm,22.0s
**EKS2 Erkin-Say** 51.76 336 P P 11 00 31.9 +0.6
SNR=124
**EKS2 Erkin-Say** 51.76 336 *e*P P 11 00 31.9 +0.6
comp=Z,117nm,0.8s
EKS2 *e*pP **pP** 11 00 42.5 +0.7
EKS2 LR LR
comp=Z,492nm,22.0s
**USP Ospenovka** 51.98 337 P P 11 00 33.0 +0.3
SNR=93
**MNAS Manas** 52.15 335 P P 11 00 34.3 +0.1
MNAS pmax pmax
comp=Z,87nm,0.9s
**MK01 Makanchi Array** 52.53 345 *e*P P 11 00 37.0 +0.2
**MK31 Makanchi Array** 52.56 345 *i* P P 11 00 36.9 -0.1
MK31 pmax pmax
comp=Z,77nm,0.7s
**MK32 Makanchi Array** 52.56 345 *e*P P 11 00 37.2 +0.2
**MKAR Makanchi Array** 52.56 345 P P 11 00 37.2 +0.2
comp=Z,92nm,0.7s,baz=148,slow=8.4,SNR=407
MKAR LR LR 11 26 44.1
comp=Z,404nm,19.9s,baz=162,slow=40
**MKAR Makanchi Array** 52.56 345 *e*P P 11 00 37.2 +0.2
MKAR *e**PP **pP** 11 00 47.2 -0.3
**MKAR Makanchi Array** 52.56 345 *e*P P 11 00 37.2 +0.2
MKAR *e*pP **pP** 11 00 47.2 -0.3
**CN2 Changchun** 52.61 23 *e*P P 11 00 36.3 -1.1
CN2 *e*S **S** 11 07 58.0 -4.3
CN2 PMZ
comp=Z,90nm,0.9s
CN2 PMZ
comp=Z,420nm,4.0s
CN2 LN
comp=Z,550nm,17.0s
CN2 LE
comp=Z,670nm,17.0s
CN2 LZ
comp=Z,690nm,18.0s
**MAKZ Makanchi** 52.65 345 *e*P P 11 00 37.6 -0.1
comp=Z,111nm,1.5s
MAKZ *e*pP **pP** 11 00 49.1 +0.9
**OPO Ambohidratompo** 53.44 250 LR LR 11 18 16.9
comp=Z,423nm,19.9s,baz=100,slow=30
**ABPO Ambohimpanom** 53.47 249 PFAKE 11 01 00.0 +16
ABPO LR LR
comp=Z,149nm,20.0s
**KK31 Karatay Array** 53.52 334 *i* P P 11 00 43.0 -1.1
KK31 pmax pmax
comp=Z,20nm,0.7s
**KKAR Karatay Array** 53.52 334 *e*P P 11 00 43.4 -0.7
KKAR *e**PP **pP** 11 00 55.5 +0.8
**KKAR Karatay Array** 53.52 334 *e*P P 11 00 43.4 -0.7
KKAR *e*pP **pP** 11 00 55.5 +0.8
**TOO Toolangi** 53.71 135 P P 11 00 45.0 -0.7
baz=54,SNR=4.0
**MAJO Matsushiro** 53.73 38 *e*P P 11 00 44.8 -1.0
MAJO *e**PP **pP** 11 00 54.0 -2.3
MAJO pmax pmax
comp=Z,50nm,1.1s
**MAJO Matsushiro** 53.73 38 *e*P P 11 00 44.8 -1.0
comp=Z,50nm,1.1s
MAJO *e*pP **pP** 11 00 54.0 -2.3
**MAT Matsushiro** 53.73 38 P P 11 00 44.7 -1.1
MAT S **S** 11 08 13.0 -4.9
**MJAR Matsushiro Arr** 53.73 38 P P 11 00 44.4 -1.4
comp=Z,28nm,0.9s,baz=219,slow=7.4,SNR=32
**EIDS Eidsvold** 53.77 119 P P 11 00 46.5 +0.2
baz=54,SNR=14
**EIDS Eidsvold** 53.77 119 *e*P P 11 00 46.3 -0.1
comp=Z,58nm,1.1s
EIDS *e*pP **pP** 11 00 56.7 -0.1
**ZAK Zakamensk** 53.92 3 *e*P P 11 00 46.7 -0.4
ZAK pmax pmax
comp=Z,18nm,1.0s
**MSHR Mys Shultsa** 54.11 28 *ce*P P 11 00 48.8 +0.4
**YNG Young** 54.45 130 P P 11 00 51.8 +0.6
baz=54,SNR=5.9
**IMOG Moghan** 54.68 320 *e*P P 11 00 51.4 -1.7
**ISRO Mashad** 54.72 320 *e*P P 11 00 51.5 -1.6
**HVS Khovu-Aksy** 54.84 355 ⇓*e*P P 11 00 53.8 +0.1
HVS pmax pmax
comp=Z,41nm,1.2s
**VLA Vladivostok** 54.87 28 ⇑P P 11 00 54.6 +0.7
VLA *e* 11 01 56.6
VLA *e* 11 02 57.7
VLA *e*S **S** 11 08 31.7 -1.2
VLA pmax pmax
comp=Z,51nm,0.9s
**MDJ Mudanjiang** 54.99 26 P P 11 00 55.0 +0.2
MDJ pP **pP** 11 01 01.3 -4.0
MDJ sP sP 11 01 03.8 -5.7
MDJ ScP **ScP** 11 05 52.5 +0.1
MDJ PcS **PcS** 11 05 56.3 +0.3
MDJ S **S** 11 08 36.0 +1.5
MDJ sS **sS** 11 08 47.0 -4.9
MDJ ScS **ScS** 11 10 42.5 +1.1
MDJ PMZ
comp=Z,29nm,1.2s
MDJ PMZ
comp=Z,160nm,4.8s
MDJ LN
comp=Z,1μm,16.0s
MDJ LE
comp=Z,560nm,17.0s
MDJ LZ
comp=Z,1μm,15.1s
**MDJ Mudanjiang** 54.99 26 *e*P P 11 00 55.3 +0.5
MDJ *e*pP **pP** 11 01 05.7 +0.4
MDJ LR LR
comp=Z,894nm,21.0s
**MOY Mondy** 55.13 1 *e*P P 11 00 56.3 +0.5
MOY pmax pmax
comp=Z,44nm,2.4s
**TLY Talaya** 55.24 3 *i* P P 11 00 57.1 +0.6
TLY *e*S S 11 08 27.7 -10
TLY pmax pmax
comp=Z,48nm,1.3s
TLY MLR MLR
comp=Z,970nm,16.0s
**TLY Talaya** 55.24 3 P P 11 00 57.8 +1.3
comp=Z,201nm,1.0s,SNR=7.3
**CAN Canberra** 55.31 131 *e*P P 11 00 57.7 +0.3
CAN *e**PP **pP** 11 01 09.0 +1.1
CAN MLR MLR
comp=Z,976nm,19.0s
**CAN Canberra** 55.31 131 *e*P P 11 00 57.6 +0.3
CAN *e*pP **pP** 11 01 09.0 +1.1
CAN LR LR
comp=Z,976nm,19.0s
**ISRV Sarvestan** 55.45 310 *e*P P 11 00 58.4 -0.4
**HIA Hailar** 55.51 16 *e*P P 11 00 58.7 +0.2
HIA pmax pmax
comp=Z,26nm,0.9s
HIA MLR MLR
comp=Z,918nm,20.0s
**HIA Hailar** 55.51 16 *e*P P 11 00 58.7 +0.2
comp=Z,26nm,0.9s
HIA LR LR
comp=Z,918nm,20.0s
**ARMA Armidale** 55.66 125 P P 11 01 01.4 +1.3
baz=56,SNR=5.6
**ARMA Armidale** 55.66 125 *e*P P 11 01 00.7 +0.6
comp=Z,39nm,1.0s
ARMA *e*pP **pP** 11 01 12.0 +1.3
**IPAR Pars** 55.72 310 *e*P P 11 01 00.3 -0.4
**USRK Ussuriysk Ar.** 55.74 28 P P 11 01 00.4 +0.2
comp=Z,85nm,0.8s,baz=222,slow=6.3,SNR=116
USRK LR LR 11 25 42.7
comp=Z,496nm,20.4s,baz=213,slow=37
**IRK Irkutsk** 55.83 3 *e*P P 11 00 59.5 -1.2
IRK pmax pmax
comp=Z,86nm,1.5s
**ICHK Chekchek** 55.89 313 *e*P P 11 01 00.7 -1.1
**MGCD Mangrove Creek** 56.16 128 P P 11 01 03.5 0.0
baz=56,SNR=5.1
**ABKT Ailbek** 56.56 321 P P 11 01 06.2 -0.1
comp=Z,451nm,1.1s,SNR=7.5
**GEYT Alibeck** 56.56 321 P P 11 01 05.0 -1.3
comp=Z,47nm,0.8s,baz=155,slow=8.2,SNR=56
GEYT LR LR 11 26 13.8
comp=Z,362nm,19.2s,baz=140,slow=37
**IKAZ Kazeroun** 56.61 309 *e*P P 11 01 06.7 -0.5
**OTUK Ortayu** 56.98 338 P P 11 01 08.4 -0.6
OTUK pmax pmax
comp=Z,116nm,0.8s
**KURBB Kurchatov Arra** 57.07 344 P P 11 01 09.4 -0.1
comp=Z,45nm,0.7s,baz=166,slow=6.7,SNR=225
**KURK Kurchatov** 57.13 344 *e*P P 11 01 09.6 -0.3
KURK *e**PP **pP** 11 01 21.0 +0.5
KURK pmax pmax
comp=Z,186nm,0.8s
KURK MLR MLR
comp=Z,707nm,20.0s
**KURK Kurchatov** 57.13 344 P P 11 01 09.6 -0.3
comp=Z,695nm,0.8s,SNR=62
**KURK Kurchatov** 57.13 344 *e*P P 11 01 09.6 -0.3
comp=Z,186nm,0.8s
KURK *e*pP **pP** 11 01 21.0 +0.5
KURK LR LR
comp=Z,707nm,20.0s
**IGAR Gharneh** 57.70 312 *e*P P 11 01 13.8 -0.9
**IZEF Zefreh** 57.73 313 *e*P P 11 01 13.6 -1.3
**DAMY Dhamar** 57.76 290 P P 11 01 17.1 +1.7
baz=58,SNR=5.1
**DAMY Dhamar** 57.76 290 *e*P P 11 01 16.3 +0.9
comp=Z,72nm,1.0s
**IPIR Pirpir** 58.69 312 *e*P P 11 01 21.8 +0.1
**ZAA0 Zalesovo Array** 58.75 350 P P 11 01 21.2 0.0
baz=59,SNR=15
**ZAA0 Zalesovo Array** 58.75 350 *e*P P 11 01 21.1 -0.2
ZAA0 *e*pP **pP** 11 01 33.0 +1.1
**ZALV Zalesovo Beam** 58.75 350 P P 11 01 21.4 +0.1
comp=Z,137nm,0.7s,baz=190,slow=5.2,SNR=269
ZALV LR LR 11 29 43.8
comp=Z,300nm,18.9s,baz=240,slow=39
**ZAA1 Zalesovo Array** 58.75 350 *e*P P 11 01 21.4 +0.1
**RAYN Ar Rayn** 59.33 300 P P 11 01 25.0 -0.9
comp=Z,227nm,0.8s,SNR=20
**RAYN Ar Rayn** 59.33 300 *e*P P 11 01 25.7 -0.3
comp=Z,27nm,0.8s
RAYN LR LR
comp=Z,273nm,20.0s
**KLR Kul'dur** 59.55 24 ⇑*i*P P 11 01 23.9 -3.0
KLR *e* 11 01 34.3
KLR pmax pmax
comp=E,38nm,1.4s
KLR pmax pmax
comp=Z,110nm,1.4s
KLR MLR MLR
comp=E,1μm,18.0s
KLR MLR MLR
comp=E,800nm,14.0s
KLR MLR MLR
comp=Z,2μm,14.0s
**KRAR Krasnoyarsk** 59.74 356 *de*P P 11 01 28.4 +0.3
KRAR pmax pmax
comp=Z,134nm,1.1s
**HNR Honiara** 60.03 99 LR LR 11 29 56.0
comp=Z,167nm,19.4s,baz=253,slow=39
**HNR Honiara** 60.03 99 *e*P P 11 01 29.9 -1.0
HNR *e**PP **pP** 11 01 42.5 +1.0
HNR pmax pmax
comp=Z,175nm,0.9s
**HNR Honiara** 60.03 99 *e*P P 11 01 29.9 -1.0
comp=Z,175nm,0.9s
HNR *e*pP **pP** 11 01 42.5 +1.0
**HABR Khabarovsk** 60.36 26 *ce*P P 11 01 29.7 -2.8
HABR *e**SP sP 11 01 38.9 -8.3
HABR *e* 11 02 14.8
HABR *e* 11 03 42.8
HABR *e*S **S** 11 09 43.4 -1.4
HABR *e**SS sS 11 09 54.3 -8.0
HABR *e* 11 11 19.1
HABR *e*SS **SS** 11 13 42.1 -1.0
HABR pmax pmax
comp=E,81nm,1.4s
HABR pmax pmax
comp=N,122nm,2.8s
HABR pmax pmax
comp=Z,190nm,2.8s
HABR MLR MLR
comp=Z,710nm,20.0s
**IRAZ Razeghan** 60.69 314 *e*P P 11 01 33.7 -1.6
**BVA0 Borovoye Array** 61.65 340 *i* P P 11 01 40.3 -0.9
BVA0 pmax pmax
comp=Z,81nm,0.7s
**BVAR Borovoye Array** 61.65 340 P P 11 01 40.4 -0.8
comp=Z,77nm,0.7s,baz=134,slow=8.5,SNR=304
**ZRNK Zerenda** 62.07 340 P P 11 01 42.8 -1.2
ZRNK pmax pmax
comp=Z,62nm,0.9s
**CHKZ Chkalovo** 62.12 341 P P 11 01 43.5 -0.8
CHKZ pmax pmax
comp=Z,97nm,0.8s
**BOD Bodaibo** 62.36 9 ⇑*i*P P 11 01 45.9 +0.1
BOD pmax pmax
comp=Z,82nm,1.0s
**KMBO Kilima Mbogo** 62.47 271 P P 11 01 48.5 +0.7
comp=Z,3.9nm,0.6s,baz=69,slow=6.6,SNR=12
**KMBO Kilima Mbogo** 62.47 271 *e*P P 11 01 48.4 +0.7
KMBO *e**PP **pP** 11 02 00.6 +2.2
KMBO pmax pmax
comp=Z,71nm,2.0s
KMBO MLR MLR
comp=Z,346nm,20.0s
**KMBO Kilima Mbogo** 62.47 271 P P 11 01 48.8 +1.0
SNR=7.5
**KMBO Kilima Mbogo** 62.47 271 *e*P P 11 01 48.4 +0.7
comp=Z,71nm,2.0s
KMBO *e*pP **pP** 11 02 00.6 +2.2
KMBO LR LR
comp=Z,346nm,20.0s
**CASY Casey** 62.95 175 *e*P P 11 01 49.7 +0.1
CASY *e*pP **pP** 11 02 01.3 +1.0
CASY LR LR
comp=Z,490nm,21.0s
**AB31 Akbulak array** 62.97 332 *i* P P 11 01 48.9 -1.2
AB31 pmax pmax
comp=Z,143nm,0.8s
**ABKAR Akbulak array** 62.97 332 *e*P P 11 01 49.4 -0.7
**YSS Yuzh-Sakhalins** 63.03 32 ⇓*i*P P 11 01 50.0 -0.5
YSS *e* 11 02 02.3
YSS pmax pmax
comp=Z,120nm,1.0s
**CLNS Chul'man** 63.68 15 *e*P P 11 01 54.7 0.0
CLNS pmax pmax
comp=Z,34nm,1.0s
CLNS pmax pmax
comp=E,18nm,1.1s
CLNS pmax pmax
comp=N,21nm,1.0s
**AKTO Aktyubinsk** 64.69 332 P P 11 02 00.5 -0.9
comp=N,31nm,0.8s,baz=128,slow=7.8,SNR=94
**AKTO Aktyubinsk** 64.69 332 P P 11 01 59.8 -1.6
AKTO pmax pmax
comp=Z,65nm,1.0s
**MAK Makhachkala** 66.08 321 *c i*P P 11 02 09.8 -0.7
MAK *e* 11 04 32.1
MAK *e*PPP PPP 11 06 07.0
MAK *e*S **S** 11 10 54.5 -1.9
MAK *e*SS **SS** 11 15 11.8 -0.7
MAK pmax pmax
comp=Z,99nm,0.7s
**GNI Garni** 66.55 317 *d*iP P 11 02 13.8 0.0
GNI pmax pmax
comp=Z,479nm,2.5s
GNI MLR MLR
comp=Z,501nm,20.0s
**GNI Garni** 66.55 317 P P 11 02 14.3 +0.4
SNR=11
**GNI Garni** 66.55 317 ⇓*i*P P 11 02 14.1 +0.3
SNR=6.8
**GNI Garni** 66.55 317 PFAKE 11 02 30.0 +16
GNI LR LR
comp=Z,185nm,20.0s
**DGRG David-gareji** 66.72 318 P P 11 02 15.7 +0.9
**DGRG David-gareji** 66.72 318 P P 11 02 15.6 +0.9
**TBLG Delisi** 67.28 318 P P 11 02 18.6 +0.4
**TBLG Delisi** 67.28 318 P P 11 02 18.6 +0.4
**DUS Dusheti** 67.47 319 P P 11 02 19.6 +0.1
**DUS Dusheti** 67.47 319 P P 11 02 19.6 +0.1
**AKH Akhalkalaki** 67.96 318 P P 11 02 22.9 +0.1
**AKH Akhalkalaki** 67.96 318 ⇓P P 11 02 23.0 +0.2
**AKH Akhalkalaki** 67.96 318 ⇓*i*P P 11 02 23.0 +0.2
**SVE Sverdlovsk** 68.12 338 *c i*P P 11 02 22.9 -0.3
SVE pmax pmax
comp=Z,160nm,0.9s
**ONI Oni** 68.52 319 P P 11 02 26.6 +0.5
**ONI Oni** 68.52 319 P P 11 02 26.5 +0.5
**MAW Mawson** 68.61 194 P P 11 02 26.6 +0.5
comp=Z,8.8nm,0.9s,baz=40,slow=5.8,SNR=20
MAW PKP2bc 11 30 40.7
comp=Z,5.6nm,1.1s,baz=229,slow=5.1,SNR=9.7
**MAW Mawson** 68.61 194 *e*P P 11 02 26.7 +0.5
MAW *e**PP **pP** 11 02 38.8 +1.9
**MAW Mawson** 68.61 194 P P 11 02 26.6 +0.5
baz=69,SNR=22
**MAW Mawson** 68.61 194 *e*P P 11 02 26.7 +0.5
MAW *e*pP **pP** 11 02 38.8 +1.9
**NCK Nalchik** 68.84 320 ⇑*e*P P 11 02 28.6 +0.6
**MBAR Mbarara** 69.01 271 *e*P P 11 02 29.6 -0.2
MBAR pmax pmax
comp=Z,35nm,0.9s
**MBAR Mbarara** 69.01 271 P P 11 02 30.7 +0.9
comp=Z,59nm,0.8s,SNR=7.4
**MBAR Mbarara** 69.01 271 *e*P P 11 02 29.6 -0.2
comp=Z,35nm,0.9s
**ZALF Zalf** 69.24 307 *e*P P 11 02 31.5 +0.8
**NEY Neytrino** 69.29 319 *d*iP P 11 02 31.5 +0.5
NEY pmax pmax
comp=Z,10.0nm,0.8s
**KBZ Khabaz** 69.39 320 P P 11 02 31.4 0.0
comp=Z,58nm,0.8s,baz=116,slow=5.1,SNR=124
KBZ LR LR 11 35 13.2
comp=Z,90nm,20.2s,baz=94,slow=38
**YAK Yakutsk** 69.41 15 *d*iP P 11 02 30.1 -1.0
YAK *e**PP **pP** 11 02 38.7 -3.2
YAK *e* 11 02 50.1
YAK *e*S **S** 11 11 39.7 +4.1
YAK *e**SS **sS** 11 11 55.6 +2.2
YAK *e* 11 12 21.7
YAK *e*SS **SS** 11 16 09.0 +5.6
YAK pmax pmax
comp=Z,212nm,0.9s
YAK pmax pmax
comp=E,39nm,1.1s
YAK pmax pmax
comp=N,51nm,1.1s
YAK pmax pmax
comp=Z,279nm,3.6s
YAK pmax pmax
comp=E,84nm,2.6s
YAK pmax pmax
comp=N,250nm,3.5s
YAK smax smax
comp=N,35nm,4.6s
YAK smax smax
comp=E,4.0nm,3.1s
YAK MLR MLR
comp=Z,846nm,17.0s
YAK MLR MLR

comp=N,602nm,16.0s
YAK MLR MLR
comp=E,242nm,16.0s
**CHVG Ch'k'valeri 69.48 318 P P 11 02 31.8 -0.2**
**CHVG Ch'k'valeri 69.48 318⇑ *i*P P 11 02 32.6 +0.6**
**KIV Kislovodsk 69.63 320 *e*P P 11 02 32.7 -0.3**
KIV *e*S **S 11 11 40.6 +1.4**
KIV pmax pmax
comp=Z,69nm,1.0s
KIV pmax pmax
comp=Z,81nm,3.6s
**KIV Kislovodsk 69.63 320** P P **11 02 33.9 +0.9**
comp=Z,394nm,1.0s,SNR=6.3
**EIL Elat 70.20 303** P P **11 02 37.3 +0.6**
baz=70,SNR=33
**MALT Malatya 70.27 313** ⇓*i*P P **11 02 37.3 +0.2**
**MALT Malatya 70.27 313** ⇓*i*P P **11 02 37.3 +0.2**
**BRBR Barbar 70.50 307** *e*P P **11 02 39.5 +0.8**
**BTCH Batrach 70.94 310** *e*P P **11 02 41.2 0.0**
**LSZ Lusaka 71.25 255** *e*P P **11 02 44.0 +0.5**
LSZ pmax pmax
comp=Z,16nm,0.9s
LSZ MLR MLR
comp=Z,467nm,21.0s
**LSZ Lusaka 71.25 255** *e*P P **11 02 44.0 +0.5**
comp=Z,16nm,0.9s
LSZ LR LR
comp=Z,467nm,21.0s
**ARNB Al Arnab 71.26 310** *e*P P **11 02 43.3 +0.2**
**SOC Sochi 71.41 318** *e*P P **11 02 42.6 -1.2**
SOC *e* 11 05 21.8
SOC *e*S **S 11 11 57.5 -2.2**
SOC pmax pmax
comp=Z,73nm,0.7s
**CSS Prodhromos 73.03 308** *e*P P **11 02 53.9 +0.2**
comp=Z,19nm,1.0s
CSS LR LR
comp=Z,99nm,20.0s
**TARA Tarawa 73.31 87** PFAKE 11 03 10.0 +14
TARA LR LR
comp=Z,905nm,22.0s
**ANN Anapa 73.41 319** *e*P P **11 02 56.3 +0.7**
ANN pmax pmax
comp=Z,40nm,1.2s
**VRH Novokhopyorsk 73.55 326** *e*P P **11 02 55.3 -1.0**
VRH pmax pmax
comp=N,50nm,0.8s
VRH pmax pmax
comp=E,60nm,0.8s
VRH pmax pmax
comp=Z,240nm,0.8s
**LBTB Lobatse 74.09 245** *e*P P **11 03 00.7 +0.5**
LBTB pmax pmax
comp=Z,28nm,1.1s
**LBTB Lobatse 74.09 245** *e*P P **11 03 00.7 +0.5**
comp=Z,28nm,1.1s
**BR101 Keskin Array S 74.25 313** *e*P P **11 02 59.8 -1.1**
**BR131 Keskin Array S 74.25 313** P P **11 03 00.1 -0.8**
baz=74,SNR=13
**BRTR Keskin Array B 74.25 313** P P **11 02 59.8 -1.1**
comp=Z,33nm,0.7s,baz=133,slow=7.2,SNR=146
BRTR LR LR 11 36 46.9
comp=Z,172nm,20.4s,baz=100,slow=37
**PEA0 Petropavlovsk- 74.42 32** *e*P P **11 03 00.1 -1.3**
**PETK Petropavlovsk- 74.42 32** P P **11 03 00.7 -0.7**
comp=Z,17nm,0.9s,baz=217,slow=4.7,SNR=8.1
PETK LR LR 11 36 41.7
comp=Z,67nm,19.9s,baz=204,slow=37
**PEA2 Petropavlovsk- 74.43 32** *e*P P **11 03 00.7 -0.8**
**BOSA Boshof 74.63 241** P P **11 03 03.5 +0.2**
comp=Z,19nm,0.7s,baz=86,slow=5.3,SNR=24
BOSA LR LR 11 31 25.1
comp=Z,136nm,18.8s,baz=118,slow=32
**BOSA Boshof 74.63 241** P P **11 03 03.2 -0.1**
baz=75,SNR=9.3
**OXZ Oxford 74.64 134** *e*P P 11 02 58.5 -4.5
OXZ *e*pP pP 11 03 13.3 -0.5
**VORD Divnogorie 74.81 325** *e*P P **11 03 02.4 -1.2**
VORD pmax pmax
comp=N,20nm,1.0s
VORD pmax pmax
comp=E,40nm,1.0s
VORD pmax pmax
comp=Z,60nm,1.0s
**PET Petropavlovsk 74.89 32** *e*P P 11 03 13.7 +10
PET *e*S S 11 12 46.6 +7.8
PET pmax pmax
comp=Z,100nm,12.5s
PET MLR MLR
comp=Z,200nm,22.0s
**ANTO Ankara 74.92 313** *e*P P **11 03 04.4 -0.2**
ANTO *e**PP **pP 11 03 15.7 +0.2**
ANTO pmax pmax
comp=Z,50nm,0.9s
ANTO MLR MLR
comp=Z,256nm,19.0s
**ANTO Ankara 74.92 313** P P **11 03 04.4 -0.2**
SNR=8.8
**ANTO Ankara 74.92 313** *e*P P **11 03 04.4 -0.2**
comp=Z,50nm,0.9s
ANTO *e*pP **pP 11 03 15.7 +0.2**
ANTO LR LR
comp=Z,256nm,19.0s
**VSR Storozhevoye 74.99 325** *e*P P **11 03 03.5 -1.2**
VSR pmax pmax
comp=N,20nm,0.8s
VSR pmax pmax
comp=E,60nm,0.8s
VSR pmax pmax
comp=Z,100nm,0.8s
**THZ Tophouse 75.03 132** *e*P P **11 03 04.8 -0.5**
THZ *e*pP **pP 11 03 17.1 +1.0**
**KHZ Kahutara 75.59 133** *e*P P **11 03 07.9 -0.5**
comp=Z,30nm,1.0s
**SIM Simferopol' 75.66 318** *e*P P **11 03 08.4 -0.3**
SIM pmax pmax
comp=Z,44nm,0.6s
SIM MLR MLR
comp=N,140nm,20.5s
**LPSR Galich'ya Gora 75.73 327** *e*P P **11 03 08.1 -0.8**
LPSR pmax pmax
comp=N,8.0nm,0.9s
LPSR pmax pmax
comp=E,10.0nm,0.9s
LPSR pmax pmax
comp=Z,90nm,0.9s
**ISP Isparta 76.02 310** P P **11 03 09.3 -1.8**
**ISP Isparta 76.02 310** PFAKE 11 03 20.0 +8.9
ISP LR LR
comp=Z,303nm,21.0s
**HIZ Hauiti 76.08 129** *e*P P **11 03 12.6 +1.3**
comp=Z,60nm,1.0s
**SYO Syowa Base 76.22 199**⇑ *e*P P **11 03 10.0 -1.4**
**SNZO South Karori 76.30 132** PFAKE 11 03 20.0 +7.5
SNZO LR LR
comp=Z,681nm,19.0s
**SEY Seymchan 77.26 22**⇑ *e*P P **11 03 17.9 +0.5**
**BFZ Birch Farm 77.39 131** *e*P P **11 03 18.7 0.0**
comp=Z,56nm,1.0s
**BKZ Black Stump Fm 77.42 129** *e*P P **11 03 18.4 -0.5**
comp=Z,88nm,1.0s
BKZ *e*pP **PcP 11 03 28.7 -0.6**
**MOS Moscow 77.78 329** *e*P P **11 03 19.6 -0.8**
MOS pmax pmax
comp=Z,281nm,0.8s
MOS pmax pmax
comp=Z,300nm,0.9s
**URZ Urewera 77.82 128** *e*P P **11 03 20.8 -0.3**
comp=Z,21nm,1.0s
**ISK Istanbul-Kandi 77.99 313** P P **11 03 20.9 -1.0**
**OBN Obninsk 78.07 328** P P **11 03 21.8 -0.2**
comp=Z,80nm,0.6s,baz=21,slow=2.0,SNR=27
**OBN Obninsk 78.07 328***d i*P P **11 03 21.6 -0.4**
OBN *e*S S 11 13 25.6 +12
OBN *i* SS **SS 11 18 20.0 +4.5**
OBN pmax pmax
comp=Z,207nm,1.2s
OBN MLR MLR
comp=Z,208nm,19.0s
**SUR Sutherland 78.69 238** PFAKE 11 03 40.0 +14
SUR LR LR
comp=Z,797nm,19.0s
**KLMR Klimovskoe 79.21 334***c i*P P **11 03 27.2 -1.0**
KLMR pmax pmax
comp=Z,167nm,1.5s
**LAST Lasithi 79.32 307** *e*P P **11 03 29.7 +0.2**

comp=Z,48nm,0.9s
**TIRR Tirgusor 79.37 316** ⇓*i*P P **11 03 29.2 -0.2**
**TIRR Tirgusor 79.37 316** ⇓*i*P P **11 03 29.1 -0.3**
**SANT Santorini 79.59 308** PFAKE 11 03 40.0 +9.1
SANT LR LR
comp=Z,150nm,19.0s
**MSAB Monastyr St. A 79.68 316** ⇓*i*P P **11 03 30.9 -0.2**
**CFR Carcaliu 79.75 317** ⇑P P **11 03 30.2 -1.3**
**CFR Carcaliu 79.75 317** ⇑*i*P P **11 03 30.2 -1.3**
**HARR Harsova 79.76 316** ⇑P P **11 03 31.6 0.0**
**HARR Harsova 79.76 316** ⇑*i*P P **11 03 31.6 0.0**
**MILM Milestii Mici 79.79 319** ⇓*i*P P **11 03 30.9 -0.8**
**KIS Kishinev 79.81 319** *e*P P **11 03 30.0 -1.8**
**KIS Kishinev 79.81 319** *e*P P **11 03 30.0 -1.8**
**IDI Anoyia 79.81 307** *e*P P **11 03 32.7 +0.5**
comp=Z,54nm,0.9s
**ALN Alexandroupoli 80.16 312** P P **11 03 32.7 -1.1**
**VAM Vamos 80.39 307** P P **11 03 35.7 +0.5**
**SORM Soroca 80.43 320** ⇓P P **11 03 34.7 -0.4**
**SORM Soroca 80.43 320** ⇓*i*P P **11 03 34.7 -0.4**
**VNDA Vanda 80.59 169** P P **11 03 34.9 -0.5**
comp=Z,10nm,1.1s,baz=297,slow=5.9,SNR=17
**VNDA Vanda 80.59 169** *e*P P **11 03 35.1 -0.4**
VNDA *e**PP **pP 11 03 47.3 +0.9**
**VNDA Vanda 80.59 169** *e*P P **11 03 35.1 -0.4**
VNDA *e*pP **pP 11 03 47.3 +0.9**
**AKASG Malin Array Be 80.64 323** P P **11 03 35.2 -1.0**
comp=Z,16nm,0.6s,baz=87,slow=4.8,SNR=86
AKASG PP **PP 11 06 39.4 -0.8**
comp=Z,0.6nm,0.6s,baz=102,slow=5.9,SNR=4.2
**AKBB Malin Array Si 80.64 323** *e*P P **11 03 35.2 -1.0**
AKBB *e* 11 06 39.4
**AKBB Malin Array Si 80.64 323** *e*P P **11 03 35.2 -1.0**
AKBB *e*PP **PP 11 06 39.4 -0.8**
**KIEV Kiev 80.65 323** *e*P P **11 03 35.3 -0.9**
KIEV pmax pmax
comp=Z,27nm,0.8s
KIEV MLR MLR
comp=Z,208nm,20.0s
**KIEV Kiev 80.65 323** *e*P P **11 03 35.2 -0.9**
comp=Z,26nm,0.8s
KIEV LR LR
comp=Z,208nm,20.0s
**AK11 Malin Array Si 80.67 323** *e*P P **11 03 35.3 -1.0**
**SZH Strazhica 80.80 315** *i*P P **11 03 36.7 -0.5**
**ISR Istrita 80.83 317** ⇑P P **11 03 38.4 +1.0**
**ISR Istrita 80.83 317** ⇑*i*P P **11 03 38.4 +1.0**
**VRI Vrincioaia 80.89 317** ⇓P P **11 03 38.1 +0.4**
**VRI Vrincioaia 80.89 317** ⇓*i*P P **11 03 38.1 +0.4**
**PLOR Plostina 80.94 317** ⇓P P **11 03 38.3 +0.3**
**PLOR Plostina 80.94 317** ⇓*i*P P **11 03 38.3 +0.3**
**TESR Tescani 81.11 318** ⇓*i*P P **11 03 38.9 +0.1**
**ANKY Antikythira Is 81.20 307** *e*P P **11 03 38.7 -0.8**
**ANKY Antikythira Is 81.20 307** *e*P P **11 03 38.7 -0.8**
**VLY Voula,Athens 81.20 309** P P 11 03 36.1 -3.4
**MLR Muntele Rosu 81.33 317** P P **11 03 40.3 +0.1**
comp=Z,12nm,0.9s,baz=133,slow=1.1,SNR=50
MLR PP **PP 11 06 48.3 +2.0**
comp=Z,1.9nm,0.9s,baz=334,slow=2.5,SNR=3.3
**MLR Muntele Rosu 81.33 317** ⇓*i*P P **11 03 40.3 +0.1**
**TMCR Tamitsa 81.36 337** *e*P P **11 03 40.5 +0.8**
TMCR pmax pmax
comp=Z,114nm,0.7s
**PLD Plovdiv 81.41 313** *i*P P 11 03 31.4 -9.1
**PRAR RASCA 81.61 319** ⇓*i*P P **11 03 41.5 +0.1**
**VLI Veliai 81.65 308** *e*P P **11 03 40.6 -1.3**
**VLI Veliai 81.65 308** *e*P P **11 03 40.6 -1.3**
**VIL2 Platees 81.68 309** *e*P P **11 03 40.6 -1.4**
**VIL2 Platees 81.68 309** *e*P P **11 03 40.6 -1.4**
**PAIG Paliouri 81.70 311** *e*P P **11 03 41.7 -0.4**
**PAIG Paliouri 81.70 311** *e*P P **11 03 41.7 -0.4**
**DOPR Dopca 81.82 317**⇑ *i*P P **11 03 42.6 0.0**
**PGB Panagyurishte 81.90 314** *i*P P **11 03 45.5 +2.4**
**VOIR 81.93 317** ⇓P P **11 03 42.1 -1.2**
**VOIR 81.93 317** ⇓*i*P P **11 03 42.1 -1.2**
**XOR Xorichti 81.96 310** P P 11 03 47.4 +3.9
**MMB Musomiste 82.01 313** *i*P P **11 03 42.7 -1.0**
**AXAR Agios Charalam 82.25 310** *e*P P **11 03 43.9 -1.1**
**AXAR Agios Charalam 82.25 310** *e*P P **11 03 43.9 -1.1**
**AXAR Agios Charalam 82.25 310** P P **11 03 42.2 -2.8**
**DESF Desfina 82.28 309** *e*P P **11 03 43.7 -1.6**
**DESF Desfina 82.28 309** *e*P P **11 03 43.7 -1.6**
**DSF Desfina 82.29 309** P P 11 03 41.0 -4.3
**BURAR Bucovina Array 82.33 319** ⇓P P **11 03 46.2 +0.8**
**BURAR Bucovina Array 82.33 319** ⇓*i*P P **11 03 46.2 +0.8**
**BUR04 Bucovina Ar. S 82.34 319** *e*P P **11 03 46.2 +0.9**
**GUR Goura 82.34 309** P P **11 03 44.2 -1.4**
**MPEP Malo Peshtene 82.38 314** *i*P P **11 03 45.4 -0.2**
**KLV Kalavryta, Ach 82.51 309** *e*P P **11 03 45.6 -0.8**
**KLV Kalavryta, Ach 82.51 309** *e*P P **11 03 45.6 -0.8**
**KKB Krupnik 82.54 313** *i*P P **11 03 45.6 -0.9**
**MICGM Minsk 82.55 326**⇓ *e*P P **11 03 44.0 -2.2**
**AGG Agios Georgios 82.55 310** *e*P P **11 03 45.2 -1.4**
AGG *e**PP **PcP 11 03 53.7 +2.1**
AGG pmax pmax
comp=Z,16nm,0.9s
**AGG Agios Georgios 82.55 310** *e*P P **11 03 45.1 -1.5**
**AGG Agios Georgios 82.55 310** *e*P P **11 03 45.1 -1.5**
**AGG Agios Georgios 82.55 310** P P 11 03 42.0 -4.6
**AGG Agios Georgios 82.55 310** *e*P P **11 03 45.2 -1.5**
comp=Z,16nm,0.9s
AGG *e*pP **PcP 11 03 53.7 +2.1**
**MNK Minsk 82.58 326**⇓ *e*P P **11 03 44.0 -2.3**
MNK pmax pmax
comp=Z,320nm,1.0s
**KALE Kalithea 82.58 309** *e*P P **11 03 45.8 -1.0**
**KALE Kalithea 82.58 309** *e*P P **11 03 45.8 -1.0**
**KALE Kalithea 82.58 309** P P 11 03 43.4 -3.4
**VTS Vitosha 82.60 314** *i*P P **11 03 46.0 -0.9**
**TRIZ Trizonia 82.63 309** *e*P P **11 03 46.2 -0.7**
**TRIZ Trizonia 82.63 309** *e*P P **11 03 46.2 -0.7**
**LIT Litokhoron 82.64 311** *e*P P **11 03 45.9 -1.1**
**LIT Litokhoron 82.64 311** *e*P P **11 03 45.9 -1.1**
**LIT Litokhoron 82.64 311** P P **11 03 45.4 -1.6**
**SERG Sergoula 82.65 309** P P **11 03 44.6 -2.5**
**LAKA Lakka 82.68 309** *e*P P **11 03 46.8 -0.5**
**LAKA Lakka 82.68 309** *e*P P **11 03 46.8 -0.5**
**MAKR Makrakomi, Fth 82.70 310** *e*P P **11 03 46.4 -1.0**
**MAKR Makrakomi, Fth 82.70 310** *e*P P **11 03 46.4 -1.0**
**ARCR ARCALIA 82.78 318** ⇓*i*P P **11 03 48.7 +1.1**
**LOT Lotru 82.81 316** ⇓*i*P P **11 03 45.7 -2.2**
**DRO Drossia 82.83 309** P P **11 03 46.8 -1.3**
**THL Klokotos Trika 82.89 310** *e*P P **11 03 46.6 -1.7**
**THL Klokotos Trika 82.89 310** *e*P P **11 03 46.6 -1.7**
**EVR Evrytania 82.93 310** *e*P P **11 03 48.0 -0.7**
**EVR Evrytania 82.93 310** *e*P P **11 03 48.0 -0.7**
**EVR Evrytania 82.93 310** P P **11 03 47.8 -0.9**
**RLS Riolos of Patr 83.04 309** *e*P P **11 03 49.3 +0.2**
**RLS Riolos of Patr 83.04 309** *e*P P **11 03 49.3 +0.2**
**CJR Cluj-Napoca 83.20 318** ⇑P P **11 03 50.2 +0.4**
**CJR Cluj-Napoca 83.20 318** ⇑*i*P P **11 03 50.2 +0.4**
**NACGM Naroch 83.28 326** *e* P **11 03 49.0 -0.9**
**IDID Didziasalis 83.42 327** *e*P P **11 03 51.0 +0.4**
IDID IAmb IAmb 11 03 51.9
comp=Z,53nm,1.0s
**BMR Baia Mare 83.48 319** ⇑P P **11 03 51.7 +0.5**
**BMR Baia Mare 83.48 319** ⇑*i*P P **11 03 51.7 +0.5**
**GZR Gura Zlata 83.48 316** ⇑P P **11 03 51.6 +0.3**
**GZR Gura Zlata 83.48 316** ⇑*i*P P **11 03 51.6 +0.3**
**DEV Deva 83.49 317** ⇓P P **11 03 52.4 +1.1**
**DEV Deva 83.49 317** ⇓*i*P P **11 03 52.4 +1.1**
**LVV L'vov 83.62 321** *e*P P **11 03 51.1 -0.7**
**IIGN Ignalina 83.71 327** *e*P P **11 03 52.6 +0.4**
IIGN IAmb IAmb 11 03 53.4
comp=Z,57nm,0.8s
**SKO Skopje 83.77 313** *e*P P **11 03 52.1 -0.7**
**IZAR Zarasai 83.81 327** *e*P P **11 03 53.0 +0.4**
IZAR IAmb IAmb 11 03 53.8
comp=Z,31nm,0.9s
**DRGR 83.81 318** ⇓P P **11 03 53.5 +0.5**
**DRGR 83.81 318** ⇓*i*P P **11 03 53.5 +0.5**
**ISAL Salakas 83.82 327** IAmb IAmb 11 03 52.9
comp=Z,43nm,0.9s
**OHR Ohrid 84.08 312** *e*P P **11 03 52.8 -1.7**
**LVZ Lovozero 84.25 340** P P **11 03 54.4 -0.3**
comp=Z,256nm,0.8s,SNR=5.9
**BZS Buzias 84.32 316** ⇓P P **11 03 55.4 -0.1**
**BZS Buzias 84.32 316** ⇓*i*P P **11 03 55.4 -0.1**
**KWP Kalwaria Pacla 84.41 320** *e*P P **11 03 56.1 +0.2**
**KWP Kalwaria Pacla 84.41 320** ⇓P P **11 03 56.3 +0.4**
**KWP Kalwaria Pacla 84.41 320** ⇓*i*P P **11 03 56.3 +0.4**

**SIRR Siria 84.42 317**⇓ *i*P P **11 03 56.2 +0.2**
**UZH Uzhgorod 84.47 319** *e*P P **11 03 54.4 -1.8**
UZH *e* 11 03 59.8
UZH *e* 11 07 09.0
UZH *e*PPP PPP 11 09 03.2
UZH *e*S **S 11 14 17.4 -2.8**
**BILL Bilibino 84.80 20***de*P P **11 03 57.1 -0.3**
BILL *e**SP sP 11 04 06.8 -5.7
BILL pmax pmax
comp=Z,21nm,1.0s
BILL MLR MLR
comp=Z,317nm,19.0s
**SUW Suwalki 85.09 325** *e*P P **11 03 58.8 -0.3**
**SUW Suwalki 85.09 325** *e*P P **11 03 58.9 -0.2**
**DIVS Divibare 85.19 315** ⇓*i*P P **11 04 00.1 +0.1**
**STHS Stebnicka Huta 85.30 320** *e*P P **11 04 01.3 +0.9**
STHS pmax pmax
comp=Z,32nm,0.8s
**STHS Stebnicka Huta 85.30 320** *e*P P **11 04 01.3 +0.9**
**FIA0 FINESS Array S 85.46 332** *e*P P **11 04 01.0 +0.1**
**FIA0 FINESS Array S 85.46 332** *e*P P **11 04 00.9 +0.1**
**FINES FINESS Array B 85.46 332** P P **11 04 00.9 +0.1**
comp=Z,31nm,0.8s,baz=116,slow=7.0,SNR=59
FINES LR LR 11 47 14.7
comp=Z,204nm,18.3s,baz=104,slow=39
**FINES FINESS Array B 85.46 332** *i*P P **11 04 01.0 +0.1**
FINES pmax pmax
comp=Z,31nm,0.8s
**PSZ Piszkesteto 85.91 318** *e*P P **11 04 03.3 -0.2**
PSZ pmax pmax
comp=Z,35nm,1.0s
PSZ MLR MLR
comp=Z,127nm,19.0s
**PSZ Piszkesteto 85.91 318** ⇓*i*P P **11 04 03.7 +0.2**
**PSZ Piszkesteto 85.91 318** *e*P P **11 04 03.3 -0.2**
comp=Z,35nm,1.0s
PSZ LR LR
comp=Z,127nm,19.0s
**NIE Niedzica 85.91 320** *e*P P **11 04 03.6 +0.2**
**NIE Niedzica 85.91 320** *e*P P **11 04 03.7 +0.3**
**BEL Belsk 86.05 322** *e*P P **11 04 04.2 +0.2**
**BEL Belsk 86.05 322** *e*P P **11 04 04.2 +0.2**
**QSPA South Pole Qui 86.31 180** PFAKE 11 04 20.0 +15
QSPA LR LR
comp=Z,479nm,22.0s
**OJC Ojcow 86.37 321** *e*P P **11 04 05.6 -0.1**
**OJC Ojcow 86.37 321** *e*P P **11 04 05.6 -0.1**
OJC pmax pmax
comp=Z,169nm,2.2s
**OJC Ojcow 86.37 321** *e*P P **11 04 05.6 -0.1**
comp=Z,169nm,2.2s
**LANS Liptovska Anna 86.40 320** *e*P P **11 04 06.4 +0.5**
**LANS Liptovska Anna 86.40 320** *e*P P **11 04 06.4 +0.5**
**VYHS Vyhne 86.70 319** *e*P P **11 04 07.3 0.0**
VYHS pmax pmax
comp=Z,14nm,1.3s
**VYHS Vyhne 86.70 319** *e*P P **11 04 07.3 0.0**
**TIP Timpagrande 86.86 309** PFAKE 11 04 20.0 +12
TIP LR LR
comp=Z,189nm,19.0s
**KLNR Kaliningrad 86.91 325** *e*P P **11 04 08.5 +0.4**
KLNR pmax pmax
comp=Z,238nm,1.0s
**OKC Ostrava-Krasne 87.36 320** *e*P P **11 04 10.8 +0.3**
**OKC Ostrava-Krasne 87.36 320** *e*P P **11 04 10.8 +0.3**
**KEV Kevo 87.50 341** *e*P P **11 04 10.9 +0.2**
KEV pmax pmax
comp=Z,48nm,1.0s
KEV MLR MLR
comp=Z,244nm,19.0s
**KEV Kevo 87.50 341** *e*P P **11 04 10.8 +0.2**
comp=Z,48nm,1.0s
KEV LR LR
comp=Z,244nm,19.0s
**MORC Moravsky Berou 87.74 320** *e*P P **11 04 12.7 +0.3**
MORC pmax pmax
comp=Z,106nm,1.0s
**MORC Moravsky Berou 87.74 320** ⇓*i*P P **11 04 12.9 +0.5**
**MORC Moravsky Berou 87.74 320** *e*P P **11 04 12.7 +0.3**
comp=Z,106nm,1.0s
**ARA0 ARCESS Array S 87.94 340** *e*PP PP 11 07 39.7 +0.4
**ARCES ARCESS Array B 87.94 340** P P **11 04 13.3 +0.4**
comp=Z,31nm,0.8s,baz=102,slow=5.1,SNR=49
ARCES PP **PP 11 07 39.7 +0.4**
comp=Z,6.3nm,0.8s,baz=96,slow=9.9,SNR=5.2
ARCES LR LR 11 48 59.2
comp=Z,309nm,18.6s,baz=104,slow=39
**KRLC Kraliky 88.27 320** *e*P P **11 04 15.6 +0.7**
**KRLC Kraliky 88.27 320** *e*P P **11 04 15.6 +0.7**
**VRAC Vranov 88.28 319** P P **11 04 15.5 +0.6**
comp=Z,5.0nm,0.8s,baz=86,slow=5.6,SNR=5.7
**GKP Gorka Klasztor 88.43 323** *e*P P **11 04 15.5 +0.1**
**GKP Gorka Klasztor 88.43 323** *e*P P **11 04 15.6 +0.1**
**CONA Conrad Observa 88.59 318** *i*P P **11 04 16.3 -0.2**
comp=Z,14nm,0.9s,SNR=6.0
**DPC Dobruska-Polom 88.59 320** *e*P P **11 04 17.3 +0.9**
DPC *e* 11 04 27.5
**DPC Dobruska-Polom 88.59 320** *e*P P **11 04 17.3 +0.9**
DPC *e*pP **PcP 11 04 20.2 +2.2**
**KSP Ksiaz 88.68 321** *e*P P **11 04 17.3 +0.6**
**KSP Ksiaz 88.68 321** *e*P P **11 04 17.3 +0.6**
**BOJS Bojanci 88.72 316** *i*P P **11 04 17.5 +0.4**
**ARSA Arzberg 88.74 317** *i*P P **11 04 17.7 +0.6**
comp=Z,34nm,0.9s,SNR=11
**UPC Upice 88.81 321** *e*P P **11 04 18.2 +0.8**
**UPC Upice 88.81 321** *e*P P **11 04 18.2 +0.8**
**PERS Pernice 88.94 317** *i*P P **11 04 18.7 +0.5**
**SOKA Soboth 89.01 317** *i*P P **11 04 19.0 +0.5**
comp=Z,51nm,1.0s,SNR=8.3
**VISS Visnje 89.05 316** *i*P P **11 04 19.0 +0.4**
**OBKA Obir 89.32 317**⇑ *i*PcP P **11 04 20.7 +0.8**
comp=Z,28nm,1.2s
**GOPC GO Pecny, Ondr 89.52 320** *e*P P **11 04 21.3 +0.5**
**GOPC GO Pecny, Ondr 89.52 320** *e*P P **11 04 21.3 +0.5**
**JAVS Javornik 89.59 316** *i*P P **11 04 21.1 -0.1**
**MOA Moln 89.65 318** ⇓*i*P P **11 04 21.5 +0.1**
comp=Z,17nm,0.9s
**PRU Pruhonice 89.69 320** *e*P P **11 04 21.9 +0.4**
**PRU Pruhonice 89.69 320** *e*P P **11 04 21.9 +0.4**
PRU *e*pP **PcP 11 04 25.8 +3.0**
**PVCC Panska Ves 89.73 321** *e*P P **11 04 22.3 +0.6**
**PVCC Panska Ves 89.73 321** *e*P P **11 04 22.3 +0.6**
**PRA Prague 89.77 320** *e*P P **11 04 22.1 +0.3**
**PRA Prague 89.77 320** *e*P P **11 04 22.1 +0.3**
**MYKA Terra Mystica 89.96 317** ⇓*i*P P **11 04 23.1 +0.2**
comp=Z,22nm,1.1s,SNR=5.7
**GEC2 GERESS Array S 90.12 319** *e*P P **11 04 23.8 +0.1**
**GEC2 GERESS Array S 90.12 319** *e*P P **11 04 23.8 +0.1**
**GERES GERESS Array B 90.12 319** P P **11 04 23.9 +0.3**
comp=Z,21nm,0.8s,baz=93,slow=4.5,SNR=121
GERES LR LR 11 49 12.5
comp=Z,104nm,19.5s,baz=88,slow=38
**BRG Berggiesshubel 90.16 321** *i*P P **11 04 24.0 +0.3**
comp=Z,45nm,1.1s
**BRG Berggiesshubel 90.16 321** *i*P P **11 04 24.0 +0.3**
BRG pmax pmax
comp=Z,45nm,1.1s
**KBA Koelnbreinsper 90.20 317** ⇓*i*P P **11 04 23.8 -0.4**
comp=Z,23nm,1.1s
**KHC Kasperske Hory 90.23 319** *e*P P **11 04 24.4 +0.3**
KHC pmax pmax
comp=Z,6.0nm,0.9s
**KHC Kasperske Hory 90.23 319** *e*P P **11 04 24.3 +0.2**
KHC *e*pP **PcP 11 04 27.9 +2.6**
**KHC Kasperske Hory 90.23 319** *e*P P **11 04 24.4 +0.3**
comp=Z,6.0nm,0.9s
**SNAA Sanae 90.49 198** P P **11 04 25.1 +0.2**
**SNAA Sanae 90.49 198** *e*P P **11 04 25.2 +0.3**
SNAA pmax pmax
comp=Z,6.0nm,1.3s
**SNAA Sanae 90.49 198** *e*P P **11 04 25.2 +0.3**
comp=Z,6.2nm,1.3s
**ABTA Abfaltersbach 90.74 317** *i*P P **11 04 26.3 -0.3**
comp=Z,22nm,1.0s,SNR=5.9
**CLL Collm 90.79 321** *e*P P **11 04 26.5 -0.1**
CLL pmax pmax
comp=Z,31nm,1.0s
**CLL Collm 90.79 321** *i*P P **11 04 26.2 -0.4**
comp=Z,24nm,1.0s
CLL *i*pP **PcP 11 04 29.7 +2.1**
CLL *e*S **S 11 15 24.0 +3.4**
CLL LmV 11 51 00.0
comp=Z,200nm,22.0s
**CLL Collm 90.79 321** *e*P P **11 04 26.5 -0.1**

comp=Z,31nm,1.0s
NKC Novy Kostel 91.06 320 eP P 11 04 28.4 +0.5
NKC e 11 04 40.5
NKC Novy Kostel 91.06 320 eP P 11 04 28.4 +0.5
NKC ex x 11 04 40.5
WTTA Wattenberg 91.38 317 i P P 11 04 29.4 -0.2
comp=Z,42nm,0.9s,SNR=8.8
WATA Walderalm 91.42 317 ij iP P 11 04 29.1 -0.8
comp=Z,20nm,0.9s,SNR=5.2
MOTA Moosalm 91.74 317 ij iP P 11 04 30.8 -0.5
comp=Z,31nm,0.9s,SNR=15
FETA Feichten 91.98 317 i PcP P 11 04 32.6 +0.2
comp=Z,22nm,1.0s,SNR=5.3
RETA Reutte 91.98 317 i P P 11 04 32.3 0.0
comp=Z,25nm,0.9s,SNR=6.1
VLC Villacollemand 92.06 314 PFAKE 11 04 40.0 +7.3
VLC LR LR
comp=Z,314nm,21.0s
FUORN Ofenpass-Fuorn 92.28 316 eP P 11 04 34.7 +0.8
comp=Z,43nm,1.1s
KEST Kesra 92.44 305 P P 11 04 36.1 +1.4
comp=Z,48nm,0.8s,baz=235,slow=1.5,SNR=27
NB2 NORSAR Subarra 92.46 331 P P 11 04 33.5 -0.7
comp=Z,16nm,0.9s,baz=95,slow=4.8
NB2 NORSAR Subarra 92.46 331 P P 11 04 33.5 -0.7
baz=95,slow=4.8
NB200 NORSAR Array S 92.46 331 eP P 11 04 33.7 -0.5
NOA NORSAR Array B 92.46 331 P P 11 04 33.7 -0.5
comp=Z,10nm,0.8s,baz=95,slow=4.7,SNR=25
NOA LR LR 11 49 38.4
comp=Z,122nm,19.5s,baz=105,slow=38
DAVOX Davos/Dischmat 92.55 317 P P 11 04 35.3 +0.2
comp=Z,12nm,0.7s,baz=100,slow=3.7,SNR=12
DAVA Damuels 92.57 317 i PcP P 11 04 35.4 +0.2
comp=Z,36nm,1.0s,SNR=7.9
NBO02 NORSAR Array S 92.64 331 eP P 11 04 35.0 0.0
KBS Kingsbay 93.15 349 PFAKE 11 04 50.0 +13
KBS LR LR
comp=Z,133nm,22.0s
KONO Kongsberg 93.21 329 eP P 11 04 37.5 -0.1
KONO pmax pmax
comp=Z,35nm,1.1s
KONO Kongsberg 93.21 329 eP P 11 04 37.5 -0.1
comp=Z,35nm,1.1s
BFO Black Forest 93.65 318 eP P 11 04 37.9 -2.0
BFO pmax pmax
comp=Z,46nm,1.8s
BFO Black Forest 93.65 318 eP P 11 04 37.9 -2.0
comp=Z,46nm,1.8s
SENIN Lac Senin/Sane 94.31 316 eP P 11 04 43.5 +0.2
comp=Z,177nm,2.7s
TAM Tamanrasset 95.29 292 PFAKE 11 05 00.0 +12
TAM LR LR
comp=Z,232nm,20.0s
TOA0 Torodi Ar. Sit 98.65 283 P P 11 05 03.0 -0.3
baz=99,SNR=5.2
TOA0 Torodi Ar. Sit 98.65 283 eP P 11 05 02.8 -0.6
TOA0 ePP PP 11 09 05.3 +0.7
TORD Torodi Ar. Bea 98.65 283 P P 11 05 02.9 -0.4
comp=Z,4.8nm,1.1s,baz=92,slow=5.4,SNR=18
TORD PP PP 11 09 05.3 +0.7
comp=Z,1.0nm,1.0s,baz=78,slow=8.7,SNR=4.5
TORD LR LR 11 49 40.1
comp=Z,113nm,18.2s,baz=100,slow=36
CAST Castle Rocks 101.35 26 ePdif Pdif 11 05 15.3 +1.0
BPAW Bear Paw Mtn. 101.64 25 ePdif Pdif 11 05 15.6 0.0
COLA College 102.70 24 PFAKE 11 05 30.0 +10
COLA LR LR
comp=Z,134nm,20.0s
ILAR Eielson Array 103.13 24 Pdiff Pdif 11 05 22.4 +0.2
comp=Z,0.4nm,0.9s,baz=307,slow=5.9,SNR=4.4
ILAR PP PP 11 09 35.1 -1.9
comp=Z,2.3nm,0.9s,baz=300,slow=6.5,SNR=8.3
ILAR PKKPbc PKKPbc 11 21 17.6 -3.2
comp=Z,1.0nm,0.9s,baz=164,slow=2.4,SNR=6.6
ILB Eielson Array 103.13 24 ePdif Pdif 11 05 22.4 +0.2
ILB ePP PP 11 09 35.1 -1.9
ILB ePKKPbc PKKPbc 11 21 17.6 -3.2
EGAK Eagle 105.39 23 PFAKE 11 10 00.0
EGAK LR LR
comp=Z,276nm,21.0s
ASCN Ascension 113.26 260 PFAKE 11 10 10.0
ASCN LR LR
comp=Z,1μm,20.0s
YKA Yellowknife Ar 116.03 17 PKP PKPdf 11 10 04.7 -1.2
comp=Z,3.5nm,0.8s,baz=315,slow=2.2,SNR=8.2
YKA PP PP 11 11 09.8 -0.4
comp=Z,2.3nm,0.9s,baz=313,slow=6.6,SNR=4.7
B05A Bryant 122.96 32 P PKPdf 11 10 20.3 +0.5
baz=123
B08A Colville Reser 124.34 31 ePKPdf PKPdf 11 10 22.4 0.0
D08A Wollman Farm, 125.39 32 ePKPdf PKPdf 11 10 25.0 +0.5
I04A Tendick Farm, 125.42 37 P PKPdf 11 10 25.1 +0.4
baz=125
HAWA Hanford 125.49 33 ePKPdf PKPdf 11 10 25.5 +0.8
NEW Newport 125.51 29 ePKIKP PKPdf 11 10 25.6 +0.9
NEW Newport 125.51 29 P PKPdf 11 10 25.2 +0.5
baz=125
NEW Newport 125.51 29 ePKPdf PKPdf 11 10 25.6 +0.9
I05D Terrebonne, OR 125.74 36 P PKPdf 11 10 26.4 +1.1
baz=126
J04D Umpqua Nationa 125.92 37 P PKPdf 11 10 26.1 +0.3
baz=126
FFC Flin Flon 126.13 15 ePKIKP PKPdf 11 10 25.0 -0.6
FFC Flin Flon 126.13 15 ePKPdf PKPdf 11 10 25.0 -0.6
J05D Fort Rock, OR 126.42 37 P PKPdf 11 10 27.4 +0.7
baz=126
M02C Callahan 126.49 39 P PKPdf 11 10 27.7 +0.9
baz=126
G08A Pilot Rock 126.50 33 ePKPdf PKPdf 11 10 27.4 +0.6
N02D Trinity Center 126.81 40 P PKPdf 11 10 27.7 +0.3
baz=127
M04C Macdoel 126.91 38 P PKPdf 11 10 28.2 +0.5
baz=127
BSMT Bassoo Peak 126.92 29 ePKPdf PKPdf 11 10 27.5 -0.1
K05A Summer Lake 126.94 37 ePKPdf PKPdf 11 10 28.8 +0.9
F10A Beach Ranch, E 126.99 32 ePKPdf PKPdf 11 10 28.0 +0.3
SWMT Swartz Lake 127.54 28 ePKPdf PKPdf 11 10 28.9 +0.2
O03D Paynes Creek 127.75 40 P PKPdf 11 10 29.8 +0.5
baz=128
MOD Modoc 127.78 37 ePKPdf PKPdf 11 10 30.3 +0.9
SCHQ Schefferville 127.84 350 PKP PKPdf 11 10 30.1 +1.1
comp=Z,9.8nm,1.1s,baz=164,slow=2.4,SNR=4.2
SCHQ Schefferville 127.84 350 ePKPdf PKPdf 11 10 27.1 -1.8
J08A Circle Bar Ran 127.98 35 ePKPdf PKPdf 11 10 30.7 +1.0
MSO Missoula 128.05 29 P PKPdf 11 10 29.9 +0.2
baz=128
MSO Missoula 128.05 29 ePKPdf PKPdf 11 10 29.4 -0.4
NSHM Saint Helena R 128.17 42 ePKPdf PKPdf 11 10 31.7 +1.6
CHMT Chamberlain Mo 128.32 28 ePKPdf PKPdf 11 10 29.6 -0.8
WVOR Wild Horse Val 128.46 36 ePKIKP PKPdf 11 10 31.7 +1.1
WVOR Wild Horse Val 128.46 36 ePKPdf PKPdf 11 10 31.7 +1.1
OHCM Honcut 128.48 41 ePKPdf PKPdf 11 10 31.0 +0.5
EGMT Eagleton 129.07 25 P PKPdf 11 10 32.4 +0.8
baz=129
EGMT Eagleton 129.07 25 PFAKE 11 10 40.0 +8.4
EGMT LR LR
comp=Z,466nm,19.0s
MFID Camas Ranch 129.42 33 ePKPdf PKPdf 11 10 32.9 +0.4
DLMT Dillon 129.76 29 ePKPdf PKPdf 11 10 33.8 +0.7
CMB Columbia Colle 129.91 42 ePKIKP PKPdf 11 10 34.7 +1.3
CMB Columbia Colle 129.91 42 ePKPdf PKPdf 11 10 34.7 +1.3
MCMT McKenzie Canyo 130.01 30 ePKPdf PKPdf 11 10 35.1 +1.4
BOZ Bozeman (W) 130.02 28 ePKIKP PKPdf 11 10 34.7 +1.2
BOZ Bozeman (W) 130.02 28 P PKPdf 11 10 34.2 +0.6
baz=130
BOZ Bozeman (W) 130.02 28 ePKPdf PKPdf 11 10 34.7 +1.2
HLID Hailey 130.09 32 P PKPdf 11 10 34.1 +0.3
baz=130
HLID Hailey 130.09 32 ePKPdf PKPdf 11 10 34.7 +0.9
QLMT Earthquake Lak 130.71 29 ePKPdf PKPdf 11 10 37.0 +2.0
NVAR Mina Array Bea 131.04 40 PKP PKPdf 11 10 36.3 +0.5
comp=Z,5.7nm,0.8s,baz=224,slow=3.6,SNR=6.8
YMR Madison River 131.06 29 ePKPdf PKPdf 11 10 37.0 +1.3
A27A Ledoux Ranch, 131.45 18 P PKPdf 11 10 36.8 +0.8
baz=131
MTUM Tungsten Hills 131.49 41 ePKPdf PKPdf 11 10 38.8 +2.2
ELK Elko 131.50 36 ePKIKP PKPdf 11 10 37.5 +0.9
ELK Elko 131.50 36 ePKPdf PKPdf 11 10 37.5 +0.9
RLMT Red Lodge 131.51 27 P PKPdf 11 10 37.5 +1.0
baz=131
ULM Lac du Bonnet 131.74 13 PKP PKPdf 11 10 35.8 -0.7
comp=Z,13nm,0.8s,baz=360,slow=0.2,SNR=10
FXWY Fox Creek 131.78 30 ePKPdf PKPdf 11 10 37.6 +0.5
MOOW Moose Ponds 131.84 30 ePKPdf PKPdf 11 10 38.5 +1.4
TPAW Teton Pass 131.93 30 ePKPdf PKPdf 11 10 38.3 +0.9
LOHW Long Hollow 132.01 30 ePKPdf PKPdf 11 10 38.0 +0.5
SNOW Snow King Moun 132.04 30 ePKPdf PKPdf 11 10 38.6 +1.0
REDW Red Top Meadow 132.07 30 ePKPdf PKPdf 11 10 36.8 -0.8
A29A Manning Farm, 132.09 17 P PKPdf 11 10 36.8 -0.4
baz=132
HVU Hansel Valley 132.19 33 ePKIKP PKPdf 11 10 38.3 +0.5
HVU Hansel Valley 132.19 33 ePKPdf PKPdf 11 10 38.3 +0.5
D25A Fairfield 132.31 21 P PKPdf 11 10 38.5 +0.8
baz=132
AHID Auburn Hatcher 132.38 31 PFAKE 11 10 50.0 +12
AHID LR LR
comp=Z,441nm,19.0s
DAC Darwin (Calif) 132.74 42 ePKIKP PKPdf 11 10 39.5 +0.4
DAC Darwin (Calif) 132.74 42 ePKPdf PKPdf 11 10 39.5 +0.4
R11A Troy Canyon, C 132.80 38 P PKPdf 11 10 40.1 +1.0
baz=133
A32A Rocking H Ranc 132.83 15 P PKPdf 11 10 37.7 -0.9
baz=133
MPMC Manual Prospec 132.93 42 P PKPdf 11 10 39.6 +0.2
baz=133
MDND Maddock 132.94 18 P PKPdf 11 10 39.1 +0.2
baz=133
HWUT Hardware Ranch 132.96 32 ePKPdf PKPdf 11 10 39.6 +0.3
HWUT LR LR
comp=Z,493nm,21.0s
FURC Furnace Creek, 133.11 41 P PKPdf 11 10 37.7 -1.8
baz=133
BW06 Boulder Array 133.15 30 ePKPdf PKPdf 11 10 35.7 -4.0
BW06 LR LR
comp=Z,101nm,19.0s
TPNV Topopah Spring 133.23 40 ePKIKP PKPdf 11 10 38.8 -1.1
TPNV Topopah Spring 133.23 40 P PKPdf 11 10 39.0 -0.9
baz=133
TPNV Topopah Spring 133.23 40 ePKPdf PKPdf 11 10 38.8 -1.1
EDW2 Edwards Air Fo 133.24 44 P PKPdf 11 10 39.2 -0.6
baz=133
DUG Dugway 133.25 34 ePKIKP PKPdf 11 10 40.7 +0.9
DUG Dugway 133.25 34 P PKPdf 11 10 39.3 -0.5
baz=133
DUG Dugway 133.25 34 ePKPdf PKPdf 11 10 40.7 +0.9
B32A Ashes, Strandq 133.30 15 P PKPdf 11 10 38.7 -0.8
baz=133
C30A Mose, Pekin 133.41 17 P PKPdf 11 10 38.3 -1.4
baz=133
C31A Landman Farms, 133.53 16 P PKPdf 11 10 39.4 -0.5
baz=133
AGMN Agassiz Nation 133.56 14 PFAKE 11 10 50.0 +10
AGMN LR LR
comp=Z,457nm,21.0s
D29A Pettibone, Tap 133.64 18 P PKPdf 11 10 39.3 -0.9
baz=134
B34A Avery, Baudette 133.67 13 P PKPdf 11 10 39.8 -0.4
baz=134
GSC Goldstone 133.82 42 ePKIKP PKPdf 11 10 42.3 +1.4
GSC Goldstone 133.82 42 P PKPdf 11 10 39.9 -1.0
baz=134
GSC Goldstone 133.82 42 ePKPdf PKPdf 11 10 42.3 +1.4
NLU North Lily Min 133.83 34 ePKPdf PKPdf 11 10 42.0 +1.0
F27A Lemmon 133.87 21 P PKPdf 11 10 39.9 -0.8
baz=134
O16A Springville 133.97 34 ePKPdf PKPdf 11 10 44.5 +3.2
B35A Bob, Littlefor 134.00 12 P PKPdf 11 10 40.2 -0.6
baz=134
MPU Maple Canyon 134.03 34 ePKPdf PKPdf 11 10 42.1 +0.8
G26A Maurine 134.15 22 P PKPdf 11 10 38.1 -3.1
baz=134
SHPR Sheep Range 134.19 40 ePKPdf PKPdf 11 10 43.1 +1.4
BBRC Big Bear Solar 134.32 44 P PKPdf 11 10 40.1 -2.0
baz=134
HEC Hector,Ludlow 134.41 43 P PKPdf 11 10 41.4 -0.7
baz=134
MURC Murrieta 134.49 45 P PKPdf 11 10 41.1 -1.1
baz=134
RSSD Black Hills 134.57 24 ePKIKP PKPdf 11 10 41.4 -0.9
RSSD Black Hills 134.57 24 ePKPdf PKPdf 11 10 41.4 -0.9
CCUT Cedar City 134.67 38 ePKPdf PKPdf 11 10 44.1 +1.5
K22A Casper 134.68 27 P PKPdf 11 10 41.4 -1.1
baz=135
K22A Casper 134.68 27 ePKPdf PKPdf 11 10 42.1 -0.4
RCBR Riachuelo 134.71 258 PFAKE 11 10 50.0 +6.9
RCBR LR LR
comp=Z,144nm,19.0s
MSU Marysvale 134.75 36 ePKIKP PKPdf 11 10 44.3 +1.5
MSU Marysvale 134.75 36 ePKPdf PKPdf 11 10 44.3 +1.5
I25A Rochford 134.78 24 P PKPdf 11 10 41.5 -1.2
baz=135
EYMN Ely 134.84 11 PFAKE 11 10 50.0 +7.6
EYMN LR LR
comp=Z,452nm,19.0s
GMRC Granite Mounta 134.88 42 P PKPdf 11 10 43.1 +0.1
baz=135
P17A Butcher Ranch, 134.91 34 ePKPdf PKPdf 11 10 42.3 -0.7
C37A Embarrass 134.92 11 P PKPdf 11 10 40.5 -2.0
baz=135
PLCA Paso Flores 134.93 190 ePKIKP PKPdf 11 10 45.0 +2.1
PLCA Paso Flores 134.93 190 ePKPdf PKPdf 11 10 45.0 +2.1
PFO Pinyon Flat Ob 135.00 44 ePKIKP PKPdf 11 10 44.5 +1.2
PFO Pinyon Flat Ob 135.00 44 P PKPdf 11 10 42.7 -0.6
baz=135
PFO Pinyon Flat Ob 135.00 44 ePKPdf PKPdf 11 10 44.5 +1.2
P18A Preston Nutter 135.07 33 ePKPdf PKPdf 11 10 44.4 +0.9
LDFC Landfair 135.08 42 ePKPdf PKPdf 11 10 44.7 +1.4
D35A Remer 135.13 13 P PKPdf 11 10 42.0 -0.9
baz=135
TRQA Tornquist 135.16 201 PFAKE 11 11 00.0 +17
TRQA LR LR
comp=Z,314nm,22.0s
J25A Sunshine Ranch 135.27 24 P PKPdf 11 10 42.9 -0.6
baz=135
SRU San Rafael 135.28 34 ePKIKP PKPdf 11 10 44.0 +0.3
SRU San Rafael 135.28 34 ePKPdf PKPdf 11 10 44.0 +0.3
E35A Pequot Lakes 135.54 14 P PKPdf 11 10 43.2 -0.5
baz=135
IRM Iron Mountain 135.59 43 P PKPdf 11 10 41.9 -2.3
baz=136
BC3 Big Chuckawall 135.67 43 P PKPdf 11 10 42.0 -2.4
baz=136
F33A 5 Mile Ranch, 135.72 16 P PKPdf 11 10 41.1 -3.0
baz=136
O20A White River Ci 135.76 31 ePKPdf PKPdf 11 10 44.3 -0.3
I28A Midland 135.79 22 P PKPdf 11 10 39.2 -5.1
baz=136
I29A Vivian Onida 136.08 21 P PKPdf 11 10 41.6 -3.3
baz=136
J27A Elkhorn Farm, 136.11 23 P PKPdf 11 10 41.5 -3.5
baz=136
F35A Swanville 136.16 14 P PKPdf 11 10 44.1 -0.8
baz=136
PDMCI Parker Dam,Lak 136.18 42 P PKPdf 11 10 44.6 -0.6
baz=136
J28A Allard Ranch, 136.26 22 P PKPdf 11 10 45.1 -0.1
baz=136
F36A Milaca 136.41 13 P PKPdf 11 10 45.0 -0.4
baz=136
GLA Glamis 136.44 44 ePKIKP PKPdf 11 10 47.8 +1.9
GLA Glamis 136.44 44 P PKPdf 11 10 45.9 +0.1
baz=136
GLA Glamis 136.44 44 ePKPdf PKPdf 11 10 47.8 +1.9
PV09 Paradox Valley 136.48 33 ePKPdf PKPdf 11 10 47.3 +1.2
PV10 Paradox Valley 136.62 33 ePKPdf PKPdf 11 10 47.7 +1.4
G35A Watkins 136.77 15 P PKPdf 11 10 46.4 +0.4
baz=137
PV05 Paradox Valley 136.80 34 ePKPdf PKPdf 11 10 47.6 +0.9
K28A Ten Mile Ranch 136.81 23 P PKPdf 11 10 46.4 +0.1
baz=137
PV01 Paradox Valley 137.05 33 ePKPdf PKPdf 11 10 48.4 +1.3
K29A Lazy Trails An 137.17 22 P PKPdf 11 10 46.9 -0.1
baz=137
H35A Sunnside Ranc 137.17 15 P PKPdf 11 10 46.6 -0.2
baz=137
SPMN St. Paul 137.17 13 P PKPdf 11 10 47.2 +0.4
baz=137
WUAZ Wupatki 137.20 38 P PKPdf 11 10 47.5 +0.2
baz=137
WUAZ Wupatki 137.20 38 ePKPdf PKPdf 11 10 47.6 +0.2
K30A Basset 137.50 21 P PKPdf 11 10 47.1 -0.5
baz=137
ECSD EROS Data Cent 137.55 18 P PKPdf 11 10 46.4 -1.1
baz=137
ECSD EROS Data Cent 137.55 18 ePKPdf PKPdf 11 10 47.5 -0.1
ECSD ePP PP 11 13 32.1 -0.6
ECSD LR LR
comp=Z,257nm,21.0s
MVCO Mesa Verde 137.75 34 P PKPdf 11 10 48.3 -0.1
baz=138
MVCO Mesa Verde 137.75 34 ePKPdf PKPdf 11 10 50.0 +1.6
OGNE Ogallala 138.03 25 P PKPdf 11 10 46.6 -2.0
baz=138
L30A Spencer Herefo 138.09 22 P PKPdf 11 10 47.2 -1.5
baz=138
M29A Burnside Ranch 138.16 23 P PKPdf 11 10 47.2 -1.7
baz=138
I37A Lemond, Waseca 138.17 14 P PKPdf 11 10 47.0 -1.6
baz=138
S22A 4UR Ranch, Cre 138.27 32 P PKPdf 11 10 48.4 -1.0
baz=138
S22A 4UR Ranch, Cre 138.27 32 ePKPdf PKPdf 11 10 50.4 +1.0
I38A Scanlan Farm, 138.40 13 P PKPdf 11 10 49.0 -0.1
baz=138
N28A Pribbeno Ranch 138.45 25 P PKPdf 11 10 46.5 -2.9
baz=138
W18A Petrified Fore 138.47 37 P PKPdf 11 10 50.6 +0.9
baz=138
PLVO Plevna 138.70 357 ePKPdf PKPdf 11 10 50.8 +1.2
M31A Lambtecht Ranc 138.90 22 P PKPpre 11 10 43.9
baz=139
SDCO Great Sand Dun 138.97 31 ePKPdf PKPdf 11 10 51.0 +0.3
BGNE Belgrade 139.14 21 ePKPdf PKPdf 11 10 52.5 +2.0
M33A Taylor Creek F 139.32 20 P PKPdf 11 10 48.8 -2.1
baz=139
L35A Bielow Farm, R 139.35 18 P PKPdf 11 10 48.9 -2.0
baz=139
NCB Newcomb 139.51 353 PFAKE 11 11 00.0 +8.8
NCB LR LR
comp=Z,469nm,20.0s
TUC Tucson 139.62 42 ePKIKP PKPdf 11 10 52.1 +0.3
TUC Tucson 139.62 42 ePKPdf PKPdf 11 10 52.1 +0.3
Q28A Sharon Springs 139.68 26 P PKPpre 11 10 44.5
baz=140
R27A Eads 139.87 28 P PKPpre 11 10 43.9
baz=140
T25A Trinidad 139.99 31 P PKPpre 11 10 45.9
baz=140
T25A Trinidad 139.99 31 ePKPdf PKPdf 11 10 49.9 -2.6
S26A Kim 140.08 29 P PKPpre 11 10 44.4
baz=140
Q29A Oakley 140.19 26 P PKPpre 11 10 44.7
baz=140
SCIA State Center 140.20 15 PFAKE 11 11 00.0 +7.6
SCIA LR LR
comp=Z,697nm,19.0s
R28A Tribune 140.28 27 P PKPpre 11 10 44.9
baz=140
P31A Stockton 140.32 23 P PKPpre 11 10 45.8
baz=140
T26A Comanche Natio 140.37 30 P PKPpre 11 10 45.7
baz=140
Q30A Quinter 140.44 25 P PKPpre 11 10 45.2
baz=140
LAZ Ladron 140.51 36 ePKPdf PKPdf 11 10 53.8 +0.3
ANMO Albuquerque 140.52 35 ePKIKP PKPpre 11 10 48.6
ANMO Albuquerque 140.52 35 ePKPpre PKPpre 11 10 48.6
P32A Huiting Farm, 140.53 22 P PKPpre 11 10 47.0
baz=140
O34A Beatrice 140.73 20 P PKPpre 11 10 47.2
baz=141
CBKS Cedar Bluff 140.78 24 PFAKE 11 11 10.0 +16
CBKS LR LR
comp=Z,417nm,19.0s
S28A Manter 140.85 28 P PKPpre 11 10 47.1
baz=141
LPM Los Pinos Moun 140.87 36 ePKPdf PKPdf 11 10 52.9 -1.3
T27A Campo 140.88 29 P PKPpre 11 10 48.0
baz=141
BNM Barren Site 140.99 36 ePKPpre PKPpre 11 10 48.3
R30A Dighton 141.00 25 P PKPpre 11 10 47.4
baz=141
Q32A Meitler Ranch, 141.10 23 P PKPpre 11 10 48.9
baz=141
T28A Walsh 141.13 28 P PKPpre 11 10 47.3
baz=141
S29A Ulysses 141.18 27 P PKPpre 11 10 47.2
baz=141
P34A Walnut Farm, R 141.25 21 P PKPpre 11 10 49.4
baz=141
R31A Burdett 141.31 25 P PKPpre 11 10 48.0
baz=141
O36A Bolckow 141.34 18 P PKPpre 11 10 47.7
baz=141
Q33A Connelly Farm, 141.37 22 P PKPpre 11 10 48.4
baz=141
AAM Ann Arbor 141.41 4 PFAKE 11 11 10.0 +15
AAM LR LR
comp=Z,501nm,20.0s
BINY Binghamton 141.44 355 ePKPdf PKPdf 11 10 57.1 +2.4
T29A Hugoton 141.48 27 P PKPpre 11 10 48.6
baz=141
R32A Long Quarter, 141.53 24 P PKPpre 11 10 49.2
baz=141
P35A Duane Minner, 141.55 20 P PKPpre 11 10 49.3
baz=141
KSU1 Kansas State U 141.72 21 ePKPdf PKPdf 11 10 51.9 -3.3
KSU1 epPKPdf pPKPdf 11 11 04.6 -2.1
P36A Good Intent, A 141.73 19 P PKPpre 11 10 49.1
baz=142
S31A Mullinville 141.90 25 P PKPpre 11 10 50.5
baz=142
R33A Olander Ranch, 141.91 23 P PKPpre 11 10 50.3
baz=142
T30A Plains 141.91 27 P PKPpre 11 10 50.8
baz=142
S32A Newby Ranch, P 142.06 24 P PKPpre 11 10 50.6
baz=142
Q35A Mercer Eighty, 142.14 20 P PKPpre 11 10 49.2
baz=142
R34A Isabella, Hill 142.20 22 P PKPpre 11 10 50.5
baz=142
Q36A Arnold C. Orve 142.24 20 P PKPpre 11 10 49.9
baz=142
U30A WK&E Inc. Balk 142.29 27 P PKPpre 11 10 51.2
baz=142
HDIL Hopedale 142.38 11 P PKPpre 11 10 50.2
baz=142
HDIL Hopedale 142.38 11 PFAKE 11 11 10.0 +14
HDIL LR LR
comp=Z,659nm,21.0s
V29A Stinnett 142.41 29 P PKPpre 11 10 51.3
baz=142
T32A Huddler Ranch, 142.50 25 P PKPpre 11 10 52.1
baz=142
S33A Kaszmaul Farm, 142.53 23 P PKPpre 11 10 52.8
baz=142
R35A Emporia Munici 142.56 21 P PKPpre 11 10 52.2
baz=142
BDFB Brasilia 142.76 238 PKhKP PKPpre 11 10 52.7
comp=Z,4.9nm,0.5s,baz=131,slow=5.8,SNR=5.0
BDFB Brasilia 142.76 238 ePKHKP PKPpre 11 10 52.7
BDFB e 11 10 57.8
BDFB Brasilia 142.76 238 ePKPpre PKPpre 11 10 52.7
BDFB ePKPdf PKPdf 11 10 57.8 -0.1
S34A Willow Spring 142.78 22 P PKPpre 11 10 53.1
baz=143
U31A Nine Bar Ranch 142.78 27 P PKPpre 11 10 53.7
baz=143
R36A Gordon, Harris 142.80 20 P PKPpre 11 10 52.8
baz=143
CPUP Villa Florida 142.83 215 PKhKP PKPpre 11 10 52.5
comp=Z,6.4nm,0.9s,baz=149,slow=2.4,SNR=9.9
T33A Patterson Ranc 142.87 24 P PKPpre 11 10 53.6
baz=143
SFIN Scholer Farm 142.94 9 P PKPpre 11 10 53.7
baz=143
SFIN Scholer Farm 142.94 9 ePKPdf PKPdf 11 10 57.4 +0.1
R37A Teagarden Farm 143.04 19 P PKPab 11 10 53.2 +0.3
baz=143
S35A Otter Creek Ra 143.09 21 P PKPbc 11 10 54.1 -0.5
baz=143
AMTX Amarillo 143.12 30 ePKPdf PKPdf 11 10 58.0 0.0
U32A Winter Ranch, 143.15 26 P PKPbc 11 10 54.1 -0.7
baz=143
X28A Dimmitt 143.15 31 P PKPbc 11 10 54.4 -0.6
baz=143
V31A Spring Creek L 143.28 27 P PKPbc 11 10 55.2 0.0
baz=143
S36A Lake Cedric, C 143.31 21 P PKPab 11 10 54.3 +0.3
baz=143
T34A McClaskey Farm 143.34 23 P PKPab 11 10 54.5 +0.3
baz=143
MNTX Cornudas Mount 143.46 37 P PKPbc 11 10 56.0 +0.1
baz=143
MNTX Cornudas Mount 143.46 37 ePKPdf PKPbc 11 10 56.4 +0.5
MNTX LR LR

comp=Z,364nm,20.0s
**X29A Tulia** 143.46 30 P PKPbc 11 10 56.4 +0.5
baz=143
**U33A Lingo Farm, Me** 143.48 25 P PKPab 11 10 55.1 +0.3
baz=143
**ACSO Alum Creek Sta** 143.52 4 *e*PKPpre PKPpre 11 10 54.9
ACSO LR LR
comp=Z,211nm,19.0s
**S37A Fort Scott** 143.54 20 P PKPab 11 10 54.4 -0.5
baz=143
**Y28A McKinney Farm,** 143.60 32 P PKPbc 11 10 56.2 -0.1
baz=144
**MVL Millersville** 143.66 355 *e*PKPdf **PKPdf 11 10 58.9 +0.2**
**V32A Arapaho** 143.68 26 P PKPbc 11 10 56.2 -0.2
baz=144
**T35A Sooner Cattle** 143.69 22 P PKPab 11 10 55.6 0.0
baz=144
**U34A Anderson Ranch** 143.71 24 P PKPab 11 10 55.8 +0.1
baz=144
**W31A Holland Ranch,** 143.72 28 P PKPab 11 10 55.7 0.0
baz=144
**T36A Boggs Farm, Ca** 143.80 21 P PKPab 11 10 56.0 +0.1
baz=144
**X30A Coker Ranch, T** 143.87 30 P PKPab 11 10 55.7 -0.7
baz=144
**V33A Lossen Ranch,** 143.93 25 P PKPab 11 10 56.1 -0.3
baz=144
**Y29A Porterfield Fa** 143.94 31 P PKPbc 11 10 57.1 -0.2
baz=144
**Z28A Tucker Farm, M** 144.00 32 P PKPab 11 10 57.2 +0.2
baz=144
**T37A Cheneyville 18** 144.09 20 P **PKPab 11 10 56.3 -0.7**
baz=144
**U35A Pawnee** 144.09 23 P **PKPab 11 10 57.1 +0.1**
baz=144
**W32A Sentinel** 144.09 27 P **PKPab 11 10 57.2 +0.1**
baz=144
**X31A McDonald Ranch** 144.16 28 P **PKPab 11 10 57.2 -0.2**
baz=144
**MCWV Mont Chateau** 144.17 359 *e*PKPdf PKPbc 11 10 57.7 +0.1
**BLO Bloomington** 144.20 8 *e*PKIKP **PKPab 11 10 57.4 0.0**
**BLO Bloomington** 144.20 8 *e*PKPdf **PKPab 11 10 57.4 0.0**
**V34A Guthrie** 144.24 24 P **PKPab 11 10 57.6 0.0**
baz=144
**V34A Guthrie** 144.24 24 *e*PKPdf PKPbc 11 10 57.8 -0.2
**Y30A Stafford Cattl** 144.32 30 P **PKPab 11 10 58.1 0.0**
baz=144
**OLIL Olney** 144.37 11 *e*PKPdf PKPbc 11 10 58.2 -0.1
**Z29A Hungry Hill Ra** 144.39 32 P PKPbc 11 10 58.6 -0.1
baz=144
**W33A Caddo, Fort Co** 144.41 26 P PKPbc 11 10 59.0 +0.4
baz=144
**U36A Oologah** 144.45 22 P **PKPab 11 10 58.0 -0.3**
baz=144
**128A Castleberry Fa** 144.46 33 P **PKPab 11 10 58.8 +0.1**
baz=144
**Y31A Rekieta Farm,** 144.56 29 P **PKPab 11 10 58.4 -0.5**
baz=144
**V35A Meyer Ranch, C** 144.58 24 P **PKPab 11 10 58.6 -0.2**
baz=144
**WMOK Wichita Mounta** 144.62 27 *e*PKIKP **PKPab 11 10 58.8 -0.3**
WMOK MLR MLR
comp=Z,293nm,20.0s
**WMOK Wichita Mounta** 144.62 27 *e*PKPdf **PKPab 11 10 58.8 -0.3**
WMOK LR LR
comp=Z,293nm,20.0s
**W34A Bridge Creek,** 144.65 25 P **PKPab 11 10 59.2 0.0**
baz=144
**W34A Bridge Creek,** 144.65 25 *e*PKPdf **PKPab 11 10 59.1 -0.1**
**X32A Elmer** 144.66 28 P **PKPab 11 10 58.8 -0.4**
baz=145
**U37A Salina** 144.66 21 P **PKPab 11 10 58.9 -0.2**
baz=144
**Z30A Sanderson Ranc** 144.67 31 P **PKPab 11 10 59.2 -0.2**
baz=145
**228A UT Block 9, Go** 144.78 34 P PKPbc 11 11 00.0 +0.1
baz=145
**129A Stewart Farms,** 144.79 33 P **PKPab 11 10 59.9 0.0**
baz=145
**TUL1 Tulsa** 144.85 22 P **PKPab 11 10 59.6 -0.2**
baz=145
**TUL1 Tulsa** 144.85 22 *e*PKPdf **PKPab 11 10 59.7 -0.2**
**U38A Gravette** 144.88 20 P **PKPab 11 10 59.3 -0.7**
baz=145
**V36A Jenks** 144.91 22 P **PKPab 11 10 59.9 -0.2**
baz=145
**X33A Lawton** 144.91 27 P **PKPab 11 10 59.5 -0.7**
baz=145
**Y32A R-V Farms, Ver** 144.93 28 P **PKPab 11 10 59.8 -0.5**
baz=145
**W35A Tecumseh** 145.09 24 P **PKPbc 11 11 00.4 -0.4**
baz=145
**SLBS Sierra La Lagu** 145.11 53 *e*PKPbc **PKPdf 11 11 02.3 +0.6**
**V37A Hulbert** 145.12 21 P **PKPbc 11 11 00.2 -0.6**
baz=145
**SIUC Southern Illin** 145.13 12 *e*PKPbc **PKPbc 11 11 00.4 -0.4**
**Z31A Sharp Cattle R** 145.14 30 P **PKPbc 11 11 00.6 -0.4**
baz=145
**X34A Smith Ranch, M** 145.16 26 P **PKPbc 11 11 00.9 -0.1**
baz=145
**WCI Wyandotte Cave** 145.16 8 *e*PKIKP **PKPbc 11 11 00.4 -0.5**
**WCI Wyandotte Cave** 145.16 8 *e*PKPbc **PKPbc 11 11 00.4 -0.5**
**USIN University of** 145.20 10 *e*PKPbc **PKPbc 11 11 00.7 -0.3**
**130A Snyder** 145.29 32 P **PKPbc 11 11 01.2 -0.3**
baz=145
**Y33A Hilltop Ranch,** 145.30 27 P **PKPbc 11 11 00.7 -0.8**
baz=145
**229A Bryant Ranch,** 145.33 33 P **PKPbc 11 11 01.8 +0.1**
baz=145
**W36A Wetumka** 145.36 23 P **PKPbc 11 11 01.0 -0.6**
baz=145
**V38A Canehill** 145.40 20 P **PKPbc 11 11 00.8 -1.0**
baz=145
**Z32A Haskell** 145.48 29 P **PKPbc 11 11 01.7 -0.4**
baz=145
**CBN Corbin** 145.52 356 *e*PKPdf **PKPdf 11 11 01.7 -0.2**
CBN LR LR
comp=Z,403nm,20.0s
**131A Roby** 145.53 31 P **PKPbc 11 11 02.4 +0.1**
baz=145
**329A Wagon Wheel Ra** 145.60 34 P **PKPbc 11 11 02.6 +0.1**
baz=146
**W37A Quinton** 145.67 22 P **PKPdf 11 11 02.1 -0.2**
baz=146
**X35A Drake** 145.70 25 P **PKPdf 11 11 02.0 -0.4**
baz=146
**Y34A Reagan Ranch,** 145.74 26 P **PKPdf 11 11 02.2 -0.2**
baz=146
**PBMO Poplar Bluff** 145.75 15 *e*PKPdf **PKPdf 11 11 01.9 -0.5**
**230A Sterling City** 145.77 33 P **PKPab 11 11 03.3 -0.1**
baz=146
**X36A Centrahoma** 145.81 24 P **PKPdf 11 11 02.5 0.0**
baz=146
**Z33A Whitaker Ranch** 145.83 28 P **PKPdf 11 11 02.8 +0.1**
baz=146
**ABTX Abilene, Hawle** 145.95 30 P **PKPbc 11 11 03.4 -0.2**
baz=146
**ABTX Abilene, Hawle** 145.95 30 *e*PKPdf **PKPbc 11 11 03.4 -0.2**
**PARMO Parma** 146.02 14 *e*PKPdf **PKPab 11 11 03.9 -0.3**
**W38A Poteau** 146.07 21 P **PKPbc 11 11 03.4 -0.4**
baz=146
**Y35A Marietta** 146.09 25 P **PKPdf 11 11 03.1 +0.1**
baz=146
**330A Mertzon** 146.10 33 P **PKPbc 11 11 03.8 -0.3**
baz=146
**231A Bronte** 146.15 32 P **PKPbc 11 11 04.0 -0.2**
baz=146
**Z34A Collier Ranch,** 146.16 27 P **PKPdf 11 11 03.5 +0.3**
baz=146
**TX31 Lajitas Ar. Si** 146.17 39 *e*PKPdf **PKPdf 11 11 03.2 -0.3**
**TXAR Lajitas Array** 146.17 39 PKPbc **PKPdf 11 11 03.6 +0.2**
comp=Z,58nm,0.8s,baz=279,slow=0.7,SNR=324
**X37A Clayton** 146.18 23 P **PKPdf 11 11 03.6 +0.4**
baz=146
**LCO Las Campanas** 146.24 195 *e*PKPdf **PKPdf 11 11 03.9 +0.1**
**429A Davenport Ranc** 146.29 35 P **PKPbc 11 11 04.3 -0.5**
baz=146
**X38A Whitesboro** 146.31 22 P **PKPbc 11 11 04.2 -0.3**
baz=146
**133A Hamilton Ranch** 146.32 29 P **PKPbc 11 11 04.6 -0.1**
baz=146
**Y36A Durant** 146.42 25 P **PKPdf 11 11 04.1 +0.5**
baz=146
**529A Stev Forest Ra** 146.47 36 P **PKPbc 11 11 05.5 +0.3**
baz=146
**Z35A Perchaven, San** 146.49 26 P **PKPdf 11 11 04.3 +0.5**
baz=146

**232A Coleman** 146.53 31 P **PKPbc 11 11 04.7 -0.7**
baz=146
**430A Baggett Ranch,** 146.54 34 P **PKPbc 11 11 05.2 -0.2**
baz=146
**331A San Angelo** 146.58 32 P **PKPbc 11 11 05.2 -0.3**
baz=146
**BLA Blacksburg** 146.62 0 *e*PKP2 **PKPdf 11 11 04.5 +0.6**
BLA MLR MLR
comp=Z,322nm,19.0s
**BLA Blacksburg** 146.62 0 *e*PKPdf **PKPdf 11 11 04.5 +0.6**
BLA LR LR
comp=Z,322nm,19.0s
**Y37A Hugo** 146.62 24 P **PKPdf 11 11 04.6 +0.7**
baz=146
**134A White-Moore Ra** 146.75 28 P **PKPbc 11 11 05.5 -0.4**
baz=147
**233A Rising Star** 146.81 30 P **PKPbc 11 11 06.1 -0.1**
baz=147
**HALT Halls** 146.84 14 *e*PKPbc **PKPbc 11 11 06.0 0.0**
**HBAR Harrisburg** 146.84 16 *e*PKPbc **PKPbc 11 11 06.5 +0.4**
**MIAR Mount Ida** 146.88 20 *e*PKP2 **PKPbc 11 11 06.3 +0.1**
MIAR MLR MLR
comp=Z,339nm,20.0s
**MIAR Mount Ida** 146.88 20 P **PKPbc 11 11 06.0 -0.2**
baz=147
**MIAR Mount Ida** 146.88 20 *e*PKPbc **PKPbc 11 11 06.2 +0.1**
MIAR LR LR
comp=Z,339nm,20.0s
**332A Millersview** 146.89 31 P **PKPbc 11 11 06.6 +0.2**
baz=147
**Z36A Blue Ridge** 146.90 25 P **PKPbc 11 11 05.6 -0.7**
baz=147
**WVT Waverly** 146.95 11 *e*PKP2 **PKPbc 11 11 06.1 -0.3**
**WVT Waverly** 146.95 11 *e*PKPbc **PKPbc 11 11 06.1 -0.3**
**530A J-C Ranch, Com** 146.97 35 P **PKPdf 11 11 05.4 +0.7**
baz=147
**431A Sonora** 146.97 33 P **PKPbc 11 11 06.7 +0.1**
baz=147
**Y38A Idabel** 147.01 22 P **PKPbc 11 11 05.6 -1.0**
baz=147
**135A Vickery Place,** 147.07 27 P **PKPbc 11 11 06.5 -0.3**
baz=147
**UALR University of** 147.08 18 *e*PKPdf **PKPbc 11 11 06.0 -0.7**
**TZTN Tazewell** 147.14 5 *e*PKPbc **PKPbc 11 11 06.5 -0.4**
**234A Clairette** 147.19 29 P **PKPbc 11 11 06.8 -0.4**
baz=147
**Y39A Lockesburg** 147.24 22 P **PKPbc 11 11 06.9 -0.4**
baz=147
**432A Menard** 147.26 32 P **PKPbc 11 11 07.2 -0.3**
baz=147
**Z37A Pogue Cattle C** 147.30 24 P **PKPbc 11 11 07.0 -0.4**
baz=147
**333A Richland Sprin** 147.32 31 P **PKPbc 11 11 07.5 -0.1**
baz=147
**531A Rocksprings** 147.40 34 P **PKPbc 11 11 08.0 +0.1**
baz=147
**Z38A Mt. Pleasant** 147.51 23 P **PKPbc 11 11 07.8 -0.2**
baz=147
**WHTX Lake Whitney** 147.52 28 P **PKPbc 11 11 07.8 -0.3**
baz=147
**WHTX Lake Whitney** 147.52 28 *e*PKPbc **PKPbc 11 11 08.4 +0.3**
**136A Ennis** 147.53 26 P **PKPbc 11 11 07.5 -0.6**
baz=147
**JCT Junction City** 147.56 33 *e*PKP2 **PKPdf 11 11 06.5 +0.8**
JCT MLR MLR
comp=Z,260nm,19.0s
**JCT Junction City** 147.56 33 P **PKPbc 11 11 08.4 +0.1**
baz=148
**JCT Junction City** 147.56 33 *e*PKPdf **PKPdf 11 11 06.5 +0.8**
JCT *e*PKPbc **PKiKP 11 11 11.0 +0.5**
JCT LR LR
comp=Z,260nm,19.0s
**334A Lometa** 147.69 30 P **PKPbc 11 11 08.4 -0.2**
baz=148
**433A Art** 147.72 31 P **PKPbc 11 11 08.4 -0.3**
baz=148
**532A Rocksprings** 147.78 33 P **PKPbc 11 11 08.7 -0.2**
baz=148
**Z39A Irene McRaven,** 147.83 22 P **PKPbc 11 11 09.1 +0.3**
baz=148
**236A Katherine and** 147.94 27 P **PKPbc 11 11 09.0 -0.2**
baz=148
**631A Perdido Creek** 147.96 35 P **PKPbc 11 11 09.1 -0.3**
baz=148
**138A Matatall Enter** 147.99 24 P **PKPbc 11 11 09.9 +0.6**
baz=148
**TKL Tuckaleechee C** 148.00 5 *e*PKIKP **PKPdf 11 11 06.2 0.0**
TKL *e* 11 11 09.2
**TKL Tuckaleechee C** 148.00 5 *e*PKPdf **PKPdf 11 11 06.2 0.0**
TKL *e*PKPbc **PKPbc 11 11 09.2 -0.1**
**434A Burnet** 148.09 30 P **PKPbc 11 11 09.2 -0.5**
baz=148
**335A Moody** 148.12 29 P **PKPbc 11 11 09.6 -0.1**
baz=148
**CPCT Cooper Cave** 148.13 7 *e*PKPbc **PKPbc 11 11 09.1 -0.5**
CPCT *e*PKPab **PKPab 11 11 12.6 +0.2**
**OXF Oxford** 148.15 14 *e*PKP2 **PKPbc 11 11 09.5 -0.2**
**OXF Oxford** 148.15 14 *e*PKPbc **PKPbc 11 11 09.5 -0.2**
**SWET Sewanee** 148.17 9 *e*PKPdf **PKPbc 11 11 08.7 -1.1**
SWET *e*PKPbc **PKPab 11 11 12.3 -0.4**
**139A Bunkhouse Ranc** 148.25 23 P **PKPbc 11 11 10.0 0.0**
baz=148
**237A Washetta, Mont** 148.25 26 P **PKPbc 11 11 10.5 +0.5**
baz=148
**533A Kerrville** 148.29 32 P **PKPbc 11 11 10.2 0.0**
baz=148
**336A Riesel** 148.31 28 P **PKPbc 11 11 10.4 +0.2**
baz=148
**632A Uvalde** 148.33 34 P **PKPbc 11 11 10.6 +0.2**
baz=148
**435B Jarrell** 148.46 29 P **PKPbc 11 11 10.8 +0.2**
baz=148
**CNNC Cliffs of the** 148.51 356 *e*PKPbc **PKPbc 11 11 11.1 +0.5**
CNNC *e*PKPab **PKPab 11 11 13.9 0.0**
CNNC LR LR
comp=Z,669nm,21.0s
**238A Jacksonville** 148.54 25 P **PKPbc 11 11 11.2 +0.4**
baz=148
**534A Blanco** 148.62 31 P **PKPbc 11 11 10.9 -0.2**
baz=148
**KMSC Kings Mountain** 148.67 2 P **PKPbc 11 11 10.4 -0.6**
baz=148
**KMSC Kings Mountain** 148.67 2 *e*PKPbc **PKPbc 11 11 10.5 -0.5**
**633A Saathoff Ranch** 148.70 33 P **PKPbc 11 11 11.6 +0.3**
baz=149
**239A Gary** 148.80 24 P **PKPbc 11 11 11.8 +0.3**
baz=149
**337A Centerville** 148.81 26 P **PKPbc 11 11 12.2 +0.7**
baz=149
**732A Laxson Ranch,** 148.82 35 P **PKPbc 11 11 11.8 +0.2**
baz=149
**436A Wall Ranch, Ga** 148.85 28 P **PKPbc 11 11 12.2 +0.5**
baz=149
**NATX Nacogdoches** 148.95 24 P **PKPbc 11 11 12.2 +0.3**
baz=149
**NATX Nacogdoches** 148.95 24 *e*PKPbc **PKPbc 11 11 12.5 +0.7**
NATX LR LR
comp=Z,553nm,20.0s
**338A Crockett** 149.02 26 P **PKPbc 11 11 12.6 +0.5**
baz=149
**535A Dale** 149.08 30 P **PKPbc 11 11 12.6 +0.4**
baz=149
**437A Phantom Ranch,** 149.11 27 P **PKPbc 11 11 12.8 +0.6**
baz=149
**832A Faith Ranch, C** 149.15 35 P **PKPbc 11 11 12.7 +0.2**
baz=149
**634A China Grove, S** 149.20 32 P **PKPbc 11 11 12.9 +0.3**
baz=149
**733A Divot King Ran** 149.21 34 P **PKPbc 11 11 12.9 +0.3**
baz=149
**536A Bastrop** 149.29 29 P **PKPbc 11 11 13.2 +0.4**
baz=149
**339A Huntington** 149.36 24 P **PKPbc 11 11 13.2 +0.3**
baz=149
**833A Chaparral WMA,** 149.45 35 P **PKPbc 11 11 13.8 +0.5**
baz=149
**438A Sam Houston St** 149.47 26 P **PKPbc 11 11 14.0 +0.8**
baz=149
**635A Leesville** 149.50 31 P **PKPbc 11 11 14.2 +0.9**
baz=149
**734A La Parita Cree** 149.51 33 P **PKPbc 11 11 13.8 +0.5**
baz=149
**340A Bronson** 149.56 23 P **PKPbc 11 11 13.4 +0.1**
baz=150
**537A Green Hill Far** 149.65 28 P **PKPbc 11 11 14.7 +1.0**
baz=150
**439A Center Grove,** 149.74 25 P **PKPbc 11 11 14.6 +0.7**
baz=150
**636A Smothers Creek** 149.79 30 P **PKPbc 11 11 15.3 +1.3**
baz=150
**735A Kenedy** 149.91 32 P **PKPbc 11 11 15.4 +1.1**
baz=150
**HKT Hockley** 149.99 28 *e*PKPdf **PKPdf 11 11 10.6 +1.2**
HKT *e*PKPbc **PKiKP 11 11 15.8 +0.5**
**VBMS Vicksburg** 150.01 18 P **PKPbc 11 11 14.5 +0.1**
baz=150
**933A Laredo** 150.06 35 P **PKPbc 11 11 15.7 +0.9**
baz=150
**834A Tilden** 150.08 34 P **PKPbc 11 11 15.8 +1.0**
baz=150
**LRAL Lakeview Retre** 150.11 11 *e*PKPbc **PKPbc 11 11 14.0 -0.6**
LRAL *e*PKPab **PKPab 11 11 19.4 -1.1**
**440A Kirbyville** 150.12 24 P **PKPbc 11 11 15.4 +0.7**
baz=150
**637A Eagle Lake** 150.18 29 P **PKPbc 11 11 16.2 +1.3**
baz=150
**736A Circle Diamond** 150.21 31 P **PKPbc 11 11 16.7 +1.7**
baz=150
**GOGA Godfrey** 150.26 5 *e*PKIKP **PKPbc 11 11 14.8 -0.2**
GOGA *e* 11 11 20.7
GOGA MLR MLR
comp=Z,394nm,20.0s
**GOGA Godfrey** 150.26 5 *e*PKPbc **PKPbc 11 11 14.8 -0.2**
GOGA *e*PKPab **PKPab 11 11 20.7 -0.4**
GOGA LR LR
comp=Z,394nm,20.0s
**835A Beeville** 150.34 33 P **PKPbc 11 11 16.7 +1.3**
baz=150
**934A Benavides** 150.50 34 P **PKPbc 11 11 17.2 +1.4**
baz=150
**540A Vidor** 150.58 25 P **PKPbc 11 11 17.6 +1.7**
baz=150
**NHSC New Hope** 150.71 360 *e*PKPbc **PKPbc 11 11 16.2 +0.1**
**034A Hebbronville** 150.82 35 P **PKPbc 11 11 17.9 +1.4**
baz=151
**LVC Limon Verde** 151.62 202 *e*PKPbc **PKPbc 11 11 19.3 +0.4**
LVC *e*PKPab **PKPab 11 11 28.0 +0.6**
**035Z Hargill** 151.63 35 P **PKPbc 11 11 19.8 +1.3**
baz=152
**BRAL Brewton** 152.06 13 *e*PKPbc **PKPbc 11 11 19.7 +0.4**
BRAL LR LR
comp=Z,334nm,20.0s
**TIGA Tifton** 152.20 6 P **PKPbc 11 11 19.7 +0.1**
baz=152
**TIGA Tifton** 152.20 6 *e*PKPdf PKPpre 11 11 06.9
TIGA *e*PKPbc **PKiKP 11 11 19.8 -0.1**
**LPAZ La Paz** 156.83 211 PKP **PKPdf 11 11 20.4 -0.1**
comp=Z,3.2nm,0.9s,baz=66,slow=2.7,SNR=7.9
LPAZ PKPab **PKPab 11 11 49.5 -0.5**
comp=Z,4.0nm,0.9s,baz=113,slow=8.9,SNR=4.6
**LPAZ La Paz** 156.83 211 *e*PKIKP **PKPdf 11 11 20.7 +0.2**
**SAML Samuel** 158.86 234 *e*PKPab **PKPab 11 11 57.3 -0.9**
SAML LR LR
comp=Z,255nm,20.0s
**SJG San Juan** 160.07 317 PFAKE 11 11 30.0 +6.4
SJG LR LR
comp=Z,191nm,21.0s
**TEIG Tepich** 161.78 25 PFAKE 11 11 40.0 +15
TEIG LR LR
comp=Z,296nm,22.0s
**SDDR Presa de Saban** 162.43 331 PFAKE 11 11 40.0 +14
SDDR LR LR
comp=Z,305nm,19.0s
**GTBY Guantanamo Bay** 163.08 343 PFAKE 11 11 40.0 +13
GTBY LR LR
comp=Z,288nm,21.0s
**NNA Nana** 164.08 192 PFAKE 11 11 40.0 +12
NNA LR LR
comp=Z,148nm,19.0s
**MTDJ Mount Denham** 165.29 350 PFAKE 11 11 40.0 +11
MTDJ LR LR
comp=Z,269nm,19.0s
**TGUH Tegucigalpa,Un** 167.57 33 *e*PKPdf **PKPdf 11 11 28.6 -1.9**
TGUH *e*PKPab **PKPab 11 12 37.3 +1.1**
**SDV Santo Domingo** 169.12 299 PFAKE 11 11 40.0 +8.1
SDV LR LR
comp=Z,226nm,20.0s
**ROSC El Rosal** 173.97 282 PKP **PKPdf 11 11 34.2 -0.4**
comp=Z,5.9nm,0.4s,baz=92,slow=16,SNR=4.1
ROSC *e*PKPdf **PKPdf 11 11 34.0 -0.5**
ROSC *e*PKPab **PKPab 11 13 05.0 -0.6**
**OTAV Otavalo** 176.14 208 *e*PKPdf **PKPdf 11 11 35.2 -0.1**
OTAV LR LR
comp=Z,259nm,22.0s

*ISK* ***26*** *11:04:53.6,39.44N×31.40E,h3km,MD2.9*
*CSEM* ***26*** *11:04:54.3±0.2,39.44N×31.39E,h2km,MD2.9,Error ellipse: s-maj=4.4km s-min=3.6km az=21.0*
*DDA* ***26*** *11:04:54.2,39.45N×31.38E,h7km,Md2.6*
**ISC 26 11:04:54.0**±1.1,**39.44N**±0.03×**31.38E**±0.03,**h4**km±10km,
**n27,**σ0.73/39,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVRH** | **Sivrihisar-ESK** | **0.11** | **85** | *e*PG | **Pg** | **11 04 56.1** | **-0.2** |
| SVRH | | | | *e*SG | **Sg** | **11 04 57.8** | **-0.1** |
| **SVRH** | **Sivrihisar-ESK** | **0.11** | **85** | *e*Pg | **Pg** | **11 04 56.1** | **-0.2** |
| SVRH | | | | *e*Sg | **Sg** | **11 04 57.8** | **-0.1** |
| **ESKT** | **Eskisehir** | **0.42** | **282** | *e*PG | **Pg** | **11 05 02.7** | **+0.6** |
| **ESKT** | **Eskisehir** | **0.42** | **282** | *e*Pg | **Pg** | **11 05 02.7** | **+0.6** |
| **ESKT** | **Eskisehir** | **0.42** | **282** | P | **Pg** | **11 05 01.7** | **-0.5** |
| ESKT | | | | S | **Sb** | **11 05 09.6** | **-1.2** |
| **SEYT** | **Eskypehyr** | **0.42** | **282** | *i* P | **Pg** | **11 05 01.7** | **-0.5** |
| SEYT | | | | *i* S | **Sb** | **11 05 09.6** | **-1.2** |
| **AUMIH** | **MIHALICIK** | **0.44** | **10** | P | **Pg** | **11 05 01.7** | **-0.8** |
| AUMIH | | | | S | **Sg** | **11 05 09.2** | **+0.9** |
| **KIZT** | **Kizilcal** | **0.68** | **145** | *e*PG | **Pg** | **11 05 07.4** | **+0.3** |
| **KIZT** | **Kizilcal** | **0.68** | **145** | *e*Pg | **Pg** | **11 05 07.4** | **+0.3** |
| **BOLV** | **Bolvadin** | **0.79** | **205** | *i* P | **Pb** | **11 05 10.1** | **-0.3** |
| BOLV | | | | *i* S | **Sb** | **11 05 21.5** | **-0.1** |
| **BOLV** | **Bolvadin** | **0.79** | **205** | P | **Pb** | **11 05 10.1** | **-0.3** |
| BOLV | | | | S | **Sg** | **11 05 21.5** | **-0.1** |
| **BORA** | **Eskisehir** | **0.84** | **302** | *i* P | **Pg** | **11 05 09.6** | **-0.6** |
| **BORA** | **Eskisehir** | **0.84** | **302** | P | **Pg** | **11 05 09.6** | **-0.6** |
| BORA | | | | S | **Sn** | **11 05 27.7** | **+2.1** |
| **MDUB** | **Mudurnu** | **1.04** | **352** | *e*PG | **Pb** | **11 05 14.5** | **-0.2** |
| MDUB | | | | *e*SG | **Sn** | **11 05 29.6** | **-1.0** |
| **MDUB** | **Mudurnu** | **1.04** | **352** | *e*Pg | **Pb** | **11 05 14.5** | **-0.2** |
| MDUB | | | | *e*Sg | **Sn** | **11 05 29.6** | **-1.0** |
| **GULT** | **Gulveren** | **1.20** | **326** | *e*PN | **Pg** | **11 05 17.5** | **+0.5** |
| **GULT** | **Gulveren** | **1.20** | **326** | *e*Pn | **Pg** | **11 05 17.5** | **+0.5** |
| **AFSR** | **Afar-Bala (A** | **1.31** | **89** | *e*PN | **Pb** | **11 05 19.1** | **-0.2** |
| **AFSR** | **Afar-Bala (A** | **1.31** | **89** | *e*Pn | **Pb** | **11 05 19.1** | **-0.2** |
| **CAVI** | **Cavuskoy** | **1.41** | **303** | *e*PN | **Pg** | **11 05 21.2** | **+0.2** |
| **CAVI** | **Cavuskoy** | **1.41** | **303** | *e*Pn | **Pg** | **11 05 21.3** | **+0.2** |
| **CHBY** | **Cihanbeyli** | **1.45** | **125** | *e*PN | **Pb** | **11 05 21.6** | **-0.1** |
| **CHBY** | **Cihanbeyli** | **1.45** | **125** | *e*Pn | **Pb** | **11 05 21.6** | **-0.1** |
| **BCAM** | **Yenicaga** | **1.47** | **21** | *i* P | **Pg** | **11 05 22.6** | **+0.3** |
| BCAM | | | | *i* S | **Sg** | **11 05 42.9** | **+1.5** |
| **BCAM** | **Yenicaga** | **1.47** | **21** | P | **Pg** | **11 05 22.6** | **+0.3** |
| BCAM | | | | S | **Sg** | **11 05 42.9** | **+1.5** |
| **TVSB** | **Tavsanli** | **1.48** | **271** | *e*PN | **Pg** | **11 05 22.4** | **-0.1** |
| **TVSB** | **Tavsanli** | **1.48** | **271** | *e*Pn | **Pg** | **11 05 22.4** | **-0.1** |

*IDC* ***26*** *11:05:44.0±0.7,3.17S×100.20E,h0km,mb4.3/19, mb1 4.4/22,mb1mx4.1/55,mbtmp4.3/22,ML4.0/3,MS4.2/3, Ms1 4.3/3,ms1mx3.6/39,Error ellipse: s-maj=24.7km s-min=12.8km az=46.0*
*NEIC* ***26*** *11:05:45.3±0.4,3.24S×100.11E,h10km,mb4.7/9,Error ellipse: s-maj=10.5km s-min=5.3km az=51.0*
*DJA* ***26*** *11:05:46.2±1.0,3°S±7°×10°E±°,h30km±5km,M5.0/11, mb5.2/7,mB5.5/2,MLv4.8/11,Mw(mB)5.0/2*
*BJI* ***26*** *11:05:46.1,3.54S×100.11E,h39km,mb4.7/34,mB5.3/18, Ms4.8/13,Ms7 4.6/14*
*ISCJB* ***26*** *11:05:47.2±0.3,3.22S±0.04×100.18E±0.04,h33km, mb4.4/29,MS4.1/3,Error ellipse: s-maj=7.0km s-min=3.5km az=142.3*
*AUST* ***26*** *11:05:59.4,3.37S×100.97E,h30km*
**ISC 26 11:05:49.2**±0.5,**3.28S**±0.05×**100.14E**±0.06,**h35km,n110,**
σ1.968/111,**mb4.4**/29,**MS4.0**/3,**Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.53** | **346** | P | **Pn** | **11 05 57.9** | **-2.4** |
| PPSI | | | | S | **Sn** | **11 06 06.3** | **-1.8** |
| **SISI** | **Saibi** | **2.21** | **332** | P | **Pn** | **11 06 21.1** | **-2.3** |
| SISI | | | | S | **Sn** | **11 06 46.4** | **-3.1** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PDSI | Padang | 2.38 | 8 | P | | Pn | 11 06 23.3 | -2.4 |
| KSI | Kapahiang | 2.47 | 99 | P | | Pn | 11 06 27.6 | +0.5 |
| SDSI | Sungai Dareh | 2.66 | 29 | P | | Pn | 11 06 28.8 | -0.8 |
| PPI | Padang Panjang | 2.82 | 5 | P | | Pn | 11 06 30.4 | -1.4 |
| | baz=3.0,SNR=12 | | | | | | | |
| PPI | Padang Panjang | 2.82 | 5 | P | | Pn | 11 06 30.2 | -1.6 |
| MNAI | Manna | 3.00 | 111 | P | | Pn | 11 06 34.1 | -0.2 |
| | baz=2.2,SNR=11 | | | | | | | |
| MNAI | Manna | 3.00 | 111 | P | | Pn | 11 06 33.8 | -0.5 |
| MNAI | Manna | 3.00 | 111 | *e*Pn | | Pn | 11 06 34.3 | 0.0 |
| BKNI | Bangkinang | 3.69 | 14 | P | | Pn | 11 06 43.0 | -0.4 |
| BKNI | Bangkinang | 3.69 | 14 | *e*Pn | | Pn | 11 06 43.0 | -0.8 |
| BKNI | | | | *e*Sn | | Sn | 11 07 23.3 | -2.9 |
| JMBI | JAMBI | 3.86 | 65 | P | | Pn | 11 06 54.5 | +8.4 |
| MNSI | Mandailing Nat | 4.09 | 352 | P | | Pn | 11 06 47.7 | -1.6 |
| MDSI | Maura Dua | 4.20 | 107 | P | | Pn | 11 06 50.9 | +0.1 |
| LWLI | Liwa | 4.27 | 114 | P | | Pn | 11 06 51.5 | -0.3 |
| PMBI | Palembang | 4.64 | 86 | P | | Pn | 11 06 56.0 | -0.8 |
| KASI | Kota Agung | 4.88 | 117 | P | | Pn | 11 07 00.3 | +0.2 |
| | 253nm,0.7s,4μm1.3nm | | | | | | | |
| KLI | Kotabumi | 4.96 | 109 | P | | Pn | 11 07 01.3 | +0.1 |
| GSI | Gunungsitoli | 5.23 | 331 | P | | Pn | 11 07 03.2 | -1.7 |
| GSI | Gunungsitoli | 5.23 | 331 | *e*Pn | | Pn | 11 07 01.1 | -3.8 |
| GSI | | | | *e*Sn | | Sn | 11 07 57.1 | -6.9 |
| PPBI | Pangkal Pinang | 6.09 | 80 | P | | Pn | 11 07 17.0 | +0.2 |
| PSI | Prapat | 6.16 | 349 | Pn | | Pn | 11 07 14.1 | -3.8 |
| | 0.8nm,0.3s,baz=166,slow=19,SNR=2.8 | | | | | | | |
| MYKOM | Kota Tinggi | 6.25 | 36 | *e*Pn | | Pn | 11 07 18.1 | -1.0 |
| CGJI | Cibinong | 6.44 | 121 | P | | Pn | 11 07 19.8 | -1.8 |
| | 126nm,1.1s,0.5nm | | | | | | | |
| IPM | Ipoh | 7.76 | 7 | *e*Pn | | Pn | 11 07 39.6 | -0.2 |
| IPM | | | | *e*Sn | | Sn | 11 09 06.4 | -0.1 |
| CNJI | Cibinong | 8.02 | 120 | P | | Pn | 11 07 48.9 | +5.6 |
| LEM | Lembang | 8.23 | 116 | Pn | | Pn | 11 07 45.0 | -1.4 |
| | 4.2nm,0.3s,baz=323,slow=20,SNR=2.8 | | | | | | | |
| LEM | Lembang | 8.23 | 116 | P | | Pn | 11 07 55.0 | +8.6 |
| KULM | Kulim | 8.53 | 3 | *e*Pn | | Pn | 11 07 47.8 | -2.5 |
| KULM | | | | *e*Sn | | Sn | 11 09 21.6 | -3.8 |
| CISI | Cisompet, Garu | 8.74 | 119 | P | | Pn | 11 07 50.9 | -2.3 |
| | baz=8.0,SNR=11 | | | | | | | |
| CISI | Cisompet, Garu | 8.74 | 119 | P | | Pn | 11 07 50.7 | -2.5 |
| | 240nm,0.6s,3μm | | | | | | | |
| CISI | Cisompet, Garu | 8.74 | 119 | *e*Pn | | Pn | 11 07 50.9 | -2.3 |
| CISI | | | | *e*Sn | | Sn | 11 09 25.7 | -4.9 |
| CMJI | Cimerak | 9.40 | 119 | P | | Pn | 11 08 00.9 | -1.3 |
| | 106nm,0.8s | | | | | | | |
| SBUM | Sibu | 13.35 | 65 | *e*Pn | | Pn | 11 08 59.6 | +3.3 |
| BBKI | Banjar Baru | 14.67 | 91 | P | | P | 11 09 21.6 | +1.4 |
| KKM | Kota Kinabalu | 18.53 | 60 | P | | P | 11 10 02.5 | -0.5 |
| | baz=18,SNR=4.7 | | | | | | | |
| UMPA | Umpang Tak | 19.40 | 356 | P | | Pn | 11 10 18.3 | +4.5 |
| | 2.7nm,1.1s,984nm | | | | | | | |
| KAPI | Kappang | 19.63 | 96 | P | | P | 11 10 13.9 | -1.1 |
| | 0.8nm,0.3s,baz=224,slow=9.3,SNR=6.1 | | | | | | | |
| PBKT | Sadao Pong | 19.74 | 2 | P | | Pn | 11 10 22.7 | +4.9 |
| | 31nm,0.7s | | | | | | | |
| BKSI | Bulukumba | 20.02 | 97 | P | | P | 11 10 17.9 | -1.4 |
| | 64nm,1.3s | | | | | | | |
| MYLDM | Lahad Datu | 20.17 | 65 | *e*P | | Pn | 11 10 23.3 | +0.3 |
| | 64nm,1.3s | | | | | | | |
| LOEI | Loei | 20.69 | 3 | P | | Pn | 11 10 29.2 | +0.3 |
| | 82nm,1.2s,4μm | | | | | | | |
| NONG | Nongkai | 21.42 | 8 | P | | P | 11 10 36.3 | +2.1 |
| | 10nm,2.6s,5μm | | | | | | | |
| CM01 | Chiang Mai Arr | 21.60 | 357 | *e*P | | P | 11 10 34.1 | -2.1 |
| CMAR | Chiang Mai Arr | 21.64 | 357 | P | | P | 11 10 35.0 | -1.6 |
| | 4.4nm,0.9s,baz=186,slow=9.3,SNR=21 | | | | | | | |
| CMAR | | | | LR | | LR | 11 19 29.9 | |
| | comp=Z,492nm,18.2s,baz=180,slow=38 | | | | | | | |
| CHTO | Chiang Mai | 21.99 | 357 | P | | P | 11 10 41.5 | +1.1 |
| | 456nm,1.4s | | | | | | | |
| CHTO | Chiang Mai | 21.99 | 357 | *e*P | | P | 11 10 39.4 | -1.0 |
| | 13nm,1.2s | | | | | | | |
| PALK | Pallekele | 22.05 | 298 | LR | | LR | 11 18 30.7 | |
| | comp=Z,466nm,18.3s,baz=116,slow=35 | | | | | | | |
| CMAI | Chiengmai2 | 23.09 | 357 | P | | P | 11 10 52.5 | +0.2 |
| | 97nm,0.7s | | | | | | | |
| GTOI | Gorontalo | 23.19 | 81 | P | | P | 11 10 50.9 | -2.2 |
| QIZ | Qiongzhong | 24.14 | 23 | P | | P | 11 11 01.5 | -0.6 |
| SLVN | Son La | 24.74 | 8 | *e*P | | P | 11 11 07.5 | -0.2 |
| H08S2 | Diego Garcia H | 27.86 | 260 | T | | T | 11 40 42.0 | |
| | baz=82,slow=75,SNR=530 | | | | | | | |
| H08S3 | Diego Garcia H | 27.86 | 260 | T | | T | 11 40 46.7 | |
| | baz=82,slow=75,SNR=454 | | | | | | | |
| H08S1 | Diego Garcia H | 27.87 | 260 | T | | T | 11 40 46.2 | |
| | baz=82,slow=75,SNR=524 | | | | | | | |
| KMI | Kunming | 28.35 | 5 | P | | P | 11 11 40.8 | +0.5 |
| KMI | | | | pP | | pP | 11 11 55.5 | +5.1 |
| KMI | | | | sP | | sP | 11 12 00.5 | +5.9 |
| KMI | | | | PMZ | | | | |
| | 7.0nm,1.1s | | | | | | | |
| GYA | Guiyang | 30.23 | 12 | *e*P | | P | 11 11 59.0 | +2.1 |
| GYA | | | | PMZ | | | | |
| | 10.0nm,0.8s | | | | | | | |
| KNRA | Kununurra | 30.74 | 115 | P | | P | 11 12 06.6 | +5.2 |
| | baz=30,SNR=6.7 | | | | | | | |
| LSA | Lhasa | 33.91 | 346 | P | | P | 11 12 29.5 | 0.0 |
| LSA | | | | PMZ | | | | |
| | 6.0nm,0.4s | | | | | | | |
| LSA | Lhasa | 33.91 | 346 | *e*P | | P | 11 12 27.1 | -2.4 |
| | 16nm,0.9s | | | | | | | |
| H01W3 | Cape Leeuwin H | 34.02 | 159 | T | | T | 11 48 21.7 | |
| | baz=336,slow=76,SNR=128 | | | | | | | |
| H01W2 | Cape Leeuwin H | 34.04 | 159 | T | | T | 11 48 22.7 | |
| | baz=336,slow=76,SNR=128 | | | | | | | |
| H01W1 | Cape Leeuwin H | 34.04 | 159 | T | | T | 11 48 22.8 | |
| | baz=336,slow=76,SNR=127 | | | | | | | |
| CD2 | Chengdu | 34.17 | 6 | P | | P | 11 12 32.3 | +1.0 |
| CD2 | | | | pP | | pP | 11 12 43.3 | +1.8 |
| CD2 | | | | PP | | PP | 11 13 50.3 | +1.1 |
| CD2 | | | | S | | S | 11 17 57.3 | +1.7 |
| CD2 | | | | sS | | sS | 11 18 16.3 | +4.0 |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | 120nm,5.0s | | | | | | | |
| WRKA | Warakurna | 34.67 | 131 | P | | P | 11 12 43.2 | +7.4 |
| | baz=34,SNR=4.4 | | | | | | | |
| WRA | Warramunga Arr | 37.24 | 119 | P | | P | 11 12 56.5 | -1.3 |
| | 1.4nm,0.4s,baz=303,slow=8.1,SNR=51 | | | | | | | |
| WRAB | Tennant Creek | 37.24 | 119 | *e*P | | P | 11 12 58.5 | +0.7 |
| | 9.3nm,1.1s | | | | | | | |
| XAN | Xi'an | 38.03 | 12 | P | | P | 11 13 03.3 | -1.0 |
| XAN | | | | pP | | pP | 11 13 14.8 | +0.3 |
| XAN | | | | PMZ | | | | |
| | 20nm,0.9s | | | | | | | |
| ASAR | Alice Springs | 38.40 | 125 | P | | P | 11 13 07.9 | +0.3 |
| | 4.0nm,0.9s,baz=298,slow=7.6,SNR=30 | | | | | | | |
| ASAR | | | | PcP | | PcP | 11 15 21.5 | +0.8 |
| | 0.7nm,0.8s,baz=307,slow=3.4,SNR=3.5 | | | | | | | |
| ASAR | | | | LR | | LR | 11 31 10.4 | |
| | comp=Z,484nm,19.2s,baz=308,slow=40 | | | | | | | |
| AS01 | Alice Springs | 38.44 | 125 | *e*P | | P | 11 13 06.5 | -1.3 |
| LZH | Lanzhou | 39.32 | 5 | *e*P | | P | 11 13 20.0 | +4.8 |
| LZH | | | | pP | | pP | 11 13 30.5 | +5.1 |
| LZH | | | | sP | | sP | 11 13 34.8 | +5.2 |
| LZH | | | | PMZ | | | | |
| | 15nm,1.0s | | | | | | | |
| GTA | Gaotai | 42.48 | 360 | *e*P | | P | 11 13 41.3 | +0.1 |
| GTA | | | | pP | | pP | 11 13 53.0 | +1.5 |
| GTA | | | | sP | | sP | 11 13 57.8 | +2.1 |
| GTA | | | | PMZ | | | | |
| | 6.0nm,1.2s | | | | | | | |
| HHC | Hu-ho-hao-te | 45.14 | 12 | *e*P | | P | 11 14 05.5 | +3.0 |
| HHC | | | | S | | S | 11 20 42.8 | +3.0 |
| HHC | | | | PMZ | | | | |
| | 14nm,0.5s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | 85nm,6.1s | | | | | | | |
| HHC | | | | LN | | | | |
| | 320nm,14.8s | | | | | | | |
| HHC | | | | LE | | | | |
| | 560nm,14.8s | | | | | | | |
| HHC | | | | LZ | | | | |
| | 330nm,14.6s | | | | | | | |
| CTA | Charters Tower | 47.94 | 114 | P | | P | 11 14 25.1 | +0.5 |
| | 3.0nm,0.7s,baz=307,slow=15,SNR=4.5 | | | | | | | |
| KSAR | Wonju Array Be | 48.02 | 30 | P | | P | 11 14 22.8 | -2.2 |
| KSH | Kashi | 48.05 | 335 | *e*P | | P | 11 14 24.5 | -0.8 |
| KSH | | | | *e*sP | | sP | 11 14 42.3 | +2.4 |
| KSH | | | | PcS | | PcS | 11 19 49.5 | +0.8 |
| KSH | | | | S | | S | 11 21 16.3 | -5.1 |
| KSH | | | | PMZ | | | | |
| | 140nm,5.0s | | | | | | | |
| KSH | | | | LN | | | | |
| | 280nm,9.2s | | | | | | | |
| KSH | | | | LE | | | | |
| | 160nm,5.4s | | | | | | | |
| KSH | | | | LZ | | | | |
| | 280nm,7.5s | | | | | | | |
| KSRS | Korea Array | 48.05 | 30 | P | | P | 11 14 22.8 | -2.4 |
| | 5.4nm,1.1s,baz=224,slow=8.8,SNR=6.2 | | | | | | | |
| WMQ | Urumqi | 48.21 | 348 | P | | P | 11 14 27.5 | +1.1 |
| WMQ | | | | pP | | pP | 11 14 40.0 | +3.1 |
| WMQ | | | | PP | | PP | 11 16 20.0 | +0.9 |
| WMQ | | | | S | | S | 11 21 23.0 | -0.5 |
| WMQ | | | | PMZ | | | | |
| | 16nm,1.0s | | | | | | | |
| WMQ | | | | PMZ | | | | |
| | 55nm,5.0s | | | | | | | |
| WMQ | | | | LN | | | | |
| | 200nm,16.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | 180nm,15.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | 200nm,15.0s | | | | | | | |
| TKM2 | Tokmak 2 | 51.06 | 337 | *e*P | | P | 11 14 48.8 | +0.5 |
| | 8.7nm,1.0s | | | | | | | |
| SONM | Songino Array | 51.20 | 5 | P | | P | 11 14 49.5 | +0.3 |
| | 3.7nm,0.8s,baz=186,slow=9.0,SNR=26 | | | | | | | |
| CMSA | Cobar Meteorol | 51.20 | 129 | P | | P | 11 14 50.8 | +1.4 |
| | baz=51,SNR=7.7 | | | | | | | |
| SONA1 | Songino Array | 51.21 | 5 | *e*P | | P | 11 14 49.2 | -0.1 |
| ULN | Ulaanbaatar | 51.29 | 6 | *e*P | | P | 11 14 50.3 | +0.3 |
| | 15nm,1.3s | | | | | | | |
| EKS2 | Erkin-Say | 51.58 | 335 | *e*P | | P | 11 14 52.1 | -0.1 |
| | 7.5nm,1.0s | | | | | | | |
| MK01 | Makanchi Array | 52.27 | 345 | *e*P | | P | 11 14 56.8 | -0.3 |
| MKAR | Makanchi Array | 52.29 | 345 | P | | P | 11 14 57.4 | +0.1 |
| | 4.8nm,0.8s,baz=153,slow=8.2,SNR=21 | | | | | | | |
| MKAR | Makanchi Array | 52.29 | 345 | *e*P | | P | 11 14 58.1 | +0.8 |
| USRK | Ussuriysk Ar. | 55.22 | 28 | P | | P | 11 15 17.8 | -0.9 |
| | 7.3nm,0.8s,baz=228,slow=5.9,SNR=10 | | | | | | | |
| GEYT | Ailibeck | 56.52 | 321 | P | | P | 11 15 28.8 | +0.6 |
| | 1.3nm,0.3s,baz=94,slow=8.7,SNR=3.1 | | | | | | | |
| KURBB | Kurchatov Arra | 56.81 | 344 | P | | P | 11 15 29.8 | -0.2 |
| | 0.7nm,0.3s,baz=163,slow=6.7,SNR=8.5 | | | | | | | |
| KURK | Kurchatov | 56.87 | 344 | *e*P | | P | 11 15 29.9 | -0.4 |
| ZAA0 | Zalesovo Array | 58.45 | 349 | *e*P | | P | 11 15 40.3 | -1.1 |
| ZALV | Zalesovo Beam | 58.45 | 349 | P | | P | 11 15 40.0 | -1.3 |
| | 7.3nm,0.8s,baz=160,slow=4.7,SNR=14 | | | | | | | |
| BVAR | Borovoye Array | 61.43 | 340 | P | | P | 11 16 00.4 | -1.5 |
| | 0.7nm,0.6s,baz=152,slow=6.7,SNR=4.0 | | | | | | | |
| ABKAR | Akbulak array | 62.83 | 332 | *e*P | | P | 11 16 10.4 | -0.9 |
| | 4.7nm,0.6s | | | | | | | |
| AKTO | Aktyubinsk | 64.55 | 332 | P | | P | 11 16 22.0 | -0.7 |
| | 1.4nm,1.0s,baz=108,slow=16,SNR=3.0 | | | | | | | |
| KBZ | Khabaz | 69.36 | 319 | P | | P | 11 16 53.3 | -0.1 |
| | 1.2nm,0.6s,baz=145,slow=5.0,SNR=4.0 | | | | | | | |
| MATP | Matopo | 71.66 | 250 | P | | P | 11 17 09.2 | +1.1 |
| | 3.8nm,0.8s,baz=98,slow=8.9,SNR=4.3 | | | | | | | |
| BRTR | Keskin Array B | 74.29 | 313 | P | | P | 11 17 22.7 | -0.6 |
| | 1.2nm,0.8s,baz=134,slow=5.3,SNR=5.7 | | | | | | | |
| BKZ | Black Stump Fm | 77.35 | 129 | *e*P | | P | 11 17 42.0 | +1.2 |
| | 12nm,0.8s | | | | | | | |
| BUR04 | Bucovina Ar. S | 82.31 | 319 | *e*P | | P | 11 18 08.7 | +1.2 |
| STHS | Stebnicka Huta | 85.27 | 320 | *e*P | | P | 11 18 23.5 | +1.0 |
| STHS | | | | *e* | | | 11 18 31.5 | |
| FINES | FINESS Array B | 85.31 | 332 | P | | P | 11 18 21.2 | -1.1 |
| | 1.5nm,0.9s,baz=125,slow=7.0,SNR=4.0 | | | | | | | |
| ARCES | ARCESS Array B | 87.72 | 340 | P | | P | 11 18 33.7 | -0.3 |
| | 2.1nm,1.0s,baz=94,slow=5.7,SNR=2.9 | | | | | | | |
| GERES | GERESS Array B | 90.10 | 319 | P | | P | 11 18 46.5 | +0.7 |
| | 0.2nm,0.2s,baz=101,slow=5.1,SNR=3.2 | | | | | | | |
| H09N1 | TRISTAN DA CUNI | 05.72 | 230 | T | | T | 13 18 53.0 | |
| | SNR=13 | | | | | | | |
| TXAR | Lajitas Array | 145.62 | 39 | PKPbc | | PKPab | 11 25 25.5 | +0.2 |
| | 5.2nm,0.8s,baz=294,slow=1.4,SNR=50 | | | | | | | |
| MIAR | Mount Ida | 146.38 | 21 | *e*PKPbc | | PKPbc | 11 25 26.9 | -0.1 |
| JCT | Junction City | 147.02 | 33 | *e*PKPbc | | PKPbc | 11 25 29.3 | +0.2 |

*DDA **26** 11:10:36.0,40˙27N×29˙12E,h2km,Md2.8*
*ISK **26** 11:10:35.6,40˙27N×29˙14E,h4km,MD2.9*
*ISCJB **26** 11:10:36.3±0.3,40˙28N±0˙02×29˙14E±0˙03,h3km±5km, Error ellipse: s-maj=3.9km s-min=3.4km az=168.4*
*CSEM **26** 11:10:36.4±0.1,40˙28N×29˙14E,h5km,MD2.8,Error ellipse: s-maj=2.3km s-min=2.1km az=123.0*

**ISC 26 11:10:36.6±0.9,40˙27N±0˙02×29˙14E±0˙02,h3km±8km, n53,σ0§42/71,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| IGD | Bursa | 0.05 | 95 | P | | Pg | 11 10 37.4 | -0.3 |
| IGD | | | | S | | Sg | 11 10 38.5 | +0.2 |
| ULDT | Uludag | 0.13 | 181 | *i* P | | Pg | 11 10 39.1 | 0.0 |
| ULDT | | | | *i* S | | Sg | 11 10 40.7 | -0.2 |
| ULDT | Uludag | 0.13 | 181 | P | | Pg | 11 10 39.1 | 0.0 |
| ULDT | | | | S | | Sg | 11 10 40.7 | -0.2 |
| GEMT | Gemlik | 0.17 | 13 | *e*PG | | Pg | 11 10 39.7 | -0.2 |
| GEMT | | | | *e*SG | | Sg | 11 10 42.7 | +0.5 |
| GEMT | Gemlik | 0.17 | 13 | *e*Pg | | Pg | 11 10 39.7 | -0.2 |
| GEMT | | | | *e*Sg | | Sg | 11 10 42.7 | +0.5 |
| MDNY | Mudanya-Bursa | 0.22 | 297 | *e*PG | | Pg | 11 10 40.3 | -0.6 |
| MDNY | | | | *e*SG | | Sg | 11 10 44.4 | +0.7 |
| MDNY | Mudanya-Bursa | 0.22 | 297 | *e*Pg | | Pg | 11 10 40.3 | -0.6 |
| MDNY | | | | *e*Sg | | Sg | 11 10 44.4 | +0.7 |
| IZI | Iznik | 0.26 | 75 | *e*PG | | Pg | 11 10 41.4 | -0.3 |
| IZI | Iznik | 0.26 | 75 | *e*Pg | | Pg | 11 10 41.4 | -0.3 |
| ARMT | Armutlu | 0.36 | 324 | *e*PG | | Pg | 11 10 43.3 | -0.3 |
| ARMT | | | | *e*SG | | Sg | 11 10 49.0 | +0.6 |
| ARMT | Armutlu | 0.36 | 324 | *e*Pg | | Pg | 11 10 43.3 | -0.3 |
| ARMT | | | | *e*Sg | | Sg | 11 10 49.0 | +0.6 |
| ADVT | Abdulvahap | 0.49 | 70 | *e*PG | | Pg | 11 10 45.7 | -0.2 |
| ADVT | | | | *e*SG | | Sg | 11 10 52.9 | +0.7 |
| ADVT | Abdulvahap | 0.49 | 70 | *e*Pg | | Pg | 11 10 45.7 | -0.2 |
| ADVT | | | | *e*Sg | | Sg | 11 10 52.9 | +0.7 |
| CAVI | Cavuskoy | 0.54 | 97 | *e*PG | | Pg | 11 10 46.6 | -0.4 |
| CAVI | Cavuskoy | 0.54 | 97 | *e*Pg | | Pg | 11 10 46.6 | -0.4 |
| BUY | Buyukada | 0.58 | 358 | *i* P | | Pg | 11 10 47.7 | -0.1 |
| BUY | | | | *i* S | | Sg | 11 10 55.6 | +0.2 |
| BUY | Buyukada | 0.58 | 358 | P | | Pg | 11 10 47.7 | -0.1 |
| BUY | | | | S | | Sg | 11 10 55.6 | +0.2 |
| HRT | Hereke | 0.68 | 36 | *e*PG | | Pg | 11 10 49.3 | -0.4 |
| HRT | | | | *e*SG | | Sg | 11 10 59.4 | +0.8 |
| HRT | Hereke | 0.68 | 36 | *e*Pg | | Pg | 11 10 49.3 | -0.4 |
| DST | Dursunbey | 0.78 | 211 | *e*PG | | Pg | 11 10 51.2 | -0.2 |
| DST | Dursunbey | 0.78 | 211 | *e*Pg | | Pg | 11 10 51.2 | -0.2 |
| ISK | Istanbul-Kandi | 0.80 | 356 | *e*PG | | Pg | 11 10 51.5 | -0.4 |
| ISK | Istanbul-Kandi | 0.80 | 356 | *e*Pg | | Pg | 11 10 51.5 | -0.4 |
| DURS | Dursunbey | 0.84 | 218 | *i* P | | Pb | 11 10 54.4 | +0.5 |
| DURS | Dursunbey | 0.84 | 218 | P | | Pb | 11 10 54.4 | +0.5 |
| DURS | | | | S | | Sn | 11 11 07.9 | -0.4 |
| TVSB | Tavsanli | 0.85 | 163 | *e*PG | | Pg | 11 10 52.6 | -0.4 |
| TVSB | Tavsanli | 0.85 | 163 | *e*Pg | | Pg | 11 10 52.6 | -0.4 |
| GPA | Golpazari | 0.90 | 88 | *e*PG | | Pb | 11 10 54.3 | -0.5 |
| GPA | Golpazari | 0.90 | 88 | *e*Pg | | Pb | 11 10 54.3 | -0.5 |
| BGKT | Bogazkoy | 0.95 | 343 | *e*PG | | Pg | 11 10 54.4 | -0.5 |
| BGKT | Bogazkoy | 0.95 | 343 | *e*Pg | | Pg | 11 10 54.4 | -0.5 |
| SILT | Sile | 0.96 | 23 | *e*PG | | Pg | 11 10 54.6 | -0.5 |
| SILT | Sile | 0.96 | 23 | *e*Pg | | Pg | 11 10 54.6 | -0.5 |
| EDC | Edincik | 0.98 | 275 | *e*PG | | Pg | 11 10 55.0 | -0.4 |
| EDC | Edincik | 0.98 | 275 | *e*Pg | | Pg | 11 10 55.0 | -0.4 |
| KLYT | Kilyos | 0.99 | 356 | *e*PG | | Pg | 11 10 55.1 | -0.4 |
| KLYT | Kilyos | 0.99 | 356 | *e*Pg | | Pg | 11 10 55.1 | -0.4 |
| GULT | Gulveren | 1.06 | 81 | *e*PG | | Pg | 11 10 56.7 | -0.3 |
| GULT | Gulveren | 1.06 | 81 | *e*Pg | | Pg | 11 10 56.7 | -0.3 |
| BORA | Eskisehir | 1.08 | 111 | *i* P | | Pg | 11 10 57.5 | +0.2 |
| BORA | Eskisehir | 1.08 | 111 | P | | Pg | 11 10 57.5 | +0.2 |
| BORA | | | | S | | Sn | 11 11 14.9 | +0.7 |
| BALB | Balikesir | 1.15 | 237 | *e*PN | | Pg | 11 10 58.2 | -0.5 |
| BALB | Balikesir | 1.15 | 237 | *e*Pn | | Pg | 11 10 58.2 | -0.5 |
| MRMT | Marmara Adasi | 1.23 | 286 | *e*PN | | Pg | 11 10 59.8 | -0.3 |
| MRMT | Marmara Adasi | 1.23 | 286 | *e*Pn | | Pg | 11 10 59.8 | -0.3 |
| DEMI | Demirci | 1.27 | 195 | *i* P | | Pg | 11 11 00.8 | -0.1 |
| DEMI | | | | *i* S | | Sn | 11 11 18.7 | -0.1 |
| DEMI | Demirci | 1.27 | 195 | P | | Pg | 11 11 00.8 | -0.1 |
| DEMI | | | | S | | Sn | 11 11 18.7 | -0.1 |
| KULA | Kula-Manisa | 1.79 | 192 | *e*PN | | Pn | 11 11 07.9 | -0.6 |
| KULA | Kula-Manisa | 1.79 | 192 | *e*Pn | | Pn | 11 11 07.9 | -0.6 |
| LPK | Lapseki | 1.82 | 274 | *e*PN | | Pn | 11 11 08.7 | -0.1 |
| LPK | Lapseki | 1.82 | 274 | *e*Pn | | Pn | 11 11 08.7 | -0.1 |
| GELI | Tayfur-Gelibol | 2.04 | 274 | *e*PN | | Pn | 11 11 12.2 | +0.4 |
| GELI | Tayfur-Gelibol | 2.04 | 274 | *e*Pn | | Pn | 11 11 12.2 | +0.4 |

*IDC **26** 11:17:38.9±3.6,3˙01S×99˙97E,h0km,mb3.7/4,mb1 3.8/4, mb1mx3.6/34,mbtmp3.8/4,Error ellipse: s-maj=135.6km s-min=59.1km az=65.0*
*DJA **26** 11:17:44.0±5.4,3˙S±47˙×10˙0E±1˙0,h30km±6km,M3.8/5, MLv3.8/5*

**ISC 26 11:17:43.8±1.5,2˙9S±0˙1×99˙8E±0˙1,h27km,n19, σ1§45/13,mb3.8/4,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PPSI | Pulau Pagai | 0.23 | 52 | P | | Pn | 11 17 51.8 | +0.4 |
| SISI | Saibi | 1.73 | 335 | P | | Pb | 11 18 15.0 | +0.1 |
| PDSI | Padang | 2.08 | 18 | P | | Pn | 11 18 17.1 | +0.2 |
| PPI | Padang Panjang | 2.50 | 13 | P | | Pn | 11 18 24.0 | +1.4 |
| SDSI | Sungai Dareh | 2.53 | 39 | P | | Pn | 11 18 22.5 | -0.6 |
| KSI | Kapahiang | 2.86 | 105 | P | | Pb | 11 18 35.8 | +1.7 |
| MDSI | Maura Dua | 4.62 | 110 | P | | Pn | 11 18 54.1 | +2.3 |
| LWLI | Liwa | 4.71 | 117 | P | | Pb | 11 19 02.8 | -3.0 |
| CMAR | Chiang Mai Arr | 21.25 | 358 | P | | P | 11 22 28.6 | +0.6 |
| | 0.5nm,0.4s,baz=185,slow=10,SNR=8.8 | | | | | | | |
| H08S2 | Diego Garcia H | 27.62 | 259 | T | | T | 11 52 39.1 | |
| | baz=82,slow=75,SNR=313 | | | | | | | |
| H08S3 | Diego Garcia H | 27.62 | 259 | T | | T | 11 52 37.7 | |
| | baz=82,slow=75,SNR=342 | | | | | | | |
| H08S1 | Diego Carcia H | 27.63 | 259 | T | | T | 11 52 40.7 | |
| | baz=82,slow=75,SNR=485 | | | | | | | |
| H01W3 | Cape Leeuwin H | 34.48 | 159 | T | | T | 12 00 18.2 | |
| | baz=335,slow=76,SNR=45 | | | | | | | |
| H01W2 | Cape Leeuwin H | 34.50 | 159 | T | | T | 12 00 19.3 | |
| | baz=335,slow=76,SNR=11 | | | | | | | |
| H01W1 | Cape Leeuwin H | 34.50 | 159 | T | | T | 12 00 19.4 | |
| | baz=335,slow=76,SNR=29 | | | | | | | |
| SONM | Songino Array | 50.86 | 6 | P | | P | 11 26 41.9 | -0.4 |
| | 0.6nm,0.7s,baz=193,slow=6.2,SNR=5.2 | | | | | | | |
| MKAR | Makanchi Array | 51.85 | 345 | P | | P | 11 26 49.6 | 0.0 |
| | 1.0nm,0.7s,baz=152,slow=8.3,SNR=6.6 | | | | | | | |
| ZALV | Zalesovo Beam | 58.02 | 350 | P | | P | 11 27 34.0 | -0.1 |
| | 1.0nm,0.5s,baz=160,slow=4.6,SNR=2.8 | | | | | | | |
| TXAR | Lajitas Array | 145.52 | 38 | PKPbc | | PKPdf | 11 37 19.4 | -1.0 |
| | 1.1nm,0.7s,baz=276,slow=0.6,SNR=13 | | | | | | | |

*BJI **26** 11:19:39.2,7˙86S×128˙94E,h198km,mb4.6/30,mB4.9/15*
*DJA **26** 11:19:41.9±0.7,7˙S±4˙×12˙9E±˙,h218km±17km,M4.8/10, mb4.9/5,mB5.4/3,MLv4.8/10,Mw(mB)4.9/3*
*IDC **26** 11:19:41.9±1.6,7˙43S×128˙37E,h165km±14km,mb4.1/14, mb1 4.3/18,mb1mx4.1/32,mbtmp4.7/18,Error ellipse: s-maj=13.1km s-min=10.1km az=90.0*
*ISCJB **26** 11:19:43.0±0.2,7˙58S±0˙03×128˙49E±0˙04,h200km, mb4.4/30,Error ellipse: s-maj=5.1km s-min=3.9km az=153.4*
*NEIC **26** 11:19:44.5±0.7,7˙58S×128˙40E,h192km±6km,mb4.7/23, Error ellipse: s-maj=9.2km s-min=6.0km az=49.0*

**ISC 26 11:19:45.3±0.4,7˙61S±0˙05×128˙34E±0˙05,h200km,n101, σ1§19/105,mb4.5/29,1D,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SAUI | Saumlaki | 2.96 | 97 | P | | Pn | 11 20 29.7 | -4.7 |
| SAUI | Saumlaki | 2.96 | 97 | *e*Pn | | Pn | 11 20 34.7 | +0.3 |
| BNDI | Bandanaira | 3.44 | 27 | P | | Pn | 11 20 34.8 | -5.5 |
| AAI | Ambon | 3.90 | 358 | P | | Pn | 11 20 41.5 | -4.4 |
| MSAI | Masohi | 4.28 | 8 | P | | Pn | 11 20 46.3 | -4.3 |
| NLAI | Namlea | 4.52 | 344 | P | | Pn | 11 20 51.9 | -1.7 |
| SOEI | Soe | 4.55 | 242 | P | | Pn | 11 20 53.3 | -0.9 |
| SOEI | Soe | 4.55 | 242 | *e*Pn | | Pn | 11 20 53.2 | -1.0 |
| SOEI | | | | *e*Sn | | Sn | 11 21 47.3 | -1.1 |
| BATI | Baumata | 5.29 | 241 | P | | Pn | 11 21 02.6 | -0.9 |
| | 221nm,0.3s,baz=91,slow=3.6,SNR=109 | | | | | | | |
| BATI | | | | S | | Sn | 11 22 02.1 | -3.1 |
| | 90nm,0.3s,baz=9.8,slow=7.5,SNR=9.6 | | | | | | | |
| BATI | Baumata | 5.29 | 241 | P | | Pn | 11 21 02.8 | -0.7 |
| | 447nm,0.5s,6μm2.0nm | | | | | | | |
| MTN | Manton Dam | 5.88 | 152 | *e*Pn | | Pn | 11 21 08.3 | -2.7 |
| SANI | Sanana | 6.00 | 337 | P | | Pn | 11 21 11.3 | -1.4 |
| FAKI | Fak Fak | 6.07 | 40 | P | | Pn | 11 21 05.8 | -7.8 |
| | 101nm,0.6s,2μm0.7nm | | | | | | | |
| FAKI | Fak Fak | 6.07 | 40 | *e*Pn | | Pn | 11 21 06.2 | -7.4 |
| FAKI | | | | *e*Sn | | Sn | 11 22 11.3 | -12 |
| BBSI | Bau Bau | 6.11 | 290 | P | | Pn | 11 21 14.0 | 0.0 |
| MMRI | Maumere | 6.13 | 260 | P | | Pn | 11 21 13.7 | -0.6 |
| MMRI | Maumere | 6.13 | 260 | *e*Pn | | Pn | 11 21 13.7 | -0.6 |
| MMRI | | | | *e*Sn | | Sn | 11 22 24.8 | +0.1 |
| SIJI | Sorong | 7.31 | 24 | P | | Pn | 11 21 23.7 | -5.9 |
| | 7.1nm,0.3s,baz=182,slow=22,SNR=50 | | | | | | | |
| SIJI | | | | S | | Sn | 11 22 40.8 | -12 |
| | 5.6nm,0.3s,baz=273,slow=23,SNR=10 | | | | | | | |
| LUWI | Luwuk | 8.57 | 319 | *e*Pn | | Pn | 11 21 48.3 | +2.2 |
| WRAB | Tennant Creek | 13.56 | 155 | *e*Pn | | Pn | 11 22 45.5 | -4.4 |
| WRAB | | | | *e*S | | S | 11 25 12.0 | -9.1 |
| WRA | Warramunga Arr | 13.56 | 155 | P | | Pn | 11 22 45.7 | -4.2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| XAN | | | | | PMZ | | | | | |
| | 27nm,0.9s | | | | | | | | | |
| **BJT** | **Baijiatuau** | **48.71** | **348** | *e*P | | **P** | | **11 28 08.4** | **-1.1** |
| | 8.6nm,0.6s | | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.64** | **344** | *e*P | | P | | 11 28 27.8 | +3.6 |
| HHC | | | | S | | **S** | | **11 35 27.3** | **+3.8** |
| HHC | | | | PMZ | | | | | | |
| | 20nm,0.6s | | | | | | | | | |
| HHC | | | | PMZ | | | | | | |
| | 240nm,7.4s | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.68** | **3** | P | | **P** | | **11 28 30.3** | **-1.4** |
| | 2.2nm,0.5s,baz=181,slow=7.7,SNR=6.9 | | | | | | | | | |
| **OXZ** | **Oxford** | **52.19** | **140** | *e*P | | P | | 11 28 40.3 | +4.7 |
| | 79nm,1.8s | | | | | | | | | |
| **ODAN** | **Odare** | **52.43** | **312** | *e*P | | **P** | | **11 28 37.6** | **-0.3** |
| | 14nm,0.4s | | | | | | | | | |
| **TAPN** | **Taplejung** | **52.48** | **313** | *e*P | | **P** | | **11 28 37.8** | **-0.6** |
| | 14nm,0.4s | | | | | | | | | |
| **RAMN** | **Ramite** | **53.06** | **312** | *e*P | | **P** | | **11 28 42.5** | **-0.1** |
| | 57nm,0.6s | | | | | | | | | |
| **GUN** | **Gumba** | **54.13** | **313** | *e*P | | **P** | | **11 28 49.9** | **-0.5** |
| | 46nm,0.6s | | | | | | | | | |
| **PKI** | **Pulchoki** | **54.29** | **312** | *e*P | | **P** | | **11 28 50.8** | **-0.7** |
| | 8.0nm,0.3s | | | | | | | | | |
| **PKIN** | **Phulchoki** | **54.30** | **312** | *e*P | | **P** | | **11 28 51.3** | **-0.3** |
| | 5.3nm,0.3s | | | | | | | | | |
| **KKN** | **Kakani** | **54.51** | **312** | *e*P | | **P** | | **11 28 52.3** | **-0.7** |
| **DMN** | **Daman** | **54.53** | **312** | *e*P | | **P** | | **11 28 52.7** | **-0.5** |
| | 13nm,0.5s | | | | | | | | | |
| **GKN** | **Gorkha** | **55.10** | **312** | *e*P | | **P** | | **11 28 56.7** | **-0.4** |
| | 51nm,0.5s | | | | | | | | | |
| **KOLN** | **Koldanda** | **55.74** | **311** | *e*P | | **P** | | **11 29 01.5** | **-0.3** |
| | 44nm,0.7s | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **58.36** | **343** | *e*P | | **P** | | **11 29 19.4** | **-0.2** |
| | 14nm,1.1s | | | | | | | | | |
| **SONM** | **Songino Array** | **58.52** | **343** | P | | **P** | | **11 29 19.7** | **-1.0** |
| | 4.9nm,0.8s,baz=164,slow=7.3,SNR=22 | | | | | | | | | |
| **SONA1** | **Songino Array** | **58.53** | **343** | *e*P | | **P** | | **11 29 20.4** | **-0.4** |
| **WMQ** | **Urumqi** | **63.02** | **328** | P | | **P** | | **11 29 51.5** | **+0.3** |
| WMQ | | | | PMZ | | | | | | |
| | 16nm,1.0s | | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **65.43** | **19** | P | | **P** | | **11 30 06.0** | **-0.4** |
| | 17nm,0.6s,baz=182,slow=4.5,SNR=33 | | | | | | | | | |
| **KSH** | **Kashi** | **67.37** | **318** | P | | **P** | | **11 30 20.0** | **+0.7** |
| KSH | | | | *ep*P | | **pP** | | **11 31 08.3** | **+2.2** |
| KSH | | | | S | | **S** | | **11 38 56.5** | **-2.3** |
| KSH | | | | PMZ | | | | | | |
| | 11nm,0.9s | | | | | | | | | |
| KSH | | | | PMZ | | | | | | |
| | 87nm,4.7s | | | | | | | | | |
| KSH | | | | LN | | | | | | |
| | 130nm,5.7s | | | | | | | | | |
| KSH | | | | LE | | | | | | |
| | 140nm,6.8s | | | | | | | | | |
| KSH | | | | LZ | | | | | | |
| | 210nm,6.9s | | | | | | | | | |
| **MK01** | **Makanchi Array** | **67.83** | **328** | *e*P | | **P** | | **11 30 21.8** | **-0.1** |
| **MKAR** | **Makanchi Array** | **67.85** | **328** | P | | **P** | | **11 30 22.0** | **0.0** |
| | 4.3nm,0.3s,baz=123,slow=7.9,SNR=42 | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.85** | **328** | *e*P | | **P** | | **11 30 22.1** | **+0.2** |
| **MAKZ** | **Makanchi** | **68.02** | **328** | *e*P | | **P** | | **11 30 23.2** | **+0.2** |
| **TKM2** | **Tokmak 2** | **69.42** | **321** | *e*P | | **P** | | **11 30 32.6** | **+0.6** |
| | 7.2nm,0.8s | | | | | | | | | |
| **AAK** | **Ala-Archa** | **69.96** | **321** | *e*P | | **P** | | **11 30 36.2** | **+1.0** |
| | 55nm,0.8s | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **70.42** | **320** | *e*P | | **P** | | **11 30 39.1** | **+1.1** |
| | 8.6nm,0.8s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.42** | **335** | P | | **P** | | **11 30 41.6** | **-1.9** |
| | 9.8nm,0.6s,baz=132,slow=5.4,SNR=25 | | | | | | | | | |
| **VNDA** | **Vanda** | **72.05** | **173** | P | | **P** | | **11 30 48.5** | **+1.5** |
| | 1.1nm,0.5s,baz=316,slow=6.7,SNR=9.8 | | | | | | | | | |
| **KKAR** | **Karatay Array** | **72.72** | **320** | *e*P | | **P** | | **11 30 52.5** | **+0.8** |
| | 2.3nm,0.4s | | | | | | | | | |
| **MAW** | **Mawson** | **73.78** | **201** | P | | **P** | | **11 30 58.6** | **+1.3** |
| | 1.3nm,0.5s,baz=71,slow=3.7,SNR=9.9 | | | | | | | | | |
| **IDAH** | **Dahanechah** | **76.37** | **306** | *e*P | | **P** | | **11 31 14.4** | **+1.3** |
| **IMON** | **Monand** | **76.67** | **307** | *e*P | | **P** | | **11 31 15.4** | **+0.6** |
| **BRVK** | **Borovoye** | **77.78** | **328** | *e*P | | **P** | | **11 31 20.1** | **-0.1** |
| | 17nm,1.1s | | | | | | | | | |
| **ABKAR** | **Akbulak array** | **81.97** | **322** | *e*P | | **P** | | **11 31 42.5** | **-0.2** |
| | 2.1nm,0.5s | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **82.37** | **180** | *e*P | | **P** | | **11 31 46.2** | **+1.5** |
| | 4.5nm,0.8s | | | | | | | | | |
| **SYO** | **Syowa Base** | **82.50** | **201** | ⇓*e*P | | **P** | | **11 31 46.0** | **+0.9** |
| **RAYN** | **Ar Rayn** | **86.49** | **294** | *e*P | | **P** | | **11 32 06.4** | **+0.2** |
| | 3.7nm,0.8s | | | | | | | | | |
| **RND** | **Reindeer** | **93.54** | **27** | *e*P | | **P** | | **11 32 36.6** | **-1.6** |
| **ILAR** | **Eielson Array** | **94.60** | **25** | P | | **P** | | **11 32 40.7** | **-2.3** |
| | 0.6nm,0.7s,baz=238,slow=5.4,SNR=6.7 | | | | | | | | | |
| **PAX** | **Paxson** | **94.99** | **27** | *e*P | | **P** | | **11 32 44.0** | **-1.0** |
| | 2.3nm,0.5s | | | | | | | | | |
| **LSZ** | **Lusaka** | **97.71** | **253** | P | | Pdif | | 11 32 58.3 | 0.0 |
| | 2.4nm,0.5s,baz=130,slow=2.9,SNR=4.7 | | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **101.58** | **340** | P | | **Pdif** | | **11 33 13.6** | **-0.6** |
| | 1.2nm,0.8s,baz=82,slow=6.5,SNR=5.3 | | | | | | | | | |
| ARCES | | | | PKiKP | | **PKiKP** | | **11 37 37.8** | **+1.0** |
| | 1.5nm,0.7s,baz=24,slow=3.3,SNR=3.9 | | | | | | | | | |
| **FINES** | **FINESS Array B** | **102.51** | **331** | PKiKP | | **PKiKP** | | **11 37 38.8** | **+0.1** |
| | 1.2nm,0.7s,baz=151,slow=3.2,SNR=3.7 | | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **109.02** | **26** | PKiKP | | **PKiKP** | | **11 37 50.8** | **+0.1** |
| | 1.0nm,0.6s,baz=301,slow=1.9,SNR=5.0 | | | | | | | | | |
| **GERES** | **GERESS Array B** | **111.83** | **320** | PKiKP | | **PKiKP** | | **11 37 56.8** | **+0.2** |
| | 1.0nm,0.7s,baz=48,slow=2.0,SNR=4.9 | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **111.84** | **320** | *e*PKPdf | | **PKiKP** | | **11 37 57.0** | **+0.5** |
| **TXAR** | **Lajitas Array** | **126.65** | **59** | PKP | | **PKPdf** | | **11 38 25.4** | **0.0** |
| | 0.3nm,0.4s,baz=192,slow=2.7,SNR=6.4 | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **127.31** | **281** | PKP | | **PKPdf** | | **11 38 27.4** | **+0.4** |
| | 2.4nm,0.7s,baz=63,slow=2.0,SNR=16 | | | | | | | | | |
| **SCHQ** | **Schefferville** | **131.37** | **12** | PKP | | **PKPdf** | | **11 38 34.8** | **+1.1** |
| | 2.6nm,0.5s,baz=263,slow=13,SNR=5.9 | | | | | | | | | |
| **DBIC** | **Dimbokro** | **133.57** | **272** | PKP | | **PKPdf** | | **11 38 40.0** | **+1.0** |
| | 2.3nm,0.5s,baz=299,slow=2.5,SNR=5.1 | | | | | | | | | |
| **CPUP** | **Villa Florida** | **145.81** | **171** | PKPbc | | **PKPab** | | **11 39 03.5** | **+1.2** |
| | 4.0nm,0.8s,baz=219,slow=4.0,SNR=8.3 | | | | | | | | | |
| **LPAZ** | **La Paz** | **151.19** | **146** | PKPbc | | **PKPbc** | | **11 39 17.1** | **+0.5** |
| | 2.9nm,0.4s,baz=54,slow=1.6,SNR=14 | | | | | | | | | |

*BJI* **26** *11:25:09.8, 3.˚31S×100.˚04E, h10km, mb4.9/42, mB5.3/24, Ms4.8/13, Ms7 4.4/12*

*IDC* **26** *11:25:14.0±1.1, 2.˚73S×99.˚75E, h0km, mb4.6/11, mb1 4.7/12, mb1mx4.3/39, mbtmp4.6/12, ML3.8/2, Error ellipse: s-maj=37.3km s-min=16.4km az=52.0*

*KLM* **26** *11:25:17.0, 2.˚76S×99.˚55E, h39km, mb4.7, ML4.8, MS5.6*

*ISCJB* **26** *11:25:16.6±0.9, 2.˚70S±0.˚04×99.˚84E±0.˚05, h25km±6km, mb4.7/31, Error ellipse: s-maj=8.8km s-min=4.7km az=150.9*

*NEIC* **26** *11:25:17.9±0.4, 2.˚72S×99.˚82E, mb4.7/14, Error ellipse: s-maj=9.6km s-min=4.7km az=54.0*

*DJA* **26** *11:25:17.5±1.0, 3.˚3S×7.˚1×10.˚0E±1.˚0, h17km±5km, M4.7/9, mb5.0/1, MLv4.6/9*

*MOS* **26** *11:25:18.6±1.1, 2.˚47S×100.˚07E, h32km, mb5.0/13, Error ellipse: s-maj=15.0km s-min=7.7km az=107.5*

**ISC 26 11:25:17.4±0.5, 2.˚74S±0.˚05×99.˚81E±0.˚06, h20km±2km, h20km:pP-P, n133, σ1s31/158, mb4.9/31, 9C-9D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.20** | **97** | P | | **Pb** | **11 25 23.7** | **+0.8** |
| **SISI** | **Saibi** | **1.57** | **333** | P | | **Pn** | **11 25 43.8** | **-0.5** |
| **PPI** | **Padang Panjang** | **2.34** | **15** | P | | **Pn** | **11 25 54.9** | **+0.1** |
| **SDSI** | **Sungai Dareh** | **2.42** | **42** | P | | **Pn** | **11 25 56.3** | **+0.5** |
| **KSI** | **Kapahiang** | **2.92** | **108** | P | | **Pn** | **11 26 03.3** | **+0.4** |
| **BKNI** | **Bangkinang** | **3.28** | **22** | P | | **Pn** | **11 26 08.6** | **+0.8** |
| **BKNI** | **Bangkinang** | **3.28** | **22** | *e*Pn | | **Pn** | **11 26 09.2** | **+1.5** |
| BKNI | | | | *e*Sn | | **Sn** | **11 26 43.0** | **-3.2** |
| **MNSI** | **Mandailing Nat** | **3.52** | **356** | P | | **Pn** | **11 26 10.0** | **-1.0** |
| **MNAI** | **Manna** | **3.53** | **117** | P | | **Pn** | **11 26 11.2** | **0.0** |
| **MNAI** | **Manna** | **3.53** | **117** | *e*Pn | | **Pn** | **11 26 11.9** | **+0.8** |
| **GSI** | **Gunungsitoli** | **4.59** | **331** | P | | **Pn** | **11 26 24.8** | **-1.0** |
| **GSI** | **Gunungsitoli** | **4.59** | **331** | *e*Pn | | **Pn** | **11 26 24.8** | **-1.0** |
| GSI | | | | *e*Sn | | **Sn** | **11 27 17.7** | **-0.9** |
| **MDSI** | **Maura Dua** | **4.70** | **112** | P | | **Pn** | **11 26 28.8** | **+1.6** |
| **LWLI** | **Liwa** | **4.81** | **118** | P | | **Pn** | **11 26 28.4** | **-0.5** |
| **KASI** | **Kota Agung** | **5.43** | **121** | P | | **Pn** | **11 26 37.6** | **+0.3** |
| **PSI** | **Prapat** | **5.57** | **351** | Pn | | **Pn** | **11 26 36.9** | **-2.5** |
| | 1.1nm,0.3s,baz=167,slow=14,SNR=2.9 | | | | | | | |
| **PSI** | **Prapat** | **5.57** | **351** | P | | **Pn** | **11 26 36.9** | **-2.5** |
| PSI | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| **PSI** | **Prapat** | **5.57** | **351** | *e*Pn | | **Pn** | **11 26 38.8** | **-0.5** |
| **KGM** | **Kluang** | **5.88** | **37** | ⇓P | | **Pn** | **11 26 44.3** | **+0.8** |
| **MYKOM** | **Kota Tinggi** | **6.05** | **42** | ⇑P | | **Pn** | **11 26 46.5** | **+0.8** |
| **MYKOM** | **Kota Tinggi** | **6.05** | **42** | *e*Pn | | **Pn** | **11 26 45.8** | **0.0** |
| **FRIM** | **Kepong** | **6.21** | **17** | ⇑P | | **Pn** | **11 26 48.5** | **+0.5** |
| **IPM** | **Ipoh** | **7.27** | **10** | ⇓P | | **Pn** | **11 27 03.5** | **+0.8** |
| **IPM** | **Ipoh** | **7.27** | **10** | *e*Pn | | **Pn** | **11 27 02.6** | **-0.1** |
| IPM | | | | *e*Sn | | **Sn** | **11 28 28.1** | **+3.4** |
| **KULM** | **Kulim** | **8.02** | **6** | ⇓P | | **Pn** | **11 27 12.3** | **-0.6** |
| **KULM** | **Kulim** | **8.02** | **6** | *e*Pn | | **Pn** | **11 27 12.3** | **-0.6** |
| KULM | | | | *e*Sn | | **Sn** | **11 28 46.1** | **+3.0** |
| **LHMI** | **Lhok Sumawe** | **8.41** | **340** | *e*Pn | | Pn | 11 27 12.6 | -5.7 |
| **KTGM** | **Kuala Trenggan** | **8.67** | **23** | ⇓P | | **Pn** | **11 27 23.3** | **+1.4** |
| **LEM** | **Lembang** | **8.78** | **118** | Pn | | **Pn** | **11 27 24.6** | **+1.2** |
| | comp=Z,3.3nm,0.3s,baz=319,slow=19,SNR=2.8 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.30** | **121** | *e*Pn | | **Pn** | **11 27 28.7** | **-1.9** |
| CISI | | | | *e*Sn | | **Sn** | **11 29 09.7** | **-4.9** |
| **KKM** | **Kota Kinabalu** | **18.56** | **62** | ⇑P | | **P** | **11 29 31.0** | **-2.4** |
| **KKM** | **Kota Kinabalu** | **18.56** | **62** | *e*Pn | | **P** | **11 29 29.6** | **-3.7** |
| | comp=Z,23nm,0.8s | | | | | | | |
| **UBPT** | **Khong Chiam** | **18.76** | **17** | P | | **P** | **11 29 34.7** | **-0.7** |
| | comp=Z,30nm,0.8s | | | | | | | |
| **UMPA** | **Umpang Tak** | **18.85** | **357** | P | | Pn | 11 29 42.3 | +5.4 |
| | comp=Z,6.4nm,0.8s,comp=Z,1μm | | | | | | | |
| **PBKT** | **Sadao Pong** | **19.22** | **3** | P | | **P** | **11 29 40.7** | **+0.3** |
| | comp=Z,17nm,0.5s | | | | | | | |
| **SDKM** | **Sandakan** | **19.26** | **64** | ⇓P | | **P** | **11 29 41.1** | **+0.1** |
| **SDKM** | **Sandakan** | **19.26** | **64** | ⇓P | | **P** | **11 29 41.3** | **+0.4** |
| **KDM** | **Kudat** | **19.51** | **60** | ⇑P | | **Pn** | **11 29 44.4** | **-0.6** |
| **KAPI** | **Kappang** | **20.02** | **97** | *e*P | | **P** | **11 29 49.2** | **-0.1** |
| | comp=Z,21nm,1.1s | | | | | | | |
| **LOEI** | **Loei** | **20.17** | **4** | P | | **P** | **11 29 51.6** | **+0.8** |
| | comp=Z,23nm,0.7s | | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.26** | **67** | ⇓P | | **P** | **11 29 52.6** | **+0.8** |
| **MYLDM** | **Lahad Datu** | **20.26** | **67** | *e*P | | **P** | **11 29 52.7** | **+0.8** |
| | comp=Z,28nm,0.9s | | | | | | | |
| **UTTA** | **Uttaradit** | **20.37** | **2** | P | | Pn | 11 29 57.1 | +2.1 |
| | comp=Z,3.8nm,0.8s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.04** | **358** | *e*P | | **P** | **11 29 59.2** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **21.08** | **358** | P | | **P** | **11 29 59.4** | **-1.3** |
| | comp=Z,15nm,0.8s,baz=186,slow=10,SNR=57 | | | | | | | |
| **LAMP** | **Lampang** | **21.13** | **360** | P | | **P** | **11 30 01.2** | **0.0** |
| | comp=Z,7.0nm,0.8s,comp=Z,61nm | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.43** | **358** | P | | **P** | **11 30 03.5** | **-1.0** |
| | comp=Z,44nm,0.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.43** | **358** | *e*P | | **P** | **11 30 03.3** | **-1.1** |
| CHTO | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.43** | **358** | *e*P | | **P** | **11 30 03.3** | **-1.1** |
| | comp=Z,6.8nm,0.8s | | | | | | | |
| **CMAI** | **Chiengmai2** | **22.54** | **358** | P | | **P** | **11 30 16.1** | **-0.4** |
| | comp=Z,30nm,0.7s,comp=Z,4μm | | | | | | | |
| **SLVN** | **Son La** | **24.26** | **9** | *e*P | | **P** | **11 30 33.0** | **-0.4** |
| **H08S2** | **Diego Garcia H** | **27.63** | **259** | T | | T | 11 59 54.3 | |
| | baz=81,slow=75,SNR=2273 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.63** | **259** | T | | T | 11 59 54.0 | |
| | baz=81,slow=75,SNR=1890 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.65** | **259** | T | | T | 11 59 58.1 | |
| | baz=81,slow=75,SNR=2000 | | | | | | | |
| **KMI** | **Kunming** | **27.84** | **6** | P | | **P** | **11 31 07.0** | **+1.0** |
| KMI | | | | pP | | **pP** | **11 31 14.0** | **+1.8** |
| KMI | | | | PMZ | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **GYA** | **Guiyang** | **29.77** | **12** | *e*P | | **P** | **11 31 25.3** | **+2.3** |
| GYA | | | | PMZ | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **LSA** | **Lhasa** | **33.30** | **346** | *e*P | | **P** | **11 31 55.5** | **+1.0** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **LSA** | **Lhasa** | **33.30** | **346** | *e*P | | **P** | **11 31 55.5** | **+1.0** |
| | comp=Z,8.7nm,0.5s | | | | | | | |
| **CD2** | **Chengdu** | **33.67** | **6** | P | | **P** | **11 31 57.8** | **+0.6** |
| CD2 | | | | pP | | **pP** | **11 32 02.5** | **-0.9** |
| CD2 | | | | PP | | **PP** | **11 33 14.0** | **+0.4** |
| CD2 | | | | S | | **S** | **11 37 20.8** | **+1.5** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,120nm,5.0s | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.65** | **159** | T | | T | 12 08 29.6 | |
| | baz=335,slow=76,SNR=105 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.66** | **159** | T | | T | 12 08 36.2 | |
| | baz=335,slow=76,SNR=127 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.66** | **159** | T | | T | 12 08 37.3 | |
| | baz=335,slow=76,SNR=65 | | | | | | | |
| **XAN** | **Xi'an** | **37.58** | **12** | P | | **P** | **11 32 29.3** | **-1.4** |
| XAN | | | | pP | | **pP** | **11 32 37.0** | **+0.1** |
| XAN | | | | PMZ | | | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.79** | **120** | P | | **P** | **11 32 31.9** | **-0.9** |
| | comp=Z,3.6nm,0.5s,baz=303,slow=9.0,SNR=8.5 | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.80** | **119** | ⇑*e*P | | **P** | **11 32 33.2** | **+0.4** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.4s | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.80** | **119** | *e*P | | **P** | **11 32 32.3** | **-0.4** |
| **LZH** | **Lanzhou** | **38.81** | **5** | ⇓P | | **P** | **11 32 41.3** | **+0.1** |
| LZH | | | | pP | | **pP** | **11 32 46.0** | **-1.4** |
| LZH | | | | sP | | **sP** | **11 32 48.0** | **-1.9** |
| LZH | | | | PMZ | | | | |
| | comp=Z,28nm,1.1s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,280nm,6.1s | | | | | | | |
| **ASAR** | **Alice Springs** | **38.98** | **125** | P | | **P** | **11 32 43.0** | **+0.2** |
| | comp=Z,6.0nm,0.7s,baz=302,slow=8.2,SNR=12 | | | | | | | |
| ASAR | | | | S | | **S** | **11 38 41.0** | **+0.3** |
| | comp=Z,0.5nm,0.9s,baz=295,slow=15,SNR=4.7 | | | | | | | |
| **AS01** | **Alice Springs** | **39.02** | **125** | *e*P | | **P** | **11 32 42.7** | **-0.3** |
| **GTA** | **Gaotai** | **41.94** | **0** | *e*P | | **P** | **11 33 07.5** | **+0.5** |
| GTA | | | | pP | | **pP** | **11 33 12.3** | **-1.0** |
| GTA | | | | sP | | **sP** | **11 33 14.5** | **-1.3** |
| GTA | | | | PP | | **PnPn** | **11 34 47.3** | **-2.2** |
| GTA | | | | S | | **S** | **11 39 25.8** | **+1.2** |
| GTA | | | | PMZ | | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,430nm,6.4s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,260nm,14.2s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,350nm,13.3s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,220nm,16.6s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **44.69** | **13** | *e*P | | **P** | **11 33 31.5** | **+2.3** |
| HHC | | | | S | | **S** | **11 40 06.5** | **+1.7** |
| HHC | | | | PMZ | | | | |
| | comp=Z,24nm,0.7s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,600nm,6.4s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,270nm,12.3s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,350nm,12.3s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,230nm,14.8s | | | | | | | |
| **BJI** | **Beijing** | **45.14** | **18** | P | | **P** | **11 33 32.8** | **+0.2** |
| BJI | | | | PMZ | | | | |
| | comp=Z,25nm,0.9s | | | | | | | |
| **KSH** | **Kashi** | **47.41** | **335** | *e*P | | **P** | **11 33 52.5** | **+1.8** |
| KSH | | | | *ep*P | | **pP** | **11 33 57.0** | **-0.1** |
| KSH | | | | S | | **S** | **11 40 43.0** | **-1.1** |
| KSH | | | | SS | | **SS** | **11 44 07.0** | **-5.1** |
| KSH | | | | PMZ | | | | |
| | comp=Z,200nm,5.5s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,180nm,7.6s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,140nm,5.6s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,150nm,7.6s | | | | | | | |
| **WMQ** | **Urumqi** | **47.61** | **348** | P | | **P** | **11 33 54.0** | **+1.9** |
| WMQ | | | | sP | | **sP** | **11 34 00.0** | **-1.0** |
| WMQ | | | | PMZ | | | | |
| | comp=Z,29nm,1.0s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.72** | **30** | P | | **P** | **11 33 50.9** | **-2.1** |
| **KSAR** | **Wonju Array Be** | **47.72** | **30** | P | | **P** | **11 33 50.9** | **-2.1** |
| **KSRS** | **Korea Array** | **47.75** | **30** | P | | **P** | **11 33 50.9** | **-2.3** |
| | comp=Z,7.7nm,0.7s,baz=223,slow=8.0,SNR=20 | | | | | | | |
| **KSRS** | **Korea Array** | **47.75** | **30** | P | | **P** | **11 33 50.9** | **-2.3** |
| KSRS | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **KS01** | **Wonju Array Si** | **47.75** | **30** | *e*P | | **P** | **11 33 52.5** | **-0.7** |
| **CTAO** | **Charters Tower** | **48.46** | **114** | *e*P | | **P** | **11 33 59.3** | **+0.2** |
| CTAO | | | | pmax | | pmax | | |
| | comp=Z,15nm,1.1s | | | | | | | |
| **CTAO** | **Charters Tower** | **48.46** | **114** | *e*P | | **P** | **11 33 59.3** | **+0.2** |
| | comp=Z,15nm,1.1s | | | | | | | |
| **UCH** | **Uchtor** | **50.28** | **336** | P | | **P** | **11 34 14.5** | **+1.4** |
| | SNR=5.6 | | | | | | | |
| **TKM2** | **Tokmak 2** | **50.43** | **337** | *e*P | | **P** | **11 34 14.7** | **+0.8** |
| TKM2 | | | | *e**SP | | **sP** | **11 34 22.1** | **-0.7** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **50.43** | **337** | P | | **P** | **11 34 15.3** | **+1.4** |
| | SNR=12 | | | | | | | |
| **TKM2** | **Tokmak 2** | **50.43** | **337** | *e*P | | **P** | **11 34 14.7** | **+0.8** |
| | comp=Z,21nm,0.8s | | | | | | | |
| TKM2 | | | | *ep*P | | **pP** | **11 34 19.5** | **-0.8** |
| TKM2 | | | | *es*P | | **sP** | **11 34 22.1** | **-0.7** |
| **AML** | **Almayashu** | **50.55** | **335** | P | | **P** | **11 34 16.1** | **+1.0** |
| | SNR=6.6 | | | | | | | |
| **AAK** | **Ala-Archa** | **50.63** | **336** | *e*P | | **P** | **11 34 16.4** | **+1.0** |
| AAK | | | | *e**PP | | **pP** | **11 34 22.6** | **+0.8** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **AAK** | **Ala-Archa** | **50.63** | **336** | *e*P | | **P** | **11 34 16.4** | **+1.0** |
| | comp=Z,5.1nm,1.0s | | | | | | | |
| AAK | | | | *ep*P | | **pP** | **11 34 22.6** | **+0.8** |
| **SONM** | **Songino Array** | **50.69** | **6** | P | | **P** | **11 34 16.2** | **+0.5** |
| | comp=Z,12nm,0.7s,baz=188,slow=8.6,SNR=49 | | | | | | | |
| **SONA1** | **Songino Array** | **50.70** | **6** | *e*P | | **P** | **11 34 16.2** | **+0.4** |
| **ULN** | **Ulaanbaatar** | **50.79** | **6** | *ce*P | | **P** | **11 34 16.8** | **+0.4** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,21nm,1.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.79** | **6** | *e*P | | **P** | **11 34 16.9** | **+0.4** |
| | comp=Z,15nm,1.0s | | | | | | | |
| **EKS2** | **Erkin-Say** | **50.95** | **335** | *e*P | | **P** | **11 34 18.5** | **+0.8** |
| EKS2 | | | | *e**SP | | **sP** | **11 34 26.7** | **+0.1** |
| EKS2 | | | | pmax | | pmax | | |
| | comp=Z,24nm,1.0s | | | | | | | |
| **EKS2** | **Erkin-Say** | **50.95** | **335** | P | | **P** | **11 34 19.4** | **+1.6** |
| | SNR=9.5 | | | | | | | |
| **EKS2** | **Erkin-Say** | **50.95** | **335** | *e*P | | **P** | **11 34 18.5** | **+0.8** |
| | comp=Z,24nm,1.0s | | | | | | | |
| EKS2 | | | | *ep*P | | **pP** | **11 34 24.1** | **0.0** |
| EKS2 | | | | *es*P | | **sP** | **11 34 26.7** | **+0.1** |
| **USP** | **Ospenovka** | **51.16** | **336** | P | | **P** | **11 34 20.1** | **+0.9** |
| | SNR=5.1 | | | | | | | |
| **MK01** | **Makanchi Array** | **51.66** | **345** | *e*P | | **P** | **11 34 23.3** | **+0.4** |
| **MKAR** | **Makanchi Array** | **51.69** | **345** | P | | **P** | **11 34 23.6** | **+0.6** |
| | comp=Z,12nm,0.8s,baz=151,slow=8.4,SNR=43 | | | | | | | |
| **CN2** | **Changchun** | **51.73** | **24** | *e*P | | **P** | **11 34 22.5** | **-0.9** |
| CN2 | | | | PMZ | | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **MAKZ** | **Makanchi** | **51.78** | **344** | *e*P | | **P** | **11 34 23.6** | **-0.1** |
| **KKAR** | **Karatay Array** | **52.72** | **333** | *e*P | | **P** | **11 34 30.9** | **+0.1** |
| **KKAR** | **Karatay Array** | **52.72** | **333** | *e*P | | **P** | **11 34 30.9** | **+0.1** |
| **TLY** | **Talaya** | **54.31** | **3** | *e*P | | **P** | **11 34 42.8** | **+0.5** |
| TLY | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **HIA** | **Hailar** | **54.60** | **16** | ⇓*e*P | | **P** | **11 34 44.1** | **-0.4** |
| HIA | | | | pmax | | pmax | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.89** | **28** | P | | **P** | **11 34 46.6** | **0.0** |
| | comp=Z,22nm,0.6s,baz=223,slow=6.4,SNR=43 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.85** | **350** | *e*P | | **P** | **11 35 07.5** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **57.85** | **350** | P | | **P** | **11 35 07.0** | **-0.5** |
| | comp=Z,8.9nm,0.4s,baz=163,slow=5.7,SNR=21 | | | | | | | |
| **KLR** | **Kul'dur** | **58.68** | **24** | *e*P | | P | 11 35 09.0 | -4.5 |
| **KRAR** | **Krasnoyarsk** | **58.83** | **355** | ⇑*e*P | | **P** | **11 35 15.4** | **+1.1** |
| KRAR | | | | pmax | | pmax | | |
| | comp=Z,13nm,0.7s | | | | | | | |
| **BRVK** | **Borovoye** | **60.87** | **340** | *e*P | | **P** | **11 35 27.9** | **-0.6** |
| BRVK | | | | *e**PP | | **pP** | **11 35 35.0** | **0.0** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **60.87** | **340** | *e*P | | **P** | **11 35 27.9** | **-0.6** |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| BRVK | | | | *ep*P | | **pP** | **11 35 35.0** | **0.0** |
| **BOD** | **Bodaibo** | **61.44** | **9** | *e*P | | **P** | **11 35 31.0** | **-1.2** |
| BOD | | | | pmax | | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.19** | **332** | *e*P | | **P** | **11 35 37.4** | **-0.1** |
| | comp=Z,4.1nm,0.8s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=E,51nm,0.5s | | | | | | | | |
| **ROOS** | **tl_alroos** | **0.62** | **42** | *e*P | Pg | 11 33 23.6 | -0.7 | | |
| ROOS | | | | *e*S | Sb | 11 33 33.5 | -0.3 | | |
| | comp=E,51nm,0.5s | | | | | | | | |
| **BRBR** | **Barbar** | **0.76** | **247** | *e*P | Pg | 11 33 23.1 | -3.8 | | |
| BRBR | | | | *e*S | Sg | 11 33 32.6 | -4.4 | | |
| BRBR | | | | AML | AML | 11 33 46.1 | | | |
| | comp=N,22nm,0.5s | | | | | | | | |
| BRBR | | | | AML | AML | 11 33 51.9 | | | |
| | comp=E,12nm,0.6s | | | | | | | | |
| **BRBR** | **Barbar** | **0.76** | **247** | *e*P | Pg | 11 33 26.3 | -0.7 | | |
| BRBR | | | | *e*S | Sb | 11 33 38.0 | +0.1 | | |
| BRBR | | | | AML | AML | 11 33 48.5 | | | |
| | comp=N,22nm,0.5s | | | | | | | | |
| BRBR | | | | AML | AML | 11 33 54.3 | | | |
| | comp=E,12nm,0.6s | | | | | | | | |
| **BRBR** | **Barbar** | **0.76** | **247** | *e*P | Pg | 11 33 26.3 | -0.7 | | |
| BRBR | | | | *e*S | Sb | 11 33 38.0 | +0.1 | | |
| | comp=E,12nm,0.6s | | | | | | | | |
| **ZALF** | **Zalf** | **0.91** | **149** | *e*P | Pg | 11 33 26.8 | -2.8 | | |
| ZALF | | | | *e*S | Sg | 11 33 39.0 | -2.6 | | |
| ZALF | | | | AML | AML | 11 33 44.2 | | | |
| | comp=E,9.9nm,0.5s | | | | | | | | |
| ZALF | | | | AML | AML | 11 33 49.9 | | | |
| | comp=N,11nm,0.8s | | | | | | | | |
| **ZALF** | **Zalf** | **0.91** | **149** | *e*P | Pg | 11 33 29.3 | -0.3 | | |
| ZALF | | | | *e*S | Sg | 11 33 41.5 | -0.1 | | |
| ZALF | | | | AML | AML | 11 33 46.6 | | | |
| | comp=E,9.9nm,0.5s | | | | | | | | |
| ZALF | | | | AML | AML | 11 33 52.3 | | | |
| | comp=N,11nm,0.8s | | | | | | | | |
| **ZALF** | **Zalf** | **0.91** | **149** | *e*P | Pg | 11 33 29.3 | -0.3 | | |
| ZALF | | | | *e*S | Sg | 11 33 41.5 | -0.1 | | |
| | comp=N,11nm,0.8s | | | | | | | | |
| **BIDA** | **Albida** | **1.36** | **344** | *e*P | Pb | 11 33 37.5 | -0.1 | | |
| BIDA | | | | *e*S | Sb | 11 33 54.4 | -0.6 | | |
| BIDA | | | | AML | AML | 11 34 08.7 | | | |
| | comp=E,31nm,0.5s | | | | | | | | |
| BIDA | | | | AML | AML | 11 34 14.0 | | | |
| | comp=N,12nm,0.6s | | | | | | | | |
| **BIDA** | **Albida** | **1.36** | **344** | *e*P | Pb | 11 33 37.5 | 0.0 | | |
| BIDA | | | | *e*S | Sb | 11 33 54.4 | -0.6 | | |
| | comp=N,13nm,0.6s | | | | | | | | |

*BJI* ***26*** *11:33:15.8,3˚.01S×99˚.99E, h29km, mb5.2/64, mB5.3/45, Ms5.0/46, Ms7 4.7/46*

*AUST* ***26*** *11:33:15.5±0.6,2˚.69S×99˚.66E, h0km, Error ellipse: s-maj=12.5km s-min=5.2km az=64.0*

*IDC* ***26*** *11:33:17.1±0.5,2˚.47S×99˚.90E, h0km, mb4.8/35, mb1 4.8/38, mb1mx4.8/45, mbtmp4.8/38, ML4.2/3, MS4.3/17, Ms1 4.3/17, ms1mx4.0/38, Error ellipse: s-maj=14.4km s-min=10.5km az=46.0*

*ISCJB* ***26*** *11:33:19.3±0.2,2˚.55S±0˚.02×99˚.84E±0˚.02, h28km, mb5.1/103, MS4.3/19, Error ellipse: s-maj=4.2km s-min=2.4km az=43.6*

*DJA* ***26*** *11:33:19.3±0.6,3˚S±4´×10˚0E±1˚, h29km±5km, M5.0/41, mb5.2/41, mB5.5/26, MLv5.4/21, Mw(mB)5.0/26*

*MOS* ***26*** *11:33:20.2±1.0,2˚.41S×99˚.96E, h31km, mb5.5/42, Error ellipse: s-maj=10.0km s-min=4.9km az=111.7*

*NEIC* ***26*** *11:33:22.0±0.2,2˚.49S×99˚.92E, mb5.2/35, Error ellipse: s-maj=6.6km s-min=4.1km az=49.0*

*KLM* ***26*** *11:33:22.9,2˚.47S×99˚.67E, h52km, mb5.4, ML4.9, MS5.7*

**ISC 26 11:33:21.1±0.3, 2˚.58S±0˚.04×99˚.86E±0˚.04, h26km±1km, h27km:pP-P, n508, σ1s42/535, mb5.2/103, MS4.3/19, 21C-39D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.24** | **140** | P | **Pb** | **11 33 28.0** | **+0.7** |
| **SISI** | **Saibi** | **1.46** | **328** | P | **Pn** | **11 33 44.4** | **-1.3** |
| **PDSI** | **Padang** | **1.76** | **20** | P | **Pn** | **11 33 49.5** | **-0.4** |
| **PPI** | **Padang Panjang** | **2.17** | **14** | P | **Pn** | **11 33 55.6** | **+0.1** |
| | baz=2.3,SNR=303 | | | | | | |
| **PPI** | **Padang Panjang** | **2.17** | **14** | P | **Pn** | **11 33 55.7** | **+0.1** |
| **SDSI** | **Sungai Dareh** | **2.27** | **44** | P | **Pn** | **11 33 58.1** | **+1.3** |
| **KSI** | **Kapahiang** | **2.93** | **111** | P | **Pn** | **11 34 07.4** | **+1.4** |
| **BKNI** | **Bangkinang** | **3.12** | **22** | P | **Pn** | **11 34 09.7** | **+1.1** |
| | baz=3.3,SNR=6.3 | | | | | | |
| **BKNI** | **Bangkinang** | **3.12** | **22** | P | **Pn** | **11 34 09.3** | **+0.7** |
| **BKNI** | **Bangkinang** | **3.12** | **22** | *e*Pn | **Pn** | **11 34 09.7** | **+1.1** |
| BKNI | | | | *e*Sn | **Sn** | **11 34 41.1** | **-3.9** |
| **MNSI** | **Mandailing Nat** | **3.36** | **355** | P | **Pn** | **11 34 11.2** | **-0.7** |
| **MNAI** | **Manna** | **3.56** | **120** | P | **Pn** | **11 34 14.8** | **+0.1** |
| | baz=3.7,SNR=18 | | | | | | |
| **MNAI** | **Manna** | **3.56** | **120** | P | **Pn** | **11 34 15.6** | **+0.9** |
| **MNAI** | **Manna** | **3.56** | **120** | *e*Pn | **Pn** | **11 34 15.5** | **+0.9** |
| **JMBI** | **JAMBI** | **3.90** | **76** | P | **Pn** | **11 34 20.7** | **+1.4** |
| **GSI** | **Gunungsitoli** | **4.48** | **329** | P | **Pn** | **11 34 24.9** | **-2.4** |
| **GSI** | **Gunungsitoli** | **4.48** | **329** | *e*Pn | **Pn** | **11 34 25.6** | **-1.7** |
| GSI | | | | *e*Sn | **Sn** | **11 35 19.3** | **+0.7** |
| **MDSI** | **Maura Dua** | **4.71** | **114** | P | **Pn** | **11 34 32.2** | **+1.7** |
| **LWLI** | **Liwa** | **4.84** | **120** | P | **Pn** | **11 34 34.9** | **+2.5** |
| | 1μm,0.8s,21μm7.3nm | | | | | | |
| **PMBI** | **Palembang** | **4.92** | **94** | P | Pb | 11 34 50.9 | +4.3 |
| **PSI** | **Prapat** | **5.42** | **350** | Pn | **Pn** | **11 34 37.3** | **-3.1** |
| | 1.7nm,0.3s,baz=181,slow=8.4,SNR=9.3 | | | | | | |
| **PSI** | **Prapat** | **5.42** | **350** | *e*P | **Pn** | **11 34 37.6** | **-2.8** |
| **PSI** | **Prapat** | **5.42** | **350** | P | **Pn** | **11 34 37.7** | **-2.8** |
| | baz=5.4,SNR=7.2 | | | | | | |
| **PSI** | **Prapat** | **5.42** | **350** | *e*Pn | **Pn** | **11 34 37.6** | **-2.8** |
| **KASI** | **Kota Agung** | **5.47** | **122** | P | **Pn** | **11 34 42.5** | **+1.5** |
| | 342nm,0.7s,6μm2.0nm | | | | | | |
| **KLI** | **Kotabumi** | **5.48** | **115** | P | **Pn** | **11 34 42.5** | **+1.4** |
| | 444nm,0.9s,7μm2.8nm | | | | | | |
| **BTDF** | **Bukit Timah Da** | **5.53** | **45** | P | **Pn** | **11 34 43.0** | **+1.2** |
| | baz=5.8,SNR=7.2 | | | | | | |
| **KGM** | **Kluang** | **5.73** | **37** | ⇓P | **Pn** | **11 34 46.0** | **+1.6** |
| **TPRI** | **Tanjung Pinang** | **5.82** | **53** | P | **Pn** | **11 34 46.9** | **+1.2** |
| | 226nm,0.7s,26μm2.7nm | | | | | | |
| **MYKOM** | **Kota Tinggi** | **5.89** | **43** | ⇓P | **Pn** | **11 34 48.9** | **+2.2** |
| **MYKOM** | **Kota Tinggi** | **5.89** | **43** | *e*Pn | **Pn** | **11 34 47.8** | **+1.0** |
| **FRIM** | **Kepong** | **6.04** | **17** | ⇑P | **Pn** | **11 34 49.7** | **+0.9** |
| **TSI** | **Tuntungan** | **6.17** | **348** | P | Pb | 11 35 03.6 | -4.3 |
| **PPBI** | **Pangkal Pinang** | **6.29** | **86** | P | **Pn** | **11 34 54.5** | **+2.4** |
| | 45nm,0.8s,79μm4.6nm | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **6.41** | **341** | P | Pn | 11 35 02.6 | +8.8 |
| **CGJI** | **Cibinong** | **7.06** | **125** | P | **Pn** | **11 35 01.3** | **-1.5** |
| | 253nm,0.8s,3μm1.0nm | | | | | | |
| **IPM** | **Ipoh** | **7.11** | **9** | ⇓P | **Pn** | **11 35 03.9** | **+0.4** |
| **IPM** | **Ipoh** | **7.11** | **9** | *e*Pn | **Pn** | **11 35 04.0** | **+0.6** |
| IPM | | | | *e*Sn | **Sn** | **11 36 24.6** | **+1.1** |
| **SBJI** | **Serang** | **7.17** | **120** | P | **Pb** | **11 35 22.1** | **-2.9** |
| **TPI** | **Tanjungpandan** | **7.79** | **91** | P | **Pn** | **11 35 15.1** | **+2.3** |
| | 56nm,1.1s | | | | | | |
| **KULM** | **Kulim** | **7.86** | **6** | ⇑P | **Pn** | **11 35 13.8** | **+0.1** |
| **KULM** | **Kulim** | **7.86** | **6** | *e*Pn | **Pn** | **11 35 12.5** | **-1.2** |
| KULM | | | | *e*Sn | **Sn** | **11 36 39.4** | **-2.5** |
| **SKJI** | **Sukabumi** | **7.99** | **124** | P | Pn | 11 35 20.9 | +5.3 |
| **KTGM** | **Kuala Trenggan** | **8.51** | **23** | ⇓P | **Pn** | **11 35 24.2** | **+1.5** |
| **CNJI** | **Cibinong** | **8.63** | **123** | P | **Pn** | **11 35 22.7** | **-1.7** |
| | 258nm,1.0s,2μm | | | | | | |
| **LEM** | **Lembang** | **8.81** | **119** | Pn | **Pn** | **11 35 27.4** | **+0.4** |
| | 3.8nm,0.3s,baz=153,slow=22,SNR=11 | | | | | | |
| **LEM** | **Lembang** | **8.81** | **119** | P | Pn | 11 35 30.5 | +3.6 |
| | 2μm,0.8s | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.34** | **122** | P | **Pn** | **11 35 32.3** | **-1.9** |
| | baz=9.5,SNR=4.8 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.34** | **122** | P | **Pn** | **11 35 33.0** | **-1.1** |
| | 268nm,0.6s | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.34** | **122** | *e*Pn | **Pn** | **11 35 32.4** | **-1.7** |
| CISI | | | | *e*Sn | Sn | 11 37 10.2 | -8.3 |
| **XMIS** | **Christmas Isla** | **9.73** | **144** | *e*Pn | Pn | 11 35 35.6 | -3.9 |
| **CMJI** | **Cimerak** | **9.99** | **121** | P | **Pn** | **11 35 41.3** | **-1.8** |
| | 151nm,0.8s | | | | | | |
| **TRTT** | **Trang** | **10.35** | **359** | P | Pn | 11 35 51.2 | +3.3 |
| | 42nm,1.1s | | | | | | |
| **SMRI** | **Semarang** | **11.44** | **113** | P | Pn | 11 36 06.6 | +3.7 |
| | 184nm,1.1s | | | | | | |
| **SMRI** | **Semarang** | **11.44** | **113** | *e*Pn | **Pn** | **11 36 04.8** | **+1.9** |
| SMRI | | | | *e*Sn | **Sn** | **11 38 11.6** | **+1.6** |
| **UWJI** | **Ujung Watu** | **11.69** | **109** | P | **Pn** | **11 36 08.3** | **+2.0** |
| | 197nm,1.1s,2μm | | | | | | |
| **PBKI** | **Pangkalan Bun** | **11.80** | **91** | P | Pn | 11 36 11.9 | +4.1 |
| | 187nm,1.1s,2μm | | | | | | |
| **NGJI** | **Ngawi** | **12.50** | **113** | P | Pn | 11 36 22.1 | +4.8 |
| **PWJI** | **Pagerwojo** | **13.06** | **115** | P | **Pn** | **11 36 27.5** | **+2.4** |
| | 60nm,1.6s | | | | | | |
| **SBUM** | **Sibu** | **13.33** | **68** | ⇓P | **Pn** | **11 36 31.3** | **+2.7** |
| **SBUM** | **Sibu** | **13.33** | **68** | *e*Pn | **Pn** | **11 36 31.4** | **+2.7** |
| **KMMI** | **Kalianget** | **14.74** | **108** | P | **Pn** | **11 36 48.7** | **+0.7** |
| | 98nm,1.2s | | | | | | |
| **BBKI** | **Banjar Baru** | **14.99** | **94** | P | **Pn** | **11 36 53.3** | **+2.0** |
| | 192nm,0.8s,2μm | | | | | | |
| **ABJI** | **Asem Bagus** | **15.22** | **110** | P | **P** | **11 37 01.8** | **+2.7** |
| **JAGI** | **Jajag, Banyuwa** | **15.38** | **113** | P | **Pn** | **11 36 53.6** | **-2.9** |
| | baz=16,SNR=6.7 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **15.38** | **113** | P | **Pn** | **11 36 54.5** | **-2.0** |
| | 68nm,0.9s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **15.38** | **113** | *e*Pn | **Pn** | **11 36 53.7** | **-2.8** |
| | 49nm,0.8s | | | | | | |
| JAGI | | | | *e*Sn | **Sn** | **11 39 44.4** | **-1.8** |
| **KBKI** | **Kotabaru** | **16.30** | **93** | P | **P** | **11 37 12.6** | **+1.4** |
| **DLV** | **T Lat** | **16.78** | **31** | *e*P | **Pn** | **11 37 15.4** | **+0.7** |
| | 34nm,1.0s | | | | | | |
| **KHLT** | **Khaolaem Dam** | **17.31** | **356** | P | **P** | **11 37 23.3** | **+1.0** |
| | 8.9nm,1.1s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.44** | **62** | P | **P** | **11 37 35.1** | **+0.1** |
| | baz=19,SNR=12 | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.44** | **62** | ⇓P | **Pn** | **11 37 35.3** | **+0.2** |
| **KKM** | **Kota Kinabalu** | **18.44** | **62** | *e*P | **Pn** | **11 37 35.4** | **+0.2** |
| | 79nm,0.9s | | | | | | |
| **CHAI** | **Chaiyaphum** | **18.48** | **6** | P | Pn | 11 37 43.0 | +7.5 |
| **UBPT** | **Khong Chiam** | **18.59** | **17** | P | **P** | **11 37 35.2** | **-1.2** |
| | 50nm,0.9s | | | | | | |
| **UMPA** | **Umpang Tak** | **18.69** | **357** | P | **Pn** | **11 37 39.0** | **+1.0** |
| | 9.8nm,1.0s,1μm | | | | | | |
| **KHON** | **Khomkaen** | **19.02** | **9** | P | Pn | 11 37 47.5 | +5.5 |
| **PBKT** | **Sadao Pong** | **19.06** | **3** | P | **P** | **11 37 39.9** | **-1.6** |
| | 19nm,1.0s,958nm | | | | | | |
| **SDKM** | **Sandakan** | **19.14** | **65** | ⇑P | **P** | **11 37 42.9** | **+0.3** |
| **TSM** | **Tawau** | **19.25** | **69** | ⇑P | **P** | **11 37 43.8** | **+0.1** |
| **KDM** | **Kudat** | **19.39** | **61** | ⇑P | **Pn** | **11 37 46.9** | **+0.4** |
| **SKNT** | **Sakolnakorn** | **19.85** | **12** | P | **Pn** | **11 37 54.1** | **+2.2** |
| | 32nm,1.7s | | | | | | |
| **SPSI** | **Sidrap Palu** | **19.93** | **94** | P | **Pn** | **11 37 52.4** | **-0.5** |
| | 38nm,0.9s,720nm | | | | | | |
| **KAPI** | **Kappang** | **20.00** | **98** | P | **P** | **11 37 51.1** | **-0.8** |
| | 2.3nm,0.3s,baz=263,slow=7.8,SNR=11 | | | | | | |
| **KAPI** | **Kappang** | **20.00** | **98** | P | **P** | **11 37 51.0** | **-0.8** |
| | 695nm,1.2s,SNR=8.1 | | | | | | |
| **KAPI** | **Kappang** | **20.00** | **98** | *e*P | **P** | **11 37 51.5** | **-0.3** |
| | 204nm,1.3s | | | | | | |
| **LOEI** | **Loei** | **20.01** | **4** | P | **P** | **11 37 51.5** | **-0.4** |
| | 17nm,0.7s | | | | | | |
| **PCI** | **Palu** | **20.04** | **86** | P | **P** | **11 37 52.5** | **+0.2** |
| | 201nm,1.1s,2μm | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.16** | **68** | ⇓P | **P** | **11 37 53.9** | **+0.4** |
| **MYLDM** | **Lahad Datu** | **20.16** | **68** | *e*P | Pn | 11 37 54.9 | -0.7 |
| | 130nm,1.0s | | | | | | |
| **UTTA** | **Uttaradit** | **20.21** | **2** | P | **P** | **11 37 54.6** | **+0.6** |
| | 6.0nm,0.9s | | | | | | |
| **MPSI** | **Mapaga** | **20.24** | **82** | P | **P** | **11 37 54.8** | **+0.3** |
| | 192nm,1.1s,2μm | | | | | | |
| **BKSI** | **Bulukumba** | **20.40** | **98** | P | **P** | **11 37 55.9** | **-0.3** |
| | 182nm,1.3s,2μm | | | | | | |
| **MHMT** | **Maesarieng** | **20.71** | **355** | P | **P** | **11 38 00.6** | **+1.1** |
| | 30nm,1.3s | | | | | | |
| **NONG** | **Nongkai** | **20.77** | **9** | P | **P** | **11 37 58.8** | **-1.3** |
| | 36nm,1.5s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **20.89** | **358** | *e*P | **P** | **11 37 59.6** | **-1.9** |
| **CM31** | **Chiang Mai Arr** | **20.92** | **358** | P | **P** | **11 38 01.9** | **+0.1** |
| | baz=21,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.92** | **358** | P | **P** | **11 38 00.8** | **-1.1** |
| | 25nm,0.9s,baz=186,slow=9.9,SNR=114 | | | | | | |
| CMAR | | | | LR | LR | 11 46 29.7 | |
| | comp=Z,1μm,20.4s,baz=188,slow=38 | | | | | | |
| **LAMP** | **Lampang** | **20.97** | **359** | P | **P** | **11 38 01.3** | **-1.0** |
| | 12nm,0.9s,96nm | | | | | | |
| **CHTO** | **Chiang Mai** | **21.28** | **358** | P | **P** | **11 38 04.2** | **-1.5** |
| | 113nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.28** | **358** | *e*P | **P** | **11 38 04.1** | **-1.5** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,33nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.28** | **358** | *e*P | **P** | **11 38 04.1** | **-1.5** |
| | comp=Z,33nm,1.1s | | | | | | |
| **PALK** | **Pallekele** | **21.48** | **297** | P | **P** | **11 38 08.5** | **+0.6** |
| | comp=Z,8.5nm,1.0s,baz=295,slow=7.2,SNR=2.3 | | | | | | |
| PALK | | | | LR | LR | 11 45 48.0 | |
| | comp=Z,980nm,18.9s,baz=116,slow=35 | | | | | | |
| **PALK** | **Pallekele** | **21.48** | **297** | *e*P | **P** | **11 38 10.2** | **+2.3** |
| **PALK** | **Pallekele** | **21.48** | **297** | *e*P | **P** | **11 38 10.2** | **+2.3** |
| **APSI** | **Ampana** | **21.84** | **86** | P | **P** | **11 38 13.6** | **+1.8** |
| | comp=Z,171nm,1.0s,comp=Z,2μm | | | | | | |
| **MRSI** | **Marisa** | **22.28** | **82** | P | **P** | **11 38 17.5** | **+0.9** |
| | comp=Z,142nm,1.1s,comp=Z,1μm | | | | | | |
| **CMAI** | **Chiengmai2** | **22.39** | **358** | P | **P** | **11 38 16.5** | **-1.2** |
| | comp=Z,95nm,0.7s,comp=Z,4μm | | | | | | |
| **LUWI** | **Luwuk** | **22.95** | **87** | P | **P** | **11 38 23.1** | **-0.6** |
| | baz=23,SNR=6.4 | | | | | | |
| **LUWI** | **Luwuk** | **22.95** | **87** | *e*P | **P** | **11 38 22.8** | **-0.8** |
| | comp=Z,177nm,1.1s | | | | | | |
| **GTOI** | **Gorontalo** | **23.36** | **82** | P | **P** | **11 38 24.9** | **-2.9** |
| | comp=Z,79nm,1.1s,comp=Z,804nm | | | | | | |
| **QIZ** | **Qiongzhong** | **23.61** | **24** | P | **P** | **11 38 29.3** | **-0.8** |
| QIZ | | | | S | **S** | **11 42 44.8** | **+1.6** |
| QIZ | | | | PMZ | | | |
| | comp=Z,49nm,1.4s | | | | | | |
| QIZ | | | | LN | | | |
| | comp=Z,770nm,13.4s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,1μm,14.7s | | | | | | |
| **SLVN** | **Son La** | **24.09** | **9** | *e*P | **P** | **11 38 33.6** | **-1.2** |
| | comp=Z,32nm,0.9s | | | | | | |
| **BATI** | **Baumata** | **24.82** | **109** | P | **P** | **11 38 41.8** | **+0.4** |
| | comp=Z,23nm,0.4s,baz=136,slow=8.4,SNR=3.6 | | | | | | |
| **SOEI** | **Soe** | **25.28** | **107** | *e*P | **P** | **11 38 44.4** | **-1.3** |
| | comp=Z,43nm,0.9s | | | | | | |
| SOEI | | | | *e*S | **S** | **11 43 09.5** | **-0.9** |
| **MBWA** | **Marble Bar** | **26.75** | **135** | *e*P | **P** | **11 39 00.9** | **+2.1** |
| | comp=Z,73nm,0.9s | | | | | | |
| **DAV** | **Davao City (W)** | **27.40** | **69** | P | **P** | **11 39 03.5** | **-1.3** |
| | comp=Z,77nm,0.6s,baz=78,slow=3.2,SNR=5.3 | | | | | | |
| **KMI** | **Kunming** | **27.68** | **6** | P | **P** | **11 39 07.3** | **0.0** |
| KMI | | | | pP | **pP** | **11 39 17.0** | **+1.9** |
| KMI | | | | sP | **sP** | **11 39 20.3** | **+2.0** |
| KMI | | | | S | **S** | **11 43 49.5** | **+1.3** |
| KMI | | | | sS | **sS** | **11 44 02.8** | **+1.8** |
| KMI | | | | SS | **SnSn** | **11 45 08.8** | **+7.7** |
| KMI | | | | PMZ | | | |
| | comp=Z,16nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,510nm,4.6s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,870nm,18.8s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,990nm,19.1s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,1μm,13.0s | | | | | | |
| **LBMI** | **Labuha** | **27.70** | **86** | P | **P** | **11 39 06.5** | **-0.9** |
| | comp=Z,117nm,1.2s,comp=Z,1μm | | | | | | |
| **TNTI** | **Ternate** | **27.70** | **83** | *e*P | **P** | **11 39 06.9** | **-0.6** |
| | comp=Z,45nm,0.8s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.71** | **258** | T | T | 12 07 57.8 | |
| | baz=81,slow=75,SNR=938 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.71** | **259** | T | T | 12 07 56.6 | |
| | baz=81,slow=75,SNR=1036 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.73** | **259** | T | T | 12 07 59.2 | |
| | baz=81,slow=75,SNR=1399 | | | | | | |
| **GYA** | **Guiyang** | **29.61** | **12** | ⇑*i*P | **P** | **11 39 23.3** | **-1.1** |
| GYA | | | | pP | **pP** | **11 39 32.5** | **+0.4** |
| GYA | | | | PP | **PnPn** | **11 40 23.0** | **+3.3** |
| GYA | | | | PcP | **PcP** | **11 42 29.8** | **+0.9** |
| GYA | | | | S | **S** | **11 44 19.5** | **+1.2** |
| GYA | | | | sS | **sS** | **11 44 31.3** | **+0.2** |
| GYA | | | | SS | **SnSn** | **11 45 54.0** | **+6.0** |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,160nm,5.3s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,2μm,17.4s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,2μm,18.0s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,2μm,17.6s | | | | | | |
| **MEEK** | **Meekatharra** | **29.93** | **145** | P | **P** | **11 39 24.9** | **-2.2** |
| | baz=30,SNR=3.9 | | | | | | |
| **KNRA** | **Kununurra** | **31.30** | **116** | P | **P** | **11 39 38.0** | **-1.4** |
| | baz=32,SNR=11 | | | | | | |
| **SWI** | **Sorong** | **31.43** | **87** | P | **P** | **11 39 40.1** | **-0.5** |
| | baz=32,SNR=4.7 | | | | | | |
| **SWI** | **Sorong** | **31.43** | **87** | P | **P** | **11 39 39.6** | **-1.0** |
| | comp=Z,112nm,1.0s | | | | | | |
| **ODAN** | **Odare** | **31.64** | **338** | *e*P | **P** | **11 39 42.9** | **+0.4** |
| **TAPN** | **Taplejung** | **31.98** | **339** | *e*P | **P** | **11 39 46.1** | **+0.6** |
| | comp=Z,126nm,0.9s | | | | | | |
| **RAMN** | **Ramite** | **32.02** | **337** | *e*P | **P** | **11 39 46.3** | **+0.4** |
| | comp=Z,36nm,0.9s | | | | | | |
| **MTN** | **Manton Dam** | **32.58** | **110** | P | **P** | **11 39 50.5** | **-0.1** |
| | baz=33,SNR=5.2 | | | | | | |
| **MTN** | **Manton Dam** | **32.58** | **110** | *e*P | **P** | **11 39 49.4** | **-1.2** |
| | comp=Z,14nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | **33.05** | **336** | *e*P | **P** | **11 39 54.8** | **-0.1** |
| **POO** | **Poona** | **33.10** | **310** | *e*P | P | 11 40 03.0 | +7.9 |
| **LSA** | **Lhasa** | **33.16** | **346** | P | **P** | **11 39 56.5** | **+0.5** |
| LSA | | | | PMZ | | | |
| | comp=Z,22nm,1.1s | | | | | | |
| **LSA** | **Lhasa** | **33.16** | **346** | *e*P | **P** | **11 39 56.7** | **+0.7** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,29nm,1.0s | | | | | | |
| **LSA** | **Lhasa** | **33.16** | **346** | *e*P | **P** | **11 39 56.7** | **+0.7** |
| | comp=Z,29nm,1.0s | | | | | | |
| **GUN** | **Gumba** | **33.16** | **337** | *e*P | **P** | **11 39 56.2** | **+0.2** |
| | comp=Z,77nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **33.30** | **336** | *e*P | **P** | **11 39 57.3** | **+0.3** |
| | baz=32,34nm,0.8s | | | | | | |
| **CD2** | **Chengdu** | **33.51** | **6** | P | **P** | **11 39 58.5** | **-0.1** |
| CD2 | | | | sP | **sP** | **11 40 09.5** | **-0.1** |
| CD2 | | | | PP | **PP** | **11 41 14.8** | **+0.1** |
| CD2 | | | | S | **S** | **11 45 20.3** | **+1.3** |
| CD2 | | | | sS | **sS** | **11 45 33.5** | **+1.6** |
| CD2 | | | | PMZ | | | |
| | comp=Z,160nm,5.2s | | | | | | |
| CD2 | | | | LE | | | |
| | comp=Z,2μm,10.0s | | | | | | |
| CD2 | | | | LZ | | | |
| | comp=Z,1μm,14.2s | | | | | | |
| **GKN** | **Gorkha** | **33.75** | **335** | *e*P | **P** | **11 40 00.8** | **0.0** |
| **KDU** | **Kakadu** | **33.80** | **109** | P | **P** | **11 39 59.6** | **-1.7** |
| | baz=34,SNR=3.2 | | | | | | |
| **ENH** | **Enshi** | **33.94** | **15** | *e*P | **P** | **11 40 01.0** | **-1.3** |
| | comp=Z,16nm,1.0s | | | | | | |
| **KOLN** | **Koldanda** | **33.99** | **334** | *e*P | **P** | **11 40 03.1** | **+0.1** |
| | comp=Z,37nm,1.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **34.31** | **154** | P | **P** | **11 40 06.7** | **+1.2** |
| | comp=Z,14nm,1.0s,baz=42,slow=0.1,SNR=4.4 | | | | | | |
| **WRKA** | **Warakurna** | **35.35** | **132** | P | **P** | **11 40 15.2** | **+0.6** |
| | baz=36,SNR=19 | | | | | | |
| **XAN** | **Xi'an** | **37.41** | **12** | P | **P** | **11 40 30.5** | **-1.6** |
| XAN | | | | pP | **pP** | **11 40 38.3** | **-1.6** |
| XAN | | | | S | S | 11 46 12.3 | -6.6 |
| XAN | | | | PMZ | | | |
| | comp=Z,76nm,0.9s | | | | | | |
| XAN | | | | PMZ | | | |
| | comp=Z,390nm,5.3s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,1μm,15.3s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,2μm,15.3s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.83** | **120** | P | **P** | **11 40 35.0** | **-0.9** |
| | comp=Z,46nm,0.9s,baz=311,slow=8.7,SNR=34 | | | | | | |
| WRA | | | | S | **S** | **11 46 21.7** | **-3.9** |
| | comp=Z,5.9nm,1.0s,baz=294,slow=15,SNR=10 | | | | | | |
| WRA | | | | LR | LR | 11 58 04.6 | |
| | comp=Z,453nm,20.6s,baz=295,slow=39 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.83** | **120** | *e*P | **P** | **11 40 35.3** | **-0.6** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,109nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **37.83** | **120** | P | **P** | **11 40 35.0** | **-0.9** |
| | comp=Z,429nm,0.6s,SNR=47 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.83** | **120** | *e*P | **P** | **11 40 34.5** | **-1.4** |
| | comp=Z,47nm,0.6s | | | | | | |
| **LZH** | **Lanzhou** | **38.65** | **5** | ⇑P | **P** | **11 40 42.0** | **-0.6** |
| LZH | | | | pP | **pP** | **11 40 49.3** | **-1.2** |
| LZH | | | | sP | **sP** | **11 40 53.0** | **-0.7** |
| LZH | | | | PMZ | | | |
| | comp=Z,60nm,1.0s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,430nm,4.0s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,1μm,16.3s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,2μm,17.5s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,1μm,15.0s | | | | | | |
| **NJ2** | **Nanjing** | **38.88** | **26** | *e*P | **P** | **11 40 44.5** | **+0.1** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,29nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **39.03** | **125** | P | **P** | **11 40 45.8** | **-0.1** |
| | comp=Z,38nm,0.8s,baz=301,slow=8.0,SNR=100 | | | | | | |
| ASAR | | | | S | **S** | **11 46 41.6** | **-2.2** |
| | comp=Z,7.2nm,1.0s,baz=298,slow=17,SNR=21 | | | | | | |
| ASAR | | | | LR | LR | 11 58 32.2 | |
| | comp=Z,744nm,20.5s,baz=297,slow=39 | | | | | | |
| **AS01** | **Alice Springs** | **39.07** | **125** | *e*P | **P** | **11 40 45.6** | **-0.6** |
| **GTA** | **Gaotai** | **41.78** | **360** | P | **P** | **11 41 08.5** | **0.0** |
| GTA | | | | pP | **pP** | **11 41 16.0** | **-0.5** |
| GTA | | | | sP | **sP** | **11 41 19.5** | **-0.2** |
| GTA | | | | PcP | **PcP** | **11 43 05.0** | **+0.5** |
| GTA | | | | S | **S** | **11 47 25.3** | **+0.8** |
| GTA | | | | SS | **SS** | **11 50 27.8** | **-3.4** |
| GTA | | | | PMZ | | | |
| | comp=Z,36nm,1.3s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=Z,360nm,5.7s | | | | | | |
| GTA | | | | LN | | | |
| | comp=Z,590nm,13.3s | | | | | | |
| GTA | | | | LE | | | |
| | comp=Z,920nm,16.1s | | | | | | |
| GTA | | | | LZ | | | |
| | comp=Z,690nm,13.8s | | | | | | |
| **TIA** | **

WMQ S **S** **11 48 49.0 +2.2**
WMQ ScS **ScS** **11 51 46.0 0.0**
WMQ SS SS 11 52 07.0 -8.0
WMQ PMZ
comp=Z,85nm,1.0s
WMQ PMZ
comp=Z,110nm,5.0s
WMQ LN
comp=Z,280nm,15.0s
WMQ LE
comp=Z,260nm,15.0s
WMQ LZ
comp=Z,240nm,14.0s
**KSAR Wonju Array Be 47.56 30** P **P** **11 41 54.3 -0.2**
**KSAR Wonju Array Be 47.56 30** P **P** **11 41 54.2 -0.2**
**KSRS Korea Array 47.59 30** P **P** **11 41 54.2 -0.4**
comp=Z,40nm,0.9s,baz=225,slow=8.5,SNR=53
KSRS LR LR 12 02 13.7
comp=Z,206nm,19.8s,baz=218,slow=37
**KS01 Wonju Array Si 47.59 30** *e*P **P** **11 41 53.6 -1.1**
**CTAO Charters Tower 48.48 115** *e*P **P** **11 42 02.0 0.0**
CTAO pmax pmax
comp=Z,56nm,1.0s
**CTAO Charters Tower 48.48 115** *e*P **P** **11 42 02.0 0.0**
comp=Z,56nm,1.0s
**QLP Quilpie 48.75 124** P **P** **11 42 03.1 -0.9**
baz=49,SNR=7.9
**PDGK Podgornoye 49.24 340** P **P** **11 42 07.4 +0.1**
PDGK pmax pmax
comp=Z,49nm,1.1s
**KZA Kyzart 49.73 336** P **P** **11 42 13.3 +1.7**
SNR=5.7
**UCH Uchtor 50.16 336** P **P** **11 42 15.4 +0.5**
SNR=14
**TKM2 Tokmak 2 50.30 337** *e*P **P** **11 42 16.1 +0.4**
TKM2 pmax pmax
comp=Z,44nm,1.0s
**TKM2 Tokmak 2 50.30 337** P **P** **11 42 16.1 +0.4**
SNR=36
**TKM2 Tokmak 2 50.30 337** *e*P **P** **11 42 16.1 +0.4**
comp=Z,44nm,1.0s
**KBK Karagaybulak 50.34 336** P **P** **11 42 17.4 +1.4**
SNR=13
**AML Almayashu 50.42 335** P **P** **11 42 17.4 +0.5**
SNR=14
**AAK Ala-Archa 50.51 336** P **P** **11 42 17.8 +0.6**
comp=Z,5.0nm,0.7s,baz=143,slow=4.8,SNR=16
**AAK Ala-Archa 50.51 336** *e*P **P** **11 42 18.1 +0.9**
AAK pmax pmax
comp=Z,121nm,2.2s
**AAK Ala-Archa 50.51 336** P **P** **11 42 17.8 +0.6**
comp=Z,50nm,0.7s,SNR=5.1
**AAK Ala-Archa 50.51 336** P **P** **11 42 17.9 +0.6**
SNR=7.2
**AAK Ala-Archa 50.51 336** *e*P **P** **11 42 18.1 +0.9**
comp=Z,121nm,2.2s
**SONM Songino Array 50.53 6** P **P** **11 42 17.5 +0.3**
comp=Z,48nm,0.9s,baz=188,slow=8.4,SNR=148
**SONA1 Songino Array 50.54 6** *e*P **P** **11 42 16.9 -0.5**
**FRU Bishkek 50.62 336** *e*P **P** **11 42 16.0 -1.9**
FRU *e* 11 42 24.0
FRU pmax pmax
comp=Z,60nm,1.6s
**ULN Ulaanbaatar 50.63 6** *e*P **P** **11 42 18.3 +0.3**
ULN pmax pmax
comp=Z,61nm,1.1s
**ULN Ulaanbaatar 50.63 6** *e*P **P** **11 42 18.3 +0.3**
comp=Z,61nm,1.1s
**CHMS Chumysh 50.70 336** P **P** **11 42 18.7 +0.2**
SNR=9.7
**EKS2 Erkin-Say 50.83 335** *e*P **P** **11 42 19.9 +0.3**
EKS2 *e**PP **pP** **11 42 28.3 +0.6**
EKS2 pmax pmax
comp=Z,33nm,0.8s
**EKS2 Erkin-Say 50.83 335** P **P** **11 42 20.2 +0.7**
SNR=21
**EKS2 Erkin-Say 50.83 335** *e*P **P** **11 42 19.9 +0.3**
comp=Z,33nm,0.8s
EKS2 *e*pP **pP** **11 42 28.3 +0.6**
**USP Ospenovka 51.03 336** P **P** **11 42 21.3 +0.3**
SNR=15
**MNAS Manas 51.23 334** P **P** **11 42 22.5 -0.1**
MNAS pmax pmax
comp=Z,50nm,1.0s
**MK01 Makanchi Array 51.52 345** *e*P **P** **11 42 23.6 -1.0**
**MK31 Makanchi Array 51.55 345** *i* P **P** **11 42 24.4 -0.4**
MK31 pmax pmax
comp=Z,21nm,0.6s
**MKAR Makanchi Array 51.55 345** P **P** **11 42 24.8 0.0**
comp=Z,34nm,0.8s,baz=150,slow=8.3,SNR=132
MKAR LR LR 12 08 04.9
comp=Z,182nm,18.6s,baz=163,slow=41
**MKAR Makanchi Array 51.55 345** *e*P **P** **11 42 24.9 +0.1**
**CN2 Changchun 51.57 24** *e*P **P** **11 42 23.5 -1.5**
CN2 *e*pP **pP** **11 42 31.5 -1.6**
CN2 *e*S **S** **11 49 45.0 +0.9**
CN2 PMZ
comp=Z,50nm,1.1s
CN2 PMZ
comp=Z,360nm,5.0s
CN2 LN
comp=Z,430nm,12.0s
CN2 LE
comp=Z,380nm,12.0s
CN2 LZ
comp=Z,690nm,13.0s
**IDAH Dahanechah 51.61 316** *e*P **P** **11 42 24.3 -1.6**
**MAKZ Makanchi 51.64 344** *e*P **P** **11 42 25.7 +0.2**
**CMSA Cobar Meteorol 51.86 129** P **P** **11 42 27.7 +0.3**
baz=52,SNR=33
**RMQ Roma 52.53 122** P **P** **11 42 31.6 -0.9**
baz=53,SNR=5.9
**KKAR Karatay Array 52.60 333** *e*P **P** **11 42 32.3 -0.4**
KKAR *e**PP **pP** **11 42 43.7 +2.9**
KKAR pmax pmax
comp=Z,2.0nm,0.7s
**KKAR Karatay Array 52.60 333** *e*P **P** **11 42 32.3 -0.4**
comp=Z,2.3nm,0.7s
KKAR *e*pP **pP** **11 42 43.7 +2.9**
**MAJO Matsushiro 52.81 39**↑ *e*P **P** **11 42 33.7 -0.7**
MAJO pmax pmax
comp=Z,151nm,1.1s
**MAJO Matsushiro 52.81 39** *e*P **P** **11 42 33.6 -0.7**
comp=Z,212nm,2.2s
**MAT Matsushiro 52.81 39** P **P** **11 42 33.0 -1.4**
**HVS Khovu-Aksy 53.77 355**↓ *e*P **P** **11 42 40.1 -1.1**
HVS pmax pmax
comp=Z,10.0nm,1.2s
**VLA Vladivostok 53.86 29**↑ *i*P **P** **11 42 42.2 +0.3**
VLA *i* 11 43 48.3
VLA *e*S **S** **11 50 15.9 +0.5**
VLA pmax pmax
comp=Z,72nm,1.3s
**OPO Ambohidratompo 53.93 249** P **P** **11 42 43.2 +0.2**
comp=Z,3.5nm,0.8s,baz=80,slow=12,SNR=4.1
**MDJ Mudanjiang 53.97 26** P **P** **11 42 42.5 -0.2**
MDJ pP **pP** **11 42 49.0 -1.8**
MDJ PP **PP** **11 44 43.5 -0.8**
MDJ ScP **ScP** **11 47 44.5 +0.2**
MDJ PcS **PcS** **11 47 47.0 +0.1**
MDJ S **S** **11 50 19.5 +2.7**
MDJ PMZ
comp=Z,41nm,1.1s
MDJ PMZ
comp=Z,190nm,5.4s
MDJ LN
comp=Z,420nm,12.3s
MDJ LE
comp=Z,680nm,15.3s
MDJ LZ
comp=Z,640nm,12.3s
**MDJ Mudanjiang 53.97 26** *e*P **P** **11 42 42.8 +0.2**
comp=Z,46nm,1.0s
**MOY Mondy 54.05 1** *e*P **P** **11 42 43.7 +0.4**
**IBAF Bafgh 54.06 313** *e*P **P** **11 42 42.6 -1.2**
**TLY Talaya 54.15 3** P **P** **11 42 44.8 +0.9**
comp=Z,8.0nm,0.8s,baz=179,slow=1.1,SNR=10
TLY LR LR 12 06 33.9
comp=Z,719nm,20.2s,baz=164,slow=37
**TLY Talaya 54.15 3** *e*P **P** **11 42 44.8 +0.9**
TLY pmax pmax
comp=Z,22nm,1.4s
TLY MLR MLR
comp=Z,398nm,15.0s
**TLY Talaya 54.15 3** P **P** **11 42 44.9 +1.0**
comp=Z,88nm,0.9s,SNR=7.1

**EIDS Eidsvold 54.19 120** P **P** **11 42 45.2 +0.5**
baz=54,SNR=7.4
**EIDS Eidsvold 54.19 120** *e*P **P** **11 42 45.2 +0.5**
comp=Z,16nm,0.9s
**HIA Hailar 54.44 16** *e*P **P** **11 42 45.8 -0.3**
HIA pmax pmax
comp=Z,46nm,1.2s
**HIA Hailar 54.44 16** *e*P **P** **11 42 45.8 -0.3**
comp=Z,46nm,1.2s
**IAKL Akhelmad 54.60 320** *e*P P 11 42 44.3 -3.5
**USRK Ussuriysk Ar. 54.73 28** P **P** **11 42 48.0 -0.2**
comp=Z,151nm,1.0s,baz=223,slow=6.1,SNR=102
USRK LR LR 12 07 45.8
comp=Z,374nm,18.9s,baz=210,slow=38
**IRK Irkutsk 54.75 3** *e*P **P** **11 42 46.6 -1.6**
IRK pmax pmax
comp=Z,42nm,1.5s
**IEMG Emamgholi 55.15 320** *e*P **P** **11 42 49.8 -2.1**
**GEYT Alibeck 55.80 320** P **P** **11 42 54.6 -1.6**
comp=Z,4.1nm,0.7s,baz=152,slow=6.6,SNR=6.9
**ISHV Shirvan 55.83 320** *e*P **P** **11 42 54.3 -2.3**
**CAN Canberra 55.93 132** *e*P **P** **11 42 58.7 +1.5**
CAN pmax pmax
comp=Z,30nm,1.2s
**CAN Canberra 55.93 132** *e*P **P** **11 42 58.7 +1.5**
comp=Z,30nm,1.2s
**OTUK Ortayu 56.02 338** P **P** **11 42 56.7 -0.8**
OTUK pmax pmax
comp=Z,27nm,1.0s
**KURBB Kurchatov Arra 56.06 344** P **P** **11 42 57.4 -0.3**
comp=Z,21nm,0.9s,baz=162,slow=6.9,SNR=87
**KURK Kurchatov 56.12 344** *e*P **P** **11 42 57.8 -0.3**
KURK *e**PP **pP** **11 43 07.2 +0.9**
**KURK Kurchatov 56.12 344** P **P** **11 42 57.4 -0.7**
comp=Z,272nm,1.0s,SNR=37
**KURK Kurchatov 56.12 344** *e*P **P** **11 42 57.8 -0.3**
KURK *e*pP **pP** **11 43 07.2 +0.9**
**ARMA Armidale 56.19 125** *e*P P 11 43 03.1 +3.9
comp=Z,16nm,1.2s
**ZAA0 Zalesovo Array 57.71 350** P **P** **11 43 09.1 -0.2**
baz=58,SNR=15
**ZALV Zalesovo Beam 57.71 350** P **P** **11 43 08.9 -0.3**
comp=Z,46nm,0.9s,baz=163,slow=5.6,SNR=100
ZALV LR LR 12 10 43.7
comp=Z,112nm,19.0s,baz=248,slow=39
**ZALV Zalesovo Beam 57.71 350** P **P** **11 43 09.0 -0.3**
**KLR Kul'dur 58.52 24** *e*P P 11 43 11.3 -3.8
KLR pmax pmax
comp=E,50nm,1.6s
KLR pmax pmax
comp=Z,120nm,1.6s
**KRAR Krasnoyarsk 58.67 355**↓ *e*P **P** **11 43 15.9 -0.1**
KRAR pmax pmax
comp=Z,25nm,1.1s
**NVS Novosibirsk 58.85 349**↑ *i*P **P** **11 43 17.5 +0.2**
NVS pmax pmax
comp=N,19nm,1.1s
NVS pmax pmax
comp=E,10.0nm,1.1s
NVS pmax pmax
comp=Z,27nm,1.1s
**RAYN Ar Rayn 58.89 299** *e*P **P** **11 43 18.2 -0.1**
comp=Z,6.0nm,1.0s
RAYN *e*pP **pP** **11 43 27.3 +0.8**
**HNR Honiara 60.08 99** *e*P **P** **11 43 26.0 -0.5**
HNR pmax pmax
comp=Z,91nm,1.0s
**HNR Honiara 60.08 99** *e*P **P** **11 43 26.0 -0.5**
comp=Z,91nm,1.0s
**ASAJ Asahikawa 60.17 34** P **P** **11 43 24.9 -1.7**
comp=Z,21nm,0.8s,baz=240,slow=8.3,SNR=5.6
**BVA0 Borovoye Array 60.67 340** *i* P **P** **11 43 28.5 -1.4**
BVA0 pmax pmax
comp=Z,22nm,1.1s
**BVAR Borovoye Array 60.67 340** P **P** **11 43 28.8 -1.1**
comp=Z,8.5nm,0.8s,baz=145,slow=8.1,SNR=28
**BRVK Borovoye 60.74 340** *ce*P **P** **11 43 29.2 -1.1**
BRVK pmax pmax
comp=Z,32nm,2.5s
**BRVK Borovoye 60.74 340** *e*P **P** **11 43 29.3 -1.0**
**ZRNK Zerenda 61.09 339** P **P** **11 43 31.1 -1.7**
ZRNK pmax pmax
comp=Z,11nm,0.9s
**CHKZ Chkalovo 61.14 341** P **P** **11 43 31.6 -1.4**
CHKZ pmax pmax
comp=Z,29nm,1.1s
**BOD Bodaibo 61.27 9** *e*P **P** **11 43 33.4 -0.4**
BOD pmax pmax
comp=Z,28nm,1.0s
**YSS Yuzh-Sakhalins 62.05 32** *e*P **P** **11 43 38.8 -0.4**
YSS pmax pmax
comp=Z,107nm,1.2s
**AB31 Akbulak array 62.08 332** *i* P **P** **11 43 38.2 -1.2**
AB31 pmax pmax
comp=Z,25nm,0.7s
**ABKAR Akbulak array 62.08 332** *e*P **P** **11 43 38.4 -1.1**
comp=Z,23nm,0.7s
ABKAR *e*pP **pP** **11 43 48.7 +1.0**
**KMBO Kilima Mbogo 62.59 270** P **P** **11 43 44.8 +0.9**
comp=Z,1.5nm,0.5s,baz=56,slow=9.4,SNR=5.3
KMBO LR LR 12 06 22.9
comp=Z,202nm,19.5s,baz=86,slow=32
**KMBO Kilima Mbogo 62.59 270** *e*P **P** **11 43 45.1 +1.2**
KMBO *e**PP **pP** **11 43 53.8 +1.7**
KMBO pmax pmax
comp=Z,3.0nm,0.9s
**KMBO Kilima Mbogo 62.59 270** *e*P **P** **11 43 45.1 +1.2**
comp=Z,2.7nm,0.9s
KMBO *e*pP **pP** **11 43 53.8 +1.7**
**CLNS Chul'man 62.60 15** *e*P **P** **11 43 42.3 -0.6**
CLNS pmax pmax
comp=Z,28nm,1.0s
CLNS pmax pmax
comp=N,15nm,1.0s
CLNS pmax pmax
comp=E,13nm,1.0s
**AKTO Aktyubinsk 63.80 332** P **P** **11 43 49.8 -1.1**
comp=E,11nm,1.0s,baz=127,slow=7.1,SNR=23
AKTO LR LR 12 15 01.0
comp=E,123nm,20.5s,baz=136,slow=39
**AKTO Aktyubinsk 63.80 332** P **P** **11 43 49.0 -1.9**
AKTO pmax pmax
comp=Z,29nm,1.3s
**DGRG David-gareji 66.00 318** P **P** **11 44 06.2 +0.7**
**DGRG David-gareji 66.00 318** P **P** **11 44 06.1 +0.7**
**TBLG Delisi 66.55 318** P **P** **11 44 08.7 -0.3**
**TBLG Delisi 66.55 318** P **P** **11 44 08.6 -0.3**
**SVE Sverdlovsk 67.16 338** *d* *i*P **P** **11 44 12.1 -0.4**
SVE pmax pmax
comp=Z,48nm,1.2s
**ONI Oni 67.79 318** P **P** **11 44 16.7 -0.1**
**ONI Oni 67.79 318** P **P** **11 44 16.7 -0.1**
**YAK Yakutsk 68.33 15** P **P** **11 44 18.2 -1.5**
comp=Z,2.7nm,0.3s,baz=32,slow=22,SNR=7.9
**YAK Yakutsk 68.33 15** *c* *i*P **P** **11 44 18.3 -1.5**
YAK *e**PP **pP** **11 44 25.0 -3.1**
YAK *e* 11 44 32.7
YAK *e* 11 46 52.7
YAK *e*PPP PPP 11 48 31.7
YAK pmax pmax
comp=Z,132nm,1.1s
YAK pmax pmax
comp=E,66nm,1.2s
YAK pmax pmax
comp=N,39nm,1.1s
YAK pmax pmax
comp=Z,198nm,3.5s
YAK pmax pmax
comp=N,51nm,2.6s
YAK pmax pmax
comp=E,210nm,3.2s
YAK MLR MLR
comp=Z,346nm,16.0s
YAK MLR MLR
comp=N,205nm,16.0s
YAK MLR MLR
comp=E,65nm,12.0s
**NEY Neytrino 68.56 319**↑ *e*P **P** **11 44 22.8 +1.0**
NEY pmax pmax
comp=Z,10.0nm,2.6s
**KBZ Khabaz 68.65 319** P **P** **11 44 22.1 0.0**
comp=Z,8.7nm,0.8s,baz=127,slow=4.1,SNR=17
**ASF Jabal al Asfar 68.81 306** P **P** **11 44 24.7 +1.2**
comp=Z,2.1nm,0.6s,baz=95,slow=7.2,SNR=4.1
**KIV Kislovodsk 68.89 319** *e*P **P** **11 44 23.7 0.0**
KIV pmax pmax
comp=Z,22nm,1.1s
**MALT Malatya 69.62 313**↓ *i*P P 11 44 35.8 +7.4
**MALT Malatya 69.62 313**↓ *i*P P 11 44 35.8 +7.4
**MAW Mawson 69.69 194** P **P** **11 44 30.0 +1.9**
comp=Z,1.4nm,1.0s,baz=71,slow=11,SNR=3.5
MAW LR LR 12 08 04.3
comp=Z,214nm,21.7s,baz=60,slow=30
**MAW Mawson 69.69 194** *e*P P 11 44 31.3 +3.2
**MAW Mawson 69.69 194** *e*P P 11 44 31.3 +3.2
**SOC Sochi 70.69 318** *e*P **P** **11 44 32.9 -1.8**
SOC *e*PPP PPP 11 48 50.4
SOC *e*S **S** **11 53 44.8 -2.7**
SOC *e*SS **SS** **11 58 15.1 -4.7**
SOC pmax pmax
comp=Z,19nm,0.3s
**SKR Severo-Kuril's 71.43 34** *e*P **P** **11 44 40.1 +1.1**
**VRH Novokhopyorsk 72.72 326** *e*P **P** **11 44 44.6 -2.1**
VRH *e**SP **sP** **11 44 54.5 -3.7**
VRH pmax pmax
comp=Z,20nm,0.9s
VRH pmax pmax
comp=N,10.0nm,0.5s
VRH pmax pmax
comp=E,30nm,0.7s
**PETK Petropavlovsk- 73.45 32** P **P** **11 44 49.1 -1.9**
comp=E,14nm,1.0s,baz=186,slow=2.7,SNR=5.1
**BRTR Keskin Array B 73.61 313** P **P** **11 44 51.2 -1.3**
comp=E,3.0nm,0.8s,baz=124,slow=6.7,SNR=15
**PET Petropavlovsk 73.92 33** *e*P **P** **11 44 53.7 -0.1**
PET pmax pmax
comp=Z,103nm,1.3s
**VORD Divnogorie 73.99 325** *e*P **P** **11 44 51.9 -2.3**
VORD *e**SP **sP** **11 45 01.4 -4.3**
VORD pmax pmax
comp=Z,20nm,0.3s
VORD pmax pmax
comp=N,50nm,0.4s
VORD pmax pmax
comp=E,220nm,1.9s
**VSR Storozhevoye 74.17 325** *e*P **P** **11 44 54.2 -1.1**
VSR *e**SP **sP** **11 45 03.2 -3.6**
VSR pmax pmax
comp=Z,20nm,0.7s
VSR pmax pmax
comp=N,10.0nm,1.2s
VSR pmax pmax
comp=E,20nm,1.0s
**LPSR Galich'ya Gora 74.89 326** *e*P **P** **11 44 58.4 -1.1**
LPSR *e**SP **sP** **11 45 08.2 -2.7**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=N,5.0nm,0.7s
LPSR pmax pmax
comp=E,20nm,1.2s
**SEY Seymchan 76.21 22** P **P** **11 45 05.8 -1.1**
comp=E,22nm,0.9s,baz=228,slow=5.4,SNR=10
**SEY Seymchan 76.21 22**↓ *e*P **P** **11 45 06.9 +0.1**
**MOS Moscow 76.92 329** *e*P **P** **11 45 10.0 -0.9**
MOS *e* 11 45 21.2
**OBN Obninsk 77.21 328** P **P** **11 45 11.6 -0.9**
comp=E,21nm,0.4s,baz=253,slow=5.7,SNR=8.3
**OBN Obninsk 77.21 328** *ce*P **P** **11 45 12.0 -0.6**
OBN *i* *PP **pP** **11 45 20.1 -0.9**
OBN *SP **sP** **11 45 22.0 -2.1**
OBN 11 45 26.0
OBN pmax pmax
comp=E,65nm,1.7s
OBN MLR MLR
comp=Z,104nm,26.0s
**SYO Syowa Base 77.28 199**↑ *e*P **P** **11 45 15.6 +2.9**
**KLMR Klimovskoe 78.28 334** *e*P **P** **11 45 17.2 -1.3**
KLMR pmax pmax
comp=Z,30nm,1.3s
**TIRR Tirgusor 78.67 316**↑ P P 11 45 29.6 +8.6
**TIRR Tirgusor 78.67 316**↑ *i*P P 11 45 29.5 +8.6
**TLB Topalu 78.96 316**↓ *i*P **P** **11 45 22.8 +0.2**
**TLB Topalu 78.96 316**↓ *i*P **P** **11 45 22.8 +0.2**
**MSAB Monastry St. A 78.98 316**↓ *i*P P 11 45 32.2 +9.5
**CFR Carcaliu 79.05 317**↓ *i*P P 11 45 28.1 +5.1
**CFR Carcaliu 79.05 317**↓ *i*P P 11 45 28.1 +5.1
**AKASG Malin Array Be 79.85 322** P **P** **11 45 26.3 -1.0**
comp=Z,0.6nm,0.3s,baz=90,slow=4.1,SNR=6.3
**AKASG Malin Array Be 79.85 322** *ce*P **P** **11 45 27.5 +0.2**
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**KIEV Kiev 79.86 322**↓ *e*P **P** **11 45 26.3 -1.0**
KIEV pmax pmax
comp=Z,4.0nm,1.0s
**VRI Vrincioaia 80.18 317** ↓ *i*P **P** **11 45 30.2 +1.0**
**VRI Vrincioaia 80.18 317** ↓ *i*P **P** **11 45 30.2 +1.0**
**PLOR Plostina 80.23 317** ↓ *i*P **P** **11 45 30.1 +0.6**
**PLOR Plostina 80.23 317** ↓ *i*P **P** **11 45 30.1 +0.6**
**TESR Tescani 80.39 318** ↓ *i*P **P** **11 45 30.5 +0.2**
**TMCR Tamitsa 80.41 337** *e*P **P** **11 45 30.4 +0.4**
TMCR pmax pmax
comp=Z,34nm,0.9s
**MLR Muntele Rosu 80.62 317** ↓ *i*P **P** **11 45 32.3 +0.5**
**MLR Muntele Rosu 80.62 317** ↓ *i*P **P** **11 45 32.3 +0.5**
**DOPR Dopca 81.11 317** ↓ *i*P **P** **11 45 35.3 +1.1**
**VOIR 81.22 317** ↓ *i*P P 11 45 46.8 +12
**VOIR 81.22 317** ↓ *i*P P 11 45 46.8 +12
**BURAR Bucovina Array 81.60 319**↑ *i*P **P** **11 45 37.5 +0.6**
**BURAR Bucovina Array 81.60 319**↑ *i*P **P** **11 45 37.5 +0.6**
**VNDA Vanda 81.62 169** P **P** **11 45 36.9 +0.7**
comp=Z,1.8nm,1.1s,baz=270,slow=3.0,SNR=3.0
VNDA LR LR 12 20 14.9
comp=Z,153nm,18.2s,baz=314,slow=34
**VNDA Vanda 81.62 169** P **P** **11 45 37.0 +0.7**
**GZR Gura Zlata 82.78 316** ↓ *i*P **P** **11 45 43.2 +0.1**
**GZR Gura Zlata 82.78 316** ↓ *i*P **P** **11 45 43.2 +0.1**
**LVV L'vov 82.85 321** *e*P P 11 45 55.7 +12
**DRGR 83.09 318** ↓ *i*P **P** **11 45 45.2 +0.5**
**DRGR 83.09 318** ↓ *i*P **P** **11 45 45.2 +0.5**
**BZS Buzias 83.62 316** ↓ *i*P **P** **11 45 47.7 +0.4**
**BZS Buzias 83.62 316** ↓ *i*P **P** **11 45 47.7 +0.4**
**BILL Bilibino 83.75 20**↓ *e*P **P** **11 45 47.0 -0.5**
BILL *PP **pP** **11 45 55.0 -1.0**
BILL *SP **sP** **11 45 57.0 -2.0**
BILL *e* 11 48 56.7
BILL *i* S SKSac 11 55 56.0 -12
BILL *e*SS **SS** **12 01 32.2 -3.6**
BILL pmax pmax
comp=Z,21nm,2.3s
**DIVS Divibare 84.51 315** ↓ *i*P **P** **11 45 52.2 +0.2**
**STHS Stebnicka Huta 84.55 320** *e*P **P** **11 45 52.0 0.0**
STHS *e* 11 46 00.6
STHS pmax pmax
comp=Z,6.0nm,1.1s
**STHS Stebnicka Huta 84.55 320** *e*P **P** **11 45 52.0 0.0**
STHS *e* 11 46 00.6
**FINES FINESS Array B 84.56 332** P **P** **11 45 51.9 +0.2**
comp=Z,2.3nm,0.5s,baz=112,slow=6.4,SNR=10
**VYHS Vyhne 85.97 319** *e*P **P** **11 45 58.9 -0.2**
VYHS *e* 11 46 09.1
**VYHS Vyhne 85.97 319** *e*P **P** **11 45 58.9 -0.2**
VYHS *e*pP **pP** **11 46 09.1 +1.5**
**ARCES ARCESS Array B 86.97 340** P **P** **11 46 03.0 -0.6**
comp=Z,5.8nm,0.8s,baz=94,slow=7.3,SNR=13
ARCES LR LR 12 29 18.1
comp=Z,192nm,18.8s,baz=100,slow=39
**ARCES ARCESS Array B 86.97 340** P **P** **11 46 03.0 -0.6**
**QSPA South Pole Qui 87.39 180** *e*P **P** **11 46 07.2 +1.4**
comp=Z,4.5nm,0.9s
**DPC Dobruska-Polom 87.84 320** *e*P **P** **11 46 08.8 +0.6**
DPC *e* 11 46 18.4
**DPC Dobruska-Polom 87.84 320** *e*P **P** **11 46 08.8 +0.6**
DPC *e*pP **PcP** **11 46 11.8 +1.8**
DPC *e*sP **sP** **11 46 18.4 -1.4**
**GERES GERESS Array B 89.39 319** P **P** **11 46 15.0 -0.6**
comp=Z,1.7nm,0.7s,baz=101,slow=4.3,SNR=12
**BRG Berggiesshubel 89.40 321** *e*P **P** **11 46 16.1 +0.6**
comp=Z,4.2nm,0.7s
BRG *e* 11 46 25.3
comp=Z,14nm,1.4s
**BRG Berggiesshubel 89.40 321** *e*P **P** **11 46 16.1 +0.6**
BRG *e* 11 46 25.3
BRG pmax pmax
comp=Z,4.0nm,0.7s
BRG pmax pmax
comp=Z,14nm,1.5s
**HFS Hagfors 90.30 330** LR LR 12 31 00.8
comp=Z,94nm,20.4s,baz=75,slow=38
**SNAA Sanae 91.55 198** P **P** **11 46 26.8 +1.6**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NOA** | **NORSAR Array B** | **91.58** | **331** | LR | LR | 12 31 58.2 | | |
| | comp=Z,82nm,18.3s,baz=95,slow=38 | | | | | | | |
| **KEST** | **Kesra** | **91.91** | **306** | P | **P** | **11 46 28.2** | **+0.6** | |
| | comp=Z,7.0nm,0.9s,baz=287,slow=11,SNR=3.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **98.53** | **283** | LR | LR | 12 29 23.3 | | |
| | comp=Z,94nm,19.3s,baz=100,slow=34 | | | | | | | |
| **ILAR** | **Eielson Array** | **102.09** | **24** | PP | PP | 11 51 22.9 | -1.6 | |
| | comp=Z,1.9nm,1.1s,baz=294,slow=6.8,SNR=6.7 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.13** | **39** | PKP | **PKPdf** | **11 52 30.9** | **+1.4** | |
| | comp=Z,0.5nm,0.8s,baz=276,slow=3.8,SNR=4.0 | | | | | | | |
| **R11A** | **Troy Canyon, C** | **131.88** | **38** | *e*PKPdf | **PKPdf** | **11 52 34.7** | **+2.0** | |
| R11A | | | | *ep*PKPdf | **pPKPdf** | **11 52 43.9** | **+2.4** | |
| **U32A** | **Winter Ranch,** | **142.12** | **25** | P | **PKPdf** | **11 52 46.6** | **-5.0** | |
| | baz=142 | | | | | | | |
| **V31A** | **Spring Creek L** | **142.26** | **27** | P | **PKPdf** | **11 52 47.2** | **-4.6** | |
| | baz=142 | | | | | | | |
| **T34A** | **McClaskey Farm** | **142.30** | **23** | P | **PKPdf** | **11 52 47.1** | **-4.7** | |
| | baz=142 | | | | | | | |
| **U33A** | **Lingo Farm, Me** | **142.44** | **24** | P | **PKPdf** | **11 52 47.4** | **-4.7** | |
| | baz=142 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **142.52** | **37** | P | **PKPdf** | **11 52 48.5** | **-3.9** | |
| | baz=142 | | | | | | | |
| **T35A** | **Sooner Cattle** | **142.65** | **22** | P | **PKPdf** | **11 52 48.4** | **-4.1** | |
| | baz=142 | | | | | | | |
| **V32A** | **Arapaho** | **142.66** | **26** | P | **PKPdf** | **11 52 47.9** | **-4.6** | |
| | baz=142 | | | | | | | |
| **W31A** | **Holland Ranch,** | **142.71** | **27** | P | **PKPdf** | **11 52 48.5** | **-4.2** | |
| | baz=142 | | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **142.75** | **21** | P | **PKPdf** | **11 52 48.5** | **-4.1** | |
| | baz=142 | | | | | | | |
| **Z28A** | **Tucker Farm, M** | **143.03** | **32** | P | PKPbc | 11 52 49.8 | -0.3 | |
| | baz=143 | | | | | | | |
| **T37A** | **Cheneyville 18** | **143.03** | **20** | P | PKPab | 11 52 48.6 | +0.3 | |
| | baz=143 | | | | | | | |
| **U35A** | **Pawnee** | **143.04** | **23** | P | PKPbc | 11 52 49.3 | -0.6 | |
| | baz=143 | | | | | | | |
| **W32A** | **Sentinel** | **143.07** | **27** | P | PKPbc | 11 52 49.9 | -0.2 | |
| | baz=143 | | | | | | | |
| **X31A** | **McDonald Ranch** | **143.15** | **28** | P | PKPbc | 11 52 50.2 | 0.0 | |
| | baz=143 | | | | | | | |
| **V34A** | **Guthrie** | **143.20** | **24** | P | PKPbc | 11 52 49.8 | -0.5 | |
| | baz=143 | | | | | | | |
| **Y30A** | **Stafford Cattl** | **143.32** | **30** | P | PKPbc | 11 52 50.6 | -0.3 | |
| | baz=143 | | | | | | | |
| **W33A** | **Caddo, Fort Co** | **143.39** | **26** | P | PKPbc | 11 52 50.5 | -0.4 | |
| | baz=143 | | | | | | | |
| **U36A** | **Oologah** | **143.40** | **21** | P | PKPbc | 11 52 50.5 | -0.3 | |
| | baz=143 | | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **143.40** | **31** | P | PKPab | 11 52 50.2 | +0.2 | |
| | baz=143 | | | | | | | |
| **128A** | **Castleberry Fa** | **143.49** | **33** | P | PKPab | 11 52 50.5 | +0.1 | |
| | baz=143 | | | | | | | |
| **V35A** | **Meyer Ranch, C** | **143.54** | **23** | P | PKPab | 11 52 49.9 | -0.5 | |
| | baz=143 | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **143.56** | **29** | P | PKPab | 11 52 50.1 | -0.5 | |
| | baz=143 | | | | | | | |
| **U37A** | **Salina** | **143.61** | **21** | P | PKPab | 11 52 50.3 | -0.3 | |
| | baz=143 | | | | | | | |
| **W34A** | **Bridge Creek,** | **143.61** | **25** | P | PKPab | 11 52 50.7 | 0.0 | |
| | baz=143 | | | | | | | |
| **X32A** | **Elmer** | **143.64** | **27** | P | PKPab | 11 52 50.7 | -0.1 | |
| | baz=143 | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **143.68** | **30** | P | PKPab | 11 52 50.9 | -0.1 | |
| | baz=143 | | | | | | | |
| **CPUP** | **Villa Florida** | **143.77** | **216** | PKP | **PKPdf** | **11 52 56.9** | **+2.2** | |
| | comp=Z,3.1nm,0.9s,baz=224,slow=7.3,SNR=2.4 | | | | | | | |
| **TUL1** | **Tulsa** | **143.81** | **22** | P | PKPab | 11 52 51.0 | -0.4 | |
| | baz=144 | | | | | | | |
| **129A** | **Stewart Farms,** | **143.81** | **32** | P | PKPab | 11 52 51.5 | -0.1 | |
| | baz=144 | | | | | | | |
| **228A** | **UT Block 9, Go** | **143.81** | **33** | P | PKPab | 11 52 51.2 | -0.5 | |
| | baz=144 | | | | | | | |
| **U38A** | **Gravette** | **143.83** | **20** | P | PKPab | 11 52 51.0 | -0.4 | |
| | baz=144 | | | | | | | |
| **V36A** | **Jenks** | **143.86** | **22** | P | PKPab | 11 52 51.6 | 0.0 | |
| | baz=144 | | | | | | | |
| **X33A** | **Lawton** | **143.89** | **26** | P | PKPab | 11 52 51.2 | -0.6 | |
| | baz=144 | | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **143.91** | **28** | P | PKPab | 11 52 51.7 | -0.2 | |
| | baz=144 | | | | | | | |
| **W35A** | **Tecumseh** | **144.05** | **24** | P | **PKPab** | **11 52 52.4** | **+0.1** | |
| | baz=144,SNR=6.4 | | | | | | | |
| **V37A** | **Hulbert** | **144.07** | **21** | P | **PKPab** | **11 52 52.0** | **-0.4** | |
| | baz=144 | | | | | | | |
| **X34A** | **Smith Ranch, M** | **144.13** | **25** | P | **PKPab** | **11 52 52.7** | **0.0** | |
| | baz=144,SNR=7.0 | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **144.14** | **29** | P | **PKPab** | **11 52 52.1** | **-0.7** | |
| | baz=144 | | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **144.28** | **27** | P | **PKPab** | **11 52 52.7** | **-0.5** | |
| | baz=144 | | | | | | | |
| **130A** | **Snyder** | **144.31** | **31** | P | **PKPab** | **11 52 52.9** | **-0.6** | |
| | baz=144 | | | | | | | |
| **W36A** | **Wetumka** | **144.32** | **23** | P | **PKPab** | **11 52 52.6** | **-0.7** | |
| | baz=144,SNR=7.9 | | | | | | | |
| **V38A** | **Canehill** | **144.34** | **20** | P | **PKPab** | **11 52 52.7** | **-0.8** | |
| | baz=144,SNR=9.6 | | | | | | | |
| **229A** | **Bryant Ranch,** | **144.35** | **33** | P | **PKPab** | **11 52 53.7** | **+0.1** | |
| | baz=144,SNR=7.0 | | | | | | | |
| **Z32A** | **Haskell** | **144.47** | **28** | P | **PKPab** | **11 52 53.5** | **-0.5** | |
| | baz=144,SNR=10 | | | | | | | |
| **131A** | **Roby** | **144.54** | **30** | P | **PKPab** | **11 52 53.9** | **-0.4** | |
| | baz=144,SNR=5.2 | | | | | | | |
| **W37A** | **Quinton** | **144.63** | **22** | P | **PKPab** | **11 52 54.0** | **-0.4** | |
| | baz=144,SNR=18 | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **144.63** | **33** | P | **PKPab** | **11 52 54.5** | **-0.3** | |
| | baz=144,SNR=29 | | | | | | | |
| **X35A** | **Drake** | **144.67** | **24** | P | **PKPab** | **11 52 54.2** | **-0.4** | |
| | baz=144,SNR=26 | | | | | | | |
| **Y34A** | **Reagan Ranch,** | **144.71** | **26** | P | **PKPab** | **11 52 54.3** | **-0.5** | |
| | baz=144,SNR=19 | | | | | | | |
| **X36A** | **Centrahoma** | **144.77** | **24** | P | **PKPab** | **11 52 54.5** | **-0.5** | |
| | baz=144,SNR=16 | | | | | | | |
| **230A** | **Sterling City** | **144.79** | **32** | P | **PKPab** | **11 52 55.0** | **-0.3** | |
| | baz=145,SNR=28 | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **144.82** | **28** | P | **PKPab** | **11 52 54.1** | **-1.2** | |
| | baz=145 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **144.95** | **29** | P | **PKPab** | **11 52 55.0** | **-0.8** | |
| | baz=145,SNR=7.6 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **144.95** | **29** | *e*PKPdf | **PKPab** | **11 52 55.6** | **-0.2** | |
| ABTX | | | | *ep*PKPdf | **pPKPdf** | **11 53 05.4** | **0.0** | |
| **W38A** | **Poteau** | **145.02** | **21** | P | **PKPbc** | **11 52 55.3** | **-0.6** | |
| | baz=145,SNR=11 | | | | | | | |
| **Y35A** | **Marietta** | **145.06** | **25** | P | **PKPbc** | **11 52 54.9** | **-1.2** | |
| | baz=145,SNR=7.2 | | | | | | | |
| **330A** | **Mertzon** | **145.13** | **32** | P | **PKPbc** | **11 52 56.1** | **-0.3** | |
| | baz=145,SNR=31 | | | | | | | |
| **X37A** | **Clayton** | **145.13** | **22** | P | **PKPbc** | **11 52 55.8** | **-0.5** | |
| | baz=145,SNR=13 | | | | | | | |
| **Z34A** | **Collier Ranch,** | **145.14** | **27** | P | **PKPbc** | **11 52 55.6** | **-0.8** | |
| | baz=145,SNR=6.2 | | | | | | | |
| **231A** | **Bronte** | **145.16** | **31** | P | **PKPbc** | **11 52 56.0** | **-0.6** | |
| | baz=145,SNR=15 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.24** | **38** | PKPbc | **PKPdf** | **11 52 57.5** | **+0.1** | |
| | comp=Z,43nm,0.8s,baz=287,slow=1.4,SNR=387 | | | | | | | |
| **X38A** | **Whitesboro** | **145.27** | **22** | P | **PKPbc** | **11 52 56.3** | **-0.5** | |
| | baz=145,SNR=31 | | | | | | | |
| **133A** | **Hamilton Ranch** | **145.31** | **29** | P | **PKPbc** | **11 52 56.3** | **-0.6** | |
| | baz=145,SNR=38 | | | | | | | |
| **429A** | **Davenport Ranc** | **145.34** | **34** | P | **PKPbc** | **11 52 56.7** | **-0.5** | |
| | baz=145,SNR=11 | | | | | | | |
| **Y36A** | **Durant** | **145.38** | **24** | P | **PKPbc** | **11 52 56.3** | **-0.8** | |
| | baz=145,SNR=14 | | | | | | | |
| **Z35A** | **Perchaven, San** | **145.47** | **26** | P | **PKPbc** | **11 52 56.8** | **-0.6** | |
| | baz=145,SNR=17 | | | | | | | |
| **529A** | **Stev Forest Ra** | **145.53** | **35** | P | **PKPab** | **11 52 58.2** | **+0.2** | |
| | baz=145,SNR=32 | | | | | | | |
| **232A** | **Coleman** | **145.54** | **30** | P | **PKPdf** | **11 52 57.6** | **-0.1** | |
| | baz=145,SNR=32 | | | | | | | |
| **430A** | **Baggett Ranch,** | **145.58** | **33** | P | **PKPdf** | **11 52 57.7** | **-0.1** | |
| | baz=145,SNR=19 | | | | | | | |
| **Y37A** | **Hugo** | **145.58** | **23** | P | **PKPdf** | **11 52 56.8** | **-0.8** | |
| | baz=145 | | | | | | | |
| **331A** | **San Angelo** | **145.60** | **32** | P | **PKPdf** | **11 52 57.8** | **0.0** | |
| | baz=145,SNR=27 | | | | | | | |
| **134A** | **White-Moore Ra** | **145.74** | **28** | P | **PKPdf** | **11 52 57.8** | **-0.1** | |
| | baz=146,SNR=6.9 | | | | | | | |
| **HBAR** | **Harrisburg** | **145.77** | **15** | *e*PKPbc | **PKPab** | **11 52 58.5** | **-0.1** | |
| HBAR | | | | *ep*PKPdf | **pPKPdf** | **11 53 07.5** | **+0.8** | |
| **MIAR** | **Mount Ida** | **145.82** | **20** | *e*PKP2 | **PKPbc** | **11 52 58.3** | **-0.2** | |
| **MIAR** | **Mount Ida** | **145.82** | **20** | P | **PKPbc** | **11 52 58.5** | **0.0** | |
| | baz=146,SNR=26 | | | | | | | |
| **MIAR** | **Mount Ida** | **145.82** | **20** | *e*PKPbc | **PKPbc** | **11 52 58.3** | **-0.2** | |
| MIAR | | | | *ep*PKPdf | **pPKPdf** | **11 53 07.7** | **+0.9** | |
| **WVT** | **Waverly** | **145.87** | **11** | *e*PKP2 | **PKPbc** | **11 52 58.3** | **-0.3** | |
| **WVT** | **Waverly** | **145.87** | **11** | *e*PKPbc | **PKPbc** | **11 52 58.3** | **-0.3** | |
| WVT | | | | *ep*PKPdf | **pPKPdf** | **11 53 07.4** | **+0.6** | |
| **Z36A** | **Blue Ridge** | **145.87** | **25** | P | **PKPdf** | **11 52 58.1** | **0.0** | |
| | baz=146 | | | | | | | |
| **Y38A** | **Idabel** | **145.96** | **22** | P | **PKPdf** | **11 52 58.2** | **-0.1** | |
| | baz=146 | | | | | | | |
| **431A** | **Sonora** | **146.00** | **33** | P | **PKPbc** | **11 52 59.1** | **-0.1** | |
| | baz=146,SNR=18 | | | | | | | |
| **530A** | **J-C Ranch, Com** | **146.01** | **34** | P | **PKPab** | **11 52 59.5** | **-0.3** | |
| | baz=146,SNR=41 | | | | | | | |
| **UALR** | **University of** | **146.01** | **18** | *e*PKPbc | **PKPbc** | **11 52 58.8** | **-0.2** | |
| UALR | | | | *ep*PKPdf | **pPKPdf** | **11 53 08.0** | **+0.9** | |
| **135A** | **Vickery Place,** | **146.05** | **27** | P | **PKPdf** | **11 52 58.5** | **0.0** | |
| | baz=146 | | | | | | | |
| **TZTN** | **Tazewell** | **146.06** | **5** | *e*PKPbc | **PKPdf** | **11 52 58.7** | **+0.3** | |
| TZTN | | | | *ep*PKPdf | **pPKPdf** | **11 53 08.6** | **+1.4** | |
| **234A** | **Clairette** | **146.18** | **28** | P | **PKPbc** | **11 52 59.6** | **-0.1** | |
| | baz=146,SNR=8.3 | | | | | | | |
| **Y39A** | **Lockesburg** | **146.19** | **21** | P | **PKPdf** | **11 52 58.9** | **+0.3** | |
| | baz=146 | | | | | | | |
| **Z37A** | **Pogue Cattle C** | **146.26** | **24** | P | **PKPdf** | **11 52 59.2** | **+0.4** | |
| | baz=146 | | | | | | | |
| **432A** | **Menard** | **146.28** | **31** | P | **PKPbc** | **11 52 59.7** | **-0.3** | |
| | baz=146,SNR=10.0 | | | | | | | |
| **333A** | **Richland Sprin** | **146.33** | **30** | P | **PKPbc** | **11 52 59.9** | **-0.2** | |
| | baz=146,SNR=26 | | | | | | | |
| **531A** | **Rocksprings** | **146.43** | **33** | P | **PKPbc** | **11 53 00.3** | **-0.3** | |
| | baz=146,SNR=24 | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **146.47** | **23** | P | **PKPbc** | **11 53 00.2** | **-0.3** | |
| | baz=146 | | | | | | | |
| **WHTX** | **Lake Whitney** | **146.51** | **27** | P | **PKPbc** | **11 53 00.2** | **-0.4** | |
| | baz=146 | | | | | | | |
| **136A** | **Ennis** | **146.51** | **26** | P | **PKPdf** | **11 52 59.9** | **+0.6** | |
| | baz=146 | | | | | | | |
| **JCT** | **Junction City** | **146.59** | **32** | P | **PKPbc** | **11 53 00.9** | **-0.1** | |
| | baz=146,SNR=50 | | | | | | | |
| **334A** | **Lometa** | **146.69** | **29** | P | **PKPbc** | **11 53 00.9** | **-0.3** | |
| | baz=146,SNR=8.1 | | | | | | | |
| **137A** | **Heron Place, G** | **146.73** | **24** | P | **PKPdf** | **11 53 00.3** | **+0.8** | |
| | baz=146 | | | | | | | |
| **433A** | **Art** | **146.74** | **31** | P | **PKPbc** | **11 53 01.1** | **-0.3** | |
| | baz=146,SNR=17 | | | | | | | |
| **Z39A** | **Irene McRaven,** | **146.78** | **22** | P | **PKPbc** | **11 53 00.9** | **-0.5** | |
| | baz=146 | | | | | | | |
| **532A** | **Rocksprings** | **146.81** | **32** | P | **PKPbc** | **11 53 01.4** | **-0.3** | |
| | baz=147,SNR=24 | | | | | | | |
| **236A** | **Katherine and** | **146.92** | **26** | P | **PKPbc** | **11 53 01.2** | **-0.6** | |
| | baz=147 | | | | | | | |
| **138A** | **Matatall Enter** | **146.95** | **24** | P | **PKPbc** | **11 53 01.4** | **-0.4** | |
| | baz=147 | | | | | | | |
| **631A** | **Perdido Creek** | **147.00** | **34** | P | **PKPbc** | **11 53 01.9** | **-0.2** | |
| | baz=147,SNR=8.9 | | | | | | | |
| **CPCT** | **Cooper Cave** | **147.04** | **7** | *e*PKPbc | **PKPbc** | **11 53 01.7** | **-0.4** | |
| CPCT | | | | *ep*PKPdf | **pPKPdf** | **11 53 10.7** | **+1.8** | |
| **SWET** | **Sewanee** | **147.08** | **9** | *e*PKPbc | **PKPbc** | **11 53 01.3** | **-1.0** | |
| SWET | | | | *ep*PKPdf | **pPKPdf** | **11 53 10.4** | **+1.5** | |
| **434A** | **Burnet** | **147.10** | **30** | P | **PKPbc** | **11 53 01.6** | **-0.8** | |
| | baz=147,SNR=14 | | | | | | | |
| **335A** | **Moody** | **147.12** | **28** | P | **PKPbc** | **11 53 01.7** | **-0.7** | |
| | baz=147,SNR=9.6 | | | | | | | |
| **139A** | **Bunkhouse Ranc** | **147.20** | **23** | P | **PKPbc** | **11 53 02.2** | **-0.3** | |
| | baz=147 | | | | | | | |
| **237A** | **Washetta, Mont** | **147.23** | **25** | P | **PKPbc** | **11 53 02.3** | **-0.4** | |
| | baz=147 | | | | | | | |
| **336A** | **Riesel** | **147.30** | **27** | P | **PKPbc** | **11 53 02.5** | **-0.4** | |
| | baz=147,SNR=5.9 | | | | | | | |
| **533A** | **Kerrville** | **147.31** | **31** | P | **PKPbc** | **11 53 02.7** | **-0.3** | |
| | baz=147,SNR=6.5 | | | | | | | |
| **632A** | **Uvalde** | **147.36** | **33** | P | **PKPbc** | **11 53 03.0** | **-0.1** | |
| | baz=147,SNR=13 | | | | | | | |
| **435B** | **Jarrell** | **147.46** | **29** | P | **PKPbc** | **11 53 03.1** | **-0.3** | |
| | baz=147 | | | | | | | |
| **238A** | **Jacksonville** | **147.51** | **24** | P | **PKPbc** | **11 53 03.5** | **0.0** | |
| | baz=147 | | | | | | | |
| **KMSC** | **Kings Mountain** | **147.58** | **2** | P | **PKPbc** | **11 53 03.6** | **0.0** | |
| | baz=147 | | | | | | | |
| **KMSC** | **Kings Mountain** | **147.58** | **2** | *e*PKPbc | **PKPbc** | **11 53 03.1** | **-0.5** | |
| KMSC | | | | *e*PKPab | **PKPab** | **11 53 05.2** | **-0.5** | |
| KMSC | | | | *ep*PKPdf | **pPKPdf** | **11 53 11.8** | **+2.0** | |
| **534A** | **Blanco** | **147.63** | **31** | P | **PKPbc** | **11 53 03.6** | **-0.3** | |
| | baz=147,SNR=7.5 | | | | | | | |
| **633A** | **Saathoff Ranch** | **147.72** | **32** | P | **PKPbc** | **11 53 04.4** | **+0.2** | |
| | baz=148,SNR=8.8 | | | | | | | |
| **239A** | **Gary** | **147.76** | **23** | P | **PKPbc** | **11 53 04.7** | **+0.5** | |
| | baz=148 | | | | | | | |
| **337A** | **Centerville** | **147.78** | **26** | P | **PKPbc** | **11 53 04.8** | **+0.6** | |
| | baz=148 | | | | | | | |
| **436A** | **Wall Ranch, Ga** | **147.84** | **28** | P | **PKPbc** | **11 53 04.9** | **+0.5** | |
| | baz=148 | | | | | | | |
| **732A** | **Laxson Ranch,** | **147.86** | **34** | P | **PKPbc** | **11 53 04.6** | **+0.1** | |
| | baz=148 | | | | | | | |
| **338A** | **Crockett** | **148.00** | **25** | P | **PKPbc** | **11 53 04.7** | **-0.1** | |
| | baz=148 | | | | | | | |
| **535A** | **Dale** | **148.09** | **29** | P | **PKPbc** | **11 53 05.2** | **+0.1** | |
| | baz=148 | | | | | | | |
| **437A** | **Phantom Ranch,** | **148.09** | **27** | P | **PKPbc** | **11 53 05.1** | **0.0** | |
| | baz=148 | | | | | | | |
| **832A** | **Faith Ranch, C** | **148.20** | **35** | P | **PKPbc** | **11 53 05.9** | **+0.5** | |
| | baz=148 | | | | | | | |
| **733A** | **Pivot King Ran** | **148.24** | **33** | P | **PKPbc** | **11 53 06.0** | **+0.4** | |
| | baz=148 | | | | | | | |
| **536A** | **Bastrop** | **148.29** | **29** | P | **PKPbc** | **11 53 06.4** | **+0.8** | |
| | baz=148 | | | | | | | |
| **438A** | **Sam Houston St** | **148.45** | **26** | P | **PKPbc** | **11 53 06.3** | **+0.3** | |
| | baz=148 | | | | | | | |
| **833A** | **Chaparral WMA,** | **148.49** | **34** | P | **PKPbc** | **11 53 06.6** | **+0.4** | |
| | baz=148 | | | | | | | |
| **635A** | **Leesville** | **148.51** | **30** | P | **PKPbc** | **11 53 06.5** | **+0.3** | |
| | baz=148 | | | | | | | |
| **734A** | **La Parita Cree** | **148.54** | **32** | P | **PKPbc** | **11 53 07.1** | **+0.8** | |
| | baz=148 | | | | | | | |
| **537A** | **Green Hill Far** | **148.64** | **28** | P | **PKPbc** | **11 53 07.2** | **+0.7** | |
| | baz=148 | | | | | | | |
| **636A** | **Smothers Creek** | **148.79** | **29** | P | **PKPbc** | **11 53 07.5** | **+0.6** | |
| | baz=149 | | | | | | | |
| **735A** | **Kenedy** | **148.92** | **31** | P | **PKPbc** | **11 53 07.8** | **+0.5** | |
| | baz=149 | | | | | | | |
| **VBMS** | **Vicksburg** | **148.94** | **17** | P | **PKPbc** | **11 53 07.7** | **+0.5** | |
| | baz=149 | | | | | | | |
| **LRAL** | **Lakeview Retre** | **149.03** | **11** | *e*PKPdf | **PKPdf** | **11 53 02.8** | **-0.5** | |
| LRAL | | | | *e*PKPab | **PKPab** | **11 53 10.4** | **-1.1** | |
| **440A** | **Kirbyville** | **149.09** | **24** | P | **PKPbc** | **11 53 09.3** | **+1.7** | |
| | baz=149 | | | | | | | |
| **933A** | **Laredo** | **149.11** | **35** | P | **PKPbc** | **11 53 08.6** | **+0.8** | |
| | baz=149 | | | | | | | |
| **834A** | **Tilden** | **149.11** | **33** | P | **PKPbc** | **11 53 09.6** | **+1.8** | |
| | baz=149 | | | | | | | |
| **637A** | **Eagle Lake** | **149.17** | **28** | P | **PKPbc** | **11 53 08.7** | **+0.8** | |
| | baz=149 | | | | | | | |
| **736A** | **Circle Diamond** | **149.22** | **30** | P | **PKPbc** | **11 53 09.0** | **+1.0** | |
| | baz=149 | | | | | | | |
| **539A** | **Cross D Ranch,** | **149.33** | **25** | P | **PKPbc** | **11 53 09.4** | **+1.2** | |
| | baz=149 | | | | | | | |
| **835A** | **Beeville** | **149.37** | **32** | P | **PKPbc** | **11 53 09.5** | **+1.1** | |
| | baz=149 | | | | | | | |
| **934A** | **Benavides** | **149.54** | **33** | P | **PKPbc** | **11 53 10.3** | **+1.4** | |
| | baz=149 | | | | | | | |
| **034A** | **Hebbronville** | **149.86** | **34** | P | **PKPbc** | **11 53 10.7** | **+1.0** | |
| | baz=150 | | | | | | | |
| **035A** | **Encino** | **150.29** | **34** | P | **PKPbc** | **11 53 11.6** | **+0.9** | |
| | baz=150 | | | | | | | |
| **936A** | **North Padre Is** | **150.33** | **32** | P | **PKPbc** | **11 53 11.7** | **+0.9** | |
| | baz=150 | | | | | | | |
| **035Z** | **Hargill** | **150.67** | **34** | P | **PKPbc** | **11 53 13.0** | **+1.3** | |
| | baz=150 | | | | | | | |
| **LPAZ** | **La Paz** | **157.81** | **212** | PKPbc | PKPdf | 11 53 26.4 | +9.2 | |
| | comp=Z,1.7nm,1.0s,baz=271,slow=8.5,SNR=4.9 | | | | | | | |

**IDC 26 11:45:13.3±6.1, 43°51.N×45°49.E, h0km, Error ellipse: s-maj=182.6km s-min=41.7km az=6.0, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBZ** | **Khabaz** | **1.89** | **278** | Pg | Pg | 11 45 51.0 | +1.4 |
| | 0.7nm,0.3s,baz=86,slow=6.1,SNR=11 | | | | | | |
| KBZ | | | | Lg | Lg | 11 46 12.7 | |
| | 0.2nm,0.3s,baz=194,slow=19,SNR=3.8 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **11.00** | **47** | *i* | | 12 47 30.0 | |
| | baz=230,slow=322,SNR=1.8 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **27.63** | **54** | *i* | | 14 32 10.0 | |
| | baz=265,slow=324,SNR=3.0 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **41.84** | **62** | *i* | | 16 00 40.0 | |
| | baz=284,slow=326,SNR=0.4 | | | | | | |

*IDC **26** 12:00:50.3±1.8, 3°.60S×99°.54E, h0km, mb3.8/9, mb1 3.9/9, mb1mx3.7/52, mbtmp3.8/9, Error ellipse: s-maj=79.2km s-min=18.4km az=54.0*

*ISCJB **26** 12:00:53.6±0.8, 3°.49S±0°.05×99°.69E±0°.06, h33km, mb3.8/9, Error ellipse: s-maj=10.3km s-min=5.2km az=141.0*

*DJA **26** 12:00:56.0±0.8, 3°.5S±5°.×10°.0E±°, h46km±9km, M3.9/8, MLv3.9/8*

**ISC 26 12:00:56.2±1.0, 3°.43S±0°.08×99°.73E±0°.10, h35km, n21, σ0°92/23, mb4.0/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.72** | **23** | P | **Pn** | **12 01 09.4** | **-0.4** |
| PPSI | | | | S | **Sn** | **12 01 20.4** | **+0.8** |
| **SISI** | **Saibi** | **2.18** | **343** | P | **Pn** | **12 01 28.7** | **-1.3** |
| SISI | | | | S | **Sn** | **12 01 55.5** | **-0.3** |
| **PDSI** | **Padang** | **2.60** | **16** | P | **Pn** | **12 01 34.7** | **-1.1** |
| **PPI** | **Padang Panjang** | **3.02** | **13** | P | **Pn** | **12 01 40.8** | **-0.8** |
| PPI | | | | S | **Sn** | **12 02 16.4** | **-0.2** |
| **MNAI** | **Manna** | **3.35** | **106** | P | **Pn** | **12 01 46.3** | **+0.2** |
| MNAI | | | | S | **Sn** | **12 02 25.0** | **+0.2** |
| **LHSI** | **Lahat** | **3.81** | **96** | P | **Pn** | **12 01 50.7** | **-1.7** |
| **MNSI** | **Mandailing Nat** | **4.20** | **358** | P | **Pn** | **12 01 56.7** | **-1.0** |
| **MDSI** | **Maura Dua** | **4.56** | **103** | P | **Pn** | **12 02 02.1** | **-0.7** |
| MDSI | | | | S | **Sn** | **12 02 54.0** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **21.76** | **358** | P | **P** | **12 05 45.0** | **0.0** |
| | 0.8nm,0.5s,baz=190,slow=8.5,SNR=9.0 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.04** | **159** | T | T | 12 43 42.4 | |
| | baz=335,slow=76,SNR=6.1 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.05** | **159** | T | T | 12 43 42.4 | |
| | baz=335,slow=76,SNR=8.6 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.06** | **159** | T | T | 12 43 42.4 | |
| | baz=335,slow=76,SNR=6.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.53** | **119** | P | **P** | **12 08 06.8** | **-0.5** |
| | 0.8nm,0.6s,baz=304,slow=9.4,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **38.66** | **124** | P | **P** | **12 08 16.1** | **-0.7** |
| | 0.5nm,0.6s,baz=293,slow=7.9,SNR=6.8 | | | | | | |
| **SONM** | **Songino Array** | **51.38** | **6** | P | **P** | **12 09 58.8** | **+1.2** |
| | 1.5nm,0.7s,baz=188,slow=9.0,SNR=9.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.32** | **345** | P | **P** | **12 10 05.1** | **+0.6** |
| | 1.2nm,0.6s,baz=145,slow=9.3,SNR=8.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.83** | **344** | P | **P** | **12 10 35.5** | **-1.6** |
| | 0.5nm,0.7s,baz=167,slow=8.1,SNR=6.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.51** | **350** | P | **P** | **12 10 49.8** | **+1.0** |
| | 1.4nm,0.4s,baz=179,slow=5.5,SNR=7.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.42** | **340** | P | **P** | **12 11 08.2** | **-0.6** |
| | 0.8nm,0.6s,baz=116,slow=9.8,SNR=3.3 | | | | | | |
| **FINES** | **FINESS Array B** | **85.24** | **332** | P | **P** | **12 13 29.6** | **+0.7** |
| | 0.5nm,0.4s,baz=111,slow=7.6,SNR=5.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.99** | **38** | PKPbc | **PKPab** | **12 20 34.3** | **+0.7** |
| | 0.8nm,0.7s,baz=310,slow=1.3,SNR=10 | | | | | | |

*ISCJB **26** 12:06:17.6±0.5, 36°.46N±0°.03×140°.69E±0°.06, h64km±4km, mb3.8/8, Error ellipse: s-maj=8.3km s-min=5.2km az=24.5*

*IDC **26** 12:06:19.0±2.5, 36°.48N×140°.78E, h66km±19km, mb3.6/8, mb1 3.7/14, mb1mx3.5/61, mbtmp3.9/14, MS4.0/4, Ms1 3.9/4, ms1mx3.1/34, Error ellipse: s-maj=33.0km s-min=11.6km az=79.0*

*JMA **26** 12:06:19.0±0.1, 36°.46N×140°.60E, h56km±1km, M3.8 Broadband fault plane solution: P waves. NP1: ϕ±13.00000°, δ66.00000°, λ81.00000°. NP2: ϕ±214.00000°, δ26.00000°, λ109.00000°. Principal axes: T Plg68.0000°, Azm266.0000°; N Plg8.0000°, Azm17.0000°; P Plg20.0000°, Azm110.0000°;*

*JMA Felt II J1.*

**ISC 26 12:06:18.9±0.9, 36°.47N±0°.05×140°.67E±0°.07, h56km±7km, n35, σ1°09/36, mb3.8/8, MS4.0/4, 2C-5D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHO** | **Hitachi** | **0.16** | **331** | ⇑P | **Pn** | **12 06 27.8** | **+0.1** |
| JHO | | | | S | **Sn** | **12 06 33.7** | **-0.4** |
| **JYT** | **Yasato** | **0.45** | **237** | P | **Pn** | **12 06 29.6** | **-0.5** |
| JYT | | | | S | **Sn** | **12 06 37.0** | **-1.1** |
| **ONAJ** | **Iwakimizuishiy** | **0.64** | **10** | ⇑P | **Pn** | **12 06 32.1** | **-0.2** |
| ONAJ | | | | S | **Sn** | **12 06 41.5** | **-0.4** |
| **JFK** | **Kawauchi** | **0.91** | **11** | P | **Pn** | **12 06 35.4** | **-0.3** |
| JFK | | | | S | **Sn** | **12 06 47.6** | **-0.4** |
| **JAG** | **Ashikaga** | **0.98** | **268** | ⇓P | **Pn** | **12 06 36.1** | **-0.4** |
| JAG | | | | S | **Sn** | **12 06 48.0** | **-1.5** |
| **JFT** | **Otama** | **1.08** | **346** | ⇓P | **Pn** | **12 06 38.0** | **+0.1** |
| JFT | | | | S | **Sn** | **12 06 51.9** | **0.0** |
| **JKT** | **Katashina** | **1.18** | **285** | ⇓P | **Pn** | **12 06 39.0** | **-0.3** |
| JKT | | | | S | **Sn** | **12 06 54.1** | **-0.3** |
| **JFY** | **Yanaizu** | **1.21** | **321** | ⇓P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **51.58** | **6** | P | | **P** | **12 16 54.3** | **+0.2** |
| | 1.1nm,0.8s,baz=192,slow=9.5,SNR=6.3 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.51** | **345** | P | | **P** | **12 17 00.7** | **-0.2** |
| | 0.4nm,0.5s,baz=167,slow=7.4,SNR=3.6 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.71** | **350** | P | | **P** | **12 17 45.0** | **-0.1** |
| | 0.9nm,0.4s,baz=158,slow=7.2,SNR=3.5 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.15** | **38** | PKPbc | | **PKPdf** | **12 27 28.3** | **+0.7** |
| | 0.3nm,0.7s,baz=265,slow=1.0,SNR=4.5 | | | | | | | | |

*ISCJB* ***26*** *12:15:24.0±0.4,59.78N±0.03×23.26E±0.05,h0km, Error ellipse: s-maj=4.7km s-min=3.2km az=162.7*
*CSEM* ***26*** *12:15:24.7±0.2,59.73N×23.33E,h2km, ML2.4, Error ellipse: s-maj=6.0km s-min=4.3km az=173.0, Mining explosion.*
*NAO* ***26*** *12:15:25.5±1.1,59.81N×23.37E, ML2.7*
*HEL* ***26*** *12:15:25.3±0.1,59.77N×23.26E,h0km, ML2.4, ML2.4(UPP), Explosion*
*BER* ***26*** *12:15:26.6±4.4,59.77N×23.26E,h0km, ML2.7(NAO), Suspected explosion*
*IDC* ***26*** *12:15:26.6±1.0,59.89N×23.29E,h0km, mb1 3.4/4, mb1mx3.2/46, mbtmp3.4/4, ML3.6/4, Error ellipse: s-maj=12.6km s-min=6.8km az=150.0*
*UPP* ***26*** *12:15:28.1,59.81N×22.87E,h0km, ML2.4, Suspected Mining explosion.*

**ISC 26 12:15:24.2±0.7, 59.80N±0.03×23.19E±0.03, h0km, n58, σ1°44/82, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MEF** | **Metsahovi** | **0.74** | **55** | ***e*P** | **Pg** | **12 15 38.0** | **-0.4** |
| MEF | | | | *e*S | **Sg** | **12 15 47.0** | **-0.9** |
| **MEF** | **Metsahovi** | **0.74** | **55** | P | **Pg** | **12 15 38.0** | **-0.4** |
| MEF | | | | S | **Sg** | **12 15 47.0** | **-0.9** |
| **MTSE** | **Matsula** | **1.13** | **163** | ***e*P** | **Pg** | **12 15 44.9** | **-0.9** |
| MTSE | | | | *e*S | **Sg** | **12 15 59.7** | **-0.8** |
| **MTSE** | **Matsula** | **1.13** | **163** | P | **Pg** | **12 15 44.9** | **-0.9** |
| MTSE | | | | S | **Sg** | **12 15 59.6** | **-0.8** |
| **RAF** | **Rauma** | **1.42** | **331** | ***e*P** | **Pn** | **12 15 51.2** | **0.0** |
| RAF | | | | *e*S | **Sg** | **12 16 10.6** | **+0.7** |
| **RAF** | **Rauma** | **1.42** | **331** | P | **Pn** | **12 15 51.2** | **0.0** |
| RAF | | | | S | **Sg** | **12 16 10.5** | **+0.7** |
| **PVF** | **Pernaja** | **1.53** | **59** | ***e*P** | **Pn** | **12 15 52.3** | **-0.6** |
| PVF | | | | *e*S | **Sg** | **12 16 12.9** | **-0.6** |
| **PVF** | **Pernaja** | **1.53** | **59** | P | **Pn** | **12 15 52.2** | **-0.6** |
| PVF | | | | S | **Sg** | **12 16 12.8** | **-0.6** |
| **AAL** | **Aland** | **1.65** | **285** | ***e*P** | **Pn** | **12 15 55.3** | **+0.9** |
| AAL | | | | *e*S | **Sn** | **12 16 17.2** | **+0.9** |
| **AAL** | **Aland** | **1.65** | **285** | P | **Pn** | **12 15 55.4** | **+1.0** |
| AAL | | | | S | **Sn** | **12 16 17.6** | **+1.3** |
| **FIA0** | **FINESS Array S** | **2.18** | **39** | Pn | **Pn** | **12 16 03.5** | **+1.8** |
| | baz=214,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 12 16 31.1 | |
| | baz=218,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **2.18** | **39** | Pn | **Pn** | **12 16 03.5** | **+1.8** |
| | baz=214,slow=18 | | | | | | |
| FIA0 | | | | Lg | Lg | 12 16 31.1 | |
| | baz=218,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **2.18** | **39** | ***e*P** | **Pn** | **12 16 03.0** | **+1.3** |
| FIA0 | | | | *e*S | **Sn** | **12 16 30.2** | **+0.7** |
| **FIA0** | **FINESS Array S** | **2.18** | **39** | P | **Pn** | **12 16 03.0** | **+1.3** |
| **FIA0** | **FINESS Array S** | **2.18** | **39** | Pn | **Pn** | **12 16 03.5** | **+1.8** |
| | SNR=50 | | | | | | |
| FIA0 | | | | S | **Sn** | **12 16 30.1** | **+0.7** |
| FIA0 | | | | Lg | Lg | 12 16 31.1 | |
| | SNR=6.4 | | | | | | |
| **FINES** | **FINESS Array B** | **2.18** | **39** | Pg | **Pn** | **12 16 03.4** | **+1.7** |
| | 19nm,0.3s,baz=218,slow=18,SNR=467 | | | | | | |
| FINES | | | | Lg | Lg | 12 16 30.9 | |
| | 4.2nm,0.3s,baz=229,slow=16,SNR=4.4 | | | | | | |
| **VSU** | **Vasula** | **2.26** | **125** | Pn | **Pn** | **12 16 04.6** | **+1.8** |
| VSU | | | | Lg | Lg | 12 16 33.8 | |
| **VSU** | **Vasula** | **2.26** | **125** | Pn | **Pn** | **12 16 04.6** | **+1.8** |
| VSU | | | | Lg | Lg | 12 16 33.8 | |
| **VSU** | **Vasula** | **2.26** | **125** | ***e*PG** | **Pn** | **12 16 04.7** | **+1.8** |
| VSU | | | | *e*SG | **Sn** | **12 16 33.5** | **+2.1** |
| **VSU** | **Vasula** | **2.26** | **125** | Pg | **Pn** | **12 16 04.6** | **+1.8** |
| VSU | | | | Sg | **Sn** | **12 16 33.5** | **+2.1** |
| VSU | | | | Lg | Lg | 12 16 33.8 | |
| | SNR=50 | | | | | | |
| **VJF** | **Virojoki** | **2.31** | **69** | ***e*P** | **Pn** | **12 16 03.5** | **0.0** |
| VJF | | | | *e*S | **Sn** | **12 16 33.1** | **+0.7** |
| VJF | | | | MSG | | 12 16 38.2 | |
| | comp=Z,18nm,0.2s | | | | | | |
| **VJF** | **Virojoki** | **2.31** | **69** | P | **Pn** | **12 16 03.4** | **0.0** |
| VJF | | | | S | **Sn** | **12 16 33.1** | **+0.7** |
| **NRTU** | **Norrtaelje** | **2.31** | **269** | ***e*P** | **Pn** | **12 16 05.3** | **+1.8** |
| **NRTU** | **Norrtaelje** | **2.31** | **269** | P | **Pn** | **12 16 05.2** | **+1.8** |
| **GRAU** | **Graesoe** | **2.39** | **285** | ***e*P** | **Pn** | **12 16 05.5** | **+0.9** |
| **GRAU** | **Graesoe** | **2.39** | **285** | P | **Pn** | **12 16 05.5** | **+0.9** |
| **KEF** | **Keuruu** | **2.52** | **18** | ***e*PB** | **Pb** | **12 16 09.5** | **-0.7** |
| KEF | | | | *e*SG | **Sb** | **12 16 43.3** | **+1.6** |
| KEF | | | | MSG | | 12 16 44.1 | |
| | comp=Z,24nm,0.2s | | | | | | |
| **FORU** | **Forsmark** | **2.58** | **285** | ***e*P** | **Pb** | **12 16 10.5** | **-0.8** |
| **FORU** | **Forsmark** | **2.58** | **285** | P | **Pb** | **12 16 10.5** | **-0.8** |
| **FLYU** | **Flymyra** | **2.69** | **279** | ***e*P** | **Pn** | **12 16 10.6** | **+1.9** |
| **FLYU** | **Flymyra** | **2.69** | **279** | P | **Pn** | **12 16 10.6** | **+1.9** |
| **KAF** | **Kangasniemi** | **2.78** | **32** | ***e*P** | **Pn** | **12 16 11.9** | **+2.0** |
| KAF | | | | *e*SB | **Sb** | **12 16 48.2** | **-1.0** |
| KAF | | | | MSG | | 12 16 49.4 | |
| | comp=Z,12nm,0.3s | | | | | | |
| **KAF** | **Kangasniemi** | **2.78** | **32** | P | **Pn** | **12 16 11.9** | **+2.0** |
| **BACU** | **Backbrunna** | **3.07** | **274** | ***e*P** | **Pn** | **12 16 15.7** | **+1.8** |
| **BACU** | **Backbrunna** | **3.07** | **274** | P | **Pn** | **12 16 15.7** | **+1.8** |
| **OSTU** | **Oestervaala** | **3.07** | **281** | ***e*P** | **Pn** | **12 16 15.5** | **+1.6** |
| **OSTU** | **Oestervaala** | **3.07** | **281** | P | **Pn** | **12 16 15.5** | **+1.6** |
| **SUF** | **Sumiainen** | **3.27** | **25** | ***e*P** | **Pn** | **12 16 18.9** | **+2.3** |
| **SUF** | **Sumiainen** | **3.27** | **25** | P | **Pn** | **12 16 18.9** | **+2.3** |
| **VAF** | **Ylistaro** | **3.27** | **356** | MSG | | 12 17 03.7 | |
| | comp=Z,8.4nm,0.3s | | | | | | |
| **FALU** | **Falun** | **3.75** | **284** | ***e*P** | **Pn** | **12 16 24.9** | **+1.7** |
| **FALU** | **Falun** | **3.75** | **284** | P | **Pn** | **12 16 24.9** | **+1.7** |
| **HFS** | **Hagfors** | **4.78** | **278** | Pn | **Pn** | **12 16 39.6** | **+2.2** |
| | baz=91,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **12 17 35.3** | **+1.8** |
| | baz=98,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 12 17 51.6 | |
| | baz=101,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **4.78** | **278** | Pn | **Pn** | **12 16 39.6** | **+2.2** |
| | baz=91,slow=12 | | | | | | |
| HFS | | | | Sn | **Sn** | **12 17 35.3** | **+1.8** |
| | baz=98,slow=28 | | | | | | |
| HFS | | | | Lg | Lg | 12 17 51.6 | |
| | baz=101,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **4.78** | **278** | Pn | **Pn** | **12 16 39.6** | **+2.2** |
| | comp=Z,1.0nm,0.3s,baz=95,slow=13,SNR=28 | | | | | | |
| HFS | | | | Sn | **Sn** | **12 17 35.0** | **+1.4** |
| | comp=Z,1.2nm,0.3s,baz=102,slow=28,SNR=6.6 | | | | | | |
| HFS | | | | Lg | Lg | 12 17 51.3 | |
| | comp=Z,3.5nm,0.3s,baz=103,slow=32,SNR=12 | | | | | | |
| **HFS** | **Hagfors** | **4.78** | **278** | Pn | **Pn** | **12 16 39.6** | **+2.2** |
| | SNR=50 | | | | | | |
| HFS | | | | Sn | **Sn** | **12 17 35.3** | **+1.8** |
| | SNR=50 | | | | | | |
| HFS | | | | Lg | Lg | 12 17 51.6 | |
| | SNR=49 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.06** | **287** | Pn | **Pn** | **12 16 55.2** | **+0.2** |
| | baz=99,slow=12 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.06** | **287** | Pn | **Pn** | **12 16 55.2** | **+0.2** |
| | baz=99,slow=12 | | | | | | |
| **NB2** | **NORSAR Subarra** | **6.06** | **287** | Pn | **Pn** | **12 16 55.2** | **+0.2** |
| | SNR=50 | | | | | | |
| **NOA** | **NORSAR Array B** | **6.06** | **287** | Pn | **Pn** | **12 16 54.1** | **-0.9** |
| | comp=Z,0.8nm,0.3s,baz=100,slow=11,SNR=13 | | | | | | |
| NOA | | | | Sn | **Sn** | **12 18 02.3** | **-2.8** |
| | comp=Z,0.6nm,0.3s,baz=130,slow=11,SNR=4.5 | | | | | | |
| **APA0** | **Apatity Array** | **8.95** | **25** | Pn | **Pn** | **12 17 35.8** | **+1.2** |
| | baz=207,slow=10 | | | | | | |
| APA0 | | | | Sn | **Sn** | **12 19 13.9** | **-2.0** |
| | baz=221,slow=22 | | | | | | |
| **APA0** | **Apatity Array** | **8.95** | **25** | Pn | **Pn** | **12 17 35.8** | **+1.2** |
| | baz=207,slow=10 | | | | | | |
| APA0 | | | | Sn | **Sn** | **12 19 13.9** | **-2.0** |
| | baz=221,slow=22 | | | | | | |
| **APA0** | **Apatity Array** | **8.95** | **25** | Pn | **Pn** | **12 17 35.8** | **+1.2** |
| | SNR=50 | | | | | | |
| **AKASG** | **Malin Array Be** | **9.74** | **157** | Pn | **Pn** | **12 17 43.6** | **-1.8** |
| | comp=Z,1.4nm,0.3s,baz=335,slow=13,SNR=4.2 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.83** | **5** | Pn | **Pn** | **12 17 46.2** | **-0.4** |
| | baz=179,slow=16 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.83** | **5** | Pn | **Pn** | **12 17 46.2** | **-0.4** |
| | baz=179,slow=16 | | | | | | |
| **ARA0** | **ARCESS Array S** | **9.83** | **5** | Pn | **Pn** | **12 17 46.2** | **-0.4** |
| | SNR=50 | | | | | | |
| ARCES | **ARCESS Array B** | **9.83** | **5** | Pn | **Pn** | **12 17 46.3** | **-0.3** |
| | comp=Z,1.0nm,0.3s,baz=180,slow=14,SNR=51 | | | | | | |
| ARCES | | | | Sn | Sn | 12 19 31.5 | -6.0 |
| | comp=Z,0.2nm,0.3s,baz=181,slow=26,SNR=3.5 | | | | | | |
| ARCES | | | | Lg | Lg | 12 20 26.6 | |
| | comp=Z,0.3nm,0.3s,baz=178,slow=31,SNR=2.5 | | | | | | |

*CSEM* ***26*** *12:18:53.9±0.5,37.15N×36.11E,h2km, MD2.6, Error ellipse: s-maj=12.9km s-min=10.6km az=52.0*
*ISCJB* ***26*** *12:18:55.9±1.0,36.97N±0.09×35.88E±0.08,h15km, Error ellipse: s-maj=14.2km s-min=7.4km az=30.0*
*ISK* ***26*** *12:18:55.8,36.96N×35.83E,h18km, MD2.6*
*DDA* ***26*** *12:19:02.4,37.66N×35.44E,h7km, Md2.6*

**ISC 26 12:18:55.4±1.0, 37.04N±0.06×35.77E±0.06, h15km, n12, σ1°23/16, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KARA** | **Karaisali** | **0.61** | **292** | ***e*PG** | **Pn** | **12 19 10.1** | **+0.4** |
| KARA | | | | *e*SG | **Sn** | **12 19 19.9** | **+0.6** |
| **KARA** | **Karaisali** | **0.61** | **292** | ***e*Pg** | **Pn** | **12 19 10.1** | **+0.4** |
| KARA | | | | *e*Sg | **Sn** | **12 19 19.9** | **+0.6** |
| **KAMA** | **Osmaniye** | **0.73** | **78** | P | **Sn** | **12 19 24.2** | **+1.9** |
| **TAHT** | **Tahtakopru-Hat** | **0.74** | **153** | ***e*PG** | **Pg** | **12 19 08.8** | **-1.0** |
| **TAHT** | **Tahtakopru-Hat** | **0.74** | **153** | ***e*Pg** | **Pg** | **12 19 08.8** | **-1.0** |
| **GULE** | **Gulek** | **0.83** | **288** | *i* P | **Pn** | **12 19 14.5** | **+1.7** |
| GULE | | | | *i* S | **Sn** | **12 19 25.6** | **+0.7** |
| **GULE** | **Gulek** | **0.83** | **288** | P | **Pn** | **12 19 14.5** | **+1.7** |
| GULE | | | | S | **Sn** | **12 19 25.6** | **+0.7** |
| **SARI** | **SarD1z-Kayseri** | **1.46** | **20** | ***e*PN** | **Pg** | **12 19 22.6** | **-1.0** |
| **GULA** | **Gulagac** | **1.79** | **317** | ***e*PN** | **Pb** | **12 19 27.7** | **-0.2** |
| **GULA** | **Gulagac** | **1.79** | **317** | ***e*Pn** | **Pb** | **12 19 27.7** | **-0.2** |
| **YAYX** | **Yaylak** | **2.45** | **321** | ***e*PN** | **Pb** | **12 19 37.7** | **-1.6** |
| **YAYX** | **Yaylak** | **2.45** | **321** | ***e*Pn** | **Pb** | **12 19 37.7** | **-1.6** |

**IDC 26 12:20:04.7±3.2, 3.47S×99.29E, h0km, mb3.4/6, mb1 3.6/6, mb1mx3.4/43, mbtmp3.5/6, Error ellipse: s-maj=127.3km s-min=20.6km az=57.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.80** | **359** | P | P | 12 24 58.4 | -0.2 |
| | 0.3nm,0.3s,baz=182,slow=9.2,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.89** | **118** | P | P | 12 27 23.6 | -0.4 |
| | 0.1nm,0.3s,baz=311,slow=10,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **38.99** | **124** | P | P | 12 27 32.9 | -0.3 |
| | 0.2nm,0.7s,baz=292,slow=7.4,SNR=2.4 | | | | | | |
| **SONM** | **Songino Array** | **51.47** | **6** | P | P | 12 29 12.2 | +0.1 |
| | 0.3nm,0.4s,baz=204,slow=7.7,SNR=2.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.26** | **345** | P | P | 12 29 17.4 | -0.4 |
| | 0.5nm,0.6s,baz=147,slow=8.1,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.48** | **350** | P | P | 12 30 02.0 | -0.5 |
| | 1.2nm,0.5s,baz=166,slow=7.3,SNR=2.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.30** | **38** | PKPbc | PKPbc | 12 39 48.6 | +0.3 |
| | 0.2nm,0.6s,baz=127,slow=0.5,SNR=2.8 | | | | | | |

*KRNET* ***26*** *12:20:52.6±0.1,43.12N×79.82E, mb3.4*
*NNC* ***26*** *12:20:53.6±1.1,42.33N×79.81E,h0km, mb3.8, mpv3.5, Error ellipse: s-maj=8.4km s-min=4.3km az=111.0*

**ISC 26 12:20:57.5±1.8, 42.52N±0.10×79.59E±0.08, h10km, n23, σ1°79/27, 15C-14D, Lake Issyk-Kul region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PDGK** | **Podgornoye** | **0.81** | **355** | ⇑P | **Pg** | **12 21 12.9** | **-0.3** |
| | 26nm,0.3s | | | | | | |
| PDGK | | | | ⇓S | **Sn** | **12 21 27.9** | **+0.7** |
| | 59nm,0.3s | | | | | | |
| **ANVS** | **Anan'yevo** | **1.44** | **281** | ⇑*i*P | **Pn** | **12 21 23.7** | **-0.2** |
| | baz=259 | | | | | | |
| ANVS | | | | ⇑*e*S | **Sg** | **12 21 45.9** | **+1.9** |
| | baz=259 | | | | | | |
| **KNDC** | **Almaty** | **2.05** | **291** | ⇓Pg | **Pb** | **12 21 34.4** | **-0.5** |
| | 47nm,0.5s | | | | | | |
| KNDC | | | | ⇑Lg | Lg | 12 22 05.8 | |
| | 54nm,0.4s | | | | | | |
| **ULHL** | **Ulahol** | **2.49** | **265** | P | **Pn** | **12 21 38.7** | **+0.3** |
| | SNR=31 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.70** | **271** | ⇓*e*P | **Pn** | **12 21 42.2** | **+1.0** |
| | baz=259 | | | | | | |
| BOOM | | | | ⇓*e*S | **Sb** | **12 22 19.6** | **+0.4** |
| | baz=259 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.97** | **279** | ⇑Pn | **Pn** | **12 21 46.1** | **+1.1** |
| | 19nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 12 22 31.4 | |
| | 87nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.97** | **279** | P | **Pn** | **12 21 46.4** | **+1.4** |
| | SNR=36 | | | | | | |
| **KBK** | **Karagaybulak** | **3.43** | **274** | P | **Pn** | **12 21 52.9** | **+1.7** |
| | SNR=25 | | | | | | |
| **CHMS** | **Chumysh** | **3.59** | **279** | P | **Pg** | **12 22 05.2** | **-1.2** |
| | SNR=5.6 | | | | | | |
| **AAK** | **Ala-Archa** | **3.76** | **274** | ⇓Pn | **Pn** | **12 21 57.2** | **+1.4** |
| | 3.0nm,0.3s | | | | | | |
| AAK | | | | ⇑Pg | **Pg** | **12 22 07.1** | **-2.5** |
| | 14nm,0.6s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 12 22 56.4 | |
| | 32nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.76** | **274** | P | **Pn** | **12 21 57.6** | **+1.8** |
| | SNR=11 | | | | | | |
| **UCH** | **Uchtor** | **3.77** | **267** | P | **Pn** | **12 21 57.8** | **+1.7** |
| | SNR=12 | | | | | | |
| **USP** | **Ospenovka** | **3.81** | **283** | P | **Pn** | **12 21 58.4** | **+2.0** |
| | SNR=7.7 | | | | | | |
| **ARLS** | **Aral** | **3.97** | **262** | ⇓*e*P | **Pn** | **12 22 00.6** | **+2.0** |
| | baz=255 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sb** | **12 22 50.8** | **-4.9** |
| | baz=255 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.29** | **274** | P | **Pb** | **12 22 15.7** | **+2.6** |
| | SNR=11 | | | | | | |
| **AML** | **Almayashu** | **4.39** | **267** | P | Pb | 12 22 17.6 | +2.6 |
| | SNR=18 | | | | | | |
| **MK31** | **Makanchi Array** | **4.69** | **23** | ⇑Pn | **Pn** | **12 22 08.2** | **-0.2** |
| | 0.6nm,0.2s,baz=199,slow=15,SNR=23 | | | | | | |
| MK31 | | | | ⇑Sn | **Sn** | **12 23 03.3** | **+0.5** |
| | 4.6nm,0.4s,baz=209,slow=27,SNR=6.4 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 12 23 23.9 | |
| | 16nm,0.8s,baz=209,slow=29,SNR=5.9 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **5.22** | **243** | ⇓Pg | **Pb** | **12 22 30.3** | **+1.3** |
| | 2.8nm,0.5s | | | | | | |
| SFK | | | | ⇑Lg | Lg | 12 23 40.9 | |
| | 16nm,0.9s | | | | | | |
| **MNAS** | **Manas** | **5.24** | **272** | ⇑Pg | **Pb** | **12 22 31.3** | **+2.1** |
| | 3.3nm,0.6s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 12 23 43.3 | |
| | 24nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **6.70** | **278** | ⇓Pg | Pb | 12 22 57.9 | +3.8 |
| | 0.9nm,0.5s,baz=87,slow=15,SNR=10 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 12 24 29.7 | |
| | 5.9nm,0.5s,baz=105,slow=27,SNR=11 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.14** | **355** | ⇓Pn | **Pn** | **12 22 55.7** | **0.0** |
| | 2.0nm,0.9s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 12 25 18.3 | |
| | 26nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **8.23** | **356** | ⇑Pn | **Pn** | **12 22 57.6** | **+0.7** |
| | 3.1nm,1.1s | | | | | | |
| KURK | | | | ⇑Lg | Lg | 12 25 20.3 | |
| | 28nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **15.23** | **303** | ⇑P | **Pn** | **12 24 30.7** | **-1.8** |
| | 0.8nm,0.8s,baz=102,slow=11,SNR=4.1 | | | | | | |

**IDC 26 12:39:22.4±3.7, 2.77S×99.58E, h0km, mb3.4/5, mb1 3.6/5, mb1mx3.5/38, mbtmp3.5/5, Error ellipse: s-maj=134.6km s-min=21.8km az=59.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.10** | **358** | P | P | 12 44 10.6 | +1.8 |
| | 1.7nm,0.4s,baz=186,slow=9.9,SNR=13 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.70** | **159** | T | T | 13 23 17.9 | |
| | baz=337 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.72** | **159** | T | T | 13 23 18.5 | |
| | baz=337 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.72** | **159** | T | T | 13 23 18.2 | |
| | baz=337 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.98** | **119** | P | P | 12 46 42.1 | -0.2 |
| | 0.2nm,0.8s,baz=306,slow=9.2,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **39.15** | **125** | P | P | 12 46 52.3 | +0.1 |
| | 0.2nm,0.5s,baz=296,slow=7.6,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **50.74** | **6** | P | P | 12 48 24.2 | -0.1 |
| | 0.4nm,0.8s,baz=193,slow=5.8,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.65** | **345** | P | P | 12 48 29.7 | -1.2 |
| | 0.5nm,0.7s,baz=155,slow=7.8,SNR=3.1 | | | | | | |

**MEX 26 12:42:43.5±0.4, 17.02N×100.48W, h16km±64km, MD3.9, Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAIG** | **El Cayaco** | **0.21** | **83** | ***e*P** | Pg | 12 42 47.8 | -0.6 |
| CAIG | | | | *e*S | Sg | 12 42 51.0 | -0.8 |
| **ACX** | **Acapulco** | **0.62** | **104** | ***e*P** | Pg | 12 42 50.6 | -5.2 |
| ACX | | | | *e*S | Sg | 12 42 57.3 | -6.7 |
| **ZIIG** | **Zihuatanejo** | **1.10** | **302** | *i* P | Pb | 12 43 03.5 | -0.7 |
| ZIIG | | | | *i* S | Sb | 12 43 13.9 | -4.5 |
| **MEIG** | **Mezcala** | **1.22** | **42** | ***e*P** | Pn | 12 43 00.5 | -5.5 |
| MEIG | | | | *e*S | Sb | 12 43 13.8 | -8.1 |
| **ARIG** | **Puente Sto Nin** | **1.26** | **6** | ***e*P** | Pn | 12 43 02.9 | -3.6 |
| ARIG | | | | *e*S | Sb | 12 43 17.6 | -5.3 |
| **PLIG** | **Platanillo** | **1.65** | **34** | ***e*P** | Pn | 12 43 07.6 | -4.3 |
| PLIG | | | | *e*S | Sn | 12 43 28.4 | -4.6 |
| **TLIG** | **Tlapa** | **1.91** | **73** | *i* P | Pn | 12 43 12.1 | -3.4 |
| TLIG | | | | *i* S | Sn | 12 43 34.9 | -4.5 |

**GUC 26 12:48:15.3±0.6, 40.88S×72.95W, h68km±5km, ML3.6, 3C-2D, Central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OSCH** | **Osorno** | **0.34** | **335** | ⇓*i*P | Pn | 12 48 26.9 | +0.5 |
| OSCH | | | | *i* S | Sn | 12 48 35.0 | +0.4 |
| OSCH | | | | AML | AML | 12 48 37.4 | |
| | comp=E,9μm,0.5s | | | | | | |
| **PMCH** | **Puerto Montt** | **0.61** | **177** | ⇓*i*P | Pn | 12 48 28.8 | -0.2 |
| PMCH | | | | *i* S | Sn | 12 48 39.4 | +0.3 |
| **PUEL** | **Puelo Alto** | **0.92** | **148** | ⇑*i*P | Pn | 12 48 32.9 | +0.2 |
| PUEL | | | | *i* S | Sn | 12 48 46.6 | +1.0 |
| **VLCH** | **Valdivia** | **1.10** | **348** | ⇑*i*P | Pn | 12 48 35.2 | +0.3 |
| VLCH | | | | *i* S | Sn | 12 48 50.0 | +0.5 |
| **HOCH** | **HornopirØn** | **1.10** | **159** | ***e*P** | Pn | 12 48 35.0 | 0.0 |
| HOCH | | | | *i* S | Sn | 12 48 50.4 | +0.7 |
| HOCH | | | | AML | AML | 12 48 55.2 | |
| | comp=E,2μm,0.4s | | | | | | |
| **PLCA** | **Paso Flores** | **1.82** | **86** | ⇑*i*P | Pn | 12 48 45.0 | +0.4 |
| PLCA | | | | *i* S | Sn | 12 49 07.7 | +0.8 |

**IDC 26 12:55:46.4±411.0, 55.27N×61.59E, h0km, Error ellipse: s-maj=174.2km s-min=123.3km az=7.0, Ural Mountains region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **5.32** | **205** | *i* | | 13 28 30.0 | |
| | baz=23,slow=326,SNR=1.7 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **13.52** | **86** | *i* | | 14 18 35.0 | |
| | baz=286,slow=319,SNR=6.2 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **28.44** | **86** | *i* | | 15 51 00.0 | |
| | baz=304,slow=326,SNR=0.5 | | | | | | |

*IDC* ***26*** *12:58:12.8±2.3,9.95S×118.12E,h0km, mb3.4/2, mb1 3.7/5, mb1mx3.5/24, mbtmp3.6/5, ML3.6/3, Error ellipse: s-maj=59.5km s-min=27.6km az=40.0*
*AUST* ***26*** *12:58:18.0,9.49S×118.96E,h0km*

**ISC 26 12:58:13.3±1.2, 10.15S±0.2×118.0E±0.1, h10km, n8, σ0°99/7, South of Sumbawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JAGI** | **Jajag, Banyuwa** | **4.12** | **292** | P | **Pg** | **12 59 31.5** | **-0.7** |
| | baz=4.9,SNR=14 | | | | | | |
| **KAPI** | **Kappang** | **5.30** | **19** | Pn | **Pn** | **12 59 32.3** | **-0.3** |
| | 2.7nm,0.3s,baz=186,slow=14,SNR=4.3 | | | | | | |
| KAPI | | | | Sn | Sn | 13 00 22.3 | -11 |
| | 2.8nm,0.3s,baz=282,slow=23,SNR=10 | | | | | | |
| **BATI** | **Baumata** | **5.58** | **92** | Pn | **Pn** | **12 59 35.2** | **-1.2** |
| | 8.5nm,0.3s,baz=122,slow=3.7,SNR=14 | | | | | | |
| BATI | | | | Sn | Sn | 13 00 28.9 | -12 |
| | 1.8nm,0.3s,baz=120,slow=20,SNR=2.6 | | | | | | |
| **KNRA** | **Kununurra** | **11.88** | **119** | P | **Pn** | **13 01 03.2** | **+0.2** |
| | baz=11,SNR=12 | | | | | | |
| **MTN** | **Manton Dam** | **13.16** | **103** | P | Pn | 13 01 16.3 | -4.2 |
| | baz=12,SNR=5.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.57** | **124** | P | **Pn** | **13 02 31.6** | **+0.7** |
| | 0.1nm,0.3s,baz=301,slow=13,SNR=8.1 | | | | | | |
| WRA | | | | S | Sn | 13 05 46.0 | -13 |
| | 0.1nm,0.3s,baz=301,slow=23,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **58.55** | **351** | P | **P** | **13 08 10.0** | **-0.2** |
| | 0.2nm,0.5s,baz=160,slow=8.8,SNR=2.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.95** | **334** | P | **P** | **13 08 54.4** | **+1.1** |
| | 0.2nm,0.4s,baz=158,slow=5.3,SNR=4.0 | | | | | | |

*ATH* ***26*** *13:03:20.9,35.61N×26.52E,h25km±2km, MD3.1/9*
*ISCJB* ***26*** *13:03:21.3±0.6,35.48N±0.05×26.57E±0.04,h28km±7km, Error ellipse: s-maj=9.4km s-min=4.2km az=155.5*
*CSEM* ***26*** *13:03:21.0±0.2,35.53N×26.49E,h10km, ML3.4, Error ellipse: s-maj=4.9km s-min=3.6km az=145.0*
*THE* ***26*** *13:03:21.8,35.42N×26.56E,h16km±2km, ML3.4/1, Error ellipse: s-maj=3.8km s-min=0.6km az=143.0*

**ISC 26 13:03:20.8±1.0, 35.53N±0.03×26.53E±0.02, h15km±9km, n37, σ0°49/60, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZKR** | **Zakros** | **0.48** | **212** | P | **Pg** | **13 03 30.0** | **-0.5** |
| ZKR | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **APE** | **Apeiranthos** | **1.73** | **333** | *e*PN | **Pn** | **13 03 50.8** | **+0.4** |
| **APE** | **Apeiranthos** | **1.73** | **333** | *e*Pn | **Pn** | **13 03 50.8** | **+0.4** |
| **VAM** | **Vamos** | **1.90** | **267** | P | **Pn** | **13 03 53.2** | **+0.5** |
| **VAM** | **Vamos** | **1.90** | **267** | P | **Pn** | **13 03 53.2** | **+0.5** |
| **KYTH** | **Kithira** | **2.93** | **286** | *e*PN | **Pn** | **13 04 07.4** | **+0.6** |
| **KYTH** | **Kithira** | **2.93** | **286** | P | **Pn** | **13 04 07.4** | **+0.6** |
| **KYTH** | **Kithira** | **2.93** | **286** | P | **Pn** | **13 04 07.4** | **+0.6** |

*ISCJB* ***26*** *13:09:10.5±0.6, 12.°01N±0.°05×88.°43W±0.°05, h51km±8km, mb3.9/7, MS3.2/2, Error ellipse: s-maj=11.6km s-min=2.7km az=40.1*
*CASC* ***26*** *13:09:11.1±2.2, 12.°04N×88.°45W, h35km±999km, MD4.1, ML3.9, mb4.2(NEIC)*
*NEIC* ***26*** *13:09:12.3±1.4, 12.°22N×88.°25W, h45km±13km, mb4.2/3, Error ellipse: s-maj=28.3km s-min=8.6km az=47.0*
*IDC* ***26*** *13:09:13.0±2.3, 12.°26N×88.°21W, h46km±23km, mb3.6/4, mb1 4.1/6, mb1mx3.6/33, mbtmp4.1/6, ML4.4/2, MS3.3/4, Ms1 3.3/4, ms1mx2.9/25, Error ellipse: s-maj=69.1km s-min=13.5km az=41.0*

**ISC 26 13:09:11.3±1.1, 12.°03N±0.°06×88.°44W±0.°06, h37km±2km, n61, σ1f91/79, mb4.0/7, 4C-3D, Off coast of central America**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNCH** | **Conchagua** | **1.37** | **25** | *e*P | **Pn** | **13 09 33.9** | **-0.2** |
| CNCH | | | | *e*P | **Pn** | **13 09 34.1** | **+0.1** |
| **VSM** | **San Miguel** | **1.40** | **7** | *e*P | **Pn** | **13 09 34.8** | **+0.2** |
| **TEL3** | **Telica 3** | **1.65** | **71** | *e*P | **Pn** | **13 09 37.4** | **-0.4** |
| **LFRS** | **El Faro** | **1.70** | **339** | *e*P | **Pn** | **13 09 37.8** | **-0.7** |
| **CAHU** | **Cacacuatique** | **1.75** | **7** | *e*P | **Pn** | **13 09 39.7** | **+0.4** |
| **CNGN** | **Cerro Negro** | **1.76** | **74** | *e*P | **Pn** | **13 09 38.7** | **-0.7** |
| CNGN | | | | AML | AML | 13 10 06.7 | |
| | comp=N,1μm,0.3s | | | | | | |
| **LBRS** | **Las Brisas** | **1.80** | **341** | *e*P | **Pn** | **13 09 39.8** | **-0.1** |
| **COPN** | **Copaltepe** | **1.81** | **85** | *e*P | **Pn** | **13 09 39.9** | **-0.1** |
| COPN | | | | ⇓*e*P | **Pn** | **13 09 40.0** | **+0.1** |
| COPN | | | | *e*S | **Sn** | **13 10 04.1** | **+2.4** |
| **SNET** | **Serv Nac Est T** | **1.82** | **335** | *e*P | **Pn** | **13 09 39.6** | **-0.6** |
| SNET | | | | AML | AML | 13 10 02.8 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **LFU** | **La Fuente** | **1.83** | **339** | ⇈*e*P | **Pn** | **13 09 39.8** | **-0.5** |
| LFU | | | | *e*S | **Sn** | **13 10 01.8** | **-0.5** |
| **BOQS** | **Boqueron** | **1.89** | **334** | *e*P | **Pn** | **13 09 40.5** | **-0.6** |
| BOQS | | | | *e*P | **Pn** | **13 09 40.9** | **-0.3** |
| BOQS | | | | *e*S | **Sn** | **13 10 03.4** | **-0.4** |
| **MOMN** | **Momotombo** | **1.89** | **78** | *e*P | **Pn** | **13 09 40.7** | **-0.5** |
| **APYN** | **Apoyeque** | **2.05** | **84** | *e*P | **Pn** | **13 09 43.4** | **+0.1** |
| **XAVN** | **Gruta Xavier** | **2.07** | **86** | *e*P | **Pn** | **13 09 43.4** | **-0.1** |
| **CRUN** | **El Crucero** | **2.09** | **91** | *e*P | **Pn** | **13 09 43.7** | **-0.2** |
| **TISN** | **Laguna Tiscapa** | **2.12** | **87** | *e*P | **Pn** | **13 09 44.2** | **-0.1** |
| **SBLS** | **San Blas** | **2.14** | **327** | *e*P | **Pn** | **13 09 44.6** | **-0.1** |
| SBLS | | | | ⇈*e*P | **Pn** | **13 09 44.6** | **-0.1** |
| SBLS | | | | *e*S | **Sn** | **13 10 10.8** | **+0.6** |
| **MGAN** | **Managua** | **2.15** | **87** | *e*P | **Pn** | **13 09 44.6** | **0.0** |
| MGAN | | | | *e*S | **Sn** | **13 10 10.2** | **+0.3** |
| **SNJE** | **San Jose** | **2.15** | **328** | ⇈*e*P | **Pn** | **13 09 44.6** | **-0.2** |
| SNJE | | | | *e*S | **Sn** | **13 10 10.9** | **+0.5** |
| **RTR** | **El Retiro** | **2.20** | **328** | *e*P | **Pn** | **13 09 45.5** | **+0.1** |
| RTR | | | | *e*S | **Sn** | **13 10 12.4** | **+0.9** |
| **TGUH** | **Tegucigalpa,Un** | **2.31** | **29** | *e*P | **Pn** | **13 09 47.6** | **+0.8** |
| **RBDL** | **Robledal** | **2.40** | **330** | ⇈*e*P | **Pn** | **13 09 48.8** | **+0.5** |
| **BOAB** | **BOACO BROADBAN** | **2.74** | **81** | *e*P | **Pn** | **13 09 52.2** | **-0.5** |
| **NBG** | **Las Nubes** | **3.15** | **324** | *e*P | **Pn** | **13 10 00.5** | **+1.9** |
| **GBS2** | **Las Lilas** | **3.16** | **112** | *i*P | **Pn** | **13 09 59.2** | **+0.7** |
| **GBS3** | **Finca Las Im¯¡** | **3.18** | **113** | *i*P | **Pn** | **13 09 59.3** | **+0.5** |
| **LAPC** | **Finca la Perla** | **3.20** | **113** | *i*P | **Pn** | **13 09 59.3** | **+0.2** |
| **GB1A** | **Borinquen Arri** | **3.21** | **112** | *i*P | **Pn** | **13 10 00.2** | **+0.9** |
| **MRL** | **Marmol** | **3.26** | **338** | *e*P | **Pn** | **13 10 02.1** | **+2.1** |
| **GPS1** | **Guardaparques** | **3.27** | **112** | *i*P | **Pn** | **13 10 01.1** | **+1.0** |
| **FUG** | **Fuego 3** | **3.36** | **316** | *e*P | **Pn** | **13 10 02.3** | **+0.9** |
| **LIM1** | **Limonal** | **3.39** | **113** | *i*P | **Pn** | **13 10 02.5** | **+0.7** |
| **GUAB** | **Guayabo de Bag** | **3.41** | **112** | *i*P | **Pn** | **13 10 03.4** | **+1.4** |
| **MESS** | **Mesas** | **3.43** | **112** | *i*P | **Pn** | **13 10 03.7** | **+1.5** |
| **COLC** | **Colonia** | **3.45** | **113** | *i*P | **Pn** | **13 10 03.3** | **+0.8** |
| **CUI** | **Cuipilapa** | **3.49** | **113** | *i*P | **Pn** | **13 10 03.6** | **+0.6** |
| CUI | | | | *i*S | **Sn** | **13 10 42.2** | **-1.0** |
| **AMAS** | **Alto Masis** | **3.66** | **112** | *i*P | **Pn** | **13 10 06.0** | **+0.5** |
| **JTS** | **JuntasAbangare** | **3.83** | **116** | P | **Pn** | **13 10 08.6** | **+0.9** |
| | comp=Z,25nm,0.3s,baz=318,slow=9.8,SNR=81 | | | | | | |
| JTS | | | | S | **Sn** | **13 10 51.8** | **+0.2** |
| | comp=Z,29nm,0.3s,baz=299,slow=20,SNR=7.9 | | | | | | |
| JTS | | | | LR | LR | 13 11 47.3 | |
| | comp=Z,252nm,18.9s,baz=286,slow=41 | | | | | | |
| **JTS** | **JuntasAbangare** | **3.83** | **116** | *e*Pn | **Pn** | **13 10 08.0** | **+0.3** |
| JTS | | | | *e*Sn | **Sn** | **13 10 51.2** | **-0.4** |
| JTS | | | | S | **Sn** | **13 10 51.8** | **+0.2** |
| **JAT** | **Jato** | **3.86** | **307** | *e*P | **Pn** | **13 10 08.5** | **+0.4** |
| JAT | | | | *e*S | **Sn** | **13 10 50.6** | **-1.7** |
| **JCR** | **Jicaral** | **3.92** | **123** | *e*S | **Sn** | **13 10 53.8** | **0.0** |
| JCR | | | | *e*P | **Pn** | **13 10 09.1** | **+0.1** |
| **CGA2** | **Cerro Gallo 2** | **4.38** | **117** | *e*P | **Pn** | **13 10 16.9** | **+1.5** |
| CGA2 | | | | *e*S | **Sn** | **13 11 05.3** | **-0.1** |
| **QCR** | **Quepos** | **4.93** | **121** | ⇓*e*P | **Pn** | **13 10 24.1** | **+1.2** |
| QCR | | | | *e*S | **Sn** | **13 11 18.5** | **-0.2** |
| **BUS** | **Buena Vista** | **5.21** | **118** | ⇓*e*P | **Pn** | **13 10 29.0** | **+1.8** |
| BUS | | | | *e*S | **Sn** | **13 11 24.6** | **-1.7** |
| **TBS2** | | **6.53** | **119** | *e*P | **Pn** | **13 10 46.7** | **+1.7** |
| TBS2 | | | | *e*S | **Sn** | **13 11 59.0** | **+0.6** |
| **CMIG** | **Matias Romero** | **8.02** | **310** | P | **Pn** | **13 11 05.9** | **+0.6** |
| | comp=Z,5.3nm,0.3s,baz=142,slow=12,SNR=49 | | | | | | |
| CMIG | | | | S | **Sn** | **13 12 32.7** | **-2.0** |
| | baz=350,slow=24,SNR=1.0 | | | | | | |
| **TEIG** | **Tepich** | **8.15** | **1** | LR | LR | 13 14 14.7 | |
| | comp=Z,276nm,20.9s,baz=262,slow=38 | | | | | | |
| **TEIG** | **Tepich** | **8.15** | **1** | *e*P | Pn | 13 11 03.6 | -3.5 |
| **BCIP** | **Isla Barro Col** | **8.92** | **108** | *e*P | **Pn** | **13 11 18.8** | **+1.1** |
| **JCT** | **Junction City** | **21.17** | **332** | *e*P | **P** | **13 13 53.3** | **-0.1** |
| | comp=Z,6.2nm,0.5s | | | | | | |
| **TXAR** | **Lajitas Array** | **22.30** | **323** | P | **P** | **13 14 06.7** | **+1.0** |
| | comp=Z,3.0nm,0.7s,baz=138,slow=9.9,SNR=31 | | | | | | |
| **MIAR** | **Mount Ida** | **22.90** | **349** | *e*P | **P** | **13 14 11.5** | **-0.3** |
| | comp=Z,13nm,1.1s | | | | | | |
| **TKL** | **Tuckaleechee C** | **23.90** | **9** | LR | LR | 13 23 52.8 | |
| | comp=Z,49nm,19.2s,baz=236,slow=37 | | | | | | |
| **SAML** | **Samuel** | **32.63** | **129** | *e*P | **P** | **13 15 38.2** | **-1.7** |
| | comp=Z,2.1nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **37.39** | **320** | P | **P** | **13 16 22.5** | **+1.6** |
| | comp=Z,0.5nm,0.8s,baz=132,slow=7.4,SNR=3.4 | | | | | | |
| **SIV** | **San Ignacio** | **38.84** | **135** | P | **P** | **13 16 33.4** | **+0.3** |
| | comp=Z,4.2nm,0.8s,baz=321,slow=9.7,SNR=7.8 | | | | | | |
| **CFAA** | **Coronel Fontan** | **47.51** | **156** | LR | LR | 13 35 08.7 | |
| | comp=Z,36nm,18.7s,slow=33 | | | | | | |
| **YKA** | **Yellowknife Ar** | **53.77** | **345** | P | **P** | **13 18 28.2** | **-1.5** |
| | comp=Z,0.6nm,0.8s,baz=130,slow=8.8,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **138.22** | **248** | PKP | **PKPdf** | **13 28 33.4** | **+0.1** |
| | comp=Z,0.2nm,0.3s,baz=67,slow=1.2,SNR=3.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **138.22** | **254** | PKP | **PKPdf** | **13 28 33.5** | **+0.1** |
| | comp=Z,0.5nm,1.0s,baz=90,slow=3.4,SNR=3.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **148.84** | **346** | PKPbc | **PKPbc** | **13 28 55.9** | **-0.1** |
| | comp=Z,0.7nm,0.6s,baz=349,slow=3.1,SNR=5.6 | | | | | | |

*DDA* ***26*** *13:12:35.8, 38.°27N×38.°12E, h2km, Md2.7*
*ISK* ***26*** *13:12:35.9, 38.°12N×38.°30E, h18km, MD2.5*
*CSEM* ***26*** *13:12:36.8±0.4, 38.°19N×38.°35E, h20km, MD2.7, Error ellipse: s-maj=10.8km s-min=8.3km az=12.0*

**ISC 26 13:12:36.1±1.0, 38.°22N±0.°04×38.°19E±0.°03, h12km±7km, n17, σ1f26/25, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MALT** | **Malatya** | **0.21** | **64** | *e*PG | **Pg** | **13 12 41.1** | **+0.4** |
| MALT | | | | *e*SG | **Sg** | **13 12 45.6** | **+1.8** |
| **MALT** | **Malatya** | **0.21** | **64** | *e*Pg | **Pg** | **13 12 41.1** | **+0.4** |
| MALT | | | | *e*Sg | **Sg** | **13 12 45.6** | **+1.8** |
| **AKCD** | **Akcadag** | **0.22** | **289** | P | **Pg** | **13 12 39.2** | **-1.8** |
| AKCD | | | | S | **Sg** | **13 12 41.9** | **-2.4** |
| **DARE** | **Darende-Malaty** | **0.66** | **302** | *e*PG | **Pn** | **13 12 51.7** | **+0.3** |
| **DARE** | **Darende-Malaty** | **0.66** | **302** | *e*Pg | **Pn** | **13 12 51.7** | **+0.3** |
| **SVRC** | **Sivrice-ELAZID** | **0.89** | **80** | *e*PG | **Pg** | **13 12 52.2** | **-1.2** |
| **SVRC** | **Sivrice-ELAZID** | **0.89** | **80** | *e*Pg | **Pg** | **13 12 52.2** | **-1.2** |
| **URFA** | **Urfa** | **0.93** | **147** | *e*PG | **Pg** | **13 12 52.2** | **-1.8** |
| **URFA** | **Urfa** | **0.93** | **147** | *e*Pg | **Pg** | **13 12 52.2** | **-1.8** |
| **KEMA** | **Kemaliye** | **1.07** | **13** | *i*P | **Pg** | **13 12 55.3** | **-1.4** |
| KEMA | | | | *i*S | **Sg** | **13 13 11.0** | **+0.3** |
| **KEMA** | **Kemaliye** | **1.07** | **13** | P | **Pg** | **13 12 55.4** | **-1.4** |
| KEMA | | | | S | **Sg** | **13 13 11.0** | **+0.3** |
| **PTK** | **Pertek** | **1.15** | **54** | *e*PN | **Pb** | **13 12 57.7** | **-0.4** |
| **PTK** | **Pertek** | **1.15** | **54** | *e*Pn | **Pb** | **13 12 57.7** | **-0.4** |
| **AYKD** | **Aykdinkavak** | **1.36** | **234** | P | **Pg** | **13 13 02.8** | **+0.5** |
| AYKD | | | | S | **Sg** | **13 13 21.4** | **+1.4** |
| **SARI** | **SarD1z-Kayseri** | **1.41** | **278** | *e*PN | **Pb** | **13 13 02.8** | **+0.4** |
| **PINB** | **Pinarbasi** | **1.48** | **288** | *i*P | **Pg** | **13 13 04.6** | **+0.1** |
| PINB | | | | *i*S | **Sn** | **13 13 22.6** | **+0.5** |
| **PINB** | **Pinarbasi** | **1.48** | **288** | P | **Pg** | **13 13 04.6** | **+0.1** |
| PINB | | | | S | **Sn** | **13 13 22.6** | **+0.5** |

*IDC* ***26*** *13:27:50.5±3.2, 2.°37S×140.°18E, h0km, mb3.9/5, mb1 4.0/6, mb1mx3.7/30, mbtmp3.9/6, ML3.7/1, Error ellipse: s-maj=142.0km s-min=23.3km az=89.0*
*DJA* ***26*** *13:27:52.4±1.6, 3.°3S×123.°14'0E±', h38km±10km, M3.4/3, MLv3.4/3*
*AUST* ***26*** *13:27:52.3±30.0, 2.°64S×139.°89E, h0km±1km, Error ellipse: s-maj=5.6km s-min=2.1km az=43.0*
*ISCJB* ***26*** *13:27:53.3±0.5, 2.°51S±0.°07×139.°87E±0.°04, h25km, mb3.8/5, Error ellipse: s-maj=10.8km s-min=5.4km az=7.6*

**ISC 26 13:27:54.1±0.9, 2.°4S±0.°1×139.°96E±0.°05, h25km, n18, σ1f45/17, mb4.1/5, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GENI** | **Genyem** | **0.28** | **132** | P | **Pn** | **13 28 01.6** | **-1.0** |
| GENI | | | | S | **Sb** | **13 28 08.2** | **+2.8** |
| **JAY** | **Jayapura** | **0.75** | **98** | P | **Pb** | **13 28 07.9** | **-0.7** |
| | baz=0.8,SNR=34 | | | | | | |
| **JAY** | **Jayapura** | **0.75** | **98** | P | **Pb** | **13 28 07.8** | **-0.8** |
| JAY | | | | S | **Sn** | **13 28 19.1** | **-0.7** |
| **SMPI** | **Sarmi** | **1.32** | **288** | P | **Pn** | **13 28 15.3** | **-1.7** |
| SMPI | | | | S | **Sn** | **13 28 34.2** | **+0.4** |
| **FAKI** | **Fak Fak** | **7.72** | **266** | P | **Pn** | **13 29 45.5** | **+0.4** |
| | baz=7.6,SNR=6.8 | | | | | | |
| **KDU** | **Kakadu** | **12.62** | **216** | P | **Pn** | **13 30 50.7** | **-1.5** |
| | baz=12,SNR=5.2 | | | | | | |
| **MTN** | **Manton Dam** | **13.56** | **220** | P | **Pn** | **13 31 02.8** | **-2.2** |
| | baz=13,SNR=6.8 | | | | | | |
| **KNRA** | **Kununurra** | **17.20** | **219** | P | **Pn** | **13 31 51.7** | **-1.1** |
| | baz=17,SNR=6.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.27** | **197** | P | **P** | **13 32 07.7** | **+1.6** |
| | 0.3nm,0.3s,baz=18,slow=12,SNR=18 | | | | | | |
| **ASAR** | **Alice Springs** | **21.93** | **195** | P | **P** | **13 32 46.6** | **+0.7** |
| | 1.3nm,0.8s,baz=24,slow=9.8,SNR=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **34.39** | **49** | T | T | 14 11 04.1 | |
| | baz=233,slow=75,SNR=26 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **34.40** | **49** | T | T | 14 11 06.3 | |
| | baz=233,slow=75,SNR=21 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **34.41** | **49** | T | T | 14 11 07.8 | |
| | baz=233,slow=75,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.32** | **322** | P | **P** | **13 39 07.0** | **+1.3** |
| | 1.3nm,0.7s,baz=106,slow=7.9,SNR=8.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **72.31** | **329** | P | **P** | **13 39 18.3** | **+0.7** |
| | 0.7nm,0.3s,baz=116,slow=3.4,SNR=2.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **74.21** | **324** | P | **P** | **13 39 29.6** | **+0.8** |
| | 0.7nm,0.7s,baz=110,slow=5.5,SNR=6.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **79.78** | **325** | P | **P** | **13 40 01.5** | **+1.3** |
| | 1.1nm,0.6s,baz=108,slow=8.0,SNR=7.1 | | | | | | |
| **DBIC** | **Dimbokro** | **144.68** | **278** | PKP | PKPbc | 13 47 28.9 | +0.2 |
| | 4.1nm,0.7s,baz=60,slow=4.9,SNR=6.5 | | | | | | |

**IDC 26 13:28:44.8±1.9, 39.°96N×53.°89E, h0km, mb3.2/2, mb1 3.6/5, mb1mx3.3/48, mbtmp3.5/5, ML3.6/3, 1C-3D, Error ellipse: s-maj=39.5km s-min=19.3km az=20.0, Turkmenistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GEYT** | **Alibeck** | **3.87** | **120** | Pn | Pn | 13 29 44.7 | -0.9 |
| | 6.9nm,0.3s,baz=303,slow=14,SNR=22 | | | | | | |
| GEYT | | | | Sn | Sn | 13 30 33.4 | +1.6 |
| | 8.6nm,0.3s,baz=315,slow=24,SNR=3.4 | | | | | | |
| GEYT | | | | Lg | Lg | 13 30 55.2 | |
| | 3.6nm,0.3s,baz=318,slow=38,SNR=5.6 | | | | | | |
| **KBZ** | **Khabaz** | **9.03** | **298** | Pn | Pn | 13 30 56.9 | +0.7 |
| | 0.3nm,0.3s,baz=224,slow=10,SNR=2.0 | | | | | | |
| KBZ | | | | Sn | Sn | 13 32 31.0 | -7.5 |
| | 0.5nm,0.3s,baz=300,slow=8.9,SNR=2.6 | | | | | | |
| **AB31** | **Akbulak array** | **10.24** | **23** | ⇑Pn | Pn | 13 31 35.2 | +22 |
| | 0.1nm,0.2s,baz=222,slow=14,SNR=6.0 | | | | | | |
| AB31 | | | | ⇓Sn | Sn | 13 33 18.2 | +10 |
| | 2.5nm,0.7s,baz=233,slow=20,SNR=4.6 | | | | | | |
| **AKTO** | **Aktyubinsk** | **10.87** | **14** | ⇓Pn | Pn | 13 31 35.1 | +14 |
| | 1.9nm,0.8s | | | | | | |
| AKTO | | | | ⇓Sn | Sn | 13 33 16.7 | -7.0 |
| | 3.3nm,0.7s | | | | | | |
| **AKTO** | **Aktyubinsk** | **10.87** | **14** | Sn | Sn | 13 33 13.3 | -10 |
| | 0.3nm,0.3s,baz=11,slow=22,SNR=3.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **17.25** | **35** | P | Pn | 13 32 46.7 | -0.3 |
| | 0.2nm,0.3s,baz=235,slow=12,SNR=3.4 | | | | | | |
| BVAR | | | | S | Sn | 13 35 43.2 | -16 |
| | 0.2nm,0.3s,baz=230,slow=26,SNR=2.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **21.66** | **62** | P | P | 13 33 38.3 | +1.4 |
| | 0.2nm,0.7s,baz=252,slow=15,SNR=1.2 | | | | | | |
| **FINES** | **FINESS Array B** | **27.41** | **331** | P | P | 13 34 30.2 | -1.6 |
| | 0.9nm,0.8s,baz=131,slow=15,SNR=1.8 | | | | | | |

*IDC* ***26*** *13:30:58.0±1.1, 35.°99S×73.°42W, h0km, mb4.0/7, mb1 4.1/8, mb1mx4.0/20, mbtmp4.0/8, ML3.4/1, MS3.7/2, Ms1 3.7/2, ms1mx3.1/16, Error ellipse: s-maj=31.1km s-min=24.6km az=107.0*
*GUC* ***26*** *13:30:59.6±0.8, 35.°81S×73.°60W, h32km±11km, ML4.5*
*ISCJB* ***26*** *13:31:01.4±0.6, 35.°83S±0.°04×73.°52W±0.°06, h33km, mb4.0/8, MS3.6/1, Error ellipse: s-maj=7.1km s-min=5.2km az=4.6*
*NEIC* ***26*** *13:31:03.7±0.7, 35.°92S×73.°44W, h35km, mb4.2/2, Error ellipse: s-maj=14.8km s-min=11.1km az=84.0*

**ISC 26 13:31:03.3±0.9, 35.°89S±0.°05×73.°49W±0.°09, h35km, n39, σ1f27/42, mb4.0/8, 1C-5D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **COCH** | **Cobquecura** | **0.62** | **113** | ⇓*i*P | **Pn** | **13 31 13.2** | **-2.4** |
| COCH | | | | *i*S | **Sn** | **13 31 23.3** | **-1.0** |
| COCH | | | | AML | AML | 13 31 24.6 | |
| | comp=E,18μm,0.3s | | | | | | |
| **CCHI** | **Chillan** | **1.35** | **122** | *e*P | **Pn** | **13 31 24.6** | **-1.0** |
| CCHI | | | | *i*S | **Sn** | **13 31 44.0** | **+1.7** |
| **TALC** | **Talca** | **1.59** | **73** | ⇈*i*P | **Pn** | **13 31 29.7** | **+0.8** |
| TALC | | | | *i*S | **Sn** | **13 31 49.6** | **+1.4** |
| **CANA** | **Caviahue** | **2.79** | **136** | *i*P | **Pn** | **13 31 45.6** | **0.0** |
| CANA | | | | *i*S | Sn | 13 32 35.8 | +18 |
| **CLCH** | **Cerro Calan** | **3.48** | **45** | *e*P | **Pn** | **13 31 52.8** | **-2.2** |
| CLCH | | | | *i*S | **Sn** | **13 32 33.7** | **-1.4** |
| CLCH | | | | AML | AML | 13 33 05.1 | |
| | comp=N,1μm,0.6s | | | | | | |
| **ROC1** | **El Roble** | **3.55** | **36** | *e*P | **Pn** | **13 31 54.4** | **-1.8** |
| **ROCH** | **El Roble** | **3.56** | **36** | *e*P | **Pn** | **13 31 54.6** | **-1.7** |
| ROCH | | | | AML | AML | 13 33 15.4 | |
| | comp=N,638nm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **3.59** | **41** | *e*P | **Pn** | **13 31 55.5** | **-1.0** |
| PEL | | | | *e*S | **Sn** | **13 32 36.8** | **-0.8** |
| **AAGR** | **Agrelo** | **4.76** | **55** | *e*P | **Pn** | **13 32 14.2** | **+1.6** |
| **ARCO** | **CERRO ARCO** | **4.84** | **52** | *i*P | **Pn** | **13 32 14.9** | **+1.1** |
| ARCO | | | | AML | AML | 13 33 50.5 | |
| | comp=Z,56nm,0.7s | | | | | | |
| **AUSP** | **Uspallata** | **5.00** | **44** | *i*P | **Pn** | **13 32 16.9** | **+0.8** |
| **ASAL** | **Salagasta** | **5.07** | **51** | *e*P | **Pn** | **13 32 18.1** | **+1.3** |
| **RTLS** | **Leoncito** | **5.37** | **42** | ⇓*e*P | **Pn** | **13 32 22.1** | **+1.0** |
| **RTCV** | **Cerro Valdivia** | **5.75** | **47** | *e*P | **Pn** | **13 32 26.8** | **+0.5** |
| **CFAA** | **Coronel Fontan** | **6.11** | **47** | Pn | **Pn** | **13 32 30.8** | **-0.5** |
| | comp=Z,1.0nm,0.3s,baz=221,slow=12,SNR=39 | | | | | | |
| CFAA | | | | Sn | **Sn** | **13 33 42.1** | **+2.2** |
| | comp=Z,0.6nm,0.3s,baz=118,slow=11,SNR=3.0 | | | | | | |
| CFAA | | | | Lg | Lg | 13 34 03.2 | |
| | comp=Z,0.2nm,0.3s,baz=144,slow=20,SNR=4.9 | | | | | | |
| **RTLL** | **Cerro Villicun** | **6.18** | **44** | *e*P | **Pn** | **13 32 31.7** | **-0.4** |
| **ACAN** | **Cantantal** | **6.35** | **57** | *e*P | **Pn** | **13 32 34.8** | **+0.4** |
| **AMOG** | **MOGNA** | **6.47** | **42** | *e*P | **Pn** | **13 32 35.3** | **-0.8** |
| **LCO** | **Las Campanas** | **7.25** | **20** | P | **Pn** | **13 32 47.9** | **+0.9** |
| **AVFE** | **Valle Fertil** | **7.26** | **46** | ⇓*e*P | **Pn** | **13 32 45.1** | **-1.9** |
| **ACHE** | **Chepes** | **7.39** | **52** | *e*P | **Pn** | **13 32 47.4** | **-1.5** |
| **AGUA** | **GUANDACOL** | **7.65** | **35** | ⇓*e*P | **Pn** | **13 32 51.5** | **-0.8** |
| **VCA** | **Vinchina** | **8.42** | **34** | *e*P | **Pn** | **13 33 00.3** | **-2.6** |
| **TCA** | **Tanti** | **8.70** | **61** | ⇓*e*P | **Pn** | **13 33 05.1** | **-1.6** |
| **TRQA** | **Tornquist** | **9.46** | **107** | *e*P | **Pn** | **13 33 18.2** | **+1.1** |
| | comp=Z,20nm,1.2s | | | | | | |
| **LVC** | **Limon Verde** | **13.82** | **18** | LR | LR | 13 39 11.3 | |
| | comp=Z,392nm,19.4s,baz=208,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **20.10** | **15** | P | Pn | 13 35 36.2 | -0.5 |
| | comp=Z,3.0nm,0.8s,baz=178,slow=6.9,SNR=10 | | | | | | |
| **SIV** | **San Ignacio** | **22.70** | **32** | P | **P** | **13 36 01.0** | **-1.1** |
| | comp=Z,5.0nm,1.0s,baz=229,slow=13,SNR=10 | | | | | | |
| **BDFB** | **Brasilia** | **30.39** | **55** | LR | LR | 13 51 06.0 | |
| | comp=Z,128nm,19.1s,baz=227,slow=40 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **48.08** | **157** | P | **P** | **13 39 39.4** | **+0.4** |
| **VNA2** | **Neumayer--Watz** | **48.75** | **156** | P | **P** | **13 39 44.2** | **0.0** |
| | baz=280,slow=9.1 | | | | | | |
| **SNAA** | **Sanae** | **50.30** | **157** | P | **P** | **13 39 55.7** | **-0.3** |
| **SNAA** | **Sanae** | **50.30** | **157** | *e*P | **P** | **13 39 55.5** | **-0.5** |
| | comp=Z,2.1nm,1.0s | | | | | | |
| **TXAR** | **Lajitas Array** | **70.82** | **332** | P | **P** | **13 42 17.0** | **+0.6** |
| | comp=Z,0.6nm,0.5s,baz=155,slow=8.6,SNR=12 | | | | | | |
| **MAW** | **Mawson** | **71.71** | **164** | P | **P** | **13 42 20.9** | **-0.3** |
| | comp=Z,2.7nm,1.0s,baz=206,slow=4.0,SNR=5.9 | | | | | | |
| **DBIC** | **Dimbokro** | **76.91** | **72** | P | **P** | **13 42 52.6** | **+0.3** |
| | comp=Z,1.6nm,0.6s,baz=207,slow=9.0,SNR=2.9 | | | | | | |
| **DUG** | **Dugway** | **83.92** | **331** | *e*P | **P** | **13 43 30.6** | **+1.1** |
| | comp=Z,2.4nm,0.9s | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.77** | **326** | P | **P** | **13 43 34.9** | **+0.9** |
| | comp=Z,0.8nm,0.7s,baz=172,slow=6.4,SNR=5.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **85.97** | **71** | P | **P** | **13 43 39.8** | **-0.5** |
| | comp=Z,0.6nm,0.8s,baz=246,slow=3.3,SNR=4.1 | | | | | | |

*IDC* ***26*** *13:36:19.1±1.3, 0.°76S×134.°07E, h0km, mb3.6/4, mb1 3.8/6, mb1mx3.6/36, mbtmp3.6/6, ML3.7/2, Error ellipse: s-maj=38.4km s-min=23.4km az=80.0*
*DJA* ***26*** *13:36:19.3±0.5, 3.°3S×12.°9E±', h10km, M3.3/4, MLv3.3/4*
*ISCJB* ***26*** *13:36:22.2±0.9, 0.°72S±0.°07×134.°00E±0.°06, h32km, mb3.6/4, Error ellipse: s-maj=10.6km s-min=8.6km az=8.4*

**ISC 26 13:36:23.7±1.1, 0.°73S±0.°09×134.°02E±0.°09, h32km, n9, σ1f03/12, mb3.6/4, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RKPI** | **Ransiki, Papua** | **0.79** | **168** | P | **Pn** | **13 36 37.4** | **-1.2** |
| **SIJI** | **Sorong** | **2.75** | **267** | Pn | **Pn** | **13 37 04.9** | **-0.7** |
| | 3.1nm,0.3s,baz=232,slow=23,SNR=21 | | | | | | |
| SIJI | | | | Sn | **Sn** | **13 37 36.2** | **-1.6** |
| | 4.5nm,0.3s,baz=129,slow=23,SNR=2.5 | | | | | | |
| **SWI** | **Sorong** | **2.76** | **267** | P | **Pn** | **13 37 04.8** | **-0.9** |
| SWI | | | | S | **Sn** | **13 37 37.9** | **0.0** |
| **FAKI** | **Fak Fak** | **2.80** | **219** | P | **Pn** | **13 37 07.6** | **+1.3** |
| FAKI | | | | S | **Sn** | **13 37 39.4** | **+0.4** |
| **WRA** | **Warramunga Arr** | **19.10** | **179** | P | **P** | **13 40 43.2** | **-0.7** |
| | 0.5nm,0.3s,baz=359,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **22.80** | **180** | P | **P** | **13 41 23.6** | **-0.4** |
| | 0.8nm,0.4s,baz=0.9,slow=12,SNR=9.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.39** | **324** | P | **P** | **13 47 04.1** | **+0.9** |
| | 0.5nm,0.6s,baz=113,slow=7.8,SNR=4.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **69.44** | **326** | P | **P** | **13 47 29.6** | **+0.9** |
| | 0.5nm,0.7s,baz=117,slow=6.3,SNR=4.6 | | | | | | |
| **ILAR** | **Eielson Array** | **86.01** | **25** | P | **P** | **13 49 00.9** | **+0.2** |
| | 0.2nm,0.6s,baz=290,slow=5.3,SNR=4.8 | | | | | | |

**IDC 26 13:40:37.1±2.2, 3.°88N×123.°38E, h0km, mb3.6/3, mb1 3.7/3, mb1mx3.4/39,

*Error ellipse: s-maj=10.7km s-min=5.9km az=14.0*
*ISCJB **26** 13:55:14.3±0.4,34°.31N±0'.06×48°.15E±0'.03, h10km, mb3.5/6, Error ellipse: s-maj=8.0km s-min=3.8km az=4.3*
*TEH **26** 13:55:15.3,34°.57N×48°.22E, h3km, ML3.8*
*DSN **26** 13:55:31.8±1.0,34°.08N×50°.42E, h15km, mb3.9/4, Ms3.7/4, Error ellipse: s-maj=52.8km s-min=8.1km az=58.0*
*ISN **26** 13:55:45.7±1.1,34°.04N×45°.95E, h3km±4km, ML3.8*

**ISC 26 13:55:15.1±0.6,34°.40N±0'.04×48°.21E±0'.03,h10km,n68,**
**σ1§58/66,mb3.5/6,4C-1D,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBZA** | **Bozab** | **0.30** | **285** | *e*Pg | **Pg** | **13 55 20.9** | **-0.4** |
| IBZA | | | | *e* | | 13 55 31.2 | |
| | comp=Z,76μm,0.1s | | | | | | |
| **IBZA** | **Bozab** | **0.30** | **285** | *e*Pg | **Pg** | **13 55 20.9** | **-0.4** |
| **IKOM** | **Komasi** | **0.62** | **249** | *e*Pg | **Pg** | **13 55 27.5** | **+0.3** |
| IKOM | | | | *e* | | 13 55 39.0 | |
| | comp=Z,84μm,0.1s | | | | | | |
| **IKOM** | **Komasi** | **0.62** | **249** | *e*Pg | **Pg** | **13 55 27.5** | **+0.3** |
| **SNGE** | **Sanandaj** | **0.99** | **315** | *e*Pg | **Pg** | **13 55 33.4** | **-0.9** |
| SNGE | | | | AML | AML | 13 55 49.9 | |
| | comp=N,5μm,0.1s | | | | | | |
| **SNGE** | **Sanandaj** | **0.99** | **315** | *e*Pg | **Pg** | **13 55 33.4** | **-0.9** |
| **IVIS** | **Veis** | **1.13** | **277** | *e*Pg | **Pb** | **13 55 35.8** | **-1.1** |
| IVIS | | | | *e* | | 13 55 58.1 | |
| | comp=Z,22μm,0.2s | | | | | | |
| **IVIS** | **Veis** | **1.13** | **277** | *e*Pg | **Pb** | **13 55 35.8** | **-1.1** |
| **ILIN** | **Lien** | **1.15** | **297** | *e*Pg | **Pb** | **13 55 35.5** | **-1.8** |
| ILIN | | | | *e* | | 13 56 04.9 | |
| | comp=Z,10μm,0.2s | | | | | | |
| **ILIN** | **Lien** | **1.15** | **297** | *e*Pg | **Pb** | **13 55 35.5** | **-1.8** |
| **IGHG** | **Ghaleghazi** | **1.36** | **268** | *e*Pn | **Pn** | **13 55 41.0** | **+0.6** |
| IGHG | | | | *e*Sg | **Sb** | **13 55 58.3** | **-0.1** |
| IGHG | | | | *e* | | 13 56 06.2 | |
| | comp=Z,21μm,0.2s | | | | | | |
| **IGHG** | **Ghaleghazi** | **1.36** | **268** | *e*Pn | **Pn** | **13 55 41.0** | **+0.6** |
| IGHG | | | | *e*Sg | **Sb** | **13 55 58.3** | **-0.1** |
| **ASAO** | **Ashtian** | **1.51** | **84** | *e*Pg | **Pn** | **13 55 41.4** | **-1.1** |
| ASAO | | | | AML | AML | 13 56 15.4 | |
| | comp=N,990nm,0.7s | | | | | | |
| **ASAO** | **Ashtian** | **1.51** | **84** | *e*Pg | **Pn** | **13 55 41.2** | **-1.2** |
| **IDHR** | **Dehrash** | **1.54** | **282** | *e*Pn | **Pn** | **13 55 43.5** | **+0.7** |
| IDHR | | | | *e* | | 13 56 13.2 | |
| | comp=Z,23μm,0.1s | | | | | | |
| **IDHR** | **Dehrash** | **1.54** | **282** | *e*Pn | **Pn** | **13 55 43.5** | **+0.7** |
| **KHMZ** | **Khomeyn** | **1.59** | **114** | *e*Pg | **Pn** | **13 55 43.0** | **-0.6** |
| **KHMZ** | **Khomeyn** | **1.59** | **114** | *e*Pg | **Pn** | **13 55 43.0** | **-0.6** |
| **IRAZ** | **Razeghan** | **1.73** | **54** | *e*Pn | **Pn** | **13 55 45.5** | **-0.1** |
| IRAZ | | | | *e*Sg | **Sn** | **13 56 05.4** | **-2.5** |
| IRAZ | | | | *e* | | 13 56 18.4 | |
| | comp=Z,12μm,0.2s | | | | | | |
| **IRAZ** | **Razeghan** | **1.73** | **54** | *e*Pn | **Pn** | **13 55 45.5** | **-0.1** |
| **IBDR** | **Badra** | **2.29** | **237** | *e*PG | x | 13 56 06.3 | |
| IBDR | | | | *e*SG | x | 13 56 20.7 | |
| **ZNJK** | **Zanjan** | **2.30** | **10** | *e*Pn | **Pb** | **13 55 56.6** | **-0.3** |
| **ZNJK** | **Zanjan** | **2.30** | **10** | *e*Pn | **Pb** | **13 55 56.6** | **-0.3** |
| **IMHD** | **Mahdasht** | **2.39** | **57** | *e*Pn | **Pn** | **13 55 54.6** | **+0.2** |
| IMHD | | | | *e*Sg | **Sb** | **13 56 26.6** | **-1.3** |
| IMHD | | | | *e* | | 13 56 38.8 | |
| | comp=Z,4μm,0.1s | | | | | | |
| **IMHD** | **Mahdasht** | **2.39** | **57** | *e*Pn | **Pn** | **13 55 54.7** | **+0.2** |
| **GHVR** | **GHOM** | **2.55** | **87** | *e*Pn | **Pn** | **13 55 57.5** | **+0.8** |
| GHVR | | | | AML | AML | 13 56 41.2 | |
| | comp=N,434nm,0.0s | | | | | | |
| GHVR | | | | AML | AML | 13 56 47.4 | |
| | comp=E,448nm,1.1s | | | | | | |
| **GHVR** | **GHOM** | **2.55** | **87** | *e*Pn | **Pn** | **13 55 57.5** | **+0.8** |
| **IR3** | **Iran Long-Peri** | **2.55** | **64** | *e*Pn | **Pb** | **13 55 59.6** | **-1.4** |
| IR3 | | | | *e* | | 13 56 55.0 | |
| | comp=Z,99nm,0.8s | | | | | | |
| **IR3** | **Iran Long-Peri** | **2.55** | **64** | *e*Pn | **Pb** | **13 55 59.7** | **-1.4** |
| **IGZV** | **Ghazvin** | **2.58** | **39** | *e*Pn | **Pb** | **13 55 59.1** | **-2.5** |
| IGZV | | | | *e* | | 13 56 40.8 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **IGZV** | **Ghazvin** | **2.58** | **39** | *e*Pn | **Pb** | **13 55 59.1** | **-2.5** |
| **QAM** | **Ghamsar** | **2.75** | **102** | *e*Pn | **Pn** | **13 56 01.1** | **+1.5** |
| QAM | | | | *e* | | 13 56 44.9 | |
| | comp=Z,10μm,0.2s | | | | | | |
| **IPIR** | **Pirpir** | **2.81** | **127** | *e*Pn | **Pn** | **13 56 02.6** | **+2.2** |
| IPIR | | | | *e* | | 13 56 55.4 | |
| | comp=Z,4μm,0.3s | | | | | | |
| **IPIR** | **Pirpir** | **2.81** | **127** | *e*Pn | **Pn** | **13 56 02.7** | **+2.2** |
| **CHTH** | **Charan** | **2.83** | **57** | *e*Pn | **Pb** | **13 56 02.9** | **-3.0** |
| **CHTH** | **Charan** | **2.83** | **57** | *e*Pn | **Pb** | **13 56 02.8** | **-3.0** |
| **IKLH** | **Kolahrood** | **3.00** | **110** | *e*Pn | **Pn** | **13 56 04.4** | **+1.4** |
| IKLH | | | | *e* | | 13 56 57.6 | |
| | comp=Z,6μm,0.3s | | | | | | |
| **IKLH** | **Kolahrood** | **3.00** | **110** | *e*Pn | **Pn** | **13 56 04.4** | **+1.4** |
| **IAFJ** | **Afjeh** | **3.22** | **62** | *e* | **Sg** | **13 57 02.3** | **+3.7** |
| | comp=Z,3μm,0.2s | | | | | | |
| **DAMV** | **Damavand** | **3.32** | **67** | *e*Pn | **Pn** | **13 56 09.7** | **+2.3** |
| DAMV | | | | AML | AML | 13 57 04.8 | |
| | comp=E,171nm,0.2s | | | | | | |
| **DAMV** | **Damavand** | **3.32** | **67** | *e*P | **Pn** | **13 56 09.7** | **+2.3** |
| **IKRK** | **Kirkuk** | **3.34** | **289** | *e*PN | x | 13 56 19.2 | |
| IKRK | | | | *e*SN | x | 13 56 42.1 | |
| **IDMV** | **Damavand** | **3.35** | **68** | *e*Pn | **Pn** | **13 56 10.3** | **+2.4** |
| IDMV | | | | *e* | | 13 57 16.1 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **IDMV** | **Damavand** | **3.35** | **68** | *e*Pn | **Pn** | **13 56 10.3** | **+2.4** |
| **BHD** | **Baghdad** | **3.38** | **252** | *e*PN | x | 13 56 12.6 | |
| BHD | | | | *e*SN | x | 13 56 33.4 | |
| **BHD** | **Baghdad** | **3.38** | **252** | *e*Pn | **Pb** | **13 56 12.6** | **-2.5** |
| | SNR=39 | | | | | | |
| BHD | | | | *e*Sn | Sn | 13 56 33.4 | -15 |
| | SNR=39 | | | | | | |
| **NSR** | **Nassriya** | **3.80** | **208** | *e*PN | x | 13 56 35.2 | |
| NSR | | | | *e*SN | x | 13 57 08.7 | |
| **NSR** | **Nassriya** | **3.80** | **208** | *e*Pn | Pg | 13 56 35.2 | +7.2 |
| | SNR=39 | | | | | | |
| NSR | | | | *e*Sn | **Sb** | **13 57 08.7** | **+0.3** |
| | SNR=39 | | | | | | |
| **NASN** | **Na'in** | **4.15** | **111** | *e*Pn | **Pn** | **13 56 19.8** | **+0.9** |
| **NASN** | **Na'in** | **4.15** | **111** | *e*Pn | **Pn** | **13 56 19.8** | **+0.9** |
| **GEYT** | **Alibeck** | **8.75** | **63** | Pn | **Pn** | **13 57 24.5** | **+2.7** |
| | comp=Z,0.3nm,0.3s,baz=246,slow=11,SNR=2.4 | | | | | | |
| **KBZ** | **Khabaz** | **10.19** | **338** | LR | LR | 14 02 04.9 | |
| | comp=Z,35nm,20.0s,baz=184,slow=41 | | | | | | |
| **BANOM** | **Banah** | **10.96** | **138** | ⇑P | **Pn** | **13 57 50.5** | **-1.6** |
| BANOM | | | | ⇑S | Sn | 13 59 38.2 | -17 |
| **BANOM** | **Banah** | **10.96** | **138** | P | **Pn** | **13 57 50.5** | **-1.6** |
| BANOM | | | | S | Sn | 13 59 38.2 | -17 |
| **HATD** | **Hatta, Dubai** | **11.76** | **142** | ⇑P | **Pn** | **13 58 01.9** | **-1.1** |
| **HATD** | **Hatta, Dubai** | **11.76** | **142** | P | **Pn** | **13 58 01.9** | **-1.1** |
| **ASHO** | **Ashiyiah** | **11.84** | **143** | ⇓P | **Pn** | **13 58 02.6** | **-1.5** |
| ASHO | | | | ⇑S | Sn | 14 00 03.2 | -13 |
| **ASHO** | **Ashiyiah** | **11.84** | **143** | P | **Pn** | **13 58 02.6** | **-1.5** |
| ASHO | | | | S | Sn | 14 00 03.2 | -13 |
| **EIL** | **Elat** | **12.20** | **251** | LR | LR | 14 04 05.0 | |
| | comp=Z,42nm,18.8s,baz=62,slow=44 | | | | | | |
| **BRTR** | **Keskin Array B** | **12.79** | **299** | Pn | **Pn** | **13 58 18.8** | **+1.6** |
| | comp=Z,0.1nm,0.3s,baz=133,slow=12,SNR=3.5 | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.56** | **21** | P | **P** | **13 59 20.7** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=213,slow=13,SNR=3.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **21.38** | **325** | P | **P** | **14 00 01.2** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=130,slow=9.7,SNR=4.0 | | | | | | |
| **BVAR** | **Borovoye Array** | **24.40** | **34** | P | **P** | **14 00 34.8** | **+1.2** |
| | comp=Z,0.5nm,0.5s,baz=231,slow=6.9,SNR=4.1 | | | | | | |
| **STHS** | **Stebnicka Huta** | **24.88** | **315** | *e* | **P** | **14 00 40.7** | **+2.7** |
| **MKAR** | **Makanchi Array** | **28.46** | **54** | P | **P** | **14 01 11.3** | **+1.1** |
| | comp=Z,0.4nm,0.7s,baz=251,slow=12,SNR=3.7 | | | | | | |
| **FINES** | **FINESS Array B** | **30.55** | **339** | P | **P** | **14 01 27.6** | **-0.9** |
| | comp=Z,0.9nm,0.6s,baz=117,slow=11,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **47.05** | **255** | P | **P** | **14 03 46.6** | **-0.5** |
| | comp=Z,0.3nm,0.5s,baz=67,slow=6.7,SNR=3.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **47.64** | **96** | P | **P** | **14 03 52.9** | **+1.1** |
| | comp=Z,0.6nm,0.3s,baz=297,slow=9.1,SNR=5.7 | | | | | | |

*NEIC **26** 13:56:47.4±1.2,3°.52S×99°.51E, h10km, mb4.4/3, Error ellipse: s-maj=40.7km s-min=9.5km az=46.0*
*IDC **26** 13:56:47.2±1.8,3°.30S×99°.80E, h0km, mb3.8/8, mb1 4.0/8, mb1mx3.7/39, mbtmp3.9/8, MS2.8/1, Ms1 3.0/1, ms1mx2.4/42, Error ellipse: s-maj=84.6km s-min=17.1km az=57.0*
*ISCJB **26** 13:56:48.6±1.3,3°.5S±0'.2×99°.4E±0'.2, h33km, mb4.0/11, MS2.7/1, Error ellipse: s-maj=44.4km s-min=11.1km az=135.9*

**ISC 26 13:56:51.2±1.5,3°.5S±0'.2×99°.6E±0'.3,h35km,n20,**
**σ1§07/16,mb4.0/11,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNAI** | **Manna** | **3.47** | **105** | P | **Pn** | **13 57 44.2** | **+1.4** |
| **CISI** | **Cisompet, Garu** | **9.13** | **117** | *e*P | **Pn** | **13 58 58.2** | **-2.4** |
| | 35nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.82** | **358** | P | **P** | **14 01 39.7** | **-0.9** |
| | 1.5nm,0.8s,baz=188,slow=9.2,SNR=6.0 | | | | | | |
| CMAR | | | | LR | LR | 14 10 00.6 | |
| | comp=Z,27nm,19.2s,baz=145,slow=37 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.27** | **260** | T | T | 14 31 43.9 | |
| | baz=81,slow=75,SNR=46 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.28** | **260** | T | T | 14 31 44.4 | |
| | baz=81,slow=75,SNR=51 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.29** | **260** | T | T | 14 31 33.7 | |
| | baz=81,slow=75,SNR=62 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.03** | **158** | T | T | 14 39 50.6 | |
| | baz=335,slow=76,SNR=5.3 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.05** | **158** | T | T | 14 39 47.3 | |
| | baz=335,slow=76,SNR=4.9 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.05** | **158** | T | T | 14 39 52.3 | |
| | baz=335,slow=76,SNR=5.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.62** | **119** | P | **P** | **14 04 02.1** | **-1.0** |
| | 0.9nm,0.7s,baz=288,slow=8.8,SNR=8.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 06 21.2** | **+0.8** |
| | 0.3nm,0.9s,baz=311,slow=2.2,SNR=5.5 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.63** | **119** | *e*P | **P** | **14 04 03.3** | **+0.2** |
| | 1.9nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **38.74** | **124** | P | **P** | **14 04 13.3** | **+0.8** |
| | 1.3nm,0.7s,baz=296,slow=8.0,SNR=27 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 06 25.4** | **+1.6** |
| | 0.4nm,0.7s,baz=294,slow=2.8,SNR=6.7 | | | | | | |
| **SONM** | **Songino Array** | **51.46** | **6** | P | **P** | **14 05 52.5** | **-0.7** |
| | 1.0nm,0.7s,baz=191,slow=9.4,SNR=8.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.35** | **345** | P | **P** | **14 05 59.9** | **+0.1** |
| | 1.3nm,0.7s,baz=143,slow=8.3,SNR=8.6 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.86** | **344** | P | **P** | **14 06 32.4** | **+0.1** |
| | 0.6nm,0.6s,baz=167,slow=7.3,SNR=6.8 | | | | | | |
| **KURK** | **Kurchatov** | **56.92** | **344** | *e*P | **P** | **14 06 33.0** | **+0.3** |
| | 3.7nm,1.0s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.55** | **350** | P | **P** | **14 06 44.5** | **+0.4** |
| | 1.6nm,0.4s,baz=186,slow=5.9,SNR=12 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.44** | **340** | P | **P** | **14 07 03.8** | **-0.2** |
| | 1.0nm,0.6s,baz=137,slow=7.3,SNR=5.8 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.75** | **332** | *e*P | **P** | **14 07 12.7** | **-0.2** |
| | 8.6nm,0.7s | | | | | | |
| **TXAR** | **Lajitas Array** | **146.12** | **38** | PKPbc | **PKPab** | **14 16 30.1** | **+0.9** |
| | 1.2nm,0.6s,baz=304,slow=0.9,SNR=18 | | | | | | |

*THR **26** 13:58:54.0±0.7,34°.37N×48°.23E, h14km±9km, ML3.7*
*ISCJB **26** 13:58:55.1±0.5,34°.44N±0'.07×48°.13E±0'.04, h10km, Error ellipse: s-maj=10.0km s-min=4.5km az=0.6*
*TEH **26** 13:58:55.1,34°.60N×48°.22E, h4km, ML3.6*
*CSEM **26** 13:58:56.4±0.3,34°.49N×48°.15E, h20km, ML3.6, Error ellipse: s-maj=14.6km s-min=7.3km az=175.0*
*ISN **26** 13:59:03.7±2.6,34°.12N×47°.48E, h0km±10km, ML3.6*

**ISC 26 13:58:54.2±0.8,34°.53N±0'.05×48°.21E±0'.03,h10km,n38,**
**σ0§94/36,Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBZA** | **Bozab** | **0.29** | **257** | *e* | Pn | 13 59 11.0 | +6.1 |
| | comp=Z,63μm,0.1s | | | | | | |
| **IKOM** | **Komasi** | **0.68** | **238** | *e* | **Sn** | **13 59 20.7** | **-0.1** |
| | comp=Z,46μm,0.1s | | | | | | |
| IKOM | | | | *e*Pg | **Pg** | **13 59 07.0** | **-0.3** |
| **SNGE** | **Sanandaj** | **0.90** | **309** | *e*Pg | **Pn** | **13 59 13.3** | **+0.1** |
| SNGE | | | | AML | AML | 13 59 29.6 | |
| | comp=N,3μm,0.4s | | | | | | |
| SNGE | | | | AML | AML | 13 59 29.7 | |
| | comp=E,1μm,0.6s | | | | | | |
| **SNGE** | **Sanandaj** | **0.90** | **309** | *e*Pg | **Pn** | **13 59 13.3** | **+0.1** |
| **ILIN** | **Lien** | **1.09** | **291** | *e*Pg | **Pb** | **13 59 14.8** | **-0.6** |
| ILIN | | | | *e* | | 13 59 38.0 | |
| | comp=Z,6μm,0.2s | | | | | | |
| **ILIN** | **Lien** | **1.09** | **291** | *e*Pg | **Pb** | **13 59 14.8** | **-0.6** |
| **IVIS** | **Veis** | **1.12** | **270** | *e*Pg | **Pb** | **13 59 15.3** | **-0.5** |
| IVIS | | | | *e*Sg | **Sb** | **13 59 31.0** | **+0.6** |
| IVIS | | | | *e* | | 13 59 37.8 | |
| | comp=Z,9μm,0.2s | | | | | | |
| **IVIS** | **Veis** | **1.12** | **270** | *e*Pg | **Pb** | **13 59 15.3** | **-0.5** |
| IVIS | | | | *e*Sg | **Sb** | **13 59 31.0** | **+0.6** |
| **IGHG** | **Ghaleghazi** | **1.37** | **262** | *e*Pn | **Pn** | **13 59 20.6** | **+1.0** |
| IGHG | | | | *e* | | 13 59 45.8 | |
| | comp=Z,9μm,0.2s | | | | | | |
| **IGHG** | **Ghaleghazi** | **1.37** | **262** | *e*Pn | **Pn** | **13 59 20.6** | **+1.0** |
| **ASAO** | **Ashtian** | **1.50** | **89** | *e*Pg | **Pn** | **13 59 21.2** | **-0.2** |
| **ASAO** | **Ashtian** | **1.50** | **89** | *e*Pg | **Pn** | **13 59 21.0** | **-0.5** |
| **IDHR** | **Dehrash** | **1.51** | **277** | *e*Pn | **Pb** | **13 59 23.3** | **+0.8** |
| IDHR | | | | *e* | | 13 59 50.2 | |
| | comp=Z,12μm,0.2s | | | | | | |
| **IDHR** | **Dehrash** | **1.51** | **277** | *e*Pn | **Pb** | **13 59 23.3** | **+0.8** |
| **KHMZ** | **Khomeyn** | **1.66** | **118** | *e*Pg | **Pn** | **13 59 22.9** | **-0.7** |
| **KHMZ** | **Khomeyn** | **1.66** | **118** | *e*Pg | **Pn** | **13 59 22.9** | **-0.7** |
| **IRAZ** | **Razeghan** | **1.66** | **58** | *e*Pn | **Pb** | **13 59 25.3** | **+0.2** |
| IRAZ | | | | *e*Sg | **Sn** | **13 59 44.9** | **-0.2** |
| IRAZ | | | | *e* | | 13 59 58.7 | |
| | comp=Z,8μm,0.2s | | | | | | |
| **IRAZ** | **Razeghan** | **1.66** | **58** | *e*Pn | **Pb** | **13 59 25.3** | **+0.2** |
| IRAZ | | | | *e*Sg | **Sn** | **13 59 44.9** | **-0.2** |
| **IR5** | **Iran Long-Peri** | **2.07** | **70** | *e*Pn | **Pb** | **13 59 31.5** | **-0.5** |
| IR5 | | | | *e* | | 14 00 06.3 | |
| | comp=Z,99nm,0.2s | | | | | | |
| **IR5** | **Iran Long-Peri** | **2.07** | **70** | *e*Pn | **Pb** | **13 59 31.5** | **-0.5** |
| **IMHD** | **Mahdasht** | **2.32** | **60** | *e*Pn | **Pb** | **13 59 36.8** | **+0.5** |
| IMHD | | | | *e* | | 14 00 11.1 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **IMHD** | **Mahdasht** | **2.32** | **60** | *e*Pn | **Pb** | **13 59 36.8** | **+0.5** |
| **IBDR** | **Badra** | **2.37** | **234** | *e*Pg | x | 13 59 39.5 | |
| IBDR | | | | *e*Sg | x | 14 00 04.7 | |
| **IGZV** | **Ghazvin** | **2.47** | **41** | *e*Pn | **Pg** | **13 59 40.8** | **-0.9** |
| IGZV | | | | *e* | | 14 00 20.4 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **GHVR** | **GHOM** | **2.55** | **90** | *e*Pg | **Pb** | **13 59 39.4** | **-0.7** |
| GHVR | | | | AML | AML | 14 00 27.2 | |
| | comp=E,253nm,1.1s | | | | | | |
| **QAM** | **Ghamsar** | **2.79** | **105** | *e*Pn | **Pn** | **13 59 40.6** | **+1.4** |
| QAM | | | | *e* | | 14 00 31.1 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **IPIR** | **Pirpir** | **2.90** | **129** | *e*Pn | **Pn** | **13 59 42.4** | **+1.6** |
| IPIR | | | | *e* | | 14 00 35.1 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IPIR** | **Pirpir** | **2.90** | **129** | *e*Pn | **Pn** | **13 59 42.4** | **+1.6** |
| **IKLH** | **Kolahrood** | **3.06** | **112** | *e*Pn | **Pn** | **13 59 44.5** | **+1.6** |
| IKLH | | | | *e* | | 14 00 37.3 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **IKLH** | **Kolahrood** | **3.06** | **112** | *e*Pn | **Pn** | **13 59 44.5** | **+1.6** |
| **DAMV** | **Damavand** | **3.27** | **69** | *e*PN | **Pn** | **13 59 47.8** | **+1.9** |
| **DAMV** | **Damavand** | **3.27** | **69** | *e*Pn | **Pn** | **13 59 47.8** | **+1.9** |
| **IKRK** | **Kirkuk** | **3.29** | **286** | *e*PN | x | 13 59 50.5 | |
| IKRK | | | | *e*SN | x | 14 00 24.9 | |
| **IDMV** | **Damavand** | **3.31** | **71** | *e*Pn | Pn | 13 59 49.8 | +3.5 |
| IDMV | | | | *e* | | 14 00 41.4 | |
| | comp=Z,835nm,0.2s | | | | | | |
| **IDMV** | **Damavand** | **3.31** | **71** | *e*Pn | Pn | 13 59 49.8 | +3.5 |
| **NSR** | **Nassriya** | **3.92** | **207** | *e*PN | x | 13 59 55.1 | |
| NSR | | | | *e*SN | x | 14 00 35.2 | |
| **NSR** | **Nassriya** | **3.92** | **207** | *e*Pn | **Pn** | **13 59 55.1** | **+0.6** |
| | SNR=39 | | | | | | |
| **RTB** | **Rutbah** | **6.75** | **259** | *e*PN | x | 14 00 37.2 | |
| RTB | | | | *e*SN | x | 14 01 42.3 | |

**IDC 26 14:03:01.2±3.1,2°.74S×100°.22E, h0km, mb3.4/6, mb1 3.5/6, mb1mx3.4/31, mbtmp3.4/6, MS2.7/1, Ms1 2.7/1, ms1mx2.3/21, Error ellipse: s-maj=128.5km s-min=20.3km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSI** | **Prapat** | **5.65** | **347** | LR | LR | 14 07 07.0 | |
| | comp=Z,71nm,20.1s,baz=48,slow=44 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.10** | **357** | P | P | 14 07 46.5 | -1.1 |
| | 0.2nm,0.4s,baz=191,slow=9.2,SNR=3.4 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.03** | **259** | T | T | 14 37 49.8 | |
| | baz=82,slow=75,SNR=123 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.03** | **259** | T | T | 14 37 50.4 | |
| | baz=82,slow=75,SNR=107 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.05** | **259** | T | T | 14 37 51.3 | |
| | baz=82,slow=75,SNR=105 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.50** | **160** | T | T | 14 45 53.7 | |
| | baz=339,slow=74,SNR=5.4 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.52** | **160** | T | T | 14 46 05.6 | |
| | baz=35,slow=74,SNR=4.5 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.52** | **160** | T | T | 14 45 57.5 | |
| **WRA** | **Warramunga Arr** | **37.44** | **120** | P | P | 14 10 16.4 | -0.2 |
| | 0.1nm,0.4s,baz=284,slow=7.7,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **38.65** | **125** | P | P | 14 10 26.6 | -0.2 |
| | 0.2nm,0.7s,baz=298,slow=7.6,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **50.65** | **5** | P | P | 14 12 03.2 | +0.7 |
| | 0.8nm,0.9s,baz=187,slow=6.4,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.79** | **344** | P | P | 14 12 10.9 | 0.0 |
| | 0.7nm,0.5s,baz=155,slow=8.6,SNR=7.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.31** | **344** | P | P | 14 12 43.4 | -0.4 |
| | 0.5nm,0.8s,baz=164,slow=6.9,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.15** | **38** | PKPbc | PKPbc | 14 22 40.6 | -0.6 |
| | 0.2nm,0.6s,baz=111,slow=0.6,SNR=3.6 | | | | | | |

*ISCJB **26** 14:04:49.3±0.9,55°.2S±0'.1×27°.0W±0'.4, h10km, mb3.9/5, Error ellipse: s-maj=39.5km s-min=15.3km az=157.5*
*IDC **26** 14:04:49.4±0.8,55°.32S×27°.07W, h0km, mb4.0/5, mb1 4.1/5, mb1mx4.0/16, mbtmp4.0/5, Error ellipse: s-maj=41.2km s-min=23.9km az=70.0*

**ISC 26 14:04:51.0±0.9,55°.3S±0'.2×27°.1W±0'.3,h10km,n11,**
**σ0§87/11,mb4.0/4,South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNA3** | **Neumayer Olymp** | **17.73** | **161** | P | **P** | **14 08 59.6** | **+1.2** |
| **VNA2** | **Neumayer--Watz** | **17.91** | **159** | P | **Pn** | **14 08 59.9** | **0.0** |
| | baz=307,slow=12 | | | | | | |
| **SNAA** | **Sanae** | **19.45** | **157** | P | **P** | **14 09 17.8** | **+0.4** |
| **MAW** | **Mawson** | **40.77** | **144** | P | **P** | **14 12 31.2** | **-0.4** |
| | 1.3nm,0.6s,baz=265,slow=9.6,SNR=7.3 | | | | | | |
| **VNDA** | **Vanda** | **47.36** | **183** | P | **P** | **14 13 24.2** | **-0.2** |
| | 1.9nm,0.7s,baz=180,slow=24,SNR=2260 | | | | | | |
| **LPAZ** | **La Paz** | **49.95** | **305** | P | **P** | **14 13 46.0** | **+0.3** |
| | 0.9nm,0.5s,baz=143,slow=7.4,SNR=5.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **72.35** | **30** | P | **P** | **14 16 17.4** | **+0.5** |
| | 1.6nm,0.9s,baz=187,slow=8.4,SNR=7.1 | | | | | | |
| **ASAR** | **Alice Springs** | **99.73** | **162** | P | **Pdif** | **14 18 33.3** | **-1.8** |
| | 0.2nm,0.8s,baz=190,slow=3.3,SNR=3.0 | | | | | | |
| **INK** | **Inuvik** | **145.21** | **321** | PKPbc | **PKPdf** | **14 24 26.7** | **-0.4** |
| | 2.2nm,0.8s,baz=51,slow=4.2,SNR=6.7 | | | | | | |
| **ILAR** | **Eielson Array** | **149.61** | **313** | PKPbc | **PKPbc** | **14 24 38.9** | **-0.3** |
| | 0.2nm,0.6s,baz=115,slow=1.7,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **150.63** | **85** | PKPbc | **PKPbc** | **14 24 41.8** | **-0.5** |
| | 0.9nm,0.9s,baz=223,slow=2.1,SNR=5.6 | | | | | | |

**IDC 26 14:29:30.9±2.5,3°.71S×99°.67E, h0km, mb3.6/7, mb1 3.7/7, mb1mx3.5/47, mbtmp3.6/7, Error ellipse: s-maj=99.8km s-min=20.3km az=55.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **22.04** | **358** | P | P | 14 34 26.7 | -0.5 |
| | 0.7nm,0.7s,baz=186,slow=9.9,SNR=9.2 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.32** | **261** | T | T | 15 04 42.4 | |
| | baz=82,slow=75,SNR=22 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.33** | **261** | T | T | 15 04 35.3 | |
| | baz=82,slow=75,SNR=17 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.34** | **261** | T | T | 15 04 42.9 | |
| | baz=82,slow=75,SNR=16 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.80** | **158** | T | T | 15 12 20.6 | |
| | baz=336,slow=76,SNR=6.8 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.81** | **158** | T | T | 15 12 14.0 | |
| | baz=336,slow=76,SNR=6.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.82** | **158** | T | T | 15 12 29.6 | |
| | baz=336,slow=76,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.45** | **118** | P | P | 14 36 46.1 | -0.3 |
| | 0.1nm,0.6s,baz=308,slow=8.8,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.55** | **124** | P | P | 14 36 55.0 | -0.6 |
| | 0.2nm,0.3s,baz=182,slow=33,SNR=1.9 | | | | | | |
| **SONM** | **Songino Array** | **51.66** | **6** | P | P | 14 38 39.6 | -0.1 |
| | 1.7nm,0.8s,baz=185,slow=9.4,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.58** | **345** | P | P | 14 38 46.9 | +0.5 |
| | 1.0nm,0.5s,baz=149,slow=9.5,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.09** | **344** | P | P | 14 39 18.6 | -0.2 |
| | 0.8nm,0.9s,baz=163,slow=6.

baz=82,slow=75,SNR=736
**H08S1 Diego Carcia H 27.83 260** T T 15 10 33.1
baz=82,slow=75,SNR=757
**KMI Kunming 28.32 5** P **P** **14 41 28.3 +0.3**
KMI pP **pP** **14 41 36.5 +2.6**
KMI S **S** **14 46 16.5 +2.7**
KMI PMZ
7.0nm,0.7s
KMI PMZ
160nm,4.7s
**ODAN Odare 32.35 338** *e*P **P** **14 42 04.9 +1.3**
14nm,0.6s
**TAPN Taplejung 32.69 339** *e*P **P** **14 42 08.1 +1.5**
12nm,0.4s
**RAMN Ramite 32.73 337** *e*P **P** **14 42 08.7 +1.7**
8.0nm,0.4s
**PKI Pulchoki 33.76 336** *e*P **P** **14 42 17.6 +1.6**
**PKIN Phulchoki 33.77 336** *e*P **P** **14 42 17.4 +1.4**
**LSA Lhasa 33.87 346** *e*P **P** **14 42 18.1 +1.0**
6.9nm,0.6s
**GUN Gumba 33.87 337** *e*P **P** **14 42 18.2 +1.2**
27nm,0.5s
**DMN Daman 33.91 336** *e*P **P** **14 42 19.5 +2.2**
**H01W3 Cape Leeuwin H 34.07 159** T T 15 18 13.0
baz=335,slow=76,SNR=46
**H01W2 Cape Leeuwin H 34.08 159** T T 15 18 14.0
baz=335,slow=76,SNR=41
**H01W1 Cape Leeuwin H 34.08 159** T T 15 18 14.2
baz=335,slow=76,SNR=37
**CD2 Chengdu 34.15 6** P **P** **14 42 19.8 +0.8**
CD2 pP **pP** **14 42 24.0 -1.0**
CD2 PP **PP** **14 43 37.5 +0.9**
CD2 S **S** **14 47 47.3 +2.8**
CD2 sS **sS** **14 47 54.8 +0.6**
CD2 PMZ
10.0nm,0.5s
CD2 PMZ
120nm,5.2s
**GKN Gorkha 34.45 335** *e*P **P** **14 42 22.6 +0.7**
**KOLN Koldanda 34.70 334** *e*P **P** **14 42 25.9 +1.9**
23nm,0.8s
**WRA Warramunga Arr 37.29 119** P **P** **14 42 45.4 -0.8**
1.0nm,0.5s,baz=297,slow=8.6,SNR=23
**WRAB Tennant Creek 37.30 119** *e*P **P** **14 42 46.3 0.0**
6.0nm,1.3s
**XAN Xi'an 38.02 12** P **P** **14 42 50.5 -1.6**
XAN PMZ
16nm,0.8s
**ASAR Alice Springs 38.45 125** P **P** **14 42 56.0 0.0**
1.5nm,0.7s,baz=298,slow=8.0,SNR=18
ASAR LR LR 15 00 16.9
comp=Z,78nm,21.0s,baz=300,slow=39
**LZH Lanzhou 39.29 5** *e*P **P** **14 43 06.0 +3.1**
LZH pP **pP** **14 43 11.5 +2.6**
LZH sP **sP** **14 43 13.3 +2.0**
LZH PMZ
14nm,1.0s
**GTA Gaotai 42.45 360** *e*P **P** **14 43 28.5 -0.4**
GTA pP **pP** **14 43 33.0 -1.9**
GTA sP **sP** **14 43 35.5 -1.8**
GTA PMZ
5.0nm,0.8s
**HHC Hu-ho-hao-te 45.13 12** *e*P **P** **14 43 53.0 +2.6**
HHC S **S** **14 50 28.8 -0.1**
HHC PMZ
25nm,0.7s
HHC PMZ
190nm,6.2s
HHC LN
280nm,14.8s
HHC LE
270nm,12.3s
HHC LZ
280nm,12.3s
**BJI Beijing 45.54 17** P **P** **14 43 55.5 +2.0**
BJI PMZ
8.0nm,0.8s
**KSH Kashi 48.00 335** *e*P **P** **14 44 13.0 0.0**
KSH *es*P **sP** **14 44 20.0 -1.4**
KSH S **S** **14 51 08.5 -1.7**
KSH ScS **ScS** **14 54 04.5 -1.1**
KSH PMZ
61nm,4.6s
KSH LN
89nm,4.9s
KSH LE
150nm,5.3s
KSH LZ
220nm,5.8s
**WMQ Urumqi 48.17 348** P **P** **14 44 15.0 +0.9**
WMQ pP **pP** **14 44 20.0 -0.2**
WMQ PMZ
14nm,1.0s
**TKM2 Tokmak 2 51.01 337** *e*P **P** **14 44 37.0 +0.9**
5.1nm,0.9s
**SONM Songino Array 51.17 5** P **P** **14 44 37.0 -0.1**
4.5nm,0.7s,baz=188,slow=9.4,SNR=32
**ULN Ulaanbaatar 51.27 6** *e*P **P** **14 44 37.9 +0.1**
9.7nm,1.3s
ULN *e* 14 44 44.5
**EKS2 Erkin-Say 51.53 335** *e*P **P** **14 44 40.9 +1.1**
3.3nm,0.5s
**MKAR Makanchi Array 52.25 345** P **P** **14 44 45.3 +0.3**
7.0nm,0.7s,baz=148,slow=8.1,SNR=41
MKAR LR LR 15 09 25.1
comp=Z,29nm,19.2s,baz=165,slow=39
**USRK Ussuriysk Ar. 55.21 28** P **P** **14 45 05.7 -1.0**
6.6nm,0.8s,baz=216,slow=7.2,SNR=9.2
**KURBB Kurchatov Arra 56.77 344** P **P** **14 45 17.6 -0.1**
3.2nm,0.8s,baz=162,slow=6.8,SNR=25
**KURK Kurchatov 56.83 344** P **P** **14 45 17.6 -0.5**
**ZALV Zalesovo Beam 58.41 349** P **P** **14 45 28.3 -0.8**
5.9nm,0.7s,baz=172,slow=4.5,SNR=20
**BVAR Borovoye Array 61.38 340** P **P** **14 45 49.2 -0.5**
0.9nm,0.3s,baz=134,slow=8.5,SNR=7.9
**KBZ Khabaz 69.31 319** P **P** **14 46 41.9 +0.7**
2.4nm,0.8s,baz=117,slow=5.1,SNR=6.1
**BRTR Keskin Array B 74.23 313** P **P** **14 47 10.8 -0.3**
0.8nm,0.8s,baz=123,slow=4.6,SNR=4.5
**FINES FINESS Array B 85.26 332** P **P** **14 48 10.4 +0.2**
0.6nm,0.6s,baz=90,slow=5.7,SNR=4.9
**TXAR Lajitas Array 145.62 39** PKPbc **PKPbc** **14 55 13.6 +0.4**
3.4nm,0.7s,baz=296,slow=1.0,SNR=27
**JCT Junction City 147.03 33** *e*PKPbc **PKPdf** **14 55 16.5 +1.2**

*ISCJB **26** 14:37:10.9±0.6, 10°.73N±0°.05×62°.32W±0°.03, h88km±7km, Error ellipse: s-maj=8.3km s-min=4.6km az=154.4*
*FUNV **26** 14:37:11.3, 10°.82N×62°.21W, h82km, MW2.8*
*TRN **26** 14:37:14.5, 10°.84N×62°.18W, h23km, MD3.4*
**ISC 26 14:37:11.5±1.4, 10°.72N±0°.05×62°.31W±0°.04, h86km±10km, n15, σ1§09/26, 2C, Near coast of Venezuela**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GUIV** | **Guiria** | **0.11** | **130** | ⇑*iP* | **Pn** | **14 37 23.6** | **-0.1** |
| GUIV | | | | *e*S | **Sn** | **14 37 31.5** | **-1.3** |
| **GUNV** | **Guanoco** | **0.83** | **229** | ⇑*iP* | **Pn** | **14 37 30.5** | **+1.4** |
| GUNV | | | | *e*S | **Sn** | **14 37 43.8** | **+1.6** |
| **TRN** | **Trinidad (W)** | **0.89** | **94** | *e*P | **Pn** | **14 37 29.8** | **+0.1** |
| TRN | | | | *e*S | **Sn** | **14 37 41.4** | **-1.9** |
| **CRUV** | **Carupano** | **0.91** | **267** | *e*P | **Pn** | **14 37 30.3** | **+0.4** |
| CRUV | | | | *e*S | **Sn** | **14 37 43.1** | **-0.6** |
| **TBH** | **Brigand Hill** | **1.24** | **101** | *e*P | **Pn** | **14 37 34.6** | **+0.8** |
| TBH | | | | *e*S | **Sn** | **14 37 51.6** | **+0.9** |
| **GRW** | **Mount Saint Ca** | **1.57** | **24** | *i* P | **Pn** | **14 37 39.1** | **+1.1** |
| GRW | | | | *e*S | **Sn** | **14 37 57.3** | **-0.7** |
| **GRSS** | **Sisters** | **1.71** | **23** | *e*P | **Pn** | **14 37 41.4** | **+1.6** |
| GRSS | | | | *e*S | **Sn** | **14 38 00.6** | **-0.7** |
| **TOSP** | **Speyside** | **1.83** | **72** | *e*P | **Pn** | **14 37 42.7** | **+1.3** |
| TOSP | | | | *e*S | **Sn** | **14 38 02.6** | **-1.5** |
| **ORIV** | **Oritupano** | **1.96** | **214** | *e*P | **Pn** | **14 37 44.0** | **+0.9** |
| ORIV | | | | *e*S | **Sn** | **14 38 08.5** | **+1.3** |
| **PCRV** | **Puerto La Cruz** | **2.35** | **257** | *e*P | **Pn** | **14 37 48.0** | **-0.2** |
| PCRV | | | | *e*S | **Sn** | **14 38 15.5** | **-1.0** |
| **GURV** | **El Guri** | **3.04** | **195** | *e*P | **Pn** | **14 37 57.6** | **+0.1** |
| **CUPV** | **Cœpira** | **3.49** | **259** | *e*P | **Pn** | **14 38 04.3** | **+0.8** |
| CUPV | | | | *e*S | **Sn** | **14 38 43.2** | **-0.6** |
| **BIRV** | **Birongo** | **3.90** | **267** | *e*P | **Pn** | **14 38 08.5** | **-0.6** |
| **LUEV** | **Luepa** | **4.92** | **170** | *e*P | **Pn** | **14 38 22.3** | **-0.8** |
| **BAUV** | **El Baul** | **5.92** | **253** | *e*P | **Pn** | **14 38 36.3** | **-0.3** |

**IDC 26 14:41:29.5±2.8, 17°.57S×174°.63W, h134km±33km, mb3.5/4, mb1 3.7/5, mb1mx3.4/23, mbtmp4.0/5, Error ellipse: s-maj=49.2km s-min=20.8km az=124.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **4.56** | **37** | P | Pn | 14 42 36.8 | -0.1 |
| | 22nm,0.3s,baz=204,slow=3.0,SNR=126 | | | | | | |
| AFI | | | | S | Sn | 14 43 24.5 | -4.7 |
| | 7.3nm,0.3s,baz=32,slow=22,SNR=4.4 | | | | | | |
| **URZ** | **Urewera** | **21.85** | **198** | P | P | 14 46 11.4 | +0.1 |
| | 3.7nm,0.4s,baz=296,slow=2.8,SNR=10 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.23** | **259** | P | P | 14 49 56.7 | -0.5 |
| | 0.2nm,0.3s,baz=96,slow=6.9,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **48.35** | **254** | P | P | 14 49 58.1 | +0.1 |
| | 1.9nm,0.6s,baz=90,slow=8.2,SNR=29 | | | | | | |
| **ILAR** | **Eielson Array** | **84.79** | **12** | P | P | 14 53 48.4 | 0.0 |
| | 0.3nm,0.5s,baz=229,slow=6.0,SNR=12 | | | | | | |

**IDC 26 14:50:34.3±999.0, 51°.59N×53°.93E, h0km, Error ellipse: s-maj=516.0km s-min=60.0km az=112.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **2.85** | **113** | *i* | | 15 09 20.0 | |
| | baz=296,slow=335,SNR=65 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **18.76** | **71** | *i* | | 16 42 50.0 | |
| | baz=274,slow=322,SNR=3.0 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **33.55** | **75** | *i* | | 18 15 50.0 | |
| | baz=297,slow=323,SNR=0.7 | | | | | | |

*ISCJB **26** 14:54:14.8±1.2, 38°.73N±0°.09×70°.39E±0°.07, h17km, Error ellipse: s-maj=14.2km s-min=6.2km az=158.1*
*NNC **26** 14:54:15.4±1.3, 38°.86N×70°.32E, h0km, mb4.0, mpv3.7, Error ellipse: s-maj=18.0km s-min=4.6km az=159.0*
**ISC 26 14:54:15.0±2.0, 38°.7N±0°.1×70°.33E±0°.06, h17km, n14, σ0§91/20, 4C-9D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **1.19** | **278** | ⇑P | **Pn** | **14 54 36.5** | **-0.4** |
| | 86nm,0.4s | | | | | | |
| DZET | | | | ⇑S | **Sg** | **14 54 54.5** | **+1.0** |
| | 103nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.81** | **60** | ⇓Pn | **Pn** | **14 54 58.3** | **-1.1** |
| SFK | | | | ⇓Sn | **Sb** | **14 55 37.3** | **-1.7** |
| | 67nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **4.17** | **23** | ⇓Pn | **Pn** | **14 55 17.7** | **-0.3** |
| MNAS | | | | ⇓Sn | **Sn** | **14 56 07.3** | **+0.9** |
| | 9.5nm,0.4s | | | | | | |
| **AML** | **Almayashu** | **4.32** | **35** | P | **Pn** | **14 55 20.3** | **+0.1** |
| | SNR=34 | | | | | | |
| **KK31** | **Karatay Array** | **4.45** | **2** | ⇓Pn | **Pn** | **14 55 21.0** | **-0.7** |
| | 2.0nm,0.5s,baz=180,slow=12,SNR=39 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **14 56 11.8** | **-1.3** |
| | 3.0nm,0.3s | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 14 56 28.7 | |
| | 4.7nm,0.4s,baz=180,slow=28,SNR=4.4 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.79** | **32** | P | **Pn** | **14 55 26.7** | **+0.3** |
| | SNR=14 | | | | | | |
| **UCH** | **Uchtor** | **4.79** | **40** | P | **Pn** | **14 55 27.4** | **+0.6** |
| | SNR=33 | | | | | | |
| **AAK** | **Ala-Archa** | **5.08** | **37** | ⇓Pn | **Pn** | **14 55 30.4** | **-0.1** |
| | 5.1nm,0.6s | | | | | | |
| AAK | | | | ⇓Sn | **Sn** | **14 56 29.7** | **+0.9** |
| **AAK** | **Ala-Archa** | **5.08** | **37** | P | **Pn** | **14 55 31.4** | **+0.8** |
| | SNR=13 | | | | | | |
| **KBK** | **Karagaybulak** | **5.32** | **40** | P | **Pn** | **14 55 35.1** | **+1.3** |
| | SNR=25 | | | | | | |
| **CHMS** | **Chumysh** | **5.48** | **36** | P | **Pn** | **14 55 36.5** | **+0.5** |
| | SNR=5.7 | | | | | | |
| **USP** | **Ospenovka** | **5.58** | **33** | P | **Pn** | **14 55 37.0** | **-0.3** |
| | SNR=6.3 | | | | | | |
| **TKM2** | **Tokmak 2** | **5.84** | **41** | ⇑Pn | **Pn** | **14 55 41.0** | **0.0** |
| | 11nm,0.6s | | | | | | |
| TKM2 | | | | ⇓Sn | **Sn** | **14 56 49.0** | **+1.3** |
| | 5.1nm,0.7s | | | | | | |
| **TKM2** | **Tokmak 2** | **5.84** | **41** | P | **Pn** | **14 55 41.6** | **+0.7** |
| | SNR=19 | | | | | | |

*IDC **26** 14:57:45.2±0.9, 2°.37S×99°.40E, h0km, mb4.4/14, mb1 4.5/15, mb1mx4.2/33, mbtmp4.4/15, ML3.8/1, MS3.6/6, Ms1 3.6/6, ms1mx3.2/36, Error ellipse: s-maj=32.2km s-min=15.5km az=50.0*
*ISCJB **26** 14:57:46.6±0.9, 2°.36S±0°.03×99°.39E±0°.04, h20km±6km, mb4.6/29, MS3.6/7, Error ellipse: s-maj=7.6km s-min=3.9km az=145.3*
*BJI **26** 14:57:47.5, 2°.30S×99°.60E, h23km, mb4.7/35, mB5.2/23, Ms4.9/11, Ms7 4.6/11*
*DJA **26** 14:57:47.8±0.5, 2°.S±3°×9°9E±°, h17km±5km, M4.9/22, mb4.8/20, mB5.5/9, MLv4.7/22, Mw(mB)5.0/9*
*AUST **26** 14:57:48.1, 2°.38S×99°.48E, h20km*
*KLM **26** 14:57:48.8, 2°.38S×99°.23E, h39km, mb4.8, ML4.5, MS5.1*
*MOS **26** 14:57:49.3×1.1, 2°.21S×99°.57E, h35km, mb4.8/16, Error ellipse: s-maj=17.6km s-min=7.5km az=104.8*
*NEIC **26** 14:57:49.5±0.5, 2°.34S±0°.05×99°.41E±0°.05, h25km±2km, **h25km:pP-P, n147, σ1§38/154, mb4.7**/29, **MS3.6**/7, **9C-9D, Southern Sumatera***

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.73** | **125** | P | **Pb** | **14 58 02.5** | **-0.8** |
| PPSI | | | | S | **Sb** | **14 58 12.6** | **-0.4** |
| **SISI** | **Saibi** | **1.06** | **342** | P | **Pn** | **14 58 08.2** | **-0.2** |
| SISI | | | | S | **Sn** | **14 58 18.8** | **-3.5** |
| **PDSI** | **Padang** | **1.77** | **37** | P | **Pn** | **14 58 16.9** | **-1.3** |
| **PPI** | **Padang Panjang** | **2.12** | **28** | P | **Pn** | **14 58 22.4** | **-0.6** |
| | baz=2.1,SNR=170 | | | | | | |
| **PPI** | **Padang Panjang** | **2.12** | **28** | P | **Pn** | **14 58 22.4** | **-0.6** |
| PPI | | | | S | **Sn** | **14 58 48.5** | **0.0** |
| **SDSI** | **Sungai Dareh** | **2.46** | **55** | P | **Pn** | **14 58 27.8** | **+0.1** |
| **BKNI** | **Bangkinang** | **3.11** | **32** | P | **Pn** | **14 58 38.1** | **+1.4** |
| | baz=3.1,SNR=4.9 | | | | | | |
| **BKNI** | **Bangkinang** | **3.11** | **32** | P | **Pn** | **14 58 36.5** | **-0.2** |
| **BKNI** | **Bangkinang** | **3.11** | **32** | *e*Pn | **Pn** | **14 58 36.4** | **-0.3** |
| **MNSI** | **Mandailing Nat** | **3.12** | **3** | P | **Pn** | **14 58 36.0** | **-0.8** |
| MNSI | | | | S | **Sn** | **14 59 14.1** | **+0.8** |
| **KSI** | **Kapahiang** | **3.44** | **112** | P | **Pn** | **14 58 41.3** | **+0.1** |
| **RGRI** | **Rengat** | **3.53** | **56** | P | **Pn** | **14 58 43.3** | **+0.8** |
| **GSI** | **Gunungsitoli** | **4.06** | **333** | P | **Pn** | **14 58 47.4** | **-2.3** |
| GSI | | | | S | **Sn** | **14 59 34.5** | **-2.0** |
| **GSI** | **Gunungsitoli** | **4.06** | **333** | *e*Pn | **Pn** | **14 58 49.0** | **-0.7** |
| **MNAI** | **Manna** | **4.07** | **120** | P | **Pn** | **14 58 49.0** | **-0.9** |
| | baz=4.0,SNR=14 | | | | | | |
| **MNAI** | **Manna** | **4.07** | **120** | P | **Pn** | **14 58 49.3** | **-0.6** |
| **PSI** | **Prapat** | **5.13** | **355** | Pn | **Pn** | **14 59 02.0** | **-2.6** |
| | 3.7nm,0.3s,baz=209,slow=9.0,SNR=12 | | | | | | |
| **PSI** | **Prapat** | **5.13** | **355** | P | **Pn** | **14 59 02.2** | **-2.4** |
| | baz=5.1,SNR=7.0 | | | | | | |
| **MDSI** | **Maura Dua** | **5.22** | **114** | P | **Pn** | **14 59 05.4** | **-0.2** |
| | 61nm,0.9s,0.4nm | | | | | | |
| **LWLI** | **Liwa** | **5.35** | **120** | P | **Pn** | **14 59 07.3** | **-0.3** |
| | 209nm,0.7s,5μm1.9nm | | | | | | |
| **KGM** | **Kluang** | **5.83** | **42** | ⇓P | **Pn** | **14 59 14.9** | **+0.7** |
| **TSI** | **Tuntungan** | **5.86** | **352** | P | **Pn** | **14 59 13.1** | **-1.5** |
| | 153nm,1.0s,0.4nm | | | | | | |
| **FRIM** | **Kepong** | **5.97** | **22** | ⇑P | **Pn** | **14 59 16.8** | **+0.8** |
| **KASI** | **Kota Agung** | **5.98** | **122** | P | **Pn** | **14 59 15.7** | **-0.4** |
| | 124nm,0.6s,0.6nm | | | | | | |
| **KLI** | **Kotabumi** | **5.99** | **115** | P | Pb | 14 59 29.2 | -3.7 |
| **MYKOM** | **Kota Tinggi** | **6.05** | **47** | ⇓P | **Pn** | **14 59 17.7** | **+0.6** |
| **KCSI** | **Kotacane, Aceh** | **6.05** | **344** | P | **Pn** | **14 59 16.3** | **-0.8** |
| | 44nm,0.9s,6μm0.6nm | | | | | | |
| **TPRI** | **Tanjung Pinang** | **6.05** | **58** | P | **Pn** | **14 59 16.4** | **-0.8** |
| | 144nm,0.7s,9μm0.7nm | | | | | | |
| **IPM** | **Ipoh** | **6.96** | **13** | ⇓P | **Pn** | **14 59 30.1** | **+0.4** |
| **IPM** | **Ipoh** | **6.96** | **13** | *e*Pn | **Pn** | **14 59 27.6** | **-2.1** |
| | 16nm,0.6s | | | | | | |
| **CGJI** | **Cibinong** | **7.57** | **124** | P | **Pn** | **14 59 35.4** | **-2.6** |
| | 75nm,0.6s,0.4nm | | | | | | |
| **KULM** | **Kulim** | **7.68** | **9** | *e*Pn | **Pn** | **14 59 37.6** | **-2.0** |
| | 12nm,0.6s | | | | | | |
| **KTGM** | **Kuala Trenggan** | **8.48** | **26** | ⇑P | **Pn** | **14 59 51.1** | **+0.6** |
| **CISI** | **Cisompet, Garu** | **9.85** | **122** | P | **Pn** | **15 00 06.2** | **-3.1** |
| | baz=9.8,SNR=6.5 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.85** | **122** | P | **Pn** | **15 00 06.6** | **-2.7** |
| | 156nm,0.6s,2μm | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.85** | **122** | *e*P | **Pn** | **15 00 06.2** | **-3.1** |
| | 112nm,0.6s | | | | | | |
| **XMIS** | **Christmas Isla** | **10.19** | **143** | P | **Pn** | **15 00 14.2** | **+0.2** |
| | baz=10,SNR=4.0 | | | | | | |
| **UGM** | **Wanagama** | **12.37** | **117** | P | **Pn** | **15 00 43.2** | **-0.7** |
| | baz=12,SNR=4.0 | | | | | | |
| **SBUM** | **Sibu** | **13.66** | **70** | ⇑P | **Pn** | **15 01 03.0** | **+1.5** |
| **BTM** | **Bintulu** | **14.74** | **68** | ⇓P | **Pn** | **15 01 17.5** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **15.88** | **113** | P | **Pn** | **15 01 27.4** | **-3.9** |
| | baz=16,SNR=7.3 | | | | | | |
| **UMPA** | **Umpang Tak** | **18.44** | **358** | P | **P** | **15 02 02.2** | **-0.8** |
| | 3.1nm,0.9s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.74** | **64** | P | **P** | **15 02 06.1** | **-0.3** |
| | baz=19,SNR=6.3 | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.74** | **64** | ⇓P | **P** | **15 02 06.4** | **-0.1** |
| **KKM** | **Kota Kinabalu** | **18.74** | **64** | *e*P | **P** | **15 02 05.8** | **-0.6** |
| | 21nm,0.8s | | | | | | |
| **SDKM** | **Sandakan** | **19.45** | **66** | ⇓P | **P** | **15 02 14.0** | **-0.2** |
| **TSM** | **Tawau** | **19.59** | **70** | ⇑P | **P** | **15 02 15.2** | **-0.5** |
| **KDM** | **Kudat** | **19.67** | **62** | ⇓P | **P** | **15 02 17.1** | **+0.5** |
| **UTTA** | **Uttaradit** | **19.99** | **3** | P | **Pn** | **15 02 21.5** | **-0.3** |
| | 2.2nm,0.9s | | | | | | |
| **TTSI** | **Tana Toraja** | **20.40** | **92** | P | Pn | 15 02 35.8 | +9.1 |
| **MHMT** | **Maesarieng** | **20.44** | **356** | P | Pn | 15 02 26.3 | -0.8 |
| | 10nm,0.8s | | | | | | |
| **KAPI** | **Kappang** | **20.47** | **98** | P | **P** | **15 02 24.8** | **-0.5** |
| | 21nm,1.0s,baz=273,slow=12,SNR=5.3 | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.48** | **69** | ⇑P | **P** | **15 02 25.7** | **+0.3** |
| **MPSI** | **Mapaga** | **20.66** | **83** | P | Pn | 15 02 29.9 | +0.2 |
| | 24nm,1.1s,671nm | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.67** | **359** | P | **P** | **15 02 26.9** | **-0.5** |
| | 4.7nm,0.7s,baz=187,slow=10,SNR=49 | | | | | | |
| CMAR | | | | LR | LR | 15 10 49.0 | |
| | comp=Z,194nm,19.7s,baz=190,slow=38 | | | | | | |
| **LAMP** | **Lampang** | **20.73** | **1** | P | Pn | 15 02 32.8 | +2.3 |
| | 7.7nm,0.9s | | | | | | |
| **BKSI** | **Bulukumba** | **20.88** | **99** | P | **P** | **15 02 29.1** | **-0.6** |
| | 31nm,0.8s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.03** | **359** | P | **P** | **15 02 34.5** | **+3.3** |
| | 86nm,1.1s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.03** | **359** | *e*P | **P** | **15 02 30.9** | **-0.3** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **21.03** | **359** | *e*P | **P** | **15 02 30.9** | **-0.3** |
| | comp=Z,6.9nm,0.9s | | | | | | |
| **CMAI** | **Chiengmai2** | **22.14** | **359** | P | **P** | **15 02 46.1** | **+2.8** |
| **APSI** | **Ampana** | **22.28** | **87** | P | **P** | **15 02 47.3** | **+2.6** |
| | comp=Z,27nm,0.6s | | | | | | |
| **MRSI** | **Marisa** | **22.70** | **83** | P | **P** | **15 02 50.8** | **+1.5** |
| | comp=Z,45nm,0.6s,comp=Z,2μm | | | | | | |
| **LUWI** | **Luwuk** | **23.39** | **87** | P | P | 15 03 05.8 | +9.5 |
| **QIZ** | **Qiongzhong** | **23.59** | **25** | P | **P** | **15 02 57.0** | **-1.1** |
| QIZ | | | | pP | **pP** | **15 03 04.0** | **-1.4** |
| QIZ | | | | sP | **sP** | **15 03 07.0** | **-1.6** |
| QIZ | | | | S | **S** | **15 07 11.8** | **+0.7** |
| QIZ | | | | PMZ | | | |
| | comp=Z,33nm,1.0s | | | | | | |
| **GTOI** | **Gorontalo** | **23.78** | **83** | P | **P** | **15 02 56.6** | **-3.5** |
| **KMSI** | **Cibinong** | **24.74** | **84** | P | P | 15 03 20.8 | +12 |
| **H08S2** | **Diego Garcia H** | **27.32** | **258** | T | T | 15 32 07.7 | |
| | baz=80,slow=75,SNR=1124 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.32** | **258** | T | T | 15 32 08.3 | |
| | baz=80,slow=75,SNR=2631 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.33** | **258** | T | T | 15 32 09.2 | |
| | baz=80,slow=75,SNR=1462 | | | | | | |
| **KMI** | **Kunming** | **27.49** | **7** | P | **P** | **15 03 34.0** | **+0.1** |
| KMI | | | | sP | **sP** | **15 03 47.5** | **+3.0** |
| KMI | | | | S | **S** | **15 08 14.3** | **+0.7** |
| KMI | | | | sS | **sS** | **15 08 26.5** | **+0.6** |
| KMI | | | | PMZ | | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,260nm,7.0s | | | | | | |
| **GYA** | **Guiyang** | **29.48** | **13** | *e*P | **P** | **15 03 52.8** | **+1.3** |
| GYA | | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | | |
| **ODAN** | **Odare** | **31.26** | **339** | *e*P | **P** | **15 04 08.8** | **+1.4** |
| | comp=Z,12nm,0.6s | | | | | | |
| **TAPN** | **Taplejung** | **31.60** | **340** | *e*P | **P** | **15 04 11.9** | **+1.5** |
| | comp=Z,36nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **31.64** | **338** | *e*P | **P** | **15 04 11.9** | **+1.2** |
| | comp=Z,8.6nm,0.6s | | | | | | |
| **KNRA** | **Kununurra** | **31.81** | **116** | P | **P** | **15 04 10.3** | **-1.8** |
| | baz=32,SNR=4.4 | | | | | | |
| **GUN** | **Gumba** | **32.77** | **338** | *e*P | **P** | **15 04 22.1** | **+1.3** |
| | comp=Z,17nm,0.6s | | | | | | |
| **LSA** | **Lhasa** | **32.83** | **347** | *e*P | **P** | **15 04 22.3** | **+0.9** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.4s | | | | | | |
| **LSA** | **Lhasa** | **32.83** | **347** | *e*P | **P** | **15 04 22.3** | **+0.9** |
| | comp=Z,4.1nm,0.4s | | | | | | |
| **KKN** | **Kakani** | **32.90** | **337** | *e*P | **P** | **15 04 22.6** | **+0.8** |
| **CD2** | **Chengdu** | **33.33** | **7** | P | **P** | **15 04 25.5** | **+0.3** |
| CD2 | | | | sP | **sP** | **15 04 36.8** | **+0.9** |
| CD2 | | | | PP | **PP** | **15 05 41.3** | **+0.4** |
| CD2 | | | | S | **S** | **15 09 46.0** | **+1.4** |
| CD2 | | | | sS | **sS** | **15 09 59.3** | **+2.3** |
| CD2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,120nm,5.0s | | | | | | |
| **GKN** | **Gorkha** | **33.35** | **336** | *e*P | **P** | **15 04 26.6** | **+1.0** |
| | comp=Z,4.3nm,0.5s | | | | | | |
| **KOLN** | **Koldanda** | **33.58** | **334** | *e*P | **P** | **15 04 28.9** | **+1.2** |
| | comp=Z,8.1nm,0.7s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **35.16** | **159** | T | T | 15 41 47.3 | |
| | baz=335,slow=76,SNR=227 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **35.17** | **159** | T | T | 15 41 41.8 | |
| | baz=335,slow=76,SNR=187 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **35.17** | **159** | T | T | 15 41 50.5 | |
| | baz=335,slow=76,SNR=196 | | | | | | |
| **WRKA** | **Warakurna** | **35.84** | **132** | P | **P** | **15 04 47.7** | **+0.6** |
| | baz=36,SNR=4.4 | | | | | | |
| **XAN** | **Xi'an** | **37.28** | **13** | P | **P** | **15 04 57.5** | **-1.7** |
| XAN | | | | PMZ | | | |
| | comp=Z,8.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **38.33** | **120** | P | **P** | **15 05 07.4** | **-1.0** |
| | comp=Z,7.3nm,0.7s,baz=303,slow=9.0,SNR=70 | | | | | | |
| WRA | | | | PcP | **PcP** | **15 07 22.7** | **+0.7** |
| | comp=Z,0.5nm,0.7s,baz=316,slow=2.1,SNR=2.9 | | | | | | |
| **WRAB** | **Tennant Creek** | **38.34** | **120** | *e*P | **P** | **15 05 07.4** | **-1.0** |
| WRAB | | | | *e* | | 15 05 15.9 | |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,15nm,0.9s | | | | | | |
| **WRAB** | **Tennant Creek** | **38.34** | **120** | *e*P | **P** | **15 05 07.3** | **-1.0** |
| | comp=Z,15nm,0.9s | | | | | | |
| WRAB | | | | *e* | | 15 05 15.9 | |
| **LZH** | **Lanzhou** | **38.45** | **6** | *e*P | P | 15 05 12.8 | +3.5 |
| LZH | | | | pP | pP | 15 05 20.0 | +3.1 |
| LZH | | | | sP | sP | 15 05 23.5 | +3.6 |
| LZH | | | | PMZ | | | |
| | comp=Z,15nm,1.0s | | | | | | |
| **NJ2** | **Nanjing** | **38.86** | **27** | *e*P | **P** | **15 05 10.8** | **-1.7** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,18nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **39.53** | **125** | P | **P** | **15 05 18.0** | **-0.4** |
| | comp=Z,3.1nm,0.7s,baz=298,slow=7.3,SNR=41 | | | | | | |
| ASAR | | | | LR | LR | 15 22 41.8 | |
| | comp=Z,72nm,20.7s,baz=303,slow=38 | | | | | | |
| **GTA** | **Gaotai** | **41.55** | **0** | *e*P | **P** | **15 05 35.3** | **+0.4** |
| GTA | | | | pP | **pP** | **15 05 43.0** | **+0.5** |
| GTA | | | | sP | **sP** | **15 05 46.3** | **+0.7** |
| GTA | | | | PMZ | | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **44.39** | **13** | *e*P | **P** | **15 06 00.3** | **+2.4** |
| HHC | | | | S | **S** | **15 12 33.5** | **+2.4** |
| HHC | | | | PMZ | | | |
| | comp=Z,26nm,0.6s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,190nm,7.4s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,270nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,310nm,12.3s | | | | | | |
| HHC | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KSH | | | | LE | | | | |
| | comp=Z,140nm,5.7s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,230nm,5.5s | | | | | | | |
| **WMQ** | **Urumqi** | **47.14** | **348** | P | | **P** | **15 06 21.5** | **+2.0** |
| WMQ | | | | pP | | **pP** | **15 06 29.0** | **+1.7** |
| WMQ | | | | PMZ | | | | |
| | comp=Z,28nm,1.0s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.59** | **31** | P | | **P** | **15 06 22.6** | **-0.4** |
| **KSAR** | **Wonju Array Be** | **47.59** | **31** | P | | **P** | **15 06 22.6** | **-0.4** |
| **KSRS** | **Korea Array** | **47.61** | **31** | P | | **P** | **15 06 22.6** | **-0.6** |
| | comp=Z,9.2nm,0.9s,baz=222,slow=9.2,SNR=16 | | | | | | | |
| **KSRS** | **Korea Array** | **47.61** | **31** | P | | **P** | **15 06 22.6** | **-0.6** |
| KSRS | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **HTT** | **Hallett** | **48.17** | **134** | P | | P | 15 06 22.6 | -5.1 |
| | baz=48,SNR=5.9 | | | | | | | |
| **QLP** | **Quilpie** | **49.26** | **124** | P | | **P** | **15 06 36.5** | **+0.4** |
| | baz=49,SNR=4.8 | | | | | | | |
| **TKM2** | **Tokmak 2** | **49.91** | **337** | *e*P | | **P** | **15 06 42.1** | **+1.0** |
| TKM2 | | | | *e* | | | 15 06 49.2 | |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **TKM2** | **Tokmak 2** | **49.91** | **337** | *e*P | | **P** | **15 06 42.1** | **+1.0** |
| | comp=Z,10nm,0.9s | | | | | | | |
| TKM2 | | | | *e* | | | 15 06 49.2 | |
| **AAK** | **Ala-Archa** | **50.11** | **336** | *ce*P | | **P** | **15 06 43.6** | **+1.1** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **SONM** | **Songino Array** | **50.34** | **6** | P | | **P** | **15 06 44.6** | **+0.5** |
| | comp=Z,12nm,0.8s,baz=187,slow=9.1,SNR=62 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **15 08 03.0** | **+0.4** |
| | comp=Z,2.2nm,0.8s,baz=189,slow=3.8,SNR=4.7 | | | | | | | |
| SONM | | | | LR | | LR | 15 30 51.7 | |
| | comp=Z,84nm,18.6s,baz=188,slow=39 | | | | | | | |
| **EKS2** | **Erkin-Say** | **50.42** | **336** | *e*P | | **P** | **15 06 46.0** | **+1.2** |
| EKS2 | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| **EKS2** | **Erkin-Say** | **50.42** | **336** | *e*P | | **P** | **15 06 46.0** | **+1.2** |
| | comp=Z,4.4nm,0.6s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.45** | **7** | *e*P | | **P** | **15 06 45.2** | **+0.3** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.45** | **7** | *e*P | | **P** | **15 06 45.2** | **+0.3** |
| | comp=Z,12nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.20** | **345** | P | | **P** | **15 06 51.0** | **+0.6** |
| | comp=Z,9.0nm,0.7s,baz=148,slow=8.4,SNR=57 | | | | | | | |
| MKAR | | | | LR | | LR | 15 31 10.5 | |
| | comp=Z,33nm,21.5s,baz=158,slow=39 | | | | | | | |
| **CN2** | **Changchun** | **51.53** | **24** | *e*P | | **P** | **15 06 52.0** | **-1.0** |
| CN2 | | | | PMZ | | | | |
| | comp=Z,20nm,0.6s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **52.36** | **129** | P | | **P** | **15 07 00.5** | **+1.1** |
| | baz=52,SNR=16 | | | | | | | |
| **HIA** | **Hailar** | **54.33** | **16** | *c i*P | | **P** | **15 07 13.5** | **-0.1** |
| HIA | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.73** | **28** | P | | **P** | **15 07 16.3** | **-0.2** |
| | comp=Z,9.7nm,1.0s,baz=231,slow=7.4,SNR=9.0 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.40** | **350** | P | | **P** | **15 07 35.7** | **+0.3** |
| | baz=58,SNR=5.1 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.40** | **350** | P | | **P** | **15 07 35.7** | **+0.3** |
| | comp=Z,15nm,0.7s,baz=182,slow=5.7,SNR=49 | | | | | | | |
| **KRAR** | **Krasnoyarsk** | **58.40** | **356** | ↑*e*P | | **P** | **15 07 42.0** | **-0.4** |
| KRAR | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **KLR** | **Kul'dur** | **58.48** | **24** | *e*P | | **P** | **15 07 43.2** | **+0.1** |
| **NVS** | **Novosibirsk** | **58.53** | **349** | *e*P | | **P** | **15 07 43.3** | **0.0** |
| **BRVK** | **Borovoye** | **60.37** | **340** | ⇓*e*P | | **P** | **15 07 55.8** | **-0.2** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **SVE** | **Sverdlovsk** | **66.77** | **338** | *e*P | | **P** | **15 08 38.6** | **+0.3** |
| **KBZ** | **Khabaz** | **68.18** | **319** | P | | **P** | **15 08 48.0** | **+0.6** |
| | comp=Z,0.8nm,0.4s,baz=144,slow=8.3,SNR=3.6 | | | | | | | |
| **YAK** | **Yakutsk** | **68.22** | **15** | *e*P | | **P** | **15 08 46.8** | **-0.5** |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **VRH** | **Novokhopyorsk** | **72.27** | **326** | *e*P | | **P** | **15 09 10.6** | **-1.8** |
| VRH | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.6s | | | | | | | |
| VRH | | | | pmax | | pmax | | |
| | comp=N,3.0nm,0.6s | | | | | | | |
| VRH | | | | pmax | | pmax | | |
| | comp=E,10.0nm,1.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **73.12** | **313** | P | | **P** | **15 09 17.0** | **-0.9** |
| | comp=E,0.8nm,0.8s,baz=152,slow=5.6,SNR=4.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **73.12** | **313** | *ce*P | | **P** | **15 09 16.6** | **-1.3** |
| BRTR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **VORD** | **Divnogorie** | **73.54** | **325** | *e*P | | **P** | **15 09 18.6** | **-1.3** |
| VORD | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| VORD | | | | pmax | | pmax | | |
| | comp=N,20nm,0.6s | | | | | | | |
| VORD | | | | pmax | | pmax | | |
| | comp=E,50nm,0.8s | | | | | | | |
| **VSR** | **Storozhevoye** | **73.72** | **325** | *e*P | | **P** | **15 09 20.4** | **-0.5** |
| VSR | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| VSR | | | | pmax | | pmax | | |
| | comp=N,10.0nm,1.6s | | | | | | | |
| VSR | | | | pmax | | pmax | | |
| | comp=E,6.0nm,0.7s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **74.45** | **327** | *e*P | | **P** | **15 09 25.2** | **0.0** |
| LPSR | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| LPSR | | | | pmax | | pmax | | |
| | comp=N,10.0nm,1.6s | | | | | | | |
| LPSR | | | | pmax | | pmax | | |
| | comp=E,3.0nm,0.4s | | | | | | | |
| **OBN** | **Obninsk** | **76.77** | **328** | ⇓*e*P | | **P** | **15 09 39.0** | **+0.6** |
| OBN | | | | *SP | | **sP** | **15 09 48.0** | **-1.5** |
| OBN | | | | *e* | | | 15 09 51.9 | |
| OBN | | | | | | | 15 12 33.0 | |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| OBN | | | | MLR | | MLR | | |
| | comp=Z,57nm,17.0s | | | | | | | |
| **VNDA** | **Vanda** | **81.94** | **169** | LR | | LR | 15 41 30.4 | |
| | comp=Z,40nm,21.7s,baz=336,slow=32 | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **83.33** | **320** | *e*P | | **P** | **15 10 16.0** | **+2.0** |
| **KOLS** | **Kolonicke sedl** | **83.33** | **320** | *e*P | | **P** | **15 10 16.0** | **+2.0** |
| **STHS** | **Stebnicka Huta** | **84.08** | **320** | *e*P | | **P** | **15 10 19.6** | **+1.7** |
| **STHS** | **Stebnicka Huta** | **84.08** | **320** | *e*P | | **P** | **15 10 19.6** | **+1.7** |
| **FINES** | **FINESS Array B** | **84.14** | **332** | P | | **P** | **15 10 17.9** | **0.0** |
| | comp=Z,1.4nm,0.6s,baz=119,slow=7.0,SNR=10 | | | | | | | |
| **FINES** | **FINESS Array B** | **84.14** | **332** | *i* P | | **P** | **15 10 18.5** | **+0.6** |
| FINES | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **86.59** | **340** | P | | **P** | **15 10 29.3** | **-0.7** |
| | comp=Z,2.1nm,0.7s,baz=117,slow=4.2,SNR=6.3 | | | | | | | |
| **GERES** | **GERESS Array B** | **88.91** | **319** | P | | **P** | **15 10 42.5** | **+0.8** |
| | comp=Z,0.3nm,0.6s,baz=31,slow=3.6,SNR=3.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **91.15** | **331** | LR | | LR | 15 54 44.7 | |
| | comp=Z,20nm,19.5s,baz=295,slow=38 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.33** | **37** | PKPbc | | **PKPdf** | **15 17 26.3** | **+0.5** |
| | comp=Z,8.7nm,0.8s,baz=280,slow=1.7,SNR=47 | | | | | | | |
| **JCT** | **Junction City** | **146.62** | **31** | *e*PKP2 | | **PKPdf** | **15 17 28.1** | **+0.2** |
| **JCT** | **Junction City** | **146.62** | **31** | *e*PKPdf | | **PKPdf** | **15 17 28.1** | **+0.2** |

*DDA **26** 15:01:30.9,38°.83N×37°.68E,h6km,Md2.5*
*CSEM **26** 15:01:32.9±0.3,38°.61N×37°.50E,h2km,MD2.6,Error ellipse: s-maj=12.5km s-min=5.6km az=22.0*
*ISK **26** 15:01:32.1,38°.58N×37°.46E,h4km,MD2.6*
*ISCJB **26** 15:01:33.0±0.6,38°.58N±0°.06×37°.47E±0°.04,h4km±7km, Error ellipse: s-maj=11.1km s-min=4.2km az=20.0*

**ISC 26 15:01:32.5**±1.1,**38°.56N**±0°.06×**37°.48E**±0°.03,**h2**km±9km, **n14**,σ0**s55**/22,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DARE** | **Darende-Malaty** | **0.02** | **23** | *e*PG | | **Pg** | **15 01 33.1** | **0.0** |
| **DARE** | **Darende-Malaty** | **0.02** | **23** | *e*Pg | | **Pg** | **15 01 33.2** | **0.0** |
| **CUGUR** | **Gurin_S¨VAS** | **0.23** | **316** | P | | **Pg** | **15 01 37.5** | **+0.5** |
| CUGUR | | | | S | | **Sg** | **15 01 40.8** | **+0.8** |
| **AKCD** | **Akcadag** | **0.44** | **126** | *i* P | | **Pg** | **15 01 41.6** | **+0.7** |
| AKCD | | | | *i* S | | **Sb** | **15 01 49.3** | **-0.8** |
| **AKCD** | **Akcadag** | **0.44** | **126** | P | | **Pg** | **15 01 41.6** | **+0.7** |
| AKCD | | | | S | | **Sb** | **15 01 49.3** | **-0.8** |
| **MALT** | **Malatya** | **0.79** | **108** | *e*PG | | **Pg** | **15 01 47.9** | **+0.3** |
| MALT | | | | *e*SG | | **Sb** | **15 02 00.4** | **+0.3** |
| **MALT** | **Malatya** | **0.79** | **108** | *e*Pg | | **Pg** | **15 01 47.9** | **+0.3** |
| MALT | | | | *e*Sg | | **Sb** | **15 02 00.4** | **+0.3** |
| **SARI** | **SarD1z-Kayseri** | **0.84** | **260** | *e*PG | | **Pg** | **15 01 48.5** | **-0.1** |
| SARI | | | | *e*SG | | **Sb** | **15 02 01.1** | **-0.8** |
| **PINB** | **Pinarbasi** | **0.85** | **278** | *i* P | | **Pb** | **15 01 49.9** | **-0.2** |
| PINB | | | | *i* S | | **Sb** | **15 02 02.6** | **+0.5** |
| **PINB** | **Pinarbasi** | **0.85** | **278** | P | | **Pb** | **15 01 49.9** | **-0.2** |
| PINB | | | | S | | **Sb** | **15 02 02.6** | **+0.5** |
| **SVSK** | **Karacayir** | **1.41** | **345** | *e*PN | | **Pb** | **15 01 59.0** | **-0.5** |
| **SVSK** | **Karacayir** | **1.41** | **345** | *e*Pn | | **Pb** | **15 01 59.0** | **-0.5** |
| **PTK** | **Pertek** | **1.54** | **77** | *e*PN | | **Pn** | **15 02 01.0** | **-0.2** |
| **PTK** | **Pertek** | **1.54** | **77** | *e*Pn | | **Pn** | **15 02 01.0** | **-0.2** |

**KRSC 26 15:10:05.5**±3.3,**49°.30N**×**156°.97E,h14**km±5km,**ML3.7, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.49** | **339** | *e*P | | Pb | 15 10 32.5 | -0.4 |
| SKR | | | | *e*S | | Sn | 15 10 49.6 | -1.5 |
| **PAU** | **Pauzhetka** | **2.17** | **357** | *e*P | | Pb | 15 10 44.7 | +0.1 |
| PAU | | | | *e*S | | Sb | 15 11 11.4 | 0.0 |
| **RUS** | **Russkaya** | **3.29** | **17** | *e*P | | Pn | 15 10 59.2 | +2.7 |
| **AVH** | **Avacha** | **4.12** | **15** | *e*P | | Pn | 15 11 12.8 | +4.6 |
| **SDLR** | **Sedlovina** | **4.16** | **16** | *e*P | | Pn | 15 11 12.8 | +4.1 |
| **KRX** | **Arik** | **4.20** | **14** | *e*P | | Pn | 15 11 12.8 | +3.5 |
| **SPN** | **Mys Shipunski** | **4.26** | **26** | *e*P | | Pn | 15 11 13.2 | +3.3 |
| **GNL** | **Ganaly** | **4.44** | **8** | *e*P | | Pn | 15 11 14.6 | +2.0 |

**IDC 26 15:11:06.8**±3.3,**3°.89S**×**99°.44E,h0**km,**mb3.5**/6,**mb1 3.6**/6, **mb1mx3.5**/27,**mbtmp3.5**/6,**Error ellipse: s-maj=129.5km s-min=21.4km az=58.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **22.21** | **359** | P | | P | 15 16 04.4 | -0.7 |
| | 0.7nm,0.6s,baz=186,slow=11,SNR=9.0 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.06** | **261** | T | | T | 15 46 14.8 | |
| | baz=82,slow=75,SNR=26 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.07** | **261** | T | | T | 15 45 59.6 | |
| | baz=82,slow=75,SNR=25 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.08** | **261** | T | | T | 15 46 25.3 | |
| | baz=82,slow=75,SNR=31 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.72** | **158** | T | | T | 15 53 58.3 | |
| | baz=335,slow=76,SNR=5.6 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.73** | **158** | T | | T | 15 53 39.9 | |
| | baz=335,slow=76,SNR=6.7 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.73** | **158** | T | | T | 15 53 43.0 | |
| | baz=335,slow=76,SNR=5.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.56** | **118** | P | | P | 15 18 23.1 | -0.2 |
| | 0.1nm,0.6s,baz=291,slow=7.1,SNR=3.2 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.64** | **124** | P | | P | 15 18 32.6 | +0.4 |
| | 0.1nm,0.5s,baz=299,slow=7.7,SNR=7.6 | | | | | | | |
| **SONM** | **Songino Array** | **51.87** | **6** | P | | P | 15 20 17.6 | +0.5 |
| | 0.7nm,0.8s,baz=190,slow=7.5,SNR=5.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.69** | **345** | P | | P | 15 20 23.1 | +0.1 |
| | 0.5nm,0.4s,baz=163,slow=8.6,SNR=5.5 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.91** | **350** | P | | P | 15 21 08.1 | +0.5 |
| | 1.1nm,0.4s,baz=189,slow=5.6,SNR=5.9 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.53** | **38** | PKPbc | | PKPdf | 15 30 48.4 | -1.2 |
| | 0.3nm,0.5s,baz=332,slow=0.9,SNR=4.9 | | | | | | | |

*ATH **26** 15:23:42.7,40°.75N×20°.78E,h22km±1km,MD3.0/13*
*THE **26** 15:23:42.7,40°.68N×20°.77E,h2km±2km,ML2.5/5,Error ellipse: s-maj=2.2km s-min=0.6km az=102.0*
*BEO **26** 15:23:42.1±1.3,40°.53N×20°.72E,h0km,ML2.5/4*
*CSEM **26** 15:23:43.2±0.2,40°.68N×20°.80E,h2km,ML2.5,Error ellipse: s-maj=4.4km s-min=3.7km az=85.0*
*SKO **26** 15:23:43.4,40°.73N×20°.86E,h15km,M1.7,ML2.1*

**ISC 26 15:23:42.8**±1.1,**40°.70N**±0°.02×**20°.79E**±0°.02,**h6**km±9km, **n54**,σ1**s01**/92,**Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **NEST** | **Nestorio** | **0.35** | **146** | P | | **Pg** | **15 23 49.1** | **-0.5** |
| NEST | | | | S | | **Sg** | **15 23 54.0** | **-0.2** |
| **NEST** | **Nestorio** | **0.35** | **146** | P | | **Pg** | **15 23 49.1** | **-0.5** |
| NEST | | | | S | | **Sg** | **15 23 54.0** | **-0.2** |
| **OHR** | **Ohrid** | **0.41** | **1** | *i* Pg | | **Pg** | **15 23 50.7** | **0.0** |
| OHR | | | | *i* Sg | | **Sg** | **15 23 56.5** | **+0.3** |
| OHR | | | | *e*Lg | | Lg | 15 23 56.7 | |
| | comp=N,120nm,0.3s | | | | | | | |
| OHR | | | | *e*Lg | | Lg | 15 23 56.7 | |
| | comp=E,302nm,0.5s | | | | | | | |
| **OHR** | **Ohrid** | **0.41** | **1** | *i* Pg | | **Pg** | **15 23 50.7** | **0.0** |
| OHR | | | | *i* Sg | | **Sg** | **15 23 56.4** | **+0.3** |
| OHR | | | | *e*Lg | | Lg | 15 23 56.7 | |
| | comp=E,302nm,0.5s | | | | | | | |
| **FNA** | **Florina** | **0.45** | **80** | *e*PB | | **Pg** | **15 23 51.7** | **+0.2** |
| FNA | | | | *e*SB | | **Sb** | **15 23 59.8** | **-0.5** |
| **FNA** | **Florina** | **0.45** | **80** | P | | **Pg** | **15 23 51.7** | **+0.2** |
| FNA | | | | S | | **Sg** | **15 23 58.6** | **+1.1** |
| **FNA** | **Florina** | **0.45** | **80** | P | | **Pg** | **15 23 51.7** | **+0.2** |
| FNA | | | | S | | **Sg** | **15 23 58.6** | **+1.1** |
| FNA | | | | *e*Sb | | **Sb** | **15 23 59.8** | **-0.5** |
| **PENT** | **Pentalofos** | **0.57** | **152** | *e*PB | | **Pg** | **15 23 54.4** | **+0.6** |
| PENT | | | | *e*SN | | **Sb** | **15 24 03.3** | **-0.4** |
| **PENT** | **Pentalofos** | **0.57** | **152** | *e*Pb | | **Pg** | **15 23 54.4** | **+0.6** |
| PENT | | | | *e*Sn | | **Sb** | **15 24 03.3** | **-0.5** |
| **KZN** | **Kozani** | **0.85** | **118** | *e*PB | | **Pg** | **15 23 59.0** | **-0.1** |
| KZN | | | | *e*SN | | **Sn** | **15 24 12.8** | **-1.4** |
| **KZN** | **Kozani** | **0.85** | **118** | P | | **Pg** | **15 23 58.9** | **-0.1** |
| KZN | | | | S | | **Sb** | **15 24 11.5** | **-0.1** |
| **KZN** | **Kozani** | **0.85** | **118** | P | | **Pg** | **15 23 58.9** | **-0.1** |
| KZN | | | | S | | **Sb** | **15 24 11.5** | **-0.1** |
| KZN | | | | *e*Sn | | **Sn** | **15 24 12.8** | **-1.4** |
| **TIR** | **Tirane** | **0.95** | **313** | *e*Pg | | **Pg** | **15 23 59.9** | **-1.2** |
| TIR | | | | *e*Sg | | **Sn** | **15 24 15.7** | **-1.0** |
| **TIR** | **Tirane** | **0.95** | **313** | *e*Pg | | **Pg** | **15 23 59.9** | **-1.2** |
| TIR | | | | *e*Sg | | **Sn** | **15 24 15.7** | **-1.0** |
| **SGD** | **Sagiada** | **1.17** | **202** | *e*PN | | **Pn** | **15 24 06.2** | **+0.4** |
| SGD | | | | *e*SN | | **Sn** | **15 24 23.2** | **+1.2** |
| **SGD** | **Sagiada** | **1.17** | **202** | *e*Pn | | **Pn** | **15 24 06.2** | **+0.4** |
| SGD | | | | *e*Sn | | **Sn** | **15 24 23.2** | **+1.2** |
| **IGT** | **Igoumenitsa** | **1.22** | **197** | *e*PN | | **Pg** | **15 24 06.8** | **+0.6** |
| IGT | | | | *e*SN | | **Sn** | **15 24 25.1** | **+1.8** |
| **IGT** | **Igoumenitsa** | **1.22** | **197** | P | | **Pg** | **15 24 06.6** | **+0.4** |
| IGT | | | | S | | **Sn** | **15 24 24.3** | **+1.0** |
| **IGT** | **Igoumenitsa** | **1.22** | **197** | P | | **Pg** | **15 24 06.6** | **+0.4** |
| IGT | | | | S | | **Sn** | **15 24 24.3** | **+1.0** |
| IGT | | | | *e*Sn | | **Sn** | **15 24 25.1** | **+1.8** |
| **KEK** | **Kerkira** | **1.25** | **218** | *e*PN | | **Pg** | **15 24 06.8** | **+0.1** |
| KEK | | | | *e*SN | | **Sn** | **15 24 23.8** | **-0.2** |
| **KEK** | **Kerkira** | **1.25** | **218** | *e*Pn | | **Pg** | **15 24 06.8** | **+0.1** |
| KEK | | | | *e*Sn | | **Sn** | **15 24 23.8** | **-0.2** |
| **GRG** | **Griva** | **1.25** | **78** | *e*PN | | **Pn** | **15 24 06.5** | **-0.4** |
| GRG | | | | *e*SN | | **Sn** | **15 24 24.3** | **+0.2** |
| **GRG** | **Griva** | **1.25** | **78** | P | | **Pn** | **15 24 06.2** | **-0.7** |
| GRG | | | | S | | **Sn** | **15 24 24.7** | **+0.6** |
| **GRG** | **Griva** | **1.25** | **78** | P | | **Pn** | **15 24 06.2** | **-0.7** |
| **GRG** | **Griva** | **1.25** | **78** | *e*Pn | | **Pn** | **15 24 06.5** | **-0.4** |
| GRG | | | | *e*Sn | | **Sn** | **15 24 24.3** | **+0.2** |
| GRG | | | | S | | **Sn** | **15 24 24.7** | **+0.6** |
| **LIT** | **Litokhoron** | **1.43** | **114** | P | | **Pn** | **15 24 09.0** | **-0.4** |
| **LIT** | **Litokhoron** | **1.43** | **114** | P | | **Pn** | **15 24 09.0** | **-0.4** |
| **THL** | **Klokotos Trika** | **1.47** | **140** | *e*PN | | **Pb** | **15 24 10.2** | **-0.4** |
| THL | | | | *e*SN | | **Sg** | **15 24 30.3** | **+0.1** |
| **THL** | **Klokotos Trika** | **1.47** | **140** | *e*Pn | | **Pb** | **15 24 10.2** | **-0.4** |
| THL | | | | *e*Sn | | **Sg** | **15 24 30.3** | **+0.1** |
| **VAY** | **Valandovo** | **1.48** | **65** | *e*Sg | | **Sg** | **15 24 33.4** | **+3.0** |
| **VAY** | **Valandovo** | **1.48** | **65** | *e*Sg | | **Sg** | **15 24 33.4** | **+3.0** |
| **DSL** | **Palaion Diasel** | **1.58** | **171** | *e*PN | | **Pb** | **15 24 12.2** | **-0.4** |
| DSL | | | | *e*SN | | **Sg** | **15 24 34.1** | **+0.4** |
| **DSL** | **Palaion Diasel** | **1.58** | **171** | *e*Pn | | **Pb** | **15 24 12.2** | **-0.4** |
| DSL | | | | *e*Sn | | **Sg** | **15 24 34.1** | **+0.4** |
| **KNT** | **Kendrikon** | **1.66** | **73** | *e*PN | | **Pn** | **15 24 12.2** | **-0.3** |
| **KNT** | **Kendrikon** | **1.66** | **73** | *e*Pn | | **Pn** | **15 24 12.2** | **-0.3** |
| **HORT** | **Hortiatis** | **1.76** | **93** | *e*PN | | **Pb** | **15 24 14.7** | **-0.9** |
| HORT | | | | *e*SN | | **Sb** | **15 24 37.2** | **-0.8** |
| **HORT** | **Hortiatis** | **1.76** | **93** | *e*Pn | | **Pb** | **15 24 14.7** | **-0.9** |
| HORT | | | | *e*Sn | | **Sb** | **15 24 37.2** | **-0.8** |
| **LKD2** | **Lefkada island** | **1.92** | **183** | *e*PN | | **Pb** | **15 24 17.0** | **-1.2** |
| **LKD2** | **Lefkada island** | **1.92** | **183** | *e*Pn | | **Pb** | **15 24 17.0** | **-1.2** |
| **EVR** | **Evrytania** | **1.95** | **156** | *e*PN | | **Pb** | **15 24 18.0** | **-0.8** |
| **EVR** | **Evrytania** | **1.95** | **156** | *e*Pn | | **Pb** | **15 24 18.0** | **-0.8** |
| **PLG** | **Polygyros** | **2.05** | **98** | *e*PN | | **Pn** | **15 24 17.9** | **0.0** |
| **PLG** | **Polygyros** | **2.05** | **98** | *e*Pn | | **Pn** | **15 24 17.9** | **0.0** |
| **AGG** | **Agios Georgios** | **2.06** | **144** | *e*PB | | **Pn** | **15 24 18.5** | **+0.5** |
| AGG | | | | *e*SN | | **Sb** | **15 24 45.3** | **-1.1** |
| **AGG** | **Agios Georgios** | **2.06** | **144** | *e*Pb | | **Pn** | **15 24 18.5** | **+0.5** |
| AGG | | | | *e*Sn | | **Sb** | **15 24 45.3** | **-1.1** |
| **BARS** | **Barje** | **2.25** | **20** | *e*Pn | | **Pb** | **15 24 22.4** | **-1.4** |
| BARS | | | | *e*Sn | | **Sb** | **15 24 53.3** | **+1.4** |
| **BARS** | **Barje** | **2.25** | **20** | *e*Pn | | **Pb** | **15 24 22.4** | **-1.4** |
| BARS | | | | *e*Sn | | **Sb** | **15 24 53.3** | **+1.4** |
| **PAIG** | **Paliouri** | **2.34** | **108** | *e*PN | | **Pn** | **15 24 21.8** | **-0.1** |
| **PAIG** | **Paliouri** | **2.34** | **108** | *e*Pn | | **Pn** | **15 24 21.8** | **-0.1** |
| **SELS** | **Selova** | **2.53** | **5** | *e*Pn | | **Pb** | **15 24 27.2** | **-1.4** |
| **SJES** | **Sjenica** | **2.63** | **347** | *e*Pn | | **Pb** | **15 24 28.4** | **-2.0** |
| **SJES** | **Sjenica** | **2.63** | **347** | *e*Pn | | **Pb** | **15 24 28.4** | **-2.0** |
| **IVAS** | **Ivanjica** | **2.91** | **351** | *e*Pn | | **Pn** | **15 24 32.5** | **+2.7** |
| **IVAS** | **Ivanjica** | **2.91** | **351** | *e*Pn | | **Pn** | **15 24 32.5** | **+2.7** |

**IDC 26 15:30:11.8**±5.1,**10°.22S**×**165°.41E,h0**km,**mb3.4**/3, **mb1 3.7**/3,**mb1mx3.4**/21,**mbtmp3.4**/3,**Error ellipse: s-maj=276.1km s-min=30.9km az=138.0,Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **31.46** | **248** | P | | P | 15 36 36.7 | +1.2 |
| | 0.1nm,0.4s,baz=74,slow=9.5,SNR=0.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **32.87** | **242** | P | | P | 15 36 46.9 | -1.0 |
| | 0.2nm,0.6s,baz=72,slow=9.1,SNR=8.0 | | | | | | | |
| **ILAR** | **Eielson Array** | **82.84** | **19** | P | | P | 15 42 37.9 | 0.0 |
| | 0.6nm,0.6s,baz=234,slow=5.2,SNR=14 | | | | | | | |

*ISCJB **26** 15:30:44.9±1.2,37°.5N±0°.1×42°.68E±0°.06,h8km±6km, Error ellipse: s-maj=24.8km s-min=8.5km az=179.4*
*CSEM **26** 15:30:44.7±0.3,37°.44N×42°.64E,h8km,MD2.7,Error ellipse: s-maj=20.9km s-min=5.0km az=4.0*
*DDA **26** 15:30:44.6,37°.35N×42°.64E,h7km,Md2.7*
*ISK **26** 15:30:45.8,37°.41N×42°.42E,h5km,MD2.7*

**ISC 26 15:30:45.4**±1.5,**37°.4N**±0°.1×**42°.60E**±0°.04,**h7**km±9km,**n12**, σ1**s32**/21,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SIRT** | **Sirnak** | **0.18** | **315** | *e*PG | | **Pg** | **15 30 48.1** | **-0.9** |
| **SIRT** | **Sirnak** | **0.18** | **315** | *e*Pg | | **Pg** | **15 30 48.1** | **-0.9** |
| **SIRN** | **S¨¨-rnak** | **0.19** | **310** | *i* P | | **Pg** | **15 30 48.6** | **-0.6** |
| SIRN | | | | *i* S | | **Sg** | **15 30 53.4** | **+1.5** |
| **SIRN** | **S¨¨-rnak** | **0.19** | **310** | P | | **Pg** | **15 30 48.6** | **-0.6** |
| SIRN | | | | S | | **Sg** | **15 30 53.4** | **+1.5** |
| **HAKT** | **HAKKARI** | **0.90** | **78** | *i* P | | **Pg** | **15 31 01.7** | **-1.1** |
| **HAKT** | **HAKKARI** | **0.90** | **78** | P | | **Pg** | **15 31 01.7** | **-1.1** |
| HAKT | | | | S | | **Sn** | **15 31 20.9** | **+2.7** |
| **BEST** | **Besiri** | **1.17** | **296** | P | | **Pb** | **15 31 07.5** | **-0.6** |
| BEST | | | | S | | **Sn** | **15 31 26.9** | **+2.3** |
| **SVAN** | **Silvan-Diyarba** | **1.35** | **305** | *e*PN | | **Pn** | **15 31 10.1** | **-0.7** |
| SVAN | | | | *e*SN | | **Sb** | **15 31 27.9** | **-0.7** |
| **SVAN** | **Silvan-Diyarba** | **1.35** | **305** | *e*Pn | | **Pn** | **15 31 10.1** | **-0.7** |
| SVAN | | | | *e*Sn | | **Sb** | **15 31 27.9** | **-0.7** |
| **MARD** | **Mardin** | **1.45** | **268** | P | | **Pn** | **15 31 11.9** | **-0.3** |
| MARD | | | | S | | **Sg** | **15 31 34.2** | **+2.3** |
| **MAZI** | **Mazidag** | **1.71** | **273** | *e*PN | | **Pn** | **15 31 15.8** | **0.0** |
| MAZI | | | | *e*SN | | **Sn** | **15 31 37.7** | **-0.3** |
| **MAZI** | **Mazidag** | **1.71** | **273** | *e*Pn | | **Pn** | **15 31 15.8** | **0.0** |
| MAZI | | | | *e*Sn | | **Sn** | **15 31 37.7** | **-0.3** |

*NNC **26** 15:31:19.0±5.0,36°.95N×70°.18E,h213km±44km,mb2.3, mpv3.5,Error ellipse: s-maj=50.6km s-min=28.6km az=156.0*

**ISC 26 15:31:18.7**±3.5,**36°.9N**±0°.2×**70°.28E**±0°.10,**h200**km,**n10**, σ0**s48**/15,**5C-4D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.27** | **330** | ⇑P | | **Pn** | **15 32 00.0** | **-0.1** |
| | 15nm,0.4s | | | | | | | |
| DZET | | | | ⇑S | | **Sn

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CUGUR | Gurin_S˜VAS | 1.70 | 66 | P | | Pn | 15 39 39.4 | +0.3 |
| CUGUR | | | | S | | Sg | 15 40 04.3 | +1.4 |
| KAMT | Kaman | 1.80 | 317 | *e*PN | | Pn | 15 39 40.1 | -0.2 |
| KAMT | Kaman | 1.80 | 317 | *e*Pn | | Pn | 15 39 40.2 | -0.2 |
| DARE | Darende-Malaty | 1.81 | 73 | *e*PN | | Pb | 15 39 41.9 | -0.2 |
| DARE | Darende-Malaty | 1.81 | 73 | *e*Pn | | Pb | 15 39 41.9 | -0.2 |
| TAHT | Tahtakopru-Hat | 1.82 | 156 | *e*PN | | Pn | 15 39 41.3 | +0.6 |
| TAHT | Tahtakopru-Hat | 1.82 | 156 | *e*Pn | | Pn | 15 39 41.3 | +0.6 |
| KUZU | Kuzuini | 1.92 | 131 | *i* P | | Pn | 15 39 42.4 | +0.4 |
| KUZU | | | | *i* S | | Sg | 15 40 10.1 | +0.3 |
| KUZU | Kuzuini | 1.92 | 131 | P | | Pn | 15 39 42.4 | +0.4 |
| KUZU | | | | S | | Sg | 15 40 10.1 | +0.3 |
| GZT | Gaziantep | 1.94 | 110 | P | | Pn | 15 39 42.4 | 0.0 |
| CHBY | Cihanbeyli | 1.95 | 286 | *e*PN | | Pn | 15 39 42.2 | -0.3 |
| CHBY | Cihanbeyli | 1.95 | 286 | *e*Pn | | Pn | 15 39 42.2 | -0.3 |
| KULU | Kulu | 2.04 | 300 | *e*PN | | Pn | 15 39 43.6 | -0.1 |
| KULU | Kulu | 2.04 | 300 | *e*Pn | | Pn | 15 39 43.6 | -0.1 |
| AKCD | Akcadag | 2.10 | 83 | *i* P | | Pn | 15 39 45.1 | +0.6 |
| AKCD | | | | *i* S | | Sn | 15 40 12.9 | +1.6 |
| AKCD | Akcadag | 2.10 | 83 | P | | Pn | 15 39 45.1 | +0.6 |
| AKCD | | | | S | | Sn | 15 40 12.9 | +1.6 |
| BRTR | Keskin Array B | 2.10 | 323 | Pg | | Pn | 15 39 44.0 | -0.6 |
| | 22nm,0.3s,baz=162,slow=13,SNR=586 | | | | | | | |
| BRTR | | | | Lg | | Lg | 15 40 08.7 | |
| | 16nm,0.3s,baz=137,slow=20,SNR=8.1 | | | | | | | |
| YAYL | Yayladag | 2.12 | 162 | *i* P | | Pn | 15 39 46.2 | +1.4 |
| YAYL | | | | *i* S | | Sn | 15 40 13.0 | +1.1 |
| YAYL | Yayladag | 2.12 | 162 | P | | Pn | 15 39 46.2 | +1.4 |
| YAYL | | | | S | | Sn | 15 40 13.0 | +1.1 |
| CUKAN | kangal_SIVAS | 2.12 | 53 | P | | Pn | 15 39 45.9 | +1.0 |
| CUKAN | | | | S | | Sn | 15 40 13.5 | +1.4 |
| CORM | Corum | 2.18 | 347 | *e*PN | | Pn | 15 39 46.5 | +0.8 |
| CORM | Corum | 2.18 | 347 | *e*Pn | | Pn | 15 39 46.5 | +0.8 |
| AFSR | Af˘ar-Bala (A | 2.22 | 309 | *e*PN | | Pn | 15 39 46.6 | +0.4 |
| AFSR | Af˘ar-Bala (A | 2.22 | 309 | *e*Pn | | Pn | 15 39 46.6 | +0.4 |
| BTCH | Batrach | 2.22 | 155 | *e*P | | Pn | 15 39 47.0 | +0.8 |
| BTCH | | | | *e*S | | Sn | 15 40 13.0 | -1.3 |
| BTCH | | | | | AML | AML | 15 40 24.6 | |
| | comp=N,258nm,0.5s | | | | | | | |
| BTCH | | | | | AML | AML | 15 40 39.9 | |
| | comp=E,306nm,0.5s | | | | | | | |
| BTCH | Batrach | 2.22 | 155 | *e*P | | Pn | 15 39 46.9 | +0.7 |
| BTCH | | | | *e*S | | Sn | 15 40 12.7 | -1.6 |
| BTCH | | | | | AML | AML | 15 40 24.6 | |
| | comp=N,258nm,0.5s | | | | | | | |
| BTCH | | | | | AML | AML | 15 40 40.0 | |
| | comp=E,306nm,0.5s | | | | | | | |
| BTCH | Batrach | 2.22 | 155 | *e*P | | Pn | 15 39 46.9 | +0.7 |
| BTCH | | | | *e*S | | Sn | 15 40 12.7 | -1.6 |
| | comp=E,306nm,0.5s | | | | | | | |
| BBAL | Bala | 2.25 | 312 | *i* P | | Pn | 15 39 46.7 | +0.1 |
| BBAL | Bala | 2.25 | 312 | P | | Pn | 15 39 46.7 | +0.1 |
| BBAL | | | | S | | Sg | 15 40 20.4 | 0.0 |
| ARNB | Al Arnab | 2.26 | 166 | *e*P | | Pn | 15 39 48.7 | +2.0 |
| ARNB | | | | *e*S | | Sn | 15 40 14.8 | +0.6 |
| ARNB | | | | | AML | AML | 15 40 23.0 | |
| | comp=E,194nm,0.6s | | | | | | | |
| ARNB | | | | | AML | AML | 15 40 26.3 | |
| | comp=N,318nm,0.8s | | | | | | | |
| ARNB | Al Arnab | 2.26 | 166 | *e*P | | Pb | 15 39 48.7 | -1.1 |
| ARNB | | | | *e*S | | Sn | 15 40 14.4 | -0.9 |
| ARNB | | | | | AML | AML | 15 40 23.0 | |
| | comp=E,194nm,0.6s | | | | | | | |
| ARNB | | | | | AML | AML | 15 40 26.3 | |
| | comp=N,318nm,0.8s | | | | | | | |
| ARNB | Al Arnab | 2.26 | 166 | *e*P | | Pn | 15 39 48.7 | +2.0 |
| ARNB | | | | *e*S | | Sn | 15 40 14.4 | -0.8 |
| | comp=N,319nm,0.8s | | | | | | | |
| SVSK | Karacayir | 2.29 | 35 | *e*PN | | Pb | 15 39 49.0 | -1.3 |
| SVSK | Karacayir | 2.29 | 35 | *e*Pn | | Pb | 15 39 49.0 | -1.3 |
| SCER | sogukcermik | 2.31 | 38 | *i* P | | Pn | 15 39 48.1 | +0.6 |
| SCER | | | | *i* S | | Sb | 15 40 19.4 | -0.4 |
| SCER | sogukcermik | 2.31 | 38 | P | | Pn | 15 39 48.0 | +0.6 |
| SCER | | | | S | | Sb | 15 40 19.4 | -0.4 |
| KONT | Konya--Tatoy | 2.31 | 268 | *e*PN | | Pn | 15 39 47.5 | +0.1 |
| KONT | Konya--Tatoy | 2.31 | 268 | *e*Pn | | Pn | 15 39 47.5 | +0.1 |
| TOKA | Tokat | 2.45 | 22 | *i* P | | Pn | 15 39 49.2 | -0.1 |
| TOKA | | | | *i* S | | Sg | 15 40 26.3 | -0.5 |
| TOKA | Tokat | 2.45 | 22 | P | | Pn | 15 39 49.2 | -0.1 |
| TOKA | | | | S | | Sg | 15 40 26.3 | -0.5 |
| TOKT | Tokat | 2.47 | 23 | *e*PN | | Pn | 15 39 51.0 | +1.4 |
| TOKT | Tokat | 2.47 | 23 | *e*Pn | | Pn | 15 39 51.0 | +1.4 |
| HDMB | Hadim | 2.48 | 245 | *e*PN | | Pn | 15 39 49.5 | -0.3 |
| HDMB | Hadim | 2.48 | 245 | *e*Pn | | Pn | 15 39 49.5 | -0.3 |
| SLNF | Slenfeh | 2.57 | 163 | *e*P | | Pn | 15 39 52.1 | +1.1 |
| SLNF | | | | *e*S | | Sn | 15 40 21.8 | -1.2 |
| SLNF | Slenfeh | 2.57 | 163 | *e*P | | Pn | 15 39 52.1 | +1.1 |
| SLNF | | | | *e*S | | Sn | 15 40 22.6 | -0.4 |
| SLNF | | | | | AML | AML | 15 40 28.2 | |
| | comp=E,395nm,0.5s | | | | | | | |
| SLNF | | | | | AML | AML | 15 40 40.0 | |
| | comp=N,134nm,0.6s | | | | | | | |
| SLNF | Slenfeh | 2.57 | 163 | *e*P | | Pn | 15 39 52.1 | +1.1 |
| SLNF | | | | *e*S | | Sn | 15 40 22.6 | -0.4 |
| | comp=N,134nm,0.6s | | | | | | | |
| CUZAR | Zara_SIVAS | 2.67 | 46 | P | | Pb | 15 39 55.8 | -1.0 |
| CUZAR | | | | S | | Sg | 15 40 33.7 | -0.1 |
| LOD | Lodumlu | 2.68 | 314 | *e*PN | | Pn | 15 39 53.1 | +0.6 |
| LOD | Lodumlu | 2.68 | 314 | *e*Pn | | Pn | 15 39 53.2 | +0.6 |
| KIZT | Kizilcal | 2.79 | 288 | *e*PN | | Pn | 15 39 54.1 | +0.1 |
| KIZT | Kizilcal | 2.79 | 288 | *e*Pn | | Pn | 15 39 54.2 | +0.1 |
| ELDT | Eldivan | 2.83 | 330 | *i* P | | Pn | 15 39 54.3 | -0.3 |
| ELDT | Eldivan | 2.83 | 330 | P | | Pn | 15 39 54.3 | -0.3 |
| ELDT | | | | S | | Sg | 15 40 37.2 | -1.7 |
| RSDY | Resadiye-TOKAT | 2.83 | 34 | *e*PN | | Pn | 15 39 56.5 | +2.0 |
| RSDY | Resadiye-TOKAT | 2.83 | 34 | *e*Pn | | Pn | 15 39 56.5 | +2.0 |
| CANT | Cankiri | 2.85 | 334 | *e*PN | | Pn | 15 39 55.8 | +0.9 |
| URFA | Urfa | 2.87 | 101 | *e*PN | | Pn | 15 39 56.8 | +1.7 |
| URFA | Urfa | 2.87 | 101 | *e*Pn | | Pn | 15 39 56.8 | +1.7 |
| ILIC | ilic-Erzincan | 2.92 | 60 | *e*PN | | Pn | 15 39 58.0 | +2.1 |
| ILIC | ilic-Erzincan | 2.92 | 60 | *e*Pn | | Pn | 15 39 58.0 | +2.1 |
| GAZI | Gazipasa | 2.99 | 233 | *i* P | | Pn | 15 39 59.2 | +2.6 |
| GAZI | Gazipasa | 2.99 | 233 | P | | Pn | 15 39 59.2 | +2.6 |
| GAZI | | | | S | | Sb | 15 40 39.2 | +0.1 |
| KVT | Kavak | 3.08 | 11 | *e*PN | | Pn | 15 39 59.7 | +1.8 |
| KVT | Kavak | 3.08 | 11 | *e*Pn | | Pn | 15 39 59.7 | +1.8 |
| LFK | Lefkose | 3.11 | 207 | *e*PN | | Pn | 15 39 58.9 | +0.5 |
| LFK | Lefkose | 3.11 | 207 | *e*Pn | | Pn | 15 39 58.9 | +0.5 |
| TOS | Tosya | 3.13 | 342 | *e*PN | | Pn | 15 40 00.0 | +1.3 |
| TOS | Tosya | 3.13 | 342 | *e*Pn | | Pn | 15 40 00.0 | +1.3 |
| BIDA | Albida | 3.15 | 164 | *e*P | | Pn | 15 40 00.1 | +1.2 |
| BIDA | | | | *e*S | | Sn | 15 40 35.8 | -1.4 |
| BIDA | | | | | AML | AML | 15 40 52.5 | |
| | comp=E,176nm,0.5s | | | | | | | |
| BIDA | | | | | AML | AML | 15 40 56.7 | |
| | comp=N,89nm,0.5s | | | | | | | |
| BIDA | Albida | 3.15 | 164 | *e*P | | Pn | 15 40 00.6 | +1.6 |
| BIDA | | | | *e*S | | Sn | 15 40 35.4 | -1.8 |
| BIDA | | | | | AML | AML | 15 40 52.6 | |
| | comp=E,176nm,0.5s | | | | | | | |
| BIDA | | | | | AML | AML | 15 40 56.8 | |
| | comp=N,89nm,0.5s | | | | | | | |
| BIDA | Albida | 3.15 | 164 | *e*P | | Pn | 15 40 00.6 | +1.7 |
| BIDA | | | | *e*S | | Sn | 15 40 35.4 | -1.8 |
| | comp=N,89nm,0.5s | | | | | | | |
| SVRC | Sivrice-ELAZID | 3.19 | 83 | *e*PN | | Pn | 15 40 01.7 | +2.1 |
| SVRC | Sivrice-ELAZID | 3.19 | 83 | *e*Pn | | Pn | 15 40 01.7 | +2.1 |
| PHNC | Paralimni | 3.21 | 199 | P | | Pb | 15 40 03.2 | -2.7 |
| | baz=3.0 | | | | | | | |
| PHNC | | | | S | | Sn | 15 40 41.1 | +2.6 |
| PHNC | Paralimni | 3.21 | 199 | P | | Pb | 15 40 03.2 | -2.7 |
| PHNC | | | | S | | Sn | 15 40 41.1 | +2.6 |
| ILGA | Ilgaz | 3.23 | 338 | *i* P | | Pn | 15 40 00.4 | +0.2 |
| ILGA | Ilgaz | 3.23 | 338 | P | | Pn | 15 40 00.4 | +0.2 |
| ILGA | | | | S | | Sg | 15 40 50.5 | -1.4 |
| MAMC | Mammari | 3.32 | 211 | P | | Pn | 15 40 03.5 | +2.2 |
| | baz=16 | | | | | | | |
| MAMC | Mammari | 3.32 | 211 | P | | Pn | 15 40 03.5 | +2.2 |
| PTK | Pertek | 3.33 | 74 | *e*PN | | Pn | 15 40 03.8 | +2.2 |
| PTK | Pertek | 3.33 | 74 | *e*Pn | | Pn | 15 40 03.8 | +2.2 |
| BYBT | Boyabat | 3.43 | 354 | *e*PN | | Pn | 15 40 04.5 | +1.7 |
| BYBT | Boyabat | 3.43 | 354 | *e*Pn | | Pn | 15 40 04.5 | +1.7 |
| SUTC | Sutluce-Ispart | 3.44 | 262 | *e*PN | | Pn | 15 40 03.4 | +0.4 |
| SUTC | Sutluce-Ispart | 3.44 | 262 | *e*Pn | | Pn | 15 40 03.4 | +0.4 |
| CSS | Prodhromos | 3.46 | 208 | P | | Pn | 15 40 05.9 | +2.7 |
| | baz=14 | | | | | | | |
| CSS | | | | S | | Sn | 15 40 43.7 | -1.2 |
| CSS | Prodhromos | 3.46 | 208 | *e*PN | | Pn | 15 40 04.0 | +0.8 |
| CSS | Prodhromos | 3.46 | 208 | *e*Pn | | Pn | 15 40 04.0 | +0.8 |
| CSS | Prodhromos | 3.46 | 208 | P | | Pn | 15 40 05.9 | +2.7 |
| CSS | | | | S | | Sn | 15 40 43.7 | -1.2 |
| AUMIH | MIHALICIK | 3.47 | 303 | P | | Pg | 15 40 13.8 | -0.8 |
| AUMIH | | | | S | | Sg | 15 41 01.0 | +1.3 |
| LEF | Lefka | 3.50 | 214 | *e*PN | | Pn | 15 40 04.5 | +0.7 |
| LEF | Lefka | 3.50 | 214 | *e*Pn | | Pn | 15 40 04.5 | +0.7 |
| BAGO | Egridir - ISPA | 3.55 | 270 | P | | Pn | 15 40 05.6 | +1.1 |
| DIKM | Dikmen | 3.59 | 360 | *e*PN | | Pn | 15 40 07.1 | +2.2 |
| DIKM | Dikmen | 3.59 | 360 | *e*Pn | | Pn | 15 40 07.1 | +2.2 |
| ALFC | Alevga | 3.61 | 218 | P | | Pn | 15 40 06.4 | +1.2 |
| | baz=25 | | | | | | | |
| ALFC | | | | S | | Sn | 15 40 44.1 | -4.4 |
| ALFC | Alevga | 3.61 | 218 | P | | Pn | 15 40 06.4 | +1.2 |
| ALFC | | | | S | | Sn | 15 40 44.1 | -4.4 |
| HAWK | Haweek | 3.64 | 165 | *e*P | | Pn | 15 40 06.7 | +0.9 |
| HAWK | | | | *e*S | | Sn | 15 40 48.3 | -1.1 |
| HAWK | | | | | AML | AML | 15 40 59.2 | |
| | comp=N,32nm,0.6s | | | | | | | |
| HAWK | | | | | AML | AML | 15 41 14.5 | |
| | comp=E,24nm,0.5s | | | | | | | |
| HAWK | Haweek | 3.64 | 165 | *e*P | | Pn | 15 40 06.9 | +1.2 |
| HAWK | | | | *e*S | | Sn | 15 40 47.8 | -1.6 |
| HAWK | | | | | AML | AML | 15 40 59.2 | |
| | comp=N,32nm,0.6s | | | | | | | |
| HAWK | | | | | AML | AML | 15 41 14.6 | |
| | comp=E,24nm,0.5s | | | | | | | |
| HAWK | Haweek | 3.64 | 165 | *e*P | | Pn | 15 40 06.9 | +1.2 |
| HAWK | | | | *e*S | | Sn | 15 40 47.8 | -1.6 |
| | comp=E,24nm,0.5s | | | | | | | |
| KSRV | Kasrt alli | 3.70 | 125 | *e*P | | Pn | 15 40 07.4 | +0.9 |
| KSRV | | | | *e*S | | Sn | 15 40 50.2 | -0.3 |
| KSRV | | | | | AML | AML | 15 41 13.3 | |
| | comp=Z,106nm,0.7s | | | | | | | |
| KSRV | Kasrt alli | 3.70 | 125 | *e*P | | Pn | 15 40 07.3 | +0.9 |
| KSRV | | | | *e*S | | Sn | 15 40 49.4 | -1.2 |
| KSRV | | | | | AML | AML | 15 41 13.4 | |
| | comp=Z,106nm,0.7s | | | | | | | |
| KSRV | Kasrt alli | 3.70 | 125 | *e*P | | Pn | 15 40 07.3 | +0.9 |
| KSRV | | | | *e*S | | Sn | 15 40 49.4 | -1.2 |
| | comp=Z,106nm,0.7s | | | | | | | |
| BCAM | Yenicaga | 3.71 | 319 | P | | Pb | 15 40 16.0 | +1.3 |
| BCAM | | | | S | | Sg | 15 41 07.1 | -0.5 |
| SZAC | Souni-Zanaja | 3.82 | 211 | P | | Pn | 15 40 10.5 | +2.4 |
| | baz=19 | | | | | | | |
| SZAC | Souni-Zanaja | 3.82 | 211 | P | | Pn | 15 40 10.5 | +2.4 |
| DYBB | Diyarbakir | 3.84 | 90 | *e*PN | | Pn | 15 40 11.1 | +2.7 |
| AKMC | Akamas | 3.84 | 219 | P | | Pn | 15 40 11.6 | +3.1 |
| | baz=27 | | | | | | | |
| AKMC | Akamas | 3.84 | 219 | P | | Pn | 15 40 11.6 | +3.1 |
| ESPY | Espiye-Giresun | 3.91 | 42 | *e*PN | | Pn | 15 40 11.8 | +2.5 |
| ESPY | Espiye-Giresun | 3.91 | 42 | *e*Pn | | Pn | 15 40 11.8 | +2.5 |
| DIY | Diyarbakir | 3.91 | 91 | *e*Pn | | Pn | 15 40 11.1 | +1.7 |
| RABH | Abou Rabah | 3.93 | 156 | *e*P | | Pn | 15 40 11.0 | +1.3 |
| RABH | | | | *e*S | | Sn | 15 40 52.7 | -3.9 |
| RABH | | | | | AML | AML | 15 41 28.5 | |
| | comp=N,19nm,0.7s | | | | | | | |
| RABH | | | | | AML | AML | 15 41 38.0 | |
| | comp=E,26nm,0.7s | | | | | | | |
| RABH | Abou Rabah | 3.93 | 156 | *e*P | | Pn | 15 40 10.8 | +1.1 |
| RABH | | | | *e*S | | Sn | 15 40 52.6 | -3.9 |
| RABH | | | | | AML | AML | 15 41 28.5 | |
| | comp=N,19nm,0.7s | | | | | | | |
| RABH | | | | | AML | AML | 15 41 38.1 | |
| | comp=E,26nm,0.7s | | | | | | | |
| RABH | Abou Rabah | 3.93 | 156 | *e*P | | Pn | 15 40 10.8 | +1.1 |
| RABH | | | | *e*S | | Sn | 15 40 52.6 | -3.9 |
| | comp=E,26nm,0.7s | | | | | | | |
| PPCY | Paphos | 3.95 | 218 | P | | Pn | 15 40 14.4 | +4.5 |
| | baz=26 | | | | | | | |
| PPCY | Paphos | 3.95 | 218 | P | | Pn | 15 40 14.4 | +4.5 |
| GUMT | Gumushane | 4.05 | 52 | *e*PN | | Pn | 15 40 13.8 | +2.4 |
| GUMT | Gumushane | 4.05 | 52 | *e*Pn | | Pn | 15 40 13.8 | +2.4 |
| MAZI | Mazidag | 4.14 | 97 | *e*PN | | Pn | 15 40 15.1 | +2.5 |
| MAZI | Mazidag | 4.14 | 97 | *e*Pn | | Pn | 15 40 15.1 | +2.5 |
| ROOS | tl_alroos | 4.20 | 157 | *e*P | | Pn | 15 40 14.0 | +0.6 |
| ROOS | | | | *e*S | | Sn | 15 40 59.2 | -4.1 |
| ROOS | | | | | AML | AML | 15 41 31.2 | |
| | comp=N,62nm,0.7s | | | | | | | |
| ROOS | | | | | AML | AML | 15 41 41.9 | |
| | comp=E,49nm,0.6s | | | | | | | |
| BNGB | Bing¯ll | 4.33 | 76 | *e*PN | | Pn | 15 40 18.1 | +2.8 |
| BAYT | Ayd˘ıntepe-Bay | 4.44 | 57 | *e*PN | | Pn | 15 40 19.4 | +2.7 |
| BAYT | Ayd˘ıntepe-Bay | 4.44 | 57 | *e*Pn | | Pn | 15 40 19.4 | +2.7 |
| BRBR | Barbar | 4.67 | 173 | *e*P | | Pn | 15 40 21.8 | +1.9 |
| BRBR | | | | *e*S | | Sn | 15 41 13.1 | -1.7 |
| BRBR | | | | | AML | AML | 15 41 21.8 | |
| | comp=E,30nm,0.6s | | | | | | | |
| BRBR | | | | | AML | AML | 15 41 42.8 | |
| | comp=N,37nm,0.7s | | | | | | | |
| BRBR | Barbar | 4.67 | 173 | *e*P | | Pn | 15 40 21.7 | +1.8 |
| BRBR | | | | *e*S | | Sn | 15 41 13.7 | -1.1 |
| BRBR | | | | | AML | AML | 15 41 21.8 | |
| | comp=E,30nm,0.6s | | | | | | | |
| BRBR | | | | | AML | AML | 15 41 42.8 | |
| | comp=N,37nm,0.7s | | | | | | | |
| BRBR | Barbar | 4.67 | 173 | *e*P | | Pn | 15 40 21.7 | +1.8 |
| BRBR | | | | *e*S | | Sn | 15 41 13.7 | -1.1 |
| | comp=N,37nm,0.7s | | | | | | | |
| AKAS | Kas | 4.89 | 250 | *i* P | | Pn | 15 40 23.5 | +0.6 |
| AKAS | Kas | 4.89 | 250 | P | | Pn | 15 40 23.5 | +0.6 |
| MMAI | Mount Meron Ar | 5.03 | 179 | Pn | | Pn | 15 40 25.9 | +1.1 |
| | comp=N,13nm,0.3s,baz=354,slow=13,SNR=37 | | | | | | | |
| MMAI | | | | | Sn | Sn | 15 41 22.1 | -1.5 |
| | comp=N,2.2nm,0.3s,baz=347,slow=25,SNR=3.2 | | | | | | | |
| MMAI | | | | | LR | LR | 15 42 45.4 | |
| | comp=N,114nm,20.1s,baz=115,slow=40 | | | | | | | |
| ZALF | Zalf | 5.39 | 161 | *e*P | | Pn | 15 40 31.9 | +2.2 |
| ZALF | | | | *e*S | | Sn | 15 41 27.2 | -5.2 |
| ZALF | | | | | AML | AML | 15 41 59.6 | |
| | comp=N,9.8nm,0.6s | | | | | | | |
| ZALF | | | | | AML | AML | 15 42 46.1 | |
| | comp=E,14nm,0.7s | | | | | | | |
| ZALF | Zalf | 5.39 | 161 | *e*P | | Pn | 15 40 31.9 | +2.2 |
| ZALF | | | | *e*S | | Sn | 15 41 27.2 | -5.2 |
| | comp=E,14nm,0.7s | | | | | | | |
| SALA | Sala | 5.46 | 167 | *e*P | | Pn | 15 40 31.6 | +0.8 |
| SALA | | | | *e*S | | Sn | 15 41 31.2 | -3.2 |
| SALA | Sala | 5.46 | 167 | *e*P | | Pn | 15 40 31.6 | +0.8 |
| SALA | | | | *e*S | | Sn | 15 41 31.2 | -3.2 |
| ASF | Jabal al Asfar | 6.02 | 167 | Pn | | Pn | 15 40 42.4 | +4.1 |
| | comp=E,0.2nm,0.3s,baz=141,slow=13,SNR=6.6 | | | | | | | |
| ASF | | | | | Sn | Sb | 15 42 03.0 | -3.4 |
| | comp=E,0.2nm,0.3s,baz=134,slow=19,SNR=1.6 | | | | | | | |
| KBZ | Khabaz | 8.08 | 43 | LR | | LR | 15 44 12.5 | |
| | comp=E,48nm,19.6s,baz=192,slow=39 | | | | | | | |
| IDI | Anoyia | 8.79 | 255 | Pn | | Pn | 15 41 18.1 | +1.6 |
| | comp=E,1.0nm,0.3s,baz=106,slow=12,SNR=6.6 | | | | | | | |
| STHS | Stebnicka Huta | 15.20 | 323 | *e*P | | P | 15 42 50.0 | +0.9 |
| GERES | GERESS Array B | 18.95 | 312 | P | | P | 15 43 31.1 | +0.4 |
| | comp=E,0.1nm,0.3s,baz=125,slow=12,SNR=3.5 | | | | | | | |
| AKTO | Aktyubinsk | 20.36 | 45 | P | | P | 15 43 44.5 | -1.4 |
| | comp=E,1.3nm,0.7s,baz=228,slow=9,SNR=4.4 | | | | | | | |
| FINES | FINESS Array B | 24.11 | 349 | P | | P | 15 44 23.7 | -1.3 |
| | comp=E,3.6nm,0.8s,baz=161,slow=12,SNR=10 | | | | | | | |
| HFS | Hagfors | 26.00 | 335 | P | | P | 15 44 42.8 | +0.6 |
| | comp=E,1.7nm,0.7s,baz=130,slow=5.8,SNR=3.5 | | | | | | | |
| MKAR | Makanchi Array | 35.33 | 60 | P | | P | 15 46 04.6 | -0.2 |
| | comp=E,0.2nm,0.2s,baz=262,slow=9.8,SNR=2.4 | | | | | | | |
| TORD | Torodi Ar. Bea | 38.80 | 239 | P | | P | 15 46 38.6 | +4.0 |
| | comp=E,0.4nm,0.8s,baz=32,slow=8.5,SNR=2.7 | | | | | | | |
| SONM | Songino Array | 51.26 | 55 | P | | P | 15 48 13.0 | -0.6 |
| | comp=E,0.2nm,0.4s,baz=274,slow=6.6,SNR=2.9 | | | | | | | |
| CMAR | Chiang Mai Arr | 58.29 | 91 | P | | P | 15 49 07.8 | +3.0 |
| | comp=E,0.3nm,0.4s,baz=293,slow=7.3,SNR=5.1 | | | | | | | |

**IDC 26 15:41:53.3±3.4, 3°27'S×100°21'E, h0km, mb3.5/6, mb1 3.7/6, mb1mx3.5/32, mbtmp3.5/6, MS3.2/2, Ms1 3.2/2, ms1mx2.6/24, Error ellipse: s-maj=138.8km s-min=20.2km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 21.62 | 357 | P | P | 15 46 45.3 | +0.1 |
| | 0.5nm,0.3s,baz=185,slow=10.0,SNR=5.6 | | | | | | |
| H08S2 | Diego Garcia H | 27.92 | 260 | T | T | 16 16 46.5 | |
| | baz=82,slow=75,SNR=123 | | | | | | |
| H08S3 | Diego Garcia H | 27.93 | 260 | T | T | 16 16 46.6 | |
| | baz=82,slow=75,SNR=172 | | | | | | |
| H08S1 | Diego Carcia H | 27.94 | 260 | T | T | 16 16 49.3 | |
| | baz=82,slow=75,SNR=147 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.02 | 159 | T | T | 16 24 33.9 | |
| | baz=335,slow=76,SNR=9.1 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.03 | 159 | T | T | 16 24 34.9 | |
| | baz=335,slow=76,SNR=11 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.03 | 159 | T | T | 16 24 35.3 | |
| | baz=335,slow=76,SNR=7.9 | | | | | | |
| WRA | Warramunga Arr | 37.19 | 119 | P | P | 15 49 05.5 | -1.0 |
| | 0.3nm,0.7s,baz=293,slow=9.3,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 38.35 | 125 | P | P | 15 49 16.9 | +0.5 |
| | 0.4nm,0.9s,baz=295,slow=7.7,SNR=4.2 | | | | | | |
| KSRS | Korea Array | 48.00 | 30 | LR | LR | 16 13 58.9 | |
| | comp=Z,34nm,19.7s,baz=85,slow=40 | | | | | | |
| SONM | Songino Array | 51.18 | 5 | P | P | 15 50 58.5 | +0.1 |
| | 0.6nm,0.8s,baz=191,slow=11,SNR=4.4 | | | | | | |
| MKAR | Makanchi Array | 52.30 | 345 | P | P | 15 51 06.5 | -0.2 |
| | 0.5nm,0.7s,baz=144,slow=8.3,SNR=2.7 | | | | | | |
| ZALV | Zalesovo Beam | 58.44 | 349 | P | P | 15 51 50.1 | -0.7 |
| | 0.2nm,0.3s,baz=159,slow=4.5,SNR=3.2 | | | | | | |
| ZALV | | | | LR | LR | 16 18 14.7 | |
| | comp=Z,14nm,18.8s,baz=74,slow=37 | | | | | | |
| TXAR | Lajitas Array | 145.56 | 39 | PKPbc | PKPbc | 16 01 34.6 | +0.1 |
| | 0.3nm,0.4s,baz=259,slow=0.9,SNR=4.2 | | | | | | |

**IDC 26 15:50:23.7±3.4, 3°61'S×99°07'E, h0km, mb3.3/4, mb1 3.4/4, mb1mx3.3/28, mbtmp3.3/4, Error ellipse: s-maj=135.0km s-min=27.7km az=61.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr | 21.92 | 360 | P | P | 15 55 18.9 | +0.1 |
| | 0.5nm,0.7s,baz=187,slow=11,SNR=5.8 | | | | | | |
| H08S2 | Diego Garcia H | 26.75 | 260 | T | T | 16 25 21.9 | |
| | baz=82,slow=75,SNR=12 | | | | | | |
| H08S3 | Diego Garcia H | 26.75 | 260 | T | T | 16 25 19.2 | |
| | baz=82,slow=75,SNR=9.9 | | | | | | |
| H08S1 | Diego Carcia H | 26.77 | 260 | T | T | 16 25 27.1 | |
| | baz=82,slow=75,SNR=10.0 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.12 | 158 | T | T | 16 33 10.1 | |
| | baz=339 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.13 | 158 | T | T | 16 33 14.8 | |
| | baz=339 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.13 | 158 | T | T | 16 33 06.3 | |
| | baz=339 | | | | | | |
| ASAR | Alice Springs | 39.10 | 124 | P | P | 15 57 53.5 | +0.5 |
| | 0.2nm,0.6s,baz=303,slow=7.7,SNR=4.9 | | | | | | |
| SONM | Songino Array | 51.63 | 6 | P | P | 15 59 32.5 | +0.3 |
| | 0.1nm,0.3s,baz=169,slow=10,SNR=2.9 | | | | | | |
| MKAR | Makanchi Array | 52.33 | 345 | P | P | 15 59 37.5 | +0.2 |
| | 0.3nm,0.5s,baz=157,slow=9.2,SNR=2.7 | | | | | | |
| PETK | Petropavlovsk- | 74.73 | 32 | P | P | 16 01 53.7 | -12 |
| | 13nm,1.0s,baz=216,slow=7.3,SNR=3.8 | | | | | | |
| TXAR | Lajitas Array | 146.53 | 38 | PKPbc | PKPdf | 16 10 05.7 | -0.9 |
| | 0.2nm,0.3s,baz=322,slow=3.7,SNR=2.2 | | | | | | |

*ISK **26** 16:14:33.3, 38°83N×25°97E, h11km, MD3.4*
*ISCJB **26** 16:14:34.1±0.6, 38°86N±0°02×25°99E±0°03, h10km±4km, Error ellipse: s-maj=3.6km s-min=3.0km az=171.1*
*CSEM **26** 16:14:34.1±0.1, 38°85N×25°95E, h10km, MD3.2, Error ellipse: s-maj=3.3km s-min=3.0km az=112.0*
*ATH **26** 16:14:34.0, 38°88N×26°05E, h21km±1km, MD3.2/10*
*DDA **26** 16:14:34.3, 38°91N×26°04E, h17km, Md2.8*

**ISC 26 16:14:34.2±0.9, 38°86N±0°02×26°01E±0°02, h13km±8km, n88, σ0°77/119, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIGR | SIGRI | 0.37 | 341 | *e*PG | Pg | 16 14 41.8 | +0.2 |
| SIGR | | | | *e*SG | Sg | 16 14 47.2 | -0.6 |
| SIGR | SIGRI | 0.37 | 341 | *e*PB | Pb | 16 14 42.2 | -0.4 |
| SIGR | | | | *e*SB | Sg | 16 14 46.9 | +0.3 |
| SIGR | SIGRI | 0.37 | 341 | *e*Pg | Pg | 16 14 41.8 | +0.2 |
| SIGR | SIGRI | 0.37 | 341 | *e*Pb | Pb | 16 14 42.2 | -0.4 |
| SIGR | | | | *e*Sb | Sg | 16 14 46.9 | +0.3 |
| SIGR | | | | *e*Sg | Sb | 16 14 47.6 | -0.6 |
| PRK | Paraskevi | 0.43 | 28 | *e*PB | Pg | 16 14 42.9 | +0.1 |
| PRK | | | | *e*SB | Sg | 16 14 48.3 | -0.3 |
| PRK | Paraskevi | 0.43 | 28 | *e*Pb | Pg | 16 14 42.9 | +0.1 |
| PRK | | | | *e*Sb | Sg | 16 14 48.3 | -0.3 |
| CHOS | Chios island | 0.48 | 176 | *e*PB | Pb | 16 14 44.5 | 0.0 |
| CHOS | | | | *e*SB | Sg | 16 14 50.6 | +0.7 |
| CHOS | Chios island | 0.48 | 176 | *e*Pb | Pb | 16 14 44.5 | 0.0 |
| AYVA | Ayvalik | 0.69 | 50 | *i* P | Pg | 16 14 47.4 | -0.2 |
| AYVA | | | | *i* S | Sg | 16 14 56.2 | -0.6 |
| AYVA | Ayvalik | 0.69 | 50 | P | Pg | 16 14 47.4 | -0.2 |
| AYVA | | | | S | Sg | 16 14 56.2 | -0.6 |
| DKL | Dikili | 0.73 | 73 | *e*PG | Pb | 16 14 48.6 | +0.1 |
| DKL | | | | *e*SG | Sn | 16 14 59.6 | -1.5 |
| DKL | Dikili | 0.73 | 73 | *e*Pg | Pb | 16 14 48.6 | -0.1 |
| DKL | | | | *e*Sg | Sn | 16 14 59.7 | -1.5 |
| ZEY | ˜zmir | 0.73 | 148 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **KULA** | **Kula-Manisa** | **2.10** | **99** | *e*PN | **Pn** | **16 15 09.7** | **+0.5** |
| **KULA** | **Kula-Manisa** | **2.10** | **99** | *e*Pn | **Pn** | **16 15 09.7** | **+0.5** |
| **MRMT** | **Marmara Adasi** | **2.13** | **35** | *e*PN | **Pn** | **16 15 10.3** | **+0.8** |
| **MRMT** | **Marmara Adasi** | **2.13** | **35** | *e*Pn | **Pn** | **16 15 10.3** | **+0.8** |
| **SMIA** | **Simia** | **2.19** | **271** | *e*PN | **Pn** | **16 15 11.5** | **+1.3** |
| **SMIA** | **Simia** | **2.19** | **271** | *e*Pb | **Pn** | **16 15 11.5** | **+1.3** |
| **VILL** | **Villia** | **2.23** | **253** | *e*Pb | **Pb** | **16 15 13.1** | **-1.2** |
| **VIL2** | **Platees** | **2.25** | **254** | *e*PB | **Pb** | **16 15 13.1** | **-1.5** |
| **KCTX** | **Karacabey (Bur** | **2.29** | **52** | *e*PN | **Pn** | **16 15 12.6** | **+0.9** |
| **KCTX** | **Karacabey (Bur** | **2.29** | **52** | *e*Pn | **Pn** | **16 15 12.6** | **+0.9** |
| **ULDT** | **Uludag** | **2.74** | **61** | P | **Pg** | **16 15 25.2** | **-1.4** |
| ULDT | | | | S | **Sg** | **16 16 01.8** | **-0.3** |
| **TVSB** | **Tavsanli** | **2.75** | **77** | *e*PN | **Pn** | **16 15 19.3** | **+1.2** |
| **TVSB** | **Tavsanli** | **2.75** | **77** | *e*Pn | **Pn** | **16 15 19.3** | **+1.2** |
| **ARMT** | **Armutlu** | **2.78** | **51** | *e*PN | **Pn** | **16 15 20.1** | **+1.7** |
| **ARMT** | **Armutlu** | **2.78** | **51** | *e*Pn | **Pn** | **16 15 20.1** | **+1.7** |
| **EDRB** | **Edirne** | **3.03** | **10** | *e*PN | **Pn** | **16 15 23.0** | **+1.1** |
| **EDRB** | **Edirne** | **3.03** | **10** | *e*Pn | **Pn** | **16 15 23.0** | **+1.1** |
| **KLYT** | **Kilyos** | **3.33** | **43** | *e*PN | **Pn** | **16 15 27.5** | **+1.5** |
| **KLYT** | **Kilyos** | **3.33** | **43** | *e*Pn | **Pn** | **16 15 27.5** | **+1.5** |

*IDC **26** 16:27:08.2±3.4, 2°.80S×99°.55E, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.5/28, mbtmp3.6/6, MS2.7/1, Ms1 2.9/1, ms1mx2.3/33, Error ellipse: s-maj=136.2km s-min=20.9km az=58.0*

*ISCJB **26** 16:27:11.5±1.1, 2°.76S±0°.05×99°.58E±0°.07, h38km±9km, mb3.6/6, MS2.5/1, Error ellipse: s-maj=13.5km s-min=7.0km az=152.2*

*DJA **26** 16:27:12.4±0.6, 3°S±3°×10°.0E±°, h22km±4km, M3.8/9, MLv3.8/9*

**ISC 26 16:27:12.2**±1.8, **2°.72S**±0°.07×**99°.58E**±0°.09, **h26**km±12km, **n22**, σ0**s67**/21, **mb3.6**/6, **Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.43** | **96** | P | **Pb** | **16 27 21.1** | **-0.3** |
| PPSI | | | | S | **Sb** | **16 27 28.2** | **+0.6** |
| **SISI** | **Saibi** | **1.47** | **340** | P | **Pn** | **16 27 36.6** | **-0.5** |
| SISI | | | | S | **Sn** | **16 27 55.4** | **-0.1** |
| **PDSI** | **Padang** | **2.00** | **26** | P | **Pn** | **16 27 43.6** | **-0.8** |
| PDSI | | | | S | **Sn** | **16 28 08.2** | **-0.5** |
| **PPI** | **Padang Panjang** | **2.39** | **20** | P | **Pn** | **16 27 49.3** | **-0.5** |
| PPI | | | | S | **Sn** | **16 28 18.1** | **-0.2** |
| **SDSI** | **Sungai Dareh** | **2.56** | **46** | P | **Pn** | **16 27 52.3** | **+0.2** |
| SDSI | | | | S | **Sn** | **16 28 22.6** | **+0.1** |
| **KSI** | **Kapahiang** | **3.15** | **107** | P | **Pn** | **16 28 00.3** | **+0.1** |
| **MNSI** | **Mandailing Nat** | **3.49** | **360** | P | **Pn** | **16 28 05.2** | **+0.3** |
| **MDSI** | **Maura Dua** | **4.91** | **111** | P | **Pn** | **16 28 24.0** | **-0.5** |
| **LWLI** | **Liwa** | **5.02** | **117** | P | **Pn** | **16 28 25.9** | **-0.1** |
| **CMAR** | **Chiang Mai Arr** 1.1nm,0.7s,baz=188,slow=9.9,SNR=14 | **21.05** | **358** | P | **P** | **16 31 54.4** | **-0.1** |
| CMAR | | | | LR | LR | 16 40 34.7 | |
| | comp=Z,20nm,19.3s,baz=85,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** baz=80,slow=75,SNR=152 | **27.41** | **259** | T | T | 17 01 51.6 | |
| **H08S3** | **Diego Garcia H** baz=80,slow=75,SNR=186 | **27.41** | **259** | T | T | 17 01 29.0 | |
| **H08S1** | **Diego Carcia H** baz=80,slow=75,SNR=154 | **27.43** | **259** | T | T | 17 01 24.7 | |
| **H01W3** | **Cape Leeuwin H** baz=335,slow=76,SNR=9.2 | **34.75** | **159** | T | T | 17 10 36.2 | |
| **H01W2** | **Cape Leeuwin H** baz=335,slow=76,SNR=9.6 | **34.76** | **159** | T | T | 17 10 45.3 | |
| **H01W1** | **Cape Leeuwin H** baz=335,slow=76,SNR=7.8 | **34.76** | **159** | T | T | 17 10 45.1 | |
| **WRA** | **Warramunga Arr** 0.3nm,0.5s,baz=303,slow=9.6,SNR=3.2 | **38.00** | **119** | P | **P** | **16 34 27.5** | **-1.0** |
| **ASAR** | **Alice Springs** 0.3nm,0.3s,baz=300,slow=7.5,SNR=28 | **39.18** | **125** | P | **P** | **16 34 38.0** | **-0.3** |
| **SONM** | **Songino Array** 0.7nm,0.5s,baz=187,slow=9.5,SNR=5.9 | **50.70** | **6** | P | **P** | **16 36 11.0** | **+1.2** |
| **MKAR** | **Makanchi Array** 0.4nm,0.4s,baz=148,slow=8.7,SNR=4.9 | **51.61** | **345** | P | **P** | **16 36 17.5** | **+1.0** |
| **ZALV** | **Zalesovo Beam** 0.4nm,0.3s,baz=101,slow=3.0,SNR=4.1 | **57.80** | **350** | P | **P** | **16 36 60.0** | **-1.2** |
| **TXAR** | **Lajitas Array** 0.2nm,0.4s,baz=356,slow=2.7,SNR=1.1 | **145.52** | **38** | PKPbc | **PKPab** | **16 46 49.9** | **+0.6** |

*NEIC **26** 16:31:38.2, 17°.10N×94°.29W, h131km, MD4.0(MEX), After MEX.*

**MEX 26 16:31:38.2**±0.9, **17°.10N×94°.29W, h131**km±24km, **MD4.0, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TGIG** | | **1.17** | **106** | *e*P | Pn | 16 32 01.6 | -1.3 |
| TGIG | | | | *e*S | Sn | 16 32 19.6 | -1.9 |
| **TGIG** | | **1.17** | **106** | *e*P | Pn | 16 32 01.6 | -1.3 |
| TGIG | | | | *e*S | Sn | 16 32 19.6 | -1.9 |
| **PCIG** | | **1.73** | **143** | *e*P | Pn | 16 32 07.8 | -1.2 |
| PCIG | | | | *i* S | Sn | 16 32 31.1 | -1.3 |
| **PCIG** | | **1.73** | **143** | *e*P | Pn | 16 32 07.8 | -1.2 |
| PCIG | | | | *i* S | Sn | 16 32 31.1 | -1.3 |
| **HUIG** | **Huatulco** | **2.19** | **233** | *e*P | Pn | 16 32 12.6 | -1.9 |
| HUIG | | | | *e*S | Sn | 16 32 41.5 | -0.8 |
| **HUIG** | **Huatulco** | **2.19** | **233** | *e*P | Pn | 16 32 12.6 | -1.9 |
| HUIG | | | | *e*S | Sn | 16 32 41.5 | -0.8 |
| **CCIG** | **Comitan** | **2.22** | **111** | *e*P | Pn | 16 32 12.7 | -2.5 |
| CCIG | | | | *e*S | Sn | 16 32 41.2 | -2.2 |
| **CCIG** | **Comitan** | **2.22** | **111** | *e*P | Pn | 16 32 12.7 | -2.5 |
| CCIG | | | | *e*S | Sn | 16 32 41.2 | -2.2 |
| **PNIG** | **Pinotepa** | **3.74** | **260** | *e*P | Pn | 16 32 33.0 | -1.6 |
| PNIG | | | | *i* S | Sn | 16 33 17.2 | -1.1 |
| **PNIG** | **Pinotepa** | **3.74** | **260** | *e*P | Pn | 16 32 33.0 | -1.6 |
| PNIG | | | | *i* S | Sn | 16 33 17.2 | -1.1 |

*ATH **26** 16:38:15.9, 38°.87N×26°.04E, h28km±1km, MD3.1/6*

*DDA **26** 16:38:16.2, 38°.87N×26°.02E, h21km, Md3.2*

*CSEM **26** 16:38:16.9±0.1, 38°.87N×25°.99E, h8km, MD3.6, Error ellipse: s-maj=2.9km s-min=2.1km az=65.0*

*ISK **26** 16:38:16.7, 38°.89N×26°.04E, h10km, MD3.6*

*ISCJB **26** 16:38:16.3±0.5, 38°.87N±0°.01×25°.99E±0°.03, h6km±3km, Error ellipse: s-maj=3.7km s-min=2.3km az=165.4*

*THE **26** 16:38:17.1, 38°.87N×26°.05E, h8km, ML3.0/6, Error ellipse: s-maj=0.9km s-min=0.4km az=80.0*

**ISC 26 16:38:17.2**±0.9, **38°.86N**±0°.01×**26°.01E**±0°.02, **h11**km±8km, **n136**, σ0**s87**/185, **6C-2D, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIGR** | **SIGRI** | **0.38** | **342** | PG | **Pg** | **16 38 24.0** | **-0.7** |
| SIGR | | | | SG | **Sg** | **16 38 29.8** | **+0.2** |
| **SIGR** | **SIGRI** | **0.38** | **342** | *e*PB | **Pg** | **16 38 24.4** | **-0.2** |
| SIGR | | | | *e*SB | **Sg** | **16 38 30.0** | **+0.4** |
| **SIGR** | **SIGRI** | **0.38** | **342** | P | **Pg** | **16 38 24.4** | **-0.2** |
| SIGR | | | | S | **Sg** | **16 38 30.1** | **+0.4** |
| **SIGR** | **SIGRI** | **0.38** | **342** | *i* Pg | **Pg** | **16 38 24.0** | **-0.7** |
| **SIGR** | **SIGRI** | **0.38** | **342** | P | **Pg** | **16 38 24.4** | **-0.2** |
| SIGR | | | | *i* Sg | **Sg** | **16 38 29.8** | **+0.2** |
| SIGR | | | | S | **Sg** | **16 38 30.1** | **+0.4** |
| **PRK** | **Paraskevi** | **0.44** | **28** | *e*PB | **Pg** | **16 38 25.2** | **-0.7** |
| PRK | | | | *e*SB | **Sg** | **16 38 31.5** | **-0.2** |
| **PRK** | **Paraskevi** | **0.44** | **28** | P | **Pg** | **16 38 25.1** | **-0.8** |
| PRK | | | | S | **Sg** | **16 38 31.3** | **-0.4** |
| **PRK** | **Paraskevi** | **0.44** | **28** | *e*Pb | **Pg** | **16 38 25.2** | **-0.7** |
| PRK | | | | S | **Sg** | **16 38 31.3** | **-0.4** |
| **CHOS** | **Chios island** | **0.47** | **175** | *e*PG | **Pb** | **16 38 27.2** | **-0.3** |
| **CHOS** | **Chios island** | **0.47** | **175** | *e*PB | **Pg** | **16 38 26.6** | **+0.2** |
| CHOS | | | | *e*SB | **Sb** | **16 38 33.8** | **-0.7** |
| **CHOS** | **Chios island** | **0.47** | **175** | P | **Pg** | **16 38 26.6** | **+0.2** |
| CHOS | | | | S | **Sb** | **16 38 33.7** | **-0.7** |
| **CHOS** | **Chios island** | **0.47** | **175** | P | **Pg** | **16 38 26.6** | **+0.2** |
| **CHOS** | **Chios island** | **0.47** | **175** | *e*Pg | **Pb** | **16 38 27.2** | **-0.3** |
| CHOS | | | | S | **Sb** | **16 38 33.7** | **-0.7** |
| **AYVA** | **Ayvalik** | **0.70** | **49** | *i* P | **Pg** | **16 38 29.8** | **-0.9** |
| AYVA | | | | *i* S | **Sg** | **16 38 39.2** | **-0.7** |
| **AYVA** | **Ayvalik** | **0.70** | **49** | P | **Pg** | **16 38 29.8** | **-0.9** |
| AYVA | | | | S | **Sg** | **16 38 39.2** | **-0.7** |
| **ZEY** | **˙zmir** | **0.73** | **148** | P | **Pg** | **16 38 31.1** | **-0.1** |
| ZEY | | | | S | **Sg** | **16 38 40.5** | **-0.2** |
| **DKL** | **Dikili** | **0.73** | **73** | *e*PG | **Pg** | **16 38 30.6** | **-0.7** |
| DKL | | | | *e*SG | **Sg** | **16 38 40.7** | **-0.2** |
| **DKL** | **Dikili** | **0.73** | **73** | *e*Pg | **Pg** | **16 38 30.6** | **-0.7** |
| DKL | | | | *e*Sg | **Sg** | **16 38 40.7** | **-0.2** |
| **BOZC** | **Bozcaada** | **0.99** | **2** | P | **Pg** | **16 38 34.9** | **-1.2** |
| BOZC | | | | P | **Sg** | **16 38 35.0** | **-1.2** |
| BOZC | | | | S | **Sg** | **16 38 48.7** | **-0.3** |
| BOZC | | | | S | **Sg** | **16 38 48.7** | **-0.3** |
| **EZN** | **Ezine** | **1.00** | **14** | *e*PG | **Pg** | **16 38 35.6** | **-0.8** |
| EZN | | | | *e*SG | **Sg** | **16 38 49.4** | **-0.1** |
| **EZN** | **Ezine** | **1.00** | **14** | *e*Pg | **Pg** | **16 38 35.6** | **-0.8** |
| EZN | | | | *e*Sg | **Sg** | **16 38 49.4** | **-0.1** |
| **IZM** | **Izmir** | **1.08** | **115** | *e*PG | **Pb** | **16 38 37.7** | **-0.3** |
| **IZM** | **Izmir** | **1.08** | **115** | *e*Pg | **Pb** | **16 38 37.7** | **-0.3** |
| **LIA** | **Limnos Island** | **1.22** | **329** | *e*PN | **Pn** | **16 38 39.2** | **-1.0** |
| LIA | | | | *e*SN | **Sb** | **16 38 55.8** | **-0.2** |
| **LIA** | **Limnos Island** | **1.22** | **329** | P | **Pn** | **16 38 39.6** | **-0.6** |
| LIA | | | | S | **Sn** | **16 38 56.9** | **+0.2** |
| **LIA** | **Limnos Island** | **1.22** | **329** | *e*Pn | **Pn** | **16 38 39.2** | **-1.0** |
| **LIA** | **Limnos Island** | **1.22** | **329** | P | **Pn** | **16 38 39.6** | **-0.6** |
| LIA | | | | *e*Sn | **Sb** | **16 38 55.8** | **-0.2** |
| LIA | | | | S | **Sn** | **16 38 56.9** | **+0.2** |
| **SMG** | **Samos** | **1.32** | **150** | P | **Pn** | **16 38 40.6** | **-0.9** |
| SMG | | | | S | **Sg** | **16 38 59.4** | **-0.2** |
| **SMG** | **Samos** | **1.32** | **150** | P | **Pn** | **16 38 40.6** | **-0.9** |
| SMG | | | | S | **Sg** | **16 38 59.4** | **-0.2** |
| **GADA** | **Gvkgeada** | **1.34** | **356** | *e*PN | **Pn** | **16 38 41.4** | **-0.4** |
| **GADA** | **Gvkgeada** | **1.34** | **356** | *e*Pn | **Pn** | **16 38 41.4** | **-0.4** |
| **AKHS** | **Akhisar** | **1.41** | **88** | *i* P | **Pn** | **16 38 42.7** | **-0.1** |
| AKHS | | | | *i* S | **Sg** | **16 39 02.0** | **-0.6** |
| **AKHS** | **Akhisar** | **1.41** | **88** | P | **Pn** | **16 38 42.7** | **-0.1** |
| AKHS | | | | S | **Sg** | **16 39 02.0** | **-0.6** |
| **AKS** | **Akhisar** | **1.41** | **88** | *e*PN | **Pn** | **16 38 42.7** | **-0.1** |
| **AKS** | **Akhisar** | **1.41** | **88** | *e*Pn | **Pn** | **16 38 42.7** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **1.50** | **140** | *i* P | **Pb** | **16 38 45.1** | **0.0** |
| GCAM | | | | *i* S | **Sg** | **16 39 06.0** | **+0.5** |
| **GCAM** | **G?zelcaml?** | **1.50** | **140** | P | **Pb** | **16 38 45.1** | **0.0** |
| GCAM | | | | S | **Sg** | **16 39 06.0** | **+0.5** |
| **LPK** | **Lapseki** | **1.62** | **21** | *e*PN | **Pn** | **16 38 45.5** | **-0.2** |
| **LPK** | **Lapseki** | **1.62** | **21** | *e*Pn | **Pn** | **16 38 45.5** | **-0.2** |
| **BALB** | **Balikesir** | **1.65** | **61** | *e*PN | **Pn** | **16 38 45.1** | **-1.0** |
| **BALB** | **Balikesir** | **1.65** | **61** | *e*Pn | **Pn** | **16 38 45.1** | **-1.0** |
| **SMTH** | **Samothraki Isl** | **1.66** | **347** | P | **Pn** | **16 38 45.2** | **-1.0** |
| SMTH | | | | S | **Sn** | **16 39 07.3** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **1.66** | **347** | P | **Pn** | **16 38 45.2** | **-1.0** |
| SMTH | | | | S | **Sn** | **16 39 07.3** | **-0.1** |
| **EREA** | **Eretria** | **1.68** | **256** | P | **Pn** | **16 38 46.2** | **-0.3** |
| **EREA** | **Eretria** | **1.68** | **256** | P | **Pn** | **16 38 46.2** | **-0.3** |
| **AOS** | **Alonnisos** | **1.69** | **281** | P | **Pn** | **16 38 46.8** | **+0.2** |
| **AOS** | **Alonnisos** | **1.69** | **281** | P | **Pn** | **16 38 46.8** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.74** | **121** | *e*PN | **Pn** | **16 38 47.7** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.74** | **121** | *e*Pn | **Pn** | **16 38 47.7** | **+0.3** |
| **GONE** | **Gonen-Balikesi** | **1.76** | **47** | *e*PN | **Pn** | **16 38 47.7** | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.76** | **47** | *e*Pn | **Pn** | **16 38 47.7** | **+0.1** |
| **APE** | **Apeiranthos** | **1.82** | **192** | *i* P | **Pn** | **16 38 47.7** | **-0.8** |
| **APE** | **Apeiranthos** | **1.82** | **192** | *e*PB | **Pn** | **16 38 47.4** | **-1.1** |
| APE | | | | *e*SN | **Sn** | **16 39 10.9** | **-0.7** |
| **APE** | **Apeiranthos** | **1.82** | **192** | P | **Pn** | **16 38 47.4** | **-1.1** |
| **APE** | **Apeiranthos** | **1.82** | **192** | *e*Pb | **Pn** | **16 38 47.4** | **-1.1** |
| APE | | | | *e*Sn | **Sn** | **16 39 10.9** | **-0.7** |
| **KRBG** | **Karabiga-Canak** | **1.83** | **33** | *e*PN | **Pn** | **16 38 47.6** | **-1.0** |
| **KRBG** | **Karabiga-Canak** | **1.83** | **33** | *e*Pn | **Pn** | **16 38 47.6** | **-1.0** |
| **ERIK** | **Erikli-Kesan** | **1.85** | **12** | *e*PN | **Pn** | **16 38 48.9** | **0.0** |
| **ERIK** | **Erikli-Kesan** | **1.85** | **12** | *e*Pn | **Pn** | **16 38 48.9** | **0.0** |
| **AYDN** | **Tasoluk** | **1.90** | **128** | *i* P | **Pn** | **16 38 50.5** | **+1.0** |
| **AYDN** | **Tasoluk** | **1.90** | **128** | P | **Pn** | **16 38 50.5** | **+1.0** |
| AYDN | | | | S | **Sg** | **16 39 20.0** | **+1.9** |
| **ALN** | **Alexandroupoli** | **2.04** | **1** | *e*PN | **Pn** | **16 38 50.7** | **-0.7** |
| **ALN** | **Alexandroupoli** | **2.04** | **1** | *e*PB | **Pn** | **16 38 50.7** | **-0.7** |
| **ALN** | **Alexandroupoli** | **2.04** | **1** | *e*Pn | **Pn** | **16 38 50.7** | **-0.7** |
| **RKY** | **Sarkoy-Tekirda** | **2.04** | **26** | *e*PN | **Pn** | **16 38 51.8** | **+0.3** |
| **RKY** | **Sarkoy-Tekirda** | **2.04** | **26** | *e*Pn | **Pn** | **16 38 51.8** | **+0.3** |
| **SART** | **Tekirdag** | **2.04** | **26** | *i* P | **Pn** | **16 38 51.0** | **-0.5** |
| SART | | | | *i* S | **Sb** | **16 39 10.8** | **-0.8** |
| **SART** | **Tekirdag** | **2.04** | **26** | P | **Pn** | **16 38 51.0** | **-0.5** |
| SART | | | | S | **Sb** | **16 39 19.0** | **-0.8** |
| **DURS** | **Dursunbey** | **2.06** | **68** | *i* P | **Pn** | **16 38 51.2** | **-0.6** |
| DURS | | | | *i* S | **Sn** | **16 39 16.8** | **-0.6** |
| **DURS** | **Dursunbey** | **2.06** | **68** | P | **Pn** | **16 38 51.1** | **-0.6** |
| DURS | | | | S | **Sn** | **16 39 16.8** | **-0.6** |
| **EDC** | **Edincik** | **2.07** | **43** | *e*PN | **Pn** | **16 38 51.6** | **-0.2** |
| **EDC** | **Edincik** | **2.07** | **43** | *e*Pn | **Pn** | **16 38 51.6** | **-0.2** |
| **KULA** | **Kula-Manisa** | **2.10** | **98** | *e*PN | **Pn** | **16 38 52.8** | **+0.4** |
| **KULA** | **Kula-Manisa** | **2.10** | **98** | *e*Pn | **Pn** | **16 38 52.8** | **+0.4** |
| **BNT** | **Bandirma** | **2.10** | **44** | *e*PN | **Pn** | **16 38 52.2** | **-0.2** |
| **BNT** | **Bandirma** | **2.10** | **44** | *e*Pn | **Pn** | **16 38 52.2** | **-0.2** |
| **BDRM** | **Kayabasi** | **2.12** | **147** | *i* P | **Pn** | **16 38 52.3** | **-0.2** |
| BDRM | | | | *i* S | **Sn** | **16 39 19.9** | **+1.1** |
| **BDRM** | **Kayabasi** | **2.12** | **147** | P | **Pn** | **16 38 52.3** | **-0.2** |
| BDRM | | | | S | **Sn** | **16 39 19.9** | **+1.1** |
| **DEMI** | **Demirci** | **2.12** | **84** | *i* P | **Pb** | **16 38 56.1** | **+0.4** |
| DEMI | | | | *i* S | **Sb** | **16 39 45.5** | **+0.2** |
| **DEMI** | **Demirci** | **2.12** | **84** | P | **Pb** | **16 38 56.1** | **+0.4** |
| DEMI | | | | S | **Sb** | **16 39 23.0** | **+1.0** |
| **MRMT** | **Marmara Adasi** | **2.13** | **35** | *e*PN | **Pn** | **16 38 52.8** | **0.0** |
| **MRMT** | **Marmara Adasi** | **2.13** | **35** | *e*Pn | **Pn** | **16 38 52.8** | **0.0** |
| **DST** | **Dursunbey** | **2.16** | **69** | *e*PN | **Pn** | **16 38 53.4** | **+0.2** |
| **DST** | **Dursunbey** | **2.16** | **69** | *e*Pn | **Pn** | **16 38 53.4** | **+0.2** |
| **KCTX** | **Karacabey (Bur** | **2.30** | **51** | *e*PN | **Pn** | **16 38 55.0** | **0.0** |
| **KCTX** | **Karacabey (Bur** | **2.30** | **51** | *e*Pn | **Pn** | **16 38 55.0** | **0.0** |
| **KAVA** | **Kavala** | **2.43** | **332** | P | **Pn** | **16 38 56.2** | **-0.6** |
| **KAVA** | **Kavala** | **2.43** | **332** | P | **Pn** | **16 38 56.2** | **-0.6** |
| **YER** | **Yerkesik** | **2.49** | **133** | *e*PN | **Pn** | **16 38 58.4** | **+0.8** |
| **YER** | **Yerkesik** | **2.49** | **133** | *e*Pn | **Pn** | **16 38 58.4** | **+0.8** |
| **MDNY** | **Mudanya-Bursa** | **2.69** | **55** | *e*PN | **Pn** | **16 39 00.9** | **+0.7** |
| **MDNY** | **Mudanya-Bursa** | **2.69** | **55** | *e*Pn | **Pn** | **16 39 01.0** | **+0.7** |
| **ULDT** | **Uludag** | **2.74** | **61** | P | **Pb** | **16 39 07.7** | **+1.4** |
| ULDT | | | | S | **Sg** | **16 39 43.8** | **-1.4** |
| **TVSB** | **Tavsanli** | **2.75** | **76** | *e*PN | **Pn** | **16 39 01.8** | **+0.5** |
| **TVSB** | **Tavsanli** | **2.75** | **76** | *e*Pn | **Pn** | **16 39 01.8** | **+0.5** |
| **KHAL** | **Karahalli** | **2.77** | **99** | P | **Pg** | **16 39 08.5** | **-1.8** |
| KHAL | | | | S | **Sg** | **16 39 45.4** | **-0.9** |
| **ARMT** | **Armutlu** | **2.79** | **51** | *e*PN | **Pn** | **16 39 02.4** | **+0.7** |
| **ARMT** | **Armutlu** | **2.79** | **51** | *e*Pn | **Pn** | **16 39 02.4** | **+0.7** |
| **KDZ** | **Kurdzhali** | **2.83** | **351** | *i* P | **Pn** | **16 39 01.1** | **-1.2** |
| **KDZ** | **Kurdzhali** | **2.83** | **351** | *i* P | **Pn** | **16 39 01.1** | **-1.2** |
| **HORT** | **Hortiatis** | **2.84** | **309** | *e*PN | **Pn** | **16 39 02.6** | **+0.1** |
| **HORT** | **Hortiatis** | **2.84** | **309** | *e*Pn | **Pn** | **16 39 02.6** | **+0.1** |
| **IGD** | **Bursa** | **2.84** | **59** | P | **Pg** | **16 39 09.8** | **-1.9** |
| IGD | | | | S | **Sb** | **16 39 44.3** | **+1.7** |
| **RZN** | **Rozhen** | **3.00** | **341** | *i* P | **Pn** | **16 39 04.6** | **-0.2** |
| **RZN** | **Rozhen** | **3.00** | **341** | *i* P | **Pn** | **16 39 04.6** | **-0.2** |
| **IZI** | **Iznik** | **3.06** | **60** | *e*PN | **Pn** | **16 39 06.2** | **+0.7** |
| **IZI** | **Iznik** | **3.06** | **60** | *e*Pn | **Pn** | **16 39 06.2** | **+0.7** |
| **BUY** | **Buyukada** | **3.12** | **49** | P | **Pb** | **16 39 13.7** | **+1.1** |
| BUY | | | | S | **Sg** | **16 39 55.4** | **-1.9** |
| **BGKT** | **Bogazkoy** | **3.15** | **42** | *e*PN | **Pn** | **16 39 07.5** | **+0.9** |
| **BGKT** | **Bogazkoy** | **3.15** | **42** | *e*Pn | **Pn** | **16 39 07.5** | **+0.9** |
| **CTYL** | **Yal??k??y-??at** | **3.15** | **33** | *e*PN | **Pn** | **16 39 07.3** | **+0.6** |
| **CTYL** | **Yal??k??y-??at** | **3.15** | **33** | *e*Pn | **Pn** | **16 39 07.3** | **+0.6** |
| **ISK** | **Istanbul-Kandi** | **3.22** | **46** | *e*PN | **Pn** | **16 39 08.5** | **+0.9** |
| **ISK** | **Istanbul-Kandi** | **3.22** | **46** | *e*Pn | **Pn** | **16 39 08.5** | **+0.9** |
| **MMB** | **Musomiste** | **3.24** | **328** | *i* P | **Pn** | **16 39 07.9** | **-0.1** |
| **MMB** | **Musomiste** | **3.24** | **328** | *i* P | **Pn** | **16 39 07.9** | **-0.1** |
| **CAVI** | **Cavuskoy** | **3.26** | **64** | *e*PN | **Pn** | **16 39 09.7** | **+1.5** |
| **CAVI** | **Cavuskoy** | **3.26** | **64** | *e*Pn | **Pn** | **16 39 09.7** | **+1.5** |
| **ADVT** | **Abdulvahap** | **3.28** | **60** | *e*PN | **Pn** | **16 39 09.4** | **+0.9** |
| **ADVT** | **Abdulvahap** | **3.28** | **60** | *e*Pn | **Pn** | **16 39 09.4** | **+0.9** |
| **KLYT** | **Kilyos** | **3.34** | **43** | *e*PN | **Pn** | **16 39 10.1** | **+0.8** |
| **KLYT** | **Kilyos** | **3.34** | **43** | *e*Pn | **Pn** | **16 39 10.1** | **+0.8** |
| **HRT** | **Hereke** | **3.44** | **54** | *e*PN | **Pn** | **16 39 11.6** | **+0.9** |
| **HRT** | **Hereke** | **3.44** | **54** | *e*Pn | **Pn** | **16 39 11.6** | **+0.9** |
| **BORA** | **Eskisehir** | **3.59** | **72** | P | **Pb** | **16 39 23.1** | **+2.3** |
| BORA | | | | S | **Sg** | **16 40 10.1** | **-2.5** |
| **SILT** | **Sile** | **3.61** | **49** | *e*PN | **Pn** | **16 39 14.1** | **+1.0** |
| **SILT** | **Sile** | **3.61** | **49** | *e*Pn | **Pn** | **16 39 14.1** | **+1.0** |
| **VTS** | **Vitosha** | **4.30** | **331** | *i* P | **Pn** | **16 39 25.1** | **+2.5** |
| **VTS** | **Vitosha** | **4.30** | **331** | *i* P | **Pn** | **16 39 25.1** | **+2.5** |
| **TLB** | **Topalu** | **5.92** | **14** | ⇑*i* P | **Pn** | **16 39 47.7** | **+2.9** |
| **MLR** | **Muntele Rosu** | **6.63** | **360** | ⇑*i* P | **Pn** | **16 39 56.7** | **+2.1** |
| **MLR** | **Muntele Rosu** | **6.63** | **360** | ⇑*i* P | **Pn** | **16 39 56.7** | **+2.1** |
| **PLOR** | **Plostina** | **7.01** | **4** | ⇓*i* P | **Pn** | **16 40 01.1** | **+1.4** |
| **PLOR** | **Plostina** | **7.01** | **4** | ⇓*i* P | **Pn** | **16 40 01.1** | **+1.4** |
| **VRI** | **Vrincioaia** | **7.03** | **4** | ⇑*i* P | **Pn** | **16 40 01.0** | **+1.0** |
| **VRI** | **Vrincioaia** | **7.03** | **4** | ⇑*i* P | **Pn** | **16 40 01.0** | **+1.0** |

*IDC **26** 16:51:19.4±1.2, 3°.65S×99°.24E, h0km, mb3.8/9, mb1 3.9/9, mb1mx3.7/36, mbtmp3.8/9, Error ellipse: s-maj=50.5km s-min=18.8km az=49.0*

*NEIC **26** 16:51:21.5±0.7, 3°.54S×99°.38E, h10km, mb4.1/2, Error ellipse: s-maj=24.6km s-min=7.4km az=47.0*

*ISCJB **26** 16:51:23.1±0.6, 3°.45S±0°.05×99°.45E±0°.06, h33km, mb3.9/11, Error ellipse: s-maj=9.3km s-min=6.7km az=179.0*

*DJA **26** 16:51:25.3±1.0, 3°S±5°×10°.0E±°, h40km±7km, M4.0/7, MLv4.0/7*

**ISC 26 16:51:25.4**±0.8, **3°.40S**±0°.08×**99°.49E**±0°.08, **h35**km, **n28**, σ0**s84**/25, **mb4.0**/11, **Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.82** | **39** | P | **Pn** | **16 51 39.4** | **-1.1** |
| PPSI | | | | S | **Sn** | **16 51 51.4** | **-0.1** |
| **SISI** | **Saibi** | **2.10** | **349** | P | **Pn** | **16 51 57.4** | **-0.7** |
| SISI | | | | S | **Sn** | **16 52 23.9** | **+0.9** |
| **PDSI** | **Padang** | **2.66** | **22** | P | **Pn** | **16 52 04.9** | **-0.9** |
| PDSI | | | | S | **Sn** | **16 52 36.8** | **-0.1** |
| **PPI** | **Padang Panjang** | **3.06** | **17** | P | **Pn** | **16 52 10.7** | **-0.7** |
| PPI | | | | S | **Sn** | **16 52 46.7** | **-0.1** |
| **SDSI** | **Sungai Dareh** | **3.13** | **38** | P | **Pn** | **16 52 12.1** | **-0.1** |
| **MNAI** | **Manna** | **3.59** | **105** | *e*P | **Pn** | **16 52 18.3** | **-0.3** |
| **MNSI** | **Mandailing Nat** | **4.17** | **1** | P | **Pn** | **16 52 26.3** | **-0.3** |
| **GSI** | **Gunungsitoli** | **5.05** | **338** | *e*P | **Pn** | **16 52 37.8** | **-0.9** |
| **CISI** | **Cisompet, Garu** 36nm,0.5s | **9.26** | **117** | *e*P | Pn | 16 53 31.5 | -5.1 |
| **CMAR** | **Chiang Mai Arr** 3.8nm,0.9s,baz=187,slow=10,SNR=37 | **21.73** | **359** | P | **P** | **16 56 14.9** | **+1.1** |
| **H08S2** | **Diego Garcia H** baz=81,slow=75,SNR=16 | **27.19** | **260** | T | T | 17 26 19.7 | |
| **H08S3** | **Diego Garcia H** baz=81,slow=75,SNR=13 | **27.20** | **260** | T | T | 17 26 13.9 | |
| **H08S1** | **Diego Carcia H** baz=81,slow=75,SNR=12 | **27.21** | **260** | T | T | 17 26 08.8 | |
| **H01W3** | **Cape Leeuwin H** baz=333 | **34.15** | **158** | T | T | 17 34 25.2 | |
| **H01W2** | **Cape Leeuwin H** baz=333 | **34.16** | **158** | T | T | 17 34 33.4 | |
| **H01W1** | **Cape Leeuwin H** baz=333 | **34.16** | **158** | T | T | 17 34 29.4 | |
| **WRA** | **Warramunga Arr** 0.2nm,0.3s,baz=305,slow=9.2,SNR=4.1 | **37.75** | **119** | P | **P** | **16 58 37.8** | **-0.6** |
| **WRAB** | **Tennant Creek** 1.4nm,0.6s | **37.76** | **119** | *e*P | **P** | **16 58 38.5** | **+0.2** |
| **ASAR** | **Alice Springs** 0.2nm,0.6s,baz=299,slow=8.0,SNR=6.6 | **38.87** | **124** | P | **P** | **16 58 47.0** | **-0.7** |
|

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| SISI | | | | S | Sn | 17 23 03.4 | -0.8 |
| PPI | Padang Panjang | 3.19 | 10 | P | Pn | 17 22 46.6 | -0.5 |
| MDSI | Maura Dua | 4.42 | 101 | P | Pn | 17 23 04.6 | +0.6 |
| MDSI | | | | S | Sn | 17 23 53.4 | -0.9 |
| LWLI | Liwa | 4.44 | 108 | P | Pn | 17 23 03.9 | -0.4 |
| LWLI | | | | S | Sn | 17 23 52.3 | -2.6 |
| CMAR | Chiang Mai Arr | 21.96 | 358 | P | P | 17 26 49.9 | -0.3 |
| | 0.4nm,0.3s,baz=185,slow=10,SNR=5.7 | | | | | | |
| H08S2 | Diego Garcia H | 27.49 | 260 | T | T | 17 57 12.2 | |
| | baz=224,slow=74,SNR=6.6 | | | | | | |
| H08S3 | Diego Garcia H | 27.49 | 260 | T | T | 17 57 34.8 | |
| | baz=81,slow=74,SNR=4.7 | | | | | | |
| H08S1 | Diego Carcia H | 27.50 | 260 | T | T | 17 57 21.7 | |
| H01W3 | Cape Leeuwin H | 33.82 | 159 | T | T | 18 05 07.9 | |
| | baz=330 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.84 | 159 | T | T | 18 05 04.4 | |
| | baz=330 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.84 | 159 | T | T | 18 05 04.4 | |
| | baz=330 | | | | | | |
| WRA | Warramunga Arr | 37.35 | 119 | P | P | 17 29 08.4 | -0.5 |
| | 0.3nm,0.7s,baz=304,slow=9.0,SNR=2.5 | | | | | | |
| ASAR | Alice Springs | 38.47 | 124 | P | P | 17 29 19.1 | +0.8 |
| | 0.2nm,0.5s,baz=299,slow=7.6,SNR=13 | | | | | | |
| SONM | Songino Array | 51.56 | 6 | P | P | 17 31 03.7 | +1.7 |
| | 0.5nm,0.6s,baz=190,slow=9.7,SNR=4.6 | | | | | | |
| MKAR | Makanchi Array | 52.54 | 345 | P | P | 17 31 10.2 | +1.0 |
| | 0.6nm,0.7s,baz=167,slow=8.1,SNR=2.7 | | | | | | |
| ZALV | Zalesovo Beam | 58.72 | 350 | P | P | 17 31 52.8 | -0.6 |
| | 0.3nm,0.3s,baz=163,slow=5.6,SNR=2.7 | | | | | | |

*ISCJB **26** 17:26:27.9±0.5,39°.06N±0°.03×26°.85E±0°.04,h3km±7km, Error ellipse: s-maj=5.3km s-min=4.3km az=136.8*
*DDA **26** 17:26:27.6,39°.08N×26°.84E,h7km,Md2.7*
*ISK **26** 17:26:27.9,39°.05N×26°.85E,h9km,MD2.6*
*CSEM **26** 17:26:28.1±0.2,39°.06N×26°.85E,h5km,MD2.6,Error ellipse: s-maj=4.3km s-min=3.2km az=34.0*

**ISC 26 17:26:27.8±1.1,39°.07N±0°.03×26°.85E±0°.03,h7km±10km, n24,σ0s36/36,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| AYVA | Ayvalik | 0.27 | 333 | *i* P | Pg | 17 26 32.8 | -0.3 |
| AYVA | | | | *i* S | Sg | 17 26 36.8 | +0.1 |
| AYVA | Ayvalik | 0.27 | 333 | P | Pg | 17 26 32.8 | -0.3 |
| AYVA | | | | S | Sg | 17 26 36.8 | +0.1 |
| IZM | Izmir | 0.74 | 154 | *e*PG | Pg | 17 26 42.3 | +0.2 |
| IZM | | | | *e*SG | Sb | 17 26 52.8 | -0.8 |
| IZM | Izmir | 0.74 | 154 | *e*Pg | Pg | 17 26 42.3 | +0.2 |
| IZM | | | | *e*Sg | Sb | 17 26 52.8 | -0.8 |
| AKS | Akhisar | 0.78 | 104 | *e*PG | Pg | 17 26 43.1 | +0.3 |
| AKS | Akhisar | 0.78 | 104 | *e*Pg | Pg | 17 26 43.1 | +0.3 |
| SIGR | SIGRI | 0.78 | 281 | *e*PG | Pb | 17 26 43.5 | -0.3 |
| SIGR | | | | *e*SG | Sb | 17 26 54.9 | +0.2 |
| SIGR | SIGRI | 0.78 | 281 | *e*Pg | Pb | 17 26 43.6 | -0.3 |
| SIGR | | | | *e*Sg | Sb | 17 26 54.9 | +0.2 |
| ZEY | ¨zmir | 0.87 | 198 | P | Pg | 17 26 44.9 | +0.3 |
| ZEY | | | | S | Sb | 17 26 57.3 | +0.2 |
| BALB | Balikesir | 0.98 | 54 | *e*PG | Pb | 17 26 47.4 | +0.2 |
| BALB | | | | *e*SG | Sn | 17 27 01.6 | -0.6 |
| BALB | Balikesir | 0.98 | 54 | *e*Pg | Pb | 17 26 47.4 | +0.2 |
| BALB | | | | *e*Sg | Sn | 17 27 01.7 | -0.6 |
| BOZC | Bozcaada | 0.99 | 322 | P | Pb | 17 26 47.6 | +0.3 |
| BOZC | | | | S | Sb | 17 27 00.9 | +0.3 |
| LPK | Lapseki | 1.30 | 357 | *e*PN | Pg | 17 26 52.9 | 0.0 |
| LPK | Lapseki | 1.30 | 357 | *e*Pn | Pg | 17 26 52.9 | 0.0 |
| GADA | Gvkgeada | 1.34 | 327 | *e*PN | Pg | 17 26 53.5 | 0.0 |
| GADA | Gvkgeada | 1.34 | 327 | *e*Pn | Pg | 17 26 53.5 | 0.0 |
| DURS | Dursunbey | 1.37 | 67 | *i* P | Pn | 17 26 53.3 | -0.2 |
| DURS | | | | *i* S | Sn | 17 27 12.2 | +0.2 |
| DURS | Dursunbey | 1.37 | 67 | P | Pn | 17 26 53.3 | -0.2 |
| DURS | | | | S | Sn | 17 27 12.2 | +0.2 |
| AYDB | Zeytinkoy-Aydi | 1.39 | 143 | *e*PN | Pn | 17 26 53.8 | 0.0 |
| AYDB | Zeytinkoy-Aydi | 1.39 | 143 | *e*Pn | Pn | 17 26 53.8 | 0.0 |
| ERIK | Erikli-Kesan | 1.62 | 351 | *e*PN | Pb | 17 26 57.8 | -0.3 |
| ERIK | Erikli-Kesan | 1.62 | 351 | *e*Pn | Pb | 17 26 57.8 | -0.3 |
| RKY | Sarkoy-Tekirda | 1.64 | 9 | *e*PN | Pn | 17 26 57.8 | +0.7 |
| RKY | Sarkoy-Tekirda | 1.64 | 9 | *e*Pn | Pn | 17 26 57.8 | +0.7 |

**IDC 26 17:26:29.9±4.4,3°.30S×99°.17E,h0km,mb3.1/3,mb1 3.3/3, mb1mx3.2/31,mbtmp3.2/3,MS2.6/1,Ms1 2.6/1, ms1mx2.3/15,Error ellipse: s-maj=168.8km s-min=31.0km az=60.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PALK | Pallekele | 21.21 | 300 | LR | LR | 17 36 58.0 | |
| | comp=Z,18nm,21.2s,baz=116,slow=30 | | | | | | |
| CMAR | Chiang Mai Arr | 21.62 | 359 | P | P | 17 31 22.4 | +0.5 |
| | 0.6nm,0.9s,baz=186,slow=11,SNR=5.6 | | | | | | |
| H08S2 | Diego Garcia H | 26.89 | 260 | T | T | 18 01 31.9 | |
| | baz=80 | | | | | | |
| H08S3 | Diego Garcia H | 26.90 | 260 | T | T | 18 01 30.2 | |
| | baz=80 | | | | | | |
| H08S1 | Diego Carcia H | 26.91 | 260 | T | T | 18 01 32.8 | |
| | baz=80 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.36 | 158 | T | T | 18 09 41.3 | |
| | baz=337 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.37 | 158 | T | T | 18 09 41.8 | |
| | baz=337 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.38 | 158 | T | T | 18 09 40.2 | |
| | baz=337 | | | | | | |
| ASAR | Alice Springs | 39.19 | 124 | P | P | 17 33 60.0 | 0.0 |
| | 0.2nm,0.6s,baz=297,slow=7.9,SNR=3.7 | | | | | | |
| MKAR | Makanchi Array | 52.06 | 345 | P | P | 17 35 40.9 | -0.6 |
| | 0.3nm,0.6s,baz=144,slow=8.6,SNR=2.8 | | | | | | |

**IDC 26 17:51:24.1±4.4,17°.65S×179°.22W,h0km,mb3.8/3, mb1 4.2/3,mb1mx3.7/24,mbtmp3.8/3,Error ellipse: s-maj=339.1km s-min=29.0km az=153.0,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | Warramunga Arr | 43.92 | 259 | P | P | 17 59 32.4 | -0.6 |
| | 1.0nm,1.1s,baz=95,slow=7.6,SNR=3.6 | | | | | | |
| ASAR | Alice Springs | 44.12 | 254 | P | P | 17 59 34.8 | +0.2 |
| | 2.6nm,0.5s,baz=88,slow=8.1,SNR=62 | | | | | | |
| NVAR | Mina Array Bea | 79.78 | 44 | P | P | 18 03 34.6 | +0.1 |
| | 0.5nm,0.6s,baz=224,slow=7.6,SNR=2.9 | | | | | | |

*IDC **26** 17:57:59.9±3.4,3°.57S×98°.96E,h0km,mb3.3/6,mb1 3.5/6, mb1mx3.4/35,mbtmp3.4/6,MS3.1/2,Ms1 3.2/2, ms1mx2.7/21,Error ellipse: s-maj=128.9km s-min=20.5km az=58.0*
*ISCJB **26** 17:58:04.9±0.9,3°.34S±0°.06×99°.50E±0°.08,h33km, mb3.3/6,MS3.0/2,Error ellipse: s-maj=12.3km s-min=8.3km az=167.5*
*DJA **26** 17:58:06.7±1.1,3°.5S±5°×10°.0E±°,h34km±7km,M3.8/3, MLv3.8/3*

**ISC 26 17:58:07.3±1.2,3°.28S±0°.09×99°.6E±0°.1,h35km,n14, σ0s88/13,mb3.4/6,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PPSI | Pulau Pagai | 0.67 | 41 | P | Pn | 17 58 19.7 | -0.6 |
| PPSI | | | | S | Sn | 17 58 29.7 | +0.1 |
| SISI | Saibi | 2.00 | 346 | P | Pn | 17 58 37.9 | -0.6 |
| SISI | | | | S | Sn | 17 59 03.5 | +1.2 |
| PDSI | Padang | 2.51 | 21 | P | Pn | 17 58 45.2 | -0.4 |
| PDSI | | | | S | Sn | 17 59 15.5 | +0.4 |
| MNAI | Manna | 3.54 | 108 | P | Pn | 17 58 59.3 | -0.5 |
| CMAR | Chiang Mai Arr | 21.61 | 358 | P | P | 18 02 54.6 | +0.2 |
| | 0.6nm,0.8s,baz=191,slow=9.1,SNR=3.9 | | | | | | |
| CMAR | | | | LR | LR | 18 12 23.5 | |
| | comp=Z,45nm,18.4s,baz=122,slow=40 | | | | | | |
| H08S2 | Diego Garcia H | 27.30 | 260 | T | T | 18 32 31.4 | |
| | baz=81,slow=75,SNR=9.1 | | | | | | |
| H08S3 | Diego Garcia H | 27.30 | 260 | T | T | 18 32 31.4 | |
| | baz=81,slow=75,SNR=11 | | | | | | |
| H08S1 | Diego Carcia H | 27.32 | 260 | T | T | 18 32 32.0 | |
| | baz=81,slow=75,SNR=8.6 | | | | | | |
| WRA | Warramunga Arr | 37.74 | 119 | P | P | 18 05 20.4 | +0.3 |
| | 0.4nm,0.9s,baz=293,slow=8.7,SNR=2.5 | | | | | | |
| ASAR | Alice Springs | 38.87 | 125 | P | P | 18 05 30.7 | +1.1 |
| | 0.2nm,1.0s,baz=302,slow=7.2,SNR=2.8 | | | | | | |
| SONM | Songino Array | 51.25 | 6 | P | P | 18 07 08.4 | +0.8 |
| | 0.4nm,0.7s,baz=201,slow=7.7,SNR=3.1 | | | | | | |
| MKAR | Makanchi Array | 52.14 | 345 | P | P | 18 07 12.7 | -1.5 |
| | 0.5nm,0.7s,baz=154,slow=8.0,SNR=3.6 | | | | | | |

*PRU **26** 17:18:14.5,46°.20N×13°.54E,h4km*

**ISC 26 17:18:12.5±0.8,46°.11N±0°.02×13°.54E±0°.02,h14km±4km, n77,σ0s51/114,23C-20D,Austria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DRE | Drenchia | 0.10 | 47 | ⇑*e*Pg | Pg | 17 18 15.6 | -0.1 |
| DRE | | | | *e*Sg | Sg | 17 18 17.9 | +0.1 |
| DRE | Drenchia | 0.10 | 47 | ⇑*e*Pg | Pg | 17 18 15.6 | -0.1 |
| DRE | | | | *e*Sg | Sg | 17 18 18.0 | +0.1 |
| COLI | Coloredo | 0.11 | 284 | ⇓*e*Pg | Pg | 17 18 15.4 | -0.4 |
| COLI | | | | *e*Sg | Sg | 17 18 17.6 | -0.4 |
| COLI | Coloredo | 0.11 | 284 | ⇓*e*Pg | Pg | 17 18 15.4 | -0.4 |
| COLI | | | | *e*Sg | Sg | 17 18 17.6 | -0.4 |
| SABO | M.te Sabotino | 0.13 | 161 | ⇑*i*Pg | Pg | 17 18 16.2 | +0.2 |
| SABO | | | | *i* Sg | Sg | 17 18 18.8 | +0.4 |
| SABO | M.te Sabotino | 0.13 | 161 | ⇑*i*Pg | Pg | 17 18 16.2 | +0.2 |
| SABO | | | | Sg | Sg | 17 18 19.1 | +0.6 |
| | 1μm,0.2s | | | | | | |
| ROBS | Robic | 0.14 | 352 | ⇓*i*Pg | Pg | 17 18 15.8 | -0.3 |
| ROBS | | | | *i* Sg | Sg | 17 18 18.4 | -0.2 |
| | comp=Z,220nm,0.1s | | | | | | |
| ROBS | Robic | 0.14 | 352 | Pg | Pg | 17 18 15.8 | -0.3 |
| ROBS | | | | *i* Sg | Sg | 17 18 18.4 | -0.2 |
| | comp=Z,220nm,0.1s | | | | | | |
| CADS | Cadrg | 0.18 | 49 | ⇑*i*Pg | Pg | 17 18 16.8 | 0.0 |
| CADS | | | | *i* Sg | Sg | 17 18 20.2 | +0.5 |
| | comp=Z,207nm,0.1s | | | | | | |
| CADS | Cadrg | 0.18 | 49 | ⇑*i*Pg | Pg | 17 18 16.8 | 0.0 |
| CADS | | | | *i* Sg | Sg | 17 18 20.2 | +0.5 |
| | comp=Z,207nm,0.1s | | | | | | |
| VINO | Villanova | 0.23 | 310 | ⇓*i*Pg | Pg | 17 18 16.9 | -0.7 |
| VINO | | | | *i* Sg | Sg | 17 18 20.6 | -0.4 |
| VINO | Villanova | 0.23 | 310 | ⇓*i*Pg | Pg | 17 18 16.9 | -0.7 |
| VINO | | | | Sg | Sg | 17 18 20.6 | -0.4 |
| | comp=Z,309nm,0.2s | | | | | | |
| BAD | Bernadia | 0.24 | 303 | ⇓*e*Pg | Pg | 17 18 17.1 | -0.7 |
| BAD | | | | *e*Sg | Sg | 17 18 20.8 | -0.5 |
| BAD | Bernadia | 0.24 | 303 | ⇓*e*Pg | Pg | 17 18 17.1 | -0.7 |
| BAD | | | | *e*Sg | Sg | 17 18 20.8 | -0.5 |
| VOJS | Vojsko | 0.25 | 107 | ⇑*i*Pg | Pg | 17 18 18.0 | +0.1 |
| VOJS | | | | *i* Sg | Sb | 17 18 22.8 | -0.4 |
| VOJS | Vojsko | 0.25 | 107 | ⇑*i*Pg | Pg | 17 18 18.0 | +0.1 |
| VOJS | | | | *i* Sg | Sb | 17 18 22.8 | -0.4 |
| BUA | Buia | 0.31 | 291 | ⇑*e*Pg | Pg | 17 18 18.4 | -0.5 |
| BUA | | | | *e*Sg | Sg | 17 18 23.7 | +0.5 |
| BUA | Buia | 0.31 | 291 | ⇑*e*Pg | Pg | 17 18 18.4 | -0.5 |
| BUA | | | | *e*Sg | Sg | 17 18 23.7 | +0.5 |
| PTCC | Patocco-Chiusa | 0.33 | 337 | ⇓*e*Pg | Pg | 17 18 18.5 | -0.7 |
| PTCC | | | | Sg | Sg | 17 18 23.4 | -0.4 |
| | comp=Z,71nm,0.4s | | | | | | |
| TLI | Talmassons | 0.36 | 239 | *e*Pg | Pg | 17 18 19.2 | -0.5 |
| TLI | Talmassons | 0.36 | 239 | *e*Pg | Pg | 17 18 19.2 | -0.5 |
| LSR | Lussari | 0.37 | 359 | ⇑*e*Pg | Pg | 17 18 19.6 | -0.5 |
| LSR | Lussari | 0.37 | 359 | ⇑*e*Pg | Pg | 17 18 19.6 | -0.5 |
| GORS | Gorjuse | 0.38 | 56 | *i* Pg | Pg | 17 18 19.9 | -0.3 |
| GORS | | | | *i* | Pg | 17 18 20.1 | -0.2 |
| | comp=Z,43nm,0.1s | | | | | | |
| GORS | Gorjuse | 0.38 | 56 | *i* Pg | Pg | 17 18 19.9 | -0.3 |
| | comp=Z,43nm,0.1s | | | | | | |
| MPRI | Monte Prat | 0.41 | 290 | ⇓*e*Pg | Pg | 17 18 20.1 | -0.5 |
| MPRI | | | | *e*Sg | Sb | 17 18 27.1 | -0.5 |
| MPRI | Monte Prat | 0.41 | 290 | ⇓*e*Pg | Pg | 17 18 20.1 | -0.5 |
| MPRI | | | | *e*Sg | Sb | 17 18 27.1 | -0.5 |
| JAVS | Javornik | 0.42 | 120 | *i* Pg | Pg | 17 18 20.7 | -0.3 |
| JAVS | | | | *i* | Pg | 17 18 20.9 | -0.1 |
| | comp=Z,32nm,0.1s | | | | | | |
| JAVS | Javornik | 0.42 | 120 | *i* Pg | Pg | 17 18 20.7 | -0.3 |
| | comp=Z,32nm,0.1s | | | | | | |
| TRI | Trieste | 0.43 | 158 | ⇓*e*Pg | Pg | 17 18 20.5 | -0.5 |
| TRI | | | | *e*Sg | Sg | 17 18 27.3 | +0.5 |
| TRI | Trieste | 0.43 | 158 | ⇓*e*Pg | Pg | 17 18 20.5 | -0.5 |
| TRI | | | | *e*Sg | Sg | 17 18 27.3 | +0.5 |
| ACOM | Acomizza, Ital | 0.44 | 358 | ⇑*e*Pg | Pg | 17 18 21.0 | -0.4 |
| ACOM | | | | *e*Sg | Sb | 17 18 28.2 | -0.7 |
| ACOM | Acomizza, Ital | 0.44 | 358 | Pg | Pg | 17 18 20.9 | -0.4 |
| ACOM | | | | Sg | Sb | 17 18 28.1 | -0.7 |
| | comp=Z,79nm,0.5s | | | | | | |
| FUSE | Fusea | 0.48 | 310 | *e*Pg | Pg | 17 18 21.3 | -0.8 |
| FUSE | | | | *e*Sg | Sg | 17 18 28.6 | +0.1 |
| FUSE | Fusea | 0.48 | 310 | *e*Pg | Pg | 17 18 21.3 | -0.8 |
| FUSE | | | | *e*Sg | Sg | 17 18 28.6 | +0.1 |
| CRNS | Crni Vrh | 0.50 | 93 | *i* Pg | Pg | 17 18 22.2 | -0.2 |
| | comp=Z,36nm,0.1s | | | | | | |
| PLRO | Paularo | 0.52 | 329 | *e*Pg | Pg | 17 18 23.0 | +0.2 |
| PLRO | Paularo | 0.52 | 329 | *e*Pg | Pg | 17 18 23.0 | +0.2 |
| PLRO | | | | *e*Sg | Sb | 17 18 32.5 | +1.5 |
| MYKA | Terra Mystica | 0.53 | 8 | ⇓*e*Pg | Pg | 17 18 22.8 | -0.1 |
| | SNR=5.8 | | | | | | |
| MYKA | | | | ⇑*e*Sg | Sg | 17 18 30.3 | +0.3 |
| | SNR=14 | | | | | | |
| MYKA | Terra Mystica | 0.53 | 8 | Pg | Pg | 17 18 22.8 | -0.1 |
| | SNR=5.8 | | | | | | |
| MYKA | | | | Sg | Sg | 17 18 30.3 | +0.3 |
| | SNR=14 | | | | | | |
| ZOU | Zoufplan | 0.60 | 319 | *e*Pg | Pg | 17 18 23.7 | -0.6 |
| ZOU | | | | *e*Sg | Sg | 17 18 32.5 | +0.3 |
| MLNI | Malnisio | 0.65 | 274 | ⇓*e*Pg | Pg | 17 18 25.2 | +0.1 |
| MLNI | | | | *e*Sg | Sb | 17 18 34.5 | -0.1 |
| MLNI | Malnisio | 0.65 | 274 | ⇓*e*Pg | Pg | 17 18 25.2 | +0.1 |
| MLNI | | | | *e*Sg | Sb | 17 18 34.5 | -0.1 |
| SKDS | Skadanscina | 0.65 | 149 | *i* Pg | Pg | 17 18 24.4 | -0.8 |
| SKDS | Skadanscina | 0.65 | 149 | *i* Pg | Pg | 17 18 24.4 | -0.8 |
| MOZS | Mozjanca | 0.66 | 73 | *i* Pg | Pg | 17 18 25.3 | 0.0 |
| MOZS | Mozjanca | 0.66 | 73 | *i* Pg | Pg | 17 18 25.3 | 0.0 |
| CEY | Cerknica | 0.72 | 120 | *e*Pg | Pg | 17 18 25.6 | -0.9 |
| CEY | Cerknica | 0.72 | 120 | *e*Pg | Pg | 17 18 25.6 | -0.9 |
| POLC | Polcenigo | 0.73 | 264 | *e*Pg | Pg | 17 18 26.1 | -0.5 |
| CAE | Caneva | 0.77 | 263 | *e*Pg | Pb | 17 18 27.7 | -0.1 |
| CAE | Caneva | 0.77 | 263 | *e*Pg | Pb | 17 18 27.7 | -0.1 |
| CIMO | Cimolais | 0.79 | 285 | *e*Pg | Pg | 17 18 26.4 | -1.4 |
| CIMO | Cimolais | 0.79 | 285 | *e*Pg | Pg | 17 18 26.4 | -1.4 |
| OBKA | Obir | 0.81 | 60 | ⇑*e*Sg | Sg | 17 18 38.0 | -0.8 |
| | comp=Z,21nm,0.2s,SNR=6.0 | | | | | | |
| OBKA | Obir | 0.81 | 60 | Sg | Sg | 17 18 38.0 | -0.8 |
| | comp=Z,21nm,0.2s,SNR=6.0 | | | | | | |
| ABTA | Abfaltersbach | 0.96 | 312 | ⇑*e*Pg | Pb | 17 18 30.9 | -0.1 |
| | SNR=11 | | | | | | |
| ABTA | | | | ⇑*e*Sg | Sg | 17 18 43.9 | +0.4 |
| | comp=Z,10.0nm,0.3s,SNR=5.3 | | | | | | |
| ABTA | Abfaltersbach | 0.96 | 312 | Pg | Pb | 17 18 30.9 | -0.1 |
| | SNR=11 | | | | | | |
| ABTA | | | | Sg | Sg | 17 18 43.9 | +0.4 |
| | comp=Z,10.0nm,0.3s,SNR=5.3 | | | | | | |
| VISS | Visnje | 0.96 | 108 | *i* Pg | Pb | 17 18 30.7 | -0.2 |
| VISS | Visnje | 0.96 | 108 | *i* Pg | Pb | 17 18 30.7 | -0.2 |
| VARN | Col Varnada, M | 1.00 | 264 | ⇑*e*Pg | Pg | 17 18 31.9 | 0.0 |
| VARN | Col Varnada, M | 1.00 | 264 | *e*Pg | Pg | 17 18 31.9 | 0.0 |
| AGOR | Agordo | 1.05 | 280 | ⇓*e*Pg | Pg | 17 18 33.5 | +0.7 |
| AGOR | Agordo | 1.05 | 280 | ⇓*e*Pg | Pg | 17 18 33.5 | +0.7 |
| GBRS | Gornja Briga | 1.06 | 122 | *i* Pg | Pn | 17 18 32.9 | -0.1 |
| | comp=Z,22nm,0.1s | | | | | | |
| CGRP | Cima Grappa | 1.23 | 260 | *e*Pg | Pb | 17 18 35.6 | -0.1 |
| CGRP | Cima Grappa | 1.23 | 260 | *e*Pg | Pb | 17 18 35.6 | -0.1 |
| RISI | Rein | 1.31 | 310 | ⇓*i*Pg | Pg | 17 18 38.3 | +0.5 |
| TEOL | Teolo | 1.51 | 241 | ⇓*i*Pg | Pn | 17 18 39.3 | +0.2 |
| TEOL | Teolo | 1.51 | 241 | ⇓*i*Pg | Pn | 17 18 39.3 | +0.2 |
| KOSI | Kohlern | 1.54 | 284 | ⇓*e*Pg | Pb | 17 18 41.0 | +0.1 |
| PANI | Panarotta | 1.55 | 269 | ⇑*e*Pg | Pn | 17 18 40.4 | +0.4 |
| PANI | Panarotta | 1.55 | 269 | ⇑*e*Pg | Pn | 17 18 40.3 | +0.4 |
| DDS | Dosso del Somm | 1.65 | 263 | ⇑*e*Pg | Pn | 17 18 41.6 | +0.3 |
| DDS | Dosso del Somm | 1.65 | 263 | ⇑*e*Pg | Pn | 17 18 41.6 | +0.3 |
| ABSI | Aberstueckl | 1.66 | 293 | *e*Pg | Pb | 17 18 42.8 | -0.1 |
| KHC | Kasperske Hory | 3.03 | 0 | *e*SN | Sn | 17 19 37.3 | +1.1 |

*IDC **26** 17:21:54.2±3.9,3°.70S×99°.71E,h0km,mb3.4/6,mb1 3.6/6, mb1mx3.4/32,mbtmp3.5/6,Error ellipse: s-maj=147.7km s-min=21.6km az=58.0*
*ISCJB **26** 17:21:57.1±1.0,3°.67S±0°.07×99°.84E±0°.08,h33km, mb3.4/6,Error ellipse: s-maj=14.5km s-min=5.7km az=139.8*
*DJA **26** 17:21:57.5±2.3,4°.5S±9°×10°.0E±1°.3,h37km±17km,M3.7/5, MLv3.7/5*

**ISC 26 17:21:59.3±1.4,3°.6S±0°.1×99°.8E±0°.1,h35km,n17, σ1s24/15,mb3.5/6,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PPSI | Pulau Pagai | 0.87 | 12 | P | Pn | 17 22 14.3 | -0.8 |
| PPSI | | | | S | Sn | 17 22 27.2 | +0.6 |
| SISI | Saibi | 2.40 | 342 | P | Pn | 17 22 34.3 | -1.7 |

*LJU **26** 17:18:11.9,46°.11N×13°.52E,h16km,ML2.1*
*CSEM **26** 17:18:12.2±0.1,46°.09N×13°.51E,h10km,ML2.6/8,Error ellipse: s-maj=2.7km s-min=2.0km az=17.0*
*VIE **26** 17:18:12.1±0.1,46°.12N×13°.56E,h11km±1km,mb2.4/5, ml2.7/6,Error ellipse: s-maj=1.2km s-min=0.8km az=40.0*

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ATD** | **Arta Tunnel** | **58.29** | **286** | LR | LR | 18 27 42.6 | |
| | comp=Z,15nm,20.4s,slow=31 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.34** | **350** | P | **P** | **18 07 57.8** | **-0.9** |
| | 0.7nm,0.5s,baz=181,slow=5.9,SNR=4.5 | | | | | | |

**IDC 26 17:59:17.4±7.0, 16°.73S×178°.94W, h0km, mb3.6/2, mb1 3.9/2, mb1mx3.6/28, mbtmp3.6/2, Error ellipse: s-maj=394.1km s-min=99.9km az=153.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.36** | **258** | P | P | 18 07 29.5 | -0.4 |
| | 0.5nm,0.7s,baz=94,slow=7.4,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **44.63** | **253** | P | P | 18 07 32.1 | 0.0 |
| | 0.8nm,0.6s,baz=86,slow=8.8,SNR=18 | | | | | | |
| **BRTR** | **Keskin Array B** | **143.59** | **316** | PKP | PKPdf | 18 18 54.1 | -0.6 |
| | 0.3nm,0.6s,baz=64,slow=3.4,SNR=2.9 | | | | | | |

*IDC **26** 18:04:34.4±1.2, 26°.03N×142°.75E, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.7/32, mbtmp3.7/7, MS2.9/3, Ms1 2.9/3, ms1mx2.5/32, Error ellipse: s-maj=40.7km s-min=23.5km az=93.0*
*ISCJB **26** 18:04:37.5±1.0, 26°.0N±0°.1×142°.8E±0°.3, h33km, mb3.7/7, MS2.9/1, Error ellipse: s-maj=32.4km s-min=19.5km az=3.8*
**ISC 26 18:04:39.7±1.2, 26°.0N±0°.2×142°.7E±0°.3, h35km, n13, σ0s69/7, mb3.5/7, Bonin Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNU** | **Nakatsue** | **12.50** | **307** | LR | LR | 18 11 34.3 | |
| | comp=Z,43nm,21.8s,baz=119,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **16.96** | **316** | LR | LR | 18 14 12.5 | |
| | comp=Z,49nm,18.6s,baz=145,slow=34 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.12** | **101** | T | T | 18 33 25.9 | |
| | baz=290,slow=74,SNR=19 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.12** | **101** | T | T | 18 33 26.7 | |
| | baz=290,slow=74,SNR=11 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.13** | **101** | T | T | 18 33 27.6 | |
| | baz=290,slow=74,SNR=17 | | | | | | |
| **PMG** | **Port Moresby** | **35.47** | **172** | LR | LR | 18 25 36.1 | |
| | comp=Z,21nm,18.7s,baz=282,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.06** | **269** | P | **P** | **18 12 20.3** | **+0.1** |
| | 0.6nm,0.6s,baz=72,slow=5.7,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **46.41** | **191** | P | **P** | **18 13 02.5** | **-0.5** |
| | 1.3nm,0.5s,baz=11,slow=8.3,SNR=13 | | | | | | |
| **ASAR** | **Alice Springs** | **50.12** | **191** | P | **P** | **18 13 32.1** | **+0.4** |
| | 0.5nm,1.2s,baz=14,slow=12,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.53** | **310** | P | **P** | **18 13 41.7** | **-0.4** |
| | 0.5nm,0.9s,baz=86,slow=9.1,SNR=2.7 | | | | | | |
| **ILAR** | **Eielson Array** | **58.43** | **28** | P | **P** | **18 14 31.3** | **-0.3** |
| | 0.4nm,0.9s,baz=258,slow=5.7,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **79.12** | **334** | P | **P** | **18 16 40.3** | **-0.1** |
| | 1.1nm,0.5s,baz=84,slow=5.2,SNR=11 | | | | | | |
| **NOA** | **NORSAR Array B** | **84.78** | **339** | P | **P** | **18 17 11.3** | **+1.1** |
| | 0.9nm,0.8s,baz=46,slow=4.5,SNR=2.7 | | | | | | |

**KRSC 26 18:16:32.7±1.4, 51°.91N×158°.33E, h98km±15km, ML3.7, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RUS** | **Russkaya** | **0.54** | **12** | *eP* | Pn | 18 16 49.7 | +1.2 |
| RUS | | | | *eS* | Sn | 18 17 01.0 | +0.7 |
| **ASAK** | **Asacha** | **0.54** | **331** | *eP* | Pn | 18 16 49.5 | +0.8 |
| ASAK | | | | *eS* | Sn | 18 17 01.2 | +0.5 |
| **MTVR** | **Mutnovka** | **0.58** | **351** | *eP* | Pn | 18 16 50.2 | +1.1 |
| MTVR | | | | *eS* | Sn | 18 17 01.9 | +0.6 |
| **GRL** | **Gorelyy** | **0.66** | **346** | *eP* | Pn | 18 16 51.2 | +1.5 |
| GRL | | | | *eS* | Sn | 18 17 03.6 | +1.1 |
| **PAU** | **Pauzhetka** | **1.04** | **245** | *eP* | Pn | 18 16 55.1 | +1.7 |
| PAU | | | | *eS* | Sn | 18 17 10.6 | +1.6 |
| **PET** | **Petropavlovsk** | **1.13** | **10** | *eP* | Pn | 18 16 56.0 | +1.6 |
| PET | | | | *eS* | Sn | 18 17 11.8 | +1.0 |
| **APC** | **Apacha** | **1.24** | **325** | *eP* | Pn | 18 16 56.8 | +1.1 |
| APC | | | | *eS* | Sn | 18 17 12.9 | -0.2 |
| **UGLR** | **Uglovaya** | **1.34** | **13** | *eP* | Pn | 18 16 59.6 | +2.6 |
| UGLR | | | | *eS* | Sn | 18 17 17.9 | +2.6 |
| **AVH** | **Avacha** | **1.38** | **10** | *eP* | Pn | 18 17 00.1 | +2.6 |
| AVH | | | | *eS* | Sn | 18 17 19.0 | +2.8 |
| **SMAR** | **Somma** | **1.39** | **12** | *eP* | Pn | 18 16 59.9 | +2.2 |
| SMAR | | | | *eS* | Sn | 18 17 18.4 | +1.8 |
| **KOK** | **Koryaka** | **1.40** | **8** | *eP* | Pn | 18 17 00.5 | +2.8 |
| KOK | | | | *eS* | Sn | 18 17 19.5 | +2.9 |
| **NLC** | **Nalytchevo** | **1.41** | **26** | *eP* | Pn | 18 16 59.0 | +1.4 |
| NLC | | | | *eS* | Sn | 18 17 16.5 | 0.0 |
| **SDLR** | **Sedlovina** | **1.41** | **14** | *eP* | Pn | 18 16 59.9 | +2.0 |
| SDLR | | | | *eS* | Sn | 18 17 18.2 | +1.2 |
| **KRX** | **Arik** | **1.47** | **8** | *eP* | Pn | 18 17 00.9 | +2.3 |
| KRX | | | | *eS* | Sn | 18 17 19.4 | +1.2 |
| **SPN** | **Mys Shipunski** | **1.58** | **40** | *eP* | Pn | 18 17 02.8 | +3.0 |
| **GNL** | **Ganaly** | **1.80** | **353** | *eP* | Pn | 18 17 04.5 | +1.7 |
| GNL | | | | *eS* | Sn | 18 17 25.8 | +0.1 |
| **SKR** | **Severo-Kuril's** | **1.85** | **229** | *eP* | Pn | 18 17 05.1 | +1.9 |
| SKR | | | | *eS* | Sn | 18 17 27.7 | +1.2 |
| **MKZ** | **Mys Kozlova** | **3.35** | **36** | *eP* | Pn | 18 17 25.0 | +2.1 |
| MKZ | | | | *eS* | Sn | 18 18 02.1 | +0.3 |
| **KZV** | **Kizimen** | **3.42** | **19** | *eP* | Pn | 18 17 27.2 | +3.1 |
| **TUMR** | **Tumrok** | **3.55** | **17** | *eP* | Pn | 18 17 27.9 | +2.1 |
| **KBTR** | **Krutoberegovo** | **5.05** | **30** | *eP* | Pn | 18 17 48.7 | +2.7 |
| **BKI** | **Bering** | **5.62** | **51** | *eS* | Sn | 18 18 53.2 | -3.7 |

*IDC **26** 18:18:49.0±2.4, 2°.22S×99°.79E, h0km, mb3.9/6, mb1 4.0/6, mb1mx3.7/37, mbtmp3.9/6, MS3.6/2, Ms1 3.6/2, ms1mx2.8/35, Error ellipse: s-maj=103.2km s-min=19.3km az=60.0*
*NEIC **26** 18:18:49.2±0.9, 2°.39S×99°.46E, h10km, mb4.0/2, Error ellipse: s-maj=27.6km s-min=12.2km az=61.0*
*DJA **26** 18:18:52.2±0.6, 2°.S±6°×10°.0E±°, h27km±10km, M3.9/8, MLv3.9/8*
**ISC 26 18:18:52.9±0.8, 2°.27S±0°.06×99°.60E±0°.07, h32km, n32, σ1s32/25, mb4.2/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.64** | **140** | P | **Pn** | **18 19 06.1** | **+0.4** |
| PPSI | | | | S | **Sn** | **18 19 14.0** | **-0.7** |
| **SISI** | **Saibi** | **1.07** | **331** | P | **Pn** | **18 19 11.4** | **-0.2** |
| SISI | | | | S | **Sb** | **18 19 26.5** | **0.0** |
| **PDSI** | **Padang** | **1.60** | **32** | P | **Pb** | **18 19 20.1** | **-1.7** |
| PDSI | | | | S | **Sb** | **18 19 42.6** | **+0.9** |
| **PPI** | **Padang Panjang** | **1.97** | **24** | P | **Pb** | **18 19 25.7** | **-2.4** |
| PPI | | | | S | **Sb** | **18 19 51.2** | **-1.1** |
| **SDSI** | **Sungai Dareh** | **2.26** | **54** | P | **Pb** | **18 19 30.9** | **-2.1** |
| **BKNI** | **Bangkinang** | **2.95** | **29** | P | **Pn** | **18 19 39.6** | **+2.0** |
| **BKNI** | **Bangkinang** | **2.95** | **29** | *e*Pn | **Pn** | **18 19 38.9** | **+1.3** |
| **MNSI** | **Mandailing Nat** | **3.05** | **360** | P | **Pn** | **18 19 40.0** | **+1.1** |
| **CMAR** | **Chiang Mai Arr** | **20.61** | **358** | P | **P** | **18 23 28.1** | **-1.5** |
| | 1.1nm,0.7s,baz=185,slow=10,SNR=14 | | | | | | |
| **CHTO** | **Chiang Mai** | **20.96** | **358** | P | **P** | **18 23 33.5** | **+0.1** |
| **H08S2** | **Diego Garcia H** | **27.52** | **258** | T | T | 18 53 04.6 | |
| | baz=80,slow=75,SNR=337 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.53** | **258** | T | T | 18 53 04.7 | |
| | baz=80,slow=75,SNR=366 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.54** | **258** | T | T | 18 53 04.1 | |
| | baz=80,slow=75,SNR=323 | | | | | | |
| **H08N1** | **Diego Garcia H** | **28.79** | **261** | T | T | 18 55 23.1 | |
| | baz=142,slow=74,SNR=5.4 | | | | | | |
| **H08N2** | **Diego Garcia H** | **28.80** | **261** | T | T | 18 55 21.8 | |
| | baz=142 | | | | | | |
| **H08N3** | **Diego Garcia H** | **28.81** | **261** | T | T | 18 55 20.3 | |
| | baz=142,slow=74,SNR=3.6 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **35.15** | **159** | T | T | 19 02 50.7 | |
| | baz=335,slow=76,SNR=24 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **35.17** | **159** | T | T | 19 02 48.8 | |
| | baz=335,slow=76,SNR=25 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **35.17** | **159** | T | T | 19 02 47.1 | |
| | baz=335,slow=76,SNR=21 | | | | | | |
| **WRA** | **Warramunga Arr** | **38.20** | **120** | P | **P** | **18 26 10.2** | **+0.3** |
| | 1.7nm,0.8s,baz=296,slow=9.1,SNR=5.7 | | | | | | |
| **WRAB** | **Tennant Creek** | **38.21** | **120** | *e*P | **P** | **18 26 11.4** | **+1.3** |
| | 3.1nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **39.42** | **126** | P | **P** | **18 26 18.9** | **-1.3** |
| | 0.6nm,0.9s,baz=299,slow=6.9,SNR=7.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 28 29.6** | **+1.5** |
| | 0.2nm,0.7s,baz=291,slow=2.4,SNR=2.6 | | | | | | |
| **JNU** | **Nakatsue** | **45.95** | **37** | LR | LR | 18 46 32.6 | |
| | comp=Z,39nm,20.9s,slow=36 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **47.79** | **101** | P | P | 18 27 23.8 | -4.0 |
| **TKM2** | **Tokmak 2** | **49.92** | **337** | P | **P** | **18 27 44.8** | **+0.9** |
| **SONM** | **Songino Array** | **50.25** | **6** | P | **P** | **18 27 47.4** | **+1.3** |
| | 2.7nm,0.8s,baz=189,slow=8.5,SNR=20 | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.35** | **7** | *e*P | **P** | **18 27 48.1** | **+1.1** |
| **MKAR** | **Makanchi Array** | **51.18** | **345** | P | **P** | **18 27 54.1** | **+1.1** |
| | 2.1nm,0.7s,baz=145,slow=8.1,SNR=13 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.36** | **350** | P | **P** | **18 28 38.7** | **+0.8** |
| | 1.7nm,0.5s,baz=183,slow=5.4,SNR=13 | | | | | | |
| **ABKAR** | **Akbulak array** | **61.69** | **332** | *e*P | **P** | **18 29 07.1** | **-0.7** |
| | 0.7nm,0.7s | | | | | | |
| **AFI** | **Afiamalu** | **88.12** | **104** | LR | LR | 19 07 01.9 | |
| | comp=Z,69nm,21.7s,baz=85,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.16** | **37** | PKPbc | **PKPbc** | **18 38 26.4** | **-1.2** |
| | 2.2nm,0.9s,baz=299,slow=2.6,SNR=10 | | | | | | |

*IDC **26** 18:24:35.7±1.0, 8°.35S×80°.22W, h0km, mb3.9/6, mb1 4.1/10, mb1mx4.0/30, mbtmp4.0/10, ML3.8/3, MS4.2/21, Ms1 4.2/21, ms1mx4.1/30, Error ellipse: s-maj=26.2km s-min=20.2km az=64.0*
*ISCJB **26** 18:24:40.7±0.6, 8°.32S±0°.06×80°.04W±0°.08, h39km, mb4.2/8, MS4.1/17, Error ellipse: s-maj=11.8km s-min=7.5km az=150.1*
*NEIC **26** 18:24:42.3±1.1, 8°.38S×79°.95W, h38km±10km, mb4.2/5, Error ellipse: s-maj=14.2km s-min=9.3km az=61.0*
**ISC 26 18:24:41.6±0.7, 8°.40S±0°.07×80°.16W±0°.09, h39km, n48, σ1s88/24, mb4.1/8, MS4.2/17, Off coast of northern Peru**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATAH** | **Atahualpa** | **2.15** | **54** | Pn | **Pn** | **18 25 14.9** | **-0.4** |
| | 110nm,0.3s,baz=260,slow=13,SNR=227 | | | | | | |
| ATAH | | | | Sn | **Sn** | **18 25 44.3** | **+3.2** |
| | 152nm,0.3s,baz=256,slow=4.2,SNR=15 | | | | | | |
| **NNA** | **Nana** | **4.83** | **138** | Pn | **Pn** | **18 25 49.6** | **-2.3** |
| | 5.8nm,0.3s,baz=310,slow=11,SNR=14 | | | | | | |
| NNA | | | | Sn | **Sn** | **18 26 49.9** | **+3.3** |
| | 23nm,0.3s,baz=249,slow=14,SNR=2.1 | | | | | | |
| NNA | | | | LR | LR | 18 27 55.1 | |
| | comp=Z,3μm,18.5s,baz=309,slow=41 | | | | | | |
| **OTAV** | **Otavalo** | **8.75** | **11** | *e*Pn | **Pn** | **18 26 44.4** | **-1.7** |
| | 70nm,1.1s | | | | | | |
| **ARE** | **Arequipa** | **11.65** | **134** | P | Pn | 18 27 41.0 | +15 |
| **PAYG** | **Puerto Ayora** | **12.68** | **307** | *e*Pn | Pn | 18 27 43.2 | +3.7 |
| **LPAZ** | **La Paz** | **14.11** | **125** | Pn | **Pn** | **18 28 00.2** | **+0.6** |
| | 0.1nm,0.3s,baz=307,slow=13,SNR=2.9 | | | | | | |
| LPAZ | | | | LR | LR | 18 34 56.1 | |
| | comp=Z,499nm,18.6s,baz=292,slow=44 | | | | | | |
| **ROSC** | **El Rosal** | **14.40** | **24** | LR | LR | 18 33 36.1 | |
| | comp=Z,923nm,18.4s,baz=200,slow=38 | | | | | | |
| **SAML** | **Samuel** | **16.79** | **93** | *e*Pn | **Pn** | **18 28 30.4** | **-3.5** |
| | 10nm,0.6s | | | | | | |
| SAML | | | | *e*Sn | Sn | 18 31 25.6 | -14 |
| **LVC** | **Limon Verde** | **17.79** | **144** | P | **P** | **18 28 47.6** | **+0.6** |
| | 12nm,0.3s,baz=304,slow=11,SNR=3.5 | | | | | | |
| LVC | | | | LR | LR | 18 35 16.4 | |
| | comp=Z,3μm,21.4s,baz=294,slow=36 | | | | | | |
| **LVC** | **Limon Verde** | **17.79** | **144** | P | **Pn** | **18 28 41.9** | **-4.6** |
| | 9.8nm,0.9s | | | | | | |
| **JTS** | **JuntasAbangare** | **19.18** | **345** | LR | LR | 18 35 38.1 | |
| | comp=Z,648nm,18.6s,baz=191,slow=35 | | | | | | |
| **SDV** | **Santo Domingo** | **19.62** | **29** | *e*P | **P** | **18 29 07.4** | **+0.2** |
| | 27nm,1.3s | | | | | | |
| **SIV** | **San Ignacio** | **20.11** | **114** | P | **P** | **18 29 11.9** | **-0.4** |
| | 2.4nm,0.6s,baz=314,slow=12,SNR=8.5 | | | | | | |
| SIV | | | | LR | LR | 18 37 15.7 | |
| | comp=Z,1μm,18.7s,baz=332,slow=38 | | | | | | |
| **CFAA** | **Coronel Fontan** | **25.61** | **156** | P | **P** | **18 30 08.2** | **+0.7** |
| | 0.2nm,0.4s,baz=324,slow=8.7,SNR=2.9 | | | | | | |
| CFAA | | | | LR | LR | 18 38 46.2 | |
| | comp=Z,28nm,21.3s,baz=322,slow=33 | | | | | | |
| **CPUP** | **Villa Florida** | **28.06** | **132** | LR | LR | 18 44 34.2 | |
| | comp=Z,497nm,18.2s,baz=322,slow=43 | | | | | | |
| **CMIG** | **Matias Romero** | **29.22** | **330** | LR | LR | 18 40 11.7 | |
| | comp=Z,196nm,19.9s,baz=190,slow=32 | | | | | | |
| **AGPR** | **Aguadilla, PR** | **29.64** | **26** | P | **P** | **18 30 45.2** | **+1.6** |
| | 23nm,1.1s | | | | | | |
| **BDFB** | **Brasilia** | **32.22** | **106** | LR | LR | 18 44 52.8 | |
| | comp=Z,1μm,18.5s,baz=272,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **43.83** | **330** | LR | LR | 18 49 45.1 | |
| | comp=Z,104nm,18.6s,baz=0.0,slow=34 | | | | | | |
| **RKT** | **Rikitea** | **54.44** | **248** | *e*S | **S** | **18 41 41.7** | **0.0** |
| | 227nm,32.2s | | | | | | |
| RKT | | | | *e*LR | LR | 18 50 06.7 | |
| | 272nm,24.0s | | | | | | |
| **NVAR** | **Mina Array Bea** | **58.59** | **325** | LR | LR | 18 56 30.6 | |
| | comp=Z,109nm,21.9s,baz=90,slow=33 | | | | | | |
| **TBI** | **Tubuai** | **67.75** | **248** | *e*LR | LR | 18 56 12.8 | |
| | 246nm,25.8s | | | | | | |
| **PPT** | **Papeete** | **67.95** | **254** | LR | LR | 18 56 46.1 | |
| | comp=Z,129nm,20.6s,baz=188,slow=28 | | | | | | |
| **PPT2** | **Papeete2** | **67.95** | **254** | *e*LR | LR | 18 56 18.4 | |
| | 404nm,26.2s | | | | | | |
| **DBIC** | **Dimbokro** | **76.55** | **81** | P | **P** | **18 36 28.3** | **-0.2** |
| | 3.9nm,0.8s,baz=214,slow=6.2,SNR=5.7 | | | | | | |
| DBIC | | | | LR | LR | 19 07 46.1 | |
| | comp=Z,330nm,21.6s,baz=246,slow=34 | | | | | | |
| **SNAA** | **Sanae** | **78.08** | **162** | *e*P | **P** | **18 36 36.8** | **+0.6** |
| | 1.8nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.70** | **180** | *e*P | **P** | **18 36 57.6** | **+1.7** |
| | 4.0nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.04** | **76** | P | **P** | **18 37 08.0** | **-0.8** |
| | 1.1nm,0.8s,baz=268,slow=3.7,SNR=5.7 | | | | | | |
| TORD | | | | LR | LR | 19 14 38.6 | |
| | comp=Z,114nm,18.1s,baz=265,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **84.84** | **49** | P | **P** | **18 37 12.5** | **0.0** |
| | 0.8nm,0.8s,baz=255,slow=6.2,SNR=4.5 | | | | | | |
| **SUMG** | **Summit** | **85.18** | **12** | P | P | 18 37 07.5 | -6.4 |
| **VNDA** | **Vanda** | **87.67** | **191** | LR | LR | 19 08 02.1 | |
| | comp=Z,135nm,20.3s,baz=131,slow=30 | | | | | | |
| **ILAR** | **Eielson Array** | **87.92** | **337** | P | **P** | **18 37 27.2** | **+0.3** |
| | 0.7nm,0.7s,baz=151,slow=4.0,SNR=8.7 | | | | | | |
| **KEST** | **Kesra** | **94.44** | **55** | LR | LR | 19 19 26.9 | |
| | comp=Z,98nm,20.1s,baz=238,slow=35 | | | | | | |
| **NOA** | **NORSAR Array B** | **97.95** | **29** | LR | LR | 19 21 52.8 | |
| | comp=Z,47nm,19.2s,baz=265,slow=35 | | | | | | |
| **GERES** | **GERESS Array B** | **98.80** | **42** | LR | LR | 19 21 50.1 | |
| | comp=Z,73nm,19.6s,baz=282,slow=35 | | | | | | |
| **BOSA** | **Boshof** | **99.32** | **121** | LR | LR | 19 21 56.6 | |
| | comp=Z,136nm,18.0s,baz=271,slow=35 | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **99.51** | **12** | LR | LR | 19 27 52.7 | |
| | comp=Z,65nm,18.6s,baz=110,slow=38 | | | | | | |
| **MAW** | **Mawson** | **99.72** | **161** | LR | LR | 19 21 25.6 | |
| | comp=Z,50nm,19.7s,baz=241,slow=34 | | | | | | |
| **DZM** | **Mont Dzumac** | **108.07** | **244** | *e*LR | LR | 19 14 58.4 | |
| | 180nm,25.2s | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **114.33** | **288** | T | T | 20 47 28.4 | |
| | baz=91,slow=75,SNR=9.5 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **114.34** | **288** | T | T | 20 47 29.5 | |
| | baz=91,slow=75,SNR=12 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **114.34** | **288** | T | T | 20 47 27.8 | |
| | baz=91,slow=75,SNR=9.9 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **114.50** | **286** | T | T | 20 47 47.7 | |
| | baz=96 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **114.51** | **286** | T | T | 20 47 48.1 | |
| | baz=96 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **114.52** | **286** | T | T | 20 47 47.3 | |
| | baz=96 | | | | | | |
| **ASAR** | **Alice Springs** | **133.91** | **225** | PKP | **PKPdf** | **18 43 56.6** | **+1.0** |
| | 0.5nm,0.7s,baz=99,slow=2.0,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **135.88** | **230** | PKP | **PKPdf** | **18 43 58.6** | **-0.7** |
| | 0.6nm,0.7s,baz=124,slow=1.7,SNR=5.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **169.97** | **5** | PKP | **PKPdf** | **18 44 46.8** | **+0.6** |
| | 0.2nm,0.3s,baz=282,slow=1.8,SNR=3.2 | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **18 45 59.8** | **-1.0** |
| | 0.3nm,0.3s,baz=326,slow=5.2,SNR=4.3 | | | | | | |

*ISCJB **26** 18:39:55.4±0.4, 29°.37N±0°.03×129°.92E±0°.08, h63km±5km, mb3.5/5, Error ellipse: s-maj=12.4km s-min=4.1km az=19.2*
*JMA **26** 18:39:55.9±0.1, 29°.36N×129°.99E, h53km±3km, M3.4*
*JMA Felt I J1.*
*IDC **26** 18:39:57.9±1.4, 29°.39N×129°.82E, h71km±14km, mb3.3/5, mb1 3.4/8, mb1mx3.2/32, mbtmp3.5/8, MS3.1/4, Ms1 3.1/4, ms1mx2.7/27, Error ellipse: s-maj=29.5km s-min=9.2km az=103.0*
**ISC 26 18:39:56.2±0.9, 29°.36N±0°.04×129°.94E±0°.08, h54km±9km, n19, σ1s28/27, mb3.5/5, MS3.0/3, Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNN** | **Nakanoshima** | **0.48** | **354** | P | **Pn** | **18 40 07.3** | **-0.3** |
| JNN | | | | S | **Sn** | **18 40 15.6** | **-0.1** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **JTAJ** | **Takarajima** | **0.67** | **252** | P | **Pn** | **18 40 10.3** | **+0.5** |
| JTAJ | | | | S | **Sn** | **18 40 20.5** | **+0.8** |
| **JAM** | **Amami Oshima** | **0.99** | **197** | P | **Pn** | **18 40 13.2** | **-0.8** |
| JAM | | | | S | **Sn** | **18 40 25.5** | **-1.5** |
| **JYAK** | **Yakushimahirau** | **1.00** | **30** | P | **Pn** | **18 40 13.5** | **-0.6** |
| JYAK | | | | S | **Sn** | **18 40 26.2** | **-1.1** |
| **JZK** | **Kikaishima** | **1.05** | **178** | P | **Pn** | **18 40 15.7** | **+1.0** |
| JZK | | | | S | **Sn** | **18 40 31.0** | **+2.7** |
| **JKC** | **Kuchinoerabu** | **1.12** | **12** | P | **Pn** | **18 40 15.7** | **+0.1** |
| JKC | | | | S | **Sn** | **18 40 29.8** | **-0.2** |
| **JAMN** | **Amaminishikomi** | **1.30** | **211** | P | **Pn** | **18 40 17.6** | **-0.5** |
| JAMN | | | | S | **Sn** | **18 40 33.8** | **-0.7** |
| **JTN** | **Tanegashima 3** | **1.57** | **35** | P | **Pn** | **18 40 21.9** | **+0.1** |
| **JTK** | **Tokunoshima** | **1.80** | **209** | P | **Pn** | **18 40 24.7** | **-0.1** |
| JTK | | | | S | **Sn** | **18 40 46.2** | **-0.3** |
| **JOW** | **Kunigami** | **2.92** | **211** | P | **Pn** | **18 40 41.0** | **+0.8** |
| | 1.0nm,0.3s,baz=180,slow=30,SNR=6.5 | | | | | | |
| JOW | | | | S | **Sn** | **18 41 15.8** | **+1.7** |
| | 2.1nm,0.3s,baz=179,slow=30,SNR=4.1 | | | | | | |
| **JNU** | **Nakatsue** | **3.83** | **12** | P | **Pn** | **18 40 55.5** | **+2.8** |
| | 2.1nm,0.3s,baz=220,slow=6.3,SNR=14 | | | | | | |
| JNU | | | | S | **Sn** | **18 41 38.0** | **+1.4** |
| | 1.2nm,0.3s,baz=236,slow=11,SNR=2.5 | | | | | | |
| **KSRS** | **Korea Array** | **8.24** | **349** | P | **Pn** | **18 41 55.8** | **+2.7** |
| | 0.1nm,0.3s,baz=162,slow=14,SNR=5.1 | | | | | | |
| KSRS | | | | LR | LR | 18 45 03.6 | |
| | comp=Z,83nm,18.1s,baz=165,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **25.88** | **322** | P | **P** | **18 45 22.6** | **-0.4** |
| | 1.0nm,0.6s,baz=140,slow=9.3,SNR=6.8 | | | | | | |
| SONM | | | | LR | LR | 18 56 41.1 | |
| | comp=Z,52nm,18.1s,baz=53,slow=39 | | | | | | |
| **TLY** | **Talaya** | **29.65** | **326** | LR | LR | 18 58 07.3 | |
| | comp=Z,30nm,19.2s,baz=130,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.25** | **256** | LR | LR | 18 58 32.6 | |
| | comp=Z,33nm,18.1s,baz=30,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **40.66** | **309** | P | **P** | **18 47 30.3** | **-0.9** |
| | 0.4nm,0.8s,baz=96,slow=11,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **49.20** | **175** | P | **P** | **18 48 39.0** | **-0.2** |
| | 0.7nm,0.6s,baz=348,slow=8.2,SNR=6.6 | | | | | | |
| **ASAR** | **Alice Springs** | **52.86** | **175** | P | **P** | **18 49 07.1** | **+0.5** |
| | 0.4nm,0.8s,baz=6.4,slow=14,SNR=22 | | | | | | |
| **FINES** | **FINESS Array B** | **70.89** | **330** | P | **P** | **18 51 06.1** | **-1.1** |
| | 0.8nm,0.7s,baz=66,slow=6.5,SNR=5.6 | | | | | | |

**MEX 26 18:40:42.9±0.4, 15°.02N×93°.60W, h16km±999km, MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.78** | **28** | *e*P | Pg | 18 40 55.5 | -2.6 |
| PCIG | | | | *e*S | Sg | 18 41 04.9 | -3.4 |

**TRN 26 18:45:14.2, 15°.07N×60°.52W, h54km, MD3.8, M3.5(FDF), 4C-15D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BVM** | **Bellevue** | **0.63** | **238** | *e*P | Pn | 18 45 28.7 | +1.3 |
| **LPMF** | **Morne Lapointe** | **0.66** | **221** | *e*P | Pn | 18 45 28.5 | +0.8 |
| **BAMF** | **Morne Balai** | **0.66** | **247** | *i*P | Pn | 18 45 29.5 | +1.7 |
| **SVN** | **Savane Anatole** | **0.67** | **250** | *e*P | Pn | 18 45 29.5 | +1.5 |
| **CXM** | **Morne La Croix** | **0.68** | **248** | *i*P | Pn | 18 45 29.7 | +1.5 |
| CXM | | | | *e*S | Sn | 18 45 40.7 | +2.4 |
| **GBMF** | **Grand Be** | **0.69** | **246** | *i*P | Pn | 18 45 29.7 | +1.6 |
| **FDF** | **Fort de France** | **0.70** | **241** | *i*P | Pn | 18 45 29.4 | +1.1 |
| **FDF** | **Fort de France** | **0.70** | **241** | *e*P | Pn | 18 45 29.6 | +1.3 |
| FDF | | | | *e*S | Sn | 18 45 40.6 | +2.1 |
| FDF | | | | *e*S | Sn | 18 45 40.8 | +2.3 |
| **ZAM** | **Aeronautique** | **0.70** | **225** | *i*P | Pn | 18 45 29.3 | +1.1 |
| **PML** | **Morne Lenard** | **0.71** | **246** | *e*P | Pn | 18 45 30.1 | +1.7 |
| **PCM** | **Pelee Case Pet** | **0.72** | **249** | *i*P | Pn | 18 45 29.5 | +1.0 |
| **PCM** | **Pelee Case Pet** | **0.72** | **249** | *e*P | Pn | 18 45 29.8 | +1.3 |
| **TRMF** | **Trois Ilets** | **0.74** | **224** | *i*P | Pn | 18 45 30.0 | +1.2 |
| **DLPL** | **La Plaine** | **0.75** | **290** | *i*P | Pn | 18 45 30.3 | +1.4 |
| DLPL | | | | *e*S | Sn | 18 45 41.9 | +2.3 |
| **BIM** | **Bigot** | **0.77** | **224** | *i*P | Pn | 18 45 30.8 | +1.6 |
| BIM | | | | *e*S | Sn | 18 45 42.6 | +2.5 |
| **DSTT** | **Stowe** | **0.78** | **283** | *i*P | Pn | 18 45 30.9 | +1.6 |
| DSTT | | | | *e*S | Sn | 18 45 42.5 | +2.3 |
| **DBCT** | **Belle View Cho** | **0.83** | **284** | *e*P | Pn | 18 45 31.5 | +1.7 |
| DBCT | | | | *e*S | Sn | 18 45 43.5 | +2.2 |
| **DSHT** | **Scott's Head** | **0.84** | **280** | *i*P | Pn | 18 45 31.9 | +1.9 |
| DSHT | | | | *e*S | Sn | 18 45 43.7 | +2.1 |
| **DPMT** | **Pointe Michel** | **0.85** | **283** | *e*P | Pn | 18 45 31.8 | +1.6 |
| DP

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| KUR | | | | | A | A | 18 51 03.0 | |
| | 92nm,0.3s | | | | | | | |
| KUR | | | | | A | A | 18 51 03.0 | |
| | 91nm,0.3s | | | | | | | |
| **JRA** | **Rausu** | **1.81** | **275** | P | **Pn** | **18 50 50.9** | **+1.7** |
| JRA | | | | *e*S | **Sn** | **18 51 10.9** | **-0.2** |
| **JNK** | **Nakash** | **2.11** | **265** | P | **Pn** | **18 50 54.6** | **+1.3** |
| JNK | | | | *e*S | **Sn** | **18 51 17.0** | **-1.5** |
| **JAK** | **Akkeshi** | **2.28** | **250** | P | **Pn** | **18 50 56.7** | **+1.2** |
| **JAR** | **Ashorobuto** | **2.84** | **261** | P | **Pn** | **18 51 05.3** | **+2.0** |
| JAR | | | | *e*S | **Sn** | **18 51 35.7** | **-0.6** |
| **JOB** | **Onbets** | **2.90** | **253** | P | **Pn** | **18 51 05.7** | **+1.6** |
| **JMP** | **Maruseppu** | **3.08** | **275** | P | **Pn** | **18 51 09.6** | **+3.0** |
| **JCH** | **Churui** | **3.33** | **251** | P | **Pn** | **18 51 11.4** | **+1.5** |
| JCH | | | | *e*S | **Sn** | **18 51 46.9** | **-1.3** |
| **YSS** | **Yuzh-Sakhalins** | **4.65** | **314** | *e*P | **Pn** | **18 51 29.9** | **+1.9** |
| YSS | | | | AMB | AMB | 18 51 30.7 | |
| | 11nm,0.3s | | | | | | | |

*IDC **26** 18:50:38.9±1.7,3°.63S×99°.69E,h0km,mb4.0/7,mb1 4.1/8, mb1mx3.8/43,mbtmp4.0/8,ML4.1/1,Error ellipse: s-maj=69.4km s-min=17.8km az=54.0*
*NEIC **26** 18:50:40.7±1.0,3°.59S×99°.81E,h10km,mb4.1/3,Error ellipse: s-maj=35.9km s-min=8.7km az=47.0*
*ISCJB **26** 18:50:42.0±0.6,3°.57S±0°.05×99°.84E±0°.06,h33km, mb4.0/10,Error ellipse: s-maj=10.9km s-min=4.6km az=142.9*
*DJA **26** 18:50:43.7±0.7,3°.5S×10°.0E±°,h56km±8km,M4.3/11, mb4.6/3,mB4.9/1,MLv4.1/11,Mw(mB)4.2/1*

**ISC 26 18:50:44.1**±0.9,**3°.58S**±0°.08×**99°.84E**±0°.10,**h35**km,**n37**, σ1§**26**/34,**mb4.1**/10,**Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.83** | **12** | P | **Pn** | **18 50 58.2** | **-1.0** |
| PPSI | | | | S | **Sn** | **18 51 10.5** | **+0.3** |
| **SISI** | **Saibi** | **2.36** | **341** | P | **Pn** | **18 51 17.9** | **-2.4** |
| SISI | | | | S | **Sn** | **18 51 46.3** | **-1.8** |
| **PDSI** | **Padang** | **2.72** | **13** | P | **Pn** | **18 51 23.7** | **-1.6** |
| **KSI** | **Kapahiang** | **2.75** | **92** | P | **Pn** | **18 51 25.9** | **+0.2** |
| **PPI** | **Padang Panjang** | **3.15** | **10** | P | **Pn** | **18 51 30.3** | **-0.9** |
| PPI | | | | S | **Sn** | **18 52 06.8** | **-0.8** |
| **MNAI** | **Manna** | **3.20** | **104** | P | **Pn** | **18 51 32.7** | **+0.8** |
| **MNSI** | **Mandailing Nat** | **4.35** | **357** | P | **Pn** | **18 51 45.2** | **-2.6** |
| **MDSI** | **Maura Dua** | **4.42** | **102** | P | **Pn** | **18 51 49.3** | **+0.7** |
| MDSI | | | | S | **Sn** | **18 52 38.6** | **-0.3** |
| **KASI** | **Kota Agung** | **5.03** | **113** | P | **Pn** | **18 51 56.8** | **-0.2** |
| | 68nm,1.7s,0.3nm | | | | | | |
| KASI | | | | S | **Sn** | **18 52 51.5** | **-2.4** |
| | 68nm,1.7s,0.3nm | | | | | | |
| **CGJI** | **Cibinong** | **6.56** | **118** | P | **Pn** | **18 52 17.5** | **-0.6** |
| | 41nm,1.1s,1μm0.2nm | | | | | | |
| **LEM** | **Lembang** | **8.39** | **113** | Pn | **Pn** | **18 52 45.0** | **+1.6** |
| | 2.2nm,0.3s,baz=189,slow=16,SNR=4.2 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.86** | **117** | P | **Pn** | **18 52 48.3** | **-1.5** |
| **CISI** | **Cisompet, Garu** | **8.86** | **117** | *e*Pn | **Pn** | **18 52 47.5** | **-2.3** |
| | 51nm,0.6s | | | | | | |
| CISI | | | | *e*Sn | Sn | 18 54 20.8 | -7.7 |
| **CMAR** | **Chiang Mai Arr** | **21.91** | **358** | P | **P** | **18 55 33.2** | **-1.3** |
| | 1.4nm,0.6s,baz=185,slow=10.0,SNR=14 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.51** | **260** | T | T | 19 25 30.8 | |
| | baz=82,slow=75,SNR=15 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.52** | **260** | T | T | 19 25 31.4 | |
| | baz=82,slow=75,SNR=15 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.53** | **260** | T | T | 19 25 31.4 | |
| | baz=82,slow=75,SNR=18 | | | | | | |
| **H08N1** | **Diego Garcia H** | **28.85** | **263** | T | T | 19 27 45.8 | |
| | baz=169 | | | | | | |
| **H08N2** | **Diego Garcia H** | **28.86** | **263** | T | T | 19 27 44.7 | |
| | baz=169 | | | | | | |
| **H08N3** | **Diego Garcia H** | **28.87** | **263** | T | T | 19 27 42.4 | |
| | baz=169 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.86** | **159** | T | T | 19 33 21.0 | |
| | baz=332 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.87** | **159** | T | T | 19 33 22.7 | |
| | baz=332 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.87** | **159** | T | T | 19 33 20.5 | |
| | baz=332 | | | | | | |
| **LSA** | **Lhasa** | **34.12** | **346** | *e*P | **P** | **18 57 27.6** | **+1.3** |
| **WRA** | **Warramunga Arr** | **37.36** | **119** | P | **P** | **18 57 54.0** | **+0.3** |
| | 0.8nm,0.6s,baz=302,slow=9.3,SNR=6.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.36** | **119** | *e*P | **P** | **18 57 54.4** | **+0.7** |
| | 2.0nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **38.48** | **124** | P | **P** | **18 58 03.3** | **+0.2** |
| | 0.6nm,0.8s,baz=291,slow=7.1,SNR=9.0 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 00 16.9** | **+1.1** |
| | 0.3nm,0.7s,baz=291,slow=2.5,SNR=4.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **51.21** | **337** | P | **P** | **18 59 44.5** | **+0.1** |
| **SONM** | **Songino Array** | **51.52** | **6** | P | **P** | **18 59 47.8** | **+1.4** |
| | 1.5nm,0.6s,baz=192,slow=9.1,SNR=12 | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.62** | **6** | *e*P | **P** | **18 59 48.6** | **+1.4** |
| | 1.5nm,0.7s | | | | | | |
| **EKS2** | **Erkin-Say** | **51.72** | **336** | *e*P | **P** | **18 59 48.7** | **+0.6** |
| **MKAR** | **Makanchi Array** | **52.50** | **345** | P | **P** | **18 59 54.3** | **+0.7** |
| | 1.0nm,0.5s,baz=154,slow=9.1,SNR=13 | | | | | | |
| **MAJO** | **Matsushiro** | **53.60** | **38** | *e*P | **P** | **19 00 01.1** | **-0.8** |
| **ZALV** | **Zalesovo Beam** | **58.68** | **350** | P | **P** | **19 00 37.2** | **-0.6** |
| | 1.7nm,0.5s,baz=190,slow=6.0,SNR=7.9 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.95** | **332** | *e*P | **P** | **19 01 06.5** | **-0.5** |
| | 2.1nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **85.43** | **332** | P | **P** | **19 03 17.9** | **+0.1** |
| | 4.5nm,1.1s,baz=120,slow=6.8,SNR=8.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.03** | **39** | PKPbc | **PKPab** | **19 10 21.9** | **+0.2** |
| | 0.5nm,0.5s,baz=332,slow=1.4,SNR=5.2 | | | | | | |

*IDC **26** 18:55:38.4±0.9,8°.10S×80°.06W,h0km,mb4.3/7, mb1 4.4/10,mb1mx4.2/33,mbtmp4.3/10,ML3.7/2,MS4.0/14, Ms1 4.0/14,ms1mx3.8/23,Error ellipse: s-maj=38.3km s-min=16.4km az=53.0*
*ISCJB **26** 18:55:43.3±0.5,8°.18S±0°.06×79°.89W±0°.07,h37km, mb4.3/15,MS4.0/11,Error ellipse: s-maj=11.4km s-min=6.8km az=143.5*
*NEIC **26** 18:55:45.2±1.1,8°.25S×79°.96W,h44km±10km,mb4.4/8, Error ellipse: s-maj=15.4km s-min=7.8km az=64.0*

**ISC 26 18:55:44.7**±0.7,**8°.16S**±0°.08×**80°.0W**±0°.1,**h37**km,**n53**, σ1§**49**/37,**mb4.5**/15,**MS4.0**/11,**Near coast of northern Peru**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ATAH** | **Atahualpa** | **1.87** | **57** | Pn | Pn | 18 56 18.4 | +3.9 |
| | 257nm,0.3s,baz=264,slow=5.1,SNR=387 | | | | | | |
| ATAH | | | | Sn | Sn | 18 56 45.7 | +8.7 |
| | 512nm,0.3s,baz=179,slow=12,SNR=6.8 | | | | | | |
| **NNA** | **Nana** | **4.90** | **141** | Pn | **Pn** | **18 56 54.1** | **-1.7** |
| | 12nm,0.3s,baz=324,slow=10,SNR=17 | | | | | | |
| NNA | | | | Sn | **Sn** | **18 57 55.3** | **+4.0** |
| | 56nm,0.3s,baz=224,slow=22,SNR=4.7 | | | | | | |
| NNA | | | | LR | LR | 18 58 57.4 | |
| | comp=Z,1μm,18.3s,baz=310,slow=40 | | | | | | |
| **NNA** | **Nana** | **4.90** | **141** | *e*Pn | **Pn** | **18 56 53.2** | **-2.6** |
| NNA | | | | S | **Sn** | **18 57 55.3** | **+4.0** |
| **OTAV** | **Otavalo** | **8.48** | **10** | *e*Pn | **Pn** | **18 57 45.4** | **0.0** |
| | 52nm,0.9s | | | | | | |
| **ARE** | **Arequipa** | **11.69** | **136** | *e*P | Pn | 18 58 43.0 | +14 |
| **PAYG** | **Puerto Ayora** | **12.68** | **305** | *e*Pn | Pn | 18 58 45.7 | +3.2 |
| **ROSC** | **El Rosal** | **14.10** | **24** | LR | LR | 19 04 38.4 | |
| | comp=Z,422nm,18.2s,baz=204,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **14.11** | **126** | Pn | **Pn** | **18 59 02.4** | **-0.2** |
| | 0.1nm,0.3s,baz=328,slow=18,SNR=3.9 | | | | | | |
| LPAZ | | | | LR | LR | 19 05 58.3 | |
| | comp=Z,247nm,18.9s,baz=294,slow=44 | | | | | | |
| **SAML** | **Samuel** | **16.62** | **94** | *e*Pn | Pn | 18 59 28.9 | -6.1 |
| | 22nm,0.5s | | | | | | |
| SAML | | | | *e*Sn | **Sn** | **19 02 36.0** | **-2.7** |
| **BCIP** | **Isla Barro Col** | **17.21** | **0** | Pn | **Pn** | **18 59 41.5** | **-0.8** |
| **LVC** | **Limon Verde** | **17.88** | **145** | P | **P** | **18 59 51.9** | **+0.7** |
| | 32nm,0.3s,baz=308,slow=10,SNR=12 | | | | | | |
| **SDV** | **Santo Domingo** | **19.32** | **29** | *e*P | **Pn** | **19 00 09.2** | **+0.9** |
| | 21nm,1.0s | | | | | | |
| **SIV** | **San Ignacio** | **20.04** | **115** | P | **P** | **19 00 13.7** | **-1.1** |
| | 3.8nm,0.7s,baz=322,slow=9.8,SNR=14 | | | | | | |
| **LCO** | **Las Campanas** | **22.50** | **158** | P | **P** | **19 00 40.3** | **-1.1** |
| **CFAA** | **Coronel Fontan** | **25.76** | **156** | P | **P** | **19 01 11.5** | **-0.5** |
| | 0.3nm,0.8s,baz=330,slow=8.8,SNR=5.4 | | | | | | |
| **CPUP** | **Villa Florida** | **28.09** | **133** | P | **P** | **19 01 33.2** | **+0.1** |
| | 2.3nm,0.8s,baz=282,slow=13,SNR=4.3 | | | | | | |
| CPUP | | | | LR | LR | 19 14 45.8 | |
| | comp=Z,231nm,20.3s,baz=323,slow=41 | | | | | | |
| **BDFB** | **Brasilia** | **32.11** | **106** | P | **P** | **19 02 08.4** | **-0.5** |
| | 3.2nm,0.4s,baz=236,slow=9.9,SNR=6.4 | | | | | | |
| BDFB | | | | LR | LR | 19 15 55.2 | |
| | comp=Z,663nm,18.5s,baz=266,slow=38 | | | | | | |
| **RPN** | **Rapa Nui** | **33.60** | **232** | LR | LR | 19 12 07.2 | |
| | comp=Z,290nm,18.5s,baz=90,slow=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **43.71** | **329** | LR | LR | 19 20 18.7 | |
| | comp=Z,59nm,18.3s,baz=0.0,slow=34 | | | | | | |
| **RCBR** | **Riachuelo** | **43.79** | **90** | LR | LR | 19 23 06.6 | |
| | comp=Z,573nm,18.2s,baz=260,slow=38 | | | | | | |
| **MIAR** | **Mount Ida** | **44.38** | **344** | *e*P | **P** | **19 03 53.9** | **+2.2** |
| | 3.5nm,0.9s | | | | | | |
| **USHA** | **Ushuaia** | **47.45** | **171** | LR | LR | 19 20 32.0 | |
| | comp=Z,81nm,20.0s,baz=291,slow=31 | | | | | | |
| **YKA** | **Yellowknife Ar** | **75.33** | **344** | P | **P** | **19 07 22.4** | **-1.4** |
| | 0.7nm,0.6s,baz=144,slow=6.2,SNR=3.5 | | | | | | |
| **TIC** | **Toumodi** | **76.17** | **81** | *e*P | **P** | **19 07 30.5** | **+0.8** |
| **VNA1** | **Neumayer--Stat** | **76.32** | **161** | P | **P** | **19 07 30.0** | **+0.6** |
| **DBIC** | **Dimbokro** | **76.33** | **81** | P | **P** | **19 07 29.1** | **-1.4** |
| | 7.0nm,0.7s,baz=242,slow=5.4,SNR=8.8 | | | | | | |
| DBIC | | | | LR | LR | 19 38 48.6 | |
| | comp=Z,173nm,21.1s,baz=247,slow=34 | | | | | | |
| **KIC** | **Kosan Boka** | **76.39** | **81** | *e*P | **P** | **19 07 32.0** | **+1.1** |
| | 19nm,0.7s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **76.67** | **161** | P | **P** | **19 07 31.7** | **+0.2** |
| | baz=292,slow=6.3 | | | | | | |
| **SNAA** | **Sanae** | **78.26** | **162** | P | **P** | **19 07 39.9** | **-0.5** |
| **SNAA** | **Sanae** | **78.26** | **162** | *e*P | **P** | **19 07 39.2** | **-1.1** |
| | 1.4nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **81.95** | **180** | *e*P | P | 19 07 54.3 | -6.2 |
| | 5.4nm,0.9s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **83.81** | **76** | *e*P | **P** | **19 08 11.7** | **+0.8** |
| **TORD** | **Torodi Ar. Bea** | **83.81** | **76** | P | **P** | **19 08 11.4** | **+0.5** |
| | 4.6nm,1.0s,baz=261,slow=4.3,SNR=18 | | | | | | |
| TORD | | | | LR | LR | 19 45 41.6 | |
| | comp=Z,80nm,18.1s,baz=320,slow=36 | | | | | | |
| **ESDC** | **Sonseca Array** | **84.55** | **49** | P | **P** | **19 08 15.5** | **+1.2** |
| | 0.8nm,0.5s,baz=260,slow=5.7,SNR=10 | | | | | | |
| **SUMG** | **Summit** | **84.90** | **12** | *e*P | **P** | **19 08 16.9** | **+1.2** |
| | 7.7nm,0.8s | | | | | | |
| **EGAK** | **Eagle** | **85.58** | **338** | *e*P | **P** | **19 08 19.7** | **+1.0** |
| | 8.7nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **87.77** | **337** | P | **P** | **19 08 28.2** | **-1.2** |
| | 2.1nm,0.8s,baz=142,slow=3.3,SNR=24 | | | | | | |
| **VNDA** | **Vanda** | **87.94** | **191** | LR | LR | 19 38 52.7 | |
| | comp=Z,78nm,19.9s,baz=126,slow=30 | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **89.15** | **335** | *e*P | **P** | **19 08 35.9** | **-0.2** |
| | 1.2nm,1.3s | | | | | | |
| **KEST** | **Kesra** | **94.15** | **55** | LR | LR | 19 50 18.9 | |
| | comp=Z,41nm,19.9s,baz=296,slow=35 | | | | | | |
| **GERES** | **GERESS Array B** | **98.50** | **42** | LR | LR | 19 52 43.6 | |
| | comp=Z,47nm,18.7s,baz=298,slow=35 | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **14.42** | **288** | T | T | 21 18 36.2 | |
| | baz=91,slow=75,SNR=8.3 | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **14.43** | **288** | T | T | 21 18 44.1 | |
| | baz=91,slow=75,SNR=7.5 | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **14.44** | **288** | T | T | 21 18 39.8 | |
| | baz=91,slow=75,SNR=7.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **14.61** | **287** | T | T | 21 18 54.5 | |
| | baz=91 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **14.61** | **287** | T | T | 21 18 54.0 | |
| | baz=91 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **14.62** | **287** | T | T | 21 18 56.7 | |
| | baz=91 | | | | | | |
| **KBZ** | **Khabaz** | **119.12** | **44** | PKP | **PKPdf** | **19 14 30.2** | **+0.4** |
| | 1.2nm,0.8s,baz=236,slow=2.1,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **132.72** | **12** | PKP | **PKPdf** | **19 14 54.7** | **-0.8** |
| | 0.5nm,0.3s,baz=337,slow=2.3,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **134.21** | **225** | PKP | **PKPdf** | **19 14 58.2** | **-1.2** |
| | 0.6nm,0.7s,baz=106,slow=2.5,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **136.18** | **230** | PKP | **PKPdf** | **19 15 02.7** | **-0.4** |
| | 1.4nm,0.8s,baz=124,slow=1.6,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **140.09** | **353** | PKhKP | PKPpre | 19 15 00.4 | |
| | 0.3nm,0.6s,baz=349,slow=2.9,SNR=2.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **169.71** | **6** | PKP | **PKPdf** | **19 15 49.1** | **-0.1** |
| | 0.5nm,0.7s,baz=279,slow=1.1,SNR=6.3 | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **19 17 02.0** | **-0.9** |
| | 1.3nm,0.8s,baz=337,slow=5.4,SNR=9.7 | | | | | | |

*ISK **26** 18:55:46.9,35°.59N×32°.07E,h24km,MD3.2*
*NIC **26** 18:55:47.3,35°.76N×32°.15E,h13km,ML3.5*
*ISCJB **26** 18:55:48.8±0.5,35°.66N±0°.03×32°.12E±0°.04,h32km±5km, Error ellipse: s-maj=6.3km s-min=3.7km az=42.9*
*CSEM **26** 18:55:48.7±0.3,35°.65N×32°.13E,h23km±3km,ML3.5, Error ellipse: s-maj=6.0km s-min=3.8km az=35.0*
*DDA **26** 18:55:51.0,36°.71N×32°.33E,h5km,Md3.0*

**ISC 26 18:55:48.7**±1.2,**35°.66N**±0°.03×**32°.12E**±0°.03,**h24**km±13km, **n63**,σ1§**04**/82,**Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GAZI** | **Gazipasa** | **0.59** | **15** | *i* P | **Pb** | **18 56 00.4** | **-0.1** |
| GAZI | | | | *i* S | **Sb** | **18 56 08.8** | **+0.3** |
| **GAZI** | **Gazipasa** | **0.59** | **15** | P | **Pb** | **18 56 00.0** | **-0.1** |
| GAZI | | | | S | **Sb** | **18 56 08.8** | **+0.3** |
| **ALFC** | **Alevga** | **0.64** | **142** | P | **Pb** | **18 56 00.9** | **-0.3** |
| | baz=328 | | | | | | |
| ALFC | | | | S | **Sn** | **18 56 11.4** | **-0.3** |
| **ALFC** | **Alevga** | **0.64** | **142** | P | **Pb** | **18 56 00.9** | **-0.3** |
| ALFC | | | | S | **Sn** | **18 56 11.4** | **-0.3** |
| **AKMC** | **Akamas** | **0.66** | **165** | P | **Pb** | **18 56 01.5** | **0.0** |
| | baz=348 | | | | | | |
| **AKMC** | **Akamas** | **0.66** | **165** | P | **Pb** | **18 56 01.5** | **0.0** |
| **AKDN** | **Akdeniz- K¯–br** | **0.78** | **117** | *e*PG | **Pb** | **18 56 02.9** | **-0.7** |
| AKDN | | | | *e*SG | **Sn** | **18 56 14.7** | **-0.4** |
| **AKDN** | **Akdeniz- K¯–br** | **0.78** | **117** | *e*Pg | **Pb** | **18 56 02.9** | **-0.7** |
| AKDN | | | | *e*Sg | **Sn** | **18 56 14.7** | **-0.4** |
| **PPCY** | **Paphos** | **0.80** | **167** | P | **Pb** | **18 56 04.1** | **+0.2** |
| | baz=349 | | | | | | |
| **PPCY** | **Paphos** | **0.80** | **167** | P | **Pb** | **18 56 04.1** | **+0.2** |
| **LEF** | **Lefka** | **0.83** | **131** | *e*PG | **Pb** | **18 56 02.9** | **-1.5** |
| **LEF** | **Lefka** | **0.83** | **131** | *e*Pg | **Pb** | **18 56 02.9** | **-1.5** |
| **MAMC** | **Mammari** | **1.02** | **118** | P | **Pb** | **18 56 06.6** | **-1.1** |
| | baz=304 | | | | | | |
| **MAMC** | **Mammari** | **1.02** | **118** | P | **Pb** | **18 56 06.6** | **-1.1** |
| **SZAC** | **Souni-Zanaja** | **1.10** | **145** | P | **Pb** | **18 56 08.9** | **-0.1** |
| | baz=329 | | | | | | |
| SZAC | | | | S | **Sn** | **18 56 25.0** | **+2.0** |
| **SZAC** | **Souni-Zanaja** | **1.10** | **145** | P | **Pb** | **18 56 08.9** | **-0.1** |
| SZAC | | | | S | **Sn** | **18 56 25.0** | **+2.0** |
| **CSS** | **Prodhromos** | **1.21** | **125** | P | **Pn** | **18 56 10.2** | **+0.1** |
| | baz=309 | | | | | | |
| **CSS** | **Prodhromos** | **1.21** | **125** | *e*PN | **Pn** | **18 56 08.9** | **-1.2** |
| **CSS** | **Prodhromos** | **1.21** | **125** | *e*Pn | **Pn** | **18 56 08.9** | **-1.2** |
| **CSS** | **Prodhromos** | **1.21** | **125** | P | **Pn** | **18 56 10.2** | **+0.1** |
| **LFK** | **Lefkose** | **1.21** | **108** | *e*PN | **Pn** | **18 56 09.0** | **-1.2** |
| **LFK** | **Lefkose** | **1.21** | **108** | *e*Pn | **Pn** | **18 56 09.0** | **-1.2** |
| **HDMB** | **Hadim** | **1.33** | **13** | *e*PN | **Pn** | **18 56 11.6** | **-0.4** |
| **HDMB** | **Hadim** | **1.33** | **13** | *e*Pn | **Pn** | **18 56 11.6** | **-0.4** |
| **EREN** | **Erenkoy** | **1.68** | **94** | *e*PN | **Pn** | **18 56 15.9** | **-0.6** |
| **EREN** | **Erenkoy** | **1.68** | **94** | *e*Pn | **Pn** | **18 56 15.9** | **-0.6** |
| **ANTB** | **Antalya** | **1.71** | **317** | *e*PN | **Pn** | **18 56 16.7** | **-0.3** |
| **ANTB** | **Antalya** | **1.71** | **317** | *e*Pn | **Pn** | **18 56 16.7** | **-0.3** |
| **KIZK** | **Mersin** | **1.83** | **63** | *i* P | **Pn** | **18 56 18.8** | **+0.1** |
| KIZK | | | | *i* S | **Sn** | **18 56 41.0** | **-0.1** |
| **KIZK** | **Mersin** | **1.83** | **63** | P | **Pn** | **18 56 18.8** | **+0.1** |
| KIZK | | | | S | **Sn** | **18 56 41.0** | **-0.1** |
| **KORT** | **Korkueli** | **1.96** | **314** | *i* P | **Pn** | **18 56 20.6** | **0.0** |
| KORT | | | | *i* S | **Sn** | **18 56 45.1** | **+0.7** |
| **KORT** | **Korkueli** | **1.96** | **314** | P | **Pn** | **18 56 20.6** | **0.0** |
| KORT | | | | S | **Sn** | **18 56 45.1** | **+0.7** |
| **SUTC** | **Sutluce-Ispart** | **2.02** | **334** | *e*PN | **Pn** | **18 56 21.4** | **0.0** |
| **SUTC** | **Sutluce-Ispart** | **2.02** | **334** | *e*Pn | **Pn** | **18 56 21.4** | **0.0** |
| **ELL** | **Elmali** | **2.09** | **302** | *e*PN | **Pn** | **18 56 21.5** | **-0.9** |
| **ELL** | **Elmali** | **2.09** | **302** | *e*Pn | **Pn** | **18 56 21.5** | **-0.9** |
| **KONT** | **Konya--Tatoy** | **2.29** | **5** | *e*PN | **Pn** | **18 56 25.4** | **+0.4** |
| **KONT** | **Konya--Tatoy** | **2.29** | **5** | *e*Pn | **Pn** | **18 56 25.4** | **+0.4** |
| **YESY** | **Yesilyurt** | **2.49** | **31** | *e*PN | **Pn** | **18 56 28.6** | **+0.8** |
| **YESY** | **Yesilyurt** | **2.49** | **31** | *e*Pn | **Pn** | **18 56 28.6** | **+0.8** |
| **BAGO** | **Egridir - ISPA** | **2.56** | **336** | P | **Pn** | **18 56 30.4** | **+1.6** |
| BAGO | | | | S | **Sn** | **18 56 59.3** | **+0.1** |
| **GOLH** | **Golhisar** | **2.59** | **308** | *i* P | **Pn** | **18 56 31.6** | **+2.3** |
| GOLH | | | | *i* S | **Sn** | **18 57 00.6** | **+0.5** |
| **GOLH** | **Golhisar** | **2.59** | **308** | P | **Pn** | **18 56 31.6** | **+2.3** |
| GOLH | | | | S | **Sn** | **18 57 00.6** | **+0.5** |
| **FETY** | **Fethiye** | **2.64** | **292** | *e*PN | **Pn** | **18 56 29.2** | **-0.7** |
| **FETY** | **Fethiye** | **2.64** | **292** | *e*Pn | **Pn** | **18 56 29.2** | **-0.7** |
| **KRTS** | **Karatas** | **2.79** | **70** | *e*PN | **Pn** | **18 56 32.3** | **+0.5** |
| **KRTS** | **Karatas** | **2.79** | **70** | *e*Pn | **Pn** | **18 56 32.3** | **+0.5** |
| **KARA** | **Karaisali** | **2.85** | **55** | *e*PN | **Pn** | **18 56 33.5** | **+0.8** |
| **KARA** | **Karaisali** | **2.85** | **55** | *e*Pn | **Pn** | **18 56 33.5** | **+0.8** |
| **DALY** | **Dalyan (Mu¨la** | **3.03** | **293** | *e*PN | **Pn** | **18 56 34.5** | **-0.7** |
| **DALY** | **Dalyan (Mu¨la** | **3.03** | **293** | *e*Pn | **Pn** | **18 56 34.5** | **-0.7** |
| **TURN** | **Turunc** | **3.09** | **294** | *i* P | **Pn** | **18 56 37.9** | **+2.0** |
| TURN | | | | *i* S | **Sn** | **18 57 10.5** | **-1.6** |
| **TURN** | **Turunc** | **3.09** | **294** | P | **Pn** | **18 56 37.9** | **+2.0** |
| TURN | | | | S | **Sn** | **18 57 10.5** | **-1.6** |
| **DNZL** | **Cakiroluk** | **3.19** | **310** | *i* P | **Pb** | **18 56 42.1** | **-2.7** |
| DNZL | | | | *i* S | **Sb** | **18 57 24.8** | **+1.4** |
| **DNZL** | **Cakiroluk** | **3.19** | **310** | P | **Pb** | **18 56 42.1** | **-2.7** |
| DNZL | | | | S | **Sb** | **18 57 24.8** | **+1.4** |
| **YAYL** | **Yayladag** | **3.26** | **82** | *i* P | **Pn** | **18 56 38.2** | **-0.2** |
| YAYL | | | | *i* S | Sn | 18 57 10.3 | -6.2 |
| **YAYL** | **Yayladag** | **3.26** | **82** | P | **Pn** | **18 56 38.2** | **-0.2** |
| YAYL | | | | S | Sn | 18 57 10.3 | -6.2 |
| **TAHT** | **Tahtakopru-Hat** | **3.37** | **77** | *e*PN | **Pn** | **18 56 40.8** | **+0.9** |
| **TAHT** | **Tahtakopru-Hat** | **3.37** | **77** | *e*Pn | **Pn** | **18 56 40.8** | **+0.9** |
| **KHAL** | **Karahalli** | **3.43** | **323** | *i* P | **Pn** | **18 56 41.6** | **+0.9** |
| KHAL | | | | *i* S | Sn | 18 57 15.7 | -4.9 |
| **KHAL** | **Karahalli** | **3.43** | **323** | P | **Pn** | **18 56 41.6** | **+0.9** |
| KHAL | | | | S | Sn | 18 57 15.7 | -4.9 |
| **MANT** | **Manisa** | **4.01** | **316** | *i* P | **Pn** | **18 56 50.3** | **+1.5** |
| MANT | | | | *i* S | Sn | 18 57 29.9 | -5.3 |
| **MANT** | **Manisa** | **4.01** | **316** | P | **Pn** | **18 56 50.3** | **+1.5** |
| MANT | | | | S | Sn | 18 57 29.9 | -5.3 |

*AUST **26** 18:57:12.4,17°.01S×178°.02W,h450km*
*IDC **26** 18:57:19.0±1.6,17°.50S×178°.74W,h503km±17km, mb3.5/10,mb1 3.7/11,mb1mx3.4/33,mbtmp4.4/11,Error ellipse: s-maj=24.6km s-min=14.6km az=158.0*
*ISCJB **26** 18:57:22.1±0.8,17°.55S±0°.2×178°.8W±0°.1,h547km, mb3.9/10,Error ellipse: s-maj=23.5km s-min=14.5km az=155.0*

**ISC 26 18:57:23.1**±1.1,**17°.4S**±0°.2×**178°.8W**±0°.2,**h547**km,**n21**, σ1§**44**/22,**mb3.7**/10,**Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **7.62** | **64** | P | P | 18 59 09.9 | -7.2 |
| | 5.0nm,0.3s,baz=252,slow=20,SNR=3.1 | | | | | | |
| **ARMA** | **Armidale** | **29.86** | **239** | P | **P** | **19 02 47.3** | **+0.7** |
| | baz=31,SNR=5.8 | | | | | | |
| **RMQ** | **Roma** | **31.33** | **248** | P | **P** | **19 02 59.8** | **+0.6** |
| | baz=32,SNR=7.3 | | | | | | |
| **CTA** | **Charters Tower** | **33.16** | **260** | P | **P** | **19 03 13.2** | **-1.6** |
| | 4.7nm,0.8s,baz=52,slow=11,SNR=4.6 | | | | | | |
| **PMG** | **Port Moresby** | **34.01** | **279** | P | **P** | **19 03 21.6** | **-0.4** |
| | baz=35,SNR=3.2 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.06** | **240** | P | **P** | **19 03 30.8** | **+0.2** |
| | baz=36,SNR=5.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.06** | **240** | P | **P** | **19 03 30.7** | **+0.1** |
| | baz=29,SNR=6.6 | | | | | | |
| **COEN** | **Coen** | **36.73** | **270** | P | **P** | **19 03 45.5** | **+0.9** |
| | baz=38,SNR=5.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.35** | **259** | P | **P** | **19 04 44.7** | **-0.5** |
| | 1.7nm,0.6s,baz=88,slow=8.8,SNR=4.3 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 09 19.9** | **+2.4** |
| | 0.5nm,0.8s,baz=98,slow=3.9,SNR=3.3 | | | | | | |
| **ASAR** | **Alice Springs** | **44.56** | **254** | P | **P** | **19 04 45.6** | **-1.2** |
| | 16nm,0.7s,baz=86,slow=8.5,SNR=52 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 09 20.4** | **+2.0** |
| | 0.4nm,0.8s,baz=110,slow=5.3,SNR=3.3 | | | | | | |
| ASAR | | | | S | **S** | **19 10 40.6** | **-2.6** |
| | 0.6nm,0.9s,baz=84,slow=14,SNR=5.5 | | | | | | |
| **SIJI** | **Sorong** | **51.76** | **283** | P | **P** | **19 05 41.1** | **+0.5** |
| | 20nm,0.7s,baz=118,slow=7.0,SNR=16 | | | | | | |
| **SWI** | **Sorong** | **51.77** | **283** | P | **P** | **19 05 41.3** | **+0.7** |
| | baz=52,SNR=8.0 | | | | | | |
| **SOEI** | **Soe** | **55.69** | **270** | P | **P** | **19 06 10.4** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| VAY | | | | *i* Sg | **Sb** | **19 01 35.8** | **+0.3** |
| **NVR** | **Nevrokopi** | **0.79** | **138** | *e*PG | **Pg** | **19 01 24.8** | **-0.2** |
| NVR | | | | *e*SG | **Sg** | **19 01 35.0** | **-0.2** |
| **NVR** | **Nevrokopi** | **0.79** | **138** | *e*Pg | **Pg** | **19 01 24.8** | **-0.2** |
| NVR | | | | *e*Sg | **Sg** | **19 01 35.0** | **-0.2** |
| **KNT** | **Kendrikon** | **0.80** | **194** | *e*PG | **Pg** | **19 01 25.0** | **-0.1** |
| KNT | | | | *e*SG | **Sg** | **19 01 35.5** | **0.0** |
| **KNT** | **Kendrikon** | **0.80** | **194** | *e*Pg | **Pg** | **19 01 25.0** | **-0.1** |
| KNT | | | | *e*Sg | **Sg** | **19 01 35.5** | **0.0** |
| **SRS** | **Serrai** | **0.88** | **158** | *e*PB | **Pg** | **19 01 26.6** | **-0.1** |
| SRS | | | | *e*SG | **Sb** | **19 01 38.9** | **-0.2** |
| **SRS** | **Serrai** | **0.88** | **158** | *e*Pb | **Pg** | **19 01 26.6** | **-0.1** |
| SRS | | | | *e*Sg | **Sb** | **19 01 38.9** | **-0.2** |
| **SOH** | **Sokhos** | **1.12** | **172** | *e*PB | **Pg** | **19 01 30.9** | **-0.5** |
| SOH | | | | *e*SB | **Sb** | **19 01 46.3** | **+0.2** |
| **SOH** | **Sokhos** | **1.12** | **172** | *e*Pb | **Pg** | **19 01 30.9** | **-0.5** |
| SOH | | | | *e*Sb | **Sb** | **19 01 46.3** | **+0.2** |
| **GRG** | **Griva** | **1.13** | **210** | *e*PB | **Pg** | **19 01 31.1** | **-0.4** |
| **GRG** | **Griva** | **1.13** | **210** | *e*Pb | **Pg** | **19 01 31.1** | **-0.4** |
| **BARS** | **Barje** | **1.33** | **312** | *e*Pg | **Pn** | **19 01 34.4** | **-0.2** |
| BARS | | | | *e*Sg | **Sb** | **19 01 50.6** | **-1.5** |
| **BARS** | **Barje** | **1.33** | **312** | *e*Pg | **Pn** | **19 01 34.4** | **-0.2** |
| BARS | | | | *e*Sg | **Sb** | **19 01 50.6** | **-1.5** |
| **HORT** | **Hortiatis** | **1.34** | **182** | *e*PB | **Pb** | **19 01 35.1** | **0.0** |
| HORT | | | | *e*SB | **Sn** | **19 01 52.8** | **+0.1** |
| **HORT** | **Hortiatis** | **1.34** | **182** | *e*Pb | **Pb** | **19 01 35.1** | **0.0** |
| HORT | | | | *e*Sb | **Sn** | **19 01 52.8** | **+0.1** |
| **ZAPS** | **Zavoj** | **1.39** | **344** | *e*Pg | **Pn** | **19 01 36.3** | **+0.8** |
| ZAPS | | | | *e*Sg | **Sg** | **19 01 56.2** | **+1.5** |

*CSEM* ***26*** *19:01:11.4±0.6,39.˚19N×41.˚58E,h10km,MD2.4, Error ellipse: s-maj=14.2km s-min=9.6km az=170.0*
*ISK* ***26*** *19:01:11.6,39.˚25N×41.˚64E,h23km, MD2.4*
*DDA* ***26*** *19:01:12.1,39.˚22N×41.˚69E,h7km,Md2.8*

**ISC 26 19:01:11.6±0.9,39˚20N±0.˚05×41˚61E±0.˚03,h27km±6km, n13,σ1º93/26,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VRTB** | **Varto-Mus** | **0.12** | **251** | *e*PG | **Pb** | **19 01 16.9** | **0.0** |
| VRTB | | | | *e*SG | **Sb** | **19 01 20.8** | **+0.2** |
| **VRTB** | **Varto-Mus** | **0.12** | **251** | *e*Pg | **Pb** | **19 01 16.9** | **0.0** |
| VRTB | | | | *e*Sg | **Sb** | **19 01 20.8** | **+0.2** |
| **EKAR** | **Karacoban** | **0.36** | **81** | *i* P | **Pb** | **19 01 20.1** | **+0.2** |
| EKAR | | | | *i* S | **Sb** | **19 01 26.3** | **+0.7** |
| **EKAR** | **Karacoban** | **0.36** | **81** | P | **Pb** | **19 01 20.1** | **+0.2** |
| EKAR | | | | S | **Sb** | **19 01 26.3** | **+0.7** |
| **BNGL** | **BINGOL** | **0.43** | **235** | P | **Pn** | **19 01 29.3** | **0.0** |
| BNGL | | | | S | **Sn** | **19 01 29.3** | **0.0** |
| **ERZM** | **Erzurum** | **0.73** | **345** | *i* P | **Pn** | **19 01 26.3** | **0.0** |
| ERZM | | | | *i* S | **Sn** | **19 01 37.0** | **+0.3** |
| **ERZM** | **Erzurum** | **0.73** | **345** | P | **Pn** | **19 01 26.4** | **0.0** |
| ERZM | | | | S | **Sn** | **19 01 37.0** | **+0.3** |
| **EZM** | **Erzurum** | **0.73** | **345** | *e*PG | **Pn** | **19 01 25.7** | **-0.7** |
| EZM | | | | *e*SG | **Sb** | **19 01 36.1** | **+0.4** |
| **BNGB** | **Bing˜¶ll** | **0.75** | **254** | *e*PG | **Pb** | **19 01 27.5** | **+1.4** |
| BNGB | | | | *e*SG | **Sn** | **19 01 39.1** | **+2.1** |
| **HOMI** | **Horasan** | **0.88** | **15** | P | **Pn** | **19 01 26.6** | **-1.7** |
| HOMI | | | | S | **Sn** | **19 01 40.0** | **-0.4** |
| **BINT** | **Bingol** | **0.93** | **250** | *e*Pg | **Pn** | **19 01 27.5** | **-1.5** |
| BINT | | | | *e*Sg | **Sn** | **19 01 39.1** | **-2.3** |
| **TUTA** | **Tutak** | **0.96** | **77** | *i* P | **Pn** | **19 01 29.3** | **-0.2** |
| TUTA | | | | *i* S | **Sb** | **19 01 42.2** | **+0.1** |
| **TUTA** | **Tutak** | **0.96** | **77** | P | **Pn** | **19 01 29.3** | **-0.2** |
| TUTA | | | | S | **Sb** | **19 01 42.2** | **+0.1** |

*ISCJB* ***26*** *19:09:42.1±0.6,40.˚15N±0.˚03×31.˚67E±0.˚05,h8km, Error ellipse: s-maj=5.3km s-min=5.0km az=24.3*
*CSEM* ***26*** *19:09:42.1±0.3,40.˚14N×31.˚66E,h2km,MD2.6, Error ellipse: s-maj=7.2km s-min=5.5km az=13.0*
*ISK* ***26*** *19:09:42.4,40.˚18N×31.˚67E,h10km, MD2.6*

**ISC 26 19:09:41.7±0.8,40˚15N±0.˚03×31˚61E±0.˚03,h8km,n21, σ1º49/28,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUMIH** | **MIHALICIK** | **0.30** | **199** | P | **Pg** | **19 09 47.3** | **-0.3** |
| AUMIH | | | | S | **Sg** | **19 09 50.9** | **-0.7** |
| **MDUB** | **Mudurnu** | **0.45** | **315** | *e*PG | **Pb** | **19 09 51.9** | **-0.1** |
| MDUB | | | | *e*SG | **Sb** | **19 09 58.9** | **0.0** |
| **MDUB** | **Mudurnu** | **0.45** | **315** | *e*Pg | **Pb** | **19 09 51.9** | **-0.1** |
| MDUB | | | | *e*Sg | **Sb** | **19 09 58.9** | **0.0** |
| **BCAM** | **Yenicaga** | **0.75** | **27** | *i* P | **Pg** | **19 09 56.2** | **+0.1** |
| BCAM | | | | *i* S | **Sg** | **19 10 05.4** | **-0.5** |
| **BCAM** | **Yenicaga** | **0.75** | **27** | P | **Pg** | **19 09 56.2** | **+0.1** |
| BCAM | | | | S | **Sg** | **19 10 05.4** | **-0.5** |
| **GULT** | **Gulveren** | **0.89** | **289** | *e*PG | **Pn** | **19 10 00.5** | **0.0** |
| **GULT** | **Gulveren** | **0.89** | **289** | *e*Pg | **Pn** | **19 10 00.5** | **0.0** |
| **BORA** | **Eskisehir** | **0.93** | **254** | *i* P | **Pg** | **19 09 59.1** | **-0.4** |
| BORA | | | | *i* S | **Sn** | **19 10 15.4** | **+0.7** |
| **BORA** | **Eskisehir** | **0.93** | **254** | P | **Pg** | **19 09 59.1** | **-0.4** |
| BORA | | | | S | **Sn** | **19 10 15.4** | **+0.7** |
| **KIZT** | **Kizilcal** | **1.28** | **171** | *e*PN | **Pg** | **19 10 06.6** | **+0.3** |
| **KIZT** | **Kizilcal** | **1.28** | **171** | *e*Pn | **Pg** | **19 10 06.6** | **+0.3** |
| **AFSR** | **Af˙ar-Bala (A** | **1.32** | **122** | *e*PN | **Pg** | **19 10 07.3** | **+0.2** |
| **AFSR** | **Af˙ar-Bala (A** | **1.32** | **122** | *e*Pn | **Pg** | **19 10 07.3** | **+0.2** |
| **TVSB** | **Tavsanli** | **1.80** | **248** | *e*PN | **Pb** | **19 10 15.3** | **+0.4** |
| **TVSB** | **Tavsanli** | **1.80** | **248** | *e*Pn | **Pb** | **19 10 15.3** | **+0.4** |
| **SILT** | **Sile** | **1.80** | **304** | *e*PN | **Pb** | **19 10 14.5** | **-0.4** |
| **SILT** | **Sile** | **1.80** | **304** | *e*Pn | **Pb** | **19 10 14.5** | **-0.4** |
| **YAYX** | **Yaylak** | **2.09** | **125** | *e*PN | **Pb** | **19 10 18.9** | **-1.0** |
| **YAYX** | **Yaylak** | **2.09** | **125** | *e*Pn | **Pb** | **19 10 18.9** | **-1.0** |
| **CORM** | **Corum** | **2.31** | **88** | *e*PN | **Pn** | **19 10 20.8** | **+0.6** |
| **CORM** | **Corum** | **2.31** | **88** | *e*Pn | **Pn** | **19 10 20.8** | **+0.6** |

*ISCJB* ***26*** *19:12:43.5±0.3,4.˚60S±0.˚03×129.˚44E±0.˚04,h200km, mb3.6/6, Error ellipse: s-maj=5.6km s-min=4.4km az=159.1*
*AUST* ***26*** *19:12:43.8±0.0,4.˚55S×129.˚47E,h206km, Error ellipse: s-maj=1.1km s-min=1.0km az=349.0*
*IDC* ***26*** *19:12:44.9±1.7,4.˚63S×129.˚45E,h200km±19km, mb3.4/6, mb1 3.5/10,mb1mx3.3/32,mbtmp4.0/10, Error ellipse: s-maj=24.9km s-min=13.9km az=71.0*
*DJA* ***26*** *19:12:47.8±0.4,4.˚5±3.˚×12.˚9E±.˚,h175km±4km, M4.1/12, mb4.0/3,MLv4.2/12*

**ISC 26 19:12:44.4±0.6,4.˚60S±0.˚06×129.˚44E±0.˚05,h200km,n41, σ1º50/47,mb3.8/6,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDI** | **Bandanaira** | **0.47** | **80** | P | **Pn** | **19 13 12.7** | **+1.3** |
| BNDI | | | | S | **Sn** | **19 13 33.0** | **+0.9** |
| **MSAI** | **Masohi** | **1.35** | **338** | P | **Pn** | **19 13 17.2** | **+0.3** |
| MSAI | | | | S | **Sn** | **19 13 39.5** | **-2.6** |
| **AAI** | **Ambon** | **1.54** | **306** | P | **Pn** | **19 13 19.1** | **+0.6** |
| | baz=1.5,SNR=70 | | | | | | |
| **AAI** | **Ambon** | **1.54** | **306** | P | **Pn** | **19 13 19.3** | **+0.8** |
| AAI | | | | S | **Sn** | **19 13 43.1** | **-1.9** |
| **NLAI** | **Namlea** | **2.70** | **300** | P | **Pn** | **19 13 31.3** | **+0.7** |
| **FAKI** | **Fak Fak** | **3.26** | **59** | P | **Pn** | **19 13 38.3** | **+1.1** |
| | baz=3.2,SNR=74 | | | | | | |
| **FAKI** | **Fak Fak** | **3.26** | **59** | P | **Pn** | **19 13 38.3** | **+1.1** |
| FAKI | | | | S | **Sn** | **19 14 17.5** | **-1.0** |
| **SIJI** | **Sorong** | **4.13** | **26** | P | **Pn** | **19 13 48.5** | **+0.6** |
| | 7.9nm,0.3s,baz=58,slow=7.0,SNR=54 | | | | | | |
| SIJI | | | | S | **Sn** | **19 14 35.3** | **-2.6** |
| | 19nm,0.3s,baz=256,slow=23,SNR=36 | | | | | | |
| **SWI** | **Sorong** | **4.13** | **26** | P | **Pn** | **19 13 48.6** | **+0.7** |
| | baz=4.1,SNR=29 | | | | | | |
| **SWI** | **Sorong** | **4.13** | **26** | P | **Pn** | **19 13 48.6** | **+0.7** |
| SWI | | | | S | **Sn** | **19 14 35.5** | **-2.4** |
| **SANI** | **Sanana** | **4.28** | **306** | P | **Pn** | **19 13 50.8** | **+1.0** |
| SANI | | | | S | **Sn** | **19 14 38.6** | **-2.5** |
| **LBMI** | **Labuha** | **4.39** | **334** | P | **Pn** | **19 13 52.1** | **+0.9** |
| LBMI | | | | S | **Sn** | **19 14 42.8** | **-0.9** |
| **SOEI** | **Soe** | **7.25** | **225** | P | Pn | **19 14 32.1** | **+4.0** |
| | baz=7.3,SNR=4.4 | | | | | | |
| **SOEI** | **Soe** | **7.25** | **225** | P | Pn | 19 14 31.5 | +3.4 |
| | 13nm,1.6s,0.1nm | | | | | | |
| **BATI** | **Baumata** | **7.99** | **226** | P | **Pn** | **19 14 38.6** | **+1.0** |
| | 4.0nm,0.3s,baz=154,slow=1.2,SNR=6.3 | | | | | | |
| **BATI** | **Baumata** | **7.99** | **226** | P | **Pn** | **19 14 40.2** | **+2.6** |
| **MTN** | **Manton Dam** | **8.36** | **169** | P | **Pn** | **19 14 41.7** | **-0.6** |
| | baz=8.5,SNR=6.0 | | | | | | |
| **KDU** | **Kakadu** | **8.57** | **160** | P | **Pn** | **19 14 44.2** | **-0.9** |
| | baz=8.7,SNR=13 | | | | | | |
| **MRSI** | **Marisa** | **9.04** | **304** | P | Pn | 19 14 55.1 | +3.9 |
| **JAGI** | **Jajag, Banyuwa** | **15.67** | **255** | P | **Pn** | **19 16 15.3** | **+0.4** |
| | baz=16,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.97** | **163** | P | **P** | **19 16 16.6** | **-1.5** |
| | 0.6nm,0.3s,baz=334,slow=13,SNR=17 | | | | | | |
| WRA | | | | S | S | 19 19 05.3 | -10 |
| | 1.0nm,0.3s,baz=335,slow=21,SNR=7.6 | | | | | | |
| **COEN** | **Coen** | **16.42** | **125** | P | **Pn** | **19 16 25.1** | **+1.2** |
| | baz=16,SNR=13 | | | | | | |
| **QIS** | **Mount Isa** | **18.68** | **149** | P | **P** | **19 16 49.1** | **+1.3** |
| | baz=19,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **19.43** | **168** | P | **P** | **19 16 57.0** | **+1.2** |
| | 0.7nm,0.3s,baz=346,slow=11,SNR=52 | | | | | | |
| ASAR | | | | S | **S** | **19 20 19.0** | **-5.8** |
| | 0.2nm,0.3s,baz=348,slow=20,SNR=13 | | | | | | |
| **WRKA** | **Warakurna** | **20.35** | **183** | P | **P** | **19 17 06.0** | **+0.4** |
| | baz=20,SNR=25 | | | | | | |
| **CISI** | **Cisoppet, Garu** | **21.70** | **261** | P | **P** | **19 17 18.2** | **-1.8** |
| | baz=22,SNR=4.6 | | | | | | |
| **CTA** | **Charters Tower** | **22.47** | **135** | P | **P** | **19 17 27.0** | **-0.1** |
| | 1.4nm,0.6s,baz=311,slow=9.3,SNR=3.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.80** | **308** | P | **P** | **19 19 41.6** | **-0.2** |
| | 2.5nm,0.5s,baz=135,slow=7.3,SNR=16 | | | | | | |
| **ODAN** | **Odare** | **51.29** | **310** | *e*P | **P** | **19 21 29.2** | **+0.6** |
| | 5.4nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **51.30** | **311** | *e*P | **P** | **19 21 29.4** | **+0.6** |
| | 11nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **51.94** | **310** | *e*P | **P** | **19 21 34.3** | **+0.8** |
| | 21nm,0.4s | | | | | | |
| **GUN** | **Gumba** | **52.98** | **310** | *e*P | **P** | **19 21 41.2** | **0.0** |
| | 8.8nm,0.4s | | | | | | |
| **PKI** | **Pulchoki** | **53.17** | **310** | *e*P | **P** | **19 21 42.7** | **+0.1** |
| | 2.6nm,0.2s | | | | | | |
| **PKIN** | **Phulchoki** | **53.18** | **310** | *e*P | **P** | **19 21 42.6** | **0.0** |
| | 1.9nm,0.2s | | | | | | |
| **KKN** | **Kakani** | **53.38** | **310** | *e*P | **P** | **19 21 44.2** | **+0.3** |
| | 4.1nm,0.3s | | | | | | |
| **GKN** | **Gorkha** | **53.98** | **310** | *e*P | **P** | **19 21 48.6** | **+0.4** |
| | 9.9nm,0.5s | | | | | | |
| **KOLN** | **Koldanda** | **54.67** | **309** | *e*P | **P** | **19 21 54.0** | **+0.8** |
| | 5.8nm,0.3s | | | | | | |
| **SONM** | **Songino Array** | **56.01** | **341** | P | **P** | **19 22 03.7** | **+1.3** |
| | 0.4nm,0.6s,baz=159,slow=6.1,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.93** | **327** | P | **P** | **19 23 10.2** | **+1.1** |
| | 1.8nm,0.5s,baz=116,slow=9.1,SNR=15 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.20** | **334** | P | **P** | **19 23 29.5** | **+0.2** |
| | 1.1nm,0.5s,baz=114,slow=3.6,SNR=4.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **75.75** | **328** | P | **P** | **19 24 08.7** | **+0.7** |
| | 0.5nm,0.6s,baz=107,slow=7.9,SNR=4.2 | | | | | | |

*SJA* ***26*** *19:16:33.6±0.7,24.˚14S×67.˚09W,h195km±10km,MD3.7, ML3.7*
*ISCJB* ***26*** *19:16:34.4±0.3,24.˚17S±0.˚04×67.˚07W±0.˚04,h192km±3km, mb3.7/9, Error ellipse: s-maj=7.0km s-min=3.9km az=37.7*
*IDC* ***26*** *19:16:34.8±1.0,24.˚11S×66.˚88W,h180km±9km,mb3.7/9, mb1 3.8/13,mb1mx3.7/23,mbtmp4.1/13, Error ellipse: s-maj=15.7km s-min=12.1km az=59.0*
*GUC* ***26*** *19:16:35.8±0.4,23.˚90S×67.˚33W,h220km,ML4.8*

**ISC 26 19:16:35.1±0.7,24˚17S±0.˚05×67˚06W±0.˚04,h185km±6km, n35,σ1º24/50,mb3.8/9,5C-1D,Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.52** | **111** | *i* P | **Pn** | **19 17 07.9** | **0.0** |
| SLA | | | | *i* S | **Sn** | **19 17 33.9** | **+0.7** |
| SLA | | | | AML | AML | 19 17 35.7 | |
| | comp=Z,378nm,0.6s | | | | | | |
| **HJA** | **Humahuaca** | **1.79** | **58** | *i* P | **Pn** | **19 17 11.1** | **+0.3** |
| HJA | | | | *i* S | **Sn** | **19 17 39.1** | **+0.7** |
| **AZAP** | **Zapla** | **1.82** | **92** | *i* P | **Pn** | **19 17 11.1** | **+0.2** |
| AZAP | | | | *i* S | **Sn** | **19 17 38.9** | **+0.3** |
| **FSA** | **Cafayete** | **2.13** | **154** | *i* P | **Pn** | **19 17 15.0** | **+0.8** |
| FSA | | | | *i* S | **Sn** | **19 17 45.0** | **+0.4** |
| **LVC** | **Limon Verde** | **2.31** | **312** | P | **Pn** | **19 17 17.4** | **+1.2** |
| | comp=Z,3µm,0.3s,baz=117,slow=8.3,SNR=667 | | | | | | |
| LVC | | | | S | **Sn** | **19 17 48.8** | **+0.7** |
| | comp=Z,4µm,0.3s,baz=166,slow=7.0,SNR=4.5 | | | | | | |
| **ASTB** | **Santa Barbara** | **2.36** | **85** | *i* P | **Pn** | **19 17 17.1** | **+0.4** |
| ASTB | | | | *i* S | **Sn** | **19 17 49.3** | **+0.3** |
| **YJA** | **Yavi** | **2.44** | **36** | *i* P | **Pn** | **19 17 17.7** | **-0.2** |
| YJA | | | | *i* S | **Sn** | **19 17 51.5** | **+0.3** |
| **AHML** | **Horco Molle** | **3.03** | **149** | *i* P | **Pn** | **19 17 24.9** | **+0.5** |
| AHML | | | | *i* S | **Sn** | **19 18 02.5** | **-0.5** |
| **PB09** | **IPOC Station P** | **3.11** | **319** | ⇑*i* P | **Pn** | **19 17 26.5** | **+1.0** |
| PB09 | | | | *i* S | **Sn** | **19 18 04.8** | **0.0** |
| PB09 | | | | AML | AML | 19 18 06.0 | |
| | comp=N,2µm,0.5s | | | | | | |
| **MACH** | **Maria Elena** | **3.17** | **308** | ⇓*i* P | **Pn** | **19 17 27.0** | **+0.6** |
| MACH | | | | eS | **Sn** | **19 18 05.3** | **-1.0** |
| **PB10** | **IPOC Station P** | **3.27** | **281** | ⇑*i* P | **Pn** | **19 17 28.1** | **+0.8** |
| PB10 | | | | *i* S | **Sn** | **19 18 07.8** | **-0.2** |
| PB10 | | | | AML | AML | 19 18 12.8 | |
| | comp=N,2µm,0.6s | | | | | | |
| **PB04** | **IPOC Station P** | **3.38** | **302** | ⇑*i* P | **Pn** | **19 17 29.2** | **+0.3** |
| PB04 | | | | *i* S | **Sn** | **19 18 09.7** | **-1.1** |
| PB04 | | | | AML | AML | 19 18 18.2 | |
| | comp=E,559nm,0.7s | | | | | | |
| **PB07** | **IPOC Station P** | **3.57** | **312** | ⇑*i* P | **Pn** | **19 17 31.3** | **+0.1** |
| PB07 | | | | *i* S | **Sn** | **19 18 13.0** | **-2.0** |
| PB07 | | | | AML | AML | 19 18 14.7 | |
| | comp=E,670nm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **3.84** | **324** | ⇑*i* P | **Pn** | **19 17 34.2** | **-0.3** |
| PB01 | | | | *i* S | **Sn** | **19 18 18.5** | **-2.5** |
| **PB11** | **IPOC Station P** | **5.01** | **331** | *e*P | **Pn** | **19 17 48.1** | **-1.4** |
| PB11 | | | | eS | **Sn** | **19 18 44.2** | **-3.7** |
| **CFAA** | **Coronel Fontan** | **7.48** | **188** | P | **Pn** | **19 18 21.1** | **-0.4** |
| | comp=E,0.3nm,0.3s,baz=352,slow=6.0,SNR=29 | | | | | | |
| CFAA | | | | S | **Sn** | **19 19 41.0** | **-4.9** |
| | comp=E,0.7nm,0.3s,baz=243,slow=18,SNR=14 | | | | | | |
| **LPAZ** | **La Paz** | **7.91** | **352** | P | **Pn** | **19 18 27.5** | **-0.3** |
| | comp=E,0.8nm,0.3s,baz=153,slow=9.1,SNR=10.0 | | | | | | |
| LPAZ | | | | S | **Sn** | **19 19 56.3** | **-0.8** |
| | comp=E,0.5nm,0.3s,baz=339,slow=22,SNR=5.0 | | | | | | |
| **CPUP** | **Villa Florida** | **9.06** | **106** | P | **Pn** | **19 18 40.6** | **-1.6** |
| | comp=E,0.4nm,0.3s,baz=282,slow=11,SNR=6.4 | | | | | | |
| **SIV** | **San Ignacio** | **9.89** | **36** | P | Pn | 19 18 49.8 | -3.5 |
| | comp=E,0.9nm,0.3s,baz=205,slow=3.9,SNR=7.3 | | | | | | |
| **BDFB** | **Brasilia** | **19.80** | **68** | P | **P** | **19 20 50.4** | **-1.1** |
| | comp=E,1.4nm,0.3s,baz=248,slow=12,SNR=7.0 | | | | | | |
| **SNAA** | **Sanae** | **59.20** | **161** | P | **P** | **19 26 17.0** | **+0.7** |
| | comp=E,0.2nm,0.6s,baz=296,slow=8.6,SNR=8.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **63.79** | **325** | P | **P** | **19 26 47.8** | **+0.2** |
| | comp=E,0.4nm,0.4s,baz=148,slow=9.6,SNR=4.3 | | | | | | |
| **TORD** | **Tordil Ar. Bea** | **76.68** | **69** | P | **P** | **19 28 05.2** | **-0.9** |
| | comp=E,1.7nm,0.6s,baz=256,slow=5.6,SNR=30 | | | | | | |
| **ULM** | **Lac du Bonnet** | **78.38** | **342** | P | **P** | **19 28 14.8** | **+0.1** |
| | comp=E,8.1nm,0.8s,baz=174,slow=6.6,SNR=6.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.64** | **321** | P | **P** | **19 28 17.9** | **+1.2** |
| | comp=E,0.2nm,0.3s,baz=130,slow=11,SNR=3.8 | | | | | | |
| **BOSA** | **Boshof** | **80.70** | **117** | P | **P** | **19 28 27.7** | **-0.3** |
| | comp=E,5.0nm,1.2s,baz=233,slow=11,SNR=4.2 | | | | | | |
| **MAW** | **Mawson** | **81.29** | **163** | P | **P** | **19 28 30.9** | **+0.7** |
| | comp=E,1.3nm,0.6s,baz=231,slow=3.2,SNR=4.7 | | | | | | |
| **ESDC** | **Sonseca Array** | **86.56** | **44** | P | **P** | **19 28 57.3** | **0.0** |
| | comp=E,0.3nm,0.5s,baz=252,slow=5.0,SNR=3.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **94.27** | **340** | P | **P** | **19 29 32.9** | **+0.3** |
| | comp=E,1.3nm,0.5s,baz=134,slow=4.5,SNR=8.0 | | | | | | |
| **ASAR** | **Alice Springs** | **128.28** | **205** | PKP | **PKPdf** | **19 35 20.4** | **+0.2** |
| | comp=E,0.8nm,0.7s,baz=141,slow=2.0,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **131.45** | **207** | PKP | **PKPdf** | **19 35 25.9** | **-0.3** |
| | comp=E,0.5nm,0.4s,baz=156,slow=1.7,SNR=12 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **143.57** | **28** | PKP | PKPbc | 19 35 45.2 | 0.0 |
| | comp=E,2.5nm,0.6s,baz=304,slow=4.1,SNR=15 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.69** | **40** | PKPbc | **PKPdf** | **19 35 53.8** | **+0.8** |
| | comp=E,4.6nm,0.7s,baz=333,slow=2.2,SNR=27 | | | | | | |
| **SIJI** | **Sorong** | **149.41** | **218** | PKPbc | **PKPbc** | **19 36 03.9** | **+0.8** |
| | comp=E,2.9nm,0.6s,baz=17,slow=8.3,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **155.82** | **11** | PKPab | **PKPab** | **19 36 34.2** | **-0.3** |
| | comp=E,0.5nm,0.6s,baz=338,slow=2.8,SNR=4.5 | | | | | | |

*IDC* ***26*** *19:28:15.2±0.9, 1.˚05N×96.˚99E,h0km,mb4.1/10, mb1 4.1/12,mb1mx3.8/36,mbtmp4.0/12,ML3.5/2,MS3.3/3, Ms1 3.4/3,ms1mx2.8/40, Error ellipse: s-maj=25.3km s-min=17.1km az=57.0*
*ISCJB* ***26*** *19:28:18.3±0.5, 1.˚17N±0.˚06×97.˚03E±0.˚05,h25km, mb4.1/17,MS4.1/1, Error ellipse: s-maj=9.4km s-min=5.7km az=37.8*
*NEIC* ***26*** *19:28:20.8±0.6, 1.˚19N×97.˚12E,h35km,mb4.2/6, Error ellipse: s-maj=10.4km s-min=8.6km az=53.0*
*DJA* ***26*** *19:28:20.0±1.8, 1.˚1N±.˚5×9.˚7E±1.˚3,h24km±8km,M4.0/10, mb4.2/2,MLv4.0/10*

**ISC 26 19:28:19.6±0.7,1˚23N±0.˚06×97˚08E±0.˚08,h25km,n52, σ1º45/44,mb4.2/17,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSI** | **Gunungsitoli** | **0.50** | **81** | P | **Pn** | **19 28 31.2** | **0.0** |
| GSI | | | | S | **Sn** | **19 28 39.8** | **+0.8** |
| **GSI** | **Gunungsitoli** | **0.50** | **81** | *e*Pg | **Pn** | **19 28 30.9** | **-0.3** |
| **PSI** | **Prapat** | **2.42** | **50** | Pn | **Pn** | **19 28 57.7** | **0.0** |
| | 2.3nm,0.3s,baz=182,slow=6.3,SNR=16 | | | | | | |
| PSI | | | | LR | LR | 19 29 47.2 | |
| | comp=Z,203nm,21.9s,baz=306,slow=36 | | | | | | |
| **MNSI** | **Mandailing Nat** | **2.53** | **100** | P | **Pn** | **19 29 00.4** | **+1.2** |
| **TSI** | **Tuntungan** | **2.70** | **33** | P | **Pn** | **19 29 02.7** | **+1.2** |
| **SISI** | **Saibi** | **3.23** | **142** | P | **Pn** | **19 29 09.8** | **+1.0** |
| **PPI** | **Padang Panjang** | **3.71** | **117** | P | **Pn** | **19 29 17.4** | **+2.0** |
| **PDSI** | **Padang** | **3.99** | **122** | P | **Pn** | **19 29 19.7** | **+0.4** |
| **BKNI** | **Bangkinang** | **4.06** | **103** | P | **Pn** | **19 29 20.8** | **+0.6** |
| **BKNI** | **Bangkinang** | **4.06** | **103** | Pn | Pn | 19 29 13.0 | -7.2 |
| **IPM** | **Ipoh** | **5.09** | **51** | *e*Pn | **Pn** | **19 29 35.5** | **+1.0** |
| | 20nm,0.9s | | | | | | |
| **KULM** | **Kulim** | **5.38** | **41** | *e*Pn | **Pn** | **19 29 38.2** | **-0.2** |
| | 28nm,1.0s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **17.22** | **6** | P | **Pn** | **19 32 18.6** | **-0.1** |
| | 0.2nm,0.3s,baz=196,slow=11,SNR=15 | | | | | | |
| CMAR | | | | LR | LR | 19 38 46.2 | |
| | comp=Z,56nm,18.9s,baz=185,slow=36 | | | | | | |
| **CHTO** | **Chiang Mai** | **17.57** | **6** | *e*P | **Pn** | **19 32 21.4** | **-1.6** |
| **SLVN** | **Son La** | **21.06** | **18** | *e*P | **P** | **19 33 01.4** | **-0.7** |
| | 7.4nm,0.7s | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.06** | **250** | T | T | 20 00 49.2 | |
| | baz=71,slow=75,SNR=2321 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.07** | **250** | T | T | 20 00 49.4 | |
| | baz=71,slow=75,SNR=2362 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.08** | **250** | T | T | 20 00 50.5 | |
| | baz=71,slow=75,SNR=2639 | | | | | | |
| **ODAN** | **Odare** | **27.14** | **341** | *e*P | **P** | **19 34 03.3** | **+2.1** |
| | 11nm,0.7s | | | | | | |
| **RAMN** | **Ramite** | **27.49** | **339** | *e*P | **P** | **19 34 06.9** | **+2.5** |
| | 11nm,0.8s | | | | | | |
| **TAPN** | **Taplejung** | **27.49** | **342** | *e*P | **P** | **19 34 06.8** | **+2.3** |
| | 26nm,1.0s | | | | | | |
| **PKI** | **Pulchoki** | **28.49** | **338** | *e*P | **P** | **19 34 15.9** | **+2.5** |
| **PKIN** | **Phulchoki** | **28.50** | **338** | *e*P | **P** | **19 34 15.6** | **+2.2** |
| **GUN** | **Gumba** | **28.62** | **339** | *e*P | **P** | **19 34 16.9** | **+2.3** |
| | 18nm,0.7s | | | | | | |
| **KKN** | **Kakani** | **28.73** | **338** | *e*P | **P** | **19 34 17.4** | **+1.9** |
| **BATI** | **Baumata** | **28.79** | **114** | P | **P** | **19 34 14.4** | **-1.5** |
| | 5.5nm,0.6s,baz=300,slow=17,SNR=3.8 | | | | | | |
| **LSA** | **Lhasa** | **28.88** | **349** | *e*P | P | 19 34 20.5 | +3.5 |
| **GKN** | **Gorkha** | **29.17** | **337** | *e*P | **P** | **19 34 21.2** | **+1.9** |
| **KOLN** | **Koldanda** | **29.39** | **335** | *e*P | **P** | **19 34 23.2** | **+1.9** |
| | 12nm,0.7s | | | | | | |
| **GTA** | **Gaotai** | **38.09** | **3** | *e*P | **P** | **19 35 38.0** | **+1.4** |
| GTA | | | | pP | **pP** | **19 35 41.5** | **-2.6** |
| GTA | | | | sP | **sP** | **19 35 44.0** | **-3.2** |
| GTA | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **39.31** | **158** | T | T | 20 17 21.3 | |
| | baz=333,slow=76,SNR=13 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **39.33** | **158** | T | T | 20 17 21.2 | |
| | baz=333,slow=76,SNR=16 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **39.33** | **158** | T | T | 20 17 24.0 | |
| | baz=333,slow=76,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.15** | **122** | P | **P** | **19 36 09.9** | **-0.6** |
| | comp=Z,0.7nm,0.6s,baz=301,slow=9.0,SNR=

*BJI **26** 19:40:38.5,3˙.60S×99˙.80E,h21km,mb5.0/60,mB5.3/38, Ms4.9/29,Ms7 4.5/28*
*MOS **26** 19:40:39.7±1.0,3˙.51S×99˙.89E,h27km,mb5.5/44,Error ellipse: s-maj=9.7km s-min=4.9km az=116.2*
*AUST **26** 19:40:39.9,3˙.84S×99˙.96E,h15km*
*DJA **26** 19:40:40.3±0.6,4˙S±2˙×10˙0E±°,h27km±5km,M4.9/50, mb4.9/50,mB5.4/25,MLv5.1/27,Mw(mB)4.9/25*
*SZGRF **26** 19:40:41.3,4˙.73S×99˙.07E,h38km,mb5.2/11(BGR)*
**ISC 26 19:40:40.9±0.4,3˙.59S±0˙.03×99.77E±0˙.04,h24km±2km, h23km:pP-P,n614,σ1♀28/636,mb5.1/126,MS3.8/21, 30C-24D,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.86** | **16** | P | **Pb** | **19 40 56.2** | **-0.9** |
| PPSI | | | | S | **Sb** | **19 41 08.4** | **+0.2** |
| **SISI** | **Saibi** | **2.35** | **343** | P | **Pn** | **19 41 16.2** | **-1.9** |
| SISI | | | | S | **Sn** | **19 41 43.7** | **-2.5** |
| **PDSI** | **Padang** | **2.75** | **15** | P | **Pn** | **19 41 22.3** | **-1.3** |
| PDSI | | | | S | **Sn** | **19 41 53.6** | **-2.6** |
| **KSI** | **Kapahiang** | **2.82** | **91** | P | **Pn** | **19 41 23.5** | **-1.1** |
| **SDSI** | **Sungai Dareh** | **3.12** | **32** | P | **Pn** | **19 41 27.7** | **-0.9** |
| **PPI** | **Padang Panjang** baz=3.4,SNR=43 | **3.18** | **11** | P | **Pn** | **19 41 28.6** | **-0.9** |
| **PPI** | **Padang Panjang** | **3.18** | **11** | P | **Pn** | **19 41 28.5** | **-0.9** |
| PPI | | | | S | **Sn** | **19 42 04.8** | **-1.8** |
| **MNAI** | **Manna** baz=3.0,SNR=25 | **3.27** | **104** | P | **Pn** | **19 41 29.1** | **-1.6** |
| **MNAI** | **Manna** | **3.27** | **104** | P | **Pn** | **19 41 29.4** | **-1.3** |
| MNAI | | | | S | **Sn** | **19 42 06.8** | **-2.1** |
| **MNAI** | **Manna** | **3.27** | **104** | *e*Pn | **Pn** | **19 41 29.2** | **-1.5** |
| MNAI | | | | *e*Sn | **Sn** | **19 42 07.7** | **-1.2** |
| **BKNI** | **Bangkinang** | **4.09** | **18** | P | **Pn** | **19 41 42.8** | **+0.7** |
| **BKNI** | **Bangkinang** | **4.09** | **18** | *e*Pn | **Pn** | **19 41 39.7** | **-2.4** |
| **RGRI** | **Rengat** | **4.12** | **39** | P | **Pn** | **19 41 41.7** | **-0.7** |
| **JMBI** | **JAMBI** | **4.33** | **63** | P | **Pn** | **19 41 45.1** | **-0.2** |
| **MNSI** | **Mandailing Nat** | **4.36** | **358** | P | **Pn** | **19 41 45.2** | **-0.6** |
| **MDSI** | **Maura Dua** | **4.49** | **102** | P | **Pn** | **19 41 46.4** | **-1.1** |
| **LWLI** | **Liwa** | **4.51** | **108** | P | **Pn** | **19 41 46.2** | **-1.6** |
| **PMBI** | **Palembang** | **5.04** | **83** | P | **Pn** | **19 41 57.5** | **+2.5** |
| **KASI** | **Kota Agung** 394nm,0.9s,13μm4.3nm | **5.09** | **112** | P | **Pn** | **19 41 53.8** | **-1.9** |
| **KLI** | **Kotabumi** 194nm,0.7s,3μm1.9nm | **5.23** | **104** | P | **Pn** | **19 41 56.5** | **-1.2** |
| **GSI** | **Gunungsitoli** 168nm,1.1s,0.9nm | **5.34** | **336** | P | **Pn** | **19 41 57.5** | **-1.6** |
| **GSI** | **Gunungsitoli** | **5.34** | **336** | *e*Pn | **Pn** | **19 41 57.0** | **-2.2** |
| **PSI** | **Prapat** 1.7nm,0.3s,baz=149,slow=5.9,SNR=4.2 | **6.41** | **352** | Pn | **Pn** | **19 42 11.7** | **-2.3** |
| **PSI** | **Prapat** | **6.41** | **352** | *e*P | **Pn** | **19 42 11.1** | **-2.9** |
| **PSI** | **Prapat** baz=6.6,SNR=4.2 | **6.41** | **352** | P | Pn | 19 42 19.9 | +5.9 |
| **PSI** | **Prapat** | **6.41** | **352** | *e*Pn | **Pn** | **19 42 11.1** | **-2.9** |
| **PPBI** | **Pangkal Pinang** 37nm,0.6s,634nm0.2nm | **6.52** | **78** | P | **Pn** | **19 42 14.6** | **-0.8** |
| **TPRI** | **Tanjung Pinang** 190nm,0.6s,2μm0.7nm | **6.53** | **47** | P | **Pn** | **19 42 15.3** | **-0.3** |
| **CGJI** | **Cibinong** 517nm,0.8s,5μm1.6nm | **6.62** | **117** | P | **Pn** | **19 42 14.0** | **-2.8** |
| **MYKOM** | **Kota Tinggi** | **6.73** | **37** | *e*Pn | **Pn** | **19 42 17.1** | **-1.2** |
| **FRIM** | **Kepong** | **7.03** | **15** | ⇑P | **Pn** | **19 42 21.4** | **-1.1** |
| **TSI** | **Tuntungan** | **7.15** | **350** | P | **Pb** | **19 42 42.7** | **-1.7** |
| **TNG** | **Tangerang** | **7.32** | **111** | P | **Pn** | **19 42 29.0** | **+2.7** |
| **KCSI** | **Kotacane, Aceh** | **7.34** | **344** | P | Pb | 19 42 52.4 | +4.7 |
| **SKJI** | **Sukabumi** 501nm,0.6s,5μm1.7nm | **7.56** | **117** | P | Pn | 19 42 26.5 | -3.2 |
| **CBJI** | **Citeko** 2μm,0.8s,15μm5.1nm | **7.59** | **112** | P | **Pn** | **19 42 31.6** | **+1.5** |
| **TPI** | **Tanjungpandan** 31nm,0.8s,0.2nm | **7.92** | **84** | P | **Pn** | **19 42 33.2** | **-1.4** |
| **IPM** | **Ipoh** | **8.12** | **9** | *e*Pn | **Pn** | **19 42 37.6** | **+0.2** |
| **CNJI** | **Cibinong** 572nm,0.7s,5μm | **8.20** | **117** | P | Pn | 19 42 34.9 | -3.6 |
| **LEM** | **Lembang** 27nm,0.3s,baz=158,slow=17,SNR=19 | **8.45** | **113** | Pn | **Pn** | **19 42 41.7** | **-0.4** |
| LEM | | | | Sn | **Sn** | **19 44 15.6** | **-1.3** |
| LEM | baz=225,slow=20,SNR=1.4 | | | LR | LR | 19 46 24.8 | |
| **LEM** | comp=Z,1μm,21.4s,baz=337,slow=41 **Lembang** baz=8.2,SNR=15 | **8.45** | **113** | P | **Pn** | **19 42 41.7** | **-0.4** |
| **LEM** | **Lembang** 3μm,0.9s,27μm | **8.45** | **113** | P | **Pn** | **19 42 41.4** | **-0.7** |
| **KULM** | **Kulim** | **8.87** | **6** | *e*Pn | Pn | 19 42 44.0 | -3.7 |
| **CISI** | **Cisompet, Garu** baz=8.7,SNR=76 | **8.92** | **117** | P | Pn | 19 42 45.2 | -3.3 |
| **CISI** | **Cisompet, Garu** 855nm,0.6s,9μm | **8.92** | **117** | P | Pn | 19 42 44.9 | -3.5 |
| **CISI** | **Cisompet, Garu** 597nm,0.6s | **8.92** | **117** | *e*Pn | Pn | 19 42 45.0 | -3.5 |
| CISI | | | | *e*Sn | Sn | 19 44 17.1 | -11 |
| **XMIS** | **Christmas Isla** baz=8.7,SNR=4.6 | **8.99** | **140** | P | Pn | 19 42 43.6 | -5.8 |
| **KTGM** | **Kuala Trenggan** | **9.48** | **21** | ⇑P | **Pn** | **19 42 55.7** | **-0.3** |
| **CMJI** | **Cimerak** 235nm,0.6s,2μm | **9.59** | **116** | P | Pn | 19 42 54.1 | -3.4 |
| **SMRI** | **Semarang** 127nm,1.3s | **11.17** | **108** | P | **Pn** | **19 43 18.6** | **-0.6** |
| **UGM** | **Wanagama** baz=11,SNR=16 | **11.53** | **112** | P | **Pn** | **19 43 22.2** | **-1.9** |
| **UGM** | **Wanagama** 141nm,1.9s | **11.53** | **112** | P | **Pn** | **19 43 21.4** | **-2.8** |
| **KSM** | **Kuching** | **11.68** | **65** | ⇓P | **Pn** | **19 43 26.9** | **+0.8** |
| **PBKI** | **Pangkalan Bun** | **11.92** | **86** | P | Pn | 19 43 33.9 | +4.5 |
| **PCJI** | **Pacitan** 49nm,1.7s | **12.23** | **112** | P | **Pn** | **19 43 30.9** | **-2.9** |
| **STKI** | **Sintang** 36nm,1.2s | **12.25** | **73** | P | **Pn** | **19 43 35.1** | **+1.0** |
| **PWJI** | **Pagerwojo** 57nm,0.7s | **12.75** | **111** | P | Pn | 19 43 37.6 | -3.3 |
| **SBUM** | **Sibu** | **13.82** | **64** | ⇓P | **Pn** | **19 43 56.9** | **+1.4** |
| **SBUM** | **Sibu** | **13.82** | **64** | *e*Pn | **Pn** | **19 43 56.8** | **+1.4** |
| **KMMI** | **Kalianget** 39nm,1.2s | **14.55** | **104** | P | **Pn** | **19 44 02.3** | **-3.1** |
| **BTM** | **Bintulu** | **14.92** | **63** | ⇓P | **P** | **19 44 14.1** | **-1.9** |
| **ABJI** | **Asem Bagus** 92nm,0.7s | **14.98** | **107** | P | **Pn** | **19 44 11.2** | **-0.1** |
| **BBKI** | **Banjar Baru** 143nm,0.7s | **15.04** | **90** | P | **Pn** | **19 44 13.0** | **+0.8** |
| **JAGI** | **Jajag, Banyuwa** baz=15,SNR=9.9 | **15.10** | **109** | P | Pn | 19 44 07.5 | -5.3 |
| **JAGI** | **Jajag, Banyuwa** 67nm,1.0s | **15.10** | **109** | P | Pn | 19 44 07.2 | -5.6 |
| **JAGI** | **Jajag, Banyuwa** | **15.10** | **109** | *e*Pn | Pn | 19 44 07.2 | -5.6 |
| **KBKI** | **Kotabaru** 41nm,1.0s,713nm | **16.37** | **89** | P | **Pn** | **19 44 30.1** | **+0.8** |
| **CHBT** | **CHBT** 25nm,1.5s | **16.44** | **9** | P | **P** | **19 44 36.9** | **+4.2** |
| **KHLT** | **Khaolaem Dam** 12nm,1.6s | **18.31** | **356** | P | **Pn** | **19 44 54.9** | **+1.4** |
| **KKM** | **Kota Kinabalu** baz=19,SNR=5.4 | **19.01** | **60** | P | **P** | **19 45 01.3** | **0.0** |
| **KKM** | **Kota Kinabalu** | **19.01** | **60** | ⇑P | **Pn** | **19 45 01.9** | **-0.3** |
| **KKM** | **Kota Kinabalu** 66nm,1.1s | **19.01** | **60** | *e*P | **P** | **19 45 00.3** | **-1.0** |
| **CHAI** | **Chaiyaphum** 9.6nm,1.3s | **19.49** | **6** | P | **Pn** | **19 45 10.5** | **+2.7** |
| **UBPT** | **Khong Chiam** 59nm,0.8s | **19.58** | **17** | P | **Pn** | **19 45 08.6** | **-0.2** |
| **SDKM** | **Sandakan** | **19.67** | **62** | ⇓P | **P** | **19 45 08.6** | **0.0** |
| **UMPA** | **Umpang Tak** 7.8nm,0.8s,81nm | **19.69** | **357** | P | **Pn** | **19 45 13.4** | **+3.2** |
| **TSM** | **Tawau** | **19.71** | **67** | ⇓P | **P** | **19 45 08.9** | **0.0** |
| **SPSI** | **Sidrap Palu** 28nm,0.8s | **19.96** | **92** | P | **P** | **19 45 09.0** | **-2.6** |
| **KAPI** | **Kappang** 2.5nm,0.3s,baz=285,slow=9.4,SNR=9.5 | **19.98** | **95** | P | **P** | **19 45 10.4** | **-1.3** |
| **KAPI** | **Kappang** 53nm,1.1s | **19.98** | **95** | *e*P | **P** | **19 45 10.3** | **-1.5** |
| **KDM** | **Kudat** | **19.98** | **59** | ⇓P | **P** | **19 45 12.1** | **+0.3** |
| **TTSI** | **Tana Toraja** 44nm,1.1s | **20.02** | **89** | P | **P** | **19 45 11.1** | **-1.2** |
| **KHON** | **Khomkaen** 9.5nm,1.0s | **20.03** | **9** | P | Pn | 19 45 16.5 | +2.3 |
| **PBKT** | **Sadao Pong** 19nm,0.8s,3μm | **20.07** | **3** | P | Pn | 19 45 17.6 | +3.0 |
| **PCI** | **Palu** 76nm,1.6s,1μm | **20.23** | **83** | P | **P** | **19 45 11.2** | **-3.3** |
| **BKSI** | **Bulukumba** 78nm,1.1s,693nm | **20.36** | **96** | P | **P** | **19 45 14.4** | **-1.6** |
| **MPSI** | **Mapaga** 35nm,1.0s | **20.49** | **79** | P | **P** | **19 45 16.3** | **-1.1** |
| **MYLDM** | **Lahad Datu** | **20.64** | **65** | ⇑P | **P** | **19 45 19.4** | **+0.4** |
| **MYLDM** | **Lahad Datu** 79nm,1.0s | **20.64** | **65** | *e*Pn | **P** | **19 45 20.0** | **+1.0** |
| **UTTA** | **Uttaradit** 8.1nm,0.9s,81nm | **21.22** | **2** | P | **P** | **19 45 26.1** | **+1.0** |
| **MHMT** | **Maesarieng** 40nm,1.0s | **21.71** | **355** | P | **P** | **19 45 31.0** | **+0.6** |
| **PALK** | **Pallekele** 25nm,1.0s,baz=116,slow=9.3,SNR=6.2 | **21.88** | **300** | P | **P** | **19 45 34.0** | **+1.7** |
| PALK | | | | LR | LR | 19 53 44.6 | |
| **PALK** | comp=Z,335nm,18.0s,baz=116,slow=36 **Pallekele** | **21.88** | **300** | *e*P | **P** | **19 45 33.6** | **+1.2** |
| PALK | comp=Z,46nm,1.2s | | | pmax | pmax | | |
| **PALK** | **Pallekele** comp=Z,46nm,1.2s | **21.88** | **300** | *e*P | **P** | **19 45 33.6** | **+1.2** |
| **CM31** | **Chiang Mai Arr** baz=22,SNR=4.9 | **21.93** | **358** | P | **P** | **19 45 33.2** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** comp=Z,17nm,0.8s,baz=187,slow=9.7,SNR=87 | **21.93** | **358** | P | **P** | **19 45 32.6** | **-0.2** |
| CMAR | | | | PcP | **PcP** | **19 49 32.6** | **+1.0** |
| CMAR | comp=Z,4.3nm,0.9s,baz=216,slow=3.2,SNR=11 | | | LR | LR | 19 54 14.2 | |
| **CMAR** | comp=Z,204nm,20.2s,baz=188,slow=37 **Chiang Mai Arr** | **21.93** | **358** | *i* P | **P** | **19 45 32.5** | **-0.2** |
| CMAR | comp=Z,18nm,0.8s | | | pmax | pmax | | |
| **LAMP** | **Lampang** comp=Z,14nm,0.9s,comp=Z,122nm | **21.98** | **360** | P | **P** | **19 45 35.8** | **+2.5** |
| **APSI** | **Ampana** comp=Z,72nm,1.1s,comp=Z,862nm | **22.02** | **84** | P | **P** | **19 45 33.5** | **-0.4** |
| **CHTO** | **Chiang Mai** comp=Z,78nm,1.3s | **22.28** | **358** | P | **P** | **19 45 37.7** | **+1.1** |
| **CHTO** | **Chiang Mai** | **22.28** | **358** | *e*P | **P** | **19 45 36.0** | **-0.6** |
| CHTO | comp=Z,62nm,1.6s | | | pmax | pmax | | |
| **CHTO** | **Chiang Mai** comp=Z,62nm,1.6s | **22.28** | **358** | *e*P | **P** | **19 45 36.0** | **-0.6** |
| **MRSI** | **Marisa** comp=Z,24nm,0.8s | **22.52** | **80** | P | **P** | **19 45 37.1** | **-2.2** |
| **BBSI** | **Bau Bau** | **22.81** | **96** | P | **P** | **19 45 41.8** | **-0.5** |
| **LUWI** | **Luwuk** baz=23,SNR=3.2 | **23.12** | **84** | P | **P** | **19 45 49.8** | **+4.3** |
| **LUWI** | **Luwuk** comp=Z,44nm,0.9s | **23.12** | **84** | P | P | 19 45 52.6 | +7.1 |
| **LUWI** | **Luwuk** comp=Z,62nm,1.6s | **23.12** | **84** | *e*P | **P** | **19 45 46.8** | **+1.3** |
| **CMAI** | **Chiengmai2** comp=Z,83nm,1.1s | **23.39** | **358** | P | **P** | **19 45 49.2** | **+0.9** |
| **GTOI** | **Gorontalo** comp=Z,41nm,1.1s | **23.61** | **80** | P | **P** | **19 45 47.3** | **-3.0** |
| **QIZ** | **Qiongzhong** | **24.57** | **23** | P | **P** | **19 46 00.0** | **+0.8** |
| QIZ | | | | pP | **pP** | **19 46 06.3** | **0.0** |
| QIZ | | | | sP | **sP** | **19 46 10.0** | **+0.8** |
| QIZ | | | | S | **S** | **19 50 21.5** | **+2.5** |
| QIZ | comp=Z,37nm,1.6s | | | PMZ | | | |
| QIZ | comp=Z,310nm,7.0s | | | PMZ | | | |
| QIZ | comp=Z,720nm,14.6s | | | LZ | | | |
| **QIZ** | **Qiongzhong** | **24.57** | **23** | *e*P | **P** | **19 45 59.5** | **+0.3** |
| **BATI** | **Baumata** comp=Z,15nm,0.5s,baz=216,slow=2.2,SNR=4.8 | **24.60** | **107** | P | **P** | **19 45 57.0** | **-2.7** |
| BATI | | | | S | **S** | **19 50 18.8** | **-0.9** |
| **BATI** | comp=Z,12nm,0.5s,baz=315,slow=18,SNR=8.6 **Baumata** | **24.60** | **107** | P | **P** | **19 45 56.6** | **-3.0** |
| **SOEI** | comp=Z,25nm,0.8s **Soe** baz=25,SNR=3.7 | **25.08** | **105** | P | **P** | **19 46 08.3** | **+4.3** |
| **SLVN** | **Son La** | **25.10** | **9** | *e*P | **P** | **19 46 04.6** | **+0.5** |
| **MBWA** | **Marble Bar** comp=Z,10.0nm,0.7s | **26.11** | **134** | *e*P | **P** | **19 46 12.6** | **-0.5** |
| **SANI** | **Sanana** | **26.23** | **87** | P | **P** | **19 46 16.9** | **+2.5** |
| **SKHT** | **Srikalahasti** | **26.32** | **311** | *e*P | **P** | **19 46 16.1** | **+0.9** |
| SKHT | comp=Z,19nm,1.0s | | | IAmb | IAmb | 19 46 17.0 | |
| **CHLP** | **Challavanipeta** | **26.87** | **325** | *e*P | **P** | **19 46 20.4** | **+0.4** |
| CHLP | comp=Z,21nm,1.1s | | | IAmb | IAmb | 19 46 21.6 | |
| **PVM** | **Polavaram** | **27.38** | **320** | *e*P | **P** | **19 46 25.1** | **+0.5** |
| PVM | comp=Z,7.2nm,0.9s | | | IAmb | IAmb | 19 46 26.2 | |
| **H08S2** | **Diego Garcia H** baz=82,slow=75,SNR=69 | **27.43** | **260** | T | T | 20 15 57.4 | |
| **H08S3** | **Diego Garcia H** baz=82,slow=75,SNR=127 | **27.44** | **260** | T | T | 20 15 57.5 | |
| **H08S1** | **Diego Carcia H** baz=82,slow=75,SNR=76 | **27.45** | **260** | T | T | 20 15 40.9 | |
| **ADKI** | **Addanki** | **27.51** | **315** | *e*P | **P** | **19 46 26.2** | **+0.4** |
| ADKI | comp=Z,16nm,1.0s | | | IAmb | IAmb | 19 46 27.4 | |
| **LBMI** | **Labuha** comp=Z,42nm,1.2s,comp=Z,714nm | **27.86** | **85** | P | **P** | **19 46 26.3** | **-2.8** |
| **RCLA** | **Racherla** | **27.98** | **313** | *e*P | **P** | **19 46 30.1** | **0.0** |
| RCLA | comp=Z,9.3nm,0.8s | | | IAmb | IAmb | 19 46 31.1 | |
| **SRLM** | **Srisailam** | **28.45** | **314** | *e*P | **P** | **19 46 34.5** | **+0.2** |
| SRLM | comp=Z,17nm,1.0s | | | IAmb | IAmb | 19 46 35.8 | |
| **NJS** | **Nagarjunasagar** | **28.46** | **315** | *e*P | **P** | **19 46 34.4** | **+0.1** |
| NJS | comp=Z,35nm,1.5s | | | IAmb | IAmb | 19 46 35.8 | |
| **KMI** | **Kunming** | **28.69** | **6** | P | **P** | **19 46 37.5** | **+1.0** |
| KMI | | | | pP | **pP** | **19 46 47.8** | **+4.2** |
| KMI | | | | PP | **PnPn** | **19 47 32.8** | **+5.4** |
| KMI | | | | S | **S** | **19 51 25.0** | **+0.5** |
| KMI | | | | sS | **sS** | **19 51 40.0** | **+3.8** |
| KMI | comp=Z,12nm,1.3s | | | PMZ | | | |
| KMI | comp=Z,190nm,4.4s | | | PMZ | | | |
| KMI | comp=Z,460nm,14.3s | | | LN | | | |
| KMI | comp=Z,680nm,19.6s | | | LE | | | |
| KMI | comp=Z,290nm,25.5s | | | LZ | | | |
| **URV** | **Uravakonda** | **28.92** | **310** | *e*P | **P** | **19 46 38.0** | **-0.5** |
| URV | comp=Z,7.5nm,1.0s | | | IAmb | IAmb | 19 46 39.9 | |
| **HYB** | **Hyderabad** | **29.57** | **316** | *e*P | **P** | **19 46 43.0** | **-1.2** |
| **HYB** | **Hyderabad** | **29.57** | **316** | *i* P | **P** | **19 46 43.0** | **-1.2** |
| **HYB** | **Hyderabad** | **29.57** | **316** | *e*P | **P** | **19 46 43.0** | **-1.2** |
| **HYBB** | **Hyderabad (bro** | **29.57** | **316** | *e*P | **P** | **19 46 44.4** | **+0.1** |
| HYBB | comp=Z,18nm,1.0s | | | IAmb | IAmb | 19 46 44.9 | |
| **RPR** | **Rampur** | **30.07** | **319** | *e*P | **P** | **19 46 48.4** | **-0.2** |
| RPR | comp=Z,15nm,1.1s | | | IAmb | IAmb | 19 46 49.8 | |
| **GYA** | **Guiyang** | **30.61** | **12** | P | **P** | **19 46 55.3** | **+1.9** |
| GYA | | | | PP | **PnPn** | **19 47 55.8** | **+2.6** |
| GYA | | | | PcP | **PcP** | **19 49 53.0** | **+1.3** |
| GYA | | | | S | **S** | **19 51 56.3** | **+1.8** |
| GYA | | | | SS | **ScP** | **19 53 39.0** | **+6.0** |
| GYA | comp=Z,20nm,1.0s | | | PMZ | | | |
| GYA | comp=Z,120nm,5.2s | | | PMZ | | | |
| GYA | comp=Z,540nm,17.6s | | | LN | | | |
| GYA | comp=Z,490nm,18.2s | | | LE | | | |
| GYA | comp=Z,530nm,17.8s | | | LZ | | | |
| **SRSP** | **Sriramsagar** comp=Z,23nm,1.0s | **30.75** | **317** | *e*P | **P** | **19 46 54.0** | **-0.7** |
| SRSP | | | | IAmb | IAmb | 19 46 55.8 | |
| **KNRA** | **Kununurra** baz=31,SNR=4.1 | **30.95** | **115** | P | **P** | **19 46 54.5** | **-1.9** |
| **KLRI** | **Killari** | **31.39** | **314** | *e*P | **P** | **19 46 60.0** | **-0.3** |
| KLRI | comp=Z,31nm,1.2s | | | IAmb | IAmb | 19 47 01.5 | |
| **SWI** | **Sorong** | **31.58** | **86** | P | **P** | **19 47 01.3** | **-0.7** |
| **SIJI** | **Sorong** comp=Z,8.5nm,0.8s,baz=296,slow=1.7,SNR=5.3 | **31.59** | **86** | P | P | 19 46 58.7 | -3.4 |
| **MTN** | **Manton Dam** baz=32,SNR=7.7 | **32.34** | **108** | P | P | 19 47 03.4 | -5.3 |
| **MTN** | **Manton Dam** comp=Z,8.1nm,0.6s | **32.34** | **108** | *e*P | P | 19 47 03.2 | -5.4 |
| **NWAO** | **Narrogin (SRO)** comp=Z,11nm,0.7s,baz=223,slow=0.1,SNR=5.5 | **33.45** | **153** | P | **P** | **19 47 17.4** | **-0.7** |
| **NWAO** | **Narrogin (SRO)** | **33.45** | **153** | *e*P | **P** | **19 47 17.5** | **-0.7** |
| NWAO | comp=Z,12nm,0.8s | | | pmax | pmax | | |
| **NWAO** | **Narrogin (SRO)** baz=33,SNR=4.0 | **33.45** | **153** | P | **P** | **19 47 18.1** | **0.0** |
| **NWAO** | **Narrogin (SRO)** comp=Z,12nm,0.8s | **33.45** | **153** | *e*P | **P** | **19 47 17.5** | **-0.7** |
| **H01W3** | **Cape Leeuwin H** | **33.87** | **159** | T | T | 20 23 18.1 | |
| | baz=336,slow=76,SNR=58 | | | | | | |
| **H01W2** | **Cape Leeuwin H** baz=336,slow=76,SNR=63 | **33.88** | **159** | T | T | 20 23 16.3 | |
| **H01W1** | **Cape Leeuwin H** baz=336,slow=76,SNR=54 | **33.89** | **159** | T | T | 20 23 15.0 | |
| **LSA** | **Lhasa** | **34.12** | **347** | P | **P** | **19 47 25.8** | **+1.3** |
| LSA | comp=Z,44nm,1.0s | | | PMZ | | | |
| **LSA** | **Lhasa** comp=Z,37nm,0.9s | **34.12** | **347** | *e*P | **P** | **19 47 25.5** | **+1.0** |
| LSA | | | | pmax | pmax | | |
| **LSA** | **Lhasa** comp=Z,37nm,0.9s | **34.12** | **347** | *e*P | **P** | **19 47 25.5** | **+1.0** |
| **CD2** | **Chengdu** | **34.52** | **6** | P | **P** | **19 47 28.3** | **+0.8** |
| CD2 | | | | sP | **sP** | **19 47 33.5** | **-4.1** |
| CD2 | | | | PP | **PP** | **19 48 48.0** | **+1.9** |
| CD2 | | | | S | **S** | **19 52 59.0** | **+3.9** |
| CD2 | | | | sS | **sS** | **19 53 05.3** | **-1.5** |
| CD2 | comp=Z,40nm,0.5s | | | PMZ | | | |
| CD2 | comp=Z,180nm,5.4s | | | PMZ | | | |
| **WRKA** | **Warakurna** baz=34,SNR=11 | **34.75** | **131** | P | **P** | **19 47 29.5** | **-0.1** |
| **ENH** | **Enshi** comp=Z,35nm,1.3s | **34.93** | **15** | *e*P | **P** | **19 47 30.3** | **-0.7** |
| **WRA** | **Warramunga Arr** comp=Z,6.7nm,0.8s,baz=300,slow=9.1,SNR=42 | **37.41** | **119** | P | **P** | **19 47 51.5** | **-1.0** |
| WRA | | | | PcP | **PcP** | **19 50 10.8** | **-0.4** |
| WRA | comp=Z,3.3nm,0.8s,baz=301,slow=2.4,SNR=6.2 | | | S | **S** | **19 53 40.7** | **+0.9** |
| **WRAB** | comp=Z,1.8nm,0.9s,baz=295,slow=16,SNR=7.8 **Tennant Creek** | **37.42** | **119** | *e*P | **P** | **19 47 51.2** | **-1.3** |
| WRAB | | | | *e* | | 19 50 10.0 | |
| WRAB | | | | *e*S | **S** | **19 53 41.2** | **+1.4** |
| WRAB | comp=Z,15nm,0.9s | | | pmax | pmax | | |
| **WRAB** | **Tennant Creek** comp=Z,97nm,0.9s,SNR=14 | **37.42** | **119** | P | **P** | **19 47 51.9** | **-0.6** |
| **WRAB** | **Tennant Creek** comp=Z,15nm,0.9s | **37.42** | **119** | *e*P | **P** | **19 47 51.2** | **-1.3** |
| WRAB | | | | *e*PcP | **PcP** | **19 50 10.0** | **-1.1** |
| WRAB | | | | *e*S | **S** | **19 53 41.2** | **+1.4** |
| **XAN** | **Xi'an** | **38.41** | **12** | P | **P** | **19 48 00.3** | **-0.4** |
| XAN | | | | pP | **pP** | **19 48 06.5** | **-1.4** |
| XAN | comp=Z,28nm,0.8s | | | PMZ | | | |
| **ASAR** | **Alice Springs** comp=Z,5.2nm,0.6s,baz=296,slow=8.0,SNR=87 | **38.53** | **124** | P | **P** | **19 48 01.4** | **-0.4** |
| ASAR | | | | PcP | **PcP** | **19 50 14.6** | **0.0** |
| ASAR | comp=Z,4.8nm,0.8s,baz=307,slow=8.2,SNR=10 | | | S | **S** | **19 54 00.8** | **+4.2** |
| ASAR | comp=Z,0.7nm,0.8s,baz=293,slow=12,SNR=4.9 | | | LR | LR | 20 05 02.8 | |
| **LZH** | comp=Z,185nm,20.4s,baz=306,slow=38 **Lanzhou** | **39.66** | **5** | *e*P | **P** | **19 48 11.5** | **+0.3** |
| LZH | | | | pP | **pP** | **19 48 15.5** | **-2.9** |
| LZH | | | | sP | **sP** | **19 48 18.5** | **-2.8** |
| LZH | comp=Z,29nm,1.0s | | | PMZ | | | |
| LZH | comp=Z,100nm,4.0s | | | PMZ | | | |
| **NJ2** | **Nanjing** | **39.82** | **26** | *e*P | **P** | **19 48 12.5** | **+0.1** |
| NJ2 | comp=Z,6.0nm,0.7s | | | PMZ | | | |
| **QIS** | **Mount Isa** baz=42,SNR=6.7 | **42.28** | **117** | P | **P** | **19 48 32.6** | **-0.3** |
| **GTA** | **Gaotai** | **42.79** | **0** | *e*P | **P** | **19 48 37.3** | **+0.4** |
| GTA | | | | pP | **pP** | **19 48 41.8** | **-2.4** |
| GTA | | | | sP | **sP** | **19 48 44.3** | **-2.7** |
| GTA | | | | PcP | **PcP** | **19 50 29.0** | **+0.9** |
| GTA | comp=Z,9.0nm,1.3s | | | PMZ | | | |
| **HHC** | **Hu-ho-hao-te** | **45.53** | **13** | *e*P | **P** | **19 49 00.0** | **+1.2** |
| HHC | | | | S | **S** | **19 55 39.5** | **-0.1** |
| HHC | comp=Z,39nm,0.7s | | | PMZ | | | |
| HHC | comp=Z,270nm,5.8s | | | PMZ | | | |
| HHC | comp=Z,360nm,14.8s | | | LN | | | |
| HHC | comp=Z,490nm,16.0s | | | LE | | | |
| HHC | comp=Z,210nm,16.0s | | | LZ | | | |
| **BJT** | **Baijiatuau** | **45.94** | **18** | *e*P | **P** | **19 49 02.2** | **+0.3** |
| BJT | comp=Z,21nm,0.9s | | | pmax | pmax | | |
| **BJT** | **Baijiatuau** comp=Z,21nm,0.9s | **45.94** | **18** | *e*P | **P** | **19 49 02.2** | **+0.3** |
| **BJI** | **Beijing** | **45.96** | **18** | P | **P** | **19 49 02.5** | **+0.4** |
| BJI | | | | S | **S** | **19 55 49.3** | **+3.7** |
| BJI | comp=Z,33nm,0.9s | | | PMZ | | | |
| BJI | comp=Z,560nm,5.5s | | | PMZ | | | |
| BJI | comp=Z,530nm,18.1s | | | LN | | | |
| BJI | comp=Z,730nm,16.3s | | | LE | | | |
| BJI | comp=Z,220nm,19.9s | | | LZ | | | |
| **JNU** | **Nakatsue** comp=Z,99nm,18.6s,baz=301,slow=38 | **46.90** | **36** | LR | LR | 20 10 19.8 | |
| **HTT** | **Hallett** baz=47,SNR=7.4 | **47.05** | **134** | P | P | 19 49 04.9 | -6.0 |
| **CTAO** | **Charters Tower** | **48.15** | **114** | *e*P | **P** | **19 49 19.4** | **-0.2** |
| CTAO | comp=Z,47nm,1.4s | | | pmax | pmax | | |
| **CTAO** | **Charters Tower** comp=Z,47nm,1.4s | **48.15** | **114** | *e*P | **P** | **19 49 19.4** | **-0.2** |
| **KSH** | **Kashi** | **48.17** | **335** | P | **P** | **19 49 18.0** | **-1.5** |
| KSH | | | | *e*pP | **pP** | **19 49 28.3** | **+1.5** |
| KSH | | | | *e*PcP | **PcP** | **19 50 47.5** | **+0.8** |
| KSH | | | | *e*PP | **PP** | **19 51 09.3** | **-2.7** |
| KSH | | | | PcS | **PcS** | **19 54 42.0** | **-0.6** |
| KSH | | | | S | **S** | **19 56 11.8** | **-5.6** |
| KSH | comp=Z,16nm,1.0s | | | PMZ | | | |
| KSH | comp=Z,69nm,6.1s | | | PMZ | | | |
| KSH | comp=Z,130nm,6.9s | | | LN | | | |
| KSH | comp=Z,130nm,5.9s | | | LE | | | |
| KSH | comp=Z,200nm,5.8s | | | LZ | | | |
| **QLP** | **Quilpie** baz=48,SNR=16 | **48.27** | **123** | P | **P** | **19 49 21.0** | **+0.5** |
| **WMQ** | **Urumqi** | **48.43** | **348** | P | **P** | **19 49 23.0** | **+1.6** |
| WMQ | | | | sP | **sP** | **19 49 30.0** | **-1.6** |
| WMQ | | | | PP | **PP** | **19 51 18.0** | **+3.7** |
| WMQ | | | | S | **S** | **19 56 23.0** | **+2.1** |
| WMQ | | | | ScS | **ScS** | **19 59 14.0** | **+1.1** |
| WMQ | | | | SS | **SS** | **19 59 45.0** | **-6.1** |
| WMQ | comp=Z,95nm,1.0s | | | PMZ | | | |
| WMQ | comp=Z,47nm,6.0s | | | PMZ | | | |
| WMQ | comp=Z,130nm,18.0s | | | LN | | | |
| WMQ | comp=Z,120nm,16.0s | | | LE | | | |
| WMQ | comp=Z,100nm,14.0s | | | LZ | | | |
| **KSAR** | **Wonju Array Be** | **48.47** | **30** | P | **P** | **19 49 21.6** | **-0.1** |
| **KSAR** | **Wonju Array Be** | **48.47** | **30** | P | **P** | **19 49 21.6** | **-0.1** |
| **KSRS** | **Korea Array** comp=Z,13nm,0.9s,baz=222,slow=7.8,SNR=17 | **48.50** | **30** | P | **P** | **19 49 21.6** | **-0.3** |
| KSRS | | | | LR | LR | 20 10 22.7 | |
| **KZA** | comp=Z,69nm,18.0s,baz=234,slow=37 **Kyzart** SNR=12 | **50.62** | **336** | P | **P** | **19 49 38.9** | **+0.3** |
| **ASHO** | **Ashiyiah** SNR=5.5 | **50.92** | **306** | ⇑*i*P | **P** | **19 49 41.3** | **+0.7** |
| **UOSS** | **Wadi Hilu** comp=Z,15nm,1.1s | **50.92** | **306** | *e*P | **P** | **19 49 39.1** | **

KBK **Karagaybulak** 51.23 337 P P 19 49 43.8 +1.0
SNR=25
AML **Almayashu** 51.30 335 P P 19 49 44.1 +0.4
SNR=17
CMSA **Cobar Meteorol** 51.30 128 P P 19 49 43.9 +0.5
baz=51,SNR=18
FAQ **Al Faqa, Dubai** 51.32 306 ⇓P P 19 49 44.2 +0.6
AAK **Ala-Archa** 51.39 336 *d* iP P 19 49 44.3 +0.2
AAK pmax pmax
comp=Z,19nm,0.9s
AAK **Ala-Archa** 51.39 336 P P 19 49 44.5 +0.5
comp=Z,64nm,0.9s,SNR=7.5
AAK **Ala-Archa** 51.39 336 P P 19 49 44.7 +0.7
SNR=9.7
AAK **Ala-Archa** 51.39 336 *e*P P P 19 49 44.2 +0.2
comp=Z,9.2nm,0.9s
FRU **Bishkek** 51.51 336 *e*P P 19 49 44.0 -0.8
FRU *e* 19 49 56.0
FRU pmax pmax
comp=Z,40nm,1.4s
SONM **Songino Array** 51.54 6 P P 19 49 45.9 +0.8
comp=Z,26nm,0.8s,baz=187,slow=9.0,SNR=182
SONM LR LR 20 14 44.4
comp=Z,184nm,18.1s,baz=195,slow=40
CHMS **Chumysh** 51.59 337 P P 19 49 45.4 0.0
SNR=12
ULN **Ulaanbaatar** 51.64 6 *de*P P 19 49 46.5 +0.7
ULN pmax pmax
comp=Z,59nm,1.7s
ULN **Ulaanbaatar** 51.64 6 *e*P P 19 49 46.1 +0.3
comp=Z,33nm,1.0s
EKS2 **Erkin-Say** 51.70 336 *e*P P 19 49 46.7 +0.3
EKS2 pmax pmax
comp=Z,29nm,0.8s
EKS2 **Erkin-Say** 51.70 336 P P 19 49 47.1 +0.8
SNR=47
EKS2 **Erkin-Say** 51.70 336 *e*P P 19 49 46.7 +0.3
comp=Z,29nm,0.8s
USP **Ospenovka** 51.92 337 P P 19 49 48.0 +0.1
SNR=27
RMQ **Roma** 52.08 121 P P 19 49 51.8 +2.5
baz=52,SNR=4.9
IDAH **Dahanechah** 52.28 317 *e*P P 19 49 50.9 -0.1
MKAR **Makanchi Array** 52.49 345 P P 19 49 52.2 +0.2
comp=Z,22nm,0.8s,baz=150,slow=8.6,SNR=115
MKAR LR LR 20 16 07.4
comp=Z,82nm,19.4s,baz=158,slow=41
CN2 **Changchun** 52.53 23 *e*P P 19 49 51.5 -0.8
CN2 *ep*P **pP** 19 50 01.0 +1.3
CN2 *e*PP **PP** 19 51 51.3 -0.2
CN2 *e*S **S** 19 57 13.3 -4.4
CN2 PMZ
comp=Z,40nm,1.0s
CN2 PMZ
comp=Z,310nm,4.0s
ITEG **Tejag** 53.14 316 *e*P P 19 49 56.9 -0.3
KKAR **Karatay Array** 53.46 334 *e*P P 19 49 58.4 -0.8
KKAR **Karatay Array** 53.46 334 *e*P P 19 49 58.4 -0.8
MAJO **Matsushiro** 53.65 38 ⇓*e*P P 19 50 00.1 -0.7
MAJO pmax pmax
comp=Z,92nm,1.2s
MAJO **Matsushiro** 53.65 38 P P 19 49 59.0 -1.8
comp=Z,30nm,1.3s
EIDS **Eidsvold** 53.78 119 P P 19 50 02.1 +0.2
baz=54,SNR=5.2
EIDS **Eidsvold** 53.78 119 *e*P P 19 50 01.4 -0.5
comp=Z,27nm,1.2s
ZAK **Zakamensk** 53.85 3 *e*P P 19 50 01.0 -1.0
ZAK pmax pmax
comp=Z,6.0nm,0.9s
IMOG **Moghan** 54.64 320 *e*P P 19 50 07.5 -0.8
ISRO **Mashad** 54.68 320 *e*P P 19 50 06.6 -1.8
VLA **Vladivostok** 54.79 28 ⇓P P 19 50 06.5 -2.4
VLA 19 51 08.7
VLA *e* 19 52 09.2
VLA *e*S **S** 19 57 46.5 -1.9
VLA pmax pmax
comp=Z,46nm,1.6s
MDJ **Mudanjiang** 54.91 26 P P 19 50 10.0 +0.3
MDJ PMZ
comp=Z,17nm,1.2s
MDJ PMZ
comp=Z,230nm,5.7s
MDJ **Mudanjiang** 54.91 26 *e*P P 19 50 09.8 +0.1
comp=Z,15nm,1.0s
IPAY **Payeh** 55.07 320 *e*P P 19 50 10.6 -0.7
TLY **Talaya** 55.16 3 *e*P P 19 50 12.7 +1.3
TLY pmax pmax
comp=Z,17nm,1.3s
TLY MLR MLR
comp=Z,270nm,16.0s
IAKL **Akhelmad** 55.31 320 *e*P P 19 50 12.2 -0.9
ISRV **Sarvestan** 55.42 310 *e*P P 19 50 14.1 -0.1
HIA **Hailar** 55.43 16 *e*P P 19 50 13.0 -0.5
HIA pmax pmax
comp=Z,22nm,1.2s
HIA **Hailar** 55.43 16 *e*P P 19 50 12.9 -0.5
comp=Z,22nm,1.2s
IKRD **Kardeh** 55.57 320 *e*P P 19 50 09.6 -5.4
USRK **Ussuriysk Ar.** 55.66 28 P P 19 50 15.2 +0.1
comp=Z,36nm,0.7s,baz=224,slow=6.1,SNR=57
USRK LR LR 20 18 03.1
comp=Z,104nm,18.6s,baz=213,slow=40
ARMA **Armidale** 55.68 125 P P 19 50 17.4 +1.7
baz=55,SNR=5.5
ARMA **Armidale** 55.68 125 *e*P P 19 50 17.0 +1.3
comp=Z,12nm,1.0s
IRK **Irkutsk** 55.76 3 *e*P P 19 50 15.2 -0.5
IRK pmax pmax
comp=Z,32nm,1.4s
IEMG **Emamgholi** 55.87 321 *e*P P 19 50 16.7 -0.5
ISFR **Sfrayin** 56.07 320 *e*P P 19 50 18.1 -0.5
ISAD **Sadrabad** 56.22 313 *e*P P 19 50 19.7 0.0
ABKT **Ailbek** 56.52 321 P P 19 50 21.1 -0.4
comp=Z,110nm,1.0s,SNR=6.2
GEYT **Alibeck** 56.52 321 P P 19 50 21.1 -0.5
comp=Z,13nm,1.0s,baz=155,slow=7.4,SNR=32
GEYT LR LR 20 15 27.0
comp=Z,69nm,19.6s,baz=355,slow=37
IKAZ **Kazeroun** 56.59 309 *e*P P 19 50 22.3 -0.2
KURK **Kurchatov** 57.06 344 *e*P P 19 50 25.0 0.0
KURK pmax pmax
comp=Z,70nm,1.0s
KURK **Kurchatov** 57.06 344 *e*P P 19 50 25.0 0.0
comp=Z,70nm,1.0s
IRAM **Ramesheh** 57.14 312 *e*P P 19 50 24.6 -1.6
DAMY **Dhamar** 57.76 290 *e*P P 19 50 31.9 +0.9
comp=Z,18nm,0.8s
IPIR **Pirpir** 58.66 312 *e*P P 19 50 36.7 -0.3
ZAA0 **Zalesovo Array** 58.68 350 P P 19 50 36.3 0.0
baz=59,SNR=8.5
ZALV **Zalesovo Beam** 58.68 350 P P 19 50 36.3 0.0
comp=Z,55nm,0.9s,baz=181,slow=5.3,SNR=207
ZALV LR LR 20 19 18.6
comp=Z,57nm,18.2s,baz=72,slow=40
ZALV **Zalesovo Beam** 58.68 350 *i* P P 19 50 36.2 -0.1
ZALV pmax pmax
comp=Z,55nm,0.9s
RAYN **Ar Rayn** 59.31 300 P P 19 50 41.6 +0.2
comp=Z,54nm,1.2s,SNR=6.9
KLR **Kul'dur** 59.47 24 *e*P P 19 50 38.3 -3.6
KLR pmax pmax
comp=Z,56nm,1.2s
KRAR **Krasnoyarsk** 59.67 356 *d* iP P 19 50 43.0 -0.1
KRAR pmax pmax
comp=Z,47nm,1.1s
NVS **Novosibirsk** 59.82 349 ⇑*i*P P 19 50 44.0 -0.2
NVS *i* *PP **pP** 19 50 55.4 +3.8
NVS *e*S **S** 19 58 54.4 +0.2
NVS pmax pmax
comp=Z,32nm,1.2s
NVS pmax pmax
comp=N,14nm,0.9s
NVS pmax pmax
comp=E,17nm,1.4s
NVS smax smax
comp=N,5.0nm,1.8s
NVS smax smax
comp=E,6.0nm,2.0s
HNR **Honiara** 60.01 99 *e*P P 19 50 44.7 -1.6
HNR pmax pmax
comp=Z,55nm,0.9s
HNR **Honiara** 60.01 99 *e*P P 19 50 44.6 -1.6
comp=Z,55nm,0.9s
IRAZ **Razeghan** 60.66 314 *e*P P 19 50 50.6 0.0

BRVK **Borovoye** 61.66 340 *e*P P 19 50 55.9 -0.8
BRVK pmax pmax
comp=Z,23nm,1.1s
BRVK **Borovoye** 61.66 340 P P 19 50 55.6 -1.1
comp=Z,97nm,0.7s,SNR=10
BRVK **Borovoye** 61.66 340 *e*P P 19 50 55.9 -0.8
comp=Z,23nm,1.1s
BOD **Bodaibo** 62.28 9 *e*P P 19 51 00.7 -0.1
BOD pmax pmax
comp=Z,35nm,1.0s
KMBO **Kilima Mbogo** 62.50 271 P P 19 51 04.4 +0.9
comp=Z,3.1nm,1.0s,baz=107,slow=4.9,SNR=5.4
KMBO **Kilima Mbogo** 62.50 271 *e*P P 19 51 02.8 -0.7
KMBO pmax pmax
comp=Z,9.0nm,1.3s
KMBO **Kilima Mbogo** 62.50 271 *e*P P 19 51 02.8 -0.7
comp=Z,9.4nm,1.3s
IGHG **Ghaleghazi** 62.62 312 *e*P P 19 51 02.8 -1.2
ABKAR **Akbulak array** 62.92 332 *e*P P 19 51 04.5 -0.8
ABKAR *e* 19 51 15.5
YSS **Yuzh-Sakhalins** 62.95 32 ⇑*i*P P 19 51 04.8 -0.7
YSS *e* 19 51 15.2
YSS pmax pmax
comp=Z,60nm,1.0s
CASY **Casey** 63.03 175 *e*P P 19 51 05.4 -0.3
ISRB **Sarab** 63.42 316 *e*P P 19 51 08.8 -0.3
AKTO **Aktyubinsk** 64.64 332 LR LR 20 23 42.2
comp=Z,42nm,18.8s,baz=135,slow=40
ISHB **Shabestar** 65.07 315 *e*P P 19 51 19.5 -0.4
IMRD **Marand** 65.20 316 *e*P P 19 51 20.8 +0.1
GNI **Garni** 66.52 317 *e*P P 19 51 29.3 +0.1
GNI pmax pmax
comp=Z,47nm,0.9s
GNI **Garni** 66.52 317 *e*P P 19 51 29.3 +0.1
comp=Z,47nm,0.9s
DGRG **David-gareji** 66.69 318 P P 19 51 30.7 +0.6
DGRG **David-gareji** 66.69 318 P P 19 51 30.7 +0.6
DZM **Mont Dzumac** 67.06 112 P P 19 51 32.8 -0.1
comp=Z,9.2nm,0.9s,baz=181,slow=5.1,SNR=3.4
TBLG **Delisi** 67.24 318 P P 19 51 33.9 +0.3
TBLG **Delisi** 67.24 318 P P 19 51 33.8 +0.3
AKH **Akhalkalaki** 67.93 318 P P 19 51 38.6 +0.5
AKH **Akhalkalaki** 67.93 318 P P 19 51 38.6 +0.5
SVE **Sverdlovsk** 68.06 338 ⇑*i*P P 19 51 37.9 -0.5
SVE pmax pmax
comp=Z,53nm,1.1s
ONI **Oni** 68.48 319 P P 19 51 41.6 +0.2
ONI **Oni** 68.48 319 P P 19 51 41.6 +0.2
MAW **Mawson** 68.69 194 P P 19 51 43.2 +1.1
comp=Z,3.1nm,0.8s,baz=339,slow=7.4,SNR=9.0
MAW LR LR 20 15 11.1
comp=Z,100nm,20.9s,baz=52,slow=30
MAW **Mawson** 68.69 194 P P 19 51 43.0 +0.9
baz=69,SNR=6.2
NCK **Nalchik** 68.80 320 ⇑*e*P P 19 51 43.8 +0.5
NEY **Neytrino** 69.26 319 ⇑*e*P P 19 51 47.3 +0.9
NEY pmax pmax
comp=Z,2.0nm,0.9s
YAK **Yakutsk** 69.33 15 *d* iP P 19 51 45.1 -1.1
YAK *e**PP **pP** 19 51 55.5 +1.8
YAK *e* 19 52 08.9
YAK *e*PPP PPP 19 56 00.2
YAK *e*S **S** 20 00 53.5 +2.2
YAK pmax pmax
comp=Z,95nm,0.9s
YAK pmax pmax
comp=E,22nm,1.3s
YAK pmax pmax
comp=N,26nm,1.1s
YAK pmax pmax
comp=Z,45nm,7.3s
YAK pmax pmax
comp=N,18nm,7.5s
YAK pmax pmax
comp=E,50nm,10.1s
YAK smax smax
comp=E,32nm,7.3s
YAK smax smax
comp=N,22nm,13.1s
YAK MLR MLR
comp=Z,284nm,17.0s
YAK MLR MLR
comp=E,123nm,15.0s
YAK MLR MLR
comp=N,53nm,5.0s
KBZ **Khabaz** 69.36 320 P P 19 51 46.8 +0.1
comp=N,17nm,0.9s,baz=126,slow=5.5,SNR=40
CHVG **Ch'k'valeri** 69.44 318 P P 19 51 47.8 +0.5
KIV **Kislovodsk** 69.59 320 *e*P P 19 51 47.8 -0.5
KIV pmax pmax
comp=Z,27nm,1.0s
EIL **Elat** 70.19 303 P P 19 51 53.0 +0.9
baz=70,SNR=13
MALT **Malatya** 70.24 313 ⇓*i*P P 19 51 53.2 +0.8
LSZ **Lusaka** 71.30 255 *e*P P 19 51 58.9 -0.4
LSZ pmax pmax
comp=Z,132nm,2.9s
LSZ **Lusaka** 71.30 255 *e*P P 19 51 58.9 -0.4
comp=Z,132nm,2.9s
SOC **Sochi** 71.38 318 *d* iP P 19 51 57.9 -1.2
SOC *e* 19 54 37.6
SOC *e*S **S** 20 01 14.4 -1.5
SOC *e* 20 01 59.1
SOC *e*SS **SS** 20 05 44.2 -6.7
SOC pmax pmax
comp=Z,25nm,0.8s
VRH **Novokhopyorsk** 73.51 326 *e*P P 19 52 10.3 -1.3
VRH pmax pmax
comp=Z,60nm,0.8s
VRH pmax pmax
comp=N,10.0nm,0.7s
VRH pmax pmax
comp=E,10.0nm,0.6s
BR131 **Keskin Array S** 74.22 313 P P 19 52 15.4 -0.8
baz=75,SNR=5.0
BRTR **Keskin Array B** 74.22 313 P P 19 52 15.2 -1.1
comp=E,6.3nm,0.8s,baz=134,slow=7.2,SNR=38
PETK **Petropavlovsk-** 74.35 32 P P 19 52 16.1 -0.4
comp=E,6.8nm,0.7s,baz=197,slow=4.6,SNR=5.7
BOSA **Boshof** 74.69 241 P P 19 52 19.1 -0.2
comp=E,8.7nm,1.0s,baz=86,slow=8.2,SNR=5.2
BOSA LR LR 20 22 20.5
comp=E,28nm,18.6s,baz=110,slow=34
VORD **Divnogorie** 74.77 325 *e*P P 19 52 16.9 -2.0
VORD pmax pmax
comp=Z,10.0nm,0.9s
VORD pmax pmax
comp=N,30nm,0.6s
VORD pmax pmax
comp=E,30nm,0.6s
VSR **Storozhevoye** 74.95 325 *e*P P 19 52 18.6 -1.4
VSR pmax pmax
comp=Z,40nm,0.9s
VSR pmax pmax
comp=N,10.0nm,1.0s
VSR pmax pmax
comp=E,30nm,0.9s
LPSR **Galich'ya Gora** 75.68 327 *e*P P 19 52 23.4 -0.8
LPSR pmax pmax
comp=Z,20nm,0.8s
LPSR pmax pmax
comp=N,7.0nm,0.9s
LPSR pmax pmax
comp=E,10.0nm,0.9s
SEY **Seymchan** 77.18 22 ⇓*e*P P 19 52 33.3 +0.8
BKZ **Black Stump Fm** 77.45 129 *e*P P 19 52 34.5 -0.1
comp=E,36nm,1.0s
MOS **Moscow** 77.74 329 *e*P P 19 52 34.8 -0.9
MOS *e* 19 52 46.0
MOS pmax pmax
comp=Z,98nm,0.9s
OBN **Obninsk** 78.02 328 ⇓*e*P P 19 52 37.1 -0.2
OBN *e* 19 52 47.7
OBN SS SS 20 07 26.0 -5.2
OBN pmax pmax
comp=Z,90nm,1.7s
OBN MLR MLR
comp=Z,47nm,16.0s
SUR **Sutherland** 78.76 238 P P 19 52 43.5 +1.2
KLMR **Klimovskoe** 79.16 334 *e*P P 19 52 42.2 -1.3
KLMR pmax pmax
comp=Z,61nm,1.4s
TLCR 79.26 317 ⇑*i*P P 19 52 45.0 +0.6
TIRR **Tirgusor** 79.34 316 ⇑*i*P P 19 52 44.6 -0.2
MSAB **Monastry St. A** 79.64 316 ⇑*i*P P 19 52 46.6 +0.1

LEOM **Leova** 80.00 318 ⇑*i*P P 19 52 48.6 +0.2
PETR **Petresti** 80.48 317 ⇓*i*P P 19 52 51.4 +0.4
AKASG **Malin Array Be** 80.60 323 P P 19 52 50.5 -1.0
comp=Z,4.0nm,0.6s,baz=89,slow=4.5,SNR=29
KIEV **Kiev** 80.61 323 *e*P P 19 52 50.7 -0.9
KIEV *e* 19 53 01.3
KIEV pmax pmax
comp=Z,16nm,1.2s
KIEV **Kiev** 80.61 323 *e*P P 19 52 50.6 -0.9
comp=Z,16nm,1.2s
KIEV *e* 19 53 01.3
VNDA **Vanda** 80.65 169 P P 19 52 50.3 -1.1
comp=Z,2.6nm,1.1s,baz=305,slow=6.7,SNR=8.4
VNDA LR LR 20 21 20.5
comp=Z,46nm,21.9s,baz=319,slow=30
VRI **Vrincioaia** 80.86 317 ⇑*i*P P 19 52 53.8 +0.7
TESR **Tescani** 81.08 318 ⇑*i*P P 19 52 54.2 0.0
MLR **Muntele Rosu** 81.30 317 ⇑*i*P P 19 52 56.0 +0.4
TMCR **Tamitsa** 81.31 337 *e*P P 19 52 55.0 0.0
TMCR pmax pmax
comp=Z,36nm,0.8s
PRAR **RASCA** 81.57 319 ⇑*i*P P 19 52 57.1 +0.3
DOPR **Dopca** 81.79 317 ⇑*i*P P 19 52 58.4 +0.4
VOIR 81.89 317 ⇑*i*P P 19 52 58.0 -0.7
BURAR **Bucovina Array** 82.30 319 ⇑*i*P P 19 53 01.9 +1.1
ARCR **ARCALIA** 82.74 318 ⇓*i*P P 19 53 04.0 +1.0
NACGM **Naroch** 83.23 326 *e* P 19 53 05.0 -0.3
IDID **Didziasalis** 83.37 327 *e*P P 19 53 06.0 +0.1
IDID lAmb lAmb 19 53 07.2
comp=Z,18nm,1.0s
GZR **Gura Zlata** 83.45 316 ⇓*i*P P 19 53 07.8 +1.1
DEV **Deva** 83.46 317 ⇑*i*P P 19 53 08.0 +1.3
LVV **L'vov** 83.58 321 *e*P P 19 53 06.1 -1.1
IIGN **Ignalina** 83.66 327 *e*P P 19 53 07.5 0.0
IIGN lAmb lAmb 19 53 08.7
comp=Z,24nm,1.0s
IZAR **Zarasai** 83.76 327 *e*P P 19 53 08.0 +0.1
IZAR lAmb lAmb 19 53 09.0
comp=Z,11nm,0.8s
ISAL **Salakas** 83.78 327 *e*P P 19 53 08.1 0.0
ISAL lAmb lAmb 19 53 09.2
comp=Z,13nm,0.9s
DRGR 83.78 318 ⇓*i*P P 19 53 08.9 +0.5
VSU **Vasula** 84.25 330 *ce*P P 19 53 10.7 +0.3
VSU pmax pmax
comp=Z,57nm,1.2s
BZS **Buzias** 84.29 316 ⇑*i*P P 19 53 11.2 +0.3
KWP **Kalwaria Pacla** 84.38 320 *e*P P 19 53 11.4 +0.2
KWP **Kalwaria Pacla** 84.38 320 *e*P P 19 53 11.5 +0.2
KWP **Kalwaria Pacla** 84.38 320 ⇓*i*P P 19 53 11.7 +0.4
KOLS **Kolonicke sedl** 84.51 320 *e*P P 19 53 13.0 +1.0
KOLS pmax pmax
comp=Z,38nm,1.0s
KOLS **Kolonicke sedl** 84.51 320 *e*P P 19 53 13.0 +1.0
KOLS *e* 19 53 23.5
BILL **Bilibino** 84.72 20 ⇑*e*P P 19 53 12.5 -0.1
BILL *e**PP **pP** 19 53 18.7 -1.7
BILL *e* 19 53 27.5
BILL *e*S **S** 20 03 43.6 +4.9
BILL pmax pmax
comp=Z,7.0nm,1.1s
BILL MLR MLR
comp=Z,116nm,19.0s
SUW **Suwalki** 85.05 325 *e*P P 19 53 14.1 -0.4
SUW **Suwalki** 85.05 325 *e*P P 19 53 14.1 -0.4
DIVS **Divibare** 85.16 315 ⇑*i*P P 19 53 15.8 +0.3
STHS **Stebnicka Huta** 85.27 320 *e*P P 19 53 16.6 +0.8
STHS pmax pmax
comp=Z,14nm,1.0s
STHS **Stebnicka Huta** 85.27 320 *e*P P 19 53 16.6 +0.8
STHS *e* 19 53 27.3
FINES **FINESS Array B** 85.41 332 P P 19 53 16.2 0.0
comp=Z,5.5nm,0.6s,baz=118,slow=6.3,SNR=31
FINES LR LR 20 36 45.2
comp=Z,40nm,18.2s,baz=46,slow=39
NIE **Niedzica** 85.87 320 *e*P P 19 53 19.6 +0.8
NIE **Niedzica** 85.87 320 *e*P P 19 53 19.6 +0.8
PSZ **Piszkesteto** 85.87 318 *e*P P 19 53 18.9 0.0
PSZ pmax pmax
comp=Z,15nm,1.0s
PSZ **Piszkesteto** 85.87 318 ⇓*e*P P 19 53 19.1 +0.2
PSZ **Piszkesteto** 85.87 318 *e*P P 19 53 18.9 0.0
comp=Z,16nm,1.0s
BEL **Belsk** 86.01 322 *e*P P 19 53 19.4 +0.1
BEL **Belsk** 86.01 322 *e*P P 19 53 19.5 +0.1
OJC **Ojcow** 86.33 321 *e*P P 19 53 21.4 +0.4
OJC **Ojcow** 86.33 321 *e*P P 19 53 21.5 +0.4
LANS **Liptovska Anna** 86.36 320 *e*P P 19 53 21.9 +0.6
LANS **Liptovska Anna** 86.36 320 *e*P P 19 53 21.9 +0.6
QSPA **South Pole Qui** 86.38 180 *e*P P 19 53 20.2 -0.9
VYHS **Vyhne** 86.67 319 *e*P P 19 53 22.5 -0.2
VYHS pmax pmax
comp=Z,6.0nm,1.3s
VYHS **Vyhne** 86.67 319 *e*P P 19 53 22.5 -0.2
OKC **Ostrava-Krasne** 87.32 320 *e*P P 19 53 26.5 +0.6
OKC **Ostrava-Krasne** 87.32 320 *e*P P 19 53 26.5 +0.6
MORC **Moravsky Berou** 87.70 320 *e*P P 19 53 27.6 -0.2
MORC *e* 19 53 39.0
MORC pmax pmax
comp=Z,54nm,1.1s
MORC **Moravsky Berou** 87.70 320 ⇑*i*P P 19 53 28.5 +0.7
MORC **Moravsky Berou** 87.70 320 *e*P P 19 53 27.6 -0.2
comp=Z,54nm,1.1s
MORC *e* 19 53 39.0
ARCES **ARCESS Array B** 87.88 340 P P 19 53 27.1 -1.0
comp=Z,10nm,0.9s,baz=108,slow=4.0,SNR=12
ARCES LR LR 20 38 03.2
comp=Z,49nm,19.1s,baz=109,slow=39
KRLC **Kraliky** 88.23 320 *e*P P 19 53 31.1 +0.8
KRLC *e* 19 53 41.7
KRLC **Kraliky** 88.23 320 *e*P P 19 53 31.1 +0.8
GKP **Gorka Klasztor** 88.39 323 *e*P P 19 53 31.0 +0.2
GKP **Gorka Klasztor** 88.39 323 *e*P P 19 53 31.0 +0.2
DPC **Dobruska-Polom** 88.56 320 *e*P P 19 53 32.7 +0.9
DPC *e* 19 53 43.7
DPC **Dobruska-Polom** 88.56 320 *e*P P 19 53 32.7 +0.9
DPC *ex* x 19 53 43.7
KSP **Ksiaz** 88.64 321 *e*P P 19 53 32.7 +0.6
KSP **Ksiaz** 88.64 321 *e*P P 19 53 32.8 +0.6
ARSA **Arzberg** 88.70 317 ⇑*i*PcP **PcP** 19 53 33.4 -0.8
comp=Z,14nm,1.0s
UPC **Upice** 88.77 321 *e*P P 19 53 33.6 +0.8
UPC *e* 19 53 44.7
UPC **Upice** 88.77 321 *e*P P 19 53 33.6 +0.8
UPC *ex* x 19 53 44.7
TREC **Trest** 88.97 319 *e*P P 19 53 34.3 +0.6
TREC *e* 19 53 45.1
TREC **Trest** 88.97 319 *e*P P 19 53 34.3 +0.6
TREC *ex* x 19 53 45.1
GOPC **GO Pecny, Ondr** 89.49 320 *e*P P 19 53 37.0 +0.8
GOPC *e* 19 53 48.9
GOPC **GO Pecny, Ondr** 89.49 320 *e*P P 19 53 37.0 +0.8
PRU **Pruhonice** 89.65 320 *e*P P 19 53 37.6 +0.7
PRU **Pruhonice** 89.65 320 *e*P P 19 53 37.6 +0.7
PVCC **Panska Ves** 89.69 321 *e*P P 19 53 37.8 +0.7
PVCC **Panska Ves** 89.69 321 *e*P P 19 53 37.8 +0.7
PRA **Prague** 89.73 320 *e*P P 19 53 37.9 +0.6
PRA **Prague** 89.73 320 *e*P P 19 53 37.9 +0.6
GEC2 **GERESS Array S** 90.09 319 *e*P P 19 53 39.3 +0.2
GEC2 **GERESS Array S** 90.09 319 *e*P P 19 53 39.3 +0.2
comp=Z,28nm,1.3s,baz=95,slow=4.6
GEC2 **GERESS Array S** 90.09 319 *e*P P 19 53 39.3 +0.2
GERES **GERESS Array B** 90.09 319 P P 19 53 39.4 +0.3
comp=Z,8.4nm,0.9s,baz=94,slow=4.4,SNR=46
BRG **Berggiesshubel** 90.12 321 *e*P P 19 53 39.5 +0.4
comp=Z,16nm,1.1s
BRG *e* 19 53 50.5
comp=Z,8.4nm,1.0s
BRG **Berggiesshubel** 90.12 321 *e*P P 19 53 39.5 +0.4
BRG *e* 19 53 50.5
BRG pmax pmax
comp=Z,16nm,1.1s
BRG pmax pmax
comp=Z,8.0nm,1.0s
BRG **Berggiesshubel** 90.12 321 *e*P P 19 53 39.5 +0.4
comp=Z,14nm,1.1s,baz=95,slow=4.6
KHC **Kasperske Hory** 90.19 319 *e*P P 19 53 39.1 -0.4
KHC pmax pmax
comp=Z,10.0nm,1.8s
KHC **Kasperske Hory** 90.19 319 *e*P P 19 53 39.9 +0.4
KHC **Kasperske Hory** 90.19 319 *e*P P 19 53 39.1 -0.4
comp=Z,10nm,1.8s
SNAA **Sanae** 90.56 198 P P 19 53 41.5 +0.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SNAA | **Sanae** | **90.56** | **198** | *e*P | **P** | | **19 53 41.7** | **+0.9** |
| SNAA | | | | *e**PP | **pP** | | **19 53 51.2** | **+2.6** |
| SNAA | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.5s | | | | | | | |
| SNAA | **Sanae** | **90.56** | **198** | *e*P | **P** | | **19 53 41.7** | **+0.9** |
| | comp=Z,5.4nm,1.5s | | | | | | | |
| SNAA | | | | *e*pP | **pP** | | **19 53 51.2** | **+2.6** |
| **RJOB** | **Jochberg** | **90.59** | **318** | *e*P | **P** | | **19 53 40.9** | **-0.6** |
| | comp=Z,15nm,1.1s,baz=95,slow=4.6 | | | | | | | |
| **WET** | **Wettzell** | **90.65** | **319** | *e*P | **P** | | **19 53 41.8** | **+0.1** |
| | comp=Z,23nm,1.2s,baz=95,slow=4.6 | | | | | | | |
| **CLL** | **Collm** | **90.75** | **321** | *e*P | **P** | | **19 53 42.5** | **+0.5** |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **CLL** | **Collm** | **90.75** | **321** | *e*P | **P** | | **19 53 42.1** | **+0.1** |
| | comp=Z,14nm,1.1s,baz=95,slow=4.6 | | | | | | | |
| **CLL** | **Collm** | **90.75** | **321** | *i* P | **P** | | **19 53 42.4** | **+0.5** |
| | comp=Z,14nm,1.1s | | | | | | | |
| CLL | | | | *i* (sP) | **sP** | | **19 53 52.6** | **+0.1** |
| **CLL** | **Collm** | **90.75** | **321** | *e*P | **P** | | **19 53 42.5** | **+0.5** |
| | comp=Z,14nm,1.1s | | | | | | | |
| **NKC** | **Novy Kostel** | **91.02** | **320** | *e*P | **P** | | **19 53 44.3** | **+1.0** |
| **NKC** | **Novy Kostel** | **91.02** | **320** | *e*P | **P** | | **19 53 44.3** | **+1.0** |
| **TANN** | **Tannenbergstha** | **91.02** | **320** | *e*P | **P** | | **19 53 43.7** | **+0.3** |
| | comp=Z,12nm,1.3s,baz=95,slow=4.6 | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **91.14** | **320** | *e*P | **P** | | **19 53 44.6** | **+0.8** |
| | comp=Z,14nm,1.1s,baz=95,slow=4.6 | | | | | | | |
| **MOX** | **Moxa** | **91.58** | **320** | *e*P | **P** | | **19 53 46.2** | **+0.4** |
| | comp=Z,10nm,1.2s,baz=95,slow=4.6 | | | | | | | |
| **GRF** | **Grafenberg Arr** | **91.77** | **319** | *e*P | **P** | | **19 53 47.3** | **+0.5** |
| | comp=Z,17nm,1.0s,baz=95,slow=4.6 | | | | | | | |
| GRF | | | | *e*pP | **pP** | | **19 53 58.5** | **+3.9** |
| **FETA** | **Feichten** | **91.95** | **317** | ⇓ *i* PcP | **P** | | **19 53 48.0** | **+0.1** |
| | comp=Z,11nm,1.2s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **92.25** | **316** | *e*P | **P** | | **19 53 50.3** | **+0.9** |
| | comp=Z,18nm,1.1s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **92.41** | **331** | P | **P** | | **19 53 49.0** | **-0.6** |
| | comp=Z,1.6nm,0.8s,baz=95,slow=5.3 | | | | | | | |
| **NOA** | **NORSAR Array B** | **92.41** | **331** | P | **P** | | **19 53 49.4** | **-0.2** |
| | comp=Z,3.0nm,0.9s,baz=95,slow=4.6,SNR=7.1 | | | | | | | |
| NOA | | | | LR | LR | | 20 39 24.8 | |
| | comp=Z,19nm,18.1s,baz=70,slow=38 | | | | | | | |
| **KEST** | **Kesra** | **92.42** | **305** | P | **P** | | **19 53 51.7** | **+1.5** |
| | comp=Z,15nm,0.9s,baz=239,slow=2.8,SNR=8.4 | | | | | | | |
| **CLZ** | **Clausthal** | **92.42** | **322** | *e*P | **P** | | **19 53 50.0** | **+0.2** |
| | comp=Z,14nm,1.2s,baz=95,slow=4.6 | | | | | | | |
| **DAVA** | **Damuels** | **92.54** | **317** | ⇑ *i* pP | **P** | | **19 53 51.3** | **+0.7** |
| | comp=Z,18nm,1.1s | | | | | | | |
| **TNS** | **Taunus Mts** | **93.58** | **320** | *e*P | **P** | | **19 53 55.3** | **+0.1** |
| | comp=Z,18nm,1.0s,baz=95,slow=4.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **98.66** | **283** | P | **P** | | **19 54 17.5** | **-1.5** |
| | comp=Z,1.1nm,1.1s,baz=72,slow=4.8,SNR=5.2 | | | | | | | |
| **L02D** | **Cave Junction,** | **125.53** | **39** | P | | **PKPdf** | **19 59 39.4** | **-1.2** |
| | baz=125 | | | | | | | |
| **I05D** | **Terrebonne, OR** | **125.66** | **35** | P | | **PKPdf** | **19 59 40.7** | **-0.1** |
| | baz=126 | | | | | | | |
| **J04D** | **Umpqua Nationa** | **125.84** | **37** | P | | **PKPdf** | **19 59 41.1** | **-0.2** |
| | baz=126 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **126.34** | **36** | P | | **PKPdf** | **19 59 42.1** | **-0.2** |
| | baz=126 | | | | | | | |
| **M02C** | **Callahan** | **126.41** | **39** | P | | **PKPdf** | **19 59 41.9** | **-0.4** |
| | baz=126 | | | | | | | |
| **N02D** | **Trinity Center** | **126.73** | **40** | P | | **PKPdf** | **19 59 42.5** | **-0.5** |
| | baz=127 | | | | | | | |
| **M04C** | **Macdoel** | **126.83** | **38** | P | | **PKPdf** | **19 59 42.3** | **-0.9** |
| | baz=127 | | | | | | | |
| **O03D** | **Paynes Creek** | **127.68** | **40** | P | | **PKPdf** | **19 59 44.2** | **-0.6** |
| | baz=128 | | | | | | | |
| **J08A** | **Circle Bar Ran** | **127.90** | **35** | *e*PKPdf | | **PKPdf** | **19 59 46.5** | **+1.3** |
| **MSO** | **Missoula** | **127.97** | **29** | P | | **PKPdf** | **19 59 44.9** | **-0.3** |
| | baz=128 | | | | | | | |
| **WVOR** | **Wild Horse Val** | **128.38** | **36** | PKIKP | | **PKPdf** | **19 59 46.6** | **+0.5** |
| **WVOR** | **Wild Horse Val** | **128.38** | **36** | P | | **PKPdf** | **19 59 46.6** | **+0.5** |
| **BOZ** | **Bozeman (W)** | **129.94** | **28** | P | | **PKPdf** | **19 59 48.8** | **-0.3** |
| | baz=130 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.97** | **40** | PKP | | **PKPdf** | **19 59 52.4** | **+1.0** |
| | comp=Z,2.1nm,0.7s,baz=266,slow=3.1,SNR=9.5 | | | | | | | |
| **YMR** | **Madison River** | **130.98** | **29** | P | | **PKPdf** | **19 59 49.4** | **-1.7** |
| **ULM** | **Lac du Bonnet** | **131.66** | **13** | PKP | | **PKPdf** | **19 59 50.5** | **-1.5** |
| | comp=Z,4.9nm,0.7s,baz=349,slow=7.1,SNR=3.2 | | | | | | | |
| **REDW** | **Red Top Meadow** | **131.99** | **30** | P | | **PKPdf** | **19 59 53.3** | **+0.2** |
| **A29A** | **Manning Farm,** | **132.01** | **17** | P | | **PKPdf** | **19 59 52.3** | **-0.4** |
| | baz=132 | | | | | | | |
| **R11A** | **Troy Canyon, C** | **132.73** | **38** | P | | **PKPdf** | **19 59 55.0** | **+0.4** |
| | baz=133 | | | | | | | |
| **R11A** | **Troy Canyon, C** | **132.73** | **38** | *e*PKPdf | | **PKPdf** | **19 59 55.6** | **+1.0** |
| **MPMC** | **Manual Prospec** | **132.85** | **42** | P | | **PKPdf** | **19 59 54.3** | **-0.6** |
| | baz=133 | | | | | | | |
| **LRMC** | **Laurel Mountai** | **133.05** | **43** | P | | **PKPdf** | **19 59 55.1** | **-0.1** |
| | baz=133 | | | | | | | |
| **RSSD** | **Black Hills** | **134.50** | **24** | *e*PKIKP | | **PKPdf** | **19 59 58.0** | **+0.2** |
| **RSSD** | **Black Hills** | **134.50** | **24** | *e*PKPdf | | **PKPdf** | **19 59 58.0** | **+0.2** |
| **MSU** | **Marysvale** | **134.67** | **36** | *e*PKIKP | | **PKPdf** | **19 59 58.6** | **+0.3** |
| **MSU** | **Marysvale** | **134.67** | **36** | *e*PKPdf | | **PKPdf** | **19 59 58.6** | **+0.3** |
| **GMRC** | **Granite Mounta** | **134.81** | **42** | P | | **PKPdf** | **19 59 59.0** | **+0.5** |
| | baz=135 | | | | | | | |
| **C37A** | **Embarrass** | **134.84** | **11** | P | | **PKPdf** | **19 59 58.7** | **+0.7** |
| | baz=135 | | | | | | | |
| **P18A** | **Preston Nutter** | **134.99** | **33** | *e*PKPdf | | **PKPdf** | **20 00 00.3** | **+1.3** |
| **D36A** | **Goodland** | **135.16** | **13** | P | | **PKPdf** | **19 59 58.2** | **-0.5** |
| | baz=135 | | | | | | | |
| **J25A** | **Sunshine Ranch** | **135.19** | **24** | P | | **PKPdf** | **19 59 58.5** | **-0.5** |
| | baz=135 | | | | | | | |
| **IRM** | **Iron Mountain** | **135.51** | **43** | P | | **PKPdf** | **19 59 58.6** | **-1.1** |
| | baz=135 | | | | | | | |
| **J32A** | **Parkston** | **137.41** | **19** | P | | **PKPdf** | **20 00 02.1** | **-0.9** |
| | baz=137 | | | | | | | |
| **ECSD** | **EROS Data Cent** | **137.47** | **18** | P | | **PKPdf** | **20 00 02.4** | **-0.7** |
| | baz=137 | | | | | | | |
| **MVCO** | **Mesa Verde** | **137.67** | **34** | *e*PKPdf | | **PKPdf** | **20 00 04.9** | **+0.9** |
| **LPM** | **Los Pinos Moun** | **140.80** | **36** | *e*PKPdf | | **PKPdf** | **20 00 10.9** | **+1.2** |
| **V32A** | **Arapaho** | **143.60** | **26** | P | | PKPbc | 20 00 12.3 | +0.6 |
| | baz=144 | | | | | | | |
| **V33A** | **Lossen Ranch,** | **143.85** | **25** | P | | PKPbc | 20 00 12.9 | +0.4 |
| | baz=144 | | | | | | | |
| **T37A** | **Cheneyville 18** | **144.01** | **20** | P | | **PKPab** | **20 00 11.9** | **-0.4** |
| | baz=144,SNR=9.9 | | | | | | | |
| **U35A** | **Pawnee** | **144.01** | **23** | P | | **PKPab** | **20 00 12.4** | **+0.1** |
| | baz=144,SNR=6.8 | | | | | | | |
| **W32A** | **Sentinel** | **144.01** | **27** | P | | **PKPab** | **20 00 12.6** | **+0.1** |
| | baz=144,SNR=7.5 | | | | | | | |
| **X31A** | **McDonald Ranch** | **144.08** | **28** | P | | **PKPab** | **20 00 12.6** | **-0.2** |
| | baz=144,SNR=6.3 | | | | | | | |
| **V34A** | **Guthrie** | **144.16** | **24** | P | | PKPbc | 20 00 13.9 | +0.6 |
| | baz=144 | | | | | | | |
| **V34A** | **Guthrie** | **144.16** | **24** | *e*PKPdf | | PKPbc | 20 00 13.2 | -0.1 |
| **Y30A** | **Stafford Cattl** | **144.24** | **30** | P | | PKPbc | 20 00 14.6 | +0.8 |
| | baz=144 | | | | | | | |
| **OLIL** | **Olney** | **144.29** | **11** | *e*PKPdf | | PKPbc | 20 00 13.8 | +0.1 |
| **Z29A** | **Hungry Hill Ra** | **144.31** | **32** | P | | PKPbc | 20 00 14.0 | -0.1 |
| | baz=144,SNR=5.3 | | | | | | | |
| **W33A** | **Caddo, Fort Co** | **144.34** | **26** | P | | PKPbc | 20 00 14.0 | 0.0 |
| | baz=144,SNR=12 | | | | | | | |
| **U36A** | **Oologah** | **144.37** | **22** | P | | PKPbc | 20 00 14.2 | +0.2 |
| | baz=144 | | | | | | | |
| **128A** | **Castleberry Fa** | **144.38** | **33** | P | | PKPbc | 20 00 14.6 | +0.3 |
| | baz=144 | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **144.49** | **29** | P | | PKPbc | 20 00 14.7 | +0.2 |
| | baz=144 | | | | | | | |
| **V35A** | **Meyer Ranch, C** | **144.50** | **24** | P | | **PKPab** | **20 00 13.8** | **-0.4** |
| | baz=144,SNR=9.4 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.54** | **27** | *e*PKIKP | | **PKPab** | **20 00 13.9** | **-0.6** |
| **WMOK** | **Wichita Mounta** | **144.54** | **27** | *e*PKPdf | | **PKPab** | **20 00 13.9** | **-0.6** |
| **W34A** | **Bridge Creek,** | **144.57** | **25** | P | | **PKPab** | **20 00 14.4** | **-0.1** |
| | baz=144,SNR=5.7 | | | | | | | |
| **W34A** | **Bridge Creek,** | **144.57** | **25** | *e*PKPdf | | **PKPab** | **20 00 13.9** | **-0.6** |
| **X32A** | **Elmer** | **144.58** | **28** | P | | **PKPab** | **20 00 13.3** | **-0.6** |
| | baz=144,SNR=8.6 | | | | | | | |
| **U37A** | **Salina** | **144.58** | **21** | P | | **PKPab** | **20 00 14.3** | **-0.2** |
| | baz=144,SNR=15 | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **144.59** | **31** | P | | **PKPab** | **20 00 14.5** | **-0.2** |
| | baz=144,SNR=17 | | | | | | | |
| **228A** | **UT Block 9, Go** | **144.70** | **34** | P | | PKPbc | 20 00 15.4 | +0.1 |
| | baz=145,SNR=5.4 | | | | | | | |
| **129A** | **Stewart Farms,** | **144.71** | **33** | P | | **PKPab** | **20 00 15.2** | **0.0** |
| | baz=145,SNR=6.7 | | | | | | | |
| **TUL1** | **Tulsa** | **144.77** | **22** | P | | **PKPab** | **20 00 15.1** | **-0.1** |
| | baz=145,SNR=11 | | | | | | | |
| **TUL1** | **Tulsa** | **144.77** | **22** | *e*PKPdf | | **PKPab** | **20 00 15.1** | **-0.1** |
| **U38A** | **Gravette** | **144.81** | **20** | P | | **PKPab** | **20 00 14.5** | **-0.8** |
| | baz=145,SNR=19 | | | | | | | |
| **V36A** | **Jenks** | **144.83** | **22** | P | | **PKPab** | **20 00 14.9** | **-0.5** |
| | baz=145,SNR=16 | | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **144.85** | **28** | P | | **PKPab** | **20 00 15.0** | **-0.6** |
| | baz=145,SNR=8.1 | | | | | | | |
| **W35A** | **Tecumseh** | **145.01** | **24** | P | | **PKPab** | **20 00 15.5** | **-0.6** |
| | baz=145,SNR=7.2 | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **145.04** | **52** | *e*PKPdf | | **PKPdf** | **20 00 17.6** | **+0.3** |
| **V37A** | **Hulbert** | **145.04** | **21** | P | | **PKPbc** | **20 00 15.3** | **-0.8** |
| | baz=145,SNR=16 | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **145.06** | **30** | P | | **PKPbc** | **20 00 16.0** | **-0.4** |
| | baz=145,SNR=29 | | | | | | | |
| **X34A** | **Smith Ranch, M** | **145.08** | **26** | P | | **PKPbc** | **20 00 15.9** | **-0.5** |
| | baz=145,SNR=9.5 | | | | | | | |
| **WCI** | **Wyandotte Cave** | **145.09** | **8** | *e*PKIKP | | **PKPbc** | **20 00 15.2** | **-1.1** |
| **WCI** | **Wyandotte Cave** | **145.09** | **8** | *e*PKPdf | | **PKPbc** | **20 00 15.2** | **-1.1** |
| **USIN** | **University of** | **145.12** | **10** | *e*PKPab | | **PKPbc** | **20 00 16.2** | **-0.1** |
| **130A** | **Snyder** | **145.22** | **32** | P | | **PKPbc** | **20 00 16.7** | **-0.2** |
| | baz=145,SNR=6.0 | | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **145.22** | **27** | P | | **PKPbc** | **20 00 16.5** | **-0.3** |
| | baz=145 | | | | | | | |
| **229A** | **Bryant Ranch,** | **145.25** | **33** | P | | **PKPbc** | **20 00 16.8** | **-0.2** |
| | baz=145,SNR=6.2 | | | | | | | |
| **W36A** | **Wetumka** | **145.28** | **23** | P | | **PKPbc** | **20 00 16.5** | **-0.5** |
| | baz=145,SNR=8.2 | | | | | | | |
| **V38A** | **Canehill** | **145.32** | **20** | P | | **PKPbc** | **20 00 16.0** | **-1.1** |
| | baz=145,SNR=19 | | | | | | | |
| **Z32A** | **Haskell** | **145.40** | **29** | P | | **PKPbc** | **20 00 17.1** | **-0.4** |
| | baz=145,SNR=17 | | | | | | | |
| **131A** | **Roby** | **145.45** | **31** | P | | **PKPbc** | **20 00 17.5** | **-0.2** |
| | baz=145,SNR=11 | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **145.52** | **34** | P | | **PKPdf** | **20 00 17.6** | **-0.3** |
| | baz=145,SNR=9.6 | | | | | | | |
| **W37A** | **Quinton** | **145.59** | **22** | P | | **PKPdf** | **20 00 17.6** | **-0.2** |
| | baz=146,SNR=10.0 | | | | | | | |
| **X35A** | **Drake** | **145.62** | **25** | P | | **PKPdf** | **20 00 17.2** | **-0.7** |
| | baz=146,SNR=9.2 | | | | | | | |
| **Y34A** | **Reagan Ranch,** | **145.66** | **26** | P | | **PKPdf** | **20 00 17.4** | **-0.6** |
| | baz=146,SNR=9.4 | | | | | | | |
| **PBMO** | **Poplar Bluff** | **145.67** | **15** | *e*PKPdf | | **PKPdf** | **20 00 17.3** | **-0.6** |
| **230A** | **Sterling City** | **145.69** | **33** | P | | **PKPdf** | **20 00 18.0** | **-0.2** |
| | baz=146,SNR=19 | | | | | | | |
| **X36A** | **Centrahoma** | **145.73** | **24** | P | | **PKPdf** | **20 00 17.8** | **-0.2** |
| | baz=146,SNR=9.0 | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **145.76** | **28** | P | | **PKPdf** | **20 00 17.8** | **-0.4** |
| | baz=146,SNR=8.0 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.87** | **30** | P | | **PKPbc** | **20 00 18.9** | **-0.1** |
| | baz=146,SNR=8.4 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.87** | **30** | *e*PKPdf | | **PKPbc** | **20 00 19.0** | **+0.1** |
| **W38A** | **Poteau** | **145.99** | **21** | P | | **PKPbc** | **20 00 19.2** | **0.0** |
| | baz=146 | | | | | | | |
| **Y35A** | **Marietta** | **146.01** | **25** | P | | **PKPbc** | **20 00 19.2** | **-0.1** |
| | baz=146 | | | | | | | |
| **330A** | **Mertzon** | **146.03** | **33** | P | | **PKPbc** | **20 00 19.3** | **-0.3** |
| | baz=146,SNR=8.9 | | | | | | | |
| **231A** | **Bronte** | **146.07** | **32** | P | | **PKPdf** | **20 00 19.1** | **+0.3** |
| | baz=146,SNR=7.5 | | | | | | | |
| **Z34A** | **Collier Ranch,** | **146.08** | **27** | P | | **PKPbc** | **20 00 19.4** | **-0.1** |
| | baz=146 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.09** | **39** | PKPbc | | **PKPab** | **20 00 20.4** | **0.0** |
| | comp=Z,15nm,0.7s,baz=280,slow=1.0,SNR=95 | | | | | | | |
| **X37A** | **Clayton** | **146.10** | **23** | P | | **PKPbc** | **20 00 19.3** | **-0.2** |
| | baz=146 | | | | | | | |
| **429A** | **Davenport Ranc** | **146.22** | **35** | P | | **PKPbc** | **20 00 19.7** | **-0.4** |
| | baz=146,SNR=7.1 | | | | | | | |
| **X38A** | **Whitesboro** | **146.24** | **22** | P | | **PKPbc** | **20 00 20.0** | **0.0** |
| | baz=146,SNR=11 | | | | | | | |
| **133A** | **Hamilton Ranch** | **146.24** | **29** | P | | **PKPbc** | **20 00 19.9** | **-0.2** |
| | baz=146,SNR=12 | | | | | | | |
| **Y36A** | **Durant** | **146.34** | **25** | P | | **PKPdf** | **20 00 19.6** | **+0.5** |
| | baz=146,SNR=6.3 | | | | | | | |
| **529A** | **Stev Forest Ra** | **146.40** | **36** | P | | **PKPbc** | **20 00 20.4** | **-0.3** |
| | baz=147,SNR=14 | | | | | | | |
| **Z35A** | **Perchaven, San** | **146.41** | **26** | P | | **PKPdf** | **20 00 19.6** | **+0.3** |
| | baz=146 | | | | | | | |
| **232A** | **Coleman** | **146.46** | **31** | P | | **PKPbc** | **20 00 20.5** | **-0.3** |
| | baz=146,SNR=11 | | | | | | | |
| **430A** | **Baggett Ranch,** | **146.47** | **34** | P | | **PKPbc** | **20 00 20.6** | **-0.2** |
| | baz=146,SNR=9.0 | | | | | | | |
| **331A** | **San Angelo** | **146.50** | **32** | P | | **PKPbc** | **20 00 20.9** | **0.0** |
| | baz=146,SNR=9.5 | | | | | | | |
| **Y37A** | **Hugo** | **146.54** | **24** | P | | **PKPbc** | **20 00 20.9** | **+0.1** |
| | baz=146 | | | | | | | |
| **BLA** | **Blacksburg** | **146.54** | **0** | *e*PKP2 | | **PKPdf** | **20 00 19.9** | **+0.5** |
| **BLA** | **Blacksburg** | **146.54** | **0** | *e*PKPdf | | **PKPdf** | **20 00 19.9** | **+0.5** |
| **134A** | **White-Moore Ra** | **146.67** | **28** | P | | **PKPbc** | **20 00 20.9** | **-0.4** |
| | baz=146 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.80** | **20** | *e*PKP2 | | **PKPdf** | **20 00 20.1** | **+0.2** |
| **MIAR** | **Mount Ida** | **146.80** | **20** | P | | **PKPbc** | **20 00 21.4** | **-0.2** |
| | baz=147,SNR=16 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.80** | **20** | *e*PKPdf | | **PKPdf** | **20 00 20.1** | **+0.2** |
| **332A** | **Millersview** | **146.81** | **31** | P | | **PKPbc** | **20 00 21.6** | **-0.2** |
| | baz=147,SNR=49 | | | | | | | |
| **Z36A** | **Blue Ridge** | **146.82** | **25** | P | | **PKPbc** | **20 00 21.6** | **-0.1** |
| | baz=147 | | | | | | | |
| **WVT** | **Waverly** | **146.87** | **11** | *e*PKP2 | | **PKPdf** | **20 00 19.8** | **-0.2** |
| **WVT** | **Waverly** | **146.87** | **11** | *e*PKPdf | | **PKPdf** | **20 00 19.8** | **-0.2** |
| **530A** | **J-C Ranch, Com** | **146.89** | **35** | P | | **PKPbc** | **20 00 22.3** | **+0.3** |
| | baz=147,SNR=36 | | | | | | | |
| **431A** | **Sonora** | **146.89** | **33** | P | | **PKPbc** | **20 00 22.1** | **0.0** |
| | baz=147,SNR=11 | | | | | | | |
| **135A** | **Vickery Place,** | **146.99** | **27** | P | | **PKPbc** | **20 00 22.1** | **-0.1** |
| | baz=147 | | | | | | | |
| **UALR** | **University of** | **147.00** | **18** | *e*PKPab | | **PKPbc** | **20 00 22.1** | **-0.1** |
| **TZTN** | **Tazewell** | **147.07** | **5** | *e*PKPdf | | **PKPdf** | **20 00 21.2** | **+0.9** |
| **234A** | **Clairette** | **147.11** | **29** | P | | **PKPbc** | **20 00 22.3** | **-0.3** |
| | baz=147 | | | | | | | |
| **Y39A** | **Lockesburg** | **147.16** | **22** | P | | **PKPbc** | **20 00 22.4** | **-0.2** |
| | baz=147 | | | | | | | |
| **432A** | **Menard** | **147.18** | **32** | P | | **PKPbc** | **20 00 22.6** | **-0.3** |
| | baz=147,SNR=5.5 | | | | | | | |
| **333A** | **Richland Sprin** | **147.24** | **31** | P | | **PKPbc** | **20 00 22.8** | **-0.2** |
| | baz=147,SNR=20 | | | | | | | |
| **531A** | **Rocksprings** | **147.32** | **34** | P | | **PKPbc** | **20 00 23.4** | **+0.1** |
| | baz=147,SNR=16 | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **147.43** | **23** | P | | **PKPbc** | **20 00 23.6** | **+0.2** |
| | baz=147 | | | | | | | |
| **WHTX** | **Lake Whitney** | **147.44** | **28** | P | | **PKPbc** | **20 00 23.7** | **+0.3** |
| | baz=147 | | | | | | | |
| **WHTX** | **Lake Whitney** | **147.44** | **28** | *e*PKPab | | **PKPbc** | **20 00 23.8** | **+0.3** |
| **JCT** | **Junction City** | **147.49** | **33** | *e*PKP2 | | **PKPdf** | **20 00 21.4** | **+0.2** |
| **JCT** | **Junction City** | **147.49** | **33** | P | | **PKPbc** | **20 00 23.7** | **0.0** |
| | baz=147,SNR=22 | | | | | | | |
| **JCT** | **Junction City** | **147.49** | **33** | *e*PKPdf | | **PKPdf** | **20 00 21.4** | **+0.2** |
| JCT | | | | *e*PKPbc | | **PKPbc** | **20 00 24.0** | **+0.3** |
| **334A** | **Lometa** | **147.61** | **30** | P | | **PKPbc** | **20 00 23.9** | **-0.1** |
| | baz=148,SNR=6.7 | | | | | | | |
| **433A** | **Art** | **147.65** | **31** | P | | **PKPbc** | **20 00 23.8** | **-0.3** |
| | baz=148,SNR=6.3 | | | | | | | |
| **137A** | **Heron Place, G** | **147.68** | **25** | P | | **PKPbc** | **20 00 24.3** | **+0.1** |
| | baz=148 | | | | | | | |
| **532A** | **Rocksprings** | **147.70** | **33** | P | | **PKPbc** | **20 00 24.1** | **-0.3** |
| | baz=148,SNR=11 | | | | | | | |
| **Z39A** | **Iron McRaven,** | **147.75** | **22** | P | | **PKPbc** | **20 00 24.6** | **+0.3** |
| | baz=148 | | | | | | | |
| **236A** | **Katherine and** | **147.86** | **27** | P | | **PKPbc** | **20 00 25.0** | **+0.3** |
| | baz=148 | | | | | | | |
| **631A** | **Perdido Creek** | **147.88** | **35** | P | | **PKPbc** | **20 00 24.7** | **-0.1** |
| | baz=148,SNR=7.9 | | | | | | | |
| **138A** | **Matatall Enter** | **147.91** | **24** | P | | **PKPbc** | **20 00 25.0** | **+0.2** |
| | baz=148 | | | | | | | |
| **434A** | **Burnet** | **148.02** | **30** | P | | **PKPbc** | **20 00 24.8** | **-0.3** |
| | baz=148,SNR=8.2 | | | | | | | |
| **335A** | **Moody** | **148.05** | **29** | P | | **PKPbc** | **20 00 24.8** | **-0.3** |
| | baz=148,SNR=7.2 | | | | | | | |
| **CPCT** | **Cooper Cave** | **148.05** | **7** | *e*PKPbc | | **PKPbc** | **20 00 24.4** | **-0.6** |
| **OXF** | **Oxford** | **148.07** | **14** | *e*PKP2 | | **PKPbc** | **20 00 24.4** | **-0.7** |
| **OXF** | **Oxford** | **148.07** | **14** | *e*PKPbc | | **PKPbc** | **20 00 24.4** | **-0.7** |
| **237A** | **Washetta, Mont** | **148.18** | **26** | P | | **PKPbc** | **20 00 26.2** | **+0.7** |
| | baz=148 | | | | | | | |
| **533A** | **Kerrville** | **148.22** | **32** | P | | **PKPbc** | **20 00 26.2** | **+0.5** |
| | baz=148 | | | | | | | |
| **336A** | **Riesel** | **148.23** | **28** | P | | **PKPbc** | **20 00 26.4** | **+0.8** |
| | baz=148 | | | | | | | |
| **632A** | **Uvalde** | **148.25** | **34** | P | | **PKPbc** | **20 00 25.9** | **+0.1** |
| | baz=148,SNR=9.0 | | | | | | | |
| **435B** | **Jarrell** | **148.38** | **29** | P | | **PKPbc** | **20 00 26.6** | **+0.5** |
| | baz=148 | | | | | | | |
| **238A** | **Jacksonville** | **148.47** | **25** | P | | **PKPbc** | **20 00 26.8** | **+0.6** |
| | baz=148 | | | | | | | |
| **534A** | **Blanco** | **148.54** | **31** | P | | **PKPbc** | **20 00 26.7** | **+0.2** |
| | baz=148 | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.59** | **2** | P | | **PKPbc** | **20 00 26.2** | **-0.3** |
| | baz=148 | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.59** | **2** | *e*PKPbc | | **PKPbc** | **20 00 25.9** | **-0.6** |
| **633A** | **Saathoff Ranch** | **148.62** | **33** | P | | **PKPbc** | **20 00 26.7** | **0.0** |
| | baz=148 | | | | | | | |
| **239A** | **Gary** | **148.72** | **24** | P | | **PKPbc** | **20 00 27.0** | **+0.2** |
| | baz=149,SNR=5.4 | | | | | | | |
| **337A** | **Centerville** | **148.73** | **26** | P | | **PKPbc** | **20 00 27.1** | **+0.2** |
| | baz=149 | | | | | | | |
| **732A** | **Laxson Ranch,** | **148.74** | **35** | P | | **PKPbc** | **20 00 27.2** | **+0.2** |
| | baz=149 | | | | | | | |
| **436A** | **Wall Ranch, Ga** | **148.77** | **28** | P | | **PKPbc** | **20 00 27.4** | **+0.3** |
| | baz=149 | | | | | | | |
| **338A** | **Crockett** | **148.94** | **26** | P | | **PKPbc** | **20 00 27.9** | **+0.4** |
| | baz=149 | | | | | | | |
| **437A** | **Phantom Ranch,** | **149.03** | **27** | P | | **PKPbc** | **20 00 27.8** | **+0.1** |
| | baz=149 | | | | | | | |
| **832A** | **Faith Ranch, C** | **149.07** | **35** | P | | **PKPbc** | **20 00 28.2** | **+0.3** |
| | baz=149 | | | | | | | |
| **634A** | **China Grove, S** | **149.12** | **32** | P | | **PKPbc** | **20 00 28.3** | **+0.3** |
| | baz=149 | | | | | | | |
| **733A** | **Divot King Ran** | **149.13** | **34** | P | | **PKPbc** | **20 00 28.5** | **+0.4** |
| | baz=149 | | | | | | | |
| **536A** | **Bastrop** | **149.22** | **29** | P | | **PKPbc** | **20 00 28.5** | **+0.2** |
| | baz=149 | | | | | | | |
| **339A** | **Huntington** | **149.28** | **24** | P | | **PKPbc** | **20 00 28.3** | **0.0** |
| | baz=149 | | | | | | | |
| **833A** | **Chaparral WMA,** | **149.38** | **35** | P | | **PKPbc** | **20 00 29.3** | **+0.6** |
| | baz=149 | | | | | | | |
| **438A** | **Sam Houston St** | **149.39** | **26** | P | | **PKPbc** | **20 00 29.1** | **+0.5** |
| | baz=149 | | | | | | | |
| **635A** | **Leesville** | **149.42** | **31** | P | | **PKPbc** | **20 00 28.9** | **+0.1** |
| | baz=149 | | | | | | | |
| **734A** | **La Parita Cree** | **149.43** | **33** | P | | **PKPbc** | **20 00 29.3** | **+0.5** |
| | baz=149 | | | | | | | |
| **340A** | **Bronson** | **149.48** | **23** | P | | **PKPbc** | **20 00 29.0** | **+0.2** |
| | baz=149 | | | | | | | |
| **537A** | **Green Hill Far** | **149.57** | **28** | P | | **PKPbc** | **20 00 29.4** | **+0.3** |
| | baz=149 | | | | | | | |
| **439A** | **Center Grove,** | **149.66** | **25** | P | | **PKPbc** | **20 00 29.0** | **-0.3** |
| | baz=150 | | | | | | | |
| **636A** | **Smothers Creek** | **149.71** | **30** | P | | **PKPbc** | **20 00 29.8** | **+0.4** |
| | baz=150 | | | | | | | |
| **735A** | **Kenedy** | **149.83** | **32** | P | | **PKPbc** | **20 00 29.7** | **-0.1** |
| | baz=150 | | | | | | | |
| **933A** | **Laredo** | **149.98** | **35** | P | | **PKPbc** | **20 00 31.1** | **+1.0** |
| | baz=150 | | | | | | | |
| **834A** | **Tilden** | **150.00** | **34** | P | | **PKPbc** | **20 00 31.1** | **+0.9** |
| | baz=150 | | | | | | | |
| **440A** | **Kirbyville** | **150.04** | **24** | P | | **PKPbc** | **20 00 31.7** | **+1.5** |
| | baz=150 | | | | | | | |
| **637A** | **Eagle Lake** | **150.10** | **29** | P | | **PKPbc** | **20 00 31.7** | **+1.3** |
| | baz=150 | | | | | | | |
| **736A** | **Circle Diamond** | **150.13** | **31** | P | | **PKPbc** | **20 00 32.1** | **+1.6** |
| | baz=150 | | | | | | | |
| **835A** | **Beeville** | **150.27** | **33** | P | | **PKPbc** | **20 00 32.8** | **+1.9** |
| | baz=150 | | | | | | | |
| **539A** | **Cross D Ranch,** | **150.27** | **26** | P | | **PKPbc** | **20 00 32.2** | **+1.4** |
| | baz=150 | | | | | | | |
| **934A** | **Benavides** | **150.42** | **34** | P | | **PKPbc** | **20 00 32.9** | **+1.7** |
| | baz=150 | | | | | | | |
| **034A** | **Hebbronville** | **150.74** | **35** | P | | **PKPbc** | **20 00 33.6** | **+1.6** |
| | baz=151 | | | | | | | |
| **035A** | **Encino** | **151.17** | **35** | P | | **PKPbc** | **20 00 33.4** | **+0.4** |
| | baz=151 | | | | | | | |
| **035Z** | **Hargill** | **151.55** | **35** | P | | **PKPbc** | **20 00 35.9** | **+2.0** |
| | baz=151 | | | | | | | |
| **LVC** | **Limon Verde** | **151.70** | **202** | *e*PKPab | | **PKPbc** | **20 00 35.5** | **+0.8** |
| **TIGA** | **Tifton** | **152.12** | **6** | *e*PKPbc | | **PKPbc** | **20 00 34.0** | **-1.1** |

*ISCJB **26** 20:03:25.8±0.3,4.°69S±0.°04×125.°86E±0.°05,h450km, m

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.13** | **356** | P | **P** | **20 20 06.3** | **-0.5** |
| | 0.2nm,0.4s,baz=186,slow=9.9,SNR=2.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.17** | **259** | T | T | 20 50 09.5 | |
| | baz=82,slow=75,SNR=233 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.18** | **259** | T | T | 20 50 11.3 | |
| | baz=82,slow=75,SNR=164 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.19** | **259** | T | T | 20 50 10.9 | |
| | baz=82,slow=75,SNR=192 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.44** | **160** | T | T | 20 58 23.1 | |
| | baz=335 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.45** | **160** | T | T | 20 58 21.0 | |
| **H01W1** | **Cape Leeuwin H** | **34.45** | **160** | T | T | 20 58 28.0 | |
| | baz=335 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.30** | **120** | P | **P** | **20 22 33.8** | **-0.3** |
| | 0.1nm,0.3s,baz=288,slow=7.6,SNR=10.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.52** | **126** | P | **P** | **20 22 44.5** | **+0.2** |
| | 0.3nm,0.6s,baz=303,slow=7.8,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **50.66** | **5** | P | **P** | **20 24 21.7** | **+0.7** |
| | 1.2nm,0.8s,baz=189,slow=8.6,SNR=9.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.85** | **344** | P | **P** | **20 24 29.9** | **0.0** |
| | 1.2nm,0.7s,baz=153,slow=8.6,SNR=7.7 | | | | | | |
| **OPO** | **Ambohidratompo** | **54.34** | **249** | LR | LR | 20 44 14.5 | |
| | comp=Z,42nm,18.5s,baz=4.0,slow=32 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.97** | **349** | P | **P** | **20 25 13.5** | **-0.4** |
| | 0.3nm,0.3s,baz=147,slow=3.4,SNR=3.2 | | | | | | |
| **MATP** | **Matopo** | **72.05** | **250** | LR | LR | 20 52 34.6 | |
| | comp=Z,45nm,21.6s,baz=126,slow=31 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.07** | **38** | PKPbc | **PKPdf** | **20 34 59.7** | **0.0** |
| | 0.3nm,0.4s,baz=247,slow=1.0,SNR=3.8 | | | | | | |

*DDA **26** 20:18:41.5, 40˚.17N×31˚.68E, h7km, Md2.8*
*ISK **26** 20:18:41.4, 40˚.10N×31˚.75E, h5km, MD2.8*
*CSEM **26** 20:18:42.3±0.2, 40˚.12N×31˚.73E, h2km, MD2.8, Error ellipse: s-maj=4.9km s-min=3.9km az=14.0*

**ISC 26 20:18:42.2**±1.1, **40˚.13N**±0˚.02×**31˚.70E**±0˚.02, **h6**km±10km, **n37**, σ0**s62**/56, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AUMIH** | **MIHALICIK** | **0.31** | **212** | P | **Pg** | **20 18 48.4** | **+0.2** |
| AUMIH | | | | S | **Sg** | **20 18 53.7** | **+1.3** |
| **MDUB** | **Mudurnu** | **0.51** | **312** | *e*PG | **Pg** | **20 18 53.4** | **-0.3** |
| **MDUB** | **Mudurnu** | **0.51** | **312** | *e*Pg | **Pb** | **20 18 53.4** | **-0.3** |
| **BTAS** | **Taskesti** | **0.69** | **310** | *i* P | **Pg** | **20 18 55.5** | **+0.1** |
| BTAS | | | | *i* S | **Sb** | **20 19 06.0** | **-0.5** |
| **BTAS** | **Taskesti** | **0.69** | **310** | P | **Pg** | **20 18 55.5** | **+0.1** |
| BTAS | | | | S | **Sb** | **20 19 06.0** | **-0.5** |
| **SVRH** | **Sivrihisar-ESK** | **0.69** | **191** | *e*PG | **Pg** | **20 18 55.6** | **+0.1** |
| SVRH | | | | *e*SG | **Sb** | **20 19 05.8** | **-0.8** |
| **SVRH** | **Sivrihisar-ESK** | **0.69** | **191** | *e*Pg | **Pg** | **20 18 55.6** | **+0.1** |
| SVRH | | | | *e*Sg | **Sb** | **20 19 05.8** | **-0.8** |
| **BCAM** | **Yenicaga** | **0.74** | **22** | *i* P | **Pg** | **20 18 55.2** | **-1.2** |
| BCAM | | | | *i* S | **Sb** | **20 19 08.6** | **+0.6** |
| **BCAM** | **Yenicaga** | **0.74** | **22** | P | **Pg** | **20 18 55.2** | **-1.2** |
| BCAM | | | | S | **Sb** | **20 19 08.6** | **+0.6** |
| **LOD** | **Lodumlu** | **0.85** | **106** | *e*PG | **Pg** | **20 18 58.2** | **-0.4** |
| **LOD** | **Lodumlu** | **0.85** | **106** | *e*Pg | **Pg** | **20 18 58.2** | **-0.4** |
| **ESKT** | **Eskisehir** | **0.89** | **227** | P | **Pg** | **20 18 59.1** | **-0.2** |
| ESKT | | | | S | **Sn** | **20 19 16.0** | **+1.3** |
| **SEYT** | **Eskypehyr** | **0.89** | **227** | *i* P | **Pg** | **20 18 59.1** | **-0.2** |
| SEYT | | | | *i* S | **Sn** | **20 19 16.0** | **+1.4** |
| **GULT** | **Gulveren** | **0.95** | **289** | *e*PG | **Pg** | **20 19 00.7** | **+0.2** |
| GULT | | | | *e*SG | **Sn** | **20 19 16.4** | **+0.3** |
| **GULT** | **Gulveren** | **0.95** | **289** | *e*Pg | **Pg** | **20 19 00.7** | **+0.2** |
| GULT | | | | *e*Sg | **Sn** | **20 19 16.4** | **+0.3** |
| **BORA** | **Eskisehir** | **0.99** | **256** | *i* P | **Pg** | **20 19 00.4** | **-0.7** |
| BORA | | | | *i* S | **Sn** | **20 19 16.8** | **-0.1** |
| **BORA** | **Eskisehir** | **0.99** | **256** | P | **Pg** | **20 19 00.4** | **-0.7** |
| BORA | | | | S | **Sn** | **20 19 16.8** | **-0.1** |
| **BBAL** | **Bala** | **1.24** | **118** | *i* P | **Pg** | **20 19 05.8** | **-0.2** |
| BBAL | | | | *i* S | **Sn** | **20 19 24.1** | **+0.8** |
| **BBAL** | **Bala** | **1.24** | **118** | P | **Pg** | **20 19 05.8** | **-0.2** |
| BBAL | | | | S | **Sn** | **20 19 24.1** | **+0.8** |
| **KIZT** | **Kizilcal** | **1.26** | **174** | *e*PN | **Pn** | **20 19 05.9** | **-0.4** |
| **KIZT** | **Kizilcal** | **1.26** | **174** | *e*Pn | **Pn** | **20 19 05.9** | **-0.4** |
| **AFSR** | **Af˙ar-Bala (A** | **1.26** | **122** | *e*PN | **Pg** | **20 19 05.7** | **-0.6** |
| **AFSR** | **Af˙ar-Bala (A** | **1.26** | **122** | *e*Pn | **Pg** | **20 19 05.7** | **-0.6** |
| **SAFT** | **Safranbolu** | **1.34** | **34** | *e*PN | **Pg** | **20 19 07.8** | **-0.1** |
| **SAFT** | **Safranbolu** | **1.34** | **34** | *e*Pn | **Pg** | **20 19 07.8** | **-0.1** |
| **ELDT** | **Eldivan** | **1.37** | **74** | *i* P | **Pb** | **20 19 07.8** | **-0.5** |
| ELDT | | | | *i* S | **Sn** | **20 19 26.8** | **+0.3** |
| **ELDT** | **Eldivan** | **1.37** | **74** | P | **Pb** | **20 19 07.8** | **-0.5** |
| ELDT | | | | S | **Sn** | **20 19 26.8** | **+0.3** |
| **KDHN** | **Kadinhani** | **1.64** | **168** | *i* P | **Pg** | **20 19 13.2** | **-0.3** |
| KDHN | | | | *i* S | **Sg** | **20 19 35.3** | **+0.5** |
| **KDHN** | **Kadinhani** | **1.64** | **168** | P | **Pg** | **20 19 13.2** | **-0.3** |
| KDHN | | | | S | **Sg** | **20 19 35.3** | **+0.5** |
| **TVSB** | **Tavsanli** | **1.85** | **249** | *e*PN | **Pb** | **20 19 15.8** | **-0.7** |
| **TVSB** | **Tavsanli** | **1.85** | **249** | *e*Pn | **Pb** | **20 19 15.8** | **-0.7** |
| **SILT** | **Sile** | **1.87** | **304** | *e*PN | **Pb** | **20 19 16.6** | **0.0** |
| **SILT** | **Sile** | **1.87** | **304** | *e*Pn | **Pb** | **20 19 16.6** | **0.0** |
| **ARMT** | **Armutlu** | **2.21** | **282** | *e*PN | **Pb** | **20 19 21.5** | **-1.0** |
| **ARMT** | **Armutlu** | **2.21** | **282** | *e*Pn | **Pb** | **20 19 21.5** | **-1.0** |
| **CORM** | **Corum** | **2.25** | **88** | *e*PN | **Pn** | **20 19 20.6** | **+0.6** |
| **CORM** | **Corum** | **2.25** | **88** | *e*Pn | **Pn** | **20 19 20.6** | **+0.6** |

**IDC 26 20:25:30.0**±4.3, **3˚.23S×99˚.97E, h0**km, **mb3.2**/4, **mb1 3.4**/4, **mb1mx3.3**/36, **mbtmp3.3**/4, **Error ellipse: s-maj=156.2km s-min=30.6km az=58.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.57** | **357** | P | P | 20 30 21.4 | 0.0 |
| | 0.6nm,0.7s,baz=189,slow=9.5,SNR=6.4 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.70** | **260** | T | T | 21 00 30.5 | |
| | baz=78 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.70** | **260** | T | T | 21 00 36.5 | |
| | baz=78 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.71** | **260** | T | T | 21 00 25.4 | |
| | baz=78 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.41** | **119** | P | P | 20 32 44.5 | -0.7 |
| | 0.2nm,0.7s,baz=301,slow=8.4,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **51.16** | **6** | P | P | 20 34 35.3 | +0.4 |
| | 0.4nm,0.6s,baz=181,slow=8.9,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.19** | **345** | P | P | 20 34 41.6 | -1.1 |
| | 0.3nm,0.6s,baz=148,slow=7.3,SNR=2.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.68** | **38** | PKPbc | PKPab | 20 45 11.9 | -0.1 |
| | 0.2nm,0.5s,baz=270,slow=0.6,SNR=3.1 | | | | | | |

*ISCJB **26** 20:27:44.6±0.5, 36˚.95N±0˚.03×29˚.28E±0˚.03, h3km±7km, Error ellipse: s-maj=5.1km s-min=4.1km az=0.8*
*CSEM **26** 20:27:44.7±0.2, 36˚.93N×29˚.30E, h5km, MD2.8, Error ellipse: s-maj=4.5km s-min=3.7km az=19.0*
*DDA **26** 20:27:44.7, 36˚.94N×29˚.25E, h7km, Md2.8*
*ISK **26** 20:27:44.1, 36˚.92N×29˚.29E, h7km, MD2.8*

**ISC 26 20:27:44.8**±1.0, **36˚.95N**±0˚.02×**29˚.31E**±0˚.02, **h6**km±9km, **n30**, σ0**s97**/49, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FETY** | **Fethiye** | **0.36** | **210** | *e*PG | **Pg** | **20 27 50.9** | **-0.9** |
| FETY | | | | *e*SG | **Sg** | **20 27 55.9** | **-0.6** |
| **FETY** | **Fethiye** | **0.36** | **210** | *e*Pg | **Pg** | **20 27 50.9** | **-0.9** |
| FETY | | | | *e*Sg | **Sg** | **20 27 55.9** | **-0.6** |
| **ELL** | **Elmali** | **0.52** | **112** | *e*PG | **Pg** | **20 27 54.8** | **-0.1** |
| ELL | | | | *e*SG | **Sg** | **20 28 02.6** | **+0.9** |
| **ELL** | **Elmali** | **0.52** | **112** | *e*Pg | **Pg** | **20 27 54.8** | **-0.1** |
| ELL | | | | *e*Sg | **Sg** | **20 28 02.6** | **+0.9** |
| **DALY** | **Dalyan (Mu˙la** | **0.54** | **256** | *e*PG | **Pg** | **20 27 54.5** | **-0.7** |
| DALY | | | | *e*SG | **Sg** | **20 28 02.4** | **+0.2** |
| **DALY** | **Dalyan (Mu˙la** | **0.54** | **256** | *e*Pg | **Pg** | **20 27 54.5** | **-0.7** |
| DALY | | | | *e*Sg | **Sg** | **20 28 02.4** | **+0.2** |
| **TURN** | **Turunc** | **0.57** | **263** | *i* P | **Pn** | **20 28 00.3** | **+0.9** |
| **TURN** | **Turunc** | **0.57** | **263** | P | **Pn** | **20 28 00.3** | **+0.9** |
| TURN | | | | S | **Sn** | **20 28 12.4** | **+3.4** |
| **AKAS** | **Kas** | **0.75** | **161** | *i* P | **Pg** | **20 27 59.6** | **+0.3** |
| AKAS | | | | *i* S | **Sn** | **20 28 13.2** | **-0.6** |
| **AKAS** | **Kas** | **0.75** | **161** | P | **Pg** | **20 27 59.6** | **+0.3** |
| AKAS | | | | S | **Sn** | **20 28 13.2** | **-0.6** |
| **DNZL** | **Cakiroluk** | **0.77** | **344** | *i* P | **Pb** | **20 28 00.9** | **+0.2** |
| DNZL | | | | *i* S | **Sg** | **20 28 09.0** | **-0.7** |
| **DNZL** | **Cakiroluk** | **0.77** | **344** | P | **Pb** | **20 28 00.9** | **+0.2** |
| DNZL | | | | S | **Sg** | **20 28 09.0** | **-0.7** |
| **DENT** | **Denizli** | **0.83** | **345** | *e*PG | **Pg** | **20 28 00.8** | **-0.1** |
| **DENT** | **Denizli** | **0.83** | **345** | *e*Pg | **Pg** | **20 28 00.8** | **-0.1** |
| **KORT** | **Korkueli** | **0.84** | **86** | *i* P | **Pg** | **20 28 01.0** | **+0.1** |
| KORT | | | | *i* S | **Sn** | **20 28 15.3** | **-0.6** |
| **KORT** | **Korkueli** | **0.84** | **86** | P | **Pg** | **20 28 01.0** | **+0.1** |
| KORT | | | | S | **Sn** | **20 28 15.3** | **-0.6** |
| **YER** | **Yerkesik** | **0.84** | **283** | *e*PG | **Pg** | **20 28 00.5** | **-0.4** |
| **YER** | **Yerkesik** | **0.84** | **283** | *e*Pg | **Pg** | **20 28 00.5** | **-0.4** |
| **AYDN** | **Tasoluk** | **1.34** | **302** | *i* P | **Pg** | **20 28 12.1** | **+1.5** |
| AYDN | | | | *i* S | **Sg** | **20 28 29.2** | **+1.2** |
| **AYDN** | **Tasoluk** | **1.34** | **302** | P | **Pg** | **20 28 12.1** | **+1.5** |
| AYDN | | | | S | **Sg** | **20 28 29.2** | **+1.2** |
| **KHAL** | **Karahalli** | **1.43** | **6** | *i* P | **Pn** | **20 28 10.7** | **-0.6** |
| KHAL | | | | *i* S | **Sn** | **20 28 29.4** | **-1.1** |
| **KHAL** | **Karahalli** | **1.43** | **6** | P | **Pn** | **20 28 10.7** | **-0.6** |
| KHAL | | | | S | **Sn** | **20 28 29.4** | **-1.1** |
| **SUTC** | **Sutluce-Ispart** | **1.45** | **68** | *e*PN | **Pn** | **20 28 11.6** | **-0.1** |
| **SUTC** | **Sutluce-Ispart** | **1.45** | **68** | *e*Pn | **Pn** | **20 28 11.6** | **-0.1** |
| **BDRM** | **Kayabasi** | **1.50** | **275** | *i* P | **Pn** | **20 28 12.3** | **+0.1** |
| BDRM | | | | *i* S | **Sn** | **20 28 29.8** | **-2.2** |
| **BDRM** | **Kayabasi** | **1.50** | **275** | P | **Pn** | **20 28 12.3** | **+0.1** |
| BDRM | | | | S | **Sn** | **20 28 29.8** | **-2.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.50** | **312** | *e*PN | **Pn** | **20 28 12.2** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.50** | **312** | *e*Pn | **Pn** | **20 28 12.2** | **-0.2** |
| **HDMB** | **Hadim** | **2.55** | **89** | *e*PN | **Pn** | **20 28 27.4** | **+0.6** |
| **HDMB** | **Hadim** | **2.55** | **89** | *e*Pn | **Pn** | **20 28 27.4** | **+0.6** |

*IDC **26** 20:27:39.5±1.9, 17˚.86S×167˚.90E, h0km, mb4.0/5, mb1 4.2/6, mb1mx3.9/31, mbtmp4.0/6, ML3.4/1, MS3.3/6, Ms1 3.3/6, ms1mx3.0/31, Error ellipse: s-maj=48.3km s-min=26.2km az=121.0*

**ISC 26 20:27:45.5**±1.3, **17.8S**±0˚.1×**167˚.7E**±0˚.3, **h32**km, **n15**, σ1**s45**/9, **mb4.0**/4, **MS3.5**/4, **Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **4.39** | **195** | *e*Pn | **Pn** | **20 28 50.3** | **+0.2** |
| | 9.9nm,0.3s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **20 29 39.7** | **-0.5** |
| | 8.7nm,0.3s | | | | | | |
| **DZM** | **Mont Dzumac** | **4.39** | **195** | Pn | **Pn** | **20 28 49.6** | **-0.5** |
| | 1.8nm,0.3s,baz=17,slow=3.5,SNR=14 | | | | | | |
| DZM | | | | Sn | **Sn** | **20 29 39.8** | **-0.5** |
| | 1.8nm,0.3s,baz=180,slow=21,SNR=5.8 | | | | | | |
| DZM | | | | LR | LR | 20 29 51.4 | |
| | comp=Z,86nm,18.4s,baz=5.5,slow=30 | | | | | | |
| **HNR** | **Honiara** | **11.23** | **317** | LR | LR | 20 33 49.4 | |
| | comp=Z,72nm,21.2s,baz=173,slow=32 | | | | | | |
| **AFI** | **Afiamalu** | **20.12** | **82** | LR | LR | 20 38 03.4 | |
| | comp=Z,73nm,21.0s,baz=319,slow=31 | | | | | | |
| **CTA** | **Charters Tower** | **20.41** | **260** | P | Pn | 20 32 21.4 | -0.9 |
| | 1.6nm,0.3s,baz=76,slow=15,SNR=4.0 | | | | | | |
| **PMG** | **Port Moresby** | **21.62** | **290** | LR | LR | 20 39 52.2 | |
| | comp=Z,126nm,18.1s,baz=85,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.61** | **261** | P | **P** | **20 34 04.6** | **-1.1** |
| | 1.5nm,0.8s,baz=93,slow=8.8,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **32.08** | **254** | P | **P** | **20 34 10.0** | **+0.1** |
| | 3.7nm,0.7s,baz=79,slow=9.1,SNR=38 | | | | | | |
| ASAR | | | | LR | LR | 20 46 31.3 | |
| | comp=Z,104nm,19.0s,baz=110,slow=35 | | | | | | |
| **PPT2** | **Papeete2** | **40.64** | **96** | *e*LR | LR | 20 47 01.5 | |
| | 60nm,23.5s | | | | | | |
| **JNU** | **Nakatsue** | **61.67** | **325** | LR | LR | 20 58 26.1 | |
| | comp=Z,146nm,21.9s,baz=123,slow=30 | | | | | | |
| **SONM** | **Songino Array** | **85.21** | **324** | P | **P** | **20 40 20.6** | **+1.7** |
| | 1.5nm,1.0s,baz=134,slow=6.4,SNR=6.1 | | | | | | |
| **ILAR** | **Eielson Array** | **89.32** | **18** | P | **P** | **20 40 36.0** | **-2.2** |
| | 0.6nm,0.9s,baz=235,slow=5.5,SNR=5.0 | | | | | | |
| **SNAA** | **Sanae** | **90.50** | **183** | P | P | 20 40 51.8 | +7.9 |
| **VNA3** | **Neumayer Olymp** | **91.15** | **181** | P | P | 20 40 50.0 | +3.1 |
| **VNA2** | **Neumayer--Watz** | **91.42** | **182** | P | **P** | **20 40 49.8** | **+1.7** |
| | baz=171,slow=3.2 | | | | | | |

*IDC **26** 20:34:39.9±1.5, 3˚.70S×99˚.27E, h0km, mb3.9/7, mb1 4.1/8, mb1mx3.8/38, mbtmp4.0/8, ML4.4/1, MS4.1/1, Ms1 4.1/1, ms1mx2.7/39, Error ellipse: s-maj=57.2km s-min=17.4km az=51.0*
*NEIC **26** 20:34:40.2±0.6, 3˚.87S×99˚.20E, h10km, mb4.1/7, Error ellipse: s-maj=20.6km s-min=8.9km az=222.0*
*ISCJB **26** 20:34:43.0±0.6, 3˚.55S±0˚.05×99˚.48E±0˚.05, h33km, mb4.1/15, MS4.2/1, Error ellipse: s-maj=9.2km s-min=5.4km az=139.4*
*DJA **26** 20:34:45.2±0.8, 3˚S±6˚×10˚E±˚, h51km±10km, M4.4/12, mb4.5/1, mB5.3/1, MLv4.3/12, Mw(mB)4.7/1*

**ISC 26 20:34:45.2**±0.9, **3˚.55S**±0˚.09×**99˚.49E**±0˚.09, **h35**km, **n34**, σ1**s33**/31, **mb4.1**/15, **Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.94** | **33** | P | **Pn** | **20 35 00.7** | **-1.2** |
| PPSI | | | | S | **Sn** | **20 35 13.1** | **-1.0** |
| **SISI** | **Saibi** | **2.25** | **350** | P | **Pn** | **20 35 16.9** | **-3.0** |
| SISI | | | | S | **Sn** | **20 35 45.6** | **-0.9** |
| **PDSI** | **Padang** | **2.80** | **20** | P | **Pn** | **20 35 25.8** | **-1.7** |
| **KSI** | **Kapahiang** | **3.09** | **92** | P | **Pn** | **20 35 32.4** | **+0.8** |
| KSI | | | | S | **Sn** | **20 36 06.9** | **-0.5** |
| **PPI** | **Padang Panjang** | **3.21** | **16** | P | **Pn** | **20 35 31.3** | **-1.8** |
| **SDSI** | **Sungai Dareh** | **3.24** | **37** | P | **Pn** | **20 35 33.4** | **-0.2** |
| **MNAI** | **Manna** | **3.54** | **103** | P | **Pn** | **20 35 38.4** | **+0.6** |
| **BKNI** | **Bangkinang** | **4.15** | **22** | P | Pn | 20 35 42.3 | -3.8 |
| **MNSI** | **Mandailing Nat** | **4.32** | **1** | P | **Pn** | **20 35 46.9** | **-1.5** |
| **MDSI** | **Maura Dua** | **4.76** | **101** | P | **Pn** | **20 35 54.0** | **-0.5** |
| **LWLI** | **Liwa** | **4.78** | **108** | P | **Pn** | **20 35 53.5** | **-1.3** |
| **KASI** | **Kota Agung** | **5.36** | **112** | P | **Pn** | **20 36 01.3** | **-1.4** |
| **LEM** | **Lembang** | **8.72** | **112** | Pn | **Pn** | **20 36 48.5** | **-0.6** |
| | 4.0nm,0.3s,baz=317,slow=19,SNR=3.5 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.19** | **116** | *e*Pn | **Pn** | **20 36 52.2** | **-3.1** |
| | 53nm,0.6s | | | | | | |
| CISI | | | | *e*Sn | Sn | 20 38 27.6 | -10 |
| **CMAR** | **Chiang Mai Arr** | **21.88** | **359** | P | **P** | **20 39 36.0** | **+0.8** |
| | 2.8nm,0.8s,baz=184,slow=10,SNR=19 | | | | | | |
| **CHTO** | **Chiang Mai** | **22.23** | **359** | P | **P** | **20 39 36.4** | **-2.6** |
| | 2.6nm,0.8s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.17** | **260** | T | T | 21 09 50.9 | |
| | baz=79,slow=74,SNR=4.7 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.18** | **260** | T | T | 21 09 43.6 | |
| | baz=79,SNR=6.1 | | | | | | |
| **DGAR** | **Diego Garcia** | **27.18** | **261** | P | P | 20 40 19.7 | -6.0 |
| | 326nm,1.1s | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.19** | **260** | T | T | 21 09 39.0 | |
| | baz=79,slow=74,SNR=3.8 | | | | | | |
| **LSA** | **Lhasa** | **34.02** | **347** | P | **P** | **20 41 27.4** | **+1.0** |
| | 2.5nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.67** | **118** | P | **P** | **20 41 57.9** | **+0.4** |
| | 0.8nm,0.6s,baz=302,slow=9.0,SNR=16 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.68** | **118** | *e*P | **P** | **20 41 58.2** | **+0.6** |
| | 4.0nm,0.9s | | | | | | |
| **ASAR** | **Alice Springs** | **38.78** | **124** | P | **P** | **20 42 07.5** | **+0.8** |
| | 1.1nm,0.8s,baz=296,slow=7.9,SNR=12 | | | | | | |
| **TKM2** | **Tokmak 2** | **51.06** | **338** | *e*P | **P** | **20 43 45.0** | **+0.7** |
| | 1.6nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **51.53** | **6** | P | **P** | **20 43 48.9** | **+1.3** |
| | 1.9nm,0.8s,baz=188,slow=8.4,SNR=10 | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.63** | **6** | P | **P** | **20 43 49.5** | **+1.1** |
| | 3.0nm,1.0s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.38** | **345** | P | **P** | **20 43 54.4** | **+0.4** |
| | 1.9nm,0.7s,baz=139,slow=9.9,SNR=14 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.79** | **39** | LR | LR | 21 08 05.8 | |
| | comp=Z,184nm,19.3s,baz=145,slow=37 | | | | | | |
| **KURK** | **Kurchatov** | **56.95** | **344** | *e*P | **P** | **20 44 26.9** | **0.0** |
| | 4.2nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.60** | **350** | P | **P** | **20 44 38.7** | **+0.3** |
| | 3.2nm,0.8s,baz=187,slow=5.1,SNR=13 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.76** | **332** | *e*P | **P** | **20 45 06.7** | **-0.2** |
| | 0.9nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.00** | **313** | P | **P** | **20 46 17.1** | **-0.5** |
| | 0.5nm,0.5s,baz=143,slow=7.2,SNR=5.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.23** | **38** | PKPbc | **PKPab** | **20 54 24.3** | **+0.8** |
| | 1.5nm,0.8s,baz=281,slow=1.1,SNR=17 | | | | | | |

*BJI **26** 20:40:55.3, 2˚.94S×99˚.68E, h5km, mb4.8/30, mB5.3/16, Ms5.0/4, Ms7 4.8/4*
*IDC **26** 20:41:01.3±0.5, 2˚.32S×99˚.55E, h0km, mb4.5/28, mb1 4.6/30, mb1mx4.5/42, mbtmp4.5/30, ML4.1/2, MS3.5/9, Ms1 3.5/9, ms1mx3.3/42, Error ellipse: s-maj=17.7km s-min=10.8km az=41.0*
*AUST **26** 20:41:03.8±1.2, 2˚.43S×99˚.21E, h36km, Error ellipse: s-maj=2.0km s-min=0.8km az=240.0*
*MOS **26** 20:41:04.5±1.1, 2˚.16S×99˚.66E, h30km, mb5.0/14, Error ellipse: s-maj=12.9km s-min=6.3km az=112.7*
*ISCJB **26** 20:41:04.3±0.3, 2˚.32S±0˚.03×99˚.52E±0˚.03, h32km, mb4.7/49, MS3.6/9, Error ellipse: s-maj=5.5km s-min=3.2km az=42.8*
*NEIC **26** 20:41:04.0±3.1, 2˚.26S×99˚.58E, h17km±19km, mb4.8/13, Error ellipse: s-maj=11.4km s-min=5.5km az=51.0*
*DJA **26** 20:41:04.2±0.6, 2˚S±3˚×9˚9E±˚, h25km±5km, M4.7/34, mb4.9/34, mB5.2/12, MLv4.8/24, Mw(mB)4.6/12*
*KLM **26** 20:41:05.9, 2˚.38S×99˚.42E, h37km, mb4.9, ML4.7, MS5.6*

**ISC 26 20:41:05.9**±0.4, **2˚.29S**±0˚.05×**99˚.50E**±0˚.05, **h32**km, **n213**, σ1**s42**/204, **mb4.7**/48, **MS3.5**/9, **2C-22D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.69** | **133** | P | **Pn** | **20 41 18.8** | **-0.7** |
| **SISI** | **Saibi** | **1.04** | **336** | P | **Pn** | **20 41 24.2** | **0.0** |
| SISI | | | | S | **Sb** | **20 41 39.2** | **+0.5** |
| **PDSI** | **Padang** | **1.67** | **35** | P | Pn | **20 41 33.0** | **+0.1** |
| **PPI** | **Padang Panjang** | **2.02** | **26** | P | **Pn** | **20 41 38.2** | **+0.5** |
| | baz=2.3,SNR=182 | | | | | | |
| **PPI** | **Padang Panjang** | **2.02** | **26** | P | **Pn** | **20 41 38.4** | **+0.6** |
| PPI | | | | S | **Sb** | **20 42 05.0** | **-1.8** |
| **SDSI** | **Sungai Dareh** | **2.35** | **55** | P | **Pn** | **20 41 43.9** | **+1.7** |
| **BKNI** | **Bangkinang** | **3.01** | **31** | P | **Pn** | **20 41 52.9** | **+1.5** |
| | baz=3.3,SNR=11 | | | | | | |
| **BKNI** | **Bangkinang** | **3.01** | **31** | P | **Pn** | **20 41 52.9** | **+1.5** |
| **BKNI** | **Bangkinang** | **3.01** | **31** | *e*Pn | **Pn** | **20 41 52.0** | **+0.6** |
| **MNSI** | **Mandailing Nat** | **3.06** | **1** | P | **Pn** | **20 41 52.0** | **-0.1** |
| **KSI** | **Kapahiang** | **3.37** | **114** | P | **Pn** | **20 41 56.8** | **+0.4** |
| **RGRI** | **Rengat** | **3.42** | **56** | P | **Pn** | **20 41 59.1** | **+2.1** |
| **MNAI** | **Manna** | **4.01** | **121** | P | **Pn** | **20 42 05.1** | **-0.2** |
| | baz=4.2,SNR=20 | | | | | | |
| **MNAI** | **Manna** | **4.01** | **121** | P | **Pn** | **20 42 05.4** | **+0.2** |
| **GSI** | **Gunungsitoli** | **4.05** | **332** | P | **Pn** | **20 42 03.0** | **-2.7** |
| **GSI** | **Gunungsitoli** | **4.05** | **332** | *e*Pn | **Pn** | **20 42 04.4** | **-1.4** |
| **PSI** | **Prapat** | **5.08** | **353** | Pn | **Pn** | **20 42 17.9** | **-2.2** |
| | 6.0nm,0.3s,baz=350,slow=2.7,SNR=28 | | | | | | |
| **PSI** | **Prapat** | **5.08** | **353** | P | **Pn** | **20 42 18.1** | **-2.0** |
| | baz=5.1,SNR=11 | | | | | | |
| **MDSI** | **Maura Dua** | **5.15** | **115** | P | **Pn** | **20 42 21.8** | **+0.9** |
| | 102nm,0.8s,2µm0.5nm | | | | | | |
| **LWLI** | **Liwa** | **5.29** | **121** | P | **Pn** | **20 42 23.4** | **+0.5** |
| | 466nm,0.7s,6µm1.9nm | | | | | | |
| **KGM** | **Kluang** | **5.73** | **42** | ⇑P | **Pn** | **20 42 30.8** | **+2.0** |
| **TSI** | **Tuntungan** | **5.82** | **351** | P | **Pn** | **20 42 29.4** | **-0.7** |
| | 212nm,0.9s,0.7nm | | | | | | |
| **FRIM** | **Kepong** | **5.88** | **21** | ⇓P | **Pn** | **20 42 32.0** | **+1.2** |
| **KLI** | **Kotabumi** | **5.92** | **116** | P | **Pn** | **20 42 34.0** | **+2.5** |
| **KASI** | **Kota Agung** | **5.93** | **123** | P | **Pn** | **20 42 31.4** | **-0.1** |
| | 184nm,0.7s,2µm0.7nm | | | | | | |
| **MYKOM** | **Kota Tinggi** | **5.94** | **47** | ⇓P | **Pn** | **20 42 33.4** | **+1.8** |
| **TPRI** | **Tanjung Pinang** | **5.94** | **58** | P | **Pn** | **20 42 33.3** | **+1.6** |
| | 189nm,0.7s,5µm0.6nm | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **6.02** | **343** | P | **Pn** | **20 42 32.3** | **-0.5** |
| | 56nm,1.2s,5µm0.6nm | | | | | | |
| **IPM** | **Ipoh** | **6.89** | **13** | ⇓P | **Pn** | **20 42 46.5** | **+1.7** |
| **IPM** | **Ipoh** | **6.89** | **13** | *e*Pn | **Pn** | **20 42 45.6** | **+0.9** |
| | 41nm,0.9s | | | | | | |
| **CGJI** | **Cibinong** | **7.52** | **125** | P | **Pn** | **20 42 51.6** | **-1.8** |
| | 109nm,0.8s,1µm0.4nm | | | | | | |
| **KULM** | **Kulim** | **7.61** | **9** | ⇓P | **Pn** | **20 42 54.3** | **-0.4** |
| **KULM** | **Kulim** | **7.61** | **9** | *e*Pn | **Pn** | **20 42 53.0** | **-1.6** |
| **TPI** | **Tanjungpandan** | **8.15** | **93** | P | **Pn** | **20 43 02.1** | **0.0** |
| | 22nm,0.9s | | | | | | |
| **KTGM** | **Kuala Trenggan** | **8.39** | **26

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **GUN** | **Gumba** | **32.76** | **337** | *e*P | | **P** | | **20 47 37.8** | **+1.3** |
| | comp=Z,30nm,0.6s | | | | | | | | | |
| **GUN** | **Gumba** | **32.76** | **337** | *e*P | | **P** | | **20 47 37.7** | **+1.3** |
| | comp=Z,30nm,0.6s | | | | | | | | | |
| **LSA** | **Lhasa** | **32.79** | **347** | P | | **P** | | **20 47 38.3** | **+1.4** |
| LSA | | | | PMZ | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| **LSA** | **Lhasa** | **32.79** | **347** | *e*P | | **P** | | **20 47 38.0** | **+1.1** |
| LSA | | | | pmax | pmax | | | | | |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| **LSA** | **Lhasa** | **32.79** | **347** | *e*P | | **P** | | **20 47 38.0** | **+1.1** |
| | comp=Z,11nm,0.9s | | | | | | | | | |
| **KKN** | **Kakani** | **32.89** | **336** | *e*P | | **P** | | **20 47 38.5** | **+1.0** |
| **KKN** | **Kakani** | **32.89** | **336** | *e*P | | **P** | | **20 47 38.5** | **+1.0** |
| | comp=Z,6.1nm,0.5s | | | | | | | | | |
| **GKN** | **Gorkha** | **33.34** | **336** | *e*P | | **P** | | **20 47 42.4** | **+1.1** |
| **GKN** | **Gorkha** | **33.34** | **336** | *e*P | | **P** | | **20 47 42.4** | **+1.1** |
| **KOLN** | **Koldanda** | **33.58** | **334** | *e*P | | **P** | | **20 47 44.7** | **+1.3** |
| | comp=Z,14nm,0.7s | | | | | | | | | |
| **KOLN** | **Koldanda** | **33.58** | **334** | *e*P | | **P** | | **20 47 44.5** | **+1.1** |
| | comp=Z,14nm,0.7s | | | | | | | | | |
| **ENH** | **Enshi** | **33.75** | **16** | P | | **P** | | **20 47 43.5** | **-1.2** |
| **NWAO** | **Narrogin (SRO)** | **34.73** | **153** | P | | **P** | | **20 47 52.1** | **-1.0** |
| | comp=Z,7.3nm,0.8s,baz=101,slow=0.1,SNR=3.1 | | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **35.18** | **159** | T | | T | | 21 25 08.7 | | |
| | baz=335,slow=76,SNR=240 | | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **35.19** | **159** | T | | T | | 21 25 04.0 | | |
| | baz=335,slow=76,SNR=236 | | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **35.19** | **159** | T | | T | | 21 25 10.5 | | |
| | baz=335,slow=76,SNR=199 | | | | | | | | | |
| **WRKA** | **Warakurna** | **35.80** | **132** | P | | **P** | | **20 48 03.7** | **+1.1** |
| | baz=36,SNR=11 | | | | | | | | | |
| **XAN** | **Xi'an** | **37.20** | **13** | P | | **P** | | **20 48 13.5** | **-0.9** |
| XAN | | | | pP | | **pP** | | **20 48 21.8** | **-2.0** |
| XAN | | | | PMZ | | | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | |
| **WRA** | **Warramunga Arr** | **38.28** | **120** | P | | **P** | | **20 48 23.0** | **-0.7** |
| | comp=Z,11nm,0.7s,baz=299,slow=8.9,SNR=87 | | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **20 50 37.0** | **-0.5** |
| | comp=Z,0.8nm,0.7s,baz=310,slow=2.1,SNR=3.4 | | | | | | | | | |
| **ASAR** | **Alice Springs** | **39.49** | **125** | P | | **P** | | **20 48 34.1** | **+0.3** |
| | comp=Z,5.5nm,0.7s,baz=300,slow=7.8,SNR=32 | | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **20 50 42.0** | **+0.7** |
| | comp=Z,0.9nm,0.6s,baz=302,slow=3.5,SNR=3.6 | | | | | | | | | |
| ASAR | | | | LR | | LR | | 21 06 08.5 | | |
| | comp=Z,114nm,20.9s,baz=300,slow=38 | | | | | | | | | |
| **GTA** | **Gaotai** | **41.49** | **0** | *e*P | | **P** | | **20 48 51.3** | **+1.1** |
| GTA | | | | pP | | **pP** | | **20 48 55.5** | **-4.2** |
| GTA | | | | sP | | sP | | 20 48 58.0 | -5.5 |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,13nm,0.9s | | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **44.32** | **13** | *e*P | | P | | 20 49 17.0 | +3.9 |
| HHC | | | | S | | **S** | | **20 55 51.0** | **+5.8** |
| HHC | | | | PMZ | | | | | | |
| | comp=Z,21nm,0.9s | | | | | | | | | |
| HHC | | | | PMZ | | | | | | |
| | comp=Z,240nm,4.4s | | | | | | | | | |
| HHC | | | | LN | | | | | | |
| | comp=Z,590nm,13.1s | | | | | | | | | |
| HHC | | | | LE | | | | | | |
| | comp=Z,320nm,16.5s | | | | | | | | | |
| HHC | | | | LZ | | | | | | |
| | comp=Z,600nm,11.9s | | | | | | | | | |
| **BJT** | **Baijiatuan** | **44.78** | **18** | P | | P | | 20 49 12.1 | -4.5 | |
| **BJT** | **Baijiatuan** | **44.78** | **18** | P | | P | | 20 49 12.1 | -4.5 | |
| **JNU** | **Nakatsue** | **46.02** | **37** | P | | **P** | | **20 49 27.3** | **+0.6** | |
| | comp=Z,40nm,0.9s,baz=285,slow=3.1,SNR=12 | | | | | | | | | |
| **WMQ** | **Urumqi** | **47.11** | **348** | P | | **P** | | **20 49 36.8** | **+1.8** | |
| WMQ | | | | PMZ | | | | | | |
| | comp=Z,14nm,1.0s | | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.49** | **31** | P | | **P** | | **20 49 38.7** | **+0.7** | |
| **KSAR** | **Wonju Array Be** | **47.49** | **31** | P | | **P** | | **20 49 38.6** | **+0.7** | |
| **KSRS** | **Korea Array** | **47.52** | **31** | P | | **P** | | **20 49 38.6** | **+0.5** | |
| | comp=Z,12nm,0.9s,baz=222,slow=8.8,SNR=26 | | | | | | | | | |
| **KSRS** | **Korea Array** | **47.52** | **31** | P | | **P** | | **20 49 38.7** | **+0.5** | |
| KSRS | | | | pmax | pmax | | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | | |
| **PMG** | **Port Moresby** | **47.89** | **101** | LR | | LR | | 21 13 33.5 | | |
| | comp=Z,44nm,18.8s,baz=311,slow=41 | | | | | | | | | |
| **HTT** | **Hallett** | **48.15** | **135** | P | | P | | 20 49 40.0 | -3.3 | |
| | baz=48,SNR=3.7 | | | | | | | | | |
| **CTAO** | **Charters Tower** | **48.93** | **115** | *e*P | | P | | **20 49 48.9** | **-0.5** | |
| **CTAO** | **Charters Tower** | **48.93** | **115** | *e*P | | **P** | | **20 49 48.9** | **-0.5** | |
| **UCH** | **Uchtor** | **49.75** | **336** | P | | **P** | | **20 49 57.1** | **+1.3** | |
| | SNR=7.1 | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **49.90** | **337** | *e*P | | **P** | | **20 49 57.8** | **+1.1** | |
| TKM2 | | | | pmax | pmax | | | | | |
| | comp=Z,20nm,0.9s | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **49.90** | **337** | P | | **P** | | **20 49 58.0** | **+1.3** | |
| | SNR=12 | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **49.90** | **337** | *e*P | | **P** | | **20 49 57.8** | **+1.1** | |
| | comp=Z,20nm,0.9s | | | | | | | | | |
| **KBK** | **Karagaybulak** | **49.93** | **336** | P | | **P** | | **20 49 58.6** | **+1.7** | |
| | SNR=6.0 | | | | | | | | | |
| **AML** | **Almayashu** | **50.01** | **335** | P | | **P** | | **20 49 59.0** | **+1.2** | |
| | SNR=7.5 | | | | | | | | | |
| **AAK** | **Ala-Archa** | **50.09** | **336** | P | | **P** | | **20 49 59.3** | **+1.2** | |
| | comp=Z,1.8nm,0.7s,baz=179,slow=6.3,SNR=11 | | | | | | | | | |
| **SONM** | **Songino Array** | **50.28** | **6** | P | | **P** | | **20 50 00.5** | **+1.1** | |
| | comp=Z,17nm,0.8s,baz=186,slow=9.0,SNR=118 | | | | | | | | | |
| SONM | | | | PcP | | **PcP** | | **20 51 18.9** | **+0.9** | |
| | comp=Z,2.8nm,0.7s,baz=190,slow=4.4,SNR=5.6 | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.38** | **7** | *e*P | | **P** | | **20 50 01.0** | **+0.8** | |
| ULN | | | | pmax | pmax | | | | | |
| | comp=Z,18nm,0.9s | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **50.38** | **7** | *e*P | | **P** | | **20 50 01.0** | **+0.8** | |
| | comp=Z,18nm,0.9s | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **50.41** | **335** | *e*P | | **P** | | **20 50 00.8** | **+0.3** | |
| EKS2 | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **50.41** | **335** | P | | **P** | | **20 50 02.1** | **+1.6** | |
| | SNR=10 | | | | | | | | | |
| **EKS2** | **Erkin-Say** | **50.41** | **335** | *e*P | | **P** | | **20 50 00.8** | **+0.3** | |
| | comp=Z,10nm,0.8s | | | | | | | | | |
| **USP** | **Ospenovka** | **50.62** | **336** | P | | **P** | | **20 50 03.0** | **+1.0** | |
| | SNR=11 | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.17** | **345** | P | | **P** | | **20 50 06.9** | **+0.9** | |
| | comp=Z,13nm,0.7s,baz=150,slow=8.4,SNR=92 | | | | | | | | | |
| MKAR | | | | LR | | LR | | 21 16 01.0 | | |
| | comp=Z,46nm,20.8s,baz=159,slow=41 | | | | | | | | | |
| **CN2** | **Changchun** | **51.45** | **24** | *e*P | | **P** | | **20 50 07.5** | **-0.6** | |
| CN2 | | | | *e*pP | | **pP** | | **20 50 15.3** | **-2.4** | |
| CN2 | | | | PMZ | | | | | | |
| | comp=Z,30nm,0.9s | | | | | | | | | |
| CN2 | | | | PMZ | | | | | | |
| | comp=Z,210nm,6.0s | | | | | | | | | |
| **ITEG** | **Tejag** | **52.02** | **316** | *e*P | | **P** | | **20 50 13.5** | **+0.7** | |
| **KKAR** | **Karatay Array** | **52.18** | **333** | *e*P | | **P** | | **20 50 13.5** | **-0.1** | |
| **KKAR** | **Karatay Array** | **52.18** | **333** | *e*P | | **P** | | **20 50 13.5** | **-0.1** | |
| **CMSA** | **Cobar Meteorol** | **52.32** | **129** | P | | **P** | | **20 50 16.5** | **+1.7** | |
| | baz=52,SNR=9.1 | | | | | | | | | |
| **ZAK** | **Zakamensk** | **52.56** | **3** | *e*P | | **P** | | **20 50 16.1** | **-0.3** | |
| ZAK | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.81** | **39** | P | | **P** | | **20 50 18.0** | **-0.4** | |
| | comp=Z,6.7nm,1.0s,baz=224,slow=8.2,SNR=4.5 | | | | | | | | | |
| **MDJ** | **Mudanjiang** | **53.86** | **26** | P | | **P** | | **20 50 25.1** | **-0.8** | |
| **HIA** | **Hailar** | **54.25** | **16** | P | | **P** | | **20 50 28.6** | **-0.1** | |
| **HIA** | **Hailar** | **54.25** | **16** | P | | **P** | | **20 50 28.6** | **-0.1** | |
| **USRK** | **Ussuriysk Ar.** | **54.64** | **28** | P | | **P** | | **20 50 32.4** | **+0.8** | |
| | comp=Z,8.7nm,0.7s,baz=230,slow=5.7,SNR=18 | | | | | | | | | |
| **GEYT** | **Alibeck** | **55.35** | **321** | P | | **P** | | **20 50 37.5** | **+0.5** | |
| | comp=Z,1.9nm,0.6s,baz=141,slow=9.6,SNR=6.6 | | | | | | | | | |
| GEYT | | | | LR | | LR | | 21 16 25.3 | | |
| | comp=Z,56nm,19.2s,baz=350,slow=38 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.68** | **344** | P | | **P** | | **20 50 39.6** | **+0.6** | |
| | comp=Z,4.9nm,0.8s,baz=165,slow=7.0,SNR=45 | | | | | | | | | |
| **KURK** | **Kurchatov** | **55.74** | **344** | P | | **P** | | **20 50 39.6** | **+0.2** | |
| **KURK** | **Kurchatov** | **55.74** | **344** | P | | **P** | | **20 50 39.6** | **+0.2** | |
| **ARMA** | **Armidale** | **56.64** | **125** | *e*P | | **P** | | **20 50 48.0** | **+1.5** | |
| | comp=Z,13nm,1.4s | | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.36** | **350** | P | | **P** | | **20 50 51.6** | **+0.7** | |
| | baz=58,SNR=13 | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.36** | **350** | P | | **P** | | **20 50 51.5** | **+0.7** | |
| | comp=Z,24nm,0.8s,baz=184,slow=5.7,SNR=87 | | | | | | | | | |
| **ATD** | **Arta Tunnel** | **57.97** | **285** | P | | **P** | | **20 50 57.2** | **+1.3** | |
| | comp=Z,1.8nm,0.3s,baz=172,slow=20,SNR=4.4 | | | | | | | | | |
| **KLR** | **Kul'dur** | **58.39** | **24** | *e*P | | **P** | | **20 50 55.4** | **-2.8** | |
| **NVS** | **Novosibirsk** | **58.50** | **349** | ⇓*i*P | | **P** | | **20 50 59.3** | **+0.5** | |
| NVS | | | | *i* | | | | 20 51 07.3 | | |
| NVS | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | | | |
| NVS | | | | pmax | pmax | | | | | |
| | comp=N,5.0nm,0.9s | | | | | | | | | |
| NVS | | | | pmax | pmax | | | | | |
| | comp=E,6.0nm,0.9s | | | | | | | | | |
| **TAU** | **Tasmania Unive** | **58.68** | **140** | *e*P | | **P** | | **20 51 02.9** | **+2.5** | |
| TAU | | | | pmax | pmax | | | | | |
| | comp=Z,46nm,1.4s | | | | | | | | | |
| **TAU** | **Tasmania Unive** | **58.68** | **140** | *e*P | | **P** | | **20 51 02.9** | **+2.5** | |
| | comp=Z,46nm,1.4s | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **60.28** | **340** | P | | **P** | | **20 51 11.1** | **-0.1** | |
| | comp=Z,3.1nm,0.7s,baz=148,slow=8.6,SNR=19 | | | | | | | | | |
| **BRVK** | **Borovoye** | **60.34** | **340** | *e*P | | **P** | | **20 51 11.2** | **-0.5** | |
| BRVK | | | | pmax | pmax | | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | | |
| **BRVK** | **Borovoye** | **60.34** | **340** | *e*P | | **P** | | **20 51 11.2** | **-0.5** | |
| | comp=Z,4.5nm,0.8s | | | | | | | | | |
| **HNR** | **Honiara** | **60.48** | **99** | LR | | LR | | 21 19 19.8 | | |
| | comp=Z,26nm,19.5s,baz=227,slow=38 | | | | | | | | | |
| **ABKAR** | **Akbulak array** | **61.65** | **332** | *e*P | | **P** | | **20 51 19.8** | **-0.8** | |
| | comp=Z,6.7nm,0.8s | | | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **61.98** | **32** | *e*P | | **P** | | **20 51 23.3** | **+0.4** | |
| **KMBO** | **Kilima Mbogo** | **62.23** | **270** | LR | | LR | | 21 14 16.7 | | |
| | comp=Z,50nm,20.0s,baz=82,slow=32 | | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **63.37** | **332** | P | | **P** | | **20 51 31.8** | **-0.3** | |
| | comp=Z,2.6nm,0.8s,baz=127,slow=5.6,SNR=4.9 | | | | | | | | | |
| **SVE** | **Sverdlovsk** | **66.76** | **338** | *e*P | | **P** | | **20 51 54.1** | **+0.2** | |
| SVE | | | | pmax | pmax | | | | | |
| | comp=Z,19nm,1.2s | | | | | | | | | |
| **YAK** | **Yakutsk** | **68.14** | **15** | *e*P | | **P** | | **20 52 02.0** | **-0.6** | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=Z,18nm,1.0s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=N,4.0nm,1.0s | | | | | | | | | |
| YAK | | | | pmax | pmax | | | | | |
| | comp=E,4.0nm,0.9s | | | | | | | | | |
| **KBZ** | **Khabaz** | **68.20** | **319** | P | | **P** | | **20 52 03.9** | **+0.6** | |
| | comp=E,3.5nm,0.9s,baz=143,slow=5.3,SNR=8.2 | | | | | | | | | |
| **LSZ** | **Lusaka** | **71.38** | **255** | P | | P | | 20 52 27.7 | +4.1 | |
| **LSZ** | **Lusaka** | **71.38** | **255** | P | | P | | 20 52 27.7 | +4.1 | |
| **MATP** | **Matopo** | **71.41** | **249** | P | | **P** | | **20 52 25.2** | **+1.5** | |
| | comp=E,3.5nm,0.7s,baz=104,slow=7.4 | | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **72.28** | **326** | *e*P | | **P** | | **20 52 27.7** | **-0.4** | |
| VRH | | | | pmax | pmax | | | | | |
| | comp=N,5.0nm,0.6s | | | | | | | | | |
| VRH | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | | |
| VRH | | | | pmax | pmax | | | | | |
| | comp=E,10.0nm,0.7s | | | | | | | | | |
| **BRTR** | **Keskin Array B** | **73.15** | **313** | P | | **P** | | **20 52 33.2** | **-0.5** | |
| | comp=E,1.0nm,0.7s,baz=139,slow=7.8,SNR=9.0 | | | | | | | | | |
| BRTR | | | | LR | | LR | | 21 27 15.1 | | |
| | comp=E,25nm,19.5s,baz=76,slow=38 | | | | | | | | | |
| **VORD** | **Divnogorie** | **73.55** | **325** | *e*P | | **P** | | **20 52 34.3** | **-1.4** | |
| VORD | | | | pmax | pmax | | | | | |
| | comp=N,5.0nm,0.6s | | | | | | | | | |
| VORD | | | | pmax | pmax | | | | | |
| | comp=E,4.0nm,0.6s | | | | | | | | | |
| VORD | | | | pmax | pmax | | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | | |
| **VSR** | **Storozhevoye** | **73.73** | **325** | *e*P | | **P** | | **20 52 36.2** | **-0.5** | |
| VSR | | | | pmax | pmax | | | | | |
| | comp=N,7.0nm,0.9s | | | | | | | | | |
| VSR | | | | pmax | pmax | | | | | |
| | comp=E,10.0nm,0.9s | | | | | | | | | |
| VSR | | | | pmax | pmax | | | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **74.45** | **327** | *e*P | | **P** | | **20 52 40.8** | **-0.1** | |
| LPSR | | | | pmax | pmax | | | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | | |
| | comp=N,2.0nm,0.6s | | | | | | | | | |
| LPSR | | | | pmax | pmax | | | | | |
| | comp=E,9.0nm,1.6s | | | | | | | | | |
| **VRI** | **Vrincioaia** | **79.72** | **317** | ⇓P | | **P** | | **20 53 12.0** | **+1.2** | |
| **VRI** | **Vrincioaia** | **79.72** | **317** | ⇓*i*P | | **P** | | **20 53 12.0** | **+1.2** | |
| **TESR** | **Tescani** | **79.93** | **318** | ⇓*i*P | | **P** | | **20 53 12.7** | **+0.8** | |
| **MLR** | **Muntele Rosu** | **80.17** | **317** | ⇓P | | **P** | | **20 53 14.5** | **+1.2** | |
| **MLR** | **Muntele Rosu** | **80.17** | **317** | ⇓*i*P | | **P** | | **20 53 14.5** | **+1.2** | |
| **BURAR** | **Bucovina Array** | **81.15** | **319** | ⇓P | | **P** | | **20 53 20.2** | **+1.7** | |
| **BURAR** | **Bucovina Array** | **81.15** | **319** | ⇓*i*P | | **P** | | **20 53 20.2** | **+1.7** | |
| **VNDA** | **Vanda** | **81.98** | **169** | LR | | LR | | 21 25 08.0 | | |
| | comp=E,23nm,20.9s,baz=334,slow=32 | | | | | | | | | |
| **DRGR** | | **82.64** | **318** | ⇓P | | **P** | | **20 53 27.3** | **+1.0** | |
| **DRGR** | | **82.64** | **318** | ⇓*i*P | | **P** | | **20 53 27.3** | **+1.0** | |
| **BZS** | **Buzias** | **83.17** | **316** | ⇓P | | **P** | | **20 53 29.8** | **+0.8** | |
| **BZS** | **Buzias** | **83.17** | **316** | ⇓*i*P | | **P** | | **20 53 29.8** | **+0.8** | |
| **KOLS** | **Kolonicke sedl** | **83.35** | **320** | *e*P | | **P** | | **20 53 31.4** | **+1.6** | |
| KOLS | | | | *e* | | | | 20 53 40.0 | | |
| KOLS | | | | pmax | pmax | | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **83.35** | **320** | *e*P | | **P** | | **20 53 31.4** | **+1.6** | |
| KOLS | | | | *es*P | | **sP** | | **20 53 40.0** | **-3.7** | |
| **STHS** | **Stebnicka Huta** | **84.10** | **320** | *e*P | | **P** | | **20 53 35.4** | **+1.7** | |
| STHS | | | | *e* | | | | 20 53 43.8 | | |
| STHS | | | | pmax | pmax | | | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **84.10** | **320** | *e*P | | **P** | | **20 53 35.4** | **+1.7** | |
| STHS | | | | *es*P | | **sP** | | **20 53 43.8** | **-3.8** | |
| **FINES** | **FINESS Array B** | **84.13** | **332** | P | | **P** | | **20 53 34.2** | **+0.6** | |
| | comp=Z,24nm,0.7s,baz=108,slow=6.5,SNR=14 | | | | | | | | | |
| **VYHS** | **Vyhne** | **85.51** | **319** | *e*P | | **P** | | **20 53 43.7** | **+2.9** | |
| **VYHS** | **Vyhne** | **85.51** | **319** | *e*PCP | | **P** | | **20 53 43.7** | **+2.9** | |
| **ARCES** | **ARCESS Array B** | **86.57** | **340** | P | | **P** | | **20 53 45.8** | **+0.1** | |
| | comp=Z,6.1nm,0.8s,baz=115,slow=4.4,SNR=12 | | | | | | | | | |
| **GERES** | **GERESS Array B** | **88.94** | **319** | P | | **P** | | **20 53 57.7** | **+0.2** | |
| | comp=Z,0.7nm,0.8s,baz=82,slow=2.8,SNR=5.4 | | | | | | | | | |
| **NOA** | **NORSAR Array B** | **91.15** | **331** | P | | **P** | | **20 54 07.1** | **-0.4** | |
| | comp=Z,0.5nm,0.4s,baz=114,slow=11,SNR=3.2 | | | | | | | | | |
| NOA | | | | LR | | LR | | 21 40 26.6 | | |
| | comp=Z,30nm,18.3s,baz=300,slow=39 | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.23** | **37** | PKPbc | | **PKPdf** | | **21 00 42.3** | **+1.1** | |
| | comp=Z,13nm,0.8s,baz=278,slow=0.9,SNR=109 | | | | | | | | | |
| **BLA** | **Blacksburg** | **145.24** | **360** | *e*PKP2 | | **PKPbc** | | **21 00 39.3** | **-1.3** | |
| **BLA** | **Blacksburg** | **145.24** | **360** | *e*PKPdf | | **PKPbc** | | **21 00 39.2** | **-1.3** | |
| **WVT** | **Waverly** | **145.65** | **11** | *e*PKIKP | | **PKPdf** | | **21 00 41.6** | **0.0** | |
| **WVT** | **Waverly** | **145.65** | **11** | *e*PKPdf | | **PKPdf** | | **21 00 41.6** | **0.0** | |
| **MIAR** | **Mount Ida** | **145.67** | **19** | *e*PKIKP | | **PKPab** | | **21 00 42.2** | **-0.1** | |
| **MIAR** | **Mount Ida** | **145.67** | **19** | *e*PKPdf | | **PKPab** | | **21 00 42.2** | **-0.1** | |
| **JCT** | **Junction City** | **146.52** | **31** | *e*PKP2 | | **PKPab** | | **21 00 45.5** | **-0.2** | |
| **JCT** | **Junction City** | **146.52** | **31** | *e*PKPbc | | **PKPab** | | **21 00 45.5** | **-0.2** | |

*IDC **26** 20:46:41.6±0.8, 3.°38S×99.°35E, h0km, mb4.2/18, mb1 4.3/19, mb1mx4.1/40, mbtmp4.2/19, ML4.4/1, Error ellipse: s-maj=32.3km s-min=14.1km az=47.0*
*NEIC **26** 20:46:42.8±0.4, 3.°39S×99.°46E, h10km, mb4.4/9, Error ellipse: s-maj=14.3km s-min=7.3km az=52.0*
*ISCJB **26** 20:46:44.4±0.4, 3.°32S±0.°04×99.°52E±0.°04, h33km, mb4.2/26, Error ellipse: s-maj=6.2km s-min=4.4km az=146.4*
*DJA **26** 20:46:46.4±0.6, 3.°S±3.°×10.°0E±.°, h49km±8km, M4.5/16, mb4.7/1, MLv4.4/4, MLv4.5/16*

**ISC 26 20:46:46.5±0.5, 3.°31S±0.°06×99.°52E±0.°07, h35km, n53, σ1§06/56, mb4.3/26, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.73** | **42** | P | | **Pn** | **20 47 00.0** | **-0.4** |
| PPSI | | | | S | | **Sn** | **20 47 10.3** | **0.0** |
| **SISI** | **Saibi** | **2.02** | **348** | P | | **Pn** | **20 47 16.2** | **-1.9** |
| SISI | | | | S | | **Sn** | **20 47 41.9** | **-0.2** |
| **PDSI** | **Padang** | **2.56** | **22** | P | | **Pn** | **20 47 24.4** | **-1.2** |
| PDSI | | | | S | | **Sn** | **20 47 54.5** | **-1.1** |
| **PPI** | **Padang Panjang** | **2.97** | **17** | P | | **Pn** | **20 47 29.8** | **-1.4** |
| PPI | | | | S | | **Sn** | **20 48 03.7** | **-1.8** |
| **SDSI** | **Sungai Dareh** | **3.04** | **39** | P | | Pn | 20 47 24.5 | -7.6 |
| **KSI** | **Kapahiang** | **3.09** | **96** | P | | **Pn** | **20 47 33.0** | **+0.1** |
| **MNAI** | **Manna** | **3.58** | **107** | P | | **Pn** | **20 47 39.2** | **-0.5** |
| MNAI | | | | S | | **Sn** | **20 48 20.6** | **-0.2** |
| **BKNI** | **Bangkinang** | **3.92** | **23** | P | | **Pn** | **20 47 42.8** | **-1.5** |
| **BKNI** | **Bangkinang** | **3.92** | **23** | *e*Pn | | Pn | 20 47 37.5 | -6.7 |
| **RGRI** | **Rengat** | **4.07** | **44** | P | | **Pn** | **20 47 45.4** | **-0.9** |
| **MNSI** | **Mandailing Nat** | **4.08** | **1** | P | | **Pn** | **20 47 45.2** | **-1.2** |
| **JMBI** | **JAMBI** | **4.44** | **68** | P | | Pn | 20 47 47.2 | -4.3 |
| **MDSI** | **Maura Dua** | **4.79** | **104** | P | | **Pn** | **20 47 55.1** | **-1.2** |
| **LWLI** | **Liwa** | **4.84** | **111** | P | | **Pn** | **20 47 57.0** | **0.0** |
| **SBSI** | **Sibolga** | **4.87** | **353** | P | | Pn | 20 47 51.0 | -6.3 |
| **GSI** | **Gunungsitoli** | **4.98** | **337** | P | | **Pn** | **20 47 56.8** | **-2.0** |
| **KASI** | **Kota Agung** | **5.43** | **114** | P | | **Pn** | **20 48 03.8** | **-1.2** |
| **KULM** | **Kulim** | **8.62** | **8** | *e*Pn | | **Pn** | **20 48 47.0** | **-1.8** |
| **LEM** | **Lembang** | **8.79** | **114** | Pn | | **Pn** | **20 48 52.0** | **+0.6** |
| | 4.3nm,0.3s,baz=319,slow=19,SNR=3.6 | | | | | | | |
| **PALK** | **Pallekele** | **21.52** | **299** | P | | **P** | **20 51 33.8** | **+1.0** |
| **CMAR** | **Chiang Mai Arr** | **21.64** | **359** | P | | **P** | **20 51 34.7** | **+0.8** |
| | 4.6nm,0.8s,baz=187,slow=10,SNR=36 | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.99** | **359** | *e*P | | **P** | **20 51 36.6** | **-1.2** |
| | 3.7nm,0.9s | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MBWA** | **Marble Bar** | **26.48** | **134** | P | | **P** | | **20 52 19.1** | **-1.6** | |
| | 15nm,1.2s | | | | | | | | | |
| **LSA** | **Lhasa** | **33.79** | **347** | P | | **P** | | **20 53 26.2** | **+0.4** | |
| **WRA** | **Warramunga Arr** | **37.77** | **119** | P | | **P** | | **20 54 00.6** | **+1.0** | |
| | 2.1nm,0.7s,baz=304,slow=9.4,SNR=16 | | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **20 56 17.1** | **+0.9** | |
| | 0.6nm,0.8s,baz=308,slow=2.2,SNR=4.0 | | | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.77** | **119** | *e*P | | **P** | | **20 53 59.8** | **+0.1** | |
| | 3.4nm,0.8s | | | | | | | | | |
| **ASAR** | **Alice Springs** | **38.89** | **124** | P | | **P** | | **20 54 10.3** | **+1.2** | |
| | 1.9nm,0.7s,baz=298,slow=7.7,SNR=15 | | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **20 56 19.6** | **0.0** | |
| | 0.6nm,0.7s,baz=295,slow=2.8,SNR=4.4 | | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.36** | **30** | P | | **P** | | **20 55 25.8** | **+0.8** | |
| **KSRS** | **Korea Array** | **48.39** | **30** | P | | **P** | | **20 55 25.8** | **+0.6** | |
| | 1.7nm,0.7s,baz=75,slow=25,SNR=6.1 | | | | | | | | | |
| **CTAO** | **Charters Tower** | **48.49** | **114** | P | | **P** | | **20 55 24.2** | **-2.1** | |
| | 10nm,1.3s | | | | | | | | | |
| **TKM2** | **Tokmak 2** | **50.84** | **337** | *e*P | | **P** | | **20 55 45.0** | **+1.0** | |
| | 2.9nm,0.7s | | | | | | | | | |
| **AAK** | **Ala-Archa** | **51.03** | **336** | P | | **P** | | **20 55 46.3** | **+0.9** | |
| | 0.7nm,0.4s,baz=136,slow=10,SNR=4.1 | | | | | | | | | |
| **AAK** | **Ala-Archa** | **51.03** | **336** | P | | **P** | | **20 55 45.9** | **+0.5** | |
| | 1.3nm,0.7s | | | | | | | | | |
| **SONM** | **Songino Array** | **51.29** | **6** | P | | **P** | | **20 55 48.3** | **+1.1** | |
| | 2.9nm,0.8s,baz=191,slow=8.1,SNR=17 | | | | | | | | | |
| SONM | | | | PcP | | **PcP** | | **20 57 02.9** | **+1.0** | |
| | 0.7nm,0.5s,baz=188,slow=5.0,SNR=4.1 | | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.39** | **6** | *e*P | | **P** | | **20 55 49.2** | **+1.2** | |
| | 5.8nm,1.1s | | | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.16** | **345** | P | | **P** | | **20 55 54.1** | **+0.5** | |
| | 3.6nm,0.7s,baz=153,slow=8.5,SNR=21 | | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.53** | **28** | P | | **P** | | **20 56 19.0** | **+0.8** | |
| | 2.8nm,0.8s,baz=213,slow=9.8,SNR=6.1 | | | | | | | | | |
| **GEYT** | **Alibeck** | **56.15** | **321** | P | | **P** | | **20 56 23.1** | **+0.3** | |
| | 0.7nm,0.4s,baz=133,slow=8.1,SNR=3.2 | | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.67** | **344** | P | | **P** | | **20 56 27.1** | **+0.8** | |
| | 1.8nm,0.8s,baz=163,slow=6.9,SNR=11 | | | | | | | | | |
| **KURK** | **Kurchatov** | **56.73** | **344** | *e*P | | **P** | | **20 56 26.6** | **-0.1** | |
| | 6.8nm,1.0s | | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.36** | **350** | P | | **P** | | **20 56 39.0** | **+0.9** | |
| | 7.2nm,0.7s,baz=178,slow=5.4,SNR=26 | | | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.24** | **340** | P | | **P** | | **20 56 58.1** | **+0.1** | |
| | 2.2nm,0.6s,baz=153,slow=10.0,SNR=12 | | | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.56** | **332** | *e*P | | **P** | | **20 57 06.8** | **0.0** | |
| **AKTO** | **Aktyubinsk** | **64.28** | **332** | P | | **P** | | **20 57 17.9** | **-0.3** | |
| | 1.1nm,0.5s,baz=182,slow=5.0,SNR=4.2 | | | | | | | | | |
| **KBZ** | **Khabaz** | **68.98** | **320** | P | | **P** | | **20 57 49.0** | **+0.6** | |
| | 3.5nm,0.9s,baz=146,slow=3.4,SNR=8.3 | | | | | | | | | |
| **BR

baz=80,slow=75,SNR=91
**H01W3 Cape Leeuwin H 34.85 159** T T 22 16 58.2
baz=335,slow=76,SNR=4.6
**H01W2 Cape Leeuwin H 34.86 159** T T 22 16 59.5
baz=335,slow=76,SNR=6.1
**H01W1 Cape Leeuwin H 34.86 159** T T 22 16 58.7
baz=335,slow=76,SNR=5.5
**WRA Warramunga Arr 37.91 120** P **P 21 40 12.7 -0.3**
0.4nm,0.9s,baz=306,slow=8.8,SNR=4.0
**ASAR Alice Springs 39.11 125** P **P 21 40 23.4 +0.3**
0.2nm,0.4s,baz=285,slow=7.4,SNR=4.5
**SONM Songino Array 50.48 6** P **P 21 41 54.8 +1.4**
0.7nm,0.7s,baz=185,slow=8.0,SNR=6.5
**MKAR Makanchi Array 51.48 345** P **P 21 42 01.4 +0.7**
0.5nm,0.4s,baz=158,slow=8.9,SNR=4.9
**ZALV Zalesovo Beam 57.65 350** P **P 21 42 43.8 -1.5**
0.5nm,0.4s,baz=161,slow=5.1,SNR=5.0
**KBZ Khabaz 68.57 319** P **P 21 43 58.0 0.0**
0.6nm,0.7s,baz=128,slow=12,SNR=2.0
**TXAR Lajitas Array 145.24 38** PKPbc **PKPbc 21 52 32.9 -0.5**
0.3nm,0.5s,baz=253,slow=0.9,SNR=5.1

*IDC **26** 21:33:01.1±2.5,3.54S±99.48E,h0km,mb3.9/7,mb1 4.1/7, mb1mx3.8/37,mbtmp3.9/7,MS3.3/1,Ms1 3.3/1, ms1mx2.5/35,Error ellipse: s-maj=63.5km s-min=51.2km az=120.0*

**ISC 26 21:33:05.8±2.8,3.6S±0.4,99.7E±0.4,h35km,n9,σ0.8?4/8, mb4.0/7,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.89** | **358** | P | **P** | | **21 37 55.2** | **-0.8** |
| | 0.9nm,0.6s,baz=187,slow=9.8,SNR=7.7 | | | | | | | |
| **JNU** | **Nakatsue** | **46.94** | **37** | LR | LR | | 22 04 07.7 | |
| | comp=Z,36nm,19.8s,baz=282,slow=40 | | | | | | | |
| **SONM** | **Songino Array** | **51.52** | **6** | P | **P** | | **21 42 08.7** | **+0.4** |
| | 1.4nm,0.7s,baz=189,slow=9.7,SNR=12 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.43** | **345** | P | **P** | | **21 42 15.4** | **+0.5** |
| | 1.5nm,0.7s,baz=147,slow=8.4,SNR=9.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.63** | **350** | P | **P** | | **21 42 59.3** | **0.0** |
| | 1.4nm,0.4s,baz=177,slow=5.5,SNR=13 | | | | | | | |
| **KBZ** | **Khabaz** | **69.26** | **320** | P | **P** | | **21 44 10.1** | **+0.6** |
| | 1.6nm,0.9s,baz=129,slow=14,SNR=3.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.12** | **313** | P | **P** | | **21 44 37.9** | **-1.1** |
| | 0.4nm,0.5s,baz=144,slow=6.3,SNR=2.8 | | | | | | | |
| **GERES** | **GERESS Array B** | **89.99** | **319** | P | **P** | | **21 46 02.2** | **+0.3** |
| | 0.6nm,0.8s,baz=64,slow=2.3,SNR=3.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.13** | **38** | PKPbc | **PKPab** | | **21 52 43.5** | **-0.3** |
| | 0.8nm,0.7s,baz=300,slow=0.7,SNR=7.9 | | | | | | | |

**IDC 26 21:42:00.6±10.0,15.39S±172.95W,h0km,mb3.4/2, mb1 3.7/2,mb1mx3.4/31,mbtmp3.4/2,Error ellipse: s-maj=482.0km s-min=27.0km az=140.0,Samoa Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **AFI** | **Afiamalu** | **1.85** | **38** | Pn | Pn | | 21 42 32.2 | -1.6 |
| | 19nm,0.3s,baz=210,slow=12,SNR=10 | | | | | | | |
| AFI | | | | Sn | Sn | | 21 42 49.8 | -8.2 |
| | 46nm,0.3s,baz=10,slow=22,SNR=11 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.18** | **329** | T | T | | 22 31 04.4 | |
| | baz=152 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.19** | **328** | T | T | | 22 31 03.0 | |
| | baz=152 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.20** | **329** | T | T | | 22 31 11.3 | |
| | baz=152 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.12** | **330** | T | T | | 22 32 16.0 | |
| | baz=153 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.12** | **330** | T | T | | 22 32 10.4 | |
| | baz=153 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.14** | **330** | T | T | | 22 32 16.3 | |
| | baz=153 | | | | | | | |
| **WRA** | **Warramunga Arr** | **50.27** | **257** | P | P | | 21 50 58.5 | -0.8 |
| | 0.3nm,0.6s,baz=90,slow=7.4,SNR=1.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **50.53** | **252** | P | P | | 21 51 00.1 | -1.1 |
| | 0.4nm,0.5s,baz=86,slow=8.1,SNR=5.8 | | | | | | | |
| **BRTR** | **Keskin Array B** | **146.42** | **321** | PKPbc | PKPab | | 22 01 45.6 | +0.6 |
| | 0.8nm,0.9s,baz=114,slow=1.7,SNR=3.7 | | | | | | | |

*BJI **26** 21:48:19.2,3.60S±99.60E,h20km,mb4.7/19,mB5.2/8, Ms4.9/2,Ms7 4.8/2*
*NEIC **26** 21:48:19.1±0.3,3.69S±99.72E,h10km,mb4.7/11,Error ellipse: s-maj=9.7km s-min=4.6km az=47.0*
*MOS **26**'21:48:21.2±1.0,3.54S±99.84E,h32km,mb4.9/29,Error ellipse: s-maj=13.8km s-min=6.2km az=115.1*
*ISCJB **26** 21:48:21.1±1.4,3.57S±0.05±99.83E±0.04,h32km±9km, mb4.6/48,MS3.3/12,Error ellipse: s-maj=9.4km s-min=4.0km az=41.0*
*DJA **26** 21:48:22.9±0.6,4.4S±4.4°±10.0E±10.4°,h53km±8km,M4.7/13, mb4.9/1,mB5.2/1,MLv4.5/13,Mw(mB)4.5/1*
*IDC **26** 21:48:22.9±0.6,3.67S±99.70E,h33km±3km,mb4.1/19, mb1 4.3/21,mb1mx4.1/40,mbtmp4.4/21,ML4.1/2,MS3.3/13, Ms1 3.3/13,ms1mx3.1/39,Error ellipse: s-maj=19.6km s-min=10.9km az=40.0*

**ISC 26 21:48:22.8±0.6,3.59S±0.06±99.85E±0.06,h32km±3km, h32km:pP-P,n169,σ1§11/176,mb4.6/48,MS3.4/12,4C-21D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.83** | **11** | P | **Pn** | | **21 48 37.1** | **-1.2** |
| PPSI | | | | S | **Sn** | | **21 48 49.3** | **-0.2** |
| **SISI** | **Saibi** | **2.37** | **341** | P | **Pn** | | **21 48 57.1** | **-2.4** |
| SISI | | | | S | **Sn** | | **21 49 25.2** | **-2.2** |
| **PDSI** | **Padang** | **2.73** | **13** | P | **Pn** | | **21 49 02.7** | **-1.7** |
| **KSI** | **Kapahiang** | **2.74** | **91** | P | **Pn** | | **21 49 05.7** | **+1.0** |
| KSI | | | | S | **Sn** | | **21 49 37.2** | **+0.5** |
| **SDSI** | **Sungai Dareh** | **3.07** | **31** | P | **Pn** | | **21 49 09.0** | **-0.2** |
| **PPI** | **Padang Panjang** | **3.15** | **10** | P | **Pn** | | **21 49 09.5** | **-0.8** |
| PPI | | | | S | **Sn** | | **21 49 45.2** | **-1.7** |
| **MNAI** | **Manna** | **3.19** | **104** | P | **Pn** | | **21 49 10.7** | **-0.2** |
| **MNAI** | **Manna** | **3.19** | **104** | *e*Pn | **Pn** | | **21 49 10.2** | **-0.6** |
| MNAI | | | | *e*Sn | **Sn** | | **21 49 47.6** | **-0.3** |
| **BKNI** | **Bangkinang** | **4.06** | **17** | P | Pb | | 21 49 42.4 | +8.7 |
| **BKNI** | **Bangkinang** | **4.06** | **17** | *e*Pn | **Pn** | | **21 49 24.1** | **+1.3** |
| **JMBI** | **JAMBI** | **4.26** | **63** | P | **Pb** | | **21 49 35.2** | **-1.8** |
| **MNSI** | **Mandailing Nat** | **4.36** | **356** | P | **Pn** | | **21 49 26.8** | **-0.1** |
| **MDSI** | **Maura Dua** | **4.41** | **102** | P | **Pn** | | **21 49 28.3** | **+0.7** |
| MDSI | | | | S | **Sn** | | **21 50 17.0** | **-0.9** |
| **LWLI** | **Liwa** | **4.43** | **109** | P | **Pn** | | **21 49 27.9** | **-0.1** |
| **KASI** | **Kota Agung** | **5.02** | **113** | P | **Pn** | | **21 49 35.4** | **-0.5** |
| KASI | | | | S | **Sn** | | **21 50 29.0** | **-3.9** |
| **GSI** | **Gunungsitoli** | **5.36** | **335** | *e*Pn | Pn | | 21 49 37.0 | -3.7 |
| GSI | | | | *e*Sn | Sn | | 21 50 34.5 | -6.8 |
| **PSI** | **Prapat** | **6.41** | **352** | Pn | **Pn** | | **21 49 53.9** | **-1.4** |
| | 1.5nm,0.3s,baz=148,slow=6.6,SNR=3.7 | | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.44** | **77** | P | Pb | | 21 50 07.0 | -7.1 |
| **CGJI** | **Cibinong** | **6.55** | **118** | P | **Pn** | | **21 49 55.0** | **-2.0** |
| **LEM** | **Lembang** | **8.38** | **113** | Pn | **Pn** | | **21 50 23.8** | **+1.5** |
| | 7.0nm,0.3s,baz=342,slow=20,SNR=6.5 | | | | | | | |
| LEM | | | | Sn | **Sn** | | **21 52 01.1** | **+5.1** |
| | 2.7nm,0.3s,baz=300,slow=20,SNR=1.6 | | | | | | | |
| LEM | | | | LR | LR | | 21 54 15.2 | |
| | comp=Z,214nm,19.7s,baz=346,slow=42 | | | | | | | |
| **KULM** | **Kulim** | **8.85** | **5** | *e*Pn | **Pn** | | **21 50 28.8** | **+0.1** |
| **CISI** | **Cisompet, Garu** | **8.86** | **117** | *e*Pn | **Pn** | | **21 50 26.6** | **-2.2** |
| **UGM** | **Wanagama** | **11.46** | **113** | *e*Pn | **Pn** | | **21 51 02.5** | **-1.8** |
| **KKM** | **Kota Kinabalu** | **18.94** | **60** | *e*P | **P** | | **21 52 38.3** | **-3.2** |
| | 23nm,1.0s | | | | | | | |
| **KAPI** | **Kappang** | **19.90** | **95** | P | **P** | | **21 52 51.9** | **0.0** |
| | 7.1nm,0.5s,baz=273,slow=13,SNR=5.1 | | | | | | | |
| KAPI | | | | LR | LR | | 22 02 07.6 | |
| | comp=Z,83nm,18.5s,baz=293,slow=41 | | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.57** | **65** | *e*P | Pn | | 21 53 06.4 | +4.9 |
| | 35nm,1.0s | | | | | | | |
| **MHMT** | **Maesariang** | **21.71** | **355** | P | **P** | | **21 53 12.4** | **+1.1** |
| | 17nm,1.0s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.88** | **358** | *e*P | **P** | | **21 53 13.3** | **+0.1** |
| **CM31** | **Chiang Mai Arr** | **21.92** | **358** | *e*P | **P** | | **21 53 13.7** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **21.92** | **358** | P | **P** | | **21 53 13.7** | **0.0** |
| | 4.9nm,0.7s,baz=187,slow=9.9,SNR=42 | | | | | | | |
| CMAR | | | | PcP | **PcP** | | **21 57 13.0** | **+0.7** |
| | 0.2nm,0.3s,baz=209,slow=3.5,SNR=4.6 | | | | | | | |
| CMAR | | | | LR | LR | | 22 01 54.2 | |
| | comp=Z,50nm,21.1s,baz=183,slow=37 | | | | | | | |
| **PALK** | **Pallekele** | **21.94** | **299** | LR | LR | | 22 00 07.7 | |
| | comp=Z,23nm,18.8s,baz=116,slow=32 | | | | | | | |
| **LAMP** | **Lampang** | **21.97** | **359** | P | **P** | | **21 53 17.1** | **+2.9** |
| | 5.6nm,1.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.27** | **358** | P | **P** | | **21 53 19.5** | **+2.0** |
| | 84nm,1.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.27** | **358** | *e*P | **P** | | **21 53 17.5** | **0.0** |
| CHTO | | | | pmax | pmax | | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.27** | **358** | *e*P | **P** | | **21 53 17.5** | **0.0** |
| | comp=Z,16nm,1.3s | | | | | | | |
| **BATI** | **Baumata** | **24.53** | **107** | P | **P** | | **21 53 40.7** | **+0.9** |
| | comp=Z,5.1nm,0.3s,baz=264,slow=10,SNR=2.3 | | | | | | | |
| BATI | | | | S | **S** | | **21 57 56.9** | **-1.7** |
| | comp=Z,3.9nm,0.3s,baz=274,slow=16,SNR=2.1 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.52** | **260** | T | T | | 22 23 34.5 | |
| | baz=82,slow=75,SNR=262 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.52** | **260** | T | T | | 22 23 27.8 | |
| | baz=82,slow=75,SNR=190 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.53** | **260** | T | T | | 22 23 28.7 | |
| | baz=82,slow=75,SNR=264 | | | | | | | |
| **DAV** | **Davao City (W)** | **27.78** | **68** | LR | LR | | 22 07 41.7 | |
| | comp=Z,52nm,18.7s,baz=160,slow=42 | | | | | | | |
| **SIJI** | **Sorong** | **31.51** | **86** | LR | LR | | 22 09 50.9 | |
| | comp=Z,35nm,20.6s,baz=75,slow=41 | | | | | | | |
| **ODAN** | **Odare** | **32.57** | **339** | *e*P | **P** | | **21 54 52.6** | **+0.9** |
| | comp=Z,4.9nm,0.5s | | | | | | | |
| **TAPN** | **Taplejung** | **32.91** | **340** | *e*P | **P** | | **21 54 54.9** | **+0.2** |
| | comp=Z,10nm,0.7s | | | | | | | |
| **RAMN** | **Ramite** | **32.95** | **338** | *e*P | **P** | | **21 54 55.5** | **+0.6** |
| **H01W3** | **Cape Leeuwin H** | **33.85** | **159** | T | T | | 22 31 01.4 | |
| | baz=336,slow=76,SNR=25 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.86** | **159** | T | T | | 22 31 01.0 | |
| | baz=336,slow=76,SNR=24 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.86** | **159** | T | T | | 22 31 08.2 | |
| | baz=336,slow=76,SNR=43 | | | | | | | |
| **GUN** | **Gumba** | **34.08** | **338** | *e*P | **P** | | **21 55 05.7** | **+0.7** |
| **LSA** | **Lhasa** | **34.13** | **346** | P | **P** | | **21 55 07.0** | **+1.5** |
| LSA | | | | PMZ | | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **LSA** | **Lhasa** | **34.13** | **346** | *e*P | **P** | | **21 55 07.0** | **+1.5** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **LSA** | **Lhasa** | **34.13** | **346** | *e*P | **P** | | **21 55 07.0** | **+1.5** |
| | comp=Z,8.9nm,0.9s | | | | | | | |
| **KKN** | **Kakani** | **34.21** | **337** | *e*P | **P** | | **21 55 06.3** | **+0.4** |
| | comp=Z,7.6nm,0.7s | | | | | | | |
| **GKN** | **Gorkha** | **34.66** | **336** | *e*P | **P** | | **21 55 10.3** | **+0.6** |
| **KOLN** | **Koldanda** | **34.89** | **334** | *e*P | **P** | | **21 55 12.4** | **+0.6** |
| | comp=Z,25nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.35** | **119** | P | **P** | | **21 55 32.6** | **-0.2** |
| | comp=Z,2.4nm,0.8s,baz=310,slow=9.1,SNR=18 | | | | | | | |
| WRA | | | | PcP | **PcP** | | **21 57 51.9** | **+0.3** |
| | comp=Z,0.8nm,0.8s,baz=309,slow=2.4,SNR=4.7 | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.35** | **119** | *ce*P | **P** | | **21 55 33.2** | **+0.4** |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.35** | **119** | *e*P | **P** | | **21 55 32.1** | **-0.7** |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **XAN** | **Xi'an** | **38.39** | **12** | P | **P** | | **21 55 41.3** | **0.0** |
| XAN | | | | pP | **pP** | | **21 55 51.0** | **+0.3** |
| XAN | | | | PMZ | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **AS12** | **Alice Springs** | **38.47** | **124** | *e*P | **P** | | **21 55 42.5** | **+0.3** |
| AS12 | | | | *e*PcP | **PcP** | | **21 57 55.4** | **+0.3** |
| **ASAR** | **Alice Springs** | **38.47** | **124** | P | **P** | | **21 55 42.5** | **+0.3** |
| | comp=Z,1.0nm,0.5s,baz=300,slow=7.9,SNR=14 | | | | | | | |
| ASAR | | | | PcP | **PcP** | | **21 57 55.4** | **+0.3** |
| | comp=Z,1.3nm,0.8s,baz=299,slow=2.8,SNR=5.4 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.50** | **12** | *e*P | **P** | | **21 56 41.0** | **+1.6** |
| HHC | | | | PMZ | | | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,150nm,3.8s | | | | | | | |
| **CTA** | **Charters Tower** | **48.08** | **114** | P | **P** | | **21 57 00.7** | **+0.8** |
| | comp=Z,4.2nm,0.8s,baz=289,slow=11,SNR=3.8 | | | | | | | |
| **KS15** | **Wonju Array Si** | **48.43** | **30** | *e*P | **P** | | **21 57 01.8** | **-0.4** |
| **KSAR** | **Wonju Array Be** | **48.43** | **30** | P | **P** | | **21 57 01.8** | **-0.4** |
| **KSAR** | **Wonju Array Be** | **48.43** | **30** | P | **P** | | **21 57 01.8** | **-0.4** |
| **WMQ** | **Urumqi** | **48.44** | **348** | P | **P** | | **21 57 04.3** | **+2.0** |
| WMQ | | | | PMZ | | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **KSRS** | **Korea Array** | **48.45** | **30** | P | **P** | | **21 57 01.8** | **-0.6** |
| | comp=Z,3.4nm,0.9s,baz=224,slow=7.0,SNR=6.4 | | | | | | | |
| KSRS | | | | LR | LR | | 22 20 50.5 | |
| | comp=Z,32nm,18.8s,baz=218,slow=40 | | | | | | | |
| **KSRS** | **Korea Array** | **48.45** | **30** | P | **P** | | **21 57 01.8** | **-0.6** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| KSRS | | | | MLR | MLR | | | |
| | comp=Z,32nm,18.8s | | | | | | | |
| **KS01** | **Wonju Array Si** | **48.46** | **30** | *e*P | **P** | | **21 57 03.3** | **+0.9** |
| **PDGK** | **Podgornoye** | **50.18** | **341** | *i* P | **P** | | **21 57 15.0** | **-0.5** |
| PDGK | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.22** | **337** | *e*P | **P** | | **21 57 24.5** | **+0.9** |
| TKM2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.22** | **337** | *e*P | **P** | | **21 57 24.5** | **+0.9** |
| | comp=Z,9.8nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **51.41** | **336** | P | **P** | | **21 57 25.7** | **+0.7** |
| | comp=Z,2.1nm,0.7s,baz=124,slow=6.7,SNR=8.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **51.41** | **336** | *e*P | **P** | | **21 57 25.4** | **+0.4** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **SONA0** | **Songino Array** | **51.52** | **6** | *e*P | **P** | | **21 57 27.2** | **+1.5** |
| SONA0 | | | | *e*PcP | **PcP** | | **21 58 40.0** | **+0.4** |
| **SONM** | **Songino Array** | **51.52** | **6** | P | **P** | | **21 57 27.2** | **+1.5** |
| | comp=Z,6.4nm,0.7s,baz=189,slow=9.1,SNR=61 | | | | | | | |
| SONM | | | | PcP | **PcP** | | **21 58 40.0** | **+0.4** |
| | comp=Z,1.0nm,0.7s,baz=187,slow=4.7,SNR=2.2 | | | | | | | |
| SONM | | | | LR | LR | | 22 23 17.1 | |
| | comp=Z,44nm,18.0s,baz=165,slow=41 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.62** | **6** | *e*P | **P** | | **21 57 25.8** | **-0.7** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.9s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.62** | **6** | *e*P | **P** | | **21 57 25.8** | **-0.7** |
| | comp=Z,7.6nm,0.9s | | | | | | | |
| **EKS2** | **Erkin-Say** | **51.73** | **336** | *e*P | **P** | | **21 57 28.1** | **+0.8** |
| EKS2 | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **EKS2** | **Erkin-Say** | **51.73** | **336** | *e*P | **P** | | **21 57 28.1** | **+0.8** |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| **MNAS** | **Manas** | **52.12** | **335** | *i* P | **P** | | **21 57 29.6** | **-0.7** |
| MNAS | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **MK01** | **Makanchi Array** | **52.48** | **345** | *e*P | **P** | | **21 57 33.0** | **+0.2** |
| **MK32** | **Makanchi Array** | **52.51** | **345** | *e*P | **P** | | **21 57 33.4** | **+0.4** |
| **MKAR** | **Makanchi Array** | **52.51** | **345** | P | **P** | | **21 57 33.4** | **+0.5** |
| | comp=Z,6.2nm,0.7s,baz=147,slow=8.5,SNR=43 | | | | | | | |
| MKAR | | | | pP | **pP** | | **21 57 43.4** | **+0.8** |
| | comp=Z,3.0nm,0.5s,baz=153,slow=8.8,SNR=10 | | | | | | | |
| MKAR | | | | LR | LR | | 22 23 27.6 | |
| | comp=Z,28nm,18.3s,baz=151,slow=40 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.51** | **345** | P | **P** | | **21 57 33.4** | **+0.5** |
| MKAR | | | | *PP | **pP** | | **21 57 43.4** | **+0.8** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| MKAR | | | | MLR | MLR | | | |
| | comp=Z,28nm,18.3s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.62** | **28** | P | **P** | | **21 57 55.8** | **+0.2** |
| | comp=Z,7.8nm,0.7s,baz=230,slow=5.3,SNR=18 | | | | | | | |
| USRK | | | | pP | **pP** | | **21 58 05.9** | **+0.6** |
| | comp=Z,7.3nm,0.5s,baz=220,slow=4.1,SNR=11 | | | | | | | |
| USRK | | | | LR | LR | | 22 26 43.8 | |
| | comp=Z,45nm,18.7s,baz=191,slow=41 | | | | | | | |
| **GEYT** | **Alibeck** | **56.57** | **321** | P | **P** | | **21 58 02.4** | **-0.2** |
| | comp=Z,2.4nm,0.8s,baz=147,slow=8.5,SNR=6.8 | | | | | | | |
| GEYT | | | | pP | **pP** | | **21 58 12.2** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=176,slow=5.9,SNR=3.3 | | | | | | | |
| **OTUK** | **Ortayu** | **56.94** | **338** | *i* P | **P** | | **21 58 03.9** | **-1.1** |
| OTUK | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **57.08** | **344** | *e*P | **P** | | **21 58 06.2** | **+0.3** |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **KURK** | **Kurchatov** | **57.08** | **344** | *e*P | **P** | | **21 58 06.2** | **+0.3** |
| | comp=Z,14nm,0.9s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.69** | **350** | *e*P | **P** | | **21 58 17.1** | **0.0** |
| **ZALV** | **Zalesovo Beam** | **58.69** | **350** | P | **P** | | **21 58 17.4** | **+0.3** |
| | comp=Z,12nm,0.8s,baz=194,slow=5.3,SNR=65 | | | | | | | |
| ZALV | | | | pP | **pP** | | **21 58 27.0** | **0.0** |
| | comp=Z,12nm,0.7s,baz=164,slow=7.1,SNR=16 | | | | | | | |
| **ZAA1** | **Zalesovo Array** | **58.69** | **350** | *e*P | **P** | | **21 58 17.4** | **+0.2** |
| **KLR** | **Kul'dur** | **59.43** | **24** | *e*P | **P** | | **21 58 23.4** | **+1.0** |
| **KRAR** | **Krasnoyarsk** | **59.67** | **355** | *e*P | **P** | | **21 58 24.8** | **+0.9** |
| KRAR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| **NVS** | **Novosibirsk** | **59.83** | **349** | *i* P | **P** | | **21 58 25.4** | **+0.4** |
| NVS | | | | pmax | pmax | | | |
| | comp=N,5.0nm,1.1s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=E,5.0nm,1.3s | | | | | | | |
| **BRVK** | **Borovoye** | **61.68** | **340** | *e*P | **P** | | **21 58 36.9** | **-0.7** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **61.68** | **340** | *e*P | **P** | | **21 58 36.9** | **-0.7** |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **CHKZ** | **Chkalovo** | **62.08** | **341** | *i* P | **P** | | **21 58 39.6** | **-0.7** |
| CHKZ | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **AB31** | **Akbulak array** | **62.95** | **332** | *i* P | **P** | | **21 58 44.9** | **-1.3** |
| AB31 | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.95** | **332** | *e*P | **P** | | **21 58 45.9** | **-0.4** |
| **DZM** | **Mont Dzumac** | **66.99** | **112** | LR | LR | | 22 31 33.9 | |
| | comp=Z,25nm,19.3s,baz=267,slow=39 | | | | | | | |
| **SVE** | **Sverdlovsk** | **68.08** | **338** | *e*P | **P** | | **21 59 19.6** | **+0.3** |
| SVE | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.1s | | | | | | | |
| **MAW** | **Mawson** | **68.72** | **194** | S | **S** | | **22 08 25.0** | **+1.1** |
| | comp=Z,0.3nm,0.4s,baz=310,slow=9.7,SNR=2.0 | | | | | | | |
| MAW | | | | LR | LR | | 22 21 02.0 | |
| | comp=Z,69nm,21.4s,baz=61,slow=29 | | | | | | | |
| **YAK** | **Yakutsk** | **69.30** | **15** | *e*P | **P** | | **21 59 26.1** | **-0.6** |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,7.0nm,1.3s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,3.0nm,1.0s | | | | | | | |
| **KBZ** | **Khabaz** | **69.40** | **320** | P | **P** | | **21 59 26.9** | **-0.8** |
| | comp=E,3.3nm,0.8s,baz=123,slow=4.5,SNR=9.8 | | | | | | | |
| KBZ | | | | pP | **pP** | | **21 59 37.4** | **-0.3** |
| | comp=E,2.4nm,0.8s,baz=98,slow=6.7,SNR=4.3 | | | | | | | |
| **KIV** | **Kislovodsk** | **69.64** | **320** | *e*P | **P** | | **21 59 29.7** | **+0.3** |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **SKR** | **Severo-Kuril's** | **72.26** | **34** | *e*P | P | | 21 59 48.3 | +3.3 |
| **VRH** | **Novokhopyorsk** | **73.54** | **326** | *e*P | **P** | | **21 59 51.7** | **-0.9** |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.9s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=E,9.0nm,0.9s | | | | | | | |
| **BR101** | **Keskin Array S** | **74.28** | **313** | *e*P | **P** | | **21 59 56.3** | **-1.0** |
| **BRTR** | **Keskin Array B** | **74.28** | **313** | P | **P** | | **21 59 56.3** | **-1.0** |
| | comp=E,1.4nm,0.7s,baz=146,slow=8.3,SNR=11 | | | | | | | |
| BRTR | | | | pP | **pP** | | **22 00 06.8** | **-0.6** |
| | comp=E,0.7nm,0.5s,baz=137,slow=7.3,SNR=3.7 | | | | | | | |
| **BOSA** | **Boshof** | **74.77** | **241** | P | **P** | | **21 59 58.6** | **-1.8** |
| | comp=E,3.1nm,0.8s,baz=106,slow=15,SNR=4.5 | | | | | | | |
| BOSA | | | | LR | LR | | 22 29 22.0 | |
| | comp=E,21nm,18.2s,baz=89,slow=33 | | | | | | | |
| **VORD** | **Divnogorie** | **74.80** | **325** | *e*P | **P** | | **21 59 58.7** | **-1.2** |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| VORD | | | | pmax | pmax | | | |
| | comp=N,9.0nm,1.5s | | | | | | | |
| VORD | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.8s | | | | | | | |
| **BR231** | **Keskin MP Arra** | **74.95** | **313** | *e*P | P | | 21 59 56.9 | -4.2 |
| **VSR** | **Storozhevoye** | **74.98** | **325** | *e*P | **P** | | **21 59 59.0** | **-2.0** |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=N,4.0nm,0.4s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=E,10.0nm,1.1s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **75.72** | **327** | *e*P | **P** | | **22 00 04.3** | **-0.9** |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=N,2.0nm,0.6s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=E,7.0nm,1.4s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **77.39** | **129** | *e*P | **P** | | **22 00 15.9** | **+0.8** |
| | comp=E,11nm,1.0s | | | | | | | |
| **OBN** | **Obninsk** | **78.05** | **328** | *e*P | **P** | | **22 00 18.3** | **+0.1** |
| OBN | | | | *PP | **PcP** | | **22 00 26.0** | **-1.8** |
| OBN | | | | | | | 22 00 29.0 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,22nm,2.5s | | | | | | | |
| OBN | | | | MLR | MLR | | | |
| | comp=Z,35nm,15.0s | | | | | | | |
| **KLMR** | **Klimovskoe** | **79.18** | **334** | *e*P | **P** | | **22 00 23.9** | **-0.4** |
| KLMR | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.8s | | | | | | | |
| **TIRR** | **Tirgusor** | **79.39** | **316** | *i* P | **P** | | **22 00 28.4** | **+2.6** |
| **TIRR** | **Tirgusor** | **79.39** | **316** | *i* P | **P** | | **22 00 28.4** | **+2.6** |
| **AKASG** | **Malin Array Be** | **80.64** | **323** | P | **P** | | **22 00 30.8** | **

*ISCJB **26** 21:51:10.2±1.7, 3.7S±0.3×99.7E±0.4, h33km, mb3.8/8, Error ellipse: s-maj=67.8km s-min=16.1km az=145.1*
*IDC **26** 21:51:11.9±2.1, 3.7S×99.68E, h30km±6km, mb3.6/8, mb1 3.7/8, mb1mx3.4/43, mbtmp3.8/8, Error ellipse: s-maj=88.4km s-min=18.2km az=54.0*
**ISC 26 21:51:12.1**±1.8, **3.7S**±0.3×**99.7E**±0.4, **h35**km, **n15**, σ0.8**71**/12, **mb3.9**/8, **Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.04** | **358** | P | **P** | **21 56 03.7** | **-0.2** |
| | 0.5nm,0.4s,baz=184,slow=9.7,SNR=2.8 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.36** | **261** | T | T | 22 26 17.2 | |
| | baz=82 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.37** | **261** | T | T | 22 26 13.9 | |
| | baz=82 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.38** | **261** | T | T | 22 26 14.1 | |
| | baz=82 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.78** | **158** | T | T | 22 33 58.8 | |
| | baz=334 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.79** | **158** | T | T | 22 33 46.7 | |
| | baz=334 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.80** | **158** | T | T | 22 34 01.9 | |
| | baz=334 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.41** | **118** | P | **P** | **21 58 22.1** | **-0.1** |
| | 0.5nm,0.8s,baz=292,slow=8.5,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.51** | **124** | P | **P** | **21 58 32.3** | **+0.9** |
| | 0.3nm,0.4s,baz=296,slow=7.5,SNR=1.7 | | | | | | |
| ASAR | | | | pP | **pP** | **21 58 40.4** | **-1.3** |
| | 0.4nm,0.5s,baz=296,slow=8.4,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **51.66** | **6** | P | **P** | **22 00 16.1** | **+0.5** |
| | 0.9nm,0.7s,baz=191,slow=7.8,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.59** | **345** | P | **P** | **22 00 22.7** | **+0.3** |
| | 1.1nm,0.7s,baz=159,slow=7.8,SNR=4.3 | | | | | | |
| MKAR | | | | pP | **pP** | **22 00 32.2** | **-0.8** |
| | 0.5nm,0.5s,baz=161,slow=6.7,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.79** | **350** | P | **P** | **22 01 06.3** | **-0.4** |
| | 1.9nm,0.6s,baz=169,slow=5.6,SNR=4.5 | | | | | | |
| ZALV | | | | pP | **pP** | **22 01 16.9** | **-0.4** |
| | 1.1nm,0.6s,baz=155,slow=4.9,SNR=4.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.69** | **340** | P | **P** | **22 01 25.9** | **-0.6** |
| | 0.6nm,0.5s,baz=144,slow=11,SNR=2.2 | | | | | | |
| **FINES** | **FINESS Array B** | **85.49** | **332** | P | **P** | **22 03 46.5** | **+0.4** |
| | 1.1nm,0.9s,baz=119,slow=11,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.22** | **39** | PKPbc | **PKPab** | **22 10 51.0** | **+0.6** |
| | 0.5nm,0.7s,baz=327,slow=1.8,SNR=4.9 | | | | | | |

*ISCJB **26** 21:51:23.4±2.3, 30.85S±0.10×179.8E±0.4, h350km, mb2.9/1, Error ellipse: s-maj=51.6km s-min=13.2km az=177.0*
*IDC **26** 21:51:23.9±5.3, 30.93S×179.94E, h360km±51km, mb2.9/1, mb1 3.1/2, mb1mx2.8/27, mbtmp3.6/2, Error ellipse: s-maj=56.4km s-min=39.2km az=45.0*
**ISC 26 21:51:23.3**±1.6, **30.9S**±0.1×**179.9E**±0.3, **h350**km, **n10**, σ1.1**45**/14, **Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **7.05** | **194** | *e*PN | **Pn** | **21 53 07.4** | **+1.2** |
| HAZ | | | | *e*SN | **S** | **21 54 28.6** | **-1.3** |
| **PKGZ** | **Pakihiroa** | **7.10** | **192** | *e*PN | **Pn** | **21 53 09.0** | **+2.2** |
| PKGZ | | | | SN | **S** | **21 54 30.4** | **-0.6** |
| **MWZ** | **Matawai** | **7.67** | **194** | *e*PN | **Pn** | **21 53 14.7** | **+1.2** |
| MWZ | | | | SN | **S** | **21 54 41.2** | **-1.9** |
| **URZ** | **Urewera** | **7.69** | **197** | P | **Pn** | **21 53 14.1** | **+0.5** |
| | 0.5nm,0.3s,baz=274,slow=5.6,SNR=14 | | | | | | |
| URZ | | | | S | **S** | **21 54 43.8** | **+0.3** |
| | 1.5nm,0.3s,baz=81,slow=24,SNR=10 | | | | | | |
| **URZ** | **Urewera** | **7.69** | **197** | *e*PN | **Pn** | **21 53 13.9** | **+0.3** |
| **PRHZ** | **Porangahau** | **9.71** | **195** | *e*PN | **Pn** | **21 53 38.7** | **+1.0** |
| **WRA** | **Warramunga Arr** | **42.31** | **274** | P | **P** | **21 58 44.5** | **+0.3** |
| | 0.4nm,0.4s,baz=111,slow=8.0,SNR=5.2 | | | | | | |
| **FINES** | **FINESS Array B** | **144.97** | **338** | PKPbc | **PKPdf** | **22 10 15.8** | **-2.6** |
| | 3.0nm,0.7s,baz=70,slow=4.6,SNR=20 | | | | | | |
| **HFS** | **Hagfors** | **149.34** | **346** | PKPbc | **PKPbc** | **22 10 31.6** | **+1.1** |
| | 1.3nm,0.8s,baz=101,slow=7.5,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **162.25** | **186** | PKPab | **PKPab** | **22 11 32.6** | **-0.3** |
| | 0.1nm,0.4s,baz=159,slow=3.2,SNR=4.3 | | | | | | |

*ISCJB **26** 21:52:15.8±0.6, 50.14N±0.04×19.09E±0.03, h0km, Error ellipse: s-maj=6.3km s-min=2.9km az=10.3*
*CSEM **26** 21:52:16.8±0.3, 50.15N×19.14E, h1km, ML2.6/4, Error ellipse: s-maj=7.3km s-min=3.4km az=6.0*
*PRU **26** 21:52:17.5, 50.14N×19.14E, h0km*
**ISC 26 21:52:16.7**±0.8, **50.12N**±0.04×**19.14E**±0.03, **h0**km, **n25**, σ0.8**57**/40, **Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.44** | **77** | *e*Pg | **Pg** | **21 52 25.0** | **-0.1** |
| OJC | | | | *e*Sg | **Sg** | **21 52 30.8** | **+0.1** |
| **OJC** | **Ojcow** | **0.44** | **77** | *e*Pg | **Pg** | **21 52 25.0** | **-0.1** |
| OJC | | | | *e*Sg | **Sg** | **21 52 30.8** | **+0.1** |
| **OKC** | **Ostrava-Krasne** | **0.70** | **247** | *e*PG | **Pb** | **21 52 32.0** | **+0.3** |
| OKC | | | | *e*SG | **Sb** | **21 52 41.4** | **-0.5** |
| | comp=Z,6.7nm,0.3s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.70** | **247** | Pg | **Pb** | **21 52 32.0** | **+0.3** |
| OKC | | | | Sg | **Sb** | **21 52 41.4** | **-0.5** |
| | 6.7nm,0.3s | | | | | | |
| **LANS** | **Liptovska Anna** | **0.99** | **167** | *e*PG | **Pg** | **21 52 36.3** | **+0.6** |
| LANS | | | | *e*SG | **Sg** | **21 52 49.0** | **+0.4** |
| **LANS** | **Liptovska Anna** | **0.99** | **167** | *e*Pg | **Pg** | **21 52 36.3** | **+0.6** |
| LANS | | | | *e*Sg | **Sg** | **21 52 49.0** | **+0.4** |
| **MORC** | **Moravsky Berou** | **1.09** | **252** | *e*Pg | **Pb** | **21 52 38.7** | **+0.3** |
| MORC | | | | *e*Sg | **Sb** | **21 52 53.6** | **+0.5** |
| **KRLC** | **Kraliky** | **1.52** | **269** | *e*PG | **Pn** | **21 52 45.3** | **+0.2** |
| KRLC | | | | *e*SG | **Sg** | **21 53 05.6** | **+0.2** |
| **KRLC** | **Kraliky** | **1.52** | **269** | Pg | **Pn** | **21 52 45.3** | **+0.2** |
| KRLC | | | | Sg | **Sg** | **21 53 05.6** | **+0.2** |
| **STHS** | **Stebnicka Huta** | **1.54** | **116** | *e*PN | **Pg** | **21 52 46.4** | **+0.3** |
| STHS | | | | *e*SN | **Sn** | **21 53 06.0** | **0.0** |
| **STHS** | **Stebnicka Huta** | **1.54** | **116** | *e*Pn | **Pg** | **21 52 46.4** | **+0.3** |
| STHS | | | | *e*Sn | **Sn** | **21 53 06.0** | **0.0** |
| **VYHS** | **Vyhne** | **1.64** | **187** | *e*PN | **Pn** | **21 52 46.4** | **-0.4** |
| VYHS | | | | *e*SN | **Sn** | **21 53 07.6** | **-1.0** |
| **VYHS** | **Vyhne** | **1.64** | **187** | *e*Pn | **Pn** | **21 52 46.4** | **-0.4** |
| VYHS | | | | *e*Sn | **Sn** | **21 53 07.6** | **-1.0** |
| **DPC** | **Dobruska-Polom** | **1.82** | **278** | *e*PG | **Pb** | **21 52 51.0** | **+0.1** |
| DPC | | | | *e*SG | **Sg** | **21 53 15.9** | **+0.7** |
| | comp=Z,6.2nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.82** | **278** | Pg | **Pb** | **21 52 51.0** | **+0.1** |
| DPC | | | | Sg | **Sg** | **21 53 15.9** | **+0.7** |
| | 6.2nm,0.4s | | | | | | |
| **UPC** | **Upice** | **2.04** | **282** | *e*SG | **Sg** | **21 53 23.4** | **+1.2** |
| | comp=Z,3.1nm,0.2s | | | | | | |
| **UPC** | **Upice** | **2.04** | **282** | Sg | **Sg** | **21 53 23.4** | **+1.2** |
| | 3.1nm,0.2s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **2.81** | **267** | *e*SG | **Sg** | **21 53 45.9** | **-1.1** |
| **GOPC** | **GO Pecny, Ondr** | **2.81** | **267** | Sg | **Sg** | **21 53 45.9** | **-1.1** |
| **PVCC** | **Panska Ves** | **2.96** | **280** | *e*SG | **Sg** | **21 53 51.5** | **-0.1** |
| | comp=Z,5.2nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **2.96** | **280** | Sg | **Sg** | **21 53 51.5** | **-0.1** |
| | 5.2nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **2.96** | **269** | *e*SG | **Sg** | **21 53 51.1** | **-0.8** |
| **PRU** | **Pruhonice** | **2.96** | **269** | Sg | **Sg** | **21 53 51.1** | **-0.8** |
| **KHC** | **Kasperske Hory** | **3.75** | **257** | *e*SG | **Sg** | **21 54 17.2** | **+0.2** |
| **KHC** | **Kasperske Hory** | **3.75** | **257** | Sg | **Sg** | **21 54 17.2** | **+0.2** |

*ISCJB **26** 21:53:47.0±2.2, 3.6S±0.3×99.5E±0.4, h33km, mb3.5/6, MS4.3/1, Error ellipse: s-maj=69.3km s-min=13.6km az=140.7*
*IDC **26** 21:53:48.2±2.3, 3.70S×99.39E, h33km±6km, mb3.4/6, mb1 3.6/7, mb1mx3.4/50, mbtmp3.7/7, ML4.3/1, MS4.3/1, Ms1 4.3/1, ms1mx2.8/18, Error ellipse: s-maj=86.6km s-min=16.7km az=56.0*
**ISC 26 21:53:48.1**±2.0, **3.7S**±0.3×**99.3E**±0.3, **h35**km, **n9**, σ1.**902**/12, **mb3.5**/6, **Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LEM** | **Lembang** | **8.80** | **111** | Pn | **Pn** | **21 55 53.5** | **+0.4** |
| | 3.7nm,0.3s,baz=319,slow=19,SNR=2.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.04** | **359** | P | **P** | **21 58 39.1** | **-0.7** |
| | 1.4nm,0.8s,baz=189,slow=9.8,SNR=7.2 | | | | | | |
| CMAR | | | | pP | **pP** | **21 58 49.3** | **+0.1** |
| | 1.4nm,0.7s,baz=186,slow=10.0,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.73** | **118** | P | **P** | **22 00 59.6** | **-1.2** |
| | 0.4nm,0.7s,baz=294,slow=9.2,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **38.81** | **124** | P | **P** | **22 01 11.5** | **+1.5** |
| | 0.3nm,0.5s,baz=301,slow=7.2,SNR=3.1 | | | | | | |
| ASAR | | | | pP | **pP** | **22 01 18.9** | **-1.2** |
| | 0.5nm,0.6s,baz=300,slow=8.2,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **51.71** | **6** | P | **P** | **22 02 52.8** | **+0.9** |
| | 0.8nm,0.8s,baz=191,slow=9.1,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.51** | **345** | P | **P** | **22 02 58.3** | **+0.6** |
| | 0.4nm,0.6s,baz=159,slow=7.6,SNR=3.1 | | | | | | |
| MKAR | | | | pP | **pP** | **22 03 07.5** | **-0.8** |
| | 0.3nm,0.4s,baz=152,slow=9.4,SNR=2.5 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **54.02** | **39** | LR | LR | 22 26 45.3 | |
| | comp=Z,258nm,20.1s,baz=320,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.73** | **350** | P | **P** | **22 03 42.9** | **+0.6** |
| | 0.7nm,0.5s,baz=143,slow=5.0,SNR=4.1 | | | | | | |
| ZALV | | | | pP | **pP** | **22 03 51.8** | **-1.1** |
| | 0.5nm,0.4s,baz=145,slow=8.5,SNR=2.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.46** | **38** | PKPbc | **PKPdf** | **22 13 25.0** | **-0.1** |
| | 0.5nm,0.8s,baz=259,slow=1.9,SNR=5.0 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 22 13 37.9 | +0.1 |
| | 0.3nm,0.7s,baz=305,slow=3.2,SNR=3.3 | | | | | | |

*CSEM **26** 21:58:15.5, 38.13N×21.64E, h21km, MD2.6, After ATH*
**ATH 26 21:58:15.6, 38.13N×21.64E, h20**km±1km, **MD2.6**/8, **Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RLS** | **Riolos of Patr** | **0.15** | **242** | *e*PB | Pb | 21 58 20.2 | 0.0 |
| RLS | | | | *e*SB | Sb | 21 58 23.6 | +0.4 |
| **RLS** | **Riolos of Patr** | **0.15** | **242** | *e*Pb | Pb | 21 58 20.2 | 0.0 |
| RLS | | | | *e*Sb | Sb | 21 58 23.6 | +0.4 |
| **DRO** | **Drossia** | **0.19** | **163** | *e*PB | Pb | 21 58 20.7 | +0.1 |
| DRO | | | | *e*SB | Sb | 21 58 24.5 | +0.5 |
| **DRO** | **Drossia** | **0.19** | **163** | *e*Pb | Pb | 21 58 20.7 | +0.1 |
| DRO | | | | *e*Sb | Sb | 21 58 24.5 | +0.5 |
| **LAKA** | **Lakka** | **0.29** | **68** | *e*PB | Pb | 21 58 21.8 | -0.4 |
| LAKA | | | | *e*SB | Sb | 21 58 26.6 | 0.0 |
| **LAKA** | **Lakka** | **0.29** | **68** | *e*Pb | Pb | 21 58 21.8 | -0.4 |
| LAKA | | | | *e*Sb | Sb | 21 58 26.6 | 0.0 |
| **KLV** | **Kalavryta, Ach** | **0.41** | **102** | *e*PB | Pb | 21 58 23.9 | -0.4 |
| KLV | | | | *e*SB | Sb | 21 58 30.5 | +0.3 |
| **KLV** | **Kalavryta, Ach** | **0.41** | **102** | *e*Pb | Pb | 21 58 23.9 | -0.4 |
| KLV | | | | *e*Sb | Sb | 21 58 30.5 | +0.3 |
| **KALE** | **Kalithea** | **0.47** | **56** | *e*PB | Pb | 21 58 24.9 | -0.4 |
| KALE | | | | *e*SB | Sb | 21 58 32.5 | +0.5 |
| **KALE** | **Kalithea** | **0.47** | **56** | *e*Pb | Pb | 21 58 24.9 | -0.4 |
| KALE | | | | *e*Sb | Sb | 21 58 32.5 | +0.5 |
| **GUR** | **Goura** | **0.59** | **109** | *e*PN | Pb | 21 58 26.7 | -0.7 |
| GUR | | | | *e*SN | Sb | 21 58 35.9 | +0.5 |
| **GUR** | **Goura** | **0.59** | **109** | *e*Pn | Pb | 21 58 26.7 | -0.7 |
| GUR | | | | *e*Sn | Sb | 21 58 35.9 | +0.5 |
| **PDO** | **Prodromos** | **0.59** | **323** | *e*PN | Pb | 21 58 27.2 | -0.1 |
| PDO | | | | *e*SN | Sb | 21 58 36.0 | +0.8 |
| **PDO** | **Prodromos** | **0.59** | **323** | *e*Pn | Pb | 21 58 27.2 | -0.1 |
| PDO | | | | *e*Sn | Sb | 21 58 36.0 | +0.8 |
| **AMT** | **Artemida-Makis** | **0.60** | **175** | *e*PN | Pb | 21 58 27.6 | +0.1 |
| AMT | | | | *e*SN | Sb | 21 58 36.0 | +0.5 |
| **AMT** | **Artemida-Makis** | **0.60** | **175** | *e*Pn | Pb | 21 58 27.6 | +0.1 |
| AMT | | | | *e*Sn | Sb | 21 58 36.0 | +0.5 |

*IDC **26** 22:06:22.7±1.4, 36.08N×30.50E, h0km, mb3.4/2, mb1 3.4/6, mb1mx3.1/31, mbtmp3.3/6, ML3.1/4, Error ellipse: s-maj=27.7km s-min=21.2km az=125.0*
*ISK **26** 22:06:25.5, 35.98N×30.46E, h15km, MD3.3*
*ISCJB **26** 22:06:26.2±0.4, 35.90N±0.04×30.53E±0.04, h62km±10km, mb3.3/2, Error ellipse: s-maj=6.1km s-min=5.1km az=156.7*
*CSEM **26** 22:06:27.0±0.4, 35.98N×30.48E, h20km, MD2.9, Error ellipse: s-maj=9.2km s-min=4.6km az=169.0*
*DDA **26** 22:06:33.3, 36.39N×30.31E, h27km, Md2.9*
**ISC 26 22:06:27.7**±2.1, **35.92N**±0.04×**30.51E**±0.04, **h36**km±2km, **n70**, σ1.**902**/86, **Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.79** | **288** | *e*P | **Pn** | **22 06 41.7** | **-0.6** |
| **KSL** | **Kastellorizon** | **0.79** | **288** | *e*P | **Pn** | **22 06 41.7** | **-0.6** |
| **AKAS** | **Kas** | **0.80** | **294** | *i* P | **Pn** | **22 06 42.2** | **-0.4** |
| AKAS | | | | *i* S | **Sn** | **22 06 54.2** | **+0.8** |
| **AKAS** | **Kas** | **0.80** | **294** | P | **Pn** | **22 06 42.2** | **-0.4** |
| AKAS | | | | S | **Sn** | **22 06 54.2** | **+0.8** |
| **ELL** | **Elmali** | **0.96** | **330** | *e*PG | **Pn** | **22 06 43.1** | **-1.7** |
| ELL | | | | *e*SG | **Sn** | **22 06 56.0** | **-1.4** |
| **ELL** | **Elmali** | **0.96** | **330** | *e*Pg | **Pn** | **22 06 43.1** | **-1.7** |
| ELL | | | | *e*Sg | **Sn** | **22 06 56.0** | **-1.4** |
| **ANTB** | **Antalya** | **0.99** | **7** | *e*PG | **Pn** | **22 06 43.9** | **-1.1** |
| ANTB | | | | *e*SG | **Sn** | **22 06 57.4** | **-0.4** |
| **ANTB** | **Antalya** | **0.99** | **7** | *e*Pg | **Pn** | **22 06 43.9** | **-1.1** |
| ANTB | | | | *e*Sg | **Sn** | **22 06 57.4** | **-0.4** |
| **KORT** | **Korkueli** | **1.09** | **353** | *i* P | **Pn** | **22 06 46.1** | **-0.5** |
| **KORT** | **Korkueli** | **1.09** | **353** | P | **Pn** | **22 06 46.1** | **-0.5** |
| KORT | | | | S | **Sn** | **22 07 04.1** | **+3.6** |
| **FETY** | **Fethiye** | **1.36** | **302** | *e*PN | **Pn** | **22 06 49.6** | **-0.5** |
| **FETY** | **Fethiye** | **1.36** | **302** | *e*Pn | **Pn** | **22 06 49.7** | **-0.5** |
| **GOLH** | **Golhisar** | **1.52** | **330** | *i* P | **Pn** | **22 06 53.6** | **+1.1** |
| **GOLH** | **Golhisar** | **1.52** | **330** | P | **Pn** | **22 06 53.6** | **+1.1** |
| GOLH | | | | S | **Sn** | **22 07 12.9** | **+1.8** |
| **BCK** | **Bucak** | **1.54** | **2** | *e*PN | **Pn** | **22 06 52.5** | **-0.2** |
| **BCK** | **Bucak** | **1.54** | **2** | *e*Pn | **Pn** | **22 06 52.5** | **-0.2** |
| **SUTC** | **Sutluce-Ispart** | **1.61** | **14** | *e*PN | **Pn** | **22 06 53.7** | **+0.1** |
| **SUTC** | **Sutluce-Ispart** | **1.61** | **14** | *e*Pn | **Pn** | **22 06 53.7** | **+0.1** |
| **DALY** | **Dalyan (Mu¨la** | **1.75** | **302** | *e*PN | **Pn** | **22 06 55.3** | **-0.1** |
| **DALY** | **Dalyan (Mu¨la** | **1.75** | **302** | *e*Pn | **Pn** | **22 06 55.3** | **-0.1** |
| **ISP** | **Isparta** | **1.90** | **0** | *e*PN | **Pn** | **22 06 58.2** | **+0.5** |
| **ISP** | **Isparta** | **1.90** | **0** | *e*Pn | **Pn** | **22 06 58.2** | **+0.5** |
| **HDMB** | **Hadim** | **1.91** | **56** | *e*PN | **Pn** | **22 06 58.4** | **+0.6** |
| **HDMB** | **Hadim** | **1.91** | **56** | *e*Pn | **Pn** | **22 06 58.4** | **+0.6** |
| **ARG** | **Arkhangelos** | **1.96** | **280** | *e*P | **Pn** | **22 06 58.4** | **+0.1** |
| **ARG** | **Arkhangelos** | **1.96** | **280** | *e*P | **Pn** | **22 06 58.4** | **+0.1** |
| **DNZL** | **Cakiroluk** | **2.12** | **327** | *i* P | **Pn** | **22 07 00.6** | **-0.2** |
| DNZL | | | | *i* S | **Sn** | **22 07 25.8** | **-0.3** |
| **DNZL** | **Cakiroluk** | **2.12** | **327** | P | **Pn** | **22 07 00.6** | **-0.2** |
| DNZL | | | | S | **Sn** | **22 07 25.8** | **-0.3** |
| **YER** | **Yerkesik** | **2.17** | **305** | *e*PN | **Pn** | **22 07 01.3** | **0.0** |
| **YER** | **Yerkesik** | **2.17** | **305** | *e*Pn | **Pn** | **22 07 01.3** | **0.0** |
| **DENT** | **Denizli** | **2.19** | **328** | *e*PN | **Pn** | **22 07 01.3** | **-0.2** |
| **DENT** | **Denizli** | **2.19** | **328** | *e*Pn | **Pn** | **22 07 01.3** | **-0.2** |
| **KONT** | **Konya--Tatoy** | **2.51** | **36** | *e*PN | **Pn** | **22 07 06.7** | **+0.7** |
| **KONT** | **Konya--Tatoy** | **2.51** | **36** | *e*Pn | **Pn** | **22 07 06.7** | **+0.7** |
| **KHL** | **Karahalli** | **2.53** | **342** | *e*PN | **Pn** | **22 07 06.0** | **-0.3** |
| **KHL** | **Karahalli** | **2.53** | **342** | *e*Pn | **Pn** | **22 07 06.0** | **-0.3** |
| **KHAL** | **Karahalli** | **2.58** | **342** | *i* P | **Pn** | **22 07 06.3** | **-0.8** |
| KHAL | | | | *i* S | **Sn** | **22 07 36.1** | **-1.2** |
| **KHAL** | **Karahalli** | **2.58** | **342** | P | **Pn** | **22 07 06.3** | **-0.8** |
| KHAL | | | | S | **Sn** | **22 07 36.1** | **-1.2** |
| **SHUT** | **Suhut-Afyon** | **2.63** | **1** | *e*PN | **Pn** | **22 07 07.9** | **+0.1** |
| **SHUT** | **Suhut-Afyon** | **2.63** | **1** | *e*Pn | **Pn** | **22 07 07.9** | **+0.1** |
| **KARP** | **Karpathos** | **2.75** | **263** | *e*P | **Pn** | **22 07 09.9** | **+0.6** |
| **KARP** | **Karpathos** | **2.75** | **263** | *e*P | **Pn** | **22 07 09.9** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.92** | **315** | *e*PN | **Pn** | **22 07 10.9** | **-0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.92** | **315** | *e*Pn | **Pn** | **22 07 10.9** | **-0.8** |
| **KIZT** | **Kizilcal** | **3.15** | **20** | *e*PN | **Pn** | **22 07 15.2** | **+0.3** |
| **KIZT** | **Kizilcal** | **3.15** | **20** | *e*Pn | **Pn** | **22 07 15.2** | **+0.3** |
| **SMG** | **Samos** | **3.45** | **302** | *e*P | **Pn** | **22 07 18.1** | **-0.8** |
| **SMG** | **Samos** | **3.45** | **302** | *e*P | **Pn** | **22 07 18.1** | **-0.8** |
| **ZKR** | **Zakros** | **3.59** | **258** | *e*P | **Pn** | **22 07 21.4** | **+0.6** |
| **ZKR** | **Zakros** | **3.59** | **258** | *e*P | **Pn** | **22 07 21.4** | **+0.6** |
| **NPS** | **Neapolis** | **4.04** | **262** | *e*P | **Pn** | **22 07 27.4** | **+0.3** |
| **NPS** | **Neapolis** | **4.04** | **262** | *e*P | **Pn** | **22 07 27.4** | **+0.3** |
| **SANT** | **Santorini** | **4.11** | **278** | *e*P | **Pn** | **22 07 27.4** | **-0.6** |
| **SANT** | **Santorini** | **4.11** | **278** | *e*P | **Pn** | **22 07 27.4** | **-0.6** |
| **LAST** | **Lasithi** | **4.17** | **261** | *e*P | **Pn** | **22 07 30.0** | **+1.1** |
| **LAST** | **Lasithi** | **4.17** | **261** | *e*P | **Pn** | **22 07 30.0** | **+1.1** |
| **BRTR** | **Keskin Array B** | **4.54** | **32** | Pn | **Pn** | **22 07 33.5** | **-0.5** |
| | 0.2nm,0.3s,baz=195,slow=15,SNR=6.4 | | | | | | |
| BRTR | | | | Sn | **Sn** | **22 08 25.8** | **+0.3** |
| | 0.2nm,0.3s,baz=198,slow=24,SNR=3.6 | | | | | | |
| **IDI** | **Anoyia** | **4.62** | **264** | Pn | **Pn** | **22 07 35.0** | **0.0** |
| | 1.7nm,0.3s,baz=112,slow=9.2,SNR=19 | | | | | | |
| IDI | | | | Sn | **Sn** | **22 08 25.3** | **-2.2** |
| | 1.8nm,0.3s,baz=278,slow=17,SNR=7.6 | | | | | | |
| **IDI** | **Anoyia** | **4.62** | **264** | *e*P | **Pn** | **22 07 35.3** | **+0.3** |
| **IDI** | **Anoyia** | **4.62** | **264** | *e*P | **Pn** | **22 07 35.3** | **+0.3** |
| **SIVA** | **Sivas** | **4.74** | **261** | *e*P | **Pn** | **22 07 37.7** | **+1.1** |
| **SIVA** | **Sivas** | **4.74** | **261** | *e*P | **Pn** | **22 07 37.7** | **+1.1** |
| **MMAI** | **Mount Meron Ar** | **4.97** | **124** | Pn | **Pn** | **22 07 40.1** | **+0.3** |
| | 1.8nm,0.3s,baz=305,slow=12,SNR=15 | | | | | | |
| MMAI | | | | Sn | **Sn** | **22 08 34.9** | **-1.2** |
| | 2.7nm,0.3s,baz=312,slow=26,SNR=7.7 | | | | | | |
| **IMMV** | **Iera Moni Meta** | **5.33** | **267** | *e*P | **Pn** | **22 07 45.2** | **+0.4** |
| **IMMV** | **Iera Moni Meta** | **5.33** | **267** | *e*P | **Pn** | **22 07 45.2** | **+0.4** |
| **VLI** | **Veliai** | **6.17** | **280** | *e*P | **Pn** | **22 07 56.6** | **+0.4** |
| **VLI** | **Veliai** | **6.17** | **280** | *e*P | **Pn** | **22 07 56.6** | **+0.4** |
| **EIL** | **Elat** | **7.26** | **148** | Pn | **Pn** | **22 08 11.1** | **-0.1** |
| | 0.3nm,0.3s,baz=334,slow=18,SNR=1.8 | | | | | | |
| EIL | | | | Sn | **Sn** | **22 09 28.3** | **-4.1** |
| | 0.3nm,0.3s,baz=82,slow=19,SNR=1.8 | | | | | | |
| **FINES** | **FINESS Array B** | **25.70** | **355** | P | **P** | **22 11 51.3** | **-2.8** |
| | 1.3nm,0.8s,baz=165,slow=12,SNR=2.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **34.43** | **236** | P | **P** | **22 13 13.2** | **+1.4** |
| | 0.2nm,0.7s,baz=29,slow=6.6,SNR=2.0 | | | | | | |

*ISK **26** 22:08:27.0, 35.99N×31.04E, h18km, MD3.7*
*ISCJB **26** 22:08:28.7±0.5, 35.99N±0.04×31.07E±0.05, h54km, Error ellipse: s-maj=7.2km s-min=3.3km az=44.4*
*CSEM **26** 22:08:29.7±0.2, 35.98N×31.04E, h40km, MD3.7, Error ellipse: s-maj=7.8km s-min=3.2km az=39.0*
*NIC **26** 22:08:32.5, 36.04N×31.49E, h40km, mb4.1, ML3.7*
*NSSC **26** 22:08:35.6±2.2, 35.94N×31.95E, h0km, 60km, ML2.6*
**ISC 26 22:08:27.7**±1.2, **35.97N**±0.04×**31.12E**±0.04, **h54**km, **n101**, σ2.**932**/101, **2D, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANTB** | **Antalya** | **1.00** | **338** | *e*PG | **Pn** | **22 08 45.9** | **+0.4** |
| ANTB | | | | *e*SG | **Sn** | **22 08 59.8** | **+1.1** |
| **ANTB** | **Antalya** | **1.00** | **338** | *e*Pg | **Pn** | **22 08 45.9** | **+0.4** |
| ANTB | | | | *e*Sg | **Sn** | **22 08 59.8** | **+1.1** |
| **ELL** | **Elmali** | **1.25** | **309** | *e*PN | **Pn** | **22 08 49.4** | **+0.4** |
| **ELL** | **Elmali** | **1.25** | **309** | *e*Pn | **Pn** | **22 08 49.4** | **+0.4** |
| **AKMC** | **Akamas** | **1.36** | **133** | P | **Pn** | **22 08 53.0** | **+2.6** |
| | baz=326 | | | | | | |
| **AKMC** | **Akamas** | **1.36** | **133** | P | **Pn** | **22 08 53.0** | **+2.6** |
| **ALFC** | **Alevga** | **1.45** | **124** | P | **Pn** | **22 08 53.2** | **+1.6** |
| | baz=314 | | | | | | |
| ALFC | | | | S | **Sn** | **22 09 10.3** | **+0.7** |
| **ALFC** | **Alevga** | **1.45** | **124** | P | **Pn** | **22 08 53.2** | **+1.6** |
| ALFC | | | | S | **Sn** | **22 09 10.3** | **+0.7** |
| **PPCY** | **Paphos** | **1.47** | **137** | P | Pn | 22 08 55.6 | +3.7 |
| | baz=329 | | | | | | |
| **PPCY** | **Paphos** | **1.47** | **137** | P | Pn | 22 08 55.6 | +3.7 |
| **HDMB** | **Hadim** | **1.48** | **48** | *e*PN | **Pn** | **22 08 54.0** | **+1.8** |
| **HDMB** | **Hadim** | **1.48** | **48** | *e*Pn | **Pn** | **22 08 54.0** | **+1.8** |
| **SUTC** | **Sutluce-Ispart** | **1.51** | **356** | *e*PN | **Pn** | **22 08 53.5** | **+1.0** |
| **SUTC** | **Sutluce-Ispart** | **1.51** | **356** | *e*Pn | **Pn** | **22 08 53.5** | **+1.0** |
| **BCK** | **Bucak** | **1.55** | **344** | *e*PN | **Pn** | **22 08 54.0** | **+1.0** |
| **BCK** | **Bucak** | **1.55** | **344** | *e*Pn | **Pn** | **22 08 54.0** | **+1.0** |
| **AKDN** | **Akdeniz- K¨–br** | **1.65** | **114** | *e*PN | **Pn** | **22 08 56.9** | **+2.7** |
| **AKDN** | **Akdeniz- K¨–br** | **1.65** | **114** | *e*Pn | **Pn** | **22 08 56.9** | **+2.7** |
| **LEF** | **Lefka** | **1.67** | **120** | *e*PN | **Pn** | **22 08 56.7** | **+2.1** |
| **LEF** | **Lefka** | **1.67** | **120** | *e*Pn | **Pn** | **22 08 56.7** | **+2.1** |
| **FETY** | **Fethiye** | **1.78** | **293** | *e*PN | **Pn** | **22 08 56.9** | **+0.8** |
| **FETY** | **Fethiye** | **1.78** | **293** | *e*Pn | **Pn** | **22 08 56.9** | **+0.8** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BRBR** | **Barbar** | **4.73** | **121** | *e*P | Pn | 22 09 41.9 | +5.2 |
| BRBR | | | | *e*S | **Sn** | **22 10 30.3** | **+0.1** |
| BRBR | | | | AML | AML | 22 10 43.5 | |
| | comp=E,30nm,0.4s | | | | | | |
| BRBR | | | | AML | AML | 22 10 45.6 | |
| | comp=N,30nm,0.5s | | | | | | |
| **BRBR** | **Barbar** | **4.73** | **121** | *e*P | Pn | 22 09 40.3 | +3.7 |
| BRBR | | | | *e*S | **Sn** | **22 10 27.2** | **-3.0** |
| BRBR | | | | AML | AML | 22 10 43.5 | |
| | comp=E,30nm,0.4s | | | | | | |
| BRBR | | | | AML | AML | 22 10 45.6 | |
| | comp=N,30nm,0.5s | | | | | | |
| **BRBR** | **Barbar** | **4.73** | **121** | *e*P | Pn | 22 09 40.3 | +3.7 |
| BRBR | | | | *e*S | **Sn** | **22 10 27.2** | **-3.0** |
| | comp=N,30nm,0.5s | | | | | | |
| **TOTH** | **TOTAH** | **5.09** | **119** | *e*P | Pn | 22 09 46.2 | +4.8 |
| TOTH | | | | *e*S | **Sn** | **22 10 38.9** | **0.0** |
| TOTH | | | | AML | AML | 22 10 49.5 | |
| | comp=E,29nm,0.6s | | | | | | |
| TOTH | | | | AML | AML | 22 10 52.6 | |
| | comp=N,23nm,0.5s | | | | | | |
| **TOTH** | **TOTAH** | **5.09** | **119** | *e*P | Pn | 22 09 45.5 | +4.0 |
| TOTH | | | | *e*S | **Sn** | **22 10 36.3** | **-2.6** |
| TOTH | | | | AML | AML | 22 10 49.5 | |
| | comp=E,29nm,0.6s | | | | | | |
| TOTH | | | | AML | AML | 22 10 52.6 | |
| | comp=N,23nm,0.5s | | | | | | |
| **TOTH** | **TOTAH** | **5.09** | **119** | *e*P | Pn | 22 09 45.5 | +4.0 |
| TOTH | | | | *e*S | **Sn** | **22 10 36.3** | **-2.6** |
| | comp=N,23nm,0.5s | | | | | | |
| **TCHB** | **Talchebab** | **5.19** | **128** | *e*P | Pn | 22 09 49.6 | +6.8 |
| TCHB | | | | *e*S | **Sn** | **22 10 39.0** | **-2.3** |
| TCHB | | | | AML | AML | 22 10 54.8 | |
| | comp=N,16nm,0.8s | | | | | | |
| TCHB | | | | AML | AML | 22 11 04.4 | |
| | comp=E,29nm,0.5s | | | | | | |
| **TCHB** | **Talchebab** | **5.19** | **128** | *e*P | Pn | 22 09 49.6 | +6.8 |
| TCHB | | | | *e*S | **Sn** | **22 10 39.0** | **-2.3** |
| | comp=E,29nm,0.5s | | | | | | |
| **RABH** | **Abou Rabah** | **5.21** | **105** | *e*P | Pn | 22 09 47.0 | +3.9 |
| RABH | | | | *e*S | **Sn** | **22 10 37.5** | **-4.4** |
| RABH | | | | AML | AML | 22 11 02.5 | |
| | comp=N,9.1nm,0.8s | | | | | | |
| RABH | | | | AML | AML | 22 11 14.3 | |
| | comp=E,8.6nm,0.4s | | | | | | |
| **RABH** | **Abou Rabah** | **5.21** | **105** | *e*P | Pn | 22 09 47.0 | +3.9 |
| RABH | | | | *e*S | **Sn** | **22 10 37.5** | **-4.4** |
| | comp=E,9.0nm,0.4s | | | | | | |
| **ROOS** | **tl_alroos** | **5.37** | **108** | *e*P | Pn | 22 09 48.9 | +3.6 |
| ROOS | | | | *e*S | **Sn** | **22 10 41.9** | **-3.9** |
| ROOS | | | | AML | AML | 22 10 55.2 | |
| | comp=N,32nm,0.6s | | | | | | |
| ROOS | | | | AML | AML | 22 10 56.5 | |
| | comp=E,22nm,0.5s | | | | | | |
| **ROOS** | **tl_alroos** | **5.37** | **108** | *e*P | Pn | 22 09 48.9 | +3.6 |
| ROOS | | | | *e*S | **Sn** | **22 10 41.9** | **-3.9** |
| | comp=E,22nm,0.5s | | | | | | |
| **SALA** | **Sala** | **5.67** | **123** | *e*P | Pn | 22 09 56.4 | +6.9 |
| SALA | | | | *e*S | **Sn** | **22 10 53.3** | **0.0** |
| SALA | | | | AML | AML | 22 11 06.1 | |
| | comp=N,13nm,0.4s | | | | | | |
| SALA | | | | AML | AML | 22 11 09.7 | |
| | comp=E,1.6nm,0.4s | | | | | | |
| **SALA** | **Sala** | **5.67** | **123** | *e*P | Pn | 22 09 55.1 | +5.6 |
| SALA | | | | *e*S | **Sn** | **22 10 50.8** | **-2.5** |
| **SALA** | **Sala** | **5.67** | **123** | *e*P | Pn | 22 09 55.1 | +5.6 |
| SALA | | | | *e*S | **Sn** | **22 10 50.8** | **-2.5** |
| **SLVT** | **Silivri** | **5.72** | **337** | *i* P | **Pn** | **22 09 50.3** | **+0.2** |
| **ZALF** | **Zalf** | **5.96** | **119** | *e*P | Pn | 22 09 59.5 | +6.1 |
| ZALF | | | | *e*S | **Sn** | **22 10 59.3** | **-1.1** |
| ZALF | | | | AML | AML | 22 11 26.2 | |
| | comp=N,5.6nm,0.5s | | | | | | |
| ZALF | | | | AML | AML | 22 11 26.4 | |
| | comp=E,8.4nm,0.6s | | | | | | |
| **ZALF** | **Zalf** | **5.96** | **119** | *e*P | Pn | 22 09 59.7 | +6.3 |
| ZALF | | | | *e*S | **Sn** | **22 10 56.9** | **-3.5** |
| ZALF | | | | AML | AML | 22 11 26.2 | |
| | comp=N,5.6nm,0.5s | | | | | | |
| ZALF | | | | AML | AML | 22 11 26.3 | |
| | comp=E,8.4nm,0.6s | | | | | | |
| **ZALF** | **Zalf** | **5.96** | **119** | *e*P | Pn | 22 09 59.7 | +6.3 |
| ZALF | | | | *e*S | **Sn** | **22 10 56.9** | **-3.5** |
| | comp=E,8.0nm,0.6s | | | | | | |
| **MALT** | **Malatya** | **6.29** | **66** | ⫴ *i*P | **Pn** | **22 10 00.1** | **+2.2** |
| **MALT** | **Malatya** | **6.29** | **66** | ⫴ *i*P | **Pn** | **22 10 00.1** | **+2.2** |

*ISCJB **26** 22:09:40.5±0.3, 40°.84N±0°.02×27°.66E±0°.02, h11km±2km, Error ellipse: s-maj=2.6km s-min=2.3km az=21.5*
*ISK **26** 22:09:40.5, 40°.80N×27°.68E, h10km, MD3.2, ML3.5*
*ATH **26** 22:09:40.3, 40°.89N×27°.67E, h27km±7km, MD3.6/11*
*DDA **26** 22:09:40.5, 40°.80N×27°.67E, h26km, Md3.2*
*CSEM **26** 22:09:41.1±0.1, 40°.80N×27°.67E, h10km, MD3.2, Error ellipse: s-maj=1.5km s-min=1.1km az=13.0*
*THE **26** 22:09:42.0, 40°.74N×27°.52E, h0km±4km, ML3.2/3, Error ellipse: s-maj=7.8km s-min=0.7km az=63.0*
*SOF **26** 22:09:43.5, 41°.06N×27°.39E, h2km, MD3.1*
*BEO **26** 22:09:49.9±1.0, 42°.30N×27°.76E, h0km, ML3.6/4*
**ISC 26 22:09:41.0**±0.8, **40°.82**N±0°.02×**27°.67E**±0°.01, **h16**km±5km, **n202**, σ1§**06**/239, **10C-19D**, **Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TKR** | **Tekirdag** | **0.20** | **330** | PG | **Pg** | **22 09 45.6** | **-0.2** |
| TKR | | | | *e*SG | **Sg** | **22 09 49.3** | **+0.3** |
| **TKR** | **Tekirdag** | **0.20** | **330** | *i* Pg | **Pg** | **22 09 45.6** | **-0.2** |
| TKR | | | | *e*Sg | **Sg** | **22 09 49.3** | **+0.3** |
| **MRMT** | **Marmara Adasi** | **0.22** | **194** | PG | **Pg** | **22 09 45.4** | **-0.8** |
| MRMT | | | | *e*SG | **Sg** | **22 09 48.7** | **-1.0** |
| **MRMT** | **Marmara Adasi** | **0.22** | **194** | *i* Pg | **Pg** | **22 09 45.4** | **-0.8** |
| MRMT | | | | *e*Sg | **Sg** | **22 09 48.7** | **-1.0** |
| **CRLT** | **Corlu** | **0.31** | **9** | PG | **Pg** | **22 09 47.6** | **0.0** |
| **CRLT** | **Corlu** | **0.31** | **9** | *i* Pg | **Pg** | **22 09 47.7** | **0.0** |
| **SART** | **Tekirdag** | **0.39** | **251** | *i* S | **Sg** | **22 09 54.7** | **+0.2** |
| **SART** | **Tekirdag** | **0.39** | **251** | *i* P | **Pg** | **22 09 49.0** | **-0.1** |
| **SART** | **Tekirdag** | **0.39** | **251** | P | **Pg** | **22 09 49.0** | **-0.1** |
| SART | | | | S | **Sg** | **22 09 54.7** | **+0.2** |
| **RKY** | **Sarkoy-Tekirda** | **0.40** | **251** | *e*PG | **Pg** | **22 09 49.0** | **-0.1** |
| RKY | | | | *e*SG | **Sg** | **22 09 55.0** | **+0.4** |
| **RKY** | **Sarkoy-Tekirda** | **0.40** | **251** | *e*Pg | **Pg** | **22 09 49.0** | **-0.1** |
| RKY | | | | *e*Sg | **Sg** | **22 09 55.0** | **+0.4** |
| **EDC** | **Edincik** | **0.49** | **162** | *e*PG | **Pg** | **22 09 50.3** | **-0.6** |
| EDC | | | | *e*SG | **Sg** | **22 09 57.3** | **-0.2** |
| **EDC** | **Edincik** | **0.49** | **162** | *e*Pg | **Pg** | **22 09 50.3** | **-0.6** |
| EDC | | | | *e*Sg | **Sg** | **22 09 57.3** | **-0.2** |
| **BNT** | **Bandirma** | **0.50** | **157** | *e*PG | **Pg** | **22 09 50.4** | **-0.6** |
| **BNT** | **Bandirma** | **0.50** | **157** | *e*Pg | **Pg** | **22 09 50.4** | **-0.6** |
| **SLVT** | **Silivri** | **0.58** | **45** | *i* S | **Sg** | **22 09 56.9** | **-3.4** |
| **KCTX** | **Karacabey (Bur** | **0.76** | **136** | *e*PG | **Pb** | **22 09 55.2** | **-0.7** |
| **KCTX** | **Karacabey (Bur** | **0.76** | **136** | *e*Pg | **Pb** | **22 09 55.2** | **-0.7** |
| **GONE** | **Gonen-Balikesi** | **0.77** | **179** | *e*PG | **Pb** | **22 09 55.6** | **-0.4** |
| **GONE** | **Gonen-Balikesi** | **0.77** | **179** | *e*Pg | **Pb** | **22 09 55.6** | **-0.4** |
| **CTYL** | **Yal??k??y-??at** | **0.81** | **35** | *e*PG | **Pg** | **22 09 56.8** | **+0.1** |
| **CTYL** | **Yal??k??y-??at** | **0.81** | **35** | *e*Pg | **Pg** | **22 09 56.8** | **+0.1** |
| **PHSR** | **Pinarhisar** | **0.82** | **352** | *e*PG | **Pg** | **22 09 57.2** | **+0.2** |
| **PHSR** | **Pinarhisar** | **0.82** | **352** | *e*Pg | **Pg** | **22 09 57.2** | **+0.2** |
| **LPK** | **Lapseki** | **0.82** | **237** | *e*PG | **Pb** | **22 09 56.6** | **-0.3** |
| **LPK** | **Lapseki** | **0.82** | **237** | *e*Pg | **Pb** | **22 09 56.6** | **-0.3** |
| **ERIK** | **Erikli-Kesan** | **0.89** | **261** | *e*PG | **Pb** | **22 09 58.0** | **0.0** |
| **ERIK** | **Erikli-Kesan** | **0.89** | **261** | *e*Pg | **Pb** | **22 09 58.0** | **0.0** |
| **BGKT** | **Bogazkoy** | **0.91** | **66** | *e*PG | **Pb** | **22 09 58.3** | **-0.1** |
| **BGKT** | **Bogazkoy** | **0.91** | **66** | *e*Pg | **Pb** | **22 09 58.3** | **-0.1** |
| **ARMT** | **Armutlu** | **0.94** | **105** | *e*PG | **Pb** | **22 09 59.0** | **0.0** |
| **ARMT** | **Armutlu** | **0.94** | **105** | *e*Pg | **Pb** | **22 09 59.0** | **0.0** |
| **MDNY** | **Mudanya-Bursa** | **1.03** | **116** | *e*PG | **Pb** | **22 10 00.5** | **+0.1** |
| **MDNY** | **Mudanya-Bursa** | **1.03** | **116** | *e*Pg | **Pb** | **22 10 00.5** | **+0.1** |
| **ISK** | **Istanbul-Kandi** | **1.08** | **76** | *e*PG | **Pb** | **22 10 01.2** | **-0.1** |
| **ISK** | **Istanbul-Kandi** | **1.08** | **76** | *e*Pg | **Pb** | **22 10 01.2** | **-0.1** |
| **BUY** | **Buyukada** | **1.10** | **88** | *i* P | **Pb** | **22 10 01.5** | **-0.1** |
| BUY | | | | *i* S | **Sg** | **22 10 17.5** | **+0.8** |
| **BUY** | **Buyukada** | **1.10** | **88** | P | **Pb** | **22 10 01.5** | **-0.1** |
| BUY | | | | S | **Sg** | **22 10 17.5** | **+0.8** |
| **KLYT** | **Kilyos** | **1.13** | **67** | *e*PN | **Pn** | **22 10 02.3** | **+0.2** |
| **KLYT** | **Kilyos** | **1.13** | **67** | *e*Pn | **Pn** | **22 10 02.3** | **+0.2** |
| **BALB** | **Balikesir** | **1.19** | **172** | *e*PN | **Pb** | **22 10 03.5** | **+0.4** |
| **BALB** | **Balikesir** | **1.19** | **172** | *e*Pn | **Pb** | **22 10 03.5** | **+0.4** |
| **ORLT** | **Orhaneli** | **1.21** | **129** | *e*PN | **Pb** | **22 10 03.8** | **+0.2** |
| **ORLT** | **Orhaneli** | **1.21** | **129** | *e*Pn | **Pb** | **22 10 03.8** | **+0.2** |
| **GEMT** | **Gemlik** | **1.22** | **108** | *e*PN | **Pg** | **22 10 04.2** | **-0.4** |
| **GEMT** | **Gemlik** | **1.22** | **108** | *e*Pn | **Pg** | **22 10 04.2** | **-0.4** |
| **ALN** | **Alexandroupoli** | **1.23** | **274** | *e*PN | **Pb** | **22 10 04.3** | **+0.4** |
| **ALN** | **Alexandroupoli** | **1.23** | **274** | *e*PN | **Pb** | **22 10 03.9** | **0.0** |
| ALN | | | | *e*SN | **Sn** | **22 10 20.1** | **+0.3** |
| **ALN** | **Alexandroupoli** | **1.23** | **274** | *e*Pn | **Pb** | **22 10 04.3** | **+0.4** |
| ALN | | | | *e*Sn | **Sn** | **22 10 20.1** | **+0.3** |
| **EDRB** | **Edirne** | **1.24** | **326** | *e*PN | **Pb** | **22 10 04.6** | **+0.5** |
| **EDRB** | **Edirne** | **1.24** | **326** | *e*Pn | **Pb** | **22 10 04.6** | **+0.5** |
| **IGD** | **Bursa** | **1.29** | **115** | P | **Pb** | **22 10 04.8** | **-0.1** |
| IGD | | | | S | **Sg** | **22 10 22.1** | **-0.7** |
| **DURS** | **Dursunbey** | **1.36** | **153** | *i* P | **Pb** | **22 10 06.0** | **-0.2** |
| DURS | | | | *i* S | **Sb** | **22 10 24.4** | **+1.0** |
| **DURS** | **Dursunbey** | **1.36** | **153** | P | **Pb** | **22 10 06.0** | **-0.2** |
| DURS | | | | S | **Sb** | **22 10 24.4** | **+1.0** |
| **DST** | **Dursunbey** | **1.42** | **149** | *e*PN | **Pb** | **22 10 06.8** | **-0.2** |
| **DST** | **Dursunbey** | **1.42** | **149** | *e*Pn | **Pb** | **22 10 06.8** | **-0.2** |
| **EZN** | **Ezine** | **1.43** | **226** | *e*PN | **Pb** | **22 10 07.0** | **-0.2** |
| **EZN** | **Ezine** | **1.43** | **226** | *e*Pn | **Pb** | **22 10 07.0** | **-0.2** |
| **IZI** | **Iznik** | **1.46** | **109** | *e*PN | **Pb** | **22 10 07.3** | **-0.4** |
| **IZI** | **Iznik** | **1.46** | **109** | *e*Pn | **Pb** | **22 10 07.3** | **-0.4** |
| **GADA** | **Gvkgeada** | **1.49** | **246** | *e*PN | **Pn** | **22 10 07.6** | **+0.6** |
| **GADA** | **Gvkgeada** | **1.49** | **246** | *e*Pn | **Pn** | **22 10 07.6** | **+0.6** |
| **HRT** | **Hereke** | **1.52** | **89** | *e*PN | **Pn** | **22 10 08.0** | **+0.5** |
| **HRT** | **Hereke** | **1.52** | **89** | *e*Pn | **Pn** | **22 10 08.0** | **+0.5** |
| **SILT** | **Sile** | **1.53** | **77** | *e*PN | **Pb** | **22 10 08.4** | **-0.6** |
| **SILT** | **Sile** | **1.53** | **77** | *e*Pn | **Pb** | **22 10 08.4** | **-0.6** |
| **BOZC** | **Bozcaada** | **1.57** | **232** | P | **Pb** | **22 10 09.3** | **-0.4** |
| BOZC | | | | S | **Sb** | **22 10 29.8** | **+0.4** |
| **ADVT** | **Abdulvahap** | **1.62** | **103** | *e*PN | **Pn** | **22 10 09.6** | **+0.7** |
| **ADVT** | **Abdulvahap** | **1.62** | **103** | *e*Pn | **Pn** | **22 10 09.6** | **+0.7** |
| **RDO** | **Rodhopi** | **1.65** | **282** | *e*PN | **Pn** | **22 10 10.1** | **+0.9** |
| RDO | | | | *e*SN | **Sn** | **22 10 29.9** | **-0.1** |
| **RDO** | **Rodhopi** | **1.65** | **282** | *e*Pn | **Pn** | **22 10 10.1** | **+0.9** |
| RDO | | | | *e*Sn | **Sn** | **22 10 29.9** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **1.66** | **259** | *e*PB | **Pn** | **22 10 09.6** | **+0.1** |
| SMTH | | | | *e*SN | **Sb** | **22 10 31.9** | **0.0** |
| **SMTH** | **Samothraki Isl** | **1.66** | **259** | P | **Pn** | **22 10 09.4** | **-0.1** |
| SMTH | | | | S | **Sn** | **22 10 31.3** | **+0.8** |
| **SMTH** | **Samothraki Isl** | **1.66** | **259** | *e*Pn | **Pn** | **22 10 09.6** | **+0.1** |
| SMTH | | | | S | **Sn** | **22 10 31.3** | **+0.8** |
| SMTH | | | | *e*Sn | **Sb** | **22 10 31.9** | **0.0** |
| **AYVA** | **Ayvalik** | **1.69** | **207** | *i* P | **Pb** | **22 10 12.5** | **+0.9** |
| **AYVA** | **Ayvalik** | **1.69** | **207** | *i* S | **Sb** | **22 10 33.6** | **+1.1** |
| **AYVA** | **Ayvalik** | **1.69** | **207** | P | **Pb** | **22 10 12.5** | **+0.9** |
| AYVA | | | | S | **Sb** | **22 10 33.6** | **+1.1** |
| **CAVI** | **Cavuskoy** | **1.77** | **110** | *e*PN | **Pn** | **22 10 11.8** | **+0.9** |
| **CAVI** | **Cavuskoy** | **1.77** | **110** | *e*Pn | **Pn** | **22 10 11.8** | **+0.9** |
| **DKL** | **Dikili** | **1.84** | **199** | *e*PN | **Pn** | **22 10 13.1** | **+1.2** |
| **DKL** | **Dikili** | **1.84** | **199** | *e*Pn | **Pn** | **22 10 13.1** | **+1.2** |
| **KDZ** | **Kurdzhali** | **1.89** | **297** | *i* P | **Pn** | **22 10 13.7** | **+1.1** |
| **KDZ** | **Kurdzhali** | **1.89** | **297** | *i* P | **Pn** | **22 10 13.7** | **+1.1** |
| **PRK** | **Paraskevi** | **1.90** | **215** | *e*PB | **Pb** | **22 10 14.4** | **-0.9** |
| PRK | | | | *e*SN | **Sb** | **22 10 38.3** | **-0.5** |
| **PRK** | **Paraskevi** | **1.90** | **215** | P | **Pn** | **22 10 13.0** | **+0.3** |
| PRK | | | | S | **Sn** | **22 10 37.2** | **+0.9** |
| **PRK** | **Paraskevi** | **1.90** | **215** | P | **Pn** | **22 10 13.0** | **+0.3** |
| **PRK** | **Paraskevi** | **1.90** | **215** | *e*Pn | **Pb** | **22 10 14.4** | **-0.9** |
| **PRK** | **Paraskevi** | **1.90** | **215** | S | **Sn** | **22 10 37.2** | **+0.9** |
| PRK | | | | *e*Sn | **Sb** | **22 10 38.3** | **-0.5** |
| **TVSB** | **Tavsanli** | **1.94** | **134** | *e*PN | **Pn** | **22 10 14.3** | **+1.0** |
| **TVSB** | **Tavsanli** | **1.94** | **134** | *e*Pn | **Pn** | **22 10 14.3** | **+1.0** |
| **AKHS** | **Akhisar** | **1.94** | **177** | *i* P | **Pn** | **22 10 13.9** | **+0.6** |
| AKHS | | | | *i* S | **Sn** | **22 10 36.4** | **-0.9** |
| **AKHS** | **Akhisar** | **1.94** | **177** | P | **Pn** | **22 10 13.9** | **+0.6** |
| AKHS | | | | S | **Sn** | **22 10 36.4** | **-0.9** |
| **AKS** | **Akhisar** | **1.94** | **177** | *e*PN | **Pn** | **22 10 14.3** | **+1.0** |
| **AKS** | **Akhisar** | **1.94** | **177** | *e*Pn | **Pn** | **22 10 14.3** | **+1.0** |
| **DEMI** | **Demirci** | **1.95** | **155** | *i* P | **Pn** | **22 10 14.5** | **+1.0** |
| DEMI | | | | *i* S | **Sb** | **22 10 39.0** | **-0.6** |
| **DEMI** | **Demirci** | **1.95** | **155** | P | **Pn** | **22 10 14.5** | **+1.0** |
| DEMI | | | | S | **Sb** | **22 10 39.6** | **-0.6** |
| **SPNC** | **Sapanca-Adapaz** | **2.01** | **93** | *e*PN | **Pn** | **22 10 15.5** | **+1.3** |
| **SPNC** | **Sapanca-Adapaz** | **2.01** | **93** | *e*Pn | **Pn** | **22 10 15.5** | **+1.3** |
| **DIM** | **Dimitrovgrad** | **2.02** | **308** | *i* P | **Pn** | **22 10 15.0** | **+0.6** |
| **DIM** | **Dimitrovgrad** | **2.02** | **308** | *i* P | **Pn** | **22 10 15.0** | **+0.6** |
| **GPA** | **Golpazari** | **2.08** | **104** | *e*PN | **Pn** | **22 10 16.5** | **+1.3** |
| **GPA** | **Golpazari** | **2.08** | **104** | *e*Pn | **Pn** | **22 10 16.5** | **+1.3** |
| **LIA** | **Limnos Island** | **2.11** | **245** | *e*PN | **Pn** | **22 10 15.8** | **+0.2** |
| LIA | | | | *e*SN | **Sb** | **22 10 43.7** | **-1.1** |
| **LIA** | **Limnos Island** | **2.11** | **245** | P | **Pn** | **22 10 15.7** | **+0.2** |
| LIA | | | | S | **Sn** | **22 10 42.1** | **+0.7** |
| **LIA** | **Limnos Island** | **2.11** | **245** | *e*Pn | **Pn** | **22 10 15.8** | **+0.2** |
| LIA | | | | S | **Sn** | **22 10 42.1** | **+0.7** |
| LIA | | | | *e*Sn | **Sb** | **22 10 43.7** | **-1.1** |
| **SIGR** | **SIGRI** | **2.12** | **222** | *e*PN | **Pn** | **22 10 17.5** | **+1.7** |
| **SIGR** | **SIGRI** | **2.12** | **222** | *e*PB | **Pb** | **22 10 17.6** | **-1.5** |
| SIGR | | | | *e*SN | **Sn** | **22 10 42.9** | **+1.4** |
| **SIGR** | **SIGRI** | **2.12** | **222** | P | **Pn** | **22 10 16.0** | **+0.2** |
| **SIGR** | **SIGRI** | **2.12** | **222** | P | **Pn** | **22 10 16.0** | **+0.2** |
| **SIGR** | **SIGRI** | **2.12** | **222** | *e*Pn | **Pn** | **22 10 17.5** | **+1.7** |
| **SIGR** | **SIGRI** | **2.12** | **222** | *e*Sn | **Sn** | **22 10 43.2** | **+1.4** |
| **GULT** | **Gulveren** | **2.20** | **99** | *e*PN | **Pn** | **22 10 18.1** | **+1.2** |
| **GULT** | **Gulveren** | **2.20** | **99** | *e*Pn | **Pn** | **22 10 18.2** | **+1.2** |
| **BORA** | **Eskisehir** | **2.33** | **113** | *i* P | **Pn** | **22 10 19.4** | **+0.7** |
| **BORA** | **Eskisehir** | **2.33** | **113** | P | **Pn** | **22 10 19.4** | **+0.7** |
| BORA | | | | S | **Sg** | **22 10 54.1** | **-1.7** |
| **RZN** | **Rozhen** | **2.39** | **292** | *i* P | **Pn** | **22 10 20.5** | **+0.9** |
| **RZN** | **Rozhen** | **2.39** | **292** | *i* P | **Pn** | **22 10 20.5** | **+0.9** |
| **KAVA** | **Kavala** | **2.40** | **275** | P | **Pn** | **22 10 20.5** | **+0.9** |
| **KAVA** | **Kavala** | **2.40** | **275** | P | **Pn** | **22 10 20.5** | **+0.9** |
| **PLD** | **Plovdiv** | **2.57** | **301** | *i* P | **Pn** | **22 10 22.6** | **+0.6** |
| **PLD** | **Plovdiv** | **2.57** | **301** | *i* P | **Pn** | **22 10 22.6** | **+0.6** |
| **MDUB** | **Mudurnu** | **2.71** | **96** | *e*PN | **Pn** | **22 10 25.5** | **+1.6** |
| **MDUB** | **Mudurnu** | **2.71** | **96** | *e*Pn | **Pn** | **22 10 25.5** | **+1.6** |
| **ZEY** | **¯zmir** | **2.73** | **200** | P | **Pn** | **22 10 30.9** | **+1.5** |
| ZEY | | | | S | **Sg** | **22 11 08.1** | **-0.6** |
| **SZH** | **Strazhica** | **2.77** | **333** | *i* P | **Pn** | **22 10 25.5** | **+0.9** |
| **SZH** | **Strazhica** | **2.77** | **333** | *i* P | **Pn** | **22 10 25.5** | **+0.9** |
| **OUR** | **Ouranopolis** | **2.85** | **261** | *e*PN | **Pn** | **22 10 25.8** | **+0.1** |
| **OUR** | **Ouranopolis** | **2.85** | **261** | *e*Pn | **Pn** | **22 10 25.8** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.87** | **176** | *e*PN | **Pn** | **22 10 27.3** | **+1.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.87** | **176** | *e*Pn | **Pn** | **22 10 27.3** | **+1.1** |
| **NVR** | **Nevrokopi** | **2.93** | **282** | *e*PN | **Pn** | **22 10 27.8** | **+0.9** |
| NVR | | | | *e*SN | **Sn** | **22 11 02.5** | **+0.8** |
| **NVR** | **Nevrokopi** | **2.93** | **282** | P | **Pn** | **22 10 28.1** | **+1.2** |
| **NVR** | **Nevrokopi** | **2.93** | **282** | *e*Pn | **Pn** | **22 10 27.8** | **+0.9** |
| **NVR** | **Nevrokopi** | **2.93** | **282** | P | **Pn** | **22 10 28.1** | **+1.2** |
| NVR | | | | *e*Sn | **Sn** | **22 11 02.5** | **+0.8** |
| **MMB** | **Musomiste** | **3.07** | **286** | *i* P | **Pn** | **22 10 29.3** | **+0.4** |
| **MMB** | **Musomiste** | **3.07** | **286** | *i* P | **Pn** | **22 10 29.3** | **+0.4** |
| **MANR** | **Mangalia** | **3.07** | **13** | ⫯ P | **Pg** | **22 10 37.7** | **-2.2** |
| **SRS** | **Serrai** | **3.10** | **277** | *e*PN | **Pn** | **22 10 29.8** | **+0.6** |
| **SRS** | **Serrai** | **3.10** | **277** | P | **Pn** | **22 10 29.8** | **+0.6** |
| **SRS** | **Serrai** | **3.10** | **277** | P | **Pn** | **22 10 29.8** | **+0.6** |
| **PGB** | **Panagyurishte** | **3.14** | **305** | *i* P | **Pn** | **22 10 31.4** | **+1.5** |
| **PGB** | **Panagyurishte** | **3.14** | **305** | *i* P | **Pn** | **22 10 31.4** | **+1.5** |
| **PAIG** | **Paliouri** | **3.17** | **255** | *e*PN | **Pn** | **22 10 31.0** | **+0.8** |
| **PAIG** | **Paliouri** | **3.17** | **255** | *e*Pn | **Pn** | **22 10 31.0** | **+0.8** |
| **PLG** | **Polygyros** | **3.25** | **264** | *e*PN | **Pn** | **22 10 31.6** | **+0.3** |
| **PLG** | **Polygyros** | **3.25** | **264** | *e*Pn | **Pn** | **22 10 31.6** | **+0.3** |
| **MSAB** | **Monastry St. A** | **3.27** | **2** | ⫴ *i*P | **Pn** | **22 10 33.0** | **+1.4** |
| **MSAB** | **Monastry St. A** | **3.27** | **2** | ⫴ *i*P | **Pn** | **22 10 33.0** | **+1.4** |
| **SOH** | **Sokhos** | **3.27** | **271** | *e*PN | **Pn** | **22 10 32.2** | **+0.5** |
| **SOH** | **Sokhos** | **3.27** | **271** | *e*Pn | **Pn** | **22 10 32.2** | **+0.5** |
| **AOS** | **Alonnisos** | **3.34** | **242** | *e*PN | **Pn** | **22 10 33.1** | **+0.5** |
| **AOS** | **Alonnisos** | **3.34** | **242** | *e*Pn | **Pn** | **22 10 33.1** | **+0.5** |
| **HORT** | **Hortiatis** | **3.48** | **268** | *e*PN | **Pn** | **22 10 35.2** | **+0.7** |
| **HORT** | **Hortiatis** | **3.48** | **268** | *e*Pn | **Pn** | **22 10 35.2** | **+0.7** |
| **KKB** | **Krupnik** | **3.61** | **288** | *i* P | **Pn** | **22 10 37.3** | **+1.1** |
| **KKB** | **Krupnik** | **3.61** | **288** | *i* P | **Pn** | **22 10 37.3** | **+1.1** |
| **KNT** | **Kendrikon** | **3.63** | **277** | *e*PN | **Pn** | **22 10 37.8** | **+1.3** |
| **KNT** | **Kendrikon** | **3.63** | **277** | P | **Pn** | **22 10 37.5** | **+1.0** |
| **KNT** | **Kendrikon** | **3.63** | **277** | P | **Pn** | **22 10 37.5** | **+1.0** |
| **KNT** | **Kendrikon** | **3.63** | **277** | *e*Pn | **Pn** | **22 10 37.8** | **+1.3** |
| **TLB** | **Topalu** | **3.77** | **4** | ⫴ *i*P | **Pn** | **22 10 39.4** | **+0.9** |
| **TLB** | **Topalu** | **3.77** | **4** | ⫴ *i*P | **Pn** | **22 10 39.4** | **+0.9** |
| **VTS** | **Vitosha** | **3.78** | **299** | *i* P | **Pn** | **22 10 40.5** | **+1.8** |
| **VTS** | **Vitosha** | **3.78** | **299** | *i* P | **Pn** | **22 10 40.5** | **+1.8** |
| **MPEP** | **Malo Peshtene** | **3.87** | **312** | *i* P | **Pn** | **22 10 41.0** | **+1.2** |
| **HARR** | **Harsova** | **3.87** | **3** | ⫯ *i*P | **Pn** | **22 10 39.1** | **-0.7** |
| **HARR** | **Harsova** | **3.87** | **3** | ⫯ *i*P | **Pn** | **22 10 39.1** | **-0.7** |
| **VAY** | **Valandovo** | **3.89** | **279** | *e*Sn | **Sb** | **22 11 36.7** | **+0.8** |
| **HUMR** | **Humele** | **4.20** | **333** | ⫯ *i*P | Pn | 22 10 38.7 | -5.7 |
| **CFR** | **Carcaliu** | **4.37** | **4** | ⫴ *i*P | **Pn** | **22 10 47.4** | **+0.8** |
| **CFR** | **Carcaliu** | **4.37** | **4** | ⫴ *i*P | **Pn** | **22 10 47.4** | **+0.8** |
| **ZAPS** | **Zavoj** | **4.48** | **305** | *e*Pn | **Pn** | **22 10 50.3** | **+2.1** |
| **GRER** | | **4.59** | **354** | ⫴ *i*P | Pn | 22 10 53.3 | +3.6 |
| **GRER** | | **4.59** | **354** | ⫴ *i*P | Pn | 22 10 53.3 | +3.6 |
| **BARS** | **Barje** | **4.81** | **296** | *e*Pn | **Pn** | **22 10 54.5** | **+1.8** |
| BARS | | | | *e*Sg | **Sg** | **22 12 10.5** | **-4.8** |
| **BARS** | **Barje** | **4.81** | **296** | *e*Pn | **Pn** | **22 10 54.5** | **+1.8** |
| BARS | | | | *e*Sg | **Sg** | **22 12 10.5** | **-4.8** |
| **MLR** | **Muntele Rosu** | **4.84** | **345** | ⫯ *i*P | **Pn** | **22 10 56.0** | **+2.8** |
| **MLR** | **Muntele Rosu** | **4.84** | **345** | ⫯ *i*P | **Pn** | **22 10 56.0** | **+2.8** |
| **VOIR** | | **5.00** | **338** | ⫴ *i*P | **Pn** | **22 10 57.2** | **+1.8** |
| **VOIR** | | **5.00** | **338** | ⫴ *i*P | **Pn** | **22 10 57.2** | **+1.8** |
| **ARR** | **Arges** | **5.06** | **335** | ⫴ *i*P | **Pn** | **22 10 57.3** | **+1.1** |
| **ARR** | **Arges** | **5.06** | **335** | ⫴ *i*P | **Pn** | **22 10 57.3** | **+1.1** |
| **VRI** | **Vrincioaia** | **5.09** | **353** | ⫴ *i*P | **Pn** | **22 10 58.8** | **+2.2** |
| **VRI** | **Vrincioaia** | **5.09** | **353** | ⫴ *i*P | **Pn** | **22 10 58.8** | **+2.2** |
| **BOLS** | **Boljevac** | **5.20** | **307** | *e*Pn | **Pn** | **22 10 58.7** | **+0.7** |
| **BOLS** | **Boljevac** | **5.20** | **307** | *e*Pn | **Pn** | **22 10 58.7** | **+0.7** |
| **BOVS** | **Bovan** | **5.25** | **304** | *e*Pn | **Pn** | **22 10 59.5** | **+0.8** |
| **BOVS** | **Bovan** | **5.25** | **304** | *e*Pn | **Pn** | **22 10 59.5** | **+0.8** |
| **DOPR** | **Dopca** | **5.41** | **343** | ⫴ *i*P | **Pn** | **22 11 02.9** | **+2.0** |
| **DOPR** | **Dopca** | **5.41** | **343** | ⫴ *i*P | **Pn** | **22 11 02.9** | **+2.0** |
| **LOT** | **Lotru** | **5.43** | **330** | ⫴ *i*P | **Pn** | **22 11 01.7** | **+0.3** |
| **LOT** | **Lotru** | **5.43** | **330** | ⫴ *i*P | **Pn** | **22 11 01.7** | **+0.3** |
| **SELS** | **Selova** | **5.44** | **298** | *e*Pn | **Pn** | **22 11 04.5** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **TVSB** | **Tavsanli** | **2.75** | **77** | *e*Pn | **Pn** | **22 19 55.8** | **+1.2** |
| **ARMT** | **Armutlu** | **2.77** | **52** | *e*PN | **Pn** | **22 19 56.4** | **+1.5** |
| **ARMT** | **Armutlu** | **2.77** | **52** | *e*Pn | **Pn** | **22 19 56.4** | **+1.5** |

**MEX 26 22:23:44.7**±0.5,**14°86N**×**93°20W**,**h5**km,**MD3.5**,**Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.84** | **359** | *e*P | Pg | 22 23 59.3 | -1.6 |
| PCIG | | | | *e*S | Sg | 22 24 10.3 | -1.5 |
| PCIG | | | | *e*S | Sb | 22 24 10.8 | -2.7 |

*DDA* ***26*** *22:35:39.2, 38°.83N×25°.96E, h7*km*, Md2.6*
*CSEM* ***26*** *22:35:39.0±0.7, 38°.75N×25°.97E, h5*km*, MD2.2, Error ellipse: s-maj=14.1km s-min=6.0km az=17.0*
*ISK* ***26*** *22:35:41.7, 39°.03N×26°.14E, h5*km*, MD2.2*

**ISC 26 22:35:38.8**±3.4,**38°.8N**±0°.1×**25°.94E**±0°.09,**h12**km,**n11**, σ0**836**/18,**Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIGR** | **SIGRI** | **0.40** | **351** | *e*PG | **Pb** | **22 35 48.3** | **+0.4** |
| SIGR | | | | *e*SG | **Sb** | **22 35 53.9** | **-0.2** |
| **SIGR** | **SIGRI** | **0.40** | **351** | *e*Pg | **Pb** | **22 35 48.3** | **+0.4** |
| SIGR | | | | *e*Sg | **Sb** | **22 35 53.9** | **-0.2** |
| **AYVA** | **Ayvalik** | **0.77** | **49** | *i* P | **Pg** | **22 35 53.7** | **0.0** |
| AYVA | | | | *i* S | **Sb** | **22 36 05.1** | **+0.6** |
| **AYVA** | **Ayvalik** | **0.77** | **49** | P | **Pg** | **22 35 53.7** | **0.0** |
| AYVA | | | | S | **Sb** | **22 36 05.1** | **+0.6** |
| **DKL** | **Dikili** | **0.80** | **71** | *e*PG | **Pb** | **22 35 54.7** | **+0.1** |
| DKL | | | | *e*SG | **Sg** | **22 36 04.2** | **-0.5** |
| **DKL** | **Dikili** | **0.80** | **71** | *e*Pg | **Pb** | **22 35 54.7** | **+0.1** |
| DKL | | | | *e*Sg | **Sg** | **22 36 04.2** | **-0.5** |
| **BOZC** | **Bozcaada** | **1.03** | **5** | P | **Pg** | **22 35 58.7** | **0.0** |
| BOZC | | | | S | **Sg** | **22 36 12.3** | **+0.1** |
| **GADA** | **Gvkgeada** | **1.38** | **359** | *e*PN | **Pg** | **22 36 05.2** | **-0.1** |
| **GADA** | **Gvkgeada** | **1.38** | **359** | *e*Pn | **Pg** | **22 36 05.2** | **-0.1** |
| **ERIK** | **Erikli-Kesan** | **1.91** | **13** | *e*PN | **Pb** | **22 36 13.2** | **-0.4** |
| **ERIK** | **Erikli-Kesan** | **1.91** | **13** | *e*Pn | **Pb** | **22 36 13.2** | **-0.4** |

**IGQ 26 22:46:47**±0.3,**0°92S**×**80°63W**,**h3**km±43km,**Mb4.1, 3C-3D, Error ellipse: s-maj=4.6km s-min=2.1km az=35.6, Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHIS** | **Cerro-Chispas-** | **0.16** | **217** | ⇓P | Pg | 22 46 52.0 | +1.9 |
| **ISPT** | **Isla de la Pla** | **0.56** | **233** | ⇑P | Pb | 22 46 58.6 | -0.8 |
| **ISPT** | **Isla de la Pla** | **0.56** | **233** | ⇑S | Sb | 22 47 07.9 | +0.1 |
| **PECV** | **Mancha de Ca P** | **0.60** | **76** | ⇑P | Pg | 22 46 54.4 | -4.2 |
| **MAG1** | **Magdalena** | **1.20** | **45** | P | Pg | 22 47 09.6 | -0.5 |
| **PAST** | **Pastocalle** | **2.00** | **84** | P | Pn | 22 47 20.3 | -2.0 |
| **IGUA** | **Igualata** | **2.07** | **106** | P | Pn | 22 47 21.6 | -1.8 |
| **CAMI** | **Rancho Maria** | **2.14** | **83** | P | Pn | 22 47 23.8 | -0.5 |
| **JUA2** | **San Juan 2** | **2.15** | **71** | P | Pn | 22 47 22.9 | -1.4 |
| **RIOE** | **Riobamba** | **2.16** | **112** | P | Pn | 22 47 22.0 | -2.4 |
| **BNAS** | **Cotopaxi Volca** | **2.17** | **83** | P | Pn | 22 47 24.0 | -0.7 |
| **NAS2** | **Nasa** | **2.18** | **83** | P | Pn | 22 47 24.7 | -0.1 |
| **BIL2** | **Estacion Bilba** | **2.19** | **104** | P | Pn | 22 47 24.7 | -0.1 |
| **MOV1** | **Cotopaxi Vol s** | **2.20** | **85** | P | Pn | 22 47 25.7 | +0.4 |
| **JUI6** | **Juive** | **2.22** | **103** | P | Pn | 22 47 23.2 | -1.9 |
| **BMAS** | **Trigal station** | **2.23** | **105** | P | Pn | 22 47 23.2 | -2.2 |
| **PITA** | **Cotopaxi Volc** | **2.23** | **81** | P | Pn | 22 47 24.7 | -0.8 |
| **BVC2** | **Cotopaxi Volca** | **2.23** | **83** | P | Pn | 22 47 24.3 | -1.4 |
| **VC1** | **Cotopaxi 1** | **2.25** | **83** | P | Pn | 22 47 25.2 | -0.6 |
| **BTAM** | **Cotopaxi Volca** | **2.25** | **84** | P | Pn | 22 47 25.6 | -0.3 |
| **PISA** | **Pisayambo** | **2.25** | **93** | P | Pn | 22 47 26.7 | +0.9 |
| **ARRY** | **Arrayan** | **2.25** | **105** | P | Pn | 22 47 23.3 | -2.4 |
| **PAT1** | **Patacocha** | **2.27** | **105** | P | Pn | 22 47 24.7 | -1.3 |
| **BPAT** | **Tungurahua Vol** | **2.27** | **105** | S | Sn | 22 47 53.1 | -1.9 |
| **BPAT** | **Tungurahua Vol** | **2.27** | **105** | P | Pn | 22 47 25.0 | -1.1 |
| **BRUN** | **Tungurahua Vol** | **2.27** | **103** | P | Pn | 22 47 26.7 | +0.8 |
| **TAMB** | **Tambo** | **2.27** | **84** | P | Pn | 22 47 26.9 | +0.7 |
| **BULB** | **Ulba Tungurahu** | **2.28** | **103** | P | Pn | 22 47 24.1 | -1.9 |
| **COV1** | **Cotopaxi Volc** | **2.30** | **84** | P | Pn | 22 47 24.6 | -2.1 |
| **OTAV** | **Otavalo** | **2.47** | **62** | ⇓P | Pn | 22 47 26.1 | -2.6 |
| **ANTI** | **Antisana** | **2.52** | **79** | P | Pn | 22 47 28.3 | -1.2 |
| **CUIC** | **Volcan Cuicoch** | **2.58** | **62** | P | Pn | 22 47 28.5 | -1.6 |
| **COTA** | **Cotacachi** | **2.61** | **61** | P | Pn | 22 47 29.2 | -1.6 |
| **URCU** | **Urcuqui** | **2.73** | **60** | P | Pn | 22 47 31.5 | -0.9 |
| **CAYA** | **Cayambe** | **2.82** | **70** | ⇓P | Pn | 22 47 34.9 | +1.2 |
| **CHAR** | **Charly** | **3.08** | **74** | P | Pb | 22 47 40.8 | -2.2 |

*ISCJB* ***26*** *22:59:30.4±0.5, 32°.13S±0°.06×179°.0W±0°.2, h50km, mb3.8/3, Error ellipse: s-maj=22.3km s-min=4.8km az=19.7*
*IDC* ***26*** *22:59:32.3±1.9, 32°.09S×178°.99W, h52km±19km, mb3.7/3, mb1 4.0/5, mb1mx3.7/31, mbtmp4.0/5, ML4.4/2, Error ellipse: s-maj=29.7km s-min=12.1km az=110.0*

**ISC 26 22:59:32.1**±0.8,**32°09S**±0°.09×**179°.0W**±0°.2,**h50**km,**n37**, σ1**950**/42,**mb3.8**/3,**South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **2.98** | **19** | P | **Pn** | **23 00 16.4** | **-0.5** |
| | 64nm,0.3s,baz=307,slow=20,SNR=1.9 | | | | | | |
| RAO | | | | S | **Sn** | **23 00 52.5** | **+1.2** |
| | 75nm,0.3s,baz=163,slow=19,SNR=2.0 | | | | | | |
| **MXZ** | **Matakaoa Point** | **5.89** | **201** | PN | **Pn** | **23 00 56.8** | **+0.1** |
| MXZ | | | | SN | **Sn** | **23 02 04.2** | **+1.3** |
| **WMGZ** | **Waiomatatini S** | **6.10** | **200** | *e*PN | **Pn** | **23 01 01.0** | **+1.5** |
| WMGZ | | | | SN | **Sn** | **23 02 11.2** | **+3.2** |
| **HAZ** | **Te Kaha** | **6.24** | **204** | PN | **Pn** | **23 01 02.3** | **+0.8** |
| HAZ | | | | SN | **Sn** | **23 02 14.6** | **+3.1** |
| **PKGZ** | **Pakihiroa** | **6.24** | **202** | PN | **Pn** | **23 01 02.4** | **+0.9** |
| **PUZ** | **Puketiti** | **6.38** | **200** | PN | **Pn** | **23 01 03.5** | **+0.1** |
| PUZ | | | | SN | **Sn** | **23 02 12.7** | **-2.3** |
| **TWGZ** | **Tauwhareparae** | **6.56** | **201** | PN | **Pn** | **23 01 06.9** | **+1.0** |
| **CNGZ** | **Carnagh Statio** | **6.78** | **199** | PN | **Pn** | **23 01 08.9** | **0.0** |
| **MWZ** | **Matawai** | **6.85** | **204** | PN | **Pn** | **23 01 09.4** | **-0.5** |
| MWZ | | | | *e*SN | **Sn** | **23 02 28.0** | **+1.5** |
| **URZ** | **Urewera** | **6.93** | **206** | P | **Pn** | **23 01 11.0** | **+0.1** |
| | 4.8nm,0.3s,baz=276,slow=5.4,SNR=37 | | | | | | |
| URZ | | | | S | **Sn** | **23 02 28.1** | **-0.3** |
| | 7.1nm,0.3s,baz=312,slow=23,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **6.93** | **206** | PN | **Pn** | **23 01 11.1** | **+0.1** |
| **RAGZ** | **Rawiri** | **7.03** | **204** | *e*PN | **Pn** | **23 01 12.5** | **0.0** |
| **RIGZ** | **Rimuhau** | **7.11** | **201** | *e*PN | **Pn** | **23 01 14.2** | **+0.7** |
| **SNGZ** | **Shannon Statio** | **7.31** | **203** | *e*PN | **Pn** | **23 01 16.9** | **+0.6** |
| **KNZ** | **Kokohu** | **7.43** | **200** | PN | **Pn** | **23 01 18.0** | **+0.3** |
| **MHGZ** | **Mahia Peninsul** | **7.48** | **199** | *e*PN | **Pn** | **23 01 17.9** | **-0.6** |
| **RAHZ** | **Arahi** | **7.52** | **204** | *e*PN | **Pn** | **23 01 19.6** | **+0.5** |
| **WHHZ** | **Waihua** | **7.62** | **203** | *e*PN | **Pn** | **23 01 19.7** | **-0.6** |
| **NMHZ** | **Naumai** | **7.78** | **205** | PN | **Pn** | **23 01 22.9** | **+0.2** |
| **ARHZ** | **Aropaoanui** | **7.86** | **203** | *e*PN | **Pn** | **23 01 23.2** | **-0.6** |
| **BKZ** | **Black Stump Fm** | **7.98** | **206** | *e*PN | **Pn** | **23 01 24.1** | **-1.0** |
| **MCHZ** | **McNeill Hill** | **8.13** | **204** | *e*PN | **Pn** | **23 01 26.8** | **-0.6** |
| **KAHZ** | **Kahuranaki** | **8.38** | **202** | *e*PN | **Pn** | **23 01 29.4** | **-1.6** |
| **FWVZ** | **Far West T-bar** | **8.41** | **210** | *e*PN | **Pn** | **23 01 33.0** | **+1.5** |
| **KRHZ** | **Kereru** | **8.42** | **205** | *e*PN | **Pn** | **23 01 29.8** | **-1.6** |
| **PRHZ** | **Porangahau** | **8.89** | **202** | *e*PN | **Pn** | **23 01 35.4** | **-2.4** |
| **MRZ** | **Mangatainoka R** | **9.60** | **206** | *e*PN | Pn | 23 01 43.8 | -3.8 |
| MRZ | | | | SN | **Sn** | **23 03 28.5** | **-5.5** |
| **KIW** | **Kapiti Island** | **10.03** | **208** | *e*PN | Pn | 23 01 49.3 | -4.1 |
| **NNZ** | **Nelson** | **10.97** | **212** | *e*PN | Pn | 23 02 02.7 | -3.5 |
| **ASAR** | **Alice Springs** | **42.19** | **269** | P | **P** | **23 07 20.7** | **+0.5** |
| | 1.0nm,0.7s,baz=111,slow=7.0,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.34** | **274** | P | **P** | **23 07 29.7** | **+0.3** |
| | 0.7nm,0.4s,baz=112,slow=8.1,SNR=13 | | | | | | |
| **QSPA** | **South Pole Qui** | **58.02** | **180** | P | **P** | **23 09 20.8** | **+1.1** |
| | 1.2nm,0.5s,baz=248,slow=0.1,SNR=12 | | | | | | |
| **SNAA** | **Sanae** | **76.49** | **179** | P | **P** | **23 11 16.1** | **-0.2** |
| **VNA3** | **Neumayer Olymp** | **76.68** | **176** | P | **P** | **23 11 17.5** | **+0.2** |
| **VNA2** | **Neumayer--Watz** | **77.10** | **177** | P | **P** | **23 11 19.9** | **+0.2** |
| | baz=183,slow=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **146.41** | **338** | PKPbc | **PKPdf** | **23 19 04.4** | **-1.0** |
| | 1.0nm,0.5s,baz=65,slow=4.0,SNR=12 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **161.13** | **182** | PKPab | **PKPab** | **23 20 09.7** | **-1.1** |
| | 0.6nm,0.8s,baz=179,slow=5.5,SNR=9.9 | | | | | | |

*ATH* ***26*** *23:02:07.8, 36°.57N×25°.62E, h23*km*±1km, MD2.9/10*
*ISCJB* ***26*** *23:02:08.3±0.6, 36°.61N±0°.02×25°.59E±0°.05, h15*km*±3km, Error ellipse: s-maj=6.1km s-min=3.9km az=177.6*
*CSEM* ***26*** *23:02:08.3±0.2, 36°.59N×25°.61E, h13*km*±1km, MD2.9, Error ellipse: s-maj=5.5km s-min=3.5km az=88.0*
*THE* ***26*** *23:02:08.1, 36°.62N×25°.65E, h4*km*±15km, ML1.9/2, Error ellipse: s-maj=15.6km s-min=0.4km az=147.0*

**ISC 26 23:02:08.2**±0.9,**36°.59N**±0°.02×**25°.62E**±0°.03,**h16**km±7km, **n30**, σ0**841**/58,**Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **THR2** | **Thira island,** | **0.21** | **226** | P | **Pb** | **23 02 13.3** | **-0.3** |
| **THR2** | **Thira island,** | **0.21** | **226** | P | **Pb** | **23 02 13.3** | **-0.3** |
| **THR3** | **Thira Island,** | **0.26** | **224** | P | **Pb** | **23 02 14.1** | **-0.3** |
| THR3 | | | | S | **Sb** | **23 02 18.4** | **-0.2** |
| **THR3** | **Thira Island,** | **0.26** | **224** | P | **Pb** | **23 02 14.1** | **-0.3** |
| THR3 | | | | S | **Sb** | **23 02 18.4** | **-0.2** |
| **SANT** | **Santorini** | **0.26** | **210** | *e*PB | **Pg** | **23 02 13.9** | **+0.1** |
| SANT | | | | *e*SB | **Sg** | **23 02 17.9** | **+0.2** |
| **SANT** | **Santorini** | **0.26** | **210** | P | **Pg** | **23 02 13.7** | **-0.1** |
| SANT | | | | S | **Sb** | **23 02 18.2** | **-0.5** |
| **SANT** | **Santorini** | **0.26** | **210** | *e*Pb | **Pg** | **23 02 13.9** | **+0.1** |
| SANT | | | | *e*Sb | **Sg** | **23 02 17.9** | **+0.2** |
| SANT | | | | S | **Sb** | **23 02 18.2** | **-0.5** |
| **THR5** | **Thira Island,** | **0.28** | **231** | P | **Pb** | **23 02 14.7** | **-0.2** |
| **THR5** | **Thira Island,** | **0.28** | **231** | P | **Pb** | **23 02 14.7** | **-0.2** |
| **THR6** | **Thira Island,** | **0.30** | **217** | P | **Pb** | **23 02 14.8** | **-0.3** |
| THR6 | | | | S | **Sb** | **23 02 19.7** | **-0.1** |
| **THR6** | **Thira Island,** | **0.30** | **217** | P | **Pb** | **23 02 14.8** | **-0.3** |
| THR6 | | | | S | **Sb** | **23 02 19.7** | **-0.1** |
| **APE** | **Apeiranthos** | **0.48** | **351** | *e*PN | **Pg** | **23 02 17.2** | **-0.6** |
| APE | | | | *e*SN | **Sb** | **23 02 26.4** | **+1.2** |
| **APE** | **Apeiranthos** | **0.48** | **351** | P | **Pg** | **23 02 17.1** | **-0.7** |
| APE | | | | S | **Sg** | **23 02 24.3** | **0.0** |
| **APE** | **Apeiranthos** | **0.48** | **351** | *e*Pn | **Pg** | **23 02 17.2** | **-0.6** |
| APE | | | | S | **Sg** | **23 02 24.3** | **0.0** |
| APE | | | | *e*Sn | **Sb** | **23 02 26.4** | **+1.2** |
| **MHLO** | **Agia Marina, M** | **0.98** | **276** | *e*PN | **Pg** | **23 02 27.1** | **-0.1** |
| MHLO | | | | *e*SN | **Sg** | **23 02 40.5** | **+0.4** |
| **MHLO** | **Agia Marina, M** | **0.98** | **276** | *e*Pn | **Pg** | **23 02 27.1** | **-0.1** |
| MHLO | | | | *e*Sn | **Sg** | **23 02 40.5** | **+0.4** |
| **SERI** | **Serifos** | **1.07** | **302** | *e*PN | **Pg** | **23 02 28.9** | **0.0** |
| SERI | | | | *e*SN | **Sn** | **23 02 43.3** | **+0.1** |
| **SERI** | **Serifos** | **1.07** | **302** | *e*Pn | **Pg** | **23 02 28.9** | **0.0** |
| SERI | | | | *e*Sn | **Sn** | **23 02 43.3** | **+0.1** |
| **NPS** | **Neapolis** | **1.33** | **180** | *e*PN | **Pn** | **23 02 32.1** | **0.0** |
| NPS | | | | *e*SN | **Sn** | **23 02 49.1** | **-0.4** |
| **NPS** | **Neapolis** | **1.33** | **180** | *e*Pn | **Pn** | **23 02 32.1** | **0.0** |
| NPS | | | | *e*Sn | **Sn** | **23 02 49.1** | **-0.4** |
| **IDI** | **Anoyia** | **1.43** | **205** | *e*PN | **Pn** | **23 02 33.5** | **-0.1** |
| IDI | | | | *e*SN | **Sb** | **23 02 53.2** | **+0.7** |
| **IDI** | **Anoyia** | **1.43** | **205** | *e*Pn | **Pn** | **23 02 33.5** | **-0.1** |
| IDI | | | | *e*Sn | **Sb** | **23 02 53.2** | **+0.7** |
| **LAST** | **Lasithi** | **1.43** | **185** | *e*PN | **Pb** | **23 02 34.8** | **+0.2** |
| LAST | | | | *e*SN | **Sb** | **23 02 53.0** | **+0.4** |
| **LAST** | **Lasithi** | **1.43** | **185** | *e*Pn | **Pb** | **23 02 34.8** | **+0.2** |
| LAST | | | | *e*Sn | **Sb** | **23 02 53.0** | **+0.4** |
| **SMG** | **Samos** | **1.48** | **41** | *e*PN | **Pb** | **23 02 35.2** | **-0.1** |
| SMG | | | | *e*SN | **Sg** | **23 02 55.5** | **-0.4** |
| **SMG** | **Samos** | **1.48** | **41** | *e*Pn | **Pb** | **23 02 35.2** | **-0.1** |
| SMG | | | | *e*Sn | **Sg** | **23 02 55.5** | **-0.4** |
| **ZKR** | **Zakros** | **1.55** | **162** | *e*PN | **Pb** | **23 02 36.5** | **-0.1** |
| ZKR | | | | *e*SN | **Sb** | **23 02 56.6** | **+0.6** |
| **ZKR** | **Zakros** | **1.55** | **162** | *e*Pn | **Pb** | **23 02 36.5** | **-0.1** |
| ZKR | | | | *e*Sn | **Sb** | **23 02 56.6** | **+0.6** |
| **KARP** | **Karpathos** | **1.63** | **129** | *e*PB | **Pn** | **23 02 36.2** | **0.0** |
| KARP | | | | *e*SN | **Sb** | **23 02 58.8** | **+0.6** |
| **KARP** | **Karpathos** | **1.63** | **129** | *e*Pb | **Pn** | **23 02 36.2** | **0.0** |
| KARP | | | | *e*Sn | **Sb** | **23 02 58.8** | **+0.6** |

*IDC* ***26*** *23:07:07.8±1.6, 3°.23S×99°.77E, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.6/38, mbtmp3.7/7, Error ellipse: s-maj=67.1km s-min=19.6km az=53.0*
*ISCJB* ***26*** *23:07:09.1±0.8, 3°.28S±0°.05×99°.70E±0°.08, h27*km*, mb3.6/7, Error ellipse: s-maj=11.3km s-min=7.2km az=171.6*
*DJA* ***26*** *23:07:11.7±0.8, 3°S±4°×10°0E±°, h32*km*±5km, M4.3/10, MLv4.3/10*

**ISC 26 23:07:11.8**±1.0,**3°20S**±0°.08×**99°78E**±0°.09,**h27**km,**n23**, σ0**877**/20,**mb3.7**/7,**Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.49** | **28** | P | **Pb** | **23 07 22.0** | **0.0** |
| PPSI | | | | S | **Sn** | **23 07 31.3** | **+0.6** |
| **SISI** | **Saibi** | **1.98** | **340** | P | **Pn** | **23 07 42.2** | **-1.4** |
| SISI | | | | S | **Sn** | **23 08 08.0** | **+0.5** |
| **PDSI** | **Padang** | **2.37** | **17** | P | **Pn** | **23 07 47.8** | **-1.2** |
| PDSI | | | | S | **Sn** | **23 08 17.4** | **+0.2** |
| **SDSI** | **Sungai Dareh** | **2.79** | **36** | P | **Pn** | **23 07 53.5** | **-1.2** |
| **PPI** | **Padang Panjang** | **2.79** | **13** | P | **Pn** | **23 07 54.1** | **-0.7** |
| PPI | | | | S | **Sn** | **23 08 28.1** | **+0.5** |
| **KSI** | **Kapahiang** | **2.85** | **99** | P | Pn | 23 07 59.3 | +3.7 |
| **BKNI** | **Bangkinang** | **3.72** | **20** | P | **Pn** | **23 08 07.2** | **-0.4** |
| **MNSI** | **Mandailing Nat** | **3.97** | **357** | P | **Pn** | **23 08 10.6** | **-0.4** |
| **MDSI** | **Maura Dua** | **4.58** | **106** | P | **Pn** | **23 08 18.8** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **21.53** | **358** | P | **P** | **23 11 58.8** | **-0.4** |
| | 1.2nm,0.4s,baz=187,slow=10,SNR=5.6 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.51** | **260** | T | T | 23 41 30.5 | |
| | baz=82,slow=74,SNR=609 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.52** | **260** | T | T | 23 41 31.3 | |
| | baz=82,slow=74,SNR=802 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.53** | **260** | T | T | 23 41 31.7 | |
| | baz=82,slow=74,SNR=468 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.23** | **159** | T | T | 23 50 16.1 | |
| | baz=335,slow=74 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.25** | **159** | T | T | 23 50 14.0 | |
| | baz=335,slow=74 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.25** | **159** | T | T | 23 50 12.4 | |
| | baz=335 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.60** | **119** | P | **P** | **23 14 24.2** | **-0.3** |
| | 0.5nm,0.8s,baz=292,slow=9.5,SNR=5.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.75** | **125** | P | **P** | **23 14 33.7** | **-0.5** |
| | 0.7nm,0.6s,baz=298,slow=7.6,SNR=7.9 | | | | | | |
| **SONM** | **Songino Array** | **51.15** | **6** | P | **P** | **23 16 13.7** | **+1.1** |
| | 0.9nm,0.8s,baz=190,slow=7.3,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.12** | **345** | P | **P** | **23 16 19.4** | **-0.3** |
| | 0.6nm,0.7s,baz=160,slow=8.9,SNR=3.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.30** | **350** | P | **P** | **23 17 03.5** | **-0.6** |
| | 0.6nm,0.6s,baz=170,slow=4.4,SNR=3.3 | | | | | | |
| **KBZ** | **Khabaz** | **69.06** | **319** | P | **P** | **23 18 16.1** | **+0.8** |
| | 0.8nm,0.6s,baz=124,slow=3.6,SNR=2.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.78** | **38** | PKPbc | **PKPab** | **23 26 50.4** | **+0.7** |
| | 0.7nm,0.6s,baz=318,slow=1.2,SNR=6.3 | | | | | | |

*ISCJB* ***26*** *23:09:43.2±1.1, 3°.75S±0°.03×99°.69E±0°.03, h15km±7km, mb4.8/80, MS3.7/6, Error ellipse: s-maj=6.5km s-min=3.4km az=137.6*
*KLM* ***26*** *23:09:43.3, 3°.71S×99°.48E, h10km, mb5.0, MS5.8*
*AUST* ***26*** *23:09:44.6±1.4, 3°.79S×99°.56E, h16km, Error ellipse: s-maj=1.6km s-min=0.6km az=241.0*
*NEIC* ***26*** *23:09:44.5±3.0, 3°.78S×99°.62E, h12km±17km, mb5.0/24, Error ellipse: s-maj=8.7km s-min=3.9km az=56.0*
*DJA* ***26*** *23:09:45.3±0.8, 4°S±4°×9°9E±°, h41km±29km, M5.2/21, mb5.1/16, mB5.7/8, MLv5.1/21, Mw(mB)5.2/8*
*MOS* ***26*** *23:09:45.2±1.1, 3°.64S×99°.74E, h25km, mb5.1/39, Error ellipse: s-maj=11.3km s-min=5.5km az=111.8*
*BJI* ***26*** *23:09:45.0, 3°.80S×99°.50E, h21km, mb4.9/48, mB5.3/35, Ms4.9/24, Ms7 4.5/23*
*IDC* ***26*** *23:09:47.3±0.6, 3°.77S×99°.70E, h30km±3km, mb4.4/29, mb1 4.5/30, mb1mx4.4/38, mbtmp4.6/30, ML5.2/1, MS3.6/4, Ms1 3.6/4, ms1mx3.1/43, Error ellipse: s-maj=15.2km s-min=9.0km az=43.0*

**ISC 26 23:09:47.6**±0.4,**3°84S**±0°.04×**99°64E**±0°.05,**h32**km±2km, **h32**km:**pP-P**,**n313**,σ1**934**/328,**mb4.8**/79,**MS3.9**/6,**21C-23D**, **Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **1.13** | **19** | P | **Pn** | **23 10 04.2** | **-2.9** |
| **SISI** | **Saibi** | **2.55** | **348** | P | Pn | 23 10 23.2 | -3.5 |
| SISI | | | | S | **Sn** | **23 10 53.6** | **-3.1** |
| **KSI** | **Kapahiang** | **2.95** | **87** | P | **Pn** | **23 10 33.7** | **+1.4** |
| **PDSI** | **Padang** | **3.02** | **16** | P | Pn | 23 10 30.0 | -3.2 |
| **MNAI** | **Manna** | **3.35** | **99** | P | **Pn** | **23 10 37.7** | **0.0** |
| | baz=3.4,SNR=6.8 | | | | | | |
| **MNAI** | **Manna** | **3.35** | **99** | P | **Pn** | **23 10 37.3** | **-0.4** |
| **MNAI** | **Manna** | **3.35** | **99** | *e*Pn | **Pn** | **23 10 37.8** | **+0.1** |
| MNAI | | | | *e*Sn | **Sn** | **23 11 15.1** | **-1.3** |
| **SDSI** | **Sungai Dareh** | **3.40** | **32** | P | **Pn** | **23 10 36.6** | **-1.7** |
| **PPI** | **Padang Panjang** | **3.44** | **13** | P | **Pn** | **23 10 36.4** | **-2.6** |
| | baz=3.4,SNR=72 | | | | | | |
| **PPI** | **Padang Panjang** | **3.44** | **13** | P | **Pn** | **23 10 36.2** | **-2.8** |
| PPI | | | | S | **Sn** | **23 11 14.3** | **-4.4** |
| **BKNI** | **Bangkinang** | **4.37** | **19** | P | **Pn** | **23 10 51.0** | **-0.7** |
| | baz=4.4,SNR=3.5 | | | | | | |
| **BKNI** | **Bangkinang** | **4.37** | **19** | P | **Pn** | **23 10 50.3** | **-1.4** |
| **BKNI** | **Bangkinang** | **4.37** | **19** | *e*Pn | **Pn** | **23 10 50.9** | **-0.8** |
| **JMBI** | **JAMBI** | **4.56** | **61** | P | **Pn** | **23 10 52.3** | **-2.0** |
| **LWLI** | **Liwa** | **4.56** | **105** | P | **Pn** | **23 10 53.3** | **-1.1** |
| LWLI | | | | S | **Sn** | **23 11 43.0** | **-3.4** |
| **MDSI** | **Maura Dua** | **4.57** | **98** | P | **Pn** | **23 10 54.1** | **-0.4** |
| MDSI | | | | S | **Sn** | **23 11 44.5** | **-2.1** |
| **MNSI** | **Mandailing Nat** | **4.60** | **359** | P | Pn | 23 10 51.4 | -3.5 |
| MNSI | | | | S | **Sn** | **23 11 44.6** | **-2.7** |
| **KASI** | **Kota Agung** | **5.12** | **109** | P | **Pn** | **23 11 01.5** | **-0.6** |
| | 236nm,0.9s,11μm3.9nm | | | | | | |
| KASI | | | | S | Sn | 23 11 54.9 | -5.2 |
| | 236nm,0.9s,11μm3.9nm | | | | | | |
| **KLI** | **Kotabumi** | **5.30** | **101** | P | **Pn** | **23 11 05.7** | **+1.2** |
| | 122nm,0.8s,4μm1.2nm | | | | | | |
| **SBSI** | **Sibolga** | **5.40** | **352** | P | Pn | 23 10 57.8 | -8.2 |
| | 288nm,0.5s,8μm7.8nm | | | | | | |
| SBSI | | | | S | Sn | 23 11 56.4 | -11 |
| | 288nm,0.5s,8μm7.8nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.51** | **338** | P | Pn | 23 11 02.6 | -4.8 |
| | 138nm,1.2s,0.8nm | | | | | | |
| GSI | | | | S | Sn | 23 12 01.5 | -8.2 |
| | 138nm,1.2s,0.8nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.51** | **338** | *e*Pn | Pn | 23 11 03.8 | -3.6 |
| GSI | | | | *e*Sn | Sn | 23 11 58.5 | -11 |
| **CGJI** | **Cibinong** | **6.63** | **115** | P | **Pn** | **23 11 21.1** | **-1.7** |
| | 290nm,0.9s,3μm1.1nm | | | | | | |
| **PSI** | **Prapat** | **6.63** | **354** | Pn | Pn | 23 11 17.5 | -5.4 |
| | 6.2nm,0.3s,baz=5.0,slow=6.0,SNR=8.3 | | | | | | |
| **PSI** | **Prapat** | **6.63** | **354** | *e*P | Pn | 23 11 17.7 | -5.3 |
| **PSI** | **Prapat** | **6.63** | **354** | P | Pn | 23 11 18.1 | -4.9 |
| | baz=6.5,SNR=5.2 | | | | | | |
| **PSI** | **Prapat** | **6.63** | **354** | *e*Pn | Pn | 23 11 17.7 | -5.3 |
| **PPBI** | **Pangkal Pinang** | **6.70** | **76** | P | **Pn** | **23 11 24.3** | **+0.5** |
| **KGM** | **Kluang** | **6.88** | **32** | ⇓P | **Pn** | **23 11 24.5** | **-1.8** |
| **MYKOM** | **Kota Tinggi** | **7.00** | **37** | ⇑P | **Pn** | **23 11 25.9** | **-2.0** |
| **MYKOM** | **Kota Tinggi** | **7.00** | **37** | *e*Pn | **Pn** | **23 11 27.9** | **+0.1** |
| **FRIM** | **Kepong** | **7.30** | **16** | ⇓P | Pn | 23 11 27.1 | -5.0 |
| **SKJI** | **Sukabumi** | **7.57** | **115** | P | **Pn** | **23 11 38.8** | **+3.1** |
| **TPI** | **Tanjunpandan** | **8.07** | **83** | P | **Pn** | **23 11 41.9** | **-0.7** |
| | 18nm,1.2s | | | | | | |
| **CNJI** | **Cibinong** | **8.21** | **115** | P | **Pn** | **23 11 42.3** | **-2.2** |
| | 276nm,0.6s,4μm | | | | | | |
| **IPM** | **Ipoh** | **8.38** | **10** | ⇑P | Pn | 23 11 41.5 | -5.3 |
| **IPM** | **Ipoh** | **8.38** | **10** | *e*Pn | **Pn** | **23 11 46.3** | **-0.5** |
| **LEM** | **Lembang** | **8.48** | **111** | Pn | **Pn** | **23 11 48.5** | **+0.2** |
| | 27nm,0.3s,baz=352,slow=22,SNR=12 | | | | | | |
| LEM | | | | Sn | **Sn** | **23 13 20.6** | **-2.6** |
| | 3.7nm,0.3s,baz=319,slow=19,SNR=2.5 | | | | | | |
| **LEM** | **Lembang** | **8.48** | **111** | P | **Pn** | **23 11 51.2** | **+2.8** |
| | baz=8.6,SNR=4.4 | | | | | | |
| **LEM** | **Lembang** | **8.48** | **111** | P | **Pn** | **23 11 49.4** | **+1.0** |
| | 2μm,1.2s | | | | | | |
| **XMIS** | **Christmas Isla** | **8.89** | **138** | P | Pn | 23 11 50.1 | -

KMI PMZ
comp=Z,14nm,1.2s
KMI PMZ
comp=Z,470nm,5.6s
KMI LN
comp=Z,470nm,11.5s
KMI LE
comp=Z,440nm,16.2s
KMI LZ
comp=Z,300nm,13.5s
**GYA Guiyang 30.88 12** P **P** **23 16 03.8 +2.5**
GYA pP **pP** **23 16 12.0 +1.3**
GYA PP **PnPn** **23 17 05.5 +3.0**
GYA PcP **PcP** **23 18 59.0 +1.2**
GYA SS SS 23 22 51.3 -25
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.3s
GYA LN
comp=Z,520nm,17.5s
GYA LE
comp=Z,460nm,17.9s
GYA LZ
comp=Z,470nm,17.6s
**SIJI Sorong 31.73 85** P **P** **23 16 06.7 -2.2**
comp=Z,13nm,0.7s,baz=269,slow=5.1,SNR=7.9
**MTN Manton Dam 32.38 108** P **P** **23 16 15.7 +1.2**
baz=32,SNR=3.5
**MTN Manton Dam 32.38 108** *e*P **P** **23 16 14.2 -0.3**
comp=Z,13nm,1.1s
**FAKI Fak Fak 32.56 89** P **P** **23 16 14.8 -1.4**
baz=33,SNR=3.2
**FAKI Fak Fak 32.56 89** *e*P **P** **23 16 13.6 -2.6**
comp=Z,24nm,0.9s
**ODAN Odare 32.73 339** *e*P **P** **23 16 17.7 -0.1**
comp=Z,7.6nm,0.4s
**TAPN Taplejung 33.08 340** *e*P **P** **23 16 21.4 +0.6**
comp=Z,29nm,0.9s
**RAMN Ramite 33.10 338** *e*P **P** **23 16 21.5 +0.5**
comp=Z,8.6nm,0.6s
**NWAO Narrogin (SRO) 33.29 152** P **P** **23 16 21.2 -1.1**
comp=Z,6.0nm,0.8s,baz=83,slow=0.0,SNR=2.9
**H01W3 Cape Leeuwin H 33.69 158** T T 23 52 38.9
baz=336,slow=76,SNR=28
**H01W2 Cape Leeuwin H 33.70 158** T T 23 52 39.4
baz=336,slow=76,SNR=31
**H01W1 Cape Leeuwin H 33.71 158** T T 23 52 40.6
baz=336,slow=76,SNR=81
**PKI Pulchoki 34.11 337** *e*P **P** **23 16 29.8 -0.1**
**PKIN Phulchoki 34.12 337** *e*P **P** **23 16 29.6 -0.3**
**GUN Gumba 34.24 338** *e*P **P** **23 16 31.2 +0.2**
comp=Z,34nm,0.4s
**LSA Lhasa 34.33 347** P **P** **23 16 32.5 +0.7**
LSA PMZ
comp=Z,19nm,1.1s
**LSA Lhasa 34.33 347** *e*P **P** **23 16 32.7 +0.8**
LSA pmax pmax
comp=Z,17nm,1.0s
**LSA Lhasa 34.33 347** *e*P **P** **23 16 32.7 +0.8**
comp=Z,17nm,1.0s
**KKN Kakani 34.36 337** *e*P **P** **23 16 31.8 -0.1**
comp=Z,10nm,0.4s
**WRKA Warakurna 34.69 130** P **P** **23 16 36.3 +1.6**
baz=35,SNR=3.8
**CD2 Chengdu 34.78 6** P **P** **23 16 36.0 +0.8**
CD2 sP **sP** **23 16 48.5 -0.1**
CD2 PP **PP** **23 17 55.5 +1.0**
CD2 S **S** **23 22 06.5 +2.7**
CD2 sS **sS** **23 22 21.3 +1.9**
CD2 PMZ
comp=Z,20nm,0.5s
CD2 PMZ
comp=Z,140nm,5.2s
**GKN Gorkha 34.80 336** *e*P **P** **23 16 35.6 0.0**
comp=Z,8.0nm,0.4s
**KOLN Koldanda 35.02 335** *e*P **P** **23 16 37.8 +0.2**
comp=Z,51nm,1.0s
**ENH Enshi 35.20 15** *e*P **P** **23 16 38.7 -0.2**
comp=Z,190nm,2.8s
**WRA Warramunga Arr 37.41 118** P **P** **23 16 57.9 -0.1**
comp=Z,8.0nm,0.8s,baz=291,slow=9.7,SNR=36
WRA PcP **PcP** **23 19 15.2 -1.3**
comp=Z,1.1nm,0.7s,baz=304,slow=1.8,SNR=4.2
**WRAB Tennant Creek 37.42 118** *ce*P **P** **23 16 58.9 +0.9**
WRAB pmax pmax
comp=Z,91nm,1.7s
**WRAB Tennant Creek 37.42 118** P **P** **23 16 59.0 +0.9**
comp=Z,136nm,1.1s,SNR=13
**WRAB Tennant Creek 37.42 118** *e*P **P** **23 16 58.9 +0.9**
comp=Z,27nm,1.0s
**AS12 Alice Springs 38.50 124** *e*P **P** **23 17 07.2 +0.1**
AS12 *e*PcP **PcP** **23 19 20.9 +1.1**
AS12 *e*S **S** **23 23 02.4 +1.5**
**ASAR Alice Springs 38.50 124** P **P** **23 17 07.2 +0.1**
comp=Z,5.9nm,0.9s,baz=298,slow=7.9,SNR=31
ASAR PcP **PcP** **23 19 20.9 +1.1**
comp=Z,2.5nm,0.8s,baz=308,slow=2.4,SNR=7.4
ASAR S **S** **23 23 02.4 +1.5**
comp=Z,0.4nm,1.0s,baz=294,slow=14,SNR=3.3
**AS01 Alice Springs 38.54 124** *e*P **P** **23 17 07.5 +0.1**
**XAN Xi'an 38.68 12** P **P** **23 17 07.8 -0.6**
XAN pP **pP** **23 17 17.0 -1.0**
XAN PMZ
comp=Z,40nm,0.9s
**LZH Lanzhou 39.91 5** *e*P **P** **23 17 18.8 0.0**
LZH pP **pP** **23 17 27.5 -0.9**
LZH sP **sP** **23 17 32.0 -0.3**
LZH PMZ
comp=Z,28nm,1.0s
LZH PMZ
comp=Z,140nm,4.8s
**NJ2 Nanjing 40.10 26** *e*P **P** **23 17 22.0 +1.8**
NJ2 PMZ
comp=Z,65nm,1.1s
**QIS Mount Isa 42.28 117** P **P** **23 17 39.6 +1.2**
baz=42,SNR=3.9
**GTA Gaotai 43.03 0** *e*P **P** **23 17 44.8 +0.4**
GTA pP **pP** **23 17 54.0 0.0**
GTA sP **sP** **23 17 58.3 +0.4**
GTA PcP **PcP** **23 19 35.5 +1.3**
GTA S **S** **23 24 10.3 +2.2**
GTA sS **sS** **23 24 26.5 +2.5**
GTA SS **SS** **23 27 17.5 -3.7**
GTA PMZ
comp=Z,8.0nm,1.0s
GTA PMZ
comp=Z,280nm,5.1s
GTA LN
comp=Z,310nm,12.4s
GTA LE
comp=Z,280nm,14.3s
GTA LZ
comp=Z,250nm,13.8s
**COEN Coen 44.09 106** *e*P **P** **23 17 51.4 -1.8**
comp=Z,24nm,1.3s
**BBOO Buckleboo 44.60 135** *e*P **P** **23 17 57.2 +0.2**
comp=Z,42nm,1.8s
**HHC Hu-ho-hao-te 45.79 13** *e*P **P** **23 18 09.0 +2.6**
HHC S **S** **23 24 51.0 +2.9**
HHC PMZ
comp=Z,18nm,0.7s
HHC PMZ
comp=Z,91nm,7.4s
HHC LN
comp=Z,290nm,14.8s
HHC LE
comp=Z,330nm,12.3s
HHC LZ
comp=Z,200nm,13.6s
**BJT Baijiatuau 46.21 18** *e*P **P** **23 18 10.5 +0.9**
BJT pmax pmax
comp=Z,35nm,1.2s
**BJT Baijiatuau 46.21 18** *e*P **P** **23 18 10.5 +0.9**
comp=Z,35nm,1.2s
**BJI Beijing 46.23 18** P **P** **23 18 10.3 +0.6**
BJI S S 23 24 59.5 +5.3
BJI PMZ
comp=Z,26nm,1.2s
BJI LN
comp=Z,560nm,16.2s
BJI LE
comp=Z,620nm,15.8s
BJI LZ
comp=Z,200nm,19.4s
**HTT Hallett 46.98 134** P P 23 18 11.2 -4.6
baz=47,SNR=8.0
**CTA Charters Tower 48.17 114** P **P** **23 18 25.0 -0.2**
comp=Z,7.8nm,0.8s,baz=309,slow=6.8,SNR=7.3
**CTAO Charters Tower 48.17 114** *e*P **P** **23 18 26.4 +1.1**
CTAO pmax pmax
comp=Z,21nm,1.2s
**CTAO Charters Tower 48.17 114** *e*P **P** **23 18 26.4 +1.1**
comp=Z,21nm,1.2s
**KSH Kashi 48.34 335** P **P** **23 18 24.8 -1.5**
KSH *e*pP **pP** **23 18 34.8 -1.2**
KSH *e*PcP **PcP** **23 19 52.8 +0.1**
KSH PcS **PcS** **23 23 47.3 -1.4**
KSH S S 23 25 18.5 -6.0
KSH PMZ
comp=Z,6.0nm,1.0s
KSH PMZ
comp=Z,100nm,5.2s
KSH LN
comp=Z,160nm,6.0s
KSH LE
comp=Z,150nm,4.9s
KSH LZ
comp=Z,190nm,6.0s
**WMQ Urumqi 48.65 348** P **P** **23 18 29.0 +0.5**
WMQ pP **pP** **23 18 39.0 +0.7**
WMQ PP **PP** **23 20 21.0 -0.8**
WMQ S **S** **23 25 28.0 -0.6**
WMQ ScS **ScS** **23 28 18.0 -0.8**
WMQ SS SS 23 28 52.0 -7.3
WMQ PMZ
comp=Z,27nm,1.0s
WMQ PMZ
comp=Z,130nm,5.0s
WMQ LN
comp=Z,71nm,16.0s
WMQ LE
comp=Z,64nm,15.0s
**KS15 Wonju Array Si 48.75 30** *e*P **P** **23 18 29.0 -0.3**
**KSAR Wonju Array Be 48.75 30** P **P** **23 18 29.0 -0.3**
**KSAR Wonju Array Be 48.75 30** P **P** **23 18 29.0 -0.3**
**KSRS Korea Array 48.78 30** P **P** **23 18 29.0 -0.5**
comp=Z,18nm,0.9s,baz=225,slow=8.3,SNR=29
**KSRS Korea Array 48.78 30** P **P** **23 18 29.0 -0.5**
KSRS pmax pmax
comp=Z,19nm,0.9s
**KS01 Wonju Array Si 48.78 30** *e*P **P** **23 18 29.3 -0.3**
**PDGK Podgornoye 50.35 341** *i*P **P** **23 18 41.9 +0.5**
PDGK pmax pmax
comp=Z,23nm,1.1s
**CMSA Cobar Meteorol 51.25 128** P **P** **23 18 50.5 +2.0**
baz=51,SNR=13
**TKM2 Tokmak 2 51.37 337** *e*P **P** **23 18 47.9 -1.5**
TKM2 pmax pmax
comp=Z,20nm,1.1s
**TKM2 Tokmak 2 51.37 337** *e*P **P** **23 18 47.9 -1.5**
comp=Z,20nm,1.1s
**AAK Ala-Archa 51.56 336** P **P** **23 18 50.9 +0.1**
comp=Z,1.3nm,0.7s,baz=147,slow=6.1,SNR=4.9
**AAK Ala-Archa 51.56 336**⇑ *e*P **P** **23 18 51.5 +0.7**
AAK pmax pmax
comp=Z,5.0nm,1.1s
**SONA0 Songino Array 51.80 6** *e*P **P** **23 18 52.9 +0.5**
SONA0 *e*PcP **PcP** **23 20 03.9 -1.3**
**SONM Songino Array 51.80 6** P **P** **23 18 52.9 +0.5**
comp=Z,13nm,0.8s,baz=187,slow=8.8,SNR=69
SONM PcP **PcP** **23 20 03.9 -1.3**
comp=Z,1.5nm,0.4s,baz=194,slow=3.7,SNR=8.8
**EKS2 Erkin-Say 51.87 336** *e*P P 23 18 49.8 -3.3
EKS2 pmax pmax
comp=Z,10.0nm,1.0s
**EKS2 Erkin-Say 51.87 336** *e*P P 23 18 49.8 -3.3
comp=Z,9.9nm,1.0s
**ULN Ulaanbaatar 51.90 6** *e*P **P** **23 18 51.0 -2.2**
ULN pmax pmax
comp=Z,19nm,1.0s
**ULN Ulaanbaatar 51.90 6** *e*P **P** **23 18 51.0 -2.2**
comp=Z,19nm,1.0s
**RMQ Roma 52.06 121** P P 23 18 58.5 +3.8
baz=52,SNR=4.6
**MNAS Manas 52.26 335** *i*P **P** **23 18 54.3 -1.7**
MNAS pmax pmax
comp=Z,15nm,1.5s
**MK01 Makanchi Array 52.67 345** *e*P **P** **23 18 58.6 -0.2**
**MK31 Makanchi Array 52.70 345** *e*P **P** **23 18 58.8 -0.2**
MK31 pmax pmax
comp=Z,3.0nm,0.3s
**MK32 Makanchi Array 52.70 345** *e*P **P** **23 18 58.6 -0.4**
**MKAR Makanchi Array 52.70 345** P **P** **23 18 58.6 -0.4**
comp=Z,24nm,1.1s,baz=153,slow=8.9,SNR=30
**MKAR Makanchi Array 52.70 345** *ce*P **P** **23 18 58.9 -0.1**
MKAR pmax pmax
comp=Z,24nm,1.1s
**MKAR Makanchi Array 52.70 345** *e*P **P** **23 18 59.1 +0.1**
**CN2 Changchun 52.80 23** *e*P **P** **23 19 00.0 +0.2**
CN2 PMZ
comp=Z,10.0nm,1.0s
**ITEG Tejag 53.23 317** *e*P **P** **23 19 02.8 -0.5**
**OPO Ambohidratompo 53.28 250** LR LR 23 37 47.2
comp=Z,190nm,21.3s,baz=0.0,slow=32
**KKAR Karatay Array 53.62 334** *e*P **P** **23 19 03.8 -2.1**
**KKAR Karatay Array 53.62 334** *e*P **P** **23 19 03.8 -2.1**
**EIDS Eidsvold 53.77 119** *e*P **P** **23 19 10.0 +2.7**
comp=Z,18nm,1.3s
**MAJO Matsushiro 53.92 38** *e*P **P** **23 19 06.8 -1.4**
MAJO pmax pmax
comp=Z,290nm,2.5s
**MAJO Matsushiro 53.92 38** *e*P **P** **23 19 06.8 -1.4**
comp=Z,290nm,2.5s
**MJAR Matsushiro Arr 53.93 38** P **P** **23 19 06.8 -1.4**
comp=Z,7.9nm,1.0s,baz=218,slow=8.0,SNR=11
**ZAK Zakamensk 54.10 3** *e*P **P** **23 19 08.3 -1.0**
ZAK pmax pmax
comp=Z,4.0nm,1.1s
**IPAY Payeh 55.17 320** *e*P **P** **23 19 17.0 -0.6**
**MDJ Mudanjiang 55.19 26** P **P** **23 19 17.8 +0.6**
MDJ pP **pP** **23 19 24.3 -2.8**
MDJ PMZ
comp=Z,11nm,1.2s
MDJ PMZ
comp=Z,220nm,5.1s
**TLY Talaya 55.41 3** *e*P **P** **23 19 19.0 +0.3**
TLY pmax pmax
comp=Z,11nm,1.4s
TLY MLR MLR
comp=Z,111nm,14.0s
**IKRD Kardeh 55.68 320** *e*P P 23 19 14.7 -6.5
**HIA Hailar 55.70 16**⇑ *e*P **P** **23 19 20.8 0.0**
HIA pmax pmax
comp=Z,6.0nm,1.1s
**IPAR Pars 55.75 310** *e*P **P** **23 19 21.9 0.0**
**USRK Ussuriysk Ar. 55.94 28** P **P** **23 19 22.6 0.0**
comp=Z,22nm,0.9s,baz=221,slow=6.6,SNR=34
USRK pP **pP** **23 19 32.8 +0.4**
comp=Z,14nm,0.8s,baz=222,slow=5.8,SNR=8.3
**GEYT Alibeck 56.63 321** P **P** **23 19 26.8 -0.9**
comp=Z,5.3nm,1.0s,baz=146,slow=8.2,SNR=14
GEYT pP **pP** **23 19 36.7 -0.9**
comp=Z,4.4nm,1.0s,baz=262,slow=4.3,SNR=5.5
**KURK Kurchatov 57.26 344** *e*P **P** **23 19 31.5 -0.3**
KURK pmax pmax
comp=Z,35nm,1.1s
**KURK Kurchatov 57.26 344** P **P** **23 19 31.3 -0.5**
comp=Z,80nm,1.1s,SNR=8.6
**KURK Kurchatov 57.26 344** *e*P **P** **23 19 31.5 -0.3**
comp=Z,35nm,1.1s
**IPIR Pirpir 58.73 312** *e*P **P** **23 19 43.0 +0.1**
**ZAA0 Zalesovo Array 58.90 350** P **P** **23 19 43.1 -0.1**
baz=59,SNR=11
**ZAA0 Zalesovo Array 58.90 350** *e*P **P** **23 19 43.0 -0.3**
**ZALV Zalesovo Beam 58.90 350** P **P** **23 19 42.7 -0.6**
comp=Z,29nm,0.9s,baz=175,slow=5.5,SNR=53
**ZALV Zalesovo Beam 58.90 350** *i*P **P** **23 19 43.0 -0.2**
ZALV pmax pmax
comp=Z,28nm,0.9s
**ZAA1 Zalesovo Array 58.90 350** *e*P **P** **23 19 42.7 -0.6**
**KLR Kul'dur 59.75 24** *e*P P 23 19 45.6 -3.6
KLR pmax pmax
comp=Z,57nm,1.6s
**KRAR Krasnoyarsk 59.91 356**⇓ *e*P **P** **23 19 50.8 +0.7**
KRAR pmax pmax
comp=Z,39nm,1.5s
**NVS Novosibirsk 60.04 349**⇑ *i*P **P** **23 19 50.7 -0.4**
NVS *i* 23 20 00.2
NVS pmax pmax
comp=Z,11nm,1.0s
NVS pmax pmax
comp=N,10.0nm,1.3s
NVS pmax pmax
comp=E,6.0nm,1.3s
**HNR Honiara 60.10 99** LR LR 23 47 56.9
comp=E,7.8nm,18.2s,baz=15,slow=38
**BVAR Borovoye Array 61.78 340** P **P** **23 20 01.9 -1.1**
comp=E,3.0nm,0.5s,baz=145,slow=8.1,SNR=22
BVAR pP **pP** **23 20 11.7 -1.3**
comp=E,2.3nm,0.6s,baz=140,slow=8.6,SNR=8.1
**BRVK Borovoye 61.84 340** *e*P **P** **23 20 02.7 -0.7**
BRVK pmax pmax
comp=Z,6.0nm,0.9s
**BRVK Borovoye 61.84 340** *e*P **P** **23 20 02.7 -0.7**
comp=Z,6.0nm,0.9s
**ZRNK Zerenda 62.19 340** *i*P **P** **23 20 03.7 -2.1**
ZRNK pmax pmax
comp=Z,9.0nm,1.0s
**CHKZ Chkalovo 62.25 341** *i*P **P** **23 20 04.4 -1.7**
CHKZ pmax pmax
comp=Z,15nm,1.0s
**BOD Bodaibo 62.54 9** *e*P **P** **23 20 07.7 -0.3**
BOD pmax pmax
comp=Z,18nm,1.2s
**AB31 Akbulak array 63.08 332** *i*P **P** **23 20 10.8 -0.9**
AB31 pmax pmax
comp=Z,20nm,1.0s
**ABKAR Akbulak array 63.08 332** *e*P **P** **23 20 10.9 -0.8**
**AKTO Aktyubinsk 64.79 332** *i*P **P** **23 20 21.5 -1.5**
AKTO pmax pmax
comp=Z,12nm,1.3s
**ISHB Shabestar 65.15 315** *e*P **P** **23 20 25.4 -0.4**
**IMRD Marand 65.28 316** *e*P **P** **23 20 27.2 +0.5**
**GNI Garni 66.60 317**⇑ *e*P **P** **23 20 35.6 +0.5**
GNI pmax pmax
comp=Z,19nm,1.1s
**SVE Sverdlovsk 68.24 338**⇓ *i*P **P** **23 20 44.9 0.0**
SVE pmax pmax
comp=Z,24nm,1.2s
**MAW Mawson 68.43 194** P **P** **23 20 46.1 +0.3**
comp=Z,1.1nm,0.7s,baz=288,slow=3.2,SNR=2.5
**MAW Mawson 68.43 194** *e*P **P** **23 20 46.1 +0.3**
MAW pmax pmax
comp=Z,2.0nm,1.4s
**MAW Mawson 68.43 194** *e*P **P** **23 20 46.1 +0.3**
comp=Z,2.1nm,1.4s
**NCK Nalchik 68.90 320**⇑ *e*P **P** **23 20 49.8 +0.4**
**NEY Neytrino 69.36 319**⇑ *e*P **P** **23 20 53.3 +0.9**
NEY pmax pmax
comp=Z,1.0nm,0.9s
**KBZ Khabaz 69.46 320** P **P** **23 20 52.8 +0.1**
comp=Z,4.7nm,0.9s,baz=128,slow=5.4,SNR=12
KBZ pP **pP** **23 21 02.2 -0.6**
comp=Z,3.5nm,0.8s,baz=157,slow=3.6,SNR=6.1
**YAK Yakutsk 69.60 15** *e*P **P** **23 20 52.7 -0.5**
YAK pmax pmax
comp=Z,38nm,0.9s
YAK pmax pmax
comp=E,14nm,1.2s
YAK pmax pmax
comp=N,14nm,1.4s
**KIV Kislovodsk 69.70 320** *e*P **P** **23 20 54.6 +0.2**
KIV pmax pmax
comp=Z,10.0nm,1.0s
**MATP Matopo 71.00 250** P **P** **23 21 04.0 +1.1**
comp=Z,2.4nm,0.8s,baz=104,slow=5.6,SNR=6.0
**VRH Novokhopyorsk 73.64 326** *e*P **P** **23 21 16.7 -1.1**
VRH pmax pmax
comp=Z,10.0nm,1.0s
VRH pmax pmax
comp=N,10.0nm,1.2s
VRH pmax pmax
comp=E,5.0nm,0.4s
**BR101 Keskin Array S 74.30 313** *e*P **P** **23 21 21.6 -0.5**
**BRTR Keskin Array B 74.30 313** P **P** **23 21 21.6 -0.5**
comp=E,2.2nm,0.8s,baz=136,slow=7.7,SNR=17
BRTR pP **pP** **23 21 31.4 -0.9**
comp=E,1.9nm,0.8s,baz=92,slow=4.2,SNR=8.5
**BRTR Keskin Array B 74.30 313** *ce*P **P** **23 21 21.2 -0.9**
BRTR pmax pmax
comp=Z,2.0nm,0.8s
**OXZ Oxford 74.59 134** *e*P P 23 21 26.9 +3.2
comp=Z,70nm,0.5s
**PETK Petropavlovsk- 74.62 32** P **P** **23 21 23.3 -0.2**
comp=Z,7.7nm,0.8s,baz=305,slow=5.1,SNR=3.2
**PEA2 Petropavlovsk- 74.62 32** *e*P **P** **23 21 23.3 -0.2**
**VORD Divnogorie 74.89 325** *e*P **P** **23 21 23.8 -1.3**
VORD pmax pmax
comp=Z,10.0nm,1.3s
VORD pmax pmax
comp=N,10.0nm,1.0s
VORD pmax pmax
comp=E,6.0nm,0.6s
**BR231 Keskin MP Arra 74.96 313** *e*P P 23 21 22.2 -3.8
**VSR Storozhevoye 75.07 326** *e*P **P** **23 21 25.0 -1.1**
VSR pmax pmax
comp=Z,10.0nm,1.1s
VSR pmax pmax
comp=N,7.0nm,0.9s
VSR pmax pmax
comp=E,10.0nm,0.8s
**LPSR Galich'ya Gora 75.82 327** *e*P **P** **23 21 28.7 -1.7**
LPSR pmax pmax
comp=Z,6.0nm,1.0s
LPSR pmax pmax
comp=N,2.0nm,0.8s
LPSR pmax pmax
comp=E,6.0nm,0.7s
**BKZ Black Stump Fm 77.39 129** *e*P **P** **23 21 41.0 +1.3**
comp=E,14nm,0.7s
**SEY Seymchan 77.45 22**⇑ *e*P **P** **23 21 39.8 +0.4**
**OBN Obninsk 78.16 328** *ce*P **P** **23 21 43.5 0.0**
OBN *e*'PP **PcP** **23 21 49.7 -3.2**
OBN *e* 23 21 53.4
OBN pmax pmax
comp=Z,33nm,1.7s
OBN MLR MLR
comp=Z,94nm,15.0s
**KLMR Klimovskoe 79.32 334** *e*P P 23 21 45.8 -3.9
KLMR pmax pmax
comp=Z,20nm,1.3s
**VNDA Vanda 80.44 169** P **P** **23 21 57.1 +1.5**
comp=Z,1.2nm,1.0s,baz=4.8,slow=2.1,SNR=4.0
**AKASG Malin Array Be 80.71 323** P **P** **23 21 56.6 -0.9**
comp=Z,0.3nm,0.3s,baz=92,slow=3.9,SNR=8.0
**AKBB Malin Array Si 80.71 323** *e*P **P** **23 21 56.7 -0.8**
**AKBB Malin Array Si 80.71 323** *e*P **P** **23 21 56.6 -0.8**
**KIEV Kiev 80.72 323**⇑ *e*P **P** **23 21 57.1 -0.4**
KIEV pmax pmax
comp=Z,5.0nm,1.3s
**VRI Vrincioaia 80.95 317** ⇓P **P** **23 21 57.9 -1.0**
**VRI Vrincioaia 80.95 317** ⇓*i*P **P** **23 21 57.9 -1.0**
**PLOR Plostina 81.00 317** ⇓P **P** **23 22 00.6 +1.4**
**PLOR Plostina 81.00 317** ⇓*i*P **P** **23 22 00.6 +1.4**
**TESR Tescani 81.17 318** ⇓*i*P **P** **23 22 00.3 +0.2**
**MLR Muntele Rosu 81.39 317** ⇓P **P** **23 22 01.7 +0.3**
**MLR Muntele Rosu 81.39 317** ⇓*i*P **P** **23 22 01.7 +0.3**
**TMCR Tamitsa 81.48 337** *e*P **P** **23 22 01.9 +0.6**
TMCR pmax pmax
comp=Z,12nm,0.8s
**ARR Arges 82.25 317**⇑ *i*P **P** **23 22 05.6 -0.3**
**BURAR Bucovina Array 82.40 319** ⇓P **P** **23 22 07.9 +1.3**
**BURAR Bucovina Array 82.40 319** ⇓*i*P **P** **23 22 07.9 +1.3**
**BUR04 Bucovina Ar. S 82.40 319** *e*P **P** **23 22 05.8 -0.9**
**DRGR 83.87 318** ⇑P **P** **23 22 14.4 +0.1**
**DRGR 83.87 318**⇑ *i*P **P** **23 22 14.4 +0.1**
**BZS Buzias 84.38 316** ⇓P **P** **23 22 16.5 -0.3**
**BZS Buzias 84.38 316** ⇓*i*P **P** **23 22 16.5 -0.3**
**KWP Kalwaria Pacla 84.48 320** ⇓P **P** **23 22 18.3 +1.1**
**KWP Kalwaria Pacla 84.48 320** ⇓*i*P **P** **23 22 18.3 +1.1**
**KOLS Kolonicke sedl 84.61 320** *e*P **P** **23 22 19.1 +1.2**
KOLS *e* 23 22 28.5
KOLS pmax pmax
comp=Z,22nm,1.7s
**KOLS Kolonicke sedl 84.61 320** *e*P **P** **23 22 19.1 +1.2**
KOLS *e* 23 22 28.5
**STHS Stebnicka Huta 85.37 320** *e*P **P** **23 22 22.5 +0.8**
STHS pmax pmax
comp=Z,6.0nm,1.2s
**STHS Stebnicka Huta 85.37 320** *e*P **P** **23 22 22.5 +0.8**
**FIA0 FINESS Array S 85.56 332** *e*P **P** **23 22 22.6 +0.3**
**FIA0 FINESS Array S 85.56 332** *e*P **P** **23 22 22.6 +0.3**
**FINES FINESS Array B 85.56 332** P **P** **23 22 22.6 +0.3**
comp=Z,1.4nm,0.3s,baz=123,slow=5.8,SNR=25
FINES pP **pP** **23 22 31.5 -1.1**

comp=Z,1.0nm,0.4s,baz=115,slow=7.4,SNR=2.5
**FINES FINESS Array B 85.56 332** *i* P **P 23 22 22.7 +0.4**
FINES pmax pmax
comp=Z,1.0nm,0.3s
**QSPA South Pole Qui 86.14 180** P **P 23 22 25.6 +0.3**
comp=Z,1.4nm,0.9s,baz=287,slow=3.8,SNR=4.6
**VYHS Vyhne 86.77 319** *e*P **P 23 22 30.5 +1.9**
**VYHS Vyhne 86.77 319** *e*P **P 23 22 30.5 +1.9**
**ARA0 ARCESS Array S 88.07 340** P **P 23 22 34.3 -0.1**
**ARCES ARCESS Array B 88.07 340** P **P 23 22 34.3 -0.1**
comp=Z,6.6nm,0.9s,baz=61,slow=5.7,SNR=6.7
**KRLC Kraliky 88.33 320** *e*P **P 23 22 37.1 +1.0**
KRLC *e* 23 22 47.5
**KRLC Kraliky 88.33 320** *e*P **P 23 22 37.1 +1.0**
KRLC *e*pP **pP 23 22 47.5 +1.0**
**DPC Dobruska-Polom 88.66 320** *e*P **P 23 22 37.6 -0.1**
DPC *e* 23 22 48.2
**DPC Dobruska-Polom 88.66 320** *e*P **P 23 22 37.6 -0.1**
DPC *e*pP **pP 23 22 48.2 +0.1**
**PVCC Panska Ves 89.80 321** *e*P **P 23 22 43.5 +0.6**
**PVCC Panska Ves 89.80 321** *e*P **P 23 22 43.5 +0.6**
**GEC2 GERESS Array S 90.18 319** *e*P **P 23 22 46.1 +1.2**
**GEC2 GERESS Array S 90.18 319** *e*P **P 23 22 46.1 +1.2**
**GERES GERESS Array B 90.18 319** P **P 23 22 44.7 -0.2**
comp=Z,2.1nm,1.0s,baz=96,slow=5.4,SNR=13
GERES pP **pP 23 22 54.8 -0.5**
comp=Z,1.1nm,0.8s,baz=93,slow=7.1,SNR=4.9
**NB200 NORSAR Array S 92.56 331** *e*P **P 23 22 54.8 -0.9**
**NOA NORSAR Array B 92.56 331** P **P 23 22 54.7 -0.9**
comp=Z,1.9nm,1.0s,baz=22,slow=4.9,SNR=2.7
**NOA NORSAR Array B 92.56 331** P **P 23 22 54.7 -0.9**
NOA pmax pmax
comp=Z,2.0nm,1.0s
**TOA0 Torodi Ar. Sit 98.59 283** *e*P Pdif 23 23 24.4 +0.4
**TORD Torodi Ar. Bea 98.59 283** P Pdif 23 23 24.4 +0.4
comp=Z,0.5nm,1.1s,baz=116,slow=3.4,SNR=3.0
**ILAR Eielson Array 103.32 24** PP PP 23 27 59.1 -0.2
comp=Z,0.4nm,1.0s,baz=299,slow=6.0,SNR=5.1
**DBIC Dimbokro 104.82 276** Pdiff **Pdif 23 23 55.7 +3.9**
comp=Z,4.5nm,1.0s,baz=212,slow=6.7,SNR=3.8
**MNTX Cornudas Mount 143.66 37** *e*PKPdf **PKPdf 23 29 19.6 -0.3**
**WMOK Wichita Mounta 144.82 27** *e*PKIKP **PKPab 23 29 20.5 -0.3**
**WMOK Wichita Mounta 144.82 27** *e*PKPdf **PKPab 23 29 20.5 -0.3**
**TUL1 Tulsa 145.05 22** *e*PKPbc **PKPab 23 29 22.0 +0.4**
**SLBS Sierra La Lagu 145.29 53** *e*PKPbc **PKPdf 23 29 24.8 +1.8**
**WCI Wyandotte Cave 145.34 8** *e*PKIKP **PKPbc 23 29 22.3 -0.2**
**WCI Wyandotte Cave 145.34 8** *e*PKPbc **PKPbc 23 29 22.3 -0.2**
**ABTX Abilene, Hawle 146.14 30** *e*PKPdf **PKPbc 23 29 25.3 +0.2**
**TX31 Lajitas Ar. Si 146.36 39** *e*PKPdf **PKPbc 23 29 25.9 -0.1**
**TXAR Lajitas Array 146.36 39** PKPbc **PKPab 23 29 26.9 +0.1**
comp=Z,9.9nm,0.9s,baz=280,slow=1.7,SNR=62
**MIAR Mount Ida 147.07 20** *e*PKP2 **PKPbc 23 29 28.1 +0.4**
**MIAR Mount Ida 147.07 20** *e*PKPdf **PKPbc 23 29 28.1 +0.4**
**TZTN Tazewell 147.32 5** *e*PKPbc **PKPbc 23 29 28.6 +0.2**
**JCT Junction City 147.76 33** *e*PKP2 **PKPdf 23 29 28.5 +1.5**
**JCT Junction City 147.76 33** *e*PKPdf **PKPdf 23 29 28.5 +1.5**
**TKL Tuckaleechee C 148.18 5** *e*PKP2 **PKPbc 23 29 30.7 -0.1**
**TKL Tuckaleechee C 148.18 5** *e*PKPbc **PKPbc 23 29 30.7 -0.1**
**OXF Oxford 148.34 14** *e*PKP2 **PKPbc 23 29 31.3 +0.1**
**OXF Oxford 148.34 14** *e*PKPbc **PKPbc 23 29 31.3 +0.1**
**SWET Sewanee 148.35 9** *e*PKPbc **PKPbc 23 29 31.0 -0.2**
**GOGA Godfrey 150.44 5** *e*PKIKP **PKPbc 23 29 37.5 +1.1**
**GOGA Godfrey 150.44 5** *e*PKPbc **PKPbc 23 29 37.5 +1.1**

*IDC* ***26*** *23:28:23.0± 1.6, 3.˚62S× 99.˚53E, h0km, mb3.7/8, mb1 3.8/8, mb1mx3.6/43, mbtmp3.7/8, Error ellipse: s-maj=62.2km s-min=21.7km az=53.0*
*ISCJB* ***26*** *23:28:26.5± 1.3, 3.˚5S± 0.˚2× 99.˚6E± 0.˚3, h33km, mb3.6/8, Error ellipse: s-maj=50.4km s-min=17.1km az=143.6*
**ISC 26 23:28:28.5±1.4, 3.˚6S±0.˚3× 99.˚7E±0.˚3, h35km, n12, σ1º10/9, mb3.7/8, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.88** | **358** | P | **P** | **23 33 19.4** | **+0.9** |
| | 1.3nm,0.7s,baz=190,slow=9.5,SNR=8.8 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.33** | **260** | T | T | 00 03 49.0 | |
| | baz=82,slow=75,SNR=8.9 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.33** | **260** | T | T | 00 03 45.9 | |
| | baz=82,slow=75,SNR=7.2 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.34** | **260** | T | T | 00 03 47.7 | |
| | baz=82,slow=75,SNR=4.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.54** | **119** | P | **P** | **23 35 38.1** | **-1.5** |
| | 0.1nm,0.3s,baz=304,slow=8.9,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **38.65** | **124** | P | **P** | **23 35 50.5** | **+1.5** |
| | 0.2nm,0.6s,baz=303,slow=7.4,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **51.51** | **6** | P | **P** | **23 37 31.1** | **+0.2** |
| | 1.0nm,0.6s,baz=183,slow=9.6,SNR=8.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.42** | **345** | P | **P** | **23 37 36.9** | **-0.6** |
| | 0.7nm,0.5s,baz=148,slow=8.5,SNR=4.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.62** | **350** | P | **P** | **23 38 21.0** | **-0.9** |
| | 1.6nm,0.7s,baz=194,slow=4.0,SNR=5.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.11** | **313** | P | **P** | **23 40 01.2** | **-0.4** |
| | 0.3nm,0.5s,baz=110,slow=7.8,SNR=3.1 | | | | | | |
| **FINES** | **FINESS Array B** | **85.31** | **332** | P | **P** | **23 41 02.3** | **+0.7** |
| | 2.8nm,1.1s,baz=145,slow=4.7,SNR=4.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.13** | **38** | PKPbc | **PKPab** | **23 48 06.4** | **-0.1** |
| | 0.6nm,0.8s,baz=335,slow=4.0,SNR=1.1 | | | | | | |

*ISCJB* ***26*** *23:36:40.7± 0.6, 21.˚67N± 0.˚09× 143.˚3E± 0.˚2, h300km, mb3.7/18, Error ellipse: s-maj=20.0km s-min=11.8km az=0.8*
*IDC* ***26*** *23:36:40.4± 3.8, 21.˚68N× 143.˚32E, h281km± 37km, mb3.4/18, mb1 3.6/19, mb1mx3.4/46, mbtmp4.0/19, Error ellipse: s-maj=19.5km s-min=11.3km az=88.0*
**ISC 26 23:36:42.1±0.7, 21.˚7N±0.˚1× 143.˚3E±0.˚2, h300km, n23, σ0º81/25, mb3.7/18, Mariana Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MJAR** | **Matsushiro Arr** | **15.45** | **344** | P | **Pn** | **23 40 05.0** | **-0.7** |
| | 0.4nm,0.3s,baz=165,slow=12,SNR=2.2 | | | | | | |
| **KSRS** | **Korea Array** | **20.58** | **323** | P | **P** | **23 40 58.4** | **-0.4** |
| | 2.3nm,0.7s,baz=144,slow=9.2,SNR=6.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **24.32** | **340** | P | **P** | **23 41 31.6** | **-1.4** |
| | 0.9nm,0.6s,baz=182,slow=13,SNR=2.9 | | | | | | |
| **BATI** | **Baumata** | **37.09** | **213** | P | **P** | **23 43 24.4** | **-0.2** |
| | 14nm,0.3s,baz=290,slow=15,SNR=3.8 | | | | | | |
| **SONM** | **Songino Array** | **39.41** | **320** | P | **P** | **23 43 44.3** | **+0.7** |
| | 1.0nm,0.7s,baz=135,slow=6.4,SNR=7.3 | | | | | | |
| **SEY** | **Seymchan** | **41.68** | **6** | P | **P** | **23 44 00.9** | **-0.8** |
| | 2.4nm,0.4s,baz=41,slow=15,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.29** | **193** | P | **P** | **23 44 07.0** | **-0.1** |
| | 1.5nm,0.9s,baz=16,slow=9.3,SNR=23 | | | | | | |
| **ASAR** | **Alice Springs** | **46.00** | **192** | P | **P** | **23 44 35.5** | **-0.8** |
| | 0.2nm,0.3s,baz=13,slow=7.9,SNR=5.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.28** | **322** | P | **P** | **23 45 38.0** | **+0.3** |
| | 1.2nm,0.5s,baz=88,slow=6.4,SNR=7.9 | | | | | | |
| ZALV | | | | PcP | **PcP** | **23 46 36.4** | **-1.2** |
| | 1.0nm,0.4s,baz=114,slow=3.1,SNR=4.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.78** | **313** | P | **P** | **23 45 41.8** | **+0.3** |
| | 1.2nm,0.5s,baz=88,slow=8.4,SNR=9.7 | | | | | | |
| MKAR | | | | PcP | **PcP** | **23 46 39.3** | **-0.5** |
| | 0.4nm,0.4s,baz=81,slow=3.4,SNR=4.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.60** | **317** | P | **P** | **23 46 01.5** | **+0.4** |
| | 3.6nm,0.6s,baz=94,slow=7.5,SNR=29 | | | | | | |
| **ILAR** | **Eielson Array** | **62.00** | **27** | P | **P** | **23 46 30.6** | **-0.1** |
| | 0.6nm,0.7s,baz=254,slow=5.3,SNR=5.4 | | | | | | |
| **BVAR** | **Borovoye Array** | **62.74** | **319** | P | **P** | **23 46 36.6** | **+0.8** |
| | 3.6nm,0.4s,baz=89,slow=7.3,SNR=42 | | | | | | |
| **INK** | **Inuvik** | **67.54** | **24** | P | **P** | **23 47 05.7** | **-0.4** |
| | 1.6nm,0.9s,baz=290,slow=2.8,SNR=4.4 | | | | | | |
| **YKA** | **Yellowknife Ar** | **76.42** | **28** | P | **P** | **23 47 59.6** | **+1.0** |
| | 1.1nm,0.4s,baz=292,slow=5.8,SNR=8.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **78.96** | **342** | P | **P** | **23 48 13.0** | **+0.5** |
| | 2.4nm,0.5s,baz=70,slow=8.1,SNR=18 | | | | | | |
| **KBZ** | **Khabaz** | **82.45** | **314** | P | **P** | **23 48 32.1** | **+0.7** |
| | 2.4nm,0.8s,baz=70,slow=5.5,SNR=7.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.07** | **52** | P | **P** | **23 48 35.0** | **+0.1** |
| | 0.5nm,0.6s,baz=292,slow=4.8,SNR=2.4 | | | | | | |
| **FINES** | **FINESS Array B** | **83.23** | **335** | P | **P** | **23 48 34.6** | **-0.4** |
| | 0.7nm,0.4s,baz=86,slow=4.3,SNR=14 | | | | | | |
| **BRTR** | **Keskin Array B** | **90.42** | **313** | P | **P** | **23 49 09.2** | **-1.1** |
| | 0.4nm,0.7s,baz=127,slow=4.9,SNR=3.4 | | | | | | |
| **MAW** | **Mawson** | **106.26** | **203** | PP | PP | 23 54 47.0 | -1.8 |
| | 0.4nm,0.4s,baz=68,slow=19,SNR=2.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.83** | **309** | PKP | **PKPdf** | **23 55 15.3** | **+0.3** |
| | 0.1nm,0.3s,baz=22,slow=1.9,SNR=8.4 | | | | | | |
| TORD | | | | PP | **PP** | **23 57 26.6** | **+1.6** |
| | 0.6nm,0.6s,baz=46,slow=4.8,SNR=12 | | | | | | |
| **LPAZ** | **La Paz** | **149.84** | **85** | PKPbc | **PKPbc** | **23 55 59.6** | **+1.2** |
| | 0.9nm,0.6s,baz=18,slow=9.9,SNR=4.6 | | | | | | |

**MEX 26 23:41:25.7±0.6, 16.˚83N× 99.˚09W, h16km±11km, MD3.7, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ACX** | **Acapulco** | **0.73** | **273** | *e*P | Pg | 23 41 35.5 | -4.6 |
| ACX | | | | *e*S | Sg | 23 41 44.9 | -5.0 |
| **TLIG** | **Tlapa** | **0.89** | **34** | *i* P | Pb | 23 41 39.7 | -3.3 |
| TLIG | | | | *e*S | Sb | 23 41 50.5 | -4.2 |
| **PNIG** | **Pinotepa** | **1.02** | **115** | *e*P | Pb | 23 41 41.6 | -3.5 |
| PNIG | | | | *e*S | Sb | 23 41 54.2 | -4.1 |
| **CAIG** | **El Cayaco** | **1.15** | **281** | *e*P | Pn | 23 41 43.0 | -4.0 |
| CAIG | | | | *e*S | Sb | 23 41 56.3 | -5.4 |
| **PLIG** | **Platanillo** | **1.61** | **346** | *e*P | Pn | 23 41 50.4 | -3.2 |
| PLIG | | | | *e*S | Sn | 23 42 09.1 | -4.9 |
| **ARIG** | **Puente Sto Nin** | **1.88** | **321** | *e*P | Pn | 23 41 54.8 | -2.4 |
| ARIG | | | | *i* S | Sn | 23 42 14.9 | -5.7 |

*BJI* ***26*** *23:45:33.8, 2.˚62S× 99.˚88E, h25km, mb5.6/75, mB5.6/58, Ms5.7/75, Ms7 5.5/71*
*ISCJB* ***26*** *23:45:36.2± 0.6, 2.˚35S± 0.˚02× 99.˚86E± 0.˚02, h24km± 3km, mb5.5/164, MS5.2/158, Error ellipse: s-maj=3.8km s-min=2.5km az=42.7*
*AUST* ***26*** *23:45:36.7± 2.2, 2.˚34S× 99.˚83E, h16km± 13km, Error ellipse: s-maj=10.7km s-min=3.9km az=56.0*
*MOS* ***26*** *23:45:37.7± 1.1, 2.˚24S× 99.˚98E, h31km, mb5.9/63, MS5.0/41, Error ellipse: s-maj=8.4km s-min=4.2km az=115.5*
*DJA* ***26*** *23:45:37.2± 0.4, 2.˚S± 3.˚× 10.˚0E± .˚, h30km± 4km, M5.6/28, mb5.6/28, mB5.9/26, MLv5.9/26, MLv5.8/21, Mw(mB)5.5/26, Mwp5.5/5*
*GCMT* ***26*** *23:45:38.5± 0.3, 2.˚60S× 99.˚66E, h19km, MW5.4/54, Moment Tensor Solution. s46,c62; s54,c69; Duration: 1s2 Moment tensor: Scale 10^17Nm; Mr=1.29±.04; Mθθ=0.79±.04; Mφφ=0.49±.04; Mrθ=0.88±.11; Mrφ=0.67±.02; Mθφ=0.40±.09; Best double couple: Mo=1.62600×10^17 NP1:φs=120.00000°, δ63.00000°, λ82.00000°. NP2: φs=317.00000°, δ28.00000°, λ105.00000°. Principal axes: T 1.6210, Plg71.0000°, Azm13.0000°; N 0.0140, Plg7.0000°, Azm124.0000°; P -1.6310, Plg18.0000°, Azm216.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC* ***26*** *23:45:38.5± 0.5, 2.˚36S× 99.˚85E, h25km± 3km, mb5.5/58, MS5.3/113 Error ellipse: s-maj=6.3km s-min=4.1km az=48.0*
*KLM* ***26*** *23:45:39.7, 2.˚35S× 99.˚72E, h37km, mb5.5, ML5.6, MS6.4*
*IDC* ***26*** *23:45:42.3± 1.2, 2.˚35S× 99.˚89E, h63km± 10km, mb4.8/32, mb1 4.9/33, mb1mx4.8/35, mbtmp5.1/33, MS5.1/25, Ms1 5.1/25, ms1mx4.9/40, Error ellipse: s-maj=11.5km s-min=7.1km az=52.0*
*SZGRF* ***26*** *23:45:44.7, 1.˚28S× 98.˚90E, h29km, mb5.5/14(BGR), Ms5.0/2(BGR)*
**ISC 26 23:45:38.3±0.3, 2.˚39S±0.˚03× 99.˚81E±0.˚03, h28km±1km, h27km: pP-P, n1042, σ1º39/1048, mb5.5/179, MS5.2/158, 37C-85D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.42** | **152** | P | **Pb** | **23 45 47.6** | **+0.2** |
| PPSI | | | | S | **Sn** | **23 45 55.7** | **+0.3** |
| **SISI** | **Saibi** | **1.28** | **326** | P | **Pn** | **23 45 59.9** | **-0.4** |
| SISI | | | | S | **Sn** | **23 46 15.1** | **-1.5** |
| **PPI** | **Padang Panjang** | **2.00** | **17** | P | **Pn** | **23 46 10.9** | **+0.6** |
| PPI | | | | S | **Sb** | **23 46 36.9** | **-1.8** |
| **SDSI** | **Sungai Dareh** | **2.17** | **48** | P | **Pn** | **23 46 14.1** | **+1.5** |
| SDSI | | | | S | **Sn** | **23 46 37.1** | **-1.4** |
| **BKNI** | **Bangkinang** | **2.96** | **24** | P | **Pn** | **23 46 25.1** | **+1.5** |
| | baz=2.9,SNR=25 | | | | | | |
| **BKNI** | **Bangkinang** | **2.96** | **24** | P | **Pn** | **23 46 24.8** | **+1.3** |
| **BKNI** | **Bangkinang** | **2.96** | **24** | *e*Pn | **Pn** | **23 46 24.9** | **+1.3** |
| BKNI | | | | *e*Sn | **Sn** | **23 46 57.2** | **-1.0** |
| **KSI** | **Kapahiang** | **3.05** | **114** | P | **Pn** | **23 46 24.9** | **+0.1** |
| **MNSI** | **Mandailing Nat** | **3.17** | **356** | P | **Pn** | **23 46 26.0** | **-0.4** |
| **MNAI** | **Manna** | **3.70** | **122** | P | **Pn** | **23 46 33.9** | **+0.3** |
| | baz=3.7,SNR=53 | | | | | | |
| **MNAI** | **Manna** | **3.70** | **122** | P | **Pn** | **23 46 34.0** | **+0.3** |
| **MNAI** | **Manna** | **3.70** | **122** | *e*Pn | **Pn** | **23 46 34.5** | **+0.8** |
| MNAI | | | | *e*Sn | **Sn** | **23 47 15.1** | **-1.3** |
| **JMBI** | **JAMBI** | **3.90** | **79** | P | **Pn** | **23 46 37.0** | **+0.6** |
| **LHSI** | **Lahat** | **3.97** | **111** | P | **Pn** | **23 46 38.8** | **+1.4** |
| **GSI** | **Gunungsitoli** | **4.29** | **329** | P | **Pn** | **23 46 41.3** | **-0.6** |
| | baz=4.3 | | | | | | |
| **GSI** | **Gunungsitoli** | **4.29** | **329** | P | **Pn** | **23 46 40.8** | **-1.1** |
| **GSI** | **Gunungsitoli** | **4.29** | **329** | *e*Pn | **Pn** | **23 46 41.6** | **-0.2** |
| **MDSI** | **Maura Dua** | **4.83** | **116** | P | **Pn** | **23 46 50.3** | **+1.1** |
| **LWLI** | **Liwa** | **4.98** | **122** | P | **Pn** | **23 46 52.7** | **+1.3** |
| | 2µm,0.8s,27µm15nm | | | | | | |
| **PMBI** | **Palembang** | **4.98** | **96** | P | **Pb** | **23 47 05.5** | **+0.6** |
| **PSI** | **Prapat** | **5.23** | **350** | P | **Pn** | **23 46 52.6** | **-2.3** |
| | 8.3nm,0.3s,baz=170,slow=10.0,SNR=31 | | | | | | |
| PSI | | | | S | **Sn** | **23 47 56.2** | **+1.9** |
| | 20nm,0.3s,baz=179,slow=16,SNR=2.4 | | | | | | |
| PSI | | | | LR | LR | 23 49 23.7 | |
| | comp=Z,39µm,19.6s,baz=184,slow=43 | | | | | | |
| **PSI** | **Prapat** | **5.23** | **350** | P | **Pn** | **23 46 52.9** | **-2.0** |
| | baz=5.1,SNR=20 | | | | | | |
| **KLI** | **Kotabumi** | **5.60** | **116** | P | **Pn** | **23 47 01.3** | **+1.5** |
| | 1µm,1.2s,15µm8.7nm | | | | | | |
| **KGM** | **Kluang** | **5.61** | **39** | ⇓P | **Pn** | **23 47 01.9** | **+2.0** |
| **KASI** | **Kota Agung** | **5.62** | **124** | P | **Pn** | **23 47 00.3** | **+0.3** |
| | 769nm,1.0s,11µm5.6nm | | | | | | |
| **TPRI** | **Tanjung Pinang** | **5.74** | **55** | P | **Pn** | **23 47 03.2** | **+1.4** |
| | 2µm,0.7s,56µm17nm | | | | | | |
| **MYKOM** | **Kota Tinggi** | **5.79** | **44** | ⇑P | **Pn** | **23 47 04.7** | **+2.3** |
| **MYKOM** | **Kota Tinggi** | **5.79** | **44** | *e*Pn | **Pn** | **23 47 04.8** | **+2.3** |
| **FRIM** | **Kepong** | **5.87** | **18** | ⇑P | **Pn** | **23 47 05.1** | **+1.5** |
| **TSI** | **Tuntungan** | **5.98** | **348** | P | **Pn** | **23 47 05.0** | **0.0** |
| | 1µm,0.7s,22µm11nm | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **6.21** | **341** | P | **Pn** | **23 47 08.9** | **+0.6** |
| | 466nm,1.0s,10µm5.2nm | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.32** | **88** | P | **Pn** | **23 47 11.4** | **+1.6** |
| **IPM** | **Ipoh** | **6.93** | **10** | *e*Pn | **Pn** | **23 47 19.4** | **+1.3** |
| **CGJI** | **Cibinong** | **7.21** | **126** | P | **Pn** | **23 47 20.1** | **-1.8** |
| | 315nm,0.8s,6µm9µm2.0nm2.0nm | | | | | | |
| **SBJI** | **Serang** | **7.31** | **121** | P | Pb | 23 47 36.2 | -8.3 |
| **KULM** | **Kulim** | **7.67** | **6** | ⇑P | **Pn** | **23 47 28.4** | **+0.1** |
| **KULM** | **Kulim** | **7.67** | **6** | *e*Pn | **Pn** | **23 47 29.4** | **+1.0** |
| **TPI** | **Tanjungpandan** | **7.84** | **93** | P | **Pn** | **23 47 31.2** | **+0.6** |
| | 74nm,0.9s,1µm19µm | | | | | | |
| **LHMI** | **Lhok Sumawe** | **8.09** | **339** | P | Pb | 23 47 52.1 | -5.7 |
| **LHMI** | **Lhok Sumawe** | **8.09** | **339** | *e*Pn | **Pn** | **23 47 33.5** | **-0.5** |
| **SKJI** | **Sukabumi** | **8.14** | **125** | P | **Pn** | **23 47 33.7** | **-1.0** |
| | 442nm,0.8s,6µm | | | | | | |
| **KTGM** | **Kuala Trenggan** | **8.35** | **23** | ⇓P | **Pn** | **23 47 38.9** | **+1.3** |
| **CNJI** | **Cibinong** | **8.78** | **124** | P | **Pn** | **23 47 41.7** | **-1.8** |
| | 268nm,0.7s,5µm | | | | | | |
| **LEM** | **Lembang** | **8.94** | **120** | P | **Pn** | **23 47 45.3** | **-0.6** |
| | 8.6nm,0.3s,baz=208,slow=4.6,SNR=9.7 | | | | | | |
| LEM | | | | S | Sn | 23 49 34.2 | +8.3 |
| | 2.0nm,0.3s,baz=330,slow=20,SNR=2.0 | | | | | | |
| LEM | | | | LR | LR | 23 51 53.2 | |
| | comp=Z,10µm,18.5s,baz=264,slow=42 | | | | | | |
| **LEM** | **Lembang** | **8.94** | **120** | P | Pn | 23 47 56.8 | +11 |
| | baz=9.0,SNR=4.0 | | | | | | |
| **LEM** | **Lembang** | **8.94** | **120** | P | **Pn** | **23 47 47.0** | **+1.1** |
| | 4µm,1.0s,44µm | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.48** | **123** | P | **Pn** | **23 47 51.4** | **-1.8** |
| | baz=9.5,SNR=22 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.48** | **123** | P | **Pn** | **23 47 51.0** | **-2.2** |
| | 476nm,0.6s,6µm | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.48** | **123** | *e*Pn | **Pn** | **23 47 51.1** | **-2.0** |
| CISI | | | | *e*Sn | Sn | 23 49 27.5 | -12 |
| **SKLT** | **Songkhla** | **9.53** | **5** | P | **Pn** | **23 47 53.0** | **-0.8** |
| | 284nm,1.2s,3µm | | | | | | |
| **CMJI** | **Cimerak** | **10.13** | **122** | P | **Pn** | **23 47 59.7** | **-2.4** |
| | 256nm,0.9s,3µm | | | | | | |
| **TRTT** | **Trang** | **10.16** | **359** | P | **Pn** | **23 48 05.5** | **+3.1** |
| | 242nm,1.3s,3µm | | | | | | |
| **PKDT** | **Phuket** | **10.32** | **352** | P | Pn | 23 48 12.1 | +7.5 |
| **CMBY** | **CAMPBELL BAY** | **11.03** | **328** | *e*P | Pn | 23 48 10.9 | -3.4 |
| CMBY | | | | AMB | AMB | 23 48 53.5 | |
| | comp=Z,82nm,1.0s | | | | | | |
| **KSM** | **Kuching** | **11.17** | **70** | ⇓P | **Pn** | **23 48 19.3** | **+3.0** |
| **KSM** | **Kuching** | **11.17** | **70** | *e*Pn | **Pn** | **23 48 19.3** | **+3.0** |
| **SMRI** | **Semarang** | **11.56** | **114** | P | **Pn** | **23 48 20.9** | **-0.7** |
| | baz=12,SNR=5.7 | | | | | | |
| **SMRI** | **Semarang** | **11.56** | **114** | P | **Pn** | **23 48 23.1** | **+1.5** |
| | comp=Z,375nm,1.3s,comp=Z,7µm | | | | | | |
| **SMRI** | **Semarang** | **11.56** | **114** | *e*Pn | **Pn** | **23 48 23.6** | **+1.9** |
| **UWJI** | **Ujung Watu** | **11.80** | **110** | P | **Pn** | **23 48 26.3** | **+1.4** |
| | comp=Z,456nm,1.2s,comp=Z,5µm | | | | | | |
| **PBKI** | **Pangkalan Bun** | **11.85** | **92** | P | **Pn** | **23 48 27.8** | **+2.2** |
| | comp=Z,374nm,1.3s,comp=Z,4µm | | | | | | |
| **STKI** | **Sintang** | **11.91** | **78** | P | Pn | 23 48 31.7 | +5.2 |
| **UGM** | **Wanagama** | **11.99** | **118** | P | **Pn** | **23 48 25.9** | **-1.7** |
| | baz=12,SNR=9.8 | | | | | | |
| **UGM** | **Wanagama** | **11.99** | **118** | *e*Pn | **Pn** | **23 48 26.1** | **-1.5** |
| **WOJI** | **Wonogiri, Jawa** | **12.32** | **116** | P | **Pn** | **23 48 30.8** | **-1.2** |
| | comp=Z,146nm,1.5s,comp=Z,5µm | | | | | | |
| **NGJI** | **Ngawi** | **12.61** | **114** | P | **Pn** | **23 48 36.7** | **+0.7** |
| **SBUM** | **Sibu** | **13.30** | **69** | ⇓P | Pn | 23 48 48.8 | +3.3 |
| **SBUM** | **Sibu** | **13.30** | **69** | *e*Pn | **Pn** | **23 48 48.0** | **+2.6** |
| **PATY** | **Pattaya** | **15.25** | **4** | P | **P** | **23 49 16.1** | **-0.4** |
| **CHBT** | **CHBT** | **15.25** | **9** | P | **Pn** | **23 49 13.7** | **+1.9** |
| | comp=Z,102nm,0.9s,comp=Z,669µm | | | | | | |
| **PBA** | **Port Blair** | **15.62** | **333** | *e*P | Pn | 23 49 18.0 | +1.3 |
| PBA | | | | AMB | AMB | 23 49 53.4 | |
| | comp=Z,109nm,0.0s | | | | | | |
| **SRDT** | **SRDT** | **16.64** | **358** | P | **Pn** | **23 49 30.2** | **+0.4** |
| | comp=Z,149nm,1.6s,comp=Z,14µm | | | | | | |
| **DGPR** | **DIGLIPUR** | **16.91** | **336** | *e*P | Pn | **23 49 30.6** | **-2.4** |
| **KHLT** | **Khaolaem Dam** | **17.12** | **356** | P | Pn | **23 49 34.8** | **-0.9** |
| | comp=Z,25nm,1.4s,comp=Z,457nm | | | | | | |
| **CHAI** | **Chaiyaphum** | **18.30** | **7** | P | **P** | **23 49 49.7** | **-0.6** |
| | comp=Z,15nm,1.0s,comp=Z,233nm | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.40** | **63** | P | **P** | **23 49 51.3** | **-0.2** |
| | baz=18,SNR=21 | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.40** | **63** | ⇓P | **Pn** | **23 49 52.2** | **+0.6** |
| **KKM** | **Kota Kinabalu** | **18.40** | **63** | *e*Pn | **Pn** | **23 49 52.1** | **+0.4** |
| | comp=Z,188nm,1.2s | | | | | | |
| **UBPT** | **Khong Chiam** | **18.43** | **18** | P | **P** | **23 49 50.7** | **-1.0** |
| | comp=Z,244nm,0.9s,comp=Z,2µm | | | | | | |
| **UMPA** | **Umpang Tak** | **18.50** | **357** | P | **P** | **23 49 51.1** | **-1.4** |
| | comp=Z,18nm,0.9s,comp=Z,308nm | | | | | | |
| **KHON** | **Khomkaen** | **18.84** | **9** | P | **Pn** | **23 49 57.5** | **+0.6** |
| | comp=Z,25nm,1.1s,comp=Z,5µm | | | | | | |
| **PBKT** | **Sadao Pong** | **18.87** | **3** | P | **P** | **23 49 54.7** | **-1.8** |
| | comp=Z,62nm,1.0s,comp=Z,2µm | | | | | | |
| **SDKM** | **Sandakan** | **19.11** | **65** | ⇓P | **Pn** | **23 50 00.2** | **0.0** |
| **TSM** | **Tawau** | **19.23** | **70** | ⇓P | **Pn** | **23 50 01.4** | **-0.3** |
| **KDM** | **Kudat** | **19.34** | **61** | ⇓P | **Pn** | **23 50 02.8** | **-0.2** |
| **SKNT** | **Sakolnakorn** | **19.67** | **12** | P | **P** | **23 50 04.3** | **-1.1** |
| | comp=Z,67nm,0.9s | | | | | | |
| **UTTA** | **Uttaradit** | **20.02** | **2** | P | **P** | **23 50 08.0** | **-1.1** |
| | comp=Z,21nm,0.8s,comp=Z,152nm | | | | | | |
| **KAPI** | **Kappang** | **20.07** | **98** | P | **P** | **23 50 09.0** | **-0.7** |
| | comp=Z,2.4nm,0.3s,baz=300,slow=8.5,SNR=12 | | | | | | |
| KAPI | | | | S | **S** | **23 53 48.0** | **-6.0** |
| | comp=Z,2.4nm,0.3s,baz=342,slow=14,SNR=3.0 | | | | | | |
| **KAPI** | **Kappang** | **20.07** | **98** | P | **P** | **23 50 09.7** | **0.0** |
| | comp=Z,691nm,1.2s,SNR=8.2 | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.12** | **68** | ⇓P | Pn | 23 50 12.1 | -0.2 |
| **MYLDM** | **Lahad Datu** | **20.12** | **68** | *e*P | **P** | **23 50 10.8** | **+0.5** |
| | comp=Z,396nm,1.1s | | | | | | |
| **MHMT** | **Maesarieng** | **20.52** | **355** | P | **P** | **23 50 13.9** | **-0.6** |
| | comp=Z,96nm,0.9s,comp=Z,834nm | | | | | | |
| **NONG** | **Nongkai** | **20.59** | **9** | P | **P** | **23 50 13.5** | **-1.8** |
| | comp=Z,122nm,0.9s | | | | | | |
| **CM15** | **Chiang Mai Arr** | **20.73** | **358** | P | **P** | **23 50 16.3** | **-0.5** |
| | baz=21 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **20.73** | **358** | *e*P | **P** | **23 50 15.5** | **-1.4** |
| CM31 | | | | *e*S | **S** | **23 54 07.2** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **20.73** | **358** | P | **P** | **23 50 15.5** | **-1.4** |
| | comp=Z,111nm,1.0s,baz=186,slow=9.4,SNR=287 | | | | | | |
| CMAR | | | | S | **S** | **23 54 07.2** | **0.0** |
| | comp=Z,1.5nm,0.3s,baz=217,slow=7.8,SNR=2.9 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,1μm,15.6s | | | | | | | | | |
| **MBWA** | **Marble Bar** | **26.92** | **135** | *e*P | | **P** | | **23 51 17.2** | **-0.1** | |
| | comp=Z,49nm,0.9s | | | | | | | | | |
| MBWA | | | | LR | | LR | | | | |
| | comp=Z,5μm,21.0s | | | | | | | | | |
| **RCLA** | **Racherla** | **27.21** | **311** | *e*P | | **P** | | **23 51 21.0** | **+1.0** | |
| RCLA | | | | IAmb | | IAmb | | 23 51 26.0 | | |
| | comp=Z,97nm,1.7s | | | | | | | | | |
| RCLA | | | | *e*S | | **S** | | **23 55 57.5** | **+0.1** | |
| RCLA | | | | IVMs_BB | | IVMs_BB | | 00 03 42.0 | | |
| | comp=Z,1μm,16.0s | | | | | | | | | |
| **DAV** | **Davao City (W)** | **27.38** | **70** | P | | **P** | | **23 51 21.7** | **+0.1** | |
| | comp=Z,188nm,0.4s,baz=79,slow=2.3,SNR=6.1 | | | | | | | | | |
| DAV | | | | LR | | LR | | 00 03 30.8 | | |
| | comp=Z,4μm,19.9s,baz=222,slow=39 | | | | | | | | | |
| **DAV** | **Davao City (W)** | **27.38** | **70** | P | | **P** | | **23 51 22.9** | **+1.3** | |
| | SNR=6.5 | | | | | | | | | |
| **DAV** | **Davao City (W)** | **27.38** | **70** | *e*P | | **P** | | **23 51 21.7** | **+0.1** | |
| | comp=Z,608nm,1.3s | | | | | | | | | |
| **KMI** | **Kunming** | **27.49** | **6** | P | | **P** | | **23 51 22.8** | **+0.1** | |
| KMI | | | | pP | | **pP** | | **23 51 31.8** | **+0.9** | |
| KMI | | | | sP | | **sP** | | **23 51 35.3** | **+1.0** | |
| KMI | | | | PP | | PnPn | | 23 52 16.3 | +8.2 | |
| KMI | | | | S | | **S** | | **23 56 07.3** | **+5.1** | |
| KMI | | | | SS | | SnSn | | 23 57 24.0 | +10 | |
| KMI | | | | PMZ | | | | | | |
| | comp=Z,30nm,1.1s | | | | | | | | | |
| KMI | | | | PMZ | | | | | | |
| | comp=Z,350nm,5.1s | | | | | | | | | |
| KMI | | | | LN | | | | | | |
| | comp=Z,4μm,16.9s | | | | | | | | | |
| KMI | | | | LE | | | | | | |
| | comp=Z,6μm,14.6s | | | | | | | | | |
| KMI | | | | LZ | | | | | | |
| | comp=Z,5μm,21.6s | | | | | | | | | |
| **NJS** | **Nagarjunasagar** | **27.65** | **314** | *e*P | | **P** | | **23 51 24.4** | **+0.4** | |
| NJS | | | | IAmb | | IAmb | | 23 51 25.8 | | |
| | comp=Z,29nm,1.6s | | | | | | | | | |
| NJS | | | | *e*S | | **S** | | **23 56 05.8** | **+1.3** | |
| NJS | | | | IVMs_BB | | IVMs_BB | | 00 03 02.9 | | |
| | comp=Z,876nm,19.1s | | | | | | | | | |
| **SRLM** | **Srisailam** | **27.66** | **312** | *e*P | | **P** | | **23 51 24.9** | **+0.8** | |
| SRLM | | | | IAmb | | IAmb | | 23 51 26.1 | | |
| | comp=Z,49nm,1.4s | | | | | | | | | |
| SRLM | | | | *e*S | | **S** | | **23 56 05.0** | **+0.4** | |
| SRLM | | | | IVMs_BB | | IVMs_BB | | 00 04 04.5 | | |
| | comp=Z,1μm,16.9s | | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.70** | **258** | T | | T | | 00 20 05.8 | | |
| | baz=80,slow=75,SNR=2864 | | | | | | | | | |
| **DGAR** | **Diego Garcia** | **27.70** | **259** | PFAKE | | | | 23 51 40.0 | +15 | |
| DGAR | | | | LR | | LR | | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.71** | **258** | T | | T | | 00 20 06.2 | | |
| | baz=80,slow=75,SNR=4400 | | | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.72** | **258** | T | | T | | 00 20 07.0 | | |
| | baz=80,slow=75,SNR=3989 | | | | | | | | | |
| **TNTI** | **Ternate** | **27.73** | **84** | *e*P | | **P** | | **23 51 22.6** | **-2.1** | |
| | comp=Z,278nm,1.4s | | | | | | | | | |
| TNTI | | | | LR | | LR | | | | |
| | comp=Z,3μm,22.0s | | | | | | | | | |
| **URV** | **Uravakonda** | **28.20** | **308** | *e*P | | **P** | | **23 51 29.3** | **+0.3** | |
| URV | | | | IAmb | | IAmb | | 23 51 39.2 | | |
| | comp=Z,107nm,2.4s | | | | | | | | | |
| URV | | | | *e*S | | **S** | | **23 56 13.3** | **+0.1** | |
| URV | | | | IVMs_BB | | IVMs_BB | | 00 03 47.5 | | |
| | comp=Z,1μm,16.6s | | | | | | | | | |
| **SZP** | **Santa** | **28.41** | **45** | *e*P | | **P** | | **23 51 30.8** | **+0.1** | |
| | comp=Z,409nm,1.0s | | | | | | | | | |
| **HYB** | **Hyderabad** | **28.76** | **314** | *e*P | | **P** | | **23 51 33.5** | **-0.4** | |
| HYB | | | | *e*S | | **S** | | **23 56 22.0** | **+0.1** | |
| **HYB** | **Hyderabad** | **28.76** | **314** | *i* P | | **P** | | **23 51 33.5** | **-0.4** | |
| HYB | | | | *e* | | | | 23 51 43.0 | | |
| HYB | | | | *e* | | | | 23 51 51.0 | | |
| HYB | | | | *e*S | | **S** | | **23 56 22.0** | **+0.1** | |
| **HYB** | **Hyderabad** | **28.76** | **314** | *e*P | | **P** | | **23 51 33.3** | **-0.6** | |
| **HYB** | **Hyderabad** | **28.76** | **314** | *e*P | | **P** | | **23 51 33.5** | **-0.4** | |
| HYB | | | | *e*S | | **S** | | **23 56 22.0** | **+0.1** | |
| **HYBB** | **Hyderabad (bro** | **28.76** | **314** | *e*P | | **P** | | **23 51 33.8** | **-0.1** | |
| HYBB | | | | IAmb | | IAmb | | 23 51 34.9 | | |
| | comp=Z,9.5nm,1.1s | | | | | | | | | |
| HYBB | | | | *e*S | | **S** | | **23 56 22.6** | **+0.7** | |
| HYBB | | | | IVMs_BB | | IVMs_BB | | 00 04 39.4 | | |
| | comp=Z,915nm,15.5s | | | | | | | | | |
| **SHL** | **Shillong** | **28.83** | **345** | *e*P | | **P** | | **23 51 34.2** | **-0.4** | |
| **RPR** | **Rampur** | **29.21** | **317** | *e*P | | **P** | | **23 51 38.0** | **+0.2** | |
| RPR | | | | IAmb | | IAmb | | 23 51 39.3 | | |
| | comp=Z,36nm,1.6s | | | | | | | | | |
| RPR | | | | *e*S | | **S** | | **23 56 29.0** | **+0.1** | |
| RPR | | | | IVMs_BB | | IVMs_BB | | 00 04 34.2 | | |
| | comp=Z,832nm,22.6s | | | | | | | | | |
| **BOK** | **Bokaro** | **29.34** | **333** | *ex* | | **P** | | **23 51 40.7** | **+1.7** | |
| BOK | | | | AMB | | AMB | | 23 51 56.6 | | |
| | comp=Z,158nm,1.9s | | | | | | | | | |
| **GYA** | **Guiyang** | **29.43** | **13**⇑ | *i* P | | **P** | | **23 51 39.0** | **-0.9** | |
| GYA | | | | pP | | **pP** | | **23 51 50.3** | **+2.3** | |
| GYA | | | | PP | | **PnPn** | | **23 52 40.5** | **+6.0** | |
| GYA | | | | PcP | | **PcP** | | **23 54 47.8** | **+2.3** | |
| GYA | | | | S | | **S** | | **23 56 35.8** | **+3.3** | |
| GYA | | | | sS | | **sS** | | **23 56 48.0** | **+2.1** | |
| GYA | | | | SS | | **SnSn** | | **23 58 08.3** | **+7.5** | |
| GYA | | | | ScP | | **ScP** | | **23 58 27.0** | **+1.4** | |
| GYA | | | | ScS | | **ScS** | | **00 02 20.3** | **-0.1** | |
| GYA | | | | PMZ | | | | | | |
| | comp=Z,40nm,1.0s | | | | | | | | | |
| GYA | | | | PMZ | | | | | | |
| | comp=Z,190nm,6.1s | | | | | | | | | |
| GYA | | | | LN | | | | | | |
| | comp=Z,10μm,16.3s | | | | | | | | | |
| GYA | | | | LE | | | | | | |
| | comp=Z,4μm,14.1s | | | | | | | | | |
| GYA | | | | LZ | | | | | | |
| | comp=Z,12μm,15.0s | | | | | | | | | |
| **SRSP** | **Sriramsagar** | **29.91** | **316** | *e*P | | **P** | | **23 51 44.5** | **+0.4** | |
| SRSP | | | | IAmb | | IAmb | | 23 51 45.5 | | |
| | comp=Z,28nm,1.5s | | | | | | | | | |
| SRSP | | | | *e*S | | **S** | | **23 56 39.7** | **-0.3** | |
| SRSP | | | | IVMs_BB | | IVMs_BB | | 00 04 44.3 | | |
| | comp=Z,738nm,19.9s | | | | | | | | | |
| **MEEK** | **Meekatharra** | **30.11** | **145** | P | | **P** | | **23 51 48.1** | **+2.3** | |
| | baz=30,SNR=4.0 | | | | | | | | | |
| **KLRI** | **Killari** | **30.60** | **313** | *e*P | | **P** | | **23 51 50.7** | **+0.4** | |
| KLRI | | | | IAmb | | IAmb | | 23 51 51.8 | | |
| | comp=Z,66nm,1.4s | | | | | | | | | |
| KLRI | | | | *e*S | | **S** | | **23 56 52.1** | **+1.2** | |
| KLRI | | | | IVMs_BB | | IVMs_BB | | 00 05 45.1 | | |
| | comp=Z,1μm,15.5s | | | | | | | | | |
| **NGP** | **Nagpur** | **30.99** | **320** | *e*P | | **P** | | **23 51 52.4** | **-1.2** | |
| NGP | | | | *e*S | | **S** | | **23 56 56.5** | **-0.4** | |
| **GOA** | **Goa** | **31.25** | **305** | *e*P | | **P** | | **23 51 56.1** | **+0.2** | |
| **KNRA** | **Kununurra** | **31.43** | **117** | P | | **P** | | **23 51 55.9** | **-1.6** | |
| | baz=32,SNR=7.7 | | | | | | | | | |
| **ODAN** | **Odare** | **31.45** | **338** | *e*P | | **P** | | **23 51 58.5** | **+0.6** | |
| | comp=Z,228nm,1.1s | | | | | | | | | |
| **SWI** | **Sorong** | **31.47** | **88** | P | | **P** | | **23 51 57.3** | **-0.6** | |
| | baz=32,SNR=6.6 | | | | | | | | | |
| **TAPN** | **Taplejung** | **31.78** | **339** | *e*P | | **P** | | **23 52 01.9** | **+1.1** | |
| | comp=Z,300nm,1.1s | | | | | | | | | |
| **RAMN** | **Ramite** | **31.83** | **337** | *e*P | | **P** | | **23 52 02.3** | **+1.1** | |
| | comp=Z,117nm,0.9s | | | | | | | | | |
| **SAUI** | **Saumlaki** | **31.83** | **101** | PFAKE | | | | 23 52 10.0 | +8.9 | |
| SAUI | | | | LR | | LR | | | | |
| | comp=Z,6μm,20.0s | | | | | | | | | |
| **FAKI** | **Fak Fak** | **32.41** | **92** | P | | **P** | | **23 52 04.5** | **-1.7** | |
| | baz=32,SNR=7.0 | | | | | | | | | |
| **FAKI** | **Fak Fak** | **32.41** | **92** | *e*P | | **P** | | **23 52 04.3** | **-1.9** | |
| | comp=Z,60nm,1.0s | | | | | | | | | |
| **MTN** | **Manton Dam** | **32.69** | **110** | P | | **P** | | **23 52 07.0** | **-1.6** | |
| | baz=33,SNR=3.1 | | | | | | | | | |
| **MTN** | **Manton Dam** | **32.69** | **110** | *e*P | | **P** | | **23 52 06.6** | **-2.0** | |
| | comp=Z,51nm,1.5s | | | | | | | | | |
| MTN | | | | LR | | LR | | | | |
| | comp=Z,400nm,20.0s | | | | | | | | | |
| **QZH** | **Quanzhou** | **32.71** | **33** | P | | **P** | | **23 52 11.3** | **+2.6** | |
| QZH | | | | S | | **S** | | **23 57 27.3** | **+3.7** | |
| QZH | | | | PMZ | | | | | | |
| | comp=Z,590nm,1.5s | | | | | | | | | |
| QZH | | | | LN | | | | | | |
| | comp=Z,15μm,20.6s | | | | | | | | | |
| QZH | | | | LE | | | | | | |
| | comp=Z,17μm,19.2s | | | | | | | | | |
| QZH | | | | LZ | | | | | | |
| | comp=Z,12μm,19.5s | | | | | | | | | |
| **PKI** | **Pulchoki** | **32.86** | **336** | *e*P | | **P** | | **23 52 10.7** | **+0.4** | |
| | comp=Z,81nm,1.1s | | | | | | | | | |
| **PKIN** | **Phulchoki** | **32.87** | **336** | *e*P | | **P** | | **23 52 10.5** | **+0.2** | |
| | comp=Z,31nm,0.8s | | | | | | | | | |
| **POO** | **Poona** | **32.94** | **310** | *e*P | | **P** | | **23 52 08.6** | **-2.2** | |
| **LSA** | **Lhasa** | **32.97** | **346** | *e*P | | **P** | | **23 52 12.4** | **+1.0** | |
| LSA | | | | pmax | | pmax | | | | |
| | comp=Z,105nm,1.0s | | | | | | | | | |
| LSA | | | | MLR | | MLR | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **LSA** | **Lhasa** | **32.97** | **346** | *e*P | | **P** | | **23 52 12.4** | **+1.0** | |
| | comp=Z,105nm,1.0s | | | | | | | | | |
| LSA | | | | LR | | LR | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | | |
| **GUN** | **Gumba** | **32.97** | **337** | *e*P | | **P** | | **23 52 12.1** | **+0.8** | |
| | comp=Z,144nm,0.6s | | | | | | | | | |
| **DMN** | **Daman** | **33.02** | **336** | *e*P | | **P** | | **23 52 12.0** | **+0.4** | |
| | comp=Z,126nm,1.0s | | | | | | | | | |
| **YULB** | **Yu-li** | **33.09** | **38** | *e*P | | **P** | | **23 52 09.0** | **-3.0** | |
| | comp=Z,95nm,1.2s | | | | | | | | | |
| **KKN** | **Kakani** | **33.10** | **336** | *e*P | | **P** | | **23 52 12.7** | **+0.4** | |
| | comp=Z,134nm,0.9s | | | | | | | | | |
| **SSLB** | **Suanglung** | **33.17** | **37** | *e*P | | **P** | | **23 52 13.0** | **+0.2** | |
| | comp=Z,164nm,1.3s | | | | | | | | | |
| **CD2** | **Chengdu** | **33.33** | **6** | P | | **P** | | **23 52 13.0** | **-1.0** | |
| CD2 | | | | sP | | **sP** | | **23 52 24.0** | **-1.6** | |
| CD2 | | | | PP | | **PP** | | **23 53 29.0** | **-0.8** | |
| CD2 | | | | S | | **S** | | **23 57 34.0** | **+0.9** | |
| CD2 | | | | sS | | **sS** | | **23 57 46.8** | **+0.2** | |
| CD2 | | | | PMZ | | | | | | |
| | comp=Z,70nm,0.7s | | | | | | | | | |
| CD2 | | | | PMZ | | | | | | |
| | comp=Z,240nm,5.6s | | | | | | | | | |
| CD2 | | | | LN | | | | | | |
| | comp=Z,9μm,16.2s | | | | | | | | | |
| CD2 | | | | LE | | | | | | |
| | comp=Z,10μm,17.2s | | | | | | | | | |
| CD2 | | | | LZ | | | | | | |
| | comp=Z,7μm,16.7s | | | | | | | | | |
| **BHPL** | **Bhopal** | **33.54** | **321** | *e*P | | **P** | | **23 52 14.7** | **-1.2** | |
| **GKN** | **Gorkha** | **33.56** | **335** | *e*P | | **P** | | **23 52 16.5** | **+0.3** | |
| **ENH** | **Enshi** | **33.77** | **15** | *e*P | | **P** | | **23 52 16.9** | **-0.9** | |
| | comp=Z,77nm,1.3s | | | | | | | | | |
| ENH | | | | LR | | LR | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | | |
| **KOLN** | **Koldanda** | **33.80** | **334** | *e*P | | **P** | | **23 52 18.9** | **+0.5** | |
| | comp=Z,116nm,0.9s | | | | | | | | | |
| **NACB** | **Ninganchiao** | **33.85** | **37** | *e*P | | **P** | | **23 52 19.0** | **+0.4** | |
| | comp=Z,169nm,1.3s | | | | | | | | | |
| **KDU** | **Kakadu** | **33.91** | **109** | P | | **P** | | **23 52 18.3** | **-1.0** | |
| | baz=34 | | | | | | | | | |
| **YHNB** | **Yeheng** | **34.09** | **37** | *e*P | | **P** | | **23 52 19.9** | **-0.9** | |
| | comp=Z,1μm,2.7s | | | | | | | | | |
| **DANN** | **Dangsing** | **34.23** | **334** | *e*P | | **P** | | **23 52 23.0** | **+0.7** | |
| **NWAO** | **Narrogin (SRO)** | **34.50** | **154** | P | | **P** | | **23 52 24.0** | **-0.2** | |
| | comp=Z,9.6nm,0.8s,baz=289,slow=0.0,SNR=4.4 | | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **34.50** | **154** | *e*P | | **P** | | **23 52 22.1** | **-2.1** | |
| NWAO | | | | pmax | | pmax | | | | |
| | comp=Z,23nm,0.9s | | | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **34.50** | **154** | *e*P | | **P** | | **23 52 22.1** | **-2.1** | |
| | comp=Z,23nm,0.9s | | | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.97** | **159** | T | | T | | 00 29 34.3 | | |
| | baz=335 | | | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.98** | **159** | T | | T | | 00 29 35.4 | | |
| | baz=335 | | | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.99** | **159** | T | | T | | 00 29 35.0 | | |
| | baz=335 | | | | | | | | | |
| **WRKA** | **Warakurna** | **35.51** | **132** | P | | **P** | | **23 52 33.4** | **+0.4** | |
| | baz=36,SNR=9.6 | | | | | | | | | |
| **KMBL** | **Kambalda** | **35.56** | **146** | P | | **P** | | **23 52 34.5** | **+1.1** | |
| | baz=36,SNR=5.1 | | | | | | | | | |
| **WHN** | **Wuhan** | **35.56** | **22** | ⇓P | | **P** | | **23 52 33.5** | **+0.2** | |
| WHN | | | | PMZ | | | | | | |
| | comp=Z,280nm,1.3s | | | | | | | | | |
| WHN | | | | LN | | | | | | |
| | comp=Z,28μm,17.5s | | | | | | | | | |
| WHN | | | | LE | | | | | | |
| | comp=Z,14μm,15.4s | | | | | | | | | |
| WHN | | | | LZ | | | | | | |
| | comp=Z,27μm,16.9s | | | | | | | | | |
| **XAN** | **Xi'an** | **37.23** | **13** | P | | **P** | | **23 52 46.3** | **-1.3** | |
| XAN | | | | pP | | **pP** | | **23 52 57.5** | **+1.6** | |
| XAN | | | | PMZ | | | | | | |
| | comp=Z,130nm,1.4s | | | | | | | | | |
| XAN | | | | PMZ | | | | | | |
| | comp=Z,620nm,6.6s | | | | | | | | | |
| XAN | | | | LE | | | | | | |
| | comp=Z,7μm,17.3s | | | | | | | | | |
| XAN | | | | LZ | | | | | | |
| | comp=Z,11μm,15.2s | | | | | | | | | |
| **NDI** | **New Delhi** | **37.74** | **327** | *e*P | | **P** | | **23 52 50.0** | **-2.0** | |
| **WRA** | **Warramunga Arr** | **37.96** | **120** | P | | **P** | | **23 52 52.8** | **-1.2** | |
| | comp=Z,52nm,0.9s,baz=297,slow=9.6 | | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **23 55 10.1** | **+0.4** | |
| | comp=Z,3.9nm,0.6s,baz=311,slow=2.3,SNR=4.6 | | | | | | | | | |
| WRA | | | | S | | **S** | | **23 58 39.8** | **-4.8** | |
| | comp=Z,8.3nm,1.0s,baz=293,slow=16,SNR=7.9 | | | | | | | | | |
| WRA | | | | LR | | LR | | 00 10 37.9 | | |
| | comp=Z,2μm,20.6s,baz=280,slow=39 | | | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.97** | **120** | *e*P | | **P** | | **23 52 53.1** | **-1.0** | |
| WRAB | | | | *e*S | | **S** | | **23 58 43.1** | **-1.6** | |
| WRAB | | | | pmax | | pmax | | | | |
| | comp=Z,67nm,0.6s | | | | | | | | | |
| WRAB | | | | MLR | | MLR | | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.97** | **120** | P | | **P** | | **23 52 53.0** | **-1.0** | |
| | comp=Z,615nm,0.6s | | | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.97** | **120** | *e*P | | **P** | | **23 52 53.1** | **-1.0** | |
| | comp=Z,67nm,0.6s | | | | | | | | | |
| WRAB | | | | *e*S | | **S** | | **23 58 43.1** | **-1.6** | |
| WRAB | | | | LR | | LR | | | | |
| | comp=Z,3μm,21.0s | | | | | | | | | |
| **LZH** | **Lanzhou** | **38.46** | **5** | ⇑P | | **P** | | **23 52 58.3** | **+0.2** | |
| LZH | | | | pP | | **pP** | | **23 53 05.0** | **-1.4** | |
| LZH | | | | sP | | **sP** | | **23 53 09.0** | **-0.7** | |
| LZH | | | | PcP | | **PcP** | | **23 55 12.5** | **+1.5** | |
| LZH | | | | PMZ | | | | | | |
| | comp=Z,170nm,1.2s | | | | | | | | | |
| LZH | | | | PMZ | | | | | | |
| | comp=Z,760nm,5.7s | | | | | | | | | |
| LZH | | | | LN | | | | | | |
| | comp=Z,6μm,15.5s | | | | | | | | | |
| LZH | | | | LE | | | | | | |
| | comp=Z,5μm,14.6s | | | | | | | | | |
| LZH | | | | LZ | | | | | | |
| | comp=Z,6μm,15.4s | | | | | | | | | |
| **DDI** | **Dehra Dun** | **38.59** | **329** | *e*P | | **P** | | **23 52 58.1** | **-1.1** | |
| DDI | | | | AMB | | AMB | | 23 53 15.3 | | |
| | comp=Z,171nm,2.2s | | | | | | | | | |
| **NJ2** | **Nanjing** | **38.73** | **26** | *e*P | | **P** | | **23 53 00.5** | **+0.3** | |
| NJ2 | | | | PMZ | | | | | | |
| | comp=Z,25nm,0.8s | | | | | | | | | |
| **BHJ** | **Bhuj** | **38.90** | **313** | *e*P | | **P** | | **23 53 01.6** | **-0.2** | |
| **SSE** | **Sheshan** | **39.02** | **30** | P | | **P** | | **23 53 04.0** | **+1.3** | |
| SSE | | | | pP | | **pP** | | **23 53 11.8** | **+0.8** | |
| SSE | | | | S | | **S** | | **23 59 03.8** | **+3.6** | |
| SSE | | | | sS | | **sS** | | **23 59 17.3** | **+3.5** | |
| SSE | | | | PMZ | | | | | | |
| | comp=Z,140nm,1.1s | | | | | | | | | |
| SSE | | | | PMZ | | | | | | |
| | comp=Z,1μm,6.2s | | | | | | | | | |
| SSE | | | | LN | | | | | | |
| | comp=Z,4μm,16.7s | | | | | | | | | |
| SSE | | | | LE | | | | | | |
| | comp=Z,890nm,16.6s | | | | | | | | | |
| SSE | | | | LZ | | | | | | |
| | comp=Z,5μm,15.6s | | | | | | | | | |
| **AS13** | **Alice Springs** | **39.16** | **126** | P | | **P** | | **23 53 04.2** | **+0.1** | |
| | baz=39 | | | | | | | | | |
| **AS12** | **Alice Springs** | **39.18** | **126** | *e*P | | **P** | | **23 53 03.7** | **-0.5** | |
| AS12 | | | | *e*PcP | | **PcP** | | **23 55 13.4** | **0.0** | |
| AS12 | | | | *e*S | | **S** | | **23 59 01.2** | **-1.7** | |
| **ASAR** | **Alice Springs** | **39.18** | **126** | P | | **P** | | **23 53 03.7** | **-0.5** | |
| | comp=Z,24nm,0.7s,baz=300,slow=7.2,SNR=110 | | | | | | | | | |
| ASAR | | | | PcP | | **PcP** | | **23 55 13.4** | **0.0** | |
| | comp=Z,7.0nm,0.8s,baz=306,slow=5.2,SNR=5.2 | | | | | | | | | |
| ASAR | | | | S | | **S** | | **23 59 01.2** | **-1.7** | |
| | comp=Z,22nm,1.3s,baz=298,slow=14,SNR=16 | | | | | | | | | |
| ASAR | | | | LR | | LR | | 00 10 45.0 | | |
| | comp=Z,3μm,21.4s,baz=302,slow=38 | | | | | | | | | |
| **AS01** | **Alice Springs** | **39.22** | **126** | *e*P | | **P** | | **23 53 03.8** | **-0.7** | |
| **AS19** | **Alice Springs** | **39.24** | **126** | P | | **P** | | **23 53 04.8** | **0.0** | |
| | baz=39 | | | | | | | | | |
| **SMLA** | **Simla** | **39.69** | **329** | *e*P | | **P** | | **23 53 07.1** | **-1.1** | |
| SMLA | | | | AMB | | AMB | | 23 53 25.4 | | |
| | comp=Z,126nm,1.3s | | | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **41.03** | **329** | *e*P | | **P** | | **23 53 18.3** | **-1.4** | |
| **GTA** | **Gaotai** | **41.59** | **0** | ⇑P | | **P** | | **23 53 24.3** | **+0.3** | |
| GTA | | | | pP | | **pP** | | **23 53 32.3** | **0.0** | |
| GTA | | | | sP | | **sP** | | **23 53 37.0** | **+1.3** | |
| GTA | | | | PcP | | **PcP** | | **23 55 19.5** | **-1.4** | |
| GTA | | | | S | | **S** | | **23 59 39.5** | **+0.8** | |
| GTA | | | | sS | | **sS** | | **23 59 52.0** | **-0.4** | |
| GTA | | | | SS | | **SS** | | **00 02 41.8** | **-2.6** | |
| GTA | | | | ScS | | **ScS** | | **00 03 24.0** | **-1.9** | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,84nm,1.3s | | | | | | | | | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,450nm,5.5s | | | | | | | | | |
| GTA | | | | LN | | | | | | |
| | comp=Z,4μm,14.7s | | | | | | | | | |
| GTA | | | | LE | | | | | | |
| | comp=Z,6μm,16.2s | | | | | | | | | |
| GTA | | | | LZ | | | | | | |
| | comp=Z,4μm,17.6s | | | | | | | | | |
| **TIA** | **Tai'an** | **41.66** | **21**⇑ | P | | **P** | | **23 53 23.0** | **-1.5** | |
| TIA | | | | PMZ | | | | | | |
| | comp=Z,70nm,0.9s | | | | | | | | | |
| TIA | | | | LN | | | | | | |
| | comp=Z,11μm,15.5s | | | | | | | | | |
| TIA | | | | LE | | | | | | |
| | comp=Z,14μm,14.3s | | | | | | | | | |
| TIA | | | | LZ | | | | | | |
| | comp=Z,14μm,14.3s | | | | | | | | | |
| **QIS** | **Mount Isa** | **42.79** | **118** | P | | **P** | | **23 53 33.5** | **-0.5** | |
| | baz=43,SNR=18 | | | | | | | | | |
| **KSHUK** | **Heuksando** | **44.04** | **31** | P | | **P** | | **23 53 44.0** | **+0.2** | |
| | SNR=7.8 | | | | | | | | | |
| **KSHUK** | **Heuksando** | **44.04** | **31** | P | | **P** | | **23 53 44.0** | **+0.2** | |
| | SNR=7.8 | | | | | | | | | |
| **KSJDO** | **Jindo** | **44.32** | **32** | P | | **P** | | **23 53 46.3** | **+0.2** | |
| | SNR=18 | | | | | | | | | |
| **KSJDO** | **Jindo** | **44.32** | **32** | P | | **P** | | **23 53 46.3** | **+0.2** | |
| | SNR=18 | | | | | | | | | |
| **COEN** | **Coen** | **44.34** | **108** | *e*P | | **P** | | **23 53 44.4** | **-2.1** | |
| | comp=Z,34nm,1.4s | | | | | | | | | |
| COEN | | | | LR | | LR | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **44.35** | **13** | *e*P | | **P** | | **23 53 46.5** | **+0.2** | |
| HHC | | | | pP | | **pP** | | **23 53 56.5** | **+1.8** | |
| HHC | | | | S | | **S** | | **00 00 24.8** | **+5.8** | |
| HHC | | | | PMZ | | | | | | |
| | comp=Z,41nm,1.0s | | | | | | | | | |
| HHC | | | | PMZ | | | | | | |
| | comp=Z,550nm,6.3s | | | | | | | | | |
| HHC | | | | LN | | | | | | |
| | comp=Z,7μm,16.3s | | | | | | | | | |
| HHC | | | | LE | | | | | | |
| | comp=Z,3μm,14.1s | | | | | | | | | |
| HHC | | | | LZ | | | | | | |
| | comp=Z,6μm,15.7s | | | | | | | | | |
| **BJT** | **Baijiatuao** | **44.79** | **18** | *e*P | | **P** | | **23 53 50.2** | **+0.5** | |
| BJT | | | | pmax | | pmax | | | | |
| | comp=Z,277nm,1.2s | | | | | | | | | |
| BJT | | | | MLR | | MLR | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **BJT** | **Baijiatuao** | **44.79** | **18** | *e*P | | **P** | | **23 53 50.2** | **+0.5** | |
| | comp=Z,277nm,1.2s | | | | | | | | | |
| BJT | | | | LR | | LR | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | | |
| **BJI** | **Beijing** | **44.81** | **18** | P | | **P** | | **23 53 50.0** | **+0.2** | |
| BJI | | | | S | | **S** | | **00 00 30.0** | **+4.5** | |
| BJI | | | | PMZ | | | | | | |
| | comp=Z,190nm,1.0s | | | | | | | | | |
| BJI | | | | LN | | | | | | |
| | comp=Z,6μm,19.6s | | | | | | | | | |
| BJI | | | | LE | | | | | | |
| | comp=Z,2μm,19.2s | | | | | | | | | |
| BJI | | | | LZ | | | | | | |
| | comp=Z,5μm,18.0s | | | | | | | | | |
| **KSKWJ** | **Gwangju** | **45.21** | **32** | P | | **P** | | **23 53 53.4** | **+0.3** | |
| | SNR=7.9 | | | | | | | | | |
| **KSKWJ** | **Gwangju** | **45.21** | **32** | P | | **P** | | **23 53 53.4** | **+0.3** | |
| | SNR=7.9 | | | | | | | | | |
| **KSJEU** | **Jeongeup** | **45.43** | **31** | P | | **P** | | **23 53 54.9** | **+0.1** | |
| | SNR=8.5 | | | | | | | | | |
| **KSJEU** | **Jeongeup** | **45.43** | **31** | P | | **P** | | **23 53 54.9** | **+0.1** | |
| | SNR=8.5 | | | | | | | | | |
| **BBOO** | **Buckleboo** | **45.50** | **136** | P | | **P** | | **23 53 54.9** | **-0.6** | |
| | baz=46,SNR=6.4 | | | | | | | | | |
| **BBOO** | **Buckleboo** | **45.50** | **136** | *e*P | | **P** | | **23 53 56.2** | **+0.6** | |
| | comp=Z,33nm,1.1s | | | | | | | | | |
| BBOO | | | | LR | | LR | | | | |
| | comp=Z,4μm,21.0s | | | | | | | | | |
| **DL2** | **Dalian** | **45.74** | **24**⇑ | *i* P | | **P** | | **23 53 57.5** | **+0.2** | |
| DL2 | | | | S | | **S** | | **00 00 39.5** | **+0.5** | |
| DL2 | | | | PMZ | | | | | | |
| | comp=Z,170nm,1.2s | | | | | | | | | |
| DL2 | | | | PMZ | | | | | | |
| | comp=Z,430nm,4.7s | | | | | | | | | |
| DL2 | | | | LN | | | | | | |
| | comp=Z,2μm,14.9s | | | | | | | | | |
| DL2 | | | | LE | | | | | | |
| | comp=Z,2μm,17.5s | | | | | | | | | |
| DL2 | | | | LZ | | | | | | |
| | comp=Z,2μm,15.3s | | | | | | | | | |
| **KSJIN** | **Jinju** | **45.76** | **33** | P | | **P** | | **23 53 58.0** | **+0.6** | |
| | SNR=6.7 | | | | | | | | | |
| **KSJIN** | **Jinju** | **45.76** | **33** | P | | **P** | | **23 53 58.0** | **+0.6** | |
| | SNR=6.7 | | | | | | | | | |
| **KSGUS** | **GUNSAN** | **45.77** | **31** | P | | **P** | | **23 53 57.8** | **+0.2** | |
| | SNR=12 | | | | | | | | | |
| **KSGUS** | **GUNSAN** | **45.77** | **31** | P | | **P** | | **23 53 57.8** | **+0.2** | |
| | SNR=12 | | | | | | | | | |
| **JNU** | **Nakatsue** | **45.92** | **37** | P | | **P** | | **23 53 58.2** | **-0.6** | |
| | comp=Z,200nm,0.9s,baz=167,slow=3.4,SNR=39 | | | | | | | | | |
| JNU | | | | LR | | LR | | 00 14 32.7 | | |
| | comp=Z,2μm,18.0s,baz=286,slow=38 | | | | | | | | | |
| **JNU** | **Nakatsue** | **45.92** | **37** | *e*P | | **P** | | **23 53 59.0** | **+0.2** | |
| | comp=Z,228nm,1.0s | | | | | | | | | |
| JNU | | | | LR | | LR | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | | |
| **KSSES** | **Seosan** | **46.19** | **30** | P | | **P** | | **23 54 00.8** | **0.0** | |
| | SNR=17 | | | | | | | | | |
| **KSSES** | **Seosan** | **46.19** | **30** | P | | **P** | | **23 54 00.8** | **0.0** | |
| | SNR=17 | | | | | | | | | |
| **TJN** | **Taejon** | **46.33** | **31** | *ce*P | | **P** | | **23 54 01.3** | **-0.7** | |
| **MTSU** | **Mount Surprise** | **46.34** | **113** | P | | **P** | | **23 54 02.0** | **-0.3** | |
| | baz=46 | | | | | | | | | |
| **KSCEA** | **Cheonan** | **46.62** | **31** | P | | **P** | | **23 54 04.2** | **0.0** | |
| | SNR=10 | | | | | | | | | |
| **KSCEA** | **Cheonan** | **46.62** | **31** | P | | **P** | | **23 54 04.2** | **0.0** | |
| | SNR=10 | | | | | | | | | |
| **KSBON** | **Boeun** | **46.65** | **31** | P | | **P** | | **23 54 04.8** | **+0.3** | |
| | SNR=13 | | | | | | | | | |
| **KSBON** | **Boeun** | **46.65** | **31** | P | | **P** | | **23 54 04.8** | **+0.3** | |
| | SNR=13 | | | | | | | | | |
| **KBL** | **Kabul** | **46.74** | **325** | *e*P | | **

KSMUS **Musan** 47.20 29 P **P** 23 54 08.4 -0.3
SNR=12
**WMQ** **Urumqi** 47.27 348 P **P** 23 54 10.5 +1.2
WMQ pP **pP** 23 54 19.0 +1.3
WMQ sP **sP** 23 54 22.0 +1.0
WMQ PP **PP** 23 56 02.0 +1.3
WMQ S **S** 00 01 02.0 +1.1
WMQ ScS **ScS** 00 03 59.0 -2.6
WMQ SS **SS** 00 04 26.0 -2.8
WMQ PMZ
comp=Z,250nm,1.0s
WMQ PMZ
comp=Z,1μm,6.0s
WMQ LN
comp=Z,2μm,16.0s
WMQ LE
comp=Z,2μm,16.0s
WMQ LZ
comp=Z,1μm,16.0s
**YNCB** **YEONCHEON** 47.41 29 P **P** 23 54 09.9 -0.4
SNR=13
**YNCB** **YEONCHEON** 47.41 29 P **P** 23 54 09.9 -0.4
SNR=13
**KS15** **Wonju Array Si** 47.42 31 *e*P **P** 23 54 10.0 -0.4
KS15 *e*PcP **PcP** 23 55 41.1 +0.3
**KSRS** **Korea Array** 47.45 31 P **P** 23 54 10.0 -0.6
comp=Z,132nm,1.0s,baz=224,slow=8.6,SNR=154
KSRS PcP **PcP** 23 55 41.1 +0.2
comp=Z,14nm,1.1s,baz=225,slow=5.4,SNR=3.2
KSRS LR LR 00 14 07.1
comp=Z,2μm,21.1s,baz=220,slow=36
**KS01** **Wonju Array Si** 47.45 31 *e*P **P** 23 54 09.4 -1.2
**PMG** **Port Moresby** 47.57 101 *de*P **P** 23 54 11.2 -0.8
PMG pmax pmax
comp=Z,54nm,0.9s
**PMG** **Port Moresby** 47.57 101 PFAKE 23 54 20.0 +8.0
PMG LR LR
comp=Z,2μm,22.0s
KSTBA **Taebaek** 47.73 32 P **P** 23 54 13.9 +0.9
SNR=14
KSCWO **Cheongwon** 47.73 30 P **P** 23 54 12.7 -0.2
SNR=9.4
**KSJES** **JEONGSEON** 47.81 31 P **P** 23 54 14.1 +0.5
SNR=10
**SMDO** **Samad** 47.91 304 ⇓P P 23 54 20.0 +5.4
SNR=8.4
**KSIJA** **INJE** 47.95 30 P **P** 23 54 14.8 +0.2
SNR=10.0
**SFK** **Sufi-Kurgan** 48.59 333 *i* P **P** 23 54 20.9 +1.1
SFK pmax pmax
comp=Z,123nm,1.6s
**CTAO** **Charters Tower** 48.60 115 *e*P **P** 23 54 20.0 0.0
CTAO pmax pmax
comp=Z,150nm,1.3s
**CTAO** **Charters Tower** 48.60 115 *e*P **P** 23 54 19.1 -0.8
comp=Z,152nm,1.3s
CTAO LR LR
comp=Z,2μm,22.0s
**QLP** **Quilpie** 48.90 124 P **P** 23 54 22.0 -0.1
baz=49,SNR=16
**SNY** **Shenyang** 49.01 24 ⇑P P 23 54 21.5 -1.1
SNY S S 00 01 33.3 +7.9
SNY PMZ
comp=Z,70nm,2.0s
SNY PMZ
comp=Z,660nm,4.6s
SNY LN
comp=Z,2μm,13.8s
SNY LE
comp=Z,3μm,15.6s
SNY LZ
comp=Z,2μm,19.8s
**PDGK** **Podgornoye** 49.05 340 *i* P **P** 23 54 23.3 +0.4
PDGK pmax pmax
comp=Z,170nm,1.4s
**ULHL** **Ulahol** 49.29 337 P **P** 23 54 26.3 +1.3
SNR=10
**UCH** **Uchtor** 49.97 336 P **P** 23 54 31.3 +0.8
SNR=36
**TKM2** **Tokmak 2** 50.11 337 *e*P **P** 23 54 32.0 +0.7
TKM2 pmax pmax
comp=Z,169nm,1.0s
TKM2 MLR MLR
comp=Z,2μm,20.0s
**TKM2** **Tokmak 2** 50.11 337 P **P** 23 54 32.1 +0.7
SNR=62
**TKM2** **Tokmak 2** 50.11 337 *e*P **P** 23 54 32.0 +0.7
comp=Z,169nm,1.0s
TKM2 LR LR
comp=Z,2μm,20.0s
**KBK** **Karagaybulak** 50.15 336 P **P** 23 54 32.7 +1.1
SNR=64
**AML** **Almayashu** 50.23 335 P **P** 23 54 33.2 +0.7
SNR=33
**UOSS** **Wadi Hilu** 50.25 305 PFAKE 23 54 50.0 +18
UOSS LR LR
comp=Z,900nm,22.0s
**AAK** **Ala-Archa** 50.31 336 P **P** 23 54 33.2 +0.4
comp=Z,8.7nm,0.9s,baz=146,slow=5.3,SNR=23
AAK S **S** **00 01 41.6 -2.5**
comp=Z,1.6nm,0.9s,baz=233,slow=20,SNR=2.0
AAK LR LR 00 19 03.4
comp=Z,3μm,20.3s,baz=138,slow=40
**AAK** **Ala-Archa** 50.31 336 *e*P **P** 23 54 33.2 +0.4
AAK *e*S **S** **00 01 41.6 -2.5**
AAK MLR MLR
comp=Z,2μm,20.0s
**AAK** **Ala-Archa** 50.31 336 P **P** 23 54 33.5 +0.7
comp=Z,243nm,0.9s,SNR=12
**AAK** **Ala-Archa** 50.31 336 P **P** 23 54 33.5 +0.7
SNR=12
**AAK** **Ala-Archa** 50.31 336 *e*P **P** 23 54 33.2 +0.4
AAK *e*S **S** **00 01 41.6 -2.5**
AAK LR LR
comp=Z,2μm,20.0s
SONA0 **Songino Array** 50.35 6 *e*P **P** 23 54 33.5 +0.6
SONA0 *e*PP **PP** 23 56 25.2 -3.5
**SONM** **Songino Array** 50.35 6 P **P** 23 54 33.5 +0.6
comp=Z,188nm,0.9s,baz=189,slow=6.7,SNR=601
SONM PP **PP** 23 56 25.2 -3.5
comp=Z,18nm,1.0s,baz=197,slow=4.5,SNR=3.3
**FRU** **Bishkek** 50.43 336 *i* P **P** 23 54 33.0 -0.5
FRU *i* 23 54 38.0
FRU pmax pmax
comp=Z,180nm,1.8s
FRU pmax pmax
comp=E,2μm,18.0s
**ULN** **Ulaanbaatar** 50.45 6 *e*P **P** 23 54 34.1 +0.4
ULN pmax pmax
comp=Z,219nm,1.1s
ULN MLR MLR
comp=Z,5μm,20.0s
**ULN** **Ulaanbaatar** 50.45 6 ⇓P **P** 23 54 34.2 +0.5
SNR=70
**ULN** **Ulaanbaatar** 50.45 6 *e*P **P** 23 54 34.1 +0.4
comp=Z,219nm,1.1s
ULN LR LR
comp=Z,5μm,20.0s
**CHMS** **Chumysh** 50.51 336 P **P** 23 54 35.2 +1.0
SNR=24
**EKS2** **Erkin-Say** 50.63 335 *e*P **P** 23 54 36.2 +1.0
EKS2 pmax pmax
comp=Z,168nm,1.0s
EKS2 MLR MLR
comp=Z,2μm,21.0s
**EKS2** **Erkin-Say** 50.63 335 P **P** 23 54 36.2 +1.0
SNR=40
**EKS2** **Erkin-Say** 50.63 335 *e*P **P** 23 54 36.2 +1.0
comp=Z,168nm,1.0s
EKS2 LR LR
comp=Z,2μm,21.0s
**FAQ** **Al Faqa, Dubai** 50.67 305 ⇓*i*P **P** 23 54 36.2 +0.6
SNR=7.3
**ASUD** **Al Ashush, Dub** 50.83 305 ⇓*i*P **P** 23 54 37.2 +0.4
SNR=5.2
**USP** **Ospenovka** 50.84 336 P **P** 23 54 37.2 +0.6
SNR=72
**MNAS** **Manas** 51.04 334 *i* P **P** 23 54 39.1 +0.9
MNAS pmax pmax
comp=Z,182nm,1.2s
**MK01** **Makanchi Array** 51.33 345 *e*P **P** 23 54 39.9 -0.3
MK01 *e*S **S** **00 01 59.9 +2.2**
**MK05** **Makanchi Array** 51.35 345 P **P** 23 54 41.1 +0.8
baz=52
**MK31** **Makanchi Array** 51.35 345 *e*P **P** 23 54 40.2 -0.2
MK31 pmax pmax
comp=Z,146nm,1.0s
**MK32** **Makanchi Array** 51.35 345 *e*P **P** 23 54 40.6 +0.3
MK32 *e*S **S** **00 01 56.9 -1.1**
**MKAR** **Makanchi Array** 51.35 345 P **P** 23 54 40.6 +0.3
comp=Z,43nm,0.6s,baz=148,slow=8.1,SNR=220
MKAR S **S** **00 01 56.9 -1.1**
comp=Z,3.8nm,1.2s,baz=148,slow=18,SNR=3.8
MKAR LR LR 00 20 28.0
comp=Z,1μm,21.2s,baz=162,slow=41
**CN2** **Changchun** 51.41 24 *e*P **P** 23 54 40.3 -0.5
CN2 *es*P **sP** 23 54 54.0 +1.4
CN2 *e*S **S** **00 01 56.0 -2.9**
CN2 PMZ
comp=Z,180nm,1.0s
CN2 PMZ
comp=Z,200nm,3.0s
CN2 LN
comp=Z,2μm,17.0s
CN2 LE
comp=Z,1μm,17.0s
CN2 LZ
comp=Z,3μm,17.0s
**MAKZ** **Makanchi** 51.45 344 *e*P **P** 23 54 38.6 -2.5
comp=Z,85nm,1.1s
MAKZ LR LR
comp=Z,3μm,20.0s
**CMSA** **Cobar Meteorol** 52.01 129 P **P** 23 54 46.2 +0.6
baz=52,SNR=47
**KK31** **Karatay Array** 52.41 333 *e*P **P** 23 54 47.7 -0.6
**KKAR** **Karatay Array** 52.41 333 *e*P **P** 23 54 49.0 +0.7
**KKAR** **Karatay Array** 52.41 333 *e*P **P** 23 54 49.0 +0.7
**ZAK** **Zakamensk** 52.65 3 *e*P **P** 23 54 50.2 +0.1
ZAK pmax pmax
comp=Z,33nm,1.4s
ZAK pmax pmax
comp=Z,25nm,1.1s
**RMQ** **Roma** 52.66 122 P **P** 23 54 51.7 +1.2
baz=53,SNR=24
**MAJO** **Matsushiro** 52.69 39 *e*P **P** 23 54 49.3 -1.2
MAJO pmax pmax
comp=Z,136nm,1.2s
**MAJO** **Matsushiro** 52.69 39 *e*P **P** 23 54 49.3 -1.2
comp=Z,136nm,1.2s
**MAT** **Matsushiro** 52.69 39 P **P** 23 54 48.9 -1.6
MAT S **S** **00 02 13.0 -3.8**
**MJAR** **Matsushiro Arr** 52.69 39 P **P** 23 54 48.8 -1.8
comp=Z,109nm,1.0s,baz=220,slow=6.5,SNR=82
**MSHR** **Mys Shultsa** 52.96 29 *c* *i*P **P** 23 54 52.1 -0.3
**IMYA** **Miami** 53.40 320 *e*P **P** 23 54 54.6 -1.4
**HVS** **Khovu-Aksy** 53.57 355 ⇑*i*P **P** 23 54 58.2 +1.4
HVS pmax pmax
comp=Z,43nm,1.1s
**VLA** **Vladivostok** 53.72 29 *α* *i*P **P** 23 54 58.3 +0.4
VLA *i* 23 56 04.0
VLA *e* 23 56 59.4
VLA S **S** **00 02 32.6 +2.2**
VLA pmax pmax
comp=Z,147nm,1.3s
**IMOG** **Moghan** 53.76 319 *e*P **P** 23 54 56.9 -1.8
**MDJ** **Mudanjiang** 53.82 26 P **P** 23 54 58.8 +0.2
MDJ pP **pP** 23 55 05.0 -2.1
MDJ sP **sP** 23 55 07.3 -3.2
MDJ PP **PP** 23 56 59.8 -0.2
MDJ S **S** **00 02 35.8 +4.1**
MDJ PMZ
comp=Z,120nm,1.1s
MDJ PMZ
comp=Z,590nm,7.1s
MDJ LN
comp=Z,3μm,19.2s
MDJ LE
comp=Z,2μm,18.4s
MDJ LZ
comp=Z,4μm,14.4s
**MDJ** **Mudanjiang** 53.82 26 *e*P **P** 23 54 59.1 +0.5
comp=Z,133nm,1.0s
MDJ LR LR
comp=Z,3μm,21.0s
**MOY** **Mondy** 53.86 1 *e*P **P** 23 54 59.7 +0.7
MOY pmax pmax
comp=Z,92nm,3.1s
**OPO** **Ambohidratompo** 53.95 249 LR LR 00 14 39.9
comp=Z,3μm,18.1s,baz=78,slow=32
**TLY** **Talaya** 53.96 3 P **P** 23 54 59.2 -0.4
comp=Z,20nm,0.9s,baz=192,slow=8.3,SNR=31
**TLY** **Talaya** 53.96 3 *e*P **P** 23 55 00.1 +0.5
TLY *e* 23 56 58.5
TLY *e*S S 00 02 44.2 +11
TLY pmax pmax
comp=Z,95nm,1.5s
TLY MLR MLR
comp=Z,2μm,15.0s
**TLY** **Talaya** 53.96 3 P **P** 23 55 00.5 +0.9
comp=Z,275nm,1.1s,SNR=15
**IPAY** **Payeh** 54.18 319 *e*P **P** 23 55 01.2 -0.6
**HIA** **Hailar** 54.27 16 *e*P **P** 23 55 01.5 -0.4
HIA pmax pmax
comp=Z,109nm,1.1s
HIA MLR MLR
comp=Z,4μm,18.0s
**HIA** **Hailar** 54.27 16 *e*P **P** 23 55 01.5 -0.4
comp=Z,110nm,1.1s
HIA LR LR
comp=Z,4μm,18.0s
**EIDS** **Eidsvold** 54.33 120 P **P** 23 55 03.0 +0.3
baz=54,SNR=9.2
**EIDS** **Eidsvold** 54.33 120 *e*P **P** 23 55 02.9 +0.1
comp=Z,29nm,0.8s
EIDS LR LR
comp=Z,1μm,19.0s
**IAKL** **Akhelmad** 54.43 319 *e*P **P** 23 55 02.1 -1.5
**IRK** **Irkutsk** 54.56 3 *e*P **P** 23 55 04.4 +0.5
IRK pmax pmax
comp=Z,203nm,1.6s
**USRK** **Ussuriysk Ar.** 54.58 28 P **P** 23 55 03.8 -0.4
comp=Z,517nm,1.0s,baz=224,slow=5.3,SNR=264
USRK LR LR 00 19 58.9
comp=Z,2μm,19.3s,baz=211,slow=38
**IKRD** **Kardeh** 54.69 320 *e*P P 23 54 59.7 -5.7
**IEMG** **Emamgholi** 54.98 320 *e*P **P** 23 55 07.1 -0.5
**ISFR** **Sfrayin** 55.19 319 *e*P **P** 23 55 07.2 -1.9
**YNG** **Young** 55.22 131 P **P** 23 55 10.1 +1.0
baz=55,SNR=11
**CIT** **Chita** 55.44 10 *e*P **P** 23 55 11.1 +0.7
CIT *e* 23 55 18.4
CIT pmax pmax
comp=Z,290nm,1.6s
**ABKT** **Ailbek** 55.62 320 P **P** 23 55 12.4 +0.5
comp=Z,128nm,1.0s,SNR=6.6
**GEYT** **Alibeck** 55.62 320 P **P** 23 55 11.1 -0.8
comp=Z,7.6nm,0.8s,baz=145,slow=5.4,SNR=29
GEYT S **S** **00 02 52.0 -4.4**
comp=Z,0.4nm,0.4s,baz=132,slow=9.9,SNR=2.1
GEYT LR LR 00 20 17.5
comp=Z,1μm,20.2s,baz=105,slow=37
**OTUK** **Ortayu** 55.82 338 *i* P **P** 23 55 12.2 -0.9
OTUK pmax pmax
comp=Z,34nm,1.2s
KURBB **Kurchatov Arra** 55.87 344 P **P** 23 55 12.9 -0.5
comp=Z,41nm,1.0s,baz=163,slow=6.7,SNR=135
KURBB S **S** **00 02 58.1 -0.9**
comp=Z,1.4nm,1.0s,baz=145,slow=15,SNR=4.8
**KURK** **Kurchatov** 55.92 344 *e*P **P** 23 55 12.9 -0.9
KURK *e*S **S** **00 02 58.1 -1.7**
**KURK** **Kurchatov** 55.92 344 P **P** 23 55 13.1 -0.7
comp=Z,606nm,1.2s,SNR=55
**KURK** **Kurchatov** 55.92 344 *e*P **P** 23 55 12.8 -0.9
KURK *e*S **S** **00 02 58.1 -1.7**
**CAN** **Canberra** 56.09 132 *e*P **P** 23 55 16.4 +1.0
CAN pmax pmax
comp=Z,32nm,1.0s
CAN MLR MLR
comp=Z,3μm,21.0s
**CAN** **Canberra** 56.09 132 P **P** 23 55 16.7 +1.3
baz=56
**CAN** **Canberra** 56.09 132 *e*P **P** 23 55 16.4 +1.0
comp=Z,32nm,1.0s
CAN LR LR
comp=Z,3μm,21.0s
**ARMA** **Armidale** 56.33 125 P **P** 23 55 19.0 +1.8
baz=56,SNR=7.3
**ARMA** **Armidale** 56.33 125 *e*P **P** 23 55 15.8 -1.4
comp=Z,30nm,1.1s
ARMA LR LR
comp=Z,1μm,21.0s
**CNB** **Canberra Magne** 56.36 132 P **P** 23 55 19.7 +2.3
baz=56
**DAMY** **Dhamar** 57.41 289 PFAKE 23 55 40.0 +15
DAMY LR LR
comp=Z,2μm,19.0s
**ZAA0** **Zalesovo Array** 57.51 350 P **P** 23 55 25.4 +0.4
baz=58,SNR=48
**ZAA0** **Zalesovo Array** 57.51 350 *e*P **P** 23 55 25.2 +0.3
ZAA0 *e*S **S** **00 03 20.4 -0.2**
**ZALV** **Zalesovo Beam** 57.51 350 P **P** 23 55 24.8 -0.2
comp=Z,155nm,1.0s,baz=160,slow=4.7,SNR=192
ZALV S **S** **00 03 18.6 -2.0**
comp=Z,4.5nm,0.9s,baz=154,slow=14,SNR=4.1
ZALV LR LR 00 22 46.9
comp=Z,1μm,19.2s,baz=170,slow=39
**ZALV** **Zalesovo Beam** 57.51 350 *i* P **P** 23 55 24.7 -0.3
ZALV pmax pmax
comp=Z,154nm,1.0s
**ZAA1** **Zalesovo Array** 57.52 350 *e*P **P** 23 55 24.8 -0.2
ZAA1 *e*S **S** **00 03 18.6 -2.1**
**IGLO** **Ghaloghah** 57.66 317 *e*P **P** 23 55 25.7 -1.0
**IFIR** **Firoozkooh** 57.97 315 *e*P **P** 23 55 28.4 -0.6
**IALA** **Alasht** 58.15 316 *e*P **P** 23 55 30.2 0.0
**KLR** **Kul'dur** 58.36 24 ⇓*e*P P 23 55 27.5 -3.5
KLR *e*S S 00 03 43.0 +11
KLR pmax pmax
comp=N,48nm,1.4s
KLR pmax pmax
comp=E,130nm,1.4s
KLR pmax pmax
comp=Z,400nm,1.4s
**IDMV** **Damavand** 58.44 315 *e*P **P** 23 55 31.1 -1.2
**KRAR** **Krasnoyarsk** 58.48 355 ⇓*i*P **P** 23 55 32.1 +0.4
KRAR pmax pmax
comp=Z,72nm,1.0s
**NVS** **Novosibirsk** 58.66 349 ⇓*i*P **P** 23 55 33.0 0.0
NVS *e* 00 03 25.2
NVS pmax pmax
comp=Z,63nm,1.2s
NVS pmax pmax
comp=N,55nm,1.4s
NVS pmax pmax
comp=E,28nm,1.4s
NVS pmax pmax
comp=Z,60nm,2.2s
NVS pmax pmax
comp=N,48nm,2.0s
**RAYN** **Ar Rayn** 58.76 299 P **P** 23 55 34.0 -0.4
comp=N,69nm,1.4s,SNR=6.5
**RAYN** **Ar Rayn** 58.76 299 *e*P **P** 23 55 34.6 +0.2
comp=N,16nm,1.1s
RAYN LR LR
comp=Z,2μm,19.0s
**ERM** **Erimo** 59.08 37 *e*P **P** 23 55 37.3 +1.1
ERM pmax pmax
comp=Z,257nm,1.6s
**ERM** **Erimo** 59.08 37 *e*P **P** 23 55 37.3 +1.1
comp=Z,257nm,1.6s
**HABR** **Khabarovsk** 59.19 27 *ce*P **P** 23 55 34.3 -2.5
HABR *e**SP sP 23 55 43.1 -5.6
HABR *e* 23 56 22.3
HABR *e* 23 57 45.2
HABR *e*S **S** **00 03 41.7 -1.0**
HABR *e**SS **sS** **00 03 52.4 -4.5**
HABR *e* 00 05 23.5
HABR *e*SS **SS** **00 07 37.3 -0.3**
HABR pmax pmax
comp=E,185nm,2.5s
HABR pmax pmax
comp=N,43nm,1.3s
HABR pmax pmax
comp=Z,175nm,1.3s
HABR pmax pmax
comp=Z,474nm,2.5s
HABR MLR MLR
comp=Z,1μm,20.0s
**IR5** **Iran Long-Peri** 59.30 314 *e*P **P** 23 55 36.9 -1.2
**IMHD** **Mahdasht** 59.47 314 *e*P **P** 23 55 39.5 +0.4
**IRAZ** **Razeghan** 59.86 314 *e*P **P** 23 55 41.3 -0.7
**ASAJ** **Asahikawa** 60.04 34 P **P** 23 55 41.0 -1.8
comp=Z,94nm,1.0s,baz=244,slow=13,SNR=9.0
**ASAJ** **Asahikawa** 60.04 34 *e*P **P** 23 55 41.0 -1.8
comp=Z,225nm,1.3s
**HNR** **Honiara** 60.16 99 PFAKE 23 56 00.0 +16
HNR LR LR
comp=Z,800nm,20.0s
**BVAR** **Borovoye Array** 60.48 340 S **S** **00 03 56.5 -2.8**
comp=Z,0.2nm,0.3s,baz=125,slow=18,SNR=2.4
BVAR LR LR 00 26 28.0
comp=Z,785nm,19.9s,baz=146,slow=40
**BRVK** **Borovoye** 60.55 340 *e*P **P** 23 55 45.3 -0.7
BRVK pmax pmax
comp=Z,86nm,1.1s
BRVK MLR MLR
comp=Z,1μm,21.0s
**BRVK** **Borovoye** 60.55 340 P **P** 23 55 45.6 -0.4
comp=Z,291nm,1.1s,SNR=19
**BRVK** **Borovoye** 60.55 340 *e*P **P** 23 55 45.3 -0.7
comp=Z,86nm,1.1s
BRVK LR LR
comp=Z,1μm,21.0s
**ZRNK** **Zerenda** 60.90 339 *i* P **P** 23 55 46.9 -1.6
ZRNK pmax pmax
comp=Z,72nm,1.0s
**CHKZ** **Chkalovo** 60.95 341 *i* P **P** 23 55 48.3 -0.4
CHKZ pmax pmax
comp=Z,194nm,1.1s
**BOD** **Bodaibo** 61.09 9 ⇓*i*P **P** 23 55 49.5 -0.1
BOD pmax pmax
comp=Z,103nm,1.6s
**YUK** **Yuzh-Kuril'sk** 61.87 36 *i* P **P** 23 55 52.7 -2.5
YUK *i* 23 58 09.2
YUK *i* PPP PPP 23 59 38.2
YUK *i* S S 00 04 40.6 +23
YUK *i* SS **SS** **00 08 20.2 +0.4**
YUK pmax pmax
comp=Z,665nm,2.6s
YUK pmax pmax
comp=N,94nm,1.5s
YUK pmax pmax
comp=E,302nm,1.5s
YUK pmax pmax
comp=Z,388nm,1.5s
**AB31** **Akbulak array** 61.89 332 *e*P **P** 23 55 54.3 -0.9
AB31 pmax pmax
comp=Z,58nm,0.8s
ABKAR **Akbulak array** 61.89 332 P **P** 23 55 54.8 -0.4
baz=62
ABKAR **Akbulak array** 61.89 332 *e*P **P** 23 55 54.6 -0.6
**YSS** **Yuzh-Sakhalins** 61.91 32 ⇑*i*P **P** 23 55 55.0 -0.4
YSS *e* 23 56 08.0
YSS pmax pmax
comp=N,100nm,1.2s
YSS pmax pmax
comp=Z,640nm,1.2s
YSS MLR MLR
comp=Z,900nm,18.0s
**FURI** **Furi** 61.95 281 *e*P P 23 56 04.7 +8.0
**FURI** **Furi** 61.95 281 *i* S S 00 04 30.7 +11
**FURI** **Furi** 61.95 281 PFAKE 23 56 10.0 +13
FURI LR LR
comp=Z,1μm,18.0s
**CLNS** **Chul'man** 62.43 15 *e*P **P** 23 55 58.5 -0.3
CLNS *e**PP **pP** 23 56 06.1 -1.3
CLNS *e* 23 56 33.1
CLNS *e*S **S** **00 04 26.1 +2.1**
CLNS pmax pmax
comp=N,49nm,0.9s
CLNS pmax pmax
comp=Z,87nm,0.9s
CLNS pmax pmax
comp=E,29nm,0.9s
CLNS pmax pmax
comp=Z,11nm,0.8s
CLNS pmax pmax
comp=E,8.0nm,1.0s
CLNS pmax pmax
comp=N,17nm,1.6s
CLNS smax smax
comp=N,238nm,11.8s
CLNS smax smax
comp=E,164nm,11.0s
CLNS MLR MLR
comp=E,1μm,14.0s
CLNS MLR MLR
comp=Z,3μm,14.0s
CLNS MLR MLR
comp=N,3μm,16.0s

**KMBO Kilima Mbogo 62.54 270 P P 23 56 01.4 +0.8**
comp=N,2.9nm,0.9s,baz=53,slow=11,SNR=6.6
KMBO LR LR 00 20 09.6
comp=N,1μm,19.1s,baz=92,slow=33
**KMBO Kilima Mbogo 62.54 270 *e*P P 23 56 02.5 +1.9**
KMBO pmax pmax
comp=Z,74nm,2.1s
KMBO MLR MLR
comp=Z,1μm,20.0s
**KMBO Kilima Mbogo 62.54 270 *e*P P 23 56 02.5 +1.9**
comp=Z,74nm,2.1s
KMBO LR LR
comp=Z,1μm,20.0s
**AKTO Aktyubinsk 63.61 332 P P 23 56 05.8 -0.9**
comp=Z,25nm,1.0s,baz=133,slow=6.9,SNR=46
AKTO S S **00 04 33.6 -5.2**
comp=Z,0.8nm,0.7s,baz=306,slow=19,SNR=3.9
**KUR Kuril'sk 63.73 36 P P 23 56 08.2 +0.7**
KUR S S **00 04 40.8 +0.3**
KUR pmax pmax
comp=N,83nm,1.4s
KUR pmax pmax
comp=E,57nm,1.4s
KUR pmax pmax
comp=Z,242nm,1.4s
KUR MLR MLR
comp=Z,693nm,17.0s
KUR MLR MLR
comp=N,1μm,17.0s
KUR MLR MLR
comp=E,118nm,17.0s
**CASY Casey 64.22 175** PFAKE 23 56 20.0 +10
CASY LR LR
comp=Z,2μm,20.0s
**TYV Tymovskoe 64.39 29 *e*P P 23 56 13.0 +1.2**
TYV pmax pmax
comp=Z,320nm,1.6s
TYV pmax pmax
comp=Z,1μm,6.0s
TYV MLR MLR
comp=E,4μm,17.0s
TYV MLR MLR
comp=Z,4μm,17.0s
**MAK Makhachkala 65.14 320 *e*P P** 23 56 10.8 -6.0
MAK *e* 23 58 40.2
MAK *e*S S 00 04 51.8 -6.2
MAK *e*SS **SS 00 09 12.5 +1.6**
MAK pmax pmax
comp=Z,511nm,2.2s
MAK MLR MLR
comp=Z,1μm,19.0s
**CUKT Cukurca 65.26 313 *e*P P 23 56 15.8 -2.1**
**GNI Garni 65.67 316*ce*P P 23 56 20.9 +0.3**
GNI pmax pmax
comp=Z,161nm,1.2s
**GNI Garni 65.67 316** ⇑P **P 23 56 21.2 +0.6**
SNR=12
**GNI Garni 65.67 316** ⇑*i*P **P 23 56 21.1 +0.6**
SNR=10
**DGRG David-gareji 65.83 318 P P 23 56 22.0 +0.5**
**DGRG David-gareji 65.83 318 P P 23 56 21.9 +0.5**
**TBLG Delisi 66.38 318 P P 23 56 24.8 -0.1**
**TBLG Delisi 66.38 318 P P 23 56 24.8 -0.1**
**SVE Sverdlovsk 66.97 338**⇓*i*P **P 23 56 28.0 -0.3**
SVE *e*PPP PPP 00 00 38.6
SVE *e*S **S 00 05 17.6 -2.2**
SVE *e*SSS SSS 00 12 39.4
SVE pmax pmax
comp=Z,242nm,1.1s
SVE MLR MLR
comp=Z,1μm,21.0s
**AKH Akhalkalaki 67.08 317 P P 23 56 30.3 +0.7**
**AKH Akhalkalaki 67.08 317 P P 23 56 30.2 +0.7**
**DZM Mont Dzumac 67.48 113 *e*P P 23 56 32.7 +0.3**
comp=Z,68nm,1.5s
**DZM Mont Dzumac 67.48 113 *e*LR** LR 00 16 56.1
comp=Z,3μm,23.5s
**DZM Mont Dzumac 67.48 113 *e*P P 23 56 33.8 +1.5**
comp=Z,24nm,1.0s
DZM LR LR
comp=Z,1μm,19.0s
**ONI Oni 67.61 318 P P 23 56 33.3 +0.5**
**ONI Oni 67.61 318 P P 23 56 33.3 +0.5**
**NCK Nalchik 67.92 319**⇓*e*P **P 23 56 34.9 +0.3**
**YAK Yakutsk 68.16 15 P P 23 56 34.5 -1.2**
comp=Z,8.3nm,0.5s,baz=37,slow=22,SNR=16
YAK S **S 00 05 30.7 -3.1**
comp=Z,2.1nm,0.3s,baz=36,slow=19,SNR=3.6
**YAK Yakutsk 68.16 15*ce*P P 23 56 34.3 -1.4**
YAK *e**PP **pP 23 56 43.8 -0.6**
YAK *e* 23 56 59.6
YAK *e* 23 59 05.9
YAK *e*PPP PPP 00 00 42.0
YAK *e*S **S 00 05 35.6 +1.7**
YAK *e* 00 06 31.6
YAK *e*SS **SS 00 09 59.3 +2.3**
YAK pmax pmax
comp=E,65nm,1.2s
YAK pmax pmax
comp=Z,167nm,0.9s
YAK pmax pmax
comp=N,80nm,1.2s
YAK pmax pmax
comp=Z,264nm,7.6s
YAK smax smax
comp=E,204nm,3.2s
YAK smax smax
comp=N,238nm,4.9s
YAK MLR MLR
comp=E,876nm,14.0s
YAK MLR MLR
comp=Z,3μm,15.0s
YAK MLR MLR
comp=N,2μm,17.0s
**NEY Neytrino 68.38 319*de*P P 23 56 38.8 +1.0**
NEY pmax pmax
comp=Z,10.0nm,1.7s
**KBZ Khabaz 68.48 319 P P 23 56 38.3 +0.2**
comp=Z,20nm,0.9s,baz=121,slow=5.0,SNR=30
KBZ S **S 00 05 37.8 -0.5**
comp=Z,1.2nm,1.0s,baz=26,slow=18,SNR=2.4
**CHVG Ch'k'valeri 68.58 318 P P 23 56 39.0 +0.2**
**KIV Kislovodsk 68.71 319 *e*P P 23 56 39.6 -0.1**
KIV *e* 23 57 03.8
KIV *e*S **S 00 05 41.2 -0.2**
KIV pmax pmax
comp=Z,49nm,1.0s
KIV pmax pmax
comp=Z,137nm,5.0s
**KIV Kislovodsk 68.71 319 P P 23 56 40.2 +0.5**
comp=Z,254nm,1.0s,SNR=13
**MBAR Mbarara 69.07 270** PFAKE 23 57 00.0 +17
MBAR LR LR
comp=Z,1μm,19.0s
**MALT Malatya 69.46 312**⇓*e*P **P 23 56 45.8 +1.3**
**MALT Malatya 69.46 312**⇓*i*P **P 23 56 45.8 +1.3**
**MAW Mawson 69.86 194 P P 23 56 47.5 +1.3**
comp=Z,2.5nm,0.9s,baz=8.1,slow=5.6,SNR=6.3
MAW LR LR 00 20 28.2
comp=Z,2μm,21.7s,baz=50,slow=30
MAW PKP2bc 00 24 47.6
comp=Z,5.6nm,1.1s,baz=208,slow=4.6,SNR=8.1
**MAW Mawson 69.86 194 *e*P P 23 56 47.5 +1.3**
MAW pmax pmax
comp=Z,10.0nm,1.4s
**MAW Mawson 69.86 194 *e*P P 23 56 47.5 +1.3**
comp=Z,9.7nm,1.4s
**DRV Dumont d'Urvil 70.00 164 S S 00 05 57.0 +1.5**
DRV L L 00 14 00.0
DRV R 00 20 00.0
**SOC Sochi 70.52 318*c i*P P 23 56 49.8 -0.9**
SOC *e**SP **sP 23 57 02.5 -0.2**
SOC *e* 23 57 08.3
SOC *e*PPP PPP 00 01 02.6
SOC *i* S **S 00 05 59.7 -2.7**
SOC *e* 00 06 48.2
SOC *e*SS **SS 00 10 31.1 -3.0**
SOC pmax pmax
comp=Z,33nm,0.9s
SOC MLR MLR
comp=Z,659nm,19.0s
**SKR Severo-Kuril's 71.30 34 *e*P P** 23 56 43.7 -12
SKR pmax pmax
comp=Z,270nm,1.0s
**LSZ Lusaka 71.65 255 *e*P P 23 56 59.6 +1.3**
**LSZ Lusaka 71.65 255** PFAKE 23 57 10.0 +12
LSZ LR LR
comp=Z,1μm,19.0s
**LFK Lefkose 72.24 308 *e*P P 23 57 01.6 +0.3**
**CSS Prodhromos 72.31 308 *e*P P 23 57 01.8 +0.1**
comp=Z,13nm,1.1s
CSS LR LR
comp=Z,400nm,18.0s
**ANN Anapa 72.50 319 *e*P P 23 56 59.8 -2.8**
ANN *e**PP pP 23 57 05.7 -5.7
ANN *e*S **S 00 06 21.1 -4.1**
ANN pmax pmax
comp=Z,25nm,1.0s
ANN MLR MLR
comp=Z,388nm,18.0s
**VRH Novokhopyorsk 72.54 326 *e*P P 23 57 01.7 -1.0**
VRH pmax pmax
comp=N,20nm,0.8s
VRH pmax pmax
comp=E,20nm,0.8s
VRH pmax pmax
comp=Z,70nm,0.8s
VRH MLR MLR
comp=N,1μm,24.0s
VRH MLR MLR
comp=E,720nm,24.0s
VRH MLR MLR
comp=Z,860nm,24.0s
**YESY Yesilyurt 72.79 311 *e*P P 23 57 04.5 -0.2**
**CORM Corum 72.86 313 *e*P P 23 57 04.1 -1.0**
**YAYX Yaylak 73.08 312 *e*P P 23 57 03.5 -2.9**
**PEA0 Petropavlovsk- 73.31 32 *e*P P 23 57 06.8 -0.5**
**PETK Petropavlovsk- 73.31 32 P P 23 57 06.6 -0.7**
comp=Z,34nm,0.9s,baz=193,slow=4.1,SNR=13
**PEA2 Petropavlovsk- 73.31 32 *e*P P 23 57 06.6 -0.7**
**BR101 Keskin Array S 73.44 313 *e*P P 23 57 07.5 -1.0**
BR101 *e*PP PP 23 59 47.1 -5.4
**BR131 Keskin Array S 73.44 313 P P 23 57 08.3 -0.2**
baz=74,SNR=7.4
**BRTR Keskin Array B 73.44 313 P P 23 57 07.5 -1.0**
comp=Z,5.0nm,0.7s,baz=136,slow=6.6,SNR=48
BRTR PP PP 23 59 47.1 -5.4
comp=Z,1.7nm,1.2s,baz=187,slow=11,SNR=2.0
BRTR LR LR 00 30 12.1
comp=Z,367nm,20.8s,baz=102,slow=36
**BRTR Keskin Array B 73.44 313*ce*P P 23 57 08.1 -0.5**
BRTR pmax pmax
comp=Z,5.0nm,0.7s
**MA2 Magadan 73.46 24 *e*P P 23 57 08.8 +0.8**
**HDMB Hadim 73.52 310 *e*P P 23 57 09.4 +0.3**
**KULU Kulu 73.71 312 *e*P P 23 57 10.5 +0.4**
**AFSR Af'ar-Bala (A 73.78 312 *e*P P 23 57 07.8 -2.7**
**PET Petropavlovsk 73.78 33 *e*P P 23 57 10.1 +0.1**
PET *e* 00 00 00.7
PET *e*S **SKiKP 00 06 37.2 -0.5**
PET pmax pmax
comp=Z,143nm,0.9s
PET pmax pmax
comp=Z,200nm,15.0s
PET pmax pmax
comp=Z,200nm,17.3s
**VORD Divnogorie 73.81 325 *e*P P 23 57 09.1 -1.1**
VORD pmax pmax
comp=N,20nm,0.7s
VORD pmax pmax
comp=E,9.0nm,0.7s
VORD pmax pmax
comp=Z,30nm,0.7s
**BZK Bozkurt 73.87 315 *e*P P 23 57 09.6 -1.2**
**VSR Storozhevoye 73.99 325 *e*P P 23 57 10.1 -1.2**
VSR pmax pmax
comp=N,10.0nm,0.8s
VSR pmax pmax
comp=E,50nm,0.8s
VSR pmax pmax
comp=Z,70nm,0.8s
**ANTO Ankara 74.11 313 *e*P P 23 57 12.5 +0.1**
ANTO pmax pmax
comp=Z,56nm,1.2s
**ANTO Ankara 74.11 313** ⇑P **P 23 57 12.2 -0.2**
SNR=13
**ANTO Ankara 74.11 313 *e*P P 23 57 12.5 +0.1**
comp=Z,56nm,1.2s
**VORR Voronezh 74.16 326 *e*P P 23 57 10.0 -2.2**
VORR pmax pmax
comp=Z,250nm,1.2s
**KIZT Kizilcal 74.51 311 *e*P P 23 57 14.4 -0.3**
**SAFT Safranbolu 74.59 314 *e*P P 23 57 15.5 +0.4**
**LPSR Galich'ya Gora 74.71 326 *e*P P 23 57 14.1 -1.3**
LPSR pmax pmax
comp=Z,50nm,0.9s
LPSR pmax pmax
comp=N,4.0nm,0.8s
LPSR pmax pmax
comp=E,10.0nm,0.9s
**SIM Simferopol' 74.76 318*ce*P P 23 57 15.4 -0.5**
SIM *e*S **S 00 06 46.0 -4.8**
SIM pmax pmax
comp=Z,60nm,1.0s
**SUTC Sutluce-Ispart 74.80 310 *e*P** P 23 57 20.1 +3.6
**RPZ Rata Peaks 74.84 135** PFAKE 23 57 30.0 +13
RPZ LR LR
comp=Z,2μm,21.0s
**SVRH Sivrihisar-ESK 74.93 312 *e*P P 23 57 16.0 -1.1**
**ISP Isparta 75.25 310**⇓P P 23 57 33.0 +14
**ISP Isparta 75.25 310**⇓*i*P P 23 57 33.0 +14
**ISP Isparta 75.25 310** PFAKE 23 57 30.0 +11
ISP LR LR
comp=Z,600nm,22.0s
**BOSA Boshof 75.31 241 P P 23 57 19.0 -0.7**
comp=Z,2.0nm,0.7s,baz=73,slow=5.6,SNR=3.2
BOSA LR LR 00 26 41.1
comp=Z,2μm,18.2s,baz=78,slow=33
**BOSA Boshof 75.31 241 *e*P P 23 57 20.3 +0.7**
**BOSA Boshof 75.31 241 *e*P P 23 57 20.3 +0.7**
**OUZ Omahuta 75.39 126** PFAKE 23 57 30.0 +10
OUZ LR LR
comp=Z,3μm,21.0s
**MDUB Mudurnu 75.45 313 *e*P P 23 57 20.5 +0.3**
**ELL Elmali 75.46 309 *e*P P 23 57 21.2 +0.9**
**OXZ Oxford 75.47 134** PFAKE 23 57 30.0 +10
OXZ LR LR
comp=Z,1μm,20.0s
**THZ Tophouse 75.83 132 *e*P P 23 57 22.9 +0.7**
comp=Z,44nm,1.2s
THZ LR LR
comp=Z,2μm,21.0s
**GULT Gulveren 75.94 313 *e*P P 23 57 24.1 +1.1**
**MQZ McQueen's Vall 75.98 134** PFAKE 23 57 40.0 +17
MQZ LR LR
comp=Z,2μm,20.0s
**SEY Seymchan 76.05 22 P P 23 57 23.3 +0.3**
comp=Z,78nm,1.0s,baz=235,slow=4.6,SNR=33
**SEY Seymchan 76.05 22**⇓*e*P **P 23 57 23.6 +0.6**
**FETY Fethiye 76.08 309 *e*P P 23 57 25.3 +1.6**
**KHZ Kahutara 76.40 133** PFAKE 23 57 40.0 +15
KHZ LR LR
comp=Z,2μm,22.0s
**DALY Dalyan (Mu'la 76.45 309 *e*P P 23 57 25.7 -0.1**
**HRT Hereke 76.67 313 *e*P P 23 57 28.1 +1.1**
**MOS Moscow 76.73 329 *e*P P 23 57 24.6 -2.3**
MOS *e* 23 57 35.5
MOS *e* 00 00 20.7
MOS pmax pmax
comp=Z,166nm,1.4s
MOS pmax pmax
comp=Z,400nm,2.0s
MOS MLR MLR
comp=Z,1μm,21.0s
MOS MLR MLR
comp=E,1μm,20.0s
**HIZ Hauiti 76.82 129 *e*P P 23 57 30.5 +2.6**
comp=E,72nm,1.2s
**OBN Obninsk 77.02 328*c i*P P 23 57 28.3 -0.3**
OBN *e**SP **sP 23 57 37.9 -2.7**
OBN *e* 23 57 41.1
OBN *e* 23 57 45.0
OBN 00 00 26.0
OBN *e*PPP PPP 00 02 11.2
OBN *e*S **S 00 07 16.8 +1.5**
OBN *i* 00 08 02.0
OBN SS **SS 00 12 18.0 +5.3**
OBN pmax pmax
comp=Z,186nm,1.7s
OBN MLR MLR
comp=Z,833nm,20.0s
**OBN Obninsk 77.02 328** P P **23 57 28.5 -0.1**
comp=Z,465nm,1.3s,SNR=6.5
**SNZO South Karori 77.09 132** PFAKE 23 57 40.0 +11
SNZO LR LR
comp=Z,2μm,22.0s
**AYDB Zeytinkoy-Aydi 77.30 310 *e*P** P 23 57 24.5 -6.3
**KLMR Klimovskoe 78.09 334 *e*P P 23 57 33.6 -0.9**
KLMR S **S 00 07 20.8 -5.9**
KLMR pmax pmax
comp=Z,131nm,1.1s
**BKZ Black Stump Fm 78.17 129 *e*P P 23 57 36.2 +0.7**
comp=Z,89nm,1.4s
BKZ LR LR
comp=Z,3μm,22.0s
**TLCR 78.42 317**⇓P P 23 57 42.0 +5.4
**TLCR 78.42 317**⇓*i*P P 23 57 42.0 +5.4
**TIRR Tirgusor 78.50 316**⇓P **P 23 57 37.6 +0.5**
**TIRR Tirgusor 78.50 316**⇓*i*P **P 23 57 37.6 +0.5**
**URZ Urewera 78.55 128 *e*P P 23 57 37.8 +0.3**
comp=Z,86nm,1.6s
URZ LR LR
comp=Z,2μm,20.0s
**LAST Lasithi 78.62 306** PFAKE 23 57 50.0 +12
LAST LR LR
comp=Z,700nm,22.0s
**MSAB Monastry St. A 78.82 316**⇓*i*P **P 23 57 39.1 +0.3**
**CFR Carcaliu 78.88 317**⇓P **P 23 57 39.4 +0.3**
**CFR Carcaliu 78.88 317**⇓*i*P **P 23 57 39.4 +0.3**
**HARR Harsova 78.89 316**⇓P **P 23 57 40.0 +0.8**
**HARR Harsova 78.89 316**⇓*i*P **P 23 57 40.0 +0.8**
**KIS Kishinev 78.90 319 *e*P P 23 57 39.0 -0.2**
KIS *e*LR LR 00 34 50.0
comp=Z,500nm,18.0s
**KIS Kishinev 78.90 319 *e*P P 23 57 39.0 -0.2**
KIS *e* 23 57 49.0
KIS *e* 00 07 30.0
KIS *e* 00 07 52.0
KIS *e* 00 08 16.0
**IDI Anoyia 79.12 306 *e*P P 23 57 42.0 +1.2**
comp=Z,78nm,1.5s
IDI LR LR
comp=Z,500nm,21.0s
**LEOM Leova 79.14 318**⇓P **P 23 57 41.4 +0.9**
**LEOM Leova 79.14 318**⇓*i*P **P 23 57 41.4 +0.9**
**GADA Gvkgeada 79.31 311 *e*P P 23 57 39.6 -2.0**
**ALN Alexandroupoli 79.35 312 *e*P P 23 57 41.5 -0.3**
**SUR Sutherland 79.44 238** PFAKE 23 58 00.0 +17
SUR LR LR
comp=Z,3μm,20.0s
**SORM Soroca 79.51 320**⇓P **P 23 57 42.4 -0.1**
**SORM Soroca 79.51 320**⇓*i*P **P 23 57 42.4 -0.1**
**PETR Petresti 79.63 317**⇓*i*P P 23 57 54.8 +12
**AKASG Malin Array Be 79.67 322** P **P 23 57 42.5 -0.9**
comp=Z,2.2nm,0.7s,baz=92,slow=4.4,SNR=27
AKASG PP **PP 00 00 42.2 -2.3**
comp=Z,0.3nm,0.4s,baz=92,slow=6.7,SNR=3.8
AKASG S **S 00 07 38.7 -5.3**
comp=Z,0.2nm,0.3s,baz=106,slow=9.4,SNR=4.6
**AKASG Malin Array Be 79.67 322*ce*P P 23 57 43.0 -0.4**
AKASG pmax pmax
comp=Z,3.0nm,0.7s
**AKBB Malin Array Si 79.67 322 *e*P P 23 57 42.5 -0.9**
**AKBB Malin Array Si 79.67 322 *e*P P 23 57 42.5 -0.9**
**KIEV Kiev 79.68 322**⇓*e*P **P 23 57 42.7 -0.7**
KIEV pmax pmax
comp=Z,14nm,1.5s
**KIEV Kiev 79.68 322 *e*P P 23 57 42.6 -0.8**
**AK11 Malin Array Si 79.70 322 *e*P P 23 57 43.3 -0.2**
**GRER 79.72 317**⇓*i*P **P 23 57 46.2 +2.4**
**IAS Iasi 79.78 319**⇓P **P 23 57 44.6 +0.6**
**IAS Iasi 79.78 319**⇓*i*P **P 23 57 44.6 +0.6**
**RDO Rodhopi 79.78 312** PFAKE 23 58 00.0 +16
RDO LR LR
comp=Z,10μm,20.0s
**ISR Istrita 79.95 316**⇓P **P 23 57 46.8 +1.7**
**ISR Istrita 79.95 316**⇓*i*P **P 23 57 46.8 +1.7**
**VRI Vrincioaia 80.01 317**⇑P **P 23 57 46.4 +1.1**
**VRI Vrincioaia 80.01 317**⇑*i*P **P 23 57 46.4 +1.1**
**PLOR Plostina 80.06 317**⇓P **P 23 57 46.8 +1.2**
**PLOR Plostina 80.06 317**⇓*i*P **P 23 57 46.8 +1.2**
**TESR Tescani 80.22 318**⇓*i*P **P 23 57 47.4 +1.0**
**TMCR Tamitsa 80.22 337 *e*P P 23 57 47.1 +1.1**
TMCR *e*S S 00 07 57.6 +8.4
TMCR pmax pmax
comp=Z,42nm,0.7s
**ZIMR 80.45 315**⇓P **P 23 57 48.5 +0.8**
**ZIMR 80.45 315**⇓*i*P **P 23 57 48.5 +0.8**
**MLR Muntele Rosu 80.45 317**⇓P **P 23 57 48.9 +1.0**
**MLR Muntele Rosu 80.45 317**⇓*i*P **P 23 57 48.9 +1.0**
**PRAR RASCA 80.70 319**⇓*i*P **P 23 57 49.8 +0.8**
**HUMR Humele 80.91 316**⇓*i*P **P 23 57 50.6 +0.4**
**DOPR Dopca 80.94 317**⇓*i*P **P 23 57 50.9 +0.5**
**VOIR 81.05 317**⇓P **P 23 57 51.2 +0.2**
**VOIR 81.05 317**⇓*i*P **P 23 57 51.2 +0.2**
**ARR Arges 81.33 316**⇑*i*P **P 23 57 52.1 -0.4**
**BURAR Bucovina Array 81.43 319**⇓P **P 23 57 54.8 +1.8**
**BURAR Bucovina Array 81.43 319**⇓*i*P **P 23 57 54.8 +1.8**
**BUR04 Bucovina Ar. S 81.43 319 *e*P P 23 57 54.2 +1.2**
**MICGM Minsk 81.54 326**⇓*e*P **P 23 57 52.0 -1.3**
**MNK Minsk 81.56 326**⇓*e*P **P 23 57 52.0 -1.4**
MNK pmax pmax
comp=Z,190nm,1.4s
**AGG Agios Georgios 81.79 310** PFAKE 23 58 10.0 +15
AGG LR LR
comp=Z,700nm,18.0s
**VNDA Vanda 81.82 169** P **P 23 57 54.4 0.0**
comp=Z,0.6nm,0.8s,baz=296,slow=9.0,SNR=2.9
VNDA LR LR 00 32 56.3
comp=Z,1μm,18.1s,baz=316,slow=35
**ARCR ARCALIA 81.88 318**⇓*i*P **P 23 57 56.2 +0.9**
**LOT Lotru 81.94 316**⇓*i*P P 23 58 03.2 +7.4
**VAY Valandovo 82.01 312 *e*P P 23 57 56.1 +0.1**
**NACGM Naroch 82.26 326 *e*P P 23 57 56.0 -1.1**
**CJR Cluj-Napoca 82.31 318**⇓P **P 23 57 59.2 +1.6**
**CJR Cluj-Napoca 82.31 318**⇓*i*P **P 23 57 59.2 +1.6**
**IDID Didziasalis 82.39 327 *e*P P 23 57 58.3 +0.5**
IDID IAmb IAmb 23 58 12.1
comp=Z,56nm,1.1s
**BMR Baia Mare 82.58 319**⇓P **P 23 58 00.6 +1.7**
**BMR Baia Mare 82.58 319**⇓*i*P **P 23 58 00.6 +1.7**
**GZR Gura Zlata 82.61 316**⇓P **P 23 58 00.1 +0.9**
**GZR Gura Zlata 82.61 316**⇓*i*P **P 23 58 00.1 +0.9**
**LVV L'vov 82.68 321 *e*P P 23 57 59.2 -0.2**
**IIGN Ignalina 82.69 326 *e*P P 23 57 59.7 +0.4**
IIGN IAmb IAmb 23 58 12.7
comp=Z,50nm,1.0s
**IZAR Zarasai 82.78 327 *e*P P 23 58 00.1 +0.4**
IZAR IAmb IAmb 23 58 12.9
comp=Z,26nm,1.1s
**ISAL Salakas 82.80 327 *e*P P 23 58 00.2 +0.4**
ISAL IAmb IAmb 23 58 13.1
comp=Z,32nm,1.1s
**SKO Skopje 82.96 313 *e*P P 23 58 00.7 -0.4**
**LVZ Lovozero 83.08 340**⇓*e*P **P 23 58 01.2 +0.1**
LVZ pmax pmax
comp=Z,60nm,1.5s
**VSU Vasula 83.24 330*de*P P 23 58 02.7 +0.6**
VSU pmax pmax
comp=Z,139nm,1.2s
**OHR Ohrid 83.29 312 *e*P P 23 58 02.0 -0.9**
**APA Apatity 83.38 339**⇓*i*P **P 23 58 02.4 -0.2**
APA *i* 23 58 11.0
APA *i* 00 01 14.0
APA *i* S **S 00 08 20.0 -1.7**
APA pmax pmax
comp=Z,432nm,1.2s
APA MLR MLR
comp=Z,700nm,20.0s
**BZS Buzias 83.45 316**⇓P **P 23 58 04.2 +0.7**
**BZS Buzias 83.45 316**⇓*i*P **P 23 58 04.2 +0.7**
**KWP Kalwaria Pacla 83.48 320 *e*P P 23 58 04.2 +0.6**
**KWP Kalwaria Pacla 83.48 320**⇓P **P 23 58 04.6 +1.0**
**KWP Kalwaria Pacla 83.48 320**⇓*i*P **P 23 58 04.6 +1.0**
**UZH Uzhgorod 83.55 319 *e*P P 23 58 03.2 -0.7**
UZH *e* 23 58 14.4
UZH *e* 23 58 18.8
UZH *e*S **S 00 08 22.4 -1.8**
**BILL Bilibino 83.58 20*de*P P 23 58 03.8 +0.1**
BILL 23 58 09.0
BILL pmax pmax
comp=Z,23nm,1.7s
**KOLS Kolonicke sedl 83.62 320 *e*P P 23 58 05.4 +1.1**

KOLS pmax pmax
comp=Z,56nm,1.2s
**KOLS Kolonicke sedl 83.62 320** *e*P **P 23 58 05.4 +1.1**
**SUW Suwalki 84.09 325** *e*P **P 23 58 06.3 -0.2**
**SUW Suwalki 84.09 325** *e*P **P 23 58 06.4 -0.1**
**DIVS Divibare 84.35 315** ||*i*P **P 23 58 08.1 -0.1**
**FIA0 FINESS Array S 84.37 332** *e*P **P 23 58 08.0 +0.2**
**FIA0 FINESS Array S 84.37 332** *e*P **P 23 58 08.0 +0.2**
**FINES FINESS Array B 84.37 332** P **P 23 58 08.0 +0.2**
comp=Z,9.5nm,0.6s,baz=109,slow=6.4,SNR=36
FINES LR LR 00 41 18.1
comp=Z,587nm,18.9s,baz=102,slow=40
**FINES FINESS Array B 84.37 332** *i* P pmax pmax **P 23 58 08.5 +0.7**
FINES
comp=Z,10.0nm,0.6s
**STHS Stebnicka Huta 84.38 320** *e*P **P 23 58 09.7 +1.5**
STHS pmax pmax
comp=Z,29nm,1.1s
**STHS Stebnicka Huta 84.38 320** *e*P **P 23 58 09.7 +1.5**
**NIE Niedzica 84.98 320** *e*P **P 23 58 12.2 +1.0**
**NIE Niedzica 84.98 320** *e*P **P 23 58 12.3 +1.0**
**PSZ Piszkesteto 85.01 318** *e*P **P 23 58 12.2 +0.8**
PSZ pmax pmax
comp=Z,56nm,1.4s
**PSZ Piszkesteto 85.01 318** ||*e*P **P 23 58 12.1 +0.7**
**PSZ Piszkesteto 85.01 318** *e*P **P 23 58 12.2 +0.8**
comp=Z,56nm,1.4s
**OJC Ojcow 85.44 321** *e*P **P 23 58 14.3 +0.9**
**OJC Ojcow 85.44 321** *e*P **P 23 58 14.3 +0.9**
**LANS Liptovska Anna 85.48 320** *e*P **P 23 58 15.1 +1.4**
**LANS Liptovska Anna 85.48 320** *e*P **P 23 58 15.1 +1.4**
**VYHS Vyhne 85.79 319** *e*P **P 23 58 15.7 +0.4**
VYHS pmax pmax
comp=Z,20nm,1.6s
**VYHS Vyhne 85.79 319** *e*P **P 23 58 15.7 +0.4**
**KLNR Kaliningrad 85.91 325** *e*P **P 23 58 15.8 +0.2**
KLNR pmax pmax
comp=Z,75nm,1.0s
**TIP Timpagrande 86.11 309** PFAKE 23 58 30.0 +13
TIP LR LR
comp=Z,400nm,21.0s
**KEV Kevo 86.33 341** PFAKE 23 58 30.0 +13
KEV LR LR
comp=Z,1μm,21.0s
**OKC Ostrava-Krasne 86.43 320** *e*P **P 23 58 19.0 +0.6**
OKC *e**PP **pP 23 58 28.9 +1.6**
OKC *e*S **S 00 08 50.7 -2.0**
OKC MLR MLR
comp=Z,500nm,15.7s
**OKC Ostrava-Krasne 86.43 320** *e*P **P 23 58 19.0 +0.6**
OKC *e*pP **pP 23 58 28.9 +1.6**
OKC *e*S **S 00 08 50.7 -2.0**
OKC AMS AMS 00 45 20.0
comp=Z,500nm,15.7s
**ARA0 ARCESS Array S 86.77 340** *e*P **P 23 58 20.2 +0.6**
**ARCES ARCESS Array B 86.77 340** P **P 23 58 19.5 -0.1**
comp=Z,16nm,0.9s,baz=116,slow=2.8,SNR=23
ARCES LR LR 00 41 20.0
comp=Z,1μm,20.3s,baz=108,slow=38
**MORC Moravsky Berou 86.81 320** *e*P **P 23 58 21.2 +0.9**
MORC pmax pmax
comp=Z,133nm,1.2s
**MORC Moravsky Berou 86.81 320** ||*i*P **P 23 58 21.5 +1.2**
**MORC Moravsky Berou 86.81 320** *e*P **P 23 58 21.2 +0.9**
comp=Z,133nm,1.2s
**ZST Bratislava 86.90 318** *e*P **P 23 58 21.2 +0.5**
**ZST Bratislava 86.90 318** *e*P **P 23 58 21.2 +0.5**
**KRLC Kraliky 87.34 320** *e*P **P 23 58 23.7 +0.9**
KRLC *e**PP **pP 23 58 33.7 +1.9**
**KRLC Kraliky 87.34 320** *e*P **P 23 58 23.7 +0.9**
KRLC *e*pP **pP 23 58 33.7 +1.9**
**VRAC Vranov 87.37 319** ||P **P 23 58 24.9 +1.9**
**VRAC Vranov 87.37 319** ||*i*P **P 23 58 24.9 +1.9**
**DPC Dobruska-Polom 87.66 320** *e*P **P 23 58 25.5 +1.1**
DPC *e**PP **pP 23 58 35.4 +2.0**
DPC MLR MLR
comp=Z,600nm,21.0s
**DPC Dobruska-Polom 87.66 320** *e*P **P 23 58 25.5 +1.1**
DPC *e*pP **pP 23 58 35.4 +2.0**
DPC AMS AMS 00 43 10.0
comp=Z,600nm,21.0s
**KSP Ksiaz 87.74 321** *e*P **P 23 58 25.8 +1.1**
**KSP Ksiaz 87.74 321** *e*P **P 23 58 25.8 +1.1**
**ARSA Arzberg 87.85 317** ⇑*i*P **P 23 58 26.4 +1.1**
comp=Z,24nm,1.1s
**BOJS Bojanci 87.87 316** *i* P **P 23 58 26.6 +1.2**
**UPC Upice 87.88 321** *e*P **P 23 58 26.1 +0.7**
UPC *e**PP **pP 23 58 35.4 +1.1**
UPC MLR MLR
comp=Z,600nm,21.6s
**UPC Upice 87.88 321** *e*P **P 23 58 26.1 +0.7**
UPC *e*pP **pP 23 58 35.4 +1.1**
UPC AMS AMS 00 43 20.0
comp=Z,600nm,21.6s
**PERS Pernice 88.07 317** *i* P **P 23 58 27.8 +1.4**
**TREC Trest 88.09 319** *e*P **P 23 58 26.9 +0.5**
TREC *e**PP **pP 23 58 36.7 +1.3**
TREC *e*S **S 00 09 09.4 +0.7**
TREC MLR MLR
comp=Z,500nm,22.0s
**TREC Trest 88.09 319** *e*P **P 23 58 26.9 +0.5**
TREC *e*pP **pP 23 58 36.7 +1.3**
TREC *e*S **S 00 09 09.4 +0.7**
TREC AMS AMS 00 46 20.0
comp=Z,500nm,22.0s
**SOKA Soboth 88.13 317** ⇑*i*P **P 23 58 27.5 +0.7**
comp=Z,30nm,1.4s
**VISS Visnje 88.19 316** *i* P **P 23 58 28.0 +1.0**
**GOPC GO Pecny, Ondr 88.60 320** *e*P **P 23 58 29.9 +1.1**
GOPC *e**PP **pP 23 58 39.6 +1.8**
GOPC MLR MLR
comp=Z,600nm,20.8s
**GOPC GO Pecny, Ondr 88.60 320** *e*P **P 23 58 29.9 +1.1**
GOPC *e*pP **pP 23 58 39.6 +1.8**
GOPC *ex* x 23 59 03.6
GOPC AMS AMS 00 45 40.0
comp=Z,600nm,20.8s
**JAVS Javornik 88.73 316** *i* P **P 23 58 30.4 +0.7**
**MOA Molln 88.76 318** ⇑*i*P **P 23 58 30.2 +0.5**
comp=Z,15nm,1.6s
**PRU Pruhonice 88.76 320** *e*P **P 23 58 30.1 +0.5**
PRU *e**PP **pP 23 58 40.2 +1.7**
PRU *e* 23 58 42.9
PRU *e*S **S 00 09 15.8 +0.8**
PRU MLR MLR
comp=Z,700nm,19.2s
**PRU Pruhonice 88.76 320** *e*P **P 23 58 30.1 +0.5**
PRU *e*pP **pP 23 58 40.2 +1.7**
PRU *e*sP **sP 23 58 42.9 +1.2**
PRU *e*S **S 00 09 15.8 +0.8**
PRU AMS AMS 00 44 40.0
comp=Z,700nm,19.2s
**PVCC Panska Ves 88.80 320** *e*P **P 23 58 30.5 +0.8**
PVCC *e**PP **pP 23 58 40.6 +1.9**
PVCC MLR MLR
comp=Z,600nm,19.6s
**PVCC Panska Ves 88.80 320** *e*P **P 23 58 30.5 +0.8**
PVCC *e*pP **pP 23 58 40.6 +1.9**
PVCC AMS AMS 00 46 00.0
comp=Z,600nm,19.6s
**PRA Prague 88.84 320** *e*P **P 23 58 30.6 +0.7**
PRA MLR MLR
comp=Z,700nm,18.1s
**PRA Prague 88.84 320** *e*P **P 23 58 30.6 +0.7**
PRA AMS AMS 00 44 40.0
comp=Z,700nm,18.1s
**GEC2 GERESS Array S 89.22 319** *e*P **P 23 58 32.5 +0.6**
**GEC2 GERESS Array S 89.22 319** *e*P **P 23 58 32.5 +0.6**
**GERES GERESS Array B 89.22 319** P **P 23 58 32.0 +0.2**
comp=Z,4.1nm,0.8s,baz=99,slow=4.2,SNR=39
**BRG Berggiesshubel 89.22 321** *e*P **P 23 58 32.2 +0.5**
comp=Z,65nm,1.7s
BRG *i* 23 58 42.3
comp=Z,44nm,1.3s
BRG *i* 23 59 05.6
comp=Z,49nm,1.4s
**BRG Berggiesshubel 89.22 321** *e*P **P 23 58 32.2 +0.5**
BRG *i* 23 58 42.3
BRG pmax pmax
comp=Z,65nm,1.7s
BRG pmax pmax
comp=Z,44nm,1.3s
BRG pmax pmax
comp=Z,49nm,1.4s
**BRG Berggiesshubel 89.22 321** *e*P **P 23 58 32.0 +0.3**
comp=Z,66nm,1.7s,baz=93,slow=4.7
**KHC Kasperske Hory 89.32 319** *e*P **P 23 58 32.8 +0.5**
KHC *e**PP **pP 23 58 42.6 +1.4**
KHC *e*S **S 00 09 21.8 +1.4**
KHC MLR MLR
comp=Z,600nm,22.6s
**KHC Kasperske Hory 89.32 319** *e*P **P 23 58 32.8 +0.5**
KHC *e*pP **pP 23 58 42.6 +1.4**
KHC *e*S **S 00 09 21.8 +1.4**
KHC AMS AMS 00 44 30.0
comp=Z,600nm,22.6s
**KHC Kasperske Hory 89.32 319** *e*P **P 23 58 32.8 +0.5**
comp=Z,16nm,1.8s
KHC LR LR
comp=Z,200nm,19.0s
**RJOB Jochberg 89.74 318** *e*P **P 23 58 33.3 -1.0**
comp=Z,32nm,1.6s,baz=93,slow=4.7
**WET Wettzell 89.78 319** *e*P **P 23 58 34.6 +0.2**
comp=Z,49nm,1.5s,baz=93,slow=4.7
**CLL Collm 89.85 321** *i* P **P 23 58 35.3 +0.7**
CLL *e*S **S 00 09 23.0 -2.1**
CLL pmax pmax
comp=Z,40nm,1.6s
CLL MLR MLR
comp=Z,500nm,18.8s
**CLL Collm 89.85 321** *e*P **P 23 58 35.3 +0.7**
comp=Z,34nm,1.4s,baz=93,slow=4.7
**CLL Collm 89.85 321** *i* P **P 23 58 35.3 +0.7**
comp=Z,40nm,1.6s
CLL *i* sP **sP 23 58 44.9 -1.9**
CLL *e* 23 59 08.0
comp=Z,45nm,1.6s
CLL *e*S **S 00 09 23.0 -2.1**
CLL *e*PS **PS 00 10 41.0 +6.7**
CLL *e*SS SS 00 15 12.0 -11
CLL *e*SSSS 00 22 19.0
CLL LmV 00 47 00.0
comp=Z,500nm,18.8s
**NKC Novy Kostel 90.13 320** *e*P **P 23 58 37.2 +1.2**
NKC *e**PP **pP 23 58 46.7 +1.7**
NKC *e* 23 58 49.7
**NKC Novy Kostel 90.13 320** *e*P **P 23 58 37.2 +1.2**
NKC *e*pP **pP 23 58 46.7 +1.7**
NKC *e*sP **sP 23 58 49.7 +1.5**
**TANN Tannenbergstha 90.13 320** *e*P **P 23 58 36.7 +0.7**
comp=Z,22nm,1.4s,baz=93,slow=4.7
**ROTZ Rotzenmuhle 90.25 320** *e*P **P 23 58 37.6 +1.0**
comp=Z,32nm,1.5s,baz=93,slow=4.7
**WTTA Wattenberg 90.50 317** ⇑*i*P **P 23 58 37.6 -0.3**
comp=Z,34nm,1.2s
**MOX Moxa 90.68 320** *e*P **P 23 58 39.0 +0.4**
comp=Z,29nm,1.3s,baz=93,slow=4.7
MOX *e*L L 01 03 05.8
comp=Z,582nm,19.7s
**MOTA Moosalm 90.86 317** ⇑*i*P **P 23 58 40.0 +0.4**
comp=Z,26nm,1.0s,SNR=8.5
**GRF Grafenberg Arr 90.89 320** *e*P **P 23 58 39.5 0.0**
comp=Z,52nm,1.4s,baz=93,slow=4.7
GRF *e*pP **pP 23 58 48.1 -0.4**
GRF *e*L L 00 47 34.6
comp=Z,618nm,18.1s
**GRFO Grafenberg 90.89 320** *e*P **P 23 58 41.2 +1.7**
GRFO pmax pmax
comp=Z,56nm,1.3s
**SPB1 Spitsbergen Ar 90.97 348** *e*P **P 23 58 39.9 +0.6**
**SPA0 Spitsbergen Ar 90.97 348** *e*P **P 23 58 39.0 -0.3**
**SPITS Spitsbergen Ar 90.97 348** P **P 23 58 39.0 -0.3**
comp=Z,31nm,1.1s,baz=118,slow=4.8,SNR=5.3
SPITS PP **PP 00 02 13.7 -1.9**
comp=Z,15nm,1.2s,baz=150,slow=15,SNR=2.9
**SPA3 Spitsbergen Ar 90.97 348** *e*P **P 23 58 40.0 +0.7**
**SPB4 Spitsbergen Ar 90.98 348** *e*P **P 23 58 40.1 +0.7**
**RETA Reutte 91.10 317** ||*i*P **P 23 58 41.3 +0.6**
comp=Z,29nm,1.1s,SNR=7.4
**FETA Fechten 91.10 317** *i* PcP **PcP 23 58 41.8 +0.1**
comp=Z,30nm,1.2s,SNR=5.2
**VLC Villacollemand 91.23 314** PFAKE 23 58 50.0 +8.7
VLC LR LR
comp=Z,300nm,19.0s
**NB2 NORSAR Subarra 91.39 331** P **P 23 58 42.2 +0.6**
comp=Z,23nm,1.2s,baz=92,slow=4.8
**NB2 NORSAR Subarra 91.39 331** P **P 23 58 42.2 +0.6**
baz=92,slow=4.8
**NB200 NORSAR Array S 91.39 331** *e*P **P 23 58 41.9 +0.2**
**NOA NORSAR Array B 91.39 331** P **P 23 58 41.9 +0.2**
comp=Z,6.4nm,1.1s,baz=95,slow=5.0,SNR=5.1
NOA PP **PP 00 02 15.2 -4.2**
comp=Z,1.8nm,0.8s,baz=90,slow=7.6,SNR=3.5
NOA LR LR 00 44 13.1
comp=Z,298nm,20.5s,baz=80,slow=38
**CLZ Clausthal 91.51 322** *e*P **P 23 58 42.1 -0.3**
comp=Z,32nm,1.4s,baz=93,slow=4.7
**NBO02 NORSAR Array S 91.56 331** *e*P **P 23 58 43.1 +0.7**
**BSEG Bad Segeberg 91.61 324** *e*P **P 23 58 42.7 -0.1**
comp=Z,74nm,1.9s,baz=93,slow=4.7
**DAVA Damuels 91.69 317** ||⇑*i*PcP **PcP 23 58 44.2 -0.1**
comp=Z,45nm,1.1s,SNR=7.5
**SNAA Sanae 91.72 198** P **P 23 58 44.3 +1.3**
**SNAA Sanae 91.72 198** *e*P **P 23 58 44.5 +1.5**
SNAA pmax pmax
comp=Z,4.0nm,1.4s
SNAA MLR MLR
comp=Z,500nm,21.0s
**SNAA Sanae 91.72 198** *e*P **P 23 58 44.5 +1.5**
comp=Z,4.5nm,1.4s
SNAA LR LR
comp=Z,500nm,21.0s
**KEST Kesra 91.76 306** P **P 23 58 43.8 -0.2**
comp=Z,19nm,0.9s,baz=340,slow=5.6,SNR=3.7
**KBS Kingsbay 91.92 349** PFAKE 23 59 00.0 +16
KBS LR LR
comp=Z,2μm,18.0s
**STU Stuttgart 92.19 319** *e*P **P 23 58 45.4 -0.2**
comp=Z,159nm,2.6s,baz=93,slow=4.7
**BFO Black Forest 92.75 318** *e*P **P 23 58 48.1 -0.1**
comp=Z,25nm,1.6s,baz=93,slow=4.7
**IBBN Ibbenburen 93.13 322** *e*P **P 23 58 49.7 -0.1**
comp=Z,17nm,1.1s,baz=93,slow=4.7
**SENIN Lac Senin/Sane 93.45 316** PFAKE 23 59 00.0 +8.3
SENIN LR LR
comp=Z,500nm,22.0s
**WLF Walferdange 94.18 319** *e*P **P 23 58 56.2 +1.5**
comp=Z,28nm,1.4s,baz=93,slow=4.7
**TAM Tamanrasset 94.87 293** *e*P **P 23 59 01.0 +2.3**
TAM pmax pmax
comp=Z,15nm,1.9s
TAM MLR MLR
comp=Z,700nm,20.0s
**TAM Tamanrasset 94.87 293** *e*P **P 23 59 01.0 +2.3**
comp=Z,15nm,1.9s
TAM LR LR
comp=Z,700nm,20.0s
**TOA0 Torodi Ar. Sit 98.44 283** *e*P Pdif 23 59 16.4 +1.5
TOA0 *e*PP **PP 00 03 15.7 +0.3**
**TORD Torodi Ar. Bea 98.44 283** P Pdif 23 59 16.4 +1.5
comp=Z,0.7nm,1.1s,baz=88,slow=3.6,SNR=2.6
TORD PP **PP 00 03 15.7 +0.3**
comp=Z,0.5nm,1.0s,baz=80,slow=3.4,SNR=3.1
TORD PKKPbc **PKKPbc 00 15 43.9 -1.2**
comp=Z,1.3nm,1.3s,baz=282,slow=7.1,SNR=3.8
TORD LR LR 00 42 09.5
comp=Z,715nm,19.6s,baz=100,slow=34
**TTA Tatalina 98.55 27** PFAKE 23 59 30.0 +16
TTA LR LR
comp=Z,900nm,21.0s
**COLD Coldfoot 99.85 22** PFAKE 23 59 30.0 +10
COLD LR LR
comp=Z,1μm,21.0s
**CAST Castle Rocks 100.17 26** PFAKE 23 59 30.0 +8.5
CAST LR LR
comp=Z,900nm,19.0s
**MLY Manley 100.29 24** *e*Pdif **Pdif 23 59 21.5 -0.6**
MLY LR LR
comp=Z,800nm,19.0s
**BPAW Bear Paw Mtn. 100.46 25** PFAKE 23 59 30.0 +7.2
BPAW LR LR
comp=Z,1μm,19.0s
**BWN Browne 101.07 25** PFAKE 23 59 40.0 +15
BWN LR LR
comp=Z,800nm,18.0s
**MDM Murphy Dome 101.33 24** PFAKE 23 59 40.0 +13
MDM LR LR
comp=Z,800nm,18.0s
**KDAK Kodiak Island 101.35 31** PP PP 00 03 33.8 -2.3
comp=Z,1.7nm,0.3s,baz=305,slow=15,SNR=4.8
**MCK McKinley 101.43 25** *e*P **Pdif 23 59 27.3 +0.2**
**MCK McKinley 101.43 25** *e*Pdif **Pdif 23 59 27.3 +0.2**
MCK *e*PP PP 00 03 30.2 -6.4
**COLA College 101.51 24** PFAKE 23 59 40.0 +13
COLA LR LR
comp=Z,1μm,18.0s
**WRH Wood River Hil 101.55 24** PFAKE 23 59 40.0 +12
WRH LR LR
comp=Z,1μm,20.0s
**RND Reindeer 101.57 25** PFAKE 23 59 40.0 +12
RND LR LR
comp=Z,900nm,19.0s
**CCB Clear Creek Bu 101.61 24** PFAKE 23 59 40.0 +12
CCB LR LR
comp=Z,900nm,18.0s
**RC01 Rabbit Creek A 101.88 28** PFAKE 23 59 40.0 +11
RC01 LR LR
comp=Z,900nm,18.0s
**FYU Fort Yukon 101.92 22** PFAKE 23 59 40.0 +11
FYU LR LR
comp=Z,1μm,21.0s
**IL1 Eielson Array 101.93 24** *e*PP PP 00 03 32.7 -7.6
**ILAR Eielson Array 101.93 24** P **Pdif 23 59 28.4 -0.9**
comp=Z,0.8nm,1.1s,baz=304,slow=6.0,SNR=4.8
ILAR PP **PP 00 03 38.3 -2.1**
comp=Z,4.9nm,1.0s,baz=290,slow=7.4,SNR=7.8
ILAR PKKP **PKKPdf 00 15 42.7 -0.4**
comp=Z,0.3nm,0.6s,baz=166,slow=2.5,SNR=2.7
**ILB Eielson Array 101.93 24** *e*Pdif **Pdif 23 59 28.4 -0.9**
ILB *e*PP **PP 00 03 38.3 -2.1**
**HDA Harding Lake 102.03 24** PFAKE 23 59 40.0 +10
HDA LR LR
comp=Z,800nm,18.0s
**PAX Paxson 103.16 25** PFAKE 23 59 50.0 +15
PAX LR LR
comp=Z,899nm,20.0s
**DOT Dot Lake 103.50 24** PFAKE 23 59 50.0 +14
DOT LR LR
comp=Z,2μm,21.0s
**DIV Divide 103.69 27** PFAKE 23 59 50.0 +13
DIV LR LR
comp=Z,200nm,22.0s
**EYAK Cordova Ski Ar 103.90 28** PFAKE 23 59 50.0 +12
EYAK LR LR
comp=Z,1μm,19.0s
**EGAK Eagle 104.19 23** PFAKE 23 59 50.0 +11
EGAK LR LR
comp=Z,1μm,20.0s
**RAGM Ragged Mountai 104.46 28** PFAKE 23 59 50.0 +9.3
RAGM LR LR
comp=Z,1μm,20.0s
**DBIC Dimbokro 104.84 276** Pdiff **Pdif 23 59 41.5 -1.8**
comp=Z,4.9nm,1.1s,baz=104,slow=4.2,SNR=2.3
**INK Inuvik 105.08 18** Pdiff **Pdif 23 59 40.4 -2.8**
comp=Z,2.6nm,1.1s,baz=299,slow=10,SNR=1.8
INK PP **PP 00 04 01.1 -2.6**
comp=Z,9.6nm,1.2s,baz=294,slow=6.3,SNR=4.4
**INK Inuvik 105.08 18** PFAKE 00 04 10.0
INK LR LR
comp=Z,1μm,21.0s
**RES Resolute Bay 107.26 4** PP PP 00 04 18.6 -0.9
comp=Z,3.5nm,0.9s,baz=22,slow=6.2,SNR=3.7
**TBI Tubuai 107.98 115** *e*LR LR 00 35 40.0
comp=Z,985nm,28.0s
**PPT2 Papeete2 108.85 109** *e*LR LR 00 36 01.4
comp=Z,959nm,25.2s
**ASCN Ascension 113.55 260** PFAKE 00 04 30.0
ASCN LR LR
comp=Z,1μm,18.0s
**RKT Rikitea 120.95 119** *e*LR LR 00 41 42.2
comp=Z,971nm,25.2s
**A05A Maple Falls 121.39 31** PFAKE 00 04 40.0 +11
A05A LR LR
comp=Z,300nm,21.0s
**EDM Edmonton 122.41 23** *e*PKIKP **PKPdf 00 04 31.7 +0.6**
**EDM Edmonton 122.41 23** *e*PKPdf **PKPdf 00 04 31.7 +0.6**
**NEW Newport 124.36 29** *e*PKIKP pPKPdf 00 04 45.2 +1.0
**NEW Newport 124.36 29** P **PKPdf 00 04 34.6 -0.4**
baz=124
**NEW Newport 124.36 29** *e*pPKPdf pPKPdf 00 04 45.2 +1.0
**M02C Callahan 125.45 39** P **PKPdf 00 04 39.0 +1.7**
baz=125
**BSMT Bassoo Peak 125.77 28** *e*PKPdf **PKPdf 00 04 38.5 +0.6**
**N02D Trinity Center 125.78 39** P **PKPdf 00 04 39.0 +1.0**
baz=126
**F10A Beach Ranch, E 125.86 31** *e*PKPdf **PKPdf 00 04 38.1 +0.1**
**SCHQ Schefferville 126.60 350** PKP **PKPdf 00 04 39.5 +0.5**
comp=Z,2.5nm,0.5s,baz=20,slow=9.9,SNR=3.6
**SCHQ Schefferville 126.60 350** *e*PKPdf **PKPdf 00 04 39.5 +0.5**
SCHQ LR LR
comp=Z,1μm,21.0s
**MOD Modoc 126.72 37** *e*PKPdf **PKPdf 00 04 40.8 +1.0**
**O03D Paynes Creek 126.73 39** P **PKPdf 00 04 39.5 -0.3**
baz=126
**SLMT Seeley Lake 126.82 28** *e*PKPdf **PKPdf 00 04 39.7 -0.2**
**MSO Missoula 126.90 28** P **PKPdf 00 04 40.6 +0.7**
baz=127
**MSO Missoula 126.90 28** *e*PKPdf **PKPdf 00 04 39.7 -0.3**
**CHMT Chamberlain Mo 127.17 28** *e*PKPdf **PKPdf 00 04 40.6 0.0**
**WVOR Wild Horse Val 127.38 35** *e*PKIKP **PKPdf 00 04 42.7 +1.6**
**WVOR Wild Horse Val 127.38 35** *e*PKPdf **PKPdf 00 04 42.7 +1.6**
**EGMT Eagleton 127.88 25** P **PKPdf 00 04 41.8 0.0**
baz=128
**EGMT Eagleton 127.88 25** *e*PKPdf **PKPdf 00 04 43.9 +2.1**
**MFID Camas Ranch 128.32 33** *e*PKPdf **PKPdf 00 04 43.8 +1.0**
MFID *e*PP **PP 00 06 50.2 +3.7**
**DLMT Dillon 128.61 29** *e*PKPdf **PKPdf 00 04 44.4 +1.0**
**BOZ Bozeman (W) 128.86 28** *e*PKIKP **PKPdf 00 04 44.6 +0.8**
**BOZ Bozeman (W) 128.86 28** P **PKPdf 00 04 44.1 +0.2**
baz=129
**BOZ Bozeman (W) 128.86 28** *e*PKPdf **PKPdf 00 04 44.6 +0.8**
**MCMT McKenzie Canyo 128.88 30** *e*PKPdf **PKPdf 00 04 45.2 +1.2**
**HLID Hailey 128.97 32** P **PKPdf 00 04 44.6 +0.5**
baz=129
**HLID Hailey 128.97 32** *e*PKPpre PKPpre 00 04 34.5
HLID *e*PKPdf **PKiKP 00 04 45.4 +0.5**
**QLMT Earthquake Lak 129.56 29** *e*PKPdf **PKPdf 00 04 46.6 +1.3**
**YMR Madison River 129.91 28** *e*PKPdf **PKPdf 00 04 48.3 +2.4**
**NV01 Mina Array Sit 130.02 39** *e*PKPdf **PKPdf 00 04 47.9 +1.5**
NV01 *e*PP **PP 00 06 56.5 -1.6**
**NVAR Mina Array Bea 130.02 39** PKP **PKPdf 00 04 46.4 +0.1**
comp=Z,1.0nm,0.5s,baz=318,slow=2.0,SNR=5.0
NVAR PP **PP 00 06 56.5 -1.6**
comp=Z,0.7nm,0.6s,baz=280,slow=5.4,SNR=3.7
**YFT Old Faithful 130.13 29** PFAKE 00 05 00.0 +14
YFT LR LR
comp=Z,2μm,18.0s
**RLMT Red Lodge 130.35 27** *e*PP PP 00 06 58.5 -1.2
**ELK Elko 130.42 35** *e*PKIKP **PKPdf 00 04 49.0 +2.0**
**ELK Elko 130.42 35** *e*PKPdf **PKPdf 00 04 49.0 +2.0**
**ULM Lac du Bonnet 130.49 13** PKP **PKPdf 00 04 44.0 -2.6**
comp=Z,2.6nm,0.9s,baz=101,slow=2.2,SNR=3.2
**FXWY Fox Creek 130.64 29** *e*PKPdf **PKPdf 00 04 48.9 +1.5**
FXWY *e*PP **PP 00 07 06.1 +4.4**
**TPAW Teton Pass 130.79 29** *e*PKPdf **PKPdf 00 04 49.3 +1.6**
TPAW *e*PP **PP 00 07 07.3 +4.6**
**CWC Cottonwood Cre 131.32 41** P **PKPdf 00 04 49.6 +0.9**
baz=131
**R11A Troy Canyon, C 131.75 38** P **PKPdf 00 04 52.1 +2.5**
baz=132
**HWUT Hardware Ranch 131.84 32** *e*PKPdf **PKPdf 00 04 51.0 +1.4**
HWUT *e*PP **PP 00 07 13.6 +4.1**
**MPMC Manual Prospec 131.93 41** P **PKPdf 00 04 51.3 +1.3**
baz=132
**E26A Carlson Angus 131.99 21** P **PKPdf 00 04 50.7 +1.1**
baz=132
**BW06 Boulder Array 132.00 29** *e*PKPdf **PKPdf 00 04 49.4 -0.5**
BW06 *e*PP **PP 00 07 09.3 -1.2**
**B32A Ashes, Strandq 132.05 15** P **PKPdf 00 04 50.0 +0.5**
baz=132
**DUG Dugway 132.16 34** *e*PKIKP **PKPdf 00 04 52.2 +2.0**
**DUG Dugway 132.16 34** P **PKPdf 00 04 51.9 +1.7**
baz=132
**DUG Dugway 132.16 34** *e*PKPdf **PKPdf 00 04 52.2 +2.0**
**EDW2 Edwards Air Fo 132.27 43** P **PKPdf 00 04 52.0 +1.5**
baz=132
**CTU Camp Tracy 132.39 33** PFAKE 00 05 00.0 +9.3
CTU LR LR
comp=Z,25μm,19.0s
**NLU North Lily Min 132.73 34** *e*PKPdf **PKPdf 00 04 53.8 +2.4**
**GSC Goldstone 132.82 42** *e*PKIKP **PKPdf 00 04 54.8 +3.2**
**GSC Goldstone 132.82 42** *e*PKPdf **PKPdf 00 04 54.8 +3.2**
**RSSD Black Hills 133.38 24** *e*PKIKP PKPdf 00 05 01.5 +9.0
**RSSD Black Hills 133.38 24** *ep*PKPdf PKPdf 00 05 01.5 +9.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| CCUT | Cedar City | 133.61 | 37 | ePKPdf | PKPdf | 00 04 56.2 | +3.0 | |
| MSU | Marysvale | 133.67 | 35 | ePKIKP | PKPdf | 00 04 55.0 | +1.8 | |
| MSU | Marysvale | 133.67 | 35 | ePKPdf | PKPdf | 00 04 55.0 | +1.8 | |
| GMRC | Granite Mounta | 133.89 | 42 | P | PKPdf | 00 04 55.1 | +1.5 | |
| | baz=134 | | | | | | | |
| P18A | Preston Nutter | 133.96 | 33 | ePKPdf | PKPdf | 00 04 55.1 | +1.3 | |
| G29A | Hoven | 133.97 | 19 | P | PKPdf | 00 04 54.1 | +0.8 | |
| | baz=134 | | | | | | | |
| PFO | Pinyon Flat Ob | 134.03 | 43 | P | PKPdf | 00 04 54.7 | +0.8 | |
| | baz=134 | | | | | | | |
| I28A | Midland | 134.58 | 21 | P | PKPdf | 00 04 56.0 | +1.5 | |
| | baz=134 | | | | | | | |
| O20A | White River Ci | 134.63 | 30 | P | PKPdf | 00 04 55.2 | +0.2 | |
| | baz=134 | | | | | | | |
| O20A | White River Ci | 134.63 | 30 | ePKPdf | PKPdf | 00 04 57.1 | +2.1 | |
| RCBR | Riachuelo | 135.03 | 259 | PFAKE | | 00 05 10.0 | +14 | |
| RCBR | | | | LR | LR | | | |
| | comp=Z,800nm,18.0s | | | | | | | |
| G33A | Ortonville | 135.03 | 16 | P | PKPdf | 00 04 54.8 | -0.5 | |
| | baz=135 | | | | | | | |
| PHWY | Pilot Hill | 135.07 | 27 | ePKPdf | PKPdf | 00 05 02.0 | +6.2 | |
| PHWY | | | | LR | LR | | | |
| | comp=Z,500nm,19.0s | | | | | | | |
| F36A | Milaca | 135.15 | 13 | P | PKPdf | 00 04 56.0 | +0.5 | |
| | baz=135 | | | | | | | |
| N23A | Red Feather La | 135.17 | 28 | P | PKPdf | 00 04 57.4 | +1.4 | |
| | baz=135 | | | | | | | |
| PV09 | Paradox Valley | 135.37 | 33 | ePKPdf | PKPdf | 00 04 59.4 | +2.9 | |
| GLA | Glamis | 135.47 | 43 | ePKIKP | PKPdf | 00 04 58.2 | +1.7 | |
| GLA | Glamis | 135.47 | 43 | P | PKPdf | 00 04 58.0 | +1.5 | |
| | baz=135 | | | | | | | |
| GLA | Glamis | 135.47 | 43 | ePKPdf | PKPdf | 00 04 58.2 | +1.7 | |
| PV10 | Paradox Valley | 135.51 | 33 | ePKPdf | PKPdf | 00 04 58.4 | +1.7 | |
| PV05 | Paradox Valley | 135.70 | 33 | ePKPdf | PKPdf | 00 04 58.2 | +1.2 | |
| PV01 | Paradox Valley | 135.94 | 33 | ePKPdf | PKPdf | 00 04 58.5 | +1.0 | |
| SMCO | Snowmass | 136.00 | 30 | PFAKE | | 00 05 10.0 | +12 | |
| SMCO | | | | LR | LR | | | |
| | comp=Z,1μm,19.0s | | | | | | | |
| WUAZ | Wupatki | 136.16 | 38 | ePKPdf | PKPdf | 00 05 00.7 | +2.8 | |
| ISCO | Idaho Springs | 136.18 | 29 | ePP | PP | 00 07 47.4 | +10 | |
| ECSD | EROS Data Cent | 136.32 | 17 | P | PKPdf | 00 04 58.2 | +0.5 | |
| | baz=136 | | | | | | | |
| ECSD | EROS Data Cent | 136.32 | 17 | ePKPdf | PKPdf | 00 04 58.7 | +1.0 | |
| TRQA | Tornquist | 136.37 | 201 | PFAKE | | 00 05 10.0 | +12 | |
| TRQA | | | | LR | LR | | | |
| | comp=Z,800nm,19.0s | | | | | | | |
| MVCO | Mesa Verde | 136.65 | 33 | ePKPdf | PKPdf | 00 05 00.6 | +1.8 | |
| WVL | Waterville | 136.98 | 349 | PFAKE | | 00 05 10.0 | +11 | |
| WVL | | | | LR | LR | | | |
| | comp=Z,3μm,22.0s | | | | | | | |
| W18A | Petrified Fore | 137.41 | 37 | P | PKPdf | 00 05 00.6 | +0.4 | |
| | baz=137 | | | | | | | |
| LBNH | Lisbon | 137.69 | 351 | PFAKE | | 00 05 10.0 | +10 | |
| LBNH | | | | LR | LR | | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| L35A | Bielow Farm, R | 138.12 | 17 | P | PKPdf | 00 05 01.3 | +0.2 | |
| | baz=138 | | | | | | | |
| TUC | Tucson | 138.61 | 41 | ePKHKP | PKPpre | 00 04 53.0 | | |
| TUC | Tucson | 138.61 | 41 | ePKPpre | PKPpre | 00 04 53.0 | | |
| T25A | Trinidad | 138.85 | 30 | ePKPdf | PKPdf | 00 05 04.4 | +1.5 | |
| T25A | | | | ePP | PP | 00 07 55.3 | +1.6 | |
| Q29A | Oakley | 139.01 | 25 | P | PKPpre | 00 04 54.8 | | |
| | baz=139 | | | | | | | |
| Q30A | Quinter | 139.25 | 24 | P | PKPpre | 00 04 54.7 | | |
| | baz=139 | | | | | | | |
| TRY | Troy | 139.41 | 353 | PFAKE | | 00 05 20.0 | +17 | |
| TRY | | | | LR | LR | | | |
| | comp=Z,1μm,21.0s | | | | | | | |
| ANMO | Albuquerque | 139.43 | 34 | ⇑iPKIKP | PKPdf | 00 05 05.3 | +1.3 | |
| ANMO | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.2s | | | | | | | |
| ANMO | Albuquerque | 139.43 | 34 | ePKPdf | PKPdf | 00 05 05.1 | +1.1 | |
| CBKS | Cedar Bluff | 139.59 | 24 | PFAKE | | 00 05 20.0 | +16 | |
| CBKS | | | | LR | LR | | | |
| | comp=Z,1μm,22.0s | | | | | | | |
| S28A | Manter | 139.69 | 27 | P | PKPpre | 00 04 57.4 | | |
| | baz=140 | | | | | | | |
| R30A | Dighton | 139.82 | 25 | P | PKPpre | 00 04 56.9 | | |
| | baz=140 | | | | | | | |
| BRYW | Bryant College | 139.88 | 350 | PFAKE | | 00 05 20.0 | +16 | |
| BRYW | | | | LR | LR | | | |
| | comp=Z,2μm,19.0s | | | | | | | |
| P34A | Walnut Farm, R | 140.03 | 20 | P | PKPpre | 00 04 57.1 | | |
| | baz=140 | | | | | | | |
| R31A | Burdett | 140.12 | 24 | P | PKPpre | 00 04 58.2 | | |
| | baz=140 | | | | | | | |
| Q33A | Connelly Farm, | 140.16 | 22 | P | PKPpre | 00 04 58.2 | | |
| | baz=140 | | | | | | | |
| R32A | Long Quarter, | 140.33 | 23 | P | PKPpre | 00 04 57.6 | | |
| | baz=140 | | | | | | | |
| KSU1 | Kansas State U | 140.51 | 20 | ePKPdf | PKPdf | 00 05 08.2 | +2.7 | |
| Q34A | Chapman | 140.55 | 21 | P | PKPpre | 00 04 59.8 | | |
| | baz=140 | | | | | | | |
| YLE | Yale | 140.70 | 351 | PFAKE | | 00 05 20.0 | +14 | |
| YLE | | | | LR | LR | | | |
| | comp=Z,700nm,19.0s | | | | | | | |
| R33A | Olander Ranch, | 140.71 | 22 | P | PKPpre | 00 05 00.3 | | |
| | baz=140 | | | | | | | |
| ALLY | Alegheny Colle | 140.91 | 360 | PFAKE | | 00 05 20.0 | +14 | |
| ALLY | | | | LR | LR | | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| R34A | Isabella, Hill | 140.99 | 22 | P | PKPpre | 00 04 59.4 | | |
| | baz=141 | | | | | | | |
| T31A | Randall Ranch, | 141.07 | 25 | P | PKPpre | 00 04 59.5 | | |
| | baz=141 | | | | | | | |
| HDIL | Hopedale | 141.12 | 11 | P | PKPpre | 00 05 01.3 | | |
| | baz=141 | | | | | | | |
| U30A | WK&E Inc. Balk | 141.12 | 27 | P | PKPpre | 00 05 00.9 | | |
| | baz=141 | | | | | | | |
| PAL | Palisades | 141.14 | 352 | PFAKE | | 00 05 20.0 | +13 | |
| PAL | | | | LR | LR | | | |
| | comp=Z,900nm,19.0s | | | | | | | |
| S34A | Willow Spring | 141.57 | 22 | P | PKPpre | 00 05 00.9 | | |
| | baz=141 | | | | | | | |
| U32A | Winter Ranch, | 141.97 | 25 | P | PKPpre | 00 05 03.2 | | |
| | baz=142 | | | | | | | |
| T34A | McClaskey Farm | 142.14 | 22 | P | PKPpre | 00 05 02.7 | | |
| | baz=142 | | | | | | | |
| U33A | Lingo Farm, Me | 142.29 | 24 | P | PKPpre | 00 05 04.3 | | |
| | baz=142 | | | | | | | |
| S37A | Fort Scott | 142.32 | 19 | P | PKPpre | 00 05 04.2 | | |
| | baz=142 | | | | | | | |
| MNTX | Cornudas Mount | 142.40 | 36 | P | PKPpre | 00 05 06.0 | | |
| | baz=142 | | | | | | | |
| MNTX | Cornudas Mount | 142.40 | 36 | ePKPdf | PKPpre | 00 05 06.6 | | |
| T35A | Sooner Cattle | 142.49 | 22 | P | PKPpre | 00 05 04.8 | | |
| | baz=142 | | | | | | | |
| V32A | Arapaho | 142.51 | 26 | P | PKPpre | 00 05 04.4 | | |
| | baz=142 | | | | | | | |
| U34A | Anderson Ranch | 142.52 | 23 | P | PKPpre | 00 05 04.8 | | |
| | baz=142 | | | | | | | |
| W31A | Holland Ranch, | 142.56 | 27 | P | PKPpre | 00 05 05.8 | | |
| | baz=142 | | | | | | | |
| T36A | Boggs Farm, Ca | 142.59 | 21 | P | PKPpre | 00 05 05.8 | | |
| | baz=142 | | | | | | | |
| T37A | Cheneyville 18 | 142.87 | 20 | P | PKPpre | 00 05 05.7 | | |
| | baz=143 | | | | | | | |
| W32A | Sentinel | 142.92 | 26 | P | PKPpre | 00 05 05.9 | | |
| | baz=143 | | | | | | | |
| X31A | McDonald Ranch | 143.00 | 28 | P | PKPpre | 00 05 06.9 | | |
| | baz=143 | | | | | | | |
| V34A | Guthrie | 143.05 | 24 | P | PKPbc | 00 05 06.5 | -0.5 | |
| | baz=143 | | | | | | | |
| V34A | Guthrie | 143.05 | 24 | ePKPpre | PKPbc | 00 05 06.6 | -0.4 | |
| Y30A | Stafford Cattl | 143.18 | 29 | P | PKPbc | 00 05 07.2 | -0.2 | |
| | baz=143 | | | | | | | |
| U36A | Oologah | 143.24 | 21 | P | PKPbc | 00 05 07.4 | 0.0 | |
| | baz=143 | | | | | | | |
| W33A | Caddo, Fort Co | 143.24 | 25 | P | PKPbc | 00 05 07.8 | +0.3 | |
| | baz=143 | | | | | | | |
| Z29A | Hungry Hill Ra | 143.26 | 31 | P | PKPbc | 00 05 08.4 | +0.7 | |
| | baz=143 | | | | | | | |
| V35A | Meyer Ranch, C | 143.38 | 23 | P | PKPbc | 00 05 07.3 | -0.5 | |
| | baz=143 | | | | | | | |
| Y31A | Rekieta Farm, | 143.42 | 29 | P | PKPbc | 00 05 08.0 | -0.1 | |
| | baz=143 | | | | | | | |
| U37A | Salina | 143.44 | 20 | P | PKPbc | 00 05 07.5 | -0.5 | |
| | baz=143 | | | | | | | |
| WMOK | Wichita Mounta | 143.45 | 26 | ePKIKP | PKPab | 00 05 06.8 | -0.3 | |
| WMOK | Wichita Mounta | 143.45 | 26 | ePKPpre | PKPab | 00 05 06.8 | -0.3 | |
| W34A | Bridge Creek, | 143.46 | 25 | P | PKPbc | 00 05 08.0 | -0.2 | |
| | baz=143 | | | | | | | |
| BDFB | Brasilia | 143.49 | 240 | PKP | PKPdf | 00 05 10.9 | -0.6 | |
| | comp=Z,1.4nm,0.4s,baz=259,slow=5.2,SNR=2.8 | | | | | | | |
| BDFB | Brasilia | 143.49 | 240 | ePKIKP | PKPdf | 00 05 11.0 | -0.6 | |
| BDFB | | | | MLR | MLR | | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| BDFB | Brasilia | 143.49 | 240 | ePKPdf | PKPdf | 00 05 10.9 | -0.6 | |
| BDFB | | | | LR | LR | | | |
| | comp=Z,1μm,20.0s | | | | | | | |
| X32A | Elmer | 143.49 | 27 | P | PKPab | 00 05 07.6 | +0.3 | |
| | baz=143 | | | | | | | |
| Z30A | Sanderson Ranc | 143.54 | 30 | P | PKPbc | 00 05 08.2 | -0.2 | |
| | baz=143 | | | | | | | |
| TUL1 | Tulsa | 143.65 | 22 | P | PKPab | 00 05 07.7 | -0.1 | |
| | baz=143 | | | | | | | |
| TUL1 | Tulsa | 143.65 | 22 | ePKPpre | PKPab | 00 05 08.5 | +0.7 | |
| U38A | Gravette | 143.66 | 20 | P | PKPab | 00 05 07.9 | 0.0 | |
| | baz=143 | | | | | | | |
| 129A | Stewart Farms, | 143.67 | 32 | P | PKPab | 00 05 08.2 | +0.1 | |
| | baz=144 | | | | | | | |
| 228A | UT Block 9, Go | 143.68 | 33 | P | PKPbc | 00 05 08.8 | -0.2 | |
| | baz=144 | | | | | | | |
| V36A | Jenks | 143.70 | 22 | P | PKPab | 00 05 08.0 | 0.0 | |
| | baz=144 | | | | | | | |
| Y32A | R-V Farms, Ver | 143.77 | 28 | P | PKPab | 00 05 08.0 | -0.3 | |
| | baz=144 | | | | | | | |
| SIUC | Southern Illin | 143.88 | 12 | PFAKE | | 00 05 20.0 | +8.4 | |
| SIUC | | | | LR | LR | | | |
| | comp=Z,899nm,20.0s | | | | | | | |
| WCI | Wyandotte Cave | 143.89 | 8 | ePKIKP | PKPbc | 00 05 09.1 | -0.2 | |
| WCI | Wyandotte Cave | 143.89 | 8 | ePKPpre | PKPbc | 00 05 09.1 | -0.2 | |
| W35A | Tecumseh | 143.90 | 24 | P | PKPab | 00 05 08.5 | -0.3 | |
| | baz=144 | | | | | | | |
| CPUP | Villa Florida | 143.90 | 216 | PKP | PKPbc | 00 05 09.7 | 0.0 | |
| | comp=Z,7.0nm,1.1s,baz=114,slow=2.9,SNR=7.7 | | | | | | | |
| CPUP | Villa Florida | 143.90 | 216 | ePKIKP | PKPbc | 00 05 10.0 | +0.4 | |
| CPUP | Villa Florida | 143.90 | 216 | ePKPdf | PKPbc | 00 05 10.0 | +0.3 | |
| V37A | Hulbert | 143.91 | 21 | P | PKPab | 00 05 08.6 | -0.2 | |
| | baz=144 | | | | | | | |
| X34A | Smith Ranch, M | 143.98 | 25 | P | PKPbc | 00 05 09.5 | -0.2 | |
| | baz=144 | | | | | | | |
| Z31A | Sharp Cattle R | 144.00 | 29 | P | PKPab | 00 05 09.1 | -0.2 | |
| | baz=144 | | | | | | | |
| Y33A | Hilltop Ranch, | 144.14 | 27 | P | PKPab | 00 05 09.7 | 0.0 | |
| | baz=144 | | | | | | | |
| W36A | Wetumka | 144.16 | 23 | P | PKPab | 00 05 09.7 | -0.1 | |
| | baz=144 | | | | | | | |
| 130A | Snyder | 144.17 | 31 | P | PKPbc | 00 05 10.3 | -0.1 | |
| | baz=144 | | | | | | | |
| V38A | Canehill | 144.18 | 20 | P | PKPab | 00 05 09.2 | -0.6 | |
| | baz=144 | | | | | | | |
| 229A | Bryant Ranch, | 144.22 | 32 | P | PKPbc | 00 05 10.6 | 0.0 | |
| | baz=144 | | | | | | | |
| SLBS | Sierra La Lagu | 144.26 | 51 | ePKPdf | PKPdf | 00 05 12.2 | -0.6 | |
| Z32A | Haskell | 144.33 | 28 | P | PKPab | 00 05 10.3 | -0.1 | |
| | baz=144 | | | | | | | |
| 131A | Roby | 144.40 | 30 | P | PKPab | 00 05 10.8 | 0.0 | |
| | baz=144 | | | | | | | |
| W37A | Quinton | 144.47 | 22 | P | PKPab | 00 05 10.9 | 0.0 | |
| | baz=144 | | | | | | | |
| 329A | Wagon Wheel Ra | 144.50 | 33 | P | PKPbc | 00 05 11.4 | -0.1 | |
| | baz=144 | | | | | | | |
| X35A | Drake | 144.51 | 24 | P | PKPab | 00 05 10.6 | -0.5 | |
| | baz=144 | | | | | | | |
| Y34A | Reagan Ranch, | 144.56 | 26 | P | PKPab | 00 05 10.9 | -0.4 | |
| | baz=144 | | | | | | | |
| X36A | Centrahoma | 144.62 | 23 | P | PKPab | 00 05 11.2 | -0.3 | |
| | baz=144 | | | | | | | |
| 230A | Sterling City | 144.65 | 32 | P | PKPbc | 00 05 11.9 | 0.0 | |
| | baz=144 | | | | | | | |
| Z33A | Whitaker Ranch | 144.68 | 27 | P | PKPab | 00 05 11.3 | -0.5 | |
| | baz=144 | | | | | | | |
| PARMO | Parma | 144.77 | 13 | ePKPdf | PKPdf | 00 05 12.7 | -0.5 | |
| ABTX | Abilene, Hawle | 144.81 | 29 | P | PKPab | 00 05 12.2 | -0.1 | |
| | baz=145 | | | | | | | |
| ABTX | Abilene, Hawle | 144.81 | 29 | ePKPdf | PKPbc | 00 05 12.7 | +0.3 | |
| W38A | Poteau | 144.86 | 21 | P | PKPab | 00 05 12.1 | -0.2 | |
| | baz=145 | | | | | | | |
| Y35A | Marietta | 144.91 | 25 | P | PKPab | 00 05 11.9 | -0.7 | |
| | baz=145 | | | | | | | |
| X37A | Clayton | 144.98 | 22 | P | PKPab | 00 05 12.4 | -0.4 | |
| | baz=145 | | | | | | | |
| Z34A | Collier Ranch, | 144.99 | 26 | P | PKPab | 00 05 12.3 | -0.6 | |
| | baz=145 | | | | | | | |
| 330A | Mertzon | 144.99 | 32 | P | PKPab | 00 05 12.7 | -0.4 | |
| | baz=145 | | | | | | | |
| 231A | Bronte | 145.03 | 31 | P | PKPbc | 00 05 12.9 | -0.2 | |
| | baz=145 | | | | | | | |
| X38A | Whitesboro | 145.11 | 21 | P | PKPbc | 00 05 13.0 | -0.2 | |
| | baz=145 | | | | | | | |
| TX31 | Lajitas Ar. Si | 145.12 | 37 | ePKPbc | PKPbc | 00 05 12.3 | -1.3 | |
| TXAR | Lajitas Array | 145.12 | 37 | PKPbc | PKPdf | 00 05 14.3 | +0.2 | |
| | comp=Z,62nm,0.7s,baz=283,slow=1.0,SNR=668 | | | | | | | |
| 133A | Hamilton Ranch | 145.17 | 28 | P | PKPbc | 00 05 13.4 | -0.2 | |
| | baz=145 | | | | | | | |
| 429A | Davenport Ranc | 145.20 | 34 | P | PKPbc | 00 05 13.7 | -0.1 | |
| | baz=145 | | | | | | | |
| Y36A | Durant | 145.23 | 24 | P | PKPbc | 00 05 13.0 | -0.7 | |
| | baz=145 | | | | | | | |
| UTMT | University of | 145.27 | 12 | ePKPbc | PKPdf | 00 05 13.9 | -0.1 | |
| Z35A | Perchaven, San | 145.31 | 26 | P | PKPbc | 00 05 13.2 | -0.8 | |
| | baz=145 | | | | | | | |
| BLA | Blacksburg | 145.34 | 0 | ePKIKP | PKPbc | 00 05 13.6 | -0.4 | |
| BLA | Blacksburg | 145.34 | 0 | ePKPbc | PKPbc | 00 05 13.6 | -0.4 | |
| GNAR | Gosnell | 145.37 | 14 | ePKPbc | PKPdf | 00 05 14.5 | +0.3 | |
| GNAR | | | | epPKPdf | pPKPdf | 00 05 24.2 | +0.8 | |
| 529A | Stev Forest Ra | 145.40 | 35 | P | PKPab | 00 05 14.8 | +0.2 | |
| | baz=145 | | | | | | | |
| 232A | Coleman | 145.40 | 30 | P | PKPbc | 00 05 14.3 | 0.0 | |
| | baz=145 | | | | | | | |
| Y37A | Hugo | 145.42 | 23 | P | PKPbc | 00 05 13.8 | -0.5 | |
| | baz=145 | | | | | | | |
| 430A | Baggett Ranch, | 145.44 | 33 | P | PKPbc | 00 05 14.5 | 0.0 | |
| | baz=145 | | | | | | | |
| 331A | San Angelo | 145.47 | 31 | P | PKPbc | 00 05 14.4 | -0.1 | |
| | baz=145 | | | | | | | |
| HALT | Halls | 145.58 | 13 | ePKPdf | PKPbc | 00 05 14.7 | 0.0 | |
| 134A | White-Moore Ra | 145.59 | 27 | P | PKPdf | 00 05 14.5 | -0.2 | |
| | baz=145 | | | | | | | |
| HBAR | Harrisburg | 145.60 | 15 | ePKPdf | PKPab | 00 05 15.2 | +0.2 | |
| MIAR | Mount Ida | 145.66 | 20 | ePKIKP | PKPbc | 00 05 14.9 | -0.1 | |
| MIAR | Mount Ida | 145.66 | 20 | P | PKPbc | 00 05 14.9 | -0.1 | |
| | baz=145 | | | | | | | |
| MIAR | Mount Ida | 145.66 | 20 | ePKPdf | PKPbc | 00 05 14.9 | -0.1 | |
| 233A | Rising Star | 145.66 | 29 | P | PKPbc | 00 05 15.1 | 0.0 | |
| | baz=146 | | | | | | | |
| Z36A | Blue Ridge | 145.71 | 25 | P | PKPdf | 00 05 14.4 | -0.5 | |
| | baz=146 | | | | | | | |
| 332A | Millersview | 145.76 | 31 | P | PKPab | 00 05 15.7 | -0.1 | |
| | baz=146 | | | | | | | |
| Y38A | Idabel | 145.81 | 22 | P | PKPdf | 00 05 14.4 | -0.6 | |
| | baz=146 | | | | | | | |
| UALR | University of | 145.85 | 18 | ePKPdf | PKPbc | 00 05 15.7 | +0.1 | |
| 431A | Sonora | 145.86 | 32 | P | PKPbc | 00 05 15.9 | 0.0 | |
| | baz=146 | | | | | | | |
| TZTN | Tazewell | 145.87 | 5 | ePKPdf | PKPbc | 00 05 15.6 | -0.1 | |
| 530A | J-C Ranch, Com | 145.88 | 34 | P | PKPab | 00 05 16.6 | +0.3 | |
| | baz=146 | | | | | | | |
| 135A | Vickery Place, | 145.90 | 26 | P | PKPdf | 00 05 15.3 | 0.0 | |
| | baz=146 | | | | | | | |
| Y39A | Lockesburg | 146.03 | 21 | P | PKPbc | 00 05 15.9 | -0.2 | |
| | baz=146 | | | | | | | |
| 234A | Clairette | 146.04 | 28 | P | PKPbc | 00 05 16.0 | -0.3 | |
| | baz=146 | | | | | | | |
| Z37A | Pogue Cattle C | 146.11 | 24 | P | PKPbc | 00 05 16.0 | -0.4 | |
| | baz=146 | | | | | | | |
| 432A | Menard | 146.14 | 31 | P | PKPbc | 00 05 16.6 | -0.1 | |
| | baz=146 | | | | | | | |
| 333A | Richland Sprin | 146.19 | 30 | P | PKPbc | 00 05 16.5 | -0.3 | |
| | baz=146 | | | | | | | |
| 531A | Rocksprings | 146.30 | 33 | P | PKPbc | 00 05 17.5 | +0.3 | |
| | baz=146 | | | | | | | |
| Z38A | Mt. Pleasant | 146.31 | 23 | P | PKPbc | 00 05 16.8 | -0.2 | |
| | baz=146 | | | | | | | |
| 136A | Ennis | 146.36 | 25 | P | PKPdf | 00 05 16.4 | +0.4 | |
| | baz=146 | | | | | | | |
| WHTX | Lake Whitney | 146.36 | 27 | P | PKPbc | 00 05 16.8 | -0.4 | |
| | baz=146 | | | | | | | |
| WHTX | Lake Whitney | 146.36 | 27 | ePKPdf | PKPbc | 00 05 17.5 | +0.2 | |
| JCT | Junction City | 146.45 | 32 | ePKP2 | PKPbc | 00 05 17.1 | -0.5 | |
| JCT | | | | MLR | MLR | | | |
| | comp=Z,800nm,20.0s | | | | | | | |
| JCT | Junction City | 146.45 | 32 | P | PKPbc | 00 05 17.8 | +0.2 | |
| | baz=146 | | | | | | | |
| JCT | Junction City | 146.45 | 32 | ePKPdf | PKPbc | 00 05 17.1 | -0.5 | |
| JCT | | | | LR | LR | | | |
| | comp=Z,800nm,20.0s | | | | | | | |
| 334A | Lometa | 146.54 | 29 | P | PKPbc | 00 05 17.6 | -0.2 | |
| | baz=146 | | | | | | | |
| 137A | Heron Place, G | 146.58 | 24 | P | PKPbc | 00 05 17.9 | 0.0 | |
| | baz=146 | | | | | | | |
| 433A | Art | 146.59 | 30 | P | PKPbc | 00 05 17.5 | -0.5 | |
| | baz=146 | | | | | | | |
| 532A | Rocksprings | 146.67 | 32 | P | PKPbc | 00 05 18.3 | 0.0 | |
| | baz=146 | | | | | | | |
| TKL | Tuckaleechee C | 146.73 | 5 | ePKP2 | PKPdf | 00 05 17.2 | +0.6 | |
| TKL | Tuckaleechee C | 146.73 | 5 | ePKPdf | PKPdf | 00 05 17.1 | +0.6 | |
| 236A | Katherine and | 146.77 | 26 | P | PKPbc | 00 05 18.3 | -0.1 | |
| | baz=147 | | | | | | | |
| 138A | Matatall Enter | 146.79 | 23 | P | PKPbc | 00 05 18.9 | +0.5 | |
| | baz=147 | | | | | | | |
| BBSR | BB Station | 146.81 | 336 | epPKPab | pPKPab | 00 05 28.7 | -0.1 | |
| CPCT | Cooper Cave | 146.86 | 6 | ePKPdf | PKPdf | 00 05 17.3 | +0.6 | |
| 631A | Perdido Creek | 146.86 | 34 | P | PKPbc | 00 05 18.8 | 0.0 | |
| | baz=147 | | | | | | | |
| OXF | Oxford | 146.90 | 14 | ePKP2 | PKPbc | 00 05 18.5 | -0.2 | |
| OXF | Oxford | 146.90 | 14 | ePKPdf | PKPbc | 00 05 18.5 | -0.2 | |
| SWET | Sewanee | 146.90 | 9 | ePKPdf | PKPbc | 00 05 18.1 | -0.7 | |
| 434A | Burnet | 146.96 | 29 | P | PKPbc | 00 05 18.7 | -0.4 | |
| | baz=147 | | | | | | | |
| 335A | Moody | 146.97 | 28 | P | PKPbc | 00 05 18.9 | -0.1 | |
| | baz=147 | | | | | | | |
| 139A | Bunkhouse Ranc | 147.04 | 22 | P | PKPbc | 00 05 19.4 | +0.3 | |
| | baz=147 | | | | | | | |
| 237A | Washetta, Mont | 147.07 | 25 | P | PKPbc | 00 05 19.5 | +0.3 | |
| | baz=147 | | | | | | | |
| 336A | Riesel | 147.15 | 27 | P | PKPbc | 00 05 19.3 | -0.2 | |
| | baz=147 | | | | | | | |
| 533A | Kerrville | 147.17 | 31 | P | PKPbc | 00 05 19.7 | 0.0 | |
| | baz=147 | | | | | | | |
| 632A | Uvalde | 147.22 | 33 | P | PKPbc | 00 05 20.2 | +0.4 | |
| | baz=147 | | | | | | | |
| 435B | Jarrell | 147.31 | 28 | P | PKPbc | 00 05 20.2 | +0.2 | |
| | baz=147 | | | | | | | |
| 238A | Jacksonville | 147.36 | 24 | P | PKPbc | 00 05 20.6 | +0.5 | |
| | baz=147 | | | | | | | |
| KMSC | Kings Mountain | 147.39 | 2 | P | PKPbc | 00 05 19.6 | -0.5 | |
| | baz=147 | | | | | | | |
| KMSC | Kings Mountain | 147.39 | 2 | PFAKE | | 00 05 30.0 | +8.1 | |
| KMSC | | | | LR | LR | | | |
| | comp=Z,900nm,20.0s | | | | | | | |
| 534A | Blanco | 147.49 | 30 | P | PKPbc | 00 05 20.4 | -0.1 | |
| | baz=147 | | | | | | | |
| 633A | Saathoff Ranch | 147.59 | 32 | P | PKPbc | 00 05 21.4 | +0.6 | |
| | baz=147 | | | | | | | |
| 239A | Gary | 147.60 | 23 | P | PKPbc | 00 05 21.1 | +0.3 | |
| | baz=147 | | | | | | | |
| 337A | Centerville | 147.63 | 26 | P | PKPbc | 00 05 21.5 | +0.7 | |
| | baz=147 | | | | | | | |
| 436A | Wall Ranch, Ga | 147.69 | 27 | P | PKPbc | 00 05 21.5 | +0.5 | |
| | baz=148 | | | | | | | |
| 732A | Laxson Ranch, | 147.73 | 34 | P | PKPbc | 00 05 21.5 | +0.3 | |
| | baz=148 | | | | | | | |
| NATX | Nacogdoches | 147.75 | 24 | PFAKE | | 00 05 30.0 | +6.5 | |
| NATX | | | | LR | LR | | | |
| | comp=Z,400nm,21.0s | | | | | | | |
| 338A | Crockett | 147.84 | 25 | P | PKPbc | 00 05 21.8 | +0.3 | |
| | baz=148 | | | | | | | |
| 535A | Dale | 147.94 | 29 | P | PKPbc | 00 05 22.0 | +0.3 | |
| | baz=148 | | | | | | | |
| 832A | Faith Ranch, C | 148.07 | 34 | P | PKPbc | 00 05 22.6 | +0.5 | |
| | baz=148 | | | | | | | |
| 733A | Divot King Ran | 148.11 | 33 | P | PKPbc | 00 05 22.6 | +0.4 | |
| | baz=148 | | | | | | | |
| 536A | Bastrop | 148.15 | 28 | P | PKPbc | 00 05 22.6 | +0.3 | |
| | baz=148 | | | | | | | |
| 339A | Huntington | 148.17 | 24 | P | PKPbc | 00 05 22.5 | +0.2 | |
| | baz=148 | | | | | | | |
| JSC | Jenkinsville | 148.25 | 2 | ePKP2 | PKPbc | 00 05 22.2 | -0.2 | |
| JSC | | | | MLR | MLR | | | |
| | comp=Z,1μm,22.0s | | | | | | | |
| JSC | Jenkinsville | 148.25 | 2 | ePKPbc | PKPbc | 00 05 22.1 | -0.2 | |
| JSC | | | | LR | LR | | | |
| | comp=Z,1μm,22.0s | | | | | | | |
| 438A | Sam Houston St | 148.30 | 26 | P | PKPbc | 00 05 23.5 | +0.9 | |
| | baz=148 | | | | | | | |
| 833A | Chaparral WMA, | 148.36 | 34 | P | PKPbc | 00 05 23.4 | +0.5 | |
| | baz=148 | | | | | | | |
| 340A | Bronson | 148.36 | 23 | P | PKPbc | 00 05 22.9 | +0.2 | |
| | baz=148 | | | | | | | |
| 635A | Leesville | 148.37 | 30 | P | PKPbc | 00 05 23.7 | +0.9 | |
| | baz=148 | | | | | | | |
| 734A | La Parita Cree | 148.40 | 32 | P | PKPbc | 00 05 23.7 | +0.8 | |
| | baz=148 | | | | | | | |
| 537A | Green Hill Far | 148.50 | 27 | P | PKPbc | 00 05 24.1 | +0.9 | |
| | baz=148 | | | | | | | |
| 439A | Center Grove, | 148.56 | 25 | P | PKPbc | 00 05 24.2 | +0.8 | |
| | baz=148 | | | | | | | |
| 636A | Smothers Creek | 148.65 | 29 | P | PKPbc | 00 05 24.7 | +1.1 | |
| | baz=148 | | | | | | | |
| VBMS | Vicksburg | 148.78 | 17 | P | PKPbc | 00 05 24.3 | +0.5 | |
| | baz=149 | | | | | | | |
| 735A | Kenedy | 148.78 | 31 | P | PKPbc | 00 05 25.2 | +1.3 | |
| | baz=149 | | | | | | | |
| LRAL | Lakeview Retre | 148.85 | 11 | ePKPbc | PKPbc | 00 05 23.8 | -0.2 | |
| 440A | Kirbyville | 148.93 | 23 | P | PKPbc | 00 05 25.2 | +1.0 | |
| | baz=149 | | | | | | | |
| 834A | Tilden | 148.97 | 33 | P | PKPbc | 00 05 25.7 | +1.2 | |
| | baz=149 | | | | | | | |
| 933A | Laredo | 148.97 | 34 | P | PKPbc | 00 05 25.6 | +1.1 | |
| | baz=149 | | | | | | | |
| GOGA | Godfrey | 148.99 | 5 | ePKP2 | PKPbc | 00 05 24.7 | +0.4 | |
| GOGA | Godfrey | 148.99 | 5 | ePKPbc | PKPbc | 00 05 24.7 | +0.4 | |
| 637A | Eagle Lake | 149.03 | 28 | P | PKPbc | 00 05 26.0 | +1.5 | |
| | baz=149 | | | | | | | |
| 736A | Circle Diamond | 149.07 | 30 | P | PKPbc | 00 05 26.4 | +1.7 | |
| | baz=149 | | | | | | | |
| 539A | Cross D Ranch, | 149.18 | 25 | P | PKPbc | 00 05 26.5 | +1.6 | |
| | baz=149 | | | | | | | |
| 835A | Beeville | 149.23 | 31 | P | PKPbc | 00 05 26.6 | +1.5 | |
| | baz=149 | | | | | | | |
| 934A | Benavides | 149.40 | 33 | P | PKPbc | 00 05 27.2 | +1.7 | |
| | baz=149 | | | | | | | |
| NHSC | New Hope | 149.44 | 360 | ePKPbc | PKPbc | 00 05 26.6 | +1.1 | |
| 737A | Port Lavaca | 149.54 | 29 | P | PKPbc | 00 05 27.4 | +1.5 | |
| | baz=149 | | | | | | | |
| 034A | Hebbronville | 149.73 | 34 | P | PKPbc | 00 05 27.9 | +1.5 | |
| | baz=150 | | | | | | | |
| 738A | Farr-Stevens R | 149.85 | 28 | P | PKPbc | 00 05 28.0 | +1.4 | |
| | baz=150 | | | | | | | |
| 035A | Encino | 150.15 | 33 | P | PKPbc | 00 05 29.0 | +1.6 | |
| | baz=150 | | | | | | | |
| 035Z | Hargill | 150.54 | 34 | P | PKPbc | 00 05 30.5 | +2.2 | |
| | baz=150 | | | | | | | |
| BRAL | Brewton | 150.80 | 12 | ePKPbc | PKPbc | 00 05 29.8 | +0.9 | |
| BRAL | | | | ePKPab | PKPab | 00 05 35.8 | 0.0 | |
| TIGA | Tifton | 150.93 | 6 | P | PKPbc | 00 05 29.3 | +0.2 | |
| | baz=151 | | | | | | | |
| LVC | Limon Verde | 152.82 | 203 | ePKPbc | PKPbc | 00 05 36.3 | +2.3 | |
| SMRT | St. Maarten | 157.11 | 314 | PFAKE | | 00 05 40.0 |

*mb1 4.6/39,mb1mx4.5/44,mbtmp4.7/39,ML4.5/2,MS4.4/10, Ms1 4.4/10,ms1mx4.0/51,Error ellipse: s-maj=11.7km s-min=8.4km az=54.0*

*NEIC* ***27*** *00:04:03.1±0.2,3.50S×99.66E,mb5.2/28,Error ellipse: s-maj=6.8km s-min=4.4km az=48.0*

*KLM* ***27*** *00:04:03.3,3.54S×99.50E,h93km,mb4.9,ML5.1,MS5.5*

*GCMT* ***27*** *00:04:03.1±0.2,3.67S×99.44E,h12km,MW5.1/85, Moment Tensor Solution. s38,c46; s85,c129; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=4.93±.11; Mθθ 1.77±.10; Mϕϕ3.16±.11; Mrθ-0.62±.44; Mrϕ-2.12±.09; Mθϕ1.07±.39; Best double couple: Mo=4.97000×10¹⁶ NP1:ϕs323.00000°,δ38.00000°,λ-92.00000°. NP2: ϕs145.00000°,δ52.00000°,λ-88.00000°. Principal axes: T 4.8520, Plg7.0000°, Azm234.0000°; N 0.2370, Plg1.0000°, Azm324.0000°; P -5.0880, Plg83.0000°, Azm64.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 27 00:04:02.9±0.3,3.61S±0.04×99.61E±0.04,h32km±1km, h31km:pP-P,n544,σ1§17/572,mb5.0/98,MS4.5/13, 36C-19D,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.93** | **26** | P | **Pn** | **00 04 17.6** | **-2.2** |
| PPSI | | | | S | **Sn** | **00 04 31.4** | **-0.6** |
| **SISI** | **Saibi** | **2.33** | **347** | P | Pn | 00 04 35.3 | -3.7 |
| SISI | | | | S | **Sn** | **00 05 04.3** | **-2.2** |
| **PDSI** | **Padang** | **2.81** | **18** | P | **Pn** | **00 04 43.5** | **-2.2** |
| **KSI** | **Kapahiang** | **2.98** | **91** | P | **Pn** | **00 04 49.1** | **+1.0** |
| **SDSI** | **Sungai Dareh** | **3.22** | **34** | P | **Pn** | **00 04 51.1** | **-0.2** |
| SDSI | | | | S | **Sn** | **00 05 28.4** | **-0.2** |
| **PPI** | **Padang Panjang** baz=3.1,SNR=84 | **3.23** | **14** | P | **Pn** | **00 04 49.0** | **-2.5** |
| **PPI** | **Padang Panjang** | **3.23** | **14** | P | **Pn** | **00 04 49.6** | **-1.8** |
| **MNAI** | **Manna** baz=3.4,SNR=30 | **3.42** | **103** | P | **Pn** | **00 04 53.8** | **-0.3** |
| **MNAI** | **Manna** | **3.42** | **103** | P | **Pn** | **00 04 54.2** | **+0.1** |
| MNAI | | | | S | **Sn** | **00 05 33.2** | **-0.4** |
| **MNAI** | **Manna** | **3.42** | **103** | *e*Pn | **Pn** | **00 04 54.0** | **-0.1** |
| MNAI | | | | *e*Sn | **Sn** | **00 05 28.4** | **-5.3** |
| **LHSI** | **Lahat** | **3.91** | **93** | P | **Pn** | **00 05 01.8** | **+1.0** |
| LHSI | | | | S | **Sn** | **00 05 46.6** | **+0.9** |
| **BKNI** | **Bangkinang** baz=4.1,SNR=6.8 | **4.16** | **20** | P | **Pn** | **00 05 04.0** | **-0.3** |
| **BKNI** | **Bangkinang** | **4.16** | **20** | P | **Pn** | **00 05 04.1** | **-0.3** |
| BKNI | | | | S | **Sn** | **00 05 57.1** | **+5.2** |
| **BKNI** | **Bangkinang** | **4.16** | **20** | *e*Pn | **Pn** | **00 05 04.0** | **-0.3** |
| **MNSI** | **Mandailing Nat** | **4.37** | **360** | P | **Pn** | **00 05 05.0** | **-2.2** |
| **JMBI** | **JAMBI** | **4.48** | **64** | P | **Pn** | **00 05 08.5** | **-0.2** |
| **MDSI** | **Maura Dua** | **4.64** | **101** | P | **Pn** | **00 05 11.1** | **+0.2** |
| **LWLI** | **Liwa** | **4.65** | **108** | P | **Pn** | **00 05 11.6** | **+0.4** |
| **SBSI** | **Sibolga** 614nm,0.5s,17μm18nm | **5.17** | **352** | P | Pn | 00 05 12.4 | -5.8 |
| **PMBI** | **Palembang** | **5.20** | **83** | P | Pb | 00 05 28.6 | -4.5 |
| **KASI** | **Kota Agung** 597nm,0.8s,14μm4.7nm | **5.23** | **112** | P | **Pn** | **00 05 18.4** | **-0.6** |
| **GSI** | **Gunungsitoli** 224nm,1.2s,4μm1.4nm | **5.29** | **337** | P | Pn | 00 05 16.1 | -3.6 |
| **GSI** | **Gunungsitoli** | **5.29** | **337** | *e*Pn | Pn | 00 05 15.5 | -4.3 |
| **KLI** | **Kotabumi** 338nm,0.9s,6μm2.8nm | **5.38** | **104** | P | **Pn** | **00 05 22.2** | **+1.2** |
| **PSI** | **Prapat** 2.6nm,0.3s,baz=163,slow=11,SNR=11 | **6.40** | **354** | Pn | Pn | 00 05 30.0 | -5.2 |
| **PSI** | **Prapat** baz=6.3,SNR=3.5 | **6.40** | **354** | P | Pn | 00 05 31.9 | -3.4 |
| **PSI** | **Prapat** | **6.40** | **354** | *e*Pn | Pn | 00 05 30.0 | -5.2 |
| **TPRI** | **Tanjung Pinang** 186nm,1.0s,3.3nm | **6.66** | **48** | P | **Pn** | **00 05 38.8** | **+0.1** |
| **PPBI** | **Pangkal Pinang** 59nm,0.9s,5μm2.5nm | **6.67** | **78** | P | **Pn** | **00 05 38.8** | **-0.1** |
| **KGM** | **Kluang** | **6.70** | **34** | ⇑P | **Pn** | **00 05 39.3** | **0.0** |
| **CGJI** | **Cibinong** 640nm,0.7s,6μm2.0nm | **6.75** | **116** | P | **Pn** | **00 05 37.3** | **-2.6** |
| **MYKOM** | **Kota Tinggi** | **6.83** | **38** | *e*Pn | **Pn** | **00 05 40.2** | **-0.9** |
| **SBJI** | **Serang** 309nm,0.8s,6μm1.4nm | **6.96** | **111** | P | **Pn** | **00 05 42.3** | **-0.5** |
| **FRIM** | **Kepong** | **7.09** | **17** | ⇑P | **Pn** | **00 05 43.4** | **-1.2** |
| **KCSI** | **Kotacane, Aceh** 73nm,0.6s,5μm0.5nm | **7.32** | **345** | P | **Pn** | **00 05 49.0** | **+1.3** |
| **TNG** | **Tangerang** 1μm,0.7s,12μm4.1nm | **7.46** | **110** | P | **Pn** | **00 05 49.0** | **-0.6** |
| TNG | 1μm,0.7s,11μm3.8nm | | | P | **Pn** | **00 05 49.0** | **-0.6** |
| **SKJI** | **Sukabumi** 740nm,0.7s,7μm2.0nm | **7.70** | **116** | P | **Pn** | **00 05 51.8** | **-1.1** |
| **CBJI** | **Citeko** 3μm,0.8s,25μm | **7.74** | **111** | P | **Pn** | **00 05 55.8** | **+2.4** |
| **TPI** | **Tanjungpandan** 43nm,1.3s | **8.08** | **84** | P | **Pn** | **00 05 58.3** | **+0.2** |
| **IPM** | **Ipoh** | **8.16** | **10** | *e*Pn | **Pn** | **00 05 56.6** | **-2.6** |
| **CNJI** | **Cibinong** 668nm,0.8s,5μm | **8.34** | **116** | P | **Pn** | **00 05 59.5** | **-2.2** |
| **LEM** | **Lembang** 20nm,0.3s,baz=202,slow=21,SNR=19 | **8.59** | **112** | Pn | **Sn** | **00 06 04.5** | **-0.8** |
| LEM | baz=180,slow=20,SNR=1.8 | | | Sn | **Sn** | **00 07 39.5** | **-1.8** |
| LEM | comp=Z,2μm,18.6s,baz=11,slow=36 | | | LR | LR | 00 09 16.5 | |
| **LEM** | **Lembang** baz=8.6,SNR=4.5 | **8.59** | **112** | P | **Pn** | **00 06 08.2** | **+2.9** |
| **LEM** | **Lembang** 4μm,1.1s,45μm | **8.59** | **112** | P | **Pn** | **00 06 05.9** | **+0.6** |
| **KULM** | **Kulim** | **8.90** | **7** | *e*Pn | **Pn** | **00 06 06.5** | **-2.9** |
| **CISI** | **Cisompet, Garu** baz=9.1,SNR=22 | **9.06** | **116** | P | **Pn** | **00 06 09.0** | **-2.6** |
| **CISI** | **Cisompet, Garu** 1μm,0.6s,11μm | **9.06** | **116** | P | **Pn** | **00 06 08.9** | **-2.8** |
| **CISI** | **Cisompet, Garu** | **9.06** | **116** | *e*Pn | **Pn** | **00 06 08.7** | **-3.0** |
| **XMIS** | **Christmas Isla** baz=9.2,SNR=6.2 | **9.09** | **139** | P | Pn | 00 06 06.4 | -5.5 |
| **XMIS** | **Christmas Isla** | **9.09** | **139** | *e*Pn | Pn | 00 06 06.5 | -5.5 |
| XMIS | | | | *e*Sn | Sn | 00 07 42.7 | -11 |
| **LHMI** | **Lhok Sumawe** baz=9.2,SNR=3.7 | **9.17** | **343** | P | **Pn** | **00 06 13.1** | **0.0** |
| **LHMI** | **Lhok Sumawe** 110nm,0.9s | **9.17** | **343** | P | **Pn** | **00 06 10.5** | **-2.6** |
| **LHMI** | **Lhok Sumawe** | **9.17** | **343** | *e*Pn | **Pn** | **00 06 10.8** | **-2.3** |
| **KTGM** | **Kuala Trenggan** | **9.55** | **22** | ⇑P | **Pn** | **00 06 17.6** | **-0.7** |
| **CMJI** | **Cimerak** 384nm,0.6s | **9.72** | **116** | P | **Pn** | **00 06 18.1** | **-2.6** |
| **SKLT** | **Songkhla** 58nm,0.8s | **10.75** | **5** | P | **Pn** | **00 06 35.7** | **+0.9** |
| **SMRI** | **Semarang** | **11.31** | **108** | P | **Pn** | **00 06 45.1** | **+2.6** |
| **SMRI** | **Semarang** | **11.31** | **108** | *e*Pn | **Pn** | **00 06 42.9** | **+0.4** |
| **UWJI** | **Ujung Watu** 282nm,0.9s,6μm | **11.63** | **104** | P | **Pn** | **00 06 46.5** | **-0.4** |
| **UGM** | **Wanagama** baz=12,SNR=16 | **11.67** | **112** | P | **Pn** | **00 06 45.5** | **-1.9** |
| **UGM** | **Wanagama** | **11.67** | **112** | *e*Pn | **Pn** | **00 06 46.1** | **-1.3** |
| **KSM** | **Kuching** | **11.82** | **65** | ⇑P | **Pn** | **00 06 51.9** | **+2.4** |
| **PBKI** | **Pangkalan Bun** | **12.08** | **86** | P | **P** | **00 07 05.2** | **-0.2** |
| **NGJI** | **Ngawi** | **12.37** | **108** | P | **Pn** | **00 07 00.1** | **+3.1** |
| **PCJI** | **Pacitan** 74nm,1.0s | **12.37** | **112** | P | **Pn** | **00 06 55.6** | **-1.4** |
| **STKI** | **Sintang** | **12.41** | **73** | P | **P** | **00 07 10.0** | **+0.9** |
| **TBJI** | **Tambak Boyo** | **12.60** | **105** | P | **P** | **00 07 10.8** | **-0.4** |
| **PWJI** | **Pagerwojo** 89nm,0.9s | **12.90** | **110** | P | **Pn** | **00 07 01.7** | **-2.5** |
| **SBUM** | **Sibu** | **13.97** | **65** | ⇑P | **Pn** | **00 07 20.1** | **+1.4** |
| **SBUM** | **Sibu** | **13.97** | **65** | *e*Pn | Pn | 00 07 10.4 | -8.3 |
| **KMMI** | **Kalianget** 73nm,1.0s | **14.70** | **104** | P | **Pn** | **00 07 27.9** | **-0.8** |
| **ABJI** | **Asem Bagus** 116nm,0.9s | **15.13** | **107** | P | **Pn** | **00 07 36.0** | **+1.4** |
| **BBKI** | **Banjar Baru** | **15.20** | **90** | P | **P** | **00 07 39.7** | **-0.5** |
| **KBKI** | **Kotabaru** | **16.53** | **89** | P | **P** | **00 07 53.8** | **-1.1** |
| **KHLT** | **Khaolaem Dam** 23nm,0.8s | **18.31** | **357** | P | **Pn** | **00 08 14.9** | **+0.2** |
| **KKM** | **Kota Kinabalu** baz=19,SNR=9.3 | **19.16** | **60** | P | **Pn** | **00 08 24.6** | **-0.5** |
| **KKM** | **Kota Kinabalu** 67nm,1.0s | **19.16** | **60** | *e*P | P | 00 08 18.5 | -5.5 |
| **CHAI** | **Chaiyaphum** 10nm,1.1s | **19.53** | **7** | P | **Pn** | **00 08 31.9** | **+2.6** |
| **UBPT** | **Khong Chiam** 66nm,0.7s | **19.64** | **17** | P | **P** | **00 08 29.5** | **+0.3** |
| **UMPA** | **Umpang Tak** 16nm,1.0s,252nm | **19.70** | **358** | P | **P** | **00 08 28.5** | **-1.3** |
| **KHON** | **Khomkaen** 15nm,0.8s,1μm | **20.07** | **9** | P | Pn | 00 08 37.9 | +2.1 |
| **PBKT** | **Sadao Pong** 28nm,0.9s,1μm | **20.09** | **4** | P | **P** | **00 08 34.1** | **0.0** |
| **KAPI** | **Kappang** | **20.13** | **95** | P | **P** | **00 08 33.8** | **-0.8** |
| KAPI | 34nm,0.9s,baz=289,slow=10,SNR=9.3 | | | LR | LR | 00 17 22.8 | |
| **KAPI** | comp=Z,1μm,18.6s,baz=327,slow=40 **Kappang** 298nm,0.9s,SNR=8.0 | **20.13** | **95** | P | **P** | **00 08 34.0** | **-0.6** |
| **KAPI** | **Kappang** | **20.13** | **95** | *e*P | **P** | **00 08 34.5** | **-0.1** |
| **MYLDM** | **Lahad Datu** 225nm,1.4s | **20.79** | **65** | *e*P | **P** | **00 08 40.0** | **-1.7** |
| **UTTA** | **Uttaradit** 13nm,1.0s,112nm | **21.24** | **2** | P | **P** | **00 08 46.2** | **-0.2** |
| **MHMT** | **Maesarieng** 55nm,1.1s,789nm | **21.71** | **356** | P | **P** | **00 08 51.9** | **+0.4** |
| **PALK** | **Pallekele** 21nm,1.1s,baz=114,slow=14,SNR=5.5 | **21.75** | **300** | P | **P** | **00 08 51.0** | **-1.0** |
| PALK | comp=Z,472nm,21.1s,baz=115,slow=33 | | | LR | LR | 00 15 57.5 | |
| **PALK** | **Pallekele** | **21.75** | **300** | *e*P | **P** | **00 08 53.7** | **+1.7** |
| PALK | comp=Z,71nm,1.2s | | | pmax | pmax | | |
| **PALK** | **Pallekele** comp=Z,70nm,1.2s | **21.75** | **300** | *e*P | **P** | **00 08 53.7** | **+1.7** |
| **NONG** | **Nongkai** comp=Z,36nm,1.0s | **21.81** | **9** | P | **P** | **00 08 51.8** | **-0.8** |
| **CM01** | **Chiang Mai Arr** | **21.90** | **358** | *e*P | **P** | **00 08 53.4** | **-0.2** |
| **CM31** | **Chiang Mai Arr** baz=22,SNR=5.7 | **21.93** | **358** | P | **P** | **00 08 54.4** | **+0.5** |
| **CM31** | **Chiang Mai Arr** | **21.93** | **358** | *e*P | **P** | **00 08 52.4** | **-1.6** |
| CM31 | | | | *e*S | **S** | **00 12 53.1** | **-1.6** |
| **CMAR** | **Chiang Mai Arr** comp=Z,40nm,0.8s,baz=187,slow=10.0,SNR=148 | **21.93** | **358** | P | **P** | **00 08 52.4** | **-1.6** |
| CMAR | | | | PcP | **PcP** | **00 12 53.1** | **+0.6** |
| CMAR | comp=Z,1.6nm,0.8s,baz=212,slow=3.3,SNR=4.0 | | | LR | LR | 00 17 54.7 | |
| **CMAR** | comp=Z,933nm,18.3s,baz=169,slow=38 **Chiang Mai Arr** | **21.93** | **358** | *c*P*e*P | **P** | **00 08 53.7** | **-0.2** |
| CMAR | | | | pmax | pmax | | |
| **LAMP** | comp=Z,42nm,0.8s **Lampang** comp=Z,18nm,0.8s,comp=Z,173nm | **21.99** | **0** | P | **P** | **00 08 55.9** | **+1.4** |
| **CHTO** | **Chiang Mai** comp=Z,235nm,1.6s | **22.29** | **358** | P | **P** | **00 08 57.3** | **-0.5** |
| **CHTO** | **Chiang Mai** | **22.29** | **358** | *e*P | **P** | **00 08 57.1** | **-0.7** |
| CHTO | comp=Z,311nm,2.3s | | | pmax | pmax | | |
| **CHTO** | **Chiang Mai** comp=Z,311nm,2.3s | **22.29** | **358** | *e*P | **P** | **00 08 57.1** | **-0.7** |
| **LUWI** | **Luwuk** | **23.28** | **84** | *e*P | **P** | **00 09 11.3** | **+3.1** |
| **CMAI** | **Chiengmai2** comp=Z,70nm,1.2s | **23.40** | **359** | P | **P** | **00 09 09.4** | **0.0** |
| **QIZ** | **Qiongzhong** | **24.65** | **24** | P | **P** | **00 09 21.3** | **+0.4** |
| QIZ | | | | pP | **pP** | **00 09 29.5** | **-0.5** |
| QIZ | | | | sP | **sP** | **00 09 33.0** | **-0.9** |
| QIZ | | | | S | **S** | **00 13 42.8** | **+2.3** |
| QIZ | comp=Z,52nm,2.3s | | | PMZ | | | |
| QIZ | comp=Z,1μm,14.0s | | | LN | | | |
| QIZ | comp=Z,2μm,14.9s | | | LZ | | | |
| **QIZ** | **Qiongzhong** comp=Z,142nm,1.5s | **24.65** | **24** | *e*P | **P** | **00 09 20.0** | **-0.9** |
| **BATI** | **Baumata** comp=Z,33nm,0.6s,baz=247,slow=7.7,SNR=11 | **24.75** | **107** | P | **P** | **00 09 21.0** | **-1.0** |
| BATI | comp=Z,11nm,0.5s,baz=18,slow=20,SNR=6.1 | | | S | **S** | **00 13 40.4** | **-2.1** |
| **SLVN** | **Son La** comp=Z,72nm,0.7s | **25.14** | **9** | *e*P | **P** | **00 09 25.7** | **+0.3** |
| **SOEI** | **Soe** | **25.23** | **105** | *e*P | P | 00 09 32.5 | +6.1 |
| **SKHT** | **Srikalahasti** | **26.21** | **312** | *e*P | **P** | **00 09 36.3** | **+1.2** |
| **CHLP** | **Challavanipeta** | **26.79** | **326** | *e*P | **P** | **00 09 39.0** | **-1.2** |
| **H08S2** | **Diego Garcia H** baz=81 | **27.27** | **260** | T | T | 00 39 03.6 | |
| **H08S3** | **Diego Garcia H** baz=81,slow=74 | **27.28** | **260** | T | T | 00 39 08.2 | |
| **PVM** | **Polavaram** | **27.29** | **320** | *e*P | **P** | **00 09 45.5** | **+0.7** |
| **H08S1** | **Diego Garcia H** baz=81,slow=74 | **27.29** | **260** | T | T | 00 39 09.5 | |
| **ADKI** | **Addanki** | **27.41** | **315** | *e*P | **P** | **00 09 45.6** | **-0.2** |
| **RCLA** | **Racherla** | **27.87** | **313** | *e*P | **P** | **00 09 50.1** | **0.0** |
| **DAV** | **Davao City (W)** comp=Z,962nm,21.8s,baz=252,slow=38 | **28.01** | **68** | LR | LR | 00 21 56.7 | |
| **SRLM** | **Srisailam** | **28.34** | **314** | *e*P | **P** | **00 09 53.2** | **-1.1** |
| **NJS** | **Nagarjunasagar** | **28.35** | **316** | *e*P | **P** | **00 09 53.5** | **-0.8** |
| **KMI** | **Kunming** | **28.72** | **6** | P | **P** | **00 09 58.8** | **+1.0** |
| KMI | | | | pP | **pP** | **00 10 11.3** | **+4.4** |
| KMI | | | | sP | **sP** | **00 10 15.5** | **+4.7** |
| KMI | comp=Z,13nm,1.2s | | | PMZ | | | |
| KMI | comp=Z,1μm,10.4s | | | PMZ | | | |
| KMI | comp=Z,510nm,15.7s | | | LN | | | |
| KMI | comp=Z,2μm,18.4s | | | LE | | | |
| KMI | comp=Z,820nm,15.9s | | | LZ | | | |
| **URV** | **Uravakonda** | **28.81** | **310** | *e*P | **P** | **00 09 58.9** | **+0.4** |
| **HYBB** | **Hyderabad (bro** | **29.47** | **316** | *e*P | **P** | **00 10 03.7** | **-0.7** |
| **SRSP** | **Sriramsagar** | **30.66** | **318** | *e*P | **P** | **00 10 14.3** | **-0.4** |
| **GYA** | **Guiyang** | **30.66** | **12** | ⇓P | **P** | **00 10 14.3** | **-0.5** |
| GYA | | | | pP | **pP** | **00 10 26.0** | **+2.0** |
| GYA | | | | PP | **PnPn** | **00 11 17.8** | **+2.7** |
| GYA | | | | PcP | **PcP** | **00 13 14.5** | **+1.8** |
| GYA | | | | S | **S** | **00 15 17.0** | **+1.5** |
| GYA | | | | sS | **sS** | **00 15 31.3** | **+0.7** |
| GYA | | | | SS | **SnSn** | **00 16 59.0** | **+4.3** |
| GYA | comp=Z,20nm,1.0s | | | PMZ | | | |
| GYA | comp=Z,120nm,5.0s | | | PMZ | | | |
| GYA | comp=Z,540nm,17.7s | | | LN | | | |
| GYA | comp=Z,480nm,18.1s | | | LE | | | |
| GYA | comp=Z,530nm,17.5s | | | LZ | | | |
| **KLRI** | **Killari** | **31.28** | **314** | *e*P | **P** | **00 10 19.8** | **-0.6** |
| **MTN** | **Manton Dam** baz=32,SNR=4.8 | **32.48** | **108** | P | **P** | **00 10 31.9** | **+0.9** |
| **MTN** | **Manton Dam** comp=Z,20nm,1.0s | **32.48** | **108** | *e*P | **P** | **00 10 30.1** | **-0.8** |
| **ODAN** | **Odare** | **32.51** | **339** | *e*P | **P** | **00 10 31.6** | **+0.3** |
| **FAKI** | **Fak Fak** comp=Z,23nm,0.9s | **32.59** | **90** | *e*P | **P** | **00 10 30.4** | **-1.5** |
| FAKI | | | | *e*pP | **pP** | **00 10 40.7** | **-0.4** |
| **TAPN** | **Taplejung** comp=Z,18nm,0.4s | **32.85** | **340** | *e*P | **P** | **00 10 34.6** | **+0.3** |
| **TAPN** | **Taplejung** comp=Z,81nm,1.0s | **32.85** | **340** | *e*P | **P** | **00 10 34.6** | **+0.3** |
| **RAMN** | **Ramite** comp=Z,30nm,0.5s | **32.88** | **338** | *e*P | **P** | **00 10 35.0** | **+0.5** |
| **RAMN** | **Ramite** comp=Z,30nm,0.5s | **32.88** | **338** | *e*P | **P** | **00 10 34.7** | **+0.2** |
| **NWAO** | **Narrogin (SRO)** comp=Z,6.0nm,0.5s,baz=265,slow=0.2,SNR=3.7 | **33.51** | **153** | P | **P** | **00 10 39.2** | **-0.4** |
| **PKI** | **Pulchoki** comp=Z,11nm,0.6s | **33.89** | **337** | *e*P | **P** | **00 10 43.2** | **-0.2** |
| **PKIN** | **Phulchoki** comp=Z,8.4nm,0.6s | **33.90** | **337** | *e*P | **P** | **00 10 43.2** | **-0.2** |
| **H01W3** | **Cape Leeuwin H** baz=336,slow=76,SNR=30 | **33.92** | **158** | T | T | 00 46 51.1 | |
| **H01W2** | **Cape Leeuwin H** baz=336,slow=76,SNR=30 | **33.93** | **158** | T | T | 00 47 11.3 | |
| **H01W1** | **Cape Leeuwin H** baz=336,slow=76,SNR=27 | **33.93** | **158** | T | T | 00 47 13.7 | |
| **GUN** | **Gumba** comp=Z,35nm,0.5s | **34.01** | **338** | *e*P | **P** | **00 10 44.4** | **-0.1** |
| **GUN** | **Gumba** comp=Z,35nm,0.5s | **34.01** | **338** | *e*P | **P** | **00 10 44.2** | **-0.3** |
| **LSA** | **Lhasa** | **34.10** | **347** | P | **P** | **00 10 45.8** | **+0.5** |
| LSA | comp=Z,28nm,1.1s | | | PMZ | | | |
| **LSA** | **Lhasa** comp=Z,54nm,1.4s | **34.10** | **347** | *e*P | **P** | **00 10 46.6** | **+1.3** |
| LSA | | | | pmax | pmax | | |
| **LSA** | **Lhasa** comp=Z,54nm,1.4s | **34.10** | **347** | *e*P | **P** | **00 10 46.6** | **+1.3** |
| **KKN** | **Kakani** comp=Z,12nm,0.5s | **34.13** | **337** | *e*P | **P** | **00 10 45.3** | **-0.1** |
| **KKN** | **Kakani** comp=Z,13nm,0.6s | **34.13** | **337** | *e*P | **P** | **00 10 45.3** | **-0.1** |
| **CD2** | **Chengdu** | **34.55** | **6** | P | **P** | **00 10 48.3** | **-0.5** |
| CD2 | | | | pP | **pP** | **00 10 57.3** | **-0.7** |
| CD2 | | | | PP | **PP** | **00 12 07.0** | **-0.5** |
| CD2 | | | | S | **S** | **00 16 16.5** | **+0.6** |
| CD2 | | | | sS | **sS** | **00 16 31.8** | **+0.7** |
| CD2 | comp=Z,40nm,0.9s | | | PMZ | | | |
| CD2 | comp=Z,120nm,5.0s | | | PMZ | | | |
| CD2 | comp=Z,2μm,15.5s | | | LE | | | |
| CD2 | comp=Z,2μm,11.4s | | | LZ | | | |
| **GKN** | **Gorkha** comp=Z,33nm,0.6s | **34.58** | **336** | *e*P | **P** | **00 10 49.0** | **-0.2** |
| **GKN** | **Gorkha** comp=Z,32nm,0.6s | **34.58** | **336** | *e*P | **P** | **00 10 48.7** | **-0.5** |
| **KMBL** | **Kambalda** baz=35,SNR=4.6 | **34.67** | **145** | P | **P** | **00 10 51.0** | **+1.2** |
| **KOLN** | **Koldanda** comp=Z,55nm,0.7s | **34.80** | **335** | *e*P | **P** | **00 10 51.2** | **0.0** |
| **KOLN** | **Koldanda** comp=Z,55nm,0.7s | **34.80** | **335** | *e*P | **P** | **00 10 51.2** | **0.0** |
| **WRKA** | **Warakurna** baz=35,SNR=3.9 | **34.86** | **130** | P | **P** | **00 10 52.4** | **+0.9** |
| **ENH** | **Enshi** comp=Z,14nm,0.9s | **34.99** | **15** | *e*P | **P** | **00 10 52.5** | **0.0** |
| **YHNB** | **Yeheng** comp=Z,884nm,2.6s | **35.18** | **36** | *e*P | **P** | **00 10 52.5** | **-1.8** |
| **DANN** | **Dangsing** | **35.24** | **335** | *e*P | **P** | **00 10 55.3** | **+0.2** |
| **DANN** | **Dangsing** | **35.24** | **335** | *e*P | **P** | **00 10 55.3** | **+0.2** |
| **WHN** | **Wuhan** | **36.77** | **22** | P | **P** | **00 11 09.0** | **+1.3** |
| WHN | | | | S | S | 00 16 58.8 | +9.1 |
| WHN | comp=Z,5μm,18.8s | | | LZ | | | |
| **WRA** | **Warramunga Arr** comp=Z,8.0nm,0.7s,baz=293,slow=8.8,SNR=37 | **37.55** | **118** | P | **P** | **00 11 14.3** | **-0.3** |
| WRA | comp=Z,2.0nm,0.9s,baz=290,slow=16,SNR=6.6 | | | S | **S** | **00 17 06.9** | **+4.8** |
| **WRAB** | **Tennant Creek** comp=Z,30nm,1.0s | **37.55** | **118** | *e*P | **P** | **00 11 14.9** | **+0.2** |
| WRAB | comp=Z,112nm,0.8s,SNR=15 | | | pmax | pmax | | |
| **WRAB** | **Tennant Creek** comp=Z,30nm,1.0s | **37.55** | **118** | P | **P** | **00 11 14.6** | **0.0** |
| **WRAB** | **Tennant Creek** | **37.55** | **118** | *e*P | **P** | **00 11 14.9** | **+0.2** |
| **XAN** | **Xi'an** | **38.46** | **12** | P | **P** | **00 11 21.5** | **-0.6** |
| XAN | | | | pP | **pP** | **00 11 29.0** | **-2.4** |
| XAN | | | | sP | **sP** | **00 11 32.0** | **-3.2** |
| XAN | comp=Z,42nm,1.2s | | | PMZ | | | |
| XAN | comp=Z,1μm,19.3s | | | LE | | | |
| XAN | comp=Z,1μm,11.2s | | | LZ | | | |
| **AS12** | **Alice Springs** | **38.65** | **124** | *e*P | **P** | **00 11 24.3** | **+0.4** |
| AS12 | | | | *e*PcP | **PcP** | **00 13 35.9** | **+0.1** |
| AS12 | | | | *e*S | S | 00 17 27.9 | +9.1 |
| **ASAR** | **Alice Springs** comp=Z,5.5nm,0.8s,baz=295,slow=7.8,SNR=58 | **38.65** | **124** | P | **P** | **00 11 24.3** | **+0.4** |
| ASAR | | | | PcP | **PcP** | **00 13 35.9** | **+0.1** |
| ASAR | comp=Z,1.4nm,0.7s,baz=310,slow=2.9,SNR=4.8 | | | S | S | 00 17 27.9 | +9.1 |
| **AS01** | comp=Z,2μm,1.1nm,0.6s,baz=295,slow=14,SNR=6.8 **Alice Springs** | **38.69** | **124** | *e*P | **P** | **00 11 23.9** | **-0.3** |
| **LZH** | **Lanzhou** | **39.69** | **5** | *e*P | **P** | **00 11 33.0** | **+0.6** |
| LZH | | | | pP | **pP** | **00 11 41.3** | **-0.5** |
| LZH | | | | sP | **sP** | **00 11 43.5** | **-2.0** |
| LZH | comp=Z,41nm,1.1s | | | PMZ | | | |
| LZH | comp=Z,160nm,4.5s | | | PMZ | | | |
| LZH | comp=Z,2μm,18.3s | | | LN | | | |
| LZH | comp=Z,2μm,17.2s | | | LE | | | |
| LZH | comp=Z,1μm,17.6s | | | LZ | | | |
| **NJ2** | **Nanjing** | **39.90** | **26** | *e*P | **P** | **00 11 33.0** | **-1.1** |
| NJ2 | comp=Z,15nm,0.6s | | | PMZ | | | |
| **MMPI** | **Merauke** baz=41,SNR=4.2 | **40.81** | **99** | P | **P** | **00 11 40.8** | **-1.2** |
| **QIS** | **Mount Isa** baz=42,SNR=8.3 | **42.41** | **117** | P | **P** | **00 11 55.3** | **+0.3** |
| **GTA** | **Gaotai** | **42.81** | **0** | *e*P | **P** | **00 11 58.5** | **+0.5** |
| GTA | | | | pP | **pP** | **00 12 08.5** | **+1.1** |
| GTA | | | | sP | **sP** | **00 12 12.3** | **+1.1** |
| GTA | | | | PcP | **PcP** | **00 13 46.0** | **-3.0** |
| GTA | comp=Z,12nm,1.7s | | | PMZ | | | |
| **TIA** | **Tai'an** comp=Z,20nm,0.9s | **42.87** | **21** | ⇑P | **P** | **00 11 58.5** | **+0.1** |
| TIA | | | | PMZ | | | |
| **BBOO** | **Buckleboo** baz=45,SNR=9.6 | **44.78** | **135** | P | **P** | **00 12 14.0** | **+0.1** |
| **BBOO** | **Buckleboo** comp=Z,17nm,1.0s | **44.78** | **135** | *e*P | **P** | **00 12 13.6** | **-0.4** |
| **HHC** | **Hu-ho-hao-te** | **45.58** | **13** | *e*P | **P** | **00 12 21.3** | **+1.2** |
| HHC | comp=Z,34nm,1.6s | | | PMZ | | | |
| HHC | comp=Z,730nm,3.1s | | | PMZ | | | |
| **BJT** | **Baijiatuau** | **46.00** | **18** | *e*P | **P** | **00 12 24.7** | **+1.3** |
| BJT | comp=Z,65nm,1.4s | | | pmax | pmax | | |
| **BJT** | **Baijiatuau** comp=Z,65nm,1.4s | **46.00** | **18** | *e*P | **P** | **00 12 24.7** | **+1.3** |
| **JNU** | **Nakatsue** comp=Z,44nm,1.0s,baz=150,slow=5.1,SNR=8.3 | **47.01** | **37** | P | **P** | **00 12 31.4** | **-0.1** |
| **JNU** | **Nakatsue** comp=Z,86nm,1.2s | **47.01** | **37** | *e*P | **P** | **00 12 31.4** | **-0.1** |
| **HTT** | **Hallett** baz=47,SNR=12 | **47.16** | **134** | P | P | 00 12 27.1 | -5.5 |
| **PMG** | **Port Moresby** | **47.56** | **99** | ⇑*e*P | **P** | **00 12 36.7** | **+0.7** |
| PMG | comp=Z,86nm,0.8s | | | pmax | pmax | | |
| **KSH** | **Kashi** | **48.11** | **335** | P | **P** | **00 12 38.0** | **-2.0** |
| KSH | | | | *e*pP | **pP** | **00 12 48.0** | **-1.5** |
| KSH | | | | *e*sP | **sP** | **00 12 52.0** | **-1.3** |
| KSH | | | | *e*ScP | **ScP** | **00 17 58.5** | **-1.3** |
| KSH | | | | S | S | 00 19 27.5 | -9.4 |
| KSH | comp=Z,21nm,1.4s | | | PMZ | | | |
| KSH | comp=Z,200nm,4.2s | | | PMZ | | | |
| KSH | comp=Z,180nm,6.0s | | | LN | | | |
| KSH | comp=Z,290nm,8.0s | | | LE | | | |
| KSH | comp=Z,380nm,11.2s | | | LZ | | | |
| **CTAO** | **Charters Tower** | **48.29** | **114** | *e*P | **P** | **00 12 41.8** | **+0.2** |
| CTAO | comp=Z,37nm,1.0s | | | pmax | pmax | | |
| **CTAO** | **Charters Tower** comp=Z,37nm,1.0s | **48.29** | **114** | *e*P | **P** | **00 12 41.8** | **+0.2** |
| **QLP** | **Quilpie** baz=48,SNR=8.3 | **48.40** | **123** | P | **P** | **00 12 43.6** | **+1.3** |
| **WMQ** | **Urumqi** | **48.42** | **348** | P | **P** | **00 12 43.5** | **+1.3** |
| WMQ | | | | pP | **pP** | **00 12 53.5** | **+1.8** |
| WMQ | | | | PP | **PP** | **00 14 36.0** | **+0.9** |
| WMQ | | | | SS | SS | 00 23 06.0 | -5.2 |
| WMQ | comp=Z,47nm,1.0s | | | PMZ | | | |
| WMQ | comp=Z,330nm,15.0s | | | LN | | | |
| WMQ | comp=Z,360nm,15.0s | | | LE | | | |
| WMQ | comp=Z,330nm,15.0s | | | LZ | | | |
| **KS15** | **Wonju Array Si** | **48.57** | **30** | *e*P | **P** | **00 12 43.7** | **+0.3** |
| **KSAR** | **Wonju Array Be** | **48.57** | **30** | P | **P** | **00 12 43.7** | **+0.3** |
| **KSAR** | **Wonju Array Be** | **48.57** | **30** | P | **P** | **00 12 43.7** | **+0.3** |
| **KSRS** | **Korea Array** comp=Z,21nm,0.9s,

SNR=26
**TKM2 Tokmak 2 51.15 337** *e*P **P** **00 13 02.8 -0.4**
comp=Z,45nm,1.1s
**KBK Karagaybulak 51.18 337** P **P** **00 13 04.3 +0.9**
SNR=14
**AML Almayashu 51.25 335** P **P** **00 13 03.8 -0.4**
SNR=12
**AAK Ala-Archa 51.34 336** P **P** **00 13 04.7 +0.1**
comp=Z,2.6nm,0.5s,baz=150,slow=5.5,SNR=8.8
**AAK Ala-Archa 51.34 336** *de*P **P** **00 13 04.5 -0.1**
AAK pmax pmax
comp=Z,14nm,1.1s
**CMSA Cobar Meteorol 51.42 128** P **P** **00 13 06.3 +1.1**
baz=52,SNR=27
**FRU Bishkek 51.46 337** *e*P **P** **00 13 05.0 -0.3**
FRU *e* 00 13 18.0
FRU pmax pmax
comp=Z,60nm,2.0s
**CHMS Chumysh 51.54 337** P **P** **00 13 06.1 +0.1**
SNR=6.9
**SONA0 Songino Array 51.57 6** *e*P **P** **00 13 06.5 +0.3**
**SONM Songino Array 51.57 6** P **P** **00 13 06.5 +0.3**
comp=Z,16nm,0.6s,baz=194,slow=9.0,SNR=112
**EKS2 Erkin-Say 51.65 336** *e*P **P** **00 13 06.6 -0.3**
EKS2 *e**PP **pP** **00 13 16.5 0.0**
EKS2 *e**SP **sP** **00 13 20.8 +0.6**
EKS2 pmax pmax
comp=Z,24nm,0.8s
**EKS2 Erkin-Say 51.65 336** P **P** **00 13 07.6 +0.7**
SNR=16
**EKS2 Erkin-Say 51.65 336** *e*P **P** **00 13 06.6 -0.3**
comp=Z,24nm,0.8s
EKS2 *ep*P **pP** **00 13 16.5 0.0**
EKS2 *es*P **sP** **00 13 20.8 +0.6**
**ULN Ulaanbaatar 51.67 6** *e*P **P** **00 13 07.3 +0.3**
ULN *e**PP **pP** **00 13 17.2 +0.7**
ULN *e**SP **sP** **00 13 20.7 +0.4**
ULN pmax pmax
comp=Z,49nm,1.3s
**ULN Ulaanbaatar 51.67 6** *e*P **P** **00 13 07.3 +0.3**
comp=Z,49nm,1.3s
ULN *ep*P **pP** **00 13 17.2 +0.7**
ULN *es*P **sP** **00 13 20.7 +0.4**
**USP Ospenovka 51.87 337** P **P** **00 13 08.0 -0.4**
SNR=19
**MNAS Manas 52.04 335** P **P** **00 13 09.2 -0.6**
MNAS pmax pmax
comp=Z,37nm,1.6s
**RMQ Roma 52.21 121** P **P** **00 13 13.3 +2.1**
baz=52,SNR=6.7
**MK01 Makanchi Array 52.44 345** *e*P **P** **00 13 12.1 -0.4**
**MK31 Makanchi Array 52.47 345** *e*P **P** **00 13 12.7 0.0**
MK31 pmax pmax
comp=Z,7.0nm,0.5s
**MK32 Makanchi Array 52.47 345** *e*P **P** **00 13 12.4 -0.3**
**MKAR Makanchi Array 52.47 345** P **P** **00 13 12.4 -0.4**
comp=Z,8.5nm,0.5s,baz=152,slow=9.3,SNR=101
**MKAR Makanchi Array 52.47 345** *e*P **P** **00 13 12.6 -0.2**
**MKAR Makanchi Array 52.47 345** *e*P **P** **00 13 12.6 -0.2**
**MAKZ Makanchi 52.56 345** *e*P **P** **00 13 13.3 -0.2**
comp=Z,50nm,1.8s
**CN2 Changchun 52.61 23** *e*P **P** **00 13 13.8 0.0**
CN2 *es*P **sP** **00 13 25.0 -2.1**
CN2 PMZ
comp=Z,20nm,1.0s
CN2 PMZ
comp=Z,200nm,5.0s
CN2 LN
comp=Z,500nm,12.0s
CN2 LE
comp=Z,600nm,12.0s
CN2 LZ
comp=Z,500nm,12.0s
**OPO Ambohidratompo 53.33 250** P **P** **00 13 21.4 +1.5**
comp=Z,4.0nm,0.8s,baz=58,slow=9.5,SNR=3.3
OPO LR LR 00 30 49.4
comp=Z,827nm,19.6s,baz=78,slow=30
**MAJO Matsushiro 53.76 39**|| *e*P **P** **00 13 22.4 -0.1**
MAJO pmax pmax
comp=Z,114nm,1.2s
**MAJO Matsushiro 53.76 39** *e*P **P** **00 13 21.7 -0.8**
comp=Z,50nm,1.4s
**MAT Matsushiro 53.76 39** P **P** **00 13 21.3 -1.2**
**MJAR Matsushiro Arr 53.77 39** P **P** **00 13 21.7 -0.8**
comp=Z,17nm,1.1s,baz=228,slow=7.9,SNR=16
**ZAK Zakamensk 53.87 3** *e*P **P** **00 13 22.9 -0.2**
ZAK pmax pmax
comp=Z,5.0nm,1.2s
**EIDS Eidsvold 53.91 119** P **P** **00 13 25.1 +1.4**
baz=54,SNR=4.2
**EIDS Eidsvold 53.91 119** *e*P **P** **00 13 25.1 +1.4**
comp=Z,24nm,1.1s
EIDS *ep*P **pP** **00 13 34.5 +1.1**
**YNG Young 54.59 130** P **P** **00 13 30.2 +1.6**
baz=55,SNR=5.2
**MDJ Mudanjiang 54.99 26** P **P** **00 13 31.5 +0.2**
MDJ pP **pP** **00 13 40.8 -0.1**
MDJ sP **sP** **00 13 45.0 +0.4**
MDJ PcS **PcS** **00 18 32.5 0.0**
MDJ S **S** **00 21 12.5 +1.2**
MDJ sS **sS** **00 21 27.3 +0.2**
MDJ PMZ
comp=Z,12nm,1.2s
MDJ PMZ
comp=Z,170nm,4.8s
MDJ LN
comp=Z,700nm,20.1s
MDJ LE
comp=Z,470nm,18.6s
MDJ LZ
comp=Z,860nm,20.9s
**TLY Talaya 55.18 3** P **P** **00 13 32.7 +0.2**
comp=Z,6.6nm,0.7s,baz=219,slow=5.9,SNR=5.3
**TLY Talaya 55.18 3** *e*P **P** **00 13 33.4 +0.9**
TLY pmax pmax
comp=Z,15nm,1.3s
**IAKL Akhelmad 55.22 320** *e*P **P** **00 13 31.6 -1.9**
**HIA Hailar 55.49 16**|| *e*P **P** **00 13 34.3 -0.5**
HIA pmax pmax
comp=Z,8.0nm,1.0s
**USRK Ussuriysk Ar. 55.75 28** P **P** **00 13 37.0 +0.3**
comp=Z,22nm,0.9s,baz=225,slow=6.3,SNR=31
**ARMA Armidale 55.80 125** P **P** **00 13 39.9 +2.3**
baz=56,SNR=6.6
**ARMA Armidale 55.80 125** *e*P **P** **00 13 37.3 -0.3**
comp=Z,15nm,1.0s
**ISFR Sfrayin 55.98 320** *e*P **P** **00 13 37.6 -1.2**
**GEYT Alibeck 56.43 321** P **P** **00 13 40.6 -1.1**
comp=Z,12nm,1.0s,baz=155,slow=8.2,SNR=26
GEYT pP **pP** **00 13 50.6 -0.8**
comp=Z,10nm,0.9s,baz=148,slow=8.7,SNR=11
**OTUK Ortayu 56.87 339** P **P** **00 13 43.7 -1.0**
OTUK pmax pmax
comp=Z,34nm,1.5s
**KURBB Kurchatov Arra 56.98 344** P **P** **00 13 44.3 -1.0**
comp=Z,4.1nm,0.7s,baz=167,slow=6.8,SNR=31
**KURK Kurchatov 57.03 344** *e*P **P** **00 13 44.3 -1.4**
**KURK Kurchatov 57.03 344** P **P** **00 13 45.7 0.0**
comp=Z,91nm,1.2s,SNR=9.7
**KURK Kurchatov 57.03 344** *e*P **P** **00 13 44.3 -1.4**
**ZAA0 Zalesovo Array 58.67 350** P **P** **00 13 56.6 -0.5**
baz=59,SNR=15
**ZAA0 Zalesovo Array 58.67 350** *e*P **P** **00 13 56.1 -1.0**
**ZALV Zalesovo Beam 58.67 350** P **P** **00 13 56.4 -0.8**
comp=Z,14nm,0.4s,baz=174,slow=5.6,SNR=84
**ZAA1 Zalesovo Array 58.67 350** *e*P **P** **00 13 56.4 -0.8**
**IFIR Firoozkooh 58.69 316** *e*P **P** **00 13 57.6 -0.4**
**IALA Alasht 58.88 316** *e*P **P** **00 13 58.9 -0.5**
**IDMV Damavand 59.16 316** *e*P **P** **00 13 59.7 -1.6**
**RAYN Ar Rayn 59.18 300** P **P** **00 14 01.0 -0.4**
comp=Z,32nm,1.3s,SNR=5.2
**RAYN Ar Rayn 59.18 300** *e*P **P** **00 14 01.2 -0.2**
comp=Z,30nm,1.9s
**KLR Kul'dur 59.55 24** *e*P **P** **00 14 02.0 -1.3**
**KRAR Krasnoyarsk 59.67 356**|| *e*P **P** **00 14 04.4 +0.4**
KRAR pmax pmax
comp=Z,50nm,1.4s
**NVS Novosibirsk 59.81 349**|| *i*P **P** **00 14 04.8 -0.2**
NVS *i* 00 14 14.5
NVS pmax pmax
comp=Z,20nm,1.2s
NVS pmax pmax
comp=N,14nm,1.4s
NVS pmax pmax
comp=E,12nm,1.4s
**HABR Khabarovsk 60.37 26** *e*P **P** **00 14 06.3 -2.6**
HABR *e**SP sP 00 14 15.2 -7.2
HABR *e* 00 14 51.5
HABR *e* 00 16 19.1
HABR *e*S **S** **00 22 19.4 -2.2**
HABR *e**SS sS 00 22 30.4 -7.2
HABR *e* 00 23 55.5
HABR *e*SS **SS** **00 26 18.1 -1.7**
HABR pmax pmax
comp=Z,75nm,1.0s
HABR MLR MLR
comp=Z,300nm,17.0s
**IRAZ Razeghan 60.56 314** *e*P **P** **00 14 10.4 -0.5**
**BVA0 Borovoye Array 61.55 340** *i*P **P** **00 14 15.2 -1.8**
BVA0 pmax pmax
comp=Z,3μm,0.1s
**BVAR Borovoye Array 61.55 340** P **P** **00 14 14.5 -2.4**
comp=Z,5.0nm,0.5s,baz=146,slow=9.9,SNR=43
**BRVK Borovoye 61.62 340** *de*P **P** **00 14 16.0 -1.4**
BRVK pmax pmax
comp=Z,35nm,2.5s
**BRVK Borovoye 61.62 340** P **P** **00 14 16.2 -1.2**
comp=Z,71nm,0.6s,SNR=9.4
**BRVK Borovoye 61.62 340** *e*P **P** **00 14 15.0 -2.4**
comp=Z,28nm,1.4s
**ZRNK Zerenda 61.97 340** P **P** **00 14 18.3 -1.4**
ZRNK pmax pmax
comp=Z,14nm,1.3s
**CHKZ Chkalovo 62.02 341** P **P** **00 14 18.3 -1.8**
CHKZ pmax pmax
comp=Z,30nm,1.4s
**BOD Bodaibo 62.32 9** *e*P **P** **00 14 20.1 -1.9**
BOD pmax pmax
comp=Z,25nm,1.5s
**KMBO Kilima Mbogo 62.34 271** P **P** **00 14 24.4 +1.1**
comp=Z,0.3nm,0.3s,baz=58,slow=18,SNR=3.1
KMBO LR LR 00 35 43.4
comp=Z,233nm,21.6s,baz=94,slow=30
**KMBO Kilima Mbogo 62.34 271** *e*P **P** **00 14 24.4 +1.1**
KMBO pmax pmax
comp=Z,25nm,2.1s
**KMBO Kilima Mbogo 62.34 271** *e*P **P** **00 14 24.4 +1.1**
comp=Z,25nm,2.1s
**AB31 Akbulak array 62.86 332** *i*P **P** **00 14 24.0 -1.8**
AB31 pmax pmax
comp=Z,12nm,0.7s
**ABKAR Akbulak array 62.86 332** *e*P **P** **00 14 24.1 -1.6**
**YSS Yuzh-Sakhalins 63.05 32**|| *e*P **P** **00 14 27.1 +0.1**
YSS pmax pmax
comp=Z,30nm,1.0s
**AKTO Aktyubinsk 64.58 332** P **P** **00 14 35.7 -1.4**
comp=Z,4.7nm,0.8s,baz=133,slow=6.2,SNR=14
AKTO pP **pP** **00 14 45.5 -1.4**
comp=Z,4.9nm,1.0s,baz=110,slow=18,SNR=6.6
**AKTO Aktyubinsk 64.58 332** P **P** **00 14 35.6 -1.5**
AKTO pmax pmax
comp=Z,23nm,1.5s
**GNI Garni 66.42 317** *de*P **P** **00 14 48.9 -0.5**
GNI pmax pmax
comp=Z,141nm,2.5s
**DGRG David-gareji 66.59 318** P **P** **00 14 50.6 +0.2**
**TBLG Delisi 67.14 318** P **P** **00 14 52.5 -1.3**
**SVE Sverdlovsk 68.02 338**|| *i*P **P** **00 14 58.8 -0.2**
SVE pmax pmax
comp=Z,38nm,1.5s
**ONI Oni 68.39 319** P **P** **00 15 02.2 +0.5**
**MAW Mawson 68.64 194** P **P** **00 15 03.2 +0.5**
comp=Z,4.6nm,0.9s,baz=6.5,slow=9.3,SNR=7.5
MAW pP **pP** **00 15 14.0 +1.5**
comp=Z,10nm,0.9s,baz=30,slow=7.3,SNR=13
MAW LR LR 00 38 38.8
comp=Z,358nm,20.9s,baz=56,slow=30
**MAW Mawson 68.64 194** *e*P **P** **00 15 03.2 +0.5**
MAW *PP **pP** **00 15 14.0 +1.5**
MAW pmax pmax
comp=Z,3.0nm,1.0s
**MAW Mawson 68.64 194** P **P** **00 15 04.4 +1.7**
baz=69,SNR=7.0
**MAW Mawson 68.64 194** *e*P **P** **00 15 03.2 +0.5**
comp=Z,3.2nm,1.0s
MAW pP **pP** **00 15 14.0 +1.5**
**NCK Nalchik 68.71 320**|| *e*P **P** **00 15 03.8 +0.2**
**NEY Neytrino 69.16 319**|| *e*P **P** **00 15 07.1 +0.4**
NEY pmax pmax
comp=Z,2.0nm,1.0s
**KBZ Khabaz 69.27 320** P **P** **00 15 06.3 -0.7**
comp=Z,7.5nm,0.9s,baz=123,slow=4.9,SNR=16
KBZ pP **pP** **00 15 15.9 -0.9**
comp=Z,9.0nm,0.7s,baz=110,slow=7.5,SNR=13
**YAK Yakutsk 69.39 15** P **P** **00 15 06.9 -0.4**
comp=Z,2.4nm,0.3s,baz=193,slow=18,SNR=4.5
**YAK Yakutsk 69.39 15** *e*P **P** **00 15 06.7 -0.7**
YAK pmax pmax
comp=Z,49nm,1.2s
YAK pmax pmax
comp=N,16nm,1.1s
YAK pmax pmax
comp=E,21nm,1.4s
**KIV Kislovodsk 69.50 320** *e*P **P** **00 15 07.9 -0.8**
KIV pmax pmax
comp=Z,18nm,1.1s
**EIL Elat 70.06 303** P **P** **00 15 13.0 +0.7**
baz=70,SNR=4.2
**MALT Malatya 70.13 313**|| *i*P **P** **00 15 13.4 +0.7**
**MALT Malatya 70.13 313**|| *i*P **P** **00 15 13.4 +0.7**
**CSS Prodhromos 72.90 308** *e*P **P** **00 15 29.5 +0.2**
comp=Z,11nm,1.5s
**VRH Novokhopyorsk 73.43 326** *e*P **P** **00 15 30.9 -1.1**
VRH pmax pmax
comp=N,10.0nm,0.9s
VRH pmax pmax
comp=E,10.0nm,0.9s
VRH pmax pmax
comp=Z,20nm,0.9s
**BR101 Keskin Array S 74.12 313** *e*P **P** **00 15 34.7 -1.8**
**BR131 Keskin Array S 74.12 313** P **P** **00 15 35.4 -1.2**
baz=74,SNR=9.1
**BRTR Keskin Array B 74.12 313** P **P** **00 15 34.7 -1.8**
comp=Z,3.2nm,0.5s,baz=123,slow=7.1,SNR=30
BRTR pP **pP** **00 15 44.5 -1.9**
comp=Z,5.1nm,0.6s,baz=115,slow=8.3,SNR=17
**BRTR Keskin Array B 74.12 313** *i*P **P** **00 15 35.0 -1.6**
BRTR pmax pmax
comp=Z,3.0nm,0.5s
**PETK Petropavlovsk- 74.44 32** P **P** **00 15 37.6 -0.4**
comp=Z,2.6nm,0.4s,baz=232,slow=7.1,SNR=7.1
**PEA2 Petropavlovsk- 74.45 32** *e*P **P** **00 15 37.6 -0.4**
**BOSA Boshof 74.55 241** P **P** **00 15 38.8 -0.5**
comp=Z,4.5nm,0.8s,baz=124,slow=5.0,SNR=8.1
BOSA pP **pP** **00 15 49.1 0.0**
comp=Z,6.8nm,0.7s,baz=79,slow=7.8,SNR=7.3
BOSA LR LR 00 44 38.3
comp=Z,345nm,18.3s,baz=84,slow=33
**BOSA Boshof 74.55 241** P **P** **00 15 40.5 +1.2**
baz=75,SNR=5.5
**VORD Divnogorie 74.69 325** *e*P **P** **00 15 38.1 -1.3**
VORD pmax pmax
comp=N,10.0nm,1.0s
VORD pmax pmax
comp=E,10.0nm,1.0s
VORD pmax pmax
comp=Z,10.0nm,1.0s
**VSR Storozhevoye 74.87 325** *e*P **P** **00 15 38.6 -1.8**
VSR pmax pmax
comp=Z,10.0nm,0.9s
VSR pmax pmax
comp=N,2.0nm,0.8s
VSR pmax pmax
comp=E,10.0nm,0.9s
**SIM Simferopol' 75.52 318** *e*P **P** **00 15 44.1 -0.3**
SIM pmax pmax
comp=Z,10.0nm,0.9s
**LPSR Galich'ya Gora 75.61 327** *e*P **P** **00 15 43.5 -1.2**
LPSR pmax pmax
comp=Z,10.0nm,0.8s
LPSR pmax pmax
comp=N,2.0nm,0.6s
LPSR pmax pmax
comp=E,4.0nm,0.8s
**SYO Syowa Base 76.23 199**|| *ep*P pP 00 16 01.0 +3.1
**SEY Seymchan 77.25 22** P **P** **00 15 53.7 -0.1**
comp=E,10nm,0.9s,baz=257,slow=4.7,SNR=8.1
SEY pP **pP** **00 16 03.8 +0.1**
comp=E,7.8nm,0.7s,baz=272,slow=8.1,SNR=4.5
**SEY Seymchan 77.25 22**|| *e*P **P** **00 15 54.5 +0.7**
**BKZ Black Stump Fm 77.56 129** *e*P **P** **00 15 56.8 +0.6**
comp=E,28nm,0.9s
**OBN Obninsk 77.95 328** *de*P **P** **00 15 57.2 -0.6**
OBN *e* 00 16 06.4
OBN *e* 00 18 56.3
OBN pmax pmax
comp=Z,47nm,1.7s
OBN MLR MLR
comp=Z,250nm,19.0s
**KLMR Klimovskoe 79.10 334** *e*P **P** **00 16 01.8 -2.2**
KLMR pmax pmax
comp=Z,28nm,1.4s
**LEOM Leova 79.91 318**|| *i*P **P** **00 16 09.5 +0.8**
**LEOM Leova 79.91 318**|| *i*P **P** **00 16 09.5 +0.8**
**AKASG Malin Array Be 80.51 323** P **P** **00 16 10.6 -1.3**
comp=Z,0.7nm,0.5s,baz=96,slow=4.0,SNR=9.3
AKASG pP **pP** **00 16 20.4 -1.6**
comp=Z,0.8nm,0.5s,baz=91,slow=4.6,SNR=2.2
**AKBB Malin Array Si 80.51 323** *e*P **P** **00 16 10.6 -1.3**
**AKBB Malin Array Si 80.51 323** *e*P **P** **00 16 10.6 -1.3**
**VNDA Vanda 80.67 169** P **P** **00 16 11.8 -0.5**
comp=Z,2.4nm,1.1s,baz=305,slow=5.2,SNR=7.3
VNDA pP **pP** **00 16 22.5 +0.2**
comp=Z,4.0nm,1.1s,baz=294,slow=5.4,SNR=9.4
**VNDA Vanda 80.67 169** *e*P **P** **00 16 13.1 +0.8**
VNDA *PP **pP** **00 16 22.5 +0.2**
**VNDA Vanda 80.67 169** *e*P **P** **00 16 13.1 +0.8**
VNDA pP **pP** **00 16 22.5 +0.2**
**VRI Vrincioaia 80.76 317**|| *i*P **P** **00 16 14.1 +0.7**
**VRI Vrincioaia 80.76 317**|| *i*P **P** **00 16 14.1 +0.7**
**PLOR Plostina 80.81 317**|| *i*P **P** **00 16 14.2 +0.5**
**PLOR Plostina 80.81 317**|| *i*P **P** **00 16 14.2 +0.5**
**TESR Tescani 80.98 318**|| *i*P **P** **00 16 14.9 +0.3**
**ZIMR 81.16 315**|| P P 00 16 25.3 +10
**ZIMR 81.16 315**|| *i*P P 00 16 25.3 +10
**MLR Muntele Rosu 81.20 317**|| *i*P **P** **00 16 16.2 +0.3**
**MLR Muntele Rosu 81.20 317**|| *i*P **P** **00 16 16.2 +0.3**
**TMCR Tamitsa 81.26 337** *e*P **P** **00 16 15.4 -0.2**
TMCR pmax pmax
comp=Z,12nm,0.6s
**PRAR RASCA 81.48 319**|| *i*P **P** **00 16 17.4 +0.2**
**VOIR 81.80 317**|| *i*P **P** **00 16 21.4 +2.4**
**VOIR 81.80 317**|| *i*P **P** **00 16 21.4 +2.4**
**ARR Arges 82.06 317**|| *i*P **P** **00 16 19.5 -0.9**
**BURAR Bucovina Array 82.20 319**|| P **P** **00 16 22.1 +1.0**
**BURAR Bucovina Array 82.20 319**|| *i*P **P** **00 16 22.1 +1.0**
**BUR04 Bucovina Ar. S 82.21 319** *e*P **P** **00 16 21.3 +0.2**
**CRAR CRAIOVA 82.41 315**|| P P 00 16 27.9 +5.8
**CRAR CRAIOVA 82.41 315**|| *i*P P 00 16 27.9 +5.8
**CJR Cluj-Napoca 83.07 318**|| *i*P **P** **00 16 26.1 +0.5**
**CJR Cluj-Napoca 83.07 318**|| *i*P **P** **00 16 26.1 +0.5**
**GZR Gura Zlata 83.35 316**|| P **P** **00 16 28.1 +1.0**
**GZR Gura Zlata 83.35 316**|| *i*P **P** **00 16 28.0 +1.0**
**DRGR 83.68 318**|| P P 00 16 21.4 -7.4
**DRGR 83.68 318**|| *i*P P 00 16 21.4 -7.4
**KWP Kalwaria Pacla 84.28 320**|| P **P** **00 16 31.9 +0.2**
**KWP Kalwaria Pacla 84.28 320**|| *i*P **P** **00 16 31.9 +0.2**
**KOLS Kolonicke sedl 84.42 320** *e*P **P** **00 16 33.1 +0.7**
KOLS *e* 00 16 42.6
KOLS pmax pmax
comp=Z,313nm,4.0s
**KOLS Kolonicke sedl 84.42 320** *e*P **P** **00 16 33.1 +0.7**
KOLS *ep*P **pP** **00 16 42.6 +0.2**
**BILL Bilibino 84.79 20** *e*P **P** **00 16 33.3 -0.5**
BILL *e* 00 19 52.2
BILL pmax pmax
comp=Z,4.0nm,1.0s
BILL MLR MLR
comp=Z,386nm,18.0s
**DIVS Divibare 85.05 315**|| *i*P P 00 16 45.6 +10
**STHS Stebnicka Huta 85.17 320** *e*P **P** **00 16 36.5 +0.3**
STHS pmax pmax
comp=Z,4.0nm,1.0s
**STHS Stebnicka Huta 85.17 320** *e*P **P** **00 16 36.5 +0.3**
**FIA0 FINESS Array S 85.35 332** *e*P **P** **00 16 36.5 -0.2**
**FIA0 FINESS Array S 85.35 332** *e*P **P** **00 16 36.5 -0.2**
**FINES FINESS Array B 85.35 332** P **P** **00 16 36.5 -0.2**
comp=Z,2.8nm,0.5s,baz=119,slow=5.9,SNR=43
**FINES FINESS Array B 85.35 332** *i*P **P** **00 16 36.5 -0.2**
FINES pmax pmax
comp=Z,3.0nm,0.4s
**PSZ Piszkesteto 85.78 318**|| P P 00 16 48.3 +9.0
**PSZ Piszkesteto 85.78 318**|| *i*P P 00 16 48.3 +9.0
**VYHS Vyhne 86.57 319** *e*P **P** **00 16 43.0 -0.1**
VYHS pmax pmax
comp=Z,12nm,2.0s
**VYHS Vyhne 86.57 319** *e*P **P** **00 16 43.0 -0.1**
**ARA0 ARCESS Array S 87.84 340** *e*P **P** **00 16 48.8 0.0**
**ARCES ARCESS Array B 87.84 340** P **P** **00 16 48.8 0.0**
comp=Z,9.5nm,0.9s,baz=95,slow=6.1,SNR=17
**GEC2 GERESS Array S 89.99 319** *e*P **P** **00 17 00.0 +0.5**
**GEC2 GERESS Array S 89.99 319** *e*P **P** **00 17 00.0 +0.5**
**GERES GERESS Array B 89.99 319** P **P** **00 16 59.6 +0.1**
comp=Z,1.1nm,0.6s,baz=105,slow=4.7,SNR=14
GERES pP **pP** **00 17 09.4 -0.3**
comp=Z,2.2nm,0.7s,baz=93,slow=4.8,SNR=9.3
**BRG Berggiesshubel 90.03 321** *e*P **P** **00 17 00.1 +0.6**
comp=Z,16nm,1.4s
BRG *e* 00 17 10.1
comp=Z,30nm,1.8s
**BRG Berggiesshubel 90.03 321** *e*P **P** **00 17 00.1 +0.6**
BRG *e* 00 17 10.1
BRG pmax pmax
comp=Z,16nm,1.4s
BRG pmax pmax
comp=Z,30nm,1.8s
**CLL Collm 90.66 321** *e*P **P** **00 17 02.0 -0.4**
CLL pmax pmax
comp=Z,14nm,1.5s
**CLL Collm 90.66 321** *e*P **P** **00 17 02.0 -0.4**
comp=Z,14nm,1.5s
CLL L L 00 48 00.0
comp=Z,500nm,18.8s
**SPA0 Spitsbergen Ar 92.12 348** *e*P **P** **00 17 07.8 -0.9**
**SPITS Spitsbergen Ar 92.12 348** P **P** **00 17 07.8 -0.9**
comp=Z,2.9nm,0.5s,baz=90,slow=3.2,SNR=7.1
**KEST Kesra 92.30 305** P **P** **00 17 10.8 +0.3**
comp=Z,6.0nm,0.9s,baz=111,slow=8.6,SNR=3.1
**NB200 NORSAR Array S 92.35 331** *e*P **P** **00 17 09.1 -1.1**
**NOA NORSAR Array B 92.35 331** P **P** **00 17 09.1 -1.1**
comp=Z,2.6nm,0.9s,baz=94,slow=4.9,SNR=4.0
**TOA0 Torodi Ar. Sit 98.51 283** *e*P **P** **00 17 38.3 -0.9**
**TORD Torodi Ar. Bea 98.51 283** P **P** **00 17 38.3 -0.9**
comp=Z,0.7nm,1.1s,baz=93,slow=5.7,SNR=5.2
TORD pP **pP** **00 17 47.9 -1.4**
comp=Z,0.5nm,0.7s,baz=92,slow=5.5,SNR=3.9
**ILAR Eielson Array 103.12 24** PP PP 00 22 13.2 -0.2
comp=Z,1.1nm,1.0s,baz=287,slow=7.4,SNR=5.3
**O03D Paynes Creek 127.79 40** P **PKPdf** **00 23 05.7 -0.1**
baz=128
**MSO Missoula 128.06 29** P **PKPdf** **00 23 06.2 0.0**
baz=128
**MSO Missoula 128.06 29** *e*PKPdf **PKPdf** **00 23 06.9 +0.7**
**EGMT Eagleton 129.07 25** P **PKPdf** **00 23 08.8 +0.8**
baz=129
**BOZ Bozeman (W) 130.03 28** *e*PKIKP **PKPdf** **00 23 11.6 +1.6**
**BOZ Bozeman (W) 130.03 28** P **PKPdf** **00 23 10.6 +0.6**
baz=130
**BOZ Bozeman (W) 130.03 28** *e*PKPdf **PKPdf** **00 23 11.6 +1.6**
**YMR Madison River 131.07 29** *e*PKPdf **PKPdf** **00 23 14.9 +2.7**
**NV01 Mina Array Sit 131.08 40** *e*PKPdf **PKPdf** **00 23 13.9 +1.6**
**NVAR Mina Array Bea 131.08 40** PKP **PKPdf** **00 23 13.9 +1.6**
comp=Z,1.6nm,0.7s,baz=292,slow=2.4,SNR=5.4
**RLMT Red Ledge 131.52 27** P **PKPdf** **00 23 11.8 -1.2**
baz=131
**HVU Hansel Valley 132.21 33** *e*PKIKP **PKPdf** **00 23 16.4 +2.1**
**HVU Hansel Valley 132.21 33** *e*PKPdf **PKPdf** **00 23 16.4 +2.1**
**R11A Troy Canyon, C 132.84 38** P **PKPdf** **00 23 17.2 +1.5**
baz=133
**MPMC Manual Prospec 132.97 42** P **PKPdf** **00 23 15.7 -0.2**
baz=133
**HWUT Hardware Ranch 132.98 32** *e*PKPdf **PKPdf** **00 23 17.7 +1.9**
**BW06 Boulder Array 133.16 29** *e*PKPdf **PKPdf** **00 23 16.0 -0.1**
**DUG Dugway 133.28 34** *e*PKIKP **PKPdf** **00 23 15.8 -0.5**
**DUG Dugway 133.28 34** *e*PKPdf **PKPdf** **00 23 15.8 -0.5**
**F27A Lemmon 133.86 21** P **PKPdf** **00 23 15.3 -1.8**
baz=134
**MSU Marysvale 134.77 36** *e*PKIKP **PKPdf** **00 23 21.6 +2.3**
**MSU Marysvale 134.77 36** *e*PKPdf **PKPdf** **00 23 21.6 +2.3**
**P18A Preston Nutter 135.09 33** *e*PKPdf **PKPdf** **00 23 21.6 +1.6**
**C39A Grand Marais 135.16 9** P **PKPdf** **00 23 17.6 -1.8**
baz=135
**J25A Sunshine Ranch 135.27 24** P **PKPdf** **00 23 18.4 -1.5**
baz=135
**PV10 Paradox Valley 136.64 33** *e*PKPdf **PKPdf** **00 23 24.5 +1.7**
**ECSD EROS Data Cent 137.54 17** P **PKPdf** **00 23 22.1 -1.9**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=137 | | | | | | | |
| SDCO | Great Sand Dun baz=139 | 138.98 | 31 | P | | PKPdf | 00 23 25.9 | -1.3 |
| T25A | Trinidad baz=140 | 140.00 | 30 | P | | PKPdf | 00 23 29.3 | +0.4 |
| BDFB | Brasilia comp=Z,2.6nm,0.8s,baz=194,slow=4.2,SNR=3.9 | 142.69 | 238 | PKP | | PKPdf | 00 23 34.4 | +0.2 |
| S36A | Lake Cedric, C baz=143 | 143.30 | 20 | P | | PKPbc | 00 23 31.4 | -0.2 |
| MNTX | Cornudas Mount baz=143 | 143.49 | 37 | P | | PKPbc | 00 23 33.4 | +1.1 |
| MNTX | Cornudas Mount | 143.49 | 37 | *e*PKPdf | | PKPbc | 00 23 33.6 | +1.3 |
| V32A | Arapaho baz=143 | 143.69 | 26 | P | | PKPbc | 00 23 32.7 | -0.1 |
| T36A | Boggs Farm, Ca baz=144 | 143.79 | 21 | P | | PKPbc | 00 23 33.0 | 0.0 |
| V33A | Lossen Ranch, baz=144 | 143.93 | 25 | P | | PKPbc | 00 23 33.4 | -0.1 |
| T37A | Cheneyville 18 baz=144 | 144.07 | 20 | P | | PKPab | 00 23 33.6 | +0.1 |
| U35A | Pawnee baz=144 | 144.08 | 23 | P | | PKPab | 00 23 33.5 | 0.0 |
| W32A | Sentinel baz=144 | 144.10 | 27 | P | | PKPbc | 00 23 34.1 | 0.0 |
| X31A | McDonald Ranch baz=144 | 144.17 | 28 | P | | PKPbc | 00 23 34.4 | +0.1 |
| V34A | Guthrie baz=144 | 144.24 | 24 | P | | PKPbc | 00 23 34.6 | +0.1 |
| V34A | Guthrie | 144.24 | 24 | *e*PKPdf | | PKPab | 00 23 34.3 | +0.2 |
| CCM | Cathedral Cave | 144.31 | 15 | *e*PKIKP | | PKPab | 00 23 34.2 | -0.1 |
| CCM | Cathedral Cave | 144.31 | 15 | *e*PKPdf | | PKPab | 00 23 34.1 | -0.1 |
| Y30A | Stafford Cattl baz=144 | 144.33 | 30 | P | | PKPbc | 00 23 35.3 | +0.4 |
| Z29A | Hungry Hill Ra baz=144 | 144.41 | 32 | P | | PKPbc | 00 23 35.6 | +0.4 |
| W33A | Caddo, Fort Co baz=144 | 144.42 | 26 | P | | PKPbc | 00 23 35.4 | +0.3 |
| U36A | Oologah baz=144 | 144.44 | 22 | P | | PKPab | 00 23 34.9 | +0.1 |
| 128A | Castleberry Fa baz=144 | 144.48 | 33 | P | | PKPab | 00 23 35.2 | +0.1 |
| V35A | Meyer Ranch, C baz=144 | 144.57 | 23 | P | | PKPab | 00 23 35.4 | 0.0 |
| Y31A | Rekieta Farm, baz=144 | 144.58 | 29 | P | | PKPab | 00 23 35.5 | 0.0 |
| WMOK | Wichita Mounta | 144.63 | 27 | *e*PKIKP | | PKPab | 00 23 35.0 | -0.6 |
| WMOK | Wichita Mounta | 144.63 | 27 | *e*PKPdf | | PKPab | 00 23 35.0 | -0.6 |
| W34A | Bridge Creek, baz=144 | 144.65 | 25 | P | | PKPbc | 00 23 35.8 | 0.0 |
| U37A | Salina baz=144 | 144.65 | 21 | P | | PKPab | 00 23 35.3 | -0.3 |
| X32A | Elmer baz=144 | 144.66 | 28 | P | | PKPab | 00 23 35.3 | -0.4 |
| Z30A | Sanderson Ranc baz=144 | 144.68 | 31 | P | | PKPbc | 00 23 36.0 | 0.0 |
| 228A | UT Block 9, Go baz=145 | 144.80 | 34 | P | | PKPbc | 00 23 36.9 | +0.4 |
| 129A | Stewart Farms, baz=145 | 144.81 | 32 | P | | PKPab | 00 23 36.4 | 0.0 |
| TUL1 | Tulsa baz=145 | 144.85 | 22 | P | | PKPab | 00 23 36.3 | -0.1 |
| TUL1 | Tulsa | 144.85 | 22 | *e*PKPdf | | PKPab | 00 23 36.2 | -0.1 |
| V36A | Jenks baz=145 | 144.90 | 22 | P | | PKPab | 00 23 36.5 | 0.0 |
| X33A | Lawton baz=145 | 144.92 | 27 | P | | PKPab | 00 23 36.3 | -0.4 |
| Y32A | R-V Farms, Ver baz=145 | 144.93 | 28 | P | | PKPab | 00 23 36.3 | -0.4 |
| W35A | Tecumseh baz=145 | 145.09 | 24 | P | | PKPbc | 00 23 36.9 | -0.3 |
| SIUC | Southern Illin | 145.10 | 12 | *e*PKPbc | | PKPab | 00 23 37.3 | +0.1 |
| V37A | Hulbert baz=145 | 145.11 | 21 | P | | PKPbc | 00 23 37.1 | -0.1 |
| WCI | Wyandotte Cave | 145.12 | 8 | *e*PKIKP | | PKPbc | 00 23 37.1 | -0.1 |
| WCI | Wyandotte Cave | 145.12 | 8 | *e*PKPbc | | PKPbc | 00 23 37.1 | -0.1 |
| Z31A | Sharp Cattle R baz=145 | 145.15 | 30 | P | | PKPbc | 00 23 37.1 | -0.4 |
| X34A | Smith Ranch, M baz=145 | 145.16 | 26 | P | | PKPbc | 00 23 37.3 | -0.2 |
| USIN | University of | 145.16 | 10 | *e*PKPbc | | PKPdf | 00 23 37.7 | -0.1 |
| SLBS | Sierra La Lagu | 145.17 | 52 | *e*PKPbc | | PKPdf | 00 23 38.8 | +0.5 |
| 130A | Snyder baz=145 | 145.31 | 31 | P | | PKPbc | 00 23 37.8 | -0.2 |
| 229A | Bryant Ranch, baz=145 | 145.35 | 33 | P | | PKPab | 00 23 38.3 | -0.1 |
| W36A | Wetumka baz=145 | 145.36 | 23 | P | | PKPbc | 00 23 37.8 | -0.2 |
| V38A | Canehill baz=145 | 145.39 | 20 | P | | PKPbc | 00 23 37.6 | -0.5 |
| Z32A | Haskell baz=145 | 145.49 | 29 | P | | PKPbc | 00 23 38.5 | -0.1 |
| 131A | Roby baz=145 | 145.55 | 31 | P | | PKPdf | 00 23 38.7 | 0.0 |
| 329A | Wagon Wheel Ra baz=145 | 145.62 | 34 | P | | PKPab | 00 23 39.8 | +0.4 |
| W37A | Quinton baz=145 | 145.67 | 22 | P | | PKPbc | 00 23 39.1 | +0.1 |
| X35A | Drake baz=145 | 145.70 | 25 | P | | PKPdf | 00 23 38.5 | -0.4 |
| PBMO | Poplar Bluff | 145.72 | 14 | *e*PKPdf | | PKPdf | 00 23 38.8 | 0.0 |
| Y34A | Reagan Ranch, baz=146 | 145.74 | 26 | P | | PKPdf | 00 23 39.1 | +0.1 |
| 230A | Sterling City baz=146 | 145.79 | 32 | P | | PKPab | 00 23 40.1 | +0.1 |
| X36A | Centrahoma baz=146 | 145.81 | 24 | P | | PKPab | 00 23 40.0 | +0.1 |
| Z33A | Whitaker Ranch baz=146 | 145.84 | 28 | P | | PKPbc | 00 23 39.8 | +0.1 |
| ABTX | Abilene, Hawle baz=146 | 145.96 | 30 | P | | PKPbc | 00 23 40.2 | +0.2 |
| ABTX | Abilene, Hawle | 145.96 | 30 | *e*PKPdf | | PKPbc | 00 23 40.3 | +0.2 |
| PARMO | Parma | 145.99 | 14 | *e*PKPdf | | PKPab | 00 23 40.9 | +0.4 |
| W38A | Poteau baz=146 | 146.06 | 21 | P | | PKPbc | 00 23 40.0 | -0.2 |
| Y35A | Marietta baz=146 | 146.10 | 25 | P | | PKPbc | 00 23 40.5 | +0.1 |
| 330A | Mertzon baz=146 | 146.12 | 33 | P | | PKPbc | 00 23 40.7 | 0.0 |
| 231A | Bronte baz=146 | 146.17 | 31 | P | | PKPbc | 00 23 40.8 | 0.0 |
| X37A | Clayton baz=146 | 146.18 | 23 | P | | PKPbc | 00 23 40.9 | +0.3 |
| TX31 | Lajitas Ar. Si | 146.20 | 38 | *e*PKPdf | | PKPbc | 00 23 40.9 | -0.1 |
| TXAR | Lajitas Array comp=Z,13nm,0.8s,baz=287,slow=0.6,SNR=140 | 146.20 | 38 | PKPbc | | PKPbc | 00 23 40.8 | -0.2 |
| X38A | Whitesboro baz=146 | 146.31 | 22 | P | | PKPab | 00 23 41.5 | -0.3 |
| 429A | Davenport Ranc baz=146 | 146.32 | 35 | P | | PKPbc | 00 23 41.5 | +0.2 |
| 133A | Hamilton Ranch baz=146 | 146.33 | 29 | P | | PKPbc | 00 23 41.5 | +0.4 |
| Y36A | Durant baz=146 | 146.42 | 24 | P | | PKPbc | 00 23 40.7 | -0.6 |
| 529A | Stev Forest Ra baz=146 | 146.50 | 36 | P | | PKPbc | 00 23 41.6 | -0.3 |
| 232A | Coleman baz=146 | 146.55 | 31 | P | | PKPbc | 00 23 41.8 | 0.0 |
| 430A | Baggett Ranch, baz=146 | 146.56 | 34 | P | | PKPbc | 00 23 42.1 | +0.1 |
| 331A | San Angelo baz=146 | 146.60 | 32 | P | | PKPdf | 00 23 41.1 | +0.6 |
| 233A | Rising Star baz=147 | 146.82 | 30 | P | | PKPbc | 00 23 42.4 | -0.2 |
| MIAR | Mount Ida | 146.87 | 20 | *e*PKP2 | | PKPbc | 00 23 42.8 | +0.2 |
| MIAR | Mount Ida baz=147 | 146.87 | 20 | P | | PKPbc | 00 23 42.3 | -0.3 |
| MIAR | Mount Ida | 146.87 | 20 | *e*PKPdf | | PKPbc | 00 23 42.8 | +0.2 |
| Z36A | Blue Ridge baz=147 | 146.90 | 25 | P | | PKPbc | 00 23 42.8 | +0.1 |
| 332A | Millersview baz=147 | 146.90 | 31 | P | | PKPbc | 00 23 43.1 | +0.2 |
| 431A | Sonora baz=147 | 146.99 | 33 | P | | PKPbc | 00 23 43.0 | -0.2 |
| 530A | J-C Ranch, Com baz=147 | 146.99 | 35 | P | | PKPbc | 00 23 42.8 | -0.4 |
| TZTN | Tazewell | 147.09 | 5 | *e*PKPdf | | PKPbc | 00 23 43.2 | 0.0 |
| 432A | Menard baz=147 | 147.28 | 32 | P | | PKPbc | 00 23 43.1 | -0.9 |
| 333A | Richland Sprin baz=147 | 147.34 | 30 | P | | PKPbc | 00 23 43.7 | -0.4 |
| 531A | Rocksprings baz=147 | 147.42 | 34 | P | | PKPbc | 00 23 44.5 | +0.1 |
| JCT | Junction City | 147.58 | 32 | *e*PKP2 | | PKPdf | 00 23 43.0 | +0.8 |
| JCT | Junction City baz=147 | 147.58 | 32 | P | | PKPbc | 00 23 44.9 | +0.1 |
| JCT | Junction City | 147.58 | 32 | *e*PKPdf | | PKPdf | 00 23 43.0 | +0.8 |
| 334A | Lometa | 147.70 | 29 | P | | PKPbc | 00 23 44.7 | -0.3 |
| | baz=148 | | | | | | | |
| 433A | Art baz=148 | 147.74 | 31 | P | | PKPbc | 00 23 44.6 | -0.6 |
| 532A | Rocksprings baz=148 | 147.80 | 33 | P | | PKPbc | 00 23 44.9 | -0.5 |
| TKL | Tuckaleechee C | 147.95 | 5 | *e*PKP2 | | PKPbc | 00 23 45.0 | -0.6 |
| TKL | Tuckaleechee C | 147.95 | 5 | *e*PKPbc | | PKPbc | 00 23 45.0 | -0.6 |
| 631A | Perdido Creek baz=148 | 147.98 | 35 | P | | PKPbc | 00 23 46.2 | +0.3 |
| 138A | Matatall Enter baz=148 | 147.98 | 24 | P | | PKPbc | 00 23 46.3 | +0.5 |
| CPCT | Cooper Cave | 148.09 | 6 | *e*PKPbc | | PKPbc | 00 23 46.0 | 0.0 |
| 434A | Burnet baz=148 | 148.11 | 30 | P | | PKPbc | 00 23 46.0 | -0.2 |
| OXF | Oxford | 148.13 | 14 | *e*PKP2 | | PKPbc | 00 23 46.0 | -0.1 |
| OXF | Oxford | 148.13 | 14 | *e*PKPbc | | PKPbc | 00 23 46.0 | -0.1 |
| SWET | Sewanee | 148.13 | 9 | *e*PKPbc | | PKPbc | 00 23 45.7 | -0.5 |
| 335A | Moody baz=148 | 148.13 | 28 | P | | PKPbc | 00 23 46.0 | -0.2 |
| 533A | Kerrville baz=148 | 148.31 | 32 | P | | PKPbc | 00 23 46.6 | -0.2 |
| 336A | Riesel baz=148 | 148.32 | 27 | P | | PKPbc | 00 23 46.6 | -0.1 |
| 632A | Uvalde baz=148 | 148.35 | 33 | P | | PKPbc | 00 23 47.5 | +0.6 |
| KMSC | Kings Mountain baz=148 | 148.61 | 1 | P | | PKPbc | 00 23 46.4 | -1.0 |
| 534A | Blanco baz=148 | 148.64 | 31 | P | | PKPbc | 00 23 47.2 | -0.4 |
| 633A | Saathoff Ranch baz=148 | 148.72 | 33 | P | | PKPbc | 00 23 48.2 | +0.4 |
| 239A | Gary baz=148 | 148.80 | 24 | P | | PKPbc | 00 23 47.3 | -0.6 |
| 337A | Centerville baz=149 | 148.81 | 26 | P | | PKPbc | 00 23 48.3 | +0.4 |
| 732A | Laxson Ranch, baz=149 | 148.84 | 35 | P | | PKPbc | 00 23 47.3 | -0.9 |
| 338A | Crockett baz=149 | 149.03 | 25 | P | | PKPbc | 00 23 49.3 | +0.8 |
| 832A | Faith Ranch, C baz=149 | 149.18 | 35 | P | | PKPdf | 00 23 46.5 | +1.7 |
| 733A | Divot King Ran baz=149 | 149.23 | 34 | P | | PKPbc | 00 23 48.1 | -1.0 |
| 339A | Huntington baz=149 | 149.36 | 24 | P | | PKPbc | 00 23 48.9 | -0.5 |
| JSC | Jenkinsville | 149.47 | 1 | *e*PKP2 | | PKPbc | 00 23 49.8 | +0.3 |
| JSC | Jenkinsville | 149.47 | 1 | *e*PKPbc | | PKPbc | 00 23 49.8 | +0.3 |
| 438A | Sam Houston St baz=149 | 149.48 | 26 | P | | PKPbc | 00 23 50.0 | +0.3 |
| 635A | Leesville baz=149 | 149.51 | 31 | P | | PKPbc | 00 23 50.3 | +0.5 |
| 340A | Bronson baz=149 | 149.56 | 23 | P | | PKPbc | 00 23 48.9 | -0.9 |
| 636A | Smothers Creek baz=150 | 149.80 | 30 | P | | PKPbc | 00 23 52.1 | +1.6 |
| VBMS | Vicksburg baz=150 | 149.99 | 17 | P | | PKPbc | 00 23 51.7 | +0.8 |
| LRAL | Lakeview Retre | 150.08 | 11 | *e*PKPbc | | PKPbc | 00 23 50.8 | -0.3 |
| 933A | Laredo baz=150 | 150.09 | 35 | P | | PKPbc | 00 23 52.4 | +1.2 |
| 834A | Tilden baz=150 | 150.10 | 34 | P | | PKPbc | 00 23 52.7 | +1.4 |
| 440A | Kirbyville baz=150 | 150.12 | 24 | P | | PKPbc | 00 23 52.0 | +0.8 |
| 637A | Eagle Lake baz=150 | 150.19 | 29 | P | | PKPbc | 00 23 53.0 | +1.6 |
| 736A | Circle Diamond baz=150 | 150.22 | 30 | P | | PKPbc | 00 23 53.3 | +1.8 |
| 835A | Beeville baz=150 | 150.37 | 32 | P | | PKPbc | 00 23 53.3 | +1.5 |
| 934A | Benavides baz=150 | 150.53 | 34 | P | | PKPbc | 00 23 53.7 | +1.4 |
| 034A | Hebbronville baz=151 | 150.84 | 35 | P | | PKPbc | 00 23 54.2 | +1.2 |
| LVC | Limon Verde | 151.63 | 203 | *e*PKPbc | | PKPbc | 00 23 56.8 | +1.5 |
| OTAV | Otavalo | 176.13 | 210 | *e*PKPdf | | PKPdf | 00 24 12.6 | +0.9 |

**IDC 27 00:13:14.0±3.4, 3°.65S×99°.45E, h0km, mb3.7/5, mb1 3.9/5, mb1mx3.5/44, mbtmp3.8/5, Error ellipse: s-maj=125.9km s-min=25.6km az=57.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| CMAR | Chiang Mai Arr 2.4nm,0.7s,baz=187,slow=9.7,SNR=14 | 21.98 | 359 | P | P | P | 00 18 09.2 | -0.5 |
| WRA | Warramunga Arr 0.3nm,0.8s,baz=302,slow=9.3,SNR=2.9 | 37.66 | 118 | P | P | P | 00 20 30.7 | -0.6 |
| SONM | Songino Array 1.3nm,0.7s,baz=187,slow=9.1,SNR=11 | 51.63 | 6 | P | P | P | 00 22 23.0 | +0.5 |
| MKAR | Makanchi Array 1.0nm,0.8s,baz=156,slow=9.3,SNR=4.8 | 52.47 | 345 | P | P | P | 00 22 28.3 | -0.4 |
| ZALV | Zalesovo Beam 0.9nm,0.4s,baz=155,slow=7.9,SNR=6.7 | 58.69 | 350 | P | P | P | 00 23 12.6 | -0.6 |
| TXAR | Lajitas Array 0.8nm,0.7s,baz=323,slow=1.4,SNR=10 | 146.34 | 38 | PKPbc | PKPbc | PKPbc | 00 32 57.8 | +0.1 |

*BJI **27** 00:17:24.6, 4°.13S×99°.51E, h35km, mb5.0/55, mB5.4/33, Ms5.0/32, Ms7 4.7/30*

*AUST **27** 00:17:25.4±1.8, 3°.57S×99°.54E, h0km, Error ellipse: s-maj=1.3km s-min=0.6km az=231.0*

*KLM **27** 00:17:26.2, 3°.56S×99°.36E, h10km, mb5.0, ML4.9, MS5.7*

*ISCJB **27** 00:17:28.8±0.2, 3°.51S±0°.02×99°.57E±0°.02, h33km, mb5.1/96, MS4.2/6, Error ellipse: s-maj=3.7km s-min=2.7km az=32.4*

*MOS **27** 00:17:29.1±1.0, 3°.43S×99°.62E, h33km, mb5.3/49, Error ellipse: s-maj=10.1km s-min=5.1km az=114.6*

*DJA **27** 00:17:29.7±0.4, 3°.5S±3°×10°0E±°, h52km±7km, MS.1/21, mb5.0/18, mB5.7/6, MLv5.0/21, Mw(mB)5.2/6*

*IDC **27** 00:17:30.4±0.7, 3°.50S×99°.52E, h30km±4km, mb4.5/31, mb1 4.6/32, mb1mx4.6/45, mbtmp4.7/32, ML4.8/1, MS4.1/5, Ms1 4.1/5, ms1mx3.6/41, Error ellipse: s-maj=13.5km s-min=10.4km az=46.0*

*NEIC **27** 00:17:30.7±0.2, 3°.46S×99°.57E, mb5.1/24, Error ellipse: s-maj=6.3km s-min=4.8km az=47.0*

*GCMT **27** 00:17:30.7±0.4, 3°.66S×99°.36E, h14km±1km, MW4.9/63, Moment Tensor Solution. s14,c15; s63,c90; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr=2.50±.21; Mθθ 1.37±.12; Mϕϕ 1.12±.14; Mrθ -0.38±.32; Mϕθ -1.08±.07; Mrϕ 0.09±.32; Best double couple: Mo2.44700×10^16^ NP1:ϕs 128.00000°, δ49.00000°, λ-95.00000°. NP2: ϕs 316.00000°, δ41.00000°, λ-84.00000°. Principal axes: T 2.3570, Plg4.0000°, Azm221.0000°; N 0.1710, Plg4.0000°, Azm131.0000°; P -2.5380, Plg84.0000°, Azm357.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 27 00:17:30.6±0.4, 3°.53S±0°.04×99°.52E±0°.04, h31km±1km, h30km:pP-P, n480, σ1°19/494, mb5.1/97, MS4.1/6, 49C-8D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID Op | ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| PPSI | Pulau Pagai | 0.91 | 33 | P | Pn | Pn | 00 17 45.4 | -1.9 |
| PPSI | | | | S | Sb | Sb | 00 17 58.7 | -0.9 |
| SISI | Saibi | 2.23 | 349 | P | Pn | Pn | 00 18 02.8 | -2.7 |
| SISI | | | | S | Sn | Sn | 00 18 31.5 | -0.5 |
| KSI | Kapahiang | 3.07 | 92 | P | Pn | Pn | 00 18 16.8 | -0.4 |
| PPI | Padang Panjang baz=3.2,SNR=31 | 3.18 | 16 | P | Pn | Pn | 00 18 16.9 | -1.7 |
| PPI | Padang Panjang | 3.18 | 16 | P | Pn | Pn | 00 18 16.6 | -1.9 |
| PPI | | | | S | Sn | Sn | 00 18 53.7 | -1.7 |
| SDSI | Sungai Dareh | 3.21 | 37 | P | Pn | Pn | 00 18 18.0 | -1.0 |
| SDSI | | | | S | Sn | Sn | 00 18 54.8 | -1.5 |
| MNAI | Manna baz=3.5,SNR=14 | 3.53 | 104 | P | Pn | Pn | 00 18 20.9 | -2.5 |
| MNAI | Manna | 3.53 | 104 | P | Pn | Pn | 00 18 21.9 | -1.5 |
| MNAI | | | | S | Sn | Sn | 00 19 02.7 | -1.4 |
| MNAI | Manna | 3.53 | 104 | *e*Pn | Pn | Pn | 00 18 21.9 | -1.5 |
| MNAI | | | | *e*Sn | Sn | Sn | 00 19 02.6 | -1.5 |
| LHSI | Lahat | 4.01 | 94 | P | Pn | Pn | 00 18 29.3 | -0.7 |
| LHSI | | | | S | Sn | Sn | 00 19 15.8 | -0.2 |
| BKNI | Bangkinang baz=4.2,SNR=4.0 | 4.12 | 22 | P | Pn | Pn | 00 18 31.7 | +0.1 |
| BKNI | Bangkinang | 4.12 | 22 | P | Pn | Pn | 00 18 30.4 | -1.2 |
| BKNI | Bangkinang | 4.12 | 22 | *e*Pn | Pn | Pn | 00 18 30.8 | -0.8 |
| MNSI | Mandailing Nat | 4.30 | 1 | P | Pn | Pn | 00 18 30.2 | -3.8 |
| MNSI | | | | S | Sn | Sn | 00 19 22.8 | -0.3 |
| MDSI | Maura Dua | 4.75 | 102 | P | Pn | Pn | 00 18 38.7 | -1.4 |
| MDSI | | | | S | Sn | Sn | 00 19 32.3 | -1.9 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LWLI | Liwa | 4.76 | 108 | P | | Pn | 00 18 38.6 | -1.9 |
| SBSI | Sibolga | 5.09 | 353 | P | | Pn | 00 18 39.4 | -5.4 |
| GSI | Gunungsitoli 162nm,0.8s,0.8nm | 5.18 | 338 | P | | Pn | 00 18 43.2 | -2.9 |
| GSI | | | | S | | Sn | 00 19 40.8 | -4.1 |
| | 162nm,0.8s,0.8nm | | | | | | | |
| GSI | Gunungsitoli | 5.18 | 338 | *e*Pn | | Pn | 00 18 43.4 | -2.7 |
| KASI | Kota Agung 284nm,0.9s,7µm2.3nm | 5.34 | 112 | P | | Pn | 00 18 45.9 | -2.5 |
| PSI | Prapat 1.7nm,0.3s,baz=155,slow=11,SNR=7.9 | 6.32 | 355 | Pn | | Pn | 00 18 57.1 | -4.7 |
| PSI | Prapat baz=6.3,SNR=5.5 | 6.32 | 355 | P | | Pn | 00 18 58.4 | -3.5 |
| KGM | Kluang | 6.69 | 35 | ⇑P | | Pn | 00 19 05.8 | -1.2 |
| SNSI | Sinabang, Aceh 198nm,1.1s,0.6nm | 6.71 | 332 | P | | Pn | 00 19 05.5 | -1.6 |
| MYKOM | Kota Tinggi | 6.83 | 39 | ⇑P | | Pn | 00 19 08.0 | -0.9 |
| CGJI | Cibinong 273nm,0.8s,4µm0.8nm | 6.87 | 117 | P | | Pn | 00 19 05.8 | -3.6 |
| FRIM | Kepong | 7.04 | 17 | ⇓P | | Pn | 00 19 10.9 | -0.9 |
| KCSI | Kotacane, Aceh 63nm,0.7s,5µm0.4nm | 7.22 | 346 | P | | Pn | 00 19 12.8 | -1.3 |
| CBJI | Citeko 1µm,0.8s,23µm | 7.85 | 112 | P | | Pn | 00 19 23.9 | +1.1 |
| IPM | Ipoh | 8.10 | 11 | ⇑P | | Pn | 00 19 24.6 | -1.7 |
| IPM | Ipoh | 8.10 | 11 | *e*Pn | | Pn | 00 19 25.2 | -1.0 |
| TPI | Tanjungpandan 18nm,1.5s | 8.16 | 85 | P | | Pn | 00 19 25.4 | -1.7 |
| CNJI | Cibinong 220nm,0.9s,3µm | 8.46 | 117 | P | | Pn | 00 19 27.4 | -3.7 |
| LEM | Lembang 10nm,0.3s,baz=207,slow=11,SNR=11 | 8.71 | 112 | Pn | | Pn | 00 19 33.9 | -0.9 |
| LEM | Lembang 2µm,0.8s | 8.71 | 112 | P | | Pn | 00 19 34.0 | -0.7 |
| KULM | Kulim | 8.84 | 7 | *e*Pn | | Pn | 00 19 33.8 | -2.5 |
| LHMI | Lhok Sumawe 110nm,1.1s | 9.07 | 344 | P | | Pn | 00 19 37.9 | -1.7 |
| LHMI | Lhok Sumawe | 9.07 | 344 | *e*Pn | | Pn | 00 19 34.1 | -5.5 |
| CISI | Cisompet, Garu baz=9.2,SNR=8.1 | 9.18 | 116 | P | | Pn | 00 19 37.8 | -3.2 |
| CISI | Cisompet, Garu 396nm,0.6s,5µm | 9.18 | 116 | P | | Pn | 00 19 37.7 | -3.4 |
| CISI | Cisompet, Garu | 9.18 | 116 | *e*Pn | | Pn | 00 19 37.0 | -4.1 |
| XMIS | Christmas Isla baz=9.2,SNR=5.5 | 9.21 | 139 | P | | Pn | 00 19 35.3 | -6.1 |
| XMIS | Christmas Isla | 9.21 | 139 | *e*Pn | | Pn | 00 19 34.4 | -7.0 |
| KTGM | Kuala Trenggan | 9.51 | 22 | ⇑P | | Pn | 00 19 44.7 | -0.9 |
| CMJI | Cimerak 153nm,0.9s | 9.84 | 116 | P | | Pn | 00 19 46.6 | -3.5 |
| SKLT | Songkhla 26nm,0.8s,1µm | 10.69 | 6 | P | | Pn | 00 20 03.7 | +2.0 |
| UGM | Wanagama baz=12,SNR=5.5 | 11.78 | 112 | P | | Pn | 00 20 14.5 | -2.2 |
| UGM | Wanagama | 11.78 | 112 | *e*Pn | | Pn | 00 20 12.6 | -4.2 |
| KSM | Kuching | 11.88 | 65 | ⇑P | | Pn | 00 20 17.3 | -0.7 |
| SBUM | Sibu | 14.02 | 65 | ⇑P | | Pn | 00 20 47.5 | +0.2 |
| BTM | Bintulu | 15.12 | 64 | ⇑P | | Pn | 00 21 02.6 | +0.4 |
| JAGI | Jajag, Banyuwa baz=15,SNR=3.2 | 15.36 | 109 | P | | Pn | 00 21 02.2 | -3.2 |
| SRDT | SRDT 122nm,1.8s,10µm | 17.77 | 359 | P | | P | 00 21 37.9 | +1.5 |
| KHLT | Khaolaem Dam 27nm,1.4s | 18.23 | 357 | P | | P | 00 21 41.6 | +0.1 |
| KKM | Kota Kinabalu baz=19,SNR=6.7 | 19.20 | 60 | P | | Pn | 00 21 52.8 | -0.5 |
| KKM | Kota Kinabalu | 19.20 | 60 | ⇑P | | P | 00 21 52.0 | -0.2 |
| KKM | Kota Kinabalu 32nm,0.9s | 19.20 | 60 | *e*P | | Pn | 00 21 53.1 | -0.2 |
| CHAI | Chaiyaphum 9.4nm,0.9s | 19.46 | 7 | P | | Pn | 00 21 55.9 | -0.5 |
| UBPT | Khong Chiam 66nm,0.9s | 19.60 | 17 | P | | P | 00 21 56.1 | -0.4 |
| UMPA | Umpang Tak 15nm,0.9s,808nm | 19.62 | 358 | P | | P | 00 21 55.7 | -1.1 |
| SDKM | Sandakan | 19.87 | 63 | ⇑P | | P | 00 21 59.7 | +0.1 |
| TSM | Tawau | 19.92 | 67 | ⇑P | | P | 00 22 00.2 | +0.1 |
| KHON | Khomkaen 10nm,1.3s,1µm | 20.01 | 9 | P | | Pn | 00 22 05.5 | +2.6 |
| PBKT | Sadao Pong 22nm,0.7s | 20.02 | 4 | P | | P | 00 22 00.7 | -0.4 |
| KDM | Kudat | 20.16 | 59 | ⇑P | | P | 00 22 03.0 | +0.3 |
| KAPI | Kappang 24nm,0.9s,baz=259,slow=11,SNR=7.4 | 20.23 | 95 | P | | P | 00 22 02.6 | -0.9 |
| KAPI | Kappang | 20.23 | 95 | *e*P | | P | 00 22 02.8 | -0.7 |
| MYLDM | Lahad Datu | 20.84 | 66 | ⇑P | | P | 00 22 09.4 | -0.7 |
| MYLDM | Lahad Datu 53nm,1.0s | 20.84 | 66 | *e*P | | P | 00 22 09.1 | -1.0 |
| UTTA | Uttaradit 12nm,0.8s,107nm | 21.16 | 3 | P | | P | 00 22 14.1 | +0.6 |
| MHMT | Maesarieng 61nm,1.0s,1µm | 21.63 | 356 | P | | P | 00 22 18.8 | +0.4 |
| PALK | Pallekele 30nm,1.0s,baz=118,slow=12,SNR=7.7 | 21.63 | 300 | P | | P | 00 22 17.5 | -1.1 |
| PALK | | | | LR | | LR | 00 28 59.9 | |
| | comp=Z,314nm,21.1s,baz=116,slow=32 | | | | | | | |
| PALK | Pallekele | 21.63 | 300 | *e*P | | P | 00 22 20.1 | +1.5 |
| PALK | | | | pmax | | pmax | | |
| | comp=Z,57nm,1.2s | | | | | | | |
| PALK | Pallekele | 21.63 | 300 | *e*P | | P | 00 22 20.1 | +1.5 |
| | comp=Z,57nm,1.2s | | | | | | | |
| NONG | Nongkai | 21.75 | 9 | P | | P | 00 22 18.5 | -1.3 |
| | comp=Z,157nm,1.5s,comp=Z,4µm | | | | | | | |
| CM01 | Chiang Mai Arr | 21.82 | 359 | *e*P | | P | 00 22 19.6 | -0.9 |
| CM31 | Chiang Mai Arr baz=22,SNR=7.9 | 21.86 | 359 | P | | P | 00 22 21.2 | +0.3 |
| CM31 | Chiang Mai Arr | 21.86 | 359 | *e*P | | P | 00 22 20.8 | -0.1 |
| CMAR | Chiang Mai Arr | 21.86 | 359 | P | | P | 00 22 20.8 | -0.1 |
| | comp=Z,45nm,0.8s,baz=188,slow=10.0,SNR=227 | | | | | | | |
| CMAR | | | | LR | | LR | 00 30 49.4 | |
| | comp=Z,767nm,19.4s,baz=177,slow=37 | | | | | | | |
| LAMP | Lampang | 21.91 | 0 | P | | P | 00 22 21.6 | +0.1 |
| | comp=Z,16nm,0.9s,comp=Z,142nm | | | | | | | |
| CHTO | Chiang Mai | 22.21 | 359 | P | | P | 00 22 24.4 | -0.3 |
| | comp=Z,200nm,2.0s | | | | | | | |
| CHTO | Chiang Mai | 22.21 | 359 | *e*P | | P | 00 22 24.5 | -0.3 |
| CHTO | | | | pmax | | pmax | | |
| | comp=Z,96nm,1.5s | | | | | | | |
| CHTO | Chiang Mai | 22.21 | 359 | *e*P | | P | 00 22 24.5 | -0.3 |
| | comp=Z,96nm,1.5s | | | | | | | |
| CMAI | Chiengmai2 | 23.32 | 359 | P | | P | 00 22 36.6 | +0.1 |
| | comp=Z,58nm,1.8s | | | | | | | |
| LUWI | Luwuk baz=23,SNR=5.5 | 23.37 | 84 | P | | P | 00 22 39.7 | +2.9 |
| LUWI | Luwuk | 23.37 | 84 | *e*P | | P | 00 22 36.4 | -0.5 |
| | comp=Z,88nm,1.4s | | | | | | | |
| QIZ | Qiongzhong | 24.61 | 24 | P | | P | 00 22 49.0 | +0.6 |
| QIZ | | | | pP | | pP | 00 22 55.8 | -1.5 |
| QIZ | | | | S | | S | 00 27 07.0 | -0.9 |
| QIZ | | | | PMZ | | | | |
| | comp=Z,56nm,1.7s | | | | | | | |
| QIZ | | | | PMZ | | | | |
| | comp=Z,1µm,12.5s | | | | | | | |
| QIZ | | | | LN | | | | |
| | comp=Z,1µm,13.3s | | | | | | | |
| QIZ | | | | LZ | | | | |
| | comp=Z,1µm,13.0s | | | | | | | |
| BATI | Baumata comp=Z,18nm,0.5s,baz=44,slow=1.4,SNR=7.2 | 24.86 | 107 | P | | P | 00 22 49.7 | -1.1 |
| SLVN | Son La | 25.08 | 10 | *e*P | | P | 00 22 53.1 | +0.4 |
| H08S2 | Diego Garcia H baz=81 | 27.20 | 260 | T | | T | 00 52 31.9 | |
| H08S3 | Diego Garcia H | 27.20 | 260 | T | | T | 00 52 33.2 | |
| H08S1 | Diego Carcia H baz=81,slow=74 | 27.21 | 260 | T | | T | 00 52 35.4 | |
| DAV | Davao City (W) comp=Z,440nm,20.0s,baz=265,slow=38 | 28.06 | 68 | LR | | LR | 00 35 13.9 | |
| KMI | Kunming | 28.66 | 6 | P | | P | 00 23 26.3 | +1.3 |
| KMI | | | | pP | | pP | 00 23 35.5 | +1.6 |
| KMI | | | | sP | | sP | 00 23 40.3 | +2.7 |
| KMI | | | | PMZ | | | | |
| | comp=Z,13nm,0.9s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,590nm,6.2s | | | | | | | |
| KMI | | | | LN | | | | |
| | comp=Z,530nm,18.6s | | | | | | | |
| KMI | | | | LE | | | | |
| | comp=Z,890nm,18.6s | | | | | | | |
| KMI | | | | LZ | | | | |
| | comp=Z,600nm,13.4s | | | | | | | |
| GYA | Guiyang | 30.61 | 13 | P | | P | 00 23 41.8 | -0.4 |

GYA SS **ScP** **00 30 27.3 +6.3**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.0s
GYA LN
comp=Z,520nm,18.2s
GYA LE
comp=Z,490nm,18.0s
GYA LZ
comp=Z,510nm,17.8s
**SIJI Sorong 31.83 86** P **P** **00 23 50.6 -2.5**
comp=Z,12nm,0.8s,baz=311,slow=7.6,SNR=9.2
**ODAN Odare 32.41 340** *e*P **P** **00 23 58.5 +0.3**
comp=Z,48nm,0.9s
**FAKI Fak Fak 32.69 90** P P 00 24 08.6 +8.0
baz=33,SNR=17
**TAPN Taplejung 32.75 340** *e*P **P** **00 24 01.9 +0.7**
comp=Z,60nm,1.0s
**RAMN Ramite 32.77 338** *e*P **P** **00 24 01.8 +0.4**
comp=Z,28nm,0.7s
**PKI Pulchoki 33.78 337** *e*P **P** **00 24 10.1 -0.2**
**PKIN Phulchoki 33.79 337** *e*P **P** **00 24 10.0 -0.3**
**GUN Gumba 33.91 338** *e*P **P** **00 24 11.7 +0.3**
comp=Z,38nm,0.6s
**DMN Daman 33.94 337** *e*P **P** **00 24 11.8 +0.2**
comp=Z,20nm,0.9s
**LSA Lhasa 34.00 347** P **P** **00 24 13.0 +0.7**
LSA PMZ
comp=Z,39nm,1.0s
**LSA Lhasa 34.00 347** *e*P **P** **00 24 13.2 +0.9**
LSA pmax pmax
comp=Z,30nm,0.9s
**LSA Lhasa 34.00 347** *e*P **P** **00 24 13.2 +0.9**
comp=Z,30nm,0.9s
**H01W3 Cape Leeuwin H 34.02 158** T T 01 01 11.4
baz=336,slow=76,SNR=6.7
**KKN Kakani 34.03 337** *e*P **P** **00 24 12.4 +0.1**
comp=Z,34nm,0.9s
**H01W2 Cape Leeuwin H 34.03 158** T T 01 01 04.8
baz=336,slow=76,SNR=7.3
**H01W1 Cape Leeuwin H 34.04 158** T T 01 00 44.9
baz=336,slow=76,SNR=7.1
**GKN Gorkha 34.47 336** *e*P **P** **00 24 16.2 +0.1**
comp=Z,66nm,1.0s
**CD2 Chengdu 34.49 6** P **P** **00 24 16.0 0.0**
CD2 sP **sP** **00 24 28.8 +0.1**
CD2 PP **PP** **00 25 35.0 +0.4**
CD2 S **S** **00 29 44.5 +1.7**
CD2 sS **sS** **00 29 59.5 +1.9**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**KOLN Koldanda 34.70 335** *e*P **P** **00 24 18.3 +0.2**
comp=Z,134nm,0.8s
**KMBL Kambalda 34.79 145** P **P** **00 24 20.6 +1.9**
baz=35,SNR=4.7
**ENH Enshi 34.94 15** *e*P **P** **00 24 19.7 -0.3**
comp=Z,12nm,0.9s
**DANN Dangsing 35.14 335** *e*P **P** **00 24 22.2 +0.2**
**YOJ Yonaguni jima 36.00 38** *e*P P 00 24 23.6 -5.5
YOJ pmax pmax
comp=Z,321nm,0.5s
**YOJ Yonaguni jima 36.00 38** *e*P P 00 24 23.6 -5.5
comp=Z,320nm,0.5s
**WHN Wuhan 36.73 22** ⇑P **P** **00 24 35.5 +0.3**
**WRA Warramunga Arr 37.67 118** P **P** **00 24 42.4 -1.0**
comp=Z,3.9nm,0.9s,baz=287,slow=12,SNR=40
WRA PcP **PcP** **00 27 00.3 -0.3**
comp=Z,1.8nm,0.9s,baz=315,slow=2.0,SNR=3.1
**WRAB Tennant Creek 37.67 118** *ce*P **P** **00 24 42.7 -0.7**
WRAB pmax pmax
comp=Z,20nm,0.8s
**WRAB Tennant Creek 37.67 118** P **P** **00 24 42.8 -0.7**
comp=Z,58nm,1.2s,SNR=10
**WRAB Tennant Creek 37.67 118** *e*P **P** **00 24 42.2 -1.3**
comp=Z,8.9nm,0.8s
**XAN Xi'an 38.41 13** P **P** **00 24 48.5 -1.0**
XAN pP **pP** **00 24 57.0 -1.5**
XAN sP **sP** **00 25 01.3 -0.9**
XAN PMZ
comp=Z,37nm,1.0s
**AS12 Alice Springs 38.77 124** *e*P **P** **00 24 52.5 -0.2**
AS12 *e*PcP **PcP** **00 27 03.7 -0.3**
**ASAR Alice Springs 38.77 124** P **P** **00 24 52.5 -0.2**
comp=Z,8.5nm,1.1s,baz=299,slow=8.0,SNR=31
ASAR PcP **PcP** **00 27 03.7 -0.3**
comp=Z,3.2nm,1.1s,baz=290,slow=2.7,SNR=4.1
ASAR pPcP 00 27 13.4
comp=Z,1.4nm,0.7s,baz=287,slow=2.1,SNR=4.7
ASAR S **S** **00 30 52.6 +4.1**
comp=Z,0.2nm,0.8s,baz=303,slow=12,SNR=2.8
**AS01 Alice Springs 38.81 124** *e*P **P** **00 24 52.4 -0.6**
**LZH Lanzhou 39.62 6** ⇑P **P** **00 25 00.3 +0.6**
LZH pP **pP** **00 25 10.0 +1.2**
LZH sP **sP** **00 25 13.8 +1.3**
LZH PMZ
comp=Z,24nm,1.0s
LZH PMZ
comp=Z,110nm,5.0s
**NJ2 Nanjing 39.88 26** *e*P **P** **00 25 02.0 +0.3**
NJ2 PMZ
comp=Z,16nm,0.8s
**QIS Mount Isa 42.53 117** P **P** **00 25 24.0 +0.2**
baz=42,SNR=3.4
**GTA Gaotai 42.73 0** *e*P **P** **00 25 28.8 +0.6**
GTA pP **pP** **00 25 35.8 +1.5**
GTA sP **sP** **00 25 39.8 +1.8**
GTA PcP **PcP** **00 27 13.5 -3.1**
GTA PMZ
comp=Z,12nm,1.8s
**BBOO Buckleboo 44.90 135** P **P** **00 25 42.7 0.0**
baz=45,SNR=5.4
**HHC Hu-ho-hao-te 45.52 13** *e*P **P** **00 25 49.0 +1.4**
HHC S **S** **00 32 32.0 +4.3**
HHC sS sS 00 32 48.0 +5.2
HHC SS **ScS** **00 35 46.0 +4.0**
HHC PMZ
comp=Z,34nm,1.1s
HHC PMZ
comp=Z,280nm,5.0s
HHC LN
comp=Z,550nm,17.4s
HHC LE
comp=Z,550nm,16.2s
HHC LZ
comp=Z,330nm,16.2s
**BJT Baijiatuau 45.96 18** *e*P **P** **00 25 51.8 +0.9**
BJT pmax pmax
comp=Z,36nm,1.1s
**BJT Baijiatuau 45.96 18** *e*P **P** **00 25 51.8 +0.9**
comp=Z,36nm,1.1s
**BJI Beijing 45.98 18** P **P** **00 25 51.5 +0.5**
BJI S **S** **00 32 38.5 +4.5**
BJI PMZ
comp=Z,29nm,1.2s
BJI LN
comp=Z,2μm,15.2s
BJI LE
comp=Z,990nm,16.4s
BJI LZ
comp=Z,1μm,17.7s
**JNU Nakatsue 47.00 37** P **P** **00 25 58.5 -0.8**
comp=Z,22nm,0.9s,baz=242,slow=6.0,SNR=4.9
**JNU Nakatsue 47.00 37** *e*P **P** **00 25 58.5 -0.8**
comp=Z,408nm,2.3s
**HTT Hallett 47.27 134** P P 00 25 55.4 -6.1
baz=47,SNR=8.4
**KSH Kashi 48.01 335** P **P** **00 26 05.5 -1.6**
KSH *ep*P **pP** **00 26 15.3 -1.0**
KSH *es*P **sP** **00 26 19.0 -0.9**
KSH *e*PP **PP** **00 27 58.5 -0.9**
KSH PcS **PcS** **00 31 26.3 -4.3**
KSH S **S** **00 32 59.5 -3.8**
KSH ScS **ScS** **00 35 54.0 -4.4**
KSH PMZ
comp=Z,17nm,0.9s
KSH PMZ
comp=Z,220nm,3.7s
KSH LN
comp=Z,160nm,7.0s
KSH LE
comp=Z,240nm,6.4s
KSH LZ
comp=Z,220nm,10.2s

**WMQ Urumqi 48.32 349** P **P** **00 26 10.5 +1.2**
WMQ pP **pP** **00 26 20.5 +1.9**
WMQ sP **sP** **00 26 24.0 +1.8**
WMQ PP **PP** **00 28 02.0 -0.1**
WMQ S **S** **00 33 07.0 -0.5**
WMQ PMZ
comp=Z,75nm,1.0s
WMQ PMZ
comp=Z,320nm,5.0s
WMQ LN
comp=Z,190nm,15.0s
WMQ LE
comp=Z,220nm,15.0s
WMQ LZ
comp=Z,160nm,15.0s
**CTA Charters Tower 48.41 114** P **P** **00 26 10.3 0.0**
comp=Z,5.1nm,0.7s,baz=278,slow=7.1,SNR=4.9
**QLP Quilpie 48.52 123** P **P** **00 26 11.2 +0.1**
baz=48,SNR=3.9
**KS15 Wonju Array Si 48.55 30** *e*P **P** **00 26 10.9 -0.1**
**KSAR Wonju Array Be 48.55 30** P **P** **00 26 11.0 -0.1**
**KSAR Wonju Array Be 48.55 30** P **P** **00 26 10.9 -0.1**
**KSRS Korea Array 48.58 30** P **P** **00 26 10.9 -0.3**
comp=Z,13nm,0.8s,baz=225,slow=7.9,SNR=27
KSRS LR LR 00 49 26.6
comp=Z,154nm,18.7s,baz=240,slow=40
**SFK Sufi-Kurgan 49.48 334** P **P** **00 26 18.2 -0.3**
SFK pmax pmax
comp=Z,31nm,1.3s
**PDGK Podgornoye 50.02 341** P **P** **00 26 22.4 +0.2**
PDGK pmax pmax
comp=Z,59nm,1.1s
**UCH Uchtor 50.88 336** P **P** **00 26 29.5 +0.1**
SNR=12
**TKM2 Tokmak 2 51.04 337** *e*P **P** **00 26 30.3 0.0**
TKM2 pmax pmax
comp=Z,36nm,0.8s
**TKM2 Tokmak 2 51.04 337** P **P** **00 26 30.4 +0.1**
SNR=36
**TKM2 Tokmak 2 51.04 337** *e*P **P** **00 26 30.3 +0.1**
comp=Z,36nm,0.8s
**KBK Karagaybulak 51.07 337** P **P** **00 26 30.9 +0.4**
SNR=21
**AML Almayashu 51.14 335** P **P** **00 26 31.1 -0.1**
SNR=14
**AAK Ala-Archa 51.23 336** P **P** **00 26 31.8 +0.2**
comp=Z,6.3nm,0.7s,baz=143,slow=4.7,SNR=24
**AAK Ala-Archa 51.23 336**⇓ *e*P **P** **00 26 32.2 +0.5**
AAK pmax pmax
comp=Z,19nm,0.9s
**AAK Ala-Archa 51.23 336** P **P** **00 26 31.9 +0.2**
comp=Z,64nm,0.7s,SNR=7.4
**AAK Ala-Archa 51.23 336** P **P** **00 26 32.1 +0.5**
SNR=6.7
**AAK Ala-Archa 51.23 336** *e*P **P** **00 26 31.8 +0.2**
comp=Z,3μm,2.5s
**CHMS Chumysh 51.44 337** P **P** **00 26 32.8 -0.2**
SNR=10
**SONA0 Songino Array 51.51 6** *e*P **P** **00 26 33.8 +0.2**
**SONM Songino Array 51.51 6** P **P** **00 26 33.8 +0.2**
comp=Z,22nm,0.8s,baz=188,slow=8.6,SNR=130
**CMSA Cobar Meteorol 51.54 128** P **P** **00 26 34.6 +0.7**
baz=52,SNR=20
**EKS2 Erkin-Say 51.55 336** *e*P **P** **00 26 34.1 +0.2**
EKS2 pmax pmax
comp=Z,27nm,0.8s
**EKS2 Erkin-Say 51.55 336** P **P** **00 26 34.3 +0.3**
SNR=33
**EKS2 Erkin-Say 51.55 336** *e*P **P** **00 26 34.1 +0.2**
comp=Z,27nm,0.8s
**ULN Ulaanbaatar 51.61 6** *ce*P **P** **00 26 35.2 +0.9**
ULN pmax pmax
comp=Z,55nm,1.7s
**ULN Ulaanbaatar 51.61 6** *e*P **P** **00 26 34.9 +0.6**
comp=Z,24nm,0.8s
**USP Ospenovka 51.76 337** P **P** **00 26 35.2 -0.2**
SNR=30
**MNAS Manas 51.93 335** P **P** **00 26 36.5 -0.4**
MNAS pmax pmax
comp=Z,54nm,1.9s
**MK01 Makanchi Array 52.34 345** *e*P **P** **00 26 39.3 -0.4**
**MK31 Makanchi Array 52.37 345** *i* P **P** **00 26 39.5 -0.4**
MK31 pmax pmax
comp=Z,875μm,0.1s
**MK32 Makanchi Array 52.37 345** *e*P **P** **00 26 39.7 -0.1**
**MKAR Makanchi Array 52.37 345** P **P** **00 26 39.7 -0.2**
comp=Z,12nm,0.6s,baz=150,slow=9.3,SNR=104
**MKAR Makanchi Array 52.37 345** *i* P **P** **00 26 39.7 -0.2**
MKAR pmax pmax
comp=Z,12nm,0.6s
**MKAR Makanchi Array 52.37 345** *e*P **P** **00 26 40.1 +0.2**
**MAKZ Makanchi 52.46 345** *e*P **P** **00 26 40.2 -0.4**
comp=Z,36nm,1.5s
**CN2 Changchun 52.57 23** *e*P **P** **00 26 41.0 -0.4**
CN2 *es*P **sP** **00 26 53.0 -1.3**
CN2 PMZ
comp=Z,20nm,1.1s
CN2 LN
comp=Z,400nm,13.0s
CN2 LE
comp=Z,400nm,13.0s
CN2 LZ
comp=Z,400nm,13.0s
**OPO Ambohidratompo 53.27 250** P **P** **00 26 47.1 -0.1**
comp=Z,5.4nm,1.0s,baz=98,slow=7.1,SNR=3.0
**MAJO Matsushiro 53.76 39** *e*P **P** **00 26 49.1 -1.2**
MAJO pmax pmax
comp=Z,70nm,1.8s
**MAJO Matsushiro 53.76 39** *e*P **P** **00 26 49.1 -1.2**
comp=Z,70nm,1.8s
**MAT Matsushiro 53.76 39** P **P** **00 26 49.0 -1.3**
MAT S **S** **00 34 17.4 -5.6**
**MJAR Matsushiro Arr 53.76 39** P **P** **00 26 49.1 -1.3**
comp=Z,8.5nm,1.0s,baz=225,slow=6.2,SNR=11
**ZAK Zakamensk 53.80 3** *e*P **P** **00 26 49.9 -0.5**
ZAK pmax pmax
comp=Z,6.0nm,1.1s
**IMOG Moghan 54.43 320** *e*P **P** **00 26 54.8 -0.8**
**HVS Khovu-Aksy 54.68 356**⇓ *e*P **P** **00 26 57.4 +0.6**
HVS pmax pmax
comp=Z,15nm,1.4s
**IPAY Payeh 54.86 320** *e*P **P** **00 26 56.9 -1.7**
**MDJ Mudanjiang 54.97 26** P **P** **00 27 00.3 +1.4**
MDJ pP **pP** **00 27 06.5 -1.7**
MDJ sP **sP** **00 27 09.3 -2.6**
MDJ PcS **PcS** **00 32 01.3 +1.1**
MDJ S **S** **00 34 42.3 +3.4**
MDJ sS **sS** **00 34 53.5 -0.7**
MDJ PMZ
comp=Z,8.0nm,0.9s
MDJ PMZ
comp=Z,550nm,7.6s
MDJ LN
comp=Z,530nm,12.1s
MDJ LE
comp=Z,310nm,12.4s
MDJ LZ
comp=Z,670nm,13.9s
**IAKL Akhelmad 55.10 320** *e*P **P** **00 26 58.9 -1.5**
**TLY Talaya 55.11 3** *e*P **P** **00 27 00.6 +0.7**
TLY pmax pmax
comp=Z,16nm,1.3s
**IKRD Kardeh 55.37 320** *e*P P 00 26 56.3 -5.9
**HIA Hailar 55.44 16**⇑ *e*P **P** **00 27 02.1 -0.2**
HIA pmax pmax
comp=Z,9.0nm,1.2s
**USRK Ussuriysk Ar. 55.73 28** P **P** **00 27 04.0 -0.3**
comp=Z,18nm,0.9s,baz=218,slow=6.4,SNR=28
**ISFR Sfrayin 55.86 320** *e*P **P** **00 27 04.1 -1.7**
**ABKT Ailbek 56.31 321** P **P** **00 27 08.4 -0.4**
comp=Z,117nm,1.0s,SNR=8.6
**GEYT Alibeck 56.32 321** P **P** **00 27 07.9 -0.9**
comp=Z,14nm,0.9s,baz=148,slow=8.7,SNR=35
**OTUK Ortayu 56.77 339** P **P** **00 27 10.6 -1.2**
OTUK pmax pmax
comp=Z,25nm,0.8s
**KURK Kurchatov 56.94 344** P **P** **00 27 12.4 -0.5**
comp=Z,125nm,0.9s,SNR=13
**ZAA0 Zalesovo Array 58.58 350** P **P** **00 27 24.4 +0.1**
baz=59,SNR=15
**ZAA0 Zalesovo Array 58.58 350** *e*P **P** **00 27 23.2 -1.1**
**ZALV Zalesovo Beam 58.58 350** P **P** **00 27 23.7 -0.7**
comp=Z,36nm,0.8s,baz=182,slow=5.5,SNR=93
ZALV pP **pP** **00 27 33.5 -0.2**
comp=Z,14nm,0.7s,baz=191,slow=5.7,SNR=12
**ZALV Zalesovo Beam 58.58 350** *i* P **P** **00 27 24.0 -0.3**
ZALV pmax pmax
comp=Z,36nm,0.8s
**ZAA1 Zalesovo Array 58.58 350** *e*P **P** **00 27 23.7 -0.7**
**RAYN Ar Rayn 59.06 300** P **P** **00 27 28.9 +0.5**
comp=Z,40nm,1.2s,SNR=5.2
**RAYN Ar Rayn 59.06 300** *e*P **P** **00 27 28.0 -0.4**
comp=Z,6.7nm,1.0s
**KLR Kul'dur 59.52 24** *e*P P 00 27 27.0 -4.0
KLR pmax pmax
comp=Z,64nm,1.8s
**KRAR Krasnoyarsk 59.59 356**⇑ *e*P **P** **00 27 32.0 +0.7**
KRAR pmax pmax
comp=Z,47nm,1.1s
**NVS Novosibirsk 59.72 349**⇑ *i*P **P** **00 27 31.7 -0.5**
NVS *i* 00 27 41.1
NVS pmax pmax
comp=Z,24nm,1.3s
NVS pmax pmax
comp=N,19nm,1.5s
NVS pmax pmax
comp=E,13nm,1.5s
**IRAZ Razeghan 60.44 314** *e*P **P** **00 27 36.4 -1.5**
**BVA0 Borovoye Array 61.45 340** *i* P **P** **00 27 42.6 -1.5**
BVA0 pmax pmax
comp=Z,16nm,0.8s
**BVAR Borovoye Array 61.45 340** P **P** **00 27 42.6 -1.5**
comp=Z,7.4nm,0.6s,baz=145,slow=8.7,SNR=46
**BRVK Borovoye 61.51 340** *de*P **P** **00 27 43.5 -1.0**
BRVK pmax pmax
comp=Z,43nm,2.5s
**BRVK Borovoye 61.51 340** P **P** **00 27 43.1 -1.4**
comp=Z,81nm,0.7s,SNR=7.5
**BRVK Borovoye 61.51 340** *e*P **P** **00 27 43.3 -1.2**
comp=Z,28nm,1.3s
**ZRNK Zerenda 61.86 340** P **P** **00 27 44.5 -2.4**
ZRNK pmax pmax
comp=Z,18nm,1.2s
**CHKZ Chkalovo 61.92 341** P **P** **00 27 45.9 -1.3**
CHKZ pmax pmax
comp=Z,23nm,0.9s
**KMBO Kilima Mbogo 62.25 271** P **P** **00 27 49.8 -0.7**
comp=Z,1.9nm,0.9s,baz=65,slow=9.3,SNR=4.2
**KMBO Kilima Mbogo 62.25 271** *i* P **P** **00 27 51.7 +1.2**
**KMBO Kilima Mbogo 62.25 271** *e*P **P** **00 27 51.5 +0.9**
comp=Z,56nm,2.8s
**BOD Bodaibo 62.26 9** *e*P **P** **00 27 47.6 -1.8**
BOD pmax pmax
comp=Z,21nm,1.1s
**AB31 Akbulak array 62.75 332** *i* P **P** **00 27 51.5 -1.4**
AB31 pmax pmax
comp=Z,38nm,1.0s
**ABKAR Akbulak array 62.75 332** *e*P **P** **00 27 51.7 -1.2**
**YSS Yuzh-Sakhalins 63.03 32**⇓ *i*P **P** **00 27 54.0 -0.8**
YSS pmax pmax
comp=Z,30nm,0.9s
**GNI Garni 66.30 317**⇑ *e*P **P** **00 28 16.8 +0.3**
GNI pmax pmax
comp=Z,73nm,1.2s
**SVE Sverdlovsk 67.91 338**⇓ *i*P **P** **00 28 26.0 -0.2**
SVE pmax pmax
comp=Z,38nm,1.5s
**NCK Nalchik 68.59 320**⇑ *e*P **P** **00 28 30.7 0.0**
**MAW Mawson 68.69 194** P **P** **00 28 31.7 +0.8**
comp=Z,5.0nm,0.9s,baz=27,slow=9.9,SNR=11
MAW LR LR 00 51 13.9
comp=Z,193nm,21.9s,baz=58,slow=29
**MAW Mawson 68.69 194** *e*P **P** **00 28 31.7 +0.8**
MAW pmax pmax
comp=Z,1.0nm,0.9s
**MAW Mawson 68.69 194** P **P** **00 28 32.8 +1.9**
baz=69,SNR=8.6
**MAW Mawson 68.69 194** *e*P **P** **00 28 31.7 +0.8**
comp=Z,1.4nm,0.9s
**MBAR Mbarara 68.78 271** *e*P **P** **00 28 32.7 0.0**
MBAR pmax pmax
comp=Z,146nm,0.3s
**MBAR Mbarara 68.78 271** *e*P **P** **00 28 32.7 0.0**
comp=Z,146nm,0.3s
**NEY Neytrino 69.05 319**⇑ *e*P **P** **00 28 34.5 +0.7**
NEY pmax pmax
comp=Z,3.0nm,0.8s
**KBZ Khabaz 69.15 320** P **P** **00 28 33.7 -0.4**
comp=Z,15nm,0.8s,baz=120,slow=5.5,SNR=41
**YAK Yakutsk 69.33 15** *e*P **P** **00 28 34.1 -0.8**
YAK pmax pmax
comp=Z,53nm,1.0s
YAK pmax pmax
comp=N,24nm,1.3s
YAK pmax pmax
comp=E,21nm,1.5s
**KIV Kislovodsk 69.39 320** *e*P **P** **00 28 35.1 -0.7**
KIV pmax pmax
comp=Z,27nm,1.0s
**KIV Kislovodsk 69.39 320** P **P** **00 28 35.2 -0.6**
comp=Z,133nm,0.9s,SNR=7.8
**EIL Elat 69.94 303** P **P** **00 28 40.0 +0.7**
baz=70,SNR=8.8
**MALT Malatya 70.01 313**⇓ *e*P **P** **00 28 40.2 +0.4**
**MALT Malatya 70.01 313**⇓ *i*P **P** **00 28 40.2 +0.4**
**LSZ Lusaka 71.07 255** *e*P **P** **00 28 47.7 +1.0**
LSZ pmax pmax
comp=Z,24nm,1.7s
**LSZ Lusaka 71.07 255** *e*P **P** **00 28 47.7 +1.0**
comp=Z,24nm,1.7s
**SOC Sochi 71.17 318** *e*P **P** **00 28 45.1 -1.4**
SOC pmax pmax
comp=Z,21nm,0.9s
**CSS Prodhromos 72.78 308** *e*P **P** **00 28 55.4 -1.0**
comp=Z,12nm,1.3s
**VRH Novokhopyorsk 73.31 326** *e*P **P** **00 28 57.8 -1.4**
VRH pmax pmax
comp=Z,40nm,0.9s
VRH pmax pmax
comp=N,10.0nm,0.8s
VRH pmax pmax
comp=E,20nm,0.9s
**BR101 Keskin Array S 74.00 313** *e*P **P** **00 29 02.2 -1.5**
**BR131 Keskin Array S 74.00 313** P **P** **00 29 02.6 -1.1**
baz=74,SNR=7.5
**BRTR Keskin Array B 74.00 313** P **P** **00 29 02.2 -1.5**
comp=E,5.7nm,0.6s,baz=136,slow=7.0,SNR=50
**BRTR Keskin Array B 74.00 313** *i* P **P** **00 29 02.5 -1.2**
BRTR pmax pmax
comp=Z,6.0nm,0.6s
**BOSA Boshof 74.50 241** P **P** **00 29 06.4 -0.4**
comp=Z,3.4nm,0.9s,baz=105,slow=4.6,SNR=4.4
BOSA pP **pP** **00 29 16.6 +0.1**
comp=Z,6.5nm,0.8s,baz=104,slow=5.3,SNR=5.1
**VORD Divnogorie 74.57 325** *e*P **P** **00 29 05.2 -1.4**
VORD pmax pmax
comp=N,20nm,1.2s
VORD pmax pmax
comp=Z,10.0nm,1.2s
VORD pmax pmax
comp=E,30nm,1.1s
**VSR Storozhevoye 74.75 325** *e*P **P** **00 29 05.9 -1.7**
VSR pmax pmax
comp=N,8.0nm,0.9s
VSR pmax pmax
comp=E,20nm,0.9s
VSR pmax pmax
comp=Z,20nm,0.9s
**SIM Simferopol' 75.41 318** *ce*P **P** **00 29 11.2 -0.3**
SIM *e*PCP **PcP** **00 29 28.0 +3.4**
SIM pmax pmax
comp=Z,11nm,0.8s
**LPSR Galich'ya Gora 75.49 327** *e*P **P** **00 29 10.7 -1.1**
LPSR pmax pmax
comp=N,6.0nm,1.0s
LPSR pmax pmax
comp=E,10.0nm,1.0s
LPSR pmax pmax
comp=Z,10.0nm,1.0s
**SYO Syowa Base 76.27 199**⇑ *e*P **P** **00 29 16.4 +0.4**
**SEY Seymchan 77.22 22**⇑ *e*P **P** **00 29 21.9 +0.5**
**BKZ Black Stump Fm 77.68 129** *e*P **P** **00 29 24.8 +0.1**
comp=Z,16nm,0.6s
**OBN Obninsk 77.83 328** *de*P **P** **00 29 24.0 -1.0**
OBN *e* 00 29 34.5
OBN *e* 00 32 25.1
OBN pmax pmax
comp=Z,56nm,1.7s
**KLMR Klimovskoe 78.99 334** *e*P **P** **00 29 29.9 -1.4**
KLMR pmax pmax
comp=Z,35nm,1.4s
**TIRR Tirgusor 79.12 316** ⇑P **P** **00 29 32.0 -0.3**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| TIRR | Tirgusor | 79.12 | 316 | ⇑*i*P | | P | | 00 29 32.0 | -0.3 |
| IDI | Anoyia | 79.56 | 307 | *e*P | | P | | 00 29 35.2 | +0.2 |
| | comp=Z,19nm,0.9s | | | | | | | | |
| LEOM | Leova | 79.79 | 318 | ⇑P | | P | | 00 29 36.0 | +0.1 |
| LEOM | Leova | 79.79 | 318 | ⇑*i*P | | P | | 00 29 36.0 | +0.1 |
| AKASG | Malin Array Be | 80.40 | 323 | P | | P | | 00 29 37.7 | -1.4 |
| | comp=Z,1.1nm,0.6s,baz=90,slow=4.5,SNR=13 | | | | | | | | |
| AKASG | Malin Array Be | 80.40 | 323 | *i* P | | P | | 00 29 38.2 | -0.9 |
| AKASG | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| AKBB | Malin Array Si | 80.40 | 323 | *e*P | | P | | 00 29 37.7 | -1.4 |
| AKBB | Malin Array Si | 80.40 | 323 | *e*P | | P | | 00 29 37.7 | -1.4 |
| KIEV | Kiev | 80.40 | 323 | ⇑*e*P | | P | | 00 29 38.0 | -1.2 |
| KIEV | | | | pmax | pmax | | | | |
| | comp=Z,6.0nm,1.2s | | | | | | | | |
| VRI | Vrincioaia | 80.64 | 317 | ⇑P | | P | | 00 29 41.0 | +0.4 |
| VRI | Vrincioaia | 80.64 | 317 | ⇑*i*P | | P | | 00 29 41.0 | +0.4 |
| VNDA | Vanda | 80.76 | 169 | P | | P | | 00 29 40.3 | -0.4 |
| | comp=Z,1.9nm,1.0s,baz=286,slow=4.2,SNR=5.5 | | | | | | | | |
| TESR | Tescani | 80.86 | 318 | ⇓*i*P | | P | | 00 29 41.7 | -0.1 |
| ZIMR | | 81.04 | 315 | ⇑P | | P | | 00 29 43.4 | +0.7 |
| ZIMR | | 81.04 | 315 | ⇑*i*P | | P | | 00 29 43.4 | +0.7 |
| MLR | Muntele Rosu | 81.08 | 317 | ⇑P | | P | | 00 29 43.3 | +0.2 |
| MLR | Muntele Rosu | 81.08 | 317 | ⇑*i*P | | P | | 00 29 43.3 | +0.2 |
| TMCR | Tamitsa | 81.15 | 337 | *e*P | | P | | 00 29 42.6 | -0.3 |
| TMCR | | | | pmax | pmax | | | | |
| | comp=Z,26nm,0.8s | | | | | | | | |
| PRAR | RASCA | 81.36 | 319 | ⇑*i*P | | P | | 00 29 44.0 | -0.4 |
| DOPR | Dopca | 81.57 | 317 | ⇑*i*P | | P | | 00 29 43.8 | -1.8 |
| BURAR | Bucovina Array | 82.08 | 319 | ⇑P | | P | | 00 29 49.1 | +0.7 |
| BURAR | Bucovina Array | 82.08 | 319 | ⇑*i*P | | P | | 00 29 49.1 | +0.7 |
| BUR04 | Bucovina Ar. S | 82.09 | 319 | *e*P | | P | | 00 29 48.7 | +0.3 |
| DRGR | | 83.56 | 318 | ⇑P | | P | | 00 29 54.7 | -1.3 |
| DRGR | | 83.56 | 318 | ⇑*i*P | | P | | 00 29 54.7 | -1.3 |
| BZS | Buzias | 84.07 | 316 | ⇑P | | P | | 00 29 58.5 | 0.0 |
| BZS | Buzias | 84.07 | 316 | ⇑*i*P | | P | | 00 29 58.5 | 0.0 |
| VSU | Vasula | 84.07 | 330 | ⇑*e*P | | P | | 00 29 56.3 | -1.9 |
| VSU | | | | pmax | pmax | | | | |
| | comp=Z,81nm,2.5s | | | | | | | | |
| KWP | Kalwaria Pacla | 84.17 | 320 | ⇑P | | P | | 00 29 59.1 | +0.1 |
| KWP | Kalwaria Pacla | 84.17 | 320 | ⇑*i*P | | P | | 00 29 59.1 | +0.1 |
| KOLS | Kolonicke sedl | 84.30 | 320 | *e*P | | P | | 00 30 00.2 | +0.6 |
| KOLS | | | | pmax | pmax | | | | |
| | comp=Z,18nm,1.1s | | | | | | | | |
| KOLS | Kolonicke sedl | 84.30 | 320 | *e*P | | P | | 00 30 00.2 | +0.6 |
| BILL | Bilibino | 84.75 | 20 | *e*P | | P | | 00 30 01.3 | -0.2 |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| STHS | Stebnicka Huta | 85.06 | 320 | *e*P | | P | | 00 30 03.8 | +0.3 |
| STHS | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.0s | | | | | | | | |
| STHS | Stebnicka Huta | 85.06 | 320 | *e*P | | P | | 00 30 03.8 | +0.3 |
| FIA0 | FINESS Array S | 85.24 | 332 | *e*P | | P | | 00 30 04.1 | 0.0 |
| FIA0 | FINESS Array S | 85.24 | 332 | *e*P | | P | | 00 30 04.0 | 0.0 |
| FINES | FINESS Array B | 85.24 | 332 | P | | P | | 00 30 04.0 | 0.0 |
| | comp=Z,4.4nm,0.7s,baz=110,slow=6.2,SNR=25 | | | | | | | | |
| FINES | | | | pP | | pP | | 00 30 13.3 | -0.5 |
| | comp=Z,1.8nm,0.6s,baz=126,slow=8.4,SNR=3.4 | | | | | | | | |
| VYHS | Vyhne | 86.45 | 319 | *e*P | | P | | 00 30 09.9 | -0.5 |
| VYHS | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.5s | | | | | | | | |
| VYHS | Vyhne | 86.45 | 319 | *e*P | | P | | 00 30 09.9 | -0.5 |
| VYHS | | | | *e* | | | | 00 30 30.7 | |
| MORC | Moravsky Berou | 87.49 | 320 | *e*P | | P | | 00 30 15.8 | +0.3 |
| MORC | | | | pmax | pmax | | | | |
| | comp=Z,381nm,3.0s | | | | | | | | |
| MORC | Moravsky Berou | 87.49 | 320 | *e*P | | P | | 00 30 15.8 | +0.3 |
| | comp=Z,381nm,3.0s | | | | | | | | |
| ARA0 | ARCESS Array S | 87.74 | 340 | *e*P | | P | | 00 30 16.2 | 0.0 |
| ARCES | ARCESS Array B | 87.74 | 340 | P | | P | | 00 30 16.2 | 0.0 |
| | comp=Z,14nm,1.0s,baz=97,slow=5.8,SNR=13 | | | | | | | | |
| GEC2 | GERESS Array S | 89.87 | 319 | *e*P | | P | | 00 30 27.2 | +0.3 |
| GEC2 | GERESS Array S | 89.87 | 319 | *e*P | | P | | 00 30 27.1 | +0.3 |
| GERES | GERESS Array B | 89.87 | 319 | P | | P | | 00 30 27.1 | +0.3 |
| | comp=Z,2.4nm,0.8s,baz=97,slow=4.4,SNR=22 | | | | | | | | |
| BRG | Berggiesshubel | 89.92 | 321 | *e*P | | P | | 00 30 26.9 | +0.2 |
| | comp=Z,25nm,1.7s | | | | | | | | |
| | comp=N,564nm,16.5s | | | | | | | | |
| | comp=E,435nm,15.3s | | | | | | | | |
| | comp=Z,620nm,20.1s | | | | | | | | |
| BRG | Berggiesshubel | 89.92 | 321 | *e*P | | P | | 00 30 27.0 | +0.2 |
| BRG | | | | pmax | pmax | | | | |
| | comp=Z,25nm,1.7s | | | | | | | | |
| BRG | | | | MLR | MLR | | | | |
| | comp=N,564nm,16.5s | | | | | | | | |
| BRG | | | | MLR | MLR | | | | |
| | comp=E,435nm,15.3s | | | | | | | | |
| BRG | | | | MLR | MLR | | | | |
| | comp=Z,620nm,20.1s | | | | | | | | |
| CLL | Collm | 90.55 | 321 | *i* P | | P | | 00 30 29.5 | -0.2 |
| CLL | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| CLL | Collm | 90.55 | 321 | *i* P | | P | | 00 30 29.5 | -0.2 |
| | comp=Z,10.0nm,1.1s | | | | | | | | |
| KEST | Kesra | 92.18 | 305 | P | | P | | 00 30 38.9 | +1.1 |
| | comp=Z,7.6nm,0.8s,baz=0.8,slow=2.5,SNR=4.4 | | | | | | | | |
| NB2 | NORSAR Subarra | 92.24 | 331 | P | | P | | 00 30 36.4 | -1.0 |
| | comp=Z,6.1nm,1.0s,baz=92,slow=5.1 | | | | | | | | |
| NB200 | NORSAR Array S | 92.24 | 331 | *e*P | | P | | 00 30 36.4 | -1.0 |
| NOA | NORSAR Array B | 92.24 | 331 | P | | P | | 00 30 36.4 | -1.0 |
| | comp=Z,2.7nm,0.9s,baz=90,slow=5.0,SNR=5.2 | | | | | | | | |
| TAM | Tamanrasset | 95.03 | 292 | *e*P | | P | | 00 30 52.3 | +1.0 |
| TAM | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.9s | | | | | | | | |
| TAM | Tamanrasset | 95.03 | 292 | *e*P | | P | | 00 30 52.3 | +1.0 |
| | comp=Z,10.0nm,1.9s | | | | | | | | |
| TOA0 | Torodi Ar. Sit | 98.40 | 283 | *e*P | | P | | 00 31 05.9 | -0.7 |
| TORD | Torodi Ar. Bea | 98.40 | 283 | P | | P | | 00 31 05.9 | -0.7 |
| | comp=Z,0.8nm,0.8s,baz=95,slow=5.5,SNR=5.5 | | | | | | | | |
| TORD | | | | pP | | pP | | 00 31 15.6 | -0.8 |
| | comp=Z,0.6nm,0.9s,baz=94,slow=3.8,SNR=3.1 | | | | | | | | |
| EDM | Edmonton | 123.57 | 23 | *e*PKIKP | | PKPdf | | 00 36 23.9 | -1.3 |
| EDM | Edmonton | 123.57 | 23 | *e*PKPdf | | PKPdf | | 00 36 23.9 | -1.3 |
| EGMT | Eagleton | 129.04 | 25 | P | | PKPdf | | 00 36 35.3 | -0.6 |
| | baz=129 | | | | | | | | |
| DLMT | Dillon | 129.75 | 29 | *e*PKPdf | | PKPdf | | 00 36 38.4 | +1.0 |
| BOZ | Bozeman (W) | 130.00 | 28 | *e*PKIKP | | PKPdf | | 00 36 39.0 | +1.2 |
| BOZ | Bozeman (W) | 130.00 | 28 | P | | PKPdf | | 00 36 38.3 | +0.4 |
| | baz=130 | | | | | | | | |
| BOZ | Bozeman (W) | 130.00 | 28 | *e*PKPdf | | PKPdf | | 00 36 39.0 | +1.2 |
| HLID | Hailey | 130.09 | 32 | P | | PKPdf | | 00 36 38.6 | +0.5 |
| | baz=130 | | | | | | | | |
| HLID | Hailey | 130.09 | 32 | *e*PKPdf | | PKPdf | | 00 36 39.8 | +1.7 |
| NV01 | Mina Array Sit | 131.08 | 40 | *e*PKPdf | | PKPdf | | 00 36 41.6 | +1.4 |
| NVAR | Mina Array Bea | 131.08 | 40 | PKP | | PKPdf | | 00 36 41.6 | +1.4 |
| | comp=Z,1.1nm,0.6s,baz=268,slow=2.3,SNR=5.8 | | | | | | | | |
| MLI | Malad Range | 132.37 | 32 | *e*PKPpre | | PKPpre | | 00 36 34.8 | |
| MCU | Monte Cristo P | 133.10 | 32 | *e*PKPpre | | PKPpre | | 00 36 30.9 | |
| P18A | Preston Nutter | 135.08 | 33 | *e*PKPdf | | PKPdf | | 00 36 49.6 | +1.8 |
| WUAZ | Wupatki | 137.23 | 38 | *e*PKPdf | | PKPdf | | 00 36 53.4 | +1.6 |
| MVCO | Mesa Verde | 137.76 | 34 | *e*PKPpre | | PKPpre | | 00 36 45.3 | |
| CFAA | Coronel Fontan | 143.16 | 198 | PKP | | PKPdf | | 00 37 03.5 | +1.0 |
| | comp=Z,0.2nm,0.3s,baz=122,slow=3.6,SNR=4.2 | | | | | | | | |
| MNTX | Cornudas Mount | 143.49 | 37 | P | | PKPbc | | 00 37 00.8 | +0.6 |
| | baz=143 | | | | | | | | |
| MNTX | Cornudas Mount | 143.49 | 37 | *e*PKPdf | | PKPdf | | 00 37 01.7 | -1.2 |
| T35A | Sooner Cattle | 143.65 | 22 | P | | PKPab | | 00 36 59.8 | +0.1 |
| | baz=143 | | | | | | | | |
| V32A | Arapaho | 143.66 | 26 | P | | PKPbc | | 00 37 00.2 | -0.4 |
| | baz=143 | | | | | | | | |
| U34A | Anderson Ranch | 143.68 | 24 | P | | PKPbc | | 00 37 00.0 | -0.6 |
| | baz=144 | | | | | | | | |
| T36A | Boggs Farm, Ca | 143.76 | 21 | P | | PKPbc | | 00 37 00.9 | +0.1 |
| | baz=144 | | | | | | | | |
| V33A | Lossen Ranch, | 143.90 | 25 | P | | PKPbc | | 00 37 01.3 | 0.0 |
| | baz=144 | | | | | | | | |
| T37A | Cheneyville 18 | 144.03 | 20 | P | | PKPab | | 00 37 00.8 | -0.3 |
| | baz=144 | | | | | | | | |
| U35A | Pawnee | 144.05 | 23 | P | | PKPab | | 00 37 01.1 | -0.1 |
| | baz=144 | | | | | | | | |
| W32A | Sentinel | 144.07 | 27 | P | | PKPbc | | 00 37 01.4 | -0.5 |
| | baz=144 | | | | | | | | |
| X31A | McDonald Ranch | 144.14 | 28 | P | | PKPab | | 00 37 01.5 | -0.2 |
| | baz=144 | | | | | | | | |
| V34A | Guthrie | 144.21 | 24 | P | | PKPab | | 00 37 01.7 | -0.1 |
| | baz=144 | | | | | | | | |
| V34A | Guthrie | 144.21 | 24 | *e*PKPdf | | PKPbc | | 00 37 02.2 | 0.0 |
| OLIL | Olney | 144.28 | 10 | *e*PKPdf | | PKPbc | | 00 37 02.4 | +0.1 |
| Y30A | Stafford Cattl | 144.31 | 30 | P | | PKPbc | | 00 37 02.3 | -0.4 |
| | baz=144 | | | | | | | | |
| Z29A | Hungry Hill Ra | 144.39 | 31 | P | | PKPbc | | 00 37 03.0 | 0.0 |
| | baz=144 | | | | | | | | |
| W33A | Caddo, Fort Co | 144.39 | 26 | P | | PKPbc | | 00 37 03.0 | +0.1 |
| | baz=144 | | | | | | | | |
| U36A | Oologah | 144.40 | 21 | P | | PKPab | | 00 37 02.2 | -0.3 |
| | baz=144 | | | | | | | | |
| 128A | Castleberry Fa | 144.47 | 33 | P | | PKPbc | | 00 37 03.1 | -0.1 |
| | baz=144 | | | | | | | | |
| V35A | Meyer Ranch, C | 144.54 | 23 | P | | PKPab | | 00 37 02.8 | -0.3 |
| | baz=144 | | | | | | | | |
| Y31A | Rekieta Farm, | 144.55 | 29 | P | | PKPab | | 00 37 02.9 | -0.3 |
| | baz=144 | | | | | | | | |
| WMOK | Wichita Mounta | 144.60 | 27 | *e*PKIKP | | PKPab | | 00 37 02.8 | -0.6 |
| WMOK | Wichita Mounta | 144.60 | 27 | *e*PKPdf | | PKPab | | 00 37 02.8 | -0.6 |
| U37A | Salina | 144.61 | 21 | P | | PKPab | | 00 37 03.0 | -0.3 |
| | baz=144 | | | | | | | | |
| W34A | Bridge Creek, | 144.62 | 25 | P | | PKPbc | | 00 37 03.2 | -0.4 |
| | baz=144 | | | | | | | | |
| X32A | Elmer | 144.64 | 27 | P | | PKPab | | 00 37 02.7 | -0.8 |
| | baz=144 | | | | | | | | |
| Z30A | Sanderson Ranc | 144.66 | 31 | P | | PKPab | | 00 37 03.3 | -0.4 |
| | baz=144 | | | | | | | | |
| 228A | UT Block 9, Go | 144.79 | 34 | P | | PKPbc | | 00 37 04.3 | 0.0 |
| | baz=145 | | | | | | | | |
| 129A | Stewart Farms, | 144.79 | 32 | P | | PKPbc | | 00 37 04.1 | -0.2 |
| | baz=145 | | | | | | | | |
| TUL1 | Tulsa | 144.81 | 22 | P | | PKPab | | 00 37 03.2 | -0.8 |
| | baz=145 | | | | | | | | |
| TUL1 | Tulsa | 144.81 | 22 | *e*PKPdf | | PKPab | | 00 37 03.7 | -0.3 |
| U38A | Gravette | 144.83 | 20 | P | | PKPab | | 00 37 03.9 | -0.2 |
| | baz=145 | | | | | | | | |
| V36A | Jenks | 144.87 | 22 | P | | PKPab | | 00 37 03.8 | -0.4 |
| | baz=145 | | | | | | | | |
| X33A | Lawton | 144.89 | 26 | P | | PKPab | | 00 37 03.4 | -1.0 |
| | baz=145 | | | | | | | | |
| Y32A | R-V Farms, Ver | 144.91 | 28 | P | | PKPab | | 00 37 03.6 | -0.9 |
| | baz=145 | | | | | | | | |
| W35A | Tecumseh | 145.06 | 24 | P | | PKPbc | | 00 37 04.5 | -0.5 |
| | baz=145 | | | | | | | | |
| WCI | Wyandotte Cave | 145.06 | 8 | *e*PKIKP | | PKPbc | | 00 37 04.5 | -0.4 |
| WCI | Wyandotte Cave | 145.06 | 8 | *e*PKPbc | | PKPbc | | 00 37 04.5 | -0.4 |
| V37A | Hulbert | 145.07 | 21 | P | | PKPbc | | 00 37 04.2 | -0.8 |
| | baz=145 | | | | | | | | |
| USIN | University of | 145.10 | 10 | *e*PKPbc | | PKPdf | | 00 37 05.1 | -0.5 |
| X34A | Smith Ranch, M | 145.13 | 25 | P | | PKPbc | | 00 37 04.8 | -0.4 |
| | baz=145 | | | | | | | | |
| Z31A | Sharp Cattle R | 145.13 | 30 | P | | PKPbc | | 00 37 04.6 | -0.7 |
| | baz=145 | | | | | | | | |
| SLBS | Sierra La Lagu | 145.20 | 52 | *e*PKPbc | | PKPdf | | 00 37 07.7 | +1.5 |
| Y33A | Hilltop Ranch, | 145.28 | 27 | P | | PKPbc | | 00 37 04.8 | -0.9 |
| | baz=145 | | | | | | | | |
| 130A | Snyder | 145.29 | 31 | P | | PKPbc | | 00 37 05.4 | -0.5 |
| | baz=145 | | | | | | | | |
| W36A | Wetumka | 145.33 | 23 | P | | PKPbc | | 00 37 05.2 | -0.6 |
| | baz=145 | | | | | | | | |
| 229A | Bryant Ranch, | 145.34 | 33 | P | | PKPdf | | 00 37 06.1 | -0.1 |
| | baz=145 | | | | | | | | |
| V38A | Canehill | 145.35 | 20 | P | | PKPbc | | 00 37 04.8 | -1.1 |
| | baz=145 | | | | | | | | |
| Z32A | Haskell | 145.47 | 29 | P | | PKPbc | | 00 37 05.9 | -0.4 |
| | baz=145 | | | | | | | | |
| 131A | Roby | 145.53 | 30 | P | | PKPbc | | 00 37 06.4 | -0.2 |
| | baz=145 | | | | | | | | |
| 329A | Wagon Wheel Ra | 145.61 | 34 | P | | PKPab | | 00 37 07.0 | -0.2 |
| | baz=145 | | | | | | | | |
| W37A | Quinton | 145.63 | 22 | P | | PKPbc | | 00 37 06.6 | -0.2 |
| | baz=145 | | | | | | | | |
| X35A | Drake | 145.67 | 25 | P | | PKPdf | | 00 37 06.0 | -0.6 |
| | baz=145 | | | | | | | | |
| PBMO | Poplar Bluff | 145.67 | 14 | *e*PKPdf | | PKPdf | | 00 37 05.5 | -1.0 |
| Y34A | Reagan Ranch, | 145.71 | 26 | P | | PKPdf | | 00 37 06.1 | -0.6 |
| | baz=146 | | | | | | | | |
| 230A | Sterling City | 145.77 | 32 | P | | PKPbc | | 00 37 07.2 | -0.2 |
| | baz=146 | | | | | | | | |
| X36A | Centrahoma | 145.77 | 24 | P | | PKPbc | | 00 37 06.8 | -0.4 |
| | baz=146 | | | | | | | | |
| Z33A | Whitaker Ranch | 145.82 | 28 | P | | PKPdf | | 00 37 06.7 | -0.3 |
| | baz=146 | | | | | | | | |
| ABTX | Abilene, Hawle | 145.94 | 30 | P | | PKPbc | | 00 37 07.5 | -0.4 |
| | baz=146 | | | | | | | | |
| ABTX | Abilene, Hawle | 145.94 | 30 | *e*PKPdf | | PKPab | | 00 37 08.0 | -0.3 |
| W38A | Poteau | 146.02 | 21 | P | | PKPbc | | 00 37 07.6 | -0.4 |
| | baz=146 | | | | | | | | |
| Y35A | Marietta | 146.07 | 25 | P | | PKPdf | | 00 37 07.5 | +0.1 |
| | baz=146 | | | | | | | | |
| 330A | Mertzon | 146.11 | 33 | P | | PKPbc | | 00 37 08.1 | -0.3 |
| | baz=146 | | | | | | | | |
| Z34A | Collier Ranch, | 146.14 | 27 | P | | PKPab | | 00 37 08.8 | -0.2 |
| | baz=146 | | | | | | | | |
| 231A | Bronte | 146.15 | 31 | P | | PKPbc | | 00 37 08.3 | -0.3 |
| | baz=146 | | | | | | | | |
| TX31 | Lajitas Ar. Si | 146.20 | 38 | *e*PKPdf | | PKPdf | | 00 37 07.8 | -0.1 |
| TXAR | Lajitas Array | 146.20 | 38 | PKPbc | | PKPab | | 00 37 09.2 | -0.3 |
| | comp=Z,11nm,0.8s,baz=270,slow=0.9,SNR=84 | | | | | | | | |
| X38A | Whitesboro | 146.27 | 22 | P | | PKPab | | 00 37 09.1 | -0.4 |
| | baz=146 | | | | | | | | |
| 133A | Hamilton Ranch | 146.31 | 29 | P | | PKPbc | | 00 37 08.8 | -0.2 |
| | baz=146 | | | | | | | | |
| 429A | Davenport Ranc | 146.31 | 35 | P | | PKPbc | | 00 37 08.8 | -0.3 |
| | baz=146 | | | | | | | | |
| Y36A | Durant | 146.38 | 24 | P | | PKPdf | | 00 37 07.3 | -0.5 |
| | baz=146 | | | | | | | | |
| Z35A | Perchaven, San | 146.47 | 26 | P | | PKPbc | | 00 37 08.7 | -0.7 |
| | baz=146 | | | | | | | | |
| 529A | Stev Forest Ra | 146.49 | 36 | P | | PKPdf | | 00 37 08.6 | +0.3 |
| | baz=146 | | | | | | | | |
| 232A | Coleman | 146.53 | 30 | P | | PKPdf | | 00 37 08.4 | +0.2 |
| | baz=146 | | | | | | | | |
| 430A | Baggett Ranch, | 146.55 | 34 | P | | PKPbc | | 00 37 08.9 | -0.9 |
| | baz=146 | | | | | | | | |
| Y37A | Hugo | 146.58 | 23 | P | | PKPbc | | 00 37 08.8 | -0.9 |
| | baz=146 | | | | | | | | |
| 331A | San Angelo | 146.59 | 32 | P | | PKPdf | | 00 37 08.4 | 0.0 |
| | baz=146 | | | | | | | | |
| 233A | Rising Star | 146.80 | 29 | P | | PKPdf | | 00 37 09.2 | +0.5 |
| | baz=147 | | | | | | | | |
| MIAR | Mount Ida | 146.83 | 20 | *e*PKP2 | | PKPbc | | 00 37 10.4 | 0.0 |
| MIAR | Mount Ida | 146.83 | 20 | P | | PKPbc | | 00 37 09.5 | -0.8 |
| | baz=147 | | | | | | | | |
| MIAR | Mount Ida | 146.83 | 20 | *e*PKPdf | | PKPbc | | 00 37 10.4 | 0.0 |
| Z36A | Blue Ridge | 146.87 | 25 | P | | PKPbc | | 00 37 09.5 | -1.0 |
| | baz=147 | | | | | | | | |
| 332A | Millersview | 146.89 | 31 | P | | PKPbc | | 00 37 10.2 | -0.5 |
| | baz=147 | | | | | | | | |
| Y38A | Idabel | 146.97 | 22 | P | | PKPbc | | 00 37 10.3 | -0.5 |
| | baz=147 | | | | | | | | |
| 431A | Sonora | 146.98 | 33 | P | | PKPbc | | 00 37 10.5 | -0.5 |
| | baz=147 | | | | | | | | |
| 530A | J-D Ranch, Com | 146.98 | 34 | P | | PKPbc | | 00 37 11.2 | +0.2 |
| | baz=147 | | | | | | | | |
| TZTN | Tazewell | 147.03 | 5 | *e*PKPdf | | PKPbc | | 00 37 10.5 | -0.4 |
| 234A | Clairette | 147.18 | 28 | P | | PKPbc | | 00 37 11.2 | -0.3 |
| | baz=147 | | | | | | | | |
| Y39A | Lockesburg | 147.19 | 21 | P | | PKPbc | | 00 37 10.9 | -0.5 |
| | baz=147 | | | | | | | | |
| 432A | Menard | 147.26 | 32 | P | | PKPbc | | 00 37 11.5 | -0.3 |
| | baz=147 | | | | | | | | |
| 333A | Richland Sprin | 147.32 | 30 | P | | PKPbc | | 00 37 11.6 | -0.3 |
| | baz=147 | | | | | | | | |
| 531A | Rocksprings | 147.41 | 33 | P | | PKPbc | | 00 37 12.0 | -0.2 |
| | baz=147 | | | | | | | | |
| JCT | Junction City | 147.57 | 32 | *e*PKP2 | | PKPdf | | 00 37 10.7 | +0.6 |
| JCT | Junction City | 147.57 | 32 | P | | PKPbc | | 00 37 12.5 | -0.2 |
| | baz=147 | | | | | | | | |
| JCT | Junction City | 147.57 | 32 | *e*PKPdf | | PKPdf | | 00 37 10.7 | +0.6 |
| 334A | Lometa | 147.68 | 29 | P | | PKPbc | | 00 37 12.4 | -0.5 |
| | baz=148 | | | | | | | | |
| 433A | Art | 147.72 | 31 | P | | PKPbc | | 00 37 12.5 | -0.6 |
| | baz=148 | | | | | | | | |
| 532A | Rocksprings | 147.79 | 33 | P | | PKPbc | | 00 37 12.8 | -0.5 |
| | baz=148 | | | | | | | | |
| TKL | Tuckaleechee C | 147.89 | 5 | *e*PKP2 | | PKPbc | | 00 37 12.9 | -0.4 |
| TKL | Tuckaleechee C | 147.89 | 5 | *e*PKPbc | | PKPbc | | 00 37 12.9 | -0.4 |
| 631A | Perdido Creek | 147.97 | 34 | P | | PKPdf | | 00 37 11.9 | +1.2 |
| | baz=148 | | | | | | | | |
| CPCT | Cooper Cave | 148.02 | 6 | *e*PKPbc | | PKPbc | | 00 37 13.4 | -0.3 |
| SWET | Sewanee | 148.07 | 8 | *e*PKPdf | | PKPbc | | 00 37 13.0 | -0.9 |
| OXF | Oxford | 148.08 | 14 | *e*PKP2 | | PKPbc | | 00 37 13.2 | -0.6 |
| OXF | Oxford | 148.08 | 14 | *e*PKPbc | | PKPbc | | 00 37 13.2 | -0.6 |
| 434A | Burnet | 148.09 | 30 | P | | PKPbc | | 00 37 13.2 | -0.9 |
| | baz=148 | | | | | | | | |
| 335A | Moody | 148.11 | 28 | P | | PKPbc | | 00 37 13.8 | -0.2 |
| | baz=148 | | | | | | | | |
| 237A | Washetta, Mont | 148.23 | 25 | P | | PKPbc | | 00 37 14.4 | +0.1 |
| | baz=148 | | | | | | | | |
| 336A | Riesel | 148.29 | 27 | P | | PKPbc | | 00 37 14.4 | 0.0 |
| | baz=148 | | | | | | | | |
| 533A | Kerrville | 148.30 | 32 | P | | PKPbc | | 00 37 14.3 | -0.4 |
| | baz=148 | | | | | | | | |
| 632A | Uvalde | 148.34 | 33 | P | | PKPbc | | 00 37 14.6 | -0.1 |
| | baz=148 | | | | | | | | |
| 534A | Blanco | 148.62 | 31 | P | | PKPbc | | 00 37 14.7 | -0.7 |
| | baz=148 | | | | | | | | |
| 633A | Saathoff Ranch | 148.70 | 33 | P | | PKPbc | | 00 37 15.8 | +0.2 |
| | baz=148 | | | | | | | | |
| 239A | Gary | 148.76 | 23 | P | | PKPbc | | 00 37 15.6 | -0.1 |
| | baz=148 | | | | | | | | |
| 337A | Centerville | 148.78 | 26 | P | | PKPbc | | 00 37 15.8 | 0.0 |
| | baz=149 | | | | | | | | |
| 732A | Laxson Ranch, | 148.83 | 34 | P | | PKPbc | | 00 37 16.0 | 0.0 |
| | baz=149 | | | | | | | | |
| 436A | Wall Ranch, Ga | 148.84 | 28 | P | | PKPbc | | 00 37 16.3 | +0.4 |
| | baz=149 | | | | | | | | |
| 338A | Crockett | 149.00 | 25 | P | | PKPbc | | 00 37 16.9 | +0.6 |
| | baz=149 | | | | | | | | |
| 535A | Dale | 149.08 | 30 | P | | PKPbc | | 00 37 17.1 | +0.6 |
| | baz=149 | | | | | | | | |
| 832A | Faith Ranch, C | 149.17 | 35 | P | | PKPbc | | 00 37 17.1 | +0.3 |
| | baz=149 | | | | | | | | |
| 733A | Divot King Ran | 149.22 | 34 | P | | PKPbc | | 00 37 17.2 | +0.2 |
| | baz=149 | | | | | | | | |
| 339A | Huntington | 149.33 | 24 | P | | PKPbc | | 00 37 17.4 | +0.3 |
| | baz=149 | | | | | | | | |
| JSC | Jenkinsville | 149.40 | 1 | *e*PKP2 | | PKPbc | | 00 37 17.0 | -0.2 |
| JSC | Jenkinsville | 149.40 | 1 | *e*PKPbc | | PKPbc | | 00 37 17.0 | -0.2 |
| 438A | Sam Houston St | 149.45 | 26 | P | | PKPbc | | 00 37 17.9 | +0.5 |
| | baz=149 | | | | | | | | |
| 635A | Leesville | 149.50 | 31 | P | | PKPbc | | 00 37 18.2 | +0.6 |
| | baz=149 | | | | | | | | |
| 340A | Bronson | 149.52 | 23 | P | | PKPbc | | 00 37 17.5 | -0.1 |
| | baz=149 | | | | | | | | |
| 636A | Smothers Creek | 149.78 | 30 | P | | PKPbc | | 00 37 19.6 | +1.3 |
| | baz=150 | | | | | | | | |
| 735A | Kenedy | 149.91 | 31 | P | | PKPbc | | 00 37 19.6 | +0.9 |
| | baz=150 | | | | | | | | |
| VBMS | Vicksburg | 149.95 | 17 | P | | PKPbc | | 00 37 19.1 | +0.5 |
| | baz=150 | | | | | | | | |
| 933A | Laredo | 150.08 | 35 | P | | PKPbc | | 00 37 19.7 | +0.6 |
| | baz=150 | | | | | | | | |
| 834A | Tilden | 150.09 | 33 | P | | PKPbc | | 00 37 20.2 | +1.1 |
| | baz=150 | | | | | | | | |
| 440A | Kirbyville | 150.09 | 24 | P | | PKPbc | | 00 37 19.3 | +0.3 |
| | baz=150 | | | | | | | | |
| GOGA | Godfrey | 150.14 | 5 | *e*PKIKP | | PKPbc | | 00 37 19.1 | 0.0 |
| GOGA | Godfrey | 150.14 | 5 | *e*PKPbc | | PKPbc | | 00 37 19.1 | 0.0 |
| 736A | Circle Diamond | 150.21 | 30 | P | | PKPbc | | 00 37 20.7 | +1.3 |
| | baz=150 | | | | | | | | |
| 835A | Beeville | 150.35 | 32 | P | | PKPbc | | 00 37 21.4 | +1.7 |
| | baz=150 | | | | | | | | |
| 934A | Benavides | 150.51 | 34 | P | | PKPbc | | 00 37 21.7 | +1.6 |
| | baz=150 | | | | | | | | |
| 034A | Hebbronville | 150.84 | 35 | P | | PKPbc | | 00 37 22.2 | +1.3 |
| | baz=151 | | | | | | | | |
| LPAZ | La Paz | 156.83 | 211 | *e*PKIKP | | PKPdf | | 00 37 25.7 | +0.9 |
| LPAZ | La Paz | 156.83 | 211 | *e*PKPdf | | PKPdf | | 00 37 25.7 | +0.9 |
| OTAV | Otavalo | 176.15 | 212 | *e*PKPdf | | PKPdf | | 00 37 39.9 | +0.3 |

*ISCJB **27** 00:35:13.7±1.2, 6.7S±0.1×129.3E±0.1, h10km, mb3.6/1, Error ellipse: s-maj=21.4km s-min=11.3km az=149.1*
*IDC **27** 00:35:14.8±2.1, 6.6S×129.2E, h0km, mb3.7/1, mb1 3.7/3, mb1mx3.4/24, mbtmp3.6/3, ML3.7/2, Error ellipse: s-maj=54.5km s-min=31.3km az=75.0*
*AUST **27** 00:35:26.8±0.0, 7.0S×128.3E, h196km, Error ellipse: s-maj=1.3km s-min=1.0km az=258.0*

**ISC 27 00:35:16.0**±1.5, **6.7S**±0.1×**129.3E**±0.2, **h10**km, **n11,** σ1**§51**/8, **Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| FAKI | Fak Fak | 4.76 | 38 | P | | Pg | 00 36 54.1 | +6.9 |
| | baz=5.7,SNR=16 | | | | | | | |
| SOEI | Soe | 5.84 | 238 | P | | Pn | 00 36 44.2 | +1.4 |
| | baz=4.9,SNR=7.2 | | | | | | | |
| MTN | Manton Dam | 6.37 | 164 | P | | Pn | 00 36 57.5 | +7.5 |
| | baz=6.4,SNR=8.7 | | | | | | | |
| BATI | Baumata | 6.58 | 238 | Pn | | Pn | 00 36 53.1 | +0.2 |
| | baz=69,slow=16 | | | | | | | |
| KDU | Kakadu | 6.72 | 153 | P | | Pb | 00 37 04.2 | -8.8 |
| | baz=6.9,SNR=25 | | | | | | | |
| LUWI | Luwuk | 8.60 | 310 | P | | Pn | 00 37 20.2 | -0.4 |
| | baz=8.2,SNR=4.3 | | | | | | | |
| KNRA | Kununurra | 8.94 | 183 | P | | Pn | 00 37 26.5 | +1.2 |
| | baz=8.6,SNR=4.8 | | | | | | | |
| WRA | Warramunga Arr | 14.05 | 160 | Pn | | Pn | 00 38 36.0 | +0.8 |
| | 0.4nm,0.3s,baz=343,slow=13,SNR=18 | | | | | | | |
| WRA | | | | Sn | | Sn | 00 41 00.2 | -11 |
| | 0.9nm,0.3s,baz=332,slow=24,SNR=9.2 | | | | | | | |
| ASAR | Alice Springs | 17.45 | 166 | P | | P | 00 39 20.4 | -0.4 |
| | 0.3nm,0.3s,baz=336,slow=11,SNR=16 | | | | | | | |
| ASAR | | | | S | | Sn | 00 42 22.1 | -12 |
| | 0.2nm,0.3s,baz=324,slow=18,SNR=4.0 | | | | | | | |
| WRKA | War

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **UPC** | **Upice** | **2.03** | **283** | *e*SG | **Sb** | **00 41 57.3** | **-0.5** |
| | comp=Z,30nm,0.4s | | | | | | | |
| **UPC** | **Upice** | **2.03** | **283** | Sg | **Sb** | **00 41 57.3** | **-0.5** |
| | 30nm,0.4s | | | | | | | |
| **KRUC** | **Moravsky** | **2.05** | **241** | *e*Pn | **Pn** | **00 41 28.8** | **-1.1** |
| KRUC | | | | *e*Sg | **Sb** | **00 41 58.8** | **+0.6** |
| | 38nm,0.7s | | | | | | | |
| **PSZ** | **Piszkesteto** | **2.24** | **166** | ⇓*i*P | **Pn** | **00 41 32.7** | **+0.2** |
| **PSZ** | **Piszkesteto** | **2.24** | **166** | ⇓*i*P | **Pn** | **00 41 32.7** | **+0.2** |
| PSZ | | | | *e*Sn | **Sn** | **00 41 59.6** | **-1.3** |
| **KOLS** | **Kolonicke sedl** | **2.36** | **118** | *e*PN | **Pn** | **00 41 34.2** | **0.0** |
| KOLS | | | | *e* | | 00 41 40.0 | | |
| **KOLS** | **Kolonicke sedl** | **2.36** | **118** | *e*SN | **Sn** | **00 42 05.1** | **+1.2** |
| **KOLS** | **Kolonicke sedl** | **2.36** | **118** | *e*Pn | **Pn** | **00 41 34.2** | **0.0** |
| KOLS | | | | *e*Sn | **Sn** | **00 42 05.1** | **+1.2** |
| **KWP** | **Kalwaria Pacla** | **2.37** | **100** | ⇓*i*P | **Pb** | **00 41 36.7** | **-1.0** |
| **KWP** | **Kalwaria Pacla** | **2.37** | **100** | S | **Sb** | **00 42 07.1** | **-0.4** |
| **KWP** | **Kalwaria Pacla** | **2.37** | **100** | ⇓*i*P | **Pb** | **00 41 36.7** | **-1.0** |
| **PVCC** | **Panska Ves** | **2.94** | **280** | *e*SG | **Sg** | **00 42 27.8** | **-0.9** |
| | comp=Z,26nm,0.4s | | | | | | | |
| **PVCC** | **Panska Ves** | **2.94** | **280** | Sg | **Sg** | **00 42 27.8** | **-0.9** |
| | 26nm,0.4s | | | | | | | |
| **PRU** | **Pruhonice** | **2.95** | **270** | *e*PG | **Pb** | **00 41 48.0** | **+0.4** |
| PRU | | | | *e*SG | **Sb** | **00 42 26.2** | **+2.1** |
| | comp=Z,15nm,0.5s | | | | | | | |
| **PRU** | **Pruhonice** | **2.95** | **270** | Pg | **Pb** | **00 41 48.0** | **+0.4** |
| PRU | | | | Sg | **Sb** | **00 42 26.2** | **+2.1** |
| | 15nm,0.5s | | | | | | | |
| **CONA** | **Conrad Observa** | **3.04** | **226** | ⇓*i*Pg | **Pb** | **00 41 48.7** | **-0.6** |
| CONA | | | | ⇑*i*Sg | **Sb** | **00 42 27.7** | **+0.7** |
| | 8.5nm,0.6s | | | | | | | |
| **CONA** | **Conrad Observa** | **3.04** | **226** | Pg | **Pb** | **00 41 48.7** | **-0.6** |
| CONA | | | | Sg | **Sb** | **00 42 27.7** | **+0.7** |
| | 8.5nm,0.6s | | | | | | | |
| **BRG** | **Berggiesshubel** | **3.39** | **285** | PG | **Pg** | **00 42 01.3** | **+2.1** |
| BRG | | | | SG | **Sg** | **00 42 42.7** | **-0.4** |
| | 11nm,0.7s | | | | | | | |
| **KHC** | **Kasperske Hory** | **3.73** | **257** | *e*PN | **Pn** | **00 41 53.1** | **+0.1** |
| KHC | | | | *e*PG | **Pb** | **00 42 01.7** | **+0.9** |
| KHC | | | | *e*SG | **Sg** | **00 42 53.1** | **-0.7** |
| | comp=Z,14nm,0.6s | | | | | | | |
| **KHC** | **Kasperske Hory** | **3.73** | **257** | Pn | **Pn** | **00 41 53.1** | **+0.1** |
| KHC | | | | Sg | **Sg** | **00 42 53.1** | **-0.7** |
| | 14nm,0.6s | | | | | | | |
| **GERES** | **GERESS Array B** | **3.74** | **253** | Pn | **Pn** | **00 41 53.8** | **+0.6** |
| | 0.1nm,0.3s,baz=76,slow=13,SNR=4.6 | | | | | | | |
| GERES | | | | Pg | **Pb** | **00 42 03.2** | **+2.0** |
| | 0.5nm,0.3s,baz=64,slow=17,SNR=9.3 | | | | | | | |
| GERES | | | | Lg | Lg | 00 42 51.7 | | |
| | 2.6nm,0.3s,baz=66,slow=27,SNR=12 | | | | | | | |
| **MOA** | **Molln** | **3.90** | **237** | ⇓*i*Pn | **Pn** | **00 41 53.7** | **-1.7** |
| MOA | | | | ⇑*i*Sg | **Sg** | **00 42 57.6** | **-1.9** |
| | 8.7nm,0.6s | | | | | | | |
| **MOA** | **Molln** | **3.90** | **237** | Pn | **Pn** | **00 41 53.7** | **-1.7** |
| MOA | | | | Sg | **Sg** | **00 42 57.6** | **-1.9** |
| | 8.7nm,0.6s | | | | | | | |
| **CLL** | **Collm** | **4.07** | **290** | *e*(Pg) | Pg | 00 42 17.0 | +4.9 |
| CLL | | | | *i* Sg | **Sg** | **00 43 05.4** | **+0.5** |
| | comp=Z,11nm,0.5s | | | | | | | |
| **DRGR** | | **4.08** | **143** | ⇑*i*P | **Pn** | **00 41 57.3** | **-0.6** |
| **DRGR** | | **4.08** | **143** | S | **Sn** | **00 42 46.8** | **+0.5** |
| **DRGR** | | **4.08** | **143** | ⇑*i*P | **Pn** | **00 41 57.3** | **-0.6** |
| DRGR | | | | S | **Sn** | **00 42 46.8** | **+0.5** |
| **BURAR** | **Bucovina Array** | **4.73** | **119** | ⇑*i*P | **Pn** | **00 42 06.7** | **-0.1** |
| **BURAR** | **Bucovina Array** | **4.73** | **119** | S | **Sn** | **00 43 04.0** | **+1.6** |
| **BURAR** | **Bucovina Array** | **4.73** | **119** | ⇑*i*P | **Pn** | **00 42 06.7** | **-0.1** |
| BURAR | | | | S | **Sn** | **00 43 04.0** | **+1.6** |
| **GZR** | **Gura Zlata** | **5.31** | **151** | ⇑*i*P | **Pn** | **00 42 15.0** | **+0.2** |
| **GZR** | **Gura Zlata** | **5.31** | **151** | ⇑*i*P | **Pn** | **00 42 15.0** | **+0.2** |
| **BSD** | **Bornholm Skovb** | **5.64** | **335** | *i* P | **Sn** | **00 43 19.4** | **-5.2** |
| BSD | | | | *i* S | **Sn** | **00 43 19.4** | **-5.2** |
| **BSD** | **Bornholm Skovb** | **5.64** | **335** | *e*P | **Pn** | **00 42 18.4** | **-0.8** |
| | SNR=46 | | | | | | | |
| **HFS** | **Hagfors** | **10.53** | **345** | Pn | **Pn** | **00 43 24.7** | **-1.4** |
| | comp=Z,0.1nm,0.3s,baz=134,slow=10,SNR=4.0 | | | | | | | |
| **FINES** | **FINESS Array B** | **12.02** | **16** | Pn | Pn | 00 43 41.6 | -5.0 |
| | comp=Z,0.1nm,0.3s,baz=192,slow=12,SNR=3.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **19.75** | **7** | P | **P** | **00 45 25.7** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=191,slow=13,SNR=3.4 | | | | | | | |

*CSEM* ***27*** *01:04:29.2±0.2, 44.˚46N×17.˚81E, h2km, ML2.5, Error ellipse: s-maj=4.3km s-min=2.9km az=63.0*
*BEO* ***27*** *01:04:29.4±0.3, 44.˚45N×17.˚74E, h12km±2km, ML2.5/1*
*PDG* ***27*** *01:04:29.4±0.4, 44.˚46N×17.˚77E, h15km±2km, ML2.9/8, Error ellipse: s-maj=1.9km s-min=1.6km az=90.0*

**ISC 27 01:04:29.7±1.1, 44˚45N±0˚02×17˚77E±0˚03, h13km±9km, n51, σ0§82/84, 15C-7D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BLY** | **Banja Luka** | **0.52** | **306** | ⇓*i*Pg | **Pg** | **01 04 39.4** | **-0.4** |
| BLY | | | | *i* Sg | **Sg** | **01 04 47.0** | **+0.2** |
| **BLY** | **Banja Luka** | **0.52** | **306** | ⇓*i*Pg | **Pg** | **01 04 39.4** | **-0.4** |
| BLY | | | | *i* Sg | **Sg** | **01 04 47.0** | **+0.2** |
| **TEKS** | **Tekeris** | **1.26** | **85** | ⇑*i*Pg | **Pn** | **01 04 52.8** | **-0.2** |
| TEKS | | | | *i* Sg | **Sb** | **01 05 09.1** | **-0.4** |
| **TEKS** | **Tekeris** | **1.26** | **85** | ⇑*i*Pg | **Pn** | **01 04 52.8** | **-0.2** |
| TEKS | | | | *i* Sg | **Sb** | **01 05 09.1** | **-0.4** |
| **BBLS** | **Lazići** | **1.31** | **116** | *e*Pg | **Pn** | **01 04 53.1** | **-0.6** |
| BBLS | | | | *i* Sg | **Sn** | **01 05 11.3** | **+0.2** |
| **BBLS** | **Lazići** | **1.31** | **116** | *e*Pg | **Pn** | **01 04 53.1** | **-0.6** |
| BBLS | | | | *i* Sg | **Sn** | **01 05 11.3** | **+0.2** |
| **UPM** | **Unac-Piva** | **1.49** | **146** | ⇑*i*Pg | **Pn** | **01 04 56.5** | **+0.2** |
| UPM | | | | *e*Sg | **Sg** | **01 05 18.7** | **+1.1** |
| **UPM** | **Unac-Piva** | **1.49** | **146** | ⇑*i*Pg | **Pn** | **01 04 56.5** | **+0.2** |
| UPM | | | | *e*Sg | **Sg** | **01 05 18.7** | **+1.1** |
| **STON** | **Ston** | **1.57** | **182** | ⇑*i*Pn | **Pn** | **01 04 55.8** | **-1.5** |
| STON | | | | *e*Sn | **Sn** | **01 05 17.6** | **+0.1** |
| **FGSL** | **Fruska Gora** | **1.61** | **63** | *e*Pg | **Pb** | **01 04 59.6** | **+0.2** |
| FGSL | | | | *e*Sg | **Sg** | **01 05 21.1** | **-0.6** |
| **FRGS** | **Fruska Gora** | **1.61** | **63** | *e*Pg | **Pb** | **01 04 59.6** | **+0.2** |
| FRGS | | | | *e*Sg | **Sg** | **01 05 21.1** | **-0.6** |
| **PLE** | **Pljevlja** | **1.62** | **133** | ⇓*i*Pn | **Pb** | **01 04 59.2** | **-0.2** |
| PLE | | | | *e*Sn | **Sg** | **01 05 22.2** | **+0.5** |
| **PLE** | **Pljevlja** | **1.62** | **133** | ⇓*i*Pn | **Pb** | **01 04 59.2** | **-0.2** |
| PLE | | | | *e*Sn | **Sg** | **01 05 22.2** | **+0.5** |
| **DIVS** | **Divibare** | **1.63** | **102** | ⇑*i*Pg | **Pb** | **01 04 59.7** | **0.0** |
| DIVS | | | | *e*Sg | **Sg** | **01 05 22.3** | **+0.1** |
| **DIVS** | **Divibare** | **1.63** | **102** | ⇑*i*Pg | **Pb** | **01 04 59.7** | **0.0** |
| DIVS | | | | *e*Sg | **Sg** | **01 05 22.3** | **+0.1** |
| **NKME** | **Niksic** | **1.89** | **153** | ⇑*i*Pn | **Pn** | **01 05 02.2** | **+0.6** |
| NKME | | | | *e*Sn | **Sb** | **01 05 28.3** | **+0.9** |
| **NKME** | **Niksic** | **1.89** | **153** | ⇑*i*Pn | **Pn** | **01 05 02.2** | **+0.6** |
| NKME | | | | *e*Sn | **Sb** | **01 05 28.3** | **+0.9** |
| **TRUS** | **Trudelj** | **1.90** | **96** | *e*Pn | **Pn** | **01 05 01.8** | **0.0** |
| TRUS | | | | *e*Sn | **Sn** | **01 05 24.8** | **-0.9** |
| **TRUS** | **Trudelj** | **1.90** | **96** | *e*Pn | **Pn** | **01 05 01.8** | **0.0** |
| TRUS | | | | *e*Sn | **Sn** | **01 05 24.8** | **-0.9** |
| **IVAS** | **Ivanjica** | **1.93** | **116** | *e*Pn | **Pn** | **01 05 02.9** | **+0.7** |
| IVAS | | | | *e*Sn | **Sn** | **01 05 27.0** | **+0.7** |
| **IVAS** | **Ivanjica** | **1.93** | **116** | *e*Pn | **Pn** | **01 05 02.9** | **+0.7** |
| IVAS | | | | *e*Sn | **Sn** | **01 05 27.0** | **+0.7** |
| **SJES** | **Sjenica** | **1.98** | **126** | *e*Pn | **Pn** | **01 05 03.7** | **+0.7** |
| **HCY** | **Herceg Novi** | **2.07** | **165** | *e*Pn | **Pn** | **01 05 04.1** | **0.0** |
| HCY | | | | *e*Sn | **Sb** | **01 05 31.8** | **-0.8** |
| **HCY** | **Herceg Novi** | **2.07** | **165** | *e*Pn | **Pn** | **01 05 04.1** | **0.0** |
| **GRUS** | **Gruza** | **2.19** | **104** | *e*Pn | **Pn** | **01 05 06.0** | **+0.2** |
| **GRUS** | **Gruza** | **2.19** | **104** | *e*Pn | **Pn** | **01 05 06.0** | **+0.2** |
| **BEY** | **Berane** | **2.20** | **135** | *e*Pn | **Pn** | **01 05 07.7** | **+1.7** |
| BEY | | | | *e*Sn | **Sb** | **01 05 36.4** | **-0.2** |
| **IVA** | **Berane** | **2.20** | **135** | *e*Pn | **Pn** | **01 05 07.7** | **+1.7** |
| IVA | | | | *e*Sn | **Sb** | **01 05 36.4** | **-0.2** |
| **PDG** | **Podgorica** | **2.29** | **151** | ⇑*i*Pn | **Pn** | **01 05 08.1** | **+1.0** |
| PDG | | | | *e*Sn | **Sb** | **01 05 37.8** | **-1.1** |
| **TTG** | **Podgorica** | **2.29** | **151** | ⇑*i*Pn | **Pn** | **01 05 08.1** | **+1.0** |
| TTG | | | | *e*Sn | **Sb** | **01 05 37.8** | **-1.1** |
| **BUM** | **Brajici-Budva** | **2.29** | **159** | ⇑*i*Pn | **Pn** | **01 05 08.0** | **+0.7** |
| BUM | | | | *e*Sn | **Sb** | **01 05 38.6** | **-0.7** |
| **BUM** | **Brajici-Budva** | **2.29** | **159** | ⇑*i*Pn | **Pn** | **01 05 08.0** | **+0.7** |
| **PVY** | **Plav** | **2.44** | **139** | ⇓*i*Pn | **Pn** | **01 05 10.2** | **+0.9** |
| PVY | | | | *e*Sn | **Sb** | **01 05 41.4** | **-2.1** |
| **DRME** | **Dracevica, Mon** | **2.48** | **155** | ⇑*i*Pn | **Pn** | **01 05 11.0** | **+1.2** |
| DRME | | | | *e*Sn | **Sb** | **01 05 43.4** | **-1.2** |
| **DRME** | **Dracevica, Mon** | **2.48** | **155** | ⇑*i*Pn | **Pn** | **01 05 11.0** | **+1.2** |
| **SELS** | **Selova** | **2.71** | **116** | *e*Pn | **Pn** | **01 05 12.9** | **-0.1** |
| **KUBS** | **Kucevo** | **2.80** | **89** | *e*Pn | **Pn** | **01 05 15.7** | **+1.6** |
| **KUBS** | **Kucevo** | **2.80** | **89** | *e*Pn | **Pn** | **01 05 15.7** | **+1.6** |
| **PKST** | **T"s** | **2.82** | **4** | ⇓*e*Pn | **Pn** | **01 05 15.4** | **+1.0** |
| **PKST** | **T"s** | **2.82** | **4** | *e*Pg | **Pb** | **01 05 19.8** | **-0.1** |
| **CSKK** | **Cs˘‡kako** | **2.94** | **6** | *e* | **Pn** | **01 05 17.5** | **+1.5** |
| **CSKK** | **Cs˘‡kako** | **2.94** | **6** | *e*Pn | **Pn** | **01 05 17.5** | **+1.5** |
| **BZS** | **Buzias** | **2.97** | **65** | *e*Pn | **Pn** | **01 05 17.0** | **+0.6** |
| BZS | | | | *i* Sn | **Sn** | **01 05 51.6** | **-0.3** |
| **BZS** | **Buzias** | **2.97** | **65** | *e*Pn | **Pn** | **01 05 17.0** | **+0.6** |
| BZS | | | | *i* Sn | **Sn** | **01 05 51.6** | **-0.3** |
| **PKSG** | | **2.98** | **8** | *e*Pn | **Pn** | **01 05 18.0** | **+1.4** |
| **BARS** | **Barje** | **3.36** | **118** | *e*Pn | **Pn** | **01 05 21.9** | **+0.1** |
| **BARS** | **Barje** | **3.36** | **118** | *e*Pn | **Pn** | **01 05 21.9** | **+0.1** |
| **ZAPS** | **Zavoj** | **3.71** | **107** | *e*Pn | **Pn** | **01 05 28.1** | **+1.5** |
| **PSZ** | **Piszkesteto** | **3.77** | **22** | ⇓*e*Pn | **Pn** | **01 05 27.7** | **+0.1** |
| **VYHS** | **Vyhne** | **4.12** | **10** | *e*PN | **Pn** | **01 05 33.1** | **+0.9** |
| VYHS | | | | *e*SN | **Sn** | **01 06 19.6** | **-0.6** |
| **VYHS** | **Vyhne** | **4.12** | **10** | *e*Pn | **Pn** | **01 05 33.1** | **+0.9** |
| VYHS | | | | *e*Sn | **Sn** | **01 06 19.6** | **-0.6** |

*NIED* ***27*** *01:18:00, 42˚.40N×144˚.00E, h29km, Mw3.7 Best double couple: M0 4.42000×10^14 NP1:φ§229.00000°, δ48.00000°, λ-169.00000°. NP2:φ§132.00000°, δ82.00000°, λ-42.00000°.*
*ISCJB* ***27*** *01:18:34.5±0.6, 42˚.34N±0˚.05×144˚.04E±0˚.06, h52km±7km, mb3.8/4, MS3.4/1, Error ellipse: s-maj=9.6km s-min=5.3km az=146.8*
*MOS* ***27*** *01:18:34.7±0.6, 42˚.28N×144˚.01E, h59km, mb4.0/1, Error ellipse: s-maj=27.8km s-min=11.8km az=72.9*
*JMA* ***27*** *01:18:34.7±0.1, 42˚.37N×143˚.98E, h60km±2km, M3.5*
*IDC* ***27*** *01:18:37.3±3.2, 42˚.30N×143˚.98E, h64km±30km, mb3.4/4, mb1 3.6/6, mb1mx3.2/35, mbtmp3.7/6, ML3.6/2, MS3.3/2, Ms1 3.3/2, ms1mx2.8/33, Error ellipse: s-maj=38.8km s-min=17.0km az=93.0*

**ISC 27 01:18:34.7±1.1, 42˚29N±0˚06×144˚09E±0˚04, h40km±4km, n35, σ1§30/37, mb3.8/4, 6C-3D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JCH** | **Churui** | **0.63** | **301** | ⇓P | **Pn** | **01 18 47.1** | **-0.1** |
| JCH | | | | *e*S | **Sn** | **01 18 55.1** | **-1.0** |
| **JOB** | **Onbets** | **0.64** | **343** | ⇑P | **Pn** | **01 18 47.3** | **-0.1** |
| JOB | | | | *e*S | **Sn** | **01 18 56.0** | **-0.4** |
| **JEM** | **Erimo** | **0.74** | **249** | P | **Pn** | **01 18 49.1** | **+0.3** |
| **JAK** | **Akkeshi** | **0.84** | **32** | ⇑P | **Pn** | **01 18 50.1** | **+0.1** |
| **JNBK** | **Urakawa-nobuka** | **0.99** | **270** | ⇓P | **Pn** | **01 18 51.7** | **-0.4** |
| **JAR** | **Ashorobuto** | **1.03** | **347** | ⇑P | **Pn** | **01 18 52.3** | **-0.4** |
| JAR | | | | *e*S | **Sn** | **01 19 04.4** | **-1.6** |
| **JBT2** | **Biratori 2** | **1.36** | **291** | P | **Pn** | **01 18 56.2** | **-1.1** |
| **JNK** | **Nakash** | **1.37** | **19** | ⇑P | **Pn** | **01 18 56.9** | **-0.5** |
| JNK | | | | *e*S | **Sn** | **01 19 13.0** | **-1.4** |
| **NEM2** | **Nemuro 2** | **1.62** | **48** | P | **Pn** | **01 19 00.5** | **-0.3** |
| NEM2 | | | | *e*S | **Sn** | **01 19 20.0** | **-0.5** |
| **JTKR** | **Abashiri--Toko** | **1.68** | **356** | P | **Pn** | **01 19 02.0** | **+0.3** |
| **JMP** | **Maruseppu** | **1.80** | **343** | ⇑P | **Pn** | **01 19 03.1** | **-0.1** |
| **JAB** | **Ashibetsu** | **1.83** | **312** | P | **Pn** | **01 19 05.1** | **+1.4** |
| **ASAJ** | **Asahikawa** | **2.13** | **330** | P | **Pn** | **01 19 08.5** | **+0.8** |
| | 11nm,0.3s,baz=162,slow=10,SNR=10 | | | | | | |
| ASAJ | | | | S | **Sn** | **01 19 35.6** | **+2.7** |
| | 14nm,0.3s,baz=114,slow=24,SNR=7.3 | | | | | | |
| **ASAJ** | **Asahikawa** | **2.13** | **330** | PN | **Pn** | **01 19 08.5** | **+0.8** |
| ASAJ | | | | S | **Sn** | **01 19 35.6** | **+2.7** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,14nm,0.3s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.17** | **36** | *d*PN | **Pn** | **01 19 09.6** | **+1.2** |
| YUK | | | | *i* S | **Sn** | **01 19 34.6** | **+0.6** |
| YUK | | | | pmax | pmax | | |
| | comp=N,28nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,27nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,173nm,0.2s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,426nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,746nm,0.4s | | | | | | |
| **SHO** | **Shikotan** | **2.55** | **51** | *e i*PN | **Pn** | **01 19 14.8** | **+1.2** |
| SHO | | | | *i* S | **Sn** | **01 19 43.7** | **+0.3** |
| SHO | | | | pmax | pmax | | |
| | comp=N,33nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,41nm,0.2s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,49nm,0.2s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,485nm,0.4s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,381nm,0.4s | | | | | | |
| **KUR** | **Kuril'sk** | **4.02** | **42** | *e*PN | Pn | 01 19 37.2 | +3.5 |
| KUR | | | | *e*S | **Sn** | **01 20 23.3** | **+3.8** |
| KUR | | | | pmax | pmax | | |
| | comp=N,30nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,45nm,0.6s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,26nm,0.3s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,74nm,0.7s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,57nm,0.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **4.76** | **349** | *e*PN | **Pn** | **01 19 45.9** | **+2.0** |
| YSS | | | | S | **Sn** | **01 20 37.3** | **-0.4** |
| YSS | | | | smax | smax | | |
| | comp=N,40nm,0.1s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,40nm,0.1s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.32** | **220** | P | **Pn** | **01 20 20.9** | **+1.7** |
| | comp=E,1.3nm,0.3s,baz=28,slow=14,SNR=9.2 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **7.32** | **220** | PN | **Pn** | **01 20 20.9** | **+1.7** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **KSRS** | **Korea Array** | **13.32** | **254** | LR | LR | 01 26 40.1 | |
| | comp=Z,89nm,18.7s,baz=349,slow=36 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.62** | **132** | T | T | 01 56 01.3 | |
| | baz=325,slow=75,SNR=189 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.64** | **132** | T | T | 01 56 06.3 | |
| | baz=325,slow=75,SNR=91 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.64** | **132** | T | T | 01 56 02.4 | |
| | baz=325,slow=75,SNR=101 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.52** | **134** | T | T | 01 57 12.0 | |
| | baz=326,slow=76,SNR=204 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.52** | **134** | T | T | 01 57 11.5 | |
| | baz=326,slow=76,SNR=126 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.53** | **134** | T | T | 01 57 14.1 | |
| | baz=326,slow=76,SNR=99 | | | | | | |
| **ILAR** | **Eielson Array** | **43.98** | **35** | P | **P** | **01 26 38.1** | **+0.5** |
| | comp=Z,0.6nm,0.9s,baz=269,slow=6.1,SNR=6.0 | | | | | | |
| **INK** | **Inuvik** | **48.78** | **29** | P | **P** | **01 27 15.4** | **+0.2** |
| | comp=Z,0.5nm,0.4s,baz=297,slow=6.2,SNR=5.6 | | | | | | |
| **INK** | **Inuvik** | **48.78** | **29** | P | **P** | **01 27 15.4** | **+0.2** |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **62.57** | **190** | P | **P** | **01 28 54.9** | **+0.3** |
| | comp=Z,0.7nm,1.0s,baz=8,slow=6.9,SNR=5.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **62.57** | **190** | P | **P** | **01 28 54.9** | **+0.3** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,1.0s | | | | | | |
| **FINES** | **FINESS Array B** | **65.13** | **332** | P | **P** | **01 29 10.3** | **-0.6** |
| | comp=Z,0.8nm,0.5s,baz=35,slow=8.5,SNR=9.8 | | | | | | |
| **FINES** | **FINESS Array B** | **65.13** | **332** | P | **P** | **01 29 10.4** | **-0.6** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **NOA** | **NORSAR Array B** | **70.12** | **338** | LR | LR | 02 05 13.2 | |
| | comp=Z,21nm,18.2s,baz=315,slow=40 | | | | | | |

*ISCJB* ***27*** *01:32:50.4±0.6, 27˚.51S±0˚.04×179˚.15W±0˚.09, h400km, mb3.8/6, Error ellipse: s-maj=11.3km s-min=5.0km az=173.9*
*IDC* ***27*** *01:32:50.0±1.7, 27˚.08S×179˚.11W, h391km±17km, mb3.5/6, mb1 3.8/6, mb1mx3.4/30, mbtmp4.3/6, Error ellipse: s-maj=27.7km s-min=20.1km az=7.0*
*AUST* ***27*** *01:32:52.0, 29˚.03S×178˚.55W, h450km*

**ISC 27 01:32:51.0±0.8, 27˚54S±0˚07×179˚1W±0˚1, h400km, n42, σ1§34/49, mb3.8/6, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **1.98** | **150** | P | **Pn** | **01 33 47.4** | **+0.7** |
| | 403nm,0.3s,baz=70,slow=10,SNR=32 | | | | | | |
| RAO | | | | S | **S** | **01 34 29.8** | **-2.0** |
| | 247nm,0.3s,baz=107,slow=19,SNR=2.7 | | | | | | |
| **WMGZ** | **Waiomatatini S** | **10.47** | **191** | PN | **Pn** | **01 35 17.1** | **+2.8** |
| WMGZ | | | | SN | **S** | **01 37 11.9** | **+0.6** |
| **HAZ** | **Te Kaha** | **10.53** | **194** | PN | **Pn** | **01 35 16.7** | **+1.7** |
| HAZ | | | | SN | **S** | **01 37 10.8** | **-1.7** |
| **PKGZ** | **Pakihiroa** | **10.58** | **192** | PN | **Pn** | **01 35 16.8** | **+1.2** |
| PKGZ | | | | SN | **S** | **01 37 12.0** | **-1.5** |
| **PUZ** | **Puketiti** | **10.75** | **191** | *e*PN | **P** | **01 35 16.5** | **-0.2** |
| PUZ | | | | *e*SN | **S** | **01 37 13.7** | **-3.3** |
| **MWZ** | **Matawai** | **11.14** | **194** | PN | **Pn** | **01 35 23.2** | **+1.0** |
| MWZ | | | | SN | **S** | **01 37 24.1** | **-1.0** |
| **URZ** | **Urewera** | **11.17** | **196** | P | **P** | **01 35 21.5** | **+0.2** |
| | 3.3nm,0.3s,baz=274,slow=4.3,SNR=15 | | | | | | |
| URZ | | | | S | **S** | **01 37 23.8** | **-1.6** |
| | 2.8nm,0.3s,baz=255,slow=24,SNR=11 | | | | | | |
| **URZ** | **Urewera** | **11.17** | **196** | PN | **Pn** | **01 35 21.8** | **-0.6** |
| URZ | | | | SN | **S** | **01 37 24.1** | **-1.3** |
| **RIGZ** | **Rimuhau** | **11.45** | **193** | PN | **Pn** | **01 35 27.3** | **+1.6** |
| RIGZ | | | | SN | **S** | **01 37 29.0** | **-2.3** |
| **NMHZ** | **Naumai** | **12.04** | **196** | PN | **Pn** | **01 35 33.3** | **+0.8** |
| **ARHZ** | **Aropaoanui** | **12.15** | **195** | *e*PN | **Pn** | **01 35 34.0** | **+0.3** |
| **BKZ** | **Black Stump Fm** | **12.18** | **197** | PN | **Pn** | **01 35 34.1** | **-0.1** |
| BKZ | | | | SN | **S** | **01 37 45.9** | **-0.2** |
| **FWVZ** | **Far West T-bar** | **12.52** | **200** | PN | **Pn** | **01 35 37.6** | **-0.7** |
| **PNHZ** | **Pukenui** | **12.96** | **197** | PN | **P** | **01 35 41.7** | **+0.6** |
| **BFZ** | **Birch Farm** | **13.67** | **195** | PN | **Pn** | **01 35 50.4** | **-1.0** |
| BFZ | | | | SN | **S** | **01 38 16.4** | **+0.3** |
| **MRZ** | **Mangatainoka R** | **13.82** | **197** | PN | **P** | **01 35 51.0** | **+0.5** |
| MRZ | | | | *e*SN | **S** | **01 38 18.4** | **-0.7** |
| **DZM** | **Mont Dzumac** | **14.25** | **289** | P | **P** | **01 35 56.4** | **+0.9** |
| | 3.1nm,0.3s,baz=179,slow=5.1,SNR=25 | | | | | | |
| **EIDS** | **Eidsvold** | **26.80** | **268** | P | **P** | **01 37 57.8** | **+1.1** |
| | baz=27,SNR=6.8 | | | | | | |
| **CTA** | **Charters Tower** | **32.52** | **276** | P | **P** | **01 38 46.7** | **0.0** |
| | 7.3nm,0.4s,baz=94,slow=11,SNR=14 | | | | | | |
| **QLP** | **Quilpie** | **32.64** | **263** | P | P | 01 38 49.6 | +2.0 |
| | baz=33,SNR=3.3 | | | | | | |
| **HTT** | **Hallett** | **36.51** | **250** | P | P | 01 39 14.7 | -5.7 |
| | baz=36,SNR=4.1 | | | | | | |
| **COEN** | **Coen** | **37.66** | **283** | P | **P** | **01 39 31.1** | **+1.0** |
| | baz=38,SNR=6.6 | | | | | | |
| **QIS** | **Mount Isa** | **38.26** | **271** | P | **P** | **01 39 35.8** | **+0.8** |
| | baz=39,SNR=3.7 | | | | | | |
| **BBOO** | **Buckleboo** | **38.94** | **251** | P | **P** | **01 39 40.5** | **0.0** |
| | baz=39,SNR=7.1 | | | | | | |
| **ASAR** | **Alice Springs** | **42.41** | **264** | P | **P** | **01 40 08.0** | **-0.6** |
| | 2.2nm,0.4s,baz=99,slow=6.7,SNR=43 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.13** | **270** | P | **P** | **01 40 13.1** | **-1.2** |
| | 11nm,0.5s,baz=109,slow=7.4,SNR=101 | | | | | | |
| **WRKA** | **Warakurna** | **46.99** | **261** | P | **P** | **01 40 43.2** | **-0.9** |
| | baz=47,SNR=16 | | | | | | |
| **KDU** | **Kakadu** | **47.56** | **278** | P | **P** | **01 40 46.6** | **-2.0** |
| | baz=48,SNR=16 | | | | | | |
| **MTN** | **Manton Dam** | **48.67** | **277** | P | **P** | **01 40 58.1** | **+1.1** |
| | baz=49,SNR=5.6 | | | | | | |
| **VNDA** | **Vanda** | **50.85** | **185** | P | P | 01 41 15.9 | +3.7 |
| | 0.5nm,0.6s,baz=19,slow=6.9,SNR=3.8 | | | | | | |
| **MEEK** | **Meekatharra** | **54.97** | **256** | P | **P** | **01 41 41.9** | **-0.8** |
| | baz=55,SNR=4.9 | | | | | | |
| **MAW** | **Mawson** | **74.66** | **201** | P | **P** | **01 43 49.3** | **+2.0** |
| | 0.7nm,0.5s,baz=118,slow=7.3,SNR=4.4 | | | | | | |
| **SNAA** | **Sanae** | **81.03** | **179** | P | **P** | **01 44 23.0** | **+0.8** |
| **VNA3** | **Neumayer Olymp** | **81.21** | **177** | P | **P** | **01 44 24.2** | **+1.2** |
| **VNA2** | **Neumayer--Watz** | **81.64** | **177** | P | **P** | **01 44 27.1** | **+1.9** |
| | baz=185,slow=4.1 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **81.87** | **177** | P | **P** | **01 44 27.9** | **+1.5** |
| **NVAR** | **Mina Array Bea** | **86.78** | **43** | P | **P** | **01 44 50.8** | **-0.7** |
| | 0.9nm,0.7s,baz=205,slow=4.0,SNR=4.2 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **91.58** | **290** | P | P | 01

0.4nm,0.5s,baz=94,slow=5.0,SNR=3.5
**TXAR Lajitas Array 146.23 39** PKPbc **PKPab 01 58 18.0 +0.4**
0.5nm,0.6s,baz=281,slow=0.7,SNR=7.8

*GUC **27** 01:40:46.1±0.6,33°.32S×72°.12W,h15km±7km, ML4.3*
*NEIC **27** 01:40:46.0,33°.32S×72°.12W,h15km, mb4.1/6, ML4.3(GUC), After GUC.*
*NEIC Felt [III] at Casablanca and [II] at Algarrobo, El Quisco, San Antonio, San Felipe and Valparaiso.*
*IDC **27** 01:40:50.5±3.2,33°.29S×71°.84W,h73km±26km, mb3.8/8, mb1 3.9/12,mb1mx3.7/30,mbtmp4.0/12,Error ellipse: s-maj=24.8km s-min=17.2km az=87.0*
**ISC 27 01:40:43.5±1.5,33°.32S±0°.04×72°.11W±0°.06,h14km±9km, n44,σ1§13/45,mb4.2/13,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ROCH** | **El Roble** | **0.99** | **69** | *i* P | **Pg** | **01 41 02.5** | **-0.1** |
| ROCH | | | | *i* S | **Sg** | **01 41 15.3** | **-0.2** |
| ROCH | | | | AML | AML | 01 41 16.5 | |
| | comp=N,14μm,0.6s | | | | | | |
| **CHPI** | **Pichilemu** | **1.07** | **175** | *i* P | **Pb** | **01 41 03.5** | **-0.2** |
| CHPI | | | | *i* S | **Sg** | **01 41 16.8** | **-1.3** |
| **PEL** | **Peldehue** | **1.21** | **82** | *i* P | **Pn** | **01 41 06.0** | **+0.1** |
| PEL | | | | *i* S | **Sb** | **01 41 21.4** | **-0.2** |
| PEL | | | | AML | AML | 01 41 26.9 | |
| | comp=E,18μm,0.6s | | | | | | |
| **SAN** | **Santiago** | **1.22** | **96** | *i* P | **Pn** | **01 41 05.9** | **-0.2** |
| SAN | | | | *i* S | **Sb** | **01 41 21.3** | **-0.6** |
| **FSR** | **Penalolen** | **1.33** | **97** | *i* P | **Pn** | **01 41 08.2** | **+0.5** |
| FSR | | | | *i* S | **Sb** | **01 41 24.2** | **-1.0** |
| **YECH** | **El Yeso** | **1.73** | **102** | *i* P | **Pn** | **01 41 14.4** | **+1.1** |
| YECH | | | | *i* S | **Sn** | **01 41 36.0** | **+0.7** |
| YECH | | | | AML | AML | 01 41 39.7 | |
| | comp=N,5μm,0.3s | | | | | | |
| **NICH** | **Los Niches** | **1.83** | **157** | *i* P | **Pn** | **01 41 15.7** | **+1.2** |
| NICH | | | | *i* S | **Sn** | **01 41 38.0** | **+0.6** |
| **CFAA** | **Coronel Fontan** | **3.69** | **63** | P | **Pn** | **01 41 42.3** | **+2.1** |
| | comp=N,0.7nm,0.3s,baz=266,slow=3.4,SNR=30 | | | | | | |
| CFAA | | | | S | **Sn** | **01 42 23.6** | **+0.1** |
| | comp=N,2.9nm,0.3s,baz=275,slow=19,SNR=3.8 | | | | | | |
| **LCO** | **Las Campanas** | **4.46** | **16** | *e*Pn | **Pn** | **01 41 50.2** | **-0.8** |
| LCO | | | | *e*Sn | **Sn** | **01 42 40.1** | **-2.7** |
| LCO | | | | *e*Sg | **Sg** | **01 43 08.2** | **+1.3** |
| **TRQA** | **Tornquist** | **9.49** | **123** | *e*Pn | **Pn** | **01 43 00.7** | **+0.9** |
| | comp=N,9.3nm,0.9s | | | | | | |
| **LVC** | **Limon Verde** | **11.04** | **16** | P | Pn | 01 43 24.9 | +3.8 |
| | comp=N,9.7nm,0.3s,baz=147,slow=7.5,SNR=2.6 | | | | | | |
| **LVC** | **Limon Verde** | **11.04** | **16** | *e*Pn | **Pn** | **01 43 24.0** | **+2.8** |
| **LPAZ** | **La Paz** | **17.34** | **13** | P | **Pn** | **01 44 45.9** | **+0.2** |
| | comp=N,0.1nm,0.3s,baz=184,slow=6.4,SNR=10 | | | | | | |
| **SIV** | **San Ignacio** | **19.93** | **33** | P | **P** | **01 45 13.1** | **-1.9** |
| | comp=N,0.2nm,0.3s,baz=220,slow=11,SNR=7.0 | | | | | | |
| **SAML** | **Samuel** | **25.62** | **21** | *e*P | **P** | **01 46 13.1** | **+0.6** |
| | comp=N,5.4nm,0.8s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **50.01** | **158** | P | **P** | **01 49 36.7** | **-0.2** |
| **VNA1** | **Neumayer--Stat** | **50.32** | **157** | P | **P** | **01 49 39.9** | **+0.7** |
| **VNA2** | **Neumayer--Watz** | **50.66** | **157** | P | **P** | **01 49 41.9** | **+0.1** |
| | baz=287,slow=8.7 | | | | | | |
| **SNAA** | **Sanae** | **52.23** | **158** | P | **P** | **01 49 53.3** | **-0.3** |
| **SNAA** | **Sanae** | **52.23** | **158** | P | **P** | **01 49 53.3** | **-0.3** |
| | comp=N,1.3nm,0.7s,baz=279,slow=8.5,SNR=28 | | | | | | |
| **SNAA** | **Sanae** | **52.23** | **158** | *e*P | P | 01 49 53.0 | -0.7 |
| | comp=N,1.4nm,0.8s | | | | | | |
| **QSPA** | **South Pole Qui** | **56.91** | **180** | P | **P** | **01 50 27.9** | **+0.1** |
| | comp=N,5.4nm,0.8s,baz=133,slow=3.1,SNR=18 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.12** | **331** | P | **P** | **01 51 49.6** | **+0.4** |
| | comp=N,0.2nm,0.5s,baz=157,slow=8.3,SNR=5.5 | | | | | | |
| **WVT** | **Waverly** | **70.64** | **347** | *e*P | **P** | **01 51 57.5** | **-0.8** |
| | comp=N,3.5nm,0.6s | | | | | | |
| **MNTX** | **Cornudas Mount** | **71.89** | **331** | *e*P | P | 01 52 05.1 | -0.9 |
| | comp=N,1.9nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **73.84** | **164** | P | **P** | **01 52 16.9** | **-0.3** |
| | comp=N,1.4nm,0.5s,baz=221,slow=9.3,SNR=4.5 | | | | | | |
| **DBIC** | **Dimbokro** | **75.02** | **71** | P | P | 01 52 23.7 | -1.2 |
| | comp=N,2.3nm,0.7s,baz=197,slow=5.0,SNR=6.0 | | | | | | |
| **SDCO** | **Great Sand Dun** | **77.24** | **333** | *e*P | **P** | **01 52 37.7** | **+0.4** |
| | comp=N,0.9nm,0.7s | | | | | | |
| **BOSA** | **Boshof** | **80.44** | **118** | P | P | 01 52 53.1 | -2.0 |
| | comp=N,2.2nm,0.9s,baz=299,slow=5.5,SNR=4.4 | | | | | | |
| **DUG** | **Dugway** | **82.26** | **330** | *e*P | **P** | **01 53 04.5** | **+0.2** |
| | comp=N,1.4nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.30** | **325** | P | **P** | **01 53 10.9** | **+1.1** |
| | comp=N,0.6nm,0.5s,baz=161,slow=5.7,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.04** | **70** | P | P | 01 53 11.2 | -2.7 |
| | comp=N,2.8nm,0.8s,baz=282,slow=4.6,SNR=44 | | | | | | |
| **ASAR** | **Alice Springs** | **118.14** | **207** | PKP | **PKPdf** | **01 59 28.8** | **-1.8** |
| | comp=N,0.2nm,0.5s,baz=191,slow=0.9,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **121.32** | **209** | PKP | **PKPdf** | **01 59 35.5** | **-1.2** |
| | comp=N,0.3nm,0.7s,baz=160,slow=1.7,SNR=7.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **121.56** | **61** | PKP | **PKPdf** | **01 59 35.1** | **-1.5** |
| | comp=N,0.3nm,0.5s,baz=186,slow=1.3,SNR=2.8 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **125.72** | **270** | T | T | 04 18 33.1 | |
| | baz=118,slow=74,SNR=48 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **125.73** | **270** | T | T | 04 18 28.1 | |
| | baz=118,slow=74,SNR=54 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **125.74** | **270** | T | T | 04 18 34.4 | |
| | baz=118,slow=74,SNR=33 | | | | | | |
| **GEYT** | **Alibeck** | **139.67** | **69** | PKP | **PKPdf** | **02 00 11.2** | **+0.5** |
| | comp=N,0.7nm,0.5s,baz=306,slow=2.7,SNR=3.0 | | | | | | |
| **ABKAR** | **Akbulak array** | **141.31** | **51** | *e*PKPdf | **PKPdf** | **02 00 15.0** | **+1.7** |
| **PSI** | **Prapat** | **148.50** | **163** | PKPbc | **PKPdf** | **02 00 29.1** | **+2.0** |
| | comp=N,7.9nm,0.8s,baz=248,slow=5.4,SNR=7.2 | | | | | | |
| **AAK** | **Ala-Archa** | **152.23** | **61** | *e*PKPbc | **PKPbc** | **02 00 38.3** | **-0.4** |
| **ZALV** | **Zalesovo Beam** | **153.68** | **32** | PKPbc | **PKPbc** | **02 00 40.5** | **-0.8** |
| | comp=N,2.7nm,0.6s,baz=299,slow=1.5,SNR=8.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **156.36** | **48** | PKPab | **PKPab** | **02 01 05.0** | **-0.8** |
| | comp=N,1.7nm,0.5s,baz=278,slow=4.8,SNR=9.8 | | | | | | |

*ISCJB **27** 01:45:47.0±0.5,37°.83N±0°.02×29°.25E±0°.04,h4km±5km, Error ellipse: s-maj=4.9km s-min=3.6km az=18.4*
*CSEM **27** 01:45:46.7±0.2,37°.81N×29°.27E,h8km,MD2.6,Error ellipse: s-maj=4.5km s-min=3.1km az=108.0*
*DDA **27** 01:45:46.6,37°.82N×29°.23E,h7km,Md2.6*
*ISK **27** 01:45:46.6,37°.83N×29°.26E,h7km,MD2.6*
**ISC 27 01:45:47.1±0.9,37°.82N±0°.02×29°.23E±0°.02,h8km±7km, n31,σ0§62/49,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DENT** | **Denizli** | **0.17** | **247** | *e*PG | **Pg** | **01 45 51.0** | **+0.3** |
| **DENT** | **Denizli** | **0.17** | **247** | *e*Pg | **Pg** | **01 45 51.0** | **+0.3** |
| **DNZL** | **Cakiroluk** | **0.19** | **228** | *i* P | **Pg** | **01 45 50.8** | **-0.4** |
| DNZL | | | | *i* S | **Sg** | **01 45 54.2** | **+0.3** |
| **DNZL** | **Cakiroluk** | **0.19** | **228** | P | **Pg** | **01 45 50.8** | **-0.4** |
| DNZL | | | | S | **Sg** | **01 45 54.2** | **+0.3** |
| **KHL** | **Karahalli** | **0.56** | **25** | *e*PG | **Pg** | **01 45 57.5** | **-0.4** |
| KHL | | | | *e*SG | **Sg** | **01 46 05.5** | **+0.2** |
| **KHL** | **Karahalli** | **0.56** | **25** | *e*Pg | **Pg** | **01 45 57.5** | **-0.4** |
| KHL | | | | *e*Sg | **Sg** | **01 46 05.5** | **+0.2** |
| **KHAL** | **Karahalli** | **0.59** | **21** | *i* P | **Pg** | **01 45 57.6** | **-1.0** |
| KHAL | | | | *i* S | **Sg** | **01 46 06.4** | **+0.1** |
| **KHAL** | **Karahalli** | **0.59** | **21** | P | **Pg** | **01 45 57.6** | **-1.0** |
| KHAL | | | | S | **Sg** | **01 46 06.4** | **+0.1** |
| **GOLH** | **Golhisar** | **0.64** | **155** | *i* P | **Pg** | **01 45 58.7** | **-0.8** |
| **GOLH** | **Golhisar** | **0.64** | **155** | P | **Pg** | **01 45 58.7** | **-0.8** |
| GOLH | | | | S | **Sb** | **01 46 10.0** | **+0.3** |
| **KULA** | **Kula-Manisa** | **0.82** | **327** | *e*PG | **Pg** | **01 46 03.0** | **-0.1** |
| KULA | | | | *e*SG | **Sb** | **01 46 14.9** | **-0.1** |
| **KULA** | **Kula-Manisa** | **0.82** | **327** | *e*Pg | **Pg** | **01 46 03.0** | **-0.1** |
| **MANT** | **Manisa** | **0.85** | **322** | *i* P | **Pb** | **01 46 04.2** | **-0.1** |
| MANT | | | | *i* S | **Sb** | **01 46 15.5** | **-0.5** |
| **MANT** | **Manisa** | **0.85** | **322** | P | **Pb** | **01 46 04.2** | **-0.1** |
| MANT | | | | S | **Sb** | **01 46 15.5** | **-0.5** |
| **YER** | **Yerkesik** | **1.01** | **228** | *e*PG | **Pb** | **01 46 06.8** | **-0.1** |
| YER | | | | *e*SG | **Sn** | **01 46 21.7** | **-0.4** |
| **YER** | **Yerkesik** | **1.01** | **228** | *e*Pg | **Pb** | **01 46 06.8** | **-0.1** |
| YER | | | | *e*Sg | **Sn** | **01 46 21.7** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.06** | **277** | *e*PN | **Pg** | **01 46 07.0** | **-0.6** |
| AYDB | | | | *e*SN | **Sn** | **01 46 23.4** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.06** | **277** | *e*Pn | **Pg** | **01 46 07.0** | **-0.6** |
| AYDB | | | | *e*Sn | **Sn** | **01 46 23.4** | **-0.1** |
| **AYDN** | **Tasoluk** | **1.08** | **262** | *i* P | **Pn** | **01 46 09.4** | **+0.8** |
| **AYDN** | **Tasoluk** | **1.08** | **262** | P | **Pn** | **01 46 09.4** | **+0.8** |
| AYDN | | | | S | **Sn** | **01 46 25.0** | **+1.2** |
| **DALY** | **Dalyan (Mu¨la** | **1.10** | **205** | *e*PN | **Pn** | **01 46 08.4** | **-0.3** |
| **DALY** | **Dalyan (Mu¨la** | **1.10** | **205** | *e*Pn | **Pn** | **01 46 08.4** | **-0.3** |
| **ELL** | **Elmali** | **1.20** | **153** | *e*PN | **Pb** | **01 46 09.9** | **-0.3** |
| **ELL** | **Elmali** | **1.20** | **153** | *e*Pn | **Pb** | **01 46 09.9** | **-0.3** |
| **BAGO** | **Egridir - ISPA** | **1.25** | **82** | P | **Pg** | **01 46 11.5** | **+0.4** |
| BAGO | | | | S | **Sn** | **01 46 30.6** | **+2.6** |
| **SHUT** | **Suhut-Afyon** | **1.28** | **55** | *e*PN | **Pb** | **01 46 11.1** | **-0.4** |
| **SHUT** | **Suhut-Afyon** | **1.28** | **55** | *e*Pn | **Pb** | **01 46 11.1** | **-0.4** |
| **DEMI** | **Demirci** | **1.29** | **342** | *i* P | **Pn** | **01 46 11.3** | **-0.1** |
| DEMI | | | | *i* S | **Sg** | **01 46 28.8** | **+0.3** |
| **DEMI** | **Demirci** | **1.29** | **342** | P | **Pn** | **01 46 11.3** | **-0.1** |
| DEMI | | | | S | **Sg** | **01 46 28.9** | **+0.3** |
| **TVSB** | **Tavsanli** | **1.64** | **6** | *e*PN | **Pn** | **01 46 16.4** | **+0.1** |
| **TVSB** | **Tavsanli** | **1.64** | **6** | *e*Pn | **Pn** | **01 46 16.4** | **+0.1** |

**IDC 27 01:51:48.6±6.5,30°.72S×178°.32W,h0km,mb3.6/2, mb1 3.9/2,mb1mx3.6/34,mbtmp3.6/2,Error ellipse: s-maj=261.8km s-min=58.3km az=156.0,Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.82** | **267** | P | P | 01 59 48.1 | -0.4 |
| | 0.2nm,0.3s,baz=106,slow=8.8,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.84** | **273** | P | P | 01 59 56.8 | +0.1 |
| | 0.7nm,0.5s,baz=114,slow=8.0,SNR=13 | | | | | | |
| **FINES** | **FINESS Array B** | **145.35** | **340** | PKPbc | PKPbc | 02 11 26.5 | -1.0 |
| | 1.4nm,0.9s,baz=58,slow=3.9,SNR=5.5 | | | | | | |

**IDC 27 02:00:07.0±2.4,3°.50S×99°.70E,h0km,mb3.7/6,mb1 3.8/6, mb1mx3.5/53,mbtmp3.7/6,Error ellipse: s-maj=105.8km s-min=21.9km az=53.0,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **27.38** | **260** | T | T | 02 34 42.0 | |
| | baz=84,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.39** | **260** | T | T | 02 34 43.0 | |
| | baz=84,slow=75 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.40** | **260** | T | T | 02 34 42.0 | |
| | baz=84,slow=75 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.98** | **158** | T | T | 02 43 02.9 | |
| | baz=334,slow=76 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.99** | **158** | T | T | 02 43 00.6 | |
| | baz=334,slow=76 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.00** | **158** | T | T | 02 43 02.5 | |
| | baz=334,slow=76 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.52** | **119** | P | P | 02 07 22.3 | -0.7 |
| | 0.2nm,0.8s,baz=288,slow=8.9,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **38.64** | **124** | P | P | 02 07 32.2 | -0.2 |
| | 0.5nm,0.5s,baz=294,slow=8.3,SNR=6.9 | | | | | | |
| **SONM** | **Songino Array** | **51.46** | **6** | P | P | 02 09 14.5 | +0.3 |
| | 0.6nm,0.7s,baz=179,slow=7.9,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.39** | **345** | P | P | 02 09 20.1 | -0.9 |
| | 0.4nm,0.5s,baz=159,slow=8.5,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.58** | **350** | P | P | 02 10 04.5 | -0.9 |
| | 0.9nm,0.4s,baz=177,slow=5.8,SNR=3.8 | | | | | | |
| **FINES** | **FINESS Array B** | **85.29** | **332** | P | P | 02 12 45.8 | +0.3 |
| | 0.8nm,0.7s,baz=104,slow=8.7,SNR=2.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.06** | **38** | PKPbc | PKPab | 02 19 50.6 | +0.3 |
| | 0.4nm,0.8s,baz=296,slow=0.9,SNR=6.7 | | | | | | |

*BJI **27** 02:16:33.8,5°.31S×134°.24E,h11km,mb4.7/37,mB5.3/21, Ms5.0/12,Ms7 4.8/12*
*IDC **27** 02:16:35.3±0.6,5°.21S×133°.83E,h0km,mb4.4/10, mb1 4.5/16,mb1mx4.3/35,mbtmp4.4/16,ML4.4/5,MS3.7/9, Ms1 3.7/9,ms1mx3.4/27,Error ellipse: s-maj=21.1km s-min=14.2km az=74.0*
*ISCJB **27** 02:16:35.0±0.3,5°.31S±0°.03×133°.88E±0°.04,h10km, mb4.5/22,MS3.8/6,Error ellipse: s-maj=5.2km s-min=4.1km az=172.4*
*NEIC **27** 02:16:36.7±0.3,5°.31S×133°.86E,h10km,mb4.7/13,Error ellipse: s-maj=8.2km s-min=5.4km az=65.0*
*AUST **27** 02:16:38.9±3.1,5°.17S×133°.89E,h26km,Error ellipse: s-maj=1.5km s-min=0.6km az=242.0*
*DJA **27** 02:16:49.5±0.5,5°.5×13°.3E°,h10km,M4.7/4,mb5.3/2, mB5.6/2,MLv4.4/4,Mw(mB)5.1/2*
**ISC 27 02:16:37.3±0.4,5°.32S±0°.05×133°.86E±0°.05,h10km,n114, σ1§46/127,mb4.5/22,MS3.6/6,1C,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMPI** | **Kaimana, Papua** | **1.65** | **355** | P | **Pn** | **02 17 03.4** | **-3.0** |
| **FAKI** | **Fak Fak** | **2.87** | **326** | P | **Pn** | **02 17 21.7** | **-1.5** |
| | baz=2.8,SNR=202 | | | | | | |
| **FAKI** | **Fak Fak** | **2.87** | **326** | P | **Pn** | **02 17 21.6** | **-1.6** |
| FAKI | | | | S | Sn | 02 17 46.4 | -11 |
| **FAKI** | **Fak Fak** | **2.87** | **326** | *e*Pn | Pn | 02 17 19.9 | -3.3 |
| FAKI | | | | *e*Sn | Sn | 02 17 49.0 | -8.8 |
| **SAUI** | **Saumlaki** | **3.67** | **224** | P | Pg | 02 17 59.0 | +11 |
| **RKPI** | **Ransiki, Papua** | **3.80** | **5** | P | **Pn** | **02 17 35.2** | **-0.7** |
| **BNDI** | **Bandanaira** | **4.01** | **281** | P | **Pn** | **02 17 41.0** | **+2.1** |
| BNDI | | | | S | **Sn** | **02 18 23.1** | **-3.0** |
| **SIJI** | **Sorong** | **5.12** | **330** | Pn | **Pn** | **02 17 52.4** | **-1.7** |
| | 11nm,0.3s,baz=228,slow=23,SNR=36 | | | | | | |
| SIJI | | | | Sn | Sn | 02 18 45.2 | -8.2 |
| | 7.7nm,0.3s,baz=105,slow=16,SNR=3.8 | | | | | | |
| SIJI | | | | LR | LR | 02 20 44.0 | |
| | comp=Z,510nm,19.8s,baz=190,slow=50 | | | | | | |
| **SWI** | **Sorong** | **5.13** | **330** | P | **Pn** | **02 17 53.2** | **-1.0** |
| | baz=5.0,SNR=12 | | | | | | |
| **SWI** | **Sorong** | **5.13** | **330** | P | **Pn** | **02 17 51.6** | **-2.7** |
| **MSAI** | **Masohi** | **5.29** | **292** | P | **Pn** | **02 17 57.1** | **+0.6** |
| **SMPI** | **Sarmi** | **5.87** | **56** | P | **Pb** | **02 18 19.3** | **-0.5** |
| **AAI** | **Ambon** | **5.87** | **286** | P | **Pn** | **02 18 05.4** | **+0.9** |
| | baz=5.9,SNR=10 | | | | | | |
| **AAI** | **Ambon** | **5.87** | **286** | P | **Pn** | **02 18 04.3** | **-0.2** |
| | 260nm,0.9s,5μm | | | | | | |
| **GENI** | **Genyem** | **6.86** | **67** | P | **Pb** | **02 18 35.4** | **-1.2** |
| **NLAI** | **Namlea** | **7.05** | **287** | P | Pn | 02 18 23.8 | +3.2 |
| **MMPI** | **Merauke** | **7.20** | **116** | P | Pn | 02 18 31.5 | +8.8 |
| | baz=7.2,SNR=5.0 | | | | | | |
| **JAY** | **Jayapura** | **7.38** | **68** | Pn | **Pn** | **02 18 26.1** | **+0.9** |
| | 8.5nm,0.3s,baz=232,slow=0.2,SNR=1.7 | | | | | | |
| JAY | | | | Sn | **Sn** | **02 19 49.0** | **-0.1** |
| | 19nm,0.3s,baz=149,slow=1.2,SNR=1.9 | | | | | | |
| **KDU** | **Kakadu** | **7.45** | **190** | P | **Pn** | **02 18 28.2** | **+2.1** |
| | baz=7.6,SNR=28 | | | | | | |
| **LBMI** | **Labuha** | **7.87** | **306** | P | Pn | 02 18 32.2 | +0.3 |
| **MTN** | **Manton Dam** | **7.94** | **200** | P | Pn | 02 18 35.7 | +2.7 |
| | baz=8.1,SNR=24 | | | | | | |
| **MTN** | **Manton Dam** | **7.94** | **200** | *e*Pn | **Pn** | **02 18 33.0** | **+0.1** |
| MTN | | | | *e*Sn | **Sn** | **02 20 03.3** | **+0.4** |
| **SANI** | **Sanana** | **8.49** | **292** | P | **Pn** | **02 18 39.9** | **-0.6** |
| **SOEI** | **Soe** | **10.47** | **245** | *e*Pn | **Pn** | **02 19 10.1** | **+2.2** |
| | 165nm,0.8s | | | | | | |
| **BATI** | **Baumata** | **11.20** | **244** | Pn | **Pn** | **02 19 16.1** | **-1.6** |
| | 12nm,0.3s,baz=86,slow=13,SNR=5.6 | | | | | | |
| BATI | | | | Sn | **Sn** | **02 21 19.2** | **-3.9** |
| | 5.8nm,0.3s,baz=117,slow=11,SNR=2.1 | | | | | | |
| **KNRA** | **Kununurra** | **11.44** | **206** | P | **Pn** | **02 19 22.0** | **+1.1** |
| | baz=12,SNR=18 | | | | | | |
| **LUWI** | **Luwuk** | **11.85** | **291** | P | **Pn** | **02 19 26.9** | **+0.4** |
| | baz=12,SNR=3.1 | | | | | | |
| **LUWI** | **Luwuk** | **11.85** | **291** | *e*Pn | **Pn** | **02 19 26.1** | **-0.5** |
| **COEN** | **Coen** | **12.57** | **134** | P | **Pn** | **02 19 37.6** | **+1.2** |
| | baz=13,SNR=4.4 | | | | | | |
| **COEN** | **Coen** | **12.57** | **134** | *e*Pn | **Pn** | **02 19 36.6** | **+0.3** |
| **PMG** | **Port Moresby** | **13.80** | **108** | LR | LR | 02 26 06.0 | |
| | comp=Z,358nm,19.1s,baz=300,slow=41 | | | | | | |
| **KAPI** | **Kappang** | **14.05** | **271** | Pn | **Pn** | **02 19 57.4** | **+0.8** |
| | 0.5nm,0.3s,baz=72,slow=20,SNR=2.2 | | | | | | |
| KAPI | | | | LR | LR | 02 26 24.3 | |
| | comp=Z,177nm,21.1s,baz=117,slow=42 | | | | | | |
| **KAPI** | **Kappang** | **14.05** | **271** | *e*Pn | **Pn** | **02 19 57.4** | **+0.8** |
| | 16nm,1.0s | | | | | | |
| **WRAB** | **Tennant Creek** | **14.53** | **178** | *e*Pn | **Pn** | **02 20 02.1** | **-1.1** |
| **WRA** | **Warramunga Arr** | **14.54** | **178** | Pn | **Pn** | **02 20 01.2** | **-2.2** |
| | 0.5nm,0.3s,baz=356,slow=13,SNR=20 | | | | | | |
| WRA | | | | Sn | Sn | 02 22 38.2 | -6.5 |
| | baz=359,slow=23,SNR=2.2 | | | | | | |
| **QIS** | **Mount Isa** | **16.14** | **160** | P | **P** | **02 20 28.8** | **+1.0** |
| | baz=16,SNR=4.2 | | | | | | |
| **AS01** | **Alice Springs** | **18.24** | **180** | *e*P | **Pn** | **02 20 48.9** | **-1.9** |
| **ASAR** | **Alice Springs** | **18.24** | **180** | P | **Pn** | **02 20 49.7** | **-1.1** |
| | 0.6nm,0.3s,baz=3.0,slow=11,SNR=38 | | | | | | |
| **CTA** | **Charters Tower** | **19.00** | **142** | P | **P** | **02 20 58.4** | **-1.0** |
| | baz=322,slow=12,SNR=2.2 | | | | | | |
| **CTAO** | **Charters Tower** | **19.00** | **142** | *e*P | **P** | **02 20 57.5** | **-1.8** |
| | 14nm,0.9s | | | | | | |
| **WRKA** | **Warakurna** | **20.32** | **195** | P | Pn | 02 21 16.2 | +0.4 |
| | baz=21,SNR=22 | | | | | | |
| **MBWA** | **Marble Bar** | **20.87** | **220** | *e*P | Pn | 02 21 21.1 | -1.2 |
| | 14nm,0.8s | | | | | | |
| **KKM** | **Kota Kinabalu** | **20.92** | **302** | *e*P | **P** | **02 21 20.6** | **+0.2** |
| | 57nm,1.3s | | | | | | |
| **QLP** | **Quilpie** | **23.35** | **156** | P | **P** | **02 21 48.3** | **+2.2** |
| | baz=24,SNR=8.2 | | | | | | |
| **KSM** | **Kuching** | **24.47** | **285** | *e*P | **P** | **02 21 57.3** | **+0.4** |
| | 28nm,1.2s | | | | | | |
| **HNR** | **Honiara** | **26.19** | **101** | LR | LR | 02 33 23.3 | |
| | comp=Z,159nm,19.9s,baz=270,slow=38 | | | | | | |
| **QIZ** | **Qiongzhong** | **33.84** | **316** | P | **P** | **02 23 21.0** | **+0.9** |
| QIZ | | | | S | **S** | **02 28 44.3** | **-0.2** |
| QIZ | | | | PMZ | | | |
| | 35nm,2.2s | | | | | | |
| QIZ | | | | LZ | | | |
| | 600nm,5.7s | | | | | | |
| **KULM** | **Kulim** | **34.79** | **287** | *e*P | **P** | **02 23 27.6** | **-0.9** |
| | 8.3nm,0.8s | | | | | | |
| **JNU** | **Nakatsue** | **38.33** | **356** | P | **P** | **02 23 56.2** | **-2.3** |
| | 72nm,0.9s,baz=159,slow=5.1,SNR=18 | | | | | | |
| **JNU** | **Nakatsue** | **38.33** | **356** | *e*P | **P** | **02 23 57.1** | **-1.4** |
| | 42nm,1.0s | | | | | | |
| **LOEI** | **Loei** | **39.37** | **306** | P | **P** | **02 24 04.5** | **-2.9** |
| | 13nm,1.1s | | | | | | |
| **SLVN** | **Son La** | **39.55** | **313** | *e*P | **P** | **02 24 08.5** | **-0.4** |
| | 2.8nm,0.5s | | | | | | |
| **UTTA** | **Uttaradit** | **40.07** | **306** | P | **P** | **02 24 13.9** | **+0.7** |
| | 3.1nm,1.1s | | | | | | |
| **WHN** | **Wuhan** | **40.25** | **334** | ⇑P | **P** | **02 24 14.8** | **+0.3** |
| **GYA** | **Guiyang** | **41.13** | **321** | *e*P | **P** | **02 24 23.8** | **+1.8** |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **41.72** | **305** | *e*P | **P** | **02 24 26.3** | **-0.5** |
| **CMAR** | **Chiang Mai Arr** | **41.75** | **305** | P | **P** | **02 24 26.6** | **-0.5** |
| | 2.9nm,0.4s,baz=130,slow=6.6,SNR=22 | | | | | | |
| CMAR | | | | PcP | **PcP** | **02 26 22.7** | **-0.8** |
| | 0.7nm,0.3s,baz=155,slow=3.0,SNR=4.5 | | | | | | |
| **CHTO** | **Chiang Mai** | **41.93** | **306** | P | **P** | **02 24 29.0** | **+0.4** |
| | 49nm,0.9s | | | | | | |
| **CHTO** | **Chiang Mai** | **41.93** | **306** | *e*P | **P** | **02 24 28.5** | **-0.1** |
| | 8.0nm,0.8s | | | | | | |
| **CMAI** | **Chiengmai2** | **42.44** | **307** | P | **P** | **02 24 32.6** | **-0.3** |
| **KMI** | **Kunming** | **42.79** | **316** | P | **P** | **02 24 36.0** | **+0.3** |
| KMI | | | | PMZ | | | |
| | 8.0nm,1.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **42.90** | **353** | P | **P** | **02 24 36.0** | **-0.2** |
| **KSRS** | **Korea Array** | **42.91** | **353** | P | **P** | **02 24 36.0** | **-0.2** |
| | 9.0nm,0.9s,baz=170,slow=9.6,SNR=18 | | | | | | |
| KSRS | | | | LR | LR | 02 43 45.0 | |
| | comp=Z,74nm,18.7s,baz=102,slow=38 | | | | | | |
| **KS01** | **Wonju Array Si** | **42.94** | **353** | *e*P | **P** | **02 24 36.1** | **-0.3** |
| **XAN** | **Xi'an** | **45.70** | **331** | P | **P** | **02 24 57.5** | **-1.2** |
| XAN | | | | pP | pP | 02 25 06.5 | +4.7 |
| XAN | | | | PMZ | | | |
| | 13nm,1.5s | | | | | | |
| **CD2** | **Chengdu** | **46.10** | **323** | P | **P** | **02 25 01.5** | **-0.4** |
| CD2 | | | | pP | **pP** | **02 25 04.5** | **-0.6** |
| CD2 | | | | PP | **PP** | **02 26 50.0** | **-0.2** |
| CD2 | | | | PcS | **PcS** | **02 30 31.3** | **-1.4** |
| CD2 | | | | S | **S** | **02 31 49.0** | **+1.1** |
| CD2 | | | | sS | **sS** | **02 31 54.3** | **+1.2** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| **BJI** | **Beijing** | **47.98** | **342** | P | **P** | **02 25 15.5** | **-0.9** |
| BJI | | | | PMZ | | | |
| | 15nm,1.5s | | | | | | |
| BJI | | | | PMZ | | | |
| | 180nm,4.1s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.32** | **358** | P | **P** | **02 25 25.1** | **-1.6** |
| | 4.4nm,0.8s,baz=172,slow=6.9,SNR=11 | | | | | | |
| **CN2** | **Changchun** | **49.48** | **352** | *e*P | **P** | **02 25 26.5** | **-1.3** |
| CN2 | | | | PMZ | | | |
| | 10.0nm,0.8s | | | | | | |
| **MDJ** | **Mudanjiang** | **49.86** | **356** | P | **P** | **02 25 30.5** | **-0.2** |
| MDJ | | | | pP | **pP** | **02 25 32.5** | **-1.4** |
| MDJ | | | | sP | **sP** | **02 25 35.3** | **+0.2** |
| MDJ | | | | S | **S** | **02 32 41.5** | **+0.9** |
| MDJ | | | | sS | **sS** | **02 32 47.0** | **+1.2** |
| MDJ | | | | PMZ | | | |
| | 16nm,1.0s | | | | | | |
| MDJ | | | | PMZ | | | |
| | 230nm,4.2s | | | | | | |
| MDJ | | | | LN | | | |
| | 270nm,5.7s | | | | | | |
| MDJ | | | | LE | | | |
| | 260nm,7.1s | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 5.1nm,0.9s | | | | | |
| **PPT** | **Papeete** | **75.62** | **107** | LR | LR | 03 00 26.3 |
| | comp=Z,21nm,18.1s,baz=348,slow=35 | | | | | |
| **MAW** | **Mawson** | **77.91** | **202** | P | **P** | **02 28 35.3 +0.2** |
| | 1.8nm,0.8s,baz=120,slow=7.1,SNR=5.2 | | | | | |
| MAW | | | | LR | LR | 03 02 47.0 |
| | comp=Z,105nm,18.1s,baz=61,slow=36 | | | | | |
| **IMYA** | **Miami** | **80.18** | **308** | *eP* | **P** | **02 28 47.7 -0.7** |
| **IMOG** | **Moghan** | **80.72** | **308** | *eP* | **P** | **02 28 51.7 +0.1** |
| **IPAY** | **Payeh** | **81.07** | **308** | *eP* | **P** | **02 28 52.6 -0.7** |
| **IKRD** | **Kardeh** | **81.52** | **308** | *eP* | P | 02 28 51.8 -3.9 |
| **IEMG** | **Emamgholi** | **81.56** | **309** | *eP* | **P** | **02 28 56.1 +0.1** |
| **ISFR** | **Sfrayin** | **81.99** | **308** | *eP* | **P** | **02 28 57.6 -0.6** |
| **GEYT** | **Alibeck** | **82.09** | **309** | P | **P** | **02 28 58.3 -0.2** |
| | 8.1nm,1.1s,baz=129,slow=2.0,SNR=15 | | | | | |
| **ABKAR** | **Akbulak array** | **83.61** | **321** | *eP* | **P** | **02 29 04.7 -1.4** |
| **ILAR** | **Eielson Array** | **90.21** | **25** | P | **P** | **02 29 35.5 -2.3** |
| | 1.3nm,1.1s,baz=263,slow=4.8,SNR=5.1 | | | | | |
| **ATD** | **Arta Tunnel** | **92.03** | **281** | LR | LR | 03 09 45.0 |
| | comp=Z,17nm,20.1s,slow=35 | | | | | |
| **KOLS** | **Kolonicke sedl** | **108.11** | **320** | *e* | **Pdif** | **02 31 03.8 +4.9** |
| **TORD** | **Torodi Ar. Bea** | **132.21** | **283** | PKP | **PKPdf** | **02 35 52.3 -0.4** |
| | 1.6nm,1.1s,baz=73,slow=0.7,SNR=6.0 | | | | | |
| **CPUP** | **Villa Florida** | **146.72** | **162** | PKPbc | **PKPbc** | **02 36 19.2 -1.0** |
| | 12nm,0.9s,baz=217,slow=2.4,SNR=19 | | | | | |
| **LPAZ** | **La Paz** | **149.44** | **135** | PKPbc | **PKPbc** | **02 36 29.1 +0.5** |
| | 4.5nm,1.0s,baz=245,slow=1.8,SNR=13 | | | | | |
| **ROSC** | **El Rosal** | **151.92** | **90** | PKPbc | **PKPbc** | **02 36 35.5 +1.2** |
| | 1.4nm,0.4s,baz=90,slow=20,SNR=2.6 | | | | | |

*IDC **27** 02:22:39.1±0.8,31°.41N×142°.51E,h0km,mb4.1/17, mb1 4.3/19,mb1mx4.2/36,mbtmp4.1/19,ML4.1/2,MS3.0/1, Ms1 3.0/1,ms1mx2.4/37,Error ellipse: s-maj=23.6km s-min=19.3km az=3.0*
*NEIC **27** 02:22:41.5±5.2,31°.39N×142°.59E,h15km±30km,mb4.3/8, Error ellipse: s-maj=13.7km s-min=11.3km az=129.0*
*JMA **27** 02:22:43.9±0.2,31°.63N×142°.47E,h116km,M3.9*
*ISCJB **27** 02:22:45.5±0.5,31°.70N±0°.06×142°.48E±0°.08,h49km, mb4.1/25,Error ellipse: s-maj=11.3km s-min=5.9km az=138.9*

**ISC 27 02:22:46.5±0.6,31°.53N±0°.08×142°.41E±0°.08,h49km,n44, σ1§43/49,mb4.1/25,Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHCJ** | **Hachijojimakas** | **2.70** | **306** | S | **Sn** | **02 23 58.6** | **-0.2** |
| **JHJ2** | **Mitsune** | **2.71** | **306** | P | **Pn** | **02 23 26.7** | **-0.8** |
| **JHJ** | **Hachijo jima 2** | **2.73** | **306** | Pn | **Pn** | **02 23 26.1** | **-1.8** |
| | 52nm,0.3s,baz=246,slow=19,SNR=2.7 | | | | | | |
| JHJ | | | | Sn | **Sn** | **02 23 54.6** | **-5.1** |
| | 72nm,0.3s,baz=232,slow=19,SNR=3.2 | | | | | | |
| **BSO1** | **Boso 1** | **3.34** | **339** | P | **Pn** | **02 23 34.3** | **-1.4** |
| BSO1 | | | | S | **Sn** | **02 24 13.9** | **0.0** |
| **BSO3** | **Boso 3** | **3.63** | **334** | P | **Pn** | **02 23 38.4** | **-1.6** |
| **JOD2** | **Odawara 2** | **4.65** | **324** | P | **Pn** | **02 23 52.7** | **-1.5** |
| JOD2 | | | | S | **Sn** | **02 24 45.6** | **-1.3** |
| **JRY** | **Ryogami san** | **5.35** | **328** | P | **Pn** | **02 24 02.2** | **-1.6** |
| JRY | | | | S | **Sn** | **02 25 02.6** | **-1.5** |
| **MJAR** | **Matsushiro Arr** | **6.10** | **326** | Pn | **Pn** | **02 24 12.1** | **-2.0** |
| | 6.5nm,0.3s,baz=147,slow=12,SNR=26 | | | | | | |
| MJAR | | | | Sn | **Sn** | **02 25 21.7** | **-0.8** |
| | 1.6nm,0.3s,baz=144,slow=27,SNR=4.0 | | | | | | |
| **MAJO** | **Matsushiro** | **6.10** | **326** | *e*Pn | **Pn** | **02 24 13.1** | **-1.0** |
| **MAT** | **Matsushiro** | **6.10** | **326** | P | **Pn** | **02 24 13.4** | **-0.7** |
| MAT | | | | S | **Sn** | **02 25 22.4** | **-0.2** |
| **JMK** | **Ichinoseki** | **7.47** | **353** | P | **Pn** | **02 24 30.4** | **-2.5** |
| **JNU** | **Nakatsue** | **9.89** | **282** | LR | LR | 02 28 40.3 | |
| | comp=Z,102nm,21.9s,baz=118,slow=36 | | | | | | |
| **KSRS** | **Korea Array** | **13.33** | **300** | Pn | **Pn** | **02 25 55.6** | **+2.7** |
| | 0.1nm,0.3s,baz=110,slow=13,SNR=5.3 | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.35** | **300** | Pn | **Pn** | **02 25 55.6** | **+2.4** |
| **ULN** | **Ulaanbaatar** | **31.39** | **312** | *eP* | **P** | **02 29 05.3** | **+2.5** |
| | 3.7nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **31.80** | **311** | P | **P** | **02 29 07.8** | **+1.4** |
| | 2.5nm,0.7s,baz=109,slow=7.3,SNR=9.8 | | | | | | |
| **CHTO** | **Chiang Mai** | **41.08** | **263** | *eP* | **P** | **02 30 25.0** | **-0.6** |
| | 4.3nm,0.6s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.24** | **262** | P | **P** | **02 30 25.9** | **-1.0** |
| | 0.9nm,0.3s,baz=100,slow=7.4,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.35** | **316** | PcP | **PcP** | **02 32 42.6** | **+0.7** |
| | 0.9nm,0.4s,baz=70,slow=1.7,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.91** | **307** | P | **P** | **02 31 20.9** | **+1.1** |
| | 1.1nm,0.5s,baz=85,slow=9.8,SNR=9.6 | | | | | | |
| **KURK** | **Kurchatov** | **50.10** | **312** | *eP* | **P** | **02 31 37.0** | **+0.5** |
| | 13nm,0.9s | | | | | | |
| **WRA** | **Warramunga Arr** | **51.76** | **190** | P | **P** | **02 31 47.4** | **-1.8** |
| | 0.6nm,0.4s,baz=7.3,slow=7.7,SNR=5.5 | | | | | | |
| **ILAR** | **Eielson Array** | **53.77** | **30** | P | **P** | **02 32 03.2** | **-0.3** |
| | 0.7nm,0.7s,baz=255,slow=6.1,SNR=8.7 | | | | | | |
| **AAK** | **Ala-Archa** | **53.98** | **302** | *eP* | **P** | **02 32 06.7** | **+0.9** |
| **EKS2** | **Erkin-Say** | **54.49** | **302** | *eP* | **P** | **02 32 10.3** | **+0.9** |
| | 1.7nm,0.6s | | | | | | |
| **BRVK** | **Borovoye** | **55.04** | **315** | *eP* | **P** | **02 32 13.7** | **+0.7** |
| | 2.7nm,0.7s | | | | | | |
| **MBWA** | **Marble Bar** | **56.72** | **206** | *eP* | **P** | **02 32 24.1** | **-1.2** |
| | 6.5nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **56.73** | **304** | *eP* | **P** | **02 32 26.5** | **+1.2** |
| | 1.3nm,0.6s | | | | | | |
| **INK** | **Inuvik** | **58.95** | **26** | P | **P** | **02 32 39.9** | **-0.5** |
| | 1.4nm,0.7s,baz=276,slow=4.6,SNR=4.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.20** | **313** | *eP* | **P** | **02 33 03.3** | **+0.5** |
| | 0.9nm,0.4s | | | | | | |
| **GEYT** | **Alibeck** | **67.32** | **301** | P | **P** | **02 33 36.8** | **+0.3** |
| | 0.7nm,0.4s,baz=96,slow=1.4,SNR=2.3 | | | | | | |
| **YKA** | **Yellowknife Ar** | **68.17** | **29** | P | **P** | **02 33 40.3** | **-1.0** |
| | 1.4nm,0.8s,baz=297,slow=6.3,SNR=3.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **69.44** | **340** | P | **P** | **02 33 50.1** | **+0.9** |
| | 4.4nm,1.0s,baz=64,slow=5.5,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **74.08** | **333** | P | **P** | **02 34 17.3** | **+0.2** |
| | 1.5nm,0.6s,baz=57,slow=7.0,SNR=11 | | | | | | |
| **KBZ** | **Khabaz** | **75.16** | **312** | P | **P** | **02 34 24.1** | **+0.5** |
| | 1.8nm,0.8s,baz=153,slow=2.3,SNR=3.5 | | | | | | |
| **NVAR** | **Mina Array Bea** | **77.65** | **53** | P | **P** | **02 34 38.3** | **+0.1** |
| | 1.0nm,0.6s,baz=286,slow=6.7,SNR=6.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **79.18** | **323** | P | **P** | **02 34 46.4** | **+0.4** |
| | 1.3nm,0.6s,baz=91,slow=35,SNR=5.1 | | | | | | |
| **HFS** | **Hagfors** | **79.45** | **337** | P | **P** | **02 34 47.1** | **-0.2** |
| | 0.9nm,0.5s,baz=116,slow=3.4,SNR=7.8 | | | | | | |
| **NB2** | **NORSAR Subarra** | **79.58** | **338** | P | **P** | **02 34 48.5** | **+0.4** |
| | comp=Z,0.8nm,0.6s,baz=40,slow=5.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **79.58** | **338** | P | **P** | **02 34 47.8** | **-0.4** |
| | comp=Z,1.0nm,0.8s,baz=44,slow=5.0,SNR=4.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **83.15** | **313** | P | **P** | **02 35 08.9** | **+1.3** |
| | comp=Z,1.7nm,0.9s,baz=103,slow=4.7,SNR=11 | | | | | | |
| **TXAR** | **Lajitas Array** | **92.79** | **53** | P | **P** | **02 35 54.7** | **+0.5** |
| | comp=Z,0.7nm,0.9s,baz=310,slow=4.9,SNR=7.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.75** | **314** | PKP | **PKPdf** | **02 41 35.5** | **-0.3** |
| | comp=Z,0.4nm,0.6s,baz=33,slow=2.0,SNR=7.9 | | | | | | |
| **LPAZ** | **La Paz** | **148.36** | **68** | PKPbc | **PKPbc** | **02 42 29.3** | **+0.5** |
| | comp=Z,2.4nm,0.9s,baz=11,slow=5.1,SNR=8.2 | | | | | | |

**SKHL 27 02:24:43.3±0.6,54°.52N×122°.95E,h10km,mb3.7/3, Southeastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNDR** | **Tynda** | **1.20** | **58** | *e*Sg | Sg | 02 25 22.0 | -0.1 |
| **TUP** | **Tupik** | **1.75** | **268** | *e*Pg | Pb | 02 25 15.0 | -0.6 |
| TUP | | | | *e*rx | rx | 02 25 16.1 | |
| TUP | | | | AMB | AMB | 02 25 16.5 | |
| | 55nm,0.5s | | | | | | |
| TUP | | | | *e*Sg | Sb | 02 25 38.4 | +0.7 |
| TUP | | | | A | A | 02 25 42.4 | |
| | 87nm,0.5s | | | | | | |
| **IENR** | **Iengra** | **2.02** | **32** | *e*Sg | Sb | 02 25 46.0 | +0.4 |
| **KROS** | **Kirovskiy** | **2.35** | **90** | *e*Pn | Pn | 02 25 22.0 | +0.1 |
| KROS | | | | *e*Pg | Pb | 02 25 25.8 | +0.1 |
| KROS | | | | AMB | AMB | 02 25 26.5 | |
| | 22nm,0.5s | | | | | | |
| KROS | | | | *e*rx | rx | 02 25 27.5 | |
| KROS | | | | *e*Sn | Sn | 02 25 51.5 | +0.7 |
| KROS | | | | *e*Sg | Sg | 02 25 56.8 | -2.0 |
| KROS | | | | A | A | 02 26 01.5 | |
| | 59nm,0.5s | | | | | | |
| **ZEA** | **Zeya** | **2.65** | **105** | *e*Sg | Sg | 02 26 06.4 | -2.0 |
| ZEA | | | | A | A | 02 26 07.3 | |
| | 60nm,0.7s | | | | | | |
| **KHN** | **Khani** | **3.00** | **325** | *e*Pg | Pb | 02 25 35.2 | -1.6 |
| KHN | | | | *e*Sg | Sb | 02 26 15.7 | +2.2 |
| **BMKR** | **Bomnak** | **3.43** | **84** | *e*Pg | Pb | 02 25 45.3 | +1.1 |
| BMKR | | | | *e*Sg | Sg | 02 26 31.9 | -1.6 |
| BMKR | | | | A | A | 02 26 36.9 | |
| | 15nm,0.5s | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **CRS** | **Chara** | **3.56** | **314** | *e*Pg | Pb | 02 25 47.6 +1.1 |
| CRS | | | | *e*Sg | Sg | 02 26 35.7 -2.1 |
| CRS | | | | *e*Sg | Sb | 02 26 37.3 +7.5 |
| **NLYR** | **Nelyaty** | **4.57** | **299** | *e*Pg | Pb | 02 26 06.2 +2.6 |
| NLYR | | | | *e*Sg | Sg | 02 27 08.3 -1.7 |
| **UKT** | **Uakit** | **5.45** | **284** | *e*Pn | Pn | 02 26 04.6 -0.1 |
| UKT | | | | *e*Pg | Pb | 02 26 21.4 +2.7 |
| UKT | | | | *e*Sn | Sn | 02 27 07.8 +0.2 |
| UKT | | | | *e*Sg | Sg | 02 27 34.5 -4.0 |
| **EKMR** | **Ekimchan** | **6.10** | **100** | *e*Sg | Sg | 02 27 54.0 -5.2 |
| EKMR | | | | A | A | 02 28 02.2 |
| | 6.0nm,0.8s | | | | | |

**IDC 27 02:26:29.1±2.9,5°.21S×133°.42E,h0km,mb3.9/2, mb1 4.0/5,mb1mx3.7/23,mbtmp3.8/5,ML3.1/3,Error ellipse: s-maj=130.7km s-min=26.5km az=73.0,Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **4.82** | **333** | Pn | Pn | 02 27 41.8 | -1.3 |
| | 1.5nm,0.3s,baz=180,slow=20,SNR=4.2 | | | | | | |
| SIJI | | | | Sn | Sn | 02 28 35.4 | -4.3 |
| | 2.9nm,0.3s,baz=53,slow=20,SNR=6.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.67** | **177** | Pn | Pn | 02 29 56.4 | -1.7 |
| | 0.1nm,0.3s,baz=356,slow=13,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **18.35** | **179** | P | Pn | 02 30 45.4 | 0.0 |
| | 0.1nm,0.3s,baz=6.7,slow=12,SNR=4.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.33** | **306** | P | P | 02 34 16.9 | -0.1 |
| | 0.7nm,0.3s,baz=119,slow=7.3,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.66** | **325** | P | P | 02 37 34.7 | +0.3 |
| | 0.8nm,0.6s,baz=116,slow=7.5,SNR=3.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **131.76** | **283** | PKP | PKPdf | 02 45 45.5 | +0.1 |
| | 0.4nm,1.0s,baz=90,slow=1.3,SNR=2.8 | | | | | | |

*ISCJB **27** 02:54:14.5±0.9,3°.44S±0°.07×99°.84E±0°.08,h33km, mb3.8/6,Error ellipse: s-maj=14.0km s-min=5.7km az=139.3*
*DJA **27** 02:54:16.2±1.1,3°.5S±9°×10°.1E±°,h49km±9km,M3.8/6, MLv3.8/6*
*IDC **27** 02:54:16.1±2.1,3°.54S×99°.68E,h30km±6km,mb3.7/6, mb1 3.9/6,mb1mx3.6/37,mbtmp3.9/6,Error ellipse: s-maj=85.8km s-min=19.6km az=56.0*

**ISC 27 02:54:16.8±1.0,3°.38S±0°.09×99°.86E±0°.10,h35km,n25, σ1§37/22,mb3.8/6,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.64** | **14** | P | **Pn** | **02 54 28.6** | **-0.7** |
| PPSI | | | | S | **Sn** | **02 54 39.8** | **+1.6** |
| **KRJI** | **Kerinci** | **2.05** | **51** | P | **Pn** | **02 54 47.7** | **-1.2** |
| **SISI** | **Saibi** | **2.18** | **339** | P | **Pn** | **02 54 48.5** | **-2.1** |
| SISI | | | | S | **Sn** | **02 55 15.9** | **-0.6** |
| **MASI** | **Maura Aman, Be** | **2.39** | **84** | P | **Pn** | **02 54 50.9** | **-2.6** |
| **KSI** | **Kapahiang** | **2.74** | **96** | P | **Pn** | **02 54 56.6** | **-1.8** |
| **PPI** | **Padang Panjang** | **2.96** | **10** | P | **Pn** | **02 55 01.6** | **+0.3** |
| **MNAI** | **Manna** | **3.24** | **108** | P | **Pn** | **02 55 05.8** | **+0.6** |
| MNAI | | | | S | **Sn** | **02 55 42.1** | **-0.4** |
| **LHSI** | **Lahat** | **3.68** | **97** | P | **Pn** | **02 55 10.1** | **-1.2** |
| **BKNI** | **Bangkinang** | **3.87** | **18** | P | **Pn** | **02 55 11.7** | **-2.2** |
| **MDSI** | **Maura Dua** | **4.45** | **104** | P | **Pn** | **02 55 21.2** | **-0.6** |
| **CMAR** | **Chiang Mai Arr** | **21.72** | **358** | P | **P** | **02 59 05.6** | **+0.5** |
| | 1.9nm,0.4s,baz=188,slow=10,SNR=5.3 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.56** | **260** | T | T | 03 28 52.5 | |
| | baz=80,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.57** | **260** | T | T | 03 28 52.2 | |
| | baz=80,slow=74 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.58** | **260** | T | T | 03 28 53.6 | |
| | baz=80,slow=74 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.03** | **159** | T | T | 03 37 05.4 | |
| | baz=330,slow=76 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.04** | **159** | T | T | 03 37 04.2 | |
| | baz=330,slow=76 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.05** | **159** | T | T | 03 37 04.2 | |
| | baz=330,slow=76 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.44** | **119** | P | **P** | **03 01 26.8** | **-0.2** |
| | 0.9nm,0.7s,baz=304,slow=9.4,SNR=12 | | | | | | |
| **ASAR** | **Alice Springs** | **38.57** | **125** | P | **P** | **03 01 37.1** | **+0.5** |
| | 0.8nm,0.5s,baz=296,slow=7.7,SNR=8.3 | | | | | | |
| **SONM** | **Songino Array** | **51.33** | **6** | P | **P** | **03 03 19.5** | **+1.7** |
| | 0.4nm,0.4s,baz=186,slow=6.7,SNR=3.6 | | | | | | |
| SONM | | | | pP | **pP** | **03 03 27.6** | **-0.7** |
| | 1.3nm,0.6s,baz=191,slow=8.9,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.32** | **345** | P | **P** | **03 03 26.1** | **+1.0** |
| | 0.4nm,0.6s,baz=157,slow=7.8,SNR=2.9 | | | | | | |
| MKAR | | | | pP | **pP** | **03 03 34.4** | **-1.2** |
| | 1.4nm,0.5s,baz=137,slow=8.9,SNR=7.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.44** | **28** | pP | pP | 03 03 57.3 | -1.1 |
| | 2.6nm,0.6s,baz=217,slow=6.6,SNR=5.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.49** | **350** | pP | pP | 03 04 18.3 | -1.7 |
| | 2.3nm,0.5s,baz=182,slow=5.9,SNR=5.9 | | | | | | |
| **FINES** | **FINESS Array B** | **85.27** | **332** | P | **P** | **03 06 48.7** | **-1.0** |
| | 0.3nm,0.6s,baz=310,slow=1.6,SNR=6.9 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 03 14 03.8 | -0.9 |
| | 0.4nm,0.6s,baz=212,slow=0.6,SNR=4.7 | | | | | | |

*ISCJB **27** 02:55:34.0±0.5,42°.55N±0°.02×18°.58E±0°.03,h3km±3km, Error ellipse: s-maj=4.4km s-min=3.6km az=6.8*
*CSEM **27** 02:55:34.4±0.2,42°.54N×18°.60E,h2km,ML2.6,Error ellipse: s-maj=3.7km s-min=3.1km az=86.0*
*PDG **27** 02:55:34.3±0.1,42°.54N×18°.59E,h8km,MD2.7/4, ML2.6/10,Error ellipse: s-maj=0.1km s-min=0.2km az=0.0*
*BEO **27** 02:55:35.1±0.5,42°.57N×18°.63E,h0km,ML2.5/1*

**ISC 27 02:55:34.1±0.9,42°.55N±0°.02×18°.58E±0°.03,h8km±7km, n55,σ0§92/93,13C-21D,Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HCY** | **Herceg Novi** | **0.12** | **211** | ⇓*i*Pg | **Pg** | **02 55 36.8** | **-0.1** |
| HCY | | | | *e*Sg | **Sg** | **02 55 39.0** | **+0.2** |
| **HCY** | **Herceg Novi** | **0.12** | **211** | ⇓*i*Pg | **Pg** | **02 55 36.8** | **-0.1** |
| HCY | | | | *e*Sg | **Sg** | **02 55 39.0** | **+0.2** |
| **BUM** | **Brajici-Budva** | **0.34** | **137** | ⇓*i*Pg | **Pg** | **02 55 40.4** | **-0.5** |
| BUM | | | | *e*Sg | **Sg** | **02 55 45.6** | **+0.1** |
| **BUM** | **Brajici-Budva** | **0.34** | **137** | ⇓*i*Pg | **Pg** | **02 55 40.4** | **-0.5** |
| BUM | | | | *e*Sg | **Sg** | **02 55 45.6** | **+0.1** |
| **NKME** | **Niksic** | **0.35** | **52** | ⇓*i*Pg | **Pg** | **02 55 40.8** | **-0.3** |
| NKME | | | | *e*Sg | **Sg** | **02 55 46.5** | **+0.8** |
| **NKME** | **Niksic** | **0.35** | **52** | ⇓*i*Pg | **Pg** | **02 55 40.8** | **-0.3** |
| NKME | | | | *e*Sg | **Sg** | **02 55 46.5** | **+0.8** |
| **NKY** | **Niksic** | **0.40** | **49** | ⇑*i*Pg | **Pg** | **02 55 41.8** | **-0.2** |
| NKY | | | | *e*Sg | **Sg** | **02 55 48.4** | **+1.0** |
| **NKY** | **Niksic** | **0.40** | **49** | ⇑*i*Pg | **Pg** | **02 55 41.8** | **-0.2** |
| NKY | | | | *e*Sg | **Sg** | **02 55 48.4** | **+1.0** |
| **PDG** | **Podgorica** | **0.52** | **103** | ⇑*i*Pg | **Pg** | **02 55 43.4** | **-0.7** |
| PDG | | | | *e*Sg | **Sg** | **02 55 51.4** | **+0.5** |
| **TTG** | **Podgorica** | **0.52** | **103** | ⇑*i*Pg | **Pg** | **02 55 43.4** | **-0.7** |
| TTG | | | | *e*Sg | **Sg** | **02 55 51.4** | **+0.5** |
| **DRME** | **Dracevica, Mon** | **0.58** | **129** | ⇓*i*Pg | **Pg** | **02 55 44.9** | **-0.4** |
| DRME | | | | *e*Sg | **Sg** | **02 55 53.7** | **+0.8** |
| **DRME** | **Dracevica, Mon** | **0.58** | **129** | ⇓*i*Pg | **Pg** | **02 55 44.9** | **-0.4** |
| DRME | | | | *e*Sg | **Sg** | **02 55 53.7** | **+0.8** |
| **UPM** | **Unac-Piva** | **0.69** | **20** | ⇑*i*Pg | **Pg** | **02 55 47.4** | **-0.2** |
| UPM | | | | *e*Sg | **Sb** | **02 55 58.5** | **+0.1** |
| **UPM** | **Unac-Piva** | **0.69** | **20** | ⇑*i*Pg | **Pg** | **02 55 47.4** | **-0.2** |
| UPM | | | | *e*Sg | **Sb** | **02 55 58.5** | **+0.1** |
| **STON** | **Ston** | **0.72** | **297** | *e*Pg | **Pg** | **02 55 47.7** | **-0.3** |
| **STON** | **Ston** | **0.72** | **297** | *e*Pg | **Pg** | **02 55 47.7** | **-0.3** |
| **ULC** | **Ulcinj** | **0.77** | **140** | ⇓*i*Pg | **Pg** | **02 55 48.2** | **-0.7** |
| ULC | | | | *e*Sg | **Sb** | **02 56 00.1** | **-0.3** |
| **ULC** | **Ulcinj** | **0.77** | **140** | ⇓*i*Pg | **Pg** | **02 55 48.2** | **-0.7** |
| ULC | | | | *e*Sg | **Sb** | **02 56 00.1** | **-0.3** |
| **PLE** | **Pljevlja** | **0.98** | **37** | *e*Pg | **Pg** | **02 55 52.7** | **-0.3** |
| PLE | | | | *e*Sg | **Sn** | **02 56 07.8** | **-0.6** |
| **PLE** | **Pljevlja** | **0.98** | **37** | *e*Pg | **Pg** | **02 55 52.7** | **-0.3** |
| PLE | | | | *e*Sg | **Sn** | **02 56 07.8** | **-0.6** |
| **BEY** | **Berane** | **1.02** | **71** | ⇓*i*Pg | **Pg** | **02 55 53.0** | **-0.8** |
| BEY | | | | *e*Sg | **Sn** | **02 56 08.9** | **-0.5** |
| **IVA** | **Berane** | **1.02** | **71** | ⇓*i*Pg | **Pg** | **02 55 53.0** | **-0.8** |
| IVA | | | | *e*Sg | **Sn** | **02 56 08.9** | **-0.5** |
| **PVY** | **Plav** | **1.02** | **87** | ⇑*i*Pg | **Pg** | **02 55 53.4** | **-0.4** |
| PVY | | | | *e*Sg | **Sn** | **02 56 09.3** | **-0.1** |
| **SJES** | **Sjenica** | **1.25** | **55** | *e*Pg | **Pn** | **02 55 57.2** | **-0.8** |
| SJES | | | | *i* Sg | **Sb** | **02 56 12.0** | **-2.2** |
| **SJES** | **Sjenica** | **1.25** | **55** | *e*Pg | **Pn** | **02 55 57.2** | **-0.8** |
| SJES | | | | *i* Sg | **Sb** | **02 56 12.0** | **-2.2** |
| **BBLS** | **Lazići** | **1.45** | **24** | *e*Pn | **Pg** | **02 56 02.3** | **+0.4** |
| BBLS | | | | *e*Sg | **Sg** | **02 56 20.5** | **-0.1** |
| **BBLS** | **Lazići** | **1.45** | **24** | *e*Pn | **Pg** | **02 56 02.3** | **+0.4** |
| BBLS | | | | *e*Sg | **Sg** | **02 56 20.5** | **-0.1** |
| **IVAS** | **Ivanjica** | **1.54** | **48** | *e*Pn | **Pb** | **02 56 02.9** | **-0.1** |
| IVAS | | | | *e*Sn | **Sg** | **02 56 23.7** | **0.0** |
| **IVAS** | **Ivanjica** | **1.54** | **48** | *e*Pn | **Pb** | **02 56 02.9** | **-0.1** |
| IVAS | | | | *e*Sn | **Sg** | **02 56 23.7** | **0.0** |
| **DIVS** | **Divibare** | **1.86** | **33** | ⇓*i*Pn | **Pb** | **02 56 07.8** | **-0.6** |
| DIVS | | | | *i* Sn | **Sb** | **02 56 31.5** | **-0.3** |
| **DIVS** | **Divibare** | **1.86** | **33** | ⇓*i*Pn | **Pb** | **02 56 07.8** | **-0.6** |
| DIVS | | | | *i* Sn | **Sb** | **02 56 31.5** | **-0.3** |
| **SELS** | **Selova** | **1.98** | **69** | ⇓*i*Pn | **Pn** | **02 56 09.1** | **+1.1** |
| **SELS** | **Selova** | **1.98** | **69** | ⇓*i*Pn | **Pn** | **02 56 09.1** | **+1.1** |
| **GRUS** | **Gruza** | **2.06** | **49** | ⇓*i*Pn | **Pn** | **02 56 10.2** | **+1.2** |
| **GRUS** | **Gruza** | **2.06** | **49** | ⇓*i*Pn | **Pn** | **02 56 10.2** | **+1.2** |
| **TEKS** | **Tekeris** | **2.11** | **19** | *e*Pn | **Pb** | **02 56 11.4** | **-1.3** |
| **TEKS** | **Tekeris** | **2.11** | **19** | *e*Pn | **Pb** | **02 56 11.4** | **-1.3** |
| **TRUS** | **Trudelj** | **2.14** | **38** | ⇓*i*Pn | **Pn** | **02 56 10.6** | **+0.5** |
| TRUS | | | | *e*Sn | **Sb** | **02 56 38.7** | **-1.0** |
| **TRUS** | **Trudelj** | **2.14** | **38** | ⇓*i*Pn | **Pn** | **02 56 10.6** | **+0.5** |
| TRUS | | | | *e*Sn | **Sb** | **02 56 38.7** | **-1.0** |
| **BARS** | **Barje** | **2.40** | **83** | ⇑*i*Pn | **Pn** | **02 56 15.3** | **+1.6** |
| BARS | | | | *i* Sn | **Sn** | **02 56 44.8** | **+1.5** |
| **BLY** | **Banja Luka** | **2.42** | **336** | ⇑*i*Pn | **Pb** | **02 56 16.7** | **-1.2** |
| BLY | | | | *i* Sn | **Sb** | **02 56 47.3** | **-0.5** |
| **BLY** | **Banja Luka** | **2.42** | **336** | ⇑*i*Pn | **Pb** | **02 56 16.7** | **-1.2** |
| BLY | | | | *i* Sn | **Sb** | **02 56 47.3** | **-0.5** |
| **BOVS** | **Bovan** | **2.53** | **64** | *e*Pn | **Pn** | **02 56 16.7** | **+1.2** |
| **BOVS** | **Bovan** | **2.53** | **64** | *e*Pn | **Pn** | **02 56 16.7** | **+1.2** |
| **FGSL** | **Fruska Gora** | **2.75** | **18** | *e*Pn | **Pn** | **02 56 19.0** | **+0.4** |
| FGSL | | | | *i* Sn | **Sn** | **02 56 53.7** | **+1.7** |
| **FRGS** | **Fruska Gora** | **2.75** | **18** | *e*Pn | **Pn** | **02 56 19.0** | **+0.4** |
| FRGS | | | | *i* Sn | **Sn** | **02 56 53.7** | **+1.7** |
| **KUBS** | **Kucevo** | **2.92** | **49** | *e*Pn | **Pn** | **02 56 20.7** | **-0.2** |
| **KUBS** | **Kucevo** | **2.92** | **49** | *e*Pn | **Pn** | **02 56 20.7** | **-0.2** |
| **ZAPS** | **Zavoj** | **3.06** | **75** | ⇑*i*Pn | **Pn** | **02 56 25.3** | **+2.4** |
| **ZAPS** | **Zavoj** | **3.06** | **75** | ⇑*i*Pn | **Pn** | **02 56 25.3** | **+2.4** |
| **BZS** | **Buzias** | **3.77** | **35** | *e*Pn | **Pn** | **02 56 33.5** | **+1.0** |
| BZS | | | | *i* Sn | **Sn** | **02 57 16.4** | **-0.5** |
| **BZS** | **Buzias** | **3.77** | **35** | *e*Pn | **Pn** | **02 56 33.5** | **+1.0** |
| BZS | | | | *i* Sn | **Sn** | **02 57 16.4** | **-0.5** |
| **GZR** | **Gura Zlata** | **4.15** | **45** | ⇓*i*P | **Pn** | **02 56 39.3** | **+1.4** |
| **GZR** | **Gura Zlata** | **4.15** | **45** | S | **Sn** | **02 57 27.9** | **+1.3** |
| **DRGR** | | **5.16** | **33** | ⇑*i*P | **Pn** | **02 56 54.0** | **+2.3** |

*CASC **27** 03:16:55.0±1.5,13°.59N×90°.65W,h34km±12km,MD3.7, ML3.7*
*MEX **27** 03:16:58.7±0.4,13°.78N×90°.75W,h20km,MD3.9*

**ISC 27 03:16:52.6±2.0,13°.52N±0°.08×90°.69W±0°.04,h19km±3km, n16,σ0§98/26,1C-3D,Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCG** | **Pacaya** | **0.87** | **5** | *e*P | **Pg** | **03 17 10.4** | **+0.7** |
| PCG | | | | *e*S | **Sg** | **03 17 21.7** | **+0.4** |
| **FUG** | **Fuego 3** | **0.93** | **351** | *e*P | **Pg** | **03 17 11.2** | **+0.4** |
| **RTR** | **El Retiro** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **37.42** | **118** | P | | **P** | **03 38 17.6** | **+0.3** |
| | 3.6nm,0.9s,baz=303,slow=8.7,SNR=8.9 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **03 40 36.4** | **+0.6** |
| | 0.5nm,0.7s,baz=285,slow=4.5,SNR=4.0 | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.42** | **118** | *e*P | | **P** | **03 38 17.7** | **+0.2** |
| | 14nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** | **38.52** | **124** | P | | **P** | **03 38 27.1** | **+0.4** |
| | 2.4nm,0.9s,baz=299,slow=7.9,SNR=20 | | | | | | | |
| ASAR | | | | PcP | | **PcP** | **03 40 40.1** | **+0.9** |
| | 0.7nm,0.5s,baz=323,slow=2.2,SNR=5.9 | | | | | | | |
| **CTA** | **Charters Tower** | **48.16** | **114** | P | | **P** | **03 39 45.3** | **+0.8** |
| | 2.0nm,0.3s,baz=269,slow=12,SNR=4.3 | | | | | | | |
| **CTAO** | **Charters Tower** | **48.16** | **114** | *e*P | | **P** | **03 39 45.0** | **+0.5** |
| | 7.0nm,0.8s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.57** | **30** | P | | **P** | **03 39 48.6** | **+1.3** |
| **KSRS** | **Korea Array** | **48.60** | **30** | P | | **P** | **03 39 48.6** | **+1.1** |
| | 5.0nm,0.9s,baz=224,slow=8.8,SNR=14 | | | | | | | |
| KSRS | | | | LR | | LR | 04 02 38.1 | |
| | comp=Z,42nm,19.7s,baz=227,slow=39 | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.26** | **337** | *e*P | | **P** | **03 40 08.4** | **+0.5** |
| | 3.5nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **51.63** | **6** | P | | **P** | **03 40 11.8** | **+1.3** |
| | 4.7nm,0.9s,baz=190,slow=8.8,SNR=22 | | | | | | | |
| SONM | | | | pP | | **pP** | **03 40 22.1** | **+1.0** |
| | 4.1nm,0.8s,baz=190,slow=10,SNR=9.3 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.73** | **6** | *e*P | | **P** | **03 40 12.2** | **+1.0** |
| | 5.0nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.56** | **345** | P | | **P** | **03 40 18.1** | **+0.7** |
| | 1.4nm,0.4s,baz=156,slow=8.6,SNR=12 | | | | | | | |
| MKAR | | | | pP | | **pP** | **03 40 27.6** | **-0.2** |
| | 2.7nm,0.6s,baz=145,slow=8.9,SNR=7.4 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.75** | **38** | P | | **P** | **03 40 26.2** | **-0.1** |
| | 2.2nm,0.9s,baz=216,slow=8.6,SNR=5.0 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.76** | **28** | P | | **P** | **03 40 41.0** | **+0.3** |
| | 6.8nm,0.8s,baz=236,slow=5.9,SNR=12 | | | | | | | |
| USRK | | | | LR | | LR | 04 09 06.7 | |
| | comp=Z,49nm,18.9s,baz=173,slow=41 | | | | | | | |
| **GEYT** | **Alibeck** | **56.56** | **321** | P | | **P** | **03 40 45.7** | **-0.8** |
| | 0.8nm,0.3s,baz=181,slow=5.9,SNR=4.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.76** | **350** | P | | **P** | **03 41 02.0** | **+0.4** |
| | 6.1nm,0.7s,baz=173,slow=5.8,SNR=24 | | | | | | | |
| ZALV | | | | pP | | **pP** | **03 41 11.4** | **-0.9** |
| | 6.5nm,0.8s,baz=174,slow=4.5,SNR=7.3 | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.97** | **332** | *e*P | | **P** | **03 41 29.6** | **-0.8** |
| | 4.8nm,0.9s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **64.69** | **332** | P | | **P** | **03 41 41.3** | **-0.4** |
| | 1.5nm,0.9s,baz=131,slow=11,SNR=3.7 | | | | | | | |
| **MAW** | **Mawson** | **68.60** | **194** | LR | | LR | 04 04 35.7 | |
| | comp=Z,53nm,21.8s,baz=62,slow=29 | | | | | | | |
| **KBZ** | **Khabaz** | **69.39** | **320** | P | | **P** | **03 42 10.7** | **-1.0** |
| | 1.8nm,0.9s,baz=146,slow=11,SNR=4.1 | | | | | | | |
| KBZ | | | | pP | | **pP** | **03 42 21.1** | **-1.3** |
| | 1.8nm,0.8s,baz=106,slow=6.0,SNR=3.3 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.25** | **313** | P | | **P** | **03 42 40.4** | **-0.8** |
| | 0.6nm,0.5s,baz=108,slow=4.7,SNR=6.2 | | | | | | | |
| BRTR | | | | pP | | **pP** | **03 42 50.5** | **-1.6** |
| | 1.1nm,0.6s,baz=140,slow=8.2,SNR=7.1 | | | | | | | |
| **BOSA** | **Boshof** | **74.61** | **241** | LR | | LR | 04 09 15.4 | |
| | comp=Z,20nm,21.6s,baz=132,slow=31 | | | | | | | |
| **VNDA** | **Vanda** | **80.58** | **169** | LR | | LR | 04 14 33.3 | |
| | comp=Z,34nm,20.8s,baz=344,slow=32 | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **84.54** | **320** | *e*P | | **P** | **03 43 38.1** | **+1.2** |
| **FINES** | **FINESS Array B** | **85.46** | **332** | P | | **P** | **03 43 41.4** | **+0.3** |
| | 0.6nm,0.4s,baz=122,slow=6.7,SNR=10 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.95** | **340** | P | | **P** | **03 43 53.2** | **+0.1** |
| | 4.8nm,1.0s,baz=101,slow=4.7,SNR=4.1 | | | | | | | |
| **GERES** | **GERESS Array B** | **90.12** | **319** | P | | **P** | **03 44 04.4** | **+0.5** |
| | 0.4nm,0.6s,baz=90,slow=4.0,SNR=5.6 | | | | | | | |
| GERES | | | | pP | | **pP** | **03 44 14.5** | **-0.6** |
| | 0.7nm,0.8s,baz=103,slow=4.2,SNR=3.0 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.64** | **27** | *e*PKPdf | | PKPbc | 03 50 39.7 | 0.0 |
| **TXAR** | **Lajitas Array** | **146.19** | **39** | PKPbc | | **PKPab** | **03 50 46.3** | **+0.9** |
| | 4.0nm,0.9s,baz=276,slow=1.5,SNR=39 | | | | | | | |
| **WVT** | **Waverly** | **146.96** | **11** | *e*PKPbc | | **PKPbc** | **03 50 46.5** | **-0.1** |
| **JCT** | **Junction City** | **147.59** | **33** | *e*PKPdf | | **PKPdf** | **03 50 45.8** | **-0.2** |
| JCT | | | | *e*PKPbc | | **PKPbc** | **03 50 49.0** | **+0.3** |

**IGQ 27 03:34:07±1.1, 2°25S×80°57W, h5km±131km, Mb4.0, 2D, Error ellipse: s-maj=7.9km s-min=2.4km az=10.7, Near coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ISPT** | **Isla de la Pla** | **1.10** | **333** | ⇓P | Pb | 03 34 28.5 | 0.0 |
| **ISPT** | **Isla de la Pla** | **1.10** | **333** | ⇓S | Sg | 03 34 41.1 | -1.4 |
| **CHIS** | **Cerro-Chispas-** | **1.20** | **353** | P | Pg | 03 34 30.0 | -0.1 |
| **PECV** | **Mancha de Ca P** | **1.55** | **20** | P | Pn | 03 34 33.5 | -1.8 |
| **RIOE** | **Riobamba** | **2.00** | **76** | P | Pn | 03 34 42.6 | +0.7 |
| **IGUA** | **Igualata** | **2.07** | **69** | P | Pb | 03 34 44.5 | -1.3 |
| **BIL2** | **Estacion Bilba** | **2.21** | **69** | P | Pb | 03 34 46.8 | -1.1 |
| **BMAS** | **Trigal station** | **2.22** | **71** | P | Pn | 03 34 45.5 | +0.5 |
| **BMAS** | **Trigal station** | **2.22** | **71** | S | Sn | 03 35 13.3 | +0.2 |
| **BBIL** | **Ulba Tungurahu** | **2.23** | **69** | P | Pn | 03 34 45.3 | +0.3 |
| **ARRY** | **Arrayan** | **2.24** | **71** | P | Pn | 03 34 46.6 | +1.4 |
| **JUI6** | **Juive** | **2.25** | **69** | P | Pb | 03 34 48.0 | -0.7 |
| **PAT1** | **Patacocha** | **2.25** | **71** | P | Pn | 03 34 46.2 | +0.6 |
| **BPAT** | **Tungurahua Vol** | **2.26** | **71** | P | Pn | 03 34 46.2 | +0.6 |
| **RUN5** | **Runtun** | **2.30** | **69** | P | Pn | 03 34 47.4 | +1.4 |
| **RUN5** | **Runtun** | **2.30** | **69** | S | Sn | 03 35 15.0 | +0.1 |
| **MAG1** | **Magdalena** | **2.30** | **20** | P | Pn | 03 34 43.4 | -2.3 |
| **ULBA** | **Ulba** | **2.30** | **70** | P | Pb | 03 34 48.5 | -1.0 |
| **BULB** | **Ulba Tungurahu** | **2.30** | **70** | P | Pn | 03 34 47.1 | +1.0 |
| **BRUN** | **Tungurahua Vol** | **2.31** | **69** | S | Sn | 03 35 14.6 | -0.7 |
| **BRUN** | **Tungurahua Vol** | **2.31** | **69** | P | Pb | 03 34 47.9 | -1.7 |
| **PAST** | **Pastocalle** | **2.47** | **51** | P | Pn | 03 34 49.1 | +0.6 |
| **PISA** | **Pisayambo** | **2.48** | **62** | P | Pb | 03 34 51.7 | -1.1 |
| **BNAS** | **Cotopaxi Volca** | **2.61** | **53** | P | Pn | 03 34 52.4 | +1.9 |
| **BVC2** | **Cotopaxi Volca** | **2.67** | **54** | P | Pn | 03 34 53.2 | +1.8 |
| **BTAM** | **Cotopaxi Volca** | **2.67** | **54** | P | Pn | 03 34 53.2 | +1.8 |
| **BTAM** | **Cotopaxi Volca** | **2.67** | **54** | S | Sn | 03 35 26.1 | +1.4 |
| **TAMB** | **Tambo** | **2.69** | **55** | P | Pb | 03 34 54.1 | -2.2 |
| **VC1** | **Cotopaxi 1** | **2.69** | **54** | P | Pn | 03 34 53.4 | +1.8 |
| **PITA** | **Cotopaxi Volc** | **2.72** | **52** | P | Pn | 03 34 54.2 | +2.4 |
| **GGP** | **Refugio Guagua** | **2.85** | **44** | P | Pn | 03 34 55.5 | +1.6 |
| **PINO** | **Pino** | **2.85** | **43** | P | Pn | 03 34 55.7 | +1.7 |
| **ANTI** | **Antisana** | **3.00** | **54** | P | Pn | 03 34 58.1 | +2.2 |
| **OTAV** | **Otavalo** | **3.25** | **41** | P | Pn | 03 35 00.9 | +1.7 |
| **CUIC** | **Volcan Cuicoch** | **3.36** | **41** | P | Pn | 03 35 02.7 | +2.0 |
| **COTA** | **Cotacachi** | **3.40** | **41** | P | Pn | 03 35 04.7 | +3.3 |
| **CAYA** | **Cayambe** | **3.46** | **48** | P | Pn | 03 35 05.0 | +2.8 |
| **URCU** | **Urcuqui** | **3.53** | **41** | P | Pn | 03 35 04.2 | +1.1 |

**DJA 27 03:51:12.4±1.0, 3°S±6′×9°9E±°, h10km, M3.5/6, MLv3.5/6, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.66** | **75** | P | Pg | 03 51 23.0 | -2.2 |
| PPSI | | | | S | Sb | 03 51 35.2 | -0.1 |
| **SISI** | **Saibi** | **1.63** | **350** | P | Pn | 03 51 40.3 | -0.8 |
| SISI | | | | S | Sn | 03 52 02.3 | +0.1 |
| **KRJI** | **Kerinci** | **2.25** | **68** | P | Pn | 03 51 50.0 | +0.1 |
| **PDSI** | **Padang** | **2.29** | **28** | P | Pn | 03 51 50.7 | +0.4 |
| PDSI | | | | S | Sn | 03 52 19.4 | +0.7 |
| **PPI** | **Padang Panjang** | **2.67** | **23** | P | Pn | 03 51 54.8 | -0.7 |
| **MASI** | **Maura Aman, Be** | **2.87** | **94** | P | Pn | 03 51 59.2 | +0.9 |

*IDC **27** 04:06:14.9±1.4, 3°.81S×99°.31E, h0km, mb3.8/9, mb1 3.9/9, mb1mx3.7/36, mbtmp3.8/9, Error ellipse: s-maj=54.4km s-min=19.1km az=51.0*
*ISCJB **27** 04:06:18.9±0.7, 3°.56S±0°.05×99°.56E±0°.05, h33km, mb3.8/9, Error ellipse: s-maj=9.0km s-min=5.4km az=141.9*
*DJA **27** 04:06:22.6±0.9, 3°S±4′×10°0E±°, h38km±10km, M3.8/5, MLv3.8/5*

**ISC 27 04:06:21.2±1.0, 3°.54S±0°.07×99°.60E±0°.08, h35km, n30, σ1ᵎ26/32, mb3.9/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.87** | **28** | P | **Pn** | **04 06 36.5** | **-0.4** |
| **SISI** | **Saibi** | **2.25** | **347** | P | **Pn** | **04 06 54.4** | **-1.6** |
| SISI | | | | S | **Sn** | **04 07 23.1** | **+0.5** |
| **MASI** | **Maura Aman, Be** | **2.66** | **82** | P | **Pn** | **04 07 02.9** | **+1.3** |
| MASI | | | | S | **Sn** | **04 07 33.1** | **+0.4** |
| **PDSI** | **Padang** | **2.74** | **18** | P | **Pn** | **04 07 00.1** | **-2.7** |
| PDSI | | | | S | **Sn** | **04 07 34.2** | **-0.6** |
| **KSI** | **Kapahiang** | **2.99** | **92** | P | **Pn** | **04 07 07.4** | **+1.3** |
| **PPI** | **Padang Panjang** | **3.16** | **15** | P | **Pn** | **04 07 07.6** | **-0.9** |
| PPI | | | | S | **Sn** | **04 07 43.4** | **-1.6** |
| **SDSI** | **Sungai Dareh** | **3.17** | **35** | P | **Pn** | **04 07 08.8** | **+0.3** |
| **MNAI** | **Manna** | **3.44** | **104** | P | **Pn** | **04 07 14.1** | **+1.7** |
| **LHSI** | **Lahat** | **3.92** | **94** | P | **Pn** | **04 07 19.2** | **+0.2** |
| **BKNI** | **Bangkinang** | **4.10** | **21** | P | **Pn** | **04 07 21.4** | **0.0** |
| **RGRI** | **Rengat** | **4.18** | **41** | P | **Pn** | **04 07 22.5** | **0.0** |
| **MNSI** | **Mandailing Nat** | **4.30** | **360** | P | **Pn** | **04 07 26.4** | **+2.2** |
| **JMBI** | **JAMBI** | **4.46** | **65** | P | **Pn** | **04 07 27.0** | **+0.7** |
| **MDSI** | **Maura Dua** | **4.66** | **102** | P | **Pn** | **04 07 28.7** | **-0.4** |
| MDSI | | | | S | **Sn** | **04 08 19.3** | **-2.7** |
| **LWLI** | **Liwa** | **4.68** | **108** | P | **Pn** | **04 07 28.1** | **-1.4** |
| **SBSI** | **Sibolga** | **5.10** | **352** | P | **Pn** | **04 07 35.4** | **+0.2** |
| **PMBI** | **Palembang** | **5.20** | **83** | P | **Pn** | **04 07 34.8** | **-1.7** |
| **CMAR** | **Chiang Mai Arr** | **21.86** | **358** | P | **P** | **04 11 12.4** | **+1.4** |
| | 3.6nm,0.7s,baz=187,slow=9.8,SNR=18 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.98** | **158** | T | T | 04 49 38.0 | |
| | baz=330 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.00** | **158** | T | T | 04 49 32.9 | |
| | baz=330 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.00** | **158** | T | T | 04 49 27.4 | |
| | baz=330 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.59** | **118** | P | **P** | **04 13 32.3** | **-0.4** |
| | 0.4nm,0.6s,baz=303,slow=9.0,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.70** | **124** | P | **P** | **04 13 41.1** | **-1.0** |
| | 0.2nm,0.4s,baz=300,slow=7.2,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.40** | **345** | P | **P** | **04 15 30.6** | **+0.6** |
| | 1.0nm,0.6s,baz=153,slow=8.2,SNR=6.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.69** | **28** | P | **P** | **04 15 55.4** | **+1.3** |
| | 2.5nm,0.8s,baz=212,slow=5.2,SNR=6.1 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.91** | **344** | P | **P** | **04 16 02.5** | **-0.1** |
| | 0.5nm,0.6s,baz=171,slow=6.8,SNR=5.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.60** | **350** | P | **P** | **04 16 15.1** | **+0.7** |
| | 1.7nm,0.4s,baz=174,slow=4.5,SNR=6.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.48** | **340** | P | **P** | **04 16 33.1** | **-1.1** |
| | 0.5nm,0.3s,baz=116,slow=9.8,SNR=4.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.06** | **313** | P | **P** | **04 17 53.2** | **-0.8** |
| | 0.7nm,0.7s,baz=141,slow=8.0,SNR=4.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.15** | **38** | PKPbc | **PKPab** | **04 26 00.0** | **+0.8** |
| | 1.2nm,0.9s,baz=265,slow=1.3,SNR=13 | | | | | | |

*IDC **27** 04:07:27.9±1.2, 30°.98N×84°.36E, h0km, mb3.7/4, mb1 3.9/5, mb1mx3.5/42, mbtmp3.8/5, ML4.6/1, MS2.9/3, Ms1 2.9/3, ms1mx2.6/39, Error ellipse: s-maj=41.9km s-min=24.5km az=57.0*

**ISC 27 04:07:33.2±1.2, 31°.1N±0°.2×84°.6E±0°.1, h35km, n9, σ2ᵎ02/10, mb3.7/3, Xizang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKAR** | **Makanchi Array** | **15.75** | **354** | Pn | **P** | **04 11 16.2** | **+0.4** |
| | 0.2nm,0.3s,baz=175,slow=12,SNR=11 | | | | | | |
| **CD2** | **Chengdu** | **16.41** | **86** | *e*P | **P** | **04 11 27.0** | **+3.7** |
| CD2 | | | | pP | **pP** | **04 11 32.5** | **+0.1** |
| CD2 | | | | sP | **sP** | **04 11 34.0** | **-2.8** |
| CD2 | | | | S | **S** | **04 14 31.0** | **-2.1** |
| CD2 | | | | sS | **sS** | **04 14 47.5** | **-0.1** |
| CD2 | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **18.09** | **131** | P | **P** | **04 11 42.4** | **+0.5** |
| | comp=Z,0.7nm,0.3s,baz=315,slow=11,SNR=5.1 | | | | | | |
| CMAR | | | | LR | LR | 04 19 40.5 | |
| | comp=Z,16nm,21.5s,baz=35,slow=40 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **20.00** | **349** | P | Pn | 04 12 04.2 | -0.3 |
| | comp=Z,2.4nm,0.8s,baz=168,slow=10,SNR=8.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **22.81** | **0** | P | **P** | **04 12 33.2** | **+0.5** |
| | comp=Z,1.8nm,0.6s,baz=182,slow=11,SNR=7.1 | | | | | | |
| **TLY** | **Talaya** | **24.86** | **29** | LR | LR | 04 23 47.1 | |
| | comp=Z,22nm,20.3s,baz=148,slow=39 | | | | | | |
| **AKASG** | **Malin Array Be** | **45.04** | **312** | LR | LR | 04 37 26.3 | |
| | comp=Z,33nm,18.9s,baz=345,slow=40 | | | | | | |
| **WRA** | **Warramunga Arr** | **69.68** | **130** | P | **P** | **04 18 39.8** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=325,slow=6.4,SNR=5.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.35** | **278** | P | **P** | **04 19 23.8** | **-1.0** |
| | comp=Z,1.7nm,0.8s,baz=54,slow=4.3,SNR=12 | | | | | | |

*ISCJB **27** 04:22:20.1±0.8, 21°.34S±0°.07×66°.70W±0°.07, h219km, mb3.6/1, Error ellipse: s-maj=10.9km s-min=8.1km az=44.6*
*IDC **27** 04:22:20.4±0.8, 21°.30S×66°.76W, h212km±15km, mb3.5/1, mb1 3.3/6, mb1mx3.2/26, mbtmp3.8/6, Error ellipse: s-maj=22.3km s-min=12.5km az=115.0*

**ISC 27 04:22:20.6±0.9, 21°.30S±0°.09×66°.71W±0°.08, h219km, n6, σ1ᵎ09/9, Southern Bolivia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **2.43** | **237** | P | **Pn** | **04 23 05.2** | **0.0** |
| | 202nm,0.3s,baz=54,slow=9.5,SNR=48 | | | | | | |
| LVC | | | | S | **S** | **04 23 38.3** | **-1.5** |
| | 391nm,0.3s,baz=268,slow=19,SNR=21 | | | | | | |
| **LPAZ** | **La Paz** | **5.17** | **345** | P | **Pn** | **04 23 39.1** | **+0.9** |
| | 2.3nm,0.3s,baz=154,slow=9.9,SNR=87 | | | | | | |
| LPAZ | | | | S | **S** | **04 24 38.9** | **-0.4** |
| | baz=41,slow=20,SNR=2.2 | | | | | | |
| **SIV** | **San Ignacio** | **7.51** | **46** | P | **Pn** | **04 24 07.9** | **+0.3** |
| | 1.0nm,0.3s,baz=246,slow=11,SNR=9.6 | | | | | | |
| SIV | | | | S | **S** | **04 25 31.9** | **-1.2** |
| | 0.3nm,0.3s,baz=300,slow=20,SNR=3.1 | | | | | | |
| **CPUP** | **Villa Florida** | **9.94** | **122** | P | **Pn** | **04 24 39.5** | **+0.8** |
| | 0.1nm,0.3s,baz=30,slow=20,SNR=3.4 | | | | | | |
| **BDFB** | **Brasilia** | **24.86** | **76** | P | **Pn** | **04 26 23.7** | **-1.2** |
| | 0.4nm,0.3s,baz=247,slow=7.7,SNR=5.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **75.36** | **69** | P | **P** | **04 33 41.0** | **+0.6** |
| | 0.7nm,0.4s,baz=254,slow=5.3,SNR=28 | | | | | | |

*ISCJB **27** 04:27:07.5±0.5, 40°.56N±0°.03×41°.27E±0°.05, h1km±10km, Error ellipse: s-maj=7.1km s-min=3.5km az=24.8*
*CSEM **27** 04:27:07.7±0.2, 40°.55N×41°.26E, h2km, MD2.7, Error ellipse: s-maj=4.2km s-min=2.5km az=128.0*
*DDA **27** 04:27:07.5, 40°.55N×41°.29E, h7km, Md2.7*
*ISK **27** 04:27:07.4, 40°.56N×41°.27E, h6km, MD2.6*

**ISC 27 04:27:07.7±1.0, 40°.54N±0°.02×41°.29E±0°.03, h9km±11km, n26, σ0ᵎ58/47, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DDEM** | **Demirkent** | **0.49** | **45** | *i* P | **Pg** | **04 27 17.1** | **-0.3** |
| DDEM | | | | *i* S | **Sb** | **04 27 25.2** | **-0.9** |
| **DDEM** | **Demirkent** | **0.49** | **45** | P | **Pg** | **04 27 17.1** | **-0.3** |
| DDEM | | | | S | **Sb** | **04 27 25.2** | **-0.9** |
| **DBAD** | **Bademkaya** | **0.57** | **33** | *i* P | **Pg** | **04 27 19.2** | **+0.4** |
| DBAD | | | | *i* S | **Sg** | **04 27 27.0** | **+0.8** |
| **DBAD** | **Bademkaya** | **0.57** | **33** | P | **Pg** | **04 27 19.2** | **+0.4** |
| DBAD | | | | S | **Sg** | **04 27 27.1** | **+0.8** |
| **EZM** | **Erzurum** | **0.64** | **175** | *e*PG | **Pb** | **04 27 20.6** | **-0.6** |
| EZM | | | | *e*SG | **Sb** | **04 27 30.2** | **-0.1** |
| **EZM** | **Erzurum** | **0.64** | **175** | *e*Pg | **Pb** | **04 27 20.6** | **-0.6** |
| EZM | | | | *e*Sg | **Sb** | **04 27 30.2** | **-0.1** |
| **ERZM** | **Erzurum** | **0.64** | **175** | *i* P | **Pg** | **04 27 19.5** | **-0.6** |
| ERZM | | | | *i* S | **Sg** | **04 27 29.1** | **+0.6** |
| **ERZM** | **Erzurum** | **0.64** | **175** | P | **Pg** | **04 27 19.5** | **-0.6** |
| ERZM | | | | S | **Sg** | **04 27 29.1** | **+0.6** |
| **KOPT** | **Kop Dagi** | **0.80** | **230** | *i* P | **Pb** | **04 27 23.7** | **-0.3** |
| **KOPT** | **Kop Dagi** | **0.80** | **230** | P | **Pb** | **04 27 23.7** | **-0.3** |
| KOPT | | | | S | **Sn** | **04 27 38.1** | **+0.5** |
| **ARTV** | **Artvin** | **0.81** | **37** | *i* P | **Pg** | **04 27 23.0** | **-0.3** |
| ARTV | | | | *i* S | **Sg** | **04 27 33.9** | **+0.1** |
| **ARTV** | **Artvin** | **0.81** | **37** | P | **Pg** | **04 27 23.0** | **-0.3** |
| ARTV | | | | S | **Sg** | **04 27 33.9** | **+0.1** |
| **DBOC** | **Borcka** | **0.85** | **19** | *i* P | **Pb** | **04 27 24.5** | **-0.2** |
| DBOC | | | | *i* S | **Sg** | **04 27 35.4** | **+0.2** |
| **DBOC** | **Borcka** | **0.85** | **19** | P | **Pb** | **04 27 24.5** | **-0.2** |
| DBOC | | | | S | **Sg** | **04 27 35.4** | **+0.2** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **0.89** | **261** | *e*PG | **Pg** | **04 27 24.4** | **-0.4** |
| BAYT | | | | *e*SG | **Sb** | **04 27 37.3** | **-0.2** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **0.89** | **261** | *e*Pg | **Pg** | **04 27 24.5** | **-0.4** |
| BAYT | | | | *e*Sg | **Sb** | **04 27 37.3** | **-0.2** |
| **BCA** | **Borcka** | **0.94** | **15** | *e*PG | **Pg** | **04 27 25.6** | **-0.2** |
| BCA | | | | *e*SG | **Sb** | **04 27 38.6** | **-0.1** |
| **BCA** | **Borcka** | **0.94** | **15** | *e*Pg | **Pg** | **04 27 25.6** | **-0.2** |
| BCA | | | | *e*Sg | **Sb** | **04 27 38.6** | **-0.1** |
| **MACK** | **Trabzon** | **1.22** | **290** | *i* P | **Pb** | **04 27 29.2** | **-1.9** |
| MACK | | | | *i* S | **Sb** | **04 27 47.2** | **+0.2** |
| **MACK** | **Trabzon** | **1.22** | **290** | P | **Pb** | **04 27 29.2** | **-1.9** |
| MACK | | | | S | **Sb** | **04 27 47.2** | **+0.2** |
| **GUMT** | **Gumushane** | **1.38** | **267** | *e*PN | **Pb** | **04 27 33.5** | **-0.3** |
| **GUMT** | **Gumushane** | **1.38** | **267** | *e*Pn | **Pb** | **04 27 33.5** | **-0.3** |
| **KELT** | **Kelkit** | **1.60** | **257** | *i* P | **Pb** | **04 27 37.8** | **+0.1** |
| KELT | | | | *i* S | **Sb** | **04 27 58.1** | **0.0** |
| **KELT** | **Kelkit** | **1.60** | **257** | P | **Pb** | **04 27 37.8** | **+0.1** |
| KELT | | | | S | **Sb** | **04 27 58.1** | **0.0** |
| **ESPY** | **Espiye-Giresun** | **1.98** | **282** | *e*PN | **Pn** | **04 27 42.1** | **+0.6** |
| **ESPY** | **Espiye-Giresun** | **1.98** | **282** | *e*Pn | **Pn** | **04 27 42.1** | **+0.6** |

**IDC 27 04:31:55.0±5.0, 2°.88S×100°.09E, h0km, mb3.6/4, mb1 3.9/4, mb1mx3.5/38, mbtmp3.7/4, Error ellipse: s-maj=202.2km s-min=25.2km az=58.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.23** | **357** | P | P | 04 36 42.7 | 0.0 |
| | 0.6nm,0.4s,baz=191,slow=9.2,SNR=3.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.48** | **120** | P | P | 04 39 10.2 | -0.5 |
| | 0.3nm,0.5s,baz=288,slow=8.7,SNR=6.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.67** | **125** | P | P | 04 39 20.8 | 0.0 |
| | 0.4nm,0.5s,baz=302,slow=8.7,SNR=5.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.04** | **349** | P | P | 04 41 49.1 | -0.6 |
| | 0.4nm,0.3s,baz=179,slow=5.8,SNR=3.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.34** | **38** | PKPbc | PKPbc | 04 51 35.4 | -0.1 |
| | 0.3nm,0.7s,baz=308,slow=1.7,SNR=5.2 | | | | | | |

*BJI **27** 04:33:17.2, 4°.05S×99°.85E, h26km, mb5.1/62, mB5.4/46, Ms5.1/49, Ms7 4.9/47*
*DJA **27** 04:33:19.3±0.4, 4°S±3′×10°0E±°, h10km, M4.9/37, mb5.0/37, mB5.4/27, MLv5.1/26, Mw(mB)4.9/27*
*NEIC **27** 04:33:20.1±0.2, 3°.54S×99°.86E, h10km, mb5.2/25, Error ellipse: s-maj=4.8km s-min=3.4km az=48.0*
*GCMT **27** 04:33:20.1±0.3, 3°.75S×99°.75E, h12km, MW5.0/78, Moment Tensor Solution. s29,c36; s78,c122; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr=3.59±.10; Mθθ=2.45±.09; Mφφ=1.15±.10; Mrθ=-2.16±.35; Mθφ=-1.65±.07; Mφr=0.46±.40; Best double couple: Mo=4.20500×10¹⁶ NP1:φs=113.00000°, δ61.00000°, λ=-101.00000°. NP2: φs=315.00000°, δ31.00000°, λ=-71.00000°. Principal axes: T 4.1260, Plg15.0000°, Azm211.0000°; N 0.1670, Plg9.0000°, Azm118.0000°; P -4.2840, Plg72.0000°, Azm357.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*MOS **27** 04:33:21.5±1.0, 3°.46S×99°.92E, h28km, mb5.5/46 Error ellipse: s-maj=9.5km s-min=4.7km az=116.9*
*ISCJB **27** 04:33:21.6±0.2, 3°.55S±0°.03×99°.85E±0°.02, h31km, mb5.1/105, MS4.2/8, Error ellipse: s-maj=4.0km s-min=2.7km az=30.2*
*KLM **27** 04:33:23.6, 3°.59S×99°.77E, h30km, mb5.4, MS5.3*
*IDC **27** 04:33:24.0±0.4, 3°.51S×99°.78E, h32km±2km, mb4.6/33, mb1 4.7/36, mb1mx4.7/39, mbtmp4.8/36, ML4.4/3, MS4.1/7, Ms1 4.1/7, ms1mx3.8/22, Error ellipse: s-maj=12.0km s-min=8.5km az=41.0*

**ISC 27 04:33:23.2±0.3, 3°.59S±0°.04×99°.80E±0°.05, h29km±1km, h29km:pP-P, n584, σ1ᵎ23/580, mb5.2/110, MS4.0/9, 32C-24D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.84** | **14** | P | **Pn** | **04 33 36.8** | **-2.4** |
| PPSI | | | | S | **Sb** | **04 33 49.5** | **-0.8** |
| **SISI** | **Saibi** | **2.35** | **342** | P | Pn | 04 33 56.6 | -3.4 |
| SISI | | | | S | **Sn** | **04 34 24.6** | **-3.3** |
| **MASI** | **Maura Aman, Be** | **2.47** | **80** | P | **Pn** | **04 33 59.6** | **-2.0** |
| **PDSI** | **Padang** | **2.74** | **14** | P | **Pn** | **04 34 06.1** | **+0.8** |
| **KSI** | **Kapahiang** | **2.79** | **91** | P | **Pn** | **04 34 07.0** | **+1.1** |
| **SDSI** | **Sungai Dareh** | **3.10** | **32** | P | **Pn** | **04 34 08.9** | **-1.3** |
| **PPI** | **Padang Panjang** | **3.17** | **11** | P | **Pn** | **04 34 09.5** | **-1.6** |
| **MNAI** | **Manna** | **3.24** | **104** | P | **Pn** | **04 34 11.5** | **-0.6** |
| **MNAI** | **Manna** | **3.24** | **104

2.4nm,0.3s,baz=270,slow=8.1,SNR=19
KAPI LR LR 04 46 59.4
comp=Z,842nm,18.0s,baz=290,slow=41
**KAPI Kappang 19.94 95** P **P 04 37 52.0 -1.1**
440nm,1.5s,SNR=9.5
**KAPI Kappang 19.94 95** *e*P **P 04 37 51.4 -1.7**
250nm,1.5s
**KDM Kudat 19.95 58** ⇓P **P 04 37 53.8 +0.6**
**TTSI Tana Toraja 19.99 89** P **P 04 37 53.4 -0.2**
54nm,1.6s,980nm
**KHON Khomkaen 20.02 8** P Pn 04 38 02.1 +6.3
**PBKT Sadao Pong 20.06 3** P Pn 04 37 55.1 -1.1
28nm,1.0s
**PCI Palu 20.19 83** P **P 04 37 56.6 +0.7**
**BKSI Bulukumba 20.33 96** P **P 04 37 56.6 -0.7**
118nm,1.9s,2µm
**WBSI Waikabubak, Su 20.36 108** P **P 04 37 56.3 -1.4**
80nm,1.2s
**MPSI Mapaga 20.46 79** P **P 04 37 58.7 0.0**
46nm,1.1s,1µm
**MYLDM Lahad Datu 20.61 65** ⇓P Pn 04 38 01.3 -1.4
**MYLDM Lahad Datu 20.61 65** *e*P **P 04 37 59.5 -0.8**
171nm,1.1s
**SKNT Sakolnakorn 20.84 11** P Pn 04 38 07.0 +1.6
39nm,0.9s
**LOEI Loei 21.01 4** P **P 04 38 04.2 -0.4**
45nm,1.5s
**NONG Nongkai 21.76 9** P **P 04 38 14.0 +1.3**
49nm,1.1s
**CM01 Chiang Mai Arr 21.88 358** *e*P **P 04 38 12.6 -1.4**
**PALK Pallekele 21.90 300** P **P 04 38 15.0 +0.7**
16nm,1.0s,baz=115,slow=12,SNR=4.5
PALK LR LR 04 45 06.1
comp=Z,306nm,20.9s,baz=116,slow=32
**PALK Pallekele 21.90 300** *e*P **P 04 38 15.3 +1.0**
**PALK Pallekele 21.90 300** *e*P **P 04 38 15.3 +1.0**
**CMAR Chiang Mai Arr 21.92 358** P **P 04 38 13.6 -0.8**
25nm,0.6s,baz=186,slow=10,SNR=88
CMAR PcP **PcP 04 42 14.0 +0.9**
3.0nm,0.7s,baz=218,slow=2.4,SNR=6.0
CMAR pPcP 04 42 24.2
3.1nm,0.7s,baz=213,slow=3.2,SNR=4.9
CMAR LR LR 04 46 57.2
comp=Z,564nm,20.2s,baz=184,slow=37
**LAMP Lampang 21.97 360** P **P 04 38 16.9 +2.0**
33nm,1.0s,295nm
**APSI Ampana 21.99 84** P **P 04 38 17.0 +1.8**
**CHTO Chiang Mai 22.27 358** P **P 04 38 17.6 -0.6**
208nm,1.6s
**CHTO Chiang Mai 22.27 358** *e*P **P 04 38 17.2 -1.0**
CHTO pmax pmax
comp=Z,115nm,1.4s
**CHTO Chiang Mai 22.27 358** *e*P **P 04 38 17.2 -1.0**
comp=Z,115nm,1.4s
**MRSI Marisa 22.49 80** P **P 04 38 21.7 +1.1**
**CMAI Chiengmai2 23.38 358** P **P 04 38 29.3 -0.6**
comp=Z,84nm,1.4s,comp=Z,1µm
**GTOI Gorontalo 23.57 80** P **P 04 38 29.5 -2.1**
comp=Z,62nm,1.6s,comp=Z,863nm
**QIZ Qiongzhong 24.55 23** P **P 04 38 40.8 +0.1**
QIZ pP **pP 04 38 47.0 -2.1**
QIZ sP **sP 04 38 50.3 -2.4**
QIZ S **S 04 43 02.0 +2.2**
QIZ sS **sS 04 43 13.0 -0.7**
QIZ PMZ
comp=Z,26nm,1.9s
QIZ PMZ
comp=Z,520nm,6.2s
QIZ LN
comp=Z,2µm,16.0s
QIZ LZ
comp=Z,2µm,14.9s
**BATI Baumata 24.57 107** P **P 04 38 39.5 -1.5**
comp=Z,30nm,0.6s,baz=237,slow=16,SNR=4.2
**SOEI Soe 25.05 105** P **P 04 38 48.9 +3.5**
**SOEI Soe 25.05 105** P P 04 38 39.8 -5.6
comp=Z,10nm,0.5s
**SLVN Son La 25.09 9** *e*P **P 04 38 45.6 0.0**
comp=Z,60nm,1.1s
**MBWA Marble Bar 26.09 134** *e*P **P 04 38 54.5 -0.1**
comp=Z,44nm,1.0s
**SANI Sanana 26.20 87** P **P 04 38 57.3 +1.6**
**SKHT Srikalahasti 26.34 311** *e*P **P 04 38 57.9 +1.0**
**CHLP Challavanipeta 26.88 325** *e*P **P 04 39 01.9 +0.2**
**PVM Polavaram 27.40 320** *e*P **P 04 39 06.5 0.0**
**H08S2 Diego Garcia H 27.47 260** T T 05 08 25.3
SNR=86
**H08S3 Diego Garcia H 27.48 260** T T 05 08 42.0
baz=336,slow=74,SNR=866
**H08S1 Diego Carcia H 27.49 260** T T 05 09 10.2
baz=80,slow=74,SNR=89
**ADKI Addanki 27.53 315** *e*P **P 04 39 08.1 +0.5**
**RCLA Racherla 28.00 313** *e*P **P 04 39 12.3 +0.4**
**SRLM Srisailam 28.47 314** *e*P **P 04 39 16.7 +0.7**
**NJS Nagarjunasagar 28.48 315** *e*P **P 04 39 16.1 0.0**
**KMI Kunming 28.68 6** P **P 04 39 19.0 +0.9**
KMI pP **pP 04 39 28.3 +1.8**
KMI sP **sP 04 39 33.3 +3.2**
KMI PP **PnPn 04 40 16.0 +6.9**
KMI S **S 04 44 04.8 -0.7**
KMI SS **SnSn 04 45 33.0 +5.7**
KMI PMZ
comp=Z,27nm,1.5s
KMI PMZ
comp=Z,280nm,5.4s
KMI LN
comp=Z,820nm,13.3s
KMI LE
comp=Z,2µm,11.9s
KMI LZ
comp=Z,1µm,13.6s
**H08N1 Diego Carcia H 28.81 263** T T 05 10 53.7
baz=347,slow=79,SNR=5.2
**H08N2 Diego Garcia H 28.82 263** T T 05 10 52.2
baz=347,slow=79,SNR=4.9
**H08N3 Diego Garcia H 28.83 263** T T 05 10 59.6
baz=347,slow=79,SNR=6.0
**URV Uravakonda 28.95 310** *e*P **P 04 39 19.6 -0.7**
**HYB Hyderabad 29.59 316** *e*P **P 04 39 25.0 -1.0**
HYB *e* 04 39 35.0
**HYB Hyderabad 29.59 316** *i*P **P 04 39 25.0 -1.0**
HYB *e* 04 39 35.0
**HYB Hyderabad 29.59 316** *e*P **P 04 39 25.0 -1.0**
HYB *e* 04 39 30.0
HYB *e* 04 39 35.0
**HYBB Hyderabad (bro 29.59 316** *e*P **P 04 39 25.9 -0.1**
**RPR Rampur 30.09 319** *e*P **P 04 39 29.0 -1.3**
**GYA Guiyang 30.60 12** ⇓*i*P **P 04 39 35.3 +0.4**
GYA pP **pP 04 39 43.5 +0.1**
GYA PP **PnPn 04 40 39.0 +4.2**
GYA PcP **PcP 04 42 33.8 +0.6**
GYA S **S 04 44 36.5 +1.1**
GYA sS **sS 04 44 50.0 +0.6**
GYA SS **SnSn 04 46 18.3 +4.4**
GYA PMZ
comp=Z,30nm,1.0s
GYA PMZ
comp=Z,140nm,5.3s
GYA LN
comp=Z,620nm,18.4s
GYA LE
comp=Z,550nm,18.1s
GYA LZ
comp=Z,640nm,17.9s
**SRSP Sriramsagar 30.77 317** *e*P **P 04 39 36.2 -0.2**
**KLRI Killari 31.41 314** *e*P **P 04 39 41.9 -0.2**
**SWI Sorong 31.55 86** P **P 04 39 41.8 -1.6**
comp=Z,33nm,1.3s
**ODAN Odare 32.56 339** *e*P **P 04 39 52.6 +0.3**
comp=Z,45nm,0.8s
**TAPN Taplejung 32.90 340** *e*P **P 04 39 56.0 +0.7**
comp=Z,114nm,1.1s
**RAMN Ramite 32.93 338** *e*P **P 04 39 56.4 +0.8**
comp=Z,18nm,0.6s
**NWAO Narrogin (SRO) 33.44 153** P **P 04 39 59.2 -0.5**
comp=Z,24nm,1.2s,baz=111,slow=0.1,SNR=3.8
**NWAO Narrogin (SRO) 33.44 153** *e*P **P 04 39 59.8 +0.1**
**NWAO Narrogin (SRO) 33.44 153** *e*P **P 04 39 59.8 +0.1**
**POO Poona 33.71 312** *e*P P 04 40 07.0 +4.7
**H01W3 Cape Leeuwin H 33.86 159** T T 05 16 08.9
baz=336,slow=76,SNR=96
**H01W2 Cape Leeuwin H 33.88 159** T T 05 16 15.9
baz=336,slow=76,SNR=106
**H01W1 Cape Leeuwin H 33.88 159** T T 05 16 10.1
baz=336,slow=76,SNR=77

**PKI Pulchoki 33.95 337** *e*P **P 04 40 04.7 +0.2**
**PKIN Phulchoki 33.95 337** *e*P **P 04 40 04.7 +0.2**
comp=Z,31nm,1.1s
**GUN Gumba 34.07 338** *e*P **P 04 40 06.3 +0.7**
comp=Z,44nm,0.6s
**DMN Daman 34.10 336** *e*P **P 04 40 06.0 +0.2**
comp=Z,6.8nm,0.5s
**LSA Lhasa 34.12 347** P **P 04 40 07.0 +0.8**
LSA PMZ
comp=Z,49nm,1.3s
**LSA Lhasa 34.12 347** *e*P **P 04 40 07.0 +0.8**
LSA pmax pmax
comp=Z,68nm,1.0s
**LSA Lhasa 34.12 347** *e*P **P 04 40 07.0 +0.8**
comp=Z,68nm,1.0s
**KKN Kakani 34.19 337** *e*P **P 04 40 06.8 +0.3**
**CD2 Chengdu 34.51 6** P **P 04 40 08.8 -0.2**
CD2 pP **pP 04 40 17.0 -0.6**
CD2 sP **sP 04 40 20.5 -0.6**
CD2 S **S 04 45 37.5 +1.4**
CD2 sS **sS 04 45 51.5 +1.3**
CD2 PMZ
comp=Z,50nm,0.7s
CD2 PMZ
comp=Z,710nm,5.3s
CD2 LE
comp=Z,2µm,16.6s
CD2 LZ
comp=Z,2µm,12.3s
**GKN Gorkha 34.64 336** *e*P **P 04 40 10.5 +0.2**
**KOLN Koldanda 34.87 334** *e*P **P 04 40 12.8 +0.4**
**ENH Enshi 34.92 15** *e*P **P 04 40 12.0 -0.6**
comp=Z,34nm,1.1s
**WHN Wuhan 36.67 21** ⇑P **P 04 40 28.5 +0.9**
WHN S **S 04 46 04.3 -4.9**
WHN LZ
comp=Z,7µm,18.0s
**WRA Warramunga Arr 37.39 119** P **P 04 40 33.3 -0.6**
comp=Z,14nm,0.8s,baz=291,slow=8.9,SNR=59
WRA PcP **PcP 04 42 52.8 +0.2**
comp=Z,3.1nm,0.8s,baz=306,slow=2.5,SNR=5.8
WRA pPcP 04 43 02.6
comp=Z,2.5nm,0.7s,baz=315,slow=2.2,SNR=4.6
WRA S **S 04 46 23.8 +3.3**
comp=Z,0.8nm,0.8s,baz=296,slow=16,SNR=5.8
**WRAB Tennant Creek 37.39 119** *e*P **P 04 40 33.1 -0.9**
WRAB *e* 04 42 52.1
WRAB pmax pmax
comp=Z,24nm,0.8s
**WRAB Tennant Creek 37.39 119** P **P 04 40 33.0 -0.9**
comp=Z,160nm,0.9s,SNR=16
**WRAB Tennant Creek 37.39 119** *e*P **P 04 40 33.1 -0.9**
comp=Z,24nm,0.8s
WRAB *e*PcP **PcP 04 42 52.1 -0.5**
**XAN Xi'an 38.40 12** P **P 04 40 41.5 -0.7**
XAN pP **pP 04 40 48.8 -2.0**
XAN S **S 04 46 34.0 -1.4**
XAN PMZ
comp=Z,66nm,1.0s
XAN LE
comp=Z,1µm,17.3s
XAN LZ
comp=Z,2µm,13.2s
**ASAR Alice Springs 38.51 124** P **P 04 40 43.4 +0.1**
comp=Z,13nm,1.0s,baz=298,slow=7.9,SNR=60
ASAR PcP **PcP 04 42 56.7 +0.7**
comp=Z,4.4nm,0.7s,baz=296,slow=2.3,SNR=8.8
ASAR pPcP 04 43 06.2
comp=Z,4.0nm,0.8s,baz=302,slow=2.7,SNR=5.8
ASAR S **S 04 46 42.3 +4.9**
comp=Z,0.2nm,0.3s,baz=293,slow=14,SNR=3.9
ASAR LR LR 04 57 22.3
comp=Z,228nm,21.1s,baz=299,slow=37
**AS01 Alice Springs 38.54 124** *e*P **P 04 40 43.1 -0.5**
**LZH Lanzhou 39.65 5** ⇑P **P 04 40 53.5 +0.7**
LZH pP **pP 04 41 02.8 +1.4**
LZH sP **sP 04 41 04.5 -0.4**
LZH PMZ
comp=Z,44nm,1.0s
LZH PMZ
comp=Z,310nm,7.3s
LZH LN
comp=Z,1µm,14.6s
LZH LE
comp=Z,3µm,14.9s
LZH LZ
comp=Z,1µm,15.8s
**TIA Tai'an 42.78 21** ⇑P **P 04 41 18.0 -0.3**
TIA PMZ
comp=Z,20nm,0.8s
**GTA Gaotai 42.78 0** *e*P **P 04 41 18.8 +0.3**
GTA pP **pP 04 41 28.5 +1.3**
GTA sP **sP 04 41 33.0 +2.4**
GTA PcP **PcP 04 43 06.5 -3.1**
GTA S **S 04 47 41.8 +1.0**
GTA sS **sS 04 47 58.5 +3.4**
GTA SS **SS 04 50 47.5 -5.1**
GTA PMZ
comp=Z,15nm,1.6s
GTA PMZ
comp=Z,240nm,5.5s
GTA LN
comp=Z,1µm,12.4s
GTA LE
comp=Z,810nm,13.3s
GTA LZ
comp=Z,1µm,13.3s
**HHC Hu-ho-hao-te 45.51 13** *e*P **P 04 41 41.5 +1.2**
HHC PP **PP 04 43 28.0 +0.8**
HHC S **S 04 48 21.3 +0.8**
HHC PMZ
comp=Z,49nm,1.0s
HHC PMZ
comp=Z,290nm,3.6s
HHC LN
comp=Z,1µm,11.8s
HHC LE
comp=Z,620nm,11.2s
HHC LZ
comp=Z,730nm,13.7s
**BJT Baijiatuao 45.92 18** *e*P **P 04 41 43.3 -0.1**
BJT pmax pmax
comp=Z,42nm,1.0s
**BJT Baijiatuao 45.92 18** *e*P **P 04 41 43.3 -0.1**
comp=Z,42nm,1.0s
**BJI Beijing 45.95 18** P **P 04 41 44.0 +0.5**
BJI S **S 04 48 29.5 +3.0**
BJI PMZ
comp=Z,40nm,1.5s
BJI PMZ
comp=Z,230nm,3.7s
BJI LN
comp=Z,1µm,17.8s
BJI LE
comp=Z,740nm,15.0s
BJI LZ
comp=Z,800nm,18.2s
**JNU Nakatsue 46.88 36** P **P 04 41 49.5 -1.6**
comp=Z,15nm,0.8s,baz=136,slow=4.1,SNR=4.4
**CTA Charters Tower 48.12 114** P **P 04 42 01.2 +0.1**
comp=Z,24nm,0.8s,baz=283,slow=9.7,SNR=26
**CTAO Charters Tower 48.12 114** *e*P **P 04 42 01.1 +0.1**
CTAO pmax pmax
comp=Z,33nm,0.9s
**CTAO Charters Tower 48.12 114** *e*P **P 04 42 01.1 +0.1**
comp=Z,33nm,0.9s
**KSH Kashi 48.18 335** P **P 04 41 59.8 -1.4**
KSH *e*pP **pP 04 42 07.0 -3.0**
KSH *e*PP **PP 04 43 51.3 -2.4**
KSH PcS **PcS 04 47 25.5 +1.3**
KSH PMZ
comp=Z,25nm,1.1s
KSH PMZ
comp=Z,150nm,3.3s
KSH LN
comp=Z,180nm,6.7s
KSH LE
comp=Z,230nm,6.6s
KSH LZ
comp=Z,330nm,7.8s
**WMQ Urumqi 48.43 348** P **P 04 42 03.8 +0.8**
WMQ sP **sP 04 42 14.5 -0.8**
WMQ PP **PP 04 43 56.0 0.0**
WMQ S **S 04 49 02.0 -0.1**
WMQ ScS **ScS 04 51 52.0 -1.9**
WMQ SS **SS 04 52 26.0 -6.3**

WMQ PMZ
comp=Z,120nm,1.0s
WMQ PMZ
comp=Z,260nm,5.0s
WMQ LN
comp=Z,280nm,16.0s
WMQ LE
comp=Z,180nm,16.0s
WMQ LZ
comp=Z,210nm,15.0s
**KSAR Wonju Array Be 48.45 30** P **P 04 42 03.1 -0.1**
**KSAR Wonju Array Be 48.45 30** P **P 04 42 03.1 -0.1**
**KSRS Korea Array 48.48 30** P **P 04 42 03.1 -0.3**
comp=Z,12nm,0.9s,baz=224,slow=8.0,SNR=31
**KS01 Wonju Array Si 48.48 30** *e*P **P 04 42 03.2 -0.2**
**SFK Sufi-Kurgan 49.65 333** P **P 04 42 13.3 +0.6**
SFK pmax pmax
comp=Z,46nm,1.1s
**PDGK Podgornoye 50.17 341** P **P 04 42 16.2 +0.1**
PDGK pmax pmax
comp=Z,40nm,0.9s
**UCH Uchtor 51.05 336** P **P 04 42 23.9 +0.5**
SNR=13
**TKM2 Tokmak 2 51.20 337** *e*P **P 04 42 24.3 0.0**
TKM2 pmax pmax
comp=Z,49nm,0.9s
**TKM2 Tokmak 2 51.20 337** P **P 04 42 24.4 0.0**
SNR=29
**TKM2 Tokmak 2 51.20 337** *e*P **P 04 42 24.2 0.0**
comp=Z,49nm,0.9s
**KBK Karagaybulak 51.23 337** P **P 04 42 25.3 +0.8**
SNR=11
**AML Almayashu 51.31 335** P **P 04 42 25.3 0.0**
SNR=17
**AAK Ala-Archa 51.40 336** P **P 04 42 25.8 +0.1**
comp=Z,5.7nm,0.7s,baz=139,slow=5.1,SNR=18
AAK pP **pP 04 42 35.9 +1.3**
comp=Z,7.6nm,0.8s,baz=211,slow=3.8,SNR=8.1
**AAK Ala-Archa 51.40 336** *de*P **P 04 42 25.8 +0.1**
AAK pmax pmax
comp=Z,18nm,0.9s
**AAK Ala-Archa 51.40 336** P **P 04 42 26.3 +0.6**
comp=Z,60nm,0.7s,SNR=7.7
**AAK Ala-Archa 51.40 336** P **P 04 42 26.7 +1.0**
SNR=7.3
**FRU Bishkek 51.52 336** *i*P **P 04 42 26.0 -0.4**
FRU pmax pmax
comp=Z,112nm,2.1s
**CHMS Chumysh 51.60 337** P **P 04 42 27.5 +0.4**
SNR=6.8
**ULN Ulaanbaatar 51.63 6** *de*P **P 04 42 27.9 +0.6**
ULN pmax pmax
comp=Z,65nm,1.7s
**ULN Ulaanbaatar 51.63 6** *e*P **P 04 42 27.7 +0.4**
comp=Z,32nm,0.9s
**EKS2 Erkin-Say 51.71 336** *e*P **P 04 42 28.3 +0.3**
EKS2 pmax pmax
comp=Z,41nm,0.9s
**EKS2 Erkin-Say 51.71 336** P **P 04 42 28.5 +0.5**
SNR=26
**EKS2 Erkin-Say 51.71 336** *e*P **P 04 42 28.2 +0.3**
comp=Z,41nm,0.9s
**USP Ospenovka 51.93 337** P **P 04 42 29.6 +0.1**
SNR=21
**MNAS Manas 52.10 335** P **P 04 42 31.1 +0.1**
MNAS pmax pmax
comp=Z,60nm,1.7s
**IDAH Dahanechah 52.30 317** *e*P **P 04 42 30.9 -1.9**
**MK01 Makanchi Array 52.47 345** *e*P **P 04 42 32.8 -0.7**
**MK31 Makanchi Array 52.50 345** *i*P **P 04 42 33.3 -0.3**
MK31 pmax pmax
comp=Z,30nm,0.8s
**MKAR Makanchi Array 52.50 345** P **P 04 42 34.1 +0.5**
comp=Z,22nm,0.7s,baz=145,slow=8.5,SNR=118
**CN2 Changchun 52.51 23** *e*P **P 04 42 33.3 -0.4**
CN2 *e*pP **pP 04 42 42.0 -0.6**
CN2 PcP **PcP 04 43 44.0 0.0**
CN2 PMZ
comp=Z,40nm,0.9s
CN2 PMZ
comp=Z,200nm,3.0s
CN2 LN
comp=Z,600nm,13.0s
CN2 LE
comp=Z,700nm,13.0s
CN2 LZ
comp=Z,600nm,13.0s
**IMON Monand 52.70 317** *e*P **P 04 42 36.0 +0.3**
**ITEG Tejag 53.16 316** *e*P **P 04 42 37.4 -1.6**
**KK31 Karatay Array 53.47 334** *i*P **P 04 42 40.0 -0.9**
KK31 pmax pmax
comp=Z,21nm,1.2s
**KKAR Karatay Array 53.47 334** *e*P **P 04 42 40.2 -0.7**
KKAR pmax pmax
comp=Z,10.0nm,1.0s
**KKAR Karatay Array 53.47 334** *e*P **P 04 42 40.1 -0.7**
comp=Z,10nm,1.0s
**OPO Ambohidratompo 53.52 250** P **P 04 42 43.2 +1.4**
comp=Z,2.3nm,0.3s,baz=303,slow=17,SNR=4.0
**MAJO Matsushiro 53.63 38** *e*P **P 04 42 41.2 -1.0**
MAJO pmax pmax
comp=Z,76nm,1.1s
**MJAR Matsushiro Arr 53.63 38** P **P 04 42 41.2 -0.9**
comp=Z,7.7nm,1.0s,baz=188,slow=8.7,SNR=6.7
**EIDS Eidsvold 53.75 119** *e*P **P 04 42 43.5 +0.2**
comp=Z,39nm,1.1s
**ZAK Zakamensk 53.84 3** *e*P **P 04 42 43.5 0.0**
ZAK *e* 04 42 52.7
ZAK pmax pmax
comp=Z,8.0nm,1.0s
ZAK pmax pmax
comp=Z,11nm,1.1s
**MSHR Mys Shultsa 54.01 28** ⇑*e*P **P 04 42 44.9 +0.1**
**HVS Khovu-Aksy 54.76 355** ⇓*e*P **P 04 42 49.9 -0.3**
HVS pmax pmax
comp=Z,42nm,1.8s
**MDJ Mudanjiang 54.89 26** P **P 04 42 51.5 +0.3**
MDJ pP **pP 04 42 57.8 -2.3**
MDJ sP **sP 04 43 00.5 -3.0**
MDJ S **S 04 50 32.8 +2.0**
MDJ sS **sS 04 50 43.8 -1.7**
MDJ PMZ
comp=Z,18nm,1.5s
MDJ PMZ
comp=Z,220nm,5.9s
MDJ LN
comp=Z,430nm,15.1s
MDJ LE
comp=Z,690nm,16.8s
MDJ LZ
comp=Z,520nm,19.8s
**IPAY Payeh 55.09 320** *e*P **P 04 42 52.1 -0.9**
**TLY Talaya 55.15 3** P **P 04 42 53.7 +0.8**
comp=Z,9.7nm,0.7s,baz=274,slow=16,SNR=5.9
**TLY Talaya 55.15 3** *e*P **P 04 42 52.3 -0.7**
TLY *e* 04 44 54.6
TLY *e*PPP PPP 04 46 08.0
TLY *e*S **S 04 50 37.9 +3.8**
TLY pmax pmax
comp=Z,15nm,0.9s
TLY MLR MLR
comp=Z,717nm,15.0s
**IAKL Akhelmad 55.33 320** *e*P **P 04 42 53.2 -1.6**
**ISRV Sarvestan 55.45 310** *e*P P 04 42 51.0 -4.9
**IKRD Kardeh 55.59 320** *e*P P 04 42 51.6 -5.0
**USRK Ussuriysk Ar. 55.64 28** P **P 04 42 57.0 +0.4**
comp=Z,32nm,0.7s,baz=222,slow=6.5,SNR=74
USRK pP **pP 04 43 06.0 +0.5**
comp=Z,47nm,0.9s,baz=222,slow=6.7,SNR=17
**ARMA Armidale 55.66 125** *e*P **P 04 42 58.3 +1.1**
comp=Z,11nm,0.9s
**IPAR Pars 55.71 310** *e*P **P 04 42 57.5 -0.2**
**IEMG Emamgholi 55.89 321** *e*P **P 04 42 58.0 -0.9**
**GEYT Alibeck 56.54 321** P **P 04 43 02.7 -0.5**
comp=Z,7.7nm,0.8s,baz=148,slow=8.7,SNR=19
GEYT pP **pP 04 43 12.2 +0.1**
comp=Z,15nm,0.9s,baz=156,slow=7.4,SNR=12
**IKAZ Kazeroun 56.61 309** *e*P **P 04 43 03.3 -0.9**
**OTUK Ortayu 56.92 338** P **P 04 43 04.5 -1.2**
OTUK pmax pmax
comp=Z,27nm,0.8s
**DAMY Dhamar 57.79 290** *e*P **P 04 43 12.8 +0.1**
comp=Z,44nm,1.3s
**IKIA Kiasar 58.47 317** *e*P **P 04 43 15.9 -1.2**
**ZALV Zalesovo Beam 58.68 350** P **P 04 43 17.9 +0.1**
comp=Z,42nm,0.7s,baz=186,slow=5.4,SNR=171

ZALV pP **pP** **04 43 27.5 +0.6**
comp=Z,76nm,0.9s,baz=174,slow=5.7,SNR=22
ZALV LR LR 05 11 59.4
comp=Z,135nm,19.1s,baz=62,slow=40
**KLR Kul'dur 59.45 24** *eP* P 04 43 19.3 -4.0
KLR pmax pmax
comp=Z,120nm,1.6s
**KRAR Krasnoyarsk 59.67 355** *ceP* **P** **04 43 25.1 +0.5**
KRAR pmax pmax
comp=Z,44nm,1.2s
**NVS Novosibirsk 59.82 349**⇑ *iP* **P** **04 43 25.7 0.0**
NVS *i* *PP **pP** **04 43 35.7 +1.0**
NVS *e* 04 45 41.6
NVS *eS* S 04 51 26.3 -9.0
NVS pmax pmax
comp=Z,30nm,1.0s
NVS pmax pmax
comp=N,21nm,1.3s
NVS pmax pmax
comp=E,12nm,1.3s
**HNR Honiara 59.98 99** *eP* **P** **04 43 26.5 -1.1**
HNR pmax pmax
comp=Z,125nm,0.9s
**HNR Honiara 59.98 99** *eP* **P** **04 43 26.5 -1.1**
comp=Z,125nm,0.9s
**IRAZ Razeghan 60.68 314** *eP* **P** **04 43 31.5 -0.9**
**VOSK Vostochnaya 61.15 340** P **P** **04 43 34.3 -0.6**
**BVA0 Borovoye Array 61.60 340** P **P** **04 43 36.5 -1.4**
BVA0 pmax pmax
comp=Z,14nm,0.8s
**BRVK Borovoye 61.66 340** *deP* **P** **04 43 37.2 -1.2**
BRVK pmax pmax
comp=Z,23nm,1.2s
**BRVK Borovoye 61.66 340** *eP* **P** **04 43 37.1 -1.2**
comp=Z,14nm,0.8s
**ZRNK Zerenda 62.01 339** P **P** **04 43 41.0 +0.3**
**BOD Bodaibo 62.27 9** *eP* **P** **04 43 41.8 -0.5**
BOD pmax pmax
comp=Z,44nm,1.5s
**KMBO Kilima Mbogo 62.53 271** P **P** **04 43 45.4 +0.2**
comp=Z,1.0nm,0.5s,baz=76,slow=7.2,SNR=4.7
KMBO pP **pP** **04 43 56.2 +1.9**
comp=Z,0.8nm,0.3s,baz=49,slow=6.8,SNR=2.6
**IGHG Ghaleghazi 62.65 312** *eP* **P** **04 43 43.9 -1.7**
**YSS Yuzh-Sakhalins 62.92 32**⇓ *iP* **P** **04 43 46.6 -0.3**
YSS *i* 04 43 56.0
YSS pmax pmax
comp=Z,60nm,1.0s
**AB31 Akbulak array 62.93 332** *i* P **P** **04 43 45.8 -1.1**
AB31 pmax pmax
comp=Z,56nm,0.9s
**ABKAR Akbulak array 62.93 332** *eP* **P** **04 43 46.1 -0.8**
comp=Z,20nm,0.7s
**ISRB Sarab 63.44 316** *eP* **P** **04 43 50.0 -0.8**
**CLNS Chul'man 63.59 15** *eP* **P** **04 43 48.1 -3.1**
CLNS pmax pmax
comp=Z,11nm,0.9s
CLNS pmax pmax
comp=N,7.0nm,1.2s
CLNS MLR MLR
comp=N,511nm,13.0s
CLNS MLR MLR
comp=Z,560nm,13.0s
CLNS MLR MLR
comp=E,250nm,13.0s
**AKTO Aktyubinsk 64.65 332** P **P** **04 43 55.8 -2.4**
AKTO pmax pmax
comp=Z,21nm,1.1s
**ISHB Shabestar 65.08 315** *eP* **P** **04 44 00.6 -1.0**
**GNI Garni 66.53 317**⇑ *eP* **P** **04 44 11.2 +0.4**
GNI pmax pmax
comp=Z,183nm,2.5s
**SVE Sverdlovsk 68.07 338**⇓ *iP* **P** **04 44 20.0 0.0**
SVE pmax pmax
comp=Z,60nm,1.1s
**MAW Mawson 68.71 194** P **P** **04 44 24.4 +0.7**
comp=Z,6.1nm,1.1s,baz=43,slow=8.9,SNR=12
**NCK Nalchik 68.82 320**⇑ *eP* **P** **04 44 25.4 +0.4**
**DRV Dumont d'Urvil 68.86 164** SKS **SKiKP** **04 54 17.0 +2.3**
DRV SS **SS** **04 57 48.0 -4.2**
DRV R 05 06 00.0
**MBAR Mbarara 69.07 271** P **P** **04 44 26.6 -0.7**
comp=Z,3.8nm,0.2s,baz=138,slow=3.6,SNR=7.9
**MBAR Mbarara 69.07 271** *eP* **P** **04 44 27.3 0.0**
**MBAR Mbarara 69.07 271** *eP* **P** **04 44 27.3 0.0**
**NEY Neytrino 69.27 319**⇑ *eP* **P** **04 44 28.7 +0.7**
NEY pmax pmax
comp=Z,14nm,2.4s
**YAK Yakutsk 69.32 15** P **P** **04 44 26.9 -0.7**
comp=Z,4.2nm,0.4s,baz=28,slow=24,SNR=6.4
**YAK Yakutsk 69.32 15** *d iP* **P** **04 44 26.6 -1.0**
YAK *e* 04 44 36.2
YAK pmax pmax
comp=Z,124nm,1.3s
YAK pmax pmax
comp=N,38nm,1.6s
YAK pmax pmax
comp=E,29nm,1.3s
**KBZ Khabaz 69.37 320** P **P** **04 44 28.3 0.0**
comp=E,12nm,0.8s,baz=124,slow=4.7,SNR=24
KBZ pP **pP** **04 44 38.2 +0.8**
comp=E,15nm,0.9s,baz=213,slow=11,SNR=12
**KIV Kislovodsk 69.61 320** *eP* **P** **04 44 29.7 -0.3**
KIV *e* 04 44 52.3
KIV *eS* **S** **04 53 38.0 +1.4**
KIV pmax pmax
comp=Z,31nm,1.1s
**LSZ Lusaka 71.33 255** *eP* **P** **04 44 41.8 +0.7**
LSZ pmax pmax
comp=Z,11nm,1.2s
**LSZ Lusaka 71.33 255** *eP* **P** **04 44 41.8 +0.7**
comp=Z,11nm,1.2s
**SOC Sochi 71.40 318** *eP* **P** **04 44 39.6 -1.2**
SOC *e* 04 47 17.6
SOC *eS* **S** **04 53 58.2 +1.0**
SOC *eSS* **SS** **04 58 36.8 +4.5**
SOC pmax pmax
comp=Z,26nm,0.9s
**VRH Novokhopyorsk 73.52 326** *eP* **P** **04 44 52.5 -0.7**
VRH pmax pmax
comp=N,10.0nm,0.8s
VRH pmax pmax
comp=E,10.0nm,0.8s
VRH pmax pmax
comp=Z,60nm,0.8s
**BRTR Keskin Array B 74.25 313** P **P** **04 44 56.9 -1.1**
comp=Z,4.7nm,0.7s,baz=134,slow=6.9,SNR=34
BRTR LR LR 05 19 23.1
comp=Z,58nm,19.0s,baz=100,slow=37
**PETK Petropavlovsk- 74.32 32** P **P** **04 44 57.1 -0.8**
comp=Z,3.4nm,0.7s,baz=219,slow=1.8,SNR=3.5
**BOSA Boshof 74.73 241** P **P** **04 45 01.1 +0.1**
comp=Z,7.5nm,1.0s,baz=63,slow=5.4,SNR=5.7
**VORD Divnogorie 74.78 325** *eP* **P** **04 44 59.5 -1.1**
VORD pmax pmax
comp=N,9.0nm,0.7s
VORD pmax pmax
comp=E,8.0nm,0.7s
VORD pmax pmax
comp=Z,10.0nm,0.7s
**VSR Storozhevoye 74.96 325** *eP* **P** **04 45 00.4 -1.2**
VSR pmax pmax
comp=N,5.0nm,0.7s
VSR pmax pmax
comp=E,10.0nm,0.7s
VSR pmax pmax
comp=Z,30nm,0.7s
**LPSR Galich'ya Gora 75.70 327** *eP* **P** **04 45 05.4 -0.4**
LPSR pmax pmax
comp=N,7.0nm,0.6s
LPSR pmax pmax
comp=E,9.0nm,0.6s
LPSR pmax pmax
comp=Z,20nm,0.6s
**SEY Seymchan 77.16 22** P **P** **04 45 14.0 0.0**
comp=Z,14nm,0.7s,baz=179,slow=22,SNR=20
SEY pP **PcP** **04 45 23.8 -0.8**
comp=Z,17nm,1.0s,baz=251,slow=9.0,SNR=6.5
**SEY Seymchan 77.16 22** *c iP* **P** **04 45 14.6 +0.7**
**MOS Moscow 77.75 329** *eP* **P** **04 45 16.3 -1.0**
MOS *e* 04 45 26.3
MOS pmax pmax
comp=Z,70nm,0.8s
**OBN Obninsk 78.03 328** *deP* **P** **04 45 18.3 -0.6**
OBN *e* 04 45 28.4
OBN *e* 04 48 22.1
OBN pmax pmax
comp=Z,78nm,1.7s
OBN MLR MLR
comp=Z,76nm,22.0s
**KLMR Klimovskoe 79.16 334** *eP* **P** **04 45 22.5 -2.6**
KLMR pmax pmax
comp=Z,65nm,1.6s
**TIRR Tirgusor 79.36 316**⇓ *iP* P 04 45 36.2 +10
**TIRR Tirgusor 79.36 316**⇓ *iP* P 04 45 36.2 +10
**IDI Anoyia 79.82 307** *eP* **P** **04 45 28.9 -0.4**
**AKASG Malin Array Be 80.61 323** P **P** **04 45 32.2 -0.9**
comp=Z,1.9nm,0.6s,baz=92,slow=4.5,SNR=17
**KIEV Kiev 80.62 323** *ceP* **P** **04 45 32.4 -0.8**
KIEV pmax pmax
comp=Z,9.0nm,1.5s
**KIEV Kiev 80.62 323** *eP* **P** **04 45 32.3 -0.8**
comp=Z,10nm,0.9s
**VNDA Vanda 80.65 169** P **P** **04 45 32.8 -0.1**
comp=Z,4.2nm,1.2s,baz=307,slow=4.3,SNR=8.2
**VRI Vrinceioaia 80.88 317**⇑ *iP* **P** **04 45 35.4 +0.7**
**VRI Vrincioaia 80.88 317**⇑ *iP* **P** **04 45 35.4 +0.7**
**PLOR Plostina 80.92 317**⇓ *iP* **P** **04 45 35.6 +0.6**
**PLOR Plostina 80.92 317**⇓ *iP* **P** **04 45 35.6 +0.6**
**TESR Tescani 81.09 318**⇑ *iP* **P** **04 45 36.3 +0.5**
**MLR Muntele Rosu 81.31 317**⇑ *iP* **P** **04 45 37.7 +0.5**
**MLR Muntele Rosu 81.31 317**⇑ *iP* **P** **04 45 37.7 +0.5**
**TMCR Tamitsa 81.31 337** *eP* **P** **04 45 36.6 0.0**
TMCR pmax pmax
comp=Z,42nm,0.8s
**DOPR Dopca 81.81 317**⇓ *iP* P 04 45 50.4 +11
**VOIR 81.91 317**⇓ *iP* **P** **04 45 39.0 -1.3**
**VOIR 81.91 317**⇓ *iP* **P** **04 45 39.0 -1.3**
**BURAR Bucovina Array 82.31 319**⇓ *iP* **P** **04 45 43.3 +0.9**
**BURAR Bucovina Array 82.31 319**⇓ *iP* **P** **04 45 43.3 +0.9**
**NACGM Naroch 83.25 326** *e* **P** **04 45 45.0 -1.9**
**IDID Didziasalis 83.38 327** *eP* **P** **04 45 48.2 +0.6**
IDID IAmb IAmb 04 45 59.2
comp=Z,19nm,1.0s
**GZR Gura Zlata 83.47 316**⇑ *iP* **P** **04 45 48.5 +0.1**
**GZR Gura Zlata 83.47 316**⇑ *iP* **P** **04 45 48.5 +0.1**
**LVV L'vov 83.59 321** *eP* **P** **04 45 48.6 -0.2**
**IIGN Ignalina 83.68 327** *eP* **P** **04 45 49.8 +0.7**
IIGN IAmb IAmb 04 46 00.7
comp=Z,18nm,0.9s
**IZAR Zarasai 83.77 327** *eP* **P** **04 45 50.0 +0.5**
IZAR IAmb IAmb 04 46 01.0
comp=Z,11nm,0.8s
**ISAL Salakas 83.79 327** *eP* **P** **04 45 50.2 +0.6**
ISAL IAmb IAmb 04 46 01.2
comp=Z,16nm,1.0s
**DRGR 83.80 318**⇑ *iP* **P** **04 45 50.7 +0.7**
**DRGR 83.80 318**⇑ *iP* **P** **04 45 50.7 +0.7**
**VSU Vasula 84.27 330** *ceP* **P** **04 45 52.4 +0.4**
VSU pmax pmax
comp=Z,157nm,2.5s
**BZS Buzias 84.31 316**⇑ *iP* **P** **04 45 52.9 +0.3**
**BZS Buzias 84.31 316**⇑ *iP* **P** **04 45 52.9 +0.3**
**KWP Kalwaria Pacla 84.39 320** *eP* **P** **04 45 53.2 +0.3**
**KWP Kalwaria Pacla 84.39 320**⇑ *iP* **P** **04 45 53.5 +0.6**
**KWP Kalwaria Pacla 84.39 320**⇑ *iP* **P** **04 45 53.5 +0.6**
**UZH Uzhgorod 84.45 319** *eP* **P** **04 45 54.2 +1.0**
**KOLS Kolonicke sedl 84.53 320** *eP* **P** **04 45 54.6 +1.0**
KOLS *e* 04 46 04.2
KOLS pmax pmax
comp=Z,33nm,0.9s
**KOLS Kolonicke sedl 84.53 320** *eP* **P** **04 45 54.6 +1.0**
KOLS *e* 04 46 04.2
**BILL Bilibino 84.70 20** *eP* **P** **04 45 54.2 +0.1**
BILL *e* 04 45 59.8
BILL pmax pmax
comp=Z,9.0nm,1.2s
**SUW Suwalki 85.06 325** *eP* **P** **04 45 55.8 -0.3**
**SUW Suwalki 85.06 325** *eP* **P** **04 45 55.8 -0.3**
**DIVS Divibare 85.17 315**⇓ *iP* **P** **04 45 56.9 -0.2**
**STHS Stebnicka Huta 85.28 320** *eP* **P** **04 45 58.4 +1.0**
STHS *e* 04 46 08.3
STHS pmax pmax
comp=Z,9.0nm,0.9s
**STHS Stebnicka Huta 85.28 320** *eP* **P** **04 45 58.4 +1.0**
STHS *e* 04 46 08.3
**FINES FINESS Array B 85.42 332** P **P** **04 45 57.9 +0.1**
comp=Z,6.1nm,0.5s,baz=118,slow=6.0,SNR=39
FINES pP **pP** **04 46 07.7 +0.7**
comp=Z,3.9nm,0.5s,baz=120,slow=5.5,SNR=6.5
**NIE Niedzica 85.89 320** *eP* **P** **04 46 01.3 +0.8**
**NIE Niedzica 85.89 320** *eP* **P** **04 46 01.3 +0.8**
**PSZ Piszkesteto 85.89 318**⇑ *iP* **P** **04 46 01.0 +0.4**
**PSZ Piszkesteto 85.89 318**⇑ *iP* **P** **04 46 01.0 +0.4**
**OJC Ojcow 86.35 321** *eP* **P** **04 46 03.1 +0.4**
**OJC Ojcow 86.35 321** *eP* **P** **04 46 03.2 +0.5**
**VYHS Vyhne 86.68 319** *eP* **P** **04 46 04.7 +0.3**
VYHS *e* 04 46 14.9
VYHS pmax pmax
comp=Z,7.0nm,1.4s
**VYHS Vyhne 86.68 319** *eP* **P** **04 46 04.7 +0.3**
VYHS *e* 04 46 14.9
**OKC Ostrava-Krasne 87.34 320** *eP* **P** **04 46 08.3 +0.8**
OKC *e* 04 46 18.2
**OKC Ostrava-Krasne 87.34 320** *eP* **P** **04 46 08.3 +0.8**
OKC *ex* x 04 46 18.2
**MORC Moravsky Berou 87.72 320** *eP* **P** **04 46 09.9 +0.5**
MORC pmax pmax
comp=Z,58nm,1.3s
**MORC Moravsky Berou 87.72 320**⇑ *iP* **P** **04 46 10.3 +0.9**
**MORC Moravsky Berou 87.72 320** *eP* **P** **04 46 09.8 +0.5**
comp=Z,58nm,1.3s
**ARCES ARCESS Array B 87.89 340** P **P** **04 46 09.5 -0.3**
comp=Z,6.6nm,0.8s,baz=104,slow=3.9,SNR=10
ARCES pP **pP** **04 46 20.1 +1.0**
comp=Z,13nm,0.9s,baz=95,slow=11,SNR=7.0
**DPC Dobruska-Polom 88.57 320** *eP* **P** **04 46 14.7 +1.3**
DPC *e* 04 46 24.2
**DPC Dobruska-Polom 88.57 320** *eP* **P** **04 46 14.7 +1.3**
DPC *ex* x 04 46 24.2
**KSP Ksiaz 88.66 321** *eP* **P** **04 46 14.5 +0.8**
**KSP Ksiaz 88.66 321** *eP* **P** **04 46 14.5 +0.8**
**PRU Pruhonice 89.67 320** *eP* **P** **04 46 19.2 +0.7**
**PRU Pruhonice 89.67 320** *eP* **P** **04 46 19.2 +0.7**
**GEC2 GERESS Array S 90.10 319** *eP* **P** **04 46 20.8 0.0**
comp=Z,59nm,1.6s,baz=93,slow=4.8
**GERES GERESS Array B 90.10 319** P **P** **04 46 21.3 +0.5**
comp=Z,6.6nm,0.8s,baz=96,slow=4.2,SNR=37
GERES pP **pP** **04 46 31.3 +1.2**
comp=Z,10nm,1.0s,baz=108,slow=4.3,SNR=11
**BRG Berggiesshubel 90.14 321** *eP* **P** **04 46 21.4 +0.7**
comp=Z,55nm,1.8s
BRG *e* 04 46 30.9
comp=Z,16nm,1.1s
BRG *e* 05 03 59.5
comp=Z,8.3nm,1.4s
**BRG Berggiesshubel 90.14 321** *eP* **P** **04 46 21.4 +0.7**
BRG *e* 04 46 30.9
BRG pmax pmax
comp=Z,55nm,1.8s
BRG pmax pmax
comp=Z,16nm,1.1s
BRG pmax pmax
comp=Z,8.0nm,1.4s
**BRG Berggiesshubel 90.14 321** *eP* **P** **04 46 21.4 +0.7**
comp=Z,55nm,1.8s,baz=93,slow=4.8
BRG *ep* **pP** **04 46 31.1 +1.1**
**KHC Kasperske Hory 90.21 319** *eP* **P** **04 46 21.1 0.0**
KHC *e* 04 46 31.0
**KHC Kasperske Hory 90.21 319** *eP* **P** **04 46 21.1 0.0**
KHC *ex* x 04 46 31.0
**SNAA Sanae 90.58 198** P **P** **04 46 23.6 +1.1**
**WET Wettzell 90.67 319** *eP* **P** **04 46 23.8 +0.5**
comp=Z,44nm,1.7s,baz=93,slow=4.8
**CLL Collm 90.77 321** *eP* **P** **04 46 24.0 +0.4**
**CLL Collm 90.77 321** *eP* **P** **04 46 23.8 +0.2**
comp=Z,22nm,1.5s,baz=93,slow=4.8
**CLL Collm 90.77 321** *eP* **P** **04 46 24.0 +0.4**
CLL *e(sP)* **sP** **04 46 34.0 -2.3**
CLL L L 05 33 00.0
comp=Z,100nm,19.4s
**TANN Tannenbergstha 91.04 320** *eP* **P** **04 46 25.3 +0.3**
comp=Z,49nm,2.1s,baz=93,slow=4.8
**ROTZ Rotzenmuhle 91.16 320** *eP* **P** **04 46 26.6 +1.1**
comp=Z,37nm,1.8s,baz=93,slow=4.8
**MOX Moxa 91.59 320** *eP* **P** **04 46 28.0 +0.5**
comp=Z,14nm,1.4s,baz=93,slow=4.8
**GRF Grafenberg Arr 91.79 319** *eP* **P** **04 46 29.7 +1.3**
comp=Z,40nm,1.6s,baz=93,slow=4.8
**NB2 NORSAR Subarra 92.42 331** P **P** **04 46 30.9 -0.2**
comp=Z,12nm,1.1s,baz=95,slow=4.6
**NB2 NORSAR Subarra 92.42 331** P **P** **04 46 30.9 -0.2**
baz=95,slow=4.6
**NOA NORSAR Array B 92.42 331** P **P** **04 46 30.9 -0.2**
comp=Z,2.1nm,0.8s,baz=96,slow=4.6,SNR=4.4
**CLZ Clausthal 92.44 322** *eP* **P** **04 46 31.9 +0.5**
comp=Z,16nm,1.1s,baz=93,slow=4.8
**KEST Kesra 92.44 305** P **P** **04 46 32.4 +0.5**
comp=Z,11nm,0.8s,baz=38,slow=2.2,SNR=6.6
**TNS Taunus Mts 93.60 320** *eP* **P** **04 46 37.5 +0.7**
comp=Z,10nm,0.8s,baz=93,slow=4.8
**TORD Torodi Ar. Bea 98.69 283** P **P** **04 47 00.0 -0.6**
comp=Z,0.7nm,0.9s,baz=86,slow=4.6,SNR=4.3
**PPT2 Papeete2 108.46 110** *eLR* LR 05 23 39.3
comp=Z,82nm,23.5s
**A04D Lummi Island 122.26 32** P **PKPdf** **04 52 15.0 -0.5**
baz=122
**I04A Tendick Farm, 125.32 37** P **PKPdf** **04 52 22.5 +0.8**
baz=125
**J04D Umpqua Nationa 125.82 37** P **PKPdf** **04 52 23.3 +0.5**
baz=126
**J05D Fort Rock, OR 126.31 37** P **PKPdf** **04 52 23.9 +0.1**
baz=126
**M04C Macdoel 126.80 38** P **PKPdf** **04 52 24.4 -0.3**
baz=127
**O03D Paynes Creek 127.65 40** P **PKPdf** **04 52 25.5 -0.7**
baz=128
**MSO Missoula 127.95 29** P **PKPdf** **04 52 26.4 -0.2**
baz=128
**BOZ Bozeman (W) 129.92 28** P **PKPdf** **04 52 30.1 -0.4**
baz=130
**HLID Hailey 129.99 32** P **PKPdf** **04 52 30.2 -0.6**
baz=130
**NVAR Mina Array Bea 130.94 40** PKP **PKPdf** **04 52 34.0 +1.2**
comp=Z,1.6nm,0.7s,baz=249,slow=2.8,SNR=12
NVAR pPKP **pPKPdf** **04 52 44.5 +2.1**
comp=Z,1.6nm,0.8s,baz=250,slow=2.1,SNR=7.3
**Q29A Oakley 140.09 26** P PKPpre 04 52 44.2
baz=140
**R28A Tribune 140.18 27** P PKPpre 04 52 44.4
baz=140
**T26A Comanche Natio 140.27 30** P PKPpre 04 52 43.7
baz=140
**Q30A Quinter 140.34 25** P PKPpre 04 52 44.0
baz=140
**S28A Manter 140.75 28** P PKPpre 04 52 44.9
baz=141
**T27A Campo 140.78 29** P PKPpre 04 52 45.5
baz=141
**R30A Dighton 140.90 25** P PKPpre 04 52 45.3
baz=141
**T28A Walsh 141.03 28** P PKPpre 04 52 46.0
baz=141
**R31A Burdett 141.21 25** P PKPpre 04 52 46.1
baz=141
**S30A Montezuma 141.36 26** P PKPpre 04 52 48.0
baz=141
**R32A Long Quarter, 141.43 24** P PKPpre 04 52 47.8
baz=141
**P35A Duane Minner, 141.45 20** P PKPpre 04 52 47.6
baz=141
**P36A Good Intent, A 141.63 19** P PKPpre 04 52 48.1
baz=141
**S31A Mullinville 141.80 25** P PKPpre 04 52 47.7
baz=142
**Q36A Arnold C. Orve 142.15 20** P PKPpre 04 52 49.6
baz=142
**U30A WK&E Inc. Balk 142.19 27** P PKPpre 04 52 49.7
baz=142
**T32A Huddler Ranch, 142.41 25** P PKPpre 04 52 50.1
baz=142
**R36A Gordon, Harris 142.71 20** P PKPpre 04 52 50.0
baz=142
**BDFB Brasilia 142.86 238** PKhKP PKPpre 04 52 50.4
comp=Z,1.1nm,0.6s,baz=42,slow=9.1,SNR=3.2
**CPUP Villa Florida 142.93 215** PKhKP PKPpre 04 52 50.7
comp=Z,2.9nm,1.0s,baz=117,slow=8.6,SNR=3.6
**R37A Teagarden Farm 142.94 19** P PKPpre 04 52 50.6
baz=143
**U32A Winter Ranch, 143.05 26** P PKPab 04 52 50.7 +0.5
baz=143
**X28A Dimmitt 143.05 31** P PKPbc 04 52 51.1 -0.8
baz=143
**S36A Lake Cedric, C 143.21 21** P PKPbc 04 52 51.4 -0.7
baz=143
**T34A McClaskey Farm 143.24 23** P PKPbc 04 52 51.8 -0.4
baz=143
**MNTX Cornudas Mount 143.36 37** P PKPbc 04 52 53.1 +0.5
baz=143,SNR=6.8
**U33A Lingo Farm, Me 143.38 25** P PKPbc 04 52 52.4 -0.2
baz=143
**S37A Fort Scott 143.44 20** P PKPbc 04 52 52.2 -0.4
baz=143
**V32A Arapaho 143.59 26** P PKPbc 04 52 53.6 +0.4
baz=143
**T35A Sooner Cattle 143.60 22** P PKPbc 04 52 53.4 +0.2
baz=143
**U34A Anderson Ranch 143.61 24** P PKPbc 04 52 53.0 -0.2
baz=143,SNR=6.2
**W31A Holland Ranch, 143.62 28** P PKPbc 04 52 53.4 +0.1
baz=143
**T36A Boggs Farm, Ca 143.70 21** P PKPbc 04 52 53.8 +0.4
baz=144
**X30A Coker Ranch, T 143.77 30** P PKPbc 04 52 54.0 +0.1
baz=144
**V33A Lossen Ranch, 143.83 25** P PKPbc 04 52 54.0 +0.1
baz=144
**Z28A Tucker Farm, M 143.90 32** P PKPbc 04 52 54.3 0.0
baz=144,SNR=8.3
**T37A Cheneyville 18 143.99 20** P PKPab 04 52 53.6 -0.2
baz=144,SNR=12
**U35A Pawnee 143.99 23** P PKPbc 04 52 54.2 -0.2
baz=144,SNR=18
**W32A Sentinel 143.99 27** P PKPbc 04 52 54.3 -0.1
baz=144,SNR=9.3
**X31A McDonald Ranch 144.06 28** P PKPbc 04 52 54.6 -0.1
baz=144,SNR=12
**V34A Guthrie 144.14 24** P PKPbc 04 52 54.7 -0.1
baz=144,SNR=11
**V34A Guthrie 144.14 24** *e*PKPdf PKPbc 04 52 55.1 +0.3
**Y30A Stafford Cattl 144.22 30** P PKPbc 04 52 55.2 0.0
baz=144,SNR=8.7
**Z29A Hungry Hill Ra 144.29 32** P PKPbc 04 52 55.5 0.0
baz=144,SNR=13
**W33A Caddo, Fort Co 144.32 26** P PKPbc 04 52 55.6 +0.2
baz=144,SNR=24
**U36A Oologah 144.35 22** P PKPbc 04 52 55.2 -0.3
baz=144,SNR=7.9
**128A Castleberry Fa 144.36 33** P PKPbc 04 52 55.7 0.0
baz=144,SNR=6.7
**Y31A Rekieta Farm, 144.46 29** P **PKPab** **04 52 55.5 -0.2**
baz=144,SNR=6.8
**V35A Meyer Ranch, C 144.48 24** P **PKPab** **04 52 55.4 -0.2**
baz=144,SNR=11
**WMOK Wichita Mounta 144.52 27** *e*PKIKP **PKPab** **04 52 55.8 -0.1**
**WMOK Wichita Mounta 144.52 27** *e*PKPdf PKPbc 04 52 55.8 -0.3
**W34A Bridge Creek, 144.55 25** P PKPbc 04 52 55.9 -0.3
baz=144,SNR=12
**W34A Bridge Creek, 144.55 25** *e*PKPdf PKPbc 04 52 56.5 +0.4
**X32A Elmer 144.56 28** P **PKPab** **04 52 55.7 -0.3**
baz=144,SNR=8.2
**U37A Salina 144.56 21** P PKPbc 04 52 55.9 -0.2
baz=144,SNR=18
**Z30A Sanderson Ranc 144.57 31** P PKPbc 04 52 56.1 -0.3
baz=144,SNR=15
**228A UT Block 9, Co 144.68 34** P PKPbc 04 52 56.9 +0.1
baz=144,SNR=8.9
**129A Stewart Farms, 144.69 33** P PKPbc 04 52 56.8 0.0
baz=144,SNR=21
**TUL1 Tulsa 144.75 22** P **PKPab** **04 52 56.3 -0.4**
baz=145,SNR=18
**TUL1 Tulsa 144.75 22** *e*PKPdf **PKPab** **04 52 56.5 -0.2**
**U38A Gravette 144.79 20** P **PKPab** **04 52 56.2 -0.6**
baz=145,SNR=23
**V36A Jenks 144.81 23** P **PKPab** **04 52 56.7 -0.2**
baz=145,SNR=25
**X33A Lawton 144.81 27** P **PKPab** **04 52 56.2 -0.7**
baz=145,SNR=7.8
**Y32A R-V Farms, Ver 144.82 28** P **PKPab** **04 52 56.8 -0.2**
baz=145,SNR=8.8
**W35A Tecumseh 144.99 24** P **PKPab** **04 52 57.2 -0.4**
baz=145,SNR=14
**V37A Hulbert 145.02 21** P **PKPbc** **04 52 57.1 -0.5**
baz=145,SNR=20
**Z31A Sharp Cattle R 145.04 30** P **PKPbc** **04 52 57.5 -0.3**
baz=145,SNR=37
**SIUC Southern Illin 145.04 13** *e*PKPdf **PKPab** **04 52 57.6 0.0**
**X34A Smith Ranch, M 145.06 26** P **PKPab** **04 52 57.7 -0.2**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=145,SNR=15 | | | | | | | |
| **WCI** | **Wyandotte Cave** | **145.07** | **8** | *e*PKIKP | **PKPbc** | **04 52 56.8** | **-1.0** |
| **WCI** | **Wyandotte Cave** | **145.07** | **8** | *e*PKPdf | **PKPbc** | **04 52 56.8** | **-1.0** |
| **USIN** | **University of** | **145.11** | **10** | *e*PKPdf | **PKPbc** | **04 52 57.3** | **-0.5** |
| **130A** | **Snyder** | **145.19** | **32** | P | **PKPbc** | **04 52 58.1** | **-0.2** |
| | baz=145,SNR=8.6 | | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **145.20** | **27** | P | **PKPbc** | **04 52 57.8** | **-0.5** |
| | baz=145,SNR=7.8 | | | | | | | |
| **229A** | **Bryant Ranch,** | **145.22** | **33** | P | **PKPdf** | **04 52 58.7** | **-0.1** |
| | baz=145,SNR=7.4 | | | | | | | |
| **W36A** | **Wetumka** | **145.26** | **23** | P | **PKPab** | **04 52 58.3** | **-0.2** |
| | baz=145,SNR=12 | | | | | | | |
| **V38A** | **Canehill** | **145.30** | **21** | P | **PKPbc** | **04 52 57.8** | **-0.7** |
| | baz=145,SNR=23 | | | | | | | |
| **Z32A** | **Haskell** | **145.38** | **29** | P | **PKPdf** | **04 52 59.0** | **-0.1** |
| | baz=145,SNR=27 | | | | | | | |
| **131A** | **Roby** | **145.43** | **31** | P | **PKPab** | **04 52 59.4** | **+0.1** |
| | baz=145,SNR=16 | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **145.50** | **34** | P | **PKPab** | **04 52 59.6** | **0.0** |
| | baz=145,SNR=35 | | | | | | | |
| **W37A** | **Quinton** | **145.58** | **22** | P | **PKPbc** | **04 52 59.2** | **-0.2** |
| | baz=145,SNR=9.7 | | | | | | | |
| **X35A** | **Drake** | **145.60** | **25** | P | **PKPdf** | **04 52 59.0** | **-0.3** |
| | baz=145,SNR=18 | | | | | | | |
| **Y34A** | **Reagan Ranch,** | **145.64** | **26** | P | **PKPbc** | **04 52 59.4** | **-0.3** |
| | baz=145,SNR=15 | | | | | | | |
| **230A** | **Sterling City** | **145.66** | **33** | P | **PKPab** | **04 52 59.9** | **-0.3** |
| | baz=146,SNR=19 | | | | | | | |
| **X36A** | **Centrahoma** | **145.71** | **24** | P | **PKPbc** | **04 52 59.6** | **-0.2** |
| | baz=146,SNR=13 | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **145.73** | **28** | P | **PKPdf** | **04 52 59.5** | **-0.2** |
| | baz=146,SNR=11 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.85** | **30** | P | **PKPbc** | **04 53 00.2** | **-0.2** |
| | baz=146,SNR=15 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.85** | **30** | *e*PKPdf | **PKPbc** | **04 53 00.0** | **-0.4** |
| **W38A** | **Poteau** | **145.97** | **21** | P | **PKPbc** | **04 53 00.2** | **-0.5** |
| | baz=146 | | | | | | | |
| **Y35A** | **Marietta** | **145.99** | **26** | P | **PKPbc** | **04 53 00.2** | **-0.5** |
| | baz=146 | | | | | | | |
| **330A** | **Mertzon** | **146.00** | **33** | P | **PKPbc** | **04 53 00.9** | **-0.1** |
| | baz=146,SNR=18 | | | | | | | |
| **231A** | **Bronte** | **146.05** | **32** | P | **PKPab** | **04 53 01.3** | **-0.3** |
| | baz=146,SNR=13 | | | | | | | |
| **Z34A** | **Collier Ranch,** | **146.06** | **27** | P | **PKPbc** | **04 53 00.5** | **-0.5** |
| | baz=146,SNR=5.7 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.07** | **39** | PKPbc | **PKPab** | **04 53 01.7** | **-0.1** |
| | comp=Z,14nm,0.7s,baz=287,slow=1.0,SNR=136 | | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 04 53 11.3 | +0.5 |
| | comp=Z,7.1nm,0.7s,baz=318,slow=1.2,SNR=9.5 | | | | | | | |
| **X37A** | **Clayton** | **146.08** | **23** | P | **PKPbc** | **04 53 01.0** | **0.0** |
| | baz=146 | | | | | | | |
| **429A** | **Davenport Ranc** | **146.19** | **35** | P | **PKPbc** | **04 53 01.2** | **-0.4** |
| | baz=146 | | | | | | | |
| **133A** | **Hamilton Ranch** | **146.22** | **29** | P | **PKPbc** | **04 53 01.5** | **0.0** |
| | baz=146,SNR=16 | | | | | | | |
| **X38A** | **Whitesboro** | **146.22** | **22** | P | **PKPbc** | **04 53 01.1** | **-0.3** |
| | baz=146,SNR=8.6 | | | | | | | |
| **Y36A** | **Durant** | **146.32** | **25** | P | **PKPbc** | **04 53 01.4** | **-0.3** |
| | baz=146,SNR=14 | | | | | | | |
| **LCO** | **Las Campanas** | **146.33** | **195** | PKPdf | **PKPbc** | **04 53 01.6** | **-0.6** |
| **529A** | **Stev Forest Ra** | **146.37** | **36** | P | **PKPbc** | **04 53 01.8** | **-0.4** |
| | baz=146 | | | | | | | |
| **Z35A** | **Perchaven, San** | **146.39** | **26** | P | **PKPbc** | **04 53 01.5** | **-0.5** |
| | baz=146,SNR=8.2 | | | | | | | |
| **GLAT** | **Glass** | **146.41** | **13** | *e*PKPbc | **PKPbc** | **04 53 01.8** | **-0.1** |
| **232A** | **Coleman** | **146.43** | **31** | P | **PKPbc** | **04 53 02.2** | **0.0** |
| | baz=146,SNR=16 | | | | | | | |
| **430A** | **Baggett Ranch,** | **146.44** | **34** | P | **PKPbc** | **04 53 02.5** | **+0.2** |
| | baz=146 | | | | | | | |
| **331A** | **San Angelo** | **146.48** | **32** | P | **PKPbc** | **04 53 02.6** | **+0.2** |
| | baz=146,SNR=18 | | | | | | | |
| **Y37A** | **Hugo** | **146.52** | **24** | P | **PKPbc** | **04 53 02.4** | **0.0** |
| | baz=146 | | | | | | | |
| **GNAR** | **Gosnell** | **146.53** | **15** | *e*PKPbc | **PKPbc** | **04 53 02.1** | **-0.2** |
| **134A** | **White-Moore Ra** | **146.65** | **28** | P | **PKPbc** | **04 53 02.3** | **-0.4** |
| | baz=146 | | | | | | | |
| **233A** | **Rising Star** | **146.71** | **30** | P | **PKPbc** | **04 53 03.2** | **+0.2** |
| | baz=146,SNR=24 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.78** | **20** | *e*PKP2 | **PKPbc** | **04 53 03.3** | **+0.2** |
| **MIAR** | **Mount Ida** | **146.78** | **20** | P | **PKPbc** | **04 53 03.2** | **+0.1** |
| | baz=147 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.78** | **20** | *e*PKPbc | **PKPbc** | **04 53 03.3** | **+0.2** |
| **332A** | **Millersview** | **146.78** | **31** | P | **PKPbc** | **04 53 03.6** | **+0.3** |
| | baz=147 | | | | | | | |
| **Z36A** | **Blue Ridge** | **146.80** | **25** | P | **PKPbc** | **04 53 03.2** | **0.0** |
| | baz=147 | | | | | | | |
| **WVT** | **Waverly** | **146.86** | **11** | *e*PKP2 | **PKPdf** | **04 53 00.9** | **-0.6** |
| **WVT** | **Waverly** | **146.86** | **11** | *e*PKPdf | **PKPdf** | **04 53 00.9** | **-0.6** |
| WVT | | | | *e*PKPbc | **PKPbc** | **04 53 03.1** | **-0.1** |
| **530A** | **J-C Ranch, Com** | **146.86** | **35** | P | **PKPbc** | **04 53 03.7** | **+0.2** |
| | baz=147 | | | | | | | |
| **431A** | **Sonora** | **146.87** | **33** | P | **PKPbc** | **04 53 03.7** | **+0.2** |
| | baz=147 | | | | | | | |
| **Y38A** | **Idabel** | **146.91** | **22** | P | **PKPbc** | **04 53 03.8** | **+0.3** |
| | baz=147 | | | | | | | |
| **135A** | **Vickery Place,** | **146.97** | **27** | P | **PKPab** | **04 53 04.2** | **-0.9** |
| | baz=147 | | | | | | | |
| **UALR** | **University of** | **146.98** | **19** | *e*PKPbc | **PKPdf** | **04 53 02.2** | **+0.6** |
| **TZTN** | **Tazewell** | **147.06** | **5** | *e*PKPbc | **PKPdf** | **04 53 02.5** | **+0.7** |
| **234A** | **Clairette** | **147.09** | **29** | P | **PKPbc** | **04 53 03.9** | **-0.1** |
| | baz=147 | | | | | | | |
| **Y39A** | **Lockesburg** | **147.14** | **22** | P | **PKPbc** | **04 53 04.6** | **+0.5** |
| | baz=147 | | | | | | | |
| **432A** | **Menard** | **147.16** | **32** | P | **PKPbc** | **04 53 04.4** | **+0.1** |
| | baz=147 | | | | | | | |
| **Z37A** | **Pogue Cattle C** | **147.20** | **24** | P | **PKPab** | **04 53 05.1** | **-0.8** |
| | baz=147 | | | | | | | |
| **333A** | **Richland Sprin** | **147.22** | **31** | P | **PKPbc** | **04 53 04.3** | **-0.2** |
| | baz=147 | | | | | | | |
| **531A** | **Rocksprings** | **147.30** | **34** | P | **PKPbc** | **04 53 04.9** | **+0.2** |
| | baz=147 | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **147.41** | **23** | P | **PKPbc** | **04 53 04.5** | **-0.4** |
| | baz=147 | | | | | | | |
| **WHTX** | **Lake Whitney** | **147.42** | **28** | P | **PKPbc** | **04 53 04.9** | **-0.1** |
| | baz=147 | | | | | | | |
| **136A** | **Ennis** | **147.44** | **26** | P | **PKPbc** | **04 53 05.0** | **0.0** |
| | baz=147 | | | | | | | |
| **JCT** | **Junction City** | **147.46** | **33** | *e*PKP2 | **PKPdf** | **04 53 03.2** | **+0.5** |
| **JCT** | **Junction City** | **147.46** | **33** | P | **PKPbc** | **04 53 05.6** | **+0.4** |
| | baz=147 | | | | | | | |
| **JCT** | **Junction City** | **147.46** | **33** | *e*PKPdf | **PKPdf** | **04 53 03.2** | **+0.5** |
| JCT | | | | *e*PKPbc | **PKPbc** | **04 53 05.7** | **+0.5** |
| **334A** | **Lometa** | **147.59** | **30** | P | **PKPbc** | **04 53 05.3** | **-0.2** |
| | baz=147 | | | | | | | |
| **433A** | **Art** | **147.62** | **31** | P | **PKPbc** | **04 53 05.7** | **+0.1** |
| | baz=147 | | | | | | | |
| **137A** | **Heron Place, G** | **147.66** | **25** | P | **PKPbc** | **04 53 05.9** | **+0.3** |
| | baz=148 | | | | | | | |
| **532A** | **Rocksprings** | **147.68** | **33** | P | **PKPbc** | **04 53 05.9** | **+0.1** |
| | baz=148 | | | | | | | |
| **Z39A** | **Irene McRaven,** | **147.73** | **22** | P | **PKPbc** | **04 53 06.1** | **+0.3** |
| | baz=148 | | | | | | | |
| **236A** | **Katherine and** | **147.84** | **27** | P | **PKPbc** | **04 53 06.0** | **-0.1** |
| | baz=148 | | | | | | | |
| **631A** | **Perdido Creek** | **147.85** | **35** | P | **PKPbc** | **04 53 06.8** | **+0.6** |
| | baz=148 | | | | | | | |
| **138A** | **Matatall Enter** | **147.89** | **24** | P | **PKPbc** | **04 53 06.9** | **+0.7** |
| | baz=148 | | | | | | | |
| **434A** | **Burnet** | **147.99** | **30** | P | **PKPbc** | **04 53 06.5** | **-0.1** |
| | baz=148 | | | | | | | |
| **335A** | **Moody** | **148.02** | **29** | P | **PKPbc** | **04 53 06.8** | **+0.2** |
| | baz=148 | | | | | | | |
| **CPCT** | **Cooper Cave** | **148.04** | **7** | *e*PKPbc | **PKPbc** | **04 53 06.3** | **-0.3** |
| **OXF** | **Oxford** | **148.06** | **14** | *e*PKIKP | **PKPdf** | **04 53 02.6** | **-0.9** |
| OXF | | | | *e* | | 04 53 06.2 | |
| **OXF** | **Oxford** | **148.06** | **14** | *e*PKPdf | **PKPdf** | **04 53 02.6** | **-0.9** |
| OXF | | | | *e*PKPbc | **PKPbc** | **04 53 06.2** | **-0.4** |
| **SWET** | **Sewanee** | **148.08** | **9** | *e*PKPbc | **PKPbc** | **04 53 05.8** | **-0.9** |
| **139A** | **Bunkhouse Ranc** | **148.15** | **23** | P | **PKPbc** | **04 53 06.9** | **0.0** |
| | baz=148 | | | | | | | |
| **237A** | **Washetta, Mont** | **148.16** | **26** | P | **PKPbc** | **04 53 07.4** | **+0.5** |
| | baz=148 | | | | | | | |
| **533A** | **Kerrville** | **148.19** | **32** | P | **PKPbc** | **04 53 07.5** | **+0.3** |
| | baz=148 | | | | | | | |
| **336A** | **Riesel** | **148.21** | **28** | P | **PKPbc** | **04 53 07.4** | **+0.3** |
| | baz=148 | | | | | | | |
| **632A** | **Uvalde** | **148.22** | **34** | P | **PKPbc** | **04 53 08.2** | **+0.9** |
| | baz=148 | | | | | | | |
| **435B** | **Jarrell** | **148.36** | **29** | P | **PKPbc** | **04 53 08.1** | **+0.6** |
| | baz=148 | | | | | | | |
| **238A** | **Jacksonville** | **148.44** | **25** | P | **PKPbc** | **04 53 08.5** | **+0.8** |
| | baz=148 | | | | | | | |
| **534A** | **Blanco** | **148.52** | **31** | P | **PKPbc** | **04 53 08.0** | **0.0** |
| | baz=148 | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.58** | **2** | P | **PKPbc** | **04 53 07.9** | **-0.1** |
| | baz=148 | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.58** | **2** | *e*PKPdf | **PKPdf** | **04 53 04.6** | **+0.3** |
| KMSC | | | | *e*PKPbc | **PKPbc** | **04 53 07.7** | **-0.3** |
| KMSC | | | | *e*PKPab | **PKPab** | **04 53 10.3** | **-1.0** |
| **633A** | **Saathoff Ranch** | **148.60** | **33** | P | **PKPbc** | **04 53 08.5** | **+0.3** |
| | baz=148 | | | | | | | |
| **239A** | **Gary** | **148.70** | **24** | P | **PKPbc** | **04 53 09.2** | **+0.8** |
| | baz=148 | | | | | | | |
| **337A** | **Centerville** | **148.71** | **26** | P | **PKPbc** | **04 53 09.4** | **+1.0** |
| | baz=148 | | | | | | | |
| **732A** | **Laxson Ranch,** | **148.72** | **35** | P | **PKPbc** | **04 53 08.8** | **+0.4** |
| | baz=148 | | | | | | | |
| **436A** | **Wall Ranch, Ga** | **148.75** | **28** | P | **PKPbc** | **04 53 09.1** | **+0.6** |
| | baz=149 | | | | | | | |
| **NATX** | **Nacogdoches** | **148.85** | **24** | P | **PKPbc** | **04 53 09.5** | **+0.8** |
| | baz=149 | | | | | | | |
| **338A** | **Crockett** | **148.92** | **26** | P | **PKPbc** | **04 53 09.4** | **+0.5** |
| | baz=149 | | | | | | | |
| **535A** | **Dale** | **148.98** | **30** | P | **PKPbc** | **04 53 09.4** | **+0.3** |
| | baz=149 | | | | | | | |
| **437A** | **Phantom Ranch,** | **149.01** | **27** | P | **PKPbc** | **04 53 09.5** | **+0.4** |
| | baz=149 | | | | | | | |
| **832A** | **Faith Ranch, C** | **149.05** | **35** | P | **PKPbc** | **04 53 10.1** | **+0.8** |
| | baz=149 | | | | | | | |
| **634A** | **China Grove, S** | **149.10** | **32** | P | **PKPbc** | **04 53 10.2** | **+0.7** |
| | baz=149 | | | | | | | |
| **733A** | **Divot King Ran** | **149.10** | **34** | P | **PKPbc** | **04 53 10.1** | **+0.6** |
| | baz=149 | | | | | | | |
| **536A** | **Bastrop** | **149.19** | **29** | P | **PKPbc** | **04 53 10.1** | **+0.4** |
| | baz=149 | | | | | | | |
| **339A** | **Huntington** | **149.26** | **25** | P | **PKPbc** | **04 53 10.2** | **+0.4** |
| | baz=149 | | | | | | | |
| **833A** | **Chaparral WMA,** | **149.35** | **35** | P | **PKPbc** | **04 53 10.6** | **+0.5** |
| | baz=149 | | | | | | | |
| **438A** | **Sam Houston St** | **149.37** | **26** | P | **PKPbc** | **04 53 10.8** | **+0.7** |
| | baz=149 | | | | | | | |
| **635A** | **Leesville** | **149.40** | **31** | P | **PKPbc** | **04 53 10.8** | **+0.6** |
| | baz=149 | | | | | | | |
| **734A** | **La Palita Cree** | **149.41** | **33** | P | **PKPbc** | **04 53 11.2** | **+1.0** |
| | baz=149 | | | | | | | |
| **340A** | **Bronson** | **149.46** | **23** | P | **PKPbc** | **04 53 10.4** | **+0.1** |
| | baz=149 | | | | | | | |
| **537A** | **Green Hill Far** | **149.55** | **28** | P | **PKPbc** | **04 53 11.0** | **+0.5** |
| | baz=149 | | | | | | | |
| **439A** | **Center Grove,** | **149.64** | **25** | P | **PKPbc** | **04 53 11.7** | **+0.9** |
| | baz=150 | | | | | | | |
| **636A** | **Smothers Creek** | **149.69** | **30** | P | **PKPbc** | **04 53 12.0** | **+1.1** |
| | baz=150 | | | | | | | |
| **735A** | **Kenedy** | **149.80** | **32** | P | **PKPbc** | **04 53 12.2** | **+1.0** |
| | baz=150 | | | | | | | |
| **538A** | **Harpers Horsep** | **149.81** | **27** | P | **PKPbc** | **04 53 11.8** | **+0.6** |
| | baz=150 | | | | | | | |
| **HKT** | **Hockley** | **149.89** | **28** | *e*PKP2 | **PKPbc** | **04 53 12.5** | **+1.2** |
| **HKT** | **Hockley** | **149.89** | **28** | *e*PKPbc | **PKPbc** | **04 53 12.5** | **+1.2** |
| **VBMS** | **Vicksburg** | **149.91** | **18** | P | **PKPbc** | **04 53 11.6** | **+0.2** |
| | baz=150 | | | | | | | |
| **933A** | **Laredo** | **149.96** | **35** | P | **PKPbc** | **04 53 12.7** | **+1.1** |
| | baz=150 | | | | | | | |
| **834A** | **Tilden** | **149.98** | **34** | P | **PKPbc** | **04 53 12.8** | **+1.2** |
| | baz=150 | | | | | | | |
| **LRAL** | **Lakeview Retre** | **150.02** | **11** | *e*PKPdf | **PKPdf** | **04 53 06.2** | **-0.4** |
| LRAL | | | | *e*PKPbc | **PKPbc** | **04 53 11.2** | **-0.4** |
| LRAL | | | | *e*PKPab | **PKPab** | **04 53 15.9** | **-1.3** |
| **440A** | **Kirbyville** | **150.02** | **24** | P | **PKPbc** | **04 53 12.8** | **+1.1** |
| | baz=150 | | | | | | | |
| **736A** | **Circle Diamond** | **150.11** | **31** | P | **PKPbc** | **04 53 13.2** | **+1.2** |
| | baz=150 | | | | | | | |
| **GOGA** | **Godfrey** | **150.17** | **6** | *e*PKIKP | **PKPdf** | **04 53 07.6** | **+0.7** |
| GOGA | | | | *e* | | 04 53 11.9 | |
| GOGA | | | | *e* | | 04 53 16.7 | |
| **GOGA** | **Godfrey** | **150.17** | **6** | *e*PKPdf | **PKPdf** | **04 53 07.6** | **+0.7** |
| GOGA | | | | *e*PKPbc | **PKPbc** | **04 53 11.9** | **-0.1** |
| GOGA | | | | *e*PKPab | **PKPab** | **04 53 16.7** | **-1.1** |
| **835A** | **Beeville** | **150.24** | **33** | P | **PKPbc** | **04 53 13.8** | **+1.5** |
| | baz=150 | | | | | | | |
| **934A** | **Benavides** | **150.40** | **34** | P | **PKPbc** | **04 53 14.1** | **+1.4** |
| | baz=150 | | | | | | | |
| **540A** | **Vidor** | **150.48** | **25** | P | **PKPbc** | **04 53 14.2** | **+1.4** |
| | baz=150 | | | | | | | |
| **034A** | **Hebbronville** | **150.72** | **35** | P | **PKPbc** | **04 53 15.0** | **+1.5** |
| | baz=150 | | | | | | | |
| **035A** | **Encino** | **151.15** | **35** | P | **PKPbc** | **04 53 16.3** | **+1.8** |
| | baz=151 | | | | | | | |
| **936A** | **North Padre Is** | **151.21** | **33** | P | **PKPbc** | **04 53 16.2** | **+1.7** |
| | baz=151 | | | | | | | |
| **035Z** | **Hargill** | **151.53** | **35** | P | **PKPbc** | **04 53 16.9** | **+1.5** |
| | baz=151 | | | | | | | |
| **LVC** | **Limon Verde** | **151.72** | **202** | *e*PKPbc | **PKPbc** | **04 53 16.2** | **0.0** |
| **LPAZ** | **La Paz** | **156.93** | **211** | PKP | **PKPdf** | **04 53 17.5** | **-0.3** |
| | comp=Z,2.6nm,1.2s,baz=168,slow=3.7,SNR=6.5 | | | | | | | |
| **OTAV** | **Otavalo** | **176.24** | **208** | *e*PKPdf | **PKPdf** | **04 53 32.4** | **-0.1** |

*ISCJB **27** 04:37:39.2±1.2, 13°.16N±0°.05×90°.59W±0°.04, h15km±9km, mb3.8/4, Error ellipse: s-maj=10.2km s-min=4.6km az=28.7*

*CASC **27** 04:37:40.7±2.1, 13°.28N×90°.57W, h19km±7km, MD4.0, ML3.6, mb4.0(NEIC)*

*IDC **27** 04:37:41.2±2.3, 13°.94N×89°.86W, h0km, mb3.8/2, mb1 3.8/4, mb1mx3.6/23, mbtmp3.6/4, ML3.8/2, Error ellipse: s-maj=70.1km s-min=20.9km az=41.0*

*NEIC **27** 04:37:44.0±1.6, 13°.27N×90°.61W, h35km, mb3.7/2, MD4.0(MEX), Error ellipse: s-maj=62.4km s-min=11.8km az=221.0*

*MEX **27** 04:37:47.9±0.3, 13°.47N×91°.00W, h10km, MD4.0*

**ISC 27 04:37:40.4±1.0, 13°.28N±0°.06×90°.61W±0°.05, h20km±7km, n32, σ1§84/46, mb3.7/4, 1C-3D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SBLS** | **San Blas** | **1.11** | **60** | ⇓*i*P | **Pn** | **04 38 00.4** | **-0.6** |
| **PCG** | **Pacaya** | **1.11** | **360** | *e*P | **Pb** | **04 38 01.6** | **+0.4** |
| PCG | | | | *e*S | **Sn** | **04 38 15.4** | **-0.5** |
| **RTR** | **El Retiro** | **1.12** | **56** | ⇓*i*P | **Pn** | **04 38 00.7** | **-0.4** |
| **SNJE** | **San Jose** | **1.14** | **59** | ⇓*i*P | **Pn** | **04 38 00.8** | **-0.6** |
| **FUG** | **Fuego 3** | **1.19** | **349** | *e*P | **Pb** | **04 38 02.4** | **0.0** |
| **NBG** | **Las Nubes** | **1.33** | **11** | *e*P | **Pb** | **04 38 05.5** | **+0.7** |
| NBG | | | | *e*S | **Sb** | **04 38 22.4** | **+0.9** |
| **BOQS** | **Boqueron** | **1.37** | **70** | ⇑*i*P | **Pn** | **04 38 04.1** | **-0.5** |
| BOQS | | | | *e*S | **Sb** | **04 38 23.9** | **+1.3** |
| **SNET** | **Serv Nac Est T** | **1.40** | **73** | *i* P | **Pn** | **04 38 04.3** | **-0.5** |
| SNET | | | | *e*S | **Sb** | **04 38 22.6** | **-0.7** |
| SNET | | | | AML | AML | 04 38 26.9 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **JAT** | **Jato** | **1.44** | **316** | *e*P | **Pb** | **04 38 06.9** | **+0.3** |
| JAT | | | | *e*S | **Sb** | **04 38 26.1** | **+1.6** |
| **LFU** | **La Fuente** | **1.52** | **72** | *i* P | **Pn** | **04 38 06.7** | **+0.2** |
| **LFRS** | **El Faro** | **1.54** | **77** | *i* P | **Pn** | **04 38 06.4** | **-0.4** |
| **LBRS** | **Las Brisas** | **1.59** | **73** | *i* P | **Pn** | **04 38 07.5** | **0.0** |
| **MRL** | **Marmol** | **1.99** | **26** | *e*P | **Pb** | **04 38 15.1** | **-0.9** |
| MRL | | | | *e*S | **Sb** | **04 38 39.8** | **-0.6** |
| **CNCH** | **Conchagua** | **2.70** | **90** | *e*P | **Pn** | **04 38 23.1** | **+0.3** |
| CNCH | | | | *e*P | Pb | 04 38 23.8 | -4.3 |
| **CCIG** | **Comitan** | **3.33** | **334** | *e*P | **Pn** | **04 38 34.0** | **+2.4** |
| CCIG | | | | *i* S | **Sn** | **04 39 08.7** | **-2.0** |
| **CCIG** | **Comitan** | **3.33** | **334** | *e*P | **Pn** | **04 38 34.0** | **+2.4** |
| CCIG | | | | *i* S | **Sn** | **04 39 08.7** | **-2.0** |
| **PCIG** | | **3.50** | **314** | *e*P | **Pn** | **04 38 34.5** | **+0.8** |
| PCIG | | | | *i* S | **Sn** | **04 39 10.1** | **-4.3** |
| **PCIG** | | **3.50** | **314** | *e*P | **Pn** | **04 38 34.5** | **+0.8** |
| PCIG | | | | *i* S | **Sn** | **04 39 10.1** | **-4.3** |
| **TEL3** | **Telica 3** | **3.73** | **100** | *e*P | **Pn** | **04 38 36.3** | **-0.6** |
| **MOMN** | **Momotombo** | **4.06** | **102** | *e*P | **Pn** | **04 38 40.2** | **-1.2** |
| MOMN | | | | *e*S | **Sn** | **04 39 28.0** | **-0.4** |
| **COPN** | **Copaltepe** | **4.07** | **105** | *e*P | **Pn** | **04 38 41.3** | **-0.2** |
| COPN | | | | AML | AML | 04 39 36.2 | |
| | comp=Z,97nm,0.6s | | | | | | |
| **TGIG** | | **4.25** | **325** | *e*P | **Pn** | **04 38 45.8** | **+1.8** |
| TGIG | | | | *i* S | **Sn** | **04 39 29.2** | **-3.9** |
| **TGIG** | | **4.25** | **325** | *e*P | **Pn** | **04 38 45.8** | **+1.8** |
| TGIG | | | | *i* S | **Sn** | **04 39 29.2** | **-3.9** |
| **XAVN** | **Gruta Xavier** | **4.32** | **105** | *e*P | **Pn** | **04 38 46.0** | **+1.0** |
| **TISN** | **Laguna Tiscapa** | **4.38** | **104** | *e*P | **Pn** | **04 38 45.4** | **-0.4** |
| **JTS** | **JuntasAbangare** | **6.28** | **118** | Pn | **Pn** | **04 39 13.6** | **+1.6** |
| | comp=Z,1.8nm,0.3s,baz=113,slow=24,SNR=7.2 | | | | | | |
| JTS | | | | Lg | Lg | 04 40 49.9 | |
| | comp=Z,0.7nm,0.3s,baz=166,slow=11,SNR=4.5 | | | | | | |
| **JTS** | **JuntasAbangare** | **6.28** | **118** | *e*Pn | **Pn** | **04 39 13.8** | **+1.8** |
| | comp=Z,18nm,0.7s | | | | | | |
| JTS | | | | *e*S | **Sb** | **04 40 42.2** | **-1.6** |
| JTS | | | | Lg | Lg | 04 40 49.9 | |
| **TXAR** | **Lajitas Array** | **20.05** | **325** | P | **Pn** | **04 42 16.0** | **+1.7** |
| | comp=Z,0.1nm,0.3s,baz=150,slow=12,SNR=6.8 | | | | | | |
| **WMOK** | **Wichita Mounta** | **22.61** | **342** | *e*P | **P** | **04 42 41.5** | **+1.5** |
| | comp=Z,3.3nm,1.2s | | | | | | |
| **MNTX** | **Cornudas Mount** | **22.81** | **326** | *e*P | **P** | **04 42 44.1** | **+2.0** |
| | comp=Z,2.3nm,0.8s | | | | | | |
| **NVAR** | **Mina Array Bea** | **35.09** | **321** | P | **P** | **04 44 35.3** | **+2.8** |
| | comp=Z,0.3nm,0.6s,baz=125,slow=8.9,SNR=3.0 | | | | | | |
| **SCHQ** | **Schefferville** | **45.44** | **19** | P | **P** | **04 45 54.8** | **-3.0** |
| | comp=Z,4.4nm,1.0s,baz=212,slow=9.5,SNR=3.9 | | | | | | |

*IDC **27** 04:47:58.7±0.6, 41°.25N×73°.25E, h0km, mb4.4/18, mb1 4.5/24, mb1mx4.3/43, mbtmp4.4/24, ML4.0/6, MS3.5/8, Ms1 3.5/8, ms1mx3.2/47, Error ellipse: s-maj=11.3km s-min=8.6km az=150.0*

*ISCJB **27** 04:48:02.4±0.4, 41°.40N±0°.02×73°.16E±0°.02, h27km±3km, mb4.4/43, MS3.6/7, Error ellipse: s-maj=3.2km s-min=2.9km az=163.8*

*NNC **27** 04:48:02.1±0.2, 41°.46N×73°.19E, h0km, mb5.0, mpv4.7, Error ellipse: s-maj=1.9km s-min=1.2km az=78.0*

*KRNET **27** 04:48:02.5±0.1, 41°.45N×73°.22E, h19km, mb4.9*

*MOS **27** 04:48:03.7±1.3, 41°.47N×73°.18E, h33km, mb4.6/16, Error ellipse: s-maj=6.4km s-min=4.5km az=98.2*

*MOS Felt (IV) at Arslanbob; (III) at Dzhalal-Abad.*

*BJI **27** 04:48:04.8, 41°.51N×73°.19E, h50km, mb4.5/23, mB4.9/8, ML4.4/4, Ms4.3/11, Ms7 4.3/10*

*KNET **27** 04:48:04.0±0.4, 41°.51N×73°.33E, h13km±2km, ml4.6, Error ellipse: s-maj=6.4km s-min=2.4km az=123.0*

*NEIC **27** 04:48:05.9±0.7, 41°.47N×73°.21E, h45km±6km, mb4.7/3, Error ellipse: s-maj=8.0km s-min=6.0km az=175.0*

*NEIC Felt [IV] at Arslanbob and [III] at Jalal-Abad.*

**ISC 27 04:48:02.9±0.6, 41°.40N±0°.02×73°.16E±0°.02, h23km±4km, n239, σ1§65/272, mb4.5/42, MS3.4/7, 73C-51D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARSB** | **Arslanbob** | **0.16** | **240** | ⇑*i*P | **Pb** | **04 48 07.3** | **-0.8** |
| | baz=238 | | | | | | |
| ARSB | | | | ⇑*i*S | **Sb** | **04 48 11.1** | **-0.5** |
| | baz=238 | | | | | | |
| **AML** | **Almayashu** | **0.83** | **28** | ⇓*i*P | **Pb** | **04 48 17.4** | **-1.5** |
| | baz=27 | | | | | | |
| AML | | | | ⇓*i*S | **Sb** | **04 48 27.8** | **-2.0** |
| | baz=27 | | | | | | |
| **AML** | **Almayashu** | **0.83** | **28** | P | **Pb** | **04 48 17.3** | **-1.6** |
| | 4μm,0.2s | | | | | | |
| AML | | | | ⇑S | **Sb** | **04 48 28.3** | **-1.6** |
| | 9μm,0.2s | | | | | | |
| **ARLS** | **Aral** | **0.98** | **62** | ⇓*i*P | **Pn** | **04 48 19.8** | **-1.7** |
| | baz=63 | | | | | | |
| ARLS | | | | ⇓*i*S | **Sb** | **04 48 32.3** | **-1.7** |
| | baz=63 | | | | | | |
| **ARK** | **Arkit** | **0.98** | **294** | ⇓*i*P | **Pn** | **04 48 20.7** | **-0.7** |
| | baz=290 | | | | | | |
| ARK | | | | ⇓*i*S | **Sb** | **04 48 34.7** | **+0.7** |
| | baz=290 | | | | | | |
| **MNAS** | **Manas** | **1.19** | **336** | ⇑P | **Pn** | **04 48 23.9** | **-0.3** |
| | 813nm,0.6s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **04 48 39.9** | **+0.1** |
| | 1μm,0.3s | | | | | | |
| **MNAS** | **Manas** | **1.19** | **336** | PG | **Pn** | **04 48 23.7** | **-0.6** |
| MNAS | | | | S | **Sn** | **04 48 39.9** | **+0.1** |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,595nm,0.5s | | | | | | |
| MNAS | | | | smax | smax | | |
| | comp=N,2μm,0.5s | | | | | | |
| **MNAS** | **Manas** | **1.19** | **336** | ⇓*i*P | **Pn** | **04 48 24.1** | **-0.2** |
| | baz=333 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sn** | **04 48 39.9** | **+0.1** |
| | baz=333 | | | | | | |
| **MNAS** | **Manas** | **1.19** | **336** | ⇑*i*P | **Pn** | **04 48 24.0** | **-0.3** |
| | baz=333 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sn** | **04 48 40.0** | **+0.1** |
| | baz=333 | | | | | | |
| **UCH** | **Uchtor** | **1.30** | **50** | *i* P | **Pn** | **04 48 25.6** | **-0.5** |
| | baz=51 | | | | | | |
| UCH | | | | *i* S | **Sn** | **04 48 42.4** | **-0.6** |
| | baz=51 | | | | | | |
| **UCH** | **Uchtor** | **1.30** | **50** | P | **Pn** | **04 48 25.6** | **-0.5** |
| | comp=N,1μm,0.2s,SNR=2128 | | | | | | |
| UCH | | | | ⇓S | **Sn** | **04 48 42.6** | **-0.5** |
| | comp=N,4μm,0.2s | | | | | | |
| **EKS2** | **Erkin-Say** | **1.34** | **20** | *e*PG | **Pn** | **04 48 26.3** | **-0.1** |
| EKS2 | | | | *e* | | 04 48 42.6 | |
| **EKS2** | **Erkin-Say** | **1.34** | **20** | ⇓*i*P | **Pn** | **04 48 26.2** | **-0.1** |
| | baz=19 | | | | | | |
| EKS2 | | | | ⇓*i*S | **Sn** | **04 48 43.3** | **-0.2** |
| | baz=19 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.34** | **20** | ⇓P | **Pn** | **04 48 26.2** | **-0.1** |
| | comp=N,566nm,0.2s,SNR=950 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.34** | **20** | *e*Pn | **Pn** | **04 48 

baz=62
BOOM ⇑*i*S **Sn** **04 49 10.5 +2.3**
baz=62
**TKM2 Tokmak 2 2.36 49** ⇓Pg **Pb** **04 48 43.2 -1.7**
comp=E,1μm,0.6s
TKM2 ⇓Lg Lg 04 49 14.6
comp=E,5μm,0.5s
**TKM2 Tokmak 2 2.36 49** PN **Pb** **04 48 43.2 -1.7**
TKM2 04 49 14.5
TKM2 pmax pmax
comp=Z,1μm,0.6s
TKM2 pmax pmax
comp=N,5μm,0.5s
**TKM2 Tokmak 2 2.36 49**⇑*i*P **Pb** **04 48 43.4 -1.5**
baz=49
TKM2 ⇑*i*S **Sb** **04 49 14.5 +0.8**
baz=49
**TKM2 Tokmak 2 2.36 49** P **Pb** **04 48 43.4 -1.5**
comp=N,995nm,0.3s,SNR=1419
**TKM2 Tokmak 2 2.36 49** *e*Pn **Pb** **04 48 43.5 -1.4**
TKM2 *e*S **Sb** **04 49 15.6 +1.9**
**KK31 Karatay Array 2.60 312** ⇑Pn **Pn** **04 48 46.1 +2.5**
comp=N,5.1nm,0.2s,baz=125,slow=12,SNR=3676
KK31 ⇑Pg **Pb** **04 48 49.4 +0.5**
comp=N,147nm,0.3s,baz=128,slow=16,SNR=6.2
KK31 ⇑Lg Lg 04 49 24.4
comp=N,1μm,0.6s,baz=132,slow=28,SNR=17
**KK31 Karatay Array 2.60 312** *e*PN **Pn** **04 48 46.0 +2.5**
KK31 04 49 24.3
KK31 pmax pmax
comp=Z,4.0nm,0.3s
KK31 pmax pmax
comp=Z,147nm,0.3s
KK31 pmax pmax
comp=N,872nm,0.5s
**KKAR Karatay Array 2.60 312** *e*PN **Pn** **04 48 46.3 +2.7**
KKAR *e*S **Sb** **04 49 22.8 +2.4**
**KKAR Karatay Array 2.60 312** *e*Pn **Pn** **04 48 46.3 +2.7**
KKAR *e*S **Sb** **04 49 22.8 +2.4**
**KSH Kashi 2.85 130** P **Pb** **04 48 51.0 -2.3**
KSH S **Sb** **04 49 26.8 -1.0**
KSH SMN
comp=N,1μm,0.5s
KSH SME
comp=N,2μm,1.1s
**KSH Kashi 2.85 130** S Pn 04 48 51.5 +4.3
**KNDC Almaty 3.35 56** ⇑Pn **Pn** **04 48 55.4 +1.5**
comp=N,133nm,0.5s
KNDC ⇑Pg **Pb** **04 49 03.1 +1.4**
comp=N,473nm,0.6s
KNDC ⇑Lg Lg 04 49 46.2
comp=N,2μm,0.6s
**AAA Alma-Ata 3.37 55** *e*PN **Pb** **04 49 04.2 +2.2**
AAA *e*S **Sb** **04 49 44.5 +2.0**
AAA pmax pmax
comp=Z,818nm,0.5s
AAA smax smax
comp=E,3μm,0.5s
**ANVS Anan'yevo 3.62 66**⇑*e*P **Pn** **04 48 59.4 +1.6**
baz=67
ANVS ⇑*i*S **Sn** **04 49 40.1 +0.2**
baz=67
**DZET Dzherino 4.22 233** ⇑Pn Pn 04 49 09.4 +3.5
comp=E,181nm,0.6s
DZET ⇓Sn **Sn** **04 49 59.9 +5.5**
comp=E,806nm,0.6s
DZET ⇑Lg Lg 04 50 17.4
comp=E,743nm,0.7s
**DZET Dzherino 4.22 233** PN Pn 04 49 09.6 +3.7
DZET 04 49 59.9
**PDGK Podgornoye 5.06 66** ⇑Pn **Pn** **04 49 20.0 +2.6**
comp=E,4.6nm,0.5s
PDGK ⇑Pg **Pb** **04 49 33.9 +3.1**
comp=E,111nm,0.8s
PDGK ⇓Lg Lg 04 50 39.4
comp=E,870nm,1.2s
**PDGK Podgornoye 5.06 66** PN **Pn** **04 49 19.9 +2.6**
PDGK 04 49 32.2
PDGK 04 50 37.1
PDGK pmax pmax
comp=Z,5.0nm,0.5s
PDGK pmax pmax
comp=Z,111nm,0.8s
PDGK pmax pmax
comp=N,539nm,0.8s
**OTUK Ortayu 6.87 355** ⇑Pn **Pn** **04 49 44.5 +2.3**
comp=N,59nm,1.1s
OTUK ⇓Pg Pb 04 50 07.0 +5.5
comp=N,38nm,0.6s
OTUK ⇑Lg Lg 04 51 37.6
comp=N,190nm,0.7s
**OTUK Ortayu 6.87 355** PN **Pn** **04 49 45.1 +2.9**
OTUK 04 50 05.0
OTUK pmax pmax
comp=Z,59nm,1.1s
OTUK pmax pmax
comp=Z,36nm,0.5s
OTUK pmax pmax
comp=N,191nm,0.7s
**KBL Kabul 7.58 207** *e*P Pn 04 49 57.6 +5.4
**KBL Kabul 7.58 207** *e*Pn Pn 04 49 57.6 +5.4
**CHCP Chirah Chowk 7.73 179** P Pn 04 49 57.7 +3.6
**MAKZ Makanchi 8.33 47** *e*Pn **Pn** **04 50 03.1 +0.9**
**MK01 Makanchi Array 8.48 48** *e*Pn **Pn** **04 50 05.7 +1.4**
**MK31 Makanchi Array 8.49 48** ⇑Pn **Pn** **04 50 06.4 +2.0**
comp=N,35nm,0.6s,baz=230,slow=14,SNR=11
MK31 ⇑Lg Lg 04 52 29.3
comp=N,108nm,0.8s,baz=237,slow=26,SNR=4.9
**MK31 Makanchi Array 8.49 48** *e*P **Pn** **04 50 06.5 +2.0**
MK31 pmax pmax
comp=Z,10.0nm,0.6s
MK31 pmax pmax
comp=Z,35nm,0.6s
MK31 pmax pmax
comp=N,108nm,0.8s
**MKAR Makanchi Array 8.49 48** Pn **Pn** **04 50 06.3 +1.9**
comp=N,2.1nm,0.3s,baz=230,slow=14,SNR=54
MKAR Lg Lg 04 52 25.1
comp=N,3.4nm,0.3s,baz=238,slow=27,SNR=3.6
MKAR LR LR 04 53 41.0
comp=N,180nm,20.0s,baz=233,slow=40
**MKAR Makanchi Array 8.49 48** *e*P **Pn** **04 50 06.7 +2.2**
**MKAR Makanchi Array 8.49 48** *e*Pn **Pn** **04 50 06.7 +2.2**
MKAR Lg Lg 04 52 25.1
**THW Thamme Wali 8.67 188** P **Pn** **04 50 09.4 +2.5**
**SARP Sargodha 9.47 183** P **Pn** **04 50 20.1 +2.2**
**KURBB Kurchatov Arra 9.95 20** ⇑Pn **Pn** **04 50 24.8 +0.5**
comp=N,16nm,0.6s
KURBB ⇑Lg Lg 04 53 17.3
comp=N,409nm,0.7s
**KURBB Kurchatov Arra 9.95 20** Pn **Pn** **04 50 24.7 +0.5**
comp=N,0.5nm,0.3s,baz=212,slow=13,SNR=24
KURBB Lg Lg 04 53 11.4
comp=N,1.6nm,0.3s,baz=204,slow=29,SNR=9.6
**KURK Kurchatov 10.05 20** ⇑Lg Lg 04 53 19.3
comp=N,767nm,1.1s
**KURK Kurchatov 10.05 20** P **Pn** **04 50 24.7 -1.1**
**KURK Kurchatov 10.05 20** Pn **Pn** **04 50 24.7 -1.1**
KURK Lg Lg 04 53 11.4
**WMQ Urumqi 10.98 72** *e*P Pn 04 50 42.0 +3.4
WMQ S **Sn** **04 52 42.0 +1.3**
WMQ SS **SnSn** **04 52 58.0 +5.7**
WMQ PMZ
comp=N,13nm,0.8s
WMQ LN
comp=N,180nm,8.0s
WMQ LE
comp=N,170nm,8.0s
WMQ LZ
comp=N,130nm,8.0s
**IMYA Miami 11.36 248** *e*P **Pn** **04 50 43.1 -0.8**
**VOSK Vostochnaya 11.42 353** ⇑Pn **Pn** **04 50 45.2 +0.6**
comp=N,9.3nm,0.6s
VOSK ⇑Lg Lg 04 54 02.2
comp=N,167nm,0.9s
**VOSK Vostochnaya 11.42 353** P **Pn** **04 50 45.1 +0.6**
VOSK pmax pmax
comp=Z,9.0nm,0.6s
**BVA0 Borovoye Array 11.78 352** ⇓Pn **Pn** **04 50 50.7 +1.3**
comp=Z,30nm,1.0s
BVA0 ⇑Sn **Sn** **04 53 03.8 +3.8**
comp=Z,34nm,0.8s,baz=156,slow=22,SNR=3.8
BVA0 ⇓Lg Lg 04 54 14.2
comp=Z,116nm,1.1s,baz=161,slow=28,SNR=3.8
**BVA0 Borovoye Array 11.78 352** P **Pn** **04 50 50.6 +1.3**
BVA0 pmax pmax
comp=Z,30nm,1.0s
**BVAR Borovoye Array 11.78 352** Pn **Pn** **04 50 48.7 -0.7**
comp=Z,1.8nm,0.3s,baz=158,slow=12,SNR=16
BVAR Sn **Sn** **04 52 59.2 -0.8**
comp=Z,2.7nm,0.3s,baz=159,slow=25,SNR=3.8
BVAR Lg Lg 04 54 04.8
comp=Z,2.7nm,0.3s,baz=158,slow=22,SNR=4.6
**BRVK Borovoye 11.82 351** ⇑Pn **Pn** **04 50 51.2 +1.2**
comp=Z,38nm,0.7s
BRVK ⇓Lg Lg 04 54 15.2
comp=Z,213nm,1.1s
**BRVK Borovoye 11.82 351** *e*P **Pn** **04 50 50.9 +0.9**
**BRVK Borovoye 11.82 351** *e*Pn **Pn** **04 50 50.9 +0.9**
BRVK *e*S Sn 04 52 46.1 -15
**ZRNK Zerenda 11.89 348** ⇓Pn **Pn** **04 50 51.1 +0.1**
comp=Z,16nm,0.8s
ZRNK ⇓Lg Lg 04 54 17.6
comp=Z,109nm,1.4s
**ZRNK Zerenda 11.89 348** P **Pn** **04 50 51.0 +0.1**
ZRNK pmax pmax
comp=Z,13nm,0.7s
**IEMG Emamgholi 11.91 255** *e*P **Pn** **04 50 49.7 -1.9**
**IMOG Moghan 12.01 248** *e*P **Pn** **04 50 51.1 -1.9**
**IPAY Payeh 12.09 250** *e*P **Pn** **04 50 53.0 -0.9**
**GEYT Alibeck 12.10 258** Pn **Pn** **04 50 51.5 -2.5**
comp=Z,2.4nm,0.3s,baz=78,slow=8.0,SNR=26
GEYT Sn **Sn** **04 53 02.8 -5.4**
comp=Z,2.9nm,0.3s,baz=117,slow=18,SNR=5.5
**AB31 Akbulak array 12.16 315** ⇑Pn **Pn** **04 50 54.3 -0.3**
comp=Z,9.9nm,0.5s,baz=120,slow=14,SNR=270
AB31 ⇓Sn **Sn** **04 53 13.8 +4.4**
comp=Z,5.8nm,0.6s
AB31 ⇓Lg Lg 04 54 28.3
comp=Z,17nm,0.7s
**AB31 Akbulak array 12.16 315** *e*P **Pn** **04 50 54.3 -0.3**
AB31 pmax pmax
comp=Z,10.0nm,0.5s
**ABKAR Akbulak array 12.16 315** *e*Pn **Pn** **04 50 54.4 -0.2**
ABKAR *e*S **Sn** **04 53 04.8 -4.6**
**IAKL Akhelmad 12.19 252** *e*P **Pn** **04 50 52.9 -2.4**
**CHKZ Chkalovo 12.40 353** ⇑Pn **Pn** **04 50 59.7 +1.9**
comp=Z,9.2nm,0.9s
CHKZ ⇓Lg Lg 04 54 32.2
comp=Z,107nm,1.0s
**CHKZ Chkalovo 12.40 353** P **Pn** **04 50 59.7 +1.9**
CHKZ pmax pmax
comp=Z,9.0nm,0.9s
**ISFR Sfrayin 12.53 255** *e*P **Pn** **04 50 58.7 -1.4**
**NDI New Delhi 13.12 164** *e*P **Pn** **04 51 08.0 +0.2**
NDI *e*S Sn 04 53 21.0 -12
**AKTO Aktyubinsk 13.86 316** ⇓Pn **Pn** **04 51 17.8 0.0**
comp=Z,19nm,0.8s
AKTO ⇓Lg Lg 04 55 22.3
comp=Z,63nm,1.6s
**AKTO Aktyubinsk 13.86 316** Pn **Pn** **04 51 17.6 -0.3**
comp=Z,0.3nm,0.3s,baz=126,slow=15,SNR=16
AKTO Sn **Sn** **04 53 48.3 -2.6**
comp=Z,0.3nm,0.3s,baz=295,slow=14,SNR=4.3
AKTO Lg Lg 04 55 12.6
comp=Z,0.6nm,0.3s,baz=195,slow=15,SNR=2.9
AKTO LR LR 04 56 58.6
comp=Z,282nm,18.6s,baz=131,slow=38
**ZAA0 Zalesovo Array 14.78 28** *e*Pn **Pn** **04 51 30.8 +0.5**
**ZALV Zalesovo Beam 14.78 28** Pn **Pn** **04 51 30.1 -0.2**
comp=Z,1.7nm,0.3s,baz=218,slow=15,SNR=17
ZALV Sn **S** **04 54 29.2 -2.0**
comp=Z,1.3nm,0.3s,baz=222,slow=21,SNR=9.7
ZALV Lg Lg 04 55 48.4
baz=213,slow=26,SNR=3.3
ZALV LR LR 04 57 28.5
comp=Z,231nm,19.7s,baz=250,slow=38
**NVS Novosibirsk 15.01 23** *e*P **P** **04 51 39.2 +0.6**
NVS *e* 04 54 21.8
**KOLN Koldanda 16.07 145** *e*P **Pn** **04 51 44.6 -3.0**
comp=Z,18nm,0.4s
**GKN Gorkha 16.34 141** *e*P **Pn** **04 51 48.1 -2.9**
comp=Z,16nm,0.4s
**GUN Gumba 17.02 138** *e*P **Pn** **04 51 56.7 -3.1**
comp=Z,13nm,0.4s
**PKIN Phulchoki 17.06 140** *e*P **Pn** **04 51 57.7 -2.5**
comp=Z,4.5nm,0.3s
**PKI Pulchoki 17.07 140** *e*P **Pn** **04 51 57.5 -2.9**
comp=Z,12nm,0.5s
**HVS Khovu-Aksy 17.16 49**⇑*i*P **P** **04 52 02.5 -0.1**
**SVE Sverdlovsk 17.43 337** *e*P **Pn** **04 52 04.8 +0.5**
SVE *e*S **Sn** **04 55 16.4 -1.1**
SVE pmax pmax
comp=Z,37nm,1.2s
**RAMN Ramite 18.17 138** *e*P **Pn** **04 52 10.8 -3.1**
comp=Z,13nm,0.5s
**TAPN Taplejung 18.42 135** *e*P **P** **04 52 14.8 -2.1**
comp=Z,17nm,0.7s
**ODAN Odare 18.65 137** *e*P **P** **04 52 16.9 -2.4**
comp=Z,24nm,0.6s
**LSA Lhasa 18.68 123** *e*P **P** **04 52 20.1 +0.2**
**LSA Lhasa 18.68 123** *e*Pn **P** **04 52 20.1 +0.2**
**MAK Makhachkala 19.06 283** *e*P Pn 04 52 37.5 +13
MAK MLR MLR
comp=Z,259nm,11.0s
**GTA Gaotai 20.37 87** *e*P Pn 04 52 39.5 -0.6
GTA pP pP 04 52 51.8 +7.4
GTA sP sP 04 52 58.3 +11
GTA PMZ
comp=Z,9.0nm,1.1s
**DGRG David-gareji 20.81 279** P Pn 04 52 45.5 +0.4
**DGRG David-gareji 20.81 279** P Pn 04 52 45.5 +0.4
**GNI Garni 21.52 276***d* *i*P **P** **04 52 53.7 +3.2**
GNI pmax pmax
comp=Z,161nm,1.1s
**GNI Garni 21.52 276** *e*P **P** **04 52 51.8 +1.3**
comp=Z,166nm,0.9s
**ONI Oni 22.07 283** P **P** **04 52 58.0 +1.8**
**ONI Oni 22.07 283** P **P** **04 52 57.9 +1.8**
**KBZ Khabaz 22.36 286** P **P** **04 52 59.4 +0.3**
comp=Z,8.5nm,0.8s,baz=117,slow=7.4,SNR=14
KBZ LR LR 05 02 28.7
comp=Z,81nm,19.1s,baz=76,slow=39
**KIV Kislovodsk 22.49 287** *e*P **P** **04 53 01.5 +0.8**
KIV pmax pmax
comp=Z,15nm,1.0s
KIV MLR MLR
comp=Z,52nm,14.0s
**NEY Neytrino 22.53 285***c* *i*P **P** **04 53 03.1 +1.9**
NEY pmax pmax
comp=Z,2.0nm,0.7s
**ZAK Zakamensk 22.67 56** *e*P **P** **04 53 02.7 +0.1**
ZAK pmax pmax
comp=Z,6.0nm,1.5s
**SRSP Sriramsagar 22.84 167** *e*P **P** **04 53 05.7 +1.3**
**RPR Rampur 23.07 165** *e*P **P** **04 53 09.7 +2.8**
**KLRI Killari 23.44 172** *e*P **P** **04 53 11.4 +0.8**
**VRH Novokhopyorsk 23.66 305** *e*P P 04 53 26.7 +14
VRH pmax pmax
comp=N,10.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.6s
VRH pmax pmax
comp=Z,20nm,0.6s
**HYBB Hyderabad (bro 24.35 167** *e*P **P** **04 53 19.8 +0.7**
**HYB Hyderabad 24.35 167** *e*P **P** **04 53 19.0 -0.1**
**HYB Hyderabad 24.35 167** *i* P **P** **04 53 19.0 -0.1**
**HYB Hyderabad 24.35 167** *e*P **P** **04 53 19.0 -0.1**
**SONM Songino Array 24.38 63** P **P** **04 53 18.8 -0.6**
comp=Z,0.6nm,0.7s,baz=260,slow=7.2,SNR=3.4
**LZH Lanzhou 24.44 92** *e*P P 04 53 13.0 -7.0
LZH pP pP 04 53 26.0 -1.0
LZH sP sP 04 53 31.8 +1.9
LZH pmax pmax
comp=Z,13nm,1.0s
LZH pmax pmax
comp=Z,51nm,4.3s
LZH LR LR
comp=N,970nm,14.2s
LZH LR LR
comp=E,950nm,14.3s
LZH LR LR
comp=Z,680nm,15.3s
**CHLP Challavanipeta 24.65 155** *e*P **P** **04 53 22.6 +0.8**
**ULN Ulaanbaatar 24.82 63**⇑*i*P **P** **04 53 25.4 +2.0**
ULN pmax pmax
comp=Z,13nm,2.9s
**VORD Divnogorie 25.13 304** *e*P **P** **04 53 25.9 0.0**
VORD pmax pmax
comp=N,4.0nm,0.6s
VORD pmax pmax
comp=E,2.0nm,0.6s
VORD pmax pmax
comp=Z,7.0nm,0.6s
**PVM Polavaram 25.15 161** *e*P **P** **04 53 27.4 +1.1**
**VSR Storozhevoye 25.25 304** *e*P **P** **04 53 24.1 -2.9**
VSR pmax pmax
comp=N,2.0nm,0.6s
VSR pmax pmax
comp=E,10.0nm,0.6s
VSR pmax pmax
comp=Z,10.0nm,0.6s
**NJS Nagarjunasagar 25.32 166** *e*P **P** **04 53 28.8 +0.9**
**LPSR Galich'ya Gora 25.65 308** *e*P **P** **04 53 30.1 -0.5**
LPSR pmax pmax
comp=N,6.0nm,0.6s
LPSR pmax pmax
comp=E,2.0nm,0.6s
LPSR pmax pmax
comp=Z,8.0nm,0.6s
**SRLM Srisailam 25.70 167** *e*P **P** **04 53 32.3 +0.9**
**ADKI Addanki 26.14 165** *e*P **P** **04 53 36.0 +0.7**
**RCLA Racherla 26.34 167** *e*P **P** **04 53 38.0 +0.8**
**URV Uravakonda 26.60 171** *e*P **P** **04 53 40.1 +0.5**
**CD2 Chengdu 26.70 103** P **P** **04 53 41.0 +0.6**
CD2 pP pP 04 53 54.3 +6.9
CD2 sP sP 04 54 00.8 +11
CD2 S **S** **04 58 13.0 -1.6**
CD2 sS sS 04 58 36.3 +10
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.0s
**OBN Obninsk 27.59 312** LR LR 05 05 33.7
comp=Z,92nm,19.5s,baz=86,slow=38
**OBN Obninsk 27.59 312**⇑*e*P **P** **04 53 47.3 -0.8**
OBN pmax pmax
comp=Z,9.0nm,1.3s
OBN MLR MLR
comp=Z,105nm,16.0s
**SKHT Srikalahasti 28.14 166** *e*P **P** **04 53 55.8 +2.5**
**HHC Hu-ho-hao-te 28.78 78** *e*P P 04 54 02.3 +3.3
HHC sP sP 04 54 21.0 +12
HHC sS sS 04 59 07.0 +8.2
HHC SS **SnSn** **05 00 14.0 +5.0**
HHC PMZ
comp=Z,22nm,1.3s
HHC LN
comp=Z,1μm,13.7s
HHC LE
comp=Z,780nm,14.9s
HHC LZ
comp=Z,810nm,14.9s
**KMI Kunming 29.39 114** P **P** **04 54 06.8 +2.1**
KMI PMZ
comp=Z,4.0nm,0.9s
**BRTR Keskin Array B 29.90 280** P **P** **04 54 10.2 +1.3**
comp=Z,3.0nm,0.7s,baz=90,slow=8.5,SNR=22
**BRTR Keskin Array B 29.90 280** *i* P **P** **04 54 10.8 +1.8**
BRTR pmax pmax
comp=Z,3.0nm,0.7s
**BR231 Keskin MP Arra 30.50 281** *e*P P 04 54 10.6 -3.7
**BOD Bodaibo 30.56 44** *e*P **P** **04 54 13.9 -0.5**
BOD pmax pmax
comp=Z,8.0nm,1.0s
**GYA Guiyang 31.32 108** *e*P **P** **04 54 23.0 +1.4**
GYA PMZ
comp=Z,10.0nm,1.0s
**AKASG Malin Array Be 31.47 302** P **P** **04 54 23.2 +0.7**
comp=Z,1.2nm,0.6s,baz=83,slow=7.9,SNR=6.3
**KIEV Kiev 31.48 302**⇑*i*P **P** **04 54 23.0 +0.4**
KIEV pmax pmax
comp=Z,7.0nm,1.4s
**TESR Tescani 33.49 295**⇑*i*P **P** **04 54 41.6 +1.3**
**VRI Vrincioaia 33.53 294** ⇑P **P** **04 54 41.6 +0.9**
**VRI Vrincioaia 33.53 294**⇑*i*P **P** **04 54 41.6 +0.9**
**PLOR Plostina 33.59 294** ⇑P **P** **04 54 43.3 +2.1**
**PLOR Plostina 33.59 294**⇑*i*P **P** **04 54 43.3 +2.1**
**ISR Istrita 33.79 292** ⇑P **P** **04 54 45.9 +2.9**
**ISR Istrita 33.79 292**⇑*i*P **P** **04 54 45.9 +2.9**
**MLR Muntele Rosu 34.14 293** ⇑P P 04 54 49.4 +3.3
**MLR Muntele Rosu 34.14 293**⇑*i*P P 04 54 49.4 +3.3
**BURAR Bucovina Array 34.30 297** ⇓P **P** **04 54 49.1 +1.6**
**BURAR Bucovina Array 34.30 297**⇓*i*P **P** **04 54 49.0 +1.6**
**BUR04 Bucovina Ar. S 34.30 297** *e*P **P** **04 54 48.2 +0.7**
**DOPR Dopca 34.44 294**⇑*i*P **P** **04 54 50.8 +2.3**
**FINES FINESS Array B 34.52 322** P **P** **04 54 49.7 +0.7**
comp=Z,2.4nm,0.4s,baz=114,slow=10,SNR=23
**FINES FINESS Array B 34.52 322** *i* P **P** **04 54 49.7 +0.7**
FINES pmax pmax
comp=Z,2.0nm,0.4s
**VOIR 34.77 293** ⇓P **P** **04 54 53.2 +1.7**
**VOIR 34.77 293**⇓*i*P **P** **04 54 53.2 +1.7**
**LOT Lotru 35.65 294**⇓*i*P **P** **04 55 01.1 +2.0**
**KWP Kalwaria Pacla 35.71 301** ⇑P **P** **04 54 56.8 -2.7**
**KWP Kalwaria Pacla 35.71 301**⇑*i*P **P** **04 54 56.8 -2.7**
**KOLS Kolonicke sedl 36.08 300** *e*P **P** **04 55 03.6 +1.0**
**KOLS Kolonicke sedl 36.08 300** *e*P **P** **04 55 03.6 +1.0**
**DRGR 36.12 296** ⇑P **P** **04 55 04.8 +1.7**
**DRGR 36.12 296**⇑*i*P **P** **04 55 04.8 +1.7**
**GZR Gura Zlata 36.34 294**⇓*i*P **P** **04 55 07.0 +2.0**
**STHS Stebnicka Huta 36.68 301** *e*P **P** **04 55 08.5 +0.7**
**STHS Stebnicka Huta 36.68 301** *e*P **P** **04 55 08.5 +0.7**
**BZS Buzias 37.09 294** ⇓P **P** **04 55 13.6 +2.3**
**BZS Buzias 37.09 294**⇓*i*P **P** **04 55 13.6 +2.3**
**ARCES ARCESS Array B 37.35 335** P **P** **04 55 13.7 +0.5**
comp=Z,1.4nm,0.4s,baz=108,slow=8.7,SNR=31
ARCES LR LR 05 10 23.6
comp=Z,30nm,18.1s,baz=104,slow=36
**NJ2 Nanjing 37.42 89** *e*P **P** **04 55 15.0 +0.8**
NJ2 PMZ
comp=Z,11nm,0.5s
**QIZ Qiongzhong 38.34 114** P **P** **04 55 22.8 +0.7**
QIZ S **S** **05 01 14.5 -0.9**
QIZ PMZ
comp=Z,43nm,2.2s
QIZ PMZ
comp=Z,1μm,12.1s
**VYHS Vyhne 38.39 300** *e*P **P** **04 55 23.7 +1.4**
**VYHS Vyhne 38.39 300** *e*P **P** **04 55 23.7 +1.4**
**DIVS Divibare 38.58 292**⇑*i*P P 04 55 18.8 -5.1
**YAK Yakutsk 39.04 39** P **P** **04 55 28.1 +0.7**
comp=Z,3.5nm,0.4s,baz=75,slow=20,SNR=3.0
**YAK Yakutsk 39.04 39** *e*P **P** **04 55 28.2 +0.7**
YAK pmax pmax
comp=Z,37nm,0.8s
YAK pmax pmax
comp=E,13nm,1.1s
**MDJ Mudanjiang 40.69 66** P **P** **04 55 40.5 -0.9**
MDJ PMZ
comp=E,6.0nm,1.0s
MDJ PMZ
comp=E,57nm,2.7s
**KLR Kul'dur 41.01 58** *e*P **P** **04 55 43.5 -0.5**
**CLL Collm 41.60 305** *i* P **P** **04 55 48.1 -0.7**
CLL pmax pmax
comp=Z,5.0nm,1.0s
**CLL Collm 41.60 305** *i* P **P** **04 55 48.1 -0.7**
comp=Z,5.0nm,1.0s
CLL *e*pP **pP** **04 56 00.0 +4.1**
**NB2 NORSAR Subarra 41.61 320** P **P** **04 55 48.4 -0.4**
comp=Z,1.9nm,0.5s,baz=90,slow=8.6
**NOA NORSAR Array B 41.61 320** P **P** **04 55 48.8 0.0**
comp=Z,2.6nm,0.6s,baz=90,slow=8.2,SNR=10
**GEC2 GERESS Array S 41.66 301** *e*P **P** **04 55 51.3 +1.8**
**GEC2 GERESS Array S 41.66 301** *e*P **P** **04 55 51.2 +1.8**
**GERES GERESS Array B 41.66 301** P **P** **04 55 50.9 +1.4**
comp=Z,5.8nm,0.6s,baz=69,slow=7.6,SNR=37
GERES LR LR 05 15 43.5
comp=Z,65nm,18.3s,baz=90,slow=40
**FETA Feichten 44.05 299**⇑*i*P **P** **04 56 09.6 +0.6**
comp=Z,4.4nm,0.9s
**DAVA Damuels 44.53 300**⇓*i*P **P** **04 56 13.6 +0.8**
comp=Z,13nm,0.6s
**BNI Bardonecchia 47.35 298** *e*P **P** **04 56 35.5 +0.4**
BNI pmax pmax
comp=Z,22nm,1.3s
**BNI Bardonecchia 47.35 298** *e*P **P** **04 56 35.5 +0.4**
comp=Z,22nm,1.3s
**MA2 Magadan 49.51 41** *e*P **P** **04 56 51.7 +0.4**
**MJAR Matsushiro Arr 49.74 73** P **P** **04 56 52.6 -0.8**
comp=Z,3.5nm,0.8s,baz=293,slow=9.0,SNR=5.4
**BILL Bilibino 53.48 28** *e*P **P** **04 57 21.0 +0.2**
BILL *e* 04 59 19.9
BILL pmax pmax
comp=Z,4.0nm,1.0s

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|---|---|---|---|---|---|---|---|---|
| **ES19** | **SONSECA Array** | **56.69** | **296** | *e*P | | **P** | **04 57 44.4** | **-0.1** |
| **ESDC** | **Sonseca Array** | **56.75** | **296** | P | | **P** | **04 57 44.8** | **-0.1** |
| | comp=Z,2.7nm,0.6s,baz=57,slow=7.3,SNR=20 | | | | | | | |
| **COLD** | **Coldfoot** | **66.80** | **17** | *e*P | | **P** | **04 58 52.6** | **+0.6** |
| | comp=Z,6.3nm,0.9s | | | | | | | |
| **SIJI** | **Sorong** | **67.20** | **113** | P | | **P** | **04 58 54.7** | **-0.7** |
| | comp=Z,4.2nm,0.4s,baz=270,slow=20,SNR=3.3 | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **67.55** | **268** | *e*P | | **P** | **04 58 56.2** | **-1.5** |
| **TOA0** | **Torodi Ar. Sit** | **67.55** | **268** | *e*P | | **P** | **04 58 57.2** | **-0.4** |
| **TORD** | **Torodi Ar. Bea** | **67.55** | **268** | P | | **P** | **04 58 57.4** | **-0.3** |
| | comp=Z,3.3nm,0.6s,baz=53,slow=5.4,SNR=82 | | | | | | | |
| **BATI** | **Baumata** | **69.20** | **126** | LR | | LR | 05 34 08.2 | |
| | comp=Z,120nm,18.7s,baz=148,slow=40 | | | | | | | |
| **COLA** | **College** | **69.30** | **17** | *c i*P | | **P** | **04 59 08.2** | **+0.4** |
| COLA | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **COLA** | **College** | **69.30** | **17** | *e*P | | **P** | **04 59 07.5** | **-0.3** |
| | comp=Z,2.7nm,0.8s | | | | | | | |
| **IL1** | **Eielson Array** | **69.61** | **17** | *e*P | | **P** | **04 59 08.6** | **-1.1** |
| **ILAR** | **Eielson Array** | **69.61** | **17** | P | | **P** | **04 59 09.6** | **-0.1** |
| | comp=Z,2.0nm,0.8s,baz=323,slow=5.1,SNR=25 | | | | | | | |
| **KDAK** | **Kodiak Island** | **74.03** | **24** | *i* P | | **P** | **04 59 36.9** | **+0.5** |
| **YKA** | **Yellowknife Ar** | **76.26** | **4** | P | | **P** | **04 59 49.5** | **+0.3** |
| | comp=Z,3.4nm,0.5s,baz=349,slow=5.8,SNR=18 | | | | | | | |
| **DBIC** | **Dimbokro** | **76.64** | **267** | P | | **P** | **04 59 50.9** | **-1.1** |
| | comp=Z,2.5nm,0.7s,baz=28,slow=7.2,SNR=3.6 | | | | | | | |
| **KIC** | **Kosan Boka** | **76.75** | **267** | *e*P | | **P** | **04 59 52.7** | **0.0** |
| | comp=Z,15nm,0.9s | | | | | | | |
| **TIC** | **Toumodi** | **76.78** | **267** | *e*P | | **P** | **04 59 52.7** | **-0.2** |
| **SCHQ** | **Schefferville** | **78.23** | **338** | P | | **P** | **04 59 59.7** | **-0.7** |
| | comp=Z,4.9nm,1.0s,baz=72,slow=20,SNR=3.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.23** | **124** | P | | **P** | **05 00 25.9** | **-1.6** |
| | comp=Z,1.1nm,0.7s,baz=318,slow=5.3,SNR=16 | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.23** | **124** | *i* P | | **P** | **05 00 25.8** | **-1.7** |
| WRA | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **83.23** | **124** | ⇑*i*P | | **P** | **05 00 27.4** | **-0.1** |
| WRAB | | | | | pmax | pmax | | |
| | comp=Z,27nm,2.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **85.75** | **127** | P | | **P** | **05 00 39.8** | **-0.5** |
| | comp=Z,1.6nm,0.6s,baz=318,slow=4.7,SNR=19 | | | | | | | |
| **AS01** | **Alice Springs** | **85.78** | **127** | *e*P | | **P** | **05 00 39.5** | **-0.9** |
| **BSMT** | **Bassoo Peak** | **90.85** | **5** | *e*P | | **P** | **05 01 05.7** | **+1.2** |
| **BOZ** | **Bozeman (W)** | **93.23** | **3** | *e*P | | **P** | **05 01 16.8** | **+1.3** |
| BOZ | | | | | pmax | pmax | | |
| | comp=Z,60nm,2.8s | | | | | | | |
| **BOZ** | **Bozeman (W)** | **93.23** | **3** | *e*P | | **P** | **05 01 16.8** | **+1.3** |
| | comp=Z,60nm,2.8s | | | | | | | |
| **FLU** | **Fool Peak** | **99.45** | **4** | *e*P | | **Pdif** | **05 01 45.5** | **+1.6** |
| **NVAR** | **Mina Array Bea** | **99.86** | **9** | P | | **Pdif** | **05 01 46.6** | **+0.8** |
| | comp=Z,0.4nm,0.7s,baz=42,slow=2.8,SNR=3.8 | | | | | | | |

*ISCJB* ***27*** *05:01:29.5±0.3,33°.35N±0°.03×55°.35E±0°.03,h10km, Error ellipse: s-maj=4.6km s-min=3.5km az=39.3*
*CSEM* ***27*** *05:01:29.7±0.1,33°.38N×55°.33E,h2km,ML4.2, Error ellipse: s-maj=3.4km s-min=2.5km az=152.0*
*THR* ***27*** *05:01:29.3±0.4,33°.41N×55°.29E,h16km±7km,ML4.0*
*TEH* ***27*** *05:01:31.3,33°.36N×55°.31E,h10km,ML4.2*

**ISC 27 05:01:29.7±1.0,33°.37N±0°.03×55°.31E±0°.03,h10km,n61, σ1°12/67,Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ICHK** | **Chekchek** | **1.36** | **214** | *e*Pn | **Pb** | **05 01 55.3** | **0.0** |
| ICHK | | | | *e*Sg | **Sg** | **05 02 13.6** | **+0.2** |
| ICHK | | | | *e* | | 05 02 13.9 | |
| | comp=Z,96μm,0.1s | | | | | | |
| **ICHK** | **Chekchek** | **1.36** | **214** | *e*Pn | **Pb** | **05 01 55.3** | **0.0** |
| ICHK | | | | *e*Sg | **Sg** | **05 02 13.6** | **+0.2** |
| **TABS** | **Tabas** | **1.54** | **79** | *e*Pg | **Pb** | **05 01 57.7** | **-0.6** |
| TABS | | | | AML | AML | 05 02 25.5 | |
| | comp=E,1μm,0.5s | | | | | | |
| TABS | | | | AML | AML | 05 02 29.0 | |
| | comp=N,2μm,0.6s | | | | | | |
| **TABS** | **Tabas** | **1.54** | **79** | *e*Pg | **Pb** | **05 01 57.7** | **-0.6** |
| **IBAF** | **Bafgh** | **1.79** | **173** | *e*Pn | **Pb** | **05 02 02.2** | **-0.5** |
| IBAF | | | | *e*Sg | **Sg** | **05 02 26.9** | **-0.4** |
| IBAF | | | | *e* | | 05 02 40.5 | |
| | comp=Z,22μm,0.0s | | | | | | |
| **IBAF** | **Bafgh** | **1.79** | **173** | *e*Pn | **Pb** | **05 02 02.2** | **-0.5** |
| IBAF | | | | *e*Sg | **Sg** | **05 02 26.9** | **-0.4** |
| **ISAD** | **Sadrabad** | **2.00** | **224** | *e*Sg | **Sg** | **05 02 33.3** | **-0.6** |
| ISAD | | | | *e*Pn | **Pb** | **05 02 05.3** | **-1.0** |
| ISAD | | | | *e* | | 05 02 35.1 | |
| | comp=Z,76μm,0.1s | | | | | | |
| **IMEH** | **Mehriz** | **2.06** | **197** | *e*Sg | **Sg** | **05 02 35.6** | **-0.4** |
| IMEH | | | | *e*Pn | **Pb** | **05 02 06.1** | **-1.3** |
| IMEH | | | | *e* | | 05 02 37.3 | |
| | comp=Z,15μm,0.2s | | | | | | |
| **NASN** | **Na'in** | **2.17** | **255** | *e*Pn | **Pn** | **05 02 07.0** | **+0.7** |
| **NASN** | **Na'in** | **2.17** | **255** | *e*Pn | **Pn** | **05 02 06.8** | **+0.6** |
| **IZEF** | **Zefreh** | **2.54** | **260** | *e*Pn | **Pn** | **05 02 12.6** | **+1.4** |
| IZEF | | | | *e*Sg | **Sg** | **05 02 50.0** | **-1.5** |
| IZEF | | | | *e* | | 05 02 55.2 | |
| | comp=Z,8μm,0.3s | | | | | | |
| **IZEF** | **Zefreh** | **2.54** | **260** | *e*Pn | **Pn** | **05 02 12.6** | **+1.4** |
| IZEF | | | | *e*Sg | **Sg** | **05 02 50.0** | **-1.5** |
| **SHRO** | **Shahrood** | **2.67** | **12** | *e*Pn | **Pn** | **05 02 13.4** | **+0.5** |
| SHRO | | | | AML | AML | 05 03 05.6 | |
| | comp=E,917nm,0.6s | | | | | | |
| SHRO | | | | AML | AML | 05 03 07.4 | |
| | comp=N,540nm,0.7s | | | | | | |
| **SHRO** | **Shahrood** | **2.67** | **12** | *e*Pn | **Pn** | **05 02 13.4** | **+0.5** |
| **IGAR** | **Gharneh** | **2.91** | **252** | *e*Pn | **Pn** | **05 02 17.5** | **+1.2** |
| IGAR | | | | *e* | | 05 03 03.4 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **IRAM** | **Ramesheh** | **2.92** | **239** | *e*Pn | **Pn** | **05 02 17.7** | **+1.3** |
| IRAM | | | | *e* | | 05 03 05.4 | |
| | comp=Z,5μm,0.2s | | | | | | |
| **IRAM** | **Ramesheh** | **2.92** | **239** | *e*Pn | **Pn** | **05 02 17.7** | **+1.3** |
| **ITEG** | **Tejag** | **2.93** | **98** | *e*Pn | **Pn** | **05 02 17.1** | **+0.7** |
| ITEG | | | | *e* | | 05 03 11.7 | |
| | comp=Z,8μm,0.3s | | | | | | |
| **ITEG** | **Tejag** | **2.93** | **98** | *e*Pn | **Pn** | **05 02 17.1** | **+0.7** |
| **IFIR** | **Firoozkooh** | **3.09** | **318** | *e*Pn | **Pn** | **05 02 19.6** | **+0.8** |
| IFIR | | | | *e* | | 05 03 18.9 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **IFIR** | **Firoozkooh** | **3.09** | **318** | *e*Pn | **Pn** | **05 02 19.6** | **+0.8** |
| **IKLH** | **Kolahrood** | **3.12** | **270** | *e*Pn | **Pn** | **05 02 20.5** | **+1.3** |
| IKLH | | | | *e* | | 05 03 24.8 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **IKLH** | **Kolahrood** | **3.12** | **270** | *e*Pn | **Pn** | **05 02 20.5** | **+1.3** |
| **IKOO** | **Kooshah** | **3.25** | **106** | *e*Pn | **Pn** | **05 02 21.9** | **+0.9** |
| IKOO | | | | *e* | | 05 03 21.1 | |
| | comp=Z,6μm,0.2s | | | | | | |
| **IKOO** | **Kooshah** | **3.25** | **106** | *e*Pn | **Pn** | **05 02 21.9** | **+0.9** |
| **IDMV** | **Damavand** | **3.49** | **310** | *e*Pn | **Pn** | **05 02 25.6** | **+1.4** |
| IDMV | | | | *e* | | 05 03 28.3 | |
| | comp=Z,6μm,0.3s | | | | | | |
| **IDMV** | **Damavand** | **3.49** | **310** | *e*Pn | **Pn** | **05 02 25.6** | **+1.4** |
| **IMON** | **Monand** | **3.66** | **92** | *e*Pn | **Pn** | **05 02 27.8** | **+1.3** |
| IMON | | | | *e* | | 05 02 43.5 | |
| | comp=Z,3μm,0.1s | | | | | | |
| **IMON** | **Monand** | **3.66** | **92** | *e*Pn | **Pn** | **05 02 27.8** | **+1.3** |
| **IPIR** | **Pirpir** | **3.77** | **261** | *e*Pn | Pn | 05 02 31.2 | +3.0 |
| IPIR | | | | *e* | | 05 03 38.0 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IPIR** | **Pirpir** | **3.77** | **261** | *e*Pn | Pn | 05 02 31.2 | +3.0 |
| **IAFJ** | **Afjeh** | **3.86** | **311** | *e*Pn | **Pn** | **05 02 31.1** | **+1.7** |
| IAFJ | | | | *e* | | 05 03 38.8 | |
| | comp=Z,7μm,0.3s | | | | | | |
| **IAFJ** | **Afjeh** | **3.86** | **311** | *e*Pn | **Pn** | **05 02 31.1** | **+1.7** |
| **IDAH** | **Dahanechah** | **3.88** | **98** | *e*Pn | **Pn** | **05 02 30.8** | **+1.1** |
| IDAH | | | | *e* | | 05 02 51.5 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IDAH** | **Dahanechah** | **3.88** | **98** | *e*Pn | **Pn** | **05 02 30.8** | **+1.1** |
| **IPAR** | **Pars** | **4.01** | **209** | *e*Pn | **Pb** | **05 02 41.0** | **+0.3** |
| IPAR | | | | *e* | | 05 04 03.8 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **SHRT** | **Shahrakht** | **4.17** | **85** | *e*Pn | **Pn** | **05 02 34.6** | **+1.1** |
| **SHRT** | **Shahrakht** | **4.17** | **85** | *e*Pn | **Pn** | **05 02 34.6** | **+1.1** |
| **ISFR** | **Sfrayin** | **4.28** | **30** | *e*Pn | **Pn** | **05 02 36.1** | **+0.9** |
| ISFR | | | | *e* | | 05 04 02.7 | |
| | comp=Z,3μm,0.3s | | | | | | |
| **ISFR** | **Sfrayin** | **4.28** | **30** | *e*Pn | **Pn** | **05 02 36.1** | **+0.9** |
| **IAKL** | **Akhelmad** | **4.29** | **40** | *e*Pn | **Pn** | **05 02 35.8** | **+0.5** |
| IAKL | | | | *e* | | 05 03 57.7 | |
| | comp=Z,879nm,0.2s | | | | | | |
| **IKRD** | **Kardeh** | **4.29** | **37** | *e*Pn | **Pb** | **05 02 44.9** | **-0.5** |
| IKRD | | | | *e* | | 05 04 14.5 | |
| | comp=Z,719nm,0.3s | | | | | | |
| **IMOG** | **Moghan** | **4.30** | **49** | *e*Pn | **Pn** | **05 02 35.8** | **+0.4** |
| IMOG | | | | *e* | | 05 03 58.2 | |
| | comp=Z,784nm,0.2s | | | | | | |
| **IMOG** | **Moghan** | **4.30** | **49** | *e*Pn | **Pn** | **05 02 35.8** | **+0.4** |
| **IR5** | **Iran Long-Peri** | **4.32** | **296** | *e*Pn | **Pn** | **05 02 36.7** | **+1.1** |
| **IR5** | **Iran Long-Peri** | **4.32** | **296** | *e*Pn | **Pn** | **05 02 36.7** | **+1.1** |
| **MRVT** | **Maraveh tapeh** | **4.32** | **8** | *e*Pn | **Pn** | **05 02 36.2** | **+0.7** |
| **MRVT** | **Maraveh tapeh** | **4.32** | **8** | *e*Pn | **Pn** | **05 02 36.2** | **+0.7** |
| **ISRV** | **Sarvestan** | **4.40** | **206** | *e*Pn | **Pb** | **05 02 44.2** | **-3.1** |
| ISRV | | | | *e* | | 05 04 13.6 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **IMHD** | **Mahdasht** | **4.47** | **302** | *e*Pn | **Pn** | **05 02 39.1** | **+1.5** |
| IMHD | | | | *e* | | 05 02 41.0 | |
| | comp=Z,1μm,0.1s | | | | | | |
| **IMHD** | **Mahdasht** | **4.47** | **302** | *e*Pn | **Pn** | **05 02 39.1** | **+1.5** |
| **KHMZ** | **Khomeyn** | **4.48** | **276** | *e*Pn | **Pn** | **05 02 38.7** | **+0.8** |
| **KHMZ** | **Khomeyn** | **4.48** | **276** | *e*Pn | **Pn** | **05 02 38.7** | **+0.8** |
| **BJRD** | **Bojnurd** | **4.64** | **21** | *e*Pn | **Pn** | **05 02 40.7** | **+0.7** |
| **BJRD** | **Bojnurd** | **4.64** | **21** | *e*Pn | **Pn** | **05 02 40.7** | **+0.7** |
| **IKAZ** | **Kazeroun** | **4.65** | **220** | *e*Pn | **Pn** | **05 02 42.0** | **+1.8** |
| IKAZ | | | | *e* | | 05 04 05.9 | |
| | comp=Z,2μm,0.5s | | | | | | |
| **IKAZ** | **Kazeroun** | **4.65** | **220** | *e*Pn | **Pn** | **05 02 42.0** | **+1.8** |
| **IMYA** | **Miami** | **4.93** | **52** | *e*Pn | **Pn** | **05 02 45.1** | **+1.1** |
| IMYA | | | | *e* | | 05 04 20.3 | |
| | comp=Z,628nm,0.4s | | | | | | |
| **IMYA** | **Miami** | **4.93** | **52** | *e*Pn | **Pn** | **05 02 45.1** | **+1.1** |
| **IGZV** | **Ghazvin** | **5.15** | **307** | *e*Pn | **Pn** | **05 02 48.8** | **+1.7** |
| IGZV | | | | *e* | | 05 04 34.5 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **IGZV** | **Ghazvin** | **5.15** | **307** | *e*Pn | **Pn** | **05 02 48.8** | **+1.7** |

*IDC* ***27*** *05:11:58.6±1.6,3°.53S×99°.86E,h0km,mb4.1/10, mb1 4.2/11,mb1mx3.9/44,mbtmp4.2/11,ML4.4/1, Error ellipse: s-maj=53.6km s-min=18.2km az=52.0*
*ISCJB* ***27*** *05:12:00.5±0.8,3°.61S±0°.06×99°.68E±0°.08,h33km, mb4.1/10, Error ellipse: s-maj=12.0km s-min=6.4km az=148.5*
*DJA* ***27*** *05:12:01.7±1.9,4°S±8°×10°0E±1°0,h38km±11km,M3.9/3, MLv3.9/3*

**ISC 27 05:12:03.5±1.0,3°.53S±0°.09×99°.8E±0°.1,h35km,n28, σ1°04/24,mb4.2/10,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.80** | **19** | P | **Pn** | **05 12 17.4** | **-0.9** |
| PPSI | | | | S | **Sn** | **05 12 30.0** | **+0.9** |
| **SISI** | **Saibi** | **2.28** | **343** | P | **Pn** | **05 12 37.2** | **-1.5** |
| SISI | | | | S | **Sn** | **05 13 05.0** | **-0.6** |
| **MASI** | **Maura Aman, Be** | **2.52** | **81** | P | **Pn** | **05 12 41.7** | **-0.3** |
| **KSI** | **Kapahiang** | **2.84** | **93** | P | **Pn** | **05 12 46.1** | **-0.4** |
| **PPI** | **Padang Panjang** | **3.12** | **12** | P | **Pn** | **05 12 49.8** | **-0.4** |
| **MNAI** | **Manna** | **3.31** | **105** | P | **Pn** | **05 12 52.4** | **-0.4** |
| **LHSI** | **Lahat** | **3.78** | **95** | P | **Pn** | **05 12 59.3** | **0.0** |
| **BKNI** | **Bangkinang** | **4.04** | **19** | P | **Pn** | **05 13 01.4** | **-1.5** |
| **RGRI** | **Rengat** | **4.08** | **39** | P | **Pn** | **05 13 03.0** | **-0.4** |
| **MNSI** | **Mandailing Nat** | **4.30** | **358** | P | **Pn** | **05 13 04.6** | **-1.8** |
| **LEM** | **Lembang** | **8.50** | **113** | Pn | **Pn** | **05 14 02.3** | **-2.0** |
| | 4.4nm,0.3s,baz=315,slow=19,SNR=2.1 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.86** | **358** | P | **P** | **05 16 53.6** | **+0.3** |
| | 1.6nm,0.6s,baz=188,slow=9.8,SNR=11 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.42** | **260** | T | T | 05 47 13.2 | |
| | baz=81,slow=75,SNR=51 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.43** | **260** | T | T | 05 46 59.6 | |
| | baz=81,slow=75,SNR=51 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.44** | **260** | T | T | 05 47 04.0 | |
| | baz=81,slow=75,SNR=49 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.94** | **159** | T | T | 05 54 44.3 | |
| | baz=336,slow=76,SNR=7.3 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.95** | **159** | T | T | 05 54 42.9 | |
| | baz=336,slow=76,SNR=7.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.95** | **159** | T | T | 05 54 37.7 | |
| | baz=336,slow=76,SNR=7.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.47** | **119** | P | **P** | **05 19 13.1** | **-0.9** |
| | 0.5nm,0.7s,baz=302,slow=8.8,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **38.58** | **124** | P | **P** | **05 19 22.4** | **-1.0** |
| | 0.5nm,0.5s,baz=293,slow=7.4,SNR=5.1 | | | | | | |
| **SONM** | **Songino Array** | **51.48** | **6** | P | **P** | **05 21 07.2** | **+1.6** |
| | 2.2nm,0.7s,baz=189,slow=8.8,SNR=10 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.42** | **345** | P | **P** | **05 21 12.8** | **+0.3** |
| | 2.0nm,0.7s,baz=146,slow=8.0,SNR=8.9 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.62** | **28** | P | **P** | **05 21 35.9** | **+0.1** |
| | 2.1nm,0.7s,baz=190,slow=9.0,SNR=5.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.61** | **350** | P | **P** | **05 21 57.6** | **+0.7** |
| | 2.4nm,0.4s,baz=186,slow=4.7,SNR=12 | | | | | | |
| **ASAJ** | **Asahikawa** | **61.01** | **34** | P | **P** | **05 22 12.1** | **-1.4** |
| | 6.8nm,0.5s,baz=317,slow=19,SNR=3.5 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.52** | **340** | P | **P** | **05 22 16.6** | **-0.2** |
| | 1.1nm,0.5s,baz=138,slow=9.3,SNR=5.6 | | | | | | |
| **FINES** | **FINESS Array B** | **85.34** | **332** | P | **P** | **05 24 37.6** | **+0.8** |
| | 1.0nm,0.5s,baz=107,slow=6.6,SNR=7.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.06** | **38** | PKPbc | **PKPab** | **05 31 42.0** | **+0.8** |
| | 0.8nm,0.7s,baz=291,slow=1.4,SNR=14 | | | | | | |

**WEL 27 05:14:34.1±0.1,43°.62S×172°.17E,h5km,ML3.6/16,3C-4D, Error ellipse: s-maj=0.8km s-min=0.6km az=0.0,South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OXZ** | **Oxford** | **0.31** | **341** | PG | Pg | 05 14 39.9 | -0.1 |
| OXZ | | | | SG | Sg | 05 14 44.2 | +0.1 |
| **CRLZ** | **Canterbury Las** | **0.33** | **83** | ⇓PG | Pg | 05 14 40.9 | +0.4 |
| CRLZ | | | | SG | Sg | 05 14 45.9 | +1.2 |
| CRLZ | | | | AML | AML | 05 14 46.2 | |
| **MQZ** | **McQueen's Vall** | **0.36** | **105** | ⇑PG | Pg | 05 14 41.2 | +0.2 |
| MQZ | | | | SG | Sg | 05 14 46.3 | +0.5 |
| MQZ | | | | AML | AML | 05 14 47.5 | |
| **RPZ** | **Rata Peaks** | **0.82** | **263** | ⇓P* | Pg | 05 14 49.9 | +0.1 |
| RPZ | | | | S* | Sg | 05 15 01.1 | +0.6 |
| RPZ | | | | AML | AML | 05 15 03.6 | |
| **LTZ** | **Lake Taylor** | **0.84** | **5** | P* | Pg | 05 14 50.3 | +0.1 |
| LTZ | | | | S* | Sg | 05 15 01.7 | +0.6 |
| LTZ | | | | AML | AML | 05 15 02.2 | |
| **WVZ** | **Waitaha Valley** | **1.18** | **297** | ⇑P* | Pg | 05 14 56.0 | -0.7 |
| WVZ | | | | AML | AML | 05 15 14.4 | |
| WVZ | | | | AML | AML | 05 15 16.8 | |
| **KHZ** | **Kahutara** | **1.56** | **40** | PN | Pn | 05 15 00.7 | -1.8 |
| **LBZ** | **Lake Benmore** | **1.63** | **241** | PN | Pn | 05 15 02.3 | -1.2 |
| LBZ | | | | AML | AML | 05 15 27.6 | |
| LBZ | | | | AML | AML | 05 15 27.7 | |
| LBZ | | | | AML | AML | 05 15 30.3 | |
| LBZ | | | | AML | AML | 05 15 30.3 | |
| **ODZ** | **Otahua Downs** | **1.80** | **217** | ⇑PN | Pn | 05 15 04.1 | -1.7 |
| ODZ | | | | AML | AML | 05 15 38.2 | |
| ODZ | | | | AML | AML | 05 15 38.2 | |
| ODZ | | | | AML | AML | 05 15 40.0 | |
| ODZ | | | | AML | AML | 05 15 40.0 | |
| **FOZ** | **Fox Glacier** | **1.81** | **271** | PN | Pn | 05 15 04.5 | -1.3 |
| FOZ | | | | AML | AML | 05 15 28.0 | |
| FOZ | | | | AML | AML | 05 15 34.2 | |
| FOZ | | | | AML | AML | 05 15 34.2 | |
| FOZ | | | | AML | AML | 05 15 34.4 | |
| **DSZ** | **Denniston Nort** | **1.89** | **352** | PN | Pn | 05 15 05.6 | -1.5 |
| DSZ | | | | AML | AML | 05 15 35.3 | |
| DSZ | | | | AML | AML | 05 15 35.3 | |
| DSZ | | | | AML | AML | 05 15 37.3 | |
| DSZ | | | | AML | AML | 05 15 37.5 | |
| **THZ** | **Tophouse** | **1.93** | **17** | ⇓PN | Pn | 05 15 05.8 | -1.8 |
| THZ | | | | AML | AML | 05 15 44.9 | |
| THZ | | | | AML | AML | 05 15 45.7 | |
| **BSWZ** | **Blackbirch Sta** | **2.28** | **34** | PN | Pn | 05 15 11.4 | -0.9 |
| **JCZ** | **Jackson Bay** | **2.51** | **258** | PN | Pn | 05 15 14.5 | -1.3 |
| JCZ | | | | AML | AML | 05 15 56.9 | |
| JCZ | | | | AML | AML | 05 15 60.0 | |
| **WKZ** | **Wanaka** | **2.57** | **241** | PN | Pn | 05 15 15.7 | -0.8 |
| WKZ | | | | AML | AML | 05 16 00.3 | |
| WKZ | | | | AML | AML | 05 16 00.3 | |
| WKZ | | | | AML | AML | 05 16 03.5 | |
| WKZ | | | | AML | AML | 05 16 03.5 | |
| **EAZ** | **Earnscleugh** | **2.61** | **231** | ⇓PN | Pn | 05 15 15.4 | -1.5 |
| EAZ | | | | AML | AML | 05 15 59.4 | |
| EAZ | | | | AML | AML | 05 16 03.2 | |
| EAZ | | | | AML | AML | 05 16 03.2 | |
| EAZ | | | | AML | AML | 05 16 03.2 | |
| **QRZ** | **Quartz Range** | **2.80** | **6** | PN | Pn | 05 15 18.1 | -1.4 |
| QRZ | | | | AML | AML | 05 15 29.6 | |
| **TUZ** | **Tuapeka** | **2.96** | **217** | PN | Pn | 05 15 20.0 | -1.7 |
| TUZ | | | | AML | AML | 05 16 11.0 | |
| TUZ | | | | AML | AML | 05 16 15.2 | |
| **MSZ** | **Milford Sound** | **3.23** | **249** | PN | Pn | 05 15 23.9 | -1.6 |
| MSZ | | | | AML | AML | 05 16 18.4 | |
| MSZ | | | | AML | AML | 05 16 24.1 | |
| **CAW** | **Cannon Point** | **3.30** | **42** | PN | Pn | 05 15 23.9 | -2.5 |
| **MLZ** | **Mavora Lakes** | **3.34** | **237** | PN | Pn | 05 15 25.5 | -1.6 |
| **SYZ** | **Scrubby Hill** | **3.63** | **215** | PN | Pn | 05 15 29.6 | -1.3 |
| **WHZ** | **Wether Hill Ro** | **3.77** | **231** | PN | Pn | 05 15 30.6 | -2.3 |
| **MRZ** | **Mangatainoka R** | **3.89** | **42** | PN | Pn | 05 15 32.1 | -2.4 |
| **APZ** | **The Paps** | **4.37** | **221** | PN | Pn | 05 15 38.9 | -2.2 |

*BJI* ***27*** *05:16:54.7,3°.06S×99°.64E,h16km,mb4.8/6,mB5.0/2*
*NEIC* ***27*** *05:16:56.1±0.4,2°.74S×99°.59E,h10km,mb4.5/3, Error ellipse: s-maj=11.8km s-min=7.1km az=51.0*
*ISCJB* ***27*** *05:16:57.6±0.9,2°.81S±0°.06×99°.57E±0°.07,h35km±7km, mb4.2/21,MS3.3/4, Error ellipse: s-maj=13.4km s-min=5.4km az=142.0*
*DJA* ***27*** *05:16:57.0±0.8,3°S±4°×10°0E±°,h20km±5km,M4.8/19, mb5.0/9,mB5.3/4,MLv4.7/19,Mw(mB)4.8/4*
*IDC* ***27*** *05:17:00.2±0.6,2°.72S×99°.54E,h35km±4km,mb4.0/19, mb1 4.2/20,mb1mx4.0/45,mbtmp4.3/20,ML4.6/1,MS3.4/4, Ms1 3.4/4,ms1mx2.9/39,Error ellipse: s-maj=16.8km s-min=11.4km az=48.0*
*KLM* ***27*** *05:17:05.3,2°.49S×100°.05E,h66km,mb4.4,MS5.5*

**ISC 27 05:16:59.4±0.7,2°.74S±0°.07×99°.62E±0°.06,h31km±4km, h31km:pP-P,n68,σ1°15/67,mb4.3/21,MS3.3/4,2C, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.39** | **93** | P | **Pb** | **05 17 08.3** | **+0.1** |
| PPSI | | | | S | **Sn** | **05 17 15.6** | **+0.3** |
| **SISI** | **Saibi** | **1.50** | **339** | P | **Pn** | **05 17 23.3** | **-0.9** |
| SISI | | | | S | **Sn** | **05 17 43.2** | **+0.5** |
| **PDSI** | **Padang** | **2.00** | **25** | P | **Pn** | **05 17 30.1** | **-1.0** |
| **PPI** | **Padang Panjang** | **2.09** | **19** | P | **Pn** | **05 17 36.7** | **+0.2** |
| **SDSI** | **Sungai Dareh** | **2.55** | **45** | P | **Pn** | **05 17 39.5** | **+0.9** |
| **MASI** | **Maura Aman, Be** | **2.65** | **99** | P | **Pn** | **05 17 39.9** | **-0.1** |
| **KSI** | **Kapahiang** | **3.10** | **107** | P | **Pn** | **05 17 46.0** | **-0.3** |
| **BKNI** | **Bangkinang** | **3.36** | **25** | P | **Pn** | **05 17 49.9** | **+0.1** |
| **BKNI** | **Bangkinang** | **3.36** | **25** | *e*Pn | **Pn** | **05 17 49.6** | **-0.2** |
| **MNSI** | **Mandailing Nat** | **3.51** | **359** | P | **Pn** | **05 17 51.5** | **-0.4** |
| **RGRI** | **Rengat** | **3.61** | **49** | P | **Pn** | **05 17 55.3** | **+2.1** |
| **MNAI** | **Manna** | **3.70** | **116** | P | **Pn** | **05 17 54.4** | **0.0** |
| **LHSI** | **Lahat** | **4.04** | **106** | P | **Pn** | **05 17 59.3** | **+0.1** |
| **GSI** | **Gunungsitoli** | **4.51** | **333** | P | **Pn** | **05 18 04.7** | **-0.9** |
| **MDSI** | **Maura Dua** | **4.87** | **111** | P | **Pn** | **05 18 10.8** | **+0.3** |
| **LWLI** | **Liwa** | **4.97** | **117** | P | **Pn** | **05 18 11.9** | **-0.2** |
| | 291nm,0.8s,8μm2.3nm | | | | | | |
| **PMBI** | **Palembang** | **5.15** | **92** | P | **Pn** | **05 18 15.0** | **+0.6** |
| **PSI** | **Prapat** | **5.55** | **353** | Pn | Pn | 05 18 15.4 | -4.6 |
| | 0.4nm,0.3s,baz=167,slow=18,SNR=2.3 | | | | | | |
| **KASI** | **Kota Agung** | **5.59** | **120** | P | **Pn** | **05 18 20.4** | **-0.1** |
| | 143nm,0.5s,0.8nm | | | | | | |
| **CGJI** | **Cibinong** | **7.17** | **123** | P | **Pn** | **05 18 40.6** | **-1.6** |
| | 86nm,0.7s,5μm0.4nm | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **7.67** | **335** | P | Pb | 05 19 02.0 | -10 |
| **CBJI** | **Citeko** | **8.08** | **117** | P | Pn | 05 19 00.8 | +6.1 |
| **CNJI** | **Cibinong** | **8.75** | **122** | P | **Pn** | **05 19 02.0** | **-1.8** |
| | 89nm,1.1s | | | | | | |
| **LEM** | **Lembang** | **8.94** | **117** | Pn | **Pn** | **05 19 07.1** | **+0.4** |
| | 5.9nm,0.3s,baz=323,slow=20,SNR=2.0 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.46** | **121** | P | **Pn** | **05 19 13.2** | **-0.5** |
| | 120nm,0.6s | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.46** | **121** | *e*Pn | **Pn** | **05 19 11.1** | **-2.6** |
| **CMJI** | **Cimerak** | **10.12** | **120** | P | **Pn** | **05 19 20.5** | **-2.1** |
| **SBUM** | **Sibu** | **13.61** | **68** | ⇑P | **Pn** | **05 20 08.6** | **-1.9** |
| **KKM** | **Kota Kinabalu** | **18.73** | **62** | ⇑P | **P** | **05 21 13.5** | **-2.4** |
| **KAPI** | **Kappang** | **20.21** | **97** | P | **P** | **05 21 31.8** | **-0.1** |
| | 5.9nm,0.5s,baz=40,slow=7.9,SNR=3.6 | | | | | | |
| KAPI | | | | LR | LR | 05 30 45.8 | |
| | comp=Z,82nm,18.7s,baz=276,slow=41 | | | | | | |
| **MPSI** | **Mapaga** | **20.50** | **82** | P | Pn | 05 21 48.7

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **BOSA** | **Boshof** | **74.97** | **241** | P | **P** | **05 28 37.0** | **-1.2** | |
| | 2.2nm,0.8s,baz=90,slow=7.1,SNR=3.4 | | | | | | | |
| **VNDA** | **Vanda** | **81.51** | **169** | P | **P** | **05 29 14.2** | **+0.9** | |
| | 0.9nm,0.8s,baz=14,slow=4.3,SNR=4.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **84.59** | **332** | P | **P** | **05 29 29.4** | **-0.1** | |
| | 2.2nm,0.9s,baz=98,slow=10,SNR=6.3 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.04** | **340** | P | **P** | **05 29 41.5** | **+0.1** | |
| | 2.7nm,0.9s,baz=100,slow=5.0,SNR=5.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.52** | **38** | PKPbc | **PKPab** | **05 36 36.8** | **+1.2** | |
| | 1.6nm,0.7s,baz=288,slow=0.5,SNR=25 | | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 05 36 47.2 | +1.5 | |
| | 2.9nm,0.7s,baz=257,slow=0.7,SNR=14 | | | | | | | |

*IPEC **27** 05:17:37.8±0.2,49.85N×18.48E,h0km,ML1.4/2, Error ellipse: s-maj=2.1km s-min=1.1km az=161.0*
*PRU **27** 05:17:39.3,49.89N×18.36E,h0km*
**CSEM 27 05:17:38.3±0.2,49.88N×18.39E,h1km,ML2.1/4, Error ellipse: s-maj=6.7km s-min=2.9km az=4.0, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OKC** | **Ostrava-Krasne** | **0.16** | **255** | *i* Pg | Pg | 05 17 42.5 | +1.1 |
| OKC | | | | *e*Sg | Sg | 05 17 45.3 | +1.8 |
| | comp=Z,59nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.16** | **255** | Pg | Pg | 05 17 42.5 | +1.1 |
| OKC | | | | Sg | Sg | 05 17 45.3 | +1.8 |
| | 59nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.56** | **260** | *e*Pg | Pg | 05 17 49.3 | +0.3 |
| | baz=83 | | | | | | |
| MORC | | | | *e*Sg | Sg | 05 17 57.0 | +0.7 |
| | 7.5nm,0.2s,baz=83 | | | | | | |
| **OJC** | **Ojcow** | **0.97** | **69** | *e*Pg | Pg | 05 17 55.7 | -1.3 |
| OJC | | | | *e*Sg | Sg | 05 18 08.6 | -1.0 |
| **OJC** | **Ojcow** | **0.97** | **69** | *e*Pg | Pg | 05 17 55.7 | -1.3 |
| OJC | | | | *e*Sg | Sg | 05 18 08.6 | -1.0 |
| **LANS** | **Liptovska Anna** | **1.01** | **136** | *e*PG | Pg | 05 17 58.0 | +0.1 |
| LANS | | | | *e*SG | Sb | 05 18 12.0 | -0.7 |
| **LANS** | **Liptovska Anna** | **1.01** | **136** | *e*Pg | Pg | 05 17 58.0 | +0.1 |
| LANS | | | | *e*Sg | Sb | 05 18 12.0 | -0.7 |
| **KRLC** | **Kraliky** | **1.05** | **281** | *e*PG | Pg | 05 17 58.1 | -0.5 |
| KRLC | | | | *e*SG | Sb | 05 18 13.1 | -0.7 |
| **KRLC** | **Kraliky** | **1.05** | **281** | Pg | Pg | 05 17 58.1 | -0.5 |
| KRLC | | | | Sg | Sb | 05 18 13.1 | -0.7 |
| **VRAC** | **Vranov** | **1.30** | **245** | *e*Pg | Pg | 05 18 02.9 | -0.3 |
| | baz=65 | | | | | | |
| VRAC | | | | *e*Sg | Sg | 05 18 19.9 | -0.2 |
| | 6.6nm,0.3s,baz=65 | | | | | | |
| **NIE** | **Niedzica** | **1.33** | **110** | *e*Pg | Pb | 05 18 04.3 | +0.2 |
| NIE | | | | *e*Sg | Sn | 05 18 22.6 | +0.2 |
| **DPC** | **Dobruska-Polom** | **1.41** | **290** | *e*PG | Pn | 05 18 05.1 | -0.1 |
| DPC | | | | *e*SG | Sn | 05 18 24.3 | -0.2 |
| | comp=Z,5.0nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.41** | **290** | Pg | Pn | 05 18 05.1 | -0.1 |
| DPC | | | | Sg | Sn | 05 18 24.3 | -0.2 |
| | 5.0nm,0.4s | | | | | | |
| **VYHS** | **Vyhne** | **1.42** | **168** | *e*PN | Pn | 05 18 04.3 | -1.0 |
| VYHS | | | | *e*SN | Sg | 05 18 22.9 | -1.1 |
| **VYHS** | **Vyhne** | **1.42** | **168** | *e*Pn | Pn | 05 18 04.3 | -1.0 |
| VYHS | | | | *e*Sn | Sg | 05 18 22.9 | -1.1 |
| **KRUC** | **Moravsky** | **1.54** | **239** | *e*Pg | Pn | 05 18 06.4 | -0.4 |
| | baz=59 | | | | | | |
| KRUC | | | | *e*Sg | Sn | 05 18 27.1 | -0.3 |
| | baz=59 | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.92** | **103** | *e*PN | Pb | 05 18 14.0 | -0.1 |
| STHS | | | | *e*SN | Sg | 05 18 41.9 | +2.0 |
| **STHS** | **Stebnicka Huta** | **1.92** | **103** | *e*Pn | Pb | 05 18 14.0 | -0.1 |
| **PRU** | **Pruhonice** | **2.49** | **274** | *e*SG | Sg | 05 18 59.2 | +1.0 |
| **PRU** | **Pruhonice** | **2.49** | **274** | Sg | Sg | 05 18 59.2 | +1.0 |
| **KHC** | **Kasperske Hory** | **3.22** | **258** | *e*SG | Sg | 05 19 21.3 | -0.6 |
| **KHC** | **Kasperske Hory** | **3.22** | **258** | Sg | Sg | 05 19 21.3 | -0.6 |

**KRSC 27 05:20:30.1±1.3,50.96N×157.72E,h54km±22km, ML3.6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PAU** | **Pauzhetka** | **0.77** | **312** | *e*P | Pn | 05 20 46.9 | +2.0 |
| PAU | | | | *e*S | Sn | 05 20 57.2 | +1.6 |
| **SKR** | **Severo-Kuril's** | **1.06** | **255** | *e*P | Pn | 05 20 49.9 | +1.2 |
| SKR | | | | *e*S | Sn | 05 21 02.9 | +0.5 |
| **ASAK** | **Asacha** | **1.43** | **4** | *e*S | Sn | 05 21 13.7 | +2.1 |
| **MTVR** | **Mutnovka** | **1.55** | **10** | *e*P | Pn | 05 20 57.8 | +2.2 |
| MTVR | | | | *e*S | Sn | 05 21 16.4 | +1.7 |
| **RUS** | **Russkaya** | **1.55** | **18** | *e*P | Pn | 05 20 57.0 | +1.6 |
| RUS | | | | *e*S | Sn | 05 21 15.0 | +0.6 |
| **APC** | **Apacha** | **2.00** | **350** | *e*P | Pn | 05 21 03.6 | +2.2 |
| **AVH** | **Avacha** | **2.39** | **15** | *e*P | Pn | 05 21 10.9 | +4.0 |
| **SMAR** | **Somma** | **2.40** | **16** | *e*P | Pn | 05 21 10.8 | +3.6 |
| **SDLR** | **Sedlovina** | **2.43** | **17** | *e*P | Pn | 05 21 09.9 | +2.4 |
| **KRX** | **Arik** | **2.47** | **13** | *e*P | Pn | 05 21 11.5 | +3.4 |
| **SPN** | **Mys Shipunski** | **2.57** | **33** | *e*P | Pn | 05 21 12.9 | +3.7 |
| SPN | | | | *e*S | Sn | 05 21 43.0 | +3.8 |
| **GNL** | **Ganaly** | **2.74** | **3** | *e*P | Pn | 05 21 13.3 | +1.5 |
| **MKZ** | **Mys Kozlova** | **4.34** | **32** | *e*P | Pn | 05 21 35.9 | +2.4 |
| **KBTR** | **Krutoberegovo** | **6.07** | **28** | *e*P | Pn | 05 22 00.6 | +3.5 |

**WEL 27 05:21:17.4±0.3,37.60S×176.38E,h193km±3km, ML3.8/3, 4C-3D, Error ellipse: s-maj=2.7km s-min=2.5km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TOZ** | **Tahuroa Road** | **0.71** | **259** | PN | Pn | 05 21 45.3 | +0.7 |
| **URZ** | **Urewera** | **0.88** | **139** | ⇑PN | Pn | 05 21 45.5 | -0.1 |
| URZ | | | | SN | Sn | 05 22 07.7 | +0.2 |
| **HAZ** | **Te Kaha** | **1.12** | **99** | PN | Pn | 05 21 47.1 | -0.2 |
| HAZ | | | | SN | Sn | 05 22 10.0 | -0.4 |
| **MWZ** | **Matawai** | **1.17** | **129** | PN | Pn | 05 21 47.9 | +0.2 |
| MWZ | | | | SN | Sn | 05 22 11.0 | -0.3 |
| **RAGZ** | **Rawiri** | **1.21** | **138** | PN | Pn | 05 21 48.7 | +0.6 |
| **MRHZ** | **Matea Rd** | **1.23** | **179** | PN | Pn | 05 21 48.3 | +0.1 |
| MRHZ | | | | SN | Sn | 05 22 11.9 | -0.5 |
| **PKGZ** | **Pakihiroa** | **1.38** | **102** | PN | Pn | 05 21 49.8 | +0.4 |
| **MXZ** | **Matakaoa Point** | **1.53** | **89** | PN | Pn | 05 21 50.8 | +0.1 |
| **NMHZ** | **Naumai** | **1.54** | **168** | PN | Pn | 05 21 50.5 | -0.4 |
| NMHZ | | | | SN | Sn | 05 22 18.3 | +1.3 |
| **RIGZ** | **Rimuhau** | **1.55** | **136** | PN | Pn | 05 21 51.4 | +0.4 |
| **BKZ** | **Black Stump Fm** | **1.57** | **177** | PN | Pn | 05 21 50.8 | -0.4 |
| BKZ | | | | SN | Sn | 05 22 16.9 | -0.7 |
| BKZ | | | | AML | AML | 05 22 19.0 | |
| **WHHZ** | **Waihua** | **1.62** | **156** | PN | Pn | 05 21 52.0 | +0.4 |
| **WMGZ** | **Waiomatatini S** | **1.63** | **98** | PN | Pn | 05 21 51.8 | +0.1 |
| **TWVZ** | **Taurewa** | **1.65** | **206** | ⇓PN | Pn | 05 21 52.1 | +0.1 |
| **NGZ** | **Ngauruhoe** | **1.69** | **201** | PN | Pn | 05 21 52.7 | +0.2 |
| **ARHZ** | **Aropaoanui** | **1.73** | **164** | PN | Pn | 05 21 52.9 | +0.3 |
| **WPVZ** | **Whakapapa** | **1.73** | **202** | PN | Pn | 05 21 52.8 | 0.0 |
| **KNZ** | **Kokohu** | **1.75** | **145** | ⇓PN | Pn | 05 21 52.9 | +0.2 |
| **TUVZ** | **Tukino** | **1.76** | **199** | PN | Pn | 05 21 53.1 | -0.1 |
| **FWVZ** | **Far West T-bar** | **1.78** | **201** | PN | Pn | 05 21 53.5 | +0.1 |
| **WHVZ** | **Whangaehu Hut** | **1.79** | **200** | PN | Pn | 05 21 53.5 | -0.1 |
| **TRVZ** | **Turoa** | **1.82** | **201** | PN | Pn | 05 21 54.0 | +0.1 |
| **KWHZ** | **Kaweka Forest** | **1.82** | **179** | PN | Pn | 05 21 53.6 | -0.1 |
| **WNVZ** | **Wahianoa** | **1.83** | **199** | ⇓PN | Pn | 05 21 53.6 | -0.3 |
| **MCHZ** | **McNeill Hill** | **1.86** | **172** | PN | Pn | 05 21 54.2 | +0.3 |
| **MOVZ** | **Moawhango** | **1.87** | **195** | PN | Pn | 05 21 53.3 | -0.9 |
| **PKVZ** | **Pokaka** | **1.88** | **205** | PN | Pn | 05 21 54.1 | -0.1 |
| **BHHZ** | **Black Hill Sta** | **1.91** | **187** | PN | Pn | 05 21 53.8 | -0.7 |
| **MHGZ** | **Mahia Peninsul** | **1.96** | **143** | PN | Pn | 05 21 55.2 | +0.2 |
| **KRHZ** | **Kereru** | **2.04** | **180** | PN | Pn | 05 21 55.4 | -0.5 |
| **CKHZ** | **Cape Kidnapper** | **2.13** | **165** | PN | Pn | 05 21 56.7 | 0.0 |
| **KAHZ** | **Kahuranaki** | **2.23** | **170** | ⇑PN | Pn | 05 21 57.6 | -0.3 |
| **PNHZ** | **Pukenui** | **2.32** | **183** | PN | Pn | 05 21 57.9 | -1.0 |
| **PXZ** | **Pawanui** | **2.46** | **171** | PN | Pn | 05 21 59.5 | -0.8 |
| PXZ | | | | AML | AML | 05 22 34.8 | |
| PXZ | | | | AML | AML | 05 22 34.8 | |
| PXZ | | | | AML | AML | 05 22 35.3 | |
| PXZ | | | | AML | AML | 05 22 35.3 | |
| **WPHZ** | **Waipukurau** | **2.46** | **179** | PN | Pn | 05 21 59.4 | -1.0 |
| **TSZ** | **Takapari Road** | **2.48** | **187** | ⇑PN | Pn | 05 21 59.3 | -1.3 |
| **PRHZ** | **Porangahau** | **2.67** | **176** | PN | Pn | 05 22 01.7 | -1.1 |
| **DVHZ** | **Dannevirke** | **2.70** | **183** | PN | Pn | 05 22 01.5 | -1.7 |
| **POWZ** | **Post Office Ro** | **2.83** | **190** | PN | Pn | 05 22 02.8 | -1.8 |
| **ANWZ** | **Angora Road** | **2.86** | **179** | PN | Pn | 05 22 03.7 | -1.2 |
| **PRWZ** | **Pori Road** | **2.97** | **186** | PN | Pn | 05 22 04.7 | -1.6 |
| **BFZ** | **Birch Farm** | **3.08** | **182** | PN | Pn | 05 22 05.2 | -2.4 |
| **MRZ** | **Mangatainoka R** | **3.12** | **191** | ⇑PN | Pn | 05 22 05.6 | -2.5 |
| MRZ | | | | AML | AML | 05 22 46.0 | |
| MRZ | | | | AML | AML | 05 22 46.8 | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **OGWZ** | **Otaki Gorge** | **3.35** | **196** | PN | Pn | 05 22 08.3 | -2.5 | |
| **HOWZ** | **Holdsworth Sta** | **3.37** | **191** | PN | Pn | 05 22 08.2 | -2.9 | |
| **KIW** | **Kapiti Island** | **3.46** | **199** | PN | Pn | 05 22 09.2 | -2.9 | |
| **MTW** | **Mount Morrison** | **3.62** | **191** | PN | Pn | 05 22 11.0 | -3.2 | |
| **CAW** | **Cannon Point** | **3.65** | **196** | PN | Pn | 05 22 11.5 | -3.1 | |
| **TRWZ** | **Traveller** | **3.83** | **188** | PN | Pn | 05 22 13.8 | -3.0 | |
| **MSWZ** | **Moikau Station** | **3.91** | **193** | PN | Pn | 05 22 14.2 | -3.6 | |
| **TCW** | **Tory Channel** | **3.96** | **204** | PN | Pn | 05 22 15.2 | -3.2 | |
| **PLWZ** | **Palliser** | **4.06** | **192** | PN | Pn | 05 22 15.9 | -3.8 | |
| **TUWZ** | **Tuamarina** | **4.27** | **205** | PN | Pn | 05 22 19.2 | -3.0 | |
| **QRZ** | **Quartz Range** | **4.40** | **222** | PN | Pn | 05 22 20.3 | -3.6 | |
| **THZ** | **Tophouse** | **4.95** | **212** | PN | Pn | 05 22 27.2 | -3.8 | |
| **MQZ** | **McQueen's Vall** | **6.73** | **204** | PN | Pn | 05 22 47.8 | -6.1 | |
| MQZ | | | | | SN | Sn | 05 23 59.8 | -11 |

*IDC **27** 05:51:42.4±0.7,7.48N×36.27W,h0km,mb4.1/19, mb1 4.2/20,mb1mx4.1/43,mbtmp4.1/20,ML4.3/1,MS3.7/24, Ms1 3.7/24,ms1mx3.6/39, Error ellipse: s-maj=23.6km s-min=14.0km az=145.0*
*ISCJB **27** 05:51:43.7±0.4,7.36N±0.08×36.21W±0.08,h24km, mb4.1/22,MS3.8/23, Error ellipse: s-maj=13.7km s-min=9.3km az=44.6*
*NEIC **27** 05:51:43.6±0.4,7.42N×36.27W,h10km,mb4.6/3, Error ellipse: s-maj=13.5km s-min=9.3km az=133.0*
**ISC 27 05:51:45.6±0.5,7.40N±0.10×36.2W±0.1,h24km,n45, σ1§17/25,mb4.2/22,MS3.7/23, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RCBR** | **Riachuelo** | **13.14** | **179** | Pn | **Pn** | **05 54 51.2** | **+0.4** |
| | 1.5nm,0.3s,baz=352,slow=14,SNR=13 | | | | | | |
| RCBR | | | | Sn | Sn | 05 57 06.9 | -9.5 |
| | 0.7nm,0.3s,baz=68,slow=16,SNR=4.0 | | | | | | |
| RCBR | | | | LR | LR | 05 58 16.6 | |
| | comp=Z,202nm,18.5s,baz=356,slow=30 | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **25.12** | **288** | T | T | 06 23 01.4 | |
| | SNR=33 | | | | | | |
| **BDFB** | **Brasilia** | **25.69** | **207** | P | **P** | **05 57 15.7** | **+1.5** |
| | 8.8nm,0.8s,baz=41,slow=12,SNR=12 | | | | | | |
| BDFB | | | | LR | LR | 06 06 13.2 | |
| | comp=Z,233nm,19.1s,baz=32,slow=34 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **26.44** | **124** | T | T | 06 25 00.5 | |
| | baz=304,slow=75,SNR=46 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **26.44** | **124** | T | T | 06 25 00.8 | |
| | baz=304,slow=75,SNR=52 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **26.46** | **124** | T | T | 06 25 02.0 | |
| | baz=304,slow=75,SNR=58 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **26.95** | **127** | T | T | 06 25 39.2 | |
| | baz=306,slow=75,SNR=56 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **26.95** | **127** | T | T | 06 25 46.3 | |
| | baz=306,slow=75,SNR=55 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **26.96** | **127** | T | T | 06 25 46.8 | |
| | baz=306,slow=75,SNR=44 | | | | | | |
| **DBIC** | **Dimbokro** | **31.15** | **89** | P | **P** | **05 58 01.9** | **-1.0** |
| | 3.8nm,0.9s,baz=190,slow=9.6,SNR=2.9 | | | | | | |
| **SAML** | **Samuel** | **31.38** | **239** | *e*P | **P** | **05 58 04.5** | **-0.3** |
| | 11nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **37.73** | **78** | P | **P** | **05 58 59.2** | **-0.6** |
| | 3.0nm,0.8s,baz=263,slow=6.8,SNR=13 | | | | | | |
| TORD | | | | LR | LR | 06 12 14.6 | |
| | comp=Z,136nm,21.4s,baz=290,slow=33 | | | | | | |
| **ROSC** | **El Rosal** | **37.95** | **269** | P | **P** | **05 59 02.8** | **+0.7** |
| | 2.1nm,0.5s,baz=106,slow=17,SNR=3.7 | | | | | | |
| **MDT** | **Midelt** | **38.73** | **45** | P | **P** | **05 59 09.2** | **+1.0** |
| | 1.7nm,0.8s,baz=284,slow=10,SNR=4.4 | | | | | | |
| **CPUP** | **Villa Florida** | **39.28** | **211** | LR | LR | 06 15 25.3 | |
| | comp=Z,160nm,18.1s,baz=28,slow=36 | | | | | | |
| **LPAZ** | **La Paz** | **39.37** | **233** | P | **P** | **05 59 14.5** | **+0.3** |
| | 3.9nm,0.8s,baz=119,slow=13,SNR=8.3 | | | | | | |
| LPAZ | | | | LR | LR | 06 14 42.0 | |
| | comp=Z,95nm,18.8s,baz=50,slow=35 | | | | | | |
| **ESDC** | **Sonseca Array** | **43.24** | **37** | P | **P** | **05 59 45.2** | **0.0** |
| | 0.2nm,0.3s,baz=251,slow=7.8,SNR=6.0 | | | | | | |
| ESDC | | | | LR | LR | 06 15 52.4 | |
| | comp=Z,68nm,18.1s,baz=305,slow=34 | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **49.58** | **155** | T | T | 06 54 01.6 | |
| | SNR=31 | | | | | | |
| **KEST** | **Kesra** | **50.28** | **49** | P | **P** | **06 00 41.0** | **+0.6** |
| | 5.6nm,0.8s,baz=245,slow=12,SNR=4.1 | | | | | | |
| KEST | | | | LR | LR | 06 20 24.4 | |
| | comp=Z,198nm,21.9s,baz=248,slow=34 | | | | | | |
| **SCHQ** | **Schefferville** | **53.26** | **338** | P | **P** | **06 01 00.6** | **-1.6** |
| | 3.9nm,0.9s,baz=262,slow=11,SNR=2.6 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **55.58** | **37** | P | **P** | **06 01 19.0** | **-0.4** |
| | 3.7nm,0.8s,baz=225,slow=7.1,SNR=2.8 | | | | | | |
| **GERES** | **GERESS Array B** | **58.83** | **36** | P | **P** | **06 01 44.5** | **+2.2** |
| | 0.3nm,0.3s,baz=220,slow=8.0,SNR=4.5 | | | | | | |
| GERES | | | | LR | LR | 06 23 29.3 | |
| | comp=Z,80nm,21.9s,baz=270,slow=32 | | | | | | |
| **HOPE** | **Hope Point** | **61.45** | **180** | *e*P | **P** | **06 01 57.9** | **-1.9** |
| **NOA** | **NORSAR Array B** | **64.02** | **24** | P | **P** | **06 02 18.4** | **+1.3** |
| | 1.2nm,0.9s,baz=235,slow=6.4,SNR=2.6 | | | | | | |
| NOA | | | | LR | LR | 06 25 37.6 | |
| | comp=Z,53nm,21.4s,baz=230,slow=32 | | | | | | |
| **MLR** | **Muntele Rosu** | **65.39** | **43** | P | **P** | **06 02 26.9** | **+0.5** |
| | 3.2nm,1.0s,baz=211,slow=5.2,SNR=6.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **66.75** | **299** | P | **P** | **06 02 34.7** | **-0.7** |
| | 0.3nm,0.5s,baz=103,slow=3.9,SNR=5.4 | | | | | | |
| TXAR | | | | LR | LR | 06 28 53.5 | |
| | comp=Z,18nm,21.9s,baz=0.0,slow=34 | | | | | | |
| **AKASG** | **Malin Array Be** | **68.86** | **38** | P | **P** | **06 02 49.4** | **+1.3** |
| | 0.8nm,0.5s,baz=263,slow=5.8,SNR=6.4 | | | | | | |
| **BOSA** | **Boshof** | **69.19** | **124** | LR | LR | 06 26 47.7 | |
| | comp=Z,47nm,19.2s,baz=314,slow=30 | | | | | | |
| **BRTR** | **Keskin Array B** | **69.85** | **50** | P | **P** | **06 02 54.0** | **-0.7** |
| | 1.4nm,0.9s,baz=244,slow=4.2,SNR=7.4 | | | | | | |
| BRTR | | | | LR | LR | 06 33 30.6 | |
| | comp=Z,32nm,22.0s,baz=238,slow=36 | | | | | | |
| **EIL** | **Elat** | **70.05** | **61** | LR | LR | 06 32 55.1 | |
| | comp=Z,98nm,21.6s,baz=245,slow=35 | | | | | | |
| **LAZ** | **Ladron** | **70.11** | **304** | *e*P | **P** | **06 02 56.3** | **-0.2** |
| | 2.0nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **70.52** | **27** | P | **P** | **06 02 58.2** | **+0.1** |
| | 3.2nm,0.8s,baz=251,slow=5.2,SNR=6.4 | | | | | | |
| FINES | | | | LR | LR | 06 30 26.3 | |
| | comp=Z,67nm,20.1s,baz=222,slow=33 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **70.62** | **58** | LR | LR | 06 35 24.0 | |
| | comp=Z,28nm,21.1s,baz=185,slow=37 | | | | | | |
| **ARCES** | **ARCESS Array B** | **73.45** | **19** | LR | LR | 06 31 43.1 | |
| | comp=Z,29nm,19.4s,baz=254,slow=33 | | | | | | |
| **HWUT** | **Hardware Ranch** | **74.16** | **311** | *e*P | **P** | **06 03 19.8** | **-0.7** |
| | 8.2nm,0.9s | | | | | | |
| **RES** | **Resolute Bay** | **74.91** | **346** | LR | LR | 06 33 47.3 | |
| | comp=Z,40nm,19.1s,baz=97,slow=34 | | | | | | |
| **KBZ** | **Khabaz** | **77.08** | **47** | LR | LR | 06 37 39.7 | |
| | comp=Z,21nm,21.0s,baz=313,slow=36 | | | | | | |
| **ATD** | **Arta Tunnel** | **77.91** | **80** | LR | LR | 06 37 51.2 | |
| | comp=Z,34nm,18.3s,baz=76,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.24** | **308** | P | **P** | **06 03 49.8** | **+0.3** |
| | 0.4nm,0.6s,baz=92,slow=12,SNR=3.7 | | | | | | |
| **BBB** | **Bella Bella** | **85.37** | **322** | LR | LR | 06 37 55.4 | |
| | comp=Z,35nm,19.9s,baz=102,slow=32 | | | | | | |
| **DLBC** | **Dease Lake** | **85.74** | **328** | LR | LR | 06 38 40.8 | |
| | comp=Z,60nm,19.1s,baz=102,slow=33 | | | | | | |
| **ILAR** | **Eielson Array** | **91.97** | **336** | P | **P** | **06 04 51.2** | **-0.9** |
| | 0.2nm,0.8s,baz=60,slow=2.2,SNR=3.1 | | | | | | |
| ILAR | | | | LR | LR | 06 44 37.0 | |
| | comp=Z,65nm,18.0s,baz=103,slow=35 | | | | | | |
| **KDAK** | **Kodiak Island** | **97.34** | **331** | LR | LR | 06 47 38.0 | |
| | comp=Z,56nm,18.8s,baz=72,slow=34 | | | | | | |
| **AAK** | **Ala-Archa** | **99.95** | **44** | LR | LR | 06 51 30.1 | |
| | comp=Z,115nm,21.8s,baz=222,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **128.87** | **59** | PKP | **PKPdf** | **06 10 54.9** | **+2.7** |
| | 0.8nm,0.3s,baz=299,slow=4.0,SNR=4.6 | | | | | | |

*DDA **27** 05:54:53.0,40.70Nx35.24E,h7km,Md2.6*
*CSEM **27** 05:54:53.0±0.3,40.71N×35.26E,h5km,MD2.6, Error ellipse: s-maj=7.5km s-min=5.5km az=119.0*
**ISC 27 05:54:52.9±1.3,40.73N±0.03×35.25E±0.03,h3km±12km, n17,σ0§61/26, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAVZ** | **Havza** | **0.50** | **46** | *i* P | **Pg** | **05 55 02.5** | **0.0** |
| HAVZ | | | | *i* S | **Sb** | **05 55 11.6** | **-0.3** |
| **HAVZ** | **Havza** | **0.50** | **46** | P | **Pg** | **05 55 02.5** | **0.0** |
| HAVZ | | | | S | **Sb** | **05 55 11.6** | **-0.3** |
| **CORM** | **Corum** | **0.72** | **221** | *e*PG | **Pg** | **05 55 06.5** | **-0.3** |
| **CORM** | **Corum** | **0.72** | **221** | *e*Pg | **Pg** | **05 55 06.6** | **-0.3** |
| **BYBT** | **Boyabat** | **0.82** | **334** | *e*PG | **Pg** | **05 55 08.4** | **-0.3** |
| **BYBT** | **Boyabat** | **0.82** | **334** | *e*Pg | **Pg** | **05 55 08.4** | **-0.3** |
| **YOZ** | **Yozgat** | **1.09** | **177** | *e*PG | **Pb** | **05 55 14.2** | **-0.3** |
| **YOZ** | **Yozgat** | **1.09** | **177** | *e*Pg | **Pb** | **05 55 14.2** | **-0.3** |
| **ILGA** | **Ilgaz** | **1.21** | **286** | *i* P | **Pb** | **05 55 16.3** | **-0.2** |
| ILGA | | | | *i* S | **Sn** | **05 55 35.0** | **+1.2** |
| **ILGA** | **Ilgaz** | **1.21** | **286** | P | **Pb** | **05 55 16.3** | **-0.2** |
| ILGA | | | | S | **Sn** | **05 55 35.0** | **+1.2** |
| **CDAG** | **Cicekdag** | **1.29** | **212** | *i* P | **Pn** | **05 55 17.2** | **-0.7** |
| CDAG | | | | *i* S | **Sb** | **05 55 34.7** | **-0.2** |
| **CDAG** | **Cicekdag** | **1.29** | **212** | P | **Pn** | **05 55 17.2** | **-0.7** |
| CDAG | | | | S | **Sb** | **05 55 34.7** | **-0.2** |
| **ELDT** | **Eldivan** | **1.41** | **261** | *i* P | **Pb** | **05 55 19.7** | **-0.2** |
| ELDT | | | | *i* S | **Sg** | **05 55 38.8** | **+0.6** |
| **ELDT** | **Eldivan** | **1.41** | **261** | P | **Pb** | **05 55 19.7** | **-0.2** |
| ELDT | | | | S | **Sg** | **05 55 38.8** | **+0.6** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.52** | **149** | P | **Pn** | **05 55 20.5** | **-0.6** |
| CUSAR | | | | S | **Sg** | **05 55 43.0** | **+1.4** |
| **YAYX** | **Yaylak** | **2.10** | **212** | *e*PG | **Pn** | **05 55 28.8** | **-0.3** |
| **YAYX** | **Yaylak** | **2.10** | **212** | *e*Pg | **Pn** | **05 55 28.8** | **-0.3** |

**IDC 27 06:00:15.2±1.3,7.36N×36.12W,h0km,mb3.6/3, mb1 4.0/4,mb1mx3.6/30,mbtmp3.8/4,ML4.1/1,MS3.5/2, Ms1 3.5/2,ms1mx2.9/37, Error ellipse: s-maj=40.3km s-min=28.6km az=164.0, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RCBR** | **Riachuelo** | **13.11** | **179** | Pn | Pn | 06 03 24.1 | +1.2 |
| | 0.9nm,0.3s,baz=355,slow=15,SNR=15 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **26.32** | **125** | T | T | 06 33 35.7 | |
| | baz=304,slow=75,SNR=11 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **26.32** | **125** | T | T | 06 33 31.5 | |
| | baz=304,slow=75,SNR=9.8 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **26.34** | **125** | T | T | 06 33 31.5 | |
| | baz=304,slow=75,SNR=10 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **26.83** | **127** | T | T | 06 34 14.6 | |
| | baz=306,slow=75,SNR=8.0 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **26.84** | **127** | T | T | 06 34 09.5 | |
| | baz=306,slow=75,SNR=11 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **26.85** | **127** | T | T | 06 34 11.2 | |
| | baz=306,slow=75,SNR=10 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **37.62** | **78** | P | P | 06 07 31.9 | -0.3 |
| | 1.1nm,1.0s,baz=270,slow=9.6,SNR=5.5 | | | | | | |
| **LPAZ** | **La Paz** | **39.45** | **233** | P | P | 06 07 47.5 | -0.7 |
| | 2.0nm,0.9s,baz=46,slow=6.1,SNR=7.2 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **55.53** | **37** | LR | LR | 06 29 54.5 | |
| | comp=Z,69nm,21.1s,baz=260,slow=32 | | | | | | |
| **VRAC** | **Vranov** | **60.69** | **37** | LR | LR | 06 33 22.2 | |
| | comp=Z,26nm,21.6s,baz=245,slow=33 | | | | | | |
| **TXAR** | **Lajitas Array** | **66.87** | **299** | P | P | 06 11 10.0 | +0.3 |
| | 0.2nm,0.6s,baz=123,slow=6.5,SNR=2.7 | | | | | | |

*AUST **27** 06:05:36.7,22.87Sx172.05W,h35km*
*IDC **27** 06:05:50.8±0.6,23.04Sx174.74W,h0km,mb4.6/14, mb1 4.7/15,mb1mx4.6/23,mbtmp4.6/15,ML4.1/1,MS3.4/4, Ms1 3.4/4,ms1mx3.0/29, Error ellipse: s-maj=21.0km s-min=15.8km az=145.0*
*ISCJB **27** 06:05:53.5±0.3,23.12S±0.08×174.76W±0.06,h30km, mb4.6/17,MS3.3/3, Error ellipse: s-maj=12.4km s-min=6.9km az=152.0*
*NEIC **27** 06:05:54.3±4.9,23.00Sx174.76W,h23km±33km,mb5.1/3, Error ellipse: s-maj=17.4km s-min=13.7km az=88.0*
**ISC 27 06:05:55.4±0.5,23.0S±0.1×174.76W±0.09,h30km,n72, σ1§05/70,mb4.7/17,MS3.2/3, Tonga Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **8.55** | **307** | *e*Pn | **Pn** | **06 07 55.3** | **-1.9** |
| | 19nm,0.7s | | | | | | |
| **AFI** | **Afiamalu** | **9.49** | **18** | Pn | Pn | 06 08 03.9 | -6.2 |
| | 6.9nm,0.3s,baz=169,slow=3.3,SNR=7.8 | | | | | | |
| AFI | | | | Sn | Sn | 06 09 44.0 | -12 |
| | 7.6nm,0.3s,baz=206,slow=22,SNR=4.3 | | | | | | |
| **RAR** | **Rarotonga** | **14.01** | **85** | Pn | Pn | 06 09 01.3 | -10 |
| | 2.9nm,0.3s,baz=278,slow=7.7,SNR=9.1 | | | | | | |
| RAR | | | | Sn | Sn | 06 11 20.1 | -26 |
| | 2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **USRK** | **Ussuriysk Ar.** | **82.74** | **324** | P | | **P** | **06 18 17.3** | **+1.1** |
| | 6.6nm,0.9s,baz=118,slow=2.4,SNR=11 | | | | | | | |
| **F04D** | **Rainier, OR** | **83.23** | **33** | P | | **P** | **06 18 19.3** | **+0.6** |
| | baz=84 | | | | | | | |
| **WUAZ** | **Wupatki** | **83.58** | **47** | P | | **P** | **06 18 21.1** | **+0.1** |
| | baz=84 | | | | | | | |
| **A04D** | **Lummi Island** | **85.19** | **32** | P | | **P** | **06 18 29.2** | **+0.6** |
| | baz=85 | | | | | | | |
| **SNAA** | **Sanae** | **85.40** | **177** | P | | **P** | **06 18 27.8** | **-1.7** |
| **VNA3** | **Neumayer Olymp** | **85.42** | **175** | P | | **P** | **06 18 28.4** | **-1.2** |
| **MNTX** | **Cornudas Mount** | **85.80** | **53** | P | | **P** | **06 18 31.5** | **-0.6** |
| | baz=86 | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **85.89** | **176** | P | | **P** | **06 18 31.3** | **-0.7** |
| | baz=189,slow=3.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **85.92** | **56** | P | | **P** | **06 18 32.6** | **-0.2** |
| | 3.3nm,0.9s,baz=207,slow=8.1,SNR=34 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **86.10** | **176** | P | | P | 06 18 30.0 | -3.0 |
| **529A** | **Stev Forest Ra** | **87.40** | **56** | P | | **P** | **06 18 39.1** | **-0.9** |
| | baz=88 | | | | | | | |
| **429A** | **Davenport Ranc** | **87.88** | **56** | P | | **P** | **06 18 41.7** | **-0.7** |
| | baz=88 | | | | | | | |
| **530A** | **J-C Ranch, Com** | **88.08** | **56** | P | | **P** | **06 18 43.0** | **-0.3** |
| | baz=88 | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **88.23** | **55** | P | | **P** | **06 18 43.5** | **-0.5** |
| | baz=88 | | | | | | | |
| **631A** | **Perdido Creek** | **88.33** | **57** | P | | **P** | **06 18 43.8** | **-0.6** |
| | baz=88 | | | | | | | |
| **732A** | **Laxson Ranch,** | **88.49** | **58** | P | | **P** | **06 18 44.4** | **-0.8** |
| | baz=89 | | | | | | | |
| **531A** | **Rocksprings** | **88.70** | **56** | P | | **P** | **06 18 45.5** | **-0.7** |
| | baz=89 | | | | | | | |
| **632A** | **Uvalde** | **88.98** | **57** | P | | **P** | **06 18 47.1** | **-0.5** |
| | baz=89 | | | | | | | |
| **532A** | **Rocksprings** | **89.18** | **57** | P | | **P** | **06 18 47.8** | **-0.7** |
| | baz=89 | | | | | | | |
| **834A** | **Tilden** | **89.33** | **59** | P | | **P** | **06 18 48.9** | **-0.2** |
| | baz=90 | | | | | | | |
| **X28A** | **Dimmitt** | **89.50** | **52** | P | | **P** | **06 18 49.3** | **-0.7** |
| | baz=90 | | | | | | | |
| **ILAR** | **Eielson Array** | **90.13** | **12** | P | | **P** | **06 18 51.5** | **-0.5** |
| | 2.8nm,0.9s,baz=214,slow=5.8,SNR=20 | | | | | | | |
| **Z32A** | **Haskell** | **90.94** | **54** | P | | **P** | **06 18 56.0** | **-0.6** |
| | baz=91 | | | | | | | |
| **334A** | **Lometa** | **91.00** | **56** | P | | **P** | **06 18 55.7** | **-1.2** |
| | baz=91 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.78** | **288** | P | | **P** | **06 19 11.8** | **+1.7** |
| | 2.4nm,0.8s,baz=125,slow=3.1,SNR=12 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **131.91** | **351** | PKP | | **PKPdf** | **06 25 04.7** | **-0.3** |
| | 2.1nm,0.8s,baz=14,slow=2.5,SNR=6.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **139.00** | **345** | PKP | | **PKPdf** | **06 25 18.3** | **-0.1** |
| | 0.8nm,0.7s,baz=39,slow=5.3,SNR=2.6 | | | | | | | |
| **AKASG** | **Malin Array Be** | **146.65** | **332** | PKPbc | | **PKPdf** | **06 25 33.2** | **+0.9** |
| | 2.8nm,0.5s,baz=42,slow=3.9,SNR=12 | | | | | | | |
| **BRTR** | **Keskin Array B** | **150.76** | **311** | PKPbc | | **PKPbc** | **06 25 44.6** | **-0.5** |
| | 2.1nm,0.8s,baz=149,slow=2.9,SNR=9.9 | | | | | | | |
| BRTR | | | | PKPab | | **PKPab** | **06 25 52.5** | **+0.3** |
| | 1.0nm,0.6s,baz=141,slow=6.1,SNR=5.1 | | | | | | | |
| **CLL** | **Collm** | **151.13** | **350** | *e*PKPbc | | **PKPbc** | **06 25 45.0** | **-0.3** |
| | comp=Z,9.0nm,0.9s | | | | | | | |
| **BRG** | **Berggiesshubel** | **151.38** | **348** | *i* P | | **PKPbc** | **06 25 46.3** | **+0.4** |
| | comp=Z,8.5nm,0.9s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.62** | **160** | PKP | | **PKPdf** | **06 25 59.1** | **-1.7** |
| | comp=Z,0.5nm,0.8s,baz=5.9,slow=1.2,SNR=4.5 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **06 27 13.6** | **-0.5** |
| | comp=Z,0.6nm,0.8s,baz=197,slow=3.8,SNR=2.9 | | | | | | | |

*IDC **27** 06:24:11.9±1.4,3°.98S×99°.50E,h0km,mb3.9/9,mb1 4.0/9, mb1mx3.8/49,mbtmp3.9/9,MS3.7/1,Ms1 3.7/1, ms1mx2.6/39,Error ellipse: s-maj=58.6km s-min=18.5km az=52.0*

*ISCJB **27** 06:24:17.0±0.8,3°.66S±0°.06×99°.51E±0°.07,h33km, mb3.9/9,MS3.7/1,Error ellipse: s-maj=10.3km s-min=7.4km az=148.7*

*DJA **27** 06:24:18.0±1.6,4°.5±6°×10°0E±°,h17km±11km,M4.1/3, MLv4.1/3*

**ISC 27 06:24:18.6**±1.0,**3°.63S**±0°.08×**99°.58E**±0°.10,**h35km,n26,**
σ1§**35**/24,**mb3.9/9,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.96** | **27** | P | **Pn** | **06 24 34.2** | **-1.5** |
| PPSI | | | | S | **Sn** | **06 24 47.3** | **-0.9** |
| **SISI** | **Saibi** | **2.34** | **348** | P | **Pn** | **06 24 55.0** | **+0.4** |
| SISI | | | | S | **Sn** | **06 25 23.4** | **+1.3** |
| **KRJI** | **Kerinci** | **2.43** | **51** | P | **Pn** | **06 24 56.5** | **+0.6** |
| **MASI** | **Maura Aman, Be** | **2.70** | **80** | P | **Pn** | **06 25 01.1** | **+1.4** |
| MASI | | | | S | **Sn** | **06 25 01.3** | **+1.6** |
| **PDSI** | **Padang** | **2.84** | **18** | P | **Pn** | **06 25 01.7** | **+0.1** |
| **KSI** | **Kapahiang** | **3.01** | **90** | P | **Pn** | **06 25 05.5** | **+1.6** |
| **SDSI** | **Sungai Dareh** | **3.26** | **35** | P | **Pn** | **06 25 07.4** | **+0.2** |
| **PPI** | **Padang Panjang** | **3.26** | **15** | P | **Pn** | **06 25 08.3** | **+1.0** |
| PPI | | | | S | **Sn** | **06 25 44.8** | **0.0** |
| **MNAI** | **Manna** | **3.45** | **102** | P | **Pn** | **06 25 11.2** | **+1.3** |
| **LHSI** | **Lahat** | **3.94** | **93** | P | **Pn** | **06 25 17.1** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **21.96** | **358** | P | **P** | **06 29 10.3** | **+0.9** |
| | 1.1nm,0.3s,baz=188,slow=8.7,SNR=5.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.24** | **260** | T | T | 06 59 34.0 | |
| | baz=81,slow=75,SNR=8.3 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.25** | **260** | T | T | 06 59 34.0 | |
| | baz=81,slow=75,SNR=16 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.26** | **260** | T | T | 06 59 34.0 | |
| | baz=81,slow=75,SNR=15 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.91** | **158** | T | T | 07 06 54.1 | |
| | baz=336 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.92** | **158** | T | T | 07 07 00.7 | |
| | baz=336 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.92** | **158** | T | T | 07 06 56.1 | |
| | baz=336 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.57** | **118** | P | **P** | **06 31 27.0** | **-3.0** |
| | 0.4nm,0.7s,baz=292,slow=9.2,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.67** | **124** | P | **P** | **06 31 36.4** | **-2.8** |
| | 0.3nm,0.5s,baz=301,slow=7.4,SNR=3.9 | | | | | | |
| **SONM** | **Songino Array** | **51.60** | **6** | P | **P** | **06 33 23.0** | **+1.3** |
| | 2.4nm,0.8s,baz=194,slow=8.1,SNR=9.1 | | | | | | |
| SONM | | | | LR | LR | 06 57 12.8 | |
| | comp=Z,64nm,18.1s,baz=0.5,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.48** | **345** | P | **P** | **06 33 29.7** | **+1.6** |
| | 1.8nm,0.6s,baz=147,slow=8.4,SNR=12 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.99** | **344** | P | **P** | **06 34 01.3** | **+0.7** |
| | 0.8nm,0.6s,baz=165,slow=6.8,SNR=6.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.69** | **350** | P | **P** | **06 34 12.9** | **+0.4** |
| | 2.3nm,0.2s,baz=156,slow=7.3,SNR=1.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.56** | **340** | P | **P** | **06 34 32.2** | **-0.1** |
| | 1.4nm,0.5s,baz=122,slow=7.2,SNR=7.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.11** | **313** | P | **P** | **06 35 51.4** | **-0.3** |
| | 0.5nm,0.6s,baz=145,slow=5.3,SNR=3.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.24** | **38** | PKPbc | **PKPbc** | **06 43 56.2** | **-0.1** |
| | 1.0nm,0.8s,baz=270,slow=1.3,SNR=15 | | | | | | |

*ISCJB **27** 06:45:03.1±0.5,59°.71N±0°.04×22°.95E±0°.05,h0km,Error ellipse: s-maj=5.8km s-min=3.8km az=8.0*

*IDC **27** 06:45:03.7±2.3,59°.44N×23°.29E,h0km,mb1 3.2/4, mb1mx3.0/40,mbtmp3.2/4,ML2.6/4,Error ellipse: s-maj=28.6km s-min=10.1km az=158.0*

*HEL **27** 06:45:05.6±0.0,59°.74N×23°.03E,h0km,ML2.0,Explosion*

**ISC 27 06:45:03.6**±0.8,**59°.68N**±0°.04×**23°.04E**±0°.03,**h0km,n15,**
σ1§**31**/22,**Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SRPE** | **Suurupi** | **0.71** | **107** | *e*P | **Pb** | **06 45 19.0** | **+0.1** |
| SRPE | | | | *e*S | **Sb** | **06 45 28.4** | **-0.7** |
| **MEF** | **Metsahovi** | **0.87** | **51** | *e*P | **Pg** | **06 45 20.4** | **+0.3** |
| **MTSE** | **Matsula** | **1.04** | **157** | *e*P | **Pn** | **06 45 25.7** | **+0.3** |
| **RAF** | **Rauma** | **1.49** | **335** | *e*P | **Pn** | **06 45 31.3** | **-0.3** |
| RAF | | | | *e*S | **Sg** | **06 45 49.7** | **-1.7** |
| **AAL** | **Aland** | **1.62** | **289** | *e*PG | **Pb** | **06 45 34.1** | **-0.1** |
| AAL | | | | *e*S | **Sn** | **06 45 54.2** | **-0.5** |
| **PVF** | **Pernaja** | **1.66** | **57** | *e*P | **Pn** | **06 45 34.6** | **+0.7** |
| PVF | | | | *e*S | **Sn** | **06 45 55.9** | **+0.1** |
| **SLIT** | **Slitere, Latvi** | **2.09** | **191** | *e*PG | **Pg** | **06 45 44.0** | **+0.4** |
| **FIA0** | **FINESS Array S** | **2.32** | **39** | *e*SB | **Sn** | **06 46 14.2** | **+2.1** |
| FIA0 | | | | MSG | | 06 46 17.1 | |
| | comp=Z,9.7nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **2.32** | **39** | Pn | **Pb** | **06 45 45.5** | **-0.7** |
| | comp=Z,2.4nm,0.3s,baz=215,slow=12,SNR=77 | | | | | | |
| FINES | | | | Lg | Lg | 06 46 15.2 | |
| | comp=Z,3.0nm,0.3s,baz=224,slow=26,SNR=24 | | | | | | |
| **VJF** | **Virojoki** | **2.42** | **67** | *e*SG | **Sb** | **06 46 19.3** | **+1.1** |
| VJF | | | | MSG | | 06 46 20.6 | |
| | comp=Z,4.0nm,0.1s | | | | | | |
| **KEF** | **Keuruu** | **2.65** | **19** | *e*SG | **Sb** | **06 46 24.6** | **-0.3** |
| KEF | | | | MSG | | 06 46 25.8 | |
| | comp=Z,6.3nm,0.2s | | | | | | |
| **UMAU** | **Umeaa** | **4.37** | **346** | *e*PG | **Pb** | **06 46 23.5** | **+2.4** |
| **HFS** | **Hagfors** | **4.73** | **280** | Pn | **Pn** | **06 46 18.6** | **+2.6** |
| | comp=Z,0.2nm,0.3s,baz=103,slow=14,SNR=5.8 | | | | | | |
| HFS | | | | Sn | **Sn** | **06 47 11.3** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=95,slow=18,SNR=4.5 | | | | | | |
| HFS | | | | Lg | Lg | 06 47 28.5 | |
| | comp=Z,0.4nm,0.3s,baz=92,slow=32,SNR=7.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **6.03** | **288** | Pn | **Pn** | **06 46 33.9** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=125,slow=11,SNR=2.4 | | | | | | |
| NOA | | | | Sn | **Sn** | **06 47 43.4** | **-0.1** |
| | comp=Z,0.1nm,0.3s,baz=104,slow=20,SNR=2.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.95** | **5** | Pn | **Pn** | **06 47 28.3** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=179,slow=13,SNR=20 | | | | | | |
| ARCES | | | | Sn | **Sn** | **06 49 16.9** | **-3.0** |
| | comp=Z,0.1nm,0.3s,baz=186,slow=23,SNR=2.5 | | | | | | |

**IDC 27 06:57:49.8**±999.0,**51°.72N**×**53°.56E,h0km,Error ellipse: s-maj=518.5km s-min=67.7km az=112.0,Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **3.12** | **113** | *i* | | 07 17 10.0 | |
| | baz=297,slow=324,SNR=10 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **18.94** | **71** | *i* | | 08 51 50.0 | |
| | baz=276,slow=318,SNR=3.1 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **33.74** | **75** | *i* | | 10 26 00.0 | |
| | baz=298,slow=317,SNR=0.5 | | | | | | |

*ISCJB **27** 07:00:49.9±0.5,40°.45N±0°.02×26°.05E±0°.03,h10km±4km, Error ellipse: s-maj=4.6km s-min=3.6km az=39.5*

*ISK **27** 07:00:49.3,40°.42N×26°.02E,h21km,MD2.5*

*CSEM **27** 07:00:50.1±0.2,40°.45N×26°.03E,h15km,MD2.5, Error ellipse: s-maj=5.4km s-min=3.9km az=151.0*

*ATH **27** 07:00:50.3,40°.43N×26°.00E,h5km±2km,MD3.1/9*

*DDA **27** 07:00:51.2,40°.39N×26°.12E,h7km,Md2.6*

**ISC 27 07:00:50.0**±0.9,**40°.44N**±0°.02×**26°.02E**±0°.02,**h17km**±7km,
**n39,**σ0§**43**/61,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GADA** | **Gvkgeada** | **0.26** | **200** | *e*PG | **Pg** | **07 00 55.7** | **-0.1** |
| GADA | | | | *e*SG | **Sg** | **07 01 00.1** | **+0.3** |
| **GADA** | **Gvkgeada** | **0.26** | **200** | *e*Pg | **Pg** | **07 00 55.7** | **-0.1** |
| GADA | | | | *e*Sg | **Sg** | **07 01 00.1** | **+0.3** |
| **SMTH** | **Samothraki Isl** | **0.37** | **275** | *e*PB | **Pg** | **07 00 57.6** | **-0.1** |
| SMTH | | | | *e*SB | **Sg** | **07 01 02.8** | **-0.2** |
| **SMTH** | **Samothraki Isl** | **0.37** | **275** | *e*Pb | **Pg** | **07 00 57.6** | **-0.1** |
| SMTH | | | | *e*Sb | **Sg** | **07 01 02.8** | **-0.2** |
| **ERIK** | **Erikli-Kesan** | **0.45** | **58** | *e*PG | **Pg** | **07 00 59.0** | **0.0** |
| ERIK | | | | *e*SG | **Sb** | **07 01 06.1** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **0.45** | **58** | *e*Pg | **Pg** | **07 00 59.0** | **0.0** |
| ERIK | | | | *e*Sg | **Sb** | **07 01 06.1** | **+0.3** |
| **ALN** | **Alexandroupoli** | **0.46** | **3** | *e*PG | **Pb** | **07 00 59.5** | **-0.2** |
| **ALN** | **Alexandroupoli** | **0.46** | **3** | *e*PB | **Pb** | **07 00 59.6** | **-0.1** |
| ALN | | | | *e*SB | **Sb** | **07 01 06.4** | **+0.2** |
| **ALN** | **Alexandroupoli** | **0.46** | **3** | *e*Pg | **Pb** | **07 00 59.5** | **-0.2** |
| ALN | | | | *e*Sb | **Sb** | **07 01 06.4** | **+0.2** |
| **LPK** | **Lapseki** | **0.57** | **96** | *e*PG | **Pg** | **07 01 01.1** | **-0.2** |
| **LPK** | **Lapseki** | **0.57** | **96** | *e*Pg | **Pg** | **07 01 01.1** | **-0.2** |
| **BOZC** | **Bozcaada** | **0.59** | **177** | P | **Pg** | **07 01 01.7** | **-0.1** |
| BOZC | | | | P | **Pb** | **07 01 01.8** | **-0.1** |
| BOZC | | | | S | **Sb** | **07 01 10.2** | **+0.2** |
| **LIA** | **Limnos Island** | **0.83** | **230** | *e*PB | **Pb** | **07 01 06.1** | **+0.1** |
| LIA | | | | *e*SB | **Sg** | **07 01 18.1** | **+0.8** |
| **LIA** | **Limnos Island** | **0.83** | **230** | *e*Pb | **Pb** | **07 01 06.1** | **+0.1** |
| LIA | | | | *e*Sb | **Sg** | **07 01 18.1** | **+0.8** |
| **PRK** | **Paraskevi** | **1.21** | **171** | *e*PB | **Pg** | **07 01 13.1** | **-0.2** |
| PRK | | | | *e*SB | **Sg** | **07 01 29.9** | **+0.9** |
| **PRK** | **Paraskevi** | **1.21** | **171** | *e*Pb | **Pg** | **07 01 13.1** | **-0.2** |
| PRK | | | | *e*Sb | **Sg** | **07 01 29.9** | **+0.9** |
| **MRMT** | **Marmara Adasi** | **1.22** | **82** | *e*PN | **Pn** | **07 01 11.6** | **-0.7** |
| **MRMT** | **Marmara Adasi** | **1.22** | **82** | *e*Pn | **Pn** | **07 01 11.6** | **-0.7** |
| **SIGR** | **SIGRI** | **1.23** | **186** | *e*PN | **Pn** | **07 01 11.7** | **-0.7** |
| **SIGR** | **SIGRI** | **1.23** | **186** | *e*PB | **Pg** | **07 01 13.4** | **-0.3** |
| SIGR | | | | *e*SB | **Sg** | **07 01 30.0** | **+0.2** |
| **SIGR** | **SIGRI** | **1.23** | **186** | *e*Pn | **Pn** | **07 01 11.7** | **-0.7** |
| **SIGR** | **SIGRI** | **1.23** | **186** | *e*Pb | **Pg** | **07 01 13.4** | **-0.3** |
| SIGR | | | | *e*Sb | **Sg** | **07 01 30.0** | **+0.2** |
| **TKR** | **Tekirdag** | **1.28** | **64** | *e*PN | **Pn** | **07 01 12.6** | **-0.5** |
| **TKR** | **Tekirdag** | **1.28** | **64** | *e*Pn | **Pn** | **07 01 12.6** | **-0.5** |
| **EDC** | **Edincik** | **1.41** | **93** | *e*PN | **Pn** | **07 01 14.4** | **-0.6** |
| **EDC** | **Edincik** | **1.41** | **93** | *e*Pn | **Pn** | **07 01 14.4** | **-0.6** |
| **BNT** | **Bandirma** | **1.46** | **93** | *e*PN | **Pn** | **07 01 14.8** | **-0.8** |
| **BNT** | **Bandirma** | **1.46** | **93** | *e*Pn | **Pn** | **07 01 14.8** | **-0.8** |
| **EDRB** | **Edirne** | **1.51** | **21** | *e*PN | **Pn** | **07 01 16.1** | **-0.2** |
| **EDRB** | **Edirne** | **1.51** | **21** | *e*Pn | **Pn** | **07 01 16.1** | **-0.2** |
| **OUR** | **Ouranopolis** | **1.56** | **267** | *e*PB | **Pg** | **07 01 20.1** | **+0.1** |
| OUR | | | | *e*SB | **Sg** | **07 01 40.9** | **+0.6** |
| **OUR** | **Ouranopolis** | **1.56** | **267** | *e*Pb | **Pg** | **07 01 20.1** | **+0.1** |
| OUR | | | | *e*Sb | **Sg** | **07 01 40.9** | **+0.6** |
| **PAIG** | **Paliouri** | **1.86** | **255** | *e*PN | **Pg** | **07 01 29.3** | **+0.5** |
| PAIG | | | | *e*SN | **Sg** | **07 01 49.8** | **-0.2** |
| **PLG** | **Polygyros** | **1.96** | **269** | *e*PG | **Pg** | **07 01 27.8** | **+0.1** |
| PLG | | | | *e*SN | **Sg** | **07 01 53.3** | **0.0** |
| **PLG** | **Polygyros** | **1.96** | **269** | *e*Pg | **Pg** | **07 01 27.8** | **+0.1** |
| **DURS** | **Dursunbey** | **2.06** | **113** | *i* P | **Pb** | **07 01 27.1** | **+0.1** |
| DURS | | | | *i* S | **Sn** | **07 01 49.8** | **+0.5** |
| **DURS** | **Dursunbey** | **2.06** | **113** | P | **Pb** | **07 01 27.1** | **+0.1** |
| DURS | | | | S | **Sn** | **07 01 49.8** | **+0.5** |
| **AOS** | **Alonnisos** | **2.08** | **233** | *e*PG | **Pg** | **07 01 29.3** | **-0.6** |
| **AOS** | **Alonnisos** | **2.08** | **233** | *e*Pg | **Pg** | **07 01 29.3** | **-0.6** |

**IDC 27 07:06:41.6**±5.0,**3°.20S**×**100°.27E,h0km,mb3.3/4, mb1 3.4/4,mb1mx3.3/40,mbtmp3.3/4,Error ellipse: s-maj=207.5km s-min=27.2km az=56.0,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S2** | **Diego Garcia H** | **27.99** | **260** | T | T | 07 41 50.9 | |
| | baz=82,slow=75,SNR=11 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.00** | **260** | T | T | 07 41 50.9 | |
| | baz=82,slow=75,SNR=4.2 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.01** | **260** | T | T | 07 41 56.2 | |
| | baz=82,slow=75,SNR=5.4 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.06** | **159** | T | T | 07 48 13.7 | |
| | baz=333,slow=76,SNR=80 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.07** | **159** | T | T | 07 48 10.2 | |
| | baz=333,slow=76,SNR=82 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.07** | **159** | T | T | 07 48 09.6 | |
| | baz=333,slow=76,SNR=84 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.17** | **119** | P | P | 07 13 53.3 | -1.5 |
| | 0.2nm,0.5s,baz=308,slow=8.9,SNR=3.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.34** | **125** | P | P | 07 14 05.7 | +1.0 |
| | 0.1nm,0.3s,baz=309,slow=8.2,SNR=3.6 | | | | | | |
| **SONM** | **Songino Array** | **51.10** | **5** | P | P | 07 15 46.9 | +0.7 |
| | 0.2nm,0.4s,baz=196,slow=10,SNR=2.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.25** | **344** | P | P | 07 15 53.8 | -0.9 |
| | 0.3nm,0.6s,baz=165,slow=8.4,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.48** | **39** | PKPbc | PKPbc | 07 26 22.0 | -0.7 |
| | 0.4nm,0.6s,baz=278,slow=0.8,SNR=7.0 | | | | | | |

*ISCJB **27** 07:13:12.8±0.5,5°.99S±0°.05×127°.95E±0°.07,h400km, mb3.7/5,Error ellipse: s-maj=9.5km s-min=6.6km az=3.4*

*IDC **27** 07:13:13.0±1.0,6°.05S×128°.00E,h398km±12km,mb3.5/5, mb1 3.5/10,mb1mx3.2/35,mbtmp4.2/10,Error ellipse: s-maj=17.1km s-min=10.6km az=85.0*

*AUST **27** 07:13:29.1±25.0,9°.92S×125°.56E,h25km,Error ellipse: s-maj=1.5km s-min=1.0km az=288.0*

**ISC 27 07:13:13.3**±0.7,**6°.03S**±0°.06×**128°.00E**±0°.09,**h400km,n16,**
σ1§**23**/19,**mb3.9/5,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **5.25** | **54** | P | S | 07 15 40.4 | -6.3 |
| | baz=9.6,SNR=6.2 | | | | | | |
| **BATI** | **Baumata** | **5.97** | **226** | P | **Pn** | **07 14 45.6** | **0.0** |
| | 16nm,0.3s,baz=60,slow=4.4,SNR=9.5 | | | | | | |
| BATI | | | | S | **S** | **07 15 58.9** | **-1.9** |
| | 4.6nm,0.3s,baz=166,slow=19,SNR=2.7 | | | | | | |
| **SIJI** | **Sorong** | **6.08** | **33** | P | **Pn** | **07 14 48.3** | **+1.4** |
| | 14nm,0.3s,baz=327,slow=14,SNR=13 | | | | | | |
| SIJI | | | | S | **S** | **07 16 01.1** | **-1.9** |
| | 3.9nm,0.3s,baz=232,slow=19,SNR=7.5 | | | | | | |
| **SWI** | **Sorong** | **6.08** | **33** | P | **S** | **07 16 00.8** | **-2.2** |
| | baz=11,SNR=4.3 | | | | | | |
| **MTN** | **Manton Dam** | **7.44** | **156** | P | **P** | **07 15 02.8** | **+0.2** |
| | baz=6.2,SNR=12 | | | | | | |
| **KDU** | **Kakadu** | **7.95** | **147** | P | **P** | **07 15 09.2** | **+1.0** |
| | baz=7.3,SNR=5.6 | | | | | | |
| **KAPI** | **Kappang** | **8.27** | **277** | P | **P** | **07 15 11.7** | **0.0** |
| | 0.8nm,0.3s,baz=152,slow=6.2,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **15.14** | **157** | P | **P** | **07 16 28.1** | **+0.7** |
| | 1.2nm,0.3s,baz=336,slow=11,SNR=99 | | | | | | |
| WRA | | | | S | **S** | **07 19 05.9** | **-2.2** |
| | 0.3nm,0.3s,baz=333,slow=21,SNR=8.4 | | | | | | |
| **ASAR** | **Alice Springs** | **18.43** | **163** | P | **P** | **07 17 03.2** | **+0.7** |
| | 0.4nm,0.3s,baz=347,slow=12,SNR=12 | | | | | | |
| ASAR | | | | S | **S** | **07 20 11.4** | **-0.2** |
| | 0.1nm,0.3s,baz=339,slow=23,SNR=5.3 | | | | | | |
| **WRKA** | **Warakurna** | **18.90** | **179** | P | **P** | **07 17 07.6** | **+0.2** |
| | baz=15,SNR=12 | | | | | | |
| **MEEK** | **Meekatharra** | **22.36** | **203** | P | **P** | **07 17 40.6** | **+1.3** |
| | baz=18,SNR=3.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **37.59** | **311** | P | **P** | **07 19 52.7** | **+0.9** |
| | 0.9nm,0.3s,baz=144,slow=6.0,SNR=5.2 | | | | | | |
| **SONM** | **Songino Array** | **56.91** | **343** | P | **P** | **07 22 18.9** | **+0.5** |
| | 0.8nm,0.7s,baz=174,slow=4.9,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.34** | **328** | P | **P** | **07 23 20.2** | **-0.3** |
| | 1.6nm,0.4s,baz=119,slow=9.7,SNR=6.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.65** | **329** | P | **P** | **07 23 46.3** | **-0.5** |
| | 1.5nm,0.4s,baz=130,slow=5.1,SNR=7.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **97.16** | **309** | P | **P** | **07 26 01.1** | **-0.7** |
| | 0.5nm,0.6s,baz=78,slow=3.4,SNR=2.4 | | | | | | |

*NNC **27** 07:18:52.5±0.5,50°.01N×78°.60E,h0km,mb3.6,mpv3.3, Error ellipse: s-maj=6.3km s-min=2.8km az=93.0*

*IDC **27** 07:18:53.3±0.8,50°.07N×78°.80E,h0km,mb1 3.3/4, mb1mx3.2/35,mbtmp3.3/4,ML3.1/4,Error ellipse: s-maj=10.6km s-min=5.9km az=64.0*

**ISC 27 07:18:54.3**±1.3,**50°.09N**±0°.05×**78°.72E**±0°.06,**h12km**±10km,
**n24,**σ0§**87**/41,**23C-19D,Eastern Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR07** | **Kurchatov Arra** | **0.51** | **345** | ⇓P | **Pg** | **07 19 03.9** | **-0.4** |
| KUR07 | | | | ⇓S | **Sb** | **07 19 12.5** | **-0.1** |
| **KUR06** | **Kurchatov Arra** | **0.53** | **346** | ⇑P | **Pg** | **07 19 04.3** | **-0.4** |
| KUR06 | | | | ⇓S | **Sb** | **07 19 12.9** | **-0.2** |
| **KUR14** | **Kurchatov Arra** | **0.53** | **351** | ⇑P | **Pg** | **07 19 04.2** | **-0.5** |
| KUR14 | | | | ⇓S | **Sb** | **07 19 12.9** | **-0.3** |
| **KUR15** | **Kurchatov Arra** | **0.54** | **349** | ⇑P | **Pg** | **07 19 04.3** | **-0.5** |
| KUR15 | | | | ⇑S | **Sb** | **07 19 13.4** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **0.55** | **347** | ⇑P | **Pg** | **07 19 04.5** | **-0.5** |
| | 71nm,0.3s | | | | | | |
| KURBB | | | | ⇓S | **Sb** | **07 19 13.7** | **+0.1** |
| | 428nm,0.6s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **0.55** | **347** | Pg | **Pg** | **07 19 03.2** | **-1.8** |
| | 9.5nm,0.3s,baz=166,slow=18,SNR=186 | | | | | | |
| KURBB | | | | Lg | Lg | 07 19 13.6 | |
| | 7.9nm,0.3s,baz=163,slow=33,SNR=43 | | | | | | |
| **KUR16** | **Kurchatov Arra** | **0.56** | **345** | ⇑P | **Pg** | **07 19 04.5** | **-0.6** |
| KUR16 | | | | ⇓S | **Sb** | **07 19 13.6** | **-0.3** |
| **KUR05** | **Kurchatov Arra** | **0.57** | **348** | ⇑P | **Pg** | **07 19 04.7** | **-0.6** |
| KUR05 | | | | ⇑S | **Sg** | **07 19 13.6** | **+0.8** |
| **KUR17** | **Kurchatov Arra** | **0.57** | **344** | ⇑P | **Pg** | **07 19 04.7** | **-0.6** |
| KUR17 | | | | ⇑S | **Sb** | **07 19 14.4** | **+0.2** |
| **KUR04** | **Kurchatov Arra** | **0.59** | **349** | ⇑P | **Pg** | **07 19 05.2** | **-0.5** |
| KUR04 | | | | ⇓S | **Sg** | **07 19 14.2** | **+0.7** |
| **KURK** | **Kurchatov** | **0.63** | **354** | ⇑P | **Pg** | **07 19 05.8** | **-0.8** |
| | 53nm,0.3s | | | | | | |
| KURK | | | | ⇓S | **Sg** | **07 19 15.2** | **+0.3** |
| | 237nm,1.0s | | | | | | |
| **MK31** | **Makanchi Array** | **4.06** | **143** | Pn | **Pn** | **07 19 56.9** | **+0.7** |
| | 0.9nm,0.4s,baz=16,slow=3.7,SNR=41 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 2.6nm,0.5s | | | | | | | |
| KURBB | | | | ⇓Sn | | Sn | 07 38 39.6 | -1.1 |
| | 33nm,0.9s | | | | | | | |
| KURBB | | | | ⇑Lg | | Lg | 07 39 26.3 | |
| | 23nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.16** | **254** | Pn | | **Pn** | **07 37 07.0** | **-1.5** |
| | 0.2nm,0.3s,baz=65,slow=14,SNR=13 | | | | | | | |
| KURBB | | | | Sn | | Sn | 07 38 38.7 | -2.0 |
| | 0.1nm,0.3s,baz=66,slow=24,SNR=4.5 | | | | | | | |
| KURBB | | | | Lg | | Lg | 07 39 26.6 | |
| | 0.1nm,0.3s,baz=68,slow=36,SNR=6.1 | | | | | | | |
| **MK31** | **Makanchi Array** | **8.70** | **223** | ⇑Pn | | **Pn** | **07 37 14.5** | **-1.4** |
| | 2.6nm,0.8s,baz=35,slow=11,SNR=10 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 07 39 43.3 | |
| | 23nm,1.1s,baz=57,slow=35,SNR=5.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **8.70** | **223** | Pn | | **Pn** | **07 37 17.7** | **+1.8** |
| | 0.3nm,0.3s,baz=34,slow=13,SNR=9.3 | | | | | | | |
| MKAR | | | | Lg | | Lg | 07 39 43.7 | |
| | 0.1nm,0.3s,baz=39,slow=33,SNR=3.0 | | | | | | | |
| **PDGK** | **Podgornoye** | **12.69** | **221** | ⇓Lg | | Lg | 07 41 50.9 | |
| | 11nm,1.3s | | | | | | | |
| **OTUK** | **Ortayu** | **12.85** | **253** | ⇑Sn | | **Sn** | **07 40 37.8** | **+2.2** |
| | 7.0nm,1.2s | | | | | | | |
| OTUK | | | | ⇑Lg | | Lg | 07 41 56.5 | |
| | 19nm,1.3s | | | | | | | |

**IDC 27 07:45:04.6±1.5, 6°24S×147°99E, h0km, mb3.9/2, mb1 4.2/5, mb1mx3.8/26, mbtmp4.1/5, ML4.0/1, Error ellipse: s-maj=38.8km s-min=29.0km az=122.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.25** | **195** | Pn | Pn | 07 45 58.6 | +1.7 |
| | 15nm,0.3s,baz=6.4,slow=6.6,SNR=20 | | | | | | |
| PMG | | | | Sn | Sn | 07 46 35.6 | -0.7 |
| | 14nm,0.3s,baz=87,slow=18,SNR=5.7 | | | | | | |
| **HNR** | **Honiara** | **12.26** | **106** | Pn | Pn | 07 47 58.9 | -1.8 |
| | 5.9nm,0.3s,baz=248,slow=19,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.01** | **223** | P | P | 07 49 26.6 | -1.6 |
| | 0.5nm,0.3s,baz=48,slow=10,SNR=26 | | | | | | |
| WRA | | | | PcP | PcP | 07 53 54.3 | +0.4 |
| | baz=34,slow=1.7,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **21.99** | **217** | P | P | 07 49 59.7 | -0.9 |
| | 1.8nm,0.5s,baz=54,slow=9.2,SNR=20 | | | | | | |
| ASAR | | | | S | S | 07 53 56.6 | -7.8 |
| | 0.7nm,0.7s,baz=36,slow=22,SNR=5.5 | | | | | | |
| **VNDA** | **Vanda** | **71.61** | **177** | P | P | 07 56 28.1 | +0.6 |
| | 0.8nm,0.5s,baz=331,slow=8.4,SNR=10 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.10** | **284** | PKPbc | PKPdf | 08 04 46.9 | -0.1 |
| | 2.7nm,0.6s,baz=78,slow=4.0,SNR=28 | | | | | | |

*DDA 27 07:56:00.9, 38°84N×27°83E, h7km, Md2.7*
*ISK 27 07:56:00.7, 38°81N×27°84E, h14km, MD2.4*
*ISCJB 27 07:56:01.6±0.8, 38°84N±0°03×27°87E±0°05, h6km±5km, Error ellipse: s-maj=7.2km s-min=5.1km az=16.5*
*CSEM 27 07:56:01.5±0.3, 38°84N×27°83E, h10km, MD2.4, Error ellipse: s-maj=5.8km s-min=3.7km az=106.0*

**ISC 27 07:56:01.6±1.0, 38°84N±0°03×27°85E±0°04, h12km±7km, n18, σ0°42/34, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKS** | **Akhisar** | **0.05** | **326** | PG | **Pg** | **07 56 03.7** | **-0.2** |
| **AKS** | **Akhisar** | **0.05** | **326** | *i* Pg | **Pg** | **07 56 03.7** | **-0.2** |
| **MANT** | **Manisa** | **0.66** | **122** | *i* P | **Pb** | **07 56 15.2** | **+0.1** |
| MANT | | | | *i* S | **Sg** | **07 56 23.4** | **+0.4** |
| **MANT** | **Manisa** | **0.66** | **122** | P | **Pb** | **07 56 15.2** | **+0.1** |
| MANT | | | | S | **Sg** | **07 56 23.4** | **+0.4** |
| **DEMI** | **Demirci** | **0.71** | **73** | *i* P | **Pb** | **07 56 16.3** | **+0.4** |
| DEMI | | | | *i* S | **Sg** | **07 56 24.8** | **+0.2** |
| **DEMI** | **Demirci** | **0.71** | **73** | P | **Pb** | **07 56 16.3** | **+0.4** |
| DEMI | | | | S | **Sg** | **07 56 24.8** | **+0.2** |
| **KULA** | **Kula-Manisa** | **0.71** | **117** | *e*PG | **Pg** | **07 56 14.9** | **-0.5** |
| KULA | | | | *e*SG | **Sg** | **07 56 25.3** | **+0.5** |
| **KULA** | **Kula-Manisa** | **0.71** | **117** | *e*Pg | **Pg** | **07 56 14.9** | **-0.5** |
| KULA | | | | *e*Sg | **Sg** | **07 56 25.3** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.89** | **178** | *e*PG | **Pg** | **07 56 17.9** | **-0.9** |
| AYDB | | | | *e*SG | **Sg** | **07 56 30.4** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.89** | **178** | *e*Pg | **Pg** | **07 56 17.9** | **-0.9** |
| AYDB | | | | *e*Sg | **Sg** | **07 56 30.4** | **0.0** |
| **DURS** | **Dursunbey** | **0.90** | **32** | *i* P | **Pb** | **07 56 19.3** | **0.0** |
| DURS | | | | *i* S | **Sg** | **07 56 31.0** | **+0.1** |
| **DURS** | **Dursunbey** | **0.90** | **32** | P | **Pb** | **07 56 19.3** | **0.0** |
| DURS | | | | S | **Sg** | **07 56 31.0** | **+0.1** |
| **AYDN** | **Tasoluk** | **1.18** | **179** | *i* P | **Pg** | **07 56 24.6** | **+0.4** |
| AYDN | | | | *i* S | **Sn** | **07 56 40.5** | **+0.6** |
| **AYDN** | **Tasoluk** | **1.18** | **179** | P | **Pg** | **07 56 24.6** | **+0.4** |
| AYDN | | | | S | **Sn** | **07 56 40.5** | **+0.6** |
| **KHAL** | **Karahalli** | **1.37** | **109** | *i* P | **Pg** | **07 56 27.7** | **-0.2** |
| KHAL | | | | *i* S | **Sb** | **07 56 44.2** | **-0.5** |
| **KHAL** | **Karahalli** | **1.37** | **109** | P | **Pg** | **07 56 27.7** | **-0.2** |
| KHAL | | | | S | **Sb** | **07 56 44.2** | **-0.5** |
| **TVSB** | **Tavsanli** | **1.40** | **64** | *e*PN | **Pn** | **07 56 26.7** | **-0.3** |
| TVSB | | | | *e*SN | **Sb** | **07 56 45.6** | **+0.1** |
| **TVSB** | **Tavsanli** | **1.40** | **64** | *e*Pn | **Pn** | **07 56 26.7** | **-0.3** |
| TVSB | | | | *e*Sn | **Sb** | **07 56 45.6** | **+0.1** |

*ISCJB 27 07:57:31.6±0.7, 4°63S±0°07×149°3E±0°1, h550km, mb3.8/6, Error ellipse: s-maj=18.9km s-min=8.8km az=7.5*
*IDC 27 07:57:31.7±1.3, 4°68S×149°41E, h536km±11km, mb3.2/6, mb1 3.6/8, mb1mx3.2/38, mbtmp4.2/8, Error ellipse: s-maj=33.3km s-min=10.9km az=109.0*
*AUST 27 07:57:40.2±3.1, 5°33S×148°52E, h566km, Error ellipse: s-maj=4.0km s-min=1.6km az=226.0*

**ISC 27 07:57:33.2±0.9, 4°64S±0°09×149°2E±0°2, h550km, n24, σ1°43/29, mb3.6/5, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.13** | **203** | P | **P** | **07 59 03.5** | **-0.7** |
| | 5.4nm,0.3s,baz=24,slow=5.6,SNR=10.0 | | | | | | |
| PMG | | | | S | **S** | **08 00 16.0** | **-2.4** |
| | 4.9nm,0.3s,baz=37,slow=20,SNR=10 | | | | | | |
| **PMG** | **Port Moresby** | **5.13** | **203** | P | **P** | **07 59 03.4** | **-0.7** |
| | baz=4.3,SNR=6.1 | | | | | | |
| **JAY** | **Jayapura** | **8.69** | **284** | P | **P** | **07 59 38.4** | **+0.4** |
| | 137nm,0.3s,baz=18,slow=0.1,SNR=4.7 | | | | | | |
| **JAY** | **Jayapura** | **8.69** | **284** | P | **P** | **07 59 38.3** | **+0.3** |
| | baz=8.3,SNR=5.1 | | | | | | |
| **COEN** | **Coen** | **10.97** | **212** | P | **P** | **08 00 02.0** | **+0.8** |
| | baz=10,SNR=18 | | | | | | |
| **CTA** | **Charters Tower** | **15.61** | **190** | P | **P** | **08 00 48.4** | **-0.6** |
| | 4.6nm,0.3s,baz=6.8,slow=11,SNR=39 | | | | | | |
| **KDU** | **Kakadu** | **18.31** | **243** | P | **P** | **08 01 10.1** | **-3.9** |
| | baz=18,SNR=5.8 | | | | | | |
| **QIS** | **Mount Isa** | **18.34** | **210** | P | **P** | **08 01 15.0** | **+0.7** |
| | baz=18,SNR=16 | | | | | | |
| **EIDS** | **Eidsvold** | **20.69** | **175** | P | **P** | **08 01 38.6** | **+3.1** |
| | baz=20,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.96** | **222** | P | **P** | **08 01 39.1** | **+1.0** |
| | 6.9nm,0.8s,baz=47,slow=9.9,SNR=60 | | | | | | |
| WRA | | | | S | **S** | **08 04 58.3** | **+2.2** |
| | 0.7nm,0.8s,baz=46,slow=15,SNR=3.2 | | | | | | |
| WRA | | | | PcP | **PcP** | **08 05 21.9** | **+0.1** |
| | 0.4nm,0.6s,baz=44,slow=1.2,SNR=3.4 | | | | | | |
| WRA | | | | ScP | **ScP** | **08 08 08.8** | **+1.9** |
| | 1.4nm,1.0s,baz=38,slow=2.7,SNR=6.2 | | | | | | |
| **RMQ** | **Roma** | **21.73** | **181** | P | **P** | **08 01 44.6** | **-0.2** |
| | baz=21,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **23.96** | **216** | P | **P** | **08 02 05.5** | **+0.6** |
| | 3.8nm,0.4s,baz=52,slow=8.0,SNR=50 | | | | | | |
| ASAR | | | | S | **S** | **08 05 44.1** | **+0.8** |
| | 0.6nm,0.8s,baz=40,slow=13,SNR=3.7 | | | | | | |
| ASAR | | | | ScP | **ScP** | **08 08 15.8** | **+1.1** |
| | 0.7nm,0.8s,baz=43,slow=2.7,SNR=5.2 | | | | | | |
| **ARMA** | **Armidale** | **25.75** | **175** | P | **P** | **08 02 20.9** | **+0.3** |
| | baz=25,SNR=5.1 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **26.95** | **187** | P | **P** | **08 02 30.4** | **-0.7** |
| | baz=26,SNR=8.0 | | | | | | |
| **WRKA** | **Warakurna** | **28.50** | **223** | P | **P** | **08 02 45.0** | **+0.2** |
| | baz=28,SNR=9.8 | | | | | | |
| **HTT** | **Hallett** | **30.19** | **197** | P | P | 08 02 52.5 | -6.8 |
| | baz=30,SNR=6.1 | | | | | | |
| **BBOO** | **Buckleboo** | **30.58** | **202** | P | **P** | **08 03 02.7** | **+0.1** |
| | baz=30,SNR=6.9 | | | | | | |
| **MEEK** | **Meekatharra** | **36.46** | **230** | P | **P** | **08 03 53.0** | **+0.7** |
| | baz=36,SNR=4.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **42.23** | **347** | P | **P** | **08 04 38.0** | **-0.5** |
| | 1.0nm,0.5s,baz=179,slow=6.2,SNR=3.4 | | | | | | |
| **KSRS** | **Korea Array** | **46.31** | **337** | P | **P** | **08 05 10.7** | **+0.8** |
| | 0.9nm,0.5s,baz=155,slow=6.6,SNR=3.7 | | | | | | |
| **SONM** | **Songino Array** | **64.30** | **329** | P | **P** | **08 07 16.1** | **+1.1** |
| | 0.4nm,0.3s,baz=148,slow=4.9,SNR=3.5 | | | | | | |
| **ILAR** | **Eielson Array** | **83.40** | **23** | P | **P** | **08 09 00.6** | **-2.1** |
| | 1.5nm,0.6s,baz=251,slow=4.9,SNR=36 | | | | | | |
| **GERES** | **GERESS Array B** | **121.98** | **327** | PKP | **PKPdf** | **08 15 25.5** | **-0.1** |
| | 0.6nm,0.4s,baz=35,slow=3.3,SNR=3.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.79** | **287** | PKPbc | **PKPbc** | **08 16 15.2** | **+0.3** |
| | 2.1nm,0.5s,baz=79,slow=2.6,SNR=22 | | | | | | |

**IDC 27 08:17:42.3±5.1, 5°32S×133°85E, h0km, mb3.9/1, mb1 3.8/4, mb1mx3.5/25, mbtmp3.7/4, ML3.5/3, Error ellipse: s-maj=260.8km s-min=27.5km az=76.0, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **5.12** | **330** | Pn | Pn | 08 18 60.0 | -0.4 |
| | 1.9nm,0.3s,baz=139,slow=20,SNR=11 | | | | | | |
| SIJI | | | | Sn | Sn | 08 19 53.8 | -6.5 |
| | 2.0nm,0.3s,baz=239,slow=22,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.54** | **178** | Pn | Pn | 08 21 09.1 | -0.5 |
| | 0.2nm,0.3s,baz=358,slow=13,SNR=11 | | | | | | |
| WRA | | | | Sn | Sn | 08 23 45.3 | -6.4 |
| | 0.2nm,0.3s,baz=0.2,slow=23,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **18.24** | **180** | P | | 08 21 57.1 | 0.0 |
| | 0.2nm,0.3s,baz=2.9,slow=12,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.00** | **325** | P | P | 08 28 49.9 | +0.1 |
| | 0.6nm,0.5s,baz=120,slow=7.3,SNR=4.4 | | | | | | |

**ISC 27 08:25:00.4±3.2, 50°3N±0°1×18°9E±0°1, h0km, n5, σ0°74/10, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OJC** | **Ojcow** | **0.60** | **93** | *e*Pg | **Pg** | **08 25 12.3** | **+0.4** |
| OJC | | | | *e*Sg | **Sg** | **08 25 18.2** | **-1.4** |
| **LANS** | **Liptovska Anna** | **1.18** | **160** | *e*PG | **Pg** | **08 25 23.5** | **+0.6** |
| LANS | | | | *e*SG | **Sg** | **08 25 37.2** | **-0.9** |
| **NIE** | **Niedzica** | **1.25** | **132** | *e*Pg | **Pb** | **08 25 25.0** | **+0.1** |
| NIE | | | | *e*Sg | **Sg** | **08 25 40.9** | **+0.3** |
| **STHS** | **Stebnicka Huta** | **1.75** | **118** | *e*PN | **Pb** | **08 25 33.6** | **+0.2** |
| STHS | | | | *e*SN | **Sn** | **08 25 55.4** | **+0.3** |
| **VYHS** | **Vyhne** | **1.77** | **181** | *e*PN | **Pb** | **08 25 33.5** | **-0.1** |
| VYHS | | | | *e*SN | **Sn** | **08 25 55.0** | **-0.4** |

**IDC 27 08:25:07.5±2.1, 26°00S×135°71E, h0km, mb4.1/1, mb1 4.0/4, mb1mx3.7/34, mbtmp3.9/4, ML3.6/3, Error ellipse: s-maj=23.4km s-min=19.6km az=46.0, Northern Territory**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **2.84** | **324** | Pn | Pn | 08 25 54.8 | +0.6 |
| | 8.4nm,0.3s,baz=146,slow=13,SNR=197 | | | | | | |
| ASAR | | | | Pg | Pg | 08 26 00.8 | -1.3 |
| | 22nm,0.3s,baz=148,slow=16,SNR=51 | | | | | | |
| ASAR | | | | Sn | Sn | 08 26 28.8 | -0.4 |
| | 18nm,0.3s,baz=145,slow=23,SNR=5.4 | | | | | | |
| ASAR | | | | Lg | Lg | 08 26 38.8 | |
| | 31nm,0.3s,baz=148,slow=26,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **6.16** | **348** | Pn | Pn | 08 26 39.9 | +0.1 |
| | 1.3nm,0.3s,baz=166,slow=14,SNR=20 | | | | | | |
| WRA | | | | Sn | Sn | 08 27 49.7 | -1.3 |
| | 4.4nm,0.3s,baz=168,slow=25,SNR=12 | | | | | | |
| WRA | | | | Lg | Lg | 08 28 18.9 | |
| | 9.0nm,0.3s,baz=168,slow=29,SNR=10 | | | | | | |
| **CTA** | **Charters Tower** | **11.35** | **61** | Pn | Pn | 08 27 51.0 | 0.0 |
| | 0.4nm,0.3s,baz=243,slow=16,SNR=3.9 | | | | | | |
| CTA | | | | Sn | Sn | 08 29 55.3 | -3.3 |
| | 0.6nm,0.3s,baz=309,slow=14,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **87.03** | **326** | P | P | 08 37 54.3 | -0.4 |
| | 0.5nm,0.4s,baz=150,slow=5.1,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **135.05** | **263** | PKP | PKPdf | 08 44 29.2 | -0.3 |
| | 0.1nm,0.3s,baz=109,slow=0.8,SNR=4.7 | | | | | | |

*ISCJB 27 08:27:59.0±1.4, 3°6S±0°2×99°7E±0°3, h33km, mb4.0/10, Error ellipse: s-maj=52.0km s-min=15.8km az=144.5*
*IDC 27 08:28:01.9±1.6, 3°64S×99°70E, h38km±7km, mb3.7/10, mb1 3.8/10, mb1mx3.5/55, mbtmp4.0/10, Error ellipse: s-maj=58.6km s-min=18.2km az=56.0*

**ISC 27 08:28:01.2±1.7, 3°7S±0°2×99°7E±0°3, h35km, n17, σ0°41/13, mb4.0/10, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **22.01** | **358** | P | **P** | **08 32 52.2** | **-0.4** |
| | 1.0nm,0.3s,baz=185,slow=9.8,SNR=4.1 | | | | | | |
| CMAR | | | | pP | **pP** | **08 33 02.2** | **+0.3** |
| | 1.6nm,0.6s,baz=191,slow=10,SNR=2.3 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.35** | **261** | T | T | 09 03 12.3 | |
| | baz=82,slow=75,SNR=10 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.36** | **261** | T | T | 09 03 07.2 | |
| | baz=82,slow=75,SNR=31 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.37** | **261** | T | T | 09 03 10.7 | |
| | baz=82,slow=75,SNR=15 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.81** | **158** | T | T | 09 10 52.6 | |
| | baz=335 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.83** | **158** | T | T | 09 10 36.0 | |
| | baz=335,SNR=7.1 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.83** | **158** | T | T | 09 10 40.2 | |
| | baz=335 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.43** | **118** | P | **P** | **08 35 10.8** | **-0.6** |
| | 0.6nm,0.6s,baz=289,slow=9.2,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **38.54** | **124** | P | **P** | **08 35 21.1** | **+0.4** |
| | 0.2nm,0.5s,baz=302,slow=8.7,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **51.63** | **6** | P | **P** | **08 37 04.9** | **+0.5** |
| | 1.7nm,0.6s,baz=188,slow=9.1,SNR=6.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.56** | **345** | P | **P** | **08 37 11.3** | **+0.1** |
| | 0.9nm,0.5s,baz=138,slow=9.3,SNR=6.5 | | | | | | |
| MKAR | | | | pP | **pP** | **08 37 21.8** | **0.0** |
| | 0.5nm,0.6s,baz=156,slow=8.8,SNR=2.9 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.77** | **28** | P | **P** | **08 37 34.5** | **-0.2** |
| | 1.9nm,0.6s,baz=238,slow=7.9,SNR=7.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.07** | **344** | P | **P** | **08 37 43.2** | **-0.5** |
| | 0.5nm,0.5s,baz=161,slow=6.3,SNR=4.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.76** | **350** | P | **P** | **08 37 55.6** | **+0.1** |
| | 2.7nm,0.6s,baz=152,slow=6.7,SNR=4.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.65** | **340** | P | **P** | **08 38 14.8** | **-0.6** |
| | 0.6nm,0.4s,baz=157,slow=7.7,SNR=4.3 | | | | | | |
| **HFS** | **Hagfors** | **91.17** | **330** | P | **P** | **08 41 02.4** | **+0.1** |
| | 1.8nm,0.8s,baz=113,slow=11,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.20** | **39** | PKPbc | **PKPab** | **08 47 39.8** | **+0.4** |
| | 0.7nm,0.7s,baz=313,slow=0.8,SNR=9.0 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 08 47 50.6 | +0.6 |
| | 0.5nm,0.6s,baz=303,slow=0.9,SNR=5.7 | | | | | | |

*ISCJB 27 08:35:03.1±0.7, 21°0S±0°1×179°1W±0°1, h600km, mb4.0/10, Error ellipse: s-maj=17.9km s-min=13.0km az=162.7*
*IDC 27 08:35:05.6±2.0, 21°05S×179°19W, h616km±23km, mb3.6/9, mb1 3.8/11, mb1mx3.5/32, mbtmp4.5/11, Error ellipse: s-maj=20.7km s-min=13.9km az=168.0*
*AUST 27 08:35:17.4±3.0, 21°53S×179°46E, h620km±5km, Error ellipse: s-maj=9.9km s-min=3.3km az=232.0*

**ISC 27 08:35:04.5±0.8, 21°2S±0°1×179°1W±0°1, h600km, n25, σ1°45/25, mb4.0/10, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **13.46** | **264** | P | **P** | **08 37 59.0** | **+0.8** |
| | 0.9nm,0.3s,baz=180,slow=7.1,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **17.32** | **190** | P | **P** | **08 38 34.0** | **+0.2** |
| | 1.7nm,0.3s,baz=290,slow=3.3,SNR=17 | | | | | | |
| URZ | | | | S | **S** | **08 41 20.2** | **-3.7** |
| | 0.3nm,0.3s,baz=148,slow=2.3,SNR=3.5 | | | | | | |
| **EIDS** | **Eidsvold** | **27.66** | **256** | P | **P** | **08 40 07.0** | **+0.9** |
| | baz=26,SNR=5.1 | | | | | | |
| **ARMA** | **Armidale** | **27.83** | **245** | P | **P** | **08 40 10.3** | **+2.6** |
| | baz=26,SNR=5.8 | | | | | | |
| **CTA** | **Charters Tower** | **32.39** | **266** | P | **P** | **08 40 47.3** | **+0.5** |
| | 16nm,0.4s,baz=94,slow=10,SNR=35 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **33.05** | **244** | P | **P** | **08 40 53.6** | **+1.5** |
| | baz=32,SNR=13 | | | | | | |
| **QLP** | **Quilpie** | **33.86** | **254** | P | **P** | **08 40 59.8** | **+0.8** |
| | baz=32,SNR=6.7 | | | | | | |
| **QIS** | **Mount Isa** | **38.50** | **263** | P | **P** | **08 41 37.0** | **-0.1** |
| | baz=37,SNR=3.5 | | | | | | |
| **HTT** | **Hallett** | **38.98** | **243** | P | P | 08 41 35.9 | -5.0 |
| | baz=38,SNR=8.7 | | | | | | |
| **BBOO** | **Buckleboo** | **41.31** | **244** | P | **P** | **08 42 00.3** | **+0.9** |
| | baz=40,SNR=32 | | | | | | |
| **ASAR** | **Alice Springs** | **43.35** | **258** | P | **P** | **08 42 15.7** | **+0.3** |
| | 12nm,0.5s,baz=96,slow=7.7,SNR=203 | | | | | | |
| ASAR | | | | ScP | **ScP** | **08 46 45.5** | **+0.3** |
| | 1.1nm,0.8s,baz=103,slow=4.8,SNR=7.3 | | | | | | |
| ASAR | | | | S | **S** | **08 47 58.0** | **-3.2** |
| | 0.7nm,0.9s,baz=97,slow=16,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.48** | **263** | P | **P** | **08 42 15.8** | **-0.6** |
| | 7.5nm,0.5s,baz=97,slow=7.5,SNR=253 | | | | | | |
| **KDU** | **Kakadu** | **46.93** | **272** | P | **P** | **08 42 42.2** | **-0.5** |
| | baz=46,SNR=6.3 | | | | | | |
| **MTN** | **Manton Dam** | **48.13** | **272** | P | **P** | **08 42 51.0** | **-0.7** |
| | baz=47,SNR=5.7 | | | | | | |
| **WRKA** | **Warakurna** | **48.28** | **255** | P | **P** | **08 42 53.0** | **+0.3** |
| | baz=47,SNR=61 | | | | | | |
| **SIJI** | **Sorong** | **52.41** | **286** | P | **P** | **08 43 22.3** | **-0.6** |
| | 20nm,0.6s,baz=123,slow=3.5,SNR=6.4 | | | | | | |
| **MEEK** | **Meekatharra** | **56.71** | **251** | P | **P** | **08 43 52.5** | **-0.3** |
| | baz=55,SNR=4.4 | | | | | | |
| **QSPA** | **South Pole Qui** | **68.88** | **180** | P | **P** | **08 45 12.0** | **+1.9** |
| | 1.7nm,0.7s,baz=358,slow=3.9,SNR=4.4 | | | | | | |
| **PMBI** | **Palembang** | **76.00** | **272** | P | P | 08 45 59.9 | +8.1 |
| | baz=75,SNR=4.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **82.24** | **44** | P | **P** | **08 46 23.6** | **-0.9** |
| | 0.9nm,0.5s,baz=226,slow=7.8,SNR=8.0 | | | | | | |
| **SNAA** | **Sanae** | **87.35** | **179** | P | **P** | **08 46 48.4** | **0.0** |
| | 0.2nm,0.5s,baz=193,slow=13,SNR=10 | | | | | | |
| **TXAR** | **Lajitas Array** | **88.30** | **58** | P | **P** | **08 46 53.6** | **0.0** |
| | 1.3nm,0.8s,baz=224,slow=5.9,SNR=18 | | | | | | |
| **ILAR** | **Eielson Array** | **89.22** | **13** | P | P | 08 46 54.4 | -2.6 |
| | 0.4nm,0.5s,baz=215,slow=5.7,SNR=5.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **89.36** | **290** | P | **P** | **08 46 59.4** | **+0.7** |
| | 1.1nm,0.4s,baz=150,slow=3.8,SNR=4.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **129.40** | **349** | PKP | **PKPdf** | **08 53 03.4** | **-1.8** |
| | 3.8nm,0.9s,baz=336,slow=2.7,SNR=3.6 | | | | | | |

*ISCJB 27 08:59:36.9±0.8, 64°72N±0°04×30°7E±0°1, h0km, Error ellipse: s-maj=8.8km s-min=4.1km az=23.8*
*CSEM 27 08:59:37.4±0.6, 64°72N×30°71E, h1km, ML2.0, Error ellipse: s-maj=16.0km s-min=7.5km az=89.0, Mining explosion.*
*HEL 27 08:59:38.0±0.2, 64°69N×30°72E, h0km, ML2.0, Explosion*
*KOLA 27 08:59:39.5, 64°81N×30°21E, h0km*

**ISC 27 08:59:37.2±1.1, 64°70N±0°04×30°65E±0°06, h0km, n18, σ0°97/27, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KU6** | **Riekki** | **1.37** | **347** | *e*P | **Pg** | **09 00 02.9** | **-0.5** |
| KU6 | | | | *e*S | **Sg** | **09 00 20.3** | **-0.8** |
| **KU6** | **Riekki** | **1.37** | **347** | P | **Pg** | **09 00 02.8** | **-0.5** |
| KU6 | | | | S | **Sg** | **09 00 20.2** | **-0.8** |
| **MSF** | **Maaselka** | **1.39** | **332** | *e*P | **Pn** | **09 00 03.1** | **-0.7** |
| MSF | | | | *e*S | **Sg** | **09 00 21.4** | **-0.5** |
| **MSF** | **Maaselka** | **1.39** | **332** | P | **Pn** | **09 00 03.1** | **-0.7** |
| MSF | | | | S | **Sg** | **09 00 21.3** | **-0.5** |
| **KJN** | **Kajaani** | **1.42** | **245** | *e*P | **Pn** | **09 00 03.6** | **-0.6** |
| KJN | | | | *e*S | **Sg** | **09 00 21.9** | **-0.7** |
| **KJN** | **Kajaani** | **1.42** | **245** | P | **Pn** | **09 00 03.5** | **-0.6** |
| KJN | | | | S | **Sg** | **09 00 21.9** | **-0.7** |
| **JOF** | **Joensuu** | **1.81** | **170** | *e*P | **Pn** | **09 00 09.5** | **-0.2** |
| **JOF** | **Joensuu** | **1.81** | **170** | P | **Pn** | **09 00 09.4** | **-0.2** |
| **OUL** | **Oulu** | **2.06** | **283** | *e*P | **Pn** | **09 00 14.4** | **+1.4** |
| **OUL** | **Oulu** | **2.06** | **283** | P | **Pn** | **09 00 14.3** | **+1.4** |
| **RNF** | **Rovaniemi** | **2.71** | **317** | *e*P | **Pn** | **09 00 23.4** | **+1.5** |
| **RNF** | **Rovaniemi** | **2.71** | **317** | P | **Pn** | **09 00 23.4** | **+1.5** |
| **SUF** | **Sumiainen** | **2.82** | **227** | *e*P | **Pn** | **09 00 25.2** | **+1.8** |
| SUF | | | | *e*SB | **Sb** | **09 01 03.6** | **+0.2** |
| SUF | | | | MSG | | 09 01 16.7 | |
| | comp=Z,3.8nm,0.1s | | | | | | |
| **SUF** | **Sumiainen** | **2.82** | **227** | P | **Pn** | **09 00 25.2** | **+1.8** |
| **APA0** | **Apatity Array** | **3.07** | **17** | P | **Pn** | **09 00 27.9** | **+1.0** |
| APA0 | | | | S | **Sn** | **09 01 04.2** | **0.0** |
| **VRF** | **Varrio** | **3.09** | **353** | *e*SB | **Sb** | **09 01 11.5** | **+0.3** |
| VRF | | | | MSG | | 09 01 25.8 | |
| | comp=Z,5.1nm,0.2s | | | | | | |
| **APA** | **Apatity** | **3.09** | **20** | P | **Pn** | **09 00 28.5** | **+1.3** |
| APA | | | | S | **Sn** | **09 01 05.0** | **+0.2** |
| **MASU** | **Masugnsbyn** | **4.48** | **312** | P | **Pn** | **09 00 46.2** | **0.0** |

**UPP 27 09:00:31.6, 67°84N×20°22E, h1km, ML0.4, Suspected Mining explosion., Sweden**

*JMA 27 09:06:39.7±0.2, 24°61N×121°95E, h74km±3km, M3.3*
*ISCJB 27 09:06:40.7±0.4, 24°64N±0°03×122°01E±0°02, h64km±4km, Error ellipse: s-maj=4.9km s-min=2.7km az=161.5*
*TAP 27 09:06:40.7, 24°63N×121°95E, h65km, ML3.8, C*

**ISC 27 09:06:41.3±1.3, 24°63N±0°04×122°01E±0°02, h61km±7km, n50, σ0°79/93, 5C-10D, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TWC** | **Suao** | **0.15** | **262** | ⇑*i* P | **Pn** | **09 06 50.9** | **+0.2** |
| | baz=254 | | | | | | |
| TWC | | | | S | **Sn** | **09 06 57.6** | **+0.2** |
| | ba

| | | | | | | |
|---|---|---|---|---|---|---|
| **NSTT** | **Nanjuang** | **0.92** | **270** | *e*P | **Pn** | **09 06 57.8 -0.6** |
| | baz=269 | | | | | |
| **YOJ** | **Yonaguni jima** | **0.93** | **100** | P | **Pn** | **09 06 58.1 -0.4** |
| YOJ | | | | S | **Sn** | **09 07 11.4 +0.3** |
| **HSN** | **Hsinchu** | **0.96** | **280** | *e*P | **Pn** | **09 06 58.1 -0.8** |
| | baz=283 | | | | | |
| HSN | | | | *e*S | **Sn** | **09 07 11.0 -0.9** |
| | baz=283 | | | | | |
| **ESL** | **Shilin** | **0.97** | **213** | ⇓P | **Pn** | **09 06 57.4 -1.6** |
| | baz=216 | | | | | |
| ESL | | | | *e*S | **Sn** | **09 07 10.6 -1.5** |
| | baz=216 | | | | | |
| **NSY** | **Sanyi** | **1.16** | **260** | *e*P | **Pn** | **09 07 01.4 -0.1** |
| | baz=257 | | | | | |
| NSY | | | | *e*S | **Sn** | **09 07 16.6 0.0** |
| | baz=257 | | | | | |
| **TWQ1** | **Liyutan** | **1.16** | **256** | *e*P | **Pn** | **09 07 01.5 -0.1** |
| | baz=254 | | | | | |
| TWQ1 | | | | S | **Sn** | **09 07 15.9 -0.7** |
| | baz=254 | | | | | |
| **WDT** | **Danda** | **1.18** | **223** | P | **Pn** | **09 07 01.5 -0.6** |
| | baz=209 | | | | | |
| WDT | | | | S | **Sn** | **09 07 16.4 -1.1** |
| | baz=209 | | | | | |
| **SMLT** | **Sun Moon Lake** | **1.26** | **234** | *e*P | **Pn** | **09 07 03.1 +0.2** |
| | baz=230 | | | | | |
| SMLT | | | | *e*S | **Sn** | **09 07 19.2 +0.2** |
| | baz=230 | | | | | |
| **TYC** | **Yuchr** | **1.28** | **236** | *e*P | **Pn** | **09 07 03.7 +0.6** |
| | baz=225 | | | | | |
| TYC | | | | S | **Sn** | **09 07 20.0 +0.7** |
| | baz=225 | | | | | |
| **EHY** | **Hungye** | **1.28** | **209** | *e*P | **Pn** | **09 07 00.8 -2.4** |
| | baz=204 | | | | | |
| EHY | | | | *e*S | **Sn** | **09 07 17.1 -2.4** |
| | baz=204 | | | | | |
| **TCU** | **Taichung** | **1.31** | **249** | *e*P | **Pn** | **09 07 03.4 0.0** |
| | baz=257 | | | | | |
| TCU | | | | *e*S | **Sn** | **09 07 18.9 -1.1** |
| | baz=257 | | | | | |
| **TWF1** | **Yuli** | **1.43** | **207** | *e*P | **Pn** | **09 07 03.1 -2.0** |
| | baz=203 | | | | | |
| **YUS** | **Yu-Shan** | **1.49** | **221** | ⇓P | **Pn** | **09 07 06.3 -0.1** |
| | baz=206 | | | | | |
| YUS | | | | *e*S | **Sn** | **09 07 25.3 +0.1** |
| | baz=206 | | | | | |
| **ALS** | **Alishan** | **1.57** | **225** | P | **Pn** | **09 07 07.7 +0.5** |
| | baz=232 | | | | | |
| ALS | | | | *e*S | **Sn** | **09 07 27.0 +0.3** |
| | baz=232 | | | | | |
| **CHN5** | **Tsauling** | **1.59** | **230** | *e*P | **Pn** | **09 07 07.6 +0.2** |
| | baz=237 | | | | | |
| CHN5 | | | | *e*S | **Sn** | **09 07 28.2 +1.2** |
| | baz=237 | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.59** | **100** | P | **Pn** | **09 07 06.7 -0.6** |
| IRIF | | | | S | **Sn** | **09 07 26.8 -0.1** |
| **ELDTW** | **Lidau** | **1.70** | **213** | *e*P | **Pn** | **09 07 07.5 -1.3** |
| | baz=201 | | | | | |
| **CHN2** | **Minshiung** | **1.78** | **232** | *e*P | **Pn** | **09 07 09.6 -0.2** |
| | baz=239 | | | | | |
| CHN2 | | | | *e*S | **Sn** | **09 07 32.5 +1.2** |
| | baz=239 | | | | | |
| **CHN4** | **Tsaushan** | **1.82** | **226** | *i* P | **Pn** | **09 07 11.1 +0.7** |
| | baz=234 | | | | | |
| CHN4 | | | | *e*S | **Sn** | **09 07 33.5 +1.1** |
| | baz=234 | | | | | |
| **CHY** | **Chiayi** | **1.84** | **232** | *e*P | **Pn** | **09 07 10.5 -0.1** |
| | baz=239 | | | | | |
| **STYT** | **Tauyuan** | **1.86** | **218** | *e*P | **Pn** | **09 07 11.3 +0.4** |
| | baz=204 | | | | | |
| STYT | | | | *e*S | **Sn** | **09 07 34.2 +0.8** |
| | baz=204 | | | | | |
| **JKRS** | **Kuro-shima** | **1.86** | **102** | P | **Pn** | **09 07 10.9 0.0** |
| JKRS | | | | S | **Sn** | **09 07 33.4 0.0** |
| **WTP** | **Ta-pu** | **1.88** | **223** | P | **Pn** | **09 07 11.7 +0.5** |
| | baz=230 | | | | | |
| WTP | | | | *e*S | **Sn** | **09 07 34.9 +1.0** |
| | baz=230 | | | | | |
| **JIJ** | **Ishigaki jima** | **1.96** | **97** | P | **Pn** | **09 07 11.8 -0.5** |
| JIJ | | | | S | **Sn** | **09 07 34.8 -1.0** |
| **CHN1** | **Nanshi** | **1.98** | **224** | *e*P | **Pn** | **09 07 12.7 +0.2** |
| | baz=230 | | | | | |
| CHN1 | | | | *e*S | **Sn** | **09 07 37.2 +1.0** |
| | baz=230 | | | | | |
| **SGST** | **Jiashian** | **2.02** | **221** | *e*P | **Pn** | **09 07 13.6 +0.5** |
| | baz=227 | | | | | |
| SGST | | | | *e*S | **Sn** | **09 07 38.4 +1.1** |
| | baz=227 | | | | | |
| **JISG** | **Ishigakijimahi** | **2.10** | **91** | P | **Pn** | **09 07 13.6 -0.5** |
| JISG | | | | S | **Sn** | **09 07 38.7 -0.4** |
| **SSD** | **Sandimen** | **2.26** | **214** | *e*P | **Pn** | **09 07 17.1 +0.7** |
| | baz=199 | | | | | |
| SSD | | | | *e*S | **Sn** | **09 07 43.9 +0.8** |
| | baz=199 | | | | | |
| **JTJ** | **Tarama** | **2.45** | **89** | P | **Pn** | **09 07 20.0 +1.1** |
| JTJ | | | | S | **Sn** | **09 07 48.6 +0.9** |
| **EAST** | **Anshuo** | **2.48** | **206** | *e*P | **Pn** | **09 07 19.4 0.0** |
| | baz=196 | | | | | |
| **SCZT** | **Fangliau** | **2.58** | **210** | *e*P | **Pn** | **09 07 22.0 +1.2** |
| | baz=207 | | | | | |
| **KNM** | **Kinmen** | **3.26** | **267** | *e*P | **Pn** | **09 07 30.4 +0.3** |
| | baz=262 | | | | | |

**IDC 27 09:25:13.3±2.3, 7°24'N×124°33'E, h0km, mb3.9/3, mb1 4.2/3, mb1mx3.6/45, mbtmp3.9/3, Error ellipse: s-maj=224.8km s-min=25.1km az=64.0, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **28.75** | **160** | P | P | 09 31 12.9 | +0.1 |
| | 0.9nm,0.4s,baz=340,slow=9.3,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **32.11** | **163** | P | P | 09 31 42.4 | -0.1 |
| | 0.8nm,0.3s,baz=339,slow=7.6,SNR=17 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.33** | **325** | P | P | 09 34 34.3 | -0.1 |
| | 0.4nm,0.5s,baz=118,slow=8.5,SNR=2.5 | | | | | | |

*ISCJB 27 09:36:36.9±0.6, 59.74N±0.05°×23.02E±0.06, h0km, Error ellipse: s-maj=6.7km s-min=4.0km az=179.7*
*IDC 27 09:36:37.8±2.5, 59.53N×23.33E, h0km, mb1 3.1/4, mb1mx3.0/44, mbtmp3.1/4, ML2.6/4, Error ellipse: s-maj=35.2km s-min=9.9km az=157.0*
*HEL 27 09:36:39.0±0.0, 59.75N×23.05E, h0km, ML2.1, Explosion*
**ISC 27 09:36:37.2±1.0, 59°66'N±0.06×23°05'E±0.04, h0km, n12, σ1s19/17, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRPE** | **Suurupi** | **0.70** | **105** | *e*P | **Pb** | **09 36 52.0** | **-0.3** |
| SRPE | | | | *e*S | **Sb** | **09 37 01.5** | **-1.0** |
| **MEF** | **Metsahovi** | **0.88** | **50** | *e*P | **Pg** | **09 36 53.7** | **-0.3** |
| MEF | | | | *e*S | **Sg** | **09 37 04.4** | **-1.1** |
| **MTSE** | **Matsula** | **1.02** | **157** | *e*P | **Pn** | **09 36 58.9** | **+0.2** |
| **RAF** | **Rauma** | **1.51** | **336** | *e*PG | **Pn** | **09 37 04.7** | **-0.8** |
| **AAL** | **Aland** | **1.63** | **290** | *e*P | **Pn** | **09 37 07.4** | **+0.3** |
| AAL | | | | *e*S | **Sn** | **09 37 27.9** | **-0.7** |
| **PVF** | **Pernaja** | **1.67** | **56** | *e*PG | **Pn** | **09 37 08.0** | **+0.4** |
| **FIA0** | **FINESS Array S** | **2.34** | **39** | *e*SB | **Sn** | **09 37 47.6** | **+1.4** |
| FIA0 | | | | MSG | | 09 37 50.7 | |
| | comp=Z,7.0nm,0.2s | | | | | | |
| **FINES** | **FINESS Array B** | **2.34** | **39** | Pn | **Pn** | **09 37 18.5** | **+1.7** |
| | comp=Z,2.1nm,0.3s,baz=221,slow=16,SNR=68 | | | | | | |
| FINES | | | | Sn | **Sn** | **09 37 48.0** | **+1.8** |
| | comp=Z,2.9nm,0.3s,baz=220,slow=26,SNR=21 | | | | | | |
| **KEF** | **Keuruu** | **2.67** | **19** | *e*SG | **Sb** | **09 37 58.0** | **-1.2** |
| KEF | | | | MSG | | 09 38 00.8 | |
| | comp=Z,6.4nm,0.2s | | | | | | |
| **HFS** | **Hagfors** | **4.74** | **280** | Pn | **Pn** | **09 37 52.1** | **+2.3** |
| | comp=Z,0.1nm,0.3s,baz=99,slow=14,SNR=8.7 | | | | | | |
| HFS | | | | Sn | **Sn** | **09 38 46.3** | **+1.0** |
| | comp=Z,0.2nm,0.3s,baz=77,slow=26,SNR=1.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **6.04** | **288** | Pn | **Pn** | **09 38 07.4** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=104,slow=16,SNR=3.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **9.97** | **5** | Pn | **Pn** | **09 39 01.8** | **+0.3** |
| | comp=Z,0.2nm,0.3s,baz=181,slow=13,SNR=20 | | | | | | |

*CSEM 27 09:48:45.5±0.3, 37.18N×37.10E, h2km, MD2.5, Error ellipse: s-maj=7.9km s-min=4.0km az=99.0*
*ISK 27 09:48:45.5, 37.20N×37.06E, h6km, MD2.5*
**DDA 27 09:48:44.8, 37.17N×37.10E, h7km, Md2.8, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AYKD** | **Aykdinkavak** | **0.34** | **316** | P | Pg | 09 48 51.4 | -0.2 |
| AYKD | | | | S | Sg | 09 48 57.3 | +1.1 |
| **KAMA** | **Osmaniye** | **0.35** | **274** | P | Pg | 09 48 51.7 | 0.0 |
| KAMA | | | | S | Sg | 09 48 57.3 | +0.8 |
| **KMRS** | **Kahramanmaras** | **0.38** | **335** | *e*PG | Pg | 09 48 52.6 | +0.4 |
| KMRS | | | | *e*SG | Sg | 09 48 57.8 | +0.5 |
| **KMRS** | **Kahramanmaras** | **0.38** | **335** | *e*Pg | Pg | 09 48 52.6 | +0.4 |
| KMRS | | | | *e*Sg | Sg | 09 48 57.8 | +0.5 |
| **KUZU** | **Kuzuini** | **0.39** | **183** | *i* P | Pg | 09 48 52.9 | +0.4 |
| KUZU | | | | *i* S | Sg | 09 48 58.8 | +1.1 |
| **KUZU** | **Kuzuini** | **0.39** | **183** | P | Pg | 09 48 52.9 | +0.4 |
| KUZU | | | | S | Sg | 09 48 58.8 | +1.1 |
| **TAHT** | **Tahtakopru-Hat** | **1.08** | **223** | *e*PG | Pn | 09 49 06.5 | +0.2 |
| TAHT | | | | *e*SG | Sn | 09 49 21.9 | +0.4 |
| **TAHT** | **Tahtakopru-Hat** | **1.08** | **223** | *e*Pg | Pn | 09 49 06.5 | +0.2 |
| TAHT | | | | *e*Sg | Sn | 09 49 21.9 | +0.3 |
| **CEYT** | **Ceyhan** | **1.09** | **262** | *e*PG | Pn | 09 49 06.3 | -0.2 |
| **CEYT** | **Ceyhan** | **1.09** | **262** | *e*Pg | Pn | 09 49 06.3 | -0.2 |
| **AKCD** | **Akcadag** | **1.30** | **30** | *i* P | Pg | 09 49 10.2 | +0.2 |
| AKCD | | | | *i* S | Sn | 09 49 28.8 | +1.4 |
| **AKCD** | **Akcadag** | **1.30** | **30** | P | Pg | 09 49 10.2 | +0.2 |
| AKCD | | | | S | Sn | 09 49 28.8 | +1.4 |
| **SARI** | **SarD1z-Kayseri** | **1.35** | **337** | *e*PN | Pg | 09 49 10.9 | -0.1 |
| **YAYL** | **Yayladag** | **1.39** | **216** | *i* P | Pn | 09 49 07.9 | -2.8 |
| **YAYL** | **Yayladag** | **1.39** | **216** | P | Pn | 09 49 07.9 | -2.8 |
| **ARNB** | **Al Arnab** | **1.59** | **215** | *e*P | Pn | 09 49 13.8 | +0.3 |
| ARNB | | | | *e*S | Sg | 09 49 37.6 | +1.5 |
| | 13nm,0.5s | | | | | | |
| **WRDH** | **Warideh** | **1.75** | **199** | *e*P | Pn | 09 49 16.3 | +0.7 |
| WRDH | | | | *e*S | Sg | 09 49 42.2 | +1.1 |
| | 22nm,0.4s | | | | | | |
| **NIG** | **Nigde** | **2.19** | **296** | *e*PN | Pn | 09 49 22.9 | +0.9 |
| **NIG** | **Nigde** | **2.19** | **296** | *e*Pn | Pn | 09 49 22.9 | +0.9 |
| **BIDA** | **Albida** | **2.24** | **197** | *e*P | Pn | 09 49 23.8 | +1.4 |
| BIDA | | | | *e*S | Sb | 09 49 54.0 | +0.3 |
| | 12nm,0.5s | | | | | | |

*CSEM 27 09:49:40.2, 37.68N×34.80E, h23km, MD2.0, After ISK*
**ISK 27 09:49:40.2, 37.68N×34.80E, h23km, MD2.0, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIG** | **Nigde** | **0.45** | **340** | *e*Pg | Pb | 09 49 50.3 | +0.4 |
| NIG | | | | *e*Sg | Sb | 09 49 57.6 | +1.1 |
| **NIG** | **Nigde** | **0.45** | **340** | *e*PG | Pb | 09 49 50.2 | +0.3 |
| NIG | | | | *e*SG | Sb | 09 49 57.6 | +1.0 |
| **KARA** | **Karaisali** | **0.47** | **154** | *e*PG | Pb | 09 49 50.2 | +0.4 |
| KARA | | | | *e*SG | Sn | 09 49 57.8 | -1.4 |
| **KARA** | **Karaisali** | **0.47** | **154** | *e*Pg | Pb | 09 49 50.3 | +0.4 |
| KARA | | | | *e*Sg | Sn | 09 49 57.8 | -1.3 |
| **GULA** | **Gulagac** | **0.80** | **326** | *e*PG | Pn | 09 49 55.9 | -0.3 |
| GULA | | | | *e*SG | Sn | 09 50 07.8 | +0.3 |
| **GULA** | **Gulagac** | **0.80** | **326** | *e*Pg | Pn | 09 49 55.9 | -0.3 |
| GULA | | | | *e*Sg | Sn | 09 50 07.8 | +0.3 |
| **YESY** | **Yesilyurt** | **0.84** | **277** | *e*PG | Pn | 09 49 57.3 | +0.4 |
| **YESY** | **Yesilyurt** | **0.84** | **277** | *e*Pg | Pn | 09 49 57.3 | +0.4 |

*IDC 27 10:01:56.5±4.2, 4.02S×102.36E, h0km, mb3.6/4, mb1 3.8/4, mb1mx3.6/27, mbtmp3.6/4, Error ellipse: s-maj=176.5km s-min=25.0km az=55.0*
*DJA 27 10:01:58.4±0.8, 5.5×10^2E±°, h10km, M3.6/5, MLv3.6/5*
**ISC 27 10:02:04.7±1.9, 5.0S±0.1×102.5E±0.1, h35km, n14, σ2s22/10, mb3.7/4, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **0.79** | **40** | P | Pn | 10 02 14.9 | -4.4 |
| MNAI | | | | S | **Sn** | **10 02 30.7** | **+0.8** |
| **KSI** | **Kapahiang** | **1.32** | **6** | P | Pn | 10 02 20.5 | -6.2 |
| **LWLI** | **Liwa** | **1.60** | **92** | P | **Pn** | **10 02 28.9** | **-1.7** |
| **MDSI** | **Maura Dua** | **1.79** | **75** | P | **Pn** | **10 02 30.5** | **-2.6** |
| MDSI | | | | S | **Sn** | **10 02 57.1** | **+2.5** |
| **MASI** | **Maura Aman, Be** | **1.83** | **353** | P | **Pn** | **10 02 31.9** | **-1.8** |
| **KASI** | **Kota Agung** | **2.11** | **105** | P | **Pn** | **10 02 35.4** | **-2.1** |
| KASI | | | | S | **Sn** | **10 03 01.9** | **-0.6** |
| **KLI** | **Kotabumi** | **2.40** | **88** | P | **Pn** | **10 02 39.9** | **-1.6** |
| **H08S2** | **Diego Garcia H** | **29.89** | **263** | T | T | 10 38 50.7 | |
| | baz=87,slow=75,SNR=12 | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.90** | **263** | T | T | 10 38 54.8 | |
| | baz=87,slow=75,SNR=10.0 | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.91** | **263** | T | T | 10 38 56.6 | |
| | baz=87,slow=75,SNR=9.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.41** | **118** | P | **P** | **10 08 49.8** | **+0.7** |
| | 0.5nm,0.3s,baz=303,slow=8.3,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **35.55** | **125** | P | **P** | **10 09 01.4** | **+2.5** |
| | 0.2nm,0.4s,baz=296,slow=8.0,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **52.69** | **3** | P | P | 10 11 07.0 | -8.8 |
| | 0.7nm,0.5s,baz=168,slow=8.5,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.55** | **343** | P | P | 10 11 18.8 | -11 |
| | 0.2nm,0.4s,baz=154,slow=5.3,SNR=2.6 | | | | | | |

*KRNET 27 10:09:15.5±0.1, 40.28N×72.01E, h5km, mb2.0*
*NNC 27 10:09:18.5±2.6, 40.31N×71.96E, h0km, mb2.7, mpv2.4, Error ellipse: s-maj=33.6km s-min=10.4km az=124.0*
**ISC 27 10:09:16.2±1.6, 40°25'N±0.05×72°01'E±0.05, h6km±15km, n11, σ1s01/18, 18C-3D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BTK** | **Batken** | **0.93** | **258** | ⇑*i*P | **Pg** | **10 09 34.0** | **-0.1** |
| BTK | | | | ⇑*i*S | **Sb** | **10 09 47.6** | **+0.1** |
| | baz=257 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.17** | **101** | ⇑*i*P | **Pb** | **10 09 38.7** | **-0.3** |
| | baz=103 | | | | | | |
| SFK | | | | ⇑*i*S | **Sn** | **10 09 55.4** | **-0.4** |
| | baz=103 | | | | | | |
| **ARSB** | **Arslanbob** | **1.30** | **34** | ⇑*i*P | **Pn** | **10 09 40.0** | **-1.1** |
| | baz=35 | | | | | | |
| ARSB | | | | ⇑*i*S | **Sg** | **10 09 59.0** | **+0.9** |
| | baz=35 | | | | | | |
| **MNAS** | **Manas** | **2.27** | **9** | ⇓Pn | **Pb** | **10 09 56.4** | **-1.3** |
| | 1.2nm,0.4s | | | | | | |
| MNAS | | | | ⇑Sn | **Sb** | **10 10 26.8** | **+0.8** |
| | 1.4nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **2.27** | **9** | ⇑*i*P | **Pb** | **10 09 55.9** | **-1.7** |
| | baz=10.0 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **10 10 26.8** | **+0.8** |
| | baz=10.0 | | | | | | |
| **AML** | **Almayashu** | **2.27** | **34** | ⇑*i*P | **Pn** | **10 09 55.4** | **+0.8** |
| | baz=34 | | | | | | |
| AML | | | | ⇑*i*S | **Sb** | **10 10 25.3** | **-1.0** |
| | baz=34 | | | | | | |
| **ARLS** | **Aral** | **2.38** | **47** | ⇑*i*P | **Pn** | **10 09 57.5** | **+1.6** |
| | baz=47 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sb** | **10 10 29.2** | **0.0** |
| | baz=47 | | | | | | |
| **UCH** | **Uchtor** | **2.73** | **43** | ⇑*i*P | **Pn** | **10 10 02.4** | **+1.3** |
| | baz=43 | | | | | | |
| UCH | | | | ⇑*i*S | **Sb** | **10 10 39.8** | **+0.1** |
| | baz=43 | | | | | | |
| **DZET** | **Dzherino** | **2.85** | **241** | ⇑Pg | **Pg** | **10 10 10.6** | **-0.2** |
| | 1.4nm,0.4s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 10 10 50.2 | |
| | 5.0nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **3.03** | **37** | ⇑Lg | Lg | 10 10 52.5 | |
| | 3.2nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **3.06** | **339** | ⇑Pg | **Pb** | **10 10 11.4** | **+0.3** |
| | 0.2nm,0.3s | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 10 10 53.0 | |
| | 0.6nm,0.3s,baz=153,slow=29,SNR=4.8 | | | | | | |

*NIED 27 10:30:00, 41.70N×143.80E, h29km, Mw4.1 Best double couple: M0 1.57000×10^15 NP1:φ=234.00000°, δ=30.00000°, λ=127.00000°. NP2:φ=12.00000°, δ=67.00000°, λ=71.00000°.*
*IDC 27 10:30:44.4±1.2, 41.65N×143.93E, h0km, mb4.0/11, mb1 4.0/13, mb1mx3.8/53, mbtmp3.9/13, ML3.2/3, MS3.3/11, Ms1 3.3/11, ms1mx3.0/57, Error ellipse: s-maj=28.6km s-min=21.5km az=96.0*
*ISCJB 27 10:30:46.4±0.5, 41.57N±0.04×143.98E±0.06, h27km, mb3.9/14, MS3.3/8, Error ellipse: s-maj=6.3km s-min=5.1km az=25.6*
*MOS 27 10:30:48.6±0.7, 41.62N×143.79E, h42km, mb4.3/2, Error ellipse: s-maj=12.7km s-min=9.9km az=78.0*
*JMA 27 10:30:48.8±0.2, 41.65N×143.85E, h52km±3km, M3.9*
*NEIC 27 10:30:50.7±1.1, 41.68N×143.78E, h39km±8km, mb4.1/3, Error ellipse: s-maj=15.2km s-min=7.9km az=99.0*
**ISC 27 10:30:48.5±0.8, 41°67N±0.07×143°95E±0.05, h27km, n50, σ0s95/47, mb4.0/14, MS3.3/8, 4C-2D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ERM** | **Erimo** | **0.69** | **301** | *e*P | **Pb** | **10 31 01.4** | **-0.5** |
| ERM | | | | *e* | | 10 31 12.8 | |
| **ERM** | **Erimo** | **0.69** | **301** | *e*Pg | **Pb** | **10 31 01.4** | **-0.5** |
| ERM | | | | *e*Sg | **Sn** | **10 31 12.8** | **+0.6** |
| **JEM** | **Erimo** | **0.69** | **301** | ⇓P | **Pb** | **10 31 01.2** | **-0.7** |
| JEM | | | | *e*S | **Sb** | **10 31 10.9** | **-0.1** |
| **JCH** | **Churui** | **1.04** | **336** | ⇑P | **Pn** | **10 31 07.0** | **-0.4** |
| JCH | | | | *e*S | **Sn** | **10 31 21.2** | **+0.2** |
| **JNBK** | **Urakawa-nobuka** | **1.08** | **305** | ⇑P | **Pn** | **10 31 08.1** | **+0.2** |
| **JOB** | **Onbets** | **1.24** | **356** | ⇑P | **Pn** | **10 31 10.3** | **+0.2** |
| **JAK** | **Akkeshi** | **1.44** | **22** | P | **Pn** | **10 31 13.2** | **+0.4** |
| JAK | | | | *e*S | **Sn** | **10 31 31.7** | **+0.8** |
| **JBT2** | **Biratori 2** | **1.62** | **314** | P | **Pn** | **10 31 15.2** | **-0.1** |
| **JAR** | **Ashorobuto** | **1.64** | **356** | ⇑P | **Pn** | **10 31 15.3** | **-0.2** |
| JAR | | | | *e*S | **Sn** | **10 31 36.6** | **+0.9** |
| **JFR** | **Furan** | **1.80** | **327** | P | **Pn** | **10 31 16.9** | **-0.9** |
| JFR | | | | *e*S | **Sn** | **10 31 38.2** | **-1.6** |
| **ASAJ** | **Asahikawa** | **2.64** | **338** | Pn | **Pn** | **10 31 30.5** | **+1.1** |
| | 2.4nm,0.3s,baz=180,slow=9.3,SNR=15 | | | | | | |
| ASAJ | | | | Sn | **Sb** | **10 32 06.3** | **-0.8** |
| | 5.1nm,0.3s,baz=272,slow=19,SNR=4.7 | | | | | | |
| ASAJ | | | | LR | LR | 10 32 51.4 | |
| | comp=Z,427nm,18.9s,baz=174,slow=48 | | | | | | |
| **ASAJ** | **Asahikawa** | **2.64** | **338** | P | **Pn** | **10 31 30.5** | **+1.1** |
| ASAJ | | | | | | 10 32 06.3 | |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,5.0nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,427nm,18.9s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **2.76** | **30** | *d* iP | **Pn** | **10 31 33.0** | **+2.1** |
| YUK | | | | *i* S | **Sn** | **10 32 01.0** | **-2.3** |
| YUK | | | | pmax | pmax | | |
| | comp=E,19nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,19nm,0.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,9.0nm,0.1s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,56nm,0.3s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,132nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **3.06** | **43** | *i* P | **Pn** | **10 31 37.4** | **+2.3** |
| SHO | | | | *i* S | **Sn** | **10 32 08.6** | **-2.2** |
| SHO | | | | smax | smax | | |
| | comp=N,66nm,0.7s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,79nm,0.7s | | | | | | |
| **MAJO** | **Matsushiro** | **6.79** | **223** | P | **Pn** | **10 32 27.1** | **+0.8** |
| MAJO | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **MAJO** | **Matsushiro** | **6.79** | **223** | Pn | **Pn** | **10 32 27.1** | **+0.8** |
| | comp=Z,6.8nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **6.79** | **223** | Pn | **Pn** | **10 32 27.1** | **+0.8** |
| | comp=Z,0.7nm,0.3s,baz=33,slow=12,SNR=13 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.13** | **290** | LR | LR | 10 36 48.8 | |
| | comp=Z,216nm,18.2s,baz=127,slow=40 | | | | | | |
| **KSRS** | **Korea Array** | **13.06** | **256** | Pn | **Pn** | **10 33 52.6** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=67,slow=14,SNR=4.2 | | | | | | |
| KSRS | | | | LR | LR | 10 38 41.0 | |
| | comp=Z,124nm,18.3s,baz=68,slow=36 | | | | | | |
| **KSAR** | **Wonju Array Be** | **13.09** | **256** | P | **Pn** | **10 33 52.7** | **+0.1** |
| **KSAR** | **Wonju Array Be** | **13.09** | **256** | Pn | **Pn** | **10 33 52.6** | **+0.1** |
| **YAK** | **Yakutsk** | **22.12** | **342** | LR | LR | 10 45 03.4 | |
| | comp=Z,44nm,20.5s,baz=150,slow=30 | | | | | | |
| **SONM** | **Songino Array** | **27.17** | **296** | P | **P** | **10 36 29.5** | **-0.2** |
| | comp=Z,0.7nm,0.4s,baz=74,slow=9.0,SNR=7.9 | | | | | | |
| SONM | | | | LR | LR | 10 47 18.9 | |
| | comp=Z,53nm,20.6s,baz=141,slow=37 | | | | | | |
| **TLY** | **Talaya** | **29.07** | **304** | LR | LR | 10 49 25.3 | |
| | comp=Z,77nm,18.5s,baz=83,slow=39 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.29** | **131** | T | T | 11 07 48.6 | |
| | baz=324,slow=75,SNR=146 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.30** | **131** | T | T | 11 07 52.0 | |
| | baz=324,slow=75,SNR=116 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.30** | **131** | T | T | 11 07 50.0 | |
| | baz=324,slow=75,SNR=113 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.16** | **133** | T | T | 11 08 56.3 | |
| | baz=325,slow=76,SNR=152 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.18** | **133** | T | T | 11 08 54.8 | |
| | baz=325,slow=76,SNR=156 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.18** | **133** | T | T | 11 08 54.7 | |
| | baz=325,slow=76,SNR=101 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.41** | **308** | P | **P** | **10 38 23.8** | **-0.2** |
| | comp=Z,1.1nm,0.4s,baz=101,slow=7.8,SNR=3.6 | | | | | | |
| ZALV | | | | LR | LR | 10 56 34.6 | |
| | comp=Z,37nm,19.5s,baz=68,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.48** | **299** | P | **P** | **10 38 49.2** | **0.0** |
| | comp=Z,1.4nm,0.7s,baz=87,slow=9.7,SNR=7.5 | | | | | | |
| MKAR | | | | LR | LR | 10 58 19.1 | |
| | comp=Z,22nm,19.2s,baz=44,slow=38 | | | | | | |
| **ILAR** | **Eielson Array** | **44.56** | **35** | P | **P** | **10 38 59.0** | **+1.4** |
| | comp=Z,0.4nm,0.8s,baz=281,slow=9.8,SNR=4.7 | | | | | | |
| **KURK** | **Kurchatov** | **44.76** | **305** | P | **P** | **10 38 59.4** | **0.0** |
| **KURK** | **Kurchatov** | **44.76** | **305** | P | **P** | **10 38 59.4** | **0.0** |
| **KURBB** | **Kurchatov Arra** | **44.84** | **305** | P | **P** | **10 38 59.4** | **-0.6** |
| | comp=Z,2.2nm,0.7s,baz=77,slow=8.7,SNR=13 | | | | | | |
| **BVAR** | **Borovoye Array** | **49.01** | **310** | P | **P** | **10 39 32.1** | **-0.6** |
| | comp=Z,1.0nm,0.4s,baz=88,slow=12,SNR=5.0 | | | | | | |
| **TKM2** | **Tokmak 2** | **49.27** | **296** | *e*P | **P** | **10 39 35.1** | **+0.1** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **49.27** | **296** | *e*P | **P** | **10 39 35.1** | **+0.1** |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **52.60** | **298** | *e*P | **P** | **10 39 59.3** | **-0.5** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **KKAR** | **Karatay Array** | **52.60** | **298** | *e*P | **P** | **10 39 59.3** | **-0.5** |
| | comp=Z,1.1nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **56.52** | **309** | *e*P | **P** | **10 40 27.7** | **-0.4** |
| | comp=Z,0.9nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **61.94** | **190** | P | **P** | **10 41 05.4** | **-0.4** |
| | comp=Z,0.1nm,0.4s,baz=7.8,slow=6.9,SNR=7.3 | | | | | | |
| **FINES** | **FINESS Array B** | **65.64** | **332** | P | **P** | **10 41 29.8** | **0.0** |
| | comp=Z,0.9nm,0.6s,baz=48,slow=8.5,SNR=8.8 | | | | | | |
| **ASAR** | **Alice Springs** | **65.66** | **190**

**IDC 27 10:39:31.7±7.7, 2°85S×99°54E, h0km, mb3.3/4, mb1 3.6/4, mb1mx3.4/52, mbtmp3.4/4, MS3.0/1, Ms1 3.0/1, ms1mx2.4/20, Error ellipse: s-maj=256.4km s-min=24.5km az=63.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.18** | **358** | P | P | 10 44 18.0 | -0.8 |
| | 0.9nm,0.5s,baz=194,slow=11,SNR=4.7 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.34** | **259** | T | T | 11 14 00.2 | |
| | baz=80,slow=75,SNR=97 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.35** | **259** | T | T | 11 14 00.8 | |
| | baz=80,slow=75,SNR=93 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.36** | **259** | T | T | 11 13 49.6 | |
| | baz=80,slow=75,SNR=70 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.64** | **159** | T | T | 11 23 00.8 | |
| | baz=335,slow=76,SNR=7.3 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.66** | **159** | T | T | 11 22 58.5 | |
| | baz=335,slow=76,SNR=8.4 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.66** | **159** | T | T | 11 23 06.0 | |
| | baz=335,slow=76,SNR=5.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.98** | **119** | P | P | 10 46 50.9 | -0.7 |
| | 0.1nm,0.8s,baz=288,slow=11,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **39.14** | **125** | P | P | 10 47 01.8 | +0.4 |
| | 0.2nm,0.3s,baz=298,slow=7.6,SNR=7.9 | | | | | | |
| **SONM** | **Songino Array** | **50.83** | **6** | P | P | 10 48 34.5 | +0.4 |
| | 0.4nm,0.5s,baz=182,slow=9.9,SNR=3.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.91** | **350** | LR | LR | 11 15 53.6 | |
| | comp=Z,12nm,18.3s,baz=72,slow=38 | | | | | | |

**IDC 27 10:43:29.4±4.0, 2°70S×99°83E, h0km, mb3.6/4, mb1 3.8/4, mb1mx3.5/45, mbtmp3.6/4, Error ellipse: s-maj=159.9km s-min=26.3km az=61.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.04** | **358** | P | P | 10 48 13.9 | -1.1 |
| | 0.9nm,0.4s,baz=190,slow=9.7,SNR=4.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.65** | **259** | T | T | 11 17 56.3 | |
| | baz=80,slow=75,SNR=88 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.66** | **259** | T | T | 11 17 56.9 | |
| | baz=80,slow=75,SNR=102 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.67** | **259** | T | T | 11 17 52.4 | |
| | baz=80,slow=75,SNR=96 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.68** | **159** | T | T | 11 27 06.3 | |
| | baz=333,slow=74,SNR=2.9 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.69** | **159** | T | T | 11 27 14.6 | |
| | baz=333,slow=74,SNR=4.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.69** | **159** | T | T | 11 27 11.5 | |
| | baz=333 | | | | | | |
| **ASAR** | **Alice Springs** | **38.99** | **125** | P | P | 10 50 57.5 | -0.4 |
| | 0.2nm,0.3s,baz=299,slow=7.6,SNR=11 | | | | | | |
| **SONM** | **Songino Array** | **50.63** | **6** | P | P | 10 52 31.5 | +1.0 |
| | 0.6nm,0.6s,baz=185,slow=7.7,SNR=4.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.65** | **345** | P | P | 10 52 37.5 | -0.5 |
| | 0.6nm,0.4s,baz=166,slow=7.5,SNR=3.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.36** | **38** | PKPbc | PKPbc | 11 03 09.5 | -0.6 |
| | 0.1nm,0.5s,baz=205,slow=0.5,SNR=4.9 | | | | | | |

*NNC **27** 10:55:44.7±2.7, 41°.23N×71°.88E, h0km, mb2.5, mpv2.3, Error ellipse: s-maj=27.4km s-min=14.9km az=132.0*
*KRNET **27** 10:55:46.3±0.1, 41°.58N×71°.62E, h16km, mb1.9*

**ISC 27 10:55:47.0±1.2, 41°.52N±0°.04×71°.70E±0°.05, h8km±12km, n13, σ1°45/22, 21C-3D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ARK** | **Arkit** | **0.34** | **36** | ⇑*i*P | **Pg** | **10 55 52.8** | **-1.0** |
| ARK | baz=52 | | | ⇑*i*S | **Sg** | **10 55 57.9** | **-0.4** |
| | baz=52 | | | | | | |
| **ARSB** | **Arslanbob** | **0.99** | **101** | ⇑*i*P | **Pg** | **10 56 07.1** | **+1.1** |
| ARSB | baz=103 | | | ⇑*i*S | **Sn** | **10 56 21.1** | **-0.5** |
| | baz=103 | | | | | | |
| **MNAS** | **Manas** | **1.14** | **32** | ⇑P | **Pg** | **10 56 08.2** | **-0.6** |
| MNAS | 0.5nm,0.3s | | | ⇓S | **Sg** | **10 56 28.7** | **+5.0** |
| | 0.9nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **1.14** | **32** | ⇑*i*P | **Pg** | **10 56 08.6** | **-0.3** |
| MNAS | baz=36 | | | ⇑*i*S | **Sg** | **10 56 23.9** | **+0.3** |
| | baz=36 | | | | | | |
| **BTK** | **Batken** | **1.61** | **205** | ⇑*i*P | **Pb** | **10 56 16.3** | **-0.7** |
| BTK | baz=202 | | | ⇑*i*S | **Sg** | **10 56 39.0** | **+0.4** |
| | baz=202 | | | | | | |
| **AML** | **Almayashu** | **1.61** | **67** | ⇑*i*P | **Pn** | **10 56 15.8** | **-0.4** |
| AML | baz=69 | | | ⇑*i*S | **Sb** | **10 56 38.7** | **+0.7** |
| | baz=69 | | | | | | |
| **KK31** | **Karatay Array** | **1.81** | **331** | ⇓Pn | **Pg** | **10 56 22.1** | **+0.4** |
| KK31 | 0.9nm,0.3s,baz=143,slow=14,SNR=24 | | | Sn | Sg | 10 56 49.5 | +4.3 |
| | 3.1nm,0.3s,baz=140,slow=27,SNR=5.0 | | | | | | |
| **EKS2** | **Erkin-Say** | **1.92** | **53** | ⇑*i*P | **Pg** | **10 56 22.7** | **-1.2** |
| EKS2 | baz=55 | | | ⇑*i*S | **Sg** | **10 56 48.0** | **-0.8** |
| | baz=55 | | | | | | |
| **ARLS** | **Aral** | **2.00** | **79** | ⇑*e*P | **Pb** | **10 56 23.2** | **-0.5** |
| ARLS | baz=81 | | | ⇑*i*S | **Sb** | **10 56 50.1** | **+1.3** |
| | baz=81 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.04** | **137** | ⇑*i*P | **Pb** | **10 56 23.6** | **-0.8** |
| SFK | baz=137 | | | ⇑*i*S | **Sb** | **10 56 50.8** | **+0.8** |
| | baz=137 | | | | | | |
| **UCH** | **Uchtor** | **2.22** | **71** | ⇑*i*P | **Pb** | **10 56 26.3** | **-1.4** |
| UCH | baz=72 | | | ⇑*i*S | **Sb** | **10 56 56.4** | **+0.9** |
| | baz=72 | | | | | | |
| **AAK** | **Ala-Archa** | **2.36** | **61** | ⇓Pg | **Pb** | **10 56 29.6** | **-0.3** |
| AAK | 1.2nm,0.4s | | | ⇑Lg | Lg | 10 57 01.6 | |
| | 1.8nm,0.5s | | | | | | |
| **DZET** | **Dzherino** | **3.49** | **220** | ⇑Lg | Lg | 10 57 33.9 | |
| | 21nm,0.4s | | | | | | |

**IDC 27 11:08:17.0±6.3, 43°.90N×45°.40E, h0km, Error ellipse: s-maj=221.1km s-min=42.4km az=174.0, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBZ** | **Khabaz** | **1.82** | **265** | Pg | Pg | 11 08 53.3 | +1.5 |
| KBZ | 0.8nm,0.3s,baz=93,slow=5.5,SNR=14 | | | Lg | Lg | 11 09 14.1 | |
| | 0.3nm,0.3s,baz=234,slow=19,SNR=4.1 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **10.78** | **48** | *i* | | 12 09 10.0 | |
| | baz=232,slow=316,SNR=0.8 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **27.45** | **55** | *i* | | 13 54 20.0 | |
| | baz=268,slow=314,SNR=2.6 | | | | | | |

**CSEM 27 11:10:14.0, 37°.36N×12°.24E, h10km, ML3.5/1, After ROM, Sicily**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MTGR** | **Montagna Grand** | **0.67** | **38** | Pg | Pb | 11 10 28.3 | +0.4 |
| | 45nm,0.2s | | | | | | |
| **MFNL** | **Monte Finestre** | **0.69** | **52** | Pg | Pb | 11 10 28.9 | +0.6 |
| MFNL | | | | Sg | Sb | 11 10 37.6 | -0.4 |
| **CRJA** | **Costa Raja** | **0.75** | **54** | Pg | Pg | 11 10 27.0 | -1.6 |
| CRJA | | | | Sg | Sg | 11 10 38.9 | +0.4 |
| | 542nm,0.2s | | | | | | |
| **CLTB** | **Caltabellotta** | **0.81** | **74** | Pg | Pg | 11 10 28.3 | -1.5 |
| | 1μm,0.4s | | | | | | |
| **CORL** | **Corleone** | **1.00** | **58** | Pg | Pg | 11 10 32.2 | -1.1 |
| **FAVR** | **Favara** | **1.15** | **94** | Pg | Pb | 11 10 35.9 | 0.0 |
| **ALJA** | **Alia** | **1.27** | **72** | Pg | Pn | 11 10 37.3 | -0.5 |

*BJI **27** 11:15:24.9, 3°.50S×99°.50E, h10km, mb4.7/8, Ms7 4.7/1*
*IDC **27** 11:15:25.6±0.7, 3°.55S×99°.44E, h0km, mb4.3/17, mb1 4.4/19, mb1mx4.1/54, mbtmp4.3/19, ML3.8/2, MS3.2/9, Ms1 3.2/9, ms1mx2.9/37, Error ellipse: s-maj=22.2km s-min=13.3km az=61.0*
*NEIC **27** 11:15:26.9±0.5, 3°.55S×99°.50E, h10km, mb4.5/3, Error ellipse: s-maj=15.5km s-min=7.2km az=49.0*
*ISCJB **27** 11:15:28.7±0.4, 3°.48S±0°.04×99°.60E±0°.04, h33km, mb4.3/20, MS3.1/9, Error ellipse: s-maj=7.4km s-min=4.1km az=135.3*
*DJA **27** 11:15:30.5±0.7, 3°S±5°×10°0E±°, h44km±22km, M4.7/9, mb5.3/1, MLv4.5/9*

**ISC 27 11:15:31.0±0.6, 3°.46S±0°.06×99°.59E±0°.07, h35km, n60, σ1°13/57, mb4.4/20, MS3.2/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.81** | **31** | P | **Pn** | **11 15 45.6** | **-0.4** |
| **SISI** | **Saibi** | **2.18** | **347** | P | **Pn** | **11 16 02.0** | **-2.8** |
| SISI | | | | S | **Sn** | **11 16 30.5** | **-0.1** |
| **MASI** | **Maura Aman, Be** | **2.67** | **83** | P | **Pn** | **11 16 08.6** | **-3.0** |
| MASI | | | | S | **Sn** | **11 16 44.1** | **+1.3** |
| **PDSI** | **Padang** | **2.68** | **19** | P | **Pn** | **11 16 11.1** | **-0.7** |
| **KSI** | **Kapahiang** | **3.01** | **94** | P | **Pn** | **11 16 13.9** | **-2.4** |
| KSI | | | | S | **Sn** | **11 16 51.2** | **+0.1** |
| **PPI** | **Padang Panjang** | **3.10** | **15** | P | **Pn** | **11 16 16.3** | **-1.1** |
| PPI | | | | S | **Sn** | **11 16 50.7** | **-2.5** |
| **SDSI** | **Sungai Dareh** | **3.12** | **36** | P | **Pn** | **11 16 18.0** | **+0.3** |
| **MNAI** | **Manna** | **3.48** | **105** | P | **Pn** | **11 16 21.8** | **-0.9** |
| **LHSI** | **Lahat** | **3.95** | **95** | P | **Pn** | **11 16 28.1** | **-1.0** |
| **BKNI** | **Bangkinang** | **4.04** | **21** | P | **Pn** | **11 16 28.9** | **-1.5** |
| **RGRI** | **Rengat** | **4.14** | **42** | P | **Pn** | **11 16 31.0** | **-0.8** |
| **MNSI** | **Mandailing Nat** | **4.23** | **360** | P | **Pn** | **11 16 32.6** | **-0.4** |
| **MDSI** | **Maura Dua** | **4.69** | **103** | P | **Pn** | **11 16 39.1** | **-0.3** |
| **LWLI** | **Liwa** | **4.72** | **109** | P | **Pn** | **11 16 38.9** | **-1.0** |
| **GSI** | **Gunungsitoli** | **5.14** | **337** | P | **Pn** | **11 16 45.0** | **-0.6** |
| **PMBI** | **Palembang** | **5.21** | **84** | P | **Pn** | **11 16 44.7** | **-1.8** |
| **KASI** | **Kota Agung** | **5.31** | **113** | P | **Pn** | **11 16 47.2** | **-0.6** |
| **PSI** | **Prapat** | **6.26** | **354** | Pn | **Pn** | **11 16 58.6** | **-2.4** |
| | 0.3nm,0.3s,baz=308,slow=15,SNR=7.0 | | | | | | |
| **LEM** | **Lembang** | **8.67** | **113** | Pn | **Pn** | **11 17 34.4** | **+0.2** |
| | 6.3nm,0.3s,baz=166,slow=20,SNR=4.7 | | | | | | |
| LEM | | | | Sn | **Sn** | **11 19 10.7** | **-0.2** |
| | 2.6nm,0.3s,baz=307,slow=20,SNR=2.1 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.14** | **117** | *e*Pn | Pn | 11 17 37.5 | -3.2 |
| | 170nm,0.6s | | | | | | |
| CISI | | | | *e*Sn | Sn | 11 19 10.3 | -12 |
| **KAPI** | **Kappang** | **20.17** | **95** | P | **P** | **11 20 03.2** | **+0.5** |
| | 25nm,1.1s,baz=251,slow=11,SNR=3.5 | | | | | | |
| KAPI | | | | LR | LR | 11 28 43.3 | |
| | comp=Z,32nm,19.5s,baz=283,slow=39 | | | | | | |
| **PALK** | **Pallekele** | **21.65** | **300** | LR | LR | 11 27 15.4 | |
| | comp=Z,35nm,19.9s,baz=116,slow=33 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.79** | **358** | P | **P** | **11 20 20.9** | **+0.7** |
| | 9.5nm,0.8s,baz=189,slow=9.8,SNR=53 | | | | | | |
| CMAR | | | | LR | LR | 11 27 46.8 | |
| | comp=Z,42nm,20.5s,baz=145,slow=34 | | | | | | |
| **BATI** | **Baumata** | **24.81** | **107** | P | **P** | **11 20 48.2** | **-2.0** |
| | 23nm,0.6s,baz=281,slow=10,SNR=3.1 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.28** | **260** | T | T | 11 51 23.0 | |
| | baz=80,slow=75,SNR=12 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.28** | **260** | T | T | 11 51 10.7 | |
| | baz=80,slow=75,SNR=10.0 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.29** | **260** | T | T | 11 51 24.8 | |
| | baz=80,slow=75,SNR=12 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.06** | **158** | T | T | 11 58 43.4 | |
| | baz=333,slow=74,SNR=2.8 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.07** | **158** | T | T | 11 58 51.2 | |
| | baz=333,slow=74,SNR=3.3 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.07** | **158** | T | T | 11 58 35.1 | |
| | baz=333 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.64** | **119** | P | **P** | **11 22 42.7** | **-0.3** |
| | 2.5nm,0.8s,baz=301,slow=9.0,SNR=37 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.64** | **119** | *e*P | **P** | **11 22 42.5** | **-0.5** |
| | 3.8nm,0.6s | | | | | | |
| **XAN** | **Xi'an** | **38.33** | **13** | P | **P** | **11 22 48.5** | **-0.1** |
| XAN | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **38.75** | **124** | P | **P** | **11 22 52.5** | **+0.1** |
| | 3.1nm,0.9s,baz=298,slow=7.7,SNR=35 | | | | | | |
| ASAR | | | | PcP | **PcP** | **11 25 03.9** | **+0.2** |
| | 0.5nm,0.6s,baz=293,slow=2.7,SNR=4.3 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **45.44** | **13** | *e*P | **P** | **11 23 48.0** | **+1.3** |
| HHC | | | | PMZ | | | |
| | 21nm,1.1s | | | | | | |
| **JNU** | **Nakatsue** | **46.91** | **37** | LR | LR | 11 44 13.4 | |
| | comp=Z,32nm,19.3s,baz=213,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **47.61** | **100** | LR | LR | 11 47 49.3 | |
| | comp=Z,23nm,18.1s,baz=264,slow=41 | | | | | | |
| **CTA** | **Charters Tower** | **48.37** | **114** | P | **P** | **11 24 10.5** | **+0.6** |
| | 5.1nm,0.9s,baz=232,slow=4.1,SNR=3.7 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.45** | **30** | P | **P** | **11 24 11.0** | **+0.8** |
| **KSRS** | **Korea Array** | **48.48** | **30** | P | **P** | **11 24 11.0** | **+0.6** |
| | 4.8nm,0.9s,baz=220,slow=8.5,SNR=13 | | | | | | |
| KSRS | | | | LR | LR | 11 44 13.1 | |
| | comp=Z,26nm,21.1s,baz=196,slow=36 | | | | | | |
| **TKM2** | **Tokmak 2** | **51.01** | **337** | *e*P | **P** | **11 24 29.7** | **-0.1** |
| | 5.6nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **51.43** | **6** | P | **P** | **11 24 34.2** | **+1.4** |
| | 4.0nm,0.7s,baz=190,slow=8.4,SNR=25 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.32** | **345** | P | **P** | **11 24 39.5** | **+0.2** |
| | 3.3nm,0.7s,baz=150,slow=8.5,SNR=17 | | | | | | |
| MKAR | | | | LR | LR | 11 48 49.2 | |
| | comp=Z,13nm,18.2s,baz=37,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.67** | **39** | P | **P** | **11 24 49.1** | **-0.3** |
| | 3.3nm,0.9s,baz=221,slow=8.4,SNR=6.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.63** | **28** | P | **P** | **11 25 04.4** | **+0.9** |
| | 4.1nm,0.8s,baz=223,slow=7.9,SNR=6.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.52** | **350** | P | **P** | **11 25 24.1** | **+0.4** |
| | 6.7nm,0.7s,baz=185,slow=6.0,SNR=13 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.72** | **332** | *e*P | **P** | **11 25 51.3** | **-1.1** |
| | 1.0nm,0.3s | | | | | | |
| **MAW** | **Mawson** | **68.77** | **194** | P | **P** | **11 26 30.6** | **-0.6** |
| | 0.6nm,0.8s,baz=40,slow=12,SNR=3.2 | | | | | | |
| MAW | | | | LR | LR | 11 50 07.9 | |
| | comp=Z,34nm,21.5s,baz=72,slow=30 | | | | | | |
| **KBZ** | **Khabaz** | **69.14** | **320** | P | **P** | **11 26 33.6** | **-0.3** |
| | 1.7nm,0.3s,baz=158,slow=3.6,SNR=6.0 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.00** | **313** | P | **P** | **11 27 02.0** | **-1.4** |
| | 1.1nm,0.7s,baz=130,slow=5.5,SNR=5.2 | | | | | | |
| **PETK** | **Petropavlovsk-** | **74.34** | **32** | P | **P** | **11 27 05.1** | **+0.1** |
| | 5.1nm,1.0s,baz=198,slow=4.2,SNR=2.7 | | | | | | |
| **BOSA** | **Boshof** | **74.59** | **241** | LR | LR | 11 52 35.8 | |
| | comp=Z,27nm,21.1s,baz=122,slow=30 | | | | | | |
| **VNDA** | **Vanda** | **80.81** | **169** | P | **P** | **11 27 40.8** | **+0.1** |
| | 0.7nm,1.0s,baz=285,slow=5.5,SNR=3.7 | | | | | | |
| **KOLS** | **Kolonicke sedl** | **84.29** | **320** | *e*P | **P** | **11 28 00.3** | **+0.9** |
| **STHS** | **Stebnicka Huta** | **85.05** | **320** | *e*P | **P** | **11 28 03.6** | **+0.4** |
| **FINES** | **FINESS Array B** | **85.21** | **332** | P | **P** | **11 28 03.1** | **-0.5** |
| | 0.7nm,0.6s,baz=67,slow=11,SNR=3.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.99** | **40** | PKP | **PKPdf** | **11 34 41.6** | **+1.9** |
| | 0.4nm,0.7s,baz=267,slow=2.5,SNR=3.6 | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.51** | **27** | *e*PKPdf | **PKPab** | **11 35 02.5** | **-0.3** |
| **TXAR** | **Lajitas Array** | **146.10** | **38** | PKPbc | **PKPab** | **11 35 09.2** | **+0.3** |
| | 3.5nm,0.7s,baz=291,slow=1.2,SNR=54 | | | | | | |
| **JCT** | **Junction City** | **147.48** | **32** | *e*PKPdf | **PKPdf** | **11 35 09.6** | **0.0** |
| JCT | | | | *e*PKPbc | **PKPbc** | **11 35 12.5** | **+0.3** |
| JCT | | | | *e*PKPab | **PKiKP** | **11 35 15.4** | **+1.1** |

*ISCJB **27** 11:16:05.9±0.7, 38°.65N±0°.04×25°.37E±0°.06, h13km, Error ellipse: s-maj=6.8km s-min=5.4km az=163.4*
*ISK **27** 11:16:05.7, 38°.54N×25°.93E, h10km, ML2.5*
*CSEM **27** 11:16:06.5±0.3, 38°.65N×25°.41E, h15km, MD2.9, Error ellipse: s-maj=8.2km s-min=6.7km az=74.0*
*ATH **27** 11:16:06.7, 38°.69N×25°.50E, h36km±5km, MD2.9/5*
*DDA **27** 11:16:10.5, 38°.68N×25°.72E, h7km, Md2.8*

**ISC 27 11:16:05.8±0.9, 38°.67N±0°.03×25°.41E±0°.05, h13km, n22, σ0°84/32, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHOS** | **Chios island** | **0.58** | **119** | *e*PN | **Pn** | **11 16 18.4** | **-1.4** |
| CHOS | | | | *e*SN | **Sb** | **11 16 26.4** | **+0.5** |
| **CHOS** | **Chios island** | **0.58** | **119** | *e*Pn | **Pn** | **11 16 18.4** | **-1.4** |
| CHOS | | | | *e*Sn | **Sb** | **11 16 26.4** | **+0.5** |
| **SIGR** | **SIGRI** | **0.64** | **32** | *e*PG | **Pn** | **11 16 19.3** | **-1.3** |
| **SIGR** | **SIGRI** | **0.64** | **32** | *e*PN | **Pn** | **11 16 19.3** | **-1.3** |
| SIGR | | | | *e*SN | **Sb** | **11 16 28.1** | **+0.4** |
| **SIGR** | **SIGRI** | **0.64** | **32** | *e*Pg | **Pn** | **11 16 19.3** | **-1.3** |
| SIGR | | | | *e*Sn | **Sb** | **11 16 28.1** | **+0.4** |
| **PRK** | **Paraskevi** | **0.88** | **49** | *e*PN | **Pn** | **11 16 23.3** | **-0.6** |
| **PRK** | **Paraskevi** | **0.88** | **49** | *e*Pn | **Pn** | **11 16 23.3** | **-0.6** |
| **ZEY** | **˙zmir** | **0.96** | **116** | P | **Pn** | **11 16 25.1** | **+0.2** |
| ZEY | | | | S | **Sn** | **11 16 37.9** | **-0.5** |
| **URLA** | **Izmir** | **0.98** | **108** | *i* S | **Sn** | **11 16 39.9** | **+0.9** |
| **URLA** | **Izmir** | **0.98** | **108** | P | **Pn** | **11 16 25.9** | **+0.6** |
| URLA | | | | S | **Sn** | **11 16 39.9** | **+0.9** |
| **AYVA** | **Ayvalik** | **1.18** | **57** | *i* P | **Pg** | **11 16 29.0** | **+0.5** |
| AYVA | | | | *i* S | **Sn** | **11 16 43.5** | **-0.4** |
| **AYVA** | **Ayvalik** | **1.18** | **57** | P | **Pg** | **11 16 29.0** | **+0.5** |
| AYVA | | | | S | **Sn** | **11 16 43.5** | **-0.4** |
| **LIA** | **Limnos Island** | **1.24** | **352** | *e*PN | **Pn** | **11 16 29.0** | **+0.2** |
| **LIA** | **Limnos Island** | **1.24** | **352** | *e*Pn | **Pn** | **11 16 29.0** | **+0.2** |
| **AOS** | **Alonnisos** | **1.30** | **293** | *e*PN | **Pb** | **11 16 31.0** | **+1.0** |
| **AOS** | **Alonnisos** | **1.30** | **293** | *e*Pn | **Pb** | **11 16 31.0** | **+1.0** |
| **EZN** | **Ezine** | **1.35** | **31** | *e*PN | **Pg** | **11 16 30.8** | **-1.0** |
| **EZN** | **Ezine** | **1.35** | **31** | *e*Pn | **Pg** | **11 16 30.8** | **-1.0** |
| **GADA** | **Gvkgeada** | **1.56** | **14** | *e*PN | **Pg** | **11 16 35.5** | **-0.3** |
| **GADA** | **Gvkgeada** | **1.56** | **14** | *e*Pn | **Pg** | **11 16 35.5** | **-0.3** |
| **APE** | **Apeiranthos** | **1.60** | **177** | *e*PN | **Pn** | **11 16 33.3** | **-0.5** |
| APE | | | | *e*SN | **Sn** | **11 16 53.3** | **-1.1** |
| **APE** | **Apeiranthos** | **1.60** | **177** | *e*Pn | **Pn** | **11 16 33.3** | **-0.5** |
| APE | | | | *e*Sn | **Sn** | **11 16 53.3** | **-1.1** |

**IDC 27 11:26:54.7±1.6, 4°.76N×127°.40E, h0km, mb3.4/3, mb1 3.6/3, mb1mx3.3/44, mbtmp3.4/3, Error ellipse: s-maj=196.3km s-min=25.1km az=74.0, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **25.48** | **165** | P | P | 11 32 25.4 | +0.6 |
| | 0.7nm,0.7s,baz=344,slow=9.9,SNR=7.8 | | | | | | |
| **ASAR** | **Alice Springs** | **28.96** | **168** | P | P | 11 32 55.5 | -0.6 |
| | 0.1nm,0.3s,baz=355,slow=7.4,SNR=3.4 | | | | | | |
| **SONM** | **Songino Array** | **46.55** | **341** | P | P | 11 35 24.2 | -0.1 |
| | 0.5nm,0.6s,baz=148,slow=8.5,SNR=3.3 | | | | | | |

*IDC **27** 11:29:35.1±2.8, 26°.11S×67°.46W, h0km, mb3.6/3, mb1 3.9/4, mb1mx3.7/21, mbtmp3.7/4, ML3.8/1, Error ellipse: s-maj=71.8km s-min=34.8km az=18.0*
*SJA **27** 11:30:04.6±0.8, 24°.02S×66°.92W, h219km±16km, ML2.5*
*ISCJB **27** 11:30:05.6±1.1, 24°.06S±0°.06×67°.3W±0°.1, h181km, mb3.1/2, Error ellipse: s-maj=17.4km s-min=7.4km az=171.6*

**ISC 27 11:30:05.9±1.4, 24°.03S±0°.07×67°.0W±0°.2, h181km, n10, σ2°01/13, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **1.56** | **117** | *i* P | **Pn** | **11 30 40.6** | **+1.9** |
| SLA | | | | AML | AML | 11 31 00.7 | |
| | comp=Z,21nm,0.6s | | | | | | |
| **HJA** | **Humahuaca** | **1.70** | **62** | *i* P | **Pn** | **11 30 41.8** | **+1.5** |
| **AZAP** | **Zapla** | **1.81** | **97** | *i* P | **Pn** | **11 30 42.2** | **+0.9** |
| **FSA** | **Cafayete** | **2.26** | **156** | *i* P | **Pn** | **11 30 47.9** | **+1.8** |
| FSA | | | | *i* S | **Sn** | **11 31 19.9** | **+2.5** |
| **YJA** | **Yavi** | **2.31** | **38** | *i* P | **Pn** | **11 30 48.8** | **+1.8** |
| YJA | | | | *i* S | **Sn** | **11 31 21.5** | **+2.6** |
| **AHML** | **Horco Molle** | **3.15** | **151** | *i* P | **Pn** | **11 30 57.2** | **+0.8** |
| AHML | | | | *i* S | **Sn** | **11 31 36.0** | **+0.1** |
| **LPAZ** | **La Paz** | **7.77** | **352** | Pn | **Pn** | **11 31 57.6** | **+0.8** |
| | comp=Z,0.4nm,0.3s,baz=176,slow=8.3,SNR=9.0 | | | | | | |
| **BDFB** | **Brasilia** | **19.73** | **68** | P | **P** | **11 34 19.6** | **-2.3** |
| | comp=Z,5.4nm,0.8s,baz=225,slow=11,SNR=6.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **63.68** | **324** | P | **P** | **11 40 18.2** | **+0.1** |
| | comp=Z,0.1nm,0.6s,baz=152,slow=7.9,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.61** | **69** | P | **P** | **11 41 34.1** | **-2.8** |
| | comp=Z,0.4nm,0.4s,baz=256,slow=6.0,SNR=6.0 | | | | | | |

**IDC 27 11:30:15.8±6.5, 2°.90S×100°.66E, h0km, mb3.3/3, mb1 3.6/3, mb1mx3.3/46, mbtmp3.3/3, Error ellipse: s-maj=241.1km s-min=29.4km az=61.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.29** | **356** | P | P | 11 35 04.7 | +0.5 |
| | 0.6nm,0.3s,baz=185,slow=10.0,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.98** | **120** | P | P | 11 37 27.8 | +0.5 |
| | 0.3nm,0.7s,baz=304,slow=9.2,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.20** | **126** | P | P | 11 37 37.0 | -0.7 |
| | 0.2nm,0.7s,baz=295,slow=8.0,SNR=3.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.00** | **39** | PKPbc | PKPab | 11 49 54.0 | -1.2 |
| | 0.3nm,0.8s,baz=267,slow=2.5,SNR=4.2 | | | | | | |

**IDC 27 11:40:45.0±6.1, 44°.20N×45°.41E, h0km, Error ellipse: s-maj=227.6km s-min=41.8km az=166.0, Ukraine - Moldova - Southwestern Russia region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBZ** | **Khabaz** | **1.87** | **256** | Pg | Pg | 11 41 22.3 | +1.4 |
| | 0.5nm,0.3s,baz=86,slow=6.8,SNR=13 | | | | | | |
| KBZ | | | | Lg | Lg | 11 41 44.0 | |
| | 0.2nm,0.3s,baz=233,slow=20,SNR=3.9 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **10.58** | **50** | *i* | | 12 42 00.0 | |
| | baz=235,slow=313,SNR=3.0 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **27.27** | **55** | *i* | | 14 26 20.0 | |
| | baz=268,slow=321,SNR=0.6 | | | | | | |

*DJA **27** 11:56:29.5±4.3, 4°S±17°×9°9E±2°5, h17km±25km, M3.9/4, mb4.4/4, mB5.4/1, MLv3.6/4, Mw(mB)4.8/1*
*ISCJB **27** 11:56:32.7±1.4, 3°.5S±0°.1×99°.4E±0°.1, h33km, mb3.3/4, Error ellipse: s-maj=23.4km s-min=9.4km az=145.0*
*IDC **27** 11:56:32.3±3.5, 3°.19S×99°.94E, h0km, mb3.4/4, mb1 3.6/4, mb1mx3.4/37, mbtmp3.4/4, Error ellipse: s-maj=142.7km s-min=22.9km az=57.0*

**ISC 27 11:56:35.0±1.5, 3°.4S±0°.1×99°.4E±0°.2, h35km, n13, σ1°20/12, mb3.3/4, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.85** | **44** | P | **Pn** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.36** | **162** | P | | **P** | **12 08 20.3** | **-3.5** |
| | 1.0nm,0.5s,baz=340,slow=11,SNR=29 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.77** | **166** | P | | **P** | **12 08 52.2** | **-3.3** |
| | 0.3nm,0.3s,baz=343,slow=11,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **59.70** | **326** | P | | P | 12 13 25.4 | -2.5 |
| | 0.3nm,0.3s,baz=122,slow=7.6,SNR=4.3 | | | | | | | |

**IDC 27 12:26:00.9±3.9, 2.92S×100.27E, h0km, mb3.3/4, mb1 3.5/4, mb1mx3.4/45, mbtmp3.3/4, Error ellipse: s-maj=161.4km s-min=23.1km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.28** | **357** | P | P | 12 30 51.1 | +2.0 |
| | 0.6nm,0.5s,baz=184,slow=11,SNR=4.7 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.05** | **259** | T | T | 13 02 01.6 | |
| | baz=80 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.05** | **259** | T | T | 13 02 01.9 | |
| | baz=80 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.07** | **259** | T | T | 13 02 04.8 | |
| | baz=80 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.30** | **120** | P | P | 12 33 14.1 | -1.0 |
| | 0.1nm,0.6s,baz=304,slow=9.3,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.50** | **125** | P | P | 12 33 26.3 | +1.1 |
| | 0.2nm,0.7s,baz=298,slow=8.2,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.98** | **344** | P | P | 12 35 11.1 | -0.8 |
| | 0.5nm,0.7s,baz=156,slow=7.4,SNR=2.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.25** | **38** | PKPbc | PKPbc | 12 45 39.6 | -1.5 |
| | 0.2nm,0.7s,baz=352,slow=6.3,SNR=3.5 | | | | | | |

**IDC 27 12:31:15.0±999.0, 52.14N×52.03E, h0km, Error ellipse: s-maj=514.2km s-min=88.5km az=109.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **4.15** | **112** | *i* | | 12 58 40.0 | |
| | baz=297,slow=324,SNR=44 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **19.70** | **72** | *i* | | 14 34 50.0 | |
| | baz=276,slow=319,SNR=2.9 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **34.55** | **75** | *i* | | 16 01 50.0 | |
| | baz=300,slow=325,SNR=0.5 | | | | | | |

*IDC 27 12:34:48.5±1.4, 0.97S×13.27W, h0km, mb4.3/12, mb1 4.3/13, mb1mx4.0/47, mbtmp4.3/13, ML3.5/1, MS3.5/11, Ms1 3.5/11, ms1mx3.3/26, Error ellipse: s-maj=52.7km s-min=29.8km az=110.0*
*ISCJB 27 12:34:49.5±1.1, 0.9S±0.2×13.1W±0.2, h13km, mb4.3/11, MS3.5/10, Error ellipse: s-maj=37.4km s-min=21.2km az=34.4*

**ISC 27 12:34:50.8±1.3, 1.0S±0.2×13.1W±0.3, h13km, n21, σ0.996/13, mb4.5/11, MS3.5/10, North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N2** | **ASCENSION HYDR** | **6.94** | **191** | T | T | 12 43 18.3 | |
| | baz=11,slow=74,SNR=36 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **6.95** | **191** | T | T | 12 43 21.5 | |
| | baz=11,slow=74,SNR=38 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **6.95** | **192** | T | T | 12 43 20.0 | |
| | baz=11,slow=74,SNR=34 | | | | | | |
| **DBIC** | **Dimbokro** | **11.20** | **47** | Pn | **Pn** | **12 37 30.1** | **-0.6** |
| | 0.3nm,0.3s,baz=201,slow=10.0,SNR=9.9 | | | | | | |
| DBIC | | | | Sn | Sn | 12 39 25.8 | -10 |
| | 0.5nm,0.3s,baz=150,slow=20,SNR=4.8 | | | | | | |
| DBIC | | | | LR | LR | 12 41 10.7 | |
| | comp=Z,326nm,20.2s,baz=192,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **20.31** | **46** | P | **P** | **12 39 26.3** | **-0.5** |
| | 3.6nm,0.6s,baz=232,slow=11,SNR=23 | | | | | | |
| TORD | | | | LR | LR | 12 46 36.6 | |
| | comp=Z,242nm,20.2s,baz=245,slow=35 | | | | | | |
| **RCBR** | **Riachuelo** | **23.26** | **258** | LR | LR | 12 47 22.7 | |
| | comp=Z,61nm,18.3s,baz=76,slow=33 | | | | | | |
| **BDFB** | **Brasilia** | **37.40** | **245** | LR | LR | 12 53 44.0 | |
| | comp=Z,320nm,21.9s,baz=70,slow=30 | | | | | | |
| **KEST** | **Kesra** | **42.10** | **28** | LR | LR | 13 01 13.3 | |
| | comp=Z,150nm,18.3s,baz=150,slow=38 | | | | | | |
| **CPUP** | **Villa Florida** | **49.42** | **236** | LR | LR | 13 01 51.8 | |
| | comp=Z,40nm,20.4s,baz=73,slow=33 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **50.34** | **91** | LR | LR | 13 03 47.1 | |
| | comp=Z,72nm,18.2s,baz=67,slow=34 | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **51.67** | **20** | P | **P** | **12 43 57.7** | **0.0** |
| | 3.0nm,0.5s,baz=218,slow=12,SNR=3.2 | | | | | | |
| **GERES** | **GERESS Array B** | **54.78** | **21** | P | **P** | **12 44 20.8** | **+0.4** |
| | 2.6nm,0.7s,baz=196,slow=8.3,SNR=10.0 | | | | | | |
| GERES | | | | LR | LR | 13 08 23.8 | |
| | comp=Z,54nm,18.7s,baz=280,slow=37 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **56.72** | **7** | P | **P** | **12 44 34.0** | **0.0** |
| | 4.1nm,0.7s,baz=180,slow=7.5,SNR=5.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **58.83** | **41** | P | **P** | **12 44 51.5** | **+2.1** |
| | 2.6nm,0.9s,baz=224,slow=6.6,SNR=11 | | | | | | |
| BRTR | | | | LR | LR | 13 11 51.6 | |
| | comp=Z,20nm,18.4s,baz=232,slow=38 | | | | | | |
| **AKASG** | **Malin Array Be** | **62.81** | **29** | P | **P** | **12 45 14.9** | **-1.2** |
| | 0.5nm,0.4s,baz=227,slow=6.2,SNR=5.1 | | | | | | |
| AKASG | | | | LR | LR | 13 13 50.1 | |
| | comp=Z,31nm,20.8s,baz=275,slow=37 | | | | | | |
| **HFS** | **Hagfors** | **64.41** | **14** | P | **P** | **12 45 26.2** | **-0.3** |
| | 5.9nm,0.9s,baz=207,slow=2.9,SNR=7.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **64.62** | **13** | P | **P** | **12 45 27.7** | **-0.2** |
| | 1.5nm,0.8s,baz=205,slow=6.8,SNR=2.8 | | | | | | |
| **KBZ** | **Khabaz** | **66.82** | **41** | P | **P** | **12 45 43.7** | **+1.3** |
| | 3.7nm,0.9s,baz=257,slow=6.5,SNR=6.7 | | | | | | |
| **FINES** | **FINESS Array B** | **69.06** | **19** | P | **P** | **12 45 55.9** | **-0.3** |
| | 2.0nm,0.6s,baz=199,slow=5.2,SNR=6.4 | | | | | | |
| **GEYT** | **Alibeck** | **75.87** | **51** | P | **P** | **12 46 37.8** | **+0.5** |
| | 1.8nm,0.7s,baz=280,slow=8.9,SNR=4.1 | | | | | | |
| GEYT | | | | LR | LR | 13 21 25.0 | |
| | comp=Z,43nm,21.2s,baz=280,slow=37 | | | | | | |
| **QSPA** | **South Pole Qui** | **89.09** | **180** | P | **P** | **12 47 45.2** | **-0.5** |
| | 3.2nm,1.0s,baz=232,slow=2.9,SNR=6.4 | | | | | | |

*ISCJB 27 12:35:46.4±1.0, 3.21S±0.06×99.53E±0.09, h35km, mb3.5/5, Error ellipse: s-maj=14.2km s-min=6.6km az=152.6*
*IDC 27 12:35:47.1±3.8, 2.80S×100.28E, h0km, mb3.5/5, mb1 3.7/5, mb1mx3.5/50, mbtmp3.5/5, Error ellipse: s-maj=142.7km s-min=21.4km az=59.0*
*DJA 27 12:35:48.3±1.1, 3.3°S±7.7×10.0E±1.2, h45km±11km, M4.0/6, mb4.2/1, MLv3.9/6*

**ISC 27 12:35:48.5±1.2, 3.18S±0.08×99.5E±0.1, h35km, n18, σ1.813/16, mb3.6/5, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.64** | **49** | P | **Pn** | **12 36 00.2** | **-1.0** |
| PPSI | | | | S | **Sn** | **12 36 10.7** | **+0.6** |
| **SISI** | **Saibi** | **1.90** | **347** | P | **Pn** | **12 36 17.0** | **-1.4** |
| SISI | | | | S | **Sn** | **12 36 40.5** | **-0.6** |
| **PDSI** | **Padang** | **2.44** | **23** | P | **Pn** | **12 36 24.6** | **-1.4** |
| **MASI** | **Maura Aman, Be** | **2.71** | **89** | P | Pn | 12 36 25.1 | -4.6 |
| **PPI** | **Padang Panjang** | **2.85** | **18** | P | **Pn** | **12 36 30.3** | **-1.2** |
| **SDSI** | **Sungai Dareh** | **2.94** | **40** | P | **Pn** | **12 36 32.5** | **-0.3** |
| **MNAI** | **Manna** | **3.62** | **109** | P | **Pn** | **12 36 40.9** | **-1.3** |
| **MNSI** | **Mandailing Nat** | **3.95** | **1** | P | Pn | 12 36 40.2 | -6.5 |
| MNSI | | | | S | **Sn** | **12 37 30.9** | **-1.0** |
| **MDSI** | **Maura Dua** | **4.82** | **106** | P | **Pn** | **12 36 56.8** | **-1.9** |
| **KASI** | **Kota Agung** | **5.48** | **115** | P | **Pn** | **12 37 07.0** | **-0.7** |
| **CMAR** | **Chiang Mai Arr** | **21.51** | **358** | P | **P** | **12 40 35.2** | **+0.6** |
| | 1.0nm,0.4s,baz=184,slow=8.9,SNR=3.3 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.26** | **260** | T | T | 13 10 37.5 | |
| | baz=81,slow=75,SNR=10 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.27** | **260** | T | T | 13 10 38.4 | |
| | baz=81,slow=75,SNR=12 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.28** | **260** | T | T | 13 10 40.7 | |
| | baz=81,slow=75,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.83** | **119** | P | **P** | **12 43 02.1** | **0.0** |
| | 0.2nm,0.5s,baz=303,slow=9.7,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.96** | **125** | P | **P** | **12 43 11.6** | **-0.1** |
| | 0.2nm,0.5s,baz=298,slow=7.3,SNR=7.3 | | | | | | |
| **SONM** | **Songino Array** | **51.16** | **6** | P | **P** | **12 44 48.9** | **+0.6** |
| | 0.4nm,0.6s,baz=187,slow=10,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.04** | **345** | P | **P** | **12 44 56.1** | **+1.4** |
| | 1.1nm,0.6s,baz=144,slow=10.0,SNR=6.0 | | | | | | |

**WEL 27 12:36:53.6±0.1, 44.44S×169.55E, h5km, ML3.6/13, 4C-4D, Error ellipse: s-maj=1.2km s-min=1.1km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LBZ** | **Lake Benmore** | **0.46** | **83** | ⇑P | Pg | 12 37 02.7 | +0.3 |
| LBZ | | | | SG | Sg | 12 37 09.0 | +0.5 |
| LBZ | | | | AML | AML | 12 37 09.2 | |
| LBZ | | | | AML | AML | 12 37 09.4 | |
| LBZ | | | | AML | AML | 12 37 09.5 | |
| **WKZ** | **Wanaka** | **0.54** | **224** | PG | Pg | 12 37 04.2 | +0.2 |
| WKZ | | | | SG | Sg | 12 37 11.4 | +0.2 |
| WKZ | | | | AML | AML | 12 37 14.0 | |
| WKZ | | | | AML | AML | 12 37 16.4 | |
| WKZ | | | | AML | AML | 12 37 17.0 | |
| **JCZ** | **Jackson Bay** | **0.68** | **303** | ⇓P* | Pg | 12 37 06.6 | -0.1 |
| JCZ | | | | AML | AML | 12 37 07.6 | |
| JCZ | | | | AML | AML | 12 37 07.8 | |
| **EAZ** | **Earnscleugh** | **0.81** | **192** | ⇑P* | Pg | 12 37 08.7 | -0.4 |
| EAZ | | | | AML | AML | 12 37 23.3 | |
| EAZ | | | | AML | AML | 12 37 23.4 | |
| EAZ | | | | AML | AML | 12 37 24.1 | |
| EAZ | | | | AML | AML | 12 37 24.2 | |
| **FOZ** | **Fox Glacier** | **0.88** | **7** | ⇓P* | Pg | 12 37 10.6 | +0.1 |
| FOZ | | | | AML | AML | 12 37 29.2 | |
| FOZ | | | | AML | AML | 12 37 29.2 | |
| FOZ | | | | AML | AML | 12 37 30.0 | |
| **ODZ** | **Otahua Downs** | **0.98** | **128** | ⇓P* | Pg | 12 37 11.9 | -0.5 |
| ODZ | | | | AML | AML | 12 37 28.7 | |
| ODZ | | | | AML | AML | 12 37 28.7 | |
| ODZ | | | | AML | AML | 12 37 29.0 | |
| ODZ | | | | AML | AML | 12 37 29.0 | |
| **MSZ** | **Milford Sound** | **1.18** | **258** | P* | Pg | 12 37 15.6 | -0.6 |
| MSZ | | | | S* | Sg | 12 37 31.5 | -0.1 |
| MSZ | | | | AML | AML | 12 37 32.2 | |
| MSZ | | | | AML | AML | 12 37 32.2 | |
| MSZ | | | | AML | AML | 12 37 32.2 | |
| **RPZ** | **Rata Peaks** | **1.30** | **57** | P* | Pn | 12 37 18.0 | -0.5 |
| RPZ | | | | AML | AML | 12 37 37.7 | |
| RPZ | | | | AML | AML | 12 37 38.5 | |
| **MLZ** | **Mavora Lakes** | **1.33** | **227** | PN | Pg | 12 37 19.3 | +0.1 |
| MLZ | | | | AML | AML | 12 37 43.5 | |
| MLZ | | | | AML | AML | 12 37 44.1 | |
| **TUZ** | **Tuapeka** | **1.51** | **178** | ⇑PN | Pn | 12 37 20.4 | -0.9 |
| TUZ | | | | AML | AML | 12 37 44.4 | |
| TUZ | | | | AML | AML | 12 37 44.4 | |
| TUZ | | | | AML | AML | 12 37 44.5 | |
| TUZ | | | | AML | AML | 12 37 44.6 | |
| **WVZ** | **Waitaha Valley** | **1.61** | **33** | PN | Pb | 12 37 23.5 | -0.3 |
| WVZ | | | | AML | AML | 12 37 49.0 | |
| WVZ | | | | AML | AML | 12 37 52.5 | |
| **HHSZ** | **Highcliff Hill** | **1.62** | **153** | PN | Pn | 12 37 22.7 | -0.1 |
| **WHZ** | **Wether Hill Ro** | **1.84** | **217** | PN | Pn | 12 37 25.2 | -0.7 |
| WHZ | | | | AML | AML | 12 37 55.5 | |
| **DCZ** | **Deep Cove** | **1.99** | **238** | PN | Pn | 12 37 28.2 | +0.4 |
| DCZ | | | | AML | AML | 12 37 56.7 | |
| DCZ | | | | AML | AML | 12 37 56.7 | |
| DCZ | | | | AML | AML | 12 37 57.2 | |
| DCZ | | | | AML | AML | 12 37 57.3 | |
| **SYZ** | **Scrubby Hill** | **2.12** | **188** | ⇑PN | Pn | 12 37 28.4 | -1.1 |
| **MQZ** | **McQueen's Vall** | **2.35** | **73** | PN | Pn | 12 37 32.0 | -0.8 |
| **CRLZ** | **Canterbury Las** | **2.38** | **70** | *e*PN | Pn | 12 37 32.8 | -0.3 |
| **LTZ** | **Lake Taylor** | **2.58** | **51** | PN | Pn | 12 37 35.4 | -0.6 |
| **APZ** | **The Paps** | **2.63** | **204** | PN | Pn | 12 37 35.6 | -1.1 |
| **PYZ** | **Puysegur Point** | **2.66** | **229** | PN | Pn | 12 37 37.1 | 0.0 |
| **DSZ** | **Denniston Nort** | **3.16** | **32** | ⇓PN | Pn | 12 37 43.6 | -0.4 |
| **KHZ** | **Kahutara** | **3.54** | **57** | PN | Pn | 12 37 48.7 | -0.5 |
| **THZ** | **Tophouse** | **3.63** | **44** | PN | Pn | 12 37 49.9 | -0.7 |
| **QRZ** | **Quartz Range** | **4.23** | **32** | PN | Pn | 12 37 58.3 | -0.4 |

*ISCJB 27 12:38:35.6±0.6, 50.38N±0.04×18.81E±0.03, h0km, Error ellipse: s-maj=6.0km s-min=2.8km az=14.6*
*CSEM 27 12:38:36.6±0.4, 50.38N×18.84E, h2km, ML3.0/5, Error ellipse: s-maj=8.7km s-min=4.1km az=11.0*
*PRU 27 12:38:37.7, 50.35N×18.82E, h0km*

**ISC 27 12:38:36.3±0.9, 50.37N±0.04×18.87E±0.02, h0km, n27, σ0.990/45, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHZP** | **Chorzow** | **0.11** | **135** | *e*Pg | **Pg** | **12 38 38.9** | **+0.5** |
| **OJC** | **Ojcow** | **0.61** | **104** | *e*Pg | **Pg** | **12 38 48.2** | **+0.2** |
| OJC | | | | *e*Sg | **Sg** | **12 38 56.5** | **+0.5** |
| **OJC** | **Ojcow** | **0.61** | **104** | *e*Pg | **Pg** | **12 38 48.2** | **+0.2** |
| OJC | | | | *e*Sg | **Sg** | **12 38 56.5** | **+0.5** |
| **OKC** | **Ostrava-Krasne** | **0.71** | **221** | *e*PG | **Pg** | **12 38 50.9** | **+1.1** |
| OKC | | | | *e*SG | **Sg** | **12 39 00.3** | **+1.3** |
| | comp=Z,50nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.71** | **221** | Pg | **Pg** | **12 38 50.9** | **+1.1** |
| OKC | | | | Sg | **Sg** | **12 39 00.3** | **+1.3** |
| | 50nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.04** | **236** | *e*Pg | **Pg** | **12 38 56.7** | **+0.5** |
| MORC | | | | *e*Sg | **Sg** | **12 39 10.7** | **+1.0** |
| **LANS** | **Liptovska Anna** | **1.28** | **162** | *e*PG | **Pg** | **12 39 00.9** | **+0.1** |
| LANS | | | | *e*SG | **Sg** | **12 39 18.0** | **+0.6** |
| **LANS** | **Liptovska Anna** | **1.28** | **162** | *e*Pg | **Pg** | **12 39 00.9** | **+0.1** |
| LANS | | | | *e*Sg | **Sg** | **12 39 18.0** | **+0.6** |
| **KRLC** | **Kraliky** | **1.37** | **258** | *e*PG | **Pg** | **12 39 02.0** | **-0.6** |
| KRLC | | | | *e*SG | **Sg** | **12 39 20.0** | **-0.4** |
| **KRLC** | **Kraliky** | **1.37** | **258** | Pg | **Pg** | **12 39 02.0** | **-0.6** |
| KRLC | | | | Sg | **Sg** | **12 39 20.0** | **-0.4** |
| **DPC** | **Dobruska-Polom** | **1.63** | **270** | *e*PG | **Pg** | **12 39 06.3** | **0.0** |
| DPC | | | | *e*SG | **Sg** | **12 39 29.1** | **+0.4** |
| | comp=Z,28nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.63** | **270** | Pg | **Pn** | **12 39 06.3** | **0.0** |
| DPC | | | | Sg | **Sg** | **12 39 29.1** | **+0.4** |
| | 28nm,0.5s | | | | | | |
| **KSP** | **Ksiaz** | **1.71** | **287** | *e*Pg | **Pb** | **12 39 08.8** | **+0.2** |
| KSP | | | | *e*Sg | **Sg** | **12 39 32.0** | **+0.8** |
| **KSP** | **Ksiaz** | **1.71** | **287** | *e*Pg | **Pb** | **12 39 08.8** | **+0.2** |
| **STHS** | **Stebnicka Huta** | **1.81** | **121** | *e*PN | **Pb** | **12 39 10.5** | **+0.3** |
| STHS | | | | *e*SN | **Sg** | **12 39 35.2** | **+0.9** |
| **STHS** | **Stebnicka Huta** | **1.81** | **121** | *e*Pn | **Pb** | **12 39 10.5** | **+0.3** |
| STHS | | | | *e*Sn | **Sg** | **12 39 35.2** | **+0.9** |
| **VRAC** | **Vranov** | **1.82** | **235** | *e*Pn | **Pb** | **12 39 10.1** | **-0.3** |
| VRAC | | | | *e*Sg | **Sb** | **12 39 33.8** | **+0.1** |
| **UPC** | **Upice** | **1.83** | **275** | *e*SG | **Sg** | **12 39 36.5** | **+1.4** |
| | comp=Z,12nm,0.4s | | | | | | |
| **UPC** | **Upice** | **1.83** | **275** | Sg | **Sg** | **12 39 36.5** | **+1.4** |
| | 12nm,0.4s | | | | | | |
| **VYHS** | **Vyhne** | **1.88** | **181** | *e*PN | **Pn** | **12 39 09.0** | **-0.6** |
| VYHS | | | | *e*SN | **Sn** | **12 39 32.5** | **-1.5** |
| **VYHS** | **Vyhne** | **1.88** | **181** | *e*Pn | **Pn** | **12 39 09.0** | **-0.6** |
| VYHS | | | | *e*Sn | **Sn** | **12 39 32.5** | **-1.5** |
| **KOLS** | **Kolonicke sedl** | **2.64** | **122** | *e* | **Pg** | **12 39 26.4** | **-0.4** |
| **PVCC** | **Panska Ves** | **2.75** | **275** | *e*SG | **Sg** | **12 40 05.9** | **+1.2** |
| | comp=Z,20nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **2.75** | **275** | Sg | **Sg** | **12 40 05.9** | **+1.2** |
| | 20nm,0.5s | | | | | | |
| **PRU** | **Pruhonice** | **2.81** | **264** | *e*SG | **Sg** | **12 40 05.0** | **-1.5** |
| | comp=Z,6.5nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **2.81** | **264** | Sg | **Sg** | **12 40 05.0** | **-1.5** |
| | 6.5nm,0.4s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.18** | **281** | PG | **Pb** | **12 39 35.3** | **+1.7** |
| BRG | | | | SG | **Sg** | **12 40 17.1** | **-1.2** |
| | 6.9nm,0.4s | | | | | | |

**GUC 27 12:40:36.5±0.4, 16.92S×68.62W, h223km±5km, ML4.1, 4C-1D, Peru-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPAZ** | **La Paz** | **0.79** | **37** | ⇑*i*P | Pn | 12 41 10.1 | +1.8 |
| LPAZ | | | | *i* S | S | 12 41 34.9 | +1.9 |
| **PB13** | **IPOC Station P** | **1.64** | **211** | ⇓*i*P | Pn | 12 41 15.7 | +1.5 |
| PB13 | | | | *i* S | S | 12 41 46.0 | +2.4 |
| PB13 | | | | AML | AML | 12 41 49.8 | |
| | comp=E,863nm,0.3s | | | | | | |
| **PB01** | **IPOC Station P** | **4.18** | **191** | ⇑*i*P | Pn | 12 41 44.2 | +2.8 |
| PB01 | | | | *i* S | S | 12 42 35.7 | +3.1 |
| **PB07** | **IPOC Station P** | **4.92** | **194** | ⇑*i*P | Pn | 12 41 53.9 | +3.1 |
| PB07 | | | | *i* S | S | 12 42 53.3 | +3.8 |
| **PB06** | **IPOC Station P** | **5.82** | **189** | ⇑*i*P | Pn | 12 42 06.3 | +4.2 |
| PB06 | | | | *i* S | S | 12 43 12.4 | +2.5 |

*IDC 27 12:43:49.7±1.4, 17.93S×178.48W, h542km±16km, mb3.7/16, mb1 3.8/18, mb1mx3.6/42, mbtmp4.6/18, Error ellipse: s-maj=14.3km s-min=10.3km az=143.0*
*ISCJB 27 12:43:51.4±0.4, 17.89S±0.10×178.53W±0.07, h579km, mb4.2/16, Error ellipse: s-maj=13.8km s-min=7.8km az=154.0*
*AUST 27 12:43:54.5±0.0, 17.93S×178.40W, h610km, Error ellipse: s-maj=1.9km s-min=1.8km az=231.0*

**ISC 27 12:43:52.1±0.5, 17.9S±0.1×178.42W±0.08, h579km, n49, σ1.926/51, mb4.0/16, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **7.51** | **59** | P | **P** | **12 45 44.4** | **-1.9** |
| | 9.4nm,0.3s,baz=229,slow=4.1,SNR=17 | | | | | | |
| AFI | | | | S | **S** | **12 47 14.7** | **-4.9** |
| | baz=198,slow=19,SNR=2.3 | | | | | | |
| **NIUE** | **Niue** | **8.15** | **100** | P | **P** | **12 45 52.7** | **+0.4** |
| | baz=8.1,SNR=4.5 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.82** | **251** | P | **P** | **12 46 57.6** | **-1.8** |
| | 2.4nm,0.3s,baz=175,slow=14,SNR=32 | | | | | | |
| **URZ** | **Urewera** | **20.68** | **190** | P | **P** | **12 47 49.9** | **-2.9** |
| | 1.9nm,0.5s,baz=330,slow=20,SNR=4.1 | | | | | | |
| **EIDS** | **Eidsvold** | **29.27** | **250** | P | **P** | **12 49 07.9** | **-0.8** |
| | baz=29,SNR=7.4 | | | | | | |
| **ARMA** | **Armidale** | **29.94** | **240** | P | **P** | **12 49 15.1** | **+0.5** |
| | baz=30,SNR=14 | | | | | | |
| **MGCD** | **Mangrove Creek** | **31.30** | **235** | P | **P** | **12 49 27.2** | **+1.1** |
| | baz=31,SNR=4.6 | | | | | | |
| **RMQ** | **Roma** | **31.50** | **248** | P | **P** | **12 49 28.1** | **+0.1** |
| | baz=32,SNR=16 | | | | | | |
| **CNB** | **Canberra Magne** | **33.44** | **232** | P | **P** | **12 49 44.6** | **+0.4** |
| | baz=33,SNR=33 | | | | | | |
| **CTA** | **Charters Tower** | **33.44** | **260** | P | **P** | **12 49 43.7** | **-0.7** |
| | 12nm,0.6s,baz=96,slow=11,SNR=26 | | | | | | |
| **PMG** | **Port Moresby** | **34.44** | **280** | P | **P** | **12 49 53.7** | **+0.9** |
| | 32nm,0.8s,baz=82,slow=5.5,SNR=5.9 | | | | | | |
| **PMG** | **Port Moresby** | **34.44** | **280** | P | **P** | **12 49 53.4** | **+0.6** |
| | baz=34,SNR=3.7 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **35.15** | **240** | P | **P** | **12 49 58.5** | **0.0** |
| | baz=35,SNR=26 | | | | | | |
| **QLP** | **Quilpie** | **35.53** | **249** | P | **P** | **12 50 01.2** | **-0.5** |
| | baz=36,SNR=50 | | | | | | |
| **COEN** | **Coen** | **37.09** | **270** | P | **P** | **12 50 14.9** | **+0.2** |
| | baz=37,SNR=22 | | | | | | |
| **TOO** | **Toolangi** | **37.18** | **231** | P | **P** | **12 50 15.4** | **+0.2** |
| | baz=37,SNR=17 | | | | | | |
| **QIS** | **Mount Isa** | **39.65** | **259** | P | **P** | **12 50 33.9** | **-1.4** |
| | baz=40,SNR=4.8 | | | | | | |
| **ARPS** | **Mount Arapiles** | **39.66** | **234** | P | **P** | **12 50 35.0** | **-0.1** |
| | baz=40,SNR=7.7 | | | | | | |
| **BBOO** | **Buckleboo** | **43.41** | **241** | P | **P** | **12 51 04.5** | **-0.3** |
| | baz=43,SNR=70 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.62** | **260** | P | **P** | **12 51 13.2** | **-1.1** |
| | 6.5nm,0.4s,baz=102,slow=8.3,SNR=233 | | | | | | |
| **ASAR** | **Alice Springs** | **44.79** | **254** | P | **P** | **12 51 15.1** | **-0.5** |
| | 109nm,0.6s,baz=88,slow=8.4,SNR=2060 | | | | | | |
| ASAR | | | | PcP | **PcP** | **12 52 44.7** | **-0.3** |
| | 2.2nm,0.5s,baz=86,slow=4.5,SNR=4.6 | | | | | | |
| **KDU** | **Kakadu** | **47.54** | **269** | P | **P** | **12 51 36.0** | **-0.4** |
| | baz=48,SNR=10 | | | | | | |
| **MTN** | **Manton Dam** | **48.78** | **268** | P | **P** | **12 51 44.8** | **-0.8** |
| | baz=49,SNR=13 | | | | | | |
| **WRKA** | **Warakurna** | **49.84** | **252** | P | **P** | **12 51 52.9** | **-0.4** |
| | baz=50,SNR=162 | | | | | | |
| **KNRA** | **Kununurra** | **50.48** | **264** | P | **P** | **12 51 57.6** | **-0.4** |
| | baz=50,SNR=36 | | | | | | |
| **SIJI** | **Sorong** | **52.22** | **283** | P | **P** | **12 52 10.3** | **-0.3** |
| | 18nm,0.5s,baz=80,slow=5.3,SNR=9.5 | | | | | | |
| **SWI** | **Sorong** | **52.22** | **283** | P | **P** | **12 52 11.1** | **+0.4** |
| | baz=52,SNR=3.2 | | | | | | |
| **SOEI** | **Soe** | **56.06** | **270** | P | **P** | **12 52 38.9** | **+1.2** |
| | baz=56,SNR=8.7 | | | | | | |
| **MEEK** | **Meekatharra** | **58.43** | **249** | P | **P** | **12 52 52.6** | **-1.0** |
| | baz=58,SNR=5.2 | | | | | | |
| **KLBR** | **Kellerberrin** | **58.83** | **244** | P | **P** | **12 52 55.6** | **-0.6** |
| | baz=59,SNR=9.7 | | | | | | |
| **BLDU** | **Ballidu** | **59.78** | **245** | P | **P** | **12 53 01.7** | **-0.9** |
| | baz=60,SNR=11 | | | | | | |
| **VNDA** | **Vanda** | **60.48** | **185** | P | **P** | **12 53 07.1** | **+0.8** |
| | 0.5nm,0.4s,baz=7.9,slow=6.6,SNR=5.8 | | | | | | |
| **MORW** | **Morawa** | **60.48** | **246** | P | **P** | **12 53 06.5** | **-0.7** |
| | baz=60,SNR=5.6 | | | | | | |
| **GIRL** | **Giralia** | **62.89** | **253** | P | **P** | **12 53 23.8** | **+0.9** |
| | baz=63,SNR=4.5 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **66.03** | **269** | P | **P** | **12 53 41.3** | **-1.5** |
| | baz=66,SNR=4.0 | | | | | | |
| **UGM** | **Wanagama** | **69.63** | **268** | P | **P** | **12 54 04.7** | **-0.1** |
| | baz=70,SNR=6.9 | | | | | | |
| **QSPA** | **South Pole Qui** | **72.18** | **180** | P | **P** | **12 54 19.6** | **+0.7** |
| | 4.4nm,0.8s,baz=352,slow=1.3,SNR=14 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.64** | **345** | P | **P** | **12 54 27.5** | **+0.3** |
| | 5.3nm,0.9s,baz=188,slow=8.7,SNR=3.0 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **78.51** | **39** | P | **P** | **12 54 56.5** | **+2.1** |
| | 3.4nm,0.7s,baz=154,slow=3.9,SNR=8.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.41** | **44** | P | **P** | **12 55 00.9** | **+1.6** |
| | 2.7nm,0.7s,baz=225,slow=8.5,SNR=7.4 | | | | | | |
| **SEY** | **Seymchan** | **83.74** | **347** | P | **P** | **12 55 20.9** | **+0.3** |
| | 2.0nm,0.5s,baz=225,slow=19 | | | | | | |
| **MAW** | **Mawson** | **83.89** | **200** | P | **P** | **12 55 22.0** | **+0.7** |
| | 1.6nm,0.5s,baz=181,slow=3.0,SNR=17 | | | | | | |
| **MAW** | **Mawson** | **83.89** | **200** | P | **P** | **12 55 21.8** | **+0.5** |
| | baz=84,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **85.86** | **13** | P | **P** | **12 55 30.8** | **0.0** |
| | 1.2nm,0.4s,baz=224,slow=5.0,SNR=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.99** | **58** | P | **P** | **12 55 35.1** | **+2.7** |
| | 3.7nm,0.8s,baz=221,slow=8.1,SNR=2.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **88.86** | **290** | P

ZAIG Zacatecas 5.35 93 eP Pn 12 50 57.1 -1.9
ZAIG Zacatecas 5.35 93 eP Pn 12 50 57.1 -1.9
SRIG Santa Rosalia 5.45 321 eP Pn 12 50 52.0 -8.1
SRIG eS Sn 12 51 50.5 -12
SRIG Santa Rosalia 5.45 321 eP Pn 12 50 52.0 -8.1
SRIG eS Sn 12 51 50.5 -12
R15V 5.68 133 e Pn 12 51 07.0 +3.7
EZ5V 5.74 128 i P Pn 12 51 09.0 +4.8
EZ5V e 12 52 14.8
HSIG 6.30 339 e Pn 12 51 07.8 -4.0
HSIG eS Sn 12 52 13.4 -11
HSIG 6.30 339 eP Pn 12 51 07.8 -4.0
HSIG eS Sn 12 52 13.4 -11
TX31 Lajitas Ar. Si 7.47 33 ePn Pn 12 51 27.8 -0.2
TXAR Lajitas Array 7.47 33 Pn Pn 12 51 26.5 -1.4
0.6nm,0.3s,baz=209,slow=13,SNR=15
TXAR Sn Sn 12 52 52.7 -0.2
1.3nm,0.3s,baz=126,slow=31,SNR=6.4
TXAR Lg Lg 12 53 33.5
1.4nm,0.3s,baz=228,slow=24,SNR=5.5
MNTX Cornudas Mount 8.93 17 P Pn 12 51 47.7 -0.2
baz=9.1
MNTX Cornudas Mount 8.93 17 ePn Pn 12 51 47.5 -0.4
631A Perdido Creek 9.37 47 P Pn 12 51 54.3 +0.4
baz=9.5
121A Cookes Peak, D 9.38 3 P Pn 12 51 54.2 0.0
baz=9.6
121A Cookes Peak, D 9.38 3 ePn Pn 12 51 54.7 +0.5
7.9nm,0.8s
732A Laxson Ranch, 9.38 52 P Pn 12 51 54.9 +0.9
baz=9.5
TUC Tucson 9.39 347 ePn Pn 12 51 55.0 +0.8
429A Davenport Ranc 9.43 36 P Pn 12 51 55.7 +0.9
baz=9.6
034A Hebbronville 9.60 64 P Pn 12 51 58.7 +1.6
baz=9.7
214A Organ Pipe Nat 9.63 337 P Pn 12 51 56.8 -0.7
baz=9.8
531A Rocksprings 9.89 43 P Pn 12 52 01.8 +0.7
baz=10.0
430A Baggett Ranch, 9.92 38 P Pn 12 52 02.7 +1.2
baz=10
632A Uvalde 9.97 49 P Pn 12 52 02.9 +0.8
baz=10,SNR=5.7
431A Sonora 10.21 41 P Pn 12 52 07.0 +1.5
baz=10
532A Rocksprings 10.28 46 P Pn 12 52 08.0 +1.6
baz=10
633A Saathoff Ranch 10.37 51 P Pn 12 52 09.2 +1.6
baz=10
330A Mertzon 10.42 36 P Pn 12 52 10.1 +1.7
baz=11
128A Castleberry Fa 10.78 28 P Pn 12 52 14.2 +0.8
baz=11
230A Sterling City 10.83 35 P Pn 12 52 15.0 +1.1
baz=11
432A Menard 10.85 43 P Pn 12 52 15.5 +1.3
baz=11
BNM Barren Site 11.08 7 ePn Pn 12 52 19.8 +2.2
534A Blanco 11.19 50 P Pn 12 52 20.8 +1.9
baz=11
433A Art 11.22 45 P Pn 12 52 20.6 +1.4
baz=11
LAZ Ladron 11.28 5 ePn Pn 12 52 21.7 +1.5
231A Bronte 11.30 37 P Pn 12 52 22.0 +1.6
baz=12
Z28A Tucker Farm, M 11.40 26 P Pn 12 52 22.8 +0.9
baz=12
GLA Glamis 11.41 331 P Pn 12 52 22.5 +0.6
baz=12
333A Richland Sprin 11.66 44 P Pn 12 52 26.7 +1.3
baz=12
Z29A Hungry Hill Ra 11.66 29 P Pn 12 52 26.4 +1.0
baz=12
434A Burnet 11.80 47 P Pn 12 52 29.3 +2.0
baz=12,SNR=6.2
131A Roby 11.83 35 P Pn 12 52 29.2 +1.6
baz=12
Y12C Blythe 11.88 334 P Pn 12 52 29.5 +1.2
baz=12
ANMO Albuquerque 11.89 8 Pn Pn 12 52 30.4 +1.9
0.1nm,0.3s,baz=184,slow=14,SNR=6.0
ANMO Lg Lg 12 55 53.7
0.1nm,0.3s,baz=63,slow=14,SNR=2.3
ANMO LR LR 12 57 10.2
comp=Z,2μm,20.5s,baz=196,slow=38
ANMO Albuquerque 11.89 8 ePn Pn 12 52 29.7 +1.2
ANMO Lg Lg 12 55 53.7
Z30A Sanderson Ranc 11.95 31 P Pn 12 52 30.8 +1.5
baz=12
334A Lometa 12.15 46 P Pn 12 52 33.7 +1.7
baz=12
233A Rising Star 12.19 41 P Pn 12 52 33.9 +1.4
baz=12
Y29A Porterfield Fa 12.19 27 P Pn 12 52 33.9 +1.2
baz=12
435B Jarrell 12.26 49 P Pn 12 52 34.9 +1.4
baz=12
Z31A Sharp Cattle R 12.46 34 P Pn 12 52 37.3 +1.1
baz=13
WUAZ Wupatki 12.61 349 P Pn 12 52 39.7 +1.2
baz=13,SNR=15
WUAZ Wupatki 12.61 349 ePn Pn 12 52 39.6 +1.2
PFO Pinyon Flat Ob 12.63 327 Pn Pn 12 52 40.2 +1.6
0.1nm,0.3s,baz=156,slow=9.6,SNR=5.4
335A Moody 12.66 48 P Pn 12 52 40.1 +1.2
baz=13
Z32A Haskell 12.80 36 P Pn 12 52 41.7 +0.9
baz=13,SNR=7.0
X30A Coker Ranch, T 13.04 29 P Pn 12 52 44.7 +0.5
baz=13
AMTX Amarillo 13.08 25 P Pn 12 52 45.0 +0.2
baz=13
WHTX Lake Whitney 13.08 45 P Pn 12 52 45.6 +0.9
baz=13
336A Riesel 13.12 49 P Pn 12 52 46.1 +0.8
baz=13
Y32A R-V Farms, Ver 13.36 34 P Pn 12 52 48.7 +0.3
baz=14
HEC Hector,Ludlow 13.57 331 P Pn 12 52 51.8 +0.3
baz=14
X31A McDonald Ranch 13.60 31 P Pn 12 52 52.7 +1.0
baz=14
X32A Elmer 13.77 33 P Pn 12 52 54.4 +0.4
baz=14
CMIG Matias Romero 14.01 113 Pn Pn 12 53 00.2 +2.8
0.4nm,0.3s,baz=300,slow=10,SNR=5.0
CMIG LR LR 12 58 13.5
comp=Z,1μm,21.5s,baz=272,slow=37
MVCO Mesa Verde 14.03 360 P Pn 12 52 58.4 +0.6
baz=14
MVCO Mesa Verde 14.03 360 ePn Pn 12 52 58.9 +1.0
W31A Holland Ranch, 14.07 30 P Pn 12 52 58.4 +0.2
baz=14
U27A Thompson Grove 14.08 19 P Pn 12 52 60.0 +1.5
baz=14
GSC Goldstone 14.18 331 P Pn 12 52 59.9 +0.1
baz=14
WMOK Wichita Mounta 14.27 34 ePn Pn 12 53 01.5 +0.5
W32A Sentinel 14.35 32 P Pn 12 53 03.1 +1.1
baz=14
T25A Trinidad 14.37 13 P Pn 12 53 03.2 +0.7
baz=15,SNR=6.4
T25A Trinidad 14.37 13 ePn Pn 12 53 04.6 +2.1
SHPR Sheep Range 14.57 338 ePn Pn 12 53 06.3 +1.2
T26A Comanche Natio 14.58 15 P Pn 12 53 05.4 0.0
baz=15
Y35A Marietta 14.62 40 P Pn 12 53 05.8 +0.1
baz=15
X34A Smith Ranch, M 14.67 37 P Pn 12 53 06.2 -0.2
baz=15
T27A Campo 14.71 18 P P 12 53 15.3 +2.1
baz=15,SNR=5.9
LRMC Laurel Mountai 14.73 329 P Pn 12 53 07.2 -0.2
baz=15
W33A Caddo, Fort Co 14.76 34 P Pn 12 53 10.2 +2.6
baz=15
SDCO Great Sand Dun 14.77 9 P Pn 12 53 09.5 +1.5
baz=15,SNR=12
SDCO Great Sand Dun 14.77 9 ePn Pn 12 53 09.8 +1.8
PV05 Paradox Valley 14.91 358 ePn Pn 12 53 11.6 +1.8
T28A Walsh 14.94 20 P Pn 12 53 11.5 +1.3
baz=15,SNR=11
PV01 Paradox Valley 14.95 359 ePn Pn 12 53 11.6 +1.1
CCUT Cedar City 15.00 344 ePn Pn 12 53 13.0 +2.0
S26A Kim 15.04 15 P Pn 12 53 11.9 +0.4
baz=15

MPMC Manual Prospec 15.12 330 P Pn 12 53 13.0 +0.3
baz=15,SNR=9.6
FURC Furnace Creek, 15.19 333 P Pn 12 53 13.4 +0.1
baz=15
PV10 Paradox Valley 15.20 358 ePn Pn 12 53 14.2 +0.4
PV04 Paradox Valley 15.22 358 ePn Pn 12 53 13.9 0.0
MMU Miners Mountai 15.22 351 ePn Pn 12 53 12.7 -1.4
ISA Isabella 15.27 327 P Pn 12 53 14.3 -0.2
baz=15
ISA Isabella 15.27 327 ePn Pn 12 53 14.2 -0.2
68nm,2.3s
PV09 Paradox Valley 15.33 358 ePn Pn 12 53 17.1 +1.6
DAC Darwin (Calif) 15.35 331 ePn Pn 12 53 15.7 +0.1
134nm,2.7s
TPNV Topopah Spring 15.36 335 P Pn 12 53 16.8 +1.1
baz=16,SNR=9.2
TPNV Topopah Spring 15.36 335 ePn Pn 12 53 16.9 +1.1
145nm,2.1s
S28A Manter 15.44 20 P P 12 53 19.6 -1.7
baz=16,SNR=8.5
Z38A Mt. Pleasant 15.50 47 P P 12 53 19.8 -2.0
baz=16
MSU Marysvale 15.67 349 ePn Pn 12 53 20.7 +0.7
S29A Ulysses 15.72 22 P P 12 53 22.4 -2.0
baz=16
V34A Guthrie 15.77 34 P P 12 53 23.3 -1.6
baz=16
V34A Guthrie 15.77 34 eP P 12 53 25.9 +1.0
22nm,1.0s
SMMC Simler 15.81 323 P Pn 12 53 22.8 +1.3
baz=16
R27A Eads 15.84 16 P P 12 53 24.5 -1.2
baz=16,SNR=11
GRAC Grapevine Rang 15.85 333 P Pn 12 53 22.8 +0.7
baz=16
U33A Lingo Farm, Me 15.95 31 P Pn 12 53 24.5 +1.3
baz=16
W36A Wetumka 15.96 39 P Pn 12 53 24.9 +1.4
baz=16
Q24A Divide 16.02 9 P Pn 12 53 25.0 +0.6
baz=16
Q24A Divide 16.02 9 ePn P 12 53 26.3 -1.7
24nm,1.3s
SRU San Rafael 16.03 354 ePn Pn 12 53 25.0 +0.4
132nm,2.1s
SMCO Snowmass 16.04 4 ePn Pn 12 53 26.0 +1.2
61nm,1.4s
V35A Meyer Ranch, C 16.08 36 P P 12 53 26.9 -1.4
baz=16
X37A Clayton 16.10 42 P Pn 12 53 26.8 +1.6
baz=16
R28A Tribune 16.16 19 P Pn 12 53 27.4 +1.3
baz=16,SNR=7.5
TIN Tinemaha 16.27 331 P Pn 12 53 28.1 +0.5
baz=16
TMUT Trail Mountain 16.29 352 ePn Pn 12 53 28.8 +0.8
121nm,1.4s
S31A Mullinville 16.33 26 P Pn 12 53 29.4 +1.2
baz=16
R11A Troy Canyon, C 16.38 339 P Pn 12 53 29.7 +0.8
baz=17,SNR=8.9
R11A Troy Canyon, C 16.38 339 ePn P 12 53 31.0 -0.9
70nm,2.3s
P17A Butcher Ranch, 16.41 353 ePn Pn 12 53 30.2 +0.8
12nm,0.9s
W37A Quinton 16.43 40 P P 12 53 31.8 -0.5
baz=17
P18A Preston Nutter 16.52 355 ePn Pn 12 53 30.8 -0.1
45nm,1.0s
V36A Jenks 16.59 38 P P 12 53 33.3 -0.7
baz=17
U35A Pawnee 16.59 35 P P 12 53 33.6 -0.4
baz=17
R30A Dighton 16.61 23 P P 12 53 33.6 -0.7
baz=17
MTUM Tungsten Hills 16.67 331 ePn Pn 12 53 33.1 +0.4
ISCO Idaho Springs 16.78 7 P Pn 12 53 35.1 +1.0
baz=17,SNR=19
ISCO Idaho Springs 16.78 7 ePn Pn 12 53 35.0 +0.8
155nm,1.9s
Q28A Sharon Springs 16.82 18 P Pn 12 53 35.4 +0.9
baz=17
T34A McClaskey Farm 16.86 32 P Pn 12 53 35.8 +0.8
baz=17
R31A Burdett 16.89 25 P Pn 12 53 35.7 +0.4
baz=17
Q29A Oakley 16.92 20 P Pn 12 53 35.6 -0.2
baz=17
W38A Poteau 16.94 42 P Pn 12 53 36.1 +0.2
baz=17
O20A White River Ci 16.95 0 P Pn 12 53 37.0 +0.8
baz=17,SNR=13
O20A White River Ci 16.95 0 ePn P 12 53 37.5 -0.7
183nm,2.0s
MPU Maple Canyon 17.06 351 ePn Pn 12 53 38.0 +0.4
242nm,1.8s
NLU North Lily Min 17.06 350 ePn P 12 53 38.8 -0.7
36nm,1.6s
T35A Sooner Cattle 17.12 34 P Pn 12 53 37.4 -0.8
baz=17
DUG Dugway 17.42 349 P P 12 53 43.6 +0.3
baz=18,SNR=6.1
DUG Dugway 17.42 349 eP P 12 53 43.1 -0.2
127nm,2.4s
NV01 Mina Array Sit 17.46 333 ePn Pn 12 53 42.9 +0.3
NVAR Mina Array Bea 17.46 333 P Pn 12 53 42.0 -0.6
0.3nm,0.3s,baz=159,slow=11,SNR=47
NVAR LR LR 13 00 18.5
comp=Z,871nm,20.6s,baz=164,slow=37
U37A Salina 17.50 38 P P 12 53 44.0 0.0
baz=18
V38A Canehill 17.54 41 P P 12 53 44.4 -0.1
baz=18
P29A Atwood 17.59 19 P P 12 53 44.9 -0.2
baz=18
CTU Camp Tracy 17.74 352 eP P 12 53 46.9 +0.1
19nm,1.1s
S35A Otter Creek Ra 17.81 33 P P 12 53 47.5 0.0
baz=18
N23A Red Feather La 17.82 6 P P 12 53 47.8 -0.1
baz=18
N23A Red Feather La 17.82 6 ePn P 12 53 49.5 +1.5
20nm,1.3s
O28A Krutsinger Ran 17.83 17 P P 12 53 48.0 +0.2
baz=18
HRU Hogsback Ridge 17.85 351 ePn Pn 12 53 42.8 -4.5
HRU eSn Sn 12 57 05.3 -1.2
R34A Isabella, Hill 17.86 30 P P 12 53 48.1 0.0
baz=18
Q32A Meitler Ranch, 17.88 26 P P 12 53 48.5 +0.3
baz=18
U38A Grizette 17.94 39 P P 12 53 49.6 +0.7
baz=18
P31A Stockton 18.03 23 P P 12 53 50.4 +0.4
baz=18
TCUT Toone Canyon 18.11 353 eP P 12 53 51.6 +0.5
24nm,0.9s
T37A Cheneyville 18 18.12 37 P P 12 53 51.6 +0.7
baz=18
Q33A Connelly Farm, 18.18 27 P P 12 53 52.4 +0.8
baz=18
S36A Lake Cedric, C 18.21 34 P P 12 53 53.3 +1.4
baz=18
N28A Pribbeno Ranch 18.42 17 P Pn 12 53 55.8 +1.4
baz=19
ELK Elko 18.49 343 ePn Pn 12 53 55.4 +0.1
5.0nm,0.9s
Q34A Chapman 18.50 29 P Pn 12 53 57.0 +1.7
baz=19
HWUT Hardware Ranch 18.61 352 eP Pn 12 53 57.4 +0.6
136nm,2.2s
S37A Fort Scott 18.64 35 P Pn 12 53 59.0 +2.1
baz=19
N29A Votaw Ranch, W 18.80 18 P Pn 12 54 00.4 +1.5
baz=19
BMN Battle Mountai 18.80 339 eP Pn 12 53 58.7 -0.3
9.4nm,1.0s
P34A Walnut Farm, R 19.07 28 P P 12 54 01.6 +0.2
baz=19
K22A Casper 19.52 4 P P 12 54 06.6 +0.1
baz=20,SNR=11
K22A Casper 19.52 4 eP P 12 54 06.9 +0.4
128nm,1.8s
BW06 Boulder Array 19.60 357 eP P 12 54 07.0 -0.4
AHID Auburn Hatcher 19.71 354 eP P 12 54 08.5 0.0
28nm,1.4s
HBAR Harrisburg 19.74 47 eP P 12 54 08.7 0.0
REDW Red Top Meadow 20.28 355 eP P 12 54 15.3 +0.5
241nm,2.8s
SNOW Snow King Moun 20.37 355 eP P 12 54 15.8 -0.1
241nm,2.5s
K28A Ten Mile Ranch 20.37 15 P P 12 54 16.5 +0.9
baz=21
TPAW Teton Pass 20.41 355 eP P 12 54 16.3 0.0
16nm,1.0s
LOHW Long Hollow 20.51 355 eP P 12 54 17.2 0.0
60nm,1.5s
O03D Paynes Creek 20.53 330 P P 12 54 17.7 +0.3
baz=21
FXWY Fox Creek 20.57 354 eP P 12 54 17.9 0.0
36nm,1.4s
L31A Butterfield Fa 20.58 20 P Pn 12 54 19.1 -1.1
baz=21
J26A Sides Ranch, S 20.59 11 P P 12 54 19.0 +1.0
baz=21
MOOW Moose Ponds 20.65 355 eP P 12 54 18.3 -0.6
23nm,1.1s
J27A Elkhorn Farm, 20.74 13 P Pn 12 54 21.2 -0.9
baz=21
IMW Indian Meadow 20.82 355 eP P 12 54 20.6 -0.1
19nm,1.0s
HLID Hailey 20.98 348 P P 12 54 21.9 -0.4
baz=21,SNR=6.3
HLID Hailey 20.98 348 eP P 12 54 22.1 -0.2
9.3nm,1.0s
FLWY Flagg Ranch 20.98 355 eP P 12 54 22.9 +0.5
24nm,0.9s
WVOR Wild Horse Val 21.06 338 eP P 12 54 23.2 0.0
63nm,2.0s
MFID Camas Ranch 21.15 345 eP P 12 54 23.8 -0.3
11nm,1.4s
I25A Rochford 21.18 9 P P 12 54 25.2 +0.7
baz=21
MOD Modoc 21.21 335 eP P 12 54 25.2 +0.4
12nm,1.1s
RSSD Black Hills 21.23 9 eP P 12 54 25.1 0.0
2.8nm,0.6s
LRAL Lakeview Retre 21.24 58 eP P 12 54 26.1 +1.1
120nm,2.3s
H17A Grant Village 21.29 356 P P 12 54 26.5 +0.8
baz=22
H17A Grant Village 21.29 356 eP P 12 54 26.7 +1.0
100nm,2.1s
YFT Old Faithful 21.36 355 eP P 12 54 27.6 +1.1
26nm,1.0s
YMR Madison River 21.59 355 eP P 12 54 29.6 +0.8
288nm,2.6s
M04C Macdoel 21.75 332 P P 12 54 30.9 +0.4
baz=22
QLMT Earthquake Lak 21.79 354 eP P 12 54 31.9 +0.9
J08A Circle Bar Ran 21.84 340 eP P 12 54 31.9 +0.5
8.2nm,0.9s
RLMT Red Lodge 21.95 358 P P 12 54 32.9 +0.1
baz=22
RLMT Red Lodge 21.95 358 eP P 12 54 32.7 0.0
53nm,1.8s
RLMT eS S 12 58 38.1 +2.9
MCMT McKenzie Canyo 21.95 351 eP P 12 54 33.7 +0.9
WVT Waverly 21.99 49 eP P 12 54 32.7 -0.4
102nm,2.4s
YBH Yreka Blue Hor 22.09 330 LR LR 13 02 38.8
comp=Z,419nm,21.5s,baz=159,slow=35
DLMT Dillon 22.44 352 eP P 12 54 39.0 +1.1
40nm,1.8s
BZMT Bozeman Pass 22.55 356 eP P 12 54 35.9 -3.3
G26A Maurine 22.60 11 P P 12 54 40.4 +0.9
baz=23
BOZ Bozeman (W) 22.61 354 P P 12 54 39.9 0.0
baz=23,SNR=11
BOZ Bozeman (W) 22.61 354 eP P 12 54 39.7 -0.2
53nm,1.8s
ECSD EROS Data Cent 22.72 22 eP P 12 54 40.3 -0.4
74nm,2.1s
LRM Limekiln Ridge 22.88 353 eP P 12 54 42.7 0.0
HRY Holter Researc 23.69 354 eP P 12 54 50.4 -0.3
F10A Beach Ranch, E 23.89 345 eP P 12 54 52.0 -0.7
95nm,2.3s
CHMT Chamberlain Mo 24.05 352 eP P 12 54 53.6 -0.7
MSO Missoula 24.07 351 P P 12 54 54.1 -0.2
baz=24,SNR=6.7
MSO Missoula 24.07 351 eP P 12 54 54.2 -0.1
111nm,2.3s
CPCT Cooper Cave 24.07 54 eP P 12 54 54.1 -0.3
D25A Fairfield 24.30 8 P P 12 54 56.9 +0.4
baz=24
SLMT Seeley Lake 24.41 352 eP P 12 54 56.7 -0.8
6.6nm,0.8s
SWMT Swartz Lake 24.74 351 eP P 12 54 59.7 -0.8
SFIN Scholer Farm 24.85 41 eP P 12 55 01.4 0.0
34nm,0.8s
EGMT Eagleton 24.86 358 P P 12 55 01.3 -0.2
baz=25
EGMT Eagleton 24.86 358 eP P 12 55 01.0 -0.6
29nm,1.2s
F04A Amboy 25.45 337 eP P 12 55 12.6 +5.9
50nm,1.4s
JTS JuntasAbangare 25.75 116 LR LR 13 05 23.2
comp=Z,560nm,19.6s,baz=312,slow=37
NEW Newport 26.03 347 P P 12 55 10.7 -1.4
2.3nm,0.7s,baz=143,slow=10,SNR=5.4
NEW LR LR 13 05 35.3
comp=Z,914nm,19.1s,baz=176,slow=37
NEW Newport 26.03 347 P P 12 55 11.0 -1.0
baz=26
NEW Newport 26.03 347 eP P 12 55 12.6 +0.5
23nm,1.8s
WALA Waterton Lakes 26.24 352 eP P 12 55 14.6 +0.5
126nm,2.4s
ULM Lac du Bonnet 28.77 17 LR LR 13 07 38.3
comp=Z,905nm,20.0s,baz=212,slow=38
OTAV Otavalo 36.91 124 eP P 12 56 44.4 -4.2
5.0nm,0.8s
ROSC El Rosal 37.53 114 LR LR 13 13 53.9
comp=Z,280nm,18.2s,baz=357,slow=39
SCHQ Schefferville 44.16 33 LR LR 13 17 51.9
comp=Z,325nm,18.3s,baz=260,slow=38
TAOE Nuku Hiva Isla 44.48 228 eT T 13 44 58.1
161nm,0.3s
KDAK Kodiak Island 46.90 329 P P 12 58 08.7 -0.5
3.9nm,0.7s,baz=103,slow=11,SNR=3.0
INK Inuvik 47.74 348 P P 12 58 14.9 -0.7
3.0nm,0.8s,baz=138,slow=11,SNR=4.2
RSO Redoubt South 48.30 332 eP P 12 58 19.0 -1.2
22nm,0.7s
ILAR Eielson Array 48.58 339 P P 12 58 20.6 -1.5
2.4nm,0.7s,baz=152,slow=6.7,SNR=29
ILAR LR LR 13 18 22.7
comp=Z,236nm,19.4s,baz=137,slow=36
TRF Thorofare Moun 48.95 337 eP P 12 58 24.2 -1.0
KTH Kantishna Hill 49.24 336 eP P 12 58 26.4 -0.9
4.7nm,0.8s
PPLA Purkeypile 49.35 335 eP P 12 58 27.4 -0.8
12nm,0.8s
CAST Castle Rocks 49.59 336 eP P 12 58 28.8 -1.1
RKT Rikitea 52.76 211 eLR LR 13 14 04.8
346nm,23.8s,baz=26
RKT Rikitea 52.76 211 eT T 13 55 20.5
4.5nm,0.3s
PMOR Pomariorio Ree 54.16 229 eT T 13 57 10.7
2.0nm,0.2s
LPAZ La Paz 55.52 131 P P 12 59 14.8 -0.3
0.4nm,0.5s,baz=312,slow=14,SNR=2.7
PPT Papeete 57.09 228 LR LR 13 17 01.8
comp=Z,244nm,20.1s,baz=4.5,slow=29
PPT2 Papeete2 57.10 228 eS S 13 07 19.7 -1.4
293nm,26.8s
PPT2 eLR LR 13 15 56.4
868nm,26.5s,baz=34
SIV San Ignacio 60.42 126 LR LR 13 24 35.1
comp=Z,130nm,20.9s,baz=349,slow=35
CPUP Villa Florida 69.68 132 P P 13 00 48.3 -0.6
2.4nm,0.8s,baz=330,slow=10,SNR=4.1
BDFB Brasilia 70.48 117 LR LR 13 34 35.2
comp=Z,375nm,18.0s,baz=278,slow=38
PETK Petropavlovsk- 74.12 321 LR LR 13 27 51.0
comp=Z,64nm,21.2s,baz=75,slow=31
ARCES ARCESS Array B 81.87 15 P P 13 02 04.4 +6.4
2.3nm,0.7s,baz=344,slow=6.1,SNR=5.5
ARCES LR LR 13 38 35.8
comp=Z,161nm,19.9s,baz=318,slow=36
ESDC Sonseca Array 85.88 49 LR LR 13 39 28.6
comp=Z,195nm,19.8s,baz=285,slow=35
FINES FINESS Array B 88.11 20 LR LR 13 40 57.6
comp=Z,236nm,18.5s,baz=319,slow=35
GERES GERESS Array B 91.69 34 LR LR 13 44 03.8
comp=Z,216nm,18.6s,baz=310,slow=36

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|---|---|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **94.27** | **248** | *e*LR | LR | 13 33 31.8 | | | |
| | 358nm,30.5s | | | | | | | | |
| **KEST** | **Kesra** | **96.95** | **47** | LR | LR | 13 46 07.0 | | | |
| | comp=Z,114nm,19.2s,baz=285,slow=35 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **97.51** | **26** | LR | LR | 13 48 56.9 | | | |
| | comp=Z,187nm,18.7s,baz=295,slow=36 | | | | | | | | |
| **DBIC** | **Dimbokro** | **99.70** | **78** | LR | LR | 13 45 42.1 | | | |
| | comp=Z,112nm,20.0s,baz=274,slow=34 | | | | | | | | |
| **WMQ** | **Urumqi** | **111.76** | **348** | PKP | **PKiKP** | **13 08 16.0** | **+1.9** | | |
| WMQ | | | | PP | PP | 13 09 02.0 | +6.9 | | |
| WMQ | | | | SKKS | **SKKSac** | **13 15 56.0** | **-3.3** | | |
| WMQ | | | | SS | **SS** | **13 24 35.0** | **+4.6** | | |
| WMQ | | | | PPMZ | | | | | |
| | 24nm,10.0s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | 130nm,26.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | 120nm,26.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | 120nm,25.0s | | | | | | | | |
| **LZH** | **Lanzhou** | **113.69** | **332** | *e*PKP | **PKiKP** | **13 08 14.0** | **-4.1** | | |
| LZH | | | | sPKP | | 13 08 20.0 | | | |
| LZH | | | | LN | | | | | |
| | 110nm,17.4s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | 120nm,18.7s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | 150nm,20.1s | | | | | | | | |
| **KSH** | **Kashi** | **117.54** | **356** | *e*PKP | **PKPdf** | **13 08 27.8** | **+2.4** | | |
| KSH | | | | *e*PP | PP | 13 09 42.5 | +6.5 | | |
| **CD2** | **Chengdu** | **118.06** | **329** | PKP | **PKPdf** | **13 08 26.0** | **-0.5** | | |
| **WRA** | **Warramunga Arr** | **121.98** | **260** | PKP | **PKPdf** | **13 08 33.4** | **-0.8** | | |
| | 0.3nm,0.7s,baz=85,slow=2.8,SNR=2.5 | | | | | | | | |

**IDC 27 13:02:21.2±3.7, 6.76S×149.31E, h0km, mb2.9/1, mb1 3.6/3, mb1mx3.4/25, mbtmp3.4/3, ML3.6/1, Error ellipse: s-maj=124.7km s-min=43.7km az=116.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.38** | **219** | Pn | Pn | 13 03 17.3 | +1.9 |
| | 1.9nm,0.3s,baz=34,slow=3.6,SNR=6.9 | | | | | | |
| PMG | | | | Sn | Sb | 13 04 06.3 | +2.4 |
| | 6.6nm,0.3s,baz=207,slow=15,SNR=7.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.57** | **227** | P | P | 13 06 50.5 | -0.4 |
| | 0.2nm,0.3s,baz=52,slow=11,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **22.40** | **220** | P | P | 13 07 20.6 | -1.0 |
| | 0.4nm,0.7s,baz=55,slow=9.1,SNR=8.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.50** | **284** | PKPbc | PKPbc | 13 22 08.0 | -0.5 |
| | 0.5nm,0.5s,baz=60,slow=2.8,SNR=4.4 | | | | | | |

*ISK **27** 13:12:59.5, 38.88N×26.11E, h5km, MD2.8*
*CSEM **27** 13:12:59.9±0.2, 38.88N×26.17E, h2km, ML2.2, Error ellipse: s-maj=5.4km s-min=4.1km az=76.0*
*ATH **27** 13:13:00.2, 38.93N×26.17E, h15km±7km, MD2.7/4*
*ISCJB **27** 13:13:00.8±0.6, 38.97N±0.03×26.16E±0.04, h9km±4km, Error ellipse: s-maj=5.5km s-min=4.3km az=157.4*
*DDA **27** 13:13:00.3, 38.99N×26.15E, h7km, Md2.9*
*THE **27** 13:13:01.9, 39.00N×26.15E, h7km±21km, ML2.2/3, Error ellipse: s-maj=21.0km s-min=0.7km az=9.0*

**ISC 27 13:12:59.5±1.1, 38.88N±0.02×26.18E±0.03, h5km±10km, n38, σ0.963/53, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRK** | **Paraskevi** | **0.37** | **10** | *e*PB | **Pg** | **13 13 07.3** | **+0.6** |
| PRK | | | | *e*SB | **Sg** | **13 13 11.6** | **-0.1** |
| **PRK** | **Paraskevi** | **0.37** | **10** | P | **Pg** | **13 13 06.8** | **+0.1** |
| PRK | | | | S | **Sg** | **13 13 11.5** | **-0.1** |
| **PRK** | **Paraskevi** | **0.37** | **10** | P | **Pg** | **13 13 06.8** | **+0.1** |
| **PRK** | **Paraskevi** | **0.37** | **10** | *e*Pb | **Pg** | **13 13 07.3** | **+0.6** |
| PRK | | | | *e*Sb | **Sg** | **13 13 11.6** | **-0.1** |
| **SIGR** | **SIGRI** | **0.42** | **322** | *e*PG | **Pg** | **13 13 08.0** | **+0.4** |
| SIGR | | | | *e*SG | **Sg** | **13 13 13.2** | **+0.1** |
| **SIGR** | **SIGRI** | **0.42** | **322** | *e*PB | **Pg** | **13 13 07.8** | **+0.2** |
| SIGR | | | | *e*SB | **Sg** | **13 13 13.3** | **+0.2** |
| **SIGR** | **SIGRI** | **0.42** | **322** | P | **Pg** | **13 13 08.0** | **+0.4** |
| SIGR | | | | S | **Sg** | **13 13 12.9** | **-0.2** |
| **SIGR** | **SIGRI** | **0.42** | **322** | *e*Pb | **Pg** | **13 13 07.8** | **+0.2** |
| SIGR | | | | S | **Sg** | **13 13 12.9** | **-0.2** |
| SIGR | | | | *e*Sg | **Sg** | **13 13 13.2** | **+0.1** |
| **CHOS** | **Chios island** | **0.50** | **192** | *e*PG | **Pg** | **13 13 09.3** | **+0.2** |
| **CHOS** | **Chios island** | **0.50** | **192** | *e*PN | **Pb** | **13 13 10.9** | **+0.1** |
| **CHOS** | **Chios island** | **0.50** | **192** | P | **Pn** | **13 13 14.1** | **+0.8** |
| CHOS | | | | S | **Sn** | **13 13 22.4** | **0.0** |
| **CHOS** | **Chios island** | **0.50** | **192** | *e*Pg | **Pg** | **13 13 09.3** | **+0.2** |
| **CHOS** | **Chios island** | **0.50** | **192** | *e*Pb | **Pb** | **13 13 10.9** | **+0.1** |
| **AYVA** | **Ayvalik** | **0.58** | **42** | *i* P | **Pg** | **13 13 10.9** | **+0.2** |
| AYVA | | | | *i* S | **Sg** | **13 13 18.7** | **+0.4** |
| **AYVA** | **Ayvalik** | **0.58** | **42** | P | **Pg** | **13 13 10.9** | **+0.2** |
| AYVA | | | | S | **Sg** | **13 13 18.7** | **+0.4** |
| **DKL** | **Dikili** | **0.59** | **71** | *e*PG | **Pb** | **13 13 12.3** | **0.0** |
| **DKL** | **Dikili** | **0.59** | **71** | *e*Pg | **Pb** | **13 13 12.3** | **0.0** |
| **URLA** | **Izmir** | **0.61** | **148** | *i* P | **Pg** | **13 13 10.6** | **-0.6** |
| **URLA** | **Izmir** | **0.61** | **148** | P | **Pg** | **13 13 10.6** | **-0.6** |
| URLA | | | | S | **Sn** | **13 13 25.5** | **+0.6** |
| **EZN** | **Ezine** | **0.95** | **7** | *e*PG | **Pb** | **13 13 18.4** | **0.0** |
| **EZN** | **Ezine** | **0.95** | **7** | *e*Pg | **Pb** | **13 13 18.4** | **0.0** |
| **BOZC** | **Bozcaada** | **0.97** | **354** | P | **Pg** | **13 13 17.1** | **-0.9** |
| BOZC | | | | S | **Sg** | **13 13 29.4** | **-1.2** |
| **AKHS** | **Akhisar** | **1.27** | **89** | *i* P | **Pn** | **13 13 22.2** | **-1.7** |
| AKHS | | | | *i* S | **Sn** | **13 13 41.8** | **+0.5** |
| **AKHS** | **Akhisar** | **1.27** | **89** | P | **Pn** | **13 13 22.2** | **-1.7** |
| AKHS | | | | S | **Sn** | **13 13 41.8** | **+0.5** |
| **LIA** | **Limnos Island** | **1.28** | **323** | *e*PN | **Pn** | **13 13 23.3** | **-0.7** |
| **LIA** | **Limnos Island** | **1.28** | **323** | *e*Pg | **Pn** | **13 13 23.3** | **-0.7** |
| **GADA** | **Gvkgeada** | **1.33** | **351** | *e*PN | **Pg** | **13 13 25.2** | **+0.2** |
| **GADA** | **Gvkgeada** | **1.33** | **351** | *e*Pn | **Pg** | **13 13 25.2** | **+0.2** |
| **BALB** | **Balikesir** | **1.52** | **59** | *e*PN | **Pb** | **13 13 28.4** | **+0.3** |
| **BALB** | **Balikesir** | **1.52** | **59** | *e*Pn | **Pb** | **13 13 28.4** | **+0.3** |
| **GONE** | **Gonen-Balikesi** | **1.65** | **44** | *e*PN | **Pb** | **13 13 30.5** | **+0.2** |
| **GONE** | **Gonen-Balikesi** | **1.65** | **44** | *e*Pn | **Pb** | **13 13 30.5** | **+0.2** |
| **EDC** | **Edincik** | **1.96** | **41** | *e*PN | **Pb** | **13 13 34.7** | **-0.9** |
| **EDC** | **Edincik** | **1.96** | **41** | *e*Pn | **Pb** | **13 13 34.7** | **-0.9** |
| **ALN** | **Alexandroupoli** | **2.02** | **357** | *e*PN | **Pb** | **13 13 36.0** | **-0.6** |
| **ALN** | **Alexandroupoli** | **2.02** | **357** | *e*Pn | **Pb** | **13 13 36.0** | **-0.6** |
| **KCTX** | **Karacabey (Bur** | **2.18** | **50** | *e*PN | **Pn** | **13 13 37.8** | **+1.5** |
| **KCTX** | **Karacabey (Bur** | **2.18** | **50** | *e*Pn | **Pn** | **13 13 37.8** | **+1.5** |

*ISCJB **27** 13:15:53.2±1.1, 33.92S±0.03×72.31W±0.05, h24km±7km, mb4.2/8, MS4.1/2, Error ellipse: s-maj=7.8km s-min=5.2km az=26.3*
*GUC **27** 13:15:54.3±0.6, 33.98S×72.11W, h28km±3km, ML4.5*
*NEIC **27** 13:15:54.0, 33.98S×72.11W, h28km, mb4.4/2, ML4.5(GUC), After GUC.*
*NEIC Felt [III] at Navidad, Paredones, Pichilemu, San Fernando, Santa Cruz, Santiago and San Vicente; [II] at Rancagua.*
*IDC **27** 13:16:00.9±3.3, 33.92S×71.84W, h70km±29km, mb3.9/8, mb1 4.0/12, mb1mx3.8/26, mbtmp4.2/12, MS4.2/4, Ms1 4.2/4, ms1mx3.6/18, Error ellipse: s-maj=33.5km s-min=15.8km az=93.0*

**ISC 27 13:15:54.2±1.5, 33.91S±0.05×72.13W±0.07, h17km±8km, n39, σ1.900/45, mb4.3/8, 7C-4D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.49** | **167** | ⇑*i*P | **Pg** | **13 16 03.7** | **-0.4** |
| CHPI | | | | *i* S | **Sg** | **13 16 10.6** | **-0.1** |
| **TACH** | **Talagante** | **1.03** | **76** | ⇑*i*P | **Pb** | **13 16 13.3** | **-0.3** |
| **RCDM** | **Rinconada Maip** | **1.18** | **70** | ⇓*i*P | **Pn** | **13 16 15.6** | **-0.4** |
| RCDM | | | | *i* S | **Sn** | **13 16 32.1** | **+0.3** |
| RCDM | | | | AML | AML | 13 16 40.4 | |
| | comp=N,12μm,0.5s | | | | | | |
| **CHCH** | **Chadas Angostu** | **1.23** | **91** | ⇓*i*P | **Pn** | **13 16 16.6** | **-0.2** |
| **ANTU** | **Antumapu** | **1.29** | **75** | *e*P | **Pb** | **13 16 17.9** | **-0.2** |
| ANTU | | | | *i* S | **Sg** | **13 16 36.0** | **-0.2** |
| ANTU | | | | AML | AML | 13 16 40.1 | |
| | comp=E,13μm,0.4s | | | | | | |
| **SAN** | **Santiago** | **1.31** | **70** | ⇑*i*P | **Pb** | **13 16 18.6** | **+0.2** |
| SAN | | | | *i* S | **Sg** | **13 16 36.5** | **0.0** |
| **NICH** | **Los Niches** | **1.32** | **146** | ⇑*i*P | **Pn** | **13 16 17.3** | **-0.6** |
| NICH | | | | *i* S | **Sn** | **13 16 34.8** | **-0.3** |
| **PCH** | **Pirque** | **1.38** | **78** | ⇑*i*P | **Pb** | **13 16 19.5** | **-0.2** |
| **FSR** | **Penalolen** | **1.41** | **73** | *e*P | **Pg** | **13 16 20.8** | **-0.5** |
| FSR | | | | *e*S | **Sg** | **13 16 40.1** | **+0.4** |
| **CLCH** | **Cerro Calan** | **1.43** | **69** | ⇑*i*P | **Pb** | **13 16 20.3** | **-0.2** |
| CLCH | | | | *i* S | **Sg** | **13 16 40.1** | **-0.3** |
| CLCH | | | | AML | AML | 13 16 47.0 | |
| | comp=N,16μm,0.8s | | | | | | |
| **PEL** | **Peldehue** | **1.43** | **58** | ⇓*i*P | **Pb** | **13 16 20.7** | **+0.2** |
| PEL | | | | *i* S | **Sg** | **13 16 40.4** | **0.0** |
| PEL | | | | AML | AML | 13 16 47.7 | |
| | comp=E,26μm,0.6s | | | | | | |
| **TALC** | **Talca** | **1.54** | **165** | ⇓*i*P | **Pn** | **13 16 20.5** | **-0.4** |
| TALC | | | | *i* S | **Sn** | **13 16 40.3** | **-0.2** |
| **YECH** | **El Yeso** | **1.72** | **82** | ⇑*i*P | **Pg** | **13 16 26.9** | **-0.6** |
| YECH | | | | *i* S | **Sg** | **13 16 51.0** | **+1.1** |
| YECH | | | | AML | AML | 13 16 55.8 | |
| | comp=E,11μm,0.2s | | | | | | |
| **CFAA** | **Coronel Fontan** | **4.01** | **56** | P | **Pn** | **13 16 57.0** | **+2.1** |
| | comp=E,0.4nm,0.3s,baz=220,slow=13,SNR=63 | | | | | | |
| CFAA | | | | S | **Sb** | **13 17 50.0** | **-2.6** |
| | comp=E,2.5nm,0.3s,baz=43,slow=19,SNR=2.7 | | | | | | |
| **LCO** | **Las Campanas** | **5.04** | **14** | *e*Pn | **Pn** | **13 17 08.4** | **-0.9** |
| | comp=E,94nm,0.8s | | | | | | |
| **TRQA** | **Tornquist** | **9.21** | **120** | *e*Pn | Pn | 13 18 09.4 | +3.2 |
| | comp=E,18nm,0.8s | | | | | | |
| **LVC** | **Limon Verde** | **11.61** | **15** | P | Pn | 13 18 43.6 | +4.2 |
| | comp=E,7.8nm,0.3s,baz=222,slow=14,SNR=2.9 | | | | | | |
| LVC | | | | LR | LR | 13 23 23.7 | |
| | comp=E,3μm,18.7s,baz=220,slow=38 | | | | | | |
| **LVC** | **Limon Verde** | **11.61** | **15** | P | **Pn** | **13 18 40.4** | **+1.0** |
| **CPUP** | **Villa Florida** | **14.86** | **63** | P | **Pn** | **13 19 26.2** | **+2.6** |
| | comp=E,0.2nm,0.3s,baz=217,slow=11,SNR=7.3 | | | | | | |
| CPUP | | | | LR | LR | 13 25 48.9 | |
| | comp=E,668nm,18.5s,baz=258,slow=40 | | | | | | |
| **LPAZ** | **La Paz** | **17.91** | **13** | P | **P** | **13 20 04.9** | **+1.1** |
| | comp=E,0.3nm,0.3s,baz=166,slow=9.7,SNR=14 | | | | | | |
| **SIV** | **San Ignacio** | **20.44** | **32** | P | **P** | **13 20 30.9** | **0.0** |
| | comp=E,3.0nm,0.7s,baz=221,slow=12,SNR=8.8 | | | | | | |
| **USHA** | **Ushuaia** | **21.08** | **174** | P | **P** | **13 20 39.8** | **+2.4** |
| | comp=E,4.6nm,0.7s,baz=344,slow=9.4,SNR=5.2 | | | | | | |
| **SAML** | **Samuel** | **26.18** | **20** | *e*P | **P** | **13 21 26.8** | **-1.1** |
| | comp=E,8.2nm,0.9s | | | | | | |
| **BDFB** | **Brasilia** | **28.35** | **56** | P | **P** | **13 21 46.0** | **-1.5** |
| | comp=E,6.5nm,0.9s,baz=170,slow=6.8,SNR=5.7 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **49.47** | **158** | P | **P** | **13 24 43.4** | **+0.2** |
| **VNA1** | **Neumayer--Stat** | **49.78** | **157** | P | **P** | **13 24 46.2** | **+0.8** |
| **VNA2** | **Neumayer--Watz** | **50.12** | **157** | P | **P** | **13 24 48.5** | **+0.4** |
| | baz=280,slow=7.9 | | | | | | |
| **SNAA** | **Sanae** | **51.70** | **158** | P | **P** | **13 24 59.2** | **-0.8** |
| **SNAA** | **Sanae** | **51.70** | **158** | P | **P** | **13 24 59.3** | **-0.8** |
| | comp=E,3.9nm,1.1s,baz=288,slow=6.7,SNR=21 | | | | | | |
| **SNAA** | **Sanae** | **51.70** | **158** | *e*P | **P** | **13 24 58.9** | **-1.1** |
| | comp=E,5.8nm,1.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **56.32** | **180** | P | **P** | **13 25 33.9** | **-0.1** |
| | comp=E,1.7nm,0.7s,baz=150,slow=3.3,SNR=10 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.62** | **331** | P | **P** | **13 27 03.6** | **+1.0** |
| | comp=E,0.4nm,0.8s,baz=148,slow=7.2,SNR=3.2 | | | | | | |
| TXAR | | | | LR | LR | 13 53 01.8 | |
| | comp=E,80nm,18.9s,baz=0.0,slow=32 | | | | | | |
| **MAW** | **Mawson** | **73.29** | **164** | P | **P** | **13 27 23.9** | **-0.3** |
| | comp=E,2.1nm,0.8s,baz=231,slow=8.9,SNR=8.3 | | | | | | |
| MAW | | | | LR | LR | 14 02 42.5 | |
| | comp=E,145nm,18.1s,baz=240,slow=38 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.25** | **70** | P | **P** | **13 28 24.7** | **-0.6** |
| | comp=E,5.6nm,0.9s,baz=254,slow=4.3,SNR=28 | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **25.69** | **269** | T | T | 15 54 12.8 | |
| | baz=118 | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **25.71** | **269** | T | T | 15 53 29.1 | |
| | baz=118,SNR=4.3 | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **25.71** | **269** | T | T | 15 54 02.8 | |
| | baz=118 | | | | | | |
| **AAK** | **Ala-Archa** | **152.53** | **62** | *e*PKPbc | **PKPbc** | **13 35 48.1** | **-1.6** |
| **ZALV** | **Zalesovo Beam** | **154.19** | **32** | PKPbc | **PKPbc** | **13 35 52.6** | **0.0** |
| | comp=E,2.8nm,0.8s,baz=286,slow=3.3,SNR=5.9 | | | | | | |

*BYKL **27** 13:18:46.6±0.2, 52.04N×105.68E*
*MOS **27** 13:18:46.2±1.6, 52.03N×105.80E, h12km, mb4.4/1, Error ellipse: s-maj=16.8km s-min=12.3km az=146.6*

**ISC 27 13:18:46.7±1.0, 52.04N±0.03×105.69E±0.02, h10km±9km, n35, σ1.992/65, 7C-1D, Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSTR** | **Listvyanka** | **0.56** | **253** | ⇑*i*PG | **Pg** | **13 18 57.6** | **+0.1** |
| LSTR | | | | *e* | | 13 19 04.9 | |
| LSTR | | | | pmax | pmax | | |
| | comp=Z,189nm,0.1s | | | | | | |
| LSTR | | | | smax | smax | | |
| | comp=E,1μm,0.1s | | | | | | |
| **LSTR** | **Listvyanka** | **0.56** | **253** | ⇑*i*Pg | **Pg** | **13 18 57.6** | **+0.1** |
| LSTR | | | | *e*Sg | **Sg** | **13 19 05.0** | **+0.1** |
| LSTR | | | | Pmax | | | |
| | comp=E,190nm,0.1s | | | | | | |
| LSTR | | | | Smax | | | |
| | comp=E,1μm,0.1s | | | | | | |
| **KAB** | **Kabansk** | **0.60** | **88** | ⇑*i*PG | **Pg** | **13 18 58.3** | **0.0** |
| KAB | | | | *i* | | 13 19 06.9 | |
| KAB | | | | pmax | pmax | | |
| | comp=Z,1μm,0.3s | | | | | | |
| KAB | | | | smax | smax | | |
| | comp=E,6μm,0.6s | | | | | | |
| **KAB** | **Kabansk** | **0.60** | **88** | ⇑*i*Pg | **Pg** | **13 18 58.3** | **0.0** |
| KAB | | | | *e*Sg | **Sg** | **13 19 06.7** | **+0.6** |
| KAB | | | | Pmax | | | |
| | comp=E,1μm,0.2s | | | | | | |
| KAB | | | | Smax | | | |
| | comp=E,6μm,0.4s | | | | | | |
| **TRG** | **Tyrgan** | **0.83** | **29** | ⇓*i*PG | **Pg** | **13 19 02.3** | **-0.4** |
| TRG | | | | *e* | | 13 19 13.6 | |
| TRG | | | | pmax | pmax | | |
| | comp=Z,182nm,0.1s | | | | | | |
| TRG | | | | smax | smax | | |
| | comp=E,2μm,0.1s | | | | | | |
| **TRG** | **Tyrgan** | **0.83** | **29** | ⇑*i*Pg | **Pg** | **13 19 02.1** | **-0.6** |
| TRG | | | | *e*Pb | **Pb** | **13 19 03.9** | **+0.6** |
| TRG | | | | *e*Sg | **Sg** | **13 19 13.3** | **-0.3** |
| TRG | | | | *e*Sb | **Sn** | **13 19 16.7** | **-0.1** |
| TRG | | | | max | | | |
| | comp=E,184nm,0.1s | | | | | | |
| TRG | | | | max | | | |
| | comp=E,2μm,0.1s | | | | | | |
| **IRK** | **Irkutsk** | **0.90** | **284** | *e*PG | **Pg** | **13 19 03.6** | **-0.4** |
| IRK | | | | *e* | | 13 19 15.3 | |
| IRK | | | | pmax | pmax | | |
| | comp=Z,500nm,0.2s | | | | | | |
| IRK | | | | smax | smax | | |
| | comp=N,4μm,0.3s | | | | | | |
| **IRK** | **Irkutsk** | **0.90** | **284** | *e*Pg | **Pg** | **13 19 03.6** | **-0.4** |
| IRK | | | | *e*Sg | **Sg** | **13 19 15.7** | **0.0** |
| IRK | | | | Pmax | | | |
| | comp=N,601nm,0.2s | | | | | | |
| IRK | | | | Smax | | | |
| | comp=N,4μm,0.3s | | | | | | |
| **ZRHB** | **Zarechye** | **1.04** | **59** | *e*Pg | **Pg** | **13 19 06.0** | **-0.7** |
| ZRHB | | | | *e*Sg | **Sg** | **13 19 19.7** | **-0.5** |
| ZRHB | | | | Pmax | | | |
| | comp=N,157nm,0.2s | | | | | | |
| ZRHB | | | | Smax | | | |
| | comp=N,2μm,0.5s | | | | | | |
| **UUDB** | **Ulan-Yde** | **1.23** | **97** | ⇑*i*Pg | **Pn** | **13 19 09.0** | **-1.0** |
| UUDB | | | | *e*Sg | **Sb** | **13 19 25.6** | **-0.4** |
| UUDB | | | | Pmax | | | |
| | comp=N,310nm,0.3s | | | | | | |
| UUDB | | | | Smax | | | |
| | comp=N,650nm,0.4s | | | | | | |
| **TLY** | **Talaya** | **1.32** | **255** | *c i*PG | **Pn** | **13 19 10.6** | **-0.6** |
| TLY | | | | *e* | | 13 19 27.7 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,91nm,0.2s | | | | | | |
| TLY | | | | smax | smax | | |
| | comp=N,575nm,0.3s | | | | | | |
| **TLY** | **Talaya** | **1.32** | **255** | *e*Pg | **Pn** | **13 19 10.7** | **-0.5** |
| TLY | | | | *e*Sg | **Sb** | **13 19 28.6** | **+0.1** |
| TLY | | | | Pmax | | | |
| | comp=N,175nm,0.1s | | | | | | |
| TLY | | | | Smax | | | |
| | comp=N,865nm,0.1s | | | | | | |
| **OGRR** | **Ongureny** | **1.98** | **35** | *e*PN | **Pn** | **13 19 20.6** | **+0.3** |
| OGRR | | | | *e* | | 13 19 22.3 | |
| OGRR | | | | *e* | | 13 19 48.1 | |
| OGRR | | | | pmax | pmax | | |
| | comp=Z,28nm,0.2s | | | | | | |
| OGRR | | | | smax | smax | | |
| | comp=E,284nm,0.4s | | | | | | |
| **OGRR** | **Ongureny** | **1.98** | **35** | *e*Pn | **Pn** | **13 19 20.6** | **+0.3** |
| OGRR | | | | *e*Sg | **Sb** | **13 19 47.9** | **+0.3** |
| OGRR | | | | Smax | | | |
| | comp=E,288nm,0.3s | | | | | | |
| **ARS** | **Arshan** | **2.02** | **268** | *e*PN | **Pn** | **13 19 21.7** | **+0.8** |
| ARS | | | | *e* | | 13 19 23.1 | |
| ARS | | | | *e* | | 13 19 48.9 | |
| ARS | | | | pmax | pmax | | |
| | comp=Z,203nm,0.5s | | | | | | |
| ARS | | | | smax | smax | | |
| | comp=N,1μm,0.5s | | | | | | |
| **ARS** | **Arshan** | **2.02** | **268** | *e*Pn | **Pn** | **13 19 21.6** | **+0.7** |
| ARS | | | | *e*Pg | **Pb** | **13 19 22.7** | **-0.9** |
| ARS | | | | *e*Sg | **Sb** | **13 19 48.9** | **+0.1** |
| ARS | | | | Pmax | | | |
| | comp=N,161nm,0.2s | | | | | | |
| ARS | | | | Smax | | | |
| | comp=N,1μm,0.4s | | | | | | |
| **ZAK** | **Zakamensk** | **2.24** | **223** | *e*PN | **Pb** | **13 19 27.1** | **-0.3** |
| ZAK | | | | *e* | | 13 19 56.2 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,40nm,0.3s | | | | | | |
| ZAK | | | | smax | smax | | |
| | comp=N,329nm,0.4s | | | | | | |
| **ZAK** | **Zakamensk** | **2.24** | **223** | *e*Pg | **Pb** | **13 19 27.3** | **-0.1** |
| ZAK | | | | *e*Sn | **Sn** | **13 19 51.2** | **-0.6** |
| ZAK | | | | *e*Sg | **Sb** | **13 19 56.3** | **+1.1** |
| ZAK | | | | Pmax | | | |
| | comp=N,22nm,0.1s | | | | | | |
| ZAK | | | | Smax | | | |
| | comp=N,330nm,0.4s | | | | | | |
| **MOY** | **Mondy** | **2.94** | **265** | *e*PN | **Pb** | **13 19 38.5** | **-0.7** |
| MOY | | | | *e* | | 13 20 16.7 | |
| MOY | | | | pmax | pmax | | |
| | comp=Z,53nm,0.2s | | | | | | |
| MOY | | | | smax | smax | | |
| | comp=N,255nm,0.5s | | | | | | |
| **MOY** | **Mondy** | **2.94** | **265** | *e*Pg | **Pb** | **13 19 37.0** | **-2.2** |
| MOY | | | | *e*Sg | **Sb** | **13 20 17.0** | **+1.9** |
| MOY | | | | Pmax | | | |
| | comp=N,64nm,0.6s | | | | | | |
| MOY | | | | Smax | | | |
| | comp=N,298nm,0.8s | | | | | | |
| **SYVR** | **Suvo** | **3.08** | **56** | *e* | **Pb** | **13 19 38.9** | **-2.6** |
| SYVR | | | | *e* | | 13 20 09.2 | |
| SYVR | | | | *e*Sg | **Sg** | **13 20 22.6** | **-2.9** |
| SYVR | | | | Smax | | | |
| | comp=N,146nm,0.3s | | | | | | |
| **ORL** | **Orlik** | **3.65** | **280** | *e*PN | **Pn** | **13 19 44.4** | **+1.1** |
| ORL | | | | *e* | | 13 19 50.8 | |
| ORL | | | | *e* | | 13 20 38.2 | |
| ORL | | | | pmax | pmax | | |
| | comp=Z,47nm,0.5s | | | | | | |
| ORL | | | | smax | smax | | |
| | comp=N,183nm,0.8s | | | | | | |
| **ORL** | **Orlik** | **3.65** | **280** | *e*Pn | **Pn** | **13 19 44.4** | **+1.1** |
| ORL | | | | *e*Pg | **Pb** | **13 19 51.1** | **-0.2** |
| ORL | | | | *e*Sg | **Sb** | **13 20 38.2** | **+2.7** |
| ORL | | | | Pmax | | | |
| | comp=N,46nm,0.5s | | | | | | |
| ORL | | | | Smax | | | |
| | comp=N,182nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **4.27** | **168** | *e*Pn | **Pn** | **13 19 51.5** | **-0.3** |
| ULN | | | | *e*Pg | **Pb** | **13 20 03.5** | **+1.6** |
| ULN | | | | *e*Sg | **Sb** | **13 20 58.2** | **+4.7** |
| **YLYR** | **Ulyunkhan** | **4.33** | **47** | *e*Pn | **Pn** | **13 19 52.3** | **-0.3** |
| YLYR | | | | *e*Pg | **Pb** | **13 20 04.3** | **+1.4** |
| YLYR | | | | *e*Sn | **Sn** | **13 20 41.1** | **-2.1** |
| YLYR | | | | *e*Sg | **Sb** | **13 21 00.5** | **+5.3** |
| YLYR | | | | Pmax | | | |
| | comp=N,6.0nm,0.5s | | | | | | |
| YLYR | | | | Smax | | | |
| | comp=N,55nm,0.5s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **4.38** | **30** | *e*PN | **Pb** | **13 20 03.0** | **-0.8** |
| NIZ | | | | *e*S | **Sn** | **13 20 43.0** | **-1.4** |
| NIZ | | | | *e* | | 13 21 01.9 | |
| NIZ | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.7s | | | | | | |
| NIZ | | | | smax | smax | | |
| | comp=N,63nm,0.6s | | | | | | |
| **NIZ** | **Nizh Angarsk** | **4.38** | **30** | *e*Pn | **Pn** | **13 19 53.2** | **-0.1** |
| NIZ | | | | *e*Pg | **Pb** | **13 20 04.3** | **+0.5** |
| NIZ | | | | *e*Sn | **Sn** | **13 20 41.8** | **-2.6** |
| NIZ | | | | *e*Sg | **Sb** | **13 21 01.6** | **+4.9** |
| NIZ | | | | Pmax | | | |
| | comp=N,13nm,0.5s | | | | | | |
| NIZ | | | | Smax | | | |
| | comp=N,80nm,0.6s | | | | | | |
| **KPC** | **Khapcheranga** | **4.84** | **116** | *e*PN | **Pn** | **13 19 57.9** | **-1.7** |
| KPC | | | | *e* | | 13 20 11.9 | |
| KPC | | | | *e* | | 13 21 15.2 | |
| KPC | | | | pmax | pmax | | |
| | comp=Z,13nm,0.4s | | | | | | |
| KPC | | | | smax | smax | | |
| | comp=E,190nm,1.3s | | | | | | |
| **KPC** | **Khapcheranga** | **4.84** | **116** | *e*Pn | **Pn** | **13 19 57.8** | **-1.8** |
| KPC | | | | *e*Pg | **Pb** | **13 20 12.8** | **+1.3** |
| KPC | | | | *e*Sn | **Sn** | **13 20 53.8** | **-1.8** |
| KPC | | | | *e*Sg | **Sb** | **13 21 15.0** | **+5.3** |
| KPC | | | | Pmax | | | |
| | comp=E,15nm,0.5s | | | | | | |
| KPC | | | | Smax | | | |
| | comp=E,191nm,1.1s | | | | | | |
| **CIT** | **Chita** | **4.86** | **87** | *e*Sg | **Sg** | **13 21 16.9** | **-5.6** |
| CIT | | | | Smax | | | |
| | comp=E,133nm,0.4s | | | | | | |
| **KMO** | **Kumora** | **5.05** | **38** | *e*Pn | **Pn** | **13 20 02.6** | **+0.2** |
| KMO | | | | *e*Pg | **Pb** | **13 20 17.2** | **+2.2** |
| KMO | | | | *e*Sg | Sb | 13 21 22.0 | +6.3 |
| KMO | | | | Pmax | | | |
| | comp=E,10.0nm,0.5s | | | | | | |
| KMO | | | | Smax | | | |
| | comp=E,65nm,1.3s | | | | | | |
| **UKT** | **Uakit** | **5.84** | **51** | *e*Pn | **Pn** | **13 20 13.9** | **+0.5** |
| UKT | | | | *e*Pg | **Pb** | **13 20 31.6** | **+3.0** |
| UKT | | | | *e*Sn | **Sn** | **13 21 17.7** | **-2.7** |
| UKT | | | | *e*Sg | Sg | 13 21 47.2 | -6.9 |
| UKT | | | | Pmax | | | |
| | comp=E,6.0nm,0.7s | | | | | | |
| UKT | | | | Smax | | | |
| | comp=E,27nm,0.9s | | | | | | |
| **NLYR** | **Nelyaty** | **7.37** | **49** | *e*PN | Pn | 13 20 14.8 | -19 |
| NLYR | | | | *e* | Pb | 13 20 59.0 | +4.5 |
| NLYR | | | | *e* | | 13 22 34.8 | |
| NLYR | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| NLYR | | | | smax | smax | | |
| | comp=N,49nm,0.5s | | | | | | |
| **NLYR** | **Nelyaty** | **7.37** | **49** | *e*Sg | Sg | 13 22 35.0 | -7.9 |
| NLYR | | | | Smax | | | |
| | comp=N,44nm,1.7s | | | | | | |
| **TUP** | **Tupik** | **8.89** | **69** | *e*Sg | Sg | 13 23 20.5 | -11 |
| TUP | | | | Smax | | | |
| | comp=N,67nm,1.1s | |

*ISCJB **27** 14:00:22.1±0.3,13°.52N±0°.03×124°.84E±0°.04,h33km, mb4.5/28,MS3.7/15,Error ellipse: s-maj=6.0km s-min=3.6km az=170.5*
*NEIC **27** 14:00:22.9±0.2,13°.21N×124°.72E,h35km,mb4.6/10,Error ellipse: s-maj=9.3km s-min=4.9km az=72.0*
*DJA **27** 14:00:26.0±3.5,14°.1N±25°×12°.5E±1°.0,h113km±20km, M4.7/18,mb4.7/18,mB5.3/6,Mw(mB)4.7/6*

**ISC 27 14:00:23.3**±0.5,**13°.47N**±0°.04×**124°.83E**±0°.05,**h33**km,**n92,** σ1§**47/88,mb4.5/28,MS3.6**/15,**9C-1D,Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUQP** | **San Andres** | **2.10** | **266** | *eP* | **Pn** | **14 00 58.2** | **+2.1** |
| AUQP | | | | *eS* | **Sb** | **14 01 26.8** | **+0.4** |
| **PLP** | **Palo** | **2.30** | **176**⇑ | *iP* | **Pn** | **14 00 59.2** | **+0.3** |
| PLP | | | | *i* S | **Sn** | **14 01 24.9** | **-1.2** |
| **GQP** | **Guinayangan** | **2.35** | **281**⇑ | *eP* | **Pn** | **14 00 59.9** | **+0.3** |
| GQP | | | | *eS* | **Sb** | **14 01 32.5** | **-1.2** |
| **OCLP** | **Ormoc** | **2.42** | **185** | *eP* | **Pn** | **14 01 01.6** | **+1.1** |
| **RCP** | **Roxas** | **2.78** | **227**⇑ | *eP* | **Pn** | **14 01 07.0** | **+1.4** |
| RCP | | | | *eS* | **Sn** | **14 01 41.4** | **+3.4** |
| **OTRP** | **Odiongan** | **2.95** | **248** | *eP* | **Pn** | **14 01 08.4** | **+0.6** |
| **KALP** | **Kalibo** | **3.01** | **234** | *eP* | Pn | 14 01 04.9 | -3.8 |
| **LLP** | **Lapu-Lapu** | **3.25** | **195**⇑ | *eP* | **Pn** | **14 01 11.4** | **-0.6** |
| LLP | | | | *eS* | **Sn** | **14 01 51.8** | **+2.2** |
| **LQP** | **Lukban** | **3.25** | **282**⇑ | *eP* | **Pb** | **14 01 19.0** | **-1.5** |
| **MSLP** | **Maasin** | **3.32** | **179** | *eP* | **Pn** | **14 01 14.0** | **+1.0** |
| **SCPH** | **Surigao** | **3.73** | **170**⇑ | *eP* | **Pn** | **14 01 18.5** | **-0.1** |
| **SJMP** | **San Jose** | **3.75** | **255** | *eP* | **Pn** | **14 01 21.0** | **+2.1** |
| **TGY** | **Tagaytay City** | **3.83** | **280**⇑ | *eP* | Pb | 14 01 39.2 | +8.9 |
| TGY | | | | *eS* | **Sn** | **14 02 02.4** | **-1.5** |
| **BALP** | **Baler** | **3.87** | **306** | *eP* | **Pn** | **14 01 21.4** | **+0.9** |
| **PCPH** | **Palayan** | **4.17** | **300**⇓ | *eP* | **Pn** | **14 01 23.1** | **-1.5** |
| PCPH | | | | *eS* | **Sn** | **14 02 09.3** | **-2.9** |
| **CUYO** | **Cuyo Island** | **4.54** | **235** | *eP* | **Pn** | **14 01 30.5** | **+0.7** |
| **BUSP** | **Coron** | **4.74** | **253** | *eP* | **Pn** | **14 01 33.8** | **+1.2** |
| **BCPH** | **Baguio City Da** | **5.02** | **306**⇑ | *iP* | **Pn** | **14 01 38.1** | **+1.6** |
| **BIPH** | **Bislig** | **5.47** | **164**⇑ | *eP* | **Pn** | **14 01 43.2** | **+0.7** |
| BIPH | | | | *eS* | **Sn** | **14 02 43.3** | **-1.1** |
| **BUKP** | **Musuan** | **5.56** | **178** | *eP* | **Pn** | **14 01 46.4** | **+2.5** |
| **ENPP** | **El Nido** | **5.74** | **247** | *eP* | **Pn** | **14 01 48.2** | **+2.0** |
| **SZP** | **Santa** | **5.85** | **314** | P | **Pn** | **14 01 48.4** | **+0.7** |
| **DAV** | **Davao City (W)** comp=Z,3μm,19.6s,baz=350,slow=45 | **6.41** | **173** | LR | LR | 14 04 55.1 | |
| **MRSI** | **Marisa** 22nm,0.9s | **13.22** | **193** | P | **P** | **14 03 35.8** | **-2.5** |
| **MPSI** | **Mapaga** 11nm,1.3s | **13.93** | **201** | P | **P** | **14 03 44.8** | **-1.4** |
| **LUWI** | **Luwuk** 59nm,0.8s,6μm | **14.56** | **188** | P | **P** | **14 03 52.8** | **-0.4** |
| **APSI** | **Ampana** 74nm,1.2s,1μm | **14.63** | **193** | P | **P** | **14 03 53.8** | **-0.2** |
| **PCI** | **Palu** 48nm,1.3s | **15.12** | **199** | P | **Pn** | **14 03 56.8** | **+2.2** |
| **TTSI** | **Tana Toraja** 90nm,0.8s,709nm | **17.15** | **197** | P | **P** | **14 04 23.4** | **+1.5** |
| **MSAI** | **Masohi** 26nm,1.2s,222nm | **17.20** | **166** | P | **P** | **14 04 24.1** | **+1.6** |
| **AAI** | **Ambon** 52nm,1.1s | **17.37** | **169** | P | **P** | **14 04 25.3** | **+0.9** |
| **SPSI** | **Sidrap Palu** 55nm,0.8s | **18.04** | **196** | P | **Pn** | **14 04 31.6** | **+0.1** |
| **STKI** | **Sintang** 26nm,1.2s,27μm | **18.77** | **226** | P | **Pn** | **14 04 40.9** | **+0.4** |
| **KAPI** | **Kappang** 0.5nm,0.3s,baz=43,slow=15,SNR=9.1 | **19.05** | **196** | P | **P** | **14 04 42.2** | **-0.7** |
| KAPI | | | | LR | LR | 14 12 30.7 | |
| **KAPI** | **Kappang** 22nm,0.8s comp=Z,384nm,20.9s,baz=26,slow=39 | **19.05** | **196** | P | **P** | **14 04 39.7** | **-3.1** |
| **BBKI** | **Banjar Baru** 55nm,0.9s | **19.53** | **211** | P | **P** | **14 04 48.0** | **-0.1** |
| **JNU** | **Nakatsue** comp=Z,150nm,20.6s,baz=137,slow=35 | **20.32** | **15** | LR | LR | 14 12 23.4 | |
| **MMRI** | **Maumere** | **22.11** | **187** | P | **P** | **14 05 17.9** | **+1.8** |
| **SOEI** | **Soe** 14nm,0.7s | **23.08** | **181** | *eP* | **P** | **14 05 22.7** | **-3.7** |
| **BATI** | **Baumata** 28nm,0.7s,baz=342,slow=2.7,SNR=7.7 | **23.55** | **183** | P | **P** | **14 05 27.3** | **-3.7** |
| BATI | | | | LR | LR | 14 16 01.5 | |
| **KSAR** | **Wonju Array Be** | **24.03** | **6** | P | **P** | **14 05 37.2** | **+2.0** |
| **KSRS** | **Korea Array** 4.2nm,0.9s,baz=184,slow=10,SNR=12 | **24.04** | **6** | P | **P** | **14 05 37.2** | **+1.8** |
| KSRS | | | | LR | LR | 14 14 50.4 | |
| **CMAR** | **Chiang Mai Arr** 4.9nm,0.7s,baz=97,slow=8.0,SNR=40 | **25.36** | **285** | P | **P** | **14 05 46.4** | **-1.3** |
| CMAR | | | | PcP | **PcP** | **14 09 20.6** | **+0.8** |
| **LSA** | **Lhasa** 29nm,1.1s | **35.06** | **303** | *eP* | **P** | **14 07 14.7** | **+0.8** |
| **TAPN** | **Taplejung** 26nm,1.1s | **37.27** | **298** | *eP* | **P** | **14 07 31.8** | **-0.8** |
| **ULN** | **Ulaanbaatar** 5.8nm,0.8s | **37.35** | **340** | *eP* | **P** | **14 07 34.1** | **+1.3** |
| **ODAN** | **Odare** 46nm,0.9s | **37.43** | **297** | *eP* | **P** | **14 07 33.3** | **-0.6** |
| **SONM** | **Songino Array** 5.3nm,0.8s,baz=156,slow=10.0,SNR=26 | **37.54** | **340** | P | **P** | **14 07 35.6** | **+1.2** |
| SONM | | | | LR | LR | 14 24 46.3 | |
| **ASAR** | **Alice Springs** 7.0nm,0.8s,baz=346,slow=7.2,SNR=100 | **37.97** | **166** | P | **P** | **14 07 36.1** | **-2.1** |
| ASAR | | | | PcP | **PcP** | **14 09 52.7** | **-0.9** |
| **RAMN** | **Ramite** 48nm,1.1s | **38.14** | **297** | *eP* | **P** | **14 07 39.6** | **-0.3** |
| **GUN** | **Gumba** 37nm,0.8s | **38.98** | **298** | *eP* | **P** | **14 07 46.7** | **-0.4** |
| **PKI** | **Pulchoki** 18nm,0.8s | **39.31** | **297** | *eP* | **P** | **14 07 48.5** | **-1.4** |
| **PKIN** | **Phulchoki** 12nm,0.8s | **39.32** | **297** | *eP* | **P** | **14 07 48.6** | **-1.3** |
| **CTA** | **Charters Tower** 3.0nm,0.8s,baz=0.0,slow=13,SNR=2.8 | **39.46** | **147** | P | **P** | **14 07 49.8** | **-1.0** |
| **KKN** | **Kakani** 29nm,1.0s | **39.47** | **297** | *eP* | **P** | **14 07 50.2** | **-0.9** |
| **DMN** | **Daman** 12nm,0.6s | **39.58** | **297** | *eP* | **P** | **14 07 51.1** | **-0.9** |
| **GKN** | **Gorkha** 6.4nm,0.5s | **40.07** | **298** | *eP* | **P** | **14 07 54.9** | **-1.1** |
| **H11S3** | **WAKE ISLAND Hy** baz=268,slow=75,SNR=28 | **40.49** | **77** | T | T | 14 51 11.8 | |
| **H11S1** | **WAKE ISLAND Hy** baz=268,slow=75,SNR=9.9 | **40.50** | **77** | T | T | 14 51 31.1 | |
| **H11S2** | **WAKE ISLAND Hy** baz=268,slow=75,SNR=21 | **40.50** | **77** | T | T | 14 51 32.2 | |
| **H11N1** | **WAKE ISLAND Hy** baz=267,slow=74,SNR=76 | **40.71** | **75** | T | T | 14 51 59.1 | |
| **H11N2** | **WAKE ISLAND Hy** baz=267,slow=74,SNR=61 | **40.72** | **75** | T | T | 14 51 51.6 | |
| **H11N3** | **WAKE ISLAND Hy** baz=267,slow=74,SNR=127 | **40.73** | **75** | T | T | 14 51 52.4 | |
| **KOLN** | **Koldanda** 31nm,0.9s | **40.92** | **297** | *eP* | **P** | **14 08 02.3** | **-0.8** |
| **MKAR** | **Makanchi Array** 9.4nm,0.8s,baz=119,slow=8.6,SNR=47 | **48.64** | **322** | P | **P** | **14 09 05.2** | **+1.0** |
| MKAR | | | | PcP | **PcP** | **14 10 29.3** | **0.0** |
| **ZALV** | **Zalesovo Beam** 3.1nm,0.7s,baz=120,slow=6.7,SNR=12 | **51.16** | **331** | P | **P** | **14 09 23.6** | **+0.6** |
| ZALV | | | | LR | LR | 14 31 52.7 | |
| **EKS2** | **Erkin-Say** 8.1nm,1.3s | **52.59** | **314** | *eP* | **P** | **14 09 34.4** | **+0.2** |
| **KURK** | **Kurchatov** 94nm,0.9s | **52.65** | **325** | *eP* | **P** | **14 09 35.1** | **+0.9** |
| **SEY** | **Seymchan** | **53.10** | **15** | P | **P** | **14 09 40.4** | **+3.1** |
| | 5.4nm,1.0s,baz=114,slow=5.7,SNR=3.6 | | | | | | |
| **BVAR** | **Borovoye Array** 8.2nm,0.8s,baz=115,slow=10.0,SNR=26 | **58.25** | **325** | P | **P** | **14 10 15.4** | **+0.9** |
| **BRVK** | **Borovoye** 18nm,0.9s | **58.32** | **325** | *eP* | **P** | **14 10 15.7** | **+0.7** |
| **GEYT** | **Alibeck** 4.7nm,0.9s,baz=116,slow=3.4,SNR=11 | **63.52** | **306** | P | **P** | **14 10 51.2** | **+0.6** |
| GEYT | | | | LR | LR | 14 41 09.8 | |
| **ABKAR** | **Akbulak array** 6.9nm,0.8s comp=Z,125nm,19.5s,baz=75,slow=39 | **63.55** | **318** | *eP* | **P** | **14 10 50.4** | **-0.1** |
| **AKTO** | **Aktyubinsk** 3.7nm,0.7s,baz=82,slow=9.3,SNR=12 | **64.98** | **320** | P | **P** | **14 10 59.8** | **-0.1** |
| AKTO | | | | LR | LR | 14 39 22.8 | |
| **KBZ** | **Khabaz** 2.5nm,0.8s,baz=172,slow=7.1,SNR=4.1 comp=Z,7.79nm,18.6s,baz=117,slow=36 | **75.02** | **312** | P | **P** | **14 12 02.1** | **+0.5** |
| KBZ | | | | LR | LR | 14 49 26.5 | |
| **RAYN** | **Ar Rayn** 8.8nm,1.0s comp=Z,47nm,19.0s,baz=29,slow=39 | **75.09** | **291** | *eP* | **P** | **14 12 01.7** | **-0.9** |
| RAYN | | | | *e* | | 14 12 13.6 | |
| **BPAW** | **Bear Paw Mtn.** 1.6nm,1.0s comp=Z,49nm,18.2s,baz=55,slow=39 | **75.45** | **27** | *eP* | **P** | **14 12 04.1** | **+0.3** |
| **MCK** | **McKinley** | **76.37** | **27** | *eP* | **P** | **14 12 09.1** | **+0.1** |
| **ILAR** | **Eielson Array** 0.6nm,0.8s,baz=248,slow=6.2,SNR=8.9 | **77.19** | **26** | P | **P** | **14 12 13.7** | **0.0** |
| ILAR | | | | LR | LR | 14 48 22.6 | |
| **DOT** | **Dot Lake** 4.4nm,0.8s,baz=53,slow=6.2,SNR=6.7 | **78.54** | **27** | *eP* | **P** | **14 12 21.8** | **+0.6** |
| **ARCES** | **ARCESS Array B** 4.4nm,0.8s,baz=53,slow=6.2,SNR=6.7 | **80.72** | **339** | P | **P** | **14 12 32.9** | **0.0** |
| **FINES** | **FINESS Array B** 3.3nm,0.9s,baz=132,slow=10,SNR=7.2 | **82.42** | **331** | P | **P** | **14 12 41.7** | **-0.3** |
| **KMBO** | **Kilima Mbogo** comp=Z,70nm,18.7s,baz=94,slow=35 | **87.90** | **268** | LR | LR | 14 51 56.2 | |
| **NOA** | **NORSAR Array B** comp=Z,49nm,18.2s,baz=55,slow=39 | **89.28** | **334** | LR | LR | 14 58 22.5 | |
| **TXAR** | **Lajitas Array** 0.4nm,0.8s,baz=319,slow=2.6,SNR=3.4 | **116.75** | **47** | PKP | **PKPdf** | **14 19 05.3** | **+0.2** |

*MOS **27** 14:02:40.4±2.2,50°.21N×157°.50E,h25km,mb4.3/1,Error ellipse: s-maj=29.9km s-min=7.1km az=83.2*

**KRSC 27 14:02:40.4**±2.2,**50°.21N**×**157°.50E,h25**km±10km,**ML4.2, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **1.00** | **298** | *eP* | Pn | 14 02 58.0 | -0.8 |
| SKR | | | | *eS* | Sb | 14 03 09.9 | -2.0 |
| **SKR** | **Severo-Kuril's** comp=Z,80nm,0.4s | **1.00** | **298** | *ePN* | Pn | 14 02 47.5 | -11 |
| SKR | | | | pmax | pmax | | |
| **PAU** | **Pauzhetka** | **1.33** | **341** | *eP* | Pb | 14 03 04.8 | +0.1 |
| PAU | | | | *eS* | Sb | 14 03 22.0 | +0.7 |
| **PAU** | **Pauzhetka** | **1.33** | **341** | PN | Pb | 14 03 04.8 | +0.1 |
| PAU | | | | S | Sb | 14 03 22.0 | +0.7 |
| **ASAK** | **Asacha** | **2.19** | **6** | *eP* | Pb | 14 03 18.0 | -1.4 |
| ASAK | | | | *eS* | Sb | 14 03 45.3 | -0.8 |
| **RUS** | **Russkaya** | **2.31** | **16** | *eP* | Pb | 14 03 19.6 | -1.8 |
| RUS | | | | *eS* | Sb | 14 03 47.2 | -2.2 |
| **RUS** | **Russkaya** | **2.31** | **16** | PN | Pb | 14 03 19.6 | -1.8 |
| RUS | | | | S | Sb | 14 03 47.2 | -2.2 |
| **MTVR** | **Mutnovka** | **2.31** | **10** | *eP* | Pb | 14 03 20.2 | -1.4 |
| MTVR | | | | *eS* | Sb | 14 03 48.4 | -1.5 |
| **APC** | **Apacha** | **2.72** | **356** | *eP* | Pn | 14 03 24.1 | +1.6 |
| **APC** | **Apacha** | **2.72** | **356** | PN | Pn | 14 03 24.1 | +1.6 |
| **PET** | **Petropavlovsk** | **2.91** | **14** | *eP* | Pn | 14 03 28.1 | +3.1 |
| PET | | | | *eS* | Sn | 14 04 02.3 | +3.2 |
| **PET** | **Petropavlovsk** | **2.91** | **14** | PN | Pn | 14 03 28.1 | +3.1 |
| PET | | | | S | Sn | 14 04 02.3 | +3.2 |
| **AVH** | **Avacha** | **3.15** | **14** | *eP* | Pb | 14 03 32.5 | -3.3 |
| AVH | | | | *eS* | Sn | 14 04 01.0 | -4.4 |
| **AVH** | **Avacha** | **3.15** | **14** | PN | Pb | 14 03 32.5 | -3.3 |
| AVH | | | | S | Sb | 14 04 10.0 | -3.8 |
| **SMAR** | **Somma** | **3.16** | **14** | *eP* | Pb | 14 03 33.2 | -2.9 |
| **SMAR** | **Somma** | **3.16** | **14** | PN | Pb | 14 03 33.2 | -2.9 |
| **KOK** | **Koryaka** | **3.16** | **12** | *eP* | Pb | 14 03 32.8 | -3.2 |
| **KOK** | **Koryaka** | **3.16** | **12** | PN | Pb | 14 03 32.8 | -3.2 |
| **NLC** | **Nalytchevo** | **3.18** | **20** | *eS* | Sn | 14 04 07.6 | +1.9 |
| **SDLR** | **Sedlovina** | **3.19** | **15** | *eP* | Pn | 14 03 32.3 | +3.2 |
| SDLR | | | | *eS* | Sn | 14 04 09.9 | +3.5 |
| **SDLR** | **Sedlovina** | **3.19** | **15** | PN | Pn | 14 03 32.3 | +3.2 |
| SDLR | | | | S | Sn | 14 04 09.9 | +3.5 |
| **KRX** | **Arik** | **3.23** | **12** | *eP* | Pn | 14 03 33.1 | +3.4 |
| **SPN** | **Mys Shipunski** | **3.29** | **28** | *eP* | Pn | 14 03 33.9 | +3.6 |
| SPN | | | | *eS* | Sn | 14 04 11.3 | +2.8 |
| **SPN** | **Mys Shipunski** | **3.29** | **28** | PN | Pn | 14 03 33.9 | +3.6 |
| **GNL** | **Ganaly** | **3.50** | **4** | *eP* | Pn | 14 03 36.1 | +2.8 |
| **GNL** | **Ganaly** | **3.50** | **4** | PN | Pn | 14 03 36.1 | +2.8 |
| **MKZ** | **Mys Kozlova** | **5.06** | **29** | *eP* | Pn | 14 03 57.1 | +2.5 |
| **MKZ** | **Mys Kozlova** | **5.06** | **29** | PN | Pn | 14 03 57.1 | +2.5 |
| **KZV** | **Kizimen** | **5.19** | **18** | *eP* | Pn | 14 04 02.4 | +5.8 |
| **TUMR** | **Tumrok** | **5.33** | **17** | *eP* | Pn | 14 04 04.6 | +6.2 |
| **TUMR** | **Tumrok** | **5.33** | **17** | PN | Pn | 14 04 04.6 | +6.2 |
| **KBTR** | **Krutoberegovo** | **6.80** | **26** | *eP* | Pn | 14 04 22.6 | +4.1 |
| **KBTR** | **Krutoberegovo** | **6.80** | **26** | PN | Pn | 14 04 22.6 | +4.1 |

*ISK **27** 14:04:05.6,39°.91N×33°.05E,h8km,MD2.6*
*CSEM **27** 14:04:06.0±0.2,39°.89N×33°.09E,h8km,MD2.6,Error ellipse: s-maj=4.5km s-min=3.4km az=93.0*
*DDA **27** 14:04:06.1,39°.91N×33°.16E,h7km,Md2.3*

**ISC 27 14:04:05.8**±1.1,**39°.90N**±0°.02×**33°.09E**±0°.03,**h1**km±10km, **n29,**σ1§**01/43,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LOD** | **Lodumlu** | **0.25** | **269** | *ePG* | **Pg** | **14 04 10.6** | **0.0** |
| LOD | | | | *eSG* | **Sg** | **14 04 14.3** | **+0.5** |
| **LOD** | **Lodumlu** | **0.25** | **269** | *ePg* | **Pg** | **14 04 10.6** | **0.0** |
| LOD | | | | *eSg* | **Sg** | **14 04 14.3** | **+0.5** |
| **BBAL** | **Bala** | **0.35** | **176** | *i* P | **Pg** | **14 04 13.1** | **+0.5** |
| BBAL | | | | *i* S | **Sg** | **14 04 16.0** | **-1.2** |
| **BBAL** | **Bala** | **0.35** | **176** | P | **Pg** | **14 04 13.1** | **+0.5** |
| BBAL | | | | S | **Sg** | **14 04 16.0** | **-1.2** |
| **AFSR** | **Af˙ar-Bala (A** | **0.45** | **182** | *ePG* | **Pg** | **14 04 14.8** | **+0.4** |
| **AFSR** | **Af˙ar-Bala (A** | **0.45** | **182** | *ePg* | **Pg** | **14 04 14.8** | **+0.4** |
| **ELDT** | **Eldivan** | **0.65** | **24** | *i* P | **Pg** | **14 04 18.1** | **-0.1** |
| ELDT | | | | *i* S | **Sg** | **14 04 26.7** | **+0.1** |
| **ELDT** | **Eldivan** | **0.65** | **24** | P | **Pg** | **14 04 18.1** | **-0.1** |
| ELDT | | | | S | **Sg** | **14 04 26.7** | **+0.1** |
| **KULU** | **Kulu** | **0.85** | **184** | *ePG* | **Pg** | **14 04 22.5** | **+0.3** |
| KULU | | | | *eSG* | **Sb** | **14 04 35.3** | **-0.1** |
| **KULU** | **Kulu** | **0.85** | **184** | *ePg* | **Pg** | **14 04 22.5** | **+0.3** |
| KULU | | | | *eSg* | **Sb** | **14 04 35.3** | **-0.1** |
| **SERE** | **Sereflikochisa** | **1.02** | **159** | *ePG* | **Pn** | **14 04 26.6** | **-0.7** |
| **SERE** | **Sereflikochisa** | **1.02** | **159** | *ePg* | **Pn** | **14 04 26.6** | **-0.7** |
| **CDAG** | **Cicekdag** | **1.03** | **105** | *i* P | **Pb** | **14 04 25.5** | **-0.9** |
| **CDAG** | **Cicekdag** | **1.03** | **105** | P | **Pb** | **14 04 25.5** | **-0.9** |
| CDAG | | | | S | **Sn** | **14 04 45.2** | **+2.8** |
| **YAYX** | **Yaylak** | **1.11** | **149** | *ePN* | **Pb** | **14 04 27.2** | **-0.6** |
| **YAYX** | **Yaylak** | **1.11** | **149** | *ePn* | **Pb** | **14 04 27.2** | **-0.6** |
| **BCAM** | **Yenicaga** | **1.21** | **320** | *i* P | **Pn** | **14 04 29.6** | **-0.3** |
| BCAM | | | | *i* S | **Sn** | **14 04 46.8** | **-0.1** |
| **BCAM** | **Yenicaga** | **1.21** | **320** | P | **Pn** | **14 04 29.6** | **-0.3** |
| BCAM | | | | S | **Sn** | **14 04 46.8** | **-0.1** |
| **CORM** | **Corum** | **1.22** | **76** | *ePN* | **Pg** | **14 04 29.9** | **+0.8** |
| **CORM** | **Corum** | **1.22** | **76** | *ePn* | **Pg** | **14 04 29.9** | **+0.8** |
| **AUMIH** | **MIHALICIK** | **1.23** | **269** | P | **Pn** | **14 04 28.7** | **-1.6** |
| AUMIH | | | | S | **Sg** | **14 04 49.5** | **+4.0** |
| **ILGA** | **Ilgaz** | **1.25** | **22** | *i* P | **Pg** | **14 04 29.9** | **+0.1** |
| ILGA | | | | *i* S | **Sn** | **14 04 49.1** | **+0.9** |
| **ILGA** | **Ilgaz** | **1.25** | **22** | P | **Pg** | **14 04 29.9** | **+0.1** |
| ILGA | | | | S | **Sn** | **14 04 49.1** | **+0.9** |
| **SVRH** | **Sivrihisar-ESK** | **1.29** | **250** | *ePN* | **Pn** | **14 04 30.1** | **-0.9** |
| **SVRH** | **Sivrihisar-ESK** | **1.29** | **250** | *ePn* | **Pn** | **14 04 30.1** | **-0.9** |
| **CHBY** | **Cihanbeyli** | **1.32** | **187** | *ePN* | **Pn** | **14 04 31.2** | **-0.2** |
| **CHBY** | **Cihanbeyli** | **1.32** | **187** | *ePn* | **Pn** | **14 04 31.2** | **-0.2** |
| **KIZT** | **Kizilcal** | **1.38** | **223** | *ePN* | **Pn** | **14 04 31.4** | **-0.8** |
| **KIZT** | **Kizilcal** | **1.38** | **223** | *ePn* | **Pn** | **14 04 31.4** | **-0.8** |

*IDC **27** 14:09:42.1±1.1,13°.19N×124°.69E,h0km,mb3.6/5, mb1 3.8/5,mb1mx3.5/53,mbtmp3.6/5,Error ellipse: s-maj=58.9km s-min=19.2km az=63.0*
*ISCJB **27** 14:09:46.1±1.0,13°.4N±0°.1×125°.02E±0°.09,h50km, mb3.6/5,Error ellipse: s-maj=18.3km s-min=10.9km az=30.2*

**ISC 27 14:09:48.3**±1.1,**13°.4N**±0°.1×**125°.0E**±0°.1,**h50**km,**n13,** σ1§**40/10,mb3.8/5,2C,Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GQP** | **Guinayangan** | **2.48** | **282**⇑ | *eP* | **Pn** | **14 10 24.5** | **-1.7** |
| GQP | | | | *eS* | **Sn** | **14 10 56.6** | **+1.2** |
| **RCP** | **Roxas** | **2.83** | **230**⇑ | *eP* | **Pn** | **14 10 31.6** | **+0.6** |
| **CMAR** | **Chiang Mai Arr** 0.9nm,0.7s,baz=95,slow=8.3,SNR=7.3 | **25.49** | **285** | P | **P** | **14 15 10.3** | **-1.8** |
| **WRA** | **Warramunga Arr** 0.2nm,0.6s,baz=345,slow=8.6,SNR=5.4 | **34.41** | **164** | P | **P** | **14 16 29.8** | **-1.2** |
| WRA | | | | PcP | **PcP** | **14 19 06.5** | **+0.5** |
| **SONM** | **Songino Array** 0.4nm,0.4s,baz=163,slow=11,SNR=2.8 | **37.65** | **339** | P | **P** | **14 16 59.5** | **+0.9** |
| **ASAR** | **Alice Springs** 0.8nm,0.4s,baz=344,slow=7.1,SNR=35 | **37.87** | **167** | P | **P** | **14 16 59.8** | **-0.9** |
| **H11S3** | **WAKE ISLAND Hy** baz=268,slow=75,SNR=29 | **40.39** | **77** | T | T | 15 00 43.5 | |
| **H11S1** | **WAKE ISLAND Hy** baz=268,slow=75,SNR=13 | **40.40** | **77** | T | T | 15 00 42.4 | |
| **H11S2** | **WAKE ISLAND Hy** baz=268,slow=75,SNR=14 | **40.40** | **77** | T | T | 15 00 48.2 | |
| **H11N1** | **WAKE ISLAND Hy** baz=267,slow=74,SNR=26 | **40.61** | **75** | T | T | 15 01 12.4 | |
| **H11N2** | **WAKE ISLAND Hy** baz=267,slow=74,SNR=16 | **40.62** | **75** | T | T | 15 01 28.9 | |
| **H11N3** | **WAKE ISLAND Hy** baz=267,slow=74,SNR=24 | **40.63** | **75** | T | T | 15 01 20.9 | |
| **MKAR** | **Makanchi Array** 1.2nm,0.8s,baz=106,slow=8.2,SNR=6.3 | **48.77** | **322** | P | **P** | **14 18 29.2** | **+0.9** |
| MKAR | | | | PcP | **PcP** | **14 19 53.8** | **+1.1** |
| | 0.5nm,0.7s,baz=126,slow=4.1,SNR=2.9 | | | | | | |

*ISCJB **27** 14:13:13.0±1.2,11°.47S±0°.10×165°.0E±0°.1,h34km, mb3.6/4,Error ellipse: s-maj=20.1km s-min=8.4km az=143.7*
*IDC **27** 14:13:15.5±3.5,11°.37S×165°.04E,h42km±30km,mb3.4/4, mb1 3.8/5,mb1mx3.5/43,mbtmp3.7/5,ML4.5/2,MS3.4/3, Ms1 3.4/3,ms1mx3.1/24,Error ellipse: s-maj=32.4km s-min=18.7km az=51.0*

**ISC 27 14:13:14.8**±1.4,**11°.4S**±0°.1×**165°.1E**±0°.1,**h34**km,**n7,** σ1§**06/8,mb3.7/4,Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** 6.9nm,0.3s,baz=197,slow=8.9,SNR=4.5 | **5.39** | **290** | P | **Pn** | **14 14 33.2** | **+0.4** |
| HNR | | | | S | **Sn** | **14 15 33.7** | **0.0** |
| HNR | 10nm,0.3s,baz=22,slow=19,SNR=2.5 | | | LR | LR | 14 16 45.2 | |
| **DZM** | **Mont Dzumac** 7.0nm,0.3s,baz=1.6,slow=4.2,SNR=78 | **10.74** | **173** | P | **Pn** | **14 15 47.9** | **+1.6** |
| DZM | | | | S | **Sn** | **14 17 44.0** | **-1.5** |
| DZM | 0.2nm,0.3s,baz=360,slow=19,SNR=2.3 | | | LR | LR | 14 19 30.0 | |
| **PMG** | **Port Moresby** comp=Z,351nm,19.1s,baz=16,slow=35 | **17.73** | **275** | LR | LR | 14 23 52.3 | |
| **WRA** | **Warramunga Arr** 0.8nm,0.9s,baz=82,slow=9.3,SNR=4.2 | **30.76** | **250** | P | **P** | **14 19 26.6** | **-0.6** |
| **ASAR** | **Alice Springs** 0.3nm,0.7s,baz=76,slow=9.6,SNR=3.7 | **32.07** | **243** | P | **P** | **14 19 38.5** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** 1.1nm,1.0s,baz=114,slow=4.0,SNR=4.8 | **71.63** | **294** | P | **P** | **14 24 33.4** | **-0.1** |
| **ILAR** | **Eielson Array** 0.7nm,0.8s,baz=238,slow=5.1,SNR=8.7 | **84.01** | **19** | P | **P** | **14 25 40.9** | **-0.5** |

**IDC 27 14:13:31.4**±4.1,**4°.80S**×**134°.44E,h0**km,**mb3.5**/1, **mb1 3.5**/4,**mb1mx3.3**/41,**mbtmp3.3**/4,**ML3.2**/3,**Error ellipse: s-maj=178.4km s-min=28.0km az=74.0,Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** 0.9nm,0.3s,baz=72,slow=16,SNR=17 | **5.03** | **321** | Pn | Pn | 14 14 48.4 | +0.3 |
| SIJI | | | | Sn | Sn | 14 15 41.0 | -6.1 |
| **WRA** | **Warramunga Arr** 0.7nm,0.3s,baz=210,slow=20,SNR=2.9 | **15.05** | **180** | Pn | Pn | 14 17 06.5 | +1.0 |
| **ASAR** | **Alice Springs** 0.1nm,0.3s,baz=357,slow=13,SNR=4.1 | **18.77** | **182** | P | P | 14 17 51.7 | -0.5 |
| **MKAR** | **Makanchi Array** 0.2nm,0.7s,baz=108,slow=9.5,SNR=4.1 | **68.92** | **324** | P | P | 14 24 38.2 | 0.0 |

*ISCJB **27** 14:18:02.4±0.3,29°.53S±0°.04×143°.71E±0°.05,h10km, mb4.7/24,Error ellipse: s-maj=7.3km s-min=5.5km az=150.0*
*AUST **27** 14:18:02.2±0.2,29°.44S×143°.59E,h7km,Error ellipse: s-maj=0.2km s-min=0.1km az=26.0*
*NEIC **27** 14:18:02.0,29°.44S×143°.59E,h7km,mb4.4/8, ML4.4(AUST),After AUST.*
*NEIC Felt at Broken Hill. Also felt at Brisbane and Roma, Queensland.*
*IDC **27** 14:18:03.1±0.7,29°.46S×143°.48E,h0km,mb4.4/12, mb1 4.5/15,mb1mx4.3/39,mbtmp4.5/15,ML4.5/3,Error ellipse: s-maj=27.9km s-min=14.3km az=91.0*
*BJI **27** 14:18:04.2,29°.59S×142°.94E,h6km,mb4.7/6,Ms4.9/2, Ms7 4.5/2*

**ISC 27 14:18:04.8**±0.5,**29°.46S**±0°.05×**143°.47E**±0°.06,**h10**km,**n73,** σ1§**89/69,mb4.6/24,New South Wales**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMSA** | **Cobar Meteorol** baz=2.8 | **2.83** | **138** | P | Pn | 14 18 46.1 | -4.0 |
| **QLP** | **Quilpie** baz=2.9,SNR=190 | **2.94** | **14** | P | **Pn** | **14 18 51.8** | **+0.1** |
| **QLP** | **Quilpie** | **2.94** | **14** | P | **Pn** | **14 18 52.1** | **+0.4** |
| **RMQ** | **Roma** baz=5.4,SNR=65 | **5.54** | **59** | P | **Pn** | **14 19 24.6** | **-2.8** |
| **RMQ** | **Roma** | **5.54** | **59** | P | **Pn** | **14 19 25.2** | **-2.2** |
| **HTT** | **Hallett** | **5.55** | **223** | P | Pn | 14 19 23.2 | -4.4 |
| **YNG** | **Young** | **6.39** | **140** | P | Pn | 14 19 35.2 | -3.9 |
| **ARMA** | **Armidale** baz=7.0,SNR=66 | **7.15** | **100** | P | Pn | 14 19 45.3 | -4.3 |
| **ARMA** | **Armidale** | **7.15** | **100** | *ePn* | Pn | 14 19 45.3 | -4.3 |
| **BBOO** | **Buckleboo** baz=7.3,SNR=115 | **7.17** | **240** | P | **Pn** | **14 19 51.2** | **+1.4** |
| **BBOO** | **Buckleboo** | **7.17** | **240** | *ePn* | **Pn** | **14 19 51.0** | **+1.1** |
| BBOO | | | | *eSn* | **S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MMPI** | **Merauke** | **21.08** | **351** | P | | **P** | **14 22 48.9** | **-0.5** |
| | 215nm,1.0s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.68** | **255** | P | | **P** | **14 23 06.7** | **+0.1** |
| | 6.8nm,1.0s,baz=118,slow=0.4,SNR=3.5 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **22.68** | **255** | P | | **P** | **14 23 08.1** | **+1.5** |
| **MBWA** | **Marble Bar** | **22.96** | **286** | *e*P | | **P** | **14 23 10.1** | **+0.6** |
| | 25nm,1.0s | | | | | | | |
| **SAUI** | **Saumlaki** | **24.23** | **329** | P | | **P** | **14 23 22.5** | **+0.5** |
| | 122nm,1.0s,3µm | | | | | | | |
| **SOEI** | **Soe** | **26.59** | **314** | P | | **P** | **14 23 43.8** | **+0.3** |
| | 13nm,1.4s | | | | | | | |
| **SMPI** | **Sarmi** | **27.69** | **350** | P | | **P** | **14 23 56.2** | **+3.0** |
| | 23nm,1.8s,26µm | | | | | | | |
| **BNDI** | **Bandanaira** | **27.93** | **330** | P | | **P** | **14 23 58.1** | **+2.7** |
| | 70nm,1.2s | | | | | | | |
| **MMRI** | **Maumere** | **28.74** | **312** | P | | **P** | **14 24 05.6** | **+3.0** |
| | 15nm,1.3s | | | | | | | |
| **EDFI** | **Ende, Flores** | **29.01** | **311** | P | | **P** | **14 24 08.0** | **+2.8** |
| | 44nm,0.8s,5µm | | | | | | | |
| **RKPI** | **Ransiki, Papua** | **29.17** | **341** | P | | **P** | **14 24 09.1** | **+2.7** |
| | 102nm,1.0s | | | | | | | |
| **WSI** | **Waingapu** | **29.29** | **308** | P | | P | 14 24 10.9 | +3.4 |
| | 405nm,0.5s | | | | | | | |
| **AAI** | **Ambon** | **29.44** | **328** | P | | **P** | **14 24 08.9** | **0.0** |
| **CASY** | **Casey** | **41.96** | **199** | *e*P | | **P** | **14 25 55.6** | **0.0** |
| | 4.4nm,1.1s | | | | | | | |
| **VNDA** | **Vanda** | **48.88** | **175** | P | | **P** | **14 26 49.9** | **-0.4** |
| | 1.1nm,0.5s,baz=341,slow=9.4,SNR=9.1 | | | | | | | |
| **VNDA** | **Vanda** | **48.88** | **175** | *e*P | | **P** | **14 26 49.3** | **-1.0** |
| | 34nm,2.5s | | | | | | | |
| **MAW** | **Mawson** | **59.57** | **206** | P | | **P** | **14 28 08.6** | **+0.4** |
| | 2.6nm,0.6s,baz=98,slow=6.8,SNR=20 | | | | | | | |
| **MAW** | **Mawson** | **59.57** | **206** | *e*P | | **P** | **14 28 08.1** | **-0.1** |
| | 0.7nm,0.8s | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.63** | **180** | P | | **P** | **14 28 15.2** | **-0.6** |
| | 7.5nm,0.9s,baz=328,slow=5.7,SNR=14 | | | | | | | |
| **QSPA** | **South Pole Qui** | **60.63** | **180** | *e*P | | **P** | **14 28 15.1** | **-0.7** |
| | 7.0nm,0.9s | | | | | | | |
| **JNU** | **Nakatsue** | **63.37** | **348** | P | | **P** | **14 28 34.0** | **-0.4** |
| | 9.1nm,0.9s,baz=150,slow=5.7,SNR=3.9 | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **64.10** | **312** | *e*P | | **P** | **14 28 40.5** | **+1.1** |
| **CMAR** | **Chiang Mai Arr** | **64.14** | **312** | P | | **P** | **14 28 39.2** | **-0.5** |
| | 1.2nm,0.5s,baz=152,slow=5.5,SNR=10 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **65.84** | **355** | P | | **P** | **14 28 49.8** | **-0.6** |
| | 2.4nm,0.7s,baz=173,slow=8.0,SNR=5.7 | | | | | | | |
| **KMI** | **Kunming** | **66.89** | **320** | P | | **P** | **14 28 59.5** | **+1.9** |
| KMI | | | | PMZ | | | | |
| | 6.0nm,0.6s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **68.14** | **347** | P | | **P** | **14 29 05.8** | **+0.8** |
| **KSRS** | **Korea Array** | **68.14** | **347** | P | | **P** | **14 29 05.8** | **+0.8** |
| | 4.0nm,0.8s,baz=153,slow=6.7,SNR=12 | | | | | | | |
| **KS01** | **Wonju Array Si** | **68.17** | **347** | *e*P | | **P** | **14 29 05.8** | **+0.6** |
| **USRK** | **Ussuriysk Ar.** | **74.05** | **351** | P | | **P** | **14 29 41.1** | **+0.5** |
| | 2.3nm,0.6s,baz=172,slow=4.2,SNR=7.0 | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **75.94** | **336** | *e*P | | **P** | **14 29 54.3** | **+2.5** |
| HHC | | | | PP | | **PP** | **14 32 47.5** | **+4.8** |
| HHC | | | | S | | **S** | **14 39 39.8** | **+5.1** |
| HHC | | | | sS | | sS | 14 39 51.5 | +11 |
| HHC | | | | PMZ | | | | |
| | 24nm,1.4s | | | | | | | |
| HHC | | | | LN | | | | |
| | 430nm,14.9s | | | | | | | |
| HHC | | | | LE | | | | |
| | 470nm,14.9s | | | | | | | |
| HHC | | | | LZ | | | | |
| | 180nm,13.7s | | | | | | | |
| **SNAA** | **Sanae** | **76.43** | **190** | P | | **P** | **14 29 53.4** | **-0.9** |
| **SNAA** | **Sanae** | **76.43** | **190** | *e*P | | **P** | **14 29 52.4** | **-1.9** |
| | 5.2nm,1.5s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **77.78** | **189** | P | | **P** | **14 30 01.3** | **-0.5** |
| | baz=154,slow=4.2 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **77.80** | **189** | P | | **P** | **14 30 01.2** | **-0.7** |
| **GTA** | **Gaotai** | **79.66** | **327** | *e*P | | **P** | **14 30 14.5** | **+1.9** |
| GTA | | | | pP | | **PcP** | **14 30 19.3** | **-1.1** |
| GTA | | | | sP | | **sP** | **14 30 21.5** | **+4.4** |
| GTA | | | | PMZ | | | | |
| | 4.0nm,0.8s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **83.15** | **9** | P | | **P** | **14 30 31.7** | **+1.1** |
| | 5.7nm,0.7s,baz=126,slow=4.7,SNR=5.3 | | | | | | | |
| **SONM** | **Songino Array** | **83.84** | **336** | P | | **P** | **14 30 35.2** | **+0.7** |
| | 2.2nm,0.8s,baz=154,slow=6.1,SNR=6.6 | | | | | | | |
| **WMQ** | **Urumqi** | **89.00** | **323** | *e*P | | **P** | **14 31 00.0** | **+0.2** |
| **MKAR** | **Makanchi Array** | **93.82** | **323** | P | | **P** | **14 31 21.3** | **-0.8** |
| | 1.1nm,0.7s,baz=147,slow=4.4,SNR=4.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **122.30** | **72** | PKP | | **PKPdf** | **14 36 59.8** | **-0.8** |
| | 0.4nm,0.6s,baz=201,slow=2.4,SNR=4.6 | | | | | | | |
| **BRTR** | **Keskin Array B** | **122.66** | **300** | PKP | | **PKPdf** | **14 37 03.4** | **+2.4** |
| | 0.6nm,0.7s,baz=101,slow=6.5,SNR=3.9 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **127.00** | **337** | PKP | | **PKPdf** | **14 37 06.6** | **-1.6** |
| | 4.7nm,0.9s,baz=48,slow=1.3,SNR=3.6 | | | | | | | |
| **GERES** | **GERESS Array B** | **137.38** | **311** | PKP | | **PKPdf** | **14 37 29.3** | **+0.7** |
| | 0.5nm,0.6s,baz=126,slow=1.7,SNR=3.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **141.07** | **254** | PKhKP | | PKPpre | 14 37 28.2 | |
| | 0.3nm,0.5s,baz=102,slow=3.6,SNR=4.3 | | | | | | | |
| TORD | | | | PKP | | **PKiKP** | **14 37 37.3** | **-1.5** |
| | 0.7nm,0.5s,baz=93,slow=1.8,SNR=5.3 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **144.85** | **327** | PKP | | PKPbc | 14 37 40.8 | +0.1 |
| | 7.9nm,0.6s,baz=52,slow=3.5,SNR=12 | | | | | | | |
| **ESDC** | **Sonseca Array** | **151.45** | **300** | PKPbc | | **PKPbc** | **14 37 58.7** | **-0.4** |
| | 1.1nm,0.6s,baz=73,slow=2.9,SNR=6.0 | | | | | | | |

*ISCJB **27** 14:18:10.7±1.4,36˚.58N±0˚.06×36˚.1E±0˚.1,h4km±13km, Error ellipse: s-maj=18.8km s-min=6.3km az=26.9*
*CSEM **27** 14:18:10.0±0.9,36˚.59N×36˚.04E,h2km,MD2.5, Error ellipse: s-maj=19.7km s-min=6.1km az=121.0*
*DDA **27** 14:18:10.2,36˚.59N×36˚.09E,h7km,Md2.5*
**ISC 27 14:18:10.0±1.9,36˚.57N±0˚.05×36˚.1E±0˚.1,h5km±15km,n8, σ0˚53/16,Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TAHT** | **Tahtakopru-Hat** | **0.22** | **150** | Pg | **Pg** | **14 18 14.4** | **0.0** |
| TAHT | | | | Sg | **Sg** | **14 18 17.3** | **0.0** |
| **TAHT** | **Tahtakopru-Hat** | **0.22** | **150** | *i* Pg | **Pg** | **14 18 14.4** | **0.0** |
| TAHT | | | | *i* Sg | **Sg** | **14 18 17.3** | **0.0** |
| **YAYL** | **Yayladag** | **0.54** | **175** | *i* P | **Pg** | **14 18 20.6** | **+0.3** |
| YAYL | | | | *i* S | **Sb** | **14 18 29.4** | **-0.7** |
| **YAYL** | **Yayladag** | **0.54** | **175** | P | **Pg** | **14 18 20.6** | **+0.3** |
| YAYL | | | | S | **Sb** | **14 18 29.4** | **-0.7** |
| **KAMA** | **Osmaniye** | **0.79** | **39** | P | **Pb** | **14 18 26.2** | **-0.2** |
| KAMA | | | | S | **Sg** | **14 18 35.7** | **+0.2** |
| **KUZU** | **Kuzuini** | **0.85** | **76** | *i* P | **Pg** | **14 18 26.6** | **+0.2** |
| KUZU | | | | *i* S | **Sg** | **14 18 37.4** | **0.0** |
| **KUZU** | **Kuzuini** | **0.85** | **76** | P | **Pg** | **14 18 26.6** | **+0.2** |
| KUZU | | | | S | **Sg** | **14 18 37.4** | **0.0** |
| **AYKD** | **Aykdinkavak** | **1.04** | **36** | P | **Pn** | **14 18 32.0** | **+0.7** |
| AYKD | | | | S | **Sg** | **14 18 42.2** | **-1.3** |

**DDA 27 14:36:09.7,37˚.41N×28˚.00E,h7km,Md2.5,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AYDN** | **Tasoluk** | **0.27** | **340** | P | Pb | 14 36 16.8 | -0.1 |
| AYDN | | | | S | Sg | 14 36 19.6 | +1.0 |
| **BDRM** | **Kayabasi** | **0.56** | **232** | P | Pg | 14 36 20.9 | +0.4 |
| BDRM | | | | S | Sg | 14 36 28.5 | +0.6 |

*ISK **27** 14:36:17.9,38˚.75N×30˚.76E,h17km,MD2.5*
*ISCJB **27** 14:36:18.8±0.6,38˚.72N±0˚.04×30˚.82E±0˚.06,h7km±6km, Error ellipse: s-maj=8.7km s-min=4.5km az=36.6*
*CSEM **27** 14:36:18.5±0.2,38˚.70N×30˚.83E,h10km,MD2.5, Error ellipse: s-maj=5.2km s-min=3.2km az=124.0*
*DDA **27** 14:36:18.7,38˚.71N×30˚.79E,h7km,Md2.5*
**ISC 27 14:36:18.6±0.9,38˚.70N±0˚.03×30˚.82E±0˚.03,h14km±6km, n19,σ0˚57/34,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BOLV** | **Bolvadin** | **0.10** | **82** | *i* P | **Pg** | **14 36 21.8** | **-0.1** |
| BOLV | | | | *i* S | **Sg** | **14 36 23.8** | **-0.3** |
| **BOLV** | **Bolvadin** | **0.10** | **82** | P | **Pg** | **14 36 21.8** | **-0.1** |
| BOLV | | | | S | **Sg** | **14 36 23.8** | **-0.3** |
| **SHUT** | **Suhut-Afyon** | **0.26** | **235** | *e*PG | **Pg** | **14 36 24.1** | **-0.1** |
| SHUT | | | | *e*SG | **Sg** | **14 36 28.5** | **+0.5** |
| **SHUT** | **Suhut-Afyon** | **0.26** | **235** | *e*Pg | **Pg** | **14 36 24.1** | **-0.1** |
| SHUT | | | | *e*Sg | **Sg** | **14 36 28.5** | **+0.5** |
| **ESKT** | **Eskisehir** | **0.81** | **2** | *e*PG | **Pg** | **14 36 33.3** | **-1.2** |
| ESKT | | | | *e*SG | **Sg** | **14 36 44.6** | **-0.6** |
| **ESKT** | **Eskisehir** | **0.81** | **2** | *e*Pg | **Pg** | **14 36 33.3** | **-1.2** |
| ESKT | | | | *e*Sg | **Sg** | **14 36 44.6** | **-0.6** |
| **ESKT** | **Eskisehir** | **0.81** | **2** | P | **Pb** | **14 36 35.1** | **+0.4** |
| ESKT | | | | S | **Sb** | **14 36 46.1** | **+0.5** |
| **SEYT** | **Eskypehyr** | **0.81** | **2** | *i* P | **Pb** | **14 36 35.1** | **+0.4** |
| SEYT | | | | *i* S | **Sb** | **14 36 46.1** | **+0.5** |
| **KIZT** | **Kizilcal** | **0.84** | **78** | *e*PG | **Pb** | **14 36 35.5** | **+0.3** |
| **KIZT** | **Kizilcal** | **0.84** | **78** | *e*Pg | **Pb** | **14 36 35.5** | **+0.3** |
| **SVRH** | **Sivrihisar-ESK** | **0.92** | **36** | *e*PG | **Pg** | **14 36 35.9** | **-0.6** |
| SVRH | | | | *e*SG | **Sb** | **14 36 49.0** | **+0.4** |
| **SVRH** | **Sivrihisar-ESK** | **0.92** | **36** | *e*Pg | **Pg** | **14 36 35.9** | **-0.6** |
| SVRH | | | | *e*Sg | **Sb** | **14 36 49.0** | **+0.4** |
| **KHAL** | **Karahalli** | **1.09** | **253** | *i* P | **Pb** | **14 36 39.4** | **-0.1** |
| KHAL | | | | *i* S | **Sg** | **14 36 54.4** | **+0.3** |
| **KHAL** | **Karahalli** | **1.09** | **253** | P | **Pb** | **14 36 39.3** | **-0.2** |
| KHAL | | | | S | **Sb** | **14 36 52.2** | **-1.5** |
| **KHAL** | **Karahalli** | **1.09** | **253** | P | **Pb** | **14 36 39.4** | **-0.1** |
| KHAL | | | | S | **Sg** | **14 36 54.4** | **+0.3** |
| **BORA** | **Eskisehir** | **1.21** | **346** | *i* P | **Pg** | **14 36 42.3** | **+0.4** |
| BORA | | | | *i* S | **Sg** | **14 36 58.3** | **+0.6** |
| **BORA** | **Eskisehir** | **1.21** | **346** | P | **Pg** | **14 36 42.3** | **+0.4** |
| BORA | | | | S | **Sg** | **14 36 58.2** | **+0.6** |
| **SUTC** | **Sutluce-Ispart** | **1.23** | **173** | *e*PN | **Pn** | **14 36 41.7** | **+0.1** |
| **SUTC** | **Sutluce-Ispart** | **1.23** | **173** | *e*Pn | **Pn** | **14 36 41.7** | **+0.1** |

*BJI **27** 14:36:43.4,10˚.82S×163˚.15E,h18km,mb4.8/26,mB5.3/4*
*ISCJB **27** 14:36:45.7±2.3,10˚.78S±0˚.05×162˚.88E±0˚.05,h22km±16km, mb4.7/40,MS3.8/12,Error ellipse: s-maj=9.4km s-min=8.6km az=37.1*
*MOS **27** 14:36:48.4±1.1,10˚.75S×162˚.84E,h44km,mb5.1/15,Error ellipse: s-maj=10.0km s-min=9.3km az=15.6*
*IDC **27** 14:36:49.2±5.5,10˚.80S×162˚.76E,h33km±40km,mb4.4/23, mb1 4.5/25,mb1mx4.4/41,mbtmp4.6/25,ML4.4/2,MS3.7/11, Ms1 3.7/11,ms1mx3.5/32,Error ellipse: s-maj=21.2km s-min=13.4km az=87.0*
*NEIC **27** 14:36:49.3±1.1,10˚.77S×162˚.88E,h36km±9km,mb4.8/14, Error ellipse: s-maj=8.3km s-min=6.9km az=124.0*
**ISC 27 14:36:48.4±0.5,10˚.84S±0˚.05×162˚.89E±0˚.06,h31km±3km, h30km:pP-P,n111,σ1§21/108,mb4.8/40,MS3.7/12,4C-2D, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HNR** | **Honiara** | **3.22** | **296** | Pn | **Pn** | **14 37 36.8** | **-0.1** |
| | 153nm,0.3s,baz=144,slow=3.0,SNR=52 | | | | | | |
| HNR | | | | Sn | **Sn** | **14 38 16.1** | **+1.9** |
| | 201nm,0.3s,baz=10,slow=21,SNR=11 | | | | | | |
| **HNR** | **Honiara** | **3.22** | **296** | *e*P | **Pn** | **14 37 36.7** | **-0.1** |
| HNR | | | | *e* | | 14 38 15.2 | |
| **HNR** | **Honiara** | **3.22** | **296** | *i* P | **Pn** | **14 37 35.0** | **-1.8** |
| HNR | | | | *i* S | **Sn** | **14 38 10.0** | **-4.2** |
| **HNR** | **Honiara** | **3.22** | **296** | *e*Pn | **Pn** | **14 37 36.7** | **-0.1** |
| HNR | | | | *e*Sn | **Sn** | **14 38 15.2** | **+1.1** |
| HNR | | | | Sn | **Sn** | **14 38 16.1** | **+1.9** |
| **DZM** | **Mont Dzumac** | **11.68** | **163** | *e*Pn | **Pn** | **14 39 35.4** | **+2.3** |
| | 16nm,0.6s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **14 41 39.0** | **-3.5** |
| | 2.1nm,0.3s | | | | | | |
| DZM | | | | *e*LR | LR | 14 42 14.7 | |
| | 977nm,24.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **11.68** | **163** | Pn | **Pn** | **14 39 34.1** | **+1.0** |
| | 0.9nm,0.3s,baz=358,slow=6.1,SNR=24 | | | | | | |
| DZM | | | | Sn | **Sn** | **14 41 39.3** | **-3.2** |
| | 0.3nm,0.3s,baz=180,slow=11,SNR=2.1 | | | | | | |
| DZM | | | | LR | LR | 14 43 29.0 | |
| | comp=Z,628nm,19.8s,baz=350,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **15.55** | **274** | LR | LR | 14 46 06.4 | |
| | comp=Z,420nm,18.9s,baz=108,slow=36 | | | | | | |
| **PMG** | **Port Moresby** | **15.55** | **274** | *e*P | **Pn** | **14 40 26.2** | **+0.6** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,138nm,1.0s | | | | | | |
| **TARA** | **Tarawa** | **15.70** | **40** | *e*P | **Pn** | **14 40 27.0** | **-0.4** |
| **EIDS** | **Eidsvold** | **18.28** | **216** | *e*P | P | 14 41 04.8 | +5.1 |
| | comp=Z,10nm,0.9s | | | | | | |
| **CTA** | **Charters Tower** | **18.47** | **238** | P | **Pn** | **14 41 03.9** | **+1.7** |
| | comp=Z,1.1nm,0.3s,baz=64,slow=15,SNR=16 | | | | | | |
| **CTAO** | **Charters Tower** | **18.47** | **238** | *e*P | **Pn** | **14 41 04.7** | **+2.6** |
| CTAO | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | |
| **CTAO** | **Charters Tower** | **18.47** | **238** | *e*P | **Pn** | **14 41 04.7** | **+2.6** |
| | comp=Z,30nm,1.0s | | | | | | |
| **COEN** | **Coen** | **19.50** | **259** | *e*P | **Pn** | **14 41 14.6** | **-0.1** |
| | comp=Z,82nm,1.4s | | | | | | |
| **AFI** | **Afiamalu** | **24.93** | **100** | P | **P** | **14 42 08.4** | **-0.8** |
| **AFI** | **Afiamalu** | **24.93** | **100** | P | **P** | **14 42 08.4** | **-0.8** |
| **WRAB** | **Tennant Creek** | **28.92** | **248** | *e*P | **P** | **14 42 44.0** | **-1.1** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **28.92** | **248** | *e*P | **P** | **14 42 44.0** | **-1.1** |
| | comp=Z,7.1nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **28.94** | **248** | P | **P** | **14 42 44.0** | **-1.1** |
| | comp=Z,9.5nm,0.8s,baz=78,slow=9.4,SNR=65 | | | | | | |
| WRA | | | | LR | LR | 14 53 36.5 | |
| | comp=Z,337nm,20.1s,baz=75,slow=35 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.94** | **248** | *i* P | **P** | **14 42 44.4** | **-0.8** |
| WRA | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.39** | **7** | T | T | 15 13 27.3 | |
| | baz=188,slow=76,SNR=533 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.39** | **7** | T | T | 15 13 28.8 | |
| | baz=188,slow=76,SNR=425 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.40** | **7** | T | T | 15 13 32.0 | |
| | baz=188,slow=76,SNR=361 | | | | | | |
| **ASAR** | **Alice Springs** | **30.40** | **241** | P | **P** | **14 42 56.6** | **-1.5** |
| | comp=Z,4.4nm,0.9s,baz=66,slow=9.4,SNR=32 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.61** | **7** | T | T | 15 15 06.8 | |
| | baz=188,slow=76,SNR=190 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.62** | **7** | T | T | 15 15 13.1 | |
| | baz=188,slow=76,SNR=332 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.63** | **7** | T | T | 15 15 08.1 | |
| | baz=188,slow=76,SNR=224 | | | | | | |
| **SIJI** | **Sorong** | **32.94** | **285** | LR | LR | 14 57 09.9 | |
| | comp=Z,144nm,20.6s,baz=272,slow=37 | | | | | | |
| **RPZ** | **Rata Peaks** | **33.51** | **169** | P | **P** | **14 43 26.8** | **+1.7** |
| | comp=Z,16nm,0.9s,baz=0.0,slow=4.0,SNR=3.6 | | | | | | |
| **PPT** | **Papeete** | **46.47** | **104** | LR | LR | 15 01 12.1 | |
| | comp=Z,39nm,20.9s,baz=17,slow=31 | | | | | | |
| **PPT2** | **Papeete2** | **46.47** | **104** | *e*LR | LR | 14 58 19.1 | |
| | comp=Z,86nm,25.0s | | | | | | |
| **TBI** | **Tubuai** | **47.01** | **112** | *e*LR | LR | 14 58 36.3 | |
| | comp=Z,170nm,32.0s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.27** | **235** | P | **P** | **14 45 18.9** | **-0.1** |
| | comp=Z,18nm,1.0s,baz=295,slow=0.1,SNR=4.4 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **47.27** | **235** | P | **P** | **14 45 19.0** | **-0.1** |
| **MJAR** | **Matsushiro Arr** | **52.55** | **335** | P | **P** | **14 45 57.5** | **-1.5** |
| | comp=Z,2.4nm,0.8s,baz=169,slow=8.4,SNR=5.1 | | | | | | |
| MJAR | | | | LR | LR | 15 06 01.5 | |
| | comp=Z,31nm,21.3s,baz=125,slow=33 | | | | | | |
| **ASAJ** | **Asahikawa** | **57.72** | **343** | P | **P** | **14 46 37.1** | **+1.0** |
| | comp=Z,34nm,0.8s,baz=233,slow=15,SNR=11 | | | | | | |
| **ASAJ** | **Asahikawa** | **57.72** | **343** | P | **P** | **14 46 37.2** | **+1.0** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,34nm,0.8s | | | | | | |
| **KSRS** | **Korea Array** | **58.16** | **328** | P | **P** | **14 46 39.2** | **-0.2** |
| | comp=Z,3.3nm,0.9s,baz=144,slow=7.7,SNR=9.5 | | | | | | |
| KSRS | | | | LR | LR | 15 08 07.1 | |
| | comp=Z,48nm,20.9s,baz=98,slow=32 | | | | | | |
| **KSAR** | **Wonju Array Be** | **58.17** | **327** | P | **P** | **14 46 39.3** | **-0.2** |
| **KSAR** | **Wonju Array Be** | **58.17** | **327** | P | **P** | **14 46 39.2** | **-0.2** |
| **RKT** | **Rikitea** | **60.29** | **110** | *e*LR | LR | 15 04 44.4 | |
| | comp=Z,246nm,33.5s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **61.54** | **335** | P | **P** | **14 47 03.3** | **+0.8** |
| | comp=Z,20nm,0.9s,baz=151,slow=6.5,SNR=25 | | | | | | |
| **PETK** | **Petropavlovsk-** | **63.85** | **357** | P | **P** | **14 47 17.7** | **0.0** |
| | comp=Z,8.4nm,0.8s,baz=136,slow=9.8,SNR=5.1 | | | | | | |
| PETK | | | | LR | LR | 15 09 38.0 | |
| | comp=Z,43nm,19.4s,baz=127,slow=31 | | | | | | |
| **HABR** | **Khabarovsk** | **63.98** | **340** | *e*P | **P** | **14 47 17.1** | **-1.6** |
| HABR | | | | *e**PP | **pP** | **14 47 27.5** | **-0.7** |
| HABR | | | | *e**SP | **sP** | **14 47 31.7** | **-0.1** |
| HABR | | | | *e* | | 14 47 51.8 | |
| HABR | | | | *e* | | 14 49 38.4 | |
| HABR | | | | *e*S | **S** | **14 55 52.7** | **0.0** |
| HABR | | | | *e**SS | **sS** | **14 56 10.2** | **+1.8** |
| HABR | | | | *e* | | 14 57 07.8 | |
| HABR | | | | *e*SS | **SS** | **15 00 03.6** | **+1.5** |
| HABR | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.2s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,32nm,2.0s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,26nm,2.0s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,45nm,19.0s | | | | | | |
| **CN2** | **Changchun** | **64.16** | **331** | *e*P | **P** | **14 47 19.8** | **-0.2** |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,1.0s | | | | | | |
| **KLR** | **Kul'dur** | **65.79** | **338** | *e*P | **P** | **14 47 27.6** | **-2.9** |
| **VNDA** | **Vanda** | **66.67** | **180** | P | **P** | **14 47 37.8** | **+2.0** |
| | comp=Z,1.9nm,0.8s,baz=346,slow=6.3,SNR=7.7 | | | | | | |
| VNDA | | | | LR | LR | 15 11 45.3 | |
| | comp=Z,75nm,20.9s,baz=348,slow=31 | | | | | | |
| **XAN** | **Xi'an** | **67.93** | **314** | P | **P** | **14 47 43.8** | **-0.7** |
| XAN | | | | pP | **pP** | **14 47 52.5** | **-1.6** |
| XAN | | | | PMZ | | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.47** | **294** | P | **P** | **14 47 53.6** | **-0.7** |
| | comp=Z,1.0nm,0.9s,baz=113,slow=7.0,SNR=6.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.47** | **294** | *i* P | **P** | **14 47 54.9** | **+0.6** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **69.88** | **321** | *e*P | **P** | **14 47 58.8** | **+2.2** |
| HHC | | | | PMZ | | | |
| | comp=Z,20nm,0.9s | | | | | | |
| **HIA** | **Hailar** | **70.83** | **332** | *d* iP | **P** | **14 48 02.3** | **+0.2** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | |
| **HIA** | **Hailar** | **70.83** | **332** | *e*P | **P** | **14 48 02.0** | **-0.1** |
| | comp=Z,6.8nm,0.8s | | | | | | |
| **LZH** | **Lanzhou** | **72.56** | **313** | *e*P | P | 14 48 16.8 | +3.8 |
| LZH | | | | pP | pP | 14 48 21.5 | -1.1 |
| LZH | | | | sP | sP | 14 48 23.3 | -2.9 |
| LZH | | | | PMZ | | | |
| | comp=Z,14nm,1.0s | | | | | | |
| **SEY** | **Seymchan** | **74.00** | **355** | P | **P** | **14 48 20.4** | **-0.2** |
| | comp=Z,3.3nm,0.7s,baz=161,slow=6.3,SNR=5.5 | | | | | | |
| **ULN** | **Ulaanbaatar** | **76.51** | **325** | *d* iP | **P** | **14 48 36.3** | **+0.7** |
| ULN | | | | pmax | pmax | | |
| | comp=Z,46nm,1.7s | | | | | | |
| **ULN** | **Ulaanbaatar** | **76.51** | **325** | *e*P | **P** | **14 48 35.8** | **+0.1** |
| | comp=Z,24nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **76.86** | **325** | P | **P** | **14 48 38.5** | **+0.9** |
| | comp=Z,14nm,0.9s,baz=136,slow=5.8,SNR=44 | | | | | | |
| **GTA** | **Gaotai** | **76.91** | **315** | *e*P | **P** | **14 48 38.8** | **+0.7** |
| GTA | | | | pP | **pP** | **14 48 47.0** | **-0.8** |
| GTA | | | | sP | **sP** | **14 48 51.3** | **0.0** |
| GTA | | | | PMZ | | | |
| | comp=Z,11nm,1.3s | | | | | | |
| **YAK** | **Yakutsk** | **77.13** | **345** | P | **P** | **14 48 38.5** | **-0.1** |
| | comp=Z,3.7nm,0.4s,baz=268,slow=1.5,SNR=2.4 | | | | | | |
| **YAK** | **Yakutsk** | **77.13** | **345** | *e*P | **P** | **14 48 38.3** | **-0.3** |
| YAK | | | | pmax | pmax | | |
| | comp=Z,18nm,0.9s | | | | | | |
| **KDAK** | **Kodiak Island** | **77.44** | **23** | P | **P** | **14 48 41.2** | **+0.8** |
| | comp=Z,9.1nm,1.0s,baz=84,slow=2.8,SNR=4.1 | | | | | | |
| **KDAK** | **Kodiak Island** | **77.44** | **23** | P | **P** | **14 48 41.2** | **+0.8** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.0s | | | | | | |
| **KDAK** | **Kodiak Island** | **77.44** | **23** | *e*P | **P** | **14 48 40.9** | **+0.4** |
| **BILL** | **Bilibino** | **78.71** | **1** | *e*P | **P** | **14 48 48.3** | **+1.0** |
| BILL | | | | *e* | | 14 48 58.3 | |
| BILL | | | | pmax | pmax | | |
| | comp=Z,25nm,1.2s | | | | | | |
| BILL | | | | MLR | MLR | | |
| | comp=Z,88nm,17.0s | | | | | | |
| **QSPA** | **South Pole Qui** | **79.16** | **180** | *e*P | **P** | **14 48 51.0** | **+0.9** |
| | comp=Z,9.1nm,1.1s | | | | | | |
| **BOD** | **Bodaibo** | **79.17** | **336** | *e*P | **P** | **14 48 47.6** | **-2.4** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.9s | | | | | | |
| **ZAK** | **Zakamensk** | **79.94** | **326** | *e*P | **P** | **14 48 54.5** | **0.0** |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.1s | | | | | | |
| **TLY** | **Talaya** | **80.41** | **327** | LR | LR | 15 21 47.4 | |
| | comp=Z,44nm,20.2s,baz=138,slow=34 | | | | | | |
| **TLY** | **Talaya** | **80.41** | **327** | *e*P | **P** | **14 48 56.9** | **0.0** |
| TLY | | | | pmax | pmax | | |
| | comp=Z,12nm,0.9s | | | | | | |
| **SML** | **Sawmill** | **81.78** | **21** | *e*P | **P** | **14 49 03.7** | **-0.3** |
| **SML** | **Sawmill** | **81.78** | **21** | *e*P | **P** | **14 49 03.7** | **-0.3** |
| **KTH** | **Kantishna Hill** | **82.10** | **19** | *e*P | **P** | **14 49 05.2** | **-0.5** |
| **TRF** | **Thorofare Moun** | **82.23** | **19** | *e*P | **P** | **14 49 05.9** | **-0.6** |
| | comp=Z,5.2nm,0.8s | | | | | | |
| **MCK** | **McKinley** | **82.87** | **20** | *e*P | **P** | **14 49 08.5** | **-1.2** |
| MCK | | | | pmax | pmax | | |
| | comp=Z,24nm,1.5s | | | | | | |
| **MCK** | **McKinley** | **82.87** | **20** | *e*P | **P** | **14 49 08.5** | **-1.2** |
| | comp=Z,24nm,1.5s | | | | | | |
| **PALK** | **Pallekele** | **83.74** | **279** | *i* P | P | 14 49 19.7 | +4.4 |
| **MAW** | **Mawson** | **83.85** | **202** | P | **P** | **14 49 15.6** | **+0.9** |
| | comp=Z,3.9nm,0.7s,baz=102,slow=5

**ISC 27 14:49:00.5±0.5,7°31S±0.04×107°60E±0.03,h10km,n54,**
**σ1§86/54,mb4.1/13,MS3.8/6,Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CISI** | **Cisompet, Garu** | **0.33** | **139** | P | **Pg** | **14 49 06.8** | **-0.4** |
| CISI | | | | S | **Sg** | **14 49 11.8** | **+0.2** |
| **CISI** | **Cisompet, Garu** | **0.33** | **139** | *e*Sg | **Sg** | **14 49 06.5** | **-5.1** |
| **CNJI** | **Cibinong** | **0.46** | **269** | P | **Pn** | **14 49 13.6** | **+0.3** |
| CNJI | | | | S | **Sg** | **14 49 10.1** | **-5.7** |
| **LEM** | **Lembang** | **0.47** | **2** | Pg | **Pg** | **14 49 07.5** | **-2.4** |
| | 1µm,0.3s,baz=144,slow=13,SNR=67 | | | | | | |
| LEM | | | | Lg | Lg | 14 49 15.4 | |
| | 4µm,0.3s,baz=252,slow=20,SNR=46 | | | | | | |
| **LEM** | **Lembang** | **0.47** | **2** | P | **Pg** | **14 49 08.9** | **-1.0** |
| LEM | | | | S | Sg | 14 49 07.7 | -8.5 |
| **CMJI** | **Cimerak** | **0.97** | **119** | P | **Pg** | **14 49 16.7** | **-2.5** |
| CMJI | | | | S | **Sg** | **14 49 29.3** | **-2.6** |
| **SKJI** | **Sukabumi** | **1.07** | **286** | P | **Pn** | **14 49 22.9** | **+1.2** |
| SKJI | | | | S | **Sn** | **14 49 39.4** | **+2.7** |
| **TNG** | **Tangerang** | **1.47** | **320** | P | **Pb** | **14 49 27.9** | **-0.1** |
| TNG | | | | S | **Sg** | **14 49 48.7** | **+0.8** |
| **CGJI** | **Cibinong** | **2.01** | **290** | P | **Pg** | **14 49 37.9** | **-1.3** |
| **SMRI** | **Semarang** | **2.83** | **85** | P | **Pb** | **14 49 49.1** | **-2.1** |
| | baz=3.0,SNR=5.1 | | | | | | |
| **SMRI** | **Semarang** | **2.83** | **85** | *e*Pn | **Pn** | **14 49 45.4** | **-0.5** |
| **UGM** | **Wanagama** | **2.96** | **102** | P | **Pn** | **14 49 48.6** | **+0.9** |
| UGM | | | | S | **Sn** | **14 50 24.4** | **+1.0** |
| **UWJI** | **Ujung Watu** | **3.44** | **75** | P | **Pn** | **14 49 54.2** | **-0.1** |
| **XMI** | **Christmas Isla** | **3.65** | **211** | P | **Pn** | **14 49 56.7** | **-0.4** |
| | baz=3.9,SNR=3.2 | | | | | | |
| **PCJI** | **Pacitan** | **3.66** | **104** | P | **Pn** | **14 49 59.3** | **+2.1** |
| PCJI | | | | S | **Sn** | **14 50 41.0** | **+0.6** |
| **XMIS** | **Christmas Isla** | **3.69** | **211** | P | **Pn** | **14 49 57.1** | **-0.6** |
| | baz=4.0,SNR=6.0 | | | | | | |
| **PWJI** | **Pagerwojo** | **4.23** | **100** | P | **Pn** | **14 50 06.0** | **+0.9** |
| **JAGI** | **Jajag, Banyuwa** | **6.60** | **101** | P | **Pn** | **14 50 39.8** | **+2.1** |
| | baz=6.9,SNR=4.4 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **6.60** | **101** | *e*P | **Pn** | **14 50 39.6** | **+1.9** |
| | 79nm,1.0s | | | | | | |
| **KKM** | **Kota Kinabalu** | **15.80** | **33** | Pn | **Pn** | **14 52 43.3** | **-0.2** |
| **BATI** | **Baumata** | **16.14** | **101** | Pn | **P** | **14 52 50.6** | **-0.4** |
| | 2.8nm,0.3s,baz=276,slow=3.8,SNR=3.6 | | | | | | |
| **LUWI** | **Luwuk** | **16.36** | **68** | *e*P | **Pn** | **14 52 51.6** | **+1.1** |
| | 36nm,1.1s | | | | | | |
| **SOEI** | **Soe** | **16.66** | **100** | *e*Pn | **Pn** | **14 52 56.1** | **+1.6** |
| | 17nm,0.4s | | | | | | |
| **KNRA** | **Kununurra** | **22.33** | **114** | P | **P** | **14 53 59.7** | **+1.0** |
| | baz=23,SNR=14 | | | | | | |
| **MTN** | **Manton Dam** | **23.81** | **105** | P | **P** | **14 54 13.4** | **-0.5** |
| | baz=24,SNR=7.3 | | | | | | |
| **WRKA** | **Warakurna** | **26.50** | **134** | P | **P** | **14 54 42.0** | **+3.6** |
| | baz=27,SNR=3.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.98** | **342** | P | **P** | **14 54 40.9** | **-1.9** |
| | 0.4nm,0.5s,baz=172,slow=8.0,SNR=4.7 | | | | | | |
| CMAR | | | | LR | LR | 15 07 28.4 | |
| | comp=Z,121nm,18.6s,baz=178,slow=41 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.81** | **119** | P | **P** | **14 54 58.5** | **-0.7** |
| | 10nm,1.1s,baz=292,slow=11,SNR=14 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 58 10.6** | **+1.5** |
| | 0.4nm,1.0s,baz=298,slow=2.2,SNR=4.7 | | | | | | |
| **WRAB** | **Tennant Creek** | **28.81** | **119** | *e*P | **P** | **14 54 59.8** | **+0.6** |
| | 9.2nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **30.03** | **126** | P | **P** | **14 55 09.7** | **-0.3** |
| | 3.7nm,0.8s,baz=303,slow=9.2,SNR=20 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 58 12.6** | **+0.4** |
| | 0.8nm,0.8s,baz=299,slow=1.5,SNR=4.5 | | | | | | |
| ASAR | | | | LR | LR | 15 07 51.8 | |
| | comp=Z,120nm,19.7s,baz=307,slow=38 | | | | | | |
| **PALU** | **Palau** | **30.50** | **62** | P | P | 14 55 23.4 | +9.3 |
| | baz=30,SNR=3.5 | | | | | | |
| **QIS** | **Mount Isa** | **33.66** | **116** | P | **P** | **14 55 42.6** | **+0.7** |
| | baz=34,SNR=6.8 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **42.92** | **129** | P | **P** | **14 57 00.8** | **+1.2** |
| | baz=43,SNR=6.9 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.39** | **22** | P | **P** | **14 57 42.8** | **0.0** |
| **KSRS** | **Korea Array** | **48.41** | **22** | P | **P** | **14 57 42.8** | **-0.2** |
| | 0.9nm,0.7s,baz=211,slow=6.4,SNR=3.2 | | | | | | |
| **SONM** | **Songino Array** | **54.91** | **359** | P | **P** | **14 58 31.0** | **-0.5** |
| | 1.2nm,1.0s,baz=172,slow=8.5,SNR=4.6 | | | | | | |
| **AAK** | **Ala-Archa** | **58.13** | **332** | LR | LR | 15 27 13.5 | |
| | comp=Z,58nm,18.9s,baz=7.5,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.37** | **340** | P | **P** | **14 58 53.2** | **-2.9** |
| | 0.6nm,0.6s,baz=151,slow=7.7,SNR=4.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **62.94** | **340** | P | **P** | **14 59 24.6** | **-2.5** |
| | 0.5nm,0.7s,baz=154,slow=6.2,SNR=5.1 | | | | | | |
| **KURK** | **Kurchatov** | **62.99** | **340** | P | **P** | **14 59 24.6** | **-2.8** |
| **ZALV** | **Zalesovo Beam** | **63.98** | **345** | P | **P** | **14 59 33.2** | **-0.7** |
| | 0.6nm,0.4s,baz=184,slow=4.5,SNR=4.1 | | | | | | |
| **MAW** | **Mawson** | **67.25** | **197** | P | **P** | **14 59 56.0** | **+1.1** |
| | 0.8nm,0.5s,baz=34,slow=8.6,SNR=3.6 | | | | | | |
| **VNDA** | **Vanda** | **75.56** | **169** | P | **P** | **15 00 46.0** | **+1.0** |
| | 1.7nm,0.8s,baz=311,slow=6.5,SNR=6.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **82.47** | **312** | P | P | 15 01 20.0 | -3.7 |
| | 0.4nm,0.4s,baz=131,slow=4.2,SNR=3.6 | | | | | | |
| **SNAA** | **Sanae** | **89.41** | **197** | P | **P** | **15 02 00.5** | **+3.1** |
| **SNAA** | **Sanae** | **89.41** | **197** | *e*P | **P** | **15 01 59.3** | **+1.9** |
| | 0.9nm,0.8s | | | | | | |
| **VNA2** | **Neumayer--Watz** | **91.06** | **197** | P | P | 15 02 09.0 | +4.1 |
| | baz=95,slow=3.7 | | | | | | |
| **VNA3** | **Neumayer Olymp** | **91.58** | **197** | P | P | 15 02 11.7 | +4.3 |
| **FINES** | **FINESS Array B** | **92.32** | **332** | LR | LR | 15 48 22.7 | |
| | comp=Z,41nm,18.6s,baz=48,slow=39 | | | | | | |
| **ARCES** | **ARCESS Array B** | **94.03** | **340** | LR | LR | 15 49 12.5 | |
| | comp=Z,59nm,18.3s,baz=82,slow=38 | | | | | | |
| **GERES** | **GERESS Array B** | **98.01** | **318** | LR | LR | 15 55 15.3 | |
| | comp=Z,44nm,18.5s,baz=59,slow=41 | | | | | | |
| **TXAR** | **Lajitas Array** | **143.32** | **49** | PKP | PKPbc | 15 08 33.9 | +0.8 |
| | 0.3nm,0.7s,baz=266,slow=3.6,SNR=2.8 | | | | | | |
| **JCT** | **Junction City** | **145.49** | **45** | *e*PKP | **PKPdf** | **15 08 39.8** | **0.0** |
| **TZTN** | **Tazewell** | **149.17** | **18** | *e*PKPdf | **PKPdf** | **15 08 45.2** | **-0.5** |

**IDC 27 15:04:42.1±2.9,23°94S×179°08W,h0km,mb3.9/3,**
**mb1 4.2/3,mb1mx3.8/23,mbtmp3.9/3,Error ellipse:**
**s-maj=267.0km s-min=32.6km az=164.0,South of Fiji**
**Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.86** | **260** | P | P | 15 12 42.7 | +0.3 |
| | 0.8nm,0.7s,baz=105,slow=7.1,SNR=9.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.24** | **266** | P | P | 15 12 44.9 | -0.6 |
| | 0.4nm,0.3s,baz=103,slow=8.3,SNR=40 | | | | | | |
| **TXAR** | **Lajitas Array** | **89.74** | **58** | P | P | 15 17 42.7 | 0.0 |
| | 0.7nm,0.8s,baz=234,slow=4.2,SNR=7.2 | | | | | | |

*BJI **27** 15:09:36.5,4.2±1.5×99.45E,h33km,mb4.9/57,mB5.3/40, Ms4.9/38,Ms7 4.6/38*
*DJA **27** 15:09:36.1±1.4,4.4°S±4.4×9.9°E±.°,h12km±10km,M5.0/20, mB5.5/14,mb5.1/20,MLv5.2/19,Mw(mB)4.9/14*
*ISCJB **27** 15:09:37.2±1.0,3.60S±0.03×99.56E±0.03,h7km±6km, mb4.8/83,MS4.0/22,Error ellipse: s-maj=5.4km s-min=3.9km az=144.5*
*NEIC **27** 15:09:38.3±2.5,3.57S×99.56E,h2km±15km,mb5.1/18, Error ellipse: s-maj=8.6km s-min=4.7km az=49.0*
*NEIC Felt at Padang.*
*KLM **27** 15:09:38.9,3.59S×99.34E,h11km,mb4.9,MS5.5*
*IDC **27** 15:09:38.2±0.4,3.52S×99.60E,h0km,mb4.6/37, mb1 4.7/39,mb1mx4.7/43,mbtmp4.6/39,ML4.2/2,MS3.9/18, Ms1 3.9/18,ms1mx3.7/36,Error ellipse: s-maj=14.1km s-min=10.1km az=51.0*
*GCMT **27** 15:09:39.6±0.3,3.73S×99.52E,h16km±1km,MW4.9/67, Moment Tensor Solution. s12,c13; s67,c96; Duration: 0 Moment tensor: Scale 10¹⁶Nm; Mrr-2.93±.22; Mθθ1.14±.12; Mϕϕ1.79±.14; Mrθ-1.12±.41; Mθϕ-1.10±.07; Mϕr0.35±.34; Best double couple: M₀2.99800×10¹⁶ NP1:ϕs133.00000°,δ56.00000°,λ-102.00000°. NP2: ϕs333.00000°,δ36.00000°,λ-73.00000°. Principal axes: T 2.7770, Plg10.0000°, Azm230.0000°; N 0.4420, Plg10.0000°, Azm139.0000°; P -3.2190, Plg76.0000°, Azm3.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*MOS **27** 15:09:40.2±1.0,3.41S×99.69E,h25km,mb5.1/41 Error ellipse: s-maj=10.9km s-min=5.2km az=112.8*
*AUST **27** 15:09:42.5±2.4,3.41S×99.67E,h29km,Error ellipse: s-maj=1.7km s-min=0.6km az=234.0*

**ISC 27 15:09:39.9±1.3,3.56S±0.04×99.58E±0.04,h11km±7km,**
**n433,σ1§21/412,mb4.9/83,MS4.0/22,16C-11D,**
**Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.90** | **29** | P | **Pn** | **15 09 57.7** | **-0.9** |
| PPSI | | | | S | **Sb** | **15 10 10.7** | **+1.1** |
| **SISI** | **Saibi** | **2.27** | **348** | P | **Pn** | **15 10 15.6** | **-1.8** |
| SISI | | | | S | **Sn** | **15 10 44.3** | **-1.1** |
| **PDSI** | **Padang** | **2.78** | **19** | P | **Pn** | **15 10 22.9** | **-1.5** |
| **KSI** | **Kapahiang** | **3.01** | **92** | P | **Pn** | **15 10 28.9** | **+1.3** |
| **PPI** | **Padang Panjang** | **3.19** | **15** | P | **Pn** | **15 10 29.1** | **-0.9** |
| | baz=3.0,SNR=39 | | | | | | |
| **PPI** | **Padang Panjang** | **3.19** | **15** | P | **Pn** | **15 10 29.1** | **-0.9** |
| **SDSI** | **Sungai Dareh** | **3.20** | **35** | P | **Pn** | **15 10 30.2** | **0.0** |
| **MNAI** | **Manna** | **3.46** | **103** | P | **Pn** | **15 10 33.7** | **-0.1** |
| | baz=3.4,SNR=21 | | | | | | |
| **MNAI** | **Manna** | **3.46** | **103** | P | **Pn** | **15 10 33.5** | **-0.3** |
| **MNAI** | **Manna** | **3.46** | **103** | *e*Pn | **Pn** | **15 10 33.5** | **-0.3** |
| **BKNI** | **Bangkinang** | **4.13** | **21** | P | **Pn** | **15 10 43.9** | **+0.9** |
| **BKNI** | **Bangkinang** | **4.13** | **21** | *e*Pn | **Pn** | **15 10 43.7** | **+0.8** |
| **MNSI** | **Mandailing Nat** | **4.33** | **0** | P | **Pn** | **15 10 44.6** | **-1.1** |
| **JMBI** | **JAMBI** | **4.49** | **65** | P | **Pb** | **15 10 58.1** | **-0.7** |
| **MDSI** | **Maura Dua** | **4.68** | **101** | P | **Pn** | **15 10 50.3** | **-0.3** |
| **LWLI** | **Liwa** | **4.70** | **108** | P | **Pn** | **15 10 50.1** | **-0.8** |
| **GSI** | **Gunungsitoli** | **5.23** | **337** | P | **Pn** | **15 10 55.8** | **-2.3** |
| | baz=5.2 | | | | | | |
| **GSI** | **Gunungsitoli** | **5.23** | **337** | P | **Pn** | **15 10 56.0** | **-2.1** |
| | 104nm,0.9s,0.7nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.23** | **337** | *e*Pn | **Pn** | **15 10 55.8** | **-2.3** |
| **KASI** | **Kota Agung** | **5.28** | **112** | P | **Pn** | **15 10 57.7** | **-1.1** |
| | 323nm,0.7s,13µm4.1nm | | | | | | |
| **KLI** | **Kotabumi** | **5.42** | **104** | P | Pn | 15 11 06.4 | +5.6 |
| **PSI** | **Prapat** | **6.35** | **354** | Pn | Pn | 15 11 10.2 | -3.5 |
| | 0.7nm,0.3s,baz=153,slow=3.4,SNR=9.9 | | | | | | |
| **PSI** | **Prapat** | **6.35** | **354** | *e*P | Pn | 15 11 10.1 | -3.6 |
| **PSI** | **Prapat** | **6.35** | **354** | P | Pn | 15 11 10.2 | -3.5 |
| | baz=6.1,SNR=6.7 | | | | | | |
| **PSI** | **Prapat** | **6.35** | **354** | *e*Pn | Pn | 15 11 10.1 | -3.6 |
| **TPRI** | **Tanjung Pinang** | **6.65** | **48** | P | Pb | 15 11 28.0 | -7.7 |
| **PPBI** | **Pangkal Pinang** | **6.70** | **78** | P | Pn | 15 11 26.2 | +7.9 |
| **CGJI** | **Cibinong** | **6.80** | **117** | P | **Pn** | **15 11 17.6** | **-2.2** |
| | 576nm,0.8s,6µm1.7nm | | | | | | |
| **MYKOM** | **Kota Tinggi** | **6.82** | **39** | *e*Pn | **Pn** | **15 11 19.7** | **-0.2** |
| **SBJI** | **Serang** | **7.01** | **112** | P | **Pb** | **15 11 38.6** | **-3.1** |
| **FRIM** | **Kepong** | **7.06** | **17** | ⇓P | **Pn** | **15 11 24.5** | **+1.3** |
| **KCSI** | **Kotacane, Aceh** | **7.26** | **346** | P | Pn | 15 11 29.6 | +3.5 |
| **TNG** | **Tangerang** | **7.51** | **110** | P | **Pn** | **15 11 31.1** | **+1.7** |
| **SKJI** | **Sukabumi** | **7.75** | **116** | P | **Pn** | **15 11 31.3** | **-1.4** |
| | 402nm,0.7s,6µm2.1nm | | | | | | |
| **TPI** | **Tanjungpandan** | **8.10** | **85** | P | **Pb** | **15 11 58.5** | **-1.9** |
| **IPM** | **Ipoh** | **8.12** | **10** | *e*Pn | **Pn** | **15 11 38.0** | **+0.2** |
| **CNJI** | **Cibinong** | **8.39** | **117** | P | **Pn** | **15 11 39.0** | **-2.5** |
| | 462nm,0.8s,4µm | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **8.40** | **338** | P | **Pn** | **15 11 42.4** | **+0.8** |
| **LEM** | **Lembang** | **8.64** | **112** | Pn | **Pn** | **15 11 45.6** | **+0.5** |
| | 26nm,0.3s,baz=160,slow=20,SNR=14 | | | | | | |
| LEM | | | | Sn | **Sn** | **15 13 19.6** | **-3.1** |
| | 3.3nm,0.3s,baz=313,slow=19,SNR=1.8 | | | | | | |
| LEM | | | | LR | LR | 15 15 23.2 | |
| | comp=Z,545nm,20.7s,baz=317,slow=40 | | | | | | |
| **LEM** | **Lembang** | **8.64** | **112** | P | **Pn** | **15 11 46.4** | **+1.3** |
| | baz=8.6,SNR=8.1 | | | | | | |
| **LEM** | **Lembang** | **8.64** | **112** | P | **Pn** | **15 11 45.1** | **0.0** |
| | 3µm,0.9s,28µm | | | | | | |
| **KULM** | **Kulim** | **8.86** | **7** | ⇑P | **Pn** | **15 11 47.6** | **-0.3** |
| **KULM** | **Kulim** | **8.86** | **7** | *e*Pn | **Pn** | **15 11 46.5** | **-1.4** |
| **CISI** | **Cisompet, Garu** | **9.11** | **116** | P | **Pn** | **15 11 48.6** | **-2.9** |
| | 812nm,0.6s,8µm | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.11** | **116** | *e*Pn | **Pn** | **15 11 48.7** | **-2.8** |
| **KTGM** | **Kuala Trenggan** | **9.52** | **22** | ⇓P | **Pn** | **15 11 57.8** | **+0.8** |
| **CMJI** | **Cimerak** | **9.77** | **116** | P | **Pn** | **15 11 57.6** | **-2.9** |
| | 212nm,0.6s | | | | | | |
| **SKLT** | **Songkhla** | **10.71** | **6** | P | **Pn** | **15 12 14.1** | **+0.7** |
| | 21nm,1.0s | | | | | | |
| **UWJI** | **Ujung Watu** | **11.68** | **105** | P | Pn | 15 12 38.5 | +12 |
| **UGM** | **Wanagama** | **11.72** | **112** | P | **Pn** | **15 12 25.9** | **-1.3** |
| | baz=12,SNR=10 | | | | | | |
| **KSM** | **Kuching** | **11.84** | **65** | ⇓P | Pn | 15 12 32.0 | +3.2 |
| **NGJI** | **Ngawi** | **12.42** | **108** | P | Pn | 15 12 46.3 | +10 |
| **STKI** | **Sintang** | **12.43** | **73** | P | P | 15 12 51.0 | +2.1 |
| **PWJI** | **Pagerwojo** | **12.95** | **111** | P | Pn | 15 12 52.0 | +8.0 |
| **SBUM** | **Sibu** | **13.98** | **65** | ⇑P | Pn | 15 13 00.9 | +2.8 |
| **SBUM** | **Sibu** | **13.98** | **65** | *e*Pn | **Pn** | **15 12 59.5** | **+1.4** |
| **ABJI** | **Asem Bagus** | **15.18** | **107** | P | P | 15 13 28.4 | +8.9 |
| **BBKI** | **Banjar Baru** | **15.24** | **90** | P | **P** | **15 13 19.6** | **-0.5** |
| **SRBI** | **Singaraja** | **16.19** | **107** | P | P | 15 13 42.0 | +11 |
| **CHBT** | **CHBT** | **16.44** | **10** | P | **P** | **15 13 37.5** | **+4.1** |
| **KBKI** | **Kotabaru** | **16.56** | **90** | P | **P** | **15 13 38.6** | **+3.7** |
| **SRDT** | **SRDT** | **17.80** | **359** | P | P | 15 13 53.2 | +4.7 |
| **KHLT** | **Khaolaem Dam** | **18.27** | **357** | P | **P** | **15 13 54.5** | **+0.8** |
| | 13nm,1.0s | | | | | | |
| **UTHA** | **Uthaitani** | **19.00** | **360** | P | **Pn** | **15 14 04.6** | **+2.2** |
| | 5.6nm,0.9s,61nm | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.16** | **60** | P | **P** | **15 14 01.4** | **-2.2** |
| | baz=19,SNR=3.9 | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.16** | **60** | *e*P | **Pn** | **15 14 05.0** | **+0.4** |
| | 110nm,1.5s | | | | | | |
| **CHAI** | **Chaiyhum** | **19.48** | **7** | P | Pn | 15 14 13.2 | +4.9 |
| **UMPA** | **Umpang Tak** | **19.65** | **358** | P | **P** | **15 14 08.7** | **-0.2** |
| | 9.0nm,0.8s,96nm | | | | | | |
| **SDKM** | **Sandakan** | **19.83** | **63** | ⇑P | **Pn** | **15 14 12.3** | **-0.2** |
| **TSM** | **Tawau** | **19.88** | **67** | ⇑P | **Pn** | **15 14 13.0** | **-0.1** |
| **PBKT** | **Sadao Pong** | **20.05** | **4** | P | Pn | 15 14 16.4 | +1.4 |
| | 15nm,0.8s,1µm | | | | | | |
| **KDM** | **Kudat** | **20.12** | **59** | ⇑P | Pn | 15 14 15.7 | -0.3 |
| **SPSI** | **Sidrap Palu** | **20.15** | **92** | P | **P** | **15 14 13.3** | **-1.1** |
| | 43nm,1.1s,551nm | | | | | | |
| **KAPI** | **Kappang** | **20.17** | **95** | P | **P** | **15 14 14.6** | **0.0** |
| | 57nm,1.2s,baz=264,slow=8.5,SNR=15 | | | | | | |
| **KAPI** | **Kappang** | **20.17** | **95** | P | **P** | **15 14 14.9** | **+0.3** |
| | 244nm,1.4s,SNR=6.4 | | | | | | |
| **KAPI** | **Kappang** | **20.17** | **95** | *e*P | **P** | **15 14 14.1** | **-0.6** |
| | 180nm,1.6s | | | | | | |
| **TTSI** | **Tana Toraja** | **20.22** | **89** | P | Pn | 15 14 19.8 | +2.8 |
| **PCI** | **Palu** | **20.41** | **83** | P | **P** | **15 14 17.2** | **-0.1** |
| | 74nm,1.5s,1µm | | | | | | |
| **BKSI** | **Bulukumba** | **20.56** | **96** | P | **P** | **15 14 17.7** | **-1.1** |
| | 76nm,0.9s,980nm | | | | | | |
| **WBSI** | **Waikabubak, Su** | **20.58** | **108** | P | Pn | 15 14 27.1 | +5.7 |
| **MPSI** | **Mapaga** | **20.68** | **80** | P | **P** | **15 14 21.0** | **+0.9** |
| | 34nm,1.0s | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.80** | **65** | ⇑P | Pn | 15 14 23.4 | -0.5 |
| **MYLDM** | **Lahad Datu** | **20.80** | **65** | *e*P | **P** | **15 14 22.5** | **+1.0** |
| | 233nm,1.6s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **21.00** | **98** | P | P | 15 14 30.6 | +7.0 |
| **LOEI** | **Loei** | **21.00** | **4** | P | **P** | **15 14 24.0** | **+0.4** |
| | 72nm,1.2s,5µm | | | | | | |
| **UTTA** | **Uttaradit** | **21.19** | **3** | P | **P** | **15 14 27.2** | **+1.6** |
| | 6.4nm,0.7s,86nm | | | | | | |
| **PALK** | **Pallekele** | **21.69** | **300** | P | **P** | **15 14 32.1** | **+0.9** |
| | 12nm,0.9s,baz=114,slow=8.7,SNR=4.9 | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.85** | **358** | *e*P | **P** | **15 14 32.6** | **-0.1** |
| CM01 | | | | *e*S | **S** | **15 18 33.4** | **-0.8** |
| **CM10** | **Chiang Mai Arr** | **21.86** | **359** | P | **P** | **15 14 33.0** | **+0.2** |
| | baz=22 | | | | | | |
| **CM07** | **Chiang Mai Arr** | **21.86** | **358** | P | **P** | **15 14 33.2** | **+0.3** |
| | baz=22 | | | | | | |
| **CM15** | **Chiang Mai Arr** | **21.88** | **358** | P | **P** | **15 14 33.4** | **+0.3** |
| | baz=22 | | | | | | |
| **CM31** | **Chiang Mai Arr** | **21.89** | **358** | P | **P** | **15 14 33.8** | **+0.7** |
| | baz=22,SNR=7.3 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.89** | **358** | P | **P** | **15 14 33.1** | **0.0** |
| | 25nm,0.8s,baz=187,slow=10.0,SNR=170 | | | | | | |
| CMAR | | | | PcP | **PcP** | **15 18 33.8** | **+1.1** |
| | 1.4nm,0.7s,baz=210,slow=3.5,SNR=4.8 | | | | | | |
| CMAR | | | | LR | LR | 15 23 03.6 | |
| | comp=Z,279nm,20.8s,baz=183,slow=37 | | | | | | |
| **LAMP** | **Lampang** | **21.94** | **0** | P | **P** | **15 14 35.5** | **+1.8** |
| | 12nm,0.8s,112nm | | | | | | |
| **CHTO** | **Chiang Mai** | **22.24** | **358** | P | **P** | **15 14 37.4** | **+0.5** |
| | 123nm,1.6s,2µm | | | | | | |
| **CHTO** | **Chiang Mai** | **22.24** | **358** | *e*P | **P** | **15 14 36.5** | **-0.4** |
| CHTO | | | | pmax | pmax | | |
| | comp=Z,34nm,1.2s | | | | | | |
| **CHTO** | **Chiang Mai** | **22.24** | **358** | *e*P | **P** | **15 14 36.5** | **-0.4** |
| | comp=Z,34nm,1.2s | | | | | | |
| **QIZ** | **Qiongzhong** | **24.62** | **24** | P | **P** | **15 15 02.0** | **+1.5** |
| QIZ | | | | pP | pP | 15 15 11.0 | +7.0 |
| QIZ | | | | S | **S** | **15 19 22.5** | **+0.8** |
| QIZ | | | | sS | sS | 15 19 37.5 | +10 |
| QIZ | | | | PMZ | | | |
| | comp=Z,59nm,2.1s | | | | | | |
| QIZ | | | | PMZ | | | |
| | comp=Z,580nm,6.7s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,860nm,4.5s | | | | | | |
| **BATI** | **Baumata** | **24.79** | **107** | P | **P** | **15 15 00.9** | **-1.4** |
| | comp=Z,15nm,0.5s,baz=54,slow=2.1,SNR=4.8 | | | | | | |
| BATI | | | | LR | LR | 15 26 33.1 | |
| | comp=Z,404nm,21.5s,baz=300,slow=41 | | | | | | |
| **SLVN** | **Son La** | **25.10** | **10** | *e*P | **P** | **15 15 05.4** | **+0.5** |
| **SOEI** | **Soe** | **25.27** | **105** | *e*P | **P** | **15 15 11.0** | **+4.3** |
| | comp=Z,39nm,0.8s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.25** | **260** | T | T | 15 45 50.3 | |
| | baz=81,slow=75,SNR=129 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.26** | **260** | T | T | 15 45 45.2 | |
| | baz=81,slow=75,SNR=296 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.27** | **260** | T | T | 15 45 32.2 | |
| | baz=81,slow=75,SNR=125 | | | | | | |
| **DAV** | **Davao City (W)** | **28.02** | **68** | LR | LR | 15 27 25.0 | |
| | comp=Z,440nm,21.9s,baz=284,slow=38 | | | | | | |
| **KMI** | **Kunming** | **28.68** | **6** | P | **P** | **15 15 38.8** | **+1.5** |
| KMI | | | | pP | pP | 15 15 51.0 | +10 |
| KMI | | | | sP | sP | 15 15 55.5 | +13 |
| KMI | | | | S | **S** | **15 20 23.8** | **-2.5** |
| KMI | | | | sS | sS | 15 20 45.5 | +13 |
| KMI | | | | PMZ | | | |
| | comp=Z,11nm,1.1s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,260nm,5.5s | | | | | | |
| KMI | | | | LN | | | |
| | comp=Z,220nm,15.6s | | | | | | |
| KMI | | | | LE | | | |
| | comp=Z,740nm,18.6s | | | | | | |
| KMI | | | | LZ | | | |
| | comp=Z,530nm,12.0s | | | | | | |
| **HYB** | **Hyderabad** | **29.41** | **316** | *e*P | **P** | **15 15 44.0** | **+0.3** |
| **HYB** | **Hyderabad** | **29.41** | **316** | *e*P | **P** | **15 15 44.0** | **+0.3** |
| **GYA** | **Guiyang** | **30.62** | **13** | P | **P** | **15 15 56.8** | **+2.4** |
| GYA | | | | pP | pP | 15 16 05.5 | +7.7 |
| GYA | | | | PP | **PP** | **15 16 58.8** | **-4.8** |
| GYA | | | | PcP | **PcP** | **15 18 53.3** | **+0.4** |
| GYA | | | | S | **S** | **15 20 57.0** | **+0.3** |
| GYA | | | | sS | sS | 15 21 13.5 | +11 |
| GYA | | | | SS | **ScP** | **15 22 41.0** | **+5.4** |
| GYA | | | | PMZ | | | |
| | comp=Z,30nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,130nm,5.3s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,680nm,18.0s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,560nm,18.2s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,690nm,17.8s | | | | | | |
| **KNRA** | **Kununurra** | **31.14** | **115** | P | **P** | **15 15 57.6** | **-1.3** |
| | baz=31,SNR=5.0 | | | | | | |
| **ODAN** | **Odare** | **32.45** | **339** | *e*P | **P** | **15 16 11.1** | **+0.4** |
| | comp=Z,36nm,1.0s | | | | | | |
| **TAPN** | **Taplejung** | **32.80** | **340** | *e*P | **P** | **15 16 14.7** | **+1.0** |
| | comp=Z,46nm,1.0s | | | | | | |
| **RAMN** | **Ramite** | **32.82** | **338** | *e*P | **P** | **15 16 14.5** | **+0.6** |
| | comp=Z,26nm,0.6s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **33.57** | **153** | P | **P** | **15 16 19.6** | **-0.4** |
| | comp=Z,11nm,1.0s,baz=106,slow=0.1,SNR=2.7 | | | | | | |
| **PKI** | **Pulchoki** | **33.83** | **337** | *e*P | **P** | **15 16 23.3** | **+0.5** |
| **PKIN** | **Phulchoki** | **33.84** | **337** | *e*P | **P** | **15 16 23.6** | **+0.8** |
| | comp=Z,4.6nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **33.96** | **338** | *e*P | **P** | **15 16 24.5** | **+0.6** |
| | comp=Z,42nm,0.6s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.97** | **158** | T | T | 15 52 37.4 | |
| | baz=336,slow=76,SNR=43 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.98** | **158** | T | T | 15 52 38.4 | |
| | baz=336,slow=76,SNR=46 | | | | | | |
| **DMN** | **Daman** | **33.99** | **337** | *e*P | **P** | **15 16 25.0** | **+0.9** |
| **H01W1** | **Cape Leeuwin H** | **33.99** | **158** | T | T | 15 52 56.0 | |
| | baz=336,slow=76,SNR=20 | | | | | | |
| **LSA** | **Lhasa** | **34.04** | **347** | P | **P** | **15 16 25.8** | **+1.0** |
| LSA | | | | PMZ | | | |
| | comp=Z,14nm,0.8s | | | | | | |
| **LSA** | **Lhasa** | **34.04** | **347** | *e*P | **P** | **15 16 25.8** | **+1.0** |
| LSA | | | | pmax | pmax | | |
| | comp=Z,22nm,0.9s | | | | | | |
| **LSA** | **Lhasa** | **34.04** | **347** | *e*P | **P** | **15 16 25.8** | **+1.0** |
| | comp=Z,22nm,0.9s | | | | | | |
| **KKN** | **Kakani** | **34.08** | **337** | *e*P | **P** | **15 16 25.0** | **+0.2** |
| | comp=Z,34nm,0.8s | | | | | | |
| **CD2** | **Chengdu** | **34.51** | **6** | *e*P | **P** | **15 16 29.3** | **+1.0** |
| CD2 | | | | pP | pP | 15 16 38.5 | +6.7 |
| CD2 | | | | PP | **PP** | **15 17 48.3** | **+1.7** |
| CD2 | | | | S | **S** | **15

**TIA Tai'an** 42.83 21 ⇑P P 15 17 38.5 +0.4
TIA PMZ
comp=Z,20nm,0.6s
TIA LN
comp=Z,1μm,13.1s
TIA LE
comp=Z,600nm,10.1s
TIA LZ
comp=Z,1μm,11.0s
**HHC Hu-ho-hao-te** 45.54 13 *e*P P 15 18 03.5 +3.7
HHC sP sP 15 18 18.3 +14
HHC S **S** **15 24 46.3 +4.4**
HHC sS sS 15 25 03.5 +16
HHC SS **ScS** **15 27 59.0 +2.4**
HHC PMZ
comp=Z,35nm,1.6s
HHC PMZ
comp=Z,120nm,5.0s
HHC LN
comp=Z,510nm,17.4s
HHC LE
comp=Z,680nm,18.7s
HHC LZ
comp=Z,350nm,14.9s
**BJI Beijing** 45.99 18 P **P** **15 18 04.5 +1.3**
BJI S **S** **15 24 49.0 +0.9**
BJI PMZ
comp=Z,21nm,1.0s
BJI PMZ
comp=Z,310nm,3.8s
BJI LN
comp=Z,760nm,14.8s
BJI LE
comp=Z,630nm,12.4s
BJI LZ
comp=Z,460nm,16.1s
**MTSU Mount Surprise** 46.11 112 P **P** **15 18 04.2 -0.5**
baz=46
**JNU Nakatsue** 46.99 37 *e*P **P** **15 18 12.8 +1.5**
comp=Z,374nm,2.5s
**PMG Port Moresby** 47.60 99 LR LR 15 41 28.9
comp=Z,78nm,19.9s,baz=270,slow=40
**KSH Kashi** 48.06 335 P **P** **15 18 18.3 -1.3**
KSH *es*P sP 15 18 31.8 +7.2
KSH *e*PcP **PcP** **15 19 48.0 +0.6**
KSH PcS **PcS** **15 23 42.5 -0.7**
KSH S S 15 25 08.3 -10
KSH ScS **ScS** **15 28 08.3 -4.9**
KSH PMZ
comp=Z,11nm,0.8s
KSH PMZ
comp=Z,120nm,5.2s
KSH LN
comp=Z,170nm,5.4s
KSH LE
comp=Z,200nm,6.1s
KSH LZ
comp=Z,260nm,5.6s
**CTA Charters Tower** 48.34 114 P **P** **15 18 21.0 -1.1**
baz=48
**CTAO Charters Tower** 48.34 114 *e*P **P** **15 18 21.5 -0.5**
CTAO pmax pmax
comp=Z,19nm,1.0s
**CTAO Charters Tower** 48.34 114 *e*P **P** **15 18 21.5 -0.5**
comp=Z,19nm,1.0s
**WMQ Urumqi** 48.36 348 P **P** **15 18 23.0 +1.2**
WMQ pP pP 15 18 33.0 +7.6
WMQ sP sP 15 18 37.5 +11
WMQ PP **PP** **15 20 15.0 +0.5**
WMQ S **S** **15 25 20.0 -2.1**
WMQ SS SS 15 28 45.0 -7.0
WMQ PMZ
comp=Z,42nm,1.0s
WMQ PMZ
comp=Z,220nm,5.0s
WMQ LN
comp=Z,190nm,15.0s
WMQ LE
comp=Z,130nm,15.0s
WMQ LZ
comp=Z,98nm,15.0s
**KSAR Wonju Array Be** 48.54 30 P **P** **15 18 23.4 +0.2**
**KSAR Wonju Array Be** 48.54 30 P **P** **15 18 23.4 +0.2**
**KSRS Korea Array** 48.57 30 P **P** **15 18 23.4 0.0**
comp=Z,14nm,0.9s,baz=224,slow=8.2,SNR=34
KSRS LR LR 15 39 25.3
comp=Z,127nm,18.3s,baz=224,slow=37
**KS01 Wonju Array Si** 48.57 30 *e*P **P** **15 18 23.1 -0.3**
**SFK Sufi-Kurgan** 49.53 334 P **P** **15 18 30.8 -0.3**
SFK pmax pmax
comp=Z,15nm,1.0s
**PDGK Podgornoye** 50.07 341 P **P** **15 18 34.7 -0.1**
PDGK pmax pmax
comp=Z,30nm,0.9s
**UCH Uchtor** 50.94 336 P **P** **15 18 42.3 +0.4**
SNR=11
**TKM2 Tokmak 2** 51.09 337 P **P** **15 18 42.4 -0.4**
TKM2 pmax pmax
comp=Z,31nm,1.1s
**TKM2 Tokmak 2** 51.09 337 P **P** **15 18 43.0 +0.1**
SNR=25
**TKM2 Tokmak 2** 51.09 337 *e*P **P** **15 18 43.0 +0.1**
comp=Z,25nm,0.9s
**KBK Karagaybulak** 51.12 337 P **P** **15 18 43.7 +0.7**
SNR=14
**AML Almayashu** 51.19 335 P **P** **15 18 43.9 +0.2**
SNR=15
**AAK Ala-Archa** 51.28 336 P **P** **15 18 44.6 +0.4**
comp=Z,5.0nm,0.8s,baz=143,slow=7.1,SNR=22
**AAK Ala-Archa** 51.28 336 ⇓*i*P **P** **15 18 44.3 +0.1**
AAK pmax pmax
comp=Z,6.0nm,0.7s
**AAK Ala-Archa** 51.28 336 P **P** **15 18 44.6 +0.4**
comp=Z,44nm,0.9s,SNR=5.4
**AAK Ala-Archa** 51.28 336 *e*P **P** **15 18 44.8 +0.6**
comp=Z,135nm,2.8s
**FRU Bishkek** 51.40 337 *i*P **P** **15 18 44.0 -0.9**
FRU pmax pmax
comp=Z,57nm,2.2s
**CMSA Cobar Meteorol** 51.47 128 P **P** **15 18 46.3 +0.7**
baz=52,SNR=5.9
**CHMS Chumysh** 51.49 337 P **P** **15 18 45.4 -0.2**
SNR=6.8
**SONM Songino Array** 51.53 6 P **P** **15 18 46.6 +0.7**
comp=Z,20nm,0.7s,baz=189,slow=8.8,SNR=115
SONM LR LR 15 44 01.1
comp=Z,175nm,18.1s,baz=185,slow=40
**SONA1 Songino Array** 51.54 6 *e*P **P** **15 18 46.2 +0.2**
**EKS2 Erkin-Say** 51.60 336 *e*P **P** **15 18 46.9 +0.4**
EKS2 pmax pmax
comp=Z,20nm,0.8s
**EKS2 Erkin-Say** 51.60 336 P **P** **15 18 47.0 +0.4**
SNR=23
**EKS2 Erkin-Say** 51.60 336 *e*P **P** **15 18 46.9 +0.4**
comp=Z,20nm,0.8s
**ULN Ulaanbaatar** 51.63 6 *e*P **P** **15 18 47.6 +0.9**
ULN pmax pmax
comp=Z,19nm,0.8s
**ULN Ulaanbaatar** 51.63 6 *e*P **P** **15 18 47.6 +0.9**
comp=Z,19nm,0.8s
**USP Ospenovka** 51.81 337 P **P** **15 18 48.9 +0.9**
SNR=8.5
**MNAS Manas** 51.98 335 P **P** **15 18 48.8 -0.6**
MNAS pmax pmax
comp=Z,21nm,1.3s
**MK07 Makanchi Array** 52.37 345 P **P** **15 18 52.2 +0.2**
baz=52
**MK03 Makanchi Array** 52.38 345 P **P** **15 18 52.6 +0.5**
baz=52
**MK01 Makanchi Array** 52.39 345 *e*P **P** **15 18 51.9 -0.3**
**MK31 Makanchi Array** 52.41 345 P **P** **15 18 52.4 0.0**
MK31 pmax pmax
comp=Z,16nm,0.8s
**MKAR Makanchi Array** 52.41 345 P **P** **15 18 52.5 +0.1**
comp=Z,13nm,0.7s,baz=147,slow=8.6,SNR=83
MKAR LR LR 15 45 19.8
comp=Z,62nm,18.9s,baz=162,slow=41
**CN2 Changchun** 52.58 23 *e*P **P** **15 18 53.3 -0.3**
CN2 *es*P sP 15 19 04.3 +5.7
CN2 PMZ
comp=Z,20nm,1.0s
CN2 PMZ
comp=Z,200nm,4.0s
CN2 LN
comp=Z,400nm,11.0s
CN2 LE
comp=Z,300nm,11.0s
CN2 LZ
comp=Z,300nm,16.0s
**OPO Ambohidratompo** 53.32 250 P **P** **15 19 01.1 +1.3**
comp=Z,3.4nm,0.8s,baz=31,slow=5.9,SNR=3.0
**KK31 Karatay Array** 53.35 334 *i*P **P** **15 18 58.4 -0.9**
**KKAR Karatay Array** 53.35 334 *e*P **P** **15 18 58.2 -1.1**
**KKAR Karatay Array** 53.35 334 *e*P **P** **15 18 58.2 -1.1**
**MAJO Matsushiro** 53.75 39 *i*P **P** **15 19 01.4 -1.0**
MAJO pmax pmax
comp=Z,84nm,1.0s
**MJAR Matsushiro Arr** 53.75 39 P **P** **15 19 01.5 -0.9**
comp=Z,5.5nm,0.8s,baz=218,slow=7.9,SNR=12
MJAR LR LR 15 43 44.7
comp=Z,97nm,18.1s,baz=230,slow=38
**ZAK Zakamensk** 53.83 3 *e*P **P** **15 19 03.2 +0.4**
ZAK pmax pmax
comp=Z,5.0nm,0.9s
**HVS Khovu-Aksy** 54.72 355 *i*P **P** **15 19 09.5 +0.2**
HVS pmax pmax
comp=Z,10.0nm,0.6s
**MDJ Mudanjiang** 54.97 26 P **P** **15 19 12.0 +0.9**
MDJ pP pP 15 19 22.3 +7.6
MDJ sP sP 15 19 25.0 +8.9
MDJ ScP **ScP** **15 24 09.3 -2.3**
MDJ PcS **PcS** **15 24 13.3 +0.7**
MDJ S **S** **15 26 52.3 -0.6**
MDJ PMZ
comp=Z,5.0nm,1.0s
MDJ PMZ
comp=Z,140nm,4.6s
MDJ LN
comp=Z,190nm,17.9s
MDJ LE
comp=Z,170nm,9.7s
MDJ LZ
comp=Z,430nm,14.8s
**TLY Talaya** 55.14 3 P **P** **15 19 12.7 +0.5**
comp=Z,7.6nm,0.7s,baz=251,slow=3.7,SNR=6.3
**TLY Talaya** 55.14 3 *e*P **P** **15 19 11.6 -0.6**
TLY *e* 15 21 09.2
TLY *e*SS SS 15 30 32.7 -6.6
TLY *e*SSS SSS 15 32 38.2
TLY pmax pmax
comp=Z,10.0nm,0.8s
TLY MLR MLR
comp=Z,302nm,14.0s
**USRK Ussuriysk Ar.** 55.72 28 P **P** **15 19 16.9 +0.3**
comp=Z,20nm,0.8s,baz=221,slow=6.1,SNR=43
USRK LR LR 15 45 23.7
comp=Z,168nm,18.4s,baz=210,slow=38
**GEYT Alibeck** 56.38 321 P **P** **15 19 20.9 -0.5**
comp=Z,10nm,0.9s,baz=159,slow=8.7,SNR=17
GEYT LR LR 15 45 13.5
comp=Z,59nm,18.9s,baz=145,slow=38
**OTUK Ortayu** 56.82 339 P **P** **15 19 23.1 -1.2**
OTUK pmax pmax
comp=Z,17nm,1.0s
**KURBB Kurchatov Arra** 56.92 344 P **P** **15 19 24.7 -0.3**
comp=Z,5.3nm,0.8s,baz=166,slow=6.9,SNR=35
**KURK Kurchatov** 56.98 344 P **P** **15 19 24.7 -0.7**
**KURK Kurchatov** 56.98 344 P **P** **15 19 24.7 -0.7**
**ATD Arta Tunnel** 58.37 286 LR LR 15 41 19.9
comp=Z,48nm,18.4s,baz=94,slow=33
**ZAA0 Zalesovo Array** 58.62 350 P **P** **15 19 36.2 -0.6**
baz=59,SNR=12
**ZAA0 Zalesovo Array** 58.62 350 *e*P **P** **15 19 36.0 -0.8**
**ZALV Zalesovo Beam** 58.62 350 P **P** **15 19 36.5 -0.3**
comp=Z,25nm,0.7s,baz=190,slow=5.0,SNR=73
**RAYN Ar Rayn** 59.13 300 *e*P **P** **15 19 40.3 -0.8**
comp=Z,3.9nm,0.9s
**KLR Kul'dur** 59.52 24 *e*P **P** **15 19 41.0 -2.2**
KLR pmax pmax
comp=Z,70nm,1.8s
KLR MLR MLR
comp=Z,2μm,12.5s
**KRAR Krasnoyarsk** 59.62 356 *i*P **P** **15 19 45.2 +1.4**
**NVS Novosibirsk** 59.76 349 *e*P **P** **15 19 43.1 -1.6**
**HABR Khabarovsk** 60.34 26 *e*P P 15 19 45.4 -3.4
HABR *e**PP pP 15 19 55.6 +3.1
HABR *e* 15 20 30.6
HABR *e* 15 21 58.4
HABR *e*S S 15 27 57.2 -6.1
HABR *e* 15 28 09.8
HABR *e**SS sS 15 28 14.2 +4.9
HABR *e* 15 29 33.2
HABR *e*SS **SS** **15 31 56.2 -4.9**
HABR pmax pmax
comp=Z,36nm,1.7s
HABR MLR MLR
comp=Z,131nm,21.0s
**VOSK Vostochnaya** 61.05 341 P **P** **15 19 52.0 -1.6**
VOSK pmax pmax
comp=Z,8.0nm,0.7s
**BVA0 Borovoye Array** 61.50 340 *i*P **P** **15 19 55.2 -1.5**
BVA0 pmax pmax
comp=Z,10.0nm,0.9s
**BVAR Borovoye Array** 61.50 340 P **P** **15 19 55.6 -1.1**
comp=Z,8.6nm,0.7s,baz=134,slow=8.5,SNR=39
**BRVK Borovoye** 61.56 340 *e*P **P** **15 19 55.9 -1.2**
BRVK pmax pmax
comp=Z,7.0nm,0.7s
**BRVK Borovoye** 61.56 340 *e*P **P** **15 19 55.9 -1.2**
comp=Z,6.8nm,0.7s
**ZRNK Zerenda** 61.91 340 P **P** **15 19 57.8 -1.6**
ZRNK pmax pmax
comp=Z,10.0nm,1.0s
**BOD Bodaibo** 62.28 9⇑*i*P **P** **15 20 01.3 -0.5**
BOD pmax pmax
comp=Z,16nm,1.0s
**KMBO Kilima Mbogo** 62.31 271 LR LR 15 44 34.8
comp=Z,43nm,19.1s,baz=80,slow=34
**KMBO Kilima Mbogo** 62.31 271 *ce*P **P** **15 20 04.8 +1.6**
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**AB31 Akbulak array** 62.80 332 *i*P **P** **15 20 04.0 -1.5**
AB31 pmax pmax
comp=Z,16nm,0.9s
**ABKAR Akbulak array** 62.80 332 *e*P **P** **15 20 04.4 -1.1**
**YSS Yuzh-Sakhalins** 63.02 32⇓*e*P **P** **15 20 07.0 0.0**
YSS *e* 15 20 16.7
YSS pmax pmax
comp=Z,30nm,0.9s
**AKTO Aktyubinsk** 64.52 332 P **P** **15 20 15.3 -1.5**
comp=Z,5.1nm,0.9s,baz=127,slow=5.6
**AKTO Aktyubinsk** 64.52 332 P **P** **15 20 14.9 -1.9**
AKTO pmax pmax
comp=Z,13nm,1.2s
**SVE Sverdlovsk** 67.96 338⇓*i*P **P** **15 20 38.5 -0.2**
SVE pmax pmax
comp=Z,25nm,1.1s
**MAW Mawson** 68.68 194 P **P** **15 20 44.9 +1.8**
comp=Z,2.0nm,0.8s,baz=0.9,slow=8.2,SNR=8.3
MAW LR LR 15 43 45.8
comp=Z,148nm,20.9s,baz=62,slow=30
**MAW Mawson** 68.68 194 *e*P **P** **15 20 44.8 +1.8**
MAW *e**PP pP 15 20 53.0 +6.3
**MAW Mawson** 68.68 194 P **P** **15 20 45.0 +2.0**
baz=69
**MAW Mawson** 68.68 194 *e*P **P** **15 20 44.8 +1.7**
MAW *ep*P pP 15 20 53.0 +6.3
**NEY Neytrino** 69.11 319 *i*P **P** **15 20 47.4 +1.0**
NEY pmax pmax
comp=Z,2.0nm,0.8s
**ASF Jabal al Asfar** 69.16 306 P **P** **15 20 47.7 +0.8**
comp=Z,2.9nm,0.6s,baz=96,slow=10,SNR=7.6
**KBZ Khabaz** 69.21 320 P **P** **15 20 46.7 -0.1**
comp=Z,11nm,0.8s,baz=124,slow=5.9,SNR=30
**YAK Yakutsk** 69.35 15 *e*P **P** **15 20 46.2 -1.1**
YAK *e* 15 20 56.4
YAK pmax pmax
comp=Z,35nm,0.8s
YAK pmax pmax
comp=E,12nm,1.4s
YAK pmax pmax
comp=N,12nm,1.2s
**KIV Kislovodsk** 69.45 320 *e*P **P** **15 20 48.3 -0.1**
KIV pmax pmax
comp=Z,16nm,1.0s
**EIL Elat** 70.01 303 P **P** **15 20 52.6 +0.6**
comp=Z,9.3nm,0.7s,baz=290,slow=3.1,SNR=10
**EIL Elat** 70.01 303 P **P** **15 20 52.5 +0.5**
baz=70,SNR=5.6
**MMAI Mount Meron Ar** 70.62 307 P **P** **15 20 56.4 +0.6**
comp=Z,4.6nm,0.7s,baz=96,slow=7.6,SNR=8.3
**VRH Novokhopyorsk** 73.37 326 *e*P **P** **15 21 10.5 -1.3**
VRH pmax pmax
comp=N,10.0nm,0.8s
VRH pmax pmax
comp=E,6.0nm,0.8s
VRH pmax pmax
comp=Z,20nm,0.8s
**BR131 Keskin Array S** 74.06 313 P **P** **15 21 15.2 -1.2**
baz=74,SNR=4.1
**BRTR Keskin Array B** 74.06 313 P **P** **15 21 15.1 -1.2**
comp=Z,5.6nm,0.7s,baz=135,slow=6.9,SNR=31
**BRTR Keskin Array B** 74.06 313 *ce*P **P** **15 21 15.1 -1.2**
BRTR pmax pmax
comp=Z,6.0nm,0.7s
**PETK Petropavlovsk-** 74.42 32 P **P** **15 21 17.4 -0.6**
comp=Z,3.9nm,0.7s,baz=210,slow=5.0,SNR=4.7
**BOSA Boshof** 74.54 241 P **P** **15 21 19.2 -0.1**
comp=Z,4.3nm,0.7s,baz=86,slow=5.9,SNR=7.6
BOSA LR LR 15 49 50.1
comp=Z,135nm,18.4s,baz=82,slow=32
**BOSA Boshof** 74.54 241 P **P** **15 21 20.1 +0.7**
baz=75,SNR=3.5
**VORD Divnogorie** 74.63 325 *e*P **P** **15 21 17.8 -1.4**
VORD pmax pmax
comp=N,20nm,0.9s
VORD pmax pmax
comp=E,20nm,0.9s
VORD pmax pmax
comp=Z,10.0nm,0.9s
**VSR Storozhevoye** 74.81 325 *e*P **P** **15 21 18.5 -1.7**
VSR pmax pmax
comp=N,8.0nm,0.9s
VSR pmax pmax
comp=E,8.0nm,0.9s
VSR pmax pmax
comp=Z,10.0nm,0.9s
**LPSR Galich'ya Gora** 75.55 327 *e*P **P** **15 21 23.9 -0.6**
LPSR pmax pmax
comp=N,5.0nm,0.8s
LPSR pmax pmax
comp=E,3.0nm,0.8s
LPSR pmax pmax
comp=Z,10.0nm,0.8s
**SEY Seymchan** 77.22 22⇓*i*P **P** **15 21 33.1 -0.7**
**BKZ Black Stump Fm** 77.62 129 *e*P **P** **15 21 36.4 -0.2**
comp=Z,22nm,0.8s
**OBN Obninsk** 77.89 328 *e*P **P** **15 21 37.1 -0.5**
OBN *e* 15 21 46.5
OBN pmax pmax
comp=Z,12nm,1.1s
OBN MLR MLR
comp=Z,42nm,17.0s
**AKASG Malin Array Be** 80.46 323 P **P** **15 21 50.3 -1.5**
comp=Z,2.1nm,0.6s,baz=87,slow=4.9,SNR=6.9
**VRI Vrincioaia** 80.70 317 ⇑P **P** **15 21 53.5 +0.2**
**VRI Vrincioaia** 80.70 317 ⇑*i*P **P** **15 21 53.5 +0.2**
**VNDA Vanda** 80.72 169 P **P** **15 21 53.2 +0.5**
comp=Z,0.8nm,0.7s,baz=339,slow=3.7,SNR=4.2
VNDA LR LR 15 48 51.3
comp=Z,66nm,21.6s,baz=316,slow=29
**VNDA Vanda** 80.72 169 *e*P **P** **15 21 54.3 +1.5**
VNDA pmax pmax
comp=Z,34nm,2.3s
**VNDA Vanda** 80.72 169 *e*P **P** **15 21 54.3 +1.5**
comp=Z,34nm,2.3s
**MLR Muntele Rosu** 81.14 317 P **P** **15 21 55.3 -0.5**
comp=Z,1.8nm,1.0s,baz=55,slow=5.6,SNR=6.2
**MLR Muntele Rosu** 81.14 317 ⇓*i*P **P** **15 21 55.0 -0.8**
**TMCR Tamitsa** 81.20 337 *e*P **P** **15 21 55.3 -0.2**
TMCR pmax pmax
comp=Z,21nm,0.8s
**BURAR Bucovina Array** 82.15 319 ⇑P **P** **15 22 02.0 +1.0**
**BURAR Bucovina Array** 82.15 319 ⇑*i*P **P** **15 22 02.0 +1.0**
**BUR04 Bucovina Ar. S** 82.15 319 *e*P **P** **15 22 00.5 -0.5**
**BZS Buzias** 84.14 316 ⇑P **P** **15 22 10.3 -0.9**
**BZS Buzias** 84.14 316 ⇑*i*P **P** **15 22 10.3 -0.9**
**KOLS Kolonicke sedl** 84.36 320 *e*P **P** **15 22 12.9 +0.6**
KOLS pmax pmax
comp=Z,10.0nm,0.9s
**KOLS Kolonicke sedl** 84.36 320 *e*P **P** **15 22 12.9 +0.6**
**BILL Bilibino** 84.76 20 *e*P **P** **15 22 16.1 +2.2**
BILL *e* 15 25 31.1
BILL pmax pmax
comp=Z,7.0nm,1.1s
BILL MLR MLR
comp=Z,154nm,18.0s
**DIVS Divibare** 85.00 315 ⇓*i*P **P** **15 22 15.9 +0.2**
**STHS Stebnicka Huta** 85.12 320 *e*P **P** **15 22 16.6 +0.5**
STHS pmax pmax
comp=Z,3.0nm,0.7s
**STHS Stebnicka Huta** 85.12 320 *e*P **P** **15 22 16.6 +0.5**
**FINES FINESS Array B** 85.29 332 P **P** **15 22 16.4 -0.3**
comp=Z,3.4nm,0.6s,baz=120,slow=4.5,SNR=17
**VYHS Vyhne** 86.52 319 *e*P **P** **15 22 23.1 0.0**
**VYHS Vyhne** 86.52 319 *e*P **P** **15 22 23.1 0.0**
**ARCES ARCESS Array B** 87.79 340 P **P** **15 22 28.8 0.0**
comp=Z,4.8nm,0.7s,baz=142,slow=6.0,SNR=10
**DPC Dobruska-Polom** 88.41 320 *e*P **P** **15 22 32.6 +0.4**
**DPC Dobruska-Polom** 88.41 320 *e*P **P** **15 22 32.6 +0.4**
**GERES GERESS Array B** 89.94 319 P **P** **15 22 39.4 -0.1**
comp=Z,0.5nm,0.4s,baz=94,slow=6.0,SNR=3.4
**BRG Berggiesshubel** 89.98 321 *e*PKP **P** **15 22 40.2 +0.8**
comp=Z,5.6nm,1.0s
**BRG Berggiesshubel** 89.98 321 *e*P **P** **15 22 40.2 +0.8**
BRG pmax pmax
comp=Z,6.0nm,1.0s
**KHC Kasperske Hory** 90.04 319 *e*P **P** **15 22 40.5 +0.6**
**KHC Kasperske Hory** 90.04 319 *e*P **P** **15 22 40.5 +0.6**
**SNAA Sanae** 90.54 198 P **P** **15 22 42.8 +1.0**
**VNA2 Neumayer--Watz** 92.15 198 P **P** **15 22 49.7 +0.5**
baz=96,slow=2.9
**KEST Kesra** 92.24 305 P **P** **15 22 51.8 +1.3**
comp=Z,4.7nm,0.9s,baz=192,slow=9.3,SNR=3.7
**NOA NORSAR Array B** 92.29 331 P **P** **15 22 49.7 -0.3**
comp=Z,2.0nm,0.8s,baz=95,slow=4.6,SNR=4.0
**TORD Torodi Ar. Bea** 98.47 283 P **P** **15 23 18.4 -0.8**
comp=Z,0.5nm,0.7s,baz=87,slow=5.3,SNR=3.2
TORD LR LR 16 03 12.8
comp=Z,68nm,21.8s,baz=75,slow=33
**ILAR Eielson Array** 103.09 24 PP PP 15 27 52.5 -0.7
comp=Z,0.5nm,0.9s,baz=287,slow=3.6,SNR=4.4
**B05A Bryant** 122.96 32 P **PKPdf** **15 28 36.1 -0.4**
baz=123
**EDM Edmonton** 123.58 23 *e*PKIKP **PKPdf** **15 28 37.2 -0.4**
**EDM Edmonton** 123.58 23 *e*PKPdf **PKPdf** **15 28 37.2 -0.4**
**I04A Tendick Farm,** 125.44 36 P **PKPdf** **15 28 40.8 -0.6**
baz=125
**NV01 Mina Array Sit** 131.07 40 *e*PKPdf **PKPdf** **15 28 53.8 +1.2**
**NVAR Mina Array Bea** 131.07 40 PKP **PKPdf** **15 28 53.7 +1.1**
comp=Z,1.4nm,0.6s,baz=287,slow=2.6,SNR=8.2
**H17A Grant Village** 131.43 29 P **PKPdf** **15 28 52.2 -1.0**
baz=131
**R11A Troy Canyon, C** 132.82 38 P **PKPdf** **15 28 55.3 -0.6**
baz=133
**R11A Troy Canyon, C** 132.82 38 *e*PKPdf **PKPdf** **15 28 57.2 +1.4**
**MPMC Manual Prospec** 132.96 42 P **PKPdf** **15 28 55.4 -0.8**
baz=133
**A33A Warroad** 133.01 13 P **PKPdf** **15 28 55.3 -0.3**
baz=133
**H33A Prehn Over Nor** 136.60 17 P **PKPdf** **15 29 02.2 -0.3**
baz=136
**R37A Teagarden Farm** 142.99 19 P **PKPdf** **15 29 09.5 -4.8**
baz=143
**CFAA Coronel Fontan** 143.16 197 PKhKP PKPpre 15 29 11.7
comp=Z,0.1nm,0.5s,baz=225,slow=4.3,SNR=3.6
**MNTX Cornudas Mount** 143.47 37 P PKPbc 15 29 12.8 +0.3
baz=143
**MNTX Cornudas Mount** 143.47 37 *e*PKPpre PKPpre 15 29 12.5
**V32A Arapaho** 143.66 26 P PKPbc 15 29 12.9 0.0
baz=144
**W31A Holland Ranch,** 143.70 28 P PKPbc 15 29 13.5 +0.4
baz=144
**T37A Cheneyville 18** 144.04 20 P **PKPab** **15 29 13.3 -0.2**
baz=144
**U35A Pawnee** 144.05 23 P PKPbc 15 29 13.9 -0.2
baz=144,SNR=6.7
**W32A Sentinel** 144.07 27 P **PKPab** **15 29 13.2 -0.6**
baz=144,SNR=6.5
**X31A McDonald Ranch** 144.14 28 P PKPbc 15 29 14.4 -0.1
baz=144
**V34A Guthrie** 144.21 24 P PKPbc 15 29 14.7 +0.1
baz=144
**V34A Guthrie** 144.21 24 *e*PKPdf PKPbc 15 29 14.6 -0.1
**Y30A Stafford Cattl** 144.31 30 P PKPbc 15 29 15.4 +0.4
baz=144
**Z29A Hungry Hill Ra** 144.38 31 P PKPbc 15 29 15.4 0.0

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=144 | | | | | | | |
| **W33A** | **Caddo, Fort Co** | **144.39** | **26** | P | | PKPbc | 15 29 15.5 | +0.2 |
| | baz=144,SNR=6.6 | | | | | | | |
| **U36A** | **Oologah** | **144.41** | **21** | P | | **PKPab** | **15 29 15.0** | **+0.1** |
| | baz=144 | | | | | | | |
| **128A** | **Castleberry Fa** | **144.46** | **33** | P | | PKPbc | 15 29 15.6 | -0.1 |
| | baz=144 | | | | | | | |
| **V35A** | **Meyer Ranch, C** | **144.54** | **23** | P | | **PKPab** | **15 29 15.4** | **0.0** |
| | baz=144,SNR=5.7 | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **144.55** | **29** | P | | **PKPab** | **15 29 15.5** | **-0.1** |
| | baz=144 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.60** | **27** | *e*PKIKP | | **PKPab** | **15 29 15.0** | **-0.7** |
| **WMOK** | **Wichita Mounta** | **144.60** | **27** | *e*PKPdf | | **PKPab** | **15 29 15.0** | **-0.7** |
| **W34A** | **Bridge Creek,** | **144.62** | **25** | P | | PKPbc | 15 29 16.4 | +0.4 |
| | baz=144 | | | | | | | |
| **U37A** | **Salina** | **144.62** | **21** | P | | **PKPab** | **15 29 15.6** | **-0.1** |
| | baz=144,SNR=5.0 | | | | | | | |
| **X32A** | **Elmer** | **144.64** | **28** | P | | **PKPab** | **15 29 15.3** | **-0.6** |
| | baz=144,SNR=8.9 | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **144.66** | **31** | P | | **PKPab** | **15 29 15.8** | **-0.2** |
| | baz=145,SNR=19 | | | | | | | |
| **228A** | **UT Block 9, Go** | **144.78** | **34** | P | | **PKPab** | **15 29 16.3** | **-0.3** |
| | baz=145 | | | | | | | |
| **129A** | **Stewart Farms,** | **144.79** | **32** | P | | **PKPab** | **15 29 16.4** | **-0.2** |
| | baz=145 | | | | | | | |
| **TUL1** | **Tulsa** | **144.82** | **22** | P | | **PKPab** | **15 29 16.0** | **-0.4** |
| | baz=145,SNR=5.6 | | | | | | | |
| **TUL1** | **Tulsa** | **144.82** | **22** | *e*PKPdf | | **PKPab** | **15 29 16.0** | **-0.4** |
| TUL1 | | | | *e* | | | 15 29 26.1 | |
| **U38A** | **Gravette** | **144.84** | **20** | P | | **PKPab** | **15 29 15.9** | **-0.6** |
| | baz=145,SNR=11 | | | | | | | |
| **V36A** | **Jenks** | **144.87** | **22** | P | | **PKPab** | **15 29 16.5** | **-0.1** |
| | baz=145,SNR=9.2 | | | | | | | |
| **X33A** | **Lawton** | **144.89** | **26** | P | | **PKPab** | **15 29 16.4** | **-0.4** |
| | baz=145 | | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **144.91** | **28** | P | | **PKPab** | **15 29 16.2** | **-0.6** |
| | baz=145,SNR=5.8 | | | | | | | |
| **W35A** | **Tecumseh** | **145.06** | **24** | P | | **PKPbc** | **15 29 17.3** | **-0.1** |
| | baz=145 | | | | | | | |
| **V37A** | **Hulbert** | **145.08** | **21** | P | | **PKPbc** | **15 29 17.4** | **0.0** |
| | baz=145,SNR=8.9 | | | | | | | |
| **WCI** | **Wyandotte Cave** | **145.08** | **8** | *e*PKIKP | | **PKPbc** | **15 29 16.4** | **-1.0** |
| **WCI** | **Wyandotte Cave** | **145.08** | **8** | *e*PKPbc | | **PKPbc** | **15 29 16.4** | **-1.0** |
| **Z31A** | **Sharp Cattle R** | **145.13** | **30** | P | | **PKPbc** | **15 29 17.2** | **-0.5** |
| | baz=145,SNR=30 | | | | | | | |
| **X34A** | **Smith Ranch, M** | **145.13** | **26** | P | | **PKPab** | **15 29 17.7** | **0.0** |
| | baz=145 | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **145.17** | **52** | *e*PKPbc | | **PKPdf** | **15 29 19.8** | **+1.1** |
| **Y33A** | **Hilltop Ranch,** | **145.28** | **27** | P | | **PKPab** | **15 29 18.2** | **0.0** |
| | baz=145 | | | | | | | |
| **130A** | **Snyder** | **145.29** | **31** | P | | **PKPab** | **15 29 18.4** | **0.0** |
| | baz=145 | | | | | | | |
| **229A** | **Bryant Ranch,** | **145.33** | **33** | P | | **PKPdf** | **15 29 18.7** | **0.0** |
| | baz=145 | | | | | | | |
| **W36A** | **Wetumka** | **145.33** | **23** | P | | **PKPbc** | **15 29 18.2** | **0.0** |
| | baz=145 | | | | | | | |
| **V38A** | **Canehill** | **145.35** | **20** | P | | **PKPbc** | **15 29 18.3** | **0.0** |
| | baz=145 | | | | | | | |
| **Z32A** | **Haskell** | **145.46** | **29** | P | | **PKPbc** | **15 29 18.3** | **-0.4** |
| | baz=145,SNR=7.6 | | | | | | | |
| **131A** | **Roby** | **145.52** | **31** | P | | **PKPdf** | **15 29 18.9** | **0.0** |
| | baz=145,SNR=7.0 | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **145.60** | **34** | P | | **PKPab** | **15 29 20.3** | **+0.7** |
| | baz=146 | | | | | | | |
| **W37A** | **Quinton** | **145.64** | **22** | P | | **PKPdf** | **15 29 18.9** | **-0.1** |
| | baz=146 | | | | | | | |
| **X35A** | **Drake** | **145.67** | **25** | P | | **PKPdf** | **15 29 19.1** | **0.0** |
| | baz=146,SNR=7.0 | | | | | | | |
| **PBMO** | **Poplar Bluff** | **145.68** | **14** | *e*PKPdf | | **PKPdf** | **15 29 18.4** | **-0.6** |
| **Y34A** | **Reagan Ranch,** | **145.71** | **26** | P | | **PKPdf** | **15 29 19.1** | **-0.1** |
| | baz=146,SNR=6.5 | | | | | | | |
| **230A** | **Sterling City** | **145.76** | **32** | P | | **PKPbc** | **15 29 19.6** | **-0.2** |
| | baz=146,SNR=17 | | | | | | | |
| **X36A** | **Centrahoma** | **145.78** | **24** | P | | **PKPab** | **15 29 20.1** | **+0.1** |
| | baz=146,SNR=5.3 | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **145.82** | **28** | P | | **PKPbc** | **15 29 19.7** | **-0.2** |
| | baz=146 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.94** | **30** | P | | **PKPbc** | **15 29 20.0** | **-0.3** |
| | baz=146,SNR=5.9 | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.94** | **30** | *e*PKPdf | | **PKPbc** | **15 29 19.9** | **-0.3** |
| ABTX | | | | *e* | | | 15 29 29.0 | |
| **330A** | **Mertzon** | **146.10** | **33** | P | | **PKPdf** | **15 29 20.1** | **+0.1** |
| | baz=146,SNR=10 | | | | | | | |
| **231A** | **Bronte** | **146.15** | **31** | P | | **PKPbc** | **15 29 20.5** | **-0.4** |
| | baz=146,SNR=14 | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **146.19** | **38** | *e*PKPdf | | **PKPbc** | **15 29 20.8** | **-0.4** |
| **TXAR** | **Lajitas Array** | **146.19** | **38** | PKPbc | | **PKPbc** | **15 29 21.3** | **+0.1** |
| | comp=Z,11nm,0.7s,baz=307,slow=0.8,SNR=83 | | | | | | | |
| **429A** | **Davenport Ranc** | **146.30** | **35** | P | | **PKPbc** | **15 29 21.4** | **-0.1** |
| | baz=146,SNR=9.3 | | | | | | | |
| **133A** | **Hamilton Ranch** | **146.30** | **29** | P | | **PKPab** | **15 29 21.8** | **-0.3** |
| | baz=146 | | | | | | | |
| **Y36A** | **Durant** | **146.39** | **24** | P | | **PKPdf** | **15 29 20.6** | **+0.3** |
| | baz=146,SNR=6.3 | | | | | | | |
| **529A** | **Stev Forest Ra** | **146.48** | **36** | P | | **PKPbc** | **15 29 22.0** | **-0.1** |
| | baz=146,SNR=5.6 | | | | | | | |
| **232A** | **Coleman** | **146.53** | **31** | P | | **PKPbc** | **15 29 21.9** | **-0.2** |
| | baz=146,SNR=10 | | | | | | | |
| **430A** | **Baggett Ranch,** | **146.54** | **34** | P | | **PKPbc** | **15 29 22.0** | **-0.2** |
| | baz=146,SNR=6.4 | | | | | | | |
| **331A** | **San Angelo** | **146.58** | **32** | P | | **PKPbc** | **15 29 22.4** | **+0.1** |
| | baz=146,SNR=5.5 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.84** | **20** | *e*PKP2 | | **PKPbc** | **15 29 22.1** | **-0.7** |
| **MIAR** | **Mount Ida** | **146.84** | **20** | P | | **PKPbc** | **15 29 22.8** | **0.0** |
| | baz=147 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.84** | **20** | *e*PKPdf | | **PKPbc** | **15 29 22.1** | **-0.7** |
| **Z36A** | **Blue Ridge** | **146.87** | **25** | P | | **PKPbc** | **15 29 23.4** | **+0.4** |
| | baz=147 | | | | | | | |
| **WVT** | **Waverly** | **146.88** | **11** | *e*PKP2 | | **PKPdf** | **15 29 21.5** | **+0.4** |
| **WVT** | **Waverly** | **146.88** | **11** | *e*PKPdf | | **PKPdf** | **15 29 21.5** | **+0.4** |
| **332A** | **Millersview** | **146.88** | **31** | P | | **PKPbc** | **15 29 23.1** | **0.0** |
| | baz=147 | | | | | | | |
| **431A** | **Sonora** | **146.97** | **33** | P | | **PKPbc** | **15 29 23.5** | **+0.1** |
| | baz=147,SNR=6.8 | | | | | | | |
| **530A** | **J-C Ranch, Com** | **146.97** | **35** | P | | **PKPbc** | **15 29 23.4** | **-0.1** |
| | baz=147,SNR=17 | | | | | | | |
| **TZTN** | **Tazewell** | **147.05** | **5** | *e*PKPbc | | **PKPbc** | **15 29 22.4** | **-1.0** |
| **234A** | **Clairette** | **147.17** | **28** | P | | **PKPbc** | **15 29 24.2** | **+0.3** |
| | baz=147 | | | | | | | |
| **432A** | **Menard** | **147.25** | **32** | P | | **PKPbc** | **15 29 24.4** | **+0.3** |
| | baz=147 | | | | | | | |
| **333A** | **Richland Sprin** | **147.31** | **30** | P | | **PKPbc** | **15 29 24.4** | **0.0** |
| | baz=147,SNR=21 | | | | | | | |
| **531A** | **Rocksprings** | **147.40** | **34** | P | | **PKPbc** | **15 29 25.0** | **+0.4** |
| | baz=147,SNR=13 | | | | | | | |
| **Z38A** | **Mt. Pleasant** | **147.48** | **23** | P | | **PKPbc** | **15 29 25.4** | **+0.7** |
| | baz=147 | | | | | | | |
| **WHTX** | **Lake Whitney** | **147.50** | **28** | P | | **PKPbc** | **15 29 24.5** | **-0.3** |
| | baz=147 | | | | | | | |
| **136A** | **Ennis** | **147.51** | **26** | P | | **PKPbc** | **15 29 24.7** | **-0.1** |
| | baz=147 | | | | | | | |
| **JCT** | **Junction City** | **147.56** | **32** | P | | **PKPbc** | **15 29 25.0** | **-0.1** |
| | baz=148,SNR=13 | | | | | | | |
| **334A** | **Lometa** | **147.68** | **29** | P | | **PKPbc** | **15 29 25.1** | **-0.2** |
| | baz=148 | | | | | | | |
| **433A** | **Art** | **147.72** | **31** | P | | **PKPbc** | **15 29 25.2** | **-0.2** |
| | baz=148,SNR=6.7 | | | | | | | |
| **532A** | **Rocksprings** | **147.78** | **33** | P | | **PKPbc** | **15 29 26.4** | **+0.7** |
| | baz=148,SNR=9.2 | | | | | | | |
| **Z39A** | **Irene McRaven,** | **147.79** | **22** | P | | **PKPbc** | **15 29 25.4** | **-0.1** |
| | baz=148 | | | | | | | |
| **TKL** | **Tuckaleechee C** | **147.91** | **5** | *e*PKP2 | | **PKPbc** | **15 29 25.2** | **-0.6** |
| **TKL** | **Tuckaleechee C** | **147.91** | **5** | *e*PKPbc | | **PKPbc** | **15 29 25.2** | **-0.6** |
| **138A** | **Matatall Enter** | **147.95** | **24** | P | | **PKPbc** | **15 29 26.0** | **+0.1** |
| | baz=148 | | | | | | | |
| **631A** | **Perdido Creek** | **147.96** | **35** | P | | **PKPbc** | **15 29 26.7** | **+0.6** |
| | baz=148,SNR=5.4 | | | | | | | |
| **CPCT** | **Cooper Cave** | **148.04** | **6** | *e*PKPbc | | **PKPbc** | **15 29 25.4** | **-0.8** |
| **434A** | **Burnet** | **148.09** | **30** | P | | **PKPbc** | **15 29 26.2** | **-0.2** |
| | baz=148 | | | | | | | |
| **SWET** | **Sewanee** | **148.09** | **9** | *e*PKPbc | | **PKPbc** | **15 29 25.0** | **-1.3** |
| SWET | | | | *e* | | | 15 29 34.2 | |
| **335A** | **Moody** | **148.11** | **28** | P | | **PKPbc** | **15 29 26.3** | **-0.1** |
| | baz=148 | | | | | | | |
| **533A** | **Kerrville** | **148.29** | **32** | P | | **PKPbc** | **15 29 26.9** | **-0.2** |
| | baz=148 | | | | | | | |
| **336A** | **Riesel** | **148.29** | **27** | P | | **PKPbc** | **15 29 27.5** | **+0.6** |
| | baz=148 | | | | | | | |
| **632A** | **Uvalde** | **148.33** | **33** | P | | **PKPbc** | **15 29 27.6** | **+0.5** |
| | baz=148 | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.56** | **1** | P | | **PKPbc** | **15 29 27.2** | **-0.3** |
| | baz=148 | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.56** | **1** | *e*PKPbc | | **PKPbc** | **15 29 26.5** | **-1.0** |
| **534A** | **Blanco** | **148.62** | **31** | P | | **PKPbc** | **15 29 28.4** | **+0.5** |
| | baz=148 | | | | | | | |
| **633A** | **Saathoff Ranch** | **148.70** | **33** | P | | **PKPbc** | **15 29 28.6** | **+0.5** |
| | baz=149 | | | | | | | |
| **239A** | **Gary** | **148.77** | **23** | P | | **PKPbc** | **15 29 27.9** | **-0.2** |
| | baz=149 | | | | | | | |
| **337A** | **Centerville** | **148.78** | **26** | P | | **PKPbc** | **15 29 28.0** | **-0.2** |
| | baz=149 | | | | | | | |
| **732A** | **Laxson Ranch,** | **148.82** | **35** | P | | **PKPbc** | **15 29 28.8** | **+0.4** |
| | baz=149 | | | | | | | |
| **535A** | **Dale** | **149.07** | **30** | P | | **PKPbc** | **15 29 28.6** | **-0.3** |
| | baz=149 | | | | | | | |
| **437A** | **Phantom Ranch,** | **149.09** | **27** | P | | **PKPbc** | **15 29 29.4** | **+0.4** |
| | baz=149 | | | | | | | |
| **832A** | **Faith Ranch, C** | **149.16** | **35** | P | | **PKPbc** | **15 29 29.7** | **+0.4** |
| | baz=149 | | | | | | | |
| **733A** | **Divot King Ran** | **149.21** | **34** | P | | **PKPbc** | **15 29 30.1** | **+0.8** |
| | baz=149 | | | | | | | |
| **438A** | **Sam Houston St** | **149.45** | **26** | P | | **PKPbc** | **15 29 30.5** | **+0.6** |
| | baz=149 | | | | | | | |
| **635A** | **Leesville** | **149.49** | **31** | P | | **PKPbc** | **15 29 30.3** | **+0.2** |
| | baz=149 | | | | | | | |
| **734A** | **La Parita Cree** | **149.51** | **33** | P | | **PKPbc** | **15 29 30.0** | **-0.1** |
| | baz=149 | | | | | | | |
| **636A** | **Smothers Creek** | **149.78** | **30** | P | | **PKPbc** | **15 29 31.5** | **+0.8** |
| | baz=150 | | | | | | | |
| **735A** | **Kenedy** | **149.90** | **32** | P | | **PKPbc** | **15 29 32.4** | **+1.3** |
| | baz=150 | | | | | | | |
| **VBMS** | **Vicksburg** | **149.96** | **17** | P | | **PKPbc** | **15 29 31.0** | **-0.1** |
| | baz=150 | | | | | | | |
| **HKT** | **Hockley** | **149.97** | **27** | *e*PKP2 | | **PKPbc** | **15 29 32.4** | **+1.3** |
| **HKT** | **Hockley** | **149.97** | **27** | *e*PKPbc | | **PKPbc** | **15 29 32.4** | **+1.3** |
| **933A** | **Laredo** | **150.07** | **35** | P | | **PKPbc** | **15 29 32.6** | **+1.1** |
| | baz=150 | | | | | | | |
| **834A** | **Tilden** | **150.08** | **33** | P | | **PKPbc** | **15 29 32.9** | **+1.4** |
| | baz=150 | | | | | | | |
| **736A** | **Circle Diamond** | **150.20** | **30** | P | | **PKPbc** | **15 29 33.5** | **+1.7** |
| | baz=150 | | | | | | | |
| **835A** | **Beeville** | **150.34** | **32** | P | | **PKPbc** | **15 29 33.8** | **+1.7** |
| | baz=150 | | | | | | | |
| **934A** | **Benavides** | **150.50** | **34** | P | | **PKPbc** | **15 29 34.4** | **+1.9** |
| | baz=150 | | | | | | | |
| **034A** | **Hebbronville** | **150.82** | **35** | P | | **PKPbc** | **15 29 35.2** | **+1.9** |
| | baz=151 | | | | | | | |
| **035A** | **Encino** | **151.25** | **34** | P | | **PKPbc** | **15 29 36.1** | **+1.8** |
| | baz=151 | | | | | | | |
| **LVC** | **Limon Verde** | **151.66** | **203** | PKPbc | | **PKPbc** | **15 29 35.0** | **-0.7** |
| | comp=Z,16nm,0.7s,baz=59,slow=3.0,SNR=5.6 | | | | | | | |
| **LVC** | **Limon Verde** | **151.66** | **203** | *e*PKPbc | | **PKPbc** | **15 29 36.3** | **+0.6** |

**IDC 27 15:13:52.5±473.0, 45.80N×65.07E, h0km, Error ellipse: s-maj=207.1km s-min=141.8km az=164.0, Central Kazakhstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I31KZ** | **AKTYUBINSK INF** | **6.59** | **317** | *i* | | 15 55 35.0 | |
| | baz=132,slow=317,SNR=5.0 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **15.08** | **50** | *i* | | 16 45 55.0 | |
| | baz=246,slow=320,SNR=7.6 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **28.13** | **71** | *i* | | 18 06 30.0 | |
| | baz=280,slow=323,SNR=2.3 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **53.80** | **349** | *i* | | 21 04 10.0 | |
| | baz=27,slow=336,SNR=0.9 | | | | | | |

**IDC 27 15:21:17.6±796.0, 51.07N×83.24E, h0km, Error ellipse: s-maj=303.0km s-min=68.8km az=20.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **I46RU** | **ZALESOVO INFRA** | **3.04** | **18** | *i* | | 15 41 15.0 | |
| | baz=200,slow=329,SNR=11 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **15.41** | **93** | *i* | | 16 54 10.0 | |
| | baz=291,slow=323,SNR=0.4 | | | | | | |
| **I18DK** | **QAANAAQ INFRAS** | **50.58** | **353** | *i* | | 20 45 50.0 | |
| | baz=16,slow=337,SNR=1.6 | | | | | | |

*ISN **27** 15:26:09.2±1.3,34.43N×46.78E,h0km±3km,ML3.8*
*AZER **27** 15:26:09.2±1.1,33.64N×49.23E,h5km, Error ellipse: s-maj=14.5km s-min=6.2km az=94.0*
*THR **27** 15:26:10.1±1.5,34.45N×48.08E,h14km±13km,ML3.8*
*IDC **27** 15:26:10.1±1.4,34.42N×48.05E,h0km, mb3.5/8, mb1 3.7/10,mb1mx3.6/46,mbtmp3.6/10,ML3.2/2,MS3.0/4, Ms1 3.1/4,ms1mx2.7/39, Error ellipse: s-maj=32.3km s-min=18.2km az=178.0*
*TEH **27** 15:26:11.3,34.38N×47.98E,h2km,ML3.8*
*CSEM **27** 15:26:11.0±0.3,34.37N×47.92E,h2km,ML3.8, Error ellipse: s-maj=9.6km s-min=5.9km az=17.0*

**ISC 27 15:26:11.2±0.6, 34.39N±0.03×48.05E±0.03, h10km, n88, σ2ᵖ12/84, mb3.8/7, MS3.0/4, 5C-14D, Western Iran**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IBZA** | **Bozab** | **0.18** | **297** | *e*Pg | **Pg** | **15 26 13.1** | **-2.1** |
| IBZA | | | | *e*Sg | **Sg** | **15 26 16.0** | **-1.9** |
| IBZA | | | | *e* | | 15 26 16.3 | |
| | comp=Z,45μm,0.0s | | | | | | |
| **IBZA** | **Bozab** | **0.18** | **297** | *e*Pg | **Pg** | **15 26 13.1** | **-2.1** |
| IBZA | | | | *e*Sg | **Sg** | **15 26 16.0** | **-1.9** |
| **IKOM** | **Komasi** | **0.50** | **244** | *e*Pg | **Pg** | **15 26 19.3** | **-1.6** |
| IKOM | | | | *e* | | 15 26 31.3 | |
| | comp=Z,43μm,0.2s | | | | | | |
| **IKOM** | **Komasi** | **0.50** | **244** | *e*Pg | **Pg** | **15 26 19.3** | **-1.6** |
| **SNGE** | **Sanandaj** | **0.91** | **321** | *e*Pg | **Pg** | **15 26 26.9** | **-1.8** |
| SNGE | | | | *e*Sg | **Sg** | **15 26 38.8** | **-1.8** |
| SNGE | | | | AML | AML | 15 26 42.6 | |
| | comp=E,2μm,0.5s | | | | | | |
| SNGE | | | | AML | AML | 15 26 43.7 | |
| | comp=N,3μm,0.6s | | | | | | |
| **SNGE** | **Sanandaj** | **0.91** | **321** | *e*Pg | **Pg** | **15 26 27.0** | **-1.8** |
| SNGE | | | | *e*Sg | **Sg** | **15 26 38.8** | **-1.8** |
| **IVIS** | **Veis** | **1.00** | **278** | *e*Pg | **Pg** | **15 26 27.5** | **-3.0** |
| IVIS | | | | *e* | | 15 26 47.7 | |
| | comp=Z,28μm,0.3s | | | | | | |
| **IVIS** | **Veis** | **1.00** | **278** | *e*Pg | **Pg** | **15 26 27.5** | **-3.0** |
| **ILIN** | **Lien** | **1.04** | **301** | *e*Pg | **Pg** | **15 26 28.7** | **-2.5** |
| ILIN | | | | *e* | | 15 26 51.6 | |
| | comp=Z,16μm,0.4s | | | | | | |
| **ILIN** | **Lien** | **1.04** | **301** | *e*Pg | **Pg** | **15 26 28.7** | **-2.5** |
| **IGHG** | **Ghaleghazi** | **1.23** | **268** | *e*Pg | **Pb** | **15 26 32.9** | **-1.7** |
| IGHG | | | | *e* | | 15 26 59.5 | |
| | comp=Z,26μm,0.3s | | | | | | |
| **IGHG** | **Ghaleghazi** | **1.23** | **268** | *e*Pg | **Pb** | **15 26 32.9** | **-1.7** |
| **IDHR** | **Dehrash** | **1.41** | **283** | *e*Pg | **Pn** | **15 26 36.2** | **-0.9** |
| IDHR | | | | *e* | | 15 27 05.1 | |
| | comp=Z,19μm,0.3s | | | | | | |
| **IDHR** | **Dehrash** | **1.41** | **283** | *e*Pg | **Pn** | **15 26 36.2** | **-0.9** |
| **ASAO** | **Ashtian** | **1.64** | **84** | *e*Pg | **Pn** | **15 26 39.6** | **-0.8** |
| ASAO | | | | AML | AML | 15 27 06.2 | |
| | comp=E,960nm,0.5s | | | | | | |
| ASAO | | | | AML | AML | 15 27 14.3 | |
| | comp=N,900nm,0.5s | | | | | | |
| **ASAO** | **Ashtian** | **1.64** | **84** | *e*Pg | **Pn** | **15 26 40.0** | **-0.3** |
| **KHMZ** | **Khomeyn** | **1.71** | **112** | *e*Pg | **Pn** | **15 26 41.0** | **-0.3** |
| KHMZ | | | | AML | AML | 15 27 15.1 | |
| | comp=N,980nm,0.9s | | | | | | |
| KHMZ | | | | AML | AML | 15 27 17.0 | |
| | comp=E,764nm,0.5s | | | | | | |
| **IBDR** | **Badra** | **2.18** | **235** | *e*PG | x | 15 26 42.7 | |
| IBDR | | | | *e*Sg | x | 15 27 05.1 | |
| **IR5** | **Iran Long-Peri** | **2.24** | **68** | *e*Pn | **Pn** | **15 26 50.2** | **+1.7** |
| IR5 | | | | *e* | | 15 27 22.1 | |
| | comp=Z,99nm,0.3s | | | | | | |
| **IR5** | **Iran Long-Peri** | **2.24** | **68** | *e*Pn | **Pn** | **15 26 50.2** | **+1.7** |
| **SHGR** | **Shooshtar-Gavs** | **2.36** | **164** | *e*Pn | **Pn** | **15 26 51.3** | **+1.3** |
| SHGR | | | | AML | AML | 15 27 33.6 | |
| | comp=E,498nm,0.8s | | | | | | |
| SHGR | | | | AML | AML | 15 27 35.0 | |
| | comp=N,604nm,0.6s | | | | | | |
| **SHGR** | **Shooshtar-Gavs** | **2.36** | **164** | *e*P | **Pn** | **15 26 52.0** | **+2.0** |
| **IMHD** | **Mahdasht** | **2.51** | **58** | *e*Pn | **Pn** | **15 26 55.0** | **+2.9** |
| IMHD | | | | *e* | | 15 27 32.3 | |
| | comp=Z,7μm,0.3s | | | | | | |
| **IMHD** | **Mahdasht** | **2.51** | **58** | *e*Pn | **Pn** | **15 26 55.0** | **+2.9** |
| **IGZV** | **Ghazvin** | **2.66** | **41** | *e*Pn | **Pn** | **15 26 57.1** | **+2.7** |
| IGZV | | | | *e* | | 15 27 42.0 | |
| | comp=Z,6μm,0.3s | | | | | | |
| **IGZV** | **Ghazvin** | **2.66** | **41** | *e*Pn | **Pn** | **15 26 57.1** | **+2.7** |
| **IR3** | **Iran Long-Peri** | **2.67** | **65** | *e*Pn | **Pb** | **15 26 58.2** | **-1.0** |
| **IR3** | **Iran Long-Peri** | **2.67** | **65** | *e*Pn | **Pb** | **15 26 58.2** | **-1.0** |
| **QAM** | **Ghamsar** | **2.88** | **102** | *e*Pn | Pn | 15 27 00.7 | +3.3 |
| QAM | | | | *e* | | 15 27 47.6 | |
| | comp=Z,6μm,0.2s | | | | | | |
| **IPIR** | **Pirpir** | **2.92** | **125** | *e*Pn | **Pn** | **15 27 00.7** | **+2.7** |
| IPIR | | | | *e* | | 15 27 53.8 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **IPIR** | **Pirpir** | **2.92** | **125** | *e*Pn | **Pn** | **15 27 00.7** | **+2.7** |
| **CHTH** | **Charan** | **2.94** | **58** | *e*Pn | **Pn** | **15 26 58.4** | **+0.2** |
| CHTH | | | | *e*Sg | **Sb** | **15 27 40.7** | **+0.7** |
| **CHTH** | **Charan** | **2.94** | **58** | *e*Pn | **Pn** | **15 26 58.4** | **+0.2** |
| CHTH | | | | *e*Sg | **Sb** | **15 27 40.7** | **+0.7** |
| **IKLH** | **Kolahrood** | **3.12** | **109** | *e*Pn | **Pb** | **15 27 05.4** | **-1.6** |
| IKLH | | | | *e* | | 15 27 52.9 | |
| | comp=Z,4μm,0.4s | | | | | | |
| **IKLH** | **Kolahrood** | **3.12** | **109** | *e*Pn | **Pb** | **15 27 05.4** | **-1.6** |
| **IKRK** | **Kirkuk** | **3.21** | **289** | *e*PG | x | 15 26 58.9 | |
| IKRK | | | | *e*SG | x | 15 27 33.6 | |
| **BHD** | **Baghdad** | **3.25** | **251** | *e*PN | x | 15 26 47.8 | |
| BHD | | | | *e*Sn | x | 15 27 16.6 | |
| **BHD** | **Baghdad** | **3.25** | **251** | *e*Pn | Pn | 15 26 47.8 | -14 |
| | SNR=39 | | | | | | |
| BHD | | | | *e*Sn | Sn | 15 27 16.6 | -24 |
| | SNR=39 | | | | | | |
| **IAFJ** | **Afjeh** | **3.34** | **63** | *e*Pn | **Pn** | **15 27 05.6** | **+1.8** |
| IAFJ | | | | *e* | | 15 28 03.9 | |
| | comp=Z,5μm,0.3s | | | | | | |
| **IAFJ** | **Afjeh** | **3.34** | **63** | *e*Pn | **Pn** | **15 27 05.6** | **+1.8** |
| **IDMV** | **Damavand** | **3.48** | **69** | *e*Pn | **Pn** | **15 27 08.2** | **+2.6** |
| IDMV | | | | *e* | | 15 28 09.3 | |
| | comp=Z,2μm,0.3s | | | | | | |
| **IDMV** | **Damavand** | **3.48** | **69** | *e*Pn | **Pn** | **15 27 08.2** | **+2.6** |
| **IAZR** | **Azarshahr** | **3.69** | **334** | *e*Pn | **Pn** | **15 27 10.7** | **+2.2** |
| IAZR | | | | *e* | | 15 28 16.8 | |
| | comp=Z,3μm,0.4s | | | | | | |
| **IAZR** | **Azarshahr** | **3.69** | **334** | *e*Pn | **Pn** | **15 27 10.7** | **+2.2** |
| **NSR** | **Nassriya** | **3.74** | **206** | *e*PN | x | 15 27 04.9 | |
| NSR | | | | *e*SN | x | 15 27 42.7 | |
| **NSR** | **Nassriya** | **3.74** | **206** | *e*Pn | Pn | 15 27 04.9 | -4.0 |
| | SNR=39 | | | | | | |
| NSR | | | | *e*Sn | Sn | 15 27 42.7 | -10 |
| | SNR=39 | | | | | | |
| **IGAR** | **Gharneh** | **3.88** | **120** | *e*Pn | **Pn** | **15 27 13.4** | **+2.3** |
| IGAR | | | | *e* | | 15 28 27.4 | |
| | comp=Z,937nm,0.3s | | | | | | |
| **IHRS** | **Heris** | **4.00** | **349** | *e*Pn | **Pn** | **15 27 15.3** | **+2.5** |
| IHRS | | | | *e* | | 15 28 30.8 | |
| | comp=Z,979nm,0.5s | | | | | | |
| **IHRS** | **Heris** | **4.00** | **349** | *e*Pn | **Pn** | **15 27 15.3** | **+2.5** |
| **IFIR** | **Firoozkooh** | **4.06** | **71** | *e*Pn | **Pn** | **15 27 16.4** | **+2.8** |
| IFIR | | | | *e* | | 15 28 22.9 | |
| | comp=Z,892nm,0.2s | | | | | | |
| **IFIR** | **Firoozkooh** | **4.06** | **71** | *e*Pn | **Pn** | **15 27 16.4** | **+2.8** |
| **LRK** | **Lerik** | **4.25** | **3** | ⇓P | **Pb** | **15 27 24.9** | **-1.2** |
| | SNR=14 | | | | | | |
| LRK | | | | ⇑S | **Sg** | **15 28 24.5** | **-3.2** |
| **LRK** | **Lerik** | **4.25** | **3** | P | **Pb** | **15 27 24.9** | **-1.2** |
| | SNR=14 | | | | | | |
| LRK | | | | S | **Sg** | **15 28 24.5** | **-3.2** |
| **NASN** | **Na'in** | **4.28** | **110** | *e*Pn | **Pn** | **15 27 17.9** | **+1.3** |
| **NASN** | **Na'in** | **4.28** | **110** | *e*Pn | **Pn** | **15 27 18.0** | **+1.3** |
| **LKRN** | **Lenkeran, Azer** | **4.35** | **8** | ⇓P | **Pb** | **15 27 26.4** | **-1.3** |
| | SNR=3.4 | | | | | | |
| LKRN | | | | ⇓S | **Sg** | **15 28 26.8** | **-4.1** |
| **LKRN** | **Lenkeran, Azer** | **4.35** | **8** | P | **Pb** | **15 27 26.4** | **-1.3** |
| | SNR=3.4 | | | | | | |
| LKRN | | | | S | **Sg** | **15 28 26.8** | **-4.1** |
| **GLBA** | **Clilabad** | **4.85** | **3** | ⇑P | Pb | 15 27 33.1 | -3.1 |
| GLBA | | | | ⇓S | Sb | 15 28 41.1 | +6.5 |
| **GLBA** | **Clilabad** | **4.85** | **3** | P | Pb | 15 27 33.1 | -3.1 |
| GLBA | | | | S | Sb | 15 28 41.1 | +6.5 |
| **NAX** | **Nakhchivan** | **5.20** | **337** | ⇓P | **Pb** | **15 27 43.2** | **+1.0** |
| | SNR=6.4 | | | | | | |
| NAX | | | | ⇓S | **Sg** | **15 28 56.4** | **-1.6** |
| **NAX** | **Nakhchivan** | **5.20** | **337** | P | **Pb** | **15 27 43.2** | **+1.0** |
| | SNR=6.4 | | | | | | |
| NAX | | | | S | **Sg** | **15 28 56.4** | **-1.6** |
| **GANJ** | **Ganja** | **6.39** | **348** | ⇓P | Pb | 15 27 57.7 | -4.8 |
| GANJ | | | | ⇓S | **Sb** | **15 29 23.1** | **+4.0** |
| **GANJ** | **Ganja** | **6.39** | **348** | P | Pb | 15 27 57.7 | -4.8 |
| GANJ | | | | S | **Sb** | **15 29 23.1** | **+4.0** |
| **MNGR** | **Mingechevir, A** | **6.42** | **353** | ⇓P | Pb | 15 27 56.5 | -6.4 |
| MNGR | | | | ⇓S | **Sb** | **15 29 21.6** | **+1.9** |
| **MNGR** | **Mingechevir, A** | **6.42** | **353** | P | Pb | 15 27 56.5 | -6.4 |
| MNGR | | | | S | **Sb** | **15 29 21.6** | **+1.9** |
| **RTB** | **Rutbah** | **6.59** | **260** | *e*Pn | x | 15 27 33.8 | |
| RTB | | | | *e*SN | x | 15 28 34.7 | |
| **RTB** | **Rutbah** | **6.59** | **260** | *e*Pn | Pn | 15 27 33.8 | -14 |
| | SNR=3.0 | | | | | | |
| RTB | | | | *e*Sn | Sn | 15 28 34.7 | -29 |
| | SNR=39 | | | | | | |
| **SIZA** | **Siyzn** | **6.71** | **6** | ⇓P | Pn | 15 27 58

**MAN 27 15:29:55, 15°24N×122°20E, h19km, mb4.7, ML3.6, MS3.6, 1C-1D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LQP** | **Lukban** | **1.29** | **210** | *eP* | Sn | 15 30 40.0 | +4.7 |
| **GQP** | **Guinayangan** | **1.34** | **170** | *eP* | Pn | 15 30 19.1 | +0.4 |
| GQP | | | | *eS* | Sb | 15 30 37.0 | +0.6 |
| **PALP** | **Palanan** | **1.83** | **7** | *eP* | Pn | 15 30 26.2 | +0.8 |
| PALP | | | | *eS* | Sn | 15 30 48.6 | +0.5 |
| **BCPH** | **Baguio City Da** | **1.93** | **306** | *iP* | Pn | 15 30 28.0 | +0.9 |
| BCPH | | | | *i S* | Sb | 15 30 53.1 | -0.7 |
| **SCZP** | **Santa Cruz** | **2.27** | **284** | *eP* | Sn | 15 30 56.2 | -2.8 |
| **APYP** | **Conner** | **2.77** | **341** | *eP* | Pn | 15 30 39.7 | +1.3 |
| **ABRA** | **Dolores** | **2.79** | **329** | *eP* | Pb | 15 30 41.7 | -2.7 |

*ISCJB 27 15:48:35.8±0.5, 33.74N±0.02×35.70E±0.05, h6km±4km, Error ellipse: s-maj=7.5km s-min=3.4km az=160.2*
*CSEM 27 15:48:35.6±0.3, 33.74N×35.70E, h2km, ML3.0, Error ellipse: s-maj=8.8km s-min=4.4km az=82.0*
*NSSC 27 15:48:35.2±1.4, 33.67N×35.57E, h9km±5km, MD1.0, ML1.8*
*GRAL 27 15:48:36.5±0.3, 33.79N×35.77E, h0km±20km, MD3.0*
**ISC 27 15:48:35.4±0.9, 33.75N±0.02×35.68E±0.04, h18km±5km, n28, σ1§13/51, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DQRL** | **Deir Qamar** | **0.10** | **247** | *eP* | **Pg** | **15 48 39.9** | **+0.7** |
| **DQRL** | **Deir Qamar** | **0.10** | **247** | *eP* | **Pg** | **15 48 39.9** | **+0.7** |
| **BHL** | **Bhannes** | **0.16** | **351** | *eP* | **Pg** | **15 48 39.2** | **-0.6** |
| BHL | | | | *eS* | **Sg** | **15 48 41.3** | **-1.5** |
| **BHL** | **Bhannes** | **0.16** | **351** | *eP* | **Pg** | **15 48 39.2** | **-0.6** |
| BHL | | | | *eS* | **Sg** | **15 48 41.3** | **-1.5** |
| **BEYL** | **Beirut** | **0.20** | **308** | *eP* | **Pg** | **15 48 40.9** | **+0.6** |
| **RCY** | **Rachaya** | **0.28** | **153** | *eP* | **Pg** | **15 48 41.8** | **+0.1** |
| RCY | | | | *eS* | **Sg** | **15 48 45.7** | **-0.2** |
| **RCY** | **Rachaya** | **0.28** | **153** | *eP* | **Pg** | **15 48 41.8** | **+0.1** |
| RCY | | | | *eS* | **Sg** | **15 48 45.7** | **-0.2** |
| **BRBR** | **Barbar** | **0.40** | **146** | *eP* | **Pg** | **15 48 43.8** | **0.0** |
| BRBR | | | | *eS* | **Sg** | **15 48 49.3** | **-0.2** |
| BRBR | comp=E,96nm,0.3s | | | AML | AML | 15 48 52.3 | |
| BRBR | comp=N,104nm,0.4s | | | AML | AML | 15 48 55.4 | |
| **BRBR** | **Barbar** | **0.40** | **146** | *eP* | **Pg** | **15 48 43.8** | **0.0** |
| BRBR | comp=N,104nm,0.4s | | | *eS* | **Sg** | **15 48 49.3** | **-0.2** |
| **HWQ** | **Hawqa** | **0.57** | **22** | *eP* | **Pg** | **15 48 45.7** | **-1.2** |
| **HWQ** | **Hawqa** | **0.57** | **22** | *eP* | **Pg** | **15 48 45.7** | **-1.2** |
| **TOTH** | **TOTAH** | **0.73** | **121** | *eP* | **Pb** | **15 48 50.0** | **+0.3** |
| TOTH | | | | *eS* | **Sn** | **15 49 01.0** | **-0.7** |
| TOTH | comp=E,37nm,0.5s | | | AML | AML | 15 49 07.2 | |
| TOTH | comp=Z,23nm,0.5s | | | AML | AML | 15 49 10.2 | |
| TOTH | comp=N,17nm,0.3s | | | AML | AML | 15 49 11.9 | |
| **TOTH** | **TOTAH** | **0.73** | **121** | *eP* | **Pb** | **15 48 50.0** | **+0.3** |
| TOTH | | | | *eS* | **Sn** | **15 49 01.0** | **-0.7** |
| TOTH | comp=N,17nm,0.3s | | | AML | AML | 15 49 07.2 | |
| **FKH** | **Fakeheh** | **0.78** | **50** | *eP* | **Pg** | **15 48 49.2** | **-1.5** |
| FKH | | | | *eS* | **Sg** | **15 48 58.4** | **-2.8** |
| **TCHB** | **Talchebab** | **1.10** | **167** | *eP* | **Pb** | **15 48 54.3** | **-1.6** |
| TCHB | | | | *eS* | **Sg** | **15 49 08.7** | **-2.5** |
| TCHB | comp=E,45nm,0.4s | | | AML | AML | 15 49 12.3 | |
| TCHB | comp=N,23nm,0.4s | | | AML | AML | 15 49 19.9 | |
| **TCHB** | **Talchebab** | **1.10** | **167** | *eP* | **Pb** | **15 48 54.3** | **-1.6** |
| TCHB | | | | *eS* | **Sg** | **15 49 08.6** | **-2.5** |
| **SALA** | **Sala** | **1.36** | **139** | *eP* | **Pb** | **15 49 00.9** | **+0.5** |
| SALA | | | | *eS* | **Sb** | **15 49 17.9** | **+0.4** |
| SALA | comp=E,2.0nm,0.4s | | | AML | AML | 15 49 25.0 | |
| SALA | comp=N,23nm,0.3s | | | AML | AML | 15 49 34.2 | |
| **SALA** | **Sala** | **1.36** | **139** | *eP* | **Pb** | **15 49 00.9** | **+0.5** |
| SALA | | | | *eS* | **Sb** | **15 49 17.9** | **+0.4** |
| **BIDA** | **Albida** | **1.37** | **22** | *eP* | **Pg** | **15 49 01.5** | **-0.3** |
| BIDA | | | | *eS* | **Sg** | **15 49 21.5** | **+1.8** |
| BIDA | comp=N,55nm,0.3s | | | AML | AML | 15 49 24.0 | |
| BIDA | comp=E,74nm,0.4s | | | AML | AML | 15 49 25.3 | |
| **BIDA** | **Albida** | **1.37** | **22** | *eP* | **Pg** | **15 49 01.5** | **-0.3** |
| BIDA | | | | *eS* | **Sg** | **15 49 21.5** | **+1.8** |
| **ROOS** | **tl_alroos** | **1.40** | **72** | *eP* | **Pg** | **15 49 01.7** | **-0.7** |
| ROOS | | | | *eS* | **Sg** | **15 49 21.9** | **+1.3** |
| ROOS | comp=Z,23nm,0.3s | | | AML | AML | 15 49 25.8 | |
| ROOS | comp=N,31nm,0.4s | | | AML | AML | 15 49 36.9 | |
| ROOS | comp=E,20nm,0.5s | | | AML | AML | 15 49 38.0 | |
| **ROOS** | **tl_alroos** | **1.40** | **72** | *eP* | **Pg** | **15 49 01.7** | **-0.7** |
| ROOS | | | | *eS* | **Sg** | **15 49 22.0** | **+1.3** |
| **ZALF** | **Zalf** | **1.61** | **120** | *eP* | **Pb** | **15 49 05.0** | **+0.4** |
| ZALF | | | | *eS* | **Sb** | **15 49 25.1** | **+0.5** |
| ZALF | comp=E,14nm,0.4s | | | AML | AML | 15 49 29.7 | |
| ZALF | comp=N,13nm,0.4s | | | AML | AML | 15 49 32.9 | |
| **ZALF** | **Zalf** | **1.61** | **120** | *eP* | **Pb** | **15 49 05.0** | **+0.4** |
| ZALF | | | | *eS* | **Sb** | **15 49 25.1** | **+0.5** |
| **WRDH** | **Warideh** | **1.86** | **19** | *eP* | **Pb** | **15 49 09.2** | **+0.3** |
| WRDH | | | | *eS* | **Sg** | **15 49 33.9** | **-1.4** |
| WRDH | comp=N,16nm,0.4s | | | AML | AML | 15 49 42.1 | |
| **WRDH** | **Warideh** | **1.86** | **19** | *eP* | **Pb** | **15 49 09.2** | **+0.3** |
| WRDH | | | | *eS* | **Sg** | **15 49 33.9** | **-1.4** |
| **ARNB** | **Al Arnab** | **2.12** | **6** | *eP* | **Pn** | **15 49 11.6** | **+1.5** |
| ARNB | | | | *eS* | **Sb** | **15 49 39.1** | **-0.3** |
| ARNB | comp=E,12nm,0.3s | | | AML | AML | 15 49 44.6 | |
| ARNB | comp=Z,19nm,0.3s | | | AML | AML | 15 49 45.1 | |
| ARNB | comp=N,19nm,0.3s | | | AML | AML | 15 49 48.9 | |
| **ARNB** | **Al Arnab** | **2.12** | **6** | *eP* | **Pn** | **15 49 11.6** | **+1.5** |
| ARNB | | | | *eS* | **Sb** | **15 49 39.2** | **-0.3** |
| ARNB | comp=N,19nm,0.3s | | | | | | |

*ISCJB 27 16:02:15.0±0.8, 3.71S±0.05×99.57E±0.08, h33km, mb3.8/9, Error ellipse: s-maj=12.6km s-min=6.5km az=158.9*
*DJA 27 16:02:14.1±1.8, 4°S±4°×9°9E±°, h34km±17km, M4.3/6, mb4.6/2, MLv4.2/6*
*IDC 27 16:02:17.9±1.4, 3.72S×99.50E, h36km±5km, mb3.5/9, mb1 3.6/9, mb1mx3.4/40, mbtmp3.7/9, Error ellipse: s-maj=42.1km s-min=18.4km az=57.0*
**ISC 27 16:02:17.7±0.9, 3.69S±0.08×99.6E±0.1, h35km, n20, σ0§97/26, mb3.7/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.99** | **23** | P | **Pn** | **16 02 33.5** | **-1.6** |
| PPSI | | | | S | **Sn** | **16 02 47.2** | **-0.7** |
| **SISI** | **Saibi** | **2.41** | **347** | P | Pn | 16 02 50.4 | -4.2 |
| SISI | | | | S | **Sn** | **16 03 20.9** | **-1.9** |
| **PPI** | **Padang Panjang** | **3.30** | **13** | P | **Pn** | **16 03 05.1** | **-1.8** |
| PPI | | | | S | **Sn** | **16 03 45.4** | **+0.5** |
| **MNAI** | **Manna** | **3.39** | **102** | P | **Pn** | **16 03 07.6** | **-0.5** |
| **MDSI** | **Maura Dua** | **4.61** | **100** | P | **Pn** | **16 03 24.6** | **-0.3** |
| **KASI** | **Kota Agung** 59nm,1.5s,0.5nm | **5.18** | **111** | P | **Pn** | **16 03 32.2** | **-0.6** |
| **CISI** | **Cisompet, Garu** | **9.01** | **116** | P | **Pn** | **16 04 23.3** | **-2.1** |
| **CMAR** | **Chiang Mai Arr** 2.1nm,0.9s,baz=186,slow=10.0,SNR=12 | **22.01** | **358** | P | **P** | **16 07 10.2** | **+1.0** |
| CMAR | 3.4nm,0.8s,baz=188,slow=10.0,SNR=12 | | | pP | **pP** | **16 07 19.1** | **+0.7** |
| **H01W3** | **Cape Leeuwin H** baz=336 | **33.84** | **158** | T | T | 16 45 26.3 | |
| **H01W2** | **Cape Leeuwin H** baz=336 | **33.85** | **158** | T | T | 16 45 26.9 | |
| **H01W1** | **Cape Leeuwin H** baz=336 | **33.85** | **158** | T | T | 16 45 19.1 | |
| **WRA** | **Warramunga Arr** 0.7nm,0.8s,baz=296,slow=9.0,SNR=5.2 | **37.49** | **118** | P | **P** | **16 09 28.7** | **+0.3** |
| **ASAR** | **Alice Springs** 1.3nm,1.1s,baz=301,slow=7.6,SNR=4.6 | **38.59** | **124** | P | **P** | **16 09 38.5** | **+0.7** |
| ASAR | 0.2nm,0.4s,baz=299,slow=3.8,SNR=3.5 | | | PcP | **PcP** | **16 11 49.5** | **-0.4** |
| **KSRS** | **Korea Array** 0.8nm,0.5s,baz=227,slow=8.5,SNR=2.5 | **48.65** | **30** | P | **P** | **16 10 59.0** | **+0.6** |
| KSRS | 1.6nm,0.8s,baz=222,slow=8.0,SNR=3.6 | | | pP | **pP** | **16 11 08.8** | **+0.1** |
| **SONM** | **Songino Array** 1.0nm,0.6s,baz=190,slow=9.3,SNR=6.2 | **51.65** | **6** | P | **P** | **16 11 21.5** | **+0.4** |
| SONM | 1.7nm,0.7s,baz=189,slow=8.4,SNR=8.2 | | | pP | **pP** | **16 11 32.2** | **+0.6** |
| **MKAR** | **Makanchi Array** 0.7nm,0.7s,baz=148,slow=7.1,SNR=4.2 | **52.55** | **345** | P | **P** | **16 11 27.6** | **-0.1** |
| MKAR | 0.4nm,0.4s,baz=161,slow=9.0,SNR=2.7 | | | pP | **pP** | **16 11 38.5** | **+0.4** |
| **USRK** | **Ussuriysk Ar.** 0.9nm,0.6s,baz=204,slow=9.5,SNR=3.1 | **55.81** | **28** | P | **P** | **16 11 51.3** | **-0.2** |
| USRK | 2.6nm,0.8s,baz=222,slow=8.1,SNR=3.9 | | | pP | **pP** | **16 12 02.9** | **+0.9** |
| **ZALV** | **Zalesovo Beam** 0.6nm,0.4s,baz=156,slow=7.5,SNR=4.2 | **58.75** | **350** | P | **P** | **16 12 11.9** | **-0.1** |
| ZALV | 0.9nm,0.6s,baz=193,slow=6.1,SNR=3.4 | | | pP | **pP** | **16 12 22.6** | **0.0** |
| **BRTR** | **Keskin Array B** 0.5nm,0.7s,baz=134,slow=6.2,SNR=3.1 | **74.19** | **313** | P | **P** | **16 13 50.2** | **-1.0** |
| **TXAR** | **Lajitas Array** 0.5nm,0.4s,baz=249,slow=1.1,SNR=6.7 | **146.25** | **38** | PKPbc | **PKPab** | **16 21 57.1** | **+0.9** |
| TXAR | 0.4nm,0.4s,baz=270,slow=1.3,SNR=3.2 | | | pPKPbc | pPKPbc | 16 22 07.5 | +0.8 |

*IDC 27 16:14:15.3±1.5, 3.83S×99.74E, h0km, mb3.8/8, mb1 4.0/9, mb1mx3.8/32, mbtmp3.9/9, ML4.3/1, Error ellipse: s-maj=52.4km s-min=17.7km az=54.0*
*NEIC 27 16:14:16.8±1.0, 3.80S×99.89E, h10km, mb4.1/2, Error ellipse: s-maj=32.8km s-min=8.2km az=224.0*
*ISCJB 27 16:14:17.8±0.7, 3.81S±0.06×99.94E±0.08, h33km, mb3.9/10, Error ellipse: s-maj=13.1km s-min=5.3km az=145.9*
*DJA 27 16:14:19.1±0.9, 4°S±6°×10°0E±°, h59km±11km, M4.3/9, mb4.7/3, mB5.1/1, MLv4.1/9, Mw(mB)4.5/1*
**ISC 27 16:14:20.5±0.9, 3.78S±0.10×100.0E±0.1, h35km, n31, σ1§45/29, mb4.0/10, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **1.01** | **358** | P | **Pn** | **16 14 36.6** | **-1.5** |
| PPSI | | | | S | **Sn** | **16 14 50.4** | **-0.6** |
| **KSI** | **Kapahiang** | **2.55** | **87** | P | **Pn** | **16 14 59.6** | **+0.1** |
| **SISI** | **Saibi** | **2.61** | **339** | P | **Pn** | **16 14 57.7** | **-2.5** |
| **MNAI** | **Manna** | **2.97** | **101** | P | **Pn** | **16 15 05.6** | **+0.5** |
| **MNAI** | **Manna** | **2.97** | **101** | *ePn* | **Pn** | **16 15 05.9** | **+0.8** |
| **PPI** | **Padang Panjang** | **3.31** | **6** | P | **Pn** | **16 15 09.4** | **-0.5** |
| PPI | | | | S | **Sn** | **16 15 46.9** | **-1.2** |
| **MDSI** | **Maura Dua** | **4.19** | **100** | P | **Pn** | **16 15 22.6** | **+0.7** |
| **KASI** | **Kota Agung** | **4.77** | **112** | P | **Pn** | **16 15 29.8** | **-0.1** |
| KASI | | | | S | **Sn** | **16 16 20.3** | **-3.8** |
| **GSI** | **Gunungsitoli** | **5.61** | **334** | *ePn* | **Pn** | **16 15 39.9** | **-1.6** |
| **CGJI** | **Cibinong** 43nm,1.3s,2µm0.2nm | **6.30** | **117** | P | **Pn** | **16 15 49.8** | **-1.1** |
| **LEM** | **Lembang** 3.4nm,0.3s,baz=306,slow=19,SNR=3.5 | **8.13** | **112** | Pn | **Pn** | **16 16 17.4** | **+1.1** |
| **CISI** | **Cisompet, Garu** 90nm,0.9s | **8.60** | **116** | P | **Pn** | **16 16 21.0** | **-1.6** |
| **CISI** | **Cisompet, Garu** 48nm,0.4s | **8.60** | **116** | *eP* | **Pn** | **16 16 21.1** | **-1.6** |
| **CMJI** | **Cimerak** | **9.27** | **116** | P | **Pn** | **16 16 30.9** | **-0.8** |
| **CMAR** | **Chiang Mai Arr** 0.9nm,0.3s,baz=186,slow=10.0,SNR=11 | **22.12** | **357** | P | **P** | **16 19 12.6** | **-0.5** |
| **H08S2** | **Diego Garcia H** baz=82,slow=75,SNR=30 | **27.67** | **261** | T | T | 16 49 34.8 | |
| **H08S3** | **Diego Garcia H** baz=82,slow=75,SNR=24 | **27.68** | **261** | T | T | 16 49 35.2 | |
| **H08S1** | **Diego Carcia H** baz=82,slow=75,SNR=21 | **27.69** | **261** | T | T | 16 49 49.6 | |
| **H01W3** | **Cape Leeuwin H** baz=336,slow=76,SNR=9.9 | **33.60** | **159** | T | T | 16 56 51.1 | |
| **H01W2** | **Cape Leeuwin H** baz=336,slow=76,SNR=13 | **33.62** | **159** | T | T | 16 56 52.1 | |
| **H01W1** | **Cape Leeuwin H** baz=336,slow=76,SNR=13 | **33.62** | **159** | T | T | 16 56 52.2 | |
| **WRA** | **Warramunga Arr** 0.6nm,0.5s,baz=298,slow=8.2,SNR=15 | **37.09** | **118** | P | **P** | **16 21 28.7** | **+0.8** |
| **WRAB** | **Tennant Creek** 1.4nm,0.5s | **37.10** | **118** | *eP* | **P** | **16 21 29.1** | **+1.2** |
| **ASAR** | **Alice Springs** 1.2nm,0.5s,baz=300,slow=7.8,SNR=16 | **38.20** | **124** | P | **P** | **16 21 40.1** | **+2.9** |
| ASAR | 0.2nm,0.7s,baz=300,slow=2.0,SNR=2.9 | | | PcP | **PcP** | **16 23 52.2** | **+0.8** |
| **SONM** | **Songino Array** 0.9nm,0.6s,baz=188,slow=9.3,SNR=6.5 | **51.70** | **5** | P | **P** | **16 23 25.5** | **+1.3** |
| **MKAR** | **Makanchi Array** 0.9nm,0.7s,baz=141,slow=7.4,SNR=3.3 | **52.74** | **345** | P | **P** | **16 23 32.5** | **+0.7** |
| **USRK** | **Ussuriysk Ar.** 1.6nm,0.6s,baz=230,slow=6.2,SNR=5.1 | **55.70** | **27** | P | **P** | **16 23 54.5** | **+1.0** |
| **ZALV** | **Zalesovo Beam** 1.1nm,0.6s,baz=178,slow=8.9,SNR=5.0 | **58.91** | **350** | P | **P** | **16 24 15.8** | **-0.1** |
| **ABKAR** | **Akbulak array** 1.0nm,0.6s | **63.21** | **332** | *eP* | **P** | **16 24 44.4** | **-0.7** |
| **BRTR** | **Keskin Array B** 0.4nm,0.5s,baz=99,slow=4.8,SNR=2.9 | **74.55** | **313** | P | **P** | **16 25 54.6** | **-1.5** |
| **TXAR** | **Lajitas Array** 0.3nm,0.3s,baz=323,slow=2.4,SNR=3.0 | **146.06** | **39** | PKPbc | **PKPab** | **16 33 58.4** | **+0.2** |

*SJA 27 16:25:29.0±0.4, 34.47S×73.94W, h33km, ML3.8*
*ISCJB 27 16:25:48.0±1.4, 34.01S±0.05×72.21W±0.09, h12km±10km, Error ellipse: s-maj=13.5km s-min=7.4km az=15.4*
*GUC 27 16:25:47.4±0.5, 34.00S×72.20W, h15km±3km, ML3.5*
**ISC 27 16:25:47.0±3.0, 33.99S±0.06×72.2W±0.1, h13km±19km, n15, σ1§05/18, 3C-2D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.43** | **159** | *iP* | **Pb** | **16 25 56.1** | **-0.4** |
| CHPI | | | | *eS* | **Sg** | **16 26 02.3** | **+0.8** |
| **ANTU** | **Antumapu** | **1.37** | **73** | *i S* | **Sb** | **16 26 30.6** | **+0.8** |
| **SAN** | **Santiago** | **1.38** | **68** | *iP* | **Pn** | **16 26 12.4** | **+0.3** |
| SAN | | | | *i S* | **Sb** | **16 26 31.1** | **+0.7** |
| **ROC1** | **El Roble** | **1.41** | **45** | *eP* | **Pn** | **16 26 12.6** | **0.0** |
| **TALC** | **Talca** | **1.48** | **162** | *iP* | **Pn** | **16 26 13.1** | **-0.3** |
| TALC | | | | *i S* | **Sb** | **16 26 33.2** | **0.0** |
| **CLCH** | **Cerro Calan** | **1.50** | **67** | *iP* | **Pn** | **16 26 14.1** | **+0.3** |
| CLCH | | | | *eS* | **Sb** | **16 26 34.2** | **+0.3** |
| CLCH | comp=N,801nm,0.9s | | | AML | AML | 16 26 39.3 | |
| **PEL** | **Peldehue** | **1.52** | **57** | *iP* | **Pn** | **16 26 14.3** | **+0.4** |
| PEL | | | | *i S* | **Sb** | **16 26 34.9** | **+0.7** |
| PEL | comp=N,2µm,0.5s | | | AML | AML | 16 26 45.3 | |
| **AUSP** | **Uspallata** | **2.94** | **54** | *i P* | **Pb** | **16 26 38.0** | **-1.5** |
| AUSP | | | | *i S* | Sg | 16 27 29.1 | +7.6 |
| **AAGR** | **Agrelo** | **2.95** | **73** | *i P* | **Pb** | **16 26 38.4** | **-1.1** |
| **ARCO** | **CERRO ARCO** | **2.96** | **68** | *i P* | **Pb** | **16 26 38.4** | **-1.3** |
| ARCO | | | | *i S* | Sg | 16 27 29.4 | +7.3 |
| ARCO | comp=Z,82nm,0.5s | | | AML | AML | 16 27 30.9 | |
| **ASAL** | **Salagasta** | **3.14** | **65** | *i P* | **Pb** | **16 26 40.8** | **-2.0** |
| **RTLS** | **Leoncito** | **3.27** | **49** | *i P* | Pn | 16 26 41.9 | +3.7 |
| **AMOG** | **MOGNA** | **4.36** | **47** | *eP* | **Pn** | **16 26 54.5** | **+1.4** |
| **ACHE** | **Chepes** | **5.45** | **60** | *eP* | Pn | 16 27 13.2 | +5.0 |
| **AGUA** | **GUANDACOL** | **5.48** | **36** | *eP* | **Pn** | **16 27 09.7** | **+1.2** |

*ISCJB 27 16:35:28.6±0.6, 1.14N±0.06×126.39E±0.05, h100km, mb3.8/5, Error ellipse: s-maj=9.3km s-min=6.5km az=12.1*
*DJA 27 16:35:28.7±1.1, 1°N±13°×12°6E±°, h19km±24km, M4.2/11, mb4.3/4, mB4.8/1, MLv4.1/11, Mw(mB)4.1/1*
*NEIC 27 16:35:29.5±0.8, 1.21N×126.46E, h84km±10km, mb4.0/1, Error ellipse: s-maj=13.3km s-min=9.2km az=210.0*
*IDC 27 16:35:30.9±6.7, 1.11N×126.26E, h98km±69km, mb3.5/4, mb1 3.7/5, mb1mx3.3/33, mbtmp3.9/5, ML4.2/1, Error ellipse: s-maj=49.1km s-min=19.6km az=65.0*
**ISC 27 16:35:29.5±1.6, 1.1N±0.1×126.43E±0.0, h100km, n22, σ1§38/20, mb3.8/5, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.00** | **111** | P | **Pn** | **16 35 47.7** | **-2.2** |
| **TNTI** | **Ternate** | **1.00** | **111** | *ePn* | **Pn** | **16 35 47.7** | **-2.2** |
| **LBMI** | **Labuha** | **2.06** | **149** | P | **Pn** | **16 36 03.1** | **+0.3** |
| **KMSI** | **Cibinong** | **2.51** | **257** | P | **Pn** | **16 36 08.1** | **-0.6** |
| KMSI | | | | S | **Sn** | **16 36 38.9** | **0.0** |
| **SANI** | **Sanana** | **3.19** | **188** | P | **Pn** | **16 36 17.2** | **-0.6** |
| **GTOI** | **Gorontalo** | **3.45** | **262** | P | **Pn** | **16 36 21.3** | **0.0** |
| **LUWI** | **Luwuk** | **4.25** | **239** | P | **Pn** | **16 36 30.8** | **-1.2** |
| **LUWI** | **Luwuk** | **4.25** | **239** | *eP* | **Pn** | **16 36 33.2** | **+1.1** |
| **NLAI** | **Namlea** | **4.39** | **171** | P | **Pn** | **16 36 33.8** | **-0.2** |
| **MRSI** | **Marisa** | **4.54** | **262** | P | **Pn** | **16 36 35.4** | **-0.5** |
| **APSI** | **Ampana** 61nm,0.8s,1µm0.4nm | **5.19** | **247** | P | **Pn** | **16 36 44.1** | **-0.7** |
| **FAKI** | **Fak Fak** | **7.07** | **125** | *eP* | Pn | 16 37 12.4 | +1.9 |
| **TTSI** | **Tana Toraja** 16nm,0.9s,0.1nm | **7.80** | **238** | P | **Pn** | **16 37 19.6** | **-0.7** |
| **SPSI** | **Sidrap Palu** 14nm,0.8s | **8.36** | **233** | P | **Pn** | **16 37 28.4** | **+0.5** |
| **KAPI** | **Kappang** 2.6nm,0.3s,baz=92,slow=9.6,SNR=4.7 | **9.04** | **227** | P | **Pn** | **16 37 38.2** | **+1.0** |
| KAPI | 0.5nm,0.3s,baz=114,slow=20,SNR=2.4 | | | S | **Sn** | **16 39 14.4** | **-2.9** |
| **KKM** | **Kota Kinabalu** | **11.30** | **296** | *eP* | **Pn** | **16 38 08.2** | **+0.2** |
| **WRAB** | **Tennant Creek** 4.3nm,0.7s | **22.33** | **160** | *eP* | **P** | **16 40 20.4** | **+1.2** |
| **WRA** | **Warramunga Arr** 2.0nm,0.4s,baz=335,slow=11,SNR=55 | **22.33** | **160** | P | **P** | **16 40 20.6** | **+1.3** |
| **ASAR** | **Alice Springs** 1.6nm,0.5s,baz=345,slow=8.1,SNR=32 | **25.70** | **164** | P | **P** | **16 40 52.6** | **+2.2** |
| **KSAR** | **Wonju Array Be** | **36.16** | **2** | P | P | 16 42 22.9 | +0.7 |
| **KSRS** | **Korea Array** 0.5nm,0.5s,baz=174,slow=8.4,SNR=2.9 | **36.17** | **2** | P | P | 16 42 22.9 | +0.6 |
| **MKAR** | **Makanchi Array** 0.5nm,0.5s,baz=118,slow=8.4,SNR=7.5 | **59.52** | **326** | P | P | 16 45 24.0 | +1.6 |

*ISCJB 27 16:39:09.7±0.8, 2.83S±0.07×99.80E±0.07, h32km, mb3.8/9, MS3.1/3, Error ellipse: s-maj=13.6km s-min=6.3km az=135.2*
*IDC 27 16:39:09.6±1.4, 2.55S×99.40E, h0km, mb3.8/8, mb1 4.0/8, mb1mx3.7/37, mbtmp3.8/8, MS3.1/4, Ms1 3.2/4, ms1mx2.7/32, Error ellipse: s-maj=57.4km s-min=21.9km az=51.0*
*DJA 27 16:39:10.8±0.8, 3°S±5°×10°0E±°, h20km±5km, M4.3/17, mb4.4/3, MLv4.2/17*
*NEIC 27 16:39:11.4±0.9, 2.51S×99.57E, h10km, mb4.2/1, Error ellipse: s-maj=21.7km s-min=13.3km az=61.0*
**ISC 27 16:39:12.1±0.9, 2.72S±0.08×99.83E±0.08, h32km, n39, σ1§14/26, mb3.9/9, MS3.2/3, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.19** | **104** | P | **Pb** | **16 39 16.5** | **-2.0** |
| **SISI** | **Saibi** | **1.57** | **332** | P | **Pb** | **16 39 38.5** | **-2.0** |
| **PDSI** | **Padang** | **1.90** | **19** | P | **Pn** | **16 39 42.0** | **-0.4** |
| **PPI** | **Padang Panjang** | **2.32** | **14** | P | **Pn** | **16 39 48.6** | **+0.5** |
| **SDSI** | **Sungai Dareh** | **2.39** | **42** | P | **Pn** | **16 39 49.5** | **+0.4** |
| **KSI** | **Kapahiang** | **2.91** | **109** | P | **Pn** | **16 39 57.9** | **+1.5** |
| **BKNI** | **Bangkinang** | **3.26** | **22** | P | **Pn** | **16 40 01.7** | **+0.7** |
| **BKNI** | **Bangkinang** | **3.26** | **22** | P | **Pn** | **16 40 00.4** | **-0.6** |
| **RGRI** | **Rengat** | **3.44** | **47** | P | **Pb** | **16 40 10.9** | **-1.5** |
| **MNSI** | **Mandailing Nat** | **3.50** | **356** | P | Pn | 16 40 07.7 | +3.4 |
| **MNAI** | **Manna** | **3.52** | **118** | P | **Pn** | **16 40 04.3** | **-0.4** |
| **JMBI** | **JAMBI** | **3.96** | **74** | P | **Pn** | **16 40 10.1** | **-0.6** |
| **GSI** | **Gunungsitoli** | **4.58** | **331** | P | **Pn** | **16 40 17.8** | **-1.5** |
| **GSI** | **Gunungsitoli** | **4.58** | **331** | *eP* | **Pn** | **16 40 18.5** | **-0.8** |
| **MDSI** | **Maura Dua** | **4.69** | **112** | P | **Pn** | **16 40 20.5** | **-0.2** |
| **LWLI** | **Liwa** | **4.80** | **119** | P | Pn | 16 40 18.7 | -3.7 |
| **PMBI** | **Palembang** | **4.94** | **93** | P | **Pn** | **16 40 23.0** | **-1.2** |
| **KASI** | **Kota Agung** 47nm,0.9s,0.3nm | **5.43** | **121** | P | **Pn** | **16 40 30.6** | **-0.3** |
| **KLI** | **Kotabumi** 51nm,0.6s,1.0nm | **5.45** | **113** | P | **Pn** | **16 40 30.6** | **-0.6** |
| **IPM** | **Ipoh** | **7.25** | **10** | *eP* | **Pn** | **16 40 57.8** | **+1.8** |
| **LEM** | **Lembang** comp=Z,68nm,18.2s,baz=210,slow=43 | **8.77** | **118** | LR | LR | 16 45 45.7 | |
| **CISI** | **Cisompet, Garu** | **9.29** | **121** | *eP* | Pn | 16 41 20.8 | -3.3 |
| **CMAR** | **Chiang Mai Arr** 1.2nm,0.6s,baz=179,slow=12,SNR=2.4 | **21.06** | **358** | P | **P** | **16 43 52.6** | **-1.1** |
| CMAR | comp=Z,36nm,19.0s,baz=148,slow=39 | | | LR | LR | 16 52 50.0 | |
| **BATI** | **Baumata** comp=Z,77nm,18.2s,baz=164,slow=40 | **24.81** | **109** | LR | LR | 16 55 55.6 | |
| **H08S2** | **Diego Garcia H** baz=81,slow=75,SNR=409 | **27.65** | **259** | T | T | 17 13 52.4 | |
| **H08S3** | **Diego Garcia H** baz=81,slow=75,SNR=367 | **27.66** | **259** | T | T | 17 13 52.9 | |
| **H08S1** | **Diego Carcia H** baz=81,slow=75,SNR=186 | **27.67** | **259** | T | T | 17 13 53.2 | |
| **H01W3** | **Cape Leeuwin H** baz=335,slow=76,SNR=9.5 | **34.66** | **159** | T | T | 17 22 26.7 | |
| **H01W2** | **Cape Leeuwin H** baz=335,slow=76,SNR=10 | **34.67** | **159** | T | T | 17 22 27.8 | |
| **H01W1** | **Cape Leeuwin H** baz=335,slow=76,SNR=8.5 | **34.68** | **159** | T | T | 17 22 27.8 | |
| **WRA** | **Warramunga Arr** 0.6nm,0.7s,baz=301,slow=9.0,SNR=3.0 | **37.79** | **120** | P | P | 16 46 31.0 | +5.2 |
| **ASAR** | **Alice Springs** 1.4nm,0.8s,baz=298,slow=7.6,SNR=2.5 | **38.98** | **125** | P | P | 16 46 42.8 | +7.0 |
| **SONM** | **Songino Array** 0.5nm,0.3s,baz=191,slow=9.2,SNR=5.6 | **50.67** | **6** | P | **P** | **16 48 10.1** | **+1.5** |
| **MKAR** | **Makanchi Array** 0.6nm,0.3s,baz=157,slow=7.9,SNR=6.9 | **51.67** | **345** | P | **P** | **16 48 17.2** | **+1.2** |
| **ZALV** | **Zalesovo Beam** 1.6nm,0.7s,baz=188,slow=7.3,SNR=7.5 | **57.84** | **350** | P | **P** | **16 49 01.4** | **+1.0** |
| ZALV | comp=Z,20nm,21.9s,baz=70,slow=40 | | | LR | LR | 17 17 32.5 | |
| **ABKAR** | **Akbulak array** 1.1nm,0.7s | **62.18** | **332** | *eP* | **P** | **16 49 30.8** | **+0.3** |
| **KBZ** | **Khabaz** 1.4nm,0.7s,baz=107,slow=6.6,SNR=3.9 | **68.73** | **319** | P | **P** | **16 50 12.6** | **-0.3** |
| **BRTR** | **Keskin Array B** 0.6nm,0.6s,baz=136,slow=6.0,SNR=4.1 | **73.68** | **313** | P | **P** | **16 50 43.1** | **0.0** |
| **TXAR** | **Lajitas Array** 0.9nm,0.7s,baz=303,slow=0.8,SNR=7.6 | **145.37** | **38** | PKPbc | **PKPab** | **16 58 48.6** | **+0.9** |

*ISCJB 27 16:40:08.9±0.6, 2.79S±0.07×140.2E±0.1,

2.2nm,0.7s,baz=122,slow=5.4,SNR=12
**ZALV Zalesovo Beam 72.96 329 P P 16 51 38.7 -0.8**
0.8nm,0.6s,baz=117,slow=5.7,SNR=3.9
**KURK Kurchatov 74.85 325** *eP* **P 16 51 50.3 -0.3**
3.1nm,0.8s
**ILAR Eielson Array 85.34 24** P **P 16 52 46.1 -0.8**
0.6nm,0.9s,baz=251,slow=5.6,SNR=3.6
**LPAZ La Paz 145.96 125** PKPbc **PKPab 16 59 52.6 +0.5**
0.6nm,0.5s,baz=180,slow=3.0,SNR=2.6

*SJA* ***27*** *16:57:59.1±1.0,32.°52S×71.°99W,h10km,ML3.7*
*GUC* ***27*** *16:58:02.8±0.5,32.°36S×71.°72W,h20km±19km,ML4.0*
**ISC 27 16:57:57.4±2.1,32°34S±0.°04×71°92W±0.°09,h5km±11km, n23,σ1°01/34,1C-8D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ROC1** | **El Roble** | **0.99** | **130** | *i* P | **Pg** | **16 58 16.7** | **+0.2** |
| ROC1 | | | | *i* S | **Sb** | **16 58 30.8** | **0.0** |
| **ROCH** | **El Roble** | **0.99** | **129** | ⇓*i* P | **Pb** | **16 58 17.9** | **+0.7** |
| ROCH | | | | *e*S | **Sg** | **16 58 29.4** | **0.0** |
| ROCH | | | | AML | AML | 16 58 31.7 | |
| | comp=E,7μm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **1.31** | **128** | *i* P | **Pn** | **16 58 23.0** | **+0.6** |
| PEL | | | | *e*S | **Sg** | **16 58 38.2** | **-1.5** |
| PEL | | | | AML | AML | 16 58 39.2 | |
| | comp=E,15μm,0.3s | | | | | | |
| **RCDM** | **Rinconada Maip** | **1.48** | **141** | *e*P | **Pn** | **16 58 24.7** | **0.0** |
| **SAN** | **Santiago** | **1.53** | **137** | *e*P | **Pb** | **16 58 26.3** | **0.0** |
| SAN | | | | *i* S | **Sn** | **16 58 44.3** | **-1.5** |
| **TACH** | **Talagante** | **1.55** | **148** | ⇑*i*P | **Pg** | **16 58 27.3** | **+0.2** |
| **CLCH** | **Cerro Calan** | **1.57** | **132** | ⇓*i*P | **Pb** | **16 58 26.9** | **-0.1** |
| CLCH | | | | *i* S | **Sn** | **16 58 45.5** | **-1.3** |
| CLCH | | | | AML | AML | 16 58 53.6 | |
| | comp=N,3μm,0.5s | | | | | | |
| **ANTU** | **Antumapu** | **1.64** | **139** | ⇓*i*P | **Pb** | **16 58 28.1** | **0.0** |
| ANTU | | | | *i* S | **Sn** | **16 58 47.4** | **-0.9** |
| **PCH** | **Pirque** | **1.74** | **137** | *e*P | **Pb** | **16 58 30.0** | **+0.1** |
| **AUSP** | **Uspallata** | **2.15** | **88** | *i* P | **Pb** | **16 58 38.3** | **+1.2** |
| AUSP | | | | *i* S | **Sg** | **16 59 08.4** | **+1.8** |
| **RTLS** | **Leoncito** | **2.29** | **77** | *i* P | **Pg** | **16 58 41.5** | **+0.1** |
| RTLS | | | | ⇓*e*S | **Sg** | **16 59 10.7** | **-0.5** |
| **TLL** | **Tololo Astrono** | **2.37** | **24** | *e*P | **Pb** | **16 58 40.9** | **+0.2** |
| TLL | | | | AML | AML | 16 59 23.2 | |
| | comp=N,1μm,0.7s | | | | | | |
| **ARCO** | **CERRO ARCO** | **2.57** | **102** | *i* P | **Pb** | **16 58 44.4** | **+0.3** |
| ARCO | | | | *i* S | **Sb** | **16 59 16.9** | **+0.7** |
| ARCO | | | | AML | AML | 16 59 25.6 | |
| | comp=Z,329nm,0.4s | | | | | | |
| **ASAL** | **Salagasta** | **2.62** | **96** | *i* P | **Pb** | **16 58 45.2** | **+0.2** |
| **AAGR** | **Agrelo** | **2.71** | **107** | *i* P | **Pb** | **16 58 45.8** | **-0.6** |
| **RTCV** | **Cerro Valdivia** | **2.91** | **81** | *e*P | **Pb** | **16 58 49.5** | **-0.3** |
| **RTLL** | **Cerro Villicun** | **3.10** | **72** | *e*P | **Pb** | **16 58 51.5** | **-1.6** |
| RTLL | | | | ⇓*e*S | **Sg** | **16 59 35.9** | **-1.3** |
| **CFAA** | **Coronel Fontan** | **3.22** | **78** | *e*P | **Pb** | **16 58 53.0** | **-2.0** |
| **AMOG** | **MOGNA** | **3.24** | **65** | *e*P | **Pb** | **16 58 54.5** | **-1.0** |
| **AVFE** | **Valle Fertil** | **4.17** | **67** | ⇓*e*P | Pn | 16 59 06.7 | +4.9 |
| AVFE | | | | ⇓*e*S | **Sb** | **17 00 01.0** | **-1.0** |
| **ACHE** | **Chepes** | **4.63** | **77** | *e*P | Pn | 16 59 12.7 | +4.5 |
| **VCA** | **Vinchina** | **4.82** | **43** | *e*P | Pn | 16 59 18.2 | -4.2 |
| VCA | | | | *e*S | **Sb** | **17 00 20.2** | **-0.5** |
| VCA | | | | *e*S | **Sb** | **17 00 20.6** | **-0.1** |
| **TCA** | **Tanti** | **6.32** | **83** | *e*P | **Pn** | **16 59 33.1** | **+1.8** |
| TCA | | | | ⇓*e*S | **Sn** | **17 00 45.4** | **+1.5** |

**DJA 27 16:59:13.1±0.5,8°S±4°×107°E±°,h28km±7km,M3.5/10, MLv3.5/10,Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNJI** | **Cibinong** | **0.75** | **353** | P | Pn | 16 59 28.6 | +0.7 |
| **CISI** | **Cisompet, Garu** | **0.77** | **50** | P | Pb | 16 59 28.0 | -0.1 |
| CISI | | | | S | Sb | 16 59 36.4 | -1.9 |
| **SKJI** | **Sukabumi** | **1.24** | **328** | P | Pb | 16 59 35.6 | -0.3 |
| SKJI | | | | S | Sn | 16 59 48.5 | -1.8 |
| **CMJI** | **Cimerak** | **1.25** | **77** | P | Pn | 16 59 34.1 | -0.6 |
| **LEM** | **Lembang** | **1.29** | **18** | P | Pb | 16 59 37.2 | +0.3 |
| LEM | | | | S | Sn | 16 59 52.0 | +0.1 |
| **TNG** | **Tangerang** | **1.96** | **343** | P | Pn | 16 59 42.7 | -1.8 |
| **CGJI** | **Cibinong** | **2.09** | **313** | P | Pn | 16 59 47.0 | +0.7 |
| **PCJI** | **Pacitan** | **3.92** | **92** | P | Pn | 17 00 11.6 | +0.1 |

**GUC 27 17:04:20.7±0.5,34.°77S×71.°80W,h44km±1km,ML3.8, 2C-2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.41** | **336** | ⇑*e*P | Pn | 17 04 29.9 | -0.6 |
| CHPI | | | | *i* S | Sn | 17 04 37.2 | -0.1 |
| **NICH** | **Los Niches** | **0.53** | **117** | ⇓*i*P | Pn | 17 04 31.4 | -0.5 |
| NICH | | | | *e*S | Sn | 17 04 39.8 | -0.2 |
| **TALC** | **Talca** | **0.65** | **168** | ⇑*i*P | Pn | 17 04 33.3 | -0.2 |
| TALC | | | | *e*S | Sn | 17 04 42.8 | +0.1 |
| **TACH** | **Talagante** | **1.32** | **33** | *e*P | Pn | 17 04 42.7 | 0.0 |
| **RCDM** | **Rinconada Maip** | **1.52** | **33** | *e*P | Pn | 17 04 45.1 | -0.3 |
| RCDM | | | | *i* S | Sn | 17 05 04.3 | +0.2 |
| **ANTU** | **Antumapu** | **1.54** | **39** | *e*P | Pn | 17 04 45.9 | +0.2 |
| ANTU | | | | *e*S | Sn | 17 05 05.5 | +0.9 |
| ANTU | | | | AML | AML | 17 05 11.3 | |
| | comp=E,2μm,0.4s | | | | | | |
| **PCH** | **Pirque** | **1.56** | **43** | *e*P | Pn | 17 04 46.4 | +0.2 |
| **COCH** | **Cobquecura** | **1.58** | **210** | *e*P | Pn | 17 04 46.4 | +0.1 |
| **SAN** | **Santiago** | **1.62** | **36** | *e*P | Pn | 17 04 47.1 | +0.3 |
| **CLCH** | **Cerro Calan** | **1.72** | **38** | *e*P | Pn | 17 04 48.6 | +0.2 |
| CLCH | | | | *e*S | Sn | 17 05 10.1 | +0.9 |
| CLCH | | | | AML | AML | 17 05 16.7 | |
| | comp=N,1μm,0.4s | | | | | | |
| **CCHI** | **Chillan** | **1.85** | **187** | *e*P | Pn | 17 04 50.3 | +0.4 |
| CCHI | | | | AML | AML | 17 05 23.1 | |
| | comp=E,871nm,0.2s | | | | | | |
| **PEL** | **Peldehue** | **1.87** | **30** | ⇓*e*P | Pn | 17 04 50.4 | +0.2 |
| PEL | | | | *e*S | Sn | 17 05 13.6 | +0.9 |
| PEL | | | | AML | AML | 17 05 19.0 | |
| | comp=N,2μm,0.4s | | | | | | |

*ISCJB* ***27*** *17:10:10.2±0.8,3.°54S±0.°06×99.°38E±0.°07,h10km, mb3.6/6,MS2.5/1,Error ellipse: s-maj=11.8km s-min=5.5km az=143.1*
*IDC* ***27*** *17:10:11.7±3.2,3.°51S×99.°39E,h0km,mb3.6/6,mb1 3.8/6, mb1mx3.6/40,mbtmp3.7/6,MS2.7/2,Ms1 2.8/2, ms1mx2.4/35,Error ellipse: s-maj=126.4km s-min=20.2km az=58.0*
*DJA* ***27*** *17:10:15.2±0.8,3°S±7°×107°E±°,h63km±9km,M4.3/13, mb4.5/2,mb4.5/6,mB6.4/1,mB6.4/1,MLv4.1/11,MLv4.2/13, Mw(mB)6.2/1,Mw(mB)6.2/1*
**ISC 27 17:10:12.8±1.1,3°47S±0.°07×99°42E±0.°09,h10km,n28, σ1°02/23,mb3.7/6,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.92** | **40** | P | **Pn** | **17 10 31.2** | **-0.6** |
| PPSI | | | | S | **Sb** | **17 10 43.8** | **+0.7** |
| **SISI** | **Saibi** | **2.16** | **351** | P | **Pn** | **17 10 47.5** | **-1.3** |
| SISI | | | | S | **Sn** | **17 11 13.9** | **-1.7** |
| **PDSI** | **Padang** | **2.75** | **22** | P | **Pn** | **17 10 56.1** | **-0.9** |
| **PPI** | **Padang Panjang** | **3.15** | **18** | P | **Pn** | **17 11 01.7** | **-0.8** |
| **KSI** | **Kapahiang** | **3.17** | **93** | P | **Pn** | **17 11 01.0** | **-1.9** |
| **SDSI** | **Sungai Dareh** | **3.22** | **39** | P | Pn | 17 10 55.0 | -8.5 |
| **MNAI** | **Manna** | **3.64** | **104** | P | **Pn** | **17 11 09.2** | **0.0** |
| **BKNI** | **Bangkinang** | **4.11** | **23** | P | **Pn** | **17 11 15.9** | **+0.2** |
| **MNSI** | **Mandailing Nat** | **4.24** | **2** | P | Pn | 17 11 12.3 | -5.2 |
| **RGRI** | **Rengat** | **4.25** | **43** | P | Pn | 17 11 09.8 | -7.9 |
| **MDSI** | **Maura Dua** | **4.85** | **102** | P | **Pn** | **17 11 25.8** | **-0.1** |
| MDSI | | | | S | **Sn** | **17 12 21.3** | **-0.9** |
| **LWLI** | **Liwa** | **4.88** | **109** | P | **Pn** | **17 11 25.2** | **-1.1** |
| **GSI** | **Gunungsitoli** | **5.09** | **339** | P | **Pn** | **17 11 27.8** | **-1.4** |
| | 17nm,2.2s,17nm,2.2s,0.1nm0.1nm | | | | | | |
| **PMBI** | **Palembang** | **5.37** | **84** | P | Pn | 17 11 28.8 | -4.3 |
| | 160nm,0.4s,160nm,0.4s,44μm44μm4.5nm4.5nm | | | | | | |
| **KASI** | **Kota Agung** | **5.46** | **112** | P | **Pn** | **17 11 33.6** | **-0.6** |
| | 59nm,1.0s,0.3nm0.3nm | | | | | | |
| **KLI** | **Kotabumi** | **5.60** | **104** | P | **Pn** | **17 11 35.8** | **-0.4** |
| | 55nm,0.5s,0.3nm0.3nm | | | | | | |
| **CGJI** | **Cibinong** | **6.99** | **117** | P | **Pn** | **17 11 53.3** | **-1.9** |
| **LEM** | **Lembang** | **8.82** | **113** | LR | LR | 17 16 14.7 | |
| | comp=Z,50nm,20.4s,baz=358,slow=41 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.80** | **359** | P | **P** | **17 15 05.7** | **+0.5** |
| | 4.1nm,0.9s,baz=186,slow=10.0,SNR=26 | | | | | | |
| CMAR | | | | LR | LR | 17 23 08.5 | |
| | comp=Z,17nm,19.0s,baz=172,slow=36 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.11** | **158** | T | T | 17 53 38.9 | |
| | baz=334 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.12** | **158** | T | T | 17 53 45.4 | |
| | baz=334 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.13** | **158** | T | T | 17 53 36.3 | |
| | baz=334 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.78** | **118** | P | **P** | **17 17 29.9** | **+0.3** |
| | 0.3nm,0.7s,baz=298,slow=8.7,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.88** | **124** | P | **P** | **17 17 38.9** | **+0.1** |
| | 0.2nm,0.6s,baz=287,slow=6.6,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **51.46** | **6** | P | **P** | **17 19 19.4** | **+1.0** |
| | 0.9nm,0.8s,baz=190,slow=8.7,SNR=7.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.29** | **345** | P | **P** | **17 19 25.1** | **+0.6** |
| | 0.3nm,0.3s,baz=145,slow=8.9,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.50** | **350** | P | **P** | **17 20 09.3** | **+0.2** |
| | 1.2nm,0.5s,baz=167,slow=7.1,SNR=9.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.21** | **38** | PKPbc | **PKPab** | **17 29 55.3** | **+0.2** |
| | 1.1nm,1.1s,baz=336,slow=2.0,SNR=4.2 | | | | | | |

**KRSC 27 17:10:37.7±0.7,55.°78N×161.°33E,h108km±6km,ML3.9, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ZLN** | **Zelenaya** | **0.38** | **309** | *e*P | Pn | 17 10 55.1 | +1.3 |
| ZLN | | | | *e*S | Sn | 17 11 07.6 | +1.8 |
| **CIRR** | **Tsirk** | **0.47** | **316** | *e*P | Pn | 17 10 55.4 | +1.1 |
| CIRR | | | | *e*S | Sn | 17 11 08.4 | +1.6 |
| **LGNR** | **Loginova** | **0.47** | **310** | *e*P | Pn | 17 10 55.6 | +1.1 |
| LGNR | | | | *e*S | Sn | 17 11 08.7 | +1.5 |
| **BZMR** | **Bezymyannaya** | **0.50** | **289** | *e*P | Pn | 17 10 55.4 | +0.9 |
| BZMR | | | | *e*S | Sn | 17 11 08.0 | +0.8 |
| **BZWR** | **Bezymyannyi-We** | **0.51** | **292** | *e*P | Pn | 17 10 55.2 | +0.6 |
| BZWR | | | | *e*S | Sn | 17 11 08.1 | +0.8 |
| **KIRR** | **Kirishev** | **0.58** | **288** | *e*P | Pn | 17 10 55.7 | +0.6 |
| KIRR | | | | *e*S | Sn | 17 11 08.5 | +0.3 |
| **KMNR** | **Kamenistaya** | **0.62** | **268** | *e*P | Pn | 17 10 56.2 | +0.9 |
| KMNR | | | | *e*S | Sn | 17 11 10.1 | +1.5 |
| **KLY** | **Klyuchi** | **0.66** | **325** | *e*P | Pn | 17 10 55.7 | +0.2 |
| KLY | | | | *e*S | Sn | 17 11 09.1 | +0.2 |
| **TUMR** | **Tumrok** | **0.84** | **234** | *e*P | Pn | 17 10 58.4 | +1.1 |
| TUMR | | | | *e*S | Sn | 17 11 13.8 | +1.8 |
| **KOZ** | **Kozyrevsk** | **0.87** | **289** | *e*P | Pn | 17 10 58.3 | +0.9 |
| KOZ | | | | *e*S | Sn | 17 11 13.5 | +1.2 |
| **KZV** | **Kizimen** | **0.89** | **222** | *e*P | Pn | 17 10 58.5 | +0.7 |
| KZV | | | | *e*S | Sn | 17 11 13.8 | +0.8 |
| **KBTR** | **Krutoberegovo** | **0.94** | **62** | *e*P | Pn | 17 10 59.1 | +1.0 |
| KBTR | | | | *e*S | Sn | 17 11 14.7 | +1.2 |
| **SRDR** | **Sredinnyy** | **1.05** | **301** | *e*P | Pn | 17 11 00.0 | +0.7 |
| SRDR | | | | *e*S | Sn | 17 11 16.3 | +0.6 |
| **MKZ** | **Mys Kozlova** | **1.25** | **169** | *e*P | Pn | 17 11 02.2 | +0.8 |
| MKZ | | | | *e*S | Sn | 17 11 20.9 | +1.6 |
| **ESO** | **Esso** | **1.49** | **277** | *e*P | Pn | 17 11 05.2 | +0.9 |
| ESO | | | | *e*S | Sn | 17 11 25.4 | +0.9 |
| **KII** | **Karymskiy** | **2.06** | **213** | *e*P | Pn | 17 11 13.0 | +1.6 |
| KII | | | | *e*S | Sn | 17 11 38.6 | +1.4 |
| **SPN** | **Mys Shipunski** | **2.79** | **196** | *e*P | Pn | 17 11 22.1 | +1.3 |
| SPN | | | | *e*S | Sn | 17 11 54.5 | +0.4 |
| **NLC** | **Nalytchevo** | **2.86** | **205** | *e*P | Pn | 17 11 23.7 | +2.0 |
| NLC | | | | *e*S | Sn | 17 11 58.3 | +2.7 |
| **GNL** | **Ganaly** | **2.87** | **225** | *e*P | Pn | 17 11 23.6 | +1.6 |
| **SDLR** | **Sedlovina** | **2.88** | **211** | *e*P | Pn | 17 11 24.4 | +2.2 |
| SDLR | | | | *e*S | Sn | 17 11 58.5 | +2.0 |
| **KRX** | **Arik** | **2.88** | **214** | *e*P | Pn | 17 11 25.4 | +3.2 |
| **SMAR** | **Somma** | **2.92** | **211** | *e*P | Pn | 17 11 25.1 | +2.3 |
| **AVH** | **Avacha** | **2.94** | **212** | *e*P | Pn | 17 11 25.4 | +2.5 |
| **PET** | **Petropavlovsk** | **3.17** | **211** | *e*P | Pn | 17 11 28.2 | +2.3 |
| PET | | | | *e*S | Sn | 17 12 05.3 | +2.3 |
| **RUS** | **Russkaya** | **3.74** | **207** | *e*P | Pn | 17 11 34.4 | +1.0 |
| RUS | | | | *e*S | Sn | 17 12 19.3 | +2.7 |
| **APC** | **Apacha** | **3.76** | **222** | *e*P | Pn | 17 11 35.9 | +2.2 |

**DJA 27 17:23:01.3±3.6,3°S±14°×99°E±2°,1,h31km±25km,M4.0/7, mb4.2/1,MLv3.8/7,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **1.00** | **44** | P | Pn | 17 23 18.9 | -0.3 |
| **SISI** | **Saibi** | **2.16** | **354** | P | Pn | 17 23 35.3 | +0.1 |
| **PDSI** | **Padang** | **2.80** | **24** | P | Pn | 17 23 44.0 | -0.1 |
| **PPI** | **Padang Panjang** | **3.20** | **20** | P | Pn | 17 23 49.7 | +0.2 |
| **MNAI** | **Manna** | **3.73** | **104** | P | Pn | 17 23 57.2 | +0.4 |
| **RGRI** | **Rengat** | **4.34** | **44** | P | Pn | 17 24 07.0 | +1.9 |
| **JMBI** | **JAMBI** | **4.70** | **67** | P | Pn | 17 24 11.3 | +1.2 |
| **MDSI** | **Maura Dua** | **4.95** | **102** | P | Pn | 17 24 13.5 | 0.0 |
| **LWLI** | **Liwa** | **4.96** | **108** | P | Pn | 17 24 13.4 | -0.5 |
| **KASI** | **Kota Agung** | **5.54** | **112** | P | Pn | 17 24 21.7 | 0.0 |

*ISCJB* ***27*** *17:25:38.3±1.1,17.°5S±0.°4×178.°8W±0.°2,h539km, mb3.6/6, Error ellipse: s-maj=52.5km s-min=13.9km az=155.7*
*IDC* ***27*** *17:25:38.6±2.0,17.°53S×178.°81W,h529km±25km,mb3.1/6, mb1 3.4/8,mb1mx3.1/28,mbtmp4.1/8,Error ellipse: s-maj=60.8km s-min=15.8km az=154.0*
**ISC 27 17:25:38.9±1.3,17.°6S±0.°4×178.°8W±0.°2,h539km,n10, σ0°67/9,mb3.5/6,Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **7.66** | **62** | P | **P** | **17 27 32.6** | **-0.5** |
| | 4.0nm,0.3s,baz=120,slow=15,SNR=6.3 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.61** | **250** | P | **P** | **17 28 44.3** | **-0.4** |
| | 0.8nm,0.3s,baz=2.3,slow=9.9,SNR=8.2 | | | | | | |
| **CTA** | **Charters Tower** | **33.16** | **260** | P | **P** | **17 31 31.5** | **+0.3** |
| | 2.5nm,0.8s,baz=110,slow=12,SNR=2.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.35** | **259** | P | **P** | **17 33 01.2** | **-0.4** |
| | 0.6nm,0.6s,baz=96,slow=8.0,SNR=9.7 | | | | | | |
| **ASAR** | **Alice Springs** | **44.55** | **254** | P | **P** | **17 33 03.2** | **+0.1** |
| | 5.9nm,0.6s,baz=89,slow=8.1,SNR=171 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **67.45** | **323** | P | **P** | **17 35 41.6** | **+0.5** |
| | 0.9nm,0.5s,baz=149,slow=6.7,SNR=3.5 | | | | | | |
| **ILAR** | **Eielson Array** | **85.66** | **13** | P | **P** | **17 37 19.3** | **-0.9** |
| | 0.3nm,0.4s,baz=225,slow=5.2,SNR=7.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **86.11** | **58** | P | **P** | **17 37 24.3** | **+1.0** |
| | 0.7nm,0.8s,baz=219,slow=6.7,SNR=6.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **144.32** | **315** | PKP | PKPbc | 17 44 13.9 | 0.0 |
| | 1.1nm,0.7s,baz=24,slow=3.9,SNR=6.1 | | | | | | |
| **GERES** | **GERESS Array B** | **147.22** | **345** | PKPbc | **PKPbc** | **17 44 22.0** | **+0.2** |
| | 1.4nm,0.6s,baz=35,slow=3.3,SNR=13 | | | | | | |

*IDC* ***27*** *17:28:02.9±1.9,7.°08S×151.°14E,h0km,mb3.5/4, mb1 3.8/5,mb1mx3.6/25,mbtmp3.6/5,ML1.0/1,Error ellipse: s-maj=70.1km s-min=24.2km az=124.0*
*ISCJB* ***27*** *17:28:07.4±1.5,7.°1S±0.°3×151.°0E±0.°3,h40km,mb3.5/3, Error ellipse: s-maj=53.2km s-min=12.7km az=137.2*
**ISC 27 17:28:08.8±1.8,7°1S±0°3×151°1E±0°3,h40km,n6,σ0°73/7, mb3.5/3,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.49** | **239** | Pn | **Pn** | **17 29 15.0** | **+0.7** |
| | 0.5nm,0.3s,baz=39,slow=13,SNR=4.7 | | | | | | |
| PMG | | | | Sn | **Sn** | **17 30 05.2** | **-0.2** |
| | 5.0nm,0.3s,baz=305,slow=21,SNR=9.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.64** | **230** | P | **P** | **17 32 43.9** | **-1.2** |
| | 1.2nm,0.6s,baz=56,slow=11,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **23.29** | **223** | P | **P** | **17 33 13.2** | **0.0** |
| | 0.4nm,0.5s,baz=66,slow=9.2,SNR=4.4 | | | | | | |
| **SONM** | **Songino Array** | **67.39** | **329** | P | **P** | **17 38 60.0** | **-0.2** |
| | 0.2nm,0.4s,baz=145,slow=5.3,SNR=2.5 | | | | | | |
| **ILAR** | **Eielson Array** | **84.94** | **22** | P | **P** | **17 40 39.5** | **0.0** |
| | 0.7nm,0.7s,baz=250,slow=5.3,SNR=9.5 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.29** | **284** | PKPbc | **PKPbc** | **17 47 54.7** | **+0.4** |
| | 0.6nm,0.6s,baz=71,slow=2.4,SNR=4.5 | | | | | | |

*DDA* ***27*** *17:34:07.0,36.°99N×31.°26E,h7km,Md2.8*
*ISK* ***27*** *17:34:07.1,36.°75N×31.°36E,h21km,MD2.9*
*CSEM* ***27*** *17:34:09.0±0.3,36.°82N×31.°32E,h30km,MD2.9,Error ellipse: s-maj=9.5km s-min=6.3km az=6.0*
**ISC 27 17:34:06.3±1.3,36.°87N±0.°04×31.°29E±0.°03,h9km±11km, n27,σ1°42/41,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANTB** | **Antalya** | **0.51** | **274** | *e*PG | **Pn** | **17 34 19.5** | **-0.2** |
| ANTB | | | | *e*SG | **Sn** | **17 34 28.3** | **-0.3** |
| **ANTB** | **Antalya** | **0.51** | **274** | *e*Pg | **Pn** | **17 34 19.5** | **-0.2** |
| ANTB | | | | *e*Sg | **Sn** | **17 34 28.3** | **-0.3** |
| **SUTC** | **Sutluce-Ispart** | **0.65** | **340** | *e*PG | **Pn** | **17 34 22.3** | **+0.4** |
| SUTC | | | | *e*SG | **Sn** | **17 34 34.4** | **+2.0** |
| **SUTC** | **Sutluce-Ispart** | **0.65** | **340** | *e*Pg | **Pn** | **17 34 22.3** | **+0.4** |
| SUTC | | | | *e*Sg | **Sn** | **17 34 34.4** | **+2.0** |
| **KORT** | **Korkueli** | **0.76** | **281** | *i* P | **Pn** | **17 34 24.6** | **+1.2** |
| KORT | | | | *i* S | **Sn** | **17 34 36.1** | **+1.0** |
| **KORT** | **Korkueli** | **0.76** | **281** | P | **Pn** | **17 34 24.6** | **+1.2** |
| KORT | | | | S | **Sn** | **17 34 36.1** | **+1.0** |
| **BCK** | **Bucak** | **0.81** | **317** | *e*PG | **Pn** | **17 34 25.1** | **+1.1** |
| **BCK** | **Bucak** | **0.81** | **317** | *e*Pg | **Pn** | **17 34 25.2** | **+1.1** |
| **HDMB** | **Hadim** | **0.97** | **84** | *e*PG | **Pb** | **17 34 25.4** | **+0.1** |
| HDMB | | | | *e*SG | **Sn** | **17 34 39.0** | **-1.3** |
| **HDMB** | **Hadim** | **0.97** | **84** | *e*Pg | **Pb** | **17 34 25.4** | **+0.1** |
| HDMB | | | | *e*Sg | **Sn** | **17 34 39.0** | **-1.3** |
| **GAZI** | **Gazipasa** | **1.04** | **127** | *i* P | **Pn** | **17 34 28.8** | **+1.7** |
| **GAZI** | **Gazipasa** | **1.04** | **127** | P | **Pn** | **17 34 28.8** | **+1.7** |
| GAZI | | | | S | **Sn** | **17 34 44.9** | **+3.0** |
| **ELL** | **Elmali** | **1.11** | **264** | *e*PN | **Pn** | **17 34 28.7** | **+0.5** |
| **ELL** | **Elmali** | **1.11** | **264** | *e*Pn | **Pn** | **17 34 28.7** | **+0.5** |
| **BAGO** | **Egridir - ISPA** | **1.19** | **341** | P | **Pb** | **17 34 28.2** | **-0.9** |
| BAGO | | | | S | **Sg** | **17 34 41.9** | **-2.8** |
| **KONT** | **Konya--Tatoy** | **1.38** | **38** | *e*PN | **Pg** | **17 34 32.8** | **+0.1** |
| **KONT** | **Konya--Tatoy** | **1.38** | **38** | *e*Pn | **Pg** | **17 34 32.8** | **+0.1** |
| **GOLH** | **Golhisar** | **1.43** | **286** | *i* P | **Pn** | **17 34 32.4** | **-0.1** |
| GOLH | | | | *i* S | **Sg** | **17 34 53.0** | **+0.8** |
| **GOLH** | **Golhisar** | **1.43** | **286** | P | **Pn** | **17 34 32.4** | **-0.1** |
| GOLH | | | | S | **Sg** | **17 34 53.0** | **+0.8** |
| **AKAS** | **Kas** | **1.49** | **246** | *i* P | **Pg** | **17 34 35.8** | **+0.9** |
| AKAS | | | | *i* S | **Sn** | **17 34 49.9** | **-3.2** |
| **AKAS** | **Kas** | **1.49** | **246** | P | **Pg** | **17 34 35.8** | **+0.9** |
| AKAS | | | | S | **Sn** | **17 34 49.9** | **-3.2** |
| **KIZT** | **Kizilcal** | **2.07** | **13** | *e*PN | **Pb** | **17 34 43.1** | **-0.9** |
| **KIZT** | **Kizilcal** | **2.07** | **13** | *e*Pn | **Pb** | **17 34 43.1** | **-0.9** |
| **DALY** | **Dalyan (Mu¨la** | **2.11** | **270** | *e*PN | **Pn** | **17 34 42.9** | **+1.1** |
| **DALY** | **Dalyan (Mu¨la** | **2.11** | **270** | *e*Pn | **Pn** | **17 34 42.9** | **+1.1** |
| **LEF** | **Lefka** | **2.17** | **143** | *e*PN | **Pn** | **17 34 41.3** | **-1.4** |
| **LEF** | **Lefka** | **2.17** | **143** | *e*Pn | **Pn** | **17 34 41.3** | **-1.4** |

*IDC* ***27*** *17:51:41.0±1.2,29.°93S×179.°17W,h320km±12km,mb3.1/4, mb1 3.4/5,mb1mx3.1/27,mbtmp3.9/5,Error ellipse: s-maj=23.9km s-min=23.7km az=25.0*
**ISC 27 17:51:41.0±0.7,30°23S±0.°07×179°3W±0.°1,h300km,n38, σ1°87/45,mb3.3/4,Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RAO** | **Raoul Island** | **1.53** | **51** | P | **Pn** | **17 52 25.2** | **+0.8** |
| | 185nm,0.3s,baz=96,slow=22,SNR=7.6 | | | | | | |
| RAO | | | | S | **S** | **17 52 57.2** | **-1.6** |
| | 152nm,0.3s,baz=90,slow=20,SNR=7.5 | | | | | | |
| **MXZ** | **Matakaoa Point** | **7.59** | **195** | PN | Pn | 17 53 34.4 | +5.0 |
| MXZ | | | | SN | **S** | **17 54 58.7** | **+1.4** |
| **HAZ** | **Te Kaha** | **7.90** | **197** | PN | Pn | 17 53 39.0 | +5.8 |
| HAZ | | | | SN | **S** | **17 55 06.5** | **+2.4** |
| **PUZ** | **Puketiti** | **8.09** | **194** | PN | Pn | 17 53 40.7 | +5.1 |
| PUZ | | | | SN | **S** | **17 55 09.5** | **+1.1** |
| **MWZ** | **Matawai** | **8.51** | **197** | PN | **P** | **17 53 46.0** | **-0.1** |
| MWZ | | | | SN | **S** | **17 55 19.8** | **+1.8** |
| **URZ** | **Urewera** | **8.55** | **200** | PN | **Pn** | **17 53 43.6** | **+2.4** |
| | 4.8nm,0.3s,baz=272,slow=4.9,SNR=32 | | | | | | |
| URZ | | | | S | **S** | **17 55 21.1** | **+2.2** |
| | 8.6nm,0.3s,baz=294,slow=20,SNR=17 | | | | | | |
| **URZ** | **Urewera** | **8.55** | **200** | PN | **Pn** | **17 53 44.0** | **+2.8** |
| URZ | | | | SN | **S** | **17 55 20.2** | **+1.3** |
| **KNZ** | **Kokohu** | **9.13** | **195** | PN | **P** | **17 53 51.3** | **-1.4** |
| **MRHZ** | **Matea Rd** | **9.29** | **201** | PN | **P** | **17 53 53.3** | **-1.4** |
| **ARHZ** | **Aropaoanui** | **9.52** | **198** | PN | **P** | **17 53 56.2** | **-1.0** |
| **BKZ** | **Black Stump Fm** | **9.57** | **200** | PN | **Pn** | **17 53 55.8** | **+2.0** |
| **MCHZ** | **McNeill Hill** | **9.77** | **199** | PN | **P** | **17 53 59.6** | **-0.4** |
| **KRHZ** | **Kereru** | **10.05** | **200** | PN | **Pn** | **17 54 01.4** | **+1.8** |
| **KAHZ** | **Kahuranaki** | **10.05** | **197** | PN | **P** | **17 54 02.4** | **-0.8** |
| **PXZ** | **Pawanui** | **10.28** | **197** | PN | **Pn** | **17 54 03.8** | **+1.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **PAU** | **Pauzhetka** | **5.12** | **27** | *e*P | **Pn** | **18 05 57.8** | **+1.9** |
| PAU | | | | AMB | AMB | 18 06 00.2 | |
| | comp=E,200nm,1.0s | | | | | | |
| PAU | | | | *e*S | **Sn** | **18 06 54.9** | **+1.3** |
| PAU | | | | A | A | 18 06 55.3 | |
| | comp=E,400nm,1.0s | | | | | | |
| **SHO** | **Shikotan** | **5.40** | **237** | *i* PN | **Pn** | **18 05 58.6** | **-1.2** |
| SHO | | | | *i* S | **Sn** | **18 06 59.3** | **-1.3** |
| SHO | | | | pmax | pmax | | |
| | comp=N,31nm,0.7s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,11nm,0.7s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,43nm,0.7s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=N,49nm,0.5s | | | | | | |
| SHO | | | | smax | smax | | |
| | comp=E,100nm,0.5s | | | | | | |
| **SHO** | **Shikotan** | **5.40** | **237** | *i* P | **Pn** | **18 05 59.6** | **-0.2** |
| SHO | | | | AMB | AMB | 18 06 06.9 | |
| | comp=E,43nm,0.7s | | | | | | |
| SHO | | | | *i* S | **Sn** | **18 06 59.3** | **-1.3** |
| SHO | | | | A | A | 18 07 12.2 | |
| | comp=E,100nm,0.5s | | | | | | |
| SHO | | | | A | A | 18 07 12.2 | |
| | comp=E,49nm,0.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.88** | **243** | *d* PN | **Pn** | **18 06 07.1** | **+0.7** |
| YUK | | | | *i* S | **Sn** | **18 07 14.6** | **+2.2** |
| YUK | | | | pmax | pmax | | |
| | comp=N,11nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,8.0nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,36nm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,27nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,56nm,0.6s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.88** | **243** | *e*P | **Pn** | **18 06 07.3** | **+0.9** |
| YUK | | | | AMB | AMB | 18 06 07.8 | |
| | comp=E,11nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 18 06 07.8 | |
| | comp=E,80nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 18 06 07.8 | |
| | comp=E,36nm,0.4s | | | | | | |
| YUK | | | | *i* S | **Sn** | **18 07 13.6** | **+1.2** |
| YUK | | | | A | A | 18 07 35.0 | |
| | comp=E,27nm,0.3s | | | | | | |
| YUK | | | | A | A | 18 07 35.0 | |
| | comp=E,56nm,0.3s | | | | | | |
| **PETK** | **Petropavlovsk-** | **6.82** | **24** | P | Pn | 18 06 24.1 | +4.9 |
| | comp=E,0.6nm,0.3s,baz=183,slow=12,SNR=5.9 | | | | | | |
| **PETK** | **Petropavlovsk-** | **6.82** | **24** | PN | Pn | 18 06 24.1 | +4.9 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **7.09** | **274** | *e*PN | **Pn** | **18 06 24.3** | **+1.3** |
| **YSS** | **Yuzh-Sakhalins** | **7.09** | **274** | *e*P | **Pn** | **18 06 25.0** | **+2.0** |
| YSS | | | | AMB | AMB | 18 06 34.2 | |
| | comp=Z,20nm,1.0s | | | | | | |
| **JMP** | **Maruseppu** | **7.47** | **250** | P | **Pn** | **18 06 30.3** | **+2.1** |
| **JAR** | **Ashorobuto** | **7.56** | **244** | P | **Pn** | **18 06 29.9** | **+0.5** |
| JAR | | | | *e*S | **Sn** | **18 07 50.2** | **-3.4** |
| **JOB** | **Onbets** | **7.74** | **242** | P | **Pn** | **18 06 31.1** | **-0.7** |
| **JKA** | **Kamikawa-asahi** | **7.91** | **253** | *e*P | **Pn** | **18 06 37.1** | **+2.9** |
| **ASAJ** | **Asahikawa** | **7.92** | **253** | P | **Pn** | **18 06 37.1** | **+2.8** |
| | comp=Z,1.2nm,0.3s,baz=73,slow=12,SNR=9.3 | | | | | | |
| **ASAJ** | **Asahikawa** | **7.92** | **253** | PN | **Pn** | **18 06 37.1** | **+2.8** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **TYV** | **Tymovskoe** | **7.92** | **303** | *e*PN | **Pn** | **18 06 36.0** | **+1.7** |
| TYV | | | | pmax | pmax | | |
| | comp=Z,31nm,1.0s | | | | | | |
| **TYV** | **Tymovskoe** | **7.92** | **303** | *e*P | **Pn** | **18 06 36.0** | **+1.7** |
| TYV | | | | AMB | AMB | 18 06 37.8 | |
| | comp=Z,31nm,1.0s | | | | | | |
| **JKK2** | **Kamakawa 2** | **7.92** | **251** | P | **Pn** | **18 06 36.2** | **+1.8** |
| **MYR** | **Moyori** | **8.42** | **240** | *e*P | **Pn** | **18 06 39.8** | **-1.4** |
| **ERM** | **Erimo** | **8.67** | **239** | *i* PN | **Pn** | **18 06 46.4** | **+1.9** |
| **ERM** | **Erimo** | **8.67** | **239** | *i* P | **Pn** | **18 06 46.5** | **+1.9** |
| **JNB** | **Noboribetsu** | **9.70** | **247** | P | **Pn** | **18 06 57.8** | **-0.9** |
| **JKB** | **Kayabe** | **10.02** | **244** | P | **Pn** | **18 07 00.4** | **-2.6** |
| JKB | | | | *e*S | Sn | 18 08 44.6 | -9.3 |
| **JYM2** | **Yakumo 2** | **10.31** | **247** | P | **Pn** | **18 07 05.6** | **-1.3** |
| **JANG** | **Nango** | **10.67** | **236** | P | Pn | 18 07 07.7 | -4.3 |
| **HABR** | **Khabarovsk** | **12.27** | **284** | *e*PN | **Pn** | **18 07 31.7** | **-1.9** |
| HABR | | | | pmax | pmax | | |
| | comp=Z,19nm,1.6s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,44nm,17.0s | | | | | | |
| **EKMR** | **Ekimchan** | **14.31** | **303** | *e*P | **Pn** | **18 08 02.5** | **+1.2** |
| EKMR | | | | AMB | AMB | 18 08 09.0 | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **15.05** | **267** | P | **Pn** | **18 08 11.5** | **+0.6** |
| | comp=Z,0.2nm,0.3s,baz=73,slow=13,SNR=3.6 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.21** | **232** | P | **P** | **18 08 16.9** | **-0.2** |
| | comp=Z,0.5nm,0.3s,baz=40,slow=9.3,SNR=5.4 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.21** | **232** | P | **P** | **18 08 16.9** | **-0.2** |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **SEY** | **Seymchan** | **16.01** | **359** | P | **P** | **18 08 27.1** | **+1.4** |
| | comp=Z,0.2nm,0.3s,baz=178,slow=13,SNR=6.4 | | | | | | |
| **KROS** | **Kirovskiy** | **18.10** | **304** | *e*P | **P** | **18 08 48.3** | **-0.5** |
| KROS | | | | AMB | AMB | 18 08 49.6 | |
| | comp=Z,4.0nm,0.7s | | | | | | |
| **KSRS** | **Korea Array** | **20.86** | **252** | P | **P** | **18 09 19.3** | **+0.3** |
| | comp=Z,1.5nm,0.6s,baz=55,slow=10,SNR=7.9 | | | | | | |
| **KSRS** | **Korea Array** | **20.86** | **252** | *e*P | Pn | 18 09 21.8 | -0.3 |
| KSRS | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **KSRS** | **Korea Array** | **20.86** | **252** | *e*P | Pn | 18 09 21.8 | -0.3 |
| **BILL** | **Bilibino** | **22.18** | **13** | *e*P | **P** | **18 09 35.2** | **+2.2** |
| BILL | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.0s | | | | | | |
| **BILL** | **Bilibino** | **22.18** | **13** | *e*P | **P** | **18 09 35.2** | **+2.2** |
| **H11N2** | **WAKE ISLAND Hy** | **29.41** | **153** | T | T | 18 42 19.1 | |
| | baz=340,slow=76,SNR=453 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.42** | **153** | T | T | 18 42 20.5 | |
| | baz=340,slow=76,SNR=237 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.42** | **153** | T | T | 18 42 20.3 | |
| | baz=340,slow=76,SNR=229 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.50** | **154** | T | T | 18 43 51.3 | |
| | baz=341,slow=76,SNR=292 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.50** | **154** | T | T | 18 43 42.9 | |
| | baz=341,slow=76,SNR=251 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.51** | **154** | T | T | 18 44 04.4 | |
| | baz=341,slow=76,SNR=263 | | | | | | |
| **SONM** | **Songino Array** | **31.27** | **289** | LR | LR | 18 23 08.4 | |
| | comp=Z,48nm,18.6s,baz=14,slow=36 | | | | | | |
| **ILAR** | **Eielson Array** | **36.38** | **39** | P | **P** | **18 11 41.5** | **+1.2** |
| | comp=Z,0.4nm,0.5s,baz=264,slow=8.8,SNR=7.3 | | | | | | |
| **ILAR** | **Eielson Array** | **36.38** | **39** | *e*P | **P** | **18 11 42.2** | **+2.0** |
| **ILAR** | **Eielson Array** | **36.38** | **39** | *e*P | **P** | **18 11 42.3** | **+2.0** |
| **INK** | **Inuvik** | **41.47** | **33** | P | **P** | **18 12 24.8** | **+2.1** |
| | comp=Z,1.8nm,0.7s,baz=293,slow=7.7,SNR=4.2 | | | | | | |
| **INK** | **Inuvik** | **41.47** | **33** | P | **P** | **18 12 24.8** | **+2.1** |
| INK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.49** | **306** | PcP | **PcP** | **18 14 22.1** | **-0.9** |
| | comp=Z,0.8nm,0.6s,baz=74,slow=6.2,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **46.85** | **297** | P | **P** | **18 13 03.5** | **-2.6** |
| | comp=Z,0.2nm,0.5s,baz=69,slow=7.1,SNR=3.1 | | | | | | |
| MKAR | | | | PcP | **PcP** | **18 14 37.7** | **-0.5** |
| | comp=Z,0.4nm,0.5s,baz=67,slow=1.8,SNR=5.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.42** | **256** | P | **P** | **18 13 49.0** | **+0.2** |
| | comp=Z,0.4nm,0.8s,baz=34,slow=6.6,SNR=3.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **52.42** | **256** | P | **P** | **18 13 49.0** | **+0.2** |
| **CMAR** | **Chiang Mai Arr** | **52.42** | **256** | *e*P | **P** | **18 13 49.0** | **+0.2** |
| **FINES** | **FINESS Array B** | **63.85** | **335** | P | **P** | **18 15 06.5** | **-1.5** |
| | comp=Z,0.9nm,0.3s,baz=33,slow=5.3,SNR=13 | | | | | | |
| **FINES** | **FINESS Array B** | **63.85** | **335** | *e*P | **P** | **18 15 06.9** | **-1.1** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **FINES** | **FINESS Array B** | **63.85** | **335** | *e*P | **P** | **18 15 06.9** | **-1.1** |
| **NOA** | **NORSAR Array B** | **68.03** | **341** | P | **P** | **18 15 32.8** | **-2.1** |
| | comp=Z,0.7nm,0.7s,baz=36,slow=5.2,SNR=4.5 | | | | | | |
| **NOA** | **NORSAR Array B** | **68.03** | **341** | *e*P | **P** | **18 15 33.9** | **-1.0** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.7s | | | | | | |
| **NOA** | **NORSAR Array B** | **68.03** | **341** | *e*P | **P** | **18 15 33.9** | **-1.0** |
| **WRA** | **Warramunga Arr** | **68.71** | **199** | P | **P** | **18 15 39.7** | **+0.1** |
| | comp=Z,0.3nm,0.9s,baz=10,slow=6.6,SNR=3.0 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.37** | **326** | P | **P** | **18 15 53.9** | **-1.7** |
| | comp=Z,0.6nm,0.3s,baz=36,slow=6.4,SNR=4.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **71.37** | **326** | P | **P** | **18 15 53.9** | **-1.7** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **72.41** | **198** | P | **P** | **18 16 03.2** | **+1.2** |
| | comp=Z,0.4nm,0.8s,baz=15,slow=6.7,SNR=5.5 | | | | | | |
| **ASAR** | **Alice Springs** | **72.41** | **198** | *e*P | **P** | **18 16 03.8** | **+1.8** |
| **TXAR** | **Lajitas Array** | **77.38** | **61** | P | **P** | **18 16 33.0** | **+2.1** |
| | comp=Z,2.1nm,0.6s,baz=305,slow=4.1,SNR=12 | | | | | | |
| **TXAR** | **Lajitas Array** | **77.38** | **61** | P | **P** | **18 16 33.1** | **+2.1** |
| TXAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **114.91** | **329** | PKP | PKPdf | 18 23 15.6 | -1.1 |
| | comp=Z,0.1nm,0.3s,baz=31,slow=2.5,SNR=3.9 | | | | | | |

**IDC 27 18:23:26.5±6.7, 5.80°S×151.51°E, h66km±52km, mb3.6/4, mb1 3.8/5, mb1mx3.4/33, mbtmp3.9/5, ML1.4/1, MS2.4/1, Ms1 2.4/1, ms1mx2.2/25, Error ellipse: s-maj=79.1km s-min=33.6km az=119.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.61** | **230** | P | Pn | 18 24 48.6 | +1.2 |
| | 0.8nm,0.3s,baz=20,slow=15,SNR=3.6 | | | | | | |
| PMG | | | | S | Sn | 18 25 50.3 | -0.1 |
| | 3.0nm,0.3s,baz=13,slow=10,SNR=4.0 | | | | | | |
| PMG | | | | LR | LR | 18 26 48.2 | |
| | comp=Z,38nm,20.1s,baz=66,slow=36 | | | | | | |
| **WRA** | **Warramunga Arr** | **21.82** | **228** | P | P | 18 28 13.1 | -0.4 |
| | 4.6nm,0.6s,baz=53,slow=9.8,SNR=49 | | | | | | |
| WRA | | | | PcP | PcP | 18 32 11.4 | 0.0 |
| | 0.2nm,0.5s,baz=44,slow=2.1,SNR=3.8 | | | | | | |
| **ASAR** | **Alice Springs** | **24.55** | **222** | P | P | 18 28 40.6 | +0.4 |
| | 2.3nm,0.6s,baz=57,slow=8.7,SNR=41 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.27** | **327** | P | P | 18 35 35.6 | +0.3 |
| | 0.5nm,0.6s,baz=116,slow=6.6,SNR=2.2 | | | | | | |
| **ILAR** | **Eielson Array** | **83.56** | **22** | P | P | 18 35 46.3 | -0.8 |
| | 0.5nm,1.0s,baz=231,slow=5.7,SNR=3.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.37** | **286** | PKPbc | PKPbc | 18 43 08.5 | -0.5 |
| | 1.0nm,0.5s,baz=89,slow=2.0,SNR=14 | | | | | | |

*NAO **27** 18:23:58.6±1.3, 67.08°N×21.25°E, ML2.3*
*ISCJB **27** 18:23:58.1±0.6, 67.07°N±0.03°×21.2°E±0.1, h0km, Error ellipse: s-maj=6.7km s-min=3.6km az=174.8*
*HEL **27** 18:23:58.9±0.2, 67.07°N×20.99°E, h0km, ML2.2, Explosion*
*IDC **27** 18:23:59.6±1.2, 67.10°N×21.16°E, h0km, mb1 3.0/3, mb1mx2.9/35, mbtmp2.9/3, ML2.3/3, Error ellipse: s-maj=22.8km s-min=9.7km az=103.0*
*CSEM **27** 18:23:59.1±0.2, 67.06°N×21.23°E, h2km, ML2.2, Error ellipse: s-maj=4.7km s-min=3.2km az=87.0, Mining explosion.*
*BER **27** 18:24:01.2±4.0, 67.10°N×21.08°E, h0km, ML1.7, ML2.3(NAO), Suspected explosion*

**ISC 27 18:23:58.8±0.9, 67.06N±0.02×21.17E±0.04, h0km, n45, σ0s88/63, Sweden**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ERTU** | **Ertsjaerv** | **0.65** | **141** | *e*P | **Pg** | **18 24 11.4** | **+0.2** |
| ERTU | | | | *e*S | **Sg** | **18 24 21.0** | **+1.4** |
| **ERTU** | **Ertsjaerv** | **0.65** | **141** | P | **Pg** | **18 24 11.3** | **+0.2** |
| ERTU | | | | S | **Sg** | **18 24 20.9** | **+1.4** |
| **LANU** | **Lannavaara** | **1.04** | **17** | *e*P | **Pg** | **18 24 17.7** | **-1.0** |
| **LANU** | **Lannavaara** | **1.04** | **17** | P | **Pg** | **18 24 17.7** | **-1.0** |
| **KALU** | **Kalix** | **1.49** | **143** | *e*P | **Pn** | **18 24 26.3** | **-0.4** |
| **KALU** | **Kalix** | **1.49** | **143** | P | **Pn** | **18 24 26.3** | **-0.4** |
| **HEF** | **Hetta** | **1.65** | **34** | *e*P | **Pn** | **18 24 28.9** | **-0.2** |
| HEF | | | | *e*SN | **Sg** | **18 24 52.4** | **+0.6** |
| **HEF** | **Hetta** | **1.65** | **34** | P | **Pn** | **18 24 28.8** | **-0.2** |
| HEF | | | | Sn | **Sg** | **18 24 52.4** | **+0.6** |
| **KIF** | **Kilpisjarvi** | **1.96** | **356** | Pn | **Pn** | **18 24 33.4** | **+0.2** |
| KIF | | | | Lg | Lg | 18 25 01.9 | |
| **KIF** | **Kilpisjarvi** | **1.96** | **356** | Pn | **Pn** | **18 24 33.4** | **+0.2** |
| KIF | | | | Lg | Lg | 18 25 01.9 | |
| **KIF** | **Kilpisjarvi** | **1.96** | **356** | *e*P | **Pn** | **18 24 34.0** | **+0.8** |
| KIF | | | | *e*SG | **Sg** | **18 25 01.5** | **-0.1** |
| KIF | | | | MSG | | 18 25 05.3 | |
| | comp=Z,22nm,0.2s | | | | | | |
| **KIF** | **Kilpisjarvi** | **1.96** | **356** | Pn | **Pn** | **18 24 33.3** | **+0.2** |
| | SNR=50 | | | | | | |
| **KIF** | **Kilpisjarvi** | **1.96** | **356** | P | **Pn** | **18 24 33.9** | **+0.8** |
| KIF | | | | Sg | **Sg** | **18 25 01.4** | **-0.1** |
| KIF | | | | Lg | Lg | 18 25 01.9 | |
| | SNR=90 | | | | | | |
| **RNF** | **Rovaniemi** | **1.97** | **101** | *e*P | **Pn** | **18 24 34.2** | **+0.8** |
| **RNF** | **Rovaniemi** | **1.97** | **101** | P | **Pn** | **18 24 34.1** | **+0.8** |
| **KTK1** | **Kautokeino** | **2.11** | **21** | *e*P | **Pn** | **18 24 36.1** | **+0.8** |
| KTK1 | | | | *e*Sg | **Sg** | **18 25 06.0** | **-0.4** |
| KTK1 | | | | IAML | | 18 25 11.1 | |
| | comp=Z,9.1nm,0.2s | | | | | | |
| **KTK1** | **Kautokeino** | **2.11** | **21** | *e*P | **Pn** | **18 24 36.1** | **+0.8** |
| | SNR=50 | | | | | | |
| KTK1 | | | | *e*Sg | **Sg** | **18 25 06.0** | **-0.4** |
| | SNR=90 | | | | | | |
| **SGF** | **Sodankyl** | **2.12** | **77** | *e*PG | **Pb** | **18 24 37.9** | **0.0** |
| **SGF** | **Sodankyl** | **2.12** | **77** | Pg | **Pb** | **18 24 37.9** | **0.0** |
| **STEI** | **Steigen** | **2.44** | **294** | *e*P | **Pn** | **18 24 41.3** | **+1.5** |
| **STEI** | **Steigen** | **2.44** | **294** | *e*P | **Pn** | **18 24 41.3** | **+1.5** |
| | SNR=50 | | | | | | |
| **OUL** | **Oulu** | **2.77** | **134** | *e*PB | **Pb** | **18 24 47.2** | **-1.8** |
| **ARA0** | **ARCESS Array S** | **2.96** | **31** | Pn | **Pn** | **18 24 47.0** | **0.0** |
| | baz=219,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **18 25 23.6** | **+0.4** |
| | baz=209,slow=18 | | | | | | |
| ARA0 | | | | Lg | Lg | 18 25 29.8 | |
| | baz=216,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.96** | **31** | Pn | **Pn** | **18 24 47.0** | **0.0** |
| | baz=219,slow=14 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **18 25 23.6** | **+0.4** |
| | baz=209,slow=18 | | | | | | |
| ARA0 | | | | Lg | Lg | 18 25 29.8 | |
| | baz=216,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **2.96** | **31** | Pn | **Pn** | **18 24 47.0** | **0.0** |
| | baz=219,slow=14,SNR=50 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **18 25 23.6** | **+0.4** |
| | baz=209,slow=17,SNR=50 | | | | | | |
| ARA0 | | | | Lg | Lg | 18 25 29.8 | |
| **ARCES** | **ARCESS Array B** | **2.96** | **31** | Pn | **Pn** | **18 24 47.4** | **+0.4** |
| | comp=Z,0.4nm,0.3s,baz=216,slow=13,SNR=24 | | | | | | |
| ARCES | | | | Sn | **Sn** | **18 25 24.6** | **+1.4** |
| | comp=Z,0.9nm,0.3s,baz=214,slow=21,SNR=8.8 | | | | | | |
| **ARE0** | **ARCESS Array S** | **2.96** | **31** | *e*P | **Pn** | **18 24 46.6** | **-0.3** |
| ARE0 | | | | IAML | | 18 25 35.9 | |
| | comp=Z,6.9nm,0.3s | | | | | | |
| **ARE0** | **ARCESS Array S** | **2.96** | **31** | *e*P | **Pn** | **18 24 47.0** | **0.0** |
| **ARE0** | **ARCESS Array S** | **2.96** | **31** | P | **Pn** | **18 24 47.0** | **0.0** |
| **UMAU** | **Umeaa** | **3.20** | **184** | *e*P | **Pn** | **18 24 50.3** | **+0.1** |
| **UMAU** | **Umeaa** | **3.20** | **184** | P | **Pn** | **18 24 50.3** | **+0.1** |
| **VRF** | **Varrio** | **3.33** | **74** | *e*SG | **Sg** | **18 25 44.8** | **-0.8** |
| VRF | | | | MSG | | 18 25 48.5 | |
| | comp=Z,5.1nm,0.1s | | | | | | |
| **VRF** | **Varrio** | **3.33** | **74** | Sg | **Sg** | **18 25 44.8** | **-0.8** |
| **VAF** | **Ylistaro** | **4.09** | **170** | MSG | | 18 26 13.5 | |
| | comp=Z,2.6nm,0.2s | | | | | | |
| **APA0** | **Apatity Array** | **4.61** | **78** | Pn | **Pn** | **18 25 08.9** | **-0.6** |
| APA0 | | | | Sn | **Sn** | **18 26 05.4** | **+1.7** |
| | baz=290,slow=18 | | | | | | |
| APA0 | | | | Lg | Lg | 18 26 22.1 | |
| | baz=272,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **4.61** | **78** | Pn | **Pn** | **18 25 08.9** | **-0.6** |
| APA0 | | | | Sn | **Sn** | **18 26 05.4** | **+1.7** |
| | baz=290,slow=18 | | | | | | |
| APA0 | | | | Lg | Lg | 18 26 22.1 | |
| | baz=272,slow=28 | | | | | | |
| **APA0** | **Apatity Array** | **4.61** | **78** | Pn | **Pn** | **18 25 08.9** | **-0.6** |
| | SNR=50 | | | | | | |
| APA0 | | | | Sn | **Sn** | **18 26 05.4** | **+1.7** |
| | baz=290,slow=18,SNR=50 | | | | | | |
| APA0 | | | | Lg | Lg | 18 26 22.1 | |
| | SNR=6.5 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.03** | **157** | Pn | **Pn** | **18 25 29.8** | **+0.7** |
| | baz=345,slow=12 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **18 26 37.8** | **-0.9** |
| | baz=335,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.03** | **157** | Pn | **Pn** | **18 25 29.8** | **+0.7** |
| | baz=345,slow=12 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **18 26 37.8** | **-0.9** |
| | baz=335,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **6.03** | **157** | Pn | **Pn** | **18 25 29.8** | **+0.7** |
| | baz=345,slow=12,SNR=50 | | | | | | |
| FIA0 | | | | Sn | **Sn** | **18 26 37.8** | **-0.9** |
| | baz=335,slow=23,SNR=50 | | | | | | |
| **FINES** | **FINESS Array B** | **6.03** | **157** | Pn | **Pn** | **18 25 30.3** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=343,slow=11,SNR=8.1 | | | | | | |
| FINES | | | | Sn | **Sn** | **18 26 40.8** | **+2.1** |
| | comp=Z,0.2nm,0.3s,baz=344,slow=23,SNR=5.7 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NB2** | **NORSAR Subarra** | **7.45** | **220** | Pn | **Pn** | **18 25 47.5** | **-1.1** |
| | baz=21,slow=14 | | | | | | |
| **NB2** | **NORSAR Subarra** | **7.45** | **220** | Pn | **Pn** | **18 25 47.5** | **-1.1** |
| | baz=21,slow=14 | | | | | | |
| **NB2** | **NORSAR Subarra** | **7.45** | **220** | Pn | **Pn** | **18 25 47.5** | **-1.1** |
| | baz=21,slow=13,SNR=50 | | | | | | |
| **NOA** | **NORSAR Array B** | **7.45** | **220** | Pn | **Pn** | **18 25 48.6** | **0.0** |
| | comp=Z,0.1nm,0.3s,baz=91,slow=17,SNR=3.4 | | | | | | |

**IDC 27 18:27:15.9±3.1, 9.27S×148.68E, h0km, mb3.0/1, mb1 3.4/2, mb1mx3.2/31, mbtmp3.1/2, ML2.6/1, Error ellipse: s-maj=64.4km s-min=37.9km az=175.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **1.50** | **265** | Pn | Pn | 18 27 44.3 | +0.1 |
| | 16nm,0.3s,baz=52,slow=9.9,SNR=40 | | | | | | |
| PMG | | | | Sn | Sn | 18 28 05.5 | +0.9 |
| | 53nm,0.3s,baz=276,slow=16,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.45** | **231** | P | Pn | 18 31 20.0 | -1.0 |
| | 0.0nm,0.3s,baz=52,slow=13,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **20.11** | **223** | P | P | 18 31 52.1 | +0.6 |
| | 0.5nm,0.6s,baz=59,slow=11,SNR=8.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.40** | **280** | PKPbc | PKPbc | 18 47 02.0 | -0.9 |
| | 0.2nm,0.5s,baz=85,slow=1.6,SNR=2.6 | | | | | | |

*IDC **27** 18:31:29.7±1.5, 3.47S×99.33E, h0km, mb3.7/7, mb1 3.8/7, mb1mx3.6/33, mbtmp3.7/7, MS3.3/1, Ms1 3.3/1, ms1mx2.3/46, Error ellipse: s-maj=59.5km s-min=19.6km az=53.0*
*ISCJB **27** 18:31:33.1±1.4, 3.4S±0.2×99.4E±0.3, h33km, mb3.7/7, MS3.3/1, Error ellipse: s-maj=53.9km s-min=16.8km az=144.8*

**ISC 27 18:31:35.1±1.6, 3.4S±0.3×99.4E±0.4, h35km, n12, σ0s47/8, mb3.7/7, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.74** | **359** | P | **P** | **18 36 23.2** | **-0.5** |
| | 1.9nm,0.7s,baz=187,slow=10,SNR=11 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.16** | **158** | T | T | 19 15 01.0 | |
| | baz=336,slow=76 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.17** | **158** | T | T | 19 15 07.2 | |
| | baz=336,slow=76 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.17** | **158** | T | T | 19 14 59.4 | |
| | baz=336,slow=76 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.80** | **119** | P | **P** | **18 38 48.3** | **-0.3** |
| | 0.5nm,0.7s,baz=298,slow=8.9,SNR=3.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.91** | **124** | P | **P** | **18 38 58.1** | **+0.2** |
| | 0.4nm,0.8s,baz=302,slow=8.2,SNR=3.0 | | | | | | |
| **SONM** | **Songino Array** | **51.41** | **6** | P | **P** | **18 40 37.3** | **+0.6** |
| | 0.7nm,0.7s,baz=187,slow=5.7,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.24** | **345** | P | **P** | **18 40 43.2** | **+0.4** |
| | 1.1nm,0.7s,baz=152,slow=8.4,SNR=7.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.67** | **28** | LR | LR | 19 06 07.6 | |
| | comp=Z,26nm,18.9s,baz=106,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.45** | **350** | P | **P** | **18 41 27.0** | **-0.4** |
| | 2.2nm,0.7s,baz=186,slow=6.8,SNR=8.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **73.85** | **313** | P | **P** | **18 43 06.6** | **-0.2** |
| | 0.5nm,0.6s,baz=131,slow=7.9,SNR=3.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.17** | **38** | PKPbc | **PKPbc** | **18 51 12.5** | **-0.1** |
| | 0.4nm,0.2s,baz=284,slow=3.6,SNR=4.5 | | | | | | |

*ISCJB **27** 18:45:56.7±0.3, 60.57S±0.05×24.4W±0.1, h10km, mb5.2/32, MS4.8/50, Error ellipse: s-maj=7.9km s-min=6.8km az=33.6*
*IDC **27** 18:45:56.8±0.4, 60.46S×24.51W, h0km, mb5.0/15, mb1 5.0/15, mb1mx4.9/19, mbtmp5.0/15, MS4.6/19, Ms1 4.6/19, ms1mx4.5/23, Error ellipse: s-maj=17.3km s-min=14.5km az=56.0*
*MOS **27** 18:46:01.1±1.5, 60.45S×24.55W, h33km, mb5.2/14, MS4.5/8, Error ellipse: s-maj=25.6km s-min=14.7km az=98.2*
*GCMT **27** 18:46:02.5±0.2, 60.90S×24.06W, h12km, MW5.3/88, Moment Tensor Solution. s51,c77; s88,c157; Duration: 1s1 Moment tensor: Scale $10^{17}$Nm; $M_{rr}$-0.98±.02; $M_{\theta\theta}$0.17±.02; $M_{\phi\phi}$0.81±.02; $M_{r\theta}$0.06±.06; $M_{\phi\theta}$0.54±.02; $M_{r\phi}$0.39±.06; Best double couple: $M_0$1.12600×$10^{17}$ NP1:$\phi_s$202.00000°, $\delta$55.00000°, $\lambda$-100.00000°. NP2: $\phi_s$39.00000°, $\delta$36.00000°, $\lambda$-76.00000°. Principal axes: T 1.1860, Plg10.0000°, Azm299.0000°; N -0.1200, Plg8.0000°, Azm207.0000°; P -1.0660, Plg77.0000°, Azm78.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC **27** 18:46:02.5±0.2, 60.49S×24.36W, h35km, mb5.4/22, MS4.9/30 Error ellipse: s-maj=10.2km s-min=7.7km az=215.0*
*BJI **27** 18:46:02.7, 60.40S×24.50W, h34km, mB5.5/5, Ms5.4/5, Ms7 5.0/9*
*AWI **27** 18:46:02.0, 60.43S×24.49W*

**ISC 27 18:45:58.4±0.3, 60.57S±0.07×24.49W±0.07, h10km, n240, σ1s63/203, mb5.3/41, MS4.9/56, 1C-3D, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HOPE** | **Hope Point** | **9.02** | **309** | Pn | Pn | 

comp=Z,7,0nm,0.8s
CPUP MLR MLR
comp=Z,774nm,21.8s
**CPUP Villa Florida 40.88 312** *e*P **P** **18 53 37.4 -3.0**
**CVNA Calvinia 41.05 65** *e*P **P** **18 53 41.9 0.0**
CVNA IAmb IAmb 18 53 46.6
comp=Z,35nm,1.1s
**VNDA Vanda 42.11 182** P **P** **18 53 52.3 +2.4**
comp=Z,25nm,0.9s,baz=190,slow=7.1,SNR=86
VNDA LR LR 19 10 39.1
comp=Z,202nm,20.0s,baz=167,slow=35
**VNDA Vanda 42.11 182** *e*P **P** **18 53 52.4 +2.4**
VNDA pmax pmax
comp=Z,94nm,1.4s
**VNDA Vanda 42.11 182** *e*P **P** **18 53 52.4 +2.4**
comp=Z,94nm,1.4s
**LCO Las Campanas 44.03 295** *e*P **P** **18 54 05.8 -0.5**
comp=Z,41nm,0.7s
**UPI Upington 44.38 64** *e*P **P** **18 54 08.1 -0.8**
UPI IAmb IAmb 18 54 13.1
comp=Z,39nm,1.1s
**HVD Gariep Dam 44.42 71** *e*P **P** **18 54 10.6 +1.3**
HVD IAmb IAmb 18 54 13.4
comp=Z,28nm,1.1s
HVD IAMs_20 IAMs_20 19 07 36.3
comp=Z,3μm,24.6s
**MIR Mirnyy 45.13 150**⇑ *i*P P 18 54 24.0 +10
MIR pmax pmax
comp=Z,110nm,1.0s
**BOSA Boshof 45.98 69** *e*P **P** **18 54 20.5 -1.2**
BOSA IAmb IAmb 18 54 25.1
comp=Z,62nm,1.5s
BOSA IAMs_20 IAMs_20 19 08 33.1
comp=Z,1μm,23.4s
**BOSA Boshof 45.98 69** P **P** **18 54 21.2 -0.5**
comp=Z,15nm,0.7s,baz=202,slow=6.7,SNR=23
BOSA LR LR 19 09 36.0
comp=Z,497nm,19.3s,baz=202,slow=31
**BOSA Boshof 45.98 69** P **P** **18 54 21.2 -0.5**
BOSA pmax pmax
comp=Z,15nm,0.7s
BOSA MLR MLR
comp=Z,497nm,19.3s
**BOSA Boshof 45.98 69** *e*P **P** **18 54 20.8 -0.9**
comp=Z,66nm,1.5s
**SWZ Schweizer 47.24 68** *e*P **P** **18 54 30.8 -0.8**
SWZ IAmb IAmb 18 54 33.6
comp=Z,61nm,1.9s
**SEK Senekal 47.33 71** *e*P **P** **18 54 32.5 +0.3**
SEK IAmb IAmb 18 54 36.0
comp=Z,91nm,1.7s
SEK IAMs_20 IAMs_20 19 11 36.2
comp=Z,2μm,19.9s
**WIN Windhoek 47.68 56** *e*P **P** **18 54 35.5 +0.4**
WIN IAmb IAmb 18 54 40.9
comp=Z,7.9nm,1.0s
WIN IAMs_20 IAMs_20 19 10 06.0
comp=Z,544nm,17.8s
**BDFB Brasilia 47.99 329** P **P** **18 54 36.7 -0.7**
comp=Z,5.5nm,0.6s,baz=148,slow=7.6,SNR=8.4
BDFB LR LR 19 13 07.8
comp=Z,249nm,19.2s,baz=160,slow=34
**BDFB Brasilia 47.99 329** P **P** **18 54 36.7 -0.7**
BDFB pmax pmax
comp=Z,6.0nm,0.6s
BDFB MLR MLR
comp=Z,249nm,19.2s
**BDFB Brasilia 47.99 329** *e*P **P** **18 54 38.0 +0.6**
comp=Z,137nm,2.1s
**LVC Limon Verde 48.82 301** *e*P **P** **18 54 43.8 -0.2**
comp=Z,32nm,0.8s
**KSR Koster 49.09 69** *e*P **P** **18 54 45.1 -0.9**
KSR IAmb IAmb 18 54 49.4
comp=Z,15nm,0.7s
**CASY Casey 49.17 158** *e*P **P** **18 54 47.4 +1.6**
comp=Z,59nm,1.0s
CASY *e*S **S** **19 01 50.9 +0.2**
CASY LR LR
comp=Z,1μm,20.0s
**LBTB Lobatse 49.22 67** *e*P **P** **18 54 44.7 -2.1**
LBTB IAmb IAmb 18 54 50.2
comp=Z,41nm,1.1s
LBTB IAMs_20 IAMs_20 19 12 06.6
comp=Z,1μm,18.2s
**LBTB Lobatse 49.22 67** LR LR 19 11 01.1
comp=Z,1μm,21.1s,baz=218,slow=31
**LBTB Lobatse 49.22 67** *e*P **P** **18 54 46.5 -0.3**
LBTB pmax pmax
comp=Z,36nm,1.1s
**LBTB Lobatse 49.22 67** *e*P **P** **18 54 46.5 -0.3**
comp=Z,36nm,1.1s
**ERPM east rand prop 49.30 70** *e*P **P** **18 54 46.7 -0.8**
ERPM IAmb IAmb 18 54 51.5
comp=Z,56nm,1.3s
**SLR Silverton 49.83 70** *e*P **P** **18 54 52.8 +1.3**
SLR IAmb IAmb 18 55 01.6
comp=Z,976nm,3.5s
SLR IAMs_20 IAMs_20 19 12 21.5
comp=Z,2μm,16.0s
**H10S2 ASCENSION HYDR 52.02 12** T T 19 51 31.8
baz=186,slow=75,SNR=22
**H10S3 ASCENSION HYDR 52.03 12** T T 19 51 34.4
baz=186,slow=75,SNR=28
**H10S1 ASCENSION HYDR 52.04 12** T T 19 51 32.3
baz=186,slow=75,SNR=23
**DRV Dumont d'Urvil 52.56 172** P P 18 55 06.0 -5.3
DRV PP PP 18 57 20.0 +10
DRV S S 19 02 22.0 -16
DRV SS **SS** **19 06 10.0 -4.8**
DRV R 19 11 00.0
**H10N1 ASCENSION HYDR 53.14 12** T T 19 52 52.6
baz=186,slow=75,SNR=8.3
**H10N3 ASCENSION HYDR 53.14 12** T T 19 52 58.0
baz=186,slow=75,SNR=13
**H10N2 ASCENSION HYDR 53.16 12** T T 19 53 11.3
baz=186,slow=75,SNR=10
**MSNA Messina 53.55 70** *e*P **P** **18 55 18.7 -0.5**
MSNA IAmb IAmb 18 55 22.7
comp=Z,41nm,1.2s
MSNA IAMs_20 IAMs_20 19 13 41.5
comp=Z,2μm,21.4s
**LPAZ La Paz 54.15 305** P **P** **18 55 23.8 -0.5**
comp=Z,18nm,0.7s,baz=162,slow=6.4,SNR=51
LPAZ LR LR 19 19 08.8
comp=Z,421nm,21.2s,baz=150,slow=37
**LPAZ La Paz 54.15 305** *e*P **P** **18 55 23.9 -0.4**
**MATP Matopo 54.51 67** LR LR 19 15 34.3
comp=Z,721nm,18.1s,baz=203,slow=33
**LSZ Lusaka 58.89 64** *e*P **P** **18 55 57.0 -0.5**
LSZ pmax pmax
comp=Z,37nm,0.8s
**LSZ Lusaka 58.89 64** *e*P **P** **18 55 57.0 -0.5**
comp=Z,37nm,0.8s
**SAML Samuel 58.98 314** *e*P **P** **18 55 56.6 -1.4**
comp=Z,14nm,0.8s
**NNA Nana 61.66 298** *e*P **P** **18 56 16.4 0.0**
**NNA Nana 61.66 298** *e*P **P** **18 56 16.4 0.0**
comp=Z,17nm,0.7s
**ABPO Ambohimpanom 64.65 84** PFAKE 18 56 50.0 +14
ABPO LR LR
comp=Z,487nm,20.0s
**KIC Kosan Boka 68.51 21** *e*P **P** **18 57 00.7 0.0**
comp=Z,59nm,1.1s
**TIC Toumodi 68.74 21** *e*P **P** **18 57 02.1 -0.1**
**DBIC Dimbokro 68.79 21** P **P** **18 57 02.4 -0.1**
comp=Z,12nm,0.8s,baz=181,slow=7.7,SNR=8.7
DBIC LR LR 19 20 14.7
comp=Z,422nm,19.9s,baz=167,slow=30
**DBIC Dimbokro 68.79 21** P **P** **18 57 02.4 -0.1**
DBIC pmax pmax
comp=Z,12nm,0.8s
DBIC MLR MLR
comp=Z,422nm,19.9s
**DBIC Dimbokro 68.79 21** *e*P **P** **18 57 02.2 -0.2**
comp=Z,25nm,0.9s
**MBAR Mbarara 73.10 59** P **P** **18 57 30.3 +1.3**
comp=Z,12nm,1.0s,baz=172,slow=5.3,SNR=9.1
**MBAR Mbarara 73.10 59** P **P** **18 57 30.3 +1.3**
MBAR pmax pmax
comp=Z,12nm,1.0s
**MBAR Mbarara 73.10 59** *e*P P 18 57 33.2 +4.3
comp=Z,46nm,1.5s
**OTAV Otavalo 73.32 302** *e*P **P** **18 57 31.8 +1.2**
comp=Z,22nm,1.1s
**KMBO Kilima Mbogo 75.48 65** P **P** **18 57 44.5 +1.6**
comp=Z,3.0nm,0.9s,baz=208,slow=5.9,SNR=4.5
KMBO LR LR 19 28 38.0
comp=Z,915nm,18.0s,baz=122,slow=34
**ROSC El Rosal 75.86 308** P **P** **18 57 46.0 +0.8**
comp=Z,11nm,0.7s,baz=135,slow=3.1,SNR=5.9
ROSC LR LR 19 31 34.5
comp=Z,323nm,21.9s,baz=172,slow=36
**ROSC El Rosal 75.86 308** *e*P **P** **18 57 47.3 +2.1**
**TOA0 Torodi Ar. Sit 76.39 26** *e*P **P** **18 57 47.6 -0.1**
**TOA0 Torodi Ar. Sit 76.39 26** *e*P **P** **18 57 48.0 +0.4**
**TORD Torodi Ar. Bea 76.39 26** P **P** **18 57 47.9 +0.2**
comp=Z,71nm,0.9s,baz=202,slow=6.5,SNR=334
TORD LR LR 19 25 52.6
comp=Z,305nm,20.1s,baz=190,slow=31
**TAU Tasmania Unive 76.66 174** *e*P **P** **18 57 49.8 +0.8**
TAU pmax pmax
comp=Z,35nm,1.0s
**TAU Tasmania Unive 76.66 174** *e*P **P** **18 57 49.8 +0.8**
comp=Z,35nm,1.0s
**THZ Tophouse 77.03 193** *e*P **P** **18 57 52.5 +1.3**
comp=Z,128nm,1.6s
**BKZ Blk Stump Fm 79.14 196** *e*P **P** **18 58 04.4 +1.4**
comp=Z,30nm,1.0s
**URZ Urewera 79.94 197** *e*P **P** **18 58 08.6 +1.4**
comp=Z,77nm,1.4s
**BCIP Isla Barro Col 81.97 305** PFAKE 18 58 30.0 +12
BCIP LR LR
comp=Z,340nm,22.0s
**OUZ Omahuta 83.41 195** *e*P **P** **18 58 26.4 +0.9**
comp=Z,119nm,1.4s
**ANWB Willy Bob 83.55 324** PFAKE 18 58 40.0 +14
ANWB LR LR
comp=Z,550nm,22.0s
**CAN Canberra 84.31 175** PFAKE 18 58 40.0 +10
CAN LR LR
comp=Z,239nm,20.0s
**TAM Tamanrasset 86.57 28** *e*P **P** **18 58 43.9 +2.3**
**TAM Tamanrasset 86.57 28** *e*P **P** **18 58 43.9 +2.3**
**DGAR Diego Garcia 87.01 100** PFAKE 18 58 50.0 +6.1
DGAR LR LR
comp=Z,709nm,19.0s
**PPT Papeete 90.57 231** LR LR 19 33 10.8
comp=Z,272nm,18.6s,baz=184,slow=31
**ASAR Alice Springs 94.24 160** P **P** **18 59 16.3 -1.4**
comp=Z,2.6nm,0.8s,baz=183,slow=4.1,SNR=28
ASAR PP **PP** **19 03 02.6 -0.9**
comp=Z,3.5nm,1.0s,baz=194,slow=7.1,SNR=8.9
ASAR PKKPbc **PKKPbc** **19 16 16.4 +1.2**
comp=Z,0.4nm,0.5s,baz=16,slow=2.3,SNR=5.2
ASAR LR LR 19 38 32.4
comp=Z,776nm,21.6s,baz=188,slow=33
**AS01 Alice Springs 94.25 160** *e*P **P** **18 59 16.0 -1.7**
AS01 *e*PP **PP** **19 03 02.3 -1.3**
**WRA Warramunga Arr 97.96 160** P **P** **18 59 33.5 -1.1**
comp=Z,1.5nm,1.0s,baz=193,slow=3.4,SNR=6.1
WRA PP **PP** **19 03 28.6 -3.7**
comp=Z,0.5nm,0.8s,baz=192,slow=6.1,SNR=3.8
WRA PKKP **PKKPdf** **19 16 06.8 +0.6**
comp=Z,0.3nm,0.5s,baz=356,slow=3.0,SNR=5.8
WRA LR LR 19 40 59.0
comp=Z,616nm,21.3s,baz=195,slow=34
**CTAO Charters Tower 99.28 171** PFAKE 18 59 50.0 +9.5
CTAO LR LR
comp=Z,369nm,19.0s
**KEST Kesra 99.89 27** LR LR 19 41 16.9
comp=Z,262nm,18.9s,baz=172,slow=33
**ESDC Sonseca Array 101.30 16** P **Pdif** **18 59 49.8 +1.0**
comp=Z,0.1nm,0.4s,baz=188,slow=4.8,SNR=2.3
**BRAL Brewton 104.50 308** PFAKE 19 00 10.0 +6.8
BRAL LR LR
comp=Z,339nm,20.0s
**CNNC Cliffs of the 104.97 317** PFAKE 19 00 20.0 +15
CNNC LR LR
comp=Z,1μm,19.0s
**CUC Castrocucco 105.50 31** PFAKE 19 04 30.0
CUC LR LR
comp=Z,76nm,22.0s
**CSS Prodhromos 106.26 46** PFAKE 19 04 30.0
CSS LR LR
comp=Z,76nm,19.0s
**CBN Corbin 107.50 319** PFAKE 19 04 40.0
CBN LR LR
comp=Z,321nm,20.0s
**BNI Bardonecchia 108.28 23** PFAKE 19 04 40.0
BNI LR LR
comp=Z,350nm,19.0s
**ANTO Ankara 110.47 44** PFAKE 19 04 40.0
ANTO LR LR
comp=Z,285nm,20.0s
**ACSO Alum Creek Sta 111.21 316** *e*PP PP 19 05 14.9 +3.3
ACSO LR LR
comp=Z,476nm,19.0s
**AAM Ann Arbor 113.28 316** PFAKE 19 04 50.0
AAM LR LR
comp=Z,946nm,20.0s
**VYHS Vyhne 114.22 30** *e*P **Pdif** **19 00 51.9 +5.9**
**VYHS Vyhne 114.22 30** PDIF **Pdif** **19 00 51.9 +5.9**
**KOLS Kolonicke sedl 115.50 32** *e*P **Pdif** **19 00 55.8 +4.1**
**KOLS Kolonicke sedl 115.50 32** PDIF **Pdif** **19 00 55.8 +4.1**
**CLL Collm 115.52 25** *e*PP PP 19 05 48.0 +5.8
CLL *e*SP SP 19 15 30.0 +10
CLL L L 19 50 00.0
comp=Z,200nm,18.0s
**CBKS Cedar Bluff 116.39 303** PFAKE 19 04 50.0 +8.6
CBKS LR LR
comp=Z,485nm,20.0s
**SCIA State Center 116.41 309** *e*PP PP 19 05 47.6 -1.0
**KIV Kislovodsk 117.58 49** *i* PKIKP **PKPdf** **19 04 41.8 -1.8**
KIV *e* 19 05 53.7
KIV *e*PS **PS** **19 15 40.2 -0.3**
KIV pmax pmax
comp=Z,5.0nm,1.2s
KIV MLR MLR
comp=Z,229nm,20.0s
**COWI Conover 118.51 314** PFAKE 19 05 00.0 +15
COWI LR LR
comp=Z,452nm,19.0s
**AKASG Malin Array Be 119.02 36** PKP **PKPdf** **19 04 44.1 -1.9**
comp=Z,0.4nm,0.4s,baz=236,slow=1.9,SNR=5.1
**AKASG Malin Array Be 119.02 36** *i* PKIKP **PKPdf** **19 04 46.5 +0.5**
AKASG pmax pmax
comp=Z,1.0nm,0.5s
**SRU San Rafael 121.31 295** *e*PKIKP **PKPdf** **19 04 50.9 -0.2**
**SRU San Rafael 121.31 295** *e*PKPdf **PKPdf** **19 04 50.9 -0.2**
**EDW2 Edwards Air Fo 121.32 286** P **PKPdf** **19 04 51.5 +0.5**
baz=122
**CCUT Cedar City 121.33 292** *e*PKPdf **PKPdf** **19 04 52.5 +1.3**
**MSU Marysvale 121.57 293** *e*PKIKP **PKPdf** **19 04 52.6 +1.0**
**MSU Marysvale 121.57 293** *e*PKPdf **PKPdf** **19 04 52.6 +1.0**
**P18A Preston Nutter 121.61 295** *e*PKPdf **PKPdf** **19 04 52.8 +1.0**
**CM01 Chiang Mai Arr 122.11 111** *e*PKPdf **PKPdf** **19 04 51.5 -1.4**
**CMAR Chiang Mai Arr 122.14 111** PKP **PKPdf** **19 04 52.2 -0.8**
comp=Z,2.8nm,0.8s,baz=232,slow=3.4,SNR=15
**TPNV Topopah Spring 122.18 289** *e*PKIKP **PKPdf** **19 04 53.8 +1.0**
**TPNV Topopah Spring 122.18 289** P **PKPdf** **19 04 53.4 +0.7**
baz=122
**TPNV Topopah Spring 122.18 289** *e*PKPdf **PKPdf** **19 04 53.8 +1.0**
**ISA Isabella 122.18 286** P **PKPdf** **19 04 53.6 +0.9**
baz=122
**CHTO Chiang Mai 122.45 110** PFAKE 19 05 10.0 +16
CHTO LR LR
comp=Z,295nm,20.0s
**AGMN Agassiz Nation 122.81 311** PFAKE 19 05 10.0 +17
AGMN LR LR
comp=Z,701nm,22.0s
**R11A Troy Canyon, C 123.00 290** P **PKPdf** **19 04 54.9 +0.6**
baz=123
**DUG Dugway 123.22 294** *e*PKIKP **PKPdf** **19 04 55.3 +0.7**
**DUG Dugway 123.22 294** P **PKPdf** **19 04 54.9 +0.3**
baz=124
**DUG Dugway 123.22 294** *e*PKPdf **PKPdf** **19 04 55.3 +0.7**
**E28A Huff 123.25 307** P **PKPdf** **19 04 53.7 -0.6**
baz=124
**HWUT Hardware Ranch 123.80 296** *e*PKPdf **PKPdf** **19 04 56.0 +0.3**
**BW06 Boulder Array 123.85 298** *e*PKPdf **PKPdf** **19 04 54.8 -1.1**
BW06 LR LR
comp=Z,410nm,21.0s
**HFS Hagfors 123.95 22** PKP **PKPdf** **19 04 53.3 -1.8**
comp=Z,2.0nm,0.8s,baz=186,slow=1.4,SNR=4.8
**NV01 Mina Array Sit 124.33 288** *e*PKPdf **PKPdf** **19 04 57.6 +0.7**
**NVAR Mina Array Bea 124.33 288** PKP **PKPdf** **19 04 57.9 +1.0**
comp=Z,1.3nm,0.6s,baz=144,slow=3.2,SNR=6.8
**NB2 NORSAR Subarra 124.36 20** PKPdf **PKPdf** **19 04 55.7 -0.3**
comp=Z,4.6nm,1.4s,baz=202,slow=1.9
**NOA NORSAR Array B 124.36 20** PKP **PKPdf** **19 04 55.5 -0.5**
comp=Z,2.3nm,0.8s,baz=195,slow=1.7,SNR=4.6
**AHID Auburn Hatcher 124.52 297** PFAKE 19 05 10.0 +13
AHID LR LR
comp=Z,123nm,20.0s
**A29A Manning Farm, 124.60 309** P **PKPdf** **19 04 59.5 +2.8**
baz=125
**ELK Elko 124.77 292** *e*PKIKP **PKPdf** **19 04 58.7 +1.0**
**ELK Elko 124.77 292** *e*PKPdf **PKPdf** **19 04 58.7 +1.0**
**LOHW Long Hollow 124.98 298** *e*PKPdf **PKPdf** **19 04 58.4 +0.4**
**TPAW Teton Pass 125.04 297** *e*PKPdf **PKPdf** **19 04 58.8 +0.7**
**OBN Obninsk 125.05 38** *e*PKIKP **PKPdf** **19 04 57.5 +0.1**
OBN pmax pmax
comp=Z,3.0nm,0.7s
OBN MLR MLR
comp=Z,71nm,17.0s
**MOOW Moose Ponds 125.15 298** *e*PKPdf **PKPdf** **19 04 58.5 +0.2**
**FXWY Fox Creek 125.19 298** *e*PKPdf **PKPdf** **19 04 59.1 +0.7**
**IMW Indian Meadow 125.36 298** *e*PKPdf **PKPdf** **19 04 59.6 +0.8**
**BMN Battle Mountai 125.43 291** *e*PKIKP **PKPdf** **19 04 59.8 +0.9**
**BMN Battle Mountai 125.43 291** *e*PKPdf **PKPdf** **19 04 59.8 +0.9**
**RLMT Red Lodge 125.61 300** P **PKPdf** **19 04 59.2 +0.1**
baz=126
**DGMT Dagmar 126.17 306** PFAKE 19 05 10.0 +10
DGMT LR LR
comp=Z,484nm,22.0s
**OHCM Honcut 126.55 287** *e*PKPpre PKPpre 19 04 54.5
**HLID Hailey 126.63 295** *e*PKPdf **PKPdf** **19 05 06.0 +5.0**
**BOZ Bozeman (W) 127.04 299** PFAKE 19 05 10.0 +8.2
BOZ LR LR
comp=Z,269nm,19.0s
**O03D Paynes Creek 127.46 287** P **PKPdf** **19 05 03.2 +0.5**
baz=128
**QIZ Qiongzhong 127.47 122** PKP **PKPdf** **19 05 03.3 +0.1**
QIZ PP **PP** **19 07 04.3 +0.8**
QIZ SS SS 19 24 16.0 +2.5
QIZ LZ
comp=Z,250nm,39.4s
**LRM Limekiln Ridge 127.53 298** *e*PKPdf **PKPdf** **19 05 03.9 +1.1**
**WVOR Wild Horse Val 127.66 291** *e*PKIKP **PKPdf** **19 05 04.5 +1.5**
**WVOR Wild Horse Val 127.66 291** *e*PKPdf **PKPdf** **19 05 04.5 +1.5**
**FINES FINESS Array B 127.72 28** PKP **PKPdf** **19 05 01.8 -0.5**
comp=Z,7.7nm,0.8s,baz=160,slow=3.5,SNR=33
**HRY Holter Researc 127.96 299** *e*PP PP 19 07 12.1 +5.0
**J08A Circle Bar Ran 128.31 292** *e*PKPdf **PKPdf** **19 05 05.6 +1.4**
**KSH Kashi 128.35 76** PKP **PKPdf** **19 05 04.0 -0.4**
KSH *es*PKP 19 05 17.8
KSH *e*PP **PP** **19 07 05.8 -3.9**
KSH PKS **PKSdf** **19 08 41.3 +0.3**
KSH SKS **SKSdf** **19 12 11.0 -4.8**
KSH PPMZ
comp=Z,120nm,5.5s
KSH LN
comp=Z,140nm,4.5s
KSH LE
comp=Z,170nm,5.8s
KSH LZ
comp=Z,220nm,5.4s
**N02D Trinity Center 128.42 287** P **PKPdf** **19 05 05.5 +1.0**
baz=129
**M04C Macdoel 128.64 288** P **PKPdf** **19 05 05.5 +0.6**
baz=129
**CHMT Chamberlain Mo 128.73 299** *e*PKPdf **PKPdf** **19 05 04.9 -0.1**
**AKTO Aktyubinsk 128.85 55** PKP **PKPdf** **19 05 04.0 -0.9**
comp=Z,5.8nm,1.0s,baz=315,slow=1.4,SNR=9.9
**AKTO Aktyubinsk 128.85 55** PKIKP **PKPdf** **19 05 04.0 -0.9**
**BMO Blue Mountains 128.93 294** *e*PKIKP **PKPdf** **19 05 05.7 +0.4**
**BMO Blue Mountains 128.93 294** *e*PKPdf **PKPdf** **19 05 05.7 +0.4**
**MSO Missoula 128.97 298** P **PKPdf** **19 05 06.0 +0.6**
baz=129
**MSO Missoula 128.97 298** *e*PKPdf **PKPdf** **19 05 06.1 +0.8**
**I07A Izee 129.34 292** *e*PKPdf **PKPdf** **19 05 07.4 +1.2**
**KMI Kunming 129.65 110** PKP **PKPdf** **19 05 07.8 +0.3**
KMI sPKP 19 05 22.0
KMI PP **PP** **19 07 23.0 +4.9**
KMI SS SS 19 24 46.0 +4.8
KMI LZ
comp=Z,170nm,27.6s
**EKS2 Erkin-Say 129.75 72** PFAKE 19 05 20.0 +13
EKS2 LR LR
comp=Z,368nm,21.0s
**G08A Pilot Rock 130.02 293** *e*PKPdf **PKPdf** **19 05 08.5 +1.1**
**AAK Ala-Archa 130.07 72** PKP **PKPdf** **19 05 06.6 -1.1**
comp=Z,2.8nm,0.8s,baz=213,slow=1.3,SNR=7.3
**AAK Ala-Archa 130.07 72** PKIKP **PKPdf** **19 05 06.6 -1.1**
AAK pmax pmax
comp=Z,3.0nm,0.9s
**AAK Ala-Archa 130.07 72** *e*PKPdf **PKPdf** **19 05 09.0 +1.4**
AAK LR LR
comp=Z,355nm,20.0s
**I05D Terrebonne, OR 130.38 291** P **PKPdf** **19 05 09.3 +1.2**
baz=131
**I04A Tendick Farm, 130.46 289** P **PKPdf** **19 05 09.2 +1.0**
baz=131
**TCBU Trout Butte 130.92 290** *e*PKPdf **PKPdf** **19 05 08.7 -0.5**
**GYA Guiyang 132.59 114** *e*Pdif **Pdif** **19 02 10.0 +1.6**
GYA PKP **PKiKP** **19 05 14.0 0.0**
GYA PP PP 19 07 42.8 +5.8
GYA PPMZ
comp=Z,150nm,7.9s
**EDM Edmonton 133.54 304** *e*PKIKP **PKPdf** **19 05 14.4 +0.7**
**EDM Edmonton 133.54 304** *e*PKPdf **PKPdf** **19 05 14.4 +0.7**
**APA Apatity 134.60 27**⇓ *i* PKIKP **PKPdf** **19 05 18.4 +3.2**
**ARCES ARCESS Array B 134.61 22** PKP **PKPdf** **19 05 14.4 -0.7**
comp=Z,3.9nm,0.7s,baz=198,slow=1.9,SNR=9.4
**BRVK Borovoye 135.90 60** PFAKE 19 05 30.0 +12
BRVK LR LR
comp=Z,265nm,19.0s
**BVAR Borovoye Array 135.92 60** PKP **PKPdf** **19 05 16.5 -1.6**
comp=Z,0.6nm,0.5s,baz=208,slow=2.2,SNR=5.4
**MK01 Makanchi Array 136.85 74** *e*PKPdf **PKPdf** **19 05 17.7 -2.4**
**MKAR Makanchi Array 136.87 74** PKhKP PKPpre 19 05 14.4
comp=Z,1.0nm,0.9s,baz=205,slow=0.4,SNR=3.8
**KURBB Kurchatov Arra 137.83 68** PKhKP PKPpre 19 05 14.6
comp=Z,0.9nm,0.8s,baz=264,slow=0.9,SNR=5.9
**KURK Kurchatov 137.94 68** PKHKP PKPpre 19 05 14.6
**KURK Kurchatov 137.94 68** PKPpre PKPpre 19 05 14.6
**LZH Lanzhou 139.29 103** *e*PKP **PKPdf** **19 05 27.3 +2.2**
LZH sPKP 19 05 41.5
LZH LN
comp=Z,120nm,19.4s
LZH LE
comp=Z,140nm,18.7s
LZH LZ
comp=Z,150nm,20.1s
**GTA Gaotai 139.95 96** *e*PKP **PKPdf** **19 05 28.5 +2.3**
GTA sPKP 19 05 43.0
**XAN Xi'an 140.03 110** PKP **PKPdf** **19 05 28.0 +1.6**
**YKA Yellowknife Ar 140.40 313** PKP **PKPdf** **19 05 26.2 +0.2**
comp=Z,5.4nm,0.7s,baz=138,slow=2.3,SNR=4.8
**RES Resolute Bay 142.58 336** *e*PKIKP **PKPdf** **19 05 26.2 -3.4**
**RES Resolute Bay 142.58 336** *e*PKPpre **PKPdf** **19 05 26.2 -3.4**
**NVS Novosibirsk 142.78 66** *e*PKHKP PKPpre 19 05 25.8
NVS *e* 19 08 37.4
NVS *e* 19 11 57.3
**ZALV Zalesovo Beam 142.93 68** PKhKP PKPpre 19 05 25.8
comp=Z,1.5nm,0.7s,baz=236,slow=4.3,SNR=7.7
**DLBC Dease Lake 144.01 300** *e*PKPdf **PKPdf** **19 05 32.0 -0.7**
**TIA Tai'an 145.54 117**⇓ *e*PKPbc **PKPdf** **19 05 36.0 0.0**
**HHC Hu-ho-hao-te 146.75 106** *e*PKPbc **PKPbc** **19 05 39.3 -0.5**
HHC PP **PP** **19 09 07.0 +2.8**
HHC SS SS 19 28 01.3 -2.0
HHC PPMZ
comp=Z,130nm,4.9s
HHC LN
comp=Z,180nm,18.5s
HHC LE
comp=Z,290nm,17.3s
HHC LZ
comp=Z,200nm,13.3s
**SKAG Skagway 146.86 299** *e*PKPbc **PKPbc** **19 05 39.8 +0.4**
**BJT Baijiatuau 148.24 112** PFAKE 19 05 50.0 +3.2
BJT LR LR
comp=Z,185nm,22.0s
**BJI Beijing 148.26 112** PKPbc **PKPdf** **19 05 42.0 +1.6**
BJI SS SS 19 28 23.5 +3.6
BJI LN
comp=Z,500nm,25.6s
BJI LE
comp=Z,460nm,25.0s
BJI LZ
comp=Z,190nm,24.5s
**SONM Songino Array 149.36 92** PKPbc **PKPbc** **19 05 45.5 -1.1**
comp=Z,19nm,1.0s,baz=221,slow=2.9,SNR=51
**SONA1 Songino Array 149.37 92** *e*PKPdf **PKPdf** **19 05 41.1 -1.1**
**ZAK Zakamensk 149.50 86** *e*PKHKP PKPpre 19 05 45.6
ZAK pmax pmax

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,28nm,2.1s | | | | | | | |
| **INK** | **Inuvik** | **150.12** | **315** | PKPbc | **PKPbc** | **19 05 47.4** | **-0.2** |
| | comp=Z,39nm,1.0s,baz=98,slow=2.9,SNR=46 | | | | | | | |
| **TLY** | **Talaya** | **150.50** | **84** | PKPbc | **PKPbc** | **19 05 46.9** | **-2.1** |
| | comp=Z,2.0nm,0.3s,baz=236,slow=4.7,SNR=5.4 | | | | | | | |
| **INCN** | **Inchon** | **150.57** | **129** | *e*PKPbc | **PKPbc** | **19 05 49.9** | **+0.3** |
| **DAWY** | **Dawson** | **150.74** | **305** | *e*PKPbc | **PKPbc** | **19 05 49.1** | **-0.1** |
| **KSAR** | **Wonju Array Be** | **151.01** | **130** | PKIKP | **PKPbc** | **19 05 50.1** | **-0.6** |
| **KSAR** | **Wonju Array Be** | **151.01** | **130** | PKPbc | **PKPbc** | **19 05 50.0** | **-0.6** |
| **KSRS** | **Korea Array** | **151.03** | **130** | PKPbc | **PKPbc** | **19 05 50.0** | **-0.6** |
| | comp=Z,9.9nm,0.9s,baz=198,slow=1.8,SNR=20 | | | | | | | |
| **KSRS** | **Korea Array** | **151.03** | **130** | PKIKP | **PKPbc** | **19 05 50.1** | **-0.6** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **EGAK** | **Eagle** | **151.72** | **306** | *e*PKPbc | **PKPbc** | **19 05 51.2** | **-0.2** |
| **MJAR** | **Matsushiro Arr** | **153.54** | **147** | PKPbc | **PKPbc** | **19 05 55.4** | **-1.0** |
| | comp=Z,3.9nm,1.0s,baz=183,slow=3.1,SNR=4.9 | | | | | | | |
| **ILAR** | **Eielson Array** | **154.03** | **304** | PKPbc | **PKPbc** | **19 05 56.2** | **-0.3** |
| | comp=Z,2.9nm,0.5s,baz=124,slow=1.3,SNR=23 | | | | | | | |
| **COLA** | **College** | **154.45** | **304** | *e*PKP2 | **PKPab** | **19 06 12.9** | **+1.0** |
| COLA | | | | MLR | MLR | | | |
| | comp=Z,202nm,19.0s | | | | | | | |
| **COLA** | **College** | **154.45** | **304** | *e*PKPab | **PKPab** | **19 06 12.9** | **+1.0** |
| COLA | | | | LR | LR | | | |
| | comp=Z,202nm,19.0s | | | | | | | |
| **SPU** | **Mount Spurr** | **155.03** | **295** | *e*PKPab | **PKPab** | **19 06 15.5** | **+0.9** |
| **RSO** | **Redoubt South** | **155.07** | **293** | *e*PKPab | **PKPab** | **19 06 16.0** | **+1.0** |
| **MDJ** | **Mudanjiang** | **157.81** | **124** | PKP | **PKPdf** | **19 05 56.0** | **+1.9** |
| **BOD** | **Bodaibo** | **158.82** | **79** | *e*PKP2 | **PKPab** | **19 06 26.6** | **-4.4** |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.8s | | | | | | | |

*IDC* ***27*** *18:53:52.9±2.6, 33.°07N×57.°41E, h0km, mb3.5/7, mb1 3.7/9, mb1mx3.5/48, mbtmp3.6/9, ML3.8/2, MS3.4/4, Ms1 3.4/4, ms1mx2.8/36, Error ellipse: s-maj=55.3km s-min=21.8km az=149.0*
*ISCJB* ***27*** *18:53:54.7±0.4, 33.°29N±0.°03×57.°38E±0.°04, h10km, mb3.7/7, MS4.1/2, Error ellipse: s-maj=4.9km s-min=4.2km az=159.8*
*THR* ***27*** *18:53:54.3±0.5, 33.°34N×57.°41E, h14km±5km, ML4.1*
*CSEM* ***27*** *18:53:55.6±0.2, 33.°27N×57.°43E, h10km, ML4.1, Error ellipse: s-maj=5.7km s-min=4.3km az=179.0*
*TEH* ***27*** *18:53:56.1, 33.°22N×57.°44E, h10km, ML3.9*

**ISC 27 18:53:54.3±0.6, 33°27N±0.°03×57°43E±0.°03, h10km, n71, σ1§58/74, mb3.7/7, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TABS** | **Tabas** | **0.46** | **325** | *e*Pg | **Pg** | **18 54 02.3** | **-0.9** |
| TABS | | | | *e*Sg | **Sg** | **18 54 08.4** | **-0.9** |
| TABS | | | | AML | AML | 18 54 11.7 | |
| | comp=N,11μm,0.2s | | | | | | |
| **TABS** | **Tabas** | **0.46** | **325** | *e*Pg | **Pg** | **18 54 02.3** | **-0.9** |
| TABS | | | | *e*Sg | **Sg** | **18 54 08.4** | **-0.9** |
| **ITEG** | **Tejag** | **1.17** | **108** | *e*Pg | **Pb** | **18 54 16.7** | **-0.1** |
| ITEG | | | | *e* | | 18 54 34.8 | |
| | comp=Z,30μm,0.2s | | | | | | |
| **ITEG** | **Tejag** | **1.17** | **108** | *e*Pg | **Pb** | **18 54 16.7** | **-0.1** |
| **IKOO** | **Kooshah** | **1.57** | **122** | *e*Pn | **Pn** | **18 54 23.3** | **+0.8** |
| IKOO | | | | *e*Sg | **Sn** | **18 54 43.8** | **+0.7** |
| IKOO | | | | *e* | | 18 54 46.9 | |
| | comp=Z,24μm,0.1s | | | | | | |
| **IKOO** | **Kooshah** | **1.57** | **122** | *e*Pn | **Pn** | **18 54 23.3** | **+0.8** |
| **IMON** | **Monand** | **1.88** | **92** | *e*Pn | **Pb** | **18 54 28.6** | **-0.3** |
| IMON | | | | *e* | | 18 55 05.2 | |
| | comp=Z,13μm,0.1s | | | | | | |
| **IMON** | **Monand** | **1.88** | **92** | *e*Pn | **Pb** | **18 54 28.6** | **-0.3** |
| **IDAH** | **Dahanechah** | **2.12** | **104** | *e*Pn | **Pn** | **18 54 31.4** | **+1.4** |
| IDAH | | | | *e* | | 18 55 05.3 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **IDAH** | **Dahanechah** | **2.12** | **104** | *e*Pn | **Pn** | **18 54 31.4** | **+1.4** |
| **SHRT** | **Shahrakht** | **2.42** | **80** | *e*Pn | **Pn** | **18 54 35.3** | **+1.3** |
| SHRT | | | | *e*Sg | **Sg** | **18 55 10.3** | **-1.8** |
| **SHRT** | **Shahrakht** | **2.42** | **80** | *e*P | **Pn** | **18 54 35.3** | **+1.3** |
| SHRT | | | | *e*Sg | **Sg** | **18 55 10.4** | **-1.8** |
| **ICHK** | **Chekchek** | **2.75** | **249** | *e*Pn | **Pn** | **18 54 39.7** | **+1.1** |
| ICHK | | | | *e* | | 18 55 24.4 | |
| | comp=Z,24μm,0.2s | | | | | | |
| **ICHK** | **Chekchek** | **2.75** | **249** | *e*Pn | **Pn** | **18 54 39.7** | **+1.1** |
| **SHRO** | **Shahrood** | **2.95** | **337** | *e*Pn | **Pn** | **18 54 42.5** | **+1.1** |
| **SHRO** | **Shahrood** | **2.95** | **337** | *e*P | **Pn** | **18 54 42.5** | **+1.1** |
| **IMEH** | **Mehriz** | **3.04** | **233** | *e*Pn | **Pn** | **18 54 44.0** | **+1.3** |
| IMEH | | | | *e* | | 18 55 32.1 | |
| | comp=Z,9μm,0.2s | | | | | | |
| **IMEH** | **Mehriz** | **3.04** | **233** | *e*Pn | **Pn** | **18 54 44.0** | **+1.3** |
| **IMOG** | **Moghan** | **3.24** | **29** | *e*Pn | **Pn** | **18 54 47.6** | **+2.2** |
| IMOG | | | | *e* | | 18 55 39.6 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **IMOG** | **Moghan** | **3.24** | **29** | *e*Pn | **Pn** | **18 54 47.6** | **+2.2** |
| **KRBR** | **Kerman** | **3.33** | **190** | *e*Pn | **Pn** | **18 54 49.1** | **+2.3** |
| KRBR | | | | AML | AML | 18 55 48.3 | |
| | comp=N,811nm,0.5s | | | | | | |
| KRBR | | | | AML | AML | 18 55 50.0 | |
| | comp=E,658nm,0.4s | | | | | | |
| **KRBR** | **Kerman** | **3.33** | **190** | *e*P | **Pn** | **18 54 49.1** | **+2.3** |
| **IPAY** | **Payeh** | **3.42** | **22** | *e*Pn | Pn | 18 54 50.5 | +2.6 |
| IPAY | | | | *e* | | 18 55 41.8 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **IPAY** | **Payeh** | **3.42** | **22** | *e*Pn | Pn | 18 54 50.5 | +2.6 |
| **ISAD** | **Sadrabad** | **3.44** | **248** | *e*Pn | **Pn** | **18 54 49.3** | **+1.1** |
| ISAD | | | | *e*Sg | **Sg** | **18 55 43.2** | **-1.6** |
| ISAD | | | | *e* | | 18 55 45.4 | |
| | comp=Z,10μm,0.1s | | | | | | |
| **ISAD** | **Sadrabad** | **3.44** | **248** | *e*Pn | **Pn** | **18 54 49.3** | **+1.1** |
| ISAD | | | | *e*Sg | **Sg** | **18 55 43.2** | **-1.6** |
| **IAKL** | **Akhelmad** | **3.50** | **18** | *e*Pn | **Pn** | **18 54 50.9** | **+1.9** |
| IAKL | | | | *e* | | 18 55 53.4 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **IKRD** | **Kardeh** | **3.60** | **14** | *e*Pn | **Pb** | **18 54 56.5** | **-1.8** |
| IKRD | | | | *e* | | 18 56 09.5 | |
| | comp=Z,1μm,0.4s | | | | | | |
| **IKRD** | **Kardeh** | **3.60** | **14** | *e*Pn | **Pb** | **18 54 56.5** | **-1.8** |
| **IMYA** | **Miami** | **3.77** | **35** | *e*Pn | **Pn** | **18 54 54.5** | **+1.9** |
| IMYA | | | | *e* | | 18 55 57.6 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **IMYA** | **Miami** | **3.77** | **35** | *e*Pn | **Pn** | **18 54 54.5** | **+1.9** |
| **ISFR** | **Sfrayin** | **3.80** | **7** | *e*Pn | **Pn** | **18 54 55.1** | **+1.9** |
| ISFR | | | | *e* | | 18 55 49.9 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **ISFR** | **Sfrayin** | **3.80** | **7** | *e*Pn | **Pn** | **18 54 55.1** | **+1.9** |
| **NASN** | **Na'in** | **3.91** | **264** | *e*Pn | **Pn** | **18 54 56.1** | **+1.4** |
| NASN | | | | AML | AML | 18 56 04.0 | |
| | comp=N,156nm,0.6s | | | | | | |
| **NASN** | **Na'in** | **3.91** | **264** | *e*Pn | **Pn** | **18 54 56.1** | **+1.4** |
| **IEMG** | **Emamgholi** | **4.25** | **13** | *e*Pn | **Pn** | **18 55 01.3** | **+1.9** |
| IEMG | | | | *e* | | 18 56 18.6 | |
| | comp=Z,664nm,0.3s | | | | | | |
| **IEMG** | **Emamgholi** | **4.25** | **13** | *e*Pn | **Pn** | **18 55 01.3** | **+1.9** |
| **ISHV** | **Shirvan** | **4.26** | **3** | *e*Pn | **Pn** | **18 55 01.1** | **+1.7** |
| ISHV | | | | *e* | | 18 55 29.2 | |
| | comp=Z,964nm,0.3s | | | | | | |
| **IZEF** | **Zefreh** | **4.30** | **266** | *e*Pn | **Pn** | **18 55 00.6** | **+0.6** |
| IZEF | | | | *e* | | 18 56 14.9 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **IZEF** | **Zefreh** | **4.30** | **266** | *e*Pn | **Pn** | **18 55 00.6** | **+0.6** |
| **IRAM** | **Ramesheh** | **4.51** | **252** | *e*Pn | **Pn** | **18 55 04.0** | **+1.1** |
| IRAM | | | | *e* | | 18 56 28.6 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **IRAM** | **Ramesheh** | **4.51** | **252** | *e*Pn | **Pn** | **18 55 04.0** | **+1.1** |
| **IFIR** | **Firoozkooh** | **4.53** | **303** | *e*Pn | **Pn** | **18 55 04.4** | **+1.2** |
| IFIR | | | | *e* | | 18 56 20.7 | |
| | comp=Z,2μm,0.1s | | | | | | |
| **IFIR** | **Firoozkooh** | **4.53** | **303** | *e*Pn | **Pn** | **18 55 04.4** | **+1.2** |
| **IGAR** | **Gharneh** | **4.62** | **261** | *e*Pn | **Pn** | **18 55 05.6** | **+1.2** |
| IGAR | | | | *e* | | 18 56 29.8 | |
| | comp=Z,1μm,0.3s | | | | | | |
| **GEYT** | **Alibeck** | **4.68** | **7** | Pn | **Pn** | **18 55 06.8** | **+1.8** |
| | comp=Z,6.6nm,0.3s,baz=199,slow=16,SNR=114 | | | | | | |
| GEYT | | | | Sn | **Sn** | **18 56 02.5** | **+3.1** |
| | comp=Z,3.2nm,0.3s,baz=178,slow=20,SNR=3.1 | | | | | | |
| GEYT | | | | LR | LR | 18 57 37.2 | |
| | comp=Z,66nm,20.0s,baz=20,slow=46 | | | | | | |
| **IKLH** | **Kolahrood** | **4.90** | **272** | *e*Pn | **Pn** | **18 55 09.8** | **+1.5** |
| IKLH | | | | *e* | | 18 56 56.3 | |
| | comp=Z,723nm,0.3s | | | | | | |
| **IKLH** | **Kolahrood** | **4.90** | **272** | *e*Pn | **Pn** | **18 55 09.8** | **+1.5** |
| **IDMV** | **Damavand** | **5.02** | **299** | *e*Pn | **Pn** | **18 55 11.2** | **+1.3** |
| IDMV | | | | *e* | | 18 56 15.2 | |
| | comp=Z,806nm,0.1s | | | | | | |
| **IDMV** | **Damavand** | **5.02** | **299** | *e*Pn | **Pn** | **18 55 11.2** | **+1.3** |
| **GHVR** | **GHOM** | **5.24** | **285** | *e*Pn | **Pn** | **18 55 14.8** | **+2.0** |
| GHVR | | | | AML | AML | 18 56 50.6 | |
| | comp=E,89nm,0.7s | | | | | | |
| GHVR | | | | AML | AML | 18 56 54.1 | |
| | comp=N,77nm,0.6s | | | | | | |
| **GHVR** | **GHOM** | **5.24** | **285** | *e*P | **Pn** | **18 55 14.6** | **+1.8** |
| **IAFJ** | **Afjeh** | **5.37** | **300** | *e*Pn | **Pn** | **18 55 16.5** | **+1.6** |
| IAFJ | | | | *e* | | 18 56 50.6 | |
| | comp=Z,1μm,0.2s | | | | | | |
| **IAFJ** | **Afjeh** | **5.37** | **300** | *e*Pn | **Pn** | **18 55 16.5** | **+1.6** |
| **IPIR** | **Pirpir** | **5.53** | **266** | *e*Pn | **Pn** | **18 55 19.8** | **+2.9** |
| IPIR | | | | *e* | | 18 56 52.6 | |
| | comp=Z,529nm,0.2s | | | | | | |
| **IPIR** | **Pirpir** | **5.53** | **266** | *e*Pn | **Pn** | **18 55 19.8** | **+2.9** |
| **KHMZ** | **Khomeyn** | **6.26** | **276** | *e*Pn | **Pn** | **18 55 28.4** | **+1.5** |
| **KHMZ** | **Khomeyn** | **6.26** | **276** | *e*P | **Pn** | **18 55 28.2** | **+1.3** |
| **AAK** | **Ala-Archa** | **16.36** | **50** | Pn | **P** | **18 57 45.4** | **-1.7** |
| | comp=Z,0.2nm,0.3s,baz=224,slow=5.6,SNR=2.3 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **17.15** | **1** | P | **Pn** | **18 57 52.4** | **-1.6** |
| | comp=Z,0.2nm,0.3s,baz=187,slow=14,SNR=3.2 | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **18.45** | **275** | LR | LR | 19 06 42.6 | | |
| | comp=Z,36nm,18.1s,baz=150,slow=42 | | | | | | | |
| **BRTR** | **Keskin Array B** | **20.15** | **295** | P | Pn | 18 58 30.3 | -0.4 | |
| | comp=Z,0.6nm,0.7s,baz=96,slow=12,SNR=2.9 | | | | | | | |
| **BVAR** | **Borovoye Array** | **21.82** | **21** | P | **P** | **18 58 47.9** | **+1.3** | |
| | comp=Z,1.4nm,0.5s,baz=205,slow=11,SNR=9.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **23.25** | **36** | P | **P** | **18 59 04.4** | **+2.7** | |
| | comp=Z,0.5nm,0.9s,baz=234,slow=10,SNR=4.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **27.01** | **319** | P | **P** | **18 59 37.7** | **+1.3** | |
| | comp=Z,1.3nm,0.6s,baz=127,slow=8.5,SNR=4.0 | | | | | | | |
| **GERES** | **GERESS Array B** | **35.92** | **309** | P | **P** | **19 00 56.3** | **+1.5** | |
| | comp=Z,0.8nm,0.7s,baz=99,slow=8.2,SNR=6.5 | | | | | | | |
| **ESDC** | **Sonseca Array** | **48.94** | **296** | P | **P** | **19 02 40.9** | **+0.1** | |
| | comp=Z,0.1nm,0.4s,baz=70,slow=7.7,SNR=2.7 | | | | | | | |
| **NJ2** | **Nanjing** | **51.05** | **74** | *e*P | **P** | **19 02 55.0** | **-1.8** | |
| NJ2 | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **54.35** | **262** | P | **P** | **19 03 20.8** | **-0.6** | |
| | comp=Z,1.1nm,0.7s,baz=64,slow=7.3,SNR=8.6 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **64.42** | **62** | LR | LR | 19 35 57.3 | | |
| | comp=Z,63nm,18.6s,baz=335,slow=39 | | | | | | | |
| **BATI** | **Baumata** | **76.34** | **112** | LR | LR | 19 45 07.5 | | |
| | comp=Z,173nm,18.7s,slow=40 | | | | | | | |

*IDC* ***27*** *19:19:31.7±5.6, 4.°72S×133.°16E, h0km, mb3.6/1, mb1 3.8/3, mb1mx3.4/28, mbtmp3.6/3, ML3.3/2, Error ellipse: s-maj=340.0km s-min=30.5km az=76.0*
*AUST* ***27*** *19:19:39.8±99.0, 4.°95S×133.°26E, h5km±1km, Error ellipse: s-maj=3.2km s-min=1.0km az=252.0*

**ISC 27 19:19:37.8±2.3, 4.°9S±0.°1×134.°0E±0.°3, h35km, n8, σ0§99/5, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SWI** | **Sorong** | **4.87** | **325** | P | **Pn** | **19 20 48.6** | **0.0** |
| | baz=4.6,SNR=3.2 | | | | | | |
| **AAI** | **Ambon** | **5.94** | **282** | P | Pn | 19 20 59.4 | -3.9 |
| | baz=5.2,SNR=3.3 | | | | | | |
| **KDU** | **Kakadu** | **7.88** | **191** | P | Pn | 19 21 36.1 | +6.1 |
| | baz=7.8,SNR=3.3 | | | | | | |
| **MTN** | **Manton Dam** | **8.39** | **200** | P | **Pn** | **19 21 37.7** | **+0.7** |
| | baz=8.2,SNR=11 | | | | | | |
| **KNRA** | **Kununurra** | **11.89** | **205** | P | **Pn** | **19 22 24.0** | **-0.9** |
| | baz=12,SNR=8.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.95** | **179** | Pn | **Pn** | **19 23 06.1** | **-0.6** |
| | 0.1nm,0.3s,baz=353,slow=13,SNR=5.1 | | | | | | |
| WRA | | | | Sn | Sn | 19 25 44.5 | -6.7 |
| | 0.1nm,0.3s,baz=358,slow=24,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **18.66** | **180** | P | **Pn** | **19 23 54.0** | **+0.6** |
| | 0.1nm,0.3s,baz=4.5,slow=11,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.76** | **325** | P | P | 19 30 33.5 | -4.7 |
| | 0.3nm,0.4s,baz=113,slow=7.9,SNR=8.1 | | | | | | |

*ISCJB* ***27*** *19:25:19.7±1.2, 1.°40S±0.°04×123.°66E±0.°03, h21km±11km, mb3.4/3, MS3.4/1, Error ellipse: s-maj=6.2km s-min=4.7km az=7.7*
*IDC* ***27*** *19:25:19.7±1.5, 1.°63S×123.°82E, h0km, mb3.5/3, mb1 3.8/4, mb1mx3.4/41, mbtmp3.6/4, ML3.8/1, MS3.5/1, Ms1 3.7/1, ms1mx2.8/21, Error ellipse: s-maj=38.0km s-min=24.5km az=65.0*
*DJA* ***27*** *19:25:20.6±0.7, 1.°S±2.°×12.°4E±.°, h19km±8km, M4.1/16, mb4.4/2, MLv4.0/16*

**ISC 27 19:25:19.2±1.6, 1.°36S±0.°04×123.°65E±0.°03, h8km±12km, n21, σ1§37/30, mb3.6/3, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LUWI** | **Luwuk** | **0.93** | **290** | P | **Pg** | **19 25 37.1** | **-0.1** |
| LUWI | | | | S | **Sg** | **19 25 49.8** | **+0.4** |
| **KMSI** | **Cibinong** | **1.95** | **10** | P | **Pn** | **19 25 53.7** | **+1.0** |
| KMSI | | | | S | **Sn** | **19 26 17.7** | **+0.4** |
| **APSI** | **Ampana** | **2.05** | **282** | P | **Pn** | **19 25 53.6** | **-0.5** |
| APSI | | | | S | **Sg** | **19 26 24.6** | **-0.6** |
| **GTOI** | **Gorontalo** | **2.08** | **342** | P | **Pn** | **19 25 55.7** | **+1.2** |
| GTOI | | | | S | **Sb** | **19 26 24.6** | **+1.2** |
| **SANI** | **Sanana** | **2.43** | **106** | P | **Pn** | **19 25 59.3** | **-0.1** |
| SANI | | | | S | **Sn** | **19 26 27.7** | **-1.7** |
| **MRSI** | **Marisa** | **2.50** | **317** | P | **Pn** | **19 25 59.9** | **-0.4** |
| MRSI | | | | S | **Sn** | **19 26 30.0** | **-1.0** |
| **PCI** | **Palu** | **3.84** | **277** | P | **Pn** | **19 26 18.7** | **0.0** |
| PCI | | | | S | **Sn** | **19 27 04.6** | **+0.5** |
| **LBMI** | **Labuha** | **3.91** | **80** | P | **Pn** | **19 26 18.6** | **-1.1** |
| LBMI | | | | S | **Sn** | **19 27 05.6** | **-0.3** |
| **NLAI** | **Namlea** | **3.92** | **119** | P | **Pn** | **19 26 20.8** | **+1.0** |
| NLAI | | | | S | **Sn** | **19 27 05.4** | **-0.6** |
| **MPSI** | **Mapaga** | **4.11** | **294** | P | **Pn** | **19 26 23.0** | **+0.5** |
| MPSI | | | | S | **Sn** | **19 27 08.1** | **-2.8** |
| **TTSI** | **Tana Toraja** | **4.18** | **246** | P | **Pn** | **19 26 25.3** | **+1.9** |
| **BBSI** | **Bau Bau** | **4.24** | **195** | P | **Pn** | **19 26 25.4** | **+1.2** |
| **TNTI** | **Ternate** | **4.28** | **60** | P | **Pn** | **19 26 24.0** | **-0.7** |
| TNTI | | | | S | **Sn** | **19 27 18.9** | **+4.1** |
| **SPSI** | **Sidrap Palu** | **4.66** | **236** | P | **Pn** | **19 26 30.6** | **+0.6** |
| **BKSI** | **Bulukumba** | **5.28** | **222** | P | **Pn** | **19 26 39.9** | **+1.3** |
| **KAPI** | **Kappang** | **5.32** | **227** | Pn | **Pn** | **19 26 40.2** | **+1.1** |
| | 3.5nm,0.3s,baz=98,slow=7.5,SNR=5.6 | | | | | | |
| KAPI | | | | Sn | **Sn** | **19 27 40.9** | **+0.1** |
| | 0.9nm,0.3s,baz=348,slow=22,SNR=2.7 | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **5.70** | **213** | P | Pn | 19 26 50.0 | +5.6 |
| **WRA** | **Warramunga Arr** | **21.22** | **151** | P | **P** | **19 30 04.3** | **-1.5** |
| | 0.7nm,0.4s,baz=330,slow=11,SNR=15 | | | | | | |
| **ASAR** | **Alice Springs** | **24.30** | **157** | P | **P** | **19 30 36.1** | **-1.3** |
| | 0.8nm,0.5s,baz=334,slow=10,SNR=14 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.28** | **310** | LR | LR | 19 45 10.7 | |
| | comp=Z,33nm,19.3s,baz=215,slow=38 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.10** | **328** | P | P | 19 35 31.0 | +3.8 |
| | 0.3nm,0.7s,baz=125,slow=8.6,SNR=3.4 | | | | | | |

**IDC 27 19:30:17.9±1.8, 5.°72S×145.°10E, h0km, mb3.4/2, mb1 3.8/5, mb1mx3.5/34, mbtmp3.6/5, ML2.5/2, Error ellipse: s-maj=54.2km s-min=29.1km az=106.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.19** | **151** | Pn | Pn | 19 31 23.2 | +0.1 |
| | 4.8nm,0.3s,baz=358,slow=6.2,SNR=17 | | | | | | |
| PMG | | | | Sn | Sn | 19 32 05.2 | -7.7 |
| | 5.1nm,0.3s,baz=95,slow=22,SNR=11 | | | | | | |
| **CTA** | **Charters Tower** | **14.33** | **176** | Pn | Pn | 19 33 42.5 | +0.3 |
| | 0.5nm,0.3s,baz=0.0,slow=12,SNR=4.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.59** | **216** | P | Pn | 19 34 25.2 | +0.5 |
| | 0.1nm,0.3s,baz=40,slow=12,SNR=5.9 | | | | | | |
| **ASAR** | **Alice Springs** | **20.85** | **210** | P | P | 19 35 00.6 | -0.9 |
| | 0.7nm,0.7s,baz=38,slow=12,SNR=6.8 | | | | | | |
| **ILAR** | **Eielson Array** | **85.97** | **23** | P | P | 19 43 00.0 | +0.2 |
| | 0.5nm,0.7s,baz=251,slow=6.0,SNR=5.1 | | | | | | |

**MEX 27 19:39:33.0±0.6, 17.°25N×94.°46W, h147km±12km, MD4.0, Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TGIG** | | **1.36** | **110** | *e*P | Pn | 19 40 00.1 | -0.9 |
| TGIG | | | | *e*S | Sn | 19 40 20.1 | -2.3 |
| **HUIG** | **Huatulco** | **2.16** | **227** | *e*P | Pn | 19 40 07.6 | -2.3 |
| HUIG | | | | *e*S | Sn | 19 40 36.8 | -1.5 |
| **CCIG** | **Comitan** | **2.42** | **113** | *e*P | Pn | 19 40 12.3 | -1.0 |
| CCIG | | | | *e*S | Sn | 19 40 42.4 | -1.8 |
| **TPIG** | **Tehuac#an** | **3.00** | **293** | *e*P | Pn | 19 40 19.1 | -1.4 |
| TPIG | | | | *e*S | Sn | 19 40 55.5 | -1.7 |
| **PNIG** | **Pinotepa** | **3.61** | **257** | *e*P | Pn | 19 40 26.4 | -1.8 |
| PNIG | | | | *e*S | Sn | 19 41 08.6 | -2.4 |

**DJA 27 19:46:26.8±0.6, 9.°S×117.°4E±.°, h64km±17km, M3.6/13, MLv3.6/13, South of Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IGBI** | **Denpasar** | **1.27** | **64** | P | Pn | 19 46 48.0 | -0.5 |
| IGBI | | | | S | Sn | 19 47 02.2 | -2.6 |
| **DNP** | **Denpasar** | **1.39** | **60** | P | Pn | 19 46 50.6 | +0.4 |
| DNP | | | | S | Sn | 19 47 08.7 | +1.0 |
| **ABJI** | **Asem Bagus** | **1.59** | **9** | P | Pn | 19 46 54.6 | +1.7 |
| **SRBI** | **Singaraja** | **1.77** | **43** | P | Pn | 19 46 54.9 | -0.3 |
| SRBI | | | | S | Sn | 19 47 16.6 | -0.1 |
| **KMMI** | **Kalianget** | **2.31** | **359** | P | Pn | 19 47 03.9 | +1.3 |
| KMMI | | | | S | Sn | 19 47 32.0 | +2.0 |
| **PWJI** | **Pagerwojo** | **2.55** | **302** | P | Pn | 19 47 05.8 | 0.0 |
| PWJI | | | | S | Sn | 19 47 35.7 | 0.0 |
| **TWSI** | **Taliwang, Sumb** | **2.93** | **78** | P | Pn | 19 47 10.5 | -0.5 |
| **PCJI** | **Pacitan** | **3.02** | **293** | P | Pn | 19 47 11.6 | -0.6 |
| PCJI | | | | S | Sn | 19 47 46.5 | -0.7 |
| **UGM** | **Wanagama** | **3.73** | **293** | P | Pn | 19 47 24.1 | +2.2 |
| UGM | | | | S | Sn | 19 48 04.2 | -0.4 |

*DDA* ***27*** *19:57:48.8, 37.°43N×38.°60E, h7km, Md2.8*
*ISCJB* ***27*** *19:57:50.1±0.8, 37.°44N±0.°03×38.°59E±0.°03, h4km±6km, Error ellipse: s-maj=5.4km s-min=3.7km az=163.2*
*CSEM* ***27*** *19:57:50.6±0.3, 37.°48N×38.°63E, h2km, ML2.1, Error ellipse: s-maj=7.4km s-min=6.2km az=138.0*
*NSSC* ***27*** *19:57:57.0±1.5, 37.°05N×38.°56E, h0km±7km, MD1.1, ML2.1*

**ISC 27 19:57:49.6±1.0, 37.°43N±0.°02×38.°61E±0.°02, h12km±8km, n41, σ0§95/59, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **URFA** | **Urfa** | **0.17** | **85** | *e*PG | **Pg** | **19 57 53.8** | **+0.2** |
| **URFA** | **Urfa** | **0.17** | **85** | *e*Pg | **Pg** | **19 57 53.8** | **+0.2** |
| **GZT** | **Gaziantep** | **0.83** | **265** | P | **Pn** | **19 58 07.1** | **-0.1** |
| GZT | | | | S | **Sb** | **19 58 17.3** | **+0.1** |
| **MALT** | **Malatya** | **0.90** | **351** | *e*PG | **Pg** | **19 58 07.3** | **+0.3** |
| **MALT** | **Malatya** | **0.90** | **351** | *e*Pg | **Pg** | **19 58 07.3** | **+0.3** |
| **AKCD** | **Akcadag** | **1.02** | **328** | *i* P | **Pg** | **19 58 09.5** | **+0.2** |
| AKCD | | | | *i* S | **Sg** | **19 58 22.2** | **-0.5** |
| **AKCD** | **Akcadag** | **1.02** | **328** | P | **Pg** | **19 58 09.5** | **+0.2** |
| AKCD | | | | S | **Sg** | **19 58 22.2** | **-0.5** |
| **SVRC** | **Sivrice-ELAZID** | **1.10** | **30** | *e*PN | **Pn** | **19 58 11.4** | **+0.4** |
| **SVRC** | **Sivrice-ELAZID** | **1.10** | **30** | *e*Pn | **Pn** | **19 58 11.4** | **+0.4** |
| **DYBB** | **Diyarbakir** | **1.33** | **66** | *e*PN | **Pg** | **19 58 15.7** | **+0.6** |
| **SLMH** | **Al Salmeh** | **1.33** | **204** | *e*P | **Pb** | **19 58 14.6** | **+0.2** |
| SLMH | | | | *e*S | **Sb** | **19 58 30.0** | **-1.4** |
| SLMH | | | | AML | AML | 19 58 37.8 | |
| | comp=Z,34nm,0.6s | | | | | | |
| **SLMH** | **Al Salmeh** | **1.33** | **204** | *e*P | **Pb** | **19 58 14.6** | **+0.2** |
| SLMH | | | | *e*S | **Sb** | **19 58 30.0** | **-1.4** |
| | comp=Z,34nm,0.6s | | | | | | |
| **KMRS** | **Kahramanmaras** | **1.36** | **274** | *e*PN | **Pb** | **19 58 15.4** | **+0.4** |
| **KMRS** | **Kahramanmaras** | **1.36** | **274** | *e*Pn | **Pb** | **19 58 15.4** | **+0.4** |
| **DIY** | **Diyarbakir** | **1.37** | **70** | *e*Pn | **Pb** | **19 58 15.7** | **+0.5** |
| **KUZU** | **Kuzuini** | **1.39** | **242** | *i* P | **Pg** | **19 58 17.9** | **+1.7** |
| KUZU | | | | *i* S | **Sg** | **19 58 33.9** | **-0.3** |
| **KUZU** | **Kuzuini** | **1.39** | **242** | P | **Pg** | **19 58 17.9** | **+1.7** |
| KUZU | | | | S | **Sg** | **19 58 33.9** | **-0.3** |
| **AYKD** | **Aykdinkavak** | **1.43** | **270** | P | **Pn** | **19 58 15.6** | **+0.2** |
| AYKD | | | | S | **Sn** | **19 58 34.0** | **-0.1** |
| **DARE** | **Darende-Malaty** | **1.45** | **323** | *e*PN | **Pb** | **19 58 17.1** | **+0.7** |
| **DARE** | **Darende-Malaty** | **1.45** | **323** | *e*Pn | **Pb** | **19 58 17.2** | **+0.7** |
| **MAZI** | **Mazidag** | **1.47** | **88** | *e*PN | **Pb** | **19 58 17.3** | **+0.5** |
| **MAZI** | **Mazidag** | **1.47** | **88** | *e*Pn | **Pb** | **19 58 17.3** | **+0.5** |
| **KAMA** | **Osmaniye** | **1.56** | **262** | P | **Pg** | **19 58 19.5** | **-0.1** |
| KAMA | | | | S | **Sg** | **19 58 39.6** | **-0.3** |
| **MNKR** | **ALMNKUR** | **1.57** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| LPAZ | | | | LR | LR | 20 11 29.1 | | | |
| | comp=N,1µm,19.9s,baz=192,slow=48 | | | | | | | | |
| **PB04** | **IPOC Station P** | **3.31** | **189** | *eP* | **Pn** | **20 09 51.2** | **-1.7** | | |
| PB04 | | | | AML | AML | 20 10 40.3 | | | |
| | comp=E,15µm,0.5s | | | | | | | | |
| **LVC** | **Limon Verde** | **3.61** | **170** | P | **Pn** | **20 09 57.1** | **+0.2** | | |
| | comp=E,6µm,0.3s,baz=333,slow=8.6,SNR=227 | | | | | | | | |
| LVC | | | | S | **Sn** | **20 10 37.5** | **-1.1** | | |
| | comp=E,8µm,0.3s,baz=54,slow=23,SNR=6.6 | | | | | | | | |
| LVC | | | | LR | LR | 20 11 57.3 | | | |
| | comp=E,1µm,19.2s,baz=272,slow=48 | | | | | | | | |
| **LVC** | **Limon Verde** | **3.61** | **170** | *eP* | **Pn** | **20 09 56.4** | **-0.5** | | |
| LVC | | | | S | **Sn** | **20 10 37.5** | **-1.1** | | |
| **YJA** | **Yavi** | **4.94** | **130** | *i* P | **Pn** | **20 10 18.1** | **+3.0** | | |
| **HJA** | **Humahuaca** | **5.70** | **137** | *i* P | **Pn** | **20 10 23.7** | **-1.8** | | |
| **AZAP** | **Zapla** | **6.66** | **142** | *i* P | **Pn** | **20 10 36.5** | **-2.0** | | |
| **SLA** | **San Lorenzo** | **6.81** | **147** | *i* P | **Pn** | **20 10 39.2** | **-1.2** | | |
| SLA | | | | AML | AML | 20 11 11.5 | | | |
| | comp=Z,98nm,0.7s | | | | | | | | |
| **ALOL** | **LOMAS DE OLMED** | **7.08** | **133** | *i* P | **Pn** | **20 10 42.0** | **-1.9** | | |
| **FSA** | **Cafayete** | **7.76** | **155** | *i* P | **Pn** | **20 10 55.5** | **+2.2** | | |
| **SIV** | **San Ignacio** | **8.68** | **71** | P | **Pn** | **20 11 06.2** | **+0.4** | | |
| | comp=Z,46nm,0.3s,baz=265,slow=12,SNR=230 | | | | | | | | |
| **NNA** | **Nana** | **9.89** | **314** | P | **Pn** | **20 11 22.1** | **-0.2** | | |
| | comp=Z,1.0nm,0.3s,baz=135,slow=10.0,SNR=1.8 | | | | | | | | |
| NNA | | | | S | Sn | 20 13 20.4 | +8.7 | | |
| | comp=Z,5.3nm,0.3s,baz=212,slow=19,SNR=3.6 | | | | | | | | |
| **NNA** | **Nana** | **9.89** | **314** | *eP* | **Pn** | **20 11 22.1** | **-0.2** | | |
| | comp=Z,36nm,0.8s | | | | | | | | |
| NNA | | | | S | Sn | 20 13 20.4 | +8.7 | | |
| **LCO** | **Las Campanas** | **9.97** | **186** | *eP* | **Pn** | **20 11 25.7** | **+2.1** | | |
| | comp=Z,79nm,0.6s | | | | | | | | |
| **SAML** | **Samuel** | **11.81** | **33** | *eP* | **Pn** | **20 11 46.0** | **-2.3** | | |
| | comp=Z,26nm,0.6s | | | | | | | | |
| **CFAA** | **Coronel Fontan** | **12.57** | **175** | P | Pn | 20 11 54.0 | -4.6 | | |
| | comp=Z,0.2nm,0.3s,baz=348,slow=13,SNR=9.7 | | | | | | | | |
| CFAA | | | | S | Sn | 20 14 24.7 | +8.1 | | |
| | comp=Z,0.1nm,0.3s,baz=8.1,slow=18,SNR=2.4 | | | | | | | | |
| CFAA | | | | LR | LR | 20 17 38.0 | | | |
| | comp=Z,11nm,20.7s,baz=330,slow=41 | | | | | | | | |
| **CPUP** | **Villa Florida** | **13.45** | **125** | P | **Pn** | **20 12 08.4** | **-1.7** | | |
| | comp=Z,0.7nm,0.3s,baz=307,slow=12,SNR=20 | | | | | | | | |
| CPUP | | | | LR | LR | 20 18 58.4 | | | |
| | comp=Z,109nm,19.3s,baz=302,slow=44 | | | | | | | | |
| **TRQA** | **Tornquist** | **20.08** | **162** | *eP* | **P** | **20 13 28.5** | **-0.9** | | |
| | comp=Z,86nm,0.9s | | | | | | | | |
| **BDFB** | **Brasilia** | **20.88** | **84** | P | Pn | 20 13 41.7 | +0.1 | | |
| | comp=Z,16nm,0.4s,baz=250,slow=8.5,SNR=25 | | | | | | | | |
| **OTAV** | **Otavalo** | **21.04** | **335** | *eP* | **P** | **20 13 41.0** | **+0.7** | | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| **ROSC** | **El Rosal** | **24.20** | **348** | LR | LR | 20 24 34.1 | | | |
| | comp=Z,82nm,19.4s,baz=186,slow=38 | | | | | | | | |
| **RCBR** | **Riachuelo** | **35.34** | **73** | P | **P** | **20 15 50.0** | **-0.3** | | |
| | comp=Z,13nm,0.8s,baz=238,slow=7.7,SNR=8.1 | | | | | | | | |
| **USHA** | **Ushuaia** | **35.74** | **179** | P | **P** | **20 15 53.2** | **+0.2** | | |
| | comp=Z,13nm,0.9s,baz=342,slow=9.3,SNR=6.9 | | | | | | | | |
| **CELP** | **Cerrillos** | **37.01** | **5** | *eP* | **P** | **20 16 02.8** | **-1.4** | | |
| **WVT** | **Waverly** | **57.52** | **343** | *eP* | **P** | **20 18 42.0** | **-1.1** | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **58.25** | **325** | P | **P** | **20 18 48.1** | **-0.4** | | |
| | comp=Z,1.4nm,0.9s,baz=140,slow=6.6,SNR=6.6 | | | | | | | | |
| TXAR | | | | pP | **pP** | **20 19 09.6** | **-0.9** | | |
| | comp=Z,1.6nm,0.9s,baz=148,slow=9.7,SNR=6.2 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **62.60** | **162** | P | **P** | **20 19 18.3** | **+0.8** | | |
| **VNA1** | **Neumayer--Stat** | **62.81** | **161** | P | **P** | **20 19 19.8** | **+1.1** | | |
| **VNA2** | **Neumayer--Watz** | **63.17** | **161** | P | **P** | **20 19 22.2** | **+0.9** | | |
| | baz=296,slow=7.5 | | | | | | | | |
| **SNAA** | **Sanae** | **64.80** | **161** | P | **P** | **20 19 31.7** | **-0.3** | | |
| **SNAA** | **Sanae** | **64.80** | **161** | P | **P** | **20 19 32.4** | **+0.4** | | |
| | comp=Z,3.4nm,0.7s,baz=292,slow=5.9,SNR=35 | | | | | | | | |
| SNAA | | | | pP | **pP** | **20 19 54.4** | **+0.1** | | |
| | comp=Z,1.6nm,0.7s,baz=288,slow=5.0,SNR=4.2 | | | | | | | | |
| **SNAA** | **Sanae** | **64.80** | **161** | *eP* | **P** | **20 19 31.5** | **-0.5** | | |
| | comp=Z,4.8nm,0.8s | | | | | | | | |
| SNAA | | | | pP | **pP** | **20 19 54.4** | **+0.1** | | |
| **SDCO** | **Great Sand Dun** | **65.81** | **329** | *eP* | **P** | **20 19 39.2** | **0.0** | | |
| | comp=Z,6.5nm,0.9s | | | | | | | | |
| **TIC** | **Toumodi** | **68.53** | **75** | *eP* | **P** | **20 19 56.5** | **-0.1** | | |
| **KIC** | **Kosan Boka** | **68.67** | **75** | *eP* | **P** | **20 19 58.1** | **+0.6** | | |
| | comp=Z,11nm,0.3s | | | | | | | | |
| **DBIC** | **Dimbokro** | **68.69** | **75** | P | **P** | **20 19 57.1** | **-0.4** | | |
| | comp=Z,5.0nm,0.8s,baz=215,slow=8.4,SNR=15 | | | | | | | | |
| DBIC | | | | pP | **pP** | **20 20 00.0** | **-0.2** | | |
| | comp=Z,12nm,0.8s,baz=226,slow=6.4,SNR=4.5 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **71.14** | **180** | *eP* | **P** | **20 20 12.3** | **+0.4** | | |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **ULM** | **Lac du Bonnet** | **72.79** | **343** | P | **P** | **20 20 21.2** | **-0.4** | | |
| | comp=Z,5.8nm,0.5s,baz=169,slow=5.8,SNR=7.1 | | | | | | | | |
| ULM | | | | pP | **pP** | **20 20 43.6** | **-0.9** | | |
| | comp=Z,6.1nm,0.5s,baz=147,slow=6.2,SNR=2.8 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.17** | **322** | P | **P** | **20 20 25.8** | **+1.3** | | |
| | comp=Z,1.6nm,0.7s,baz=157,slow=5.8,SNR=9.4 | | | | | | | | |
| NVAR | | | | pP | **pP** | **20 20 47.5** | **+0.2** | | |
| | comp=Z,2.3nm,0.8s,baz=136,slow=7.6,SNR=4.4 | | | | | | | | |
| NVAR | | | | sP | **sP** | **20 20 58.8** | **+2.0** | | |
| | comp=Z,1.8nm,0.7s,baz=143,slow=7.2,SNR=3.2 | | | | | | | | |
| **SCHQ** | **Schefferville** | **73.61** | **2** | pP | pP | 20 20 48.5 | -0.8 | | |
| | comp=Z,15nm,0.9s,baz=174,slow=4.8,SNR=4.8 | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **77.16** | **71** | *eP* | **P** | **20 20 46.8** | **-0.8** | | |
| **TORD** | **Torodi Ar. Bea** | **77.16** | **71** | P | **P** | **20 20 46.8** | **-0.8** | | |
| | comp=Z,2.4nm,0.4s,baz=253,slow=5.8,SNR=39 | | | | | | | | |
| TORD | | | | pP | **pP** | **20 21 09.7** | **-0.9** | | |
| | comp=Z,5.2nm,0.5s,baz=252,slow=5.6,SNR=5.6 | | | | | | | | |
| TORD | | | | sP | **sP** | **20 21 20.7** | **+0.5** | | |
| | comp=Z,5.8nm,0.7s,baz=252,slow=5.3,SNR=3.6 | | | | | | | | |
| **SYO** | **Syowa Base** | **79.02** | **160**‖ | *eP* | **P** | **20 20 56.0** | **-0.9** | | |
| **VNDA** | **Vanda** | **79.14** | **190** | P | **P** | **20 20 58.9** | **+1.3** | | |
| | comp=Z,3.8nm,0.9s,baz=127,slow=4.7,SNR=16 | | | | | | | | |
| **EDM** | **Edmonton** | **81.27** | **335** | *eP* | **P** | **20 21 07.5** | **-1.7** | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **PAB** | **San Pablo** | **84.23** | **45** | *eP* | **P** | **20 21 25.0** | **+0.1** | | |
| | comp=Z,3.5nm,0.7s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **84.55** | **45** | P | **P** | **20 21 27.2** | **+0.7** | | |
| | comp=Z,1.8nm,0.8s,baz=250,slow=5.4,SNR=12 | | | | | | | | |
| ESDC | | | | pP | **pP** | **20 21 50.1** | **+0.3** | | |
| | comp=Z,3.4nm,0.8s,baz=246,slow=5.5,SNR=6.0 | | | | | | | | |
| **BOSA** | **Boshof** | **85.18** | **118** | P | **P** | **20 21 30.2** | **+0.1** | | |
| | comp=Z,4.5nm,0.9s,baz=251,slow=5.9,SNR=5.8 | | | | | | | | |
| BOSA | | | | LR | LR | 20 57 35.0 | | | |
| | comp=Z,17nm,18.4s,baz=298,slow=34 | | | | | | | | |
| **MAW** | **Mawson** | **86.86** | **164** | P | **P** | **20 21 37.1** | **-0.3** | | |
| | comp=Z,7.2nm,1.0s,baz=219,slow=7.5,SNR=18 | | | | | | | | |
| MAW | | | | LR | LR | 21 02 03.4 | | | |
| | comp=Z,21nm,18.3s,baz=246,slow=37 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **88.66** | **341** | P | **P** | **20 21 46.0** | **+0.1** | | |
| | comp=Z,8.0nm,0.6s,baz=133,slow=4.9,SNR=18 | | | | | | | | |
| YKA | | | | pP | **pP** | **20 22 09.2** | **-0.2** | | |
| | comp=Z,8.9nm,0.5s,baz=132,slow=4.8,SNR=12 | | | | | | | | |
| YKA | | | | sP | **sP** | **20 22 18.7** | **-0.1** | | |
| | comp=Z,4.3nm,0.6s,baz=136,slow=4.9,SNR=3.4 | | | | | | | | |
| **KEST** | **Kesra** | **92.35** | **53** | LR | LR | 21 02 55.8 | | | |
| | comp=Z,35nm,20.7s,baz=260,slow=35 | | | | | | | | |
| **SUMG** | **Summit** | **93.75** | **9** | *i* P | pP | 20 22 33.6 | +0.2 | | |
| | comp=Z,19nm,1.2s | | | | | | | | |
| **CASY** | **Casey** | **94.94** | **180** | *eP* | **P** | **20 22 15.9** | **+0.8** | | |
| | comp=Z,8.4nm,1.1s | | | | | | | | |
| **GERES** | **GERESS Array B** | **99.82** | **42** | LR | LR | 21 02 22.9 | | | |
| | comp=Z,35nm,21.0s,baz=338,slow=32 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyd** | **26.89** | **279** | T | T | 22 47 12.8 | | | |
| | baz=101,slow=75,SNR=652 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyd** | **26.89** | **279** | T | T | 22 47 12.8 | | | |
| | baz=101,slow=75,SNR=512 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyd** | **26.90** | **281** | T | T | 22 47 21.8 | | | |
| | baz=100,slow=75,SNR=77 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyd** | **26.90** | **279** | T | T | 22 47 18.4 | | | |
| | baz=101,slow=75,SNR=429 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyd** | **26.92** | **281** | T | T | 22 47 15.3 | | | |
| | baz=100,slow=75,SNR=95 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyd** | **26.92** | **281** | T | T | 22 47 26.8 | | | |
| | baz=100,slow=75,SNR=92 | | | | | | | | |
| **CTA** | **Charters Tower** | **127.58** | **224** | PKP | **PKPdf** | **20 27 59.4** | **+0.7** | | |
| | comp=Z,3.5nm,0.8s,baz=134,slow=1.4,SNR=2.9 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **129.76** | **41** | *e*PKPdf | **PKPdf** | **20 28 02.7** | **+0.8** | | |
| **ASAR** | **Alice Springs** | **131.75** | **209** | PKP | **PKPdf** | **20 28 06.2** | **-0.4** | | |
| | comp=Z,2.8nm,0.7s,baz=136,slow=1.8,SNR=21 | | | | | | | | |
| ASAR | | | | pPKP | **pPKPdf** | **20 28 31.7** | **+0.5** | | |
| | comp=Z,0.6nm,0.5s,baz=136,slow=1.5,SNR=2.4 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **134.70** | **212** | PKP | **PKPdf** | **20 28 12.1** | **-0.1** | | |
| | comp=Z,5.7nm,0.7s,baz=150,slow=1.8,SNR=52 | | | | | | | | |
| WRA | | | | pPKP | **pPKPdf** | **20 28 37.7** | **+1.0** | | |
| | comp=Z,1.5nm,0.6s,baz=145,slow=1.7,SNR=3.3 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **134.70** | **213** | *e*PKPdf | **PKPdf** | **20 28 11.7** | **-0.5** | | |
| **ZALV** | **Zalesovo Beam** | **139.99** | **23** | PKP | **PKPdf** | **20 28 21.7** | **+0.9** | | |
| | comp=Z,4.2nm,0.7s,baz=296,slow=3.0,SNR=19 | | | | | | | | |
| ZALV | | | | pPKP | **pPKPdf** | **20 28 46.2** | **+0.8** | | |
| | comp=Z,3.7nm,0.7s,baz=272,slow=2.9,SNR=4.6 | | | | | | | | |
| **AAK** | **Ala-Archa** | **141.66** | **44** | PKP | **PKPdf** | **20 28 25.6** | **+1.2** | | |
| | comp=Z,0.8nm,0.4s,baz=159,slow=5.7,SNR=5.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **143.99** | **33** | PKP | PKPbc | 20 28 27.2 | +0.8 | | |
| | comp=Z,1.9nm,0.7s,baz=339,slow=1.1,SNR=11 | | | | | | | | |
| MKAR | | | | pPKP | pPKPdf | 20 28 52.0 | -0.8 | | |
| | comp=Z,1.6nm,0.7s,baz=285,slow=2.9,SNR=3.9 | | | | | | | | |
| **POO** | **Poona** | **145.43** | **85** | *eP* | **PKPdf** | **20 28 30.0** | **-1.6** | | |
| **TLY** | **Talaya** | **147.00** | **8** | PKPbc | **PKPab** | **20 28 36.6** | **-0.3** | | |
| | comp=Z,6.2nm,0.9s,baz=34,slow=3.6,SNR=4.4 | | | | | | | | |
| TLY | | | | pPKPbc | pPKPbc | 20 29 00.2 | +0.5 | | |
| | comp=Z,4.7nm,0.6s,baz=284,slow=2.9,SNR=3.8 | | | | | | | | |
| **BATI** | **Baumata** | **148.13** | **205** | PKPbc | **PKPbc** | **20 28 39.4** | **-0.1** | | |
| | comp=Z,21nm,0.7s,baz=268,slow=3.5,SNR=5.1 | | | | | | | | |
| **SOEI** | **Soe** | **148.28** | **207** | *e*PKPbc | **PKPbc** | **20 28 41.0** | **+1.0** | | |
| **WMQ** | **Urumqi** | **148.81** | **33** | P | **PKPab** | **20 28 49.0** | **+4.5** | | |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **149.09** | **329** | PKPbc | **PKPbc** | **20 28 41.3** | **+0.3** | | |
| | comp=Z,5.8nm,0.8s,baz=12,slow=1.3,SNR=10 | | | | | | | | |
| USRK | | | | pPKPbc | **pPKPbc** | **20 29 05.6** | **+0.2** | | |
| | comp=Z,2.8nm,0.7s,baz=63,slow=0.5,SNR=3.5 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **150.00** | **311** | PKPbc | **PKPbc** | **20 28 43.6** | **0.0** | | |
| | comp=Z,5.2nm,0.8s,baz=132,slow=1.0,SNR=16 | | | | | | | | |
| MJAR | | | | pPKPbc | **pPKPbc** | **20 29 08.5** | **+0.5** | | |
| | comp=Z,2.9nm,0.8s,baz=101,slow=2.0,SNR=3.9 | | | | | | | | |
| **MMRI** | **Maumere** | **150.12** | **204** | *e*PKPbc | **PKPbc** | **20 28 43.0** | **-1.5** | | |
| **SONM** | **Songino Array** | **151.10** | **6** | PKPbc | **PKPbc** | **20 28 46.5** | **+0.5** | | |
| | comp=Z,10nm,0.8s,baz=177,slow=1.2,SNR=13 | | | | | | | | |
| SONM | | | | pPKPbc | **pPKPbc** | **20 29 10.6** | **+0.2** | | |
| | comp=Z,3.7nm,0.5s,baz=312,slow=1.6,SNR=5.0 | | | | | | | | |
| **SIJI** | **Sorong** | **151.51** | **228** | PKPbc | **PKPbc** | **20 28 47.3** | **-0.5** | | |
| | comp=Z,12nm,0.7s,baz=116,slow=8.3,SNR=12 | | | | | | | | |
| **KAPI** | **Kappang** | **154.38** | **202** | PKPbc | **PKPbc** | **20 28 54.6** | **+0.5** | | |
| | comp=Z,2.0nm,0.3s,baz=178,slow=1.3,SNR=4.5 | | | | | | | | |
| KAPI | | | | PKPab | **PKPab** | **20 29 09.2** | **+0.8** | | |
| | comp=Z,17nm,0.9s,baz=181,slow=2.8,SNR=13 | | | | | | | | |
| **KAPI** | **Kappang** | **154.38** | **202** | PKPbc | **PKPbc** | **20 28 54.6** | **+0.5** | | |
| KAPI | | | | *e*PKPab | **PKPab** | **20 29 08.9** | **+0.6** | | |
| KAPI | | | | PKPab | **PKPab** | **20 29 09.2** | **+0.8** | | |
| **KSRS** | **Korea Array** | **156.10** | **324** | PKPab | **PKPab** | **20 29 15.8** | **+0.6** | | |
| | comp=Z,2.1nm,0.8s,baz=69,slow=4.2,SNR=5.4 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **156.13** | **324** | PKPab | **PKPab** | **20 29 15.8** | **+0.4** | | |
| **HHC** | **Hu-ho-hao-te** | **158.24** | **358** | *e*PKP | **PKPdf** | **20 28 47.3** | **-2.8** | | |
| HHC | | | | PP | **PP** | **20 33 05.0** | **+1.5** | | |
| HHC | | | | SS | SS | 20 52 54.0 | -1.9 | | |
| HHC | | | | PPMZ | | | | | |
| | comp=Z,69nm,4.9s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | comp=Z,190nm,11.1s | | | | | | | | |
| **PSI** | **Prapat** | **160.34** | **144** | PKPab | **PKPab** | **20 29 34.6** | **+0.3** | | |
| | comp=Z,5.5nm,0.8s,baz=251,slow=7.7,SNR=4.2 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **169.13** | **91** | PKP | **PKPdf** | **20 29 00.8** | **+0.1** | | |
| | comp=Z,0.6nm,0.9s,baz=279,slow=2.7,SNR=4.7 | | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **20 30 13.3** | **+0.4** | | |
| | comp=Z,0.7nm,0.9s,baz=255,slow=6.8,SNR=5.8 | | | | | | | | |

*ISCJB **27** 20:12:03.4±0.5,24°.08N±0°.04×122°.59E±0°.02,h21km±5km, Error ellipse: s-maj=6.2km s-min=2.9km az=172.5*
*TAP **27** 20:12:03.9,24°.10N×122°.52E,h16km±1km,ML3.1,D*
*JMA **27** 20:12:04.0±0.2,24°.91N×122°.84E,h3km,M2.7*

**ISC 27 20:12:03.5±1.1,24°.10N±0°.04×122°.59E±0°.02,h20km±14km, n31,σ0§58/62,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YOJ** | **Yonaguni jima** | **0.53** | **47** | P | **Pb** | **20 12 13.5** | **-0.5** |
| YOJ | | | | *e*S | **Sb** | **20 12 20.2** | **-1.0** |
| **ENA** | **Nanau** | **0.84** | **293** | P | **Pb** | **20 12 19.1** | **-0.3** |
| | baz=294 | | | | | | |
| ENA | | | | *e*S | **Sb** | **20 12 30.2** | **0.0** |
| | baz=294 | | | | | | |
| **TWC** | **Suao** | **0.84** | **307** | P | **Pb** | **20 12 18.9** | **-0.5** |
| | baz=310 | | | | | | |
| TWC | | | | *e*S | **Sb** | **20 12 30.9** | **+0.7** |
| | baz=310 | | | | | | |
| **TWD** | **Chiawan** | **0.91** | **269** | *e*P | **Pn** | **20 12 21.0** | **-0.1** |
| | baz=268 | | | | | | |
| TWD | | | | *e*S | **Sb** | **20 12 32.6** | **+0.4** |
| | baz=268 | | | | | | |
| **ILA** | **Ilan** | **1.01** | **311** | *e*P | **Pb** | **20 12 22.1** | **-0.1** |
| | baz=313 | | | | | | |
| ILA | | | | *e*S | **Sn** | **20 12 35.6** | **-0.5** |
| | baz=313 | | | | | | |
| **TWE** | **Neicheng** | **1.04** | **306** | P | **Pb** | **20 12 22.7** | **-0.1** |
| | baz=308 | | | | | | |
| TWE | | | | S | **Sb** | **20 12 36.2** | **+0.2** |
| | baz=308 | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.07** | **77** | P | **Pb** | **20 12 23.1** | **-0.2** |
| IRIF | | | | *e*S | **Sb** | **20 12 36.8** | **0.0** |
| **ENTT** | **Nioudou** | **1.07** | **300** | P | **Pn** | **20 12 23.4** | **0.0** |
| | baz=301 | | | | | | |
| ENTT | | | | *e*S | **Sn** | **20 12 37.7** | **-0.1** |
| | baz=301 | | | | | | |
| **ESL** | **Shilin** | **1.09** | **255** | *e*P | **Pn** | **20 12 23.1** | **-0.6** |
| | baz=253 | | | | | | |
| ESL | | | | *e*S | **Sn** | **20 12 35.9** | **-1.7** |
| | baz=253 | | | | | | |
| **NNS** | **Nan Shan** | **1.16** | **287** | *e*P | **Pb** | **20 12 25.0** | **+0.1** |
| | baz=287 | | | | | | |
| NNS | | | | *e*S | **Sn** | **20 12 39.9** | **0.0** |
| | baz=287 | | | | | | |
| **WHF** | **Hehuan Shan** | **1.21** | **272** | *e*P | **Pn** | **20 12 25.6** | **0.0** |
| | baz=272 | | | | | | |
| WHF | | | | *e*S | **Sb** | **20 12 40.8** | **-0.5** |
| | baz=272 | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.21** | **323** | *e*P | **Pb** | **20 12 25.6** | **-0.2** |
| | baz=325 | | | | | | |
| NWF | | | | *e*S | **Sn** | **20 12 41.7** | **+0.5** |
| | baz=325 | | | | | | |
| **NSK** | **Sanguang** | **1.26** | **297** | P | **Pb** | **20 12 26.8** | **+0.2** |
| | baz=298 | | | | | | |
| NSK | | | | *e*S | **Sn** | **20 12 41.9** | **-0.4** |
| | baz=298 | | | | | | |
| **TWA** | **Mucha** | **1.26** | **314** | *e*P | **Pb** | **20 12 26.4** | **-0.2** |
| | baz=315 | | | | | | |
| TWA | | | | *e*S | **Sb** | **20 12 42.6** | **+0.1** |
| | baz=315 | | | | | | |
| **TWT** | **Tachien** | **1.30** | **277** | *e*P | **Pb** | **20 12 27.0** | **-0.3** |
| | baz=276 | | | | | | |
| TWT | | | | *e*S | **Sb** | **20 12 43.9** | **+0.3** |
| | baz=276 | | | | | | |
| **EHY** | **Hungye** | **1.30** | **243** | *e*P | **Pn** | **20 12 25.9** | **-0.7** |
| | baz=241 | | | | | | |
| EHY | | | | *e*S | **Sn** | **20 12 42.9** | **-0.4** |
| | baz=241 | | | | | | |
| **JKRS** | **Kuro-shima** | **1.30** | **84** | P | **Pb** | **20 12 27.6** | **+0.3** |
| JKRS | | | | *e*S | **Sb** | **20 12 44.5** | **+0.9** |
| **WDT** | **Danda** | **1.38** | **256** | *e*P | **Pn** | **20 12 27.3** | **-0.5** |
| | baz=254 | | | | | | |
| WDT | | | | *e*S | **Sn** | **20 12 45.0** | **-0.6** |
| | baz=254 | | | | | | |
| **TWF1** | **Yuli** | **1.40** | **238** | *e*P | **Pn** | **20 12 27.8** | **-0.1** |
| | baz=236 | | | | | | |
| TWF1 | | | | *e*S | **Sn** | **20 12 45.8** | **0.0** |
| | baz=236 | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.44** | **79** | P | **Pn** | **20 12 28.4** | **-0.1** |
| JIJ | | | | *e*S | **Sn** | **20 12 46.4** | **-0.4** |
| **SMLT** | **Sun Moon Lake** | **1.56** | **262** | *e*P | **Pn** | **20 12 30.8** | **+0.6** |
| | baz=261 | | | | | | |
| SMLT | | | | *e*S | **Sn** | **20 12 50.0** | **+0.1** |
| | baz=261 | | | | | | |
| **TYC** | **Yuchr** | **1.59** | **263** | *e*P | **Pn** | **20 12 30.1** | **-0.4** |
| | baz=262 | | | | | | |
| TYC | | | | *e*S | **Sn** | **20 12 50.5** | **-0.1** |
| | baz=262 | | | | | | |
| **YUS** | **Yu-Shan** | **1.62** | **248** | *e*P | **Pn** | **20 12 31.4** | **+0.1** |
| | baz=246 | | | | | | |
| YUS | | | | *e*S | **Sn** | **20 12 51.0** | **-0.9** |
| | baz=246 | | | | | | |
| **ELDTW** | **Lidau** | **1.70** | **238** | *e*P | **Pn** | **20 12 31.9** | **-0.3** |
| | baz=236 | | | | | | |
| ELDTW | | | | *e*S | **Sn** | **20 12 52.8** | **-0.6** |
| | baz=236 | | | | | | |
| **ALS** | **Alishan** | **1.74** | **250** | *e*P | **Pn** | **20 12 33.6** | **+0.9** |
| | baz=249 | | | | | | |
| ALS | | | | *e*S | **Sn** | **20 12 54.4** | **-0.1** |
| | baz=249 | | | | | | |
| **CHN5** | **Tsauling** | **1.82** | **254** | *e*P | **Pn** | **20 12 34.7** | **+0.9** |
| | baz=253 | | | | | | |
| CHN5 | | | | *e*S | **Sn** | **20 12 55.9** | **-0.3** |
| | baz=253 | | | | | | |
| **STYT** | **Tauyuan** | **1.92** | **241** | *e*P | **Pn** | **20 12 35.9** | **+0.8** |
| | baz=239 | | | | | | |
| STYT | | | | *e*S | **Sn** | **20 12 58.8** | **0.0** |
| | baz=239 | | | | | | |
| **CHN4** | **Tsaushan** | **1.98** | **248** | *e*P | **Pn** | **20 12 37.0** | **+1.2** |
| | baz=247 | | | | | | |
| CHN4 | | | | *e*S | **Sn** | **20 13 00.5** | **+0.5** |
| | baz=247 | | | | | | |
| **WTP** | **Ta-pu** | **2.00** | **245** | *e*P | **Pn** | **20 12 37.1** | **+0.9** |
| | baz=243 | | | | | | |
| WTP | | | | *e*S | **Sn** | **20 12 59.6** | **-1.0** |
| | baz=243 | | | | | | |
| **CHN1** | **Nanshi** | **2.10** | **245** | *e*P | **Pn** | **20 12 38.5** | **+1.0** |
| | baz=243 | | | | | | |
| CHN1 | | | | *e*S | **Sn** | **20 13 02.4** | **-0.6** |
| | baz=243 | | | | | | |
| **SGST** | **Jiashian** | **2.10** | **241** | *e*P | **Pn** | **20 12 38.5** | **+1.0** |
| | baz=240 | | | | | | |
| SGST | | | | *e*S | **Sn** | **20 13 03.5** | **+0.4** |
| | baz=240 | | | | | | |

**IDC 27 20:18:38.6±6.8,2°.80S×100°.54E,h0km,mb3.2/3, mb1 3.5/3,mb1mx3.3/37,mbtmp3.3/3,Error ellipse: s-maj=246.9km s-min=30.0km az=61.0,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.18** | **356** | P | P | 20 23 26.0 | +0.1 |
| | 0.4nm,0.8s,baz=182,slow=10.0,SNR=4.7 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.33** | **160** | T | T | 21 01 58.6 | |
| | baz=333 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.34** | **160** | T | T | 21 02 00.4 | |
| | baz=333,slow=74 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.35** | **160** | T | T | 21 01 55.0 | |
| | baz=333,slow=74 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.13** | **120** | P | P | 20 25 51.5 | +0.1 |
| | 0.3nm,0.6s,baz=304,slow=9.2,SNR=6.8 | | | | | | |
| **ASAR** | **Alice Springs** | **38.35** | **126** | P | P | 20 26 01.5 | -0.2 |
| | 0.3nm,0.6s,baz=298,slow=7.9,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.00** | **39** | PKPbc | PKPab | 20 38 17.1 | -1.1 |
| | 0.2nm,0.6s,baz=354,slow=0.9,SNR=3.8 | | | | | | |

*ISCJB **27** 20:25:07.4±0.6,11°.27N±0°.04×61°.72W±0°.04,h110km±7km, Error ellipse: s-maj=7.5km s-min=4.6km az=139.8*
*TRN **27** 20:25:09.0,11°.27N×61°.64W,h103km,MD3.4*
*FUNV **27** 20:25:10.2,11°.17N×61°.62W,h99km,MW3.4*

**ISC 27 20:25:06.3±1.4,11°.22N±0°.04×61°.64W±0°.04,h126km±9km, n21,σ1§86/38,2C-3D,Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TCE** | **Chacachacare** | **0.54** | **192** | *e*P | **Pn** | **20 25 26.3** | **+1.1** |
| TCE | | | | *e*S | **Sn** | **20 25 38.1** | **-1.3** |
| **TRN** | **Trinidad (W)** | **0.62** | **158**‖ | *e*P | **Pn** | **20 25 27.0** | **+1.4** |
| TRN | | | | *e*S | **Sn** | **20 25 38.6** | **-1.6** |
| **GUIV** | **Guiria** | **0.81** | **225**‖ | *e*P | **Pn** | **20 25 27.8** | **+0.6** |
| GUIV | | | | *e*S | **Sn** | **20 25 41.4** | **-1.5** |
| **BOT** | **Bacolet** | **0.90** | **93** | *e*P | **Pn** | **20 25 29.1** | **+1.2** |
| BOT | | | | *e*S | **Sn** | **20 25 44.0** | **-0.3** |
| **TBH** | **Brigand Hill** | **0.92** | **143** | *e*P | **Pn** | **20 25 29.3** | **+1.2** |
| TBH | | | | *e*S | **Sn** | **20 25 44.0** | **-0.6** |
| **GRW** | **Mount Saint Ca** | **0.93** | **359** | *e*P | **Pn** | **20 25 28.6** | **+0.3** |
| **TOSP** | **Speyside** | **1.08** | **86** | *e*P | **Pn** | **20 25 30.8** | **+1.2** |
| TOSP | | | | *e*S | **Sn** | **20 25 46.2** | **-1.1** |
| **GUNV** | **Guanoco** | **1.66** | **231** | *e*P | **Pn** | **20 25 38.2** | **+2.2** |
| GUNV | | | | *e*S | **Sn** | **20 25 58.8** | **+0.2** |
| **CRUV** | **Carupano** | **1.66** | **251**‖ | *e*P | **Pn** | **20 25 37.2** | **+1.3** |
| CRUV | | | | *e*S | **Sn** | **20 25 57.3** | **-1.3** |
| **SVB** | **Belmont** | **2.07** | **10** | *e*P | **Pn** | **20 25 42.0** | **+1.0** |
|

*KRNET* ***27*** *20:58:50.3±0.1, 39˚.72N×71˚.18E, mb1.8*
*NNC* ***27*** *20:58:52.9±0.9, 40˚.04N×70˚.40E, h0km, mb2.6, mpv2.3, Error ellipse: s-maj=21.1km s-min=4.0km az=122.0*
**ISC 27 20:58:49.9±2.1, 39˚.68N±0˚.08×71˚.07E±0˚.06, h5km±15km, n9, σ1§91/15, 14C-4D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BTK** | **Batken** | **0.43** | **333** | ⇑ | *e* | **P** | **Pg** | **20 58 59.4** | **+1.1** |
| | baz=321 | | | | | | | | |
| BTK | | | | ⇑ | *e* | S | **Sg** | **20 59 05.1** | **+1.2** |
| | baz=321 | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.90** | **79** | ⇑ | *i* | **P** | **Pn** | **20 59 23.8** | **+0.6** |
| | baz=80 | | | | | | | | |
| SFK | | | | ⇑ | *i* | S | **Sb** | **20 59 49.8** | **+0.5** |
| | baz=80 | | | | | | | | |
| **DZET** | **Dzherino** | **1.95** | **244** | ⇑ | | Pg | **Pn** | **20 59 24.2** | **+0.4** |
| | 1.8nm,0.5s | | | | | | | | |
| DZET | | | | ⇑ | | Lg | Lg | 20 59 49.0 | |
| | 11nm,0.5s | | | | | | | | |
| **ARSB** | **Arslanbob** | **2.20** | **41** | ⇑ | *e* | **P** | **Pn** | **20 59 28.4** | **+1.2** |
| | baz=40 | | | | | | | | |
| ARSB | | | | ⇑ | *i* | S | **Sb** | **20 59 56.1** | **-1.7** |
| | baz=40 | | | | | | | | |
| **ARK** | **Arkit** | **2.23** | **17** | ⇑ | *i* | **P** | **Pb** | **20 59 30.3** | **-0.4** |
| | baz=16 | | | | | | | | |
| ARK | | | | ⇑ | *i* | S | **Sb** | **20 59 59.4** | **+0.8** |
| | baz=16 | | | | | | | | |
| **MNAS** | **Manas** | **3.01** | **21** | ⇑ | | Pg | **Pg** | **20 59 46.1** | **-1.5** |
| | 0.8nm,0.6s | | | | | | | | |
| MNAS | | | | ⇓ | | Lg | Lg | 21 00 26.3 | |
| | 1.2nm,0.4s | | | | | | | | |
| **MNAS** | **Manas** | **3.01** | **21** | ⇓ | *i* | **P** | **Pn** | **20 59 40.9** | **+2.5** |
| | baz=20 | | | | | | | | |
| MNAS | | | | ⇓ | *i* | S | **Sb** | **21 00 18.1** | **-3.1** |
| | baz=20 | | | | | | | | |
| **ARLS** | **Aral** | **3.29** | **47** | ⇑ | *i* | **P** | **Pn** | **20 59 44.2** | **+1.9** |
| | baz=47 | | | | | | | | |
| ARLS | | | | ⇑ | *i* | S | **Sn** | **21 00 23.2** | **+1.3** |
| | baz=47 | | | | | | | | |
| **KK31** | **Karatay Array** | **3.45** | **353** | ⇓ | | Pg | **Pb** | **20 59 48.6** | **-2.9** |
| | 0.3nm,0.3s,baz=180,slow=18,SNR=7.8 | | | | | | | | |
| KK31 | | | | ⇑ | | Lg | Lg | 21 00 30.1 | |
| | 0.4nm,0.3s,baz=185,slow=29,SNR=3.9 | | | | | | | | |

*IDC* ***27*** *21:05:37.1±0.6, 13˚.29N×145˚.64E, h0km, mb4.6/32, mb1 4.7/32, mb1mx4.6/44, mbtmp4.6/32, MS4.2/21, Ms1 4.2/21, ms1mx4.1/35, Error ellipse: s-maj=17.8km s-min=12.3km az=100.0*
*MOS* ***27*** *21:05:40.6±1.2, 13˚.35N×145˚.36E, h30km, mb5.1/30, MS4.2/5, Error ellipse: s-maj=11.6km s-min=6.9km az=105.6*
*ISCJB* ***27*** *21:05:40.5±1.5, 13˚.40N±0˚.04×145˚.49E±0˚.04, h25km±10km, mb4.9/101, MS4.3/26, Error ellipse: s-maj=6.8km s-min=5.1km az=140.9*
*GCMT* ***27*** *21:05:42.2±0.4, 12˚.95N×145˚.73E, h22km±1km, MW5.0/63, Moment Tensor Solution. s27,c30; s63,c91; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr3.55±.28; Mθθ-0.67±.17; Mφφ-2.88±.18; Mrθ1.00±.33; Mrφ-1.52±.11; Mθφ1.43±.26; Best double couple: M=4.00300×10^16 NP1:ϕ=31.00000°, δ58.00000°, λ94.00000°. NP2: ϕ=203.00000°, δ32.00000°, λ84.00000°. Principal axes: T 3.9580, Plg77.0000°, Azm312.0000°; N 0.0920, Plg3.0000°, Azm208.0000°; P -4.0480, Plg13.0000°, Azm118.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC* ***27*** *21:05:42.2±0.2, 13˚.24N×145˚.44E, mb5.0/28 Error ellipse: s-maj=7.6km s-min=5.9km az=121.0*
*BJI* ***27*** *21:05:43.1, 13˚.25N×145˚.76E, h66km, mb4.8/43, mB5.2/24, Ms4.8/29, Ms7 4.5/27*
*DJA* ***27*** *21:06:01.3±3.8, 13˚N±13˚×14˚5E±2˚1, h150km±28km, M5.0/25, mb4.9/25, mB5.6/7, Mw(mB)5.1/7*
**ISC 27 21:05:43.1±0.5, 13˚.31N±0˚.05×145˚.67E±0˚.07, h36km±1km, h37km: pP-P, n243, σ1§49/244, mb4.9/100, MS4.2/27, 8C-6D, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ANA2** | **Anatahan** | **3.01** | **1** | | *e* | Pn | Pn | 21 06 31.6 | +3.4 |
| ANA2 | | | | | *e* | Sn | **Sn** | **21 07 01.0** | **-2.2** |
| **SARN** | **Sarigan** | **3.37** | **2** | | *e* | Pn | **Pn** | **21 06 34.7** | **+1.5** |
| **SIJI** | **Sorong** | **20.06** | **226** | | | P | **P** | **21 10 13.7** | **+0.3** |
| | 34nm,1.0s,baz=34,slow=10,SNR=4.9 | | | | | | | | |
| SIJI | | | | | | LR | LR | 21 18 45.8 | |
| | comp=Z,488nm,19.1s,baz=34,slow=39 | | | | | | | | |
| **SWI** | **Sorong** | **20.06** | **227** | | | P | Pn | 21 10 15.8 | +0.5 |
| | 48nm,1.0s,1μm | | | | | | | | |
| **DAV** | **Davao City (W)** | **20.71** | **255** | | | LR | LR | 21 18 17.3 | |
| | comp=Z,741nm,19.4s,baz=70,slow=37 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **20.85** | **73** | | | T | T | 21 31 54.1 | |
| | baz=206,slow=75 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **20.87** | **73** | | | T | T | 21 31 57.6 | |
| | baz=206,slow=75 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **20.87** | **73** | | | T | T | 21 31 55.8 | |
| | baz=206,slow=75 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.31** | **70** | | | T | T | 21 32 28.0 | |
| | baz=254,slow=74 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.32** | **70** | | | T | T | 21 32 28.6 | |
| | baz=254 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.33** | **70** | | | T | T | 21 32 34.1 | |
| | baz=254,slow=74 | | | | | | | | |
| **LBMI** | **Labuha** | **22.73** | **234** | | | P | **P** | **21 10 43.5** | **+1.4** |
| | 46nm,1.2s | | | | | | | | |
| **JNU** | **Nakatsue** | **23.90** | **328** | | | P | **P** | **21 10 51.9** | **-1.6** |
| | 25nm,1.1s,baz=92,slow=9.5,SNR=3.2 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.08** | **345** | | | P | **P** | **21 10 53.5** | **-1.7** |
| | 10.0nm,1.0s,baz=171,slow=9.4,SNR=13 | | | | | | | | |
| MJAR | | | | | | LR | LR | 21 19 58.1 | |
| | comp=Z,671nm,19.0s,baz=160,slow=36 | | | | | | | | |
| **MAJO** | **Matsushiro** | **24.08** | **345** | ⇓ | *i* | P | **P** | **21 10 53.0** | **-2.2** |
| MAJO | | | | | | pmax | pmax | | |
| | comp=Z,311nm,1.4s | | | | | | | | |
| **MAJO** | **Matsushiro** | **24.08** | **345** | | *e* | P | **P** | **21 10 54.0** | **-1.1** |
| | comp=Z,42nm,1.1s | | | | | | | | |
| **MAT** | **Matsushiro** | **24.08** | **345** | | | P | **P** | **21 10 53.3** | **-1.9** |
| MAT | | | | | | S | **S** | **21 15 12.8** | **+2.5** |
| **GTOI** | **Gorontalo** | **25.74** | **243** | | | P | **P** | **21 11 11.8** | **+1.4** |
| | comp=Z,25nm,1.6s | | | | | | | | |
| **HNR** | **Honiara** | **26.67** | **147** | | | LR | LR | 21 22 29.5 | |
| | comp=Z,2μm,18.7s,baz=311,slow=38 | | | | | | | | |
| **MRSI** | **Marisa** | **26.74** | **243** | | | P | **P** | **21 11 18.6** | **-0.9** |
| | comp=Z,59nm,1.1s,comp=Z,818nm | | | | | | | | |
| **LUWI** | **Luwuk** | **26.81** | **240** | | | P | **P** | **21 11 17.4** | **-2.7** |
| | comp=Z,103nm,1.0s,comp=Z,862nm | | | | | | | | |
| **LUWI** | **Luwuk** | **26.81** | **240** | | *e* | P | **P** | **21 11 18.2** | **-1.9** |
| | comp=Z,88nm,0.9s | | | | | | | | |
| **APSI** | **Ampana** | **27.69** | **241** | | | P | **P** | **21 11 29.2** | **+1.2** |
| | comp=Z,38nm,1.1s | | | | | | | | |
| **MPSI** | **Mapaga** | **28.60** | **245** | | | P | **P** | **21 11 36.0** | **-0.1** |
| | comp=Z,27nm,1.2s | | | | | | | | |
| **KSRS** | **Korea Array** | **28.79** | **330** | | | P | **P** | **21 11 37.1** | **-0.4** |
| | comp=Z,4.7nm,0.8s,baz=146,slow=9.2,SNR=9.3 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.80** | **330** | | | P | **P** | **21 11 37.1** | **-0.5** |
| **KSAR** | **Wonju Array Be** | **28.80** | **330** | | | P | **P** | **21 11 37.1** | **-0.5** |
| **KS01** | **Wonju Array Si** | **28.82** | **330** | | *e* | P | **P** | **21 11 37.0** | **-0.9** |
| **PCI** | **Palu** | **29.25** | **243** | | | P | **P** | **21 11 44.4** | **+2.5** |
| | comp=Z,21nm,1.1s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **30.62** | **0** | | | P | **P** | **21 11 53.6** | **0.0** |
| YUK | | | | | | S | **S** | **21 16 55.1** | **+1.7** |
| YUK | | | | | *i* | | | 21 22 28.0 | |
| YUK | | | | | | pmax | pmax | | |
| | comp=Z,247nm,3.6s | | | | | | | | |
| YUK | | | | | | MLR | MLR | | |
| | comp=Z,643nm,23.0s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **30.81** | **356** | | | P | **P** | **21 11 56.0** | **+0.6** |
| | comp=Z,5.5nm,0.7s,baz=175,slow=18,SNR=3.6 | | | | | | | | |
| **NJ2** | **Nanjing** | **30.84** | **312** | | *e* | P | **P** | **21 11 56.0** | **+0.2** |
| NJ2 | | | | | | PMZ | | | |
| | comp=Z,12nm,0.8s | | | | | | | | |
| **KAPI** | **Kappang** | **31.53** | **236** | | | P | **P** | **21 12 00.7** | **-1.3** |
| | comp=Z,2.1nm,0.6s,baz=37,slow=14,SNR=2.9 | | | | | | | | |
| **MSHR** | **Mys Shultsa** | **31.76** | **339** | | *e* | P | **P** | **21 12 03.0** | **-0.7** |
| **VLA** | **Vladivostok** | **32.00** | **341** | ⇑ | *e* | P | **P** | **21 12 05.6** | **-0.2** |
| VLA | | | | | | pmax | pmax | | |
| | comp=Z,32nm,0.6s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **32.94** | **342** | | | P | **P** | **21 12 13.3** | **-0.8** |
| | comp=Z,7.5nm,0.8s,baz=159,slow=8.2,SNR=14 | | | | | | | | |
| USRK | | | | | | LR | LR | 21 25 17.8 | |
| | comp=Z,289nm,18.6s,baz=144,slow=36 | | | | | | | | |
| **WHN** | **Wuhan** | **33.58** | **306** | ⇑ | | P | P | 21 12 16.0 | -3.8 |
| **KBKI** | **Kotabaru** | **33.61** | **243** | | | P | **P** | **21 12 21.7** | **+1.4** |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **34.09** | **339** | | | P | **P** | **21 12 24.0** | **-0.1** |
| MDJ | | | | | | S | **S** | **21 17 46.3** | **-1.2** |
| MDJ | | | | | | PMZ | | | |
| | comp=Z,21nm,1.3s | | | | | | | | |
| MDJ | | | | | | PMZ | | | |
| | comp=Z,99nm,4.4s | | | | | | | | |
| MDJ | | | | | | LN | | | |
| | comp=Z,340nm,17.8s | | | | | | | | |
| MDJ | | | | | | LE | | | |
| | comp=Z,240nm,16.2s | | | | | | | | |
| MDJ | | | | | | LZ | | | |
| | comp=Z,670nm,17.2s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **34.83** | **284** | | | P | **P** | **21 12 29.0** | **-1.9** |
| QIZ | | | | | | S | **S** | **21 17 57.0** | **-2.6** |
| QIZ | | | | | | PMZ | | | |
| | comp=Z,35nm,2.7s | | | | | | | | |
| QIZ | | | | | | LZ | | | |
| | comp=Z,630nm,12.1s | | | | | | | | |
| **BBKI** | **Banjar Baru** | **34.84** | **244** | | | P | **P** | **21 12 34.0** | **+3.0** |
| | comp=Z,23nm,1.4s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **34.86** | **199** | | *e* | P | **P** | **21 12 29.2** | **-1.8** |
| WRAB | | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **34.86** | **199** | | | P | **P** | **21 12 28.5** | **-2.5** |
| | comp=Z,59nm,0.7s,SNR=5.0 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **34.86** | **199** | | *e* | P | **P** | **21 12 29.2** | **-1.8** |
| | comp=Z,9.4nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.88** | **199** | | | P | **P** | **21 12 28.9** | **-2.3** |
| | comp=Z,6.4nm,0.8s,baz=19,slow=9.4,SNR=21 | | | | | | | | |
| WRA | | | | | | LR | LR | 21 26 14.3 | |
| | comp=Z,354nm,21.6s,baz=10.0,slow=36 | | | | | | | | |
| **CN2** | **Changchun** | **34.99** | **334** | | *e* | P | **P** | **21 12 32.0** | **+0.1** |
| CN2 | | | | | *e* | S | **S** | **21 18 04.8** | **+3.3** |
| CN2 | | | | | | PMZ | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| CN2 | | | | | | PMZ | | | |
| | comp=Z,200nm,5.0s | | | | | | | | |
| CN2 | | | | | | LN | | | |
| | comp=Z,400nm,13.0s | | | | | | | | |
| CN2 | | | | | | LE | | | |
| | comp=Z,500nm,13.0s | | | | | | | | |
| CN2 | | | | | | LZ | | | |
| | comp=Z,300nm,17.0s | | | | | | | | |
| **HABR** | **Khabarovsk** | **36.15** | **348** | | *e* | P | **P** | **21 12 39.1** | **-2.6** |
| HABR | | | | | *e* | *PP | **pP** | **21 12 48.9** | **-3.3** |
| HABR | | | | | *e* | *SP | **sP** | **21 12 53.1** | **-3.5** |
| HABR | | | | | *e* | | | 21 14 01.3 | |
| HABR | | | | | *e* | | | 21 15 04.3 | |
| HABR | | | | | *e* | S | **S** | **21 18 17.4** | **-1.6** |
| HABR | | | | | *e* | *SS | **sS** | **21 18 33.7** | **-2.6** |
| HABR | | | | | *e* | SS | **SnSn** | **21 20 45.6** | **-1.0** |
| HABR | | | | | *e* | SSS | SSS | 21 21 02.1 | |
| HABR | | | | | *e* | | | 21 22 53.8 | |
| HABR | | | | | | pmax | pmax | | |
| | comp=Z,29nm,2.4s | | | | | | | | |
| HABR | | | | | | MLR | MLR | | |
| | comp=Z,253nm,21.0s | | | | | | | | |
| **STKI** | **Sintang** | **36.34** | **251** | | | P | **P** | **21 12 45.6** | **+1.7** |
| | comp=Z,20nm,1.2s,comp=Z,3μm | | | | | | | | |
| **BJI** | **Beijing** | **37.15** | **321** | | | P | **P** | **21 12 51.0** | **+0.6** |
| BJI | | | | | | S | **S** | **21 18 35.3** | **+0.8** |
| BJI | | | | | | PMZ | | | |
| | comp=Z,13nm,2.3s | | | | | | | | |
| BJI | | | | | | PMZ | | | |
| | comp=Z,260nm,4.5s | | | | | | | | |
| BJI | | | | | | LN | | | |
| | comp=Z,470nm,16.8s | | | | | | | | |
| BJI | | | | | | LE | | | |
| | comp=Z,590nm,17.0s | | | | | | | | |
| BJI | | | | | | LZ | | | |
| | comp=Z,220nm,20.6s | | | | | | | | |
| **PBKI** | **Pangkalan Bun** | **37.30** | **247** | | | P | **P** | **21 12 53.7** | **+1.7** |
| | comp=Z,121nm,1.1s | | | | | | | | |
| **AS01** | **Alice Springs** | **38.49** | **197** | | *e* | P | **P** | **21 12 59.9** | **-2.1** |
| **ASAR** | **Alice Springs** | **38.51** | **197** | | | P | **P** | **21 13 00.2** | **-1.9** |
| | comp=Z,2.8nm,1.1s,baz=29,slow=7.4,SNR=12 | | | | | | | | |
| ASAR | | | | | | LR | LR | 21 31 23.3 | |
| | comp=Z,253nm,18.0s,baz=14,slow=40 | | | | | | | | |
| **GYA** | **Guiyang** | **38.78** | **296** | | | P | **P** | **21 13 03.8** | **-0.8** |
| GYA | | | | | | pP | **pP** | **21 13 17.0** | **+1.9** |
| GYA | | | | | | PP | **PnPn** | **21 14 37.3** | **+1.1** |
| GYA | | | | | | PcP | **PcP** | **21 15 17.8** | **+2.1** |
| GYA | | | | | | S | **S** | **21 18 57.5** | **-2.4** |
| GYA | | | | | | SS | SnSn | 21 21 39.0 | -12 |
| GYA | | | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| GYA | | | | | | PMZ | | | |
| | comp=Z,130nm,5.2s | | | | | | | | |
| GYA | | | | | | LN | | | |
| | comp=Z,520nm,18.0s | | | | | | | | |
| GYA | | | | | | LE | | | |
| | comp=Z,460nm,18.2s | | | | | | | | |
| GYA | | | | | | LZ | | | |
| | comp=Z,530nm,17.8s | | | | | | | | |
| **XAN** | **Xi'an** | **39.18** | **308** | | | P | **P** | **21 13 06.8** | **-0.9** |
| XAN | | | | | | PMZ | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **NGJI** | **Ngawi** | **39.70** | **241** | | | P | P | 21 13 22.7 | +11 |
| **PWJI** | **Pagerwojo** | **39.75** | **240** | | | P | **P** | **21 13 11.9** | **-0.7** |
| | comp=Z,93nm,1.2s | | | | | | | | |
| **PCJI** | **Pacitan** | **40.37** | **240** | | | P | **P** | **21 13 18.1** | **+0.4** |
| | comp=Z,95nm,1.5s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **40.49** | **319** | | *e* | P | **P** | **21 13 19.8** | **+1.2** |
| HHC | | | | | | S | **S** | **21 19 26.5** | **+1.4** |
| HHC | | | | | | PMZ | | | |
| | comp=Z,24nm,0.6s | | | | | | | | |
| HHC | | | | | | PMZ | | | |
| | comp=Z,180nm,3.8s | | | | | | | | |
| HHC | | | | | | LN | | | |
| | comp=Z,480nm,12.4s | | | | | | | | |
| HHC | | | | | | LE | | | |
| | comp=Z,330nm,12.6s | | | | | | | | |
| HHC | | | | | | LZ | | | |
| | comp=Z,420nm,13.0s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **40.64** | **150** | | *e* | LR | LR | 21 24 28.5 | |
| | comp=Z,232nm,23.6s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **40.64** | **150** | | | P | **P** | **21 13 19.1** | **-0.8** |
| | comp=Z,5.3nm,0.8s,baz=360,slow=19,SNR=3.5 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **40.84** | **11** | | | P | **P** | **21 13 23.1** | **+1.9** |
| | comp=Z,7.4nm,0.9s,baz=194,slow=10,SNR=2.6 | | | | | | | | |
| **TPI** | **Tanjungpandan** | **40.96** | **250** | | | P | **P** | **21 13 23.3** | **+0.7** |
| | comp=Z,35nm,1.5s | | | | | | | | |
| **KMI** | **Kunming** | **42.04** | **293** | | | P | **P** | **21 13 33.3** | **+1.7** |
| KMI | | | | | | pP | **pP** | **21 13 43.5** | **+1.2** |
| KMI | | | | | | S | **S** | **21 19 51.8** | **+3.1** |
| KMI | | | | | | sS | sS | 21 20 14.3 | +8.0 |
| KMI | | | | | | SS | SS | 21 22 48.3 | -8.5 |
| KMI | | | | | | PMZ | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | | |
| KMI | | | | | | PMZ | | | |
| | comp=Z,550nm,5.9s | | | | | | | | |
| KMI | | | | | | LN | | | |
| | comp=Z,480nm,15.3s | | | | | | | | |
| KMI | | | | | | LE | | | |
| | comp=Z,430nm,21.6s | | | | | | | | |
| KMI | | | | | | LZ | | | |
| | comp=Z,410nm,18.0s | | | | | | | | |
| **CHBT** | **CHBT** | **42.19** | **274** | | | P | **P** | **21 13 34.6** | **+1.9** |
| | comp=Z,33nm,1.3s,comp=Z,1μm | | | | | | | | |
| **MBWA** | **Marble Bar** | **42.69** | **217** | | *e* | P | **P** | **21 13 35.8** | **-0.9** |
| | comp=Z,24nm,1.1s | | | | | | | | |
| **LEM** | **Lembang** | **42.76** | **244** | | | P | **P** | **21 13 36.3** | **-1.2** |
| | comp=Z,24nm,0.9s,baz=230,slow=8.1,SNR=4.4 | | | | | | | | |
| **PBKT** | **Sadao Pong** | **43.25** | **280** | | | P | **P** | **21 13 42.0** | **+0.8** |
| | comp=Z,17nm,1.0s | | | | | | | | |
| **LZH** | **Lanzhou** | **43.80** | **309** | | *e* | P | **P** | **21 13 47.3** | **+1.6** |
| LZH | | | | | | pP | **pP** | **21 13 59.5** | **+3.1** |
| LZH | | | | | | PMZ | | | |
| | comp=Z,30nm,1.2s | | | | | | | | |
| LZH | | | | | | LN | | | |
| | comp=Z,390nm,16.1s | | | | | | | | |
| LZH | | | | | | LE | | | |
| | comp=Z,420nm,15.0s | | | | | | | | |
| LZH | | | | | | LZ | | | |
| | comp=Z,680nm,18.2s | | | | | | | | |
| **CGJI** | **Cibinong** | **44.36** | **246** | | | P | P | 21 13 53.4 | +3.1 |
| | comp=Z,56nm,1.2s | | | | | | | | |
| **UTHA** | **Uthaitani** | **44.76** | **279** | | | P | **P** | **21 13 54.3** | **+0.9** |
| | comp=Z,5.5nm,1.1s | | | | | | | | |
| **MDSI** | **Maura Dua** | **44.83** | **250** | | | P | **P** | **21 13 53.0** | **-1.0** |
| | comp=Z,36nm,1.2s | | | | | | | | |
| **CMAI** | **Chiengmai2** | **45.05** | **285** | | | P | **P** | **21 13 56.4** | **+0.5** |
| | comp=Z,43nm,1.0s | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **45.12** | **283** | | *e* | P | **P** | **21 13 54.6** | **-1.7** |
| **CMAR** | **Chiang Mai Arr** | **45.14** | **283** | | | P | **P** | **21 13 56.6** | **+0.2** |
| | comp=Z,6.2nm,0.9s,baz=84,slow=6.0,SNR=34 | | | | | | | | |
| CMAR | | | | | | PcP | **PcP** | **21 15 38.2** | **+1.6** |
| | comp=Z,2.6nm,0.9s,baz=72,slow=2.1,SNR=6.0 | | | | | | | | |
| **UMPA** | **Umpang Tak** | **45.28** | **280** | | | P | **P** | **21 13 59.4** | **+1.8** |
| | comp=Z,4.4nm,1.1s | | | | | | | | |
| **KHLT** | **Khaolaem Dam** | **45.63** | **278** | | | P | **P** | **21 14 01.6** | **+1.2** |
| | comp=Z,8.0nm,1.2s | | | | | | | | |
| **KSI** | **Kapahiang** | **45.96** | **251** | | | P | **P** | **21 14 03.3** | **+0.3** |
| | comp=Z,101nm,1.2s,comp=Z,3μm | | | | | | | | |
| **MHMT** | **Maesarieng** | **46.10** | **282** | | | P | **P** | **21 14 04.9** | **+0.8** |
| | comp=Z,7.2nm,1.0s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **47.05** | **325** | | *e* | P | **P** | **21 14 08.8** | **-2.5** |
| ULN | | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **47.05** | **325** | | *e* | P | **P** | **21 14 08.8** | **-2.5** |
| | comp=Z,12nm,1.2s | | | | | | | | |
| **PSI** | **Prapat** | **47.36** | **261** | | | P | **P** | **21 14 13.2** | **-1.0** |
| | comp=Z,7.6nm,0.8s,baz=63,slow=2.3,SNR=4.3 | | | | | | | | |
| **SONM** | **Songino Array** | **47.41** | **325** | | | P | **P** | **21 14 13.8** | **-0.2** |
| | comp=Z,6.5nm,1.1s,baz=137,slow=9.2,SNR=14 | | | | | | | | |
| **SONA1** | **Songino Array** | **47.41** | **325** | | *e* | P | **P** | **21 14 13.8** | **-0.3** |
| **GTA** | **Gaotai** | **47.94** | **312** | ⇓ | | P | **P** | **21 14 19.0** | **+0.7** |
| GTA | | | | | | pP | **pP** | **21 14 33.0** | **+3.9** |
| GTA | | | | | | sP | sP | 21 14 38.5 | +5.1 |
| GTA | | | | | | PcP | **PcP** | **21 15 47.5** | **+1.2** |
| GTA | | | | | | S | **S** | **21 21 11.5** | **-2.1** |
| GTA | | | | | | SS | SS | 21 24 33.5 | -9.2 |
| GTA | | | | | | PMZ | | | |
| | comp=Z,16nm,1.3s | | | | | | | | |
| GTA | | | | | | PMZ | | | |
| | comp=Z,180nm,6.1s | | | | | | | | |
| GTA | | | | | | LN | | | |
| | comp=Z,270nm,15.2s | | | | | | | | |
| GTA | | | | | | LE | | | |
| | comp=Z,350nm,15.2s | | | | | | | | |
| GTA | | | | | | LZ | | | |
| | comp=Z,320nm,16.2s | | | | | | | | |
| **KCSI** | **Kotacane, Aceh** | **48.29** | **263** | | | P | **P** | **21 14 21.3** | **+0.1** |
| **GSI** | **Gunungsitoli** | **49.06** | **260** | | *e* | P | **P** | **21 14 25.2** | **-1.9** |
| | comp=Z,21nm,1.1s | | | | | | | | |
| **SEY** | **Seymchan** | **49.78** | **4** | | | P | **P** | **21 14 31.2** | **-0.6** |
| | comp=Z,2.5nm,0.5s,baz=204,slow=20,SNR=3.6 | | | | | | | | |
| **YAK** | **Yakutsk** | **49.99** | **350** | | | P | **P** | **21 14 33.0** | **-0.4** |
| | comp=Z,3.3nm,0.3s,baz=175,slow=2.6,SNR=2.3 | | | | | | | | |
| **YAK** | **Yakutsk** | **49.99** | **350** | | *e* | P | **P** | **21 14 32.2** | **-1.2** |
| YAK | | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **BOD** | **Bodaibo** | **50.46** | **339** | | *e* | P | P | 21 14 33.7 | -3.3 |
| BOD | | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.4s | | | | | | | | |
| **ZAK** | **Zakamensk** | **50.50** | **326** | | *e* | P | **P** | **21 14 36.9** | **-0.8** |
| ZAK | | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **TAPN** | **Taplejung** | **55.67** | **294** | | *e* | P | **P** | **21 15 17.5** | **+1.1** |
| | comp=Z,10nm,0.7s | | | | | | | | |
| **ODAN** | **Odare** | **55.94** | **293** | | *e* | P | **P** | **21 15 18.1** | **-0.1** |
| **BILL** | **Bilibino** | **56.31** | **9** | ⇑ | *e* | P | **P** | **21 15 19.2** | **-0.6** |
| BILL | | | | | *e* | | | 21 16 15.4 | |
| BILL | | | | | *e* | | | 21 17 24.1 | |
| BILL | | | | | | pmax | pmax | | |
| | comp=Z,14nm,1.1s | | | | | | | | |
| BILL | | | | | | MLR | MLR | | |
| | comp=Z,117nm,17.0s | | | | | | | | |
| **RAMN** | **Ramite** | **56.65** | **294** | | *e* | P | **P** | **21 15 23.0** | **-0.3** |
| | comp=Z,3.4nm,0.5s | | | | | | | | |
| **GUN** | **Gumba** | **57.32** | **295** | | *e* | P | **P** | **21 15 28.1** | **0.0** |
| | comp=Z,24nm,0.9s | | | | | | | | |
| **PKI** | **Pulchoki** | **57.72** | **294** | | *e* | P | **P** | **21 15 30.3** | **-0.7** |
| **PKIN** | **Phulchoki** | **57.73** | **294** | | *e* | P | **P** | **21 15 30.2** | **-0.8** |
| **KKN** | **Kakani** | **57.84** | **295** | | *e* | P | **P** | **21 15 30.7** | **-1.0** |
| **WMQ** | **Urumqi** | **57.89** | **314** | | | P | **P** | **21 15 32.0** | **+0.4** |
| WMQ | | | | | | PMZ | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **DMN** | **Daman** | **57.99** | **294** | | *e* | P | **P** | **21 15 32.5** | **-0.3** |
| | comp=Z,13nm,0.9s | | | | | | | | |
| **GKN** | **Gorkha** | **58.42** | **295** | | *e* | P | **P** | **21 15 35.1** | **-0.5** |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **CHLP** | **Challavanipeta** | **59.24** | **284** | | *e* | P | **P** | **21 15 41.0** | **-0.2** |
| **KOLN** | **Koldanda** | **59.33** | **294** | | *e* | P | **P** | **21 15 41.5** | **-0.5** |
| | comp=Z,18nm,1.1s | | | | | | | | |
| **PVM** | **Polavaram** | **61.67** | **283** | | *e* | P | **P** | **21 15 57.3** | **-0.6** |
| **MK01** | **Makanchi Array** | **62.22** | **316** | | *e* | P | **P** | **21 16 00.5** | **-0.6** |
| **MKAR** | **Makanchi Array** | **62.23** | **316** | | | P | **P** | **21 16 01.1** | **-0.1** |
| | comp=Z,11nm,0.8s,baz=94,slow=8.5,SNR=53 | | | | | | | | |
| MKAR | | | | | | LR | LR | 21 43 51.6 | |
| | comp=Z,108nm,18.1s,baz=90,slow=37 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **62.30** | **324** | | *e* | P | **P** | **21 16 00.2** | **-1.3** |
| **ZALV** | **Zalesovo Beam** | **62.30** | **324** | | | P | **P** | **21 16 00.6** | **-0.9** |
| | comp=Z,1.4nm,0.6s,baz=84,slow=5.3,SNR=6.2 | | | | | | | | |
| ZALV | | | | | | LR | LR | 21 44 14.4 | |
| | comp=Z,259nm,20.2s,baz=70,slow=37 | | | | | | | | |
| **MAKZ** | **Makanchi** | **62.45** | **316** | | *e* | P | **P** | **21 16 03.0** | **+0.3** |
| **ADKI** | **Addanki** | **63.41** | **281** | | *e* | P | **P** | **21 16 08.8** | **-0.7** |
| **NVS** | **Novosibirsk** | **63.44** | **325** | | *e* | P | **P** | **21 16 07.3** | **-1.7** |
| **SKHT** | **Srikalahasti** | **63.94** | **279** | | *e* | P | **P** | **21 16 11.5** | **-1.5** |
| **NJS** | **Nagarjunasagar** | **63.95** | **282** | | *e* | P | **P** | **21 16 12.3** | **-0.8** |
| **PALK** | **Pallekele** | **64.06** | **272** | | | P | **P** | **21 16 13.6** | **-0.3** |
| | comp=Z,9.1nm,0.9s,baz=112,slow=5.3,SNR=3.5 | | | | | | | | |
| **SRLM** | **Srisailam** | **64.40** | **282** | | *e* | P | **P** | **21 16 14.8** | **-1.4** |
| **HYB** | **Hyderabad** | **64.57** | **283** | | *i* | P | **P** | **21 16 15.0** | **-2.2** |
| **HYBB** | **Hyderabad (bro** | **64.57** | **283** | | *e* | P | **P** | **21 16 16.7** | **-0.4** |
| **SRSP** | **Sriramsagar** | **64.60** | **285** | | *e* | P | **P** | **21 16 16.6** | **-0.8** |
| **KURK** | **Kurchatov** | **65.30** | **320** | | | P | **P** | **21 16 21.0** | **-0.3** |
| **KURK** | **Kurchatov** | **65.30** | **320** | | | P | **P** | **21 16 21.6** | **+0.3** |
| | comp=Z,172nm,1.0s,SNR=12 | | | | | | | | |
| **KURK** | **Kurchatov** | **65.30** | **320** | | | P | **P** | **21 16 21.0** | **-0.3** |
| **KURBB** | **Kurchatov Arra** | **65.34** | **320** | | | P | **P** | **21 16 21.0** | **-0.6** |
| | comp=Z,20nm,0.9s,baz=101,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,88nm,22.8s | | | | | | | | |
| **PPT2** | **Papeete2** | **70.89** | **114** | *e*LR | | LR | | 21 37 58.5 | |
| | comp=Z,409nm,22.0s | | | | | | | | |
| **DAWY** | **Dawson** | **71.54** | **27** | *e*P | | **P** | | **21 17 02.1** | **+2.0** |
| **KBL** | **Kabul** | **71.64** | **302** | *e*P | | **P** | | **21 17 01.3** | **-0.2** |
| KBL | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **KBL** | **Kabul** | **71.64** | **302** | *e*P | | **P** | | **21 17 01.3** | **-0.2** |
| | comp=Z,7.8nm,1.0s | | | | | | | | |
| **TBI** | **Tubuai** | **73.15** | **120** | *e*S | | **SKiKP** | | **21 26 38.1** | **-1.9** |
| | comp=Z,114nm,27.5s | | | | | | | | |
| **TBI** | **Tubuai** | **73.15** | **120** | *e*LR | | LR | | 21 39 08.2 | |
| | comp=Z,232nm,22.8s | | | | | | | | |
| **INK** | **Inuvik** | **74.33** | **22** | P | | **P** | | **21 17 16.0** | **-0.5** |
| | comp=Z,4.8nm,0.9s,baz=282,slow=5.9,SNR=7.5 | | | | | | | | |
| **INK** | **Inuvik** | **74.33** | **22** | P | | **P** | | **21 17 16.0** | **-0.5** |
| **DLBC** | **Dease Lake** | **75.80** | **33** | *e*P | | **P** | | **21 17 24.9** | **-0.3** |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **SVE** | **Sverdlovsk** | **76.27** | **326**⇑ | *e*P | | **P** | | **21 17 27.4** | **-0.5** |
| SVE | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.4s | | | | | | | | |
| SVE | | | | | MLR | MLR | | | |
| | comp=Z,524nm,18.0s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **78.38** | **319** | | LR | LR | | 21 55 06.8 | |
| | comp=Z,207nm,18.8s,slow=38 | | | | | | | | |
| **ABKT** | **Ailbek** | **80.04** | **307** | P | | **P** | | **21 17 49.2** | **-0.1** |
| | comp=Z,94nm,1.1s,SNR=7.0 | | | | | | | | |
| **GEYT** | **Ailbeck** | **80.04** | **307** | P | | **P** | | **21 17 49.7** | **+0.4** |
| | comp=Z,9.2nm,1.0s,baz=72,slow=4.7,SNR=24 | | | | | | | | |
| GEYT | | | | | LR | LR | | 21 55 49.2 | |
| | comp=Z,141nm,21.3s,baz=100,slow=38 | | | | | | | | |
| **I04A** | **Tendick Farm,** | **82.29** | **47** | P | | **P** | | **21 18 01.7** | **+0.6** |
| | baz=82 | | | | | | | | |
| **M02C** | **Callahan** | **82.42** | **49** | P | | **P** | | **21 18 03.1** | **+1.2** |
| | baz=82 | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **82.47** | **49** | *e*P | | **P** | | **21 18 03.9** | **+1.8** |
| YBH | | | | | pmax | pmax | | | |
| | comp=Z,86nm,2.3s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **82.47** | **49** | *e*P | | **P** | | **21 18 03.9** | **+1.8** |
| | comp=Z,86nm,2.3s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.75** | **27** | P | | **P** | | **21 18 04.2** | **+1.2** |
| | comp=Z,2.5nm,0.7s,baz=285,slow=5.2,SNR=5.4 | | | | | | | | |
| **G05D** | **Wamic, OR** | **82.78** | **45** | P | | **P** | | **21 18 04.6** | **+1.1** |
| | baz=83 | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **83.23** | **47** | P | | **P** | | **21 18 07.5** | **+1.4** |
| | baz=83 | | | | | | | | |
| **K05A** | **Summer Lake** | **83.59** | **48** | *e*P | | **P** | | **21 18 06.0** | **-2.1** |
| | comp=Z,172nm,2.5s | | | | | | | | |
| **HAWA** | **Hanford** | **83.76** | **44** | *e*P | | **P** | | **21 18 08.3** | **-0.2** |
| | comp=Z,90nm,2.4s | | | | | | | | |
| **UOSS** | **Wadi Hilu** | **84.02** | **294** | *e*P | | **P** | | **21 18 10.4** | **0.0** |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **MOD** | **Modoc** | **84.19** | **48** | *e*P | | **P** | | **21 18 12.6** | **+1.5** |
| | comp=Z,6.5nm,0.9s | | | | | | | | |
| **LRV** | **Little Rabbit** | **84.84** | **54** | *e*PP | | PP | | 21 21 32.5 | +1.7 |
| **NEW** | **Newport** | **84.92** | **42** | LR | | LR | | 21 53 39.2 | |
| | comp=Z,93nm,19.0s,baz=284,slow=34 | | | | | | | | |
| **NEW** | **Newport** | **84.92** | **42** | *e*P | | **P** | | **21 18 15.6** | **+1.1** |
| NEW | | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | | |
| **NEW** | **Newport** | **84.92** | **42** | P | | **P** | | **21 18 15.4** | **+0.9** |
| | baz=85 | | | | | | | | |
| **NEW** | **Newport** | **84.92** | **42** | *e*P | | **P** | | **21 18 15.6** | **+1.1** |
| | comp=Z,6.6nm,0.9s | | | | | | | | |
| **CMB** | **Columbia Colle** | **84.98** | **52** | *e*P | | **P** | | **21 18 16.8** | **+1.8** |
| CMB | | | | *e*PP | | **pP** | | **21 18 26.5** | **0.0** |
| **CMB** | **Columbia Colle** | **84.98** | **52** | *e*P | | **P** | | **21 18 16.8** | **+1.8** |
| CMB | | | | *e*pP | | **pP** | | **21 18 26.5** | **0.0** |
| **J08A** | **Circle Bar Ran** | **85.18** | **47** | *e*P | | **P** | | **21 18 17.9** | **+2.0** |
| J08A | | | | *e*pP | | **pP** | | **21 18 28.0** | **+0.5** |
| **WVOR** | **Wild Horse Val** | **85.28** | **48** | *e*P | | **P** | | **21 18 17.9** | **+1.4** |
| WVOR | | | | | pmax | pmax | | | |
| | comp=Z,55nm,2.3s | | | | | | | | |
| **WVOR** | **Wild Horse Val** | **85.28** | **48** | *e*P | | **P** | | **21 18 17.9** | **+1.4** |
| | comp=Z,55nm,2.3s | | | | | | | | |
| **BMO** | **Blue Mountains** | **85.63** | **45** | *e*P | | **P** | | **21 18 19.3** | **+1.1** |
| BMO | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **BMO** | **Blue Mountains** | **85.63** | **45** | *e*P | | **P** | | **21 18 19.3** | **+1.1** |
| | comp=Z,8.8nm,1.0s | | | | | | | | |
| **NV01** | **Mina Array Sit** | **86.48** | **51** | *e*P | | **P** | | **21 18 23.6** | **+0.9** |
| **NVAR** | **Mina Array Bea** | **86.48** | **51** | P | | **P** | | **21 18 23.7** | **+1.0** |
| | comp=Z,2.1nm,0.6s,baz=276,slow=6.3,SNR=8.6 | | | | | | | | |
| NVAR | | | | | LR | LR | | 21 54 19.4 | |
| | comp=Z,64nm,19.2s,baz=261,slow=34 | | | | | | | | |
| **BSMT** | **Bassoo Peak** | **86.54** | **42** | *e*P | | **P** | | **21 18 24.2** | **+1.5** |
| **BLMT** | **Blacktail Moun** | **86.77** | **41** | *e*P | | **P** | | **21 18 25.4** | **+1.5** |
| **GRAC** | **Grapevine Rang** | **87.56** | **53** | P | | **P** | | **21 18 28.5** | **+0.8** |
| | baz=88 | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **87.56** | **53** | *e*P | | **P** | | **21 18 29.2** | **+1.2** |
| DAC | | | | | pmax | pmax | | | |
| | comp=Z,21nm,1.7s | | | | | | | | |
| **DAC** | **Darwin (Calif)** | **87.56** | **53** | *e*P | | **P** | | **21 18 29.2** | **+1.2** |
| | comp=Z,21nm,1.7s | | | | | | | | |
| **ARA0** | **ARCESS Array S** | **87.59** | **342** | *e*P | | **P** | | **21 18 26.2** | **-0.9** |
| **ARCES** | **ARCESS Array B** | **87.59** | **342** | P | | **P** | | **21 18 26.1** | **-1.1** |
| | comp=Z,14nm,0.9s,baz=37,slow=6.4,SNR=11 | | | | | | | | |
| ARCES | | | | | LR | LR | | 22 00 30.9 | |
| | comp=Z,120nm,20.2s,baz=73,slow=38 | | | | | | | | |
| **MPMC** | **Manual Prospec** | **87.70** | **54** | P | | **P** | | **21 18 29.8** | **+1.2** |
| | baz=88 | | | | | | | | |
| **HLID** | **Hailey** | **87.98** | **46** | P | | **P** | | **21 18 30.9** | **+1.1** |
| | baz=88 | | | | | | | | |
| **HLID** | **Hailey** | **87.98** | **46** | *e*P | | **P** | | **21 18 30.8** | **+1.0** |
| | comp=Z,5.5nm,0.9s | | | | | | | | |
| **ELK** | **Elko** | **88.17** | **49** | *e*P | | **P** | | **21 18 32.1** | **+1.2** |
| ELK | | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| **ELK** | **Elko** | **88.17** | **49** | *e*P | | **P** | | **21 18 32.0** | **+1.2** |
| | comp=Z,8.8nm,0.9s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **88.27** | **322** | *e*P | | **P** | | **21 18 28.7** | **-2.0** |
| VRH | | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.8s | | | | | | | | |
| VRH | | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.8s | | | | | | | | |
| VRH | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **GSC** | **Goldstone** | **88.43** | **54** | P | | **P** | | **21 18 33.0** | **+1.0** |
| | baz=89 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **88.44** | **53** | *e*P | | **P** | | **21 18 33.5** | **+1.5** |
| TPNV | | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.7s | | | | | | | | |
| **TPNV** | **Topopah Spring** | **88.44** | **53** | P | | **P** | | **21 18 33.0** | **+0.9** |
| | baz=88 | | | | | | | | |
| **TPNV** | **Topopah Spring** | **88.44** | **53** | *e*P | | **P** | | **21 18 33.5** | **+1.5** |
| | comp=Z,22nm,1.7s | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **88.57** | **51** | P | | **P** | | **21 18 33.5** | **+0.9** |
| | baz=89 | | | | | | | | |
| **R11A** | **Troy Canyon, C** | **88.57** | **51** | *e*P | | **P** | | **21 18 34.2** | **+1.5** |
| | comp=Z,11nm,1.5s | | | | | | | | |
| **LRM** | **Limekiln Ridge** | **88.66** | **43** | *e*P | | **P** | | **21 18 34.2** | **+1.2** |
| **BOZ** | **Bozeman (W)** | **89.26** | **43** | P | | **P** | | **21 18 36.6** | **+0.9** |
| | baz=89 | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **89.41** | **324** | *e*P | | **P** | | **21 18 34.4** | **-1.6** |
| LPSR | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| LPSR | | | | | pmax | pmax | | | |
| | comp=N,5.0nm,0.6s | | | | | | | | |
| LPSR | | | | | pmax | pmax | | | |
| | comp=E,8.0nm,0.9s | | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **89.42** | **55** | P | | **P** | | **21 18 37.3** | **+0.6** |
| | baz=90 | | | | | | | | |
| **GMRC** | **Granite Mounta** | **89.48** | **54** | P | | **P** | | **21 18 37.9** | **+0.9** |
| | baz=90 | | | | | | | | |
| **NCK** | **Nalchik** | **89.50** | **315**⇓ | *e*P | | **P** | | **21 18 35.9** | **-0.8** |
| **GNI** | **Garni** | **89.69** | **311**⇓ | *e*P | | **P** | | **21 18 37.5** | **-0.4** |
| GNI | | | | | pmax | pmax | | | |
| | comp=Z,48nm,1.3s | | | | | | | | |
| **OBN** | **Obninsk** | **89.76** | **327**⇑ | *e*P | | **P** | | **21 18 35.3** | **-2.3** |
| OBN | | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| OBN | | | | | MLR | MLR | | | |
| | comp=Z,122nm,16.0s | | | | | | | | |
| **VSR** | **Storozhevoye** | **89.78** | **323** | *e*P | | P | | 21 18 34.3 | -3.5 |
| VSR | | | | | pmax | pmax | | | |
| | comp=N,5.0nm,0.9s | | | | | | | | |
| VSR | | | | | pmax | pmax | | | |
| | comp=E,8.0nm,0.9s | | | | | | | | |
| VSR | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **VORD** | **Divnogorie** | **89.79** | **323** | *e*P | | **P** | | **21 18 35.2** | **-2.6** |
| VORD | | | | | pmax | pmax | | | |
| | comp=N,20nm,1.0s | | | | | | | | |
| VORD | | | | | pmax | pmax | | | |
| | comp=E,6.0nm,1.0s | | | | | | | | |
| VORD | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **89.91** | **315** | P | | **P** | | **21 18 37.3** | **-1.3** |
| | comp=Z,5.3nm,1.0s,baz=222,slow=1.1,SNR=8.4 | | | | | | | | |
| KBZ | | | | | LR | LR | | 22 02 30.8 | |
| | comp=Z,87nm,19.8s,baz=66,slow=38 | | | | | | | | |
| **BC3** | **Big Chuckawall** | **89.95** | **55** | P | | **P** | | **21 18 39.7** | **+0.5** |
| | baz=90 | | | | | | | | |
| **KIV** | **Kislovodsk** | **89.98** | **315** | *e*P | | **P** | | **21 18 37.5** | **-1.6** |
| KIV | | | | *e* | | | | 21 29 05.1 | |
| KIV | | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | | |
| KIV | | | | | MLR | MLR | | | |
| | comp=Z,152nm,19.0s | | | | | | | | |
| **KIV** | **Kislovodsk** | **89.98** | **315** | P | | **P** | | **21 18 38.5** | **-0.6** |
| | comp=Z,78nm,0.9s,SNR=5.1 | | | | | | | | |
| **DUG** | **Dugway** | **90.10** | **49** | *e*P | | **P** | | **21 18 41.4** | **+1.6** |
| DUG | | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.1s | | | | | | | | |
| **DUG** | **Dugway** | **90.10** | **49** | P | | **P** | | **21 18 40.2** | **+0.4** |
| | baz=90 | | | | | | | | |
| **DUG** | **Dugway** | **90.10** | **49** | *e*P | | **P** | | **21 18 41.4** | **+1.6** |
| | comp=Z,8.1nm,1.1s | | | | | | | | |
| **YFT** | **Old Faithful** | **90.17** | **44** | *e*P | | P | | 21 18 44.6 | +4.4 |
| | comp=Z,6.9nm,1.0s | | | | | | | | |
| **NEY** | **Neytrino** | **90.18** | **315** | *e*P | | **P** | | **21 18 39.7** | **-0.4** |
| NEY | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | | |
| **CCUT** | **Cedar City** | **90.48** | **51** | *e*P | | **P** | | **21 18 43.8** | **+2.1** |
| | comp=Z,73nm,2.9s | | | | | | | | |
| **HWUT** | **Hardware Ranch** | **90.57** | **47** | *e*P | | **P** | | **21 18 43.5** | **+1.5** |
| | comp=Z,12nm,1.4s | | | | | | | | |
| **FINES** | **FINESS Array B** | **91.74** | **335** | P | | **P** | | **21 18 45.3** | **-1.4** |
| | comp=Z,6.2nm,0.7s,baz=93,slow=4.2,SNR=19 | | | | | | | | |
| FINES | | | | | LR | LR | | 22 02 19.9 | |
| | comp=Z,66nm,18.4s,baz=56,slow=37 | | | | | | | | |
| **WUAZ** | **Wupatki** | **92.62** | **53** | P | | **P** | | **21 18 52.2** | **+0.6** |
| | baz=93 | | | | | | | | |
| **WUAZ** | **Wupatki** | **92.62** | **53** | *e*P | | **P** | | **21 18 53.7** | **+2.1** |
| | comp=Z,9.7nm,1.2s | | | | | | | | |
| **K22A** | **Casper** | **93.74** | **45** | P | | **P** | | **21 18 56.2** | **-0.4** |
| | baz=94 | | | | | | | | |
| **RAYN** | **Ar Rayn** | **93.84** | **295** | P | | **P** | | **21 18 56.5** | **-0.8** |
| | comp=Z,44nm,1.1s,SNR=7.0 | | | | | | | | |
| **PHWY** | **Pilot Hill** | **94.98** | **46** | *e*P | | **P** | | **21 18 60.0** | **-2.5** |
| PHWY | | | | *e*pP | | pP | | 21 19 22.8 | +8.8 |
| **F27A** | **Lemmon** | **95.42** | **40** | P | | **P** | | **21 19 03.6** | **-0.5** |
| | baz=96 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **95.69** | **325** | LR | | LR | | 22 04 42.2 | |
| | comp=Z,299nm,19.8s,baz=70,slow=37 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **95.69** | **325** | *ce*P | | **P** | | **21 19 03.9** | **-1.2** |
| **NOA** | **NORSAR Array B** | **97.58** | **339** | P | | **P** | | **21 19 11.6** | **-1.9** |
| | comp=Z,2.9nm,0.9s,baz=47,slow=4.6,SNR=4.7 | | | | | | | | |
| NOA | | | | | LR | LR | | 22 06 01.3 | |
| | comp=Z,63nm,21.7s,baz=40,slow=37 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **97.82** | **314** | P | | **P** | | **21 19 14.2** | **-1.1** |
| | comp=Z,3.4nm,1.0s,baz=83,slow=4.0,SNR=11 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **97.82** | **314** | *ce*P | | **P** | | **21 19 14.1** | **-1.1** |
| BRTR | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | | |
| **BR231** | **Keskin MP Arra** | **98.37** | **314** | *e*P | | P | | 21 19 14.7 | -2.9 |
| **MAW** | **Mawson** | **99.47** | **203** | P | | **Pdif** | | **21 19 21.6** | **0.0** |
| | comp=Z,1.4nm,0.8s,baz=16,slow=7.4,SNR=4.0 | | | | | | | | |
| **ESDC** | **Sonseca Array** | **120.18** | **333** | PP | | PP | | 21 25 52.6 | -2.4 |
| | comp=Z,1.2nm,1.0s,baz=18,slow=7.1,SNR=4.9 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **135.66** | **305** | PKP | | **PKPdf** | | **21 25 00.3** | **-0.3** |
| | comp=Z,2.0nm,1.0s,baz=22,slow=3.2,SNR=7.1 | | | | | | | | |
| **DBIC** | **Dimbokro** | **144.63** | **302** | PKP | | PKPbc | | 21 25 15.7 | 0.0 |
| | comp=Z,34nm,0.8s,baz=40,slow=3.8,SNR=23 | | | | | | | | |
| **KIC** | **Kosan Boka** | **144.71** | **302** | *e*PKP1 | | PKPbc | | 21 25 15.8 | -0.1 |
| | comp=Z,55nm,0.9s | | | | | | | | |
| **TIC** | **Toumodi** | **144.78** | **303** | *e*PKP1 | | **PKPab** | | **21 25 15.8** | **-0.3** |
| **LIC** | **Lamto** | **145.02** | **302** | *e*PKP1 | | **PKPbc** | | **21 25 16.8** | **-0.1** |
| | comp=Z,68nm,0.8s | | | | | | | | |
| **LPAZ** | **La Paz** | **147.21** | **99** | PKPbc | | **PKPab** | | **21 25 25.4** | **-0.5** |
| | comp=Z,2.0nm,0.7s,baz=225,slow=2.1,SNR=6.6 | | | | | | | | |

*BJI* ***27*** *21:34:54.6, 3.36S×99.89E, h29km, mb4.8/47, mB5.3/32, Ms4.9/32, Ms7 4.6/31*
*ISCJB* ***27*** *21:34:56.3± 1.0, 2.99S± 0.04× 99.73E± 0.04, h22km± 6km, mb4.6/51, MS4.0/12, Error ellipse: s-maj=8.1km s-min=4.7km az=138.9*
*DJA* ***27*** *21:34:57.6± 0.3, 3°S± 3°× 10°0E± °, h10km, M4.5/24, mb4.6/24, mB5.1/13, MLv4.7/19, Mw(mB)4.4/13*
*KLM* ***27*** *21:34:57.5, 2.99S× 99.84E, h10km, mb4.7, ML4.5, MS5.5*
*NEIC* ***27*** *21:34:57.4± 2.5, 2.91S× 99.84E, h13km± 15km, mb4.9/13, Error ellipse: s-maj=9.5km s-min=3.9km az=60.0*
*MOS* ***27*** *21:34:59.2± 1.1, 2.80S× 99.90E, h39km, mb5.0/27, Error ellipse: s-maj=13.4km s-min=6.5km az=108.0*
*IDC* ***27*** *21:34:59.6± 0.6, 2.88S× 99.83E, h26km± 2km, mb4.1/20, mb1 4.3/23, mb1mx4.1/42, mbtmp4.3/23, ML4.0/3, MS4.0/11, Ms1 4.0/11, ms1mx3.7/38, Error ellipse: s-maj=18.6km s-min=12.0km az=53.0*
*AUST* ***27*** *21:35:01.4± 2.3, 2.94S× 99.97E, h45km, Error ellipse: s-maj=3.2km s-min=0.8km az=238.0*
**ISC 27 21:34:59.0± 0.5, 3.04S± 0.05× 99.71E± 0.05, h30km± 2km, h30km:pP-P, n270, σ1≋32/284, mb4.7/51, MS4.0/12, 7C-7D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.41** | **47** | P | | **Pb** | **21 35 06.4** | **-1.6** |
| PPSI | | | | S | | **Sb** | **21 35 14.3** | **+0.2** |
| **SISI** | **Saibi** | **1.81** | **340** | P | | **Pn** | **21 35 26.5** | **-1.7** |
| **PPI** | **Padang Panjang** | **2.66** | **15** | P | | **Pn** | **21 35 38.0** | **-1.9** |
| | baz=2.5,SNR=51 | | | | | | | |
| **PPI** | **Padang Panjang** | **2.66** | **15** | P | | **Pn** | **21 35 38.5** | **-1.3** |
| **SDSI** | **Sungai Dareh** | **2.71** | **39** | P | | **Pn** | **21 35 39.4** | **-1.1** |
| **KSI** | **Kapahiang** | **2.94** | **102** | P | | **Pn** | **21 35 45.1** | **+1.3** |
| **MNAI** | **Manna** | **3.49** | **112** | P | | **Pn** | **21 35 51.4** | **+0.1** |
| | baz=3.3,SNR=16 | | | | | | | |
| **MNAI** | **Manna** | **3.49** | **112** | *e*Pn | | **Pn** | **21 35 51.0** | **-0.4** |
| MNAI | | | | *e*Sn | | **Sn** | **21 36 28.1** | **-3.7** |
| **BKNI** | **Bangkinang** | **3.60** | **22** | P | | **Pn** | **21 35 52.4** | **-0.4** |
| | baz=3.4,SNR=6.1 | | | | | | | |
| **BKNI** | **Bangkinang** | **3.60** | **22** | P | | **Pn** | **21 35 52.2** | **-0.6** |
| **BKNI** | **Bangkinang** | **3.60** | **22** | *e*Pn | | **Pn** | **21 35 52.1** | **-0.7** |
| **MNSI** | **Mandailing Nat** | **3.81** | **358** | P | | **Pn** | **21 35 55.1** | **-0.6** |
| **JMBI** | **JAMBI** | **4.17** | **70** | P | | **Pn** | **21 36 00.3** | **-0.3** |
| **SBSI** | **Sibolga** | **4.63** | **350** | P | | **Pn** | **21 36 04.0** | **-3.0** |
| **MDSI** | **Maura Dua** | **4.68** | **108** | P | | **Pn** | **21 36 08.3** | **+0.6** |
| **LWLI** | **Liwa** | **4.76** | **114** | P | | **Pn** | **21 36 08.8** | **-0.1** |
| **GSI** | **Gunungsitoli** | **4.81** | **334** | P | | **Pn** | **21 36 07.7** | **-1.8** |
| **GSI** | **Gunungsitoli** | **4.81** | **334** | *e*Pn | | **Pn** | **21 36 07.2** | **-2.3** |
| **KASI** | **Kota Agung** | **5.37** | **117** | P | | **Pn** | **21 36 17.1** | **-0.1** |
| | 121nm,1.1s,3μm0.8nm | | | | | | | |
| **KLI** | **Kotabumi** | **5.44** | **110** | P | | **Pn** | **21 36 19.8** | **+1.6** |
| | 127nm,0.8s,3μm0.8nm | | | | | | | |
| **PSI** | **Prapat** | **5.86** | **352** | Pn | | **Pn** | **21 36 20.9** | **-3.1** |
| | 0.9nm,0.3s,baz=162,slow=14,SNR=3.7 | | | | | | | |
| **PSI** | **Prapat** | **5.86** | **352** | P | | **Pn** | **21 36 27.0** | **+3.1** |
| | baz=5.7,SNR=4.3 | | | | | | | |
| **KGM** | **Kluang** | **6.18** | **36** | ⇓P | | **Pn** | **21 36 27.5** | **-0.8** |
| **MYKOM** | **Kota Tinggi** | **6.34** | **41** | ⇓P | | **Pn** | **21 36 29.4** | **-1.1** |
| **MYKOM** | **Kota Tinggi** | **6.34** | **41** | *e*Pn | | **Pn** | **21 36 28.3** | **-2.2** |
| **FRIM** | **Kepong** | **6.52** | **17** | ⇑P | | **Pn** | **21 36 32.6** | **-0.4** |
| **KCSI** | **Kotacane, Aceh** | **6.80** | **343** | P | | Pb | 21 37 02.6 | +6.1 |
| **CGJI** | **Cibinong** | **6.94** | **121** | P | | **Pn** | **21 36 37.5** | **-1.2** |
| | 118nm,0.9s,2μm | | | | | | | |
| **IPM** | **Ipoh** | **7.58** | **10** | ⇑P | | **Pn** | **21 36 47.8** | **+0.2** |
| **IPM** | **Ipoh** | **7.58** | **10** | *e*Pn | | **Pn** | **21 36 46.9** | **-0.8** |
| **CBJI** | **Citeko** | **7.87** | **116** | P | | Pn | 21 36 56.0 | +4.5 |
| | 426nm,0.6s,13μm | | | | | | | |
| **KULM** | **Kulim** | **8.33** | **6** | ⇑P | | **Pn** | **21 36 58.0** | **+0.1** |
| **KULM** | **Kulim** | **8.33** | **6** | *e*Pn | | **Pn** | **21 36 56.1** | **-1.7** |
| **LEM** | **Lembang** | **8.73** | **116** | Pn | | **Pn** | **21 37 04.4** | **+0.9** |
| | 4.9nm,0.3s,baz=313,slow=19,SNR=4.8 | | | | | | | |
| **LEM** | **Lembang** | **8.73** | **116** | P | | Pn | 21 37 13.2 | +10 |
| **KTGM** | **Kuala Trenggan** | **8.99** | **22** | ⇓P | | **Pn** | **21 37 07.1** | **+0.2** |
| **CISI** | **Cisompet, Garu** | **9.23** | **119** | P | | **Pn** | **21 37 08.0** | **-2.3** |
| | baz=9.1,SNR=23 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.23** | **119** | P | | **Pn** | **21 37 09.0** | **-1.3** |
| | 193nm,0.6s,3μm | | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.23** | **119** | *e*Pn | | **Pn** | **21 37 08.3** | **-1.9** |
| **XMIS** | **Christmas Isla** | **9.46** | **142** | *e*Pn | | Pn | 21 37 09.0 | -4.3 |
| **UGM** | **Wanagama** | **11.80** | **115** | P | | **Pn** | **21 37 44.3** | **-1.1** |
| | baz=12,SNR=7.7 | | | | | | | |
| **UGM** | **Wanagama** | **11.80** | **115** | *e*Pn | | **Pn** | **21 37 44.1** | **-1.3** |
| **BBKI** | **Banjar Baru** | **15.11** | **92** | P | | **P** | **21 38 35.2** | **-0.2** |
| | 52nm,0.7s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.79** | **61** | P | | **Pn** | **21 39 18.5** | **+1.6** |
| | baz=18,SNR=3.4 | | | | | | | |
| **UMPA** | **Umpang Tak** | **19.14** | **358** | ⇑P | | Pn | 21 39 26.4 | +5.4 |
| **SDKM** | **Sandakan** | **19.48** | **64** | ⇑P | | **Pn** | **21 39 24.4** | **-0.7** |
| **TSM** | **Tawau** | **19.56** | **68** | ⇓P | | **P** | **21 39 24.9** | **+0.3** |
| **KDM** | **Kudat** | **19.75** | **60** | ⇑P | | **P** | **21 39 26.3** | **-0.3** |
| **SPSI** | **Sidrap Palu** | **20.04** | **93** | P | | Pn | 21 39 37.8 | +6.0 |
| **TTSI** | **Tana Toraja** | **20.08** | **91** | P | | Pn | 21 39 31.7 | -0.5 |
| | 27nm,1.2s,551nm | | | | | | | |
| **KAPI** | **Kappang** | **20.09** | **96** | P | | **P** | **21 39 29.5** | **-0.8** |
| | 1.0nm,0.3s,baz=271,slow=9.9,SNR=7.8 | | | | | | | |
| **KAPI** | **Kappang** | **20.09** | **96** | *e*P | | **P** | **21 39 29.5** | **-0.8** |
| | 9.2nm,1.1s | | | | | | | |
| **MPSI** | **Mapaga** | **20.46** | **81** | P | | Pn | 21 39 35.4 | -1.2 |
| | 23nm,1.5s,662nm | | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.47** | **67** | ⇑P | | **P** | **21 39 35.0** | **+0.5** |
| **MYLDM** | **Lahad Datu** | **20.47** | **67** | *e*P | | Pn | 21 39 37.8 | +1.0 |
| | 134nm,1.9s | | | | | | | |
| **BKSI** | **Bulukumba** | **20.48** | **97** | P | | **P** | **21 39 34.0** | **-0.7** |
| | 59nm,1.6s,800nm | | | | | | | |
| **UTTA** | **Uttaradit** | **20.67** | **2** | P | | Pn | 21 39 37.9 | -1.1 |
| | 2.7nm,1.1s | | | | | | | |
| **MHMT** | **Maesarieng** | **21.16** | **355** | P | | **P** | **21 39 43.6** | **+1.7** |
| | 18nm,1.2s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.34** | **358** | *e*P | | **P** | **21 39 42.3** | **-1.5** |
| **CM31** | **Chiang Mai Arr** | **21.38** | **358** | *e*P | | **P** | **21 39 43.1** | **-1.1** |
| **CMAR** | **Chiang Mai Arr** | **21.38** | **358** | P | | **P** | **21 39 43.1** | **-1.1** |
| | 14nm,0.8s,baz=187,slow=10,SNR=65 | | | | | | | |
| CMAR | | | | | LR | LR | | 21 49 11.1 | |
| | comp=Z,859nm,18.2s,baz=184,slow=40 | | | | | | | | |
| **LAMP** | **Lampang** | **21.43** | **360** | P | | **P** | **21 39 48.0** | **+3.2** |
| | 9.2nm,0.8s | | | | | | | |
| **PALK** | **Pallekele** | **21.56** | **298** | LR | | LR | | 21 46 57.5 | |
| | comp=Z,372nm,19.1s,baz=116,slow=33 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.73** | **358** | P | | **P** | **21 39 49.7** | **+1.7** |
| | 89nm,1.4s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.73** | **358** | *e*P | | **P** | **21 39 46.6** | **-1.4** |
| CHTO | | | | | pmax | pmax | | | |
| | comp=Z,26nm,1.2s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **21.73** | **358** | *e*P | | **P** | **21 39 46.6** | **-1.4** |
| | comp=Z,26nm,1.2s | | | | | | | | |
| **MRSI** | **Marisa** | **22.49** | **81** | P | | P | 21 40 01.0 | +4.7 |
| | comp=Z,24nm,1.2s,comp=Z,958nm | | | | | | | | |
| **GTOI** | **Gorontalo** | **23.58** | **81** | P | | **P** | **21 40 07.6** | **+0.2** |
| | comp=Z,21nm,1.6s | | | | | | | | |
| **QIZ** | **Qiongzhong** | **24.09** | **24** | P | | **P** | **21 40 12.5** | **+0.4** |
| QIZ | | | | S | | **S** | **21 44 29.5** | **+1.5** |
| QIZ | | | | PMZ | | | | | |
| | comp=Z,27nm,1.8s | | | | | | | | |
| QIZ | | | | PMZ | | | | | |
| | comp=Z,500nm,7.0s | | | | | | | | |
| QIZ | | | | LN | | | | | |
| | comp=Z,1μm,13.0s | | | | | | | | |
| QIZ | | | | LZ | | | | | |
| | comp=Z,1μm,17.4s | | | | | | | | |
| **SLVN** | **Son La** | **24.57** | **9** | *e*P | | **P** | **21 40 16.5** | **-0.1** |
| **SOEI** | **Soe** | **25.29** | **106** | P | | P | 21 40 16.9 | -6.3 |
| | baz=25,SNR=3.3 | | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.47** | **259** | T | | T | 22 09 21.3 | | |
| | baz=81,slow=74,SNR=1280 | | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.48** | **259** | T | | T | 22 09 21.7 | | |
| | baz=81,slow=74,SNR=257 | | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.49** | **259** | T | | T | 22 09 21.9 | | |
| | baz=81,slow=74,SNR=937 | | | | | | | | |
| **KMI** | **Kunming** | **28.15** | **6** | P | | **P** | **21 40 49.0** | **0.0** |
| KMI | | | | pP | | **pP** | **21 40 57.5** | **-0.2** |
| KMI | | | | sP | | **sP** | **21 41 03.5** | **+2.1** |
| KMI | | | | S | | **S** | **21 45 37.5** | **+4.7** |
| KMI | | | | sS | | sS | 21 45 53.8 | +6.6 |
| KMI | | | | PMZ | | | | | |
| | comp=Z,12nm,1.7s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,540nm,5.5s | | | | | | | | |
| KMI | | | | LN | | | | | |
| | comp=Z,750nm,11.5s | | | | | | | | |
| KMI | | | | LE | | | | | |
| | comp=Z,910nm,12.8s | | | | | | | | |
| KMI | | | | LZ | | | | | |
| | comp=Z,1μm,12.8s | |

GTA LN
comp=Z,490nm,12.8s
GTA LE
comp=Z,950nm,16.6s
GTA LZ
comp=Z,500nm,13.3s
HHC Hu-ho-hao-te 45.00 13 eP P 21 43 12.5 +0.6
HHC PP PP 21 44 58.3 +0.8
HHC S S 21 49 50.3 +1.5
HHC SS ScS 21 53 03.0 -4.2
HHC PMZ
comp=Z,25nm,0.7s
HHC PMZ
comp=Z,250nm,4.8s
HHC LN
comp=Z,700nm,8.2s
HHC LE
comp=Z,420nm,12.6s
HHC LZ
comp=Z,600nm,12.6s
BJT Baijiatuau 45.44 18 eP P 21 43 15.9 +0.7
BJT pmax pmax
comp=Z,36nm,1.2s
BJT Baijiatuau 45.44 18 eP P 21 43 15.9 +0.7
comp=Z,36nm,1.2s
BJI Beijing 45.46 18 P P 21 43 15.8 +0.4
BJI S S 21 49 57.0 +2.0
BJI PMZ
comp=Z,24nm,1.2s
BJI PMZ
comp=Z,260nm,5.9s
BJI LN
comp=Z,660nm,12.6s
BJI LE
comp=Z,580nm,15.5s
BJI LZ
comp=Z,670nm,17.7s
KSH Kashi 47.65 335 eP P 21 43 34.3 +1.6
KSH esP sP 21 43 48.0 +2.7
KSH ePP PP 21 45 25.8 +1.1
KSH eScP ScP 21 48 52.3 -2.1
KSH PcS PcS 21 48 56.5 -1.1
KSH S S 21 50 26.5 -0.2
KSH SS SS 21 53 52.0 -3.4
KSH PMZ
comp=Z,180nm,5.0s
KSH LN
comp=Z,100nm,5.3s
KSH LE
comp=Z,230nm,5.7s
KSH LZ
comp=Z,280nm,9.9s
WMQ Urumqi 47.88 348 P P 21 43 35.0 +0.6
WMQ pP pP 21 43 44.5 +1.0
WMQ PP PP 21 45 26.0 -0.7
WMQ S S 21 50 30.0 +0.1
WMQ SS SS 21 53 53.0 -6.0
WMQ PMZ
comp=Z,71nm,1.0s
WMQ PMZ
comp=Z,210nm,5.0s
WMQ LN
comp=Z,130nm,15.0s
WMQ LE
comp=Z,160nm,15.0s
WMQ LZ
comp=Z,98nm,15.0s
KS15 Wonju Array Si 48.03 30 eP P 21 43 34.8 -0.8
KSAR Wonju Array Be 48.03 30 P P 21 43 34.8 -0.8
KSAR Wonju Array Be 48.03 30 P P 21 43 34.8 -0.8
KSRS Korea Array 48.06 30 P P 21 43 34.8 -1.0
comp=Z,5.3nm,1.0s,baz=224,slow=8.9,SNR=15
KSRS LR LR 22 07 32.7
comp=Z,141nm,18.1s,baz=224,slow=41
KSRS Korea Array 48.06 30 P P 21 43 34.8 -1.0
KSRS pmax pmax
comp=Z,5.0nm,1.0s
KSRS MLR MLR
comp=Z,141nm,18.1s
KS01 Wonju Array Si 48.06 30 eP P 21 43 34.7 -1.1
PDGK Podgornoye 49.63 341 i P P 21 43 47.9 +0.2
PDGK pmax pmax
comp=Z,32nm,0.9s
TKM2 Tokmak 2 50.67 337 i P P 21 43 56.0 +0.1
TKM2 pmax pmax
comp=Z,29nm,1.0s
AAK Ala-Archa 50.87 336⇓eP P 21 43 57.6 +0.2
AAK pmax pmax
comp=Z,23nm,2.1s
AAK Ala-Archa 50.87 336 eP P 21 43 58.6 +1.2
comp=Z,40nm,1.9s
SONA0 Songino Array 51.00 6 eP P 21 43 58.6 +0.4
SONA0 ePcP PcP 21 45 15.3 +1.2
SONM Songino Array 51.00 6 P P 21 43 58.6 +0.4
comp=Z,8.9nm,0.9s,baz=189,slow=8.0,SNR=57
SONM pP pP 21 44 06.5 -0.8
comp=Z,3.9nm,0.7s,baz=189,slow=9.6,SNR=8.2
SONM PcP PcP 21 45 15.3 +1.2
comp=Z,1.7nm,0.7s,baz=187,slow=4.3,SNR=2.8
SONM pPcP 21 45 23.1
comp=Z,0.8nm,0.4s,baz=190,slow=3.9,SNR=8.2
SONA1 Songino Array 51.02 6 eP P 21 43 58.5 +0.2
ULN Ulaanbaatar 51.10 6 eP P 21 43 59.1 +0.1
ULN pmax pmax
comp=Z,11nm,1.0s
ULN Ulaanbaatar 51.10 6 eP P 21 43 59.1 +0.1
comp=Z,11nm,1.0s
MNAS Manas 51.58 334 i P P 21 44 02.7 0.0
MNAS pmax pmax
comp=Z,15nm,0.8s
CMSA Cobar Meteorol 51.69 129 P P 21 44 05.6 +2.0
baz=52,SNR=7.0
MK01 Makanchi Array 51.92 345 eP P 21 44 05.1 +0.1
MK32 Makanchi Array 51.95 345 eP P 21 44 06.0 +0.7
MKAR Makanchi Array 51.95 345 P P 21 44 06.0 +0.7
comp=Z,8.1nm,0.8s,baz=149,slow=8.7,SNR=52
MKAR pP pP 21 44 14.1 -0.3
comp=Z,14nm,0.7s,baz=149,slow=8.4,SNR=27
MKAR LR LR 22 11 30.8
comp=Z,92nm,18.1s,baz=160,slow=42
MAKZ Makanchi 52.05 345 eP P 21 44 06.1 +0.2
comp=Z,20nm,1.1s
CN2 Changchun 52.05 23 eP P 21 44 05.5 -0.5
CN2 PMZ
comp=Z,10.0nm,0.7s
CN2 PMZ
comp=Z,200nm,4.0s
CN2 LN
comp=Z,400nm,12.0s
CN2 LE
comp=Z,400nm,12.0s
CN2 LZ
comp=Z,400nm,11.0s
MAJO Matsushiro 53.26 39 eP P 21 44 13.7 -1.5
MAJO pmax pmax
comp=Z,61nm,1.8s
MAJO Matsushiro 53.26 39 eP P 21 44 13.7 -1.5
comp=Z,61nm,1.8s
MJAR Matsushiro Arr 53.26 39 P P 21 44 13.7 -1.5
comp=Z,1.8nm,0.9s,baz=230,slow=7.8,SNR=4.8
ZAK Zakamensk 53.30 3 eP P 21 44 11.8 -3.5
ZAK pmax pmax
comp=Z,4.0nm,1.5s
MDJ Mudanjiang 54.45 26 P P 21 44 23.3 -0.3
MDJ pP pP 21 44 31.5 -1.2
MDJ sP sP 21 44 35.5 -0.8
MDJ S S 21 52 01.3 +0.9
MDJ PMZ
comp=Z,5.0nm,1.1s
MDJ PMZ
comp=Z,48nm,3.4s
MDJ LN
comp=Z,500nm,13.2s
MDJ LE
comp=Z,360nm,16.1s
MDJ LZ
comp=Z,640nm,16.6s
USRK Ussuriysk Ar. 55.20 28 P P 21 44 29.3 +0.2
comp=Z,6.4nm,0.6s,baz=221,slow=5.0,SNR=27
GEYT Alibeck 56.06 321 P P 21 44 36.1 +0.6
comp=Z,1.2nm,0.7s,baz=121,slow=5.7,SNR=3.9
OTUK Ortayu 56.39 338 i P P 21 44 37.9 +0.3
OTUK pmax pmax
comp=Z,16nm,0.8s
KURK Kurchatov 56.52 344 eP P 21 44 38.5 +0.1
KURK pmax pmax
comp=Z,14nm,1.0s
KURK Kurchatov 56.52 344 eP P 21 44 38.5 +0.1
comp=Z,14nm,1.0s
ZAA0 Zalesovo Array 58.13 350 P P 21 44 50.2 +0.5
baz=58,SNR=5.3
ZAA0 Zalesovo Array 58.13 350 eP P 21 44 50.1 +0.4
ZALV Zalesovo Beam 58.13 350 P P 21 44 49.9 +0.2
comp=Z,19nm,0.7s,baz=184,slow=5.5,SNR=93
ZALV pP pP 21 44 58.4 -0.5
comp=Z,20nm,0.7s,baz=165,slow=6.3,SNR=22
ZAA1 Zalesovo Array 58.14 350 eP P 21 44 49.9 +0.2
RAYN Ar Rayn 58.99 300 eP P 21 44 56.1 -0.2
comp=Z,2.3nm,0.8s
NVS Novosibirsk 59.27 349 eP P 21 44 56.7 -0.9
HNR Honiara 60.15 99 eP P 21 45 01.0 -3.5
HNR pmax pmax
comp=Z,100nm,0.4s
HNR Honiara 60.15 99 eP P 21 45 01.0 -3.5
comp=Z,100nm,0.4s
BVAR Borovoye Array 61.06 340 P P 21 45 09.6 -0.3
comp=Z,3.4nm,0.7s,baz=145,slow=8.8,SNR=18
BVAR pP pP 21 45 18.4 -0.8
comp=Z,4.3nm,0.6s,baz=123,slow=11,SNR=17
BRVK Borovoye 61.12 340ceP P 21 45 09.9 -0.5
BRVK pmax pmax
comp=Z,9.0nm,2.5s
BRVK Borovoye 61.12 340 eP P 21 45 09.8 -0.5
comp=Z,5.8nm,0.7s
BOD Bodaibo 61.75 9 eP P 21 45 13.9 -0.6
BOD pmax pmax
comp=Z,11nm,1.7s
AB31 Akbulak array 62.41 332 i P P 21 45 17.4 -1.7
AB31 pmax pmax
comp=Z,11nm,0.7s
KMBO Kilima Mbogo 62.44 270 P P 21 45 22.5 +2.2
comp=Z,0.6nm,0.5s,baz=67,slow=9.5,SNR=3.3
KMBO Kilima Mbogo 62.44 270 eP P 21 45 22.5 +2.2
KMBO pmax pmax
comp=Z,23nm,2.3s
KMBO Kilima Mbogo 62.44 270 eP P 21 45 22.5 +2.2
comp=Z,22nm,2.3s
AKTO Aktyubinsk 64.13 332 P P 21 45 30.2 -0.3
comp=Z,2.9nm,0.9s,baz=123,slow=10,SNR=5.5
GNI Garni 66.08 317 eP P 21 45 42.5 -1.1
GNI pmax pmax
comp=Z,37nm,1.3s
SVE Sverdlovsk 67.53 338 i P P 21 45 52.9 +0.6
SVE pmax pmax
comp=Z,17nm,1.2s
YAK Yakutsk 68.82 15 eP P 21 45 59.9 -0.3
YAK pmax pmax
comp=Z,15nm,0.8s
KBZ Khabaz 68.90 319 P P 21 46 02.2 +1.1
comp=Z,2.1nm,0.8s,baz=122,slow=5.9,SNR=5.7
KIV Kislovodsk 69.14 320 eP P 21 46 01.8 -0.9
KIV pmax pmax
comp=Z,8.0nm,1.1s
MAW Mawson 69.21 194 P P 21 46 05.5 +3.0
comp=Z,1.8nm,0.8s,baz=38,slow=9.3,SNR=4.6
MAW LR LR 22 11 27.3
comp=Z,92nm,18.1s,baz=61,slow=32
MAW Mawson 69.21 194 eP P 21 46 05.5 +3.0
MAW pmax pmax
comp=Z,1.0nm,1.0s
MAW Mawson 69.21 194 eP P 21 46 05.5 +3.0
comp=Z,0.7nm,1.0s
VRH Novokhopyorsk 73.02 326 eP P 21 46 25.7 -0.2
VRH pmax pmax
comp=N,9.0nm,0.7s
VRH pmax pmax
comp=Z,10.0nm,0.7s
VRH pmax pmax
comp=E,4.0nm,0.6s
BR101 Keskin Array S 73.81 313 eP P 21 46 30.9 -0.2
BRTR Keskin Array B 73.81 313 P P 21 46 30.9 -0.2
comp=E,1.1nm,0.7s,baz=122,slow=6.1,SNR=7.0
BRTR pP pP 21 46 38.6 -1.9
comp=E,2.1nm,0.9s,baz=132,slow=6.8,SNR=7.6
VSR Storozhevoye 74.46 325 eP P 21 46 34.0 -0.4
VSR pmax pmax
comp=N,3.0nm,0.7s
VSR pmax pmax
comp=E,4.0nm,0.7s
VSR pmax pmax
comp=Z,8.0nm,0.7s
BR231 Keskin MP Arra 74.48 313 eP P 21 46 31.9 -3.0
LPSR Galich'ya Gora 75.19 327 eP P 21 46 38.5 -0.1
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=N,3.0nm,0.7s
LPSR pmax pmax
comp=E,8.0nm,0.8s
OBN Obninsk 77.52 328 eP P 21 46 51.8 +0.1
OBN e 21 47 00.7
OBN e 21 49 43.9
OBN pmax pmax
comp=Z,5.0nm,0.9s
OBN MLR MLR
comp=Z,69nm,17.0s
VNDA Vanda 81.20 169 P P 21 47 13.8 +2.3
comp=Z,0.6nm,0.9s,baz=320,slow=6.3,SNR=2.4
VNDA LR LR 22 20 23.0
comp=Z,59nm,19.5s,baz=310,slow=34
BUR04 Bucovina Ar. S 81.85 319 eP P 21 47 17.2 +1.6
KOLS Kolonicke sedl 84.05 320 eP P 21 47 28.5 +1.6
KOLS e 21 47 36.6
KOLS pmax pmax
comp=Z,9.0nm,1.1s
KOLS Kolonicke sedl 84.05 320 eP P 21 47 28.5 +1.6
KOLS e 21 47 36.6
BILL Bilibino 84.23 20 eP P 21 47 24.2 -3.1
BILL e 21 50 40.3
BILL pmax pmax
comp=Z,7.0nm,1.2s
STHS Stebnicka Huta 84.81 320 e P 21 47 40.2 +9.5
FIA0 FINESS Array S 84.89 332 eP P 21 47 31.6 +0.8
FIA0 FINESS Array S 84.89 332 eP P 21 47 31.6 +0.8
FINES FINESS Array B 84.89 332 P P 21 47 31.6 +0.8
comp=Z,1.8nm,0.7s,baz=123,slow=6.8,SNR=12
FINES pP pP 21 47 39.9 -0.5
comp=Z,2.7nm,0.5s,baz=132,slow=10,SNR=3.3
FINES FINESS Array B 84.89 332 i P P 21 47 30.7 -0.1
FINES pmax pmax
comp=Z,2.0nm,0.6s
ARA0 ARCESS Array S 87.35 340 eP P 21 47 44.1 +1.3
ARCES ARCESS Array B 87.35 340 P P 21 47 44.1 +1.3
comp=Z,2.6nm,0.8s,baz=101,slow=4.7,SNR=5.2
ARCES pP pP 21 47 51.8 -0.6
comp=Z,2.7nm,0.8s,baz=92,slow=6.1,SNR=1.8
ARCES LR LR 22 32 09.7
comp=Z,112nm,18.3s,baz=110,slow=39
VRAC Vranov 87.79 319 LR LR 22 30 19.8
comp=Z,36nm,21.2s,baz=28,slow=38
GEC2 GERESS Array S 89.64 319 eP P 21 47 55.7 +1.5
GEC2 GERESS Array S 89.64 319 eP P 21 47 55.7 +1.5
GERES GERESS Array B 89.64 319 P P 21 47 55.7 +1.5
comp=Z,0.8nm,0.9s,baz=114,slow=4.7,SNR=4.2
GERES pP pP 21 48 04.1 +0.3
comp=Z,2.1nm,1.0s,baz=95,slow=4.3,SNR=6.2
CLL Collm 90.29 321 eP P 21 47 58.0 +1.0
CLL Collm 90.29 321 eP P 21 47 58.0 +1.0
CLL LmV 22 14 00.0
comp=Z,200nm,19.0s
NOA NORSAR Array B 91.91 331 LR LR 22 34 21.2
comp=Z,57nm,18.8s,baz=70,slow=39
Z29A Hungry Hill Ra 143.87 31 P PKPdf 21 54 31.4 -0.8
baz=144
V35A Meyer Ranch, C 144.02 23 P PKPbc 21 54 30.5 +0.4
baz=144
WMOK Wichita Mounta 144.08 26 ePKIKP PKPab 21 54 28.2 -1.7
WMOK Wichita Mounta 144.08 26 ePKPdf PKPab 21 54 28.2 -1.7
W34A Bridge Creek, 144.09 25 P PKPbc 21 54 30.7 +0.4
baz=144
X32A Elmer 144.12 27 P PKPbc 21 54 30.9 +0.4
baz=144
Z30A Sanderson Ranc 144.15 31 P PKPbc 21 54 31.1 +0.4
baz=144
TUL1 Tulsa 144.29 22 P PKPbc 21 54 31.6 +0.6
baz=144
U38A Gravette 144.31 20 P PKPbc 21 54 31.4 +0.3
baz=144
V36A Jenks 144.34 22 P PKPdf 21 54 31.9 -0.9
baz=144
Y32A R-V Farms, Ver 144.39 28 P PKPbc 21 54 31.6 +0.3
baz=144
W35A Tecumseh 144.53 24 P PKPbc 21 54 32.1 +0.4
baz=144
V37A Hulbert 144.55 21 P PKPdf 21 54 32.4 -0.8
baz=144
X34A Smith Ranch, M 144.61 25 P PKPdf 21 54 32.6 -0.7
baz=144
Z31A Sharp Cattle R 144.61 29 P PKPdf 21 54 32.9 -0.5
baz=144
Y33A Hilltop Ranch, 144.76 27 P PKPab 21 54 31.9 -0.5
baz=144
130A Snyder 144.78 31 P PKPab 21 54 32.4 -0.2
baz=144
W36A Wetumka 144.80 23 P PKPab 21 54 32.4 -0.1
baz=144
229A Bryant Ranch, 144.82 33 P PKPdf 21 54 33.3 -0.6
baz=144
V38A Canehill 144.82 20 P PKPab 21 54 32.1 -0.5
baz=144,SNR=5.9
Z32A Haskell 144.95 29 P PKPdf 21 54 33.4 -0.5
baz=145
131A Roby 145.01 30 P PKPdf 21 54 33.6 -0.5
baz=145
329A Wagon Wheel Ra 145.10 33 P PKPdf 21 54 33.9 -0.4
baz=145,SNR=7.5
W37A Quinton 145.11 22 P PKPab 21 54 33.7 0.0
baz=145
X35A Drake 145.15 25 P PKPdf 21 54 33.9 -0.3
baz=145,SNR=5.2
PBMO Poplar Bluff 145.15 14 ePKPbc PKPdf 21 54 33.9 -0.3
Y34A Reagan Ranch, 145.19 26 P PKPab 21 54 34.0 0.0
baz=145,SNR=6.3
X36A Centrahoma 145.25 24 P PKPdf 21 54 34.4 0.0
baz=145
230A Sterling City 145.26 32 P PKPdf 21 54 34.7 +0.1
baz=145,SNR=13
Z33A Whitaker Ranch 145.30 28 P PKPdf 21 54 34.4 -0.1
baz=145
ABTX Abilene, Hawle 145.42 30 P PKPab 21 54 35.0 +0.1
baz=145
W38A Poteau 145.50 21 P PKPab 21 54 35.3 +0.2
baz=145
Y35A Marietta 145.54 25 P PKPab 21 54 35.5 +0.2
baz=145
330A Mertzon 145.60 33 P PKPab 21 54 35.7 0.0
baz=145,SNR=6.2
Z34A Collier Ranch, 145.62 27 P PKPab 21 54 35.7 +0.1
baz=145
X37A Clayton 145.62 22 P PKPab 21 54 35.7 +0.2
baz=145
231A Bronte 145.63 31 P PKPab 21 54 35.8 +0.1
baz=145
TX31 Lajitas Ar. Si 145.70 38 ePKPdf PKPab 21 54 36.5 +0.4
TXAR Lajitas Array 145.70 38 PKPbc PKPab 21 54 36.9 +0.8
comp=Z,10nm,0.8s,baz=309,slow=1.3,SNR=91
TXAR pPKPbc pPKPbc 21 54 44.5 -1.1
comp=Z,5.2nm,0.6s,baz=273,slow=1.0,SNR=15
X38A Whitesboro 145.75 22 P PKPab 21 54 36.0 +0.1
baz=145
133A Hamilton Ranch 145.79 29 P PKPab 21 54 36.0 -0.2
baz=146,SNR=8.9
429A Davenport Ranc 145.80 34 P PKPab 21 54 36.2 -0.2
baz=146,SNR=5.7
Y36A Durant 145.86 24 P PKPab 21 54 36.5 +0.1
baz=146
Z35A Perchaven, San 145.94 26 P PKPab 21 54 36.5 -0.3
baz=146
529A Stev Forest Ra 145.99 35 P PKPab 21 54 37.2 +0.1
baz=146,SNR=10
232A Coleman 146.01 30 P PKPab 21 54 37.3 +0.1
baz=146,SNR=7.7
430A Baggett Ranch, 146.04 33 P PKPbc 21 54 36.7 -0.1
baz=146
331A San Angelo 146.07 32 P PKPbc 21 54 36.9 +0.1
baz=146,SNR=5.3
134A White-Moore Ra 146.21 28 P PKPab 21 54 37.6 -0.2
baz=146
MIAR Mount Ida 146.30 20 ePKP2 PKPbc 21 54 37.3 0.0
MIAR Mount Ida 146.30 20 ePKPdf PKPbc 21 54 37.3 0.0
WVT Waverly 146.34 11 ePKIKP PKPdf 21 54 34.6 -1.6
WVT e 21 54 43.4
WVT Waverly 146.34 11 ePKPdf PKPdf 21 54 34.6 -1.6
WVT epPKPdf pPKPdf 21 54 43.4 -2.8
332A Millersview 146.37 31 P PKPab 21 54 38.1 -0.4
baz=146,SNR=9.8
431A Sonora 146.46 33 P PKPab 21 54 38.8 -0.1
baz=146
530A J-C Ranch, Com 146.47 34 P PKPbc 21 54 38.1 0.0
baz=146,SNR=7.5
Y39A Lockesburg 146.67 21 P PKPab 21 54 39.0 -0.5
baz=146
432A Menard 146.75 32 P PKPbc 21 54 38.6 -0.2
baz=146
333A Richland Sprin 146.80 30 P PKPbc 21 54 39.2 +0.3
baz=146,SNR=7.3
531A Rocksprings 146.90 33 P PKPbc 21 54 39.8 +0.5
baz=147,SNR=8.9
JCT Junction City 147.05 32 ePKP2 PKPab 21 54 40.8 -0.4
JCT Junction City 147.05 32 ePKPdf PKPab 21 54 40.8 -0.4
334A Lometa 147.16 29 P PKPbc 21 54 40.2 +0.2
baz=147
433A Art 147.21 31 P PKPbc 21 54 40.5 +0.4
baz=147
532A Rocksprings 147.28 33 P PKPab 21 54 41.1 -1.0
baz=147
434A Burnet 147.57 30 P PKPbc 21 54 41.1 0.0
baz=147
335A Moody 147.59 28 P PKPbc 21 54 41.4 +0.3
baz=147
533A Kerrville 147.78 31 P PKPbc 21 54 41.9 +0.2
baz=148
632A Uvalde 147.82 33 P PKPbc 21 54 42.1 +0.3
baz=148
KMSC Kings Mountain 148.04 2 P PKPbc 21 54 42.7 +0.5
baz=148
534A Blanco 148.10 31 P PKPbc 21 54 42.5 -0.1
baz=148
337A Centerville 148.26 26 P PKPbc 21 54 42.3 -0.5
baz=148
732A Laxson Ranch, 148.32 34 P PKPbc 21 54 43.0 -0.2
baz=148
832A Faith Ranch, C 148.66 35 P PKPbc 21 54 44.3 +0.2
baz=148
635A Leesville 148.98 31 P PKPbc 21 54 46.0 +1.2
baz=149
537A Green Hill Far 149.12 28 P PKPbc 21 54 46.8 +1.7
baz=149
736A Circle Diamond 149.69 30 P PKPbc 21 54 48.7 +2.2
baz=149
540A Vidor 150.03 24 P PKPab 21 54 50.3 -2.8
baz=150
034A Hebbronville 150.32 35 P PKPab 21 54 51.1 -3.3
baz=150
035A Encino 150.75 34 P PKPab 21 54 52.5 -3.6
baz=150
936A North Padre Is 150.80 32 P PKPab 21 54 53.2 -3.1
baz=150

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*DDA* ***27*** *22:07:26.6, 39.°01N×38.°27E, h4km, Md2.9*
*ISK* ***27*** *22:07:26.0, 39.°02N×38.°28E, h2km, MD2.7*
*CSEM* ***27*** *22:07:27.1±0.2, 39.°02N×38.°27E, h2km, MD2.7, Error ellipse: s-maj=3.7km s-min=3.1km az=105.0*
**ISC 27 22:07:26.8**±1.1**, 39.°02N**±0.°02×**38.°27E**±0.°02**, h3km**±10km**,**
**n43,** σ**0.s58**/65**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILIC** | **ilic-Erzincan** | **0.49** | **28** | ePG | **Pg** | **22 07 36.2** | **-0.1** |
| ILIC | | | | eSG | **Sg** | **22 07 43.7** | **+0.9** |
| **ILIC** | **ilic-Erzincan** | **0.49** | **28** | ePg | **Pg** | **22 07 36.2** | **-0.1** |
| ILIC | | | | eSg | **Sg** | **22 07 43.7** | **+0.9** |
| **REFA** | **Refahiye_ERZ˜** | **0.54** | **45** | P | Pn | 22 07 45.4 | +3.8 |
| REFA | | | | S | Sn | 22 08 00.6 | +9.3 |
| **CUKAN** | **kangal_SIVAS** | **0.69** | **296** | P | **Pg** | **22 07 40.2** | **+0.1** |
| CUKAN | | | | S | **Sg** | **22 07 49.4** | **+0.2** |
| **MALT** | **Malatya** | **0.71** | **170** | ePG | **Pg** | **22 07 40.3** | **-0.2** |
| **MALT** | **Malatya** | **0.71** | **170** | ePg | **Pg** | **22 07 40.3** | **-0.2** |
| **DARE** | **Darende-Malaty** | **0.76** | **234** | ePG | **Pg** | **22 07 41.3** | **-0.1** |
| DARE | | | | eSG | **Sb** | **22 07 53.2** | **-0.3** |
| **DARE** | **Darende-Malaty** | **0.76** | **234** | ePg | **Pg** | **22 07 41.3** | **-0.1** |
| DARE | | | | eSg | **Sb** | **22 07 53.2** | **-0.3** |
| **ELZG** | **Elazig** | **0.76** | **133** | i P | **Pg** | **22 07 41.6** | **+0.2** |
| ELZG | | | | i S | **Sb** | **22 07 52.5** | **-1.2** |
| **ELZG** | **Elazig** | **0.76** | **133** | P | **Pg** | **22 07 41.6** | **+0.2** |
| ELZG | | | | S | **Sb** | **22 07 52.5** | **-1.2** |
| **AKCD** | **Akcadag** | **0.77** | **201** | i P | **Pb** | **22 07 42.5** | **-0.4** |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AKCD | | | | *i* S | **Sb** | **22 07 53.7** | **-0.1** |
| **AKCD** | **Akcadag** | **0.77** | **201** | P | **Pb** | **22 07 42.5** | **-0.4** |
| AKCD | | | | S | **Sb** | **22 07 53.7** | **-0.1** |
| **PTK** | **Pertek** | **0.88** | **98** | *e*PG | **Pg** | **22 07 43.7** | **-0.1** |
| PTK | | | | *e*SG | **Sb** | **22 07 56.5** | **-0.7** |
| **PTK** | **Pertek** | **0.88** | **98** | *e*Pg | **Pg** | **22 07 43.7** | **-0.1** |
| PTK | | | | *e*Sg | **Sb** | **22 07 56.5** | **-0.7** |
| **CUZAR** | **Zara_SIVAS** | **0.95** | **336** | P | **Pg** | **22 07 45.6** | **+0.5** |
| CUZAR | | | | S | **Sg** | **22 07 54.8** | **-2.7** |
| **SVRC** | **Sivrice-ELAZID** | **1.03** | **128** | *e*PG | **Pg** | **22 07 46.6** | **0.0** |
| **SVRC** | **Sivrice-ELAZID** | **1.03** | **128** | *e*Pg | **Pg** | **22 07 46.6** | **0.0** |
| **EZC** | **Erzincan** | **1.11** | **48** | *e*Pn | **Pn** | **22 07 50.9** | **+1.4** |
| **SUSE** | **Susehri** | **1.19** | **357** | *i* P | **Pg** | **22 07 49.9** | **+0.2** |
| SUSE | | | | *i* S | **Sn** | **22 08 07.7** | **+0.3** |
| **SUSE** | **Susehri** | **1.19** | **357** | P | **Pg** | **22 07 49.9** | **+0.2** |
| SUSE | | | | S | **Sn** | **22 08 07.7** | **+0.3** |
| **CUALT** | **Altinyayla-SIV** | **1.20** | **283** | P | **Pg** | **22 07 49.5** | **-0.5** |
| CUALT | | | | S | **Sg** | **22 08 05.7** | **+0.2** |
| **SCER** | **sogukcermik** | **1.22** | **314** | *i* P | **Pg** | **22 07 49.9** | **-0.4** |
| SCER | | | | *i* S | **Sb** | **22 08 07.1** | **+0.2** |
| **SCER** | **sogukcermik** | **1.22** | **314** | P | **Pg** | **22 07 49.9** | **-0.4** |
| SCER | | | | S | **Sb** | **22 08 07.1** | **+0.2** |
| **ERZN** | **Erzincan** | **1.26** | **63** | *e*PN | **Pg** | **22 07 50.9** | **-0.2** |
| **EUZM** | **Uzumlu** | **1.30** | **58** | *i* P | **Pg** | **22 07 51.8** | **0.0** |
| EUZM | | | | *i* S | **Sn** | **22 08 10.1** | **0.0** |
| **EUZM** | **Uzumlu** | **1.30** | **58** | P | **Pg** | **22 07 51.8** | **0.0** |
| EUZM | | | | S | **Sn** | **22 08 10.1** | **0.0** |
| **SVSK** | **Karacayir** | **1.33** | **313** | *e*PN | **Pb** | **22 07 52.5** | **+0.1** |
| **SVSK** | **Karacayir** | **1.33** | **313** | *e*Pn | **Pb** | **22 07 52.6** | **+0.1** |
| **KELT** | **Kelkit** | **1.36** | **34** | *i* P | **Pn** | **22 07 52.4** | **-0.6** |
| KELT | | | | *i* S | **Sn** | **22 08 11.9** | **+0.2** |
| **KELT** | **Kelkit** | **1.36** | **34** | P | **Pn** | **22 07 52.4** | **-0.6** |
| KELT | | | | S | **Sn** | **22 08 11.9** | **+0.2** |
| **SARI** | **SarD1z-Kayseri** | **1.57** | **248** | *e*PN | **Pn** | **22 07 56.0** | **+0.2** |
| **CUSAR** | **Sarkisla-SIVAS** | **1.62** | **285** | P | **Pg** | **22 07 57.8** | **-0.2** |
| CUSAR | | | | S | **Sg** | **22 08 19.5** | **+0.4** |
| **GUMT** | **Gumushane** | **1.72** | **32** | *e*PN | **Pn** | **22 07 57.8** | **0.0** |
| **GUMT** | **Gumushane** | **1.72** | **32** | *e*Pn | **Pn** | **22 07 57.8** | **0.0** |
| **BINT** | **Bingol** | **1.73** | **94** | *e*Pn | **Pg** | **22 08 00.4** | **+0.3** |
| **KMRS** | **Kahramanmaras** | **1.85** | **216** | *e*PN | **Pn** | **22 08 00.1** | **+0.5** |
| **KMRS** | **Kahramanmaras** | **1.85** | **216** | *e*Pn | **Pn** | **22 08 00.1** | **+0.5** |
| **BNGB** | **Bing¨ll** | **1.88** | **90** | *e*PN | **Pn** | **22 08 00.4** | **+0.5** |
| **ESPY** | **Espiye-Giresun** | **1.93** | **10** | *e*PN | **Pn** | **22 08 00.8** | **+0.2** |
| **ESPY** | **Espiye-Giresun** | **1.93** | **10** | *e*Pn | **Pn** | **22 08 00.8** | **+0.2** |
| **AYKD** | **Aykdinkavak** | **1.97** | **216** | P | **Pg** | **22 08 04.4** | **-0.2** |
| AYKD | | | | S | **Sg** | **22 08 31.4** | **+1.3** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.99** | **46** | *e*PN | **Pn** | **22 08 01.8** | **+0.2** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.99** | **46** | *e*Pn | **Pn** | **22 08 01.8** | **+0.2** |

*ISK* ***27*** *22:09:54.5,39˚.03N×38˚.27E,h18km, MD2.3*
*CSEM* ***27*** *22:09:55.5±0.2,39˚.02N×38˚.30E,h8km, MD2.3, Error ellipse: s-maj=5.0km s-min=3.6km az=102.0*
*DDA* ***27*** *22:09:55.8,39˚.02N×38˚.27E,h7km, Md2.5*

**ISC 27 22:09:55.5**±1.1,**39˚.01N**±0˚.03×**38˚.28E**±0˚.03,**h7**km±11km, **n18**,σ0ˢ**42**/32,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ILIC** | **ilic-Erzincan** | **0.49** | **27** | *e*PG | **Pg** | **22 10 04.8** | **-0.3** |
| ILIC | | | | *e*SG | **Sg** | **22 10 12.0** | **+0.4** |
| **ILIC** | **ilic-Erzincan** | **0.49** | **27** | *e*Pg | **Pg** | **22 10 04.8** | **-0.3** |
| ILIC | | | | *e*Sg | **Sg** | **22 10 12.0** | **+0.4** |
| **CUKAN** | **kangal_SIVAS** | **0.70** | **296** | P | **Pg** | **22 10 09.0** | **0.0** |
| CUKAN | | | | S | **Sg** | **22 10 18.5** | **+0.3** |
| **MALT** | **Malatya** | **0.71** | **171** | *e*PG | **Pg** | **22 10 09.2** | **0.0** |
| MALT | | | | *e*SG | **Sb** | **22 10 19.6** | **-0.6** |
| **MALT** | **Malatya** | **0.71** | **171** | *e*Pg | **Pg** | **22 10 09.2** | **0.0** |
| MALT | | | | *e*Sg | **Sb** | **22 10 19.6** | **-0.6** |
| **ELZG** | **Elazig** | **0.75** | **133** | *i* P | **Pg** | **22 10 10.2** | **+0.2** |
| ELZG | | | | *i* S | **Sb** | **22 10 21.5** | **-0.1** |
| **ELZG** | **Elazig** | **0.75** | **133** | P | **Pg** | **22 10 10.2** | **+0.2** |
| ELZG | | | | S | **Sb** | **22 10 21.5** | **-0.1** |
| **DARE** | **Darende-Malaty** | **0.76** | **235** | *e*PG | **Pg** | **22 10 09.9** | **-0.3** |
| DARE | | | | *e*SG | **Sb** | **22 10 21.0** | **-0.8** |
| **DARE** | **Darende-Malaty** | **0.76** | **235** | *e*Pg | **Pg** | **22 10 09.9** | **-0.3** |
| DARE | | | | *e*Sg | **Sb** | **22 10 21.0** | **-0.8** |
| **AKCD** | **Akcadag** | **0.77** | **201** | *i* P | **Pb** | **22 10 11.4** | **+0.1** |
| AKCD | | | | *i* S | **Sb** | **22 10 22.5** | **+0.5** |
| **AKCD** | **Akcadag** | **0.77** | **201** | P | **Pb** | **22 10 11.4** | **+0.1** |
| AKCD | | | | S | **Sb** | **22 10 22.5** | **+0.5** |
| **PTK** | **Pertek** | **0.88** | **98** | *e*PG | **Pg** | **22 10 12.0** | **-0.4** |
| **PTK** | **Pertek** | **0.88** | **98** | *e*Pg | **Pg** | **22 10 12.0** | **-0.4** |
| **SVRC** | **Sivrice-ELAZID** | **1.02** | **128** | *e*PG | **Pg** | **22 10 14.7** | **-0.5** |
| **SVRC** | **Sivrice-ELAZID** | **1.02** | **128** | *e*Pg | **Pg** | **22 10 14.7** | **-0.5** |
| **SUSE** | **Susehri** | **1.20** | **357** | *i* P | **Pb** | **22 10 18.6** | **0.0** |
| SUSE | | | | *i* S | **Sn** | **22 10 35.8** | **+0.4** |
| **SUSE** | **Susehri** | **1.20** | **357** | P | **Pb** | **22 10 18.6** | **0.0** |
| SUSE | | | | S | **Sn** | **22 10 35.8** | **+0.4** |
| **CUALT** | **Altinyayla-SIV** | **1.21** | **283** | P | **Pg** | **22 10 18.7** | **-0.1** |
| CUALT | | | | S | **Sn** | **22 10 36.0** | **+0.2** |

**MEX 27 22:30:32.0**±0.4,**14˚.79N×93˚.41W,h15km, MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.93** | **12** | *e*P | Pb | 22 30 46.7 | -3.2 |
| PCIG | | | | *e*S | Sb | 22 30 58.4 | -3.7 |

*IDC* ***27*** *22:34:34.8±1.4,34˚.79N×23˚.75E,h0km, mb3.8/7, mb1 3.8/9, mb1mx3.6/46, mbtmp3.7/9, ML3.2/2, Error ellipse: s-maj=30.9km s-min=12.7km az=161.0*
*ATH* ***27*** *22:34:42.6,35˚.10N×24˚.19E,h24km, MD3.7/21, ML3.5*
*CSEM* ***27*** *22:34:43.7±0.3,35˚.09N×24˚.21E,h15km, MD3.7, Error ellipse: s-maj=7.3km s-min=2.3km az=20.0*
*DDA* ***27*** *22:34:49.0,34˚.80N×25˚.26E,h10km, Md3.1*

**ISC 27 22:34:41.1**±1.5,**34˚.98N**±0˚.07×**24˚.19E**±0˚.03,**h17**km±5km, **n98**,σ1ˢ**77**/114,**mb3.8**/**7**,**Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VAM** | **Vamos** | **0.43** | **2** | *e*PB | **Pb** | **22 34 50.4** | **+0.2** |
| VAM | | | | *e*SB | **Sg** | **22 34 55.0** | **-0.6** |
| **VAM** | **Vamos** | **0.43** | **2** | *e*Pb | **Pb** | **22 34 50.4** | **+0.2** |
| VAM | | | | *e*Sb | **Sg** | **22 34 55.0** | **-0.6** |
| **IMMV** | **Iera Moni Meta** | **0.51** | **341** | *e*PB | **Pg** | **22 34 51.5** | **+0.2** |
| IMMV | | | | *e*SB | **Sg** | **22 34 57.3** | **-0.8** |
| **IMMV** | **Iera Moni Meta** | **0.51** | **341** | *e*Pb | **Pg** | **22 34 51.5** | **+0.2** |
| IMMV | | | | *e*Sb | **Sg** | **22 34 57.3** | **-0.8** |
| **SIVA** | **Sivas** | **0.51** | **86** | *e*PN | **Pb** | **22 34 53.1** | **+1.5** |
| SIVA | | | | *e*SN | **Sb** | **22 35 00.2** | **+1.4** |
| **SIVA** | **Sivas** | **0.51** | **86** | *e*Pn | **Pb** | **22 34 53.1** | **+1.5** |
| SIVA | | | | *e*Sn | **Sb** | **22 35 00.2** | **+1.4** |
| **IDI** | **Anoyia** | **0.65** | **62** | Pg | **Pn** | **22 34 55.6** | **0.0** |
| | 20nm,0.3s,baz=267,slow=10,SNR=101 | | | | | | |
| IDI | | | | Lg | Lg | 22 35 11.1 | |
| | 37nm,0.3s,baz=306,slow=19,SNR=15 | | | | | | |
| **IDI** | **Anoyia** | **0.65** | **62** | *e*PN | **Pg** | **22 34 55.2** | **+1.2** |
| IDI | | | | *e*SN | **Sg** | **22 35 03.3** | **+0.6** |
| **IDI** | **Anoyia** | **0.65** | **62** | *e*Pn | **Pg** | **22 34 55.2** | **+1.2** |
| IDI | | | | *e*Sn | **Sg** | **22 35 03.3** | **+0.6** |
| **LAST** | **Lasithi** | **1.08** | **80** | *e*PN | **Pg** | **22 35 02.9** | **+1.0** |
| **LAST** | **Lasithi** | **1.08** | **80** | *e*Pn | **Pg** | **22 35 02.9** | **+1.0** |
| **ANKY** | **Antikythira Is** | **1.14** | **321** | *e*PN | **Pn** | **22 35 03.0** | **+0.7** |
| ANKY | | | | *e*SN | **Sn** | **22 35 17.9** | **+0.4** |
| **ANKY** | **Antikythira Is** | **1.14** | **321** | *e*Pn | **Pn** | **22 35 03.0** | **+0.7** |
| ANKY | | | | *e*Sn | **Sn** | **22 35 17.9** | **+0.4** |
| **KYTH** | **Kithira** | **1.60** | **325** | *e*PN | **Pn** | **22 35 09.9** | **+1.3** |
| **KYTH** | **Kithira** | **1.60** | **325** | *e*Pn | **Pn** | **22 35 09.9** | **+1.3** |
| **MHLO** | **Agia Marina, M** | **1.71** | **6** | *e*PN | **Pn** | **22 35 11.0** | **+0.8** |
| **MHLO** | **Agia Marina, M** | **1.71** | **6** | *e*Pn | **Pn** | **22 35 11.0** | **+0.8** |
| **SANT** | **Santorini** | **1.73** | **36** | *e*PN | **Pb** | **22 35 12.9** | **+0.5** |
| **SANT** | **Santorini** | **1.73** | **36** | *e*Pn | **Pb** | **22 35 12.9** | **+0.5** |
| **VLI** | **Veliai** | **2.01** | **330** | *e*PN | **Pb** | **22 35 16.5** | **-0.6** |
| **VLI** | **Veliai** | **2.01** | **330** | *e*Pn | **Pb** | **22 35 16.5** | **-0.6** |
| **APE** | **Apeiranthos** | **2.35** | **27** | *e*PN | **Pn** | **22 35 20.3** | **+1.3** |
| **APE** | **Apeiranthos** | **2.35** | **27** | *e*Pn | **Pn** | **22 35 20.3** | **+1.3** |
| **KARP** | **Karpathos** | **2.50** | **76** | *e*PN | **Pb** | **22 35 24.1** | **-1.4** |
| **KARP** | **Karpathos** | **2.50** | **76** | *e*Pn | **Pb** | **22 35 24.1** | **-1.4** |
| **KRND** | **KRANIDI** | **2.54** | **341** | *e*PN | **Pn** | **22 35 23.3** | **+1.8** |
| **KRND** | **KRANIDI** | **2.54** | **341** | *e*Pn | **Pn** | **22 35 23.3** | **+1.8** |
| **DID** | **Didima** | **2.63** | **343** | *e*PN | **Pn** | **22 35 24.2** | **+1.4** |
| **DID** | **Didima** | **2.63** | **343** | *e*Pn | **Pn** | **22 35 24.2** | **+1.4** |
| **VLX** | **Vlachokerasia** | **2.80** | **329** | *e*PN | **Pn** | **22 35 26.9** | **+1.8** |
| VLX | | | | *e*SN | **Sn** | **22 35 59.2** | **+0.7** |
| **VLX** | **Vlachokerasia** | **2.80** | **329** | *e*Pn | **Pn** | **22 35 26.9** | **+1.8** |
| VLX | | | | *e*Sn | **Sn** | **22 35 59.2** | **+0.7** |
| **NAIG** | **Nisos Aigina** | **2.83** | **349** | *e*PN | **Pn** | **22 35 27.0** | **+1.5** |
| **NAIG** | **Nisos Aigina** | **2.83** | **349** | *e*Pn | **Pn** | **22 35 27.0** | **+1.5** |
| **ITM** | **Ithomi** | **2.86** | **321** | *e*PN | **Pn** | **22 35 28.1** | **+2.2** |
| ITM | | | | *e*SN | **Sn** | **22 36 00.7** | **+0.8** |
| **ITM** | **Ithomi** | **2.86** | **321** | *e*Pn | **Pn** | **22 35 28.1** | **+2.2** |
| ITM | | | | *e*Sn | **Sn** | **22 36 00.7** | **+0.8** |
| **VLY** | **Voula,Athens** | **2.88** | **354** | *e*PN | **Pn** | **22 35 27.7** | **+1.5** |
| **VLY** | **Voula,Athens** | **2.88** | **354** | *e*Pn | **Pn** | **22 35 27.7** | **+1.5** |
| **ATH** | **Athens Observa** | **3.01** | **353** | *e*PN | **Pn** | **22 35 29.0** | **+1.1** |
| **ATH** | **Athens Observa** | **3.01** | **353** | *e*Pn | **Pn** | **22 35 29.0** | **+1.1** |
| **PTL** | **Penteli** | **3.07** | **355** | *e*PN | **Pn** | **22 35 30.2** | **+1.3** |
| **PTL** | **Penteli** | **3.07** | **355** | *e*Pn | **Pn** | **22 35 30.2** | **+1.3** |
| **LTK** | **Loutraki** | **3.19** | **342** | *e*PN | **Pn** | **22 35 32.0** | **+1.5** |
| **LTK** | **Loutraki** | **3.19** | **342** | *e*Pn | **Pn** | **22 35 32.0** | **+1.5** |
| **VILL** | **Villia** | **3.25** | **348** | *e*Pn | **Pn** | **22 35 32.7** | **+1.3** |
| **GUR** | **Goura** | **3.30** | **334** | *e*PN | **Pn** | **22 35 33.6** | **+1.5** |
| **GUR** | **Goura** | **3.30** | **334** | *e*Pn | **Pn** | **22 35 33.6** | **+1.5** |
| **VIL2** | **Platees** | **3.31** | **347** | *e*PN | **Pn** | **22 35 32.7** | **+0.6** |
| **EREA** | **Eretria** | **3.44** | **357** | *e*PN | **Pn** | **22 35 35.4** | **+1.5** |
| **EREA** | **Eretria** | **3.44** | **357** | *e*Pn | **Pn** | **22 35 35.4** | **+1.5** |
| **ARG** | **Arkhangelos** | **3.44** | **68** | *e*PN | **Pn** | **22 35 36.6** | **+2.7** |
| **ARG** | **Arkhangelos** | **3.44** | **68** | *e*Pn | **Pn** | **22 35 36.6** | **+2.7** |
| **KLV** | **Kalavryta, Ach** | **3.47** | **332** | *e*PN | **Pn** | **22 35 36.0** | **+1.7** |
| **KLV** | **Kalavryta, Ach** | **3.47** | **332** | *e*Pn | **Pn** | **22 35 36.0** | **+1.7** |
| **DRO** | **Drossia** | **3.57** | **327** | *e*PN | **Pn** | **22 35 38.4** | **+2.7** |
| **DRO** | **Drossia** | **3.57** | **327** | *e*Pn | **Pn** | **22 35 38.4** | **+2.7** |
| **DESF** | **Desfina** | **3.67** | **339** | *e*PN | **Pn** | **22 35 38.8** | **+1.6** |
| **DESF** | **Desfina** | **3.67** | **339** | *e*Pn | **Pn** | **22 35 38.8** | **+1.6** |
| **DSF** | **Desfina** | **3.67** | **339** | *e*PN | **Pn** | **22 35 38.5** | **+1.4** |
| **DSF** | **Desfina** | **3.67** | **339** | *e*Pn | **Pn** | **22 35 38.5** | **+1.4** |
| **LAKA** | **Lakka** | **3.71** | **332** | *e*PN | **Pn** | **22 35 39.2** | **+1.6** |
| **LAKA** | **Lakka** | **3.71** | **332** | *e*Pn | **Pn** | **22 35 39.2** | **+1.6** |
| **RLS** | **Riolos of Patr** | **3.77** | **325** | *e*PN | **Pn** | **22 35 40.3** | **+1.9** |
| **RLS** | **Riolos of Patr** | **3.77** | **325** | *e*Pn | **Pn** | **22 35 40.3** | **+1.9** |
| **KALE** | **Kalithea** | **3.78** | **335** | *e*PN | **Pn** | **22 35 40.0** | **+1.4** |
| **KALE** | **Kalithea** | **3.78** | **335** | *e*Pn | **Pn** | **22 35 40.0** | **+1.4** |
| **LKR** | **Lokris** | **3.79** | **346** | *e*PN | **Pn** | **22 35 40.4** | **+1.8** |
| **LKR** | **Lokris** | **3.79** | **346** | *e*Pn | **Pn** | **22 35 40.4** | **+1.8** |
| **EFP** | **Efpalio** | **3.90** | **333** | *e*PN | **Pn** | **22 35 42.0** | **+1.9** |
| **EFP** | **Efpalio** | **3.90** | **333** | *e*Pn | **Pn** | **22 35 42.0** | **+1.9** |
| **TURN** | **Turunc** | **4.05** | **61** | *i* P | **Pn** | **22 35 40.6** | **-1.7** |
| TURN | | | | *i* S | **Sn** | **22 36 23.5** | **-5.8** |
| **TURN** | **Turunc** | **4.05** | **61** | P | **Pn** | **22 35 40.6** | **-1.7** |
| TURN | | | | S | **Sn** | **22 36 23.5** | **-5.8** |
| **AGG** | **Agios Georgios** | **4.30** | **340** | *e*PN | **Pn** | **22 35 47.6** | **+1.9** |
| **AGG** | **Agios Georgios** | **4.30** | **340** | *e*Pn | **Pn** | **22 35 47.6** | **+1.9** |
| **VLS** | **Valsamata** | **4.31** | **319** | *e*PN | **Pn** | **22 35 48.6** | **+2.8** |
| **VLS** | **Valsamata** | **4.31** | **319** | *e*Pn | **Pn** | **22 35 48.6** | **+2.8** |
| **PDO** | **Prodromos** | **4.34** | **327** | *e*PN | **Pn** | **22 35 48.3** | **+2.0** |
| **PDO** | **Prodromos** | **4.34** | **327** | *e*Pn | **Pn** | **22 35 48.3** | **+2.0** |
| **MAKR** | **Makrakomi, Fth** | **4.35** | **338** | *e*PN | **Pn** | **22 35 48.2** | **+1.8** |
| **MAKR** | **Makrakomi, Fth** | **4.35** | **338** | *e*Pn | **Pn** | **22 35 48.2** | **+1.8** |
| **GOLH** | **Golhisar** | **4.90** | **61** | *i* P | Pn | 22 35 57.1 | +3.1 |
| GOLH | | | | *i* S | **Sn** | **22 36 52.9** | **+2.5** |
| **GOLH** | **Golhisar** | **4.90** | **61** | P | Pn | 22 35 57.1 | +3.1 |
| GOLH | | | | S | **Sn** | **22 36 52.9** | **+2.5** |
| **KORT** | **Korkueli** | **5.39** | **66** | *i* P | **Pn** | **22 36 02.8** | **+2.0** |
| KORT | | | | *i* S | **Sn** | **22 37 01.2** | **-1.3** |
| **KORT** | **Korkueli** | **5.39** | **66** | P | **Pn** | **22 36 02.8** | **+2.0** |
| KORT | | | | S | **Sn** | **22 37 01.2** | **-1.3** |
| **IGT** | **Igoumenitsa** | **5.49** | **327** | *e*PN | **Pn** | **22 36 04.7** | **+2.7** |
| **IGT** | **Igoumenitsa** | **5.49** | **327** | *e*Pn | **Pn** | **22 36 04.7** | **+2.7** |
| **NEST** | **Nestorio** | **5.97** | **336** | *e*PN | **Pn** | **22 36 10.7** | **+2.0** |
| **NEST** | **Nestorio** | **5.97** | **336** | *e*Pn | **Pn** | **22 36 10.7** | **+2.0** |
| **BRTR** | **Keskin Array B** | **8.89** | **55** | Pn | **Pn** | **22 36 51.0** | **+2.2** |
| | 0.1nm,0.3s,baz=240,slow=17,SNR=2.7 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **9.52** | **99** | Pn | **Pn** | **22 36 56.4** | **-1.0** |
| | 0.7nm,0.3s,baz=287,slow=16,SNR=4.1 | | | | | | |
| **GERES** | **GERESS Array B** | **15.88** | **334** | Pn | **P** | **22 38 26.8** | **-0.6** |
| | 0.1nm,0.3s,baz=149,slow=12,SNR=4.9 | | | | | | |
| **AKASG** | **Malin Array Be** | **16.13** | **12** | Pn | **P** | **22 38 29.6** | **-0.5** |
| | 1.5nm,0.3s,baz=210,slow=10,SNR=4.6 | | | | | | |
| **HFS** | **Hagfors** | **26.08** | **348** | P | **P** | **22 40 11.4** | **-2.0** |
| | 1.3nm,0.4s,baz=156,slow=11,SNR=12 | | | | | | |
| **NOA** | **NORSAR Array B** | **27.38** | **346** | P | **P** | **22 40 22.8** | **-2.4** |
| | 1.2nm,0.7s,baz=154,slow=8.7,SNR=2.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **29.77** | **229** | P | P | 22 40 41.5 | -5.3 |
| | 0.5nm,1.0s,baz=27,slow=7.6,SNR=3.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **34.62** | **1** | P | P | 22 41 26.2 | -2.7 |
| | 3.3nm,0.8s,baz=185,slow=9.0,SNR=4.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.54** | **56** | P | **P** | **22 42 50.3** | **-1.5** |
| | 0.8nm,0.6s,baz=280,slow=7.2,SNR=6.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **45.70** | **46** | P | **P** | **22 42 59.3** | **-1.6** |
| | 0.8nm,0.4s,baz=276,slow=7.1,SNR=3.9 | | | | | | |
| **SONM** | **Songino Array** | **60.22** | **50** | P | **P** | **22 44 46.6** | **-1.6** |
| | 0.4nm,0.6s,baz=280,slow=7.4,SNR=4.3 | | | | | | |

*MOS* ***27*** *22:44:49.1±1.1,61˚.04N×151˚.33W,h56km, mb4.7/17, Error ellipse: s-maj=11.8km s-min=5.9km az=85.1*
*BJI* ***27*** *22:44:49.2,61˚.24N×151˚.17W,h64km, mb4.8/16, mB5.1/6, Ms4.9/3, Ms7 4.5/4*
*ISCJB* ***27*** *22:44:50.4±0.1,60˚.98N±0˚.02×150˚.90W±0˚.02, h77km±1km, mb4.4/61, Error ellipse: s-maj=2.8km s-min=1.7km az=173.7*
*IDC* ***27*** *22:44:52.5±0.7,61˚.03N×151˚.26W,h75km±5km, mb4.0/31, mb1 4.2/37, mb1mx4.1/55, mbtmp4.4/37, MS3.3/15, Ms1 3.3/15, ms1mx3.1/40, Error ellipse: s-maj=10.7km s-min=9.6km az=37.0*
*NEIC* ***27*** *22:44:52.3, 60˚.98N×150˚.99W, h66km, mb4.7/25, ML4.4(AEIC), After AEIC.*
*NEIC Felt [IV] at Sterling; [III] at Anchorage, Kenai, Soldotna and Wasilla; [II] at Eagle River, Elmendorf AFB and Girdwood. Also felt at Chugiak, Fort Richardson, Palmer and Seward.*

**ISC 27 22:44:51.7**±0.3,**60˚.97N**±0˚.02×**151˚.02W**±0˚.02,**h74**km±2km, **h74**km:**pP-P**,**n260**,σ1ˢ**41**/336,**mb4.5**/61,**5C-2D**,**Kenai Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NKA** | **Nikishka** | **0.25** | **206** | P | **Pn** | **22 45 03.8** | **+0.7** |
| **VOGL** | **Vogel Lake** | **0.29** | **84** | P | **Pn** | **22 45 03.4** | **+0.2** |
| **FIB** | **Fire Island** | **0.45** | **64** | P | **Pn** | **22 45 04.5** | **0.0** |
| FIB | | | | S | **Sn** | **22 45 15.0** | **+1.1** |
| **FIB** | **Fire Island** | **0.45** | **64** | P | **Pn** | **22 45 04.5** | **0.0** |
| FIB | | | | S | **Sn** | **22 45 14.9** | **+1.1** |
| **SUA** | **Susitna One** | **0.52** | **15** | P | **Pn** | **22 45 04.3** | **-0.9** |
| SUA | | | | S | **Sn** | **22 45 14.0** | **-1.1** |
| **SPU** | **Mount Spurr** | **0.55** | **294** | P | **Pn** | **22 45 04.7** | **-0.8** |
| **SPCG** | **Spurr Capps Gl** | **0.59** | **304** | P | **Pn** | **22 45 05.2** | **-0.7** |
| SPCG | | | | S | **Sn** | **22 45 15.1** | **-1.3** |
| **SLKM** | **Skilak Lake** | **0.60** | **139** | P | **Pn** | **22 45 05.3** | **-0.7** |
| **SLKM** | **Skilak Lake** | **0.60** | **139** | P | **Pn** | **22 45 05.3** | **-0.7** |
| **CKN** | **Chakachatna No** | **0.62** | **295** | P | **Pn** | **22 45 05.7** | **-0.5** |
| **RC01** | **Rabbit Creek A** | **0.63** | **78** | P | **Pn** | **22 45 05.7** | **-0.6** |
| RC01 | | | | S | **Sn** | **22 45 16.1** | **-0.9** |
| **STLK** | **Strandline Lak** | **0.66** | **324** | P | **Pn** | **22 45 06.1** | **-0.5** |
| **CKL** | **Chakachamna La** | **0.68** | **290** | P | **Pn** | **22 45 06.3** | **-0.6** |
| **SPBG** | **Spurr Blockage** | **0.72** | **295** | P | **Pn** | **22 45 06.7** | **-0.6** |
| SPBG | | | | S | **Sn** | **22 45 17.3** | **-1.5** |
| **BGL** | **Barrier Glacie** | **0.73** | **295** | P | **Pn** | **22 45 06.8** | **-0.6** |
| **RDT** | **Redoubt** | **0.79** | **241** | P | **Pn** | **22 45 07.6** | **-0.4** |
| **DFR** | **Drift River** | **0.90** | **246** | P | **Pn** | **22 45 09.0** | **-0.3** |
| **RDJH** | **Redoubt Jeurge** | **0.95** | **248** | P | **Pn** | **22 45 09.8** | **-0.2** |
| RDJH | | | | S | **Sn** | **22 45 23.4** | **-0.2** |
| **RDN** | **Redoubt North** | **0.97** | **243** | P | **Pn** | **22 45 09.8** | **-0.4** |
| **PTE** | **Portage** | **0.98** | **95** | P | **Pn** | **22 45 09.9** | **-0.2** |
| PTE | | | | S | **Sn** | **22 45 23.4** | **-0.4** |
| **RSO** | **Redoubt South** | **0.99** | **240** | *e*Pn | **Pn** | **22 45 10.3** | **-0.3** |
| **RDWB** | **Redoubt West** | **1.02** | **243** | P | **Pn** | **22 45 10.7** | **-0.1** |
| RDWB | | | | S | **Sn** | **22 45 24.9** | **-0.1** |
| **RED** | **Redoubt Volcan** | **1.02** | **238** | P | **Pn** | **22 45 10.7** | **-0.1** |
| RED | | | | S | **Sn** | **22 45 25.2** | **+0.1** |
| **SKT** | **Skwentna** | **1.05** | **347** | P | **Pn** | **22 45 10.7** | **-0.3** |
| SKT | | | | S | **Sn** | **22 45 25.1** | **-0.4** |
| **PMR** | **Palmer** | **1.10** | **55** | P | **Pn** | **22 45 11.1** | **-0.6** |
| PMR | | | | S | **Sn** | **22 45 25.5** | **-1.1** |
| **PMR** | **Palmer** | **1.10** | **55** | P | **Pn** | **22 45 11.1** | **-0.6** |
| PMR | | | | S | **Sn** | **22 45 25.5** | **-1.1** |
| **SEW** | **Seward** | **1.16** | **138** | P | **Pn** | **22 45 11.5** | **-0.9** |
| SEW | | | | S | **Sn** | **22 45 27.3** | **-0.6** |
| **BRLK** | **Bradley Lake** | **1.21** | **177** | P | **Pn** | **22 45 13.1** | **0.0** |
| BRLK | | | | S | **Sn** | **22 45 29.8** | **+0.7** |
| **PWL** | **Port Wells** | **1.31** | **94** | P | **Pn** | **22 45 13.8** | **-0.6** |
| PWL | | | | S | **Sn** | **22 45 30.4** | **-1.0** |
| **HOM** | **Homer** | **1.35** | **194** | P | **Pn** | **22 45 15.4** | **+0.6** |
| HOM | | | | S | **Sn** | **22 45 33.5** | **+1.3** |
| **IVE** | **Iliamna Volcan** | **1.38** | **227** | P | **Pn** | **22 45 15.4** | **+0.1** |
| **ILW** | **Iliamna West** | **1.39** | **230** | P | **Pn** | **22 45 15.8** | **+0.3** |
| **TRAP** | **Trapper Creek** | **1.42** | **15** | P | **Pn** | **22 45 15.6** | **-0.1** |
| **CNPM** | **China Poot** | **1.45** | **184** | P | **Pn** | **22 45 16.2** | **0.0** |
| CNPM | | | | S | **Sn** | **22 45 34.2** | **-0.4** |
| **SML** | **Sawmill** | **1.54** | **56** | P | **Pn** | **22 45 16.9** | **-0.5** |
| SML | | | | S | **Sn** | **22 45 35.5** | **-1.3** |
| **SML** | **Sawmill** | **1.54** | **56** | P | **Pn** | **22 45 16.9** | **-0.5** |
| SML | | | | S | **Sn** | **22 45 35.5** | **-1.3** |
| **PDB** | **Pedro Bay** | **1.97** | **235** | P | **Pn** | **22 45 23.1** | **+0.1** |
| PDB | | | | S | **Sn** | **22 45 47.2** | **+0.3** |
| **PDB** | **Pedro Bay** | **1.97** | **235** | P | **Pn** | **22 45 23.1** | **+0.1** |
| PDB | | | | S | **Sn** | **22 45 47.2** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **1.98** | **62** | P | **Pn** | **22 45 22.8** | **-0.4** |
| SCM | | | | S | **Sn** | **22 45 47.3** | **+0.2** |
| **SCM** | **Sheep Creek Mo** | **1.98** | **62** | P | **Pn** | **22 45 22.8** | **-0.4** |
| SCM | | | | S | **Sn** | **22 45 47.3** | **+0.2** |
| **AUE** | **Augustine Isla** | **2.00** | **217** | P | **Pn** | **22 45 24.2** | **+0.8** |
| **PPLA** | **Purkeypile** | **2.01** | **345** | P | **Pn** | **22 45 23.7** | **-0.1** |
| PPLA | | | | S | **Sn** | **22 45 49.2** | **+1.1** |
| **AUW** | **Augustine West** | **2.02** | **219** | P | **Pn** | **22 45 24.4** | **+0.7** |
| **JPK** | **Jack Peak** | **2.15** | **86** | P | **Pn** | **22 45 24.4** | **-1.2** |
| JPK | | | | S | **Sn** | **22 45 49.4** | **-1.9** |
| **SVW2** | **Sparrevohn** | **2.23** | **275** | P | **Pn** | **22 45 25.9** | **-0.6** |
| SVW2 | | | | S | **Sn** | **22 45 51.4** | **-1.7** |
| **FID** | **Port Fidalgo** | **2.23** | **94** | P | **Pn** | **22 45 24.4** | **-2.1** |
| FID | | | | S | **Sn** | **22 45 50.9** | **-2.3** |
| **VMT** | **TAPS Tl Valdez** | **2.27** | **85** | P | **Pn** | **22 45 26.0** | **-1.0** |
| VMT | | | | S | **Sn** | **22 45 51.9** | **-2.0** |
| **VLZ** | **Valdez** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,18nm,0.9s | | | | | | | | |
| **EDM** | **Edmonton** | **21.61** | **94** | *e*P | | **P** | | **22 49 37.1** | **+1.8** |
| | comp=Z,18nm,0.9s | | | | | | | | |
| **F03A** | **Seaside** | **21.98** | **121** | *e*P | | **P** | | **22 49 42.8** | **+3.4** |
| | comp=Z,449nm,2.1s | | | | | | | | |
| **ETW** | **Entiat** | **22.09** | **113** | P | | pP | | 22 49 58.4 | +2.4 |
| **WTV** | **Waterville** | **22.19** | **113** | P | | pP | | 22 49 59.0 | +2.0 |
| **LTY** | **Liberty** | **22.20** | **114** | *e*P | | **P** | | **22 49 44.2** | **+2.4** |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **SAW** | **Saint Andrews** | **22.44** | **112** | P | | pP | | 22 50 01.5 | +2.0 |
| **NAC** | **Naches** | **22.53** | **115** | P | | pP | | 22 50 03.1 | +2.5 |
| **NEW** | **Newport** | **23.07** | **108** | P | | **P** | | **22 49 52.3** | **+1.5** |
| | comp=Z,3.9nm,0.8s,baz=295,slow=12,SNR=4.6 | | | | | | | | |
| NEW | | | | LR | | LR | | 22 58 26.9 | |
| | comp=Z,82nm,19.4s,baz=337,slow=35 | | | | | | | | |
| **CROR** | **Criterion Ridg** | **23.83** | **118** | P | | **P** | | **22 50 00.4** | **+2.6** |
| **RES** | **Resolute Bay** | **23.96** | **33** | P | | **P** | | **22 49 59.0** | **+0.4** |
| | comp=Z,9.3nm,0.6s,baz=261,slow=11,SNR=50 | | | | | | | | |
| **RES** | **Resolute Bay** | **23.96** | **33** | *e*P | | **P** | | **22 49 59.3** | **+0.7** |
| RES | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **RES** | **Resolute Bay** | **23.96** | **33** | *e*P | | **P** | | **22 49 59.2** | **+0.7** |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **BMO** | **Blue Mountains** | **25.55** | **114** | *e*P | | **P** | | **22 50 16.0** | **+2.7** |
| | comp=Z,4.1nm,0.6s | | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **25.79** | **125** | P | | **P** | | **22 50 18.2** | **+2.6** |
| | comp=Z,4.3nm,0.9s,baz=304,slow=3.6,SNR=5.1 | | | | | | | | |
| YBH | | | | LR | | LR | | 22 58 29.1 | |
| | comp=Z,75nm,21.4s,baz=349,slow=32 | | | | | | | | |
| **SEY** | **Seymchan** | **25.96** | **299**‖ | *e*P | | **P** | | **22 50 15.0** | **-1.8** |
| **PETK** | **Petropavlovsk-** | **28.31** | **277** | LR | | LR | | 23 01 33.0 | |
| | comp=Z,31nm,19.3s,baz=72,slow=36 | | | | | | | | |
| **RLMT** | **Red Lodge** | **29.05** | **104** | *e*P | | P | | 22 50 48.4 | +3.5 |
| | comp=Z,98nm,2.6s | | | | | | | | |
| **IMW** | **Indian Meadow** | **29.19** | **107** | *e*P | | **P** | | **22 50 49.4** | **+3.2** |
| | comp=Z,5.2nm,0.8s | | | | | | | | |
| **TPAW** | **Teton Pass** | **29.50** | **108** | *e*P | | **P** | | **22 50 50.0** | **+1.1** |
| | comp=Z,2.2nm,0.9s | | | | | | | | |
| **ELK** | **Elko** | **29.74** | **116** | P | | **P** | | **22 50 53.3** | **+2.3** |
| | comp=Z,4.2nm,0.7s,baz=242,slow=0.5,SNR=14 | | | | | | | | |
| **ELK** | **Elko** | **29.74** | **116** | P | | **P** | | **22 50 53.3** | **+2.3** |
| ELK | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | | |
| **ELK** | **Elko** | **29.74** | **116** | *e*P | | P | | 22 50 54.5 | +3.5 |
| | comp=Z,32nm,2.1s | | | | | | | | |
| **NV01** | **Mina Array Sit** | **30.38** | **123** | *e*P | | **P** | | **22 50 59.7** | **+3.1** |
| **NVAR** | **Mina Array Bea** | **30.38** | **123** | P | | **P** | | **22 50 59.1** | **+2.4** |
| | comp=Z,2.5nm,0.7s,baz=312,slow=9.4,SNR=14 | | | | | | | | |
| **BW06** | **Boulder Array** | **30.70** | **107** | *e*P | | **P** | | **22 51 01.4** | **+1.9** |
| **ULM** | **Lac du Bonnet** | **31.97** | **84** | P | | **P** | | **22 51 11.6** | **+1.3** |
| | comp=Z,3.2nm,0.5s,baz=306,slow=9.6,SNR=4.7 | | | | | | | | |
| **RSSD** | **Black Hills** | **32.29** | **100** | *e*P | | **P** | | **22 51 15.7** | **+2.3** |
| RSSD | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| **RSSD** | **Black Hills** | **32.29** | **100** | *e*P | | **P** | | **22 51 15.7** | **+2.3** |
| | comp=Z,5.7nm,0.6s | | | | | | | | |
| **SRU** | **San Rafael** | **33.17** | **113** | *e*P | | P | | 22 51 24.5 | +3.4 |
| SRU | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | | |
| **SRU** | **San Rafael** | **33.17** | **113** | *e*P | | P | | 22 51 24.5 | +3.4 |
| | comp=Z,5.5nm,0.8s | | | | | | | | |
| **CCUT** | **Cedar City** | **33.20** | **118** | *e*P | | **P** | | **22 51 24.6** | **+3.2** |
| | comp=Z,100nm,2.9s | | | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **35.29** | **125** | LR | | LR | | 23 03 53.9 | |
| | comp=Z,56nm,18.7s,baz=328,slow=32 | | | | | | | | |
| **WUAZ** | **Wupatki** | **35.77** | **117** | *e*P | | P | | 22 51 46.8 | +3.2 |
| | comp=Z,10nm,0.9s | | | | | | | | |
| **KUR** | **Kuril'sk** | **38.35** | **274** | P | | P | | 22 51 59.1 | -6.0 |
| KUR | | | | S | | S | | 22 57 47.2 | -6.7 |
| KUR | | | | pmax | | pmax | | | |
| | comp=Z,338nm,4.0s | | | | | | | | |
| **SUMG** | **Summit** | **39.10** | **26** | *i* P | | **P** | | **22 52 12.6** | **+1.1** |
| SUMG | | | | pmax | | pmax | | | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **SUMG** | **Summit** | **39.10** | **26** | *i* P | | **P** | | **22 52 12.6** | **+1.1** |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **SUMG** | **Summit** | **39.10** | **26** | *e*P | | **P** | | **22 52 12.2** | **+0.7** |
| | comp=Z,13nm,0.6s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **39.30** | **16** | *i* P | | **P** | | **22 52 12.6** | **-0.1** |
| DAG | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **DAG** | **Danmarks Havn** | **39.30** | **16** | *i* P | | **P** | | **22 52 12.6** | **-0.1** |
| | comp=Z,10nm,0.6s | | | | | | | | |
| **SFJD** | **Kangerlussuaq** | **39.81** | **37** | P | | **P** | | **22 52 18.1** | **+1.1** |
| | comp=Z,10nm,0.9s,baz=315,slow=7.1,SNR=3.2 | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **40.21** | **275** | P | | P | | 22 52 17.0 | -3.5 |
| YUK | | | *i* | | | | | 22 54 22.1 | |
| YUK | | | | S | | **S** | | **22 58 17.4** | **-4.3** |
| YUK | | | *i* | | | | | 23 02 23.9 | |
| YUK | | | | pmax | | pmax | | | |
| | comp=Z,218nm,4.9s | | | | | | | | |
| **SCHQ** | **Schefferville** | **42.22** | **59** | P | | **P** | | **22 52 37.4** | **+0.5** |
| | comp=Z,4.1nm,0.5s,baz=317,slow=8.1,SNR=8.8 | | | | | | | | |
| **AAM** | **Ann Arbor** | **43.56** | **84** | *e*P | | **P** | | **22 52 46.0** | **-1.9** |
| AAM | | | | pmax | | pmax | | | |
| | comp=Z,59nm,1.0s | | | | | | | | |
| **AAM** | **Ann Arbor** | **43.56** | **84** | *e*P | | **P** | | **22 52 46.0** | **-1.9** |
| | comp=Z,59nm,1.0s | | | | | | | | |
| **SADO** | **Sadowa** | **43.88** | **78** | LR | | LR | | 23 12 55.8 | |
| | comp=Z,56nm,19.6s,baz=274,slow=38 | | | | | | | | |
| **BOD** | **Bodaibo** | **44.38** | **310** | *e*P | | **P** | | **22 52 52.5** | **-1.7** |
| BOD | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,1.5s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **44.43** | **113** | P | | **P** | | **22 52 57.5** | **+2.4** |
| | comp=Z,0.6nm,0.6s,baz=306,slow=6.0,SNR=10 | | | | | | | | |
| TXAR | | | | pP | | **pP** | | **22 53 15.1** | **+1.8** |
| | comp=Z,1.4nm,0.8s,baz=327,slow=5.2,SNR=8.2 | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **44.54** | **94** | *e*P | | **P** | | **22 52 56.5** | **+0.7** |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **JCT** | **Junction City** | **45.22** | **109** | *e*P | | **P** | | **22 53 03.2** | **+1.9** |
| JCT | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | | |
| **JCT** | **Junction City** | **45.22** | **109** | *e*P | | **P** | | **22 53 03.2** | **+1.9** |
| | comp=Z,8.1nm,0.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **46.73** | **286** | P | | **P** | | **22 53 11.7** | **-1.2** |
| | comp=Z,2.5nm,0.6s,baz=52,slow=7.7,SNR=9.2 | | | | | | | | |
| **OXF** | **Oxford** | **46.85** | **95** | *e*P | | **P** | | **22 53 15.5** | **+1.5** |
| OXF | | | | pmax | | pmax | | | |
| | comp=Z,24nm,0.8s | | | | | | | | |
| **OXF** | **Oxford** | **46.85** | **95** | *e*P | | **P** | | **22 53 15.4** | **+1.5** |
| | comp=Z,24nm,0.8s | | | | | | | | |
| **BINY** | **Binghamton** | **47.33** | **78** | *e*P | | **P** | | **22 53 19.0** | **+1.4** |
| | comp=Z,62nm,1.5s | | | | | | | | |
| **MDJ** | **Mudanjiang** | **47.53** | **288** | P | | **P** | | **22 53 19.5** | **+0.3** |
| MDJ | | | | PMZ | | | | | |
| | comp=Z,12nm,1.3s | | | | | | | | |
| MDJ | | | | PMZ | | | | | |
| | comp=Z,170nm,5.2s | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **48.68** | **89** | LR | | LR | | 23 14 53.0 | |
| | comp=Z,121nm,19.0s,baz=7.0,slow=37 | | | | | | | | |
| **LUPA** | **Lehigh Univers** | **48.85** | **78** | *e*P | | **P** | | **22 53 30.8** | **+1.4** |
| | comp=Z,19nm,0.9s | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **49.70** | **274** | P | | **P** | | **22 53 35.9** | **0.0** |
| | comp=Z,2.1nm,0.6s,baz=27,slow=6.2,SNR=6.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **49.76** | **2** | P | | **P** | | **22 53 35.2** | **-0.7** |
| | comp=Z,3.2nm,0.8s,baz=354,slow=7.3,SNR=6.1 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **49.76** | **2** | P | | **P** | | **22 53 35.2** | **-0.7** |
| ARCES | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **CN2** | **Changchun** | **50.07** | **290** | *e*P | | **P** | | **22 53 38.0** | **-0.6** |
| CN2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **TLY** | **Talaya** | **52.93** | **311** | LR | | LR | | 23 16 03.6 | |
| | comp=Z,32nm,18.9s,baz=28,slow=35 | | | | | | | | |
| **KS01** | **Wonju Array Si** | **53.91** | **283** | *e*P | | **P** | | **22 54 06.8** | **-0.4** |
| **KSRS** | **Korea Array** | **53.92** | **283** | P | | **P** | | **22 54 08.3** | **+1.1** |
| | comp=Z,9.8nm,0.8s,baz=31,slow=6.7,SNR=24 | | | | | | | | |
| KSRS | | | | LR | | LR | | 23 16 43.0 | |
| | comp=Z,13nm,20.8s,baz=189,slow=36 | | | | | | | | |
| **KSRS** | **Korea Array** | **53.92** | **283** | P | | **P** | | **22 54 08.3** | **+1.1** |
| KSRS | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| KSRS | | | | MLR | | MLR | | | |
| | comp=Z,13nm,20.8s | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **53.95** | **283** | P | | **P** | | **22 54 08.3** | **+0.9** |
| **KSAR** | **Wonju Array Be** | **53.95** | **283** | P | | **P** | | **22 54 08.3** | **+0.9** |
| **ZAK** | **Zakamensk** | **54.12** | **310** | *e*P | | **P** | | **22 54 08.9** | **+0.2** |
| ZAK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **54.73** | **306** | *d i*P | | **P** | | **22 54 13.3** | **+0.1** |
| ULN | | | | pmax | | pmax | | | |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **54.73** | **306** | *e*P | | **P** | | **22 54 13.1** | **0.0** |
| | comp=Z,15nm,0.7s | | | | | | | | |
| **SONA1** | **Songino Array** | **55.00** | **307** | *e*P | | **P** | | **22 54 16.0** | **+0.9** |
| **SONM** | **Songino Array** | **55.01** | **307** | P | | **P** | | **22 54 16.5** | **+1.3** |
| | comp=Z,23nm,0.7s,baz=36,slow=7.6,SNR=175 | | | | | | | | |
| SONM | | | | LR | | LR | | 23 19 40.3 | |
| | comp=Z,70nm,18.1s,baz=16,slow=38 | | | | | | | | |
| **TJN** | **Taejon** | **55.05** | **283** | *ce*P | | **P** | | **22 54 16.3** | **+0.9** |
| **ZAA0** | **Zalesovo Array** | **57.17** | **324** | *e*P | | **P** | | **22 54 29.4** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **57.17** | **324** | P | | **P** | | **22 54 29.7** | **-0.6** |
| | comp=Z,4.4nm,0.6s,baz=29,slow=7.1,SNR=24 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **57.55** | **10** | P | | **P** | | **22 54 33.0** | **+0.1** |
| | comp=Z,2.1nm,0.8s,baz=350,slow=7.4 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **57.55** | **10** | P | | **P** | | **22 54 33.1** | **+0.1** |
| | comp=Z,0.9nm,0.6s,baz=350,slow=7.2,SNR=3.9 | | | | | | | | |
| **FINES** | **FINESS Array B** | **57.89** | **2** | P | | **P** | | **22 54 34.9** | **-0.4** |
| | comp=Z,2.5nm,0.8s,baz=1.1,slow=7.2,SNR=9.6 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.60** | **298** | *e*P | | **P** | | **22 54 40.8** | **+0.1** |
| HHC | | | | pP | | **pP** | | **22 54 59.0** | **-0.6** |
| HHC | | | | PcS | | **PcS** | | **22 59 32.5** | **+0.6** |
| HHC | | | | S | | **S** | | **23 02 36.8** | **-2.1** |
| HHC | | | | ScS | | **ScS** | | **23 04 21.0** | **-2.3** |
| HHC | | | | SS | | **SS** | | **23 06 33.0** | **+1.1** |
| HHC | | | | PMZ | | | | | |
| | comp=Z,25nm,1.6s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | comp=Z,440nm,13.7s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | comp=Z,400nm,14.9s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | comp=Z,250nm,16.2s | | | | | | | | |
| **HFS** | **Hagfors** | **58.65** | **9** | P | | **P** | | **22 54 39.6** | **-0.9** |
| | comp=Z,4.5nm,0.9s,baz=1.3,slow=6.2,SNR=2.3 | | | | | | | | |
| **SVE** | **Sverdlovsk** | **59.94** | **341** | *e*P | | **P** | | **22 54 49.6** | **+0.1** |
| SVE | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.8s | | | | | | | | |
| **BRVK** | **Borovoye** | **61.65** | **333** | *ce*P | | **P** | | **22 54 59.9** | **-1.3** |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.66** | **333** | P | | **P** | | **22 55 00.5** | **-0.7** |
| | comp=Z,3.1nm,0.6s,baz=28,slow=7.4,SNR=6.9 | | | | | | | | |
| BVAR | | | | PcP | | **PcP** | | **22 55 42.5** | **+0.5** |
| | comp=Z,2.4nm,0.7s,baz=343,slow=3.1,SNR=6.9 | | | | | | | | |
| **KURK** | **Kurchatov** | **61.77** | **327** | ScP | | **ScP** | | **22 59 37.2** | **+0.1** |
| **KURBB** | **Kurchatov Arra** | **61.88** | **327** | ScP | | **ScP** | | **22 59 37.2** | **-0.4** |
| | comp=Z,0.4nm,0.6s,baz=27,slow=5.4,SNR=3.6 | | | | | | | | |
| **MOS** | **Moscow** | **63.44** | **355** | *e*P | | **P** | | **22 55 12.9** | **-0.1** |
| MOS | | | | pmax | | pmax | | | |
| | comp=Z,30nm,1.0s | | | | | | | | |
| **OBN** | **Obninsk** | **64.11** | **355**⇑ | *e*P | | **P** | | **22 55 17.5** | **+0.1** |
| OBN | | | | *e* | | | | 22 55 55.7 | |
| OBN | | | | *e* | | | | 22 57 38.7 | |
| OBN | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.28** | **322** | P | | **P** | | **22 55 17.6** | **-1.1** |
| | comp=Z,1.2nm,0.6s,baz=43,slow=6.4,SNR=8.6 | | | | | | | | |
| MKAR | | | | PP | | **PP** | | **22 57 35.8** | **-4.5** |
| | comp=Z,1.1nm,0.7s,baz=35,slow=6.6,SNR=3.7 | | | | | | | | |
| MKAR | | | | LR | | LR | | 23 23 42.5 | |
| | comp=Z,22nm,20.9s,baz=13,slow=36 | | | | | | | | |
| **MK01** | **Makanchi Array** | **64.30** | **322** | *e*P | | **P** | | **22 55 17.8** | **-1.0** |
| **GTA** | **Gaotai** | **64.67** | **306** | *e*P | | **P** | | **22 55 22.0** | **+0.5** |
| GTA | | | | pP | | **pP** | | **22 55 39.3** | **-1.5** |
| GTA | | | | sP | | **sP** | | **22 55 46.8** | **-2.2** |
| GTA | | | | PMZ | | | | | |
| | comp=Z,13nm,1.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **65.23** | **317** | *e*P | | **P** | | **22 55 27.0** | **+2.0** |
| **AKTO** | **Aktyubinsk** | **66.52** | **340** | P | | **P** | | **22 55 32.4** | **-0.7** |
| | comp=Z,3.5nm,0.5s,baz=15,slow=6.9,SNR=14 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **67.33** | **339** | *e*P | | **P** | | **22 55 37.3** | **-0.9** |
| | comp=Z,4.2nm,0.6s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **68.57** | **9** | *e*P | | **P** | | **22 55 46.7** | **+0.7** |
| DPC | | | | *e* | | | | 22 56 07.9 | |
| **DPC** | **Dobruska-Polom** | **68.57** | **9** | *e*P | | **P** | | **22 55 46.7** | **+0.7** |
| DPC | | | | *ep*P | | **pP** | | **22 56 07.9** | **+2.4** |
| **AKASG** | **Malin Array Be** | **68.68** | **360** | P | | **P** | | **22 55 46.4** | **-0.3** |
| | comp=Z,2.9nm,0.5s,baz=2.9,slow=6.3,SNR=8.8 | | | | | | | | |
| **KRLC** | **Kraliky** | **68.88** | **8** | *ep*P | | pP | | 22 56 09.6 | +2.2 |
| **KHC** | **Kasperske Hory** | **69.55** | **11** | *e*P | | **P** | | **22 55 53.4** | **+1.2** |
| KHC | | | | *e* | | | | 22 56 14.0 | |
| **KHC** | **Kasperske Hory** | **69.55** | **11** | *e*P | | **P** | | **22 55 53.4** | **+1.2** |
| KHC | | | | *ep*P | | **PcP** | | **22 56 14.0** | **-0.8** |
| **GERES** | **GERESS Array B** | **69.85** | **11** | P | | **P** | | **22 55 54.8** | **+0.8** |
| | comp=Z,0.2nm,0.3s,baz=346,slow=4.8,SNR=4.4 | | | | | | | | |
| GERES | | | | pP | | **pP** | | **22 56 13.6** | **0.0** |
| | comp=Z,0.2nm,0.4s,baz=275,slow=29,SNR=1.6 | | | | | | | | |
| **LANS** | **Liptovska Anna** | **69.97** | **7** | *e*P | | **P** | | **22 55 56.3** | **+1.6** |
| **LANS** | **Liptovska Anna** | **69.97** | **7** | *e*P | | **P** | | **22 55 56.3** | **+1.6** |
| **AAK** | **Ala-Archa** | **70.32** | **326** | P | | **P** | | **22 55 57.4** | **+0.3** |
| | comp=Z,2.3nm,0.4s,baz=127,slow=2.1,SNR=10 | | | | | | | | |
| **AAK** | **Ala-Archa** | **70.32** | **326** | P | | **P** | | **22 55 57.4** | **+0.3** |
| AAK | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **AAK** | **Ala-Archa** | **70.32** | **326** | *e*P | | **P** | | **22 55 57.2** | **+0.1** |
| | comp=Z,4.1nm,0.9s | | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **70.32** | **5** | *e*P | | **P** | | **22 55 59.8** | **+3.0** |
| **KOLS** | **Kolonicke sedl** | **70.32** | **5** | *e*P | | **P** | | **22 55 59.8** | **+3.0** |
| **CD2** | **Chengdu** | **70.36** | **298** | *e*P | | **P** | | **22 55 55.5** | **-1.9** |
| CD2 | | | | pP | | **pP** | | **22 56 13.5** | **-3.4** |
| CD2 | | | | sP | | **sP** | | **22 56 21.3** | **-3.8** |
| CD2 | | | | S | | **S** | | **23 05 01.5** | **-2.3** |
| CD2 | | | | sS | | **SKiKP** | | **23 05 32.5** | **-1.8** |
| CD2 | | | | SS | | **SS** | | **23 09 32.8** | **-2.1** |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,120nm,5.2s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **70.48** | **327** | *e*P | | **P** | | **22 55 56.2** | **-1.9** |
| EKS2 | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **70.48** | **327** | *e*P | | **P** | | **22 55 56.2** | **-1.9** |
| | comp=Z,4.6nm,0.6s | | | | | | | | |
| **VYHS** | **Vyhne** | **70.58** | **7** | *e*P | | **P** | | **22 56 01.4** | **+3.0** |
| VYHS | | | | *e* | | | | 22 56 20.2 | |
| VYHS | | | | pmax | | pmax | | | |
| | comp=Z,132nm,3.8s | | | | | | | | |
| **VYHS** | **Vyhne** | **70.58** | **7** | *e*P | | **P** | | **22 56 01.4** | **+3.0** |
| VYHS | | | | *ep*P | | **PcP** | | **22 56 20.1** | **+1.0** |
| **KKAR** | **Karatay Array** | **70.92** | **329** | *e*P | | **P** | | **22 55 59.6** | **-1.0** |
| KKAR | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **KKAR** | **Karatay Array** | **70.92** | **329** | *e*P | | **P** | | **22 55 59.6** | **-1.0** |
| | comp=Z,1.7nm,0.6s | | | | | | | | |
| **FETA** | **Feichten** | **71.35** | **13**⇑ | *i* P | | **P** | | **22 56 02.9** | **-0.4** |
| | comp=Z,8.8nm,1.4s | | | | | | | | |
| **KSH** | **Kashi** | **72.79** | **324** | *e*P | | **P** | | **22 56 15.0** | **+3.0** |
| KSH | | | | *es*P | | **sP** | | **22 56 38.5** | **-1.2** |
| KSH | | | | S | | **S** | | **23 05 32.0** | **+0.3** |
| KSH | | | | ScS | | **ScS** | | **23 06 13.8** | **+1.0** |
| KSH | | | | PMZ | | | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| KSH | | | | PMZ | | | | | |
| | comp=Z,58nm,4.9s | | | | | | | | |
| **MLR** | **Muntele Rosu** | **73.87** | **2** | P | | **P** | | **22 56 18.8** | **+0.6** |
| | comp=Z,0.6nm,0.7s,baz=4.4,slow=6.3,SNR=5.7 | | | | | | | | |
| **KIV** | **Kislovodsk** | **74.84** | **350** | *e*P | | **P** | | **22 56 24.0** | **+0.2** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | | |
| **KBZ** | **Khabaz** | **75.05** | **350** | P | | **P** | | **22 56 25.5** | **+0.6** |
| | comp=Z,2.7nm,0.9s,baz=328,slow=6.8,SNR=6.9 | | | | | | | | |
| **KMI** | **Kunming** | **75.83** | **296** | P | | **P** | | **22 56 31.5** | **+1.6** |
| KMI | | | | pP | | **pP** | | **22 56 50.3** | **+0.7** |
| KMI | | | | sP | | **sP** | | **22 56 57.8** | **0.0** |
| KMI | | | | S | | **S** | | **23 06 04.8** | **-1.4** |
| KMI | | | | sS | | **ScS** | | **23 06 37.3** | **-0.4** |
| KMI | | | | PMZ | | | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| KMI | | | | LZ | | | | | |
| | comp=Z,36nm,27.1s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **76.16** | **26** | P | | **P** | | **22 56 32.1** | **+0.7** |
| | comp=Z,0.3nm,0.5s,baz=336,slow=6.4,SNR=4.3 | | | | | | | | |
| ESDC | | | | pP | | **pP** | | **22 56 52.0** | **+0.9** |
| | comp=Z,0.5nm,0.5s,baz=341,slow=5.5,SNR=4.0 | | | | | | | | |
| **GEYT** | **Alibeck** | **78.61** | **337** | P | | **P** | | **22 56 45.5** | **+0.4** |
| | comp=Z,6.3nm,0.7s,baz=356,slow=3.8,SNR=17 | | | | | | | | |
| GEYT | | | | LR | | LR | | 23 35 38.7 | |
| | comp=Z,7.0nm,19.6s,baz=315,slow=39 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.59** | **356** | P | | **P** | | **22 56 50.7** | **+0.2** |
| | comp=Z,1.3nm,0.9s,baz=316,slow=4.0,SNR=3.4 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **79.59** | **356** | *i* P | | P | | 22 56 56.0 | +5.5 |
| BRTR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | |
| **TAPN** | **Taplejung** | **80.00** | **309** | *e*P | | **P** | | **22 56 53.2** | **+0.1** |
| | comp=Z,19nm,0.6s | | | | | | | | |
| **KKN** | **Kakani** | **80.50** | **312** | *e*P | | **P** | | **22 56 56.4** | **+0.7** |
| | comp=Z,4.4nm,0.5s | | | | | | | | |
| **DANN** | **Dangsing** | **80.54** | **313** | *e*P | | **P** | | **22 56 56.3** | **+0.3** |
| **GKN** | **Gorkha** | **80.54** | **312** | *e*P | | **P** | | **22 56 55.8** | **0.0** |
| | comp=Z,15nm,0.8s | | | | | | | | |
| **PKIN** | **Phulchoki** | **80.65** | **311** | *e*P | | **P** | | **22 56 56.6** | **0.0** |
| **PKI** | **Pulchoki** | **80.65** | **311** | *e*P | | **P** | | **22 56 56.6** | **-0.1** |
| **DMN** | **Daman** | **80.73** | **312** | *e*P | | **P** | | **22 56 57.1** | **+0.1** |
| | comp=Z,9.6nm,0.7s | | | | | | | | |
| **RAMN** | **Ramite** | **80.78** | **310** | *e*P | | **P** | | **22 56 57.0** | **-0.2** |
| | comp=Z,20nm,1.0s | | | | | | | | |
| **KOLN** | **Koldanda** | **81.12** | **313** | *e*P | | **P** | | **22 56 58.8** | **-0.2** |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **83.34** | **296** | P | | **P** | | **22 57 10.0** | **-0.4** |
| | comp=Z,1.3nm,0.3s,baz=6.1,slow=5.9,SNR=5.2 | | | | | | | | |
| CMAR | | | | pP | | **pP** | | **22 57 33.0** | **+2.5** |
| | comp=Z,1.0nm,0.6s,baz=10.0,slow=5.9,SNR=2.8 | | | | | | | | |
| CMAR | | | | LR | | LR | | 23 37 46.7 | |
| | comp=Z,19nm,20.0s,baz=170,slow=38 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **83.34** | **296** | *ce*P | | P | | 22 57 14.0 | +3.6 |
| **WRA** | **Warramunga Arr** | **100.05** | **247** | P | | **Pdif** | | **22 58 27.2** | **-1.3** |
| | comp=Z,0.3nm,0.8s,baz=36,slow=5.5,SNR=3.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **103.00** | **27** | PKKPbc | PKKPbc | | | 23 14 36.8 | +1.6 |
| | comp=Z,0.2nm,0.4s,baz=162,slow=2.9,SNR=9.0 | | | | | | | | |
| **BOSA** | **Boshof** | **147.55** | **6** | PKPbc | | **PKPab** | | **23 04 28.6** | **-0.6** |
| | comp=Z,2.1nm,0.6s,baz=344,slow=5.8,SNR=5.8 | | | | | | | | |
| BOSA | | | | pPKPbc | | **pPKPbc** | | **23 04 48.6** | **+0.7** |
| | comp=Z,3.0nm,0.6s,baz=334,slow=5.1,SNR=3.4 | | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **161.67** | **140** | P | | **PKPab** | | **23 05 27.2** | **-0.7** |
| **VNA2** | **Neumayer--Watz** | **162.47** | **140** | P | | **PKPab** | | **23 05 32.3** | **+0.9** |
| | baz=282,slow=5.8 | | | | | | | | |
| **MAW** | **Mawson** | **164.05** | **231** | PKPab | | **PKPab** | | **23 05 38.6** | **+0.2** |
| | comp=Z,0.3nm,0.3s,baz=86,slow=6.8,SNR=4.4 | | | | | | | | |
| MAW | | | | pPKPab | | **pPKPab** | | **23 05 58.9** | **+0.1** |
| | comp=Z,3.1nm,0.9s,baz=91,slow=5.8,SNR=4.7 | | | | | | | | |

*ISK* ***27*** *22:44:52.9, 39.02N×38.25E, h5km, MD2.8*
*DDA* ***27*** *22:44:53.8, 39.02N×38.28E, h7km, Md3.0*
*CSEM* ***27*** *22:44:54.4±0.2, 39.00N×38.27E, h2km, MD2.8, Error ellipse: s-maj=4.4km s-min=3.8km az=106.0*

**ISC 27 22:44:54.3±1.0, 39.03N±0.02×38.26E±0.02, h7km±9km, n60, σ0.90/87, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ILIC** | **ilic-Erzincan** | **0.49** | **29** | *e*PG | | **Pg** | | **22 45 03.2** | **-0.6** |
| **ILIC** | **ilic-Erzincan** | **0.49** | **29** | *e*Pg | | **Pg** | | **22 45 03.2** | **-0.6** |
| **REFA** | **Refahiye_ERZ¯** | **0.54** | **47** | *i* P | | Pn | | 22 45 12.4 | +3.8 |
| REFA | | | | *i* S | | Sn | | 22 45 27.2 | +9.2 |
| **REFA** | **Refahiye_ERZ¯** | **0.54** | **47** | P | | Pn | | 22 45 12.4 | +3.8 |
| REFA | | | | S | | Sn | | 22 45 27.2 | +9.2 |
| **CUKAN** | **kangal_SIVAS** | **0.68** | **295** | P | | **Pg** | | **22 45 07.3** | **-0.1** |
| CUKAN | | | | S | | **Sg** | | **22 45 16.5** | **+0.1** |
| **MALT** | **Malatya** | **0.72** | **170** | *e*PG | | **Pg** | | **22 45 07.3** | **-0.9** |
| **MALT** | **Malatya** | **0.72** | **170** | *e*Pg | | **Pg** | | **22 45 07.4** | **-0.9** |
| **DARE** | **Darende-Malaty** | **0.76** | **233** | *e*PG | | **Pg** | | **22 45 08.2** | **-0.7** |
| DARE | | | | *e*SG | | **Sb** | | **22 45 19.7** | **-0.8** |
| **DARE** | **Darende-Malaty** | **0.76** | **233** | *e*Pg | | **Pg** | | **22 45 08.2** | **-0.7** |
| DARE | | | | *e*Sg | | **Sb** | | **22 45 19.7** | **-0.8** |
| **ELZG** | **Elazig** | **0.77** | **133** | *i* P | | **Pg** | | **22 45 08.6** | **-0.6** |
| ELZG | | | | *i* S | | **Sg** | | **22 45 19.9** | **+0.7** |
| **ELZG** | **Elazig** | **0.77** | **133** | P | | **Pg** | | **22 45 08.6** | **-0.6** |
| ELZG | |

**ISC 27 23:10:58.8±1.0, 60°27'N±0°09'×60°14'E±0°07, h10km, n24, σ1§77/29, mb3.9/3, 8C-9D, Ural Mountains region**

| Code | Station Name | Δ° | AZ° | Phase ID | Time | Res |
|---|---|---|---|---|---|---|
| | | | | Op ISC | h m s | ISC |
| **CHKZ** | **Chkalovo** | **8.73** | **135** | ⇓Pn **Pn** | **23 13 06.3** | **+1.4** |
| | 6.2nm,0.6s | | | | | |
| CHKZ | | | | ⇓Sn **Sn** | **23 14 42.9** | **-0.5** |
| | 5.6nm,0.7s | | | | | |
| **ZRNK** | **Zerenda** | **8.81** | **142** | ⇑Pn **Pn** | **23 13 07.0** | **+1.0** |
| | 4.3nm,0.5s | | | | | |
| ZRNK | | | | ⇑Sn Sn | 23 14 41.6 | -3.7 |
| | 8.9nm,0.8s | | | | | |
| **BRVK** | **Borovoye** | **9.13** | **138** | ⇑Pn **Pn** | **23 13 11.9** | **+1.5** |
| | 23nm,0.7s | | | | | |
| BRVK | | | | ⇑Sn **Sn** | **23 14 49.8** | **-3.2** |
| | 5.0nm,0.4s | | | | | |
| **BVA0** | **Borovoye Array** | **9.19** | **138** | ⇓Pn **Pn** | **23 13 12.9** | **+1.7** |
| | 19nm,0.5s,baz=330,slow=15,SNR=133 | | | | | |
| BVA0 | | | | ⇓Sn **Sn** | **23 14 51.9** | **-2.7** |
| | 8.6nm,0.7s,baz=340,slow=26,SNR=12 | | | | | |
| **BVAR** | **Borovoye Array** | **9.19** | **138** | Pn **Pn** | **23 13 13.0** | **+1.8** |
| | 7.3nm,0.3s,baz=328,slow=15,SNR=185 | | | | | |
| BVAR | | | | Sn **Sn** | **23 14 51.2** | **-3.4** |
| | 1.8nm,0.3s,baz=321,slow=22,SNR=8.0 | | | | | |
| BVAR | | | | Lg Lg | 23 15 50.4 | |
| | baz=320,slow=26,SNR=1.9 | | | | | |
| **VOSK** | **Vostochnaya** | **9.64** | **137** | ⇓Pn **Pn** | **23 13 18.5** | **+1.1** |
| | 9.5nm,0.5s | | | | | |
| VOSK | | | | ⇓Sn **Sn** | **23 15 04.0** | **-1.6** |
| | 4.6nm,0.5s | | | | | |
| **AKTO** | **Aktyubinsk** | **9.93** | **188** | ⇓Pn **Pn** | **23 13 21.9** | **+0.5** |
| | 8.3nm,1.2s | | | | | |
| AKTO | | | | ⇑Sn **Sn** | **23 15 12.6** | **-0.2** |
| | 7.4nm,0.9s | | | | | |
| **AKTO** | **Aktyubinsk** | **9.93** | **188** | Pn **Pn** | **23 13 22.4** | **+1.0** |
| | 0.5nm,0.3s,baz=7.6,slow=11,SNR=8.7 | | | | | |
| AKTO | | | | Sn **Sn** | **23 15 11.8** | **-1.0** |
| | 0.4nm,0.3s,baz=185,slow=23,SNR=7.5 | | | | | |
| AKTO | | | | Lg Lg | 23 16 10.0 | |
| | 0.2nm,0.3s,baz=18,slow=20,SNR=2.8 | | | | | |
| **AB31** | **Akbulak array** | **11.04** | **181** | ⇑Pn **Pn** | **23 13 36.2** | **-0.3** |
| | 0.6nm,0.3s,baz=7.0,slow=12,SNR=58 | | | | | |
| AB31 | | | | ⇑Sn **Sn** | **23 15 37.4** | **-2.5** |
| | 0.8nm,0.5s,baz=22,slow=23,SNR=4.3 | | | | | |
| **KURK** | **Kurchatov** | **14.14** | **124** | ⇑P **Pn** | **23 14 18.4** | **-0.4** |
| | 5.7nm,0.6s | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.17** | **125** | ⇓P **Pn** | **23 14 18.5** | **-0.8** |
| | 4.0nm,0.6s | | | | | |
| **KURBB** | **Kurchatov Arra** | **14.17** | **125** | Pn Pn | 23 14 17.6 | -1.6 |
| | 0.1nm,0.3s,baz=321,slow=13,SNR=12 | | | | | |
| **ZALV** | **Zalesovo Beam** | **14.77** | **104** | Pn **Pn** | **23 14 30.5** | **+3.0** |
| | 0.2nm,0.3s,baz=300,slow=13,SNR=2.7 | | | | | |
| ZALV | | | | Sn Sn | 23 17 01.1 | -10 |
| | 0.2nm,0.3s,baz=307,slow=22,SNR=2.8 | | | | | |
| **FINES** | **FINESS Array B** | **16.52** | **289** | Pn Pn | 23 14 45.7 | -4.5 |
| | 0.3nm,0.3s,baz=92,slow=14,SNR=11 | | | | | |
| FINES | | | | Sn Sn | 23 17 38.2 | -15 |
| | 0.2nm,0.3s,baz=76,slow=24,SNR=4.2 | | | | | |
| **ARCES** | **ARCESS Array B** | **17.10** | **317** | Pn **Pn** | 23 14 52.1 | -5.4 |
| | 0.8nm,0.3s,baz=98,slow=14,SNR=18 | | | | | |
| ARCES | | | | Sn Sn | 23 17 48.5 | -19 |
| | 0.1nm,0.3s,baz=110,slow=22,SNR=3.1 | | | | | |
| **KK31** | **Karatay Array** | **18.32** | **155** | P **Pn** | **23 15 12.6** | **-0.1** |
| | 0.3nm,0.3s,baz=356,slow=40,SNR=7.4 | | | | | |
| **MKAR** | **Makanchi Array** | **18.73** | **126** | P **P** | **23 15 18.4** | **+1.1** |
| | 0.3nm,0.3s,baz=331,slow=8.5,SNR=8.7 | | | | | |
| **MNAS** | **Manas** | **19.35** | **151** | ⇓P **P** | **23 15 26.4** | **+2.1** |
| | 2.2nm,1.1s | | | | | |
| **KBZ** | **Khabaz** | **19.57** | **220** | P **P** | **23 15 26.9** | **+0.5** |
| | 0.2nm,0.3s,baz=0.0,slow=12,SNR=3.5 | | | | | |
| **AAK** | **Ala-Archa** | **19.72** | **147** | P **P** | **23 15 30.9** | **+2.6** |
| | 0.2nm,0.3s,baz=306,slow=6.0,SNR=10 | | | | | |
| **AKASG** | **Malin Array Be** | **19.78** | **255** | P **P** | **23 15 28.7** | **-0.1** |
| | 0.5nm,0.3s,baz=44,slow=10,SNR=4.6 | | | | | |
| **SPITS** | **Spitsbergen Ar** | **22.70** | **338** | P **P** | **23 15 59.1** | **-0.9** |
| | 3.8nm,0.8s,baz=74,slow=3.2,SNR=3.6 | | | | | |
| **HFS** | **Hagfors** | **22.71** | **290** | P **P** | **23 15 58.6** | **-1.7** |
| | 2.7nm,0.7s,baz=82,slow=14,SNR=7.2 | | | | | |
| **NOA** | **NORSAR Array B** | **23.55** | **293** | P **P** | **23 16 07.6** | **-1.3** |
| | 4.1nm,1.2s,baz=79,slow=9.6,SNR=6.5 | | | | | |

*IDC **27** 23:28:19.8±1.1, 2°33'N×127°83'E, h0km, mb3.8/6, mb1 4.0/7, mb1mx3.8/34, mbtmp3.9/7, ML3.8/1, Error ellipse: s-maj=63.3km s-min=17.4km az=59.0*
*ISCJB **27** 23:28:23.8±0.8, 2°4'N±0°2'×128°2'E±0°2, h51km, mb3.8/6, Error ellipse: s-maj=42.3km s-min=9.1km az=140.0*

**ISC 27 23:28:25.9±0.9, 2°4'N±0°2'×128°1'E±0°3, h51km, n7, σ1§06/9, mb3.8/6, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase ID | Time | Res |
|---|---|---|---|---|---|---|
| | | | | Op ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.52** | **135** | Pn **Pn** | **23 29 32.5** | **+0.7** |
| | 4.2nm,0.3s,baz=191,slow=23,SNR=26 | | | | | |
| SIJI | | | | Sn **Sn** | **23 30 21.4** | **-1.7** |
| | 2.5nm,0.3s,baz=27,slow=21,SNR=4.3 | | | | | |
| **WRA** | **Warramunga Arr** | **23.00** | **165** | P **P** | **23 33 26.9** | **+0.3** |
| | 0.8nm,0.5s,baz=344,slow=10,SNR=6.0 | | | | | |
| **ASAR** | **Alice Springs** | **26.49** | **168** | P **P** | **23 33 58.6** | **0.0** |
| | 0.3nm,0.6s,baz=354,slow=8.4,SNR=5.5 | | | | | |
| ASAR | | | | PcP **PcP** | **23 37 24.2** | **+1.4** |
| | 0.2nm,0.4s,baz=346,slow=1.9,SNR=3.8 | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.73** | **301** | P **P** | **23 34 53.0** | **-1.1** |
| | 1.0nm,0.3s,baz=116,slow=6.2,SNR=11 | | | | | |
| **SONM** | **Songino Array** | **49.02** | **341** | P **P** | **23 37 07.6** | **-0.2** |
| | 0.3nm,0.5s,baz=156,slow=7.9,SNR=2.9 | | | | | |
| **MKAR** | **Makanchi Array** | **59.44** | **325** | P **P** | **23 38 23.7** | **+0.2** |
| | 2.0nm,0.5s,baz=120,slow=8.5,SNR=11 | | | | | |
| **GEYT** | **Allbeck** | **72.80** | **309** | P **P** | **23 39 49.6** | **+0.2** |
| | 1.3nm,0.7s,baz=134,slow=6.2,SNR=5.2 | | | | | |

*ISCJB **27** 23:29:22.1±0.8, 3°5'N±0°2'×123°7'E±0°3, h350km, mb3.6/6, Error ellipse: s-maj=40.3km s-min=11.7km az=151.2*
*IDC **27** 23:29:25.5±3.4, 3°71'N×124°01'E, h366km±36km, mb3.4/6, mb1 3.6/7, mb1mx3.2/35, mbtmp4.1/7, Error ellipse: s-maj=69.1km s-min=16.4km az=67.0*

**ISC 27 23:29:23.6±0.8, 3°6'N±0°2'×123°8'E±0°3, h350km, n9, σ1§37/13, mb3.7/6, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | Time | Res |
|---|---|---|---|---|---|---|
| | | | | Op ISC | h m s | ISC |
| **SIJI** | **Sorong** | **8.69** | **120** | P **Pn** | **23 31 26.3** | **+0.3** |
| | 1.6nm,0.3s,baz=282,slow=20,SNR=2.4 | | | | | |
| **WRA** | **Warramunga Arr** | **25.55** | **156** | P **P** | **23 34 23.0** | **+1.0** |
| | 1.0nm,0.4s,baz=338,slow=9.7,SNR=5.9 | | | | | |
| WRA | | | | PcP **PcP** | **23 37 43.3** | **+0.5** |
| | 0.2nm,0.4s,baz=323,slow=3.0,SNR=4.1 | | | | | |
| WRA | | | | S **S** | **23 38 20.4** | **-3.1** |
| | 0.7nm,0.9s,baz=334,slow=15,SNR=4.9 | | | | | |
| **ASAR** | **Alice Springs** | **28.80** | **160** | P **P** | **23 34 51.9** | **+1.1** |
| | 0.4nm,0.4s,baz=342,slow=7.9,SNR=5.2 | | | | | |
| ASAR | | | | S **S** | **23 39 14.4** | **0.0** |
| | 0.4nm,0.5s,baz=349,slow=23,SNR=4.1 | | | | | |
| **SONM** | **Songino Array** | **46.59** | **344** | P **P** | **23 37 17.9** | **+0.2** |
| | 0.6nm,0.7s,baz=161,slow=9.2,SNR=4.7 | | | | | |
| **MKAR** | **Makanchi Array** | **56.05** | **327** | P **P** | **23 38 28.4** | **+1.2** |
| | 2.3nm,0.5s,baz=120,slow=8.4,SNR=20 | | | | | |
| MKAR | | | | PcP **PcP** | **23 39 20.1** | **-0.7** |
| | 0.6nm,0.6s,baz=119,slow=3.2,SNR=3.6 | | | | | |
| **ARCES** | **ARCESS Array B** | **89.59** | **340** | P **P** | **23 41 40.2** | **-1.6** |
| | 1.2nm,0.8s,baz=77,slow=4.1,SNR=3.2 | | | | | |
| **FINES** | **FINESS Array B** | **90.58** | **332** | P **P** | **23 41 45.2** | **-1.3** |
| | 8.0nm,1.1s,baz=72,slow=4.8,SNR=6.4 | | | | | |
| **TORD** | **Torodi Ar. Bea** | **120.15** | **287** | PKP **PKPdf** | **23 47 34.5** | **+0.2** |
| | 0.2nm,0.3s,baz=79,slow=1.6,SNR=17 | | | | | |
| **TXAR** | **Lajitas Array** | **124.03** | **51** | PKP **PKPdf** | **23 47 41.7** | **+0.1** |
| | 0.1nm,0.5s,baz=5.4,slow=1.9,SNR=2.4 | | | | | |

*ISK **27** 23:32:18.5, 37°23'N×43°83'E, h4km, MD2.7*
*CSEM **27** 23:32:19.5±1.1, 37°29'N×43°81'E, h2km, MD2.7, Error ellipse: s-maj=24.7km s-min=9.4km az=134.0*
*DDA **27** 23:32:19.3, 37°20'N×43°88'E, h5km, Md2.7*

**ISC 27 23:32:18.7±2.3, 37°31'N±0°08×43°9'E±0°1, h5km±11km, n16, σ0§59/24, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | Time | Res |
|---|---|---|---|---|---|---|
| | | | | Op ISC | h m s | ISC |
| **CUKT** | **Cukurca** | **0.22** | **254** | ePG **Pg** | **23 32 22.8** | **-0.2** |
| CUKT | | | | eSG **Sg** | **23 32 26.0** | **+0.1** |
| **CUKT** | **Cukurca** | **0.22** | **254** | ePg **Pg** | **23 32 22.8** | **-0.2** |
| CUKT | | | | eSg **Sg** | **23 32 26.0** | **+0.1** |
| **SIRT** | **Sirnak** | **1.16** | **280** | ePN **Pb** | **23 32 40.9** | **-0.3** |
| **SIRT** | **Sirnak** | **1.16** | **280** | ePn **Pb** | **23 32 40.9** | **-0.3** |
| **SIRN** | **S¨–rnak** | **1.18** | **280** | *i* P **Pb** | **23 32 41.0** | **-0.5** |
| SIRN | | | | *i* S **Sn** | **23 32 57.5** | **-0.8** |
| **SIRN** | **S¨–rnak** | **1.18** | **280** | P **Pb** | **23 32 41.0** | **-0.5** |
| SIRN | | | | S **Sn** | **23 32 57.5** | **-0.8** |
| **TVAN** | **Van** | **1.27** | **343** | *i* P **Pn** | **23 32 42.9** | **-0.4** |
| TVAN | | | | *i* S **Sb** | **23 33 00.4** | **+0.4** |
| **TVAN** | **Van** | **1.27** | **343** | P **Pn** | **23 32 42.9** | **-0.4** |
| TVAN | | | | S **Sb** | **23 33 00.4** | **+0.4** |
| **CLDR** | **Caldiran** | **1.83** | **1** | ePN **Pb** | **23 32 52.9** | **+0.1** |
| **CLDR** | **Caldiran** | **1.83** | **1** | ePn **Pb** | **23 32 52.9** | **+0.1** |
| **TUTA** | **Tutak** | **2.25** | **339** | *i* P **Pb** | **23 32 59.7** | **-0.3** |
| TUTA | | | | *i* S **Sg** | **23 33 31.3** | **+0.3** |
| **TUTA** | **Tutak** | **2.25** | **339** | P **Pb** | **23 32 59.7** | **-0.3** |
| TUTA | | | | S **Sg** | **23 33 31.4** | **+0.3** |
| **SVAN** | **Silvan-Diyarba** | **2.28** | **292** | ePN **Pn** | **23 32 58.1** | **+1.1** |
| **SVAN** | **Silvan-Diyarba** | **2.28** | **292** | ePn **Pn** | **23 32 58.1** | **+1.1** |
| **MAZI** | **Mazidag** | **2.73** | **274** | ePN **Pn** | **23 33 04.2** | **+0.9** |
| **MAZI** | **Mazidag** | **2.73** | **274** | ePn **Pn** | **23 33 04.2** | **+0.9** |

*IDC **27** 23:36:56.8±1.7, 20°14S×174°24W, h0km, mb3.7/3, mb1 4.1/5, mb1mx3.8/21, mbtmp3.9/5, ML3.9/2, MS3.2/1, Ms1 3.2/1, ms1mx2.6/25, Error ellipse: s-maj=63.4km s-min=26.2km az=126.0*

**ISC 27 23:37:00.5±1.4, 20°05±0°2'×174°1'W±0°4, h31km, n7, σ2§34/9, mb3.9/3, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | Time | Res |
|---|---|---|---|---|---|---|
| | | | | Op ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **6.43** | **21** | Pn **Pn** | **23 38 33.8** | **+0.7** |
| | 1.6nm,0.3s,baz=225,slow=17,SNR=2.2 | | | | | |
| AFI | | | | Sn **Sn** | **23 39 42.2** | **-3.4** |
| | 2.3nm,0.3s,baz=204,slow=20,SNR=2.6 | | | | | |
| **URZ** | **Urewera** | **19.75** | **201** | P **P** | **23 41 24.9** | **-2.9** |
| | 0.6nm,0.3s,baz=348,slow=9.3,SNR=3.6 | | | | | |
| **RPZ** | **Rata Peaks** | **26.73** | **204** | LR LR | 23 52 52.6 | |
| | comp=Z,57nm,21.4s,baz=30,slow=36 | | | | | |
| **ASAR** | **Alice Springs** | **48.20** | **256** | P **P** | **23 45 38.2** | **-0.3** |
| | 1.4nm,0.7s,baz=88,slow=8.4,SNR=16 | | | | | |
| ASAR | | | | PcP **PcP** | **23 47 06.9** | **+1.3** |
| | 0.5nm,0.6s,baz=102,slow=4.2,SNR=4.2 | | | | | |
| **WRA** | **Warramunga Arr** | **48.30** | **261** | P **P** | **23 45 38.2** | **-1.1** |
| | 1.0nm,0.8s,baz=96,slow=8.2,SNR=6.4 | | | | | |
| WRA | | | | PcP **PcP** | **23 47 07.5** | **+1.6** |
| | 0.6nm,1.0s,baz=96,slow=3.0,SNR=2.4 | | | | | |
| **ILAR** | **Eielson Array** | **87.04** | **11** | P **P** | **23 49 45.1** | **+2.7** |
| | 0.5nm,0.8s,baz=206,slow=6.0,SNR=5.1 | | | | | |
| **AKASG** | **Malin Array Be** | **144.23** | **334** | PKP **PKPdf** | **23 56 33.2** | **0.0** |
| | 1.1nm,0.7s,baz=41,slow=3.6,SNR=6.9 | | | | | |

*ISK **28** 00:31:20.4, 35°83N×31°73E, h10km, MD3.7*
*DDA **28** 00:31:21.3, 35°66N×31°95E, h24km, MI3.7*
*ISCJB **28** 00:31:23.9±0.3, 35°87N±0°03×31°90E±0°03, h35km, Error ellipse: s-maj=4.7km s-min=2.7km az=33.7*
*NSSC **28** 00:31:24.8±1.8, 35°74N×31°89E, h85km±169km, MD1.4, ML2.3*
*CSEM **28** 00:31:24.7±0.2, 35°86N×31°84E, h40km, ML3.7, Error ellipse: s-maj=6.1km s-min=3.4km az=35.0*
*NIC **28** 00:31:26.0, 35°83N×32°05E, h37km, ML3.4*

**ISC 28 00:31:24.1±1.2, 35°83N±0°03×31°87E±0°03, h35km, n99, σ1§72/134, 2C, Cyprus region**

| Code | Station Name | Δ° | AZ° | Phase ID | Time | Res |
|---|---|---|---|---|---|---|
| | | | | Op ISC | h m s | ISC |
| **GAZI** | **Gazipasa** | **0.54** | **41** | *i* P **Pn** | **00 31 35.2** | **-0.2** |
| GAZI | | | | *i* S **Sn** | **00 31 43.2** | **-0.1** |
| **GAZI** | **Gazipasa** | **0.54** | **41** | P **Pn** | **00 31 35.2** | **-0.2** |
| GAZI | | | | S **Sn** | **00 31 43.2** | **-0.1** |
| **AKMC** | **Akamas** | **0.88** | **155** | P **Pn** | **00 31 41.0** | **+1.0** |
| | baz=343 | | | | | |
| **AKMC** | **Akamas** | **0.88** | **155** | P **Pn** | **00 31 41.0** | **+1.0** |
| **ALFC** | **Alevga** | **0.89** | **138** | eP **Pn** | **00 31 40.8** | **+0.6** |
| | baz=326 | | | | | |
| ALFC | | | | S **Sn** | **00 31 52.7** | **+0.8** |
| **ALFC** | **Alevga** | **0.89** | **138** | eP **Pn** | **00 31 40.8** | **+0.6** |
| ALFC | | | | S **Sn** | **00 31 52.7** | **+0.8** |
| **PPCY** | **Paphos** | **1.01** | **157** | P **Pn** | **00 31 43.6** | **+1.7** |
| | baz=345 | | | | | |
| **PPCY** | **Paphos** | **1.01** | **157** | P **Pn** | **00 31 43.6** | **+1.7** |
| **AKDN** | **Akdeniz- K¨–br** | **1.04** | **120** | ePN **Pn** | **00 31 42.6** | **+0.4** |
| AKDN | | | | eSN **Sn** | **00 31 58.9** | **+3.5** |
| **AKDN** | **Akdeniz- K¨–br** | **1.04** | **120** | ePn **Pn** | **00 31 42.6** | **+0.4** |
| AKDN | | | | eSn **Sn** | **00 31 58.9** | **+3.5** |
| **LEF** | **Lefka** | **1.09** | **130** | ePN **Pn** | **00 31 42.9** | **0.0** |
| **LEF** | **Lefka** | **1.09** | **130** | ePn **Pn** | **00 31 42.9** | **0.0** |
| **ERMK** | **Ermenek** | **1.17** | **46** | *i* P **Pn** | **00 31 44.5** | **+0.3** |
| **ERMK** | **Ermenek** | **1.17** | **46** | P **Pn** | **00 31 44.5** | **+0.3** |
| **HDMB** | **Hadim** | **1.24** | **23** | ePN **Pn** | **00 31 45.1** | **-0.1** |
| **HDMB** | **Hadim** | **1.24** | **23** | ePn **Pn** | **00 31 45.1** | **-0.1** |
| **MAMC** | **Mammari** | **1.28** | **120** | ⇑*i*P **Pn** | **00 31 46.2** | **+0.7** |
| | baz=304 | | | | | |
| **MAMC** | **Mammari** | **1.28** | **120** | *i*P **Pn** | **00 31 46.2** | **+0.7** |
| **SZAC** | **Souni-Zanaja** | **1.35** | **142** | P **Pn** | **00 31 48.4** | **+1.9** |
| | baz=327 | | | | | |
| **SZAC** | **Souni-Zanaja** | **1.35** | **142** | P **Pn** | **00 31 48.4** | **+1.9** |
| **ANTB** | **Antalya** | **1.46** | **318** | ePN **Pn** | **00 31 46.4** | **-1.5** |
| **ANTB** | **Antalya** | **1.46** | **318** | ePn **Pn** | **00 31 46.4** | **-1.5** |
| **LFK** | **Lefkose** | **1.46** | **111** | ePN **Pn** | **00 31 48.4** | **+0.8** |
| **LFK** | **Lefkose** | **1.46** | **111** | ePn **Pn** | **00 31 48.4** | **+0.8** |
| **CSS** | **Prodhromos** | **1.47** | **125** | P **Pn** | **00 31 48.3** | **+0.1** |
| | baz=309 | | | | | |
| CSS | | | | S **Sn** | **00 32 06.0** | **-0.2** |
| **CSS** | **Prodhromos** | **1.47** | **125** | P **Pn** | **00 31 48.3** | **+0.1** |
| CSS | | | | S **Sn** | **00 32 06.0** | **-0.2** |
| **KORT** | **Korkueli** | **1.70** | **314** | P Pn | 00 31 54.3 | +2.9 |
| **SUTC** | **Sutluce-Ispart** | **1.79** | **337** | ePN **Pn** | **00 31 51.5** | **-1.2** |
| **SUTC** | **Sutluce-Ispart** | **1.79** | **337** | ePn **Pn** | **00 31 51.5** | **-1.2** |
| **AKAS** | **Kas** | **1.88** | **283** | *i* P **Pn** | **00 31 53.3** | **-0.6** |
| **AKAS** | **Kas** | **1.88** | **283** | P **Pn** | **00 31 53.3** | **-0.6** |
| **EREN** | **Erenkoy** | **1.89** | **98** | ePN **Pn** | **00 31 55.5** | **+1.5** |
| **EREN** | **Erenkoy** | **1.89** | **98** | ePn **Pn** | **00 31 55.5** | **+1.5** |
| **PHNC** | **Paralimni** | **1.94** | **114** | P Pn | 00 31 58.2 | +3.5 |
| | baz=297 | | | | | |
| **PHNC** | **Paralimni** | **1.94** | **114** | P Pn | 00 31 58.2 | +3.5 |
| **KIZK** | **Mersin** | **1.95** | **70** | *i* P **Pn** | **00 31 56.2** | **+1.5** |
| **KIZK** | **Mersin** | **1.95** | **70** | P **Pn** | **00 31 56.2** | **+1.5** |
| **KONT** | **Konya--Tatoy** | **2.15** | **10** | ePN **Pn** | **00 31 57.7** | **+0.1** |
| **KONT** | **Konya--Tatoy** | **2.15** | **10** | ePn **Pn** | **00 31 57.7** | **+0.1** |
| **ISP** | **Isparta** | **2.27** | **332** | ePN **Pn** | **00 31 58.2** | **-1.0** |
| **BAGO** | **Egridir - ISPA** | **2.33** | **338** | P **Pn** | **00 31 58.6** | **-1.5** |
| **GOLH** | **Golhisar** | **2.33** | **308** | *i* P **Pn** | **00 32 01.4** | **+1.3** |
| **GOLH** | **Golhisar** | **2.33** | **308** | P **Pn** | **00 32 01.4** | **+1.3** |
| GOLH | | | | S Sn | 00 32 38.1 | +10 |
| **FETY** | **Fethiye** | **2.40** | **291** | ePN **Pn** | **00 31 59.2** | **-1.6** |
| **FETY** | **Fethiye** | **2.40** | **291** | ePn **Pn** | **00 31 59.3** | **-1.6** |
| **YESY** | **Yesilyurt** | **2.46** | **37** | ePN **Pn** | **00 32 02.9** | **+1.0** |
| **YESY** | **Yesilyurt** | **2.46** | **37** | ePn **Pn** | **00 32 02.9** | **+1.0** |
| **DALY** | **Dalyan (Mu¨la** | **2.78** | **292** | ePN **Pn** | **00 32 05.0** | **-1.1** |
| **DALY** | **Dalyan (Mu¨la** | **2.78** | **292** | ePn **Pn** | **00 32 05.0** | **-1.1** |
| **TURN** | **Turunc** | **2.84** | **293** | *i* P **Pn** | **00 32 09.1** | **+2.2** |
| **TURN** | **Turunc** | **2.84** | **293** | P **Pn** | **00 32 09.1** | **+2.2** |
| TURN | | | | S **Sn** | **00 32 43.2** | **+3.4** |
| **CHBY** | **Cihanbeyli** | **2.87** | **16** | ePN **Pn** | **00 32 08.0** | **+0.5** |
| **CHBY** | **Cihanbeyli** | **2.87** | **16** | ePn **Pn** | **00 32 08.0** | **+0.5** |
| **DNZL** | **Cakiroluk** | **2.94** | **310** | *i* P **Pn** | **00 32 10.1** | **+1.6** |
| **DNZL** | **Cakiroluk** | **2.94** | **310** | P **Pn** | **00 32 10.1** | **+1.6** |
| DNZL | | | | S **Sn** | **00 32 48.1** | **+5.5** |
| **KARA** | **Karaisali** | **2.94** | **60** | ePN **Pn** | **00 32 10.2** | **+1.9** |
| **KARA** | **Karaisali** | **2.94** | **60** | ePn **Pn** | **00 32 10.2** | **+1.9** |
| **KIZT** | **Kizilcal** | **3.05** | **0** | ePN **Pn** | **00 32 10.2** | **+0.2** |
| **ARNB** | **Al Arnab** | **3.33** | **88** | eP **Pn** | **00 32 14.9** | **+1.1** |
| ARNB | | | | eS **Sn** | **00 32 51.5** | **-0.7** |
| ARNB | | | | AML AML | 00 33 00.1 | |
| | comp=N,44nm,0.5s | | | | | |
| ARNB | | | | AML AML | 00 33 02.4 | |
| | comp=E,24nm,0.5s | | | | | |
| **ARNB** | **Al Arnab** | **3.33** | **88** | eP **Pn** | **00 32 14.9** | **+1.1** |
| ARNB | | | | eS **Sn** | **00 32 51.5** | **-0.7** |
| | comp=E,24nm,0.5s | | | | | |
| **YAYL** | **Yayladag** | **3.44** | **85** | *i* P **Pn** | **00 32 16.2** | **+0.8** |
| YAYL | | | | *i* S **Sn** | **00 32 56.4** | **+1.4** |
| **YAYL** | **Yayladag** | **3.44** | **85** | P **Pn** | **00 32 16.2** | **+0.8** |
| YAYL | | | | S **Sn** | **00 32 56.4** | **+1.4** |
| **YAYX** | **Yaylak** | **3.47** | **26** | ePN **Pn** | **00 32 16.8** | **+1.1** |
| **YAYX** | **Yaylak** | **3.47** | **26** | ePn **Pn** | **00 32 16.8** | **+1.1** |
| **SVRH** | **Sivrihisar-ESK** | **3.63** | **356** | ePN **Pn** | **00 32 18.4** | **+0.5** |
| **SVRH** | **Sivrihisar-ESK** | **3.63** | **356** | ePn **Pn** | **00 32 18.4** | **+0.5** |
| **AYDN** | **Tasoluk** | **3.69** | **301** | *i* P **Pn** | **00 32 18.8** | **+0.1** |
| **AYDN** | **Tasoluk** | **3.69** | **301** | P **Pn** | **00 32 18.8** | **+0.1** |
| AYDN | | | | S **Sn** | **00 32 57.5** | **-3.6** |
| **WRDH** | **Warideh** | **3.71** | **94** | eP **Pn** | **00 32 19.5** | **+0.5** |
| WRDH | | | | eS **Sn** | **00 33 00.9** | **-0.6** |
| WRDH | | | | AML AML | 00 33 20.7 | |
| | comp=N,10nm,0.3s | | | | | |
| **WRDH** | **Warideh** | **3.71** | **94** | eP **Pn** | **00 32 19.5** | **+0.5** |
| WRDH | | | | eS **Sn** | **00 33 00.9** | **-0.6** |
| | comp=N,10.0nm,0.3s | | | | | |
| **BIDA** | **Albida** | **3.72** | **101** | eP **Pn** | **00 32 19.3** | **+0.1** |
| BIDA | | | | eS **Sn** | **00 33 00.9** | **-1.0** |
| BIDA | | | | AML AML | 00 33 05.7 | |
| | comp=N,49nm,0.5s | | | | | |
| BIDA | | | | AML AML | 00 33 06.4 | |
| | comp=E,147nm,0.4s | | | | | |
| **BIDA** | **Albida** | **3.72** | **101** | eP **Pn** | **00 32 19.3** | **+0.1** |
| BIDA | | | | eS **Sn** | **00 33 00.9** | **-1.0** |
| | comp=E,147nm,0.4s | | | | | |
| **BTCH** | **Batrach** | **3.73** | **85** | eP **Pn** | **00 32 19.6** | **+0.3** |
| BTCH | | | | eS **Sn** | **00 33 01.7** | **-0.3** |
| BTCH | | | | AML AML | 00 33 09.2 | |
| | comp=E,69nm,0.4s | | | | | |
| BTCH | | | | AML AML | 00 33 10.4 | |
| | comp=N,64nm,0.6s | | | | | |
| **BTCH** | **Batrach** | **3.73** | **85** | eP **Pn** | **00 32 19.6** | **+0.3** |
| BTCH | | | | eS **Sn** | **00 33 01.7** | **-0.3** |
| | comp=N,64nm,0.6s | | | | | |
| **AFSR** | **Af¨ar-Bala (A** | **3.74** | **14** | ePN **Pn** | **00 32 20.3** | **+0.9** |
| **BDRM** | **Kayabasi** | **3.78** | **290** | P **Pn** | **00 32 16.9** | **-2.9** |
| BDRM | | | | S **Sn** | **00 32 59.0** | **-4.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **3.83** | **305** | ePN **Pn** | **00 32 20.3** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **3.83** | **305** | ePn **Pn** | **00 32 20.3** | **-0.4** |
| **HAWK** | **Haweek** | **3.94** | **108** | eP **Pn** | **00 32 23.9** | **+1.9** |
| HAWK | | | | eS **Sn** | **00 33 06.5** | **-0.5** |
| HAWK | | | | AML AML | 00 33 10.7 | |
| | comp=N,12nm,0.4s | | | | | |
| HAWK | | | | AML AML | 00 33 12.9 | |
| | comp=E,9.2nm,0.6s | | | | | |
| **HAWK** | **Haweek** | **3.94** | **108** | eP **Pn** | **00 32 24.0** | **+1.9** |
| HAWK | | | | eS **Sn** | **00 33 06.6** | **-0.5** |
| | comp=E,9.0nm,0.6s | | | | | |
| **TVSB** | **Tavsanli** | **4.09** | **333** | ePN **Pn** | **00 32 24.6** | **+0.3** |
| **TVSB** | **Tavsanli** | **4.09** | **333** | ePn **Pn** | **00 32 24.6** | **+0.3** |
| **KAMA** | **Osmaniye** | **4.09** | **69** | P **Pn** | **00 32 24.7** | **+0.4** |
| **BRBR** | **Barbar** | **4.14** | **124** | eP **Pn** | **00 32 25.6** | **+0.6** |
| BRBR | | | | AML AML | 00 33 08.2 | |
| | comp=N,0.6nm,3.4s | | | | | |
| BRBR | | | | eS **Sn** | **00 33 10.2** | **-2.0** |
| BRBR | | | | AML AML | 00 33 18.6 | |
| | comp=E,17nm,0.7s | | | | | |
| **BRBR** | **Barbar** | **4.14** | **124** | eP **Pn** | **00 32 25.6** | **+0.6** |
| BRBR | | | | eS **Sn** | **00 33 10.2** | **-2.0** |
| | comp=E,17nm,0.7s | | | | | |
| **KUZU** | **Kuzuini** | **4.31** | **76** | *i* P **Pn** | **00 32 26.9** | **-0.3** |
| **KUZU** | **Kuzuini** | **4.31** | **76** | P **Pn** | **00 32 26.9** | **-0.3** |
| **TOTH** | **TOTAH** | **4.49** | **122** | eP **Pn** | **00 32 31.0** | **+1.3** |
| TOTH | | | | eS **Sn** | **00 33 17.7** | **-3.1** |
| TOTH | | | | AML AML | 00 33 27.8 | |
| | comp=E,21nm,0.7s | | | | | |
| TOTH | | | | AML AML | 00 33 28.4 | |
| | comp=N,18nm,0.6s | | | | | |
| **TOTH** | **TOTAH** | **4.49** | **122** | eP **Pn** | **00 32 31.0** | **+1.3** |
| TOTH | | | | eS **Sn** | **00 33 17.7** | **-3.1** |
| | comp=N,18nm,0.6s | | | | | |
| **RABH** | **Abou Rabah** | **4.58** | **106** | eP **Pn** | **00 32 33.6** | **+2.6** |
| RABH | | | | eS **Sn** | **00 33 19.7** | **-3.4** |
| RABH | | | | AML AML | 00 33 34.7 | |
| | comp=E,5.5nm,0.8s | | | | | |
| RABH | | | | AML AML | 00 33 39.7 | |
| | comp=N,4.6nm,0.4s | | | | | |
| **RABH** | **Abou Rabah** | **4.58** | **106** | eP **Pn** | **00 32 33.6** | **+2.6** |
| RABH | | | | eS **Sn** | **00 33 19.7** | **-3.4** |
| | comp=N,5.0nm,0.4s | | | | | |
| **TCHB** | **Talchebab** | **4.63** | **132** | eP **Pn** | **00 32 32.8** | **+1.2** |
| TCHB | | | | eS **Sn** | **00 33 20.3** | **-3.8** |
| TCHB | | | | AML AML | 00 33 33.5 | |
| | comp=E,21nm,0.9s | | | | | |
| TCHB | | | | AML AML | 00 33 38.5 | |
| | comp=N,9.9nm,0.4s | | | | | |
| **TCHB** | **Talchebab** | **4.63** | **132** | eP **Pn** | **00 32 32.8** | **+1.2** |
| TCHB | | | | eS **Sn** | **00 33 20.3** | **-3.8

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| TAHT | | | | eSG | Sb | 00 48 44.2 | +0.4 | |
| **TAHT** | **Tahtakopru-Hat** | **0.87** | **264** | *e*Pg | **Pg** | **00 48 30.9** | **0.0** | |
| TAHT | | | | eSg | Sb | 00 48 44.2 | +0.4 | |
| **GZT** | **Gaziantep** | **0.92** | **15** | P | **Pg** | **00 48 30.8** | **-1.2** | |
| GZT | | | | S | Sg | 00 48 42.8 | -1.1 | |
| **AYKD** | **Aykdinkavak** | **1.01** | **339** | P | **Pg** | **00 48 32.8** | **-0.9** | |
| AYKD | | | | S | Sg | 00 48 46.9 | 0.0 | |
| **YAYL** | **Yayladag** | **1.02** | **246** | *i* P | **Pb** | **00 48 34.9** | **+0.3** | |
| **YAYL** | **Yayladag** | **1.02** | **246** | P | **Pb** | **00 48 34.9** | **+0.3** | |
| YAYL | | | | S | Sn | 00 48 50.1 | -0.2 | |
| **WRDH** | **Warideh** | **1.17** | **216** | *e*P | **Pg** | **00 48 36.6** | **-0.2** | |
| WRDH | | | | eS | Sg | 00 48 51.8 | -0.2 | |
| WRDH | | | | AML | AML | 00 48 55.0 | | |
| | comp=N,103nm,0.2s | | | | | | | |
| **WRDH** | **Warideh** | **1.17** | **216** | *e*P | **Pg** | **00 48 36.6** | **-0.2** | |
| WRDH | | | | eS | Sg | 00 48 51.8 | -0.2 | |
| | comp=N,103nm,0.2s | | | | | | | |
| **ARNB** | **Al Arnab** | **1.20** | **240** | *e*P | **Pg** | **00 48 37.6** | **+0.3** | |
| ARNB | | | | eS | Sn | 00 48 54.7 | +0.1 | |
| **ARNB** | **Al Arnab** | **1.20** | **240** | *e*P | **Pg** | **00 48 37.6** | **+0.3** | |
| ARNB | | | | eS | Sn | 00 48 54.7 | +0.1 | |
| **SLNF** | **Slenfeh** | **1.21** | **224** | *e*P | **Pb** | **00 48 38.0** | **+0.3** | |
| SLNF | | | | eS | Sb | 00 48 54.1 | +0.4 | |
| SLNF | | | | AML | AML | 00 48 57.3 | | |
| | comp=N,114nm,0.4s | | | | | | | |
| SLNF | | | | AML | AML | 00 48 58.5 | | |
| | comp=E,227nm,0.3s | | | | | | | |
| **SLNF** | **Slenfeh** | **1.21** | **224** | *e*P | **Pb** | **00 48 38.0** | **+0.3** | |
| SLNF | | | | eS | Sb | 00 48 54.1 | +0.4 | |
| | comp=E,227nm,0.3s | | | | | | | |
| **KFRA** | **Kufra** | **1.30** | **197** | *e*P | **Pn** | **00 48 38.4** | **-0.8** | |
| KFRA | | | | eS | Sg | 00 48 56.2 | +0.1 | |
| KFRA | | | | AML | AML | 00 49 01.8 | | |
| | comp=E,147nm,0.5s | | | | | | | |
| KFRA | | | | AML | AML | 00 49 02.1 | | |
| | comp=N,363nm,0.2s | | | | | | | |
| **KFRA** | **Kufra** | **1.30** | **197** | *e*P | **Pn** | **00 48 38.4** | **-0.8** | |
| KFRA | | | | eS | Sg | 00 48 56.2 | +0.1 | |
| | comp=N,363nm,0.2s | | | | | | | |
| **CEYT** | **Ceyhan** | **1.33** | **295** | *e*PN | **Pg** | **00 48 40.4** | **+0.7** | |
| **CEYT** | **Ceyhan** | **1.33** | **295** | *e*Pn | **Pg** | **00 48 40.4** | **+0.7** | |
| **KRTS** | **Karatas** | **1.52** | **275** | *e*PN | **Pn** | **00 48 42.0** | **-0.1** | |
| **KRTS** | **Karatas** | **1.52** | **275** | *e*Pn | **Pn** | **00 48 42.0** | **-0.1** | |
| **BIDA** | **Albida** | **1.64** | **208** | *e*P | **Pn** | **00 48 43.2** | **-0.7** | |
| BIDA | | | | eS | Sn | 00 49 04.9 | -0.5 | |
| BIDA | | | | AML | AML | 00 49 13.8 | | |
| | comp=N,44nm,0.5s | | | | | | | |
| BIDA | | | | AML | AML | 00 49 15.8 | | |
| | comp=E,98nm,0.4s | | | | | | | |
| **BIDA** | **Albida** | **1.64** | **208** | *e*P | **Pn** | **00 48 43.2** | **-0.7** | |
| BIDA | | | | eS | Sn | 00 49 04.9 | -0.5 | |
| | comp=E,98nm,0.4s | | | | | | | |
| **MNKR** | **ALMNKUR** | **1.71** | **107** | *e*P | **Pn** | **00 48 44.4** | **-0.4** | |
| MNKR | | | | eS | Sn | 00 49 06.1 | -1.0 | |
| MNKR | | | | AML | AML | 00 49 13.2 | | |
| | comp=N,184nm,0.5s | | | | | | | |
| MNKR | | | | AML | AML | 00 49 18.3 | | |
| | comp=E,442nm,0.2s | | | | | | | |
| **MNKR** | **ALMNKUR** | **1.71** | **107** | *e*P | **Pn** | **00 48 44.4** | **-0.4** | |
| MNKR | | | | eS | Sn | 00 49 06.1 | -1.0 | |
| | comp=E,442nm,0.2s | | | | | | | |
| **AKCD** | **Akcadag** | **1.90** | **16** | P | **Pn** | **00 48 45.3** | **-2.3** | |
| AKCD | | | | S | Sn | 00 49 11.4 | -0.7 | |
| **RABH** | **Abou Rabah** | **2.02** | **181** | *e*P | **Pn** | **00 48 48.9** | **-0.3** | |
| RABH | | | | eS | Sn | 00 49 13.9 | -1.0 | |
| RABH | | | | AML | AML | 00 49 22.7 | | |
| | comp=N,13nm,0.4s | | | | | | | |
| RABH | | | | AML | AML | 00 49 25.5 | | |
| | comp=E,19nm,0.3s | | | | | | | |
| **RABH** | **Abou Rabah** | **2.02** | **181** | *e*P | **Pn** | **00 48 48.9** | **-0.3** | |
| RABH | | | | eS | Sn | 00 49 13.9 | -1.0 | |
| | comp=E,19nm,0.3s | | | | | | | |
| **SARI** | **SarD1z-Kayseri** | **2.05** | **341** | *e*PN | **Pb** | **00 48 52.1** | **-0.1** | |
| **HAWK** | **Haweek** | **2.06** | **200** | *e*P | **Pn** | **00 48 50.4** | **+0.7** | |
| HAWK | | | | eS | Sn | 00 49 16.5 | +0.7 | |
| HAWK | | | | AML | AML | 00 49 21.3 | | |
| | comp=N,41nm,0.2s | | | | | | | |
| HAWK | | | | AML | AML | 00 49 24.5 | | |
| | comp=E,21nm,0.7s | | | | | | | |
| **HAWK** | **Haweek** | **2.06** | **200** | *e*P | **Pn** | **00 48 50.4** | **+0.7** | |
| HAWK | | | | eS | Sn | 00 49 16.5 | +0.7 | |
| | comp=E,21nm,0.7s | | | | | | | |
| **MALT** | **Malatya** | **2.07** | **26** | *e*PN | **Pb** | **00 48 52.8** | **+0.4** | |
| **MALT** | **Malatya** | **2.07** | **26** | *e*Pn | **Pb** | **00 48 52.8** | **+0.4** | |
| **DARE** | **Darende-Malaty** | **2.11** | **5** | *e*PN | **Pb** | **00 48 53.0** | **-0.1** | |
| **DARE** | **Darende-Malaty** | **2.11** | **5** | *e*Pn | **Pb** | **00 48 53.1** | **-0.1** | |
| **ROOS** | **tl_alroos** | **2.29** | **179** | *e*P | **Pn** | **00 48 53.3** | **+0.5** | |
| ROOS | | | | eS | Sn | 00 49 20.3 | -1.2 | |
| ROOS | | | | AML | AML | 00 49 34.5 | | |
| | comp=N,34nm,0.5s | | | | | | | |
| ROOS | | | | AML | AML | 00 49 37.4 | | |
| | comp=E,18nm,0.5s | | | | | | | |
| **ROOS** | **tl_alroos** | **2.29** | **179** | *e*P | **Pn** | **00 48 53.3** | **+0.5** | |
| ROOS | | | | eS | Sn | 00 49 20.3 | -1.2 | |
| | comp=E,18nm,0.5s | | | | | | | |
| **PINB** | **Pinarbasi** | **2.31** | **343** | *i* P | **Pb** | **00 48 56.7** | **+0.1** | |
| **PINB** | **Pinarbasi** | **2.31** | **343** | P | **Pb** | **00 48 56.7** | **+0.1** | |
| **SVRC** | **Sivrice-ELAZID** | **2.51** | **40** | *e*PN | **Pn** | **00 48 57.7** | **+1.7** | |
| **SVRC** | **Sivrice-ELAZID** | **2.51** | **40** | *e*Pn | **Pn** | **00 48 57.7** | **+1.7** | |
| **MAZI** | **Mazidag** | **2.74** | **68** | *e*PN | **Pn** | **00 48 59.3** | **+0.2** | |
| **MAZI** | **Mazidag** | **2.74** | **68** | *e*Pn | **Pn** | **00 48 59.3** | **+0.2** | |
| **PTK** | **Pertek** | **2.96** | **34** | *e*PN | **Pn** | **00 49 04.1** | **+2.0** | |
| **PTK** | **Pertek** | **2.96** | **34** | *e*Pn | **Pn** | **00 49 04.1** | **+2.0** | |
| **ILIC** | **ilic-Erzincan** | **3.16** | **19** | *e*PN | **Pn** | **00 49 07.5** | **+2.7** | |
| **ILIC** | **ilic-Erzincan** | **3.16** | **19** | *e*Pn | **Pn** | **00 49 07.5** | **+2.7** | |
| **BRBR** | **Barbar** | **3.23** | **200** | *e*P | **Pn** | **00 49 05.3** | **-0.6** | |
| BRBR | | | | eS | Sn | 00 49 44.3 | -0.6 | |
| BRBR | | | | AML | AML | 00 50 02.5 | | |
| | comp=E,8.1nm,0.6s | | | | | | | |
| BRBR | | | | AML | AML | 00 50 07.5 | | |
| | comp=N,9.2nm,0.6s | | | | | | | |
| **BRBR** | **Barbar** | **3.23** | **200** | *e*P | **Pn** | **00 49 05.3** | **-0.6** | |
| BRBR | | | | eS | Sn | 00 49 44.3 | -0.6 | |
| | comp=N,9.0nm,0.6s | | | | | | | |

*ISCJB **28** 00:53:23.2±0.3,10˚.77S±0˚.05×162˚.83E±0˚.05,h21km, mb4.7/22,MS3.5/9,Error ellipse: s-maj=7.9km s-min=7.2km az=143.5*
*NEIC **28** 00:53:26.9±0.8,10˚.73S×162˚.82E,h38km±7km,mb4.9/14, Error ellipse: s-maj=10.2km s-min=8.3km az=117.0*
*BJI **28** 00:53:27.5,10˚.40S×163˚.04E,h45km,mb4.9/24,mB5.3/19, Ms5.1/11,Ms7 4.7/11*
*IDC **28** 00:53:28.1±2.9,10˚.92S×162˚.77E,h51km±25km,mb4.3/14, mb1 4.4/17,mb1mx4.2/39,mbtmp4.5/17,ML4.3/3,MS3.5/12, Ms1 3.6/12,ms1mx3.4/27,Error ellipse: s-maj=22.3km s-min=13.2km az=70.0*

**ISC 28 00:53:24.7±0.5,10.75S±0.06×162.83E±0.07,h21km,n68, σ1s92/81,mb4.8/22,MS3.5/9,Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **3.13** | **295** | P | | | **Pn** | **00 54 13.6** | **+0.8** |
| | 89nm,0.3s,baz=144,slow=5.8,SNR=13 | | | | | | | | |
| HNR | | | | S | | | **Sn** | **00 54 52.5** | **+3.0** |
| | 147nm,0.3s,baz=178,slow=21,SNR=10 | | | | | | | | |
| HNR | | | | LR | | | LR | 00 55 23.9 | |
| | comp=Z,545nm,21.7s,baz=157,slow=37 | | | | | | | | |
| **HNR** | **Honiara** | **3.13** | **295** | *e*P | | | **Pn** | **00 54 12.0** | **-0.8** |
| HNR | | | | eS | | | **Sn** | **00 54 50.0** | **+0.4** |
| **HNR** | **Honiara** | **3.13** | **295** | *e*Pn | | | **Pn** | **00 54 13.9** | **+1.1** |
| HNR | | | | eSn | | | **Sn** | **00 54 49.1** | **-0.5** |
| **DZM** | **Mont Dzumac** | **11.78** | **163** | P | | | **Pn** | **00 56 11.5** | **-0.1** |
| | 1.5nm,0.3s,baz=1.8,slow=16,SNR=9.8 | | | | | | | | |
| DZM | | | | LR | | | LR | 01 00 06.1 | |
| | comp=Z,486nm,19.3s,baz=1.5,slow=34 | | | | | | | | |
| **PMG** | **Port Moresby** | **15.49** | **274** | LR | | | LR | 01 03 03.3 | |
| | comp=Z,243nm,18.9s,baz=102,slow=37 | | | | | | | | |
| **TARA** | **Tarawa** | **15.66** | **40** | *e*Pn | | | **Pn** | **00 57 02.3** | **-2.0** |
| | 160nm,1.3s | | | | | | | | |
| **MSVF** | **Nonsavu** | **16.30** | **117** | *e*Pn | | | **P** | **00 57 14.6** | **-0.8** |
| | 29nm,1.1s | | | | | | | | |
| **EIDS** | **Eidsvold** | **18.32** | **216** | *e*P | | | **Pn** | **00 57 39.5** | **+1.9** |
| | 14nm,0.4s | | | | | | | | |
| **CTA** | **Charters Tower** | **18.47** | **238** | P | | | **Pn** | **00 57 39.6** | **+0.1** |
| | 0.3nm,0.3s,baz=62,slow=15,SNR=3.7 | | | | | | | | |
| **CTAO** | **Charters Tower** | **18.47** | **238** | *e*P | | | **Pn** | **00 57 40.7** | **+1.2** |
| | 80nm,1.7s | | | | | | | | |
| **COEN** | **Coen** | **19.46** | **259** | *e*P | | | **Pn** | **00 57 52.3** | **+0.7** |
| | 30nm,1.1s | | | | | | | | |
| **ARMA** | **Armidale** | **22.17** | **206** | *e*P | | | **P** | **00 58 19.6** | **0.0** |
| | 66nm,1.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **28.92** | **248** | P | | | **P** | **00 59 21.3** | **-1.2** |
| | 2.9nm,0.6s,baz=79,slow=9.3,SNR=30 | | | | | | | | |
| WRA | | | | LR | | | LR | 01 10 22.8 | |
| | comp=Z,201nm,19.1s,baz=55,slow=35 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **29.30** | **8** | T | | | T | 01 30 03.0 | |
| | baz=188,slow=76,SNR=461 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.31** | **7** | T | | | T | 01 30 06.2 | |
| | baz=188,slow=76,SNR=487 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.32** | **8** | T | | | T | 01 30 06.0 | |
| | baz=188,slow=76,SNR=385 | | | | | | | | |
| **AS12** | **Alice Springs** | **30.40** | **241** | *e*P | | | **P** | **00 59 34.0** | **-1.7** |
| **ASAR** | **Alice Springs** | **30.40** | **241** | P | | | **P** | **00 59 34.0** | **-1.7** |
| | 1.6nm,0.5s,baz=64,slow=10,SNR=16 | | | | | | | | |
| ASAR | | | | LR | | | LR | 01 11 43.5 | |
| | comp=Z,97nm,18.1s,baz=64,slow=36 | | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **30.54** | **8** | T | | | T | 01 31 38.3 | |
| | baz=188,slow=76,SNR=210 | | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.54** | **8** | T | | | T | 01 31 41.7 | |
| | baz=188,slow=76,SNR=251 | | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **30.55** | **8** | T | | | T | 01 31 39.6 | |
| | baz=188,slow=76,SNR=292 | | | | | | | | |
| **SIJI** | **Sorong** | **32.86** | **285** | LR | | | LR | 01 14 07.4 | |
| | comp=Z,95nm,19.8s,baz=125,slow=38 | | | | | | | | |
| **BBOO** | **Buckleboo** | **32.99** | **224** | *e*P | | | **P** | **00 59 56.7** | **-1.6** |
| | 59nm,1.6s | | | | | | | | |
| **RPZ** | **Rata Peaks** | **33.61** | **169** | P | | | **P** | **01 00 02.4** | **-1.2** |
| | 14nm,0.9s,baz=5.0,slow=14,SNR=3.8 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **52.44** | **335** | P | | | **P** | **01 02 33.5** | **-2.5** |
| | 3.3nm,0.9s,baz=176,slow=8.3,SNR=4.4 | | | | | | | | |
| MJAR | | | | LR | | | LR | 01 22 58.4 | |
| | comp=Z,31nm,20.8s,baz=150,slow=34 | | | | | | | | |
| **MAJO** | **Matsushiro** | **52.45** | **335** | *e*P | | | **P** | **01 02 33.5** | **-2.5** |
| | 125nm,2.3s | | | | | | | | |
| **ASAJ** | **Asahikawa** | **57.62** | **343** | P | | | **P** | **01 03 14.1** | **+0.9** |
| | 21nm,0.8s,baz=214,slow=11,SNR=9.7 | | | | | | | | |
| **ASAJ** | **Asahikawa** | **57.62** | **343** | *e*P | | | **P** | **01 03 12.3** | **-0.9** |
| | 7.3nm,0.7s | | | | | | | | |
| **KSRS** | **Korea Array** | **58.06** | **328** | P | | | **P** | **01 03 16.9** | **+0.5** |
| | 2.2nm,0.7s,baz=137,slow=7.6,SNR=7.3 | | | | | | | | |
| KSRS | | | | LR | | | LR | 01 26 51.0 | |
| | comp=Z,31nm,18.4s,baz=134,slow=34 | | | | | | | | |
| **KS15** | **Wonju Array Si** | **58.07** | **328** | *e*P | | | **P** | **01 03 16.9** | **+0.4** |
| **NJ2** | **Nanjing** | **59.83** | **317** | *e*P | | | **P** | **01 03 29.3** | **+0.5** |
| NJ2 | | | | PMZ | | | | | |
| | 10.0nm,0.7s | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **61.44** | **335** | P | | | **P** | **01 03 40.0** | **+0.5** |
| | 13nm,0.9s,baz=151,slow=7.5,SNR=28 | | | | | | | | |
| **WHN** | **Wuhan** | **62.08** | **313** | P | | | P | 01 03 39.8 | -4.3 |
| **PEA2** | **Petropavlovsk-** | **63.76** | **357** | *e*P | | | **P** | **01 03 55.2** | **+0.4** |
| **PETK** | **Petropavlovsk-** | **63.76** | **357** | P | | | **P** | **01 03 55.2** | **+0.4** |
| | 5.2nm,0.8s,baz=181,slow=9.9,SNR=3.5 | | | | | | | | |
| **CN2** | **Changchun** | **64.05** | **331** | *e*P | | | P | 01 04 02.5 | +5.5 |
| **GYA** | **Guiyang** | **65.90** | **305** | *e*P | | | **P** | **01 04 12.0** | **+2.5** |
| GYA | | | | pP | | | pP | 01 04 24.3 | +8.0 |
| GYA | | | | sP | | | sP | 01 04 30.0 | +11 |
| GYA | | | | PP | | | **PP** | **01 06 39.0** | **+4.1** |
| GYA | | | | ScP | | | | 01 08 40.3 | |
| GYA | | | | S | | | **S** | **01 12 54.5** | **-1.5** |
| GYA | | | | sS | | | sS | 01 13 16.0 | +8.8 |
| GYA | | | | SKS | | | **SKSac** | **01 14 00.3** | **-4.5** |
| GYA | | | | SS | | | **SS** | **01 17 11.0** | **-0.5** |
| GYA | | | | PMZ | | | | | |
| | 20nm,1.0s | | | | | | | | |
| GYA | | | | PMZ | | | | | |
| | 120nm,5.7s | | | | | | | | |
| GYA | | | | LN | | | | | |
| | 550nm,19.0s | | | | | | | | |
| GYA | | | | LE | | | | | |
| | 480nm,20.2s | | | | | | | | |
| GYA | | | | LZ | | | | | |
| | 510nm,19.8s | | | | | | | | |
| **VNDA** | **Vanda** | **66.76** | **180** | P | | | **P** | **01 04 12.9** | **-1.1** |
| | 3.3nm,1.1s,baz=340,slow=7.5,SNR=7.6 | | | | | | | | |
| VNDA | | | | LR | | | LR | 01 29 19.2 | |
| | comp=Z,38nm,18.6s,baz=352,slow=32 | | | | | | | | |
| **VNDA** | **Vanda** | **66.76** | **180** | *e*P | | | **P** | **01 04 15.2** | **+1.2** |
| | 41nm,2.6s | | | | | | | | |
| **KMI** | **Kunming** | **68.54** | **302** | P | | | **P** | **01 04 28.3** | **+1.9** |
| KMI | | | | PMZ | | | | | |
| | 6.0nm,0.5s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | 210nm,5.6s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.38** | **294** | LR | | | LR | 01 34 11.1 | |
| | comp=Z,14nm,20.1s,baz=130,slow=35 | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **69.78** | **321** | *e*P | | | **P** | **01 04 35.8** | **+2.1** |
| HHC | | | | sP | | | sP | 01 04 52.0 | +9.0 |
| HHC | | | | S | | | **S** | **01 13 41.0** | **-0.9** |
| HHC | | | | sS | | | sS | 01 14 01.5 | +8.3 |
| HHC | | | | ScS | | | **SKiKP** | **01 14 26.5** | **+6.2** |
| HHC | | | | PMZ | | | | | |
| | 25nm,1.3s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | 130nm,6.2s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | 360nm,16.2s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | 380nm,16.2s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | 190nm,16.2s | | | | | | | | |
| **CD2** | **Chengdu** | **70.16** | **308** | *e*P | | | **P** | **01 04 36.5** | **+0.3** |
| CD2 | | | | pP | | | pP | 01 04 49.5 | +6.5 |
| CD2 | | | | PP | | | **PP** | **01 07 11.8** | **0.0** |
| CD2 | | | | S | | | **S** | **01 13 45.0** | **-1.7** |
| CD2 | | | | sS | | | sS | 01 14 07.5 | +10 |
| CD2 | | | | SKS | | | **SKSac** | **01 14 33.5** | **-3.2** |
| CD2 | | | | SS | | | **SS** | **01 18 16.5** | **-0.7** |
| CD2 | | | | PMZ | | | | | |
| | 10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | 120nm,5.2s | | | | | | | | |
| **LZH** | **Lanzhou** | **72.46** | **313** | *e*P | | | **P** | **01 04 52.5** | **+2.4** |
| LZH | | | | pP | | | **PcP** | **01 05 04.5** | **-3.3** |
| LZH | | | | sP | | | sP | 01 05 09.0 | +10 |
| LZH | | | | PMZ | | | | | |
| | 13nm,1.0s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **76.40** | **325** | *e*P | | | **P** | **01 05 12.8** | **0.0** |
| | 23nm,1.3s | | | | | | | | |
| **SONA0** | **Songino Array** | **76.76** | **325** | *e*P | | | **P** | **01 05 15.5** | **+0.8** |
| **SONM** | **Songino Array** | **76.76** | **325** | P | | | **P** | **01 05 15.5** | **+0.8** |
| | 6.0nm,0.8s,baz=146,slow=5.6,SNR=34 | | | | | | | | |
| SONM | | | | LR | | | LR | 01 37 02.3 | |
| | comp=Z,34nm,21.4s,baz=68,slow=34 | | | | | | | | |
| **SONA1** | **Songino Array** | **76.76** | **325** | *e*P | | | **P** | **01 05 15.1** | **+0.4** |
| **GTA** | **Gaotai** | **76.81** | **315** | *e*P | | | **P** | **01 05 16.0** | **+0.8** |
| GTA | | | | pP | | | **PcP** | **01 05 29.0** | **+2.6** |
| GTA | | | | sP | | | sP | 01 05 34.3 | +10 |
| GTA | | | | S | | | **S** | **01 14 58.0** | **-3.8** |
| GTA | | | | sS | | | **SKSac** | **01 15 21.0** | **-5.4** |
| GTA | | | | SS | | | **SS** | **01 19 58.5** | **0.0** |
| GTA | | | | PMZ | | | | | |
| | 5.0nm,1.3s | | | | | | | | |
| GTA | | | | PMZ | | | | | |
| | 160nm,5.5s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | 130nm,16.1s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | 230nm,14.7s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | 110nm,17.3s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **79.25** | **180** | *e*P | | | **P** | **01 05 29.2** | **+0.9** |
| | 5.3nm,0.9s | | | | | | | | |
| **IL1** | **Eielson Array** | **84.16** | **19** | *e*P | | | **P** | **01 05 53.0** | **-1.0** |
| **ILAR** | **Eielson Array** | **84.16** | **19** | P | | | **P** | **01 05 53.5** | **-0.5** |
| | 2.1nm,0.7s,baz=249,slow=4.7,SNR=22 | | | | | | | | |
| **ILB** | **Eielson Array** | **84.16** | **19** | *e*P | | | **P** | **01 05 53.5** | **-0.5** |
| **EGAK** | **Eagle** | **86.10** | **21** | *e*P | | | **P** | **01 06 04.2** | **+0.5** |
| | 16nm,1.2s | | | | | | | | |
| **WMQ** | **Urumqi** | **86.87** | **316** | *e*P | | | **P** | **01 06 09.0** | **+0.9** |
| WMQ | | | | sP | | | sP | 01 06 28.0 | +10 |
| WMQ | | | | PP | | | **PP** | **01 09 34.0** | **+2.9** |
| WMQ | | | | S | | | **SKKSac** | **01 16 42.0** | **-0.6** |
| WMQ | | | | SS | | | **SS** | **01 22 28.0** | **0.0** |
| WMQ | | | | PMZ | | | | | |
| | 13nm,1.1s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | 37nm,20.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | 41nm,20.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | 40nm,20.0s | | | | | | | | |
| **NV01** | **Mina Array Sit** | **88.03** | **50** | *e*P | | | **P** | **01 06 15.0** | **+1.1** |
| **NVAR** | **Mina Array Bea** | **88.03** | **50** | P | | | **P** | **01 06 15.0** | **+1.1** |
| | 1.7nm,0.7s,baz=220,slow=6.6,SNR=9.1 | | | | | | | | |
| **J08A** | **Circle Bar Ran** | **89.21** | **46** | *e*P | | | **P** | **01 06 20.7** | **+1.4** |
| | 96nm,2.8s | | | | | | | | |
| J08A | | | | eS | | | **S** | **01 17 09.6** | **+1.9** |
| **INK** | **Inuvik** | **90.57** | **19** | P | | | **P** | **01 06 26.0** | **+1.1** |
| | 1.7nm,0.8s,baz=256,slow=4.2,SNR=3.1 | | | | | | | | |
| **MK01** | **Makanchi Array** | **91.35** | **317** | *e*P | | | **P** | **01 06 28.6** | **-0.5** |
| **MK32** | **Makanchi Array** | **91.36** | **317** | *e*P | | | **P** | **01 06 28.9** | **-0.2** |
| **MKAR** | **Makanchi Array** | **91.36** | **317** | P | | | **P** | **01 06 28.9** | **-0.2** |
| | 3.0nm,0.7s,baz=94,slow=6.3,SNR=23 | | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **91.65** | **325** | *e*P | | | **P** | **01 06 29.1** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **91.65** | **325** | P | | | **P** | **01 06 28.7** | **-1.5** |
| | 1.0nm,0.6s,baz=110,slow=4.7,SNR=4.5 | | | | | | | | |
| ZALV | | | | LR | | | LR | 01 45 17.3 | |
| | comp=Z,36nm,21.9s,baz=70,slow=34 | | | | | | | | |
| **ZAA1** | **Zalesovo Array** | **91.65** | **325** | *e*P | | | **P** | **01 06 28.7** | **-1.5** |
| **BGU** | **Big Grassy Mou** | **92.57** | **49** | *e*pP | | | pP | 01 06 47.3 | +5.3 |
| **KSH** | **Kashi** | **94.35** | **309** | *e*P | | | **P** | **01 06 46.3** | **+3.1** |
| KSH | | | | *e*pP | | | pP | 01 07 00.5 | +10 |
| KSH | | | | *e*PP | | | PP | 01 10 37.3 | +6.6 |
| KSH | | | | SKS | | | **SKSac** | **01 17 17.0** | **-0.5** |
| KSH | | | | S | | | **S** | **01 17 50.0** | **-4.2** |
| KSH | | | | sS | | | sS | 01 18 15.8 | +10 |
| KSH | | | | SS | | | **SS** | **01 24 18.3** | **+1.9** |
| KSH | | | | PMZ | | | | | |
| | 83nm,4.3s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | 140nm,4.1s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | 160nm,5.7s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | 200nm,5.5s | | | | | | | | |
| **ESDC** | **Sonseca Array** | **148.89** | **340** | PKPbc | | | **PKPbc** | **01 13 10.8** | **-0.6** |
| | 0.3nm,0.6s,baz=18,slow=3.8,SNR=3.7 | | | | | | | | |

*IDC **28** 00:57:29.0±0.7,14˚.08N×60˚.58W,h0km,mb4.2/14, mb1 4.3/15,mb1mx4.1/47,mbtmp4.2/15,ML3.0/1,Error ellipse: s-maj=17.9km s-min=14.0km az=69.0*
*TRN **28** 00:57:30.8,13˚.96N×60˚.58W,h19km,MD4.1*
*TRN Felt MMI III in Saint Lucia.*
*NEIC **28** 00:57:31.6,13˚.96N×60˚.57W,h24km,mb4.0/8, MD4.2(TRN),After TRN.*

**ISC 28 00:57:31.4±1.0,14˚.01N±0˚.02×60˚.57W±0˚.04,h18km±4km, n102,σ0s97/120,mb4.1/22,7C-2D,Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MCLT** | **Moule a Chique** | **0.47** | **230** | *e*P | | | **Pn** | **00 57 42.4** | **-0.7** |
| MCLT | | | | eS | | | **Sn** | **00 57 50.2** | **-0.7** |
| **H05S1** | **Guadeloupe/Mar** | **0.48** | **328** | Pn | | | **Pb** | **00 57 41.5** | **+0.1** |
| H05S1 | | | | Sn | | | **Sg** | **00 57 48.2** | **+0.3** |
| **BIM** | **Bigot** | **0.70** | **316** | *e*P | | | **Pg** | **00 57 45.9** | **+0.7** |
| **TRMF** | **Trois Ilets** | **0.70** | **319** | *e*P | | | **Pb** | **00 57 45.2** | **+0.1** |
| **ZAM** | **Aeronautique** | **0.71** | **322** | *e*P | | | **Pb** | **00 57 45.2** | **-0.1** |
| **FDF** | **Fort de France** | **0.91** | **322** | *e*P | | | **Pb** | **00 57 48.5** | **-0.3** |
| **FDF** | **Fort de France** | **0.91** | **322** | *e*Pg | | | **Pg** | **00 57 49.2** | **0.0** |
| FDF | | | | eSg | | | **Sb** | **00 57 59.4** | **-1.2** |
| **SVV** | **Soufriere Volc** | **0.93** | **222** | ⇑*i*P | | | **Pn** | **00 57 49.6** | **+0.1** |
| SVV | | | | eS | | | **Sn** | **00 58 03.1** | **+0.7** |
| **SVV** | **Soufriere Volc** | **0.93** | **222** | ⇑*i*P | | | **Pn** | **00 57 49.6** | **+0.1** |
| SVV | | | | eS | | | **Sn** | **00 58 03.1** | **+0.7** |
| **PML** | **Morne Lenard** | **0.97** | **322** | *e*P | | | **Pb** | **00 57 49.3** | **-0.4** |
| **GBMF** | **Grand Be** | **0.97** | **324** | *e*P | | | **Pb** | **00 57 49.2** | **-0.5** |
| **BAMF** | **Morne Balai** | **0.98** | **325** | *e*P | | | **Pb** | **00 57 49.3** | **-0.6** |
| **CXM** | **Morne La Croix** | **0.98** | **324** | *e*P | | | **Pb** | **00 57 49.7** | **-0.3** |
| CXM | | | | eS | | | **Sn** | **00 58 05.4** | **+1.5** |
| **SVB** | **Belmont** | **0.99** | **222** | *e*P | | | **Pg** | **00 57 50.4** | **-0.2** |
| SVB | | | | eS | | | **Sn** | **00 58 04.7** | **+0.8** |
| **SVB** | **Belmont** | **0.99** | **222** | *e*P | | | **Pg** | **00 57 50.4** | **-0.2** |
| SVB | | | | eS | | | **Sn** | **00 58 04.7** | **+0.8** |
| **SVN** | **Savane Anatole** | **1.01** | **325** | *e*P | | | **Pb** | **00 57 49.7** | **-0.7** |
| **PCM** | **Pelee Case Pet** | **1.01** | **322** | *e*P | | | **Pb** | **00 57 48.9** | **-1.5** |
| **PCM** | **Pelee Case Pet** | **1.01** | **322** | *e*P | | | **Pb** | **00 57 50.0** | **-0.4** |
| **FCV** | **Fort Charlotte** | **1.07** | **218** | ⇓*e*P | | | **Pn** | **00 57 51.4** | **-0.1** |
| FCV | | | | eS | | | **Sg** | **00 58 05.6** | **-0.6** |
| **FCV** | **Fort Charlotte** | **1.07** | **218** | ⇓*e*P | | | **Pn** | **00 57 51.4** | **-0.1** |
| FCV | | | | eS | | | **Sg** | **00 58 05.6** | **-0.6** |
| **BBGH** | **Gun Hill** | **1.31** | **131** | *e*Pn | | | **Pb** | **00 57 55.6** | **+0.1** |
| BBGH | | | | eSn | | | Sn | 00 58 04.6 | -7.2 |
| **DSTT** | **Stowe** | **1.42** | **330** | *e*P | | | **Pb** | **00 57 57.8** | **+0.5** |
| DSTT | | | | eS | | | **Sg** | **00 58 17.3** | **-0.1** |
| **DSHT** | **Scott's Head** | **1.43** | **327** | *e*P | | | **Pg** | **00 57 58.5** | **-0.5** |
| DSHT | | | | eS | | | **Sg** | **00 58 17.2** | **-0.4** |
| **DBCT** | **Belle View Cho** | **1.46** | **329** | ⇑*i*P | | | **Pb** | **00 57 58.9** | **+0.8** |
| DBCT | | | | eS | | | **Sg** | **00 58 18.2** | **-0.5** |
| **DPMT** | **Pointe Michel** | **1.47** | **328** | *e*P | | | **Pn** | **00 57 57.4** | **+0.5** |
| DPMT | | | | eS | | | **Sg** | **00 58 18.9** | **0.0** |
| **DLPL** | **La Plaine** | **1.47** | **334** | *e*P | | | **Pn** | **00 57 57.6** | **+0.6** |
| DLPL | | | | eS | | | **Sb** | **00 58 17.2** | **+0.7** |
| **MDN** | **Morne-Daniel** | **1.52** | **329** | *e*P | | | **Pb** | **00 57 59.9** | **+0.7** |
| MDN | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **H10N2** | **ASCENSION HYDR** | **50.62** | **113** | T | T | 02 01 38.8 | | |
| | baz=295,slow=75,SNR=6.5 | | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **50.63** | **113** | T | T | 02 01 42.2 | | |
| | baz=295,slow=75,SNR=7.0 | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **50.95** | **114** | T | T | 02 01 51.9 | | |
| | baz=296,slow=74,SNR=14 | | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **50.95** | **114** | T | T | 02 01 56.1 | | |
| | baz=296,slow=74,SNR=13 | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **50.97** | **114** | T | T | 02 01 51.4 | | |
| | baz=296,slow=74,SNR=15 | | | | | | | |
| **REDW** | **Red Top Meadow** | **51.90** | **315** | *e*P | **P** | **01 06 36.3** | **-3.0** | |
| | 0.4nm,0.5s | | | | | | | |
| **MOOW** | **Moose Ponds** | **51.95** | **315** | *e*P | P | 01 06 36.3 | -3.3 | |
| | 0.4nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **55.58** | **51** | P | **P** | **01 07 07.4** | **+1.3** | |
| | 1.5nm,0.7s,baz=260,slow=7.5,SNR=19 | | | | | | | |
| **ES19** | **SONSECA Array** | **55.63** | **51** | *e*P | **P** | **01 07 07.8** | **+1.3** | |
| **EKA** | **Eskdalemuir Ar** | **60.26** | **34** | P | **P** | **01 07 39.5** | **+0.9** | |
| | 2.5nm,0.9s,baz=259,slow=7.2,SNR=3.4 | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **60.37** | **83** | *e*P | **P** | **01 07 40.2** | **+0.2** | |
| **TORD** | **Torodi Ar. Bea** | **60.37** | **83** | P | **P** | **01 07 39.9** | **-0.1** | |
| | 1.5nm,1.1s,baz=282,slow=6.3,SNR=10 | | | | | | | |
| **TCBU** | **Trout Butte** | **60.41** | **313** | *e*P | P | 01 07 35.0 | -5.1 | |
| **YKA** | **Yellowknife Ar** | **61.46** | **335** | P | **P** | **01 07 46.7** | **+0.2** | |
| | 2.2nm,0.6s,baz=104,slow=7.6,SNR=7.6 | | | | | | | |
| **YKB5** | **Yellowknife Ar** | **61.46** | **335** | *e*P | **P** | **01 07 46.7** | **+0.2** | |
| **NB200** | **NORSAR Array S** | **69.04** | **30** | *e*P | **P** | **01 08 36.0** | **+0.1** | |
| **NOA** | **NORSAR Array B** | **69.04** | **30** | P | **P** | **01 08 36.0** | **+0.1** | |
| | 1.3nm,0.7s,baz=260,slow=6.3,SNR=3.3 | | | | | | | |
| **GEC2** | **GERESS Array S** | **69.25** | **43** | *e*P | **P** | **01 08 36.2** | **-1.2** | |
| **GERES** | **GERESS Array B** | **69.25** | **43** | P | **P** | **01 08 36.2** | **-1.2** | |
| | 0.1nm,0.3s,baz=258,slow=4.8,SNR=4.1 | | | | | | | |
| **HFS** | **Hagfors** | **70.12** | **31** | P | **P** | **01 08 42.7** | **+0.2** | |
| | 8.0nm,1.1s,baz=242,slow=12,SNR=3.8 | | | | | | | |
| **INK** | **Inuvik** | **70.78** | **338** | P | **P** | **01 08 46.6** | **+0.2** | |
| | 1.8nm,0.6s,baz=83,slow=3.6,SNR=8.8 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **75.61** | **21** | *e*P | **P** | **01 09 16.1** | **+1.2** | |
| **ARCES** | **ARCESS Array B** | **75.61** | **21** | P | **P** | **01 09 16.1** | **+1.2** | |
| | 2.6nm,0.7s,baz=228,slow=1.5,SNR=6.4 | | | | | | | |
| **ILAR** | **Eielson Array** | **75.87** | **334** | P | **P** | **01 09 16.8** | **+0.3** | |
| | 0.6nm,0.5s,baz=82,slow=4.7,SNR=16 | | | | | | | |
| **ILB** | **Eielson Array** | **75.87** | **334** | *e*P | **P** | **01 09 16.8** | **+0.3** | |
| **FIA0** | **FINESS Array S** | **76.22** | **30** | *e*P | **P** | **01 09 18.2** | **-0.3** | |
| **FINES** | **FINESS Array B** | **76.22** | **30** | P | **P** | **01 09 18.2** | **-0.3** | |
| | 2.7nm,0.7s,baz=212,slow=6.8,SNR=6.2 | | | | | | | |

*IDC **28** 00:58:11.9±4.6, 3.˚24S×100.˚05E, h0km, mb3.5/5, mb1 3.6/5, mb1mx3.4/50, mbtmp3.5/5, MS3.4/1, Ms1 3.4/1, ms1mx2.6/23, Error ellipse: s-maj=177.2km s-min=24.1km az=60.0*

*ISCJB **28** 00:58:13.6±1.1, 3.˚41S±0.˚08×99.˚8E±0.˚1, h33km, mb3.5/5, MS3.3/1, Error ellipse: s-maj=20.5km s-min=7.9km az=155.9*

*DJA **28** 00:58:14.9±1.2, 3.˚5S±6.˚×10.˚0E±.˚, h59km±16km, M3.5/6, MLv3.5/6*

**ISC 28 00:58:14.7±1.2, 3.˚49S±0.˚09×99.˚7E±0.˚1, h35km, n15, σ1s73/14, mb3.4/5, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.79** | **24** | P | **Pn** | **00 58 29.2** | **-0.1** |
| PPSI | | | | S | **Sn** | **00 58 42.6** | **+2.8** |
| **SISI** | **Saibi** | **2.23** | **344** | P | **Pn** | **00 58 47.8** | **-1.4** |
| SISI | | | | S | **Sn** | **00 59 15.1** | **-0.4** |
| **PDSI** | **Padang** | **2.67** | **17** | P | **Pn** | **00 58 54.0** | **-1.3** |
| **PPI** | **Padang Panjang** | **3.09** | **13** | P | **Pn** | **00 58 59.5** | **-1.5** |
| PPI | | | | S | **Sn** | **00 59 34.1** | **-2.7** |
| **MNAI** | **Manna** | **3.37** | **105** | P | **Pn** | **00 59 02.9** | **-2.0** |
| **CMAR** | **Chiang Mai Arr** | **21.82** | **358** | P | **P** | **01 03 02.1** | **-1.9** |
| | 1.2nm,0.7s,baz=187,slow=10,SNR=9.3 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.38** | **260** | T | T | 01 34 18.2 | |
| | baz=80,slow=75,SNR=7.8 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.38** | **260** | T | T | 01 34 14.5 | |
| | baz=80,slow=75,SNR=10 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.39** | **260** | T | T | 01 34 14.9 | |
| | baz=80,slow=75,SNR=7.0 | | | | | | |
| **DAV** | **Davao City (W)** | **27.89** | **68** | LR | LR | 01 13 58.1 | |
| | comp=Z,86nm,21.2s,baz=280,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.53** | **119** | P | **P** | **01 05 26.2** | **+0.4** |
| | 0.3nm,0.8s,baz=309,slow=9.1,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.65** | **124** | P | **P** | **01 05 35.9** | **+0.7** |
| | 0.2nm,0.7s,baz=300,slow=8.3,SNR=3.4 | | | | | | |
| **SONM** | **Songino Array** | **51.44** | **6** | P | **P** | **01 07 18.1** | **+1.6** |
| | 0.9nm,0.6s,baz=186,slow=5.4,SNR=5.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.56** | **350** | P | **P** | **01 08 08.8** | **+1.1** |
| | 0.9nm,0.7s,baz=185,slow=8.2,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.06** | **38** | PKPbc | **PKPab** | **01 17 52.6** | **+0.2** |
| | 0.1nm,0.5s,baz=319,slow=0.3,SNR=5.4 | | | | | | |

*MDD **28** 00:59:36.8±1.4, 36.˚58N×15.˚93W, h30km, mb3.5/13, Error ellipse: s-maj=19.7km s-min=8.5km az=127.0, PRXIMO*

*CSEM **28** 00:59:38.4±0.5, 36.˚52N×15.˚49W, h20km, ML3.0/4, Error ellipse: s-maj=12.8km s-min=8.9km az=150.0*

*INMG **28** 00:59:40.3±1.4, 36.˚59N×15.˚96W, h10km, ML2.4, Error ellipse: s-maj=9.5km s-min=3.0km az=120.0*

**ISC 28 00:59:32.9±1.3, 36.˚59N±0.˚06×15.˚74W±0.˚09, h10km, n82, σ2s88/89, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMPST** | **Porto Santo, M** | **3.54** | **188** | *e*Pn | **Pn** | **01 00 29.2** | **+1.3** |
| PMPST | | | | *e*Sn | **Sn** | **01 01 04.8** | **-5.0** |
| PMPST | | | | A | A | 01 01 11.7 | |
| | 17nm,0.5s | | | | | | |
| **PMPST** | **Porto Santo, M** | **3.54** | **188** | *e*Pn | **Pn** | **01 00 29.2** | **+1.3** |
| PMPST | | | | *e*Sn | **Sn** | **01 01 04.8** | **-5.0** |
| | 17nm,0.5s | | | | | | |
| **PMPS** | **Porto Santo** | **3.56** | **188** | *e*Sn | **Sn** | **01 01 06.2** | **-4.1** |
| PMPS | | | | A | A | 01 01 12.0 | |
| | 11nm,0.8s | | | | | | |
| **PMPS** | **Porto Santo** | **3.56** | **188** | P | **Pn** | **01 00 29.2** | **+1.0** |
| PMPS | | | | S | **Sn** | **01 01 06.2** | **-4.1** |
| | 5.3nm,0.8s | | | | | | |
| **PMAR** | **Madeira** | **3.98** | **194** | *e*Sn | **Sn** | **01 01 16.3** | **-4.6** |
| PMAR | | | | A | A | 01 01 22.9 | |
| | 8.8nm,0.3s | | | | | | |
| **PMAR** | **Madeira** | **3.98** | **194** | S | **Sn** | **01 01 16.3** | **-4.6** |
| | 4.4nm,0.3s | | | | | | |
| **PMAR** | **Madeira** | **3.98** | **194** | S | **Sn** | **01 01 16.3** | **-4.6** |
| | 4.4nm,0.3s | | | | | | |
| **PFVI** | **Vila Bisbo** | **5.57** | **82** | *e*Pn | Pn | 01 00 59.0 | +3.2 |
| PFVI | | | | *e*Sn | **Sn** | **01 01 58.4** | **-1.4** |
| PFVI | | | | A | A | 01 02 06.7 | |
| | 3.4nm,0.8s | | | | | | |
| **PFVI** | **Vila Bisbo** | **5.57** | **82** | P | Pn | 01 00 59.3 | +3.5 |
| | 0.6nm,0.1s,SNR=7.9 | | | | | | |
| PFVI | | | | S | **Sn** | **01 01 58.8** | **-1.0** |
| | 1.9nm,0.2s,SNR=7.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **5.57** | **82** | *e*Pn | Pn | 01 00 59.0 | +3.2 |
| PFVI | | | | *e*Sn | **Sn** | **01 01 58.4** | **-1.4** |
| | 3.4nm,0.8s | | | | | | |
| PFVI | | | | S | **Sn** | **01 01 58.8** | **-1.0** |
| | 1.9nm,0.2s,SNR=7.9 | | | | | | |
| **PMAFR** | **Mafra** | **5.63** | **63** | *e*Pn | Pn | 01 01 00.3 | +3.6 |
| PMAFR | | | | *e*Sn | **Sn** | **01 01 59.4** | **-2.0** |
| PMAFR | | | | A | A | 01 02 03.3 | |
| | 13nm,0.6s | | | | | | |
| **PMAFR** | **Mafra** | **5.63** | **63** | P | Pn | 01 01 00.2 | +3.5 |
| | 1.3nm,0.1s,SNR=7.9 | | | | | | |
| PMAFR | | | | S | **Sn** | **01 02 01.1** | **-0.4** |
| | 1.4nm,0.1s,SNR=7.9 | | | | | | |
| **PMAFR** | **Mafra** | **5.63** | **63** | P | Pn | 01 01 00.2 | +3.5 |
| | 1.3nm,0.1s,SNR=7.9 | | | | | | |
| PMAFR | | | | *e*Sn | **Sn** | **01 01 59.4** | **-2.0** |
| | 13nm,0.6s | | | | | | |
| PMAFR | | | | S | **Sn** | **01 02 01.1** | **-0.4** |
| | 1.4nm,0.1s,SNR=7.9 | | | | | | |
| **PTEO** | **Sao Teotonio** | **5.69** | **78** | *e*Sn | **Sn** | **01 02 01.9** | **-0.9** |
| PTEO | | | | A | A | 01 02 10.0 | |
| | 2.9nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **5.69** | **78** | S | **Sn** | **01 02 01.9** | **-0.9** |
| | 1.4nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **5.69** | **78** | S | **Sn** | **01 02 01.9** | **-0.9** |
| | 1.4nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **5.72** | **81** | *e*Sn | **Sn** | **01 02 02.3** | **-1.4** |
| MORF | | | | A | A | 01 02 04.5 | |
| | 1.2nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **5.72** | **81** | S | **Sn** | **01 02 02.3** | **-1.4** |
| | 1.2nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **5.72** | **81** | S | **Sn** | **01 02 02.3** | **-1.4** |
| | 1.2nm,0.1s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **5.94** | **73** | *e*Sn | **Sn** | **01 02 07.3** | **-1.7** |
| PNCL | | | | A | A | 01 02 11.3 | |
| | 1.4nm,0.4s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **5.94** | **73** | *e*Sn | **Sn** | **01 02 07.3** | **-1.7** |
| | 1.4nm,0.4s | | | | | | |
| **MESJ** | **Messejana** | **6.13** | **76** | *e*Sn | **Sn** | **01 02 12.2** | **-1.4** |
| MESJ | | | | A | A | 01 02 19.7 | |
| | 1.4nm,0.6s | | | | | | |
| **MESJ** | **Messejana** | **6.13** | **76** | S | **Sn** | **01 02 12.2** | **-1.4** |
| **MESJ** | **Messejana** | **6.13** | **76** | S | **Sn** | **01 02 12.2** | **-1.4** |
| | 1.4nm,0.6s | | | | | | |
| **PCVE** | **Castro Verde** | **6.24** | **78** | *e*Sn | **Sn** | **01 02 14.9** | **-1.5** |
| PCVE | | | | A | A | 01 02 21.2 | |
| | 1.2nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **6.24** | **78** | S | **Sn** | **01 02 14.9** | **-1.5** |
| | 1.2nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **6.24** | **78** | S | **Sn** | **01 02 14.9** | **-1.5** |
| | 1.2nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **6.29** | **82** | *e*Pn | Pn | 01 01 09.1 | +3.4 |
| PBDV | | | | *e*Sn | **Sn** | **01 02 16.1** | **-1.6** |
| PBDV | | | | A | A | 01 02 20.1 | |
| | 1.8nm,0.5s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **6.29** | **82** | P | Pn | 01 01 09.1 | +3.4 |
| PBDV | | | | S | **Sn** | **01 02 16.1** | **-1.6** |
| | 1.8nm,0.5s | | | | | | |
| **PBEJ** | **Beja** | **6.44** | **75** | *e*Sn | **Sn** | **01 02 19.8** | **-1.4** |
| PBEJ | | | | A | A | 01 02 23.6 | |
| | 1.2nm,0.3s | | | | | | |
| **PBEJ** | **Beja** | **6.44** | **75** | S | **Sn** | **01 02 19.8** | **-1.4** |
| | 0.6nm,0.3s | | | | | | |
| **PBEJ** | **Beja** | **6.44** | **75** | S | **Sn** | **01 02 19.8** | **-1.4** |
| | 0.6nm,0.3s | | | | | | |
| **PMTG** | **Montargil** | **6.44** | **65** | *e*Sn | **Sn** | **01 02 18.6** | **-2.7** |
| PMTG | | | | A | A | 01 02 26.3 | |
| | 1.5nm,1.0s | | | | | | |
| **PMTG** | **Montargil** | **6.44** | **65** | *e*Sn | **Sn** | **01 02 18.6** | **-2.7** |
| | 1.5nm,1.0s | | | | | | |
| **PVAQ** | **Vaqueiros** | **6.47** | **80** | *e*Pn | Pn | 01 01 12.3 | +4.1 |
| PVAQ | | | | *e*Sn | **Sn** | **01 02 20.1** | **-2.0** |
| PVAQ | | | | A | A | 01 02 21.5 | |
| | 1.3nm,0.8s | | | | | | |
| **PVAQ** | **Vaqueiros** | **6.47** | **80** | P | Pn | 01 01 12.3 | +4.1 |
| PVAQ | | | | S | **Sn** | **01 02 20.1** | **-2.0** |
| | 1.3nm,0.8s | | | | | | |
| **PTOM** | **Tomar** | **6.52** | **60** | *e*Sn | **Sn** | **01 02 21.9** | **-1.4** |
| PTOM | | | | A | A | 01 02 26.9 | |
| | 4.0nm,0.5s | | | | | | |
| **PTOM** | **Tomar** | **6.52** | **60** | S | **Sn** | **01 02 21.9** | **-1.4** |
| | 2.0nm,0.5s | | | | | | |
| **PTOM** | **Tomar** | **6.52** | **60** | S | **Sn** | **01 02 21.9** | **-1.4** |
| | 2.0nm,0.5s | | | | | | |
| **PCAS** | **Casmilo, Conde** | **6.66** | **57** | *e*Sn | **Sn** | **01 02 23.8** | **-2.9** |
| **EGRO** | **El Granado** | **6.67** | **79** | P | Pn | 01 01 13.9 | +3.0 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | |
| EGRO | | | | S | **Sn** | **01 02 24.9** | **-2.0** |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| **EGRO** | **El Granado** | **6.67** | **79** | P | Pn | 01 01 13.9 | +3.0 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | |
| EGRO | | | | S | **Sn** | **01 02 24.9** | **-2.0** |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| **PBAR** | **Barrancos** | **7.11** | **75** | *e*Sn | **Sn** | **01 02 35.4** | **-2.3** |
| PBAR | | | | A | A | 01 02 37.2 | |
| | 1.9nm,0.7s | | | | | | |
| **PBAR** | **Barrancos** | **7.11** | **75** | S | **Sn** | **01 02 35.4** | **-2.3** |
| | 1.9nm,0.7s | | | | | | |
| **PBAR** | **Barrancos** | **7.11** | **75** | S | **Sn** | **01 02 35.4** | **-2.3** |
| | 1.9nm,0.7s | | | | | | |
| **PMRV** | **Marv??o** | **7.17** | **64** | *e*Pn | Pn | 01 01 21.8 | +3.9 |
| PMRV | | | | *e*Sn | **Sn** | **01 02 34.8** | **-4.6** |
| PMRV | | | | A | A | 01 02 39.5 | |
| | 1.6nm,0.4s | | | | | | |
| **PMRV** | **Marv??o** | **7.17** | **64** | P | Pn | 01 01 21.8 | +3.9 |
| **PMRV** | **Marv??o** | **7.17** | **64** | P | Pn | 01 01 21.8 | +3.9 |
| **EBAD** | **Badajoz** | **7.25** | **70** | P | Pn | 01 01 21.7 | +2.8 |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| EBAD | | | | S | **Sn** | **01 02 38.6** | **-2.6** |
| | 0.5nm,0.2s,SNR=7.9 | | | | | | |
| **EBAD** | **Badajoz** | **7.25** | **70** | P | Pn | 01 01 21.7 | +2.8 |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| EBAD | | | | S | **Sn** | **01 02 38.6** | **-2.6** |
| | 0.5nm,0.2s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **7.33** | **78** | P | Pn | 01 01 22.8 | +2.8 |
| | 0.7nm,1.8s,SNR=7.9 | | | | | | |
| EMIN | | | | S | **Sn** | **01 02 41.2** | **-2.1** |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **7.33** | **78** | P | Pn | 01 01 22.8 | +2.8 |
| | 0.7nm,1.8s,SNR=7.9 | | | | | | |
| EMIN | | | | S | **Sn** | **01 02 41.2** | **-2.1** |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| **MTE** | **Manteigas** | **7.47** | **57** | *e*Sn | **Sn** | **01 02 44.3** | **-2.4** |
| MTE | | | | A | A | 01 02 49.0 | |
| | 2.0nm,0.5s | | | | | | |
| **MTE** | **Manteigas** | **7.47** | **57** | S | **Sn** | **01 02 44.3** | **-2.4** |
| | 1.0nm,0.5s | | | | | | |
| **POLO** | **Lamas de Olo** | **7.81** | **50** | *e*Pn | **Pn** | **01 01 29.2** | **+2.5** |
| POLO | | | | *e*Sn | **Sn** | **01 02 49.8** | **-5.5** |
| POLO | | | | A | A | 01 03 05.3 | |
| | 0.5nm,0.6s | | | | | | |
| **POLO** | **Lamas de Olo** | **7.81** | **50** | *e*Pn | **Pn** | **01 01 29.2** | **+2.5** |
| **PCAB** | **Cabril** | **7.88** | **47** | *e*Pn | **Pn** | **01 01 30.6** | **+3.1** |
| PCAB | | | | *e*Sn | **Sn** | **01 02 52.7** | **-4.0** |
| PCAB | | | | A | A | 01 03 00.1 | |
| | 1.7nm,0.5s | | | | | | |
| **PCAB** | **Cabril** | **7.88** | **47** | P | **Pn** | **01 01 30.6** | **+3.1** |
| PCAB | | | | S | **Sn** | **01 02 52.7** | **-4.0** |
| | 0.9nm,0.5s | | | | | | |
| **PCAB** | **Cabril** | **7.88** | **47** | P | **Pn** | **01 01 30.6** | **+3.1** |
| **PGAV** | **Gavieira, Arco** | **7.89** | **45** | *e*Pn | **Pn** | **01 01 30.9** | **+3.1** |
| PGAV | | | | *e*Sn | **Sn** | **01 02 53.5** | **-3.8** |
| PGAV | | | | A | A | 01 02 55.6 | |
| | 2.8nm,0.8s | | | | | | |
| **PGAV** | **Gavieira, Arco** | **7.89** | **45** | *e*Pn | **Pn** | **01 01 30.9** | **+3.1** |
| **ELOB** | **Lobios** | **7.95** | **46** | P | **Pn** | **01 01 31.0** | **+2.4** |
| | 0.7nm,0.3s,SNR=7.9 | | | | | | |
| ELOB | | | | S | **Sn** | **01 02 53.6** | **-5.1** |
| | 0.2nm,0.1s,SNR=7.9 | | | | | | |
| **ELOB** | **Lobios** | **7.95** | **46** | P | **Pn** | **01 01 31.0** | **+2.4** |
| | 0.7nm,0.3s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **8.18** | **53** | *e*Pn | Pn | 01 01 35.4 | +3.6 |
| MVO | | | | *e*Sn | **Sn** | **01 02 58.8** | **-5.5** |
| MVO | | | | A | A | 01 03 04.1 | |
| | 1.8nm,0.5s | | | | | | |
| **MVO** | **Moncorvo** | **8.18** | **53** | P | **Pn** | **01 02 34.4** | **+2.6** |
| | 0.4nm,0.2s,SNR=7.9 | | | | | | |
| MVO | | | | S | **Sn** | **01 02 58.5** | **-5.9** |
| | 0.5nm,0.2s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **8.18** | **53** | P | **Pn** | **01 01 34.4** | **+2.6** |
| | 0.4nm,0.2s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **8.18** | **53** | *e*Pn | Pn | 01 01 35.4 | +3.6 |
| **EMAZ** | **Mazaricos** | **8.21** | **37** | P | **Pn** | **01 01 34.2** | **+2.1** |
| | 0.5nm,0.1s,SNR=7.9 | | | | | | |
| EMAZ | | | | S | Sn | 01 02 58.7 | -6.1 |
| | 1.2nm,0.2s,SNR=7.9 | | | | | | |
| **EMAZ** | **Mazaricos** | **8.21** | **37** | P | **Pn** | **01 01 34.2** | **+2.1** |
| | 0.5nm,0.1s,SNR=7.9 | | | | | | |
| **EPLA** | **Plasencia** | **8.35** | **63** | P | **Pn** | **01 01 36.7** | **+2.7** |
| | 0.2nm,1.2s,SNR=7.9 | | | | | | |
| EPLA | | | | S | **Sn** | **01 03 04.9** | **-3.3** |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | |
| **EPLA** | **Plasencia** | **8.35** | **63** | P | **Pn** | **01 01 36.7** | **+2.7** |
| | 0.2nm,1.2s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **8.35** | **77** | P | Pn | 01 01 37.1 | +3.0 |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| ECAB | | | | S | **Sn** | **01 03 04.9** | **-3.5** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **8.35** | **77** | P | Pn | 01 01 37.1 | +3.0 |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| ECAB | | | | S | **Sn** | **01 03 04.9** | **-3.5** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **8.56** | **41** | P | **Pn** | **01 01 38.7** | **+1.9** |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **8.56** | **41** | P | **Pn** | **01 01 38.7** | **+1.9** |
| | 0.8nm,0.1s,SNR=7.9 | | | | | | |
| **ECAL** | **Calabor** | **8.79** | **50** | P | **Pn** | **01 01 42.8** | **+2.7** |
| | 0.5nm,0.2s,SNR=7.9 | | | | | | |
| ECAL | | | | S | **Sn** | **01 03 14.7** | **-4.5** |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| **ECAL** | **Calabor** | **8.79** | **50** | P | **Pn** | **01 01 42.8** | **+2.7** |
| | 0.5nm,0.2s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **9.02** | **77** | P | Pn | 01 01 46.3 | +3.1 |
| | 0.5nm,2.9s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **01 03 20.6** | **-4.3** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **9.02** | **77** | P | Pn | 01 01 46.3 | +3.1 |
| | 0.5nm,2.9s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **01 03 20.6** | **-4.3** |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **EPON** | **Pontenova** | **9.42** | **42** | S | Sn | 01 03 29.8 | -4.8 |
| | 0.2nm,0.2s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **9.64** | **83** | P | Pn | 01 01 54.7 | +2.9 |
| | 0.5nm,1.7s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **9.64** | **83** | P | Pn | 01 01 54.7 | +2.9 |
| | 0.5nm,1.7s,SNR=7.9 | | | | | | |

*IDC **28** 01:35:52.6±0.8, 0.˚62S×67.˚38E, h0km, mb3.9/11, mb1 4.0/12, mb1mx3.8/42, mbtmp3.9/12, ML4.0/1, MS3.4/8, Ms1 3.4/8, ms1mx3.0/35, Error ellipse: s-maj=25.9km s-min=18.7km az=10.0*

*ISCJB **28** 01:35:53.5±0.7, 0.˚6S±0.˚1×67.˚39E±0.˚10, h19km, mb3.9/11, MS3.4/7, Error ellipse: s-maj=21.0km s-min=13.6km az=171.6*

**ISC 28 01:35:55.6±0.9, 0.˚6S±0.˚2×67.˚4E±0.˚1, h19km, n22, σ1s05/13, mb3.9/11, MS3.4/7, Carlsberg Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08N2** | **Diego Garcia H** | **6.76** | **148** | T | T | 01 44 13.9 | |
| | baz=328,slow=75,SNR=188 | | | | | | |
| **H08N3** | **Diego Garcia H** | **6.77** | **148** | T | T | 01 44 19.0 | |
| | baz=328,slow=75,SNR=221 | | | | | | |
| **H08N1** | **Diego Carcia H** | **6.78** | **148** | T | T | 01 44 20.7 | |
| | baz=328,slow=75,SNR=168 | | | | | | |
| **PALK** | **Pallekele** | **15.42** | **59** | Pn | **Pn** | **01 39 32.0** | **-0.3** |
| | 0.6nm,0.3s,baz=297,slow=9.0,SNR=6.7 | | | | | | |
| PALK | | | | LR | LR | 01 44 13.1 | |
| | comp=Z,145nm,19.6s,baz=296,slow=32 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **30.12** | **269** | P | **P** | **01 42 03.0** | **-1.7** |
| | 2.3nm,0.5s,baz=250,slow=20,SNR=10 | | | | | | |
| KMBO | | | | LR | LR | 01 53 09.6 | |
| | comp=Z,50nm,18.4s,baz=82,slow=34 | | | | | | |
| **PSI** | **Prapat** | **31.72** | **84** | LR | LR | 01 52 47.4 | |
| | comp=Z,104nm,18.6s,baz=224,slow=32 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.34** | **57** | LR | LR | 01 58 10.2 | |
| | comp=Z,38nm,18.1s,baz=198,slow=37 | | | | | | |
| **LEM** | **Lembang** | **40.62** | **100** | LR | LR | 01 57 11.5 | |
| | comp=Z,56nm,20.3s,baz=44,slow=32 | | | | | | |
| **LSZ** | **Lusaka** | **41.35** | **247** | P | **P** | **01 43 41.7** | **+0.9** |
| | 1.1nm,0.5s,baz=17,slow=10.0,SNR=4.2 | | | | | | |
| **BOSA** | **Boshof** | **48.93** | **231** | LR | LR | 02 02 11.6 | |
| | comp=Z,51nm,20.7s,baz=40,slow=32 | | | | | | |
| **KBZ** | **Khabaz** | **49.25** | **337** | P | **P** | **01 44 44.1** | **+1.2** |
| | 3.1nm,1.0s,baz=157,slow=7.7,SNR=5.7 | | | | | | |
| **BRTR** | **Keskin Array B** | **50.59** | **326** | P | **P** | **01 44 53.2** | **-0.2** |
| | 1.0nm,0.8s,baz=139,slow=11,SNR=5.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **56.24** | **12** | P | **P** | **01 45 33.2** | **-1.2** |
| | 0.5nm,0.4s,baz=224,slow=6.2,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **58.94** | **30** | P | **P** | **01 45 54.7** | **+0.9** |
| | 1.0nm,0.7s,baz=233,slow=7.6,SNR=5.4 | | | | | | |
| **AKASG** | **Malin Array Be** | **60.51** | **333** | P | **P** | **01 46 03.7** | **-0.6** |
| | 0.3nm,0.3s,baz=145,slow=5.2,SNR=3.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.49** | **285** | P | **P** | **01 46 45.3** | **+0.7** |
| | 1.7nm,1.2s,baz=64,slow=3.4,SNR=5.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **68.19** | **111** | P | **P** | **01 46 55.1** | **-0.3** |
| | 1.7nm,0.9s,baz=282,slow=6.1,SNR=9.7 | | | | | | |
| **ASAR** | **Alice Springs** | **68.34** | **115** | P | **P** | **01 46 55.8** | **-0.5** |
| | 0.6nm,0.7s,baz=282,slow=6.1,SNR=5.4 | | | | | | |
| **DBIC** | **Dimbokro** | **72.42** | **277** | LR | LR | 02 17 21.0 | |
| | comp=Z,22nm,19.8s,baz=104,slow=34 | | | | | | |
| **ESDC** | **Sonseca Array** | **76.08** | **311** | P | **P** | **01 47 42.4** | **+0.2** |
| | 0.3nm,0.6s,baz=75,slow=5.0,SNR=4.8 | | | | | | |
| **YAK** | **Yakutsk** | **77.87** | **25** | LR | LR | 02 22 47.6 | |
| | comp=Z,33nm,21.1s,baz=78,slow=36 | | | | | | |
| **TXAR** | **Lajitas Array** | **150.16** | **344** | PKPbc | **PKPbc** | **01 55 47.7** | **+1.6** |
| | 2.4nm,0.8s,baz=74,slow=2.2,SNR=22 | | | | | | |

**DJA 28 01:39:29.6±0.2, 8.˚5S±2.˚×11.˚0E±.˚, h10km, M4.1/22, mb4.3/1, mB5.1/1, MLv4.0/22, Mw(mB)4.5/1, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **0.11** | **24** | P | Pg | 01 39 31.9 | -0.4 |
| UGM | | | | S | Sg | 01 39 34.1 | -0.2 |
| **WOJI** | **Wonogiri, Jawa** | **0.47** | **69** | P | Pg | 01 39 37.6 | -1.2 |
| WOJI | | | | S | Sg | 01 39 44.0 | -1.1 |
| **PCJI** | **Pacitan** | **0.71** | **105** | P | Pg | 01 39 42.7 | -0.7 |
| PCJI | | | | S | Sg | 01 39 52.7 | -0.1 |
| **SMRI** | **Semarang** | **0.95** | **358** | P | Pg | 01 39 47.3 | -0.8 |
| SMRI | | | | S | Sg | 01 40 00.6 | +0.1 |
| **NGJI** | **Ngawi** | **1.16** | **57** | P | Pb | 01 39 51.8 | 0.0 |
| **PWJI** | **Pagerwojo** | **1.31** | **91** | P | Pn | 01 39 51.3 | -2.7 |
| PWJI | | | | S | Sb | 01 40 08.8 | -2.4 |
| **UWJI** | **Ujung Watu** | **1.65** | **16** | P | Pn | 01 39 58.3 | -0.3 |
| UWJI | | | | S | Sb | 01 40 20.5

152nm,0.4s,4μm0.8nm
**NLAI Namlea 7.00 283** P **Pn** **01 48 21.4 +2.2**
49nm,0.5s,2μm0.4nm
**SANI Sanana 8.40 289** P **Pn** **01 48 38.8 +0.3**
**SOEI Soe 10.77 242** P **Pn** **01 49 11.6 +0.5**
**KAPI Kappang 14.13 269** LR LR 01 55 35.0
comp=Z,24nm,20.1s,baz=127,slow=37
**WRA Warramunga Arr 15.03 179** Pn **Pn** **01 50 07.0 -2.2**
0.7nm,0.3s,baz=0.0,slow=13,SNR=30
WRA Sn Sn 01 52 45.9 -9.3
0.8nm,0.3s,baz=357,slow=24,SNR=7.2
**ASAR Alice Springs 18.73 180** P **P** **01 50 55.4 0.0**
0.6nm,0.3s,baz=0.0,slow=12,SNR=28
ASAR S Sn 01 54 12.3 -13
0.2nm,0.3s,baz=0.3,slow=26,SNR=5.8
**MKAR Makanchi Array 68.65 325** P **P** **01 57 41.1 +1.5**
0.4nm,0.5s,baz=109,slow=8.9,SNR=2.7

**DJA 28 01:58:48.1**±0.6,**8˚S**±5˚×**10˚8E**±˚,**h37**km±5km,**M3.6**/12, **MLv3.6**/12,**Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CISI** | **Cisompet, Garu** | **0.52** | **21** | P | Pn | 01 59 00.0 | +0.8 |
| CISI | | | | S | Sn | 01 59 08.3 | +1.4 |
| **CMJI** | **Cimerak** | **0.85** | **72** | P | Pn | 01 59 04.4 | +0.8 |
| CMJI | | | | S | Sn | 01 59 16.2 | +1.3 |
| **CNJI** | **Cibinong** | **0.89** | **326** | P | Pn | 01 59 04.3 | +0.2 |
| CNJI | | | | S | Sn | 01 59 15.9 | +0.2 |
| **LEM** | **Lembang** | **1.22** | **359** | P | Pn | 01 59 09.8 | +1.0 |
| LEM | | | | S | Sn | 01 59 27.6 | +3.5 |
| **SKJI** | **Sukabumi** | **1.49** | **314** | P | Pn | 01 59 12.9 | +0.6 |
| SKJI | | | | S | Sn | 01 59 31.6 | +1.1 |
| **CGJI** | **Cibinong** | **2.39** | **306** | P | Pn | 01 59 25.5 | +0.8 |
| CGJI | | | | S | Sn | 01 59 53.3 | +0.5 |
| **UGM** | **Wanagama** | **2.87** | **87** | P | Pn | 01 59 32.4 | +1.1 |
| UGM | | | | S | Sn | 02 00 05.6 | +0.9 |
| **PCJI** | **Pacitan** | **3.52** | **93** | P | Pn | 01 59 41.5 | +1.3 |
| PCJI | | | | S | Sn | 02 00 21.2 | +0.7 |

*NIED* ***28*** *02:20:00, 37˚.30N×140˚.00E, h5km, Mw3.6 Best double couple: M0 3.06000×10^14 NP1:φs3.00000°, δ24.00000°, λ93.00000°. NP2:φs180.00000°, δ66.00000°, λ88.00000°.*
*IDC* ***28*** *02:20:45.2±1.2, 37˚.24N×140˚.17E, h0km, mb3.9/6, mb1 4.0/7, mb1mx3.6/44, mbtmp3.9/7, ML3.6/1, MS2.5/1, Ms1 2.5/1, ms1mx2.2/47, Error ellipse: s-maj=28.2km s-min=14.7km az=145.0*
*ISCJB* ***28*** *02:20:46.4±0.6, 37˚.30N±0˚.04×140˚.02E±0˚.04, h13km±4km, mb3.8/6, Error ellipse: s-maj=7.6km s-min=4.5km az=165.3*
*JMA* ***28*** *02:20:46.6, 37˚.28N×140˚.01E, h7km±1km, M3.6 Broadband fault plane solution: P waves. NP1: φs171.00000°, δ86.00000°, λ79.00000°. NP2:φs60.00000°, δ11.00000°, λ159.00000°. Principal axes: T Plg48.0000°, Azm70.0000°; N Plg11.0000°, Azm172.0000°; P Plg40.0000°, Azm271.0000°;*
*JMA Felt III J1.*
**ISC 28 02:20:45.6**±1.4,**37˚28N**±0˚.05×**140˚.06E**±0˚.04,**h5**km±10km, **n16**,**σ052**/21,**mb3.8**/6,**2C-4D**,**Eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JFY** | **Yanaizu** | **0.31** | **295** | ⇓P | **Pg** | **02 20 52.1** | **+0.5** |
| JFY | | | | S | **Sg** | **02 20 55.9** | **+0.2** |
| **JSB** | **Shiboa** | **0.33** | **199** | P | **Pb** | **02 20 53.6** | **-0.4** |
| **JFT** | **Otama** | **0.33** | **43** | ⇑P | **Pb** | **02 20 53.5** | **-0.5** |
| JFT | | | | S | **Sb** | **02 20 58.4** | **-1.2** |
| **JFK** | **Kawauchi** | **0.66** | **82** | ⇑P | **Pb** | **02 20 59.7** | **+0.1** |
| JFK | | | | S | **Sb** | **02 21 08.8** | **-0.3** |
| **JNS** | **Sasagawa** | **0.80** | **313** | ⇓P | **Pg** | **02 21 01.1** | **+0.2** |
| JNS | | | | S | **Sg** | **02 21 11.3** | **0.0** |
| **JKT** | **Katashina** | **0.82** | **232** | ⇓P | **Pg** | **02 21 01.8** | **+0.4** |
| JKT | | | | S | **Sg** | **02 21 11.9** | **-0.2** |
| **JHK** | **Hiroka** | **0.83** | **268** | ⇓P | **Pg** | **02 21 01.5** | **0.0** |
| JHK | | | | S | **Sg** | **02 21 11.6** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **1.65** | **244** | Pn | **Pb** | **02 21 16.1** | **-0.4** |
| | 31nm,0.3s,baz=63,slow=13,SNR=192 | | | | | | |
| MJAR | | | | Lg | Lg | 02 21 40.1 | |
| | 10nm,0.3s,baz=26,slow=23,SNR=9.7 | | | | | | |
| **MAT** | **Matsushiro** | **1.65** | **244** | P | **Pb** | **02 21 16.3** | **-0.3** |
| MAT | | | | *e*S | **Sb** | **02 21 37.5** | **-0.2** |
| **KSRS** | **Korea Array** | **9.66** | **275** | Pn | Pn | 02 23 08.0 | +2.7 |
| | 0.5nm,0.3s,baz=84,slow=14,SNR=3.9 | | | | | | |
| KSRS | | | | LR | LR | 02 26 44.3 | |
| | comp=Z,24nm,18.3s,baz=185,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **43.07** | **302** | P | **P** | **02 28 47.0** | **+0.6** |
| | 0.5nm,0.7s,baz=91,slow=8.6,SNR=3.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **44.99** | **308** | P | **P** | **02 29 01.5** | **-0.2** |
| | 1.6nm,0.7s,baz=84,slow=8.1,SNR=3.8 | | | | | | |
| **ILAR** | **Eielson Array** | **49.87** | **32** | P | **P** | **02 29 40.4** | **+0.9** |
| | 0.7nm,0.8s,baz=271,slow=5.9,SNR=7.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **57.17** | **186** | P | **P** | **02 30 33.2** | **-0.3** |
| | 0.3nm,0.4s,baz=3.5,slow=7.3,SNR=7.9 | | | | | | |
| **HFS** | **Hagfors** | **73.42** | **335** | P | P | 02 32 21.0 | +2.5 |
| | 1.0nm,0.4s,baz=85,slow=3.6,SNR=6.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **73.44** | **322** | P | **P** | **02 32 18.8** | **+0.1** |
| | 0.5nm,0.5s,baz=49,slow=6.5,SNR=2.9 | | | | | | |

*MEX* ***28*** *02:22:22.6±1.0, 23˚.03N×108˚.55W, h8km, MD5.3*
*ISCJB* ***28*** *02:22:24.0±0.2, 23˚.15N±0˚.02×108˚.39W±0˚.01, h10km, mb5.2/147, MS5.3/317, Error ellipse: s-maj=2.8km s-min=1.9km az=17.8*
*IDC* ***28*** *02:22:23.9±0.6, 23˚.23N×108˚.42W, h0km, mb4.6/21, mb1 4.8/26, mb1mx4.7/39, mbtmp4.6/26, ML4.0/5, MS5.0/28, Ms1 5.0/28, ms1mx4.9/44, Error ellipse: s-maj=17.8km s-min=11.3km az=55.0*
*MOS* ***28*** *02:22:24.5±1.2, 23˚.18N×108˚.40W, h13km, mb5.4/32, MS5.1/26, Error ellipse: s-maj=8.8km s-min=4.7km az=88.0*
*GCMT* ***28*** *02:22:25.3±0.1, 23˚.28N×108˚.51W, h16km, MW5.6/106, Moment Tensor Solution. s93,c151; s106,c257; Duration: 1s5 Moment tensor: Scale 10^17Nm; Mrr=0.10±.03; Mθθ=2.73±.04; Mφφ=2.83±.04; Mrθ=-0.10±.09; Mθφ=-0.94±.03; Mφr=-0.28±.09; Best double couple: M0 2.95100×10^17 NP1:φs216.00000°, δ89.00000°, λ6.00000°. NP2:φs126.00000°, δ84.00000°, λ179.00000°. Principal axes: T 3.0080, Plg5.0000°, Azm81.0000°; N -0.1100, Plg84.0000°, Azm230.0000°; P -2.8930, Plg3.0000°, Azm350.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*NEIC* ***28*** *02:22:25.3±0.3, 23˚.08N×108˚.45W, h10km, mb5.3/145, MS5.2/265, MW5.4, MD5.3(MEX) Error ellipse: s-maj=5.2km s-min=3.3km az=213.0, Moment Tensor Solution. s22 Moment tensor: Scale 10^17Nm; Mrr=0.01; Mθθ=1.24; Mφφ 1.25; Mrθ=0.44; Mθφ=0.55; Mφr=0.66; Best double couple: M0 1.60000×10^17 NP1:φs33.00000°, δ90.00000°, λ-30.00000°. NP2:φs123.00000°, δ60.00000°, λ-180.00000°. Principal axes: T 1.5800, Plg21.0000°, Azm82.0000°; N -0.0100, Plg60.0000°, Azm212.0000°; P -1.5800, Plg21.0000°, Azm344.0000°;*
*NEIC Felt at San Jose del Cabo and San Lucas, Baja California Sur; Los Mochis, Sinaloa; Bucerias, Nayarit.*
*BJI* ***28*** *02:22:26.7, 23˚.20N×108˚.40W, h10km, mb5.3/3, mB5.7/13, Ms5.7/10, Ms7 5.2/11*
**ISC 28 02:22:25.5**±0.3,**23˚18N**±0˚.04×**108˚43W**±0˚.05,**h10**km, **n1065**,**σ1s40**/843,**mb5.3**/148,**MS5.2**/317,**2C-4D**,**Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLBS** | **Sierra La Lagu** | **1.48** | **290** | *e*Pn | Pn | 02 22 46.4 | -6.0 |
| SLBS | | | | *e*Sn | Sn | 02 22 58.3 | -14 |
| **MAIG** | **Mazatlaan** | **1.84** | **89** | *e*P | Pn | 02 22 53.4 | -3.8 |
| MAIG | | | | *i* S | **Sn** | **02 23 15.8** | **-4.7** |
| **MAIG** | **Mazatlaan** | **1.84** | **89** | *e*P | Pn | 02 22 53.4 | -3.8 |
| MAIG | | | | *i* S | **Sn** | **02 23 15.8** | **-4.7** |
| **LPIG** | **La Paz** | **1.96** | **298** | Pn | Pn | 02 22 52.0 | -6.7 |
| | 158nm,0.3s,baz=316,slow=2.3,SNR=128 | | | | | | |
| LPIG | | | | Sn | Sn | 02 23 14.7 | -8.7 |
| | 3μm,0.3s,baz=120,slow=20,SNR=53 | | | | | | |
| **LPIG** | **La Paz** | **1.96** | **298** | *e*P | Pn | 02 22 51.9 | -6.9 |
| **LPIG** | **La Paz** | **1.96** | **298** | *e*P | Pn | 02 22 51.9 | -6.9 |
| **ANIG** | **Ahuacatlan** | **4.19** | **120** | *i* P | Pn | 02 23 26.1 | -3.6 |
| ANIG | | | | *i* S | **Sn** | **02 24 14.1** | **-4.7** |
| **ANIG** | **Ahuacatlan** | **4.19** | **120** | *i* P | Pn | 02 23 26.1 | -3.6 |
| ANIG | | | | *i* S | **Sn** | **02 24 14.1** | **-4.7** |
| **HPIG** | | **4.50** | **33** | *e*P | **Pn** | **02 23 32.3** | **-1.6** |
| HPIG | | | | *i* S | **Sn** | **02 24 25.7** | **-0.8** |
| **HPIG** | | **4.50** | **33** | *e*P | **Pn** | **02 23 32.3** | **-1.6** |
| HPIG | | | | *i* S | **Sn** | **02 24 25.7** | **-0.8** |
| **CJM** | **Chamela** | **4.83** | **139** | *e*P | **Pn** | **02 23 38.7** | **+0.4** |
| CJM | | | | *e*S | **Sn** | **02 24 34.5** | **+0.1** |
| **CJM** | **Chamela** | **4.83** | **139** | *e*P | **Pn** | **02 23 38.7** | **+0.4** |
| CJM | | | | *e*S | **Sn** | **02 24 34.5** | **+0.1** |
| **H06N1** | **SOCORRO T-PHAS** | **4.92** | **210** | T | T | 02 28 36.9 | |
| | SNR=17 | | | | | | |
| **H06N** | **Isla Socorro** | **4.92** | **210** | *e*P | Pn | 02 23 33.9 | -5.6 |
| **H06E** | | **4.96** | **208** | *e*P | Pn | 02 23 35.9 | -4.1 |
| **H06E1** | **SOCORRO T-PHAS** | **4.96** | **209** | T | T | 02 28 38.1 | |
| | SNR=911 | | | | | | |
| **H06S1** | **SOCORRO T** | **5.01** | **209** | T | T | 02 28 41.2 | |
| | SNR=63 | | | | | | |
| **H06S** | | **5.02** | **209** | *e*P | **Pn** | **02 23 40.5** | **-0.4** |
| **SRIG** | **Santa Rosalia** | **5.38** | **321** | *e*P | Pn | 02 23 42.2 | -3.7 |
| SRIG | | | | *e*S | **Sn** | **02 24 44.7** | **-3.1** |
| **SRIG** | **Santa Rosalia** | **5.38** | **321** | *e*P | Pn | 02 23 42.2 | -3.7 |
| SRIG | | | | *e*S | **Sn** | **02 24 44.7** | **-3.1** |
| **ZAIG** | **Zacatecas** | **5.42** | **93** | *e*P | **Pn** | **02 23 43.8** | **-2.8** |
| ZAIG | | | | *i* S | **Sn** | **02 24 46.5** | **-2.7** |
| **ZAIG** | **Zacatecas** | **5.42** | **93** | *e*P | **Pn** | **02 23 43.8** | **-2.8** |
| ZAIG | | | | *i* S | **Sn** | **02 24 46.5** | **-2.7** |
| **R15V** | | **5.75** | **133** | *e*P | **Pn** | **02 23 52.1** | **+1.0** |
| R15V | | | | *e*S | **Sn** | **02 24 52.5** | **-4.7** |
| **EZ5V** | | **5.81** | **128** | *e*P | **Pn** | **02 23 52.0** | **-0.1** |
| EZ5V | | | | *e*S | **Sn** | **02 24 56.4** | **-2.5** |
| **HSIG** | | **6.24** | **339** | *e*P | **Pn** | **02 23 54.6** | **-3.1** |
| HSIG | | | | *e*S | **Sn** | **02 25 06.2** | **-3.0** |
| **HSIG** | | **6.24** | **339** | *e*P | **Pn** | **02 23 54.6** | **-3.1** |
| HSIG | | | | *e*S | **Sn** | **02 25 06.2** | **-3.0** |
| **LTX** | **Lajitas** | **7.47** | **34** | *e*P | **Pn** | **02 24 13.6** | **-1.1** |
| LTX | | | | *e* | | 02 25 38.0 | |
| **LTX** | **Lajitas** | **7.47** | **34** | *e*Pn | **Pn** | **02 24 13.6** | **-1.1** |
| LTX | | | | *e*Pg | Pg | 02 24 42.1 | -6.5 |
| LTX | | | | *e*Sn | **Sn** | **02 25 38.0** | **-1.5** |
| LTX | | | | *e*Lg | Lg | 02 26 20.0 | |
| **TX31** | **Lajitas Ar. Si** | **7.47** | **34** | *e*Pn | **Pn** | **02 24 14.2** | **-0.5** |
| **TXAR** | **Lajitas Array** | **7.47** | **34** | Pn | **Pn** | **02 24 13.6** | **-1.1** |
| | 1.2nm,0.3s,baz=207,slow=14,SNR=64 | | | | | | |
| TXAR | | | | Pg | Pg | 02 24 42.1 | -6.5 |
| | 1.1nm,0.3s,baz=218,slow=16,SNR=8.5 | | | | | | |
| TXAR | | | | Sn | **Sn** | **02 25 38.0** | **-1.5** |
| | 1.0nm,0.3s,baz=216,slow=15,SNR=3.7 | | | | | | |
| TXAR | | | | Lg | Lg | 02 26 20.0 | |
| | 2.3nm,0.3s,baz=219,slow=21,SNR=3.8 | | | | | | |
| **529A** | **Stev Forest Ra** | **8.87** | **37** | P | **Pn** | **02 24 35.5** | **+1.7** |
| | baz=9.0,SNR=9.6 | | | | | | |
| **MNTX** | **Cornudas Mount** | **8.91** | **17** | P | **Pn** | **02 24 34.4** | **+0.1** |
| | baz=9.0,SNR=27 | | | | | | |
| **MNTX** | **Cornudas Mount** | **8.91** | **17** | *e*Pn | **Pn** | **02 24 34.0** | **-0.3** |
| **ARIG** | **Puente Sto Nin** | **8.99** | **121** | *e*P | **Pn** | **02 24 35.8** | **+0.3** |
| ARIG | | | | *e*S | **Sn** | **02 26 17.2** | **+0.3** |
| **832A** | **Faith Ranch, C** | **9.16** | **55** | P | **Pn** | **02 24 37.0** | **-0.8** |
| | baz=9.3 | | | | | | |
| **TUC** | **Tucson** | **9.33** | **348** | *e*P | **Pn** | **02 24 40.2** | **0.0** |
| **TUC** | **Tucson** | **9.33** | **348** | *e*Pn | **Pn** | **02 24 40.2** | **0.0** |
| **121A** | **Cookes Peak, D** | **9.34** | **3** | P | **Pn** | **02 24 41.6** | **+1.2** |
| | baz=9.4,SNR=18 | | | | | | |
| **933A** | **Laredo** | **9.38** | **60** | P | Pn | 02 24 44.5 | +3.8 |
| | baz=9.5 | | | | | | |
| **631A** | **Perdido Creek** | **9.39** | **47** | P | **Pn** | **02 24 41.8** | **+0.9** |
| | baz=9.5,SNR=40 | | | | | | |
| **530A** | **J-C Ranch, Com** | **9.40** | **41** | P | **Pn** | **02 24 42.9** | **+1.8** |
| | baz=9.5 | | | | | | |
| **732A** | **Laxson Ranch,** | **9.40** | **52** | P | **Pn** | **02 24 42.3** | **+1.2** |
| | baz=9.5,SNR=14 | | | | | | |
| **429A** | **Davenport Ranc** | **9.43** | **37** | P | **Pn** | **02 24 43.5** | **+2.0** |
| | baz=9.6,SNR=25 | | | | | | |
| **214A** | **Organ Pipe Nat** | **9.57** | **337** | P | **Pn** | **02 24 44.1** | **+0.7** |
| | baz=9.6 | | | | | | |
| 214A | | | | S | **Sn** | **02 26 31.1** | **0.0** |
| | baz=9.6 | | | | | | |
| **833A** | **Chaparral WMA,** | **9.62** | **56** | P | **Pn** | **02 24 44.9** | **+0.9** |
| | baz=9.7,SNR=9.0 | | | | | | |
| **034A** | **Hebbronville** | **9.64** | **64** | P | **Pn** | **02 24 45.5** | **+1.2** |
| | baz=9.8,SNR=8.5 | | | | | | |
| **YAIG** | **Yautepec** | **9.74** | **114** | *i* P | **Pn** | **02 24 48.7** | **+2.8** |
| YAIG | | | | *e*S | **Sn** | **02 26 39.7** | **+4.3** |
| **YAIG** | **Yautepec** | **9.74** | **114** | *i* P | **Pn** | **02 24 48.7** | **+2.8** |
| YAIG | | | | *e*S | **Sn** | **02 26 39.7** | **+4.3** |
| **733A** | **Divot King Ran** | **9.90** | **54** | P | **Pn** | **02 24 49.6** | **+1.8** |
| | baz=10.0 | | | | | | |
| **531A** | **Rocksprings** | **9.90** | **44** | P | **Pn** | **02 24 50.5** | **+2.5** |
| | baz=10.0,SNR=8.9 | | | | | | |
| **430A** | **Baggett Ranch,** | **9.92** | **39** | P | **Pn** | **02 24 50.6** | **+2.3** |
| | baz=10,SNR=22 | | | | | | |
| **035Z** | **Hargill** | **9.96** | **69** | P | **Pn** | **02 24 50.9** | **+2.2** |
| | baz=10 | | | | | | |
| **934A** | **Benavides** | **9.98** | **62** | P | **Pn** | **02 24 51.2** | **+2.2** |
| | baz=10 | | | | | | |
| **632A** | **Uvalde** | **9.99** | **49** | P | **Pn** | **02 24 50.3** | **+1.2** |
| | baz=10,SNR=12 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **10.06** | **33** | P | **Pn** | **02 24 51.9** | **+1.7** |
| | baz=10,SNR=9.8 | | | | | | |
| **035A** | **Encino** | **10.08** | **66** | P | **Pn** | **02 24 51.0** | **+0.7** |
| | baz=10 | | | | | | |
| **834A** | **Tilden** | **10.18** | **59** | P | **Pn** | **02 24 52.9** | **+1.2** |
| | baz=10 | | | | | | |
| **431A** | **Sonora** | **10.22** | **41** | P | **Pn** | **02 24 54.8** | **+2.4** |
| | baz=10,SNR=32 | | | | | | |
| **532A** | **Rocksprings** | **10.29** | **46** | P | **Pn** | **02 24 55.2** | **+1.9** |
| | baz=10,SNR=26 | | | | | | |
| **228A** | **UT Block 9, Go** | **10.30** | **29** | P | Pn | 02 24 57.3 | +3.9 |
| | baz=10 | | | | | | |
| **633A** | **Saathoff Ranch** | **10.39** | **51** | P | **Pn** | **02 24 57.0** | **+2.4** |
| | baz=10,SNR=13 | | | | | | |
| **330A** | **Mertzon** | **10.43** | **37** | P | **Pn** | **02 24 57.4** | **+2.2** |
| | baz=11,SNR=18 | | | | | | |
| **734A** | **La Parita Cree** | **10.52** | **55** | P | **Pn** | **02 24 56.1** | **-0.3** |
| | baz=11 | | | | | | |
| **229A** | **Bryant Ranch,** | **10.54** | **32** | P | **Pn** | **02 24 59.0** | **+2.4** |
| | baz=11,SNR=6.0 | | | | | | |
| **JCT** | **Junction City** | **10.59** | **45** | *e*P | **Pn** | **02 24 59.8** | **+2.4** |
| **JCT** | **Junction City** | **10.59** | **45** | P | **Pn** | **02 24 58.7** | **+1.3** |
| | baz=11 | | | | | | |
| **JCT** | **Junction City** | **10.59** | **45** | *e*Pn | **Pn** | **02 24 59.8** | **+2.4** |
| **128A** | **Castleberry Fa** | **10.77** | **28** | P | **Pn** | **02 25 01.9** | **+2.0** |
| | baz=11,SNR=22 | | | | | | |
| **331A** | **San Angelo** | **10.78** | **40** | P | **Pn** | **02 25 02.6** | **+2.6** |
| | baz=11,SNR=22 | | | | | | |
| **835A** | **Beeville** | **10.82** | **60** | P | **Pn** | **02 24 59.7** | **-0.8** |
| | baz=11 | | | | | | |
| **230A** | **Sterling City** | **10.83** | **35** | P | **Pn** | **02 25 02.1** | **+1.4** |
| | baz=11 | | | | | | |
| **533A** | **Kerrville** | **10.85** | **49** | P | **Pn** | **02 25 02.2** | **+1.3** |
| | baz=11 | | | | | | |
| **432A** | **Menard** | **10.86** | **43** | P | **Pn** | **02 25 02.0** | **+0.9** |
| | baz=11,SNR=35 | | | | | | |
| **Y22D** | **IRIS PASSCAL I** | **10.94** | **7** | P | **Pn** | **02 25 02.4** | **+0.2** |
| | baz=11 | | | | | | |
| **634A** | **China Grove, S** | **10.95** | **54** | P | **Pn** | **02 25 02.0** | **-0.3** |
| | baz=11 | | | | | | |
| **BNM** | **Barren Site** | **11.05** | **8** | *e*Pn | **Pn** | **02 25 06.1** | **+2.3** |
| **129A** | **Stewart Farms,** | **11.06** | **30** | P | **Pn** | **02 25 04.2** | **+0.4** |
| | baz=11 | | | | | | |
| **735A** | **Kenedy** | **11.09** | **57** | P | **Pn** | **02 25 04.5** | **+0.2** |
| | baz=11 | | | | | | |
| **LPM** | **Los Pinos Moun** | **11.20** | **8** | *e*Pn | **Pn** | **02 25 08.5** | **+2.6** |
| **534A** | **Blanco** | **11.21** | **50** | P | **Pn** | **02 25 07.1** | **+1.1** |
| | baz=11,SNR=45 | | | | | | |
| **433A** | **Art** | **11.23** | **46** | P | **Pn** | **02 25 07.9** | **+1.7** |
| | baz=11,SNR=15 | | | | | | |
| **332A** | **Millersview** | **11.24** | **41** | P | **Pn** | **02 25 08.3** | **+2.0** |
| | baz=11,SNR=10 | | | | | | |
| **LAZ** | **Ladron** | **11.24** | **5** | *e*Pn | **Pn** | **02 25 08.7** | **+2.3** |
| **231A** | **Bronte** | **11.30** | **38** | P | **Pn** | **02 25 08.9** | **+1.7** |
| | baz=11,SNR=12 | | | | | | |
| **GLA** | **Glamis** | **11.34** | **332** | P | **Pn** | **02 25 08.5** | **+0.8** |
| | baz=11,SNR=35 | | | | | | |
| **635A** | **Leesville** | **11.38** | **55** | P | **Pn** | **02 25 07.4** | **-0.8** |
| | baz=12 | | | | | | |
| **Z28A** | **Tucker Farm, M** | **11.39** | **27** | P | **Pn** | **02 25 10.8** | **+2.4** |
| | baz=12 | | | | | | |
| **130A** | **Snyder** | **11.46** | **33** | P | **Pn** | **02 25 11.2** | **+1.8** |
| | baz=12,SNR=6.5 | | | | | | |
| **IBP** | **Imperial Bould** | **11.62** | **326** | P | **Pn** | **02 25 12.4** | **+0.9** |
| | baz=12,SNR=33 | | | | | | |
| **232A** | **Coleman** | **11.65** | **40** | P | **Pn** | **02 25 13.8** | **+1.8** |
| | baz=12,SNR=13 | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **11.66** | **29** | P | **Pn** | **02 25 13.2** | **+1.1** |
| | baz=12,SNR=38 | | | | | | |
| **333A** | **Richland Sprin** | **11.67** | **44** | P | **Pn** | **02 25 13.9** | **+1.7** |
| | baz=12,SNR=18 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **11.70** | **328** | P | **Pn** | **02 25 13.6** | **+1.1** |
| | baz=12,SNR=14 | | | | | | |
| **736A** | **Circle Diamond** | **11.72** | **58** | P | **Pn** | **02 25 15.0** | **+2.2** |
| | baz=12,SNR=6.2 | | | | | | |
| **Y12C** | **Blythe** | **11.82** | **334** | P | **Pn** | **02 25 15.6** | **+1.5** |
| | baz=12,SNR=54 | | | | | | |
| **434A** | **Burnet** | **11.82** | **48** | P | **Pn** | **02 25 15.0** | **+0.8** |
| | baz=12,SNR=41 | | | | | | |
| **131A** | **Roby** | **11.82** | **35** | P | **Pn** | **02 25 15.2** | **+0.9** |
| | baz=12 | | | | | | |
| **ANMO** | **Albuquerque** | **11.85** | **8** | Pn | **Pn** | **02 25 16.4** | **+1.7** |
| | 0.1nm,0.3s,baz=172,slow=16,SNR=26 | | | | | | |
| ANMO | | | | Lg | Lg | 02 28 44.5 | |
| | 0.1nm,0.3s,baz=50,slow=16,SNR=3.7 | | | | | | |
| ANMO | | | | LR | LR | 02 29 57.1 | |
| | comp=Z,18μm,20.1s,baz=196,slow=38 | | | | | | |
| **ANMO** | **Albuquerque** | **11.85** | **8** | *d* iP | **Pn** | **02 25 16.6** | **+1.8** |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,49nm,1.7s | | | | | | |
| **535A** | **Dale** | **11.86** | **53** | P | **Pn** | **02 25 15.7** | **+0.9** |
| | baz=12,SNR=7.1 | | | | | | |
| **BAR** | **Barrett** | **11.94** | **324** | *e*Pn | **Pn** | **02 25 17.6** | **+1.7** |
| **Z30A** | **Sanderson Ranc** | **11.95** | **31** | P | **Pn** | **02 25 17.1** | **+1.2** |
| | baz=12,SNR=23 | | | | | | |
| **W18A** | **Petrified Fore** | **11.95** | **355** | P | **Pn** | **02 25 17.8** | **+1.7** |
| | baz=12,SNR=16 | | | | | | |
| **636A** | **Smothers Creek** | **11.97** | **56** | P | **Pn** | **02 25 17.0** | **+0.7** |
| | baz=12 | | | | | | |
| **MONP** | **Monument Peak** | **11.97** | **326** | P | **Pn** | **02 25 18.0** | **+1.5** |
| | baz=12,SNR=21 | | | | | | |
| **Y28A** | **McKinney Farm,** | **11.99** | **26** | P | **Pn** | **02 25 17.4** | **+0.9** |
| | baz=12 | | | | | | |
| **BC3** | **Big Chuckawall** | **12.13** | **331** | P | **Pn** | **02 25 19.5** | **+1.0** |
| | baz=12,SNR=40 | | | | | | |
| **737A** | **Port Lavaca** | **12.13** | **60** | P | **Pn** | **02 25 19.1** | **+0.7** |
| | baz=12 | | | | | | |
| **PDMCI** | **Parker Dam,Lak** | **12.16** | **337** | P | **Pn** | **02 25 20.3** | **+1.5** |
| | baz=12,SNR=29 | | | | | | |
| **334A** | **Lometa** | **12.16** | **46** | P | **Pn** | **02 25 19.5** | **+0.6** |
| | baz=12,SNR=11 | | | | | | |
| **Y29A** | **Porterfield Fa** | **12.18** | **28** | P | **Pn** | **02 25 21.1** | **+1.9** |
| | baz=12 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **12.19** | **38** | P | **Pn** | **02 25 20.9** | **+1.5** |
| | baz=12,SNR=16 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **12.19** | **38** | *e*Pn | **Pn** | **02 25 21.6** | **+2.2** |
| **536A** | **Bastrop** | **12.26** | **54** | P | **Pn** | **02 25 20.5** | **+0.3** |
| | baz=12 | | | | | | |
| **435B** | **Jarrell** | **12.28** | **50** | P | **Pn** | **02 25 21.6** | **+1.2** |
| | baz=12,SNR=25 | | | | | | |
| **109C** | **Camp Elliot, M** | **12.34** | **324** | P | **Pn** | **02 25 23.0** | **+1.8** |
| | baz=12,SNR=6.8 | | | | | | |
| **IRM** | **Iron Mountain** | **12.43** | **333** | P | **Pn** | **02 25 23.5** | **+1.0** |
| | baz=12,SNR=50 | | | | | | |
| **Z31A** | **Sharp Cattle R** | **12.46** | **34** | P | **Pn** | **02 25 23.6** | **+0.7** |
| | baz=13,SNR=9.8 | | | | | | |
| **Y30A** | **Stafford Cattl** | **12.54** | **30** | P | **Pn** | **02 25 26.5** | **+2.4** |
| | baz=13 | | | | | | |
| **X28A** | **Dimmitt** | **12.54** | **24** | P | Pn | 02 25 27.6 | +3.4 |
| | baz=13 | | | | | | |
| **WUAZ** | **Wupatki** | **12.56** | **349** | P | **Pn** | **02 25 25.8** | **+1.3** |
| | baz=13,SNR=208 | | | | | | |
| **WUAZ** | **Wupatki** | **12.56** | **349** | *e*Pn | **Pn** | **02 25 27.0** | **+2.5** |
| **PFO** | **Pinyon Flat Ob** | **12.56** | **328** | Pn | **Pn** | **02 25 25.8** | **+1.4** |
| | comp=Z,0.3nm,0.3s,baz=154,slow=12,SNR=22 | | | | | | |
| PFO | | | | Lg | Lg | 02 29 09.7 | |
| | comp=Z,0.1nm,0.3s,baz=252,slow=20,SNR=3.0 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **12.56** | **328** | Pn | **Pn** | **02 25 26.2** | **+1.8** |
| | comp=Z,341nm,1.3s,SNR=11 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **12.56** | **328** | Pn | **Pn** | **02 25 26.5** | **+2.1** |
| | comp=Z,469nm,1.6s,SNR=11 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **12.56** | **328** | P | **Pn** | **02 25 24.8** | **+0.3** |
| | baz=13,SNR=45 | | | | | | |
| **133A** | **Hamilton Ranch** | **12.60** | **40** | P | **Pn** | **02 25 25.5** | **+0.6** |
| | baz=13,SNR=12 | | | | | | |
| **234A** | **Clairette** | **12.66** | **44** | P | **Pn** | **02 25 26.3** | **+0.6** |
| | baz=13,SNR=8.3 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **12.66** | **330** | P | **Pn** | **02 25 27.3** | **+1.5** |
| | baz=13,SNR=20 | | | | | | |
| **X29A** | **Tulia** | **12.68** | **26** | P | **Pn** | **02 25 27.4** | **+1.4** |
| | baz=13 | | | | | | |
| **335A** | **Moody** | **12.68** | **48** | P | **Pn** | **02 25 26.9** | **+0.9** |
| | baz=13,SNR=21 | | | | | | |
| **NEE2** | **Needles Airpor** | **12.75** | **336** | P | **Pn** | **02 25 27.2** | **+0.3** |
| | baz=13 | | | | | | |
| **Z32A** | **Haskell** | **12.80** | **36** | P | **Pn** | **02 25 28.3** | **+0.7** |
| | baz=13,SNR=61 | | | | | | |
| **537A** | **Green Hill Far** | **12.82** | **55** | P | **Pn** | **02 25 28.1** | **+0.2** |
| | baz=13 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **12.83** | **51** | P | **Pn** | **02 25 26.2** | **-1.8** |
| | baz=13 | | | | | | |
| **Y31A** | **Rekieta Farm,** | **12.91** | **32** | P | **Pn** | **02 25 30.7** | **+1.6** |
| | baz=13,SNR=17 | | | | | | |
| **MURC** | **Murrieta** | **12.93** | **325** | P | **Pn** | **02 25 29.9** | **+0.5** |
| | baz=13,SNR=9.7 | | | | | | |
| **X30A** | **Coker Ranch, T** | **13.03** | **29** | P | **Pn** | **02 25 32.4** | **+1.7** |
| | baz=13,SNR=28 | | | | | | |
| **AMTX** | **Amarillo** | **13.07** | **25** | P | **Pn** | **02 25 32.7** | **+1.4** |
| | baz=13 | | | | | | |
| **AMTX** | **Amarillo** | **13.07** | **25** | *e*Pn | **Pn** | **02 25 32.6** | **+1.4** |
| **134A** | **White-Moore Ra** | **13.08** | **42** | P | **Pn** | **02 25 31.8** | **+0.4** |
| | baz

SNCC **San Nicolas Is** 14.00 318 *e*Pn Pn 02 25 44.4 +0.4
136A **Ennis** 14.01 46 P Pn 02 25 44.9 +0.8
baz=14
DECC **Green Verdugo** 14.03 324 P Pn 02 25 46.9 +2.5
baz=14
539A **Cross D Ranch,** 14.06 58 P Pn 02 25 42.4 -2.4
baz=14
U27A **Thompson Grove** 14.06 19 P Pn 02 25 45.3 +0.4
baz=14
W31A **Holland Ranch,** 14.06 30 P Pn 02 25 46.6 +1.7
baz=14,SNR=16
CMIG **Matias Romero** 14.08 113 Pn Pn 02 25 46.0 +0.9
comp=Z,0.2nm,0.3s,baz=289,slow=11,SNR=21
CMIG Lg Lg 02 29 53.4
baz=99,slow=19,SNR=2.4
CMIG LR LR 02 30 24.2
comp=Z,7µm,20.4s,baz=274,slow=34
Z35A **Perchaven, San** 14.10 42 P Pn 02 25 44.8 -0.7
baz=14
GSC **Goldstone** 14.11 331 *e*P Pn 02 25 46.9 +1.3
GSC **Goldstone** 14.11 331 P Pn 02 25 46.5 +0.9
baz=14,SNR=59
GSC **Goldstone** 14.11 331 *e*Pn Pn 02 25 46.9 +1.3
U28A **Mallet** 14.21 21 P Pn 02 25 48.1 +1.2
baz=14,SNR=8.8
237A **Washetta, Mont** 14.22 49 P Pn 02 25 46.2 -0.7
baz=14
338A **Crockett** 14.22 52 P Pn 02 25 46.7 -0.3
baz=14
V30A **Spur Ranch, Mi** 14.23 26 P Pn 02 25 47.6 +0.4
baz=14
Y34A **Reagan Ranch,** 14.24 39 P Pn 02 25 47.5 +0.2
baz=14,SNR=14
X33A **Lawton** 14.27 35 P Pn 02 25 46.5 -1.1
baz=14
WMOK **Wichita Mounta** 14.27 34 *e*P Pn 02 25 47.3 -0.4
WMOK **Wichita Mounta** 14.27 34 *e*Pn Pn 02 25 47.3 -0.4
T25A **Trinidad** 14.34 13 P Pn 02 25 51.0 +2.1
baz=14,SNR=9.7
T25A **Trinidad** 14.34 13 *e*Pn Pn 02 25 51.6 +2.8
439A **Center Grove,** 14.34 55 P Pn 02 25 46.8 -1.9
baz=14
EDW2 **Edwards Air Fo** 14.34 327 P Pn 02 25 49.9 +1.2
baz=14,SNR=29
W32A **Sentinel** 14.34 32 P Pn 02 25 48.8 +0.1
baz=14,SNR=15
SHOC **Shoshone** 14.39 333 P Pn 02 25 50.4 +1.0
baz=14,SNR=56
SHPR **Sheep Range** 14.50 338 *e*Pn Pn 02 25 52.5 +1.5
OSI **Osito Adit** 14.52 324 P Pn 02 25 51.0 -0.2
baz=14
OSI **Osito Adit** 14.52 324 *e*Pn Pn 02 25 51.6 +0.5
T26A **Comanche Natio** 14.56 16 P Pn 02 25 52.2 +0.4
baz=15,SNR=19
Z36A **Blue Ridge** 14.58 44 P Pn 02 25 50.6 -1.2
baz=15
V31A **Spring Creek L** 14.60 29 P Pn 02 25 55.2 +3.0
baz=15
137A **Heron Place, G** 14.60 47 P Pn 02 25 51.5 -0.7
baz=15
Y35A **Marietta** 14.63 41 P Pn 02 25 51.8 -0.7
baz=15,SNR=17
LRMC **Laurel Mountai** 14.67 329 P Pn 02 25 53.6 +0.4
baz=15,SNR=50
X34A **Smith Ranch, M** 14.67 37 P Pn 02 25 53.0 -0.2
baz=15,SNR=18
T27A **Campo** 14.69 18 P Pn 02 25 52.3 -1.2
baz=15
238A **Jacksonville** 14.70 50 P Pn 02 25 52.7 -0.9
baz=15,SNR=6.6
SDCO **Great Sand Dun** 14.74 9 P Pn 02 25 55.6 +1.3
baz=15,SNR=92
SDCO **Great Sand Dun** 14.74 9 *e*Pn Pn 02 25 57.3 +3.0
W33A **Caddo, Fort Co** 14.75 34 P Pn 02 25 54.5 +0.2
baz=15,SNR=9.9
339A **Huntington** 14.76 54 P Pn 02 25 52.5 -1.8
baz=15
PV05 **Paradox Valley** 14.86 358 *e*Pn Pn 02 25 58.2 +2.2
NATX **Nacogdoches** 14.90 52 P Pn 02 25 53.9 -2.3
baz=15
PV01 **Paradox Valley** 14.91 360 *e*Pn Pn 02 25 57.5 +1.0
U30A **WK&E Inc. Balk** 14.91 25 P P 02 25 59.5 -2.7
baz=15,SNR=9.2
V32A **Arapaho** 14.92 31 P Pn 02 25 58.1 +1.6
baz=15,SNR=20
T28A **Walsh** 14.92 20 P Pn 02 25 58.5 +1.8
baz=15,SNR=25
440A **Kirbyville** 14.93 57 P Pn 02 25 54.8 -1.9
baz=15
CCUT **Cedar City** 14.94 345 *e*Pn Pn 02 25 59.4 +2.4
SBC **Santa Barbara** 14.95 321 P Pn 02 25 54.2 -2.7
baz=15
ARVC **Arvin** 14.96 325 P Pn 02 25 57.5 +0.3
baz=15,SNR=20
X35A **Drake** 15.01 39 P Pn 02 25 57.2 -0.6
baz=15,SNR=10
MPMC **Manual Prospec** 15.05 331 P Pn 02 25 58.6 +0.1
baz=15,SNR=117
Z37A **Pogue Cattle C** 15.05 46 P Pn 02 25 57.1 -1.2
baz=15
Y36A **Durant** 15.08 42 P Pn 02 25 58.8 +0.1
baz=15,SNR=7.6
138A **Matatall Enter** 15.09 48 P Pn 02 25 58.6 -0.2
baz=15
U31A **Nine Bar Ranch** 15.10 28 P Pn 02 26 01.0 +2.1
baz=15,SNR=7.1
FURC **Furnace Creek,** 15.12 333 P Pn 02 25 59.3 +0.1
baz=15,SNR=47
PV10 **Paradox Valley** 15.16 358 *e*Pn Pn 02 26 00.1 +0.1
239A **Gary** 15.17 52 P Pn 02 25 59.6 -0.3
baz=15
W34A **Bridge Creek,** 15.18 35 P Pn 02 25 59.4 -0.6
baz=15
W34A **Bridge Creek,** 15.18 35 *e*Pn Pn 02 25 59.3 -0.7
comp=Z,58nm,0.9s
ISA **Isabella** 15.20 327 P Pn 02 26 00.2 -0.2
baz=15,SNR=25
S27A **Las Animas** 15.22 17 P Pn 02 26 02.0 +1.4
baz=15
T29A **Hugoton** 15.23 22 P Pn 02 26 02.0 +1.3
baz=15,SNR=13
PV09 **Paradox Valley** 15.28 358 *e*Pn Pn 02 26 03.1 +1.4
TPNV **Topopah Spring** 15.29 336 *e*P Pn 02 26 02.7 +1.1
TPNV pmax pmax
comp=Z,1µm,1.9s
TPNV **Topopah Spring** 15.29 336 P Pn 02 26 02.8 +1.1
baz=15,SNR=74
TPNV **Topopah Spring** 15.29 336 *e*Pn Pn 02 26 02.7 +1.1
comp=Z,1µm,1.9s
340A **Bronson** 15.30 54 P Pn 02 25 59.4 -2.2
baz=15,SNR=15
PKM **Peak Mountain** 15.33 322 P Pn 02 26 02.4 +0.2
baz=15,SNR=12
V33A **Lossen Ranch,** 15.37 33 P Pn 02 26 03.3 +0.8
baz=16,SNR=16
T30A **Plains** 15.41 24 P Pn 02 26 03.5 +0.4
baz=16
S28A **Manter** 15.42 20 P P 02 26 05.8 -2.1
baz=16,SNR=60
U32A **Winter Ranch,** 15.48 30 P Pn 02 26 05.5 +1.5
baz=16,SNR=8.7
X36A **Centrahoma** 15.50 40 P Pn 02 26 03.4 -0.8
baz=16,SNR=28
Z38A **Mt. Pleasant** 15.51 47 P Pn 02 26 03.1 -1.3
baz=16
Y37A **Hugo** 15.55 43 P Pn 02 26 04.2 -0.7
baz=16
139A **Bunkhouse Ranc** 15.59 50 P Pn 02 26 03.5 -1.8
baz=16
W35A **Tecumseh** 15.61 38 P Pn 02 26 05.0 -0.6
baz=16,SNR=19
CWC **Cottonwood Cre** 15.63 330 P Pn 02 26 05.8 -0.3
baz=16,SNR=40
VES **Vestal, Richgr** 15.65 326 P Pn 02 26 05.5 -0.6
baz=16,SNR=22
S29A **Ulysses** 15.71 22 P Pn 02 26 08.7 +1.8
baz=16,SNR=24
SMMC **Simmler** 15.74 323 P Pn 02 26 06.7 -0.6
baz=16,SNR=17
V34A **Guthrie** 15.77 34 P Pn 02 26 07.2 -0.6
baz=16,SNR=30
V34A **Guthrie** 15.77 34 *e*Pn Pn 02 26 07.3 -0.5
comp=Z,318nm,1.1s
GRAC **Grapevine Rang** 15.79 333 P Pn 02 26 08.2 +0.2
baz=16,SNR=51
T31A **Randall Ranch,** 15.79 27 P Pn 02 26 08.9 +0.9
baz=16,SNR=18
R27A **Eads** 15.81 16 P Pn 02 26 09.7 +1.4
baz=16,SNR=71
U33A **Lingo Farm, Me** 15.94 32 P Pn 02 26 09.8 -0.1
baz=16
S30A **Montezuma** 15.96 24 P Pn 02 26 11.2 +1.0
baz=16,SNR=8.4
W36A **Wetumka** 15.97 39 P Pn 02 26 09.4 -0.9
baz=16,SNR=15
Q24A **Divide** 15.98 9 P Pn 02 26 11.9 +1.1
baz=16,SNR=26
Q24A **Divide** 15.98 9 *e*Pn P 02 26 12.9 -1.4
comp=Z,173nm,1.4s
SRU **San Rafael** 15.98 354 *e*P Pn 02 26 12.1 +1.5
SRU pmax pmax
comp=Z,102nm,1.1s
SRU **San Rafael** 15.98 354 *e*Pn Pn 02 26 12.1 +1.5
comp=Z,102nm,1.1s
SMCO **Snowmass** 16.00 4 *e*Pn P 02 26 13.3 -1.2
comp=Z,448nm,1.4s
Z39A **Irene McRaven,** 16.05 48 P Pn 02 26 10.1 -1.3
baz=16
V35A **Meyer Ranch, C** 16.08 36 P Pn 02 26 11.5 -0.2
baz=16,SNR=20
RCTC **Rector, Farmer** 16.09 327 P Pn 02 26 12.0 +0.1
baz=16,SNR=19
Y38A **Idabel** 16.09 45 P Pn 02 26 11.1 -0.7
baz=16
X37A **Clayton** 16.11 42 P Pn 02 26 11.6 -0.4
baz=16,SNR=13
R28A **Tribune** 16.14 19 P Pn 02 26 12.7 +0.1
baz=16,SNR=47
T32A **Huddler Ranch,** 16.18 28 P Pn 02 26 13.8 +0.8
baz=16,SNR=14
TIN **Tinemaha** 16.21 331 P Pn 02 26 13.6 +0.2
baz=16,SNR=8.5
U34A **Anderson Ranch** 16.23 33 P Pn 02 26 13.7 0.0
baz=16,SNR=32
R11A **Troy Canyon, C** 16.32 340 P Pn 02 26 16.0 +1.1
baz=16,SNR=97
S31A **Mullinville** 16.32 26 P P 02 26 16.8 -0.9
baz=16,SNR=20
P17A **Butcher Ranch,** 16.36 354 *e*Pn Pn 02 26 16.8 +1.3
comp=Z,472nm,2.0s
T33A **Patterson Ranc** 16.40 30 P Pn 02 26 16.9 +1.1
baz=16,SNR=10
R29A **Marienthal** 16.43 21 P Pn 02 26 17.2 +1.0
baz=17,SNR=23
W37A **Quinton** 16.44 41 P Pn 02 26 15.9 -0.4
baz=17,SNR=28
P18A **Preston Nutter** 16.47 355 *e*Pn Pn 02 26 17.5 +0.5
comp=Z,349nm,1.2s
X38A **Whitesboro** 16.50 43 P Pn 02 26 16.7 -0.3
baz=17,SNR=20
Y39A **Lockesburg** 16.52 46 P Pn 02 26 17.2 -0.1
baz=17,SNR=6.5
LEVU **Levan** 16.53 351 *e*Pn P 02 26 19.5 -0.8
KSCO **Kaye Shedlock'** 16.54 16 P Pn 02 26 18.4 +0.7
baz=17,SNR=10
KSCO **Kaye Shedlock'** 16.54 16 *e*Pn P 02 26 20.0 -0.3
comp=Z,263nm,1.4s
U35A **Pawnee** 16.59 35 P Pn 02 26 18.4 +0.1
baz=17,SNR=55
V36A **Jenks** 16.59 38 P Pn 02 26 18.2 0.0
baz=17,SNR=15
R30A **Dighton** 16.59 23 P Pn 02 26 19.2 +0.9
baz=17,SNR=17
MTUM **Tungsten Hills** 16.60 331 *e*Pn P 02 26 20.1 -1.0
S32A **Newby Ranch, P** 16.61 27 P P 02 26 20.1 -0.9
baz=17,SNR=21
ISCO **Idaho Springs** 16.74 8 *e*P P 02 26 22.7 -0.1
ISCO pmax pmax
comp=Z,553nm,1.8s
ISCO **Idaho Springs** 16.74 8 P P 02 26 22.2 -0.6
baz=17,SNR=116
ISCO **Idaho Springs** 16.74 8 *e*Pn P 02 26 22.7 -0.1
comp=Z,553nm,1.8s
TUL1 **Tulsa** 16.77 38 P Pn 02 26 19.8 -0.7
baz=17,SNR=26
TUL1 **Tulsa** 16.77 38 *e*Pn Pn 02 26 19.8 -0.7
comp=Z,216nm,1.3s
Q28A **Sharon Springs** 16.80 18 P Pn 02 26 21.6 +0.6
baz=17,SNR=24
T34A **McClaskey Farm** 16.86 33 P Pn 02 26 21.8 +0.1
baz=17,SNR=17
R31A **Burdett** 16.88 25 P P 02 26 23.8 -0.2
baz=17,SNR=18
Q29A **Oakley** 16.90 20 P Pn 02 26 23.2 +1.0
baz=17,SNR=52
O20A **White River Ci** 16.91 0 P P 02 26 24.4 0.0
baz=17,SNR=95
O20A **White River Ci** 16.91 0 *e*Pn P 02 26 24.2 -0.2
comp=Z,800nm,1.8s
S33A **Kaszmaul Farm,** 16.93 30 P Pn 02 26 23.5 +0.9
baz=17,SNR=12
W38A **Poteau** 16.95 43 P Pn 02 26 22.5 -0.3
baz=17,SNR=20
MLAC **Mammoth Lakes** 16.95 331 P P 02 26 24.7 -0.3
baz=17,SNR=15
MPU **Maple Canyon** 17.00 352 *e*Pn P 02 26 25.1 -0.5
comp=Z,412nm,1.7s
NLU **North Lily Min** 17.01 350 *e*Pn P 02 26 25.6 0.0
comp=Z,245nm,1.5s
LRV **Little Rabbit** 17.11 323 *e*Pn P 02 26 26.6 0.0
T35A **Sooner Cattle** 17.12 34 P Pn 02 26 24.2 -0.8
baz=17,SNR=34
V37A **Hulbert** 17.12 39 P Pn 02 26 24.0 -0.9
baz=17,SNR=15
U36A **Oologah** 17.15 37 P Pn 02 26 24.7 -0.5
baz=17,SNR=27
O16A **Springville** 17.18 352 *e*Pn Pn 02 26 11.3 -15
MIAR **Mount Ida** 17.23 46 *e*P Pn 02 26 26.3 +0.1
MIAR pmax pmax
comp=Z,58nm,1.3s
MIAR **Mount Ida** 17.23 46 P Pn 02 26 26.0 -0.3
baz=17,SNR=12
MIAR **Mount Ida** 17.23 46 *e*Pn Pn 02 26 26.3 +0.1
comp=Z,58nm,1.3s
Q30A **Quinter** 17.23 22 P Pn 02 26 26.6 +0.3
baz=17,SNR=19
CBKS **Cedar Bluff** 17.26 23 *e*P P 02 26 29.3 +1.1
CBKS pmax pmax
comp=Z,125nm,1.3s
CBKS **Cedar Bluff** 17.26 23 P Pn 02 26 27.3 +0.7
baz=17,SNR=14
CBKS **Cedar Bluff** 17.26 23 *e*Pn P 02 26 29.3 +1.1
comp=Z,125nm,1.3s
P28A **Saint Francis** 17.30 18 P P 02 26 28.5 -0.2
baz=17,SNR=13
R32A **Long Quarter,** 17.32 26 P P 02 26 28.7 -0.1
baz=18,SNR=36
DUG **Dugway** 17.37 349 *e*P P 02 26 30.1 +0.6
DUG pmax pmax
comp=Z,201nm,1.6s
DUG **Dugway** 17.37 349 P P 02 26 29.0 -0.5
baz=18,SNR=45
DUG **Dugway** 17.37 349 *e*Pn P 02 26 30.1 +0.6
comp=Z,201nm,1.6s
NV01 **Mina Array Sit** 17.39 333 *e*Pn Pn 02 26 28.2 -0.3
NVAR **Mina Array Bea** 17.39 333 P Pn 02 26 28.2 -0.3
comp=Z,0.8nm,0.3s,baz=151,slow=11,SNR=74
NVAR LR LR 02 33 04.3
comp=Z,6µm,19.3s,baz=163,slow=37
S34A **Willow Spring** 17.43 31 P Pn 02 26 29.5 +0.6
baz=18,SNR=12
U37A **Salina** 17.50 38 P Pn 02 26 28.8 -0.9
baz=18,SNR=14
R33A **Olander Ranch,** 17.53 28 P Pn 02 26 29.8 -0.2
baz=18,SNR=22
V38A **Canehill** 17.54 41 P Pn 02 26 29.5 -0.7
baz=18,SNR=60
Q31A **Ellis** 17.55 24 P Pn 02 26 30.9 +0.5
baz=18,SNR=13
T36A **Boggs Farm, Ca** 17.56 35 P Pn 02 26 29.9 -0.5
baz=18,SNR=30
P29A **Atwood** 17.57 20 P P 02 26 31.3 -0.3
baz=18,SNR=35
SAO **San Andreas Ge** 17.60 323 *e*P P 02 26 31.9 0.0
SAO pmax pmax
comp=Z,298nm,1.8s
SAO **San Andreas Ge** 17.60 323 *e*Pn P 02 26 31.9 0.0
comp=Z,298nm,1.8s
CTU **Camp Tracy** 17.69 352 *e*Pn P 02 26 33.3 +0.2
comp=Z,83nm,1.2s
P30A **Selden** 17.73 21 P P 02 26 33.1 -0.3
baz=18,SNR=11
N23A **Red Feather La** 17.79 6 P P 02 26 34.7 +0.5
baz=18,SNR=18
N23A **Red Feather La** 17.79 6 *e*Pn P 02 26 36.0 +1.7
comp=Z,451nm,2.2s
S35A **Otter Creek Ra** 17.81 33 P P 02 26 34.6 +0.4
baz=18,SNR=23
O28A **Krutsinger Ran** 17.81 17 P P 02 26 35.1 +0.7
baz=18,SNR=14
R34A **Isabella, Hill** 17.85 30 P P 02 26 35.8 +1.1
baz=18,SNR=7.7
Q32A **Meitler Ranch,** 17.86 26 P P 02 26 36.1 +1.2
baz=18,SNR=20
U38A **Gravette** 17.95 39 P Pn 02 26 32.4 -2.8
baz=18
CMB **Columbia Colle** 18.01 328 *e*P Pn 02 26 36.1 +0.1
CMB pmax pmax
comp=Z,69nm,1.4s
CMB **Columbia Colle** 18.01 328 *e*Pn Pn 02 26 36.1 +0.1
comp=Z,69nm,1.4s
P31A **Stockton** 18.01 23 P P 02 26 38.0 +1.4
baz=18
O29A **4D Ranch, Culb** 18.09 19 P P 02 26 38.3 +1.0
baz=18,SNR=21
BGU **Big Grassy Mou** 18.11 349 *e*Pn P 02 26 38.4 +0.6
comp=Z,194nm,1.5s
T37A **Cheneyville 18** 18.13 37 P Pn 02 26 34.6 -2.7
baz=18
Q33A **Connelly Farm,** 18.17 27 P P 02 26 38.2 0.0
baz=18,SNR=32
UALR **University of** 18.18 47 *e*Pn Pn 02 26 37.4 -0.6
comp=Z,108nm,1.4s
S36A **Lake Cedric, C** 18.21 34 P P 02 26 38.8 +0.1
baz=18,SNR=23
VBMS **Vicksburg** 18.22 56 P Pn 02 26 35.5 -3.0
baz=18
PHWY **Pilot Hill** 18.24 7 *e*Pn P 02 26 39.7 +0.4
comp=Z,186nm,1.6s
R35A **Emporia Munici** 18.36 32 P Pn 02 26 35.0 -5.3
baz=18
O30A **MW Ranch, Wils** 18.37 21 P P 02 26 40.8 +0.4
baz=18,SNR=9.3
SPUT **South Promonto** 18.39 350 *e*P P 02 26 42.4 +1.6
comp=Z,274nm,1.5s
P32A **Huiting Farm,** 18.39 25 P P 02 26 40.8 +0.2
baz=18,SNR=16
N28A **Pribbeno Ranch** 18.40 17 P Pn 02 26 41.6 +0.9
baz=18,SNR=7.2
ELK **Elko** 18.43 343 P P 02 26 40.9 -0.4
comp=Z,0.2nm,0.3s,baz=48,slow=0.2,SNR=73
ELK LR LR 02 33 39.4
comp=Z,9µm,20.0s,baz=315,slow=37
GZU **Grizzly Peak** 18.44 352 *e*P Pn 02 26 42.3 +0.8
Q34A **Chapman** 18.50 29 P Pn 02 26 42.7 +0.8
baz=19,SNR=15
OGNE **Ogallala** 18.52 15 P P 02 26 41.8 -0.3
baz=19
OGNE **Ogallala** 18.52 15 *e*P Pn 02 26 43.7 +1.5
comp=Z,183nm,1.4s
HWUT **Hardware Ranch** 18.56 353 *e*P Pn 02 26 43.7 +0.8
comp=Z,270nm,1.4s
RSUT **Red Spur Mount** 18.58 353 *e*P Pn 02 26 44.1 +0.9
O31A **Woolen Ranch,** 18.59 22 P P 02 26 42.9 0.0
baz=19,SNR=9.9
P33A **Williams Farm,** 18.60 27 P Pn 02 26 43.1 -0.1
baz=19,SNR=12
WVUT **Wellsville** 18.62 352 *e*P Pn 02 26 44.2 +0.6
S37A **Fort Scott** 18.64 36 P Pn 02 26 43.6 -0.1
baz=19,SNR=20
R36A **Gordon, Harris** 18.71 33 P P 02 26 44.0 -0.1
baz=19,SNR=17
BMN **Battle Mountai** 18.74 339 *e*P Pn 02 26 45.8 +0.8
BMN pmax pmax
comp=Z,131nm,1.3s
BMN **Battle Mountai** 18.74 339 *e*P Pn 02 26 45.8 +0.8
comp=Z,131nm,1.3s
N29A **Votaw Ranch, W** 18.78 19 P Pn 02 26 46.0 +0.7
baz=19,SNR=7.9
KSU1 **Kansas State U** 18.79 30 P Pn 02 26 46.4 +1.0
baz=19,SNR=12
KSU1 **Kansas State U** 18.79 30 *e*P Pn 02 26 46.5 +1.0
Q35A **Mercer Eighty,** 18.86 31 P Pn 02 26 46.6 +0.2
baz=19,SNR=12
HVU **Hansel Valley** 18.90 350 *e*P Pn 02 26 47.3 +0.3
HVU pmax pmax
comp=Z,120nm,1.2s
HVU **Hansel Valley** 18.90 350 *e*P Pn 02 26 47.3 +0.3
comp=Z,120nm,1.2s
N30A **Hueftle Ranch,** 18.91 20 P Pn 02 26 47.7 +0.7
baz=19
R37A **Teagarden Farm** 19.05 35 P Pn 02 26 48.6 0.0
baz=19
P34A **Walnut Farm, R** 19.06 28 P Pn 02 26 49.5 +0.7
baz=19,SNR=50
O32A **Brockman Farm,** 19.07 24 P P 02 26 48.0 -0.1
baz=19,SNR=10.0
M28A **Bar X Bar Ranc** 19.11 16 P P 02 26 48.3 -0.3
baz=19
O33A **Hebron** 19.18 26 P Pn 02 26 49.9 -0.4
baz=19,SNR=19
NPI **North Pocatell** 19.22 351 *e*P Pn 02 26 50.7 -0.1
Q36A **Arnold C. Orve** 19.22 32 P Pn 02 26 51.0 +0.3
baz=19
N31A **Bailey Ranch,** 19.32 22 P Pn 02 26 52.1 +0.2
baz=20
M29A **Burnside Ranch** 19.34 18 P Pn 02 26 52.1 -0.1
baz=20,SNR=7.3
P35A **Duane Minner,** 19.41 30 P Pn 02 26 53.1 +0.1
baz=20
K22A **Casper** 19.48 4 P P 02 26 53.4 +0.6
baz=20,SNR=50
K22A **Casper** 19.48 4 *e*P Pn 02 26 54.3 +0.3
comp=Z,1µm,2.0s
N32A **Stulken Farm,** 19.50 24 P P 02 26 53.1 +0.3
baz=20
BW06 **Boulder Array** 19.56 358 *e*P P 02 26 54.2 +0.6
comp=Z,430nm,1.9s
OHCM **Honcut** 19.56 328 *e*P Pn 02 26 55.5 +0.7
O34A **Beatrice** 19.64 28 P Pn 02 26 55.3 -0.5
baz=20,SNR=28
L28A **Connealy Angus** 19.64 15 P P 02 26 54.7 +0.2
baz=20
AHID **Auburn Hatcher** 19.66 354 *e*P P 02 26 55.3 +0.6
comp=Z,111nm,1.1s
M30A **Dale-Ortello V** 19.66 19 P P 02 26 54.9 +0.2
baz=20
Q37A **Longview Farm,** 19.67 34 P Pn 02 26 56.0 -0.1
baz=20,SNR=11
HBAR **Harrisburg** 19.76 47 *e*P Pn 02 26 57.9 +0.7
M31A **Lambtecht Ranc** 19.77 21 P P 02 26 56.3 +0.5
baz=20,SNR=20
N33A **J Bar K, Exete** 19.80 25 P P 02 26 56.6 +0.5
baz=20,SNR=5.8
P36A **Good Intent, A** 19.86 31 P Pn 02 26 58.0 -0.3
baz=20,SNR=11
L29A **Maesberg Ranch** 19.97 18 P P 02 26 57.7 -0.3
baz=20
O35A **Humboldt** 20.05 29 P Pn 02 26 60.0 -0.6
baz=20,SNR=9.6
L30A **Spencer Herefo** 20.08 19 P P 02 26 58.9 -0.3
baz=20
OXF **Oxford** 20.09 52 *e*P P 02 26 58.8 -0.5
OXF pmax pmax
comp=Z,165nm,1.4s
OXF MLR MLR
comp=Z,11µm,21.0s
OXF **Oxford** 20.09 52 *e*P P 02 26 58.8 -0.5
comp=Z,165nm,1.4s
OXF LR LR
comp=Z,11µm,21.0s
HOPS **Hopland** 20.10 325 *e*P Pn 02 27 00.7 -0.6
comp=Z,456nm,2.0s
HOPS LR LR
comp=Z,10µm,20.0s
BGNE **Belgrade** 20.12 23 P P 02 27 00.3 +0.8
baz=20,SNR=25
BGNE **Belgrade** 20.12 23 *e*P Pn 02 27 01.6 +0.1
comp=Z,657nm,1.4s
N34A **Lincoln** 20.27 27 P P 02 27 02.1 +0.9
baz=20,SNR=16
K28A **Ten Mile Ranch** 20.35 15 P P 02 27 02.8 +0.7
baz=20,SNR=16
O36A **Bolckow** 20.38 31 P Pn 02 27 03.5 -0.9
baz=20,SNR=14
GNAR **Gosnell** 20.42 47 *e*P Pn 02 27 05.0 0.0
LOHW **Long Hollow** 20.46 355 *e*P P 02 27 04.1 +0.7
comp=Z,329nm,1.6s
O03D **Paynes Creek** 20.47 330 P P 02 27 04.0 +0.6
baz=20,SNR=42
SNET **Serv Nac Est T** 20.49 114 PFAKE 02 27 20.0 +14
SNET LR LR
comp=Z,8µm,19.0s
J25A **Sunshine Ranch** 20.52 10 P P 02 27 04.6 +0.6

baz=21,SNR=12
**FXWY Fox Creek 20.52 355** PFAKE 02 27 20.0 +14
FXWY LR LR
comp=Z,7µm,18.0s
**BRAL Brewton 20.54 63** PFAKE 02 27 20.0 +14
BRAL LR LR
comp=Z,4µm,20.0s
**J26A Sides Ranch, S 20.56 11** P **P 02 27 05.3 +0.9**
baz=21,SNR=39
**L31A Butterfield Fa 20.57 21** P Pn 02 27 05.8 -0.8
baz=21,SNR=21
**PBMO Poplar Bluff 20.61 45** eP **P 02 27 05.9 +1.0**
comp=Z,137nm,1.5s
PBMO LR LR
comp=Z,16µm,22.0s
**M33A Taylor Creek F 20.61 25** P **P 02 27 03.2 -1.8**
baz=21
**N35A Tabor 20.66 28** P Pn 02 27 07.0 -0.7
baz=21,SNR=20
**K29A Lazy Trails An 20.66 17** P **P 02 27 06.2 +0.8**
baz=21
**L32A Elgin 20.69 22** P Pn 02 27 08.1 -0.1
baz=21,SNR=5.2
**J27A Elkhorn Farm, 20.71 13** P Pn 02 27 07.7 -0.8
baz=21,SNR=30
**IMW Indian Meadow 20.77 355** eP **P 02 27 07.3 +0.4**
comp=Z,211nm,1.1s
**K30A Basset 20.78 19** P Pn 02 27 08.1 -1.0
baz=21,SNR=18
**M34A Aspy Farms, Fr 20.79 26** P Pn 02 27 08.3 -1.0
baz=21,SNR=8.1
**HALT Halls 20.85 48** eP **P 02 27 07.3 -0.2**
**KCPM Cahto Peak 20.88 326** eP Pn 02 27 11.7 +1.2
comp=Z,152nm,1.3s
KCPM LR LR
comp=Z,5µm,20.0s
**CCM Cathedral Cave 20.89 41** eP **P 02 27 08.7 +0.8**
CCM pmax pmax
comp=Z,46nm,1.1s
CCM MLR MLR
comp=Z,15µm,18.0s
**CCM Cathedral Cave 20.89 41** eP **P 02 27 08.7 +0.8**
comp=Z,46nm,1.1s
CCM LR LR
comp=Z,15µm,18.0s
**KIPM Iron Peak 20.92 326** eP **P 02 27 09.2 +0.8**
**HLID Hailey 20.93 348** P **P 02 27 09.0 +0.6**
baz=21,SNR=37
**HLID Hailey 20.93 348** PFAKE 02 27 20.0 +9.0
HLID LR LR
comp=Z,6µm,21.0s
**FLWY Flagg Ranch 20.93 355** eP **P 02 27 09.4 +0.8**
comp=Z,152nm,1.0s
**PARMO Parma 20.99 46** eP Pn 02 27 11.1 -0.5
**K31A O'Neill 21.00 20** P **P 02 27 10.0 +0.9**
baz=21,SNR=18
**WVOR Wild Horse Val 21.00 339** eP **P 02 27 09.1 -0.2**
WVOR pmax pmax
comp=Z,224nm,1.4s
WVOR MLR MLR
comp=Z,7µm,18.0s
**WVOR Wild Horse Val 21.00 339** eP **P 02 27 09.1 -0.2**
comp=Z,224nm,1.4s
WVOR LR LR
comp=Z,7µm,18.0s
**WDC Whiskeytown Da 21.04 329** eP **P 02 27 09.2 -0.3**
WDC pmax pmax
comp=Z,118nm,1.4s
WDC MLR MLR
comp=Z,4µm,22.0s
**WDC Whiskeytown Da 21.04 329** eP **P 02 27 09.2 -0.3**
comp=Z,118nm,1.4s
WDC LR LR
comp=Z,4µm,22.0s
**J28A Allard Ranch, 21.05 15** P **P 02 27 10.5 +0.8**
baz=21,SNR=46
**GLAT Glass 21.08 47** eP **P 02 27 11.1 +1.1**
**MCID Moose Creek 21.08 354** eP **P 02 27 11.0 +0.8**
**MFID Camas Ranch 21.09 345** eP **P 02 27 10.8 +0.6**
comp=Z,66nm,1.1s
MFID LR LR
comp=Z,8µm,21.0s
**L33A Hoskins 21.10 24** P **P 02 27 12.5 +2.3**
baz=21
**M35A Neola 21.13 27** P **P 02 27 11.0 +0.5**
baz=21,SNR=7.4
**I25A Rochford 21.14 9** P **P 02 27 11.4 +0.6**
baz=21,SNR=19
**RSSD Black Hills 21.20 9** eP **P 02 27 12.0 +0.6**
RSSD pmax pmax
comp=Z,146nm,1.7s
**RSSD Black Hills 21.20 9** eP **P 02 27 12.0 +0.6**
comp=Z,146nm,1.7s
**YTP The Promontory 21.21 356** eP **P 02 27 11.8 +0.1**
**H17A Grant Village 21.24 356** P **P 02 27 12.8 +0.9**
baz=21,SNR=39
**H17A Grant Village 21.24 356** eP **P 02 27 13.0 +1.1**
comp=Z,272nm,1.5s
**J29A Okreek 21.26 16** P **P 02 27 13.6 +1.7**
baz=21,SNR=35
**LRAL Lakeview Retre 21.27 58** eP **P 02 27 12.8 +0.8**
comp=Z,84nm,1.3s
**L34A Svendsen Farm, 21.27 25** P **P 02 27 12.8 +0.8**
baz=21
**K32A Verdigre 21.29 22** P **P 02 27 11.9 -0.2**
baz=21
**I26A New Underwood 21.30 11** P **P 02 27 13.4 +1.0**
baz=21,SNR=21
**YFT Old Faithful 21.31 355** eP **P 02 27 14.9 +2.2**
comp=Z,593nm,1.9s
**KMRM Mail Ridge 21.34 326** eP **P 02 27 15.8 +2.9**
comp=Z,427nm,1.5s
**UTMT University of 21.41 48** eP **P 02 27 15.0 +1.5**
comp=Z,126nm,1.0s
**J30A Dallas 21.41 18** P **P 02 27 14.3 +0.8**
baz=22,SNR=17
**N02D Trinity Center 21.43 329** P **P 02 27 14.7 +1.0**
baz=22
**I27A Quinn 21.49 13** P **P 02 27 14.9 +0.5**
baz=22,SNR=23
**YPM Purple Mountai 21.52 355** eP **P 02 27 16.3 +1.3**
**YMR Madison River 21.54 355** eP **P 02 27 16.2 +1.2**
comp=Z,168nm,1.1s
**K33A Hardington 21.58 23** P **P 02 27 16.1 +0.8**
baz=22
**J31A Geddes 21.60 19** P **P 02 27 15.9 +0.3**
baz=22
**I28A Midland 21.61 14** P **P 02 27 16.7 +1.1**
baz=22,SNR=18
**YHH Holmes Hill 21.65 355** eP **P 02 27 17.3 +0.9**
**M04C Macdoel 21.68 332** P **P 02 27 16.7 +0.1**
baz=22,SNR=16
**L35A Bielow Farm, R 21.73 27** P **P 02 27 17.2 +0.3**
baz=22
**QLMT Earthquake Lak 21.74 354** eP **P 02 27 18.5 +1.3**
**H25A Fruitdale 21.75 9** P **P 02 27 18.4 +1.1**
baz=22,SNR=27
**J08A Circle Bar Ran 21.78 340** eP **P 02 27 18.2 +0.7**
comp=Z,72nm,1.0s
J08A LR LR
comp=Z,7µm,19.0s
**I29A Vivian Onida 21.84 16** P **P 02 27 18.9 +0.8**
baz=22,SNR=6.9
**KHMM Horse Mountain 21.84 327** eP **P 02 27 19.8 +1.5**
comp=Z,140nm,1.2s
KHMM LR LR
comp=Z,9µm,19.0s
**SLM Saint Louis 21.87 41** eP **P 02 27 19.6 +1.1**
SLM pmax pmax
comp=Z,108nm,1.2s
**SLM Saint Louis 21.87 41** eP **P 02 27 19.6 +1.1**
comp=Z,108nm,1.2s
**MCMT McKenzie Canyo 21.90 352** eP **P 02 27 20.4 +1.4**
**RLMT Red Lodge 21.90 358** P **P 02 27 19.1 +0.1**
baz=22,SNR=22
**RLMT Red Lodge 21.90 358** eP **P 02 27 17.0 -2.0**
comp=Z,179nm,1.4s
RLMT LR LR
comp=Z,4µm,20.0s
**SIUC Southern Illin 21.94 44** eP **P 02 27 20.0 +0.7**
comp=Z,360nm,1.6s
SIUC LR LR
comp=Z,16µm,21.0s
**J32A Parkston 21.96 21** P **P 02 27 19.2 -0.2**
baz=22
**I30A Oacoma 21.97 18** P **P 02 27 19.8 +0.3**
baz=22

**TGUH Tegucigalpa,Un 21.98 111** eP **P 02 27 22.9 +3.2**
comp=Z,62nm,1.2s
TGUH LR LR
comp=Z,12µm,22.0s
**K34A Le Mars 21.99 25** P **P 02 27 21.9 +2.1**
baz=22,SNR=14
**WVT Waverly 22.01 49** eP **P 02 27 19.5 -0.5**
WVT pmax pmax
comp=Z,56nm,1.0s
**WVT Waverly 22.01 49** eP **P 02 27 19.5 -0.5**
comp=Z,56nm,1.0s
**H27A Howes 22.02 12** P **P 02 27 20.9 +0.8**
baz=22,SNR=18
**YBH Yreka Blue Hor 22.02 330** P **P 02 27 18.6 -1.6**
comp=Z,6.2nm,0.8s,baz=162,slow=3.2,SNR=3.3
YBH LR LR 02 35 25.7
comp=Z,3µm,21.4s,baz=160,slow=36
**YBH Yreka Blue Hor 22.02 330** PFAKE 02 27 30.0 +10
YBH LR LR
comp=Z,3µm,21.0s
**K05A Summer Lake 22.08 335** eP **P 02 27 21.9 +1.0**
comp=Z,279nm,1.3s
K05A LR LR
comp=Z,5µm,18.0s
**J33A Davis 22.21 23** P **P 02 27 21.9 -0.2**
baz=22
**H28A Mission Ridge 22.29 14** P **P 02 27 22.2 -0.8**
baz=22
**I31A Royce, Wessing 22.34 19** P **P 02 27 23.2 -0.2**
baz=22
**K04D Chiloquin, OR 22.34 333** P **P 02 27 22.6 -1.0**
baz=22
**G25A Newell 22.34 9** P **P 02 27 23.6 +0.1**
baz=22,SNR=34
**K35A Storm Lake 22.36 26** P **P 02 27 24.0 +0.2**
baz=22
**H29A Onida 22.43 16** P **P 02 27 25.2 +0.8**
baz=23
**J34A George 22.55 24** P **P 02 27 27.0 +1.2**
baz=23
**BOZ Bozeman (W) 22.57 354** eP **P 02 27 26.8 +0.8**
BOZ pmax pmax
comp=Z,130nm,1.4s
BOZ MLR MLR
comp=Z,7µm,20.0s
**BOZ Bozeman (W) 22.57 354** P **P 02 27 26.1 +0.1**
baz=23,SNR=20
**BOZ Bozeman (W) 22.57 354** eP **P 02 27 26.8 +0.8**
comp=Z,130nm,1.4s
BOZ LR LR
comp=Z,7µm,20.0s
**G26A Maurine 22.57 11** P **P 02 27 26.6 +0.6**
baz=23,SNR=15
**GCMT Greycliff 22.58 358** eP **P 02 27 26.6 +0.4**
**SCIA State Center 22.59 31** eP **P 02 27 26.7 +0.5**
comp=Z,309nm,1.8s
SCIA LR LR
comp=Z,1µm,20.0s
**SUSD South Dakota S 22.59 18** P **P 02 27 26.4 +0.2**
baz=23
**K36A Gilmore City 22.62 28** P **P 02 27 27.6 +1.1**
baz=23,SNR=7.9
**I32A Karley and Nic 22.67 21** P **P 02 27 27.8 +0.7**
baz=23
**J05D Fort Rock, OR 22.68 335** P **P 02 27 27.3 0.0**
baz=23,SNR=21
**G28A Parade 22.69 14** P **P 02 27 28.0 +0.7**
baz=23
**ECSD EROS Data Cent 22.70 23** P **P 02 27 27.7 +0.4**
baz=23,SNR=27
**ECSD EROS Data Cent 22.70 23** eP **P 02 27 28.4 +1.1**
comp=Z,815nm,2.5s
ECSD LR LR
comp=Z,800nm,21.0s
**I07A Izee 22.76 339** eP **P 02 27 27.8 -0.2**
comp=Z,84nm,1.5s
I07A LR LR
comp=Z,6µm,18.0s
**H31A Wolsey 22.76 19** P **P 02 27 28.2 +0.3**
baz=23
**L02D Cave Junction, 22.77 330** P **P 02 27 25.5 -2.5**
baz=23
**G27A Dupree 22.77 12** P **P 02 27 28.3 +0.2**
baz=23,SNR=12
**BMO Blue Mountains 22.81 344** eP **P 02 27 28.5 -0.1**
comp=Z,565nm,2.3s
BMO LR LR
comp=Z,6µm,20.0s
**LRM Limekiln Ridge 22.83 353** eP **P 02 27 29.3 +0.4**
**I33A Coleman 22.91 22** P **P 02 27 30.3 +0.8**
baz=23
**J35A Milford 22.91 25** P **P 02 27 31.3 +1.8**
baz=23
**SWET Sewanee 22.95 53** eP **P 02 27 30.1 0.0**
comp=Z,252nm,1.9s
SWET LR LR
comp=Z,6µm,20.0s
**J04D Umpqua Nationa 22.99 334** P **P 02 27 30.0 -0.6**
baz=23
**G29A Hoven 23.03 15** P **P 02 27 31.1 +0.3**
baz=23
**F25A Bowman 23.05 9** P **P 02 27 31.4 +0.4**
baz=23,SNR=20
**K37A Belmond 23.08 29** P **P 02 27 31.5 +0.2**
baz=23
**USIN University of 23.09 46** eP **P 02 27 32.5 +1.0**
comp=Z,372nm,1.3s
**F26A Lodgepole 23.10 10** P **P 02 27 31.7 +0.2**
baz=23,SNR=32
**KBO Bosley Butte 23.10 329** PFAKE 02 27 40.0 +8.3
KBO LR LR
comp=Z,8µm,22.0s
**H32A Carlson Farm, 23.11 20** P **P 02 27 31.3 -0.2**
baz=23
**G30A Faulkton 23.17 17** P **P 02 27 32.1 -0.1**
baz=23,SNR=7.0
**F27A Lemmon 23.23 11** P **P 02 27 32.3 -0.5**
baz=23,SNR=28
**J36A Seneca 1, Swea 23.23 27** P **P 02 27 32.6 -0.2**
baz=23
**I34A Hadley 23.24 23** P **P 02 27 33.2 +0.3**
baz=23
**OLIL Olney 23.25 43** eP **P 02 27 32.5 -0.5**
comp=Z,150nm,1.1s
**K38A Parkersburg 23.37 30** P **P 02 27 34.6 +0.3**
baz=24
**I35A Creekview Farm 23.41 25** P **P 02 27 36.6 +1.9**
baz=24
**F28A McLaughlin 23.45 13** P **P 02 27 35.8 +0.8**
baz=24,SNR=5.1
**H33A Prehn Over Nor 23.49 21** P **P 02 27 32.2 -3.2**
baz=24
**TIGA Tifton 23.52 64** P **P 02 27 35.3 -0.5**
baz=24,SNR=15
**TIGA Tifton 23.52 64** eP **P 02 27 36.5 +0.7**
comp=Z,244nm,1.4s
TIGA LR LR
comp=Z,2µm,22.0s
**G31A Conde 23.52 18** P **P 02 27 34.6 -1.1**
baz=24
**LAO LASA Array 23.52 4** P **P 02 27 34.6 -1.2**
baz=24
**LAO LASA Array 23.52 4** PFAKE 02 27 50.0 +14
LAO LR LR
comp=Z,7µm,20.0s
**J37A Redenius Farm, 23.55 28** P **P 02 27 35.3 -0.7**
baz=24
**I04A Tendick Farm, 23.57 334** P **P 02 27 33.5 -2.8**
baz=24
**E25A Miller Ranch, 23.62 9** P **P 02 27 36.6 -0.1**
baz=24,SNR=20
**I05D Terrebonne, OR 23.62 336** P **P 02 27 36.3 -0.5**
baz=24,SNR=15
**HRY Holter Researc 23.64 354** eP **P 02 27 37.2 +0.2**
**F29A Eureka 23.66 15** P **P 02 27 36.8 -0.2**
baz=24
**KEBM Edson Butte 23.66 330** eP **P 02 27 36.8 -0.5**
comp=Z,467nm,1.4s
KEBM LR LR
comp=Z,8µm,20.0s
**HDIL Hopedale 23.67 38** P **P 02 27 37.9 +0.8**
baz=24,SNR=9.2
**HDIL Hopedale 23.67 38** PFAKE 02 27 50.0 +13
HDIL LR LR
comp=Z,11µm,20.0s
**G08A Pilot Rock 23.67 341** eP **P 02 27 35.1 -2.2**
comp=Z,99nm,1.8s
G08A LR LR

comp=Z,6µm,19.0s
**E26A Carlson Angus 23.73 10** P **P 02 27 38.3 +0.5**
baz=24,SNR=12
**G32A Webster 23.76 19** P **P 02 27 36.8 -1.3**
baz=24
**H34A Spellman Lake, 23.81 23** P **P 02 27 37.7 -0.8**
baz=24
**F10A Beach Ranch, E 23.84 345** eP **P 02 27 38.2 -0.6**
comp=Z,67nm,1.1s
F10A LR LR
comp=Z,7µm,18.0s
**E27A Carson 23.85 12** P **P 02 27 39.4 +0.4**
baz=24,SNR=15
**F30A Leola 23.86 16** P **P 02 27 38.7 -0.3**
baz=24
**I03D Drain, OR 23.88 333** P **P 02 27 35.8 -3.4**
baz=24
**I36A Fitzsimmons Fa 23.93 26** P **P 02 27 41.9 +2.2**
baz=24
**CHMT Chamberlain Mo 24.00 352** eP **P 02 27 40.1 -0.5**
**MSO Missoula 24.01 351** P **P 02 27 40.2 -0.4**
baz=24,SNR=37
**MSO Missoula 24.01 351** eP **P 02 27 40.7 +0.2**
comp=Z,87nm,1.1s
MSO LR LR
comp=Z,7µm,20.0s
**J38A Wedel Dairy, R 24.03 30** P **P 02 27 38.7 -2.0**
baz=24
**G33A Ortonville 24.04 21** P **P 02 27 39.9 -0.9**
baz=24
**F31A Hecla 24.09 18** P **P 02 27 39.3 -1.9**
baz=24
**CPCT Cooper Cave 24.10 54** eP **P 02 27 41.9 +0.6**
**WCI Wyandotte Cave 24.14 46** PFAKE 02 27 50.0 +8.2
WCI LR LR
comp=Z,6µm,20.0s
**G06A Carlson Farm, 24.15 339** eP **P 02 27 42.9 +1.1**
comp=Z,408nm,2.3s
G06A LR LR
comp=Z,6µm,19.0s
**E28A Huff 24.16 13** P **P 02 27 42.1 +0.2**
baz=24,SNR=18
**GOGA Godfrey 24.17 60** eP **P 02 27 42.3 +0.2**
GOGA pmax pmax
comp=Z,187nm,1.9s
GOGA MLR MLR
comp=Z,10µm,21.0s
**GOGA Godfrey 24.17 60** eP **P 02 27 42.3 +0.2**
comp=Z,187nm,1.9s
GOGA LR LR
comp=Z,10µm,21.0s
**H35A Sunnyside Ranc 24.18 24** P **P 02 27 42.4 +0.4**
baz=24,SNR=20
**I37A Lemond, Waseca 24.18 27** P **P 02 27 42.1 +0.1**
baz=24,SNR=14
**H04A Detroit Lake 24.23 336** eP **P 02 27 42.3 -0.3**
comp=Z,138nm,1.4s
H04A LR LR
comp=Z,6µm,18.0s
**D25A Fairfield 24.27 8** P **P 02 27 42.6 -0.3**
baz=24,SNR=14
**D26A Manning 24.28 10** P **P 02 27 42.9 0.0**
baz=24,SNR=19
**SLMT Seeley Lake 24.35 352** eP **P 02 27 43.8 0.0**
**G34A Benson 24.36 22** P **P 02 27 43.2 -0.4**
baz=24
**E29A Napoleon 24.39 15** P **P 02 27 43.5 -0.4**
baz=24
**G05D Wamic, OR 24.39 338** P **P 02 27 44.1 +0.1**
baz=24
**H36A Jessenland, He 24.43 26** P **P 02 27 45.0 +0.7**
baz=25,SNR=7.5
**E30A Jud 24.51 16** P **P 02 27 43.6 -1.4**
baz=25
**BLO Bloomington 24.51 44** eP **P 02 27 47.1 +2.0**
BLO pmax pmax
comp=Z,141nm,1.3s
**BLO Bloomington 24.51 44** eP **P 02 27 47.1 +2.0**
comp=Z,141nm,1.3s
**D27A Center 24.51 11** P **P 02 27 44.1 -0.9**
baz=25
**COR Corvallis 24.59 334** PFAKE 02 28 00.0 +14
COR LR LR
comp=Z,4µm,19.0s
**F33A 5 Mile Ranch, 24.66 21** P **P 02 27 45.5 -0.9**
baz=25
**I38A Scanlan Farm, 24.67 29** P **P 02 27 47.0 +0.6**
baz=25,SNR=9.8
**SWMT Swartz Lake 24.69 351** eP **P 02 27 46.3 -0.5**
**TKL Tuckaleechee C 24.74 54** P **P 02 27 45.5 -1.7**
comp=Z,25nm,1.0s,baz=208,slow=7.7,SNR=16
TKL LR LR 02 38 10.2
comp=Z,5µm,20.5s,baz=252,slow=38
**G35A Watkins 24.76 24** P **P 02 27 48.0 +0.7**
baz=25,SNR=6.0
**D28A Regan 24.78 13** P **P 02 27 48.6 +1.1**
baz=25
**JFWS Jewell Farm 24.79 33** eP **P 02 27 47.9 +0.3**
JFWS pmax pmax
comp=Z,354nm,2.3s
JFWS MLR MLR
comp=Z,3µm,18.0s
**JFWS Jewell Farm 24.79 33** eP **P 02 27 47.9 +0.3**
comp=Z,354nm,2.3s
JFWS LR LR
comp=Z,3µm,18.0s
**EGMT Eagleton 24.82 358** P **P 02 27 47.6 -0.3**
baz=25,SNR=34
**EGMT Eagleton 24.82 358** eP **P 02 27 47.9 0.0**
comp=Z,311nm,1.4s
EGMT LR LR
comp=Z,2µm,21.0s
**C25A Freed Ranch, W 24.83 8** P **P 02 27 47.8 -0.1**
baz=25,SNR=13
**E31A Nome 24.83 17** P **P 02 27 47.5 -0.4**
baz=25
**HAWA Hanford 24.84 341** eP **P 02 27 47.6 -0.4**
comp=Z,63nm,1.0s
HAWA LR LR
comp=Z,6µm,19.0s
**H37A Dierke Farm, C 24.85 27** P **P 02 27 48.2 +0.1**
baz=25
**SFIN Scholer Farm 24.85 41** P **P 02 27 49.4 +1.2**
baz=25,SNR=33
**SFIN Scholer Farm 24.85 41** eP **P 02 27 49.3 +1.2**
comp=Z,376nm,1.1s
**JTMT Jette 24.96 351** eP **P 02 27 48.6 -0.6**
**F34A Alexandria 24.97 22** P **P 02 27 48.8 -0.4**
baz=25
**YBMT Yellow Bay 25.03 351** eP **P 02 27 50.2 +0.3**
**G36A St. Michael 25.05 25** P **P 02 27 50.1 +0.3**
baz=25,SNR=5.7
**E07A Sunnyside 25.09 341** eP **P 02 27 51.0 +0.7**
comp=Z,63nm,1.1s
E07A LR LR
comp=Z,5µm,18.0s
**G03D McMinnville, O 25.09 335** P **P 02 27 50.4 +0.2**
baz=25,SNR=13
**C27A Sayler Ranch, 25.10 11** P **P 02 27 49.5 -0.9**
baz=25
**C26A Wahner Farm, P 25.11 10** P **P 02 27 48.0 -2.4**
baz=25
**D30A Buchanan 25.11 16** P **P 02 27 48.6 -1.9**
baz=25
**BSMT Bassoo Peak 25.14 350** eP **P 02 27 51.7 +0.8**
**BLMT Blacktail Moun 25.23 351** eP **P 02 27 50.8 -0.9**
**F35A Swanville 25.27 23** P **P 02 27 50.5 -1.4**
baz=25
**D08A Wollman Farm, 25.28 343** eP **P 02 27 50.1 -1.8**
comp=Z,30nm,1.1s
D08A LR LR
comp=Z,6µm,21.0s
**E33A Westby DABS, E 25.34 20** P **P 02 27 51.7 -0.9**
baz=26
**F04A Amboy 25.38 337** eP **P 02 27 51.3 -1.6**
comp=Z,222nm,1.8s
F04A LR LR
comp=Z,2µm,22.0s
**B25A Knox Farm, Ray 25.39 8** P **P 02 27 54.1 +1.1**
baz=26
**SPMN St. Paul 25.42 26** P **P 02 27 52.8 -0.4**
baz=26
**SPMN St. Paul 25.42 26** eP **P 02 27 54.5 +1.3**
comp=Z,92nm,1.4s
**DGMT Dagmar 25.46 7** P **P 02 27 53.3 -0.4**
baz=26,SNR=8.7
**DGMT Dagmar 25.46 7** eP **P 02 27 53.1 -0.5**
comp=Z,402nm,1.9s

DGMT LR LR
comp=Z,16µm,22.0s
**MDND Maddock 25.61 14** *eP* **P 02 27 54.4 -0.6**
MDND comp=Z,191nm,1.2s LR LR
comp=Z,7µm,20.0s
**B26A Jensen Ranch, 25.62 10** P **P 02 27 53.7 -1.4**
baz=26
**F36A Milaca 25.66 25** P **P 02 27 54.8 -0.6**
baz=26,SNR=11
**C30A Mose, Pekin 25.73 16** P P 02 27 50.6 -5.5
baz=26
**C09A Chrisman Ranch 25.80 345** *eP* **P 02 27 55.9 -0.8**
C09A comp=Z,27nm,1.3s LR LR
comp=Z,5µm,21.0s
**F03A Seaside 25.81 335** PFAKE 02 28 10.0 +13
F03A LR LR
comp=Z,5µm,19.0s
**B27A Peters Farms, 25.81 11** P **P 02 27 53.9 -2.9**
baz=26
**JTS JuntasAbangare 25.82 116** P **P 02 27 58.0 +0.8**
comp=Z,8.2nm,0.8s,baz=283,slow=2.7,SNR=4.0
JTS LR LR 02 38 11.3
comp=Z,3µm,19.6s,baz=312,slow=37
**JTS JuntasAbangare 25.82 116** PFAKE 02 28 10.0 +13
JTS LR LR
comp=Z,3µm,18.0s
**LON Longmire 25.88 339** *eP* **P 02 27 57.5 +0.1**
LON pmax pmax
comp=Z,361nm,2.3s
LON MLR MLR
comp=Z,5µm,20.0s
**LON Longmire 25.88 339** *eP* **P 02 27 57.5 +0.1**
comp=Z,361nm,2.3s
LON LR LR
comp=Z,5µm,20.0s
**E35A Pequot Lakes 25.93 22** P **P 02 27 57.5 -0.4**
baz=26,SNR=15
**LTY Liberty 25.96 341** PFAKE 02 28 10.0 +12
LTY LR LR
comp=Z,4µm,20.0s
**NEW Newport 25.98 347** P **P 02 27 58.0 -0.4**
comp=Z,16nm,1.0s,baz=156,slow=11,SNR=12
NEW LR LR 02 38 30.9
comp=Z,6µm,18.2s,baz=174,slow=37
**NEW Newport 25.98 347** P **P 02 27 57.8 -0.5**
baz=26,SNR=16
**NEW Newport 25.98 347** PFAKE 02 28 10.0 +12
NEW LR LR
comp=Z,7µm,18.0s
**B28A Dugan Ranch, T 26.02 12** P **P 02 27 59.2 +0.5**
baz=26,SNR=8.1
**A25A Svangstu Ranch 26.05 8** P **P 02 27 59.1 +0.1**
baz=26
**JSC Jenkinsville 26.19 59** *eP* **P 02 28 00.5 +0.2**
JSC pmax pmax
comp=Z,54nm,1.4s
JSC MLR MLR
comp=Z,9µm,19.0s
**JSC Jenkinsville 26.19 59** *eP* **P 02 28 00.5 +0.2**
comp=Z,54nm,1.4s
JSC LR LR
comp=Z,9µm,19.0s
**WALA Waterton Lakes 26.19 352** *eP* **P 02 28 00.7 +0.3**
comp=Z,64nm,1.1s
WALA LR LR
comp=Z,6µm,20.0s
**E36A McGregor 26.31 24** P **P 02 28 00.9 -0.4**
baz=26
**D05A Enumclaw 26.32 339** *eP* **P 02 28 02.7 +1.3**
comp=Z,61nm,1.2s
D05A LR LR
comp=Z,7µm,19.0s
**E03A Lebam 26.32 336** *eP* **P 02 28 01.1 -0.3**
comp=Z,115nm,1.0s
E03A LR LR
comp=Z,6µm,19.0s
**KMSC Kings Mountain 26.41 57** P **P 02 28 02.0 -0.4**
baz=26
**KMSC Kings Mountain 26.41 57** *eP* **P 02 28 02.1 -0.2**
comp=Z,28nm,0.9s
KMSC LR LR
comp=Z,8µm,18.0s
**B30A Myrvik Farm, E 26.47 15** P **P 02 28 00.3 -2.4**
baz=27
**D35A Remer 26.50 22** P **P 02 28 02.6 -0.4**
baz=27
**B08A Colville Reser 26.59 344** *eP* **P 02 28 03.6 -0.2**
comp=Z,98nm,1.5s
B08A LR LR
comp=Z,6µm,18.0s
**B31A Greenbush Farm 26.61 16** P **P 02 28 03.7 -0.3**
baz=27
**C06D Leavenworth 26.62 341** P **P 02 28 03.4 -0.8**
baz=27
**A29A Manning Farm, 26.70 14** P **P 02 28 04.5 -0.4**
baz=27
**NHSC New Hope 26.73 62** *eP* **P 02 28 07.3 +2.1**
comp=Z,580nm,2.3s
NHSC LR LR
comp=Z,2µm,21.0s
**D36A Goodland 26.90 23** P **P 02 28 08.3 +1.6**
baz=27
**A30A Hoffart Farm, 26.93 15** P **P 02 28 07.6 +0.6**
baz=27
**AGMN Agassiz Nation 26.99 19** P **P 02 28 08.6 +1.2**
baz=27
**AGMN Agassiz Nation 26.99 19** *eP* **P 02 28 08.8 +1.4**
comp=Z,53nm,0.9s
AGMN LR LR
comp=Z,12µm,18.0s
**NLWA Neilton Lookou 27.15 337** PFAKE 02 28 20.0 +11
NLWA LR LR
comp=Z,5µm,19.0s
**D37A Cotton 27.16 24** P **P 02 28 10.1 +1.1**
baz=27
**B05A Bryant 27.30 340** P **P 02 28 09.9 -0.2**
baz=27
**B06A Marblemount 27.33 341** PFAKE 02 28 20.0 +10
B06A LR LR
comp=Z,5µm,18.0s
**BLN Blyn Mountain 27.36 338** *eP* **P 02 28 07.5 -3.3**
**ACSO Alum Creek Sta 27.38 46** *eP* **P 02 28 12.4 +1.4**
comp=Z,94nm,1.4s
ACSO LR LR
comp=Z,2µm,19.0s
**C36A Pine Crest Far 27.51 23** P **P 02 28 13.2 +1.1**
baz=28
**B34A Aery, Baudette 27.53 20** P **P 02 28 13.4 +1.1**
baz=28
**COWI Conover 27.69 30** PFAKE 02 28 30.0 +16
COWI LR LR
comp=Z,6µm,19.0s
**A33A Warroad 27.70 19** P **P 02 28 15.0 +1.2**
baz=28
**B35A Bob, Littlefor 27.72 21** P **P 02 28 15.1 +1.1**
baz=28
**C37A Embarrass 27.73 24** P **P 02 28 13.6 -0.4**
baz=28
**BLA Blacksburg 27.83 53** PFAKE 02 28 30.0 +15
BLA LR LR
comp=Z,7µm,22.0s
**A04D Lummi Island 27.89 340** P **P 02 28 15.2 -0.2**
baz=28
**C38A Sawbill Land. 28.06 25** P **P 02 28 17.7 +0.6**
baz=28
**PGC Sidney 28.08 339** PFAKE 02 28 30.0 +13
PGC LR LR
comp=Z,5µm,20.0s
**AAM Ann Arbor 28.08 41** PFAKE 02 28 30.0 +13
AAM LR LR
comp=Z,7µm,19.0s
**EYMN Ely 28.17 25** P **P 02 28 17.0 -0.9**
baz=28
**EYMN Ely 28.17 25** *eP* **P 02 28 18.5 +0.5**
comp=Z,58nm,0.9s
EYMN LR LR
comp=Z,2µm,19.0s
**C39A Grand Marais 28.60 26** P **P 02 28 22.9 +1.1**
baz=29
**ULM Lac du Bonnet 28.75 17** P **P 02 28 22.0 -1.2**
comp=Z,30nm,0.9s,baz=220,slow=10,SNR=6.3
ULM LR LR 02 40 25.6
comp=Z,6µm,20.2s,baz=202,slow=38
**ULM Lac du Bonnet 28.75 17** *eP* **P 02 28 21.7 -1.4**
ULM pmax pmax
comp=Z,55nm,1.1s
ULM MLR MLR
comp=Z,10µm,18.0s
**ULM Lac du Bonnet 28.75 17** *eP* **P 02 28 21.7 -1.4**
comp=Z,55nm,1.1s
ULM LR LR
comp=Z,10µm,18.0s
**CNNC Cliffs of the 29.12 59** PFAKE 02 28 40.0 +13
CNNC LR LR
comp=Z,3µm,18.0s
**MCWV Mont Chateau 29.24 49** *eP* **P 02 28 28.8 +1.2**
comp=Z,41nm,1.5s
MCWV LR LR
comp=Z,4µm,19.0s
**MTDJ Mount Denham 29.28 94** PFAKE 02 28 40.0 +12
MTDJ LR LR
comp=Z,2µm,19.0s
**PAYG Puerto Ayora 29.56 141** PFAKE 02 28 40.0 +9.4
PAYG LR LR
comp=Z,1µm,19.0s
**EDM Edmonton 30.23 354** *eP* **P 02 28 35.7 -0.6**
EDM pmax pmax
comp=Z,65nm,1.4s
EDM MLR MLR
comp=Z,6µm,20.0s
**EDM Edmonton 30.23 354** *eP* **P 02 28 35.7 -0.6**
comp=Z,65nm,1.4s
EDM LR LR
comp=Z,6µm,20.0s
**CBN Corbin 30.44 53** PFAKE 02 28 50.0 +12
CBN LR LR
comp=Z,11µm,18.0s
**BCIP Isla Barro Col 30.71 112** PFAKE 02 28 50.0 +9.2
BCIP LR LR
comp=Z,4µm,19.0s
**GTBY Guantanamo Bay 31.12 90** PFAKE 02 29 00.0 +16
GTBY LR LR
comp=Z,3µm,19.0s
**SDMD Soldier's Deli 31.27 51** PFAKE 02 29 00.0 +14
SDMD LR LR
comp=Z,4µm,19.0s
**MVL Millersville 31.84 51** *eP* **P 02 28 51.0 +0.5**
comp=Z,58nm,2.0s
**FFC Flin Flon 31.87 7** *eP* **P 02 28 50.1 -0.6**
FFC pmax pmax
comp=Z,46nm,1.3s
FFC MLR MLR
comp=Z,18µm,20.0s
**FFC Flin Flon 31.87 7** *eP* **P 02 28 50.1 -0.6**
comp=Z,46nm,1.3s
FFC LR LR
comp=Z,18µm,20.0s
**SADO Sadowa 32.18 41** PFAKE 02 29 10.0 +17
SADO LR LR
comp=Z,19µm,18.0s
**LUPA Lehigh Univers 32.76 50** *eP* **P 02 28 56.8 -1.8**
comp=Z,80nm,1.7s
LUPA LR LR
comp=Z,4µm,21.0s
**KSPA Keystone Colle 32.85 48** PFAKE 02 29 10.0 +11
KSPA LR LR
comp=Z,17µm,19.0s
**BINY Binghamton 32.97 47** *eP* **P 02 28 59.6 -0.9**
comp=Z,102nm,1.2s
BINY LR LR
comp=Z,9µm,21.0s
**BRNJ Basking Ridge 33.36 50** PFAKE 02 29 20.0 +16
BRNJ LR LR
comp=Z,4µm,18.0s
**LGNH LØogne 33.74 91** PFAKE 02 29 20.0 +13
LGNH LR LR
comp=Z,2µm,20.0s
**CPNY Central Park 33.83 51** PFAKE 02 29 20.0 +12
CPNY LR LR
comp=Z,6µm,20.0s
**PAL Palisades 33.94 50** PFAKE 02 29 20.0 +11
PAL LR LR
comp=Z,5µm,20.0s
**PAPH Port-au-Prince 34.02 91** PFAKE 02 29 20.0 +10
PAPH LR LR
comp=Z,2µm,21.0s
**GRTK Grand Turk 34.47 85** PFAKE 02 29 30.0 +16
GRTK LR LR
comp=Z,3µm,22.0s
**YLE Yale 34.73 50** PFAKE 02 29 30.0 +14
YLE LR LR
comp=Z,4µm,20.0s
**SDDR Presa de Saban 34.84 90** PFAKE 02 29 30.0 +13
SDDR LR LR
comp=Z,2µm,21.0s
**LONY Lake Ozonia 34.94 44** *eP* **P 02 29 17.1 -0.5**
comp=Z,91nm,1.8s
LONY LR LR
comp=Z,6µm,18.0s
**ACCN Adirondack Com 35.01 46** *eP* **P 02 29 19.0 +0.8**
comp=Z,47nm,1.8s
ACCN LR LR
comp=Z,2µm,21.0s
**BRYW Bryant College 35.92 50** PFAKE 02 29 40.0 +14
BRYW LR LR
comp=Z,5µm,19.0s
**HRV Adam Dziewonsk 36.11 49** PFAKE 02 29 40.0 +12
HRV LR LR
comp=Z,4µm,18.0s
**LBNH Lisbon 36.51 46** PFAKE 02 29 40.0 +9.0
LBNH LR LR
comp=Z,4µm,22.0s
**OTAV Otavalo 36.99 124** *eP* **P 02 29 38.2 +2.3**
comp=Z,32nm,1.2s
OTAV LR LR
comp=Z,1µm,19.0s
**WRAK Wrangell Islan 37.55 338** *eP* **P 02 29 41.2 +1.5**
comp=Z,38nm,1.1s
WRAK LR LR
comp=Z,3µm,21.0s
**ROSC El Rosal 37.60 114** P **P 02 29 42.5 +1.4**
comp=Z,2.1nm,0.3s,baz=334,slow=3.3,SNR=11
ROSC LR LR 02 46 42.0
comp=Z,2µm,18.2s,baz=352,slow=39
**WVL Waterville 38.13 46** PFAKE 02 30 00.0 +15
WVL LR LR
comp=Z,5µm,21.0s
**DLBC Dease Lake 38.47 342** *eP* **P 02 29 48.8 +1.3**
comp=Z,61nm,1.4s
**PKME Peaks-Kenny Pk 38.63 46** PFAKE 02 30 00.0 +11
PKME LR LR
comp=Z,6µm,19.0s
**AGP Aguadilla 38.80 89** PFAKE 02 30 00.0 +9.3
AGP LR LR
comp=Z,2µm,20.0s
**SDV Santo Domingo 38.86 105** *eP* **P 02 29 52.1 +0.6**
comp=Z,55nm,1.2s
SDV LR LR
comp=Z,2µm,18.0s
**CRPR Cabo Rojo, PR 38.92 90** PFAKE 02 30 00.0 +8.3
CRPR LR LR
comp=Z,5µm,21.0s
**YKA Yellowknife Ar 39.52 355** P **P 02 29 54.6 -1.5**
comp=Z,9.8nm,1.0s,baz=172,slow=7.6,SNR=14
**BBSR BB Station 39.53 67** PFAKE 02 30 10.0 +13
BBSR LR LR
comp=Z,2µm,19.0s
**SJG San Juan 39.78 89** PFAKE 02 30 10.0 +11
SJG LR LR
comp=Z,2µm,22.0s
**CPD Cerro la Pandu 40.02 89** PFAKE 02 30 10.0 +9.1
CPD LR LR
comp=Z,6µm,22.0s
**HUMP Col San Antoni 40.05 89** PFAKE 02 30 10.0 +8.8
HUMP LR LR
comp=Z,2µm,22.0s
**STVI Saint Thomas 40.82 88** PFAKE 02 30 20.0 +12
STVI LR LR
comp=Z,2µm,22.0s
**SKAG Skagway 40.93 339** *eP* **P 02 30 09.1 +1.3**
comp=Z,33nm,1.4s
SKAG LR LR
comp=Z,2µm,18.0s
**DHAK Deception Hill 41.63 337** PFAKE 02 30 30.0 +16
DHAK LR LR
comp=Z,2µm,20.0s
**SABA Saba 42.58 89** PFAKE 02 30 30.0 +8.0
SABA LR LR
comp=Z,2µm,22.0s
**SMRT St. Maarten 42.62 88** PFAKE 02 30 30.0 +7.6
SMRT LR LR
comp=Z,1µm,18.0s
**SEUS St. Eustatius 42.86 89** PFAKE 02 30 40.0 +16
SEUS LR LR
comp=Z,2µm,20.0s
**PCA Pinnacle 43.08 337** PFAKE 02 30 40.0 +14
PCA LR LR
comp=Z,3µm,20.0s
**POHA Pohakuloa 43.83 275** PFAKE 02 30 40.0 +7.6
POHA LR LR
comp=Z,4µm,20.0s
**ANWB Willy Bob 43.91 88** PFAKE 02 30 40.0 +7.3
ANWB LR LR
comp=Z,1µm,20.0s
**SCHQ Schefferville 44.16 33** P **P 02 30 33.0 -1.3**
comp=Z,18nm,1.1s,baz=244,slow=12,SNR=4.6
SCHQ LR LR 02 50 39.5
comp=Z,2µm,18.3s,baz=245,slow=38
**SCHQ Schefferville 44.16 33** PFAKE 02 30 50.0 +16
SCHQ LR LR
comp=Z,6µm,19.0s
**TAOE Nuku Hiva Isla 44.46 228** *eT* T 03 17 42.4
comp=Z,308nm,0.3s
**RAGM Ragged Mountai 44.91 335** PFAKE 02 30 50.0 +10
RAGM LR LR
comp=Z,3µm,22.0s
**BMRM Bremner River 45.25 336** *eP* **P 02 30 43.7 +0.7**
comp=Z,52nm,1.2s
BMRM LR LR
comp=Z,2µm,18.0s
**FDF Fort de France 45.33 92** PFAKE 02 31 00.0 +16
FDF LR LR
comp=Z,1µm,20.0s
**EYAK Cordova Ski Ar 45.42 335** PFAKE 02 31 00.0 +16
EYAK LR LR
comp=Z,2µm,20.0s
**DAWY Dawson 45.70 342** *eP* **P 02 30 45.0 -1.4**
comp=Z,28nm,1.1s
**GRGR Grenville 45.73 96** PFAKE 02 31 00.0 +13
GRGR LR LR
comp=Z,1µm,21.0s
**KIP Kipapa 45.74 278** PFAKE 02 31 00.0 +13
KIP LR LR
comp=Z,7µm,21.0s
**DIV Divide 45.80 336** PFAKE 02 31 00.0 +13
DIV LR LR
comp=Z,1µm,20.0s
**KLU Klutina 46.08 336** *eP* **P 02 30 49.9 +0.4**
comp=Z,224nm,2.4s
KLU LR LR
comp=Z,900nm,21.0s
**MENT Mentasta 46.25 339** *eP* **P 02 30 50.9 +0.1**
**HARP HAARP 46.39 337** *eP* **P 02 30 52.0 +0.2**
comp=Z,451nm,2.3s
HARP LR LR
comp=Z,1µm,18.0s
**NNA Nana 46.66 135** PFAKE 02 31 10.0 +15
NNA LR LR
comp=Z,757nm,20.0s
**EGAK Eagle 46.74 341** *eP* **P 02 30 54.9 +0.3**
comp=Z,87nm,1.9s
EGAK LR LR
comp=Z,2µm,21.0s
**SCM Sheep Creek Mo 46.82 336** *eP* **P 02 30 55.4 +0.1**
SCM pmax pmax
comp=Z,295nm,2.4s
SCM MLR MLR
comp=Z,1µm,21.0s
**SCM Sheep Creek Mo 46.82 336** *eP* **P 02 30 55.4 +0.1**
comp=Z,295nm,2.4s
SCM LR LR
comp=Z,1µm,21.0s
**KDAK Kodiak Island 46.83 329** PFAKE 02 31 10.0 +15
KDAK LR LR
comp=Z,2µm,21.0s
**DOT Dot Lake 46.84 339** *eP* **P 02 30 55.6 +0.2**
comp=Z,60nm,1.1s
**PAX Paxson 46.87 338** *eP* **P 02 30 55.5 -0.2**
PAX pmax pmax
comp=Z,98nm,2.0s
**PAX Paxson 46.87 338** *eP* **P 02 30 55.5 -0.2**
comp=Z,98nm,2.0s
**OHAK Old Harbor 46.91 328** PFAKE 02 31 10.0 +14
OHAK LR LR
comp=Z,2µm,21.0s
**BRLK Bradley Lake 47.07 332** *eP* **P 02 30 57.0 -0.3**
comp=Z,345nm,2.1s
BRLK LR LR
comp=Z,1µm,19.0s
**CNPM China Poot 47.09 332** PFAKE 02 31 10.0 +13
CNPM LR LR
comp=Z,1µm,18.0s
**RIDG Independ'e Rid 47.16 339** PFAKE 02 31 10.0 +12
RIDG LR LR
comp=Z,2µm,21.0s
**SML Sawmill 47.18 335** *eP* **P 02 30 57.3 -0.8**
SML pmax pmax
comp=Z,88nm,1.3s
SML MLR MLR
comp=Z,1µm,20.0s
**SML Sawmill 47.18 335** *eP* **P 02 30 57.3 -0.8**
comp=Z,88nm,1.3s
SML LR LR
comp=Z,1µm,20.0s
**BBGH Gun Hill 47.30 93** PFAKE 02 31 10.0 +10
BBGH LR LR
comp=Z,2µm,21.0s
**RC01 Rabbit Creek A 47.32 334** *eP* **P 02 30 59.9 +0.8**
comp=Z,95nm,1.4s
RC01 LR LR
comp=Z,1µm,20.0s
**HOM Homer 47.34 332** PFAKE 02 31 10.0 +11
HOM LR LR
comp=Z,1µm,19.0s
**PMR Palmer 47.37 335** *eP* **P 02 31 00.0 +0.6**
PMR pmax pmax
comp=Z,281nm,2.0s
PMR MLR MLR
comp=Z,2µm,19.0s
**PMR Palmer 47.37 335** *eP* **P 02 31 00.0 +0.6**
comp=Z,280nm,2.0s
PMR LR LR
comp=Z,2µm,19.0s
**DRLN Deer Lake 47.49 44** PFAKE 02 31 10.0 +9.4
DRLN LR LR
comp=Z,10µm,18.0s
**INK Inuvik 47.69 348** P **P 02 31 01.1 -0.8**
comp=Z,17nm,0.9s,baz=145,slow=9.3,SNR=12
**SUA Susitna One 47.93 334** *eP* **P 02 31 04.3 +0.3**
comp=Z,49nm,1.0s
SUA LR LR
comp=Z,1µm,20.0s
**RSO Redoubt South 48.23 332** *eP* **P 02 31 06.8 +0.3**
**HDA Harding Lake 48.30 339** PFAKE 02 31 20.0 +13
HDA LR LR
comp=Z,2µm,18.0s
**SPU Mount Spurr 48.31 333** *eP* **P 02 31 07.3 +0.4**
**RND Reindeer 48.34 337** *eP* **P 02 31 07.2 +0.1**
RND pmax pmax
comp=Z,75nm,1.4s
RND MLR MLR
comp=Z,1µm,18.0s
**RND Reindeer 48.34 337** *eP* **P 02 31 07.2 +0.1**
comp=Z,75nm,1.4s
RND LR LR
comp=Z,1µm,18.0s
**IL1 Eielson Array 48.52 339** *eP* **P 02 31 07.6 -0.8**
**ILAR Eielson Array 48.52 339** P **P 02 31 08.5 +0.2**
comp=Z,12nm,0.9s,baz=149,slow=6.7,SNR=56
ILAR LR LR 02 51 00.2
comp=Z,2µm,18.1s,baz=137,slow=35
**ILB Eielson Array 48.52 339** *eP* **P 02 31 08.6 +0.2**
**MCK McKinley 48.56 337** *eP* **P 02 31 08.3 -0.5**
MCK pmax pmax
comp=Z,50nm,1.2s
MCK MLR MLR
comp=Z,2µm,19.0s
**MCK McKinley 48.56 337** *eP* **P 02 31 08.3 -0.5**
comp=Z,50nm,1.2s
MCK LR LR
comp=Z,2µm,19.0s
**WRH Wood River Hil 48.73 338** *eP* **P 02 31 09.2 -0.8**
comp=Z,53nm,1.5s
WRH LR LR
comp=Z,2µm,18.0s
**CCB Clear Creek Bu 48.74 339** *eP* **P 02 31 10.1 +0.1**
comp=Z,12nm,1.0s
CCB LR LR
comp=Z,2µm,20.0s

**TRF Thorofare Moun 48.88 337 eP P 02 31 11.4 0.0**
comp=Z,115nm,1.0s
TRF LR LR
comp=Z,1µm,22.0s
**COLA College 48.90 339 i P P 02 31 10.3 -0.9**
COLA pmax pmax
comp=Z,34nm,1.5s
**COLA College 48.90 339 PFAKE 02 31 20.0 +8.8**
COLA LR LR
comp=Z,1µm,19.0s
**BWN Browne 49.02 338 PFAKE 02 31 20.0 +7.8**
BWN LR LR
comp=Z,1µm,19.0s
**MDM Murphy Dome 49.08 339 eP P 02 31 12.3 -0.4**
comp=Z,16nm,1.2s
MDM LR LR
comp=Z,2µm,22.0s
**FYU Fort Yukon 49.20 342 eP P 02 31 11.7 -1.9**
comp=Z,194nm,1.7s
FYU LR LR
comp=Z,1µm,19.0s
**PPLA Purkeypile 49.28 335 eP P 02 31 15.4 +0.9**
comp=Z,138nm,1.0s
PPLA LR LR
comp=Z,1µm,18.0s
**BPAW Bear Paw Mtn. 49.51 337 eP P 02 31 15.2 -0.8**
comp=Z,47nm,1.2s
BPAW LR LR
comp=Z,2µm,19.0s
**CAST Castle Rocks 49.53 336 eP P 02 31 15.4 -0.8**
comp=Z,45nm,1.1s
CAST LR LR
comp=Z,1µm,21.0s
**MLY Manley 49.97 338 eP P 02 31 19.1 -0.4**
comp=Z,444nm,3.0s
MLY LR LR
comp=Z,2µm,22.0s
**COLD Coldfoot 51.12 341 eP P 02 31 28.1 0.0**
comp=Z,40nm,1.4s
**XMAS Kiritimati 51.90 253 PFAKE 02 31 50.0 +15**
XMAS LR LR
comp=Z,7.0nm,21.0s
**RES Resolute Bay 52.04 5 PFAKE 02 31 50.0 +15**
RES LR LR
comp=Z,8µm,18.0s
**RKT Rikitea 52.77 211 eS S 02 39 07.8 -1.4**
comp=Z,695nm,28.0s
RKT eLQ LQ 02 44 29.0
comp=Z,754nm,35.2s
RKT eLR LR 02 46 40.1
comp=Z,2µm,24.2s,baz=28
**RKT Rikitea 52.77 211 eT T 03 28 12.6**
comp=Z,13nm,0.3s
**PMOR Pomariorio Ree 54.14 229 eT T 03 29 46.5**
comp=Z,2.7nm,0.2s
**SAML Samuel 54.57 121 eP P 02 31 52.1 -2.2**
comp=Z,42nm,1.6s
SAML LR LR
comp=Z,1µm,21.0s
**LPAZ La Paz 55.60 131 P P 02 32 01.7 -0.7**
comp=Z,4.2nm,1.1s,baz=332,slow=7.9,SNR=9.2
LPAZ LR LR 02 53 39.1
comp=Z,744nm,19.6s,baz=328,slow=34
**SFJD Kangerlussuaq 56.46 24 PFAKE 02 32 20.0 +13**
SFJD LR LR
comp=Z,4µm,19.0s
**PPT Papeete 57.07 228 LR LR 02 49 59.5**
comp=Z,2µm,20.1s,baz=6.0,slow=29
**PPT2 Papeete2 57.09 228 eS S 02 40 00.0 -7.6**
comp=Z,977nm,25.5s
PPT2 eLQ LQ 02 46 15.1
comp=Z,613nm,23.8s
PPT2 eLR LR 02 48 36.7
comp=Z,5µm,26.2s,baz=32
**JOHN Johnston Islan 57.45 276 PFAKE 02 32 30.0 +15**
JOHN LR LR
comp=Z,5µm,20.0s
**LVC Limon Verde 59.58 137 eP P 02 32 30.7 +0.8**
comp=Z,44nm,1.5s
LVC LR LR
comp=Z,539nm,20.0s
**TBI Tubuai 61.07 224 eS S 02 40 52.4 -6.5**
comp=Z,554nm,29.8s
TBI eLQ LQ 02 47 53.9
comp=Z,2µm,34.5s
TBI eLR LR 02 50 27.8
comp=Z,2µm,28.8s,baz=38
**TBI Tubuai 61.07 224 eT T 03 38 28.7**
comp=Z,11nm,0.2s
**MIDW Midway 61.59 291 PFAKE 02 33 00.0 +17**
MIDW LR LR
comp=Z,2µm,20.0s
**SUMG Summit 62.09 19 eP P 02 32 47.4 +0.9**
SUMG pmax pmax
comp=Z,55nm,1.4s
**SUMG Summit 62.09 19 i P P 02 32 47.4 +0.9**
comp=Z,55nm,1.4s
**SUMG Summit 62.09 19 eP P 02 32 46.4 -0.2**
comp=Z,44nm,1.3s
**RAR Rarotonga 66.70 233 PFAKE 02 33 30.0 +13**
RAR LR LR
comp=Z,2.0nm,20.0s
**BILL Bilibino 66.98 336‖ eP P 02 33 18.9 +0.8**
BILL e 02 33 50.8
BILL e 02 35 45.7
BILL ePPP PPP 02 37 23.1
BILL eS S 02 42 06.4 -4.9
BILL eSS SS 02 46 24.5 -4.8
BILL pmax pmax
comp=Z,41nm,1.2s
BILL MLR MLR
comp=Z,943nm,17.0s
**DAG Danmarks Havn 67.56 14 i P P 02 33 20.8 -0.8**
DAG pmax pmax
comp=Z,17nm,1.0s
**DAG Danmarks Havn 67.56 14 i P P 02 33 20.8 -0.8**
comp=Z,17nm,1.0s
**CPUP Villa Florida 69.76 132 P P 02 33 36.0 0.0**
comp=Z,6.9nm,0.9s,baz=324,slow=7.4,SNR=13
CPUP LR LR 03 03 33.0
comp=Z,631nm,21.0s,baz=333,slow=35
**BDFB Brasilia 70.56 117 P P 02 33 41.2 -0.1**
comp=Z,9.6nm,0.9s,baz=281,slow=5.5,SNR=11
BDFB LR LR 03 05 53.0
comp=Z,1µm,21.6s,baz=300,slow=37
**BDFB Brasilia 70.56 117 eP P 02 33 41.2 -0.1**
BDFB pmax pmax
comp=Z,185nm,2.2s
BDFB MLR MLR
comp=Z,2µm,22.0s
**BDFB Brasilia 70.56 117 eP P 02 33 41.2 -0.1**
comp=Z,185nm,2.2s
BDFB LR LR
comp=Z,2µm,22.0s
**JMIC Jan Mayen 71.47 20 LR LR 03 04 16.2**
comp=Z,926nm,18.4s,baz=266,slow=35
**AFI Afiamalu 72.10 246 PFAKE 02 34 00.0 +9.4**
AFI LR LR
comp=Z,1µm,19.0s
**PLCA Paso Flores 72.69 151 eP P 02 33 55.6 +2.0**
PLCA pmax pmax
comp=Z,104nm,2.1s
**PLCA Paso Flores 72.69 151 eP P 02 33 55.6 +2.0**
comp=Z,104nm,2.1s
**KBS Kingsbay 72.90 10 PFAKE 02 34 10.0 +16**
KBS LR LR
comp=Z,2µm,21.0s
**SEY Seymchan 73.69 332 P P 02 34 00.3 +1.1**
comp=Z,3.8nm,0.7s,baz=106,slow=5.3,SNR=7.7
**PEA1 Petropavlovsk- 74.05 321 eP P 02 34 01.8 +0.2**
**PEA0 Petropavlovsk- 74.05 321 eP P 02 34 05.7 +4.1**
**PETK Petropavlovsk- 74.05 321 P P 02 34 01.8 +0.2**
comp=Z,23nm,1.1s,baz=96,slow=9.1,SNR=5.6
PETK LR LR 03 00 16.7
comp=Z,358nm,20.7s,baz=72,slow=31
**TRQA Tornquist 74.91 144 eP P 02 34 06.2 -0.5**
comp=Z,63nm,1.7s
TRQA LR LR
comp=Z,900nm,19.0s
**SKR Severo-Kuril's 75.74 319 i P P 02 34 11.9 +0.6**
**RCBR Riachuelo 76.38 102 PFAKE 02 34 30.0 +14**
RCBR LR LR
comp=Z,1µm,21.0s
**WAKE Wake Island 78.14 286 PFAKE 02 34 40.0 +15**
WAKE LR LR
comp=Z,2µm,19.0s
**TARA Tarawa 79.03 267 PFAKE 02 34 40.0 +10**
TARA LR LR
comp=Z,2µm,20.0s
**ESK Eskdalemuir 79.45 34 PFAKE 02 34 40.0 +8.0**
ESK LR LR
comp=Z,2µm,18.0s
**CWF Charnwood Fore 81.61 36 PFAKE 02 35 00.0 +16**
CWF LR LR
comp=Z,3µm,19.0s
**ARA0 ARCESS Array S 81.85 15 eP P 02 34 46.8 +2.2**
**ARCES ARCESS Array B 81.85 15 P P 02 34 44.6 0.0**
comp=Z,6.9nm,0.9s,baz=328,slow=5.9,SNR=5.9
ARCES LR LR 03 11 23.1
comp=Z,1µm,20.0s,baz=331,slow=36
**PGAV Gavieira, Arco 81.97 48 eS S 02 45 12.9 +13**
**PGAV Gavieira, Arco 81.97 48 eLQ LQ 02 56 41.9**
PGAV eLR LR 03 02 19.3
comp=Z,2µm,18.0s
**KEV Kevo 82.03 14 PFAKE 02 35 00.0 +15**
KEV LR LR
comp=Z,2µm,22.0s
**MSVF Nonsavu 82.52 247 PFAKE 02 35 00.0 +11**
MSVF LR LR
comp=Z,1µm,21.0s
**POLO Lamas de Olo 82.53 48 eP P 02 34 49.8 +0.9**
comp=Z,21nm,1.3s
**PVRL Vila Real 82.63 48 eP P 02 34 50.2 +0.9**
comp=Z,22nm,0.4s
**PVIS Viseu 82.74 49 eP P 02 34 50.1 +0.2**
comp=Z,22nm,1.8s
**NBO02 NORSAR Array S 82.94 25 eP P 02 34 52.4 +1.9**
**KUR Kuril'sk 82.94 316 d i P P 02 34 56.2 +5.5**
KUR i 02 34 57.8
KUR pmax pmax
comp=Z,178nm,1.4s
KUR pmax pmax
comp=E,134nm,1.5s
KUR pmax pmax
comp=N,147nm,1.4s
KUR MLR MLR
comp=Z,751nm,20.0s
**NB2 NORSAR Subarra 83.09 25 P P 02 34 52.7 +1.4**
comp=Z,49nm,1.2s,baz=307,slow=5.1
**NB2 NORSAR Subarra 83.09 25 P P 02 34 52.7 +1.4**
baz=307,slow=5.1
**NB200 NORSAR Array S 83.09 25 eP P 02 34 51.4 +0.2**
**NOA NORSAR Array B 83.09 25 P P 02 34 51.4 +0.2**
comp=Z,4.8nm,0.8s,baz=306,slow=5.1,SNR=7.7
**MTE Manteigas 83.11 49 eP P 02 34 51.5 -0.3**
comp=Z,19nm,1.1s
**MTE Manteigas 83.11 49 eS S 02 45 20.0 +8.2**
**MTE Manteigas 83.11 49 eLQ LQ 02 57 01.3**
MTE eLR LR 03 02 18.2
comp=Z,2µm,18.0s
**MTE Manteigas 83.11 49 PFAKE 02 35 00.0 +8.2**
MTE LR LR
comp=Z,2µm,20.0s
**MVO Moncorvo 83.15 48 eP P 02 34 52.5 +0.5**
comp=Z,42nm,1.6s
**MVO Moncorvo 83.15 48 eS S 02 45 25.3 +13**
**MVO Moncorvo 83.15 48 eLQ LQ 02 57 04.5**
MVO eLR LR 03 02 19.3
comp=Z,2µm,20.0s
**PMTG Montargil 83.18 50 eP P 02 34 54.3 +2.2**
comp=Z,28nm,1.7s
**KONO Kongsberg 83.25 27 eP P 02 34 55.0 +3.0**
KONO pmax pmax
comp=Z,87nm,1.1s
KONO MLR MLR
comp=Z,2µm,19.0s
**KONO Kongsberg 83.25 27 eP P 02 34 55.0 +3.0**
comp=Z,87nm,1.1s
KONO LR LR
comp=Z,2µm,19.0s
**YAK Yakutsk 83.34 336 eP P 02 34 52.2 -0.3**
YAK e 02 34 59.9
YAK e 02 38 11.4
YAK eS S 02 45 06.4 -6.8
YAK pmax pmax
comp=N,2.0nm,0.9s
YAK pmax pmax
comp=E,5.0nm,1.3s
YAK pmax pmax
comp=Z,16nm,0.9s
YAK pmax pmax
comp=Z,18nm,0.3s
YAK MLR MLR
comp=E,554nm,18.0s
YAK MLR MLR
comp=Z,983nm,24.0s
YAK MLR MLR
comp=N,613nm,19.0s
**PNCL Nicolau / Gran 83.35 51 eP P 02 34 53.9 +0.9**
comp=N,24nm,1.7s
**PCBR Castelo Branco 83.39 50 eP P 02 34 54.0 +0.8**
comp=N,26nm,1.5s
**PFVI Vila Bisbo 83.53 52 PFAKE 02 35 10.0 +16**
PFVI LR LR
comp=Z,2µm,18.0s
**MORF Marmelete 83.59 52 eP P 02 34 54.9 +0.6**
MORF eS S 02 45 16.3 -0.6
MORF AMS AMS 03 12 32.8
comp=Z,921nm,19.9s
**PMRV Marv??o 83.62 50 eP P 02 34 55.6 +1.2**
comp=Z,39nm,1.5s
**PMRV Marv??o 83.62 50 eS S 02 45 28.6 +12**
**PMRV Marv??o 83.62 50 eLR LR 03 02 33.6**
comp=Z,2µm,18.0s
**MESJ Messejana 83.69 52 eP P 02 34 55.4 +0.6**
MESJ eS S 02 45 17.4 -0.3
MESJ AMS AMS 03 12 59.4
comp=Z,1µm,16.3s
**MESJ Messejana 83.69 52 eP P 02 34 56.8 +2.0**
comp=Z,24nm,1.7s
**MESJ Messejana 83.69 52 eP P 02 34 55.3 +0.6**
MESJ eS S 02 45 17.3 -0.3
**PBEJ Beja 83.86 51 eP P 02 34 56.8 +1.1**
comp=Z,28nm,1.4s
**PCVE Castro Verde 83.90 52 eP P 02 34 56.8 +0.9**
comp=Z,31nm,1.7s
**PBDV Barranco-do-Ve 84.14 52 eP P 02 34 58.9 +1.8**
comp=Z,40nm,1.4s
**PVAQ Vaqueiros 84.23 52 eP P 02 34 58.4 +0.9**
comp=Z,35nm,1.3s
**PVAQ Vaqueiros 84.23 52 eS S 02 45 28.9 +5.8**
**PVAQ Vaqueiros 84.23 52 eLQ LQ 02 57 34.9**
PVAQ eLR LR 03 04 27.6
comp=Z,960nm,18.0s
**PBAR Barrancos 84.39 51 eP P 02 34 59.5 +1.1**
comp=Z,50nm,1.4s
**HFS Hagfors 84.61 25 P P 02 34 58.8 -0.3**
comp=Z,5.6nm,0.9s,baz=234,slow=5.0,SNR=3.3
HFS LR LR 03 13 00.3
comp=Z,942nm,18.3s,baz=300,slow=36
**RAO Raoul Island 84.75 235 PFAKE 02 35 10.0 +10**
RAO LR LR
comp=Z,1µm,20.0s
**YUK Yuzh-Kuril'sk 84.76 316 d i P P 02 35 04.0 +3.9**
YUK i 02 35 06.4
YUK i 02 35 08.0
YUK i S S 02 45 27.3 -0.8
YUK SS SS 02 51 03.8 +4.7
YUK pmax pmax
comp=Z,408nm,5.8s
**YSS Yuzh-Sakhalins 85.31 319 eP P 02 35 11.0 +8.2**
YSS pmax pmax
comp=Z,50nm,1.0s
**PAB San Pablo 85.69 49 eP P 02 35 05.5 +0.5**
PAB pmax pmax
comp=Z,13nm,1.1s
PAB MLR MLR
comp=Z,2µm,20.0s
**PAB San Pablo 85.69 49 eP P 02 35 05.5 +0.5**
comp=Z,13nm,1.1s
PAB LR LR
comp=Z,2µm,20.0s
**ESDC Sonseca Array 85.90 49 P P 02 35 07.0 +1.0**
comp=Z,1.2nm,0.8s,baz=310,slow=5.2,SNR=11
ESDC LR LR 03 12 16.1
comp=Z,1µm,19.7s,baz=295,slow=35
**ES19 SONSECA Array 85.93 48 eP P 02 35 07.4 +1.3**
**RTC Rabat Centre 86.31 55 PFAKE 02 35 20.0 +12**
RTC LR LR
comp=Z,5µm,21.0s
**EFI East Falkland 86.60 151 PFAKE 02 35 20.0 +11**
EFI LR LR
comp=Z,573nm,20.0s
**WLF Walferdange 87.20 36 PFAKE 02 35 20.0 +7.9**
WLF LR LR
comp=Z,2µm,22.0s
**ERM Erimo 87.46 315 PFAKE 02 35 20.0 +6.6**
ERM LR LR
comp=Z,533nm,20.0s
**RGN Rugen 87.94 30 PFAKE 02 35 30.0 +15**
RGN LR LR
comp=Z,1µm,20.0s
**FINES FINESS Array B 88.09 20 LR LR 03 13 45.3**
comp=Z,1µm,18.7s,baz=322,slow=35
**MDT Midelt 88.50 55 LR LR 03 10 28.5**
comp=Z,293nm,21.2s,slow=33
**SSB Saint Sauveur 88.65 41 PFAKE 02 35 30.0 +11**
SSB LR LR
comp=Z,2µm,20.0s
**BFO Black Forest 89.14 37 PFAKE 02 35 30.0 +8.6**
BFO LR LR
comp=Z,2µm,20.0s
**STU Stuttgart 89.36 36 PFAKE 02 35 30.0 +7.7**
STU LR LR
comp=Z,2µm,18.0s
**SENIN Lac Senin/Sane 89.67 39 PFAKE 02 35 40.0 +16**
SENIN LR LR
comp=Z,2µm,19.0s
**CLL Collm 89.80 32 eP P 02 35 32.0 +7.7**
CLL MLR MLR
comp=Z,2µm,20.5s
**CLL Collm 89.80 32 eP P 02 35 25.0 +0.7**
CLL eS S 02 46 22.0 +5.6
CLL ePS PnS 02 47 19.0 -3.1
CLL eSS SS 02 52 18.0 +5.7
CLL Lm MLR 03 15 00.0
comp=N,1µm,19.8s
CLL Lm MLR 03 15 00.0
comp=E,1µm,21.0s
CLL Lm MLR 03 15 00.0
comp=Z,2µm,20.5s
**CLL Collm 89.80 32 PFAKE 02 35 40.0 +16**
CLL LR LR
comp=Z,2µm,20.0s
**GRFO Grafenberg 89.89 34 PFAKE 02 35 40.0 +15**
GRFO LR LR
comp=Z,2µm,20.0s
**BNI Bardonecchia 90.04 40 PFAKE 02 35 40.0 +14**
BNI LR LR
comp=Z,2µm,21.0s
**NKC Novy Kostel 90.19 33 AMS AMS 03 17 40.0**
comp=Z,2µm,16.2s
**BRG Berggiesshubel 90.54 32 e(P) P 02 35 37.6 +10**
comp=Z,12nm,1.6s
**BRG Berggiesshubel 90.54 32 eP P 02 35 37.6 +10**
BRG pmax pmax
comp=Z,12nm,1.6s
**TUE Stuetta 90.78 38 PFAKE 02 35 40.0 +11**
TUE LR LR
comp=Z,3µm,19.0s
**PVCC Panska Ves 91.06 32 AMS AMS 03 18 10.0**
comp=Z,2µm,17.4s
**FUORN Ofenpass-Fuorn 91.20 37 PFAKE 02 35 40.0 +8.7**
FUORN LR LR
comp=Z,3µm,19.0s
**PRA Prague 91.29 33 AMS AMS 03 18 50.0**
comp=Z,2µm,16.8s
**PRU Pruhonice 91.39 33 AMS AMS 03 16 20.0**
comp=Z,2µm,19.7s
**KHC Kasperske Hory 91.45 34 AMS AMS 03 16 10.0**
comp=Z,2µm,20.0s
**KHC Kasperske Hory 91.45 34 PFAKE 02 35 40.0 +7.9**
KHC LR LR
comp=Z,600nm,20.0s
**GOPC GO Pecny, Ondr 91.56 33 AMS AMS 03 16 20.0**
comp=Z,2µm,18.9s
**GERES GERESS Array B 91.69 34 LR LR 03 17 23.7**
comp=Z,1µm,18.1s,baz=308,slow=36
**UPC Upice 91.78 32 AMS AMS 03 19 20.0**
comp=Z,2µm,14.5s
**BOD Bodaibo 91.89 339 eP P 02 35 30.5 -3.4**
BOD pmax pmax
comp=Z,7.0nm,1.4s
**DPC Dobruska-Polom 92.03 32 AMS AMS 03 19 30.0**
comp=Z,2µm,15.0s
**TREC Trest 92.31 33 AMS AMS 03 16 50.0**
comp=Z,2µm,18.5s
**URZ Urewera 92.71 229 PFAKE 02 35 50.0 +12**
URZ LR LR
comp=Z,2µm,21.0s
**VLC Villacollemand 92.72 39 PFAKE 02 35 50.0 +12**
VLC LR LR
comp=Z,924nm,19.0s
**VRAC Vranov 92.85 32 LR LR 03 14 21.6**
comp=Z,199nm,19.9s,baz=306,slow=34
**MORC Moravsky Berou 93.00 32 PFAKE 02 35 50.0 +11**
MORC LR LR
comp=Z,6µm,19.0s
**USRK Ussuriysk Ar. 93.15 321 P P 02 35 39.7 -0.3**
comp=Z,1.6nm,0.8s,baz=51,slow=5.7,SNR=3.4
**OKC Ostrava-Krasne 93.25 31 AMS AMS 03 19 00.0**
comp=Z,1µm,16.6s
**MJAR Matsushiro Arr 93.55 312 P P 02 35 42.4 +0.4**
comp=Z,0.7nm,0.5s,baz=47,slow=4.8,SNR=3.1
**MAJO Matsushiro 93.55 312 PFAKE 02 35 50.0 +7.9**
MAJO LR LR
comp=Z,580nm,19.0s
**BKZ Black Stump Fm 93.56 229 PFAKE 02 35 50.0 +8.1**
BKZ LR LR
comp=Z,1µm,20.0s
**TRI Trieste 93.69 36 PFAKE 02 35 50.0 +7.6**
TRI LR LR
comp=Z,1µm,20.0s
**VLA Vladivostok 93.85 320‖ eP P 02 35 42.3 -1.0**
VLA i 02 35 42.8
VLA e 02 39 26.8
VLA S SKSac 02 46 16.7 -1.6
VLA pmax pmax
comp=Z,12nm,0.8s
**OUZ Omahuta 93.89 233 PFAKE 02 35 50.0 +6.6**
OUZ LR LR
comp=Z,1µm,22.0s
**DZM Mont Dzumac 94.23 248 eLR LR 03 05 46.1**
comp=Z,2µm,30.4s
**DZM Mont Dzumac 94.23 248 PFAKE 02 36 00.0 +15**
DZM LR LR
comp=Z,3µm,20.0s
**MDJ Mudanjiang 94.25 323 PFAKE 02 36 00.0 +15**
MDJ LR LR
comp=Z,497nm,21.0s
**VSL Villasalto 94.83 43 PFAKE 02 36 00.0 +12**
VSL LR LR
comp=Z,700nm,21.0s
**HNR Honiara 95.13 262 PFAKE 02 36 00.0 +10**
HNR LR LR
comp=Z,31µm,19.0s
**PSZ Piszkesteto 95.41 32 PFAKE 02 36 00.0 +10**
PSZ LR LR
comp=Z,1µm,19.0s
**SNZO South Karori 95.73 228 PFAKE 02 36 00.0 +8.3**
SNZO LR LR
comp=Z,1µm,20.0s
**HIA Hailar 96.10 331 PFAKE 02 36 00.0 +6.5**
HIA LR LR
comp=Z,1µm,22.0s
**OBN Obninsk 96.47 19‖ eP P 02 35 55.9 +1.0**
OBN eS SKSac 02 46 26.1 -5.6
OBN eSS SS 02 53 43.4 -3.7
OBN eSSS SSS 02 57 29.4
OBN pmax pmax
comp=Z,6.0nm,1.1s
OBN MLR MLR
comp=Z,1µm,19.0s
**ASCN Ascension 96.79 96 PFAKE 02 36 10.0 +13**
ASCN LR LR
comp=Z,1µm,21.0s
**KEST Kesra 96.97 46 LR LR 03 18 35.0**
comp=Z,559nm,19.1s,baz=268,slow=35
**KHZ Kahutara 96.99 227 PFAKE 02 36 10.0 +13**
KHZ LR LR
comp=Z,1µm,20.0s
**CN2 Changchun 97.06 324 eP Pdif 02 35 58.0 0.0**
**THZ Tophouse 97.15 228 PFAKE 02 36 10.0 +12**
THZ LR LR
comp=Z,1µm,21.0s
**KIEV Kiev 97.49 26 PFAKE 02 36 10.0 +10**
KIEV LR LR
comp=Z,2µm,21.0s
**AKASG Malin Array Be 97.50 26 LR LR 03 21 34.8**

comp=Z,1μm,19.0s,baz=320,slow=36
**CLTB Caltabellotta 98.39 43** PFAKE 02 36 20.0 +16
CLTB LR LR
comp=Z,444nm,20.0s
**CUC Castrocucco 98.47 40** PFAKE 02 36 20.0 +16
CUC LR LR
comp=Z,1μm,19.0s
**HOPE Hope Point 98.61 146** PFAKE 02 36 10.0 +5.6
HOPE LR LR
comp=Z,542nm,20.0s
**TIP Timpagrande 99.55 40** PFAKE 02 36 20.0 +11
TIP LR LR
comp=Z,1μm,19.0s
**DBIC Dimbokro 99.75 78** LR LR 03 18 29.8
comp=Z,698nm,20.4s,baz=290,slow=34
**TIR Tirane 99.89 37** PFAKE 02 36 20.0 +9.4
TIR LR LR
comp=Z,2μm,20.0s
**WDD Wield Dalam 100.27 44** PFAKE 02 36 20.0 +7.6
WDD LR LR
comp=Z,676nm,19.0s
**INCN Inchon 100.49 318** PFAKE 02 36 20.0 +6.6
INCN LR LR
comp=Z,562nm,20.0s
**TAM Tamanrasset 101.19 59** PFAKE 02 36 30.0 +13
TAM LR LR
comp=Z,1μm,21.0s
**TIRR Tirgusor 101.98 30** PFAKE 02 36 30.0 +10
TIRR LR LR
comp=Z,1μm,18.0s
**ULN Ulaanbaatar 102.43 336** PFAKE 02 36 30.0 +8.0
ULN LR LR
comp=Z,800nm,20.0s
**SONA0 Songino Array 102.70 337** *e*Pdif **Pdif 02 36 23.4 +0.3**
SONA0 *e*PP **PP 02 40 37.4 +1.7**
**SONM Songino Array 102.70 337** P **Pdif 02 36 23.4 +0.3**
comp=Z,0.3nm,0.6s,baz=42,slow=4.5,SNR=2.9
SONM PP **PP 02 40 37.4 +1.7**
comp=Z,1.3nm,1.0s,baz=52,slow=6.0,SNR=5.6
**TOA1 Torodi Ar. Sit 102.70 70** *e*Pdif **Pdif 02 36 21.7 -1.9**
TOA1 *e*PKKPdf **PKKPdf 02 52 27.1 -2.3**
**TORD Torodi Ar. Bea 102.70 70** P **Pdif 02 36 21.7 -1.9**
comp=Z,0.6nm,1.0s,baz=292,slow=7.6,SNR=2.9
TORD PKKP **PKKPdf 02 52 27.1 -2.3**
comp=Z,0.4nm,1.0s,baz=197,slow=3.1,SNR=3.6
**LHI Lord Howe Isla 103.77 241** PFAKE 02 36 40.0 +12
LHI LR LR
comp=Z,7μm,22.0s
**MANU Manus Island 103.86 274** PFAKE 02 36 40.0 +11
MANU LR LR
comp=Z,43μm,20.0s
**BRVK Borovoye 104.08 1** PFAKE 02 36 40.0 +11
BRVK LR LR
comp=Z,2μm,19.0s
**BJI Beijing 104.61 326** P **Pdif 02 36 31.5 -0.1**
BJI S **Sdif 02 48 24.0 -0.5**
BJI SS **SS 02 55 42.5 +1.3**
BJI LN
comp=Z,380nm,13.0s
BJI LE
comp=Z,540nm,22.7s
BJI LZ
comp=Z,550nm,22.5s
**BJT Baijiatuau 104.63 326** PFAKE 02 36 40.0 +8.2
BJT LR LR
comp=Z,1μm,22.0s
**KURK Kurchatov 106.17 355** PFAKE 02 41 00.0
KURK LR LR
comp=Z,1μm,21.0s
**HHC Hu-ho-hao-te 106.25 329** Pdif **Pdif 02 36 42.8 +3.7**
HHC PP PP 02 41 09.8 +7.5
HHC S **Sdif 02 48 40.0 +1.5**
HHC PPMZ
comp=Z,190nm,6.2s
HHC LN
comp=Z,550nm,16.2s
HHC LE
comp=Z,580nm,17.4s
HHC LZ
comp=Z,600nm,18.7s
**KURBB Kurchatov Arra 106.27 355** PKKPab PKKPab 02 52 31.7 +1.3
comp=Z,0.6nm,0.3s,baz=205,slow=4.3,SNR=6.0
**SANT Santorini 106.49 37** PFAKE 02 41 00.0
SANT LR LR
comp=Z,1μm,19.0s
**PMG Port Moresby 106.83 267** PFAKE 02 41 00.0
PMG LR LR
comp=Z,43μm,22.0s
**IDI Anoyia 106.94 38** PFAKE 02 41 00.0
IDI LR LR
comp=Z,700nm,20.0s
**ANTO Ankara 107.59 30** PFAKE 02 41 00.0
ANTO LR LR
comp=Z,900nm,20.0s
**ISP Isparta 108.09 33** PFAKE 02 41 10.0
ISP LR LR
comp=Z,1μm,20.0s
**EIDS Eidsvold 108.56 250** PFAKE 02 41 10.0
EIDS LR LR
comp=Z,7μm,22.0s
**ARMA Armidale 109.54 245** PFAKE 02 41 10.0
ARMA LR LR
comp=Z,9μm,21.0s
**MAK Makhachkala 110.55 19** *e*PKIKP PKiKP 02 41 12.7 +14
MAK MLR MLR
comp=Z,2μm,23.0s
**CTAO Charters Tower 111.23 257** PFAKE 02 41 10.0
CTAO LR LR
comp=Z,11μm,21.0s
**SBA Scott Base 111.40 193** PFAKE 02 41 10.0
SBA LR LR
comp=Z,8.0nm,19.0s
**WMQ Urumqi 111.71 348** *e*Pdif **Pdif 02 37 06.0 +2.7**
WMQ PP PP 02 41 49.0 +7.5
WMQ SKS SKiKP 02 44 11.0 -25
**WMQ Urumqi 111.71 348** SS SS 02 57 22.0 +5.6
WMQ AMB AMB
comp=Z,18nm,10.0s
WMQ LR LR
comp=N,840nm,23.0s
WMQ LR LR
comp=E,780nm,23.0s
WMQ LR LR
comp=Z,710nm,23.0s
**WMQ Urumqi 111.71 348** *e*PKP **PKiKP 02 41 02.0 +1.2**
WMQ PP PP 02 41 48.0 +6.5
WMQ SKS **SKSdf 02 48 12.0 -1.2**
WMQ SKKS **SKKSac 02 48 41.0 -4.7**
WMQ SS **SS 02 57 22.0 +5.6**
WMQ PPMZ
comp=Z,24nm,10.0s
WMQ LN
comp=Z,820nm,24.0s
WMQ LE
comp=Z,780nm,23.0s
WMQ LZ
comp=Z,710nm,22.0s
**CSS Prodhromos 111.74 33** PFAKE 02 41 10.0
CSS LR LR
comp=Z,100nm,20.0s
**TATO Taipei 111.93 312** PFAKE 02 41 10.0
TATO LR LR
comp=Z,6μm,20.0s
**YHNB Yeheng 112.20 311** PFAKE 02 41 10.0
YHNB LR LR
comp=Z,3μm,20.0s
**GNI Garni 112.21 22** PFAKE 02 41 10.0
GNI LR LR
comp=Z,968nm,21.0s
**GTA Gaotai 112.37 337** *e*PKP **PKiKP 02 41 02.0 -0.2**
GTA PP **PP 02 41 49.5 +3.0**
GTA SKS **SKSdf 02 48 13.8 -0.9**
GTA SKKS **SKKSac 02 48 44.5 -6.0**
GTA SS **SS 02 57 24.3 -1.5**
GTA PPMZ
comp=Z,260nm,7.4s
GTA LN
comp=Z,360nm,19.5s
GTA LE
comp=Z,280nm,18.1s
GTA LZ
comp=Z,320nm,21.9s
**CAN Canberra 112.90 240** PFAKE 02 41 10.0
CAN LR LR
comp=Z,6μm,22.0s

**QSPA South Pole Qui 113.06 180** PFAKE 02 41 10.0
QSPA LR LR
comp=Z,500nm,19.0s
**SSLB Suanglung 113.07 311** PFAKE 02 41 20.0
SSLB LR LR
comp=Z,900nm,20.0s
**LZH Lanzhou 113.63 332** *e*PKP PKiKP 02 40 59.3 -5.5
LZH sPKP 02 41 04.8
LZH LN
comp=Z,630nm,18.0s
LZH LE
comp=Z,1μm,17.4s
LZH LZ
comp=Z,790nm,19.3s
**TKM2 Tokmak 2 114.13 357** PFAKE 02 41 20.0 +14
TKM2 LR LR
comp=Z,2μm,18.0s
**EKS2 Erkin-Say 114.46 358** PFAKE 02 41 20.0 +14
EKS2 LR LR
comp=Z,2μm,19.0s
**AAK Ala-Archa 114.46 358** PFAKE 02 41 20.0 +14
AAK LR LR
comp=Z,2μm,19.0s
**ENH Enshi 115.58 324** PFAKE 02 41 20.0 +12
ENH LR LR
comp=Z,760nm,19.0s
**TAU Tasmania Unive 115.59 232** PFAKE 02 41 20.0 +12
TAU LR LR
comp=Z,3μm,21.0s
**KSH Kashi 117.50 356** *e*PKP **PKPdf 02 41 14.5 +2.4**
KSH *e*PP PP 02 42 35.0 +13
KSH PKS **PKSdf 02 44 47.8 -1.1**
KSH SKS **SKSdf 02 48 24.0 -0.6**
KSH SKKS **SKKSac 02 49 26.5 +1.5**
KSH PPMZ
comp=Z,180nm,4.4s
KSH LN
comp=Z,150nm,8.0s
KSH LE
comp=Z,83nm,5.7s
KSH LZ
comp=Z,190nm,5.9s
**CD2 Chengdu 117.99 329** PKP **PKPdf 02 41 12.3 -0.8**
CD2 sPKP 02 41 17.0
CD2 SKS **SKSdf 02 48 24.5 -1.2**
CD2 SKKS **SKKSac 02 49 24.5 -4.0**
CD2 SS **SS 02 58 39.5 -0.4**
CD2 PPMZ
comp=Z,120nm,5.2s
**DAV Davao City (W) 119.27 293** PFAKE 02 41 30.0 +14
DAV LR LR
comp=Z,7μm,19.0s
**GYA Guiyang 120.10 323** *e*Pdif **Pdif 02 37 40.0 -1.0**
GYA PKP **PKPdf 02 41 15.5 -1.9**
GYA PP **PP 02 42 44.8 +3.6**
GYA PPMZ
comp=Z,130nm,7.8s
**SAUI Saumlaki 120.90 275** PFAKE 02 41 30.0 +11
SAUI LR LR
comp=Z,17μm,22.0s
**WRAB Tennant Creek 121.92 260** PFAKE 02 41 30.0 +9.2
WRAB LR LR
comp=Z,14μm,21.0s
**WB2 Warramunga Arr 121.92 260** PFAKE 02 41 30.0 +9.2
WB2 LR LR
comp=Z,11μm,21.0s
**WRA Warramunga Arr 121.93 260** PKP **PKPdf 02 41 19.5 -1.3**
comp=Z,1.1nm,0.8s,baz=71,slow=2.4,SNR=8.9
WRA PKKPbc PKKPab 02 51 25.3 +6.7
comp=Z,0.7nm,1.0s,baz=259,slow=2.7,SNR=4.6
**KBL Kabul 122.55 2** PFAKE 02 41 30.0 +8.0
KBL LR LR
comp=Z,1μm,22.0s
**MTN Manton Dam 122.76 269** PFAKE 02 41 30.0 +7.5
MTN LR LR
comp=Z,10μm,18.0s
**AS01 Alice Springs 123.19 256** *e*PKPdf **PKPdf 02 41 26.2 +3.0**
**AS31 Alice Springs 123.23 256** *e*PKPdf **PKPdf 02 41 22.5 -0.8**
AS31 LR LR
comp=Z,200nm,21.0s
**ASAR Alice Springs 123.23 256** PKP **PKPdf 02 41 22.5 -0.8**
comp=Z,1.4nm,1.0s,baz=99,slow=1.8,SNR=7.1
**KMI Kunming 123.27 326** PKP **PKPdf 02 41 22.5 -1.1**
**QIZ Qiongzhong 123.82 315** PKP **PKPdf 02 41 25.3 +0.8**
QIZ SS SS 03 00 01.0 +5.5
QIZ LZ
comp=Z,670nm,23.3s
**QIZ Qiongzhong 123.82 315** PFAKE 02 41 40.0 +15
QIZ LR LR
comp=Z,4μm,21.0s
**LSA Lhasa 124.16 339** PFAKE 02 41 40.0 +14
LSA LR LR
comp=Z,900nm,20.0s
**MYLDM Lahad Datu 126.22 296** PFAKE 02 41 40.0 +11
MYLDM LR LR
comp=Z,10μm,20.0s
**RAYN Ar Rayn 127.11 30** PFAKE 02 41 40.0 +9.2
RAYN LR LR
comp=Z,400nm,20.0s
**KKM Kota Kinabalu 127.61 298** PFAKE 02 41 40.0 +8.0
KKM LR LR
comp=Z,5μm,21.0s
**DLV T Lat 129.76 310** PFAKE 02 41 50.0 +14
DLV LR LR
comp=Z,3μm,21.0s
**UOSS Wadi Hilu 129.89 18** PFAKE 02 41 50.0 +14
UOSS LR LR
comp=Z,700nm,20.0s
**KAPI Kappang 130.19 284** PFAKE 02 41 50.0 +13
KAPI LR LR
comp=Z,4μm,22.0s
**CASY Casey 130.34 199** PFAKE 02 41 50.0 +15
CASY LR LR
comp=Z,800nm,19.0s
**CHTO Chiang Mai 130.44 325** PFAKE 02 41 50.0 +13
CHTO LR LR
comp=Z,1μm,19.0s
**CM31 Chiang Mai Arr 130.73 325** *e*PKPdf **PKPdf 02 41 38.0 +0.3**
**CMAR Chiang Mai Arr 130.73 325** PKP **PKPdf 02 41 38.0 +0.3**
comp=Z,0.9nm,0.3s,baz=316,slow=2.5,SNR=3.3
**SBUM Sibu 132.92 297** PFAKE 02 41 50.0 +8.0
SBUM LR LR
comp=Z,2μm,20.0s
**DAMY Dhamar 134.01 38** PFAKE 02 42 00.0 +16
DAMY LR LR
comp=Z,700nm,18.0s
**MBAR Mbarara 134.45 66** PFAKE 02 42 00.0 +15
MBAR LR LR
comp=Z,800nm,21.0s
**SUR Sutherland 134.52 113** PFAKE 02 42 00.0 +15
SUR LR LR
comp=Z,465nm,19.0s
**FURI Furi 134.70 49** PFAKE 02 42 00.0 +14
FURI LR LR
comp=Z,500nm,18.0s
**KSM Kuching 135.04 298** PFAKE 02 42 00.0 +14
KSM LR LR
comp=Z,1μm,20.0s
**MAW Mawson 135.24 175** PKP **PKPdf 02 41 44.2 -0.5**
comp=Z,0.6nm,0.4s,baz=258,slow=5.2,SNR=3.5
**MAW Mawson 135.24 175** *e*PKIKP **PKPdf 02 41 44.3 -0.4**
MAW MLR MLR
comp=Z,100nm,19.0s
**MAW Mawson 135.24 175** *e*PKPdf **PKPdf 02 41 44.3 -0.4**
MAW LR LR
comp=Z,100nm,19.0s
**MBWA Marble Bar 135.51 263** PFAKE 02 42 00.0 +13
MBWA LR LR
comp=Z,8μm,21.0s
**LSZ Lusaka 138.41 87** PFAKE 02 42 00.0 +7.7
LSZ LR LR
comp=Z,700nm,22.0s
**NWAO Narrogin (SRO) 138.82 246** PFAKE 02 42 00.0 +7.6
NWAO LR LR
comp=Z,10μm,21.0s
**UGM Wanagama 139.68 286** PFAKE 02 42 10.0 +15
UGM LR LR
comp=Z,2μm,22.0s
**KULM Kulim 139.91 311** PFAKE 02 42 10.0 +15
KULM LR LR
comp=Z,2μm,20.0s
**MYKOM Kota Tinggi 139.95 304** PFAKE 02 42 10.0 +15
MYKOM LR LR
comp=Z,1μm,20.0s
**KMBO Kilima Mbogo 140.13 62** *e*PKIKP **PKPdf 02 41 53.0 -2.7**
KMBO MLR MLR
comp=Z,795nm,19.0s
**KMBO Kilima Mbogo 140.13 62** *e*PKPdf **PKPdf 02 41 53.0 -2.7**
KMBO LR LR
comp=Z,795nm,19.0s
**PSI Prapat 142.88 310** PFAKE 02 42 10.0 +10
PSI LR LR
comp=Z,2μm,22.0s
**MNAI Manna 144.38 297** PFAKE 02 42 10.0 +7.1
MNAI LR LR
comp=Z,3μm,21.0s
**GSI Gunungsitoli 144.89 310** *e*PKPdf PKPbc 02 42 03.0 0.0
**ABPO Ambohimpanom 156.92 84** PFAKE 02 42 30.0 +7.7
ABPO LR LR
comp=Z,634nm,21.0s
**DGAR Diego Garcia 164.30 357** PFAKE 02 42 40.0 +10
DGAR LR LR
comp=Z,1μm,21.0s

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*IDC **28** 03:00:18.7±1.2, 13°.22N×145°.81E, h0km, mb3.9/7, mb1 4.1/7, mb1mx3.8/45, mbtmp3.9/7, MS4.4/1, Ms1 4.4/1, ms1mx3.2/52, Error ellipse: s-maj=49.4km s-min=21.3km az=93.0*
*ISCJB **28** 03:00:23.7±1.2, 13°.2N±0°.1×145°.8E±0°.4, h50km, mb3.9/7, MS4.4/1, Error ellipse: s-maj=49.5km s-min=19.1km az=2.6*
**ISC 28 03:00:25.5±1.3, 13°.2N±0°.2×145°.8E±0°.4, h50km, n9, σ0§49/8, mb4.0/7, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **34.79** | **199** | P | **P** | **03 07 11.2** | **-0.5** |
| | 1.3nm,0.7s,baz=20,slow=9.5,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **38.42** | **198** | P | **P** | **03 07 43.0** | **+0.5** |
| | 0.3nm,0.8s,baz=23,slow=9.9,SNR=5.1 | | | | | | |
| **AFI** | **Afiamalu** | **49.91** | **121** | LR | LR | 03 24 43.7 | |
| | comp=Z,422nm,20.8s,baz=171,slow=29 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.40** | **316** | P | **P** | **03 10 43.9** | **+0.5** |
| | 0.5nm,0.3s,baz=90,slow=8.4,SNR=6.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **65.51** | **320** | P | **P** | **03 11 03.3** | **-0.4** |
| | 1.1nm,0.7s,baz=101,slow=6.8,SNR=12 | | | | | | |
| **ILAR** | **Eielson Array** | **68.55** | **25** | P | **P** | **03 11 22.8** | **0.0** |
| | 0.3nm,0.6s,baz=255,slow=5.5,SNR=7.7 | | | | | | |
| **BVAR** | **Borovoye Array** | **70.80** | **322** | P | **P** | **03 11 37.2** | **+0.4** |
| | 0.7nm,0.4s,baz=105,slow=8.4,SNR=6.5 | | | | | | |
| **FINES** | **FINESS Array B** | **91.91** | **335** | P | **P** | **03 13 28.0** | **-0.4** |
| | 5.5nm,1.1s,baz=98,slow=5.8,SNR=5.2 | | | | | | |
| **DBIC** | **Dimbokro** | **144.80** | **302** | PKP | **PKPdf** | **03 19 58.2** | **+0.2** |
| | 3.3nm,0.5s,baz=44,slow=2.6,SNR=8.8 | | | | | | |

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*IDC **28** 03:10:19.0±5.8, 4°.35S×144°.01E, h86km±50km, mb3.6/4, mb1 3.8/6, mb1mx3.5/37, mbtmp4.0/6, ML4.0/1, Error ellipse: s-maj=44.1km s-min=28.4km az=127.0*
*ISCJB **28** 03:10:20.5±1.2, 4°.5S±0°.1×144°.0E±0°.1, h110km, mb3.7/4, Error ellipse: s-maj=24.2km s-min=13.5km az=141.7*
**ISC 28 03:10:21.2±1.0, 4°.4S±0°.1×144°.1E±0°.2, h110km, n7, σ1§24/9, mb3.7/4, Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **5.84** | **149** | P | **Pn** | **03 11 46.1** | **+0.7** |
| | 3.8nm,0.3s,baz=12,slow=10,SNR=6.5 | | | | | | |
| PMG | | | | S | **Sn** | **03 12 49.9** | **-1.2** |
| | 2.9nm,0.3s,baz=316,slow=20,SNR=3.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.15** | **211** | P | **P** | **03 14 24.0** | **-1.2** |
| | 0.5nm,0.3s,baz=38,slow=9.9,SNR=46 | | | | | | |
| **ASAR** | **Alice Springs** | **21.54** | **206** | P | **P** | **03 15 00.9** | **-0.9** |
| | 3.8nm,0.6s,baz=33,slow=9.8,SNR=36 | | | | | | |
| **VNDA** | **Vanda** | **73.69** | **176** | P | **P** | **03 21 44.0** | **+1.5** |
| | 0.9nm,0.7s,baz=325,slow=8.0,SNR=4.0 | | | | | | |
| **MAW** | **Mawson** | **82.62** | **202** | P | **P** | **03 22 32.6** | **+0.7** |
| | 0.3nm,0.4s,baz=102,slow=9.3,SNR=3.4 | | | | | | |
| **ILAR** | **Eielson Array** | **85.16** | **24** | P | **P** | **03 22 45.0** | **+0.1** |
| | 0.7nm,0.7s,baz=252,slow=5.1,SNR=9.7 | | | | | | |
| ILAR | | | | pP | **pP** | **03 23 11.8** | **-1.5** |
| | 0.6nm,0.6s,baz=256,slow=4.8,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **141.88** | **286** | PKP | **PKPdf** | **03 29 40.7** | **-0.4** |
| | 0.3nm,0.7s,baz=36,slow=2.3,SNR=3.9 | | | | | | |

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*MOS **28** 03:12:14.4±2.1, 53°.18N×163°.04E, h47km, mb4.2/1, Error ellipse: s-maj=14.0km s-min=8.9km az=124.4*
**KRSC 28 03:12:14.4±1.5, 53°.18N×163°.04E, h47km±23km, ML4.1, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MKZ** | **Mys Kozlova** | **1.58** | **331** | *i* P | Pn | 03 12 42.3 | +2.3 |
| MKZ | | | | *e*S | Sn | 03 13 01.5 | +2.2 |
| **MKZ** | **Mys Kozlova** | **1.58** | **331** | PN | Pn | 03 12 42.3 | +2.3 |
| MKZ | | | | S | Sn | 03 13 01.5 | +2.2 |
| **SPN** | **Mys Shipunski** | **1.82** | **269** | *i* P | Pn | 03 12 45.8 | +2.6 |
| SPN | | | | *e*S | Sn | 03 13 06.8 | +1.7 |
| **SPN** | **Mys Shipunski** | **1.82** | **269** | PN | Pn | 03 12 45.8 | +2.6 |
| SPN | | | | S | Sn | 03 13 06.8 | +1.7 |
| **NLC** | **Nalytchevo** | **2.23** | **271** | *e*P | Pn | 03 12 51.5 | +2.8 |
| NLC | | | | *e*S | Sn | 03 13 17.7 | +2.7 |
| **NLC** | **Nalytchevo** | **2.23** | **271** | PN | Pn | 03 12 51.5 | +2.8 |
| NLC | | | | S | Sn | 03 13 17.7 | +2.7 |
| **KII** | **Karymskiy** | **2.31** | **293** | *e*P | Pn | 03 12 52.7 | +2.7 |
| KII | | | | *e*S | Sn | 03 13 19.4 | +2.2 |
| **KII** | **Karymskiy** | **2.31** | **293** | PN | Pn | 03 12 52.7 | +2.7 |
| KII | | | | S | Sn | 03 13 19.4 | +2.2 |
| **SDLR** | **Sedlovina** | **2.50** | **274** | *i* P | Pn | 03 12 55.9 | +3.2 |
| SDLR | | | | *e*S | Sn | 03 13 25.2 | +3.1 |
| **SDLR** | **Sedlovina** | **2.50** | **274** | PN | Pn | 03 12 55.9 | +3.2 |
| SDLR | | | | S | Sn | 03 13 25.2 | +3.1 |
| **KZV** | **Kizimen** | **2.52** | **321** | *i* P | Pn | 03 12 56.2 | +3.1 |
| KZV | | | | *e*S | Sn | 03 13 25.5 | +2.7 |
| **UGLR** | **Uglovaya** | **2.54** | **272** | *e*P | Pn | 03 12 56.7 | +3.5 |
| **SMAR** | **Somma** | **2.55** | **274** | *i* P | Pn | 03 12 56.6 | +3.1 |
| **SMAR** | **Somma** | **2.55** | **274** | PN | Pn | 03 12 56.6 | +3.1 |
| **AVH** | **Avacha** | **2.59** | **274** | *e*P | Pn | 03 12 57.5 | +3.6 |
| AVH | | | | *e*S | Sn | 03 13 28.7 | +4.5 |
| **AVH** | **Avacha** | **2.59** | **274** | PN | Pn | 03 12 57.5 | +3.6 |
| AVH | | | | S | Sn | 03 13 28.7 | +4.5 |
| **KRX** | **Arik** | **2.64** | **276** | *e*P | Pn | 03 12 57.9 | +3.2 |
| **KOK** | **Koryaka** | **2.65** | **274** | *e*P | Pn | 03 12 58.2 | +3.5 |
| **KOK** | **Koryaka** | **2.65** | **274** | PN | Pn | 03 12 58.2 | +3.5 |
| **PET** | **Petropavlovsk** | **2.65** | **268** | *e*P | Pn | 03 12 58.0 | +3.4 |
| PET | | | | *e*S | Sn | 03 13 28.7 | +3.3 |
| **PET** | **Petropavlovsk** | **2.65** | **268** | *e*PN | Pn | 03 12 58.0 | +3.4 |
| PET | | | | *e*S | Sn | 03 13 28.4 | +3.0 |
| PET | | | | pmax | pmax | | |
| | comp=Z,62nm,0.4s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=E,207nm,0.4s | | | | | | |
| PET | | | | smax | smax | | |
| | comp=N,132nm,0.5s | | | | | | |
| **TUMR** | **Tumrok** | **2.71** | **322** | *e*P | Pn | 03 12 58.9 | +3.3 |
| **TUMR** | **Tumrok** | **2.71** | **322** | PN | Pn | 03 12 58.9 | +3.3 |
| **RUS** | **Russkaya** | **2.85** | **257** | *e*P | Pn | 03 12 59.9 | +2.6 |
| RUS | | | | *e*S | Sn | 03 13 32.3 | +2.0 |
| **RUS** | **Russkaya** | **2.85** | **257** | PN | Pn | 03 12 59.9 | +2.6 |
| RUS | | | | S | Sn | 03 13 32.3 | +2.0 |
| **MTVR** | **Mutnovka** | **3.03** | **259** | *e*P | Pn | 03 13 02.8 | +2.8 |
| MTVR | | | | *e*S | Sn | 03 13 37.1 | +2.0 |
| **KBTR** | **Krutoberegovo** | **3.04** | **358** | *e*P | Pn | 03 13 01.6 | +1.7 |
| KBTR | | | | *e*S | Sn | 03 13 37.2 | +2.1 |
| **KBTR** | **Krutoberegovo** | **3.04** | **358** | PN | Pn | 03 13 01.6 | +1.7 |
| KBTR | | | | S | Sn | 03 13 37.2 | +2.1 |
| **KMNR** | **Kamenistaya** | **3.06** | **329** | *e*S | Sn | 03 13 41.0 | +5.2 |
| **GNL** | **Ganaly** | **3.09** | **282** | *e*P | Pn | 03 13 04.8 | +3.9 |
| GNL | | | | *e*S | Sn | 03 13 40.9 | +4.2 |
| **GNL** | **Ganaly** | **3.09** | **282** | PN | Pn | 03 13 04.8 | +3.9 |
| GNL | | | | S | Sn | 03 13 40.9 | +4.2 |
| **ASAK** | **Asacha** | **3.22** | **258** | *e*P | Pn | 03 13 05.8 | +3.2 |
| ASAK | | | | *e*S | Sn | 03 13 43.2 | +3.4 |
| **KOZ** | **Kozyrevsk** | **3.42** | **329** | *e*P | Pn | 03 13 09.5 | +4.2 |
| KOZ | | | | *e*S | Sn | 03 13 49.7 | +5.1 |
| **KOZ** | **Kozyrevsk** | **3.42** | **329** | PN | Pn | 03 13 09.5 | +4.2 |
| KOZ | | | | S | Sn | 03 13 49.7 | +5.1 |
| **SRKR** | **Sorokina** | **3.65** | **344** | *e*P | Pn | 03 13 12.1 | +3.7 |
| SRKR | | | | *e*S | Sn | 03 13 55.6 | +5.4 |
| **SRKR** | **Sorokina** | **3.65** | **344** | PN | Pn | 03 13 12.1 | +3.7 |
| SRKR | | | | S | Sn | 03 13 55.6 | +5.4 |
| **SRDR** | **Sredinnyy** | **3.69** | **330** | *e*P | Pn | 03 13 12.9 | +4.0 |
| **SRDR** | **Sredinnyy** | **3.69** | **330** | PN | Pn | 03 13 12.9 | +4.0 |
| **ESO** | **Esso** | **3.74** | **319** | *e*P | Pn | 03 13 13.4 | +3.8 |
| ESO | | | | *e*S | Sn | 03 13 55.8 | +3.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ESO** | **Esso** | **3.74** | **319** | PN | Pn | 03 13 13.4 +3.8 |
| ESO | | | | S | Sn | 03 13 55.8 +3.5 |

*MOS* ***28*** *03:16:09.9±1.2,6˙27S×130˙07E,h123km,mb4.9/16,Error ellipse: s-maj=13.3km s-min=6.5km az=113.3*
*BJI* ***28*** *03:16:14.1,6˙35S×130˙19E,h168km,mb4.7/44,mB4.9/30*
*AUST* ***28*** *03:16:15.5±1.0,6˙43S×129˙98E,h160km±8km,Error ellipse: s-maj=12.0km s-min=5.0km az=37.0*
*IDC* ***28*** *03:16:15.9±0.6,6˙31S×130˙09E,h165km±5km,mb4.3/20, mb1 4.4/23,mb1mx4.3/44,mbtmp4.8/23,Error ellipse: s-maj=13.9km s-min=8.7km az=89.0*
*ISCJB* ***28*** *03:16:15.6±0.3,6˙44S±0˙02×130˙05E±0˙03,h180km±3km, mb4.8/63,Error ellipse: s-maj=4.4km s-min=3.5km az=162.6*
*NEIC* ***28*** *03:16:16.2±0.5,6˙41S×130˙04E,h168km±5km,mb5.1/28, Error ellipse: s-maj=6.9km s-min=4.5km az=50.0*
*DJA* ***28*** *03:16:17.3±0.3,6˙5±3˙×13˙0E±˚,h151km±9km,M5.5/21, mb5.4/19,mB5.8/17,MLv5.7/21,Mw(mB)5.4/17*
**ISC 28 03:16:16.1±0.3,6˙50S±0˙03×130˙03E±0˙04,h169km±2km, h169km:pP-P,n328,σ1s19/381,mb4.7/63,3C-1D,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.94** | **139** | P | | **Pn** | **03 16 53.4** | **+1.6** |
| SAUI | | | | S | | **Sn** | **03 17 17.8** | **-1.6** |
| **SAUI** | **Saumlaki** | **1.94** | **139** | *e*Pn | | **Pn** | **03 16 52.6** | **+0.8** |
| SAUI | | | | *e*Sn | | **Sn** | **03 17 17.6** | **-1.8** |
| **BNDI** | **Bandanaira** | **1.97** | **356** | P | | **Pn** | **03 16 52.1** | **0.0** |
| BNDI | | | | S | | **Sn** | **03 17 20.7** | **+0.8** |
| **AAI** | **Ambon** | **3.33** | **327** | P | | **Pn** | **03 17 09.5** | **+1.0** |
| AAI | | | | S | | **Sn** | **03 17 50.8** | **+1.6** |
| **FAKI** | **Fak Fak** | **4.19** | **32** | P | | **Pn** | **03 17 17.3** | **-2.1** |
| **FAKI** | **Fak Fak** | **4.19** | **32** | *e*Pn | | **Pn** | **03 17 17.3** | **-2.1** |
| FAKI | | | | *e*S | | Sn | 03 17 58.4 | -10 |
| **NLAI** | **Namlea** | **4.36** | **318** | P | | **Pn** | **03 17 23.7** | **+2.2** |
| **KMPI** | **Kaimana, Papua** | **4.62** | **53** | P | | **Pn** | **03 17 24.0** | **-1.0** |
| **SIJI** | **Sorong** | **5.73** | **13** | P | | **Pn** | **03 17 37.1** | **-2.4** |
| | 40nm,0.3s,baz=40,slow=19,SNR=132 | | | | | | | |
| SIJI | | | | S | | Sn | 03 18 36.5 | -8.5 |
| | 184nm,0.3s,baz=253,slow=23,SNR=25 | | | | | | | |
| **SWI** | **Sorong** | **5.73** | **12** | P | | **Pn** | **03 17 37.2** | **-2.3** |
| | 210nm,0.7s,45µm9.1nm | | | | | | | |
| **SANI** | **Sanana** | **5.98** | **317** | P | | **Pn** | **03 17 44.5** | **+1.8** |
| | 462nm,0.9s,4µm1.5nm | | | | | | | |
| **LBMI** | **Labuha** | **6.34** | **337** | P | | **Pn** | **03 17 47.5** | **-0.1** |
| | 418nm,0.7s,13µm4.0nm | | | | | | | |
| **MTN** | **Manton Dam** | **6.40** | **170** | P | | **Pn** | **03 17 48.8** | **+0.5** |
| | baz=6.5,SNR=173 | | | | | | | |
| **MTN** | **Manton Dam** | **6.40** | **170** | *e*Pn | | **Pn** | **03 17 49.0** | **+0.7** |
| MTN | | | | *e*Sn | | **Sn** | **03 18 58.2** | **-2.6** |
| **RKPI** | **Ransiki, Papua** | **6.46** | **40** | P | | **Pn** | **03 17 48.5** | **-0.6** |
| | 5µm,0.7s,86µm32nm | | | | | | | |
| **SOEI** | **Soe** | **6.55** | **240** | P | | **Pn** | **03 17 51.1** | **+0.6** |
| | baz=6.6,SNR=52 | | | | | | | |
| **SOEI** | **Soe** | **6.55** | **240** | P | | **Pn** | **03 17 51.3** | **+0.8** |
| | 885nm,0.9s,7µm6.0nm | | | | | | | |
| **SOEI** | **Soe** | **6.55** | **240** | *e*Pn | | **Pn** | **03 17 51.4** | **+0.9** |
| SOEI | | | | *e*S | | **Sn** | **03 19 03.6** | **-1.1** |
| **KDU** | **Kakadu** | **6.61** | **159** | P | | **Pn** | **03 17 51.1** | **+0.1** |
| | baz=6.7,SNR=743 | | | | | | | |
| **BATI** | **Baumata** | **7.29** | **239** | P | | **Pn** | **03 18 01.0** | **+0.8** |
| | 202nm,0.3s,baz=106,slow=1.5,SNR=192 | | | | | | | |
| BATI | | | | S | | **Sn** | **03 19 20.1** | **-2.1** |
| | 68nm,0.3s,baz=90,slow=22,SNR=13 | | | | | | | |
| **BATI** | **Baumata** | **7.29** | **239** | P | | **Pn** | **03 18 00.9** | **+0.8** |
| | 764nm,0.6s,8µm2.6nm | | | | | | | |
| **BBSI** | **Bau Bau** | **7.48** | **277** | P | | **Pn** | **03 18 05.8** | **+3.1** |
| | 599nm,1.0s,5µm2.0nm | | | | | | | |
| **TNTI** | **Ternate** | **7.69** | **340** | P | | **Pn** | **03 18 04.8** | **-0.7** |
| | 112nm,0.7s,1.1nm | | | | | | | |
| **TNTI** | **Ternate** | **7.69** | **340** | *e*Pn | | **Pn** | **03 18 04.6** | **-0.9** |
| TNTI | | | | *e*S | | Sn | 03 19 21.2 | -11 |
| **SRPI** | **Serui, Papua** | **7.72** | **54** | P | | **Pn** | **03 18 05.1** | **-0.7** |
| | 798nm,0.8s,14µm4.0nm | | | | | | | |
| **KDI** | **Kendari** | **7.79** | **289** | P | | **Pn** | **03 18 09.7** | **+2.9** |
| | 289nm,0.8s,3µm1.2nm | | | | | | | |
| **MMRI** | **Maumere** | **8.01** | **254** | P | | **Pn** | **03 18 11.8** | **+2.2** |
| | 155nm,0.8s | | | | | | | |
| **MMRI** | **Maumere** | **8.01** | **254** | *e*Pn | | **Pn** | **03 18 10.2** | **+0.6** |
| MMRI | | | | *e*S | | **Sn** | **03 19 38.9** | **-0.3** |
| **EDFI** | **Ende, Flores** | **8.56** | **254** | P | | **Pn** | **03 18 18.7** | **+1.7** |
| | 132nm,0.6s,8µm | | | | | | | |
| **LUWI** | **Luwuk** | **9.04** | **307** | P | | **Pn** | **03 18 25.3** | **+2.0** |
| | 360nm,1.4s,4µm | | | | | | | |
| **LUWI** | **Luwuk** | **9.04** | **307** | *e*Pn | | **Pn** | **03 18 24.8** | **+1.5** |
| **KNRA** | **Kununurra** | **9.21** | **188** | P | | **Pn** | **03 18 25.3** | **-0.1** |
| | baz=9.3,SNR=52 | | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **9.48** | **272** | P | | **Pn** | **03 18 30.9** | **+1.8** |
| | 158nm,1.5s,3µm | | | | | | | |
| **SMPI** | **Sarmi** | **9.75** | **63** | P | | **Pn** | **03 18 31.7** | **-0.9** |
| | 58nm,0.8s | | | | | | | |
| **BKSI** | **Bulukumba** | **9.92** | **276** | P | | **Pn** | **03 18 36.1** | **+1.2** |
| | 80nm,0.9s,768nm | | | | | | | |
| **APSI** | **Ampana** | **10.03** | **303** | P | | **Pn** | **03 18 39.1** | **+2.8** |
| **BASI** | **Baing, Sumba** | **10.05** | **248** | P | | **Pn** | **03 18 35.7** | **-0.9** |
| **KAPI** | **Kappang** | **10.33** | **278** | P | | **Pn** | **03 18 42.1** | **+1.8** |
| | 0.5nm,0.3s,baz=121,slow=6.5,SNR=21 | | | | | | | |
| **KAPI** | **Kappang** | **10.33** | **278** | Pn | | **Pn** | **03 18 42.9** | **+2.7** |
| | 173nm,1.0s,SNR=6.7 | | | | | | | |
| **KAPI** | **Kappang** | **10.33** | **278** | *e*Pn | | **Pn** | **03 18 41.5** | **+1.3** |
| **WRAB** | **Tennant Creek** | **14.00** | **163** | *e*P | | **Pn** | **03 19 25.7** | **-1.7** |
| WRAB | | | | *e*S | | Sn | 03 21 52.6 | -11 |
| **WRAB** | **Tennant Creek** | **14.00** | **163** | Pn | | **Pn** | **03 19 25.9** | **-1.5** |
| | 1µm,0.6s,SNR=31 | | | | | | | |
| **WRAB** | **Tennant Creek** | **14.00** | **163** | *e*Pn | | **Pn** | **03 19 25.7** | **-1.7** |
| WRAB | | | | *e*S | | Sn | 03 21 52.6 | -11 |
| **WRA** | **Warramunga Arr** | **14.01** | **163** | P | | **Pn** | **03 19 24.9** | **-2.5** |
| | 6.0nm,0.3s,baz=348,slow=12,SNR=76 | | | | | | | |
| WRA | | | | S | | Sn | 03 21 51.6 | -12 |
| | 12nm,0.3s,baz=336,slow=23,SNR=8.1 | | | | | | | |
| **COEN** | **Coen** | **14.91** | **121** | *e*Pn | | **Pn** | **03 19 39.1** | **+0.5** |
| **JAGI** | **Jajag, Banyuwa** | **15.86** | **262** | P | | **Pn** | **03 19 48.4** | **-2.0** |
| | baz=16,SNR=9.2 | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **15.86** | **262** | *e*Pn | | **Pn** | **03 19 48.0** | **-2.4** |
| | 73nm,0.7s | | | | | | | |
| JAGI | | | | *e*S | | S | 03 22 31.9 | -15 |
| **MYLDM** | **Lahad Datu** | **16.34** | **315** | *e*P | | **Pn** | **03 19 57.3** | **+1.2** |
| | 55nm,0.9s | | | | | | | |
| **QIS** | **Mount Isa** | **16.78** | **147** | P | | **Pn** | **03 20 02.6** | **+1.1** |
| | baz=17,SNR=59 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.47** | **168** | P | | **Pn** | **03 20 10.3** | **+0.6** |
| | 18nm,0.3s,baz=348,slow=10,SNR=508 | | | | | | | |
| **AS01** | **Alice Springs** | **17.48** | **168** | *e*P | | **Pn** | **03 20 09.5** | **-0.3** |
| **MBWA** | **Marble Bar** | **17.66** | **213** | *e*P | | **Pn** | **03 20 11.7** | **-0.2** |
| **WRKA** | **Warakurna** | **18.51** | **185** | P | | **Pn** | **03 20 21.6** | **-0.3** |
| | baz=19,SNR=58 | | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.58** | **312** | P | | **P** | **03 20 21.3** | **+0.7** |
| | baz=19,SNR=10 | | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.58** | **312** | *e*P | | **P** | **03 20 20.4** | **-0.2** |
| | 91nm,1.0s | | | | | | | |
| **UGM** | **Wanagama** | **19.40** | **265** | P | | **P** | **03 20 28.7** | **-0.8** |
| | baz=19,SNR=4.0 | | | | | | | |
| **SMRI** | **Semarang** | **19.46** | **267** | *e*P | | **P** | **03 20 30.5** | **+0.4** |
| | 91nm,0.9s | | | | | | | |
| **SBUM** | **Sibu** | **19.87** | **296** | *e*P | | **P** | **03 20 35.2** | **+0.7** |
| | 126nm,1.0s | | | | | | | |
| **CTA** | **Charters Tower** | **20.75** | **132** | P | | **P** | **03 20 45.9** | **+2.0** |
| | 67nm,0.7s,baz=302,slow=12,SNR=55 | | | | | | | |
| **CTAO** | **Charters Tower** | **20.75** | **132** | *e*P | | **P** | **03 20 45.6** | **+1.7** |
| CTAO | | | | pmax | | pmax | | |
| | comp=Z,2µm,1.9s | | | | | | | |
| **CTAO** | **Charters Tower** | **20.75** | **132** | *e*P | | **P** | **03 20 45.5** | **+1.7** |
| | comp=Z,2µm,1.9s | | | | | | | |
| **KSM** | **Kuching** | **21.21** | **291** | *e*P | | **P** | **03 20 49.6** | **+0.7** |
| | comp=Z,25nm,0.7s | | | | | | | |
| **CISI** | **Cisompet, Garu** | **22.07** | **266** | P | | **P** | **03 20 56.4** | **-1.4** |
| | baz=22,SNR=7.5 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **22.07** | **266** | *e*P | | **P** | **03 20 56.0** | **-1.8** |
| | comp=Z,408nm,1.0s | | | | | | | |
| **GIRL** | **Giralia** | **22.12** | **222** | P | | **P** | **03 20 59.9** | **+1.7** |
| | baz=22,SNR=4.4 | | | | | | | |
| **LEM** | **Lembang** | **22.26** | **268** | P | | **P** | **03 21 00.6** | **+0.8** |
| | comp=Z,94nm,0.7s,baz=57,slow=6.8,SNR=7.6 | | | | | | | |
| **MEEK** | **Meekatharra** | **22.79** | **207** | P | | **P** | **03 21 05.0** | **+0.6** |
| | baz=23,SNR=14 | | | | | | | |
| **QLP** | **Quilpie** | **24.13** | **147** | P | | **P** | **03 21 17.3** | **+0.7** |
| | baz=24,SNR=35 | | | | | | | |
| **XMIS** | **Christmas Isla** | **24.42** | **259** | *e*P | | **P** | **03 21 19.3** | **-0.1** |
| | comp=Z,189nm,1.0s | | | | | | | |
| **KMBL** | **Kambalda** | **25.89** | **196** | P | | **P** | **03 21 33.4** | **+0.9** |
| | baz=26,SNR=13 | | | | | | | |
| **BBOO** | **Buckleboo** | **26.78** | **169** | P | | **P** | **03 21 41.2** | **+0.8** |
| | baz=27,SNR=48 | | | | | | | |
| **BBOO** | **Buckleboo** | **26.78** | **169** | *e*P | | **P** | **03 21 41.1** | **+0.7** |
| | comp=Z,57nm,0.7s | | | | | | | |
| **BLDU** | **Ballidu** | **27.05** | **206** | P | | **P** | **03 21 44.1** | **+1.2** |
| | baz=27,SNR=7.8 | | | | | | | |
| **MYKOM** | **Kota Tinggi** | **27.40** | **287** | *e*P | | **P** | **03 21 48.3** | **+2.2** |
| | comp=Z,22nm,1.0s | | | | | | | |
| **KLBR** | **Kellerberrin** | **27.48** | **203** | P | | **P** | **03 21 47.8** | **+1.1** |
| | baz=28,SNR=7.8 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.86** | **203** | P | | **P** | **03 22 00.5** | **+1.5** |
| | comp=Z,6.9nm,0.3s,baz=97,slow=0.1,SNR=13 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.86** | **203** | *e*P | | **P** | **03 22 00.0** | **+1.1** |
| **NWAO** | **Narrogin (SRO)** | **28.86** | **203** | P | | **P** | **03 22 00.3** | **+1.4** |
| | baz=29,SNR=10 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **28.86** | **203** | *e*P | | **P** | **03 22 00.0** | **+1.1** |
| **CMSA** | **Cobar Meteorol** | **28.90** | **152** | P | | **P** | **03 22 00.7** | **+1.4** |
| | baz=29,SNR=99 | | | | | | | |
| **RKGY** | **Rocky Gully** | **30.46** | **202** | P | | **P** | **03 22 15.5** | **+2.5** |
| | baz=31,SNR=9.3 | | | | | | | |
| **ARMA** | **Armidale** | **31.27** | **142** | *e*P | | **P** | **03 22 21.9** | **+1.5** |
| | comp=Z,161nm,0.8s | | | | | | | |
| **KULM** | **Kulim** | **31.57** | **291** | *e*P | | **P** | **03 22 21.7** | **-1.3** |
| | comp=Z,171nm,2.4s | | | | | | | |
| **ARPS** | **Mount Arapiles** | **32.01** | **162** | P | | **P** | **03 22 28.4** | **+1.9** |
| | baz=32,SNR=14 | | | | | | | |
| **PSI** | **Prapat** | **32.40** | **286** | *e*P | | **P** | **03 22 28.6** | **-1.8** |
| PSI | | | | pmax | | pmax | | |
| | comp=Z,23nm,0.9s | | | | | | | |
| **PSI** | **Prapat** | **32.40** | **286** | P | | **P** | **03 22 28.7** | **-1.7** |
| | baz=32,SNR=5.7 | | | | | | | |
| **PSI** | **Prapat** | **32.40** | **286** | *e*P | | **P** | **03 22 28.6** | **-1.8** |
| | comp=Z,23nm,0.9s | | | | | | | |
| **GSI** | **Gunungsitoli** | **33.30** | **282** | P | | **P** | **03 22 38.0** | **-0.2** |
| | comp=Z,53nm,1.0s | | | | | | | |
| **TRTT** | **Trang** | **33.44** | **295** | P | | **P** | **03 22 39.1** | **-0.2** |
| | comp=Z,17nm,1.3s | | | | | | | |
| **CAN** | **Canberra** | **33.58** | **151** | *e*P | | **P** | **03 22 42.1** | **+1.7** |
| CAN | | | | pmax | | pmax | | |
| | comp=Z,68nm,0.8s | | | | | | | |
| **CAN** | **Canberra** | **33.58** | **151** | *e*P | | **P** | **03 22 42.0** | **+1.7** |
| | comp=Z,68nm,0.8s | | | | | | | |
| **CNB** | **Canberra Magne** | **33.75** | **151** | P | | **P** | **03 22 43.9** | **+2.0** |
| | baz=34,SNR=14 | | | | | | | |
| **TOO** | **Toolangi** | **33.98** | **158** | P | | **P** | **03 22 46.4** | **+2.6** |
| | baz=34,SNR=14 | | | | | | | |
| **LHMI** | **Lhok Sumawe** | **35.01** | **289** | *e*P | | **P** | **03 22 51.0** | **-1.9** |
| | comp=Z,146nm,0.9s | | | | | | | |
| **MILA** | **Mila** | **35.07** | **153** | P | | **P** | **03 22 55.3** | **+2.2** |
| | baz=35,SNR=5.1 | | | | | | | |
| **CHAI** | **Chaiyaphum** | **35.58** | **309** | P | | **P** | **03 22 56.9** | **-0.8** |
| | comp=Z,12nm,0.7s,comp=Z,117nm | | | | | | | |
| **PHET** | **Kaeng Krachan** | **35.83** | **303** | P | | **P** | **03 22 59.6** | **-0.2** |
| | comp=Z,15nm,0.9s,comp=Z,131nm | | | | | | | |
| **SRDT** | **SRDT** | **37.00** | **304** | P | | **P** | **03 23 09.8** | **+0.1** |
| | comp=Z,122nm,0.8s | | | | | | | |
| **LOEI** | **Loei** | **37.10** | **310** | P | | **P** | **03 23 07.8** | **-2.7** |
| | comp=Z,16nm,1.3s | | | | | | | |
| **KHLT** | **Khaolaem Dam** | **37.67** | **304** | P | | **P** | **03 23 15.1** | **-0.3** |
| | comp=Z,24nm,0.7s | | | | | | | |
| **SLVN** | **Son La** | **37.71** | **318** | *e*P | | **P** | **03 23 15.5** | **-0.2** |
| | comp=Z,6.4nm,0.6s | | | | | | | |
| **UTTA** | **Uttaradit** | **37.78** | **310** | P | | **P** | **03 23 15.9** | **-0.3** |
| | comp=Z,15nm,0.8s,comp=Z,127nm | | | | | | | |
| **UMPA** | **Umpang Tak** | **38.21** | **307** | P | | **P** | **03 23 19.0** | **-0.9** |
| | comp=Z,7.4nm,0.8s,comp=Z,1µm | | | | | | | |
| **MOO** | **Moorlands** | **38.89** | **160** | P | | **P** | **03 23 27.8** | **+2.5** |
| | baz=39,SNR=5.8 | | | | | | | |
| **LAMP** | **Lampang** | **38.94** | **310** | P | | **P** | **03 23 26.2** | **+0.2** |
| | comp=Z,10nm,0.9s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **39.40** | **309** | *e*P | | **P** | **03 23 29.5** | **-0.3** |
| **CMAR** | **Chiang Mai Arr** | **39.43** | **310** | P | | **P** | **03 23 29.9** | **-0.1** |
| | comp=Z,9.4nm,0.6s,baz=141,slow=7.4,SNR=32 | | | | | | | |
| **CHTO** | **Chiang Mai** | **39.64** | **310** | P | | **P** | **03 23 31.4** | **-0.3** |
| | comp=Z,180nm,1.2s | | | | | | | |
| **CHTO** | **Chiang Mai** | **39.64** | **310** | *e*P | | **P** | **03 23 31.5** | **-0.3** |
| CHTO | | | | pmax | | pmax | | |
| | comp=Z,255nm,0.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **39.64** | **310** | *e*P | | **P** | **03 23 31.5** | **-0.2** |
| | comp=Z,26nm,0.8s | | | | | | | |
| **NJ2** | **Nanjing** | **39.79** | **345** | *e*P | | **P** | **03 23 32.5** | **-0.2** |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **GYA** | **Guiyang** | **39.83** | **326** | P | | **P** | **03 23 34.8** | **+1.4** |
| GYA | | | | pP | | **pP** | **03 24 11.8** | **+2.0** |
| GYA | | | | sP | | **sP** | **03 24 31.0** | **+2.1** |
| GYA | | | | PP | | **PnPn** | **03 25 12.3** | **-1.3** |
| GYA | | | | PcP | | **PcP** | **03 25 37.5** | **+1.4** |
| GYA | | | | ScP | | **ScP** | **03 29 08.5** | **-0.8** |
| GYA | | | | S | | **S** | **03 29 27.5** | **+2.1** |
| GYA | | | | sS | | **sS** | **03 30 31.0** | **+1.8** |
| GYA | | | | PMZ | | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=Z,120nm,5.0s | | | | | | | |
| **CMAI** | **Chiengmai2** | **40.23** | **311** | P | | **P** | **03 23 36.2** | **-0.6** |
| | comp=Z,29nm,0.9s | | | | | | | |
| **KMI** | **Kunming** | **41.14** | **321** | P | | **P** | **03 23 44.8** | **+0.5** |
| KMI | | | | pP | | **pP** | **03 24 22.5** | **+1.6** |
| KMI | | | | PMZ | | | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,140nm,6.0s | | | | | | | |
| KMI | | | | LN | | | | |
| | comp=Z,510nm,5.0s | | | | | | | |
| KMI | | | | LE | | | | |
| | comp=Z,640nm,6.1s | | | | | | | |
| KMI | | | | LZ | | | | |
| | comp=Z,440nm,6.1s | | | | | | | |
| **MAJO** | **Matsushiro** | **43.49** | **10** | *e*P | | **P** | **03 24 00.9** | **-1.9** |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,55nm,1.1s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.49** | **10** | P | | **P** | **03 24 00.8** | **-2.1** |
| | comp=Z,3.0nm,0.8s,baz=188,slow=10,SNR=4.6 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **43.76** | **358** | P | | **P** | **03 24 04.9** | **0.0** |
| KSAR | | | | | | | 03 25 48.6 | |
| **KSAR** | **Wonju Array Be** | **43.76** | **358** | P | | **P** | **03 24 04.9** | **0.0** |
| KSAR | | | | PcP | | **PcP** | **03 25 48.6** | **0.0** |
| **KSRS** | **Korea Array** | **43.77** | **358** | P | | **P** | **03 24 04.9** | **0.0** |
| | comp=Z,1.6nm,0.5s,baz=168,slow=9.1,SNR=7.0 | | | | | | | |
| KSRS | | | | PcP | | **PcP** | **03 25 48.6** | **0.0** |
| | comp=Z,1.8nm,0.8s,baz=188,slow=4.8,SNR=4.1 | | | | | | | |
| **CD2** | **Chengdu** | **44.90** | **327** | *e*P | | **P** | **03 24 14.5** | **+0.4** |
| CD2 | | | | pP | | **pP** | **03 24 52.3** | **+1.0** |
| CD2 | | | | PP | | **PP** | **03 26 03.0** | **+0.4** |
| CD2 | | | | PcS | | **PcS** | **03 29 46.5** | **-0.3** |
| CD2 | | | | S | | **S** | **03 30 40.3** | **+1.0** |
| CD2 | | | | sS | | **sS** | **03 31 47.0** | **+2.8** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,20nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,160nm,5.2s | | | | | | | |
| **XAN** | **Xi'an** | **45.00** | **335** | P | | **P** | **03 24 13.3** | **-1.5** |
| XAN | | | | PMZ | | | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| XAN | | | | PMZ | | | | |
| | comp=Z,210nm,6.2s | | | | | | | |
| **BJI** | **Beijing** | **48.04** | **346** | P | | **P** | **03 24 37.3** | **-1.0** |
| BJI | | | | pP | | **pP** | **03 25 15.5** | **-0.5** |
| BJI | | | | sP | | **sP** | **03 25 34.0** | **-0.7** |
| BJI | | | | PcP | | **PcP** | **03 26 04.8** | **+1.2** |
| BJI | | | | S | | **S** | **03 31 27.3** | **+3.7** |
| BJI | | | | PMZ | | | | |
| | comp=Z,16nm,1.0s | | | | | | | |
| BJI | | | | LN | | | | |
| | comp=Z,1µm,21.2s | | | | | | | |
| BJI | | | | LE | | | | |
| | comp=Z,1µm,19.6s | | | | | | | |
| BJI | | | | LZ | | | | |
| | comp=Z,1µm,23.6s | | | | | | | |
| **LZH** | **Lanzhou** | **48.98** | **332** | *e*P | | P | 03 24 49.5 | +3.7 |
| LZH | | | | pP | | pP | 03 25 25.0 | +1.4 |
| LZH | | | | sP | | sP | 03 25 43.3 | +1.0 |
| LZH | | | | PMZ | | | | |
| | comp=Z,25nm,1.0s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,85nm,4.0s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,1µm,16.6s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,2µm,19.4s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,700nm,13.1s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **50.08** | **342** | *e*P | | **P** | **03 24 55.8** | **+1.8** |
| HHC | | | | pP | | **pP** | **03 25 35.3** | **+3.4** |
| HHC | | | | S | | **S** | **03 31 55.5** | **+3.2** |
| HHC | | | | sS | | **sS** | **03 33 02.5** | **+4.1** |
| HHC | | | | PMZ | | | | |
| | comp=Z,17nm,1.0s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,110nm,7.5s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,1µm,18.7s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,670nm,21.1s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,1µm,19.9s | | | | | | | |
| **CN2** | **Changchun** | **50.23** | **356** | *e*P | | P | 03 24 58.3 | +3.3 |
| **USRK** | **Ussuriysk Ar.** | **50.49** | **2** | P | | **P** | **03 24 56.6** | **-0.2** |
| | comp=Z,4.0nm,0.5s,baz=186,slow=7.5,SNR=14 | | | | | | | |
| **MDJ** | **Mudanjiang** | **50.88** | **360** | P | | **P** | **03 25 00.0** | **+0.2** |
| MDJ | | | | PMZ | | | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| MDJ | | | | PMZ | | | | |
| | comp=Z,140nm,7.5s | | | | | | | |
| **PALK** | **Pallekele** | **51.07** | **285** | P | | **P** | **03 25 00.5** | **-1.3** |
| | comp=Z,7.7nm,0.7s,baz=116,slow=9.9,SNR=5.2 | | | | | | | |
| **PALK** | **Pallekele** | **51.07** | **285** | *e*P | | **P** | **03 25 00.8** | **-1.0** |
| PALK | | | | pmax | | pmax | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| **PALK** | **Pallekele** | **51.07** | **285** | *e*P | | **P** | **03 25 00.8** | **-1.0** |
| | comp=Z,26nm,1.1s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **51.11** | **147** | *e*P | | **P** | **03 25 02.6** | **+1.0** |
| | comp=Z,581nm,2.5s | | | | | | | |
| **CHLP** | **Challavanipeta** | **51.69** | **300** | *e*P | | **P** | **03 25 05.8** | **-0.4** |
| **LSA** | **Lhasa** | **51.85** | **316** | P | | **P** | **03 25 08.3** | **+0.3** |
| LSA | | | | PMZ | | | | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **51.85** | **316** | *e*P | | **P** | **03 25 08.2** | **+0.3** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,24nm,0.6s | | | | | | | |
| **LSA** | **Lhasa** | **51.85** | **316** | *e*P | | **P** | **03 25 08.2** | **+0.3** |
| | comp=Z,24nm,0.6s | | | | | | | |
| **ODZ** | **Otahua Downs** | **52.12** | **144** | *e*P | | **P** | **03 25 09.9** | **+0.8** |
| | comp=Z,201nm,1.9s | | | | | | | |
| **ODZ** | **Otahua Downs** | **52.12** | **144** | *e*P | | **P** | **03 25 10.1** | **+1.0** |
| | comp=Z,201nm,1.9s | | | | | | | |
| ODZ | | | | LR | | LR | | |
| | comp=Z,5µm,19.0s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **52.29** | **14** | P | | **P** | **03 25 09.4** | **-0.8** |
| YUK | | | | *i* *PP | | **pP** | **03 25 48.3** | **-0.2** |
| YUK | | | | S | | **S** | **03 32 23.8** | **+1.4** |
| YUK | | | | *i* SS | | **SS** | **03 36 00.4** | **-2.2** |
| YUK | | | | pmax | | pmax | | |
| | comp=Z,255nm,2.1s | | | | | | | |
| **ODAN** | **Odare** | **52.95** | **311** | *e*P | | **P** | **03 25 15.2** | **-0.5** |
| | comp=Z,105nm,0.7s | | | | | | | |
| **ODAN** | **Odare** | **52.95** | **311** | *e*P | | **P** | **03 25 15.2** | **-0.5** |
| | comp=Z,105nm,0.7s | | | | | | | |
| **TAPN** | **Taplejung** | **52.97** | **311** | *e*P | | **P** | **03 25 15.4** | **-0.5** |
| | comp=Z,66nm,0.6s | | | | | | | |
| **TAPN** | **Taplejung** | **52.97** | **311** | *e*P | | **P** | **03 25 15.5** | **-0.5** |
| | comp=Z,71nm,0.7s | | | | | | | |
| **PVM** | **Polavaram** | **53.33** | **297** | *e*P | | **P** | **03 25 17.5** | **-0.8** |
| **GTA** | **Gaotai** | **53.55** | **331** | P | | **P** | **03 25 20.0** | **+0.3** |
| GTA | | | | pP | | **pP** | **03 25 56.8** | **-1.4** |
| GTA | | | | sP | | **sP** | **03 26 14.5** | **-2.2** |
| GTA | | | | PcP | | **PcP** | **03 26 23.3** | **-1.0** |
| GTA | | | | S | | **S** | **03 32 40.5** | **+0.6** |
| GTA | | | | sS | | **sS** | **03 33 44.0** | **-2.7** |
| GTA | | | | SS | | **SS** | **03 36 23.3** | **+0.4** |
| GTA | | | | PMZ | | | | |
| | comp=Z,19nm,1.1s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,130nm,4.7s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,850nm,18.5s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,720nm,17.1s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,810nm,17.3s | | | | | | | |
| **RAMN** | **Ramite** | **53.59** | **310** | *e*P | | **P** | **03 25 20.2** | **-0.2** |
| | comp=Z,255nm,0.7s | | | | | | | |
| **RAMN** | **Ramite** | **53.59** | **310** | *e*P | | **P** | **03 25 20.2** | **-0.2** |
| | comp=Z,255nm,0.7s | | | | | | | |
| **SKHT** | **Srikalahasti** | **53.84** | **292** | *e*P | | **P** | **03 25 21.1** | **-1.0** |
| **KUR** | **Kuril'sk** | **53.93** | **16***c* | *i*P | | **P** | **03 25 20.9** | **-1.3** |
| KUR | | | | *i* *PP | | pP | 03 25 54.9 | -5.7 |
| KUR | | | | *i* | | | 03 26 23.7 | |
| KUR | | | | | | | 03 27 32.6 | |
| KUR | | | | *i* S | | **S** | **03 32 45.0** | **+0.6** |
| KUR | | | | *i* | | | 03 34 55.0 | |
| KUR | | | | *i* SS | | **SS** | **03 36 27.3** | **-1.0** |
| KUR | | | | pmax | | pmax | | |
| | comp=Z,794nm,4.5s | | | | | | | |
| **ADKI** | **Addanki** | **54.30** | **295** | *e*P | | **P** | **03 25 24.6** | **-0.9** |
| **GUN** | **Gumba** | **54.64** | **311** | *e*P | | **P** | **03 25 27.6** | **-0.6** |
| | comp=Z,171nm,0.7s | | | | | | | |
| **GUN** | **Gumba** | **54.64** | **311** | *e*P | | **P** | **03 25 27.6** | **-0.6** |
| | comp=Z,171nm,0.7s | | | | | | | |
| **PKI** | **Pulchoki** | **54.82** | **310** | *e*P | | **P** | **03 25 28.4** | **-1.0** |
| | comp=Z,58nm,0.7s | | | | | | | |
| **PKI** | **Pulchoki** | **54.82** | **310** | *e*P | | **P** | **03 25 28.4** | **-1.0** |
| | comp=Z,58nm,0.7s | | | | | | | |
| **PKIN** | **Phulchoki** | **54.83** | **310** | *e*P | | **P** | **03 25 28.5** | **-0.9** |
| | comp=Z,44nm,0.7s | | | | | | | |
| **KKN** | **Kakani** | **55.03** | **310** | *e*P | | **P** | **03 25 30.1** | **-0.7** |
| | comp=Z,86nm,0

BOD *e* 03 27 16.2
BOD pmax pmax
comp=Z,3.0nm,1.2s
**PDGK Podgornoye 67.42 322** P **P** **03 26 53.6 +0.1**
PDGK pmax pmax
comp=Z,21nm,1.0s
**KSH Kashi 67.67 317** P **P** **03 26 56.3 +1.0**
KSH *e*pP **pP** **03 27 34.5 -1.0**
KSH *e*sP **sP** **03 27 52.3 -1.3**
KSH S **S** **03 35 37.3 -1.9**
KSH ScS **SKiKP** **03 36 33.8 -1.8**
KSH PMZ
comp=Z,16nm,0.9s
KSH PMZ
comp=Z,98nm,4.8s
KSH LN
comp=Z,170nm,7.4s
KSH LE
comp=Z,150nm,6.4s
KSH LZ
comp=Z,230nm,6.1s
**MK31 Makanchi Array 67.82 327** *e*P **P** **03 26 56.0 0.0**
MK31 pmax pmax
comp=Z,15nm,0.6s
**MKAR Makanchi Array 67.82 327** P **P** **03 26 56.3 +0.3**
comp=Z,21nm,0.6s,baz=125,slow=7.9,SNR=135
MKAR pP **pP** **03 27 34.6 -1.6**
comp=Z,3.8nm,0.6s,baz=114,slow=8.1,SNR=2.4
**MKAR Makanchi Array 67.82 327** *i* P **P** **03 26 56.2 +0.2**
MKAR pmax pmax
comp=Z,21nm,0.6s
**YAK Yakutsk 68.33 360** *i* P **P** **03 26 57.8 -0.9**
YAK pmax pmax
comp=Z,18nm,0.8s
**TKM2 Tokmak 2 69.61 320** *e*P **P** **03 27 07.8 +0.4**
TKM2 pmax pmax
comp=Z,16nm,0.7s
**TKM2 Tokmak 2 69.61 320** P **P** **03 27 07.9 +0.5**
SNR=20
**TKM2 Tokmak 2 69.61 320** *e*P **P** **03 27 07.8 +0.4**
comp=Z,16nm,0.7s
**KBK Karagaybulak 69.89 320** P **P** **03 27 09.8 +0.7**
SNR=9.2
**UCH Uchtor 69.96 319** P **P** **03 27 10.8 +0.9**
SNR=22
**AAK Ala-Archa 70.17 320** P **P** **03 27 11.4 +0.6**
comp=Z,20nm,0.9s,baz=120,slow=5.5,SNR=44
**AAK Ala-Archa 70.17 320** *e*P **P** **03 27 11.4 +0.6**
AAK pmax pmax
comp=Z,14nm,0.7s
**AAK Ala-Archa 70.17 320** P **P** **03 27 11.5 +0.7**
comp=Z,148nm,0.8s,SNR=12
**AAK Ala-Archa 70.17 320** P **P** **03 27 11.7 +0.9**
SNR=17
**AAK Ala-Archa 70.17 320** *e*P **P** **03 27 11.4 +0.6**
comp=Z,14nm,0.7s
**FRU Bishkek 70.19 320** *e*P **P** **03 27 11.0 +0.2**
**AML Almayashu 70.45 319** P **P** **03 27 13.7 +0.9**
SNR=15
**KBL Kabul 70.46 310** *e*P **P** **03 27 13.0 +0.2**
**KBL Kabul 70.46 310** *e*P **P** **03 27 13.0 +0.2**
**USP Ospenovka 70.48 320** P **P** **03 27 13.0 +0.5**
SNR=20
**EKS2 Erkin-Say 70.65 319** *e*P **P** **03 27 14.5 +0.9**
EKS2 pmax pmax
comp=Z,27nm,0.8s
**EKS2 Erkin-Say 70.65 319** P **P** **03 27 14.5 +0.9**
SNR=24
**EKS2 Erkin-Say 70.65 319** *e*P **P** **03 27 14.5 +0.9**
comp=Z,27nm,0.8s
**ZALV Zalesovo Beam 71.15 334** P **P** **03 27 15.6 -0.6**
comp=Z,4.3nm,0.6s,baz=126,slow=5.2,SNR=16
ZALV pP **pP** **03 27 54.6 -2.1**
comp=Z,1.6nm,0.5s,baz=97,slow=3.4,SNR=2.2
**SEY Seymchan 71.31 11** *i* P **P** **03 27 17.4 +0.4**
**KURBB Kurchatov Arra 72.10 328** P **P** **03 27 21.4 -0.5**
comp=Z,7.7nm,0.7s,baz=126,slow=4.8,SNR=23
KURBB pP **pP** **03 28 01.3 -1.2**
comp=Z,6.2nm,0.8s,baz=129,slow=5.3,SNR=3.6
**KURK Kurchatov 72.10 329** P **P** **03 27 21.4 -0.6**
KURK *PP **pP** **03 28 01.3 -1.3**
**KURK Kurchatov 72.10 329** P **P** **03 27 21.4 -0.6**
KURK pP **pP** **03 28 01.3 -1.3**
**NVS Novosibirsk 72.43 334** *e*P P 03 27 15.9 -7.9
NVS *e* 03 28 03.1
**VNDA Vanda 72.94 173** P **P** **03 27 26.9 +0.3**
comp=Z,8.1nm,0.8s,baz=317,slow=6.2,SNR=42
**KK31 Karatay Array 72.98 319** *i* P **P** **03 27 27.2 -0.2**
KK31 pmax pmax
comp=Z,6.0nm,0.6s
**KKAR Karatay Array 72.98 319** *e*P **P** **03 27 27.6 +0.2**
KKAR pmax pmax
comp=Z,16nm,1.0s
**KKAR Karatay Array 72.98 319** *e*P **P** **03 27 27.6 +0.2**
comp=Z,16nm,1.0s
**OTUK Ortayu 74.25 324** P **P** **03 27 34.8 +0.1**
OTUK pmax pmax
comp=Z,9.0nm,0.9s
**MAW Mawson 75.42 201** P **P** **03 27 42.4 +1.3**
comp=Z,6.1nm,0.8s,baz=69,slow=6.5,SNR=21
**BVAR Borovoye Array 77.65 328** P **P** **03 27 53.7 -0.1**
comp=Z,2.4nm,0.7s,baz=116,slow=6.8,SNR=13
BVAR pP **pP** **03 28 33.9 -1.1**
comp=Z,6.2nm,0.9s,baz=130,slow=6.0,SNR=5.0
**BRVK Borovoye 77.73 328** *i* P **P** **03 27 52.3 -1.9**
BRVK pmax pmax
comp=Z,6.0nm,1.0s
**GEYT Alibeck 79.91 310** P **P** **03 28 06.3 -0.2**
comp=Z,5.1nm,0.7s,baz=197,slow=4.6,SNR=8.6
**AB31 Akbulak array 82.13 322** *i* P **P** **03 28 17.3 -0.7**
AB31 pmax pmax
comp=Z,1.0nm,0.5s
**ABKAR Akbulak array 82.13 322** *e*P **P** **03 28 17.1 -0.8**
comp=Z,1.2nm,0.4s
**QSPA South Pole Qui 83.48 180** *e*P **P** **03 28 24.7 -0.1**
comp=Z,18nm,1.2s
**AKTO Aktyubinsk 83.69 322** P **P** **03 28 25.2 -0.8**
comp=Z,2.9nm,0.6s,baz=127,slow=9.9,SNR=8.6
AKTO pP **pP** **03 29 06.9 -0.9**
comp=Z,3.0nm,0.7s,baz=93,slow=6.1,SNR=2.1
**SYO Syowa Base 84.14 201** *e*P **P** **03 28 27.4 -0.5**
**IRAZ Razeghan 85.71 306** *e*P **P** **03 28 37.1 +0.4**
**KDAK Kodiak Island 88.78 32** *i* P **P** **03 28 49.9 -0.7**
**ILAR Eielson Array 92.88 25** P **P** **03 29 07.2 -2.3**
comp=Z,0.9nm,0.7s,baz=258,slow=4.5,SNR=9.8
**SNAA Sanae 96.16 193** P **P** **03 29 24.2 -0.3**
**VNA3 Neumayer Olymp 97.98 192** P Pdif 03 29 32.9 +0.2
**VNA1 Neumayer--Stat 98.12 193** P P 03 29 30.0 -3.3
**214A Organ Pipe Nat 116.41 58** P **PKPdf** **03 34 40.5 +0.1**
baz=116
**LAO LASA Array 117.49 40** P **PKPdf** **03 34 42.4 +0.3**
baz=117
**O20A White River Ci 118.22 48** P **PKPdf** **03 34 43.9 +0.1**
baz=118
**PV01 Paradox Valley 118.52 50** *e*PKPdf **PKPdf** **03 34 45.4 +0.9**
**E25A Miller Ranch, 119.36 40** P **PKPdf** **03 34 45.7 0.0**
baz=119
**G25A Newell 119.87 41** P **PKPdf** **03 34 45.7 -1.0**
baz=120
**E26A Carlson Angus 119.96 39** P **PKPdf** **03 34 46.8 0.0**
baz=120
**H25A Fruitdale 119.97 42** P **PKPdf** **03 34 46.3 -0.6**
baz=120
**F26A Lodgepole 120.09 40** P **PKPdf** **03 34 45.7 -1.4**
baz=120
**I25A Rochford 120.11 42** P **PKPdf** **03 34 45.8 -1.6**
baz=120
**J25A Sunshine Ranch 120.30 43** P **PKPdf** **03 34 47.5 -0.2**
baz=120
**G27A Dupree 120.75 40** P **PKPdf** **03 34 47.5 -0.9**
baz=121
**H27A Howes 120.96 41** P **PKPdf** **03 34 48.2 -0.7**
baz=121
**ANMO Albuquerque 120.99 53** *i* PKIKP **PKPdf** **03 34 48.1 -1.3**
ANMO pmax pmax
comp=Z,8.0nm,1.7s
**I27A Quinn 121.21 42** P **PKPdf** **03 34 48.1 -1.2**
baz=121
**H28A Mission Ridge 121.63 41** P **PKPdf** **03 34 49.7 -0.4**
baz=122
**I28A Midland 121.82 41** P **PKPdf** **03 34 50.1 -0.3**
baz=122
**K28A Ten Mile Ranch 122.20 43** P **PKPdf** **03 34 51.0 -0.3**
baz=122
**C31A Landman Farms, 122.24 36** P **PKPdf** **03 34 50.1 -1.0**
baz=122
**S26A Kim 122.53 49** P **PKPdf** **03 34 52.2 0.0**
baz=122
**T26A Comanche Natio 122.58 50** P **PKPdf** **03 34 52.7 +0.3**
baz=122
**J29A Okreek 122.62 42** P **PKPdf** **03 34 51.6 -0.4**
baz=122
**MNTX Cornudas Mount 122.66 56** P **PKPdf** **03 34 52.9 +0.5**
baz=123
**J30A Dallas 123.20 42** P **PKPdf** **03 34 52.6 -0.6**
baz=123
**Q28A Sharon Springs 123.25 47** P **PKPdf** **03 34 53.3 -0.1**
baz=123
**R28A Tribune 123.52 48** P **PKPdf** **03 34 53.7 -0.3**
baz=123
**B34A Aery, Baudette 123.64 34** P **PKPdf** **03 34 53.8 0.0**
baz=124
**P29A Atwood 123.71 46** P **PKPdf** **03 34 54.6 +0.3**
baz=124
**T28A Walsh 123.71 49** P **PKPdf** **03 34 54.4 0.0**
baz=124
**Q29A Oakley 123.94 47** P **PKPdf** **03 34 55.2 +0.4**
baz=124
**B35A Bob, Littlefor 124.23 34** P **PKPdf** **03 34 54.3 -0.6**
baz=124
**S29A Ulysses 124.29 48** P **PKPdf** **03 34 55.8 +0.3**
baz=124
**H33A Prehn Over Nor 124.35 39** P **PKPdf** **03 34 57.6 +2.3**
baz=124
**Q30A Quinter 124.45 47** P **PKPdf** **03 34 55.3 -0.5**
baz=124
**X28A Dimmitt 124.47 52** P **PKPdf** **03 34 56.7 +0.8**
baz=124
**TXAR Lajitas Array 124.65 59** PKP **PKPdf** **03 34 56.6 +0.2**
comp=Z,1.1nm,0.9s,baz=354,slow=1.3,SNR=5.1
**R30A Dighton 124.67 47** P **PKPdf** **03 34 56.6 +0.4**
baz=125
**P31A Stockton 124.85 46** P **PKPdf** **03 34 56.8 +0.3**
baz=125
**228A UT Block 9, Go 124.85 55** P **PKPdf** **03 34 56.8 +0.1**
baz=125
**ECSD EROS Data Cent 124.89 40** P **PKPdf** **03 34 56.2 -0.1**
baz=125
**BGNE Belgrade 124.92 43** P **PKPdf** **03 34 56.7 +0.2**
baz=125
**U30A WK&E Inc. Balk 125.02 50** P **PKPdf** **03 34 57.0 +0.1**
baz=125
**R31A Burdett 125.22 47** P **PKPdf** **03 34 57.7 +0.5**
baz=125
**V30A Spur Ranch, Mi 125.25 50** P **PKPdf** **03 34 57.5 +0.1**
baz=125
**P32A Huiting Farm, 125.36 45** P **PKPdf** **03 34 57.5 +0.1**
baz=125
**329A Wagon Wheel Ra 125.52 56** P **PKPdf** **03 34 57.8 -0.2**
baz=125
**H35A Sunnyside Ranc 125.53 38** P **PKPdf** **03 34 57.7 +0.1**
baz=125
**X30A Coker Ranch, T 125.53 52** P **PKPdf** **03 34 57.9 0.0**
baz=125
**529A Stev Forest Ra 125.68 57** P **PKPdf** **03 34 58.4 +0.1**
baz=126
**Z30A Sanderson Ranc 125.69 53** P **PKPdf** **03 34 58.4 +0.1**
baz=126
**429A Davenport Ranc 125.82 57** P **PKPdf** **03 34 58.4 -0.2**
baz=126
**O33A Hebron 125.88 44** P **PKPdf** **03 34 58.3 -0.1**
baz=126
**P33A Williams Farm, 126.07 45** P **PKPdf** **03 34 59.1 +0.3**
baz=126
**Q33A Connelly Farm, 126.16 46** P **PKPdf** **03 34 59.0 +0.1**
baz=126
**X31A McDonald Ranch 126.17 51** P **PKPdf** **03 34 58.8 -0.3**
baz=126
**430A Baggett Ranch, 126.33 56** P **PKPdf** **03 34 59.7 +0.2**
baz=126
**R33A Olander Ranch, 126.33 47** P **PKPdf** **03 34 59.9 +0.7**
baz=126
**530A J-C Ranch, Com 126.41 57** P **PKPdf** **03 34 59.6 -0.1**
baz=126
**V32A Arapaho 126.52 50** P **PKPdf** **03 35 00.7 +1.0**
baz=126
**P34A Walnut Farm, R 126.64 45** P **PKPdf** **03 34 59.9 +0.1**
baz=126
**231A Bronte 126.75 55** P **PKPdf** **03 35 00.4 +0.1**
baz=127
**331A San Angelo 126.85 56** P **PKPdf** **03 35 00.9 +0.4**
baz=127
**R34A Isabella, Hill 126.86 46** P **PKPdf** **03 35 00.1 -0.2**
baz=127
**431A Sonora 126.87 56** P **PKPdf** **03 35 00.9 +0.3**
baz=127
**KSU1 Kansas State U 126.98 45** P **PKPdf** **03 35 01.5 +1.0**
baz=127
**Z32A Haskell 127.00 53** P **PKPdf** **03 35 01.6 +0.9**
baz=127
**531A Rocksprings 127.07 57** P **PKPdf** **03 35 01.9 +0.9**
baz=127
**P35A Duane Minner, 127.21 44** P **PKPdf** **03 35 01.2 +0.3**
baz=127
**631A Perdido Creek 127.24 58** P **PKPdf** **03 35 02.2 +0.9**
baz=127
**I38A Scanlan Farm, 127.40 38** P **PKPdf** **03 35 01.5 +0.4**
baz=127
**JCT Junction City 127.60 56** P **PKPdf** **03 35 02.1 +0.2**
baz=128
**S35A Otter Creek Ra 127.78 47** P **PKPdf** **03 35 02.8 +0.7**
baz=128
**X34A Smith Ranch, M 127.84 51** P **PKPdf** **03 35 02.8 +0.5**
baz=128
**732A Laxson Ranch, 127.93 59** P **PKPdf** **03 35 02.1 -0.4**
baz=128
**U35A Pawnee 128.01 48** P **PKPdf** **03 35 02.2 -0.3**
baz=128
**333A Richland Sprin 128.02 55** P **PKPdf** **03 35 02.8 +0.1**
baz=128
**832A Faith Ranch, C 128.05 59** P **PKPdf** **03 35 03.0 +0.2**
baz=128
**R36A Gordon, Harris 128.09 45** P **PKPdf** **03 35 02.4 -0.3**
baz=128
**W35A Tecumseh 128.37 50** P **PKPdf** **03 35 03.2 -0.1**
baz=128
**633A Saathoff Ranch 128.41 57** P **PKPdf** **03 35 03.9 +0.4**
baz=128
**R37A Teagarden Farm 128.57 45** P **PKPdf** **03 35 02.9 -0.6**
baz=128
**TORD Torodi Ar. Bea 128.74 282** PKP **PKPdf** **03 35 04.3 -0.1**
comp=Z,1.1nm,0.6s,baz=70,slow=2.0,SNR=19
**434A Burnet 128.76 55** P **PKPdf** **03 35 03.8 -0.3**
baz=129
**S37A Fort Scott 128.82 46** P **PKPdf** **03 35 03.6 -0.4**
baz=129
**V36A Jenks 128.83 49** P **PKPdf** **03 35 03.7 -0.4**
baz=129
**X36A Centrahoma 128.99 50** P **PKPdf** **03 35 04.3 -0.1**
baz=129
**WHTX Lake Whitney 129.04 54** P **PKPdf** **03 35 03.3 -1.3**
baz=129
**Y36A Durant 129.29 51** P **PKPdf** **03 35 04.4 -0.6**
baz=129
**V37A Hulbert 129.38 48** P **PKPdf** **03 35 04.6 -0.5**
baz=129
**W37A Quinton 129.47 49** P **PKPdf** **03 35 05.9 +0.6**
baz=129
**LVC Limon Verde 145.64 148** *e*PKPdf **PKPab** **03 35 37.3 +0.7**
**CPUP Villa Florida 146.60 168** PKPbc **PKPbc** **03 35 39.1 +0.6**
comp=Z,14nm,0.8s,baz=180,slow=2.6,SNR=33
CPUP SKPbc **SKPbc** **03 39 00.1 -1.4**
comp=Z,5.1nm,1.1s,baz=180,slow=1.6,SNR=5.7
**OTAV Otavalo 150.91 101** *e*PKPdf **PKPdf** **03 35 45.0 +0.3**
**LPAZ La Paz 151.10 142** PKPbc **PKPbc** **03 35 52.1 +1.1**
comp=Z,6.7nm,0.8s,baz=144,slow=2.3,SNR=8.0

*DJA **28** 03:17:22.3±0.2,6˚S×3˚×15˚4E±˚, h10km, M6.0/58, mb5.8/58, mB6.3/46, MLv6.6/1, Mw(mB)6.0/46, Mwp6.7/3*
*MOS **28** 03:17:24.0±1.0, 5.4S×153.6E, h33km, mb5.8/57, MS5.4/38, Error ellipse: s-maj=7.9km s-min=6.1km az=101.8*
*GCMT **28** 03:17:24.8±0.1, 5.6S×153.8E, h30km, MW5.8/116, Moment Tensor Solution. s105,c202; s116,c265; Duration: 28s0 Moment tensor: Scale 1017Nm; Mrr1.05±.04; Mθθ-0.20±.04; Mφφ-0.84±.04; Mrθ2.35±.08; Mθφ1.25±.03; Mφr-6.49±.15; Best double couple: M07.06600×1017 NP1:φs160.00000˚, δ85.00000˚, λ96.00000˚. NP2:φs291.00000˚, δ8.00000˚, λ41.00000˚. Principal axes: T 6.8010, Plg50.0000˚, Azm77.0000˚; N 0.5330, Plg6.0000˚, Azm340.0000˚; P -7.3300, Plg39.0000˚, Azm245.0000˚; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*NEIC **28** 03:17:24.8±0.2,5.51S×153.74E, h33km, mb5.7/121, MS5.7/299, MW5.6 Error ellipse: s-maj=4.9km s-min=4.6km az=175.0, Moment Tensor Solution. s15 Moment tensor: Scale 1017Nm; Mrr-0.20; Mθθ 0.95; Mφφ-0.75; Mrθ 0.22; Mθφ 1.55; Mφr-2.37; Best double couple: M03.00000×1017 NP1:φs11.00000˚, δ87.00000˚, λ-128.00000˚. NP2:φs277.00000˚, δ38.00000˚, λ-5.00000˚. Principal axes: T 2.5200, Plg31.0000˚, Azm131.0000˚; N 0.7600, Plg38.0000˚, Azm13.0000˚; P -3.2800, Plg37.0000˚, Azm248.0000˚;*
*BJI **28** 03:17:25.0, 5.35S×153.94E, h49km, mb5.4/74, mB5.7/49, Ms5.4/64, Ms7 5.2/61*
*AUST **28** 03:17:26.9±1.2, 5.52S×153.94E, h63km±8km, Error ellipse: s-maj=15.2km s-min=4.7km az=70.0*
*ISCJB **28** 03:17:26.0±0.7, 5.57S±0.02×153.71E±0.02, h56km±6km, mb5.6/203, MS5.6/367, Error ellipse: s-maj=4.1km s-min=3.2km az=25.3*
*IDC **28** 03:17:27.7±1.2, 5.52S×153.73E, h56km±10km, mb5.1/31, mb1 5.2/34, mb1mx5.1/42, mbtmp5.4/34, MS5.0/24, Ms1 5.0/24, ms1mx4.9/32, Error ellipse: s-maj=11.2km s-min=9.6km az=59.0*
**ISC 28 03:17:27.2±0.3, 5.55S±0.03×153.75E±0.04, h52km±1km, h51km:pP-P, n838, σ1852/717, mb5.7/215, MS5.7/368, 16C-13D, New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** baz=2.2 | **2.07** | **310** | P | | **Pn** | **03 18 01.2** | **+1.6** |
| **HNR** | **Honiara** 56nm,0.3s,baz=171,slow=7.5,SNR=22 | **7.26** | **122** | P | | **Pn** | **03 19 11.6** | **+0.9** |
| HNR | 71nm,0.3s,baz=153,slow=3.8,SNR=4.5 | | | S | | **Sn** | **03 20 36.9** | **+5.1** |
| HNR | comp=Z,31μm,19.2s,baz=292,slow=40 | | | LR | | LR | 03 22 22.7 | |
| **HNR** | **Honiara** | **7.26** | **122** | P | | **Pn** | **03 19 11.6** | **+0.9** |
| HNR | | | | S | | **Sn** | **03 20 36.9** | **+5.1** |
| HNR | comp=Z,56nm,0.3s | | | pmax | pmax | | | |
| HNR | comp=N,71nm,0.3s | | | smax | smax | | | |
| HNR | comp=Z,31μm,19.3s | | | MLR | MLR | | | |
| **HNR** | **Honiara** | **7.26** | **122** | *e*P | | **Pn** | **03 19 12.0** | **+1.3** |
| HNR | | | | *e*S | | **Sn** | **03 20 30.0** | **-1.8** |
| **HNR** | **Honiara** | **7.26** | **122** | *e*Pn | | **Pn** | **03 19 12.1** | **+1.4** |
| HNR | | | | *e*Sn | | Sn | 03 20 18.4 | -13 |
| **PMG** | **Port Moresby** comp=Z,42nm,0.3s,baz=53,slow=5.3,SNR=108 | **7.57** | **239** | P | | **Pn** | **03 19 16.5** | **+1.4** |
| PMG | comp=Z,74nm,0.3s,baz=200,slow=23,SNR=13 | | | S | | **Sn** | **03 20 40.9** | **+1.3** |
| **PMG** | **Port Moresby** | **7.57** | **239** | P | | **Pn** | **03 19 16.5** | **+1.4** |
| PMG | | | | S | | **Sn** | **03 20 40.9** | **+1.3** |
| PMG | comp=Z,42nm,0.3s | | | pmax | pmax | | | |
| PMG | comp=N,74nm,0.3s | | | smax | smax | | | |
| **PMG** | **Port Moresby** baz=7.8 | **7.57** | **239** | P | | **Pn** | **03 19 16.4** | **+1.4** |
| **PMG** | **Port Moresby** | **7.57** | **239** | *e*Pn | | **Pn** | **03 19 16.1** | **+1.0** |
| PMG | | | | *e*Sn | | Sn | 03 20 27.4 | -12 |
| **JAY** | **Jayapura** baz=14 | **13.35** | **283** | P | | **Pn** | **03 20 36.6** | **+2.4** |
| **GENI** | **Genyem** comp=N,1μm,1.5s,comp=N,22μm | **13.86** | **282** | P | | **Pn** | **03 20 42.5** | **+1.5** |
| **SMPI** | **Sarmi** comp=N,603nm,1.5s | **15.41** | **283** | P | | **Pn** | **03 21 02.7** | **+1.2** |
| **CTA** | **Charters Tower** comp=N,3.7nm,0.3s,baz=31,slow=14,SNR=18 | **16.19** | **206** | P | | **P** | **03 21 12.8** | **-0.9** |
| CTA | comp=N,11μm,21.7s,baz=24,slow=35 | | | LR | | LR | 03 26 47.9 | |
| **CTA** | **Charters Tower** baz=16 | **16.19** | **206** | P | | **P** | **03 21 13.2** | **-0.5** |
| **KWAJ** | **Kwajalein Atol** | **19.86** | **44** | *e*P | | **P** | **03 21 54.2** | **0.0** |
| KWAJ | | | | *e*S | | S | 03 25 27.8 | -7.3 |
| KWAJ | comp=Z,661nm,1.2s | | | pmax | pmax | | | |
| **KWAJ** | **Kwajalein Atol** comp=Z,661nm,1.2s | **19.86** | **44** | *e*P | | **P** | **03 21 54.2** | **0.0** |
| KWAJ | | | | *e*S | | S | 03 25 27.8 | -7.3 |
| **QIS** | **Mount Isa** baz=20 | **20.28** | **221** | P | | **P** | **03 21 59.2** | **+0.5** |
| **TARA** | **Tarawa** comp=Z,3μm,1.4s | **20.34** | **71** | *e*P | | **P** | **03 21 59.7** | **+0.3** |
| TARA | | | | *e*S | | **S** | **03 25 38.8** | **-6.0** |
| TARA | comp=Z,15μm,21.0s | | | LR | | LR | | |
| **DZM** | **Mont Dzumac** comp=Z,1μm,1.3s | **20.51** | **144** | *e*P | | **P** | **03 22 00.6** | **-0.7** |
| DZM | comp=Z,3μm,24.2s | | | *e*S | | **S** | **03 25 47.8** | **-0.4** |
| DZM | comp=Z,14μm,23.0s | | | *e*LR | | LR | 03 27 01.6 | |
| **DZM** | **Mont Dzumac** comp=Z,184nm,0.5s,baz=0.2,slow=3.5,SNR=168 | **20.51** | **144** | P | | **P** | **03 22 01.0** | **-0.3** |
| DZM | comp=Z,6μm,21.5s,baz=330,slow=32 | | | LR | | LR | 03 28 30.2 | |
| **DZM** | **Mont Dzumac** comp=Z,1μm,1.4s | **20.51** | **144** | *e*P | | **P** | **03 21 59.7** | **-1.6** |
| **RMQ** | **Roma** baz=22 | **21.36** | **192** | P | | **P** | **03 22 11.0** | **+0.6** |
| **FAKI** | **Fak Fak** baz=22 | **21.60** | **276** | P | | **P** | **03 22 13.2** | **+0.2** |
| **FAKI** | **Fak Fak** | **21.60** | **276** | P | | **P** | **03 22 12.8** | **-0.2** |
| **FAKI** | **Fak Fak** | **21.60** | **276** | PFAKE | | | 03 22 20.0 | +7.0 |
| FAKI | comp=Z,8μm,20.0s | | | LR | | LR | | |
| **SAUI** | **Saumlaki** comp=Z,2μm,1.4s,comp=Z,35μm | **22.42** | **263** | P | | **P** | **03 22 23.4** | **+1.6** |
| **SAUI** | **Saumlaki** comp=Z,3μm,1.3s | **22.42** | **263** | *e*P | | **P** | **03 22 23.0** | **+1.1** |
| **QLP** | **Quilpie** baz=23 | **22.80** | **202** | P | | **P** | **03 22 26.0** | **+0.2** |
| **SIJI** | **Sorong** comp=Z,464nm,1.0s,baz=90,slow=8.5,SNR=39 | **22.92** | **281** | P | | **P** | **03 22 27.0** | **-0.1** |
| **SWI** | **Sorong** comp=Z,786nm,1.4s,comp=Z,11μm | **22.92** | **281** | P | | **P** | **03 22 26.8** | **-0.3** |
| **PALU** | **Palau** baz=23 | **23.10** | **303** | P | | **P** | **03 22 29.0** | **+0.1** |
| **ANA2** | **Anatahan** | **23.16** | **340** | *e*P | | **P** | **03 22 27.3** | **-2.0** |
| **SARN** | **Sarigan** | **23.47** | **341** | *e*P | | **P** | **03 22 29.7** | **-2.7** |
| **WRAB** | **Tennant Creek** | **23.67** | **231** | PFAKE | | | 03 22 40.0 | +5.7 |
| WRAB | comp=Z,14μm,20.0s | | | LR | | LR | | |
| **WB2** | **Warramunga Arr** | **23.68** | **231** | PFAKE | | | 03 22 40.0 | +5.6 |
| WB2 | comp=Z,11μm,21.0s | | | LR | | LR | | |
| **WRA** | **Warramunga Arr** comp=Z,137nm,0.7s,baz=54,slow=10,SNR=36 | **23.69** | **231** | P | | **P** | **03 22 34.7** | **+0.2** |
| WRA | comp=Z,8.5nm,0.8s,baz=59,slow=2.8,SNR=5.6 | | | ScP | | **ScP** | **03 29 51.5** | **-0.5** |
| WRA | comp=Z,11μm,21.0s,baz=55,slow=36 | | | LR | | LR | 03 31 39.7 | |
| WRA | comp=Z,5.2nm,1.2s,baz=54,slow=3.6,SNR=4.6 | | | ScS | | **ScS** | **03 33 40.8** | **+1.9** |
| **ARMA** | **Armidale** | **24.82** | **184** | PFAKE | | | 03 23 00.0 | +15 |
| ARMA | comp=Z,9μm,21.0s | | | LR | | LR | | |
| **AAI** | **Ambon** | **25.54** | **273** | P | | **P** | **03 22 54.6** | **+3.2** |
| **AS16** | **Alice Springs** baz=26 | **26.22** | **225** | P | | **P** | **03 22 58.3** | **+0.8** |
| **AS31** | **Alice Springs** | **26.26** | **225** | PFAKE | | | 03 23 10.0 | +12 |
| AS31 | comp=Z,200nm,21.0s | | | LR | | LR | | |
| **ASAR** | **Alice Springs** comp=Z,98nm,1.0s,baz=59,slow=9.2,SNR=35 | **26.26** | **225** | P | | **P** | **03 22 57.9** | **0.0** |
| ASAR | comp=Z,10.0nm,0.8s,baz=52,slow=3.3,SNR=6.9 | | | ScP | | **ScP** | **03 29 59.5** | **+0.2** |
| ASAR | comp=Z,12μm,21.8s,baz=62,slow=35 | | | LR | | LR | 03 32 57.3 | |
| **LHI** | **Lord Howe Isla** comp=Z,70nm,0.8s | **26.32** | **170** | *e*P | | **P** | **03 22 55.0** | **-3.2** |
| LHI | comp=Z,7μm,22.0s | | | LR | | LR | | |
| **LBMI** | **Labuha** comp=Z,701nm,1.2s,comp=Z,9μm | **26.65** | **280** | P | | **P** | **03 23 02.4** | **+0.9** |
| **MSVF** | **Nonsavu** | **26.66** | **119** | *e*P | | **P** | **03 23 03.0** | **+1.4** |
| MSVF | comp=Z,69nm,1.2s | | | pmax | pmax | | | |
| **MSVF** | **Nonsavu** | **26.66** | **119** | *e*P | | **P** | **03 23 02.6** | **+1.0** |

MSVF LR LR
comp=Z,69nm,1.2s
**NLAI Namlea 26.67 274** P **P** **03 23 02.1 +0.5**
comp=Z,11µm,22.0s
**TNTI Ternate 27.08 283** P **P** **03 23 05.7 +0.4**
comp=Z,214nm,1.4s,comp=Z,4µm
**TNTI Ternate 27.08 283** *e*P **P** **03 23 04.7 -0.7**
comp=Z,255nm,1.5s,comp=Z,9µm
TNTI LR LR
comp=Z,351nm,1.2s
**H11S3 WAKE ISLAND Hy 27.08 28** T T 03 51 10.7
comp=Z,8µm,22.0s
baz=208,slow=76,SNR=1112
**H11S2 WAKE ISLAND Hy 27.09 28** T T 03 51 18.9
baz=208,slow=76,SNR=1208
**H11S1 WAKE ISLAND Hy 27.10 28** T T 03 51 23.2
baz=208,slow=76,SNR=824
**WAKE Wake Island 27.75 27** PFAKE 03 23 20.0 +8.8
WAKE LR LR
comp=Z,12µm,20.0s
**SANI Sanana 27.91 276** P **P** **03 23 13.2 +0.4**
comp=Z,308nm,0.9s,comp=Z,4µm
**H11N1 WAKE ISLAND Hy 28.24 27** T T 03 52 45.4
baz=184,slow=77,SNR=43
**H11N3 WAKE ISLAND Hy 28.25 27** T T 03 53 10.2
baz=184,slow=77,SNR=99
**H11N2 WAKE ISLAND Hy 28.26 27** T T 03 53 06.1
baz=184,slow=77,SNR=31
**SOEI Soe 29.51 260** *e*P **P** **03 23 27.5 +0.4**
comp=Z,310nm,0.9s
SOEI LR LR
comp=Z,8µm,22.0s
**SGSI Sangihe 29.64 287** P P 03 23 31.7 +3.6
**CAN Canberra 29.95 188** *e*P **P** **03 23 29.5 -1.2**
CAN *e* 03 30 12.4
CAN pmax pmax
comp=Z,300nm,2.0s
**CAN Canberra 29.95 188** *e*P **P** **03 23 30.3 -0.4**
comp=Z,302nm,2.0s
CAN LR LR
comp=Z,6µm,22.0s
**BATI Baumata 30.15 259** P **P** **03 23 33.7 +1.0**
comp=Z,371nm,1.0s,baz=117,slow=0.7,SNR=18
BATI LR LR 03 37 17.6
comp=Z,7µm,20.8s,baz=102,slow=40
**BATI Baumata 30.15 259** P **P** **03 23 33.5 +0.9**
comp=Z,253nm,1.2s,comp=Z,3µm
**KMSI Cibinong 30.34 281** P **P** **03 23 34.8 +0.5**
**DAV Davao City (W) 30.78 294** PFAKE 03 23 50.0 +12
DAV LR LR
comp=Z,7µm,19.0s
**BBSI Bau Bau 31.03 269** P **P** **03 23 42.0 +1.6**
**KDI Kendari 31.06 272** P **P** **03 23 41.4 +0.7**
**LUWI Luwuk 31.24 277** P **P** **03 23 42.5 +0.3**
**LUWI Luwuk 31.24 277** *e*P **P** **03 23 42.2 0.0**
comp=Z,772nm,1.3s
LUWI LR LR
comp=Z,2µm,20.0s
**GTOI Gorontalo 31.30 280** P **P** **03 23 43.8 +1.0**
**MMRI Maumere 31.41 263** P **P** **03 23 43.0 -0.8**
**MMRI Maumere 31.41 263** *e*P **P** **03 23 42.3 -1.5**
comp=Z,310nm,1.0s
MMRI LR LR
comp=Z,4µm,21.0s
**BBOO Buckleboo 31.75 209** PFAKE 03 24 00.0 +13
BBOO LR LR
comp=Z,7µm,22.0s
**EDFI Ende, Flores 31.96 262** P **P** **03 23 47.4 -1.3**
**MRSI Marisa 32.32 280** P **P** **03 23 50.7 -1.1**
comp=Z,88nm,1.2s,comp=Z,2µm
**APSI Ampana 32.37 277** P **P** **03 23 52.2 0.0**
comp=Z,470nm,1.2s,comp=Z,5µm
**BSSI Bau Bau, Buton 33.09 267** P **P** **03 23 58.9 +0.4**
comp=Z,817nm,1.4s,comp=Z,11µm
**BASI Baing, Sumba 33.17 260** P **P** **03 23 59.3 +0.1**
comp=Z,1µm,1.3s,comp=Z,12µmcomp=Z,223µm
**BKSI Bulukumba 33.47 269** P **P** **03 24 01.6 -0.2**
**KAPI Kappang 33.85 269** P **P** **03 24 05.1 0.0**
comp=Z,315nm,1.1s,baz=97,slow=5.0,SNR=98
KAPI ScP **ScP** **03 30 24.0 +0.1**
comp=Z,6.3nm,0.5s,baz=92,slow=5.3,SNR=4.5
**KAPI Kappang 33.85 269** P **P** **03 24 05.9 +0.7**
comp=Z,2µm,1.3s,SNR=75
**KAPI Kappang 33.85 269** P **P** **03 24 05.4 +0.3**
SNR=95
**KAPI Kappang 33.85 269** *e*P **P** **03 24 05.1 0.0**
comp=Z,675nm,1.3s
KAPI ScP **ScP** **03 30 24.0 +0.1**
KAPI LR LR
comp=Z,4µm,21.0s
**SPSI Sidrap Palu 33.90 271** P **P** **03 24 04.6 -0.9**
**TTSI Tana Toraja 33.92 273** P **P** **03 24 07.2 +1.5**
**PCI Palu 34.16 277** P **P** **03 24 09.4 +1.6**
comp=Z,597nm,1.1s,comp=Z,6µm
**WBSI Waikabubak, Su 34.28 261** P **P** **03 24 07.6 -1.3**
**MPSI Mapaga 34.30 279** P **P** **03 24 07.8 -1.2**
**OUZ Omahuta 34.75 151** *e*P **P** **03 24 11.2 -1.4**
comp=Z,197nm,1.5s
OUZ *e*PP **PnPn** **03 25 24.4 -5.7**
OUZ LR LR
comp=Z,5µm,19.0s
**AFI Afiamalu 34.94 106** P **P** **03 24 16.3 +1.7**
comp=Z,27nm,0.6s,baz=220,slow=6.5,SNR=6.2
**AFI Afiamalu 34.94 106** P **P** **03 24 16.3 +1.7**
AFI MLR MLR
comp=Z,5µm,21.0s
**AFI Afiamalu 34.94 106** P **P** **03 24 16.3 +1.7**
AFI LR LR
comp=Z,5µm,21.0s
**RAO Raoul Island 35.68 135** PFAKE 03 24 30.0 +9.3
RAO LR LR
comp=Z,6µm,20.0s
**MBWA Marble Bar 36.43 242** P **P** **03 24 27.6 +0.3**
SNR=7.6
**MBWA Marble Bar 36.43 242** PFAKE 03 24 40.0 +13
MBWA LR LR
comp=Z,8µm,21.0s
**TWSI Taliwang, Sumb 36.70 263** P **P** **03 24 27.9 -1.8**
comp=Z,199nm,1.0s,comp=Z,2µm
**MYLDM Lahad Datu 36.77 286** ⇑P **P** **03 24 32.1 +1.9**
**MYLDM Lahad Datu 36.77 286** *e*P **P** **03 24 31.4 +1.2**
comp=Z,439nm,1.3s
MYLDM *e*PP PP 03 25 45.5 -9.4
MYLDM LR LR
comp=Z,10µm,20.0s
**KUZ Kuaotunu 37.00 150** PN **P** **03 24 31.3 -0.6**
**BKB Balikpapan 37.02 275** P **P** **03 24 33.4 +1.0**
**TSM Tawau 37.14 285** ⇓P **P** **03 24 34.0 +0.6**
**KBKI Kotabaru 37.53 272** P **P** **03 24 36.7 0.0**
comp=Z,142nm,1.1s,comp=Z,16µm
**TAU Tasmania Unive 37.64 188** *e*P **P** **03 24 37.7 +0.5**
TAU pmax pmax
comp=Z,218nm,1.4s
TAU MLR MLR
comp=Z,3µm,20.0s
**TAU Tasmania Unive 37.64 188** *e*P **P** **03 24 37.7 +0.5**
comp=Z,218nm,1.4s
TAU *e*PP PP 03 25 54.8 -9.2
TAU LR LR
comp=Z,3µm,20.0s
**HIZ Hauiti 38.00 153** *e*P **P** **03 24 40.6 +0.3**
comp=Z,264nm,1.4s
HIZ LR LR
comp=Z,3µm,20.0s
**SDKM Sandakan 38.15 286** ⇓P **P** **03 24 41.9 -0.1**
**SRBI Singaraja 38.34 264** P **P** **03 24 41.9 -1.6**
**DNP Denpasar 38.35 263** P **P** **03 24 46.8 +3.2**
**IGBI Denpasar 38.42 263** P **P** **03 24 42.4 -1.8**
**HAZ Te Kaha 38.82 149** PN **P** **03 24 46.9 -0.3**
HAZ SN **S** **03 30 40.8 -0.6**
**BBKI Banjar Baru 38.84 271** P **P** **03 24 48.5 +0.8**
**COVZ Chateau Observ 38.87 153** PN **P** **03 24 48.1 +0.3**
**URZ Urewera 38.87 150** P **P** **03 24 47.3 -0.4**
comp=Z,37nm,0.4s,baz=326,slow=3.5,SNR=32
**URZ Urewera 38.87 150** *e*P **P** **03 24 46.9 -0.7**
comp=Z,376nm,1.5s
URZ LR LR
comp=Z,4µm,19.0s
**FWVZ Far West T-bar 38.92 153** PN **P** **03 24 48.6 +0.3**
**WNVZ Wahianoa 39.00 153** PN **P** **03 24 49.4 +0.5**
**KKM Kota Kinabalu 39.20 287** ⇓P **P** **03 24 51.2 +0.4**
**KKM Kota Kinabalu 39.20 287** *e*P **P** **03 24 49.3 -1.5**
comp=Z,250nm,1.3s
KKM LR LR
comp=Z,5µm,21.0s
**TWGZ Tauwhareparae 39.24 149** PN **P** **03 24 50.7 -0.1**

TWGZ SN **S** **03 30 45.0 -2.9**
**BKZ Black Stump Fm 39.28 152** *e*P **P** **03 24 50.2 -0.9**
comp=Z,63nm,1.0s
BKZ LR LR
comp=Z,5µm,21.0s
**ABJI Asem Bagus 39.30 264** P **P** **03 24 50.0 -1.6**
**RAHZ Arahi 39.37 151** PN **P** **03 24 51.9 +0.1**
RAHZ SN **S** **03 30 46.8 -3.0**
**JAGI Jajag, Banyuwa 39.39 263** P **P** **03 24 49.6 -2.8**
**JAGI Jajag, Banyuwa 39.39 263** *e*P P 03 24 48.7 -3.7
comp=Z,272nm,1.1s
JAGI LR LR
comp=Z,3µm,22.0s
**KWHZ Kaweka Forest 39.46 152** SN **S** **03 30 47.8 -3.2**
**RIGZ Rimuhau 39.54 150** PN **P** **03 24 52.7 -0.6**
RIGZ SN **S** **03 30 49.2 -3.1**
**KMMI Kalianget 39.56 266** P **P** **03 24 54.0 +0.3**
**WHHZ Waihua 39.57 151** PN **P** **03 24 53.1 -0.4**
WHHZ SN **S** **03 30 48.7 -3.9**
**MCHZ McNeill Hill 39.60 152** PN **P** **03 24 53.5 -0.2**
**KNZ Kokohu 39.74 150** PN **P** **03 24 53.7 -1.2**
**THZ Tophouse 39.90 157** PN **P** **03 24 54.9 -1.4**
**THZ Tophouse 39.90 157** *e*P **P** **03 24 54.9 -1.4**
comp=Z,98nm,0.7s
THZ LR LR
comp=Z,5µm,20.0s
**KAHZ Kahuranaki 39.96 152** PN **P** **03 24 56.5 -0.3**
**TUWZ Tuamarina 40.03 156** PN **P** **03 24 56.4 -0.7**
**SNZO South Karori 40.24 155** *e*P **P** **03 24 58.5 -0.4**
comp=Z,239nm,1.4s
SNZO LR LR
comp=Z,4µm,20.0s
**HOWZ Holdsworth Sta 40.24 154** PN **P** **03 24 57.2 -1.8**
**BFZ Birch Farm 40.38 153** *e*P **P** **03 24 58.1 -2.1**
comp=Z,502nm,1.6s
BFZ LR LR
comp=Z,4µm,20.0s
**JHJ Hachijo jima 2 40.67 342** LR LR 03 41 51.9
comp=Z,490nm,18.3s,baz=308,slow=36
**KHZ Kahutara 40.71 157** PN **P** **03 25 01.4 -1.4**
**KHZ Kahutara 40.71 157** *e*P **P** **03 25 00.7 -2.1**
comp=Z,60nm,0.7s
KHZ LR LR
comp=Z,6µm,20.0s
**OXZ Oxford 40.95 160** *e*P **P** **03 25 03.0 -1.8**
comp=Z,55nm,0.5s
OXZ LR LR
comp=Z,5µm,20.0s
**RPZ Rata Peaks 40.96 161** P **P** **03 25 04.7 -0.2**
comp=Z,27nm,0.6s,baz=261,slow=3.7,SNR=9.7
**RPZ Rata Peaks 40.96 161** *e*P **P** **03 25 04.3 -0.6**
comp=Z,52nm,1.0s
**RPZ Rata Peaks 40.96 161** *e*P **P** **03 25 03.8 -1.1**
comp=Z,295nm,1.7s
RPZ LR LR
comp=Z,4µm,18.0s
**WKZ Wanaka 41.34 164** PFAKE 03 25 20.0 +12
WKZ LR LR
comp=Z,5µm,18.0s
**MQZ McQueen's Vall 41.49 159** *e*P **P** **03 25 08.5 -0.8**
comp=Z,258nm,1.7s
MQZ LR LR
comp=Z,4µm,19.0s
**BTM Bintulu 41.53 281** ⇓P **P** **03 25 11.0 +1.0**
**PWJI Pagerwojo 41.71 264** P **P** **03 25 09.9 -1.6**
**NGJI Ngawi 42.05 265** P **P** **03 25 15.4 +1.2**
**PBKI Pangkalan Bun 42.05 272** P **P** **03 25 15.4 +1.1**
**SBUM Sibu 42.23 280** ⇓P **P** **03 25 16.3 +0.5**
**SBUM Sibu 42.23 280** *e*P **P** **03 25 16.3 +0.5**
comp=Z,176nm,1.2s
SBUM LR LR
comp=Z,1µm,22.0s
**YOJ Yonaguni jima 42.26 316** PFAKE 03 25 30.0 +14
YOJ LR LR
comp=Z,6µm,20.0s
**PCJI Pacitan 42.33 264** P **P** **03 25 15.4 -1.2**
**JOHN Johnston Islan 42.52 58** PFAKE 03 25 30.0 +12
JOHN LR LR
comp=Z,8µm,20.0s
**UWJI Ujung Watu 42.57 267** P **P** **03 25 18.8 +0.3**
**STKI Sintang 42.57 276** P **P** **03 25 19.1 +0.6**
**WOJI Wonogiri, Jawa 42.58 264** P **P** **03 25 19.0 +0.4**
**YULB Yu-li 42.79 313** *e*P **P** **03 25 18.5 -1.6**
comp=Z,60nm,1.0s
**UGM Wanagama 42.98 264** P **P** **03 25 22.1 +0.3**
**UGM Wanagama 42.98 264** *e*P **P** **03 25 20.9 -0.9**
comp=Z,404nm,1.2s
UGM LR LR
comp=Z,2µm,22.0s
**SMRI Semarang 43.06 266** P **P** **03 25 23.5 +1.0**
**SMRI Semarang 43.06 266** *e*P **P** **03 25 20.5 -2.0**
comp=Z,253nm,1.1s
SMRI LR LR
comp=Z,3µm,22.0s
**NACB Ninganchiao 43.06 315** *e*P **P** **03 25 20.5 -1.8**
comp=Z,120nm,1.0s
**TPUB Ta-pu 43.22 313** *e*P **P** **03 25 22.8 -0.9**
comp=Z,385nm,2.0s
**SSLB Suanglung 43.28 314** *e*P **P** **03 25 22.9 -1.2**
comp=Z,277nm,2.1s
SSLB LR LR
comp=Z,3µm,19.0s
**YHNB Yeheng 43.53 315** *e*P **P** **03 25 24.9 -1.2**
comp=Z,174nm,1.2s
**NWAO Narrogin (SRO) 43.55 227** P **P** **03 25 25.7 -0.5**
comp=Z,40nm,0.9s,baz=253,slow=0.0,SNR=8.0
**MIDW Midway 43.62 38** PFAKE 03 25 40.0 +13
MIDW LR LR
comp=Z,7µm,22.0s
**KSM Kuching 43.94 278** ⇓P **P** **03 25 30.0 +0.5**
**KSM Kuching 43.94 278** *e*P **P** **03 25 29.4 -0.2**
comp=Z,130nm,1.0s
KSM LR LR
comp=Z,1µm,19.0s
**JNU Nakatsue 44.16 332** P **P** **03 25 30.4 -0.6**
comp=Z,105nm,0.9s,baz=118,slow=5.9,SNR=12
**JNU Nakatsue 44.16 332** *e*P **P** **03 25 29.9 -1.2**
comp=Z,161nm,1.1s
**MJAR Matsushiro Arr 44.32 342** P **P** **03 25 32.2 -0.1**
comp=Z,16nm,1.0s,baz=173,slow=8.6,SNR=12
MJAR ScP **ScP** **03 31 02.5 -1.2**
comp=Z,7.8nm,1.1s,baz=174,slow=4.9,SNR=6.5
MJAR LR LR 03 42 33.1
comp=Z,539nm,21.1s,baz=190,slow=34
**MAJO Matsushiro 44.33 342** *e*P **P** **03 25 31.6 -0.7**
MAJO pmax pmax
comp=Z,30nm,1.0s
MAJO MLR MLR
comp=Z,2µm,21.0s
**MAJO Matsushiro 44.33 342** *e*P **P** **03 25 31.6 -0.7**
comp=Z,30nm,1.0s
MAJO LR LR
comp=Z,2µm,21.0s
**MAT Matsushiro 44.33 342** P **P** **03 25 32.0 -0.3**
MAT eS **S** **03 32 01.2 -1.7**
**CMJI Cimerak 45.03 265** P **P** **03 25 36.8 -1.5**
**CISI Cisompet, Garu 45.66 265** P **P** **03 25 42.3 -1.0**
**CISI Cisompet, Garu 45.66 265** *e*P **P** **03 25 42.0 -1.3**
comp=Z,538nm,0.9s
CISI LR LR
comp=Z,2µm,21.0s
**LEM Lembang 45.87 266** P **P** **03 25 44.4 -0.7**
comp=Z,104nm,0.8s,baz=64,slow=6.1,SNR=11
**LEM Lembang 45.87 266** P **P** **03 25 45.1 0.0**
**TPI Tanjungpandan 46.05 272** P **P** **03 25 46.6 +0.3**
comp=Z,343nm,1.3s,comp=Z,4µm
**CNJI Cibinong 46.34 265** P **P** **03 25 47.1 -1.5**
**CBJI Citeko 46.64 266** P **P** **03 25 53.2 +2.2**
**SKJI Sukabumi 46.92 266** P **P** **03 25 54.0 +0.9**
**PPBI Pangkal Pinang 47.61 272** P **P** **03 25 58.5 -0.1**
**CGJI Cibinong 47.78 266** P **P** **03 25 57.6 -2.3**
**SSE Sheshan 47.91 322** P **P** **03 26 01.5 +1.0**
SSE sP **sP** **03 26 21.3 +1.0**
SSE S **S** **03 32 55.0 +0.6**
SSE PMZ
comp=Z,38nm,1.1s
SSE PMZ
comp=Z,580nm,7.5s
SSE LN
comp=Z,1µm,19.7s
SSE LE
comp=Z,1µm,19.7s
SSE LZ
comp=Z,2µm,15.6s
**DLV T Lat 48.25 291** *e*P **P** **03 26 03.5 -0.2**
comp=Z,500nm,1.2s

DLV LR LR
comp=Z,3µm,21.0s
**ERM Erimo 48.31 349** *e*P **P** **03 26 04.1 +0.7**
ERM pmax pmax
comp=Z,17nm,0.8s
**TJN Taejon 48.48 331** *i* P **P** **03 26 04.2 -0.6**
**GZH Guangzhou 48.66 307** P **P** **03 26 08.0 +1.6**
GZH pP **pP** **03 26 19.0 -1.3**
GZH S **S** **03 33 06.8 +1.6**
GZH ScS **ScS** **03 35 54.0 -0.9**
GZH PMZ
comp=Z,2µm,5.5s
GZH LN
comp=Z,2µm,21.2s
GZH LE
comp=Z,5µm,21.4s
**KLI Kotabumi 48.68 268** P **P** **03 26 07.0 +0.2**
**KASI Kota Agung 49.01 268** P **P** **03 26 06.6 -2.7**
**KSRS Korea Array 49.09 333** P **P** **03 26 09.0 -0.5**
comp=Z,25nm,1.0s,baz=149,slow=8.8,SNR=25
KSRS LR LR 03 46 44.7
comp=Z,550nm,18.2s,baz=160,slow=36
**KSRS Korea Array 49.09 333** P **P** **03 26 09.0 -0.5**
KSRS pmax pmax
comp=Z,25nm,1.0s
KSRS MLR MLR
comp=Z,551nm,18.2s
**KSAR Wonju Array Be 49.10 333** P **P** **03 26 09.0 -0.6**
**KSAR Wonju Array Be 49.10 333** P **P** **03 26 09.0 -0.6**
**KS01 Wonju Array Si 49.12 333** *e*P **P** **03 26 08.3 -1.5**
**XMAS Kiritimati 49.33 83** PFAKE 03 26 20.0 +8.2
XMAS LR LR
comp=Z,12µm,20.0s
**MDSI Maura Dua 49.38 269** P **P** **03 26 10.6 -1.6**
**LWLI Liwa 49.47 268** P **P** **03 26 13.2 +0.2**
**TPRI Tanjung Pinang 49.57 276** P **P** **03 26 14.9 +1.3**
**QIZ Qiongzhong 49.66 301** P **P** **03 26 14.8 +0.6**
QIZ pP **pP** **03 26 27.8 -0.3**
QIZ sP **sP** **03 26 34.8 +0.8**
QIZ S **S** **03 33 22.3 +2.8**
QIZ sS **sS** **03 33 40.0 -2.8**
QIZ ScS **ScS** **03 36 00.5 -1.4**
QIZ PMZ
comp=Z,65nm,1.4s
QIZ LN
comp=Z,1µm,22.5s
QIZ LE
comp=Z,1µm,21.8s
QIZ LZ
comp=Z,3µm,20.4s
**QIZ Qiongzhong 49.66 301** PFAKE 03 26 30.0 +16
QIZ LR LR
comp=Z,4µm,21.0s
**INCN Inchon 49.71 332** P **P** **03 26 14.6 +0.3**
SNR=7.0
**INCN Inchon 49.71 332** *e*P **P** **03 26 13.2 -1.1**
comp=Z,164nm,1.1s
INCN LR LR
comp=Z,2µm,20.0s
**YUK Yuzh-Kuril'sk 49.86 353** P **P** **03 26 13.9 -1.3**
YUK *i* 03 27 30.1
YUK 03 28 09.1
YUK S **S** **03 33 22.5 +1.1**
YUK *i* 03 36 04.3
YUK pmax pmax
comp=Z,186nm,2.6s
YUK MLR MLR
comp=Z,671nm,19.0s
**NJ2 Nanjing 50.02 321** *e*P **P** **03 26 17.0 +0.3**
NJ2 pP **pP** **03 26 31.0 +0.4**
NJ2 sP **sP** **03 26 37.0 +0.5**
NJ2 S **S** **03 33 25.3 +1.3**
NJ2 sS **sS** **03 33 48.3 +1.0**
NJ2 PMZ
comp=Z,40nm,0.8s
NJ2 PMZ
comp=Z,780nm,6.3s
NJ2 LN
comp=Z,2µm,22.8s
NJ2 LE
comp=Z,2µm,21.2s
NJ2 LZ
comp=Z,2µm,23.4s
**LHSI Lahat 50.07 270** P **P** **03 26 16.4 -1.0**
**JMBI JAMBI 50.14 272** P P 03 26 22.3 +4.3
**MYKOM Kota Tinggi 50.37 277** ⇓P **P** **03 26 20.2 +0.6**
**MYKOM Kota Tinggi 50.37 277** *e*P **P** **03 26 18.9 -0.7**
comp=Z,165nm,1.4s
MYKOM LR LR
comp=Z,1µm,20.0s
**ASAJ Asahikawa 50.45 350** LR LR 03 43 31.6
comp=Z,1µm,21.8s,baz=164,slow=31
**MNAI Manna 50.60 269** PFAKE 03 26 30.0 +8.5
MNAI LR LR
comp=Z,3µm,21.0s
**KUR Kuril'sk 50.83 355***d* *i*P P 03 26 14.2 -8.3
KUR pmax pmax
comp=Z,739nm,4.1s
**KGM Kluang 50.92 277** ⇓P **P** **03 26 24.9 +1.1**
**MASI Maura Aman, Be 51.40 270** P **P** **03 26 26.1 -1.4**
**KTGM Kuala Trenggan 51.68 281** ⇑P **P** **03 26 30.3 +0.7**
**WHN Wuhan 52.04 316** P **P** **03 26 33.3 +1.4**
WHN S **S** **03 33 54.8 +2.7**
WHN PMZ
comp=Z,280nm,1.2s
WHN LZ
comp=Z,5µm,17.2s
**UBPT Khong Chiam 52.11 294** P **P** **03 26 34.2 +1.6**
comp=Z,292nm,1.3s
**VLA Vladivostok 52.34 340** *e*P **P** **03 26 34.3 +0.5**
VLA pmax pmax
comp=Z,35nm,0.9s
**SDSI Sungai Dareh 52.42 273** P **P** **03 26 34.1 -0.9**
**FRIM Kepong 52.79 278** ⇑P **P** **03 26 38.1 +0.3**
**BKNI Bangkinang 52.95 275** P **P** **03 26 39.6 +0.6**
**YSS Yuzh-Sakhalins 53.17 351** *e*P **P** **03 26 40.0 +0.1**
YSS *e* 03 26 47.3
YSS pmax pmax
comp=Z,60nm,1.0s
**USRK Ussuriysk Ar. 53.26 341** P **P** **03 26 39.3 -1.3**
comp=Z,19nm,0.8s,baz=168,slow=8.5,SNR=19
**DL2 Dalian 53.29 329** P **P** **03 26 41.0 0.0**
DL2 S **S** **03 34 09.0 +0.1**
DL2 PMZ
comp=Z,70nm,1.1s
DL2 PMZ
comp=Z,510nm,5.9s
DL2 LN
comp=Z,680nm,14.7s
DL2 LE
comp=Z,600nm,17.8s
DL2 LZ
comp=Z,820nm,18.2s
**PDSI Padang 53.38 273** P **P** **03 26 40.0 -2.2**
**PPI Padang Panjang 53.49 274** P **P** **03 26 41.2 -1.8**
**IPM Ipoh 53.59 280** ⇑P **P** **03 26 44.2 +0.6**
**IPM Ipoh 53.59 280** *e*P **P** **03 26 43.5 -0.2**
comp=Z,147nm,1.5s
IPM *e*PcP **PcP** **03 27 49.7 -0.1**
IPM LR LR
comp=Z,1µm,20.0s
**TIA Tai'an 53.87 323** ⇑P **P** **03 26 44.5 -0.8**
TIA PMZ
comp=Z,80nm,0.9s
**SKNT Sakolnakorn 54.03 295** P **P** **03 26 47.7 +0.9**
comp=Z,269nm,1.2s
**KULM Kulim 54.10 281** ⇑P **P** **03 26 47.8 +0.4**
**KULM Kulim 54.10 281** *e*P **P** **03 26 46.2 -1.2**
comp=Z,70nm,1.0s
KULM LR LR
comp=Z,2µm,20.0s
**MDJ Mudanjiang 54.45 339** P **P** **03 26 50.8 +1.5**
MDJ pP **pP** **03 27 03.5 +0.1**
MDJ sP **sP** **03 27 10.5 +1.2**
MDJ PP **PP** **03 28 57.0 +4.9**
MDJ ScP **ScP** **03 31 47.5 +0.9**
MDJ PcS **PcS** **03 31 54.3 +2.4**
MDJ S **S** **03 34 22.8 -1.5**
MDJ PMZ
comp=Z,28nm,0.8s
MDJ PMZ
comp=Z,400nm,8.4s
MDJ LN
comp=Z,2µm,34.5s
MDJ LE

MDJ LZ
comp=Z,2μm,32.2s
MDJ LR LR
comp=Z,740nm,22.8s
**MDJ Mudanjiang 54.45 339** *e*P **P 03 26 48.5 -0.9**
comp=Z,41nm,1.1s
MDJ LR LR
comp=Z,1μm,20.0s
**MNSI Mandailing Nat 54.46 275** P **P 03 26 48.7 -1.3**
**SKLT Songkhla 54.50 283** P **P 03 26 50.4 +0.1**
comp=Z,139nm,0.9s,comp=Z,2μm
**SISI Saibi 54.70 272** P **P 03 26 52.0 +0.2**
**KHON Khomkaen 54.86 294** P **P 03 26 53.7 +0.9**
comp=Z,80nm,1.1s,comp=Z,2μm
**NONG Nongkai 55.15 296** P **P 03 26 55.3 +0.4**
comp=Z,278nm,1.1s,comp=Z,5μm
**ENH Enshi 55.35 313** *e*P **P 03 26 56.1 -0.1**
comp=Z,66nm,1.0s
ENH LR LR
comp=Z,2μm,22.0s
**CN2 Changchun 55.36 335** *e*P **P 03 26 55.3 -0.7**
CN2 *ep*P **pP 03 27 07.8 -2.3**
CN2 *e*S **S 03 34 36.0 -0.6**
CN2 PMZ
comp=Z,40nm,1.0s
CN2 LN
comp=Z,840nm,20.0s
CN2 LE
comp=Z,930nm,20.0s
CN2 LZ
comp=Z,1μm,20.0s
**PSI Prapat 55.38 277** P **P 03 26 55.3 -1.5**
comp=Z,19nm,0.7s,baz=154,slow=4.1,SNR=40
PSI ScP **ScP 03 31 50.5 -1.1**
comp=Z,2.2nm,0.4s,baz=140,slow=2.7,SNR=5.0
PSI LR LR 03 55 18.8
comp=Z,1μm,20.1s,baz=129,slow=41
**PSI Prapat 55.38 277** *e*P **P 03 26 55.3 -1.5**
PSI pmax pmax
comp=Z,252nm,1.6s
**PSI Prapat 55.38 277** *e*P **P 03 26 55.3 -1.5**
comp=Z,252nm,1.6s
PSI ScP **ScP 03 31 50.5 -1.1**
**CHAI Chaiyaphum 55.48 293** P **P 03 26 57.6 +0.3**
comp=Z,40nm,1.1s,comp=Z,330nm
**TRTT Trang 55.54 283** P **P 03 26 57.8 0.0**
comp=Z,127nm,1.1s
**GYA Guiyang 55.59 307**⇑ *i*P **P 03 26 58.0 -0.1**
GYA pP **pP 03 27 15.0 +2.8**
GYA sP **sP 03 27 21.5 +3.4**
GYA PP **PP 03 29 06.5 +3.7**
GYA ScP **ScP 03 31 52.0 -0.3**
GYA S **S 03 34 43.8 +3.2**
GYA sS **sS 03 35 04.5 +0.3**
GYA SS **SS 03 38 27.3 +0.8**
GYA PMZ
comp=Z,40nm,1.0s
GYA PMZ
comp=Z,390nm,5.9s
GYA LN
comp=Z,1μm,19.3s
GYA LE
comp=Z,2μm,20.5s
GYA LZ
comp=Z,3μm,22.7s
**PATY Pattaya 55.65 290** P **P 03 27 00.2 +1.7**
comp=Z,32nm,1.1s,comp=Z,894nm
**SLVN Son La 55.69 300** *e*P **P 03 26 59.3 +0.5**
SLVN *e*PP PP 03 28 58.1 -5.5
**TSI Tuntungan 55.84 278** P **P 03 27 02.8 +2.8**
**POHA Pohakuloa 55.86 62** PFAKE 03 27 10.0 +10
POHA LR LR
comp=Z,6μm,19.0s
**SURA Surathani 55.88 285** P **P 03 27 01.0 +0.8**
comp=Z,60nm,1.3s
**SKR Severo-Kuril's 56.04 2** *i*P **P 03 27 01.4 +0.7**
**HABR Khabarovsk 56.24 345** *e*P **P 03 26 59.9 -2.2**
HABR *e**PP **pP 03 27 13.7 -2.5**
HABR *e* 03 27 56.9
HABR *e*PPP PPP 03 30 20.4
HABR *e*S **S 03 34 46.9 -1.1**
HABR *e**SS **sS 03 35 10.3 -1.4**
HABR *e* 03 36 44.5
HABR *e*SS **SS 03 38 35.3 -0.3**
HABR pmax pmax
comp=Z,88nm,1.0s
HABR MLR MLR
comp=Z,902nm,18.0s
**GSI Gunungsitoli 56.51 275** P **P 03 27 02.8 -2.0**
**GSI Gunungsitoli 56.51 275** *e*P **P 03 27 03.4 -1.4**
comp=Z,579nm,1.8s
GSI LR LR
comp=Z,700nm,20.0s
**PPT Papeete 56.60 107** LR LR 03 49 21.0
comp=Z,1μm,18.3s,baz=273,slow=34
**PPT2 Papeete2 56.60 107** *e*P **P 03 27 07.9 +2.5**
comp=Z,122nm,1.6s
PPT2 *e*S S 03 35 01.0 +6.8
comp=Z,3μm,29.5s
PPT2 *e*SS SS 03 38 52.0 +9.5
comp=Z,1μm,26.2s
PPT2 *e*LQ LQ 03 41 30.9
comp=Z,3μm,33.5s
PPT2 *e*LR LR 03 43 52.7
comp=Z,5μm,28.8s
**PAE Paea 56.61 107** *e*P **P 03 27 07.7 +2.3**
comp=Z,21nm,1.2s
**PBKT Sadao Pong 56.62 294** P **P 03 27 06.4 +1.0**
comp=Z,170nm,1.2s
**KCSI Kotacane, Aceh 56.63 278** P **P 03 27 04.4 -1.2**
**LOEI Loei 56.65 295** P **P 03 27 03.7 -2.0**
comp=Z,243nm,1.1s,comp=Z,2μm
**PHET Kaeng Krachan 56.80 289** P **P 03 27 08.0 +1.2**
comp=Z,43nm,1.3s,comp=Z,372nm
**TIAR Tiarei 56.82 107** *e*P **P 03 27 09.3 +2.4**
comp=Z,16nm,0.7s
**PKDT Phuket 56.86 283** P **P 03 27 07.4 +0.2**
comp=Z,136nm,1.1s,comp=Z,9μm
**TVO Taravao 56.93 108** *e*P **P 03 27 10.1 +2.4**
comp=Z,122nm,1.7s
**BJT Baijiatuau 57.02 326** *e*P **P 03 27 06.8 -1.1**
BJT *e**PP pP 03 27 12.4 -10
BJT pmax pmax
comp=Z,36nm,0.9s
BJT MLR MLR
comp=Z,2μm,19.0s
**BJT Baijiatuau 57.02 326** *e*P **P 03 27 06.8 -1.1**
comp=Z,36nm,0.9s
BJT *ep*P pP 03 27 12.4 -10
BJT LR LR
comp=Z,2μm,19.0s
**BJI Beijing 57.03 326** P **P 03 27 07.5 -0.4**
BJI pP **pP 03 27 23.3 +1.2**
BJI S **S 03 34 54.5 -4.4**
BJI PMZ
comp=Z,9.0nm,1.0s
BJI LN
comp=Z,1μm,21.2s
BJI LE
comp=Z,1μm,21.2s
BJI LZ
comp=Z,1μm,22.4s
**UTTA Uttaradit 57.37 295** P **P 03 27 11.4 +0.7**
comp=Z,97nm,1.1s,comp=Z,782nm
**TBI Tubuai 57.39 114** *e*S **S 03 35 10.1 +5.8**
comp=Z,717nm,36.0s
TBI *e*SS SS 03 39 03.3 +8.7
comp=Z,435nm,27.0s
**NANT Nan 57.58 296** P **P 03 27 12.7 +0.5**
comp=Z,104nm,1.2s,comp=Z,887nm
**LHMI Lhok Sumawe 57.72 280** P **P 03 27 13.0 -0.3**
**LHMI Lhok Sumawe 57.72 280** *e*P **P 03 27 13.0 -0.3**
comp=Z,478nm,1.1s
LHMI LR LR
comp=Z,1μm,21.0s
**XAN Xi'an 57.81 316** P **P 03 27 13.0 -0.6**
XAN pP **pP 03 27 28.5 +0.7**
XAN PMZ
comp=Z,89nm,1.4s
XAN LN
comp=Z,990nm,18.4s
XAN LE
comp=Z,1μm,17.3s
XAN LZ
comp=Z,3μm,19.4s
**KLR Kul'dur 57.83 343** *e*P **P 03 27 11.3 -2.1**
KLR *e*S **S 03 35 05.5 -3.5**
KLR pmax pmax
comp=E,62nm,1.6s
KLR pmax pmax
comp=Z,140nm,1.6s
**SNSI Sinabang, Aceh 57.89 276** P **P 03 27 15.1 +0.6**
**PMOR Pomariorio Ree 58.04 104** *e*P **P 03 27 17.7 +2.2**
comp=Z,412nm,1.2s
**MEH Mehetia 58.06 108** *e*P **P 03 27 17.8 +2.1**
comp=Z,64nm,1.3s
**MLSI Meulaboh, Aceh 58.09 278** P **P 03 27 14.4 -1.5**
**KMI Kunming 58.18 304** P **P 03 27 18.5 +1.9**
KMI pP **pP 03 27 32.0 +1.2**
KMI S **S 03 35 15.8 +0.8**
KMI sS **sS 03 35 39.5 +0.7**
KMI PMZ
comp=Z,65nm,1.6s
KMI PMZ
comp=Z,790nm,7.3s
KMI LN
comp=Z,710nm,22.4s
KMI LE
comp=Z,1μm,26.9s
KMI LZ
comp=Z,2μm,27.6s
**KHLT Khaolaem Dam 58.28 291** P **P 03 27 18.4 +1.2**
comp=Z,74nm,1.4s,comp=Z,1μm
**VAH Vaihoa 58.31 104** *e*P **P 03 27 19.4 +2.0**
comp=Z,227nm,1.3s
**UMPA Umpang Tak 58.44 293** P **P 03 27 19.2 +0.9**
comp=Z,47nm,1.2s,comp=Z,505nm
**LAMP Lampang 58.45 296** P **P 03 27 19.3 +1.0**
comp=Z,96nm,1.1s,comp=Z,757nm
**PEA0 Petropavlovsk- 58.53 3** *e*P **P 03 27 17.4 -0.8**
**PETK Petropavlovsk- 58.53 3** P **P 03 27 18.1 -0.2**
comp=Z,50nm,0.8s,baz=166,slow=8.5,SNR=27
PETK LR LR 03 52 09.6
comp=Z,286nm,19.5s,baz=179,slow=36
**CM01 Chiang Mai Arr 59.02 295** *e*P **P 03 27 23.4 +1.1**
**CMAR Chiang Mai Arr 59.05 295** P **P 03 27 23.6 +1.1**
comp=Z,176nm,1.0s,baz=111,slow=5.1,SNR=83
CMAR LR LR 03 52 37.2
comp=Z,1μm,19.2s,baz=112,slow=36
**CHTO Chiang Mai 59.16 296** P **P 03 27 23.9 +0.7**
comp=Z,942nm,1.3s,comp=Z,11μm
**CHTO Chiang Mai 59.16 296** *e*P **P 03 27 23.9 +0.7**
CHTO pmax pmax
comp=Z,267nm,1.2s
CHTO MLR MLR
comp=Z,1μm,18.0s
**CHTO Chiang Mai 59.16 296** P **P 03 27 24.3 +1.1**
SNR=49
**CHTO Chiang Mai 59.16 296** *e*P **P 03 27 23.9 +0.7**
comp=Z,267nm,1.2s
CHTO LR LR
comp=Z,1μm,18.0s
**CMAI Chiengmai2 59.43 297** P **P 03 27 26.0 +0.7**
comp=Z,79nm,1.2s,comp=Z,1μm
**NKL Nikolayevsk 59.51 351** *i*P **P 03 27 26.2 +1.2**
NKL *e* 03 27 36.2
NKL pmax pmax
comp=N,43nm,1.0s
NKL pmax pmax
comp=Z,130nm,1.0s
**MHMT Maesarieng 59.87 295** P **P 03 27 29.1 +0.9**
comp=Z,67nm,1.2s
**CD2 Chengdu 59.94 310** P **P 03 27 28.5 0.0**
CD2 sP **sP 03 27 49.0 +0.4**
CD2 PP **PP 03 29 41.3 0.0**
CD2 PcS **PcS 03 32 16.5 -0.3**
CD2 S **S 03 35 37.8 +0.6**
CD2 sS **sS 03 36 02.3 +1.2**
CD2 SS **SS 03 39 36.3 +1.7**
CD2 PMZ
comp=Z,150nm,0.8s
CD2 PMZ
comp=Z,690nm,5.1s
CD2 LN
comp=Z,2μm,19.6s
CD2 LE
comp=Z,3μm,19.2s
CD2 LZ
comp=Z,3μm,21.6s
**HHC Hu-ho-hao-te 60.20 324**⇑ P **P 03 27 31.5 +1.4**
HHC sP **sP 03 27 50.3 0.0**
HHC S **S 03 35 42.3 +2.0**
HHC sS **sS 03 36 02.8 -1.4**
HHC ScS SKKSac 03 37 15.0 -1.4
HHC PMZ
comp=Z,45nm,1.4s
HHC PMZ
comp=Z,310nm,6.2s
HHC LN
comp=Z,1μm,18.7s
HHC LE
comp=Z,1μm,17.4s
HHC LZ
comp=Z,2μm,19.9s
**DRV Dumont d'Urvil 61.76 186** P **P 03 27 38.0 -2.1**
DRV PP **PP 03 29 56.0 -0.4**
DRV S **S 03 35 58.0 -1.0**
DRV L L 03 43 00.0
DRV R 03 47 00.0
**HIA Hailar 62.10 336** *e*P **P 03 27 42.1 -0.6**
HIA *e* 03 29 59.1
HIA pmax pmax
comp=Z,44nm,1.1s
HIA MLR MLR
comp=Z,1μm,22.0s
**HIA Hailar 62.10 336** *e*P **P 03 27 42.1 -0.6**
comp=Z,44nm,1.1s
HIA *e*PP **PP 03 29 59.1 -0.8**
HIA LR LR
comp=Z,1μm,22.0s
**LZH Lanzhou 62.42 316** *e*P **P 03 27 46.3 +1.0**
LZH S **S 03 36 03.0 -5.8**
LZH PMZ
comp=Z,210nm,1.0s
LZH PMZ
comp=Z,510nm,4.0s
LZH LN
comp=Z,1μm,15.0s
LZH LE
comp=Z,2μm,16.9s
LZH LZ
comp=Z,2μm,17.3s
**MA2 Magadan 64.96 358** *e*P **P 03 28 01.6 +0.2**
**NIKH Nikolski High 66.31 24** PFAKE 03 28 20.0 +10
NIKH LR LR
comp=Z,5μm,22.0s
**CLNS Chul'man 66.49 343** *e*P **P 03 28 13.2 +1.9**
CLNS *e* 03 28 42.3
CLNS *e* 03 30 39.8
CLNS *e*S **S 03 37 00.7 +2.7**
CLNS pmax pmax
comp=N,27nm,1.0s
CLNS pmax pmax
comp=Z,68nm,1.0s
CLNS pmax pmax
comp=E,10.0nm,0.6s
CLNS pmax pmax
comp=N,12nm,1.0s
CLNS pmax pmax
comp=Z,7.0nm,0.9s
CLNS pmax pmax
comp=E,9.0nm,1.0s
CLNS smax smax
comp=E,544nm,12.7s
CLNS smax smax
comp=N,213nm,12.7s
CLNS MLR MLR
comp=N,119nm,12.0s
CLNS MLR MLR
comp=Z,233nm,14.0s
CLNS MLR MLR
comp=E,236nm,13.0s
**GTA Gaotai 66.84 317**⇓ P **P 03 28 14.8 +0.7**
GTA pP **pP 03 28 27.8 -0.7**
GTA sP **sP 03 28 33.0 -1.3**
GTA PP **PP 03 30 44.8 +2.9**
GTA ScP 03 32 41.3
GTA S **S 03 37 02.5 -0.6**
GTA sS **sS 03 37 24.5 -2.9**
GTA SS **SS 03 41 22.0 -0.3**
GTA PMZ
comp=E,97nm,1.3s
GTA PMZ
comp=E,780nm,5.2s
GTA LN
comp=E,950nm,17.1s
GTA LE
comp=E,1μm,19.0s
GTA LZ
comp=E,1μm,20.9s
**ULN Ulaanbaatar 67.12 328***d* *i*P **P 03 28 16.2 +0.5**
ULN pmax pmax
comp=Z,27nm,0.9s
**ULN Ulaanbaatar 67.12 328** P **P 03 28 16.7 +1.0**
SNR=13
**ULN Ulaanbaatar 67.12 328** *e*P **P 03 28 15.9 +0.2**
comp=Z,25nm,0.8s
ULN LR LR
comp=Z,1μm,20.0s
**SONM Songino Array 67.46 328** P **P 03 28 17.8 0.0**
comp=Z,9.8nm,0.5s,baz=143,slow=5.3,SNR=18
**SONA1 Songino Array 67.46 328** *e*P **P 03 28 16.9 -0.9**
**CASY Casey 67.59 197** *e*P **P 03 28 17.3 -0.8**
comp=Z,57nm,1.4s
CASY *e*PP **PP 03 30 46.0 -1.6**
CASY LR LR
comp=Z,3μm,22.0s
**SEY Seymchan 68.29 359** *e*P **P 03 28 22.3 -0.2**
**AKUT Akutan 68.41 24** PFAKE 03 28 40.0 +17
AKUT LR LR
comp=Z,4μm,20.0s
**LSA Lhasa 69.44 304** P **P 03 28 31.5 +0.6**
LSA PMZ
comp=Z,40nm,1.0s
**LSA Lhasa 69.44 304** *e*P **P 03 28 30.9 0.0**
LSA pmax pmax
comp=Z,118nm,1.4s
LSA MLR MLR
comp=Z,2μm,22.0s
**LSA Lhasa 69.44 304** *e*P **P 03 28 30.9 0.0**
comp=Z,118nm,1.4s
LSA LR LR
comp=Z,2μm,22.0s
**YAK Yakutsk 69.89 348***c* *i*P **P 03 28 35.2 +2.8**
YAK *e* 03 31 06.3
YAK *e*S **S 03 37 37.9 -0.3**
YAK *e**SS **sS 03 37 58.7 -3.9**
YAK *e*SSS SSS 03 45 06.3
YAK pmax pmax
comp=Z,79nm,1.0s
YAK pmax pmax
comp=N,37nm,1.4s
YAK pmax pmax
comp=E,20nm,1.5s
YAK pmax pmax
comp=Z,9.0nm,0.4s
YAK smax smax
comp=E,397nm,3.6s
YAK smax smax
comp=N,208nm,3.5s
**FALS False Pass 69.90 25** PFAKE 03 28 40.0 +7.4
FALS LR LR
comp=Z,6μm,19.0s
**ZAK Zakamensk 70.62 328** *e*P **P 03 28 37.0 -0.3**
ZAK pmax pmax
comp=Z,39nm,0.9s
**RKT Rikitea 70.63 112** *e*S **S 03 37 52.2 +3.8**
comp=Z,778nm,25.0s
RKT *e*SS SS 03 42 28.9 +7.9
comp=Z,772nm,29.0s
RKT *e*LQ LQ 03 47 25.9
comp=Z,2μm,32.2s
RKT *e*LR LR 03 50 28.2
comp=Z,4μm,34.2s,baz=274
**BOD Bodaibo 70.82 339** *e*P **P 03 28 35.7 -2.5**
BOD pmax pmax
comp=Z,21nm,1.0s
**TLY Talaya 71.19 330** P **P 03 28 40.5 -0.2**
comp=Z,16nm,0.7s,baz=222,slow=5.4,SNR=8.7
**TLY Talaya 71.19 330** *e*P **P 03 28 41.2 +0.5**
TLY *e* 03 38 25.9
TLY pmax pmax
comp=Z,22nm,0.9s
TLY MLR MLR
comp=Z,1μm,24.0s
**IRK Irkutsk 71.22 330** *e*P **P 03 28 40.0 -0.8**
IRK pmax pmax
comp=Z,54nm,1.3s
**SDPT Sand Point 71.48 26** PFAKE 03 28 50.0 +7.8
SDPT LR LR
comp=Z,4μm,19.0s
**TAPN Taplejung 71.60 301** *e*P **P 03 28 44.1 +0.1**
comp=Z,198nm,0.9s
**ODAN Odare 71.73 300** *e*P **P 03 28 44.9 +0.2**
comp=Z,245nm,0.9s
**VNDA Vanda 72.06 178** P **P 03 28 45.6 +0.2**
comp=Z,8.5nm,0.7s,baz=337,slow=7.2,SNR=21
**RAMN Ramite 72.44 300** *e*P **P 03 28 48.9 0.0**
comp=Z,71nm,0.7s
**CHLP Challavanipeta 72.69 291** *e*P **P 03 28 51.1 +0.8**
CHLP IAmb IAmb 03 28 52.9
comp=Z,190nm,1.2s
CHLP *e*S **S 03 38 13.1 +0.9**
**GUN Gumba 73.31 301** *e*P **P 03 28 54.3 +0.1**
comp=Z,216nm,1.0s
**MIR Mirnyy 73.58 201**⇑ *i*P P 03 29 04.0 +9.4
MIR pmax pmax
comp=Z,180nm,1.5s
**PKI Pulchoki 73.62 301** *e*P **P 03 28 55.7 -0.4**
**PKIN Phulchoki 73.64 301** *e*P **P 03 28 56.4 +0.4**
**KKN Kakani 73.79 301** *e*P **P 03 28 56.8 -0.1**
**GAMB Gambell 73.85 15** PFAKE 03 29 10.0 +14
GAMB LR LR
comp=Z,3μm,19.0s
**DMN Daman 73.89 301** *e*P **P 03 28 57.6 +0.1**
comp=Z,475nm,1.2s
**BILL Bilibino 73.95 5**⇑ *e*P **P 03 28 57.2 +0.5**
BILL *e* 03 29 13.5
BILL *e* 03 31 39.8
BILL *e*PPP PPP 03 33 25.6
BILL pmax pmax
comp=Z,54nm,0.9s
**PALK Pallekele 73.98 279** P **P 03 28 58.0 -0.1**
comp=Z,54nm,1.1s,baz=117,slow=6.2,SNR=11
PALK LR LR 04 06 40.4
comp=Z,541nm,18.1s,baz=120,slow=40
**PALK Pallekele 73.98 279** P **P 03 28 58.0 -0.1**
PALK pmax pmax
comp=Z,54nm,1.1s
PALK MLR MLR
comp=Z,541nm,18.1s
**PALK Pallekele 73.98 279** P **P 03 28 58.8 +0.7**
comp=Z,317nm,1.5s,SNR=6.6
**PALK Pallekele 73.98 279** P **P 03 28 59.0 +0.9**
SNR=5.6
**PALK Pallekele 73.98 279** *e*P **P 03 28 57.9 -0.1**
comp=Z,144nm,1.4s
**GKN Gorkha 74.40 301** *e*P **P 03 29 00.1 -0.3**
comp=Z,617nm,1.3s
**PVM Polavaram 74.71 289** *e*P **P 03 29 02.7 +0.5**
PVM IAmb IAmb 03 29 03.8
comp=Z,78nm,1.3s
PVM *e*S **S 03 38 33.9 -1.1**
**SII Sitkinak Islan 75.00 27** PFAKE 03 29 10.0 +6.9
SII LR LR
comp=Z,4μm,20.0s
**KOLN Koldanda 75.22 300** *e*P **P 03 29 04.8 -0.4**
comp=Z,365nm,1.3s
**DANN Dangsing 75.23 301** *e*P **P 03 29 04.9 -0.5**
**OHAK Old Harbor 75.79 27** PFAKE 03 29 20.0 +13
OHAK LR LR
comp=Z,2μm,18.0s
**SKHT Srikalahasti 75.92 286** *e*P **P 03 29 08.5 -0.6**
SKHT IAmb IAmb 03 29 10.8
comp=Z,88nm,1.3s
SKHT *e*S **S 03 38 47.8 -0.7**
**ADKI Addanki 76.02 288** *e*P **P 03 29 08.9 -0.7**
ADKI IAmb IAmb 03 29 11.3
comp=Z,110nm,1.2s
ADKI *e*S **S 03 38 48.6 -1.0**
**HVS Khovu-Aksy 76.20 326** *e*P **P 03 29 10.4 +0.3**
HVS pmax pmax
comp=Z,67nm,1.0s
**TNA Tin City 76.26 15** PFAKE 03 29 20.0 +10
TNA LR LR
comp=Z,2μm,20.0s
**KDAK Kodiak Island 76.42 26** *e*P **P 03 29 10.8 -0.2**
KDAK pmax pmax
comp=Z,36nm,1.0s

KDAK MLR MLR
comp=Z,3µm,22.0s
**KDAK Kodiak Island 76.42 26** *e*P **P 03 29 10.8 -0.2**
comp=Z,36nm,1.0s
KDAK LR LR
comp=Z,3µm,22.0s
**NJS Nagarjunasagar 76.77 288** *e*P **P 03 29 13.0 -0.9**
NJS IAmb IAmb 03 29 15.2
comp=Z,115nm,1.3s
NJS *e*S **S 03 38 57.3 -0.5**
**RCLA Racherla 76.92 287** *e*P **P 03 29 14.8 0.0**
RCLA IAmb IAmb 03 29 15.9
comp=Z,68nm,1.6s
RCLA *e*S **S 03 38 58.9 -0.6**
**WMQ Urumqi 76.93 317** P **P 03 29 14.5 +0.1**
WMQ pP **PcP 03 29 27.0 +1.7**
WMQ sP **sP 03 29 36.5 +1.6**
WMQ PP **PP 03 32 11.0 +2.9**
WMQ S **S 03 39 00.0 +1.3**
WMQ SS **SS 03 43 56.0 -0.4**
WMQ PMZ
comp=Z,59nm,1.2s
WMQ PMZ
comp=Z,160nm,8.0s
WMQ LN
comp=Z,1µm,20.0s
WMQ LE
comp=Z,870nm,20.0s
WMQ LZ
comp=Z,950nm,20.0s
**SRLM Srisailam 77.08 288** *e*P **P 03 29 14.4 -1.3**
SRLM IAmb IAmb 03 29 16.9
comp=Z,138nm,1.2s
SRLM *e*S **S 03 38 59.9 -1.4**
**RPR Rampur 77.19 291** *e*P **P 03 29 15.6 -0.7**
RPR IAmb IAmb 03 29 17.7
comp=Z,58nm,1.1s
RPR *e*S **S 03 39 01.0 -1.2**
**HYB Hyderabad 77.63 289** *i* P **P 03 29 18.0 -0.8**
HYB *e*S **S 03 39 04.0 -3.2**
**HYBB Hyderabad (bro 77.63 289** *e*P **P 03 29 18.8 0.0**
HYBB IAmb IAmb 03 29 19.9
comp=Z,53nm,1.1s
HYBB *e*S **S 03 39 07.6 +0.4**
**NGP Nagpur 77.83 293** *e*P **P 03 29 20.7 +0.8**
NGP *e*S **S 03 39 07.9 -1.3**
NGP *ex* x 04 11 32.4
comp=Z,774nm,18.1s
**HOM Homer 77.88 25** PFAKE 03 29 30.0 +11
HOM LR LR
comp=Z,4µm,21.0s
**CNPM China Poot 77.98 25** *e*P **P 03 29 21.2 +1.4**
comp=Z,101nm,0.8s
CNPM LR LR
comp=Z,5µm,20.0s
**SRSP Sriramsagar 78.08 291** *e*P **P 03 29 20.2 -1.0**
SRSP IAmb IAmb 03 29 22.2
comp=Z,160nm,1.6s
SRSP *e*S **S 03 39 11.8 -0.2**
**BRLK Bradley Lake 78.26 25** *e*P **P 03 29 21.9 +0.5**
comp=Z,41nm,0.8s
BRLK LR LR
comp=Z,5µm,20.0s
**URV Uravakonda 78.45 286** *e*P **P 03 29 22.7 -0.7**
URV IAmb IAmb 03 29 24.8
comp=Z,101nm,1.3s
URV *e*S **S 03 39 15.6 -0.5**
**KRAR Krasnoyarsk 78.89 330** *e*P **P 03 29 25.6 +0.7**
KRAR pmax pmax
comp=Z,27nm,0.7s
**SEW Seward 79.05 25** *e*P **P 03 29 24.7 -1.0**
comp=Z,105nm,1.1s
SEW LR LR
comp=Z,5µm,20.0s
**SUA Susitna One 79.25 24** *e*P **P 03 29 26.3 -0.6**
comp=Z,55nm,0.8s
SUA LR LR
comp=Z,3µm,22.0s
**RC01 Rabbit Creek A 79.46 24** PFAKE 03 29 40.0 +12
RC01 LR LR
comp=Z,2µm,21.0s
**PPLA Purkeypile 79.50 22** PFAKE 03 29 40.0 +12
PPLA LR LR
comp=Z,4µm,21.0s
**KLRI Killari 79.57 289** *e*P **P 03 29 29.1 -0.4**
KLRI IAmb IAmb 03 29 30.3
comp=Z,115nm,1.7s
KLRI *e*S **S 03 39 28.2 +0.2**
**CAST Castle Rocks 79.84 22** *e*P **P 03 29 29.2 -0.8**
comp=Z,34nm,0.8s
CAST LR LR
comp=Z,3µm,20.0s
**PMR Palmer 79.97 24** *e*P **P 03 29 29.3 -1.3**
PMR pmax pmax
comp=Z,67nm,1.2s
PMR MLR MLR
comp=Z,3µm,21.0s
**PMR Palmer 79.97 24** *e*P **P 03 29 29.3 -1.3**
comp=Z,67nm,1.2s
PMR LR LR
comp=Z,3µm,21.0s
**MID Middleton Isla 80.06 27** PFAKE 03 29 40.0 +8.8
MID LR LR
comp=Z,2µm,21.0s
**SML Sawmill 80.41 24** *e*P **P 03 29 33.0 -0.1**
SML pmax pmax
comp=Z,113nm,1.0s
SML MLR MLR
comp=Z,3µm,22.0s
**SML Sawmill 80.41 24** *e*P **P 03 29 33.0 -0.1**
comp=Z,113nm,1.0s
SML LR LR
comp=Z,3µm,22.0s
**TRF Thorofare Moun 80.53 22** *e*P **P 03 29 33.5 -0.3**
comp=Z,35nm,0.8s
TRF LR LR
comp=Z,5µm,20.0s
**BPAW Bear Paw Mtn. 80.63 21** *e*P **P 03 29 34.5 +0.3**
comp=Z,82nm,1.7s
BPAW LR LR
comp=Z,2µm,20.0s
**SCM Sheep Creek Mo 80.83 24** PFAKE 03 29 50.0 +15
SCM LR LR
comp=Z,4µm,22.0s
**EYAK Cordova Ski Ar 80.87 26** PFAKE 03 29 50.0 +15
EYAK LR LR
comp=Z,4µm,20.0s
**RND Reindeer 81.05 23** *e*P **P 03 29 35.5 -1.0**
RND pmax pmax
comp=Z,53nm,1.0s
RND MLR MLR
comp=Z,4µm,20.0s
**RND Reindeer 81.05 23** *e*P **P 03 29 35.5 -1.0**
comp=Z,53nm,1.0s
RND LR LR
comp=Z,4µm,20.0s
**DIV Divide 81.14 25** *e*P **P 03 29 35.8 -1.3**
comp=Z,36nm,0.8s
DIV LR LR
comp=Z,3µm,20.0s
**MCK McKinley 81.19 22** *e*P **P 03 29 35.1 -2.1**
MCK pmax pmax
comp=Z,107nm,1.0s
MCK MLR MLR
comp=Z,5µm,20.0s
**MCK McKinley 81.19 22** *e*P **P 03 29 35.1 -2.1**
comp=Z,107nm,1.0s
MCK LR LR
comp=Z,5µm,20.0s
**BWN Browne 81.23 22** PFAKE 03 29 50.0 +13
BWN LR LR
comp=Z,3µm,21.0s
**MLY Manley 81.24 21** *e*P **P 03 29 36.9 -0.6**
comp=Z,74nm,1.3s
MLY LR LR
comp=Z,3µm,22.0s
**KLU Klutina 81.25 25** *e*P **P 03 29 37.9 +0.2**
comp=Z,109nm,1.0s
KLU LR LR
comp=Z,3µm,22.0s
**RAGM Ragged Mountai 81.26 26** PFAKE 03 29 50.0 +12
RAGM LR LR
comp=Z,3µm,19.0s
**MK01 Makanchi Array 81.49 319** *e*P **P 03 29 39.0 -0.1**
MK01 *e*PP PP 03 32 40.8 -5.2
**MK31 Makanchi Array 81.50 319** *i* P **P 03 29 39.0 -0.3**
MK31 pmax pmax
comp=Z,48nm,1.0s
**MKAR Makanchi Array 81.50 319** P **P 03 29 39.7 +0.4**
comp=Z,13nm,0.6s,baz=98,slow=7.1,SNR=12
MKAR S **S 03 39 47.2 0.0**
comp=Z,0.7nm,0.6s,baz=90,slow=7.2,SNR=2.9
MKAR LR LR 04 07 05.2
comp=Z,951nm,19.5s,baz=97,slow=36
**MKAR Makanchi Array 81.50 319** *e*P **P 03 29 39.2 -0.1**
MKAR S **S 03 39 47.2 0.0**
**MKAR Makanchi Array 81.50 319** *e*P **P 03 29 39.2 -0.1**
MKAR S **S 03 39 47.2 0.0**
**BMRM Bremner River 81.56 26** *e*P **P 03 29 39.7 +0.4**
comp=Z,139nm,1.4s
BMRM LR LR
comp=Z,4µm,21.0s
**MAKZ Makanchi 81.71 319** *e*P **P 03 29 39.7 -0.6**
MAKZ LR LR
comp=Z,4µm,21.0s
**WRH Wood River Hil 81.89 22** *e*P **P 03 29 39.9 -0.9**
comp=Z,113nm,1.6s
WRH LR LR
comp=Z,3µm,19.0s
**HARP HAARP 82.01 24** *e*P **P 03 29 41.6 +0.1**
comp=Z,51nm,0.9s
HARP LR LR
comp=Z,4µm,22.0s
**CCB Clear Creek Bu 82.09 22** *e*P **P 03 29 40.0 -1.9**
comp=Z,26nm,0.8s
CCB LR LR
comp=Z,3µm,19.0s
**MDM Murphy Dome 82.10 21** *e*P **P 03 29 41.4 -0.6**
comp=Z,50nm,1.2s
MDM LR LR
comp=Z,2µm,22.0s
**PAX Paxson 82.15 24** *e*P **P 03 29 43.0 +0.6**
PAX pmax pmax
comp=Z,208nm,2.4s
PAX MLR MLR
comp=Z,4µm,22.0s
**PAX Paxson 82.15 24** *e*P **P 03 29 43.0 +0.6**
comp=Z,208nm,2.4s
PAX LR LR
comp=Z,4µm,22.0s
**COLA College 82.19 22** *e*P **P 03 29 40.9 -1.5**
COLA pmax pmax
comp=Z,56nm,0.8s
COLA MLR MLR
comp=Z,2µm,20.0s
**COLA College 82.19 22** *e*P **P 03 29 40.9 -1.5**
comp=Z,56nm,0.8s
COLA LR LR
comp=Z,2µm,20.0s
**HDA Harding Lake 82.28 22** PFAKE 03 29 50.0 +7.1
HDA LR LR
comp=Z,5µm,20.0s
**ZAA0 Zalesovo Array 82.29 326** *e*P **P 03 29 41.5 -1.6**
**ZALV Zalesovo Beam 82.29 326** P **P 03 29 42.6 -0.5**
comp=Z,28nm,0.5s,baz=115,slow=5.9,SNR=11
ZALV S **S 03 39 52.9 -2.0**
comp=Z,1.9nm,0.8s,baz=99,slow=8.9,SNR=5.0
ZALV LR LR 04 06 41.1
comp=Z,830nm,21.7s,baz=74,slow=36
**PDGK Podgornoye 82.45 315** P **P 03 29 43.8 -0.4**
PDGK pmax pmax
comp=Z,19nm,0.7s
**ILAR Eielson Array 82.49 22** P **P 03 29 41.0 -3.0**
comp=Z,21nm,1.1s,baz=246,slow=5.3,SNR=25
ILAR PKKPbc PKKPbc 03 48 21.6 +8.5
comp=Z,0.3nm,0.6s,baz=23,slow=2.8,SNR=4.3
ILAR LR LR 04 03 17.0
comp=Z,3µm,20.3s,baz=238,slow=33
**IL1 Eielson Array 82.50 22** *e*P **P 03 29 40.8 -3.2**
**COLD Coldfoot 82.65 19** *e*P **P 03 29 45.7 +0.9**
comp=Z,56nm,1.3s
COLD LR LR
comp=Z,2µm,19.0s
**RIDG Independ'e Rid 82.77 23** *e*P **P 03 29 43.5 -2.0**
comp=Z,77nm,1.2s
RIDG LR LR
comp=Z,3µm,21.0s
**DOT Dot Lake 83.03 23** *e*P **P 03 29 44.7 -2.1**
comp=Z,126nm,0.8s
DOT LR LR
comp=Z,10µm,22.0s
**PCA Pinnacle 83.12 27** *e*P **P 03 29 47.6 +0.2**
comp=Z,75nm,1.0s
PCA LR LR
comp=Z,3µm,21.0s
**NVS Novosibirsk 83.47 327** *e*P **P 03 29 49.0 -0.2**
NVS *e*S **S 03 40 03.6 -3.1**
NVS pmax pmax
comp=Z,69nm,1.2s
NVS pmax pmax
comp=N,21nm,1.3s
NVS pmax pmax
comp=E,46nm,1.2s
NVS smax smax
comp=E,120nm,2.6s
**DHAK Deception Hill 83.69 29** PFAKE 03 30 00.0 +10
DHAK LR LR
comp=Z,2µm,21.0s
**FYU Fort Yukon 83.98 21** PFAKE 03 30 00.0 +8.4
FYU LR LR
comp=Z,2µm,20.0s
**KSH Kashi 84.13 311** P **P 03 29 55.0 +1.8**
KSH pP **pP 03 30 08.3 +0.2**
KSH sP **sP 03 30 13.5 -0.3**
KSH S **SKSac 03 40 12.5 -0.1**
KSH SS **SS 03 45 48.0 +3.6**
KSH PMZ
comp=Z,66nm,1.1s
KSH PMZ
comp=Z,700nm,5.2s
KSH LN
comp=Z,470nm,5.9s
KSH LE
comp=Z,430nm,6.9s
KSH LZ
comp=Z,700nm,10.4s
**QSPA South Pole Qui 84.42 180** *e*P **P 03 29 53.8 -0.3**
comp=Z,539nm,1.9s
QSPA LR LR
comp=Z,800nm,19.0s
**EGAK Eagle 84.67 23** *e*P **P 03 29 54.2 -1.0**
comp=Z,35nm,1.0s
EGAK LR LR
comp=Z,4µm,20.0s
**H02N1 VAN INLET T-PH 84.78 35** T T 05 03 37.7
**H02S1 DAWSON INLET T 84.80 35** T T 05 03 39.0
SNR=31
**KURK Kurchatov 84.93 322** P **P 03 29 56.3 -0.5**
KURK pmax pmax
comp=Z,23nm,0.9s
**KURK Kurchatov 84.93 322** *e*P **P 03 29 56.5 -0.3**
KURK LR LR
comp=Z,3µm,19.0s
**KURBB Kurchatov Arra 84.97 322** P **P 03 29 56.3 -0.6**
comp=Z,23nm,0.9s,baz=105,slow=3.9,SNR=12
**DAWY Dawson 85.08 24** *e*P **P 03 29 57.2 -0.1**
comp=Z,88nm,1.6s
**TKM2 Tokmak 2 85.12 314** *e*P **P 03 29 58.1 -0.1**
TKM2 pmax pmax
comp=Z,57nm,0.7s
**TKM2 Tokmak 2 85.12 314** P **P 03 29 58.1 -0.1**
SNR=31
**TKM2 Tokmak 2 85.12 314** *e*P **P 03 29 58.1 -0.1**
comp=Z,57nm,0.7s
**SKAG Skagway 85.21 29** *e*P **P 03 29 59.8 +1.9**
comp=Z,158nm,1.8s
SKAG LR LR
comp=Z,3µm,22.0s
**MAW Mawson 85.25 203** P **P 03 29 57.5 -0.5**
comp=Z,21nm,0.6s,baz=97,slow=7.3,SNR=38
MAW LR LR 04 04 35.7
comp=Z,873nm,21.9s,baz=72,slow=33
**MAW Mawson 85.25 203** *e*P **P 03 29 57.4 -0.5**
comp=Z,6.7nm,0.8s
**KBK Karagaybulak 85.54 313** P **P 03 30 00.9 +0.7**
SNR=18
**CHMS Chumysh 85.75 314** P **P 03 30 00.7 -0.4**
SNR=14
**UCH Uchtor 85.77 313** P **P 03 30 03.1 +1.4**
SNR=36
**WRAK Wrangell Islan 85.78 32** *e*P **P 03 30 00.9 +0.1**
comp=Z,60nm,1.4s
WRAK LR LR
comp=Z,1µm,22.0s
**FRU Bishkek 85.81 314** *i* P **P 03 30 00.0 -1.4**
FRU *i* 03 30 14.0
FRU *e* 03 40 23.0
FRU *e* 03 40 33.0
FRU pmax pmax
comp=Z,100nm,1.8s
FRU MLR MLR
comp=E,1µm,18.0s
**AAK Ala-Archa 85.86 313** P **P 03 30 02.4 +0.5**
comp=E,39nm,1.1s,baz=108,slow=3.2,SNR=18
AAK LR LR 04 10 58.1
comp=E,719nm,18.2s,baz=110,slow=37
**AAK Ala-Archa 85.86 313** P **P 03 30 02.4 +0.5**
AAK pmax pmax
comp=Z,39nm,1.1s
AAK MLR MLR
comp=Z,719nm,18.2s
**AAK Ala-Archa 85.86 313** P **P 03 30 02.3 +0.5**
comp=Z,198nm,1.1s,SNR=15
**AAK Ala-Archa 85.86 313** P **P 03 30 03.0 +1.1**
SNR=17
**AAK Ala-Archa 85.86 313** P **P 03 30 02.6 +0.8**
SNR=18
**AAK Ala-Archa 85.86 313** *e*P **P 03 30 01.8 0.0**
comp=Z,40nm,0.8s
**USP Ospenovka 85.98 314** P **P 03 30 02.3 0.0**
SNR=21
**SFK Sufi-Kurgan 86.10 311** P **P 03 30 03.2 +0.1**
SFK pmax pmax
comp=Z,60nm,0.7s
**AML Almayashu 86.35 313** P **P 03 30 04.7 +0.2**
SNR=35
**EKS2 Erkin-Say 86.39 313** *e*P **P 03 30 04.9 +0.6**
EKS2 pmax pmax
comp=Z,69nm,1.3s
**EKS2 Erkin-Say 86.39 313** P **P 03 30 05.4 +1.1**
SNR=11
**EKS2 Erkin-Say 86.39 313** *e*P **P 03 30 04.9 +0.6**
comp=Z,69nm,1.3s
**MNAS Manas 87.28 313** P **P 03 30 08.9 +0.1**
MNAS pmax pmax
comp=Z,38nm,1.1s
**DLBC Dease Lake 87.54 31** *e*P **P 03 30 10.4 +0.9**
comp=Z,62nm,1.2s
DLBC LR LR
comp=Z,2µm,21.0s
**KBO Bosley Butte 87.81 47** PFAKE 03 30 20.0 +8.8
KBO LR LR
comp=Z,6µm,20.0s
**KMRM Mail Ridge 87.87 49** PFAKE 03 30 20.0 +8.4
KMRM LR LR
comp=Z,7µm,21.0s
**KCPM Cahto Peak 87.88 50** PFAKE 03 30 20.0 +8.3
KCPM LR LR
comp=Z,3µm,19.0s
**KHMM Horse Mountain 87.96 49** PFAKE 03 30 20.0 +8.0
KHMM LR LR
comp=Z,6µm,22.0s
**HOPS Hopland 88.17 51** PFAKE 03 30 20.0 +7.1
HOPS LR LR
comp=Z,4µm,19.0s
**KBL Kabul 88.76 305** PFAKE 03 30 30.0 +14
KBL LR LR
comp=Z,1µm,22.0s
**WDC Whiskeytown Da 88.81 49** *e*P **P 03 30 15.3 -0.5**
WDC pmax pmax
comp=Z,43nm,1.6s
WDC MLR MLR
comp=Z,4µm,20.0s
**WDC Whiskeytown Da 88.81 49** *e*P **P 03 30 15.3 -0.5**
comp=Z,43nm,1.6s
WDC LR LR
comp=Z,4µm,20.0s
**INK Inuvik 88.81 21** P **P 03 30 14.1 -1.1**
comp=Z,11nm,0.9s,baz=255,slow=5.6,SNR=16
**INK Inuvik 88.81 21** P **P 03 30 14.1 -1.1**
INK MLR MLR
comp=Z,4µm,22.0s
**INK Inuvik 88.81 21** P **P 03 30 14.1 -1.1**
INK LR LR
comp=Z,4µm,22.0s
**KKAR Karatay Array 88.83 313** *e*P **P 03 30 14.2 -1.7**
**KKAR Karatay Array 88.83 313** *e*P **P 03 30 14.2 -1.7**
**COR Corvallis 88.85 45** PFAKE 03 30 30.0 +14
COR LR LR
comp=Z,4µm,20.0s
**YBH Yreka Blue Hor 88.85 48** PFAKE 03 30 30.0 +14
YBH LR LR
comp=Z,8µm,21.0s
**F03A Seaside 88.88 44** PFAKE 03 30 30.0 +14
F03A LR LR
comp=Z,4µm,20.0s
**NLWA Neilton Lookou 88.90 42** PFAKE 03 30 30.0 +14
NLWA LR LR
comp=Z,4µm,20.0s
**G03D McMinnville, O 88.97 45** P **P 03 30 15.8 -0.7**
baz=89
**E03A Lebam 88.97 43** PFAKE 03 30 30.0 +14
E03A LR LR
comp=Z,4µm,20.0s
**SAO San Andreas Ge 89.13 53** PFAKE 03 30 30.0 +13
SAO LR LR
comp=Z,3µm,21.0s
**O03D Paynes Creek 89.33 50** P **P 03 30 19.9 +1.5**
baz=89
**I04A Tendick Farm, 89.36 46** P **P 03 30 19.4 +0.9**
baz=89
**PGC Sidney 89.38 41** PFAKE 03 30 30.0 +12
PGC LR LR
comp=Z,2µm,22.0s
**H04A Detroit Lake 89.65 45** PFAKE 03 30 30.0 +10
H04A LR LR
comp=Z,2µm,20.0s
**F04A Amboy 89.66 44** PFAKE 03 30 30.0 +10
F04A LR LR
comp=Z,5µm,22.0s
**SMMC Simmler 90.12 55** P **P 03 30 23.3 +1.2**
baz=90
**CMB Columbia Colle 90.13 52** *e*P **P 03 30 24.1 +1.9**
**CMB Columbia Colle 90.13 52** *e*P **P 03 30 20.4 -1.8**
CMB pmax pmax
comp=Z,88nm,2.4s
CMB MLR MLR
comp=Z,3µm,22.0s
**CMB Columbia Colle 90.13 52** *e*P **P 03 30 20.4 -1.8**
comp=Z,88nm,2.4s
CMB LR LR
comp=Z,3µm,22.0s
**D05A Enumclaw 90.14 43** PFAKE 03 30 30.0 +8.1
D05A LR LR
comp=Z,4µm,22.0s
**LON Longmire 90.20 43** PFAKE 03 30 30.0 +7.7
LON LR LR
comp=Z,3µm,22.0s
**I05D Terrebonne, OR 90.20 46** P **P 03 30 22.8 +0.4**
baz=90
**B05A Bryant 90.21 42** P **P 03 30 22.9 +0.7**
baz=90
**PKM Peak Mountain 90.22 55** P **P 03 30 24.7 +1.8**
baz=90
**K05A Summer Lake 90.32 47** PFAKE 03 30 30.0 +6.8
K05A LR LR
comp=Z,7µm,19.0s
**G05D Wamic, OR 90.34 45** P **P 03 30 23.6 +0.6**
baz=90
**BVA0 Borovoye Array 90.40 323** *i* P **P 03 30 22.4 -0.6**
BVA0 pmax pmax
comp=Z,52nm,1.3s
**BVAR Borovoye Array 90.40 323** P **P 03 30 22.6 -0.4**
comp=Z,16nm,0.9s,baz=96,slow=6.0,SNR=13
BVAR LR LR 04 12 11.4
comp=Z,451nm,19.8s,baz=91,slow=36
**BRVK Borovoye 90.47 323** *d* P **P 03 30 23.0 -0.3**
BRVK pmax pmax
comp=Z,26nm,1.1s
**BRVK Borovoye 90.47 323** P **P 03 30 23.7 +0.3**
SNR=8.9
**BRVK Borovoye 90.47 323** *e*P **P 03 30 22.8 -0.5**
comp=Z,34nm,1.0s
BRVK LR LR
comp=Z,800nm,18.0s
**B06A Marblemount 90.65 41** PFAKE 03 30 40.0 +16
B06A LR LR
comp=Z,2µm,22.0s
**MOD Modoc 90.65 48** PFAKE 03 30 40.0 +15

MOD LR LR
comp=Z,6µm,20.0s
**G06A Carlson Farm, 90.81 45** PFAKE 03 30 40.0 +15
G06A LR LR
comp=Z,3µm,19.0s
**LTY Liberty 91.03 43** PFAKE 03 30 40.0 +14
LTY LR LR
comp=Z,3µm,21.0s
**CIS Catalina Islan 91.22 57** P **P 03 30 28.1 +0.8**
baz=91
**ISA Isabella 91.39 54** eP **P 03 30 25.2 -3.0**
ISA pmax pmax
comp=Z,110nm,2.8s
ISA MLR MLR
comp=Z,3µm,18.0s
**ISA Isabella 91.39 54** P **P 03 30 28.7 +0.5**
baz=91
**ISA Isabella 91.39 54** eP **P 03 30 25.1 -3.0**
comp=Z,110nm,2.8s
ISA LR LR
comp=Z,3µm,18.0s
**I07A Izee 91.48 46** eP **P 03 30 28.8 +0.3**
comp=Z,74nm,1.8s
**MTUM Tungsten Hills 91.49 53** eP **P 03 30 28.2 -0.5**
**MWC Mount Wilson 91.59 56** eP **P 03 30 30.7 +1.5**
**MWC Mount Wilson 91.59 56** eP **P 03 30 28.5 -0.7**
MWC pmax pmax
comp=Z,183nm,1.8s
MWC MLR MLR
comp=Z,2µm,19.0s
**MWC Mount Wilson 91.59 56** eP **P 03 30 28.5 -0.7**
comp=Z,183nm,1.8s
MWC LR LR
comp=Z,2µm,19.0s
**EDW2 Edwards Air Fo 91.71 55** P **P 03 30 31.0 +1.3**
baz=92
**HAWA Hanford 91.71 44** eP **P 03 30 31.0 +1.7**
comp=Z,35nm,1.4s
HAWA LR LR
comp=Z,4µm,21.0s
**NV01 Mina Array Sit 91.80 52** eP **P 03 30 29.6 -0.6**
**NVAR Mina Array Bea 91.80 52** P **P 03 30 30.4 +0.3**
comp=Z,8.2nm,0.9s,baz=254,slow=5.9,SNR=21
NVAR LR LR 04 04 31.2
comp=Z,3µm,21.6s,baz=274,slow=31
**WVOR Wild Horse Val 91.94 48** eP **P 03 30 29.4 -1.2**
WVOR pmax pmax
comp=Z,19nm,1.2s
WVOR MLR MLR
comp=Z,7µm,21.0s
**WVOR Wild Horse Val 91.94 48** eP **P 03 30 32.3 +1.7**
**WVOR Wild Horse Val 91.94 48** eP **P 03 30 29.4 -1.2**
comp=Z,19nm,1.2s
WVOR LR LR
comp=Z,7µm,21.0s
**G08A Pilot Rock 92.00 45** eP **P 03 30 30.0 -0.8**
comp=Z,42nm,1.5s
**LRMC Laurel Mountai 92.01 55** P **P 03 30 31.2 +0.1**
baz=92
**B08A Colville Reser 92.06 42** eP **P 03 30 30.6 -0.2**
comp=Z,89nm,2.2s
B08A ePP **PP 03 34 10.9 -0.2**
B08A LR LR
comp=Z,3µm,20.0s
**J08A Circle Bar Ran 92.15 47** eP **P 03 30 32.2 +0.7**
comp=Z,84nm,2.3s
J08A LR LR
comp=Z,5µm,20.0s
**DAC Darwin (Calif) 92.16 54** eP **P 03 30 33.2 +1.3**
**DAC Darwin (Calif) 92.16 54** eP **P 03 30 32.6 +0.8**
DAC e 03 34 12.2
DAC pmax pmax
comp=Z,22nm,1.1s
DAC MLR MLR
comp=Z,4µm,19.0s
**DAC Darwin (Calif) 92.16 54** eP **P 03 30 32.6 +0.8**
comp=Z,22nm,1.1s
DAC ePP **PP 03 34 12.2 -0.4**
DAC LR LR
comp=Z,4µm,19.0s
**MPMC Manual Prospec 92.23 54** P **P 03 30 33.1 +0.9**
baz=92
**BAR Barrett 92.61 58** eP **P 03 30 32.6 -1.2**
**C09A Chrisman Ranch 92.71 42** PFAKE 03 30 40.0 +6.1
C09A LR LR
comp=Z,4µm,20.0s
**GSC Goldstone 92.72 55** eP **P 03 30 37.2 +2.9**
**GSC Goldstone 92.72 55** eP **P 03 30 35.4 +1.1**
GSC e 03 34 16.0
GSC pmax pmax
comp=Z,66nm,1.9s
GSC MLR MLR
comp=Z,3µm,21.0s
**GSC Goldstone 92.72 55** eP **P 03 30 35.4 +1.1**
comp=Z,66nm,1.9s
GSC ePP **PP 03 34 16.0 -0.8**
GSC LR LR
comp=Z,3µm,21.0s
**FURC Furnace Creek, 92.77 54** P **P 03 30 35.6 +1.3**
baz=93
**BMN Battle Mountai 92.82 50** eP **P 03 30 36.9 +2.2**
**BMN Battle Mountai 92.82 50** eP **P 03 30 33.8 -0.9**
BMN pmax pmax
comp=Z,107nm,2.4s
BMN MLR MLR
comp=Z,4µm,22.0s
**BMN Battle Mountai 92.82 50** eP **P 03 30 33.8 -0.9**
comp=Z,107nm,2.4s
BMN LR LR
comp=Z,4µm,22.0s
**PFO Pinyon Flat Ob 92.86 57** eP **P 03 30 37.6 +2.5**
**PFO Pinyon Flat Ob 92.86 57** eP **P 03 30 35.0 -0.1**
PFO pmax pmax
comp=Z,91nm,2.0s
**PFO Pinyon Flat Ob 92.86 57** P P 03 30 38.7 +3.6
comp=Z,178nm,0.3s,SNR=5.8
**PFO Pinyon Flat Ob 92.86 57** eP **P 03 30 35.0 -0.1**
comp=Z,91nm,2.0s
**BMO Blue Mountains 93.12 45** eP **P 03 30 36.6 +0.6**
BMO pmax pmax
comp=Z,30nm,1.3s
BMO MLR MLR
comp=Z,2µm,22.0s
**BMO Blue Mountains 93.12 45** eP **P 03 30 36.6 +0.6**
comp=Z,30nm,1.3s
BMO LR LR
comp=Z,2µm,22.0s
**F10A Beach Ranch, E 93.27 44** eP **P 03 30 37.9 +1.2**
comp=Z,35nm,1.3s
F10A LR LR
comp=Z,3µm,22.0s
**BELC Belle Mtn. Jos 93.27 56** P **P 03 30 37.9 +0.9**
baz=93
**SYO Syowa Base 93.28 199**⇑ eP **P 03 30 35.4 -0.6**
**TPNV Topopah Spring 93.30 53** eP **P 03 30 38.4 +1.4**
TPNV pmax pmax
comp=Z,99nm,1.8s
TPNV MLR MLR
comp=Z,2µm,20.0s
**TPNV Topopah Spring 93.30 53** P **P 03 30 37.6 +0.6**
baz=93
**TPNV Topopah Spring 93.30 53** eP **P 03 30 38.4 +1.4**
comp=Z,98nm,1.8s
TPNV LR LR
comp=Z,2µm,20.0s
**NEW Newport 93.52 42** eP **P 03 30 38.4 +0.8**
NEW pmax pmax
comp=Z,31nm,1.6s
NEW MLR MLR
comp=Z,3µm,20.0s
**NEW Newport 93.52 42** P **P 03 30 37.4 -0.3**
baz=94
**NEW Newport 93.52 42** eP **P 03 30 38.4 +0.8**
comp=Z,31nm,1.6s
NEW LR LR
comp=Z,3µm,20.0s
**R11A Troy Canyon, C 93.92 52** P **P 03 30 40.3 +0.4**
baz=94
**R11A Troy Canyon, C 93.92 52** eP **P 03 30 41.2 +1.3**
comp=Z,59nm,1.8s
R11A LR LR
comp=Z,2µm,20.0s
**IRM Iron Mountain 93.99 56** P **P 03 30 41.1 +0.9**
baz=94
**MFID Camas Ranch 94.08 47** PFAKE 03 30 50.0 +10
MFID LR LR
comp=Z,5µm,19.0s

**SHPR Sheep Range 94.14 54** eP **P 03 30 40.8 -0.1**
SHPR ePP **PP 03 34 25.0 -3.0**
**GLA Glamis 94.18 57** eP **P 03 30 43.1 +2.0**
GLA pmax pmax
comp=Z,85nm,0.5s
GLA MLR MLR
comp=Z,3µm,21.0s
**GLA Glamis 94.18 57** eP **P 03 30 42.6 +1.6**
**GLA Glamis 94.18 57** eP **P 03 30 43.1 +2.0**
comp=Z,85nm,0.5s
GLA LR LR
comp=Z,3µm,21.0s
**HLID Hailey 95.11 47** P **P 03 30 45.9 +0.6**
baz=95
**HLID Hailey 95.11 47** ePP PP 03 34 37.5 +2.0
**HLID Hailey 95.11 47** eP **P 03 30 46.6 +1.3**
comp=Z,11nm,1.1s
HLID ePP PP 03 34 27.0 -8.4
HLID LR LR
comp=Z,6µm,19.0s
**MSO Missoula 95.59 44** PFAKE 03 31 00.0 +13
MSO LR LR
comp=Z,3µm,20.0s
**CCUT Cedar City 95.63 53** eP **P 03 30 50.2 +2.4**
comp=Z,45nm,1.6s
CCUT LR LR
comp=Z,2µm,19.0s
**YKA Yellowknife Ar 95.64 28** P **P 03 30 47.5 +0.6**
comp=Z,2.9nm,0.6s,baz=268,slow=4.2,SNR=8.5
**WALA Waterton Lakes 95.69 41** eP **P 03 30 49.1 +1.5**
comp=Z,30nm,1.3s
WALA LR LR
comp=Z,3µm,20.0s
**BGU Big Grassy Mou 96.03 50** PFAKE 03 31 00.0 +11
BGU LR LR
comp=Z,2µm,20.0s
**EDM Edmonton 96.14 37** eP **P 03 30 50.2 +0.7**
EDM e 03 34 40.4
EDM pmax pmax
comp=Z,33nm,1.3s
EDM MLR MLR
comp=Z,2µm,19.0s
**EDM Edmonton 96.14 37** eP **P 03 30 50.2 +0.7**
comp=Z,33nm,1.3s
EDM ePP **PP 03 34 40.4 -2.5**
EDM LR LR
comp=Z,2µm,19.0s
**DUG Dugway 96.17 50** P **P 03 30 50.0 -0.1**
baz=96
**DUG Dugway 96.17 50** PFAKE 03 31 00.0 +10
DUG LR LR
comp=Z,3µm,21.0s
**HVU Hansel Valley 96.25 49** eP **P 03 30 51.0 +0.6**
HVU pmax pmax
comp=Z,18nm,1.6s
HVU MLR MLR
comp=Z,2µm,22.0s
**HVU Hansel Valley 96.25 49** eP **P 03 30 51.0 +0.6**
comp=Z,18nm,1.6s
HVU LR LR
comp=Z,2µm,22.0s
**DLMT Dillon 96.48 45** PFAKE 03 31 00.0 +8.6
DLMT LR LR
comp=Z,2µm,21.0s
**SPUT South Promonto 96.48 49** PFAKE 03 31 00.0 +8.5
SPUT LR LR
comp=Z,2µm,20.0s
**ABKAR Akbulak array 96.65 319** eP **P 03 30 49.6 -2.2**
**NLU North Lily Min 96.73 51** PFAKE 03 31 00.0 +7.3
NLU LR LR
comp=Z,3µm,22.0s
**MPU Maple Canyon 97.07 50** PFAKE 03 31 10.0 +16
MPU LR LR
comp=Z,4µm,22.0s
**HWUT Hardware Ranch 97.15 49** PFAKE 03 31 10.0 +15
HWUT LR LR
comp=Z,2µm,20.0s
**WUAZ Wupatki 97.16 55** PFAKE 03 31 10.0 +15
WUAZ LR LR
comp=Z,2µm,20.0s
**BOZ Bozeman (W) 97.16 45** eP Pdif 03 30 55.1 +0.5
BOZ pmax pmax
comp=Z,60nm,2.5s
BOZ MLR MLR
comp=Z,2µm,22.0s
**BOZ Bozeman (W) 97.16 45** eP Pdif 03 30 57.9 +3.3
**BOZ Bozeman (W) 97.16 45** P **P 03 30 54.3 -0.1**
baz=97
**BOZ Bozeman (W) 97.16 45** eP Pdif 03 30 55.1 +0.6
comp=Z,60nm,2.5s
BOZ ePP **PP 03 34 47.9 -3.3**
BOZ LR LR
comp=Z,2µm,22.0s
**O16A Springville 97.17 50** PFAKE 03 31 10.0 +15
O16A LR LR
comp=Z,3µm,21.0s
**AHID Auburn Hatcher 97.52 48** PFAKE 03 31 10.0 +14
AHID LR LR
comp=Z,6µm,20.0s
**TUC Tucson 97.55 58** PFAKE 03 31 10.0 +13
TUC LR LR
comp=Z,3µm,18.0s
**FXWY Fox Creek 97.58 47** ePP PP 03 34 43.6 -11
FXWY LR LR
comp=Z,6µm,21.0s
**YMR Madison River 97.63 46** PFAKE 03 31 10.0 +13
YMR LR LR
comp=Z,3µm,22.0s
**TPAW Teton Pass 97.63 47** ePP PP 03 34 55.3 +0.3
TPAW LR LR
comp=Z,7µm,21.0s
**IMW Indian Meadow 97.64 47** PFAKE 03 31 10.0 +13
IMW LR LR
comp=Z,4µm,21.0s
**REDW Red Top Meadow 97.70 47** ePP PP 03 34 54.2 -1.3
REDW LR LR
comp=Z,8µm,21.0s
**YFT Old Faithful 97.72 46** PFAKE 03 31 10.0 +13
YFT LR LR
comp=Z,3µm,20.0s
**P17A Butcher Ranch, 97.75 51** PFAKE 03 31 10.0 +13
P17A LR LR
comp=Z,3µm,21.0s
**SNOW Snow King Moun 97.77 47** PFAKE 03 31 10.0 +13
SNOW LR LR
comp=Z,7µm,20.0s
**MOOW Moose Ponds 97.78 47** ePP PP 03 34 55.2 -0.8
MOOW LR LR
comp=Z,6µm,21.0s
**FLWY Flagg Ranch 97.82 46** PFAKE 03 31 10.0 +12
FLWY LR LR
comp=Z,3µm,21.0s
**GEYT Alibeck 97.82 307** LR LR 04 17 11.2
comp=Z,634nm,20.2s,baz=80,slow=37
**YNR Norris Junctio 97.83 46** PFAKE 03 31 10.0 +12
YNR LR LR
comp=Z,3µm,22.0s
**LOHW Long Hollow 97.88 47** ePP PP 03 34 53.3 -3.6
LOHW LR LR
comp=Z,6µm,20.0s
**AKTO Aktyubinsk 97.90 320** LR LR 04 16 45.4
comp=Z,586nm,19.2s,baz=105,slow=36
**H17A Grant Village 97.90 46** PFAKE 03 31 10.0 +12
H17A LR LR
comp=Z,4µm,22.0s
**SRU San Rafael 97.91 51** PFAKE 03 31 10.0 +12
SRU LR LR
comp=Z,3µm,22.0s
**P18A Preston Nutter 98.13 51** PFAKE 03 31 10.0 +11
P18A LR LR
comp=Z,4µm,22.0s
**EGMT Eagleton 98.44 42** PFAKE 03 31 10.0 +10
EGMT LR LR
comp=Z,3µm,19.0s
**W18A Petrified Fore 98.49 55** PFAKE 03 31 10.0 +9.2
W18A LR LR
comp=Z,2µm,22.0s
**BW06 Boulder Array 98.65 48** eP **P 03 31 00.3 -1.0**
comp=Z,36nm,2.3s
BW06 ePP PP 03 34 56.0 -6.7
BW06 LR LR
comp=Z,5µm,20.0s
**RLMT Red Lodge 98.83 45** ePP PP 03 35 01.5 -2.6
RLMT LR LR
comp=Z,2µm,22.0s
**PV10 Paradox Valley 99.07 52** eP **Pdif 03 31 04.3 +0.9**

**UOSS Wadi Hilu 99.14 294** PFAKE 03 31 10.0 +6.4
UOSS LR LR
comp=Z,400nm,20.0s
**MVCO Mesa Verde 99.50 53** PFAKE 03 31 20.0 +15
MVCO LR LR
comp=Z,2µm,18.0s
**O20A White River Ci 99.67 50** P **Pdif 03 31 05.0 -0.9**
baz=100
**O20A White River Ci 99.67 50** PFAKE 03 31 20.0 +14
O20A LR LR
comp=Z,3µm,21.0s
**SMCO Snowmass 100.67 51** ePdif **Pdif 03 31 09.4 -1.3**
SMCO ePP **PP 03 35 19.8 +1.3**
SMCO LR LR
comp=Z,3µm,21.0s
**K22A Casper 100.89 48** ePP PP 03 35 16.3 -3.4
K22A LR LR
comp=Z,3µm,20.0s
**LAO LASA Array 100.89 44** P **Pdif 03 31 11.8 +0.8**
baz=101
**LAO LASA Array 100.89 44** PFAKE 03 31 20.0 +9.0
LAO LR LR
comp=Z,3µm,22.0s
**ANMO Albuquerque 101.18 56** PFAKE 03 31 20.0 +7.3
ANMO LR LR
comp=Z,2µm,18.0s
**N23A Red Feather La 101.40 50** ePP PP 03 35 23.9 +0.1
N23A LR LR
comp=Z,2µm,20.0s
**SNAA Sanae 101.42 187** P **Pdif 03 31 11.5 -1.3**
**SNAA Sanae 101.42 187** PFAKE 03 31 20.0 +7.1
SNAA LR LR
comp=Z,500nm,21.0s
**ISCO Idaho Springs 101.70 51** PFAKE 03 31 30.0 +15
ISCO LR LR
comp=Z,3µm,21.0s
**PHWY Pilot Hill 101.75 49** PFAKE 03 31 30.0 +15
PHWY LR LR
comp=Z,3µm,20.0s
**SDCO Great Sand Dun 101.87 53** PFAKE 03 31 30.0 +14
SDCO LR LR
comp=Z,3µm,20.0s
**Q24A Divide 102.10 51** PFAKE 03 31 30.0 +13
Q24A LR LR
comp=Z,2µm,22.0s
**DGMT Dagmar 102.12 42** PFAKE 03 31 30.0 +14
DGMT LR LR
comp=Z,2µm,20.0s
**MNTX Cornudas Mount 102.14 59** PFAKE 03 31 30.0 +13
MNTX LR LR
comp=Z,3µm,22.0s
**VNA3 Neumayer Olymp 102.58 185** P **Pdif 03 31 18.4 +0.5**
**RSSD Black Hills 102.61 46** PFAKE 03 31 30.0 +11
RSSD LR LR
comp=Z,5µm,22.0s
**VNA2 Neumayer--Watz 102.65 186** P **Pdif 03 31 20.3 +2.0**
baz=178,slow=4.5
**FFC Flin Flon 102.74 35** PFAKE 03 31 30.0 +11
FFC LR LR
comp=Z,2µm,19.0s
**T25A Trinidad 102.77 53** PFAKE 03 31 30.0 +10
T25A LR LR
comp=Z,2µm,19.0s
**TXAR Lajitas Array 103.66 61** Pdiff **Pdif 03 31 29.2 +5.4**
comp=Z,0.8nm,0.9s,baz=239,slow=6.3,SNR=5.6
TXAR PKKPbc **PKKPbc 03 47 17.2 +1.0**
comp=Z,0.4nm,0.7s,baz=91,slow=5.0,SNR=3.4
**ABPO Ambohimpanom 103.69 249** PFAKE 03 31 40.0 +16
ABPO LR LR
comp=Z,5µm,21.0s
**KSCO Kaye Shedlock' 104.06 51** PFAKE 03 31 40.0 +15
KSCO LR LR
comp=Z,2µm,21.0s
**KBS Kingsbay 104.21 353** PFAKE 03 31 40.0 +15
KBS LR LR
comp=Z,800nm,19.0s
**OGNE Ogallala 104.35 49** PFAKE 03 31 40.0 +13
OGNE LR LR
comp=Z,3µm,20.0s
**AMTX Amarillo 105.10 56** PFAKE 03 36 00.0
AMTX LR LR
comp=Z,2µm,18.0s
**MDND Maddock 105.25 42** PFAKE 03 36 00.0
MDND LR LR
comp=Z,3µm,20.0s
**FCC Fort Churchill 106.12 30** PFAKE 03 36 00.0
FCC LR LR
comp=Z,2µm,20.0s
**CBKS Cedar Bluff 106.32 51** PFAKE 03 36 00.0
CBKS LR LR
comp=Z,3µm,21.0s
**APA Apatity 106.36 340**⇓ *i*P **Pdif 03 31 35.0 +0.3**
APA MLR MLR
comp=Z,1µm,13.0s
**ABTX Abilene, Hawle 106.95 58** PFAKE 03 36 00.0
ABTX LR LR
comp=Z,2µm,19.0s
**JCT Junction City 106.97 60** PFAKE 03 36 00.0
JCT LR LR
comp=Z,6µm,20.0s
**BGNE Belgrade 107.21 48** PFAKE 03 36 00.0
BGNE LR LR
comp=Z,2µm,19.0s
**ULM Lac du Bonnet 107.22 39** PFAKE 03 36 00.0
ULM LR LR
comp=Z,2µm,18.0s
**WMOK Wichita Mounta 107.49 55** PFAKE 03 36 00.0
WMOK LR LR
comp=Z,2µm,21.0s
**AGMN Agassiz Nation 107.64 41** PFAKE 03 36 00.0
AGMN LR LR
comp=Z,3µm,19.0s
**ARCES ARCESS Array B 107.85 343** Pdiff **Pdif 03 31 39.9 -1.5**
comp=Z,6.1nm,1.0s,baz=46,slow=8.0,SNR=2.5
ARCES PKiKP **PKiKP 03 35 50.7 +2.3**
comp=Z,3.6nm,1.1s,baz=80,slow=1.5,SNR=6.2
ARCES PKKPbc **PKKPbc 03 47 05.3 +0.6**
comp=Z,2.8nm,0.8s,baz=251,slow=3.7,SNR=3.6
**ECSD EROS Data Cent 107.98 46** PFAKE 03 36 00.0
ECSD LR LR
comp=Z,5µm,22.0s
**W34A Bridge Creek, 108.27 55** PFAKE 03 36 00.0
W34A LR LR
comp=Z,2µm,20.0s
**U34A Anderson Ranch 108.32 54** PFAKE 03 36 00.0
U34A LR LR
comp=Z,2µm,19.0s
**V34A Guthrie 108.41 54** PFAKE 03 36 00.0
V34A LR LR
comp=Z,2µm,22.0s
**KSU1 Kansas State U 108.70 51** PFAKE 03 36 00.0
KSU1 LR LR
comp=Z,4µm,21.0s
**KVTX Kingsville 108.82 63** PFAKE 03 36 00.0
KVTX LR LR
comp=Z,3µm,19.0s
**WHTX Lake Whitney 108.85 58** PFAKE 03 36 00.0
WHTX LR LR
comp=Z,3µm,18.0s
**RAYN Ar Rayn 108.91 293** PFAKE 03 36 00.0
RAYN LR LR
comp=Z,800nm,22.0s
**TUL1 Tulsa 109.79 54** PFAKE 03 36 00.0
TUL1 LR LR
comp=Z,2µm,22.0s
**DAMY Dhamar 110.09 283** PFAKE 03 36 10.0
DAMY LR LR
comp=Z,498nm,21.0s
**SPMN St. Paul 110.36 44** PFAKE 03 36 10.0
SPMN LR LR
comp=Z,3µm,20.0s
**HKT Hockley 110.43 60** PFAKE 03 36 10.0
HKT LR LR
comp=Z,9µm,19.0s
**EYMN Ely 110.57 41** PFAKE 03 36 10.0
EYMN LR LR
comp=Z,3µm,21.0s
**SCIA State Center 110.77 47** PFAKE 03 36 10.0
SCIA LR LR
comp=Z,4µm,22.0s
**NATX Nacogdoches 111.24 58** PFAKE 03 36 10.0
NATX LR LR
comp=Z,2µm,21.0s
**MIAR Mount Ida 111.78 55** PFAKE 03 36 10.0
MIAR LR LR

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,3µm,19.0s | | | | | | |
| JFWS | Jewell Farm | 112.69 | 46 | PFAKE | | 03 36 10.0 | |
| JFWS | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| UALR | University of | 112.74 | 55 | PFAKE | | 03 36 10.0 | |
| UALR | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| CCM | Cathedral Cave | 113.02 | 51 | PFAKE | | 03 36 10.0 | |
| CCM | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| SLM | Saint Louis | 113.68 | 50 | PFAKE | | 03 36 10.0 | |
| SLM | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| PBMO | Poplar Bluff | 113.91 | 52 | PFAKE | | 03 36 10.0 | |
| PBMO | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| HDIL | Hopedale | 113.95 | 48 | PFAKE | | 03 36 10.0 | |
| HDIL | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| MET | Memphis--Engin | 114.63 | 54 | PFAKE | | 03 36 10.0 | +7.7 |
| MET | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| VBMS | Vicksburg | 114.66 | 57 | PFAKE | | 03 36 10.0 | +7.6 |
| VBMS | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| OXF | Oxford | 115.17 | 54 | PFAKE | | 03 36 10.0 | +6.7 |
| OXF | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| OLIL | Olney | 115.29 | 50 | PFAKE | | 03 36 20.0 | +17 |
| OLIL | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| FURI | Furi | 115.56 | 277 | PFAKE | | 03 36 20.0 | +15 |
| FURI | | | | LR | LR | | |
| | comp=Z,700nm,22.0s | | | | | | |
| SFIN | Scholer Farm | 115.62 | 48 | PFAKE | | 03 36 20.0 | +16 |
| SFIN | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| AKASG | Malin Array Be | 115.65 | 324 | PKP | PKPdf | 03 36 03.0 | -0.8 |
| | comp=Z,0.9nm,0.4s,baz=50,slow=2.7,SNR=6.7 | | | | | | |
| AK11 | Malin Array Si | 115.69 | 324 | ePKPdf | PKPdf | 03 36 02.6 | -1.2 |
| USIN | University of | 115.80 | 50 | PFAKE | | 03 36 20.0 | +16 |
| USIN | | | | LR | LR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| WVT | Waverly | 116.10 | 52 | PFAKE | | 03 36 20.0 | +15 |
| WVT | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| KMBO | Kilima Mbogo | 116.24 | 266 | PFAKE | | 03 36 20.0 | +14 |
| KMBO | | | | LR | LR | | |
| | comp=Z,700nm,20.0s | | | | | | |
| BLO | Bloomington | 116.37 | 49 | PFAKE | | 03 36 20.0 | +14 |
| BLO | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| BRTR | Keskin Array B | 116.50 | 312 | PKP | PKPdf | 03 36 05.0 | -0.9 |
| | comp=Z,1.4nm,0.8s,baz=116,slow=2.0,SNR=4.9 | | | | | | |
| WCI | Wyandotte Cave | 116.78 | 50 | PFAKE | | 03 36 20.0 | +14 |
| WCI | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| LRAL | Lakeview Retre | 117.43 | 56 | PFAKE | | 03 36 20.0 | +12 |
| LRAL | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| AAM | Ann Arbor | 117.53 | 45 | PFAKE | | 03 36 20.0 | +12 |
| AAM | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| HFS | Hagfors | 117.71 | 339 | PKP | PKPdf | 03 36 09.0 | +1.6 |
| | comp=Z,1.6nm,0.7s,baz=29,slow=3.3,SNR=4.7 | | | | | | |
| BRAL | Brewton | 117.78 | 58 | PFAKE | | 03 36 20.0 | +12 |
| BRAL | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| SWET | Sewanee | 117.81 | 53 | PFAKE | | 03 36 20.0 | +12 |
| SWET | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| NB2 | NORSAR Subarra | 117.93 | 340 | PKPdf | PKPdf | 03 36 09.2 | +1.3 |
| | comp=Z,4.4nm,1.1s,baz=35,slow=1.9 | | | | | | |
| NOA | NORSAR Array B | 117.93 | 340 | PKP | PKPdf | 03 36 09.2 | +1.3 |
| | comp=Z,0.8nm,0.5s,baz=42,slow=1.9,SNR=3.3 | | | | | | |
| CSS | Prodhromos | 117.95 | 307 | PFAKE | | 03 36 20.0 | +11 |
| CSS | | | | LR | LR | | |
| | comp=Z,200nm,22.0s | | | | | | |
| TEIG | Tepich | 118.13 | 70 | PFAKE | | 03 36 20.0 | +11 |
| TEIG | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| ACSO | Alum Creek Sta | 118.67 | 47 | PFAKE | | 03 36 20.0 | +10 |
| ACSO | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| TGUH | Tegucigalpa,Un | 119.42 | 77 | PFAKE | | 03 36 20.0 | +8.0 |
| TGUH | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| BOSA | Boshof | 119.93 | 233 | PKP | PKPdf | 03 36 12.4 | -0.5 |
| | comp=Z,4.6nm,0.7s,baz=135,slow=2.5,SNR=15 | | | | | | |
| GOGA | Godfrey | 120.23 | 54 | PFAKE | | 03 36 20.0 | +6.9 |
| GOGA | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| KOLS | Kolonicke sedl | 120.46 | 325 | ePKIKP | PKPdf | 03 36 16.2 | +3.1 |
| KOLS | Kolonicke sedl | 120.46 | 325 | ePKP | PKPdf | 03 36 16.2 | +3.1 |
| TIGA | Tifton | 120.60 | 57 | PFAKE | | 03 36 30.0 | +16 |
| TIGA | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| STHS | Stebnicka Huta | 120.79 | 326 | ePKIKP | PKPdf | 03 36 17.7 | +3.9 |
| STHS | Stebnicka Huta | 120.79 | 326 | ePKP | PKPdf | 03 36 17.7 | +3.9 |
| SCHQ | Schefferville | 121.04 | 26 | PFAKE | | 03 36 30.0 | +16 |
| SCHQ | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| MCWV | Mont Chateau | 121.14 | 47 | PFAKE | | 03 36 30.0 | +15 |
| MCWV | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| MMNY | Mt. Morris Dam | 121.33 | 43 | PFAKE | | 03 36 30.0 | +15 |
| MMNY | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| KMSC | Kings Mountain | 121.47 | 52 | PFAKE | | 03 36 30.0 | +15 |
| KMSC | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| SUR | Sutherland | 121.50 | 227 | PFAKE | | 03 36 30.0 | +14 |
| SUR | | | | LR | LR | | |
| | comp=Z,4µm,22.0s | | | | | | |
| BLA | Blacksburg | 121.54 | 49 | PFAKE | | 03 36 30.0 | +14 |
| BLA | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| JTS | JuntasAbangare | 121.73 | 81 | PFAKE | | 03 36 30.0 | +13 |
| JTS | | | | LR | LR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| LANS | Liptovska Anna | 121.92 | 326 | ePKIKP | PKPdf | 03 36 19.6 | +3.6 |
| LANS | Liptovska Anna | 121.92 | 326 | ePKP | PKPdf | 03 36 19.6 | +3.6 |
| LSZ | Lusaka | 122.24 | 248 | ePKIKP | PKPdf | 03 36 16.3 | -1.3 |
| LSZ | | | | e | | 03 37 50.8 | |
| LSZ | | | | MLR | MLR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| LSZ | Lusaka | 122.24 | 248 | ePKPdf | PKPdf | 03 36 16.3 | -1.3 |
| LSZ | | | | ePP | PP | 03 37 50.8 | -2.6 |
| LSZ | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| OKC | Ostrava-Krasne | 122.25 | 328 | AMS | AMS | 04 30 50.0 | |
| | comp=Z,700nm,19.3s | | | | | | |
| PSZ | Piszkesteto | 122.34 | 325 | PFAKE | | 03 36 30.0 | +13 |
| PSZ | | | | LR | LR | | |
| | comp=Z,800nm,21.0s | | | | | | |
| MORC | Moravsky Berou | 122.61 | 328 | ePKIKP | PKPdf | 03 36 14.4 | -2.9 |
| MORC | Moravsky Berou | 122.61 | 328 | ePKPdf | PKPdf | 03 36 14.3 | -2.9 |
| VYHS | Vyhne | 122.63 | 326 | ePKIKP | PKPdf | 03 36 19.7 | +2.4 |
| VYHS | Vyhne | 122.63 | 326 | ePKP | PKPdf | 03 36 19.7 | +2.4 |
| LONY | Lake Ozonia | 122.67 | 39 | PFAKE | | 03 36 30.0 | +12 |
| LONY | | | | LR | LR | | |
| | comp=Z,2µm,18.0s | | | | | | |
| MBAR | Mbarara | 122.77 | 266 | PFAKE | | 03 36 30.0 | +11 |
| MBAR | | | | LR | LR | | |
| | comp=Z,500nm,19.0s | | | | | | |
| KRLC | Kraliky | 122.83 | 328 | ePKIKP | PKPdf | 03 36 20.2 | +2.5 |
| KRLC | | | | e | | 03 36 33.6 | |
| KRLC | Kraliky | 122.83 | 328 | ePKPdf | PKPdf | 03 36 20.2 | +2.5 |
| KRLC | | | | esPKP | | 03 36 33.6 | |
| BINY | Binghamton | 122.84 | 42 | PFAKE | | 03 36 30.0 | +12 |
| BINY | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| DPC | Dobruska-Polom | 122.91 | 329 | ePKIKP | PKPdf | 03 36 20.9 | +3.1 |
| DPC | | | | e | | 03 36 33.5 | |
| DPC | | | | MLR | MLR | | |
| | comp=Z,600nm,17.2s | | | | | | |
| DPC | Dobruska-Polom | 122.91 | 329 | ePKPdf | PKPdf | 03 36 20.9 | +3.1 |
| DPC | | | | esPKP | | 03 36 33.5 | |
| DPC | | | | AMS | AMS | 04 33 50.0 | |
| | comp=Z,600nm,17.2s | | | | | | |
| NHSC | New Hope | 122.97 | 54 | PFAKE | | 03 36 30.0 | +12 |
| NHSC | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| UPC | Upice | 122.97 | 329 | ePKIKP | PKPdf | 03 36 20.9 | +3.0 |
| UPC | | | | MLR | MLR | | |
| | comp=Z,700nm,23.8s | | | | | | |
| UPC | Upice | 122.97 | 329 | ePKPdf | PKPdf | 03 36 20.9 | +3.0 |
| UPC | | | | AMS | AMS | 04 31 20.0 | |
| | comp=Z,700nm,23.8s | | | | | | |
| KSPA | Keystone Colle | 123.26 | 43 | PFAKE | | 03 36 30.0 | +11 |
| KSPA | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| SDMD | Soldier's Deli | 123.39 | 46 | PFAKE | | 03 36 30.0 | +11 |
| SDMD | | | | LR | LR | | |
| | comp=Z,800nm,20.0s | | | | | | |
| CBN | Corbin | 123.46 | 47 | PFAKE | | 03 36 30.0 | +11 |
| CBN | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| PVCC | Panska Ves | 123.69 | 330 | ePKIKP | PKPdf | 03 36 21.1 | +1.8 |
| PVCC | Panska Ves | 123.69 | 330 | ePKPdf | PKPdf | 03 36 21.1 | +1.8 |
| BRG | Berggiesshubel | 123.78 | 331 | ePKP | PKPdf | 03 36 21.9 | +2.5 |
| | comp=Z,9.6nm,1.2s | | | | | | |
| BRG | Berggiesshubel | 123.78 | 331 | ePKIKP | PKPdf | 03 36 21.9 | +2.5 |
| BRG | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | |
| ACCN | Adirondack Com | 123.83 | 40 | PFAKE | | 03 36 30.0 | +10 |
| ACCN | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| LUPA | Lehigh Univers | 123.94 | 44 | PFAKE | | 03 36 30.0 | +10 |
| LUPA | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| CLL | Collm | 123.95 | 331 | ePKIKP | PKPdf | 03 36 23.0 | +3.3 |
| CLL | | | | MLR | MLR | | |
| | comp=Z,600nm,21.9s | | | | | | |
| CLL | Collm | 123.95 | 331 | ⇑iPKPdf | PKPdf | 03 36 22.3 | +2.6 |
| | comp=Z,8.0nm,0.9s | | | | | | |
| CLL | | | | e | | 03 36 37.0 | |
| CLL | | | | ePP | PP | 03 38 01.0 | -2.3 |
| | comp=Z,11nm,1.2s | | | | | | |
| CLL | | | | eSS | SS | 03 54 49.0 | +0.1 |
| CLL | | | | LmV | | 04 32 00.0 | |
| | comp=Z,600nm,21.9s | | | | | | |
| CLL | Collm | 123.95 | 331 | ePKPdf | PKPdf | 03 36 18.3 | -1.4 |
| GOPC | GO Pecny, Ondr | 123.96 | 329 | ePKIKP | PKPdf | 03 36 22.1 | +2.3 |
| GOPC | | | | e | | 03 36 35.4 | |
| GOPC | | | | eSS | SS | 03 54 53.6 | +4.4 |
| GOPC | | | | MLR | MLR | | |
| | comp=Z,800nm,19.4s | | | | | | |
| GOPC | GO Pecny, Ondr | 123.96 | 329 | ePKPdf | PKPdf | 03 36 22.1 | +2.3 |
| GOPC | | | | esPKP | | 03 36 35.4 | |
| GOPC | | | | eSS | SS | 03 54 53.6 | +4.4 |
| GOPC | | | | AMS | AMS | 04 34 30.0 | |
| | comp=Z,800nm,19.4s | | | | | | |
| TREC | Trest | 123.97 | 328 | ePKIKP | PKPdf | 03 36 22.7 | +2.8 |
| TREC | | | | e | | 03 36 35.7 | |
| TREC | Trest | 123.97 | 328 | ePKPdf | PKPdf | 03 36 22.7 | +2.8 |
| TREC | | | | esPKP | | 03 36 35.7 | |
| PRU | Pruhonice | 124.04 | 329 | ePKIKP | PKPdf | 03 36 22.5 | +2.6 |
| PRU | | | | eSS | SS | 03 54 54.8 | +4.7 |
| PRU | | | | MLR | MLR | | |
| | comp=Z,700nm,16.0s | | | | | | |
| PRU | Pruhonice | 124.04 | 329 | ePKPdf | PKPdf | 03 36 22.5 | +2.6 |
| PRU | | | | eSS | SS | 03 54 54.8 | +4.7 |
| PRU | | | | AMS | AMS | 04 34 20.0 | |
| | comp=Z,700nm,16.0s | | | | | | |
| CNNC | Cliffs of the | 124.11 | 51 | PFAKE | | 03 36 30.0 | +9.5 |
| CNNC | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| BRNJ | Basking Ridge | 124.46 | 44 | PFAKE | | 03 36 30.0 | +9.0 |
| BRNJ | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| IDI | Anoyia | 124.48 | 309 | PFAKE | | 03 36 30.0 | +8.7 |
| IDI | | | | LR | LR | | |
| | comp=Z,600nm,20.0s | | | | | | |
| LBNH | Lisbon | 124.52 | 39 | PFAKE | | 03 36 30.0 | +8.9 |
| LBNH | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| PAL | Palisades | 124.76 | 43 | PFAKE | | 03 36 30.0 | +8.4 |
| PAL | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| NKC | Novy Kostel | 124.92 | 331 | ePKIKP | PKPdf | 03 36 24.6 | +2.9 |
| NKC | Novy Kostel | 124.92 | 331 | ePKPdf | PKPdf | 03 36 24.6 | +2.9 |
| KHC | Kasperske Hory | 125.06 | 329 | ePKIKP | PKPdf | 03 36 23.4 | +1.4 |
| KHC | | | | e | | 03 36 36.5 | |
| KHC | | | | MLR | MLR | | |
| | comp=Z,800nm,22.1s | | | | | | |
| KHC | Kasperske Hory | 125.06 | 329 | ePKPdf | PKPdf | 03 36 23.4 | +1.4 |
| KHC | | | | epPKP | pPKPdf | 03 36 36.5 | -1.0 |
| KHC | | | | AMS | AMS | 04 32 20.0 | |
| | comp=Z,800nm,22.1s | | | | | | |
| KHC | Kasperske Hory | 125.06 | 329 | ePKPdf | PKPdf | 03 36 19.4 | -2.6 |
| KHC | | | | LR | LR | | |
| | comp=Z,300nm,21.0s | | | | | | |
| GEC2 | GERESS Array S | 125.18 | 329 | ePKIKP | PKPdf | 03 36 22.4 | +0.1 |
| GEC2 | GERESS Array S | 125.18 | 329 | ePKPdf | PKPdf | 03 36 22.4 | +0.1 |
| GERES | GERESS Array B | 125.18 | 329 | PKP | PKPdf | 03 36 22.1 | -0.2 |
| | comp=Z,4.1nm,0.9s,baz=90,slow=1.6,SNR=17 | | | | | | |
| YLE | Yale | 125.28 | 42 | PFAKE | | 03 36 30.0 | +7.5 |
| YLE | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| TRQA | Tornquist | 125.38 | 146 | PFAKE | | 03 36 30.0 | +7.0 |
| TRQA | | | | LR | LR | | |
| | comp=Z,800nm,18.0s | | | | | | |
| MOA | Molln | 125.50 | 327 | ⇑iPKiKP | PKiKP | 03 36 25.1 | +1.9 |
| | comp=Z,7.7nm,1.2s | | | | | | |
| HRV | Adam Dziewonsk | 125.61 | 40 | PFAKE | | 03 36 30.0 | +6.8 |
| HRV | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| WVL | Waterville | 125.74 | 37 | PFAKE | | 03 36 30.0 | +6.7 |
| WVL | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| GRF | Grafenberg Arr | 125.88 | 331 | ePKPdf | PKPdf | 03 36 24.8 | +1.2 |
| | baz=48,slow=1.0 | | | | | | |
| NNA | Nana | 126.76 | 109 | PFAKE | | 03 36 40.0 | +14 |
| NNA | | | | LR | LR | | |
| | comp=Z,900nm,21.0s | | | | | | |
| BCIP | Isla Barro Col | 126.77 | 83 | PFAKE | | 03 36 40.0 | +14 |
| BCIP | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| EMMW | East Machias | 126.96 | 36 | PFAKE | | 03 36 40.0 | +14 |
| EMMW | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| TRI | Trieste | 127.06 | 326 | PFAKE | | 03 36 40.0 | +14 |
| TRI | | | | LR | LR | | |
| | comp=Z,800nm,22.0s | | | | | | |
| WTTA | Wattenberg | 127.25 | 328 | ⇑iPKiKP | PKiKP | 03 36 29.0 | +2.0 |
| | comp=Z,18nm,1.0s | | | | | | |
| OTAV | Otavalo | 127.62 | 94 | PFAKE | | 03 36 40.0 | +12 |
| OTAV | | | | LR | LR | | |
| | comp=Z,1µm,18.0s | | | | | | |
| FETA | Feichten | 127.88 | 329 | ⇑iPKiKP | PKiKP | 03 36 28.0 | -0.2 |
| | comp=Z,9.2nm,0.8s | | | | | | |
| WLF | Walferdange | 128.25 | 334 | PFAKE | | 03 36 40.0 | +12 |
| WLF | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| FUORN | Ofenpass-Fuorn | 128.39 | 328 | ePKPdf | PKPdf | 03 36 23.9 | -4.8 |
| FUORN | | | | LR | LR | | |
| | comp=Z,600nm,20.0s | | | | | | |
| MTDJ | Mount Denham | 128.43 | 71 | PFAKE | | 03 36 40.0 | +11 |
| MTDJ | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| TIP | Timpagrande | 128.76 | 317 | PFAKE | | 03 36 40.0 | +11 |
| TIP | | | | LR | LR | | |
| | comp=Z,400nm,21.0s | | | | | | |
| TUE | Stuetta | 128.96 | 329 | ePKPdf | PKPdf | 03 36 31.2 | +1.4 |
| TUE | | | | LR | LR | | |
| | comp=Z,800nm,22.0s | | | | | | |
| DRLN | Deer Lake | 129.06 | 26 | PFAKE | | 03 36 40.0 | +10 |
| DRLN | | | | LR | LR | | |
| | comp=Z,4µm,22.0s | | | | | | |
| VLC | Villacollemand | 129.91 | 326 | PFAKE | | 03 36 40.0 | +8.6 |
| VLC | | | | LR | LR | | |
| | comp=Z,300nm,22.0s | | | | | | |
| GTBY | Guantanamo Bay | 130.44 | 69 | PFAKE | | 03 36 40.0 | +7.0 |
| GTBY | | | | LR | LR | | |
| | comp=Z,900nm,19.0s | | | | | | |
| BNI | Bardonecchia | 131.29 | 329 | ePKIKP | PKPpre | 03 36 27.6 | |
| BNI | | | | MLR | MLR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| BNI | Bardonecchia | 131.29 | 329 | ePKPpre | PKPpre | 03 36 27.6 | |
| BNI | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| ROSC | El Rosal | 132.13 | 88 | PKP | PKPdf | 03 36 38.1 | +1.2 |
| | comp=Z,6.5nm,0.5s,baz=119,slow=3.9,SNR=6.4 | | | | | | |
| LGNH | LØogne | 133.02 | 70 | PFAKE | | 03 36 50.0 | +12 |
| LGNH | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| PAPH | Port-au-Prince | 133.30 | 70 | PFAKE | | 03 36 50.0 | +12 |
| PAPH | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| GRTK | Grand Turk | 133.77 | 65 | PFAKE | | 03 36 50.0 | +11 |
| GRTK | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| BBSR | BB Station | 135.31 | 48 | PFAKE | | 03 36 50.0 | +8.2 |
| BBSR | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| SDV | Santo Domingo | 135.87 | 83 | ePKPpre | PKPpre | 03 36 34.0 | |
| SDV | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| CPUP | Villa Florida | 136.28 | 138 | PKP | PKPdf | 03 36 43.3 | -0.5 |
| | comp=Z,2.3nm,0.6s,baz=166,slow=0.6,SNR=4.3 | | | | | | |
| CRPR | Cabo Rojo, PR | 138.24 | 69 | PFAKE | | 03 37 00.0 | +12 |
| CRPR | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| SJG | San Juan | 139.11 | 69 | PFAKE | | 03 37 00.0 | +11 |
| SJG | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| CPD | Cerro la Pandu | 139.34 | 69 | PFAKE | | 03 37 00.0 | +10 |
| CPD | | | | LR | LR | | |
| | comp=Z,6µm,21.0s | | | | | | |
| HUMP | Col San Antoni | 139.38 | 69 | PFAKE | | 03 37 00.0 | +10 |
| HUMP | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| STVI | Saint Thomas | 140.16 | 68 | PFAKE | | 03 37 00.0 | +8.9 |
| STVI | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| SAML | Samuel | 140.47 | 111 | PFAKE | | 03 37 00.0 | +8.1 |
| SAML | | | | LR | LR | | |
| | comp=Z,400nm,20.0s | | | | | | |
| ES19 | SONSECA Array | 140.47 | 333 | ePKPdf | PKPdf | 03 36 49.3 | -1.9 |
| ESDC | Sonseca Array | 140.52 | 333 | PKhKP | PKPpre | 03 36 47.1 | |
| | comp=Z,0.5nm,0.6s,baz=6.9,slow=2.2,SNR=5.5 | | | | | | |
| ESDC | | | | PP | PP | 03 39 48.5 | -1.2 |
| | comp=Z,2.4nm,1.0s,baz=30,slow=6.8,SNR=5.4 | | | | | | |
| MVO | Moncorvo | 140.59 | 337 | ePKPdf | PKPdf | 03 36 58.2 | +6.8 |
| PVIS | Viseu | 141.31 | 337 | ePKPdf | PKPdf | 03 36 52.5 | -0.2 |
| MTE | Manteigas | 141.44 | 337 | ePKPdf | PKPdf | 03 36 52.6 | -0.4 |
| PCBR | Castelo Branco | 141.89 | 336 | ePKPdf | PKPdf | 03 36 50.4 | -3.3 |
| SABA | Saba | 141.91 | 68 | PFAKE | | 03 37 10.0 | +16 |
| SABA | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| SMRT | St. Maarten | 141.97 | 68 | PFAKE | | 03 37 10.0 | +16 |
| SMRT | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| SEUS | St. Eustatius | 142.19 | 69 | PFAKE | | 03 37 10.0 | +15 |
| SEUS | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| PMRV | Marv??o | 142.21 | 336 | ePKPdf | PKPdf | 03 36 51.4 | -2.9 |
| PTOM | Tomar | 142.45 | 337 | ePKPdf | PKPdf | 03 36 49.4 | -5.3 |
| PMTG | Montargil | 142.85 | 336 | ePKPdf | PKPdf | 03 36 53.8 | -1.6 |
| PBAR | Barrancos | 143.12 | 334 | ePKPdf | PKPdf | 03 36 55.8 | -0.1 |
| ANWB | Willy Bob | 143.25 | 68 | PFAKE | | 03 37 10.0 | +13 |
| ANWB | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| PBEJ | Beja | 143.60 | 335 | ePKPdf | PKPdf | 03 36 57.0 | +0.2 |
| PNCL | Nicolau / Gran | 143.80 | 336 | ePKPdf | PKPbc | 03 36 55.9 | +1.1 |
| MESJ | Messejana | 143.90 | 335 | eP | PKPdf | 03 36 56.3 | -1.0 |
| MESJ | Messejana | 143.90 | 335 | ePKPdf | PKPdf | 03 36 56.3 | -1.0 |
| PCVE | Castro Verde | 144.00 | 335 | ePKPdf | PKPdf | 03 36 57.5 | 0.0 |
| PVAQ | Vaqueiros | 144.06 | 334 | ePKPdf | PKPbc | 03 36 56.3 | +0.7 |
| PBDV | Barranco-do-Ve | 144.28 | 335 | ePKPdf | PKPdf | 03 36 59.2 | +1.1 |
| PTEO | Sao Teotonio | 144.36 | 336 | ePKPdf | PKPbc | 03 36 57.0 | +0.5 |
| FDF | Fort de France | 144.50 | 72 | ePKIKP | PKPdf | 03 36 58.5 | -0.5 |
| FDF | | | | MLR | MLR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| FDF | Fort de France | 144.50 | 72 | ePKPdf | PKPdf | 03 36 58.5 | -0.5 |
| FDF | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| MORF | Marmelete | 144.53 | 335 | eP | PKPab | 03 36 57.0 | 0.0 |
| MORF | Marmelete | 144.53 | 335 | ePKPdf | PKPdf | 03 36 58.2 | -0.3 |
| PFVI | Vila Bisbo | 144.75 | 335 | ePKPdf | PKPdf | 03 36 58.7 | -0.1 |
| PFVI | Vila Bisbo | 144.75 | 335 | PFAKE | | 03 37 10.0 | +11 |
| PFVI | | | | LR | LR | | |
| | comp=Z,900nm,21.0s | | | | | | |
| TAM | Tamanrasset | 144.87 | 302 | ePKIKP | PKPbc | 03 36 59.1 | +0.3 |
| TAM | | | | MLR | MLR | | |
| | comp=Z,400nm,20.0s | | | | | | |
| TAM | Tamanrasset | 144.87 | 302 | ePKPdf | PKPbc | 03 36 59.1 | +0.3 |
| TAM | | | | LR | LR | | |
| | comp=Z,400nm,20.0s | | | | | | |
| BBGH | Gun Hill | 146.31 | 75 | PFAKE | | 03 37 10.0 | +5.8 |
| BBGH | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| BDFB | Brasilia | 149.87 | 135 | PKPbc | PKPbc | 03 37 11.2 | -1.7 |
| | comp=Z,13nm,0.9s,baz=195,slow=1.7,SNR=7.6 | | | | | | |
| BDFB | Brasilia | 149.87 | 135 | PKIKP | PKPbc | 03 37 11.2 | -1.7 |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| BDFB | Brasilia | 149.87 | 135 | ePKPbc | PKPbc | 03 37 11.4 | -1.5 |
| BDFB | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| TOA0 | Torodi Ar. Sit | 151.43 | 287 | eP | PKPbc | 03 37 16.3 | -0.2 |
| TORD | Torodi Ar. Bea | 151.43 | 287 | PKPbc | PKPbc | 03 37 15.2 | -1.3 |
| | comp=Z,15nm,0.7s,baz=40,slow=2.0,SNR=42 | | | | | | |
| TORD | | | | PP | PP | 03 40 58.5 | +2.5 |
| | comp=Z,2.4nm,0.9s,baz=64,slow=3.9,SNR=3.7 | | | | | | |
| TORD | | | | PKKP | | 03 45 54.1 | |
| | comp=Z,1.1nm,1.0s,baz=149,slow=0.9,SNR=3.5 | | | | | | |
| KIC | Kosan Boka | 158.59 | 273 | eP | PKPab | 03 37 54.3 | -1.2 |
| | comp=Z,122nm,1.3s | | | | | | |
| DBIC | Dimbokro | 158.70 | 274 | PKPab | PKPab | 03 37 55.4 | -0.6 |
| | comp=Z,9.0nm,0.8s,baz=100,slow=5.1,SNR=8.2 | | | | | | |
| TIC | Toumodi | 158.86 | 274 | eP | PKPab | 03 37 53.5 | -3.2 |

**IDC 28 03:24:53.5**±1.0**, 1°.35N×123°.76E, h0**km**, mb4.3**/7**, mb1 4.4**/7**, mb1mx4.0**/46**, mbtmp4.3**/7**, MS4.6**/6**, Ms1 4.6**/6**, ms1mx4.0**/41**, Error ellipse: s-maj=67.9km s-min=18.7km az=68.0, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SIJI | Sorong | 7.82 | 106 | LR | LR | 03 30 20.3 | |
| | comp=Z,8µm,20.8s,baz=104,slow=42 | | | | | | |
| WRA | Warramunga Arr | 23.57 | 154 | P | P | 03 30 05.6 | -0.4 |
| | 6.4nm,0.4s,baz=330,slow=11,SNR=22 | | | | | | |
| ASAR | Alice Springs | 26.75 | 159 | P | P | 03 30 35.7 | +0.6 |
| | 2.3nm,0.6s,baz=339,slow=7.1,SNR=4.5 | | | | | | |
| USRK | Ussuriysk Ar. | 43.29 | 9 | P | P | 03 32 56.5 | -0.4 |
| | 1.3nm,0.4s,baz=191,slow=6.2,SNR=7.9 | | | | | | |
| SONM | Songino Array | 48.69 | 344 | P | P | 03 33 39.9 | +0.2 |
| | 2.1nm,0.7s,baz=158,slow=9.3,SNR=3.9 | | | | | | |
| MKAR | Makanchi Array | 57.88 | 328 | P | P | 03 34 47.5 | +0.3 |
| | 2.4nm,0.4s,baz=124,slow=7.5,SNR=8.8 | | | | | | |
| KURBB | Kurchatov Arra | 62.19 | 329 | P | P | 03 35 16.5 | -0.2 |
| | 2.4nm,0.4s,baz=134,slow=6.7,SNR=10 | | | | | | |
| BVAR | Borovoye Array | 67.73 | 328 | P | P | 03 35 52.3 | -0.4 |
| | 0.9nm,0.6s,baz=125,slow=9.0,SNR=1.8 | | | | | | |
| OBN | Obninsk | 87.29 | 325 | LR | LR | 04 20 43.0 | |
| | comp=Z,290nm,18.3s,baz=66,slow=38 | | | | | | |
| ARCES | ARCESS Array B | 91.63 | 340 | LR | LR | 04 25 16.7 | |
| | comp=Z,361nm,18.2s,baz=62,slow=40 | | | | | | |
| AKASG | Malin Array Be | 91.84 | 321 | LR | LR | 04 23 15.0 | |
| | comp=Z,276nm,21.4s,baz=60,slow=38 | | | | | | |
| FINES | FINESS Array B | 92.50 | 332 | LR | LR | 04 22 31.3 | |
| | comp=Z,236nm,19.4s,baz=56,slow=37 | | | | | | |
| NOA | NORSAR Array B | 99.56 | 333 | LR | LR | 04 28 11.0 | |
| | comp=Z,91nm,19.6s,baz=50,slow=38 | | | | | | |

*MOS **28** 03:31:10.9±0.8, 48°.61N×156°.92E, h57km, mb4.6/1, Error ellipse: s-maj=44.4km s-min=6.4km az=81.5*
*IDC **28** 03:31:16.1±2.1, 49°.42N×155°.17E, h0km, mb3.6/4, mb1 3.8/5, mb1mx3.5/36, mbtmp3.6/5, ML2.6/1, Error ellipse: s-maj=49.0km s-min=30.8km az=161.0*
*KRSC **28** 03:31:17.3±1.9, 49°.24N×157°.22E, h40km±26km, ML4.4*
**ISC 28 03:31:18.5**±2.3**, 49°.2N**±0°.1×**156°.7E**±0°.1**, h34**km**, n43, σ2s.09**/43**, mb3.4**/4**, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SKR | Severo-Kuril's | 1.50 | 346 | eP | Pn | 03 31 43.1 | +0.2 |
| SKR | | | | eS | Sb | 03 32 03.0 | -1.3 |
| SKR | Severo-Kuril's | 1.50 | 346 | ePN | Pn | 03 31 32.5 | -10 |
| SKR | | | | pmax | pmax | | |
| | comp=N,90nm,0.5s | | | | | | |
| SKR | | | | pmax | pmax | | |
| | comp=Z,170nm,0.5s | | | | | | |
| PAU | Pauzhetka | 2.24 | 2 | eP | Pn | 03 31 54.6 | +1.5 |
| PAU | | | | eS | Sn | 03 32 21.8 | +2.3 |
| PAU | Pauzhetka | 2.24 | 2 | PN | Pn | 03 31 54.6 | +1.5 |
| ASAK | Asacha | 3.25 | 13 | eP | Pn | 03 32 08.5 | +1.5 |
| MTVR | Mutnovka | 3.39 | 16 | eP | Pn | 03 32 10.7 | +1.6 |
| MTVR | | | | eS | Sn | 03 32 49.6 | +1.5 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RUS | **Russkaya** | **3.41** | **19** | *e*P | | **Pn** | **03 32 09.7** | **+0.6** |
| RUS | | | | *e*S | | **Sn** | **03 32 49.3** | **+1.0** |
| **RUS** | **Russkaya** | **3.41** | **19** | PN | | **Pn** | **03 32 09.7** | **+0.6** |
| **PETK** | **Petropavlovsk-** | **3.93** | **9** | Pn | | **Pn** | **03 32 19.2** | **+2.8** |
| | comp=Z,1.9nm,0.3s,baz=271,slow=15,SNR=17 | | | | | | | |
| PETK | | | | Sn | | **Sb** | **03 33 09.7** | **-4.4** |
| | comp=Z,0.8nm,0.3s,baz=300,slow=24,SNR=1.3 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.93** | **9** | PN | | **Pn** | **03 32 19.2** | **+2.8** |
| PETK | | | | | | | 03 33 09.7 | |
| PETK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| PETK | | | | smax | smax | | | |
| | comp=N,1.0nm,0.3s | | | | | | | |
| **PET** | **Petropavlovsk** | **3.99** | **17** | *e*P | | **Pn** | **03 32 18.3** | **+1.1** |
| PET | | | | *e*S | | **Sn** | **03 33 03.7** | **+1.0** |
| **PET** | **Petropavlovsk** | **3.99** | **17** | PN | | **Pn** | **03 32 18.3** | **+1.1** |
| **UGLR** | **Uglovaya** | **4.20** | **18** | *e*P | | **Pn** | **03 32 22.9** | **+2.7** |
| **AVH** | **Avacha** | **4.24** | **17** | *e*P | | **Pn** | **03 32 23.1** | **+2.4** |
| **AVH** | **Avacha** | **4.24** | **17** | PN | | **Pn** | **03 32 23.1** | **+2.4** |
| **KOK** | **Koryaka** | **4.24** | **16** | *e*P | | **Pn** | **03 32 23.7** | **+2.9** |
| **KOK** | **Koryaka** | **4.24** | **16** | PN | | **Pn** | **03 32 23.7** | **+2.9** |
| **SMAR** | **Somma** | **4.25** | **17** | *e*P | | **Pn** | **03 32 23.7** | **+2.8** |
| **SMAR** | **Somma** | **4.25** | **17** | PN | | **Pn** | **03 32 23.7** | **+2.8** |
| **SDLR** | **Sedlovina** | **4.28** | **18** | *e*P | | **Pn** | **03 32 22.9** | **+1.6** |
| **SDLR** | **Sedlovina** | **4.28** | **18** | PN | | **Pn** | **03 32 22.9** | **+1.6** |
| **KRX** | **Arik** | **4.31** | **16** | *e*P | | **Pn** | **03 32 24.8** | **+3.1** |
| **SPN** | **Mys Shipunski** | **4.40** | **27** | *e*P | | **Pn** | **03 32 24.6** | **+1.8** |
| SPN | | | | *e*S | | **Sn** | **03 33 13.2** | **+0.4** |
| **SPN** | **Mys Shipunski** | **4.40** | **27** | PN | | **Pn** | **03 32 24.6** | **+1.8** |
| **GNL** | **Ganaly** | **4.54** | **9** | *e*P | | **Pn** | **03 32 27.4** | **+2.6** |
| **GNL** | **Ganaly** | **4.54** | **9** | PN | | **Pn** | **03 32 27.4** | **+2.6** |
| **KII** | **Karymskiy** | **5.11** | **19** | P | | **Pn** | **03 32 33.9** | **+1.3** |
| **KII** | **Karymskiy** | **5.11** | **19** | PN | | **Pn** | **03 32 33.9** | **+1.3** |
| **MKZ** | **Mys Kozlova** | **6.17** | **28** | *e*P | | **Pn** | **03 32 48.1** | **+1.0** |
| **MKZ** | **Mys Kozlova** | **6.17** | **28** | PN | | **Pn** | **03 32 48.1** | **+1.0** |
| **KZV** | **Kizimen** | **6.29** | **19** | *e*P | | **Pn** | **03 32 50.6** | **+1.7** |
| **TUMR** | **Tumrok** | **6.42** | **18** | *e*P | | **Pn** | **03 32 53.5** | **+2.9** |
| **TUMR** | **Tumrok** | **6.42** | **18** | PN | | **Pn** | **03 32 53.5** | **+2.9** |
| **KBTR** | **Krutoberegovo** | **7.91** | **26** | *e*P | | **Pn** | **03 33 11.3** | **+0.3** |
| **KBTR** | **Krutoberegovo** | **7.91** | **26** | PN | | **Pn** | **03 33 11.3** | **+0.3** |
| **H11S1** | **WAKE ISLAND Hy** | **31.70** | **162** | T | | T | 04 12 04.3 | |
| | baz=347,slow=76,SNR=6.6 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.71** | **162** | T | | T | 04 12 04.9 | |
| | baz=347,slow=76,SNR=14 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **31.72** | **162** | T | | T | 04 12 03.8 | |
| | baz=347,slow=76,SNR=5.1 | | | | | | | |
| **SONM** | **Songino Array** | **32.84** | **287** | P | | P | 03 37 42.8 | -6.0 |
| | comp=N,0.2nm,0.3s,baz=76,slow=6.1,SNR=1.4 | | | | | | | |
| **ILAR** | **Eielson Array** | **33.10** | **41** | P | | P | 03 37 56.8 | +6.0 |
| | comp=N,0.3nm,0.7s,baz=255,slow=7.1,SNR=1.6 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.28** | **341** | P | | **P** | **03 40 53.5** | **-1.5** |
| | comp=N,3.7nm,0.9s,baz=45,slow=9.0,SNR=1.5 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **56.28** | **341** | P | | **P** | **03 40 53.5** | **-1.5** |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **TXAR** | **Lajitas Array** | **74.20** | **63** | P | | P | 03 42 59.8 | +7.9 |
| | comp=Z,0.1nm,0.5s,baz=316,slow=5.0,SNR=2.8 | | | | | | | |

*CSEM* ***28*** *03:32:43.7, 12.˚24N×44.˚35E, h7km, ML3.5, After DHMR*
**DHMR 28 03:32:43.7±0.9, 12.˚24N×44.˚35E, h8km±5km, ML3.5, 3D, Western Arabian Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ADEN** | **Aden** | **0.82** | **49** | ⇓*i*P | | | Pg | 03 32 58.6 | -0.9 |
| ADEN | | | | *i* S | | | Sb | 03 33 11.2 | -0.2 |
| ADEN | | | | AML | | | AML | 03 33 12.1 | |
| | comp=E,2μm,0.3s | | | | | | | | |
| **ADEN** | **Aden** | **0.82** | **49** | ⇓*i*P | | | Pg | 03 32 58.6 | -0.9 |
| ADEN | | | | *i* S | | | Sb | 03 33 11.2 | -0.3 |
| | comp=E,837nm,0.3s | | | | | | | | |
| **TRBA** | **At Turbah** | **1.01** | **347** | ⇓*i*P | | | Pg | 03 33 02.2 | -1.3 |
| TRBA | | | | *i* S | | | Sb | 03 33 17.4 | -0.1 |
| **UDYN** | **Al 'Udayn** | **1.76** | **348** | *i* P | | | Pn | 03 33 15.5 | +0.8 |
| UDYN | | | | *i* S | | | Sg | 03 33 40.1 | -0.5 |
| **UDYN** | **Al 'Udayn** | **1.76** | **348** | *i* P | | | Pn | 03 33 15.5 | +0.8 |
| UDYN | | | | *i* S | | | Sg | 03 33 40.2 | -0.4 |
| **LBOS** | | **1.85** | **28** | *i* P | | | Pb | 03 33 17.1 | -1.0 |
| LBOS | | | | *i* S | | | Sb | 03 33 42.6 | +0.9 |
| **BDHA** | **Al Bayda'** | **2.10** | **34** | *i* P | | | Pb | 03 33 21.0 | -1.4 |
| BDHA | | | | *i* S | | | Sb | 03 33 49.6 | +0.8 |
| **BDHA** | **Al Bayda'** | **2.10** | **34** | *i* P | | | Pb | 03 33 21.0 | -1.3 |
| BDHA | | | | *i* S | | | Sb | 03 33 49.6 | +0.8 |
| **DHBB** | **Dhamar BB** | **2.32** | **1** | *i* S | | | Sb | 03 33 55.8 | +0.5 |
| **DHBB** | **Dhamar BB** | **2.32** | **1** | *i* S | | | Sb | 03 33 55.8 | +0.5 |

*BJI* ***28*** *03:59:38.9, 36.˚62N×70.˚98E, h173km, mb5.0/62, mB5.2/36*
*ISCJB* ***28*** *03:59:39.7±0.2, 36.˚52N±0.˚01×71.˚10E±0.˚01, h175km±2km, mb5.2/282, Error ellipse: s-maj=2.1km s-min=1.7km az=23.6*
*MOS* ***28*** *03:59:40.1±0.9, 36.˚53N×71.˚13E, h183km, mb5.4/63, Error ellipse: s-maj=4.9km s-min=3.3km az=107.4*
*GCMT* ***28*** *03:59:42.2±0.2, 36.˚38N×70.˚81E, h189km±2km, MW5.3/97, Moment Tensor Solution. s36,c45; s97,c170; Duration: 1ŝ1 Moment tensor: Scale 10^17Nm; Mrr0.90±.03; Mθθ-1.21±.03; Mφφ0.30±.03; Mrθ0.17±.03; Mθφ-0.03±.03; Mφr0.23±.02; Best double couple: M0 1.10600×10^17 NP1:ϕ8 72.00000°, δ52.00000°, λ67.00000°. NP2: ϕ287.00000°, δ43.00000°, λ117.00000°. Principal axes: T 0.9880, Plg71.0000°, Azm282.0000°; N 0.2350, Plg18.0000°, Azm87.0000°; P -1.2240, Plg5.0000°, Azm178.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*SZGRF* ***28*** *03:59:42.6, 36.˚06N×70.˚65E, h189km, mb5.5/20(BGR)*
*NEIC* ***28*** *03:59:42.2±0.2, 36.˚52N×71.˚10E, mb5.2/81, Error ellipse: s-maj=4.2km s-min=3.6km az=202.0*
*NEIC Felt [II] at Kabul. Also felt at Baghlan and Faizabad. Felt at Islamabad, Mardan and Rawalpindi, Pakistan. Also felt at Dushanbe, Tajikistan.*
*IDC* ***28*** *03:59:42.6±0.6, 36.˚53N×71.˚15E, h191km±5km, mb4.8/39, mb1 4.9/43, mb1mx4.9/49, mbtmp5.4/43, Error ellipse: s-maj=6.9km s-min=5.6km az=10.0*
*NNC* ***28*** *03:59:44.6±0.9, 36.˚89N×70.˚97E, h185km±7km, mb5.1, mpv6.2, Error ellipse: s-maj=9.4km s-min=4.5km az=161.0*
**ISC 28 03:59:41.5±0.2, 36.˚53N±0.˚03×71.˚08E±0.˚02, h184km±1km, h184km:pP-P,n1036,σ1ŝ42/1193, mb5.2/308, 82C-60D, Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KBL** | **Kabul** | **2.59** | **221** | *e*PN | | | **Pn** | **04 00 25.0** | **-0.7** |
| KBL | | | | *e* | | | | 04 00 57.9 | |
| **KBL** | **Kabul** | **2.59** | **221** | *e*Pn | | | **Pn** | **04 00 25.0** | **-0.7** |
| KBL | | | | *e*Sn | | | **Sn** | **04 00 57.9** | **-2.1** |
| **CEP** | **Cherat** | **2.78** | **166** | ⇓P | | | **Pn** | **04 00 27.9** | **0.0** |
| CEP | | | | S | | | **Sn** | **04 01 03.0** | **-1.1** |
| **DZET** | **Dzherino** | **2.89** | **323** | ⇓P | | | **Pn** | **04 00 28.3** | **-0.8** |
| | 7μm,0.4s | | | | | | | | |
| DZET | | | | ⇑S | | | **Sn** | **04 01 02.6** | **-3.7** |
| | 25μm,0.5s | | | | | | | | |
| **DZET** | **Dzherino** | **2.89** | **323** | PN | | | **Pn** | **04 00 28.3** | **-0.8** |
| DZET | | | | pmax | pmax | | | | |
| | comp=Z,7μm,0.4s | | | | | | | | |
| **CHCP** | **Chirah Chowk** | **3.38** | **147** | ⇓P | | | **Pn** | **04 00 35.3** | **+0.3** |
| **THW** | **Thamme Wali** | **3.77** | **171** | ⇓P | | | **Pn** | **04 00 39.6** | **-0.3** |
| **SFK** | **Sufi-Kurgan** | **3.97** | **28** | ⇑P | | | **Pn** | **04 00 42.4** | **-0.2** |
| | comp=Z,2μm,0.5s | | | | | | | | |
| SFK | | | | ⇑S | | | **Sn** | **04 01 28.1** | **-2.3** |
| | comp=Z,6μm,0.5s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.97** | **28** | PN | | | **Pn** | **04 00 42.3** | **-0.2** |
| SFK | | | | S | | | **Sn** | **04 01 28.0** | **-2.3** |
| SFK | | | | pmax | pmax | | | | |
| | comp=Z,2μm,0.5s | | | | | | | | |
| SFK | | | | smax | smax | | | | |
| | comp=N,6μm,0.5s | | | | | | | | |
| **SARP** | **Sargodha** | **4.78** | **164** | ⇓P | | | **Pn** | **04 00 51.6** | **-1.2** |
| **KSH** | **Kashi** | **4.88** | **51** | P | | | Pn | 04 00 49.0 | -5.1 |
| KSH | | | | S | | | Sn | 04 01 35.3 | -16 |
| KSH | | | | PMZ | | | | | |
| | comp=N,4μm,0.3s | | | | | | | | |
| KSH | | | | SMN | | | | | |
| | comp=N,22μm,0.7s | | | | | | | | |
| KSH | | | | SME | | | | | |
| | comp=N,23μm,0.5s | | | | | | | | |
| **AML** | **Almayashu** | **5.95** | **19** | P | | | **Pn** | **04 01 07.5** | **-0.7** |
| | SNR=6016 | | | | | | | | |
| **MNAS** | **Manas** | **6.05** | **10** | ⇑P | | | **Pn** | **04 01 08.7** | **-0.7** |
| | comp=N,4μm,0.6s | | | | | | | | |
| MNAS | | | | ⇓S | | | **Sn** | **04 02 14.1** | **-4.4** |
| | comp=N,11μm,1.1s | | | | | | | | |
| **MNAS** | **Manas** | **6.05** | **10** | PN | | | **Pn** | **04 01 08.6** | **-0.7** |
| MNAS | | | | pmax | pmax | | | | |
| | comp=Z,4μm,0.6s | | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **6.07** | **133** | *e*P | | | **Pn** | **04 01 08.7** | **-1.0** |
| DHRM | | | | *e*S | | | **Sn** | **04 02 14.6** | **-4.6** |
| **UCH** | **Uchtor** | **6.28** | **24** | P | | | **Pn** | **04 01 11.7** | **-0.9** |
| | SNR=817 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.47** | **18** | *e*PN | | | **Pn** | **04 01 14.4** | **-0.4** |
| EKS2 | | | | *e*S | | | **Sn** | **04 02 25.1** | **-3.3** |
| EKS2 | | | | pmax | pmax | | | | |
| | comp=Z,32nm,0.3s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.47** | **18** | P | | | **Pn** | **04 01 14.3** | **-0.4** |
| | SNR=546 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.47** | **18** | *e*Pn | | | **Pn** | **04 01 14.3** | **-0.4** |
| | comp=Z,32nm,0.3s | | | | | | | | |
| EKS2 | | | | *e*S | | | **Sn** | **04 02 25.1** | **-3.3** |
| **KK31** | **Karatay Array** | **6.58** | **356** | P | | | **Pn** | **04 01 15.2** | **-1.0** |
| | comp=Z,1μm,0.3s,baz=176,slow=13 | | | | | | | | |
| KK31 | | | | ⇑S | | | **Sn** | **04 02 25.6** | **-5.2** |
| | comp=Z,1μm,0.5s,baz=177,slow=22,SNR=12 | | | | | | | | |
| **KK31** | **Karatay Array** | **6.58** | **356** | PN | | | **Pn** | **04 01 15.1** | **-1.0** |
| KK31 | | | | pmax | pmax | | | | |
| | comp=Z,2μm,0.3s | | | | | | | | |
| **KKAR** | **Karatay Array** | **6.58** | **356** | *e*PN | | | **Pn** | **04 01 15.4** | **-0.7** |
| **KKAR** | **Karatay Array** | **6.58** | **356** | *e*Pn | | | **Pn** | **04 01 15.4** | **-0.7** |
| KKAR | | | | *e*Sn | | | **Sn** | **04 02 25.9** | **-5.0** |
| **AAK** | **Ala-Archa** | **6.64** | **22** | ⇓P | | | **Pn** | **04 01 16.9** | **-0.1** |
| | comp=Z,1μm,0.7s | | | | | | | | |
| AAK | | | | ⇑S | | | **Sn** | **04 02 29.9** | **-2.6** |
| | comp=Z,2μm,0.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.64** | **22** | P | | | **Pn** | **04 01 16.3** | **-0.7** |
| | comp=Z,156nm,0.3s,baz=191,slow=8.8,SNR=1460 | | | | | | | | |
| AAK | | | | S | | | **Sn** | **04 02 28.9** | **-3.6** |
| | comp=Z,80nm,0.3s,baz=217,slow=15,SNR=3.8 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.64** | **22** | Pn | | | **Pn** | **04 01 16.7** | **-0.4** |
| | comp=Z,9μm,0.6s | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.64** | **22** | Pn | | | **Pn** | **04 01 16.8** | **-0.4** |
| | SNR=610 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.64** | **22** | P | | | **Pn** | **04 01 16.6** | **-0.4** |
| | SNR=1005 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.64** | **22** | *e*Pn | | | **Pn** | **04 01 16.6** | **-0.4** |
| AAK | | | | *e*Sn | | | **Sn** | **04 02 30.4** | **-2.1** |
| **BHK** | **Bhakra** | **6.76** | **137** | *ex* | | | **Pn** | **04 01 15.9** | **-2.6** |
| BHK | | | | *e*S | | | Sn | 04 02 28.1 | -7.0 |
| **KBK** | **Karagaybulak** | **6.81** | **25** | P | | | **Pn** | **04 01 18.8** | **-0.4** |
| | SNR=642 | | | | | | | | |
| **FRU** | **Bishkek** | **6.86** | **22** | ⇓*i*PN | | | **Pn** | **04 01 19.0** | **-0.8** |
| FRU | | | | *i* S | | | **Sn** | **04 02 36.0** | **-1.5** |
| FRU | | | | pmax | pmax | | | | |
| | comp=Z,3μm,1.8s | | | | | | | | |
| FRU | | | | smax | smax | | | | |
| | comp=E,3μm,1.8s | | | | | | | | |
| FRU | | | | smax | smax | | | | |
| | comp=E,13μm,2.0s | | | | | | | | |
| **CHMS** | **Chumysh** | **7.05** | **23** | P | | | **Pn** | **04 01 21.6** | **-0.8** |
| | SNR=120 | | | | | | | | |
| **USP** | **Ospenovka** | **7.22** | **20** | P | | | **Pn** | **04 01 23.4** | **-1.1** |
| | SNR=249 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.27** | **27** | P | | | **Pn** | **04 01 25.0** | **-0.4** |
| | comp=E,2μm,0.8s | | | | | | | | |
| TKM2 | | | | S | | | **Sn** | **04 02 44.0** | **-3.4** |
| | comp=E,805nm,0.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.27** | **27** | *e*PN | | | **Pn** | **04 01 24.3** | **-1.0** |
| TKM2 | | | | pmax | pmax | | | | |
| | comp=Z,38nm,0.4s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.27** | **27** | P | | | **Pn** | **04 01 24.5** | **-0.9** |
| | SNR=1262 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.27** | **27** | *e*Pn | | | **Pn** | **04 01 24.3** | **-1.0** |
| | comp=Z,38nm,0.4s | | | | | | | | |
| TKM2 | | | | *e*S | | | Px | 04 02 23.5 | |
| **SMLA** | **Simla** | **7.39** | **135** | *e*P | | | **Pn** | **04 01 25.6** | **-1.2** |
| SMLA | | | | *i* S | | | Sn | 04 02 43.7 | -6.4 |
| SMLA | | | | AML | AML | | | 04 02 50.0 | |
| | comp=E,2μm,0.2s | | | | | | | | |
| SMLA | | | | AML | AML | | | 04 02 51.0 | |
| | comp=N,3μm,0.7s | | | | | | | | |
| **KNDC** | **Almaty** | **8.07** | **32** | ⇑P | | | **Pn** | **04 01 35.8** | **+0.2** |
| | comp=N,2μm,1.2s | | | | | | | | |
| **AAA** | **Alma-Ata** | **8.10** | **32** | *e*PN | | | **Pn** | **04 01 35.2** | **-0.9** |
| AAA | | | | pmax | pmax | | | | |
| | comp=Z,6μm,1.2s | | | | | | | | |
| AAA | | | | MLR | MLR | | | | |
| | comp=Z,8μm,5.0s | | | | | | | | |
| **DDI** | **Dehra Dun** | **8.50** | **135** | *e*P | | | **Pn** | **04 01 40.0** | **-1.5** |
| DDI | | | | *e*S | | | Sn | 04 03 10.2 | -6.4 |
| DDI | | | | AML | AML | | | 04 03 12.6 | |
| | comp=N,2μm,0.6s | | | | | | | | |
| DDI | | | | AML | AML | | | 04 03 14.0 | |
| | comp=E,2μm,0.5s | | | | | | | | |
| **IMYA** | **Miami** | **8.85** | **272** | *e*P | | | **Pn** | **04 01 43.2** | **-2.9** |
| **BHGR** | **Bahadurgarh** | **9.25** | **146** | *ex* | | | Sn | 04 03 26.3 | -8.1 |
| **KHET** | **Khetri** | **9.33** | **153** | *e*S | | | Sn | 04 03 26.5 | -10 |
| KHET | | | | AML | AML | | | 04 03 29.5 | |
| | comp=E,915nm,0.5s | | | | | | | | |
| KHET | | | | AML | AML | | | 04 03 29.8 | |
| | comp=N,779nm,0.3s | | | | | | | | |
| **ISRO** | **Mashad** | **9.36** | **272** | *e*P | | | **Pn** | **04 01 49.8** | **-2.9** |
| **PDGK** | **Podgornoye** | **9.37** | **41** | P | | | **Pn** | **04 01 51.3** | **-1.2** |
| | comp=N,181nm,0.8s | | | | | | | | |
| **NDI** | **New Delhi** | **9.38** | **145** | *ex* | | | Pn | 04 01 48.5 | -4.4 |
| NDI | | | | *e*S | | | Sn | 04 03 28.0 | -10 |
| **IMOG** | **Moghan** | **9.48** | **271** | *e*P | | | **Pn** | **04 01 52.4** | **-2.1** |
| **KUDL** | **Kundal** | **9.53** | **150** | *e*S | | | Sn | 04 03 31.2 | -10 |
| KUDL | | | | AML | AML | | | 04 03 33.5 | |
| | comp=E,2μm,0.5s | | | | | | | | |
| KUDL | | | | AML | AML | | | 04 03 34.0 | |
| | comp=N,812nm,0.4s | | | | | | | | |
| **IPAY** | **Payeh** | **9.73** | **273** | *e*P | | | **Pn** | **04 01 55.5** | **-2.2** |
| **IAKL** | **Akhelmad** | **9.91** | **274** | *e*P | | | **Pn** | **04 01 57.4** | **-2.8** |
| **IMON** | **Monand** | **9.95** | **254** | *e*P | | | **Pn** | **04 02 00.2** | **-0.3** |
| **IDAH** | **Dahanechah** | **9.98** | **251** | *e*P | | | **Pn** | **04 02 00.2** | **-0.8** |
| **IEMG** | **Emamgholi** | **9.98** | **279** | *e*P | | | Pn | 04 01 57.9 | -3.2 |
| **ABKT** | **Ailbek** | **10.43** | **282** | Pn | | | **Pn** | **04 02 03.6** | **-3.0** |
| | comp=N,3μm,0.4s,SNR=78 | | | | | | | | |
| **GEYT** | **Ailbeck** | **10.43** | **282** | P | | | **Pn** | **04 02 03.5** | **-3.1** |
| | comp=N,61nm,0.3s,baz=106,slow=11,SNR=291 | | | | | | | | |
| GEYT | | | | S | | | **Sn** | **04 03 59.5** | **-3.2** |
| | comp=N,84nm,0.3s,baz=165,slow=14,SNR=8.1 | | | | | | | | |
| **ISFR** | **Sfrayin** | **10.50** | **277** | *e*P | | | **Pn** | **04 02 05.4** | **-2.4** |
| **ISHV** | **Shirvan** | **10.74** | **279** | *e*P | | | **Pn** | **04 02 08.1** | **-2.7** |
| **IKOO** | **Kooshah** | **10.77** | **251** | *e*P | | | **Pn** | **04 02 10.4** | **-0.8** |
| **OTUK** | **Ortayu** | **11.75** | **4** | ⇓P | | | **Pn** | **04 02 21.5** | **-2.0** |
| | comp=N,252nm,0.7s | | | | | | | | |
| **OTUK** | **Ortayu** | **11.75** | **4** | P | | | **Pn** | **04 02 21.4** | **-2.0** |
| OTUK | | | | pmax | pmax | | | | |
| | comp=Z,252nm,0.7s | | | | | | | | |
| **MAKZ** | **Makanchi** | **13.10** | **35** | *e*Pn | | | **Pn** | **04 02 39.3** | **-1.3** |
| **MK01** | **Makanchi Array** | **13.22** | **36** | *e*Pn | | | **Pn** | **04 02 40.0** | **-2.2** |
| **MK31** | **Makanchi Array** | **13.23** | **36** | ⇑P | | | **Pn** | **04 02 41.1** | **-1.2** |
| | comp=Z,170nm,0.8s,baz=203,slow=8.2,SNR=491 | | | | | | | | |
| **MK31** | **Makanchi Array** | **13.23** | **36** | *i* P | | | **Pn** | **04 02 41.1** | **-1.2** |
| MK31 | | | | pmax | pmax | | | | |
| | comp=Z,170nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.23** | **36** | P | | | **Pn** | **04 02 40.4** | **-1.9** |
| | comp=Z,4.8nm,0.3s,baz=220,slow=9.5,SNR=268 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.23** | **36** | *e*P | | | **Pn** | **04 02 40.8** | **-1.5** |
| **MKAR** | **Makanchi Array** | **13.23** | **36** | *e*Pn | | | **Pn** | **04 02 40.8** | **-1.5** |
| **BHJ** | **Bhuj** | **13.29** | **186** | *e*P | | | **Pn** | **04 02 41.5** | **-1.6** |
| BHJ | | | | AMB | AMB | | | 04 02 42.2 | |
| | comp=Z,1μm,0.5s | | | | | | | | |
| **DANN** | **Dangsing** | **13.45** | **124** | *e*P | | | **Pn** | **04 02 43.6** | **-1.9** |
| | comp=Z,74nm,0.4s | | | | | | | | |
| **KOLN** | **Koldanda** | **13.73** | **126** | *e*P | | | **Pn** | **04 02 46.8** | **-2.1** |
| | comp=Z,188nm,0.3s | | | | | | | | |
| **IBAF** | **Bafgh** | **13.77** | **254** | *e*P | | | **Pn** | **04 02 49.0** | **-0.3** |
| **IGLO** | **Ghaloghah** | **13.88** | **275** | *e*P | | | **Pn** | **04 02 51.5** | **+0.9** |
| **GKN** | **Gorkha** | **14.27** | **123** | *e*P | | | **Pn** | **04 02 53.7** | **-1.8** |
| | comp=Z,354nm,0.2s | | | | | | | | |
| **BHPL** | **Bhopal** | **14.33** | **156** | *e*P | | | **Pn** | **04 02 54.4** | **-1.9** |
| BHPL | | | | AMB | AMB | | | 04 03 00.2 | |
| | comp=Z,8μm,0.4s | | | | | | | | |
| BHPL | | | | *ex* | x | | | 04 05 23.2 | |
| **ICHK** | **Chekchek** | **14.41** | **258** | *e*P | | | **Pn** | **04 02 57.6** | **+0.2** |
| **IMEH** | **Mehriz** | **14.59** | **254** | *e*P | | | **Pn** | **04 02 58.9** | **-0.7** |
| **WMQ** | **Urumqi** | **14.63** | **55** | P | | | **Pn** | **04 02 59.0** | **-0.8** |
| WMQ | | | | sP | | | | 04 03 45.0 | |
| WMQ | | | | S | | | **Sn** | **04 05 38.0** | **-5.0** |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,140nm,0.8s | | | | | | | | |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,1μm,3.5s | | | | | | | | |
| WMQ | | | | LN | | | | | |
| | comp=Z,440nm,9.0s | | | | | | | | |
| WMQ | | | | LE | | | | | |
| | comp=Z,410nm,8.0s | | | | | | | | |
| WMQ | | | | LZ | | | | | |
| | comp=Z,480nm,9.0s | | | | | | | | |
| **IALA** | **Alasht** | **14.74** | **274** | *e*P | | | **P** | **04 03 03.3** | **+0.4** |
| **DMN** | **Daman** | **14.84** | **123** | *e*P | | | **Pn** | **04 03 01.6** | **-1.1** |
| | comp=Z,778nm,0.4s | | | | | | | | |
| **KKN** | **Kakani** | **14.84** | **122** | *e*P | | | **Pn** | **04 03 01.0** | **-1.7** |
| | comp=Z,675nm,0.5s | | | | | | | | |
| **IFIR** | **Firoozkooh** | **14.85** | **272** | *e*P | | | **Pn** | **04 03 03.4** | **+0.6** |
| **PKIN** | **Phulchoki** | **15.05** | **122** | *e*P | | | **Pn** | **04 03 04.2** | **-1.2** |
| | comp=Z,708nm,0.4s | | | | | | | | |
| **PKI** | **Pulchoki** | **15.07** | **122** | *e*P | | | **Pn** | **04 03 04.2** | **-1.4** |
| | comp=Z,796nm,0.5s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.08** | **19** | ⇓P | | | **Pn** | **04 03 02.5** | **-2.6** |
| | comp=Z,136nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.08** | **19** | P | | | **Pn** | **04 03 02.5** | **-2.6** |
| | comp=Z,1.8nm,0.3s,baz=208,slow=11,SNR=149 | | | | | | | | |
| KURBB | | | | S | | | **S** | **04 05 53.7** | **-0.2** |
| | baz=207,slow=19,SNR=6.2 | | | | | | | | |
| **AB31** | **Akbulak array** | **15.09** | **331** | ⇓P | | | **Pn** | **04 03 03.5** | **-1.9** |
| | comp=Z,96nm,0.4s,baz=144,slow=11,SNR=4243 | | | | | | | | |
| **AB31** | **Akbulak array** | **15.09** | **331** | *i* P | | | **Pn** | **04 03 03.4** | **-1.9** |
| AB31 | | | | pmax | pmax | | | | |
| | comp=Z,96nm,0.4s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **15.09** | **331** | *e*Pn | | | **Pn** | **04 03 03.7** | **-1.6** |
| ABKAR | | | | *e*S | | | Sn | 04 05 39.1 | -15 |
| **IPRN** | **Peran** | **15.10** | **274** | *e*P | | | **P** | **04 03 07.2** | **+0.5** |
| **ISAD** | **Sadrabad** | **15.10** | **257** | *e*P | | | **Pn** | **04 03 06.1** | **+0.1** |
| **GUN** | **Gumba** | **15.18** | **120** | *e*P | | | **Pn** | **04 03 05.7** | **-1.2** |
| | comp=Z,764nm,0.4s | | | | | | | | |
| **KURK** | **Kurchatov** | **15.18** | **19** | ⇓P | | | **Pn** | **04 03 04.0** | **-2.4** |
| | comp=Z,363nm,1.1s | | | | | | | | |
| **KURK** | **Kurchatov** | **15.18** | **19** | *e*P | | | **Pn** | **04 03 03.7** | **-2.7** |
| KURK | | | | *e*S | | | **S** | **04 05 59.0** | **+2.7** |
| **KURK** | **Kurchatov** | **15.18** | **19** | Pn | | | **Pn** | **04 03 03.7** | **-2.7** |
| | comp=Z,1μm,1.0s,SNR=96 | | | | | | | | |
| **KURK** | **Kurchatov** | **15.18** | **19** | *e*Pn | | | **Pn** | **04 03 03.7** | **-2.7** |
| KURK | | | | *e*S | | | **S** | **04 05 59.0** | **+2.7** |
| **IDMV** | **Damavand** | **15.44** | **272** | *e*P | | | **P** | **04 03 11.2** | **+0.7** |
| **IAFJ** | **Afjeh** | **15.65** | **273** | *e*P | | | **P** | **04 03 14.0** | **+1.0** |
| **IRAM** | **Rameshesh** | **16.17** | **259** | *e*P | | | **Pn** | **04 03 19.0** | **+0.1** |
| **IR3** | **Iran Long-Peri** | **16.27** | **272** | *e*P | | | **Pn** | **04 03 19.9** | **0.0** |
| **RAMN** | **Ramite** | **16.28** | **122** | *e*P | | | **P** | **04 03 19.0** | **-0.8** |
| | comp=Z,557nm,0.4s | | | | | | | | |
| **QAM** | **Ghamsar** | **16.30** | **266** | *e*P | | | **Pn** | **04 03 20.6** | **+0.2** |
| **IKLH** | **Kolahrood** | **16.31** | **264** | *e*P | | | **Pn** | **04 03 20.6** | **0.0** |
| **BANOM** | **Banah** | **16.46** | **234** | ⇑*i*P | | | **Pn** | **04 03 22.2** | **0.0** |
| | SNR=14 | | | | | | | | |
| **ZRNK** | **Zerenda** | **16.49** | **356** | ⇓P | | | **P** | **04 03 20.8** | **-0.8** |
| | comp=Z,329nm,1.0s | | | | | | | | |
| **ZRNK** | **Zerenda** | **16.49** | **356** | P | | | **P** | **04 03 20.7** | **-0.8** |
| ZRNK | | | | pmax | pmax | | | | |
| | comp=Z,329nm,1.0s | | | | | | | | |
| **IPAR** | **Pars** | **16.49** | **251** | *e*P | | | **Pn** | **04 03 22.9** | **+0.1** |
| **BVA0** | **Borovoye Array** | **16.50** | **359** | P | | | **P** | **04 03 21.0** | **-0.8** |
| | comp=Z,220nm,0.7s,baz=164,slow=11,SNR=1063 | | | | | | | | |
| **BVA0** | **Borovoye Array** | **16.50** | **359** | *i* P | | | **P** | **04 03 21.0** | **-0.8** |
| BVA0 | | | | pmax | pmax | | | | |
| | comp=Z,220nm,0.7s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **16.50** | **359** | P | | | **P** | **04 03 21.1** | **-0.6** |
| | comp=Z,32nm,0.3s,baz=161,slow=12,SNR=160 | | | | | | | | |
| BVAR | | | | S | | | **S** | **04 06 23.7** | **-0.6** |
| | comp=Z,3.5nm,0.3s,baz=165,slow=24,SNR=7.5 | | | | | | | | |
| **BRVK** | **Borovoye** | **16.54** | **358** | ⇓P | | | **P** | **04 03 21.8** | **-0.4** |
| | comp=Z,859nm,0.8s | | | | | | | | |
| **BRVK** | **Borovoye** | **16.54** | **358** | *e*P | | | **P** | **04 03 21.7** | **-0.4** |
| BRVK | | | | *e*S | | | **S** | **04 06 21.4** | **-3.7** |
| BRV

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ZAA0** | **Zalesovo Array** | **19.86** | **24** | *e*P | | **P** | **04 03 58.0** | **-0.3** |
| **ZALV** | **Zalesovo Beam** | **19.86** | **24** | P | | **P** | **04 03 58.1** | **-0.2** |
| | comp=Z,37nm,0.3s,baz=222,slow=11,SNR=428 | | | | | | | |
| ZALV | | | | S | | **S** | **04 07 29.9** | **-1.6** |
| | comp=Z,1.5nm,0.3s,baz=217,slow=19,SNR=4.6 | | | | | | | |
| **ITBZ** | **Tabriz** | **19.87** | **282** | *e*P | | **P** | **04 04 00.8** | **+2.0** |
| **IAZR** | **Azarshahr** | **20.04** | **281** | *e*P | | **P** | **04 04 02.4** | **+1.8** |
| **IGHG** | **Ghaleghazi** | **20.08** | **271** | *e*P | | **P** | **04 04 01.8** | **+0.7** |
| **NVS** | **Novosibirsk** | **20.13** | **21**⇑ | *i*P | | **P** | **04 04 01.7** | **+0.6** |
| NVS | | | | *i* PPP | | PPP | 04 04 35.6 | |
| NVS | | | | *e*S | | **S** | **04 07 35.7** | **-1.1** |
| NVS | | | | *e* | | | 04 08 16.0 | |
| NVS | | | | pmax | pmax | | | |
| | comp=N,71nm,0.6s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=E,26nm,0.6s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=Z,86nm,0.6s | | | | | | | |
| NVS | | | | smax | smax | | | |
| | comp=N,550nm,2.3s | | | | | | | |
| NVS | | | | smax | smax | | | |
| | comp=E,704nm,2.6s | | | | | | | |
| **IDHR** | **Dehrash** | **20.15** | **272** | *e*P | | **P** | **04 04 02.3** | **+0.5** |
| **HYBB** | **Hyderabad (bro** | **20.15** | **159** | *e*P | | **P** | **04 04 02.2** | **+0.5** |
| HYBB | | | | IAmb | IAmb | | 04 04 07.0 | |
| | comp=Z,590nm,1.5s | | | | | | | |
| HYBB | | | | *e*S | | **S** | **04 07 37.8** | **-0.2** |
| **HYB** | **Hyderabad** | **20.15** | **159** | *e*P | | **P** | **04 04 01.0** | **-0.7** |
| HYB | | | | *e*S | | **S** | **04 07 40.0** | **+2.1** |
| **HYB** | **Hyderabad** | **20.15** | **159** | *i* P | | **P** | **04 04 01.0** | **-0.7** |
| | comp=Z,320nm,1.0s | | | | | | | |
| HYB | | | | *e* | | | 04 04 23.0 | |
| HYB | | | | *e* | | | 04 04 28.0 | |
| HYB | | | | *e*sP | | **sP** | **04 04 56.0** | **-0.1** |
| HYB | | | | *e*S | | **S** | **04 07 37.0** | **-0.9** |
| **HYB** | **Hyderabad** | **20.15** | **159** | *e*P | | **P** | **04 04 02.2** | **+0.5** |
| HYB | | | | AMB | AMB | | 04 04 07.2 | |
| | comp=Z,291nm,1.1s | | | | | | | |
| **HYB** | **Hyderabad** | **20.15** | **159** | *e*P | | **P** | **04 04 01.0** | **-0.7** |
| HYB | | | | *e*S | | **S** | **04 07 40.0** | **+2.1** |
| **IMRD** | **Marand** | **20.20** | **284** | *e*P | | Pn | 04 04 04.6 | -2.1 |
| **ISHB** | **Shabestar** | **20.29** | **283** | *e*P | | **P** | **04 04 04.9** | **+1.6** |
| **DGRG** | **David-gareji** | **20.54** | **292** | P | | **P** | **04 04 07.5** | **+1.7** |
| **DGRG** | **David-gareji** | **20.54** | **292** | P | | **P** | **04 04 07.4** | **+1.7** |
| **SHL** | **Shillong** | **20.86** | **116** | *e*P | | **P** | **04 04 09.5** | **+0.1** |
| SHL | | | | AMB | AMB | | 04 04 12.9 | |
| | comp=Z,177nm,0.8s | | | | | | | |
| **GNI** | **Garni** | **20.95** | **288** | *e*P | | **P** | **04 04 12.4** | **+2.2** |
| GNI | | | | pmax | pmax | | | |
| | comp=Z,3μm,1.1s | | | | | | | |
| **GNI** | **Garni** | **20.95** | **288** | P | | **P** | **04 04 12.7** | **+2.5** |
| | SNR=91 | | | | | | | |
| **GNI** | **Garni** | **20.95** | **288**⇑ | *i*P | | **P** | **04 04 11.8** | **+1.6** |
| | SNR=77 | | | | | | | |
| **GNI** | **Garni** | **20.95** | **288** | *e*P | | **P** | **04 04 12.4** | **+2.2** |
| | comp=Z,3μm,1.1s | | | | | | | |
| **SEAG** | **Tbilisi Sea** | **21.00** | **292** | P | | **P** | **04 04 14.7** | **+4.1** |
| **TBLG** | **Delisi** | **21.05** | **292** | *e*P | | **P** | **04 04 12.2** | **+1.2** |
| **TBLG** | **Delisi** | **21.05** | **292** | P | | **P** | **04 04 12.2** | **+1.2** |
| **TBLG** | **Delisi** | **21.05** | **292** | P | | **P** | **04 04 12.2** | **+1.2** |
| **GOA** | **Goa** | **21.09** | **173** | *e*P | | **P** | **04 04 12.9** | **+1.3** |
| **DUS** | **Dusheti** | **21.11** | **293** | P | | P | 04 04 18.8 | +7.0 |
| **DUS** | **Dusheti** | **21.11** | **293** | P | | P | 04 04 18.8 | +7.0 |
| **NJS** | **Nagarjunasagar** | **21.19** | **158** | *e*P | | **P** | **04 04 13.0** | **+0.3** |
| NJS | | | | IAmb | IAmb | | 04 04 20.1 | |
| | comp=Z,120nm,1.1s | | | | | | | |
| NJS | | | | *e*S | | **S** | **04 07 56.1** | **-1.3** |
| **CHLP** | **Challavanipeta** | **21.29** | **144** | *e*P | | **P** | **04 04 14.2** | **+0.5** |
| CHLP | | | | IAmb | IAmb | | 04 04 21.6 | |
| | comp=Z,170nm,1.3s | | | | | | | |
| CHLP | | | | *e*S | | **S** | **04 07 59.3** | **+0.4** |
| **PVM** | **Polavaram** | **21.35** | **151** | *e*P | | **P** | **04 04 15.2** | **+0.8** |
| PVM | | | | IAmb | IAmb | | 04 04 22.9 | |
| | comp=Z,123nm,1.0s | | | | | | | |
| PVM | | | | *e*S | | **S** | **04 08 00.1** | **0.0** |
| **SVE** | **Sverdlovsk** | **21.48** | **344** | *de*P | | **P** | **04 04 16.4** | **+0.9** |
| SVE | | | | *e* | | | 04 05 09.9 | |
| SVE | | | | *e*S | | **S** | **04 08 03.5** | **+1.9** |
| SVE | | | | pmax | pmax | | | |
| | comp=Z,173nm,0.9s | | | | | | | |
| **SRLM** | **Srisailam** | **21.50** | **159** | *e*P | | **P** | **04 04 16.1** | **+0.1** |
| SRLM | | | | IAmb | IAmb | | 04 04 23.4 | |
| | comp=Z,317nm,1.4s | | | | | | | |
| SRLM | | | | *e*S | | **S** | **04 08 02.6** | **0.0** |
| **CLDR** | **Caldiran** | **21.58** | **285** | *e*P | | **P** | **04 04 19.2** | **+2.2** |
| **VIS** | **Vishakhapatnam** | **21.64** | **147** | *i* P | | **P** | **04 04 18.7** | **+1.3** |
| VIS | | | | *i* x | | **S** | **04 08 08.6** | **+3.8** |
| **HVS** | **Khovu-Aksy** | **21.78** | **41** | *e*P | | **P** | **04 04 19.1** | **+0.5** |
| HVS | | | | pmax | pmax | | | |
| | comp=Z,134nm,1.1s | | | | | | | |
| **EAK** | **Akyaka** | **21.83** | **289** | P | | **P** | **04 04 21.9** | **+2.5** |
| **AKH** | **Akhalkalaki** | **21.95** | **291** | *e*P | | **P** | **04 04 20.0** | **-0.7** |
| **AKH** | **Akhalkalaki** | **21.95** | **291** | P | | **P** | **04 04 22.9** | **+2.3** |
| **AKH** | **Akhalkalaki** | **21.95** | **291** | P | | **P** | **04 04 22.9** | **+2.3** |
| **CUKT** | **Cukurca** | **21.96** | **280** | *e*P | | **P** | **04 04 20.8** | **+0.1** |
| **DIGO** | **Kars** | **22.00** | **289** | P | | **P** | **04 04 23.3** | **+2.1** |
| **ADKI** | **Addanki** | **22.07** | **157** | *e*P | | **P** | **04 04 22.1** | **+0.4** |
| ADKI | | | | IAmb | IAmb | | 04 04 30.1 | |
| | comp=Z,66nm,1.1s | | | | | | | |
| ADKI | | | | *e*S | | **S** | **04 08 12.3** | **+0.6** |
| **ONI** | **Oni** | **22.09** | **294** | P | | **P** | **04 04 23.9** | **+2.0** |
| **ONI** | **Oni** | **22.09** | **294** | P | | **P** | **04 04 23.8** | **+2.0** |
| **NCK** | **Nalchik** | **22.11** | **297**⇑ | *i*P | | **P** | **04 04 22.4** | **+0.5** |
| **RCLA** | **Racherla** | **22.13** | **159** | IAmb | IAmb | | 04 04 23.3 | |
| | comp=Z,73nm,0.8s | | | | | | | |
| RCLA | | | | *e*P | | **P** | **04 04 23.6** | **+1.3** |
| **URV** | **Uravakonda** | **22.19** | **164** | *e*P | | **P** | **04 04 23.5** | **+0.5** |
| URV | | | | IAmb | IAmb | | 04 04 24.3 | |
| | comp=Z,121nm,1.1s | | | | | | | |
| URV | | | | *e*S | | **S** | **04 08 13.5** | **-0.2** |
| **AGRB** | **Hanur-Agry** | **22.29** | **286** | *e*P | | **P** | **04 04 25.3** | **+1.4** |
| **TUTA** | **Tutak** | **22.43** | **286** | P | | **P** | **04 04 28.2** | **+2.9** |
| **EPOS** | **Posof** | **22.53** | **291** | P | | **P** | **04 04 28.6** | **+2.6** |
| **KBZ** | **Khabaz** | **22.64** | **297** | P | | **P** | **04 04 27.3** | **+0.5** |
| | comp=Z,35nm,0.7s,baz=117,slow=5.9,SNR=89 | | | | | | | |
| **NEY** | **Neytrino** | **22.70** | **296***c* | *i*P | | **P** | **04 04 27.2** | **-0.4** |
| NEY | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| **GTA** | **Gaotai** | **22.80** | **74** | ⇑P | | **P** | **04 04 30.3** | **+1.8** |
| GTA | | | | pP | | **pP** | **04 05 06.0** | **+4.3** |
| GTA | | | | sP | | **sP** | **04 05 26.5** | **+1.7** |
| GTA | | | | PcP | | **PcP** | **04 08 14.5** | **+0.9** |
| GTA | | | | S | | **S** | **04 08 26.3** | **+2.8** |
| GTA | | | | PMZ | | | | |
| | comp=Z,100nm,1.7s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,770nm,5.9s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,530nm,15.7s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,500nm,14.7s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,580nm,17.3s | | | | | | | |
| **KIV** | **Kislovodsk** | **22.83** | **298** | *e*P | | **P** | **04 04 29.3** | **+0.6** |
| KIV | | | | *e**PP | | **pP** | **04 05 01.3** | **-0.7** |
| KIV | | | | *e*S | | **S** | **04 08 26.3** | **+2.4** |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,93nm,0.9s | | | | | | | |
| KIV | | | | MLR | MLR | | | |
| | comp=Z,299nm,14.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **22.83** | **298** | P | | **P** | **04 04 29.9** | **+1.2** |
| | comp=Z,718nm,0.9s,SNR=15 | | | | | | | |
| **EKAR** | **Karacoban** | **23.02** | **286** | P | | **P** | **04 04 31.4** | **+0.9** |
| **CHVG** | **Ch'k'valeri** | **23.11** | **294** | *e*P | | **P** | **04 04 35.1** | **+4.1** |
| **CHVG** | **Ch'k'valeri** | **23.11** | **294** | P | | **P** | **04 04 35.7** | **+4.6** |
| **ARTV** | **Artvin** | **23.12** | **291** | P | | **P** | **04 04 33.8** | **+2.4** |
| **HOMI** | **Horasan** | **23.12** | **288** | P | | **P** | **04 04 35.2** | **+3.7** |
| **DBAD** | **Bademkaya** | **23.29** | **290** | P | | **P** | **04 04 34.5** | **+1.7** |
| **DBOC** | **Borcka** | **23.32** | **291** | P | | **P** | **04 04 35.0** | **+1.9** |
| **BCA** | **Borcka** | **23.36** | **291** | *e*P | | **P** | **04 04 35.5** | **+2.1** |
| **EZM** | **Erzurum** | **23.54** | **287** | *e*P | | **P** | **04 04 36.2** | **+0.9** |
| **BNGL** | **BINGOL** | **23.74** | **285** | P | | **P** | **04 04 39.7** | **+2.5** |
| **SKHT** | **Srikalahasti** | **23.97** | **159** | *e*P | | **P** | **04 04 40.1** | **+1.0** |
| SKHT | | | | IAmb | IAmb | | 04 04 43.2 | |
| | comp=Z,58nm,0.7s | | | | | | | |
| SKHT | | | | *e*S | | **S** | **04 08 41.7** | **-0.7** |
| **BNGB** | **Bing^¶l** | **24.11** | **285** | *e*P | | **P** | **04 04 38.5** | **-1.9** |
| **RBK** | **Rabkut** | **24.12** | **223** | P | | **P** | **04 04 40.3** | **-0.2** |
| | SNR=26 | | | | | | | |
| **MARD** | **Mardin** | **24.19** | **281** | P | | **P** | **04 04 43.4** | **+2.3** |
| **MAZI** | **Mazidag** | **24.43** | **281** | *e*P | | **P** | **04 04 42.5** | **-0.8** |
| **KRAR** | **Krasnoyarsk** | **24.44** | **30** | *e*P | | **P** | **04 04 44.2** | **+1.2** |
| KRAR | | | | pmax | pmax | | | |
| | comp=Z,46nm,1.1s | | | | | | | |
| **BAYT** | **Ayd¯ntepe-Bay** | **24.47** | **289** | *e*P | | **P** | **04 04 44.9** | **+1.2** |
| **DYBB** | **Diyarbakir** | **24.62** | **283** | *e*P | | **P** | **04 04 44.8** | **-0.2** |
| **ABTO** | **Aybut** | **24.74** | **224** | P | | **P** | **04 04 47.0** | **+0.8** |
| | SNR=50 | | | | | | | |
| **MDRS** | **Chennai** | **24.77** | **158** | *e*P | | **P** | **04 04 47.5** | **+1.1** |
| MDRS | | | | AMB | AMB | | 04 04 51.8 | |
| | comp=Z,42nm,1.2s | | | | | | | |
| **ERZN** | **Erzincan** | **24.82** | **287** | *e*P | | **P** | **04 04 48.9** | **+2.2** |
| **SOC** | **Sochi** | **24.92** | **296***c* | *i*P | | **P** | **04 04 47.8** | **+0.3** |
| SOC | | | | *e* | | | 04 05 25.2 | |
| SOC | | | | *e**SP | | **sP** | **04 05 42.2** | **-3.9** |
| SOC | | | | *e*S | | **S** | **04 09 00.2** | **+3.3** |
| SOC | | | | pmax | pmax | | | |
| | comp=Z,132nm,1.1s | | | | | | | |
| **GUMT** | **Gumushane** | **24.97** | **289** | *e*P | | **P** | **04 04 50.9** | **+2.7** |
| **PTK** | **Pertek** | **25.12** | **285** | *e*P | | **P** | **04 04 52.0** | **+2.4** |
| **KELT** | **Kelkit** | **25.15** | **288** | P | | **P** | **04 04 52.3** | **+2.4** |
| **ELZG** | **Elazig** | **25.47** | **284** | P | | **P** | **04 04 55.0** | **+2.3** |
| **VRH** | **Novokhopyorsk** | **25.54** | **314** | *e*P | | **P** | **04 04 53.3** | **+0.4** |
| VRH | | | | *e**PP | | **pP** | **04 05 27.5** | **-2.7** |
| VRH | | | | *e* | | | 04 05 41.9 | |
| VRH | | | | *e**SP | | **sP** | **04 05 56.0** | **+4.3** |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,160nm,0.9s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=N,100nm,1.0s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=E,300nm,1.5s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=N,120nm,0.7s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,130nm,0.7s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=E,90nm,0.6s | | | | | | | |
| **REFA** | **Refahiye_ERZ¯** | **25.57** | **286** | P | | **P** | **04 04 56.3** | **+2.8** |
| **RAYN** | **Ar Rayn** | **25.57** | **247** | P | | **P** | **04 04 53.0** | **-0.6** |
| | comp=E,873nm,1.0s,SNR=87 | | | | | | | |
| **RAYN** | **Ar Rayn** | **25.57** | **247** | *e*P | | **P** | **04 04 53.4** | **-0.2** |
| | comp=E,168nm,1.1s | | | | | | | |
| RAYN | | | | *e*PcP | | **PcP** | **04 08 19.0** | **-0.8** |
| **ILIC** | **ilic-Erzincan** | **25.71** | **286** | *e*P | | **P** | **04 04 56.2** | **+1.3** |
| **MALT** | **Malatya** | **25.92** | **284** | *e*P | | **P** | **04 04 57.1** | **+0.4** |
| **MALT** | **Malatya** | **25.92** | **284**⇑ | *i*P | | **P** | **04 04 58.4** | **+1.7** |
| **SUSE** | **Susehri** | **25.95** | **288** | P | | **P** | **04 04 59.4** | **+2.4** |
| **MOY** | **Mondy** | **26.04** | **45** | *e*P | | **P** | **04 04 58.7** | **+1.0** |
| MOY | | | | pmax | pmax | | | |
| | comp=Z,58nm,2.4s | | | | | | | |
| **CUZAR** | **Zara_SIVAS** | **26.30** | **288** | P | | **P** | **04 05 01.9** | **+1.7** |
| **LZH** | **Lanzhou** | **26.34** | **81** | *e*P | | **P** | **04 05 02.5** | **+1.9** |
| LZH | | | | pP | | **pP** | **04 05 37.5** | **-0.5** |
| LZH | | | | sP | | **sP** | **04 05 57.8** | **-1.6** |
| LZH | | | | PcP | | **PcP** | **04 08 22.5** | **+1.0** |
| LZH | | | | PMZ | | | | |
| | comp=Z,39nm,1.1s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,510nm,4.0s | | | | | | | |
| **CUKAN** | **kangal_SIVAS** | **26.57** | **286** | P | | **P** | **04 05 04.8** | **+2.2** |
| **DARE** | **Darende-Malaty** | **26.63** | **285** | *e*P | | **P** | **04 05 01.9** | **-1.2** |
| **ANN** | **Anapa** | **26.68** | **299** | *e*P | | **P** | **04 05 03.1** | **-0.1** |
| ANN | | | | *i* *PP | | **pP** | **04 05 42.1** | **+1.4** |
| ANN | | | | *i* | | | 04 05 56.7 | |
| ANN | | | | *e* | | | 04 08 20.7 | |
| ANN | | | | *e*S | | **S** | **04 09 26.3** | **+1.7** |
| ANN | | | | *e**SS | | **sS** | **04 10 32.7** | **+1.1** |
| ANN | | | | pmax | pmax | | | |
| | comp=Z,121nm,1.1s | | | | | | | |
| **VORD** | **Divnogorie** | **26.87** | **313** | *e*P | | **P** | **04 05 05.2** | **+0.3** |
| VORD | | | | *e**SP | | **sP** | **04 06 07.2** | **+3.4** |
| VORD | | | | pmax | pmax | | | |
| | comp=Z,140nm,1.1s | | | | | | | |
| VORD | | | | pmax | pmax | | | |
| | comp=N,130nm,1.0s | | | | | | | |
| VORD | | | | pmax | pmax | | | |
| | comp=E,170nm,0.9s | | | | | | | |
| **SVSK** | **Karacayir** | **26.89** | **288** | *e*P | | **P** | **04 05 06.9** | **+1.7** |
| **ZAK** | **Zakamensk** | **26.92** | **49** | *e*P | | **P** | **04 05 06.8** | **+1.2** |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,17nm,1.3s | | | | | | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,29nm,1.3s | | | | | | | |
| **VSR** | **Storozhevoye** | **27.03** | **313** | *e*P | | **P** | **04 05 06.6** | **+0.3** |
| VSR | | | | *e**PP | | **pP** | **04 05 41.6** | **-2.3** |
| VSR | | | | *e* | | | 04 05 56.1 | |
| VSR | | | | *e**SP | | **sP** | **04 06 09.7** | **+4.4** |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,260nm,1.2s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=N,50nm,0.9s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=E,310nm,1.1s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,100nm,0.8s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=N,90nm,0.6s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=E,410nm,1.0s | | | | | | | |
| **VORR** | **Voronezh** | **27.17** | **314** | *e*P | | **P** | **04 05 07.0** | **-0.6** |
| VORR | | | | pmax | pmax | | | |
| | comp=Z,500nm,1.2s | | | | | | | |
| **KUZU** | **Kuzuini** | **27.20** | **281** | P | | **P** | **04 05 10.1** | **+1.9** |
| **KMRS** | **Kahramanmaras** | **27.22** | **282** | *e*P | | **P** | **04 05 09.2** | **+0.9** |
| **AYKD** | **Aykdinkavak** | **27.31** | **282** | P | | **P** | **04 05 10.5** | **+1.4** |
| **PINB** | **Pinarbasi** | **27.46** | **285** | P | | **P** | **04 05 11.7** | **+1.0** |
| **SARI** | **SarD1z-Kayseri** | **27.48** | **284** | *e*P | | **P** | **04 05 12.0** | **+1.3** |
| **CUSAR** | **Sarkisla-SIVAS** | **27.51** | **287** | P | | **P** | **04 05 12.7** | **+1.7** |
| **TLY** | **Talaya** | **27.57** | **46** | P | | **P** | **04 05 12.3** | **+1.0** |
| | comp=Z,3.6nm,0.6s,baz=248,slow=5.0,SNR=4.3 | | | | | | | |
| TLY | | | | PcP | | **PcP** | **04 08 25.0** | **+1.0** |
| | comp=Z,7.8nm,0.8s,baz=254,slow=5.9,SNR=4.0 | | | | | | | |
| TLY | | | | ScP | | **ScP** | **04 11 46.5** | **-0.6** |
| | comp=Z,3.2nm,0.5s,baz=314,slow=1.8,SNR=3.0 | | | | | | | |
| **ROOS** | **tl_alroos** | **27.58** | **275** | *e*P | | **P** | **04 05 13.6** | **+2.0** |
| **RABH** | **Abou Rabah** | **27.58** | **276** | *e*P | | **P** | **04 05 12.7** | **+1.1** |
| **CD2** | **Chengdu** | **27.67** | **92** | *e*P | | **P** | **04 05 13.5** | **+1.1** |
| CD2 | | | | pP | | **pP** | **04 05 49.8** | **-0.2** |
| CD2 | | | | S | | **S** | **04 09 43.0** | **+2.3** |
| CD2 | | | | sS | | **sS** | **04 10 48.3** | **+0.5** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,60nm,0.8s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,160nm,5.2s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **27.68** | **316** | *e*P | | **P** | **04 05 12.7** | **+0.6** |
| LPSR | | | | *e**PP | | **pP** | **04 05 44.9** | **-4.8** |
| LPSR | | | | *e**SP | | **sP** | **04 06 08.9** | **-2.2** |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,230nm,1.0s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=N,40nm,1.3s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=E,160nm,1.3s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,330nm,1.8s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=N,60nm,1.2s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=E,400nm,1.4s | | | | | | | |
| **KFRA** | **Kufra** | **27.73** | **278** | *e*P | | **P** | **04 05 11.2** | **-1.6** |
| **BTCH** | **Batrach** | **27.82** | **279** | *e*P | | **P** | **04 05 14.3** | **+0.6** |
| **ZALF** | **Zalf** | **27.88** | **273** | *e*P | | **P** | **04 05 15.0** | **+0.8** |
| **SLNF** | **Slenfeh** | **28.10** | **279** | *e*P | | **P** | **04 05 13.8** | **-2.5** |
| **IRK** | **Irkutsk** | **28.14** | **46** | *e*P | | **P** | **04 05 16.1** | **-0.1** |
| IRK | | | | *e* | | | 04 05 57.9 | |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,64nm,2.5s | | | | | | | |
| **BIDA** | **Albida** | **28.15** | **277** | *e*P | | **P** | **04 05 15.4** | **-1.2** |
| **HAWK** | **Haweek** | **28.20** | **276** | *e*P | | **P** | **04 05 17.3** | **+0.2** |
| **ARNB** | **Al Arnab** | **28.25** | **279** | *e*P | | **P** | **04 05 18.9** | **+1.4** |
| **SONM** | **Songino Array** | **28.27** | **55** | P | | **P** | **04 05 18.8** | **+1.3** |
| | comp=Z,15nm,0.9s,baz=259,slow=8.9,SNR=58 | | | | | | | |
| SONM | | | | pP | | **pP** | **04 05 58.1** | **+2.8** |
| | comp=Z,15nm,1.0s,baz=259,slow=9.8,SNR=4.1 | | | | | | | |
| SONM | | | | SKKS | | | 04 37 34.3 | |
| | comp=Z,2.3nm,0.9s,baz=90,slow=2.9,SNR=9.6 | | | | | | | |
| **SONA1** | **Songino Array** | **28.27** | **55** | *e*P | | **P** | **04 05 18.7** | **+1.1** |
| **TRD** | **Trivandrum** | **28.40** | **168** | *e*P | | **P** | **04 05 20.1** | **+1.3** |
| **SALA** | **Sala** | **28.43** | **272** | *e*P | | P | 04 05 15.2 | -4.1 |
| **ASF** | **Jabal al Asfar** | **28.46** | **271** | P | | **P** | **04 05 20.5** | **+1.1** |
| | comp=Z,3.8nm,0.7s,baz=72,slow=1.9,SNR=14 | | | | | | | |
| **TOTH** | **TOTAH** | **28.49** | **274** | *e*P | | **P** | **04 05 18.9** | **-0.7** |
| **QASN** | **Qassioun** | **28.56** | **274** | *e*P | | **P** | **04 05 23.1** | **+2.8** |
| **ULN** | **Ulaanbaatar** | **28.71** | **55***c* | *i*P | | **P** | **04 05 22.6** | **+1.1** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.71** | **55** | P | | **P** | **04 05 22.8** | **+1.3** |
| | SNR=9.0 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **28.71** | **55** | *e*P | | **P** | **04 05 22.4** | **+0.9** |
| | comp=Z,13nm,0.8s | | | | | | | |
| **KARA** | **Karaisali** | **28.71** | **282** | *e*P | | **P** | **04 05 22.5** | **+1.0** |
| **BRBR** | **Barbar** | **28.86** | **274** | *e*P | | **P** | **04 05 24.0** | **+0.9** |
| **NIG** | **Nigde** | **28.93** | **284** | *e*P | | **P** | **04 05 25.1** | **+1.4** |
| **SIM** | **Simferopol'** | **29.04** | **298** | *e*P | | **P** | **04 05 23.9** | **-0.4** |
| SIM | | | | pmax | pmax | | | |
| | comp=Z,38nm,0.9s | | | | | | | |
| **ILGA** | **Ilgaz** | **29.32** | **290** | P | | **P** | **04 05 28.2** | **+1.1** |
| **KMI** | **Kunming** | **29.34** | **104** | P | | **P** | **04 05 28.3** | **+0.9** |
| KMI | | | | PMZ | | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,290nm,6.8s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **29.41** | **274** | P | | **P** | **04 05 29.2** | **+1.5** |
| | comp=Z,1.6nm,0.4s,baz=68,slow=7.4,SNR=11 | | | | | | | |
| MMAI | | | | PcP | | **PcP** | **04 08 29.3** | **+0.3** |
| | comp=Z,20nm,0.8s,baz=74,slow=6.2,SNR=12 | | | | | | | |
| MMAI | | | | ScP | | **ScP** | **04 11 51.8** | **-1.5** |
| | comp=Z,3.2nm,0.6s,baz=69,slow=4.8,SNR=6.4 | | | | | | | |
| **YAYX** | **Yaylak** | **29.44** | **286** | *e*P | | **P** | **04 05 27.6** | **-0.4** |
| **BRTR** | **Keskin Array B** | **29.49** | **288** | P | | **P** | **04 05 29.4** | **+0.9** |
| | comp=Z,13nm,0.8s,baz=96,slow=7.7,SNR=58 | | | | | | | |
| BRTR | | | | pP | | **pP** | **04 06 08.1** | **+1.7** |
| | comp=Z,11nm,0.8s,baz=96,slow=9.0,SNR=3.5 | | | | | | | |
| BRTR | | | | PcP | | **PcP** | **04 08 28.7** | **-0.4** |
| | comp=Z,11nm,0.8s,baz=109,slow=4.5,SNR=5.6 | | | | | | | |
| **CMAI** | **Chiengmai2** | **29.52** | **116** | P | | **P** | **04 05 29.3** | **+0.3** |
| | comp=Z,36nm,1.0s | | | | | | | |
| **MMLI** | **Mount Malkishu** | **29.57** | **273** | *e*P | | **P** | **04 05 28.9** | **-0.2** |
| **ELDT** | **Eldivan** | **29.58** | **289** | P | | **P** | **04 05 31.2** | **+2.0** |
| **YESY** | **Yesilyurt** | **29.66** | **284** | *e*P | | **P** | **04 05 30.3** | **+0.3** |
| **MOS** | **Moscow** | **29.68** | **321** | *e*P | | P | 04 05 26.3 | -3.4 |
| MOS | | | | *e**PP | | pP | 04 06 08.8 | +1.2 |
| MOS | | | | *e* | | | 04 06 29.3 | |
| MOS | | | | *e*S | | S | 04 10 04.0 | -7.5 |
| MOS | | | | *e* | | | 04 11 12.8 | |
| MOS | | | | pmax | pmax | | | |
| | comp=Z,311nm,1.3s | | | | | | | |
| MOS | | | | pmax | pmax | | | |
| | comp=Z,500nm,1.4s | | | | | | | |
| **EREN** | **Erenkoy** | **29.75** | **279** | *e*P | | **P** | **04 05 29.9** | **-0.7** |
| **MHMT** | **Maesarieng** | **29.89** | **120** | P | | **P** | **04 05 33.8** | **+1.8** |
| | comp=Z,22nm,0.7s | | | | | | | |
| **BBAL** | **Bala** | **29.90** | **287** | P | | **P** | **04 05 32.5** | **+0.4** |
| **OBN** | **Obninsk** | **29.96** | **319** | P | | **P** | **04 05 33.4** | **+1.2** |
| | comp=Z,189nm,0.4s,baz=85,slow=2.9,SNR=36 | | | | | | | |
| OBN | | | | PP | | PnPn | 04 06 25.1 | -13 |
| | comp=Z,42nm,0.4s,baz=124,slow=14,SNR=4.7 | | | | | | | |
| **OBN** | **Obninsk** | **29.96** | **319***c* | *i*P | | **P** | **04 05 33.1** | **+0.9** |
| OBN | | | | *e**PP | | **pP** | **04 06 09.0** | **-1.1** |
| OBN | | | | *e* | | | 04 06 38.2 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,141nm,0.9s | | | | | | | |
| **OBN** | **Obninsk** | **29.96** | **319** | P | | **P** | **04 05 33.0** | **+0.9** |
| | comp=Z,2μm,0.4s,SNR=9.2 | | | | | | | |
| **SAFT** | **Safranbolu** | **30.08** | **291** | *e*P | | **P** | **04 05 32.9** | **-0.6** |
| **ANTO** | **Ankara** | **30.12** | **288** | *e*P | | **P** | **04 05 35.0** | **+1.1** |
| ANTO | | | | pmax | pmax | | | |
| | comp=Z,206nm,2.3s | | | | | | | |
| **ANTO** | **Ankara** | **30.12** | **288** | *e*P | | **P** | **04 05 35.0** | **+1.1** |
| | comp=Z,206nm,2.3s | | | | | | | |
| **BR231** | **Keskin MP Arra** | **30.14** | **288** | *e*P | | P | 04 05 29.5 | -4.6 |
| **LOD** | **Lodumlu** | **30.14** | **288** | *e*P | | P | 04 05 29.9 | -4.2 |
| **CHTO** | **Chiang Mai** | **30.18** | **118** | P | | **P** | **04 05 36.1** | **+1.5** |
| | comp=Z,63nm,1.4s | | | | | | | |
| **CHTO** | **Chiang Mai** | **30.18** | **118** | *e*P | | **P** | **04 05 34.7** | **+0.1** |
| CHTO | | | | pmax | pmax | | | |
| | comp=Z,65nm,1.6s | | | | | | | |
| **CHTO** | **Chiang Mai** | **30.18** | **118** | *e*P | | **P** | **04 05 34.7** | **+0.1** |
| | comp=Z,64nm,1.6s | | | | | | | |
| **CRAI** | **Chiangrai** | **30.30** | **114** | P | | P | 04 05 28.5 | -7.2 |
| **LFK** | **Lefkose** | **30.32** | **279** | *e*P | | **P** | **04 05 34.8** | **-0.9** |
| **DGPR** | **DIGLIPUR** | **30.41** | **134** | *e*P | | **P** | **04 05 36.6** | **0.0** |
| **CMAR** | **Chiang Mai Arr** | **30.41** | **119** | P | | **P** | **04 05 37.4** | **+0.8** |
| | comp=Z,16nm,0.9s,baz=300,slow=7.7,SNR=62 | | | | | | | |
| CMAR | | | | PcP | | **PcP** | **04 08 31.6** | **-0.1** |
| | comp=Z,11nm,0.9s,baz=294,slow=5.4,SNR=6.4 | | | | | | | |
| CMAR | | | | ScP | | **ScP** | **04 11 56.2** | **-0.4** |
| | comp=Z,1.7nm,0.3s,baz=302,slow=4.5,SNR=5.4 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.41** | **119***c* | *e*P | | **P** | **04 05 37.4** | **+0.8** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.0s | | | | | | | |
| **PALK** | **Pallekele** | **30.42** | **161** | P | | **P** | **04 05 38.2** | **+1.5** |
| | comp=Z,41nm,0.6s,baz=295,slow=7.5,SNR=24 | | | | | | | |
| **PALK** | **Pallekele** | **30.42** | **161** | *e*P | | **P** | **04 05 37.9** | **+1.2** |
| PALK | | | | pmax | pmax | | |

TLCR 32.80 299⇑ *iP* P 04 05 58.6 +1.4 4
IGD Bursa 32.81 290 P P 04 05 57.5 +0.1 4
MILM Milestii Mici 32.85 302⇓ *iP* P 04 05 58.4 +0.8 4
KIS Kishinev 32.85 302⇑ *iP* P 04 05 59.0 +1.4 4
KIS *i* pP **pP** 04 06 38.0 +2.2 4
KIS *eS* **S** 04 11 03.0 +1.8 4
KIS *es*S **ScP** 04 12 05.0 +0.6 4
KIS *eS*S **SnSn** 04 13 20.0 -1.1 4
KIS *eS*cS ScS 04 15 53.0 -12 4
KIS Kishinev 32.85 302 *i* P P 04 05 59.0 +1.4 4
KIS *i* *PP **pP** 04 06 38.0 +2.2 4
KIS *eS* **S** 04 11 03.0 +1.8 4
KIS *eS*S **SnSn** 04 13 20.0 -1.1 4
KHL Karahalli 32.85 286 *eP* P 04 05 57.1 -0.8 4
ELL Elmali 32.86 283 *eP* P 04 05 58.7 +0.7 4
KHAL Karahalli 32.87 286 P P 04 05 58.3 +0.2 4
AKASG Malin Array Be 32.98 309 P P 04 05 59.1 +0.5 4
comp=Z,111nm,0.6s,baz=81,slow=7.0,SNR=474
AKASG pP **pP** 04 06 38.4 +1.5 4
comp=Z,14nm,0.8s,baz=89,slow=7.7,SNR=1.7
AKASG PP **PnPn** 04 07 15.1 -0.2 4
comp=Z,16nm,0.6s,baz=85,slow=9.7,SNR=4.8
AKASG PcP **PcP** 04 08 37.5 -0.6 4
comp=Z,11nm,0.7s,baz=82,slow=3.0,SNR=6.5
AKASG ScP **ScP** 04 12 03.6 -1.2 4
comp=Z,0.6nm,0.4s,baz=116,slow=2.2,SNR=4.2
KIEV Kiev 32.99 309 *eP* P 04 05 59.0 +0.3 4
KIEV pmax pmax
comp=Z,149nm,0.7s
KIEV Kiev 32.99 309 *eP* P 04 05 59.0 +0.3 4
comp=Z,149nm,0.7s
AK11 Malin Array Si 33.01 309 *eP* P 04 05 59.0 +0.1 4
TIRR Tirgusor 33.09 297 *eP* P 04 06 00.5 +0.7 4
PBKT Sadao Pong 33.11 119 P P 04 06 01.4 +1.3 4
comp=Z,80nm,1.6s
AKAS Kas 33.21 282 P P 04 05 58.6 -2.5 4
LEOM Leova 33.22 301⇓ *iP* P 04 06 02.3 +1.5 4
SORM Soroca 33.24 304⇑ *iP* P 04 06 02.3 +1.3 4
CFR Carcaliu 33.28 299⇑ *iP* P 04 06 02.4 +1.0 4
SRDT SRDT 33.39 124 P P 04 06 04.2 +1.6 4
comp=Z,145nm,1.2s,comp=Z,8µm
DURS Dursunbey 33.46 288 *i* P P 04 06 03.9 +0.8 4
DURS Dursunbey 33.46 288 P P 04 06 03.9 +0.8 4
KULA Kula-Manisa 33.49 286 *eP* P 04 06 01.3 -2.1 4
KULA Kula-Manisa 33.49 286 *eP* P 04 06 01.3 -2.1 4
MSAB Monastry St. A 33.52 297⇓ *iP* P 04 06 05.0 +1.5 4
FETY Fethiye 33.53 283 *eP* P 04 06 02.4 -1.3 4
NONG Nongkai 33.70 114 P P 04 06 06.2 +0.9 4
comp=Z,59nm,1.1s
TMCR Tamitsa 34.05 335 *eP* P 04 06 08.8 +1.1 4
TMCR *eS* **S** 04 11 18.2 -1.0 4
TMCR pmax pmax
comp=Z,124nm,0.8s
VRI Vrincioaia 34.27 300⇓ *iP* P 04 06 11.9 +2.0 4
CHAI Chaiyaphum 34.27 119 P P 04 06 11.6 +1.3 4
comp=Z,24nm,1.1s,comp=Z,208nm
PLOR Plostina 34.32 300⇓ *iP* P 04 06 12.6 +2.2 4
TESR Tescani 34.33 301⇓ *iP* P 04 06 11.8 +1.4 4
KHON Khomkaen 34.58 117 P P 04 06 14.1 +1.2 4
comp=Z,36nm,0.4s
PHET Kaeng Krachan 34.77 125 P P 04 06 16.4 +1.9 4
comp=Z,13nm,0.8s,comp=Z,188nm
MLR Muntele Rosu 34.82 299 P P 04 06 17.0 +2.2 4
comp=Z,15nm,0.7s,baz=72,slow=1.7,SNR=74
MLR PP **PnPn** 04 07 38.5 +0.4 4
comp=Z,7.9nm,0.8s,baz=103,slow=9.7,SNR=3.9
MLR PcP **PcP** 04 08 43.2 -0.5 4
comp=Z,8.1nm,0.8s,baz=204,slow=4.0,SNR=3.0
MLR Muntele Rosu 34.82 299⇑ *iP* P 04 06 17.1 +2.3 4
SZH Strazhica 34.94 295 *iP* P 04 06 14.4 -1.3 4
SKNT Sakolnakorn 35.00 115 P P 04 06 17.4 +0.9 4
comp=Z,134nm,1.1s
DOPR Dopca 35.20 300⇑ *iP* P 04 06 19.4 +1.5 4
NACGM Naroch 35.24 316 *eP* P 04 06 18.0 -0.1 4
BJI Beijing 35.29 70 P P 04 06 18.3 -0.4 4
BJI pP **pP** 04 06 54.5 -2.7 4
BJI sP **sP** 04 07 13.5 -4.8 4
BJI PcP **PcP** 04 08 45.5 +0.6 4
BJI S **S** 04 11 38.8 +0.1 4
BJI LN
comp=Z,480nm,11.8s
BJI LE
comp=Z,380nm,6.1s
BJI LZ
comp=Z,210nm,19.9s
BOD Bodaibo 35.29 39 *eP* P 04 06 17.8 -0.7 4
BOD *e* 04 07 01.1
BOD pmax pmax
comp=Z,27nm,1.5s
BURAR Bucovina Array 35.32 303⇓ *iP* P 04 06 20.4 +1.3 4
BUR04 Bucovina Ar. S 35.33 303 *eP* P 04 06 19.4 +0.4 4
VOIR 35.45 299⇑ *iP* P 04 06 21.6 +1.4 4
ATD Arta Tunnel 35.59 233 P P 04 06 24.2 +2.6 4
comp=Z,33nm,0.9s,baz=40,slow=4.1,SNR=8.6
ARR Arges 35.75 290⇑ *iP* P 04 06 24.2 +1.5 4
ARCR ARCALIA 35.91 302⇓ *iP* P 04 06 26.4 +2.5 4
LVV L'vov 36.20 307⇓ *iP* P 04 06 27.2 +0.9 4
LVV *e* 04 08 47.4
LVV *eS* **S** 04 11 50.0 -2.4 4
LVV *e* 04 12 56.6
VSU Vasula 36.20 322*c* *iP* P 04 06 26.9 +0.7 4
VSU pmax pmax
comp=Z,449nm,0.9s
APE Apeiranthos 36.21 285 *eP* P 04 06 27.2 +0.6 4
APE pmax pmax
comp=Z,67nm,0.8s
APE Apeiranthos 36.21 285⇑ *iP* P 04 06 23.6 -3.0 4
LOT Lotru 36.35 299⇑ *iP* P 04 06 29.1 +1.2 4
BMR Baia Mare 36.49 303⇓ *iP* P 04 06 30.9 +2.1 4
TIA Tai'an 36.80 76⇑ P P 04 06 33.3 +1.7 4
TIA PMZ
comp=Z,70nm,1.2s
DRGR 37.03 302⇑ *iP* P 04 06 35.4 +1.9 4
KWP Kalwaria Pacla 37.04 306 *eP* P 04 06 34.9 +1.4 4
KWP Kalwaria Pacla 37.04 306⇑ *eP* P 04 06 34.9 +1.4 4
KWP Kalwaria Pacla 37.04 306⇓ *iP* P 04 06 35.3 +1.8 4
GZR Gura Zlata 37.05 299⇓ *iP* P 04 06 34.7 +1.0 4
TRPA Tarpa 37.13 304⇑ *eS* P 04 06 35.7 +1.5 4
SUW Suwalki 37.14 314 *i* P P 04 06 34.7 +0.5 4
SUW Suwalki 37.14 314⇑ *iP* P 04 06 34.7 +0.5 4
IDI Anoyia 37.16 282 P P 04 06 34.9 +0.2 4
comp=Z,31nm,0.4s,baz=96,slow=11,SNR=7.4
HIA Hailar 37.23 54 *eP* P 04 06 35.4 +0.3 4
HIA pmax pmax
comp=Z,10.0nm,1.0s
UZH Uzhgorod 37.30 305 *eP* P 04 06 35.5 -0.1 4
UZH *e**SP **sP** 04 07 37.1 +1.6 4
UZH *eS* **S** 04 12 06.9 -2.2 4
UZH *i* SSS SSS 04 14 47.9 4
KOLS Kolonicke sedl 37.31 305 *eP* P 04 06 37.1 +1.3 4
KOLS pmax pmax
comp=Z,40nm,0.9s
KOLS Kolonicke sedl 37.31 305 *eP* P 04 06 37.1 +1.3 4
LVZ Lovozero 37.46 338*c* *iP* P 04 06 37.4 +0.6 4
LVZ pmax pmax
comp=Z,55nm,0.8s
LVZ Lovozero 37.46 338 P P 04 06 37.9 +1.1 4
comp=Z,603nm,0.8s,SNR=25
FINES FINESS Array B 37.50 326 P P 04 06 38.1 +1.0 4
comp=Z,118nm,0.8s,baz=122,slow=9.7,SNR=325
FINES PP **PP** 04 08 03.2 -3.2 4
comp=Z,25nm,0.7s,baz=105,slow=14,SNR=5.2
APA Apatity 37.63 337⇓ *iP* P 04 06 38.4 +0.2 4
APA pmax pmax
comp=Z,135nm,1.4s
APA MLR MLR
comp=Z,2µm,14.0s
SIRR Siria 37.78 301⇑ *iP* P 04 06 40.3 +0.5 4
SIRR Siria 37.78 301⇑ *iP* P 04 06 40.3 +0.5 4
BZS Buzias 37.85 300⇑ *iP* P 04 06 41.9 +1.6 4
STHS Stebnicka Huta 37.99 306 *eP* P 04 06 42.8 +1.3 4
STHS pmax pmax
comp=Z,23nm,0.7s
STHS Stebnicka Huta 37.99 306 *eP* P 04 06 42.8 +1.3 4
QIZ Qiongzhong 38.17 107 P P 04 06 43.5 +0.3 4
QIZ pP **pP** 04 07 20.3 -2.0 4
QIZ sP **sP** 04 07 40.3 -2.9 4
QIZ S **ScP** 04 12 25.0 +0.8 4
QIZ PMZ
comp=Z,47nm,1.8s
BEL Belsk 38.37 310 *eP* P 04 06 45.1 +0.6 4
BEL Belsk 38.37 310⇑ *eP* P 04 06 45.2 +0.7 4
NIE Niedzica 38.61 306 *eP* P 04 06 48.4 +1.8 4
NIE Niedzica 38.61 306⇑ *eP* P 04 06 48.4 +1.8 4
TRTT Trang 38.66 131 P P 04 06 48.6 +1.2 4
comp=Z,39nm,1.1s,comp=Z,949nm
PSZ Piszkesteto 38.91 303 *eP* P 04 06 50.1 +0.9 4
PSZ *e* 04 08 23.4
PSZ pmax pmax
comp=Z,202nm,2.1s
PSZ Piszkesteto 38.91 303⇓ *iP* P 04 06 51.0 +1.8 4
PSZ Piszkesteto 38.91 303 *eP* P 04 06 50.1 +0.9 4
comp=Z,202nm,2.1s
PSZ *e* 04 08 23.4
OJC Ojcow 38.94 307 *eP* P 04 06 49.7 +0.4 4
OJC Ojcow 38.94 307 *eP* P 04 06 50.2 +0.9 4
OJC pmax pmax
comp=Z,116nm,1.0s
OJC Ojcow 38.94 307 *eP* P 04 06 50.1 +0.9 4
comp=Z,116nm,1.0s
KLNR Kaliningrad 38.95 314 *iP* P 04 06 49.7 +0.4 4
LANS Liptovska Anna 39.16 305 *eP* P 04 06 53.5 +2.3 4
LANS Liptovska Anna 39.16 305 *eP* P 04 06 53.5 +2.3 4
NJ2 Nanjing 39.41 82 *eP* P 04 06 54.0 +0.6 4
NJ2 PMZ
comp=Z,30nm,0.8s
VYHS Vyhne 39.59 304 *eP* P 04 06 55.8 +1.0 4
VYHS pmax pmax
comp=Z,35nm,1.5s
VYHS Vyhne 39.59 304 *eP* P 04 06 55.8 +1.0 4
VYHS *e*PP **PnPn** 04 08 33.6 -0.9 4
MLSI Meulaboh, Aceh 39.66 138 P P 04 06 53.9 -1.7 4
comp=Z,92nm,1.0s
SKLT Songkhla 39.75 130 P P 04 06 57.9 +1.5 4
comp=Z,19nm,1.2s,comp=Z,1µm
OKC Ostrava-Krasne 40.00 307 *eP* P 04 06 59.2 +1.1 4
OKC *e**PP **pP** 04 07 39.3 +1.9 4
OKC *e* 04 08 31.2
OKC Ostrava-Krasne 40.00 307 *eP* P 04 06 59.2 +1.1 4
OKC *ex* x 04 07 02.1
OKC *epP* **pP** 04 07 39.3 +1.9 4
OKC *ePP* **PP** 04 08 31.2 -2.7 4
FURI Furi 40.27 235 *eP* P 04 07 09.3 +8.3 4
comp=Z,34nm,0.9s
MORC Moravsky Berou 40.40 306 *eP* P 04 07 02.2 +0.8 4
MORC pmax pmax
comp=Z,199nm,0.8s
MORC Moravsky Berou 40.40 306⇑ *iP* P 04 07 02.8 +1.4 4
MORC Moravsky Berou 40.40 306 *eP* P 04 07 02.2 +0.8 4
comp=Z,199nm,0.8s
GKP Gorka Klasztor 40.60 312 *eP* P 04 07 03.6 +0.7 4
GKP Gorka Klasztor 40.60 312⇑ *eP* P 04 07 03.6 +0.7 4
ZST Bratislava 40.77 304 *eP* P 04 07 04.7 +0.3 4
ZST *e* 04 08 43.7
ZST Bratislava 40.77 304 *eP* P 04 07 04.7 +0.3 4
ZST *ePP* **PP** 04 08 43.7 +1.6 4
CLNS Chul'man 40.85 43 *eP* P 04 07 05.6 +0.6 4
CLNS pmax pmax
comp=Z,28nm,1.2s
CLNS pmax pmax
comp=E,17nm,1.0s
CLNS pmax pmax
comp=N,9.0nm,1.2s
KRLC Kraliky 40.88 307 *eP* P 04 07 06.5 +1.1 4
KRLC *e**PP **pP** 04 07 42.5 -2.3 4
KRLC *e* 04 08 47.0
KRLC Kraliky 40.88 307 *eP* P 04 07 06.5 +1.1 4
KRLC *ex* x 04 07 09.5
KRLC *epP* **pP** 04 07 42.5 -2.3 4
KRLC *ePP* **PnPn** 04 08 47.0 -2.4 4
KCSI Kotacane, Aceh 41.02 137 P P 04 07 05.3 -1.5 4
comp=N,41nm,1.0s,comp=N,6µm
VRAC Vranov 41.03 306 P P 04 07 08.1 +1.5 4
comp=N,42nm,0.9s,baz=88,slow=9.0,SNR=43
VRAC Vranov 41.03 306⇓ *iP* P 04 07 08.6 +2.0 4
ARA0 ARCESS Array S 41.14 338 *eP* P 04 07 08.4 +1.2 4
ARCES ARCESS Array B 41.14 338 P P 04 07 08.4 +1.3 4
comp=N,98nm,0.7s,baz=112,slow=8.4,SNR=354
ARE0 ARCESS Array S 41.14 338⇑ *iP* P 04 07 08.5 +1.3 4
ARE0 IAmb IAmb 04 07 09.3
comp=Z,153nm,1.0s
DPC Dobruska-Polom 41.16 307 *eP* P 04 07 09.1 +1.4 4
DPC Dobruska-Polom 41.16 307 *eP* P 04 07 09.1 +1.4 4
DPC *ex* x 04 07 12.4
KSP Ksiaz 41.17 308 *eP* P 04 07 08.7 +1.1 4
KSP Ksiaz 41.17 308⇑ *eP* P 04 07 08.7 +1.1 4
SOP Sopron 41.17 303⇑ *eP* P 04 07 08.6 +0.9 4
SNSI Sinabang, Aceh 41.18 140 P P 04 07 09.6 +1.5 4
comp=Z,202nm,0.9s
KULM Kulim 41.25 132 *eP* P 04 07 08.6 0.0 4
comp=Z,24nm,1.2s
UPC Upice 41.36 308 *eP* P 04 07 10.5 +1.3 4
UPC Upice 41.36 308 *eP* P 04 07 10.5 +1.3 4
CN2 Changchun 41.54 63 *eP* P 04 07 11.3 +0.6 4
CN2 *epP* **pP** 04 07 51.5 +1.2 4
CN2 *eS* **S** 04 13 10.5 -2.0 4
CN2 PMZ
comp=Z,10.0nm,1.2s
CONA Conrad Observa 41.62 304 *iP* P 04 07 12.5 +1.1 4
comp=Z,69nm,1.1s,SNR=21
KTK1 Kautokeino 41.62 336⇑ *iP* P 04 07 11.9 +0.9 4
KTK1 IAmb IAmb 04 07 12.6
comp=Z,101nm,0.8s
TREC Trest 41.76 306 *eP* P 04 07 13.7 +1.2 4
TREC Trest 41.76 306 *eP* P 04 07 13.7 +1.2 4
ARSA Arzberg 41.91 303 *iP* P 04 07 14.6 +0.8 4
comp=Z,21nm,1.2s,SNR=6.1
GROS Grobnik 42.01 302 *i* Pn P 04 07 15.6 +1.0 4
GROS Grobnik 42.01 302 *eP* PcP 04 09 06.1 0.0 4
BSD Bornholm Skovb 42.03 315⇑ *iP* P 04 07 14.4 -0.2 4
BSD pmax pmax
comp=Z,120nm,0.8s
BSD Bornholm Skovb 42.03 315⇑ *iP* P 04 07 14.4 -0.2 4
comp=Z,116nm,0.8s
GOPC GO Pecny, Ondr 42.17 307 *eP* P 04 07 17.1 +1.3 4
GOPC *e**PP **pP** 04 07 57.7 +2.2 4
GOPC *e* 04 09 00.0
GOPC GO Pecny, Ondr 42.17 307 *eP* P 04 07 17.1 +1.3 4
GOPC *epP* **pP** 04 07 57.7 +2.2 4
GOPC *ePP* **PP** 04 09 00.0 +2.8 4
HAMF Hammerfest 42.22 339⇑ *iP* P 04 07 17.4 +1.5 4
HAMF IAmb IAmb 04 07 18.3
comp=Z,194nm,0.7s
PSI Prapat 42.26 136 P P 04 07 17.0 0.0 4
comp=Z,25nm,0.7s,baz=302,slow=8.8,SNR=21
PSI Prapat 42.26 136 P P 04 07 17.0 0.0 4
PSI pmax pmax
comp=Z,25nm,0.7s
PSI Prapat 42.26 136 *eP* P 04 07 16.5 -0.5 4
comp=Z,28nm,0.7s
PVCC Panska Ves 42.28 308 *eP* P 04 07 17.8 +1.2 4
PVCC *e* 04 09 01.9
PVCC *e* 04 09 05.5
PVCC Panska Ves 42.28 308 *eP* P 04 07 17.8 +1.2 4
PVCC *ePP* **PP** 04 09 01.9 +3.6 4
PVCC *ex* x 04 09 05.5
SOKA Soboth 42.31 302 *iP* P 04 07 18.3 +1.2 4
comp=Z,30nm,0.6s,SNR=15
BOJS Bojanci 42.31 300 *i* Pn P 04 07 18.0 +1.0 4
BOJS Bojanci 42.31 300 *iP* PcP 04 09 07.3 +0.3 4
PRU Pruhonice 42.33 307 *eP* P 04 07 18.2 +1.2 4
PRU *e* 04 08 59.6
PRU Pruhonice 42.33 307 *eP* P 04 07 18.2 +1.2 4
PRU *ePP* **PP** 04 08 59.6 +0.8 4
PRA Prague 42.39 307 *eP* P 04 07 18.5 +1.0 4
PRA *e* 04 09 00.2
PRA Prague 42.39 307 *eP* P 04 07 18.5 +1.0 4
PRA *ePP* **PP** 04 09 00.2 +0.7 4
VISS Visnje 42.55 301 *i* Pn P 04 07 20.5 +1.5 4
VISS Visnje 42.55 301 *eP* PcP 04 09 08.2 +0.3 4
BRG Berggiesshubel 42.66 308 *iP* P 04 07 20.9 +1.2 4
comp=Z,99nm,1.0s
BRG *i* pP **pP** 04 08 01.4 +2.0 4
comp=Z,31nm,1.1s
BRG *e* 04 12 40.4
comp=Z,29nm,1.8s
comp=N,573nm,23.6s
comp=E,293nm,20.1s
comp=Z,958nm,23.5s
BRG Berggiesshubel 42.66 308 *i* P P 04 07 20.9 +1.2 4
BRG *i* *PP **pP** 04 08 01.5 +2.0 4
BRG pmax pmax
comp=Z,99nm,1.0s
BRG pmax pmax
comp=Z,31nm,1.1s
BRG pmax pmax
comp=Z,29nm,1.8s
BRG MLR MLR
comp=N,573nm,23.6s
BRG MLR MLR
comp=E,293nm,20.1s
BRG MLR MLR
comp=Z,958nm,23.5s
OBKA Obir 42.66 302⇑ *iP* P 04 07 21.1 +1.2 4
comp=Z,29nm,1.1s
MOA Molln 42.69 304 *i* P P 04 07 20.8 +0.8 4
comp=Z,49nm,1.2s,SNR=12
GSI Gunungsitoli 42.77 139 P P 04 07 22.3 +1.3 4
comp=Z,195nm,1.0s,comp=Z,2µm
GSI Gunungsitoli 42.77 139 *eP* P 04 07 22.2 +1.2 4
RGN Rugen 42.94 314 *eP* P 04 07 22.7 +0.8 4
comp=Z,472nm,1.1s
CUC Castrocucco 42.95 292 *eP* P 04 07 22.4 +0.2 4
comp=Z,49nm,0.7s
GEC2 GERESS Array S 42.97 305 *eP* P 04 07 22.9 +0.6 4
comp=Z,34nm,1.5s,baz=85,slow=7.8
GEC2 *e*PP **PP** 04 09 07.4 +1.6 4
GERES GERESS Array B 42.97 305 P P 04 07 23.4 +1.1 4
comp=Z,3.4nm,0.5s,baz=90,slow=8.4,SNR=28
GERES PP **PP** 04 09 05.8 0.0 4
comp=Z,13nm,0.9s,baz=90,slow=8.0,SNR=8.1
KHC Kasperske Hory 43.02 306 *eP* P 04 07 22.6 -0.1 4
KHC *e* 04 09 06.8
KHC pmax pmax
comp=Z,20nm,1.4s
KHC Kasperske Hory 43.02 306 *eP* P 04 07 23.5 +0.8 4
KHC *ex* x 04 07 27.1
KHC *epP* **pP** 04 08 00.4 -2.1 4
KHC *ePP* **PP** 04 09 07.0 +0.7 4
KHC Kasperske Hory 43.02 306 *eP* P 04 07 22.6 -0.1 4
comp=Z,20nm,1.4s
KHC *e* 04 09 06.8
JAVS Javornik 43.08 301 *ePn* P 04 07 24.2 +0.9 4
JAVS Javornik 43.08 301 *i* P PcP 04 09 09.6 -0.1 4
HFS Hagfors 43.08 322 P P 04 07 23.6 +0.6 4
comp=Z,160nm,0.5s,baz=98,slow=11,SNR=540
CLL Collm 43.22 309⇑ *iP* P 04 07 24.7 +0.5 4
CLL *i* 04 09 09.8
CLL pmax pmax
comp=Z,59nm,1.0s
CLL pmax pmax
comp=Z,71nm,1.5s
CLL Collm 43.22 309 *eP* P 04 07 24.5 +0.3 4
comp=Z,59nm,0.9s,baz=85,slow=7.8
CLL *e*PP PcP 04 09 09.6 -0.3 4
CLL Collm 43.22 309⇑ *iP* P 04 07 24.7 +0.5 4
comp=Z,59nm,1.0s
CLL *i* PcP PcP 04 09 09.8 -0.2 4
comp=Z,71nm,1.5s
CLL *e*PP PP 04 09 09.0 +0.7 4
CLL Collm 43.22 309 *eP* P 04 07 25.2 +1.0 4
comp=Z,54nm,0.8s
MYKA Terra Mystica 43.26 302⇑ *iP* P 04 07 24.0 -0.8 4
comp=Z,16nm,0.6s
TRO Tromso 43.27 336 *eP* P 04 07 25.4 +1.1 4
TRI Trieste 43.31 301 *eP* P 04 07 25.3 +0.3 4
TRI Trieste 43.31 301 *eP* P 04 07 25.3 +0.3 4
KBA Koelnbreinsper 43.41 303⇑ *iP* P 04 07 26.6 +0.6 4
comp=Z,18nm,0.5s
COP Copenhagen 43.47 315⇑ *iP* P 04 07 27.0 +1.0 4
COP pmax pmax
comp=Z,120nm,0.8s
COP Copenhagen 43.47 315⇑ *iP* P 04 07 27.0 +1.0 4
comp=Z,123nm,0.8s
WET Wettzell 43.48 306 *eP* P 04 07 27.0 +0.7 4
comp=Z,22nm,1.3s,baz=85,slow=7.8
WET *e*PP PcP 04 09 10.8 -0.1 4
TANN Tannenbergstha 43.63 308 *eP* P 04 07 28.4 +0.8 4
comp=Z,60nm,1.3s,baz=85,slow=7.8
TANN *e*PP PcP 04 09 11.7 +0.2 4
NKC Novy Kostel 43.65 307 *eP* P 04 07 29.2 +1.5 4
NKC *e* 04 09 11.7
NKC Novy Kostel 43.65 307 *eP* P 04 07 29.2 +1.5 4
NKC *e*PP PcP 04 09 11.7 +0.2 4
RJOB Jochberg 43.69 304 *eP* P 04 07 28.3 +0.2 4
comp=Z,64nm,1.6s,baz=85,slow=7.8
RJOB *e*PP PcP 04 09 11.2 -0.5 4
MOR8 Moi Rana 43.82 331⇑ *iP* P 04 07 29.1 +0.2 4
MOR8 IAmb IAmb 04 07 29.8
comp=Z,302nm,0.6s
ROTZ Rotzenmuhle 43.85 307 *eP* P 04 07 30.7 +1.5 4
comp=Z,97nm,1.4s,baz=85,slow=7.8
YAK Yakutsk 43.91 35 *eP* P 04 07 28.9 -0.6 4
YAK *e**PP **pP** 04 08 13.2 +3.8 4
YAK *e* 04 09 12.2
YAK *e* 04 09 14.7
YAK *eS* **S** 04 13 45.2 -1.3 4
YAK *e**SS **sS** 04 14 58.5 +2.0 4
YAK pmax pmax
comp=Z,61nm,0.9s
YAK pmax pmax
comp=E,29nm,1.3s
YAK pmax pmax
comp=N,11nm,1.1s
YAK pmax pmax
comp=Z,21nm,0.5s
YAK smax smax
comp=N,109nm,1.4s
YAK smax smax
comp=E,144nm,1.5s
STEI Steigen 43.98 333 *eP* P 04 07 31.2 +1.2 4
STEI IAmb IAmb 04 07 31.7
comp=Z,89nm,0.7s
ABTA Abfaltersbach 44.02 302⇑ *iP* P 04 07 29.2 -1.5 4
comp=Z,15nm,0.9s
MOX Moxa 44.15 308 *eP* P 04 07 32.4 +0.8 4
comp=Z,87nm,1.3s,baz=85,slow=7.8
NC602 NORSAR Array S 44.21 323 *eP* P 04 07 32.5 +0.6 4
NC602 IAmb IAmb 04 07 33.0
comp=Z,96nm,0.9s
MNSI Mandailing Nat 44.28 137 P P 04 07 33.0 0.0 4
comp=Z,136nm,0.9s
MDJ Mudanjiang 44.33 61 P P 04 07 33.5 +0.3 4
MDJ PMZ
comp=Z,20nm,1.4s
MDJ PMZ
comp=Z,240nm,7.5s
NB2 NORSAR Subarra 44.40 323 P P 04 07 33.8 +0.3 4
comp=Z,167nm,0.7s,baz=95,slow=7.9
NB2 NORSAR Subarra 44.40 323 P P 04 07 33.8 +0.3 4
baz=95,slow=7.9
NOA NORSAR Array B 44.40 323 P P 04 07 33.6 +0.2 4
comp=Z,185nm,0.8s,baz=96,slow=7.8,SNR=374
KONS Konsvik 44.42 331 *eP* P 04 07 34.3 +0.8 4
KONS IAmb IAmb 04 07 35.0
comp=Z,72nm,0.6s
STOK Stokkvaagen 44.42 331 *eP* P 04 07 35.1 +1.7 4
GRF Grafenberg Arr 44.49 307 *eP* P 04 07 35.9 +1.5 4
comp=Z,195nm,1.5s,baz=85,slow=7.8
GRF *ePP* **PP** 04 09 21.9 0.0 4
GRFO Grafenberg 44.49 307 *eP* P 04 07 35.7 +1.3 4
GRFO pmax pmax
comp=Z,150nm,1.4s
GRFO Grafenberg 44.49 307 *eP* P 04 07 35.7 +1.3 4
comp=Z,150nm,1.4s
SSLB Suanglung 44.50 92 *eP* P 04 07 36.6 +1.8 4
comp=Z,109nm,1.2s
NSS Namsos 44.51 328 *eP* P 04 07 35.0 +0.8 4
WTTA Wattenberg 44.53 303⇑ *iP* P 04 07 34.9 0.0 4
comp=Z,25nm,0.6s,SNR=9.5
WATA Walderalm 44.56 303⇑ *iP* P 04 07 35.0 -0.2 4
comp=Z,13nm,0.5s,SNR=6.7
NB002 NORSAR Array S 44.57 323 *eP* P 04 07 35.1 +0.2 4
FUR Furstenfeldbru 44.65 305 *eP* P 04 07 36.4 +0.8 4
comp=Z,191nm,1.5s,baz=85,slow=7.8
FUR *epP* **pP** 04 08 17.7 +2.0 4
LOF Lofoten 44.65 333 *eP* P 04 07 35.6 +0.4 4
BSEG Bad Segeberg 44.72 313 *eP* P 04 07 37.0 +1.0 4
comp=Z,136nm,0.9s,baz=85,slow=7.8
KSAR Wonju Array Be 44.78 71 P P 04 07 37.4 +0.6 4
KSAR 04 09 15.0
KSAR Wonju Array Be 44.78 71 P P 04 07 37.4 +0.6 4
KSAR PcP PcP 04 09 15.0 -0.6 4
KSRS Korea Array 44.81 71 P P 04 07 37.4 +0.4 4
comp=Z,27nm,1.1s,baz=278,slow=6.9,SNR=43
KSRS PcP PcP 04 09 15.0 -0.6 4
comp=Z,14nm,0.9s,baz=283,slow=3.8,SNR=8.6
KSRS Korea Array 44.81 71 P P 04 07 37.4 +0.4 4
KSRS 04 09 15.0
KSRS pmax pmax
comp=Z,27nm,1.1s
KSRS pmax pmax
comp=Z,14nm,0.9s

**CLZ Clausthal 44.82 310** *e*P **P** **04 07 37.7 +0.8**
comp=Z,152nm,1.3s,baz=85,slow=7.8
**MOTA Moosalm 44.88 303**⇑ *i*P **P** **04 07 37.2 -0.4**
comp=Z,13nm,0.5s,SNR=14
**NRDL Niedersach Rie 44.93 311** *e*P **P** **04 07 38.7 +1.1**
comp=Z,133nm,1.2s,baz=85,slow=7.8
NRDL *e*PP **PP** **04 09 30.1 +3.8**
**YULB Yu-li 44.97 92** *e*P **P** **04 07 39.2 +0.8**
comp=Z,71nm,1.1s
**TWG Pinlang 45.06 93** *e*P **P** **04 07 41.6 +2.4**
comp=Z,837nm,1.3s
**TBLU Trondheim 45.07 326** *e*P **P** **04 07 39.3 +0.6**
**KLR Kul'dur 45.08 54** *e*P **P** **04 07 36.6 -2.4**
KLR pmax pmax
comp=E,68nm,1.6s
KLR pmax pmax
comp=Z,130nm,1.6s
**RETA Reutte 45.09 304**⇑ *i*P **P** **04 07 38.8 -0.3**
comp=Z,15nm,0.7s,SNR=5.9
**GTTG Gvttingen 45.10 309** *e*P **P** **04 07 39.8 +0.7**
comp=Z,159nm,1.1s,baz=85,slow=7.8
GTTG *e*PP **PP** **04 09 30.9 +2.7**
**KONO Kongsberg 45.10 321** *e*P **P** **04 07 39.7 +0.7**
KONO IAmb IAmb 04 07 40.2
comp=Z,103nm,0.8s
**KONO Kongsberg 45.10 321** *e*P **P** **04 07 38.8 -0.2**
KONO pmax pmax
comp=Z,101nm,0.8s
**KONO Kongsberg 45.10 321** *e*P **P** **04 07 38.8 -0.2**
comp=Z,101nm,0.8s
**FETA Feichten 45.18 303**⇑ *i*P **P** **04 07 39.7 -0.3**
comp=Z,22nm,0.5s,SNR=16
**BJO Bjornoya 45.22 343** *e*P **P** **04 07 41.5 +1.8**
BJO IAmb IAmb 04 07 42.0
comp=Z,196nm,0.9s
**MUD Monsted U'grnd 45.29 316** *i* P **P** **04 07 41.9 +1.4**
MUD pmax pmax
comp=Z,99nm,1.1s
**MUD Monsted U'grnd 45.29 316** *i* P **P** **04 07 41.9 +1.4**
comp=Z,99nm,1.1s
**BKNI Bangkinang 45.48 136** P **P** **04 07 41.8 -0.7**
comp=Z,163nm,0.9s
**DOMB Dombas 45.51 324** *e*P **P** **04 07 43.0 +0.8**
DOMB IAmb IAmb 04 07 43.6
comp=Z,114nm,1.1s
**FUORN Ofenpass-Fuorn 45.57 303** *e*P **P** **04 07 42.8 -0.4**
comp=Z,26nm,0.7s
**HOMB Homborsund 45.64 319** *e*P **P** **04 07 44.3 +1.1**
**DAVA Damuels 45.71 304** *i* P **P** **04 07 44.3 +0.1**
comp=Z,60nm,0.5s,SNR=37
**PPI Padang Panjang 45.77 137** P **P** **04 07 44.9 +0.2**
comp=Z,90nm,0.9s
**SISI Saibi 45.79 139** P **P** **04 07 46.0 +1.1**
comp=Z,134nm,1.0s,comp=Z,2µm
**DAVOX Davos/Dischmat 45.80 303** P **P** **04 07 45.1 +0.2**
comp=Z,24nm,0.6s,baz=98,slow=5.9,SNR=49
DAVOX PcP **PcP** **04 09 19.3 +0.1**
comp=Z,18nm,0.5s,baz=56,slow=3.6,SNR=8.7
DAVOX ScP **ScP** **04 12 53.8 -0.8**
comp=Z,6.1nm,0.9s,baz=169,slow=12,SNR=5.0
**MSHR Mys Shultsa 45.87 63** *i* P **P** **04 07 46.4 +1.1**
**STU Stuttgart 45.93 306** *e*P **P** **04 07 46.2 +0.6**
comp=Z,43nm,0.8s,baz=85,slow=7.8
**MYKOM Kota Tinggi 45.95 131** *e*P **P** **04 07 46.4 +0.2**
comp=Z,35nm,0.9s
**USRK Ussuriysk Ar. 46.10 61** P **P** **04 07 47.4 +0.3**
comp=Z,19nm,1.1s,baz=272,slow=6.9,SNR=14
**PDSI Padang 46.18 137** P **P** **04 07 47.8 -0.2**
comp=Z,28nm,0.4s
**TNS Taunus Mts 46.21 308** *e*P **P** **04 07 48.5 +0.7**
comp=Z,51nm,1.2s,baz=85,slow=7.8
**TUE Stuetta 46.21 303** *e*P **P** **04 07 47.6 -0.6**
comp=Z,14nm,0.5s
**VLA Vladivostok 46.27 62** *e*P **P** **04 07 47.3 -1.0**
VLA pmax pmax
comp=Z,84nm,1.0s
**SNART Snartemo 46.32 319** *e*P **P** **04 07 49.8 +1.2**
SNART IAmb IAmb 04 07 50.4
comp=Z,51nm,0.6s
**IBBN Ibbenburen 46.38 311** *e*P **P** **04 07 49.8 +0.7**
comp=Z,156nm,1.0s,baz=85,slow=7.8
IBBN *e*PP **PP** **04 09 44.6 +4.1**
**AKN Aaknes 46.48 324** *e*P **P** **04 07 50.9 +1.1**
**BFO Black Forest 46.57 305** *ce*P **P** **04 07 51.9 +1.2**
**BFO Black Forest 46.57 305** *e*P **P** **04 07 51.0 +0.3**
comp=Z,36nm,1.3s,baz=85,slow=7.8
**BFO Black Forest 46.57 305** P **P** **04 07 51.4 +0.7**
comp=Z,105nm,0.7s,SNR=6.1
**BFO Black Forest 46.57 305** *e*P **P** **04 07 51.0 +0.3**
**ODD1 Odda 46.61 321** *e*P **P** **04 07 52.0 +1.2**
**BLS5 Blasjo 46.70 321** *e*P **P** **04 07 53.0 +1.5**
BLS5 IAmb IAmb 04 07 53.8
comp=Z,112nm,1.0s
**BUG Bochum--Univer 46.79 310** *e*P **P** **04 07 52.9 +0.6**
comp=Z,109nm,1.2s,baz=85,slow=7.8
**HYA Hoyanger 46.84 323** *e*P **P** **04 07 53.7 +1.2**
**WTSB Winterswijk 47.01 310** *e*P **P** **04 07 54.8 +0.8**
comp=Z,184nm,1.4s
**HSPB Hornsund (broa 47.12 345** *e*P **P** **04 07 55.1 +0.6**
HSPB IAmb IAmb 04 07 55.9
comp=Z,101nm,0.9s
**RUND Rundenannen 47.24 322** *e*P **P** **04 07 56.9 +1.2**
**BER Bergen 47.26 322** *e*P **P** **04 07 57.0 +1.3**
**KMY Karmoy 47.32 320** *e*P **P** **04 07 57.8 +1.5**
**ASK Askoy 47.33 322** *e*P **P** **04 07 57.5 +1.3**
**HABR Khabarovsk 47.35 54** *e*P **P** **04 07 55.3 -1.3**
HABR *e**PP **pP** **04 08 35.0 -2.2**
HABR *e**SP **sP** **04 08 55.4 -2.3**
HABR *e* 04 09 23.0
HABR *e* 04 09 48.0
HABR *e*S **S** **04 14 35.4 -0.7**
HABR *e**SS **sS** **04 15 45.9 -1.0**
HABR *e* 04 17 29.8
HABR *e*SS **SS** **04 18 06.5 +0.8**
HABR pmax pmax
comp=Z,99nm,1.5s
HABR MLR MLR
comp=Z,590nm,20.0s
**SPB2 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.4 +2.2**
**SPB1 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.5 +2.2**
**SPA2 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.5 +2.2**
**SPA0 Spitsbergen Ar 47.48 347**⇑ *i*P **P** **04 07 59.1 +1.8**
**SPA0 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.5 +2.2**
**SPA1 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.5 +2.2**
**SPB3 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.5 +2.2**
**SPITS Spitsbergen Ar 47.48 347** P **P** **04 07 58.6 +1.3**
comp=Z,49nm,0.8s,baz=126,slow=8.4,SNR=36
**SPA3 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.5 +2.2**
**SPB5 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.5 +2.2**
**SPB4 Spitsbergen Ar 47.48 347** *e*P **P** **04 07 59.6 +2.2**
**PPSI Pulau Pagai 47.49 139** P **P** **04 07 59.0 +0.9**
comp=Z,155nm,1.2s
**SENIN Lac Senin/Sane 47.62 303** *e*P **P** **04 07 59.0 -0.1**
**MEM Membach 47.70 309** P **P** **04 07 59.9 +0.6**
comp=Z,31nm,1.3s
**HGN Heimansgroeve 47.72 309** *e*P **P** **04 07 59.9 +0.5**
comp=Z,37nm,1.3s
**WLF Walferdange 47.76 307** P **P** **04 08 01.4 +1.6**
comp=Z,61nm,1.3s
**WLF Walferdange 47.76 307** *e*P **P** **04 08 01.2 +1.4**
WLF pmax pmax
comp=Z,92nm,1.1s
**WLF Walferdange 47.76 307** *e*P **P** **04 08 00.7 +0.9**
comp=Z,91nm,1.0s,baz=85,slow=7.8
WLF *e*pP **pP** **04 08 42.1 +1.7**
WLF *e*PP **PP** **04 09 56.3 +3.3**
**WLF Walferdange 47.76 307** *e*P **P** **04 08 01.2 +1.4**
comp=Z,92nm,1.1s
**BEBN Eben Emael 47.87 309** P **P** **04 08 02.2 +1.6**
**BCLA Clavier 48.17 308** P **P** **04 08 04.4 +1.4**
**BNI Bardonecchia 48.34 301** *e*P **P** **04 08 03.5 -1.0**
**BNI Bardonecchia 48.34 301** *e*P **P** **04 08 03.5 -1.0**
**JNU Nakatsue 48.52 75** P **P** **04 08 07.0 +1.0**
comp=Z,72nm,1.0s,baz=313,slow=3.6,SNR=17
**JNU Nakatsue 48.52 75** *e*P **P** **04 08 06.2 +0.2**
**KBS Kingsbay 48.60 347**⇑ *i*P **P** **04 08 07.5 +1.7**
KBS IAmb IAmb 04 08 08.3
comp=Z,105nm,0.9s
**KBS Kingsbay 48.60 347** *e*P **P** **04 08 06.5 +0.7**
KBS *e**PP **pP** **04 08 50.0 +3.5**
KBS pmax pmax
comp=Z,113nm,0.9s
**KBS Kingsbay 48.60 347** *e*P **P** **04 08 06.5 +0.7**
comp=Z,113nm,0.9s
KBS *e*pP **pP** **04 08 50.0 +3.5**

**DOU Dourbes 48.67 308** P **P** **04 08 07.9 +1.1**
**SNF Seneffe 48.80 309** P **P** **04 08 09.0 +1.3**
**KMBO Kilima Mbogo 48.90 228** P **P** **04 08 10.6 +1.4**
comp=Z,21nm,0.8s,baz=31,slow=11,SNR=70
**KMBO Kilima Mbogo 48.90 228** *ce*P **P** **04 08 10.6 +1.4**
KMBO pmax pmax
comp=Z,21nm,0.8s
**KMBO Kilima Mbogo 48.90 228** P **P** **04 08 10.9 +1.7**
SNR=10
**KMBO Kilima Mbogo 48.90 228** *e*P **P** **04 08 10.2 +1.0**
comp=Z,24nm,0.8s
**MASI Maura Aman, Be 49.01 137** P **P** **04 08 09.3 -0.5**
comp=Z,349nm,1.0s,comp=Z,10µm
**KEST Kesra 49.09 289** P **P** **04 08 11.1 +0.9**
comp=Z,24nm,0.7s,baz=332,slow=2.3,SNR=50
**KEST Kesra 49.09 289** *e*P **P** **04 08 11.6 +1.3**
**KSI Kapahiang 49.62 137** P **P** **04 08 13.5 -1.0**
comp=Z,395nm,0.5s,comp=Z,5µm
**SSB Saint Sauveur 49.75 302** *e*P **P** **04 08 15.3 +0.2**
SSB *e**PP **pP** **04 08 57.8 +1.8**
SSB *e* 04 09 29.3
SSB pmax pmax
comp=Z,21nm,0.5s
**SSB Saint Sauveur 49.75 302** *e*P **P** **04 08 15.3 +0.2**
comp=Z,21nm,0.5s
SSB *e*pP **pP** **04 08 57.8 +1.8**
SSB *e*PcP **PcP** **04 09 29.3 -4.0**
**YEL1 Yell 50.42 322**‖ *e*P **P** **04 08 20.6 +0.8**
**PPBI Pangkal Pinang 50.46 132** P **P** **04 08 20.6 -0.1**
comp=Z,44nm,1.2s,comp=Z,22µm
**SAN1 Sandwick 50.55 322**‖ *e*P **P** **04 08 21.4 +0.6**
**SBUM Sibu 50.86 122** *e*P **P** **04 08 25.1 +1.3**
**KKM Kota Kinabalu 51.17 115** *e*P **P** **04 08 27.6 +1.5**
KKM *e*pP **pP** **04 09 09.3 +2.0**
**MDSI Maura Dua 51.20 136** P **P** **04 08 22.7 -3.5**
comp=Z,24nm,1.0s
**LWLI Liwa 51.56 136** P **P** **04 08 29.2 +0.2**
**SKP1 Kophill 51.70 311** *e*P **P** **04 08 29.8 +0.3**
**HPK Haverah Park 51.71 314**‖ *e*P **P** **04 08 30.0 +0.5**
HPK AMB AMB 04 08 30.4
comp=Z,148nm,1.2s
**CWF Charnwood Fore 51.78 312** *e*P **P** **04 08 30.3 +0.2**
**MLA1 Latheron 51.88 320**‖ *e*P **P** **04 08 31.2 +0.6**
**ESY Stoneypath 51.89 317**‖ *e*P **P** **04 08 31.3 +0.4**
**MCD Coleburn Disti 51.94 319**‖ *e*P **P** **04 08 32.1 +0.9**
**EDU Dundee 52.00 317**‖ *e*P **P** **04 08 32.0 +0.4**
**WOL Wolverton 52.04 311** *e*P **P** **04 08 32.2 +0.1**
WOL AMB AMB 04 08 33.6
comp=Z,148nm,1.2s
**STKI Sintang 52.12 125** P **P** **04 08 35.7 +2.7**
**BIGH Upper Bighouse 52.13 320** *e*P **P** **04 08 32.5 0.0**
**EDI Edinburgh 52.21 317**‖ *e*P **P** **04 08 33.3 +0.1**
**KASI Kota Agung 52.23 136** P **P** **04 08 30.4 -3.4**
comp=Z,79nm,1.2s
**STNC Stoke 52.23 313** *e*P **P** **04 08 33.7 +0.3**
**EKA Eskdalemuir Ar 52.31 316** P **P** **04 08 34.5 +0.5**
comp=Z,61nm,0.9s,baz=87,slow=8.7,SNR=44
EKA PcP **PcP** **04 09 38.7 -3.8**
comp=Z,23nm,0.9s,baz=85,slow=8.0,SNR=6.0
**ESK Eskdalemuir 52.34 316**‖ *e*P **P** **04 08 34.2 +0.1**
ESK AMB AMB 04 08 35.5
comp=Z,76nm,1.1s
**ESK Eskdalemuir 52.34 316** *ce*P **P** **04 08 34.7 +0.6**
**ESK Eskdalemuir 52.34 316** P **P** **04 08 34.0 -0.1**
comp=Z,471nm,1.0s,SNR=6.2
**ESK Eskdalemuir 52.34 316** *e*P **P** **04 08 34.0 -0.1**
**MVH1 Achvaich 52.37 319**‖ *e*P **P** **04 08 34.7 +0.4**
**BHH Howats Hill 52.39 316**‖ *e*P **P** **04 08 34.9 +0.3**
**KESW Keswick, Cumbr 52.43 315** *e*P **P** **04 08 35.5 +0.7**
**MDO Dochfour 52.55 319**‖ *e*P **P** **04 08 36.1 +0.3**
**MBAR Mbarara 52.58 235** *e*P **P** **04 08 36.3 -0.3**
**MBAR Mbarara 52.58 235** P **P** **04 08 36.0 -0.6**
comp=Z,122nm,0.7s,SNR=9.8
**MBAR Mbarara 52.58 235** *e*P **P** **04 08 36.3 -0.3**
**BWH Wardlaw 52.62 316** *e*P **P** **04 08 36.9 +0.7**
**YSS Yuzh-Sakhalins 52.76 55** *e*P **P** **04 08 38.5 +1.2**
YSS pmax pmax
comp=Z,90nm,1.0s
**HLM1 Long Mynd 52.76 312**‖ *e*P **P** **04 08 37.5 +0.2**
**EAB Aberfoyle 52.79 317**‖ *e*P **P** **04 08 37.6 +0.2**
**RSC Scourie 52.81 320**‖ *e*P **P** **04 08 38.4 +1.0**
**MONM Monmouth 52.88 312** *e*P **P** **04 08 38.0 -0.1**
MONM AMB AMB 04 08 38.7
comp=Z,106nm,1.4s
**MAJO Matsushiro 52.88 69** *d* *i*P **P** **04 08 38.5 0.0**
MAJO pmax pmax
comp=Z,207nm,1.2s
**MAJO Matsushiro 52.88 69** *e*P **P** **04 08 37.9 -0.6**
comp=Z,52nm,1.3s
**MAT Matsushiro 52.88 69** P **P** **04 08 38.1 -0.4**
**MJAR Matsushiro Arr 52.88 69** P **P** **04 08 38.5 0.0**
comp=Z,31nm,1.1s,baz=289,slow=9.2,SNR=34
MJAR pP **pP** **04 09 21.5 +1.6**
comp=Z,6.5nm,0.9s,baz=291,slow=8.6,SNR=3.1
**PGBU Glenifferbraes 52.95 317**‖ *e*P **P** **04 08 39.0 +0.4**
PGBU AMB AMB 04 08 39.6
comp=Z,164nm,1.4s
**MCH1 Michaelchurch 52.96 312**‖ *e*P **P** **04 08 38.7 0.0**
MCH1 AMB AMB 04 08 39.3
comp=Z,134nm,1.3s
**KAC Achnashellach 53.04 319**‖ *e*P **P** **04 08 39.7 +0.5**
**KSB Sheil Bridge 53.16 319**‖ *e*P **P** **04 08 40.7 +0.6**
**WPM1 Penmaenmawr 53.19 314**‖ *e*P **P** **04 08 40.9 +0.5**
**KPL Plockton 53.26 319**‖ *e*P **P** **04 08 41.1 +0.3**
**YLL Llanberis 53.38 313**‖ *e*P **P** **04 08 42.1 +0.3**
**MYLDM Lahad Datu 53.42 114** *e*P **P** **04 08 44.2 +1.6**
**WIM Isle of Man 53.43 315**‖ *e*P **P** **04 08 42.9 +0.8**
**WLF1 Llynfaes 53.47 314** *e*P **P** **04 08 42.7 +0.3**
**YRE Yr Eifl 53.56 313**‖ *e*P **P** **04 08 43.6 +0.5**
**LPW Lampeter 53.57 312** *e*P **P** **04 08 43.6 +0.4**
LPW AMB AMB 04 08 44.1
comp=Z,77nm,1.1s
**HEX Exmoor 53.68 311** *e*P **P** **04 08 43.7 -0.3**
**RRH Rhenigidale 53.68 320** *e*P **P** **04 08 44.6 +0.7**
**CGJI Cibinong 53.79 136** P **P** **04 08 42.2 -3.0**
comp=Z,94nm,0.5s
**MA2 Magadan 54.30 38** *e*P **P** **04 08 48.4 0.0**
**SEY Seymchan 54.36 34** P **P** **04 08 49.6 +0.8**
comp=Z,23nm,1.0s,baz=282,slow=6.6,SNR=20
**SEY Seymchan 54.36 34** *i* P **P** **04 08 50.1 +1.4**
**ERM Erimo 54.56 60** *e*P **P** **04 08 50.5 0.0**
ERM pmax pmax
comp=Z,25nm,1.2s
**DAG Danmarks Havn 54.72 344**⇑ *i*P **P** **04 08 52.2 +1.1**
DAG pmax pmax
comp=Z,86nm,0.9s
**DAG Danmarks Havn 54.72 344**⇑ *i*P **P** **04 08 52.2 +1.1**
comp=Z,102nm,0.9s
**YUK Yuzh-Kuril'sk 55.74 57** P **P** **04 08 58.5 -0.4**
YUK *i**PP **pP** **04 09 44.5 +3.8**
YUK S S **04 16 30.3 -0.6**
YUK pmax pmax
comp=Z,223nm,4.1s
YUK MLR MLR
comp=Z,376nm,14.0s
**BBKI Banjar Baru 56.97 125** P **P** **04 09 08.2 +0.3**
comp=Z,88nm,1.0s
**VAL Valentia 57.27 313**⇑ *i*P **P** **04 09 11.0 +1.4**
**ESDC Sonseca Array 57.50 298** P **P** **04 09 11.3 -0.1**
comp=Z,8.2nm,0.5s,baz=57,slow=7.6,SNR=94
**TAM Tamanrasset 57.60 276** *e*P **P** **04 09 12.1 -0.4**
TAM pmax pmax
comp=Z,24nm,1.1s
**TAM Tamanrasset 57.60 276** *e*P **P** **04 09 12.1 -0.4**
comp=Z,24nm,1.1s
**KBKI Kotabaru 57.73 123** P **P** **04 09 14.1 +0.8**
comp=Z,57nm,1.1s
**MPSI Mapaga 57.74 117** P **P** **04 09 14.3 +1.0**
comp=Z,47nm,1.1s,comp=Z,2µm
**PAB San Pablo 57.82 298** *e*P **P** **04 09 13.5 -0.3**
PAB *e**PP **pP** **04 09 56.1 +0.2**
**PAB San Pablo 57.82 298** *e*P **P** **04 09 13.5 -0.3**
PAB *e*pP **pP** **04 09 56.1 +0.2**
**BILL Bilibino 58.55 26** *d* *i*P **P** **04 09 19.9 +1.6**
BILL *e**PP **pP** **04 10 00.5 0.0**
BILL *i* 04 11 34.4
BILL *e*PPP PPP 04 12 55.3
BILL *e*S S 04 17 27.9 +21
BILL pmax pmax
comp=Z,32nm,1.1s
**PCI Palu 58.56 118** P **P** **04 09 19.8 +0.7**
comp=Z,62nm,1.2s
**PBRG Braganca 58.63 301** *e*P **P** **04 09 19.6 +0.3**
comp=Z,29nm,2.0s

**MVO Moncorvo 59.08 301** *e*P **P** **04 09 22.8 +0.4**
comp=Z,30nm,1.1s
**MRSI Marisa 59.12 115** P **P** **04 09 23.5 +0.6**
comp=Z,120nm,1.1s,comp=Z,2µm
**PVRL Vila Real 59.51 301** *e*P **P** **04 09 25.8 +0.5**
comp=Z,31nm,1.8s
**POLO Lamas de Olo 59.52 301** *e*P **P** **04 09 25.8 +0.3**
comp=Z,9.3nm,2.9s
**PCAB Cabril 59.55 301** *e*P **P** **04 09 26.3 +0.7**
comp=Z,47nm,1.6s
**PGAV Gavieira, Arco 59.61 302** *e*P **P** **04 09 26.4 +0.3**
comp=Z,38nm,2.0s
**ABPO Ambohimpanom 59.67 206** *e*P **P** **04 09 27.6 +0.9**
**ABPO Ambohimpanom 59.67 206** P **P** **04 09 27.2 +0.5**
comp=Z,137nm,1.1s,SNR=5.5
**ABPO Ambohimpanom 59.67 206** *e*P **P** **04 09 27.6 +0.9**
**MTE Manteigas 59.74 300** *e*P **P** **04 09 27.9 +1.0**
comp=Z,64nm,1.5s
**MTE Manteigas 59.74 300** *e*P **P** **04 09 27.3 +0.4**
comp=Z,30nm,0.8s
MTE *e* 04 10 10.3
**GTOI Gorontalo 59.79 114** P **P** **04 09 26.4 -1.1**
comp=Z,35nm,1.1s
**PVIS Viseu 59.85 300** *e*P **P** **04 09 28.5 +0.8**
comp=Z,43nm,1.7s
**APSI Ampana 59.86 117** P **P** **04 09 28.3 +0.4**
comp=Z,90nm,1.4s,comp=Z,1µm
**PCBR Castelo Branco 59.92 299** *e*P **P** **04 09 28.5 +0.4**
comp=Z,25nm,1.7s
**PMRV Marv??o 60.03 299** *e*P **P** **04 09 28.9 0.0**
comp=Z,33nm,1.6s
**TTSI Tana Toraja 60.05 120** P **P** **04 09 29.2 -0.1**
comp=Z,32nm,1.1s,comp=Z,1µm
**PBAR Barrancos 60.30 297** *e*P **P** **04 09 31.1 +0.4**
comp=Z,118nm,1.3s
**PCAS Casmilo, Conde 60.55 300** *e*P **P** **04 09 32.9 +0.5**
comp=Z,25nm,1.2s
**PTOM Tomar 60.67 299** *e*P **P** **04 09 33.9 +0.7**
comp=Z,67nm,1.7s
**SPSI Sidrap Palu 60.67 121** P **P** **04 09 33.5 0.0**
comp=Z,13nm,0.8s
**PMTG Montargil 60.77 299** *e*P **P** **04 09 34.3 +0.5**
comp=Z,32nm,1.5s
**PBEJ Beja 60.95 298** *e*P **P** **04 09 35.6 +0.5**
comp=Z,43nm,1.3s
**SUMG Summit 61.05 341**⇑ *i*P **P** **04 09 37.3 +1.6**
SUMG pmax pmax
comp=Z,140nm,1.1s
**SUMG Summit 61.05 341**⇑ *i*P **P** **04 09 37.3 +1.6**
comp=Z,142nm,1.1s
**SUMG Summit 61.05 341** *e*P **P** **04 09 37.2 +1.6**
**PVAQ Vaqueiros 61.11 297** *e*P **P** **04 09 36.4 +0.2**
comp=Z,51nm,1.2s
**PCVE Castro Verde 61.24 297** *e*P **P** **04 09 37.4 +0.3**
comp=Z,25nm,1.3s
**MESJ Messejana 61.28 297** *e*P **P** **04 09 37.3 0.0**
MESJ AMb AMB 04 09 39.0
comp=Z,44nm,1.1s
**MESJ Messejana 61.28 297** *e*P **P** **04 09 37.9 +0.6**
comp=Z,43nm,1.0s
**MESJ Messejana 61.28 297** *e*P **P** **04 09 37.3 0.0**
MESJ pmax pmax
comp=Z,44nm,1.1s
**PBDV Barranco-do-Ve 61.34 297** *e*P **P** **04 09 38.2 +0.5**
comp=Z,73nm,1.1s
**PNCL Nicolau / Gran 61.39 298** *e*P **P** **04 09 38.7 +0.7**
comp=Z,46nm,1.7s
**KAPI Kappang 61.42 122** P **P** **04 09 37.4 -1.1**
comp=Z,16nm,0.9s,baz=295,slow=7.2,SNR=10.0
**KAPI Kappang 61.42 122** P **P** **04 09 37.9 -0.6**
SNR=5.6
**KAPI Kappang 61.42 122** *e*P **P** **04 09 37.4 -1.1**
comp=Z,19nm,1.1s
**PMAFR Mafra 61.56 299** *e*P **P** **04 09 40.1 +0.9**
comp=Z,77nm,1.4s
**PTEO Sao Teotonio 61.77 297** *e*P **P** **04 09 41.3 +0.7**
comp=Z,68nm,1.2s
**MORF Marmelete 61.83 297** *e*P **P** **04 09 41.0 -0.1**
MORF AMb AMB 04 09 43.4
comp=Z,36nm,1.5s
**MORF Marmelete 61.83 297** *e*P **P** **04 09 41.9 +0.9**
comp=Z,37nm,1.5s
**MORF Marmelete 61.83 297** *e*P **P** **04 09 40.9 -0.1**
MORF pmax pmax
comp=Z,37nm,1.5s
**BKSI Bulukumba 61.89 122** P **P** **04 09 41.5 -0.1**
comp=Z,14nm,1.4s
**PFVI Vila Bisbo 62.03 297** *e*P **P** **04 09 42.9 +0.6**
comp=Z,48nm,1.6s
**PFVI Vila Bisbo 62.03 297** *e*P **P** **04 09 42.9 +0.6**
**BSSI Bau Bau, Buton 62.74 122** P **P** **04 09 45.9 -1.3**
comp=Z,52nm,1.6s,comp=Z,700nm
**TNTI Ternate 62.94 111** P **P** **04 09 49.1 +0.5**
comp=Z,199nm,1.4s
**TNTI Ternate 62.94 111** *e*P **P** **04 09 48.0 -0.6**
TNTI *e* 04 10 33.0
**LBMI Labuha 63.97 112** P **P** **04 09 54.2 -1.2**
comp=Z,54nm,0.9s
**KULLO Kullorsuaq 64.06 346**⇑ *i*P **P** **04 09 56.0 +1.0**
comp=Z,81nm,1.1s
**WBSI Waikabubak, Su 64.56 125** P P 04 09 55.9 -3.3
comp=Z,59nm,1.1s,comp=Z,890nm
**NLAI Namlea 65.41 114** P **P** **04 10 04.5 -0.1**
comp=Z,39nm,1.0s,comp=Z,1µm
**LSZ Lusaka 65.52 226** *e*P **P** **04 10 05.6 +0.2**
**LSZ Lusaka 65.52 226** P **P** **04 10 06.1 +0.6**
SNR=11
**LSZ Lusaka 65.52 226** *e*P **P** **04 10 05.6 +0.2**
**BASI Baing, Sumba 65.77 125** P **P** **04 10 05.3 -1.6**
comp=Z,245nm,1.1s,comp=Z,3µm
**TOA0 Torodi Ar. Sit 65.78 269** *e*P **P** **04 10 04.0 -3.1**
**TORD Torodi Ar. Bea 65.78 269** P **P** **04 10 05.3 -1.8**
comp=Z,60nm,0.6s,baz=50,slow=5.8,SNR=701
TORD PKPPKP **P'P'df** **04 38 44.8 +0.6**
comp=Z,3.0nm,1.3s,baz=234,slow=2.5,SNR=5.1
**ILULI Iluiisat 66.39 341**⇑ *i*P **P** **04 10 10.8 +0.7**
comp=Z,120nm,1.1s
**MSAI Masohi 66.83 113** P **P** **04 10 13.2 -0.5**
comp=Z,16nm,1.0s
**SWI Sorong 66.94 109** P **P** **04 10 14.3 -0.2**
comp=Z,104nm,1.1s
**SFJD Kangerlussuaq 67.75 339** *i* P **P** **04 10 19.2 +0.5**
SFJD pmax pmax
comp=Z,33nm,0.9s
**SFJD Kangerlussuaq 67.75 339** *i* P **P** **04 10 19.2 +0.5**
comp=Z,33nm,0.9s
**BATI Baumata 67.83 122** P **P** **04 10 18.9 -1.1**
comp=Z,43nm,1.1s
**SOEI Soe 67.92 122** P **P** **04 10 19.2 -1.4**
comp=Z,86nm,1.1s,comp=Z,906nm
**SOEI Soe 67.92 122** *e*P **P** **04 10 19.3 -1.4**
comp=Z,100nm,1.0s
**RES Resolute Bay 68.68 356** *e*P **P** **04 10 25.1 +0.8**
RES pmax pmax
comp=Z,26nm,1.1s
**RES Resolute Bay 68.68 356** *e*P **P** **04 10 25.1 +0.8**
comp=Z,26nm,1.1s
**FAKI Fak Fak 69.03 110** P **P** **04 10 27.1 -0.4**
comp=Z,86nm,1.2s
**MSNA Messina 70.23 220** *e*P **P** **04 10 34.3 -0.3**
MSNA IAmb IAmb 04 10 37.0
comp=Z,61nm,1.1s
MSNA IAMs_20 IAMs_20 04 19 50.3
comp=Z,3µm,26.7s
**SAUI Saumlaki 71.67 115** P **P** **04 10 43.2 -0.3**
comp=Z,191nm,1.1s
**COLD Coldfoot 71.93 16** *e*P **P** **04 10 44.8 +0.6**
comp=Z,73nm,1.0s
COLD *e*pP **pP** **04 11 29.2 +1.1**
**POGA Pongola 73.62 216** *e*P **P** **04 10 53.5 -1.1**
POGA IAmb IAmb 04 10 55.4
comp=Z,21nm,0.9s
**INK Inuvik 73.87 9** P **P** **04 10 56.6 +1.1**
comp=Z,94nm,0.9s,baz=0.5,slow=7.6,SNR=216
**INK Inuvik 73.87 9** P **P** **04 10 56.6 +1.1**
INK pmax pmax
comp=Z,94nm,0.9s
**INK Inuvik 73.87 9** *e*P **P** **04 10 56.5 +1.0**
comp=Z,135nm,1.0s
**SLR Silverton 73.91 220** *e*P **P** **04 10 56.3 -0.3**
SLR IAmb IAmb 04 10 57.9
comp=Z,160nm,1.7s
**BPAW Bear Paw Mtn. 74.35 18** *e*P **P** **04 10 58.5 0.0**
comp=Z,9.7nm,1.0s
BPAW *e*pP **pP** **04 11 42.1 -0.6**
**ERPM east rand prop 74.43 219** *e*P **P** **04 10 58.4 -1.2**
ERPM IAmb IAmb 04 11 00.2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,63nm,1.0s | | | | | | | | |
| **COLA** | **College** | **74.43** | **16** | *e*P | **P** | **04 10 59.3 +0.4** |
| COLA | | | | *e**PP | **pP** | **04 11 44.6 +1.6** |
| COLA | | | | pmax | pmax | |
| | comp=Z,102nm,0.9s | | | | | | | | |
| **COLA** | **College** | **74.43** | **16** | *e*P | **P** | **04 10 59.3 +0.4** |
| | comp=Z,102nm,0.9s | | | | | | | | |
| COLA | | | | *e*pP | **pP** | **04 11 44.6 +1.6** |
| **KSR** | **Koster** | **74.72** | **221** | *e*P | **P** | **04 11 00.3 -0.9** |
| KSR | | | | IAmb | IAmb | 04 11 02.4 |
| | comp=Z,44nm,1.0s | | | | | | | | |
| **ILAR** | **Eielson Array** | **74.73** | **16** | P | **P** | **04 11 00.5 -0.2** |
| | comp=Z,32nm,1.0s,baz=318,slow=4.4,SNR=154 | | | | | | | | |
| **LBTB** | **Lobatse** | **74.74** | **222** | *e*P | **P** | **04 11 00.4 -0.9** |
| LBTB | | | | IAmb | IAmb | 04 11 02.7 |
| | comp=Z,202nm,1.4s | | | | | | | | |
| **DBIC** | **Dimbokro** | **74.76** | **267** | *e*P | **P** | **04 10 59.3 -2.3** |
| **DBIC** | **Dimbokro** | **74.76** | **267** | P | **P** | **04 11 00.4 -1.2** |
| | comp=Z,23nm,0.5s,baz=30,slow=6.8,SNR=71 | | | | | | | | |
| **KTH** | **Kantishna Hill** | **74.82** | **18** | *e*P | **P** | **04 11 01.0 -0.2** |
| | comp=Z,94nm,1.0s | | | | | | | | |
| KTH | | | | *e*pP | **pP** | **04 11 45.0 -0.5** |
| **KIC** | **Kosan Boka** | **74.85** | **267** | *e*P | **P** | **04 11 00.9 -1.2** |
| | comp=Z,56nm,0.5s | | | | | | | | |
| **GENI** | **Genyem** | **74.90** | **105** | P | **P** | **04 11 02.9 +0.5** |
| | comp=Z,136nm,1.1s,comp=Z,7μm | | | | | | | | |
| **TIC** | **Toumodi** | **74.91** | **267** | *e*P | **P** | **04 11 01.2 -1.3** |
| **MCK** | **McKinley** | **75.15** | **17** | *e*P | **P** | **04 11 02.9 -0.2** |
| MCK | | | | pmax | pmax | |
| | comp=Z,38nm,1.0s | | | | | | | | |
| **MCK** | **McKinley** | **75.15** | **17** | *e*P | **P** | **04 11 02.9 -0.2** |
| | comp=Z,38nm,1.0s | | | | | | | | |
| **LIC** | **Lamto** | **75.16** | **267** | *e*P | **P** | **04 11 02.6 -1.3** |
| | comp=Z,32nm,0.5s | | | | | | | | |
| **EGAK** | **Eagle** | **75.90** | **14** | *e*P | **P** | **04 11 07.7 +0.4** |
| | comp=Z,29nm,0.9s | | | | | | | | |
| **DOT** | **Dot Lake** | **76.33** | **15** | *e*P | **P** | **04 11 09.7 -0.1** |
| | comp=Z,81nm,1.0s | | | | | | | | |
| **SEK** | **Senekal** | **76.36** | **219** | *e*P | **P** | **04 11 09.5 -1.0** |
| SEK | | | | IAmb | IAmb | 04 11 11.4 |
| | comp=Z,108nm,1.0s | | | | | | | | |
| **PAX** | **Paxson** | **76.61** | **16** | *e*P | **P** | **04 11 11.7 +0.2** |
| PAX | | | | pmax | pmax | |
| | comp=Z,71nm,1.1s | | | | | | | | |
| **PAX** | **Paxson** | **76.61** | **16** | *e*P | **P** | **04 11 11.7 +0.2** |
| | comp=Z,71nm,1.1s | | | | | | | | |
| **SWZ** | **Schweizer** | **76.62** | **221** | *e*P | **P** | **04 11 10.4 -1.5** |
| SWZ | | | | IAmb | IAmb | 04 11 11.9 |
| | comp=Z,27nm,0.9s | | | | | | | | |
| **DAWY** | **Dawson** | **76.88** | **13** | *e*P | **P** | **04 11 13.4 +0.5** |
| | comp=Z,70nm,1.0s | | | | | | | | |
| **PMR** | **Palmer** | **76.92** | **18** | *e*P | **P** | **04 11 11.9 -1.1** |
| PMR | | | | *e**PP | **pP** | **04 12 01.0 +3.5** |
| PMR | | | | pmax | pmax | |
| | comp=Z,29nm,1.0s | | | | | | | | |
| **PMR** | **Palmer** | **76.92** | **18** | *e*P | **P** | **04 11 11.9 -1.1** |
| | comp=Z,28nm,1.0s | | | | | | | | |
| PMR | | | | *e*pP | **pP** | **04 12 01.0 +3.5** |
| **SML** | **Sawmill** | **76.94** | **18** | *e*P | **P** | **04 11 13.2 0.0** |
| SML | | | | *e**PP | **pP** | **04 11 58.5 +0.8** |
| SML | | | | pmax | pmax | |
| | comp=Z,22nm,1.0s | | | | | | | | |
| **SML** | **Sawmill** | **76.94** | **18** | *e*P | **P** | **04 11 13.2 0.0** |
| | comp=Z,22nm,1.0s | | | | | | | | |
| SML | | | | *e*pP | **pP** | **04 11 58.5 +0.8** |
| **MENT** | **Mentasta** | **77.03** | **16** | *e*P | **P** | **04 11 13.9 +0.2** |
| **RC01** | **Rabbit Creek A** | **77.19** | **19** | *e*P | **P** | **04 11 13.9 -0.7** |
| | comp=Z,24nm,0.9s | | | | | | | | |
| **WIN** | **Windhoek** | **77.78** | **230** | *e*P | **P** | **04 11 18.1 -0.5** |
| WIN | | | | IAmb | IAmb | 04 11 19.7 |
| | comp=Z,9.4nm,0.8s | | | | | | | | |
| **BOSA** | **Boshof** | **77.81** | **220** | *e*P | **P** | **04 11 18.1 -0.4** |
| BOSA | | | | IAmb | IAmb | 04 11 19.3 |
| | comp=Z,103nm,1.1s | | | | | | | | |
| **BOSA** | **Boshof** | **77.81** | **220** | P | **P** | **04 11 18.4 -0.1** |
| | comp=Z,59nm,0.8s,baz=27,slow=4.4,SNR=61 | | | | | | | | |
| **DIV** | **Divide** | **78.15** | **17** | *e*P | **P** | **04 11 20.6 +0.6** |
| | comp=Z,38nm,0.9s | | | | | | | | |
| **BMRM** | **Bremner River** | **78.57** | **17** | *e*P | **P** | **04 11 23.1 +0.8** |
| | comp=Z,87nm,1.1s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **79.15** | **22** | *e*P | **P** | **04 11 25.6 +0.3** |
| KDAK | | | | pmax | pmax | |
| | comp=Z,62nm,1.1s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **79.15** | **22** | P | **P** | **04 11 25.9 +0.6** |
| | comp=Z,483nm,1.0s,SNR=7.3 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **79.15** | **22** | *e*P | **P** | **04 11 25.6 +0.3** |
| | comp=Z,62nm,1.1s | | | | | | | | |
| **HVD** | **Gariep Dam** | **79.29** | **219** | *e*P | **P** | **04 11 25.6 -1.0** |
| **OHAK** | **Old Harbor** | **79.39** | **23** | *e*P | **P** | **04 11 26.9 +0.2** |
| | comp=Z,66nm,1.0s | | | | | | | | |
| **UPI** | **Upington** | **79.75** | **223** | *e*P | **P** | **04 11 29.2 +0.1** |
| UPI | | | | IAmb | IAmb | 04 11 30.4 |
| | comp=Z,117nm,1.2s | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.21** | **3** | P | **P** | **04 11 36.8 +0.5** |
| | comp=Z,20nm,0.5s,baz=352,slow=5.4,SNR=72 | | | | | | | | |
| **SKAG** | **Skagway** | **81.89** | **13** | *e*P | **P** | **04 11 40.7 +0.8** |
| | comp=Z,50nm,1.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.95** | **122** | P | **P** | **04 11 39.9 -1.0** |
| | comp=Z,47nm,0.8s,baz=324,slow=4.9,SNR=288 | | | | | | | | |
| WRA | | | | pP | **pP** | **04 12 26.5 +0.6** |
| | comp=Z,2.3nm,0.5s,baz=325,slow=5.0,SNR=1.2 | | | | | | | | |
| WRA | | | | PKKPbc | **PKKPbc** | **04 30 09.6 +0.5** |
| | comp=Z,3.6nm,0.8s,baz=127,slow=2.2,SNR=28 | | | | | | | | |
| WRA | | | | PKPPKP | **P'P'df** | **04 38 12.9 -1.2** |
| | comp=Z,2.2nm,1.0s,baz=120,slow=1.4,SNR=7.6 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **81.95** | **122** | *e*P | **P** | **04 11 39.8 -1.0** |
| WRAB | | | | pmax | pmax | |
| | comp=Z,88nm,0.9s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **81.95** | **122** | P | **P** | **04 11 39.0 -1.8** |
| | comp=Z,503nm,0.6s,SNR=79 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **81.95** | **122** | *e*P | **P** | **04 11 39.8 -1.0** |
| | comp=Z,88nm,0.9s | | | | | | | | |
| **SCHQ** | **Schefferville** | **82.09** | **337** | P | **P** | **04 11 41.9 +0.8** |
| | comp=Z,22nm,0.8s,baz=35,slow=5.2,SNR=11 | | | | | | | | |
| **CVNA** | **Calvinia** | **82.98** | **222** | *e*P | **P** | **04 11 44.4 -1.7** |
| CVNA | | | | IAmb | IAmb | 04 11 47.2 |
| | comp=Z,61nm,1.1s | | | | | | | | |
| **SUR** | **Sutherland** | **83.12** | **221** | *e*P | **P** | **04 11 47.2 +0.4** |
| | comp=Z,42nm,0.9s | | | | | | | | |
| **DLBC** | **Dease Lake** | **83.75** | **11** | *e*P | **P** | **04 11 50.5 +0.8** |
| | comp=Z,84nm,1.4s | | | | | | | | |
| **ASAR** | **Alice Springs** | **84.22** | **125** | P | **P** | **04 11 51.5 -1.0** |
| | comp=Z,40nm,0.8s,baz=321,slow=5.3,SNR=299 | | | | | | | | |
| ASAR | | | | PKKPbc | **PKKPbc** | **04 30 04.3 +0.3** |
| | comp=Z,1.4nm,0.6s,baz=125,slow=2.7,SNR=12 | | | | | | | | |
| ASAR | | | | PKPPKP | **P'P'df** | **04 38 10.2 +0.3** |
| | comp=Z,1.1nm,0.8s,baz=128,slow=2.7,SNR=7.9 | | | | | | | | |
| **COEN** | **Coen** | **84.36** | **112** | *e*P | **P** | **04 11 51.7 -1.5** |
| | comp=Z,34nm,1.0s | | | | | | | | |
| **PMG** | **Port Moresby** | **84.55** | **106** | *c i*P | **P** | **04 11 53.5 -0.7** |
| PMG | | | | pmax | pmax | |
| | comp=Z,144nm,1.1s | | | | | | | | |
| **WRAK** | **Wrangell Islan** | **85.30** | **13** | *e*P | **P** | **04 11 58.0 +0.8** |
| | comp=Z,23nm,0.9s | | | | | | | | |
| **FFC** | **Flin Flon** | **88.92** | **356** | *e*P | **P** | **04 12 15.1 +0.3** |
| FFC | | | | pmax | pmax | |
| | comp=Z,88nm,1.0s | | | | | | | | |
| **FFC** | **Flin Flon** | **88.92** | **356** | P | **P** | **04 12 15.0 +0.3** |
| | comp=Z,415nm,1.2s,SNR=7.0 | | | | | | | | |
| **FFC** | **Flin Flon** | **88.92** | **356** | *e*P | **P** | **04 12 15.1 +0.3** |
| | comp=Z,88nm,1.0s | | | | | | | | |
| **CTAO** | **Charters Tower** | **90.50** | **115** | *e*P | **P** | **04 12 21.5 -1.1** |
| CTAO | | | | pmax | pmax | |
| | comp=Z,60nm,1.1s | | | | | | | | |
| **CTAO** | **Charters Tower** | **90.50** | **115** | *e*P | **P** | **04 12 21.5 -1.1** |
| | comp=Z,60nm,1.1s | | | | | | | | |
| **EDM** | **Edmonton** | **90.54** | **3** | *e*P | **P** | **04 12 23.1 +0.7** |
| EDM | | | | *e**PP | **pP** | **04 13 08.9 +0.8** |
| EDM | | | | pmax | pmax | |
| | comp=Z,228nm,1.2s | | | | | | | | |
| **EDM** | **Edmonton** | **90.54** | **3** | *e*P | **P** | **04 12 23.1 +0.7** |
| | comp=Z,228nm,1.2s | | | | | | | | |
| EDM | | | | *e*pP | **pP** | **04 13 08.9 +0.8** |
| **ULM** | **Lac du Bonnet** | **92.83** | **352** | P | **P** | **04 12 33.3 +0.3** |
| | comp=Z,34nm,0.9s,baz=353,slow=4.3,SNR=13 | | | | | | | | |
| **A33A** | **Warroad** | **94.06** | **351** | P | **P** | **04 12 39.2 +0.5** |
| | baz=94,SNR=10.0 | | | | | | | | |
| **A30A** | **Hoffart Farm,** | **94.38** | **353** | P | **P** | **04 12 40.6 +0.5** |
| | baz=94,SNR=6.9 | | | | | | | | |
| **B35A** | **Bob, Littlefor** | **94.41** | **350** | P | **P** | **04 12 40.1 -0.1** |
| | baz=94 | | | | | | | | |
| **B34A** | **Aery, Baudette** | **94.41** | **351** | P | **P** | **04 12 40.3 0.0** |
| | baz=94,SNR=5.6 | | | | | | | | |
| **EYMN** | **Ely** | **94.47** | **348** | P | **P** | **04 12 41.2 +0.6** |
| | baz=94 | | | | | | | | |
| **A29A** | **Manning Farm,** | **94.49** | **354** | P | **P** | **04 12 41.1 +0.5** |
| | baz=94 | | | | | | | | |
| **A27A** | **Ledoux Ranch,** | **94.62** | **355** | P | **P** | **04 12 42.2 +1.0** |
| | baz=94 | | | | | | | | |
| **C38A** | **Sawbill Land.** | **94.66** | **348** | P | **P** | **04 12 41.8 +0.3** |
| | baz=94 | | | | | | | | |
| **WALA** | **Waterton Lakes** | **94.67** | **3** | *e*P | **P** | **04 12 41.8 +0.2** |
| | comp=Z,24nm,0.9s | | | | | | | | |
| WALA | | | | *e*pP | **pP** | **04 13 32.5 +5.0** |
| **A26A** | **Wade Farm, Ken** | **94.73** | **355** | P | **P** | **04 12 43.1 +1.3** |
| | baz=94 | | | | | | | | |
| **B32A** | **Ashes, Strandq** | **94.73** | **352** | P | **P** | **04 12 41.9 +0.1** |
| | baz=94,SNR=6.5 | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **94.75** | **351** | P | **P** | **04 12 42.1 +0.2** |
| | baz=94,SNR=5.3 | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **94.75** | **351** | *e*P | **P** | **04 12 41.9 0.0** |
| | comp=Z,36nm,1.0s | | | | | | | | |
| **A25A** | **Svangstu Ranch** | **94.75** | **356** | P | **P** | **04 12 43.1 +1.2** |
| | baz=94 | | | | | | | | |
| **B05A** | **Bryant** | **94.77** | **9** | P | **P** | **04 12 42.3 +0.4** |
| | baz=94,SNR=7.1 | | | | | | | | |
| **C37A** | **Embarrass** | **94.79** | **349** | P | **P** | **04 12 42.5 +0.5** |
| | baz=94 | | | | | | | | |
| **B31A** | **Greenbush Farm** | **94.83** | **352** | P | **P** | **04 12 42.4 +0.2** |
| | baz=94,SNR=8.9 | | | | | | | | |
| **C36A** | **Pine Crest Far** | **94.86** | **349** | P | **P** | **04 12 42.7 +0.3** |
| | baz=94 | | | | | | | | |
| **B30A** | **Myrvik Farm, E** | **94.87** | **353** | P | **P** | **04 12 42.9 +0.5** |
| | baz=94,SNR=5.3 | | | | | | | | |
| **B29A** | **Wagenman Farm,** | **94.95** | **354** | P | **P** | **04 12 43.0 +0.2** |
| | baz=95,SNR=5.7 | | | | | | | | |
| **B28A** | **Dugan Ranch, T** | **95.05** | **354** | P | **P** | **04 12 44.2 +1.0** |
| | baz=95 | | | | | | | | |
| **C35A** | **Jirik Farms, M** | **95.09** | **350** | P | **P** | **04 12 43.1 -0.3** |
| | baz=95 | | | | | | | | |
| **B27A** | **Peters Farms,** | **95.17** | **355** | P | **P** | **04 12 44.5 +0.7** |
| | baz=95 | | | | | | | | |
| **C06D** | **Leavenworth** | **95.25** | **8** | P | **P** | **04 12 44.7 +0.6** |
| | baz=95 | | | | | | | | |
| **B26A** | **Jensen Ranch,** | **95.26** | **356** | P | **P** | **04 12 45.6 +1.4** |
| | baz=95 | | | | | | | | |
| **NEW** | **Newport** | **95.27** | **5** | P | **P** | **04 12 44.7 +0.4** |
| | baz=95,SNR=9.7 | | | | | | | | |
| **C33A** | **Trail** | **95.27** | **351** | P | **P** | **04 12 44.7 +0.5** |
| | baz=95 | | | | | | | | |
| **DGMT** | **Dagmar** | **95.27** | **357** | P | **P** | **04 12 45.5 +1.3** |
| | baz=95 | | | | | | | | |
| **DGMT** | **Dagmar** | **95.27** | **357** | *e*P | **P** | **04 12 45.5 +1.3** |
| | comp=Z,40nm,1.1s | | | | | | | | |
| **D37A** | **Cotton** | **95.39** | **349** | P | **P** | **04 12 45.5 +0.7** |
| | baz=95 | | | | | | | | |
| **C31A** | **Landman Farms,** | **95.46** | **352** | P | **P** | **04 12 45.5 +0.4** |
| | baz=95,SNR=8.0 | | | | | | | | |
| **D36A** | **Goodland** | **95.48** | **349** | P | **P** | **04 12 45.5 +0.3** |
| | baz=95 | | | | | | | | |
| **MDND** | **Maddock** | **95.59** | **354** | P | **P** | **04 12 46.5 +0.8** |
| | baz=95 | | | | | | | | |
| **C30A** | **Mose, Pekin** | **95.63** | **353** | P | **P** | **04 12 46.7 +0.8** |
| | baz=95 | | | | | | | | |
| **BLMT** | **Blacktail Moun** | **95.70** | **4** | *e*P | **P** | **04 12 47.3 +0.9** |
| | comp=Z,9.0nm,0.9s | | | | | | | | |
| **C28A** | **Hausauer Farms** | **95.78** | **354** | P | **P** | **04 12 47.5 +0.9** |
| | baz=95 | | | | | | | | |
| **EGMT** | **Eagleton** | **95.82** | **1** | P | **P** | **04 12 47.8 +1.0** |
| | baz=96,SNR=13 | | | | | | | | |
| **EGMT** | **Eagleton** | **95.82** | **1** | *e*P | **P** | **04 12 47.5 +0.6** |
| | comp=Z,36nm,1.0s | | | | | | | | |
| **BSMT** | **Bassoo Peak** | **95.83** | **4** | *e*P | **P** | **04 12 47.9 +0.9** |
| | comp=Z,30nm,1.2s | | | | | | | | |
| **D33A** | **AnnSam, Waubun** | **95.89** | **351** | P | **P** | **04 12 46.5 -0.6** |
| | baz=96 | | | | | | | | |
| **JTMT** | **Jette** | **95.96** | **4** | *e*P | **P** | **04 12 48.2 +0.6** |
| | comp=Z,7.2nm,1.0s | | | | | | | | |
| **C25A** | **Freed Ranch, W** | **95.98** | **356** | P | **P** | **04 12 48.8 +1.2** |
| | baz=96 | | | | | | | | |
| **E36A** | **McGregor** | **96.14** | **349** | P | **P** | **04 12 48.7 +0.5** |
| | baz=96 | | | | | | | | |
| **SWMT** | **Swartz Lake** | **96.22** | **3** | *e*P | **P** | **04 12 49.0 +0.3** |
| | comp=Z,6.5nm,1.1s | | | | | | | | |
| SWMT | | | | *e*PP | **PP** | **04 16 43.2 +0.2** |
| **D30A** | **Buchanan** | **96.24** | **353** | P | **P** | **04 12 48.8 +0.2** |
| | baz=96 | | | | | | | | |
| **E35A** | **Pequot Lakes** | **96.27** | **350** | P | **P** | **04 12 49.1 +0.3** |
| | baz=96 | | | | | | | | |
| **D28A** | **Regan** | **96.32** | **354** | P | **P** | **04 12 49.7 +0.6** |
| | baz=96 | | | | | | | | |
| **D29A** | **Pettibone, Tap** | **96.37** | **354** | P | **P** | **04 12 50.0 +0.8** |
| | baz=96 | | | | | | | | |
| **E34A** | **Wadena** | **96.41** | **350** | P | **P** | **04 12 50.3 +0.9** |
| | baz=96 | | | | | | | | |
| **D27A** | **Center** | **96.48** | **355** | P | **P** | **04 12 51.1 +1.4** |
| | baz=96 | | | | | | | | |
| **SLMT** | **Seeley Lake** | **96.50** | **3** | *e*P | **P** | **04 12 50.6 +0.6** |
| | comp=Z,26nm,1.0s | | | | | | | | |
| **D25A** | **Fairfield** | **96.55** | **356** | P | **P** | **04 12 52.2 +2.1** |
| | baz=96 | | | | | | | | |
| **D26A** | **Manning** | **96.61** | **356** | P | **P** | **04 12 52.1 +1.7** |
| | baz=96,SNR=5.5 | | | | | | | | |
| **E31A** | **Nome** | **96.70** | **352** | P | **P** | **04 12 51.7 +1.0** |
| | baz=96 | | | | | | | | |
| **F36A** | **Milaca** | **96.82** | **349** | P | **P** | **04 12 51.3 0.0** |
| | baz=96 | | | | | | | | |
| **CHMT** | **Chamberlain Mo** | **96.84** | **3** | *e*P | **P** | **04 12 51.6 0.0** |
| | comp=Z,9.4nm,1.0s | | | | | | | | |
| CHMT | | | | *e*pP | **pP** | **04 13 38.7 +1.1** |
| **E30A** | **Jud** | **96.86** | **353** | P | **P** | **04 12 51.8 +0.4** |
| | baz=96 | | | | | | | | |
| **MSO** | **Missoula** | **96.90** | **3** | P | **P** | **04 12 52.0 +0.3** |
| | baz=96 | | | | | | | | |
| **E28A** | **Huff** | **96.94** | **354** | P | **P** | **04 12 52.6 +0.7** |
| | baz=97,SNR=5.3 | | | | | | | | |
| **HRY** | **Holter Researc** | **97.10** | **2** | *e*P | Pdif | 04 12 53.7 +1.0 |
| | comp=Z,14nm,1.1s | | | | | | | | |
| **LAO** | **LASA Array** | **97.12** | **358** | P | Pdif | 04 12 53.6 +0.9 |
| | baz=97,SNR=22 | | | | | | | | |
| **LAO** | **LASA Array** | **97.12** | **358** | *e*P | Pdif | 04 12 54.1 +1.3 |
| | comp=Z,34nm,0.9s | | | | | | | | |
| **E27A** | **Carson** | **97.15** | **355** | P | Pdif | 04 12 53.3 +0.4 |
| | baz=97 | | | | | | | | |
| **E26A** | **Carlson Angus** | **97.17** | **356** | P | Pdif | 04 12 53.7 +0.7 |
| | baz=97,SNR=5.9 | | | | | | | | |
| **E25A** | **Miller Ranch,** | **97.20** | **356** | P | Pdif | 04 12 54.6 +1.5 |
| | baz=97,SNR=5.2 | | | | | | | | |
| **F33A** | **5 Mile Ranch,** | **97.22** | **351** | P | Pdif | 04 12 53.6 +0.5 |
| | baz=97 | | | | | | | | |
| **SPMN** | **St. Paul** | **97.33** | **349** | P | **P** | **04 12 53.2 -0.4** |
| | baz=97 | | | | | | | | |
| **F31A** | **Hecla** | **97.43** | **353** | P | Pdif | 04 12 54.6 +0.6 |
| | baz=97 | | | | | | | | |
| **G03D** | **McMinnville, O** | **97.61** | **10** | P | Pdif | 04 12 55.5 +0.6 |
| | baz=97 | | | | | | | | |
| **F28A** | **McLaughlin** | **97.67** | **354** | P | Pdif | 04 12 55.8 +0.6 |
| | baz=97 | | | | | | | | |
| **F27A** | **Lemmon** | **97.74** | **355** | P | Pdif | 04 12 56.0 +0.5 |
| | baz=97,SNR=7.0 | | | | | | | | |
| **F25A** | **Bowman** | **97.78** | **356** | P | Pdif | 04 12 56.7 +1.0 |
| | baz=97 | | | | | | | | |
| **F26A** | **Lodgepole** | **97.80** | **356** | P | Pdif | 04 12 56.6 +0.7 |
| | baz=97 | | | | | | | | |
| **LRM** | **LaMoiln Ridge** | **97.96** | **2** | *e*P | Pdif | 04 12 57.2 +0.5 |
| | comp=Z,32nm,0.9s | | | | | | | | |
| **H37A** | **Dierke Farm, C** | **97.97** | **349** | P | Pdif | 04 12 57.3 +0.8 |
| | baz=98 | | | | | | | | |
| **G31A** | **Conde** | **98.05** | **352** | P | Pdif | 04 12 57.6 +0.8 |
| | baz=98 | | | | | | | | |
| **BOZ** | **Bozeman (W)** | **98.17** | **2** | P | Pdif | 04 12 58.0 +0.5 |
| | baz=98,SNR=6.9 | | | | | | | | |
| **G27A** | **Dupree** | **98.22** | **355** | P | Pdif | 04 12 58.4 +0.7 |
| | baz=98 | | | | | | | | |
| **G30A** | **Faulkton** | **98.24** | **353** | P | Pdif | 04 12 58.5 +0.8 |
| | baz=98 | | | | | | | | |
| **G26A** | **Maurine** | **98.35** | **355** | Pdiff | Pdif | 04 12 58.9 +0.6 |
| | baz=98 | | | | | | | | |
| **G28A** | **Parade** | **98.45** | **354** | Pdiff | Pdif | 04 12 59.4 +0.7 |
| | baz=98 | | | | | | | | |
| **H32A** | **Carlson Farm,** | **98.67** | **352** | Pdiff | Pdif | 04 13 00.8 +1.1 |
| | baz=98 | | | | | | | | |
| **I36A** | **Fitzsimmons Fa** | **98.69** | **349** | Pdiff | Pdif | 04 13 00.3 +0.5 |
| | baz=98 | | | | | | | | |
| **RLMT** | **Red Lodge** | **98.73** | **0** | Pdiff | Pdif | 04 13 01.4 +1.3 |
| | baz=98 | | | | | | | | |
| **H29A** | **Onida** | **98.84** | **354** | Pdiff | Pdif | 04 13 01.5 +1.1 |
| | baz=98 | | | | | | | | |
| **H28A** | **Mission Ridge** | **98.86** | **354** | Pdiff | Pdif | 04 13 01.6 +1.1 |
| | baz=98 | | | | | | | | |
| **SUSD** | **South Dakota S** | **98.90** | **353** | Pdiff | Pdif | 04 13 01.6 +0.9 |
| | baz=98 | | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **98.94** | **3** | *e*P | Pdif | 04 13 02.0 +0.9 |
| | comp=Z,1.4nm,0.9s | | | | | | | | |
| **H27A** | **Howes** | **98.98** | **355** | Pdiff | Pdif | 04 13 01.8 +0.7 |
| | baz=99 | | | | | | | | |
| **H25A** | **Fruitdale** | **99.08** | **356** | Pdiff | **Pdif** | **04 13 02.5 +0.9** |
| | baz=99 | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **99.33** | **351** | Pdiff | **Pdif** | **04 13 03.5 +0.9** |
| | baz=99 | | | | | | | | |
| **J36A** | **Seneca 1, Swea** | **99.42** | **349** | Pdiff | **Pdif** | **04 13 03.9 +0.9** |
| | baz=99 | | | | | | | | |
| **I27A** | **Quinn** | **99.54** | **355** | Pdiff | **Pdif** | **04 13 04.5 +0.9** |
| | baz=99 | | | | | | | | |
| **I28A** | **Midland** | **99.54** | **354** | Pdiff | **Pdif** | **04 13 04.8 +1.2** |
| | baz=99 | | | | | | | | |
| **I26A** | **New Underwood** | **99.63** | **356** | Pdiff | **Pdif** | **04 13 05.5 +1.5** |
| | baz=99 | | | | | | | | |
| **I25A** | **Rochford** | **99.69** | **356** | Pdiff | **Pdif** | **04 13 06.3 +1.9** |
| | baz=99 | | | | | | | | |
| **J05D** | **Fort Rock, OR** | **99.78** | **9** | Pdiff | **Pdif** | **04 13 06.6 +1.8** |
| | baz=99 | | | | | | | | |
| **IMW** | **Indian Meadow** | **99.93** | **1** | *e*Pdif | **Pdif** | **04 13 06.8 +1.2** |
| | comp=Z,3.8nm,1.0s | | | | | | | | |
| **J29A** | **Okreek** | **100.06** | **354** | Pdiff | **Pdif** | **04 13 06.9 +1.1** |
| | baz=100 | | | | | | | | |
| **J30A** | **Dallas** | **100.06** | **353** | Pdiff | **Pdif** | **04 13 07.0 +1.1** |
| | baz=100 | | | | | | | | |
| **J28A** | **Allard Ranch,** | **100.12** | **354** | Pdiff | **Pdif** | **04 13 07.3 +1.2** |
| | baz=100 | | | | | | | | |
| **HLID** | **Hailey** | **100.13** | **4** | Pdiff | **Pdif** | **04 13 07.5 +1.2** |
| | baz=100 | | | | | | | | |
| **J27A** | **Elkhorn Farm,** | **100.35** | **355** | Pdiff | **Pdif** | **04 13 08.3 +1.1** |
| | baz=100 | | | | | | | | |
| **K30A** | **Basset** | **100.72** | **353** | Pdiff | **Pdif** | **04 13 10.0 +1.2** |
| | baz=100 | | | | | | | | |
| **K22A** | **Casper** | **101.17** | **358** | Pdiff | **Pdif** | **04 13 12.4 +1.4** |
| | baz=101 | | | | | | | | |
| **L30A** | **Spencer Herefo** | **101.45** | **353** | Pdiff | **Pdif** | **04 13 12.2 +0.1** |
| | baz=101 | | | | | | | | |
| **M33A** | **Taylor Creek F** | **101.54** | **351** | Pdiff | **Pdif** | **04 13 12.9 +0.4** |
| | baz=101 | | | | | | | | |
| **N02D** | **Trinity Center** | **101.84** | **11** | Pdiff | **Pdif** | **04 13 14.4 +0.5** |
| | baz=102 | | | | | | | | |
| **DUG** | **Dugway** | **103.57** | **3** | Pdiff | **Pdif** | **04 13 22.3 +0.6** |
| | baz=103 | | | | | | | | |
| **O20A** | **White River Ci** | **103.71** | **359** | Pdiff | **Pdif** | **04 13 22.7 +0.3** |
| | baz=103 | | | | | | | | |
| **ISCO** | **Idaho Springs** | **103.98** | **357** | Pdiff | **Pdif** | **04 13 23.6 -0.1** |
| | baz=104 | | | | | | | | |
| **MAW** | **Mawson** | **104.00** | **183** | PP | PP | 04 17 41.0 -1.8 |
| | comp=Z,0.6nm,0.2s,baz=359,slow=11,SNR=4.2 | | | | | | | | |
| MAW | | | | PKKPbc | **PKKPbc** | **04 29 13.5 +0.4** |
| | comp=Z,1.0nm,0.7s,baz=288,slow=3.9,SNR=5.5 | | | | | | | | |
| **Q32A** | **Meitler Ranch,** | **104.25** | **352** | Pdiff | **Pdif** | **04 13 24.2 -0.4** |
| | baz=104 | | | | | | | | |
| **CBKS** | **Cedar Bluff** | **104.55** | **353** | Pdiff | **Pdif** | **04 13 27.2 +1.2** |
| | baz=104 | | | | | | | | |
| **Q24A** | **Divide** | **104.80** | **357** | Pdiff | **Pdif** | **04 13 28.1 +0.7** |
| | baz=104 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **104.91** | **8** | Pdiff | **Pdif** | **04 13 30.3 +2.5** |
| | comp=Z,1.0nm,0.6s,baz=333,slow=2.2,SNR=4.9 | | | | | | | | |
| NVAR | | | | PKiKP | **PKiKP** | **04 17 40.8 -1.0** |
| | comp=Z,1.1nm,0.5s,baz=285,slow=3.1,SNR=5.5 | | | | | | | | |
| **R31A** | **Burdett** | **105.05** | **352** | Pdiff | **Pdif** | **04 13 29.7 +1.6** |
| | baz=105 | | | | | | | | |
| **T26A** | **Comanche Natio** | **106.50** | **356** | PKiKP | **PKiKP** | **04 17 45.9 +1.1** |
| | baz=106 | | | | | | | | |
| **U35A** | **Pawnee** | **106.59** | **350** | PKiKP | **PKiKP** | **04 17 45.8 +1.1** |
| | baz=106 | | | | | | | | |
| **FURC** | **Furnace Creek,** | **107.00** | **7** | PKiKP | **PKiKP** | **04 17 46.0 +0.6** |
| | baz=107 | | | | | | | | |
| **U27A** | **Thompson Grove** | **107.20** | **355** | PKiKP | **PKiKP** | **04 17 46.2 +0.2** |
| | baz=107 | | | | | | | | |
| **PKM** | **Peak Mountain** | **108.22** | **9** | PKiKP | **PKiKP** | **04 17 47.3 -0.7** |
| | baz=108 | | | | | | | | |
| **Z32A** | **Haskell** | **109.97** | **352** | PKiKP | **PKiKP** | **04 17 50.0 -1.1** |
| | baz=110 | | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **110.03** | **352** | PKiKP | **PKiKP** | **04 17 50.2 -1.1** |
| | baz=110 | | | | | | | | |
| **128A** | **Castleberry Fa** | **110.95** | **354** | PKiKP | **PKiKP** | **04 17 51.9 -1.2** |
| | baz=111 | | | | | | | | |
| **121A** | **Cookes Peak, D** | **111.29** | **359** | PKiKP | **PKiKP** | **04 17 53.4 -0.4** |
| | baz=111 | | | | | | | | |
| **336A** | **Riesel** | **111.50** | **349** | PKiKP | **PKiKP** | **04 17 53.2 -0.8** |
| | baz=111 | | | | | | | | |
| **334A** | **Lometa** | **111.75** | **350** | PKiKP | **PKiKP** | **04 17 53.9 -0.6** |
| | baz=111 | | | | | | | | |
| **330A** | **Mertzon** | **112.03** | **353** | PKiKP | **PKiKP** | **04 17 54.6 -0.5** |
| | baz=112 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **112.05** | **357** | PKiKP | **PKiKP** | **04 17 55.1 0.0** |
| | baz=112 | | | | | | | | |
| **331A** | **San Angelo** | **112.05** | **352** | PKiKP | **PKiKP** | **04 17 54.5 -0.7** |
| | baz=112 | | | | | | | | |
| **431A** | **Sonora** | **112.69** | **352** | PKiKP | **PKiKP** | **04 17 55.7 -0.7** |
| | baz=112 | | | | | | | | |
| **JCT** | **Junction City** | **112.80** | **351** | PKiKP | **PKiKP** | **04 17 55.7 -0.9** |
| | baz=112 | | | | | | | | |
| **429A** | **Davenport Ranc** | **112.88** | **353** | PKiKP | **PKiKP** | **04 17 56.1 -0.7** |
| | baz=112 | | | | | | | | |
| **532A** | **Rocksprings** | **113.16** | **352** | PKiKP | **PKiKP** | **04 17 56.6 -0.7** |
| | baz=113 | | | | | | | | |
| **531A** | **Rocksprings** | **113.19** | **352** | PKiKP | **PKiKP** | **04 17 56.9 -0.4** |
| | baz=113 | | | | | | | | |
| **530A** | **J-C Ranch, Com** | **113.29** | **353** | PKiKP | **PKiKP** | **04 17 57.2 -0.3** |
| | baz=113 | | | | | | | | |
| **636

*CSEM **28** 04:04:47.2±0.1,38.34N×22.29E,h10km,MD3.3,Error ellipse: s-maj=1.9km s-min=1.8km az=38.0*
*THE **28** 04:04:47.3,38.34N×22.28E,h0km±1km,ML3.6/26,Error ellipse: s-maj=1.4km s-min=0.4km az=173.0*
**ISC 28 04:04:47.4±0.8,38.34N±0.01×22.28E±0.01,h10km±5km, n254,σ0s69/369,5C,Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KALE** | **Kalithea** | **0.12** | **295** | ⇑*i* | *e*PB | **Pg** | **04 04 50.1** | **-0.3** |
| KALE | | | | | *e*SB | **Sg** | 04 04 52.3 | -0.2 |
| **KALE** | **Kalithea** | **0.12** | **295** | | P | **Pg** | **04 04 50.0** | **-0.3** |
| KALE | | | | | S | **Sg** | 04 04 52.4 | -0.1 |
| **KALE** | **Kalithea** | **0.12** | **295** | ⇑*i* | P | **Pg** | **04 04 50.1** | **-0.3** |
| KALE | | | | | *e*Sb | **Sg** | 04 04 52.3 | -0.2 |
| **SERG** | **Sergoula** | **0.19** | **293** | | P | **Pg** | **04 04 51.0** | **-0.4** |
| SERG | | | | | S | **Sg** | 04 04 54.2 | 0.0 |
| **SERG** | **Sergoula** | **0.19** | **293** | | P | **Pg** | **04 04 51.0** | **-0.4** |
| SERG | | | | | S | **Sg** | 04 04 54.2 | 0.0 |
| **DSF** | **Desfina** | **0.21** | **70** | | *e*PB | **Pg** | **04 04 51.8** | **0.0** |
| DSF | | | | | *e*SB | **Sg** | 04 04 55.4 | +0.7 |
| **DSF** | **Desfina** | **0.21** | **70** | | P | **Pg** | **04 04 51.7** | **0.0** |
| DSF | | | | | S | **Sg** | 04 04 55.4 | +0.7 |
| **DSF** | **Desfina** | **0.21** | **70** | | *e*Pb | **Pg** | **04 04 51.8** | **0.0** |
| DSF | | | | | S | **Sg** | 04 04 55.5 | +0.7 |
| **DESF** | **Desfina** | **0.21** | **70** | | *e*PB | **Pg** | **04 04 51.8** | **0.0** |
| DESF | | | | | *e*SB | **Sg** | 04 04 55.4 | +0.5 |
| **DESF** | **Desfina** | **0.21** | **70** | | *e*Pb | **Pg** | **04 04 51.8** | **0.0** |
| DESF | | | | | *e*Sb | **Sg** | 04 04 55.4 | +0.5 |
| **LAKA** | **Lakka** | **0.26** | **247** | | *e*PB | **Pg** | **04 04 52.5** | **-0.1** |
| LAKA | | | | | *e*SB | **Sg** | 04 04 56.2 | +0.1 |
| **LAKA** | **Lakka** | **0.26** | **247** | | P | **Pg** | **04 04 52.5** | **-0.1** |
| LAKA | | | | | S | **Sg** | 04 04 56.0 | -0.1 |
| **LAKA** | **Lakka** | **0.26** | **247** | | P | **Pg** | **04 04 52.5** | **-0.1** |
| LAKA | | | | | S | **Sg** | 04 04 56.2 | +0.1 |
| **EFP** | **Efpalio** | **0.31** | **286** | | P | **Pg** | **04 04 53.0** | **-0.5** |
| EFP | | | | | S | **Sg** | 04 04 58.0 | +0.4 |
| **EFP** | **Efpalio** | **0.31** | **286** | | P | **Pg** | **04 04 53.0** | **-0.5** |
| EFP | | | | | S | **Sg** | 04 04 57.5 | -0.1 |
| **KLV** | **Kalavryta, Ach** | **0.31** | **199** | | *e*PB | **Pg** | **04 04 53.5** | **-0.2** |
| KLV | | | | | *e*SB | **Sg** | 04 04 58.1 | +0.2 |
| **KLV** | **Kalavryta, Ach** | **0.31** | **199** | | P | **Pg** | **04 04 53.5** | **-0.2** |
| KLV | | | | | S | **Sg** | 04 04 57.7 | -0.2 |
| **KLV** | **Kalavryta, Ach** | **0.31** | **199** | | P | **Pg** | **04 04 53.5** | **-0.2** |
| KLV | | | | | *e*Sb | **Sg** | 04 04 58.1 | +0.2 |
| **UPR** | **University Cam** | **0.39** | **262** | | P | **Pg** | **04 04 55.0** | **-0.1** |
| UPR | | | | | S | **Sg** | 04 05 00.4 | +0.1 |
| **UPR** | **University Cam** | **0.39** | **262** | | P | **Pg** | **04 04 54.9** | **-0.1** |
| UPR | | | | | S | **Sg** | 04 05 00.4 | +0.1 |
| **GUR** | **Goura** | **0.41** | **173** | | *e*PB | **Pg** | **04 04 55.4** | **0.0** |
| GUR | | | | | *e*SB | **Sg** | 04 05 01.2 | +0.4 |
| **GUR** | **Goura** | **0.41** | **173** | | P | **Pg** | **04 04 55.7** | **+0.3** |
| GUR | | | | | S | **Sg** | 04 05 01.0 | +0.2 |
| **GUR** | **Goura** | **0.41** | **173** | | *e*Pb | **Pg** | **04 04 55.4** | **0.0** |
| GUR | | | | | S | **Sg** | 04 05 01.0 | +0.2 |
| **THAL** | **Thalero** | **0.43** | **135** | | *e*PB | **Pg** | **04 04 56.1** | **+0.3** |
| THAL | | | | | *e*SB | **Sg** | 04 05 01.9 | +0.5 |
| **THAL** | **Thalero** | **0.43** | **135** | | P | **Pg** | **04 04 56.0** | **+0.3** |
| THAL | | | | | S | **Sg** | 04 05 01.5 | +0.1 |
| **THAL** | **Thalero** | **0.43** | **135** | | P | **Pg** | **04 04 56.0** | **+0.3** |
| THAL | | | | | S | **Sg** | 04 05 01.5 | +0.1 |
| THAL | | | | | *e*Sb | **Sg** | 04 05 01.9 | +0.5 |
| **AXAR** | **Agios Charalam** | **0.52** | **35** | | *e*PN | **Pg** | **04 04 56.9** | **-0.6** |
| AXAR | | | | | *e*SN | **Sg** | 04 05 04.7 | +0.3 |
| **AXAR** | **Agios Charalam** | **0.52** | **35** | | P | **Pg** | **04 04 57.5** | **0.0** |
| AXAR | | | | | S | **Sb** | 04 05 05.6 | -0.6 |
| **AXAR** | **Agios Charalam** | **0.52** | **35** | | P | **Pg** | **04 04 56.9** | **-0.6** |
| AXAR | | | | | *e*Sn | **Sg** | 04 05 04.7 | +0.3 |
| AXAR | | | | | S | **Sb** | 04 05 05.3 | -0.9 |
| **DRO** | **Drossia** | **0.59** | **229** | | P | **Pg** | **04 04 58.4** | **-0.5** |
| **DRO** | **Drossia** | **0.59** | **229** | | P | **Pg** | **04 04 58.4** | **-0.5** |
| DRO | | | | | S | **Sb** | 04 05 07.7 | -0.6 |
| **LTK** | **Loutraki** | **0.63** | **120** | | *e*PN | **Pg** | **04 04 59.7** | **+0.1** |
| LTK | | | | | *e*SN | **Sb** | 04 05 08.9 | -0.4 |
| **LTK** | **Loutraki** | **0.63** | **120** | | P | **Pg** | **04 04 59.6** | **+0.1** |
| LTK | | | | | S | **Sb** | 04 05 08.9 | -0.4 |
| **LTK** | **Loutraki** | **0.63** | **120** | | P | **Pg** | **04 04 59.6** | **+0.1** |
| LTK | | | | | S | **Sb** | 04 05 08.9 | -0.4 |
| **LKR** | **Lokris** | **0.64** | **61** | | *e*PN | **Pg** | **04 04 59.1** | **-0.8** |
| LKR | | | | | *e*SN | **Sg** | 04 05 08.4 | +0.1 |
| **LKR** | **Lokris** | **0.64** | **61** | | P | **Pg** | **04 04 59.3** | **-0.6** |
| LKR | | | | | S | **Sb** | 04 05 09.3 | -0.4 |
| **LKR** | **Lokris** | **0.64** | **61** | | P | **Pg** | **04 04 59.3** | **-0.6** |
| LKR | | | | | *e*Sn | **Sg** | 04 05 08.4 | +0.1 |
| LKR | | | | | S | **Sb** | 04 05 09.3 | -0.4 |
| **PVO** | **Paravola** | **0.65** | **295** | | P | **Pg** | **04 04 59.4** | **-0.6** |
| PVO | | | | | S | **Sg** | 04 05 08.8 | +0.2 |
| **PVO** | **Paravola** | **0.65** | **295** | | P | **Pg** | **04 04 59.4** | **-0.6** |
| PVO | | | | | S | **Sg** | 04 05 08.8 | +0.2 |
| **ATAL** | **Atalanti** | **0.68** | **59** | | P | **Pg** | **04 04 59.8** | **-0.7** |
| ATAL | | | | | S | **Sg** | 04 05 09.8 | +0.3 |
| **ATAL** | **Atalanti** | **0.68** | **59** | | P | **Pg** | **04 04 59.8** | **-0.7** |
| ATAL | | | | | S | **Sg** | 04 05 09.8 | +0.3 |
| **AGG** | **Agios Georgios** | **0.68** | **3** | | *e*P | **Pg** | **04 04 59.0** | **-1.5** |
| **AGG** | **Agios Georgios** | **0.68** | **3** | | *e*PN | **Pg** | **04 04 59.3** | **-1.3** |
| AGG | | | | | *e*SN | **Sg** | 04 05 09.3 | -0.2 |
| **AGG** | **Agios Georgios** | **0.68** | **3** | | P | **Pg** | **04 04 59.3** | **-1.1** |
| AGG | | | | | S | **Sg** | 04 05 09.6 | +0.1 |
| **AGG** | **Agios Georgios** | **0.68** | **3** | | P | **Pg** | **04 04 59.5** | **-1.1** |
| AGG | | | | | *e*Sn | **Sg** | 04 05 09.3 | -0.2 |
| AGG | | | | | S | **Sg** | 04 05 09.6 | +0.1 |
| **MAKR** | **Makrakomi, Fth** | **0.68** | **350** | | *e*PN | **Pg** | **04 04 59.7** | **-0.9** |
| **MAKR** | **Makrakomi, Fth** | **0.68** | **350** | | P | **Pg** | **04 05 00.7** | **+0.1** |
| MAKR | | | | | S | **Sg** | 04 05 10.2 | +0.7 |
| **MAKR** | **Makrakomi, Fth** | **0.68** | **350** | | *e*Pn | **Pg** | **04 04 59.7** | **-0.9** |
| **MAKR** | **Makrakomi, Fth** | **0.68** | **350** | | P | **Pg** | **04 05 00.1** | **-0.5** |
| MAKR | | | | | S | **Sg** | 04 05 10.2 | +0.7 |
| **EVR** | **Evrytania** | **0.68** | **327** | | *e*PN | **Pg** | **04 04 59.7** | **-0.8** |
| EVR | | | | | *e*SN | **Sg** | 04 05 09.3 | -0.3 |
| **EVR** | **Evrytania** | **0.68** | **327** | | P | **Pg** | **04 04 59.8** | **-0.8** |
| EVR | | | | | S | **Sb** | 04 05 10.7 | -0.3 |
| **EVR** | **Evrytania** | **0.68** | **327** | | P | **Pg** | **04 04 59.8** | **-0.8** |
| EVR | | | | | *e*Sn | **Sg** | 04 05 09.3 | -0.3 |
| EVR | | | | | S | **Sb** | 04 05 10.6 | -0.4 |
| **RLS** | **Riolos of Patr** | **0.70** | **246** | | *e*PN | **Pg** | **04 05 00.3** | **-0.6** |
| RLS | | | | | *e*SN | **Sg** | 04 05 10.1 | +0.1 |
| **RLS** | **Riolos of Patr** | **0.70** | **246** | | P | **Pg** | **04 05 00.4** | **-0.5** |
| RLS | | | | | S | **Sb** | 04 05 11.0 | -0.3 |
| **RLS** | **Riolos of Patr** | **0.70** | **246** | | P | **Pg** | **04 05 00.4** | **-0.5** |
| RLS | | | | | *e*Sn | **Sg** | 04 05 10.1 | +0.1 |
| RLS | | | | | S | **Sb** | 04 05 11.0 | -0.3 |
| **AXS** | **Araxos** | **0.72** | **259** | | P | **Pg** | **04 05 01.1** | **-0.3** |
| AXS | | | | | S | **Sg** | 04 05 11.1 | +0.3 |
| **AXS** | **Araxos** | **0.72** | **259** | | P | **Pg** | **04 05 01.1** | **-0.3** |
| AXS | | | | | S | **Sg** | 04 05 11.1 | +0.3 |
| **VIL2** | **Platees** | **0.79** | **99** | | *e*PN | **Pg** | **04 05 02.9** | **+0.3** |
| **VILL** | **Villia** | **0.83** | **102** | | P | **Pb** | **04 04 04.1** | **+0.2** |
| VILL | | | | | S | **Sn** | 04 05 16.5 | -1.0 |
| **VILL** | **Villia** | **0.83** | **102** | | *e*Pn | **Pg** | **04 05 02.9** | **-0.5** |
| **VILL** | **Villia** | **0.83** | **102** | | P | **Pb** | **04 04 04.1** | **+0.2** |
| VILL | | | | | S | **Sn** | 04 05 16.5 | -1.0 |
| **PDO** | **Prodromos** | **0.90** | **287** | | P | **Pg** | **04 04 04.3** | **-0.4** |
| PDO | | | | | S | **Sn** | 04 05 18.6 | -0.5 |
| **PDO** | **Prodromos** | **0.90** | **287** | | P | **Pg** | **04 05 04.1** | **-0.6** |
| PDO | | | | | S | **Sn** | 04 05 18.6 | -0.5 |
| **SMIA** | **Simia** | **0.91** | **53** | | *e*PN | **Pg** | **04 05 04.0** | **-0.8** |
| SMIA | | | | | *e*SN | **Sb** | 04 05 17.2 | -0.1 |
| **SMIA** | **Simia** | **0.91** | **53** | | P | **Pg** | **04 05 04.7** | **-0.1** |
| SMIA | | | | | S | **Sb** | 04 05 17.6 | +0.3 |
| **SMIA** | **Simia** | **0.91** | **53** | | *e*Pn | **Pg** | **04 05 04.0** | **-0.8** |
| **SMIA** | **Simia** | **0.91** | **53** | | P | **Pg** | **04 05 04.7** | **-0.1** |
| SMIA | | | | | *e*Sn | **Sb** | 04 05 17.2 | -0.1 |
| SMIA | | | | | S | **Sb** | 04 05 17.6 | +0.3 |
| **AMT** | **Artemida-Makis** | **0.93** | **209** | | P | **Pg** | **04 05 05.0** | **-0.2** |
| AMT | | | | | S | **Sb** | 04 05 18.1 | +0.3 |
| **AMT** | **Artemida-Makis** | **0.93** | **209** | | P | **Pg** | **04 05 04.8** | **-0.4** |
| AMT | | | | | S | **Sb** | 04 05 18.1 | +0.3 |
| **VLX** | **Vlachokerasia** | **0.97** | **175** | | *e*PN | **Pg** | **04 05 04.9** | **-1.2** |
| **VLX** | **Vlachokerasia** | **0.97** | **175** | | P | **Pg** | **04 05 05.6** | **-0.5** |
| VLX | | | | | S | **Sn** | 04 05 20.4 | -0.6 |
| **VLX** | **Vlachokerasia** | **0.97** | **175** | | *e*Pn | **Pg** | **04 04 04.9** | **-1.2** |
| **VLX** | **Vlachokerasia** | **0.97** | **175** | | P | **Pg** | **04 05 05.6** | **-0.5** |
| VLX | | | | | S | **Sn** | 04 05 20.4 | -0.6 |
| **MRKA** | **Markates** | **1.09** | **70** | | *e*PN | **Pb** | **04 05 07.4** | **-0.9** |
| MRKA | | | | | *e*SN | **Sb** | 04 05 23.0 | +0.4 |
| **MRKA** | **Markates** | **1.09** | **70** | | P | **Pb** | **04 05 07.7** | **-0.6** |
| MRKA | | | | | S | **Sn** | 04 05 23.5 | -0.3 |
| **MRKA** | **Markates** | **1.09** | **70** | | *e*Pn | **Pb** | **04 05 07.4** | **-0.9** |
| **MRKA** | **Markates** | **1.09** | **70** | | P | **Pb** | **04 05 07.7** | **-0.6** |
| MRKA | | | | | *e*Sn | **Sb** | 04 05 23.0 | +0.4 |
| MRKA | | | | | S | **Sn** | 04 05 23.5 | -0.3 |
| **NAIG** | **Nisos Aigina** | **1.12** | **121** | | *e*PN | **Pb** | **04 05 08.8** | **0.0** |
| **NAIG** | **Nisos Aigina** | **1.12** | **121** | | *e*Pn | **Pb** | **04 05 08.8** | **0.0** |
| **DID** | **Didima** | **1.13** | **137** | | P | **Pb** | **04 05 08.4** | **-0.5** |
| DID | | | | | S | **Sg** | 04 05 24.2 | +0.6 |
| **DID** | **Didima** | **1.13** | **137** | | P | **Pb** | **04 05 08.4** | **-0.5** |
| DID | | | | | S | **Sg** | 04 05 24.2 | +0.6 |
| **KRND** | **KRANIDI** | **1.18** | **144** | | *e*PN | **Pb** | **04 05 09.8** | **0.0** |
| **KRND** | **KRANIDI** | **1.18** | **144** | | P | **Pb** | **04 05 09.8** | **0.0** |
| KRND | | | | | S | **Sn** | 04 05 27.1 | +1.1 |
| **KRND** | **KRANIDI** | **1.18** | **144** | | P | **Pb** | **04 05 09.8** | **0.0** |
| KRND | | | | | S | **Sn** | 04 05 27.1 | +1.1 |
| **FYTO** | **Fytoko, Volos** | **1.18** | **26** | | P | **Pb** | **04 05 09.7** | **-0.2** |
| **FYTO** | **Fytoko, Volos** | **1.18** | **26** | | P | **Pb** | **04 05 09.7** | **-0.2** |
| **ATH** | **Athens Observa** | **1.19** | **108** | | *e*PN | **Pb** | **04 05 09.9** | **-0.1** |
| ATH | | | | | *e*SN | **Sn** | 04 05 26.8 | +0.5 |
| **ATH** | **Athens Observa** | **1.19** | **108** | | P | **Pb** | **04 05 09.9** | **-0.1** |
| ATH | | | | | S | **Sg** | 04 05 25.8 | +0.1 |
| **ATH** | **Athens Observa** | **1.19** | **108** | | P | **Pb** | **04 05 09.9** | **-0.1** |
| ATH | | | | | S | **Sg** | 04 05 25.8 | +0.1 |
| ATH | | | | | *e*Sn | **Sn** | 04 05 26.8 | +0.5 |
| **ITM** | **Ithomi** | **1.19** | **194** | | *e*PN | **Pb** | **04 05 09.3** | **-0.8** |
| **ITM** | **Ithomi** | **1.19** | **194** | | P | **Pb** | **04 05 09.4** | **-0.7** |
| ITM | | | | | S | **Sn** | 04 05 26.8 | +0.4 |
| **ITM** | **Ithomi** | **1.19** | **194** | | P | **Pb** | **04 05 09.4** | **-0.7** |
| ITM | | | | | S | **Sn** | 04 05 26.8 | +0.4 |
| **KFL** | **Anninata** | **1.20** | **259** | | P | **Pb** | **04 05 09.5** | **-0.6** |
| KFL | | | | | S | **Sn** | 04 05 27.4 | +1.0 |
| **KFL** | **Anninata** | **1.20** | **259** | | P | **Pb** | **04 05 09.5** | **-0.6** |
| KFL | | | | | S | **Sn** | 04 05 27.4 | +1.0 |
| **NEO** | **Neokhori** | **1.21** | **37** | | *e*PN | **Pn** | **04 05 09.1** | **-1.3** |
| **NEO** | **Neokhori** | **1.21** | **37** | | *e*Pn | **Pn** | **04 05 09.1** | **-1.3** |
| **DSL** | **Palaion Diasel** | **1.22** | **311** | | *e*PN | **Pn** | **04 05 09.2** | **-1.3** |
| **DSL** | **Palaion Diasel** | **1.22** | **311** | | P | **Pn** | **04 05 10.1** | **-0.4** |
| DSL | | | | | S | **Sn** | 04 05 29.1 | +2.1 |
| **DSL** | **Palaion Diasel** | **1.22** | **311** | | *e*Pn | **Pn** | **04 05 09.2** | **-1.3** |
| **DSL** | **Palaion Diasel** | **1.22** | **311** | | P | **Pn** | **04 05 10.1** | **-0.4** |
| DSL | | | | | S | **Sn** | 04 05 29.1 | +2.1 |
| **THL** | **Klokotos Trika** | **1.24** | **351** | | *e*PN | **Pn** | **04 05 09.0** | **-1.7** |
| **THL** | **Klokotos Trika** | **1.24** | **351** | | P | **Pn** | **04 05 10.5** | **-0.2** |
| **THL** | **Klokotos Trika** | **1.24** | **351** | | *e*Pn | **Pn** | **04 05 09.0** | **-1.7** |
| **THL** | **Klokotos Trika** | **1.24** | **351** | | P | **Pn** | **04 05 10.5** | **-0.2** |
| **SKIA** | **Skiathos** | **1.24** | **48** | | *e*PN | **Pn** | **04 05 10.1** | **-0.7** |
| **SKIA** | **Skiathos** | **1.24** | **48** | | *e*Pn | **Pn** | **04 05 10.1** | **-0.7** |
| **ATHU** | **Athens Univers** | **1.24** | **107** | | P | **Pn** | **04 05 10.4** | **-0.4** |
| ATHU | | | | | S | **Sn** | 04 05 27.8 | +0.2 |
| **ATHU** | **Athens Univers** | **1.24** | **107** | | P | **Pn** | **04 05 10.4** | **-0.4** |
| ATHU | | | | | S | **Sn** | 04 05 27.8 | +0.2 |
| **XOR** | **Xorichti** | **1.25** | **35** | | *e*PN | **Pn** | **04 05 10.2** | **-0.7** |
| **XOR** | **Xorichti** | **1.25** | **35** | | P | **Pn** | **04 05 10.4** | **-0.5** |
| **XOR** | **Xorichti** | **1.25** | **35** | | P | **Pn** | **04 05 10.4** | **-0.5** |
| **PTL** | **Penteli** | **1.28** | **103** | | *e*PN | **Pn** | **04 05 11.0** | **-0.3** |
| PTL | | | | | *e*SN | **Sb** | 04 05 28.2 | 0.0 |
| **PTL** | **Penteli** | **1.28** | **103** | | P | **Pn** | **04 05 11.1** | **-0.3** |
| PTL | | | | | S | **Sg** | 04 05 29.9 | +1.2 |
| **PTL** | **Penteli** | **1.28** | **103** | | P | **Pn** | **04 05 11.1** | **-0.3** |
| PTL | | | | | *e*Sn | **Sb** | 04 05 28.2 | 0.0 |
| PTL | | | | | S | **Sg** | 04 05 29.9 | +1.2 |
| **VLY** | **Voula,Athens** | **1.29** | **112** | | *e*PN | **Pn** | **04 05 11.0** | **-0.4** |
| **VLY** | **Voula,Athens** | **1.29** | **112** | | P | **Pn** | **04 05 11.2** | **-0.2** |
| VLY | | | | | S | **Sg** | 04 05 29.2 | +0.3 |
| **VLY** | **Voula,Athens** | **1.29** | **112** | | P | **Pn** | **04 05 11.2** | **-0.2** |
| VLY | | | | | S | **Sg** | 04 05 29.2 | +0.3 |
| **EREA** | **Eretria** | **1.30** | **86** | | *e*PN | **Pn** | **04 05 11.2** | **-0.4** |
| **EREA** | **Eretria** | **1.30** | **86** | | P | **Pn** | **04 05 11.6** | **0.0** |
| EREA | | | | | S | **Sg** | 04 05 30.4 | +1.1 |
| **EREA** | **Eretria** | **1.30** | **86** | | *e*Pn | **Pn** | **04 05 11.2** | **-0.4** |
| **EREA** | **Eretria** | **1.30** | **86** | | P | **Pn** | **04 05 11.6** | **0.0** |
| EREA | | | | | S | **Sg** | 04 05 30.4 | +1.1 |
| **VLS** | **Valsamata** | **1.34** | **264** | | *e*PN | **Pn** | **04 05 10.8** | **-1.3** |
| **VLS** | **Valsamata** | **1.34** | **264** | | P | **Pn** | **04 05 11.2** | **-0.9** |
| VLS | | | | | S | **Sg** | 04 05 31.3 | +0.8 |
| **VLS** | **Valsamata** | **1.34** | **264** | | *e*Pn | **Pn** | **04 05 10.8** | **-1.3** |
| **VLS** | **Valsamata** | **1.34** | **264** | | P | **Pn** | **04 05 11.2** | **-0.9** |
| VLS | | | | | S | **Sg** | 04 05 31.3 | +0.8 |
| **LKD2** | **Lefkada island** | **1.35** | **290** | | P | **Pn** | **04 05 12.0** | **-0.2** |
| **LKD2** | **Lefkada island** | **1.35** | **290** | | P | **Pn** | **04 05 12.0** | **-0.2** |
| **AOS** | **Alonnisos** | **1.50** | **56** | | *e*PB | **Pn** | **04 05 12.9** | **-1.4** |
| **PYL** | **PYLOS** | **1.50** | **197** | | P | **Pb** | **04 05 14.9** | **-0.5** |
| **PYL** | **PYLOS** | **1.50** | **197** | | P | **Pb** | **04 05 14.9** | **-0.5** |
| **DYR** | **Agios Nikonas** | **1.58** | **178** | | *e*PN | **Pn** | **04 05 15.4** | **0.0** |
| **DYR** | **Agios Nikonas** | **1.58** | **178** | | P | **Pn** | **04 05 16.5** | **-0.1** |
| **DYR** | **Agios Nikonas** | **1.58** | **178** | | *e*Pn | **Pn** | **04 05 15.4** | **0.0** |
| **DYR** | **Agios Nikonas** | **1.58** | **178** | | P | **Pn** | **04 05 16.5** | **-0.1** |
| **MEV** | **Metsovon** | **1.66** | **331** | | P | **Pb** | **04 05 18.4** | **+0.3** |
| **MEV** | **Metsovon** | **1.66** | **331** | | P | **Pb** | **04 05 18.4** | **+0.3** |
| **VLI** | **Veliai** | **1.70** | **162** | | *e*PB | **Pn** | **04 05 16.6** | **-0.5** |
| **VLI** | **Veliai** | **1.70** | **162** | | P | **Pn** | **04 05 16.8** | **-0.3** |
| VLI | | | | | S | **Sg** | 04 05 41.5 | -0.6 |
| **VLI** | **Veliai** | **1.70** | **162** | | P | **Pn** | **04 05 16.8** | **-0.3** |
| VLI | | | | | S | **Sg** | 04 05 41.5 | -0.6 |
| **JAN** | **Janina** | **1.72** | **320** | | *e*PN | **Pn** | **04 05 17.8** | **+0.4** |
| **JAN** | **Janina** | **1.72** | **320** | | P | **Pb** | **04 05 19.1** | **0.0** |
| JAN | | | | | S | **Sg** | 04 05 42.8 | +0.1 |
| **JAN** | **Janina** | **1.72** | **320** | | *e*Pn | **Pn** | **04 05 17.8** | **+0.4** |
| **JAN** | **Janina** | **1.72** | **320** | | P | **Pb** | **04 05 19.1** | **0.0** |
| JAN | | | | | S | **Sg** | 04 05 42.8 | +0.1 |
| **KARY** | **Karystos** | **1.73** | **100** | | P | **Pn** | **04 05 17.4** | **-0.1** |
| KARY | | | | | S | **Sg** | 04 05 42.3 | -0.6 |
| **LIT** | **Litokhoron** | **1.77** | **5** | | *e*PN | **Pn** | **04 05 17.3** | **-0.7** |
| **LIT** | **Litokhoron** | **1.77** | **5** | | P | **Pn** | **04 05 17.5** | **-0.5** |
| LIT | | | | | S | **Sn** | 04 05 41.2 | +0.7 |
| **LIT** | **Litokhoron** | **1.77** | **5** | | P | **Pn** | **04 05 17.5** | **-0.5** |
| LIT | | | | | S | **Sn** | 04 05 41.2 | +0.7 |
| **IGT** | **Igoumenitsa** | **1.93** | **309** | | *e*P | **Pb** | **04 05 22.1** | **-0.5** |
| **IGT** | **Igoumenitsa** | **1.93** | **309** | | P | **Pb** | **04 05 22.9** | **+0.3** |
| **IGT** | **Igoumenitsa** | **1.93** | **309** | | *e*P | **Pb** | **04 05 22.1** | **-0.5** |
| **KZN** | **Kozani** | **2.00** | **349** | | *e*PN | **Pn** | **04 05 21.4** | **+0.1** |
| **KZN** | **Kozani** | **2.00** | **349** | | P | **Pn** | **04 05 21.5** | **+0.1** |
| KZN | | | | | S | **Sb** | 04 05 49.4 | +0.5 |
| **KZN** | **Kozani** | **2.00** | **349** | | *e*Pn | **Pn** | **04 05 21.4** | **+0.1** |
| KZN | | | | | S | **Sb** | 04 05 49.4 | +0.5 |
| **SGD** | **Sagiada** | **2.04** | **309** | | P | **Pb** | **04 05 24.3** | **-0.2** |
| **SGD** | **Sagiada** | **2.04** | **309** | | P | **Pb** | **04 05 24.3** | **-0.2** |
| **PENT** | **Pentalofos** | **2.05** | **335** | | *e*PN | **Pn** | **04 05 22.8** | **+0.8** |
| **PENT** | **Pentalofos** | **2.05** | **335** | | *e*Pn | **Pn** | **04 05 22.8** | **+0.8** |
| **SERI** | **Serifos** | **2.11** | **123** | | *e*PB | **Pn** | **04 05 22.6** | **-0.1** |
| **KYTH** | **Kithira** | **2.14** | **163** | | *e*PN | **Pn** | **04 05 23.9** | **+0.7** |
| **KYTH** | **Kithira** | **2.14** | **163** | | P | **Pn** | **04 05 23.9** | **+0.7** |
| **KYTH** | **Kithira** | **2.14** | **163** | | *e*Pn | **Pn** | **04 05 23.9** | **+0.7** |
| **PLG** | **Polygyros** | **2.22** | **24** | | *e*PN | **Pn** | **04 05 22.9** | **-1.4** |
| **PLG** | **Polygyros** | **2.22** | **24** | | *e*Pn | **Pn** | **04 05 22.9** | **-1.4** |
| **NEST** | **Nestorio** | **2.28** | **336** | | *e*PN | **Pn** | **04 05 26.3** | **+1.2** |
| **NEST** | **Nestorio** | **2.28** | **336** | | P | **Pn** | **04 05 26.7** | **+1.6** |
| NEST | | | | | S | **Sb** | 04 05 56.9 | 0.0 |
| **NEST** | **Nestorio** | **2.28** | **336** | | *e*Pn | **Pn** | **04 05 26.3** | **+1.2** |
| **NEST** | **Nestorio** | **2.28** | **336** | | P | **Pn** | **04 05 26.7** | **+1.6** |
| NEST | | | | | S | **Sb** | 04 05 56.9 | 0.0 |
| **HORT** | **Hortiatis** | **2.34** | **15** | | *e*PN | **Pn** | **04 05 25.2** | **-0.8** |
| **HORT** | **Hortiatis** | **2.34** | **15** | | *e*Pn | **Pn** | **04 05 25.2** | **-0.8** |
| **THE** | **Thessaloniki** | **2.35** | **13** | | *e*PN | **Pn** | **04 05 25.0** | **-1.0** |
| **THE** | **Thessaloniki** | **2.35** | **13** | | *e*Pn | **Pn** | **04 05 25.0** | **-1.0** |
| **OUR** | **Ouranopolis** | **2.39** | **33** | | *e*P | **Pn** | **04 05 25.4** | **-1.1** |
| **OUR** | **Ouranopolis** | **2.39** | **33** | | *e*P | **Pn** | **04 05 25.4** | **-1.1** |
| **FNA** | **Florina** | **2.54** | **344** | | *e*P | **Pn** | **04 05 28.8** | **+0.2** |
| **FNA** | **Florina** | **2.54** | **344** | | *e*PB | **Pn** | **04 05 29.0** | **+0.4** |
| **FNA** | **Florina** | **2.54** | **344** | | P | **Sn** | **04 06 00.9** | **+1.3** |
| FNA | | | | | S | **Sn** | 04 06 00.9 | +1.3 |
| **FNA** | **Florina** | **2.54** | **344** | | P | **Pn** | **04 05 29.1** | **+0.4** |
| FNA | | | | | S | **Sn** | 04 06 00.9 | +1.3 |
| **SOH** | **Sokhos** | **2.61** | **18** | | *e*PN | **Pn** | **04 05 29.9** | **+0.2** |
| **SOH** | **Sokhos** | **2.61** | **18** | | *e*Pn | **Pn** | **04 05 29.9** | **+0.2** |
| **GRG** | **Griva** | **2.61** | **2** | | *e*PN | **Pn** | **04 05 29.2** | **-0.5** |
| **GRG** | **Griva** | **2.61** | **2** | | *e*Pn | **Pn** | **04 05 29.2** | **-0.5** |
| **KNT** | **Kendrikon** | **2.86** | **9** | | *e*P | **Pn** | **04 05 33.3** | **+0.3** |
| **KNT** | **Kendrikon** | **2.86** | **9** | | *e*PN | **Pn** | **04 05 32.8** | **-0.2** |
| **KNT** | **Kendrikon** | **2.86** | **9** | | *e*Pn | **Pn** | **04 05 32.8** | **-0.2** |
| **KNT** | **Kendrikon** | **2.86** | **9** | | *e*P | **Pn** | **04 05 33.3** | **+0.3** |
| **APE** | **Apeiranthos** | **2.88** | **115** | | *e*P | **Pn** | **04 05 33.1** | **-0.2** |
| **APE** | **Apeiranthos** | **2.88** | **115** | | *e*PN | **Pn** | **04 05 33.5** | **+0.2** |
| **APE** | **Apeiranthos** | **2.88** | **115** | | *e*P | **Pn** | **04 05 33.1** | **-0.2** |
| **APE** | **Apeiranthos** | **2.88** | **115** | | *e*Pn | **Pn** | **04 05 33.5** | **+0.2** |
| **SRS** | **Serrai** | **2.95** | **20** | | *e*PN | **Pn** | **04 05 33.9** | **-0.4** |
| **SRS** | **Serrai** | **2.95** | **20** | | *e*Pn | **Pn** | **04 05 33.9** | **-0.4** |
| **CHOS** | **Chios island** | **2.97** | **88** | | *e*PN | **Pn** | **04 05 34.7** | **+0.1** |
| **CHOS** | **Chios island** | **2.97** | **88** | | *e*Pn | **Pn** | **04 05 34.7** | **+0.1** |
| **VAY** | **Valandovo** | **2.98** | **4** | | *i* Pn | **Pn** | **04 05 35.3** | **+0.6** |
| VAY | | | | | *e*Sn | **Sn** | **04 06 11.1** | **+0.5** |
| **VAY** | **Valandovo** | **2.98** | **4** | | *e*Pn | **Pn** | **04 05 34.6** | **-0.1** |
| **VAY** | **Valandovo** | **2.98** | **4** | | *e*Pn | **Pn** | **04 05 34.6** | **-0.1** |
| VAY | | | | | *e*Sn | **Sn** | **04 06 11.0** | **+0.5** |
| **OHR** | **Ohrid** | **2.99** | **338** | | *i* Pn | **Pn** | **04 05 36.7** | **+1.8** |
| OHR | | | | | *e*Sn | **Sn** | **04 06 13.3** | **+2.4** |
| **OHR** | **Ohrid** | **2.99** | **338** | | *i* Pn | **Pn** | **04 05 36.7** | **+1.8** |
| OHR | | | | | *e*Sn | **Sn** | **04 06 13.3** | **+2.4** |
| **IMMV** | **Iera Moni Meta** | **3.18** | **154** | | *e*PN | **Pn** | **04 05 37.3** | **-0.2** |
| **IMMV** | **Iera Moni Meta** | **3.18** | **154** | | *e*Pn | **Pn** | **04 05 37.3** | **-0.2** |
| **NVR** | **Nevrokopi** | **3.24** | **22** | | *e*PN | **Pn** | **04 05 38.0** | **-0.3** |
| **NVR** | **Nevrokopi** | **3.24** | **22** | | *e*Pn | **Pn** | **04 05 38.0** | **-0.3** |
| **VAM** | **Vamos** | **3.31** | **152** | | *e*PN | **Pn** | **04 05 39.3** | **+0.1** |
| **VAM** | **Vamos** | **3.31** | **152** | | *e*Pn | **Pn** | **04 05 39.3** | **+0.1** |
| **URLA** | **Izmir** | **3.39** | **88** | | *i* P | **Pn** | **04 05 40.1** | **-0.3** |
| **URLA** | **Izmir** | **3.39** | **88** | | P | **Pn** | **04 05 40.1** | **-0.3** |
| **MMB** | **Musomiste** | **3.43** | **18** | | *i* P | **Pn** | **04 05 40.6** | **-0.3** |
| **MMB** | **Musomiste** | **3.43** | **18** | | *i* P | **Pn** | **04 05 40.6** | **-0.3** |
| **TIR** | **Tirane** | **3.53** | **329** | | *e*Pn | **Pn** | **04 05 43.6** | **+1.4** |
| **TIR** | **Tirane** | **3.53** | **329** | | *e*Pn | **Pn** | **04 05 43.6** | **+1.4** |
| **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PMOZ | | | | | S | | Sn | 05 21 31.0 | -1.5 |
| | 18nm,0.8s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **60** | *eP* | | **Pn** | **05 21 02.6** | **+1.6** |
| PFVI | | | | *eS* | | Sn | 05 21 47.7 | -5.5 |
| PFVI | | | | A | | A | 05 21 51.1 | |
| | 2.6nm,0.4s | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **60** | P | | **Pn** | **05 21 02.5** | **+1.5** |
| | 1.4nm,0.3s,SNR=7.2 | | | | | | | | |
| PFVI | | | | S | | Sn | 05 21 48.3 | -4.9 | |
| | 0.9nm,0.2s,SNR=7.9 | | | | | | | | |
| **PFVI** | **Vila Bisbo** | **4.48** | **60** | *eP* | | **Pn** | **05 21 02.6** | **+1.6** |
| **MORF** | **Marmelete** | **4.68** | **59** | *eP* | | **Pn** | **05 21 05.9** | **+2.0** |
| MORF | | | | *eS* | | Sn | 05 21 52.0 | -6.2 |
| MORF | | | | | AML | AML | 05 21 53.6 | |
| | comp=N,3.4nm,0.4s | | | | | | | | |
| **MORF** | **Marmelete** | **4.68** | **59** | *eP* | | **Pn** | **05 21 05.5** | **+1.6** |
| MORF | | | | *eS* | | Sn | 05 21 53.6 | -4.7 |
| MORF | | | | A | | A | 05 21 59.5 | |
| | comp=N,2.9nm,0.1s | | | | | | | | |
| **MORF** | **Marmelete** | **4.68** | **59** | P | | **Pn** | **05 21 05.5** | **+1.6** |
| MORF | | | | S | | Sn | 05 21 53.6 | -4.7 |
| | comp=N,2.9nm,0.1s | | | | | | | | |
| **MORF** | **Marmelete** | **4.68** | **59** | *eP* | | **Pn** | **05 21 05.5** | **+1.6** |
| **PTEO** | **Sao Teotonio** | **4.75** | **56** | *eP* | | **Pn** | **05 21 07.1** | **+2.4** |
| PTEO | | | | *eS* | | Sn | 05 21 54.5 | -5.3 |
| PTEO | | | | A | | A | 05 22 01.8 | |
| | comp=N,3.2nm,1.0s | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.75** | **56** | P | | **Pn** | **05 21 07.1** | **+2.4** |
| PTEO | | | | S | | Sn | 05 21 54.5 | -5.3 |
| | comp=N,1.6nm,1.0s | | | | | | | | |
| **PTEO** | **Sao Teotonio** | **4.75** | **56** | *eP* | | **Pn** | **05 21 07.1** | **+2.4** |
| **PBDV** | **Barranco-do-Ve** | **5.17** | **63** | *eP* | | **Pn** | **05 21 12.5** | **+1.9** |
| PBDV | | | | *eS* | | Sn | 05 22 05.8 | -4.5 |
| PBDV | | | | A | | A | 05 22 12.2 | |
| | comp=N,2.0nm,0.2s | | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **5.17** | **63** | P | | **Pn** | **05 21 12.5** | **+1.9** |
| PBDV | | | | S | | Sn | 05 22 05.8 | -4.5 |
| | comp=N,2.0nm,0.2s | | | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **5.17** | **63** | *eP* | | **Pn** | **05 21 12.5** | **+1.9** |
| PBDV | | | | S | | Sn | 05 22 05.8 | -4.5 |
| | comp=N,2.0nm,0.2s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **5.18** | **52** | *eP* | | **Pn** | **05 21 12.8** | **+2.1** |
| PNCL | | | | *eS* | | Sn | 05 22 05.8 | -4.8 |
| PNCL | | | | A | | A | 05 22 09.2 | |
| | comp=N,1.1nm,0.3s | | | | | | | | |
| **PNCL** | **Nicolau / Gran** | **5.18** | **52** | *eP* | | **Pn** | **05 21 12.8** | **+2.1** |
| **MESJ** | **Messejana** | **5.24** | **56** | *eP* | | **Pn** | **05 21 13.0** | **+1.5** |
| MESJ | | | | *eS* | | Sn | 05 22 05.7 | -6.3 |
| MESJ | | | | | AML | AML | 05 22 08.2 | |
| | comp=N,1.2nm,0.3s | | | | | | | | |
| **MESJ** | **Messejana** | **5.24** | **56** | *eP* | | **Pn** | **05 21 13.3** | **+1.8** |
| MESJ | | | | *eS* | | Sn | 05 22 07.6 | -4.4 |
| MESJ | | | | A | | A | 05 22 11.2 | |
| | comp=N,1.7nm,0.6s | | | | | | | | |
| **MESJ** | **Messejana** | **5.24** | **56** | P | | **Pn** | **05 21 13.3** | **+1.8** |
| MESJ | | | | S | | Sn | 05 22 07.6 | -4.4 |
| | comp=N,1.7nm,0.6s | | | | | | | | |
| **MESJ** | **Messejana** | **5.24** | **56** | *eP* | | **Pn** | **05 21 13.3** | **+1.8** |
| MESJ | | | | S | | Sn | 05 22 07.6 | -4.4 |
| | comp=N,1.7nm,0.6s | | | | | | | | |
| **PCVE** | **Castro Verde** | **5.26** | **59** | *eP* | | **Pn** | **05 21 14.2** | **+2.4** |
| PCVE | | | | *eS* | | Sn | 05 22 07.5 | -5.1 |
| PCVE | | | | A | | A | 05 22 10.9 | |
| | comp=N,1.5nm,0.3s | | | | | | | | |
| **PCVE** | **Castro Verde** | **5.26** | **59** | P | | **Pn** | **05 21 14.2** | **+2.4** |
| PCVE | | | | S | | Sn | 05 22 07.5 | -5.1 |
| | comp=N,1.5nm,0.3s | | | | | | | | |
| **PCVE** | **Castro Verde** | **5.26** | **59** | *eP* | | **Pn** | **05 21 14.2** | **+2.4** |
| **PMAFR** | **Mafra** | **5.29** | **41** | S | | **Sn** | **05 22 09.3** | **-3.8** |
| | comp=N,2.4nm,0.2s,SNR=7.9 | | | | | | | | |
| **PMAFR** | **Mafra** | **5.29** | **41** | S | | **Sn** | **05 22 09.3** | **-3.8** |
| | comp=N,2.4nm,0.2s,SNR=7.9 | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **5.39** | **62** | *eP* | | **Pn** | **05 21 15.3** | **+1.7** |
| PVAQ | | | | *eS* | | Sn | 05 22 09.7 | -6.0 |
| PVAQ | | | | A | | A | 05 22 15.0 | |
| | comp=N,2.4nm,0.1s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **5.39** | **62** | P | | **Pn** | **05 21 15.3** | **+1.7** |
| PVAQ | | | | S | | Sn | 05 22 09.7 | -6.0 |
| | comp=N,2.4nm,0.1s | | | | | | | | |
| **PVAQ** | **Vaqueiros** | **5.39** | **62** | *eP* | | **Pn** | **05 21 15.3** | **+1.7** |
| **PBEJ** | **Beja** | **5.58** | **56** | *eP* | | **Pn** | **05 21 18.4** | **+2.3** |
| PBEJ | | | | *eS* | | Sn | 05 22 15.6 | -4.7 |
| **PBEJ** | **Beja** | **5.58** | **56** | P | | **Pn** | **05 21 18.4** | **+2.3** |
| PBEJ | | | | S | | Sn | 05 22 15.6 | -4.7 |
| **PBEJ** | **Beja** | **5.58** | **56** | *eP* | | **Pn** | **05 21 18.4** | **+2.3** |
| **EGRO** | **El Granado** | **5.62** | **62** | P | | **Pn** | **05 21 18.7** | **+2.0** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | |
| EGRO | | | | S | | Sn | 05 22 16.7 | -4.5 | |
| | comp=N,0.6nm,0.4s,SNR=5.2 | | | | | | | | |
| **EGRO** | **El Granado** | **5.62** | **62** | P | | **Pn** | **05 21 18.7** | **+2.0** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | | | |
| **EVO** | **Evora** | **5.76** | **51** | *eS* | | Sn | 05 22 20.0 | -4.7 | |
| EVO | | | | A | | A | 05 22 29.0 | |
| | comp=N,2.0nm,0.2s | | | | | | | | |
| **EVO** | **Evora** | **5.76** | **51** | S | | Sn | 05 22 20.0 | -4.7 | |
| | comp=N,2.0nm,0.2s | | | | | | | | |
| **PMTG** | **Montargil** | **5.96** | **46** | *eS* | | Sn | 05 22 24.9 | -4.8 | |
| PMTG | | | | A | | A | 05 22 27.0 | |
| | comp=N,1.0nm,0.7s | | | | | | | | |
| **PBAR** | **Barrancos** | **6.22** | **58** | *eP* | | **Pn** | **05 21 26.8** | **+1.9** |
| PBAR | | | | *eS* | | Sn | 05 22 30.4 | -5.6 | |
| PBAR | | | | A | | A | 05 22 37.1 | |
| | comp=N,2.1nm,0.6s | | | | | | | | |
| **PBAR** | **Barrancos** | **6.22** | **58** | P | | **Pn** | **05 21 26.8** | **+1.9** |
| PBAR | | | | S | | Sn | 05 22 30.4 | -5.6 | |
| | comp=N,2.1nm,0.6s | | | | | | | | |
| **PBAR** | **Barrancos** | **6.22** | **58** | *eP* | | **Pn** | **05 21 26.8** | **+1.9** |
| **EMIN** | **Mina Concepcio** | **6.30** | **62** | P | | **Pn** | **05 21 27.6** | **+1.6** |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | | |
| EMIN | | | | S | | Sn | 05 22 33.1 | -5.0 | |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | | |
| **EMIN** | **Mina Concepcio** | **6.30** | **62** | P | | **Pn** | **05 21 27.6** | **+1.6** |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | | | |
| **EBAD** | **Badajoz** | **6.53** | **53** | P | | **Pn** | **05 21 30.7** | **+1.5** |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | | | |
| **EBAD** | **Badajoz** | **6.53** | **53** | P | | **Pn** | **05 21 30.7** | **+1.5** |
| | comp=N,0.6nm,0.1s,SNR=7.9 | | | | | | | | |
| **PMRV** | **Marv??o** | **6.69** | **47** | *eS* | | Sn | 05 22 40.5 | -7.1 | |
| PMRV | | | | A | | A | 05 22 55.0 | |
| | comp=N,1.1nm,0.6s | | | | | | | | |
| **ECAB** | **El Cabril** | **7.33** | **63** | P | | **Pn** | **05 21 41.3** | **+1.1** |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | | | |
| ECAB | | | | S | | Sn | 05 22 58.1 | -5.4 | |
| | comp=N,0.5nm,0.3s,SNR=7.9 | | | | | | | | |
| **ECAB** | **El Cabril** | **7.33** | **63** | P | | **Pn** | **05 21 41.3** | **+1.1** |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | | | |
| **EADA** | **Adamuz** | **7.99** | **64** | P | | **Pn** | **05 21 50.6** | **+1.4** |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | | | |
| EADA | | | | S | | Sn | 05 23 13.5 | -6.1 | |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | | | |
| **EADA** | **Adamuz** | **7.99** | **64** | P | | **Pn** | **05 21 50.6** | **+1.4** |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | | | |
| **ELOB** | **Lobios** | **8.14** | **31** | P | | **Pn** | **05 21 53.4** | **+2.0** |
| | comp=N,0.8nm,3.0s,SNR=7.9 | | | | | | | | |
| ELOB | | | | S | | Sn | 05 23 19.0 | -4.6 | |
| | comp=N,2.7nm,1.8s,SNR=7.9 | | | | | | | | |
| **ELOB** | **Lobios** | **8.14** | **31** | P | | **Pn** | **05 21 53.4** | **+2.0** |
| | comp=N,0.8nm,3.0s,SNR=7.9 | | | | | | | | |

**WEL 28 05:39:26.4±0.3, 38°34'S×179°25'E, h33km, ML3.5/4, 4C-2D, Error ellipse: s-maj=3.5km s-min=1.2km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PUZ** | **Puketiti** | **0.83** | **289** | ⇑PN | Pn | 05 39 41.0 | -0.8 |
| PUZ | | | | SN | Sn | 05 39 52.0 | -0.9 |
| PUZ | | | | AML | AML | 05 39 52.9 | |
| **CNGZ** | **Carnagh Statio** | **0.83** | **260** | PN | Pn | 05 39 41.3 | -0.5 |
| **WMGZ** | **Waiomatatini S** | **0.84** | **308** | ⇑PN | Pn | 05 39 41.4 | -0.5 |
| WMGZ | | | | SN | Sn | 05 39 52.8 | -0.4 |
| **TWGZ** | **Tauwhareparae** | **1.01** | **279** | ⇓PN | Pn | 05 39 43.9 | -0.5 |
| TWGZ | | | | SN | Sn | 05 39 57.7 | +0.1 |
| **PKGZ** | **Pakihiroa** | **1.04** | **297** | PN | Pn | 05 39 44.2 | -0.5 |
| **MXZ** | **Matakaoa Point** | **1.08** | **316** | PN | Pn | 05 39 45.3 | +0.2 |
| MXZ | | | | SN | Sn | 05 39 59.3 | +0.3 |
| MXZ | | | | AML | AML | 05 40 00.9 | |
| MXZ | | | | AML | AML | 05 40 01.5 | |
| MXZ | | | | AML | AML | 05 40 02.7 | |
| **TKGZ** | **Te Karaka** | **1.11** | **265** | PN | Pn | 05 39 45.0 | -0.6 |
| **PRGZ** | **Paritu Road** | **1.22** | **241** | PN | Pn | 05 39 46.8 | -0.4 |
| **RIGZ** | **Rimuhau** | **1.22** | **252** | PN | Pn | 05 39 46.6 | -0.6 |
| **HAZ** | **Te Kaha** | **1.30** | **296** | PN | Pn | 05 39 47.7 | -0.6 |
| **MHGZ** | **Mahia Peninsul** | **1.33** | **232** | PN | Pn | 05 39 48.6 | -0.1 |
| **MWZ** | **Matawai** | **1.36** | **270** | ⇓PN | Pn | 05 39 48.3 | -0.8 |
| MWZ | | | | AML | AML | 05 40 05.4 | |
| MWZ | | | | AML | AML | 05 40 05.4 | |
| MWZ | | | | AML | AML | 05 40 05.4 | |
| MWZ | | | | AML | AML | 05 40 05.5 | |
| **KNZ** | **Kokohu** | **1.41** | **241** | ⇑PN | Pn | 05 39 49.0 | -0.7 |
| **RAGZ** | **Rawiri** | **1.45** | **263** | PN | Pn | 05 39 50.0 | -0.5 |
| **SNGZ** | **Shannon Statio** | **1.56** | **253** | PN | Pn | 05 39 51.3 | -0.6 |
| **URZ** | **Urewera** | **1.69** | **272** | PN | Pn | 05 39 53.7 | +0.1 |
| URZ | | | | AML | AML | 05 40 17.0 | |
| **WHHZ** | **Waihua** | **1.74** | **244** | PN | Pn | 05 39 54.5 | +0.2 |
| **ARHZ** | **Aropaoanui** | **1.99** | **242** | PN | Pn | 05 39 57.6 | -0.1 |
| **NMHZ** | **Naumai** | **2.06** | **248** | PN | Pn | 05 39 58.7 | -0.1 |
| **CKHZ** | **Cape Kidnapper** | **2.15** | **232** | PN | Pn | 05 39 59.2 | -0.7 |
| **TARZ** | **Mount Tarawera** | **2.16** | **272** | PN | Pn | 05 40 00.5 | +0.2 |
| **MCHZ** | **McNeill Hill** | **2.28** | **240** | PN | Pn | 05 40 02.2 | +0.4 |
| **BKZ** | **Black Stump Fm** | **2.31** | **248** | PN | Pn | 05 40 02.0 | -0.2 |
| **KAHZ** | **Kahuranaki** | **2.35** | **231** | PN | Pn | 05 40 02.1 | -0.6 |
| **KWHZ** | **Kaweka Forest** | **2.46** | **243** | PN | Pn | 05 40 04.1 | -0.2 |
| **PXZ** | **Pawanui** | **2.51** | **227** | PN | Pn | 05 40 03.3 | -1.5 |
| **KRHZ** | **Kereru** | **2.59** | **239** | PN | Pn | 05 40 05.3 | -0.8 |
| **BHHZ** | **Black Hill Sta** | **2.74** | **244** | ⇑PN | Pn | 05 40 07.7 | -0.5 |
| **PNHZ** | **Pukenui** | **2.85** | **236** | PN | Pn | 05 40 08.6 | -1.0 |
| **KRVZ** | **Karewarewa** | **2.92** | **254** | PN | Pn | 05 40 10.2 | -0.5 |
| **MOVZ** | **Moawhango** | **2.93** | **248** | PN | Pn | 05 40 10.4 | -0.4 |
| **TUVZ** | **Tukino** | **2.96** | **251** | PN | Pn | 05 40 10.8 | -0.4 |
| **WNVZ** | **Wahianoa** | **3.02** | **250** | PN | Pn | 05 40 11.6 | -0.5 |
| **FWVZ** | **Far West T-bar** | **3.03** | **251** | PN | Pn | 05 40 11.8 | -0.6 |
| **TRVZ** | **Turoa** | **3.05** | **251** | PN | Pn | 05 40 12.0 | -0.6 |
| **TSZ** | **Takapari Road** | **3.08** | **235** | PN | Pn | 05 40 11.2 | -1.5 |
| **DVHZ** | **Dannevirke** | **3.09** | **230** | PN | Pn | 05 40 11.1 | -1.8 |
| **BFZ** | **Birch Farm** | **3.30** | **224** | PN | Pn | 05 40 13.1 | -2.6 |
| **PRWZ** | **Pori Road** | **3.37** | **228** | PN | Pn | 05 40 15.0 | -1.7 |
| **MRZ** | **Mangatainoka R** | **3.67** | **230** | PN | Pn | 05 40 18.6 | -2.2 |
| **MTW** | **Mount Morrison** | **4.03** | **225** | PN | Pn | 05 40 22.7 | -3.2 |

*ISCJB **28** 05:39:51.2±1.0, 37°.13S±0°.05×73°.8W±0°.1, h14km, mb4.3/2, Error ellipse: s-maj=13.1km s-min=6.3km az=23.5*
*GUC **28** 05:39:53.2±0.5, 37°.19S×73°.60W, h24km±2km, ML4.5*
*NEIC **28** 05:39:53.0, 37°.19S×73°.59W, h24km, mb4.4/2, ML4.5(GUC), After GUC.*
*NEIC Felt [IV] at Concepcion and [III] at Chiguayante, Coronel, La Laja, Lota, Penco, San Pedro, San Rosendo and Tome.*

**ISC 28 05:39:52.1±1.3, 37°.14S±0°.07×73°.7W±0°.1, h14km, n8, σ1s78/12, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CCHI** | **Chillan** | **1.40** | **68** | *i* P | **Pn** | **05 40 16.9** | **-0.3** |
| CCHI | | | | *i* S | **Sb** | **05 40 34.5** | **-1.3** |
| **TALC** | **Talca** | **2.41** | **44** | *i* P | **Pn** | **05 40 32.9** | **+1.9** |
| TALC | | | | *i* S | **Sb** | **05 41 02.6** | **-2.1** |
| **VLCH** | **Valdivia** | **2.68** | **173** | *i* P | **Pn** | **05 40 36.1** | **+1.2** |
| VLCH | | | | *i* S | **Sn** | **05 41 08.5** | **+1.3** |
| VLCH | | | | AML | AML | 05 41 36.4 | |
| | comp=E,2µm,0.3s | | | | | | |
| **NICH** | **Los Niches** | **2.92** | **44** | *i* P | **Pn** | **05 40 39.9** | **+1.7** |
| NICH | | | | *i* S | **Sn** | **05 41 15.3** | **+2.3** |
| NICH | | | | AML | AML | 05 41 30.7 | |
| | comp=N,3µm,0.6s | | | | | | |
| **LCO** | **Las Campanas** | **8.49** | **18** | Pn | **Pn** | **05 41 56.2** | **+1.3** |
| **TRQA** | **Tornquist** | **9.34** | **99** | *e*Pn | **Pn** | **05 42 08.1** | **+1.7** |
| TRQA | | | | *e*Sn | Sn | 05 43 44.9 | -6.3 |
| **RCBR** | **Riachuelo** | **46.46** | **57** | *e*P | **P** | **05 48 17.4** | **-1.4** |
| | comp=N,19nm,1.2s | | | | | | |
| **WUAZ** | **Wupatki** | **80.32** | **330** | *e*P | **P** | **05 52 01.8** | **-1.0** |
| | comp=N,0.5nm,0.4s | | | | | | |

*CSEM **28** 06:26:10.6, 34°.04N×25°.01E, h21km, MD3.5, After ATH*
**ATH 28 06:26:10.4, 34°.03N×25°.00E, h15km, MD3.5/5, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SIVA** | **Sivas** | **1.00** | **351** | *e*PN | Pg | 06 26 29.7 | 0.0 |
| SIVA | | | | *e*SN | Sg | 06 26 43.0 | +0.2 |
| **SIVA** | **Sivas** | **1.00** | **351** | *e*Pn | Pg | 06 26 29.7 | 0.0 |
| SIVA | | | | *e*Sn | Sg | 06 26 43.0 | +0.2 |
| **LAST** | **Lasithi** | **1.20** | **19** | *e*PN | Pb | 06 26 33.0 | +0.1 |
| LAST | | | | *e*SN | Sg | 06 26 49.4 | +0.1 |
| **LAST** | **Lasithi** | **1.20** | **19** | *e*Pn | Pb | 06 26 33.0 | +0.1 |
| LAST | | | | *e*Sn | Sg | 06 26 49.4 | +0.1 |
| **IDI** | **Anoyia** | **1.26** | **356** | *e*PN | Pb | 06 26 34.1 | +0.1 |
| IDI | | | | *e*SN | Sg | 06 26 51.7 | +0.4 |
| **IDI** | **Anoyia** | **1.26** | **356** | *e*Pn | Pb | 06 26 34.1 | +0.1 |
| IDI | | | | *e*Sn | Sg | 06 26 51.7 | +0.4 |
| **NPS** | **Neapolis** | **1.33** | **22** | *e*PN | Pb | 06 26 35.2 | +0.1 |
| **NPS** | **Neapolis** | **1.33** | **22** | *e*Pn | Pb | 06 26 35.2 | +0.1 |
| **VAM** | **Vamos** | **1.52** | **335** | *e*PN | Pb | 06 26 38.8 | +0.4 |
| **VAM** | **Vamos** | **1.52** | **335** | *e*Pn | Pb | 06 26 38.8 | +0.4 |

**IDC 28 06:44:26.6±4.1, 3°.23S×100°.69E, h0km, mb3.6/4, mb1 3.8/4, mb1mx3.5/30, mbtmp3.6/4, MS2.9/1, Ms1 2.9/1, ms1mx2.3/43, Error ellipse: s-maj=168.9km s-min=23.8km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PALK** | **Pallekele** | **22.52** | **298** | LR | LR | 06 57 34.7 | |
| | comp=Z,26nm,18.2s,baz=116,slow=35 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.41** | **260** | T | T | 07 19 35.4 | |
| | baz=82,slow=75,SNR=171 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.41** | **260** | T | T | 07 19 32.0 | |
| | baz=82,slow=75,SNR=147 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.43** | **260** | T | T | 07 19 32.9 | |
| | baz=82,slow=75,SNR=133 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.88** | **160** | T | T | 07 26 46.5 | |
| | baz=336,slow=76,SNR=20 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.89** | **160** | T | T | 07 26 47.7 | |
| | baz=336,slow=76,SNR=20 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.90** | **160** | T | T | 07 26 47.6 | |
| | baz=336,slow=76,SNR=16 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.78** | **119** | P | P | 06 51 36.1 | -0.3 |
| | 0.2nm,0.6s,baz=301,slow=9.7,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **37.98** | **125** | P | P | 06 51 46.8 | +0.2 |
| | 0.4nm,0.4s,baz=296,slow=7.7,SNR=3.4 | | | | | | |
| **SONM** | **Songino Array** | **51.10** | **5** | P | P | 06 53 31.9 | +0.8 |
| | 1.1nm,0.6s,baz=184,slow=9.4,SNR=7.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.39** | **344** | P | P | 06 53 40.1 | -0.6 |
| | 0.7nm,0.6s,baz=140,slow=7.9,SNR=5.4 | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **06.17** | **230** | T | T | 08 56 46.9 | |
| | SNR=5.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.23** | **39** | PKPbc | PKPbc | 07 04 05.3 | -1.5 |
| | 0.5nm,0.5s,baz=301,slow=0.7,SNR=5.9 | | | | | | |

**WEL 28 06:56:01.4±0.3, 37°.98S×176°.22E, h148km±3km, ML3.5/13, 9C-5D, Error ellipse: s-maj=3.2km s-min=2.9km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **0.75** | **112** | ⇑PN | Pn | 06 56 24.2 | +0.2 |
| URZ | | | | SN | Sn | 06 56 41.7 | +0.4 |
| URZ | | | | AML | AML | 06 56 42.6 | |
| **MWZ** | **Matawai** | **1.09** | **109** | PN | Pn | 06 56 27.2 | +0.4 |
| MWZ | | | | SN | Sn | 06 56 46.2 | 0.0 |
| MWZ | | | | AML | AML | 06 56 47.2 | |
| **SNGZ** | **Shannon Statio** | **1.19** | **133** | ⇑PN | Pn | 06 56 28.2 | +0.5 |
| SNGZ | | | | SN | Sn | 06 56 47.9 | +0.1 |
| **BKZ** | **Black Stump Fm** | **1.20** | **170** | ⇑PN | Pn | 06 56 27.8 | -0.1 |
| BKZ | | | | SN | Sn | 06 56 47.3 | -0.9 |
| **NMHZ** | **Naumai** | **1.20** | **158** | PN | Pn | 06 56 28.9 | +1.0 |
| **HAZ** | **Te Kaha** | **1.26** | **80** | PN | Pn | 06 56 27.9 | -0.4 |
| HAZ | | | | SN | Sn | 06 56 48.2 | -0.6 |
| **TUVZ** | **Tukino** | **1.36** | **199** | PN | Pn | 06 56 29.7 | +0.2 |
| **FWVZ** | **Far West T-bar** | **1.38** | **202** | PN | Pn | 06 56 29.9 | +0.1 |
| **RIGZ** | **Rimuhau** | **1.41** | **121** | PN | Pn | 06 56 30.0 | +0.1 |
| **ARHZ** | **Aropaoanui** | **1.41** | **155** | PN | Pn | 06 56 30.2 | +0.3 |
| **TRVZ** | **Turoa** | **1.42** | **202** | PN | Pn | 06 56 30.3 | +0.1 |
| **WNVZ** | **Wahianoa** | **1.43** | **200** | PN | Pn | 06 56 30.2 | -0.1 |
| **PKGZ** | **Pakihiroa** | **1.47** | **86** | PN | Pn | 06 56 30.6 | +0.1 |
| **MCHZ** | **McNeill Hill** | **1.50** | **166** | PN | Pn | 06 56 31.2 | +0.4 |
| **BHHZ** | **Black Hill Sta** | **1.51** | **185** | ⇑PN | Pn | 06 56 30.5 | -0.5 |
| **KNZ** | **Kokohu** | **1.54** | **133** | PN | Pn | 06 56 31.0 | -0.2 |
| **PUZ** | **Puketiti** | **1.61** | **94** | PN | Pn | 06 56 31.7 | -0.3 |
| **KRHZ** | **Kereru** | **1.66** | **176** | PN | Pn | 06 56 32.2 | -0.4 |
| **MXZ** | **Matakaoa Point** | **1.70** | **76** | PN | Pn | 06 56 33.0 | 0.0 |
| **WMGZ** | **Waiomatatini S** | **1.74** | **85** | ⇓PN | Pn | 06 56 33.3 | -0.2 |
| **MHGZ** | **Mahia Peninsul** | **1.76** | **132** | PN | Pn | 06 56 33.6 | 0.0 |
| **CKHZ** | **Cape Kidnapper** | **1.80** | **159** | ⇑PN | Pn | 06 56 33.9 | -0.2 |
| **KAHZ** | **Kahuranaki** | **1.88** | **164** | ⇑PN | Pn | 06 56 34.7 | -0.4 |
| **PNHZ** | **Pukenui** | **1.93** | **181** | PN | Pn | 06 56 34.6 | -1.1 |
| **WAZ** | **Wanganui** | **2.02** | **208** | PN | Pn | 06 56 36.2 | -0.4 |
| **TSZ** | **Takapari Road** | **2.08** | **186** | ⇑PN | Pn | 06 56 36.1 | -1.3 |
| **PXZ** | **Pawanui** | **2.11** | **167** | ⇓PN | Pn | 06 56 36.8 | -0.8 |
| **PRHZ** | **Porangahau** | **2.30** | **172** | PN | Pn | 06 56 38.6 | -1.4 |
| **DVHZ** | **Dannevirke** | **2.31** | **181** | PN | Pn | 06 56 38.5 | -1.7 |
| **POWZ** | **Post Office Ro** | **2.43** | **188** | PN | Pn | 06 56 39.8 | -1.7 |
| **ANWZ** | **Angora Road** | **2.48** | **176** | PN | Pn | 06 56 40.7 | -1.4 |
| **PRWZ** | **Pori Road** | **2.58** | **184** | ⇓PN | Pn | 06 56 41.8 | -1.6 |
| **MRZ** | **Mangatainoka R** | **2.72** | **190** | ⇑PN | Pn | 06 56 42.8 | -2.4 |
| MRZ | | | | AML | AML | 06 57 17.1 | |
| **HOWZ** | **Holdsworth Sta** | **2.96** | **190** | ⇑PN | Pn | 06 56 45.4 | -2.8 |
| **KIW** | **Kapiti Island** | **3.05** | **199** | PN | Pn | 06 56 46.4 | -2.9 |
| **MTW** | **Mount Morrison** | **3.22** | **190** | ⇓PN | Pn | 06 56 48.2 | -3.2 |
| **CAW** | **Cannon Point** | **3.25** | **196** | ⇓PN | Pn | 06 56 48.7 | -3.0 |
| **TCW** | **Tory Channel** | **3.56** | **204** | PN | Pn | 06 56 52.6 | -3.2 |
| **PLWZ** | **Palliser** | **3.66** | **191** | PN | Pn | 06 56 53.3 | -3.9 |
| PLWZ | | | | SN | Sn | 06 57 33.8 | -6.7 |
| **THZ** | **Tophouse** | **4.56** | **213** | PN | Pn | 06 57 05.6 | -3.3 |
| **KHZ** | **Kahutara** | **4.88** | **204** | PN | Pn | 06 57 06.1 | -7.0 |

*IDC **28** 07:15:42.8±1.5, 5°.29S×146°.97E, h0km, mb3.9/2, mb1 4.3/4, mb1mx3.7/29, mbtmp4.0/4, ML4.1/1, MS2.9/2, Ms1 2.9/2, ms1mx2.4/29, Error ellipse: s-maj=70.9km s-min=26.0km az=114.0*
*ISCJB **28** 07:15:46.8±0.9, 5°.52S±0°.09×147°.1E±0°.2, h35km, mb4.1/4, MS3.3/1, Error ellipse: s-maj=28.6km s-min=12.0km az=9.5*
*NEIC **28** 07:15:48.2±0.8, 5°.43S×147°.06E, h35km, mb4.2/3, Error ellipse: s-maj=33.0km s-min=13.5km az=108.0*

**ISC 28 07:15:48.0±1.1, 5°.41S±0°.09×147°.0E±0°.2, h35km, n10, σ2s08/11, mb4.1/4, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.98** | **177** | Pn | **Pn** | **07 16 45.7** | **-0.9** |
| | 5.1nm,0.3s,baz=26,slow=9.4,SNR=10 | | | | | | |
| PMG | | | | Sn | **Sn** | **07 17 28.8** | **-3.3** |
| | 9.5nm,0.3s,baz=16,slow=21,SNR=7.7 | | | | | | |
| PMG | | | | LR | LR | 07 18 00.2 | |
| | comp=Z,50nm,19.4s,baz=223,slow=34 | | | | | | |
| **PMG** | **Port Moresby** | **3.98** | **177** | *e*Pn | **Pn** | **07 16 45.6** | **-0.9** |
| PMG | | | | *e*Sn | **Sn** | **07 17 36.3** | **+4.3** |
| **WRAB** | **Tennant Creek** | **18.95** | **219** | *e*P | **Pn** | **07 20 07.7** | **+0.5** |
| | 5.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.96** | **219** | P | **Pn** | **07 20 07.8** | **+0.4** |
| | 0.5nm,0.3s,baz=43,slow=12,SNR=37 | | | | | | |
| **ASAR** | **Alice Springs** | **22.09** | **213** | P | **P** | **07 20 40.9** | **+0.6** |
| | 3.0nm,0.6s,baz=45,slow=9.8,SNR=50 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.00** | **8** | LR | LR | 07 44 59.2 | |
| | comp=Z,27nm,21.5s,baz=135,slow=30 | | | | | | |
| **SML** | **Sawmill** | **83.13** | **26** | *e*P | **P** | **07 28 11.7** | **+1.6** |
| | 2.1nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **84.95** | **23** | P | **P** | **07 28 19.2** | **-0.1** |
| | 0.8nm,0.8s,baz=256,slow=5.1,SNR=7.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **92.11** | **319** | *e*P | **P** | **07 28 52.9** | **-0.9** |
| | 0.3nm,0.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.90** | **285** | PKP | **PKPbc** | **07 35 21.4** | **-0.3** |
| | 0.3nm,0.4s,baz=65,slow=1.7,SNR=5.8 | | | | | | |

**IDC 28 07:27:02.2±6.4, 3°.58S×99°.69E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.2/46, mbtmp3.4/3, Error ellipse: s-maj=223.9km s-min=28.9km az=62.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.91** | **358** | P | P | 07 31 57.2 | 0.0 |
| | 2.1nm,0.6s,baz=188,slow=9.9,SNR=5.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.49** | **119** | P | P | 07 34 17.8 | -0.3 |
| | 0.2nm,0.7s,baz=294,slow=8.7,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.60** | **124

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ODAN** | **Odare** | **5.00** | **254** | *e*Pn | | **Pn** | 07 42 13.9 | -0.7 |
| ODAN | | | | *e*Sn | | **Sn** | 07 43 09.8 | -1.5 |
| | 905nm,0.4s | | | | | | | |
| **RAMN** | **Ramite** | **5.65** | **258** | *e*Pn | | **Pn** | 07 42 22.8 | -0.7 |
| RAMN | | | | *e*Sn | | **Sn** | 07 43 26.5 | -0.7 |
| | 790nm,0.6s | | | | | | | |
| **GUN** | **Gumba** | **6.11** | **268** | *e*Pn | | **Pn** | 07 42 29.2 | -0.6 |
| **PKI** | **Pulchoki** | **6.57** | **265** | *e*Pn | | **Pn** | 07 42 34.8 | -1.2 |
| PKI | | | | *e*Sn | | **Sn** | 07 43 45.6 | -4.0 |
| | 192nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **6.58** | **265** | *e*Pn | | **Pn** | 07 42 34.7 | -1.4 |
| PKIN | | | | *e*Sn | | **Sn** | 07 43 45.8 | -4.0 |
| | 279nm,0.4s | | | | | | | |
| **KKN** | **Kakani** | **6.65** | **267** | *e*Pn | | **Pn** | 07 42 36.3 | -0.8 |
| KKN | | | | *e*Sn | | **Sn** | 07 43 48.1 | -3.5 |
| | 225nm,0.4s | | | | | | | |
| **DMN** | **Daman** | **6.83** | **266** | *e*Pn | | **Pn** | 07 42 38.5 | -1.0 |
| **GKN** | **Gorkha** | **7.20** | **269** | *e*Pn | | **Pn** | 07 42 43.0 | -1.5 |
| **DANN** | **Dangsing** | **7.96** | **272** | *e*Pn | | Pn | 07 42 51.7 | -3.2 |
| DANN | | | | *e*Sn | | **Sn** | 07 44 17.8 | -5.7 |
| | 25nm,0.4s | | | | | | | |
| **KOLN** | **Koldanda** | **8.14** | **268** | *e*Pn | | **Pn** | 07 42 55.4 | -1.9 |
| KOLN | | | | *e*Sn | | **Sn** | 07 44 22.0 | -5.8 |
| | 130nm,0.3s | | | | | | | |
| **KMI** | **Kunming** | **9.45** | **107** | P | | **Pn** | 07 43 18.3 | +3.0 |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | |
| KMI | | | | pmax | pmax | | | |
| | comp=Z,95nm,3.9s | | | | | | | |
| **CD2** | **Chengdu** | **9.89** | **72** | *e*P | | Pn | 07 43 16.3 | -4.8 |
| CD2 | | | | PP | | | 07 43 27.0 | |
| CD2 | | | | S | | **Sn** | 07 45 08.0 | -2.5 |
| CD2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **CHTO** | **Chiang Mai** | **11.01** | **148** | *e*P | | **Pn** | 07 43 36.4 | 0.0 |
| **CHTO** | **Chiang Mai** | **11.01** | **148** | *e*Pn | | **Pn** | 07 43 36.4 | 0.0 |
| **CMAR** | **Chiang Mai Arr** | **11.32** | **149** | P | | **Pn** | 07 43 40.2 | -0.3 |
| | comp=Z,1.0nm,0.3s,baz=319,slow=12,SNR=12 | | | | | | | |
| CMAR | | | | LR | | LR | 07 47 39.2 | |
| | comp=Z,53nm,20.8s,baz=334,slow=35 | | | | | | | |
| **LZH** | **Lanzhou** | **12.15** | **48** | *e*P | | Pn | 07 43 48.5 | -3.4 |
| LZH | | | | pP | | **P** | 07 44 00.0 | -1.2 |
| LZH | | | | sP | | | 07 44 05.3 | |
| LZH | | | | PMZ | | | | |
| | comp=Z,46nm,1.0s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,210nm,5.0s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,780nm,14.8s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,710nm,14.3s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,540nm,16.1s | | | | | | | |
| **GYA** | **Guiyang** | **12.47** | **95**⇑ | *i*P | | Pn | 07 43 52.0 | -4.3 |
| GYA | | | | pP | | **P** | 07 44 05.3 | +0.5 |
| GYA | | | | S | | **Sn** | 07 46 14.5 | +1.1 |
| GYA | | | | PMZ | | | | |
| | comp=Z,40nm,0.7s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=Z,110nm,4.2s | | | | | | | |
| **GTA** | **Gaotai** | **12.51** | **26** | *e*P | | Pn | 07 43 53.0 | -3.7 |
| GTA | | | | pP | | **P** | 07 44 04.0 | -1.2 |
| GTA | | | | sP | | | 07 44 12.5 | |
| GTA | | | | S | | **Sn** | 07 46 09.0 | -5.2 |
| GTA | | | | SS | | S | 07 46 25.3 | -11 |
| GTA | | | | PMZ | | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,150nm,4.8s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,230nm,11.2s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,510nm,10.9s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,140nm,10.0s | | | | | | | |
| **CHLP** | **Challavanipeta** | **12.62** | **221** | *e*Pn | | **Pn** | 07 43 57.1 | -1.1 |
| CHLP | | | | *e* | | | 07 46 10.6 | |
| CHLP | | | | *e*Sn | | **Sn** | 07 46 19.9 | +3.0 |
| **NDI** | **New Delhi** | **13.70** | **275** | *e*S | | Sn | 07 46 32.0 | -11 |
| **NGP** | **Nagpur** | **14.37** | **243** | *e*P | | P | 07 44 34.4 | +8.6 |
| NGP | | | | *ex* | | x | 07 44 35.2 | |
| | comp=Z,23nm,1.2s | | | | | | | |
| NGP | | | | *e*S | | S | 07 47 24.6 | +10 |
| **PVM** | **Polavaram** | **15.06** | **225** | *e*Pn | | **Pn** | 07 44 30.4 | +0.3 |
| PVM | | | | *e* | | | 07 47 07.8 | |
| PVM | | | | *e*Sn | | **Sn** | 07 47 20.4 | +4.2 |
| **RPR** | **Rampur** | **15.53** | **236** | *e*Pn | | **Pn** | 07 44 34.8 | -1.2 |
| RPR | | | | *e*Sn | | **Sn** | 07 47 31.7 | +4.3 |
| **WMQ** | **Urumqi** | **16.01** | **347** | P | | **P** | 07 44 43.0 | -0.9 |
| WMQ | | | | S | | **Sn** | 07 47 37.5 | -1.4 |
| WMQ | | | | SS | | S | 07 48 00.0 | +12 |
| WMQ | | | | PMZ | | | | |
| | comp=Z,69nm,1.0s | | | | | | | |
| WMQ | | | | PMZ | | | | |
| | comp=Z,250nm,4.0s | | | | | | | |
| WMQ | | | | LN | | | | |
| | comp=Z,110nm,10.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | comp=Z,190nm,10.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | comp=Z,110nm,10.0s | | | | | | | |
| **SRSP** | **Sriramsagar** | **16.19** | **238** | *e*Pn | | **Pn** | 07 44 42.8 | -1.5 |
| SRSP | | | | *e* | | | 07 47 32.2 | |
| SRSP | | | | *e*Sn | | **Sn** | 07 47 44.5 | +1.1 |
| **HYBB** | **Hyderabad (bro** | **17.00** | **233** | *e*Pn | | **P** | 07 44 54.9 | -0.2 |
| HYBB | | | | *e*Sn | | **S** | 07 48 07.9 | -0.3 |
| **HYB** | **Hyderabad** | **17.00** | **233** | *i*P | | **pP** | 07 45 06.0 | -5.1 |
| HYB | | | | *e* | | | 07 47 52.0 | |
| HYB | | | | *e*S | | **Sn** | 07 48 05.0 | +1.9 |
| **HYB** | **Hyderabad** | **17.00** | **233** | *e*P | | **pP** | 07 45 06.0 | -5.1 |
| HYB | | | | *e*S | | S | 07 48 26.0 | +18 |
| **ADKI** | **Addanki** | **17.16** | **226** | *e*Pn | | **Pn** | 07 44 56.1 | -0.2 |
| ADKI | | | | *e*Sn | | **S** | 07 48 10.1 | -1.0 |
| **KSH** | **Kashi** | **17.85** | **313** | *e*P | | **Pn** | 07 45 06.0 | +1.3 |
| KSH | | | | *e*PP | | **pP** | 07 45 23.5 | +3.1 |
| KSH | | | | S | | **S** | 07 48 26.3 | +1.9 |
| KSH | | | | SS | | SnSn | 07 48 49.3 | +11 |
| KSH | | | | PMZ | | | | |
| | comp=Z,92nm,6.6s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,180nm,5.2s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,250nm,6.9s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,230nm,5.3s | | | | | | | |
| **KLRI** | **Killari** | **18.02** | **239** | *e*P | | **Pn** | 07 45 07.2 | +0.3 |
| KLRI | | | | *e*Sn | | **S** | 07 48 31.1 | +3.1 |
| **RCLA** | **Racherla** | **18.10** | **228** | *e*P | | **Pn** | 07 45 08.4 | +0.6 |
| RCLA | | | | *e*Sn | | **S** | 07 48 32.5 | +2.9 |
| **QIZ** | **Qiongzhong** | **18.13** | **117** | P | | **Pn** | 07 45 10.8 | +2.6 |
| QIZ | | | | S | | **Sn** | 07 48 30.8 | +0.4 |
| QIZ | | | | PMZ | | | | |
| | comp=Z,29nm,1.6s | | | | | | | |
| **PDGK** | **Podgornoye** | **18.42** | **328** | P | | **P** | 07 45 10.4 | -0.1 |
| PDGK | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **WHN** | **Wuhan** | **18.91** | **78** | ⇑P | | **Pn** | 07 45 17.0 | -0.4 |
| WHN | | | | PMZ | | | | |
| | comp=Z,56nm,0.8s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **19.84** | **46** | *e*P | | **P** | 07 45 25.8 | -0.3 |
| HHC | | | | pP | | **pP** | 07 45 39.5 | -2.8 |
| HHC | | | | S | | **S** | 07 48 59.5 | -5.6 |
| HHC | | | | sS | | Sn | 07 49 20.8 | +10 |
| HHC | | | | SS | | **SnSn** | 07 49 32.0 | +4.9 |
| HHC | | | | PMZ | | | | |
| | comp=Z,21nm,1.5s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,180nm,6.2s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,470nm,13.7s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,450nm,13.7s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,150nm,9.9s | | | | | | | |
| **TKM2** | **Tokmak 2** | **20.14** | **321** | *e*P | | **P** | 07 45 30.3 | +0.9 |
| TKM2 | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **20.14** | **321** | *e*P | | **P** | 07 45 30.3 | +0.9 |
| | comp=Z,14nm,0.6s | | | | | | | |
| **MK01** | **Makanchi Array** | **20.18** | **339** | *e*P | | **P** | 07 45 28.4 | -1.2 |
| **MK31** | **Makanchi Array** | **20.20** | **339** | *e*P | | **P** | 07 45 28.8 | -1.1 |
| MK31 | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **20.20** | **339** | P | | **P** | 07 45 28.4 | -1.6 |
| | comp=Z,7.4nm,0.7s,baz=146,slow=13,SNR=58 | | | | | | | |
| MKAR | | | | LR | | LR | 07 53 09.6 | |
| | comp=Z,20nm,20.7s,baz=168,slow=36 | | | | | | | |
| **MKAR** | **Makanchi Array** | **20.20** | **339** | *i* P | | **P** | 07 45 29.0 | -0.9 |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,0.7s | | | | | | | |
| **MKAR** | **Makanchi Array** | **20.20** | **339** | *e*P | | **P** | 07 45 29.0 | -0.9 |
| **MAKZ** | **Makanchi** | **20.32** | **338** | *e*P | | **P** | 07 45 30.5 | -0.6 |
| **AAK** | **Ala-Archa** | **20.58** | **319** | P | | **P** | 07 45 34.3 | +0.1 |
| | comp=Z,1.0nm,0.4s,baz=155,slow=7.0,SNR=5.9 | | | | | | | |
| **AAK** | **Ala-Archa** | **20.58** | **319**‖ | *e*P | | **P** | 07 45 34.9 | +0.7 |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **AAK** | **Ala-Archa** | **20.58** | **319** | *e*P | | **P** | 07 45 34.9 | +0.7 |
| **EKS2** | **Erkin-Say** | **21.02** | **318** | *e*P | | **P** | 07 45 40.0 | +1.2 |
| EKS2 | | | | pmax | pmax | | | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **EKS2** | **Erkin-Say** | **21.02** | **318** | *e*P | | **P** | 07 45 40.0 | +1.2 |
| | comp=Z,12nm,0.6s | | | | | | | |
| **KBL** | **Kabul** | **21.17** | **293** | *e*P | | **P** | 07 45 41.4 | +0.8 |
| KBL | | | | pmax | pmax | | | |
| | comp=Z,35nm,0.8s | | | | | | | |
| **KBL** | **Kabul** | **21.17** | **293** | *e*P | | **P** | 07 45 41.4 | +0.8 |
| | comp=Z,35nm,0.8s | | | | | | | |
| **MNAS** | **Manas** | **21.68** | **316** | P | | **P** | 07 45 46.7 | +0.8 |
| MNAS | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| **SONM** | **Songino Array** | **22.18** | **25** | P | | **P** | 07 45 50.2 | -1.0 |
| | comp=Z,24nm,0.8s,baz=215,slow=12,SNR=117 | | | | | | | |
| SONM | | | | LR | | LR | 07 55 31.9 | |
| | comp=Z,85nm,20.8s,baz=201,slow=39 | | | | | | | |
| **SONA1** | **Songino Array** | **22.19** | **25** | *e*P | | **P** | 07 45 49.8 | -1.5 |
| **ULN** | **Ulaanbaatar** | **22.45** | **26** | *e*P | | **P** | 07 45 52.3 | -1.8 |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,24nm,0.8s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **22.45** | **26** | *e*P | | **P** | 07 45 52.3 | -1.8 |
| | comp=Z,24nm,0.8s | | | | | | | |
| **NJ2** | **Nanjing** | **22.82** | **74** | *e*P | | **P** | 07 45 58.3 | +0.4 |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,30nm,0.7s | | | | | | | |
| **ZAK** | **Zakamensk** | **23.44** | **17** | *e*P | | **P** | 07 46 03.0 | -0.8 |
| ZAK | | | | *e* | | | 07 46 31.5 | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **PALK** | **Pallekele** | **23.84** | **211** | LR | | LR | 07 56 13.5 | |
| | comp=Z,23nm,21.1s,baz=298,slow=38 | | | | | | | |
| **TLY** | **Talaya** | **24.72** | **16** | P | | **P** | 07 46 14.5 | -0.8 |
| | comp=Z,1.6nm,0.7s,baz=41,slow=20,SNR=2.1 | | | | | | | |
| TLY | | | | LR | | LR | 07 57 09.3 | |
| | comp=Z,98nm,18.3s,baz=180,slow=39 | | | | | | | |
| **TLY** | **Talaya** | **24.72** | **16** | *e*P | | **P** | 07 46 15.9 | +0.6 |
| TLY | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **24.76** | **338** | P | | **P** | 07 46 15.5 | -0.1 |
| | comp=Z,9.8nm,0.7s,baz=148,slow=9.4,SNR=42 | | | | | | | |
| **KURK** | **Kurchatov** | **24.82** | **338** | P | | **P** | 07 46 15.5 | -0.5 |
| **KURK** | **Kurchatov** | **24.82** | **338** | P | | **P** | 07 46 15.5 | -0.5 |
| **KCSI** | **Kotacane, Aceh** | **25.11** | **168** | P | | P | 07 46 26.5 | +7.5 |
| **OTUK** | **Ortayu** | **25.43** | **327** | P | | **P** | 07 46 21.2 | -0.5 |
| OTUK | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.27** | **349** | P | | **P** | 07 46 29.0 | -0.2 |
| | comp=Z,4.8nm,0.6s,baz=175,slow=8.3,SNR=19 | | | | | | | |
| ZALV | | | | LR | | LR | 07 58 26.7 | |
| | comp=Z,14nm,19.6s,baz=66,slow=40 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.27** | **349** | P | | **P** | 07 46 29.0 | -0.2 |
| **HIA** | **Hailar** | **29.39** | **37**⇑ | *e*P | | **P** | 07 46 58.4 | +1.3 |
| HIA | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.2s | | | | | | | |
| **BVAR** | **Borovoye Array** | **29.72** | **332** | P | | **P** | 07 47 00.2 | +0.2 |
| | comp=Z,1.4nm,0.6s,baz=110,slow=12,SNR=4.4 | | | | | | | |
| **BRVK** | **Borovoye** | **29.79** | **332**⇑ | *i*P | | **P** | 07 47 01.2 | +0.6 |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **BRVK** | **Borovoye** | **29.79** | **332** | *e*P | | **P** | 07 47 01.2 | +0.6 |
| | comp=Z,6.0nm,0.7s | | | | | | | |
| **GEYT** | **Alibeck** | **30.43** | **297** | P | | **P** | 07 47 07.5 | +1.0 |
| | comp=Z,2.1nm,0.7s,baz=131,slow=8.4,SNR=3.6 | | | | | | | |
| **KSRS** | **Korea Array** | **30.74** | **64** | LR | | LR | 07 59 30.4 | |
| | comp=Z,59nm,19.6s,baz=262,slow=36 | | | | | | | |
| **ABKAR** | **Akbulak array** | **32.67** | **319** | *e*P | | **P** | 07 47 26.5 | +0.5 |
| | comp=Z,2.3nm,0.5s | | | | | | | |
| **JNU** | **Nakatsue** | **32.97** | **72** | LR | | LR | 08 01 41.8 | |
| | comp=Z,112nm,18.3s,baz=298,slow=38 | | | | | | | |
| **BOD** | **Bodaibo** | **33.02** | **21** | *e*P | | **P** | 07 47 27.7 | -1.2 |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.4s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **34.32** | **320** | P | | **P** | 07 47 40.4 | +0.1 |
| | comp=Z,2.0nm,0.7s,baz=110,slow=7.2,SNR=6.8 | | | | | | | |
| **USRK** | **Usuriysk Ar.** | **34.99** | **52** | LR | | LR | 08 03 07.4 | |
| | comp=Z,69nm,21.1s,baz=45,slow=38 | | | | | | | |
| **KLR** | **Kul'dur** | **36.32** | **44** | *e*P | | P | 07 47 53.8 | -3.7 |
| **YAK** | **Yakutsk** | **41.54** | **25** | LR | | LR | 08 07 27.7 | |
| | comp=Z,51nm,19.6s,baz=210,slow=38 | | | | | | | |
| **RAYN** | **Ar Rayn** | **42.59** | **275** | *e*P | | **P** | 07 48 50.9 | +1.0 |
| | comp=Z,12nm,1.4s | | | | | | | |
| **NEY** | **Neytrino** | **42.64** | **304** | P | | **P** | 07 48 52.0 | +1.7 |
| NEY | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **ANN** | **Anapa** | **46.51** | **306** | *e*P | | **P** | 07 49 20.8 | 0.0 |
| ANN | | | | *e* | | | 07 51 10.5 | |
| ANN | | | | *e*S | | **S** | 07 56 05.3 | +2.2 |
| ANN | | | | pmax | pmax | | | |
| | comp=Z,44nm,1.3s | | | | | | | |
| **BRTR** | **Keskin Array B** | **49.53** | **300** | P | | **P** | 07 49 44.8 | +0.4 |
| | comp=Z,1.4nm,0.6s,baz=112,slow=8.5,SNR=7.4 | | | | | | | |
| **BRTR** | **Keskin Array B** | **49.53** | **300** | *i* P | | **P** | 07 49 44.7 | +0.4 |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **AKASG** | **Malin Array Be** | **52.14** | **314** | P | | **P** | 07 50 02.7 | -0.9 |
| | comp=Z,1.2nm,0.5s,baz=80,slow=6.3,SNR=5.9 | | | | | | | |
| **AKASG** | **Malin Array Be** | **52.14** | **314** | *i* P | | **P** | 07 50 03.5 | -0.1 |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **MLR** | **Muntele Rosu** | **54.60** | **307** | pP | | pP | 07 50 41.9 | -0.5 |
| | comp=Z,1.1nm,0.9s,baz=119,slow=8.2,SNR=2.6 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **55.84** | **337** | P | | **P** | 07 50 30.1 | -0.2 |
| | comp=Z,3.1nm,1.1s,baz=94,slow=8.6,SNR=4.1 | | | | | | | |
| **VYHS** | **Vyhne** | **59.04** | **312** | *e*P | | P | 07 50 57.2 | +4.1 |
| **VYHS** | **Vyhne** | **59.04** | **312** | *e*P | | P | 07 50 57.2 | +4.1 |
| **HFS** | **Hagfors** | **60.53** | **326** | P | | **P** | 07 51 03.0 | -0.1 |
| | comp=Z,2.1nm,0.7s,baz=98,slow=17,SNR=3.5 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **61.64** | **327** | P | | pP | 07 51 30.0 | -1.5 |
| | comp=Z,3.8nm,1.0s,baz=59,slow=6.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **61.64** | **327** | pP | | pP | 07 51 29.8 | -1.7 |
| | comp=Z,2.0nm,0.8s,baz=57,slow=6.4,SNR=4.3 | | | | | | | |
| **GERES** | **GERESS Array B** | **62.32** | **313** | P | | **P** | 07 51 15.5 | 0.0 |
| | comp=Z,1.0nm,0.4s,baz=38,slow=29,SNR=6.3 | | | | | | | |
| GERES | | | | pP | | **pP** | 07 51 36.5 | 0.0 |
| | comp=Z,0.5nm,0.3s,baz=88,slow=5.0,SNR=1.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **62.56** | **135** | P | | **P** | 07 51 17.7 | +0.4 |
| | comp=Z,1.9nm,0.6s,baz=326,slow=7.2,SNR=34 | | | | | | | |
| WRA | | | | pP | | **pP** | 07 51 38.7 | +0.4 |
| | comp=Z,11nm,0.7s,baz=317,slow=7.8,SNR=32 | | | | | | | |
| **WRAB** | **Tennant Creek** | **62.56** | **135** | *e*P | | **P** | 07 51 17.9 | +0.6 |
| WRAB | | | | *e**PP | | **pP** | 07 51 39.4 | +1.1 |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,15nm,0.7s | | | | | | | |
| **WRAB** | **Tennant Creek** | **62.56** | **135** | *e*P | | **P** | 07 51 17.9 | +0.6 |
| | comp=Z,15nm,0.7s | | | | | | | |
| WRAB | | | | *e*pP | | **pP** | 07 51 39.4 | +1.1 |
| **ASAR** | **Alice Springs** | **65.12** | **138** | P | | **P** | 07 51 35.5 | +1.4 |
| | comp=Z,2.8nm,0.8s,baz=322,slow=6.5,SNR=26 | | | | | | | |
| ASAR | | | | pP | | **pP** | 07 51 55.5 | +0.3 |
| | comp=Z,5.1nm,0.6s,baz=322,slow=6.7,SNR=18 | | | | | | | |
| ASAR | | | | sP | | **sP** | 07 52 06.3 | +2.1 |
| | comp=Z,2.7nm,0.5s,baz=322,slow=6.7,SNR=5.1 | | | | | | | |
| **COLA** | **College** | **75.99** | **23** | *e*P | | **P** | 07 52 40.7 | +1.1 |
| COLA | | | | pmax | pmax | | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **COLA** | **College** | **75.99** | **23** | *e*P | | **P** | 07 52 40.7 | +1.1 |
| | comp=Z,11nm,1.2s | | | | | | | |
| **ILAR** | **Eielson Array** | **76.38** | **22** | P | | **P** | 07 52 41.8 | 0.0 |
| | comp=Z,3.2nm,0.9s,baz=297,slow=5.2,SNR=25 | | | | | | | |
| ILAR | | | | pP | | **pP** | 07 53 03.2 | -0.1 |
| | comp=Z,0.7nm,0.8s,baz=292,slow=5.7,SNR=2.2 | | | | | | | |
| **ESDC** | **Sonseca Array** | **77.29** | **308** | P | | **P** | 07 52 47.2 | -0.3 |
| | comp=Z,0.3nm,0.3s,baz=61,slow=7.0,SNR=5.7 | | | | | | | |
| **INK** | **Inuvik** | **77.79** | **16** | P | | **P** | 07 52 49.5 | -0.1 |
| | comp=Z,3.2nm,0.8s,baz=2.6,slow=6.0,SNR=7.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.82** | **282** | P | | **P** | 07 53 28.9 | +1.1 |
| | comp=Z,1.5nm,0.6s,baz=55,slow=3.8,SNR=14 | | | | | | | |
| TORD | | | | pP | | **pP** | 07 53 48.9 | -0.9 |
| | comp=Z,1.2nm,0.8s,baz=59,slow=4.4,SNR=4.1 | | | | | | | |
| **BOSA** | **Boshof** | **85.90** | **235** | pP | | pP | 07 53 54.5 | -0.5 |
| | comp=Z,4.2nm,1.0s,baz=316,slow=2.6,SNR=2.6 | | | | | | | |

**MAN 28 07:55:30,13°38N×120°58E,h46km,mb3.9,ML2.6,MS2.2,**
**1C,Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PGP** | **Puerto Galera** | **0.38** | **71**⇑ | *e*P | Pn | 07 55 41.3 | +1.6 |
| PGP | | | | *i* S | Sn | 07 55 52.8 | +6.3 |
| **SJMP** | **San Jose** | **1.05** | **150** | *e*P | Pn | 07 55 50.3 | +2.0 |
| SJMP | | | | *e*S | Sn | 07 56 02.1 | +0.3 |
| **BUSP** | **Coron** | **1.42** | **195** | *e*P | Pn | 07 55 54.5 | +1.2 |
| BUSP | | | | *e*S | Sn | 07 56 06.9 | -3.9 |
| **ENPP** | **El Nido** | **2.44** | **208** | *e*P | Pn | 07 56 08.2 | +0.9 |
| **CUYO** | **Cuyo Island** | **2.55** | **170** | *e*P | Pn | 07 56 09.3 | +0.4 |

*ISCJB* ***28*** *08:14:13.6±1.2, 1°83N±0°09×126°74E±0°07, h10km, mb3.9/4, Error ellipse: s-maj=14.5km s-min=6.7km az=34.0*
*IDC* ***28*** *08:14:13.2±1.2, 0°79N×124°51E, h0km, mb3.9/4, mb1 4.2/4, mb1mx3.8/31, mbtmp4.0/4, Error ellipse: s-maj=143.2km s-min=20.2km az=67.0*
*DJA* ***28*** *08:14:16.8±0.9, 2°N±5°×12°7E±°, h20km±13km, M3.8/5, MLv3.8/5*

**ISC 28 08:14:15.4±1.4, 1°8N±0°1×126°74E±0°09, h10km, n10,**
**σ1§46/12, mb4.0/4, Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **1.15** | **147** | P | **Pb** | **08 14 37.1** | **-0.4** |
| TNTI | | | | S | **Sg** | **08 14 52.8** | **+0.1** |
| **LBMI** | **Labuha** | **2.49** | **162** | P | **Pn** | **08 14 57.2** | **+1.2** |
| LBMI | | | | S | **Sn** | **08 15 26.9** | **+0.4** |
| **SANI** | **Sanana** | **3.84** | **191** | P | **Pn** | **08 15 15.5** | **+0.8** |
| **GTOI** | **Gorontalo** | **3.88** | **254** | P | **Pn** | **08 15 15.8** | **+0.6** |
| GTOI | | | | S | **Sn** | **08 16 02.5** | **+1.6** |
| **MRSI** | **Marisa** | **4.96** | **255** | P | **Pn** | **08 15 28.6** | **-1.4** |
| **APSI** | **Ampana** | **5.73** | **243** | P | **Pn** | **08 15 40.9** | **+0.3** |
| **WRA** | **Warramunga Arr** | **22.81** | **161** | P | **P** | **08 19 15.8** | **-2.8** |
| | 3.9nm,0.6s,baz=330,slow=11,SNR=37 | | | | | | |
| **ASAR** | **Alice Springs** | **26.20** | **165** | P | **P** | **08 19 48.9** | **-1.7** |
| | 2.2nm,0.8s,baz=351,slow=7.6,SNR=30 | | | | | | |
| **SONM** | **Songino Array** | **49.17** | **342** | P | **P** | **08 23 05.0** | **+1.2** |
| | 0.3nm,0.4s,baz=153,slow=9.7,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **59.19** | **326** | P | P | 08 24 13.0 | -3.7 |
| | 0.7nm,0.4s,baz=117,slow=8.3,SNR=8.4 | | | | | | |

**IDC 28 08:30:16.7±4.9, 3°64S×101°55E, h0km, mb3.5/4,**
**mb1 3.6/4, mb1mx3.4/45, mbtmp3.5/4, MS3.3/2, Ms1 3.3/2,**
**ms1mx2.6/30, Error ellipse: s-maj=200.8km**
**s-min=24.6km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **29.18** | **261** | T | T | 09 08 24.6 | |
| | baz=82,slow=75,SNR=13 | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.18** | **261** | T | T | 09 08 24.6 | |
| | baz=82,slow=75,SNR=15 | | | | | | |
| **H08S1** | **Diego Garcia H** | **29.20** | **261** | T | T | 09 08 24.6 | |
| | baz=82,slow=75,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **35.84** | **120** | P | P | 08 37 18.6 | +0.1 |
| | 0.3nm,1.1s,baz=301,slow=10.0,SNR=4.6 | | | | | | |
| WRA | | | | LR | LR | 08 53 00.3 | |
| | comp=Z,26nm,18.7s,baz=45,slow=38 | | | | | | |
| **ASAR** | **Alice Springs** | **37.05** | **125** | P | P | 08 37 28.6 | -0.2 |
| | 0.4nm,0.8s,baz=302,slow=7.8,SNR=5.1 | | | | | | |
| ASAR | | | | LR | LR | 08 53 10.1 | |
| | comp=Z,78nm,19.6s,baz=38,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **51.44** | **4** | P | P | 08 39 23.7 | 0.0 |
| | 0.3nm,0.5s,baz=182,slow=9.7,SNR=2.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.06** | **349** | P | P | 08 40 18.8 | +0.3 |
| | 0.5nm,0.3s,baz=176,slow=8.1,SNR=3.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.00** | **40** | PKPbc | PKPab | 08 49 54.4 | -1.8 |
| | 0.4nm,0.5s,baz=309,slow=1.9,SNR=3.8 | | | | | | |

*BJI* ***28*** *08:38:29.1, 5°96S×146°62E, h216km, mb4.3/15, mB5.0/10*
*ISCJB* ***28*** *08:38:32.2±0.6, 5°45S±0°04×146°81E±0°05, h226km±5km, mb4.3/15, Error ellipse: s-maj=8.3km s-min=6.1km az=175.4*
*IDC* ***28*** *08:38:33.2±0.7, 5°52S×146°83E, h234km±7km, mb4.0/9, mb1 4.2/14, mb1mx3.9/39, mbtmp4.7/14, Error ellipse: s-maj=15.0km s-min=8.8km az=103.0*
*NEIC* ***28*** *08:38:33.8±0.2, 5°38S×146°79E, mb4.8/6, Error ellipse: s-maj=7.0km s-min=5.2km az=96.0*
*AUST* ***28*** *08:38:33.4±0.0, 5°50S×146°77E, h222km, Error ellipse: s-maj=1.0km s-min=0.9km az=236.0*
*DJA* ***28*** *08:38:35.4±0.5, 6°S±5°×14°7E±°, h201km±8km, M4.9/8, mb4.5/8, mB4.8/3, MLv5.2/2, Mw(mB)4.1/3*

**ISC 28 08:38:33.2±0.4, 5°52S±0°04×146°86E±0°06, h222km±3km,**
**h222km:pP-P, n67, σ1§59/95, mb4.4/16, Eastern New**
**Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MANU** | **Manus Island** | **3.50** | **8** | P | **Pn** | **08 39 30.4** | **+0.6** |
| | baz=3.5,SNR=3.7 | | | | | | |
| **MANU** | **Manus Island** | **3.50** | **8** | *e*Pn | **Pn** | **08 39 30.0** | **+0.2** |
| **PMG** | **Port Moresby** | **3.87** | **176** | P | **Pn** | **08 39 34.1** | **-0.1** |
| | 33nm,0.3s,baz=22,slow=5.3,SNR=135 | | | | | | |
| PMG | | | | S | **S** | **08 40 21.7** | **-0.5** |
| | 99nm,0.3s,baz=301,slow=19,SNR=4.4 | | | | | | |
| **PMG** | **Port Moresby** | **3.87** | **176** | P | **Pn** | **08 39 34.1** | **-0.1** |
| | baz=3.9,SNR=72 | | | | | | |
| **PMG**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 8.8nm,0.9s,baz=1.0,slow=10,SNR=3.9 | | | | | | | |
| **ARMA** | **Armidale** | **25.17** | **170** | P | | **P** | **08 43 39.9** | **+1.5** |
| | baz=25,SNR=7.3 | | | | | | | |
| **ARMA** | **Armidale** | **25.17** | **170** | *e*P | | **P** | **08 43 39.8** | **+1.3** |
| | 23nm,1.0s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.90** | **182** | P | | **P** | **08 43 45.6** | **+0.7** |
| | baz=26,SNR=6.8 | | | | | | | |
| **WRKA** | **Warakurna** | **26.33** | **221** | P | | **P** | **08 43 48.6** | **-0.3** |
| | baz=26,SNR=42 | | | | | | | |
| **HTT** | **Hallett** | **28.73** | **194** | P | | P | 08 44 03.9 | -6.2 |
| | baz=29,SNR=3.4 | | | | | | | |
| **BBOO** | **Buckleboo** | **28.96** | **199** | P | | **P** | **08 44 12.1** | **0.0** |
| | baz=29,SNR=4.6 | | | | | | | |
| **MBWA** | **Marble Bar** | **30.54** | **237** | *e*P | | **P** | **08 44 25.4** | **-0.8** |
| | 18nm,1.0s | | | | | | | |
| **MSVF** | **Nonsavu** | **32.81** | **114** | *e*P | | **P** | **08 44 47.5** | **+1.4** |
| | 54nm,1.3s | | | | | | | |
| **MEEK** | **Meekatharra** | **34.15** | **229** | P | | **P** | **08 44 57.1** | **-0.5** |
| | baz=34,SNR=8.8 | | | | | | | |
| **QIZ** | **Qiongzhong** | **43.87** | **305** | P | | P | 08 46 12.3 | -5.8 |
| QIZ | | | | S | | **S** | **08 52 31.5** | **-0.9** |
| QIZ | | | | pmax | | pmax | | |
| | comp=Z,33nm,2.1s | | | | | | | |
| QIZ | | | | pmax | | pmax | | |
| | comp=Z,550nm,4.9s | | | | | | | |
| **NJ2** | **Nanjing** | **45.91** | **326** | *e*P | | **P** | **08 46 34.8** | **+0.9** |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| **GYA** | **Guiyang** | **50.26** | **311** | *e*P | | **P** | **08 47 08.3** | **+0.8** |
| GYA | | | | pP | | **pP** | **08 47 55.8** | **-0.2** |
| GYA | | | | sP | | **sP** | **08 48 21.0** | **+0.4** |
| GYA | | | | PP | | **PP** | **08 49 06.5** | **+1.2** |
| GYA | | | | S | | **S** | **08 54 01.5** | **-1.4** |
| GYA | | | | PMZ | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **KMI** | **Kunming** | **52.60** | **307** | P | | **P** | **08 47 26.5** | **+1.6** |
| KMI | | | | pP | | **pP** | **08 48 15.0** | **+1.2** |
| KMI | | | | PMZ | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,400nm,5.1s | | | | | | | |
| **CN2** | **Changchun** | **52.77** | **341** | *e*P | | **P** | **08 47 28.5** | **+3.0** |
| **CMAR** | **Chiang Mai Arr** | **52.90** | **298** | pP | | pP | 08 48 17.6 | +1.7 |
| | comp=Z,1.6nm,0.3s,baz=116,slow=5.1,SNR=1.7 | | | | | | | |
| **CD2** | **Chengdu** | **54.84** | **314** | *e*P | | **P** | **08 47 40.3** | **-0.6** |
| CD2 | | | | pP | | **pP** | **08 48 28.8** | **-1.4** |
| CD2 | | | | sP | | **sP** | **08 48 53.0** | **-1.6** |
| CD2 | | | | PcS | | **PcS** | **08 52 39.8** | **-0.7** |
| CD2 | | | | S | | **S** | **08 55 04.5** | **-0.2** |
| CD2 | | | | sS | | **sS** | **08 56 30.3** | **-0.9** |
| CD2 | | | | SS | | **SS** | **08 58 52.5** | **+0.8** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,120nm,5.0s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **56.36** | **328** | *e*P | | **P** | **08 47 53.5** | **+2.0** |
| HHC | | | | sP | | **sP** | **08 49 08.0** | **+2.5** |
| HHC | | | | PP | | **PP** | **08 50 03.8** | **+4.1** |
| HHC | | | | S | | **S** | **08 55 29.5** | **+5.0** |
| HHC | | | | SS | | **SS** | **08 59 16.8** | **+1.5** |
| HHC | | | | PMZ | | | | |
| | comp=Z,11nm,1.1s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,210nm,6.2s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,410nm,5.6s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,410nm,5.7s | | | | | | | |
| **LZH** | **Lanzhou** | **57.76** | **319** | *e*P | | P | 08 48 05.0 | +3.5 |
| LZH | | | | pP | | **PcP** | **08 48 52.5** | **+0.8** |
| LZH | | | | sP | | sP | 08 49 15.8 | +0.1 |
| LZH | | | | PMZ | | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| **GTA** | **Gaotai** | **62.29** | **320** | *e*P | | **P** | **08 48 31.5** | **-0.6** |
| GTA | | | | pP | | **pP** | **08 49 23.3** | **+0.5** |
| GTA | | | | sP | | **sP** | **08 49 47.0** | **+0.1** |
| GTA | | | | PMZ | | | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **SONM** | **Songino Array** | **63.92** | **331** | P | | **P** | **08 48 40.6** | **-2.1** |
| | comp=Z,1.1nm,0.7s,baz=139,slow=4.4,SNR=7.2 | | | | | | | |
| **CASY** | **Casey** | **65.67** | **195** | *e*P | | **P** | **08 48 52.8** | **-0.7** |
| | comp=Z,6.8nm,0.5s | | | | | | | |
| **SEY** | **Seymchan** | **68.39** | **3** | P | | **P** | **08 49 09.0** | **-1.6** |
| | comp=Z,2.9nm,0.7s,baz=160,slow=7.9,SNR=4.7 | | | | | | | |
| **WMQ** | **Urumqi** | **72.34** | **319** | P | | **P** | **08 49 35.0** | **0.0** |
| WMQ | | | | PMZ | | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| **VNDA** | **Vanda** | **72.39** | **177** | P | | **P** | **08 49 33.7** | **-0.9** |
| | comp=Z,1.0nm,0.8s,baz=324,slow=6.8,SNR=6.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **77.04** | **320** | P | | **P** | **08 50 00.3** | **-1.5** |
| | comp=Z,0.2nm,0.4s,baz=94,slow=8.4,SNR=2.6 | | | | | | | |
| MKAR | | | | pP | | **pP** | **08 50 57.0** | **+2.4** |
| | comp=Z,0.8nm,0.9s,baz=96,slow=4.9,SNR=3.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **78.54** | **328** | P | | **P** | **08 50 07.1** | **-2.7** |
| | comp=Z,1.3nm,0.6s,baz=91,slow=6.2,SNR=4.2 | | | | | | | |
| **KSH** | **Kashi** | **78.96** | **312** | *e*P | | **P** | **08 50 11.8** | **-0.9** |
| KSH | | | | *es*P | | **sP** | **08 51 29.0** | **-0.2** |
| KSH | | | | *e*PP | | **PP** | **08 53 14.5** | **-0.4** |
| KSH | | | | S | | S | 08 59 45.0 | -7.9 |
| KSH | | | | sS | | **sS** | **09 01 21.8** | **-3.9** |
| KSH | | | | SS | | **SS** | **09 05 06.3** | **+2.7** |
| KSH | | | | PMZ | | | | |
| | comp=Z,180nm,5.1s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,270nm,6.3s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,230nm,5.2s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,290nm,5.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.44** | **180** | *e*P | | **P** | **08 50 40.3** | **-0.5** |
| | comp=Z,112nm,3.0s | | | | | | | |
| **ILAR** | **Eielson Array** | **85.10** | **23** | P | | **P** | **08 50 41.4** | **-2.5** |
| | comp=Z,3.5nm,0.8s,baz=253,slow=5.1,SNR=32 | | | | | | | |
| ILAR | | | | pP | | **pP** | **08 51 39.0** | **+1.3** |
| | comp=Z,0.5nm,0.8s,baz=247,slow=5.8,SNR=1.9 | | | | | | | |
| **BVAR** | **Borovoye Array** | **86.30** | **324** | pP | | pP | 08 51 44.8 | +0.9 |
| | comp=Z,2.1nm,0.7s,baz=111,slow=6.5,SNR=2.3 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **97.19** | **52** | P | | **P** | **08 51 40.6** | **-0.5** |
| | comp=Z,1.3nm,0.8s,baz=255,slow=7.0,SNR=6.2 | | | | | | | |
| **LPAZ** | **La Paz** | **139.16** | **123** | PKP | | **PKPdf** | **08 57 34.3** | **-1.1** |
| | comp=Z,0.9nm,0.9s,baz=191,slow=6.1,SNR=3.9 | | | | | | | |
| **CPUP** | **Villa Florida** | **140.60** | **145** | PKP | | **PKPdf** | **08 57 35.5** | **-1.4** |
| | comp=Z,1.1nm,0.7s,baz=291,slow=2.3,SNR=3.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.83** | **285** | PKP | | PKPbc | 08 57 42.9 | -1.5 |
| | comp=Z,0.2nm,0.3s,baz=54,slow=2.7,SNR=3.0 | | | | | | | |
| TORD | | | | pPKP | | pPKPdf | 08 58 42.4 | +0.5 |
| | comp=Z,2.5nm,0.8s,baz=90,slow=3.1,SNR=8.4 | | | | | | | |
| **SAML** | **Samuel** | **146.78** | **115** | *e*PKPdf | | **PKPdf** | **08 57 45.8** | **-2.3** |
| SAML | | | | *e*PKPbc | | **PKPbc** | **08 57 48.5** | **-1.7** |
| SAML | | | | *e*PKPab | | **PKPab** | **08 57 50.3** | **-1.6** |
| **BDFB** | **Brasilia** | **154.33** | **145** | PKPbc | | **PKPbc** | **08 58 07.4** | **-0.9** |
| | comp=Z,0.8nm,0.3s,baz=84,slow=1.6,SNR=4.7 | | | | | | | |

*ISCJB **28** 08:38:49.3±0.7, 0.°1N±0.°2×16.°36W±0.°09, h13km, mb4.1/10, MS3.4/8, Error ellipse: s-maj=22.0km s-min=12.2km az=167.4*

*IDC **28** 08:38:49.1±1.0, 0.°09N×16.°44W, h0km, mb4.1/8, mb1 4.2/9, mb1mx3.8/49, mbtmp4.1/9, ML3.6/1, MS3.4/9, Ms1 3.4/9, ms1mx3.1/39, Error ellipse: s-maj=34.7km s-min=19.4km az=178.0*

*NEIC **28** 08:38:50.6±0.5, 0.°11N×16.°38W, h10km, mb4.1/2, Error ellipse: s-maj=19.0km s-min=10.5km az=165.0*

**ISC 28 08:38:51.2±0.8, 0.°1N±0.°2×16.°3W±0.°1, h13km, n26, σ0.98/13, mb4.3/10, MS3.4/8, North of Ascension Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H10N2** | **ASCENSION HYDR** | **8.08** | **167** | T | T | 08 48 52.6 | |
| | baz=346,slow=74,SNR=65 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **8.09** | **167** | T | T | 08 48 52.3 | |
| | baz=346,slow=74,SNR=62 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **8.10** | **167** | T | T | 08 48 53.9 | |
| | baz=346,slow=74,SNR=92 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **9.13** | **169** | T | T | 08 50 10.6 | |
| | baz=349,slow=74,SNR=66 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **9.14** | **169** | T | T | 08 50 10.6 | |
| | baz=349,slow=74,SNR=110 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **9.15** | **169** | T | T | 08 50 12.5 | |
| | baz=349,slow=74,SNR=69 | | | | | | |
| **DBIC** | **Dimbokro** | **13.19** | **60** | Pn | | **Pn** | **08 41 57.3** | **-1.1** |
| | 0.3nm,0.3s,baz=236,slow=15,SNR=4.0 | | | | | | | |
| DBIC | | | | LR | | LR | 08 45 58.7 | |
| | comp=Z,191nm,21.5s,baz=224,slow=32 | | | | | | | |
| **RCBR** | **Riachuelo** | **20.39** | **253** | LR | | LR | 08 49 08.9 | |
| | comp=Z,158nm,19.8s,baz=73,slow=30 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **22.09** | **53** | P | | **P** | **08 43 46.6** | **+0.3** |
| | 16nm,0.9s,baz=238,slow=9.1,SNR=36 | | | | | | | |
| TORD | | | | LR | | LR | 08 51 49.3 | |
| | comp=Z,90nm,19.1s,baz=220,slow=35 | | | | | | | |
| **BDFB** | **Brasilia** | **34.96** | **242** | LR | | LR | 08 58 00.5 | |
| | comp=Z,78nm,21.4s,baz=144,slow=33 | | | | | | | |
| **H09N1** | **TRISTAN DA CUN** | **37.16** | **175** | T | | T | 09 24 59.9 | |
| | SNR=3.4 | | | | | | | |
| **KEST** | **Kesra** | **42.77** | **31** | LR | | LR | 09 05 58.3 | |
| | comp=Z,89nm,18.8s,baz=312,slow=38 | | | | | | | |
| **H05S1** | **Guadeloupe/Mar** | **46.25** | **290** | T | | T | 09 36 38.9 | |
| | SNR=4.3 | | | | | | | |
| **LSZ** | **Lusaka** | **46.56** | **111** | P | | **P** | **08 47 20.4** | **+1.1** |
| | 0.8nm,0.3s,baz=0.0,slow=11,SNR=2.6 | | | | | | | |
| **SIV** | **San Ignacio** | **46.93** | **248** | P | | **P** | **08 47 20.9** | **-1.2** |
| | 2.3nm,0.9s,baz=103,slow=7.4,SNR=4.1 | | | | | | | |
| **CPUP** | **Villa Florida** | **47.41** | **233** | LR | | LR | 09 05 02.1 | |
| | comp=Z,59nm,20.6s,baz=65,slow=33 | | | | | | | |
| **SAML** | **Samuel** | **47.50** | **258** | *e*P | | **P** | **08 47 27.3** | **+0.8** |
| | 4.3nm,1.0s | | | | | | | |
| **LBTB** | **Lobatse** | **47.61** | **125** | P | | **P** | **08 47 27.5** | **+0.2** |
| | 2.8nm,0.8s,baz=297,slow=9.0,SNR=2.9 | | | | | | | |
| **MATP** | **Matopo** | **48.36** | **118** | P | | **P** | **08 47 33.5** | **+0.3** |
| | 2.7nm,0.8s,baz=262,slow=12,SNR=5.1 | | | | | | | |
| **BOSA** | **Boshof** | **48.95** | **129** | P | | **P** | **08 47 38.3** | **+0.7** |
| | 2.6nm,0.8s,baz=330,slow=8.1,SNR=3.2 | | | | | | | |
| BOSA | | | | LR | | LR | 09 04 12.9 | |
| | comp=Z,13nm,21.2s,baz=347,slow=31 | | | | | | | |
| **LPAZ** | **La Paz** | **53.59** | **250** | P | | **P** | **08 48 11.8** | **-1.5** |
| | 1.0nm,0.8s,baz=60,slow=10.0,SNR=4.8 | | | | | | | |
| LPAZ | | | | LR | | LR | 09 10 03.2 | |
| | comp=Z,71nm,19.1s,baz=60,slow=35 | | | | | | | |
| **ROSC** | **El Rosal** | **58.10** | **276** | LR | | LR | 09 11 17.5 | |
| | comp=Z,16nm,19.2s,baz=46,slow=34 | | | | | | | |
| **SNAA** | **Sanae** | **72.17** | **176** | *e*P | | **P** | **08 50 14.8** | **-0.6** |
| | 0.7nm,0.9s | | | | | | | |
| **TXAR** | **Lajitas Array** | **87.62** | **299** | P | | **P** | **08 51 40.6** | **+0.7** |
| | 0.8nm,0.8s,baz=109,slow=6.8,SNR=4.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **142.81** | **131** | PKP | | **PKPdf** | **08 58 26.7** | **+1.3** |
| | 0.5nm,0.8s,baz=222,slow=1.2,SNR=4.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **145.16** | **126** | PKPbc | | **PKPbc** | **08 58 28.8** | **-0.3** |
| | 1.7nm,1.0s,baz=246,slow=2.8,SNR=11 | | | | | | | |

**IDC 28 08:47:55.4±10.0, 16.°84S×177.°00W, h0km, mb3.8/3, mb1 4.1/3, mb1mx3.7/22, mbtmp3.8/3, MS3.6/15, Ms1 3.6/15, ms1mx3.4/37, Error ellipse: s-maj=450.1km s-min=37.2km az=141.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AFI** | **Afiamalu** | **5.82** | **61** | LR | LR | 08 51 19.1 | |
| | comp=Z,755nm,19.9s,baz=245,slow=35 | | | | | | |
| **DZM** | **Mont Dzumac** | **16.46** | **249** | *e*LR | LR | 08 55 16.8 | |
| | 559nm,26.2s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.46** | **249** | LR | LR | 08 57 03.4 | |
| | comp=Z,257nm,19.7s,baz=279,slow=33 | | | | | | |
| **RAR** | **Rarotonga** | **16.85** | **108** | LR | LR | 08 56 59.7 | |
| | comp=Z,258nm,20.8s,baz=280,slow=32 | | | | | | |
| **URZ** | **Urewera** | **21.96** | **192** | LR | LR | 09 00 34.3 | |
| | comp=Z,201nm,18.8s,baz=21,slow=35 | | | | | | |
| **PPT2** | **Papeete2** | **26.20** | **96** | *e*LR | LR | 09 00 18.1 | |
| | 376nm,27.8s | | | | | | |
| **PPT** | **Papeete** | **26.20** | **96** | LR | LR | 09 01 34.6 | |
| | comp=Z,89nm,20.4s,baz=194,slow=31 | | | | | | |
| **TBI** | **Tubuai** | **26.63** | **109** | *e*LR | LR | 09 00 39.1 | |
| | 438nm,29.5s | | | | | | |
| **RKT** | **Rikitea** | **39.88** | **106** | *e*LR | LR | 09 06 43.3 | |
| | 270nm,29.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **46.16** | **258** | P | P | 08 56 22.8 | +0.6 |
| | 0.9nm,1.1s,baz=87,slow=7.2,SNR=5.5 | | | | | | |
| WRA | | | | LR | LR | 09 14 27.9 | |
| | comp=Z,71nm,19.3s,baz=100,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **46.38** | **253** | P | P | 08 56 23.2 | -0.7 |
| | 1.1nm,0.6s,baz=85,slow=8.6,SNR=24 | | | | | | |
| ASAR | | | | LR | LR | 09 14 06.9 | |
| | comp=Z,193nm,21.1s,baz=96,slow=34 | | | | | | |
| **BATI** | **Baumata** | **57.90** | **268** | LR | LR | 09 20 37.9 | |
| | comp=Z,62nm,21.6s,baz=85,slow=34 | | | | | | |
| **VNDA** | **Vanda** | **61.62** | **185** | LR | LR | 09 20 16.7 | |
| | comp=Z,19nm,19.9s,baz=352,slow=32 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **64.59** | **320** | LR | LR | 09 29 19.3 | |
| | comp=Z,34nm,18.1s,baz=15,slow=38 | | | | | | |
| **ASAJ** | **Asahikawa** | **71.00** | **330** | LR | LR | 09 28 24.4 | |
| | comp=Z,30nm,18.3s,slow=34 | | | | | | |
| **PETK** | **Petropavlovsk-** | **73.01** | **344** | LR | LR | 09 26 30.8 | |
| | comp=Z,20nm,21.8s,baz=141,slow=32 | | | | | | |
| **KSRS** | **Korea Array** | **74.82** | **317** | LR | LR | 09 28 24.7 | |
| | comp=Z,20nm,21.7s,baz=137,slow=32 | | | | | | |
| **ILAR** | **Eielson Array** | **84.55** | **12** | P | P | 09 00 30.0 | 0.0 |
| | 1.3nm,1.0s,baz=226,slow=6.2,SNR=5.5 | | | | | | |
| **MAW** | **Mawson** | **85.31** | **199** | LR | LR | 09 36 34.1 | |
| | comp=Z,34nm,19.1s,baz=61,slow=34 | | | | | | |
| **ATAH** | **Atahualpa** | **96.12** | **99** | LR | LR | 09 35 45.9 | |
| | comp=Z,37nm,21.3s,baz=208,slow=30 | | | | | | |

*CSEM **28** 09:06:42.5±0.3, 33.°76N×35.°71E, h2km, ML2.9, Error ellipse: s-maj=14.6km s-min=5.2km az=87.0*

*GRAL **28** 09:06:42.4±0.3, 33.°79N×35.°77E, h6km, 6km, MD2.9*

*NSSC **28** 09:06:43.7±0.6, 33.°73N×36.°07E, h2km, 3km, ML2.2*

**ISC 28 09:06:42.4±1.1, 33.°78N±0.°02×35.°75E±0.°05, h5km±16km, n15, σ0.75/24, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BHL** | **Bhannes** | **0.15** | **326** | *e*P | | **Pg** | **09 06 45.2** | **-0.2** |
| BHL | | | | *e*S | | **Sg** | **09 06 47.4** | **0.0** |
| **BHL** | **Bhannes** | **0.15** | **326** | *e*P | | **Pg** | **09 06 45.2** | **-0.2** |
| BHL | | | | *e*S | | **Sg** | **09 06 47.4** | **0.0** |
| **DQRL** | **Deir Qamar** | **0.17** | **243** | *e*P | | **Pg** | **09 06 45.9** | **+0.1** |
| **DQRL** | **Deir Qamar** | **0.17** | **243** | *e*P | | **Pg** | **09 06 45.9** | **+0.1** |
| **RCY** | **Rachaya** | **0.29** | **166** | *e*P | | **Pg** | **09 06 47.9** | **-0.3** |
| RCY | | | | *e*S | | **Sg** | **09 06 51.9** | **-0.2** |
| **BRBR** | **Barbar** | **0.41** | **156** | *e*P | | **Pg** | **09 06 50.3** | **0.0** |
| BRBR | | | | *e*S | | **Sg** | **09 06 55.9** | **+0.2** |
| BRBR | | | | AML | AML | 09 06 59.8 | | |
| | comp=N,227nm,0.6s | | | | | | | |
| BRBR | | | | AML | AML | 09 07 00.4 | | |
| | comp=E,155nm,0.6s | | | | | | | |
| **BRBR** | **Barbar** | **0.41** | **156** | *e*P | | **Pg** | **09 06 50.3** | **0.0** |
| BRBR | | | | *e*S | | **Sg** | **09 06 55.9** | **+0.2** |
| **HWQ** | **Hawqa** | **0.52** | **18** | *e*P | | **Pg** | **09 06 51.6** | **-0.9** |
| **HWQ** | **Hawqa** | **0.52** | **18** | *e*P | | **Pg** | **09 06 51.6** | **-0.9** |
| **BIDA** | **Albida** | **1.32** | **21** | *e*P | | **Pg** | **09 07 08.2** | **+0.5** |
| BIDA | | | | *e*S | | **Sg** | **09 07 26.6** | **+1.9** |
| BIDA | | | | AML | AML | 09 07 31.6 | | |
| | comp=N,83nm,0.8s | | | | | | | |
| BIDA | | | | AML | AML | 09 07 35.5 | | |
| | comp=E,93nm,0.5s | | | | | | | |
| **BIDA** | **Albida** | **1.32** | **21** | *e*P | | **Pg** | **09 07 08.2** | **+0.5** |
| BIDA | | | | *e*S | | **Sg** | **09 07 26.6** | **+1.9** |
| **WRDH** | **Warideh** | **1.81** | **17** | *e*P | | **Pg** | **09 07 16.1** | **-1.0** |
| WRDH | | | | *e*S | | **Sb** | **09 07 38.9** | **-0.1** |
| WRDH | | | | AML | AML | 09 07 45.1 | | |
| | comp=N,26nm,0.3s | | | | | | | |
| **WRDH** | **Warideh** | **1.81** | **17** | *e*P | | **Pg** | **09 07 16.1** | **-1.0** |
| WRDH | | | | *e*S | | **Sb** | **09 07 38.9** | **-0.1** |
| **SLNF** | **Slenfeh** | **1.85** | **12** | *e*P | | **Pb** | **09 07 16.7** | **-0.2** |
| **SLNF** | **Slenfeh** | **1.85** | **12** | *e*P | | **Pb** | **09 07 16.7** | **-0.2** |

*KRNET **28** 09:07:38.4±0.1, 40.°95N×72.°84E, h24km, mb3.0*

*NNC **28** 09:07:38.7±1.2, 40.°96N×72.°82E, h0km, mb3.7, mpv3.5, Error ellipse: s-maj=14.6km s-min=6.7km az=77.0*

**ISC 28 09:07:37.7±1.3, 40.°93N±0.°03×72.°87E±0.°03, h3km±11km, n31, σ0.97/53, 31C-15D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ARSB** | **Arslanbob** | **0.40** | **12** | *e*P | | **Pg** | **09 07 46.3** | **+0.9** |
| | baz=14 | | | | | | |
| ARSB | | | | *e*S | | **Sb** | **09 07 52.4** | **-1.7** |
| | baz=14 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.04** | **152** | P | | **Pg** | **09 07 57.6** | **+0.1** |
| | 17nm,0.2s | | | | | | |
| SFK | | | | S | | **Sn** | **09 08 15.3** | **+0.8** |
| | 330nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.04** | **152** | *e*P | | **Pg** | **09 07 57.7** | **+0.1** |
| | baz=152 | | | | | | |
| SFK | | | | *i*S | | **Sn** | **09 08 14.6** | **+0.1** |
| | baz=152 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.04** | **152** | *i*P | | **Pg** | **09 07 57.7** | **+0.1** |
| | baz=152 | | | | | | | |
| SFK | | | | *i*S | | **Sn** | **09 08 14.0** | **-0.5** |
| | baz=152 | | | | | | | |
| **ARK** | **Arkit** | **1.10** | **322** | *i*P | | **Pg** | **09 07 58.3** | **-0.5** |
| | baz=322 | | | | | | | |
| ARK | | | | *i*S | | **Sb** | **09 08 13.6** | **-0.7** |
| | baz=322 | | | | | | | |
| **AML** | **Almayashu** | **1.35** | **27** | *i*P | | **Pn** | **09 08 03.2** | **-0.6** |
| | baz=28 | | | | | | | |
| AML | | | | *i*S | | **Sb** | **09 08 21.0** | **-0.6** |
| | baz=28 | | | | | | | |
| **AML** | **Almayashu** | **1.35** | **27** | P | | **Pn** | **09 08 03.2** | **-0.6** |
| | SNR=52 | | | | | | | |
| **ARLS** | **Aral** | **1.43** | **49** | *e*P | | **Pn** | **09 08 04.6** | **-0.1** |
| | baz=50 | | | | | | | |
| ARLS | | | | *e*S | | **Sn** | **09 08 23.5** | **-0.7** |
| | baz=50 | | | | | | | |
| **MNAS** | **Manas** | **1.58** | **350** | P | | **Pb** | **09 08 06.8** | **-0.8** |
| | 29nm,0.4s | | | | | | | |
| MNAS | | | | S | | **Sg** | **09 08 29.4** | **+1.0** |
| | 129nm,0.3s | | | | | | | |
| **MNAS** | **Manas** | **1.58** | **350** | *i*P | | **Pb** | **09 08 06.8** | **-0.8** |
| | baz=351 | | | | | | | |
| MNAS | | | | *i*S | | **Sg** | **09 08 28.3** | **-0.1** |
| | baz=351 | | | | | | | |
| **MNAS** | **Manas** | **1.58** | **350** | *e*P | | **Pb** | **09 08 06.9** | **-0.7** |
| | baz=351 | | | | | | | |
| MNAS | | | | *i*S | | **Sg** | **09 08 28.1** | **-0.3** |
| | baz=351 | | | | | | | |
| **UCH** | **Uchtor** | **1.79** | **43** | *i*P | | **Pn** | **09 08 10.8** | **+0.9** |
| | baz=44 | | | | | | | |
| UCH | | | | *i*S | | **Sb** | **09 08 35.3** | **+1.0** |
| | baz=44 | | | | | | | |
| **UCH** | **Uchtor** | **1.79** | **43** | P | | **Pb** | **09 08 11.0** | **-0.4** |
| | SNR=83 | | | | | | | |
| **BTK** | **Batken** | **1.79** | **242** | *e*P | | **Pn** | **09 08 08.9** | **-0.7** |
| | baz=241 | | | | | | | |
| BTK | | | | *e*S | | **Sn** | **09 08 32.5** | **-0.4** |
| | baz=241 | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.86** | **21** | *i*P | | **Pb** | **09 08 11.6** | **-0.7** |
| | baz=22 | | | | | | | |
| EKS2 | | | | *i*S | | **Sb** | **09 08 36.4** | **+0.4** |
| | baz=22 | | | | | | | |
| **EKS2** | **Erkin-Say** | **1.86** | **21** | P | | **Pb** | **09 08 11.8** | **-0.5** |
| | SNR=11 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.09** | **35** | Pn | | **Pb** | **09 08 15.1** | **-1.2** |
| | 18nm,0.3s | | | | | | | |
| AAK | | | | Sn | | **Sb** | **09 08 43.0** | **+0.3** |
| | 86nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **2.09** | **35** | *i*P | | **Pb** | **09 08 15.1** | **-1.2** |
| | baz=36 | | | | | | | |
| AAK | | | | *i*S | | **Sb** | **09 08 43.1** | **+0.3** |
| | baz=36 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.09** | **35** | P | | **Pb** | **09 08 15.3** | **-1.0** |
| | SNR=44 | | | | | | | |
| **KZA** | **Kyzart** | **2.12** | **57** | *i*P | | **Pn** | **09 08 15.1** | **+0.7** |
| | baz=57 | | | | | | | |
| KZA | | | | *i*S | | **Sb** | **09 08 44.2** | **+0.3** |
| | baz=57 | | | | | | | |
| **KZA** | **Kyzart** | **2.12** | **57** | P | | **Pn** | **09 08 15.8** | **+1.4** |
| | SNR=15 | | | | | | | |
| **KBK** | **Karagaybulak** | **2.32** | **41** | *i*P | | **Pb** | **09 08 19.1** | **-1.1** |
| | baz=42 | | | | | | | |
| KBK | | | | *i*S | | **Sb** | **09 08 49.6** | **+0.2** |
| | baz=42 | | | | | | | |
| **KBK** | **Karagaybulak** | **2.32** | **41** | P | | **Pb** | **09 08 19.4** | **-0.9** |
| | SNR=12 | | | | | | | |
| **NRN** | **Naryn** | **2.41** | **77** | *i*P | | **Pn** | **09 08 18.3** | **-0.1** |
| | baz=78 | | | | | | | |
| NRN | | | | *e*S | | **Sn** | **09 08 48.0** | **-0.6** |
| | baz=78 | | | | | | | |
| **USP** | **Ospenovka** | **2.63** | **27** | *i*P | | **Pn** | **09 08 21.6** | **+0.5** |
| | baz=28 | | | | | | | |
| USP | | | | *i*S | | **Sn** | **09 08 55.3** | **+1.8** |
| | baz=28 | | | | | | | |
| **USP** | **Ospenovka** | **2.63** | **27** | P | | **Pn** | **09 08 22.4** | **+1.3** |
| | SNR=5.5 | | | | | | | |
| **KK31** | **Karatay Array** | **2.79** | **322** | Pg | | **Pb** | **09 08 28.2** | **0.0** |
| | 2.9nm,0.3s,baz=127,slow=16,SNR=76 | | | | | | | |
| KK31 | | | | Lg | | Lg | 09 09 04.2 | |
| | 17nm,0.5s,baz=132,slow=30,SNR=10.0 | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.84** | **45** | Pn | | **Pn** | **09 08 25.7** | **+1.6** |
| | 10nm,0.5s | | | | | | | |
| TKM2 | | | | Sn | | **Sb** | **09 09 02.3** | **-2.2** |
| | 24nm,0.6s | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.84** | **45** | *i*P | | **Pn** | **09 08 25.6** | **+1.4** |
| | baz=45 | | | | | | | |
| TKM2 | | | | *i*S | | **Sb** | **09 09 02.7** | **-1.8** |
| | baz=45 | | | | | | | |
| **TKM2** | **Tokmak 2** | **2.84** | **45** | P | | **Pn** | **09 08 25.7** | **+1.6** |
| | SNR=14 | | | | | | | |
| **DZET** | **Dzherino** | **3.77** | **237** | Pn | | **Pn** | **09 08 38.1** | **+1.3** |
| | 8.1nm,0.5s | | | | | | | |
| DZET | | | | Sn | | **Sn** | **09 09 23.1** | **+1.4** |
| | 31nm,0.7s | | | | | | | |

**IDC 28 09:08:35.0±1.7, 12.°35N×143.°57E, h0km, mb3.7/4, mb1 4.0/4, mb1mx3.6/51, mbtmp3.7/4, Error ellipse: s-maj=162.3km s-min=24.0km az=113.0, South of Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H11S3** | **WAKE ISLAND Hy** | **23.09** | **72** | T | T | 09 37 42.0 | |
| | baz=244,slow=78,SNR=7.2 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **23.11** | **72** | T | T | 09 37 35.6 | |
| | baz=244,slow=78,SNR=8.2 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **23.11** | **72** | T | T | 09 37 35.6 | |
| | baz=244,slow=78,SNR=8.3 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **23.56** | **69** | T | T | 09 38 08.6 | |
| | baz=255,slow=75,SNR=14 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **23.57** | **69** | T | T | 09 38 10.3 | |
| | baz=255,slow=75,SNR=11 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **23.58** | **69** | T | T | 09 38 08.3 | |
| | baz=255,slow=75,SNR=11 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.35** | **196** | P | P | 09 

### Jordan - Syria region

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BTCH** | **Batrach** | **0.28** | **343** | *e*P | Pg | 09 20 34.7 | +0.3 |
| BTCH | | | | *e*S | Sg | 09 20 38.0 | -0.4 |
| BTCH | | | | AML | AML | 09 20 40.4 | |
| | comp=E,184nm,0.3s | | | | | | |
| BTCH | | | | AML | AML | 09 20 40.9 | |
| | comp=N,184nm,0.4s | | | | | | |
| **BTCH** | **Batrach** | **0.28** | **343** | *e*P | Pg | 09 20 34.7 | +0.3 |
| BTCH | | | | *e*S | Sg | 09 20 38.0 | -0.5 |
| | comp=N,185nm,0.4s | | | | | | |
| **WRDH** | **Warideh** | **0.29** | **205** | *e*P | Pb | 09 20 35.4 | -0.1 |
| WRDH | | | | *e*S | Sg | 09 20 38.0 | -0.6 |
| WRDH | | | | AML | AML | 09 20 41.5 | |
| | comp=Z,141nm,0.2s | | | | | | |
| WRDH | | | | AML | AML | 09 20 43.4 | |
| | comp=N,62nm,0.3s | | | | | | |
| **WRDH** | **Warideh** | **0.29** | **205** | *e*P | Pb | 09 20 35.4 | -0.1 |
| WRDH | | | | *e*S | Sg | 09 20 38.0 | -0.6 |
| | comp=N,62nm,0.3s | | | | | | |
| **SLNF** | **Slenfeh** | **0.32** | **238** | *e*P | Pb | 09 20 35.8 | -0.4 |
| SLNF | | | | *e*S | Sg | 09 20 40.3 | +0.4 |
| SLNF | | | | AML | AML | 09 20 44.0 | |
| | comp=E,87nm,0.2s | | | | | | |
| SLNF | | | | AML | AML | 09 20 54.4 | |
| | comp=N,16nm,0.3s | | | | | | |
| **SLNF** | **Slenfeh** | **0.32** | **238** | *e*P | Pb | 09 20 35.8 | -0.5 |
| SLNF | | | | *e*S | Sg | 09 20 40.3 | +0.4 |
| | comp=N,16nm,0.3s | | | | | | |
| **ARNB** | **Al Arnab** | **0.49** | **281** | *e*P | Pg | 09 20 38.3 | +0.1 |
| ARNB | | | | *e*S | Sg | 09 20 44.8 | +0.1 |
| ARNB | | | | AML | AML | 09 20 46.5 | |
| | comp=N,54nm,0.3s | | | | | | |
| ARNB | | | | AML | AML | 09 20 48.3 | |
| | comp=E,15nm,0.3s | | | | | | |
| **ARNB** | **Al Arnab** | **0.49** | **281** | *e*P | Pg | 09 20 38.3 | +0.1 |
| ARNB | | | | *e*S | Sg | 09 20 44.8 | 0.0 |
| | comp=E,15nm,0.3s | | | | | | |
| **HAWK** | **Haweek** | **1.25** | **186** | *e*P | Pn | 09 20 50.8 | -0.8 |
| HAWK | | | | *e*S | Sb | 09 21 06.8 | -1.2 |
| HAWK | | | | AML | AML | 09 21 11.5 | |
| | comp=N,15nm,0.8s | | | | | | |
| HAWK | | | | AML | AML | 09 21 14.8 | |
| | comp=E,6.9nm,0.3s | | | | | | |
| **HAWK** | **Haweek** | **1.25** | **186** | *e*P | Pn | 09 20 50.8 | -0.9 |
| HAWK | | | | *e*S | Sb | 09 21 06.8 | -1.3 |
| | comp=E,7.0nm,0.3s | | | | | | |

**NNC 28 09:21:32.9±5.3, 36°81'N×70°71'E, h0km, mb3.9, mpv3.4, 3C-5D, Error ellipse: s-maj=42.3km s-min=18.9km az=178.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.49** | **324** | ⇑Pn | Pn | 09 22 14.6 | -0.3 |
| | 1.9nm,0.1s | | | | | | |
| DZET | | | | ⇓Sn | Sn | 09 22 47.8 | +1.8 |
| | 52nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.87** | **34** | ⇓Pn | Pn | 09 22 34.0 | 0.0 |
| | 2.1nm,0.2s | | | | | | |
| SFK | | | | ⇓Sn | Sn | 09 23 22.6 | +2.2 |
| | 7.6nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **5.83** | **13** | ⇓Pn | Pn | 09 22 59.7 | -1.1 |
| | 2.9nm,0.6s | | | | | | |
| MNAS | | | | ⇓Sn | Sn | 09 24 08.9 | +0.4 |
| | 4.0nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **6.28** | **359** | Pn | Pn | 09 23 05.5 | -1.4 |
| | 2.2nm,0.3s,baz=188,slow=13,SNR=51 | | | | | | |
| KK31 | | | | Sn | Sn | 09 24 17.1 | -2.4 |
| | 9.0nm,0.8s,baz=187,slow=20,SNR=11 | | | | | | |
| **AAK** | **Ala-Archa** | **6.50** | **25** | ⇑Pn | Pn | 09 23 10.1 | +0.1 |
| | 1.4nm,0.7s | | | | | | |
| AAK | | | | ⇑Sn | Sn | 09 24 25.3 | +0.2 |
| | 9.4nm,0.8s | | | | | | |
| **AB31** | **Akbulak array** | **14.70** | **331** | Pn | Pn | 09 24 55.8 | -6.2 |
| | 1.3nm,0.3s,baz=161,slow=12,SNR=45 | | | | | | |
| AB31 | | | | Lg | Lg | 09 26 57.9 | |
| | 4.0nm,0.7s,baz=220,slow=9.4,SNR=30 | | | | | | |

*ISN **28** 09:22:14.9±1.3, 28°55'N×44°85'E, h0km±6km, ML4.8*
*BJI **28** 09:22:15.8, 29°85'N×50°46'E, h23km, mb4.8/30, mB5.1/18, Ms4.7/11, Ms7 4.5/10*
*IDC **28** 09:22:18.7±0.4, 29°99'N×51°18'E, h0km, mb4.4/35, mb1 4.5/40, mb1mx4.4/58, mbtmp4.4/40, ML3.9/5, MS3.5/13, Ms1 3.5/13, ms1mx3.2/44, Error ellipse: s-maj=11.5km s-min=9.3km az=121.0*
*ISCJB **28** 09:22:21.3±0.7, 29°88'N±0°02'×51°19'E±0°02', h28km±5km, mb4.7/78, MS3.5/11, Error ellipse: s-maj=4.2km s-min=3.0km az=32.0*
*CSEM **28** 09:22:21.0±0.1, 29°96'N×51°15'E, h10km, mb4.8/48, Ms4.4, Error ellipse: s-maj=4.5km s-min=3.3km az=39.0*
*THR **28** 09:22:22.4±0.3, 30°04'N×51°29'E, h17km±10km, ML4.5*
*TEH **28** 09:22:23.4, 29°99'N×51°17'E, h10km, ML4.3*
*NEIC **28** 09:22:23.4, 29°99'N×51°17'E, h10km, mb4.5/19, MN4.3(TEH), After TEH.*
*MOS **28** 09:22:24.1±1.1, 30°00'N×51°18'E, h49km, mb4.9/29, Error ellipse: s-maj=7.8km s-min=4.8km az=110.7*
*OMAN **28** 09:22:25.7±4.2, 29°88'N×51°35'E, h153km±101km, Error ellipse: s-maj=59.4km s-min=26.4km az=81.0*
*DSN **28** 09:22:32.1±1.0, 29°40'N×51°57'E, h30km, mb4.2/8, Ms4.4/6, Error ellipse: s-maj=17.7km s-min=6.5km az=20.0*

**ISC 28 09:22:22.1±0.4, 29°91'N±0°04×51°18'E±0°03, h18km±1km, n383, σ1§15/370, mb4.7/78, MS3.5/11, 38C-27D, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IKAZ** | **Kazeroun** | **0.59** | **103** | *e*Pg | **Pg** | **09 22 31.7** | **-2.3** |
| IKAZ | | | | *e* | | 09 22 49.9 | |
| | comp=Z,30μm,0.2s | | | | | | |
| **IKAZ** | **Kazeroun** | **0.59** | **103** | *e*Pg | **Pg** | **09 22 31.7** | **-2.3** |
| **AHBU** | **AHRAM** | **1.05** | **174** | *e*Pg | **Pn** | **09 22 44.0** | **+2.2** |
| **SHI** | **Shiraz** | **1.19** | **103** | *e*Pn | **Pg** | **09 22 47.0** | **+1.8** |
| **SHI** | **Shiraz** | **1.19** | **103** | *e*Pn | **Pg** | **09 22 47.0** | **+1.8** |
| **IPAR** | **Pars** | **1.63** | **92** | *e*Pn | **Pn** | **09 22 52.6** | **+2.6** |
| IPAR | | | | *e* | | 09 23 18.5 | |
| | comp=Z,30μm,0.3s | | | | | | |
| **IPAR** | **Pars** | **1.63** | **92** | *e*Pn | **Pn** | **09 22 52.7** | **+2.6** |
| **ISRV** | **Sarvestan** | **1.77** | **107** | *e*Pn | **Pn** | **09 22 54.2** | **+2.2** |
| ISRV | | | | *e* | | 09 23 45.9 | |
| | comp=Z,39μm,0.4s | | | | | | |
| **ISRV** | **Sarvestan** | **1.77** | **107** | *e*Pn | **Pn** | **09 22 54.2** | **+2.2** |
| **ISAD** | **Sadrabad** | **2.94** | **47** | *e*Pn | **Pn** | **09 23 09.5** | **+1.4** |
| ISAD | | | | *e* | | 09 24 06.5 | |
| | comp=Z,12μm,0.5s | | | | | | |
| **ISAD** | **Sadrabad** | **2.94** | **47** | *e*Pn | **Pn** | **09 23 09.5** | **+1.4** |
| **SHGR** | **Shooshtar-Gavs** | **2.99** | **318** | *e*Pn | **Pn** | **09 23 10.7** | **+2.1** |
| SHGR | | | | AML | AML | 09 24 06.9 | |
| | comp=N,2μm,0.5s | | | | | | |
| **SHGR** | **Shooshtar-Gavs** | **2.99** | **318** | *e*Pn | **Pn** | **09 23 10.7** | **+2.1** |
| **NASN** | **Na'in** | **3.20** | **25** | *e*Pn | **Pn** | **09 23 12.1** | **+0.4** |
| **NASN** | **Na'in** | **3.20** | **25** | *e*Pn | **Pn** | **09 23 12.1** | **+0.4** |
| **IMEH** | **Mehriz** | **3.31** | **63** | *e*Pn | **Pn** | **09 23 14.9** | **+1.7** |
| IMEH | | | | *e* | | 09 24 18.3 | |
| | comp=Z,6μm,0.4s | | | | | | |
| **IMEH** | **Mehriz** | **3.31** | **63** | *e*Pn | **Pn** | **09 23 14.9** | **+1.7** |
| **ICHK** | **Chekchek** | **3.62** | **49** | *e*Pn | **Pn** | **09 23 18.5** | **+1.1** |
| ICHK | | | | *e* | | 09 23 53.4 | |
| | comp=Z,5μm,0.4s | | | | | | |
| **ICHK** | **Chekchek** | **3.62** | **49** | *e*Pn | **Pn** | **09 23 18.5** | **+1.1** |
| **IBAF** | **Bafgh** | **4.13** | **65** | *e* | | 09 24 53.6 | |
| | comp=Z,4μm,0.5s | | | | | | |
| **NSR** | **Nassriya** | **4.48** | **285** | *e*PG | x | 09 23 15.3 | |
| NSR | | | | *e*SG | x | 09 23 58.8 | |
| **GHVR** | **GHOM** | **4.56** | **1** | *e*Pn | **Pn** | **09 23 31.0** | **+0.9** |
| **GHVR** | **GHOM** | **4.56** | **1** | *e*Pn | **Pn** | **09 23 31.0** | **+0.9** |
| **ASAO** | **Ashtian** | **4.72** | **348** | *e*Pn | **Pn** | **09 23 33.9** | **+1.3** |
| ASAO | | | | AML | AML | 09 24 40.8 | |
| | comp=E,148nm,2.5s | | | | | | |
| **ASAO** | **Ashtian** | **4.72** | **348** | *e*Pn | **Pn** | **09 23 33.9** | **+1.3** |
| **KRBR** | **Kerman** | **4.85** | **88** | *e*Pn | **Pn** | **09 23 35.6** | **+1.2** |
| **KRBR** | **Kerman** | **4.85** | **88** | *e*Pn | **Pn** | **09 23 35.6** | **+1.2** |
| **IBDR** | **Badra** | **5.50** | **307** | *e*Pn | x | 09 23 28.2 | |
| IBDR | | | | *e*SN | x | 09 24 18.3 | |
| **IRAZ** | **Razeghan** | **5.58** | **349** | *e*Pn | **Pn** | **09 23 45.1** | **+0.8** |
| IRAZ | | | | *e* | | 09 25 55.0 | |
| | comp=Z,3μm,0.5s | | | | | | |
| **IRAZ** | **Razeghan** | **5.58** | **349** | *e*Pn | **Pn** | **09 23 45.1** | **+0.8** |
| **IDMV** | **Damavand** | **5.70** | **7** | *e*Pn | **Pn** | **09 23 46.9** | **+0.9** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IDMV** | **Damavand** | **5.70** | **7** | *e*Pn | **Pn** | **09 23 46.9** | **+0.9** |
| **IFIR** | **Firoozkooh** | **5.87** | **13** | *e*Pn | **Pn** | **09 23 48.3** | **0.0** |
| IFIR | | | | *e* | | 09 24 30.1 | |
| | comp=Z,377nm,0.2s | | | | | | |
| **IFIR** | **Firoozkooh** | **5.87** | **13** | *e*Pn | **Pn** | **09 23 48.3** | **0.0** |
| **IVIS** | **Veis** | **5.88** | **323** | *e*Pn | **Pn** | **09 23 49.3** | **+0.9** |
| IVIS | | | | *e* | | 09 25 05.0 | |
| | comp=Z,2μm,0.2s | | | | | | |
| **IVIS** | **Veis** | **5.88** | **323** | *e*Pn | **Pn** | **09 23 49.3** | **+0.9** |
| **IGHG** | **Ghaleghazi** | **5.89** | **320** | *e*Pn | **Pn** | **09 23 48.7** | **+0.1** |
| IGHG | | | | *e* | | 09 25 01.9 | |
| | comp=Z,4μm,0.2s | | | | | | |
| **IGHG** | **Ghaleghazi** | **5.89** | **320** | *e*Pn | **Pn** | **09 23 48.7** | **+0.1** |
| **BANOM** | **Banah** | **6.03** | **130** | ⇑P | **Pn** | **09 23 51.1** | **+0.8** |
| BANOM | | | | ⇓S | **Sn** | **09 24 58.5** | **-0.4** |
| **BANOM** | **Banah** | **6.03** | **130** | ⇑*i*P | **Pn** | **09 23 50.6** | **+0.3** |
| | SNR=59 | | | | | | |
| **BANOM** | **Banah** | **6.03** | **130** | P | **Pn** | **09 23 51.1** | **+0.8** |
| BANOM | | | | S | **Sn** | **09 24 58.5** | **-0.4** |
| **ILIN** | **Lien** | **6.13** | **326** | *e*Pn | **Pn** | **09 23 52.2** | **+0.2** |
| ILIN | | | | *e* | | 09 25 07.7 | |
| | comp=Z,3μm,0.2s | | | | | | |
| **ILIN** | **Lien** | **6.13** | **326** | *e*Pn | **Pn** | **09 23 52.2** | **+0.2** |
| **IDHR** | **Dehrash** | **6.26** | **321** | *e*Pn | **Pn** | **09 23 54.7** | **+1.0** |
| IDHR | | | | *e* | | 09 25 08.8 | |
| | comp=Z,6μm,0.2s | | | | | | |
| **IDHR** | **Dehrash** | **6.26** | **321** | *e*Pn | **Pn** | **09 23 54.7** | **+1.0** |
| **TABS** | **Tabas** | **6.28** | **52** | *e*Pn | **Pn** | **09 23 54.6** | **+0.7** |
| **TABS** | **Tabas** | **6.28** | **52** | *e*Pn | **Pn** | **09 23 54.6** | **+0.7** |
| **ASUD** | **Al Ashush, Dub** | **6.43** | **144** | ⇓*i*P | **Pn** | **09 23 57.2** | **+1.3** |
| | SNR=52 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **6.43** | **144** | P | **Pn** | **09 23 57.2** | **+1.3** |
| | SNR=52 | | | | | | |
| **FAQ** | **Al Faqa, Dubai** | **6.47** | **142** | ⇓P | **Pn** | **09 23 57.2** | **+0.8** |
| **FAQ** | **Al Faqa, Dubai** | **6.47** | **142** | P | **Pn** | **09 23 57.2** | **+0.8** |
| **UOSS** | **Wadi Hilu** | **6.67** | **137** | *e*Pn | **Pn** | **09 23 58.9** | **-0.2** |
| **UOSS** | **Wadi Hilu** | **6.67** | **137** | *e*Pn | **Pn** | **09 23 58.9** | **-0.2** |
| **BHD** | **Baghdad** | **6.70** | **302** | *e*PN | x | 09 23 28.8 | |
| BHD | | | | *e*SN | x | 09 24 20.9 | |
| **HATD** | **Hatta, Dubai** | **6.71** | **138** | ⇑P | **Pn** | **09 24 00.7** | **+0.9** |
| **HATD** | **Hatta, Dubai** | **6.71** | **138** | P | **Pn** | **09 24 00.7** | **+0.9** |
| **ASHO** | **Ashiyiah** | **6.78** | **139** | ⇑Pn | **Pn** | **09 24 01.6** | **+0.9** |
| | SNR=17 | | | | | | |
| **ASHO** | **Ashiyiah** | **6.78** | **139** | ml | | 09 24 02.6 | |
| | SNR=14 | | | | | | |
| ASHO | | | | ⇑S | **Sn** | **09 25 17.0** | **-0.5** |
| **ASHO** | **Ashiyiah** | **6.78** | **139** | ⇓*i*P | **Pn** | **09 24 01.6** | **+0.9** |
| | SNR=17 | | | | | | |
| **ASHO** | **Ashiyiah** | **6.78** | **139** | P | **Pn** | **09 24 01.6** | **+0.9** |
| | SNR=17 | | | | | | |
| ASHO | | | | S | **Sn** | **09 25 17.0** | **-0.5** |
| **IKOO** | **Kooshah** | **7.16** | **68** | *e*Pn | **Pn** | **09 24 07.1** | **+1.0** |
| IKOO | | | | *e* | | 09 26 30.3 | |
| | comp=Z,3μm,0.9s | | | | | | |
| **IKOO** | **Kooshah** | **7.16** | **68** | *e*Pn | **Pn** | **09 24 07.1** | **+1.0** |
| **IKRK** | **Kirkuk** | **7.95** | **315** | *e*PN | x | 09 23 58.0 | |
| IKRK | | | | *e*SN | x | 09 25 10.8 | |
| **RAYN** | **Ar Rayn** | **8.13** | **220** | *e*Pn | **Pn** | **09 24 20.0** | **+0.7** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| RAYN | | | | *e*Sn | **Sn** | **09 25 48.8** | **-2.1** |
| **RAYN** | **Ar Rayn** | **8.13** | **220** | *e*Pn | **Pn** | **09 24 20.0** | **+0.7** |
| | comp=Z,0.9nm,0.3s | | | | | | |
| RAYN | | | | *e*Sn | **Sn** | **09 25 48.8** | **-2.1** |
| **HOQ** | **Hoqain** | **8.35** | **138** | Pn | **Pn** | **09 24 22.2** | **-0.1** |
| | SNR=7.8 | | | | | | |
| **HOQ** | **Hoqain** | **8.35** | **138** | ml | | 09 24 30.7 | |
| | SNR=6.8 | | | | | | |
| **HOQ** | **Hoqain** | **8.35** | **138** | P | **Pn** | **09 24 22.2** | **-0.1** |
| | SNR=7.8 | | | | | | |
| **SMDO** | **Samad** | **9.19** | **136** | ⇓Pn | **Pn** | **09 24 33.6** | **-0.2** |
| | SNR=19 | | | | | | |
| **SMDO** | **Samad** | **9.19** | **136** | P | **Pn** | **09 24 33.6** | **-0.2** |
| | SNR=19 | | | | | | |
| **RTB** | **Rutbah** | **9.79** | **291** | *e*PN | x | 09 23 45.4 | |
| RTB | | | | *e*SN | x | 09 24 48.8 | |
| **GEYT** | **Alibeck** | **9.86** | **34** | Pn | **Pn** | **09 24 42.6** | **-0.3** |
| | comp=Z,0.6nm,0.3s,baz=222,slow=13,SNR=23 | | | | | | |
| **SHAO** | **Shalim** | **12.51** | **160** | P | **Pn** | **09 25 20.0** | **+0.8** |
| | SNR=5.2 | | | | | | |
| **ABTO** | **Aybut** | **12.65** | **171** | Pn | **Pn** | **09 25 20.4** | **-0.8** |
| | SNR=53 | | | | | | |
| **ABTO** | **Aybut** | **12.65** | **171** | P | **Pn** | **09 25 20.4** | **-0.8** |
| | SNR=53 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **13.81** | **287** | LR | LR | 09 32 11.0 | |
| | comp=Z,181nm,20.9s,baz=110,slow=43 | | | | | | |
| **EIL** | **Elat** | **14.09** | **273** | Pn | **Pn** | **09 25 41.4** | **+0.6** |
| | comp=Z,0.6nm,0.3s,baz=35,slow=12,SNR=2.4 | | | | | | |
| **NEY** | **Neytrino** | **14.93** | **335** | ⇓*e*P | Pn | 09 25 55.8 | +3.5 |
| NEY | | | | pmax | pmax | | |
| | comp=Z,11nm,2.0s | | | | | | |
| **NEY** | **Neytrino** | **14.93** | **335** | *e*P | Pn | 09 25 55.8 | +3.5 |
| | comp=Z,11nm,2.0s | | | | | | |
| **KBZ** | **Khabaz** | **15.29** | **337** | Pn | **Pn** | **09 25 57.2** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=138,slow=7.1,SNR=11 | | | | | | |
| **KIV** | **Kislovodsk** | **15.56** | **337** | *e*P | **Pn** | **09 26 02.2** | **+1.7** |
| KIV | | | | *e*S | **Sn** | **09 28 56.4** | **+3.9** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,79nm,1.0s | | | | | | |
| KIV | | | | MLR | MLR | | |
| | comp=Z,77nm,12.0s | | | | | | |
| **KIV** | **Kislovodsk** | **15.56** | **337** | *e*P | **Pn** | **09 26 02.2** | **+1.7** |
| | comp=Z,79nm,1.0s | | | | | | |
| **CSS** | **Prodhromos** | **15.88** | **293** | *e*Pn | **Pn** | **09 26 05.0** | **+0.4** |
| | comp=Z,22nm,1.1s | | | | | | |
| **CSS** | **Prodhromos** | **15.88** | **293** | *e*Pn | **Pn** | **09 26 05.0** | **+0.4** |
| | comp=Z,22nm,1.1s | | | | | | |
| **SOC** | **Sochi** | **16.42** | **329** | *e*P | **Pn** | **09 26 11.9** | **+0.4** |
| SOC | | | | *e* | | 09 29 15.2 | |
| SOC | | | | pmax | pmax | | |
| | comp=Z,28nm,0.8s | | | | | | |
| SOC | | | | MLR | MLR | | |
| | comp=Z,406nm,16.0s | | | | | | |
| **SOC** | **Sochi** | **16.42** | **329** | *e*P | **Pn** | **09 26 11.9** | **+0.4** |
| | comp=Z,28nm,0.8s | | | | | | |
| **DAMY** | **Dhamar** | **16.50** | **204** | *e*Pn | **Pn** | **09 26 13.0** | **+0.1** |
| | comp=Z,24nm,0.8s | | | | | | |
| **DAMY** | **Dhamar** | **16.50** | **204** | *e*Pn | **Pn** | **09 26 13.0** | **+0.1** |
| | comp=Z,24nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **17.39** | **309** | P | **Pn** | **09 26 22.6** | **-1.2** |
| | comp=Z,0.6nm,0.3s,baz=131,slow=12,SNR=16 | | | | | | |
| BRTR | | | | LR | LR | 09 34 55.3 | |
| | comp=Z,142nm,21.3s,baz=115,slow=44 | | | | | | |
| **BRTR** | **Keskin Array B** | **17.39** | **309** | *i* P | **Pn** | **09 26 24.3** | **+0.5** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **BRTR** | **Keskin Array B** | **17.39** | **309** | *i* P | **Pn** | **09 26 24.3** | **+0.5** |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **THW** | **Thamme Wali** | **17.80** | **75** | P | **Pn** | **09 26 28.4** | **-0.5** |
| **BR231** | **Keskin MP Arra** | **18.03** | **308** | *e*Pn | Pn | 09 26 24.8 | -6.9 |
| **ANTO** | **Ankara** | **18.03** | **308** | *e*P | **Pn** | **09 26 32.7** | **+1.0** |
| ANTO | | | | pmax | pmax | | |
| | comp=Z,68nm,1.5s | | | | | | |
| **ANTO** | **Ankara** | **18.03** | **308** | *e*Pn | **Pn** | **09 26 32.7** | **+1.0** |
| | comp=Z,68nm,1.5s | | | | | | |
| **ANTO** | **Ankara** | **18.03** | **308** | *e*P | **Pn** | **09 26 32.7** | **+1.0** |
| | comp=Z,68nm,1.5s | | | | | | |
| **CEP** | **Cherat** | **18.03** | **72** | P | **Pn** | **09 26 31.5** | **-0.4** |
| **ANN** | **Anapa** | **18.41** | **328** | *e*P | **P** | **09 26 35.2** | **-0.8** |
| ANN | | | | *e*S | **Sn** | **09 30 04.5** | **+3.3** |
| ANN | | | | pmax | pmax | | |
| | comp=Z,68nm,1.6s | | | | | | |
| **ANN** | **Anapa** | **18.41** | **328** | *e*P | **P** | **09 26 35.2** | **-0.8** |
| | comp=Z,68nm,1.6s | | | | | | |
| ANN | | | | *e*S | **Sn** | **09 30 04.5** | **+3.3** |
| **ATD** | **Arta Tunnel** | **19.86** | **205** | P | **P** | **09 26 53.4** | **+1.1** |
| | comp=Z,0.6nm,0.3s,baz=270,slow=20,SNR=2.5 | | | | | | |
| ATD | | | | LR | LR | 09 35 56.1 | |
| | comp=Z,85nm,19.4s,baz=50,slow=41 | | | | | | |
| **KKAR** | **Karatay Array** | **20.31** | **44** | *e*P | **P** | **09 26 58.0** | **+1.0** |
| **KKAR** | **Karatay Array** | **20.31** | **44** | *e*P | **P** | **09 26 58.0** | **+1.0** |
| **KKAR** | **Karatay Array** | **20.31** | **44** | *e*P | **P** | **09 26 58.0** | **+1.0** |
| **ABKAR** | **Akbulak array** | **20.44** | **17** | *e*P | **P** | **09 26 57.9** | **-0.4** |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **ABKAR** | **Akbulak array** | **20.44** | **17** | *e*P | **P** | **09 26 57.9** | **-0.4** |
| | comp=Z,3.9nm,0.6s | | | | | | |
| **AKTK** | **Aktyubinsk** | **21.14** | **12** | P | **P** | **09 27 05.6** | **-0.2** |
| **AKTO** | **Aktyubinsk** | **21.14** | **12** | P | **P** | **09 27 05.6** | **-0.3** |
| | comp=Z,6.6nm,0.7s,baz=204,slow=10.0,SNR=14 | | | | | | |
| AKTO | | | | LR | LR | 09 37 15.5 | |
| | comp=Z,116nm,18.3s,baz=178,slow=43 | | | | | | |
| **EKS2** | **Erkin-Say** | **22.14** | **49** | *e*P | **P** | **09 27 18.8** | **+2.0** |
| EKS2 | | | | pmax | pmax | | |
| | comp=Z,26nm,1.4s | | | | | | |
| **EKS2** | **Erkin-Say** | **22.14** | **49** | *e*P | **P** | **09 27 18.8** | **+2.0** |
| | comp=Z,26nm,1.4s | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EKS2** | **Erkin-Say** | **22.14** | **49** | *e*P | **P** | **09 27 18.8** | **+2.0** |
| | comp=Z,26nm,1.4s | | | | | | |
| **LAST** | **Lasithi** | **22.26** | **290** | ⇑*i*P | **P** | **09 27 20.4** | **+2.3** |
| **LAST** | **Lasithi** | **22.26** | **290** | *e*P | **P** | **09 27 20.6** | **+2.5** |
| | comp=Z,514nm,2.5s | | | | | | |
| **LAST** | **Lasithi** | **22.26** | **290** | ⇑*i*P | **P** | **09 27 20.4** | **+2.3** |
| **SANT** | **Santorini** | **22.44** | **293** | ⇓*i*P | **P** | **09 27 19.8** | **-0.2** |
| **SANT** | **Santorini** | **22.44** | **293** | ⇓*i*P | **P** | **09 27 19.8** | **-0.2** |
| **KSH** | **Kashi** | **22.46** | **58** | P | P | 09 27 16.5 | -3.8 |
| KSH | | | | *e*pP | pP | 09 27 25.8 | +0.2 |
| KSH | | | | *e*PP | **PnPn** | **09 27 43.3** | **-0.2** |
| KSH | | | | S | S | 09 31 11.5 | -15 |
| KSH | | | | PMZ | | | |
| | comp=Z,34nm,1.0s | | | | | | |
| KSH | | | | PMZ | | | |
| | comp=Z,300nm,6.3s | | | | | | |
| KSH | | | | LN | | | |
| | comp=Z,430nm,6.9s | | | | | | |
| KSH | | | | LE | | | |
| | comp=Z,210nm,5.8s | | | | | | |
| KSH | | | | LZ | | | |
| | comp=Z,390nm,6.1s | | | | | | |
| **AAK** | **Ala-Archa** | **22.60** | **49** | P | **P** | **09 27 22.1** | **+0.3** |
| | comp=Z,5.5nm,0.8s,baz=234,slow=9.0,SNR=9.4 | | | | | | |
| AAK | | | | LR | LR | 09 36 27.6 | |
| | comp=Z,88nm,18.3s,baz=246,slow=38 | | | | | | |
| **AAK** | **Ala-Archa** | **22.60** | **49** | *e*P | **P** | **09 27 24.2** | **+2.4** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,19nm,1.2s | | | | | | |
| **AAK** | **Ala-Archa** | **22.60** | **49** | *e*P | **P** | **09 27 24.2** | **+2.4** |
| | comp=Z,19nm,1.2s | | | | | | |
| **AAK** | **Ala-Archa** | **22.60** | **49** | *e*P | **P** | **09 27 24.2** | **+2.4** |
| | comp=Z,19nm,1.2s | | | | | | |
| **NDI** | **New Delhi** | **22.73** | **87** | *e*P | **P** | **09 27 24.5** | **+1.4** |
| **IDI** | **Anoyia** | **22.75** | **290** | P | **P** | **09 27 23.6** | **+0.2** |
| | comp=Z,17nm,0.7s,baz=87,slow=15,SNR=8.2 | | | | | | |
| **IDI** | **Anoyia** | **22.75** | **290** | ⇑*i*P | **P** | **09 27 24.0** | **+0.6** |
| **IDI** | **Anoyia** | **22.75** | **290** | *e*P | **P** | **09 27 25.5** | **+2.1** |
| | comp=Z,44nm,1.0s | | | | | | |
| **IDI** | **Anoyia** | **22.75** | **290** | *e*P | **P** | **09 27 25.5** | **+2.1** |
| | comp=Z,44nm,1.0s | | | | | | |
| **FRU** | **Bishkek** | **22.77** | **49** | *e*P | **P** | **09 27 24.5** | **+1.1** |
| FRU | | | | *e* | | 09 27 59.0 | |
| **FRU** | **Bishkek** | **22.77** | **49** | *e*P | **P** | **09 27 24.5** | **+1.1** |
| **VORD** | **Divnogorie** | **22.84** | **340** | *e*P | **P** | **09 27 23.0** | **-1.0** |
| VORD | | | | *e*S | **S** | **09 31 31.6** | **-0.8** |
| VORD | | | | pmax | pmax | | |
| | comp=N,140nm,0.9s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=E,70nm,0.9s | | | | | | |
| VORD | | | | pmax | pmax | | |
| | comp=Z,80nm,0.9s | | | | | | |
| VORD | | | | smax | smax | | |
| | comp=E,70nm,0.9s | | | | | | |
| VORD | | | | smax | smax | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| VORD | | | | smax | smax | | |
| | comp=N,20nm,0.8s | | | | | | |
| **VORD** | **Divnogorie** | **22.84** | **340** | *e*P | **P** | **09 27 23.0** | **-1.0** |
| VORD | | | | *e*S | **S** | **09 31 31.6** | **-0.8** |
| | comp=N,20nm,0.8s | | | | | | |
| **VSR** | **Storozhevoye** | **23.10** | **341** | *e*P | **P** | **09 27 24.4** | **-2.3** |
| VSR | | | | *e*S | **S** | **09 31 32.6** | **-4.2** |
| VSR | | | | pmax | pmax | | |
| | comp=N,30nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=E,20nm,0.7s | | | | | | |
| VSR | | | | pmax | pmax | | |
| | comp=Z,30nm,0.7s | | | | | | |
| VSR | | | | smax | smax | | |
| | comp=N,120nm,1.1s | | | | | | |
| VSR | | | | smax | smax | | |
| | comp=Z,40nm,1.0s | | | | | | |
| VSR | | | | smax | smax | | |
| | comp=E,50nm,1.1s | | | | | | |
| **VSR** | **Storozhevoye** | **23.10** | **341** | *e*P | **P** | **09 27 24.4** | **-2.3** |
| VSR | | | | *e*S | **S** | **09 31 32.6** | **-4.2** |
| | comp=E,40nm,1.0s | | | | | | |
| **TIRR** | **Tirgusor** | **23.13** | **315** | ⇑P | **P** | **09 27 26.5** | **-0.5** |
| **TIRR** | **Tirgusor** | **23.13** | **315** | ⇑*i*P | **P** | **09 27 26.5** | **-0.5** |
| **TIRR** | **Tirgusor** | **23.13** | **315** | P | **P** | **09 27 26.5** | **-0.5** |
| **MSAB** | **Monastry St. A** | **23.31** | **314** | ⇑*i*P | **P** | **09 27 31.4** | **+2.5** |
| **TKM2** | **Tokmak 2** | **23.45** | **50** | *e*P | **P** | **09 27 30.9** | **+0.3** |
| TKM2 | | | | pmax | pmax | | |
| | comp=Z,15nm,1.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **23.45** | **50** | *e*P | **P** | **09 27 30.9** | **+0.3** |
| | comp=Z,15nm,1.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **23.45** | **50** | *e*P | **P** | **09 27 30.9** | **+0.3** |
| | comp=Z,15nm,1.3s | | | | | | |
| **CFR** | **Carcaliu** | **23.67** | **316** | ⇑P | **P** | **09 27 31.5** | **-0.9** |
| **CFR** | **Carcaliu** | **23.67** | **316** | ⇑*i*P | **P** | **09 27 31.5** | **-0.9** |
| **CFR** | **Carcaliu** | **23.67** | **316** | P | **P** | **09 27 31.5** | **-0.9** |
| **KIS** | **Kishinev** | **24.31** | **321** | *e*P | **P** | **09 27 38.0** | **-0.4** |
| **KIS** | **Kishinev** | **24.31** | **321** | *e*P | **P** | **09 27 38.0** | **-0.4** |
| **KIS** | **Kishinev** | **24.31** | **321** | *e*P | **P** | **09 27 38.0** | **-0.4** |
| **LPSR** | **Galich'ya Gora** | **24.40** | **342** | *e*P | **P** | **09 27 37.3** | **-1.9** |
| LPSR | | | | *e*S | **S** | **09 32 00.8** | **+3.0** |
| LPSR | | | | pmax | pmax | | |
| | comp=Z,40nm,0.9s | | | | | | |
| LPSR | | | | pmax | pmax | | |
| | comp=N,6

comp=Z,28nm,0.4s,baz=51,slow=6.5,SNR=3.9
OBN LR LR 09 38 36.9
comp=Z,98nm,18.2s,baz=271,slow=36
**OBN Obninsk 27.28 342**⇓*e*P **P 09 28 04.5 -0.6**
OBN *e* 09 28 50.3
OBN pmax pmax
comp=Z,27nm,0.7s
OBN MLR MLR
comp=Z,99nm,15.0s
**OBN Obninsk 27.28 342** *e*P **P 09 28 04.5 -0.6**
comp=Z,27nm,0.7s
**DRGR 27.76 315** ⇓P **P 09 28 10.6 +0.9**
**DRGR 27.76 315**⇓*i*P **P 09 28 10.6 +0.9**
**DRGR 27.76 315** P **P 09 28 10.6 +0.9**
**KOLN Koldanda 28.43 86** *e*P **P 09 28 15.9 -0.2**
**DIVS Divibare 28.45 308**⇑*i*P P 09 28 20.1 +4.2
**PDG Podgorica 28.46 305**⇑*i*P **P 09 28 15.6 -0.3**
**PDG Podgorica 28.46 305**⇑*i*P **P 09 28 15.6 -0.3**
**UZH Uzhgorod 28.89 318** *e*P **P 09 28 21.1 +1.5**
**UZH Uzhgorod 28.89 318** *e*P **P 09 28 21.1 +1.5**
**KURBB Kurchatov Arra 29.11 37** P P **09 28 21.6 +0.1**
comp=Z,3.1nm,0.6s,baz=238,slow=9.0,SNR=15
KURBB PcP **PcP 09 31 29.4 +0.3**
comp=Z,0.7nm,0.2s,baz=236,slow=2.9,SNR=4.3
**KURK Kurchatov 29.21 37** P **P 09 28 21.7 -0.8**
**KURK Kurchatov 29.21 37** P **P 09 28 21.6 -0.8**
KURK *e*P **P 09 28 22.1 -0.4**
**KURK Kurchatov 29.21 37** *e*P **P 09 28 22.0 -0.4**
**GKN Gorkha 29.28 85** *e*P **P 09 28 23.0 -0.6**
comp=Z,6.9nm,0.3s
**MK01 Makanchi Array 29.40 46** *e*P **P 09 28 24.4 +0.2**
**MK01 Makanchi Array 29.40 46** *e*P **P 09 28 24.4 +0.2**
**MKAR Makanchi Array 29.40 46** P **P 09 28 23.6 -0.6**
comp=Z,1.3nm,0.8s,baz=230,slow=7.6,SNR=7.0
MKAR PcP **PcP 09 31 29.4 -0.6**
comp=Z,0.8nm,0.7s,baz=255,slow=2.8,SNR=3.7
MKAR LR LR 09 40 49.4
comp=Z,100nm,19.6s,baz=221,slow=38
**DMN Daman 29.77 86** *e*P **P 09 28 27.7 -0.3**
comp=Z,30nm,0.7s
**KKN Kakani 29.89 86** *e*P **P 09 28 29.0 0.0**
comp=Z,18nm,0.4s
**PKIN Phulchoki 30.03 86** *e*P **P 09 28 30.2 -0.1**
comp=Z,19nm,0.5s
**PKI Pulchoki 30.04 86** *e*P **P 09 28 30.0 -0.5**
comp=Z,62nm,0.8s
**GUN Gumba 30.38 85** *e*P **P 09 28 33.3 -0.2**
comp=Z,50nm,0.8s
**LANS Liptovska Anna 30.77 318** *e*P **P 09 28 37.4 +1.0**
**LANS Liptovska Anna 30.77 318** *e*P **P 09 28 37.4 +1.0**
**LANS Liptovska Anna 30.77 318** *e*P **P 09 28 37.4 +1.0**
**VYHS Vyhne 30.86 316** *e*P **P 09 28 36.9 -0.2**
VYHS pmax pmax
comp=Z,17nm,2.0s
**VYHS Vyhne 30.86 316** *e*P **P 09 28 36.9 -0.2**
**VYHS Vyhne 30.86 316** *e*P **P 09 28 36.9 -0.2**
comp=Z,17nm,2.0s
**RAMN Ramite 31.22 87** *e*P P 09 28 39.8 -1.0
comp=Z,26nm,0.6s
**ODAN Odare 31.92 86** *e*P P 09 28 45.8 -1.2
comp=Z,16nm,0.6s
**WMQ Urumqi 32.07 54** *e*P **P 09 28 48.0 +0.1**
WMQ pP pP 09 28 58.0 +4.5
WMQ S **S 09 33 58.0 -1.2**
WMQ PMZ
comp=Z,11nm,0.9s
WMQ LN
comp=Z,280nm,15.0s
WMQ LE
comp=Z,90nm,15.0s
WMQ LZ
comp=Z,98nm,15.0s
**TAPN Taplejung 32.09 85** *e*P **P 09 28 47.7 -0.8**
comp=Z,17nm,0.6s
**MORC Moravsky Berou 32.18 318** *e*P **P 09 28 48.6 -0.1**
MORC pmax pmax
comp=Z,33nm,1.1s
**MORC Moravsky Berou 32.18 318** *e*P **P 09 28 48.6 -0.1**
comp=Z,32nm,1.1s
**MORC Moravsky Berou 32.18 318** *e*P **P 09 28 48.6 -0.1**
comp=Z,32nm,1.1s
**VRAC Vranov 32.55 316** ⇑P **P 09 28 52.2 +0.3**
**VRAC Vranov 32.55 316**⇑*i*P **P 09 28 52.2 +0.3**
**VRAC Vranov 32.55 316** P **P 09 28 52.2 +0.3**
**KRLC Kraliky 32.75 318** *e*P **P 09 28 52.9 -0.8**
**KRLC Kraliky 32.75 318** *e*P **P 09 28 52.9 -0.8**
**KRLC Kraliky 32.75 318** *e*P **P 09 28 52.9 -0.8**
**VSU Vasula 33.12 337**⇓*i*P P 09 28 55.3 -1.4
VSU pmax pmax
comp=Z,152nm,2.1s
**VSU Vasula 33.12 337** *i*P P 09 28 55.3 -1.4
comp=Z,152nm,2.1s
**DPC Dobruska-Polom 33.13 318** *e*P **P 09 28 56.9 -0.2**
**DPC Dobruska-Polom 33.13 318** *e*P **P 09 28 56.9 -0.2**
DPC *ep*P **pP 09 29 02.9 +0.2**
**DPC Dobruska-Polom 33.13 318** *e*P **P 09 28 56.9 -0.2**
**UPC Upice 33.38 318** *e*P **P 09 28 59.0 -0.2**
**UPC Upice 33.38 318** *e*P **P 09 28 59.0 -0.2**
UPC *ep*P **pP 09 29 05.2 +0.4**
**UPC Upice 33.38 318** *e*P **P 09 28 59.0 -0.2**
**NVS Novosibirsk 33.87 33** *e*P **P 09 29 03.6 +0.3**
NVS *e* 09 31 44.4
**NVS Novosibirsk 33.87 33** *e*P **P 09 29 03.6 +0.3**
**GERES GERESS Array B 34.14 314** P P 09 29 04.5 -1.5
comp=Z,1.0nm,0.4s,baz=120,slow=7.9,SNR=6.7
GERES PcP **PcP 09 31 42.8 0.0**
comp=Z,1.8nm,0.7s,baz=0.0,slow=1.3,SNR=8.2
GERES LR LR 09 45 02.2
comp=Z,59nm,21.2s,baz=291,slow=40
**ZALV Zalesovo Beam 34.16 36** P P 09 29 04.9 -1.0
comp=Z,5.4nm,0.8s,baz=243,slow=9.2,SNR=15
ZALV LR LR 09 45 04.1
comp=Z,82nm,18.7s,baz=248,slow=40
**ZALV Zalesovo Beam 34.16 36** *i*P **P 09 29 06.0 +0.1**
ZALV pmax pmax
comp=Z,5.0nm,0.8s
**ZALV Zalesovo Beam 34.16 36** *i*P **P 09 29 06.0 +0.1**
comp=Z,5.0nm,0.8s
**KHC Kasperske Hory 34.31 315** *e*P P 09 29 06.4 -1.0
KHC pmax pmax
comp=Z,3.0nm,0.7s
**KHC Kasperske Hory 34.31 315** *e*P **P 09 29 07.3 -0.1**
KHC *ep*P **pP 09 29 12.5 -0.5**
**KHC Kasperske Hory 34.31 315** *e*P P 09 29 06.4 -1.0
comp=Z,3.3nm,0.7s
**KHC Kasperske Hory 34.31 315** *e*P P 09 29 06.4 -1.0
comp=Z,3.3nm,0.7s
**WTTA Wattenberg 34.98 311**⇑*i*P **P 09 29 12.5 -0.8**
comp=Z,34nm,1.2s
**WTTA Wattenberg 34.98 311** P **P 09 29 12.5 -0.8**
comp=Z,34nm,1.2s
**WATA Walderalm 35.04 311**⇑*i*P **P 09 29 13.0 -0.8**
comp=Z,13nm,0.5s
**WATA Walderalm 35.04 311** P **P 09 29 13.0 -0.8**
comp=Z,13nm,0.5s
**MOTA Moosalm 35.35 311**⇓*i*P P 09 29 15.5 -1.1
comp=Z,13nm,0.6s
**MOTA Moosalm 35.35 311** P P 09 29 15.5 -1.1
comp=Z,13nm,0.6s
**NKC Novy Kostel 35.38 316** *e*P **P 09 29 16.6 0.0**
**NKC Novy Kostel 35.38 316** *e*P **P 09 29 16.6 0.0**
NKC *ep*P **pP 09 29 20.9 -1.3**
**NKC Novy Kostel 35.38 316** *e*P **P 09 29 16.6 0.0**
**KEST Kesra 35.43 291** P P 09 29 15.2 -2.0
comp=Z,6.3nm,1.0s,baz=171,slow=6.7,SNR=2.8
**CLL Collm 35.45 318**⇑*i*P **P 09 29 16.1 -0.9**
CLL pmax pmax
comp=Z,23nm,1.5s
**CLL Collm 35.45 318**⇑*i*P **P 09 29 16.1 -0.9**
comp=Z,23nm,1.5s
**CLL Collm 35.45 318** *i*P **P 09 29 16.1 -0.9**
comp=Z,23nm,1.5s
**FETA Feichten 35.52 310**⇑*i*P **P 09 29 17.5 -0.5**
comp=Z,9.0nm,0.7s
**FETA Feichten 35.52 310** P **P 09 29 17.5 -0.5**
comp=Z,9.0nm,0.7s
**RETA Reutte 35.62 311**⇑*i*P P 09 29 17.5 -1.1
comp=Z,7.8nm,0.6s
**RETA Reutte 35.62 311** P P 09 29 17.5 -1.1
comp=Z,7.8nm,0.6s
**FINES FINESS Array B 35.62 340** P P 09 29 16.3 -2.1
comp=Z,9.1nm,0.7s,baz=150,slow=11,SNR=17
FINES PcP **PcP 09 31 46.2 -0.5**
comp=Z,1.9nm,0.6s,baz=145,slow=4.7,SNR=3.6
**MBAR Mbarara 36.06 216** P **P 09 29 22.1 -0.7**
comp=Z,2.7nm,0.3s,baz=65,slow=7.5,SNR=6.2
**MBAR Mbarara 36.06 216** *e*P **P 09 29 22.7 -0.2**
MBAR pmax pmax
comp=Z,13nm,1.1s
**MBAR Mbarara 36.06 216** *e*P **P 09 29 22.7 -0.2**
comp=Z,12nm,1.1s
**MBAR Mbarara 36.06 216** *e*P **P 09 29 22.7 -0.2**
comp=Z,12nm,1.1s
**DAVA Damuels 36.15 310**⇑*i*P **P 09 29 22.6 -0.7**
comp=Z,33nm,0.5s
**DAVA Damuels 36.15 310** P **P 09 29 22.6 -0.7**
comp=Z,33nm,0.5s
**BNI Bardonecchia 37.91 306** *e*P **P 09 29 37.4 -0.9**
BNI pmax pmax
comp=Z,9.0nm,0.8s
**BNI Bardonecchia 37.91 306** *e*P **P 09 29 37.4 -0.9**
comp=Z,9.4nm,0.8s
**BNI Bardonecchia 37.91 306** *e*P **P 09 29 37.4 -0.9**
comp=Z,9.4nm,0.8s
**HFS Hagfors 39.25 331** P P 09 29 46.3 -2.9
comp=Z,7.5nm,0.4s,baz=125,slow=9.3,SNR=53
**GTA Gaotai 40.69 63** ⇓P **P 09 30 02.8 +1.2**
GTA pP **pP 09 30 07.3 -0.1**
GTA sP **sP 09 30 09.8 +0.2**
GTA S **S 09 36 11.8 +0.7**
GTA PMZ
comp=Z,15nm,0.8s
GTA PMZ
comp=Z,100nm,4.0s
GTA LN
comp=Z,130nm,14.3s
GTA LE
comp=Z,170nm,15.7s
GTA LZ
comp=Z,68nm,15.2s
**NB2 NORSAR Subarra 40.77 331** P P 09 30 00.0 -1.9
comp=Z,2.7nm,0.5s,baz=121,slow=8.6
**NB2 NORSAR Subarra 40.77 331** P P 09 30 00.0 -1.9
comp=Z,2.7nm,0.5s,baz=121,slow=8.2,SNR=2.3
**NOA NORSAR Array B 40.77 331** P P 09 30 00.2 -1.6
comp=Z,5.9nm,0.8s,baz=122,slow=8.4,SNR=11
**TAM Tamanrasset 41.31 271** *e*P **P 09 30 08.0 +1.1**
TAM pmax pmax
comp=Z,5.0nm,0.6s
**TAM Tamanrasset 41.31 271** *e*P **P 09 30 08.0 +1.1**
comp=Z,4.9nm,0.6s
**TAM Tamanrasset 41.31 271** *e*P **P 09 30 08.0 +1.1**
comp=Z,4.9nm,0.6s
**MLS Moulis 41.76 302** *e*P **P 09 30 09.7 -0.5**
**ARCES ARCESS Array B 42.30 347** P P 09 30 12.6 -1.6
comp=Z,8.0nm,1.0s,baz=148,slow=7.0,SNR=14
ARCES PcP **PcP 09 32 05.9 -1.7**
comp=Z,3.0nm,0.8s,baz=64,slow=2.8,SNR=3.5
**LARF Larrau 43.29 302** *e*P **P 09 30 23.0 +0.3**
**ZAK Zakamensk 43.73 47** *e*P **P 09 30 26.3 +0.1**
ZAK *e* 09 32 08.6
ZAK pmax pmax
comp=Z,3.0nm,1.3s
ZAK pmax pmax
comp=Z,3.0nm,1.3s
**ZAK Zakamensk 43.73 47** *e*P **P 09 30 26.3 +0.1**
comp=Z,3.0nm,1.3s
**TLY Talaya 44.15 45** LR LR 09 49 44.0
comp=Z,96nm,21.6s,baz=256,slow=37
**LZH Lanzhou 44.16 68** *e*P **P 09 30 30.8 +0.9**
LZH pP pP 09 30 40.5 +4.8
LZH sP sP 09 30 44.3 +6.4
LZH PMZ
comp=Z,37nm,1.0s
LZH PMZ
comp=Z,150nm,6.8s
**CHTO Chiang Mai 44.62 93** *e*P **P 09 30 33.2 -0.4**
CHTO pmax pmax
comp=Z,7.0nm,1.0s
**CHTO Chiang Mai 44.62 93** *e*P **P 09 30 33.1 -0.4**
comp=Z,7.4nm,1.0s
**CHTO Chiang Mai 44.62 93** *e*P **P 09 30 33.2 -0.4**
comp=Z,7.4nm,1.0s
**CMAR Chiang Mai Arr 44.76 94** P **P 09 30 34.0 -0.7**
comp=Z,2.7nm,0.3s,baz=289,slow=8.3,SNR=8.2
**CD2 Chengdu 45.01 75** *e*P P 09 30 35.5 -1.1
CD2 PMZ
comp=Z,10.0nm,0.5s
**SONM Songino Array 45.55 51** P P 09 30 39.7 -1.1
comp=Z,0.5nm,0.4s,baz=255,slow=9.1,SNR=3.8
SONM LR LR 09 52 14.7
comp=Z,58nm,18.1s,baz=186,slow=40
**KMI Kunming 45.67 83** P **P 09 30 42.3 +0.1**
KMI PMZ
comp=Z,13nm,1.0s
KMI PMZ
comp=Z,310nm,5.9s
KMI LN
comp=Z,230nm,6.4s
KMI LE
comp=Z,260nm,4.9s
KMI LZ
comp=Z,250nm,6.4s
**ESDC Sonseca Array 45.69 298** P **P 09 30 41.1 -0.8**
comp=Z,0.7nm,0.4s,baz=79,slow=6.8,SNR=11
ESDC PcP **PcP 09 32 19.8 0.0**
comp=Z,0.5nm,0.5s,baz=48,slow=3.6,SNR=5.9
**ULN Ulaanbaatar 45.99 51**⇑*e*P **P 09 30 44.2 -0.1**
ULN pmax pmax
comp=Z,3.0nm,0.8s
**ULN Ulaanbaatar 45.99 51** *e*P **P 09 30 44.2 -0.1**
comp=Z,3.0nm,0.8s
**PAB San Pablo 46.00 298** *e*P **P 09 30 44.5 +0.1**
PAB pmax pmax
comp=Z,5.0nm,0.9s
**PAB San Pablo 46.00 298** *e*P **P 09 30 44.5 +0.1**
comp=Z,4.6nm,0.9s
**PAB San Pablo 46.00 298** *e*P **P 09 30 44.5 +0.1**
comp=Z,4.6nm,0.9s
**PBRG Braganca 47.60 301** *e*P **P 09 30 57.3 +0.4**
comp=Z,18nm,2.3s
**PBRG Braganca 47.60 301** *e*P **P 09 30 57.3 +0.4**
comp=Z,18nm,2.3s
**MVO Moncorvo 47.88 300** *e*P **P 09 30 59.6 +0.5**
comp=Z,21nm,1.9s
**MVO Moncorvo 47.88 300** *e*P **P 09 30 59.6 +0.5**
comp=Z,21nm,1.9s
**PBAR Barrancos 48.26 296** *e*P **P 09 31 02.2 +0.3**
comp=Z,55nm,1.3s
**PBAR Barrancos 48.26 296** *e*P **P 09 31 02.2 +0.3**
comp=Z,55nm,1.3s
**MTE Manteigas 48.35 299** *e*P **P 09 31 03.8 +1.1**
comp=Z,21nm,1.6s
**MTE Manteigas 48.35 299** *e*P **P 09 31 03.8 +1.1**
comp=Z,21nm,1.6s
**OPO Ambohidratompo 48.35 185** P **P 09 31 04.1 +1.2**
comp=Z,1.9nm,0.7s,baz=90,slow=18,SNR=2.3
**PMRV Marv??o 48.35 298** *e*P **P 09 31 02.8 +0.1**
comp=Z,13nm,1.8s
**PMRV Marv??o 48.35 298** *e*P **P 09 31 02.8 +0.1**
comp=Z,13nm,1.8s
**POLO Lamas de Olo 48.43 300** *e*P **P 09 31 04.0 +0.6**
**POLO Lamas de Olo 48.43 300** *e*P **P 09 31 04.0 +0.6**
**TOA0 Torodi Ar. Sit 48.58 261** *e*P **P 09 31 04.8 +0.1**
**TOA0 Torodi Ar. Sit 48.58 261** *e*P **P 09 31 04.8 +0.1**
**TOA0 Torodi Ar. Sit 48.58 261** *e*P **P 09 31 04.8 +0.1**
**TORD Torodi Ar. Bea 48.58 261** P **P 09 31 04.8 +0.1**
comp=Z,15nm,0.7s,baz=57,slow=8.0,SNR=101
**XAN Xi'an 48.61 69** P **P 09 31 04.0 -0.8**
XAN pP **pP 09 31 13.5 +2.9**
XAN PMZ
comp=Z,17nm,0.8s
**PGAV Gavieira, Arco 48.72 301** *e*P **P 09 31 07.0 +1.4**
comp=Z,40nm,1.8s
**PGAV Gavieira, Arco 48.72 301** *e*P **P 09 31 07.0 +1.4**
comp=Z,40nm,1.8s
**PBDV Barranco-do-Ve 49.10 295** *e*P **P 09 31 08.4 -0.1**
comp=Z,24nm,1.5s
**PBDV Barranco-do-Ve 49.10 295** *e*P **P 09 31 08.4 -0.1**
comp=Z,24nm,1.5s
**PCVE Castro Verde 49.12 296** *e*P **P 09 31 08.1 -0.5**
comp=Z,15nm,1.8s
**PCVE Castro Verde 49.12 296** *e*P **P 09 31 08.1 -0.5**
comp=Z,15nm,1.8s
**PNCL Nicolau / Gran 49.43 296** *e*P **P 09 31 11.3 +0.4**
comp=Z,17nm,1.9s
**PNCL Nicolau / Gran 49.43 296** *e*P **P 09 31 11.3 +0.4**
comp=Z,17nm,1.9s
**HHC Hu-ho-hao-te 49.55 60** *e*P **P 09 31 12.5 +0.5**
HHC S **S 09 38 16.8 -2.4**
HHC sS sS 09 38 34.0 +5.2
HHC PMZ
comp=Z,28nm,1.1s
HHC PMZ
comp=Z,150nm,5.0s
HHC LN
comp=Z,390nm,16.2s
HHC LE
comp=Z,360nm,11.2s
HHC LZ
comp=Z,220nm,13.7s
**PFVI Vila Bisbo 49.82 295** *e*P **P 09 31 14.4 +0.4**
comp=Z,27nm,1.4s
**PFVI Vila Bisbo 49.82 295** *e*P **P 09 31 14.4 +0.4**
comp=Z,27nm,1.4s
**LSZ Lusaka 50.10 209** P **P 09 31 15.8 -0.4**
comp=Z,4.8nm,0.8s,baz=29,slow=9.9,SNR=7.8
**LSZ Lusaka 50.10 209** *e*P **P 09 31 18.1 +1.8**
LSZ pmax pmax
comp=Z,50nm,0.8s
**LSZ Lusaka 50.10 209** *e*P **P 09 31 18.1 +1.8**
comp=Z,50nm,0.8s
**LSZ Lusaka 50.10 209** *e*P **P 09 31 18.1 +1.8**
comp=Z,50nm,0.8s
**SPITS Spitsbergen Ar 50.77 351** P P 09 31 19.4 -1.1
comp=Z,9.0nm,0.7s,baz=145,slow=9.1,SNR=9.5
**BOD Bodaibo 50.85 38** *e*P **P 09 31 20.6 -0.8**
BOD pmax pmax
comp=Z,11nm,1.3s
**BOD Bodaibo 50.85 38** *e*P **P 09 31 20.6 -0.8**
comp=Z,11nm,1.3s
**MATP Matopo 54.60 206** P **P 09 31 50.1 +0.5**
comp=Z,5.9nm,1.0s,baz=23,slow=10.0,SNR=8.1
**TIA Tai'an 54.69 65** *e*P **P 09 31 51.0 +0.8**
TIA PMZ
comp=Z,20nm,0.6s
**DAG Danmarks Havn 56.51 345** *e*P **P 09 32 01.9 -0.7**
**DAG Danmarks Havn 56.51 345** *i*P **P 09 32 01.9 -0.7**
**NJ2 Nanjing 57.18 69** *e*P **P 09 32 08.3 +0.3**
NJ2 PMZ
comp=Z,40nm,0.7s
**DBIC Dimbokro 57.38 258** P **P 09 32 09.9 +0.3**
comp=Z,9.8nm,0.8s,baz=31,slow=6.5,SNR=7.9
**KIC Kosan Boka 57.44 258** *e*P **P 09 32 10.0 -0.1**
comp=Z,35nm,1.0s
**TIC Toumodi 57.53 258** *e*P **P 09 32 10.9 +0.2**
**LIC Lamto 57.75 258** *e*P **P 09 32 12.3 0.0**
comp=Z,73nm,1.9s
**YAK Yakutsk 58.73 33** *e*P **P 09 32 17.7 -0.7**
YAK pmax pmax
comp=Z,11nm,0.6s
**YAK Yakutsk 58.73 33** *e*P **P 09 32 17.7 -0.7**
comp=Z,11nm,0.6s
**CN2 Changchun 59.16 54** *e*P **P 09 32 23.3 +1.6**
**LBTB Lobatse 59.87 207** P **P 09 32 27.1 +0.2**
comp=Z,6.2nm,0.7s,baz=29,slow=5.9,SNR=8.8
**LBTB Lobatse 59.87 207** P **P 09 32 27.1 +0.2**
LBTB pmax pmax
comp=Z,6.0nm,0.7s
**LBTB Lobatse 59.87 207** *e*P **P 09 32 28.1 +1.2**
**SUMG Summit 61.66 340** *i*P **P 09 32 39.0 +0.2**
SUMG pmax pmax
comp=Z,12nm,0.8s
**SUMG Summit 61.66 340** *i*P **P 09 32 39.0 +0.2**
comp=Z,12nm,0.8s
**SUMG Summit 61.66 340** *e*P **P 09 32 38.1 -0.7**
**SUMG Summit 61.66 340** *i*P **P 09 32 39.0 +0.2**
comp=Z,12nm,0.8s
**KLR Kul'dur 62.10 47** *i*P **P 09 32 41.6 -0.1**
**KLR Kul'dur 62.10 47** *i*P **P 09 32 41.6 -0.1**
**KSAR Wonju Array Be 62.66 61** P **P 09 32 44.9 -0.7**
**KSAR Wonju Array Be 62.66 61** P **P 09 32 44.9 -0.7**
**KSAR Wonju Array Be 62.66 61** P **P 09 32 44.9 -0.7**
**KSRS Korea Array 62.69 61** P P 09 32 44.9 -0.9
comp=Z,3.7nm,0.8s,baz=274,slow=7.6,SNR=8.3
KSRS LR LR 10 03 17.4
comp=Z,44nm,18.1s,baz=315,slow=39
**KSRS Korea Array 62.69 61** P P 09 32 44.9 -0.9
KSRS pmax pmax
comp=Z,4.0nm,0.8s
KSRS MLR MLR
comp=Z,44nm,18.1s
**BOSA Boshof 63.24 205** P **P 09 32 50.1 +0.6**
comp=Z,4.1nm,0.7s,baz=31,slow=6.6,SNR=8.1
**USRK Ussuriysk Ar. 63.62 52** P P 09 32 50.8 -1.0
comp=Z,1.0nm,0.7s,baz=208,slow=2.8,SNR=3.5
USRK LR LR 10 03 31.0
comp=Z,60nm,18.4s,baz=242,slow=39
**SEY Seymchan 68.66 29** P P 09 33 22.8 -1.0
comp=Z,5.7nm,0.8s,baz=299,slow=9.3,SNR=6.0
**SEY Seymchan 68.66 29**⇓*e*P **P 09 33 23.4 -0.4**
**SEY Seymchan 68.66 29** *e*P **P 09 33 23.4 -0.4**
**BILL Bilibino 71.27 21**⇑*e*P **P 09 33 40.7 +0.9**
BILL *e* 09 36 20.6
BILL *e*PPP PPP 09 38 03.7
BILL *e*S S 09 42 47.9 -8.2
BILL pmax pmax
comp=Z,22nm,1.7s
BILL MLR MLR
comp=Z,60nm,14.0s
**BILL Bilibino 71.27 21** *e*P **P 09 33 40.7 +0.9**
comp=Z,22nm,1.7s
**SCHQ Schefferville 80.28 329** P **P 09 34 30.8 -0.8**
comp=Z,9.0nm,0.7s,baz=56,slow=4.5,SNR=8.3
**COLA College 84.36 8**⇓*e*P **P 09 34 52.9 +0.2**
**COLA College 84.36 8** *e*P **P 09 34 52.9 +0.2**
**ILAR Eielson Array 84.58 8** P **P 09 34 53.2 -0.7**
comp=Z,1.3nm,0.7s,baz=316,slow=3.8,SNR=14
**BPAW Bear Paw Mtn. 84.69 10** *e*P **P 09 34 53.7 -0.8**
comp=Z,3.1nm,1.2s
**BPAW Bear Paw Mtn. 84.69 10** *e*P **P 09 34 53.7 -0.8**
comp=Z,3.1nm,1.2s
**YKA Yellowknife Ar 87.21 353** P P 09 35 04.4 -2.5
comp=Z,4.9nm,0.7s,baz=2.1,slow=3.5,SNR=4.3
**YKA Yellowknife Ar 87.21 353** P P 09 35 04.4 -2.5
YKA pmax pmax
comp=Z,5.0nm,0.7s
**WRA Warramunga Arr 94.07 111** P P 09 35 37.7 -2.0
comp=Z,0.3nm,0.6s,baz=315,slow=3.8,SNR=5.6
**ASAR Alice Springs 95.58 114** P P 09 35 44.6 -1.9
comp=Z,0.9nm,0.8s,baz=306,slow=4.5,SNR=8.1
**LPAZ La Paz 123.12 269** PKP **PKPdf 09 41 17.2 -1.6**
comp=Z,0.9nm,0.7s,baz=149,slow=4.6,SNR=4.2
**VNDA Vanda 123.43 166** PKP **PKPdf 09 41 15.1 -1.9**
comp=Z,0.7nm,0.9s,baz=317,slow=0.9,SNR=3.7
**CFAA Coronel Fontan 128.50 252** PKP **PKPdf 09 41 27.5 -0.6**
comp=Z,0.5nm,0.8s,baz=74,slow=1.7,SNR=6.8

**MEX 28 09:27:52.9±0.6, 15°.89N×92°.76W, h174km±8km, MD3.7, Mexico-Guatemala border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **0.48** | **248** | *e*P | Pn | 09 28 15.7 | -1.2 |
| PCIG | | | | *e*S | Sn | 09 28 33.0 | -2.2 |
| **TGIG** | | **0.95** | **338** | *i*P | Pn | 09 28 18.5 | -1.2 |
| TGIG | | | | *e*S | Sn | 09 28 37.9 | -2.6 |

*ISCJB **28** 09:31:12.7±0.5, 14°.79S±0°.04×23°.35E±0°.05, h10km, mb4.0/8, Error ellipse: s-maj=6.4km s-min=5.4km az=177.3*
*IDC **28** 09:31:13.4±0.8, 14°.60S×23°.31E, h0km, mb4.0/7, mb1 4.1/12, mb1mx3.8/51, mbtmp4.1/12, ML4.3/5, MS2.9/4, Ms1 2.9/4, ms1mx2.6/38, Error ellipse: s-maj=20.5km s-min=13.8km az=59.0*
*NEIC **28** 09:31:14.8±0.5, 14°.69S×23°.29E, h10km, mb4.4/3, Error ellipse: s-maj=12.0km s-min=8.3km az=96.0*

**ISC 28 09:31:14.8±0.6, 14.73S±0°.06×23°.34E±0°.06, h10km, n23, σ1s23/28, mb4.0/8, Zambia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSZ** | **Lusaka** | **4.72** | **97** | *e*Pn | **Pn** | **09 32 26.8** | **+0.6** |
| | 8.1nm,0.3s,baz=299,slow=13,SNR=58 | | | | | | |
| LSZ | | | | Lg | Lg | 09 33 45.3 | |
| | 30nm,0.3s,baz=13,slow=11,SNR=12 | | | | | | |
| **LSZ** | **Lusaka** | **4.72** | **97** | *e*Pn | **Pn** | **09 32 27.6** | **+1.4** |
| LSZ | | | | *e*Sn | **Sn** | **09 33 21.7** | **+0.6** |
| LSZ | | | | Lg | Lg | 09 33 45.3 | |
| **TSUM** | **Tsumeb** | **7.08** | **230** | *e*Pn | **Pn** | **09 33 00.2** | **+1.5** |
| TSUM | | | | *e*Sn | **Sn** | **09 34 20.2** | **+0.9** |
| TSUM | | | | *e*Sg | **Sg** | **09 35 01.4** | **-0.7** |
| **BLWY** | **Bulawayo** | **7.37** | **138** | *i*S | **Sn** | **09 34 23.6** | **-2.9** |
| **MATP** | **Matopo** | **7.51** | **140** | Pn | **Pn** | **09 33 05.7** | **+1.2** |
| | 3.6nm,0.3s,baz=315,slow=14,SNR=47 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| MATP | | | | Sn | | **Sn** | **09 34 29.3** | **-0.5** |
| | 5.5nm,0.3s,baz=255,slow=20,SNR=4.7 | | | | | | | | |
| MATP | | | | Lg | | Lg | 09 35 15.9 | | |
| | 7.5nm,0.3s,baz=46,slow=17,SNR=7.9 | | | | | | | | |
| MATP | | | | LR | | LR | 09 36 20.4 | | |
| | comp=Z,90nm,20.9s,baz=287,slow=40 | | | | | | | | |
| **LBTB** | **Lobatse** | **10.45** | **169** | Pn | | **Pn** | **09 33 45.3** | **+0.4** |
| | 2.0nm,0.3s,baz=351,slow=12,SNR=18 | | | | | | | | |
| LBTB | | | | Sn | | **Sn** | **09 35 41.7** | **-0.5** |
| | 1.6nm,0.3s,baz=285,slow=20,SNR=2.3 | | | | | | | | |
| LBTB | | | | Lg | | Lg | 09 36 49.2 | | |
| | 2.0nm,0.3s,baz=276,slow=21,SNR=5.8 | | | | | | | | |
| LBTB | | | | LR | | LR | 09 38 05.5 | | |
| | comp=Z,108nm,18.4s,baz=3.0,slow=39 | | | | | | | | |
| **BOSA** | **Boshof** | **13.93** | **173** | *i* P | | **Pn** | **09 34 31.1** | **-1.4** |
| **BOSA** | **Boshof** | **13.93** | **173** | Pn | | **Pn** | **09 34 32.2** | **-0.3** |
| | 1.5nm,0.3s,baz=351,slow=13,SNR=17 | | | | | | | | |
| BOSA | | | | Sn | | **Sn** | **09 37 05.2** | **-2.2** |
| | 0.8nm,0.3s,baz=15,slow=6.2,SNR=3.8 | | | | | | | | |
| BOSA | | | | Lg | | Lg | 09 38 40.3 | | |
| | 1.6nm,0.3s,baz=64,slow=12,SNR=3.7 | | | | | | | | |
| BOSA | | | | LR | | LR | 09 39 40.6 | | |
| | comp=Z,29nm,21.4s,baz=3.5,slow=36 | | | | | | | | |
| **MBAR** | **Mbarara** | **15.83** | **28** | Lg | | Lg | 09 39 18.5 | | |
| | 0.8nm,0.3s,baz=312,slow=22,SNR=6.6 | | | | | | | | |
| **MBAR** | **Mbarara** | **15.83** | **28** | *e*Pn | | **Pn** | **09 34 59.3** | **+1.3** |
| MBAR | | | | Lg | | Lg | 09 39 18.5 | | |
| **SUR** | **Sutherland** | **17.72** | **187** | P | | **P** | **09 35 22.9** | **+0.1** |
| | 0.0nm,0.3s,baz=0.5,slow=16,SNR=3.7 | | | | | | | | |
| **SUR** | **Sutherland** | **17.72** | **187** | *e*Pn | | **Pn** | **09 35 21.0** | **-1.0** |
| | 14nm,0.9s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **19.28** | **47** | P | | **Pn** | **09 35 41.0** | **-0.1** |
| | 0.2nm,0.3s,baz=212,slow=19,SNR=2.6 | | | | | | | | |
| KMBO | | | | Lg | | Lg | 09 41 16.8 | | |
| | 0.1nm,0.3s,baz=132,slow=18,SNR=5.7 | | | | | | | | |
| KMBO | | | | LR | | LR | 09 42 48.1 | | |
| | comp=Z,32nm,18.6s,baz=54,slow=36 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.02** | **321** | P | | **P** | **09 38 06.5** | **-1.3** |
| | 2.5nm,0.6s,baz=146,slow=8.8,SNR=16 | | | | | | | | |
| **DBIC** | **Dimbokro** | **35.12** | **305** | P | | **P** | **09 38 08.9** | **+0.2** |
| | 2.4nm,0.4s,baz=120,slow=12,SNR=8.3 | | | | | | | | |
| **DBIC** | **Dimbokro** | **35.12** | **305** | *e*P | | **P** | **09 38 09.1** | **+0.3** |
| | 3.0nm,0.4s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **55.01** | **10** | P | | **P** | **09 40 45.9** | **-0.7** |
| | 1.0nm,0.9s,baz=160,slow=4.6,SNR=2.4 | | | | | | | | |
| **MAW** | **Mawson** | **58.72** | **163** | P | | **P** | **09 41 14.7** | **+2.4** |
| | 1.1nm,0.6s,baz=314,slow=7.8,SNR=9.6 | | | | | | | | |
| **KKAR** | **Karatay Array** | **71.96** | **34** | *e*P | | **P** | **09 42 37.9** | **-0.6** |
| | 3.7nm,1.0s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **78.64** | **27** | P | | **P** | **09 43 16.6** | **-0.2** |
| | 0.6nm,0.5s,baz=259,slow=1.5,SNR=3.8 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.83** | **37** | P | | **P** | **09 43 27.8** | **-1.1** |
| | 0.4nm,0.7s,baz=216,slow=4.9,SNR=3.3 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **80.96** | **32** | P | | **P** | **09 43 28.6** | **-0.8** |
| | 1.0nm,0.8s,baz=240,slow=6.1,SNR=7.6 | | | | | | | | |
| **KURK** | **Kurchatov** | **81.06** | **32** | P | | **P** | **09 43 28.6** | **-1.3** |

**PGC 28 09:32:17.1±0.1, 62°58N×125°18W, h5km, ML3.2/18, 223km Wnw of Fort Simpson, Nt Northwest Territories, Canada, Northwest Territories**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FNBB** | **Fort Nelson** | **3.85** | **163** | Pn | Pn | 09 33 16.1 | -0.9 |
| FNBB | | | | Sn | Sn | 09 34 04.6 | +1.9 |
| FNBB | | | | Sg | Sb | 09 34 16.1 | +3.6 |
| **CLVN** | **Colville Lake** | **4.49** | **356** | Pn | Pn | 09 33 23.3 | -2.4 |
| CLVN | | | | Sn | Sn | 09 34 13.6 | -4.7 |
| CLVN | | | | Sg | Sg | 09 34 36.1 | -5.1 |
| **YKR1** | **Yellowknife Ar** | **4.74** | **87** | Pn | Pn | 09 33 27.6 | -1.6 |
| YKR1 | | | | Sn | Sn | 09 34 20.7 | -3.8 |
| **YKR2** | **Yellowknife Ar** | **4.76** | **87** | Pn | Pn | 09 33 28.2 | -1.2 |
| YKR2 | | | | Sg | Sb | 09 34 43.3 | +4.8 |
| **YKR3** | **Yellowknife Ar** | **4.79** | **86** | Pn | Pn | 09 33 28.8 | -0.9 |
| **DLBC** | **Dease Lake** | **4.80** | **212** | Pn | Pn | 09 33 29.7 | -0.4 |
| DLBC | | | | Sg | Sb | 09 34 44.9 | +5.1 |
| **YKR4** | **Yellowknife Ar** | **4.81** | **86** | Pn | Pn | 09 33 29.2 | -0.9 |
| YKR4 | | | | Sn | Sn | 09 34 21.6 | -4.4 |
| YKR4 | | | | Sg | Sg | 09 34 46.3 | -5.1 |
| **YKR5** | **Yellowknife Ar** | **4.83** | **86** | Pn | Pn | 09 33 29.1 | -1.2 |
| YKR5 | | | | Sg | Sb | 09 34 45.4 | +4.9 |
| **YKW3** | **Yellowknife Ar** | **4.89** | **86** | Pn | Pn | 09 33 30.4 | -0.7 |
| YKW3 | | | | Sn | Sn | 09 34 22.0 | -6.0 |
| YKW3 | | | | Sg | Sg | 09 34 48.5 | -5.5 |
| **YKB9** | **Yellowknife Ar** | **4.89** | **85** | Pn | Pn | 09 33 30.7 | -0.5 |
| YKB9 | | | | Sn | Sn | 09 34 22.3 | -5.8 |
| YKB9 | | | | Sg | Sb | 09 34 46.8 | +4.6 |
| **YKB8** | **Yellowknife Ar** | **4.89** | **86** | Pn | Pn | 09 33 30.2 | -1.0 |
| YKB8 | | | | Sg | Sb | 09 34 47.5 | +5.3 |
| **YKB7** | **Yellowknife Ar** | **4.89** | **86** | Pn | Pn | 09 33 30.1 | -1.2 |
| YKB7 | | | | Sn | Sn | 09 34 23.5 | -4.7 |
| YKB7 | | | | Sg | Sb | 09 34 47.6 | +5.3 |
| **YKB6** | **Yellowknife Ar** | **4.90** | **86** | Pn | Pn | 09 33 30.3 | -1.0 |
| YKB6 | | | | Sn | Sn | 09 34 24.1 | -4.2 |
| YKB6 | | | | Sg | Sb | 09 34 48.3 | +5.9 |
| **YKR8** | **Yellowknife Ar** | **4.90** | **86** | Pn | Pn | 09 33 30.7 | -0.6 |
| YKR8 | | | | Sn | Sn | 09 34 25.4 | -2.9 |
| **YKB4** | **Yellowknife Ar** | **4.90** | **87** | Pn | Pn | 09 33 30.3 | -1.0 |
| **YKB2** | **Yellowknife Ar** | **4.91** | **87** | Pn | Pn | 09 33 31.4 | 0.0 |
| **YKB1** | **Yellowknife Ar** | **4.91** | **87** | Pn | Pn | 09 33 31.8 | +0.4 |
| YKB1 | | | | Sn | Sn | 09 34 24.1 | -4.4 |
| YKB1 | | | | Sg | Sg | 09 34 51.5 | -3.1 |
| **YKR9** | **Yellowknife Ar** | **4.92** | **86** | Pn | Pn | 09 33 30.8 | -0.8 |
| **WHY** | **Whitehorse** | **5.01** | **252** | Pn | Pn | 09 33 31.0 | -2.0 |
| WHY | | | | Sn | Sn | 09 34 29.4 | -2.0 |
| WHY | | | | Sg | Sb | 09 34 49.2 | +3.2 |
| **HYT** | **Haines Junctio** | **6.12** | **259** | Pn | Pn | 09 33 45.6 | -2.6 |
| HYT | | | | Sg | Sb | 09 35 24.9 | +7.1 |
| **PLBC** | **Pleasant Camp** | **6.27** | **245** | Pn | Pn | 09 33 48.6 | -1.6 |
| PLBC | | | | Sn | Sn | 09 34 59.3 | -2.8 |
| PLBC | | | | Sg | Sb | 09 35 28.1 | +6.2 |
| **DAWY** | **Dawson** | **6.57** | **289** | Pn | Pn | 09 33 52.3 | -1.9 |
| DAWY | | | | Sn | Sn | 09 35 00.5 | -9.0 |
| DAWY | | | | Sg | Sg | 09 35 43.8 | -4.2 |
| **DAWY** | **Dawson** | **6.57** | **289** | *e*P | Sn | 09 35 00.1 | -9.4 |
| | 16nm,1.3s | | | | | | |
| **DAWY** | **Dawson** | **6.57** | **289** | *e*P | Sn | 09 35 00.1 | -9.4 |
| | 16nm,1.3s | | | | | | |
| **INK** | **Inuvik** | **6.71** | **333** | Pn | Pn | 09 33 52.9 | -3.2 |
| INK | | | | Sn | Sn | 09 35 06.1 | -6.6 |
| **KUKN** | **Kugluktuk,NWT** | **6.75** | **34** | Pn | Pn | 09 33 55.4 | -1.4 |
| KUKN | | | | Sn | Sn | 09 35 07.2 | -6.6 |
| KUKN | | | | Sg | Sg | 09 35 48.5 | -5.2 |
| **YUK2** | **White River** | **7.37** | **271** | Sg | Sg | 09 36 04.0 | -10 |
| **SNLN** | **Sandy Lake, NW** | **8.08** | **80** | Pn | Pn | 09 34 14.0 | -0.8 |
| SNLN | | | | Sn | Sn | 09 35 40.7 | -5.7 |
| SNLN | | | | Sg | Sg | 09 36 25.5 | -11 |
| **GDLN** | **Gardenia Lake,** | **8.95** | **85** | Pn | Pn | 09 34 24.1 | -2.8 |
| GDLN | | | | Sn | Sn | 09 36 00.5 | -7.5 |

*IDC **28** 09:37:50.6±0.8, 3°.71S×99°.59E, h0km, mb4.1/13, mb1 4.2/13, mb1mx3.9/47, mbtmp4.1/13, Error ellipse: s-maj=25.4km s-min=17.9km az=59.0*
*NEIC **28** 09:37:51.7±0.8, 3°.77S×99°.71E, h10km, mb4.3/1, Error ellipse: s-maj=24.7km s-min=13.4km az=53.0*
*ISCJB **28** 09:37:52.5±0.6, 3°.73S±0°.05×99°.86E±0°.06, h33km, mb4.1/14, Error ellipse: s-maj=9.7km s-min=4.7km az=142.6*
*DJA **28** 09:37:52.9±0.7, 4°S±5°×10°E±°, h68km±9km, M4.4/9, mb4.8/6, mB5.7/1, MLv4.3/9, Mw(mB)5.3/1*

**ISC 28 09:37:55.3±0.7, 3°.70S±0°.08×99°.80E±0°.09, h35km, n37, σ1°99/35, mb4.2/14, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.95** | **13** | P | **Pn** | **09 38 10.9** | **-1.4** |
| PPSI | | | | S | **Sn** | **09 38 24.5** | **-0.1** |
| **SISI** | **Saibi** | **2.46** | **343** | P | **Pn** | **09 38 30.7** | **-2.3** |
| SISI | | | | S | **Sn** | **09 39 00.3** | **-1.6** |
| **MNAI** | **Manna** | **3.22** | **102** | P | **Pn** | **09 38 42.4** | **-1.0** |
| **PPI** | **Padang Panjang** | **3.28** | **11** | P | Pn | 09 38 40.4 | -3.8 |
| PPI | | | | S | **Sn** | **09 39 20.8** | **-1.2** |
| **MDSI** | **Maura Dua** | **4.44** | **100** | P | **Pn** | **09 38 58.9** | **-1.3** |
| MDSI | | | | S | **Sn** | **09 39 48.1** | **-2.6** |
| **LWLI** | **Liwa** | **4.45** | **107** | P | **Pn** | **09 38 59.6** | **-0.8** |
| **KASI** | **Kota Agung** | **5.02** | **111** | P | **Pn** | **09 39 06.8** | **-1.4** |
| | 86nm,0.4s,0.5nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.45** | **336** | P | Pn | 09 39 10.4 | -3.6 |
| | 19nm,0.7s,0.1nm | | | | | | |
| GSI | | | | S | **Sn** | **09 40 10.3** | **-5.2** |
| | 19nm,0.7s,0.1nm | | | | | | |
| **CGJI** | **Cibinong** | **6.54** | **116** | P | **Pn** | **09 39 26.3** | **-2.9** |
| | 63nm,1.0s,0.4nm | | | | | | |
| **CNJI** | **Cibinong** | **8.13** | **116** | P | **Pn** | **09 39 48.5** | **-2.4** |
| | 86nm,1.2s | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.85** | **116** | P | **Pn** | **09 39 58.1** | **-2.8** |
| | 123nm,1.2s,5μm | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.85** | **116** | Pn | **Pn** | **09 39 57.7** | **-3.2** |
| | 66nm,0.5s | | | | | | |
| **KULM** | **Kulim** | **8.97** | **5** | *e*Pn | **Pn** | **09 40 02.2** | **-0.3** |
| **CMJI** | **Cimerak** | **9.51** | **116** | P | **Pn** | **09 40 06.9** | **-3.0** |
| **CMAR** | **Chiang Mai Arr** | **22.03** | **358** | P | **P** | **09 42 48.1** | **+1.1** |
| | 1.7nm,0.8s,baz=189,slow=9.4,SNR=7.6 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.45** | **261** | T | T | 10 13 33.1 | |
| | baz=94,slow=74,SNR=36 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.45** | **261** | T | T | 10 13 37.5 | |
| | SNR=34 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.46** | **261** | T | T | 10 13 37.5 | |
| | baz=86,slow=74,SNR=42 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.76** | **159** | T | T | 10 20 43.0 | |
| | baz=336,slow=76,SNR=30 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.77** | **159** | T | T | 10 20 47.5 | |
| | baz=336,slow=76,SNR=27 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.78** | **158** | T | T | 10 20 44.2 | |
| | baz=336,slow=76,SNR=26 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.34** | **118** | P | **P** | **09 45 05.0** | **+0.3** |
| | 0.5nm,0.6s,baz=303,slow=9.2,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **38.44** | **124** | P | **P** | **09 45 16.8** | **+2.7** |
| | 1.0nm,0.5s,baz=299,slow=7.7,SNR=6.1 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 47 27.4** | **+0.4** |
| | 0.5nm,1.0s,baz=321,slow=1.6,SNR=4.1 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.55** | **30** | P | **P** | **09 46 38.1** | **+2.9** |
| **KSRS** | **Korea Array** | **48.58** | **30** | P | **P** | **09 46 38.1** | **+2.7** |
| | 1.3nm,0.8s,baz=231,slow=7.9,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **51.65** | **6** | P | **P** | **09 47 00.2** | **+1.6** |
| | 1.5nm,0.7s,baz=192,slow=9.8,SNR=11 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.60** | **345** | P | **P** | **09 47 06.3** | **+0.6** |
| | 1.7nm,0.6s,baz=149,slow=8.4,SNR=11 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.74** | **28** | P | **P** | **09 47 29.8** | **+1.2** |
| | 2.7nm,0.8s,baz=225,slow=8.0,SNR=7.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.12** | **344** | P | **P** | **09 47 37.4** | **-0.8** |
| | 0.8nm,0.6s,baz=169,slow=7.2,SNR=3.9 | | | | | | |
| **KURK** | **Kurchatov** | **57.17** | **344** | P | **P** | **09 47 37.4** | **-1.2** |
| **ZALV** | **Zalesovo Beam** | **58.79** | **350** | P | **P** | **09 47 50.0** | **+0.1** |
| | 2.3nm,0.6s,baz=190,slow=5.4,SNR=9.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.70** | **340** | P | **P** | **09 48 08.3** | **-1.6** |
| | 1.8nm,0.5s,baz=159,slow=12,SNR=6.6 | | | | | | |
| **ABKAR** | **Akbulak array** | **63.03** | **332** | *e*P | **P** | **09 48 18.3** | **-0.5** |
| | 2.0nm,0.8s | | | | | | |
| **MATP** | **Matopo** | **71.19** | **250** | P | **P** | **09 49 12.0** | **+0.6** |
| | 3.2nm,0.5s,baz=78,slow=4.6,SNR=14 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.32** | **313** | P | **P** | **09 49 28.8** | **-0.9** |
| | 0.9nm,0.6s,baz=147,slow=6.2,SNR=4.3 | | | | | | |
| **FINES** | **FINESS Array B** | **85.52** | **332** | P | **P** | **09 50 30.1** | **+0.6** |
| | 17nm,1.3s,baz=108,slow=8.9,SNR=5.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.16** | **39** | PKPbc | **PKPab** | **09 57 34.1** | **+0.7** |
| | 1.1nm,0.6s,baz=198,slow=0.8,SNR=7.1 | | | | | | |

*ISCJB **28** 09:49:35.6±0.6, 13°.39N±0°.03×60°.73W±0°.08, h94km±6km, Error ellipse: s-maj=12.8km s-min=3.8km az=12.1*
*TRN **28** 09:49:35.5, 13°.41N×60°.74W, h85km, MD3.6*
*FUNV **28** 09:49:36.9, 13°.04N×60°.43W, h5km, MW3.4*

**ISC 28 09:49:36.2±1.5, 13°.38N±0°.04×60°.64W±0°.09, h84km±9km, n32, σ0°89/47, 3C-7D, Windward Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MCLT** | **Moule a Chique** | **0.43** | **318** | *e*P | **Pn** | **09 49 49.9** | **0.0** |
| MCLT | | | | *e*S | **Sn** | **09 50 00.0** | **0.0** |
| **SVV** | **Soufriere Volc** | **0.56** | **263** | *i*P | **Pn** | **09 49 51.7** | **+0.8** |
| SVV | | | | *e*S | **Sn** | **09 50 02.1** | **+0.2** |
| **SVB** | **Belmont** | **0.60** | **259** | *e*P | **Pn** | **09 49 50.9** | **-0.4** |
| SVB | | | | *e*S | **Sn** | **09 50 01.9** | **-0.7** |
| **FCV** | **Fort Charlotte** | **0.63** | **249** | *i*eP | **Pn** | **09 49 52.0** | **+0.5** |
| FCV | | | | *e*S | **Sn** | **09 50 03.1** | **+0.2** |
| **BIM** | **Bigot** | **1.20** | **340** | *e*P | **Pn** | **09 49 58.0** | **0.0** |
| BIM | | | | *e*S | **Sn** | **09 50 14.2** | **-0.2** |
| **TRMF** | **Trois Ilets** | **1.21** | **341** | *e*P | **Pn** | **09 49 57.8** | **-0.3** |
| **LPMF** | **Morne Lapointe** | **1.22** | **345** | *e*P | **Pn** | **09 49 58.2** | **0.0** |
| **ZAM** | **Aeronautique** | **1.24** | **342** | *i*eP | **Pn** | **09 49 58.2** | **-0.2** |
| **BVM** | **Bellevue** | **1.40** | **343** | *i*P | **Pn** | **09 50 00.9** | **+0.3** |
| **FDF** | **Fort de France** | **1.43** | **340** | *i*P | **Pn** | **09 50 00.2** | **-0.7** |
| **FDF** | **Fort de France** | **1.43** | **340** | *i*P | **Pn** | **09 50 00.5** | **-0.4** |
| FDF | | | | *e*S | **Sn** | **09 50 19.4** | **0.0** |
| **GRSS** | **Sisters** | **1.44** | **221** | *e*P | **Pn** | **09 50 00.2** | **-0.6** |
| GRSS | | | | *e*S | **Sn** | **09 50 19.1** | **-0.3** |
| **PML** | **Morne Lenard** | **1.48** | **339** | *e*P | **Pn** | **09 50 01.4** | **-0.1** |
| **GBMF** | **Grand Be** | **1.49** | **340** | *i*eP | **Pn** | **09 50 01.5** | **-0.2** |
| **BAMF** | **Morne Balai** | **1.50** | **341** | *e*P | **Pn** | **09 50 01.9** | **0.0** |
| **CXM** | **Morne La Croix** | **1.51** | **340** | *i*eP | **Pn** | **09 50 01.6** | **-0.4** |
| CXM | | | | *e*S | **Sn** | **09 50 22.3** | **+0.9** |
| **GRHS** | **Sauteurs** | **1.51** | **220** | *e*P | **Pn** | **09 50 02.4** | **+0.6** |
| GRHS | | | | *e*S | **Sn** | **09 50 21.6** | **+0.4** |
| **PCM** | **Pelee Case Pet** | **1.53** | **339** | *e*P | **Pn** | **09 50 01.5** | **-0.6** |
| **PCM** | **Pelee Case Pet** | **1.53** | **339** | *i*eP | **Pn** | **09 50 01.7** | **-0.4** |
| **SVN** | **Savane Anatole** | **1.54** | **341** | *e*P | **Pn** | **09 50 02.1** | **-0.2** |
| **GRW** | **Mount Saint Ca** | **1.57** | **219** | *e*P | **Pn** | **09 50 02.1** | **-0.6** |
| GRW | | | | *e*S | **Sn** | **09 50 22.0** | **-0.7** |
| **TOSP** | **Speyside** | **2.08** | **177** | *e*P | **Pn** | **09 50 10.6** | **+1.4** |
| TOSP | | | | *e*S | **Sn** | **09 50 35.8** | **+1.4** |
| **BBL** | **Barber's Block** | **2.27** | **339** | *e*P | **Pn** | **09 50 11.0** | **-0.9** |
| **LZG** | **Guadaloupe-1** | **2.95** | **338** | *i*P | **Pn** | **09 50 20.3** | **-0.7** |
| **GUIV** | **Guiria** | **3.13** | **210** | *e*P | **Pn** | **09 50 22.8** | **-0.6** |
| GUIV | | | | *e*S | **Sn** | **09 50 58.3** | **-1.5** |
| **CRUV** | **Carupano** | **3.70** | **224** | *e*P | **Pn** | **09 50 31.7** | **+0.5** |
| CRUV | | | | *e*S | **Sn** | **09 51 14.2** | **+0.5** |
| **GUNV** | **Guanoco** | **3.92** | **215** | *e*P | **Pn** | **09 50 35.0** | **+0.9** |
| GUNV | | | | *e*S | **Sn** | **09 51 16.6** | **-2.3** |
| **PCRV** | **Puerto La Cruz** | **5.04** | **231** | *e*P | **Pn** | **09 50 50.8** | **+1.3** |
| **ORIV** | **Oritupano** | **5.07** | **213** | *e*P | **Pn** | **09 50 49.6** | **-0.3** |
| **CUPV** | **Cepira** | **6.03** | **237** | *e*P | **Pn** | **09 51 05.5** | **+2.6** |
| CUPV | | | | *e*S | **Sn** | **09 52 10.3** | **-0.3** |
| **GURV** | **El Guri** | **6.08** | **203** | *e*P | **Pn** | **09 51 02.8** | **-0.8** |
| **LUEV** | **Luepa** | **7.54** | **186** | *e*P | **Pn** | **09 51 21.4** | **-2.2** |
| LUEV | | | | *e*S | Sn | 09 52 38.0 | -10 |

*IDC **28** 09:52:10.2±1.1, 3°.15S×100°.20E, h0km, mb4.3/14, mb1 4.4/16, mb1mx4.1/52, mbtmp4.3/16, ML3.9/2, MS3.3/4, Ms1 3.3/4, ms1mx2.8/38, Error ellipse: s-maj=40.1km s-min=14.2km az=48.0*
*ISCJB **28** 09:52:11.8±0.5, 3°.25S±0°.05×100°.10E±0°.05, h27km, mb4.4/18, MS3.3/3, Error ellipse: s-maj=9.3km s-min=4.0km az=135.3*
*NEIC **28** 09:52:11.6±0.5, 3°.18S×100°.20E, h10km, mb4.5/4, Error ellipse: s-maj=14.3km s-min=5.8km az=53.0*
*BJI **28** 09:52:13.9, 2°.81S×100°.04E, h20km, mb4.7/7, mB5.2/2*
*DJA **28** 09:52:13.6±0.5, 3°S±4°×10°E±°, h28km±4km, M4.5/18, mb4.4/8, mB5.7/1, MLv4.5/18, Mw(mB)5.2/1*

**ISC 28 09:52:14.0±0.7, 3°.17S±0°.08×100°.17E±0°.07, h27km, n58, σ1°05/54, mb4.4/18, MS3.2/3, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.43** | **338** | P | **Pn** | **09 52 24.1** | **-0.4** |
| PPSI | | | | S | **Sn** | **09 52 32.7** | **+1.2** |
| **MASI** | **Maura Aman, Be** | **2.07** | **89** | P | **Pn** | **09 52 47.4** | **+0.4** |
| MASI | | | | S | **Sn** | **09 53 13.0** | **+1.1** |
| **SISI** | **Saibi** | **2.12** | **329** | P | **Pn** | **09 52 48.0** | **+0.2** |
| SISI | | | | S | **Sn** | **09 53 12.3** | **-1.0** |
| **SDSI** | **Sungai Dareh** | **2.55** | **30** | P | **Pn** | **09 52 53.7** | **+0.1** |
| **PPI** | **Padang Panjang** | **2.70** | **5** | P | **Pn** | **09 52 55.7** | **0.0** |
| PPI | | | | S | **Sn** | **09 53 29.5** | **+1.9** |
| **MNAI** | **Manna** | **3.02** | **113** | P | **Pn** | **09 53 00.4** | **+0.3** |
| MNAI | | | | S | **Sn** | **09 53 37.2** | **+1.7** |
| **BKNI** | **Bangkinang** | **3.58** | **14** | P | **Pn** | **09 53 08.1** | **+0.3** |
| **BKNI** | **Bangkinang** | **3.58** | **14** | *e*Pn | **Pn** | **09 53 08.4** | **+0.7** |
| **MNSI** | **Mandailing Nat** | **3.98** | **351** | P | **Pn** | **09 53 12.5** | **-0.8** |
| **MDSI** | **Maura Dua** | **4.21** | **108** | P | **Pn** | **09 53 17.3** | **+0.9** |
| **LWLI** | **Liwa** | **4.29** | **115** | P | **Pn** | **09 53 17.0** | **-0.7** |
| **KASI** | **Kota Agung** | **4.91** | **119** | P | **Pn** | **09 53 25.4** | **-0.7** |
| **GSI** | **Gunungsitoli** | **5.14** | **330** | P | **Pn** | **09 53 30.7** | **+1.4** |
| | 33nm,0.9s,0.3nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.14** | **330** | *e*Pn | **Pn** | **09 53 28.3** | **-1.1** |
| **PSI** | **Prapat** | **6.06** | **348** | Pn | **Pn** | **09 53 41.0** | **-1.0** |
| | 0.8nm,0.3s,baz=182,slow=14,SNR=4.9 | | | | | | |
| PSI | | | | LR | LR | 09 56 00.2 | |
| | comp=Z,111nm,19.2s,baz=248,slow=39 | | | | | | |
| **CGJI** | **Cibinong** | **6.48** | **122** | P | **Pn** | **09 53 45.6** | **-2.1** |
| | 61nm,0.7s,5μm0.4nm | | | | | | |
| **IPM** | **Ipoh** | **7.64** | **6** | Pn | **Pn** | **09 54 05.0** | **+1.3** |
| | 12nm,0.6s | | | | | | |
| **KULM** | **Kulim** | **8.41** | **3** | *e*Pn | **Pn** | **09 54 12.1** | **-2.2** |
| | 9.0nm,0.8s | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.77** | **120** | P | **Pn** | **09 54 17.0** | **-2.2** |
| **CISI** | **Cisompet, Garu** | **8.77** | **120** | *e*Pn | **Pn** | **09 54 17.8** | **-1.4** |
| | 57nm,0.5s | | | | | | |
| **KAPI** | **Kappang** | **19.62** | **96** | P | **P** | **09 56 40.6** | **0.0** |
| | 1.2nm,0.3s,baz=261,slow=17,SNR=3.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.52** | **357** | P | **P** | **09 56 59.2** | **-2.0** |
| | 3.7nm,0.7s,baz=184,slow=10,SNR=18 | | | | | | |
| CMAR | | | | LR | LR | 10 06 52.3 | |
| | comp=Z,73nm,18.6s,baz=190,slow=41 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.90** | **260** | T | T | 10 27 07.8 | |
| | baz=82,slow=75,SNR=1538 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.91** | **260** | T | T | 10 27 07.8 | |
| | baz=82,slow=75,SNR=1710 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.92** | **260** | T | T | 10 27 08.8 | |
| | baz=82,slow=75,SNR=1392 | | | | | | |
| **TAPN** | **Taplejung** | **32.63** | **339** | *e*P | **P** | **09 58 45.9** | **+1.8** |
| **RAMN** | **Ramite** | **32.69** | **337** | *e*P | P | 09 58 50.6 | +6.1 |
| **LSA** | **Lhasa** | **33.80** | **346** | *e*P | **P** | **09 58 55.6** | **+1.1** |
| | 7.4nm,0.6s | | | | | | |
| **GUN** | **Gumba** | **33.83** | **337** | *e*P | P | 09 58 58.9 | +4.3 |
| **DMN** | **Daman** | **33.87** | **336** | *e*P | P | 09 59 00.3 | +5.4 |
| **KKN** | **Kakani** | **33.96** | **336** | *e*P | P | 09 59 00.2 | +4.6 |
| **H01W3** | **Cape Leeuwin H** | **34.12** | **159** | T | T | 10 34 55.2 | |
| | baz=336,slow=76,SNR=207 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.13** | **159** | T | T | 10 34 55.8 | |
| | baz=336,slow=76,SNR=232 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.14** | **159** | T | T | 10 34 56.4 | |
| | baz=336,slow=76,SNR=208 | | | | | | |
| **GKN** | **Gorkha** | **34.41** | **335** | *e*P | P | 09 59 05.1 | +5.7 |
| | 14nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **34.66** | **334** | *e*P | P | 09 59 08.8 | +7.2 |
| | 25nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **37.27** | **119** | P | **P** | **09 59 23.3** | **-0.7** |
| | 1.6nm,0.5s,baz=298,slow=8.8,SNR=26 | | | | | | |
| WRA | | | | LR | LR | 10 16 56.5 | |
| | comp=Z,44nm,20.1s,baz=285,slow=40 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.27** | **119** | *e*P | **P** | **09 59 23.8** | **-0.2** |
| **XAN** | **Xi'an** | **37.92** | **12** | P | **P** | **09 59 28.3** | **-0.9** |
| XAN | | | | pP | **pP** | **09 59 37.3** | **0.0** |
| XAN | | | | PMZ | | | |
| | 18nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **38.44** | **125** | P | **P** | **09 59 33.9** | **0.0** |
| | 1.7nm,0.3s,baz=299,slow=8.0,SNR=19 | | | | | | |
| ASAR | | | | LR | LR | 10 17 15.4 | |
| | comp=Z,76nm,20.6s,baz=307,slow=39 | | | | | | |
| **NDI** | **New Delhi** | **38.59** | **327** | *e*P | P | 09 59 45.5 | +11 |
| **GTA** | **Gaotai** | **42.37** | **360** | *e*P | **P** | **10 00 06.8** | **+0.6** |
| GTA | | | | pP | **pP** | **10 00 12.8** | **-1.5** |
| GTA | | | | sP | **sP** | **10 00 15.8** | **-1.8** |
| GTA | | | | PMZ | | | |
| | 7.0nm,1.0s | | | | | | |
| **CTA** | **Charters Tower** | **47.96** | **114** | P | **P** | **10 00 51.1** | **+0.4** |
| | 2.3nm,0.7s,baz=311,slow=11,SNR=3.6 | | | | | | |
| **TKM2** | **Tokmak 2** | **50.97** | **337** | *e*P | **P** | **10 01 14.7** | **+1.1** |
| | 5.0nm,0.9s | | | | | | |
| **SONM** | **Songino Array** | **51.08** | **5** | P | **P** | **10 01 14.5** | **+0.3** |
| | 4.5nm,0.7s,baz=188,slow=9.1,SNR=31 | | | | | | |
| **EKS2** | **Erkin-Say** | **51.49** | **335** | *e*P | **P** | **10 01 18.6** | **+1.2** |
| | 3.5nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.19** | **345** | P | **P** | **10 01 23.2** | **+0.8** |
| | 6.7nm,0.7s,baz=148,slow=7.9,SNR=42 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.10** | **28** | P | **P** | **10 01 43.5** | **-0.3** |
| | 4.6nm,0.7s

1.1nm,0.9s,baz=214,slow=11,SNR=4.5
LPAZ LR LR 10 34 09.7
comp=Z,51nm,21.8s,baz=170,slow=30
**DZM Mont Dzumac 60.46 274** *e*LR LR 10 33 55.7
172nm,26.1s
**DZM Mont Dzumac 60.46 274** LR LR 10 35 47.1
comp=Z,65nm,21.0s,baz=283,slow=30
**H06N1 SOCORRO T-PHAS 5.14 13** T T 11 39 42.5
SNR=6.9
**H01W1 Cape Leeuwin H 76.96 226** T T 11 43 08.3
baz=150,slow=76,SNR=162
**H01W2 Cape Leeuwin H 76.97 226** T T 11 43 08.6
baz=150,slow=76,SNR=114
**H01W3 Cape Leeuwin H 76.98 226** T T 11 43 09.5
baz=150,slow=76,SNR=136
**ASAR Alice Springs 77.16 247** P **P 10 17 34.3 -0.7**
0.4nm,0.8s,baz=149,slow=6.0,SNR=5.0
**WRA Warramunga Arr 79.99 249** P **P 10 17 51.3 +0.7**
1.2nm,0.8s,baz=147,slow=4.8,SNR=8.0
**BOSA Boshof 92.03 153** LR LR 10 57 27.2
comp=Z,29nm,18.8s,baz=172,slow=34
**H11S2 WAKE ISLAND Hy 93.92 297** T T 12 03 21.8
baz=148,slow=76,SNR=24
**H11S3 WAKE ISLAND Hy 93.94 297** T T 12 03 24.5
baz=148,slow=76,SNR=27
**H11S1 WAKE ISLAND Hy 93.94 297** T T 12 03 23.1
baz=148,slow=76,SNR=22
**H11N3 WAKE ISLAND Hy 94.86 298** T T 12 04 30.6
baz=148,slow=76,SNR=17
**H11N1 WAKE ISLAND Hy 94.86 298** T T 12 04 32.1
baz=148,slow=76,SNR=13
**H11N2 WAKE ISLAND Hy 94.87 298** T T 12 04 32.6
baz=148,slow=76,SNR=18

**IDC 28 10:12:25.3±3.3, 24°.35N×109°.20W, h0km, mb3.6/2, mb1 3.8/4, mb1mx3.6/41, mbtmp3.3/4, ML3.2/2, MS3.2/1, Ms1 3.2/1, ms1mx2.5/27, Error ellipse: s-maj=61.3km s-min=15.7km az=146.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LPIG** | **La Paz** | **1.04** | **257** | Pn | Pn | 10 12 47.2 | +0.1 |
| | 12nm,0.3s,baz=40,slow=2.7,SNR=25 | | | | | | |
| LPIG | | | | Sn | Sn | 10 13 02.6 | +0.2 |
| | 44nm,0.3s,baz=108,slow=20,SNR=25 | | | | | | |
| LPIG | | | | LR | LR | 10 13 15.0 | |
| | comp=Z,247nm,21.2s,baz=148,slow=48 | | | | | | |
| **TXAR** | **Lajitas Array** | **7.01** | **44** | Pn | Pn | 10 14 11.2 | +1.8 |
| | 0.1nm,0.3s,baz=224,slow=14,SNR=2.8 | | | | | | |
| TXAR | | | | Pg | Pb | 10 14 31.6 | +3.4 |
| | 0.2nm,0.3s,baz=229,slow=15,SNR=4.2 | | | | | | |
| TXAR | | | | Sn | Sn | 10 15 22.9 | -7.1 |
| | 0.2nm,0.3s,baz=210,slow=12,SNR=3.3 | | | | | | |
| TXAR | | | | Lg | Lg | 10 16 04.7 | |
| | 0.5nm,0.3s,baz=220,slow=31,SNR=5.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.03** | **333** | Pn | P | 10 16 16.3 | +0.2 |
| | 0.2nm,0.3s,baz=161,slow=9.4,SNR=5.1 | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.67** | **57** | LR | LR | 10 28 31.3 | |
| | comp=Z,50nm,18.1s,baz=22,slow=39 | | | | | | |
| **NEW** | **Newport** | **24.68** | **347** | P | P | 10 17 46.9 | -1.1 |
| | 1.4nm,0.8s,baz=179,slow=11,SNR=3.6 | | | | | | |
| **ILAR** | **Eielson Array** | **47.17** | **339** | P | P | 10 20 59.6 | +0.3 |
| | 0.3nm,0.6s,baz=158,slow=4.7,SNR=4.3 | | | | | | |

**IDC 28 10:26:38.2±3.5, 3°.76S×99°.07E, h0km, mb3.6/6, mb1 3.8/6, mb1mx3.5/43, mbtmp3.7/6, Error ellipse: s-maj=131.8km s-min=20.7km az=58.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **22.08** | **360** | P | P | 10 31 35.2 | +0.2 |
| | 1.9nm,0.4s,baz=190,slow=9.8,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.95** | **118** | P | P | 10 33 57.8 | -0.1 |
| | 0.2nm,0.8s,baz=288,slow=7.9,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **39.01** | **124** | P | P | 10 34 06.8 | -0.1 |
| | 0.5nm,1.0s,baz=312,slow=8.3,SNR=3.0 | | | | | | |
| **SONM** | **Songino Array** | **51.78** | **6** | P | P | 10 35 47.6 | -0.3 |
| | 0.9nm,0.8s,baz=190,slow=9.6,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.48** | **346** | P | P | 10 35 53.0 | 0.0 |
| | 0.9nm,0.7s,baz=183,slow=2.4,SNR=5.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.73** | **350** | P | P | 10 36 37.5 | -0.2 |
| | 0.7nm,0.3s,baz=168,slow=7.6,SNR=4.0 | | | | | | |

**IDC 28 10:35:49.5±6.0, 44°.25N×45°.39E, h0km, Error ellipse: s-maj=214.8km s-min=41.0km az=164.0, Ukraine - Moldova - Southwestern Russia region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBZ** | **Khabaz** | **1.87** | **255** | Pg | Pg | 10 36 26.9 | +1.5 |
| | 0.8nm,0.3s,baz=69,slow=8.6,SNR=16 | | | | | | |
| KBZ | | | | Lg | Lg | 10 36 48.4 | |
| | 0.4nm,0.3s,baz=227,slow=19,SNR=4.5 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **10.56** | **50** | *i* | | 11 36 30.0 | |
| | baz=236,slow=311,SNR=0.9 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **27.25** | **55** | *i* | | 13 19 20.0 | |
| | baz=266,slow=316,SNR=2.7 | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **41.55** | **63** | *i* | | 14 49 20.0 | |
| | baz=289,slow=319,SNR=0.2 | | | | | | |

*MDD **28** 10:41:28.9±1.1, 35°.64N×6°.93W, h34km, mbLg2.3/29, Error ellipse: s-maj=10.9km s-min=4.9km az=16.0, PRXIMO*
*IGIL **28** 10:41:28.1, 35°.77N×6°.96W, h0km, ML2.0*
*INMG **28** 10:41:29.0±1.2, 35°.77N×6°.97W, h6km±6km, ML2.0, Error ellipse: s-maj=4.7km s-min=3.0km az=59.0*
*CSEM **28** 10:41:29.3±0.2, 35°.85N×6°.85W, h20km, ML2.0, Error ellipse: s-maj=4.8km s-min=2.9km az=16.0*

**ISC 28 10:41:26.1±1.5, 35°.75N±0°.07×6°.87W±0°.03, h10km, n91, σ1.930/164, 1C-4D, Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PBDV** | **Barranco-do-Ve** | **1.72** | **331** | ⇓*e*Pn | **Pn** | **10 41 56.7** | **+0.7** |
| PBDV | | | | *e*Sn | **Sn** | **10 42 17.6** | **-0.5** |
| PBDV | | | | A | A | 10 42 19.4 | |
| | 5.5nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **1.72** | **331** | P | **Pn** | **10 41 56.7** | **+0.7** |
| PBDV | | | | S | **Sn** | **10 42 17.6** | **-0.5** |
| | 5.5nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **1.72** | **331** | P | **Pn** | **10 41 56.7** | **+0.7** |
| PBDV | | | | S | **Sn** | **10 42 17.6** | **-0.5** |
| | 5.5nm,0.1s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.79** | **338** | ⇓*e*Pn | **Pn** | **10 41 57.9** | **+0.9** |
| PVAQ | | | | *e*Sn | **Sn** | **10 42 19.4** | **-0.3** |
| PVAQ | | | | A | A | 10 42 19.8 | |
| | 11nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.79** | **338** | P | **Pn** | **10 41 57.9** | **+0.9** |
| PVAQ | | | | S | **Sn** | **10 42 19.4** | **-0.3** |
| | 11nm,0.4s | | | | | | |
| **PVAQ** | **Vaqueiros** | **1.79** | **338** | P | **Pn** | **10 41 57.9** | **+0.9** |
| PVAQ | | | | S | **Sn** | **10 42 19.4** | **-0.3** |
| | 11nm,0.4s | | | | | | |
| **EGRO** | **El Granado** | **1.85** | **345** | P | **Pn** | **10 41 59.0** | **+1.2** |
| | 2.0nm,0.0s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sn** | **10 42 21.7** | **+0.5** |
| | 6.4nm,0.1s,SNR=7.9 | | | | | | |
| **EGRO** | **El Granado** | **1.85** | **345** | P | **Pn** | **10 41 59.0** | **+1.2** |
| | 2.0nm,0.0s,SNR=18 | | | | | | |
| EGRO | | | | S | **Sn** | **10 42 21.7** | **+0.5** |
| | 6.4nm,0.1s,SNR=7.9 | | | | | | |
| **EMIJ** | **Mijas** | **1.88** | **64** | P | **Pn** | **10 41 59.3** | **+1.0** |
| | 1.4nm,1.2s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | **Sn** | **10 42 21.4** | **-0.8** |
| | 22nm,2.9s,SNR=7.9 | | | | | | |
| **EMIJ** | **Mijas** | **1.88** | **64** | P | **Pn** | **10 41 59.3** | **+1.0** |
| | 1.4nm,1.2s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | **Sn** | **10 42 21.4** | **-0.8** |
| | 22nm,2.9s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.02** | **4** | ⇓P | **Pn** | **10 42 01.5** | **+1.3** |
| | 1.4nm,0.1s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sn** | **10 42 24.9** | **-0.6** |
| | 2.9nm,0.1s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.02** | **4** | P | **Pn** | **10 42 01.5** | **+1.3** |
| | 1.4nm,0.1s,SNR=18 | | | | | | |
| EMIN | | | | S | **Sn** | **10 42 24.9** | **-0.6** |
| | 2.9nm,0.1s,SNR=7.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **2.10** | **312** | *e*Sn | **Sn** | **10 42 26.8** | **-0.5** |
| PFVI | | | | A | A | 10 42 37.0 | |
| | 6.5nm,0.5s | | | | | | |
| **PFVI** | **Vila Bisbo** | **2.10** | **312** | P | **Pn** | **10 42 01.0** | **-0.2** |
| | 16nm,3.0s,SNR=7.9 | | | | | | |
| PFVI | | | | S | **Sn** | **10 42 25.9** | **-1.4** |
| | 78nm,4.7s,SNR=7.9 | | | | | | |
| **PFVI** | **Vila Bisbo** | **2.10** | **312** | P | **Pn** | **10 42 01.0** | **-0.2** |
| | 16nm,3.0s,SNR=7.9 | | | | | | |
| PFVI | | | | S | **Sn** | **10 42 25.9** | **-1.4** |
| | 78nm,4.7s,SNR=7.9 | | | | | | |
| PFVI | | | | *e*Sn | **Sn** | **10 42 26.8** | **-0.5** |
| | 6.5nm,0.5s | | | | | | |
| **PCVE** | **Castro Verde** | **2.10** | **334** | *e*Pn | **Pn** | **10 42 02.2** | **+0.9** |
| PCVE | | | | *e*Sn | **Sn** | **10 42 27.0** | **-0.5** |
| PCVE | | | | A | A | 10 42 29.6 | |
| | 4.9nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **2.10** | **334** | P | **Pn** | **10 42 02.2** | **+0.9** |
| PCVE | | | | S | **Sn** | **10 42 27.0** | **-0.5** |
| | 4.9nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **2.10** | **334** | P | **Pn** | **10 42 02.2** | **+0.9** |
| PCVE | | | | S | **Sn** | **10 42 27.0** | **-0.5** |
| | 4.9nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **2.11** | **318** | *e*P | **Pn** | **10 42 01.8** | **+0.3** |
| MORF | | | | *e*S | **Sn** | **10 42 26.6** | **-1.3** |
| MORF | | | | AML | AML | 10 42 29.8 | |
| | comp=N,11nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **2.11** | **318** | *e*Pn | **Pn** | **10 42 01.8** | **+0.3** |
| MORF | | | | *e*Sn | **Sn** | **10 42 26.8** | **-1.1** |
| MORF | | | | A | A | 10 42 32.0 | |
| | comp=N,13nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **2.11** | **318** | P | **Pn** | **10 42 01.8** | **+0.3** |
| MORF | | | | S | **Sn** | **10 42 26.8** | **-1.1** |
| | comp=N,13nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **2.11** | **318** | P | **Pn** | **10 42 01.8** | **+0.3** |
| MORF | | | | S | **Sn** | **10 42 26.8** | **-1.1** |
| | comp=N,13nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.33** | **321** | *e*Pn | **Pn** | **10 42 04.9** | **+0.5** |
| PTEO | | | | *e*Sn | **Sn** | **10 42 32.3** | **-0.8** |
| PTEO | | | | A | A | 10 42 40.2 | |
| | comp=N,3.9nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.33** | **321** | P | **Pn** | **10 42 04.9** | **+0.5** |
| PTEO | | | | S | **Sn** | **10 42 32.3** | **-0.8** |
| | comp=N,1.9nm,0.3s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.33** | **321** | P | **Pn** | **10 42 04.9** | **+0.5** |
| PTEO | | | | S | **Sn** | **10 42 32.3** | **-0.8** |
| | comp=N,1.9nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **2.35** | **333** | *e*P | **Pn** | **10 42 05.6** | **+0.8** |
| MESJ | | | | *e*S | **Sn** | **10 42 32.6** | **-1.0** |
| MESJ | | | | AML | AML | 10 42 36.3 | |
| | comp=N,7.5nm,0.3s | | | | | | |
| **MESJ** | **Messejana** | **2.35** | **333** | ⇓*e*Pn | **Pn** | **10 42 05.5** | **+0.8** |
| MESJ | | | | *e*Sn | **Sn** | **10 42 32.6** | **-1.0** |
| MESJ | | | | A | A | 10 42 37.9 | |
| | comp=N,4.7nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.35** | **333** | P | **Pn** | **10 42 05.5** | **+0.8** |
| MESJ | | | | S | **Sn** | **10 42 32.6** | **-1.0** |
| | comp=N,4.7nm,0.2s | | | | | | |
| **MESJ** | **Messejana** | **2.35** | **333** | P | **Pn** | **10 42 05.5** | **+0.8** |
| MESJ | | | | S | **Sn** | **10 42 32.6** | **-1.0** |
| | comp=N,4.7nm,0.2s | | | | | | |
| **PBEJ** | **Beja** | **2.41** | **341** | *e*Pn | **Pn** | **10 42 06.5** | **+1.0** |
| PBEJ | | | | *e*Sn | **Sn** | **10 42 35.1** | **0.0** |
| PBEJ | | | | A | A | 10 42 36.0 | |
| | comp=N,5.4nm,0.1s | | | | | | |
| **PBEJ** | **Beja** | **2.41** | **341** | P | **Pn** | **10 42 06.5** | **+1.0** |
| PBEJ | | | | S | **Sn** | **10 42 35.1** | **0.0** |
| | comp=N,2.7nm,0.1s | | | | | | |
| **PBEJ** | **Beja** | **2.41** | **341** | P | **Pn** | **10 42 06.5** | **+1.0** |
| PBEJ | | | | S | **Sn** | **10 42 35.1** | **0.0** |
| | comp=N,2.7nm,0.1s | | | | | | |
| **PBAR** | **Barrancos** | **2.42** | **357** | *e*Pn | **Pn** | **10 42 07.2** | **+1.5** |
| PBAR | | | | *e*Sn | **Sn** | **10 42 34.8** | **-0.7** |
| PBAR | | | | A | A | 10 42 40.9 | |
| | comp=N,8.5nm,0.1s | | | | | | |
| **PBAR** | **Barrancos** | **2.42** | **357** | P | **Pn** | **10 42 07.2** | **+1.5** |
| PBAR | | | | S | **Sn** | **10 42 34.8** | **-0.7** |
| | comp=N,8.5nm,0.1s | | | | | | |
| **PBAR** | **Barrancos** | **2.42** | **357** | P | **Pn** | **10 42 07.2** | **+1.5** |
| PBAR | | | | S | **Sn** | **10 42 34.8** | **-0.7** |
| | comp=N,8.5nm,0.1s | | | | | | |
| **ECAB** | **El Cabril** | **2.60** | **26** | P | **Pn** | **10 42 09.4** | **+1.3** |
| | comp=N,0.5nm,0.0s,SNR=7.9 | | | | | | |
| ECAB | | | | S | **Sn** | **10 42 38.9** | **-0.9** |
| | comp=N,3.6nm,0.1s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **2.60** | **26** | P | **Pn** | **10 42 09.4** | **+1.3** |
| | comp=N,0.5nm,0.0s,SNR=7.9 | | | | | | |
| ECAB | | | | S | **Sn** | **10 42 38.9** | **-0.9** |
| | comp=N,3.6nm,0.1s,SNR=7.9 | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.71** | **331** | *e*Pn | **Pn** | **10 42 10.2** | **+0.6** |
| PNCL | | | | *e*Sn | **Sn** | **10 42 41.5** | **-0.9** |
| PNCL | | | | A | A | 10 42 43.0 | |
| | comp=N,2.8nm,0.3s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.71** | **331** | *e*Pn | **Pn** | **10 42 10.2** | **+0.6** |
| PNCL | | | | *e*Sn | **Sn** | **10 42 41.5** | **-0.9** |
| | comp=N,2.8nm,0.3s | | | | | | |
| **EGUA** | **Guajares** | **2.88** | **67** | P | **Pn** | **10 42 13.4** | **+1.4** |
| | comp=N,9.7nm,1.9s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sn** | **10 42 46.2** | **-0.6** |
| | comp=N,31nm,2.4s,SNR=7.9 | | | | | | |
| **EGUA** | **Guajares** | **2.88** | **67** | P | **Pn** | **10 42 13.4** | **+1.4** |
| | comp=N,9.7nm,1.9s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sn** | **10 42 46.2** | **-0.6** |
| | comp=N,31nm,2.4s,SNR=7.9 | | | | | | |
| **EVO** | **Evora** | **2.92** | **342** | *e*Pn | **Pn** | **10 42 13.9** | **+1.3** |
| EVO | | | | *e*Sn | **Sn** | **10 42 46.9** | **-0.9** |
| EVO | | | | A | A | 10 42 47.9 | |
| | comp=N,10nm,0.1s | | | | | | |
| **EVO** | **Evora** | **2.92** | **342** | P | **Pn** | **10 42 13.9** | **+1.3** |
| EVO | | | | S | **Sn** | **10 42 46.9** | **-0.9** |
| | comp=N,10nm,0.1s | | | | | | |
| **EVO** | **Evora** | **2.92** | **342** | P | **Pn** | **10 42 13.9** | **+1.3** |
| EVO | | | | S | **Sn** | **10 42 46.9** | **-0.9** |
| | comp=N,10nm,0.1s | | | | | | |
| **SELV** | **Sierra Elvira** | **2.94** | **59** | P | **Pn** | **10 42 13.4** | **+0.6** |
| | comp=N,2.5nm,0.3s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **2.94** | **59** | P | **Pn** | **10 42 13.4** | **+0.6** |
| | comp=N,2.5nm,0.3s,SNR=7.9 | | | | | | |
| **EBAD** | **Badajoz** | **3.00** | **358** | ⇑P | **Pn** | **10 42 15.1** | **+1.4** |
| | comp=N,2.0nm,0.1s,SNR=18 | | | | | | |
| EBAD | | | | S | **Sn** | **10 42 48.6** | **-1.1** |
| | comp=N,1.6nm,0.1s,SNR=7.9 | | | | | | |
| **EBAD** | **Badajoz** | **3.00** | **358** | P | **Pn** | **10 42 15.1** | **+1.4** |
| | comp=N,2.0nm,0.1s,SNR=18 | | | | | | |
| EBAD | | | | S | **Sn** | **10 42 48.6** | **-1.1** |
| | comp=N,1.6nm,0.1s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **3.03** | **37** | P | **Pn** | **10 42 15.9** | **+1.8** |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **10 42 49.4** | **-1.1** |
| | comp=N,5.2nm,0.1s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **3.03** | **37** | P | **Pn** | **10 42 15.9** | **+1.8** |
| | comp=N,0.1nm,0.1s,SNR=7.9 | | | | | | |
| EADA | | | | S | **Sn** | **10 42 49.4** | **-1.1** |
| | comp=N,5.2nm,0.1s,SNR=7.9 | | | | | | |
| **ECOG** | **Cogollos-Vega** | **3.07** | **59** | S | **Sn** | **10 42 51.0** | **-0.6** |
| | comp=N,12nm,1.1s,SNR=7.9 | | | | | | |
| **ECOG** | **Cogollos-Vega** | **3.07** | **59** | S | **Sn** | **10 42 51.0** | **-0.6** |
| | comp=N,12nm,1.1s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **3.12** | **61** | P | **Pn** | **10 42 16.8** | **+1.4** |
| | comp=N,0.8nm,2.9s,SNR=7.9 | | | | | | |
| EQUE | | | | S | **Sn** | **10 42 51.6** | **-1.3** |
| | comp=N,23nm,6.5s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **3.12** | **61** | P | **Pn** | **10 42 16.8** | **+1.4** |
| | comp=N,0.8nm,2.9s,SNR=7.9 | | | | | | |
| EQUE | | | | S | **Sn** | **10 42 51.6** | **-1.3** |
| | comp=N,23nm,6.5s,SNR=7.9 | | | | | | |
| **EBER** | **Berja** | **3.41** | **69** | P | **Pn** | **10 42 20.8** | **+1.3** |
| | comp=N,3.2nm,3.1s,SNR=7.9 | | | | | | |
| EBER | | | | S | **Sn** | **10 42 58.8** | **-1.3** |
| | comp=N,12nm,1.8s,SNR=7.9 | | | | | | |
| **EBER** | **Berja** | **3.41** | **69** | P | **Pn** | **10 42 20.8** | **+1.3** |
| | comp=N,3.2nm,3.1s,SNR=7.9 | | | | | | |
| EBER | | | | S | **Sn** | **10 42 58.8** | **-1.3** |
| | comp=N,12nm,1.8s,SNR=7.9 | | | | | | |
| **PMTG** | **Montargil** | **3.48** | **342** | *e*Pn | **Pn** | **10 42 21.4** | **+1.1** |
| PMTG | | | | *e*Sn | **Sn** | **10 43 00.3** | **-1.3** |
| PMTG | | | | A | A | 10 43 04.3 | |
| | comp=N,1.9nm,0.5s | | | | | | |
| **PMTG** | **Montargil** | **3.48** | **342** | *e*Pn | **Pn** | **10 42 21.4** | **+1.1** |
| PMTG | | | | *e*Sn | **Sn** | **10 43 00.3** | **-1.3** |
| | comp=N,1.9nm,0.5s | | | | | | |
| **EQES** | **Quesada** | **3.67** | **55** | P | **Pn** | **10 42 24.2** | **+1.2** |
| | comp=N,5.1nm,1.7s,SNR=7.9 | | | | | | |
| EQES | | | | S | **Sn** | **10 43 04.4** | **-2.1** |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **3.67** | **55** | P | **Pn** | **10 42 24.2** | **+1.2** |
| | comp=N,5.1nm,1.7s,SNR=7.9 | | | | | | |
| EQES | | | | S | **Sn** | **10 43 04.4** | **-2.1** |
| | comp=N,2.0nm,0.1s,SNR=7.9 | | | | | | |
| **PMRV** | **Marv??o** | **3.69** | **354** | *e*Pn | **Pn** | **10 42 24.6** | **+1.4** |
| PMRV | | | | *e*Sn | **Sn** | **10 43 05.9** | **-0.9** |
| | comp=N,4.9nm,0.2s | | | | | | |
| **PMRV** | **Marv??o** | **3.69** | **354** | P | **Pn** | **10 42 24.6** | **+1.4** |
| PMRV | | | | A | A | 10 43 07.2 | |
| | comp=N,4.9nm,0.2s | | | | | | |
| **PMRV** | **Marv??o** | **3.69** | **354** | P | **Pn** | **10 42 24.6** | **+1.4** |
| PMRV | | | | S | **Sn** | **10 43 05.9** | **-0.9** |
| | comp=N,4.9nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **3.73** | **330** | *e*Pn | **Pn** | **10 42 24.3** | **+0.6** |
| **PMAFR** | **Mafra** | **3.73** | **330** | P | **Pn** | **10 42 24.6** | **+0.9** |
| | comp=N,53nm,3.0s,SNR=7.9 | | | | | | |
| PMAFR | | | | S | **Sn** | **10 43 05.4** | **-2.3** |
| | comp=N,12nm,4.8s,SNR=7.9 | | | | | | |
| **PMAFR** | **Mafra** | **3.73** | **330** | *e*Pn | **Pn** | **10 42 24.3** | **+0.6** |
| **PMAFR** | **Mafra** | **3.73** | **330** | P | **Pn** | **10 42 24.6** | **+0.9** |
| | comp=N,53nm,3.0s,SNR=7.9 | | | | | | |
| PMAFR | | | | S | **Sn** | **10 43 05.4** | **-2.3** |
| | comp=N,12nm,4.8s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **4.01** | **58** | P | **Pn** | **10 42 28.8** | **+1.2** |
| | comp=N,47nm,3.0s,SNR=7.9 | | | | | | |
| EHUE | | | | S | **Sn** | **10 43 12.7** | **-1.9** |
| | comp=N,11nm,4.1s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **4.01** | **58** | P | **Pn** | **10 42 28.8** | **+1.2** |
| | comp=N,47nm,3.0s,SNR=7.9 | | | | | | |
| EHUE | | | | S | **Sn** | **10 43 12.7** | **-1.9** |
| | comp=N,11nm,4.1s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **4.20** | **54** | P | **Pn** | **10 42 32.1** | **+1.8** |
| | comp=N,1.5nm,0.1s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **10 43 16.3** | **-3.1** |
| | comp=N,4.9nm,0.2s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **4.20** | **54** | P | **Pn** | **10 42 32.1** | **+1.8** |
| | comp=N,1.5nm,0.1s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **10 43 16.3** | **-3.1** |
| | comp=N,4.9nm,0.2s,SNR=7.9 | | | | | | |
| **EPLA** | **Plasencia** | **4.35** | **8** | P | **Pn** | **10 42 33.8** | **+1.5** |
| | comp=N,1.1nm,0.1s,SNR=7.9 | | | | | | |
| EPLA | | | | S | **Sn** | **10 43 21.4** | **-1.7** |
| | comp=N,4.4nm,0.3s,SNR=7.9 | | | | | | |
| **EPLA** | **Plasencia** | **4.35** | **8** | P | **Pn** | **10 42 33.8** | **+1.5** |
| | comp=N,1.1nm,0.1s,SNR=7.9 | | | | | | |
| EPLA | | | | S | **Sn** | **10 43 21.4** | **-1.7** |
| | comp=N,4.4nm,0.3s,SNR=7.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **4.55** | **30** | P | **Pn** | **10 42 36.6** | **+1.6** |
| | SNR=7.9 | | | | | | |
| ESDC | | | | S | **Sn** | **10 43 25.6** | **-2.3** |
| | SNR=7.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **4.55** | **30** | P | **Pn** | **10 42 36.6** | **+1.6** |
| | SNR=7.9 | | | | | | |
| ESDC | | | | S | **Sn** | **10 43 25.6** | **-2.3** |
| | SNR=7.9 | | | | | | |
| **OUK** | **Oukaimeden** | **4.61** | **191** | Pg | **Pn** | **10 42 39.0** | **+3.0** |
| **OUK** | **Oukaimeden** | **4.61** | **191** | Pg | **Pn** | **10 42 39.0** | **+3.0** |
| **ETOB** | **Tobarra** | **5.14** | **54** | P | **Pn** | **10 42 43.6** | **+0.5** |
| | comp=N,1.3nm,0.1s,SNR=7.9 | | | | | | |
| ETOB | | | | S | Sn | 10 43 39.2 | -3.3 |
| | comp=N,1.2nm,0.1s,SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **5.14** | **54** | P | **Pn** | **10 42 43.6** | **+0.5** |
| | comp=N,1.3nm,0.1s,SNR=7.9 | | | | | | |
| ETOB | | | | S | Sn | 10 43 39.2 | -3.3 |
| | comp=N,1.2nm,0.1s,SNR=7.9 | | | | | | |
| **GUD** | **Guadarrama** | **5.33** | **23** | P | **Pn** | **10 42 47.6** | **+1.7** |
| | comp=N,1.0nm,2.9s,SNR=7.9 | | | | | | |
| GUD | | | | S | **Sn** | **10 43 44.7** | **-2.7** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| **GUD** | **Guadarrama** | **5.33** | **23** | P | **Pn** | **10 42 47.6** | **+1.7** |
| | comp=N,1.0nm,2.9s,SNR=7.9 | | | | | | |
| GUD | | | | S | **Sn** | **10 43 44.7** | **-2.7** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **5.41** | **359** | P | **Pn** | **10 42 48.7** | **+1.9** |
| | comp=N,1.8nm,0.1s,SNR=7.9 | | | | | | |
| MVO | | | | S | **Sn** | **10 43 46.9** | **-2.2** |
| | comp=N,2.7nm,0.2s,SNR=7.9 | | | | | | |
| **MVO** | **Moncorvo** | **5.41** | **359** | P | **Pn** | **10 42 48.7** | **+1.9** |
| | comp=N,1.8nm,0.1s,SNR=7.9 | | | | | | |
| MVO | | | | S | **Sn** | **10 43 46.9** | **-2.2** |
| | comp=N,2.7nm,0.2s,SNR=7.9 | | | | | | |
| **ELOB** | **Lobios** | **6.18** | **352** | P | **Pn** | **10 42 58.8** | **+1.4** |
| | comp=N,2.1nm,2.3s,SNR=7.9 | | | | | | |
| ELOB | | | | S | Sn | 10 44 04.6 | -3.6 |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| **ELOB** | **Lobios** | **6.18** | **352** | P | **Pn** | **10 42 58.8** | **+1.4** |
| | comp=N,2.1nm,2.3s,SNR=7.9 | | | | | | |
| ELOB | | | | S | Sn | 10 44 04.6 | -3.6 |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| **ECAL** | **Calabor** | **6.18** | **1** | P | **Pn** | **10 42 59.3** | **+1.8** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| ECAL | | | | S | Sn | 10 44 04.4 | -3.9 |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | |
| **ECAL** | **Calabor** | **6.18** | **1** | P | **Pn** | **10 42 59.3** | **+1.8** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| ECAL | | | | S | Sn | 10 44 04.4 | -3.9 |
| | comp=N,0.9nm,0.2s,SNR=7.9 | | | | | | |
| **ETOR** | **Torete** | **6.32** | **35** | P | **Pn** | **10 43 01.0** | **+1.6** |
| | comp=N,0.9nm,0.6s,SNR=7.9 | | | | | | |
| ETOR | | | | S | Sn | 10 44 08.3 | -3.4 |
| | comp=N,44nm,3.6s,SNR=7.9 | | | | | | |
| **ETOR** | **Torete** | **6.32** | **35** | P | **Pn** | **10 43 01.0** | **+1.6** |
| | comp=N,0.9nm,0.6s,SNR=7.9 | | | | | | |
| ETOR | | | | S | Sn | 10 44 08.3 | -3.4 |
| | comp=N,44nm,3.6s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **7.11** | **353** | P | **Pn** | **10 43 11.3** | **+1.2** |
| | comp=N,2.3nm,2.4s,SNR=7.9 | | | | | | |
| **EAGO** | **Agolada(Pontev** | **7.11** | **353** | P | **Pn** | **10 43 11.3** | **+1.2** |
| | comp=N,2.3nm,2.4s,SNR=7.9 | | | | | | |

**IDC 28 11:08:06.7±3.5, 0°.54N×97°.87E, h0km, mb3.3/3, mb1 3.8/4, mb1mx3.5/33, mbtmp3.5/4, Error ellipse: s-maj=141.2km s-min=25.1km az=59.0, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **17.83** | **3** | P | Pn | 11 12 16.4 | 0.0 |
| | baz=192,slow=11,SNR=5.1 | |

*0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-1.56±.20; $M_{\theta\theta}$-4.08±.18; $M_{\phi\phi}$5.63±.19; $M_{r\theta}$1.14±.40; $M_{r\phi}$2.40±.13; $M_{\theta\phi}$-0.12±.32; Best double couple: M≥5.60400×$10^{16}$ NP1:ϕ=237.00000°,δ78.00000°,λ-14.00000°. NP2: ϕ=330.00000°,δ76.00000°,λ-168.00000°. Principal axes: T 6.1930, Plg1.0000°, Azm283.0000°; N -1.1880, Plg72.0000°, Azm16.0000°; P -5.0160, Plg18.0000°, Azm193.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*BJI **28** 11:37:02.2,24.60S×112.10W,h15km,mB5.5/9,Ms5.7/8, Ms7 5.0/9*

**ISC 28 11:37:00.1±0.4,24.63S±0.10×112.02W±0.07,h10km, n141,σ1§54/136,mb4.9/32,MS4.3/12,Easter Island region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RPN** | **Rapa Nui** | **3.46** | **136** | Pn | | **Pn** | **11 37 53.0** | **-1.1** |
| | 7.4nm,0.3s,baz=320,slow=19,SNR=8.4 | | | | | | | |
| **RKT** | **Rikitea** | **21.05** | **269** | *e*S | | **S** | **11 45 36.5** | **-2.3** |
| | 1µm,28.0s | | | | | | | |
| RKT | | | | *e*LR | | LR | 11 46 45.9 | |
| | 4µm,26.8s,baz=104 | | | | | | | |
| **RKT** | **Rikitea** | **21.05** | **269** | *e*T | | T | 12 03 11.7 | |
| | 3.6nm,0.2s | | | | | | | |
| **TBI** | **Tubuai** | **34.17** | **264** | *e*S | | **S** | **11 49 14.1** | **+1.9** |
| | 115nm,26.0s | | | | | | | |
| TBI | | | | *e*LQ | | LQ | 11 51 25.8 | |
| | 683nm,28.8s | | | | | | | |
| TBI | | | | *e*LR | | LR | 11 52 47.2 | |
| | 1µm,28.5s,baz=93 | | | | | | | |
| **PPT2** | **Papeete2** | **35.65** | **274** | *e*S | | **S** | **11 49 37.6** | **+2.3** |
| | 189nm,27.5s | | | | | | | |
| PPT2 | | | | *e*LQ | | LQ | 11 52 00.8 | |
| | 452nm,25.5s | | | | | | | |
| PPT2 | | | | *e*LR | | LR | 11 53 22.2 | |
| | 1µm,30.2s,baz=104 | | | | | | | |
| **PPT** | **Papeete** | **35.66** | **274** | LR | | LR | 11 53 13.5 | |
| | comp=Z,49nm,20.5s,baz=174,slow=28 | | | | | | | |
| **LVC** | **Limon Verde** | **39.43** | **96** | P | | **P** | **11 44 32.8** | **+1.9** |
| | 34nm,1.0s,baz=251,slow=9.9,SNR=6.0 | | | | | | | |
| **LVC** | **Limon Verde** | **39.43** | **96** | *e*P | | **P** | **11 44 33.6** | **+2.7** |
| | 30nm,1.4s | | | | | | | |
| **LPAZ** | **La Paz** | **41.80** | **87** | P | | **P** | **11 44 52.5** | **+1.5** |
| | 7.9nm,1.0s,baz=254,slow=7.8,SNR=23 | | | | | | | |
| LPAZ | | | | LR | | LR | 11 58 36.2 | |
| | comp=Z,339nm,19.6s,baz=254,slow=31 | | | | | | | |
| **LPAZ** | **La Paz** | **41.80** | **87** | *e*P | | **P** | **11 44 52.4** | **+1.5** |
| | 25nm,1.3s | | | | | | | |
| **JTS** | **JuntasAbangare** | **43.62** | **40** | P | | **P** | **11 45 04.8** | **-0.1** |
| | 11nm,0.9s,baz=130,slow=19,SNR=3.6 | | | | | | | |
| **CMIG** | **Matias Romero** | **44.71** | **24** | P | | **P** | **11 45 13.1** | **-0.5** |
| | 1.0nm,0.3s,baz=308,slow=7.0,SNR=3.8 | | | | | | | |
| **ROSC** | **El Rosal** | **46.94** | **56** | LR | | LR | 12 01 46.8 | |
| | comp=Z,184nm,19.4s,baz=207,slow=32 | | | | | | | |
| **SAML** | **Samuel** | **49.01** | **80** | *e*P | | **P** | **11 45 47.4** | **-0.1** |
| | 35nm,1.6s | | | | | | | |
| **CPUP** | **Villa Florida** | **49.08** | **104** | P | | **P** | **11 45 48.9** | **+1.1** |
| | 3.7nm,0.8s,baz=259,slow=6.3,SNR=7.5 | | | | | | | |
| CPUP | | | | LR | | LR | 12 02 49.7 | |
| | comp=Z,356nm,21.0s,baz=255,slow=31 | | | | | | | |
| **CPUP** | **Villa Florida** | **49.08** | **104** | *e*P | | **P** | **11 45 49.0** | **+1.1** |
| **034A** | **Hebbronville** | **52.98** | **15** | P | | **P** | **11 46 18.5** | **+1.5** |
| | baz=53 | | | | | | | |
| **TXAR** | **Lajitas Array** | **54.26** | **9** | P | | **P** | **11 46 27.2** | **+0.7** |
| | 0.6nm,0.7s,baz=170,slow=8.9,SNR=3.8 | | | | | | | |
| TXAR | | | | LR | | LR | 12 05 25.3 | |
| | comp=Z,100nm,18.5s,baz=0.0,slow=31 | | | | | | | |
| **529A** | **Stev Forest Ra** | **55.25** | **10** | P | | **P** | **11 46 32.8** | **-0.8** |
| | baz=56 | | | | | | | |
| **530A** | **J-C Ranch, Com** | **55.43** | **11** | P | | **P** | **11 46 33.7** | **-1.2** |
| | baz=56 | | | | | | | |
| **531A** | **Rocksprings** | **55.59** | **12** | P | | **P** | **11 46 34.7** | **-1.3** |
| | baz=56 | | | | | | | |
| **532A** | **Rocksprings** | **55.68** | **13** | P | | **P** | **11 46 35.7** | **-1.0** |
| | baz=56 | | | | | | | |
| **JCT** | **Junction City** | **56.04** | **13** | P | | **P** | **11 46 38.0** | **-1.2** |
| | baz=56 | | | | | | | |
| **JCT** | **Junction City** | **56.04** | **13** | *e*P | | **P** | **11 46 38.1** | **-1.2** |
| | 62nm,1.9s | | | | | | | |
| **431A** | **Sonora** | **56.08** | **12** | P | | **P** | **11 46 38.9** | **-0.6** |
| | baz=56 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **56.37** | **7** | P | | **P** | **11 46 40.0** | **-1.6** |
| | baz=57 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **56.37** | **7** | *e*P | | **P** | **11 46 40.1** | **-1.5** |
| | 14nm,1.5s | | | | | | | |
| **TUC** | **Tucson** | **56.64** | **1** | *e*P | | **P** | **11 46 43.3** | **-0.2** |
| | 16nm,1.8s | | | | | | | |
| **434A** | **Burnet** | **56.69** | **14** | P | | **P** | **11 46 42.1** | **-1.7** |
| | baz=57 | | | | | | | |
| **331A** | **San Angelo** | **56.72** | **12** | P | | **P** | **11 46 42.8** | **-1.3** |
| | baz=57 | | | | | | | |
| **332A** | **Millersview** | **56.93** | **13** | P | | **P** | **11 46 44.4** | **-1.1** |
| | baz=57 | | | | | | | |
| **333A** | **Richland Sprin** | **57.02** | **13** | P | | **P** | **11 46 44.0** | **-2.3** |
| | baz=58 | | | | | | | |
| **334A** | **Lometa** | **57.19** | **14** | P | | **P** | **11 46 46.0** | **-1.4** |
| | baz=58 | | | | | | | |
| **128A** | **Castleberry Fa** | **57.66** | **10** | P | | **P** | **11 46 48.2** | **-2.6** |
| | baz=58 | | | | | | | |
| **234A** | **Clairette** | **57.86** | **14** | P | | **P** | **11 46 51.3** | **-0.8** |
| | baz=58 | | | | | | | |
| **WHTX** | **Lake Whitney** | **58.00** | **15** | P | | **P** | **11 46 52.2** | **-0.8** |
| | baz=58 | | | | | | | |
| **133A** | **Hamilton Ranch** | **58.28** | **13** | P | | **P** | **11 46 53.8** | **-1.2** |
| | baz=59 | | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **58.40** | **10** | P | | **P** | **11 46 54.6** | **-1.4** |
| | baz=59 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **58.43** | **356** | P | | **P** | **11 46 55.7** | **-0.6** |
| | baz=59 | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **58.52** | **11** | P | | **P** | **11 46 54.8** | **-2.0** |
| | baz=59 | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **58.73** | **12** | P | | **P** | **11 46 56.7** | **-1.5** |
| | baz=59 | | | | | | | |
| **BBRC** | **Big Bear Solar** | **58.76** | **355** | P | | **P** | **11 46 56.2** | **-2.4** |
| | baz=59 | | | | | | | |
| **Z32A** | **Haskell** | **58.84** | **12** | P | | **P** | **11 46 57.9** | **-1.1** |
| | baz=59 | | | | | | | |
| **LAZ** | **Ladron** | **58.89** | **5** | *e*P | | **P** | **11 47 00.3** | **+0.8** |
| **Y28A** | **McKinney Farm,** | **58.96** | **9** | P | | **P** | **11 46 58.7** | **-1.2** |
| | baz=59 | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **58.97** | **13** | P | | **P** | **11 46 58.5** | **-1.3** |
| | baz=59 | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **59.34** | **11** | P | | **P** | **11 47 01.3** | **-1.1** |
| | baz=60 | | | | | | | |
| **GSC** | **Goldstone** | **59.78** | **355** | *e*P | | **P** | **11 47 05.5** | **0.0** |
| | 102nm,2.8s | | | | | | | |
| **X32A** | **Elmer** | **59.96** | **12** | P | | **P** | **11 47 05.9** | **-0.7** |
| | baz=60 | | | | | | | |
| **LRMC** | **Laurel Mountai** | **60.02** | **355** | P | | **P** | **11 47 06.5** | **-0.7** |
| | baz=60 | | | | | | | |
| **X31A** | **McDonald Ranch** | **60.04** | **11** | P | | **P** | **11 47 06.7** | **-0.5** |
| | baz=60 | | | | | | | |
| **BDFB** | **Brasilia** | **60.30** | **95** | LR | | LR | 12 11 14.4 | |
| | comp=Z,339nm,18.9s,baz=202,slow=34 | | | | | | | |
| **SHOC** | **Shoshone** | **60.34** | **356** | P | | **P** | **11 47 08.8** | **-0.4** |
| | baz=61 | | | | | | | |
| **MPMC** | **Manual Prospec** | **60.59** | **355** | P | | **P** | **11 47 10.3** | **-0.9** |
| | baz=61 | | | | | | | |
| **DAC** | **Darwin (Calif)** | **60.81** | **355** | *e*P | | **P** | **11 47 13.3** | **+0.6** |
| | 53nm,2.6s | | | | | | | |
| **SHPR** | **Sheep Range** | **60.88** | **357** | *e*P | | **P** | **11 47 13.0** | **-0.1** |
| **FURC** | **Furnace Creek,** | **60.95** | **356** | P | | **P** | **11 47 13.0** | **-0.3** |
| | baz=61 | | | | | | | |
| **U27A** | **Thompson Grove** | **61.34** | **8** | P | | **P** | **11 47 15.8** | **-0.4** |
| | baz=62 | | | | | | | |
| **TPNV** | **Topopah Spring** | **61.38** | **356** | *e*P | | P | 11 47 19.1 | +2.6 |
| | 13nm,1.5s | | | | | | | |
| **MIAR** | **Mount Ida** | **61.40** | **17** | P | | **P** | **11 47 15.9** | **-0.6** |
| | baz=62 | | | | | | | |
| **MVCO** | **Mesa Verde** | **61.60** | **3** | P | | P | 11 47 14.7 | -3.4 |
| | baz=62 | | | | | | | |
| **MVCO** | **Mesa Verde** | **61.60** | **3** | *e*P | | **P** | **11 47 17.1** | **-1.0** |
| | 22nm,1.5s | | | | | | | |
| **CCUT** | **Cedar City** | **61.87** | **359** | *e*P | | **P** | **11 47 20.1** | **+0.3** |
| | 40nm,2.1s | | | | | | | |
| **T26A** | **Comanche Natio** | **61.99** | **8** | P | | **P** | **11 47 18.2** | **-2.5** |
| | baz=62 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **62.35** | **6** | P | | **P** | **11 47 21.9** | **-1.3** |
| | baz=63 | | | | | | | |
| **SDCO** | **Great Sand Dun** | **62.35** | **6** | *e*P | | **P** | **11 47 22.5** | **-0.7** |
| | 16nm,1.8s | | | | | | | |
| **S26A** | **Kim** | **62.44** | **8** | P | | **P** | **11 47 22.5** | **-1.1** |
| | baz=63 | | | | | | | |
| **T31A** | **Randall Ranch,** | **62.49** | **11** | P | | **P** | **11 47 23.2** | **-0.6** |
| | baz=63 | | | | | | | |
| **R11A** | **Troy Canyon, C** | **62.74** | **357** | P | | **P** | **11 47 24.8** | **-0.8** |
| | baz=63 | | | | | | | |
| **R11A** | **Troy Canyon, C** | **62.74** | **357** | *e*P | | **P** | **11 47 25.4** | **-0.2** |
| | 8.8nm,1.6s | | | | | | | |
| **NV01** | **Mina Array Sit** | **63.01** | **354** | *e*P | | **P** | **11 47 26.7** | **-0.7** |
| **NVAR** | **Mina Array Bea** | **63.01** | **354** | P | | **P** | **11 47 27.1** | **-0.4** |
| | 1.8nm,0.7s,baz=183,slow=8.2,SNR=10 | | | | | | | |
| **R27A** | **Eads** | **63.18** | **8** | P | | **P** | **11 47 26.2** | **-2.3** |
| | baz=64 | | | | | | | |
| **R28A** | **Tribune** | **63.37** | **9** | P | | **P** | **11 47 27.4** | **-2.3** |
| | baz=64 | | | | | | | |
| **SRU** | **San Rafael** | **63.43** | **1** | *e*P | | **P** | **11 47 29.4** | **-0.7** |
| | 9.8nm,1.2s | | | | | | | |
| **T37A** | **Cheneyville 18** | **63.50** | **15** | P | | **P** | **11 47 28.6** | **-1.9** |
| | baz=64 | | | | | | | |
| **R30A** | **Dighton** | **63.55** | **10** | P | | **P** | **11 47 29.0** | **-1.9** |
| | baz=64 | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **63.92** | **8** | P | | **P** | **11 47 32.6** | **-0.7** |
| | baz=64 | | | | | | | |
| **KSCO** | **Kaye Shedlock'** | **63.92** | **8** | *e*P | | **P** | **11 47 32.8** | **-0.6** |
| | 38nm,1.5s | | | | | | | |
| **HALT** | **Halls** | **63.92** | **20** | *e*P | | P | 11 47 37.9 | +4.7 |
| **Q28A** | **Sharon Springs** | **64.08** | **9** | P | | **P** | **11 47 34.0** | **-0.4** |
| | baz=64 | | | | | | | |
| **ISCO** | **Idaho Springs** | **64.38** | **5** | P | | **P** | **11 47 36.1** | **-0.4** |
| | baz=65 | | | | | | | |
| **ISCO** | **Idaho Springs** | **64.38** | **5** | *e*P | | **P** | **11 47 36.6** | **0.0** |
| | 28nm,2.5s | | | | | | | |
| **DUG** | **Dugway** | **64.50** | **359** | P | | **P** | **11 47 36.0** | **-1.2** |
| | baz=65 | | | | | | | |
| **DUG** | **Dugway** | **64.50** | **359** | *e*P | | **P** | **11 47 37.5** | **+0.4** |
| | 89nm,3.0s | | | | | | | |
| **P31A** | **Stockton** | **64.91** | **11** | P | | **P** | **11 47 38.9** | **-0.8** |
| | baz=65 | | | | | | | |
| **P32A** | **Huiting Farm,** | **65.14** | **11** | P | | **P** | **11 47 40.3** | **-0.9** |
| | baz=66 | | | | | | | |
| **BGU** | **Big Grassy Mou** | **65.23** | **359** | *e*P | | **P** | **11 47 42.2** | **+0.3** |
| | 37nm,2.3s | | | | | | | |
| **VNDA** | **Vanda** | **65.30** | **194** | LR | | LR | 12 10 47.1 | |
| | comp=Z,114nm,19.9s,baz=92,slow=31 | | | | | | | |
| **CCM** | **Cathedral Cave** | **65.34** | **18** | *e*P | | **P** | **11 47 41.4** | **-1.1** |
| | 24nm,1.6s | | | | | | | |
| **WVOR** | **Wild Horse Val** | **67.01** | **355** | *e*P | | **P** | **11 47 53.5** | **+0.2** |
| | 12nm,1.3s | | | | | | | |
| **BW06** | **Boulder Array** | **67.10** | **2** | *e*P | | P | 11 47 50.3 | -3.7 |
| BW06 | | | | *e*P | | pP | 11 47 52.6 | -4.7 |
| **K22A** | **Casper** | **67.14** | **4** | *e*P | | **P** | **11 47 54.5** | **+0.4** |
| | 26nm,1.6s | | | | | | | |
| **HLID** | **Hailey** | **67.89** | **358** | P | | **P** | **11 47 57.8** | **-1.2** |
| | baz=68 | | | | | | | |
| **HLID** | **Hailey** | **67.89** | **358** | *e*P | | **P** | **11 47 58.1** | **-0.8** |
| | 30nm,2.1s | | | | | | | |
| **J08A** | **Circle Bar Ran** | **67.92** | **355** | *e*P | | **P** | **11 48 00.1** | **+1.1** |
| | 129nm,2.8s | | | | | | | |
| **LOHW** | **Long Hollow** | **67.92** | **1** | *e*P | | **P** | **11 47 57.8** | **-1.3** |
| | 15nm,1.8s | | | | | | | |
| **J25A** | **Sunshine Ranch** | **68.11** | **6** | P | | **P** | **11 47 59.5** | **-0.7** |
| | baz=69 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **68.11** | **353** | P | | **P** | **11 47 59.3** | **-1.0** |
| | baz=68 | | | | | | | |
| **J27A** | **Elkhorn Farm,** | **68.17** | **8** | P | | **P** | **11 48 01.0** | **+0.4** |
| | baz=69 | | | | | | | |
| **J29A** | **Okreek** | **68.55** | **9** | P | | **P** | **11 48 01.5** | **-1.4** |
| | baz=69 | | | | | | | |
| **MCMT** | **McKenzie Canyo** | **69.13** | **359** | *e*P | | **P** | **11 48 06.3** | **-0.4** |
| **G08A** | **Pilot Rock** | **69.87** | **355** | *e*P | | **P** | **11 48 12.6** | **+1.4** |
| | 91nm,2.4s | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **70.78** | **160** | P | | **P** | **11 48 16.9** | **+0.6** |
| **VNA2** | **Neumayer--Watz** | **71.58** | **160** | P | | **P** | **11 48 22.4** | **+1.2** |
| **SNAA** | **Sanae** | **72.62** | **162** | P | | **P** | **11 48 28.1** | **+0.6** |
| **SNAA** | **Sanae** | **72.62** | **162** | *e*P | | **P** | **11 48 28.3** | **+0.8** |
| | 4.9nm,1.3s | | | | | | | |
| **DZM** | **Mont Dzumac** | **73.80** | **253** | *e*LR | | LR | 12 11 11.7 | |
| | 496nm,26.9s | | | | | | | |
| **DZM** | **Mont Dzumac** | **73.80** | **253** | LR | | LR | 12 13 20.3 | |
| | comp=Z,210nm,20.6s,baz=264,slow=30 | | | | | | | |
| **EDM** | **Edmonton** | **77.53** | **359** | *e*P | | **P** | **11 48 55.7** | **-0.1** |
| | 13nm,1.2s | | | | | | | |
| **MAW** | **Mawson** | **87.96** | **178** | LR | | LR | 12 26 36.9 | |
| | comp=Z,137nm,18.5s,baz=242,slow=34 | | | | | | | |
| **SCHQ** | **Schefferville** | **88.11** | **24** | LR | | LR | 12 27 25.0 | |
| | comp=Z,51nm,18.8s,baz=60,slow=34 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **89.98** | **290** | T | | T | 13 29 31.6 | |
| | baz=116,slow=75,SNR=175 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **90.00** | **290** | T | | T | 13 29 32.7 | |
| | baz=116,slow=75,SNR=116 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **90.00** | **290** | T | | T | 13 29 33.0 | |
| | baz=116,slow=75,SNR=132 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **90.34** | **291** | T | | T | 13 29 58.5 | |
| | baz=117,slow=75,SNR=25 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **90.36** | **291** | T | | T | 13 30 05.0 | |
| | baz=117,slow=75,SNR=11 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **90.36** | **291** | T | | T | 13 30 06.7 | |
| | baz=117,slow=75,SNR=44 | | | | | | | |
| **CTA** | **Charters Tower** | **91.86** | **247** | LR | | LR | 12 26 39.6 | |
| | comp=Z,100nm,18.0s,baz=44,slow=33 | | | | | | | |
| **ASAR** | **Alice Springs** | **100.08** | **238** | LR | | LR | 12 32 39.2 | |
| | comp=Z,137nm,18.5s,baz=122,slow=34 | | | | | | | |
| **CN2** | **Changchun** | **129.81** | **307** | *e*PKP | | **PKPdf** | **11 56 10.5** | **+0.7** |
| **WHN** | **Wuhan** | **138.71** | **289** | PKP | | **PKPdf** | **11 56 25.3** | **-1.5** |
| **HHC** | **Hu-ho-hao-te** | **140.37** | **305** | *e*PKP | | **PKPdf** | **11 56 32.3** | **+2.6** |
| HHC | | | | PP | | PP | 11 59 34.8 | +6.4 |
| HHC | | | | SKKS | | | 12 06 20.0 | |
| HHC | | | | SS | | **SS** | **12 17 55.0** | **+2.1** |
| HHC | | | | PPMZ | | | | |
| | 85nm,6.2s | | | | | | | |
| HHC | | | | LN | | | | |
| | 380nm,14.9s | | | | | | | |
| HHC | | | | LE | | | | |
| | 380nm,14.9s | | | | | | | |
| HHC | | | | LZ | | | | |
| | 120nm,13.7s | | | | | | | |
| **QIZ** | **Qiongzhong** | **140.85** | **270** | PKP | | **PKPdf** | **11 56 29.3** | **-1.8** |
| QIZ | | | | PP | | **PP** | **11 59 31.3** | **-0.5** |
| QIZ | | | | SS | | SS | 12 17 58.5 | -1.0 |
| QIZ | | | | LZ | | | | |
| | 99nm,23.8s | | | | | | | |
| **SONM** | **Songino Array** | **141.88** | **317** | PKP | | **PKPdf** | **11 56 29.5** | **-2.8** |
| | 0.5nm,0.9s,baz=298,slow=3.2,SNR=3.6 | | | | | | | |
| **GYA** | **Guiyang** | **145.14** | **281** | *e*PKPbc | | **PKPbc** | **11 56 37.0** | **-1.2** |
| GYA | | | | PP | | **PP** | **12 00 00.3** | **+2.5** |
| GYA | | | | PPMZ | | | | |
| | 120nm,7.9s | | | | | | | |
| **LZH** | **Lanzhou** | **147.19** | **299** | *e*PKPbc | | **PKPdf** | **11 56 38.8** | **-3.1** |
| LZH | | | | pPKP | | **PKPbc** | **11 56 42.5** | **-1.6** |
| LZH | | | | sPKP | | | 11 56 44.8 | |
| LZH | | | | LN | | | | |
| | 110nm,17.4s | | | | | | | |
| LZH | | | | LE | | | | |
| | 120nm,18.7s | | | | | | | |
| LZH | | | | LZ | | | | |
| | 150nm,20.1s | | | | | | | |
| **BRTR** | **Keskin Array B** | **147.50** | **54** | PKPbc | | **PKPbc** | **11 56 43.3** | **-1.5** |
| | 0.9nm,0.8s,baz=224,slow=3.4,SNR=4.2 | | | | | | | |
| **CD2** | **Chengdu** | **147.83** | **289** | PKPbc | | **PKPdf** | **11 56 41.8** | **-1.2** |
| CD2 | | | | pPKP | | **PKiKP** | **11 56 46.8** | **-1.0** |
| CD2 | | | | sPKP | | | 11 56 48.5 | |
| CD2 | | | | PP | | **PP** | **12 00 12.0** | **-1.4** |
| CD2 | | | | SKS | | **SKSdf** | **12 03 49.8** | **-2.0** |
| CD2 | | | | SKKS | | **SKKSac** | **12 07 02.5** | **-2.7** |
| CD2 | | | | SS | | **SS** | **12 19 17.5** | **-1.8** |
| CD2 | | | | PPMZ | | | | |
| | 120nm,5.2s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **148.13** | **341** | *e*PKPdf | | **PKPdf** | **11 56 43.5** | **+0.9** |
| **ZALV** | **Zalesovo Beam** | **148.13** | **341** | PKPbc | | **PKPdf** | **11 56 43.5** | **+0.9** |
| | 2.0nm,0.6s,baz=32,slow=2.6,SNR=7.6 | | | | | | | |
| **KMI** | **Kunming** | **148.52** | **278** | PKPbc | | **PKPdf** | **11 56 43.8** | **-0.7** |
| **GTA** | **Gaotai** | **149.44** | **307** | *e*PKPbc | | **PKPbc** | **11 56 49.3** | **-0.6** |
| GTA | | | | sPKP | | | 11 56 56.3 | |
| GTA | | | | PKPab | | PKPab | 11 57 00.0 | +5.3 |
| GTA | | | | PP | | PP | 12 00 30.3 | +7.9 |
| GTA | | | | SKS | | **SKSdf** | **12 03 56.0** | **+2.2** |
| GTA | | | | SKKS | | **SKKSac** | **12 07 18.0** | **+4.1** |
| GTA | | | | PPMZ | | | | |
| | 240nm,5.9s | | | | | | | |
| GTA | | | | LN | | | | |
| | 180nm,14.5s | | | | | | | |
| GTA | | | | LE | | | | |
| | 230nm,15.2s | | | | | | | |
| GTA | | | | LZ | | | | |
| | 170nm,16.2s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **150.60** | **264** | PKPbc | | **PKPbc** | **11 56 51.9** | **-1.2** |
| | 1.1nm,0.7s,baz=245,slow=0.7,SNR=9.7 | | | | | | | |
| **BVAR** | **Borovoye Array** | **151.59** | **357** | PKPbc | | **PKPbc** | **11 56 51.4** | **-3.0** |
| | 1.2nm,0.6s,baz=162,slow=0.5,SNR=4.1 | | | | | | | |
| **KBZ** | **Khabaz** | **152.01** | **41** | PKPbc | | **PKPbc** | **11 56 54.2** | **-1.3** |
| | 1.0nm,0.4s,baz=49,slow=1.7,SNR=4.1 | | | | | | | |
| **KURK** | **Kurchatov** | **152.69** | **345** | PKPbc | | **PKPbc** | **11 56 54.8** | **-2.1** |
| **KURBB** | **Kurchatov Arra** | **152.80** | **345** | PKPbc | | **PKPbc** | **11 56 54.8** | **-2.3** |
| | 0.7nm,0.4s,baz=17,slow=1.7,SNR=13 | | | | | | | |
| **WMQ** | **Urumqi** | **154.97** | **325** | PKPbc | | **PKPdf** | **11 56 56.0** | **+2.6** |
| WMQ | | | | PP | | PP | 12 01 00.0 | +6.8 |
| WMQ | | | | SKS | | **SKSdf** | **12 04 01.0** | **+0.8** |
| WMQ | | | | SKKS | | **SKKSac** | **12 07 47.0** | **+3.4** |
| WMQ | | | | SS | | **SS** | **12 20 40.0** | **+3.8** |
| WMQ | | | | LN | | | | |
| | 97nm,25.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | 100nm,25.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | 120nm,26.0s | | | | | | | |
| **KKAR** | **Karatay Array** | **161.46** | **354** | *e*PKPab | | **PKPab** | **11 57 44.2** | **-1.3** |
| **KSH** | **Kashi** | **163.70** | **337** | *e*PKP | | **PKPdf** | **11 57 05.0** | **+1.3** |
| KSH | | | | PKS | | **PKSdf** | **12 00 38.8** | **+2.0** |
| KSH | | | | *e*PP | | **PP** | **12 01 44.5** | **+4.2** |
| KSH | | | | PPMZ | | | | |
| | 220nm,5.3s | | | | | | | |
| KSH | | | | LN | | | | |
| | 320nm,5.4s | | | | | | | |
| KSH | | | | LE | | | | |
| | 190nm,5.7s | | | | | | | |
| KSH | | | | LZ | | | | |
| | 320nm,5.8s | | | | | | | |

*ISCJB **28** 11:52:06.6±1.1,13.8N±0.1×91.45W±0.06,h85km±11km, Error ellipse: s-maj=19.2km s-min=5.4km az=24.9*
*MEX **28** 11:52:08.8±0.5,13.68N×91.67W,h20km,MD3.9*
*CASC **28** 11:52:08.5±2.7,13.81N×91.36W,h60km±33km,MD3.7, ML3.4*

**ISC 28 11:52:06.7±1.9,13.8N±0.1×91.47W±0.07,h77km±16km, n16,σ0§84/26,1D,Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JAT** | **Jato** | **0.59** | **344** | *e*P | | **Pn** | **11 52 21.3** | **+0.3** |
| JAT | | | | *e*S | | **Sn** | **11 52 32.1** | **+0.5** |
| **FUG** | **Fuego 3** | **0.92** | **41** | *e*P | | **Pn** | **11 52 24.4** | **-0.5** |
| **PCG** | **Pacaya** | **1.05** | **52** | *e*P | | **Pn** | **11 52 26.9** | **+0.4** |
| PCG | | | | *e*S | | **Sn** | **11 52 41.1** | **-0.1** |
| **NBG** | **Las Nubes** | **1.37** | **52** | *e*P | | **Pn** | **11 52 32.0** | **+1.5** |
| NBG | | | | *e*S | | **Sn** | **11 52 47.7** | **-0.6** |
| **RBDL** | **Robledal** | **1.77** | **78** | *e*P | | **Pn** | **11 52 36.0** | **+0.4** |
| RBDL | | | | *e*S | | **Sn** | **11 52 57.1** | **-0.4** |
| **RTR** | **El Retiro** | **1.78** | **85** | *e*P | | **Pn** | **11 52 36.3** | **+0.6** |
| **SBLS** | **San Blas** | **1.79** | **87** | *e*P | | **Pn** | **11 52 36.4** | **+0.3** |
| SBLS | | | | *e*S | | **Sn** | **11 52 57.2** | **-1.1** |
| **SNJE** | **San Jose** | **1.81** | **86** | *e*P | | **Pn** | **11 52 36.6** | **+0.4** |
| SNJE | | | | *e*S | | **Sn** | **11 52 58.4** | **-0.3** |
| **BOQS** | **Boqueron** | **2.13** | **90** | *e*P | | **Pn** | **11 52 41.2** | **+0.8** |
| BOQS | | | | *e*S | | **Sn** | **11 53 05.1** | **-1.0** |
| **MRL** | **Marmol** | **2.16** | **53** | *e*P | | **Pn** | **11 52 41.3** | **+0.4** |
| **SNET** | **Serv Nac Est T** | **2.17** | **91** | AML | | AML | 11 53 11.9 | |
| | comp=Z,367nm,0.2s | | | | | | | |
| **LFU** | **La Fuente** | **2.29** | **90** | *e*P | | **Pn** | **11 52 43.0** | **+0.5** |
| **LFRS** | **El Faro** | **2.34** | **93** | *e*P | | **Pn** | **11 52 44.4** | **+1.2** |
| LFRS | | | | *e*S | | **Sn** | **11 53 10.8** | **-0.3** |
| **LBRS** | **Las Brisas** | **2.36** | **90** | *e*P | | **Pn** | **11 52 43.9** | **+0.5** |
| LBRS | | | | *e*S | | **Sn** | **11 53 09.9** | **-1.5** |
| **PCIG** | | **2.58** | **319** | *e*P | | **Pn** | **11 52 46.7** | **+0.4** |
| PCIG | | | | *e*S | | **Sn** | **11 53 14.8** | **-1.8** |
| **TGIG** | | **3.41** | **332** | *e*S | | **Sn** | **11 53 36.5** | **-0.5** |
| TGIG | | | | *e*S | | **Sn** | **11 53 37.5** | **+0.6** |

**KRSC 28 11:56:39.8±0.3,55.14N×160.31E,h-1km±2km,ML3.6, Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **KZV** | **Kizimen** | **0.03** | **195** | *i* P | | Pg | 11 56 40.6 | 0.0 |
| **TUMR** | **Tumrok** | **0.17** | **326** | *i* P | | Pg | 11 56 43.9 | +0.7 |
| **KMNR** | **Kamenistaya** | **0.61** | **356** | *e*P | | Pb | 11 56 53.4 | -0.2 |
| KMNR | | | | *e*S | | Sb | 11 57 03.3 | +0.4 |
| **BZMR** | **Bezymyannaya** | **0.80** | **7** | P | | Pb | 11 56 56.4 | -0.4 |
| BZMR | | | | S | | Sb | 11 57 08.9 | +0.6 |
| **KIRR** | **Kirishev** | **0.81** | **1** | *e*P | | Pb | 11 56 56.5 | -0.5 |
| KIRR | | | | *e*S | | Sb | 11 57 09.9 | +1.2 |
| **BZWR** | **Bezymyannyi-We** | **0.83** | **7** | P | | Pb | 11 56 57.5 | +0.2 |
| BZWR | | | | S | | Sn | 11 57 10.9 | -1.2 |
| **ZLN** | **Zelenaya** | **0.92** | **18** | P | | Pb | 11 56 59.2 | +0.4 |
| **KOZ** | **Kozyrevsk** | **0.95** | **345** | *e*P | | Pb | 11 56 59.7 | +0.5 |
| KOZ | | | | *e*S | | Sn | 11 57 14.9 | +0.2 |
| **MKZ** | **Mys Kozlova** | **1.01** | **125** | *e*P | | Pg | 11 56 58.7 | -0.4 |
| MKZ | | | | *e*S | | Sb | 11 57 14.5 | +0.6 |
| **KLY** | **Klyuchi** | **1.19** | **9** | S | | Sn | 11 57 23.4 | +2.9 |
| **ESO** | **Esso** | **1.20** | **311** | P | | Pg | 11 57 02.2 | -0.7 |
| ESO | | | | S | | Sb | 11 57 19.6 | -0.1 |
| **KII** | **Karymskiy** | **1.22** | **205** | P | | Pn | 11 57 04.8 | +0.6 |
| **SRDR** | **Sredinnyy** | **1.22** | **344** | *e*P | | Pg | 11 57 03.4 | 0.0 |
| SRDR | | | | S | | Sb | 11 57 21.8 | +0.5 |
| **BDR** | **Baidarnaya** | **1.52** | **19** | P | | Pg | 11 57 09.5 | +0.5 |
| BDR | | | | S | | Sn | 11 57 32.1 | +3.3 |
| **SMKR** | **Semkarok** | **1.58** | **24** | *e*P | | Pg | 11 57 11.0 | +0.7 |
| SMKR | | | | *e*S | | Sg | 11 57 32.7 | +1.8 |
| **SRKR** | **Sorokina** | **1.59** | **17** | *e*P | | Pb | 11 57 09.8 | -0.3 |
| SRKR | | | | *e*S | | Sg | 11 57 31.7 | +0.6 |
| **KBTR** | **Krutoberegovo** | **1.78** | **52** | P | | Pn | 11 57 11.3 | -0.5 |
| KBTR | | | | S | | Sb | 11 57 36.3 | +0.2 |
| **GNL** | **Ganaly** | **2.00** | **225** | *e*P | | Pn | 11 57

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| KU6 | | | | SG | **Sb** | **12 03 11.8** | **+1.2** |
| **KU6** | **Riekki** | **2.42** | **233** | Pb | **Pb** | **12 02 40.1** | **-0.1** |
| KU6 | | | | Sg | **Sb** | **12 03 11.7** | **+1.2** |
| **MSF** | **Maaselka** | **2.76** | **236** | PB | **Pb** | **12 02 45.9** | **-0.1** |
| MSF | | | | SG | **Sb** | **12 03 21.2** | **+0.9** |
| **MSF** | **Maaselka** | **2.76** | **236** | Pb | **Pb** | **12 02 45.9** | **-0.1** |
| MSF | | | | Sg | **Sb** | **12 03 21.2** | **+0.9** |
| **SGF** | **Sodankyl** | **3.11** | **272** | PB | **Pn** | **12 02 48.4** | **+2.3** |
| SGF | | | | SG | **Sb** | **12 03 28.1** | **-2.2** |
| **SGF** | **Sodankyl** | **3.11** | **272** | Pb | **Pn** | **12 02 48.4** | **+2.3** |
| **RNF** | **Rovaniemi** | **3.49** | **258** | PN | **Pn** | **12 02 52.6** | **+1.3** |
| | baz=68 | | | | | | |
| RNF | | | | SG | **Sb** | **12 03 41.2** | **-0.1** |
| **RNF** | **Rovaniemi** | **3.49** | **258** | Pn | **Pn** | **12 02 52.6** | **+1.3** |
| **KEV** | **Kevo** | **3.54** | **312** | PB | **Pn** | **12 02 53.3** | **+1.2** |
| **ARA0** | **ARCESS Array S** | **3.88** | **305** | Pn | **Pn** | **12 02 57.0** | **+0.3** |
| | baz=122,slow=16 | | | | | | |
| ARA0 | | | | Pg | **Pb** | **12 03 06.2** | **+1.1** |
| | baz=121,slow=18 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **12 03 41.8** | **-1.2** |
| | baz=117,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 12 03 52.5 | |
| | baz=123,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.88** | **305** | Pn | **Pn** | **12 02 57.0** | **+0.3** |
| | baz=122,slow=16 | | | | | | |
| ARA0 | | | | Pg | **Pb** | **12 03 06.2** | **+1.1** |
| | baz=121,slow=18 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **12 03 41.8** | **-1.2** |
| | baz=117,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 12 03 52.5 | |
| | baz=123,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.88** | **305** | Pn | **Pn** | **12 02 57.0** | **+0.3** |
| | SNR=141 | | | | | | |
| **ARA0** | **ARCESS Array S** | **3.88** | **305** | Pg | **Pb** | **12 03 06.2** | **+1.1** |
| | SNR=90 | | | | | | |
| ARA0 | | | | Sn | **Sn** | **12 03 41.8** | **-1.2** |
| | SNR=4.6 | | | | | | |
| ARA0 | | | | Lg | Lg | 12 03 52.5 | |
| **ARE0** | **ARCESS Array S** | **3.88** | **305** | PN | **Pn** | **12 02 57.0** | **+0.3** |
| | baz=118 | | | | | | |
| ARE0 | | | | SN | **Sn** | **12 03 42.4** | **-0.6** |
| **ARE0** | **ARCESS Array S** | **3.88** | **305** | Pn | **Pn** | **12 02 57.0** | **+0.3** |
| ARE0 | | | | Sn | **Sn** | **12 03 42.4** | **-0.6** |
| **HEF** | **Hetta** | **4.21** | **287** | PN | **Pn** | **12 03 50.8** | **-0.1** |
| HEF | | | | SN | **Sn** | **12 03 50.8** | **-0.1** |
| **HEF** | **Hetta** | **4.21** | **287** | Pn | **Pn** | **12 03 02.3** | **+1.2** |
| HEF | | | | Sn | **Sn** | **12 03 50.8** | **-0.1** |
| **OUL** | **Oulu** | **4.30** | **239** | PN | Pn | 12 03 06.5 | +4.1 |
| **LANU** | **Lannavaara** | **4.81** | **282** | PN | **Pn** | **12 03 09.9** | **+0.5** |
| LANU | | | | SG | **Sb** | **12 04 21.4** | **+2.2** |
| **LANU** | **Lannavaara** | **4.81** | **282** | Pn | **Pn** | **12 03 09.9** | **+0.5** |
| **FIA0** | **FINESS Array S** | **7.15** | **215** | Sn | **Sn** | **12 05 02.1** | **-1.2** |
| | baz=38,slow=28 | | | | | | |
| FIA0 | | | | Lg | Lg | 12 05 38.5 | |
| | baz=22,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **7.15** | **215** | Sn | **Sn** | **12 05 02.1** | **-1.2** |
| | baz=38,slow=28 | | | | | | |
| FIA0 | | | | Lg | Lg | 12 05 38.5 | |
| | baz=22,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** | **7.15** | **215** | Sn | **Sn** | **12 05 02.2** | **-1.2** |
| **SPA0** | **Spitsbergen Ar** | **11.84** | **342** | Pn | **Pn** | **12 04 44.7** | **-1.0** |
| | baz=151,slow=18 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **11.84** | **342** | Pn | **Pn** | **12 04 44.7** | **-1.0** |
| | baz=151,slow=18 | | | | | | |
| **SPA0** | **Spitsbergen Ar** | **11.84** | **342** | Pn | **Pn** | **12 04 44.7** | **-1.0** |
| | SNR=5.7 | | | | | | |

*IDC **28** 12:06:30.4±1.1,5.˚85S×115.˚03E,h0km,mb3.7/5, mb1 4.0/8,mb1mx3.8/36,mbtmp3.9/8,ML4.1/3,MS3.1/3, Ms1 3.2/3,ms1mx2.7/38,Error ellipse: s-maj=26.7km s-min=15.7km az=29.0*

*ISCJB **28** 12:06:31.6±0.3,6.˚03S±0.˚03×115.˚09E±0.˚03,h10km, mb3.7/5,MS3.1/1,Error ellipse: s-maj=4.6km s-min=4.0km az=156.0*

*DJA **28** 12:06:35.8±0.2,6.˚5S±2.˚×11.˚5E±.˚,h54km±13km,M4.8/3, MLv4.8/3*

*AUST **28** 12:06:37.2±0.0,5.˚96S×114.˚89E,h63km,Error ellipse: s-maj=2.3km s-min=0.9km az=347.0*

**ISC 28 12:06:31.5±0.7,5.˚95S±0.˚05×115.˚08E±0.˚05,h10km,n45, σ1°34/43,mb3.7/5,Java Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KMMI** | **Kalianget** | **1.56** | **225** | P | **Pg** | **12 07 00.6** | **-0.8** |
| KMMI | | | | S | **Sb** | **12 07 19.5** | **-0.6** |
| **ABJI** | **Asem Bagus** | **2.02** | **204** | P | **Pn** | **12 07 05.9** | **+0.3** |
| ABJI | | | | S | **Sn** | **12 07 29.4** | **-1.5** |
| **SRBI** | **Singaraja** | **2.13** | **176** | P | **Pn** | **12 07 07.2** | **+0.1** |
| SRBI | | | | S | **Sn** | **12 07 31.4** | **-2.2** |
| **BWJI** | **Bawean** | **2.41** | **272** | P | **Pb** | **12 07 12.9** | **-2.1** |
| **BBKI** | **Banjar Baru** | **2.48** | **355** | P | **Pb** | **12 07 15.9** | **-0.3** |
| **JAGI** | **Jajag, Banyuwa** | **2.67** | **200** | P | **Pn** | **12 07 14.9** | **+0.3** |
| | baz=2.6,SNR=102 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **2.67** | **200** | P | **Pn** | **12 07 14.8** | **+0.2** |
| **DNP** | **Denpasar** | **2.72** | **177** | P | **Pn** | **12 07 15.3** | **+0.1** |
| **KBKI** | **Kotabaru** | **2.85** | **23** | P | **Pb** | **12 07 20.5** | **-1.9** |
| **IGBI** | **Denpasar** | **2.85** | **179** | P | **Pn** | **12 07 17.3** | **+0.2** |
| **TWSI** | **Taliwang, Sumb** | **3.30** | **147** | P | **Pn** | **12 07 23.5** | **+0.2** |
| TWSI | | | | S | **Sn** | **12 08 00.5** | **-2.1** |
| **TBJI** | **Tambak Boyo** | **3.32** | **255** | P | **Pn** | **12 07 25.0** | **+1.4** |
| **PWJI** | **Pagerwojo** | **3.85** | **237** | P | **Pn** | **12 07 30.5** | **-0.3** |
| **NGJI** | **Ngawi** | **3.86** | **248** | P | **Pb** | **12 07 41.7** | **+2.0** |
| **UWJI** | **Ujung Watu** | **4.13** | **263** | P | **Pn** | **12 07 36.5** | **+1.8** |
| **PCJI** | **Pacitan** | **4.47** | **240** | P | **Pn** | **12 07 40.0** | **+0.7** |
| **PBKI** | **Pangkalan Bun** | **4.68** | **313** | P | **Pn** | **12 07 43.6** | **+1.3** |
| **SMRI** | **Semarang** | **4.74** | **256** | P | **Pn** | **12 07 44.5** | **+1.5** |
| | baz=4.5,SNR=5.2 | | | | | | |
| **SMRI** | **Semarang** | **4.74** | **256** | P | **Pn** | **12 07 44.1** | **+1.1** |
| **KAPI** | **Kappang** | **4.75** | **79** | Pn | **Pn** | **12 07 43.3** | **+0.2** |
| | 4.1nm,0.3s,baz=263,slow=10,SNR=8.3 | | | | | | |
| KAPI | | | | Pg | Pb | 12 07 58.5 | +3.7 |
| | 20nm,0.3s,baz=263,slow=11,SNR=12 | | | | | | |
| KAPI | | | | Lg | Lg | 12 09 01.5 | |
| | 13nm,0.3s,baz=254,slow=22,SNR=6.4 | | | | | | |
| KAPI | | | | LR | LR | 12 09 54.0 | |
| | comp=Z,181nm,19.7s,baz=264,slow=43 | | | | | | |
| **UGM** | **Wanagama** | **4.92** | **246** | P | **Pn** | **12 07 46.2** | **+0.6** |
| | baz=4.7,SNR=16 | | | | | | |
| **BKB** | **Balikpapan** | **5.00** | **21** | P | Pn | 12 07 52.0 | +5.4 |
| **BKSI** | **Bulukumba** | **5.06** | **83** | P | **Pn** | **12 07 49.0** | **+1.5** |
| **SPSI** | **Sidrap Palu** | **5.07** | **67** | P | **Pn** | **12 07 50.1** | **+2.4** |
| **BSSI** | **Bau Bau, Buton** | **5.39** | **92** | P | **Pn** | **12 07 53.3** | **+1.3** |
| **TTSI** | **Tana Toraja** | **5.54** | **59** | P | **Pn** | **12 07 56.7** | **+2.7** |
| **WBSI** | **Waikabubak, Su** | **5.63** | **131** | P | **Pn** | **12 07 55.9** | **+0.5** |
| **STKI** | **Sintang** | **6.97** | **329** | P | Pn | 12 08 16.9 | +3.1 |
| **EDFI** | **Ende, Flores** | **7.13** | **113** | P | **Pn** | **12 08 16.9** | **+0.9** |
| **LEM** | **Lembang** | **7.46** | **263** | Pn | **Pn** | **12 08 21.3** | **+0.6** |
| | 4.9nm,0.3s,baz=104,slow=18,SNR=4.0 | | | | | | |
| **LEM** | **Lembang** | **7.46** | **263** | P | **Pn** | **12 08 22.1** | **+1.4** |
| **MMRI** | **Maumere** | **7.59** | **111** | P | **Pn** | **12 08 23.0** | **+0.7** |
| **BATI** | **Baumata** | **9.50** | **117** | Pn | **Pn** | **12 08 51.0** | **+2.5** |
| | 2.2nm,0.3s,baz=324,slow=17,SNR=2.0 | | | | | | |
| **SOEI** | **Soe** | **9.86** | **113** | P | Pn | 12 09 02.8 | +9.3 |
| | baz=10.0,SNR=4.2 | | | | | | |
| **KNRA** | **Kununurra** | **16.55** | **127** | P | **P** | **12 10 27.7** | **+1.3** |
| | baz=17,SNR=5.2 | | | | | | |
| **MTN** | **Manton Dam** | **17.25** | **115** | P | **P** | **12 10 35.6** | **+1.4** |
| | baz=17,SNR=4.5 | | | | | | |
| **PSI** | **Prapat** | **18.32** | **298** | LR | LR | 12 19 00.8 | |
| | comp=Z,54nm,18.6s,baz=200,slow=41 | | | | | | |
| **MEEK** | **Meekatharra** | **20.85** | **171** | P | Pn | 12 11 15.2 | -1.0 |
| | baz=21,SNR=6.1 | | | | | | |
| **WRKA** | **Warakurna** | **22.82** | **148** | P | **P** | **12 11 35.8** | **+0.9** |
| | baz=23,SNR=19 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.32** | **128** | P | **P** | **12 11 41.7** | **+1.6** |
| | 5.1nm,0.9s,baz=308,slow=9.5,SNR=20 | | | | | | |
| **ASAR** | **Alice Springs** | **25.27** | **136** | P | **P** | **12 11 58.9** | **+0.7** |
| | 1.3nm,0.7s,baz=312,slow=8.5,SNR=17 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.00** | **327** | LR | LR | 12 23 37.4 | |
| | comp=Z,43nm,18.1s,baz=148,slow=36 | | | | | | |
| **SONM** | **Songino Array** | **54.10** | **353** | P | **P** | **12 15 56.3** | **-0.3** |
| | 0.3nm,0.4s,baz=169,slow=8.5,SNR=4.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **60.02** | **335** | P | **P** | **12 16 38.6** | **+0.2** |
| | 0.5nm,0.7s,baz=134,slow=8.2,SNR=3.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **64.86** | **341** | P | **P** | **12 17 09.8** | **-0.9** |
| | 0.5nm,0.4s,baz=141,slow=7.3,SNR=2.2 | | | | | | |

**IDC 28 12:08:08.1±1.7,4.˚24S×143.˚82E,h0km,mb3.9/3, mb1 4.3/5,mb1mx3.8/31,mbtmp4.2/5,ML4.6/2,Error ellipse: s-maj=33.9km s-min=27.6km az=111.0,New Guinea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **3.55** | **299** | Pn | Pn | 12 09 05.3 | +0.7 |
| | 16nm,0.3s,baz=193,slow=0.4,SNR=4.2 | | | | | | |
| JAY | | | | Sn | Sn | 12 09 47.3 | 0.0 |
| | 12nm,0.3s,baz=156,slow=0.4,SNR=2.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.13** | **210** | P | Pn | 12 12 21.6 | 0.0 |
| | 3.0nm,0.3s,baz=29,slow=10,SNR=58 | | | | | | |
| **BATI** | **Baumata** | **20.84** | **252** | P | P | 12 12 51.6 | -0.2 |
| | 20nm,0.5s,baz=81,slow=6.1,SNR=6.5 | | | | | | |
| **ASAR** | **Alice Springs** | **21.55** | **205** | P | P | 12 12 59.1 | -0.2 |
| | 1.0nm,0.4s,baz=29,slow=13,SNR=15 | | | | | | |
| **ILAR** | **Eielson Array** | **85.14** | **24** | P | P | 12 20 45.9 | 0.0 |
| | 0.3nm,0.6s,baz=265,slow=4.9,SNR=3.8 | | | | | | |

**WEL 28 12:18:19.9±0.5,37.˚37S×177.˚15E,h130km±3km,ML3.6/15, 8C-6D,Error ellipse: s-maj=5.2km s-min=3.8km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **0.63** | **128** | ⇑PN | Pn | 12 18 39.7 | 0.0 |
| HAZ | | | | SN | Sn | 12 18 54.4 | -0.3 |
| **URZ** | **Urewera** | **0.89** | **182** | ⇓PN | Pn | 12 18 41.7 | 0.0 |
| URZ | | | | SN | Sn | 12 18 58.4 | +0.1 |
| URZ | | | | AML | AML | 12 18 59.6 | |
| **PKGZ** | **Pakihiroa** | **0.89** | **124** | PN | Pn | 12 18 41.1 | -0.7 |
| **MXZ** | **Matakaoa Point** | **0.94** | **102** | ⇑PN | Pn | 12 18 42.2 | +0.1 |
| **MWZ** | **Matawai** | **1.01** | **163** | ⇓PN | Pn | 12 18 42.7 | -0.2 |
| MWZ | | | | SN | Sn | 12 19 00.7 | +0.4 |
| MWZ | | | | AML | AML | 12 19 01.9 | |
| **TWGZ** | **Tauwhareparae** | **1.04** | **141** | PN | Pn | 12 18 43.7 | +0.6 |
| **WMGZ** | **Waiomatatini S** | **1.10** | **114** | ⇑PN | Pn | 12 18 43.7 | +0.1 |
| **PUZ** | **Puketiti** | **1.12** | **129** | ⇑PN | Pn | 12 18 43.7 | -0.3 |
| PUZ | | | | AML | AML | 12 19 02.0 | |
| **TKGZ** | **Te Karaka** | **1.20** | **153** | PN | Pn | 12 18 44.7 | +0.1 |
| **CNGZ** | **Carnagh Statio** | **1.39** | **143** | PN | Pn | 12 18 46.8 | +0.1 |
| **SNGZ** | **Shannon Statio** | **1.42** | **174** | PN | Pn | 12 18 46.8 | -0.2 |
| **RIGZ** | **Rimuhau** | **1.42** | **160** | PN | Pn | 12 18 47.1 | 0.0 |
| **RAHZ** | **Arahi** | **1.55** | **182** | PN | Pn | 12 18 48.5 | 0.0 |
| **MRHZ** | **Matea Rd** | **1.57** | **201** | PN | Pn | 12 18 48.5 | -0.3 |
| **KNZ** | **Kokohu** | **1.70** | **166** | PN | Pn | 12 18 49.4 | -0.8 |
| **WHHZ** | **Waihua** | **1.71** | **178** | PN | Pn | 12 18 50.1 | -0.1 |
| **NMHZ** | **Naumai** | **1.75** | **189** | PN | Pn | 12 18 51.3 | +0.4 |
| **BKZ** | **Black Stump Fm** | **1.87** | **196** | ⇓PN | Pn | 12 18 51.3 | -0.9 |
| **MHGZ** | **Mahia Peninsul** | **1.88** | **162** | PN | Pn | 12 18 51.2 | -1.1 |
| **ARHZ** | **Aropaoanui** | **1.89** | **184** | PN | Pn | 12 18 52.2 | -0.3 |
| **MCHZ** | **McNeill Hill** | **2.10** | **190** | PN | Pn | 12 18 54.7 | -0.3 |
| **KWHZ** | **Kaweka Forest** | **2.13** | **195** | PN | Pn | 12 18 54.8 | -0.6 |
| **TUVZ** | **Tukino** | **2.23** | **211** | PN | Pn | 12 18 56.5 | -0.4 |
| **FWVZ** | **Far West T-bar** | **2.26** | **213** | PN | Pn | 12 18 57.0 | -0.4 |
| **BHHZ** | **Black Hill Sta** | **2.28** | **202** | PN | Pn | 12 18 56.3 | -1.1 |
| **CKHZ** | **Cape Kidnapper** | **2.29** | **181** | PN | Pn | 12 18 56.2 | -1.1 |
| **WNVZ** | **Wahianoa** | **2.30** | **211** | PN | Pn | 12 18 57.2 | -0.5 |
| **MOVZ** | **Moawhango** | **2.31** | **208** | PN | Pn | 12 18 56.5 | -1.2 |
| **KRHZ** | **Kereru** | **2.35** | **195** | PN | Pn | 12 18 56.7 | -1.5 |
| **KAHZ** | **Kahuranaki** | **2.43** | **185** | PN | Pn | 12 18 58.0 | -1.2 |
| **PNHZ** | **Pukenui** | **2.65** | **196** | ⇑PN | Pn | 12 19 00.1 | -1.8 |
| **PXZ** | **Pawanui** | **2.67** | **185** | ⇓PN | Pn | 12 19 00.1 | -2.0 |
| **TSZ** | **Takapari Road** | **2.84** | **199** | PN | Pn | 12 19 02.3 | -2.2 |
| **PRHZ** | **Porangahau** | **2.92** | **188** | PN | Pn | 12 19 03.5 | -1.9 |
| **DVHZ** | **Dannevirke** | **3.02** | **194** | PN | Pn | 12 19 04.1 | -2.7 |
| **POWZ** | **Post Office Ro** | **3.21** | **199** | PN | Pn | 12 19 06.6 | -2.5 |
| **PRWZ** | **Pori Road** | **3.31** | **196** | PN | Pn | 12 19 08.0 | -2.5 |
| **BFZ** | **Birch Farm** | **3.38** | **192** | ⇓PN | Pn | 12 19 08.4 | -3.0 |
| **MRZ** | **Mangatainoka R** | **3.51** | **200** | ⇓PN | Pn | 12 19 09.8 | -3.3 |
| MRZ | | | | AML | AML | 12 19 51.6 | |
| **TIWZ** | **Tintock** | **3.54** | **196** | PN | Pn | 12 19 10.5 | -3.0 |
| TIWZ | | | | AML | AML | 12 19 53.4 | |
| TIWZ | | | | AML | AML | 12 19 53.8 | |
| **HOWZ** | **Holdsworth Sta** | **3.75** | **199** | ⇑PN | Pn | 12 19 12.6 | -3.6 |
| **OGWZ** | **Otaki Gorge** | **3.77** | **203** | PN | Pn | 12 19 13.3 | -3.2 |
| **TMWZ** | **Te Maipa** | **3.86** | **194** | ⇑PN | Pn | 12 19 14.2 | -3.5 |
| **KIW** | **Kapiti Island** | **3.90** | **206** | PN | Pn | 12 19 14.8 | -3.4 |
| **MTW** | **Mount Morrison** | **3.99** | **198** | PN | Pn | 12 19 15.5 | -4.0 |
| **CAW** | **Cannon Point** | **4.07** | **203** | ⇑PN | Pn | 12 19 16.6 | -3.9 |
| **TCW** | **Tory Channel** | **4.44** | **209** | PN | Pn | 12 19 21.2 | -4.2 |
| **PLWZ** | **Palliser** | **4.44** | **199** | PN | Pn | 12 19 20.9 | -4.6 |
| **TUWZ** | **Tuamarina** | **4.75** | **210** | PN | Pn | 12 19 25.3 | -4.3 |
| **QRZ** | **Quartz Range** | **4.98** | **225** | PN | Pn | 12 19 29.2 | -3.4 |
| **THZ** | **Tophouse** | **5.48** | **215** | PN | Pn | 12 19 35.5 | -3.9 |
| **KHZ** | **Kahutara** | **5.75** | **208** | PN | Pn | 12 19 37.9 | -5.1 |
| **MQZ** | **McQueen's Vall** | **7.20** | **207** | SN | Sn | 12 21 10.7 | -12 |
| **ODZ** | **Otahua Downs** | **9.10** | **211** | SN | Sn | 12 21 56.6 | -12 |

*NNC **28** 12:34:12.8±6.1,36.˚95N×70.˚99E,h0km,mb3.7,mpv3.3, Error ellipse: s-maj=51.7km s-min=25.4km az=0.0*

**ISC 28 12:34:14.5±3.7,37.˚0N±0.˚2×70.˚92E±0.˚07,h10km,n10, σ1°98/15,6C-4D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.44** | **318** | ⇑Pn | **Pn** | **12 34 54.6** | **+0.1** |
| | 1.4nm,0.3s | | | | | | |
| DZET | | | | ⇓Sn | **Sb** | **12 35 28.9** | **+0.2** |
| | 53nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.62** | **33** | ⇓Pn | **Pn** | **12 35 12.4** | **+1.5** |
| | 9.4nm,0.4s | | | | | | |
| SFK | | | | ⇑Sn | **Sb** | **12 36 00.7** | **-2.1** |
| | 16nm,0.5s | | | | | | |
| **AML** | **Almayashu** | **5.55** | **22** | P | **Pn** | **12 35 36.7** | **-0.7** |
| | SNR=39 | | | | | | |
| **MNAS** | **Manas** | **5.61** | **12** | ⇑Pn | **Pn** | **12 35 37.5** | **-0.5** |
| | 1.4nm,0.3s | | | | | | |
| MNAS | | | | ⇑Sn | **Sn** | **12 36 46.1** | **+3.5** |
| | 2.7nm,0.3s | | | | | | |
| **UCH** | **Uchtor** | **5.90** | **27** | P | **Pn** | **12 35 41.4** | **-1.0** |
| | SNR=22 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.06** | **20** | P | **Pn** | **12 35 44.0** | **-0.3** |
| | SNR=13 | | | | | | |
| **KK31** | **Karatay Array** | **6.09** | **357** | ⇓Pn | **Pn** | **12 35 42.8** | **-1.9** |
| | 0.9nm,0.3s,baz=183,slow=12,SNR=12 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **12 36 52.8** | **-1.6** |
| | 2.6nm,0.5s,baz=184,slow=24,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **6.25** | **25** | ⇓Pn | **Pn** | **12 35 45.4** | **-1.6** |
| | 2.2nm,0.5s | | | | | | |
| AAK | | | | ⇑Sn | **Sn** | **12 37 02.2** | **+3.6** |
| | 4.6nm,0.7s | | | | | | |
| **AAK** | **Ala-Archa** | **6.25** | **25** | P | **Pn** | **12 35 46.1** | **-0.9** |
| | SNR=6.1 | | | | | | |
| **TKM2** | **Tokmak 2** | **6.91** | **30** | P | **Pn** | **12 35 54.1** | **-2.0** |
| | SNR=9.2 | | | | | | |

**NNC 28 12:35:31.4±2.1,37.˚78N×69.˚31E,h0km,mb3.6,mpv3.4, 4C-5D,Error ellipse: s-maj=18.7km s-min=9.2km az=44.0,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **1.09** | **340** | ⇓P | Pg | 12 35 52.1 | -0.4 |
| | 39nm,0.3s | | | | | | |
| DZET | | | | ⇑S | Sg | 12 36 07.5 | +0.7 |
| | 208nm,0.7s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.96** | **54** | ⇓Pg | Pb | 12 36 43.7 | +1.4 |
| | 4.4nm,0.5s | | | | | | |
| SFK | | | | ⇓Lg | Lg | 12 37 36.0 | |
| | 14nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **5.30** | **27** | ⇓Pg | Pb | 12 37 07.6 | +2.5 |
| | 1.6nm,0.5s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 12 38 17.8 | |
| | 4.8nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **5.40** | **9** | ⇑Pg | Pg | 12 37 13.5 | -1.3 |
| | 1.5nm,0.6s,baz=192,slow=17 | | | | | | |
| KK31 | | | | Lg | Lg | 12 38 20.6 | |
| | 4.0nm,0.5s,baz=192,slow=29,SNR=6.7 | | | | | | |
| **AAK** | **Ala-Archa** | **6.26** | **38** | ⇑Pg | Pb | 12 37 17.3 | -4.2 |
| | 3.1nm,1.1s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 12 38 47.6 | |
| | 5.2nm,0.7s | | | | | | |

*DDA **28** 12:53:38.2,40.˚68N×31.˚07E,h12km,Md2.7*

*ISCJB **28** 12:53:39.4±0.7,40.˚60N±0.˚04×31.˚10E±0.˚05,h7km±4km, Error ellipse: s-maj=7.1km s-min=6.5km az=5.9*

*CSEM **28** 12:53:39.1±0.1,40.˚57N×31.˚12E,h5km,MD2.6,Error ellipse: s-maj=3.7km s-min=3.2km az=157.0*

*ISK **28** 12:53:39.2,40.˚60N×31.˚11E,h9km,MD2.6*

**ISC 28 12:53:39.0±0.9,40.°59N±0.°04×31.°11E±0.°03,h8km±5km, n39,σ0°46/49,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BTAS** | **Taskesti** | **0.08** | **255** | *i* P | **Pg** | **12 53 41.4** | **+0.2** |
| BTAS | | | | *i* S | **Sg** | **12 53 42.6** | **-0.2** |
| **BTAS** | **Taskesti** | **0.08** | **255** | P | **Pg** | **12 53 41.4** | **+0.2** |
| BTAS | | | | S | **Sg** | **12 53 42.6** | **-0.2** |
| **BTAS** | **Taskesti** | **0.08** | **255** | P | **Pg** | **12 53 41.4** | **+0.2** |
| BTAS | | | | S | **Sg** | **12 53 42.6** | **-0.2** |
| **GULT** | **Gulveren** | **0.48** | **251** | *e*PG | **Pg** | **12 53 48.9** | **+0.6** |
| GULT | | | | *e*SG | **Sb** | **12 53 56.2** | **-0.6** |
| **GULT** | **Gulveren** | **0.48** | **251** | *e*Pg | **Pg** | **12 53 48.9** | **+0.6** |
| GULT | | | | *e*Sg | **Sb** | **12 53 56.3** | **-0.6** |
| **SPNC** | **Sapanca-Adapaz** | **0.61** | **279** | *e*PG | **Pb** | **12 53 51.5** | **-0.4** |
| SPNC | | | | *e*SG | **Sb** | **12 54 00.7** | **-0.1** |
| **SPNC** | **Sapanca-Adapaz** | **0.61** | **279** | *e*Pg | **Pb** | **12 53 51.5** | **-0.4** |
| SPNC | | | | *e*Sg | **Sb** | **12 54 00.6** | **-0.1** |
| **KDZE** | **Karadeniz Ereo** | **0.77** | **19** | *e*PG | **Pb** | **12 53 54.4** | **-0.1** |
| **KDZE** | **Karadeniz Ereo** | **0.77** | **19** | *e*Pg | **Pb** | **12 53 54.4** | **-0.1** |
| **AUMIH** | **MIHALICIK** | **0.78** | **158** | P | **Pg** | **12 53 54.6** | **+0.6** |
| AUMIH | | | | S | **Sn** | **12 54 07.9** | **-0.3** |
| **BORA** | **Eskisehir** | **0.87** | **215** | *i* P | **Pg** | **12 53 55.5** | **-0.1** |
| BORA | | | | *i* S | **Sg** | **12 54 06.6** | **-0.4** |
| **BORA** | **Eskisehir** | **0.87** | **215** | P | **Pg** | **12 53 55.6** | **-0.1** |
| **BORA** | **Eskisehir** | **0.87** | **215** | P | **Pg** | **12 53 55.5** | **-0.1** |
| BORA | | | | S | **Sg** | **12 54 06.6** | **-0.4** |
| **CAVI** | **Cavuskoy** | **1.04** | **248** | *e*PG | **Pg** | **12 53 58.8** | **-0.2** |
| **CAVI** | **Cavuskoy** | **1.04** | **248** | *e*Pg | **Pg** | **12 53 58.8** | **-0.2** |
| **ADVT** | **Abdulvahap** | **1.05** | **262** | *e*PG | **Pn** | **12 53 59.9** | **-0.1** |
| **ADVT** | **Abdulvahap** | **1.05** | **262** | *e*Pg | **Pn** | **12 53 59.9** | **-0.1** |
| **ESKT** | **Eskisehir** | **1.09** | **190** | *e*PN | **Pn** | **12 54 00.8** | **+0.2** |
| **ESKT** | **Eskisehir** | **1.09** | **190** | *e*Pn | **Pn** | **12 54 00.8** | **+0.2** |
| **HRT** | **Hereke** | **1.12** | **282** | *e*PN | **Pg** | **12 54 00.3** | **-0.1** |
| **HRT** | **Hereke** | **1.12** | **282** | *e*Pn | **Pg** | **12 54 00.3** | **-0.1** |
| **SVRH** | **Sivrihisar-ESK** | **1.19** | **164** | *e*PN | **Pg** | **12 54 02.3** | **+0.4** |
| **SVRH** | **Sivrihisar-ESK** | **1.19** | **164** | *e*Pn | **Pn** | **12 54 02.3** | **+0.4** |
| **SILT** | **Sile** | **1.24** | **297** | *e*PN | **Pg** | **12 54 03.4** | **+0.6** |
| **SILT** | **Sile** | **1.24** | **297** | *e*Pn | **Pg** | **12 54 03.4** | **+0.6** |
| **IZI** | **Iznik** | **1.27** | **259** | *e*PN | **Pg** | **12 54 03.8** | **+0.4** |
| **IZI** | **Iznik** | **1.27** | **259** | *e*Pn | **Pg** | **12 54 03.8** | **+0.4** |
| **SAFT** | **Safranbolu** | **1.36** | **61** | *e*PN | **Pg** | **12 54 05.0** | **-0.2** |
| **SAFT** | **Safranbolu** | **1.36** | **61** | *e*Pn | **Pg** | **12 54 05.0** | **-0.2** |
| **GEMT** | **Gemlik** | **1.47** | **265** | *e*PN | **Pb** | **12 54 06.5** | **0.0** |
| **GEMT** | **Gemlik** | **1.47** | **265** | *e*Pn | **Pb** | **12 54 06.5** | **0.0** |
| **ISK** | **Istanbul-Kandi** | **1.62** | **288** | *e*PN | **Pb** | **12 54 08.7** | **-0.4** |
| **ISK** | **Istanbul-Kandi** | **1.62** | **288** | *e*Pn | **Pb** | **12 54 08.7** | **-0.4** |
| **TVSB** | **Tavsanli** | **1.70** | **228** | *e*PN | **Pn** | **12 54 09.9** | **+0.9** |
| **TVSB** | **Tavsanli** | **1.70** | **228** | *e*Pn | **Pn** | **12 54 09.9** | **+0.9** |
| **ORLT** | **Orhaneli** | **1.77** | **253** | *e*PN | **Pn** | **12 54 10.9** | **+1.0** |
| **ORLT** | **Orhaneli** | **1.77** | **253** | *e*Pn | **Pn** | **12 54 10.9** | **+1.0** |
| **KIZT** | **Kizilcal** | **1.81** | **160** | *e*PN | **Pn** | **12 54 11.4** | **+0.9** |
| **KIZT** | **Kizilcal** | **1.81** | **160** | *e*Pn | **Pn** | **12 54 11.4** | **+0.9** |

**MAN 28 12:58:28,11.˚69N×125.˚81E,h46km,mb3.5,ML2.2,MS1.7, 2D,Samar**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLP** | **Palo** | **0.96** | **238** | ⇓*e*P | Pn | 12 58 47.5 | +2.3 |
| PLP | | | | *e*S | Sn | 12 58 58.1 | +0.4 |
| **OCLP** | **Ormoc** | **1.33** | **242** | *e*P | Pn | 12 58 55.4 | +5.2 |
| OCLP | | | | *e*S | Sn | 12 59 08.4 | +1.6 |
| **MSLP** | **Maasin** | **1.80** | **211** | *e*P | Pn | 12 58 58.2 | +1.6 |
| MSLP | | | | *e*S | Sn | 12 59 16.5 | -1.8 |
| **SCPH** | **Surigao** | **1.92** | **189** | ⇓*e*P | Pn | 12 58 58.8 | +0.6 |

*DDA **28** 13:11:30.7,38.˚74N×36.˚64E,h7km,Md2.7*

*ISK **28** 13:11:32.6,38.˚75N×36.˚38E,h3km,MD2.5*

*ISCJB **28** 13:11:33.1±0.8,38.˚78N±0.˚04×36.˚37E±0.˚06,h0km±9km, Error ellipse: s-maj=

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **H11N1** | **WAKE ISLAND Hy** | **40.42** | **73** | T | T | 14 08 05.7 | |
| | baz=265,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.43** | **73** | T | T | 14 08 08.8 | |
| | baz=265,slow=75 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.44** | **73** | T | T | 14 08 07.0 | |
| | baz=265,slow=75 | | | | | | |
| **GUN** | **Gumba** | **40.86** | **300** | *e*P | **P** | **13 24 53.5** | **+0.1** |
| | 30nm,0.8s | | | | | | |
| **PKI** | **Pulchoki** | **41.17** | **299** | *e*P | **P** | **13 24 55.0** | **-0.9** |
| **PKIN** | **Phulchoki** | **41.18** | **299** | *e*P | **P** | **13 24 54.8** | **-1.1** |
| | 6.6nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **41.95** | **300** | *e*P | **P** | **13 25 01.0** | **-1.0** |
| **KOLN** | **Koldanda** | **42.77** | **299** | *e*P | **P** | **13 25 08.6** | **-0.2** |
| | 17nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **48.96** | **25** | LR | LR | 13 46 34.7 | |
| | comp=Z,7.0nm,21.5s,baz=77,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.96** | **323** | P | **P** | **13 26 12.4** | **+0.1** |
| | 1.2nm,0.4s,baz=116,slow=8.6,SNR=9.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.54** | **331** | P | **P** | **13 26 30.4** | **-0.8** |
| | 1.9nm,0.6s,baz=144,slow=6.8,SNR=7.2 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.00** | **325** | P | **P** | **13 26 41.9** | **0.0** |
| | 1.8nm,0.5s,baz=126,slow=7.0,SNR=17 | | | | | | |
| **BVAR** | **Borovoye Array** | **60.59** | **325** | P | **P** | **13 27 21.1** | **0.0** |
| | 0.7nm,0.6s,baz=123,slow=7.1,SNR=4.1 | | | | | | |
| **ILAR** | **Eielson Array** | **78.78** | **26** | P | **P** | **13 29 13.1** | **+0.3** |
| | 0.4nm,0.8s,baz=245,slow=5.9,SNR=3.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.11** | **340** | P | **P** | **13 29 35.1** | **-0.6** |
| | 3.6nm,0.9s,baz=74,slow=7.8,SNR=4.2 | | | | | | |
| **FINES** | **FINESS Array B** | **84.81** | **332** | P | **P** | **13 29 44.3** | **-0.2** |
| | 1.0nm,0.6s,baz=83,slow=4.6,SNR=4.5 | | | | | | |

*ISCJB **28** 13:21:27.1±0.7,29°.66S±0°.03×71°.26W±0°.10,h57km±5km, mb3.7/3, Error ellipse: s-maj=13.9km s-min=5.4km az=1.0*
*GUC **28** 13:21:28.4±0.4,29°.64S×71°.09W,h38km±1km, ML4.1*
*IDC **28** 13:21:28.0±0.4,29°.64S×71°.30W,h50km±34km,mb3.8/2, mb1 3.9/7,mb1mx3.7/28,mbtmp3.9/7,ML3.7/4,MS2.6/4, Ms1 2.7/4,ms1mx2.5/25,Error ellipse: s-maj=50.4km s-min=16.3km az=69.0*
*NEIC **28** 13:21:28.0,29°.64S×71°.09W,h38km,ML4.1(GUC),After GUC.*
*NEIC Felt [III] at La Higuera and [II] at Coquimbo, La Serena and Vicuna.*

**ISC 28 13:21:27.8±0.9,29°.65S±0°.04×71°.21W±0°.09,h48km±8km, n32,σ1s15/32,mb4.0/3,1C-1D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **LSCH** | **La Serena** | **0.26** | **187** | | *e*P | | **Pn** | **13 21 36.4** | **-0.1** |
| LSCH | | | | | *e*S | | **Sn** | **13 21 42.5** | **-0.1** |
| **TLL** | **Tololo Astrono** | **0.62** | **146** | ⇓ | *e*P | | **Pn** | **13 21 41.0** | **+0.2** |
| TLL | | | | | *e*S | | **Sn** | **13 21 50.2** | **+0.1** |
| TLL | | | | | AML | | AML | 13 21 51.6 | |
| | comp=E,15μm,0.4s | | | | | | | | |
| **LCO** | **Las Campanas** | **0.77** | **35** | | *e*P | | **Pn** | **13 21 42.7** | **-0.1** |
| LCO | | | | | *e*S | | **Sn** | **13 21 53.5** | **-0.1** |
| **LCO** | **Las Campanas** | **0.77** | **35** | | *e*Pn | | **Pn** | **13 21 43.3** | **+0.5** |
| LCO | | | | | *e*Sn | | **Sn** | **13 21 53.0** | **-0.6** |
| **VACH** | **Vallenar** | **1.14** | **20** | ⇑ | *i*P | | **Pn** | **13 21 48.2** | **+0.8** |
| VACH | | | | | *e*S | | **Sn** | **13 22 02.9** | **+0.9** |
| **AGUA** | **GUANDACOL** | **2.37** | **87** | | *i*P | | Pn | 13 22 24.4 | +20 |
| **CPCH** | **Copiapo** | **2.40** | **18** | | *e*P | | **Pn** | **13 22 06.1** | **+1.4** |
| CPCH | | | | | *e*S | | **Sn** | **13 22 34.5** | **+1.5** |
| **CDCH** | **Caldera** | **2.59** | **8** | | *e*P | | **Pn** | **13 22 07.4** | **0.0** |
| **AMOG** | **MOGNA** | **2.68** | **119** | | *i*P | | Pn | 13 22 27.2 | +19 |
| AMOG | | | | | *i*S | | Sn | 13 22 56.2 | +16 |
| **RTLS** | **Leoncito** | **2.70** | **143** | | *i*P | | Pn | 13 22 29.7 | +21 |
| **VCA** | **Vinchina** | **2.78** | **72** | | *i*P | | Pn | 13 22 30.9 | +21 |
| **RTCV** | **Cerro Valdivia** | **3.18** | **135** | | *i*P | | Pn | 13 22 33.5 | +18 |
| **CFAA** | **Coronel Fontan** | **3.22** | **128** | | P | | **Pn** | **13 22 18.1** | **+2.1** |
| | comp=E,1.9nm,0.3s,baz=312,slow=12,SNR=36 | | | | | | | | |
| CFAA | | | | | S | | **Sn** | **13 22 55.6** | **+2.6** |
| | comp=E,2.0nm,0.3s,baz=176,slow=20,SNR=6.4 | | | | | | | | |
| CFAA | | | | | LR | | LR | 13 23 33.6 | |
| | comp=E,12nm,20.0s,baz=325,slow=38 | | | | | | | | |
| **CFAA** | **Coronel Fontan** | **3.22** | **128** | | *i*P | | Pn | 13 22 34.9 | +19 |
| **ROCH** | **El Roble** | **3.32** | **177** | | *e*P | | **Pn** | **13 22 19.5** | **+2.1** |
| ROCH | | | | | AML | | AML | 13 23 10.7 | |
| | comp=E,445nm,0.8s | | | | | | | | |
| **AVFE** | **Valle Fertil** | **3.40** | **108** | | *i*P | | Pn | 13 22 37.0 | +18 |
| AVFE | | | | | AML | | AML | 13 23 21.3 | |
| | comp=Z,239nm,0.5s | | | | | | | | |
| **ARCO** | **CERRO ARCO** | **3.73** | **149** | | *i*P | | Pn | 13 22 41.9 | +19 |
| ARCO | | | | | AML | | AML | 13 23 22.8 | |
| | comp=Z,168nm,0.5s | | | | | | | | |
| **TCA** | **Tanti** | **5.95** | **108** | | *i*P | | Pn | 13 23 09.5 | +16 |
| **LVC** | **Limon Verde** | **7.30** | **17** | | P | | **Pn** | **13 23 11.2** | **-1.0** |
| | comp=Z,37nm,0.3s,baz=190,slow=9.1,SNR=7.1 | | | | | | | | |
| LVC | | | | | LR | | LR | 13 26 14.9 | |
| | comp=Z,255nm,21.8s,baz=222,slow=39 | | | | | | | | |
| **LVC** | **Limon Verde** | **7.30** | **17** | | *e*Pn | | **Pn** | **13 23 12.1** | **-0.1** |
| LVC | | | | | *e*Sn | | **Sn** | **13 24 32.6** | **-1.3** |
| **TRQA** | **Tornquist** | **11.36** | **140** | | *e*Pn | | **Pn** | **13 24 06.6** | **-0.9** |
| TRQA | | | | | *e*Sn | | **Sn** | **13 26 10.8** | **-2.1** |
| **CPUP** | **Villa Florida** | **12.70** | **78** | | P | | **Pn** | **13 24 25.4** | **-0.4** |
| | comp=Z,0.2nm,0.3s,baz=223,slow=18,SNR=2.5 | | | | | | | | |
| CPUP | | | | | LR | | LR | 13 29 41.5 | |
| | comp=Z,44nm,22.0s,baz=265,slow=39 | | | | | | | | |
| **LPAZ** | **La Paz** | **13.60** | **13** | | P | | **Pn** | **13 24 40.1** | **+1.5** |
| | comp=Z,0.3nm,0.3s,baz=176,slow=5.4,SNR=9.2 | | | | | | | | |
| LPAZ | | | | | LR | | LR | 13 30 48.6 | |
| | comp=Z,28nm,19.1s,baz=220,slow=41 | | | | | | | | |
| **SIV** | **San Ignacio** | **16.48** | **37** | | P | | **P** | **13 25 17.5** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=227,slow=9.8,SNR=6.0 | | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **53.76** | **159** | | P | | **P** | **13 30 45.6** | **+0.7** |
| | baz=286,slow=8.4 | | | | | | | | |
| **SNAA** | **Sanae** | **55.36** | **159** | | P | | **P** | **13 30 56.5** | **0.0** |
| **SNAA** | **Sanae** | **55.36** | **159** | | *e*P | | **P** | **13 30 55.1** | **-1.4** |
| | comp=Z,0.1nm,0.5s | | | | | | | | |
| **MAW** | **Mawson** | **77.14** | **164** | | P | | **P** | **13 33 16.0** | **+0.1** |
| | comp=Z,1.2nm,0.5s,baz=230,slow=7.9,SNR=8.6 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **82.06** | **70** | | P | | **P** | **13 33 43.4** | **0.0** |
| | comp=Z,1.2nm,0.8s,baz=245,slow=4.9,SNR=4.6 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.89** | **210** | | PKP | | **PKPdf** | **13 40 22.0** | **-1.1** |
| | comp=Z,0.3nm,1.0s,baz=152,slow=1.9,SNR=4.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **124.89** | **210** | | PKP | | **PKPdf** | **13 40 22.0** | **-1.1** |
| **ZALV** | **Zalesovo Beam** | **150.13** | **29** | | PKPbc | | **PKPbc** | **13 41 13.3** | **+0.5** |
| | comp=Z,3.2nm,0.5s,baz=297,slow=1.6,SNR=13 | | | | | | | | |

*KRNET **28** 13:21:51.3±0.1,39°.55N×73°.57E,h12km,mb3.5*
*IDC **28** 13:21:51.3±1.1,39°.50N×73°.59E,h0km,mb3.8/6, mb1 3.7/13,mb1mx3.6/44,mbtmp3.6/13,ML3.1/7,Error ellipse: s-maj=20.5km s-min=13.5km az=126.0*
*BJI **28** 13:21:53.2,39°.50N×73°.29E,h9km,ML3.5/4*
*NNC **28** 13:21:53.4±1.4,39°.62N×73°.51E,h0km,mb4.0,mpv3.8, Error ellipse: s-maj=16.0km s-min=6.6km az=100.0*
*MOS **28** 13:21:54.7±2.1,39°.70N×73°.33E,h20km,mb4.4/3,Error ellipse: s-maj=12.8km s-min=6.8km az=85.7*

**ISC 28 13:21:51.1±1.0,39°.44N±0°.04×73°.57E±0°.02,h3km±5km, n79,σ1s90/96,mb3.9/6,31C-27D,Tajikistan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SFK** | **Sufi-Kurgan** | **0.57** | **355** | | ⇓P | | **Pg** | **13 22 00.7** | **-1.5** |
| | 360nm,0.3s | | | | | | | | |
| SFK | | | | | ⇑S | | **Sg** | **13 22 07.2** | **-2.3** |
| | 2μm,0.6s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.57** | **355** | | PG | | **Pg** | **13 22 00.6** | **-1.5** |
| SFK | | | | | S | | **Sg** | **13 22 07.2** | **-2.3** |
| SFK | | | | | pmax | | pmax | | |
| | comp=Z,360nm,0.3s | | | | | | | | |
| SFK | | | | | smax | | smax | | |
| | comp=N,2μm,0.6s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.57** | **355** | ⇓ | *i*P | | **Pg** | **13 22 00.6** | **-1.5** |
| | baz=353 | | | | | | | | |
| SFK | | | | ⇓ | *i*S | | **Sg** | **13 22 07.3** | **-2.3** |
| | baz=353 | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.57** | **355** | ⇑ | *i*P | | **Pg** | **13 22 00.6** | **-1.5** |
| | baz=353 | | | | | | | | |
| SFK | | | | ⇑ | *i*S | | **Sg** | **13 22 07.4** | **-2.1** |
| | baz=353 | | | | | | | | |
| **KSH** | **Kashi** | **1.86** | **87** | | Pg | | **Pn** | **13 22 23.5** | **-0.5** |
| KSH | | | | | Sg | | **Sn** | **13 22 46.5** | **-1.5** |
| KSH | | | | | SMN | | | | |
| | comp=N,380nm,0.5s | | | | | | | | |
| KSH | | | | | SME | | | | |
| | comp=N,450nm,0.7s | | | | | | | | |
| **ARSB** | **Arslanbob** | **1.93** | **347** | ⇓ | *e*P | | **Pn** | **13 22 25.5** | **+0.5** |
| | baz=346 | | | | | | | | |
| ARSB | | | | ⇓ | *e*S | | **Sb** | **13 22 50.8** | **-0.8** |
| | baz=346 | | | | | | | | |
| **BTK** | **Batken** | **2.21** | **287** | ⇓ | *e*P | | **Pb** | **13 22 30.9** | **-0.8** |
| | baz=284 | | | | | | | | |
| BTK | | | | ⇓ | *e*S | | **Sb** | **13 23 00.0** | **+0.5** |
| | baz=284 | | | | | | | | |
| **ARLS** | **Aral** | **2.48** | **13** | ⇓ | *e*P | | **Pn** | **13 22 34.4** | **+1.8** |
| | baz=14 | | | | | | | | |
| ARLS | | | | ⇓ | *e*S | | **Sb** | **13 23 05.9** | **-1.5** |
| | baz=14 | | | | | | | | |
| **ARK** | **Arkit** | **2.65** | **333** | ⇓ | *e*P | | **Pn** | **13 22 37.0** | **+2.2** |
| | baz=332 | | | | | | | | |
| ARK | | | | ⇓ | *e*S | | **Sb** | **13 23 09.6** | **-2.7** |
| | baz=332 | | | | | | | | |
| **AML** | **Almayashu** | **2.69** | **2** | ⇓ | *i*P | | **Pn** | **13 22 37.7** | **+2.1** |
| | baz=2.0 | | | | | | | | |
| AML | | | | ⇓ | *i*S | | **Sb** | **13 23 11.9** | **-1.6** |
| | baz=2.0 | | | | | | | | |
| **AML** | **Almayashu** | **2.69** | **2** | | P | | **Pn** | **13 22 37.8** | **+2.1** |
| | SNR=71 | | | | | | | | |
| **NRN** | **Naryn** | **2.72** | **42** | ⇓ | *e*P | | **Pn** | **13 22 38.0** | **+2.1** |
| | baz=44 | | | | | | | | |
| NRN | | | | ⇓ | *e*S | | **Sn** | **13 23 12.3** | **+2.8** |
| | baz=44 | | | | | | | | |
| **UCH** | **Uchtor** | **2.87** | **14** | ⇑ | *i*P | | **Pn** | **13 22 40.9** | **+2.7** |
| | baz=15 | | | | | | | | |
| UCH | | | | ⇑ | *i*S | | **Sb** | **13 23 18.1** | **-0.8** |
| | baz=15 | | | | | | | | |
| **UCH** | **Uchtor** | **2.87** | **14** | | P | | **Pn** | **13 22 40.9** | **+2.7** |
| | SNR=28 | | | | | | | | |
| **KZA** | **Kyzart** | **2.92** | **25** | ⇑ | *e*P | | Pn | 13 22 42.3 | +3.4 |
| | baz=26 | | | | | | | | |
| KZA | | | | ⇑ | *i*S | | **Sb** | **13 23 20.3** | **-0.1** |
| | baz=26 | | | | | | | | |
| **KZA** | **Kyzart** | **2.92** | **25** | | P | | **Pb** | **13 22 43.4** | **-0.7** |
| | SNR=22 | | | | | | | | |
| **MNAS** | **Manas** | **3.15** | **345** | ⇓ | Pn | | **Pn** | **13 22 43.3** | **+1.6** |
| | comp=N,12nm,0.5s | | | | | | | | |
| MNAS | | | | ⇑ | Pg | | **Pb** | **13 22 46.9** | **-0.8** |
| | comp=N,62nm,0.9s | | | | | | | | |
| MNAS | | | | ⇑ | Lg | | Lg | 13 23 26.8 | |
| | comp=N,86nm,0.6s | | | | | | | | |
| **MNAS** | **Manas** | **3.15** | **345** | | PN | | **Pn** | **13 22 43.2** | **+1.6** |
| MNAS | | | | | | | | 13 22 46.9 | |
| MNAS | | | | | | | | 13 23 26.8 | |
| MNAS | | | | | pmax | | pmax | | |
| | comp=Z,63nm,0.9s | | | | | | | | |
| MNAS | | | | | pmax | | pmax | | |
| | comp=N,86nm,0.6s | | | | | | | | |
| **MNAS** | **Manas** | **3.15** | **345** | ⇓ | *e*P | | **Pn** | **13 22 43.6** | **+1.9** |
| | baz=345 | | | | | | | | |
| MNAS | | | | ⇓ | *e*S | | **Sn** | **13 23 20.6** | **+0.8** |
| | baz=345 | | | | | | | | |
| **MNAS** | **Manas** | **3.15** | **345** | ⇑ | *i*P | | **Pn** | **13 22 43.7** | **+2.0** |
| | baz=345 | | | | | | | | |
| MNAS | | | | ⇑ | *i*S | | **Sb** | **13 23 23.5** | **-3.0** |
| | baz=345 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.22** | **3** | ⇑ | *i*P | | **Pn** | **13 22 45.5** | **+2.9** |
| | baz=3.0 | | | | | | | | |
| EKS2 | | | | ⇑ | *i*S | | **Sb** | **13 23 25.9** | **-2.7** |
| | baz=3.0 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.22** | **3** | | P | | **Pn** | **13 22 45.5** | **+2.9** |
| | SNR=16 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.26** | **12** | ⇑ | Pn | | **Pn** | **13 22 46.3** | **+3.0** |
| | comp=N,13nm,0.7s | | | | | | | | |
| AAK | | | | ⇑ | Pg | | **Pb** | **13 22 51.0** | **+1.3** |
| | comp=N,56nm,0.7s | | | | | | | | |
| AAK | | | | ⇓ | Lg | | Lg | 13 23 30.9 | |
| | comp=N,121nm,0.7s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.26** | **12** | | Pn | | **Pn** | **13 22 46.0** | **+2.7** |
| | comp=N,6.3nm,0.3s,baz=179,slow=13,SNR=54 | | | | | | | | |
| AAK | | | | | Lg | | Lg | 13 23 31.7 | |
| | comp=N,10nm,0.3s,baz=316,slow=16,SNR=5.6 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.26** | **12** | | PN | | **Pn** | **13 22 46.2** | **+3.0** |
| AAK | | | | | | | | 13 22 51.0 | |
| AAK | | | | | | | | 13 23 30.9 | |
| AAK | | | | | pmax | | pmax | | |
| | comp=Z,56nm,0.7s | | | | | | | | |
| AAK | | | | | pmax | | pmax | | |
| | comp=N,121nm,0.7s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.26** | **12** | ⇓ | *i*P | | Pn | 13 22 46.5 | +3.3 |
| | baz=12 | | | | | | | | |
| AAK | | | | ⇓ | *i*S | | **Sb** | **13 23 27.6** | **-2.3** |
| | baz=12 | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.26** | **12** | | P | | Pn | 13 22 46.6 | +3.3 |
| | SNR=38 | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.37** | **18** | ⇑ | *i*P | | Pn | 13 22 48.4 | +3.6 |
| | baz=18 | | | | | | | | |
| KBK | | | | ⇑ | *i*S | | **Sb** | **13 23 34.6** | **+1.5** |
| | baz=18 | | | | | | | | |
| **KBK** | **Karagaybulak** | **3.37** | **18** | | P | | **Pb** | **13 22 52.8** | **+1.2** |
| | SNR=46 | | | | | | | | |
| **ULHL** | **Ulahol** | **3.45** | **35** | ⇑ | *i*P | | Pn | 13 22 50.1 | +4.1 |
| | baz=36 | | | | | | | | |
| ULHL | | | | ⇑ | *i*S | | **Sb** | **13 23 39.5** | **+4.0** |
| | baz=36 | | | | | | | | |
| **ULHL** | **Ulahol** | **3.45** | **35** | | P | | **Pb** | **13 22 51.1** | **-2.0** |
| | SNR=16 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.66** | **14** | ⇑ | *i*P | | **Pn** | **13 22 51.7** | **+3.1** |
| | baz=14 | | | | | | | | |
| CHMS | | | | ⇑ | *i*S | | **Sb** | **13 23 44.3** | **+3.1** |
| | baz=14 | | | | | | | | |
| **CHMS** | **Chumysh** | **3.66** | **14** | | P | | **Pn** | **13 22 51.2** | **+2.6** |
| | SNR=9.1 | | | | | | | | |
| **DZET** | **Dzherino** | **3.75** | **262** | ⇑ | Pn | | **Pn** | **13 22 52.7** | **+2.8** |
| | comp=N,12nm,0.5s | | | | | | | | |
| DZET | | | | ⇑ | Pg | | **Pb** | **13 23 00.0** | **+2.1** |
| | comp=N,126nm,0.7s | | | | | | | | |
| DZET | | | | ⇑ | Lg | | Lg | 13 23 54.9 | |
| | comp=N,782nm,0.7s | | | | | | | | |
| **DZET** | **Dzherino** | **3.75** | **262** | | PN | | **Pn** | **13 22 52.7** | **+2.8** |
| DZET | | | | | | | | 13 23 00.0 | |
| DZET | | | | | | | | 13 23 54.9 | |
| DZET | | | | | pmax | | pmax | | |
| | comp=Z,126nm,0.7s | | | | | | | | |
| DZET | | | | | pmax | | pmax | | |
| | comp=N,782nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.79** | **23** | ⇑ | Pn | | Pn | 13 22 55.2 | +4.6 |
| | comp=N,3.0nm,0.7s | | | | | | | | |
| TKM2 | | | | ⇓ | Pg | | **Pb** | **13 23 00.4** | **+1.6** |
| | comp=N,20nm,0.8s | | | | | | | | |
| TKM2 | | | | ⇑ | Lg | | Lg | 13 23 50.8 | |
| | comp=N,110nm,0.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.79** | **23** | | PN | | Pn | 13 22 55.2 | +4.6 |
| TKM2 | | | | | | | | 13 23 00.4 | |
| TKM2 | | | | | | | | 13 23 50.8 | |
| TKM2 | | | | | pmax | | pmax | | |
| | comp=Z,20nm,0.9s | | | | | | | | |
| TKM2 | | | | | pmax | | pmax | | |
| | comp=N,110nm,0.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.79** | **23** | ⇑ | *e*P | | Pn | 13 22 55.4 | +4.8 |
| | baz=24 | | | | | | | | |
| TKM2 | | | | ⇑ | *i*S | | **Sg** | **13 23 50.1** | **-2.9** |
| | baz=24 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **3.79** | **23** | | P | | Pb | 13 22 55.6 | -3.2 |
| | SNR=14 | | | | | | | | |
| **USP** | **Ospenovka** | **3.88** | **10** | | P | | **Pn** | **13 22 54.6** | **+2.9** |
| | SNR=9.1 | | | | | | | | |
| **KK31** | **Karatay Array** | **4.32** | **329** | | Pn | | **Pn** | **13 22 59.1** | **+1.4** |
| | comp=N,0.8nm,0.2s,baz=132,slow=11,SNR=162 | | | | | | | | |
| KK31 | | | | ⇓ | Pg | | **Pb** | **13 23 08.9** | **+1.2** |
| | comp=N,9.0nm,0.5s,baz=144,slow=15,SNR=20 | | | | | | | | |
| KK31 | | | | ⇓ | Sn | | **Sn** | **13 23 50.8** | **+2.2** |
| | comp=N,12nm,0.3s,baz=142,slow=26,SNR=4.9 | | | | | | | | |
| KK31 | | | | ⇑ | Lg | | Lg | 13 24 04.0 | |
| | comp=N,48nm,0.6s,baz=151,slow=29,SNR=5.5 | | | | | | | | |
| **KK31** | **Karatay Array** | **4.32** | **329** | *i* | PN | | **Pn** | **13 22 59.1** | **+1.4** |
| KK31 | | | | | | | | 13 23 08.9 | |
| KK31 | | | | | | | | 13 23 50.8 | |
| KK31 | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| KK31 | | | | | pmax | | pmax | | |
| | comp=Z,15nm,0.4s | | | | | | | | |
| KK31 | | | | | smax | | smax | | |
| | comp=N,27nm,0.3s | | | | | | | | |
| KK31 | | | | | pmax | | pmax | | |
| | comp=N,27nm,0.3s | | | | | | | | |
| **PDGK** | **Podgornoye** | **5.90** | **47** | ⇑ | Pn | | Pn | 13 23 23.3 | +4.0 |
| | comp=N,6.8nm,0.8s | | | | | | | | |
| PDGK | | | | ⇑ | Lg | | Lg | 13 24 54.9 | |
| | comp=N,78nm,0.8s | | | | | | | | |
| **PDGK** | **Podgornoye** | **5.90** | **47** | | PN | | Pn | 13 23 23.3 | +4.0 |
| PDGK | | | | | | | | 13 23 44.1 | |
| PDGK | | | | | | | | 13 24 54.8 | |
| PDGK | | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.7s | | | | | | | | |
| PDGK | | | | | pmax | | pmax | | |
| | comp=N,78nm,0.8s | | | | | | | | |
| **OTUK** | **Ortayu** | **8.84** | **355** | ⇓ | Pn | | **Pn** | **13 24 00.8** | **+1.0** |
| | comp=N,2.5nm,0.7s | | | | | | | | |
| OTUK | | | | ⇓ | Lg | | Lg | 13 26 29.3 | |
| | comp=N,6.6nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.72** | **38** | | Pn | | **Pn** | **13 24 13.0** | **+1.2** |
| | comp=N,0.1nm,0.3s,baz=219,slow=14,SNR=2.2 | | | | | | | | |
| MKAR | | | | | Lg | | Lg | 13 26 56.7 | |
| | comp=N,0.0nm,0.3s,baz=248,slow=23,SNR=2.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **9.72** | **38** | | P | | **Pn** | **13 24 13.0** | **+1.2** |
| **IMYA** | **Miami** | **11.09** | **258** | | *e*P | | **Pn** | **13 24 30.0** | **-0.6** |
| **KURBB** | **Kurchatov Arra** | **11.71** | **16** | | Pn | | **Pn** | **13 24 38.5** | **-0.4** |
| | comp=N,0.0nm,0.3s,baz=206,slow=12,SNR=3.2 | | | | | | | | |
| KURBB | | | | | Lg | | Lg | 13 28 00.0 | |
| | comp=N,0.1nm,0.3s,baz=198,slow=29,SNR=8.9 | | | | | | | | |
| **KURK** | **Kurchatov** | **11.82** | **16** | | P | | **Pn** | **13 24 38.5** | **-1.9** |
| **IEMG** | **Emamgholi** | **11.88** | **265** | | *e*P | | **Pn** | **13 24 40.0** | **-1.6** |
| **IPAY** | **Payeh** | **11.89** | **260** | | *e*P | | **Pn** | **13 24 41.1** | **-0.6** |
| **IAKL** | **Akhelmad** | **12.02** | **261** | | *e*P | | **Pn** | **13 24 42.1** | **-1.5** |
| **GEYT** | **Alibeck** | **12.17** | **268** | | Pn | | **Pn** | **13 24 45.1** | **-0.3** |
| | comp=N,0.4nm,0.3s,baz=96,slow=10,SNR=3.3 | | | | | | | | |
| GEYT | | | | | Sn | | **Sn** | **13 27 00.3** | **-1.3** |
| | comp=N,0.4nm,0.3s,baz=52,slow=49,SNR=3.0 | | | | | | | | |
| **ISFR** | **Sfrayin** | **12.47** | **264** | | *e*P | | **Pn** | **13 24 47.1** | **-2.7** |
| **BVAR** | **Borovoye Array** | **13.76** | **352** | | Pn | | **Pn** | **13 25 05.2** | **-1.7** |
| | comp=N,0.2nm,0.3s,baz=165,slow=12,SNR=8.7 | | | | | | | | |
| BVAR | | | | | Lg | | Lg | 13 29 02.2 | |
| | comp=N,0.1nm,0.3s,baz=176,slow=26,SNR=2.5 | | | | | | | | |
| **BRVK** | **Borovoye** | **13.80** | **352** | ⇓ | *e*P | | **Pn** | **13 25 05.5** | **-2.0** |
| BRVK | | | | | pmax | | pmax | | |
| | comp=Z,9.0nm,1.8s | | | | | | | | |
| **AB31** | **Akbulak array** | **13.81** | **320** | | P | | **Pn** | **13 25 06.2** | **-1.4** |
| | comp=Z,0.9nm,0.5s,baz=128,slow=14,SNR=10 | | | | | | | | |
| **AB31** | **Akbulak array** | **13.81** | **320** | | P | | **Pn** | **13 25 06.2** | **-1.4** |
| AB31 | | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **15.52** | **320** | | Pn | | **Pn** | **13 25 28.9** | **-1.9** |
| | comp=Z,0.1nm,0.3s,baz=125,slow=12,SNR=2.6 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.40** | **24** | | Pn | | **Pn** | **13 25 41.1** | **-1.0** |
| | comp=Z,0.1nm,0.3s,baz=198,slow=14,SNR=2.1 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **16.40** | **24** | | *e*P | | **P** | **13 25 45.6** | **+0.6** |
| **NVS** | **Novosibirsk** | **16.72** | **20** | | *e*P | | **P** | **13 25 49.3** | **+0.8** |
| **GTA** | **Gaotai** | **20.25** | **82** | | *e*P | | Pn | 13 26 33.8 | +4.2 |
| GTA | | | | | pP | | pP | 13 26 38.5 | +10 |
| GTA | | | | | sP | | sP | 13 26 41.0 | +12 |
| **SONM** | **Songino Array** | **25.04** | **60** | | P | | **P** | **13 27 17.0** | **+0.5** |
| | comp=Z,0.5nm,0.8s,baz=262,slow=9.9,SNR=2.7 | | | | | | | | |
| **SONM** | **Songino Array** | **25.04** | **60** | | P | | **P** | **13 27 17.0** | **+0.5** |
| **ANN** | **Anapa** | **27.18** | **293** | | *e*P | | **P** | **13 27 35.6** | **-0.1** |
| ANN | | | | | *e**PP | | **pP** | **13 27 39.5** | **+2.8** |
| ANN | | | | | *e* | | | 13 28 18.4 | |
| ANN | | | | | *e* | | | 13 30 57.4 | |
| ANN | | | | | *e*S | | **S** | **13 32 13.4** | **-1.5** |
| ANN | | | | | *e*SS | | **SnSn** | **13 33 20.6** | **-1.0** |
| **BRTR** | **Keskin Array B** | **30.60** | **283** | | P | | **P** | **13 28 07.5** | **+1.2** |
| | comp=Z,1.2nm,0.8s,baz=74,slow=9.5,SNR=4.4 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **30.60** | **283** | | P | | **P** | **13 28 07.6** | **+1.2** |
| BRTR | | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **37.98** | **303** | | *e*P | | **P** | **13 29 08.8** | **-1.2** |
| **STHS** | **Stebnicka Huta** | **37.98** | **303** | | *e*P | | **P** | **13 29 08.8** | **-1.2** |
| **CN2** | **Changchun** | **38.50** | **66** | | *e*P | | P | 13 29 18.3 | +3.9 |
| **ARCES** | **ARCESS Array B** | **39.25** | **336** | | P | | **P** | **13 29 21.0** | **+0.6** |
| | comp=Z,3.2nm,0.9s,baz=107,slow=7.8,SNR=3.7 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **39.25** | **336** | | P | | **P** | **13 29 21.0** | **+0.6** |
| ARCES | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **HFS** | **Hagfors** | **42.07** | **320** | | P | | **P** | **13 29 45.3** | **+1.5** |
| | comp=Z,6.1nm,1.1s,baz=99,slow=7.4,SNR=3.3 | | | | | | | | |
| **HFS** | **Hagfors** | **42.07** | **320** | | P | | **P** | **13 29 45.3** | **+1.5** |
| HFS | | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.81** | **269** | | P | | **P** | **13 32 50.3** | **-0.4** |
| | comp=Z,0.8nm,0.7s,baz=44,slow=5.9,SNR=6.2 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.88** | **124** | | P | | **P** | **13 34 13.0** | **+1.1** |
| | comp=Z,0.2nm,0.6s,baz=325,slow=4.6,SNR=5.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.88** | **124** | | *e*P | | P | 13 34 16.5 | +4.5 |

*MOS **28** 13:31:42.6±2.1,49°.58N×156°.89E,h48km,mb4.2/1,Error ellipse: s-maj=49.6km s-min=7.8km az=82.0*

**KRSC 28 13:31:42.6±1.8,49°.58N×156°.89E,h48km±25km,ML4.0, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.21** | **336** | | *i*P | | Pn | 13 32 03.7 | +0.6 |
| SKR | | | | | *i*S | | Sn | 13 32 18.5 | +0.2 |
| **SKR** | **Severo-Kuril's** | **1.21** | **336** | | *e*Pn | | Pn | 13 31 52.7 | -10 |
| SKR | | | | | pmax | | pmax | | |
| | comp=Z,60nm,0.5s | | | | | | | | |
|

*OMAN 13:56:27.2±99.0, 26°34'N×56°85'E, h16km±7km, Error ellipse: s-maj=159.1km s-min=117.2km az=10.0*

**ISC 28 13:56:14.9±1.4, 27°32'N±0°06×56°1E±0°1, h10km, n18, σ0§81/22, 3C-4D, Southern Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNDS** | **Bandar-Abbas** | **0.12** | **49** | *e*P | **Pg** | **13 56 16.9** | **-1.0** |
| BNDS | | | | *e*Sg | **Sg** | **13 56 20.7** | **+0.6** |
| **BANOM** | **Banah** | **1.41** | **172** | P | **Pn** | **13 56 39.9** | **-0.7** |
| | SNR=107 | | | | | | |
| BANOM | | | | ⇓S | **Sb** | **13 56 59.9** | **+0.7** |
| **BANOM** | **Banah** | **1.41** | **172** | ⇓*e*P | **Pn** | **13 56 39.9** | **-0.7** |
| | SNR=107 | | | | | | |
| **BANOM** | **Banah** | **1.41** | **172** | P | **Pn** | **13 56 39.9** | **-0.7** |
| | SNR=107 | | | | | | |
| BANOM | | | | S | **Sb** | **13 56 59.9** | **+0.7** |
| **NAZ** | **Nazwa, Dubai** | **2.35** | **189** | ⇓P | **Pn** | **13 56 54.6** | **+1.0** |
| **NAZ** | **Nazwa, Dubai** | **2.35** | **189** | P | **Pn** | **13 56 54.6** | **+1.0** |
| **HATD** | **Hatta, Dubai** | **2.48** | **179** | ⇓P | **Pn** | **13 56 55.1** | **-0.3** |
| **HATD** | **Hatta, Dubai** | **2.48** | **179** | ⇓P | **Pn** | **13 56 55.1** | **-0.3** |
| **HATD** | **Hatta, Dubai** | **2.48** | **179** | P | **Pn** | **13 56 55.1** | **-0.3** |
| **ASHO** | **Ashiyiah** | **2.62** | **180** | P | **Pn** | **13 56 57.6** | **+0.3** |
| | SNR=33 | | | | | | |
| ASHO | | | | ⇑P | **Pn** | **13 56 57.7** | **+0.3** |
| **ASHO** | **Ashiyiah** | **2.62** | **180** | ⇑*e*P | **Pn** | **13 56 57.5** | **+0.1** |
| | SNR=33 | | | | | | |
| **ASHO** | **Ashiyiah** | **2.62** | **180** | P | **Pn** | **13 56 57.5** | **+0.1** |
| | SNR=33 | | | | | | |
| **KRBR** | **Kerman** | **2.72** | **13** | *e*Pn | **Pn** | **13 56 59.7** | **+0.7** |
| **ASUD** | **Al Ashush, Dub** | **2.76** | **194** | P | **Pn** | **13 57 00.3** | **+1.1** |
| | SNR=6.1 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.76** | **194** | *e*P | **Pn** | **13 57 00.3** | **+1.1** |
| | SNR=6.1 | | | | | | |
| **ASUD** | **Al Ashush, Dub** | **2.76** | **194** | P | **Pn** | **13 57 00.3** | **+1.1** |
| | SNR=6.1 | | | | | | |
| **GHIR** | **Ghir-Karzin** | **2.90** | **290** | *e*Pn | **Pn** | **13 56 59.9** | **-1.3** |
| **SHAO** | **Shalim** | **9.26** | **183** | P | **Pn** | **13 58 27.9** | **-0.7** |
| | SNR=17 | | | | | | |

**IDC 28 14:05:52.5±14.0, 4°24S×96°86E, h0km, mb3.2/3, mb1 3.5/3, mb1mx3.3/31, mbtmp3.2/3, Error ellipse: s-maj=403.4km s-min=30.8km az=67.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.65** | **5** | P | P | 14 10 55.5 | 0.0 |
| | 0.8nm,0.6s,baz=190,slow=9.9,SNR=8.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **39.69** | **116** | P | P | 14 13 25.2 | -1.8 |
| | 0.4nm,1.1s,baz=290,slow=7.8,SNR=4.6 | | | | | | |
| **ASAR** | **Alice Springs** | **40.61** | **122** | P | P | 14 13 36.0 | +1.4 |
| | 0.2nm,0.5s,baz=303,slow=7.8,SNR=5.5 | | | | | | |

*ISCJB 28 14:11:57.3±0.7, 26°03S±0°05×29°23E±0°04, h0km, mb4.0/1, Error ellipse: s-maj=7.4km s-min=4.9km az=6.3*
*PRE 28 14:11:57.6±1.4, 26°00S×29°23E, h0km, ML3.3, Explosion*
*IDC 28 14:11:57.2±2.6, 26°21S×29°16E, h0km, mb3.8/1, mb1 3.4/4, mb1mx3.3/28, mbtmp3.4/4, ML3.0/3, Error ellipse: s-maj=29.4km s-min=19.7km az=128.0*
*BUL 28 14:11:59.2±6.2, 25°99S×29°99E, h15km±999km, MD3.6*

**ISC 28 14:11:57.2±0.9, 26°05S±0°05×29°24E±0°04, h0km, n15, σ1§79/24, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ERPM** | **east rand prop** | **0.94** | **252** | *e*P | **Pg** | **14 12 15.8** | **+0.7** |
| ERPM | | | | *e*S | **Sg** | **14 12 27.8** | **+0.5** |
| ERPM | | | | AML | AML | 14 12 30.3 | |
| | comp=Z,232nm,0.4s | | | | | | |
| **WDLM** | **Western Deep L** | **1.67** | **257** | *e*P | **Pb** | **14 12 29.2** | **+0.3** |
| WDLM | | | | *e*S | **Sn** | **14 12 51.1** | **+1.0** |
| WDLM | | | | AML | AML | 14 12 52.5 | |
| | comp=Z,565nm,0.5s | | | | | | |
| **KSR** | **Koster** | **2.11** | **275** | *e*P | **Pb** | **14 12 35.3** | **-1.2** |
| KSR | | | | *e*S | **Sn** | **14 13 02.0** | **+1.0** |
| KSR | | | | AML | AML | 14 13 04.9 | |
| | comp=Z,80nm,0.4s | | | | | | |
| **BFSD** | **Buffelsfontein** | **2.34** | **249** | *e*P | **Pn** | **14 12 39.0** | **+1.9** |
| BFSD | | | | *e*S | **Sn** | **14 13 07.7** | **+1.1** |
| BFSD | | | | AML | AML | 14 13 14.0 | |
| | comp=Z,172nm,0.4s | | | | | | |
| **POGA** | **Pongola** | **2.50** | **122** | *e*P | **Pb** | **14 12 42.2** | **-0.7** |
| POGA | | | | *e*S | **Sn** | **14 13 12.4** | **+2.1** |
| POGA | | | | AML | AML | 14 13 25.1 | |
| | comp=Z,288nm,0.5s | | | | | | |
| **LBTB** | **Lobatse** | **3.44** | **287** | Pn | **Pn** | **14 12 53.3** | **+1.1** |
| | comp=Z,1.5nm,0.3s,baz=108,slow=12,SNR=13 | | | | | | |
| LBTB | | | | Pg | **Pb** | **14 13 00.1** | **+1.0** |
| | comp=Z,6.1nm,0.3s,baz=117,slow=18,SNR=61 | | | | | | |
| LBTB | | | | Lg | Lg | 14 13 45.4 | |
| | comp=Z,31nm,0.3s,baz=24,slow=19,SNR=36 | | | | | | |
| **SWZ** | **Schweizer** | **3.67** | **251** | *e*P | **Pn** | **14 12 56.9** | **+1.5** |
| SWZ | | | | *e*S | **Sn** | **14 13 40.7** | **+1.3** |
| SWZ | | | | AML | AML | 14 13 55.1 | |
| | comp=Z,114nm,0.4s | | | | | | |
| **BOSA** | **Boshof** | **4.36** | **233** | *i* P | Pn | 14 13 09.8 | +5.0 |
| BOSA | | | | *i* S | **Sb** | **14 14 05.4** | **-2.6** |
| **BOSA** | **Boshof** | **4.36** | **233** | Pn | **Pn** | **14 13 03.5** | **-1.4** |
| | comp=Z,0.3nm,0.3s,baz=57,slow=15,SNR=5.1 | | | | | | |
| BOSA | | | | Pg | **Pb** | **14 13 12.9** | **-1.9** |
| | comp=Z,1.0nm,0.3s,baz=54,slow=12,SNR=11 | | | | | | |
| BOSA | | | | Sn | **Sn** | **14 13 52.6** | **-3.9** |
| | comp=Z,3.8nm,0.3s,baz=94,slow=16,SNR=5.3 | | | | | | |
| BOSA | | | | Lg | Lg | 14 14 11.2 | |
| | comp=Z,26nm,0.3s,baz=338,slow=4.6,SNR=19 | | | | | | |
| **I47ZA** | **BOSHOF INFRASO** | **4.38** | **233** | *i* | | 14 40 50.0 | |
| | baz=56,slow=332,SNR=0.7 | | | | | | |
| **KSD** | **Kokstad** | **4.47** | **178** | *e*P | **Pn** | **14 13 07.6** | **+1.2** |
| KSD | | | | *e*S | **Sn** | **14 14 00.6** | **+1.4** |
| KSD | | | | AML | AML | 14 14 19.3 | |
| | comp=Z,25nm,0.5s | | | | | | |
| **MATP** | **Matopo** | **5.64** | **353** | *i* P | Pn | 14 13 24.2 | +1.8 |
| MATP | | | | *i* S | **Sn** | **14 14 25.2** | **-2.9** |
| **MATP** | **Matopo** | **5.64** | **353** | Pn | **Pn** | **14 13 23.9** | **+1.5** |
| | comp=Z,1.4nm,0.3s,baz=170,slow=12,SNR=17 | | | | | | |
| **BLWY** | **Bulawayo** | **5.91** | **354** | *i* P | **Pn** | **14 13 23.8** | **-2.4** |
| BLWY | | | | *i* S | Sn | 14 14 24.0 | -11 |
| **TORD** | **Torodi Ar. Bea** | **47.29** | **322** | P | **P** | **14 20 33.1** | **+0.5** |
| | comp=Z,0.9nm,0.7s,baz=141,slow=7.3,SNR=6.9 | | | | | | |

**IDC 28 14:11:59.7±2.0, 30°14S×76°85E, h0km, mb3.5/4, mb1 3.7/4, mb1mx3.5/29, mbtmp3.5/4, MS3.1/1, Ms1 3.0/1, ms1mx2.5/21, Error ellipse: s-maj=57.8km s-min=40.1km az=69.0, Mid-Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H08S2** | **Diego Garcia H** | **22.75** | **349** | T | T | 14 41 07.3 | |
| | baz=172,slow=76 | | | | | | |
| **H08S1** | **Diego Garcia H** | **22.75** | **349** | T | T | 14 41 06.1 | |
| | baz=172,slow=76 | | | | | | |
| **H08S3** | **Diego Garcia H** | **22.77** | **349** | T | T | 14 41 05.5 | |
| | baz=172,slow=76 | | | | | | |
| **BOSA** | **Boshof** | **44.67** | **259** | LR | LR | 14 35 21.1 | |
| | comp=Z,21nm,18.6s,baz=14,slow=31 | | | | | | |
| **ASAR** | **Alice Springs** | **50.85** | **97** | P | P | 14 21 02.6 | +0.1 |
| | 0.6nm,1.0s,baz=252,slow=6.2,SNR=6.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **52.60** | **93** | P | P | 14 21 15.3 | -0.3 |
| | 0.3nm,0.7s,baz=248,slow=7.7,SNR=2.5 | | | | | | |
| **VNDA** | **Vanda** | **59.73** | **165** | P | P | 14 22 05.6 | -0.1 |
| | 0.4nm,0.7s,baz=270,slow=11,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **84.02** | **5** | P | P | 14 24 31.6 | +0.1 |
| | 0.3nm,0.4s,baz=192,slow=5.7,SNR=2.4 | | | | | | |

*ISCJB 28 14:31:18.5±0.8, 13°34N±0°10×145°1E±0°2, h10km, mb3.8/9, MS2.7/2, Error ellipse: s-maj=28.3km s-min=13.9km az=176.9*
*IDC 28 14:31:18.4±1.0, 13°38N×145°18E, h0km, mb3.8/8, mb1 4.0/8, mb1mx3.8/40, mbtmp3.8/8, MS2.8/2, Ms1 2.9/2, ms1mx2.4/39, Error ellipse: s-maj=33.5km s-min=19.3km az=92.0*
*NEIC 28 14:31:20.1±0.7, 13°35N×145°12E, h10km, mb4.0/1, Error ellipse: s-maj=24.4km s-min=13.2km az=91.0*
*NEIC Felt [II] at Dededo. Also felt at Mangilao and Yigo.*

**ISC 28 14:31:20.2±1.0, 13°4N±0°1×145°1E±0°2, h10km, n17, σ0§93/10, mb4.0/9, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H11S3** | **WAKE ISLAND Hy** | **21.35** | **73** | T | T | 14 58 48.9 | |
| | baz=259,slow=75 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **21.36** | **73** | T | T | 14 58 50.0 | |
| | baz=259,slow=75 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **21.37** | **73** | T | T | 14 58 50.5 | |
| | baz=259,slow=75 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.79** | **70** | T | T | 14 59 20.1 | |
| | baz=256,slow=75 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.80** | **70** | T | T | 14 59 22.1 | |
| | baz=256,slow=75 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.81** | **70** | T | T | 14 59 22.6 | |
| | baz=256,slow=75 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **23.91** | **346** | LR | LR | 14 45 02.3 | |
| | comp=Z,19nm,20.1s,baz=195,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **28.49** | **330** | P | **P** | **14 37 16.5** | **+0.9** |
| | 1.3nm,0.7s,baz=145,slow=9.6,SNR=3.6 | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.50** | **330** | P | **P** | **14 37 16.5** | **+0.8** |
| **WRAB** | **Tennant Creek** | **34.73** | **198** | P | **P** | **14 38 10.6** | **-0.2** |
| | 1.3nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **34.75** | **198** | P | **P** | **14 38 10.6** | **-0.3** |
| | 1.8nm,0.8s,baz=21,slow=9.7,SNR=23 | | | | | | |
| **ASAR** | **Alice Springs** | **38.39** | **197** | P | **P** | **14 38 42.1** | **+0.2** |
| | 0.5nm,0.6s,baz=22,slow=12,SNR=27 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.61** | **283** | P | **P** | **14 39 33.3** | **+0.1** |
| | 0.5nm,0.6s,baz=82,slow=6.9,SNR=3.9 | | | | | | |
| CMAR | | | | LR | LR | 14 57 22.9 | |
| | comp=Z,11nm,20.4s,baz=90,slow=35 | | | | | | |
| **SONM** | **Songino Array** | **47.07** | **325** | P | **P** | **14 39 52.1** | **-0.2** |
| | 0.4nm,0.6s,baz=116,slow=6.6,SNR=3.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **61.83** | **316** | P | **P** | **14 41 38.9** | **-0.7** |
| | 0.5nm,0.5s,baz=98,slow=8.1,SNR=6.3 | | | | | | |
| **ILAR** | **Eielson Array** | **68.67** | **25** | P | **P** | **14 42 22.1** | **-1.5** |
| | 0.4nm,0.4s,baz=252,slow=5.6,SNR=9.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.87** | **51** | P | **P** | **14 44 07.1** | **+1.3** |
| | 0.3nm,0.3s,baz=258,slow=2.5,SNR=2.0 | | | | | | |

*ISCJB 28 14:35:52.9±0.9, 6°2S±0°1×149°94E±0°09, h52km, mb3.8/4, Error ellipse: s-maj=20.1km s-min=11.4km az=154.6*
*IDC 28 14:35:53.2±2.2, 6°07S×149°85E, h40km±17km, mb3.6/5, mb1 4.0/7, mb1mx3.6/31, mbtmp4.1/7, ML2.6/1, MS2.6/1, Ms1 2.6/1, ms1mx2.3/28, Error ellipse: s-maj=32.5km s-min=12.7km az=134.0*
*AUST 28 14:37:03.7±1.7, 9°90S×146°35E, h272km, Error ellipse: s-maj=2.1km s-min=1.5km az=31.0*

**ISC 28 14:35:54.2±1.0, 6°1S±0°1×149°9E±0°1, h52km, n14, σ1§14/15, mb3.6/4, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.28** | **219** | P | **Pn** | **14 36 57.1** | **+0.3** |
| | 23nm,0.3s,baz=24,slow=13,SNR=59 | | | | | | |
| PMG | | | | S | **Sn** | **14 37 42.9** | **-2.6** |
| | 25nm,0.3s,baz=289,slow=19,SNR=14 | | | | | | |
| PMG | | | | LR | LR | 14 38 25.7 | |
| | comp=Z,87nm,21.4s,baz=356,slow=36 | | | | | | |
| **COEN** | **Coen** | **10.25** | **220** | P | **Pn** | **14 38 18.2** | **-0.5** |
| | baz=5.1,SNR=5.2 | | | | | | |
| **HNR** | **Honiara** | **10.52** | **109** | P | **Pn** | **14 38 22.3** | **-0.2** |
| | 8.7nm,0.3s,baz=220,slow=16,SNR=5.6 | | | | | | |
| **MTN** | **Manton Dam** | **19.67** | **249** | P | Pn | 14 40 28.7 | +7.8 |
| | baz=15,SNR=3.2 | | | | | | |
| **RMQ** | **Roma** | **20.34** | **183** | P | **P** | **14 40 27.0** | **+0.8** |
| | baz=17,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.45** | **226** | P | **P** | **14 40 27.7** | **+0.1** |
| | 2.5nm,0.6s,baz=51,slow=11,SNR=28 | | | | | | |
| WRA | | | | S | **S** | **14 44 14.4** | **+0.5** |
| | 0.4nm,0.8s,baz=50,slow=22,SNR=3.0 | | | | | | |
| **KNRA** | **Kununurra** | **22.81** | **244** | P | **P** | **14 40 53.7** | **+0.9** |
| | baz=18,SNR=4.8 | | | | | | |
| **ASAR** | **Alice Springs** | **23.29** | **220** | P | **P** | **14 40 58.3** | **+0.7** |
| | 0.8nm,0.5s,baz=55,slow=9.2,SNR=21 | | | | | | |
| ASAR | | | | S | **S** | **14 45 08.3** | **+1.9** |
| | 0.8nm,1.0s,baz=23,slow=22,SNR=4.9 | | | | | | |
| **BATI** | **Baumata** | **26.27** | **259** | P | **P** | **14 41 26.1** | **+1.1** |
| | 6.0nm,0.6s,baz=104,slow=4.2,SNR=2.6 | | | | | | |
| **WRKA** | **Warakurna** | **27.99** | **225** | P | P | 14 41 47.0 | +6.6 |
| | baz=23,SNR=5.2 | | | | | | |
| **MEEK** | **Meekatharra** | **36.13** | **232** | P | **P** | **14 42 51.4** | **-0.2** |
| | baz=31,SNR=3.6 | | | | | | |
| **VNDA** | **Vanda** | **71.70** | **177** | P | **P** | **14 47 10.6** | **+0.4** |
| | 1.0nm,0.8s,baz=348,slow=7.1,SNR=6.0 | | | | | | |
| **ILAR** | **Eielson Array** | **84.42** | **23** | P | **P** | **14 48 20.0** | **-0.8** |
| | 0.3nm,0.7s,baz=250,slow=5.4,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.87** | **285** | PKPbc | **PKPbc** | **14 55 33.8** | **-0.8** |
| | 1.2nm,0.5s,baz=81,slow=2.4,SNR=11 | | | | | | |

*KLM 28 14:39:37.5, 3°47S×104°14E, h332km, mb4.8, ML4.8, MS5.5*
*ISCJB 28 14:39:38.3±0.2, 3°22S±0°04×104°15E±0°04, h350km, mb3.7/12, Error ellipse: s-maj=6.8km s-min=3.3km az=43.3*
*AUST 28 14:39:38.1±0.0, 3°20S×104°18E, h350km, Error ellipse: s-maj=1.6km s-min=0.7km az=229.0*
*DJA 28 14:39:39.6±0.3, 3°5S×104°4E, *, h356km±5km, M4.7/15, mb4.7/15, mB5.2/10, MLv4.8/7, Mw(mB)4.5/10*
*IDC 28 14:39:39.9±0.7, 3°14S×104°31E, h359km±7km, mb3.6/13, mb1 3.7/16, mb1mx3.5/38, mbtmp4.3/16, Error ellipse: s-maj=16.6km s-min=8.1km az=57.0*

**ISC 28 14:39:38.7±0.4, 3°27S±0°06×104°19E±0°06, h350km, n90, σ1§56/99, mb3.7/12, 3C-5D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMBI** | **Palembang** | **0.68** | **60** | P | **Pn** | **14 40 25.3** | **+1.9** |
| | baz=0.7,SNR=5.0 | | | | | | |
| **PMBI** | **Palembang** | **0.68** | **60** | P | **Pn** | **14 40 25.3** | **+1.9** |
| **LHSI** | **Lahat** | **0.86** | **230** | P | **Pn** | **14 40 26.0** | **+2.1** |
| **MDSI** | **Maura Dua** | **1.21** | **180** | P | **Pn** | **14 40 27.0** | **+1.6** |
| **KSI** | **Kapahiang** | **1.63** | **257** | P | **Pn** | **14 40 29.2** | **+1.5** |
| **MNAI** | **Manna** | **1.64** | **229** | P | **Pn** | **14 40 29.6** | **+1.9** |
| | baz=1.7,SNR=17 | | | | | | |
| **JMBI** | **JAMBI** | **1.71** | **342** | P | **Pn** | **14 40 29.6** | **+1.4** |
| **LWLI** | **Liwa** | **1.74** | **184** | P | **Pn** | **14 40 30.3** | **+1.9** |
| **PPBI** | **Pangkal Pinang** | **2.24** | **61** | P | **Pn** | **14 40 32.5** | **+0.7** |
| **KASI** | **Kota Agung** | **2.26** | **172** | P | **Pn** | **14 40 32.9** | **+1.0** |
| **TPI** | **Tanjungpandan** | **3.50** | **82** | P | **Pn** | **14 40 43.8** | **+1.1** |
| **SDSI** | **Sungai Dareh** | **3.60** | **310** | P | **Pn** | **14 40 43.9** | **+0.1** |
| **CGJI** | **Cibinong** | **3.64** | **156** | P | **Pn** | **14 40 43.3** | **-0.9** |
| **PPSI** | **Pulau Pagai** | **4.20** | **277** | P | **Pn** | **14 40 50.4** | **+0.6** |
| **BTDF** | **Bukit Timah Da** | **4.62** | **355** | P | **Pn** | **14 40 54.6** | **+0.3** |
| | baz=4.6,SNR=18 | | | | | | |
| **PPI** | **Padang Panjang** | **4.71** | **306** | P | **Pn** | **14 40 55.8** | **+0.6** |
| | baz=4.7,SNR=16 | | | | | | |
| **PPI** | **Padang Panjang** | **4.71** | **306** | P | **Pn** | **14 40 55.4** | **+0.2** |
| **LEM** | **Lembang** | **4.92** | **136** | P | **Pn** | **14 40 58.4** | **+0.8** |
| | 5.3nm,0.3s,baz=336,slow=9.3,SNR=11 | | | | | | |
| LEM | | | | S | **S** | **14 42 02.2** | **+0.9** |
| | 4.2nm,0.3s,baz=156,slow=20,SNR=2.7 | | | | | | |
| **LEM** | **Lembang** | **4.92** | **136** | P | **Pn** | **14 40 59.5** | **+1.9** |
| | baz=5.0,SNR=3.5 | | | | | | |
| **LEM** | **Lembang** | **4.92** | **136** | P | **Pn** | **14 40 58.8** | **+1.2** |
| **MYKOM** | **Kota Tinggi** | **5.04** | **356** | ⇓P | **Pn** | **14 40 59.5** | **+0.7** |
| **KGM** | **Kluang** | **5.32** | **351** | ⇓P | **Pn** | **14 41 02.7** | **+0.8** |
| **SISI** | **Saibi** | **5.45** | **291** | *e*P | **Pn** | **14 41 03.6** | **+0.3** |
| **CISI** | **Cisompet, Garu** | **5.58** | **140** | P | **Pn** | **14 41 03.6** | **-1.3** |
| | baz=5.7,SNR=20 | | | | | | |
| **MNSI** | **Mandailing Nat** | **6.12** | **311** | P | **Pn** | **14 41 10.9** | **-0.1** |
| **SMRI** | **Semarang** | **7.27** | **121** | P | **Pn** | **14 41 26.1** | **+1.8** |
| **XMI** | **Christmas Isla** | **7.29** | **168** | P | **Pn** | **14 41 25.1** | **+0.6** |
| | baz=7.4,SNR=3.5 | | | | | | |
| **XMIS** | **Christmas Isla** | **7.31** | **169** | P | **Pn** | **14 41 25.3** | **+0.5** |
| | baz=7.4,SNR=23 | | | | | | |
| **UWJI** | **Ujung Watu** | **7.43** | **115** | P | **Pn** | **14 41 28.2** | **+2.1** |
| **PBKI** | **Pangkalan Bun** | **7.50** | **86** | P | **Pn** | **14 41 29.0** | **+2.0** |
| **KSM** | **Kuching** | **7.72** | **52** | P | Pn | 14 41 39.1 | +9.5 |
| | baz=7.7,SNR=9.6 | | | | | | |
| **UGM** | **Wanagama** | **7.81** | **126** | P | **Pn** | **14 41 30.7** | **0.0** |
| | baz=7.9,SNR=32 | | | | | | |
| **PSI** | **Prapat** | **8.00** | **319** | P | **Pn** | **14 41 31.6** | **-1.5** |
| | 9.5nm,0.3s,baz=146,slow=8.8,SNR=17 | | | | | | |
| PSI | | | | S | S | 14 42 57.8 | -8.5 |
| | 0.9nm,0.3s,baz=34,slow=18,SNR=4.7 | | | | | | |
| **PSI** | **Prapat** | **8.00** | **319** | P | **Pn** | **14 41 31.9** | **-1.2** |
| | baz=7.9,SNR=12 | | | | | | |
| **STKI** | **Sintang** | **8.01** | **66** | P | **Pn** | **14 41 35.0** | **+2.0** |
| | 45nm,0.9s,9µm | | | | | | |
| **GSI** | **Gunungsitoli** | **8.02** | **304** | P | **Pn** | **14 41 32.0** | **-1.2** |
| | 557nm,0.6s,6µm | | | | | | |
| **WOJI** | **Wonogiri, Jawa** | **8.10** | **124** | P | **Pn** | **14 41 34.6** | **+0.6** |
| | 74nm,2.0s | | | | | | |
| **NGJI** | **Ngawi** | **8.31** | **120** | P | **Pn** | **14 41 37.0** | **+0.5** |
| **IPM** | **Ipoh** | **8.32** | **338** | ⇓P | **P** | **14 41 39.0** | **-0.6** |
| **KTGM** | **Kuala Trenggan** | **8.61** | **353** | ⇑P | **Pn** | **14 41 39.8** | **-0.3** |
| **TSI** | **Tuntungan** | **8.76** | **320** | P | **Pn** | **14 41 43.3** | **+1.3** |
| **PWJI** | **Pagerwojo** | **8.93** | **122** | P | **P** | **14 41 46.7** | **+0.4** |
| | 45nm,0.7s | | | | | | |
| **KULM** | **Kulim** | **9.21** | **337** | ⇑P | **Pn** | **14 41 47.8** | **+0.5** |
| **KCSI** | **Kotacane, Aceh** | **9.31** | **316** | P | **Pn** | **14 41 47.4** | **-1.1** |
| | 96nm,0.6s,4µm | | | | | | |
| **KMMI** | **Kalianget** | **10.44** | **111** | P | **P** | **14 42 05.2** | **+2.1** |
| **BBKI** | **Banjar Baru** | **10.64** | **91** | P | **P** | **14 42 06.5** | **+1.2** |
| | 317nm,0.8s,3µm | | | | | | |
| **MLSI** | **Meulaboh, Aceh** | **10.79** | **314** | P | **Pn** | **14 42 04.9** | **-1.3** |
| | 199nm,0.5s,6µm | | | | | | |
| **ABJI** | **Asem Bagus** | **10.96** | **115** | P | **P** | **14 42 11.4** | **+2.5** |
| **LHMI** | **Lhok Sumawe** | **11.12** | **319** | P | **Pn** | **14 42 08.0** | **-2.0** |
| | baz=11,SNR=5.1 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **11.18** | **118** | P | **Pn** | **14 42 09.8** | **-1.0** |
| | baz=11,SNR=12 | | | | | | |
| **TRTT** | **Trang** | **11.91** | **338** | P | **P** | **14 42 19.3** | **-0.1** |
| **KBKI** | **Kotabaru** | **11.96** | **90** | P | **Pn** | **14 42 22.3** | **+2.2** |
| | 48nm,0.8s,470nm | | | | | | |
| **SRBI** | **Singaraja** | **11.97** | **114** | P | Pn | 14 42 23.5 | +3.4 |
| **TWSI** | **Taliwang, Sumb** | **13.74** | **114** | P | **Pn** | **14 42 42.4** | **+1.3** |
| **TSM** | **Tawau** | **15.61** | **61** | ⇓P | **Pn** | **14 43 02.2** | **-0.5** |
| **KAPI** | **Kappang** | **15.62** | **97** | P | **P** | **14 42 59.1** | **-1.1** |
| | 6.8nm,0.3s,baz=273,slow=12,SNR=47 | | | | | | |
| **SDKM** | **Sandakan** | **15.72** | **56** | ⇑P | **P** | **14 43 02.6** | **+1.2** |
| **KDM** | **Kudat** | **16.18** | **51** | ⇓P | **P** | **14 43 07.8** | **+1.6** |
| **BATI** | **Baumata** | **20.52** | **111** | P | **P** | **14 43 50.7** | **-1.0** |
| | 6.1nm,0.4s,baz=131,slow=13,SNR=2.8 | | | | | | |
| BATI | | | | S | **S** | **14 47 13.3** | **-5.3** |
| | 14nm,0.6s,baz=123,slow=22,SNR=3.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.20** | **347** | P | **P** | **14 44 06.8** | **-0.1** |
| | 2.0nm,0.6s,baz=182,slow=8.8,SNR=25 | | | | | | |
| CMAR | | | | ScP | **ScP** | **14 50 52.1** | **-2.4** |
| | 0.6nm,0.7s,baz=199,slow=3.7,SNR=6.2 | | | | | | |
| **KNRA** | **Kununurra** | **27.15** | **119** | P | **P** | **14 44 50.3** | **-1.0** |
| | baz=27,SNR=5.4 | | | | | | |
| **SIJI** | **Sorong** | **27.16** | **86** | P | **P** | **14 44 52.0** | **+0.4** |
| | 6.7nm,0.8s,baz=341,slow=24,SNR=4.0 | | | | | | |
| **FAKI** | **Fak Fak** | **28.02** | **90** | P | **P** | **14 44 59.6** | **+0.5** |
| | baz=28,SNR=5.7 | | | | | | |
| **WRKA** | **Warakurna** | **31.73** | **135** | P | **P** | **14 45 32.5** | **+1.0** |
| | baz=32,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **33.76** | **122** | P | **P** | **14 45 48.7** | **-0.2** |
| | 0.8nm,0.3s,baz=293,slow=8.7,SNR=28 | | | | | | |
| WRA | | | | pP | **pP** | **14 46 57.9** | **+2.5** |
| | 1.0nm,0.9s,baz=296,slow=9.3,SNR=3.0 | | | | | | |
| WRA | | | | PcP | **PcP** | **14 48 18.8** | **-0.6** |
| | 0.4nm,0.5s,baz=316,slow=2.1,SNR=4.3 | | | | | | |
| WRA | | | | S | **S** | **14 50 41.9** | **-4.5** |
| | 2.0nm,1.1s,baz=294,slow=16,SNR=5.7 | | | | | | |
| **ODAN** | **Odare** | **34.07** | **333** | *e*P | **P** | **14 45 51.5** | **-0.2** |
| | 7.5nm,0.4s | | | | | | |
| **TAPN** | **Taplejung** | **34.34** | **333** | *e*P | **P** | **14 45 54.3** | **+0.2** |
| | 12nm,0.5s | | | | | | |
| **RAMN** | **Ramite** | **34.51** | **332** | *e*P | **P** | **14 45 55.5** | **0.0** |
| | 6.5nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **35.15** | **128** | P | **P** | **14 46 00.8** | **0.0** |
| | 2.5nm,0.6s,baz=301,slow=8.0,SNR=41 | | | | | | |
| ASAR | | | | PcP | **PcP** | **14 48 23.5** | **+0.1** |
| | 0.6nm,0.4s,baz=315,slow=2.9,SNR=4.8 | | | | | | |
| ASAR | | | | S | **S** | **14 51 03.4** | **-4.3** |
| | 1.1nm,0.9s,baz=295,slow=18,SNR=7.2 | | | | | | |
| **PKI** | **Pulchoki** | **35.61** | **331** | *e*P | **P** | **14 46 03.9** | **-1.0** |
| **GUN** | **Gumba** | **35.66** | **332** | *e*P | **P** | **14 46 05.0** | **-0.4** |
| | 14nm,0.4s | | | | | | |
| **DMN** | **Daman** | **35.79** | **330** | *e*P | **P** | **14 46 05.5** | **-0.8** |
| | 4.5nm,0.3s | | | | | | |
| **KKN** | **Kakani** | **35.85** | **331** | *e*P | **P** | **14 46 06.0** | **-0.8** |
| **GKN** | **Gorkha** | **36.35** | **330** | *e*P | **P** | **14 46 10.1** | **-0.8** |
| | 8.5nm,0.3s | | | | | | |
| **KOLN** | **Koldanda** | **36.69** | **329** | *e*P | **P** | **14 46 13.2** | **-0.6** |
| | 16nm,0.6s | | | | | | |
| **QIS** | **Mount Isa** | **38.53** | **119** | P | **P** | **14 46 29.1** | **0.0** |
| | baz=39,SNR=4.0 | | | | | | |
| **CTA** | **Charters Tower** | **44.28** | **116** | P | **P** | **14 47 14.5** | **-0.8** |
| | 1.7nm,0.6s,baz=343,slow=5.6,SNR=3.4 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **48.09** | **131** | P | **P** | **14 47 45.6** | **+1.1** |
| | baz=48,SNR=9.4 | | | | | | |
| **SONM** | **Songino Array** | **50.93** | **2** | P | **P** | **14 48 06.2** | **+0.7** |
| | 1.4nm,0.8s,baz=178,slow=9.7,SNR=8.3 | | | | | | |
| SONM | | | | pP | **pP** | **14 49 19.2** | **+1.2** |
| | 1.1nm,0.9s,baz=187,slow=9.1,SNR=3.6 | | | | | | |
| SONM | | | | ScP | **ScP** | **14 52 34.9** | **-3.6** |
| | 0.2nm,0.3s,baz=180,slow=2.3,SNR=2.2 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.43** | **25** | pP | pP | 14 49 38.2 | +1.3 |
| | 3.7nm,0.9s,baz=212,slow=3.7,SNR=6.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **53.47** | **341** | P | **P** | **14 48 23.0** | **-0.9** |
| | 2.7nm,0.8s,baz=154,slow=8.8,SNR=13 | | | | | | |
| M

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SFK | | | | | pmax | pmax | | | |
| | comp=Z,66nm,0.4s | | | | | | | | |
| SFK | | | | | smax | smax | | | |
| | comp=N,280nm,0.2s | | | | | | | | |
| **SARP** | **Sargodha** | **4.72** | **165** | | P | **Pn** | **15 56 24.9** | **-0.9** | |
| **KSH** | **Kashi** | **4.81** | **50** | *e*P | | Pn | 15 56 24.5 | -2.6 | |
| KSH | | | | S | | Sn | 15 57 14.5 | -7.9 | |
| KSH | | | | SMN | | | | | |
| | comp=N,560nm,0.5s | | | | | | | | |
| KSH | | | | SME | | | | | |
| | comp=N,450nm,0.2s | | | | | | | | |
| **AML** | **Almayashu** | **5.94** | **18** | P | | **Pn** | **15 56 42.6** | **+0.2** | |
| | SNR=304 | | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **5.96** | **134** | *e*P | | **Pn** | **15 56 42.6** | **+0.1** | |
| DHRM | | | | *e*S | | **Sn** | **15 57 48.1** | **-1.9** | |
| DHRM | | | | AML | | AML | 15 57 51.0 | | |
| | comp=E,2μm,0.2s | | | | | | | | |
| DHRM | | | | AML | | AML | 15 57 51.4 | | |
| | comp=N,1μm,0.2s | | | | | | | | |
| **MNAS** | **Manas** | **6.06** | **9** | ⇓P | | **Pn** | **15 56 43.8** | **0.0** | |
| | comp=N,69nm,0.6s | | | | | | | | |
| MNAS | | | | ⇓S | | **Sn** | **15 57 49.7** | **-2.7** | |
| | comp=N,168nm,0.6s | | | | | | | | |
| **MNAS** | **Manas** | **6.06** | **9** | PN | | **Pn** | **15 56 43.8** | **0.0** | |
| MNAS | | | | pmax | | pmax | | | |
| | comp=E,69nm,0.6s | | | | | | | | |
| **UCH** | **Uchtor** | **6.26** | **23** | P | | **Pn** | **15 56 46.6** | **-0.1** | |
| | SNR=127 | | | | | | | | |
| **KZA** | **Kyzart** | **6.39** | **28** | P | | **Pn** | **15 56 48.2** | **-0.1** | |
| | SNR=40 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.46** | **17** | *e*PN | | **Pn** | **15 56 49.3** | **+0.2** | |
| EKS2 | | | | pmax | | pmax | | | |
| | comp=E,51nm,0.6s | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.46** | **17** | P | | **Pn** | **15 56 49.6** | **+0.5** | |
| | SNR=72 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **6.46** | **17** | *e*Pn | | **Pn** | **15 56 49.2** | **+0.2** | |
| | comp=E,51nm,0.6s | | | | | | | | |
| EKS2 | | | | *e*Sn | | Sn | 15 57 51.3 | -11 | |
| **KK31** | **Karatay Array** | **6.62** | **355** | ⇓P | | **Pn** | **15 56 50.8** | **-0.3** | |
| | comp=Z,63nm,0.5s,baz=183,slow=13,SNR=740 | | | | | | | | |
| KK31 | | | | S | | Sn | 15 58 01.2 | -4.3 | |
| | comp=Z,80nm,0.6s,baz=184,slow=21,SNR=22 | | | | | | | | |
| **KK31** | **Karatay Array** | **6.62** | **355** | PN | | **Pn** | **15 56 50.6** | **-0.5** | |
| KK31 | | | | pmax | | pmax | | | |
| | comp=Z,52nm,0.2s | | | | | | | | |
| **KKAR** | **Karatay Array** | **6.62** | **355** | *e*PN | | **Pn** | **15 56 50.6** | **-0.5** | |
| KKAR | | | | pmax | | pmax | | | |
| | comp=Z,103nm,0.3s | | | | | | | | |
| **KKAR** | **Karatay Array** | **6.62** | **355** | *e*Pn | | **Pn** | **15 56 50.6** | **-0.5** | |
| | comp=Z,103nm,0.3s | | | | | | | | |
| KKAR | | | | *e*Sn | | Sn | 15 57 56.4 | -9.2 | |
| **AAK** | **Ala-Archa** | **6.63** | **21** | ⇓P | | **Pn** | **15 56 53.4** | **+2.1** | |
| | comp=Z,40nm,0.4s | | | | | | | | |
| AAK | | | | ⇓S | | **Sn** | **15 58 04.1** | **-1.7** | |
| | comp=Z,110nm,0.6s | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.63** | **21** | P | | **Pn** | **15 56 52.1** | **+0.8** | |
| | comp=Z,23nm,0.3s,baz=194,slow=7.7,SNR=225 | | | | | | | | |
| AAK | | | | S | | **Sn** | **15 58 04.1** | **-1.7** | |
| | comp=Z,5.7nm,0.3s,baz=17,slow=23,SNR=12 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.63** | **21** | P | | **Pn** | **15 56 52.0** | **+0.6** | |
| | SNR=120 | | | | | | | | |
| **AAK** | **Ala-Archa** | **6.63** | **21** | *e*Pn | | **Pn** | **15 56 51.5** | **+0.2** | |
| | comp=Z,83nm,0.6s | | | | | | | | |
| AAK | | | | *e*Sn | | Sn | 15 57 47.4 | -19 | |
| AAK | | | | S | | **Sn** | **15 58 04.1** | **-1.7** | |
| **BHK** | **Bhakra** | **6.65** | **138** | *e*P | | **Pn** | **15 56 50.2** | **-1.3** | |
| BHK | | | | *e*S | | **Sn** | **15 58 02.0** | **-4.3** | |
| **KBK** | **Karagaybulak** | **6.79** | **24** | P | | **Pn** | **15 56 56.1** | **+2.6** | |
| | SNR=37 | | | | | | | | |
| **FRU** | **Bishkek** | **6.85** | **21** | *e*PN | | **Pn** | **15 56 55.5** | **+1.4** | |
| FRU | | | | *i* S | | **Sn** | **15 58 11.5** | **+0.6** | |
| FRU | | | | pmax | | pmax | | | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| FRU | | | | smax | | smax | | | |
| | comp=N,220nm,1.4s | | | | | | | | |
| **ULHL** | **Ulahol** | **6.93** | **33** | P | | **Pn** | **15 56 56.4** | **+1.0** | |
| | SNR=14 | | | | | | | | |
| **CHMS** | **Chumysh** | **7.04** | **22** | P | | **Pn** | **15 56 58.3** | **+1.6** | |
| | SNR=20 | | | | | | | | |
| **USP** | **Ospenovka** | **7.21** | **19** | P | | **Pn** | **15 56 58.7** | **-0.3** | |
| | SNR=28 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.25** | **26** | ⇑P | | **Pn** | **15 57 01.5** | **+1.9** | |
| | comp=N,89nm,0.5s | | | | | | | | |
| TKM2 | | | | ⇓S | | **Sn** | **15 58 18.9** | **-1.8** | |
| | comp=N,27nm,0.7s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.25** | **26** | *e*PN | | **Pn** | **15 56 59.2** | **-0.4** | |
| TKM2 | | | | pmax | | pmax | | | |
| | comp=Z,133nm,0.5s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.25** | **26** | P | | **Pn** | **15 57 01.7** | **+2.1** | |
| | SNR=195 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **7.25** | **26** | *e*Pn | | **Pn** | **15 56 59.2** | **-0.4** | |
| | comp=Z,132nm,0.5s | | | | | | | | |
| **SMLA** | **Simla** | **7.28** | **136** | *i* P | | **Pn** | **15 56 59.1** | **-0.8** | |
| SMLA | | | | *i* S | | **Sn** | **15 58 17.6** | **-3.8** | |
| SMLA | | | | AML | | AML | 15 58 22.8 | | |
| | comp=N,654nm,0.2s | | | | | | | | |
| SMLA | | | | AML | | AML | 15 58 23.9 | | |
| | comp=E,606nm,0.3s | | | | | | | | |
| **DDI** | **Dehra Dun** | **8.39** | **135** | *e*P | | **Pn** | **15 57 14.3** | **-0.6** | |
| DDI | | | | *e*S | | **Sn** | **15 58 46.1** | **-2.1** | |
| DDI | | | | AML | | AML | 15 58 48.2 | | |
| | comp=E,389nm,0.3s | | | | | | | | |
| DDI | | | | AML | | AML | 15 58 48.9 | | |
| | comp=N,452nm,0.1s | | | | | | | | |
| **IMYA** | **Miami** | **8.97** | **272** | *e*P | | Pn | 15 57 20.0 | -2.7 | |
| **KHET** | **Khetri** | **9.24** | **154** | *e*P | | Pn | 15 57 23.0 | -3.2 | |
| KHET | | | | *ex* | | Sn | 15 59 00.7 | -8.1 | |
| **NDI** | **New Delhi** | **9.28** | **145** | *e*P | | **Pn** | **15 57 25.5** | **-1.1** | |
| NDI | | | | *ex* | | Sn | 15 59 01.0 | -8.6 | |
| **PDGK** | **Podgornoye** | **9.31** | **40** | ⇓P | | **Pn** | **15 57 27.0** | **+0.2** | |
| | comp=N,6.8nm,0.6s | | | | | | | | |
| **PDGK** | **Podgornoye** | **9.31** | **40** | P | | **Pn** | **15 57 27.0** | **+0.2** | |
| PDGK | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **IMOG** | **Moghan** | **9.61** | **271** | *e*P | | Pn | 15 57 29.0 | -2.2 | |
| **IPAY** | **Payeh** | **9.86** | **273** | *e*P | | Pn | 15 57 31.1 | -3.3 | |
| **IAKL** | **Akhelmad** | **10.04** | **274** | *e*P | | Pn | 15 57 32.8 | -4.1 | |
| **IMON** | **Monand** | **10.06** | **254** | *e*P | | **Pn** | **15 57 36.3** | **-0.9** | |
| **IEMG** | **Emamgholi** | **10.11** | **279** | *e*P | | Pn | 15 57 33.5 | -4.3 | |
| **IKRD** | **Kardeh** | **10.23** | **275** | *e*P | | Pn | 15 57 26.0 | -13 | |
| **GEYT** | **Alibeck** | **10.56** | **282** | P | | Pn | 15 57 39.4 | -4.1 | |
| | comp=Z,2.2nm,0.3s,baz=91,slow=11,SNR=19 | | | | | | | | |
| GEYT | | | | S | | Sn | 15 59 31.2 | -9.1 | |
| | comp=Z,2.3nm,0.3s,baz=108,slow=17,SNR=4.9 | | | | | | | | |
| **ISFR** | **Sfrayin** | **10.63** | **277** | *e*P | | Pn | 15 57 41.9 | -2.8 | |
| **ISHV** | **Shirvan** | **10.87** | **280** | *e*P | | Pn | 15 57 45.7 | -2.1 | |
| **OTUK** | **Ortayu** | **11.77** | **4** | ⇓P | | **Pn** | **15 57 58.2** | **-1.2** | |
| | comp=Z,6.1nm,0.8s | | | | | | | | |
| **OTUK** | **Ortayu** | **11.77** | **4** | P | | **Pn** | **15 57 58.1** | **-1.2** | |
| OTUK | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **MK31** | **Makanchi Array** | **13.19** | **35** | ⇓P | | **P** | **15 58 21.7** | **-0.4** | |
| | comp=Z,6.4nm,0.7s,baz=223,slow=15,SNR=29 | | | | | | | | |
| **MK31** | **Makanchi Array** | **13.19** | **35** | *i* P | | **P** | **15 58 21.7** | **-0.4** | |
| MK31 | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.6s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.19** | **35** | P | | **Pn** | **15 58 17.3** | **-0.3** | |
| | comp=Z,0.3nm,0.3s,baz=222,slow=14,SNR=9.2 | | | | | | | | |
| **BHJ** | **Bhuj** | **13.27** | **186** | *e*P | | Pn | 15 58 11.0 | -7.8 | |
| BHJ | | | | AMB | | AMB | 15 58 16.6 | | |
| | comp=Z,17nm,0.5s | | | | | | | | |
| BHJ | | | | *ex* | | Sn | 16 00 32.6 | -13 | |
| **DANN** | **Dangsing** | **13.33** | **124** | *e*P | | **Pn** | **15 58 18.7** | **-1.2** | |
| | comp=Z,4.1nm,0.2s | | | | | | | | |
| **KOLN** | **Koldanda** | **13.61** | **126** | *e*P | | **Pn** | **15 58 21.7** | **-1.6** | |
| | comp=Z,28nm,0.4s | | | | | | | | |
| **IGLO** | **Ghaloghah** | **14.00** | **275** | *e*P | | **Pn** | **15 58 27.3** | **-1.0** | |
| **GKN** | **Gorkha** | **14.14** | **123** | *e*P | | **Pn** | **15 58 28.7** | **-1.3** | |
| | comp=Z,212nm,0.4s | | | | | | | | |
| **BHPL** | **Bhopal** | **14.25** | **156** | *e*P | | **Pn** | **15 58 30.9** | **-0.5** | |
| BHPL | | | | AMB | | AMB | 15 58 36.2 | | |
| | comp=Z,40nm,0.5s | | | | | | | | |
| BHPL | | | | *ex* | | Sn | 16 00 57.7 | -12 | |
| **DMN** | **Daman** | **14.71** | **123** | *e*P | | **Pn** | **15 58 36.6** | **-0.7** | |
| | comp=Z,90nm,0.6s | | | | | | | | |
| **KKN** | **Kakani** | **14.72** | **122** | *e*P | | **Pn** | **15 58 36.1** | **-1.2** | |
| | comp=Z,94nm,0.6s | | | | | | | | |
| **PKIN** | **Phulchoki** | **14.93** | **123** | *e*P | | **Pn** | **15 58 38.9** | **-1.1** | |
| | comp=Z,56nm,0.4s | | | | | | | | |
| **PKI** | **Pulchoki** | **14.94** | **123** | *e*P | | **Pn** | **15 58 39.1** | **-1.1** | |
| | comp=Z,65nm,0.4s | | | | | | | | |
| **GUN** | **Gumba** | **15.05** | **120** | *e*P | | **Pn** | **15 58 40.6** | **-1.0** | |
| | comp=Z,24nm,0.4s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **15.07** | **18** | P | | **Pn** | **15 58 39.4** | **-1.8** | |
| | comp=Z,0.4nm,0.3s,baz=208,slow=11,SNR=9.3 | | | | | | | | |
| **KURK** | **Kurchatov** | **15.18** | **18** | P | | **Pn** | **15 58 39.4** | **-3.2** | |
| **KURK** | **Kurchatov** | **15.18** | **18** | P | | **Pn** | **15 58 39.4** | **-3.2** | |
| **AB31** | **Akbulak array** | **15.18** | **331** | P | | **Pn** | **15 58 40.7** | **-1.9** | |
| | comp=Z,4.2nm,0.3s,baz=144,slow=11,SNR=316 | | | | | | | | |
| **AB31** | **Akbulak array** | **15.18** | **331** | *e*P | | **Pn** | **15 58 40.7** | **-1.9** | |
| AB31 | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,0.3s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **15.18** | **331** | *e*Pn | | **Pn** | **15 58 40.1** | **-2.5** | |
| | comp=Z,10nm,0.3s | | | | | | | | |
| ABKAR | | | | *e*Sn | | Sn | 16 01 13.0 | -18 | |
| **RAMN** | **Ramite** | **16.15** | **122** | *e*P | | **Pn** | **15 58 54.2** | **-0.8** | |
| | comp=Z,38nm,0.4s | | | | | | | | |
| **VOSK** | **Vostochnaya** | **16.23** | **359** | ⇓P | | **Pn** | **15 58 54.7** | **-0.8** | |
| | comp=Z,8.1nm,0.6s | | | | | | | | |
| **VOSK** | **Vostochnaya** | **16.23** | **359** | P | | **Pn** | **15 58 54.6** | **-0.8** | |
| VOSK | | | | pmax | | pmax | | | |
| | comp=Z,8.0nm,0.6s | | | | | | | | |
| **ZRNK** | **Zerenda** | **16.53** | **355** | ⇑P | | **P** | **15 58 59.0** | **0.0** | |
| | comp=Z,7.2nm,0.5s | | | | | | | | |
| **ZRNK** | **Zerenda** | **16.53** | **355** | P | | **P** | **15 58 59.0** | **0.0** | |
| ZRNK | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **16.54** | **358** | ⇑P | | **P** | **15 58 60.0** | **+0.8** | |
| | comp=Z,9.2nm,1.0s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **16.54** | **358** | P | | **P** | **15 58 59.9** | **+0.8** | |
| BVA0 | | | | pmax | | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **16.54** | **358** | P | | **P** | **15 58 59.4** | **+0.3** | |
| | comp=Z,2.1nm,0.3s,baz=158,slow=10,SNR=22 | | | | | | | | |
| BVAR | | | | S | | | 16 01 52.7 | -10 | |
| | comp=Z,0.3nm,0.3s,baz=169,slow=26,SNR=2.7 | | | | | | | | |
| **BRVK** | **Borovoye** | **16.57** | **358** | ⇑*e*P | | **P** | **15 59 00.4** | **+0.9** | |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.7s | | | | | | | | |
| **BRVK** | **Borovoye** | **16.57** | **358** | *e*Pn | | **P** | **15 58 59.0** | **-0.5** | |
| | comp=Z,12nm,0.6s | | | | | | | | |
| **TAPN** | **Taplejung** | **16.68** | **118** | *e*P | | **P** | **15 59 00.9** | **-0.3** | |
| | comp=Z,58nm,0.5s | | | | | | | | |
| **ODAN** | **Odare** | **16.76** | **120** | *e*P | | **P** | **15 59 02.3** | **+0.3** | |
| | comp=Z,18nm,0.3s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.88** | **330** | ⇓P | | **P** | **15 59 02.9** | **0.0** | |
| | comp=Z,26nm,0.7s | | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.88** | **330** | P | | **P** | **15 59 02.7** | **-0.2** | |
| | baz=266,slow=0.0 | | | | | | | | |
| AKTO | | | | S | | S | 16 01 58.5 | -12 | |
| | comp=Z,0.2nm,0.3s,baz=168,slow=20,SNR=3.7 | | | | | | | | |
| **CHKZ** | **Chkalovo** | **17.19** | **359** | ⇑P | | **P** | **15 59 06.8** | **+0.6** | |
| | comp=Z,6.7nm,0.6s | | | | | | | | |
| **CHKZ** | **Chkalovo** | **17.19** | **359** | P | | **P** | **15 59 06.8** | **+0.6** | |
| CHKZ | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| **IRAZ** | **Razeghan** | **17.28** | **273** | *e*Pn | | **P** | **15 59 09.0** | **+1.3** | |
| **LSA** | **Lhasa** | **18.00** | **106** | P | | **Pn** | **15 59 20.3** | **+2.9** | |
| LSA | | | | PMZ | | | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **LSA** | **Lhasa** | **18.00** | **106** | *e*P | | **P** | **15 59 17.0** | **+1.1** | |
| LSA | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| **LSA** | **Lhasa** | **18.00** | **106** | *e*Pn | | **P** | **15 59 17.0** | **+1.1** | |
| | comp=Z,9.8nm,0.6s | | | | | | | | |
| **SRSP** | **Sriramsagar** | **18.59** | **158** | *e*P | | **P** | **15 59 21.9** | **+0.1** | |
| **RPR** | **Rampur** | **18.95** | **156** | *e*P | | **P** | **15 59 26.8** | **+1.0** | |
| **KLRI** | **Killari** | **18.96** | **164** | *e*P | | **P** | **15 59 26.6** | **+0.6** | |
| **ZALV** | **Zalesovo Beam** | **19.84** | **24** | P | | **P** | **15 59 35.8** | **+0.7** | |
| | comp=Z,22nm,0.5s,baz=222,slow=12,SNR=101 | | | | | | | | |
| **HYBB** | **Hyderabad (bro** | **20.08** | **159** | *e*P | | **P** | **15 59 37.1** | **-0.9** | |
| **HYB** | **Hyderabad** | **20.08** | **159** | *e*P | | **P** | **15 59 38.0** | **0.0** | |
| **HYB** | **Hyderabad** | **20.08** | **159** | *i* P | | **P** | **15 59 38.0** | **0.0** | |
| HYB | | | | *e* | | | 15 59 41.0 | | |
| **HYB** | **Hyderabad** | **20.08** | **159** | *ex* | | Pn | 15 59 38.8 | -2.7 | |
| HYB | | | | AMB | | AMB | 15 59 42.3 | | |
| | comp=Z,21nm,0.8s | | | | | | | | |
| **HYB** | **Hyderabad** | **20.08** | **159** | *e*P | | **P** | **15 59 38.0** | **0.0** | |
| HYB | | | | *e* | | | 15 59 41.0 | | |
| **NVS** | **Novosibirsk** | **20.12** | **20** | *i* P | | **P** | **15 59 39.3** | **+1.2** | |
| NVS | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| NVS | | | | pmax | | pmax | | | |
| | comp=N,12nm,0.7s | | | | | | | | |
| NVS | | | | pmax | | pmax | | | |
| | comp=E,3.0nm,0.6s | | | | | | | | |
| **GNI** | **Garni** | **21.07** | **288** | ⇓*e*P | | **P** | **15 59 50.4** | **+1.7** | |
| GNI | | | | pmax | | pmax | | | |
| | comp=Z,73nm,1.1s | | | | | | | | |
| **GNI** | **Garni** | **21.07** | **288** | *e*Pn | | **P** | **15 59 49.4** | **+0.7** | |
| | comp=Z,59nm,0.9s | | | | | | | | |
| **NJS** | **Nagarjunasagar** | **21.12** | **158** | *e*P | | **P** | **15 59 49.0** | **-0.1** | |
| **PVM** | **Polavaram** | **21.27** | **152** | *e*P | | **P** | **15 59 52.4** | **+1.7** | |
| **SRLM** | **Srisailam** | **21.43** | **159** | *e*P | | **P** | **15 59 52.4** | **-0.1** | |
| **SVE** | **Sverdlovsk** | **21.55** | **344** | *e*P | | **P** | **15 59 53.5** | **+0.1** | |
| SVE | | | | *e*S | | S | 16 03 50.3 | +7.8 | |
| SVE | | | | pmax | | pmax | | | |
| | comp=Z,14nm,0.9s | | | | | | | | |
| **ADKI** | **Addanki** | **21.99** | **157** | *e*P | | **P** | **15 59 57.5** | **-0.7** | |
| **RCLA** | **Racherla** | **22.05** | **160** | *e*P | | **P** | **15 59 59.4** | **+0.4** | |
| **URV** | **Uravakonda** | **22.12** | **164** | *e*P | | **P** | **16 00 00.5** | **+0.8** | |
| **KBZ** | **Khabaz** | **22.77** | **297** | P | | **P** | **16 00 04.3** | **-1.2** | |
| | comp=Z,1.1nm,0.6s,baz=55,slow=4.7,SNR=3.7 | | | | | | | | |
| **NEY** | **Neytrino** | **22.83** | **296** | ⇑*e*P | | **P** | **16 00 09.0** | **+2.6** | |
| NEY | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.8s | | | | | | | | |
| **KIV** | **Kislovodsk** | **22.95** | **298** | *e*P | | **P** | **16 00 07.6** | **+0.2** | |
| KIV | | | | *e*S | | **S** | **16 04 05.1** | **-1.1** | |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | | |
| **SKHT** | **Srikalahasti** | **23.90** | **159** | *e*P | | **P** | **16 00 17.6** | **+1.4** | |
| **ANN** | **Anapa** | **26.80** | **299** | *e*P | | **P** | **16 00 42.6** | **+0.5** | |
| ANN | | | | *e**PP | | **pP** | **16 01 15.7** | **+2.3** | |
| ANN | | | | *e*S | | S | **16 05 06.1** | **-0.9** | |
| ANN | | | | pmax | | pmax | | | |
| | comp=Z,44nm,1.0s | | | | | | | | |
| **BRTR** | **Keskin Array B** | **29.61** | **288** | P | | **P** | **16 01 06.7** | **-0.6** | |
| | comp=Z,0.3nm,0.4s,baz=70,slow=7.3,SNR=2.2 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **30.29** | **119** | P | | **P** | **16 01 14.6** | **+1.2** | |
| | comp=Z,1.1nm,0.8s,baz=300,slow=7.8,SNR=7.8 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **33.09** | **309** | P | | **P** | **16 01 37.4** | **-0.1** | |
| | comp=Z,2.5nm,0.5s,baz=81,slow=7.1,SNR=17 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **33.09** | **309** | *i* P | | **P** | **16 01 37.4** | **-0.1** | |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | |
| **KIEV** | **Kiev** | **33.10** | **309** | ⇑*i* P | | **P** | **16 01 37.0** | **-0.6** | |
| KIEV | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| **WHN** | **Wuhan** | **36.21** | **87** | P | | **P** | **16 02 07.0** | **+2.5** | |
| **SANT** | **Santorini** | **36.56** | **284** | *e*P | | **P** | **16 02 08.4** | **+1.0** | |
| | comp=Z,51nm,1.0s | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.59** | **326** | P | | **P** | **16 02 16.1** | **+0.3** | |
| | comp=Z,2.9nm,0.5s,baz=120,slow=9.0,SNR=18 | | | | | | | | |
| **FINES** | **FINESS Array B** | **37.59** | **326** | *i* P | | **P** | **16 02 16.1** | **+0.3** | |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | |
| **KEV** | **Kevo** | **40.88** | **338** | P | | **P** | **16 02 42.5** | **-0.4** | |
| **KEV** | **Kevo** | **40.88** | **338** | P | | **P** | **16 02 42.5** | **-0.4** | |
| **ARCES** | **ARCESS Array B** | **41.22** | **338** | P | | **P** | **16 02 46.3** | **+0.6** | |
| | comp=Z,5.5nm,0.7s,baz=112,slow=8.8,SNR=25 | | | | | | | | |
| **CN2** | **Changchun** | **41.44** | **63** | *e*P | | **P** | **16 02 50.0** | **+2.1** | |
| **HFS** | **Hagfors** | **43.19** | **322** | P | | **P** | **16 03 01.7** | **-0.1** | |
| | comp=Z,7.2nm,0.5s,baz=92,slow=13,SNR=27 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **44.50** | **323** | P | | **P** | **16 03 11.8** | **-0.5** | |
| | comp=Z,3.3nm,0.6s,baz=93,slow=7.9 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **44.50** | **323** | P | | **P** | **16 03 12.0** | **-0.2** | |
| | comp=Z,5.0nm,0.7s,baz=96,slow=7.8,SNR=18 | | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **47.54** | **347** | P | | **P** | **16 03 36.7** | **+0.9** | |
| | comp=Z,5.5nm,0.7s,baz=116,slow=8.7,SNR=6.0 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **65.90** | **269** | P | | P | 16 05 43.4 | -2.8 | |
| | comp=Z,0.6nm,0.4s,baz=55,slow=5.8,SNR=6.4 | | | | | | | | |
| **INK** | **Inuvik** | **73.88** | **9** | P | | **P** | **16 06 34.3** | **+0.3** | |
| | comp=Z,1.3nm,0.4s,baz=334,slow=4.7,SNR=4.2 | | | | | | | | |
| **ILAR** | **Eielson Array** | **74.73** | **16** | P | | **P** | **16 06 38.5** | **-0.6** | |
| | comp=Z,0.5nm,0.9s,baz=323,slow=3.6,SNR=3.5 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.24** | **3** | P | | **P** | **16 07 15.1** | **+0.2** | |
| | comp=Z,2.1nm,0.6s,baz=351,slow=5.7,SNR=4.2 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **81.24** | **3** | P | | **P** | **16 07 15.1** | **+0.2** | |
| YKA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **81.83** | **122** | P | | **P** | **16 07 18.0** | **-0.7** | |
| | comp=Z,0.3nm,0.4s,baz=324,slow=4.9,SNR=30 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **81.83** | **122** | *e*P | | **P** | **16 07 17.7** | **-1.0** | |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.9s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **81.83** | **122** | *e*P | | **P** | **16 07 17.6** | **-1.0** | |
| | comp=Z,3.3nm,0.9s | | | | | | | | |
| **ASAR** | **Alice Springs** | **84.10** | **125** | P | | **P** | **16 07 29.6** | **-0.7** | |
| | comp=Z,0.6nm,0.5s,baz=309,slow=4.6,SNR=26 | | | | | | | | |

*IDC* ***28*** *16:52:29.0±0.8, 63°.43N×151°.49W, h0km, mb3.6/6, mb1 3.8/10, mb1mx3.6/43, mbtmp3.7/10, ML3.4/4, MS2.9/1, Ms1 2.9/1, ms1mx2.4/46, Error ellipse: s-maj=12.9km s-min=10.1km az=147.0*

*ISCJB* ***28*** *16:52:29.4±0.5, 63°.33N±0°.02×151°.48W±0°.04, h11km±3km, mb3.6/7, Error ellipse: s-maj=3.3km s-min=2.8km az=26.9*

*NEIC* ***28*** *16:52:29.7, 63°.30N×151°.44W, h8km, ML3.9(AEIC), After AEIC.*

**ISC 28 16:52:29.7±1.0, 63°.33N±0°.03×151°.49W±0°.02, h9km±7km, n88, σ1°11/105, mb3.6/7, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CAST** | **Castle Rocks** | **0.28** | **289** | P | **Pg** | **16 52 35.6** | **+0.1** |
| CAST | | | | S | **Sg** | **16 52 40.1** | **+0.8** |
| **KTH** | **Kantishna Hill** | **0.34** | **48** | P | **Pg** | **16 52 36.5** | **+0.1** |
| KTH | | | | S | **Sg** | **16 52 41.7** | **+0.7** |
| **PPLA** | **Purkeypile** | **0.54** | **217** | P | **Pg** | **16 52 39.4** | **-0.7** |
| **TRF** | **Thorofare Moun** | **0.55** | **76** | P | **Pg** | **16 52 40.2** | **-0.3** |
| TRF | | | | S | **Sg** | **16 52 48.1** | **+0.3** |
| **CHUM** | **Lake Minchumin** | **0.67** | **327** | P | **Pb** | **16 52 43.6** | **0.0** |
| CHUM | | | | S | **Sb** | **16 52 53.0** | **0.0** |
| **BPAW** | **Bear Paw Mtn.** | **0.81** | **16** | P | **Pb** | **16 52 45.5** | **-0.5** |
| BPAW | | | | S | **Sb** | **16 52 56.8** | **-0.2** |
| **CUT** | **Chulitna** | **1.08** | **148** | P | **Pg** | **16 52 49.5** | **-0.9** |
| **TRAP** | **Trapper Creek** | **1.15** | **150** | P | **Pg** | **16 52 50.8** | **-0.9** |
| **RND** | **Reindeer** | **1.19** | **85** | P | **Pg** | **16 52 51.0** | **-1.5** |
| RND | | | | S | **Sg** | **16 53 06.9** | **-1.1** |
| **MCK** | **McKinley** | **1.21** | **69** | P | **Pb** | **16 52 52.0** | **-0.9** |
| MCK | | | | S | **Sb** | **16 53 08.8** | **+0.2** |
| **BWN** | **Browne** | **1.24** | **46** | P | **Pn** | **16 52 53.8** | **+0.6** |
| **SKT** | **Skwentna** | **1.35** | **181** | P | **Pn** | **16 52 54.2** | **-0.6** |
| SKT | | | | S | **Sb** | **16 53 11.5** | **-1.0** |
| **MLY** | **Manley** | **1.74** | **10** | P | **Pn** | **16 52 59.9** | **-0.3** |
| MLY | | | | S | **Sg** | **16 53 24.5** | **-1.2** |
| **STLK** | **Strandline Lak** | **1.84** | **185** | P | **Pn** | **16 53 01.4** | **-0.2** |
| **WRH** | **Wood River Hil** | **1.89** | **51** | P | **Pn** | **16 53 01.5** | **-0.7** |
| **SUA** | **Susitna One** | **1.90** | **169** | P | **Pn** | **16 53 02.6** | **+0.2** |
| SUA | | | | S | **Sn** | **16 53 27.8** | **+1.2** |
| **NCG** | **North Capps Gl** | **1.96** | **190** | P | **Pn** | **16 53 03.0** | **-0.2** |
| **PMR** | **Palmer** | **2.06** | **147** | P | **Pn** | **16 53 04.4** | **0.0** |
| **SPCG** | **Spurr Capps Gl** | **2.06** | **187** | P | **Pn** | **16 53 04.7** | **+0.1** |
| SPCG | | | | S | **Sn** | **16 53 31.1** | **+0.7** |
| **CRP** | **Crater Peak** | **2.09** | **189** | P | **Pn** | **16 53 05.5** | **+0.4** |
| **CCB** | **Clear Creek Bu** | **2.10** | **49** | P | **Pn** | **16 53 03.9** | **-1.1** |
| **TTA** | **Tatalina** | **2.10** | **261** | P | **Pn** | **16 53 04.3** | **-0.7** |
| **TT01** | **Tatalina** | **2.10** | **260** | P | **Pn** | **16 53 04.3** | **-0.8** |
| **SML** | **Sawmill** | **2.11** | **135** | P | **Pn** | **16 53 05.0** | **-0.2** |
| **BGL** | **Barrier Glacie** | **2.11** | **192** | P | **Pn** | **16 53 06.0** | **+0.7** |
| **CKT** | **Bend** | **2.16** | **189** | P | **Pn** | **16 53 06.3** | **+0.4** |
| **SPCR** | **Spurr Chakacha** | **2.16** | **189** | P | **Pn** | **16 53 06.3** | **+0.3** |
| **MDM** | **Murphy Dome** | **2.17** | **40** | P | **Pn** | **16 53 05.2** | **-0.9** |
| **CKL** | **Chakachamna La** | **2.17** | **191** | P | **Pn** | **16 53 06.8** | **+0.6** |
| **COLA** | **College** | **2.23** | **44** | P | **Pn** | **16 53 07.5** | **+0.8** |
| **HDA** | **Harding Lake** | **2.28** | **60** | P | **Pn** | **16 53 08.0** | **+0.5** |
| **RC01** | **Rabbit Creek A** | **2.39** | **159** | P | **Pn** | **16 53 09.3** | **+0.3** |
| **SCM** | **Sheep Creek Mo** | **2.44** | **126** | P | **Pn** | **16 53 09.5** | **-0.3** |
| **ILAR** | **Eielson Array** | **2.49** | **52** | Pn | **Pn** | **16 53 09.1** | **-1.3** |
| | 4.6nm,

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| RCDM | | | | | *e*S | | **Sb** | **16 56 11.7** | **-0.3** |
| **NICH** | **Los Niches** | **1.32** | **143** | | *e*P | | **Pn** | **16 55 57.5** | **+0.4** |
| NICH | | | | | *e*S | | **Sn** | **16 56 14.8** | **+0.7** |
| NICH | | | | | AML | | AML | 16 56 18.1 | |
| | comp=E,19μm,0.5s | | | | | | | | |
| **ANTU** | **Antumapu** | **1.35** | **74** | | *e*P | | **Pn** | **16 55 57.5** | **+0.1** |
| ANTU | | | | | *e*S | | **Sb** | **16 56 15.5** | **+0.4** |
| ANTU | | | | | AML | | AML | 16 56 18.2 | |
| | comp=N,4μm,0.4s | | | | | | | | |
| **SAN** | **Santiago** | **1.36** | **70** | | *e*P | | **Pn** | **16 55 57.7** | **+0.1** |
| SAN | | | | | *e*S | | **Sn** | **16 56 15.5** | **+0.3** |
| **ROC1** | **El Roble** | **1.38** | **46** | | *i* P | | **Pg** | **16 56 00.2** | **0.0** |
| ROC1 | | | | | *i* S | | Sg | 16 56 28.9 | +11 |
| **ROCH** | **El Roble** | **1.38** | **46** | | *e*P | | **Pn** | **16 55 58.4** | **+0.3** |
| ROCH | | | | | *e*S | | **Sb** | **16 56 17.2** | **+1.0** |
| ROCH | | | | | AML | | AML | 16 56 24.6 | |
| | comp=N,6μm,0.6s | | | | | | | | |
| **CLCH** | **Cerro Calan** | **1.48** | **69** | | *e*P | | **Pn** | **16 55 59.8** | **+0.4** |
| CLCH | | | | | *e*S | | **Sn** | **16 56 19.0** | **+0.8** |
| CLCH | | | | | AML | | AML | 16 56 27.1 | |
| | comp=E,3μm,0.6s | | | | | | | | |
| **PEL** | **Peldehue** | **1.49** | **58** | | *e*P | | **Pn** | **16 56 00.1** | **+0.7** |
| PEL | | | | | *e*S | | **Sb** | **16 56 19.4** | **+0.3** |
| PEL | | | | | AML | | AML | 16 56 26.2 | |
| | comp=E,10μm,0.6s | | | | | | | | |
| **TALC** | **Talca** | **1.52** | **163** | | *e*P | | **Pn** | **16 56 00.8** | **+1.0** |
| **YECH** | **El Yeso** | **1.78** | **82** | | *e*P | | **Pn** | **16 56 03.7** | **+0.1** |
| YECH | | | | | *e*S | | **Sn** | **16 56 26.4** | **+0.7** |
| **AUSP** | **Uspallata** | **2.91** | **55** | | *i* P | | **Pn** | **16 56 22.1** | **+3.0** |
| AUSP | | | | | *i* S | | **Sg** | **16 57 08.0** | **+0.8** |
| **AAGR** | **Agrelo** | **2.94** | **74** | | *i* P | | **Pb** | **16 56 23.8** | **-1.6** |
| **ARCO** | **CERRO ARCO** | **2.94** | **69** | | *i* P | | **Pb** | **16 56 23.8** | **-1.7** |
| ARCO | | | | | *i* S | | **Sg** | **16 57 08.8** | **+0.7** |
| ARCO | | | | | AML | | AML | 16 57 09.7 | |
| | comp=Z,227nm,0.5s | | | | | | | | |
| **ASAL** | **Salagasta** | **3.12** | **65** | | *i* P | | **Pb** | **16 56 25.7** | **-2.8** |
| **RTLS** | **Leoncito** | **3.24** | **50** | | *i* P | | **Pn** | **16 56 26.3** | **+2.7** |
| **CFAA** | **Coronel Fontan** | **4.06** | **56** | | Pn | | **Pn** | **16 56 36.1** | **+1.3** |
| | comp=Z,0.5nm,0.3s,baz=248,slow=10,SNR=23 | | | | | | | | |
| CFAA | | | | | Sn | | **Sn** | **16 57 25.1** | **+3.2** |
| | comp=Z,0.6nm,0.3s,baz=278,slow=8.9,SNR=3.9 | | | | | | | | |
| CFAA | | | | | Lg | | Lg | 16 57 33.9 | |
| | comp=Z,3.4nm,0.3s,baz=141,slow=23,SNR=7.5 | | | | | | | | |
| CFAA | | | | | LR | | LR | 16 58 32.5 | |
| | comp=Z,28nm,21.4s,baz=233,slow=44 | | | | | | | | |
| **LVC** | **Limon Verde** | **11.65** | **15** | | LR | | LR | 17 03 02.8 | |
| | comp=Z,314nm,20.2s,baz=211,slow=39 | | | | | | | | |
| **CPUP** | **Villa Florida** | **14.92** | **63** | | Pn | | **Pn** | **16 59 04.1** | **+0.6** |
| | comp=Z,0.3nm,0.3s,baz=231,slow=6.5,SNR=3.3 | | | | | | | | |
| CPUP | | | | | LR | | LR | 17 05 10.7 | |
| | comp=Z,125nm,21.6s,baz=233,slow=39 | | | | | | | | |
| **LPAZ** | **La Paz** | **17.95** | **13** | | P | | **Pn** | **16 59 42.6** | **-0.2** |
| | comp=Z,0.2nm,0.3s,baz=195,slow=7.0,SNR=8.2 | | | | | | | | |
| **SIV** | **San Ignacio** | **20.49** | **32** | | P | | **P** | **17 00 08.8** | **-1.7** |
| | comp=Z,1.6nm,0.6s,baz=221,slow=9.3,SNR=4.2 | | | | | | | | |
| **BDFB** | **Brasilia** | **28.41** | **56** | | LR | | LR | 17 13 48.6 | |
| | comp=Z,102nm,18.8s,baz=232,slow=38 | | | | | | | | |
| **MAW** | **Mawson** | **73.27** | **164** | | P | | **P** | **17 07 03.4** | **+0.3** |
| | comp=Z,1.0nm,0.8s,baz=238,slow=9.5,SNR=2.9 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.31** | **70** | | P | | **P** | **17 08 03.8** | **-0.8** |
| | comp=Z,1.5nm,0.7s,baz=245,slow=5.1,SNR=8.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **120.75** | **209** | | PKP | | **PKPdf** | **17 14 24.0** | **-0.9** |
| | comp=Z,0.3nm,0.8s,baz=157,slow=1.4,SNR=4.2 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **154.24** | **32** | | PKPbc | | **PKPbc** | **17 15 31.6** | **-0.2** |
| | comp=Z,1.5nm,0.6s,baz=322,slow=2.9,SNR=7.4 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **156.82** | **49** | | PKPab | | **PKPab** | **17 15 56.6** | **-0.5** |
| | comp=Z,0.4nm,0.8s,baz=328,slow=2.2,SNR=2.7 | | | | | | | | |

**DJA 28 17:00:36.8**±0.9, **9°S**±5°×**11°0E**±°, **h35**km±8km, **M3.8**/9, **MLv3.8**/9, **Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **UGM** | **Wanagama** | **0.79** | **23** | P | Pn | 17 00 51.8 | +0.3 |
| UGM | | | | S | Sn | 17 01 03.1 | +1.0 |
| **PCJI** | **Pacitan** | **1.05** | **65** | P | Pn | 17 00 54.9 | -0.2 |
| PCJI | | | | S | Sn | 17 01 09.6 | +1.0 |
| **WOJI** | **Wonogiri, Jawa** | **1.06** | **42** | P | Pn | 17 00 54.5 | -0.7 |
| WOJI | | | | S | Sn | 17 01 06.9 | -1.9 |
| **SMRI** | **Semarang** | **1.60** | **8** | P | Pn | 17 01 03.3 | +0.7 |
| SMRI | | | | S | Sn | 17 01 23.1 | +1.1 |
| **PWJI** | **Pagerwojo** | **1.69** | **69** | P | Pn | 17 01 03.6 | -0.3 |
| PWJI | | | | S | Sn | 17 01 21.9 | -2.4 |
| **CISI** | **Cisompet, Garu** | **2.60** | **294** | P | Pn | 17 01 16.5 | 0.0 |
| CISI | | | | S | Sn | 17 01 46.2 | -0.8 |

*IDC **28** 17:10:05.6±1.1, 3°.51S×99°.41E, h0km, mb4.2/14, mb1 4.3/15, mb1mx4.1/39, mbtmp4.2/15, ML3.5/1, MS3.0/6, Ms1 3.1/6, ms1mx2.7/36, Error ellipse: s-maj=32.6km s-min=14.9km az=47.0*
*NEIC **28** 17:10:07.3±0.5, 3°.48S×99°.45E, h10km, mb4.4/7, Error ellipse: s-maj=15.3km s-min=7.6km az=48.0*
*DJA **28** 17:10:07.5±1.1, 4°S±5°×9°E±°, h28km±11km, M4.6/11, mb4.9/2, mB5.2/2, MLv4.5/11, Mw(mB)4.7/2*
*ISCJB **28** 17:10:08.4±0.5, 3°.50S±0°.05×99°.39E±0°.05, h33km, mb4.2/20, MS3.1/4, Error ellipse: s-maj=9.1km s-min=5.1km az=141.0*

**ISC 28 17:10:10.7**±0.8, **3°.48S**±0°.07×**99°33E**±0°.08, **h35**km, **n48,** σ1**s30**/42, **mb4.3**/20, **MS3.0**/4, **Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.98** | **44** | P | **Pn** | **17 10 26.1** | **-1.9** |
| PPSI | | | | S | **Sn** | **17 10 42.1** | **+1.5** |
| **SISI** | **Saibi** | **2.15** | **354** | P | **Pn** | **17 10 41.9** | **-2.1** |
| SISI | | | | S | **Sn** | **17 11 09.4** | **-0.1** |
| **PPI** | **Padang Panjang** | **3.18** | **20** | P | **Pn** | **17 10 56.8** | **-1.5** |
| PPI | | | | S | **Sn** | **17 11 35.9** | **+0.9** |
| **KSI** | **Kapahiang** | **3.26** | **93** | P | **Pn** | **17 10 58.2** | **-1.2** |
| KSI | | | | S | **Sn** | **17 11 39.2** | **+2.1** |
| **SDSI** | **Sungai Dareh** | **3.28** | **40** | P | **Pn** | **17 10 58.2** | **-1.5** |
| **BKNI** | **Bangkinang** | **4.14** | **24** | P | **Pn** | **17 11 10.1** | **-1.4** |
| **BKNI** | **Bangkinang** | **4.14** | **24** | *e*Pn | **Pn** | **17 11 08.5** | **-3.1** |
| **LHSI** | **Lahat** | **4.20** | **95** | P | **Pn** | **17 11 11.1** | **-1.2** |
| **MNSI** | **Mandailing Nat** | **4.25** | **3** | P | **Pn** | **17 11 11.0** | **-2.0** |
| **MDSI** | **Maura Dua** | **4.94** | **102** | P | **Pn** | **17 11 20.6** | **-1.9** |
| | 44nm,0.6s,946nm0.3nm | | | | | | |
| **LWLI** | **Liwa** | **4.96** | **108** | P | **Pn** | **17 11 21.3** | **-1.5** |
| **SBSI** | **Sibolga** | **5.01** | **355** | P | Pn | 17 11 18.7 | -4.8 |
| **GSI** | **Gunungsitoli** | **5.06** | **340** | *e*Pn | **Pn** | **17 11 22.2** | **-1.9** |
| | 13nm,0.6s | | | | | | |
| **PSI** | **Prapat** | **6.25** | **356** | Pn | Pn | 17 11 36.1 | -4.5 |
| | 1.2nm,0.3s,baz=159,slow=13,SNR=3.1 | | | | | | |
| PSI | | | | LR | LR | 17 14 02.8 | |
| | comp=Z,112nm,21.9s,baz=182,slow=38 | | | | | | |
| **LEM** | **Lembang** | **8.90** | **112** | Pn | Pn | 17 12 09.7 | -7.3 |
| | 3.6nm,0.3s,baz=315,slow=19,SNR=2.9 | | | | | | |
| LEM | | | | Sn | **Sn** | **17 13 56.5** | **+0.2** |
| | 3.7nm,0.3s,baz=322,slow=20,SNR=3.5 | | | | | | |
| LEM | | | | LR | LR | 17 15 12.0 | |
| | comp=Z,33nm,20.8s,baz=272,slow=35 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.37** | **116** | *e*Pn | Pn | 17 12 18.7 | -4.6 |
| | 96nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **20.42** | **95** | P | **P** | **17 14 44.9** | **-0.2** |
| | 3.9nm,0.3s,baz=252,slow=9.4,SNR=4.7 | | | | | | |
| KAPI | | | | LR | LR | 17 24 13.3 | |
| | comp=Z,44nm,18.3s,baz=290,slow=42 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.80** | **359** | P | **P** | **17 15 00.1** | **+0.2** |
| | 12nm,0.9s,baz=188,slow=9.8,SNR=76 | | | | | | |
| CMAR | | | | LR | LR | 17 23 56.6 | |
| | comp=Z,44nm,18.0s,baz=190,slow=38 | | | | | | |
| **CHTO** | **Chiang Mai** | **22.15** | **359** | *e*P | **P** | **17 15 03.7** | **+0.1** |
| | 6.5nm,1.1s | | | | | | |
| **BATI** | **Baumata** | **25.05** | **107** | P | **P** | **17 15 30.0** | **-2.1** |
| | 9.2nm,0.6s,baz=270,slow=9.1,SNR=3.0 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.02** | **260** | T | T | 17 45 41.2 | |
| | baz=81 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.03** | **260** | T | T | 17 45 41.2 | |
| | baz=81,slow=74 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.04** | **260** | T | T | 17 45 41.2 | |
| | baz=81,slow=74 | | | | | | |
| **LSA** | **Lhasa** | **33.91** | **347** | *e*P | **P** | **17 16 52.2** | **+1.3** |
| | 7.8nm,1.0s | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.14** | **158** | T | T | 17 53 32.9 | |
| | baz=336,slow=76,SNR=19 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.15** | **158** | T | T | 17 53 32.9 | |
| | baz=336,slow=76,SNR=18 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.16** | **158** | T | T | 17 53 29.2 | |
| | baz=336,slow=76,SNR=21 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.86** | **118** | P | **P** | **17 17 23.3** | **-1.2** |
| | 0.7nm,0.6s,baz=301,slow=8.9,SNR=15 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.86** | **118** | *e*P | **P** | **17 17 23.6** | **-1.0** |
| **ASAR** | **Alice Springs** | **38.96** | **124** | P | **P** | **17 17 33.3** | **-0.5** |
| | 0.8nm,0.6s,baz=300,slow=7.5,SNR=21 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.59** | **30** | P | **P** | **17 18 50.9** | **0.0** |
| **KSRS** | **Korea Array** | **48.62** | **31** | P | **P** | **17 18 50.9** | **-0.2** |
| | 3.1nm,0.9s,baz=222,slow=6.3,SNR=6.7 | | | | | | |
| KSRS | | | | LR | LR | 17 38 40.6 | |
| | comp=Z,21nm,21.4s,baz=182,slow=35 | | | | | | |
| **TKM2** | **Tokmak 2** | **50.92** | **338** | *e*P | **P** | **17 19 08.8** | **0.0** |
| | 2.9nm,0.8s | | | | | | |
| **EKS2** | **Erkin-Say** | **51.42** | **336** | *e*P | **P** | **17 19 14.0** | **+1.6** |
| | 3.1nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **51.47** | **6** | P | **P** | **17 19 13.9** | **+1.2** |
| | 3.4nm,0.8s,baz=187,slow=8.7,SNR=20 | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.57** | **7** | *e*P | **P** | **17 19 15.0** | **+1.4** |
| | 2.3nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.27** | **345** | P | **P** | **17 19 19.2** | **+0.6** |
| | 4.7nm,0.9s,baz=150,slow=7.9,SNR=19 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.84** | **39** | P | **P** | **17 19 29.1** | **-1.2** |
| | 4.6nm,1.1s,baz=208,slow=8.0,SNR=5.0 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.76** | **28** | P | **P** | **17 19 44.1** | **0.0** |
| | 2.8nm,0.8s,baz=207,slow=9.3,SNR=6.2 | | | | | | |
| **KURK** | **Kurchatov** | **56.83** | **344** | *e*P | **P** | **17 19 51.8** | **+0.2** |
| | 6.3nm,0.9s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.49** | **350** | P | **P** | **17 20 03.5** | **+0.3** |
| | 6.8nm,0.8s,baz=185,slow=5.5,SNR=30 | | | | | | |
| **BRVK** | **Borovoye** | **61.40** | **341** | *e*P | **P** | **17 20 23.4** | **+0.2** |
| **ABKAR** | **Akbulak array** | **62.61** | **332** | *e*P | **P** | **17 20 31.4** | **0.0** |
| | 4.3nm,0.8s | | | | | | |
| **KBZ** | **Khabaz** | **68.98** | **320** | P | **P** | **17 21 13.4** | **+0.9** |
| | 2.6nm,0.8s,baz=133,slow=5.3,SNR=5.3 | | | | | | |
| **MATP** | **Matopo** | **70.83** | **250** | LR | LR | 17 47 11.6 | |
| | comp=Z,31nm,20.0s,baz=106,slow=31 | | | | | | |
| **BRTR** | **Keskin Array B** | **73.82** | **313** | P | **P** | **17 21 42.2** | **+0.1** |
| | 1.3nm,0.7s,baz=134,slow=8.9,SNR=5.7 | | | | | | |
| **GERES** | **GERESS Array B** | **89.71** | **319** | P | **P** | **17 23 06.0** | **+0.6** |
| | 0.3nm,0.6s,baz=103,slow=4.3,SNR=3.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.27** | **38** | PKPbc | **PKPab** | **17 29 49.8** | **+0.6** |
| | 2.1nm,0.8s,baz=282,slow=0.9,SNR=19 | | | | | | |

*IDC **28** 17:11:42.8±0.6, 13°.81N×90°.81W, h0km, mb4.5/19, mb1 4.7/20, mb1mx4.6/35, mbtmp4.5/20, ML5.3/1, MS3.7/18, Ms1 3.7/18, ms1mx3.5/33, Error ellipse: s-maj=26.0km s-min=13.0km az=53.0*
*ISCJB **28** 17:11:46.5±0.3, 13°.77N±0°.04×90°.94W±0°.04, h33km, mb4.7/89, MS3.7/16, Error ellipse: s-maj=7.1km s-min=2.9km az=42.5*
*MEX **28** 17:11:48.7±0.5, 13°.51N×91°.71W, h10km, MD4.8*
*NEIC **28** 17:11:48.3±0.9, 13°.66N×91°.01W, h38km±7km, mb4.8/72, MD4.8(MEX), MD5.0(SNET), Error ellipse: s-maj=10.2km s-min=4.7km az=46.0*
*NEIC Felt at Guatemala. Felt [II] at San Salvador, El Salvador.*
*CASC **28** 17:11:50.4±3.0, 13°.49N×91°.02W, h7km±27km, ML4.7, mb4.8(NEIC)*

**ISC 28 17:11:46.8**±0.4, **13°.61N**±0°.06×**91°.23W**±0°.05, **h29**km, **n443,** σ1**s24**/436, **mb4.8**/90, **MS3.7**/16, **1C-4D, Near coast of Guatemala**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IXG** | **Ixpaco** | **0.93** | **53** | *e*P | **Pn** | **17 12 05.7** | **+1.5** |
| IXG | | | | *e*S | Sn | 17 12 20.1 | +3.4 |
| **RTR** | **El Retiro** | **1.56** | **79** | *i* P | **Pb** | **17 12 15.5** | **+0.3** |
| **SBLS** | **San Blas** | **1.57** | **82** | *i* P | **Pb** | **17 12 15.3** | **-0.1** |
| **SNJE** | **San Jose** | **1.59** | **81** | *i* P | **Pb** | **17 12 15.7** | **0.0** |
| **BOQS** | **Boqueron** | **1.89** | **86** | *e*P | **Pb** | **17 12 20.6** | **-0.3** |
| **SNET** | **Serv Nac Est T** | **1.94** | **88** | *e*P | **Pb** | **17 12 20.8** | **-0.7** |
| SNET | | | | *e*S | **Sb** | **17 12 47.4** | **+2.0** |
| SNET | | | | AML | AML | 17 12 53.2 | |
| | comp=Z,11μm,0.3s | | | | | | |
| **LFU** | **La Fuente** | **2.06** | **86** | *i* eP | **Pb** | **17 12 22.6** | **-0.9** |
| **MRL** | **Marmol** | **2.07** | **46** | *i* eP | **Pb** | **17 12 23.6** | **-0.2** |
| **LFRS** | **El Faro** | **2.10** | **89** | *e*P | **Pb** | **17 12 23.1** | **-1.2** |
| **LBRS** | **Las Brisas** | **2.12** | **86** | *e*P | **Pb** | **17 12 23.8** | **-0.9** |
| **SNVI** | **San Vicente** | **2.32** | **90** | *e*P | **Pb** | **17 12 26.7** | **-1.3** |
| **CCIG** | **Comitan** | **2.80** | **342** | *i* P | **Pn** | **17 12 31.3** | **+1.5** |
| CCIG | | | | *i* S | **Sn** | **17 13 03.6** | **+1.0** |
| **CCIG** | **Comitan** | **2.80** | **342** | *i* P | **Pn** | **17 12 31.3** | **+1.5** |
| CCIG | | | | *i* S | **Sn** | **17 13 03.6** | **+1.0** |
| **PCIG** | | **2.84** | **317** | *e*P | **Pn** | **17 12 28.6** | **-1.5** |
| PCIG | | | | *e*S | **Sn** | **17 12 59.1** | **-4.3** |
| **PCIG** | | **2.84** | **317** | *e*P | **Pn** | **17 12 28.6** | **-1.5** |
| PCIG | | | | *e*S | **Sn** | **17 12 59.1** | **-4.3** |
| **CAHU** | **Cacaucatique** | **2.93** | **87** | *e*P | Pb | 17 12 34.9 | -3.7 |
| **CNCH** | **Conchagua** | **3.32** | **95** | *e*P | Pb | 17 12 40.3 | -4.7 |
| **TGIG** | | **3.64** | **330** | *e*P | **Pn** | **17 12 41.2** | **-0.1** |
| **TGIG** | | **3.64** | **330** | *e*P | **Pn** | **17 12 41.2** | **-0.1** |
| **CMIG** | **Matias Romero** | **4.94** | **315** | Pn | **Pn** | **17 12 57.9** | **-1.2** |
| | comp=Z,14nm,0.3s,baz=132,slow=9.8,SNR=61 | | | | | | |
| CMIG | | | | Sn | **Sn** | **17 13 57.1** | **+1.8** |
| | comp=Z,30nm,0.3s,baz=307,slow=20,SNR=7.8 | | | | | | |
| CMIG | | | | LR | LR | 17 15 07.9 | |
| | comp=Z,912nm,20.7s,baz=114,slow=40 | | | | | | |
| **JTS** | **JuntasAbangare** | **6.97** | **118** | Pn | **Pn** | **17 13 28.3** | **+1.3** |
| | comp=Z,7.7nm,0.3s,baz=327,slow=9.5,SNR=21 | | | | | | |
| JTS | | | | Sn | **Sn** | **17 14 44.3** | **-1.0** |
| | comp=Z,7.7nm,0.3s,baz=225,slow=20,SNR=1.9 | | | | | | |
| JTS | | | | Lg | Lg | 17 15 10.9 | |
| | comp=Z,3.4nm,0.3s,baz=137,slow=19,SNR=3.3 | | | | | | |
| **JCR** | **Jicaral** | **7.06** | **121** | eP | Pn | 17 13 32.2 | +4.0 |
| **TEIG** | **Tepich** | **7.16** | **23** | Pn | Pn | 17 13 33.0 | +3.4 |
| | comp=Z,3.9nm,0.3s,baz=359,slow=23,SNR=38 | | | | | | |
| TEIG | | | | Sn | Sn | 17 14 55.6 | +5.7 |
| | baz=0.0,slow=20,SNR=2.3 | | | | | | |
| **CGA2** | **Cerro Gallo 2** | **7.52** | **118** | *e*P | Pn | 17 13 40.1 | +5.4 |
| CGA2 | | | | *e*S | **Sn** | **17 14 59.1** | **0.0** |
| **QCR** | **Quepos** | **8.07** | **120** | *e*P | Pn | 17 13 46.7 | +4.6 |
| QCR | | | | *e*S | **Sn** | **17 15 13.4** | **+0.9** |
| **BUS** | **Buena Vista** | **8.35** | **118** | *e*P | Pn | 17 13 51.9 | +5.5 |
| BUS | | | | *e*S | **Sn** | **17 15 19.4** | **-0.6** |
| **MTDJ** | **Mount Denham** | **13.94** | **69** | *e*P | **P** | **17 15 12.0** | **+1.6** |
| **034A** | **Hebbronville** | **15.09** | **334** | P | **P** | **17 15 21.6** | **-1.4** |
| | baz=15,SNR=5.2 | | | | | | |
| **933A** | **Laredo** | **15.83** | **333** | P | **P** | **17 15 30.0** | **-1.2** |
| | baz=16 | | | | | | |
| **833A** | **Chaparral WMA,** | **16.50** | **334** | P | **P** | **17 15 38.3** | **-0.3** |
| | baz=17 | | | | | | |
| **636A** | **Smothers Creek** | **16.69** | **342** | P | **P** | **17 15 40.0** | **-0.7** |
| | baz=17 | | | | | | |
| **540A** | **Vidor** | **16.71** | **352** | P | **Pn** | **17 15 38.6** | **-0.3** |
| | baz=17 | | | | | | |
| **832A** | **Faith Ranch, C** | **16.72** | **332** | P | **P** | **17 15 41.4** | **+0.3** |
| | baz=17 | | | | | | |
| **733A** | **Divot King Ran** | **16.80** | **335** | P | **P** | **17 15 42.1** | **+0.2** |
| | baz=17 | | | | | | |
| **732A** | **Laxson Ranch,** | **17.10** | **333** | P | **P** | **17 15 45.8** | **+0.5** |
| | baz=17,SNR=8.4 | | | | | | |
| **440A** | **Kirbyville** | **17.24** | **352** | P | **Pn** | **17 15 45.4** | **0.0** |
| | baz=17 | | | | | | |
| **633A** | **Saathoff Ranch** | **17.41** | **336** | P | **P** | **17 15 49.1** | **+0.4** |
| | baz=18 | | | | | | |
| **534A** | **Blanco** | **17.66** | **339** | P | **P** | **17 15 53.0** | **+1.5** |
| | baz=18,SNR=7.7 | | | | | | |
| **632A** | **Uvalde** | **17.70** | **335** | P | **P** | **17 15 53.4** | **+1.5** |
| | baz=18,SNR=8.0 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **17.83** | **344** | P | **Pn** | **17 15 52.4** | **-0.4** |
| | baz=18 | | | | | | |
| **533A** | **Kerrville** | **17.90** | **337** | P | **P** | **17 15 56.0** | **+1.9** |
| | baz=18,SNR=6.9 | | | | | | |
| **631A** | **Perdido Creek** | **17.95** | **333** | P | **P** | **17 15 56.5** | **+1.7** |
| | baz=18 | | | | | | |
| **338A** | **Crockett** | **18.06** | **349** | P | **Pn** | **17 15 55.7** | **+0.2** |
| | baz=18 | | | | | | |
| **435B** | **Jarrell** | **18.07** | **342** | P | **P** | **17 15 56.6** | **+0.7** |
| | baz=18 | | | | | | |
| **532A** | **Rocksprings** | **18.29** | **335** | P | **Pn** | **17 16 00.2** | **+1.7** |
| | baz=18,SNR=21 | | | | | | |
| **434A** | **Burnet** | **18.31** | **340** | P | **Pn** | **17 16 00.1** | **+1.3** |
| | baz=18 | | | | | | |
| **OTAV** | **Otavalo** | **18.35** | **135** | P | **P** | **17 15 57.4** | **-2.3** |
| | comp=Z,5.4nm,0.8s | | | | | | |
| **336A** | **Riesel** | **18.43** | **345** | P | **Pn** | **17 16 00.4** | **+0.3** |
| | baz=18 | | | | | | |
| **335A** | **Moody** | **18.49** | **343** | P | **Pn** | **17 16 01.7** | **+0.9** |
| | baz=19 | | | | | | |
| **433A** | **Art** | **18.54** | **338** | P | **Pn** | **17 16 02.8** | **+1.3** |
| | baz=19,SNR=14 | | | | | | |
| **JCT** | **Junction City** | **18.56** | **336** | P | **Pn** | **17 16 03.3** | **+1.5** |
| | baz=19,SNR=7.2 | | | | | | |
| **JCT** | **Junction City** | **18.56** | **336** | *e*P | **Pn** | **17 16 03.3** | **+1.5** |
| | comp=Z,10nm,0.6s | | | | | | |
| **239A** | **Gary** | **18.56** | **351** | P | **P** | **17 16 01.4** | **0.0** |
| | baz=19 | | | | | | |
| **531A** | **Rocksprings** | **18.59** | **334** | P | **Pn** | **17 16 03.6** | **+1.5** |
| | baz=19,SNR=9.2 | | | | | | |
| **334A** | **Lometa** | **18.78** | **341** | P | **Pn** | **17 16 05.4** | **+1.0** |
| | baz=19,SNR=11 | | | | | | |
| **237A** | **Washetta, Mont** | **18.78** | **348** | P | **Pn** | **17 16 04.8** | **+0.4** |
| | baz=19 | | | | | | |
| **ROSC** | **El Rosal** | **18.79** | **116** | P | **Pn** | **17 16 09.6** | **+4.5** |
| | comp=Z,1.7nm,0.3s,baz=94,slow=8.7,SNR=8.2 | | | | | | |
| **432A** | **Menard** | **18.91** | **337** | P | **Pn** | **17 16 07.2** | **+1.2** |
| | baz=19,SNR=6.3 | | | | | | |
| **530A** | **J-C Ranch, Com** | **18.93** | **332** | P | **Pn** | **17 16 08.2** | **+2.0** |
| | baz=19,SNR=19 | | | | | | |
| **236A** | **Katherine and** | **18.94** | **346** | P | **Pn** | **17 16 07.2** | **+0.9** |
| | baz=19 | | | | | | |
| **333A** | **Richland Sprin** | **19.02** | **339** | P | **Pn** | **17 16 08.2** | **+0.9** |
| | baz=19,SNR=21 | | | | | | |
| **431A** | **Sonora** | **19.07** | **335** | P | **Pn** | **17 16 09.3** | **+1.4** |
| | baz=19,SNR=28 | | | | | | |
| **WHTX** | **Lake Whitney** | **19.17** | **344** | P | **Pn** | **17 16 09.2** | **+0.2** |
| | baz=19 | | | | | | |
| **139A** | **Bunkhouse Ranc** | **19.20** | **352** | P | **P** | **17 16 08.7** | **+0.3** |
| | baz=19 | | | | | | |
| **138A** | **Matatall Enter** | **19.29** | **350** | P | **Pn** | **17 16 10.6** | **+0.1** |
| | baz=19 | | | | | | |
| **529A** | **Stev Forest Ra** | **19.32** | **330** | P | **Pn** | **17 16 12.0** | **+1.0** |
| | baz=19,SNR=36 | | | | | | |
| **137A** | **Heron Place, G** | **19.35** | **348** | P | **P** | **17 16 10.6** | **+0.6** |
| | baz=19 | | | | | | |
| **234A** | **Clairette** | **19.37** | **342** | P | **Pn** | **17 16 11.5** | **0.0** |
| | baz=20,SNR=8.5 | | | | | | |
| **136A** | **Ennis** | **19.39** | **346** | P | **Pn** | **17 16 11.8** | **0.0** |
| | baz=20 | | | | | | |
| **430A** | **Baggett Ranch,** | **19.42** | **333** | P | **Pn** | **17 16 13.2** | **+1.0** |
| | baz=20,SNR=22 | | | | | | |
| **TXAR** | **Lajitas Array** | **19.44** | **326** | P | **Pn** | **17 16 13.7** | **+1.2** |
| | comp=Z,2.0nm,0.3s,baz=153,slow=12,SNR=164 | | | | | | |
| TXAR | | | | PcP | **PcP** | **17 20 34.3** | **+2.3** |
| | comp=Z,0.1nm,0.3s,baz=142,slow=4.6,SNR=3.3 | | | | | | |
| TXAR | | | | LR | LR | 17 24 54.1 | |
| | comp=Z,75nm,21.6s,baz=0.0,slow=41 | | | | | | |
| **331A** | **San Angelo** | **19.54** | **336** | P | **Pn** | **17 16 14.5** | **+0.9** |
| | baz=20,SNR=30 | | | | | | |
| **429A** | **Davenport Ranc** | **19.58** | **332** | P | **Pn** | **17 16 15.1** | **+1.0** |
| | baz=20,SNR=29 | | | | | | |
| **H06E1** | **SOCORRO T-PHAS** | **19.60** | **288** | T | T | 17 36 22.4 | |
| | SNR=307 | | | | | | |
| **H06S1** | **SOCORRO T** | **19.62** | **288** | T | T | 17 36 25.5 | |
| | SNR=23 | | | | | | |
| **135A** | **Vickery Place,** | **19.69** | **344** | P | **P** | **17 16 14.5** | **+0.8** |
| | baz=20 | | | | | | |
| **LRAL** | **Lakeview Retre** | **19.72** | **11** | *e*P | **Pn** | **17 16 15.4** | **-0.2** |
| | comp=Z,29nm,0.8s | | | | | | |
| **Z39A** | **Irene McRaven,** | **19.73** | **353** | P | **Pn** | **17 16 15.0** | **-0.7** |
| | baz=20 | | | | | | |
| **232A** | **Coleman** | **19.76** | **338** | P | **Pn** | **17 16 16.0** | **-0.3** |
| | baz=20,SNR=17 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **19.85** | **351** | P | **P** | **17 16 16.1** | **+0.6** |
| | baz=20 | | | | | | |
| **Z37A** | **Pogue Cattle C** | **19.91** | **349** | P | **P** | **17 16 16.4** | **+0.3** |
| | baz=20 | | | | | | |
| **330A** | **Mertzon** | **19.93** | **334** | P | **Pn** | **17 16 18.2** | **0.0** |
| | baz=20,SNR=40 | | | | | | |
| **231A** | **Bronte** | **20.05** | **337** | P | Pn | 17 16 19.6 | -0.1 |
| | baz=20,SNR=12 | | | | | | |
| **Z36A** | **Blue Ridge** | **20.14** | **347** | P | **P** | **17 16 18.2** | **-0.4** |
| | baz=20 | | | | | | |
| **133A** | **Hamilton Ranch** | **20.18** | **341** | P | Pn | 17 16 20.5 | -0.6 |
| | baz=20,SNR=14 | | | | | | |
| **230A** | **Sterling City** | **20.33** | **335** | P | **P** | **17 16 22.0** | **+1.3** |
| | baz=20,SNR=26 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **20.35** | **333** | P | Pn | 17 16 23.1 | -0.1 |
| | baz=20,SNR=15 | | | | | | |
| **Z35A** | **Perchaven, San** | **20.38** | **345** | P | **P** | **17 16 21.9** | **+0.6** |
| | baz=20 | | | | | | |
| **Y39A** | **Lockesburg** | **20.40** | **353** | P | **P** | **17 16 21.4** | **-0.1** |
| | baz=20 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **20.43** | **339** | P | **P** | **17 16 23.3** | **+1.5** |
| | baz=20,SNR=17 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **20.43** | **339** | *e*P | **P** | **17 16 23.1** | **+1.2** |
| | comp=Z,48nm,0.7s | | | | | | |
| **Y38A** | **Idabel** | **20.48** | **352** | P | **P** | **17 16 22.9** | **+0.7** |
| | baz=20 | | | | | | |
| **Z34A** | **Collier Ranch,** | **20.59** |

V38A **Canehill** 22.34 353 P P 17 16 41.3 -1.0
baz=22,SNR=6.7
X31A **McDonald Ranch** 22.38 341 P P 17 16 43.1 +0.4
baz=22,SNR=46
W33A **Caddo, Fort Co** 22.42 344 P P 17 16 42.7 -0.5
baz=22,SNR=5.2
V37A **Hulbert** 22.45 352 P P 17 16 42.2 -1.3
baz=22,SNR=11
V36A **Jenks** 22.48 350 P P 17 16 43.0 -0.9
baz=23
X30A **Coker Ranch, T** 22.51 339 P P 17 16 44.4 +0.2
baz=23,SNR=21
Y28A **McKinney Farm,** 22.55 336 P P 17 16 44.4 -0.3
baz=23,SNR=11
W32A **Sentinel** 22.61 343 P P 17 16 44.6 -0.6
baz=23,SNR=10
V35A **Meyer Ranch, C** 22.63 348 P P 17 16 44.6 -0.9
baz=23
X29A **Tulia** 22.81 337 P P 17 16 47.5 0.0
baz=23,SNR=9.5
W31A **Holland Ranch,** 22.88 341 P P 17 16 48.0 -0.1
baz=23,SNR=7.3
U38A **Gravette** 22.91 353 P P 17 16 47.5 -0.8
baz=23,SNR=7.0
TKL **Tuckaleechee C** 22.95 16 P P 17 16 49.5 +0.7
comp=Z,21nm,0.5s,baz=174,slow=9.6,SNR=20
TKL LR LR 17 26 24.5
comp=Z,204nm,21.5s,baz=190,slow=39
U37A **Salina** 22.97 352 P P 17 16 48.0 -0.9
baz=23
V33A **Lossen Ranch,** 23.01 345 P P 17 16 49.0 -0.4
baz=23
X28A **Dimmitt** 23.07 336 P P 17 16 50.2 0.0
baz=23
W30A **Crocket Farms** 23.08 340 P P 17 16 50.1 -0.1
baz=23
V32A **Arapaho** 23.11 344 P P 17 16 49.9 -0.6
baz=23
AMTX **Amarillo** 23.19 338 P P 17 16 51.3 -0.1
baz=23
AMTX **Amarillo** 23.19 338 eP P 17 16 50.6 -0.8
comp=Z,54nm,0.6s
U35A **Pawnee** 23.20 349 P P 17 16 50.8 -0.5
baz=23
V31A **Spring Creek L** 23.39 342 P P 17 16 53.3 0.0
baz=24
W29A **Amraillo** 23.39 338 P P 17 16 52.8 -0.6
baz=24,SNR=9.3
U34A **Anderson Ranch** 23.42 347 P P 17 16 52.6 -1.0
baz=24
U33A **Lingo Farm, Me** 23.55 346 P P 17 16 53.4 -1.4
baz=24
V30A **Spur Ranch, Mi** 23.64 341 P P 17 16 55.8 +0.1
baz=24
T37A **Cheneyville 18** 23.65 353 P P 17 16 54.4 -1.3
baz=24,SNR=7.4
T35A **Sooner Cattle** 23.68 349 P P 17 16 55.4 -0.7
baz=24
T36A **Boggs Farm, Ca** 23.72 351 P P 17 16 55.8 -0.6
baz=24
W28A **Vega** 23.72 337 P P 17 16 56.2 -0.4
baz=24,SNR=8.6
TZTN **Tazewell** 23.85 15 eP P 17 16 57.4 -0.3
comp=Z,22nm,0.6s
T34A **McClaskey Farm** 23.92 348 P P 17 16 56.9 -1.3
baz=24
V29A **Stinnett** 24.02 339 P P 17 17 00.2 +0.8
baz=24
SIUC **Southern Illin** 24.07 4 eP P 17 16 59.8 +0.1
comp=Z,38nm,0.7s
121A **Cookes Peak, D** 24.16 324 P P 17 17 03.1 +2.3
baz=24,SNR=11
121A **Cookes Peak, D** 24.16 324 eP P 17 17 02.8 +2.0
comp=Z,18nm,0.8s
V28A **Channing** 24.17 338 P P 17 17 01.1 +0.4
baz=24,SNR=6.4
ATAH **Atahualpa** 24.23 148 LR LR 17 25 21.2
comp=Z,183nm,18.3s,baz=330,slow=34
S37A **Fort Scott** 24.26 353 P P 17 17 00.5 -0.9
baz=24,SNR=7.6
S36A **Lake Cedric, C** 24.33 352 P P 17 17 01.3 -0.7
baz=24
U30A **WK&E Inc. Balk** 24.34 341 P P 17 17 02.2 0.0
baz=24
CCM **Cathedral Cave** 24.34 360 eP P 17 17 00.8 -1.4
comp=Z,38nm,0.7s
S35A **Otter Creek Ra** 24.40 350 P P 17 17 02.3 -0.4
baz=24
V27A **Dan Oppiter Fa** 24.40 337 P P 17 17 03.3 +0.4
baz=24
U29A **Oasis Ranch, S** 24.46 340 P P 17 17 03.5 +0.1
baz=25,SNR=6.9
U28A **Mallet** 24.73 338 P P 17 17 05.0 -0.8
baz=25
T30A **Plains** 24.78 342 P P 17 17 06.6 +0.4
baz=25
R37A **Teagarden Farm** 24.81 353 P P 17 17 04.9 -1.6
baz=25,SNR=5.1
LPM **Los Pinos Moun** 24.89 329 eP P 17 17 09.1 +1.6
comp=Z,17nm,0.9s
R36A **Gordon, Harris** 24.91 352 P P 17 17 07.1 -0.2
baz=25
WCI **Wyandotte Cave** 24.91 9 eP P 17 17 06.0 -1.3
comp=Z,110nm,0.6s
U27A **Thompson Grove** 24.98 337 P P 17 17 08.6 +0.4
baz=25,SNR=7.5
T29A **Hugoton** 25.11 341 P P 17 17 10.0 +0.7
baz=25,SNR=6.0
R34A **Isabella, Hill** 25.16 349 P P 17 17 09.4 -0.2
baz=25
OLIL **Olney** 25.18 6 eP P 17 17 10.9 +1.2
comp=Z,28nm,0.7s
LAZ **Ladron** 25.23 328 eP P 17 17 12.4 +2.0
comp=Z,12nm,0.9s
ANMO **Albuquerque** 25.31 330 P P 17 17 12.7 +1.5
comp=Z,9.9nm,0.8s,baz=146,slow=12,SNR=24
ANMO PcP PcP 17 20 46.2 +2.4
comp=Z,2.7nm,0.9s,baz=111,slow=5.2,SNR=4.3
ANMO LR LR 17 28 11.9
comp=Z,55nm,19.7s,baz=106,slow=39
Q37A **Longview Farm,** 25.33 354 P P 17 17 10.6 -0.5
baz=25
S29A **Ulysses** 25.48 342 P P 17 17 12.8 +0.2
baz=26,SNR=7.7
T27A **Campo** 25.51 338 P P 17 17 13.0 +0.1
baz=26
Q36A **Arnold C. Orve** 25.53 352 P P 17 17 12.8 -0.1
baz=26
R31A **Burdett** 25.66 345 P P 17 17 14.3 +0.1
baz=26
TUC **Tucson** 25.82 319 eP P 17 17 17.0 +1.3
comp=Z,15nm,0.9s
R30A **Dighton** 25.86 344 P P 17 17 16.0 0.0
baz=26
T26A **Comanche Natio** 25.94 337 P P 17 17 17.6 +0.7
baz=26
Q33A **Connelly Farm,** 25.95 348 P P 17 17 16.3 -0.5
baz=26
Q32A **Meitler Ranch,** 26.10 347 P P 17 17 18.1 -0.1
baz=26
P36A **Good Intent, A** 26.14 353 P P 17 17 18.5 0.0
baz=26,SNR=5.2
P34A **Walnut Farm, R** 26.30 350 P P 17 17 19.6 -0.4
baz=26
R28A **Tribune** 26.36 341 P P 17 17 20.4 -0.2
baz=26
R27A **Eads** 26.64 339 P P 17 17 23.2 +0.1
baz=27
214A **Organ Pipe Nat** 26.91 316 P P 17 17 27.7 +2.1
baz=27,SNR=6.2
SDCO **Great Sand Dun** 27.19 335 P P 17 17 28.0 -0.3
baz=27
SDCO **Great Sand Dun** 27.19 335 eP P 17 17 29.4 +1.1
comp=Z,4.2nm,0.9s
Q24A **Divide** 28.09 337 P P 17 17 37.6 +1.2
baz=28
MVCO **Mesa Verde** 28.11 330 P P 17 17 37.7 +1.2
baz=28,SNR=10
MVCO **Mesa Verde** 28.11 330 eP P 17 17 38.1 +1.7
comp=Z,15nm,0.8s
WUAZ **Wupatki** 28.37 324 P P 17 17 40.0 +1.2
baz=28,SNR=7.6
WUAZ **Wupatki** 28.37 324 eP P 17 17 40.8 +2.1
comp=Z,13nm,0.9s
GLA **Glamis** 28.93 316 P P 17 17 44.6 +1.0
baz=29,SNR=7.3
ISCO **Idaho Springs** 29.00 337 eP P 17 17 46.3 +1.9
comp=Z,3.0nm,0.6s

Y12C **Blythe** 29.15 317 P P 17 17 46.6 +1.1
baz=29
NNA **Nana** 29.16 150 LR LR 17 27 46.5
comp=Z,42nm,20.0s,baz=317,slow=33
PDMCI **Parker Dam,Lak** 29.24 319 P P 17 17 47.2 +0.9
baz=29
PV04 **Paradox Valley** 29.24 331 eP P 17 17 48.2 +1.7
SWSC **Sam W. Stewart** 29.53 315 P P 17 17 51.1 +2.3
baz=30
IBP **Imperial Bould** 29.58 314 P P 17 17 51.6 +2.2
baz=30
BC3 **Big Chuckawall** 29.71 316 P P 17 17 52.7 +2.1
baz=30,SNR=11
IRM **Iron Mountain** 29.81 317 P P 17 17 53.2 +1.8
baz=30,SNR=6.6
MONP **Monument Peak** 29.93 314 P P 17 17 54.3 +1.6
baz=30
N23A **Red Feather La** 30.07 337 P P 17 17 54.7 +0.8
baz=30
BELC **Belle Mtn. Jos** 30.28 316 P P 17 17 57.5 +1.8
baz=30
I38A **Scanlan Farm,** 30.34 358 P P 17 17 54.9 -1.0
baz=30
LDFC **Landfair** 30.35 319 eP P 17 17 59.6 +3.4
comp=Z,18nm,0.5s
PFO **Pinyon Flat Ob** 30.36 315 P P 17 17 58.1 +1.6
baz=30
ECSD **EROS Data Cent** 30.37 352 P P 17 17 56.2 0.0
baz=30
GMRC **Granite Mounta** 30.52 318 P P 17 17 59.1 +1.3
baz=31,SNR=8.2
MURC **Murrieta** 30.87 315 P P 17 18 02.9 +2.1
baz=31
MSU **Marysvale** 30.98 327 eP P 17 18 04.3 +2.4
comp=Z,14nm,0.8s
HEC **Hector,Ludlow** 30.99 317 P P 17 18 03.5 +1.6
baz=31
TUQ **Turquoise Moun** 31.10 319 P P 17 18 04.8 +2.0
baz=31
SHPR **Sheep Range** 31.29 321 eP P 17 18 06.1 +1.5
comp=Z,7.6nm,1.0s
BFSC **Mount Baldy Ra** 31.54 315 P P 17 18 08.1 +1.2
baz=32
GSC **Goldstone** 31.59 318 P P 17 18 08.8 +1.7
baz=32
G33A **Ortonville** 31.79 353 P P 17 18 07.6 -1.0
baz=32
K22A **Casper** 31.82 338 P P 17 18 09.3 +0.2
baz=32
MPU **Maple Canyon** 31.83 329 eP P 17 18 11.0 +1.6
comp=Z,51nm,0.9s
EDW2 **Edwards Air Fo** 32.13 316 P P 17 18 13.6 +1.7
baz=32
TPNV **Topopah Spring** 32.25 321 P P 17 18 14.9 +1.9
baz=32
F35A **Swanville** 32.27 356 P P 17 18 12.3 -0.5
baz=32
LRMC **Laurel Mountai** 32.27 317 P P 17 18 15.2 +2.0
baz=32
FURC **Furnace Creek,** 32.33 319 P P 17 18 15.3 +1.8
baz=32
CTU **Camp Tracy** 32.41 330 eP P 17 18 16.8 +2.4
comp=Z,14nm,0.9s
MPMC **Manual Prospec** 32.49 318 P P 17 18 17.2 +2.0
baz=33,SNR=11
DUG **Dugway** 32.56 328 P P 17 18 17.2 +1.5
baz=33
DUG **Dugway** 32.56 328 eP P 17 18 17.8 +2.1
comp=Z,5.2nm,0.8s
TCUT **Toone Canyon** 32.58 331 eP P 17 18 17.7 +1.8
comp=Z,28nm,1.0s
SADO **Sadowa** 32.72 16 P P 17 18 15.8 -1.0
comp=Z,8.2nm,0.3s,baz=217,slow=9.7,SNR=13
R11A **Troy Canyon, C** 32.77 323 P P 17 18 19.4 +1.9
baz=33,SNR=5.8
E36A **McGregor** 32.85 357 P P 17 18 16.4 -1.6
baz=33
ISA **Isabella** 32.90 317 P P 17 18 20.2 +1.6
baz=33
E35A **Pequot Lakes** 32.95 356 P P 17 18 17.7 -1.1
baz=33
E34A **Wadena** 32.97 355 P P 17 18 18.7 -0.2
baz=33
GRAC **Grapevine Rang** 32.98 320 P P 17 18 21.6 +2.3
baz=33,SNR=11
SBC **Santa Barbara** 33.08 314 P P 17 18 21.6 +1.5
baz=33
BW06 **Boulder Array** 33.09 335 eP P 17 18 20.9 +0.6
comp=Z,1.8nm,0.6s
BGU **Big Grassy Mou** 33.22 329 eP P 17 18 23.3 +1.8
comp=Z,14nm,0.9s
VES **Vestal, Richgr** 33.41 316 P P 17 18 25.8 +2.8
baz=34
D37A **Cotton** 33.46 359 P P 17 18 22.2 -1.1
baz=34
D33A **AnnSam, Waubun** 33.65 354 P P 17 18 24.1 -0.8
baz=34
HVU **Hansel Valley** 33.74 330 eP P 17 18 27.3 +1.3
comp=Z,16nm,1.1s
AHID **Auburn Hatcher** 33.74 333 eP P 17 18 26.8 +0.8
comp=Z,8.3nm,0.7s
D30A **Buchanan** 33.98 351 P P 17 18 26.9 -0.9
baz=34
C38A **Sawbill Land.** 34.00 360 P P 17 18 26.8 -1.2
baz=34
C37A **Embarrass** 34.02 359 P P 17 18 27.0 -1.1
baz=34
C36A **Pine Crest Far** 34.07 358 P P 17 18 27.3 -1.3
baz=34
E26A **Carlson Angus** 34.09 346 P P 17 18 28.4 -0.5
baz=34
REDW **Red Top Meadow** 34.12 334 eP P 17 18 30.4 +1.1
comp=Z,37nm,1.0s
SNOW **Snow King Moun** 34.16 334 eP P 17 18 30.7 +1.0
comp=Z,23nm,0.7s
ELK **Elko** 34.23 327 P P 17 18 31.2 +0.9
comp=Z,11nm,0.8s,baz=21,slow=0.2,SNR=49
EYMN **Ely** 34.23 360 P P 17 18 28.2 -1.8
baz=34
EYMN **Ely** 34.23 360 eP P 17 18 28.5 -1.5
TPAW **Teton Pass** 34.26 334 eP P 17 18 31.8 +1.1
comp=Z,10nm,0.8s
E25A **Miller Ranch,** 34.35 345 P P 17 18 29.6 -1.5
baz=34
D28A **Regan** 34.38 349 P P 17 18 29.7 -1.6
baz=34
MOOW **Moose Ponds** 34.39 335 eP P 17 18 32.3 +0.7
comp=Z,5.8nm,1.0s
NVAR **Mina Array Bea** 34.45 321 P P 17 18 34.8 +2.6
comp=Z,15nm,0.7s,baz=137,slow=8.3,SNR=53
NVAR PcP PcP 17 21 08.8 +1.5
comp=Z,4.0nm,0.7s,baz=134,slow=4.8,SNR=5.9
NVAR ScP ScP 17 24 56.3 +5.7
comp=Z,0.4nm,0.4s,baz=110,slow=5.2,SNR=4.0
NVAR LR LR 17 34 11.5
comp=Z,186nm,21.4s,baz=242,slow=39
D27A **Center** 34.49 348 P P 17 18 30.6 -1.7
baz=35
C31A **Landman Farms,** 34.51 352 P P 17 18 30.9 -1.5
baz=35
IMW **Indian Meadow** 34.59 335 eP P 17 18 33.8 +0.3
comp=Z,4.5nm,0.6s
D26A **Manning** 34.62 346 P P 17 18 31.7 -1.7
baz=35
FLWY **Flagg Ranch** 34.64 335 eP P 17 18 34.1 +0.3
B35A **Bob, Littlefor** 34.71 357 P P 17 18 32.7 -1.3
baz=35
AGMN **Agassiz Nation** 34.80 355 P P 17 18 33.6 -1.2
baz=35
H17A **Grant Village** 34.85 335 P P 17 18 37.0 +1.3
baz=35
B34A **Aery, Baudette** 34.89 356 P P 17 18 34.3 -1.3
baz=35
RLMT **Red Lodge** 34.95 337 P P 17 18 36.1 -0.4
baz=35
B32A **Ashes, Strandq** 34.96 354 P P 17 18 35.0 -1.2
baz=35
BMN **Battle Mountai** 35.10 324 eP P 17 18 39.8 +2.0
comp=Z,15nm,0.7s
B31A **Greenbush Farm** 35.12 353 P P 17 18 36.5 -1.1
baz=35
C26A **Wahner Farm, P** 35.29 347 P P 17 18 38.6 -0.6
baz=35
A33A **Warroad** 35.39 355 P P 17 18 38.7 -1.2
baz=36,SNR=5.3
CMB **Columbia Colle** 35.52 319 eP P 17 18 43.0 +1.7
comp=Z,8.9nm,1.0s
QLMT **Earthquake Lak** 35.55 335 eP P 17 18 44.3 +2.6
comp=Z,0.4nm,0.6s
GCMT **Greycliff** 35.67 338 eP P 17 18 42.7 +0.1
comp=Z,1.6nm,0.2s
SAML **Samuel** 35.74 127 eP P 17 18 43.1 -0.3
comp=Z,12nm,1.1s
A29A **Manning Farm,** 35.83 351 P P 17 18 43.2 -0.5
baz=36
HLID **Hailey** 35.88 331 P P 17 18 45.8 +1.4
baz=36,SNR=19
HLID **Hailey** 35.88 331 eP P 17 18 45.6 +1.2
comp=Z,8.3nm,0.7s
MCMT **McKenzie Canyo** 36.15 334 eP P 17 18 48.8 +1.9
comp=Z,18nm,0.9s
A26A **Wade Farm, Ken** 36.30 348 P P 17 18 47.4 -0.3
baz=36
DGMT **Dagmar** 36.38 345 P P 17 18 48.1 -0.4
baz=36
MFID **Camas Ranch** 36.46 329 eP P 17 18 51.1 +1.8
comp=Z,20nm,1.1s
DLMT **Dillon** 36.47 334 eP P 17 18 50.8 +1.4
comp=Z,18nm,1.0s
A25A **Svangstu Ranch** 36.57 347 P P 17 18 49.8 -0.3
baz=37
ULM **Lac du Bonnet** 36.73 355 P P 17 18 49.5 -2.0
comp=Z,6.8nm,0.6s,baz=172,slow=8.9,SNR=5.6
ULM LR LR 17 36 21.7
comp=Z,78nm,19.7s,baz=296,slow=40
LRM **Limekiln Ridge** 36.78 335 eP P 17 18 53.2 +1.1
comp=Z,127nm,0.9s
WVOR **Wild Horse Val** 37.23 326 eP P 17 18 57.6 +1.6
comp=Z,21nm,0.9s
LPAZ **La Paz** 37.46 142 P P 17 18 59.8 +1.1
comp=Z,2.0nm,0.8s,baz=339,slow=8.7,SNR=8.9
LPAZ LR LR 17 34 07.9
comp=Z,95nm,20.6s,baz=310,slow=36
EGMT **Eagleton** 37.61 340 P P 17 18 59.1 +0.1
baz=38,SNR=5.3
EGMT **Eagleton** 37.61 340 eP P 17 18 59.4 +0.4
comp=Z,11nm,0.7s
O03D **Paynes Creek** 37.73 321 P P 17 19 01.8 +1.6
baz=38
MOD **Modoc** 37.82 324 eP P 17 19 02.4 +1.4
comp=Z,13nm,1.0s
CHMT **Chamberlain Mo** 37.99 335 eP P 17 19 03.0 +0.6
comp=Z,5.0nm,0.9s
MSO **Missoula** 38.20 335 P P 17 19 04.4 +0.3
baz=38
M04C **Macdoel** 38.65 322 P P 17 19 09.2 +1.3
baz=39
N02D **Trinity Center** 38.69 321 P P 17 19 09.4 +1.2
baz=39
M02C **Callahan** 39.02 321 P P 17 19 11.7 +0.8
baz=39
YBMT **Yellow Bay** 39.06 336 eP P 17 19 12.6 +1.4
comp=Z,4.9nm,0.7s
YBH **Yreka Blue Hor** 39.13 322 P P 17 19 12.0 +0.1
comp=Z,2.6nm,0.5s,baz=91,slow=3.9,SNR=8.7
KHMM **Horse Mountain** 39.27 320 eP P 17 19 14.7 +1.6
BSMT **Bassoo Peak** 39.37 335 eP P 17 19 14.3 +0.4
comp=Z,2.7nm,0.7s
J04D **Umpqua Nationa** 39.70 324 P P 17 19 17.8 +1.1
baz=40
L02D **Cave Junction,** 39.92 322 P P 17 19 20.0 +1.6
baz=40
I05D **Terrebonne, OR** 39.97 326 P P 17 19 20.2 +1.4
baz=40
I04A **Tendick Farm,** 40.22 324 P P 17 19 22.3 +1.4
baz=40
G05D **Wamic, OR** 40.55 327 P P 17 19 25.6 +2.0
baz=41,SNR=9.3
NEW **Newport** 40.68 333 P P 17 19 24.7 +0.1
comp=Z,5.8nm,0.7s,baz=143,slow=8.5,SNR=5.7
NEW **Newport** 40.68 333 P P 17 19 25.0 +0.4
baz=41
VFP **Flag Point** 40.68 327 P P 17 19 27.3 +2.5
I03D **Drain, OR** 40.69 324 P P 17 19 27.1 +2.4
baz=41
VLL **Laurance Lake** 40.89 327 P P 17 19 29.6 +3.1
SAW **Saint Andrews** 41.29 331 P P 17 19 31.1 +1.4
NAC **Naches** 41.30 329 P P 17 19 31.7 +1.9
G03D **McMinnville, O** 41.58 326 P P 17 19 33.9 +1.8
baz=42
LON **Longmire** 41.81 328 eP P 17 19 35.1 +1.1
comp=Z,21nm,0.8s
F04D **Rainier, OR** 42.00 327 P P 17 19 37.2 +1.8
baz=42
LVC **Limon Verde** 42.12 148 LR LR 17 36 47.0
comp=Z,399nm,18.2s,baz=292,slow=36
C06D **Leavenworth** 42.16 330 P P 17 19 38.0 +1.3
baz=42
RPW **Rockport** 42.82 330 P P 17 19 42.7 +0.5
JCW **Jim Creek** 42.85 330 P P 17 19 42.7 +0.3
B05A **Bryant** 42.98 330 P P 17 19 43.5 +0.1
baz=43
EDM **Edmonton** 43.24 341 eP P 17 19 45.1 -0.4
comp=Z,25nm,0.4s
VDB **Vedder Mountai** 43.51 331 P P 17 19 48.8 +1.2
A04D **Lummi Island** 43.59 330 P P 17 19 49.2 +1.0
baz=44
RPN **Rapa Nui** 44.15 203 LR LR 17 33 31.0
comp=Z,129nm,21.8s,baz=39,slow=29
SCHQ **Schefferville** 45.33 20 P P 17 20 00.2 -1.9
comp=Z,26nm,0.9s,baz=204,slow=5.9,SNR=8.9
SCHQ LR LR 17 39 55.2
comp=Z,158nm,18.6s,baz=259,slow=38
YKA **Yellowknife Ar** 51.58 346 P P 17 20 49.4 -0.6
comp=Z,8.0nm,0.6s,baz=154,slow=7.7,SNR=14
YKA PcP PcP 17 22 03.8 +0.1
comp=Z,1.6nm,0.5s,baz=148,slow=3.5,SNR=5.1
CPUP **Villa Florida** 51.60 140 P P 17 20 50.0 -0.8
comp=Z,1.1nm,0.5s,baz=305,slow=6.5,SNR=4.5
BDFB **Brasilia** 51.68 123 P P 17 20 51.0 -0.7
comp=Z,2.5nm,0.5s,baz=292,slow=7.8,SNR=4.1
DLBC **Dease Lake** 53.31 336 eP P 17 21 05.0 +1.9
comp=Z,19nm,0.8s
TAOE **Nuku Hiva Isla** 53.45 248 eT T 18 18 12.7
comp=Z,225nm,0.3s
RKT **Rikitea** 56.27 230 eT T 18 21 47.6
comp=Z,18nm,0.3s
RCBR **Riachuelo** 58.21 106 eP P 17 21 38.7 -0.2
comp=Z,18nm,0.9s
SFJD **Kangerlussuaq** 59.66 17 LR LR 17 48 16.1
comp=Z,122nm,18.6s,baz=222,slow=37
BMRM **Bremner River** 60.85 333 eP P 17 21 57.5 +1.1
comp=Z,10nm,0.6s
INK **Inuvik** 61.02 343 LR LR 17 52 34.6
comp=Z,38nm,19.0s,baz=130,slow=40
INK **Inuvik** 61.02 343 eP P 17 21 56.8 -0.5
comp=Z,4.5nm,0.5s
RES **Resolute Bay** 61.10 359 eP P 17 21 56.0 -1.8
comp=Z,5.1nm,0.5s
EGAK **Eagle** 61.35 338 eP P 17 21 59.6 0.0
comp=Z,8.2nm,1.0s
PMOR **Pomariorio Ree** 62.86 245 eT T 18 29 58.7
comp=Z,6.1nm,0.3s
ILAR **Eielson Array** 63.49 337 P P 17 22 13.9 -0.1
comp=Z,9.2nm,0.9s,baz=135,slow=4.5,SNR=56
ILAR LR LR 17 52 10.1
comp=Z,83nm,19.5s,baz=118,slow=38
MCK **McKinley** 63.86 335 eP P 17 22 15.5 -1.0
comp=Z,17nm,1.0s
COLA **College** 63.91 337 eP P 17 22 16.3 -0.4
comp=Z,7.6nm,0.8s
TRF **Thorofare Moun** 64.31 335 eP P 17 22 20.3 +0.8
comp=Z,14nm,0.8s
RSO **Redoubt South** 64.36 331 eP P 17 22 20.4 +0.5
comp=Z,95nm,0.7s
KTH **Kantishna Hill** 64.61 335 eP P 17 22 21.2 -0.2
comp=Z,20nm,0.9s
BPAW **Bear Paw Mtn.** 64.84 335 eP P 17 22 22.5 -0.4
comp=Z,5.0nm,1.0s
PPLA **Purkeypile** 64.91 334 eP P 17 22 23.4 -0.1
comp=Z,18nm,0.9s
PPT2 **Papeete2** 65.39 243 eLR LR 17 41 50.3
comp=Z,134nm,25.5s
SUMG **Summit** 66.41 15 *i* P P 17 22 32.2 -1.1
comp=Z,8.0nm,0.7s
TBI **Tubuai** 67.78 238 eT T 18 36 07.8
comp=Z,12nm,0.3s
DAG **Danmarks Havn** 72.86 13 *i* P P 17 23 10.5 -2.0
comp=Z,6.9nm,0.5s
ESDC **Sonseca Array** 79.36 52 P P 17 23 47.7 -2.6
comp=Z,0.4nm,0.4s,baz=302,slow=4.4,SNR=4.5
MDT **Midelt** 79.95 59 LR LR 17 52 15.6
comp=Z,34nm,20.2s,baz=312,slow=31
NOA **NORSAR Array B** 84.12 29 P P 17 24 17.2 +2.2
comp=Z,1.3nm,0.9s,baz=291,slow=5.3,SNR=3.2
DBIC **Dimbokro** 84.94 84 P P 17 24 18.1 -1.8

comp=Z,2.2nm,0.5s,baz=305,slow=3.5,SNR=5.8
DBIC LR LR 17 56 52.9
comp=Z,42nm,21.4s,baz=273,slow=32
**ARCES ARCESS Array B 86.27 18** P **P 17 24 23.9 -1.6**
comp=Z,3.9nm,0.8s,baz=282,slow=4.7,SNR=9.0
**SEY Seymchan 89.41 336** P **P 17 24 41.0 +0.4**
comp=Z,5.0nm,0.9s,baz=89,slow=5.0,SNR=8.0
**GERES GERESS Array B 89.42 40** P **P 17 24 39.3 -1.8**
comp=Z,0.3nm,0.6s,baz=290,slow=7.2,SNR=2.5
GERES LR LR 18 00 04.2
comp=Z,41nm,19.1s,baz=288,slow=33
**TORD Torodi Ar. Bea 89.74 77** P **P 17 24 41.4 -1.8**
comp=Z,0.7nm,0.6s,baz=293,slow=4.4,SNR=6.2
**ZALV Zalesovo Beam 112.63 3** PKiKP **PKiKP 17 30 20.1 -0.3**
comp=Z,1.0nm,0.5s,baz=13,slow=3.3,SNR=5.4
**KURK Kurchatov 115.33 7** PKP **PKPdf 17 30 26.0 +0.3**
**KURBB Kurchatov Arra 115.42 7** PKP **PKPdf 17 30 26.0 +0.1**
comp=Z,1.1nm,0.5s,baz=352,slow=1.7,SNR=16
**SONM Songino Array 116.84 347** PKP **PKPdf 17 30 29.1 +0.2**
comp=Z,0.4nm,0.6s,baz=350,slow=1.2,SNR=4.1
**KSRS Korea Array 117.29 326** PKP **PKPdf 17 30 30.1 +0.2**
comp=Z,1.1nm,0.6s,baz=2.0,slow=1.4,SNR=4.3
**KSAR Wonju Array Be 117.32 326** PKP **PKPdf 17 30 30.1 +0.1**
**BOSA Boshof 119.51 115** PKP **PKPdf 17 30 34.8 +0.3**
comp=Z,1.9nm,0.6s,baz=219,slow=4.2,SNR=5.4
**MKAR Makanchi Array 119.59 5** PKP **PKPdf 17 30 33.1 -1.0**
comp=Z,0.5nm,0.5s,baz=306,slow=2.8,SNR=8.1
**GEYT Alibeck 121.21 28** PKP **PKPdf 17 30 37.8 +0.3**
comp=Z,2.2nm,0.4s,baz=283,slow=4.0,SNR=5.4
**AAK Ala-Archa 122.52 12** PKP **PKPdf 17 30 41.0 +1.0**
comp=Z,1.1nm,0.5s,baz=236,slow=7.3,SNR=5.7
**CTA Charters Tower 124.83 255** PKP **PKPdf 17 30 45.4 +0.6**
comp=Z,5.3nm,0.9s,baz=63,slow=2.3,SNR=3.9
**WRA Warramunga Arr 136.03 255** PKhKP PKPpre 17 30 51.4
comp=Z,0.2nm,0.7s,baz=91,slow=3.3,SNR=2.7
WRA PKP **PKPdf 17 31 06.1 +0.1**
comp=Z,2.4nm,0.8s,baz=88,slow=2.4,SNR=24
**ASAR Alice Springs 136.24 250** PKhKP PKPpre 17 30 55.9
comp=Z,0.2nm,0.7s,baz=110,slow=4.2,SNR=4.5
ASAR PKP **PKPdf 17 31 06.6 +0.2**
comp=Z,1.4nm,0.7s,baz=86,slow=1.9,SNR=19
**LSA Lhasa 136.88 357** *e*P **PKPdf 17 31 09.1 +1.0**
**GKN Gorkha 138.44 6** *e*P **PKPdf 17 31 11.2 +0.7**
**KOLN Koldanda 138.56 7** *e*P **PKPdf 17 31 11.6 +0.8**
**GUN Gumba 138.63 4** *e*P **PKPdf 17 31 09.2 -1.9**
comp=Z,14nm,0.5s
**DMN Daman 138.87 5** *e*P **PKPdf 17 31 11.0 -0.5**
**PKIN Phulchoki 138.93 5** *e*P **PKPdf 17 31 09.5 -2.1**
comp=Z,6.3nm,0.5s
**PKIN Phulchoki 138.93 5** *e*P **PKPdf 17 31 11.1 -0.5**
**PKI Pulchoki 138.93 5** *e*P **PKPdf 17 31 09.7 -2.0**
**RAMN Ramite 139.63 3** *e*P **PKPdf 17 31 09.8 -3.0**
**CRAI Chiangrai 144.49 341** P PKPab 17 31 13.9 -5.7
comp=Z,141nm,1.0s,comp=Z,16μm
**SOEI Soe 145.05 272** *e*P **PKPbc 17 31 23.3 +1.3**
**CMAI Chiengmai2 145.17 343** P **PKPbc 17 31 22.7 +0.5**
comp=Z,21nm,0.8s,comp=Z,3μm
**NONG Nongkai 145.48 335** P **PKPbc 17 31 23.6 +0.6**
**SRSP Sriamsagar 146.07 18** *e*PKPab **PKPdf 17 31 23.6 -0.5**
**SKNT Sakolnakorn 146.10 333** P **PKPab 17 31 26.3 +0.7**
**PHRA Phrae 146.15 340** P **PKPbc 17 31 25.5 +0.4**
comp=Z,357nm,1.1s
**CHTO Chiang Mai 146.26 342** P **PKPdf 17 31 25.3 +0.9**
comp=Z,144nm,1.1s
**CHTO Chiang Mai 146.26 342** *e*PKPdf **PKPdf 17 31 25.3 +0.9**
**CMMT Chiang Mai 146.26 342** P **PKPdf 17 31 25.3 +0.9**
comp=Z,33nm,1.1s
**KLRI Killari 146.31 21** *e*PKPbc **PKPdf 17 31 23.4 -1.1**
**LAMP Lampang 146.32 341** P **PKPbc 17 31 26.2 +0.6**
comp=Z,11nm,0.8s,comp=Z,102nm
**RPR Rampur 146.41 16** *e*PKPab **PKPdf 17 31 25.4 +0.8**
**CMAR Chiang Mai Arr 146.59 342** PKPbc **PKPbc 17 31 26.7 +0.2**
comp=Z,16nm,0.5s,baz=341,slow=3.4,SNR=156
**LOEI Loei 146.71 338** P **PKPdf 17 31 26.5 +1.3**
comp=Z,20nm,1.2s,comp=Z,4μm
**UTTA Uttaradit 146.75 339** P **PKPbc 17 31 27.2 +0.3**
comp=Z,12nm,0.9s,comp=Z,127nm
**MHMT Maesarieng 147.15 344** P **PKPbc 17 31 28.5 +0.5**
**KHON Khomkaen 147.16 335** P **PKPab 17 31 29.9 +0.2**
**HYBB Hyderabad (bro 147.56 18** *e*PKPdf **PKPdf 17 31 24.8 -1.8**
HYBB *e*PKPbc **PKPbc 17 31 28.1 -1.1**
**HYB Hyderabad 147.56 18** *i* PKP **PKPdf 17 31 28.0 +1.4**
**PBKT Sadao Pong 147.68 338** P **PKPbc 17 31 30.7 +1.2**
comp=Z,21nm,1.0s
**CHAI Chaiyaphum 147.90 336** P **PKPbc 17 31 31.8 +1.7**
comp=Z,6.7nm,1.4s
**KAPI Kappang 148.29 283** PKPbc **PKPdf 17 31 30.3 +2.4**
comp=Z,3.5nm,0.4s,baz=31,slow=5.9,SNR=2.3
**PVM Polavaram 148.53 13** *e*PKPdf **PKPdf 17 31 28.3 +0.1**
PVM *e*PKPbc **PKPbc 17 31 31.6 -0.1**
**NJS Nagarjunasagar 148.60 18** *e*PKPbc **PKPbc 17 31 31.3 -0.6**
**UMPA Umpang Tak 148.74 341** P **PKPbc 17 31 34.2 +1.8**
**SRLM Srisailam 148.90 19** *e*PKPdf **PKPdf 17 31 28.7 -0.2**
SRLM *e*PKPbc **PKPbc 17 32 32.0 -0.8**
**UTHA Uthaitani 149.16 340** P **PKPbc 17 31 34.3 +0.9**
**URV Uravakonda 149.42 22** *e*PKPbc **PKPbc 17 31 33.2 -0.9**
**ADKI Addanki 149.46 17** *e*PKPbc **PKPbc 17 31 32.9 -1.2**
ADKI *e*PKiKP **PKiKP 17 31 34.2 -1.1**
**RCLA Racherla 149.53 19** *e*PKPbc **PKPbc 17 31 33.2 -1.1**
**MBWA Marble Bar 149.56 251** *e*PKPbc **PKPbc 17 31 34.3 0.0**
**SKHT Srikalahasti 151.38 19** *e*PKPbc **PKPbc 17 31 37.7 -1.0**
**PSI Prapat 160.84 328** PKPab **PKPab 17 32 27.9 +0.4**
comp=Z,6.7nm,0.8s,baz=30,slow=18,SNR=5.8

*NNC **28** 17:15:27.9±1.9, 36°.68N×69°.69E, h157km±19km, mb2.7, mpv3.6, Error ellipse: s-maj=18.6km s-min=11.3km az=161.0*
**ISC 28 17:15:27.9**±3.4, **36°.6N**±0°.2×**69°.7E**±0°.1, **h150**km, **n11**, σ0§41/15, **1C-9D, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZET** | **Dzherino** | **2.28** | **342** | ⇓P | Pn | 17 16 06.1 | -0.3 |
| | 8.7nm,0.4s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **17 16 36.5** | **+0.4** |
| | 29nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **4.50** | **40** | ⇓P | **Pn** | **17 16 34.5** | **-0.4** |
| | 2.1nm,0.3s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **17 17 27.2** | **+0.2** |
| | 14nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **6.22** | **19** | ⇓P | **Pn** | **17 16 57.7** | **0.0** |
| | 9.7nm,0.8s | | | | | | |
| MNAS | | | | ⇓S | **Sn** | **17 18 08.4** | **+0.5** |
| | 4.0nm,0.6s | | | | | | |
| **AML** | **Almayashu** | **6.29** | **28** | P | **Pn** | **17 16 58.6** | **-0.2** |
| | SNR=9.2 | | | | | | |
| **KK31** | **Karatay Array** | **6.49** | **5** | ⇓P | **Pn** | **17 17 00.9** | **-0.1** |
| | 2.5nm,0.5s,baz=186,slow=12,SNR=22 | | | | | | |
| KK31 | | | | ⇓S | **Sn** | **17 18 13.2** | **-0.8** |
| | 0.4nm,0.2s,baz=190,slow=23,SNR=4.6 | | | | | | |
| **UCH** | **Uchtor** | **6.70** | **32** | P | **Pn** | **17 17 04.0** | **-0.3** |
| | SNR=9.8 | | | | | | |
| **EKS2** | **Erkin-Say** | **6.78** | **26** | P | **Pn** | **17 17 05.1** | **0.0** |
| | SNR=13 | | | | | | |
| **AAK** | **Ala-Archa** | **7.03** | **30** | ⇓P | **Pn** | **17 17 08.3** | **-0.2** |
| | 2.0nm,0.3s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **17 18 27.4** | **+0.1** |
| | 5.8nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **7.03** | **30** | P | **Pn** | **17 17 08.8** | **+0.4** |
| | SNR=6.8 | | | | | | |
| **USP** | **Ospenovka** | **7.57** | **28** | P | **Pn** | **17 17 16.2** | **+0.6** |
| | SNR=10 | | | | | | |
| **AB31** | **Akbulak array** | **14.48** | **334** | P | **Pn** | **17 18 45.7** | **0.0** |
| | 0.3nm,0.3s,baz=150,slow=13,SNR=25 | | | | | | |

*IDC **28** 17:19:39.9±1.9, 3°.12N×95°.61E, h0km, mb3.7/6, mb1 3.8/8, mb1mx3.5/50, mbtmp3.6/8, ML3.2/2, Error ellipse: s-maj=65.7km s-min=18.1km az=56.0*
*ISCJB **28** 17:19:47.4±1.2, 3°.28N±0°.05×95°.97E±0°.09, h65km±11km, mb3.7/6, Error ellipse: s-maj=15.6km s-min=7.0km az=159.6*
*DJA **28** 17:19:48.6±1.5, 3°N±3°×9°.6E±°, h38km±20km, M4.0/10, mb4.1/3, MLv3.9/10*
**ISC 28 17:19:48.3**±1.8, **3°.30N**±0°.06×**96°.0E**±0°.1, **h55**km±17km, **n20**, σ1§01/19, **mb3.8/6, Off west coast of northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MLSI** | **Meulaboh, Aceh** | **1.06** | **24** | P | **Pn** | **17 20 05.7** | **-1.2** |
| MLSI | | | | S | **Sn** | **17 20 21.0** | **+0.3** |
| **KCSI** | **Kotacane, Aceh** | **1.81** | **83** | P | **Pn** | **17 20 17.4** | **+0.3** |
| KCSI | | | | S | **Sn** | **17 20 38.9** | **-0.1** |
| **LHMI** | **Lhok Sumawe** | **2.15** | **27** | P | **Pn** | **17 20 21.9** | **+0.1** |
| LHMI | | | | S | **Sn** | **17 20 48.1** | **+0.8** |
| **GSI** | **Gunungsitoli** | **2.55** | **141** | P | **Pn** | **17 20 27.0** | **-0.2** |
| GSI | | | | S | **Sn** | **17 20 57.0** | **0.0** |
| **TSI** | **Tuntungan** | **2.60** | **85** | P | Pn | 17 20 31.8 | +4.0 |
| TSI | | | | S | **Sn** | **17 20 58.2** | **0.0** |
| **PSI** | **Prapat** | **2.99** | **99** | Pn | **Pn** | **17 20 34.4** | **+1.0** |
| | 1.8nm,0.3s,baz=283,slow=14,SNR=5.8 | | | | | | |
| PSI | | | | Sn | **Sn** | **17 21 05.3** | **-2.8** |
| | 4.5nm,0.3s,baz=300,slow=16,SNR=5.7 | | | | | | |
| **MNSI** | **Mandailing Nat** | **4.38** | **124** | P | **Pn** | **17 20 53.0** | **+0.7** |
| **CMAR** | **Chiang Mai Arr** | **15.35** | **11** | Pn | **Pn** | **17 23 23.1** | **+1.5** |
| | 0.1nm,0.3s,baz=198,slow=12,SNR=5.4 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.82** | **245** | T | T | 17 51 27.1 | |
| | baz=65 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.82** | **245** | T | T | 17 51 28.1 | |
| | baz=65 | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.84** | **245** | T | T | 17 51 29.2 | |
| | baz=65 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **41.64** | **157** | T | T | 18 11 22.3 | |
| | baz=333 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **41.65** | **157** | T | T | 18 11 25.0 | |
| | baz=333 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **41.66** | **157** | T | T | 18 11 20.6 | |
| | baz=333 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.19** | **123** | P | **P** | **17 27 52.1** | **-0.1** |
| | 1.3nm,0.5s,baz=301,slow=9.1,SNR=23 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.93** | **347** | P | **P** | **17 27 57.5** | **-0.3** |
| | 0.5nm,0.5s,baz=163,slow=9.9,SNR=7.9 | | | | | | |
| **SONM** | **Songino Array** | **45.27** | **10** | P | **P** | **17 28 00.0** | **-0.6** |
| | 0.3nm,0.5s,baz=189,slow=9.9,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **45.64** | **128** | P | **P** | **17 28 04.2** | **+0.5** |
| | 0.5nm,0.5s,baz=301,slow=7.9,SNR=21 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **49.40** | **345** | P | **P** | **17 28 32.6** | **+0.2** |
| | 1.0nm,0.6s,baz=167,slow=6.9,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **51.31** | **352** | P | **P** | **17 28 46.0** | **-0.9** |
| | 0.7nm,0.5s,baz=183,slow=5.7,SNR=5.7 | | | | | | |

*AUST **28** 17:25:06.4, 28°.94S×177°.41W, h35km*
*ISCJB **28** 17:25:09.6±0.2, 29°.44S±0°.03×177°.62W±0°.05, h87km, mb4.8/39, Error ellipse: s-maj=6.8km s-min=3.2km az=17.9*
*MOS **28** 17:25:11.4±1.2, 28°.87S×177°.74W, h82km, mb5.0/8, Error ellipse: s-maj=12.3km s-min=10.8km az=36.2*
*GCMT **28** 17:25:11.5±0.3, 28°.71S×177°.60W, h90km±3km, MW5.0/71, Moment Tensor Solution. s34,c41; s71,c105; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$1.00±.18; $M_{\theta\theta}$-3.52±.16; $M_{\phi\phi}$2.52±.16; $M_{r\theta}$-0.91±.11; $M_{r\phi}$-0.11±.13; $M_{\theta\phi}$-2.68±.09; Best double couple: $M_w$4.17200×$10^{16}$ NP1:ϕ228.00000°, δ75.00000°, λ39.00000°. NP2: ϕ126.00000°, δ53.00000°, λ161.00000°. Principal axes: T 4.5710, Plg37.0000°, Azm94.0000°; N -0.8010, Plg49.0000°, Azm245.0000°; P -3.7720, Plg15.0000°, Azm353.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC **28** 17:25:11.5±0.3, 29°.16S×177°.53W, mb5.1/19 Error ellipse: s-maj=11.3km s-min=8.2km az=136.0*
*IDC **28** 17:25:12.0±0.7, 28°.79S×177°.69W, h82km±5km, mb4.4/23, mb1 4.5/24, mb1mx4.4/36, mbtmp4.7/24, MS3.6/13, Ms1 3.6/13, ms1mx3.5/24, Error ellipse: s-maj=13.9km s-min=12.9km az=77.0*
**ISC 28 17:25:11.9**±0.5, **29°.11S**±0°.05×**177°.55W**±0°.07, **h89**km±3km, **h89**km:**pP-P, n243,** σ1§48/200, **mb4.9**/39, **6C, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **RAO** | **Raoul Island** | **0.35** | **247** | P | **Pn** | **17 25 26.8** | **+1.3** |
| | 7μm,0.3s,baz=89,slow=7.3,SNR=335 | | | | | | |
| RAO | | | | S | **Sn** | **17 25 37.3** | **+1.7** |
| | 24μm,0.3s,baz=115,slow=19,SNR=50 | | | | | | |
| **MXZ** | **Matakaoa Point** | **9.11** | **201** | PN | Pn | 17 27 15.3 | -5.2 |
| MXZ | | | | *e*SN | **Sn** | **17 29 00.0** | **-1.2** |
| **WMGZ** | **Waiomatatini S** | **9.31** | **200** | PN | Pn | 17 27 18.6 | -4.6 |
| WMGZ | | | | SN | **Sn** | **17 29 05.4** | **-0.8** |
| **HAZ** | **Te Kaha** | **9.46** | **203** | PN | Pn | 17 27 20.8 | -4.4 |
| HAZ | | | | SN | **Sn** | **17 29 11.2** | **+1.5** |
| **PKGZ** | **Pakihiroa** | **9.46** | **202** | PN | Pn | 17 27 20.3 | -5.0 |
| PKGZ | | | | SN | **Sn** | **17 29 09.3** | **-0.6** |
| **PUZ** | **Puketiti** | **9.60** | **200** | PN | Pn | 17 27 21.7 | -5.4 |
| PUZ | | | | SN | **Sn** | **17 29 09.7** | **-3.5** |
| **OUZ** | **Omahuta** | **9.66** | **229** | *e*Pn | Pn | 17 27 36.1 | +8.1 |
| **TWGZ** | **Tauwhareparae** | **9.78** | **201** | PN | Pn | 17 27 24.9 | -4.7 |
| **CNGZ** | **Carnagh Statio** | **9.99** | **200** | PN | Pn | 17 27 27.8 | -4.7 |
| **MWZ** | **Matawai** | **10.07** | **203** | PN | Pn | 17 27 27.6 | -5.9 |
| **URZ** | **Urewera** | **10.15** | **205** | P | Pn | 17 27 29.3 | -5.3 |
| | 1.8nm,0.3s,baz=259,slow=4.0,SNR=37 | | | | | | |
| URZ | | | | S | **Sn** | **17 29 23.5** | **-3.0** |
| | 25nm,0.3s,baz=221,slow=19,SNR=18 | | | | | | |
| URZ | | | | LR | LR | 17 30 20.2 | |
| | comp=Z,117nm,21.2s,baz=22,slow=30 | | | | | | |
| **URZ** | **Urewera** | **10.15** | **205** | PN | Pn | 17 27 29.3 | -5.3 |
| **URZ** | **Urewera** | **10.15** | **205** | *e*Pn | Pn | 17 27 31.2 | -3.4 |
| URZ | | | | S | **Sn** | **17 29 23.5** | **-3.0** |
| **RAGZ** | **Rawiri** | **10.25** | **203** | PN | Pn | 17 27 31.6 | -4.5 |
| RAGZ | | | | SN | **Sn** | **17 29 27.4** | **-1.7** |
| **RIGZ** | **Rimuhau** | **10.33** | **201** | PN | Pn | 17 27 31.0 | -6.1 |
| **SNGZ** | **Shannon Statio** | **10.54** | **202** | PN | Pn | 17 27 34.8 | -5.1 |
| **KNZ** | **Kokohu** | **10.65** | **201** | PN | Pn | 17 27 34.4 | -7.0 |
| **MHGZ** | **Mahia Peninsul** | **10.70** | **199** | PN | Pn | 17 27 35.1 | -7.0 |
| **NMHZ** | **Naumai** | **11.00** | **204** | PN | Pn | 17 27 40.1 | -6.2 |
| **ARHZ** | **Aropaoanui** | **11.09** | **203** | PN | Pn | 17 27 40.8 | -6.6 |
| **BKZ** | **Black Stump Fm** | **11.18** | **205** | PN | Pn | 17 27 42.2 | -6.5 |
| **BKZ** | **Black Stump Fm** | **11.18** | **205** | *e*Pn | Pn | 17 27 41.9 | -6.8 |
| **MCHZ** | **McNeill Hill** | **11.35** | **203** | PN | Pn | 17 27 44.8 | -6.1 |
| **KAHZ** | **Kahuranaki** | **11.61** | **202** | PN | Pn | 17 27 47.3 | -7.1 |
| **PXZ** | **Pawanui** | **11.82** | **201** | PN | Pn | 17 27 48.9 | -8.4 |
| PXZ | | | | *e*SN | Sn | 17 29 55.5 | -12 |
| **MSVF** | **Nonsavu** | **12.02** | **339** | *e*P | **Pn** | **17 27 58.0** | **-2.2** |
| **MSVF** | **Nonsavu** | **12.02** | **339** | Pn | **Pn** | **17 27 58.0** | **-2.2** |
| | 507nm,0.9s,SNR=7.0 | | | | | | |
| **MSVF** | **Nonsavu** | **12.02** | **339** | *e*Pn | **Pn** | **17 27 58.0** | **-2.2** |
| **PRHZ** | **Porangahau** | **12.11** | **202** | PN | Pn | 17 27 52.5 | -8.7 |
| **TSZ** | **Takapari Road** | **12.16** | **204** | PN | Pn | 17 27 53.5 | -8.3 |
| **NIUE** | **Niue** | **12.17** | **37** | P | Pn | 17 27 54.1 | -8.0 |
| | baz=12,SNR=7.6 | | | | | | |
| **BFZ** | **Birch Farm** | **12.61** | **202** | PN | Pn | 17 27 59.3 | -8.6 |
| BFZ | | | | SN | Sn | 17 30 15.9 | -11 |
| **BFZ** | **Birch Farm** | **12.61** | **202** | *e*Pn | **Pn** | **17 28 05.9** | **-2.0** |
| BFZ | | | | *e*Sn | Sn | 17 30 19.4 | -7.0 |
| **MRZ** | **Mangatainoka R** | **12.82** | **204** | PN | Pn | 17 28 01.3 | -9.4 |
| MRZ | | | | *e*SN | Sn | 17 30 17.6 | -14 |
| **SNZO** | **South Karori** | **13.71** | **205** | *e*Pn | Pn | 17 28 12.3 | -10 |
| SNZO | | | | *e*Sn | Sn | 17 30 44.0 | -9.0 |
| **TUWZ** | **Tuamarina** | **14.11** | **207** | PN | Pn | 17 28 19.4 | -8.1 |
| **NNZ** | **Nelson** | **14.16** | **209** | *e*SN | Sn | 17 30 54.5 | -10 |
| **QRZ** | **Quartz Range** | **14.23** | **212** | PN | Pn | 17 28 25.3 | -3.8 |
| **CTZ** | **Chatham Island** | **14.61** | **177** | *e*Pn | **Pn** | **17 28 31.6** | **-2.4** |
| CTZ | | | | SN | Sn | 17 31 04.9 | -10 |
| **THZ** | **Tophouse** | **14.82** | **209** | PN | Pn | 17 28 29.5 | -7.3 |
| THZ | | | | SN | Sn | 17 31 09.3 | -11 |
| **THZ** | **Tophouse** | **14.82** | **209** | *e*Pn | Pn | 17 28 29.9 | -6.8 |
| THZ | | | | *e*Sn | Sn | 17 31 11.8 | -8.2 |
| **KHZ** | **Kahutara** | **15.11** | **206** | *e*SN | Sn | 17 31 15.0 | -12 |
| **KHZ** | **Kahutara** | **15.11** | **206** | *e*Pn | Pn | 17 28 34.9 | -5.4 |
| KHZ | | | | *e*Sn | Sn | 17 31 15.8 | -11 |
| **DSZ** | **Denniston Nort** | **15.29** | **212** | SN | Sn | 17 31 19.2 | -12 |
| **AFI** | **Afiamalu** | **16.05** | **21** | P | Pn | 17 28 40.5 | -12 |
| | 8.3nm,0.3s,baz=308,slow=2.6,SNR=9.4 | | | | | | |
| AFI | | | | S | Sn | 17 31 24.0 | -26 |
| | 1.2nm,0.3s,baz=90,slow=20,SNR=2.6 | | | | | | |
| **AFI** | **Afiamalu** | **16.05** | **21** | *e*P | Pn | 17 28 41.1 | -11 |
| **AFI** | **Afiamalu** | **16.05** | **21** | *e*P | Pn | 17 28 41.1 | -11 |
| AFI | | | | S | Sn | 17 31 24.0 | -26 |
| **DZM** | **Mont Dzumac** | **16.05** | **292** | *e*Pn | **P** | **17 28 55.9** | **+1.7** |
| | 124nm,1.4s | | | | | | |
| DZM | | | | *e*LR | LR | 17 32 39.4 | |
| | 2μm,28.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **16.05** | **292** | P | **P** | **17 28 55.1** | **+1.0** |
| | 0.4nm,0.3s,baz=346,slow=2.4,SNR=6.1 | | | | | | |
| DZM | | | | LR | LR | 17 32 42.2 | |
| | comp=Z,163nm,21.8s,baz=162,slow=28 | | | | | | |
| **OXZ** | **Oxford** | **16.47** | **208** | *e*Pn | **Pn** | **17 28 55.6** | **-1.7** |
| | 32nm,0.5s | | | | | | |
| **MQZ** | **McQueen's Vall** | **16.55** | **206** | *e*SN | Sn | 17 31 44.3 | -17 |
| **MQZ** | **McQueen's Vall** | **16.55** | **206** | *e*Sn | Sn | 17 31 50.4 | -11 |
| **RPZ** | **Rata Peaks** | **17.20** | **209** | P | **Pn** | **17 29 04.3** | **-2.1** |
| | 1.1nm,0.3s,baz=17,slow=2.7,SNR=4.2 | | | | | | |
| RPZ | | | | S | Sn | 17 32 00.7 | -17 |
| | 1.7nm,0.3s,baz=112,slow=19,SNR=7.0 | | | | | | |
| **RPZ** | **Rata Peaks** | **17.20** | **209** | *e*Pn | **Pn** | **17 29 04.0** | **-2.4** |
| RPZ | | | | S | Sn | 17 32 00.7 | -17 |
| **RAR** | **Rarotonga** | **17.89** | **68** | P | **Pn** | **17 29 14.6** | **-0.4** |
| | 6.6nm,0.3s,baz=240,slow=16,SNR=5.7 | | | | | | |
| RAR | | | | S | Sn | 17 32 14.3 | -20 |
| | 3.6nm,0.3s,baz=87,slow=17,SNR=3.8 | | | | | | |
| RAR | | | | LR | LR | 17 35 22.8 | |
| | comp=Z,124nm,18.6s,baz=205,slow=34 | | | | | | |
| **JCZ** | **Jackson Bay** | **18.51** | **213** | PN | **P** | **17 29 19.0** | **-2.1** |
| **TBI** | **Tubuai** | **25.80** | **84** | *e*LR | LR | 17 36 54.9 | |
| | 723nm,31.8s,baz=249 | | | | | | |
| **TBI** | **Tubuai** | **25.80** | **84** | *e*T | T | 17 57 17.6 | |
| | 49nm,0.3s | | | | | | |
| **ARMA** | **Armidale** | **26.75** | **260** | P | **P** | **17 30 46.0** | **+2.6** |
| | baz=27,SNR=6.7 | | | | | | |
| **MGCD** | **Mangrove Creek** | **27.08** | **253** | P | **P** | **17 30 50.4** | **+4.2** |
| | baz=27,SNR=5.4 | | | | | | |
| **PAE** | **Paea** | **28.01** | **72** | *e*T | T | 18 00 00.3 | |
| | 23nm,0.3s | | | | | | |
| **PPT2** | **Papeete2** | **28.05** | **72** | *e*LR | LR | 17 37 49.1 | |
| | 967nm,31.8s | | | | | | |
| **PPT2** | **Papeete2** | **28.05** | **72** | *e*T | T | 18 00 03.7 | |
| | 14nm,0.3s | | | | | | |
| **PPT** | **Papeete** | **28.06** | **72** | LR | LR | 17 39 57.7 | |
| | comp=Z,79nm,19.0s,baz=186,slow=32 | | | | | | |
| **EIDS** | **Eidsvold** | **28.10** | **270** | P | P | 17 30 59.6 | +4.2 |
| | baz=26,SNR=4.0 | | | | | | |
| **TVO** | **Taravao** | **28.23** | **73** | *e*T | T | 18 00 16.6 | |
| | 4.4nm,0.3s | | | | | | |
| **TIAR** | **Tiarei** | **28.26** | **72** | *e*T | T | 18 00 18.6 | |
| | 2.1nm,0.2s | | | | | | |
| **CNB** | **Canberra Magne** | **28.59** | **249** | P | **P** | **17 31 02.7** | **+3.0** |
| | baz=29,SNR=8.4 | | | | | | |
| **HNR** | **Honiara** | **28.79** | **308** | P | **P** | **17 31 00.4** | **-1.1** |
| | 21nm,0.5s,baz=155,slow=8.7,SNR=4.9 | | | | | | |
| HNR | | | | LR | LR | 17 41 51.7 | |
| | comp=Z,69nm,18.4s,baz=145,slow=35 | | | | | | |
| **CAN** | **Canberra** | **28.88** | **249** | *e*P | **P** | **17 31 04.5** | **+2.2** |
| CAN | | | | pmax | pmax | | |
| | comp=Z,42nm,1.6s | | | | | | |
| **CAN** | **Canberra** | **28.88** | **249** | *e*P | **P** | **17 31 04.5** | **+2.2** |
| | comp=Z,42nm,1.6s | | | | | | |
| **RMQ** | **Roma** | **29.86** | **267** | P | **P** | **17 31 14.1** | **+3.1** |
| | baz=30,SNR=6.8 | | | | | | |
| **PMOR** | **Pomariorio Ree** | **30.75** | **69** | *e*T | T | 18 03 24.7 | |
| | comp=Z,4.8nm,0.2s | | | | | | |
| **VAH** | **Vaihoa** | **30.85** | **70** | *e*T | T | 18 03 31.7 | |
| | comp=Z,46nm,0.3s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **31.73** | **256** | P | **P** | **17 31 28.9** | **+1.5** |
| | baz=32,SNR=8.1 | | | | | | |
| **TOO** | **Toolangi** | **31.85** | **245** | P | **P** | **17 31 31.6** | **+3.2** |
| | baz=32,SNR=4.8 | | | | | | |
| **QLP** | **Quilpie** | **33.79** | **265** | P | **P** | **17 31 45.6** | **+0.2** |
| | baz=34,SNR=12 | | | | | | |
| **CTA** | **Charters Tower** | **34.01** | **277** | P | **P** | **17 31 47.9** | **+0.5** |
| | comp=Z,6.8nm,0.4s,baz=99,slow=10,SNR=17 | | | | | | |
| CTA | | | | LR | LR | 17 43 42.5 | |
| | comp=Z,398nm,21.6s,baz=150,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **34.01** | **277** | *e*P | **P** | **17 31 48.1** | **+0.7** |
| CTAO | | | | *e**PP | **pP** | **17 32 10.4** | **+2.5** |
| **CTAO** | **Charters Tower** | **34.01** | **277** | *e*P | **P** | **17 31 48.1** | **+0.7** |
| CTAO | | | | *e*pP | **pP** | **17 32 10.4** | **+2.5** |
| **MTSU** | **Mount Surprise** | **36.46** | **279** | P | **P** | **17 32 11.0** | **+2.5** |
| | baz=36,SNR=6.9 | | | | | | |
| **HTT** | **Hallett** | **37.26** | **252** | P | P | 17 32 09.4 | -5.7 |
| | baz=37,SNR=11 | | | | | | |
| **PMG** | **Port Moresby** | **38.43** | **293** | *i* P | **P** | **17 32 24.5** | **-0.6** |
| PMG | | | | pmax | pmax | | |
| | comp=Z,80nm,1.2s | | | | | | |
| **RKT** | **Rikitea** | **38.53** | **91** | *e*LR | LR | 17 42 49.8 | |
| | comp=Z,509nm,32.0s,baz=253 | | | | | | |
| **COEN** | **Coen** | **39.32** | **284** | P | **P** | **17 32 33.8** | **+1.3** |
| | baz=39,SNR=9.3 | | | | | | |
| **BBOO** | **Buckleboo** | **39.71** | **253** | P | **P** | **17 32 35.7** | **0.0** |
| | baz=40,SNR=14 | | | | | | |
| **AS01** | **Alice Springs** | **43.55** | **265** | *e*P | **P** | **17 33 06.6** | **-0.5** |
| AS01 | | | | *e*pP | **pP** | **17 33 27.4** | **-0.9** |
| **ASAR** | **Alice Springs** | **43.59** | **265** | P | **P** | **17 33 06.4** | **-1.0** |
| | comp=Z,3.3nm,0.4s,baz=105,slow=7.3,SNR=151 | | | | | | |
| ASAR | | | | pP | **pP** | **17 33 27.4** | **-1.2** |
| | comp=Z,6.0nm,0.8s,baz=114,slow=8.4,SNR=8.1 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 34 53.6** | **0.0** |
| | comp=Z,2.8nm,0.5s,baz=116,slow=3.7,SNR=8.2 | | | | | | |
| ASAR | | | | ScP | **ScP** | **17 38 35.5** | **-1.6** |
| | comp=Z,0.4nm,0.6s,baz=122,slow=4.3,SNR=3.2 | | | | | | |
| ASAR | | | | LR | LR | 17 50 44.1 | |
| | comp=Z,126nm,18.2s,baz=98,slow=35 | | | | | | |
| **WRAB** | **Tennant Creek** | **44.45** | **271** | *e*P | **P** | **17 33 14.2** | **-0.1** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,38nm,1.4s | | | | | | |
| **WRAB** | **Tennant Creek** | **44.45** | **271** | P | **P** | **17 33 14.6** | **+0.2** |
| | comp=Z,83nm,1.2s,SNR=18 | | | | | | |
| **WRAB** | **Tennant Creek** | **44.45** | **271** | *e*P | **P** | **17 33 14.2** | **-0.1** |
| | comp=Z,38nm,1.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.46** | **271** | P | **P** | **17 33 13.1** | **-1.3** |
| | comp=Z,4.8nm,0.4s,baz=107,slow=7.9

| Code | Station Name | Δ° | AZ° | Op | ISC | Time | Res |
|---|---|---|---|---|---|---|---|
| | comp=Z,13nm,0.6s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **77.42** | **325** | P | **P** | **17 36 56.5** | **-0.7** |
| | comp=Z,3.7nm,0.6s,baz=158,slow=5.5,SNR=16 | | | | | | |
| MJAR | | | | LR | LR | 18 07 20.7 | |
| | comp=Z,25nm,19.9s,baz=215,slow=33 | | | | | | |
| **JNU** | **Nakatsue** | **78.86** | **318** | P | **P** | **17 37 04.2** | **-1.2** |
| | comp=Z,13nm,0.6s,baz=3.0,slow=1.4,SNR=8.5 | | | | | | |
| **SNAA** | **Sanae** | **79.43** | **178** | *e*P | **P** | **17 37 10.3** | **+2.3** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| **SNAA** | **Sanae** | **79.43** | **178** | *e*P | **P** | **17 37 10.3** | **+2.3** |
| | comp=Z,1.7nm,0.9s | | | | | | |
| **ERM** | **Erimo** | **79.52** | **331** | P | **P** | **17 37 11.0** | **+2.4** |
| ERM | | | | pmax | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | |
| **VNA3** | **Neumayer Olymp** | **79.56** | **176** | P | **P** | **17 37 10.6** | **+1.9** |
| **VNA2** | **Neumayer--Watz** | **80.00** | **177** | P | **P** | **17 37 13.5** | **+2.5** |
| | baz=177,slow=4.0 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **80.23** | **176** | P | P | 17 37 15.6 | +3.4 |
| **ASAJ** | **Asahikawa** | **81.49** | **332** | P | **P** | **17 37 18.8** | **-0.4** |
| | comp=Z,6.2nm,0.7s,baz=188,slow=7.1,SNR=3.4 | | | | | | |
| **PLCA** | **Paso Flores** | **83.09** | **133** | P | P | 17 37 31.5 | +3.5 |
| | baz=83,SNR=3.8 | | | | | | |
| **TJN** | **Taejon** | **83.20** | **318** | P | **P** | **17 37 28.0** | **-0.2** |
| **KSRS** | **Korea Array** | **83.63** | **319** | P | **P** | **17 37 31.2** | **+0.9** |
| | comp=Z,2.5nm,0.7s,baz=137,slow=5.5,SNR=9.9 | | | | | | |
| **KSAR** | **Wonju Array Be** | **83.64** | **319** | P | **P** | **17 37 31.3** | **+0.8** |
| **KSAR** | **Wonju Array Be** | **83.64** | **319** | P | **P** | **17 37 31.2** | **+0.8** |
| **KS01** | **Wonju Array Si** | **83.66** | **319** | *e*P | **P** | **17 37 30.8** | **+0.3** |
| **PKM** | **Peak Mountain** | **83.78** | **44** | P | **P** | **17 37 32.8** | **+1.3** |
| | baz=84 | | | | | | |
| **LRV** | **Little Rabbit** | **84.08** | **43** | *e*PP | PP | 17 40 42.9 | -5.5 |
| **MONP** | **Monument Peak** | **84.61** | **48** | P | **P** | **17 37 37.3** | **+1.5** |
| | baz=85 | | | | | | |
| **PETK** | **Petropavlovsk-** | **84.67** | **345** | P | **P** | **17 37 35.4** | **+0.1** |
| | comp=Z,5.3nm,0.6s,baz=114,slow=8.1,SNR=14 | | | | | | |
| **IPM** | **Ipoh** | **84.69** | **278** | *e*P | **P** | **17 37 35.8** | **-0.6** |
| | comp=Z,20nm,0.6s | | | | | | |
| **EDW2** | **Edwards Air Fo** | **84.89** | **45** | P | **P** | **17 37 38.4** | **+1.4** |
| | baz=85 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **85.59** | **47** | P | **P** | **17 37 41.8** | **+1.3** |
| | baz=86 | | | | | | |
| **PSI** | **Prapat** | **85.70** | **276** | P | **P** | **17 37 40.0** | **-1.6** |
| | comp=Z,5.2nm,0.4s,baz=162,slow=5.7,SNR=6.5 | | | | | | |
| **PSI** | **Prapat** | **85.70** | **276** | *e*P | **P** | **17 37 40.0** | **-1.6** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,24nm,1.2s | | | | | | |
| **PSI** | **Prapat** | **85.70** | **276** | *e*P | **P** | **17 37 40.0** | **-1.6** |
| | comp=Z,24nm,1.2s | | | | | | |
| **BC3** | **Big Chuckawall** | **85.72** | **48** | P | **P** | **17 37 42.9** | **+1.7** |
| | baz=86 | | | | | | |
| **GSC** | **Goldstone** | **85.91** | **46** | *e*P | **P** | **17 37 43.7** | **+1.7** |
| GSC | | | | pmax | pmax | | |
| | comp=Z,25nm,1.6s | | | | | | |
| **GSC** | **Goldstone** | **85.91** | **46** | P | **P** | **17 37 43.5** | **+1.4** |
| | baz=86 | | | | | | |
| **GSC** | **Goldstone** | **85.91** | **46** | *e*P | **P** | **17 37 43.7** | **+1.7** |
| | comp=Z,25nm,1.6s | | | | | | |
| **MPMC** | **Manual Prospec** | **85.97** | **45** | P | **P** | **17 37 42.3** | **-0.2** |
| | baz=86 | | | | | | |
| **DAC** | **Darwin (Calif)** | **86.05** | **45** | *e*PP | PP | 17 41 00.1 | -4.5 |
| **GSI** | **Gunungsitoli** | **86.15** | **274** | *e*P | **P** | **17 37 44.0** | **+0.3** |
| | comp=Z,23nm,0.6s | | | | | | |
| **IRM** | **Iron Mountain** | **86.23** | **47** | P | **P** | **17 37 45.0** | **+1.4** |
| | baz=86 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **86.31** | **326** | P | **P** | **17 37 42.9** | **-0.7** |
| | comp=Z,1.9nm,0.8s,baz=124,slow=5.5,SNR=4.6 | | | | | | |
| **NV01** | **Mina Array Sit** | **87.03** | **43** | *e*P | **P** | **17 37 47.9** | **+0.3** |
| **NVAR** | **Mina Array Bea** | **87.03** | **43** | P | **P** | **17 37 48.3** | **+0.7** |
| | comp=Z,0.4nm,0.3s,baz=208,slow=8.4,SNR=6.1 | | | | | | |
| NVAR | | | | pP | **pP** | **17 38 09.2** | **-2.1** |
| | comp=Z,0.4nm,0.3s,baz=210,slow=7.0,SNR=2.2 | | | | | | |
| NVAR | | | | LR | LR | 18 14 52.4 | |
| | comp=Z,50nm,18.3s,baz=262,slow=34 | | | | | | |
| **TUC** | **Tucson** | **88.00** | **51** | *e*P | **P** | **17 37 54.7** | **+2.5** |
| TUC | | | | pmax | pmax | | |
| | comp=Z,18nm,1.5s | | | | | | |
| **TUC** | **Tucson** | **88.00** | **51** | *e*P | **P** | **17 37 54.7** | **+2.5** |
| | comp=Z,18nm,1.5s | | | | | | |
| **HABR** | **Khabarovsk** | **88.12** | **331** | *e*P | **P** | **17 37 52.4** | **+0.2** |
| HABR | | | | *e**PP | **pP** | **17 38 16.2** | **+0.2** |
| HABR | | | | *e**SP | **sP** | **17 38 26.3** | **+0.8** |
| HABR | | | | *e* | | 17 41 20.2 | |
| HABR | | | | PPP | PPP | 17 43 15.8 | |
| HABR | | | | *e*S | **SKSac** | **17 48 12.0** | **-0.4** |
| HABR | | | | *e* | | 17 48 34.6 | |
| HABR | | | | *e*SS | **SS** | **17 54 21.0** | **+1.0** |
| HABR | | | | *e*SSS | SSS | 17 57 55.0 | |
| **FRIS** | **Frissel Point** | **88.82** | **36** | *e*P | **P** | **17 37 52.9** | **-3.1** |
| **KLR** | **Kul'dur** | **90.13** | **330** | *i* P | **P** | **17 38 02.8** | **+1.1** |
| **TX31** | **Lajitas Ar. Si** | **91.36** | **57** | *e*P | **P** | **17 38 09.3** | **+1.3** |
| **TXAR** | **Lajitas Array** | **91.36** | **57** | P | **P** | **17 38 08.7** | **+0.6** |
| | comp=Z,1.4nm,1.0s,baz=214,slow=6.0,SNR=6.1 | | | | | | |
| TXAR | | | | LR | LR | 18 11 26.4 | |
| | comp=Z,24nm,21.1s,baz=0.0,slow=30 | | | | | | |
| **MNTX** | **Cornudas Mount** | **91.41** | **54** | P | **P** | **17 38 06.9** | **-1.2** |
| | baz=92 | | | | | | |
| **RSO** | **Redoubt South** | **91.53** | **12** | *e*PP | PP | 17 41 42.1 | -5.8 |
| **ANMO** | **Albuquerque** | **92.47** | **51***c* | *e*P | **P** | **17 38 14.8** | **+1.6** |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,5.0nm,1.5s | | | | | | |
| **PV09** | **Paradox Valley** | **92.72** | **47** | *e*P | **P** | **17 38 12.3** | **-2.1** |
| **CM01** | **Chiang Mai Arr** | **93.32** | **289** | *e*P | **P** | **17 38 17.5** | **+0.3** |
| **429A** | **Davenport Ranc** | **93.35** | **57** | P | **P** | **17 38 17.4** | **+0.2** |
| | baz=94 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.35** | **289** | P | **P** | **17 38 18.5** | **+1.1** |
| | comp=Z,1.6nm,0.6s,baz=135,slow=4.0,SNR=17 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **93.35** | **289** | *i* P | **P** | **17 38 18.5** | **+1.1** |
| CMAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **CHTO** | **Chiang Mai** | **93.52** | **289** | *e*P | **P** | **17 38 19.6** | **+1.4** |
| **CHTO** | **Chiang Mai** | **93.52** | **289** | *e*P | **P** | **17 38 19.6** | **+1.4** |
| **DHAK** | **Deception Hill** | **93.74** | **19** | *e*PP | PP | 17 42 00.7 | -4.3 |
| **531A** | **Rocksprings** | **94.10** | **58** | P | **P** | **17 38 21.3** | **+0.6** |
| | baz=94 | | | | | | |
| **SMCO** | **Snowmass** | **94.49** | **47** | *e*P | P | 17 38 19.4 | -3.3 |
| | comp=Z,18nm,1.0s | | | | | | |
| **SEY** | **Seymchan** | **94.82** | **347** | P | **P** | **17 38 22.0** | **-1.0** |
| | comp=Z,1.9nm,0.7s,baz=85,slow=23,SNR=5.9 | | | | | | |
| **SEY** | **Seymchan** | **94.82** | **347** | P | **P** | **17 38 22.0** | **-1.0** |
| **BOZ** | **Bozeman (W)** | **95.42** | **40** | *e*PP | PP | 17 42 17.0 | -1.6 |
| **ILAR** | **Eielson Array** | **96.59** | **13** | P | **P** | **17 38 29.5** | **-1.6** |
| | comp=Z,0.4nm,0.9s,baz=236,slow=6.4,SNR=2.8 | | | | | | |
| **LPAZ** | **La Paz** | **98.31** | **114** | LR | LR | 18 12 44.9 | |
| | comp=Z,23nm,20.8s,baz=250,slow=29 | | | | | | |
| **SONM** | **Songino Array** | **102.45** | **318** | P | **Pdif** | **17 38 59.6** | **+1.8** |
| | comp=Z,0.2nm,0.4s,baz=106,slow=5.1,SNR=2.6 | | | | | | |
| **MK01** | **Makanchi Array** | **117.23** | **310** | *e*PKPdf | **PKPdf** | **17 43 44.7** | **-1.9** |
| **MKAR** | **Makanchi Array** | **117.24** | **310** | Pdiff | **Pdif** | **17 40 04.4** | **+0.9** |
| | comp=Z,0.3nm,0.7s,baz=104,slow=6.1,SNR=2.4 | | | | | | |
| MKAR | | | | PKP | **PKPdf** | **17 43 45.3** | **-1.3** |
| | comp=Z,1.6nm,0.5s,baz=98,slow=1.1,SNR=24 | | | | | | |
| **MKAR** | **Makanchi Array** | **117.24** | **310***c* | *i*PKIKP | **PKPdf** | **17 43 45.5** | **-1.1** |
| MKAR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **117.24** | **310** | Pdif | **Pdif** | **17 40 04.4** | **+0.9** |
| MKAR | | | | *e*PKPdf | **PKiKP** | **17 43 47.5** | **+0.8** |
| **ZALV** | **Zalesovo Beam** | **117.33** | **319** | PKP | **PKPdf** | **17 43 46.8** | **+0.3** |
| | comp=Z,1.3nm,0.6s,baz=121,slow=2.2,SNR=5.9 | | | | | | |
| **BOSA** | **Boshof** | **118.60** | **203** | PKP | **PKPdf** | **17 43 51.1** | **+1.1** |
| | comp=Z,1.8nm,0.5s,baz=154,slow=4.7,SNR=5.9 | | | | | | |
| **AAK** | **Ala-Archa** | **121.72** | **304** | PKP | **PKPdf** | **17 43 55.5** | **0.0** |
| | comp=Z,0.9nm,0.5s,baz=132,slow=1.4,SNR=5.5 | | | | | | |
| **AAK** | **Ala-Archa** | **121.72** | **304** | *i* PKIKP | **PKPdf** | **17 43 55.0** | **-0.5** |
| **KKAR** | **Karatay Array** | **124.68** | **304** | *e*PKIKP | **PKPdf** | **17 44 00.3** | **-0.7** |
| **KKAR** | **Karatay Array** | **124.68** | **304** | *e*PKPdf | **PKPdf** | **17 44 00.3** | **-0.7** |
| **MATP** | **Matopo** | **124.71** | **210** | PKP | **PKPdf** | **17 44 02.5** | **+0.5** |
| | comp=Z,2.1nm,0.6s,baz=125,slow=1.1,SNR=7.8 | | | | | | |
| **BRVK** | **Borovoye** | **125.82** | **316** | *e*PKIKP | **PKPdf** | **17 44 02.1** | **-0.7** |
| **BRVK** | **Borovoye** | **125.82** | **316** | *e*PKPdf | **PKPdf** | **17 44 02.1** | **-0.7** |
| **GEYT** | **Alibeck** | **133.36** | **296** | PKP | **PKPdf** | **17 44 19.0** | **+1.3** |
| | comp=Z,1.9nm,0.7s,baz=220,slow=5.8,SNR=5.2 | | | | | | |
| GEYT | | | | SKPbc | **SKPbc** | **17 47 38.5** | **+0.4** |
| | comp=Z,7.4nm,1.0s,baz=90,slow=1.5,SNR=12 | | | | | | |
| **AKTO** | **Aktyubinsk** | **133.52** | **313** | PKP | **PKPdf** | **17 44 18.4** | **+0.8** |
| | comp=Z,2.7nm,0.7s,baz=58,slow=2.5,SNR=10 | | | | | | |
| AKTO | | | | SKPbc | **SKPbc** | **17 47 39.0** | **+0.9** |
| | comp=Z,4.1nm,1.1s,baz=95,slow=3.5,SNR=5.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **137.42** | **348** | PKhKP | PKPpre | 17 44 16.0 | |
| | comp=Z,3.2nm,0.7s,baz=7.6,slow=3.7,SNR=4.9 | | | | | | |
| ARCES | | | | PKP | **PKPdf** | **17 44 23.6** | **-0.6** |
| | comp=Z,3.1nm,0.6s,baz=13,slow=1.4,SNR=11 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **138.71** | **154** | T | T | 20 20 02.4 | |
| | baz=204,slow=74,SNR=39 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **138.71** | **154** | T | T | 20 20 17.9 | |
| | baz=204,slow=74,SNR=66 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **138.73** | **154** | T | T | 20 19 54.4 | |
| | baz=204,slow=74,SNR=36 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **139.79** | **153** | T | T | 20 21 28.4 | |
| | baz=203,slow=75,SNR=44 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **139.79** | **153** | T | T | 20 21 22.7 | |
| | baz=203,slow=75,SNR=56 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **139.81** | **153** | T | T | 20 21 15.1 | |
| | baz=203,slow=75,SNR=43 | | | | | | |
| **GNI** | **Garni** | **143.81** | **299**⇑ | *i*PKIKP | **PKPdf** | **17 44 41.3** | **+4.4** |
| **FINES** | **FINESS Array B** | **144.07** | **341** | PKhKP | PKPpre | 17 44 33.2 | |
| | comp=Z,5.9nm,0.6s,baz=84,slow=2.8,SNR=36 | | | | | | |
| **FINES** | **FINESS Array B** | **144.07** | **341***c* | *i*PKIKP | **PKPdf** | **17 44 38.2** | **+1.8** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | |
| **NCK** | **Nalchik** | **144.25** | **305** | PKIKP | **PKPdf** | **17 44 37.0** | **-0.4** |
| **KBZ** | **Khabaz** | **144.70** | **306** | PKP | **PKPdf** | **17 44 37.7** | **-0.3** |
| | comp=Z,2.7nm,0.5s,baz=144,slow=3.4,SNR=12 | | | | | | |
| **KIV** | **Kislovodsk** | **144.81** | **306** | *e*PKIKP | **PKPdf** | **17 44 40.5** | **+2.1** |
| KIV | | | | pmax | pmax | | |
| | comp=Z,8.0nm,0.9s | | | | | | |
| **NEY** | **Neytrino** | **144.92** | **305** | *i* PKIKP | **PKPdf** | **17 44 41.0** | **+2.3** |
| **VSU** | **Vasula** | **146.21** | **337**⇑ | *i*PKP2 | **PKPbc** | **17 44 41.6** | **+0.2** |
| VSU | | | | pmax | pmax | | |
| | comp=Z,134nm,1.0s | | | | | | |
| **NB2** | **NORSAR Subarra** | **147.54** | **352** | PKP | **PKPbc** | **17 44 44.2** | **-1.0** |
| | comp=Z,5.9nm,0.5s,baz=11,slow=2.9 | | | | | | |
| **NOA** | **NORSAR Array B** | **147.54** | **352** | PKPbc | **PKPbc** | **17 44 43.7** | **-1.4** |
| | comp=Z,2.1nm,0.5s,baz=13,slow=4.6,SNR=25 | | | | | | |
| **NBO02** | **NORSAR Array S** | **147.57** | **352** | *e*PKPbc | **PKPbc** | **17 44 44.4** | **-0.8** |
| **HFS** | **Hagfors** | **148.06** | **349** | PKPbc | **PKPbc** | **17 44 45.4** | **-1.1** |
| | comp=Z,14nm,0.6s,baz=50,slow=2.3,SNR=33 | | | | | | |
| **AKASG** | **Malin Array Be** | **150.50** | **324** | PKPbc | **PKPbc** | **17 44 52.2** | **-0.6** |
| | comp=Z,9.7nm,0.4s,baz=46,slow=3.3,SNR=35 | | | | | | |
| **KIEV** | **Kiev** | **150.51** | **324** | *e*PKIKP | **PKPbc** | **17 44 51.2** | **-1.7** |
| **KIEV** | **Kiev** | **150.51** | **324** | *e*PKPbc | **PKPbc** | **17 44 51.2** | **-1.7** |
| **AK11** | **Malin Array Si** | **150.54** | **324** | *e*PKPbc | **PKPbc** | **17 44 52.4** | **-0.6** |
| **BRTR** | **Keskin Array B** | **152.31** | **301** | PKPbc | **PKPbc** | **17 44 57.0** | **-0.6** |
| | comp=Z,3.8nm,0.5s,baz=135,slow=4.3,SNR=24 | | | | | | |
| BRTR | | | | PKPab | **PKPab** | **17 45 08.3** | **+0.4** |
| | comp=Z,3.8nm,0.7s,baz=101,slow=3.2,SNR=7.8 | | | | | | |
| **ANTO** | **Ankara** | **152.91** | **301** | *e*PKIKP | **PKPbc** | **17 45 00.6** | **+1.8** |
| **ANTO** | **Ankara** | **152.91** | **301** | *e*PKPbc | **PKPbc** | **17 45 00.6** | **+1.8** |
| **BR231** | **Keskin MP Arra** | **152.93** | **301** | *e*PKPbc | **PKPbc** | **17 44 57.9** | **-1.0** |
| **EKA** | **Eskdalemuir Ar** | **153.49** | **7** | PKPbc | **PKPbc** | **17 44 58.8** | **-0.7** |
| | comp=Z,1.4nm,0.7s,baz=321,slow=0.9,SNR=2.6 | | | | | | |
| EKA | | | | PKPab | **PKPab** | **17 45 10.6** | **-1.5** |
| | comp=Z,0.6nm,0.4s,baz=330,slow=2.9,SNR=3.4 | | | | | | |
| **BUR04** | **Bucovina Ar. S** | **154.47** | **323** | *e*PKPbc | **PKPbc** | **17 45 02.2** | **+0.2** |
| BUR04 | | | | *e*PKPab | **PKPab** | **17 45 16.5** | **-0.2** |
| **UPC** | **Upice** | **156.30** | **338** | *e*PKP2 | **PKPab** | **17 45 25.2** | **+0.9** |
| **UPC** | **Upice** | **156.30** | **338** | *e*PKPAB | **PKPab** | **17 45 25.2** | **+0.9** |
| **DPC** | **Dobruska-Polom** | **156.34** | **338** | *e*PKP2 | **PKPab** | **17 45 24.5** | **0.0** |
| **DPC** | **Dobruska-Polom** | **156.34** | **338** | *e*PKPAB | **PKPab** | **17 45 24.5** | **0.0** |
| **GOPC** | **GO Pecny, Ondr** | **157.21** | **339** | *e*PKP2 | **PKPab** | **17 45 28.6** | **+0.4** |
| **GOPC** | **GO Pecny, Ondr** | **157.21** | **339** | *e*PKPAB | **PKPab** | **17 45 28.6** | **+0.4** |
| **NKC** | **Novy Kostel** | **157.59** | **343** | *e*PKP2 | **PKPab** | **17 45 28.7** | **-1.1** |
| **NKC** | **Novy Kostel** | **157.59** | **343** | *e*PKPAB | **PKPab** | **17 45 28.7** | **-1.1** |
| **KHC** | **Kasperske Hory** | **158.27** | **340** | *e*PKP2 | **PKPab** | **17 45 32.7** | **-0.2** |
| **KHC** | **Kasperske Hory** | **158.27** | **340** | *e*PKPAB | **PKPab** | **17 45 32.7** | **-0.2** |
| **GERES** | **GERESS Array B** | **158.49** | **339** | PKPab | **PKPab** | **17 45 34.1** | **+0.2** |
| | comp=Z,0.4nm,0.6s,baz=352,slow=3.0,SNR=4.6 | | | | | | |
| **CONA** | **Conrad Observa** | **158.54** | **335**⇑ | *i*PKPab | **PKPab** | **17 45 34.9** | **+0.8** |
| | comp=Z,6.6nm,1.2s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **164.10** | **177** | *e*PKPdf | **PKPdf** | **17 45 06.0** | **+0.5** |
| TOA0 | | | | *e*PKPab | **PKPab** | **17 46 01.3** | **+2.3** |
| **TORD** | **Torodi Ar. Bea** | **164.10** | **177** | PKP | **PKPdf** | **17 45 06.2** | **+0.7** |
| | comp=Z,1.7nm,0.9s,baz=251,slow=4.4,SNR=6.5 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **17 46 00.7** | **+1.7** |
| | comp=Z,2.2nm,0.5s,baz=174,slow=3.3,SNR=18 | | | | | | |

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*IDC **28** 17:28:32.0±2.7, 34°.19S×72°.37W, h0$^{km}$, mb4.0/1, mb1 3.9/2, mb1mx3.5/26, mbtmp3.8/2, ML3.8/1, Error ellipse: s-maj=123.8km s-min=64.0km az=94.0*

*ISCJB **28** 17:28:37.0±1.1, 33°.95S±0°.04×72°.22W±0°.09, h23$^{km}$±9$^{km}$, mb4.0/1, Error ellipse: s-maj=12.4km s-min=6.1km az=6.9*

*GUC **28** 17:28:37.3±0.5, 33°.96S×72°.12W, h16$^{km}$±2$^{km}$, ML3.8*

**ISC 28 17:28:37.4**±1.8, **33°.99S**±0°.05×**72°.18W**±0°.09, **h27**$^{km}$±12$^{km}$, **n24**, σ1$^{s}$**53**/36, **Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.43** | **160** | *e*P | **Pb** | **17 28 46.1** | **-0.4** |
| CHPI | | | | *e*S | **Sn** | **17 28 52.9** | **-1.7** |
| **NICH** | **Los Niches** | **1.28** | **142** | *e*P | **Pb** | **17 29 00.0** | **-0.8** |
| NICH | | | | *e*S | **Sb** | **17 29 17.3** | **+0.4** |
| NICH | | | | AML | AML | 17 29 22.4 | |
| | comp=E,5μm,0.6s | | | | | | |
| **ANTU** | **Antumapu** | **1.35** | **72** | *e*P | **Pn** | **17 29 00.7** | **+0.1** |
| ANTU | | | | *e*S | **Sn** | **17 29 18.1** | **+0.4** |
| **SAN** | **Santiago** | **1.37** | **68** | *e*P | **Pn** | **17 29 00.8** | **0.0** |
| SAN | | | | *e*S | **Sn** | **17 29 18.5** | **+0.4** |
| **ROC1** | **El Roble** | **1.40** | **44** | *i* P | **Pn** | **17 29 02.1** | **+0.7** |
| ROC1 | | | | *i* S | Sb | 17 29 27.3 | +6.6 |
| **ROCH** | **El Roble** | **1.41** | **44** | *e*P | **Pn** | **17 29 01.4** | **-0.1** |
| ROCH | | | | AML | AML | 17 29 28.4 | |
| | comp=E,2μm,0.8s | | | | | | |
| **TALC** | **Talca** | **1.48** | **162** | *e*P | **Pb** | **17 29 03.6** | **-0.5** |
| TALC | | | | *e*S | **Sb** | **17 29 23.2** | **+0.7** |
| **CLCH** | **Cerro Calan** | **1.49** | **67** | *e*P | **Pn** | **17 29 02.8** | **+0.3** |
| CLCH | | | | *e*S | **Sn** | **17 29 22.0** | **+0.9** |
| CLCH | | | | AML | AML | 17 29 30.1 | |
| | comp=N,2μm,0.4s | | | | | | |
| **PEL** | **Peldehue** | **1.51** | **56** | *e*P | **Pn** | **17 29 03.3** | **+0.6** |
| PEL | | | | *e*S | **Sn** | **17 29 22.5** | **+1.1** |
| PEL | | | | AML | AML | 17 29 30.0 | |
| | comp=N,4μm,0.5s | | | | | | |
| **AUSP** | **Uspallata** | **2.93** | **54** | *i* P | **Pn** | **17 29 25.1** | **+2.6** |
| **AAGR** | **Agrelo** | **2.94** | **73** | *i* P | **Pb** | **17 29 27.7** | **-1.5** |
| **ARCO** | **CERRO ARCO** | **2.95** | **68** | *i* P | **Pb** | **17 29 27.0** | **-2.3** |
| ARCO | | | | AML | AML | 17 29 33.2 | |
| | comp=Z,1μm,0.7s | | | | | | |
| **ASAL** | **Salagasta** | **3.13** | **64** | *e*P | **Pb** | **17 29 30.8** | **-1.6** |
| ASAL | | | | *i* S | **Sb** | **17 30 13.8** | **+3.7** |
| **RTLS** | **Leoncito** | **3.26** | **49** | *i* P | **Pn** | **17 29 29.1** | **+2.1** |
| RTLS | | | | *i* S | **Sb** | **17 30 13.8** | **-0.4** |
| **RTCV** | **Cerro Valdivia** | **3.72** | **56** | *e*P | **Pb** | **17 29 40.2** | **-2.3** |
| RTCV | | | | *e*S | **Sb** | **17 30 28.4** | **+1.2** |
| **CFAA** | **Coronel Fontan** | **4.08** | **55** | *e*P | **Pn** | **17 29 39.2** | **+1.1** |
| **RTLL** | **Cerro Villicun** | **4.10** | **51** | *e*P | **Pn** | **17 29 39.3** | **+1.0** |
| RTLL | | | | *e*S | **Sb** | **17 30 38.8** | **+0.9** |
| **AMOG** | **MOGNA** | **4.35** | **47** | *e*P | **Pn** | **17 29 43.4** | **+1.5** |
| **ACAN** | **Cantantal** | **4.52** | **69** | *e*P | **Pn** | **17 29 46.8** | **+2.6** |
| ACAN | | | | *e*S | **Sb** | **17 30 47.4** | **-2.8** |
| **AGUA** | **GUANDACOL** | **5.48** | **36** | *e*P | **Pn** | **17 29 58.7** | **+1.3** |
| **LPAZ** | **La Paz** | **18.00** | **13** | P | **P** | **17 32 46.9** | **+0.3** |
| | comp=Z,0.1nm,0.3s,baz=188,slow=12,SNR=6.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.32** | **70** | P | **P** | **17 41 07.3** | **+0.1** |
| | comp=Z,1.1nm,0.9s,baz=246,slow=5.0,SNR=4.2 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **154.28** | **32** | PKPbc | **PKPbc** | **17 48 34.5** | **+0.2** |
| | comp=Z,0.5nm,0.5s,baz=306,slow=3.4,SNR=3.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **156.85** | **49** | PKP | **PKPdf** | **17 48 28.0** | **-1.8** |
| | comp=Z,0.4nm,0.7s,baz=305,slow=2.5,SNR=2.4 | | | | | | |

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*ISCJB **28** 17:31:11.9±0.7, 5°.45S±0°.09×153°.75E±0°.05, h50$^{km}$, mb3.5/6, Error ellipse: s-maj=13.0km s-min=7.8km az=5.8*

*IDC **28** 17:31:16.2±3.0, 5°.56S×153°.76E, h79$^{km}$±28$^{km}$, mb3.4/7, mb1 3.6/9, mb1mx3.4/38, mbtmp3.8/9, Error ellipse: s-maj=26.9km s-min=15.4km az=1.0*

**ISC 28 17:31:14.3**±1.0, **5°.4S**±0°.1×**153°.74E**±0°.08, **h50**$^{km}$, **n13**, σ1$^{s}$**87**/12, **mb3.4**/6, **New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **7.33** | **123** | P | **Pn** | **17 32 59.9** | **+1.2** |
| | 0.9nm,0.3s,baz=19,slow=14,SNR=2.2 | | | | | | |
| HNR | | | | S | **Sn** | **17 34 21.0** | **+0.4** |
| | 3.4nm,0.3s,baz=175,slow=15,SNR=2.5 | | | | | | |
| **PMG** | **Port Moresby** | **7.63** | **238** | P | **Pn** | **17 33 03.7** | **+0.7** |
| | 2.6nm,0.3s,baz=61,slow=7.3,SNR=9.2 | | | | | | |
| PMG | | | | S | **Sn** | **17 34 28.6** | **+0.5** |
| | 1.0nm,0.3s,baz=324,slow=19,SNR=2.7 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.61** | **145** | P | **P** | **17 35 47.6** | **-2.0** |
| | 4.4nm,0.4s,baz=0.6,slow=14,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.75** | **231** | P | **P** | **17 36 21.0** | **-1.3** |
| | 0.8nm,0.5s,baz=56,slow=9.8,SNR=3.3 | | | | | | |
| WRA | | | | PcP | **PcP** | **17 40 03.4** | **-1.8** |
| | 0.2nm,0.4s,baz=75,slow=3.8,SNR=5.3 | | | | | | |
| **ASAR** | **Alice Springs** | **26.34** | **225** | P | **P** | **17 36 45.0** | **-0.9** |
| | 0.6nm,0.7s,baz=58,slow=9.9,SNR=2.9 | | | | | | |
| ASAR | | | | PcP | **PcP** | **17 40 08.7** | **-2.3** |
| | 0.2nm,0.5s,baz=59,slow=2.1,SNR=4.9 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.98** | **28** | T | T | 18 05 08.7 | |
| | baz=208,slow=76,SNR=12 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.99** | **28** | T | T | 18 05 12.4 | |
| | baz=208,slow=76,SNR=11 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.00** | **28** | T | T | 18 05 10.4 | |
| | baz=208,slow=76,SNR=8.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.99** | **295** | P | **P** | **17 41 09.7** | **+0.3** |
| | 0.8nm,0.8s,baz=121,slow=4.8,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **81.41** | **319** | P | P | 17 43 25.1 | -0.9 |
| | 0.2nm,0.5s,baz=91,slow=7.1,SNR=2.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.19** | **326** | P | P | 17 43 28.5 | -1.4 |
| | 0.6nm,0.4s,baz=126,slow=4.7,SNR=3.0 | | | | | | |
| **ILAR** | **Eielson Array** | **82.39** | **22** | P | **P** | **17 43 30.1** | **-0.6** |
| | 0.2nm,0.6s,baz=254,slow=5.5,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.39** | **288** | PKPbc | **PKPdf** | **17 51 01.3** | **+3.7** |
| | 0.1nm,0.3s,baz=66,slow=1.6,SNR=2.8 | | | | | | |

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**IDC 28 17:33:23.1**±4.0, **2°.28S**×**101°.94E**, **h0**$^{km}$, **mb3.2**/4, **mb1 3.5**/4, **mb1mx3.3**/48, **mbtmp3.3**/4, **Error ellipse: s-maj=176.9km s-min=22.9km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **20.82** | **352** | P | P | 17 38 06.6 | +0.3 |
| | 0.3nm,0.6s,baz=186,slow=9.3,SNR=3.7 | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.81** | **259** | T | T | 18 09 26.3 | |
| | baz=83 | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.82** | **259** | T | T | 18 09 11.2 | |
| | baz=83 | | | | | | |
| **H08S1** | **Diego Carcia H** | **29.83** | **259** | T | T | 18 09 27.7 | |
| | baz=83 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.19** | **121** | P | P | 17 40 27.1 | -0.7 |
| | 0.3nm,0.8s,baz=297,slow=8.6,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **37.53** | **127** | P | P | 17 40 39.8 | +0.5 |
| | 0.5nm,0.7s,baz=303,slow=7.8,SNR=5.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.84** | **343** | P | P | 17 42 32.8 | -0.2 |
| | 0.3nm,0.6s,baz=148,slow=8.5,SNR=2.2 | | | | | | |

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*IDC **28** 17:43:11.5±1.1, 2°.03S×136°.64E, h0$^{km}$, mb3.7/6, mb1 4.1/9, mb1mx3.8/27, mbtmp4.0/9, ML4.1/2, MS3.5/4, Ms1 3.5/4, ms1mx2.9/27, Error ellipse: s-maj=28.8km s-min=18.3km az=40.0*

*ISCJB **28** 17:43:15.5±0.5, 2°.24S±0°.06×136°.62E±0°.03, h33$^{km}$, mb3.6/5, MS3.6/3, Error ellipse: s-maj=8.3km s-min=4.3km az=6.7*

*DJA **28** 17:43:15.7±0.5, 2°S±16°×13°7E±°, h164$^{km}$±12$^{km}$, M4.3/7, mb4.1/3, MLv4.4/7*

*AUST **28** 17:43:15.9±3.4, 2°.49S×136°.61E, h0$^{km}$, Error ellipse: s-maj=1.4km s-min=0.8km az=20.0*

**ISC 28 17:43:17.4**±0.7, **2°.26S**±0°.08×**136°.62E**±0°.04, **h35**$^{km}$, **n31**, σ1$^{s}$**95**/30, **mb3.8**/5, **MS3.6**/3, **Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SMPI** | **Sarmi** | **2.10** | **83** | P | **Pn** | **17 43 50.3** | **+0.2** |
| SMPI | | | | S | **Sn** | **17 44 19.6** | **+4.5** |
| **RKPI** | **Ransiki, Papua** | **2.56** | **287** | P | Pn | 17 43 59.8 | +3.4 |
| RKPI | | | | S | Sn | 17 44 34.4 | +8.1 |
| **GENI** | **Genyem** | **3.56** | **95** | P | **Pn** | **17 44 09.3** | **-0.8** |
| GENI | | | | S | **Sn** | **17 44 51.3** | **+0.3** |
| **JAY** | **Jayapura** | **4.09** | **94** | Pn | **Pn** | **17 44 17.4** | **0.0** |
| | 24nm,0.3s,baz=229,slow=0.9,SNR=41 | | | | | | |
| JAY | | | | Sn | **Sn** | **17 45 04.1** | **0.0** |
| | 20nm,0.3s,baz=115,slow=8.5,SNR=2.8 | | | | | | |
| **JAY** | **Jayapura** | **4.09** | **94** | P | **Pn** | **17 44 18.6** | **+1.1** |
| | baz=4.1,SNR=16 | | | | | | |
| **FAKI** | **Fak Fak** | **4.42** | **261** | P | **Pn** | **17 44 23.6** | **+1.6** |
| | baz=4.4,SNR=9.3 | | | | | | |
| **FAKI** | **Fak Fak** | **4.42** | **261** | P | **Pn** | **17 44 23.8** | **+1.8** |
| **SIJI** | **Sorong** | **5.53** | **284** | Pn | **Pn** | **17 44 36.2** | **-1.1** |
| | 3.0nm,0.3s,baz=141,slow=23,SNR=30 | | | | | | |
| SIJI | | | | Sn | **Sn** | **17 45 39.4** | **-0.3** |
| | 3.9nm,0.3s,baz=281,slow=22,SNR=9.3 | | | | | | |
| **SWI** | **Sorong** | **5.54** | **284** | P | **Pn** | **17 44 40.2** | **+2.9** |
| | baz=5.6,SNR=7.3 | | | | | | |
| **SWI** | **Sorong** | **5.54** | **284** | P | **Pn** | **17 44 38.0** | **+0.6** |
| | 44nm,0.6s,0.2nm | | | | | | |
| SWI | | | | S | **Sn** | **17 45 42.1** | **+2.2** |
| | 44nm,0.6s,0.2nm | | | | | | |
| **KDU** | **Kakadu** | **11.14** | **201** | P | **Pn** | **17 45 54.6** | **+0.3** |
| | baz=11,SNR=9.4 | | | | | | |
| **MTN** | **Manton Dam** | **11.84** | **207** | P | **Pn** | **17 46 05.0** | **+1.2** |
| | baz=12,SNR=51 | | | | | | |
| **PMG** | **Port Moresby** | **12.65** | **125** | LR | LR | 17 52 01.4 | |
| | comp=Z,181nm,19.0s,baz=283,slow=42 | | | | | | |
| **COEN** | **Coen** | **13.30** | **151** | P | **Pn** | **17 46 23.8** | **-0.1** |
| | baz=13,SNR=14 | | | | | | |
| **BATI** | **Baumata** | **15.10** | **238** | Pn | **Pn** | **17 46 49.8** | **+1.5** |
| | baz=56,slow=3.6,SNR=2.5 | | | | | | |
| **KNRA** | **Kununurra** | **15.42** | **210** | P | **Pn** | **17 46 52.3** | **-0.1** |
| | baz=15,SNR=3.7 | | | | | | |
| **MTSU** | **Mount Surprise** | **17.49** | **155** | P | **P** | **17 47 20.9** | **+1.3** |
| | baz=17,SNR=13 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.71** | **187** | P | **Pn** | **17 47 19.2** | **-2.3** |
| | 0.7nm,0.3s,baz=6.2,slow=12,SNR=34 | | | | | | |
| WRA | | | | S | Sn | 17 50 26.7 | -11 |
| | 0.3nm,0.3s,baz=4.4,slow=23,SNR=4.9 | | | | | | |
| **QIS** | **Mount Isa** | **18.42** | **171** | P | **Pn** | **17 47 31.7** | **+1.6** |
| | baz=18,SNR=8.0 | | | | | | |
| **CTA** | **Charters Tower** | **20.06** | **153** | P | **P** | **17 47 49.0** | **+1.2** |
| | 3.0nm,0.8s,baz=338,slow=11,SNR=2.8 | | | | | | |
| **ASAR** | **Alice Springs** | **21.44** | **187** | P | **P** | **17 48 03.1** | **+0.4** |
| | 6.5nm,0.7s,baz=12,slow=10,SNR=79 | | | | | | |
| ASAR | | | | S | **S** | **17 51 53.1** | **-5.8** |
| | 0.8nm,0.6s,baz=8.3,slow=26,SNR=4.0 | | | | | | |
| **WRKA** | **Warakurna** | **24.03** | **199** | P | **P** | **17 48 29.5** | **+0.2** |
| | baz=24,SNR=12 | | | | | | |
| **QLP** | **Quilpie** | **25.26** | **164** | P | P | 17 48 45.9 | +5.5 |
| | baz=25,SNR=3.1 | | | | | | |
| **MNAI** | **Manna** | **33.67** | **266** | P | P | 17 50 00.4 | +5.0 |
| | baz=34,SNR=3.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **42.41** | **301** | P | **P** | **17 51 07.9** | **-1.1** |
| | 0.2nm,0.4s,baz=111,slow=5.3,SNR=3.1 | | | | | | |
| **RPZ** | **Rata Peaks** | **51.35** | **148** | LR | LR | 18 13 42.9 | |
| | comp=Z,55nm,20.1s,baz=278,slow=36 | | | | | | |
| **URZ** | **Urewera** | **51.51** | **139** | LR | LR | 18 13 35.9 | |
| | comp=Z,54nm,18.7s,baz=303,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.17** | **323** | P | **P** | **17 54 11.8** | **-2.4** |
| | 0.5nm,0.6s,baz=122,slow=7.6,SNR=4.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.51** | **330** | P | **P** | **17 54 26.6** | **-1.8** |
| | 0.4nm,0.5s,baz=108,slow=4.7,SNR=2.5 | | | | | | |
| **VNDA** | **Vanda** | **76.42** | **175** | P | **P** | **17 55 03.8** | **+0.9** |
| | 0.9nm,0.8s,baz=329,slow=8.1,SNR=4.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **99.40** | **341** | LR | LR | 18 46 12.2 | |
| | comp=Z,16nm,20.7s,baz=16,slow=38 | | | | | | |

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*DJA **28** 17:48:17.2±1.4, 4°S±6°×9°9E±°, h14$^{km}$±14$^{km}$, M4.2/7, mb4.5/2, mB5.4/1, MLv4.0/7, Mw(mB)4.8/1*

*ISCJB **28** 17:48:22.1±1.1, 3°.59S±0°.08×99°.4E±0°.1, h10$^{km}$, mb3.6/6, MS3.7/1, Error ellipse: s-maj=19.9km s-min=8.1km az=152.1*

*IDC **28** 17:48:23.1±3.4, 3°.61S×99°.41E, h0$^{km}$, mb3.6/6, mb1 3.7/6, mb1mx3.5/30, mbtmp3.6/6, MS3.7/1, Ms1 3.7/1, ms1mx2.6/26, Error ellipse: s-maj=132.0km s-min=20.7km az=58.0*

**ISC 28 17:48:23.8**±1.4, **3°.6S**±0°.1×**99°.3E**±0°.2, **h10**$^{km}$, **n19**, σ1$^{s}$**56**/14, **mb3.6**/6, **Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | Phase ID ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **1.04** | **40** | P | **Pn** | **17 48 43.4** | **-1.1** |
| PPSI | | | | S | Sn | 17 49 04.2 | +5.0 |
| **SISI** | **Saibi** | **2.25** | **354** | P | **Pn** | **17 48 57.9** | **-3.2** |
| SISI | | | | S | **Sn** | **17 49 28.8** | **-0.1** |
| **PDSI** | **Padang** | **2.87** | **23** | P | **Pn** | **17 49 08.6** | **-1.1** |
| **PPI** | **Padang Panjang** | **3.27** | **19** | P | **Pn** | **17 49 13.4** | **-1.8** |
| **MDSI** | **Maura Dua** | **4.91** | **101** | P | **Pn** | **17 49 36.2** | **-1.5** |
| **LWLI** | **Liwa** | **4.92** | **107** | P | **Pn** | **17 49 35.8** | **-2.1** |
| | 43nm,0.2s,4μm0.4nm | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.89** | **359** | P | **P** | **17 53 18.1** | **+0.9** |
| | 1.9nm,0.8s,baz=188,slow=9.8,SNR=16 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.02** | **260** | T | T | 18 23 57.7 | |
| | baz=82,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.03** | **260** | T | T | 18 23 57.7 | |
| | baz=82,slow=75 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.04** | **260** | T | T | 18 23 57.7 | |
| | baz=82,slow=75 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.05** | **158** | T | T | 18 31 47.4 | |
| | baz=336,slow=76,SNR=4.9 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.06** | **158** | T | T | 18 31 47.8 | |

baz=336,slow=76,SNR=3.7
**H01W1 Cape Leeuwin H 34.06 158** T T 18 31 48.1
baz=336,slow=76,SNR=4.4
**WRA Warramunga Arr 37.80 118** P **P** 17 55 41.0 **+0.2**
0.4nm,0.6s,baz=304,slow=9.1,SNR=3.4
**ASAR Alice Springs 38.89 124** P **P** 17 55 49.7 **-0.2**
0.4nm,0.7s,baz=296,slow=8.5,SNR=2.9
**SONM Songino Array 51.56 6** P **P** 17 57 31.4 **+1.2**
0.7nm,0.8s,baz=186,slow=7.4,SNR=4.8
SONM LR LR 18 21 46.2
comp=Z,72nm,19.5s,baz=87,slow=39
**MKAR Makanchi Array 52.37 345** P **P** 17 57 37.4 **+1.3**
0.6nm,0.7s,baz=138,slow=9.2,SNR=3.5
**ZALV Zalesovo Beam 58.59 350** P **P** 17 58 21.3 **+0.6**
0.7nm,0.5s,baz=197,slow=4.6,SNR=4.2
**TXAR Lajitas Array 146.34 38** PKPbc **PKPab** 18 08 06.5 **0.0**
0.7nm,0.8s,baz=298,slow=1.8,SNR=5.5

*IDC **28** 17:49:29.5±1.6,34.°12S×72.°20W,h0km,mb4.0/1, mb1 3.9/3,mb1mx3.7/15,mbtmp3.8/3,ML3.9/2,Error ellipse: s-maj=78.7km s-min=44.8km az=125.0*
*ISCJB **28** 17:49:32.8±1.7,33.°93S±0.°05×72.°25W±0.°10,h20km±10km, mb4.0/1,Error ellipse: s-maj=14.6km s-min=5.7km az=23.4*
*GUC **28** 17:49:34.2±0.5,33.°96S×72.°21W,h13km±2km,ML3.9*
**ISC 28 17:49:32.1±2.1,33.°98S±0.°05×72.°23W±0.°09,h14km±11km, n18,σ1§20/29,Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.45** | **156** | *eP* | | **Pb** | | **17 49 42.8** | **+0.9** |
| CHPI | | | | *eS* | | **Sb** | | **17 49 49.4** | **+0.9** |
| **RCDM** | **Rinconada Maip** | **1.28** | **68** | *eP* | | **Pn** | | **17 49 55.1** | **-0.4** |
| RCDM | | | | *eS* | | **Sb** | | **17 50 11.3** | **-0.9** |
| **NICH** | **Los Niches** | **1.31** | **142** | *eP* | | **Pg** | | **17 49 56.8** | **-0.7** |
| NICH | | | | *eS* | | **Sg** | | **17 50 15.0** | **+0.4** |
| **ANTU** | **Antumapu** | **1.39** | **73** | *eP* | | **Pn** | | **17 49 57.2** | **+0.1** |
| ANTU | | | | *eS* | | **Sb** | | **17 50 15.2** | **-0.2** |
| ANTU | | | | | AML | AML | | 17 50 15.9 | |
| | comp=N,3μm,0.4s | | | | | | | | |
| **SAN** | **Santiago** | **1.40** | **69** | *eP* | | **Pn** | | **17 49 57.6** | **+0.3** |
| SAN | | | | *eS* | | **Sn** | | **17 50 15.4** | **-0.2** |
| **TALC** | **Talca** | **1.50** | **161** | *eP* | | **Pb** | | **17 49 59.6** | **-0.1** |
| TALC | | | | *eS* | | **Sg** | | **17 50 18.9** | **-1.6** |
| **CLCH** | **Cerro Calan** | **1.52** | **68** | *eP* | | **Pn** | | **17 49 59.4** | **+0.4** |
| CLCH | | | | *eS* | | **Sn** | | **17 50 18.5** | **-0.1** |
| CLCH | | | | | AML | AML | | 17 50 25.4 | |
| | comp=E,2μm,0.5s | | | | | | | | |
| **PEL** | **Peldehue** | **1.53** | **58** | *eP* | | **Pn** | | **17 49 59.9** | **+0.8** |
| PEL | | | | *eS* | | **Sn** | | **17 50 19.1** | **+0.4** |
| PEL | | | | | AML | AML | | 17 50 26.0 | |
| | comp=E,5μm,2.5s | | | | | | | | |
| **AUSP** | **Uspallata** | **2.95** | **55** | *i* P | | **Pb** | | **17 50 24.0** | **-0.7** |
| **AAGR** | **Agrelo** | **2.97** | **74** | *i* P | | **Pb** | | **17 50 23.1** | **-1.8** |
| **ARCO** | **CERRO ARCO** | **2.98** | **69** | *i* P | | **Pb** | | **17 50 23.5** | **-1.5** |
| ARCO | | | | *i* S | | **Sg** | | **17 51 10.9** | **+3.0** |
| ARCO | | | | | AML | AML | | 17 51 16.8 | |
| | comp=Z,122nm,0.6s | | | | | | | | |
| **ASAL** | **Salagasta** | **3.16** | **65** | *i* P | | **Pb** | | **17 50 26.3** | **-1.8** |
| ASAL | | | | *i* S | | **Sg** | | **17 51 14.9** | **+1.2** |
| **RTLS** | **Leoncito** | **3.28** | **49** | *i* P | | **Pb** | | **17 50 28.7** | **-1.6** |
| RTLS | | | | *i* S | | **Sg** | | **17 51 20.0** | **+2.3** |
| **CPUP** | **Villa Florida** | **14.96** | **63** | Pn | | **Pn** | | **17 53 03.6** | **+0.5** |
| | comp=Z,0.1nm,0.3s,baz=241,slow=19,SNR=2.4 | | | | | | | | |
| **LPAZ** | **La Paz** | **17.99** | **13** | P | | **Pn** | | **17 53 43.2** | **+0.7** |
| | comp=Z,0.1nm,0.3s,baz=166,slow=5.8,SNR=6.4 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.35** | **70** | P | | **P** | | **18 02 03.7** | **-0.4** |
| | comp=Z,1.0nm,0.8s,baz=227,slow=5.6,SNR=5.0 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **120.71** | **209** | PKP | | **PKPdf** | | **18 08 23.7** | **-0.5** |
| | comp=Z,0.2nm,0.8s,baz=170,slow=1.6,SNR=3.1 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **154.29** | **32** | PKPbc | | **PKPbc** | | **18 09 31.4** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=295,slow=3.6,SNR=3.9 | | | | | | | | |

**SKHL 28 17:53:50.8±0.7,45.°22N×153.°16E,h43km±5km,mb4.2/3, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **3.74** | **272** | *eP* | | Pn | | 17 54 46.6 | +0.7 |
| KUR | | | | | AMB | AMB | | 17 54 47.7 | |
| | 80nm,0.3s | | | | | | | | |
| KUR | | | | | AMB | AMB | | 17 54 47.7 | |
| | 50nm,0.3s | | | | | | | | |
| KUR | | | | | AMB | AMB | | 17 54 47.7 | |
| | 26nm,0.3s | | | | | | | | |
| KUR | | | | *i* S | | Sn | | 17 55 28.5 | -0.2 |
| KUR | | | | | A | A | | 17 55 41.3 | |
| | 37nm,0.4s | | | | | | | | |
| KUR | | | | | A | A | | 17 55 41.3 | |
| | 13nm,0.4s | | | | | | | | |
| **SHO** | **Shikotan** | **4.72** | **256** | *eP* | | Pn | | 17 55 00.2 | +0.8 |
| SHO | | | | | AMB | AMB | | 17 55 04.1 | |
| | 12nm,0.5s | | | | | | | | |
| SHO | | | | *i* S | | Sn | | 17 55 52.7 | -0.2 |
| SHO | | | | | A | A | | 17 56 01.7 | |
| | 17nm,0.3s | | | | | | | | |
| SHO | | | | | A | A | | 17 56 01.7 | |
| | 29nm,0.3s | | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.34** | **260** | *i* P | | Pn | | 17 55 09.7 | +1.8 |
| YUK | | | | | AMB | AMB | | 17 55 14.8 | |
| | 15nm,0.3s | | | | | | | | |
| YUK | | | | | AMB | AMB | | 17 55 14.8 | |
| | 7.0nm,0.3s | | | | | | | | |
| YUK | | | | | AMB | AMB | | 17 55 14.8 | |
| | 20nm,0.3s | | | | | | | | |
| YUK | | | | *i* S | | Sn | | 17 56 08.3 | +0.1 |
| YUK | | | | | A | A | | 17 56 11.6 | |
| | 12nm,0.5s | | | | | | | | |
| YUK | | | | | A | A | | 17 56 11.6 | |
| | 41nm,0.5s | | | | | | | | |
| **SKR** | **Severo-Kuril's** | **5.82** | **19** | *eP* | | Pn | | 17 55 15.7 | +1.3 |
| **YSS** | **Yuzh-Sakhalins** | **7.44** | **287** | *eP* | | Pn | | 17 55 38.6 | +1.9 |
| YSS | | | | *eS* | | Sn | | 17 56 59.3 | -0.4 |
| **MYR** | **Moyori** | **7.72** | **251** | *eP* | | Pn | | 17 55 42.5 | +1.9 |
| MYR | | | | *eS* | | Sn | | 17 57 05.3 | -1.5 |

*AUST **28** 18:03:31.6±2.7,4.°88S×155.°28E,h19km,Error ellipse: s-maj=2.2km s-min=1.0km az=36.0*
*ISCJB **28** 18:03:46.8±0.3,5.°53S±0.°04×153.°72E±0.°05,h43km, mb4.3/20,MS3.6/3,Error ellipse: s-maj=7.1km s-min=6.1km az=147.9*
*NEIC **28** 18:03:47.5±0.5,5.°48S×153.°73E,h35km,mb4.6/7,Error ellipse: s-maj=13.7km s-min=11.0km az=71.0*
*IDC **28** 18:03:50.5±1.0,5.°61S×153.°66E,h61km±7km,mb4.1/15, mb1 4.2/18,mb1mx4.1/26,mbtmp4.4/18,MS3.5/4, Ms1 3.6/4,ms1mx3.0/25,Error ellipse: s-maj=18.0km s-min=11.8km az=72.0*
**ISC 28 18:03:48.7±0.5,5.°48S±0.°06×153.°72E±0.°06,h43km,n61, σ1§61/67,mb4.5/20,MS3.7/3,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.01** | **309** | P | | **Pn** | | **18 04 22.0** | **+1.8** |
| | baz=3.2,SNR=57 | | | | | | | | |
| **HNR** | **Honiara** | **7.32** | **123** | P | | **Pn** | | **18 05 34.4** | **+1.3** |
| | 6.7nm,0.3s,baz=176,slow=3.8,SNR=8.0 | | | | | | | | |
| HNR | | | | | S | | **Sn** | **18 06 57.4** | **+2.4** |
| | baz=198,slow=20,SNR=2.3 | | | | | | | | |
| HNR | | | | | LR | LR | | 18 08 53.4 | |
| | comp=Z,225nm,19.3s,baz=274,slow=42 | | | | | | | | |
| **HNR** | **Honiara** | **7.32** | **123** | *eP* | | **Pn** | | **18 05 34.0** | **+0.9** |
| HNR | | | | *eS* | | **Sn** | | **18 06 59.0** | **+4.1** |
| **PMG** | **Port Moresby** | **7.59** | **239** | P | | **Pn** | | **18 05 38.5** | **+1.7** |
| | 13nm,0.3s,baz=54,slow=4.1,SNR=38 | | | | | | | | |
| PMG | | | | | S | | **Sn** | **18 07 02.9** | **+1.4** |
| | 39nm,0.3s,baz=300,slow=23,SNR=12 | | | | | | | | |
| **PMG** | **Port Moresby** | **7.59** | **239** | P | | **Pn** | | **18 05 38.5** | **+1.7** |
| | baz=9.2,SNR=33 | | | | | | | | |
| **MTSU** | **Mount Surprise** | **15.58** | **215** | P | | **P** | | **18 07 31.3** | **+2.1** |
| | baz=17,SNR=7.3 | | | | | | | | |
| **CTA** | **Charters Tower** | **16.24** | **206** | P | | **Pn** | | **18 07 34.8** | **+0.9** |
| | 0.6nm,0.3s,baz=26,slow=14,SNR=11 | | | | | | | | |
| **CTAO** | **Charters Tower** | **16.24** | **206** | *eP* | | **Pn** | | **18 07 32.2** | **-1.7** |
| | 16nm,1.1s | | | | | | | | |
| **EIDS** | **Eidsvold** | **19.94** | **187** | P | | **P** | | **18 08 16.7** | **-0.5** |
| | baz=21,SNR=3.0 | | | | | | | | |
| **QIS** | **Mount Isa** | **20.31** | **221** | P | | **P** | | **18 08 21.3** | **0.0** |
| | baz=22,SNR=14 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.58** | **144** | P | | **P** | | **18 08 23.1** | **-1.2** |
| | 21nm,0.5s,baz=255,slow=0.8,SNR=51 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **20.58** | **144** | *eP* | | **P** | | **18 08 23.3** | **-0.9** |
| | 25nm,0.6s | | | | | | | | |
| **RMQ** | **Roma** | **21.42** | **192** | P | | **P** | | **18 08 33.3** | **+0.1** |
| | baz=22,SNR=7.8 | | | | | | | | |
| **FAKI** | **Fak Fak** | **21.56** | **276** | P | | **P** | | **18 08 39.4** | **+4.6** |
| | baz=23,SNR=3.6 | | | | | | | | |
| **KDU** | **Kakadu** | **22.16** | **250** | P | | **P** | | **18 08 40.8** | **-0.4** |
| | baz=24,SNR=8.0 | | | | | | | | |
| **QLP** | **Quilpie** | **22.86** | **202** | P | | **P** | | **18 08 47.7** | **-0.8** |
| | baz=24,SNR=12 | | | | | | | | |
| **SIJI** | **Sorong** | **22.88** | **281** | P | | **P** | | **18 08 48.4** | **-0.4** |
| | 12nm,0.5s,baz=120,slow=7.5,SNR=12 | | | | | | | | |
| **SWI** | **Sorong** | **22.88** | **281** | P | | **P** | | **18 08 48.4** | **-0.5** |
| | baz=24,SNR=3.2 | | | | | | | | |
| **MTN** | **Manton Dam** | **23.45** | **250** | P | | **P** | | **18 08 55.6** | **+1.0** |
| | baz=25,SNR=11 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **23.69** | **231** | *eP* | | **P** | | **18 08 55.9** | **-0.9** |
| | 6.4nm,0.6s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.71** | **231** | P | | **P** | | **18 08 55.5** | **-1.5** |
| | 7.6nm,0.5s,baz=56,slow=10,SNR=143 | | | | | | | | |
| WRA | | | | | pP | | **pP** | **18 09 09.2** | **+1.0** |
| | 3.7nm,0.6s,baz=50,slow=10,SNR=5.4 | | | | | | | | |
| WRA | | | | | PcP | | **PcP** | **18 12 39.4** | **-1.1** |
| | 0.5nm,0.6s,baz=60,slow=2.7,SNR=3.6 | | | | | | | | |
| WRA | | | | | ScP | | **ScP** | **18 16 12.2** | **-3.2** |
| | 0.6nm,0.8s,baz=62,slow=3.2,SNR=4.8 | | | | | | | | |
| **ARMA** | **Armidale** | **24.89** | **184** | P | | **P** | | **18 09 07.9** | **+0.2** |
| | baz=26,SNR=9.4 | | | | | | | | |
| **ASAR** | **Alice Springs** | **26.29** | **225** | P | | **P** | | **18 09 19.6** | **-0.9** |
| | 4.7nm,0.7s,baz=57,slow=9.1,SNR=109 | | | | | | | | |
| ASAR | | | | | pP | | **pP** | **18 09 34.8** | **+2.8** |
| | 2.0nm,0.7s,baz=48,slow=8.5,SNR=4.7 | | | | | | | | |
| ASAR | | | | | PcP | | **PcP** | **18 12 45.6** | **-0.5** |
| | 0.7nm,0.5s,baz=59,slow=2.5,SNR=5.9 | | | | | | | | |
| ASAR | | | | | ScP | | **ScP** | **18 16 20.6** | **-2.1** |
| | 0.8nm,0.7s,baz=50,slow=2.6,SNR=8.8 | | | | | | | | |
| ASAR | | | | | LR | | LR | 18 19 18.9 | |
| | comp=Z,103nm,21.1s,baz=86,slow=36 | | | | | | | | |
| **KNRA** | **Kununurra** | **26.51** | **246** | P | | **P** | | **18 09 22.0** | **-0.5** |
| | baz=28,SNR=11 | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **27.00** | **195** | P | | **P** | | **18 09 25.9** | **-0.7** |
| | baz=28,SNR=8.2 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.04** | **28** | T | | T | | 18 37 43.9 | |
| | baz=208,slow=76,SNR=26 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.04** | **28** | T | | T | | 18 37 43.8 | |
| | baz=208,slow=76,SNR=24 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.05** | **28** | T | | T | | 18 37 45.3 | |
| | baz=208,slow=76,SNR=45 | | | | | | | | |
| **WRKA** | **Warakurna** | **31.19** | **229** | P | | **P** | | **18 10 02.6** | **-1.5** |
| | baz=33,SNR=12 | | | | | | | | |
| **KAPI** | **Kappang** | **33.83** | **269** | *eP* | | **P** | | **18 10 26.6** | **-0.7** |
| | 9.6nm,1.0s | | | | | | | | |
| **URZ** | **Urewera** | **38.95** | **150** | P | | **P** | | **18 11 09.6** | **-1.0** |
| | 5.8nm,0.7s,baz=273,slow=4.1,SNR=6.3 | | | | | | | | |
| **MEEK** | **Meekatharra** | **39.54** | **234** | P | | **P** | | **18 11 14.7** | **-1.0** |
| | baz=41,SNR=7.1 | | | | | | | | |
| **RPZ** | **Rata Peaks** | **41.03** | **161** | P | | **P** | | **18 11 28.0** | **+0.1** |
| | 4.4nm,0.5s,baz=315,slow=2.9,SNR=4.3 | | | | | | | | |
| **KLBR** | **Kellerberrin** | **42.52** | **228** | P | | **P** | | **18 11 38.5** | **-1.8** |
| | baz=44,SNR=7.7 | | | | | | | | |
| **MORW** | **Morawa** | **42.65** | **232** | P | | **P** | | **18 11 40.0** | **-1.3** |
| | baz=44,SNR=6.8 | | | | | | | | |
| **BLDU** | **Balliduu** | **42.83** | **230** | P | | **P** | | **18 11 41.4** | **-1.4** |
| | baz=44,SNR=9.6 | | | | | | | | |
| **KSRS** | **Korea Array** | **49.02** | **333** | P | | **P** | | **18 12 33.1** | **+1.8** |
| | 1.3nm,0.6s,baz=151,slow=7.4,SNR=6.3 | | | | | | | | |
| **KSAR** | **Wonju Array Be** | **49.02** | **333** | P | | **P** | | **18 12 33.1** | **+1.8** |
| **USRK** | **Ussuriysk Ar.** | **53.18** | **341** | P | | **P** | | **18 13 04.1** | **+1.6** |
| | 1.7nm,0.7s,baz=155,slow=4.8,SNR=4.5 | | | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.46** | **3** | P | | **P** | | **18 13 42.0** | **+1.8** |
| | 3.0nm,0.5s,baz=162,slow=8.5,SNR=13 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **58.99** | **295** | P | | **P** | | **18 13 45.4** | **+0.8** |
| | 5.6nm,0.8s,baz=115,slow=5.1,SNR=57 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **59.10** | **296** | *eP* | | **P** | | **18 13 46.0** | **+0.6** |
| | 8.9nm,1.4s | | | | | | | | |
| **SONM** | **Songino Array** | **67.38** | **328** | P | | **P** | | **18 14 38.5** | **-1.3** |
| | 0.5nm,0.6s,baz=96,slow=2.9,SNR=2.8 | | | | | | | | |
| **LSA** | **Lhasa** | **69.38** | **304** | *eP* | | **P** | | **18 14 52.3** | **-0.7** |
| **TAPN** | **Taplejung** | **71.54** | **301** | *eP* | | **P** | | **18 15 06.0** | **-0.1** |
| | 9.5nm,0.7s | | | | | | | | |
| **ODAN** | **Odare** | **71.67** | **300** | *eP* | | **P** | | **18 15 06.7** | **-0.1** |
| | 15nm,0.8s | | | | | | | | |
| **VNDA** | **Vanda** | **72.12** | **178** | P | | **P** | | **18 15 07.1** | **-1.2** |
| | 6.6nm,0.8s,baz=313,slow=6.0,SNR=5.6 | | | | | | | | |
| **RAMN** | **Ramite** | **72.38** | **300** | *eP* | | **P** | | **18 15 10.6** | **-0.5** |
| **GUN** | **Gumba** | **73.25** | **301** | *eP* | | **P** | | **18 15 16.0** | **-0.4** |
| **PKI** | **Pulchoki** | **73.56** | **301** | *eP* | | **P** | | **18 15 17.1** | **-1.1** |
| **PKIN** | **Phulchoki** | **73.58** | **301** | *eP* | | **P** | | **18 15 16.6** | **-1.6** |
| **KKN** | **Kakani** | **73.73** | **301** | *eP* | | **P** | | **18 15 17.9** | **-1.1** |
| **GKN** | **Gorkha** | **74.34** | **301** | *eP* | | **P** | | **18 15 21.3** | **-1.2** |
| **MKAR** | **Makanchi Array** | **81.44** | **319** | P | | **P** | | **18 16 00.8** | **-0.5** |
| | 1.4nm,0.5s,baz=92,slow=6.3,SNR=13 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **82.22** | **326** | P | | **P** | | **18 16 04.2** | **-1.1** |
| | 3.6nm,0.6s,baz=117,slow=5.8,SNR=16 | | | | | | | | |
| ZALV | | | | | pP | | **pP** | **18 16 22.1** | **+3.9** |
| | 1.4nm,0.6s,baz=114,slow=5.1,SNR=3.3 | | | | | | | | |
| **ILAR** | **Eielson Array** | **82.44** | **22** | P | | **P** | | **18 16 03.5** | **-2.7** |
| | 1.0nm,0.6s,baz=245,slow=5.1,SNR=16 | | | | | | | | |
| ILAR | | | | | pP | | pP | 18 16 24.8 | +5.6 |
| | 0.4nm,0.6s,baz=255,slow=5.1,SNR=2.4 | | | | | | | | |
| ILAR | | | | | LR | | LR | 18 49 35.5 | |
| | comp=Z,32nm,20.2s,baz=276,slow=33 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.49** | **180** | *eP* | | **P** | | **18 16 15.7** | **-1.2** |
| | 3.9nm,0.8s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **85.06** | **314** | *eP* | | **P** | | **18 16 20.7** | **+0.3** |
| | 2.3nm,0.5s | | | | | | | | |
| **MAW** | **Mawson** | **85.30** | **203** | P | | **P** | | **18 16 19.3** | **-1.5** |
| | 1.3nm,0.8s,baz=102,slow=10,SNR=9.5 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **91.78** | **52** | LR | | LR | | 18 51 14.4 | |
| | comp=Z,36nm,19.4s,baz=265,slow=31 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **151.38** | **287** | PKPbc | | **PKPbc** | | **18 23 37.0** | **-2.0** |
| | 1.1nm,0.6s,baz=94,slow=1.8,SNR=13 | | | | | | | | |

*TAP **28** 18:10:38.4,23.°93N×122.°43E,h7km±1km,ML3.1,D*
*JMA **28** 18:10:39.1±0.2,24.°02N×122.°51E,h14km±4km,M2.7*
**ISC 28 18:10:37.4±1.1,23.°91N±0.°03×122.°51E±0.°02,h10km±10km, n38,σ0§70/71,Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JYNG** | **Yonaguni jima** | **0.67** | **36** | *eS* | | **Sg** | | **18 10 58.1** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **0.71** | **40** | P | | **Pg** | | **18 10 51.4** | **+0.2** |
| YOJ | | | | *eS* | | **Sg** | | **18 10 59.5** | **-1.0** |
| **ENA** | **Nanau** | **0.87** | **306** | *eP* | | **Pb** | | **18 10 54.6** | **-0.1** |
| | baz=308 | | | | | | | | |
| ENA | | | | | *eS* | | **Sb** | **18 11 05.9** | **-0.6** |
| | baz=308 | | | | | | | | |
| **TWC** | **Suao** | **0.92** | **319** | P | | **Pg** | | **18 10 55.1** | **-0.1** |
| | baz=322 | | | | | | | | |
| TWC | | | | | S | | **Sg** | **18 11 06.4** | **-0.8** |
| | baz=322 | | | | | | | | |
| **ESL** | **Shilin** | **0.99** | **265** | P | | **Pg** | | **18 10 56.5** | **-0.1** |
| | baz=262 | | | | | | | | |
| ESL | | | | | S | | **Sb** | **18 11 10.1** | **+0.2** |
| | baz=262 | | | | | | | | |
| **ILA** | **Ilan** | **1.10** | **321** | *eP* | | **Pn** | | **18 11 00.0** | **+1.1** |
| | baz=323 | | | | | | | | |
| ILA | | | | | *eS* | | **Sn** | **18 11 14.1** | **-0.2** |
| | baz=323 | | | | | | | | |
| **TWE** | **Neicheng** | **1.12** | **316** | P | | **Pn** | | **18 10 59.3** | **+0.1** |
| | baz=319 | | | | | | | | |
| TWE | | | | | S | | **Sn** | **18 11 14.2** | **-0.4** |
| | baz=319 | | | | | | | | |
| **ENTT** | **Nioudou** | **1.13** | **310** | P | | **Pn** | | **18 10 59.8** | **+0.4** |
| | baz=312 | | | | | | | | |
| ENTT | | | | | *eS* | | **Sg** | **18 11 13.8** | **0.0** |
| | baz=312 | | | | | | | | |
| **EHY** | **Hungye** | **1.16** | **250** | P | | **Pb** | | **18 10 59.5** | **-0.2** |
| | baz=247 | | | | | | | | |
| EHY | | | | | S | | **Sb** | **18 11 15.3** | **+0.4** |
| | baz=247 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **1.17** | **282** | *eP* | | **Pb** | | **18 10 59.9** | **-0.1** |
| | baz=281 | | | | | | | | |
| WHF | | | | | *eS* | | **Sn** | **18 11 15.7** | **-0.7** |
| | baz=281 | | | | | | | | |
| **NNS** | **Nan Shan** | **1.17** | **297** | *eP* | | **Pb** | | **18 10 59.9** | **+0.1** |
| | baz=298 | | | | | | | | |
| NNS | | | | | *eS* | | **Sg** | **18 11 15.3** | **+0.2** |
| | baz=298 | | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.19** | **69** | P | | **Pb** | | **18 11 00.4** | **+0.3** |
| IRIF | | | | *eS* | | **Sb** | | **18 11 15.2** | **-0.4** |
| **HATJ** | **Hateruma jima** | **1.19** | **83** | *eS* | | **Sg** | | **18 11 16.5** | **+0.7** |
| **TWF1** | **Yuli** | **1.25** | **244** | P | | **Pn** | | **18 11 01.2** | **+0.2** |
| | baz=240 | | | | | | | | |
| TWF1 | | | | | *eS* | | **Sb** | **18 11 17.6** | **+0.3** |
| | baz=240 | | | | | | | | |
| **TWT** | **Tachien** | **1.27** | **286** | *eP* | | **Pg** | | **18 11 02.3** | **+0.5** |
| | baz=285 | | | | | | | | |
| TWT | | | | | *eS* | | **Sg** | **18 11 19.3** | **+1.0** |
| | baz=285 | | | | | | | | |
| **WDT** | **Danda** | **1.27** | **263** | *eP* | | **Pn** | | **18 11 01.6** | **-0.1** |
| | baz=261 | | | | | | | | |
| WDT | | | | | *eS* | | **Sb** | **18 11 18.2** | **-0.2** |
| | baz=261 | | | | | | | | |
| **NSK** | **Sanguang** | **1.30** | **306** | *eP* | | **Pb** | | **18 11 02.1** | **0.0** |
| | baz=307 | | | | | | | | |
| NSK | | | | | *eS* | | **Sb** | **18 11 18.3** | **-0.5** |
| | baz=307 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.33** | **233** | *eS* | | **Sb** | | **18 11 17.9** | **-1.6** |
| | baz=229 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **1.33** | **330** | *eP* | | **Pb** | | **18 11 02.6** | **0.0** |
| | baz=332 | | | | | | | | |
| NWF | | | | | *eS* | | **Sg** | **18 11 20.6** | **+0.1** |
| | baz=332 | | | | | | | | |
| **TWA** | **Mucha** | **1.36** | **322** | *eP* | | **Pg** | | **18 11 03.3** | **-0.3** |
| | baz=324 | | | | | | | | |
| TWA | | | | | *eS* | | **Sg** | **18 11 21.2** | **0.0** |
| | baz=324 | | | | | | | | |
| **JKRS** | **Kuro-shima** | **1.41** | **76** | P | | **Pb** | | **18 11 04.5** | **+0.7** |
| **SMLT** | **Sun Moon Lake** | **1.48** | **269** | *eP* | | **Pn** | | **18 11 04.5** | **+0.2** |
| | baz=268 | | | | | | | | |
| SMLT | | | | | *eS* | | **Sb** | **18 11 24.0** | **0.0** |
| | baz=268 | | | | | | | | |
| **YUS** | **Yu-Shan** | **1.49** | **254** | *eP* | | **Pn** | | **18 11 05.2** | **+0.4** |
| | baz=252 | | | | | | | | |
| YUS | | | | | S | | **Sn** | **18 11 23.9** | **-0.8** |
| | baz=252 | | | | | | | | |
| **TYC** | **Yuchr** | **1.52** | **270** | *eP* | | **Pn** | | **18 11 05.3** | **+0.6** |
| | baz=269 | | | | | | | | |
| TYC | | | | | *eS* | | **Sg** | **18 11 25.9** | **-0.3** |
| | baz=269 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.55** | **243** | P | | **Pn** | | **18 11 05.1** | **-0.2** |
| | baz=240 | | | | | | | | |
| ELDTW | | | | | *eS* | | **Sn** | **18 11 24.1** | **-1.4** |
| | baz=240 | | | | | | | | |
| **JIJ** | **Ishigaki jima** | **1.56** | **73** | P | | **Pb** | | **18 11 06.3** | **-0.1** |
| JIJ | | | | *eS* | | **Sn** | | **18 11 24.9** | **-0.6** |
| **ALS** | **Alishan** | **1.62** | **256** | P | | **Pn** | | **18 11 07.2** | **+0.8** |
| | baz=254 | | | | | | | | |
| ALS | | | | | S | | **Sn** | **18 11 27.8** | **+0.4** |
| | baz=254 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.71** | **260** | *eP* | | **Pb** | | **18 11 09.1** | **0.0** |
| | baz=258 | | | | | | | | |
| CHN5 | | | | | *eS* | | **Sg** | **18 11 32.1** | **-0.4** |
| | baz=258 | | | | | | | | |
| **STYT** | **Tauyuan** | **1.78** | **246** | *eP* | | **Pn** | | **18 11 09.3** | **+1.0** |
| | baz=243 | | | | | | | | |
| STYT | | | | | *eS* | | **Sn** | **18 11 31.5** | **+0.5** |
| | baz=243 | | | | | | | | |
| **CHN4** | **Tsaushan** | **1.85** | **253** | *eP* | | **Pb** | | **18 11 11.6** | **+0.3** |
| | baz=251 | | | | | | | | |
| CHN4 | | | | | *eS* | | **Sb** | **18 11 36.0** | **+1.4** |
| | baz=251 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.86** | **250** | *eP* | | **Pb** | | **18 11 11.2** | **-0.4** |
| | baz=247 | | | | | | | | |
| WTP | | | | | *eS* | | **Sb** | **18 11 34.9** | **-0.2** |
| | baz=247 | | | | | | | | |
| **ECL** | **Taimali** | **1.94** | **228** | *eS* | | **Sn** | | **18 11 33.9** | **-1.1** |
| | baz=225 | | | | | | | | |
| **SGST** | **Jiashian** | **1.96** | **245** | *eP* | | **Pb** | | **18 11 13.3** | **+0.1** |
| | baz=243 | | | | | | | | |
| SGST | | | | | *eS* | | **Sb** | **18 11 38.7** | **+1.0** |
| | baz=243 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.96** | **249** | *eP* | | **Pb** | | **18 11 13.0** | **-0.3** |
| | baz=247 | | | | | | | | |
| CHN1 | | | | | *eS* | | **Sb** | **18 11 38.7** | **+0.9** |
| | baz=247 | | | | | | | | |
| **TWK** | **Hsinying** | **1.97** | **251** | *eP* | | **Pn** | | **18 11 12.4** | **+1.5** |
| | baz=249 | | | | | | | | |
| TWK | | | | | *eS* | | **Sb** | **18 11 38.8** | **+0.8** |
| | baz=249 | | | | | | | | |
| **SSD** | **Sandimen** | **2.08** | **237** | *eP* | | **Pb** | | **18 11 14.5** | **-0.9** |
| | baz=234 | | | | | | | | |
| SSD | | | | | *eS* | | **Sn** | **18 11 39.8** | **+1.3** |
| | baz=234 | | | | | | | | |
| **EAST** | **Anshuo** | **2.16** | **226** | *eP* | | **Pb** | | **18 11 16.6** | **-0.1** |
| | baz=223 | | | | | | | | |
| EAST | | | | | *eS* | | **Sn** | **18 11 38.4** | **-2.0** |
| | baz=223 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.32** | **229** | *eP* | | **Pb** | | **18 11 19.2** | **-0.3** |
| | baz=226 | | | | | | | | |
| SCZT | | | | | *eS* | | **Sb** | **18 11 47.4** | **-0.8** |
| | baz=226 | | | | | | | | |

*SJA **28** 18:18:57.5±1.0,36.°50S×70.°32W,h3km±211km,ML3.2, MW2.9*
*ISCJB **28** 18:19:15.9±1.3,34.°61S±0.°04×72.°1W±0.°1,h26km±6km, Error ellipse: s-maj=15.7km s-min=6.5km az=173.2*
*GUC **28** 18:19:16.8±0.5,34.°59S×72.°11W,h28km±3km,ML3.3*
**ISC 28 18:19:16.0±1.9,34.°66S±0.°05×71.°89W±0.°08,h12km±14km, n15,σ1§50/26,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.28** | **341** | *eP* | | **Pb** | | **18 19 22.4** | **-0.6** |
| CHPI | | | | *eS* | | **Sg** | | **18 19 26.5** | **+0.9** |
| **NICH** | **Los Niches** | **0.65** | **123** | *eP* | | Pn | | 18 19 31.6 | +0.6 |
| NICH | | | | *eS* | | **Sn** | | **18 19 42.2** | **+1.1** |
| **TALC** | **Talca** | **0.77** | **164** | *eP* | | Pn | | 18 19 32.6 | -0.1 |
| TALC | | | | *eS* | | **Sn** | | **18 19 44.2** | **-0.1** |
| **RCDM** | **Rinconada Maip** | **1.47** | **38** | *eP* | | **Pn** | | **18 19 41.7** | **-0.7** |
| RCDM | | | | *eS* | | **Sn** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BAUV** | **El Baul** | **5.38** | **67** | *e*P | | **Pn** | | **18 20 58.4** | **-1.0** |
| **MONV** | **Montecano** | **5.90** | **31** | *e*P | | **Pn** | | **18 21 06.4** | **+0.2** |
| MONV | | | | *e*S | | **Sn** | | **18 22 09.8** | **-3.6** |
| **BIRV** | **Birongo** | **7.61** | **61** | *e*P | | **Pn** | | **18 21 28.0** | **-0.8** |
| **SIV** | **San Ignacio** | **25.63** | **152** | LR | | LR | | 18 34 47.3 | |
| | comp=Z,27nm,18.4s,baz=130,slow=36 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **36.48** | **312** | P | | **P** | | **18 26 30.6** | **+0.6** |
| | 0.2nm,0.6s,baz=115,slow=10,SNR=2.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.67** | **78** | P | | **P** | | **18 30 56.3** | **-0.5** |
| | 0.2nm,0.7s,baz=284,slow=6.1,SNR=2.8 | | | | | | | | |
| **ASAR** | **Alice Springs** | **149.19** | **234** | PKPbc | | **PKPbc** | | **18 39 10.4** | **0.0** |
| | 0.2nm,0.6s,baz=126,slow=3.1,SNR=4.7 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **150.41** | **241** | PKPbc | | **PKPbc** | | **18 39 13.7** | **+0.3** |
| | 0.2nm,0.8s,baz=108,slow=2.4,SNR=6.9 | | | | | | | | |

**IDC 28 18:33:55.2±5.7, 22.78N×93.40E, h0km, mb3.2/2, mb1 3.4/3, mb1mx3.1/65, mbtmp3.1/3, ML3.1/1, Error ellipse: s-maj=117.6km s-min=99.2km az=13.0, Myanmar-India border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **6.74** | **129** | Pn | | Pn | 18 35 35.6 | +0.1 |
| | 0.1nm,0.3s,baz=304,slow=13,SNR=5.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **58.31** | **134** | P | | P | 18 43 51.9 | -0.3 |
| | 0.4nm,1.0s,baz=324,slow=7.3,SNR=3.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **60.68** | **137** | P | | P | 18 44 08.8 | +0.2 |
| | 0.3nm,0.9s,baz=321,slow=7.1,SNR=4.6 | | | | | | | |

*ISCJB **28** 18:40:53.2±1.2, 19.01N±0.03×145.56E±0.05, h229km±11km, mb4.4/95, Error ellipse: s-maj=8.2km s-min=5.2km az=9.2*
*BJI **28** 18:40:53.2, 19.00N×145.70E, h231km, mb4.2/12, mB4.7/6*
*MOS **28** 18:40:54.0±1.1, 19.00N×145.53E, h240km, mb4.4/16, Error ellipse: s-maj=12.8km s-min=6.8km az=111.4*
*NEIC **28** 18:40:56.1±0.3, 19.01N×145.48E, mb4.7/24, Error ellipse: s-maj=8.4km s-min=6.5km az=87.0*
*IDC **28** 18:40:56.6±0.7, 18.99N×145.45E, h249km±6km, mb4.1/33, mb1 4.2/35, mb1mx4.1/54, mbtmp4.6/35, Error ellipse: s-maj=11.0km s-min=7.0km az=92.0*

**ISC 28 18:40:56.5±0.6, 19.03N±0.05×145.52E±0.08, h249km±4km, h249km:pP-P, n156, σ1s29/164, mb4.5/94, 3C-3D, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CBIJ** | **Chichi jima** | **8.60** | **340** | *e*P | | Pn | 18 42 53.9 | -3.5 |
| | 101nm,0.6s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **18.60** | **341** | P | | **P** | **18 44 54.6** | **-0.9** |
| | 5.0nm,0.3s,baz=102,slow=11,SNR=52 | | | | | | | |
| MJAR | | | | S | | **S** | **18 48 07.8** | **-6.3** |
| | 0.5nm,0.3s,baz=151,slow=15,SNR=4.3 | | | | | | | |
| MJAR | | | | ScP | | **ScP** | **18 52 22.8** | **-1.9** |
| | 0.0nm,0.3s,baz=152,slow=3.6,SNR=4.4 | | | | | | | |
| **MAJO** | **Matsushiro** | **18.60** | **341** | *e*P | | **P** | **18 44 54.8** | **-0.8** |
| MAJO | | | | pmax | | pmax | | |
| | comp=Z,47nm,0.6s | | | | | | | |
| **MAJO** | **Matsushiro** | **18.60** | **341** | *e*P | | **P** | **18 44 54.8** | **-0.8** |
| | comp=Z,47nm,0.6s | | | | | | | |
| **MAT** | **Matsushiro** | **18.60** | **341** | P | | **P** | **18 44 55.6** | **0.0** |
| MAT | | | | *e*S | | **S** | **18 48 10.0** | **-4.1** |
| **JNU** | **Nakatsue** | **19.20** | **320** | P | | **P** | **18 45 02.5** | **+0.4** |
| | comp=Z,0.4nm,0.3s,baz=117,slow=6.8,SNR=3.0 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **20.05** | **88** | T | | T | 19 06 36.6 | |
| | baz=275,slow=75,SNR=2.8 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **20.06** | **88** | T | | T | 19 06 33.0 | |
| | baz=275,slow=75,SNR=2.3 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **20.07** | **88** | T | | T | 19 06 36.6 | |
| | baz=275,slow=75,SNR=6.0 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **20.18** | **85** | T | | T | 19 06 48.8 | |
| | baz=274,slow=74 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **20.18** | **84** | T | | T | 19 06 46.2 | |
| | baz=274,slow=74 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **20.19** | **85** | T | | T | 19 06 54.1 | |
| | baz=274 | | | | | | | |
| **SMPI** | **Sarmi** | **21.93** | **198** | P | | **P** | **18 45 31.2** | **+1.2** |
| | comp=Z,34nm,1.9s | | | | | | | |
| **GENI** | **Genyem** | **22.12** | **194** | P | | **P** | **18 45 30.6** | **-1.2** |
| | comp=Z,134nm,1.6s,comp=Z,2μm | | | | | | | |
| **ERM** | **Erimo** | **23.00** | **355** | P | | **P** | **18 45 37.5** | **-2.0** |
| ERM | | | | pmax | | pmax | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **ERM** | **Erimo** | **23.00** | **355** | P | | **P** | **18 45 37.5** | **-2.0** |
| | comp=Z,27nm,1.1s | | | | | | | |
| **YHNB** | **Yeheng** | **23.09** | **288** | *e*P | | **P** | **18 45 41.4** | **+0.7** |
| | comp=Z,59nm,1.1s | | | | | | | |
| **SSLB** | **Suanglung** | **23.34** | **286** | *e*P | | **P** | **18 45 43.4** | **+0.5** |
| | comp=Z,51nm,0.9s | | | | | | | |
| **KSRS** | **Korea Array** | **23.95** | **324** | P | | **P** | **18 45 48.4** | **+0.1** |
| | comp=Z,10nm,0.8s,baz=149,slow=8.3,SNR=25 | | | | | | | |
| KSRS | | | | ScP | | **ScP** | **18 52 36.7** | **-1.2** |
| | comp=Z,2.9nm,1.0s,baz=116,slow=4.2,SNR=5.6 | | | | | | | |
| **KSRS** | **Korea Array** | **23.95** | **324** | P | | **P** | **18 45 48.4** | **+0.1** |
| KSRS | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| KSRS | | | | pmax | | pmax | | |
| | comp=N,3.0nm,1.0s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **23.97** | **324** | P | | **P** | **18 45 48.4** | **0.0** |
| **KSAR** | **Wonju Array Be** | **23.97** | **324** | P | | **P** | **18 45 48.4** | **0.0** |
| KSAR | | | | ScP | | **ScP** | **18 52 36.7** | **-1.2** |
| **SIJI** | **Sorong** | **24.23** | **217** | P | | **P** | **18 45 50.9** | **-0.1** |
| | comp=N,6.5nm,0.4s,baz=353,slow=20,SNR=8.3 | | | | | | | |
| **ASAJ** | **Asahikawa** | **25.14** | **355** | P | | **P** | **18 46 00.6** | **+1.7** |
| | comp=N,9.7nm,0.6s,baz=262,slow=11,SNR=13 | | | | | | | |
| **ASAJ** | **Asahikawa** | **25.14** | **355** | P | | **P** | **18 46 00.6** | **+1.7** |
| ASAJ | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.6s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **27.54** | **339** | P | | **P** | **18 46 21.1** | **+0.8** |
| | comp=Z,3.0nm,0.6s,baz=144,slow=9.1,SNR=9.2 | | | | | | | |
| **PMG** | **Port Moresby** | **28.30** | **177** | P | | **P** | **18 46 25.7** | **-1.6** |
| | comp=Z,19nm,0.6s,baz=49,slow=3.1,SNR=11 | | | | | | | |
| **PMG** | **Port Moresby** | **28.30** | **177** | *c iP* | | **P** | **18 46 25.8** | **-1.5** |
| PMG | | | | pmax | | pmax | | |
| | comp=Z,95nm,0.7s | | | | | | | |
| **PMG** | **Port Moresby** | **28.30** | **177** | *e*P | | **P** | **18 46 25.5** | **-1.8** |
| | comp=Z,52nm,0.8s | | | | | | | |
| **MRSI** | **Marisa** | **29.57** | **234** | P | | **P** | **18 46 37.9** | **-0.7** |
| | comp=Z,33nm,0.9s | | | | | | | |
| **CN2** | **Changchun** | **29.90** | **330** | *e*P | | P | 18 46 44.5 | +3.3 |
| **LUWI** | **Luwuk** | **29.95** | **231** | P | | **P** | **18 46 39.3** | **-2.6** |
| | comp=Z,30nm,1.1s | | | | | | | |
| **HABR** | **Khabarovsk** | **30.58** | **346** | *e*P | | **P** | **18 46 46.1** | **-0.9** |
| HABR | | | | *e*PP | | **pP** | **18 47 35.7** | **-0.8** |
| HABR | | | | *e* | | | 18 47 57.9 | |
| HABR | | | | *e*SP | | **sP** | **18 48 04.9** | **-0.5** |
| HABR | | | | *e* | | **S** | **18 49 37.4** | |
| HABR | | | | *e*S | | **S** | **18 51 30.4** | **+0.4** |
| HABR | | | | *e* | | | 18 52 55.6 | |
| HABR | | | | *e* | | | 18 56 52.3 | |
| HABR | | | | pmax | | pmax | | |
| | comp=Z,18nm,2.0s | | | | | | | |
| HABR | | | | pmax | | pmax | | |
| | comp=E,7.0nm,1.0s | | | | | | | |
| HABR | | | | pmax | | pmax | | |
| | comp=N,19nm,2.0s | | | | | | | |
| **MPSI** | **Mapaga** | **31.25** | **236** | P | | **P** | **18 46 52.9** | **-0.4** |
| | comp=N,21nm,0.8s,comp=N,466nm | | | | | | | |
| **HNR** | **Honiara** | **31.65** | **152** | P | | **P** | **18 46 56.2** | **-0.6** |
| | comp=N,36nm,0.6s,baz=82,slow=5.1,SNR=5.2 | | | | | | | |
| **PCI** | **Palu** | **32.07** | **235** | P | | **P** | **18 46 58.9** | **-1.6** |
| | comp=N,18nm,1.1s | | | | | | | |
| **KLR** | **Kul'dur** | **32.11** | **343** | *e*P | | P | 18 46 57.4 | -3.0 |
| **COEN** | **Coen** | **32.85** | **184** | *e*P | | **P** | **18 47 06.4** | **-0.9** |
| | comp=N,14nm,0.6s | | | | | | | |
| **BBSI** | **Bau Bau** | **33.23** | **225** | P | | P | 18 47 18.0 | +7.4 |
| **TTSI** | **Tana Toraja** | **33.47** | **232** | P | | **P** | **18 47 13.5** | **+0.9** |
| | comp=N,73nm,0.8s,comp=N,547nm | | | | | | | |
| **SPSI** | **Sidrap Palu** | **34.12** | **231** | P | | **P** | **18 47 16.9** | **-1.3** |
| | comp=N,46nm,0.9s,comp=N,410nm | | | | | | | |
| **BKSI** | **Bulukumba** | **34.80** | **228** | P | | **P** | **18 47 22.7** | **-1.3** |
| | comp=N,11nm,1.0s | | | | | | | |
| **KAPI** | **Kappang** | **34.85** | **229** | P | | **P** | **18 47 24.7** | **+0.2** |
| | comp=N,21nm,0.7s,baz=20,slow=0.4,SNR=15 | | | | | | | |
| **KAPI** | **Kappang** | **34.85** | **229** | *e*P | | **P** | **18 47 24.9** | **+0.5** |
| **BSSI** | **Bau Bau, Buton** | **35.12** | **227** | P | | **P** | **18 47 26.7** | **-0.1** |
| | comp=N,61nm,0.7s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **35.31** | **13** | P | | **P** | **18 47 29.6** | **+1.7** |
| | comp=N,2.5nm,0.7s,baz=205,slow=6.4,SNR=3.3 | | | | | | | |
| **SOEI** | **Soe** | **35.45** | **218** | P | | **P** | **18 47 27.7** | **-2.0** |
| | comp=N,27nm,1.0s | | | | | | | |
| **SOEI** | **Soe** | **35.45** | **218** | *e*P | | **P** | **18 47 27.7** | **-2.0** |
| | comp=N,16nm,0.8s | | | | | | | |
| **BATI** | **Baumata** | **36.17** | **218** | P | | **P** | **18 47 34.4** | **-1.3** |
| | comp=N,25nm,0.6s,baz=31,slow=0.4,SNR=13 | | | | | | | |
| **BATI** | **Baumata** | **36.17** | **218** | P | | **P** | **18 47 34.9** | **-0.7** |
| | comp=N,19nm,0.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **36.25** | **314** | *e*P | | **P** | **18 47 39.3** | **+3.1** |
| HHC | | | | PMZ | | | | |
| | comp=N,21nm,1.1s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=N,92nm,3.7s | | | | | | | |
| **KBKI** | **Kotabaru** | **36.42** | **236** | P | | **P** | **18 47 38.5** | **+0.8** |
| | comp=N,18nm,0.9s | | | | | | | |
| **STKI** | **Sintang** | **38.34** | **244** | P | | **P** | **18 47 54.3** | **+0.4** |
| | comp=N,25nm,1.2s | | | | | | | |
| **TWSI** | **Taliwang, Sumb** | **39.47** | **228** | P | | **P** | **18 48 03.1** | **-0.1** |
| | comp=N,39nm,0.9s,comp=N,409nm | | | | | | | |
| **WRAB** | **Tennant Creek** | **40.24** | **196** | *c iP* | | **P** | **18 48 09.4** | **0.0** |
| WRAB | | | | pmax | | pmax | | |
| | comp=Z,253nm,1.5s | | | | | | | |
| **WRAB** | **Tennant Creek** | **40.24** | **196** | *e*P | | **P** | **18 48 09.2** | **-0.2** |
| | comp=Z,52nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **40.25** | **196** | P | | **P** | **18 48 09.4** | **0.0** |
| | comp=Z,32nm,0.6s,baz=18,slow=8.9,SNR=273 | | | | | | | |
| WRA | | | | ScP | | **ScP** | **18 53 33.0** | **-0.4** |
| | comp=Z,2.7nm,0.9s,baz=18,slow=4.1,SNR=6.7 | | | | | | | |
| WRA | | | | S | | **S** | **18 53 58.1** | **+0.3** |
| | comp=Z,3.8nm,1.0s,baz=31,slow=16,SNR=8.4 | | | | | | | |
| **KHON** | **Khomkaen** | **40.70** | **273** | P | | **P** | **18 48 14.7** | **+1.4** |
| | comp=Z,11nm,0.9s | | | | | | | |
| **CHAI** | **Chaiyaphum** | **41.57** | **273** | P | | **P** | **18 48 21.2** | **+0.9** |
| | comp=Z,11nm,0.8s,comp=Z,101nm | | | | | | | |
| **LOEI** | **Loei** | **41.97** | **275** | P | | **P** | **18 48 22.8** | **-0.8** |
| | comp=Z,24nm,1.1s | | | | | | | |
| **PBKT** | **Sadao Pong** | **42.41** | **274** | P | | **P** | **18 48 28.6** | **+1.5** |
| | comp=Z,20nm,1.0s,comp=Z,2μm | | | | | | | |
| **ULN** | **Ulaanbaatar** | **42.41** | **322** | *e*P | | **P** | **18 48 27.6** | **+0.7** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **NAYO** | **Nakonayok** | **42.52** | **271** | P | | **P** | **18 48 29.7** | **+1.7** |
| | comp=Z,82nm,1.0s,comp=Z,5μm | | | | | | | |
| **UTTA** | **Uttaradit** | **42.60** | **276** | P | | **P** | **18 48 29.9** | **+1.3** |
| | comp=Z,5.4nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **42.78** | **321** | P | | **P** | **18 48 29.8** | **0.0** |
| | comp=Z,2.0nm,0.5s,baz=136,slow=10,SNR=13 | | | | | | | |
| SONM | | | | pP | | **pP** | **18 49 21.2** | **-0.7** |
| | comp=Z,2.2nm,0.6s,baz=130,slow=7.5,SNR=2.7 | | | | | | | |
| SONM | | | | ScP | | **ScP** | **18 53 42.0** | **-1.3** |
| | comp=Z,3.1nm,0.9s,baz=121,slow=3.8,SNR=10 | | | | | | | |
| **CMAI** | **Chiengmai2** | **43.72** | **279** | P | | **P** | **18 48 39.0** | **+1.3** |
| | comp=Z,51nm,1.2s | | | | | | | |
| **ASAR** | **Alice Springs** | **43.92** | **195** | P | | **P** | **18 48 38.8** | **-0.2** |
| | comp=Z,16nm,0.7s,baz=16,slow=8.0,SNR=307 | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **18 53 45.6** | **-2.5** |
| | comp=Z,1.4nm,0.8s,baz=16,slow=3.9,SNR=5.0 | | | | | | | |
| ASAR | | | | S | | **S** | **18 54 52.0** | **+0.5** |
| | comp=Z,4.2nm,0.9s,baz=21,slow=19,SNR=9.1 | | | | | | | |
| **CMMT** | **Chiang Mai** | **43.95** | **278** | P | | **P** | **18 48 40.9** | **+1.4** |
| | comp=Z,12nm,1.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **43.96** | **278** | P | | **P** | **18 48 40.9** | **+1.4** |
| | comp=Z,75nm,0.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **43.96** | **278** | *e*P | | **P** | **18 48 40.3** | **+0.8** |
| CHTO | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,1.1s | | | | | | | |
| **CHTO** | **Chiang Mai** | **43.96** | **278** | *e*P | | **P** | **18 48 40.3** | **+0.8** |
| | comp=Z,4.3nm,1.1s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.01** | **277** | P | | **P** | **18 48 41.3** | **+1.4** |
| | comp=Z,11nm,0.8s,baz=68,slow=6.7,SNR=90 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.01** | **277** | *i* P | | **P** | **18 48 41.2** | **+1.4** |
| CMAR | | | | pmax | | pmax | | |
| | comp=Z,11nm,0.8s | | | | | | | |
| **UTHA** | **Uthaitani** | **44.03** | **273** | P | | **P** | **18 48 42.0** | **+1.9** |
| | comp=Z,4.6nm,0.9s | | | | | | | |
| **SEY** | **Seymchan** | **44.13** | **5** | P | | **P** | **18 48 40.8** | **+0.7** |
| | comp=Z,2.4nm,0.7s,baz=171,slow=8.1,SNR=9.6 | | | | | | | |
| **SEY** | **Seymchan** | **44.13** | **5** | *e*P | | **P** | **18 48 42.3** | **+2.2** |
| **YAK** | **Yakutsk** | **44.37** | **349** | *e*P | | **P** | **18 48 41.7** | **-0.3** |
| YAK | | | | *e* | | | 18 49 29.8 | |
| YAK | | | | pmax | | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=N,6.0nm,1.2s | | | | | | | |
| YAK | | | | pmax | | pmax | | |
| | comp=E,7.0nm,1.3s | | | | | | | |
| **UMPA** | **Umpang Tak** | **44.46** | **274** | P | | **P** | **18 48 45.9** | **+2.4** |
| | comp=E,7.3nm,0.9s | | | | | | | |
| **MHMT** | **Maesarieng** | **45.00** | **277** | P | | **P** | **18 48 49.3** | **+1.6** |
| | comp=E,9.0nm,1.0s | | | | | | | |
| **DZM** | **Mont Dzumac** | **45.68** | **152** | *e*P | | **P** | **18 48 52.8** | **-0.2** |
| | comp=E,71nm,1.0s | | | | | | | |
| **IPM** | **Ipoh** | **45.74** | **257** | *e*P | | **P** | **18 48 54.8** | **+1.3** |
| | comp=E,32nm,1.3s | | | | | | | |
| **KULM** | **Kulim** | **45.78** | **259** | *e*P | | **P** | **18 48 54.6** | **+0.8** |
| | comp=E,24nm,1.0s | | | | | | | |
| **ZAK** | **Zakamensk** | **45.79** | **323** | *e*P | | **P** | **18 48 55.0** | **+1.5** |
| ZAK | | | | *e* | | | 18 49 45.4 | |
| ZAK | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.4s | | | | | | | |
| ZAK | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,1.1s | | | | | | | |
| **CGJI** | **Cibinong** | **46.79** | **241** | P | | **P** | **18 49 00.7** | **-0.9** |
| | comp=Z,42nm,0.9s | | | | | | | |
| **MDSI** | **Maura Dua** | **46.92** | **244** | P | | **P** | **18 49 03.1** | **+0.4** |
| | comp=Z,12nm,2.4s,comp=Z,1μm | | | | | | | |
| **KASI** | **Kota Agung** | **47.20** | **243** | P | | **P** | **18 49 05.9** | **+1.1** |
| | comp=Z,64nm,1.2s | | | | | | | |
| **KSI** | **Kapahiang** | **47.87** | **246** | P | | P | 18 49 13.2 | +3.2 |
| | comp=Z,81nm,1.1s | | | | | | | |
| **PSI** | **Prapat** | **48.31** | **256** | P | | **P** | **18 49 14.8** | **+1.3** |
| | comp=Z,14nm,0.9s,baz=45,slow=2.2,SNR=6.4 | | | | | | | |
| **MNSI** | **Mandailing Nat** | **48.52** | **254** | P | | **P** | **18 49 16.2** | **+1.2** |
| | comp=Z,48nm,0.9s | | | | | | | |
| **GSI** | **Gunungsitoli** | **50.14** | **255** | *e*P | | **P** | **18 49 27.7** | **+0.5** |
| | comp=Z,40nm,0.6s | | | | | | | |
| **LSA** | **Lhasa** | **50.26** | **293** | *e*P | | **P** | **18 49 30.2** | **+1.7** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **LSA** | **Lhasa** | **50.26** | **293** | *e*P | | **P** | **18 49 30.2** | **+1.7** |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **TAPN** | **Taplejung** | **53.39** | **290** | *e*P | | **P** | **18 49 52.7** | **+1.4** |
| | comp=Z,5.3nm,0.3s | | | | | | | |
| **ODAN** | **Odare** | **53.71** | **290** | *e*P | | **P** | **18 49 54.8** | **+1.2** |
| **GUN** | **Gumba** | **54.97** | **291** | *e*P | | **P** | **18 50 03.9** | **+1.2** |
| **PKI** | **Pulchoki** | **55.41** | **291** | *e*P | | **P** | **18 50 06.6** | **+0.7** |
| | comp=Z,6.7nm,0.5s | | | | | | | |
| **PKIN** | **Phulchoki** | **55.42** | **291** | *e*P | | **P** | **18 50 06.5** | **+0.6** |
| | comp=Z,4.9nm,0.4s | | | | | | | |
| **KKN** | **Kakani** | **55.51** | **291** | *e*P | | **P** | **18 50 07.2** | **+0.8** |
| | comp=Z,10nm,0.9s | | | | | | | |
| **DMN** | **Daman** | **55.67** | **291** | *e*P | | **P** | **18 50 08.7** | **+1.0** |
| **GKN** | **Gorkha** | **56.05** | **291** | *e*P | | **P** | **18 50 10.9** | **+0.7** |
| | comp=Z,11nm,0.6s | | | | | | | |
| **DANN** | **Dangsing** | **56.80** | **292** | *e*P | | **P** | **18 50 16.8** | **+1.2** |
| **KOLN** | **Koldanda** | **56.99** | **291** | *e*P | | **P** | **18 50 17.7** | **+0.8** |
| | comp=Z,11nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.65** | **322** | P | | **P** | **18 50 19.7** | **-1.1** |
| | comp=Z,2.9nm,0.7s,baz=100,slow=6.7,SNR=11 | | | | | | | |
| ZALV | | | | ScP | | **ScP** | **18 54 46.5** | **-0.2** |
| | comp=Z,1.3nm,0.6s,baz=116,slow=4.2,SNR=5.4 | | | | | | | |
| **MK31** | **Makanchi Array** | **58.12** | **314** | P | | **P** | **18 50 24.6** | **+0.5** |
| MK31 | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.12** | **314** | P | | **P** | **18 50 24.2** | **+0.1** |
| | comp=Z,3.0nm,0.6s,baz=93,slow=8.9,SNR=21 | | | | | | | |
| MKAR | | | | ScP | | **ScP** | **18 54 50.0** | **+1.0** |
| | comp=Z,1.1nm,0.8s,baz=107,slow=7.1,SNR=3.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **58.12** | **314** | *i* P | | **P** | **18 50 25.0** | **+0.9** |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **KDAK** | **Kodiak Island** | **59.18** | **33** | *i* P | | **P** | **18 50 33.2** | **+2.0** |
| **KURK** | **Kurchatov** | **60.92** | **318** | P | | **P** | **18 50 43.0** | **-0.1** |
| KURK | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **60.92** | **318** | *e*P | | **P** | **18 50 42.1** | **-0.9** |
| | comp=Z,26nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **60.96** | **318** | P | | **P** | **18 50 43.0** | **-0.4** |
| | comp=Z,6.6nm,0.6s,baz=97,slow=7.2,SNR=75 | | | | | | | |
| **KSH** | **Kashi** | **62.54** | **305** | P | | **P** | **18 50 57.5** | **+3.2** |
| KSH | | | | PMZ | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **62.71** | **309** | *e*P | | **P** | **18 50 56.5** | **+1.0** |
| TKM2 | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **TKM2** | **Tokmak 2** | **62.71** | **309** | *e*P | | **P** | **18 50 56.5** | **+1.0** |
| | comp=Z,3.7nm,0.7s | | | | | | | |
| **COLD** | **Coldfoot** | **62.72** | **23** | *e*P | | **P** | **18 50 56.4** | **+1.6** |
| **COLA** | **College** | **63.05** | **26** | *e*P | | **P** | **18 50 56.3** | **-0.6** |
| COLA | | | | pmax | | pmax | | |
| | comp=Z,25nm,3.1s | | | | | | | |
| **ILAR** | **Eielson Array** | **63.43** | **26** | P | | **P** | **18 50 59.5** | **0.0** |
| | comp=Z,3.5nm,0.9s,baz=258,slow=5.1,SNR=20 | | | | | | | |
| ILAR | | | | pP | | **pP** | **18 51 54.8** | **-1.1** |
| | comp=Z,1.8nm,0.8s,baz=256,slow=6.1,SNR=3.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **63.53** | **309** | P | | **P** | **18 51 00.7** | **-0.1** |
| | comp=Z,1.7nm,0.7s,baz=153,slow=9.0,SNR=4.8 | | | | | | | |
| **AAK** | **Ala-Archa** | **63.53** | **309** | P | | **P** | **18 51 01.0** | **+0.2** |
| AAK | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **BVA0** | **Borovoye Array** | **66.12** | **320** | *i* P | | **P** | **18 51 16.6** | **-0.4** |
| BVA0 | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| **BVAR** | **Borovoye Array** | **66.12** | **320** | P | | **P** | **18 51 16.9** | **-0.1** |
| | comp=Z,10nm,0.5s,baz=94,slow=7.6,SNR=59 | | | | | | | |
| **BRVK** | **Borovoye** | **66.18** | **320** | *i iP* | | **P** | **18 51 17.8** | **+0.4** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **66.18** | **320** | *e*P | | **P** | **18 51 17.5** | **+0.1** |
| | comp=Z,5.1nm,0.6s | | | | | | | |
| **KK31** | **Karatay Array** | **66.43** | **309** | *i* P | | **P** | **18 51 19.5** | **+0.3** |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **KKAR** | **Karatay Array** | **66.43** | **309** | *e*P | | **P** | **18 51 19.3** | **+0.1** |
| KKAR | | | | pmax | | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **66.43** | **309** | *e*P | | **P** | **18 51 19.3** | **+0.1** |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| **DZET** | **Dzherino** | **68.14** | **305** | P | | **P** | **18 51 30.2** | **+0.1** |
| DZET | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.5s | | | | | | | |
| **INK** | **Inuvik** | **69.14** | **23** | P | | **P** | **18 51 36.5** | **+0.9** |
| | comp=Z,3.0nm,0.7s,baz=256,slow=7.2,SNR=7.8 | | | | | | | |
| **AB31** | **Akbulak array** | **72.99** | **317** | P | | **P** | **18 51 58.3** | **-0.6** |
| AB31 | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **72.99** | **317** | *e*P | | **P** | **18 51 58.1** | **-0.8** |
| | comp=Z,5.8nm,0.6s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **74.01** | **318** | P | | **P** | **18 52 04.2** | **-0.6** |
| | comp=Z,2.6nm,0.6s,baz=89,slow=8.7,SNR=10 | | | | | | | |
| **GEYT** | **Alibek** | **76.57** | **306** | P | | **P** | **18 52 19.9** | **+0.1** |
| | comp=Z,3.0nm,0.7s,baz=108,slow=3.3,SNR=10 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **77.78** | **28** | P | | **P** | **18 52 27.0** | **+1.1** |
| | comp=Z,2.0nm,0.6s,baz=291,slow=5.4,SNR=5.0 | | | | | | | |
| **CMB** | **Columbia Colle** | **81.64** | **53** | *e*P | | **P** | **18 52 46.9** | **-0.2** |
| CMB | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| **CMB** | **Columbia Colle** | **81.64** | **53** | *e*P | | **P** | **18 52 46.9** | **-0.2** |
| | comp=Z,7.4nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **82.13** | **342** | P | | **P** | **18 52 49.3** | **+0.2** |
| | comp=Z,4.3nm,0.8s,baz=91,slow=9.1,SNR=12 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.07** | **52** | P | | **P** | **18 52 56.4** | **+1.6** |
| | comp=Z,7.4nm,0.7s,baz=267,slow=6.4,SNR=31 | | | | | | | |
| **LRM** | **Limekiln Ridge** | **84.62** | **43** | *e*P | | **P** | **18 53 03.7** | **+1.2** |
| | comp=Z,61nm,0.9s | | | | | | | |
| **QLMT** | **Earthquake Lak** | **85.66** | **44** | *e*P | | **P** | **18 53 09.6** | **+2.0** |
| | comp=Z,0.5nm,0.6s | | | | | | | |
| **KBZ** | **Khabaz** | **85.79** | **315** | P | | **P** | **18 53 08.2** | **+0.2** |
| | comp=Z,2.0nm,0.7s,baz=86,slow=5.4,SNR=5.0 | | | | | | | |
| KBZ | | | | pP | | **pP** | **18 54 08.0** | **+0.1** |
| | comp=Z,2.6nm,0.9s,baz=70,slow=2.3,SNR=2.9 | | | | | | | |
| **FINES** | **FINESS Array B** | **86.52** | **335** | P | | **P** | **18 53 09.4** | **-1.7** |
| | comp=Z,4.6nm,0.3s,baz=87,slow=4.3,SNR=64 | | | | | | | |
| **HWUT** | **Hardware Ranch** | **86.80** | **47** | *e*P | | **P** | **18 53 14.3** | **+1.2** |
| | comp=Z,2.8nm,0.3s | | | | | | | |
| **WUAZ** | **Wupatki** | **89.29** | **53** | *e*P | | **P** | **18 53 26.8** | **+1.8** |
| | comp=Z,8.5nm,1.3s | | | | | | | |
| **PV01** | **Paradox Valley** | **90.30** | **49** | *e*P | | **P** | **18 53 30.2** | **+0.4** |
| | comp=Z,198nm,0.7s | | | | | | | |
| **HFS** | **Hagfors** | **92.02** | **338** | P | | **P** | **18 53 34.7** | **-2.2** |
| | comp=Z,1.5nm,0.4s,baz=90,slow=3.0,SNR=11 | | | | | | | |
| **NOA** | **NORSAR Array B** | **92.21** | **340** | P | | **P** | **18 53 36.8** | **-1.0** |
| | comp=Z,1.2nm,0.9s,baz=54,slow=4.6,SNR=2.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **93.76** | **314** | P | | **P** | **18 53 44.4** | **-1.2** |
| | comp=Z,2.3nm,0.8s,baz=71,slow=5.4,SNR=6.9 | | | | | | | |
| **BRTR** | **Keskin Array B** | **93.76** | **314** | *i* P | | **P**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **BINT** | **Bingol** | **1.33** | **141** | *e*Pn | | **Pn** | **18 42 11.2** | **-0.3** |
| **GRSN** | **GIRESUNGRSN** | **1.34** | **320** | *i* P | | **Pn** | **18 42 10.4** | **-1.1** |
| GRSN | | | | *i* S | | **Sb** | **18 42 26.9** | **-2.3** |
| **GRSN** | **GIRESUNGRSN** | **1.34** | **320** | P | | **Pn** | **18 42 10.4** | **-1.1** |
| GRSN | | | | S | | **Sb** | **18 42 26.9** | **-2.3** |
| **BNGB** | **Bing¨¶l** | **1.34** | **133** | *e*PN | | **Pn** | **18 42 11.2** | **-0.5** |
| **ELZG** | **Elazig** | **1.45** | **193** | *i* P | | **Pn** | **18 42 12.3** | **-0.9** |
| ELZG | | | | *i* S | | **Sb** | **18 42 32.4** | **-0.1** |
| **ELZG** | **Elazig** | **1.45** | **193** | P | | **Pn** | **18 42 12.3** | **-0.9** |
| ELZG | | | | S | | **Sb** | **18 42 32.4** | **-0.1** |
| **EZM** | **Erzurum** | **1.50** | **90** | *e*PN | | **Pn** | **18 42 13.2** | **-0.8** |
| **SVRC** | **Sivrice-ELAZID** | **1.53** | **183** | *e*PN | | **Pn** | **18 42 14.4** | **+0.1** |
| **SVRC** | **Sivrice-ELAZID** | **1.53** | **183** | *e*Pn | | **Pn** | **18 42 14.4** | **+0.1** |
| **CUKAN** | **kangal_SIVAS** | **1.61** | **249** | P | | **Pn** | **18 42 15.7** | **+0.2** |
| CUKAN | | | | S | | **Sg** | **18 42 41.0** | **+2.8** |
| **BNGL** | **BINGOL** | **1.65** | **125** | P | | **Pn** | **18 42 15.6** | **-0.5** |
| BNGL | | | | S | | **Sg** | **18 42 42.6** | **+3.2** |
| **RSDY** | **Resadiye-TOKAT** | **1.67** | **288** | *e*PN | | **Pn** | **18 42 16.5** | **+0.4** |
| **RSDY** | **Resadiye-TOKAT** | **1.67** | **288** | *e*Pn | | **Pn** | **18 42 16.5** | **+0.4** |
| **SCER** | **sogukcermik** | **1.76** | **269** | *i* P | | **Pb** | **18 42 18.5** | **-0.5** |
| SCER | | | | *i* S | | **Sg** | **18 42 43.7** | **+1.0** |
| **SCER** | **sogukcermik** | **1.76** | **269** | P | | **Pb** | **18 42 18.5** | **-0.5** |
| SCER | | | | S | | **Sg** | **18 42 43.7** | **+1.0** |
| **MALT** | **Malatya** | **1.77** | **206** | *e*PN | | **Pn** | **18 42 17.2** | **-0.2** |
| **MALT** | **Malatya** | **1.77** | **206** | P | | **Pb** | **18 42 18.6** | **-0.5** |
| **MALT** | **Malatya** | **1.77** | **206** | *e*Pn | | **Pn** | **18 42 17.3** | **-0.2** |
| **MALT** | **Malatya** | **1.77** | **206** | P | | **Pb** | **18 42 18.6** | **-0.5** |
| **SVSK** | **Karacayir** | **1.85** | **271** | *e*PN | | **Pn** | **18 42 19.5** | **+0.9** |
| **SVSK** | **Karacayir** | **1.85** | **271** | *e*Pn | | **Pn** | **18 42 19.5** | **+0.9** |
| **AKCD** | **Akcadag** | **1.98** | **216** | *i* P | | **Pb** | **18 42 21.8** | **-1.0** |
| AKCD | | | | *i* S | | **Sg** | **18 42 50.1** | **+0.1** |
| **AKCD** | **Akcadag** | **1.98** | **216** | P | | **Pb** | **18 42 21.8** | **-1.0** |
| AKCD | | | | S | | **Sg** | **18 42 50.1** | **+0.1** |
| **DARE** | **Darende-Malaty** | **2.01** | **229** | *e*PN | | **Pn** | **18 42 21.6** | **+0.8** |
| **DARE** | **Darende-Malaty** | **2.01** | **229** | *e*Pn | | **Pn** | **18 42 21.6** | **+0.8** |
| **DYBB** | **Diyarbakir** | **2.03** | **164** | *e*PN | | **Pn** | **18 42 21.5** | **+0.3** |
| **CUGUR** | **Gurin_S¨VAS** | **2.04** | **235** | P | | **Pb** | **18 42 23.2** | **-0.6** |
| **DDEM** | **Demirkent** | **2.04** | **60** | *i* P | | **Pn** | **18 42 22.0** | **+0.7** |
| **DDEM** | **Demirkent** | **2.04** | **60** | P | | **Pn** | **18 42 22.0** | **+0.7** |
| **DBAD** | **Bademkaya** | **2.07** | **57** | *i* P | | **Pn** | **18 42 22.6** | **+1.0** |
| DBAD | | | | *i* S | | **Sb** | **18 42 50.1** | **-0.1** |
| **DBAD** | **Bademkaya** | **2.07** | **57** | P | | **Pn** | **18 42 22.6** | **+1.0** |
| DBAD | | | | S | | **Sb** | **18 42 50.1** | **-0.1** |
| **DIY** | **Diyarbakir** | **2.11** | **162** | *e*Pn | | **Pn** | **18 42 21.5** | **-0.7** |
| **EKAR** | **Karacoban** | **2.15** | **107** | *i* P | | **Pb** | **18 42 26.0** | **+0.2** |
| **EKAR** | **Karacoban** | **2.15** | **107** | P | | **Pb** | **18 42 26.0** | **+0.2** |
| **DBOC** | **Borcka** | **2.24** | **49** | *i* P | | **Pn** | **18 42 24.6** | **+0.7** |
| **DBOC** | **Borcka** | **2.24** | **49** | P | | **Pn** | **18 42 24.6** | **+0.7** |
| **SVAN** | **Silvan-Diyarba** | **2.24** | **141** | *e*PN | | **Pn** | **18 42 24.3** | **+0.3** |
| **SVAN** | **Silvan-Diyarba** | **2.24** | **141** | *e*Pn | | **Pn** | **18 42 24.3** | **+0.3** |
| **BCA** | **Borcka** | **2.28** | **47** | *e*PN | | **Pn** | **18 42 24.2** | **-0.3** |
| **BCA** | **Borcka** | **2.28** | **47** | *e*Pn | | **Pn** | **18 42 24.2** | **-0.3** |
| **TOKA** | **Tokat** | **2.29** | **281** | *i* P | | **Pb** | **18 42 26.9** | **-1.1** |
| **TOKA** | **Tokat** | **2.29** | **281** | P | | **Pb** | **18 42 26.9** | **-1.1** |
| **ARTV** | **Artvin** | **2.30** | **56** | *i* P | | **Pn** | **18 42 26.2** | **+1.2** |
| ARTV | | | | *i* S | | **Sb** | **18 42 57.0** | **-0.2** |
| **ARTV** | **Artvin** | **2.30** | **56** | P | | **Pn** | **18 42 26.2** | **+1.2** |
| ARTV | | | | S | | **Sb** | **18 42 57.0** | **-0.2** |
| **BTMT** | **Batman** | **2.36** | **136** | *e*PN | | **Pn** | **18 42 26.2** | **+0.7** |
| **BTMT** | **Batman** | **2.36** | **136** | *e*Pn | | **Pn** | **18 42 26.3** | **+0.7** |
| **CUSAR** | **Sarkisla-SIVAS** | **2.49** | **260** | P | | **Pn** | **18 42 29.4** | **+1.9** |
| CUSAR | | | | S | | **Sg** | **18 43 07.6** | **+1.3** |
| **URFA** | **Urfa** | **2.51** | **191** | *e*PN | | **Pn** | **18 42 28.5** | **+0.8** |
| **URFA** | **Urfa** | **2.51** | **191** | *e*Pn | | **Pn** | **18 42 28.5** | **+0.8** |
| **MAZI** | **Mazidag** | **2.58** | **161** | *e*PN | | **Pn** | **18 42 29.0** | **+0.4** |
| **MAZI** | **Mazidag** | **2.58** | **161** | *e*Pn | | **Pn** | **18 42 29.0** | **+0.4** |
| **AGRB** | **Hanur-Agry** | **2.78** | **96** | *e*PN | | **Pn** | **18 42 31.5** | **0.0** |
| **AGRB** | **Hanur-Agry** | **2.78** | **96** | *e*Pn | | **Pn** | **18 42 31.5** | **0.0** |
| **KARS** | **Kars** | **2.90** | **74** | *e*PN | | **Pn** | **18 42 33.5** | **+0.4** |
| **KARS** | **Kars** | **2.90** | **74** | P | | **Pn** | **18 42 33.8** | **+0.7** |
| **KARS** | **Kars** | **2.90** | **74** | *e*Pn | | **Pn** | **18 42 33.5** | **+0.4** |
| **KARS** | **Kars** | **2.90** | **74** | P | | **Pn** | **18 42 33.8** | **+0.7** |
| **VANB** | **Van** | **3.36** | **112** | *e*PN | | **Pn** | **18 42 39.8** | **+0.4** |
| **VANB** | **Van** | **3.36** | **112** | *e*Pn | | **Pn** | **18 42 39.8** | **+0.4** |
| **SIRT** | **Sirnak** | **3.38** | **134** | *e*PN | | **Pn** | **18 42 40.2** | **+0.6** |
| **SIRT** | **Sirnak** | **3.38** | **134** | *e*Pn | | **Pn** | **18 42 40.2** | **+0.6** |
| **CLDR** | **Caldiran** | **3.57** | **101** | *e*PN | | **Pn** | **18 42 42.8** | **+0.4** |
| **CLDR** | **Caldiran** | **3.57** | **101** | *e*Pn | | **Pn** | **18 42 42.8** | **+0.4** |
| **SOC** | **Sochi** | **3.68** | **3** | *e*P | | **Pn** | **18 42 43.9** | **+0.2** |
| SOC | | | | *e* | | | 18 43 27.4 | |
| SOC | | | | | pmax | pmax | | |
| | comp=Z,45nm,0.8s | | | | | | | |
| SOC | | | | | smax | smax | | |
| | comp=N,197nm,0.6s | | | | | | | |
| SOC | | | | | smax | smax | | |
| | comp=E,217nm,0.6s | | | | | | | |
| **SOC** | **Sochi** | **3.68** | **3** | *e*P | | **Pn** | **18 42 43.9** | **+0.2** |
| | comp=E,45nm,0.8s | | | | | | | |
| SOC | | | | *e*S | | **Sn** | **18 43 27.4** | **0.0** |
| | comp=E,197nm,0.6s | | | | | | | |
| **SLMH** | **Al Salmeh** | **3.87** | **198** | *e*P | | **Pn** | **18 42 47.0** | **+0.6** |
| SLMH | | | | | AML | AML | 18 43 57.9 | |
| | comp=Z,36nm,0.6s | | | | | | | |
| **MNKR** | **ALMNKUR** | **3.96** | **182** | *e*P | | **Pn** | **18 42 46.4** | **-1.2** |
| MNKR | | | | | AML | AML | 18 44 14.0 | |
| | comp=Z,70nm,0.7s | | | | | | | |
| **KSRV** | **Kasrt alli** | **4.05** | **185** | *e*P | | **Pn** | **18 42 49.5** | **+0.7** |
| KSRV | | | | *e*S | | Sn | 18 43 28.5 | -8.1 |
| KSRV | | | | | AML | AML | 18 44 10.6 | |
| | comp=Z,25nm,0.7s | | | | | | | |
| **ONI** | **Oni** | **4.06** | **47** | P | | **Pn** | **18 42 51.1** | **+2.1** |
| **ONI** | **Oni** | **4.06** | **47** | P | | **Pn** | **18 42 51.0** | **+2.1** |
| **ONI** | **Oni** | **4.06** | **47** | P | | **Pn** | **18 42 51.0** | **+2.1** |
| **GNI** | **Garni** | **4.10** | **85** | *e*P | | **Pg** | **18 43 02.6** | **-2.2** |
| **NEY** | **Neytrino** | **4.16** | **36** | *e*P | | **Pn** | **18 42 53.5** | **+3.0** |
| **NEY** | **Neytrino** | **4.16** | **36** | *e*P | | **Pn** | **18 42 53.5** | **+3.0** |
| **CUKT** | **Cukurca** | **4.23** | **128** | *e*PN | | **Pn** | **18 42 52.5** | **+1.1** |
| **CUKT** | **Cukurca** | **4.23** | **128** | *e*Pn | | **Pn** | **18 42 52.5** | **+1.1** |
| **TBLG** | **Delisi** | **4.43** | **64** | *e*PN | | **Pn** | **18 42 55.6** | **+1.5** |
| **TBLG** | **Delisi** | **4.43** | **64** | P | | **Pb** | **18 43 07.6** | **+3.1** |
| **TBLG** | **Delisi** | **4.43** | **64** | P | | **Pb** | **18 43 07.6** | **+3.1** |
| **TBLG** | **Delisi** | **4.43** | **64** | *e*Pn | | **Pn** | **18 42 55.6** | **+1.5** |
| **BRTR** | **Keskin Array B** | **4.45** | **269** | Pn | | **Pn** | **18 42 56.0** | **+1.6** |
| | comp=Z,1.7nm,0.3s,baz=100,slow=14,SNR=48 | | | | | | | |
| BRTR | | | | | Pg | **Pb** | **18 43 06.6** | **+1.7** |
| | comp=Z,2.0nm,0.3s,baz=95,slow=14,SNR=19 | | | | | | | |
| BRTR | | | | | Lg | Lg | 18 44 08.9 | |
| | comp=Z,1.0nm,0.3s,baz=109,slow=25,SNR=3.0 | | | | | | | |
| **BTCH** | **Batrach** | **4.51** | **212** | *e*P | | **Pn** | **18 42 55.8** | **+0.5** |
| BTCH | | | | *e*S | | Sn | 18 43 40.1 | -8.0 |
| BTCH | | | | | AML | AML | 18 44 19.6 | |
| | comp=E,40nm,0.5s | | | | | | | |
| BTCH | | | | | AML | AML | 18 44 26.6 | |
| | comp=N,42nm,0.6s | | | | | | | |
| **KBZ** | **Khabaz** | **4.62** | **33** | Pn | | **Pn** | **18 42 58.6** | **+2.0** |
| | comp=N,0.7nm,0.3s,baz=181,slow=5.6,SNR=14 | | | | | | | |
| KBZ | | | | | Sn | **Sb** | **18 43 58.4** | **-5.2** |
| | comp=N,0.6nm,0.3s,baz=270,slow=20,SNR=4.2 | | | | | | | |
| KBZ | | | | | LR | LR | 18 45 10.1 | |
| | comp=N,170nm,19.0s,baz=202,slow=44 | | | | | | | |
| **KBZ** | **Khabaz** | **4.62** | **33** | P | | **Pn** | **18 42 58.6** | **+2.0** |
| KBZ | | | | | | | 18 43 58.4 | |
| KBZ | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| KBZ | | | | | smax | smax | | |
| | comp=N,1.0nm,0.3s | | | | | | | |
| KBZ | | | | | MLR | MLR | | |
| | comp=Z,170nm,19.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **4.72** | **30** | *e*P | | **Pn** | **18 42 59.1** | **+1.0** |
| KIV | | | | | pmax | pmax | | |
| | comp=Z,16nm,0.8s | | | | | | | |
| KIV | | | | | MLR | MLR | | |
| | comp=Z,16nm,7.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **4.72** | **30** | *e*P | | **Pn** | **18 42 59.1** | **+1.0** |
| | comp=Z,16nm,7.0s | | | | | | | |
| **NCK** | **Nalchik** | **4.76** | **40** | P | | Pn | 18 43 03.0 | +4.4 |
| **NCK** | **Nalchik** | **4.76** | **40** | P | | Pn | 18 43 03.0 | +4.4 |
| **ARNB** | **Al Arnab** | **4.87** | **215** | *e*P | | **Pn** | **18 42 59.0** | **-1.2** |
| ARNB | | | | *e*S | | Sn | 18 43 46.4 | -11 |
| ARNB | | | | | AML | AML | 18 44 17.3 | |
| | comp=E,13nm,0.6s | | | | | | | |
| ARNB | | | | | AML | AML | 18 44 37.1 | |
| | comp=N,19nm,0.5s | | | | | | | |
| **WRDH** | **Warideh** | **5.00** | **209** | *e*P | | **Pn** | **18 42 59.6** | **-2.3** |
| WRDH | | | | | AML | AML | 18 44 30.6 | |
| | comp=Z,30nm,0.5s | | | | | | | |
| **FEO** | **Feodosiya** | **5.91** | **331** | *e*P | | **Pn** | **18 43 13.8** | **-0.5** |
| **FEO** | **Feodosiya** | **5.91** | **331** | *e*P | | **Pn** | **18 43 13.8** | **-0.5** |
| **SUDU** | **Sudak** | **5.95** | **328** | *e*P | | **Pn** | **18 43 17.3** | **+2.4** |
| SUDU | | | | *e*S | | **Sn** | **18 44 23.9** | **+0.5** |
| **SUDU** | **Sudak** | **5.95** | **328** | *e*P | | **Pn** | **18 43 17.3** | **+2.4** |
| SUDU | | | | *e*S | | **Sn** | **18 44 23.9** | **+0.5** |
| **YAL** | **Yalta** | **6.01** | **321** | *e*P | | **Pn** | **18 43 18.9** | **+3.2** |
| YAL | | | | *e*S | | **Sn** | **18 44 28.0** | **+3.2** |
| **SEV** | **Sevastopol'** | **6.29** | **319** | *e*P | | **Pn** | **18 43 21.4** | **+1.8** |
| SEV | | | | *e*S | | **Sn** | **18 44 31.8** | **0.0** |
| **MMAI** | **Mount Meron Ar** | **7.60** | **206** | Pn | | **Pn** | **18 43 40.3** | **+2.7** |
| | comp=Z,0.3nm,0.3s,baz=30,slow=15,SNR=3.0 | | | | | | | |
| MMAI | | | | | Sn | **Sn** | **18 44 59.7** | **-4.4** |
| | comp=Z,0.2nm,0.3s,baz=29,slow=27,SNR=2.6 | | | | | | | |
| **ASF** | **Jabal al Asfar** | **7.98** | **196** | Pn | | **Pn** | **18 43 44.2** | **+1.3** |
| | comp=Z,0.1nm,0.3s,baz=319,slow=20,SNR=2.5 | | | | | | | |
| **AKASG** | **Malin Array Be** | **12.94** | **330** | Pn | | **Pn** | **18 44 50.5** | **-0.2** |
| | comp=Z,1.6nm,0.3s,baz=134,slow=14,SNR=4.6 | | | | | | | |
| AKASG | | | | | Sn | Sn | 18 47 04.0 | -11 |
| | baz=134,slow=25,SNR=5.3 | | | | | | | |
| **GEYT** | **Alibeck** | **14.70** | **92** | Pn | | **P** | **18 45 19.0** | **-2.0** |
| | baz=297,slow=11,SNR=2.5 | | | | | | | |
| **AKTK** | **Aktyubinsk** | **16.77** | **45** | P | | **Pn** | **18 45 42.3** | **+0.6** |
| **AKTO** | **Aktyubinsk** | **16.77** | **45** | Pn | | **Pn** | **18 45 42.3** | **+0.6** |
| | comp=Z,0.1nm,0.3s,baz=252,slow=12,SNR=2.9 | | | | | | | |
| **GERES** | **GERESS Array B** | **20.35** | **305** | P | | Pn | 18 46 24.9 | -0.6 |
| | comp=Z,0.2nm,0.4s,baz=105,slow=11,SNR=3.2 | | | | | | | |
| **FINES** | **FINESS Array B** | **23.07** | **344** | P | | **P** | **18 46 53.9** | **+1.7** |
| | comp=Z,5.8nm,1.0s,baz=164,slow=16,SNR=3.1 | | | | | | | |
| **FINES** | **FINESS Array B** | **23.07** | **344** | P | | **P** | **18 46 53.9** | **+1.7** |
| FINES | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **KEST** | **Kesra** | **24.05** | **270** | LR | | LR | 18 59 31.9 | |
| | comp=Z,49nm,18.6s,baz=202,slow=44 | | | | | | | |
| **HFS** | **Hagfors** | **25.83** | **330** | P | | **P** | **18 47 18.6** | **+0.5** |
| | comp=Z,1.8nm,0.8s,baz=158,slow=16,SNR=2.2 | | | | | | | |
| **HFS** | **Hagfors** | **25.83** | **330** | P | | **P** | **18 47 18.6** | **+0.5** |
| HFS | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.22** | **55** | P | | **P** | **18 47 50.0** | **+1.4** |
| | comp=Z,0.8nm,0.8s,baz=269,slow=9.1,SNR=7.7 | | | | | | | |
| **KURK** | **Kurchatov** | **29.29** | **55** | P | | **P** | **18 47 50.0** | **+0.8** |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **KURK** | **Kurchatov** | **29.29** | **55** | P | | **P** | **18 47 50.0** | **+0.8** |
| | comp=Z,1.0nm,0.8s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **30.59** | **350** | P | | **P** | **18 48 01.2** | **+0.6** |
| | comp=Z,2.0nm,0.8s,baz=153,slow=8.1,SNR=4.2 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **30.59** | **350** | P | | **P** | **18 48 01.2** | **+0.6** |
| ARCES | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **31.62** | **63** | P | | **P** | **18 48 10.3** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=264,slow=10,SNR=2.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **42.51** | **242** | P | | **Pn** | **18 49 42.5** | **-0.1** |
| | comp=Z,0.6nm,0.7s,baz=54,slow=6.7,SNR=4.9 | | | | | | | |
| **DAV** | **Davao City** | **82.58** | **87** | LR | | LR | 19 34 46.3 | |
| | comp=Z,264nm,21.3s,baz=172,slow=38 | | | | | | | |
| **PCRV** | **Puerto La Cruz** | **94.11** | **287** | LR | | LR | 19 33 07.8 | |
| | comp=Z,33nm,21.2s,slow=33 | | | | | | | |

*GUC **28** 18:43:13.0±0.6,33.73S×72.23W,h37km±3km, ML3.9*
**ISC 28 18:43:12.9±2.8,33.80S±0.05×72.11W±0.10,h1km±16km, n25,σ1.91/41/36, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.59** | **172** | *e*P | **Pb** | **18 43 26.0** | **-0.1** |
| CHPI | | | | *e*S | **Sb** | **18 43 35.7** | **+0.7** |
| **RCDM** | **Rinconada Maip** | **1.13** | **74** | *e*P | **Pb** | **18 43 33.7** | **-1.4** |
| RCDM | | | | *e*S | **Sg** | **18 43 50.1** | **+1.1** |
| **ROC1** | **El Roble** | **1.23** | **48** | *i* P | **Pn** | **18 43 35.7** | **-1.7** |
| ROC1 | | | | *i* S | **Sn** | **18 43 58.9** | **+4.1** |
| **ROCH** | **El Roble** | **1.23** | **48** | *e*P | **Pn** | **18 43 35.5** | **-2.0** |
| ROCH | | | | *e*S | **Sb** | **18 43 53.0** | **-0.6** |
| ROCH | | | | AML | AML | 18 43 59.6 | |
| | comp=N,3μm,0.3s | | | | | | |
| **ANTU** | **Antumapu** | **1.25** | **80** | *e*P | **Pn** | **18 43 36.5** | **-1.0** |
| ANTU | | | | *e*S | **Sn** | **18 43 54.5** | **-0.5** |
| ANTU | | | | AML | AML | 18 43 55.5 | |
| | comp=N,5μm,0.3s | | | | | | |
| **SAN** | **Santiago** | **1.25** | **74** | *e*P | **Pn** | **18 43 36.4** | **-1.2** |
| SAN | | | | *e*S | **Sn** | **18 43 54.3** | **-0.8** |
| **PCH** | **Pirque** | **1.34** | **83** | *e*P | **Pn** | **18 43 37.8** | **-1.0** |
| PCH | | | | *e*S | **Sg** | **18 43 56.9** | **+1.0** |
| **PEL** | **Peldehue** | **1.36** | **61** | *e*P | **Pn** | **18 43 37.9** | **-1.1** |
| PEL | | | | *e*S | **Sn** | **18 43 56.8** | **-0.9** |
| PEL | | | | AML | AML | 18 44 04.5 | |
| | comp=E,5μm,0.5s | | | | | | |
| **CLCH** | **Cerro Calan** | **1.37** | **73** | *e*P | **Pn** | **18 43 38.3** | **-0.9** |
| CLCH | | | | AML | AML | 18 43 59.6 | |
| | comp=E,2μm,0.3s | | | | | | |
| **NICH** | **Los Niches** | **1.40** | **149** | *e*P | **Pn** | **18 43 39.3** | **-0.2** |
| NICH | | | | *e*S | **Sg** | **18 43 58.6** | **+0.7** |
| **TALC** | **Talca** | **1.64** | **166** | *e*P | **Pn** | **18 43 42.3** | **-0.6** |
| TALC | | | | *e*S | **Sb** | **18 44 04.9** | **-0.2** |
| **AUSP** | **Uspallata** | **2.77** | **56** | *i* P | **Pn** | **18 44 00.0** | **+1.3** |
| AUSP | | | | *i* S | **Sb** | **18 44 39.7** | **+1.7** |
| **ARCO** | **CERRO ARCO** | **2.82** | **71** | *e*P | **Pb** | **18 44 02.1** | **-2.1** |
| ARCO | | | | AML | AML | 18 44 51.9 | |
| | comp=Z,184nm,0.5s | | | | | | |
| **AAGR** | **Agrelo** | **2.83** | **76** | *e*P | **Pb** | **18 44 03.1** | **-1.2** |
| **ASAL** | **Salagasta** | **3.00** | **67** | *i* P | **Pn** | **18 44 03.2** | **+1.7** |
| **RTLS** | **Leoncito** | **3.10** | **51** | *i* P | **Pn** | **18 44 05.5** | **+1.4** |
| RTLS | | | | *e*S | **Sb** | **18 44 49.1** | **+1.9** |
| **RTCV** | **Cerro Valdivia** | **3.57** | **58** | *e*P | **Pn** | **18 44 11.4** | **+1.9** |
| **CFAA** | **Coronel Fontan** | **3.93** | **57** | *e*P | **Pn** | **18 44 15.3** | **+0.9** |
| **RTLL** | **Cerro Villicun** | **3.93** | **52** | *e*P | **Pn** | **18 44 14.8** | **+0.4** |
| **AMOG** | **MOGNA** | **4.18** | **48** | *e*P | **Pn** | **18 44 18.2** | **+0.3** |
| **ACAN** | **Cantantal** | **4.40** | **71** | *e*P | **Pn** | **18 44 21.6** | **+0.7** |
| **AGUA** | **GUANDACOL** | **5.29** | **37** | *e*P | **Pn** | **18 44 32.7** | **-0.4** |
| **ACHE** | **Chepes** | **5.29** | **62** | *e*P | Pn | 18 44 38.2 | +4.9 |
| **VCA** | **Vinchina** | **6.05** | **35** | *e*P | **Pn** | **18 44 42.6** | **-1.1** |
| **TCA** | **Tanti** | **6.80** | **71** | *e*P | **Pn** | **18 44 52.6** | **-1.3** |

*NEIC **28** 18:44:31.1,43.49S×172.18E,h7km,ML4.0(WEL), After WEL.*
*NEIC Felt in central Canterbury.*
**WEL 28 18:44:31.2±0.1,43.49S×172.18E,h7km±1km, ML4.0/21, 6C-4D, Error ellipse: s-maj=0.9km s-min=0.9km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OXZ** | **Oxford** | **0.19** | **328** | ⇓P | Pg | 18 44 34.8 | -0.3 |
| OXZ | | | | S | Sg | 18 44 37.8 | +0.1 |
| **OXZ** | **Oxford** | **0.19** | **328** | Pg | Pg | 18 44 34.8 | -0.3 |
| OXZ | | | | Sg | Sg | 18 44 37.8 | +0.1 |
| **CRLZ** | **Canterbury Las** | **0.33** | **105** | ⇓P | Pg | 18 44 38.1 | +0.4 |
| CRLZ | | | | AML | AML | 18 44 38.5 | |
| CRLZ | | | | S | Sg | 18 44 43.4 | +1.3 |
| **CRLZ** | **Canterbury Las** | **0.33** | **105** | Pg | Pg | 18 44 38.1 | +0.4 |
| CRLZ | | | | Sg | Sg | 18 44 43.4 | +1.3 |
| **MQZ** | **McQueen's Vall** | **0.41** | **122** | ⇓P | Pg | 18 44 39.3 | +0.2 |
| MQZ | | | | S | Sg | 18 44 45.3 | +0.8 |
| MQZ | | | | AML | AML | 18 44 45.9 | |
| **MQZ** | **McQueen's Vall** | **0.41** | **122** | Pg | Pg | 18 44 39.2 | +0.1 |
| MQZ | | | | Sg | Sg | 18 44 45.3 | +0.8 |
| **LTZ** | **Lake Taylor** | **0.71** | **5** | ⇑P* | Pg | 18 44 45.1 | +0.2 |
| LTZ | | | | AML | AML | 18 44 55.2 | |
| LTZ | | | | AML | AML | 18 44 57.1 | |
| **LTZ** | **Lake Taylor** | **0.71** | **5** | ⇑P* | Pg | 18 44 45.1 | +0.2 |
| **RPZ** | **Rata Peaks** | **0.85** | **254** | ⇑P* | Pg | 18 44 47.2 | -0.3 |
| RPZ | | | | AML | AML | 18 45 00.4 | |
| RPZ | | | | AML | AML | 18 45 03.3 | |
| **RPZ** | **Rata Peaks** | **0.85** | **254** | P* | Pg | 18 44 47.2 | -0.3 |
| **WVZ** | **Waitaha Valley** | **1.13** | **291** | ⇑P* | Pg | 18 44 52.1 | -0.7 |
| WVZ | | | | AML | AML | 18 45 14.7 | |
| WVZ | | | | AML | AML | 18 45 15.9 | |
| **WVZ** | **Waitaha Valley** | **1.13** | **291** | P* | Pg | 18 44 52.1 | -0.7 |
| **KHZ** | **Kahutara** | **1.47** | **43** | ⇑PN | Pn | 18 44 56.4 | -1.6 |
| KHZ | | | | AML | AML | 18 45 25.1 | |
| KHZ | | | | AML | AML | 18 45 27.1 | |
| **KHZ** | **Kahutara** | **1.47** | **43** | Pn | Pn | 18 44 56.4 | -1.6 |
| **LBZ** | **Lake Benmore** | **1.70** | **237** | PN | Pn | 18 45 00.0 | -1.2 |
| LBZ | | | | AML | AML | 18 45 25.6 | |
| LBZ | | | | AML | AML | 18 45 25.8 | |
| LBZ | | | | AML | AML | 18 45 27.6 | |
| LBZ | | | | AML | AML | 18 45 27.6 | |
| **LBZ** | **Lake Benmore** | **1.70** | **237** | Pn | Pn | 18 45 00.0 | -1.2 |
| **DSZ** | **Denniston Nort** | **1.76** | **351** | AML | AML | 18 45 27.9 | |
| DSZ | | | | AML | AML | 18 45 27.9 | |
| DSZ | | | | AML | AML | 18 45 31.2 | |
| DSZ | | | | AML | AML | 18 45 31.4 | |
| **THZ** | **Tophouse** | **1.81** | **18** | ⇓PN | Pn | 18 45 01.2 | -1.6 |
| THZ | | | | AML | AML | 18 45 37.0 | |
| THZ | | | | AML | AML | 18 45 38.2 | |
| **THZ** | **Tophouse** | **1.81** | **18** | Pn | Pn | 18 45 01.2 | -1.6 |
| **FOZ** | **Fox Glacier** | **1.81** | **267** | PN | Pn | 18 45 01.5 | -1.2 |
| FOZ | | | | AML | AML | 18 45 24.6 | |
| FOZ | | | | AML | AML | 18 45 24.7 | |
| FOZ | | | | AML | AML | 18 45 31.0 | |
| FOZ | | | | AML | AML | 18 45 31.0 | |
| **FOZ** | **Fox Glacier** | **1.81** | **267** | Pn | Pn | 18 45 01.5 | -1.2 |
| **ODZ** | **Otahua Downs** | **1.91** | **215** | PN | Pn | 18 45 02.3 | -1.8 |
| ODZ | | | | AML | AML | 18 45 07.6 | |
| ODZ | | | | AML | AML | 18 45 32.5 | |
| ODZ | | | | AML | AML | 18 45 36.0 | |
| ODZ | | | | AML | AML | 18 45 39.2 | |
| **ODZ** | **Otahua Downs** | **1.91** | **215** | Pn | Pn | 18 45 02.3 | -1.8 |
| **BSWZ** | **Blackbirch Sta** | **2.17** | **36** | PN | Pn | 18 45 06.5 | -1.2 |
| BSWZ | | | | AML | AML | 18 45 17.1 | |
| BSWZ | | | | AML | AML | 18 45 52.5 | |
| **BSWZ** | **Blackbirch Sta** | **2.17** | **36** | Pn | Pn | 18 45 06.5 | -1.2 |
| **NNZ** | **Nelson** | **2.44** | **22** | ⇑PN | Pn | 18 45 10.5 | -0.9 |
| **NNZ** | **Nelson** | **2.44** | **22** | Pn | Pn | 18 45 10.5 | -0.9 |
| **JCZ** | **Jackson Bay** | **2.54** | **256** | AML | AML | 18 46 02.8 | |
| JCZ | | | | AML | AML | 18 46 02.9 | |
| **WKZ** | **Wanaka** | **2.64** | **238** | AML | AML | 18 45 58.7 | |
| WKZ | | | | AML | AML | 18 46 00.8 | |
| WKZ | | | | AML | AML | 18 46 02.8 | |
| WKZ | | | | AML | AML | 18 46 05.9 | |
| **QRZ** | **Quartz Range** | **2.67** | **6** | AML | AML | 18 45 23.2 | |
| QRZ | | | | AML | AML | 18 45 58.1 | |
| **EAZ** | **Earnscleugh** | **2.70** | **229** | PN | Pn | 18 45 13.3 | -1.6 |
| EAZ | | | | AML | AML | 18 46 00.7 | |
| EAZ | | | | AML | AML | 18 46 07.9 | |
| **EAZ** | **Earnscleugh** | **2.70** | **229** | Pn | Pn | 18 45 13.3 | -1.6 |
| **TUZ** | **Tuapeka** | **3.06** | **215** | PN | Pn | 18 45 18.1 | -1.8 |
| TUZ | | | | AML | AML | 18 46 11.5 | |
| TUZ | | | | AML | AML | 18 46 11.6 | |
| TUZ | | | | AML | AML | 18 46 14.8 | |
| TUZ | | | | AML | AML | 18 46 14.8 | |
| **TUZ** | **Tuapeka** | **3.06** | **215** | Pn | Pn | 18 45 18.1 | -1.8 |
| **CAW** | **Cannon Point** | **3.20** | **43** | AML | AML | 18 45 58.6 | |
| CAW | | | | AML | AML | 18 45 59.6 | |
| **MLZ** | **Mavora Lakes** | **3.42** | **236** | AML | AML | 18 46 24.3 | |
| MLZ | | | | AML | AML | 18 46 28.4 | |
| **SYZ** | **Scrubby Hill** | **3.73** | **214** | AML | AML | 18 46 36.2 | |
| SYZ | | | | AML | AML | 18 46 38.1 | |
| **WHZ** | **Wether Hill Ro** | **3.86** | **230** | AML | AML | 18 46 43.5 | |

**IDC 28 18:55:19.1±3.2,10.28S×167.15E,h0km,mb3.7/3, mb1 4.0/4,mb1mx3.6/28,mbtmp3.9/4,ML3.0/1,MS3.7/2, Ms1 3.7/2,ms1mx2.8/24, Error ellipse: s-maj=67.0km s-min=40.7km az=103.0, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **11.75** | **183** | Pn | Pn | 18 58 09.5 | +1.3 |
| | 0.1nm,0.3s,baz=300,slow=20,SNR=2.2 | | | | | | |
| **AFI** | **Afiamalu** | **20.92** | **102** | LR | LR | 19 06 44.5 | |
| | comp=Z,44nm,20.7s,baz=292,slow=33 | | | | | | |
| **CTA** | **Charters Tower** | **22.38** | **242** | P | P | 19 00 20.1 | +0.9 |
| | 1.6nm,0.5s,baz=60,slow=14,SNR=3.8 | | | | | |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| KHL | Karahalli | 1.99 | 5 | ePn | | Pn | 19 04 21.8 | 0.0 | | | |
| GCAM | G?zelcaml? | 2.14 | 310 | *i* P | | Pn | 19 04 23.8 | +0.2 | | | |
| GCAM | G?zelcaml? | 2.14 | 310 | P | | Pn | 19 04 23.8 | +0.2 | | | |
| KULA | Kula-Manisa | 2.23 | 347 | *e*PN | | Pn | 19 04 25.0 | -0.1 | | | |
| KULA | Kula-Manisa | 2.23 | 347 | *e*Pn | | Pn | 19 04 25.0 | -0.1 | | | |
| SMG | Samos | 2.39 | 306 | *e*Pn | | Pn | 19 04 26.7 | -0.5 | | | |
| SMG | | | | *e*Sn | | Sn | 19 04 55.9 | -1.2 | | | |
| SMG | Samos | 2.39 | 306 | *e*Pn | | Pn | 19 04 26.7 | -0.5 | | | |
| SMG | | | | *e*Sn | | Sn | 19 04 55.9 | -1.2 | | | |
| SHUT | Suhut-Afyon | 2.43 | 24 | *e*PN | | Pn | 19 04 28.1 | +0.2 | | | |
| SHUT | Suhut-Afyon | 2.43 | 24 | *e*Pn | | Pn | 19 04 28.1 | +0.2 | | | |
| IZM | Izmir | 2.62 | 323 | *e*Pn | | Pn | 19 04 30.7 | +0.4 | | | |
| IZM | Izmir | 2.62 | 323 | *e*Pn | | Pn | 19 04 30.7 | +0.4 | | | |
| ZKR | Zakros | 2.78 | 245 | *e*PN | | Pn | 19 04 32.9 | +0.4 | | | |
| ZKR | Zakros | 2.78 | 245 | *e*Pn | | Pn | 19 04 32.9 | +0.4 | | | |
| AKS | Akhisar | 2.80 | 336 | *e*PN | | Pn | 19 04 33.3 | +0.5 | | | |
| AKS | Akhisar | 2.80 | 336 | *e*Pn | | Pn | 19 04 33.3 | +0.5 | | | |
| KONT | Konya--Tatoy | 2.93 | 56 | *e*PN | | Pn | 19 04 34.7 | 0.0 | | | |
| KONT | Konya--Tatoy | 2.93 | 56 | *e*Pn | | Pn | 19 04 34.7 | 0.0 | | | |
| APE | Apeiranthos | 3.11 | 285 | *e*PN | | Pn | 19 04 37.6 | +0.5 | | | |
| APE | Apeiranthos | 3.11 | 285 | *e*PN | | Pn | 19 04 37.1 | 0.0 | | | |
| APE | Apeiranthos | 3.11 | 285 | *e*Pn | | Pn | 19 04 37.1 | 0.0 | | | |
| TVSB | Tavsanli | 3.11 | 2 | *e*PN | | Pn | 19 04 38.0 | +0.8 | | | |
| TVSB | Tavsanli | 3.11 | 2 | *e*Pn | | Pn | 19 04 38.0 | +0.8 | | | |
| NPS | Neapolis | 3.17 | 251 | *e*PN | | Pn | 19 04 37.2 | -0.8 | | | |
| NPS | Neapolis | 3.17 | 251 | *e*Pn | | Pn | 19 04 37.2 | -0.8 | | | |
| LAST | Lasithi | 3.31 | 250 | *e*PN | | Pn | 19 04 39.3 | -0.6 | | | |
| LAST | | | | *e*SN | | Sn | 19 05 19.1 | -0.8 | | | |
| LAST | Lasithi | 3.31 | 250 | *e*Pn | | Pn | 19 04 39.3 | -0.6 | | | |
| LAST | | | | *e*Sn | | Sn | 19 05 19.1 | -0.8 | | | |
| IDI | Anoyia | 3.72 | 255 | *e*PN | | Pn | 19 04 44.5 | -1.1 | | | |
| IDI | Anoyia | 3.72 | 255 | *e*Pn | | Pn | 19 04 44.5 | -1.1 | | | |
| SIVA | Sivas | 3.88 | 251 | *e*PN | | Pn | 19 04 48.5 | +0.9 | | | |
| SIVA | Sivas | 3.88 | 251 | *e*Pn | | Pn | 19 04 48.5 | +0.9 | | | |
| VAM | Vamos | 4.24 | 259 | *e*PN | | Pn | 19 04 54.2 | +1.7 | | | |
| VAM | Vamos | 4.24 | 259 | *e*Pn | | Pn | 19 04 54.2 | +1.7 | | | |
| IMMV | Iera Moni Meta | 4.40 | 260 | *e*PN | | Pn | 19 04 55.5 | +0.8 | | | |
| IMMV | Iera Moni Meta | 4.40 | 260 | *e*Pn | | Pn | 19 04 55.5 | +0.8 | | | |

*SJA* ***28*** *19:11:32.4±1.1,33.60S×73.13W,h10km,ML3.4*
*GUC* ***28*** *19:11:42.4±0.4,33.97S×72.01W,h13km±6km,ML3.5*

**ISC 28 19:11:42.1**±1.8,**33.93S**±0.05×**72.06W**±0.10,**h13**km±11km,
**n20,**σ1**866**/34,**Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.47** | **174** | *e*P | **Pg** | **19 11 51.2** | **0.0** |
| CHPI | | | | *e*S | **Sg** | **19 11 57.9** | **+0.3** |
| **RCDM** | **Rinconada Maip** | **1.13** | **68** | *e*P | **Pb** | **19 12 03.2** | **-0.3** |
| **ANTU** | **Antumapu** | **1.24** | **74** | *e*P | **Pb** | **19 12 05.5** | **+0.2** |
| ANTU | | | | *e*S | **Sg** | **19 12 22.8** | **+0.8** |
| ANTU | | | | AML | AML | 19 12 25.5 | |
| | comp=E,1μm,0.4s | | | | | | |
| **SAN** | **Santiago** | **1.26** | **68** | *e*P | **Pb** | **19 12 05.8** | **+0.1** |
| SAN | | | | *e*S | **Sg** | **19 12 23.3** | **+0.7** |
| **NICH** | **Los Niches** | **1.27** | **148** | *e*P | **Pn** | **19 12 05.5** | **-0.1** |
| NICH | | | | *e*S | **Sn** | **19 12 22.7** | **+0.1** |
| **ROC1** | **El Roble** | **1.29** | **43** | *i* P | **Pn** | **19 12 06.0** | **+0.1** |
| ROC1 | | | | *e*S | **Sb** | **19 12 23.2** | **+0.4** |
| **CLCH** | **Cerro Calan** | **1.37** | **68** | *e*P | **Pb** | **19 12 07.6** | **+0.1** |
| CLCH | | | | *e*S | **Sg** | **19 12 26.9** | **+0.5** |
| CLCH | | | | AML | AML | 19 12 34.8 | |
| | comp=E,989nm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **1.39** | **56** | *e*P | **Pb** | **19 12 07.9** | **+0.1** |
| PEL | | | | *e*S | **Sg** | **19 12 27.3** | **+0.6** |
| PEL | | | | AML | AML | 19 12 33.8 | |
| | comp=E,3μm,0.5s | | | | | | |
| **TALC** | **Talca** | **1.51** | **167** | *e*P | **Pb** | **19 12 09.4** | **-0.5** |
| **AUSP** | **Uspallata** | **2.81** | **54** | *i* P | **Pn** | **19 12 29.6** | **+2.6** |
| AUSP | | | | *e*S | **Sg** | **19 13 10.6** | **-1.8** |
| **AAGR** | **Agrelo** | **2.83** | **74** | *i* P | **Pb** | **19 12 31.7** | **-0.8** |
| **ARCO** | **CERRO ARCO** | **2.83** | **68** | *i* P | **Pb** | **19 12 31.5** | **-1.1** |
| ARCO | | | | *i* S | **Sg** | **19 13 15.0** | **+2.0** |
| ARCO | | | | AML | AML | 19 13 17.4 | |
| | comp=Z,69nm,0.6s | | | | | | |
| **ASAL** | **Salagasta** | **3.01** | **65** | *i* P | **Pb** | **19 12 32.8** | **-2.8** |
| ASAL | | | | *i* S | **Sg** | **19 13 19.1** | **+0.3** |
| **RTLS** | **Leoncito** | **3.15** | **48** | *i* P | **Pn** | **19 12 33.9** | **+2.3** |
| RTLS | | | | *e*S | **Sg** | **19 13 23.2** | **0.0** |
| **RTCV** | **Cerro Valdivia** | **3.60** | **56** | *e*P | **Pb** | **19 12 44.8** | **-0.9** |
| RTCV | | | | *e*S | **Sg** | **19 13 34.3** | **-3.5** |
| **CFAA** | **Coronel Fontan** | **3.96** | **55** | *e*P | **Pn** | **19 12 45.4** | **+2.7** |
| **RTLL** | **Cerro Villicun** | **3.98** | **50** | *e*P | **Pn** | **19 12 44.8** | **+1.9** |
| RTLL | | | | *e*S | **Sb** | **19 13 37.1** | **-3.1** |
| **AMOG** | **MOGNA** | **4.24** | **46** | *e*P | **Pn** | **19 12 48.0** | **+1.6** |
| **ACAN** | **Cantantal** | **4.41** | **69** | *e*P | **Pn** | **19 12 51.7** | **+3.0** |
| ACAN | | | | *e*S | **Sb** | **19 13 50.7** | **-1.8** |
| **AGUA** | **GUANDACOL** | **5.37** | **35** | *e*P | **Pn** | **19 13 03.5** | **+1.5** |

**IDC 28 19:23:20.2**±3.3,**3.64S×99.28E,h0km,mb3.4/5,mb1 3.5/5,**
**mb1mx3.4/34,mbtmp3.4/5,Error ellipse:**
**s-maj=134.4km s-min=25.4km az=60.0,Southwest of**
**Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.96** | **359** | P | P | 19 28 16.2 | +0.4 |
| | 0.3nm,0.4s,baz=186,slow=9.8,SNR=3.8 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.95** | **260** | T | T | 19 58 31.3 | |
| | baz=82 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.95** | **260** | T | T | 19 58 30.4 | |
| | baz=82 | | | | | | |
| **H08S1** | **Diego Garcia H** | **26.97** | **260** | T | T | 19 58 31.0 | |
| | baz=82 | | | | | | |
| **ASAR** | **Alice Springs** | **38.90** | **124** | P | P | 19 30 47.7 | -0.3 |
| | 0.4nm,1.0s,baz=306,slow=7.9,SNR=3.0 | | | | | | |
| **SONM** | **Songino Array** | **51.64** | **6** | P | P | 19 32 28.3 | -0.5 |
| | 0.4nm,0.8s,baz=176,slow=4.3,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.42** | **345** | P | P | 19 32 34.4 | -0.1 |
| | 0.5nm,0.7s,baz=160,slow=8.8,SNR=3.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.65** | **350** | P | P | 19 33 18.8 | -0.3 |
| | 0.5nm,0.6s,baz=181,slow=6.9,SNR=3.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.43** | **38** | PKPbc | PKPbc | 19 43 03.9 | -0.3 |
| | 0.2nm,0.6s,baz=315,slow=3.5,SNR=2.6 | | | | | | |

*NEIC* ***28*** *19:32:44.5±1.7,6.11S×147.61E,h46km±17km,mb4.7/5,*
*Error ellipse: s-maj=14.7km s-min=12.1km az=137.0*
*ISCJB* ***28*** *19:32:46.4±0.5,6.22S±0.04×147.52E±0.08,h77km,*
*mb4.2/14,Error ellipse: s-maj=10.8km s-min=5.7km*
*az=169.6*
*IDC* ***28*** *19:32:46.1±2.2,6.16S×147.57E,h58km±18km,mb3.8/11,*
*mb1 4.0/15,mb1mx3.8/36,mbtmp4.1/15,ML4.0/3,MS3.7/2,*
*Ms1 3.7/2,ms1mx3.1/14,Error ellipse: s-maj=27.4km*
*s-min=15.0km az=93.0*
*AUST* ***28*** *19:32:50.0±0.0,6.47S×147.65E,h82km,Error ellipse:*
*s-maj=0.9km s-min=0.7km az=227.0*
*DJA* ***28*** *19:32:55.4±0.7,7°S±5°×147°E±°,h89km±10km,M4.6/15,*
*mb4.5/15,mB5.0/2,MLv4.6/1,Mw(mB)4.3/2*

**ISC 28 19:32:48.2**±0.6,**6.25S**±0.06×**147.6E**±0.1,**h77**km,**n58,**
σ1**330**/58,**mb4.2**/14,**Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **3.17** | **187** | P | **Pn** | **19 33 34.9** | **-1.0** |
| | 18nm,0.3s,baz=314,slow=3.8,SNR=71 | | | | | | |
| PMG | | | | S | **Sn** | **19 34 11.5** | **-1.0** |
| | 22nm,0.3s,baz=194,slow=18,SNR=3.0 | | | | | | |
| **PMG** | **Port Moresby** | **3.17** | **187** | P | **Pn** | **19 33 34.8** | **-1.0** |
| | baz=3.0,SNR=31 | | | | | | |
| **PMG** | **Port Moresby** | **3.17** | **187** | *e*Pn | **Pn** | **19 33 34.5** | **-1.3** |
| PMG | | | | S | **Sn** | **19 34 11.5** | **-1.0** |
| **MANU** | **Manus Island** | **4.18** | **357** | P | Pn | 19 33 56.8 | +7.2 |
| | baz=4.4,SNR=3.6 | | | | | | |
| **RABL** | **Rabaul** | **5.02** | **66** | P | Pn | 19 34 05.6 | +4.4 |
| | baz=5.0,SNR=4.4 | | | | | | |
| **COEN** | **Coen** | **8.79** | **209** | P | **Pn** | **19 34 52.1** | **-0.6** |
| | baz=8.7,SNR=26 | | | | | | |
| **MTSU** | **Mount Surprise** | **12.23** | **195** | P | **Pn** | **19 35 39.5** | **-0.1** |
| | baz=12,SNR=6.2 | | | | | | |
| **CTA** | **Charters Tower** | **13.82** | **185** | P | **Pn** | **19 36 01.7** | **+0.9** |
| | 0.2nm,0.3s,baz=359,slow=12,SNR=4.3 | | | | | | |
| **FAKI** | **Fak Fak** | **15.61** | **282** | P | **P** | **19 36 27.2** | **+0.6** |
| | baz=16,SNR=3.9 | | | | | | |
| **QIS** | **Mount Isa** | **16.18** | **208** | P | **P** | **19 36 32.9** | **0.0** |
| | baz=16,SNR=5.4 | | | | | | |
| **SIJI** | **Sorong** | **17.11** | **288** | P | **Pn** | **19 36 42.7** | **+0.2** |
| | 0.9nm,0.3s,baz=90,slow=15,SNR=4.5 | | | | | | |
| **SWI** | **Sorong** | **17.11** | **288** | P | **Pn** | **19 36 42.4** | **-0.2** |
| | 20nm,1.1s,1μm | | | | | | |
| **MTN** | **Manton Dam** | **17.46** | **247** | P | **P** | **19 36 50.8** | **+3.7** |
| | baz=18,SNR=6.1 | | | | | | |
| **WRAB** | **Tennant Creek** | **18.70** | **222** | *e*P | **P** | **19 36 59.3** | **-1.4** |
| | 13nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **18.71** | **222** | P | **P** | **19 36 59.5** | **-1.3** |
| | 0.8nm,0.3s,baz=50,slow=11,SNR=38 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 44 57.6** | **+2.5** |
| | 0.0nm,0.3s,baz=43,slow=2.5,SNR=4.0 | | | | | | |
| **EIDS** | **Eidsvold** | **19.32** | **170** | P | **Pn** | **19 37 09.6** | **+0.5** |
| | baz=19,SNR=5.6 | | | | | | |
| **EIDS** | **Eidsvold** | **19.32** | **170** | *e*P | **Pn** | **19 37 08.3** | **-0.8** |
| | 14nm,0.8s | | | | | | |
| **AAI** | **Ambon** | **19.45** | **277** | P | **P** | **19 37 09.1** | **+0.2** |
| | baz=20,SNR=5.3 | | | | | | |
| **AAI** | **Ambon** | **19.45** | **277** | P | **P** | **19 37 08.7** | **-0.2** |
| | 37nm,0.8s | | | | | | |
| **RMQ** | **Roma** | **20.16** | **177** | P | Pn | 19 37 18.1 | -0.9 |
| | baz=20,SNR=11 | | | | | | |
| **QLP** | **Quilpie** | **20.47** | **189** | P | **P** | **19 37 20.4** | **+0.6** |
| | baz=20,SNR=10 | | | | | | |
| **KNRA** | **Kununurra** | **20.68** | **242** | P | **P** | **19 37 21.4** | **-0.7** |
| | baz=21,SNR=5.8 | | | | | | |
| **ASAR** | **Alice Springs** | **21.74** | **216** | P | **P** | **19 37 33.0** | **-0.4** |
| | 6.3nm,0.5s,baz=54,slow=8.1,SNR=98 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 45 04.7** | **+2.4** |
| | 1.5nm,0.8s,baz=40,slow=2.4,SNR=5.9 | | | | | | |
| **SOEI** | **Soe** | **23.32** | **260** | P | **P** | **19 37 50.7** | **+0.6** |
| | baz=23,SNR=3.8 | | | | | | |
| **BATI** | **Baumata** | **23.97** | **259** | P | **P** | **19 37 56.7** | **+1.0** |
| | 13nm,0.6s,baz=109,slow=3.2,SNR=7.6 | | | | | | |
| **BATI** | **Baumata** | **23.97** | **259** | P | **P** | **19 37 55.4** | **-0.4** |
| | 13nm,0.7s | | | | | | |
| **DZM** | **Mont Dzumac** | **24.09** | **133** | LR | LR | 19 46 01.7 | |
| | comp=Z,251nm,21.3s,baz=5.0,slow=33 | | | | | | |
| **ARMA** | **Armidale** | **24.35** | **171** | P | **P** | **19 37 59.9** | **+0.8** |
| | baz=24,SNR=12 | | | | | | |
| **ARMA** | **Armidale** | **24.35** | **171** | *e*P | **P** | **19 37 59.5** | **+0.3** |
| | 34nm,1.2s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.22** | **184** | P | **P** | **19 38 07.8** | **+0.9** |
| | baz=25,SNR=11 | | | | | | |
| **LUWI** | **Luwuk** | **25.26** | **281** | P | **P** | **19 38 07.5** | **0.0** |
| | baz=25,SNR=7.0 | | | | | | |
| **LUWI** | **Luwuk** | **25.26** | **281** | P | **P** | **19 38 06.6** | **-0.9** |
| | 53nm,1.1s | | | | | | |
| **LUWI** | **Luwuk** | **25.26** | **281** | *e*P | **P** | **19 38 06.6** | **-0.9** |
| | 33nm,0.8s | | | | | | |
| **WRKA** | **Warakurna** | **26.26** | **223** | P | **P** | **19 38 15.4** | **-1.0** |
| | baz=26,SNR=15 | | | | | | |
| **MGCD** | **Mangrove Creek** | **27.03** | **173** | P | **P** | **19 38 26.9** | **+3.6** |
| | baz=27,SNR=6.0 | | | | | | |
| **LHI** | **Lord Howe Isla** | **27.36** | **158** | P | **P** | **19 38 25.8** | **-0.4** |
| | baz=27,SNR=3.4 | | | | | | |
| **YNG** | **Young** | **27.93** | **179** | P | **P** | **19 38 35.5** | **+4.3** |
| | baz=28,SNR=10 | | | | | | |
| **PCI** | **Palu** | **28.16** | **280** | P | **P** | **19 38 34.4** | **+0.8** |
| **HTT** | **Hallett** | **28.21** | **195** | P | P | 19 38 27.1 | -6.8 |
| | baz=28,SNR=6.6 | | | | | | |
| **MBWA** | **Marble Bar** | **30.75** | **238** | *e*P | **P** | **19 38 56.2** | **-0.2** |
| **MEEK** | **Meekatharra** | **34.22** | **230** | P | **P** | **19 39 26.7** | **-0.1** |
| | baz=34,SNR=8.2 | | | | | | |
| **KLBR** | **Kellerberrin** | **37.58** | **224** | P | **P** | **19 39 54.8** | **-0.6** |
| | baz=38,SNR=5.3 | | | | | | |
| **CISI** | **Cisompet, Garu** | **39.46** | **266** | P | **P** | **19 40 11.7** | **+0.2** |
| | baz=40,SNR=4.2 | | | | | | |
| **KSRS** | **Korea Array** | **47.18** | **339** | P | **P** | **19 41 12.8** | **-0.4** |
| | 0.6nm,0.5s,baz=150,slow=7.7,SNR=4.1 | | | | | | |
| **KSAR** | **Wonju Array Be** | **47.18** | **339** | P | **P** | **19 41 12.8** | **-0.4** |
| **GSI** | **Gunungsitoli** | **50.45** | **277** | *e*P | **P** | **19 41 37.6** | **-1.1** |
| | 14nm,0.4s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **52.14** | **346** | P | **P** | **19 41 50.8** | **+0.1** |
| | 0.9nm,0.5s,baz=141,slow=6.4,SNR=5.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **53.85** | **298** | P | **P** | **19 42 03.7** | **-0.1** |
| | 0.9nm,0.9s,baz=126,slow=6.1,SNR=6.0 | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.75** | **7** | P | **P** | **19 42 46.0** | **+1.1** |
| | 5.8nm,1.0s,baz=173,slow=9.0,SNR=2.6 | | | | | | |
| **SONM** | **Songino Array** | **64.89** | **331** | P | **P** | **19 43 19.5** | **0.0** |
| | 1.0nm,0.8s,baz=151,slow=3.4,SNR=7.5 | | | | | | |
| **VNDA** | **Vanda** | **71.64** | **177** | P | **P** | **19 44 02.1** | **+1.0** |
| | 0.9nm,0.6s,baz=336,slow=6.5,SNR=9.7 | | | | | | |
| VNDA | | | | LR | LR | 20 14 28.7 | |
| | comp=Z,34nm,18.7s,baz=338,slow=35 | | | | | | |
| **MKAR** | **Makanchi Array** | **78.04** | **320** | P | **P** | **19 44 37.5** | **-1.1** |
| | 0.4nm,0.5s,baz=97,slow=7.4,SNR=6.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **79.51** | **328** | P | **P** | **19 44 44.3** | **-2.1** |
| | 3.0nm,0.7s,baz=114,slow=5.9,SNR=9.4 | | | | | | |
| **ILAR** | **Eielson Array** | **85.49** | **23** | P | **P** | **19 45 15.3** | **-2.0** |
| | 0.8nm,0.8s,baz=245,slow=5.5,SNR=7.5 | | | | | | |
| **GERES** | **GERESS Array B** | **122.42** | **326** | PKP | **PKPdf** | **19 51 34.0** | **-0.9** |
| | 0.3nm,0.5s,baz=11,slow=2.7,SNR=3.7 | | | | | | |
| **LPAZ** | **La Paz** | **138.19** | **123** | PKP | **PKPdf** | **19 52 07.8** | **+1.5** |
| | 0.8nm,0.6s,baz=333,slow=4.5,SNR=3.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.69** | **284** | PKPbc | **PKPdf** | **19 52 19.0** | **+0.1** |
| | 5.7nm,0.6s,baz=72,slow=3.8,SNR=72 | | | | | | |
| **DBIC** | **Dimbokro** | **152.58** | **272** | PKPbc | **PKPbc** | **19 52 37.3** | **+0.3** |
| | 5.3nm,1.0s,baz=110,slow=5.4,SNR=4.3 | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **19 52 48.0** | **+0.2** |
| | 5.4nm,0.8s,baz=46,slow=6.2,SNR=3.0 | | | | | | |

*ISCJB* ***28*** *19:33:50.5±0.4,5.48S±0.04×153.82E±0.06,h35km,*
*mb4.6/27,MS3.5/8,Error ellipse: s-maj=8.5km*
*s-min=6.1km az=6.8*
*NEIC* ***28*** *19:33:51.7±0.4,5.43S×153.94E,h35km,mb4.8/11,Error*
*ellipse: s-maj=10.9km s-min=7.2km az=90.0*
*AUST* ***28*** *19:33:53.9±1.2,5.41S×153.76E,h56km,Error ellipse:*
*s-maj=1.4km s-min=1.0km az=258.0*
*IDC* ***28*** *19:33:56.2±0.8,5.52S×153.81E,h74km±7km,mb4.3/21,*
*mb1 4.4/24,mb1mx4.3/37,mbtmp4.6/24,MS3.6/11,*
*Ms1 3.6/11,ms1mx3.6/14,Error ellipse: s-maj=14.7km*
*s-min=10.9km az=75.0*

**ISC 28 19:33:51.7**±0.5,**5.46S**±0.07×**153.90E**±0.09,**h35**km,**n80,**
σ1**822**/72,**mb4.7**/27,**MS3.5**/8,**New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **7.18** | **124** | P | Pn | 19 35 40.4 | +6.1 |
| | 10nm,0.3s,baz=213,slow=4.0,SNR=16 | | | | | | |
| HNR | | | | S | Sn | 19 37 08.2 | +13 |
| | 18nm,0.3s,baz=236,slow=23,SNR=6.2 | | | | | | |
| HNR | | | | LR | LR | 19 38 47.2 | |
| | comp=Z,845nm,18.8s,baz=245,slow=40 | | | | | | |
| **HNR** | **Honiara** | **7.18** | **124** | *e*P | Pn | 19 35 40.0 | +5.7 |
| HNR | | | | *e*S | Sn | 19 37 03.0 | +8.3 |
| **HNR** | **Honiara** | **7.18** | **124** | *e*Pn | Pn | 19 35 39.9 | +5.6 |
| | 263nm,0.8s | | | | | | |
| **PMG** | **Port Moresby** | **7.75** | **239** | P | **Pn** | **19 35 45.0** | **+2.9** |
| | 32nm,0.3s,baz=33,slow=8.1,SNR=5.6 | | | | | | |
| PMG | | | | S | **Sn** | **19 37 06.8** | **-1.7** |
| | 12nm,0.3s,baz=43,slow=17,SNR=3.8 | | | | | | |
| PMG | | | | LR | LR | 19 38 44.3 | |
| | comp=Z,846nm,22.0s,baz=100,slow=38 | | | | | | |
| **MTSU** | **Mount Surprise** | **15.69** | **216** | P | **P** | **19 37 32.9** | **-1.1** |
| | baz=16,SNR=22 | | | | | | |
| **CTA** | **Charters Tower** | **16.33** | **206** | P | **Pn** | **19 37 39.5** | **+1.0** |
| | 1.2nm,0.3s,baz=25,slow=13,SNR=18 | | | | | | |
| CTA | | | | LR | LR | 19 42 51.7 | |
| | comp=Z,420nm,20.6s,baz=38,slow=33 | | | | | | |
| **CTAO** | **Charters Tower** | **16.33** | **206** | *e*P | **Pn** | **19 37 39.4** | **+1.0** |
| | 52nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **19.98** | **187** | P | **P** | **19 38 22.5** | **+1.3** |
| | baz=20,SNR=7.0 | | | | | | |
| **EIDS** | **Eidsvold** | **19.98** | **187** | *e*P | **P** | **19 38 22.2** | **+1.0** |
| | 51nm,1.3s | | | | | | |
| **QIS** | **Mount Isa** | **20.44** | **221** | P | **P** | **19 38 26.4** | **+0.1** |
| | baz=20,SNR=27 | | | | | | |
| **DZM** | **Mont Dzumac** | **20.50** | **145** | *e*P | **P** | **19 38 28.1** | **+1.2** |
| | 113nm,0.9s | | | | | | |
| DZM | | | | *e*LR | LR | 19 43 23.1 | |
| | 422nm,23.9s | | | | | | |
| **DZM** | **Mont Dzumac** | **20.50** | **145** | P | Pn | 19 38 28.2 | -1.1 |
| | 45nm,0.5s,baz=180,slow=3.4,SNR=80 | | | | | | |
| **RMQ** | **Roma** | **21.48** | **193** | P | **P** | **19 38 38.4** | **+1.0** |
| | baz=22,SNR=5.9 | | | | | | |
| **KDU** | **Kakadu** | **22.33** | **250** | P | **P** | **19 38 46.0** | **-0.6** |
| | baz=22,SNR=8.6 | | | | | | |
| **QLP** | **Quilpie** | **22.94** | **203** | P | **P** | **19 38 53.0** | **0.0** |
| | baz=23,SNR=6.0 | | | | | | |
| **SIJI** | **Sorong** | **23.05** | **281** | P | **P** | **19 38 53.9** | **-0.3** |
| | 14nm,0.7s,baz=71,slow=13,SNR=6.9 | | | | | | |
| **SWI** | **Sorong** | **23.05** | **281** | P | **P** | **19 38 55.5** | **+1.3** |
| | baz=23,SNR=3.1 | | | | | | |
| **MTN** | **Manton Dam** | **23.62** | **250** | P | **P** | **19 39 01.0** | **+1.2** |
| | baz=24,SNR=4.0 | | | | | | |
| **WRAB** | **Tennant Creek** | **23.84** | **231** | *e*P | **P** | **19 39 01.1** | **-0.8** |
| **WRA** | **Warramunga Arr** | **23.86** | **231** | P | **P** | **19 39 01.2** | **-0.8** |
| | 18nm,0.8s,baz=55,slow=9.6,SNR=32 | | | | | | |
| WRA | | | | PcP | **PcP** | **19 42 44.3** | **-0.4** |
| | 3.5nm,0.6s,baz=57,slow=2.3,SNR=8.5 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 46 15.3** | **-5.3** |
| | 0.9nm,0.7s,baz=54,slow=2.9,SNR=3.2 | | | | | | |
| WRA | | | | LR | LR | 19 49 48.1 | |
| | comp=Z,186nm,18.0s,baz=45,slow=40 | | | | | | |
| **ARMA** | **Armidale** | **24.92** | **185** | P | **P** | **19 39 12.9** | **+1.2** |
| | baz=25,SNR=9.5 | | | | | | |
| **ASAR** | **Alice Springs** | **26.43** | **225** | P | **P** | **19 39 24.9** | **-0.5** |
| | 20nm,0.9s,baz=58,slow=9.3,SNR=15 | | | | | | |
| ASAR | | | | PcP | **PcP** | **19 42 50.2** | **-0.2** |
| | 3.9nm,0.5s,baz=66,slow=2.4,SNR=13 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 46 23.4** | **-4.4** |
| | 1.0nm,0.8s,baz=42,slow=2.8,SNR=5.4 | | | | | | |
| ASAR | | | | LR | LR | 19 49 35.0 | |
| | comp=Z,267nm,20.9s,baz=93,slow=36 | | | | | | |
| **KNRA** | **Kununurra** | **26.68** | **246** | P | **P** | **19 39 27.6** | **-0.1** |
| | baz=27,SNR=6.6 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **26.94** | **28** | T | T | 20 07 51.8 | |
| | baz=208,slow=76,SNR=33 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **26.94** | **28** | T | T | 20 07 47.0 | |
| | baz=208,slow=76,SNR=203 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **26.95** | **28** | T | T | 20 07 43.6 | |
| | baz=208,slow=76,SNR=32 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **27.06** | **196** | P | **P** | **19 39 31.1** | **+0.1** |
| | baz=27,SNR=6.0 | | | | | | |
| **BATI** | **Baumata** | **30.31** | **259** | P | **P** | **19 40 00.6** | **+0.4** |
| | 19nm,0.7s,baz=137,slow=3.6,SNR=5.2 | | | | | | |
| **DAV** | **Davao City (W)** | **30.88** | **293** | LR | LR | 19 50 58.4 | |
| | comp=Z,106nm,20.7s,baz=66,slow=33 | | | | | | |
| **HTT** | **Hallett** | **31.12** | **205** | P | P | 19 40 00.0 | -7.1 |
| | baz=31,SNR=5.1 | | | | | | |
| **WRKA** | **Warakurna** | **31.33** | **229** | P | **P** | **19 40 08.0** | **-1.0** |
| | baz=31,SNR=9.1 | | | | | | |
| **LUWI** | **Luwuk** | **31.37** | **277** | P | P | 19 40 05.9 | -3.6 |
| | baz=31,SNR=4.0 | | | | | | |
| **ARPS** | **Mount Arapiles** | **33.06** | **198** | P | **P** | **19 40 24.2** | **+0.1** |
| | baz=33,SNR=5.3 | | | | | | |
| **KAPI** | **Kappang** | **34.00** | **269** | P | **P** | **19 40 31.9** | **-0.6** |
| | 20nm,1.1s,baz=102,slow=3.9,SNR=7.2 | | | | | | |
| **KAPI** | **Kappang** | **34.00** | **269** | *e*P | **P** | **19 40 32.6** | **0.0** |
| | 21nm,1.3s | | | | | | |
| **URZ** | **Urewera** | **38.88** | **150** | P | **P** | **19 41 14.4** | **+0.5** |
| | 9.8nm,0.4s,baz=249,slow=1.9,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **38.88** | **150** | *e*P | **P** | **19 41 14.3** | **+0.5** |
| | 12nm,0.5s | | | | | | |
| **MEEK** | **Meekatharra** | **39.69** | **234** | P | **P** | **19 41 20.0** | **-0.8** |
| | baz=40,SNR=4.5 | | | | | | |
| **RPZ** | **Rata Peaks** | **40.99** | **161** | P | **P** | **19 41 31.6** | **+0.3** |
| | 4.4nm,0.5s,baz=308,slow=4.2,SNR=5.2 | | | | | | |
| **KLBR** | **Kellerberrin** | **42.66** | **228** | P | **P** | **19 41 43.9** | **-1.3** |
| | baz=43,SNR=8.7 | | | | | | |
| **MORW** | **Morawa** | **42.80** | **232** | P | **P** | **19 41 45.4** | **-0.9** |
| | baz=43,SNR=7.9 | | | | | | |
| **BLDU** | **Balliduu** | **42.98** | **230** | P | **P** | **19 41 46.7** | **-1.0** |
| | baz=43,SNR=7.3 | | | | | | |
| **JNU** | **Nakatsue** | **44.15** | **332** | P | **P** | **19 41 57.1** | **0.0** |
| | 13nm,0.8s,baz=158,slow=8.4,SNR=3.7 | | | | | | |
| **MJAR** | **Matsushiro Ant** | **44.29** | **342** | LR | LR | 19 58 49.9 | |
| | comp=Z,29nm,20.5s,baz=175,slow=34 | | | | | | |
| **KSRS** | **Korea Array** | **49.08** | **333** | P | **P** | **19 42 35.5** | **-0.1** |
| | 1.6nm,0.6s,baz=143,slow=6.8,SNR=6.2 | | | | | | |
| **KSAR** | **Wonju Array Be** | **49.09** | **332** | P | **P** | **19 42 35.5** | **-0.2** |
| **ASAJ** | **Asahikawa** | **50.39** | **349** | P | **P** | **19 42 46.0** | **+0.6** |
| | 4.1nm,0.7s,baz=148,slow=15,SNR=2.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **53.23** | **340** | P | **P** | **19 43 07.0** | **+0.4** |
| | 3.8nm,0.9s,baz=184,slow=8.6,SNR=6.5 | | | | | | |
| USRK | | | | LR | LR | 20 02 10.2 | |
| | comp=Z,29nm,21.6s,baz=146,slow=32 | | | | | | |
| **PPT** | **Papeete** | **56.49** | **107** | LR | LR | 20 06 05.3 | |
| | comp=Z,28nm,18.4s,baz=356,slow=34 | | | | | | |
| **PPT2** | **Papeete2** | **56.49** | **107** | *e*LR | LR | 20 00 29.2 | |
| | 12nm,28.2s | | | | | | |
| **PETK** | **Petropavlovsk-** | **58.43** | **3** | P | **P** | **19 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| SCPH | | | | *e*S | Sg | 20 24 26.3 | -0.9 | | |
| **BUTP** | **Butuan** | **2.20** | **179** | *e*P | Pn | 20 24 19.2 | +1.5 | | |
| **PVCP** | **Virac** | **2.78** | **330** | *e*P | Pn | 20 24 28.1 | +2.4 | | |
| PVCP | | | | *e*S | Sn | 20 24 57.4 | -1.6 | | |

*THE **28** 20:28:21.6, 35°.74N × 22°.15E, h12$^{km}_{\pm}$3$^{km}$, ML3.0/3, Error ellipse: s-maj=3.8km s-min=1.3km az=141.0*
*ATH **28** 20:28:22.6, 35°.73N × 22°.23E, h42$^{km}_{\pm}$10$^{km}$, MD3.5/20*
*CSEM **28** 20:28:24.1±0.6, 35°.75N × 22°.28E, h30$^{km}$, MD3.5, Error ellipse: s-maj=15.1km s-min=5.4km az=43.0*

**ISC 28 20:28:24.0**±1.9, **35°.76N**±0°.07 × **22°.25E**±0°.07, **h29**$^{km}_{\pm}$14$^{km}$, **n70**, σ1§**00**/84, **Central Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **KYTH** | **Kithira** | **0.82** | **51** | *e*P | | **Pb** | **20 28 38.8** | **-1.0** |
| **KYTH** | **Kithira** | **0.82** | **51** | P | | **Pb** | **20 28 38.8** | **-1.0** |
| **KYTH** | **Kithira** | **0.82** | **51** | *e*P | | **Pb** | **20 28 38.8** | **-1.0** |
| **ANKY** | **Antikythira Is** | **0.86** | **83** | *e*P | | **Pn** | **20 28 40.5** | **+0.3** |
| ANKY | | | | *e*S | | **Sb** | **20 28 52.7** | **+1.1** |
| **ANKY** | **Antikythira Is** | **0.86** | **83** | P | | **Pn** | **20 28 40.3** | **+0.1** |
| ANKY | | | | S | | **Sb** | **20 28 52.7** | **+1.1** |
| **ANKY** | **Antikythira Is** | **0.86** | **83** | *e*P | | **Pn** | **20 28 40.5** | **+0.3** |
| ANKY | | | | *e*S | | **Sb** | **20 28 52.7** | **+1.1** |
| **DYR** | **Agios Nikonas** | **1.00** | **4** | *e*P | | **Pn** | **20 28 40.8** | **-1.4** |
| **DYR** | **Agios Nikonas** | **1.00** | **4** | P | | **Pn** | **20 28 40.8** | **-1.4** |
| DYR | | | | S | | **Sn** | **20 28 55.1** | **-0.3** |
| **DYR** | **Agios Nikonas** | **1.00** | **4** | *e*P | | **Pn** | **20 28 40.8** | **-1.4** |
| DYR | | | | S | | **Sn** | **20 28 55.1** | **-0.3** |
| **VLI** | **Veliai** | **1.10** | **30** | *e*P | | **Pn** | **20 28 43.2** | **-0.4** |
| VLI | | | | *e*S | | **Sn** | **20 28 58.5** | **+0.6** |
| **VLI** | **Veliai** | **1.10** | **30** | P | | **Pn** | **20 28 43.0** | **-0.6** |
| VLI | | | | S | | **Sb** | **20 29 00.1** | **+1.5** |
| **VLI** | **Veliai** | **1.10** | **30** | *e*P | | **Pn** | **20 28 43.2** | **-0.4** |
| VLI | | | | *e*S | | **Sn** | **20 28 58.5** | **+0.6** |
| **PYL** | **PYLOS** | **1.21** | **340** | *e*P | | **Pn** | **20 28 43.7** | **-1.3** |
| PYL | | | | *e*S | | **Sn** | **20 29 01.3** | **+1.0** |
| **PYL** | **PYLOS** | **1.21** | **340** | P | | **Pn** | **20 28 42.8** | **-2.2** |
| PYL | | | | S | | **Sn** | **20 29 00.6** | **+0.3** |
| **PYL** | **PYLOS** | **1.21** | **340** | *e*P | | **Pn** | **20 28 43.7** | **-1.3** |
| PYL | | | | S | | **Sn** | **20 29 00.6** | **+0.3** |
| **IMMV** | **Iera Moni Meta** | **1.44** | **101** | *e*P | | **Pn** | **20 28 48.3** | **+0.1** |
| **IMMV** | **Iera Moni Meta** | **1.44** | **101** | *e*P | | **Pn** | **20 28 48.3** | **+0.1** |
| **ITM** | **Ithomi** | **1.44** | **350** | *e*P | | **Pn** | **20 28 47.3** | **-0.9** |
| ITM | | | | *e*S | | **Sn** | **20 29 05.6** | **-0.6** |
| **ITM** | **Ithomi** | **1.44** | **350** | P | | **Pn** | **20 28 46.5** | **-1.7** |
| ITM | | | | S | | **Sn** | **20 29 06.9** | **+0.7** |
| **ITM** | **Ithomi** | **1.44** | **350** | *e*P | | **Pn** | **20 28 47.3** | **-0.9** |
| ITM | | | | S | | **Sn** | **20 29 06.9** | **+0.7** |
| **VLX** | **Vlachokerasia** | **1.61** | **4** | *e*P | | **Pn** | **20 28 52.0** | **+1.4** |
| **VLX** | **Vlachokerasia** | **1.61** | **4** | P | | **Pn** | **20 28 51.7** | **+1.1** |
| **VLX** | **Vlachokerasia** | **1.61** | **4** | P | | **Pn** | **20 28 51.7** | **+1.1** |
| **VAM** | **Vamos** | **1.63** | **102** | *e*P | | **Pn** | **20 28 50.8** | **+0.1** |
| **VAM** | **Vamos** | **1.63** | **102** | P | | **Pn** | **20 28 50.8** | **+0.1** |
| **VAM** | **Vamos** | **1.63** | **102** | *e*P | | **Pn** | **20 28 50.8** | **+0.1** |
| **KRND** | **KRANIDI** | **1.77** | **24** | *e*P | | **Pn** | **20 28 51.0** | **-1.8** |
| **KRND** | **KRANIDI** | **1.77** | **24** | *e*P | | **Pn** | **20 28 51.0** | **-1.8** |
| **AMT** | **Artemida-Makis** | **1.82** | **346** | *e*P | | **Pn** | **20 28 54.6** | **+1.1** |
| **AMT** | **Artemida-Makis** | **1.82** | **346** | P | | **Pn** | **20 28 55.0** | **+1.5** |
| **AMT** | **Artemida-Makis** | **1.82** | **346** | *e*P | | **Pn** | **20 28 54.6** | **+1.1** |
| **DID** | **Didima** | **1.91** | **24** | *e*P | | **Pn** | **20 28 55.8** | **+1.1** |
| **DID** | **Didima** | **1.91** | **24** | *e*P | | **Pn** | **20 28 55.8** | **+1.1** |
| **MHLO** | **Agia Marina, M** | **1.97** | **61** | *e*P | | **Pn** | **20 28 54.3** | **-1.2** |
| **MHLO** | **Agia Marina, M** | **1.97** | **61** | P | | **Pn** | **20 28 54.1** | **-1.4** |
| **MHLO** | **Agia Marina, M** | **1.97** | **61** | *e*P | | **Pn** | **20 28 54.3** | **-1.2** |
| **GUR** | **Goura** | **2.17** | **2** | *e*P | | **Pn** | **20 28 59.6** | **+1.2** |
| **GUR** | **Goura** | **2.17** | **2** | *e*P | | **Pn** | **20 28 59.6** | **+1.2** |
| **IDI** | **Anoyia** | **2.20** | **102** | *e*P | | **Pn** | **20 28 57.9** | **-0.8** |
| **IDI** | **Anoyia** | **2.20** | **102** | *e*P | | **Pn** | **20 28 57.9** | **-0.8** |
| **NAIG** | **Nisos Aigina** | **2.23** | **26** | *e*P | | **Pn** | **20 28 59.3** | **+0.3** |
| **NAIG** | **Nisos Aigina** | **2.23** | **26** | *e*P | | **Pn** | **20 28 59.3** | **+0.3** |
| **DRO** | **Drossia** | **2.23** | **349** | *e*P | | **Pn** | **20 28 58.7** | **-0.4** |
| **DRO** | **Drossia** | **2.23** | **349** | *e*P | | **Pn** | **20 28 58.7** | **-0.4** |
| **KLV** | **Kalavryta, Ach** | **2.28** | **358** | *e*P | | **Pn** | **20 29 00.3** | **+0.5** |
| **KLV** | **Kalavryta, Ach** | **2.28** | **358** | *e*P | | **Pn** | **20 29 00.3** | **+0.5** |
| **LTK** | **Loutraki** | **2.33** | **14** | *e*P | | **Pn** | **20 29 00.8** | **+0.4** |
| **LTK** | **Loutraki** | **2.33** | **14** | *e*P | | **Pn** | **20 29 00.8** | **+0.4** |
| **RLS** | **Riolos of Patr** | **2.38** | **345** | *e*P | | **Pn** | **20 29 01.2** | **+0.1** |
| **RLS** | **Riolos of Patr** | **2.38** | **345** | *e*P | | **Pn** | **20 29 01.2** | **+0.1** |
| **VLY** | **Voula,Athens** | **2.43** | **30** | *e*P | | **Pn** | **20 28 59.8** | **-2.0** |
| **VLY** | **Voula,Athens** | **2.43** | **30** | *e*P | | **Pn** | **20 28 59.8** | **-2.0** |
| **LAKA** | **Lakka** | **2.48** | **355** | *e*P | | **Pn** | **20 29 03.1** | **+0.5** |
| **LAKA** | **Lakka** | **2.48** | **355** | *e*P | | **Pn** | **20 29 03.1** | **+0.5** |
| **VILL** | **Villia** | **2.54** | **19** | *e*P | | **Pn** | **20 29 02.8** | **-0.6** |
| **VIL2** | **Platees** | **2.58** | **18** | *e*P | | **Pn** | **20 29 02.8** | **-1.1** |
| **PTL** | **Penteli** | **2.62** | **29** | *e*P | | **Pn** | **20 29 04.3** | **-0.2** |
| **PTL** | **Penteli** | **2.62** | **29** | *e*P | | **Pn** | **20 29 04.3** | **-0.2** |
| **KALE** | **Kalithea** | **2.63** | **358** | *e*P | | **Pn** | **20 29 06.0** | **+1.4** |
| **KALE** | **Kalithea** | **2.63** | **358** | *e*P | | **Pn** | **20 29 06.0** | **+1.4** |
| **SERG** | **Sergoula** | **2.65** | **357** | *e*P | | **Pn** | **20 29 05.9** | **+1.0** |
| **SERG** | **Sergoula** | **2.65** | **357** | *e*P | | **Pn** | **20 29 05.9** | **+1.0** |
| **DSF** | **Desfina** | **2.66** | **5** | *e*P | | **Pn** | **20 29 04.1** | **-0.8** |
| **DSF** | **Desfina** | **2.66** | **5** | *e*P | | **Pn** | **20 29 04.1** | **-0.8** |
| **DESF** | **Desfina** | **2.66** | **5** | *e*P | | **Pn** | **20 29 04.7** | **-0.3** |
| **DESF** | **Desfina** | **2.66** | **5** | *e*P | | **Pn** | **20 29 04.7** | **-0.3** |
| **EFP** | **Efpalio** | **2.68** | **354** | *e*P | | **Pn** | **20 29 06.0** | **+0.8** |
| **EFP** | **Efpalio** | **2.68** | **354** | *e*P | | **Pn** | **20 29 06.0** | **+0.8** |
| **LAST** | **Lasithi** | **2.70** | **102** | *e*P | | **Pn** | **20 29 04.8** | **-0.8** |
| **LAST** | **Lasithi** | **2.70** | **102** | *e*P | | **Pn** | **20 29 04.8** | **-0.8** |

*NIED **28** 20:35:00, 31°.20N × 130°.30E, h140$^{km}$, Mw3.8 Best double couple: M$_0$6.05000×10$^{14}$ NP1:ϕ$_3$316.00000°, δ23.00000°, λ-134.00000°. NP2:ϕ$_3$182.00000°, δ73.00000°, λ-73.00000°.*
*ISCJB **28** 20:35:32.7±0.4, 31°.20N±0°.04 × 130°.32E±0°.08, h167$^{km}_{\pm}$3$^{km}$, mb3.5/6, Error ellipse: s-maj=12.1km s-min=5.3km az=16.7*
*IDC **28** 20:35:34.3±1.3, 31°.29N × 130°.37E, h170$^{km}_{\pm}$14$^{km}$, mb3.3/6, mb1 3.4/8, mb1mx3.1/52, mbtmp3.7/8, Error ellipse: s-maj=28.0km s-min=13.8km az=67.0*
*JMA **28** 20:35:34.5±0.1, 31°.22N × 130°.33E, h159$^{km}_{\pm}$1$^{km}$, M3.8*

**ISC 28 20:35:33.6**±0.8, **31°.21N**±0°.05 × **130°.31E**±0°.09, **h164**$^{km}_{\pm}$6$^{km}$, **n22**, σ0§**67**/34, **mb3.6**/6, **1C-4D**, **Kyushu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **JSU** | **Suzuyama** | **0.32** | **23** | ⇓P | | **Pn** | **20 35 56.2** | **+0.2** |
| JSU | | | | S | | **Sn** | **20 36 13.2** | **0.0** |
| **JTSR** | **Tashiro 2** | **0.53** | **94** | ⇑P | | **Pn** | **20 35 57.0** | **+0.2** |
| JTSR | | | | S | | **Sn** | **20 36 13.5** | **-0.9** |
| **JSJ** | **Shimokoshiki** | **0.69** | **313** | ⇓P | | **Pn** | **20 35 57.5** | **-0.1** |
| JSJ | | | | *e*S | | **Sn** | **20 36 15.6** | **-0.4** |
| **JKC** | **Kuchinoerabu** | **0.75** | **187** | P | | **Pn** | **20 35 58.4** | **+0.4** |
| JKC | | | | *e*S | | **Sn** | **20 36 16.3** | **-0.3** |
| **JTN** | **Tanegashima 3** | **0.80** | **133** | P | | **Pn** | **20 35 58.7** | **+0.4** |
| JTN | | | | S | | **Sn** | **20 36 16.9** | **-0.3** |
| **JTZ** | **Takazaki** | **0.96** | **44** | ⇓P | | **Pn** | **20 35 59.7** | **+0.3** |
| JTZ | | | | S | | **Sn** | **20 36 19.1** | **-0.2** |
| **JYAK** | **Yakushimahirau** | **0.98** | **170** | P | | **Pn** | **20 36 00.0** | **+0.4** |
| JYAK | | | | S | | **Sn** | **20 36 18.7** | **-0.9** |
| **JIU2** | **Izumi 2** | **1.40** | **18** | ⇓P | | **Pn** | **20 36 03.9** | **+0.6** |
| JIU2 | | | | S | | **Sn** | **20 36 25.7** | **-0.6** |
| **JNN** | **Nakanoshima** | **1.41** | **195** | P | | **Pn** | **20 36 04.1** | **+0.6** |
| JNN | | | | *e*S | | **Sn** | **20 36 27.4** | **+1.0** |
| **JNU** | **Nakatsue** | **1.97** | **14** | P | | **Pn** | **20 36 09.8** | **+0.5** |
| | 14nm,0.3s,baz=246,slow=3.5,SNR=71 | | | | | | | |
| JNU | | | | S | | **Sn** | **20 36 36.3** | **-0.7** |
| | 15nm,0.3s,baz=118,slow=12,SNR=9.6 | | | | | | | |
| **JAM** | **Amami Oshima** | **2.85** | **193** | P | | **Pn** | **20 36 19.6** | **-0.2** |
| JAM | | | | S | | **Sn** | **20 36 54.7** | **-0.8** |
| **JAMN** | **Amaminishikomi** | **3.11** | **199** | P | | **Pn** | **20 36 23.9** | **+0.9** |
| **JNTH** | **Nagotoyohara** | **5.08** | **204** | P | | **Pn** | **20 36 48.2** | **-0.2** |
| **JJT2** | **Tamagusuku 2** | **5.53** | **205** | P | | **Pn** | **20 36 53.7** | **-0.6** |
| **KSRS** | **Koreа Array** | **6.54** | **343** | P | | **Pn** | **20 37 08.9** | **+1.4** |
| | 0.2nm,0.3s,baz=171,slow=14,SNR=5.8 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **8.45** | **49** | P | | **Pn** | **20 37 34.2** | **+1.2** |
| | 1.0nm,0.3s,baz=235,slow=15,SNR=9.2 | | | | | | | |
| MJAR | | | | S | | **Sn** | **20 39 05.9** | **-1.2** |
| | 0.7nm,0.3s,baz=236,slow=24,SNR=6.5 | | | | | | | |
| **SONM** | **Songino Array** | **24.67** | **319** | P | | **P** | **20 40 38.9** | **-0.4** |
| | 0.2nm,0.3s,baz=129,slow=9.2,SNR=2.7 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.68** | **312** | P | | **P** | **20 43 14.1** | **+0.2** |
| | 0.1nm,0.4s,baz=95,slow=9.7,SNR=3.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **51.00** | **175** | P | | **P** | **20 44 19.1** | **+0.3** |
| | 0.7nm,0.4s,baz=354,slow=8.0,SNR=20 | | | | | | | |
| **ASAR** | **Alice Springs** | **54.67** | **176** | P | | **P** | **20 44 46.4** | **+0.7** |
| | 1.2nm,0.6s,baz=358,slow=6.1,SNR=24 | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINESS Array B** | **69.45** | **330** | P | | **P** | **20 46 23.3** | **-0.4** | |
| | 2.5nm,0.9s,baz=68,slow=5.2,SNR=9.6 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **75.66** | **334** | P | | **P** | **20 46 60.0** | **-0.4** | |
| | 1.1nm,0.9s,baz=43,slow=9.1,SNR=2.5 | | | | | | | | |

*CSEM **28** 20:38:15.9±0.1, 45°.71N × 10°.91E, h10$^{km}$, ML3.1/28, Error ellipse: s-maj=1.7km s-min=1.3km az=152.0*
*VIE **28** 20:38:16.4±0.2, 45°.75N × 10°.95E, h9$^{km}$, mb2.5/12, ml3.1/15, Error ellipse: s-maj=1.1km s-min=0.7km az=22.0*
*ISCJB **28** 20:38:16.5±0.2, 45°.69N±0°.02 × 10°.87E±0°.02, h18$^{km}_{\pm}$2$^{km}$, Error ellipse: s-maj=2.8km s-min=2.1km az=162.8*
*LDG **28** 20:38:17.2±0.1, 45°.72N × 10°.95E, h2$^{km}$, Ml2.8/16, Error ellipse: s-maj=1.7km s-min=1.4km az=167.0*
*GEN **28** 20:38:19.5, 45°.76N × 10°.77E, h51$^{km}$, ML2.8*
*PRU **28** 20:38:21.5, 45°.90N × 11°.07E, h6$^{km}$*

**ISC 28 20:38:15.9**±0.8, **45°.70N**±0°.01 × **10°.93E**±0°.01, **h16**$^{km}_{\pm}$4$^{km}$, **n164**, σ1§**17**/261, **24C-30D**, **Northern Italy**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | h m s | ISC |
| **BALD** | **Monte Baldo** | **0.08** | **260** | ⇑*i*Pg | | **Pg** | **20 38 19.3** | **-0.1** |
| BALD | | | | *i* Sg | | **Sg** | **20 38 21.2** | **-0.5** |
| **BALD** | **Monte Baldo** | **0.08** | **260** | ⇑*i*Pg | | **Pg** | **20 38 19.3** | **-0.1** |
| BALD | | | | *i* Sg | | **Sg** | **20 38 21.2** | **-0.5** |
| **ROVR** | **Rover˜¤ Verone** | **0.12** | **116** | Pg | | **Pg** | **20 38 19.4** | **-0.3** |
| **MARN** | **Marana (Italy)** | **0.21** | **106** | ⇓*e*Pg | | **Pg** | **20 38 20.7** | **-0.1** |
| MARN | | | | *e*Sg | | **Sg** | **20 38 23.4** | **-0.7** |
| **MARN** | **Marana (Italy)** | **0.21** | **106** | ⇓*e*Pg | | **Pg** | **20 38 20.7** | **-0.1** |
| MARN | | | | *e*Sg | | **Sg** | **20 38 23.4** | **-0.7** |
| **MAGA** | **Magasa** | **0.22** | **291** | Pg | | **Pg** | **20 38 21.3** | **+0.2** |
| MAGA | | | | Sg | | **Sg** | **20 38 24.9** | **+0.3** |
| | 2μm,0.3s | | | | | | | |
| **DDS** | **Dosso del Somm** | **0.26** | **45** | ⇓*e*Pg | | **Pg** | **20 38 21.8** | **+0.1** |
| DDS | | | | *e*Sg | | **Sg** | **20 38 25.3** | **-0.4** |
| **DDS** | **Dosso del Somm** | **0.26** | **45** | ⇓*e*Pg | | **Pg** | **20 38 21.8** | **+0.1** |
| DDS | | | | *e*Sg | | **Sg** | **20 38 25.3** | **-0.4** |
| **SALO** | **Salr** | **0.29** | **255** | Pg | | **Pg** | **20 38 22.8** | **0.0** |
| SALO | | | | Sg | | **Sb** | **20 38 27.6** | **+0.2** |
| **RNI** | **Roncone** | **0.35** | **326** | ⇓*e*Pg | | **Pg** | **20 38 23.6** | **+0.4** |
| RNI | | | | *e*Sg | | **Sb** | **20 38 29.0** | **-0.1** |
| **RNI** | **Roncone** | **0.35** | **326** | ⇓*e*Pg | | **Pg** | **20 38 23.6** | **+0.4** |
| RNI | | | | *e*Sg | | **Sb** | **20 38 29.0** | **-0.1** |
| **PANI** | **Panarotta** | **0.44** | **37** | ⇓*e*Pg | | **Pg** | **20 38 25.3** | **+0.4** |
| PANI | | | | *e*Sg | | **Sg** | **20 38 31.1** | **+0.1** |
| **PANI** | **Panarotta** | **0.44** | **37** | ⇓*e*Pg | | **Pg** | **20 38 25.3** | **+0.4** |
| PANI | | | | *e*Sg | | **Sg** | **20 38 31.1** | **+0.1** |
| **MABI** | **Malga Bissina** | **0.46** | **321** | Pg | | **Pg** | **20 38 25.2** | **0.0** |
| MABI | | | | Sg | | **Sg** | **20 38 31.6** | **+0.1** |
| | 169nm,0.2s | | | | | | | |
| **TEOL** | **Teolo** | **0.62** | **122** | ⇓*e*Pg | | **Pg** | **20 38 28.2** | **0.0** |
| **TEOL** | **Teolo** | **0.62** | **122** | ⇓*e*Pg | | **Pg** | **20 38 28.2** | **0.0** |
| TEOL | | | | Sg | | **Sb** | **20 38 37.4** | **+0.5** |
| | 800nm,0.2s | | | | | | | |
| **CGRP** | **Cima Grappa** | **0.64** | **73** | ⇓*e*Pg | | **Pg** | **20 38 28.7** | **+0.1** |
| **CGRP** | **Cima Grappa** | **0.64** | **73** | ⇓*e*Pg | | **Pg** | **20 38 28.7** | **+0.1** |
| CGRP | | | | Sg | | **Sg** | **20 38 37.2** | **+0.1** |
| | 178nm,0.4s | | | | | | | |
| **APPI** | **Appiano** | **0.81** | **15** | Pg | | **Pb** | **20 38 31.8** | **+0.1** |
| APPI | | | | Sg | | **Sg** | **20 38 42.7** | **+0.3** |
| | 460nm,0.4s | | | | | | | |
| **KOSI** | **Kohlern** | **0.83** | **22** | ⇓*e*Pg | | **Pb** | **20 38 32.2** | **+0.2** |
| KOSI | | | | *e*Sg | | **Sg** | **20 38 43.4** | **+0.3** |
| **MTLO** | **Montello** | **0.83** | **81** | ⇓*e*Pg | | **Pg** | **20 38 32.6** | **+0.6** |
| **MTLO** | **Montello** | **0.83** | **81** | ⇓*e*Pg | | **Pg** | **20 38 32.6** | **+0.6** |
| **MDI** | **Monti di Nese** | **0.85** | **276** | Pg | | **Pg** | **20 38 32.9** | **+0.4** |
| | 89nm,0.2s | | | | | | | |
| **BRMO** | **Bormio** | **0.87** | **334** | Pg | | **Pb** | **20 38 32.8** | **+0.1** |
| BRMO | | | | Sg | | **Sg** | **20 38 45.0** | **+0.7** |
| | 94nm,0.3s | | | | | | | |
| **VARN** | **Col Varnada, M** | **0.88** | **70** | ⇑*e*Pg | | **Pb** | **20 38 32.9** | **+0.1** |
| **VARN** | **Col Varnada, M** | **0.88** | **70** | *e*Pg | | **Pb** | **20 38 32.9** | **+0.1** |
| **NOVE** | **Novellara** | **0.91** | **189** | Pg | | **Pn** | **20 38 34.7** | **+0.7** |
| | 748nm,0.4s | | | | | | | |
| **MOSI** | **Grossmontoni** | **0.96** | **344** | Pg | | **Pg** | **20 38 34.7** | **+0.2** |
| MOSI | | | | Sg | | **Sg** | **20 38 47.6** | **+0.5** |
| | 191nm,0.4s | | | | | | | |
| **AGOR** | **Agordo** | **0.98** | **53** | ⇑*e*Pg | | **Pg** | **20 38 35.0** | **+0.2** |
| AGOR | | | | *e*Sg | | **Sg** | **20 38 47.9** | **+0.2** |
| **ADRI** | **Adria, Italy** | **1.01** | **130** | *e*Pg | | **Pg** | **20 38 36.2** | **+0.7** |
| **ADRI** | **Adria, Italy** | **1.01** | **130** | *e*Pg | | **Pg** | **20 38 36.2** | **+0.7** |
| **PRMA** | **PARMA** | **1.03** | **205** | Pg | | **Pg** | **20 38 36.8** | **+1.0** |
| | 277nm,0.3s | | | | | | | |
| **FUORN** | **Ofenpass-Fuorn** | **1.03** | **334** | Pg | | **Pb** | **20 38 35.8** | **+0.3** |
| **ABSI** | **Aberstueckl** | **1.07** | **15** | ⇓*e*Pg | | **Pn** | **20 38 36.5** | **+0.1** |
| **CAE** | **Caneva** | **1.10** | **73** | ⇓*e*Pg | | **Pg** | **20 38 37.6** | **+0.4** |
| **CAE** | **Caneva** | **1.10** | **73** | ⇓*e*Pg | | **Pg** | **20 38 37.6** | **+0.4** |
| **FIU** | **Minerbio Fiu** | **1.13** | **159** | Pg | | **Pg** | **20 38 38.4** | **+0.7** |
| | 618nm,0.5s | | | | | | | |
| **CSO** | **Casso** | **1.13** | **59** | ⇓*e*Pg | | **Pg** | **20 38 37.8** | **0.0** |
| **CSO** | **Casso** | **1.13** | **59** | ⇓*e*Pg | | **Pg** | **20 38 37.8** | **0.0** |
| **POLC** | **Polcenigo** | **1.15** | **73** | Pg | | **Pg** | **20 38 38.4** | **+0.3** |
| | 363nm,0.5s | | | | | | | |
| **CIMO** | **Cimolais** | **1.22** | **59** | ⇓*e*Pg | | **Pg** | **20 38 39.3** | **-0.2** |
| **CIMO** | **Cimolais** | **1.22** | **59** | ⇓*e*Pg | | **Pg** | **20 38 39.3** | **-0.2** |
| **ROSI** | **Rosskopf** | **1.28** | **151** | ⇓*e*Pg | | **Pb** | **20 38 40.4** | **+0.7** |
| **CMPO** | **Campotto Po** | **1.28** | **150** | Pg | | **Pg** | **20 38 40.9** | **+0.4** |
| | 183nm,0.6s | | | | | | | |
| **DAVOX** | **Davos/Dischmat** | **1.30** | **327** | Pg | | **Pb** | **20 38 40.6** | **+0.5** |
| **FETA** | **Feichten** | **1.33** | **354** | *e*Pg | | **Pg** | **20 38 41.4** | **-0.2** |
| | SNR=64 | | | | | | | |
| FETA | | | | ⇑*i*Sg | | **Sg** | **20 38 58.8** | **-0.2** |
| | 13nm,0.2s | | | | | | | |
| **FETA** | **Feichten** | **1.33** | **354** | Pg | | **Pg** | **20 38 41.4** | **-0.2** |
| | SNR=64 | | | | | | | |
| FETA | | | | Sg | | **Sg** | **20 38 58.8** | **-0.2** |
| | 13nm,0.2s | | | | | | | |
| **MUGIO** | **Muggio** | **1.34** | **280** | Pg | | **Pb** | **20 38 40.7** | **+0.1** |
| **TUE** | **Stuetta** | **1.34** | **306** | Pg | | **Pb** | **20 38 41.2** | **+0.4** |
| | 127nm,0.5s | | | | | | | |
| **BOB** | **Bobbio (Coli)** | **1.40** | **229** | Pg | | **Pg** | **20 38 42.6** | **-0.2** |
| **CSMI** | **Casera Mimoias** | **1.45** | **55** | *e*Pg | | **Pb** | **20 38 43.5** | **+0.9** |
| CSMI | | | | *e*Sg | | **Sg** | **20 39 04.2** | **+1.4** |
| **CSMI** | **Casera Mimoias** | **1.45** | **55** | *e*Pg | | **Pb** | **20 38 43.5** | **+0.9** |
| CSMI | | | | *e*Sg | | **Sg** | **20 39 04.2** | **+1.4** |
| **RISI** | **Rein** | **1.48** | **32** | ⇓*e*Pg | | **Pg** | **20 38 44.2** | **-0.3** |
| **VARE** | **Varese** | **1.52** | **277** | Pg | | **Pb** | **20 38 43.5** | **-0.2** |
| | 76nm,0.5s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **1.52** | **46** | ⇑*e*Pg | | **Pg** | **20 38 44.8** | **-0.4** |
| | SNR=40 | | | | | | | |
| ABTA | | | | ⇑*i*Sn | | **Sb** | **20 39 03.6** | **+0.7** |
| ABTA | | | | ⇑*i*Sg | | **Sg** | **20 39 05.5** | **+0.5** |
| | 27nm,0.2s | | | | | | | |
| **ABTA** | **Abfaltersbach** | **1.52** | **46** | Pg | | **Pg** | **20 38 44.8** | **-0.4** |
| | SNR=40 | | | | | | | |
| ABTA | | | | Sn | | **Sb** | **20 39 03.6** | **+0.7** |
| ABTA | | | | Sg | | **Sg** | **20 39 05.5** | **+0.5** |
| | 27nm,0.2s | | | | | | | |
| **FUSE** | **Fusea** | **1.61** | **63** | *e*Pg | | **Pb** | **20 38 45.1** | **-0.2** |
| **FUSE** | **Fusea** | **1.61** | **63** | *e*Pg | | **Pb** | **20 38 45.1** | **-0.2** |
| **SC2M** | **Scurtabo** | **1.62** | **218** | P | | **Pb** | **20 38 45.5** | **0.0** |
| **SC2M** | **Scurtabo** | **1.62** | **218** | Pg | | **Pb** | **20 38 46.0** | **+0.5** |
| **WTTA** | **Wattenberg** | **1.64** | **17** | ⇓*i*Pn | | **Pn** | **20 38 45.0** | **+0.7** |
| WTTA | | | | ⇑*e*Pg | | **Pg** | **20 38 47.2** | **-0.3** |
| | SNR=14 | | | | | | | |
| **WTTA** | **Wattenberg** | **1.64** | **17** | Pn | | **Pn** | **20 38 45.0** | **+0.7** |
| **BDI** | **Bagni Di Lucca** | **1.65** | **188** | Pg | | **Pb** | **20 38 46.4** | **+0.4** |
| | 63nm,0.4s | | | | | | | |
| **MOTA** | **Moosalm** | **1.65** | **4** | ⇑*i*Pn | | **Pn** | **20 38 45.1** | **+0.7** |
| MOTA | | | | ⇓*e*Pg | | **Pg** | **20 38 47.2** | **-0.5** |
| | SNR=36 | | | | | | | |
| MOTA | | | | ⇓*i*Sn | | **Sb** | **20 39 06.7** | **0.0** |
| MOTA | | | | ⇓*i*Sg | | **Sg** | **20 39 09.5** | **+0.3** |
| | 18nm,0.3s | | | | | | | |
| **MOTA** | **Moosalm** | **1.65** | **4** | Pn | | **Pn** | **20 38 45.1** | **+0.7** |
| **ZOU** | **Zoufplan** | **1.66** | **58** | *e*Pg | | **Pb** | **20 38 46.7** | **+0.4** |
| **ZOU** | **Zoufplan** | **1.66** | **58** | *e*Pg | | **Pb** | **20 38 47.1** | **+0.9** |
| **ZOU** | **Zoufplan** | **1.66** | **58** | *e*Pg | | **Pb** | **20 38 47.2** | **+0.9** |
| **WATA** | **Walderalm** | **1.70** | **15** | ⇑*e*Pn | | **Pn** | **20 38 45.7** | **+0.6** |
| | SNR=10.0 | | | | | | | |
| WATA | | | | ⇑*i*Pg | | **Pb** | **20 38 47.9** | **+1.0** |
| **WATA** | **Walderalm** | **1.70** | **15** | Pn | | **Pn** | **20 38 45.7** | **+0.6** |
| | SNR=10.0 | | | | | | | |
| **VINO** | **Villanova** | **1.74** | **70** | ⇑*e*Pg | | **Pn** | **20 38 46.4** | **+0.9** |
| VINO | | | | *e*Sg | | **Sb** | **20 39 10.1** | **+1.2** |
| **VINO** | **Villanova** | **1.74** | **70** | Pg | | **Pn** | **20 38 46.3** | **+0.9** |
| VINO | | | | *e*Sg | | **Sb** | **20 39 10.1** | **+1.2** |
| **DAVA** | **Damuels** | **1.75** | **336** | ⇑*i*Pg | | **Pg** | **20 38 49.2** | **-0.3** |
| DAVA | | | | ⇑*i*Sg | | **Sg** | **20 39 13.3** | **+1.1** |
| | 35nm,0.4s | | | | | | | |
| **DAVA** | **Damuels** | **1.75** | **336** | Pg | | **Pg** | **20 38 49.2** | **-0.3** |
| DAVA | | | | Sg | | **Sg** | **20 39 13.3** | **+1.1** |
| | 35nm,0.4s | | | | | | | |
| **FUSIO** | **Fusio** | **1.75** | **297** | Pg | | **Pb** | **20 38 48.0** | **+0.3** |
| **RETA** | **Reutte** | **1.79** | **356** | ⇓*i*Pn | | **Pn** | **20 38 47.0** | **+0.7** |
| RETA | | | | ⇑*e*Pg | | **Pg** | **20 38 50.0** | **-0.4** |
| | SNR=24 | | | | | | | |
| RETA | | | | ⇑*i*Sg | | **Sg** | **20 39 14.5** | **+0.8** |
| | 16nm,0.3s | | | | | | | |
| **RETA** | **Reutte** | **1.79** | **356** | Pn | | **Pn** | **20 38 47.0** | **+0.7** |
| **RETA** | **Reutte** | **1.79** | **356** | Pg | | **Pg** | **20 38 50.0** | **-0.4** |
| | SNR=24 | | | | | | | |
| RETA | | | | Sg | | **Sg** | **20 39 14.5** | **+0.8** |
| | 16nm,0.3s | | | | | | | |
| **MAIM** | **Mastiano** | **1.81** | **190** | P | | **Pb** | **20 38 47.9** | **-0.7** |
| **MAIM** | **Mastiano** | **1.81** | **190** | Pg | | **Pb** | **20 38 48.4** | **-0.2** |
| | 39nm,0.4s | | | | | | | |
| **SABO** | **M.te Sabotino** | **1.89** | **80** | *e*Pg | | **Pn** | **20 38 49.0** | **+1.4** |
| **SABO** | **M.te Sabotino** | **1.89** | **80** | *e*Pg | | **Pn** | **20 38 49.0** | **+1.4** |
| **ACOM** | **Acomizza, Ital** | **1.99** | **64** | *e*Pg | | **Pb** | **20 38 51.4** | **-0.5** |
| **ACOM** | **Acomizza, Ital** | **1.99** | **64** | *e*Pg | | **Pb** | **20 38 51.3** | **-0.5** |
| **ASQU** | **Asqua** | **2.00** | **162** | Pg | | **Pb** | **20 38 51.6** | **-0.3** |
| | 33nm,0.7s | | | | | | | |
| **CADS** | **Cadrg** | **2.03** | **74** | *i* Pn | | **Pn** | **20 38 50.4** | **+0.9** |
| CADS | | | | *i* Sn | | **Sg** | **20 39 21.1** | **-0.1** |
| | comp=Z,33nm,0.2s | | | | | | | |
| **CADS** | **Cadrg** | **2.03** | **74** | Pn | | **Pn** | **20 38 50.4** | **+0.9** |
| **PCP** | **Piancastagn** | **2.04** | **236** | P | | **Pn** | **20 38 51.0** | **+1.4** |
| **SATI** | **Pass

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **LMR** | **La Mourre** | **3.94** | **235** | *e*Pn | **Pn** | **20 39 16.5** | **+0.8** |
| | SNR=1.0 | | | | | | | |
| LMR | | | | eSn | **Sn** | **20 39 59.6** | **-2.0** |
| | comp=Z,2.2nm,0.4s,SNR=1.0 | | | | | | | |
| **SMRF** | **Simiane la Rot** | **4.18** | **248** | *e*Pn | **Pn** | **20 39 19.0** | **0.0** |
| | SNR=1.0 | | | | | | | |
| **SMRF** | **Simiane la Rot** | **4.18** | **248** | *e*Pn | **Pn** | **20 39 19.0** | **0.0** |
| | SNR=1.0 | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **4.49** | **261** | *e*Pn | **Pn** | **20 39 24.0** | **+0.7** |
| | SNR=1.0 | | | | | | | |
| VIVF | | | | eSn | **Sn** | **20 40 15.1** | **-0.1** |
| | comp=Z,2.2nm,0.4s,SNR=1.0 | | | | | | | |
| **VIVF** | **Saint-Julien-l** | **4.49** | **261** | *e*Pn | **Pn** | **20 39 24.0** | **+0.7** |
| | SNR=1.0 | | | | | | | |
| VIVF | | | | eSn | **Sn** | **20 40 15.1** | **-0.1** |
| | comp=Z,1.1nm,0.4s,SNR=1.0 | | | | | | | |
| **NKC** | **Novy Kostel** | **4.65** | **12** | eSN | **Sn** | **20 40 19.3** | **+0.2** |
| NKC | | | | eSG | **Sg** | **20 40 43.4** | **-1.8** |
| **NKC** | **Novy Kostel** | **4.65** | **12** | Sn | **Sn** | **20 40 19.3** | **+0.2** |
| NKC | | | | Sg | **Sg** | **20 40 43.4** | **-1.8** |
| **TREC** | **Trest** | **4.75** | **39** | eSG | **Sg** | **20 40 43.8** | **-4.4** |
| | comp=Z,4.2nm,0.3s | | | | | | | |
| **TREC** | **Trest** | **4.75** | **39** | Sg | **Sg** | **20 40 43.8** | **-4.4** |
| | comp=Z,4.2nm,0.3s | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **4.89** | **307** | *e*Pn | **Pn** | **20 39 29.6** | **+0.8** |
| | SNR=1.0 | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **4.89** | **307** | *e*Pn | **Pn** | **20 39 29.6** | **+0.8** |
| | SNR=1.0 | | | | | | | |
| **PRU** | **Pruhonice** | **4.94** | **28** | eSG | **Sg** | **20 40 51.2** | **-3.1** |
| **PRU** | **Pruhonice** | **4.94** | **28** | Sg | **Sg** | **20 40 51.2** | **-3.1** |
| **GOPC** | **GO Pecny, Ondr** | **4.96** | **30** | eSN | **Sn** | **20 40 27.4** | **+0.8** |
| GOPC | | | | eSG | **Sg** | **20 40 50.8** | **-4.1** |
| | comp=Z,7.9nm,0.6s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **4.96** | **30** | Sn | **Sn** | **20 40 27.4** | **+0.8** |
| GOPC | | | | Sg | **Sg** | **20 40 50.8** | **-4.1** |
| | comp=Z,7.9nm,0.6s | | | | | | | |
| **SMF** | **Signal de Mont** | **5.01** | **283** | *e*Pn | **Pn** | **20 39 31.4** | **+1.0** |
| | SNR=1.0 | | | | | | | |
| SMF | | | | eSn | **Sn** | **20 40 26.7** | **-1.3** |
| | comp=Z,5.5nm,0.3s,SNR=1.0 | | | | | | | |
| **SMF** | **Signal de Mont** | **5.01** | **283** | *e*Pn | **Pn** | **20 39 31.4** | **+1.0** |
| | SNR=1.0 | | | | | | | |
| SMF | | | | eSn | **Sn** | **20 40 26.7** | **-1.3** |
| | comp=Z,2.8nm,0.3s,SNR=1.0 | | | | | | | |
| **LOR** | **Lormes** | **5.13** | **290** | *e*Pn | **Pn** | **20 39 33.1** | **+1.1** |
| | baz=112,SNR=1.0 | | | | | | | |
| LOR | | | | eSn | **Sn** | **20 40 29.5** | **-1.3** |
| | comp=Z,3.1nm,0.2s | | | | | | | |
| **LOR** | **Lormes** | **5.13** | **290** | *e*Pn | **Pn** | **20 39 33.1** | **+1.1** |
| | SNR=1.0 | | | | | | | |
| LOR | | | | eSn | **Sn** | **20 40 29.5** | **-1.3** |
| | comp=Z,1.5nm,0.2s | | | | | | | |
| **LASF** | **Ste Croix** | **5.28** | **255** | *e*Pn | **Pn** | **20 39 34.0** | **-0.1** |
| | SNR=1.0 | | | | | | | |
| LASF | | | | eSn | **Sn** | **20 40 33.2** | **-1.3** |
| | comp=Z,1.6nm,0.3s | | | | | | | |
| **LASF** | **Ste Croix** | **5.28** | **255** | *e*Pn | **Pn** | **20 39 34.0** | **-0.1** |
| | SNR=1.0 | | | | | | | |
| LASF | | | | eSn | **Sn** | **20 40 33.2** | **-1.3** |
| | comp=Z,0.8nm,0.3s | | | | | | | |
| **SSF** | **Saint Saulge** | **5.31** | **288** | *e*Pn | **Pn** | **20 39 35.1** | **+0.6** |
| | SNR=1.0 | | | | | | | |
| **SSF** | **Saint Saulge** | **5.31** | **288** | *e*Pn | **Pn** | **20 39 35.1** | **+0.6** |
| | SNR=1.0 | | | | | | | |
| **AVF** | **Avril sur Loir** | **5.37** | **284** | *e*Pn | **Pn** | **20 39 36.2** | **+1.0** |
| | SNR=1.0 | | | | | | | |
| **AVF** | **Avril sur Loir** | **5.37** | **284** | *e*Pn | **Pn** | **20 39 36.2** | **+1.0** |
| | SNR=1.0 | | | | | | | |
| **PVCC** | **Panska Ves** | **5.42** | **25** | eSG | **Sg** | **20 41 07.0** | **-2.6** |
| | comp=Z,5.4nm,0.4s | | | | | | | |
| **BGF** | **Bois d'Agland** | **5.68** | **282** | *e*Pn | **Pn** | **20 39 40.5** | **+0.9** |
| | SNR=1.0 | | | | | | | |
| **BGF** | **Bois d'Agland** | **5.68** | **282** | *e*Pn | **Pn** | **20 39 40.5** | **+0.9** |
| | SNR=1.0 | | | | | | | |
| **UPC** | **Upice** | **5.90** | **33** | *ex* | **Sg** | **20 41 20.3** | **-4.7** |
| **DPC** | **Dobruska-Polom** | **5.90** | **36** | *ex* | **Sg** | **20 41 19.2** | **-5.8** |
| **HYF** | **Humbligny** | **5.93** | **288** | *e*Pn | **Pn** | **20 39 43.4** | **+0.3** |
| **HYF** | **Humbligny** | **5.93** | **288** | *e*Pn | **Pn** | **20 39 43.4** | **+0.3** |
| **TCF** | **Toulx Ste Croi** | **6.10** | **279** | *e*Pn | **Pn** | **20 39 46.1** | **+0.7** |
| | SNR=1.0 | | | | | | | |
| TCF | | | | eSn | **Sn** | **20 40 54.0** | **-0.8** |
| | comp=Z,1.9nm,0.3s,SNR=1.0 | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **6.10** | **279** | *e*Pn | **Pn** | **20 39 46.1** | **+0.7** |
| | SNR=1.0 | | | | | | | |
| TCF | | | | eSn | **Sn** | **20 40 54.0** | **-0.8** |
| | comp=Z,0.9nm,0.3s,SNR=1.0 | | | | | | | |
| **CAF** | **Calviac** | **6.30** | **266** | *e*Pn | **Pn** | **20 39 49.6** | **+1.5** |
| | SNR=1.0 | | | | | | | |
| **CAF** | **Calviac** | **6.30** | **266** | *e*Pn | **Pn** | **20 39 49.6** | **+1.5** |
| | SNR=1.0 | | | | | | | |

*ISCJB **28** 20:40:18.2±0.3,1°.07N±0°.03×127°.31E±0°.04,h100km, mb4.1/18, Error ellipse: s-maj=5.3km s-min=3.3km az=155.9*
*NEIC **28** 20:40:21.3±0.7,1°.10N×127°.45E,h129km±7km,mb4.6/7, Error ellipse: s-maj=13.9km s-min=7.9km az=79.0*
*DJA **28** 20:40:21.5±0.3,1°.N±3°×12°.7E±°,h81km±5km,M4.6/12, mb4.9/9,mB5.0/7,MLv4.7/12,Mw(mB)4.3/7*
*IDC **28** 20:40:22.2±1.7,1°.04N×127°.43E,h138km±16km,mb3.8/14, mb1 3.9/18,mb1mx3.8/37,mbtmp4.3/18,MS3.1/3, Ms1 3.1/3,ms1mx2.6/23,Error ellipse: s-maj=20.1km s-min=11.1km az=76.0*
*AUST **28** 20:40:23.1±1.2,0°.82N×127°.40E,h132km, Error ellipse: s-maj=2.5km s-min=0.9km az=10.0*

**ISC 28 20:40:19.6±0.5,1°.05N±0°.03×127°.24E±0°.05,h100km,n97, σ1s61/97,mb4.1/18,Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TNTI** | **Ternate** | **0.30** | **156** | P | **Pn** | **20 40 37.2** | **+3.0** |
| TNTI | | | | S | **Sn** | **20 40 46.6** | **+1.5** |
| **TNTI** | **Ternate** | **0.30** | **156** | *e*P | **Pn** | **20 40 37.2** | **+3.0** |
| **LBMI** | **Labuha** | **1.69** | **171** | P | **Pn** | **20 40 51.1** | **+2.8** |
| LBMI | | | | S | **Sn** | **20 41 12.8** | **+2.7** |
| **SGSI** | **Sangihe** | **3.13** | **327** | P | **Pn** | **20 41 08.4** | **+1.2** |
| SGSI | | | | S | **Sn** | **20 41 44.9** | **+1.1** |
| **KMSI** | **Cibinong** | **3.30** | **262** | P | **Pn** | **20 41 12.0** | **+2.7** |
| KMSI | | | | S | **Sn** | **20 41 49.8** | **+2.0** |
| **SANI** | **Sanana** | **3.32** | **202** | P | **Pn** | **20 41 11.0** | **+1.3** |
| SANI | | | | S | **Sn** | **20 41 46.1** | **-2.3** |
| **GTOI** | **Gorontalo** | **4.25** | **265** | P | Pn | 20 41 26.1 | +3.9 |
| **NLAI** | **Namlea** | **4.26** | **182** | P | **Pn** | **20 41 23.4** | **+1.0** |
| **SWI** | **Sorong** | **4.44** | **115** | P | **Pn** | **20 41 27.2** | **+2.4** |
| | baz=4.2,SNR=3.9 | | | | | | | |
| **SWI** | **Sorong** | **4.44** | **115** | P | **Pn** | **20 41 26.4** | **+1.6** |
| **SIJI** | **Sorong** | **4.45** | **115** | P | **Pn** | **20 41 26.9** | **+2.0** |
| | 4.2nm,0.3s,baz=318,slow=7.9,SNR=12 | | | | | | | |
| SIJI | | | | S | **Sn** | **20 42 17.5** | **+1.8** |
| | 0.7nm,0.3s,baz=172,slow=22,SNR=6.3 | | | | | | | |
| **MSAI** | **Masohi** | **4.68** | **159** | P | **Pn** | **20 41 30.3** | **+2.3** |
| **AAI** | **Ambon** | **4.80** | **169** | P | **Pn** | **20 41 31.6** | **+1.9** |
| | baz=4.6,SNR=25 | | | | | | | |
| **AAI** | **Ambon** | **4.80** | **169** | P | **Pn** | **20 41 31.0** | **+1.4** |
| **LUWI** | **Luwuk** | **4.93** | **245** | P | **Pn** | **20 41 32.6** | **+1.2** |
| | baz=5.0,SNR=81 | | | | | | | |
| **LUWI** | **Luwuk** | **4.93** | **245** | P | **Pn** | **20 41 31.3** | **-0.1** |
| **LUWI** | **Luwuk** | **4.93** | **245** | *e*P | **Pn** | **20 41 32.2** | **+0.8** |
| | 258nm,0.4s | | | | | | | |
| **MRSI** | **Marisa** | **5.33** | **264** | P | **Pn** | **20 41 37.6** | **+0.7** |
| | 90nm,0.6s,1µm | | | | | | | |
| **GSPH** | **General Santos** | **5.50** | **335** | *e*P | **Pn** | **20 41 39.6** | **+0.3** |
| GSPH | | | | *e*S | **Sn** | **20 42 39.4** | **-2.1** |
| **APSI** | **Ampana** | **5.92** | **251** | P | **Pn** | **20 41 46.1** | **+1.2** |
| | 359nm,0.5s,4µm | | | | | | | |
| **MATI** | **Mati** | **5.94** | **350** | *e*P | **Pn** | **20 41 47.3** | **+2.1** |
| **DAV** | **Davao City (W)** | **6.21** | **345** | P | Pn | 20 41 52.1 | +3.3 |
| | 96nm,0.3s,baz=280,slow=6.1,SNR=3.3 | | | | | | | |
| DAV | | | | S | **Sn** | **20 43 01.0** | **+2.6** |
| | 60nm,0.3s,baz=253,slow=14,SNR=1.6 | | | | | | | |
| **FAKI** | **Fak Fak** | **6.37** | **128** | P | **Pn** | **20 41 53.2** | **+2.2** |
| | baz=6.1,SNR=27 | | | | | | | |
| **FAKI** | **Fak Fak** | **6.37** | **128** | P | **Pn** | **20 41 52.5** | **+1.5** |
| | 51nm,0.7s | | | | | | | |
| **FAKI** | **Fak Fak** | **6.37** | **128** | *e*P | **Pn** | **20 41 52.9** | **+2.0** |
| | 27nm,0.6s | | | | | | | |
| **BUKP** | **Musuan** | **7.13** | **342** | *e*P | **Pn** | **20 42 02.7** | **+1.4** |
| **MPSI** | **Mapaga** | **7.38** | **265** | P | **Pn** | **20 42 06.1** | **+1.4** |
| | 30nm,0.6s,523nm | | | | | | | |
| **PCI** | **Palu** | **7.66** | **255** | P | Pn | 20 42 13.0 | +4.5 |
| | 37nm,0.8s,0.2nm | | | | | | | |
| **PAGZ** | **Pagadian** | **7.77** | **330** | *e*P | **Pn** | **20 42 10.3** | **+0.2** |
| **BUTP** | **Butuan** | **8.03** | **348** | *e*P | **Pn** | **20 42 15.1** | **+1.5** |
| **IPIL** | **Ipil** | **8.16** | **325** | *e*P | **Pn** | **20 42 16.7** | **+1.4** |
| **TTSI** | **Tana Toraja** | **8.46** | **241** | P | **Pn** | **20 42 21.0** | **+1.5** |
| | 158nm,0.6s,2µm0.7nm | | | | | | | |
| **SPSI** | **Sidrap Palu** | **8.98** | **236** | P | **Pn** | **20 42 29.1** | **+2.6** |
| | 74nm,0.8s,945nm | | | | | | | |
| **BKSI** | **Bulukumba** | **9.52** | **228** | P | Pn | 20 42 38.4 | +4.6 |
| | 76nm,0.7s,809nm | | | | | | | |
| **KAPI** | **Kappang** | **9.61** | **231** | P | Pn | 20 42 38.5 | +3.5 |
| | 5.7nm,0.3s,baz=8.5,slow=6.0,SNR=12 | | | | | | | |
| KAPI | | | | S | **Sn** | **20 44 20.1** | **-1.0** |
| | 11nm,0.3s,baz=191,slow=23,SNR=20 | | | | | | | |
| KAPI | | | | LR | LR | 20 46 06.5 | |
| | comp=Z,27nm,21.1s,baz=85,slow=35 | | | | | | | |
| **KAPI** | **Kappang** | **9.61** | **231** | *e*P | Pn | 20 42 38.4 | +3.4 |
| | 13nm,0.3s | | | | | | | |
| KAPI | | | | S | **Sn** | **20 44 20.1** | **-1.0** |
| **SOEI** | **Soe** | **11.13** | **195** | P | Pn | 20 43 06.0 | +10 |
| | baz=11,SNR=3.6 | | | | | | | |
| **SOEI** | **Soe** | **11.13** | **195** | *e*P | Pn | 20 43 00.4 | +4.5 |
| | 24nm,0.9s | | | | | | | |
| **BATI** | **Baumata** | **11.73** | **198** | P | Pn | 20 43 08.0 | +4.1 |
| | 3.5nm,0.3s,baz=179,slow=5.7,SNR=4.1 | | | | | | | |
| **MTN** | **Manton Dam** | **14.33** | **164** | P | **Pn** | **20 43 35.7** | **-2.2** |
| | baz=14,SNR=8.3 | | | | | | | |
| **KDU** | **Kakadu** | **14.60** | **159** | P | **Pn** | **20 43 40.0** | **-1.3** |
| | baz=14,SNR=3.5 | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **16.11** | **234** | P | **P** | **20 44 05.8** | **+3.9** |
| | baz=16,SNR=7.9 | | | | | | | |
| **KNRA** | **Kununurra** | **16.68** | **175** | P | **Pn** | **20 44 06.5** | **-1.0** |
| | baz=17,SNR=6.9 | | | | | | | |
| **UGM** | **Wanagama** | **18.90** | **242** | P | **Pn** | **20 44 35.4** | **+1.1** |
| | baz=19,SNR=3.5 | | | | | | | |
| **LEM** | **Lembang** | **21.09** | **248** | P | **P** | **20 44 58.2** | **+1.8** |
| | 13nm,0.7s,baz=347,slow=12,SNR=4.3 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **21.18** | **246** | P | **P** | **20 45 00.4** | **+3.1** |
| | baz=21,SNR=6.7 | | | | | | | |
| **WRAB** | **Tennant Creek** | **21.98** | **162** | *e*P | **P** | **20 45 03.8** | **-1.9** |
| | 11nm,0.9s | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.99** | **162** | P | **P** | **20 45 03.8** | **-1.9** |
| | 6.1nm,0.5s,baz=341,slow=11,SNR=89 | | | | | | | |
| WRA | | | | S | S | 20 48 54.5 | -8.0 |
| | 1.7nm,0.8s,baz=334,slow=21,SNR=12 | | | | | | | |
| **MBWA** | **Marble Bar** | **23.26** | **198** | *e*P | **P** | **20 45 18.6** | **+0.1** |
| | 5.0nm,0.7s | | | | | | | |
| **QIS** | **Mount Isa** | **24.65** | **151** | P | **P** | **20 45 29.9** | **-1.2** |
| | baz=24,SNR=5.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.41** | **166** | P | **P** | **20 45 36.4** | **-1.6** |
| | 2.0nm,0.4s,baz=341,slow=8.4,SNR=39 | | | | | | | |
| ASAR | | | | S | **S** | **20 50 01.3** | **+3.7** |
| | 2.8nm,0.9s,baz=339,slow=17,SNR=12 | | | | | | | |
| ASAR | | | | LR | LR | 20 57 04.0 | |
| | comp=Z,46nm,20.1s,baz=92,slow=40 | | | | | | | |
| **WRKA** | **Warakurna** | **25.95** | **178** | P | **P** | **20 45 42.0** | **-0.9** |
| | baz=26,SNR=19 | | | | | | | |
| **MEEK** | **Meekatharra** | **28.75** | **196** | P | **P** | **20 46 08.4** | **+0.4** |
| | baz=29,SNR=4.7 | | | | | | | |
| **MORW** | **Morawa** | **31.81** | **199** | P | **P** | **20 46 34.1** | **-0.7** |
| | baz=32,SNR=3.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **32.72** | **304** | P | **P** | **20 46 41.7** | **-1.3** |
| | 0.4nm,0.8s,baz=139,slow=9.1,SNR=4.7 | | | | | | | |
| **KLBR** | **Kellerberrin** | **33.69** | **195** | P | **P** | **20 46 50.6** | **-0.6** |
| | baz=34,SNR=5.6 | | | | | | | |
| **BBOO** | **Buckleboo** | **34.69** | **167** | P | **P** | **20 46 59.6** | **-0.2** |
| | baz=35,SNR=7.2 | | | | | | | |
| **KSAR** | **Wonju Arr Be** | **36.22** | **1** | P | **P** | **20 47 11.6** | **-1.3** |
| **KSRS** | **Korea Array** | **36.23** | **1** | P | **P** | **20 47 11.6** | **-1.4** |
| | 1.2nm,0.7s,baz=178,slow=9.2,SNR=4.1 | | | | | | | |
| **LSA** | **Lhasa** | **44.61** | **313** | *e*P | **P** | **20 48 23.2** | **+0.4** |
| **CHLP** | **Challavanipeta** | **45.77** | **295** | *e*P | **P** | **20 48 32.2** | **+0.7** |
| **TAPN** | **Taplejung** | **46.04** | **308** | *e*P | **P** | **20 48 34.7** | **+0.8** |
| | 3.1nm,0.3s | | | | | | | |
| **ODAN** | **Odare** | **46.06** | **307** | *e*P | **P** | **20 48 34.9** | **+0.9** |
| | 3.2nm,0.4s | | | | | | | |
| **RAMN** | **Ramite** | **46.73** | **307** | *e*P | **P** | **20 48 40.5** | **+1.2** |
| | 5.5nm,0.4s | | | | | | | |
| **PVM** | **Polavaram** | **47.66** | **292** | *e*P | **P** | **20 48 46.4** | **+0.2** |
| **GUN** | **Gumba** | **47.74** | **308** | *e*P | **P** | **20 48 48.0** | **+0.8** |
| | 14nm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **47.96** | **307** | *e*P | **P** | **20 48 49.4** | **+0.5** |
| | 3.5nm,0.3s | | | | | | | |
| **PKIN** | **Phulchoki** | **47.97** | **307** | *e*P | **P** | **20 48 49.9** | **+1.0** |
| | 1.9nm,0.2s | | | | | | | |
| **KKN** | **Kakani** | **48.16** | **307** | *e*P | **P** | **20 48 50.8** | **+0.5** |
| | 3.4nm,0.3s | | | | | | | |
| **SKHT** | **Srikalahasti** | **48.68** | **287** | *e*P | **P** | **20 48 53.4** | **-0.8** |
| **GKN** | **Gorkha** | **48.76** | **307** | *e*P | **P** | **20 48 55.5** | **+0.7** |
| | 2.7nm,0.3s | | | | | | | |
| **ADKI** | **Addanki** | **48.86** | **290** | *e*P | **P** | **20 48 56.4** | **+0.9** |
| **KOLN** | **Koldanda** | **49.49** | **306** | *e*P | **P** | **20 49 01.7** | **+1.2** |
| | 20nm,0.5s | | | | | | | |
| **DANN** | **Dangsing** | **49.61** | **307** | *e*P | **P** | **20 49 02.5** | **+1.0** |
| **RCLA** | **Racherla** | **49.73** | **289** | *e*P | **P** | **20 49 02.2** | **0.0** |
| **SRLM** | **Srisailam** | **49.93** | **290** | *e*P | **P** | **20 49 01.5** | **-2.2** |
| **SONM** | **Songino Array** | **49.99** | **342** | P | **P** | **20 49 03.8** | **0.0** |
| | 0.5nm,0.4s,baz=163,slow=8.3,SNR=7.6 | | | | | | | |
| SONM | | | | PcP | **PcP** | **20 50 22.0** | **-0.5** |
| | 0.6nm,0.7s,baz=171,slow=5.1,SNR=3.0 | | | | | | | |
| **RPR** | **Rampur** | **50.21** | **294** | *e*P | P | 20 49 09.5 | +3.7 |
| **HYB** | **Hyderabad** | **50.54** | **292** | *i* P | **P** | **20 49 07.5** | **-0.8** |
| **HYBB** | **Hyderabad (bro** | **50.54** | **292** | *e*P | **P** | **20 49 08.5** | **+0.1** |
| **SRSP** | **Sriramsagar** | **51.10** | **294** | *e*P | **P** | **20 49 12.5** | **0.0** |
| **URV** | **Uravakonda** | **51.24** | **288** | *e*P | **P** | **20 49 13.3** | **-0.3** |
| **KLRI** | **Killari** | **52.50** | **292** | *e*P | **P** | **20 49 22.5** | **-0.5** |
| **MKAR** | **Makanchi Array** | **60.04** | **326** | P | **P** | **20 50 16.1** | **0.0** |
| | 2.0nm,0.6s,baz=120,slow=8.5,SNR=24 | | | | | | | |
| MKAR | | | | PcP | **PcP** | **20 50 59.9** | **-1.2** |
| | 1.9nm,0.6s,baz=131,slow=4.0,SNR=8.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **63.20** | **333** | P | **P** | **20 50 34.8** | **-2.3** |
| | 0.8nm,0.5s,baz=98,slow=7.6,SNR=3.6 | | | | | | | |
| **KURK** | **Kurchatov** | **64.27** | **328** | *e*P | **P** | **20 50 43.5** | **-0.7** |
| | 8.9nm,0.8s | | | | | | | |
| **KKAR** | **Karatay Array** | **65.54** | **318** | *e*P | **P** | **20 50 52.0** | **-0.6** |
| | 2.3nm,0.9s | | | | | | | |
| **GEYT** | **Alibeck** | **72.97** | **309** | P | **P** | **20 51 38.8** | **+0.1** |
| | 2.2nm,0.7s,baz=141,slow=5.0,SNR=7.0 | | | | | | | |
| **VNDA** | **Vanda** | **80.72** | **173** | P | **P** | **20 52 19.1** | **-2.2** |
| | 1.0nm,0.6s,baz=319,slow=6.0,SNR=13 | | | | | | | |
| **MAW** | **Mawson** | **81.44** | **200** | P | **P** | **20 52 24.4** | **-0.8** |
| | 1.6nm,0.4s,baz=71,slow=5.5,SNR=9.1 | | | | | | | |
| **MAW** | **Mawson** | **81.44** | **200** | P | **P** | **20 52 24.5** | **-0.7** |
| | baz=81,SNR=14 | | | | | | | |
| **KBZ** | **Khabaz** | **85.19** | **314** | LR | LR | 21 35 02.4 | |
| | comp=Z,49nm,20.9s,baz=346,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **87.29** | **25** | P | P | 20 52 52.5 | -2.5 |
| | 0.3nm,0.9s,baz=275,slow=5.2,SNR=3.1 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **93.13** | **340** | P | **P** | **20 53 20.0** | **-2.1** |
| | 1.1nm,0.4s,baz=85,slow=5.6,SNR=16 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **93.13** | **340** | P | **P** | **20 53 20.0** | **-2.1** |
| **FINES** | **FINESS Array B** | **94.42** | **332** | P | P | 20 53 25.5 | -2.6 |
| | 2.3nm,0.9s,baz=289,slow=12,SNR=3.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **124.20** | **287** | PKP | **PKPdf** | **20 59 05.8** | **-1.8** |
| | 0.4nm,0.3s,baz=92,slow=1.9,SNR=13 | | | | | | | |

*CRAAG **28** 20:40:56.0,35°.34N×2°.08E,Ml3.7*
*MDD **28** 20:40:59.6±2.7,35°.35N×1°.96E,h0km,mb3.8/8, Error ellipse: s-maj=26.5km s-min=11.3km az=136.0,PRXIMO*
*CSEM **28** 20:41:01.1±0.6,35°.43N×1°.84E,h10km,mb3.8, Error ellipse: s-maj=12.3km s-min=6.0km az=136.0*

**ISC 28 20:41:00.2±2.7,35°.4N±0°.1×1°.9E±0°.1,h10km,n37, σ0s74/42,Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ETRT** | **Tiaret** | **0.47** | **268** | P | **Pg** | **20 41 09.1** | **-0.3** |
| **ETRT** | **Tiaret** | **0.47** | **268** | P | **Pg** | **20 41 09.1** | **-0.3** |
| **ETRT** | **Tiaret** | **0.47** | **268** | P | **Pg** | **20 41 09.1** | **-0.3** |
| **EANR** | **`Ain N'Sour** | **0.83** | **311** | P | **Pb** | **20 41 16.3** | **-0.5** |
| **EANR** | **`Ain N'Sour** | **0.83** | **311** | P | **Pb** | **20 41 16.3** | **-0.5** |
| **EANR** | **`Ain N'Sour** | **0.83** | **311** | P | **Pb** | **20 41 16.3** | **-0.5** |
| **OJGS** | **Djebel Guires** | **0.92** | **277** | P | Pg | 20 41 14.3 | -3.7 |
| **OJGS** | **Djebel Guires** | **0.92** | **277** | P | Pg | 20 41 14.3 | -3.7 |
| **OJGS** | **Djebel Guires** | **0.92** | **277** | P | Pg | 20 41 14.3 | -3.7 |
| **EBNR** | **Beni Rached** | **0.93** | **343** | P | **Pb** | **20 41 18.6** | **+0.2** |
| **EBNR** | **Beni Rached** | **0.93** | **343** | P | **Pb** | **20 41 18.6** | **+0.2** |
| **EMUR** | **La Murta** | **3.49** | **315** | P | **Pn** | **20 41 55.6** | **+1.0** |
| | 3.7nm,0.3s,SNR=4.6 | | | | | | | |
| **EMUR** | **La Murta** | **3.49** | **315** | P | **Pn** | **20 41 55.6** | **+1.0** |
| | 3.7nm,0.3s,SNR=4.6 | | | | | | | |
| **EIBI** | **Ibiza** | **3.64** | **353** | P | **Pn** | **20 41 56.6** | **0.0** |
| | 5.9nm,0.2s,SNR=37 | | | | | | | |
| EIBI | | | | S | **Sn** | **20 42 39.1** | **-0.5** |
| | 13nm,1.1s | | | | | | | |
| **EIBI** | **Ibiza** | **3.64** | **353** | P | **Pn** | **20 41 56.6** | **0.0** |
| | 5.9nm,0.2s,SNR=37 | | | | | | | |
| EIBI | | | | S | **Sn** | **20 42 39.1** | **-0.5** |
| | 13nm,1.1s | | | | | | | |
| **EBEN** | **Beniarda** | **3.70** | **334** | P | **Pn** | **20 41 58.3** | **+0.9** |
| | 0.0nm,0.1s,SNR=7.9 | | | | | | | |
| EBEN | | | | S | **Sn** | **20 42 41.2** | **+0.1** |
| | 1.6nm,0.5s,SNR=7.9 | | | | | | | |
| **EBEN** | **Beniarda** | **3.70** | **334** | P | **Pn** | **20 41 58.3** | **+0.9** |
| | SNR=7.9 | | | | | | | |
| EBEN | | | | S | **Sn** | **20 42 41.2** | **+0.1** |
| | 1.6nm,0.5s,SNR=7.9 | | | | | | | |
| **EBER** | **Berja** | **4.13** | **293** | P | **Pn** | **20 42 03.6** | **+0.1** |
| | 1.2nm,0.3s,SNR=9.0 | | | | | | | |
| **EBER** | **Berja** | **4.13** | **293** | P | **Pn** | **20 42 03.6** | **+0.1** |
| | 1.2nm,0.3s,SNR=9.0 | | | | | | | |
| **ETOB** | **Tobarra** | **4.24** | **321** | P | **Pn** | **20 42 05.0** | **+0.1** |
| | 2.4nm,0.3s,SNR=24 | | | | | | | |
| ETOB | | | | S | **Sn** | **20 42 54.3** | **-0.1** |
| | 6.8nm,1.0s | | | | | | | |
| **ETOB** | **Tobarra** | **4.24** | **321** | P | **Pn** | **20 42 05.0** | **+0.1** |
| | 2.4nm,0.3s,SNR=24 | | | | | | | |
| ETOB | | | | S | **Sn** | **20 42 54.3** | **-0.1** |
| | 6.8nm,1.0s | | | | | | | |
| **EHUE** | **Huescar** | **4.32** | **305** | P | **Pn** | **20 42 06.5** | **+0.4** |
| | 1.5nm,2.6s,SNR=7.9 | | | | | | | |
| **EHUE** | **Huescar** | **4.32** | **305** | P | **Pn** | **20 42 06.5** | **+0.4** |
| | 1.5nm,2.6s,SNR=7.9 | | | | | | | |
| **ETOS** | **Mallorca** | **4.42** | **9** | P | **Pn** | **20 42 07.6** | **+0.3** |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| **ETOS** | **Mallorca** | **4.42** | **9** | P | **Pn** | **20 42 07.6** | **+0.3** |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| **SESP** | **Santiago Espad** | **4.46** | **309** | P | **Pn** | **20 42 09.9** | **+1.8** |
| | 0.1nm,0.3s,SNR=7.9 | | | | | | | |
| **SESP** | **Santiago Espad** | **4.46** | **309** | P | **Pn** | **20 42 09.9** | **+1.8** |
| | 0.1nm,0.3s,SNR=7.9 | | | | | | | |
| **EGUA** | **Guajares** | **4.63** | **290** | P | **Pn** | **20 42 11.0** | **+0.8** |
| | 0.9nm,1.1s,SNR=7.9 | | | | | | | |
| **EGUA** | **Guajares** | **4.63** | **290** | P | **Pn** | **20 42 11.0** | **+0.8** |
| | 0.9nm,1.1s,SNR=7.9 | | | | | | | |
| **EQES** | **Quesada** | **4.64** | **302** | P | **Pn** | **20 42 11.8** | **+1.3** |
| | 7.4nm,0.3s,SNR=34 | | | | | | | |
| EQES | | | | S | **Sn** | **20 43 04.0** | **-0.5** |
| | 13nm,1.5s | | | | | | | |
| **EQES** | **Quesada** | **4.64** | **302** | P | **Pn** | **20 42 11.8** | **+1.3** |
| | 7.4nm,0.3s,SNR=34 | | | | | | | |
| EQES | | | | S | **Sn** | **20 43 04.0** | **-0.5** |
| | 13nm,1.5s | | | | | | | |
| **EQUE** | **Quentar** | **4.65** | **294** | P | **Pn** | **20 42 11.6** | **+1.0** |
| | 3.9nm,0.4s,SNR=12 | | | | | | | |
| **EQUE** | **Quentar** | **4.65** | **294** | P | **Pn** | **20 42 11.6** | **+1.0** |
| | 3.9nm,0.4s,SNR=12 | | | | | | | |
| **EMOS** | **Mosqueruela** | **5.29** | **340** | P | **Pn** | **20 42 20.2** | **+0.8** |
| | 1.2nm,0.5s,SNR=13 | | | | | | | |
| **EMOS** | **Mosqueruela** | **5.29** | **340** | P | **Pn** | **20 42 20.2** | **+0.8** |
| | 1.2nm,0.5s,SNR=13 | | | | | | | |
| **ESDC** | **Sonseca Array** | **6.30** | **314** | P | **Pn** | **20 42 32.9** | **-0.3** |
| | 0.3nm,0.3s,baz=128,slow=12,SNR=6.6 | | | | | | | |
| **ESDC** | **Sonseca Array** | **6.30** | **314** | P | **Pn** | **20 42 32.9** | **-0.3** |
| | 0.3nm,0.3s,baz=128,slow=12,SNR=6.6 | | | | | | | |

*CSEM **28** 21:10:36.2,65°.15N×19°.58W,h3km,ML3.2,After REY*

**REY 28 21:10:36.2,65°.15N×19°.58W,h3km,Iceland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ISKR** | **Skrokkalda** | **0.78** | **139** | P | Pg | 21 10 50.1 | -1.2 |
| | baz=139 | | | | | | |
| ISKR | | | | S | Sg | 21 11 00.9 | -0.5 |
| | baz=139 | | | | | | |
| **ISKR** | **Skrokkalda** | **0.78** | **139** | P | Pg | 21 10 50.1 | -1.2 |
| ISKR | | | | S | Sg | 21 11 00.9 | -0.6 |
| **IASB** | **`sbjarnarst** | **0.84** | **242** | S | Sg | 21 11 02.5 | -0.8 |
| | baz=242 | | | | | | |
| IASB | | | | P | Pg | 21 10 51.2 | -1.1 |
| | baz=242 | | | | | | |
| **IASB** | **`sbjarnarst** | **0.84** | **242** | P | Pg | 21 10 51.2 | -1.2 |
| IASB | | | | S | Sg | 21 11 02.5 | -0.8 |
|

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ISKI | | | | S | Sg | 21 11 15.2 | -2.4 | | |
| **IMEL** | **Melhnausar** | **1.30** | **70** | P | Pg | 21 10 58.3 | -2.8 | | |
| | baz=70 | | | | | | | | |
| IMEL | | | | S | Sg | 21 11 15.6 | -2.4 | | |
| | baz=70 | | | | | | | | |
| **IMEL** | **Melhnausar** | **1.30** | **70** | P | Pg | 21 10 58.3 | -2.8 | | |
| IMEL | | | | S | Sg | 21 11 15.6 | -2.3 | | |
| **IHED** | **Heoinshofoi** | **1.33** | **44** | S | Sg | 21 11 16.7 | -2.2 | | |
| | baz=44 | | | | | | | | |
| IHED | | | | P | Pn | 21 10 59.2 | -2.4 | | |
| | baz=44 | | | | | | | | |
| **IHED** | **Heoinshofoi** | **1.33** | **44** | P | Pn | 21 10 59.2 | -2.4 | | |
| IHED | | | | S | Sg | 21 11 16.7 | -2.2 | | |
| **ISOL** | **Solvholt** | **1.36** | **206** | P | Pn | 21 10 59.1 | -2.8 | | |
| | baz=206 | | | | | | | | |
| ISOL | | | | S | Sg | 21 11 16.7 | -3.0 | | |
| | baz=206 | | | | | | | | |
| **ISOL** | **Solvholt** | **1.36** | **206** | P | Pn | 21 10 59.1 | -2.9 | | |
| ISOL | | | | S | Sg | 21 11 16.7 | -3.0 | | |
| **IDIM** | **Dimmadals^¡s** | **1.37** | **52** | S | Sg | 21 11 17.4 | -2.9 | | |
| | baz=52 | | | | | | | | |
| IDIM | | | | P | Pn | 21 10 59.9 | -2.3 | | |
| | baz=52 | | | | | | | | |
| **IDIM** | **Dimmadals^¡s** | **1.37** | **52** | P | Pn | 21 10 59.9 | -2.3 | | |
| IDIM | | | | S | Sg | 21 11 17.4 | -2.9 | | |
| **IMKO** | **Mokollar** | **1.39** | **96** | P | Pn | 21 10 59.6 | -2.8 | | |
| | baz=96 | | | | | | | | |
| IMKO | | | | S | Sg | 21 11 17.8 | -3.1 | | |
| | baz=96 | | | | | | | | |
| **IMKO** | **Mokollar** | **1.39** | **96** | P | Pn | 21 10 59.6 | -2.9 | | |
| IMKO | | | | S | Sg | 21 11 17.8 | -3.0 | | |
| **ISAN** | **Sandskeio** | **1.39** | **219** | P | Pn | 21 10 59.6 | -2.9 | | |
| | baz=219 | | | | | | | | |
| ISAN | | | | S | Sg | 21 11 17.7 | -3.1 | | |
| | baz=219 | | | | | | | | |
| **ISAN** | **Sandskeio** | **1.39** | **219** | P | Pn | 21 10 59.6 | -2.9 | | |
| ISAN | | | | S | Sg | 21 11 17.7 | -3.2 | | |
| **IASM** | **Asmuli** | **1.39** | **199** | P | Pn | 21 10 59.6 | -2.8 | | |
| | baz=199 | | | | | | | | |
| IASM | | | | S | Sg | 21 11 18.1 | -2.8 | | |
| | baz=199 | | | | | | | | |
| **IASM** | **Asmuli** | **1.39** | **199** | P | Pn | 21 10 59.6 | -2.8 | | |
| IASM | | | | S | Sg | 21 11 18.1 | -2.8 | | |
| **IGHA** | **Grjothals** | **1.40** | **59** | S | Sb | 21 11 18.3 | -3.0 | | |
| | baz=59 | | | | | | | | |
| IGHA | | | | P | Pn | 21 11 00.0 | -2.7 | | |
| | baz=59 | | | | | | | | |
| **IGHA** | **Grjothals** | **1.40** | **59** | P | Pn | 21 11 00.0 | -2.7 | | |
| IGHA | | | | S | Sb | 21 11 18.3 | -3.0 | | |
| **IKRE** | **Kreppuhraun** | **1.41** | **104** | P | Pn | 21 11 00.0 | -2.8 | | |
| | baz=104 | | | | | | | | |
| **IKRE** | **Kreppuhraun** | **1.41** | **104** | P | Pn | 21 11 00.0 | -2.8 | | |
| **IBJA** | **Bjarnastaoir** | **1.42** | **212** | P | Pn | 21 11 00.4 | -2.4 | | |
| | baz=212 | | | | | | | | |
| **IBJA** | **Bjarnastaoir** | **1.42** | **212** | P | Pn | 21 11 00.4 | -2.4 | | |
| **IKAL** | **Kalfafell** | **1.46** | **145** | S | Sb | 21 11 20.2 | -2.6 | | |
| | baz=145 | | | | | | | | |
| IKAL | | | | P | Pn | 21 11 01.1 | -2.2 | | |
| | baz=145 | | | | | | | | |
| **IKAL** | **Kalfafell** | **1.46** | **145** | P | Pn | 21 11 01.1 | -2.2 | | |
| IKAL | | | | S | Sb | 21 11 20.2 | -2.5 | | |
| **ISNB** | **Snabyli** | **1.48** | **163** | P | Pn | 21 11 01.4 | -2.2 | | |
| | baz=163 | | | | | | | | |
| **ISNB** | **Snabyli** | **1.48** | **163** | P | Pn | 21 11 01.4 | -2.2 | | |
| **IKAS** | **Kald??rsel** | **1.50** | **222** | P | Pn | 21 11 01.4 | -2.5 | | |
| | baz=222 | | | | | | | | |
| **IKAS** | **Kald??rsel** | **1.50** | **222** | P | Pn | 21 11 01.4 | -2.5 | | |
| **IGOD** | **Go??abunga** | **1.50** | **176** | P | Pn | 21 11 01.9 | -2.2 | | |
| | baz=176 | | | | | | | | |
| **IGOD** | **Go??abunga** | **1.50** | **176** | P | Pn | 21 11 01.9 | -2.2 | | |
| **IMID** | **Miomork** | **1.50** | **185** | P | Pn | 21 11 01.8 | -2.2 | | |
| | baz=185 | | | | | | | | |
| **IMID** | **Miomork** | **1.50** | **185** | P | Pn | 21 11 01.8 | -2.2 | | |
| **IBRU** | **Bruarjokull** | **1.52** | **101** | P | Pn | 21 11 01.7 | -2.6 | | |
| | baz=101 | | | | | | | | |
| IBRU | | | | S | Sn | 21 11 21.7 | -2.9 | | |
| | baz=101 | | | | | | | | |
| **IBRU** | **Bruarjokull** | **1.52** | **101** | P | Pn | 21 11 01.7 | -2.6 | | |
| IBRU | | | | S | Sn | 21 11 21.7 | -2.9 | | |
| **IGRS** | **Grimsstaoir** | **1.53** | **70** | P | Pn | 21 11 02.0 | -2.4 | | |
| | baz=70 | | | | | | | | |
| IGRS | | | | S | Sn | 21 11 22.1 | -2.7 | | |
| | baz=70 | | | | | | | | |
| **IGRS** | **Grimsstaoir** | **1.53** | **70** | P | Pn | 21 11 02.0 | -2.4 | | |
| IGRS | | | | S | Sn | 21 11 22.1 | -2.7 | | |
| **IGRI** | **Grimsey** | **1.54** | **24** | S | Sn | 21 11 21.8 | -3.2 | | |
| | baz=24 | | | | | | | | |
| IGRI | | | | P | Pn | 21 11 01.9 | -2.6 | | |
| | baz=24 | | | | | | | | |
| **IGRI** | **Grimsey** | **1.54** | **24** | P | Pn | 21 11 01.9 | -2.6 | | |
| IGRI | | | | S | Sn | 21 11 21.8 | -3.2 | | |
| **IHVA** | **Hvannstoosfjol** | **1.59** | **95** | S | Sn | 21 11 23.5 | -2.8 | | |
| | baz=95 | | | | | | | | |
| IHVA | | | | P | Pn | 21 11 02.7 | -2.5 | | |
| | baz=95 | | | | | | | | |
| **IHVA** | **Hvannstoosfjol** | **1.59** | **95** | P | Pn | 21 11 02.7 | -2.5 | | |
| IHVA | | | | S | Sn | 21 11 23.5 | -2.8 | | |
| **IVOS** | **Vogsosar** | **1.59** | **216** | P | Pn | 21 11 03.0 | -2.2 | | |
| | baz=216 | | | | | | | | |
| IVOS | | | | S | Sn | 21 11 24.1 | -2.1 | | |
| | baz=216 | | | | | | | | |
| **IVOS** | **Vogsosar** | **1.59** | **216** | P | Pn | 21 11 03.0 | -2.2 | | |
| IVOS | | | | S | Sn | 21 11 24.1 | -2.1 | | |
| **IESK** | **Eystri-Skogar** | **1.63** | **178** | P | Pn | 21 11 03.6 | -2.1 | | |
| | baz=178 | | | | | | | | |
| **IESK** | **Eystri-Skogar** | **1.63** | **178** | P | Pn | 21 11 03.6 | -2.1 | | |
| **IGIL** | **Gilhagi** | **1.63** | **54** | S | Sn | 21 11 25.1 | -2.2 | | |
| | baz=54 | | | | | | | | |
| IGIL | | | | P | Pn | 21 11 03.6 | -2.2 | | |
| | baz=54 | | | | | | | | |
| **IGIL** | **Gilhagi** | **1.63** | **54** | P | Pn | 21 11 03.6 | -2.2 | | |
| IGIL | | | | S | Sn | 21 11 25.1 | -2.2 | | |
| **IHVO** | **Lagu-Hvolar** | **1.66** | **169** | P | Pn | 21 11 04.1 | -2.0 | | |
| | baz=169 | | | | | | | | |
| **IHVO** | **Lagu-Hvolar** | **1.66** | **169** | P | Pn | 21 11 04.1 | -2.0 | | |
| **IKRI** | **Krysuvik** | **1.67** | **221** | P | Pn | 21 11 04.1 | -2.2 | | |
| | baz=221 | | | | | | | | |
| **IKRI** | **Krysuvik** | **1.67** | **221** | P | Pn | 21 11 04.1 | -2.2 | | |
| **IVSH** | **V-Sauoahnukur** | **1.67** | **100** | P | Pn | 21 11 04.0 | -2.5 | | |
| | baz=100 | | | | | | | | |
| **IVSH** | **V-Sauoahnukur** | **1.67** | **100** | P | Pn | 21 11 04.0 | -2.5 | | |
| **IVOG** | **Vogar** | **1.69** | **227** | P | Pn | 21 11 04.6 | -2.0 | | |
| | baz=227 | | | | | | | | |
| **IVOG** | **Vogar** | **1.69** | **227** | P | Pn | 21 11 04.6 | -2.0 | | |
| **IADA** | **Aoalbol** | **1.70** | **93** | P | Pn | 21 11 04.4 | -2.3 | | |
| | baz=92 | | | | | | | | |
| **IADA** | **Aoalbol** | **1.70** | **93** | P | Pn | 21 11 04.4 | -2.4 | | |
| **IGRV** | **Grindav??k** | **1.80** | **225** | P | Pn | 21 11 06.2 | -1.8 | | |
| | baz=225 | | | | | | | | |
| IGRV | | | | S | Sn | 21 11 29.4 | -1.8 | | |
| | baz=225 | | | | | | | | |
| **IGRV** | **Grindav??k** | **1.80** | **225** | P | Pn | 21 11 06.2 | -1.8 | | |
| IGRV | | | | S | Sn | 21 11 29.4 | -1.8 | | |
| **ILEI** | **Leirhofn** | **1.80** | **44** | P | Pn | 21 11 06.0 | -2.0 | | |
| | baz=44 | | | | | | | | |
| ILEI | | | | S | Sn | 21 11 29.2 | -2.0 | | |
| | baz=44 | | | | | | | | |
| **ILEI** | **Leirhofn** | **1.80** | **44** | P | Pn | 21 11 06.0 | -2.0 | | |
| ILEI | | | | S | Sn | 21 11 29.2 | -2.1 | | |
| **IFAG** | **Fagurholsmyri** | **1.80** | **134** | P | Pn | 21 11 06.3 | -1.7 | | |
| | baz=134 | | | | | | | | |
| IFAG | | | | S | Sn | 21 11 28.8 | -2.5 | | |
| | baz=134 | | | | | | | | |
| **IFAG** | **Fagurholsmyri** | **1.80** | **134** | P | Pn | 21 11 06.3 | -1.7 | | |
| IFAG | | | | S | Sn | 21 11 28.8 | -2.5 | | |

**WEL 28 21:31:29.8±0.5, 36°73'S×177°46'E, h140km±5km, ML3.6/8, 2C-1D, Error ellipse: s-maj=5.9km s-min=5.4km az=0.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAZ** | **Te Kaha** | **1.06** | **166** | PN | Pn | 21 31 54.2 | 0.0 |
| HAZ | | | | SN | Sn | 21 32 12.9 | +0.1 |
| **MXZ** | **Matakaoa Point** | **1.07** | **141** | PN | Pn | 21 31 54.3 | 0.0 |
| MXZ | | | | SN | Sn | 21 32 12.5 | -0.5 |
| **PKGZ** | **Pakihiroa** | **1.24** | **157** | PN | Pn | 21 31 56.2 | +0.2 |
| **WMGZ** | **Waiomatatini S** | **1.33** | **145** | PN | Pn | 21 31 56.7 | -0.1 |
| WMGZ | | | | SN | Sn | 21 32 17.0 | -0.5 |
| **PUZ** | **Puketiti** | **1.48** | **155** | PN | Pn | 21 31 58.1 | -0.4 |
| **TWGZ** | **Tauwhareparae** | **1.50** | **164** | PN | Pn | 21 31 59.1 | +0.3 |
| TWGZ | | | | SN | Sn | 21 32 21.1 | +0.2 |
| **URZ** | **Urewera** | **1.55** | **190** | ⇓PN | Pn | 21 31 59.4 | +0.2 |
| **MWZ** | **Matawai** | **1.60** | **178** | PN | Pn | 21 31 59.6 | -0.2 |
| **TKGZ** | **Te Karaka** | **1.73** | **170** | PN | Pn | 21 32 00.6 | -0.6 |
| **RAGZ** | **Rawiri** | **1.76** | **181** | PN | Pn | 21 32 01.8 | +0.1 |
| **CNGZ** | **Carnagh Statio** | **1.85** | **162** | PN | Pn | 21 32 02.4 | -0.2 |
| **RIGZ** | **Rimuhau** | **1.99** | **173** | ⇑PN | Pn | 21 32 03.7 | -0.6 |
| **SNGZ** | **Shannon Statio** | **2.05** | **183** | ⇑PN | Pn | 21 32 04.5 | -0.5 |
| **KNZ** | **Kokohu** | **2.29** | **176** | PN | Pn | 21 32 06.7 | -1.1 |
| **WHNZ** | **Waihua** | **2.35** | **184** | PN | Pn | 21 32 08.0 | -0.6 |
| **NMHZ** | **Naumai** | **2.42** | **192** | PN | Pn | 21 32 09.9 | +0.3 |
| **MHGZ** | **Mahia Peninsul** | **2.45** | **172** | PN | Pn | 21 32 08.9 | -0.9 |
| **BKZ** | **Black Stump Fm** | **2.55** | **197** | PN | Pn | 21 32 10.4 | -0.7 |
| **ARHZ** | **Aropaoanui** | **2.56** | **188** | PN | Pn | 21 32 10.4 | -0.8 |
| **MCHZ** | **McNeill Hill** | **2.78** | **192** | PN | Pn | 21 32 13.6 | -0.3 |
| **CKHZ** | **Cape Kidnapper** | **2.94** | **186** | PN | Pn | 21 32 14.5 | -1.5 |
| **BHHZ** | **Black Hill Sta** | **2.97** | **201** | PN | Pn | 21 32 15.5 | -1.0 |
| **WNVZ** | **Wahianoa** | **2.98** | **209** | PN | Pn | 21 32 16.2 | -0.6 |
| **KRHZ** | **Kereru** | **3.04** | **196** | PN | Pn | 21 32 15.7 | -1.6 |
| **KAHZ** | **Kahuranaki** | **3.10** | **188** | PN | Pn | 21 32 16.7 | -1.4 |
| **PNHZ** | **Pukenui** | **3.33** | **197** | PN | Pn | 21 32 18.9 | -2.2 |
| **TSZ** | **Takapari Road** | **3.53** | **199** | PN | Pn | 21 32 21.4 | -2.3 |
| **PRHZ** | **Porangahau** | **3.59** | **190** | PN | Pn | 21 32 22.1 | -2.4 |
| **DVHZ** | **Dannevirke** | **3.71** | **195** | PN | Pn | 21 32 23.3 | -2.7 |
| **BFZ** | **Birch Farm** | **4.06** | **193** | PN | Pn | 21 32 27.3 | -3.2 |
| **MRZ** | **Mangatainoka R** | **4.19** | **200** | PN | Pn | 21 32 29.1 | -3.2 |
| **HOWZ** | **Holdsworth Sta** | **4.43** | **199** | PN | Pn | 21 32 31.8 | -3.8 |
| **OGWZ** | **Otaki Gorge** | **4.46** | **203** | PN | Pn | 21 32 32.4 | -3.4 |
| **TMWZ** | **Te Maipa** | **4.54** | **195** | PN | Pn | 21 32 33.4 | -3.5 |
| **KIW** | **Kapiti Island** | **4.58** | **205** | PN | Pn | 21 32 33.9 | -3.6 |
| **MTW** | **Mount Morrison** | **4.68** | **198** | PN | Pn | 21 32 34.6 | -4.1 |
| **CAW** | **Cannon Point** | **4.75** | **202** | PN | Pn | 21 32 35.6 | -4.1 |
| **PLWZ** | **Palliser** | **5.13** | **199** | PN | Pn | 21 32 40.0 | -4.8 |
| **QRZ** | **Quartz Range** | **5.62** | **222** | PN | Pn | 21 32 47.9 | -3.4 |
| **THZ** | **Tophouse** | **6.15** | **214** | PN | Pn | 21 32 55.0 | -3.4 |
| **KHZ** | **Kahutara** | **6.44** | **207** | PN | Pn | 21 32 57.4 | -4.8 |

*DDA **28** 21:38:40.4, 39°.99N×25°.49E, h7km, Md2.7*
*ISCJB **28** 21:38:41.6±0.4, 39°.85N±0°.02×25°.41E±0°.02, h11km±3km, Error ellipse: s-maj=3.3km s-min=2.5km az=29.7*
*THE **28** 21:38:41.9, 39°.84N×25°.43E, h12km±1km, ML3.0/7, Error ellipse: s-maj=1.5km s-min=0.7km az=211.0*
*ATH **28** 21:38:41.1, 39°.85N×25°.40E, h23km±1km, MD3.1/12*
*ISK **28** 21:38:41.1, 39°.87N×25°.47E, h5km, MD3.5*
*CSEM **28** 21:38:42.1±0.1, 39°.86N×25°.41E, h10km, MD3.1, Error ellipse: s-maj=3.8km s-min=3.1km az=26.0*

**ISC 28 21:38:41.7±0.8, 39°.84N±0°.02×25°.41E±0°.02, h15km±6km, n93, σ0°89/135, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LIA** | **Limnos Island** | **0.19** | **289** | *e*PB | **Pg** | **21 38 46.0** | **-0.1** |
| LIA | | | | *e*SB | **Sg** | **21 38 49.2** | **+0.1** |
| **LIA** | **Limnos Island** | **0.19** | **289** | P | **Pg** | **21 38 46.1** | **-0.1** |
| LIA | | | | S | **Sg** | **21 38 49.6** | **+0.5** |
| **LIA** | **Limnos Island** | **0.19** | **289** | P | **Pg** | **21 38 46.1** | **-0.1** |
| LIA | | | | *e*Sb | **Sg** | **21 38 49.2** | **+0.1** |
| LIA | | | | S | **Sg** | **21 38 49.6** | **+0.5** |
| **BOZC** | **Bozcaada** | **0.49** | **89** | P | **Pg** | **21 38 57.0** | **-0.6** |
| BOZC | | | | S | **Sg** | **21 38 57.6** | **-0.5** |
| **GADA** | **Gvkgeada** | **0.52** | **46** | *e*PG | **Pg** | **21 38 51.3** | **-0.6** |
| GADA | | | | *e*SG | **Sg** | **21 38 58.7** | **-0.1** |
| **GADA** | **Gvkgeada** | **0.52** | **46** | *e*Pg | **Pg** | **21 38 51.3** | **-0.6** |
| GADA | | | | *e*Sg | **Sg** | **21 38 58.7** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **0.64** | **8** | *e*PN | **Pg** | **21 38 54.0** | **-0.2** |
| SMTH | | | | *e*SN | **Sb** | **21 39 03.9** | **+0.5** |
| **SMTH** | **Samothraki Isl** | **0.64** | **8** | P | **Pg** | **21 38 54.1** | **-0.2** |
| SMTH | | | | S | **Sb** | **21 39 03.3** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **0.64** | **8** | P | **Pg** | **21 38 54.1** | **-0.2** |
| SMTH | | | | S | **Sb** | **21 39 03.3** | **-0.1** |
| SMTH | | | | *e*Sn | **Sb** | **21 39 03.9** | **+0.5** |
| **EZN** | **Ezine** | **0.70** | **91** | *e*PG | **Pg** | **21 38 54.7** | **-0.7** |
| **EZN** | **Ezine** | **0.70** | **91** | *e*Pg | **Pg** | **21 38 54.7** | **-0.7** |
| **SIGR** | **SIGRI** | **0.71** | **151** | *e*PG | **Pg** | **21 38 55.4** | **-0.1** |
| **SIGR** | **SIGRI** | **0.71** | **151** | *e*PN | **Pg** | **21 38 55.1** | **-0.5** |
| SIGR | | | | *e*SN | **Sb** | **21 39 05.6** | **+0.2** |
| **SIGR** | **SIGRI** | **0.71** | **151** | P | **Pg** | **21 38 55.3** | **-0.3** |
| SIGR | | | | S | **Sb** | **21 39 05.5** | **+0.2** |
| **SIGR** | **SIGRI** | **0.71** | **151** | *e*Pg | **Pg** | **21 38 55.4** | **-0.1** |
| SIGR | | | | S | **Sb** | **21 39 05.5** | **+0.2** |
| **PRK** | **Paraskevi** | **0.89** | **131** | *e*PN | **Pb** | **21 38 58.4** | **-0.4** |
| PRK | | | | *e*SN | **Sn** | **21 39 11.5** | **-0.7** |
| **PRK** | **Paraskevi** | **0.89** | **131** | P | **Pb** | **21 38 58.6** | **-0.2** |
| PRK | | | | S | **Sg** | **21 39 10.9** | **+0.4** |
| **PRK** | **Paraskevi** | **0.89** | **131** | P | **Pb** | **21 38 58.6** | **-0.2** |
| PRK | | | | S | **Sg** | **21 39 10.9** | **+0.4** |
| PRK | | | | *e*Sn | **Sn** | **21 39 11.5** | **-0.7** |
| **GELI** | **Tayfur-Gelibol** | **0.99** | **55** | *e*PG | **Pb** | **21 39 00.2** | **-0.3** |
| **GELI** | **Tayfur-Gelibol** | **0.99** | **55** | *e*Pg | **Pb** | **21 39 00.2** | **-0.3** |
| **AYVA** | **Ayvalik** | **1.12** | **118** | *i* P | **Pb** | **21 39 01.9** | **-0.8** |
| AYVA | | | | *i* S | **Sn** | **21 39 18.0** | **+0.1** |
| **AYVA** | **Ayvalik** | **1.12** | **118** | P | **Pb** | **21 39 01.9** | **-0.8** |
| AYVA | | | | S | **Sn** | **21 39 18.0** | **+0.1** |
| **LPK** | **Lapseki** | **1.16** | **62** | *e*PN | **Pn** | **21 39 03.2** | **-0.1** |
| **LPK** | **Lapseki** | **1.16** | **62** | *e*Pn | **Pn** | **21 39 03.3** | **+0.1** |
| **ALN** | **Alexandroupoli** | **1.17** | **24** | *e*PN | **Pg** | **21 39 03.8** | **-0.4** |
| **ALN** | **Alexandroupoli** | **1.17** | **24** | *e*PN | **Pn** | **21 39 03.0** | **-0.4** |
| ALN | | | | *e*SN | **Sb** | **21 39 18.6** | **+0.2** |
| **ALN** | **Alexandroupoli** | **1.17** | **24** | P | **Pn** | **21 39 03.2** | **-0.2** |
| ALN | | | | S | **Sg** | **21 39 19.3** | **-0.1** |
| **ALN** | **Alexandroupoli** | **1.17** | **24** | P | **Pn** | **21 39 03.2** | **-0.2** |
| **ALN** | **Alexandroupoli** | **1.17** | **24** | *e*Pn | **Pg** | **21 39 03.8** | **-0.4** |
| ALN | | | | *e*Sn | **Sb** | **21 39 18.6** | **+0.2** |
| ALN | | | | S | **Sg** | **21 39 19.3** | **-0.1** |
| **ERIK** | **Erikli-Kesan** | **1.19** | **45** | *e*PN | **Pb** | **21 39 03.9** | **+0.1** |
| **ERIK** | **Erikli-Kesan** | **1.19** | **45** | *e*Pn | **Pb** | **21 39 03.9** | **+0.1** |
| **OUR** | **Ouranopolis** | **1.21** | **295** | *e*PN | **Pb** | **21 39 04.2** | **0.0** |
| OUR | | | | *e*SN | **Sn** | **21 39 20.0** | **0.0** |
| **OUR** | **Ouranopolis** | **1.21** | **295** | P | **Pb** | **21 39 04.2** | **0.0** |
| OUR | | | | S | **Sn** | **21 39 20.2** | **+0.2** |
| **OUR** | **Ouranopolis** | **1.21** | **295** | P | **Pb** | **21 39 04.2** | **0.0** |
| OUR | | | | S | **Sn** | **21 39 20.2** | **+0.2** |
| **KAVA** | **Kavala** | **1.35** | **330** | P | **Pn** | **21 39 06.1** | **+0.2** |
| KAVA | | | | S | **Sn** | **21 39 23.0** | **-0.5** |
| **KAVA** | **Kavala** | **1.35** | **330** | P | **Pn** | **21 39 06.1** | **+0.2** |
| KAVA | | | | S | **Sn** | **21 39 23.0** | **-0.5** |
| **AOS** | **Alonnisos** | **1.36** | **241** | *e*PN | **Pg** | **21 39 07.5** | **-0.4** |
| AOS | | | | *e*SN | **Sg** | **21 39 25.7** | **+0.1** |
| **AOS** | **Alonnisos** | **1.36** | **241** | *e*Pn | **Pg** | **21 39 07.5** | **-0.4** |
| AOS | | | | *e*Sn | **Sg** | **21 39 25.7** | **+0.1** |
| **CHOS** | **Chios island** | **1.53** | **161** | *e*PN | **Pn** | **21 39 08.7** | **+0.2** |
| CHOS | | | | *e*SN | **Sg** | **21 39 30.4** | **-0.6** |
| **CHOS** | **Chios island** | **1.53** | **161** | *e*Pn | **Pn** | **21 39 08.7** | **+0.2** |
| CHOS | | | | *e*Sn | **Sg** | **21 39 30.4** | **-0.6** |
| **PLG** | **Polygyros** | **1.60** | **290** | *e*PN | **Pn** | **21 39 09.9** | **+0.4** |
| **PLG** | **Polygyros** | **1.60** | **290** | P | **Pn** | **21 39 09.9** | **+0.4** |
| **PLG** | **Polygyros** | **1.60** | **290** | P | **Pn** | **21 39 09.9** | **+0.4** |
| **BALY** | **Balya** | **1.70** | **93** | *i* P | **Pb** | **21 39 12.0** | **-0.7** |
| BALY | | | | *i* S | **Sb** | **21 39 33.0** | **-0.5** |
| **BALY** | **Balya** | **1.70** | **93** | P | **Pb** | **21 39 12.0** | **-0.7** |
| BALY | | | | S | **Sb** | **21 39 33.4** | **-0.5** |
| **GONE** | **Gonen-Balikesi** | **1.76** | **82** | *e*PN | **Pb** | **21 39 13.3** | **-0.3** |
| **GONE** | **Gonen-Balikesi** | **1.76** | **82** | *e*Pn | **Pb** | **21 39 13.3** | **-0.3** |
| **EREA** | **Eretria** | **1.82** | **220** | *e*PN | **Pn** | **21 39 12.9** | **+0.4** |
| EREA | | | | *e*SN | **Sn** | **21 39 36.3** | **+1.0** |
| **EREA** | **Eretria** | **1.82** | **220** | *e*Pn | **Pn** | **21 39 12.9** | **+0.4** |
| EREA | | | | *e*Sn | **Sn** | **21 39 36.3** | **+1.0** |
| **SOH** | **Sokhos** | **1.86** | **303** | *e*PN | **Pn** | **21 39 13.3** | **+0.3** |
| SOH | | | | *e*SN | **Sn** | **21 39 36.2** | **0.0** |
| **SOH** | **Sokhos** | **1.86** | **303** | *e*Pn | **Pn** | **21 39 13.3** | **+0.3** |
| SOH | | | | *e*Sn | **Sn** | **21 39 36.2** | **0.0** |
| **SRS** | **Serrai** | **1.89** | **313** | *e*PN | **Pn** | **21 39 13.7** | **+0.3** |
| SRS | | | | *e*SN | **Sn** | **21 39 36.6** | **-0.3** |
| **SRS** | **Serrai** | **1.89** | **313** | P | **Pn** | **21 39 13.6** | **+0.2** |
| **SRS** | **Serrai** | **1.89** | **313** | *e*Pn | **Pn** | **21 39 13.7** | **+0.3** |
| SRS | | | | *e*Sn | **Sn** | **21 39 36.6** | **-0.3** |
| **BALB** | **Balikesir** | **1.91** | **95** | *e*PN | **Pb** | **21 39 15.4** | **-0.8** |
| **BALB** | **Balikesir** | **1.91** | **95** | *e*Pn | **Pb** | **21 39 15.4** | **-0.8** |
| **NVR** | **Nevrokopi** | **1.92** | **323** | *e*PN | **Pn** | **21 39 14.3** | **+0.5** |
| **NVR** | **Nevrokopi** | **1.92** | **323** | P | **Pn** | **21 39 14.4** | **+0.6** |
| **NVR** | **Nevrokopi** | **1.92** | **323** | *e*Pn | **Pn** | **21 39 14.3** | **+0.5** |
| **HORT** | **Hortiatis** | **1.93** | **294** | *e*PN | **Pn** | **21 39 14.4** | **+0.4** |
| **HORT** | **Hortiatis** | **1.93** | **294** | *e*Pn | **Pn** | **21 39 14.4** | **+0.4** |
| **EDC** | **Edincik** | **1.95** | **74** | *e*PN | **Pb** | **21 39 15.8** | **-1.1** |
| **EDC** | **Edincik** | **1.95** | **74** | *e*Pn | **Pb** | **21 39 15.8** | **-1.1** |
| **BNT** | **Bandirma** | **1.99** | **74** | *e*PN | **Pb** | **21 39 16.8** | **-0.8** |
| **BNT** | **Bandirma** | **1.99** | **74** | *e*Pn | **Pb** | **21 39 16.8** | **-0.8** |
| **IZM** | **Izmir** | **2.03** | **134** | *e*PN | **Pb** | **21 39 18.0** | **-0.3** |
| **IZM** | **Izmir** | **2.03** | **134** | *e*Pn | **Pb** | **21 39 18.0** | **-0.3** |
| **AKS** | **Akhisar** | **2.09** | **116** | *e*PN | **Pb** | **21 39 18.8** | **-0.5** |
| **AKS** | **Akhisar** | **2.09** | **116** | *e*Pn | **Pb** | **21 39 18.8** | **-0.5** |
| **LKR** | **Lokris** | **2.22** | **238** | *e*PN | **Pn** | **21 39 18.6** | **+0.7** |
| **LKR** | **Lokris** | **2.22** | **238** | *e*Pn | **Pn** | **21 39 18.6** | **+0.7** |
| **EDRB** | **Edirne** | **2.25** | **26** | *e*PN | **Pn** | **21 39 19.8** | **+1.5** |
| **EDRB** | **Edirne** | **2.25** | **26** | *e*Pn | **Pn** | **21 39 19.8** | **+1.5** |
| **SMG** | **Samos** | **2.40** | **152** | *e*PN | **Pn** | **21 39 20.8** | **+0.4** |
| **SMG** | **Samos** | **2.40** | **152** | *e*Pn | **Pn** | **21 39 20.8** | **+0.4** |
| **PHSR** | **Pinarhisar** | **2.41** | **41** | *e*PN | **Pn** | **21 39 21.9** | **+1.4** |
| **PHSR** | **Pinarhisar** | **2.41** | **41** | *e*Pn | **Pn** | **21 39 21.9** | **+1.4** |
| **DST** | **Dursunbey** | **2.48** | **94** | *e*PN | **Pn** | **21 39 23.6** | **+2.0** |
| **DST** | **Dursunbey** | **2.48** | **94** | *e*Pn | **Pn** | **21 39 23.6** | **+2.0** |
| **AGG** | **Agios Georgios** | **2.52** | **252** | *e*PN | **Pb** | **21 39 25.9** | **-0.8** |
| **AGG** | **Agios Georgios** | **2.52** | **252** | *e*Pn | **Pb** | **21 39 25.9** | **-0.8** |
| **GRG** | **Griva** | **2.56** | **297** | *e*PN | **Pb** | **21 39 25.6** | **-1.6** |
| **GRG** | **Griva** | **2.56** | **297** | *e*PB | **Pn** | **21 39 24.1** | **+1.5** |
| **GRG** | **Griva** | **2.56** | **297** | *e*Pn | **Pb** | **21 39 25.7** | **-1.6** |
| **VAY** | **Valandovo** | **2.62** | **305** | *i* Pn | **Pg** | **21 39 33.0** | **+1.1** |
| VAY | | | | *e*Sn | **Sg** | **21 40 03.9** | **-2.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.70** | **134** | *e*PN | **Pb** | **21 39 27.4** | **-2.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.70** | **134** | *e*Pn | **Pb** | **21 39 27.4** | **-2.4** |
| **KULA** | **Kula-Manisa** | **2.85** | **117** | *e*PN | **Pn** | **21 39 29.1** | **+2.5** |
| **KULA** | **Kula-Manisa** | **2.85** | **117** | *e*Pn | **Pn** | **21 39 29.1** | **+2.5** |
| **ISK** | **Istanbul-Kandi** | **3.04** | **65** | *e*PN | **Pn** | **21 39 31.3** | **+2.1** |
| **ISK** | **Istanbul-Kandi** | **3.04** | **65** | *e*Pn | **Pn** | **21 39 31.3** | **+2.1** |
| **TVSB** | **Tavsanli** | **3.15** | **96** | *e*PN | **Pn** | **21 39 33.8** | **+3.0** |
| **TVSB** | **Tavsanli** | **3.15** | **96** | *e*Pn | **Pn** | **21 39 33.8** | **+3.0** |

*BJI **28** 21:41:11.0, 0°.15S×20°.69W, h10km, mB5.7/5, Ms5.3/6, Ms7 5.0/7*
*MOS **28** 21:41:12.4±1.1, 0°.40S×19°.97W, h10km, mb4.9/31, MS4.1/15, Error ellipse: s-maj=12.1km s-min=5.9km az=54.9*
*IDC **28** 21:41:12.5±0.5, 0°.47S×19°.95W, h0km, mb4.4/24, mb1 4.6/26, mb1mx4.5/34, mbtmp4.5/26, ML5.1/2, MS4.2/27, Ms1 4.2/27, ms1mx4.2/29, Error ellipse: s-maj=15.9km s-min=11.4km az=140.0*
*ISCJB **28** 21:41:13.8±0.2, 0°.49S±0°.05×19°.91W±0°.03, h19km, mb4.8/95, MS4.2/26, Error ellipse: s-maj=7.1km s-min=3.5km az=163.4*
*NEIC **28** 21:41:14.1±0.3, 0°.46S×19°.98W, h10km, mb5.0/31, Error ellipse: s-maj=8.6km s-min=6.2km az=156.0*
*GCMT **28** 21:41:14.1±0.2, 0°.38S×19°.87W, h19km, MW5.2/105, Moment Tensor Solution. s68,c108; s105,c179; Duration: 0 Moment tensor: Scale 10^16 Nm; Mrr~0.56±.14; Mθθ 1.96±.13; Mϕϕ~1.40±.13; Mrθ 0.32±.27; Mϕθ~6.41±.12; Mϕr~0.11±.26; Best double couple: Mo6.63400×10^16 NP1:ϕs83.00000°, δ89.00000°, λ177.00000°. NP2: ϕs173.00000°, δ87.00000°, λ1.00000°. Principal axes: T 6.9200, Plg2.0000°, Azm38.0000°; N -0.5740, Plg87.0000°, Azm241.0000°; P -6.3490, Plg1.0000°, Azm128.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 28 21:41:15.2±0.3, 0°.52S±0°.07×19°.99W±0°.06, h19km, n442, σ1s93/442, mb4.8/95, MS4.1/26, 16C-12D, Central Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10N2** | **ASCENSION HYDR** | **9.10** | **143** | T | T | 21 53 02.8 | |

comp=Z,368nm,16.0s
**PAB San Pablo 42.37 18** *e*P **P 21 49 07.9 -0.5**
PAB pmax pmax
comp=Z,18nm,1.4s
**PAB San Pablo 42.37 18** *e*P **P 21 49 07.9 -0.5**
comp=Z,18nm,1.4s
**PVIS Viseu 42.50 14** *e*P **P 21 49 09.8 +0.4**
comp=Z,34nm,1.8s
**ESDC Sonseca Array 42.61 18** P **P 21 49 11.7 +1.3**
comp=Z,3.3nm,0.7s,baz=206,slow=8.6,SNR=31
ESDC PP **PP 21 50 50.6 +1.2**
comp=Z,2.4nm,0.7s,baz=204,slow=11,SNR=5.5
ESDC LR LR 22 06 53.1
comp=Z,196nm,19.6s,baz=200,slow=36
**ES19 SONSECA Array 42.65 18** *e*P **P 21 49 10.5 -0.2**
**MVO Moncorvo 43.13 14** *e*P **P 21 49 16.0 +1.4**
comp=Z,28nm,1.6s
**MVO Moncorvo 43.13 14** *e*LR LR 22 01 46.9
comp=Z,247nm,16.0s
**SIV San Ignacio 43.33 247** P **P 21 49 18.5 +2.0**
comp=Z,3.1nm,0.7s,baz=89,slow=9.0,SNR=7.3
**PGAV Gavieira, Arco 43.60 13** *e*LR LR 22 01 43.3
comp=Z,194nm,18.0s
**SAML Samuel 43.81 258** *e*P **P 21 49 21.5 +1.2**
comp=Z,17nm,1.3s
SAML *e* 21 51 06.6
**CPUP Villa Florida 44.15 231** P **P 21 49 23.7 +0.8**
comp=Z,1.2nm,0.5s,baz=69,slow=3.7,SNR=3.6
CPUP LR LR 22 06 43.0
comp=Z,444nm,19.6s,baz=61,slow=35
**CPUP Villa Florida 44.15 231** P **P 21 49 23.7 +0.8**
CPUP pmax pmax
comp=Z,1.0nm,0.5s
CPUP MLR MLR
comp=Z,444nm,19.6s
**CPUP Villa Florida 44.15 231** *e*P **P 21 49 20.6 -2.3**
**KEST Kesra 45.25 34** P **P 21 49 32.1 +0.4**
comp=Z,5.2nm,0.6s,baz=229,slow=5.4,SNR=8.7
KEST LR LR 22 10 04.3
comp=Z,2µm,18.3s,baz=184,slow=38
**CPD Cerro la Pandu 48.77 295** *e*P **P 21 49 57.7 -1.7**
CPD pmax pmax
comp=Z,156nm,1.4s
**CPD Cerro la Pandu 48.77 295** *e*P **P 21 49 57.7 -1.7**
comp=Z,156nm,1.4s
**LSZ Lusaka 49.77 110** P **P 21 50 07.2 0.0**
comp=Z,3.1nm,0.7s,baz=338,slow=8.1,SNR=9.2
**LSZ Lusaka 49.77 110** P **P 21 50 07.2 0.0**
LSZ pmax pmax
comp=Z,3.0nm,0.7s
**LSZ Lusaka 49.77 110** *e*P **P 21 50 08.4 +1.2**
**SUR Sutherland 49.81 134** P **P 21 50 08.1 +0.7**
comp=Z,0.5nm,0.7s,baz=247,slow=9.7,SNR=2.9
**SUR Sutherland 49.81 134** *e*P **P 21 50 08.4 +1.0**
**LPAZ La Paz 49.95 249** P **P 21 50 09.8 +0.6**
comp=Z,4.6nm,1.0s,baz=66,slow=6.4,SNR=12
LPAZ LR LR 22 11 10.1
comp=Z,442nm,18.4s,baz=86,slow=36
**LPAZ La Paz 49.95 249** P **P 21 50 09.8 +0.6**
LPAZ pmax pmax
comp=Z,5.0nm,1.0s
LPAZ MLR MLR
comp=Z,442nm,18.4s
**LPAZ La Paz 49.95 249** *e*P **P 21 50 08.9 -0.3**
comp=Z,38nm,1.8s
**MBAR Mbarara 50.73 90** P **P 21 50 14.3 -0.3**
comp=Z,2.1nm,0.2s,baz=259,slow=6.9,SNR=8.9
**MBAR Mbarara 50.73 90** P **P 21 50 14.3 -0.3**
MBAR pmax pmax
comp=Z,2.0nm,0.2s
**MBAR Mbarara 50.73 90** *e*P **P 21 50 16.3 +1.7**
**BNI Bardonecchia 51.17 24** *e*P **P 21 50 15.2 -2.1**
**BNI Bardonecchia 51.17 24** *e*P **P 21 50 15.2 -2.1**
**SDV Santo Domingo 51.30 282** *e*P **P 21 50 19.2 +0.4**
comp=Z,61nm,2.2s
**BOSA Boshof 51.44 127** P **P 21 50 18.8 -0.9**
comp=Z,7.5nm,0.8s,baz=291,slow=7.6,SNR=13
BOSA LR LR 22 08 51.2
comp=Z,295nm,18.8s,baz=298,slow=32
**BOSA Boshof 51.44 127** P **P 21 50 18.8 -0.9**
BOSA pmax pmax
comp=Z,8.0nm,0.8s
BOSA MLR MLR
comp=Z,295nm,18.8s
**BOSA Boshof 51.44 127** *e*P **P 21 50 20.3 +0.6**
**SENIN Lac Senin/Sane 52.49 24** *e*P **P 21 50 25.2 -2.1**
comp=Z,35nm,1.6s
**FUORN Ofenpass-Fuorn 53.93 25** *e*P **P 21 50 35.9 -2.0**
comp=Z,45nm,1.8s
**DAVA Damuels 54.29 25**⇑*i*P **P 21 50 39.8 -0.6**
comp=Z,18nm,0.7s
**FETA Feichten 54.44 25**⇑*i*P **P 21 50 41.0 -0.5**
comp=Z,8.4nm,0.9s
**BFO Black Forest 54.50 23** *e*P **P 21 50 41.1 -0.6**
BFO pmax pmax
comp=Z,174nm,2.8s
**BFO Black Forest 54.50 23** *e*P **P 21 50 42.5 +0.7**
comp=Z,9.8nm,1.0s,baz=218,slow=7.0
**BFO Black Forest 54.50 23** *e*P **P 21 50 41.1 -0.6**
comp=Z,174nm,2.8s
**ROSC El Rosal 54.54 276** P **P 21 50 42.9 -0.2**
comp=Z,5.2nm,0.5s,baz=109,slow=12,SNR=6.8
ROSC LR LR 22 12 25.8
comp=Z,372nm,19.1s,baz=79,slow=34
**ROSC El Rosal 54.54 276** *e*P **P 21 50 44.3 +1.2**
**DOU Dourbes 54.64 19** P **P 21 50 43.1 +0.4**
**WLF Walferdange 54.80 21** *e*P **P 21 50 44.9 +1.0**
comp=Z,68nm,2.2s,baz=218,slow=7.0
**RETA Reutte 54.82 25**⇑*i*P **P 21 50 43.4 -0.7**
comp=Z,7.6nm,0.9s
**SNF Seneffe 54.90 19** P **P 21 50 45.6 +1.1**
**IDI Anoyia 54.94 45** P **P 21 50 46.9 +1.7**
comp=Z,16nm,0.7s,baz=53,slow=1.7,SNR=5.6
**ABTA Abfaltersbach 55.02 27**⇑*i*P **P 21 50 46.4 +0.8**
comp=Z,12nm,0.8s
**BCLA Clavier 55.15 19** P **P 21 50 47.4 +1.0**
comp=Z,22nm,2.7s
**STU Stuttgart 55.20 23** *e*P **P 21 50 47.4 +0.6**
comp=Z,18nm,1.1s,baz=218,slow=7.0
**KBA Koelnbreinsper 55.64 27**⇑*i*P **P 21 50 49.6 -0.6**
comp=Z,4.9nm,0.6s
**RJOB Jochberg 55.89 26** *e*P **P 21 50 51.1 -0.7**
comp=Z,16nm,0.6s,baz=218,slow=7.0
**TNS Taunus Mts 56.09 22** *e*P **P 21 50 54.2 +1.0**
comp=Z,47nm,1.8s,baz=218,slow=7.0
**DIVS Divibare 56.92 34**⇓*i*P **P 21 50 59.9 +0.6**
**WET Wettzell 57.00 25** *e*P **P 21 50 59.6 -0.1**
comp=Z,13nm,0.9s,baz=218,slow=7.0
**GEC2 GERESS Array S 57.12 26** *e*P **P 21 51 00.7 0.0**
**GEC2 GERESS Array S 57.12 26** *e*P **P 21 51 00.5 -0.2**
comp=Z,7.9nm,1.1s,baz=218,slow=7.0
**GEC2 GERESS Array S 57.12 26** *e*P **P 21 51 00.7 0.0**
**GERES GERESS Array B 57.12 26** P **P 21 51 00.5 -0.2**
comp=Z,3.2nm,0.7s,baz=214,slow=6.4,SNR=33
GERES PP **PP 21 53 05.7 -2.1**
comp=Z,2.9nm,0.8s,baz=208,slow=8.3,SNR=5.9
GERES LR LR 22 16 04.5
comp=Z,108nm,18.9s,baz=237,slow=37
**GERES GERESS Array B 57.12 26** P **P 21 51 00.5 -0.2**
GERES 21 53 05.7
GERES pmax pmax
comp=Z,3.0nm,0.7s
GERES pmax pmax
comp=Z,3.0nm,0.8s
GERES MLR MLR
comp=Z,109nm,18.9s
**KMBO Kilima Mbogo 57.24 91** P **P 21 51 04.1 +1.8**
comp=Z,2.9nm,1.0s,baz=248,slow=9.3,SNR=6.2
KMBO LR LR 22 13 44.3
comp=Z,892nm,18.2s,baz=260,slow=34
**KMBO Kilima Mbogo 57.24 91** P **P 21 51 04.1 +1.8**
KMBO pmax pmax
comp=Z,3.0nm,1.0s
KMBO MLR MLR
comp=Z,892nm,18.2s
**KMBO Kilima Mbogo 57.24 91** *e*P **P 21 51 03.6 +1.3**
comp=Z,4.5nm,1.0s
**KHC Kasperske Hory 57.29 26** *e*P **P 21 51 00.7 -1.0**
KHC pmax pmax
comp=Z,27nm,2.4s
**KHC Kasperske Hory 57.29 26** *e*P **P 21 51 01.3 -0.4**
**KHC Kasperske Hory 57.29 26** *e*P **P 21 51 00.7 -1.0**
comp=Z,27nm,2.4s
**CONA Conrad Observa 57.43 28**⇑*i*P **P 21 51 02.5 -0.3**
comp=Z,4.9nm,0.7s
**IBBN Ibbenburen 57.57 20** *e*P **P 21 51 03.8 +0.3**
comp=Z,39nm,1.5s,baz=218,slow=7.0

**NKC Novy Kostel 57.66 24** *e*P **P 21 51 05.0 +0.7**
NKC *e* 21 51 12.9
**NKC Novy Kostel 57.66 24** *e*P **P 21 51 05.0 +0.7**
NKC *ex* x 21 51 12.9
**PLN Plauen 57.73 24** *e*P **P 21 51 05.4 +0.6**
baz=218,slow=7.0
**TANN Tannenbergstha 57.80 24** *e*P **P 21 51 05.5 +0.2**
comp=Z,7.7nm,0.7s,baz=218,slow=7.0
**TREC Trest 58.25 27** *e*P **P 21 51 08.1 -0.3**
**TREC Trest 58.25 27** *e*P **P 21 51 08.1 -0.3**
**PRU Pruhonice 58.35 25** *e*P **P 21 51 09.6 +0.5**
**PRU Pruhonice 58.35 25** *e*P **P 21 51 09.6 +0.5**
**GOPC GO Pecny, Ondr 58.40 26** *e*P **P 21 51 08.9 -0.6**
**GOPC GO Pecny, Ondr 58.40 26** *e*P **P 21 51 08.9 -0.6**
**SMOL Smolenice 58.58 28** *e*P **P 21 51 11.7 +0.9**
**SMOL Smolenice 58.58 28** *e*P **P 21 51 11.7 +0.9**
**CLL Collm 58.71 24** *e*S **S 21 59 20.0 +4.6**
**BRG Berggiesshubel 58.76 24** *e*P **P 21 51 11.5 -0.5**
comp=Z,11nm,1.5s
BRG *e* 21 51 26.4
comp=Z,3.9nm,0.9s
BRG S S 21 59 26.0 +10
**BRG Berggiesshubel 58.76 24** *e*P **P 21 51 11.5 -0.5**
BRG S S 21 59 26.0 +10
BRG pmax pmax
comp=Z,11nm,1.5s
BRG pmax pmax
comp=Z,4.0nm,0.9s
**PVCC Panska Ves 58.76 25** *e*P **P 21 51 11.8 -0.2**
**PVCC Panska Ves 58.76 25** *e*P **P 21 51 11.8 -0.2**
**SIRR Siria 59.22 32**⇓*i*P **P 21 51 15.8 +0.6**
**VYHS Vyhne 59.24 29** *e*P **P 21 51 15.2 -0.2**
VYHS pmax pmax
comp=Z,6.0nm,0.8s
**VYHS Vyhne 59.24 29** *e*P **P 21 51 15.2 -0.2**
**GZR Gura Zlata 59.28 34**⇓*i*P **P 21 51 15.5 -0.3**
**GZR Gura Zlata 59.28 34**⇓*i*P **P 21 51 15.5 -0.3**
**UPC Upice 59.37 26** *e*P **P 21 51 16.1 -0.1**
**UPC Upice 59.37 26** *e*P **P 21 51 16.1 -0.1**
**PSZ Piszkesteto 59.38 30** *e*P **P 21 51 16.6 +0.2**
PSZ pmax pmax
comp=Z,29nm,1.6s
**PSZ Piszkesteto 59.38 30**⇓*i*P **P 21 51 16.9 +0.5**
**PSZ Piszkesteto 59.38 30** *e*P **P 21 51 16.6 +0.2**
comp=Z,29nm,1.6s
**DPC Dobruska-Polom 59.39 26** *e*P **P 21 51 15.9 -0.5**
DPC *e* 21 51 22.1
**DPC Dobruska-Polom 59.39 26** *e*P **P 21 51 15.9 -0.5**
DPC *e*pP **pP 21 51 22.1 -0.4**
**KRLC Kraliky 59.39 27** *e*P **P 21 51 17.1 +0.7**
**KRLC Kraliky 59.39 27** *e*P **P 21 51 17.1 +0.7**
**MORC Moravsky Berou 59.52 27** *e*P **P 21 51 17.5 +0.2**
MORC pmax pmax
comp=Z,587nm,2.8s
**MORC Moravsky Berou 59.52 27**⇓*i*P **P 21 51 17.6 +0.2**
**MORC Moravsky Berou 59.52 27** *e*P **P 21 51 17.5 +0.2**
comp=Z,587nm,2.8s
**BSEG Bad Segeberg 59.79 20** *e*P **P 21 51 19.5 +0.5**
comp=Z,13nm,0.8s,baz=218,slow=7.0
**OKC Ostrava-Krasne 59.85 28** *e*P **P 21 51 19.7 +0.2**
**OKC Ostrava-Krasne 59.85 28** *e*P **P 21 51 19.7 +0.2**
**LOT Lotru 59.87 34**⇓*i*P **P 21 51 21.4 +1.5**
**LANS Liptovska Anna 59.99 29** *e*P **P 21 51 22.0 +1.4**
**LANS Liptovska Anna 59.99 29** *e*P **P 21 51 22.0 +1.4**
**DRGR 60.11 33**⇑P **P 21 51 20.9 -0.6**
**DRGR 60.11 33**⇑*i*P **P 21 51 20.9 -0.6**
**VOIR 60.59 35**⇓P **P 21 51 24.7 -0.1**
**VOIR 60.59 35**⇓*i*P **P 21 51 24.7 -0.1**
**STHS Stebnicka Huta 61.04 29** *e*P **P 21 51 28.0 +0.3**
STHS pmax pmax
comp=Z,8.0nm,1.9s
**STHS Stebnicka Huta 61.04 29** *e*P **P 21 51 28.0 +0.3**
**UZH Uzhgorod 61.05 31** *e*P **P 21 51 27.7 0.0**
**KOLS Kolonicke sedl 61.24 30** *e*P **P 21 51 30.2 +1.2**
**KOLS Kolonicke sedl 61.24 30** *e*P **P 21 51 30.2 +1.2**
**VRI Vrincioaia 61.80 35**⇑P **P 21 51 31.2 -1.7**
**VRI Vrincioaia 61.80 35**⇑*i*P **P 21 51 31.2 -1.7**
**BUR04 Bucovina Ar. S 61.97 33** *e*P **P 21 51 33.6 -0.5**
**BURAR Bucovina Array 61.97 33**⇑P **P 21 51 35.6 +1.5**
**BURAR Bucovina Array 61.97 33**⇑*i*P **P 21 51 35.6 +1.5**
**BR231 Keskin MP Arra 62.61 44** *e*P **P 21 51 41.4 +2.8**
**BRTR Keskin Array B 63.16 44** P **P 21 51 41.5 -0.7**
comp=Z,5.0nm,0.8s,baz=233,slow=5.9,SNR=14
BRTR LR LR 22 21 31.2
comp=Z,96nm,19.0s,baz=208,slow=38
**BRTR Keskin Array B 63.16 44** P **P 21 51 41.6 -0.7**
BRTR pmax pmax
comp=Z,5.0nm,0.8s
BRTR MLR MLR
comp=Z,96nm,19.0s
**AK11 Malin Array Si 65.86 32** *e*P **P 21 52 00.0 +0.5**
**KIEV Kiev 65.89 32**⇓*e*P **P 21 51 59.7 0.0**
KIEV pmax pmax
comp=Z,14nm,0.9s
**KIEV Kiev 65.89 32** *e*P **P 21 51 59.1 -0.6**
comp=Z,104nm,2.2s
**AKASG Malin Array Be 65.90 32** P **P 21 51 58.8 -0.9**
comp=Z,5.2nm,0.7s,baz=236,slow=7.2,SNR=21
AKASG LR LR 22 22 31.4
comp=Z,129nm,19.4s,baz=275,slow=38
**AKASG Malin Array Be 65.90 32** P **P 21 51 58.8 -0.9**
AKASG pmax pmax
comp=Z,5.0nm,0.7s
AKASG MLR MLR
comp=Z,129nm,19.4s
**NB2 NORSAR Subarra 65.90 16** P **P 21 51 59.9 +0.2**
comp=Z,1.3nm,0.7s,baz=211,slow=6.5
**NOA NORSAR Array B 65.90 16** P **P 21 51 59.8 +0.2**
comp=Z,2.2nm,0.8s,baz=212,slow=6.5,SNR=6.7
NOA LR LR 22 22 45.7
comp=Z,104nm,18.9s,baz=205,slow=38
**NOA NORSAR Array B 65.90 16** P **P 21 51 59.8 +0.2**
NOA pmax pmax
comp=Z,2.0nm,0.8s
NOA MLR MLR
comp=Z,104nm,18.9s
**MALT Malatya 66.02 47**⇓P **P 21 52 01.7 +0.7**
**MALT Malatya 66.02 47**⇓*i*P **P 21 52 01.7 +0.7**
**SCHQ Schefferville 67.15 333** LR LR 22 15 42.3
comp=Z,136nm,22.0s,baz=113,slow=31
**KMSC Kings Mountain 67.18 309** P **P 21 52 09.2 +0.9**
baz=67
**RAYN Ar Rayn 67.85 64** P **P 21 52 13.4 +0.6**
comp=Z,54nm,0.9s,SNR=6.2
**RAYN Ar Rayn 67.85 64** *e*P **P 21 52 13.2 +0.4**
comp=Z,7.7nm,0.9s
**ANN Anapa 67.86 40** *e*P **P 21 52 10.5 -1.8**
ANN *e**PP **pP 21 52 13.6 -4.9**
ANN *e* 21 52 34.6
ANN *e* 21 54 41.4
ANN eS **S 22 01 08.4 -1.5**
ANN eSS **SS 22 05 34.1 +2.3**
ANN pmax pmax
comp=Z,84nm,1.2s
**VNA1 Neumayer--Stat 70.43 176** P P 21 52 33.6 +5.8
**VNA2 Neumayer--Watz 70.77 176** P **P 21 52 32.0 +2.1**
baz=336,slow=6.3
**NEY Neytrino 70.81 43** P **P 21 52 31.0 +0.1**
NEY pmax pmax
comp=Z,2.0nm,0.9s
**SWET Sewanee 70.82 308** *e*P **P 21 52 30.5 -0.5**
comp=Z,19nm,1.0s
**FINES FINESS Array B 71.01 21** P **P 21 52 31.2 -0.3**
comp=Z,2.2nm,0.7s,baz=189,slow=4.8,SNR=5.1
FINES LR LR 22 25 49.9
comp=Z,106nm,18.3s,baz=231,slow=38
**FINES FINESS Array B 71.01 21** P **P 21 52 31.2 -0.3**
FINES pmax pmax
comp=Z,2.0nm,0.7s
FINES MLR MLR
comp=Z,106nm,18.3s
**KIV Kislovodsk 71.02 43** *e*P **P 21 52 32.8 +0.7**
KIV eS **S 22 01 49.0 +1.5**
KIV eSS **SS 22 06 20.0 -0.9**
KIV pmax pmax
comp=Z,14nm,1.1s
KIV MLR MLR
comp=Z,53nm,18.0s
**KBZ Khabaz 71.09 43** P **P 21 52 32.2 -0.2**
comp=Z,13nm,0.9s,baz=245,slow=4.7,SNR=21
KBZ LR LR 22 25 34.7
comp=Z,87nm,20.8s,baz=264,slow=38
**KBZ Khabaz 71.09 43** P **P 21 52 32.2 -0.2**
KBZ pmax pmax
comp=Z,13nm,0.9s
KBZ MLR MLR
comp=Z,87nm,20.8s
**IGHG Ghaleghazi 71.09 53** *e*P **P 21 52 32.9 0.0**
**GNI Garni 71.26 47**⇓*e*P **P 21 52 35.2 +1.5**
GNI pmax pmax
comp=Z,133nm,1.3s
**IVIS Veis 71.36 53** *e*P **P 21 52 34.4 0.0**
**ISHB Shabestar 71.37 49** *e*P **P 21 52 32.7 -1.9**
**NCK Nalchik 71.49 43**⇑*i*P **P 21 52 36.3 +1.4**
**ILIN Lien 71.55 53** *e*P **P 21 52 35.6 -0.1**
**VORD Divnogorie 71.58 35** *e*P **P 21 52 34.6 -0.6**
VORD pmax pmax
comp=N,5.0nm,0.8s
VORD pmax pmax
comp=E,10.0nm,0.8s
VORD pmax pmax
comp=Z,10.0nm,0.8s
**VSR Storozhevoye 71.62 35** *e*P **P 21 52 34.7 -0.7**
VSR pmax pmax
comp=N,4.0nm,0.8s
VSR pmax pmax
comp=E,5.0nm,0.8s
VSR pmax pmax
comp=Z,10.0nm,0.8s
**SNAA Sanae 71.89 174** P **P 21 52 38.1 +1.4**
**SNAA Sanae 71.89 174** P **P 21 52 37.4 +0.7**
comp=Z,0.8nm,1.0s,baz=324,slow=7.6,SNR=8.5
**SNAA Sanae 71.89 174**⇓*e*P **P 21 52 38.6 +1.9**
SNAA pmax pmax
comp=Z,4.0nm,1.5s
**SNAA Sanae 71.89 174** *e*P **P 21 52 37.6 +0.9**
**LPSR Galich'ya Gora 72.08 33** *e*P **P 21 52 37.4 -0.7**
LPSR pmax pmax
comp=N,6.0nm,0.8s
LPSR pmax pmax
comp=Z,10.0nm,0.8s
LPSR pmax pmax
comp=E,7.0nm,0.7s
**WVT Waverly 72.54 308** *e*P **P 21 52 42.2 +0.9**
WVT pmax pmax
comp=Z,14nm,1.0s
**WVT Waverly 72.54 308** *e*P **P 21 52 42.2 +0.9**
comp=Z,14nm,1.0s
**ISRB Sarab 72.81 50** *e*P **P 21 52 42.2 -0.9**
**SFIN Scholer Farm 73.06 313** P **P 21 52 44.5 +0.2**
baz=73
**VRH Novokhopyorsk 73.08 35** *e*P P 21 52 33.9 -10
VRH pmax pmax
comp=N,3.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.6s
VRH pmax pmax
comp=Z,7.0nm,0.6s
**OLIL Olney 73.38 311** *e*P **P 21 52 47.0 +0.8**
comp=Z,37nm,1.1s
**IRAZ Razeghan 74.03 53** *e*P **P 21 52 49.5 -0.8**
**IAFJ Afjeh 75.54 53** *e*P **P 21 52 57.4 -1.8**
**CCM Cathedral Cave 75.63 309** *e*P **P 21 52 57.2 -2.1**
CCM pmax pmax
comp=Z,16nm,1.0s
**CCM Cathedral Cave 75.63 309** *e*P **P 21 52 57.1 -2.1**
comp=Z,16nm,1.0s
**IDMV Damavand 75.74 53** *e*P **P 21 52 59.3 -1.1**
**ARCES ARCESS Array B 76.23 15** P **P 21 53 01.4 -0.7**
comp=Z,1.8nm,0.8s,baz=207,slow=5.0,SNR=4.0
ARCES LR LR 22 28 58.7
comp=Z,89nm,18.2s,baz=236,slow=38
**ARCES ARCESS Array B 76.23 15** P **P 21 53 01.4 -0.7**
ARCES pmax pmax
comp=Z,2.0nm,0.8s
ARCES MLR MLR
comp=Z,89nm,18.2s
**340A Bronson 76.56 302** P **P 21 53 04.7 -0.1**
baz=77
**IMEH Mehriz 77.16 58** *e*P **P 21 53 09.0 +0.6**
**Y38A Idabel 77.65 305** P **P 21 53 10.4 -0.4**
baz=78
**W38A Poteau 77.66 306** P **P 21 53 11.1 +0.2**
baz=78
**238A Jacksonville 77.69 303** P **P 21 53 11.6 +0.6**
baz=78
**V38A Canehill 77.71 307** P **P 21 53 11.7 +0.6**
baz=78
**I38A Scanlan Farm, 77.73 315** P **P 21 53 10.9 -0.1**
baz=78
**U38A Gravette 77.78 307** P **P 21 53 11.4 -0.2**
baz=78
**X38A Whitesboro 77.85 306** P **P 21 53 12.4 +0.5**
baz=78
**C38A Sawbill Land. 77.88 319** P **P 21 53 12.5 +0.7**
baz=78
**X37A Clayton 78.28 305** P **P 21 53 14.5 +0.2**
baz=78
**V37A Hulbert 78.30 307** P **P 21 53 14.2 -0.1**
baz=78
**137A Heron Place, G 78.30 303** P **P 21 53 14.7 +0.2**
baz=78
**T37A Cheneyville 18 78.32 308** P **P 21 53 14.5 0.0**
baz=78
**S37A Fort Scott 78.36 309** P **P 21 53 14.3 -0.4**
baz=78
**U37A Salina 78.36 307** P **P 21 53 14.3 -0.4**
baz=78
**W37A Quinton 78.41 306** P **P 21 53 14.8 -0.2**
baz=78
**J37A Redenius Farm, 78.44 314** P **P 21 53 15.2 +0.2**
baz=78
**R37A Teagarden Farm 78.45 309** P **P 21 53 14.6 -0.6**
baz=78
**C37A Embarrass 78.48 319** P **P 21 53 14.9 -0.2**
baz=78
**I37A Lemond, Waseca 78.48 315** P **P 21 53 14.7 -0.5**
baz=78
**D37A Cotton 78.50 318** P **P 21 53 15.4 +0.2**
baz=78
**TUL1 Tulsa 78.82 307** P **P 21 53 16.7 -0.5**
baz=79
**U36A Oologah 78.85 307** P **P 21 53 17.4 0.0**
baz=79
**236A Katherine and 78.87 303** P **P 21 53 17.7 0.0**
baz=79
**C36A Pine Crest Far 78.91 319** P **P 21 53 16.9 -0.6**
baz=79
**E36A McGregor 78.91 318** P **P 21 53 17.9 +0.4**
baz=79
**I36A Fitzsimmons Fa 78.91 315** P **P 21 53 17.6 0.0**
baz=79
**V36A Jenks 78.92 307** P **P 21 53 17.6 -0.3**
baz=79
**Z36A Blue Ridge 78.96 304** P **P 21 53 17.7 -0.4**
baz=79
**R36A Gordon, Harris 78.98 309** P **P 21 53 18.0 -0.1**
baz=79
**D36A Goodland 79.00 318** P **P 21 53 17.9 -0.1**
baz=79
**636A Smothers Creek 79.00 300** P **P 21 53 18.6 +0.3**
baz=79
**Q36A Arnold C. Orve 79.05 310** P **P 21 53 18.6 +0.1**
baz=79
**W36A Wetumka 79.06 306** P **P 21 53 18.8 +0.2**
baz=79
**T36A Boggs Farm, Ca 79.07 308** P **P 21 53 18.3 -0.3**
baz=79
**X36A Centrahoma 79.08 305** P **P 21 53 18.5 -0.2**
baz=79
**S35A Otter Creek Ra 79.51 308** P **P 21 53 21.2 +0.2**
baz=80
**T35A Sooner Cattle 79.55 308** P **P 21 53 21.1 -0.2**
baz=80
**P35A Duane Minner, 79.57 310** P **P 21 53 20.8 -0.5**
baz=80
**W35A Tecumseh 79.58 306** P **P 21 53 21.4 -0.1**
baz=80
**B35A Bob, Littlefor 79.63 319** P **P 21 53 21.4 0.0**
baz=80
**035A Encino 79.64 297** P **P 21 53 21.9 0.0**
baz=80
**V35A Meyer Ranch, C 79.64 306** P **P 21 53 22.0 +0.2**
baz=80
**U35A Pawnee 79.64 307** P **P 21 53 21.7 -0.1**
baz=80
**WHTX Lake Whitney 79.65 303** P **P 21 53 22.3 +0.4**
baz=80
**Z35A Perchaven, San 79.65 304** P **P 21 53 21.5 -0.3**
baz=80
**934A Benavides 80.08 298** P **P 21 53 24.7 +0.5**

baz=80
T34A McClaskey Farm 80.10 308 P P 21 53 24.6 +0.3
baz=80
S34A Willow Spring 80.14 308 P P 21 53 24.4 0.0
baz=80
Y34A Reagan Ranch, 80.15 304 P P 21 53 24.6 0.0
baz=80
834A Tilden 80.16 299 P P 21 53 24.8 +0.1
baz=80
434A Burnet 80.20 301 P P 21 53 25.1 +0.1
baz=80,SNR=7.3
234A Clairette 80.23 302 P P 21 53 25.4 +0.4
baz=80
334A Lometa 80.23 302 P P 21 53 25.1 0.0
baz=80,SNR=8.1
134A White-Moore Ra 80.25 303 P P 21 53 25.4 +0.3
baz=80
B34A Aery, Baudette 80.26 319 P P 21 53 26.1 +1.3
baz=80
H34A Spellman Lake, 80.28 315 P P 21 53 25.9 +0.8
baz=80
534A Blanco 80.29 300 P P 21 53 25.6 +0.1
baz=80,SNR=7.2
U34A Anderson Ranch 80.30 307 P P 21 53 26.0 +0.7
baz=80
W34A Bridge Creek, 80.33 306 P P 21 53 26.0 +0.5
baz=80
R34A Isabella, Hill 80.33 309 P P 21 53 26.2 +0.7
baz=80
ECSD EROS Data Cent 80.71 314 P P 21 53 26.9 -0.5
baz=81
ECSD EROS Data Cent 80.71 314 eP P 21 53 27.8 +0.5
comp=Z,32nm,1.4s
933A Laredo 80.74 298 P P 21 53 28.6 +0.7
baz=81
U33A Lingo Farm, Me 80.76 307 P P 21 53 28.6 +0.9
baz=81
533A Kerrville 80.78 300 P P 21 53 28.0 -0.1
baz=81
A33A Warroad 80.83 320 P P 21 53 27.9 0.0
baz=81
633A Saathoff Ranch 80.84 300 P P 21 53 28.7 +0.3
baz=81
333A Richland Sprin 80.87 302 P P 21 53 28.7 +0.2
baz=81,SNR=5.8
733A Divot King Ran 80.87 299 P P 21 53 28.9 +0.3
baz=81
Y33A Hilltop Ranch, 80.87 304 P P 21 53 28.6 +0.1
baz=81
Q33A Connelly Farm, 80.88 310 P P 21 53 28.7 +0.3
baz=81
433A Art 80.90 301 P P 21 53 28.6 -0.1
baz=81
Z33A Whitaker Ranch 80.90 304 P P 21 53 29.1 +0.5
baz=81
R33A Olander Ranch, 80.91 309 P P 21 53 28.6 +0.1
baz=81
833A Chaparral WMA, 80.92 299 P P 21 53 29.2 +0.5
baz=81
GEYT Alibeck 80.94 52 P P 21 53 28.5 -0.3
comp=Z,3.9nm,0.7s,baz=274,slow=6.8,SNR=10.0
GEYT LR LR 22 32 24.2
comp=Z,175nm,19.2s,baz=225,slow=38
133A Hamilton Ranch 80.95 303 P P 21 53 28.8 -0.1
baz=81
H33A Prehn Over Nor 80.96 315 P P 21 53 29.0 +0.3
baz=81
IKOO Kooshan 80.99 57 eP P 21 53 28.5 -0.9
AGMN Agassiz Nation 81.01 319 P P 21 53 29.1 +0.3
baz=81
WMOK Wichita Mounta 81.08 305 eP P 21 53 28.8 -0.8
WMOK pmax pmax
comp=Z,8.0nm,1.0s
WMOK Wichita Mounta 81.08 305 eP P 21 53 28.8 -0.8
comp=Z,8.2nm,1.0s
632A Uvalde 81.37 300 P P 21 53 31.7 +0.4
baz=81,SNR=6.2
ULM Lac du Bonnet 81.39 321 LR LR 22 25 41.8
comp=Z,210nm,18.1s,baz=90,slow=33
O32A Brockman Farm, 81.40 311 P P 21 53 31.2 +0.1
baz=81
V32A Arapaho 81.42 306 P P 21 53 31.7 +0.4
baz=81
H32A Carlson Farm, 81.42 315 P P 21 53 31.3 +0.1
baz=81
832A Faith Ranch, C 81.42 299 P P 21 53 31.7 +0.2
baz=81
Q32A Meitler Ranch, 81.44 309 P P 21 53 31.3 -0.1
baz=81
732A Laxson Ranch, 81.46 299 P P 21 53 32.7 +1.0
baz=82,SNR=7.3
X32A Elmer 81.46 305 P P 21 53 31.6 0.0
baz=82
B32A Ashes, Strandq 81.47 319 P P 21 53 32.2 +1.0
baz=82
JCT Junction City 81.48 301 eP P 21 53 32.6 +0.8
JCT pmax pmax
comp=Z,17nm,0.9s
JCT Junction City 81.48 301 P P 21 53 32.2 +0.4
baz=82
JCT Junction City 81.48 301 eP P 21 53 32.6 +0.8
comp=Z,17nm,0.9s
R32A Long Quarter, 81.49 309 P P 21 53 32.7 +1.1
baz=82
232A Coleman 81.49 302 P P 21 53 32.6 +0.8
baz=82
T32A Huddler Ranch, 81.50 308 P P 21 53 33.0 +1.3
baz=82
Z32A Haskell 81.50 304 P P 21 53 32.0 +0.2
baz=82
W32A Sentinel 81.51 305 P P 21 53 31.8 0.0
baz=82
432A Menard 81.51 301 P P 21 53 32.0 0.0
baz=82
332A Millersview 81.52 302 P P 21 53 31.9 -0.1
baz=82,SNR=7.8
532A Rocksprings 81.53 300 P P 21 53 32.3 +0.1
baz=82,SNR=5.7
Y32A R-V Farms, Ver 81.54 304 P P 21 53 32.4 +0.4
baz=82
ABTX Abilene, Hawle 81.56 303 P P 21 53 32.8 +0.6
baz=82
ABTX Abilene, Hawle 81.56 303 eP P 21 53 32.2 +0.1
comp=Z,12nm,0.8s
S32A Newby Ranch, P 81.57 308 P P 21 53 32.1 0.0
baz=82
IDAH Dahanechah 81.75 57 eP P 21 53 33.4 -0.1
631A Perdido Creek 82.05 300 P P 21 53 35.3 +0.6
baz=82,SNR=7.0
Z31A Sharp Cattle R 82.05 304 P P 21 53 35.0 +0.2
baz=82
X31A McDonald Ranch 82.05 305 P P 21 53 35.1 +0.3
baz=82
231A Bronte 82.06 302 P P 21 53 35.3 +0.5
baz=82
W31A Holland Ranch, 82.08 305 P P 21 53 35.0 +0.1
baz=82
531A Rocksprings 82.09 300 P P 21 53 35.1 +0.1
baz=82
331A San Angelo 82.09 302 P P 21 53 35.3 +0.3
baz=82
R31A Burdett 82.11 309 P P 21 53 35.4 +0.5
baz=82
C31A Landman Farms, 82.16 318 P P 21 53 35.7 +0.7
baz=82
431A Sonora 82.19 301 P P 21 53 36.1 +0.5
baz=82
131A Roby 82.19 303 P P 21 53 36.1 +0.6
baz=82
Y31A Rekieta Farm, 82.22 304 P P 21 53 36.2 +0.6
baz=82
CBKS Cedar Bluff 82.33 309 P P 21 53 36.5 +0.4
baz=82
B30A Myrvik Farm, E 82.66 319 P P 21 53 38.9 +1.4
baz=83
130A Snyder 82.67 303 P P 21 53 38.7 +0.7
baz=83
R30A Dighton 82.69 309 P P 21 53 38.7 +0.7
baz=83
L30A Spencer Herefo 82.70 312 P P 21 53 38.5 +0.5
baz=83
A30A Hoffart Farm, 82.72 319 P P 21 53 37.7 -0.2
baz=83
J30A Dallas 82.72 314 P P 21 53 37.6 -0.4
baz=83
Q30A Quinter 82.73 309 P P 21 53 38.8 +0.6
baz=83
230A Sterling City 82.73 302 P P 21 53 38.7 +0.4
baz=83
D30A Buchanan 82.73 318 P P 21 53 37.8 -0.2
baz=83
430A Baggett Ranch, 82.74 301 P P 21 53 38.1 -0.4
baz=83
S30A Montezuma 82.77 308 P P 21 53 38.9 +0.5
baz=83
X30A Coker Ranch, T 82.77 305 P P 21 53 38.9 +0.4
baz=83
530A J-C Ranch, Com 82.77 300 P P 21 53 38.9 +0.3
baz=83,SNR=12
Z30A Sanderson Ranc 82.87 303 P P 21 53 39.7 +0.6
baz=83,SNR=9.8
S29A Ulysses 83.28 308 P P 21 53 41.8 +0.7
baz=83
429A Davenport Ranc 83.29 301 P P 21 53 41.9 +0.6
baz=83
Q29A Oakley 83.30 309 P P 21 53 41.3 +0.1
baz=83
Z29A Hungry Hill Ra 83.35 303 P P 21 53 41.9 +0.4
baz=83
T29A Hugoton 83.38 307 P P 21 53 41.7 0.0
baz=83
R29A Marienthal 83.38 309 P P 21 53 42.5 +0.9
baz=83
MDND Maddock 83.41 318 P P 21 53 41.5 +0.1
baz=83
529A Stev Forest Ra 83.53 300 P P 21 53 43.3 +0.8
baz=84
ABKAR Akbulak array 83.82 40 eP P 21 53 43.4 -0.1
Y28A McKinney Farm, 83.86 304 P P 21 53 45.0 +0.8
baz=84
R28A Tribune 83.90 308 P P 21 53 45.1 +0.8
baz=84
128A Castleberry Fa 83.95 303 P P 21 53 45.3 +0.6
baz=84
E28A Huff 83.98 317 P P 21 53 44.3 -0.1
baz=84
H28A Mission Ridge 83.98 315 P P 21 53 45.2 +0.7
baz=84
J28A Allard Ranch, 83.99 314 P P 21 53 45.0 +0.4
baz=84
228A UT Block 9, Go 84.00 302 P P 21 53 45.5 +0.6
baz=84
T28A Walsh 84.02 307 P P 21 53 45.5 +0.5
baz=84
O28A Krutsinger Ran 84.04 310 P P 21 53 45.2 +0.2
baz=84
OGNE Ogallala 84.32 311 P P 21 53 46.9 +0.6
baz=84
T27A Campo 84.50 307 P P 21 53 47.7 +0.2
baz=84
J27A Elkhorn Farm, 84.53 313 P P 21 53 48.5 +1.1
baz=84
U27A Thompson Grove 84.53 306 P P 21 53 47.7 +0.1
baz=84
C27A Sayler Ranch, 84.66 318 P P 21 53 48.9 +1.0
baz=85
R27A Eads 84.67 308 P P 21 53 48.6 +0.4
baz=85
G27A Dupree 84.70 316 P P 21 53 48.7 +0.6
baz=85
H27A Howes 84.72 315 P P 21 53 48.8 +0.6
baz=85
TXAR Lajitas Array 84.73 299 P P 21 53 49.9 +1.2
comp=Z,1.9nm,0.6s,baz=118,slow=6.3,SNR=21
TXAR LR LR 22 27 45.1
comp=Z,55nm,21.8s,baz=0.0,slow=33
TXAR Lajitas Array 84.73 299 P P 21 53 49.9 +1.2
TXAR pmax pmax
comp=Z,2.0nm,0.6s
TXAR MLR MLR
comp=Z,55nm,21.8s
TX31 Lajitas Ar. Si 84.73 299 eP P 21 53 49.4 +0.7
F27A Lemmon 84.81 316 P P 21 53 49.3 +0.6
baz=85
C26A Wahner Farm, P 85.07 318 P P 21 53 50.8 +0.9
baz=85
S26A Kim 85.14 308 P P 21 53 51.2 +0.6
baz=85
A26A Wade Farm, Ken 85.15 319 P P 21 53 51.1 +0.8
baz=85
G26A Maurine 85.16 315 P P 21 53 51.1 +0.7
baz=85
T26A Comanche Natio 85.21 307 P P 21 53 51.7 +0.6
baz=85
B26A Jensen Ranch, 85.22 318 P P 21 53 51.6 +0.9
baz=85
SVE Sverdlovsk 85.30 33 eP P 21 53 52.7 +1.9
J26A Sides Ranch, S 85.31 313 P P 21 53 51.4 +0.1
baz=85
I25A Rochford 85.85 314 P P 21 53 54.7 +0.6
baz=86
T25A Trinidad 85.86 307 P P 21 53 55.0 +0.7
baz=86
MNTX Cornudas Mount 86.34 302 P P 21 53 57.4 +0.8
baz=86
Q24A Divide 86.55 309 P P 21 53 58.9 +1.1
baz=86
SDCO Great Sand Dun 86.76 308 P P 21 53 59.6 +0.7
baz=87
SDCO Great Sand Dun 86.76 308 eP P 21 54 00.0 +1.1
comp=Z,9.4nm,1.1s
MAW Mawson 86.79 158 LR LR 22 25 26.8
comp=Z,56nm,19.3s,baz=250,slow=31
ISCO Idaho Springs 86.96 310 eP P 21 54 00.0 +0.2
ISCO pmax pmax
comp=Z,56nm,2.6s
ISCO Idaho Springs 86.96 310 P P 21 54 00.9 +1.1
baz=87
ISCO Idaho Springs 86.96 310 eP P 21 54 00.0 +0.2
comp=Z,56nm,2.6s
N23A Red Feather La 87.27 311 P P 21 54 01.8 +0.5
baz=87
N23A Red Feather La 87.27 311 eP P 21 54 03.5 +2.2
comp=Z,14nm,1.1s
ANMO Albuquerque 87.39 305 eP P 21 54 03.1 +1.2
ANMO pmax pmax
comp=Z,3.0nm,0.8s
ANMO Albuquerque 87.39 305 eP P 21 54 03.0 +1.2
comp=Z,3.0nm,0.8s
BNM Barren Site 87.50 304 eP P 21 54 04.4 +1.9
LPM Los Pinos Moun 87.51 304 eP P 21 54 04.0 +1.6
LAO LASA Array 87.78 317 P P 21 54 03.9 +0.6
baz=88
MVCO Mesa Verde 89.12 307 P P 21 54 11.2 +1.1
baz=89
MVCO Mesa Verde 89.12 307 eP P 21 54 12.2 +2.2
comp=Z,7.3nm,1.0s
KBL Kabul 89.50 56 eP P 21 54 13.8 +1.9
KBL pmax pmax
comp=Z,5.0nm,1.0s
KBL Kabul 89.50 56 eP P 21 54 13.8 +1.9
comp=Z,5.4nm,1.0s
QSPA South Pole Qui 89.55 180 eP P 21 54 12.8 +1.5
comp=Z,15nm,1.0s
RLMT Red Lodge 89.85 315 P P 21 54 14.3 +1.0
baz=90
EGMT Eagleton 90.22 318 P P 21 54 16.4 +1.6
baz=90
AAK Ala-Archa 93.66 47 LR LR 22 41 47.2
comp=Z,71nm,19.5s,baz=259,slow=39
AAK Ala-Archa 93.66 47 eP P 21 54 31.5 +0.5
AAK pmax pmax
comp=Z,8.0nm,0.8s
AAK Ala-Archa 93.66 47 eP P 21 54 30.4 -0.6
comp=Z,2.7nm,0.8s
R11A Troy Canyon, C 94.72 308 P P 21 54 36.1 +0.2
baz=95
KSH Kashi 94.94 51 P P 21 54 36.8 -0.1
KSH epP pP 21 54 41.8 -1.4
KSH ePP PP 21 58 28.0 +2.0
KSH S S 22 05 45.8 -4.8
KSH SS SS 22 12 18.0 +2.4
KSH PMZ
comp=Z,180nm,5.7s
KSH LN
comp=Z,270nm,5.1s
KSH LE
comp=Z,170nm,6.1s
KSH LZ
comp=Z,210nm,5.8s
NEW Newport 95.14 318 P P 21 54 37.4 0.0
baz=95
NVAR Mina Array Bea 96.84 308 LR LR 22 36 03.2
comp=Z,100nm,21.8s,baz=84,slow=34
ISA Isabella 97.20 306 P P 21 54 46.7 -0.4
baz=97
MKAR Makanchi Array 98.79 43 P P 21 54 53.7 -0.2
comp=Z,0.3nm,0.6s,baz=272,slow=3.6,SNR=2.6
MKAR LR LR 22 46 32.0
comp=Z,51nm,18.4s,baz=307,slow=40
ZALV Zalesovo Beam 99.11 35 LR LR 22 45 06.2
comp=Z,63nm,18.1s,baz=250,slow=39
WMQ Urumqi 103.07 45 eP Pdif 21 55 14.0 +0.8
WMQ PP PP 21 59 28.0 +0.2
WMQ SKS SKSac 22 05 52.0 -0.4
WMQ S Sdif 22 06 58.0 -1.2
WMQ SS SS 22 14 09.0 -0.1
WMQ LN
comp=Z,130nm,22.0s
WMQ LE
comp=Z,85nm,22.0s
WMQ LZ
comp=Z,71nm,22.0s
LZH Lanzhou 117.15 49 ePKP PKPdf 21 59 56.5 -3.4
LZH sPKP 22 00 02.0
LZH LN
comp=Z,110nm,17.4s
LZH LE
comp=Z,120nm,18.7s
LZH LZ
comp=Z,150nm,20.1s
CD2 Chengdu 118.82 55 PKP PKPdf 22 00 02.0 -1.1
CD2 sPKP 22 00 06.8
CD2 SKS SKSdf 22 07 14.0 -0.7
CD2 SKKS SKKSac 22 08 18.5 -3.0
CD2 SS SS 22 17 39.5 -0.7
CD2 PPMZ
comp=Z,120nm,5.4s
KMI Kunming 119.60 61 PKP PKPdf 22 00 04.3 -0.7
KMI sPKP 22 00 10.5
KMI LZ
comp=Z,65nm,20.1s
HHC Hu-ho-hao-te 120.60 41 ePKP PKPdf 22 00 08.3 +2.0
HHC PP PP 22 01 38.5 +5.2
HHC SKKS 22 08 27.8
HHC SS SS 22 18 06.0 +3.8
HHC PPMZ
comp=Z,87nm,7.5s
HHC LN
comp=Z,340nm,12.4s
HHC LE
comp=Z,350nm,14.9s
HHC LZ
comp=Z,250nm,13.7s
CN2 Changchun 127.05 31 ePKP PKPdf 22 00 15.3 -3.1
PPT2 Papeete2 127.23 247 eLR LR 22 40 16.7
comp=Z,238nm,24.8s
QIZ Qiongzhong 127.51 66 PKP PKPdf 22 00 19.0 -1.0
QIZ SS SS 22 19 30.5 -0.6
ASAR Alice Springs 145.06 135 PKPbc PKPdf 22 00 52.2 -0.1
comp=Z,15nm,0.7s,baz=227,slow=2.7,SNR=151
ASAR Alice Springs 145.06 135 PKIKP PKPdf 22 00 52.2 -0.1
ASAR pmax pmax
comp=Z,15nm,0.7s
WRA Warramunga Arr 147.65 130 PKPbc PKPbc 22 00 59.2 -0.3
comp=Z,3.0nm,0.9s,baz=237,slow=2.6,SNR=19
WRA Warramunga Arr 147.65 130 PKP2 PKPbc 22 00 59.2 -0.3
WRA pmax pmax
comp=Z,3.0nm,0.9s
WRAB Tennant Creek 147.67 130 ePKP2 PKPbc 22 00 59.2 -0.3
WRAB Tennant Creek 147.67 130 ePKPbc PKPbc 22 00 59.2 -0.3

**DJA 28 22:03:51.5±0.6, 0°S±3°×12°4E±°, h37km±10km, M4.1/6, mb4.6/1, mB4.8/1, MLv3.9/6, Mw(mB)4.0/1, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KMSI | Cibinong | 0.82 | 32 | P | Pn | 22 04 05.9 | -0.7 |
| KMSI | | | | S | Sn | 22 04 19.3 | +1.8 |
| GTOI | Gorontalo | 0.93 | 325 | P | Pn | 22 04 10.2 | +2.1 |
| GTOI | | | | S | Sn | 22 04 25.9 | +5.7 |
| LUWI | Luwuk | 1.19 | 221 | P | Pn | 22 04 11.9 | +0.2 |
| LUWI | | | | S | Sn | 22 04 28.2 | +1.6 |
| MRSI | Marisa | 1.72 | 291 | P | Pn | 22 04 18.8 | -0.1 |
| APSI | Ampana | 2.05 | 248 | P | Pn | 22 04 23.7 | +0.2 |
| APSI | | | | S | Sn | 22 04 49.3 | +1.5 |
| SANI | Sanana | 3.10 | 128 | P | Sn | 22 05 05.9 | -7.7 |
| MPSI | Mapaga | 3.68 | 277 | P | Pn | 22 04 46.6 | +0.7 |
| TNTI | Ternate | 3.92 | 77 | P | Pn | 22 04 52.5 | +3.3 |
| LBMI | Labuha | 3.98 | 97 | P | Pn | 22 04 46.1 | -3.9 |
| NLAI | Namlea | 4.70 | 131 | P | Pn | 22 05 01.5 | +1.6 |
| TTSI | Tana Toraja | 4.72 | 232 | P | Pn | 22 04 59.1 | -1.1 |
| SPSI | Sidrap Palu | 5.37 | 225 | P | Pn | 22 05 08.4 | -0.6 |

**IDC 28 22:07:59.3±3.3, 3°88S×99°61E, h0km, mb3.5/6, mb1 3.6/6, mb1mx3.5/35, mbtmp3.5/6, Error ellipse: s-maj=130.1km s-min=20.5km az=57.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| CMAR | Chiang Mai Arr | 22.21 | 358 | P | P | 22 12 56.7 | -0.8 |
| | 1.0nm,0.8s,baz=186,slow=9.4,SNR=6.9 | | | | | | |
| H01W3 | Cape Leeuwin H | 33.66 | 158 | T | T | 22 50 55.0 | |
| | baz=338 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.67 | 158 | T | T | 22 50 52.8 | |
| | baz=338,slow=74 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.68 | 158 | T | T | 22 50 53.5 | |
| | baz=338,slow=74 | | | | | | |
| WRA | Warramunga Arr | 37.42 | 118 | P | P | 22 15 13.8 | -0.7 |
| | 0.2nm,0.6s,baz=304,slow=9.0,SNR=3.2 | | | | | | |
| ASAR | Alice Springs | 38.50 | 124 | P | P | 22 15 23.5 | -0.2 |
| | 0.1nm,0.3s,baz=300,slow=8.5,SNR=3.0 | | | | | | |
| SONM | Songino Array | 51.84 | 6 | P | P | 22 17 10.2 | +0.8 |
| | 0.6nm,0.8s,baz=194,slow=9.0,SNR=3.8 | | | | | | |
| MKAR | Makanchi Array | 52.73 | 345 | P | P | 22 17 15.2 | -0.6 |
| | 0.8nm,0.8s,baz=163,slow=8.9,SNR=5.3 | | | | | | |
| ZALV | Zalesovo Beam | 58.94 | 350 | P | P | 22 17 59.6 | -0.6 |
| | 0.7nm,0.6s,baz=151,slow=3.4,SNR=4.6 | | | | | | |
| TXAR | Lajitas Array | 146.42 | 39 | PKPbc | PKPab | 22 27 43.6 | -0.3 |
| | 0.7nm,0.7s,baz=255,slow=0.7,SNR=6.7 | | | | | | |

**IDC 28 22:15:31.4±4.1, 7°10S×151°06E, h0km, mb3.0/2, mb1 3.4/2, mb1mx3.2/22, mbtmp3.1/2, Error ellipse: s-maj=169.0km s-min=51.5km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | Warramunga Arr | 20.64 | 230 | P | P | 22 20 11.8 | -1.1 |
| | 0.3nm,0.6s,baz=56,slow=11,SNR=4.5 | | | | | | |
| ASAR | Alice Springs | 23.30 | 223 | P | P | 22 20 41.7 | +0.5 |
| | 0.3nm,0.4s,baz=63,slow=8.4,SNR=2.8 | | | | | | |
| TORD | Torodi Ar. Bea | 149.26 | 284 | PKPbc | PKPbc | 22 35 22.9 | -0.4 |
| | 0.2nm,0.6s,baz=68,slow=3.4,SNR=4.4 | | | | | | |

*SJA 28 22:17:33.7±0.7, 31°90S×69°27W, h25km±10km, MD3.5, ML3.6*
*GUC 28 22:17:35.7±0.6, 31°88S×69°14W, h22km±4km, ML4.0*
**ISC 28 22:17:34.8±1.0, 31°86S±0°03×69°26W±0°06, h29km±9km, n15, σt§30/22, 1C-2D, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| RTLS | Leoncito | 0.07 | 332 | *i* P | Pb | 22 17 39.8 | -0.4 |
| AUSP | Uspallata | 0.38 | 196 | *i* P | Pb | 22 17 41.9 | -1.7 |
| RTCV | Cerro Valdivia | 0.61 | 91 | *i* P | Pn | 22 17 46.8 | -0.8 |
| RTLL | Cerro Villicun | 0.85 | 52 | *i* P | Pn | 22 17 50.9 | 0.0 |
| RTLL | | | | *i* S | Sn | 22 18 03.9 | +1.5 |
| ARCO | CERRO ARCO | 1.02 | 164 | *i* P | Pn | 22 17 53.2 | -0.1 |
| ARCO | | | | *i* S | Sn | 22 18 06.8 | 0.0 |
| ARCO | | | | AML | AML | 22 18 08.3 | |
| | comp=Z,2μm,0.4s | | | | | | |
| AAGR | Agrelo | 1.28 | 163 | *i* P | Pb | 22 17 57.5 | -0.8 |
| PEL | Peldehue | 1.76 | 223 | *i* P | Pb | 22 18 05.8 | -0.7 |
| PEL | | | | *i* S | Sb | 22 18 28.9 | +0.8 |
| PEL | | | | AML | AML | 22 18 30.2 | |
| | comp=E,2μm,0.6s | | | | | | |
| CLCH | Cerro Calan | 1.88 | 215 | *i* P | Pb | 22 18 08.2 | -0.3 |
| CLCH | | | | *i* S | Sb | 22 18 32.9 | +1.4 |
| CLCH | | | | AML | AML | 22 18 35.4 | |
| | comp=E,2μm,0.7s | | | | | | |
| SAN | Santiago | 1.98 | 216 | *i* S | Sb | 22 18 36.3 | +1.7 |
| PCH | Pirque | 2.05 | 211 | *e*P | Pb | 22 18 11.0 | -0.5 |
| PCH | | | | *i* S | Sb | 22 18 37.6 | +1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ANTU** | **Antumapu** | **2.06** | **214** | | AML | AML | 22 18 41.2 | |
| | comp=N,640nm,0.3s | | | | | | | |
| **RCDM** | **Rinconada Maip** | **2.08** | **218** | ‖ | *i*P | **Pb** | **22 18 11.4** | **-0.6** |
| RCDM | | | | | *e*S | **Sb** | **22 18 38.5** | **+1.0** |
| **TLL** | **Tololo Astrono** | **2.14** | **321** | | *e*P | **Pb** | **22 18 13.1** | **-0.1** |
| TLL | | | | | *i*S | **Sb** | **22 18 41.9** | **+2.5** |
| TLL | | | | | AML | AML | 22 18 46.9 | |
| | comp=N,3μm,0.5s | | | | | | | |
| **TACH** | **Talagante** | **2.28** | **218** | | *e*P | **Pb** | **22 18 13.8** | **-1.6** |
| **LSCH** | **La Serena** | **2.58** | **318** | | *e*P | **Pb** | **22 18 18.1** | **-2.4** |
| LSCH | | | | | *e*S | **Sb** | **22 18 50.9** | **-0.9** |

*DDA **28** 22:40:16.0,38˚.42N×39˚.03E,h16km,Md3.1*
*NSSC **28** 22:40:15.8±2.1,38˚.21N×39˚.90E,h77km±86km,ML2.8*
*ISK **28** 22:40:15.7,38˚.40N×39˚.03E,h4km,MD3.6*
*CSEM **28** 22:40:16.5±0.2,38˚.41N×39˚.03E,h2km,MD3.1, Error ellipse: s-maj=4.5km s-min=3.5km az=135.0*

**ISC 28 22:40:15.9±0.8, 38˚.40N±0˚.02×39˚.04E±0˚.02, h15km±5km, n79,σ1ˢ59/112, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ELZG** | **Elazig** | **0.10** | **336** | *i*P | **Pg** | **22 40 19.6** | **+0.1** |
| ELZG | | | | *i*S | **Sg** | **22 40 21.8** | **0.0** |
| **ELZG** | **Elazig** | **0.10** | **336** | P | **Pg** | **22 40 19.6** | **+0.1** |
| ELZG | | | | S | **Sg** | **22 40 21.8** | **0.0** |
| **SVRC** | **Sivrice-ELAZID** | **0.21** | **97** | *e*PG | **Pg** | **22 40 20.7** | **-0.2** |
| SVRC | | | | *e*SG | **Sg** | **22 40 24.6** | **+0.3** |
| **SVRC** | **Sivrice-ELAZID** | **0.21** | **97** | *e*Pg | **Pg** | **22 40 20.7** | **-0.2** |
| SVRC | | | | *e*Sg | **Sg** | **22 40 24.6** | **+0.3** |
| **MALT** | **Malatya** | **0.49** | **260** | *e*PG | **Pg** | **22 40 25.5** | **-0.2** |
| MALT | | | | *e*SG | **Sb** | **22 40 32.8** | **-0.5** |
| **MALT** | **Malatya** | **0.49** | **260** | *e*Pg | **Pg** | **22 40 25.5** | **-0.2** |
| MALT | | | | *e*Sg | **Sb** | **22 40 32.8** | **-0.5** |
| **PTK** | **Pertek** | **0.56** | **29** | *e*PG | **Pg** | **22 40 26.8** | **-0.3** |
| PTK | | | | *e*SG | **Sb** | **22 40 35.9** | **+0.4** |
| **PTK** | **Pertek** | **0.56** | **29** | *e*Pg | **Pg** | **22 40 26.8** | **-0.3** |
| **AKCD** | **Akcadag** | **0.89** | **263** | *i*P | **Pb** | **22 40 33.0** | **-0.1** |
| AKCD | | | | *i*S | **Sb** | **22 40 44.1** | **-0.6** |
| **AKCD** | **Akcadag** | **0.89** | **263** | P | **Pb** | **22 40 33.0** | **-0.1** |
| AKCD | | | | S | **Sb** | **22 40 44.1** | **-0.6** |
| **DYBB** | **Diyarbakir** | **0.98** | **117** | *e*PG | **Pn** | **22 40 35.2** | **+0.1** |
| **URFA** | **Urfa** | **0.98** | **190** | *e*PG | **Pn** | **22 40 35.1** | **-0.1** |
| URFA | | | | *e*SG | **Sn** | **22 40 49.2** | **+0.4** |
| **URFA** | **Urfa** | **0.98** | **190** | *e*Pg | **Pn** | **22 40 35.1** | **-0.1** |
| URFA | | | | *e*Sg | **Sn** | **22 40 49.2** | **+0.4** |
| **DIY** | **Diyarbakir** | **1.06** | **118** | *e*Pg | **Pb** | **22 40 35.2** | **-0.9** |
| **ATAB** | **Bozova** | **1.10** | **213** | *i*P | **Pg** | **22 40 38.5** | **+1.3** |
| ATAB | | | | *i*S | **Sg** | **22 40 54.0** | **+2.4** |
| **ATAB** | **Bozova** | **1.10** | **213** | P | **Pg** | **22 40 38.5** | **+1.3** |
| ATAB | | | | S | **Sg** | **22 40 54.0** | **+2.4** |
| **ILIC** | **ilic-Erzincan** | **1.11** | **341** | *e*PN | **Pg** | **22 40 37.6** | **+0.2** |
| **ILIC** | **ilic-Erzincan** | **1.11** | **341** | *e*Pn | **Pg** | **22 40 37.6** | **+0.2** |
| **BINT** | **Bingol** | **1.23** | **67** | *e*Pn | Pg | 22 40 43.0 | +3.3 |
| **DARE** | **Darende-Malaty** | **1.23** | **278** | *e*PN | **Pg** | **22 40 39.6** | **-0.1** |
| **DARE** | **Darende-Malaty** | **1.23** | **278** | *e*Pn | **Pg** | **22 40 39.6** | **-0.1** |
| **ERZN** | **Erzincan** | **1.30** | **24** | *e*PN | **Pg** | **22 40 41.1** | **+0.2** |
| **EZC** | **Erzincan** | **1.37** | **10** | *e*Pn | **Pb** | **22 40 41.2** | **-0.1** |
| **BNGB** | **Bing¶ll** | **1.41** | **65** | *e*PN | **Pg** | **22 40 43.0** | **-0.1** |
| **MAZI** | **Mazidag** | **1.46** | **130** | *e*PN | **Pg** | **22 40 43.7** | **-0.3** |
| **MAZI** | **Mazidag** | **1.46** | **130** | *e*Pn | **Pg** | **22 40 43.7** | **-0.3** |
| **GZT** | **Gaziantep** | **1.57** | **229** | P | **Pb** | **22 40 44.6** | **-0.1** |
| GZT | | | | S | **Sg** | **22 41 08.1** | **+1.7** |
| **SVAN** | **Silvan-Diyarba** | **1.72** | **98** | *e*PN | **Pb** | **22 40 47.6** | **-0.4** |
| **SVAN** | **Silvan-Diyarba** | **1.72** | **98** | *e*Pn | **Pb** | **22 40 47.6** | **+0.4** |
| **BNGL** | **BINGOL** | **1.74** | **71** | P | **Pg** | **22 40 49.2** | **-0.2** |
| BNGL | | | | S | **Sg** | **22 41 14.0** | **+1.9** |
| **MARD** | **Mardin** | **1.75** | **128** | P | **Pb** | **22 40 47.4** | **-0.4** |
| MARD | | | | S | **Sb** | **22 41 11.4** | **+1.6** |
| **CUZAR** | **Zara_SIVAS** | **1.78** | **327** | P | **Pg** | **22 40 49.6** | **-0.5** |
| CUZAR | | | | S | **Sg** | **22 41 13.1** | **-0.2** |
| **BEST** | **Besiri** | **1.83** | **106** | P | **Pb** | **22 40 48.3** | **-0.9** |
| BEST | | | | S | **Sb** | **22 41 11.7** | **-0.3** |
| **KMRS** | **Kahramanmaras** | **1.91** | **243** | *e*PN | **Pb** | **22 40 50.0** | **-0.6** |
| **KMRS** | **Kahramanmaras** | **1.91** | **243** | *e*Pn | **Pb** | **22 40 50.0** | **-0.6** |
| **BTMT** | **Batman** | **1.94** | **95** | *e*PN | **Pb** | **22 40 50.6** | **-0.4** |
| **BTMT** | **Batman** | **1.94** | **95** | *e*Pn | **Pb** | **22 40 50.6** | **-0.4** |
| **CUALT** | **Altinyayla-SIV** | **1.98** | **297** | P | **Pb** | **22 40 52.6** | **+0.8** |
| CUALT | | | | S | **Sg** | **22 41 19.1** | **-0.6** |
| **SARI** | **SarD1z-Kayseri** | **2.06** | **271** | *e*PN | **Pb** | **22 40 52.6** | **-0.8** |
| **GUMT** | **Gumushane** | **2.08** | **9** | *e*PN | **Pb** | **22 40 52.6** | **-0.8** |
| **GUMT** | **Gumushane** | **2.08** | **9** | *e*Pn | **Pb** | **22 40 52.7** | **-0.8** |
| **BAYT** | **Ayd¨-ntepe-Bay** | **2.16** | **23** | *e*PN | **Pb** | **22 40 53.9** | **-1.0** |
| **BAYT** | **Ayd¨-ntepe-Bay** | **2.16** | **23** | *e*Pn | **Pb** | **22 40 53.9** | **-1.0** |
| **SVSK** | **Karacayir** | **2.19** | **314** | *e*PN | **Pb** | **22 40 54.4** | **-0.8** |
| **SVSK** | **Karacayir** | **2.19** | **314** | *e*Pn | **Pb** | **22 40 54.4** | **-0.8** |
| **KUZU** | **Kuzuini** | **2.25** | **224** | P | **Pg** | **22 41 00.4** | **+1.3** |
| KUZU | | | | S | **Sg** | **22 41 27.9** | **-0.5** |
| **EZM** | **Erzurum** | **2.35** | **50** | *e*PN | **Pb** | **22 40 56.4** | **-1.7** |
| **SLMH** | **Al Salmeh** | **2.36** | **202** | *e*P | **Pn** | **22 40 56.0** | **+1.9** |
| SLMH | | | | *e*S | **Sn** | **22 41 24.1** | **+1.3** |
| SLMH | | | | AML | AML | 22 41 37.5 | |
| | comp=N,137nm,0.4s | | | | | | |
| SLMH | | | | AML | AML | 22 41 40.7 | |
| | comp=E,158nm,0.5s | | | | | | |
| **SLMH** | **Al Salmeh** | **2.36** | **202** | *e*P | **Pn** | **22 40 56.0** | **+1.9** |
| SLMH | | | | *e*S | **Sn** | **22 41 24.1** | **+1.3** |
| | comp=E,158nm,0.5s | | | | | | |
| **RSDY** | **Resadiye-TOKAT** | **2.39** | **327** | *e*PN | **Pb** | **22 40 57.2** | **-1.5** |
| **RSDY** | **Resadiye-TOKAT** | **2.39** | **327** | *e*Pn | **Pb** | **22 40 57.2** | **-1.5** |
| **MNKR** | **ALMNKUR** | **2.46** | **176** | *e*P | **Pn** | **22 40 53.6** | **-2.0** |
| MNKR | | | | *e*S | Sn | 22 41 18.0 | -7.4 |
| MNKR | | | | AML | AML | 22 41 48.5 | |
| | comp=Z,421nm,0.3s | | | | | | |
| **MNKR** | **ALMNKUR** | **2.46** | **176** | *e*P | **Pn** | **22 40 53.6** | **-2.0** |
| MNKR | | | | *e*S | Sn | 22 41 18.0 | -7.4 |
| | comp=Z,421nm,0.3s | | | | | | |
| **ESPY** | **Espiye-Giresun** | **2.52** | **355** | *e*PN | **Pb** | **22 40 59.1** | **-1.8** |
| **ESPY** | **Espiye-Giresun** | **2.52** | **355** | *e*Pn | **Pb** | **22 40 59.1** | **-1.8** |
| **KSRV** | **Kasrt alli** | **2.53** | **181** | *e*P | **Pb** | **22 41 01.2** | **+0.1** |
| KSRV | | | | *e*S | **Sg** | **22 41 35.2** | **-2.2** |
| KSRV | | | | AML | AML | 22 41 43.2 | |
| | comp=Z,54nm,0.2s | | | | | | |
| **KSRV** | **Kasrt alli** | **2.53** | **181** | *e*P | **Pb** | **22 41 01.2** | **+0.1** |
| KSRV | | | | *e*S | **Sg** | **22 41 35.2** | **-2.2** |
| | comp=Z,54nm,0.2s | | | | | | |
| **KTUT** | **Trabzon** | **2.64** | **12** | *e*PN | **Pb** | **22 41 00.6** | **-2.3** |
| **KTUT** | **Trabzon** | **2.64** | **12** | *e*Pn | **Pb** | **22 41 00.6** | **-2.3** |
| **TOKT** | **Tokat** | **2.72** | **315** | *e*PN | **Pn** | **22 41 01.5** | **+2.3** |
| **TOKT** | **Tokat** | **2.72** | **315** | *e*Pn | **Pn** | **22 41 01.5** | **+2.3** |
| **SIRT** | **Sirnak** | **2.83** | **107** | *e*PN | **Pn** | **22 41 03.3** | **+2.6** |
| **SIRT** | **Sirnak** | **2.83** | **107** | *e*Pn | **Pn** | **22 41 03.3** | **+2.6** |
| **TAHT** | **Tahtakopru-Hat** | **3.04** | **229** | *e*PN | **Pn** | **22 41 06.1** | **+2.6** |
| **TAHT** | **Tahtakopru-Hat** | **3.04** | **229** | *e*Pn | **Pn** | **22 41 06.1** | **+2.6** |
| **BTCH** | **Batrach** | **3.13** | **222** | *e*P | **Pn** | **22 41 06.7** | **+1.9** |
| BTCH | | | | *e*S | **Sb** | **22 41 46.1** | **-3.3** |
| BTCH | | | | AML | AML | 22 42 04.6 | |
| | comp=N,168nm,0.5s | | | | | | |
| BTCH | | | | AML | AML | 22 42 06.0 | |
| | comp=E,126nm,0.4s | | | | | | |
| **BTCH** | **Batrach** | **3.13** | **222** | *e*P | **Pn** | **22 41 06.7** | **+1.9** |
| BTCH | | | | *e*S | **Sb** | **22 41 46.1** | **-3.3** |
| | comp=E,126nm,0.4s | | | | | | |
| **ARNB** | **Al Arnab** | **3.53** | **225** | *e*P | Pn | 22 41 13.5 | +3.2 |
| ARNB | | | | *e*S | **Sb** | **22 41 57.0** | **-3.8** |
| ARNB | | | | AML | AML | 22 42 12.7 | |
| | comp=N,39nm,0.6s | | | | | | |
| ARNB | | | | AML | AML | 22 42 14.2 | |
| | comp=E,20nm,0.4s | | | | | | |
| **ARNB** | **Al Arnab** | **3.53** | **225** | *e*P | Pn | 22 41 13.5 | +3.2 |
| ARNB | | | | *e*S | **Sb** | **22 41 57.0** | **-3.8** |
| | comp=E,20nm,0.4s | | | | | | |
| **CUKT** | **Cukurca** | **3.80** | **106** | *e*PN | **Pn** | **22 41 17.1** | **+3.1** |
| **CUKT** | **Cukurca** | **3.80** | **106** | *e*Pn | **Pn** | **22 41 17.1** | **+3.1** |
| **BIDA** | **Albida** | **4.03** | **214** | *e*P | **Pn** | **22 41 19.0** | **+1.9** |
| BIDA | | | | *e*S | **Sn** | **22 42 05.6** | **+1.6** |
| **BIDA** | **Albida** | **4.03** | **214** | *e*P | **Pn** | **22 41 19.0** | **+1.9** |
| BIDA | | | | *e*S | **Sn** | **22 42 05.6** | **+1.6** |
| **RABH** | **Abou Rabah** | **4.23** | **201** | *e*P | **Pn** | **22 41 21.5** | **+1.7** |
| RABH | | | | *e*S | **Sn** | **22 42 06.5** | **-2.5** |
| RABH | | | | AML | AML | 22 42 43.9 | |
| | comp=N,12nm,0.8s | | | | | | |
| RABH | | | | AML | AML | 22 42 44.3 | |
| | comp=E,20nm,0.6s | | | | | | |
| **RABH** | **Abou Rabah** | **4.23** | **201** | *e*P | **Pn** | **22 41 21.5** | **+1.7** |
| RABH | | | | *e*S | **Sn** | **22 42 06.5** | **-2.5** |
| | comp=E,20nm,0.6s | | | | | | |
| **HAWK** | **Haweek** | **4.42** | **210** | *e*P | **Pn** | **22 41 25.0** | **+2.5** |
| HAWK | | | | *e*S | **Sn** | **22 42 14.3** | **+0.6** |
| HAWK | | | | AML | AML | 22 42 39.8 | |
| | comp=E,12nm,0.6s | | | | | | |
| HAWK | | | | AML | AML | 22 42 42.1 | |
| | comp=N,18nm,0.7s | | | | | | |
| **HAWK** | **Haweek** | **4.42** | **210** | *e*P | **Pn** | **22 41 25.0** | **+2.5** |
| HAWK | | | | *e*S | **Sn** | **22 42 14.3** | **+0.6** |
| | comp=N,18nm,0.7s | | | | | | |
| **ROOS** | **tl_alroos** | **4.46** | **199** | *e*P | **Pn** | **22 41 23.7** | **+0.7** |
| ROOS | | | | *e*S | **Sn** | **22 42 11.0** | **-3.6** |
| ROOS | | | | AML | AML | 22 42 54.8 | |
| | comp=N,33nm,0.4s | | | | | | |
| ROOS | | | | AML | AML | 22 43 06.5 | |
| | comp=E,25nm,0.6s | | | | | | |
| **ROOS** | **tl_alroos** | **4.46** | **199** | *e*P | **Pn** | **22 41 23.7** | **+0.7** |
| ROOS | | | | *e*S | **Sn** | **22 42 11.0** | **-3.6** |
| | comp=E,25nm,0.6s | | | | | | |

**IDC 28 22:46:30.1±7.6, 2˚.44S×134˚.08E, h0km, mb3.3/2, mb1 3.5/3, mb1mx3.2/29, mbtmp3.3/3, ML3.0/1, Error ellipse: s-maj=426.6km s-min=29.0km az=77.0, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **17.40** | **179** | P | Pn | 22 50 32.7 | -1.8 |
| | 0.1nm,0.3s,baz=360,slow=12,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **21.10** | **180** | P | P | 22 51 17.4 | +0.9 |
| | 0.7nm,0.7s,baz=360,slow=10,SNR=7.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.80** | **324** | P | P | 22 57 23.6 | 0.0 |
| | 0.2nm,0.4s,baz=116,slow=6.6,SNR=6.1 | | | | | | |

*IDC **28** 23:00:03.0±1.4,3˚.91S×99˚.49E,h0km,mb3.7/8,mb1 3.9/8, mb1mx3.7/37,mbtmp3.8/8, Error ellipse: s-maj=51.3km s-min=19.5km az=53.0*
*ISCJB **28** 23:00:06.2±1.4,3˚.8S±0˚.2×99˚.6E±0˚.3,h33km,mb3.7/8, Error ellipse: s-maj=47.2km s-min=16.8km az=144.8*

**ISC 28 23:00:08.3±1.6, 3˚.9S±0˚.2×99˚.5E±0˚.3, h35km, n12,σ1ˢ12/9, mb3.8/8, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **22.20** | **359** | P | **P** | **23 04 59.8** | **-2.0** |
| | 0.7nm,0.3s,baz=189,slow=11,SNR=7.3 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.69** | **158** | T | T | 23 42 47.1 | |
| | baz=335 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.70** | **158** | T | T | 23 42 47.3 | |
| | baz=335,slow=74 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.71** | **158** | T | T | 23 42 58.8 | |
| | baz=335,slow=74 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.48** | **118** | P | **P** | **23 07 18.3** | **-0.7** |
| | 0.4nm,0.7s,baz=302,slow=8.8,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **38.56** | **124** | P | **P** | **23 07 27.8** | **-0.2** |
| | 0.2nm,0.4s,baz=298,slow=7.7,SNR=3.2 | | | | | | |
| **SONM** | **Songino Array** | **51.85** | **6** | P | **P** | **23 09 13.3** | **+0.2** |
| | 1.2nm,0.8s,baz=198,slow=7.8,SNR=8.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.71** | **345** | P | **P** | **23 09 20.0** | **+0.6** |
| | 1.2nm,0.7s,baz=144,slow=7.8,SNR=7.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **56.02** | **28** | P | **P** | **23 09 45.1** | **+1.5** |
| | 1.3nm,0.7s,baz=185,slow=10,SNR=4.4 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.92** | **350** | P | **P** | **23 10 03.3** | **-0.5** |
| | 1.6nm,0.6s,baz=182,slow=5.5,SNR=7.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.25** | **313** | P | **P** | **23 11 42.3** | **+0.1** |
| | 0.7nm,0.7s,baz=116,slow=6.7,SNR=2.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.46** | **39** | PKPbc | **PKPab** | **23 19 47.8** | **+0.3** |
| | 0.7nm,0.7s,baz=277,slow=1.5,SNR=5.8 | | | | | | |

**IDC 28 23:04:03.1±2.5, 2˚.84S×100˚.10E, h0km, mb3.9/7, mb1 4.0/7, mb1mx3.7/36, mbtmp3.9/7, Error ellipse: s-maj=88.7km s-min=19.9km az=58.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.19** | **357** | P | P | 23 08 50.5 | +0.1 |
| | 0.9nm,0.3s,baz=185,slow=9.9,SNR=5.2 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.89** | **259** | T | T | 23 38 49.2 | |
| | baz=81,slow=75,SNR=321 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.90** | **259** | T | T | 23 38 47.7 | |
| | baz=81,slow=75,SNR=223 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.91** | **259** | T | T | 23 38 50.5 | |
| | baz=81,slow=75,SNR=277 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.45** | **159** | T | T | 23 47 15.6 | |
| | baz=335,slow=76,SNR=7.5 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.47** | **159** | T | T | 23 47 16.6 | |
| | baz=335,slow=76,SNR=9.8 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.47** | **159** | T | T | 23 47 10.8 | |
| | baz=335,slow=76,SNR=8.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.49** | **120** | P | P | 23 11 18.7 | -0.2 |
| | 0.5nm,0.8s,baz=306,slow=8.8,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.69** | **125** | P | P | 23 11 28.8 | -0.2 |
| | 0.5nm,0.7s,baz=307,slow=9.2,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **50.76** | **5** | P | P | 23 13 05.3 | +0.2 |
| | 1.4nm,0.8s,baz=187,slow=9.1,SNR=9.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.85** | **345** | P | P | 23 13 13.1 | -0.1 |
| | 2.7nm,0.6s,baz=147,slow=7.8,SNR=20 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **54.84** | **28** | P | P | 23 13 34.9 | -0.3 |
| | 3.3nm,0.8s,baz=213,slow=4.3,SNR=8.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.00** | **349** | P | P | 23 13 56.8 | -0.8 |
| | 2.0nm,0.8s,baz=160,slow=7.8,SNR=6.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.30** | **38** | PKPbc | PKPbc | 23 23 43.5 | -0.1 |
| | 1.1nm,0.7s,baz=328,slow=1.7,SNR=7.8 | | | | | | |

**IDC 28 23:04:33.6±2.1, 4˚.89S×148˚.47E, h0km, mb3.4/3, mb1 3.8/3, mb1mx3.5/33, mbtmp3.5/3, MS3.1/1, Ms1 3.1/1, ms1mx2.5/19, Error ellipse: s-maj=140.6km s-min=29.7km az=121.0, Bismarck Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **20.32** | **221** | P | P | 23 09 10.8 | -0.7 |
| | 1.0nm,0.7s,baz=43,slow=11,SNR=6.9 | | | | | | |
| **ASAR** | **Alice Springs** | **23.36** | **216** | P | P | 23 09 43.5 | -0.4 |
| | 0.5nm,0.5s,baz=47,slow=8.6,SNR=9.1 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **42.32** | **348** | LR | LR | 23 29 24.8 | |
| | comp=Z,23nm,18.6s,baz=245,slow=35 | | | | | | |
| **ILAR** | **Eielson Array** | **83.89** | **23** | P | P | 23 17 04.2 | -0.9 |
| | 0.2nm,0.7s,baz=232,slow=6.8,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **146.21** | **286** | PKPbc | PKPab | 23 24 17.8 | 0.0 |
| | 0.4nm,1.1s,baz=76,slow=3.0,SNR=2.9 | | | | | | |

**IDC 28 23:08:28.3±3.5, 3˚.37S×99˚.83E, h0km, mb3.6/6, mb1 3.7/6, mb1mx3.5/34, mbtmp3.6/6, Error ellipse: s-maj=136.2km s-min=20.5km az=58.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.71** | **358** | P | P | 23 13 20.9 | -0.2 |
| | 0.5nm,0.3s,baz=186,slow=9.0,SNR=2.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.53** | **260** | T | T | 23 43 24.4 | |
| | baz=82,slow=75,SNR=269 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.54** | **260** | T | T | 23 43 24.8 | |
| | baz=82,slow=75,SNR=264 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.55** | **260** | T | T | 23 43 25.8 | |
| | baz=82,slow=75,SNR=262 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.05** | **159** | T | T | 23 51 16.1 | |
| | baz=336,slow=76,SNR=17 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.07** | **159** | T | T | 23 51 17.2 | |
| | baz=336,slow=76,SNR=23 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.07** | **159** | T | T | 23 51 18.2 | |
| | baz=336,slow=76,SNR=18 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.47** | **119** | P | P | 23 15 43.2 | -0.7 |
| | 0.3nm,0.6s,baz=299,slow=9.1,SNR=3.4 | | | | | | |
| **ASAR** | **Alice Springs** | **38.60** | **125** | P | P | 23 15 53.5 | 0.0 |
| | 0.3nm,0.6s,baz=299,slow=8.0,SNR=3.3 | | | | | | |
| **SONM** | **Songino Array** | **51.32** | **6** | P | P | 23 17 34.7 | +0.2 |
| | 0.9nm,0.6s,baz=188,slow=8.0,SNR=8.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.30** | **345** | P | P | 23 17 41.2 | -0.4 |
| | 1.0nm,0.8s,baz=116,slow=8.2,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.48** | **350** | P | P | 23 18 25.4 | -0.6 |
| | 0.5nm,0.3s,baz=167,slow=8.2,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.88** | **38** | PKPbc | PKPab | 23 28 11.1 | +0.2 |
| | 0.5nm,0.6s,baz=13,slow=2.7,SNR=3.6 | | | | | | |

*CSEM **28** 23:48:31.3±0.7, 39˚.54N×54˚.65E, h10km, mb3.6, Error ellipse: s-maj=26.3km s-min=10.8km az=171.0*
*AZER **28** 23:48:35.5±31.0, 39˚.19N×53˚.88E, h11km, Error ellipse: s-maj=12.7km s-min=11.4km az=236.0*
*NNC **28** 23:48:44.1±5.1, 40˚.35N×55˚.66E, h0km, mb3.6, Error ellipse: s-maj=44.8km s-min=25.0km az=43.0*

**ISC 28 23:48:28.2±1.4, 39˚.3N±0˚.1×54˚.82E±0˚.06, h10km, n29, σ2ˢ17/33, 20C-10D, Turkmenistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LKRN** | **Lenkeran, Azer** | **4.74** | **265** | ‖P | **Pn** | **23 49 39.8** | **+0.1** |
| LKRN | | | | ‖S | Sn | 23 50 28.2 | -6.6 |
| **LKRN** | **Lenkeran, Azer** | **4.74** | **265** | P | **Pn** | **23 49 39.8** | **+0.1** |
| LKRN | | | | S | Sn | 23 50 28.2 | -6.6 |
| **ATGJ** | **Altiaghaj** | **4.78** | **291** | ‖P | **Pn** | **23 49 42.5** | **+2.0** |
| ATGJ | | | | ‖S | **Sn** | **23 50 32.6** | **-3.4** |
| **ATGJ** | **Altiaghaj** | **4.78** | **291** | P | **Pn** | **23 49 42.5** | **+2.0** |
| ATGJ | | | | S | **Sn** | **23 50 32.6** | **-3.4** |
| **SIZA** | **Siyzn** | **4.88** | **294** | ‖P | **Pn** | **23 49 43.6** | **+1.8** |
| SIZA | | | | ‖S | Sn | 23 50 34.4 | -3.9 |
| **SIZA** | **Siyzn** | **4.88** | **294** | P | **Pn** | **23 49 43.6** | **+1.8** |
| SIZA | | | | S | Sn | 23 50 34.4 | -3.9 |
| **GLBA** | **Clilabad** | **4.99** | **272** | ‖P | **Pn** | **23 49 43.6** | **+0.5** |
| GLBA | | | | ‖S | Sn | 23 50 34.2 | -6.7 |
| **GLBA** | **Clilabad** | **4.99** | **272** | P | **Pn** | **23 49 43.6** | **+0.5** |
| GLBA | | | | S | Sn | 23 50 34.2 | -6.7 |
| **PQL** | **Pirkuli** | **5.01** | **290** | ‖P | **Pn** | **23 49 45.3** | **+1.6** |
| PQL | | | | ‖S | Sn | 23 50 37.6 | -4.1 |
| **PQL** | **Pirkuli** | **5.01** | **290** | P | **Pn** | **23 49 45.3** | **+1.6** |
| PQL | | | | S | Sn | 23 50 37.6 | -4.1 |
| **LRK** | **Lerik** | **5.09** | **265** | ‖P | **Pn** | **23 49 46.3** | **+1.6** |
| LRK | | | | ‖S | Sn | 23 50 37.3 | -6.3 |
| **LRK** | **Lerik** | **5.09** | **265** | P | **Pn** | **23 49 46.3** | **+1.6** |
| LRK | | | | S | Sn | 23 50 37.3 | -6.3 |
| **QUBA** | **Quba, Azerbaij** | **5.26** | **295** | ‖P | **Pn** | **23 49 48.4** | **+1.4** |
| QUBA | | | | ‖S | Sn | 23 50 43.8 | -3.9 |
| **QUBA** | **Quba, Azerbaij** | **5.26** | **295** | P | **Pn** | **23 49 48.4** | **+1.4** |
| QUBA | | | | S | Sn | 23 50 43.8 | -3.9 |
| **IML** | **Ismayilli** | **5.32** | **289** | ‖P | **Pn** | **23 49 48.2** | **+0.5** |
| IML | | | | ‖S | Sn | 23 50 44.6 | -4.4 |
| **IML** | **Ismayilli** | **5.32** | **289** | P | **Pn** | **23 49 48.2** | **+0.5** |
| IML | | | | S | Sn | 23 50 44.6 | -4.4 |
| **SEKA** | **Sheki** | **6.14** | **291** | ‖P | **Pn** | **23 49 59.9** | **+0.8** |
| SEKA | | | | ‖S | Sn | 23 51 03.6 | -5.9 |
| **SEKA** | **Sheki** | **6.14** | **291** | P | **Pn** | **23 49 59.9** | **+0.8** |
| SEKA | | | | S | Sn | 23 51 03.6 | -5.9 |
| **GANJ** | **Ganja** | **6.67** | **285** | ‖P | **Pn** | **23 50 06.1** | **-0.2** |
| GANJ | | | | ‖S | Sn | 23 51 13.2 | -9.2 |
| **GANJ** | **Ganja** | **6.67** | **285** | P | **Pn** | **23 50 06.1** | **-0.2** |
| GANJ | | | | S | Sn | 23 51 13.2 | -9.2 |
| **ZKTA** | **Zakatala** | **6.68** | **293** | ‖P | **Pn** | **23 50 07.2** | **+0.7** |
| ZKTA | | | | ‖S | Sn | 23 51 16.4 | -6.2 |
| **QZX** | **Qazax, Azerbai** | **7.45** | **287** | ‖P | **Pn** | **23 50 16.5** | **-0.5** |
| QZX | | | | ‖S | Sn | 23 51 33.9 | -7.7 |
| **QZX** | **Qazax, Azerbai** | **7.45** | **287** | P | **Pn** | **23 50 16.5** | **-0.5** |
| QZX | | | | S | Sn | 23 51 33.9 | -7.8 |
| **AB31** | **Akbulak array** | **10.63** | **18** | ‖Pn | **Pn** | **23 50 59.5** | **-1.0** |
| | 0.2nm,0.2s,baz=203,slow=14,SNR=27 | | | | | | |
| AB31 | | | | ‖Sn | Sn | 23 52 48.6 | -11 |
| | 3.4nm,0.5s,baz=201,slow=24,SNR=23 | | | | | | |
| **AB31** | **Akbulak array** | **10.63** | **18** | Pn | **Pn** | **23 50 59.5** | **-1.0** |
| | 0.2nm,0.2s,SNR=27 | | | | | | |
| AB31 | | | | Sn | Sn | 23 52 48.6 | -11 |
| | 3.4nm,0.5s,SNR=23 | | | | | | |
| **AKTO** | **Aktyubinsk** | **11.39** | **10** | ‖Pn | **Pn** | **23 51 13.9** | **+3.0** |
| | 1.3nm,0.7s | | | | | | |
| AKTO | | | | ‖Sn | Sn | 23 53 08.1 | -10 |
| | 3.9nm,0.6s | | | | | | |
| **AKTO** | **Aktyubinsk** | **11.39** | **10** | Pn | **Pn** | **23 51 13.9** | **+3.0** |
| | 1.3nm,0.7s | | | | | | |
| AKTO | | | | Sn | Sn | 23 53 08.1 | -10 |
| | 3.9nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **12.42** | **67** | ‖P | **Pn** | **23 51 28.1** | **+3.0** |
| KK31 | | | | ‖S | **Sn** | **23 53 38.7** | **-4.8** |
| | 0.4nm,0.3s,baz=266,slow=24,SNR=3.2 | | | | | | |
| **KK31** | **Karatay Array** | **12.42** | **67** | P | **Pn** | **23 51 28.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| GLI | Glacier Island | 2.78 | 66 | P | Pn | 00 05 47.3 | -0.7 |
| HIN | Hinchinbrook I | 2.95 | 77 | P | Pn | 00 05 49.3 | -1.1 |
| PLK2 | Peulik 2 | 2.97 | 226 | P | Pn | 00 05 50.4 | -0.2 |
| PLK5 | Peulik 5 | 3.02 | 234 | P | Pn | 00 05 51.4 | +0.2 |
| FID | Port Fidalgo | 3.03 | 71 | P | Pn | 00 05 49.4 | -2.0 |
| PPLA | Purkeypile | 3.04 | 1 | *e*Pn | Pn | 00 05 51.8 | +0.2 |
| PPLA | | | | *e*S | Sn | 00 06 22.9 | -4.1 |
| PLK1 | Peulik 1 | 3.05 | 229 | P | Pn | 00 05 51.5 | -0.1 |
| MID | Middleton Isla | 3.06 | 96 | *e*Pn | Pn | 00 05 51.2 | -0.6 |
| MID | | | | *e*S | Sn | 00 06 23.8 | -3.6 |
| JPK | Jack Peak | 3.07 | 65 | P | Pn | 00 05 50.8 | -1.2 |
| SCM | Sheep Creek Mo | 3.13 | 49 | P | Pn | 00 05 51.8 | -1.0 |
| VLZ | Valdez | 3.22 | 64 | P | Pn | 00 05 52.3 | -1.5 |
| SII | Sitkinak Islan | 3.47 | 197 | P | Pn | 00 05 56.9 | -0.4 |
| DIV | Divide | 3.47 | 66 | P | Pn | 00 05 56.1 | -1.3 |
| TT01 | Tatalina | 3.53 | 331 | P | Pn | 00 05 57.4 | -0.7 |
| KLU | Klutina | 3.54 | 60 | P | Pn | 00 05 56.8 | -1.5 |
| CAST | Castle Rocks | 3.56 | 2 | P | Pn | 00 05 58.5 | 0.0 |
| TRF | Thorofare Moun | 3.72 | 14 | P | Pn | 00 06 01.0 | +0.2 |
| KTH | Kantishna Hill | 3.75 | 10 | P | Pn | 00 06 01.7 | +0.5 |
| RND | Reindeer | 3.91 | 23 | P | Pn | 00 06 03.0 | -0.3 |
| BMRM | Bremner River | 3.98 | 71 | *e*Pn | Pn | 00 06 03.1 | -1.1 |
| BMRM | | | | *e*S | Sn | 00 06 46.8 | -2.8 |
| MCK | McKinley | 4.19 | 21 | P | Pn | 00 06 06.9 | -0.2 |
| BPAW | Bear Paw Mtn. | 4.29 | 8 | P | Pn | 00 06 08.5 | +0.1 |
| HARP | HAARP | 4.30 | 51 | P | Pn | 00 06 07.6 | -1.0 |
| BWN | Browne | 4.52 | 16 | P | Pn | 00 06 11.6 | +0.1 |
| PAX | Paxson | 4.52 | 44 | P | Pn | 00 06 11.0 | -0.6 |
| KHIT | Khitrov Hills | 4.56 | 79 | P | Pn | 00 06 11.8 | -0.5 |
| VRDI | Verde Repeater | 4.58 | 69 | P | Pn | 00 06 12.5 | 0.0 |
| PS10 | TAPS Pump St10 | 4.73 | 38 | P | Pn | 00 06 14.5 | 0.0 |
| MCARA | McCarthy VSAT | 4.82 | 68 | P | Pn | 00 06 15.8 | +0.2 |
| CHGN | Chignik | 4.83 | 225 | *e*Pn | Pn | 00 06 15.8 | +0.1 |
| CHGN | | | | *e*S | Sn | 00 07 07.0 | -3.2 |
| WRH | Wood River Hil | 5.02 | 21 | P | Pn | 00 06 17.5 | -0.8 |
| PTPK | Patty Peak | 5.04 | 71 | P | Pn | 00 06 18.7 | -0.1 |
| KIAG | Kiagna River | 5.05 | 74 | P | Pn | 00 06 18.5 | -0.4 |
| BALM | Baldy | 5.07 | 72 | P | Pn | 00 06 18.9 | -0.3 |
| BAGL | Bagley Icefiel | 5.14 | 79 | P | Pn | 00 06 20.4 | +0.4 |
| MENT | Mentasta | 5.15 | 50 | *e*Pn | Pn | 00 06 19.1 | -1.0 |
| MENT | | | | *e*S | Sn | 00 07 19.4 | +1.3 |
| HDA | Harding Lake | 5.20 | 27 | P | Pn | 00 06 20.1 | -0.6 |
| MESA | MESA | 5.21 | 82 | P | Pn | 00 06 21.4 | +0.3 |
| MLY | Manley | 5.23 | 7 | P | Pn | 00 06 20.9 | -0.3 |
| CCB | Clear Creek Bu | 5.23 | 22 | P | Pn | 00 06 19.9 | -1.3 |
| YAH | Yahtse | 5.31 | 80 | P | Pn | 00 06 22.1 | -0.4 |
| BARN | Barnard Glacie | 5.40 | 73 | P | Pn | 00 06 23.8 | +0.1 |
| COLA | College | 5.43 | 21 | P | Pn | 00 06 22.7 | -1.1 |
| MDM | Murphy Dome | 5.45 | 19 | P | Pn | 00 06 23.5 | -0.6 |
| DOT | Dot Lake | 5.45 | 42 | *e*Pn | Pn | 00 06 23.1 | -1.1 |
| | 69nm,0.6s | | | | | | |
| DOT | | | | *e*S | Sn | 00 07 23.3 | -2.1 |
| RKAV | Rock Avalanche | 5.51 | 81 | P | Pn | 00 06 24.9 | -0.2 |
| ILAR | Eielson Array | 5.53 | 25 | P | Pn | 00 06 23.9 | -1.3 |
| | 8.9nm,0.3s,baz=206,slow=14,SNR=147 | | | | | | |
| ILAR | | | | S | Sn | 00 07 23.8 | -3.5 |
| | 21nm,0.3s,baz=211,slow=23,SNR=16 | | | | | | |
| ILB | Eielson Array | 5.53 | 25 | P | Pn | 00 06 24.0 | -1.2 |
| IL1 | Eielson Array | 5.53 | 25 | P | Pn | 00 06 24.3 | -0.9 |
| CTGM | Chitina Glacie | 5.55 | 74 | P | Pn | 00 06 25.3 | -0.3 |
| TABL | Table Mountain | 5.61 | 79 | P | Pn | 00 06 26.5 | -0.1 |
| LOGN | Logan Glacier | 5.70 | 75 | P | Pn | 00 06 27.5 | -0.2 |
| BCA3 | Beaver Creek A | 5.97 | 53 | P | Pn | 00 06 30.9 | -0.4 |
| PCA | Pinnacle | 6.06 | 83 | P | Pn | 00 06 32.5 | 0.0 |
| IM3 | Indian Mountai | 6.17 | 355 | P | Pn | 00 06 32.9 | -1.1 |
| EGAK | Eagle | 7.15 | 42 | *e*Pn | Pn | 00 06 45.9 | -1.4 |
| | 10nm,0.5s | | | | | | |
| EGAK | | | | *e*S | Sn | 00 07 60.0 | -6.8 |
| DAWY | Dawson | 7.39 | 50 | *e*Pn | Pn | 00 06 49.4 | -1.3 |
| | 6.6nm,0.5s | | | | | | |
| DAWY | | | | *e*S | Sn | 00 08 10.5 | -2.4 |
| COLD | Coldfoot | 7.44 | 6 | P | Pn | 00 06 50.2 | -1.0 |
| PLBC | Pleasant Camp | 8.09 | 86 | P | Pn | 00 06 59.7 | -0.4 |
| BM3 | Burnt Mountain | 8.31 | 21 | P | Pn | 00 07 01.4 | -1.7 |
| SKAG | Skagway | 8.61 | 85 | *e*Pn | Pn | 00 07 07.3 | +0.2 |
| | 9.4nm,0.4s | | | | | | |
| SKAG | | | | *e*S | Sn | 00 08 34.7 | -7.7 |
| DLBC | Dease Lake | 11.52 | 87 | P | Pn | 00 07 49.3 | +2.5 |
| | 3.5nm,0.3s,baz=255,slow=9.8,SNR=6.6 | | | | | | |
| INK | Inuvik | 11.73 | 36 | P | Pn | 00 07 47.9 | -1.7 |
| | 0.4nm,0.3s,baz=251,slow=14,SNR=13 | | | | | | |
| INK | | | | S | Sn | 00 09 54.6 | -3.8 |
| | 0.1nm,0.3s,baz=278,slow=17,SNR=2.8 | | | | | | |
| YKA | Yellowknife Ar | 18.19 | 65 | P | P | 00 09 11.2 | 0.0 |
| | 1.6nm,0.3s,baz=277,slow=9.9,SNR=22 | | | | | | |
| NEW | Newport | 23.38 | 104 | P | P | 00 10 07.6 | +1.1 |
| | 3.6nm,0.8s,baz=326,slow=8.1,SNR=8.1 | | | | | | |
| RES | Resolute Bay | 25.23 | 32 | P | P | 00 10 24.4 | +1.6 |
| | 5.0nm,1.3s | | | | | | |
| PETK | Petropavlovsk- | 27.82 | 278 | LR | LR | 00 23 05.5 | |
| | comp=Z,11nm,18.1s,baz=57,slow=39 | | | | | | |
| IMW | Indian Meadow | 29.51 | 104 | *e*P | P | 00 11 03.9 | +2.1 |
| | 5.8nm,0.8s | | | | | | |
| TPAW | Teton Pass | 29.81 | 105 | *e*P | P | 00 11 06.5 | +2.1 |
| | 2.2nm,0.6s | | | | | | |
| NVAR | Mina Array Bea | 30.36 | 120 | P | P | 00 11 10.3 | +1.1 |
| | 0.7nm,0.4s,baz=316,slow=12,SNR=3.1 | | | | | | |
| PV01 | Paradox Valley | 35.08 | 108 | *e*P | P | 00 11 52.1 | +1.7 |
| | 490nm,1.4s | | | | | | |
| TXAR | Lajitas Array | 44.61 | 111 | P | P | 00 13 09.8 | +0.6 |
| | 0.7nm,0.8s,baz=340,slow=5.7,SNR=4.6 | | | | | | |
| JCT | Junction City | 45.51 | 106 | *e*P | P | 00 13 17.6 | +1.3 |
| | 7.2nm,0.6s | | | | | | |
| ARCES | ARCESS Array B | 50.88 | 1 | P | P | 00 13 57.6 | +0.6 |
| | 4.1nm,0.9s,baz=338,slow=7.1,SNR=3.3 | | | | | | |
| KSRS | Korea Array | 53.55 | 283 | P | P | 00 14 18.0 | +0.9 |
| | 0.5nm,0.3s,baz=52,slow=9.1,SNR=3.3 | | | | | | |
| KSAR | Wonju Array Be | 53.57 | 283 | P | P | 00 14 18.0 | +0.6 |
| SONM | Songino Array | 55.15 | 306 | P | P | 00 14 29.0 | +0.2 |
| | 2.2nm,0.7s,baz=42,slow=7.2,SNR=14 | | | | | | |
| ZALV | Zalesovo Beam | 57.68 | 324 | P | P | 00 14 45.6 | -0.9 |
| | 3.4nm,0.5s,baz=30,slow=6.5,SNR=15 | | | | | | |
| FINES | FINESS Array B | 59.01 | 1 | P | P | 00 14 56.1 | +0.5 |
| | 0.9nm,0.6s,baz=130,slow=3.0,SNR=4.8 | | | | | | |
| BRVK | Borovoye | 62.34 | 333 | *e*P | P | 00 15 17.8 | -0.6 |
| | 4.0nm,0.7s | | | | | | |
| MKAR | Makanchi Array | 64.75 | 322 | P | P | 00 15 33.2 | -1.2 |
| | 1.1nm,0.5s,baz=39,slow=6.7,SNR=12 | | | | | | |
| AKASG | Malin Array Be | 69.78 | 359 | P | P | 00 16 06.3 | +0.3 |
| | 1.3nm,0.5s,baz=2.1,slow=5.9,SNR=5.4 | | | | | | |

*IDC* ***29*** *00:07:21.0±2.1,6°.33S×150°.42E, h0km, mb3.6/6, mb1 3.8/7, mb1mx3.7/26, mbtmp3.6/7, ML1.9/1, Error ellipse: s-maj=75.1km s-min=22.7km az=116.0*

*ISCJB* ***29*** *00:07:25.0±1.7,6°.3S±0°.2×150°.2E±0°.4, h33km, mb3.5/5, Error ellipse: s-maj=60.3km s-min=10.7km az=32.8*

**ISC 29 00:07:26.2±1.9, 6°.4S±0°.3×150°.4E±0°.4, h33km, n8, σ1§14/9, mb3.6/5, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PMG | Port Moresby | 4.38 | 226 | Pn | Pn | 00 08 31.6 | +1.2 |
| | 4.3nm,0.3s,baz=22,slow=6.6,SNR=8.5 | | | | | | |
| PMG | | | | Sn | Sn | 00 09 19.7 | -0.7 |
| | 15nm,0.3s,baz=41,slow=22,SNR=14 | | | | | | |
| WRA | Warramunga Arr | 20.60 | 228 | P | P | 00 12 01.4 | -1.3 |
| | 1.1nm,0.6s,baz=50,slow=11,SNR=9.7 | | | | | | |
| ASAR | Alice Springs | 23.38 | 221 | P | P | 00 12 32.1 | 0.0 |
| | 0.5nm,0.5s,baz=52,slow=9.3,SNR=6.7 | | | | | | |
| SONM | Songino Array | 66.39 | 329 | P | P | 00 18 13.0 | +1.0 |
| | 0.3nm,0.5s,baz=146,slow=10,SNR=3.2 | | | | | | |
| MKAR | Makanchi Array | 79.92 | 320 | P | P | 00 19 32.1 | +0.2 |
| | 0.1nm,0.3s,baz=106,slow=6.8,SNR=2.8 | | | | | | |
| ZALV | Zalesovo Beam | 81.12 | 327 | P | P | 00 19 36.4 | -1.8 |
| | 0.5nm,0.3s,baz=116,slow=6.6,SNR=5.1 | | | | | | |
| ILAR | Eielson Array | 84.52 | 23 | P | P | 00 19 55.5 | -0.1 |
| | 0.3nm,0.6s,baz=244,slow=4.9,SNR=5.6 | | | | | | |
| TORD | Torodi Ar. Bea | 148.42 | 285 | PKPbc | PKPbc | 00 27 10.8 | +0.3 |
| | 0.4nm,0.4s,baz=84,slow=2.8,SNR=17 | | | | | | |

*IDC* ***29*** *00:44:48.0±2.5,2°.72S×99°.83E, h0km, mb3.9/7, mb1 4.1/7, mb1mx3.7/33, mbtmp4.0/7, Error ellipse: s-maj=88.2km s-min=19.3km az=58.0*

*ISCJB* ***29*** *00:44:49.3±0.9,2°.87S±0°.07×99°.56E±0°.07, h33km, mb3.9/7, Error ellipse: s-maj=13.0km s-min=6.3km az=135.2*

*DJA* ***29*** *00:44:50.7±1.0,3°.S±6°×10°.0E±°, h25km±5km, M4.2/8, mb4.7/1, MLv4.0/8*

**ISC 29 00:44:52.3±1.1, 2°.8S±0°.1×99°.7E±0°.1, h35km, n24, σ0§90/20, mb3.9/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| PPSI | Pulau Pagai | 0.36 | 89 | P | Pn | 00 45 00.6 | -0.4 |
| PPSI | | | | S | Sn | 00 45 06.3 | -0.6 |
| SISI | Saibi | 1.54 | 339 | P | Pn | 00 45 16.4 | -0.9 |
| SISI | | | | S | Sn | 00 45 36.0 | -0.1 |
| PPI | Padang Panjang | 2.42 | 18 | P | Pn | 00 45 28.4 | -0.9 |
| SDSI | Sungai Dareh | 2.55 | 44 | P | Pn | 00 45 31.6 | +0.5 |
| BKNI | Bangkinang | 3.38 | 24 | P | Pn | 00 45 42.2 | -0.3 |
| MNSI | Mandailing Nat | 3.54 | 359 | P | Pn | 00 45 44.2 | -0.6 |
| LHSI | Lahat | 4.01 | 105 | P | Pn | 00 45 51.5 | +0.3 |
| GSI | Gunungsitoli | 4.55 | 333 | P | Pn | 00 45 58.3 | -0.4 |
| MDSI | Maura Dua | 4.83 | 111 | P | Pn | 00 46 02.1 | -0.4 |
| KASI | Kota Agung | 5.55 | 120 | P | Pn | 00 46 10.9 | -1.6 |
| CMAR | Chiang Mai Arr | 21.11 | 358 | P | P | 00 49 32.9 | -1.1 |
| | 1.3nm,0.3s,baz=190,slow=10,SNR=13 | | | | | | |
| H08S2 | Diego Garcia H | 27.47 | 259 | T | T | 01 19 18.6 | |
| | baz=81,slow=75,SNR=342 | | | | | | |
| H08S3 | Diego Garcia H | 27.47 | 259 | T | T | 01 19 18.6 | |
| | baz=81,slow=75,SNR=343 | | | | | | |
| H08S1 | Diego Garcia H | 27.48 | 259 | T | T | 01 19 18.6 | |
| | baz=81,slow=75,SNR=392 | | | | | | |
| H01W3 | Cape Leeuwin H | 34.67 | 159 | T | T | 01 28 05.4 | |
| | baz=335,slow=76,SNR=15 | | | | | | |
| H01W2 | Cape Leeuwin H | 34.69 | 159 | T | T | 01 28 04.3 | |
| | baz=335,slow=76,SNR=17 | | | | | | |
| H01W1 | Cape Leeuwin H | 34.69 | 159 | T | T | 01 28 05.2 | |
| | baz=335,slow=76,SNR=12 | | | | | | |
| WRA | Warramunga Arr | 37.91 | 119 | P | P | 00 52 05.2 | -1.4 |
| | 0.7nm,0.6s,baz=305,slow=9.7,SNR=9.2 | | | | | | |
| ASAR | Alice Springs | 39.09 | 125 | P | P | 00 52 16.5 | 0.0 |
| | 0.6nm,0.4s,baz=300,slow=7.5,SNR=11 | | | | | | |
| SONM | Songino Array | 50.74 | 6 | P | P | 00 53 49.0 | +0.2 |
| | 1.0nm,0.8s,baz=189,slow=7.2,SNR=7.0 | | | | | | |
| MKAR | Makanchi Array | 51.67 | 345 | P | P | 00 53 56.6 | +0.9 |
| | 1.4nm,0.7s,baz=140,slow=8.8,SNR=10 | | | | | | |
| USRK | Ussuriysk Ar. | 55.00 | 28 | P | P | 00 54 20.9 | +0.7 |
| | 1.6nm,0.6s,baz=222,slow=5.7,SNR=7.4 | | | | | | |
| ZALV | Zalesovo Beam | 57.86 | 350 | P | P | 00 54 40.7 | +0.3 |
| | 2.3nm,0.5s,baz=181,slow=5.5,SNR=15 | | | | | | |
| TXAR | Lajitas Array | 145.52 | 38 | PKPbc | PKPab | 01 04 29.8 | +1.8 |
| | 0.4nm,0.5s,baz=302,slow=1.1,SNR=6.2 | | | | | | |

*NEIC* ***29*** *01:02:57.8, 32°.12N×115°.18W, h7km, ML3.5(PAS), ML3.6(ECX), After ECX.*

*ECX* ***29*** *01:02:57.8±0.5, 32°.12N×115°.19W, h7km, MD3.4, ML3.6*

**ISC 29 01:02:55.7±1.0, 32°.10N±0°.02×115°.14W±0°.02, h10km±9km, n56, σ1§27/104, 2C-6D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| MBIG | Mexicali | 0.31 | 351 | *e*P | Pb | 01 03 03.7 | +0.3 |
| CPBX | Cerro Prieto | 0.35 | 337 | *e*P | Pb | 01 03 03.8 | -0.2 |
| CPBX | | | | *e*S | Sg | 01 03 08.5 | +1.2 |
| CPBX | | | | IAML | | 01 03 10.8 | |
| | comp=E,29µm,0.4s | | | | | | |
| ECBX | El Chinero | 0.63 | 173 | *e*P | Pb | 01 03 09.2 | +0.5 |
| ECBX | | | | *e*S | Sb | 01 03 18.4 | +0.8 |
| EMSC | East Mesa | 0.65 | 12 | *i*P | Pg | 01 03 09.1 | +0.7 |
| YMD | Yuma Desert | 0.68 | 48 | *e*P | Pg | 01 03 09.6 | +0.7 |
| RDX | Rancho Dawling | 0.70 | 256 | *e*P | Pg | 01 03 09.8 | +0.5 |
| RDX | | | | *e*S | Sg | 01 03 18.8 | +0.3 |
| RDX | | | | *e* | | 01 03 20.5 | |
| RDX | | | | IAML | | 01 03 20.5 | |
| | comp=N,3µm,0.4s | | | | | | |
| RDX | Rancho Dawling | 0.70 | 256 | *e*P | Pg | 01 03 09.8 | +0.5 |
| RDX | | | | *e*S | Sg | 01 03 18.8 | +0.3 |
| SGL | Mount Signal | 0.74 | 318 | *i*P | Pg | 01 03 09.8 | -0.2 |
| DRIC | Desert Rsrch C | 0.75 | 340 | *e*P | Pg | 01 03 10.7 | +0.4 |
| COA | Coachella | 0.76 | 1 | *i*P | Pg | 01 03 10.5 | 0.0 |
| YUH | Yuha Desert | 0.86 | 310 | *i*P | Pg | 01 03 11.7 | -0.6 |
| RMX | La Rumorosa | 0.94 | 303 | *e*P | Pg | 01 03 12.8 | -1.0 |
| RMX | | | | *e*S | Sg | 01 03 24.6 | -1.5 |
| RMX | | | | IAML | | 01 03 26.7 | |
| | comp=N,2µm,0.1s | | | | | | |
| RMX | | | | *e* | | 01 03 26.7 | |
| RMX | La Rumorosa | 0.94 | 303 | *e*P | Pg | 01 03 12.8 | -1.0 |
| RMX | | | | *e*S | Sg | 01 03 25.3 | -0.8 |
| IBP | Imperial Bould | 0.98 | 305 | *i*P | Pg | 01 03 13.9 | -0.7 |
| IBP | Imperial Bould | 0.98 | 305 | P | Pg | 01 03 13.9 | -0.7 |
| | baz=0.9,SNR=409 | | | | | | |
| IBP | | | | S | Sg | 01 03 27.2 | -0.2 |
| | baz=0.9 | | | | | | |
| GLA | Glamis | 0.99 | 16 | P | Pg | 01 03 13.7 | -1.1 |
| | baz=1.0,SNR=270 | | | | | | |
| GLA | | | | S | Sg | 01 03 26.7 | -0.9 |
| | baz=1.0 | | | | | | |
| GLA | Glamis | 0.99 | 16 | *e*Pg | Pg | 01 03 13.5 | -1.3 |
| GLA | | | | *e*Sg | Sg | 01 03 26.7 | -0.9 |
| SWSC | Sam W. Stewart | 1.01 | 327 | P | Pg | 01 03 13.5 | -1.6 |
| | baz=1.0,SNR=91 | | | | | | |
| SWSC | | | | S | Sg | 01 03 28.3 | +0.2 |
| | baz=1.0 | | | | | | |
| SPX | San Pedro Mart | 1.08 | 195 | *e*P | Pg | 01 03 17.1 | +0.5 |
| SPX | | | | *e*S | Sn | 01 03 32.0 | -0.5 |
| SPX | San Pedro Mart | 1.08 | 195 | *e*P | Pg | 01 03 17.1 | +0.5 |
| SPX | | | | *e*S | Sn | 01 03 32.0 | -0.5 |
| ZAX | El Zacaton | 1.12 | 239 | *e*P | Pb | 01 03 17.2 | -0.1 |
| ZAX | | | | *e*S | Sb | 01 03 31.8 | -0.2 |
| CBX | Cerro Bola | 1.31 | 280 | *e*P | Pn | 01 03 19.4 | -0.7 |
| CBX | | | | *e* | | 01 03 38.2 | |
| CBX | | | | IAML | | 01 03 38.2 | |
| | comp=E,2µm,0.5s | | | | | | |
| ECNX | Esteban Cantu | 1.31 | 251 | *e*P | Pn | 01 03 19.8 | -0.4 |
| ECNX | | | | *e*S | Sb | 01 03 37.4 | -0.1 |
| MONP | Monument Peak | 1.34 | 307 | P | Pn | 01 03 19.2 | -1.5 |
| | baz=1.3,SNR=214 | | | | | | |
| MONP | | | | S | Sb | 01 03 37.8 | -0.5 |
| | baz=1.3 | | | | | | |
| PBX | Punta Banda | 1.39 | 256 | *e*P | Pn | 01 03 21.2 | 0.0 |
| PBX | Punta Banda | 1.39 | 256 | *e*P | Pn | 01 03 20.8 | -0.4 |
| PBX | | | | *e*S | Sb | 01 03 38.9 | -0.7 |
| BAR | Barrett | 1.42 | 295 | *e*Pn | Pn | 01 03 20.5 | -1.1 |
| BAR | | | | *e*Pg | Pb | 01 03 22.4 | +0.1 |
| BAR | | | | *e*Sn | Sn | 01 03 39.5 | -0.9 |
| BC3 | Big Chuckawall | 1.57 | 351 | P | Pn | 01 03 22.2 | -1.6 |
| | baz=1.6,SNR=53 | | | | | | |
| Y12C | Blythe | 1.73 | 17 | P | Pn | 01 03 24.6 | -1.2 |
| | baz=1.7 | | | | | | |
| Y12C | | | | Sb | Sb | 01 03 49.3 | 0.0 |
| | baz=1.7 | | | | | | |
| 109C | Camp Elliot, M | 1.84 | 296 | P | Pn | 01 03 26.6 | -0.8 |
| | baz=1.8,SNR=73 | | | | | | |
| 109C | | | | Sb | Sb | 01 03 52.2 | -0.3 |
| | baz=1.8 | | | | | | |
| PFO | Pinyon Flat Ob | 1.87 | 324 | P | Pn | 01 03 26.2 | -1.7 |
| | baz=1.8,SNR=30 | | | | | | |
| PFO | | | | Sb | Sb | 01 03 53.8 | +0.3 |
| | baz=1.8 | | | | | | |
| PFO | Pinyon Flat Ob | 1.87 | 324 | *e*Pn | Pn | 01 03 25.9 | -2.0 |
| PFO | | | | *e*Sn | Sn | 01 03 51.4 | -0.2 |
| 214A | Organ Pipe Nat | 1.98 | 93 | P | Pn | 01 03 28.3 | -1.1 |
| | baz=2.0,SNR=44 | | | | | | |
| 214A | Organ Pipe Nat | 1.98 | 93 | *e*Pn | Pn | 01 03 28.1 | -1.2 |
| 214A | | | | *e*Pg | Pb | 01 03 33.4 | +1.4 |
| BELC | Belle Mtn. Jos | 2.03 | 339 | P | Pn | 01 03 28.5 | -1.6 |
| | baz=2.0,SNR=27 | | | | | | |
| IRM | Iron Mountain | 2.06 | 360 | P | Pn | 01 03 29.1 | -1.3 |
| | baz=2.0,SNR=49 | | | | | | |
| MURC | Murrieta | 2.29 | 311 | P | Pn | 01 03 31.6 | -1.9 |
| | baz=2.2,SNR=13 | | | | | | |
| MURC | | | | Sb | Sb | 01 04 06.6 | +1.0 |
| | baz=2.2 | | | | | | |
| BBRC | Big Bear Solar | 2.62 | 326 | Sb | Sb | 01 04 15.8 | +0.4 |
| | baz=2.6 | | | | | | |
| GMRC | Granite Mounta | 2.71 | 351 | P | Pn | 01 03 38.2 | -1.3 |
| | baz=2.7,SNR=7.9 | | | | | | |
| BFSC | Mount Baldy Ra | 3.00 | 316 | Sb | Sb | 01 04 27.6 | +1.5 |
| | baz=3.0 | | | | | | |
| CIS | Catalina Islan | 3.04 | 296 | P | Pn | 01 03 42.7 | -1.2 |
| | baz=3.0,SNR=8.3 | | | | | | |
| CIS | | | | Sb | Sb | 01 04 28.2 | +1.1 |
| | baz=3.0 | | | | | | |
| FMP | Fort Macarthur | 3.10 | 302 | Sb | Sb | 01 04 30.0 | +1.2 |
| | baz=3.1 | | | | | | |
| MWC | Mount Wilson | 3.24 | 312 | *e*Pn | Pn | 01 03 45.6 | -1.1 |
| MWC | | | | *e*Pg | Pb | 01 03 55.1 | +1.8 |
| MWC | | | | *e*Sn | Sn | 01 04 25.5 | +0.1 |
| MWC | | | | *e*Sg | Sb | 01 04 35.6 | +2.7 |
| PASC | Pasadena Art C | 3.29 | 310 | *e*Pn | Pn | 01 03 47.8 | +0.5 |
| PASC | | | | *e*Pg | Pb | 01 03 55.9 | +1.8 |
| PASC | | | | *e*Sg | Sb | 01 04 36.1 | +2.0 |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| GSC | Goldstone | 3.48 | 337 | *e*Pn | Pn | 01 03 50.3 | +0.2 |
| GSC | | | | *e*Pg | Pb | 01 04 00.2 | +2.7 |
| GSC | | | | *e*Sg | Sg | 01 04 45.1 | -2.5 |
| EDW2 | Edwards Air Fo | 3.66 | 320 | Pg | Pg | 01 04 05.1 | -0.6 |
| | baz=3.6 | | | | | | |
| EDW2 | | | | Sb | Sb | 01 04 47.7 | +2.8 |
| | baz=3.6 | | | | | | |
| TUC | Tucson | 3.70 | 86 | *e*Pn | Pn | 01 03 53.3 | +0.3 |
| TUC | | | | *e*Pg | Pg | 01 04 05.5 | -1.1 |
| TUC | | | | *e*Sn | Sn | 01 04 37.1 | +0.4 |
| TUC | | | | *e*Sg | Sg | 01 04 52.4 | -2.2 |
| OSI | Osito Adit | 3.91 | 311 | Sb | Sb | 01 04 54.0 | +1.8 |
| | baz=3.9 | | | | | | |
| SHPR | Sheep Range | 4.40 | 360 | *e*Pn | Pn | 01 04 03.2 | +0.6 |
| SHPR | | | | *e*Pg | Pb | 01 04 16.9 | +3.8 |
| SHPR | | | | *e*Sn | Sn | 01 04 55.8 | +1.7 |
| SHPR | | | | *e*Sb | Sb | 01 05 08.5 | +2.2 |
| SHPR | | | | *e*Sg | Sg | 01 05 18.3 | +1.4 |
| ISA | Isabella | 4.51 | 323 | *e*Pn | Pn | 01 04 03.5 | -0.7 |
| ISA | | | | *e*Pg | Pg | 01 04 19.8 | -2.3 |
| ISA | | | | *e*Sg | Sg | 01 05 15.9 | -4.6 |
| WUAZ | Wupatki | 4.63 | 42 | *e*Pn | Pn | 01 04 05.8 | -0.1 |
| WUAZ | | | | *e*Pg | Pg | 01 04 23.4 | -1.0 |
| WUAZ | | | | *e*Sg | Sg | 01 05 22.2 | -2.3 |
| DAC | Darwin (Calif) | 4.64 | 335 | *e*Pg | Pg | 01 04 24.7 | +0.1 |
| DAC | | | | *e*Sg | Sb | 01 05 19.4 | +6.2 |
| CCUT | Cedar City | 5.63 | 15 | *e*Pn | Pn | 01 04 21.0 | +1.3 |
| | comp=E,7.3nm,0.9s | | | | | | |
| CCUT | | | | *e*Pg | Pg | 01 04 39.7 | -3.9 |
| CCUT | | | | *e*Sg | Sg | 01 05 56.8 | +0.2 |
| 121A | Cookes Peak, D | 6.24 | 84 | P | Pn | 01 04 27.7 | -0.4 |
| | baz=6.3,SNR=9.6 | | | | | | |
| 121A | Cookes Peak, D | 6.24 | 84 | *e*Pn | Pn | 01 04 28.1 | 0.0 |
| | comp=E,7.9nm,0.6s | | | | | | |
| 121A | | | | *e*Sn | Sn | 01 05 38.7 | -0.9 |
| 121A | | | | *e*Sg | Sg | 01 06 13.8 | -2.3 |
| R11A | Troy Canyon, C | 6.25 | 357 | *e*Pn | Pn | 01 04 28.6 | +0.5 |
| | comp=E,2.7nm,0.4s | | | | | | |
| R11A | | | | *e*Pg | Pg | 01 04 55.6 | +0.3 |
| R11A | | | | *e*Sg | Sg | 01 06 15.4 | -0.9 |

**IDC 29 01:03:49.3±3.1, 25°.75S×67°.32W, h0km, mb3.6/2, mb1 3.8/3, mb1mx3.6/19, mbtmp3.7/3, ML4.0/1, Error ellipse: s-maj=73.9km s-min=53.2km az=49.0, Catamarca Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| LPAZ | La Paz | 9.45 | 355 | Pn | Pn | 01 06 06.8 | -0.7 |
| | 0.6nm,0.3s,baz=166,slow=10,SNR=19 | | | | | | |
| BDFB | Brasilia | 20.64 | 65 | P | P | 01 08 31.8 | +1.1 |
| | 2.7nm,0.6s,baz=233,slow=13,SNR=5.2 | | | | | | |
| TORD | Torodi Ar. Bea | 77.47 | 69 | P | P | 01 15 46.0 | -1.0 |
| | 0.2nm,0.5s,baz=259,slow=5.4,SNR=6.1 | | | | | | |
| MKAR | Makanchi Array | 148.04 | 41 | PKPbc | PKPbc | 01 23 36.9 | +0.2 |
| | 0.4nm,0.6s,baz=262,slow=2.9,SNR=3.4 | | | | | | |

*ISCJB* ***29*** *01:20:09.8±0.9, 10°.06N±0°.08×126°.62E±0°.07, h10km, mb3.7/6, Error ellipse: s-maj=11.6km s-min=9.1km az=18.9*

*IDC* ***29*** *01:20:10.4±1.7, 9°.77N×125°.63E, h0km, mb3.7/6, mb1 3.8/6, mb1mx3.6/42, mbtmp3.7/6, Error ellipse: s-maj=187.8km s-min=19.8km az=69.0*

*MAN* ***29*** *01:20:15, 10°.15N×126°.24E, h1km, mb4.4, ML3.3, MS3.1*

**ISC 29 01:20:11.1±1.1, 9°.89N±0°.07×126°.47E±0°.08, h10km, n21, σ1§84/13, mb3.6/6, 3C-2D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| SCPH | Surigao | 0.97 | 263 | *i*P | Pn | 01 20 31.9 | +1.1 |
| SCPH | | | | *e*S | Sg | 01 20 43.3 | +0.9 |
| BUTP | Butuan | 1.24 | 222 | *e*P | Pg | 01 20 45.8 | +11 |
| MSLP | Maasin | 1.60 | 279 | *e*P | Pn | 01 20 40.8 | +1.3 |
| MSLP | | | | *e*S | Sn | 01 20 47.4 | -13 |
| PLP | Palo | 1.93 | 311 | *i*P | Pn | 01 20 43.9 | -0.1 |
| PLP | | | | *e*S | Sn | 01 21 07.5 | -0.9 |
| BUKP | Musuan | 2.44 | 215 | *e*P | Pg | 01 20 59.1 | +1.3 |
| BUKP | | | | *e*S | Sn | 01 21 16.9 | -4.0 |
| TBP | Tagbilaran | 2.57 | 266 | *i*P | Pn | 01 20 56.4 | +3.6 |
| TBP | | | | *e*S | Pn | 01 20 57.3 | +4.4 |
| DCPH | Dipolog City | 3.34 | 247 | *i*P | Pb | 01 21 08.4 | -2.1 |
| RCP | Roxas | 4.01 | 295 | *i*P | Pn | 01 21 16.7 | +4.0 |
| WRA | Warramunga Arr | 30.64 | 165 | P | P | 01 26 26.5 | +0.6 |
| | 0.4nm,0.8s,baz=348,slow=9.2,SNR=3.0 | | | | | | |
| ASAR | Alice Springs | 34.14 | 168 | P | P | 01 26 58.9 | +2.4 |
| | 0.3nm,0.3s,baz=353,slow=7.2,SNR=5.0 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 39.84 | 73 | T | T | 02 10 43.4 | |
| | baz=266,slow=79 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 39.86 | 73 | T | T | 02 10 45.1 | |
| | baz=266,slow=79 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 39.86 | 73 | T | T | 02 10 44.0 | |
| | baz=266,slow=79 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 40.19 | 71 | T | T | 02 11 10.9 | |
| | baz=265,slow=74,SNR=23 | | | | | | |
| H11N2 

comp=E,42nm,0.5s
**BHGR Bahadurgarh 6.69 156** *e*S **Sn 01 28 28.6 -1.1**
**NDI New Delhi 6.79 154** *e*P **Pn 01 27 17.0 +0.9**
NDI *e*S **Sn 01 28 30.0 -2.2**
**KHET Khetri 6.96 165** *e*P **Pn 01 27 20.2 +1.7**
KHET *e*S **Sn 01 28 35.5 -1.0**
**KUDL Kundal 7.06 161** *e*P **Pn 01 27 22.4 +2.6**
KUDL *e*S **Sn 01 28 37.1 -1.7**
**AML Almayashu 7.27 359** P **Pn 01 27 24.8 +1.7**
SNR=18
**KZA Kyzart 7.30 8** P **Pn 01 27 25.1 +1.6**
SNR=8.9
**UCH Uchtor 7.38 4** P **Pn 01 27 27.1 +2.5**
SNR=5.5
**MNAS Manas 7.70 353** ⇑P **Pn 01 27 29.9 +1.3**
comp=E,2.1nm,0.4s
MNAS ⇓S **Sn 01 28 52.0 -2.6**
comp=E,4.8nm,0.6s
**AAK Ala-Archa 7.79 4** ⇓P **Pn 01 27 31.6 +1.7**
comp=E,1.9nm,0.7s
AAK ⇑S **Sn 01 28 55.1 -1.8**
comp=E,6.0nm,1.0s
**AAK Ala-Archa 7.79 4** Pn **Pn 01 27 31.6 +1.7**
comp=E,0.5nm,0.3s,baz=205,slow=0.6,SNR=5.3
AAK Sn **Sn 01 28 56.6 -0.3**
comp=E,0.2nm,0.3s,baz=0.0,slow=19,SNR=1.8
**EKS2 Erkin-Say 7.80 360** P **Pn 01 27 32.1 +2.1**
SNR=9.5
**EKS2 Erkin-Say 7.80 360** *e*Pn **Pn 01 27 31.6 +1.6**
comp=E,5.5nm,0.5s
**TKM2 Tokmak 2 8.17 9** ⇑P **Pn 01 27 36.9 +1.6**
comp=E,2.0nm,0.4s
TKM2 ⇓S **Sn 01 29 04.8 -1.7**
comp=E,4.3nm,0.8s
**TKM2 Tokmak 2 8.17 9** P **Pn 01 27 37.1 +1.8**
SNR=7.5
**TKM2 Tokmak 2 8.17 9** *e*Pn **Pn 01 27 36.7 +1.4**
comp=E,3.8nm,0.4s
**KK31 Karatay Array 8.64 344** P **Pn 01 27 42.1 +0.7**
comp=E,2.6nm,0.5s,baz=153,slow=12,SNR=34
KK31 ⇑S **Sn 01 29 14.5 -3.1**
comp=E,1.5nm,0.3s,baz=143,slow=22
**KKAR Karatay Array 8.64 344** *e*Pn **Pn 01 27 42.2 +0.8**
comp=E,3.8nm,0.4s
KKAR *e*Sn **Sn 01 29 14.5 -3.1**
**DANN Dangsing 10.65 125** *e*P **Pn 01 28 08.8 -0.6**
comp=E,1.4nm,0.2s
**KOLN Koldanda 10.93 128** *e*P **Pn 01 28 12.8 -0.3**
comp=E,13nm,0.4s
**GKN Gorkha 11.47 124** *e*P **Pn 01 28 19.4 -1.0**
comp=E,14nm,0.3s
**DMN Daman 12.04 124** *e*P **Pn 01 28 27.0 -1.3**
comp=E,19nm,0.4s
**KKN Kakani 12.05 123** *e*P **Pn 01 28 26.6 -1.8**
comp=E,13nm,0.4s
**PKIN Phulchoki 12.26 123** *e*P **Pn 01 28 29.8 -1.5**
comp=E,14nm,0.3s
**PKI Pulchoki 12.27 123** *e*P **Pn 01 28 29.8 -1.8**
comp=E,7.6nm,0.3s
**GUN Gumba 12.39 121** *e*P **Pn 01 28 31.1 -2.1**
comp=E,7.7nm,0.3s
**GEYT Alibeck 13.03 288** Pn **Pn 01 28 41.2 -0.4**
comp=E,0.4nm,0.3s,baz=91,slow=13,SNR=2.3
GEYT Sn **Sn 01 31 03.9 -1.5**
comp=E,1.4nm,0.3s,baz=122,slow=34,SNR=5.7
**RAMN Ramite 13.49 122** *e*P **Pn 01 28 45.9 -2.2**
comp=E,18nm,0.5s
**MKAR Makanchi Array 13.53 26** Pn P 01 28 53.6 -3.4
comp=E,0.2nm,0.3s,baz=206,slow=11,SNR=6.6
**TAPN Taplejung 14.03 118** *e*P **Pn 01 28 53.8 -1.8**
comp=E,11nm,0.4s
**ODAN Odare 14.10 121** *e*P **Pn 01 28 54.6 -1.8**
**KURBB Kurchatov Arra 16.13 11** ⇑P **P 01 29 25.0 -0.8**
comp=E,7.2nm,1.4s
**KURBB Kurchatov Arra 16.13 11** Pn **Pn 01 29 21.6 -1.2**
comp=E,0.1nm,0.3s,baz=203,slow=10,SNR=12
**KURK Kurchatov 16.23 11** ⇓P **Pn 01 29 25.4 +1.2**
comp=E,6.4nm,0.8s
**KURK Kurchatov 16.23 11** *e*Pn **Pn 01 29 24.4 +0.2**
**AB31 Akbulak array 17.67 329** P **Pn 01 29 41.4 -0.7**
comp=E,0.4nm,0.5s,baz=132,slow=14,SNR=16
**ABKAR Akbulak array 17.67 329** *e*Pn **Pn 01 29 41.4 -0.7**
**VOSK Vostochnaya 17.98 354** P **Pn 01 29 43.7 -2.3**
**BVA0 Borovoye Array 18.33 353** P **Pn 01 29 50.5 +0.2**
comp=E,2.3nm,0.7s,baz=156,slow=9.5,SNR=8.8
**BVAR Borovoye Array 18.33 353** P **P 01 29 50.2 0.0**
comp=E,0.7nm,0.3s,baz=162,slow=10,SNR=12
**BRVK Borovoye 18.38 353** ⇑P **Pn 01 29 51.1 +0.3**
comp=E,3.3nm,0.5s
**BRVK Borovoye 18.38 353** *e*P **Pn 01 29 50.7 -0.1**
comp=E,15nm,1.3s
**ZRNK Zerenda 18.42 351** P **P 01 29 49.4 -1.6**
**CHKZ Chkalovo 18.96 354** ⇑P **Pn 01 29 57.7 -0.1**
comp=E,2.7nm,0.9s
**AKTO Aktyubinsk 19.38 328** ⇓P **Pn 01 30 02.3 -0.6**
comp=E,9.8nm,1.5s
**AKTO Aktyubinsk 19.38 328** P **P 01 30 01.9 +0.3**
comp=E,0.5nm,0.3s,baz=127,slow=13,SNR=9.9
**ZALV Zalesovo Beam 20.60 19** P **P 01 30 14.1 -0.8**
comp=E,3.9nm,0.5s,baz=213,slow=11,SNR=15
**SONM Songino Array 27.45 52** P **P 01 31 21.9 +0.2**
comp=E,0.7nm,0.8s,baz=256,slow=8.7,SNR=4.3
**FINES FINESS Array B 40.13 327** P **P 01 33 11.2 +0.1**
comp=E,0.7nm,0.4s,baz=127,slow=13,SNR=6.3
**ARCES ARCESS Array B 43.55 338** P **P 01 33 39.4 +0.4**
comp=E,6.1nm,0.9s,baz=111,slow=8.3,SNR=11
**NOA NORSAR Array B 47.08 324** P **P 01 34 06.6 -0.5**
comp=E,0.8nm,0.8s,baz=102,slow=7.3,SNR=3.3
**ESDC Sonseca Array 60.27 300** P **P 01 35 43.6 -0.4**
comp=E,0.3nm,0.5s,baz=54,slow=6.9,SNR=3.9
**TORD Torodi Ar. Bea 68.02 271** P **P 01 36 35.5 +0.4**
comp=E,0.6nm,0.6s,baz=46,slow=5.8,SNR=16
**INK Inuvik 75.14 10** P **P 01 37 17.4 +0.3**
comp=E,0.5nm,0.5s,baz=9.5,slow=6.1,SNR=3.7
**BOSA Boshof 78.03 222** P **P 01 37 35.6 +1.4**
comp=E,2.9nm,1.0s,baz=7.9,slow=3.0,SNR=4.7
**WRA Warramunga Arr 79.16 124** P **P 01 37 41.0 +0.6**
comp=E,0.3nm,0.5s,baz=322,slow=5.3,SNR=4.7
**ASAR Alice Springs 81.42 127** P **P 01 37 53.6 +1.1**
comp=E,0.5nm,0.6s,baz=314,slow=5.3,SNR=6.0

*IDC* ***29*** *01:41:30.7±2.3,24.04S×179.92E,h499km±23km, mb3.5/7, mb1 3.7/8, mb1mx3.5/22, mbtmp4.5/8, Error ellipse: s-maj=21.0km s-min=20.4km az=63.0*
*ISCJB* ***29*** *01:41:32.2±0.9,24.07S±0.10×179.8E±0.2, h526km, mb3.9/7, Error ellipse: s-maj=22.5km s-min=13.1km az=177.4*

**ISC 29 01:41:33.2±0.9,24.2S±0.1×179.9E±0.2,h526km,n10, σ1s50/13,mb3.8/7,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **URZ** | **Urewera** | **14.22** | **189** | P | | **P** | **01 44 34.0** | **-0.7** |
| URZ | 6.2nm,0.3s,baz=319,slow=0.8,SNR=24 | | | S | | **S** | **01 47 03.4** | **-1.0** |
| **CTA** | **Charters Tower** | **31.37** | **271** | P | | **P** | **01 47 11.3** | **+0.3** |
| **ASAR** | 8.4nm,0.3s,baz=93,slow=11,SNR=17<br>**Alice Springs** | **41.88** | **261** | P | | **P** | **01 48 37.3** | **-0.2** |
| ASAR | 1.3nm,0.3s,baz=94,slow=7.3,SNR=21 | | | ScP | | **ScP** | **01 53 23.9** | **+2.5** |
| **WRA** | 0.6nm,0.9s,baz=104,slow=3.7,SNR=4.7<br>**Warramunga Arr** | **42.28** | **266** | P | | **P** | **01 48 39.8** | **-0.9** |
| WRA | 2.8nm,0.3s,baz=97,slow=8.4,SNR=48 | | | ScP | | **ScP** | **01 53 26.0** | **+3.0** |
| **VNDA** | 0.4nm,0.6s,baz=95,slow=3.8,SNR=5.3<br>**Vanda** | **54.08** | **185** | P | | **P** | **01 50 08.8** | **+1.0** |
| **MAW** | 0.9nm,0.8s,baz=330,slow=6.6,SNR=3.9<br>**Mawson** | **77.44** | **200** | P | | **P** | **01 52 34.3** | **+0.7** |
| **PETK** | 2.2nm,0.5s,baz=128,slow=6.5,SNR=7.7<br>**Petropavlovsk-** | **79.36** | **347** | P | | **P** | **01 52 43.1** | **-0.9** |
| **TXAR** | 2.3nm,0.6s,baz=143,slow=7.9,SNR=3.7<br>**Lajitas Array** | **90.68** | **58** | P | | **P** | **01 53 40.2** | **+0.2** |
| **AKASG** | 0.8nm,0.7s,baz=209,slow=6.6,SNR=10<br>**Malin Array Be** | **145.15** | **327** | PKPbc | | **PKPdf** | **02 00 09.7** | **-0.8** |
| **BRTR** | 0.9nm,0.3s,baz=47,slow=4.4,SNR=5.5<br>**Keskin Array B** | **147.66** | **307** | PKPbc | | **PKPbc** | **02 00 17.7** | **-1.2** |
| | 0.7nm,0.8s,baz=145,slow=5.3,SNR=3.5 | | | | | | | |

*NNC* ***29*** *02:17:55.7±2.3,40.65N×70.90E,h0km,mb2.8,mpv2.4, Error ellipse: s-maj=59.8km s-min=13.5km az=124.0*
*ISCJB* ***29*** *02:17:56.5±2.0,40.64N±0.07×71.04E±0.08,h15km±20km, Error ellipse: s-maj=13.2km s-min=6.8km az=140.6*
*KRNET* ***29*** *02:17:56.2±0.1,40.69N×71.09E,h30km,mb2.0*

**ISC 29 02:17:55.3±3.5,40.68N±0.06×70.95E±0.07,h9km±27km, n8,σ0s93/15,12C-4D,Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ARK** | **Arkit** | **1.36** | **34** | ⇑*i*P | | **Pn** | **02 18 20.3** | **-0.3** |
| ARK | baz=31 | | | ⇑*i*S | | **Sn** | **02 18 37.4** | **-1.4** |
| **ARSB** | **Arslanbob** | **1.67** | **66** | ⇑*i*P | | **Pn** | **02 18 24.5** | **-0.3** |
| ARSB | baz=65 | | | ⇑*i*S | | **Sn** | **02 18 45.8** | **-0.7** |
| **SFK** | **Sufi-Kurgan** | **2.06** | **108** | ⇑*i*P | | **Pn** | **02 18 31.2** | **+0.9** |
| SFK | baz=109 | | | ⇑*i*S | | **Sn** | **02 18 56.2** | **0.0** |
| **MNAS** | **Manas** | **2.15** | **32** | ⇓Pn | | **Pb** | **02 18 34.3** | **-0.2** |
| MNAS | 1.1nm,0.4s | | | ⇓Sn | | **Sb** | **02 19 02.4** | **+1.0** |
| **MNAS** | 4.0nm,0.5s<br>**Manas** | **2.15** | **32** | ⇑*e*P | | **Pn** | **02 18 32.8** | **+1.3** |
| MNAS | baz=30 | | | ⇑*e*S | | **Sb** | **02 19 00.1** | **-1.3** |
| **KK31** | baz=30<br>**Karatay Array** | **2.45** | **352** | Pg | | **Pb** | **02 18 39.9** | **+0.3** |
| KK31 | 0.5nm,0.3s,baz=163,slow=16,SNR=20 | | | ⇑Lg | | Lg | 02 19 13.1 | |
| **DZET** | 1.9nm,0.4s,baz=185,slow=25,SNR=9.3<br>**Dzherino** | **2.48** | **222** | ⇓Pn | | **Pb** | **02 18 39.3** | **-0.8** |
| DZET | 1.0nm,0.3s | | | ⇓Sn | | **Sn** | **02 19 07.0** | **+0.5** |
| DZET | 2.2nm,0.5s | | | ⇑Lg | | Lg | 02 19 15.7 | |
| **ARLS** | 5.9nm,0.4s<br>**Aral** | **2.80** | **64** | ⇑*e*P | | **Pn** | **02 18 41.1** | **+0.6** |
| ARLS | baz=63 | | | ⇑*e*S | | **Sn** | **02 19 15.1** | **+0.6** |

*BJI* ***29*** *02:24:52.9,13.37S×62.66E,h6km,mb5.0/40,mB5.1/29, Ms5.0/21,Ms7 4.7/11*
*ISCJB* ***29*** *02:25:00.8±0.2,12.50S±0.03×63.29E±0.03,h10km, mb4.9/140,MS4.0/31,Error ellipse: s-maj=4.6km s-min=4.5km az=166.7*
*IDC* ***29*** *02:25:00.8±0.4,12.43S×63.24E,h0km,mb4.6/35, mb1 4.7/36,mb1mx4.6/52,mbtmp4.6/36,ML4.8/1,MS4.0/29, Ms1 4.0/29,ms1mx3.9/42,Error ellipse: s-maj=12.1km s-min=11.4km az=178.0*
*MOS* ***29*** *02:25:01.1±1.1,12.50S×63.33E,h10km,mb5.1/45,Error ellipse: s-maj=9.1km s-min=5.9km az=96.3*
*GCMT* ***29*** *02:25:02.3±0.3,12.29S×63.21E,h18km±1km,MW5.0/71, Moment Tensor Solution. s28,c37; s71,c103; Duration: 0 Moment tensor: Scale 10^16^Nm; Mrr2.48±.17; Mθθ-0.16±.11; Mϕϕ-2.32±.12; Mrθ-1.14±.26; Mrϕ-2.05±.08; Mθϕ0.01±.22; Best double couple: M03.32000×10^16^ NP1:ϕ235.0000°, δ56.0000°, λ123.0000°. NP2: ϕ6.0000°, δ46.0000°, λ52.0000°. Principal axes: T 3.0270, Plg63.0000°, Azm201.0000°; N 0.5880, Plg26.0000°, Azm35.0000°; P -3.6130, Plg6.0000°, Azm302.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*
*NEIC* ***29*** *02:25:02.3±0.1,12.49S×63.29E,h10km,mb5.2/50 Error ellipse: s-maj=5.3km s-min=4.6km az=174.0*

**ISC 29 02:25:03.3±0.5,12.57S±0.05×63.21E±0.05,h15km±2km, h14km:pP-P,n660,σ1s09/659,mb5.0/141,MS4.0/32, 23C-12D,South Indian Ocean**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MRIV** | **Mauritius Mete** | **9.43** | **215** | *e*Pn | | **Pn** | **02 27 18.9** | **+0.1** |
| **H08N3** | **Diego Garcia H** | **9.86** | **52** | T | | T | 02 37 12.9 | |
| **H08N1** | baz=232,slow=76,SNR=91<br>**Diego Garcia H** | **9.88** | **52** | T | | T | 02 37 14.6 | |
| **H08N2** | baz=232,slow=76,SNR=99<br>**Diego Garcia H** | **9.88** | **52** | T | | T | 02 37 11.8 | |
| **H08S1** | baz=232,slow=76,SNR=95<br>**Diego Garcia H** | **10.35** | **63** | T | | T | 02 37 49.7 | |
| **H08S2** | baz=246,slow=75,SNR=6.2<br>**Diego Garcia H** | **10.37** | **63** | T | | T | 02 37 60.0 | |
| **H08S3** | baz=246,slow=75,SNR=6.0<br>**Diego Garcia H** | **10.37** | **63** | T | | T | 02 37 50.8 | |
| **OPO** | baz=246,slow=75,SNR=6.5<br>**Ambohidratompo** | **16.54** | **247** | Pn | | **P** | **02 28 57.3** | **-0.3** |
| OPO | 3.1nm,0.3s,baz=69,slow=13,SNR=14 | | | Sn | | **Sn** | **02 31 56.0** | **-2.7** |
| OPO | 2.3nm,0.3s,baz=203,slow=9.3,SNR=3.5 | | | LR | | LR | 02 33 36.5 | |
| **ABPO** | comp=Z,576nm,20.6s,baz=64,slow=31<br>**Ambohimpanom** | **16.65** | **245** | *e*P | | **Pn** | **02 28 57.4** | **+0.9** |
| ABPO | comp=E,271nm,1.3s | | | pmax | | pmax | | |
| **ABPO** | comp=Z,271nm,1.0s,SNR=11<br>**Ambohimpanom** | **16.65** | **245** | P | | **P** | **02 28 59.0** | **+0.1** |
| **ABPO** | comp=Z,271nm,1.0s,SNR=11<br>**Ambohimpanom** | **16.65** | **245** | *e*Pn | | **Pn** | **02 28 57.4** | **+0.9** |
| ABPO | comp=Z,271nm,1.3s | | | *e*Sn | | Sn | 02 31 47.5 | -14 |
| **PALK** | **Pallekele** | **26.29** | **42** | P | | **P** | **02 30 38.2** | **-0.4** |
| PALK | comp=Z,10nm,0.8s,baz=112,slow=5.4,SNR=3.6 | | | LR | | LR | 02 38 23.4 | |
| **PALK** | comp=Z,558nm,19.1s,baz=296,slow=31<br>**Pallekele** | **26.29** | **42** | *e*P | | **P** | **02 30 38.0** | **-0.6** |
| PALK | comp=Z,45nm,1.2s | | | pmax | | pmax | | |
| **PALK** | **Pallekele** | **26.29** | **42** | *e*P | | **P** | **02 30 38.0** | **-0.6** |
| **KMBO** | comp=Z,45nm,1.2s<br>**Kilima Mbogo** | **28.12** | **292** | P | | **P** | **02 30 55.1** | **-0.2** |
| KMBO | comp=Z,1.9nm,0.3s,baz=68,slow=7.8,SNR=12 | | | LR | | LR | 02 40 55.4 | |
| **KMBO** | comp=Z,229nm,18.7s,baz=156,slow=34<br>**Kilima Mbogo** | **28.12** | **292** | *e*P | | **P** | **02 30 56.1** | **+0.8** |
| **URV** | comp=Z,48nm,2.3s<br>**Urakonda** | **30.68** | **27** | *e*P | | **P** | **02 31 17.5** | **-0.2** |
| **SKHT** | **Srikalahasti** | **30.84** | **33** | *e*P | | **P** | **02 31 17.4** | **-1.6** |
| **ATD** | **Arta Tunnel** | **31.33** | **319** | P | | **P** | **02 31 22.4** | **-1.2** |
| **RCLA** | comp=Z,7.9nm,0.7s,baz=242,slow=13,SNR=4.0<br>**Racherla** | **31.91** | **30** | *e*P | | **P** | **02 31 29.1** | **+0.5** |
| **SRLM** | **Srisailam** | **32.44** | **29** | *e*P | | **P** | **02 31 32.1** | **-1.1** |
| **POO** | **Poona** | **32.64** | **19** | ⇓*i*P | | **P** | **02 31 34.0** | **-0.9** |
| **ADKI** | comp=Z,20nm,1.0s<br>**Addanki** | **32.74** | **31** | *e*P | | **P** | **02 31 33.8** | **-2.0** |
| **NJS** | **Nagarjunasagar** | **33.03** | **29** | *e*P | | **P** | **02 31 38.8** | **+0.5** |
| **KLRI** | **Killari** | **33.19** | **24** | *e*P | | **P** | **02 31 40.0** | **+0.2** |
| **HYBB** | **Hyderabad (bro** | **33.43** | **27** | *e*P | | **P** | **02 31 41.6** | **-0.2** |
| **LSZ** | **Lusaka** | **34.07** | **261** | *e*P | | **P** | **02 31 48.6** | **+0.9** |
| LSZ | comp=Z,23nm,0.9s | | | pmax | | pmax | | |
| **LSZ** | **Lusaka** | **34.07** | **261** | *e*P | | **P** | **02 31 48.6** | **+0.9** |
| **MATP** | comp=Z,23nm,0.9s<br>**Matopo** | **34.13** | **252** | P | | **P** | **02 31 48.2** | **+0.1** |
| **MBAR** | comp=Z,11nm,0.9s,baz=101,slow=9.6,SNR=13<br>**Mbarara** | **34.32** | **288** | LR | | LR | 02 43 48.5 | |
| **SRSP** | comp=Z,197nm,19.5s,baz=124,slow=33<br>**Sriramsagar** | **34.68** | **26** | *e*P | | **P** | **02 31 53.4** | **+0.8** |
| **PVM** | **Polavaram** | **34.77** | **32** | *e*P | | **P** | **02 31 52.0** | **-1.4** |
| **RPR** | **Rampur** | **35.03** | **27** | *e*P | | **P** | **02 31 55.4** | **-0.3** |
| **GSI** | **Gunungsitoli** | **36.80** | **70** | P | | P | 02 32 20.3 | +9.3 |
| **CHLP** | comp=Z,69nm,1.2s<br>**Challavanipeta** | **37.10** | **34** | *e*P | | **P** | **02 32 12.0** | **-1.4** |
| **LBTB** | **Lobatse** | **37.56** | **245** | P | | **P** | **02 32 18.0** | **+0.5** |
| **LBTB** | comp=Z,8.6nm,0.8s,baz=99,slow=8.3,SNR=11<br>**Lobatse** | **37.56** | **245** | *e*P | | **P** | **02 32 18.5** | **+1.0** |
| LBTB | comp=Z,16nm,1.0s | | | pmax | | pmax | | |
| **LBTB** | **Lobatse** | **37.56** | **245** | *e*P | | **P** | **02 32 18.5** | **+1.0** |
| **MNSI** | comp=Z,16nm,1.0s<br>**Mandalling Nat** | **38.46** | **72** | P | | P | 02 32 34.9 | +10 |
| **PSI** | comp=Z,25nm,1.2s<br>**Prapat** | **38.62** | **69** | LR | | LR | 02 45 04.1 | |
| **BOSA** | comp=Z,237nm,20.4s,baz=232,slow=31<br>**Boshof** | **38.75** | **240** | P | | **P** | **02 32 27.5** | **0.0** |
| BOSA | comp=Z,9.6nm,1.1s,baz=72,slow=9.0,SNR=8.6 | | | LR | | LR | 02 46 49.6 | |
| **BOSA** | comp=Z,280nm,18.5s,baz=76,slow=34<br>**Boshof** | **38.75** | **240** | *e*P | | **P** | **02 32 28.3** | **+0.8** |
| BOSA | comp=Z,138nm,2.6s | | | pmax | | pmax | | |
| **BOSA** | **Boshof** | **38.75** | **240** | *e*P | | **P** | **02 32 28.2** | **+0.8** |
| **PPI** | comp=Z,138nm,2.6s<br>**Padang Panjang** | **38.79** | **75** | P | | P | 02 32 37.4 | +10 |
| **RAYN** | comp=Z,32nm,1.1s,comp=Z,746nm<br>**Ar Rayn** | **39.84** | **334** | P | | **P** | **02 32 35.6** | **-0.9** |
| | comp=Z,57nm,1.0s,SNR=9.3 | | | | | | | |
| **RAYN** | **Ar Rayn** | **39.84** | **334** | *e*P | | **P** | **02 32 34.7** | **-1.8** |
| **IPM** | comp=Z,10nm,1.0s<br>**Ipoh** | **41.22** | **68** | *e*P | | **P** | **02 32 45.0** | **-3.1** |
| **KULM** | comp=Z,8.5nm,0.8s<br>**Kulim** | **41.23** | **67** | *e*P | | **P** | **02 32 46.8** | **-1.3** |
| **CGJI** | comp=Z,55nm,1.2s<br>**Cibinong** | **42.27** | **86** | P | | P | 02 33 07.5 | +11 |
| **IKAZ** | **Kazeroun** | **43.51** | **346** | *e*P | | **P** | **02 33 05.5** | **-1.3** |
| **LEM** | **Lembang** | **44.10** | **87** | LR | | LR | 02 47 31.5 | |
| **CISI** | comp=Z,102nm,21.1s,baz=50,slow=31<br>**Cisompet, Garu** | **44.16** | **88** | P | | P | 02 33 24.3 | +12 |
| **CISI** | **Cisompet, Garu** | **44.16** | **88** | *e*P | | **P** | **02 33 12.5** | **+0.5** |
| **IMEH** | comp=Z,38nm,0.6s<br>**Mehriz** | **44.48** | **349** | *e*P | | **P** | **02 33 12.6** | **-1.9** |
| **KOLN** | **Koldanda** | **44.71** | **26** | *e*P | | **P** | **02 33 17.8** | **+1.5** |
| **IKOO** | comp=Z,81nm,0.9s<br>**Kooshah** | **44.92** | **355** | *e*P | | **P** | **02 33 17.5** | **-0.5** |
| **TPI** | **Tanjungpandan** | **45.05** | **81** | P | | P | 02 33 27.7 | +8.7 |
| **ISAD** | comp=Z,21nm,1.5s<br>**Sadrabad** | **45.16** | **349** | *e*P | | **P** | **02 33 21.4** | **+1.5** |
| **IDAH** | **Dahanechah** | **45.17** | **356** | *e*P | | **P** | **02 33 18.5** | **-1.4** |
| **DMN** | **Daman** | **45.24** | **28** | *e*P | | **P** | **02 33 21.4** | **+0.8** |
| **DANN** | comp=Z,99nm,0.9s<br>**Dangsing** | **45.28** | **26** | *e*P | | **P** | **02 33 21.4** | **+0.4** |
| **IRAM** | comp=Z,22nm,0.8s<br>**Ramesheh** | **45.33** | **347** | *e*P | | **P** | **02 33 18.9** | **-2.4** |
| **PKI** | **Pulchoki** | **45.34** | **28** | *e*P | | **P** | **02 33 21.9** | **+0.4** |
| **ICHK** | comp=Z,59nm,1.0s<br>**Chekchek** | **45.35** | **350** | *e*P | | **P** | **02 33 20.2** | **-1.1** |
| **GKN** | **Gorkha** | **45.36** | **27** | *e*P | | **P** | **02 33 22.2** | **+0.7** |
| **RAMN** | comp=Z,158nm,1.0s<br>**Ramite** | **45.38** | **30** | *e*P | | **P** | **02 33 21.4** | **-0.3** |
| **UMPA** | comp=Z,109nm,0.7s<br>**Umpang Tak** | **45.40** | **52** | P | | P | 02 33 29.5 | +7.8 |
| **ITEG** | comp=Z,6.8nm,1.2s,comp=Z,2μm<br>**Tejag** | **45.41** | **355** | *e*P | | **P** | **02 33 20.7** | **-1.1** |
| **UTHA** | **Uthaitani** | **45.47** | **53** | P | | P | 02 33 30.7 | +8.4 |
| **KKN** | comp=Z,4.1nm,1.0s,comp=Z,238nm<br>**Kakani** | **45.47** | **28** | *e*P | | **P** | **02 33 22.9** | **+0.5** |
| **IMON** | comp=Z,95nm,1.0s<br>**Monand** | **45.63** | **356** | *e*P | | **P** | **02 33 23.1** | **-0.5** |
| **ODAN** | **Odare** | **45.70** | **31** | *e*P | | **P** | **02 33 23.8** | **-0.4** |
| **GUN** | comp=Z,153nm,0.8s<br>**Gumba** | **45.85** | **28** | *e*P | | **P** | **02 33 24.7** | **-0.8** |
| **MHMT** | comp=Z,157nm,0.9s<br>**Maesarieng** | **45.91** | **49** | P | | P | 02 33 33.7 | +8.0 |
| **TAPN** | comp=Z,10nm,1.3s<br>**Taplejung** | **46.26** | **31** | *e*P | | **P** | **02 33 27.1** | **-1.6** |
| **IZEF** | comp=Z,90nm,1.1s<br>**Zefreh** | **46.39** | **347** | *e*P | | **P** | **02 33 27.7** | **-1.9** |
| **IPIR** | **Pirpir** | **46.52** | **346** | *e*P | | **P** | **02 33 29.3** | **-1.4** |
| **CMAR** | **Chiang Mai Arr** | **46.83** | **49** | P | | **P** | **02 33 32.1** | **-0.9** |
| CMAR | comp=Z,2.2nm,0.4s,baz=246,slow=9.5,SNR=13 | | | LR | | LR | 02 52 30.4 | |
| **IKLH** | comp=Z,84nm,18.2s,baz=228,slow=35<br>**Kolahrood** | **46.96** | **347** | *e*P | | **P** | **02 33 32.3** | **-1.8** |
| **CHTO** | **Chiang Mai** | **47.05** | **49** | *e*P | | **P** | **02 33 33.4** | **-1.3** |
| CHTO | comp=Z,14nm,0.9s | | | pmax | | pmax | | |
| **CHTO** | **Chiang Mai** | **47.05** | **49** | *e*P | | **P** | **02 33 33.4** | **-1.3** |
| **CMMT** | comp=Z,14nm,0.9s<br>**Chiang Mai** | **47.05** | **49** | P | | **P** | **02 33 37.4** | **+2.6** |
| **KBL** | comp=Z,18nm,1.1s<br>**Kabul** | **47.18** | **7** | *e*P | | **P** | **02 33 38.3** | **+2.6** |
| KBL | comp=Z,11nm,0.9s | | | pmax | | pmax | | |
| **KBL** | **Kabul** | **47.18** | **7** | *e*P | | **P** | **02 33 38.3** | **+2.6** |
| **QAM** | comp=Z,11nm,0.9s<br>**Ghamsar** | **47.42** | **347** | *e*P | | **P** | **02 33 36.7** | **-0.9** |
| **UTTA** | **Uttaradit** | **47.61** | **52** | P | | **P** | **02 33 38.8** | **-0.3** |
| **CHAI** | comp=Z,12nm,1.0s,comp=Z,107nm<br>**Chaiyaphum** | **47.67** | **55** | P | | **P** | **02 33 39.4** | **-0.1** |
| **PHRA** | **Phrae** | **47.82** | **50** | P | | **P** | **02 33 43.8** | **+3.1** |
| **LOEI** | comp=Z,490nm,0.9s,comp=Z,30μm<br>**Loei** | **48.02** | **52** | P | | P | 02 33 46.8 | +4.5 |
| **IKOM** | comp=Z,60nm,1.1s<br>**Komasi** | **48.83** | **343** | *e*P | | **P** | **02 33 46.7** | **-1.7** |
| **IFIR** | **Firoozkooh** | **48.96** | **349** | *e*P | | **P** | **02 33 48.9** | **-0.6** |
| **IDMV** | **Damavand** | **49.04** | **348** | *e*P | | **P** | **02 33 48.8** | **-1.4** |
| **IAKL** | **Akhelmad** | **49.09** | **355** | *e*P | | **P** | **02 33 50.5** | **0.0** |
| **IGHG** | **Ghaleghazi** | **49.25** | **342** | *e*P | | **P** | **02 33 49.9** | **-1.9** |
| **IKRD** | **Kardeh** | **49.28** | **355** | *e*P | | **P** | **02 33 52.3** | **+0.3** |
| **IRAZ** | **Razeghan** | **49.34** | **346** | *e*P | | **P** | **02 33 51.0** | **-1.4** |
| **IVIS** | **Veis** | **49.35** | **342** | *e*P | | **P** | **02 33 50.2** | **-2.1** |
| **IAFJ** | **Afjeh** | **49.38** | **348** | *e*P | | P | 02 33 58.5 | +5.7 |
| **IALA** | **Alasht** | **49.38** | **349** | *e*P | | **P** | **02 33 52.6** | **-0.1** |
| **IGLO** | **Ghaloghah** | **49.60** | **350** | *e*P | | **P** | **02 33 53.5** | **-0.9** |
| **IPRN** | **Peran** | **49.62** | **348** | *e*P | | **P** | **02 33 53.8** | **-0.6** |
| **IDHR** | **Dehrash** | **49.65** | **342** | *e*P | | **P** | **02 33 52.5** | **-2.2** |
| **ILIN** | **Lien** | **49.68** | **342** | *e*P | | **P** | **02 33 52.8** | **-2.2** |
| **NONG** | **Nongkai** | **49.80** | **53** | P | | P | 02 34 03.8 | +7.9 |
| **SKNT** | comp=Z,38nm,1.3s<br>**Sakolnakorn** | **49.85** | **55** | P | | P | 02 34 04.2 | +7.9 |
| **IEMG** | comp=Z,38nm,1.4s<br>**Emamgholi** | **49.90** | **355** | *e*P | | **P** | **02 33 57.3** | **+0.6** |
| **LSA** | **Lhasa** | **49.92** | **32** | P | | **P** | **02 33 59.5** | **+2.2** |
| LSA | comp=Z,16nm,1.3s | | | PMZ | | | | |
| **LSA** | **Lhasa** | **49.92** | **32** | *e*P | | **P** | **02 33 56.6** | **-0.7** |
| LSA | comp=Z,47nm,1.2s | | | pmax | | pmax | | |
| **LSA** | **Lhasa** | **49.92** | **32** | *e*P | | **P** | **02 33 56.6** | **-0.7** |
| **JAGI** | comp=Z,47nm,1.2s<br>**Jajag, Banyuwa** | **50.20** | **91** | P | | **P** | **02 33 59.3** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** | **50.20** | **91** | *e*P | | **P** | **02 33 58.6** | **-0.4** |
| **IGZV** | comp=Z,40nm,0.8s<br>**Ghazvin** | **50.21** | **346** | *e*P | | **P** | **02 33 57.6** | **-1.5** |
| **GEYT** | **Alibeck** | **50.46** | **355** | P | | **P** | **02 33 58.8** | **-1.9** |
| **SBUM** | comp=Z,2.9nm,0.8s,baz=144,slow=8.9,SNR=5.8<br>**Sibu** | **50.91** | **76** | *e*P | | **P** | **02 34 04.4** | **-0.1** |
| **H01W3** | comp=Z,31nm,1.0s<br>**Cape Leeuwin H** | **51.02** | **125** | T | | T | 03 29 01.5 | |
| **H01W2** | baz=284,slow=75,SNR=6.4<br>**Cape Leeuwin H** | **51.02** | **125** | T | | T | 03 29 01.9 | |
| **H01W1** | baz=284,slow=75,SNR=6.6<br>**Cape Leeuwin H** | **51.04** | **125** | T | | T | 03 29 01.9 | |
| **SLVN** | baz=284,slow=75,SNR=7.8<br>**Son La** | **52.27** | **50** | *e*P | | **P** | **02 34 13.5** | **-1.1** |
| **IBST** | comp=Z,19nm,0.9s<br>**Bostanabad** | **52.30** | **344** | *e*P | | **P** | **02 34 12.6** | **-2.1** |
| **TWSI** | **Taliwang, Sumb** | **52.82** | **91** | P | | P | **02 34 18.7** | **0.0** |
| **KBKI** | **Kotabaru** | **53.17** | **85** | P | | P | 02 34 30.2 | +8.9 |
| **KSH** | comp=Z,38nm,1.1s,comp=Z,1μm<br>**Kashi** | **53.17** | **12** | P | | P | **02 34 18.0** | **-2.9** |
| KSH | | | | *es*P | | **sP** | **02 34 

**CSS Prodhromos 55.11 330** *e*P P 02 34 34.9 -0.2
comp=Z,3.5nm,1.0s
**GNI Garni 55.19 343** *e*P P 02 34 35.3 -0.4
GNI pmax pmax
comp=Z,307nm,0.9s
**GNI Garni 55.19 343** *e*P P 02 34 35.3 -0.4
comp=Z,307nm,0.9s
**QIZ Qiongzhong 55.66 56** P P 02 34 39.0 -0.3
QIZ S S 02 42 26.8 +1.4
**KK31 Karatay Array 55.80 6** P P 02 34 40.8 +0.9
KK31 pmax pmax
comp=Z,3.0nm,0.7s
**KKAR Karatay Array 55.80 6** *e*P P 02 34 40.2 +0.3
KKAR pmax pmax
comp=Z,5.0nm,0.7s
**KKAR Karatay Array 55.80 6** *e*P P 02 34 40.2 +0.3
comp=Z,4.7nm,0.7s
**EKS2 Erkin-Say 55.81 9** *e*P P 02 34 41.3 +1.2
EKS2 pmax pmax
comp=Z,16nm,0.8s
**EKS2 Erkin-Say 55.81 9** *e*P P 02 34 41.3 +1.2
comp=Z,16nm,0.8s
**KKM Kota Kinabalu 55.83 74** *e*P P 02 34 40.2 -0.6
comp=Z,37nm,1.1s
**AAK Ala-Archa 55.90 10** P P 02 34 41.4 +0.6
comp=Z,3.6nm,0.8s,baz=132,slow=4.3,SNR=11
**AAK Ala-Archa 55.90 10** *e*P P 02 34 41.7 +0.9
AAK pmax pmax
comp=Z,10.0nm,0.8s
**AAK Ala-Archa 55.90 10** *e*P P 02 34 41.7 +0.9
comp=Z,9.9nm,0.8s
**KAPI Kappang 56.29 88** P P 02 34 42.7 -1.2
comp=Z,9.2nm,0.7s,baz=270,slow=8.7,SNR=6.7
**KAPI Kappang 56.29 88** *e*P P 02 34 42.8 -1.2
comp=Z,32nm,0.9s
**TKM2 Tokmak 2 56.38 11** *e*P P 02 34 43.9 -0.4
TKM2 pmax pmax
comp=Z,10.0nm,0.9s
**TKM2 Tokmak 2 56.38 11** *e*P P 02 34 43.9 -0.4
comp=Z,10.0nm,0.9s
**AKH Akhalkalaki 56.71 342**⇑ *i*P P 02 34 46.4 -0.2
**MAK Makhachkala 57.10 346** *e*P P 02 34 46.0 -3.1
**GYA Guiyang 57.35 47**⇓ *i*P P 02 34 49.8 -1.6
GYA PP PP 02 37 03.3 +4.4
GYA ScP ScP 02 39 45.8 +0.8
GYA S S 02 42 49.0 +1.2
GYA SS SS 02 46 39.8 +2.1
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,130nm,6.0s
GYA LN
comp=Z,680nm,20.3s
GYA LE
comp=Z,520nm,21.0s
GYA LZ
comp=Z,650nm,20.7s
**CD2 Chengdu 58.19 41** *e*P P 02 34 58.5 +1.4
CD2 pP pP 02 35 01.8 -0.1
CD2 PP PP 02 37 07.0 +0.7
CD2 S S 02 43 01.0 +2.4
CD2 SS SS 02 46 54.3 +3.6
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**SYO Syowa Base 58.39 190**⇓ *i*P P 02 34 57.8 -0.1
**NEY Neytrino 58.63 343**⇓ *e*P P 02 35 00.9 +0.8
NEY pmax pmax
comp=Z,3.0nm,1.2s
**BRTR Keskin Array B 58.85 334** P P 02 35 00.7 -1.0
comp=Z,2.7nm,0.9s,baz=142,slow=10,SNR=10
BRTR LR LR 02 59 21.5
comp=Z,44nm,18.2s,baz=133,slow=35
**KBZ Khabaz 59.02 343** P P 02 35 01.8 -0.7
comp=Z,2.9nm,0.8s,baz=206,slow=7.7,SNR=5.3
KBZ LR LR 03 00 41.7
comp=Z,199nm,19.0s,baz=160,slow=36
**BATI Baumata 59.21 94** P P 02 35 05.6 +1.1
comp=Z,43nm,0.7s,baz=177,slow=2.5,SNR=11
**KIV Kislovodsk 59.28 343** *i* P P 02 35 05.3 +0.8
KIV *i* 02 37 19.0
KIV *i* S S 02 43 19.3 +6.9
KIV pmax pmax
comp=Z,12nm,1.5s
KIV MLR MLR
comp=Z,176nm,19.0s
**LUWI Luwuk 60.11 84** *e*P P 02 35 09.6 -1.2
comp=Z,29nm,0.9s
**WMQ Urumqi 60.40 20** P P 02 35 13.5 +1.3
WMQ pP pP 02 35 18.5 +1.5
WMQ PP PP 02 37 29.0 +3.4
WMQ S S 02 43 24.0 -2.7
WMQ PMZ
comp=Z,26nm,1.0s
WMQ PMZ
comp=Z,120nm,6.0s
WMQ LN
comp=Z,160nm,20.0s
WMQ LE
comp=Z,120nm,18.0s
**MAKZ Makanchi 61.46 15** *e*P P 02 35 20.2 +0.9
**MK01 Makanchi Array 61.50 15** *e*P P 02 35 18.4 -1.2
**MK31 Makanchi Array 61.52 15** P P 02 35 19.5 -0.2
MK31 pmax pmax
comp=Z,23nm,0.8s
**MKAR Makanchi Array 61.52 15** P P 02 35 18.6 -1.2
comp=Z,7.3nm,0.8s,baz=208,slow=7.0,SNR=26
MKAR LR LR 03 00 21.4
comp=Z,104nm,18.5s,baz=184,slow=35
**MKAR Makanchi Array 61.52 15** *e*P P 02 35 19.2 -0.5
**AB31 Akbulak array 61.62 358** P P 02 35 20.5 +0.2
AB31 pmax pmax
comp=Z,20nm,0.8s
**ABKAR Akbulak array 61.62 358** *e*P P 02 35 18.0 -2.3
comp=Z,21nm,0.9s
**ANN Anapa 61.70 339** P P 02 35 28.5 +7.6
ANN pmax pmax
comp=Z,74nm,1.2s
**LZH Lanzhou 61.75 37**⇑ P P 02 35 29.5 +7.9
LZH pP pP 02 35 33.8 +7.4
LZH sP sP 02 35 36.8 +8.6
LZH PP PP 02 37 46.5 +8.7
LZH *e*S S 02 43 54.3 +10
LZH sS sS 02 44 01.0 +8.7
**LZH Lanzhou 61.75 37** SS SS 02 47 51.5 +4.8
LZH pmax pmax
comp=Z,31nm,1.0s
LZH pmax pmax
comp=Z,100nm,5.4s
LZH LR LR
comp=N,390nm,15.0s
LZH LR LR
comp=E,380nm,14.9s
LZH LR LR
comp=Z,510nm,16.7s
**GTA Gaotai 61.94 32** P P 02 35 29.8 +7.0
GTA pP pP 02 35 34.0 +6.4
GTA sP sP 02 35 36.8 +7.4
GTA pmax pmax
comp=Z,41nm,1.5s
**GTA Gaotai 61.94 32** P P 02 35 21.0 -1.8
GTA pP pP 02 35 27.0 -0.6
GTA sP sP 02 35 29.8 +0.4
GTA S S 02 43 42.8 -3.8
GTA PMZ
comp=Z,74nm,4.5s
GTA LN
comp=Z,120nm,18.0s
GTA LE
comp=Z,250nm,19.5s
**CASY Casey 62.26 160** *e*P P 02 35 24.3 -0.1
comp=Z,32nm,1.1s
**AKTO Aktyubinsk 62.90 356** P P 02 35 26.9 -2.0
comp=Z,10nm,0.9s,baz=189,slow=6.1,SNR=18
**XAN Xi'an 63.54 42** P P 02 35 39.8 +6.3
XAN pP pP 02 35 52.8 +15
XAN pmax pmax
comp=Z,81nm,0.9s
**XAN Xi'an 63.54 42** P P 02 35 31.5 -2.0
XAN PMZ
comp=Z,19nm,1.2s
**KURBB Kurchatov Arra 64.34 11** P P 02 35 36.8 -1.5
comp=Z,4.4nm,1.0s,baz=206,slow=7.1,SNR=15
**KURK Kurchatov 64.44 11** *e*P P 02 35 37.9 -1.1
KURK pmax pmax
comp=Z,33nm,0.8s
**KURK Kurchatov 64.44 11** P P 02 35 38.4 -0.6
comp=Z,134nm,0.7s,SNR=5.4
**KURK Kurchatov 64.44 11** *e*P P 02 35 37.9 -1.1
comp=Z,33nm,0.8s
**BVA0 Borovoye Array 65.62 5** *e*P P 02 35 46.5 -0.1
BVA0 pmax pmax
comp=Z,14nm,0.9s
**BVAR Borovoye Array 65.62 5** P P 02 35 46.1 -0.5
comp=Z,5.3nm,0.7s,baz=152,slow=6.7,SNR=16
**BRVK Borovoye 65.65 5** *e*P P 02 35 47.4 +0.6
BRVK pmax pmax
comp=Z,19nm,1.0s
**BRVK Borovoye 65.65 5** *e*P P 02 35 47.4 +0.6
comp=Z,19nm,1.0s
**NVL N'lazarevskaya 66.04 196** *e*P P 02 35 49.7 +0.5
NVL pmax pmax
comp=Z,18nm,0.9s
**MTN Manton Dam 66.07 99** *e*P P 02 35 50.2 -0.2
comp=Z,81nm,2.1s
**TOA0 Torodi Ar. Sit 66.12 291** *e*P P 02 35 51.4 +0.7
**TORD Torodi Ar. Bea 66.12 291** P P 02 35 49.8 -0.9
comp=Z,1.6nm,1.1s,baz=125,slow=3.8,SNR=7.2
TORD LR LR 03 02 42.3
comp=Z,108nm,21.2s,baz=85,slow=34
**VRH Novokhopyorsk 66.21 345** *e*P P 02 35 51.4 +1.0
VRH *e**PP **pP** 02 35 56.3 +1.1
VRH pmax pmax
comp=Z,10.0nm,0.9s
VRH pmax pmax
comp=N,7.0nm,1.3s
VRH pmax pmax
comp=E,9.0nm,0.6s
**TAM Tamanrasset 66.52 302** *e*P P 02 35 54.9 +1.7
TAM pmax pmax
comp=Z,69nm,3.0s
**TAM Tamanrasset 66.52 302** *e*P P 02 35 54.9 +1.7
comp=Z,69nm,3.0s
**VORD Divnogorie 66.62 344** *e*P P 02 35 54.1 +1.1
VORD *e**PP **pP** 02 35 59.0 +1.2
VORD pmax pmax
comp=Z,10.0nm,0.8s
VORD pmax pmax
comp=N,30nm,0.9s
VORD pmax pmax
comp=E,20nm,0.8s
**VRI Vrincioaia 66.81 333**⇑ *i*P P 02 35 54.4 0.0
**PLOR Plostina 66.83 333**⇓ *i*P P 02 35 54.1 -0.5
**MLR Muntele Rosu 66.87 332** *i*P P 02 35 55.5 +0.6
**VSR Storozhevoye 66.88 344** *e*P P 02 35 55.7 +1.0
VSR *e**PP **pP** 02 36 00.2 +0.7
VSR pmax pmax
comp=N,10.0nm,1.1s
VSR pmax pmax
comp=E,8.0nm,1.1s
VSR pmax pmax
comp=Z,10.0nm,1.1s
**TIR Tirane 66.90 326**⇓ *i*P P 02 35 56.3 +1.2
**VOIR 67.23 332**⇑ *i*P P 02 35 56.3 -0.9
**TESR Tescani 67.34 334**⇑ *i*P P 02 35 58.0 +0.2
**ARR Arges 67.38 332** *i*P P 02 35 57.8 -0.3
**ASAR Alice Springs 67.53 111** P P 02 35 58.8 -0.8
comp=Z,15nm,0.8s,baz=272,slow=5.9,SNR=111
ASAR LR LR 03 02 34.1
comp=Z,66nm,19.3s,baz=272,slow=33
**AS01 Alice Springs 67.57 111** *e*P P 02 35 57.7 -2.1
**LPSR Galich'ya Gora 68.19 344** *e*P P 02 36 04.4 +1.4
LPSR *e**PP **pP** 02 36 09.3 +1.5
LPSR pmax pmax
comp=Z,10.0nm,1.1s
LPSR pmax pmax
comp=N,10.0nm,1.3s
LPSR pmax pmax
comp=E,10.0nm,1.6s
**WRA Warramunga Arr 68.26 107** P P 02 36 04.0 -0.3
comp=E,23nm,0.8s,baz=275,slow=5.4,SNR=159
WRA LR LR 03 04 26.7
comp=E,88nm,18.5s,baz=305,slow=35
**WRA Warramunga Arr 68.26 107** P P 02 36 04.0 -0.3
**GZR Gura Zlata 68.27 331**⇓ *i*P P 02 36 04.4 +0.7
**WRAB Tennant Creek 68.27 107** *e*P P 02 36 04.1 -0.2
WRAB pmax pmax
comp=Z,48nm,0.8s
**WRAB Tennant Creek 68.27 107** P P 02 36 04.0 -0.2
comp=Z,334nm,0.9s,SNR=33
**WRAB Tennant Creek 68.27 107** *e*P P 02 36 04.1 -0.2
comp=Z,48nm,0.8s
**SIJI Sorong 68.41 86** LR LR 03 00 40.0
comp=Z,105nm,21.8s,baz=127,slow=31
**DIVS Divibare 68.73 328**⇑ *i*P P 02 36 06.3 -0.4
**ZALV Zalesovo Beam 68.77 14** P P 02 36 05.5 -1.0
comp=Z,9.3nm,0.9s,baz=213,slow=6.0,SNR=13
ZALV LR LR 03 04 16.2
comp=Z,131nm,18.7s,baz=203,slow=34
**HVS Khovu-Aksy 68.77 20**⇑ *e*P P 02 36 08.6 +1.8
HVS pmax pmax
comp=Z,22nm,1.0s
**BURAR Bucovina Array 68.82 333**⇓ *i*P P 02 36 08.4 +1.3
**BUR04 Bucovina Ar. S 68.82 333** *e*P P 02 36 09.8 +2.6
**FAKI Fak Fak 68.92 88** *e*P P 02 36 08.2 -0.2
comp=Z,19nm,0.9s
**BBOO Buckleboo 68.96 120** *e*P P 02 36 08.0 -0.4
comp=Z,25nm,1.0s
**SVE Sverdlovsk 69.17 358** *e*P P 02 36 10.6 +1.6
SVE pmax pmax
comp=Z,35nm,1.5s
**NVS Novosibirsk 69.26 12** *e*P P 02 36 09.7 +0.1
NVS pmax pmax
comp=Z,22nm,0.8s
NVS pmax pmax
comp=N,13nm,0.8s
**NJ2 Nanjing 69.29 49** *e*P P 02 36 10.5 +0.2
NJ2 PMZ
comp=N,15nm,0.5s
**DRGR 69.33 332**⇑ *i*P P 02 36 10.1 -0.2
**HHC Hu-ho-hao-te 69.44 37** *e*P P 02 36 12.0 +0.8
HHC sP sP 02 36 18.0 +0.2
HHC PP PP 02 38 48.8 +3.9
HHC S S 02 45 18.0 -0.2
HHC PMZ
comp=N,33nm,0.8s
HHC PMZ
comp=N,170nm,6.7s
HHC LN
comp=N,260nm,16.0s
HHC LE
comp=N,370nm,17.3s
**AKASG Malin Array Be 69.64 338** P P 02 36 10.2 -1.9
comp=N,3.8nm,0.7s,baz=145,slow=5.0,SNR=14
AKASG LR LR 03 04 22.1
comp=N,29nm,21.6s,baz=280,slow=34
**KIEV Kiev 69.64 338** *e*P P 02 36 10.2 -1.8
KIEV pmax pmax
comp=Z,19nm,0.8s
**KIEV Kiev 69.64 338** *e*P P 02 36 10.2 -1.8
comp=Z,19nm,0.8s
**AK11 Malin Array Si 69.64 338** *e*P P 02 36 11.5 -0.5
**KEST Kesra 69.96 316** LR LR 03 06 48.6
comp=Z,112nm,20.3s,baz=142,slow=36
**TIA Tai'an 70.26 44**⇑ P P 02 36 23.5 +7.3
TIA pmax pmax
comp=Z,30nm,0.6s
**DBIC Dimbokro 70.28 282** P P 02 36 18.1 +1.3
comp=Z,3.9nm,0.9s,baz=132,slow=7.9,SNR=3.3
DBIC LR LR 03 06 02.5
comp=Z,80nm,20.3s,baz=93,slow=35
**BLY Banja Luka 70.65 327**⇓ *i*P P 02 36 24.1 +5.7
**SNAA Sanae 70.70 198** P P 02 36 19.2 +0.8
**SNAA Sanae 70.70 198***c i*P P 02 36 19.2 +0.8
SNAA pmax pmax
comp=Z,7.0nm,0.8s
**SNAA Sanae 70.70 198** *e*P P 02 36 19.1 +0.7
comp=Z,5.8nm,0.8s
**UZH Uzhgorod 70.87 333**⇑ *i*P P 02 36 19.2 -0.4
UZH *i* 02 36 27.0
UZH *i* 02 36 36.4
**LVV L'vov 71.00 334** *e*P P 02 36 21.1 +0.7
LVV *e* 02 36 27.1
**OBN Obninsk 71.07 344** *i*P P 02 36 21.9 +1.2
OBN *i* 02 36 26.6
OBN *i* 02 36 44.8
OBN pmax pmax
comp=Z,34nm,1.2s
OBN MLR MLR
comp=Z,182nm,17.0s
**KOLS Kolonicke sedl 71.11 333** *e*P P 02 36 21.6 +0.5
KOLS pmax pmax
comp=Z,22nm,1.5s
**KOLS Kolonicke sedl 71.11 333** *e*P P 02 36 21.6 +0.5
**SONM Songino Array 71.35 29** P P 02 36 21.9 -0.8
comp=Z,5.3nm,0.6s,baz=221,slow=6.5,SNR=38
SONM LR LR 03 06 21.0
comp=Z,319nm,18.6s,baz=198,slow=35
**MOS Moscow 71.36 345** *e*P P 02 36 23.7 +1.3
MOS *e* 02 39 03.8
MOS pmax pmax
comp=Z,124nm,1.7s
**SONA1 Songino Array 71.36 29** *e*P P 02 36 21.6 -1.2
**KWP Kalwaria Pacla 71.43 334**⇑ *i*P P 02 36 23.7 +0.7
**PSZ Piszkesteto 71.47 331** *e*P P 02 36 24.6 +1.2
PSZ pmax pmax
comp=Z,5.0nm,0.8s
**PSZ Piszkesteto 71.47 331** *e*P P 02 36 24.6 +1.2
comp=Z,5.2nm,0.8s
**ULN Ulaanbaatar 71.69 29**⇓ *e*P P 02 36 23.9 -0.9
ULN pmax pmax
comp=Z,6.0nm,1.0s
**ULN Ulaanbaatar 71.69 29** *e*P P 02 36 23.6 -1.2
comp=Z,18nm,0.9s
**BJI Beijing 71.77 40** P P 02 36 27.0 +1.8
BJI PP PP 02 39 06.0 +1.1
BJI S S 02 45 47.8 +2.7
BJI SS SS 02 50 25.8 +4.2
BJI PMZ
comp=Z,10.0nm,1.0s
BJI PMZ
comp=Z,270nm,5.7s
BJI LN
comp=Z,360nm,5.2s
BJI LE
comp=Z,100nm,10.6s
**ZAK Zakamensk 71.81 26** *e*P P 02 36 20.4 -5.0
ZAK pmax pmax
comp=Z,6.0nm,1.1s
**VNA2 Neumayer--Watz 71.89 199** P P 02 36 27.3 +1.8
baz=66,slow=6.7
**STHS Stebnicka Huta 71.92 333** *e*P P 02 36 27.0 +1.0
STHS pmax pmax
comp=Z,5.0nm,1.2s
**STHS Stebnicka Huta 71.92 333** *e*P P 02 36 27.0 +1.0
**VNA1 Neumayer--Stat 72.10 199** P P 02 36 28.7 +1.9
**VYHS Vyhne 72.38 331** *e*P P 02 36 27.6 -1.1
VYHS pmax pmax
comp=Z,9.0nm,1.5s
**VYHS Vyhne 72.38 331** *e*P P 02 36 27.6 -1.1
**LANS Liptovska Anna 72.54 332** *e*P P 02 36 31.5 +1.7
**LANS Liptovska Anna 72.54 332** *e*P P 02 36 31.4 +1.7
**VNA3 Neumayer Olymp 72.68 199** P P 02 36 31.9 +1.6
**KRAR Krasnoyarsk 72.69 17** P P 02 36 29.6 -0.8
KRAR pmax pmax
comp=Z,25nm,0.3s
**TLY Talaya 72.94 25** *e*P P 02 36 40.1 +8.1
TLY pmax pmax
comp=Z,17nm,1.1s
**SOKA Soboth 73.06 328**⇑ *i*P P 02 36 34.2 +1.3
comp=Z,14nm,1.6s
**ARSA Arzberg 73.17 328**⇑ *i*P P 02 36 33.1 -0.5
comp=Z,16nm,1.4s
**CONA Conrad Observa 73.45 329**⇑ *i*P P 02 36 36.4 +1.2
comp=Z,25nm,1.4s
**OKC Ostrava-Krasne 73.64 331** *e*P P 02 36 37.2 +1.1
**OKC Ostrava-Krasne 73.64 331** *e*P P 02 36 37.2 +1.1
**MORC Moravsky Berou 73.88 331** *e*P P 02 36 36.6 -1.1
MORC pmax pmax
comp=Z,21nm,1.0s
**MORC Moravsky Berou 73.88 331** *e*P P 02 36 36.5 -1.1
comp=Z,21nm,1.0s
**KBA Koelnbreinsper 74.20 327**⇑ *i*P P 02 36 39.1 -0.7
comp=Z,7.7nm,1.1s
**MOA Molln 74.21 328**⇑ *i*P P 02 36 38.8 -0.8
comp=Z,22nm,1.4s
**ABTA Abfaltersbach 74.44 326**⇑ *i*P P 02 36 41.8 +0.8
comp=Z,14nm,1.4s
**KRLC Kraliky 74.44 331** *e*P P 02 36 42.1 +1.2
**KRLC Kraliky 74.44 331** *e*P P 02 36 42.1 +1.2
**TREC Trest 74.54 330** *e*P P 02 36 43.8 +2.3
**TREC Trest 74.54 330** *e*P P 02 36 43.8 +2.3
**DPC Dobruska-Polom 74.84 331** *e*P P 02 36 45.0 +1.7
**DPC Dobruska-Polom 74.84 331** *e*P P 02 36 45.0 +1.7
**RJOB Jochberg 74.91 327** *e*P P 02 36 44.6 +0.9
comp=Z,4.2nm,0.8s,baz=128,slow=5.9
**GEC2 GERESS Array S 75.14 329** *e*P P 02 36 47.8 +2.7
**GEC2 GERESS Array S 75.14 329** *e*P P 02 36 44.0 -1.0
comp=Z,2.1nm,0.9s,baz=128,slow=5.9
**GEC2 GERESS Array S 75.14 329** *e*P P 02 36 47.8 +2.7
**GERES GERESS Array B 75.14 329** P P 02 36 42.5 -2.6
comp=Z,1.2nm,0.8s,baz=168,slow=6.8,SNR=9.4
GERES LR LR 03 11 04.8
comp=Z,36nm,19.2s,baz=124,slow=37
**WTTA Wattenberg 75.23 327**⇑ *i*P P 02 36 45.9 +0.2
comp=Z,16nm,1.3s
**KHC Kasperske Hory 75.39 329** *e*P P 02 36 45.0 -1.4
KHC pmax pmax
comp=Z,4.0nm,1.2s
**KHC Kasperske Hory 75.39 329** *e*P P 02 36 47.0 +0.6
**KHC Kasperske Hory 75.39 329** *e*P P 02 36 45.0 -1.4
comp=Z,4.4nm,1.2s
**PRU Pruhonice 75.46 330** *e*P P 02 36 48.3 +1.6
**PRU Pruhonice 75.46 330** *e*P P 02 36 48.3 +1.6
**MOTA Moosalm 75.57 326**⇑ *i*P P 02 36 47.4 -0.2
comp=Z,11nm,1.0s
**PRA Prague 75.57 330** *e*P P 02 36 48.1 +0.8
**PRA Prague 75.57 330** *e*P P 02 36 48.1 +0.8
**FETA Feichten 75.57 326**⇑ *i*P P 02 36 47.4 -0.3
comp=Z,10nm,1.1s
**FUORN Ofenpass-Fuorn 75.59 325** *e*P P 02 36 48.2 +0.3
comp=Z,124nm,2.5s
**WET Wettzell 75.75 329** *e*P P 02 36 48.2 -0.2
comp=Z,1.8nm,0.9s,baz=128,slow=5.9
**PVCC Panska Ves 75.80 330** *e*P P 02 36 50.4 +1.7
**PVCC Panska Ves 75.80 330** *e*P P 02 36 50.4 +1.7
**FUR Furstenfeldbru 75.97 327** *e*P P 02 36 49.7 0.0
comp=Z,13nm,0.8s,baz=128,slow=5.9
**BRG Berggiesshubel 76.33 330** *e*P P 02 36 53.6 +1.9
comp=Z,11nm,1.3s
**BRG Berggiesshubel 76.33 330** *e*P P 02 36 53.6 +1.9
BRG pmax pmax
comp=Z,11nm,1.3s
**BRG Berggiesshubel 76.33 330** *e*P P 02 36 52.9 +1.3
comp=Z,4.5nm,1.0s,baz=128,slow=5.9
**NKC Novy Kostel 76.65 329**⇓ *e*P P 02 36 55.8 +2.2
**NKC Novy Kostel 76.65 329** *e*P P 02 36 55.8 +2.2
**WERN Wernitzgruen 76.72 329** *e*P P 02 36 55.3 +1.3
comp=Z,12nm,1.2s,baz=128,slow=5.9
**GUNZ Gunzen 76.79 329** *e*P P 02 36 55.6 +1.2
comp=Z,5.6nm,0.9s,baz=128,slow=5.9
**WERD Werda 76.86 329** *e*P P 02 36 55.8 +1.1
comp=Z,6.6nm,1.3s,baz=128,slow=5.9
**GRF Grafenberg Arr 76.94 328** *e*P P 02 36 54.7 -0.5
comp=Z,5.9nm,0.9s,baz=128,slow=5.9
**GRFO Grafenberg 76.94 328** *e*P P 02 36 55.3 +0.1
GRFO pmax pmax
comp=Z,17nm,1.0s
**GRFO Grafenberg 76.94 328** *e*P P 02 36 55.3 +0.1
comp=Z,17nm,1.0s
**CLL Collm 77.06 330** *e*P P 02 36 54.0 -1.8
**CLL Collm 77.06 330** *e*P P 02 36 54.0 -1.8
CLL L L 03 06 00.0
comp=Z,100nm,18.3s
**SENIN Lac Senin/Sane 77.12 324** *e*P P 02 36 58.3 +1.7
comp=Z,134nm,2.6s
**MOX Moxa 77.33 329** *e*P P 02 36 58.4 +1.1
comp=Z,2.6nm,1.0s,baz=128,slow=5.9
**COEN Coen 77.47 102** *e*P P 02 36 57.9 -1.1
**QSPA South Pole Qui 77.50 180** *e*P P 02 36 58.8 +0.4
comp=Z,50nm,1.0s
**KSAR Wonju Array Be 78.38 47** P P 02 37 02.2 -1.3
**KSAR Wonju Array Be 78.38 47** P P 02 37 02.1 -1.3
**KS01 Wonju Array Si 78.40 47** *e*P P 02 37 01.1 -2.5
**KSRS Korea Array 78.41 47** P P 02 37 02.1 -1.5
comp=Z,1.8nm,0.6s,baz=243,slow=5.3,SNR=5.6
KSRS LR LR 03 12 47.2
comp=Z,81nm,18.4s,baz=234,slow=37
**HIA Hailar 79.09 34**⇓ *e*P P 02 37 06.4 -0.8
HIA pmax pmax
comp=Z,4.0nm,0.6s
**HIA Hailar 79.09 34** *e*P P 02 37 06.3 -0.8
comp=Z,20nm,0.9s
**CTAO Charters Towers 79.34 108** *e*P P 02 37 08.6 -0.7
CTAO pmax pmax

comp=Z,9.0nm,0.7s
CTAO Charters Tower 79.34 108 eP P 02 37 08.6 -0.7
comp=Z,8.7nm,0.7s
FINES FINESS Array B 79.38 343 P P 02 37 09.0 +0.6
comp=Z,16nm,1.1s,baz=170,slow=12,SNR=7.3
FINES LR LR 03 14 04.8
comp=Z,73nm,18.0s,baz=186,slow=37
FINES FINESS Array B 79.38 343 iP P 02 37 11.3 +2.9
FINES pmax pmax
comp=Z,16nm,1.1s
CAN Canberra 79.45 124 eP P 02 37 10.1 +0.5
CAN Canberra 79.45 124 eP P 02 37 10.1 +0.5
CN2 Changchun 79.63 41 eP P 02 37 16.8 +6.6
CN2 pmax pmax
comp=Z,20nm,1.0s
VNDA Vanda 79.68 167 P P 02 37 10.7 +0.7
comp=Z,6.4nm,0.7s,baz=273,slow=5.4,SNR=40
VNDA LR LR 03 08 37.1
comp=Z,207nm,18.7s,baz=248,slow=33
VNDA Vanda 79.68 167 eP P 02 37 10.8 +0.8
SBA Scott Base 80.62 168 eP P 02 37 14.5 -0.6
SBA pmax pmax
comp=Z,9.0nm,1.0s
SBA Scott Base 80.62 168 eP P 02 37 14.5 -0.6
comp=Z,8.7nm,1.0s
ES19 SONSECA Array 81.06 314 eP P 02 37 19.4 +1.3
ESDC Sonseca Array 81.09 314 P P 02 37 18.4 +0.2
comp=Z,1.2nm,0.6s,baz=106,slow=4.7,SNR=10
ESDC LR LR 03 13 10.8
comp=Z,64nm,19.7s,baz=185,slow=36
PMG Port Moresby 82.15 98 P P 02 37 24.3 0.0
PMG pmax pmax
comp=Z,139nm,1.5s
PMG Port Moresby 82.15 98 eP P 02 37 24.1 -0.2
comp=Z,48nm,1.2s
MDJ Mudanjiang 82.65 41 P P 02 37 25.3 -1.0
MDJ PMZ
comp=Z,12nm,0.8s
MDJ PMZ
comp=Z,120nm,4.4s
LVZ Lovozero 82.86 349 P P 02 37 29.2 +2.3
LVZ pmax pmax
comp=Z,86nm,1.7s
USRK Ussuriysk Ar. 84.04 42 P P 02 37 31.3 -2.1
comp=Z,3.2nm,0.8s,baz=222,slow=3.9,SNR=8.2
NB2 NORSAR Subarra 84.05 337 P P 02 37 34.2 +1.0
comp=Z,21nm,1.4s,baz=129,slow=5.3
NB2 NORSAR Subarra 84.05 337 P P 02 37 34.2 +1.0
baz=129,slow=5.3
NOA NORSAR Array B 84.05 337 P P 02 37 32.2 -1.0
comp=Z,4.3nm,1.1s,baz=121,slow=5.3,SNR=3.9
NOA LR LR 03 15 45.7
comp=Z,41nm,19.4s,baz=125,slow=36
MAJO Matsushiro 85.68 51 eP P 02 37 41.3 -0.6
MAJO pmax pmax
comp=Z,25nm,1.2s
MAJO Matsushiro 85.68 51 eP P 02 37 41.3 -0.6
comp=Z,25nm,1.2s
MAT Matsushiro 85.68 51 P P 02 37 40.5 -1.4
MJAR Matsushiro Arr 85.68 51 P P 02 37 40.9 -1.1
comp=Z,9.7nm,1.0s,baz=242,slow=5.5,SNR=13
MJAR LR LR 03 14 28.6
comp=Z,47nm,20.5s,baz=280,slow=35
CLNS Chul'man 85.77 29 eP P 02 37 48.4 +6.5
CLNS pmax pmax
comp=Z,7.0nm,1.0s
CLNS pmax pmax
comp=N,27nm,1.1s
CLNS pmax pmax
comp=E,8.0nm,1.2s
KLR Kul'dur 85.94 38 eP P 02 37 37.7 -5.2
ARCES ARCESS Array B 86.03 348 P P 02 37 42.1 -0.8
comp=E,10nm,1.0s,baz=130,slow=1.9,SNR=6.6
ARCES LR LR 03 16 15.2
comp=E,76nm,20.6s,baz=134,slow=36
SAML Samuel 122.61 251 ePKPdf PKPdf 02 43 58.7 -0.8
INK Inuvik 123.26 7 ePKIKP PKPdf 02 43 58.0 -1.1
INK Inuvik 123.26 7 ePKPdf PKPdf 02 43 58.0 -1.1
COLA College 123.55 15 ePKIKP PKPdf 02 43 59.3 -0.5
COLA College 123.55 15 ePKPdf PKPdf 02 43 59.3 -0.5
ILAR Eielson Array 123.88 15 PKP PKPdf 02 43 58.7 -1.8
comp=E,2.4nm,0.9s,baz=293,slow=2.8,SNR=14
LPAZ La Paz 123.99 240 PKP PKPdf 02 44 02.3 -0.6
comp=E,4.3nm,0.8s,baz=108,slow=2.7,SNR=16
OTAV Otavalo 140.05 255 ePKPdf PKPdf 02 44 33.8 +0.8
E26A Carlson Angus 144.10 343 P PKPbc 02 44 36.5 -0.3
baz=144,SNR=9.2
H32A Carlson Farm, 144.12 336 P PKPbc 02 44 36.8 0.0
baz=144
TIGA Tifton 144.15 307 P PKPab 02 44 35.8 -1.1
baz=144
F28A McLaughlin 144.16 341 P PKPbc 02 44 37.1 +0.2
baz=144
K36A Gilmore City 144.32 331 P PKPab 02 44 36.1 -1.1
baz=144
E25A Miller Ranch, 144.34 344 P PKPab 02 44 36.6 -0.5
baz=144,SNR=5.2
ECSD EROS Data Cent 144.42 335 P PKPab 02 44 36.7 -0.8
baz=144
ECSD EROS Data Cent 144.42 335 ePKPdf PKPab 02 44 36.7 -0.8
NEW Newport 144.42 0 ePKIKP PKPab 02 44 37.4 0.0
NEW Newport 144.42 0 P PKPab 02 44 36.7 -0.7
baz=144
NEW Newport 144.42 0 ePKPdf PKPab 02 44 37.4 0.0
F27A Lemmon 144.52 342 P PKPab 02 44 37.3 -0.5
baz=144,SNR=11
I32A Karley and Nic 144.52 336 P PKPab 02 44 37.9 0.0
baz=144
K35A Storm Lake 144.62 332 P PKPab 02 44 37.1 -1.2
baz=144
F26A Lodgepole 144.73 343 P PKPab 02 44 38.0 -0.7
baz=145,SNR=15
SUSD South Dakota S 144.75 338 P PKPab 02 44 37.8 -0.9
baz=145,SNR=7.1
BSMT Bassoo Peak 144.79 358 ePKPdf PKPab 02 44 38.1 -0.9
LAO LASA Array 144.84 347 P PKPab 02 44 38.5 -0.5
baz=145
LAO LASA Array 144.84 347 ePKPdf PKPbc 02 44 39.0 -0.1
F25A Bowman 144.88 344 P PKPab 02 44 38.3 -0.9
baz=145,SNR=7.8
G28A Parade 144.89 340 P PKPab 02 44 38.5 -0.7
baz=145,SNR=15
J33A Davis 144.90 334 P PKPab 02 44 38.3 -1.0
baz=145
WVT Waverly 144.94 317 ePKIKP PKPab 02 44 38.1 -1.5
WVT Waverly 144.94 317 ePKPdf PKPab 02 44 38.1 -1.5
G27A Dupree 144.94 342 P PKPab 02 44 38.4 -1.0
baz=145,SNR=11
I31A Royce, Wessing 144.94 337 P PKPab 02 44 38.0 -1.4
baz=145
K34A Le Mars 145.04 333 P PKPbc 02 44 38.5 -1.3
baz=145,SNR=5.5
H29A Onida 145.04 339 P PKPbc 02 44 38.7 -1.1
baz=145
SWMT Swartz Lake 145.09 357 ePKPbc PKPbc 02 44 39.0 -1.0
G26A Maurine 145.22 342 P PKPbc 02 44 39.3 -1.0
baz=145,SNR=22
J32A Parkston 145.22 335 P PKPbc 02 44 39.2 -1.2
baz=145
L35A Bielow Farm, R 145.24 332 P PKPbc 02 44 39.5 -0.9
baz=145
H28A Mission Ridge 145.27 340 P PKPbc 02 44 39.7 -0.9
baz=145,SNR=7.5
SLMT Seeley Lake 145.33 356 ePKPbc PKPbc 02 44 39.7 -1.0
G25A Newell 145.54 343 P PKPdf 02 44 40.6 -0.7
baz=145,SNR=12
I29A Vivian Onida 145.60 339 P PKPdf 02 44 40.8 -0.6
baz=146
CHMT Chamberlain Mo 145.64 356 ePKPbc PKPdf 02 44 40.8 -0.9
J31A Geddes 145.65 336 P PKPdf 02 44 40.8 -0.7
baz=146,SNR=9.8
H27A Howes 145.65 341 P PKPdf 02 44 40.7 -0.8
baz=146
HRY Holter Researc 145.71 354 ePKPbc PKPdf 02 44 41.5 -0.2
L34A Svendsen Farm, 145.74 332 P PKPdf 02 44 40.7 -1.0
baz=146,SNR=5.4
MSO Missoula 145.77 357 P PKPdf 02 44 41.1 -0.6
baz=146
M35A Neola 145.82 331 P PKPdf 02 44 41.1 -0.7
baz=146,SNR=6.7
K32A Verdigre 145.86 335 P PKPdf 02 44 41.4 -0.5
baz=146,SNR=8.9
PARMO Parma 145.87 319 ePKPbc PKPdf 02 44 42.2 +0.2
J30A Dallas 145.91 337 P PKPdf 02 44 41.8 -0.1
baz=146,SNR=18
I28A Midland 145.92 340 P PKPdf 02 44 41.6 -0.4
baz=146,SNR=10
L33A Hoskins 145.97 334 P PKPdf 02 44 41.5 -0.6
baz=146
LRAL Lakeview Retre 146.00 312 ePKPbc PKPdf 02 44 42.4 0.0
H25A Fruitdale 146.12 343 P PKPdf 02 44 42.1 -0.2
baz=146,SNR=5.9
J29A Okreek 146.15 338 P PKPdf 02 44 42.7 +0.3
baz=146,SNR=9.3
I27A Quinn 146.15 341 P PKPdf 02 44 42.5 +0.1
baz=146
M34A Aspy Farms, Fr 146.20 332 P PKPdf 02 44 42.3 -0.1
baz=146
HAWA Hanford 146.21 3 ePKPbc PKPdf 02 44 42.7 +0.4
K31A O'Neill 146.21 336 P PKPdf 02 44 42.3 -0.2
baz=146,SNR=10.0
N35A Tabor 146.26 330 P PKPdf 02 44 42.6 0.0
baz=146
GCMT Greycliff 146.34 351 ePKPbc PKPbc 02 44 43.6 -0.3
M33A Taylor Creek F 146.42 333 P PKPdf 02 44 43.1 +0.2
baz=146
L32A Elgin 146.42 334 P PKPdf 02 44 43.1 +0.2
baz=146,SNR=5.8
I26A New Underwood 146.44 342 P PKPdf 02 44 43.3 +0.4
baz=146
J28A Allard Ranch, 146.45 339 P PKPdf 02 44 42.8 -0.1
baz=146,SNR=8.4
O36A Bolckow 146.48 329 P PKPdf 02 44 43.5 +0.5
baz=146,SNR=10
K30A Basset 146.51 337 P PKPdf 02 44 43.5 +0.4
baz=146
L31A Butterfield Fa 146.62 335 P PKPdf 02 44 43.8 +0.6
baz=146,SNR=7.2
LRM Limekiln Ridge 146.66 354 ePKPbc PKPbc 02 44 44.2 -0.8
N34A Lincoln 146.69 331 P PKPdf 02 44 43.9 +0.6
baz=147
K29A Lazy Trails An 146.70 338 P PKPbc 02 44 44.4 -0.6
baz=147,SNR=5.4
RSSD Black Hills 146.70 343 ePKP2 PKPdf 02 44 44.2 +0.7
RSSD Black Hills 146.70 343 ePKPbc PKPdf 02 44 44.2 +0.7
I25A Rochford 146.71 343 P PKPdf 02 44 44.3 +0.7
baz=147,SNR=20
BOZ Bozeman (W) 146.74 353 P PKPbc 02 44 44.3 -0.9
baz=147
O35A Humboldt 146.85 330 P PKPdf 02 44 44.2 +0.6
baz=147,SNR=5.7
J27A Elkhorn Farm, 146.86 340 P PKPbc 02 44 44.8 -0.7
baz=147,SNR=5.1
OXF Oxford 146.91 316 ePKP2 PKPdf 02 44 44.0 +0.1
OXF Oxford 146.91 316 ePKPbc PKPdf 02 44 44.0 +0.1
RLMT Red Lodge 146.93 350 P PKPdf 02 44 44.2 +0.3
baz=147,SNR=11
RLMT Red Lodge 146.93 350 ePKPbc PKPbc 02 44 45.7 -0.1
BGNE Belgrade 146.97 334 P PKPdf 02 44 44.5 +0.7
baz=147,SNR=5.9
BGNE Belgrade 146.97 334 ePKPbc PKPdf 02 44 44.6 +0.8
P36A Good Intent, A 146.99 329 P PKPbc 02 44 44.9 -0.9
baz=147,SNR=5.9
K28A Ten Mile Ranch 147.12 339 P PKPbc 02 44 45.7 -0.5
baz=147,SNR=6.5
DLMT Dillon 147.12 355 ePKPbc PKPbc 02 44 45.6 -0.7
Q37A Longview Farm, 147.15 327 P PKPdf 02 44 44.9 +0.8
baz=147,SNR=5.7
J26A Sides Ranch, S 147.16 341 P PKPbc 02 44 45.6 -0.7
baz=147,SNR=9.0
N33A J Bar K, Exete 147.20 332 P PKPdf 02 44 45.3 +1.0
baz=147
G05D Wamic, OR 147.21 6 P PKPbc 02 44 45.5 -0.8
baz=147
O34A Beatrice 147.29 331 P PKPbc 02 44 45.7 -1.0
baz=147
J25A Sunshine Ranch 147.31 342 P PKPbc 02 44 46.2 -0.5
baz=147,SNR=7.9
L29A Maesberg Ranch 147.36 337 P PKPbc 02 44 46.0 -0.9
baz=147
M31A Lambtecht Ranc 147.37 335 P PKPbc 02 44 45.8 -1.1
baz=147
P35A Duane Minner, 147.47 329 P PKPbc 02 44 46.1 -1.1
baz=147
QLMT Earthquake Lak 147.53 353 ePKPbc PKPbc 02 44 47.7 +0.3
YNR Norris Junctio 147.54 352 ePKPbc PKPbc 02 44 48.3 +0.8
YMR Madison River 147.63 352 ePKPdf PKPdf 02 44 44.4 -0.7
YMR ePKPbc PKPbc 02 44 48.3 +0.6
LKWY Lake 147.65 351 ePKP2 PKPab 02 44 50.0 0.0
LKWY Lake 147.65 351 ePKPbc PKPab 02 44 50.0 0.0
MCMT McKenzie Canyo 147.68 355 ePKPbc PKPbc 02 44 47.5 -0.4
R37A Teagarden Farm 147.76 327 P PKPbc 02 44 46.6 -1.4
baz=148
O33A Hebron 147.79 332 P PKPdf 02 44 46.2 +1.0
baz=148,SNR=6.8
N31A Bailey Ranch, 147.79 334 P PKPbc 02 44 47.0 -1.1
baz=148
YFT Old Faithful 147.82 352 ePKPbc PKPbc 02 44 48.6 +0.3
H17A Grant Village 147.84 352 ePKPbc PKPab 02 44 49.9 -0.9
P34A Walnut Farm, R 147.85 330 P PKPbc 02 44 46.8 -1.4
baz=148,SNR=14
O32A Brockman Farm, 147.96 333 P PKPbc 02 44 47.4 -1.2
baz=148
M29A Burnside Ranch 147.97 337 P PKPbc 02 44 47.2 -1.4
baz=148
Q35A Mercer Eighty, 147.99 329 P PKPbc 02 44 47.1 -1.6
baz=148,SNR=5.4
KSU1 Kansas State U 148.09 329 P PKPbc 02 44 47.7 -1.1
baz=148,SNR=10
KSU1 Kansas State U 148.09 329 ePKPbc PKPbc 02 44 47.8 -1.1
I05D Terrebonne, OR 148.10 6 P PKPbc 02 44 48.3 -0.5
baz=148
R36A Gordon, Harris 148.11 327 P PKPbc 02 44 47.6 -1.3
baz=148
S37A Fort Scott 148.16 326 P PKPbc 02 44 47.8 -1.2
baz=148,SNR=12
FLWY Flagg Ranch 148.16 352 ePKPbc PKPbc 02 44 49.6 +0.4
M28A Bar X Bar Ranc 148.27 338 P PKPbc 02 44 48.5 -0.9
baz=148
N30A Hueftle Ranch, 148.29 335 P PKPbc 02 44 47.9 -1.6
baz=148
P33A Williams Farm, 148.35 331 P PKPbc 02 44 48.6 -0.9
baz=148
IMW Indian Meadow 148.38 352 ePKPbc PKPbc 02 44 50.4 +0.6
Q34A Chapman 148.39 330 P PKPbc 02 44 48.9 -0.7
baz=148
I03D Drain, OR 148.47 9 P PKPbc 02 44 49.2 -0.5
baz=148
R35A Emporia Munici 148.47 328 P PKPbc 02 44 48.7 -1.2
baz=148,SNR=5.6
N29A Votaw Ranch, W 148.49 336 P PKPbc 02 44 49.6 -0.4
baz=148
MOOW Moose Ponds 148.50 352 ePKPbc PKPbc 02 44 50.1 0.0
O31A Woolen Ranch, 148.51 334 P PKPbc 02 44 48.9 -1.1
baz=148
I04A Tendick Farm, 148.51 8 P PKPbc 02 44 49.6 -0.3
baz=148
S36A Lake Cedric, C 148.60 327 P PKPbc 02 44 49.3 -0.9
baz=148,SNR=7.2
LOHW Long Hollow 148.61 351 ePKPbc PKPbc 02 44 50.5 +0.1
P32A Huiting Farm, 148.62 332 P PKPbc 02 44 49.2 -1.1
baz=148
T37A Cheneyville 18 148.66 325 P PKPbc 02 44 49.7 -0.8
baz=149,SNR=24
UALR University of 148.69 319 ePKPbc PKPbc 02 44 50.1 -0.4
K22A Casper 148.73 345 P PKPbc 02 44 49.5 -1.1
baz=149,SNR=12
K22A Casper 148.73 345 ePKPbc PKPbc 02 44 49.4 -1.2
Q33A Connelly Farm, 148.76 331 P PKPbc 02 44 49.5 -1.1
baz=149,SNR=6.3
SNOW Snow King Moun 148.78 352 ePKPbc PKPbc 02 44 51.2 +0.4
TPAW Teton Pass 148.78 352 ePKPdf PKPdf 02 44 47.2 +0.2
TPAW ePKPbc PKPbc 02 44 50.9 0.0
U38A Gravette 148.84 324 P PKPbc 02 44 49.7 -1.2
baz=149,SNR=12
REDW Red Top Meadow 148.89 352 ePKPbc PKPbc 02 44 51.2 0.0
OGNE Ogallala 148.91 338 P PKPbc 02 44 50.5 -0.6
baz=149
N28A Pribbeno Ranch 148.95 337 P PKPbc 02 44 50.8 -0.4
baz=149
VBMS Vicksburg 148.96 313 P PKPbc 02 44 51.2 -0.1
baz=149
S35A Otter Creek Ra 149.02 327 P PKPbc 02 44 50.6 -0.7
baz=149,SNR=8.0
R34A Isabella, Hill 149.02 329 P PKPbc 02 44 50.6 -0.7
baz=149
HLID Hailey 149.05 357 P PKPbc 02 44 51.5 0.0
baz=149
HLID Hailey 149.05 357 ePKPbc PKPbc 02 44 51.2 -0.2
P31A Stockton 149.05 333 P PKPbc 02 44 50.1 -1.3
baz=149,SNR=9.9
J04D Umpqua Nationa 149.10 8 P PKPbc 02 44 50.8 -0.8
baz=149
Q32A Meitler Ranch, 149.11 332 P PKPbc 02 44 50.3 -1.2
baz=149,SNR=5.9
O29A 4D Ranch, Culb 149.14 336 P PKPbc 02 44 51.1 -0.5
baz=149
J05D Fort Rock, OR 149.16 6 P PKPbc 02 44 51.5 -0.2
baz=149
T36A Boggs Farm, Ca 149.24 326 P PKPbc 02 44 51.4 -0.4
baz=149
V38A Canehill 149.25 323 P PKPbc 02 44 51.1 -0.9
baz=149,SNR=13
BW06 Boulder Array 149.27 350 ePKPdf PKPdf 02 44 46.9 -1.0
BW06 ePKPbc PKPbc 02 44 51.3 -0.8
U37A Salina 149.29 324 P PKPbc 02 44 51.7 -0.4
baz=149
R33A Olander Ranch, 149.38 330 P PKPbc 02 44 51.4 -0.8
baz=149,SNR=9.4
P30A Selden 149.41 334 P PKPbc 02 44 51.5 -0.8
baz=149,SNR=8.4
S34A Willow Spring 149.41 328 P PKPbc 02 44 51.7 -0.6
baz=149,SNR=6.9
Q31A Ellis 149.48 333 P PKPbc 02 44 52.0 -0.5
baz=149
O28A Krutsinger Ran 149.53 337 P PKPbc 02 44 52.2 -0.4
baz=149
MIAR Mount Ida 149.62 320 ePKP2 PKPbc 02 44 52.7 -0.2
MIAR Mount Ida 149.62 320 P PKPbc 02 44 53.0 +0.1
baz=150,SNR=12
MIAR Mount Ida 149.62 320 ePKPbc PKPbc 02 44 52.7 -0.2
R32A Long Quarter, 149.64 331 P PKPbc 02 44 52.0 -0.8
baz=150,SNR=10
P29A Atwood 149.64 335 P PKPbc 02 44 52.5 -0.4
baz=150
U36A Oologah 149.64 325 P PKPbc 02 44 52.2 -0.7
baz=150,SNR=14
V37A Hulbert 149.67 324 P PKPbc 02 44 52.1 -0.8
baz=150,SNR=14
T35A Sooner Cattle 149.69 327 P PKPbc 02 44 52.7 -0.4
baz=150,SNR=22
PHWY Pilot Hill 149.71 343 ePKPbc PKPbc 02 44 52.7 -0.6
K04D Chiloquin, OR 149.75 7 P PKPbc 02 44 52.6 -0.6
baz=150
CBKS Cedar Bluff 149.79 333 ePKP2 PKPbc 02 44 52.5 -0.8
CBKS Cedar Bluff 149.79 333 P PKPbc 02 44 52.3 -1.0
baz=150,SNR=5.3
CBKS Cedar Bluff 149.79 333 ePKPbc PKPbc 02 44 52.5 -0.8
W38A Poteau 149.86 322 P PKPbc 02 44 53.2 -0.3
baz=150,SNR=7.2
Q30A Quinter 149.87 334 P PKPbc 02 44 52.5 -0.9
baz=150,SNR=6.1
S33A Kaszmaul Farm, 149.95 329 P PKPbc 02 44 52.9 -0.7
baz=150
T34A McClaskey Farm 149.97 328 P PKPbc 02 44 53.2 -0.5
baz=150,SNR=5.7
P28A Saint Francis 150.00 336 P PKPbc 02 44 53.1 -0.7
baz=150
TUL1 Tulsa 150.02 324 P PKPbc 02 44 53.1 -0.7
baz=150,SNR=13
TUL1 Tulsa 150.02 324 ePKPbc PKPbc 02 44 53.1 -0.7
R31A Burdett 150.13 332 P PKPbc 02 44 53.7 -0.4
baz=150,SNR=8.1
V36A Jenks 150.20 324 P PKPbc 02 44 53.7 -0.6
baz=150,SNR=10
WVOR Wild Horse Val 150.21 3 ePKIKP PKPbc 02 44 54.2 -0.1
WVOR Wild Horse Val 150.21 3 ePKPbc PKPbc 02 44 54.2 -0.1
U35A Pawnee 150.21 326 P PKPbc 02 44 54.0 -0.3
baz=150,SNR=7.5
N23A Red Feather La 150.22 343 P PKPbc 02 44 54.0 -0.5
baz=150,SNR=11
Q29A Oakley 150.26 335 P PKPbc 02 44 53.9 -0.6
baz=150,SNR=9.5
X38A Whitesboro 150.32 321 P PKPbc 02 44 54.5 -0.1
baz=150,SNR=8.5
S32A Newby Ranch, P 150.32 331 P PKPbc 02 44 54.1 -0.4
baz=150,SNR=8.6
Y39A Lockesburg 150.34 320 P PKPbc 02 44 54.6 -0.1
baz=150
W37A Quinton 150.35 323 P PKPbc 02 44 54.1 -0.6
baz=150,SNR=9.0
Q28A Sharon Springs 150.47 336 P PKPbc 02 44 54.7 -0.3
baz=150,SNR=7.9
R30A Dighton 150.47 333 P PKPbc 02 44 54.3 -0.6
baz=150,SNR=8.0
T33A Patterson Ranc 150.47 329 P PKPbc 02 44 54.6 -0.3
baz=150
M04C Macdoel 150.57 8 P PKPbc 02 44 54.8 -0.3
baz=150
U34A Anderson Ranch 150.59 327 P PKPbc 02 44 55.1 -0.2
baz=150
MOD Modoc 150.62 5 ePKPdf PKPdf 02 44 49.6 -0.3
MOD ePKPbc PKPbc 02 44 55.2 -0.1
MOD ePKPab PKPab 02 45 03.2 +1.2
S31A Mullinville 150.65 331 P PKPbc 02 44 54.7 -0.6
baz=150,SNR=7.8
HVU Hansel Valley 150.69 354 ePKIKP PKPbc 02 44 55.0 -0.5
HVU Hansel Valley 150.69 354 ePKPbc PKPbc 02 44 55.0 -0.5
X37A Clayton 150.70 322 P PKPbc 02 44 55.2 -0.3
baz=151,SNR=5.8
HWUT Hardware Ranch 150.72 352 ePKPdf PKPdf 02 44 49.8 -0.3
HWUT ePKPbc PKPbc 02 44 55.3 -0.3
HWUT ePKPab PKPab 02 45 03.4 +1.0
V35A Meyer Ranch, C 150.72 325 P PKPbc 02 44 55.3 -0.3
baz=151
R29A Marienthal 150.72 334 P PKPbc 02 44 55.5 -0.1
baz=151
T32A Huddler Ranch, 150.73 330 P PKPbc 02 44 55.2 -0.3
baz=151,SNR=9.4
Y38A Idabel 150.75 320 P PKPbc 02 44 55.2 -0.4
baz=151
M02C Callahan 150.80 9 P PKPbc 02 44 55.6 -0.1
baz=151
W36A Wetumka 150.82 324 P PKPbc 02 44 55.4 -0.4
baz=151,SNR=7.1
KSCO Kaye Shedlock' 150.82 337 P PKPbc 02 44 55.5 -0.3
baz=151,SNR=12
KSCO Kaye Shedlock' 150.82 337 ePKPbc PKPbc 02 44 55.5 -0.3
U33A Lingo Farm, Me 150.90 328 P PKPbc 02 44 55.8 -0.2
baz=151,SNR=6.9
V34A Guthrie 151.04 326 P PKPbc 02 44 56.4 +0.1
baz=151
R28A Tribune 151.07 335 P PKPbc 02 44 55.9 -0.5
baz=151,SNR=11
S30A Montezuma 151.08 333 P PKPbc 02 44 56.0 -0.4
baz=151,SNR=11
ISCO Idaho Springs 151.14 342 ePKIKP PKPbc 02 44 55.8 -1.0
ISCO Idaho Springs 151.14 342 P PKPbc 02 44 56.2 -0.6
baz=151
ISCO Idaho Springs 151.14 342 ePKPbc PKPbc 02 44 55.8 -1.0
T31A Randall Ranch, 151.16 331 P PKPbc 02 44 56.1 -0.4
baz=151,SNR=6.8
TCUT Toone Canyon 151.17 352 ePKPbc PKPbc 02 44 56.5 -0.3
W35A Tecumseh 151.18 325 P PKPbc 02 44 56.2 -0.4
baz=151,SNR=6.0
N02D Trinity Center 151.24 9 P PKPbc 02 44 56.5 -0.2
baz=151
Y37A Hugo 151.26 321 P PKPbc 02 44 56.6 -0.2
baz=151,SNR=8.2
X36A Centrahoma 151.29 323 P PKPbc 02 44 56.5 -0.4
baz=151,SNR=9.4
139A Bunkhouse Ranc 151.34 318 P PKPbc 02 44 57.1 +0.1
baz=151
Z38A Mt. Pleasant 151.35 320 P PKPbc 02 44 57.3 +0.2
baz=151
S29A Ulysses 151.39 333 P PKPbc 02 44 56.9 -0.3
baz=151,SNR=6.7
U32A Winter Ranch, 151.39 329 P PKPbc 02 44 57.0 -0.1
baz=151
V33A Lossen Ranch, 151.46 327 P PKPbc 02 44 57.1 -0.2
baz=151
R27A Eads 151.52 336 P PKPbc 02 44 56.9 -0.5
baz=151,SNR=10
O20A White River Ci 151.53 346 P PKPbc 02 44 56.9 -0.7
baz=151
O20A White River Ci 151.53 346 ePKPbc PKPbc 02 44 56.9 -0.7
T30A Plains 151.59 332 P PKPbc 02 44 57.3 -0.3
baz=152
W34A Bridge Creek, 151.62 326 P PKPbc 02 44 57.5 -0.2
baz=152
W34A Bridge Creek, 151.62 326 ePKPbc PKPbc 02 44 57.7 0.0
W34A ePKPab PKPab 02 45 06.2 0.0
Y36A Durant 151.72 322 P PKPbc 02 44 57.5 -0.4
baz=152
S28A Manter 151.75 334 P PKPbc 02 44 57.8 -0.2
baz=152,SNR=10
Q24A Divide 151.75 341 P PKPbc 02 44 57.5 -0.8
baz=152
X35A Drake 151.78 324 P PKPbc 02 44 57.1 -0.9
baz=152,SNR=6.0
138A Matatall Enter 151.80 319 P PKPbc 02 44 58.2 +0.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=152 | | | | | | | |
| 239A | Gary | 151.80 | 317 | P | | PKPbc | 02 44 58.4 | +0.3 |
| | baz=152 | | | | | | | |
| T29A | Hugoton | 151.85 | 333 | P | | PKPbc | 02 44 58.2 | 0.0 |
| | baz=152 | | | | | | | |
| V32A | Arapaho | 151.93 | 328 | P | | PKPbc | 02 44 58.2 | -0.2 |
| | baz=152 | | | | | | | |
| O03D | Paynes Creek | 152.03 | 8 | P | | PKPbc | 02 44 58.2 | -0.3 |
| | baz=152 | | | | | | | |
| W33A | Caddo, Fort Co | 152.06 | 327 | P | | PKPbc | 02 44 58.4 | -0.3 |
| | baz=152 | | | | | | | |
| U30A | WK&E Inc. Balk | 152.07 | 331 | P | | PKPbc | 02 44 58.4 | -0.3 |
| | baz=152,SNR=6.0 | | | | | | | |
| SMCO | Snowmass | 152.11 | 344 | *e*PKPdf | | PKPdf | 02 44 53.2 | +0.6 |
| SMCO | | | | *e*PKPab | | PKPab | 02 45 07.8 | -0.8 |
| X34A | Smith Ranch, M | 152.12 | 325 | P | | PKPbc | 02 44 58.5 | -0.3 |
| | baz=152,SNR=7.4 | | | | | | | |
| Y35A | Marietta | 152.16 | 323 | P | | PKPbc | 02 44 58.8 | -0.1 |
| | baz=152 | | | | | | | |
| T28A | Walsh | 152.24 | 334 | P | | PKPbc | 02 44 58.9 | -0.3 |
| | baz=152 | | | | | | | |
| 238A | Jacksonville | 152.24 | 318 | P | | PKPbc | 02 44 59.1 | 0.0 |
| | baz=152 | | | | | | | |
| Z36A | Blue Ridge | 152.24 | 321 | P | | PKPbc | 02 44 59.1 | 0.0 |
| | baz=152 | | | | | | | |
| BMN | Battle Mountai | 152.25 | 1 | *e*PKIKP | | PKPdf | 02 44 53.0 | +0.6 |
| BMN | | | | *e* | | | 02 44 59.3 | |
| BMN | | | | *e* | | | 02 45 07.9 | |
| BMN | Battle Mountai | 152.25 | 1 | *e*PKPdf | | PKPdf | 02 44 53.0 | +0.6 |
| BMN | | | | *e*PKPbc | | PKiKP | 02 44 59.2 | -0.2 |
| BMN | | | | *e*PKPab | | PKPab | 02 45 07.8 | -0.9 |
| DUG | Dugway | 152.26 | 353 | *e*PKIKP | | PKPbc | 02 44 58.7 | -0.4 |
| DUG | | | | *e* | | | 02 45 07.7 | |
| DUG | Dugway | 152.26 | 353 | P | | PKPbc | 02 44 58.8 | -0.3 |
| | baz=152 | | | | | | | |
| DUG | Dugway | 152.26 | 353 | *e*PKPbc | | PKPbc | 02 44 58.7 | -0.4 |
| DUG | | | | *e*PKPab | | PKPab | 02 45 07.7 | -1.2 |
| 137A | Heron Place, G | 152.27 | 319 | P | | PKPbc | 02 44 59.6 | +0.4 |
| | baz=152 | | | | | | | |
| 339A | Huntington | 152.28 | 316 | P | | PKPbc | 02 44 58.9 | -0.3 |
| | baz=152 | | | | | | | |
| V31A | Spring Creek L | 152.29 | 329 | P | | PKPbc | 02 44 59.4 | +0.1 |
| | baz=152 | | | | | | | |
| S26A | Kim | 152.36 | 337 | P | | PKPbc | 02 44 58.8 | -0.6 |
| | baz=152,SNR=7.0 | | | | | | | |
| W32A | Sentinel | 152.49 | 328 | P | | PKPbc | 02 44 59.0 | -0.6 |
| | baz=152,SNR=7.0 | | | | | | | |
| X33A | Lawton | 152.53 | 326 | P | | PKPbc | 02 44 58.9 | -0.9 |
| | baz=152,SNR=5.7 | | | | | | | |
| WMOK | Wichita Mounta | 152.54 | 326 | *e*PKIKP | | PKPdf | 02 44 53.1 | +0.3 |
| WMOK | | | | *e* | | | 02 44 59.2 | |
| WMOK | Wichita Mounta | 152.54 | 326 | *e*PKPdf | | PKPdf | 02 44 53.1 | +0.3 |
| WMOK | | | | *e*PKPbc | | PKPbc | 02 44 59.2 | -0.6 |
| T27A | Campo | 152.54 | 335 | P | | PKPbc | 02 44 59.2 | -0.7 |
| | baz=152 | | | | | | | |
| 237A | Washetta, Mont | 152.69 | 318 | P | | PKPbc | 02 45 00.1 | 0.0 |
| | baz=153 | | | | | | | |
| Z35A | Perchaven, San | 152.70 | 322 | P | | PKPbc | 02 44 59.9 | -0.3 |
| | baz=153 | | | | | | | |
| T26A | Comanche Natio | 152.79 | 336 | P | | PKPbc | 02 45 00.1 | -0.4 |
| | baz=153 | | | | | | | |
| W31A | Holland Ranch, | 152.80 | 329 | P | | PKPbc | 02 44 59.7 | -0.6 |
| | baz=153 | | | | | | | |
| 136A | Ennis | 152.84 | 320 | P | | PKPbc | 02 44 59.5 | -1.0 |
| | baz=153 | | | | | | | |
| U28A | Mallet | 152.91 | 334 | P | | PKPbc | 02 45 00.1 | -0.5 |
| | baz=153 | | | | | | | |
| TMUT | Trail Mountain | 152.93 | 350 | *e*PKPbc | | PKPbc | 02 45 00.2 | -0.7 |
| SDCO | Great Sand Dun | 152.97 | 340 | P | | PKPbc | 02 45 00.3 | -0.7 |
| | baz=153 | | | | | | | |
| SDCO | Great Sand Dun | 152.97 | 340 | *e*PKPbc | | PKPbc | 02 45 00.4 | -0.7 |
| SRU | San Rafael | 152.99 | 349 | *e*PKIKP | | PKPbc | 02 45 00.3 | -0.6 |
| SRU | San Rafael | 152.99 | 349 | *e*PKPbc | | PKPbc | 02 45 00.2 | -0.6 |
| Y33A | Hilltop Ranch, | 153.00 | 325 | P | | PKPbc | 02 45 00.7 | -0.1 |
| | baz=153 | | | | | | | |
| X32A | Elmer | 153.05 | 327 | P | | PKPbc | 02 45 00.6 | -0.3 |
| | baz=153 | | | | | | | |
| Z34A | Collier Ranch, | 153.06 | 323 | P | | PKPbc | 02 45 00.8 | -0.2 |
| | baz=153 | | | | | | | |
| U27A | Thompson Grove | 153.13 | 334 | P | | PKPbc | 02 45 00.7 | -0.5 |
| | baz=153 | | | | | | | |
| T25A | Trinidad | 153.13 | 338 | P | | PKPbc | 02 45 00.2 | -1.1 |
| | baz=153,SNR=5.3 | | | | | | | |
| 236A | Katherine and | 153.16 | 319 | P | | PKPbc | 02 45 00.8 | -0.4 |
| | baz=153 | | | | | | | |
| X31A | McDonald Ranch | 153.25 | 328 | P | | PKPbc | 02 45 01.0 | -0.3 |
| | baz=153 | | | | | | | |
| 135A | Vickery Place, | 153.33 | 321 | P | | PKPbc | 02 45 01.2 | -0.4 |
| | baz=153 | | | | | | | |
| PV04 | Paradox Valley | 153.34 | 346 | *e*PKPbc | | PKPbc | 02 45 01.1 | -0.6 |
| V28A | Channing | 153.44 | 333 | P | | PKPbc | 02 45 01.4 | -0.4 |
| | baz=153 | | | | | | | |
| Z33A | Whitaker Ranch | 153.61 | 324 | P | | PKPbc | 02 45 02.2 | 0.0 |
| | baz=154 | | | | | | | |
| 437A | Phantom Ranch, | 153.66 | 317 | P | | PKPbc | 02 45 02.3 | 0.0 |
| | baz=154 | | | | | | | |
| V27A | Dan Oppiter Fa | 153.70 | 334 | P | | PKPbc | 02 45 02.0 | -0.4 |
| | baz=154 | | | | | | | |
| 134A | White-Moore Ra | 153.72 | 322 | P | | PKPbc | 02 45 02.1 | -0.3 |
| | baz=154 | | | | | | | |
| WHTX | Lake Whitney | 153.75 | 321 | P | | PKPbc | 02 45 01.9 | -0.6 |
| | baz=154 | | | | | | | |
| 336A | Riesel | 153.76 | 319 | P | | PKPbc | 02 45 02.0 | -0.5 |
| | baz=154 | | | | | | | |
| AMTX | Amarillo | 153.90 | 331 | P | | PKPbc | 02 45 02.4 | -0.4 |
| | baz=154 | | | | | | | |
| Y31A | Rekieta Farm, | 153.92 | 327 | P | | PKPbc | 02 45 02.1 | -0.7 |
| | baz=154 | | | | | | | |
| 234A | Clairette | 154.16 | 321 | P | | PKPbc | 02 45 03.0 | -0.4 |
| | baz=154 | | | | | | | |
| 133A | Hamilton Ranch | 154.19 | 323 | P | | PKPbc | 02 45 03.1 | -0.3 |
| | baz=154 | | | | | | | |
| 335A | Moody | 154.20 | 319 | P | | PKPbc | 02 45 03.7 | +0.2 |
| | baz=154 | | | | | | | |
| NVAR | Mina Array Bea | 154.21 | 3 | PKP | | PKPdf | 02 44 56.5 | +1.1 |
| | comp=E,0.4nm,0.6s,baz=24,slow=1.3,SNR=5.0 | | | | | | | |
| NVAR | | | | PKPbc | | PKiKP | 02 45 04.2 | +0.6 |
| | comp=E,6.1nm,0.8s,baz=332,slow=0.6,SNR=23 | | | | | | | |
| X29A | Tulia | 154.26 | 330 | P | | PKPbc | 02 45 03.7 | +0.1 |
| | baz=154 | | | | | | | |
| R11A | Troy Canyon, C | 154.31 | 358 | P | | PKPbc | 02 45 03.5 | -0.2 |
| | baz=154 | | | | | | | |
| Z31A | Sharp Cattle R | 154.35 | 326 | P | | PKPbc | 02 45 03.2 | -0.6 |
| | baz=154 | | | | | | | |
| 334A | Lometa | 154.68 | 320 | P | | PKPbc | 02 45 04.2 | -0.3 |
| | baz=155 | | | | | | | |
| 434A | Burnet | 155.05 | 320 | P | | PKPdf | 02 45 05.2 | +8.7 |
| | baz=155 | | | | | | | |
| 333A | Richland Sprin | 155.14 | 321 | P | | PKPdf | 02 45 04.8 | +8.2 |
| | baz=155 | | | | | | | |
| 934A | Benavides | 157.28 | 314 | P | | PKPdf | 02 44 59.6 | +0.1 |
| | baz=157 | | | | | | | |
| 530A | J-C Ranch, Com | 157.40 | 323 | P | | PKPdf | 02 44 59.3 | -0.3 |
| | baz=157 | | | | | | | |
| 035Z | Hargill | 157.63 | 311 | P | | PKPdf | 02 45 00.1 | +0.1 |
| | baz=158 | | | | | | | |
| EDW2 | Edwards Air Fo | 157.76 | 3 | P | | PKPdf | 02 45 00.3 | +0.3 |
| | baz=158 | | | | | | | |
| BSC | Santa Cruz Isl | 158.52 | 6 | P | | PKPdf | 02 45 00.1 | -0.8 |
| | baz=158 | | | | | | | |
| TXAR | Lajitas Array | 159.33 | 326 | PKP | | PKPdf | 02 45 02.2 | +0.1 |
| | comp=E,0.5nm,0.8s,baz=236,slow=2.3,SNR=4.4 | | | | | | | |
| TXAR | | | | PKPab | | PKPab | 02 45 39.5 | +0.1 |
| | comp=E,3.1nm,1.1s,baz=46,slow=3.6,SNR=5.4 | | | | | | | |

*ATH **29** 02:39:31.2, 36°.37N×29°.48E, h46$^{km}_{\pm 6}$, MD3.3/5*
*CSEM **29** 02:39:33.5±0.2, 36°.26N×29°.34E, h20$^{km}$, MD3.4, Error ellipse: s-maj=4.9km s-min=3.6km az=19.0*
*ISCJB **29** 02:39:33.6±0.4, 36°.25N±0°.03×29°.35E±0°.03, h29$^{km}_{\pm 3}$, Error ellipse: s-maj=4.9km s-min=3.5km az=18.5*
*DDA **29** 02:39:33.3, 36°.43N×29°.27E, h7$^{km}$, Md3.3*
*ISK **29** 02:39:35.4, 36°.57N×29°.36E, h11$^{km}$, MD3.4*
*NIC **29** 02:39:35.2, 36°.52N×29°.54E, h25$^{km}$, ML3.3*

**ISC 29 02:39:33.9±0.9, 36°.29N±0°.03×29°.32E±0°.02, h24$^{km}_{\pm 7}$, n72, σ1$^{s}$15/101, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| AKAS | Kas | 0.24 | 103 | *i* P | Pb | 02 39 39.8 | -0.2 |
| AKAS | | | | *i* S | Sb | 02 39 45.0 | +0.8 |
| AKAS | Kas | 0.24 | 103 | P | Pb | 02 39 39.8 | -0.2 |
| AKAS | | | | S | Sb | 02 39 45.0 | +0.8 |
| KSL | Kastellorizon | 0.25 | 123 | *e*P | Pb | 02 39 40.1 | 0.0 |
| KSL | | | | *e*S | Sb | 02 39 46.0 | +1.7 |
| FETY | Fethiye | 0.40 | 331 | PG | Pb | 02 39 40.7 | -1.6 |
| FETY | | | | *e*SG | Sb | 02 39 44.5 | -3.6 |
| FETY | Fethiye | 0.40 | 331 | *i* Pg | Pb | 02 39 40.7 | -1.6 |
| ELL | Elmali | 0.66 | 46 | *e*PG | Pb | 02 39 45.3 | -1.6 |
| ELL | Elmali | 0.66 | 46 | *e*Pg | Pb | 02 39 45.3 | -1.6 |
| DALY | Dalyan (Mu˘la | 0.75 | 315 | *e*PG | Pb | 02 39 46.8 | -1.5 |
| DALY | | | | *e*SG | Sb | 02 39 56.9 | -1.3 |
| DALY | Dalyan (Mu˘la | 0.75 | 315 | *e*Pg | Pb | 02 39 46.8 | -1.5 |
| DALY | | | | *e*Sg | Sb | 02 39 56.9 | -1.3 |
| TURN | Turunc | 0.82 | 316 | *i* P | Pn | 02 39 51.4 | +1.5 |
| TURN | | | | *i* S | Sn | 02 40 05.2 | +3.8 |
| TURN | Turunc | 0.82 | 316 | P | Pn | 02 39 51.4 | +1.5 |
| TURN | | | | S | Sn | 02 40 05.2 | +3.8 |
| ARG | Arkhangelos | 0.97 | 266 | *e*P | Pn | 02 39 51.0 | -1.0 |
| ARG | | | | *e*S | Sn | 02 40 06.3 | +1.4 |
| ARG | Arkhangelos | 0.97 | 266 | *e*P | Pn | 02 39 51.0 | -1.0 |
| ARG | | | | *e*S | Sn | 02 40 06.3 | +1.4 |
| GOLH | Golhisar | 0.97 | 12 | *i* P | Pn | 02 39 50.5 | -1.6 |
| GOLH | | | | *i* S | Sn | 02 40 04.5 | -0.7 |
| GOLH | Golhisar | 0.97 | 12 | P | Pn | 02 39 50.5 | -1.6 |
| GOLH | | | | S | Sn | 02 40 04.5 | -0.7 |
| KORT | Korkueli | 1.09 | 49 | *i* P | Pn | 02 39 53.5 | -0.4 |
| KORT | | | | *i* S | Sb | 02 40 10.3 | +2.2 |
| KORT | Korkueli | 1.09 | 49 | P | Pn | 02 39 53.5 | -0.4 |
| KORT | | | | S | Sb | 02 40 10.3 | +2.2 |
| YER | Yerkesik | 1.19 | 316 | *e*PG | Pb | 02 39 55.6 | -0.1 |
| YER | | | | *e*SG | Sn | 02 40 10.2 | -0.3 |
| YER | Yerkesik | 1.19 | 316 | *e*Pg | Pb | 02 39 55.6 | -0.1 |
| YER | | | | *e*Sg | Sn | 02 40 10.2 | -0.3 |
| ANTB | Antalya | 1.24 | 60 | *e*PN | Pb | 02 39 56.8 | +0.3 |
| ANTB | Antalya | 1.24 | 60 | *e*Pn | Pb | 02 39 56.8 | +0.3 |
| DNZL | Cakiroluk | 1.42 | 351 | *i* P | Pn | 02 39 57.8 | -0.6 |
| DNZL | | | | *i* S | Sb | 02 40 16.8 | -0.6 |
| DNZL | Cakiroluk | 1.42 | 351 | P | Pn | 02 39 57.8 | -0.6 |
| DNZL | | | | S | Sb | 02 40 16.8 | -0.6 |
| DENT | Denizli | 1.48 | 351 | *e*PN | Pn | 02 39 58.8 | -0.3 |
| DENT | Denizli | 1.48 | 351 | *e*Pn | Pn | 02 39 58.8 | -0.3 |
| BCK | Bucak | 1.55 | 41 | *e*PN | Pn | 02 40 00.3 | +0.2 |
| BCK | Bucak | 1.55 | 41 | *e*Pn | Pn | 02 40 00.3 | +0.2 |
| BDRM | Kayabasi | 1.69 | 298 | *i* P | Pn | 02 40 01.3 | -0.7 |
| BDRM | | | | *i* S | Sb | 02 40 25.8 | +0.5 |
| BDRM | Kayabasi | 1.69 | 298 | P | Pn | 02 40 01.3 | -0.7 |
| BDRM | | | | S | Sb | 02 40 25.8 | +0.5 |
| AYDN | Tasoluk | 1.79 | 320 | *i* P | Pb | 02 40 05.8 | -0.2 |
| AYDN | | | | *i* S | Sb | 02 40 28.4 | +0.3 |
| AYDN | Tasoluk | 1.79 | 320 | P | Pb | 02 40 05.8 | -0.2 |
| AYDN | | | | S | Sb | 02 40 28.4 | +0.3 |
| SUTC | Sutluce-Ispart | 1.80 | 48 | *e*PN | Pn | 02 40 04.3 | +0.8 |
| SUTC | Sutluce-Ispart | 1.80 | 48 | *e*Pn | Pn | 02 40 04.3 | +0.8 |
| ISP | Isparta | 1.81 | 32 | *e*PN | Pn | 02 40 04.1 | +0.4 |
| ISP | Isparta | 1.81 | 32 | *e*Pn | Pn | 02 40 04.1 | +0.4 |
| KARP | Karpathos | 1.90 | 248 | *e*P | Pn | 02 40 04.7 | -0.2 |
| KARP | | | | *e*S | Sn | 02 40 29.4 | +1.3 |
| KARP | Karpathos | 1.90 | 248 | *e*P | Pn | 02 40 04.7 | -0.2 |
| KARP | | | | *e*S | Sn | 02 40 29.4 | +1.3 |
| AYDB | Zeytinkoy-Aydi | 2.01 | 326 | *e*PN | Pn | 02 40 07.5 | +1.1 |
| AYDB | Zeytinkoy-Aydi | 2.01 | 326 | *e*Pn | Pn | 02 40 07.5 | +1.1 |
| KHL | Karahalli | 2.04 | 5 | *e*PN | Pn | 02 40 06.6 | -0.2 |
| KHL | Karahalli | 2.04 | 5 | *e*Pn | Pn | 02 40 06.6 | -0.2 |
| BAGO | Egridir - ISPA | 2.07 | 34 | P | Pn | 02 40 08.1 | +0.9 |
| BAGO | | | | S | Sn | 02 40 33.5 | +1.2 |
| KULA | Kula-Manisa | 2.28 | 347 | *e*PN | Pn | 02 40 10.4 | +0.2 |
| KULA | Kula-Manisa | 2.28 | 347 | *e*Pn | Pn | 02 40 10.4 | +0.2 |
| SHUT | Suhut-Afyon | 2.46 | 23 | *e*PN | Pn | 02 40 12.8 | +0.1 |
| SHUT | Suhut-Afyon | 2.46 | 23 | *e*Pn | Pn | 02 40 12.8 | +0.1 |
| IZM | Izmir | 2.67 | 323 | *e*PN | Pn | 02 40 16.2 | +0.8 |
| IZM | Izmir | 2.67 | 323 | *e*Pn | Pn | 02 40 16.2 | +0.8 |
| AKMC | Akamas | 2.76 | 116 | P | Pn | 02 40 16.0 | -0.6 |
| | baz=304 | | | | | | |
| AKMC | Akamas | 2.76 | 116 | P | Pn | 02 40 16.0 | -0.6 |
| PPCY | Paphos | 2.84 | 119 | P | Pn | 02 40 17.1 | -0.6 |
| | baz=306 | | | | | | |
| PPCY | Paphos | 2.84 | 119 | P | Pn | 02 40 17.1 | -0.6 |
| AKS | Akhisar | 2.85 | 336 | *e*PN | Pn | 02 40 18.6 | +0.7 |
| AKS | Akhisar | 2.85 | 336 | *e*Pn | Pn | 02 40 18.6 | +0.7 |
| ALFC | Alevga | 2.90 | 112 | P | Pn | 02 40 17.7 | -0.9 |
| | baz=299 | | | | | | |
| ALFC | | | | S | Sn | 02 40 50.7 | -2.0 |
| ALFC | Alevga | 2.90 | 112 | P | Pn | 02 40 17.7 | -0.9 |
| ALFC | | | | S | Sn | 02 40 50.7 | -2.0 |
| KONT | Konya--Tatoy | 2.94 | 55 | *e*PN | Pn | 02 40 20.7 | +1.5 |
| KONT | Konya--Tatoy | 2.94 | 55 | *e*Pn | Pn | 02 40 20.7 | +1.5 |
| TVSB | Tavsanli | 3.16 | 2 | *e*PN | Pn | 02 40 22.5 | +0.3 |
| TVSB | Tavsanli | 3.16 | 2 | *e*Pn | Pn | 02 40 22.5 | +0.3 |
| SZAC | Souni-Zanaja | 3.29 | 117 | P | Pn | 02 40 23.2 | -0.7 |
| | baz=303 | | | | | | |
| SZAC | | | | S | Sn | 02 41 01.1 | -1.1 |
| SZAC | Souni-Zanaja | 3.29 | 117 | P | Pn | 02 40 23.2 | -0.7 |
| SZAC | | | | S | Sn | 02 41 01.1 | -1.1 |
| LAST | Lasithi | 3.32 | 251 | *e*P | Pn | 02 40 24.4 | 0.0 |
| LAST | Lasithi | 3.32 | 251 | *e*P | Pn | 02 40 24.4 | 0.0 |
| DST | Dursunbey | 3.36 | 351 | *e*PN | Pn | 02 40 25.5 | +0.6 |
| DST | Dursunbey | 3.36 | 351 | *e*Pn | Pn | 02 40 25.5 | +0.6 |
| BALB | Balikesir | 3.54 | 342 | *e*PN | Pn | 02 40 27.7 | +0.4 |
| BALB | Balikesir | 3.54 | 342 | *e*Pn | Pn | 02 40 27.7 | +0.4 |
| SVRH | Sivrihisar-ESK | 3.60 | 28 | *e*PN | Pn | 02 40 29.1 | +0.8 |
| SVRH | Sivrihisar-ESK | 3.60 | 28 | *e*Pn | Pn | 02 40 29.1 | +0.8 |
| IDI | Anoyia | 3.74 | 256 | *e*P | Pn | 02 40 30.2 | +0.1 |
| IDI | Anoyia | 3.74 | 256 | *e*P | Pn | 02 40 30.2 | +0.1 |

*IDC **29** 02:52:37.8±0.9, 8°.71N×126°.30E, h0$^{km}$, mb3.9/8, mb1 4.1/9, mb1mx3.9/36, mbtmp4.1/9, ML5.0/1, MS3.5/5, Ms1 3.5/5, ms1mx3.0/41, Error ellipse: s-maj=41.7km s-min=16.7km az=86.0*
*MAN **29** 02:52:42, 8°.67N×125°.71E, h17$^{km}$, mb5.0, ML4.0, MS4.0*
*NEIC **29** 02:52:42.2±0.9, 8°.67N×126°.59E, h35$^{km}$, mb4.4/1, Error ellipse: s-maj=34.3km s-min=13.8km az=91.0*
*NEIC Felt [II PIVS] at Butuan.*

**ISC 29 02:52:41.1±0.7, 8°.68N±0°.04×125°.75E±0°.06, h10$^{km}$, n31, σ1$^{s}$53/24, mb4.0/9, MS3.6/4, 4C-2D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BUTP | Butuan | 0.31 | 337 | *e*P | Pb | 02 52 50.3 | +1.5 |
| BUTP | | | | *e*S | Sb | 02 52 55.3 | +1.3 |
| BIPH | Bislig | 0.78 | 129 | *i* P | Pn | 02 52 59.9 | +1.6 |
| BIPH | | | | *i* S | Sn | 02 53 12.1 | +2.0 |
| BUKP | Musuan | 1.04 | 220 | *e*P | Pg | 02 53 01.0 | -0.1 |
| BUKP | | | | *e*S | Sg | 02 53 14.3 | -0.5 |
| SCPH | Surigao | 1.12 | 347 | *e*P | Pb | 02 53 01.3 | -1.4 |
| DAV | Davao City (W) | 1.61 | 186 | Pn | Pb | 02 53 11.3 | +0.4 |
| | 122nm,0.3s,baz=80,slow=3.2,SNR=8.4 | | | | | | |
| DAV | Davao City (W) | 1.61 | 186 | *e*Pn | Pg | 02 53 13.1 | +1.1 |
| MSLP | Maasin | 1.69 | 329 | *e*P | Pn | 02 53 10.0 | -0.7 |
| MSLP | | | | *e*S | Sn | 02 53 24.9 | -7.5 |
| MATI | Mati | 1.80 | 164 | *e*P | Pn | 02 53 13.0 | +0.8 |
| CTBH | Cotabato--PC H | 2.08 | 226 | *e*P | Pn | 02 53 17.0 | +1.0 |
| TBP | Tagbilaran | 2.11 | 299 | *e*P | Pn | 02 53 18.6 | +2.0 |
| TBP | | | | *e*S | Sn | 02 53 24.9 | -18 |
| DCPH | Dipolog City | 2.37 | 268 | *e*P | Pn | 02 53 21.2 | +1.1 |
| PLP | Palo | 2.58 | 343 | *e*P | Pn | 02 53 24.6 | +1.6 |
| RCP | Roxas | 4.11 | 314 | *e*P | Pn | 02 53 46.6 | +2.5 |
| BATI | Baumata | 18.88 | 186 | P | P | 02 56 59.4 | -2.4 |
| | 4.7nm,0.3s,baz=98,slow=7.7,SNR=3.3 | | | | | | |
| BATI | | | | LR | LR | 03 05 09.3 | |
| | comp=Z,70nm,20.6s,baz=296,slow=40 | | | | | | |
| CMAR | Chiang Mai Arr | 27.77 | 293 | LR | LR | 03 09 38.0 | |
| | comp=Z,51nm,18.5s,baz=114,slow=36 | | | | | | |
| WRA | Warramunga Arr | 29.68 | 164 | P | P | 02 58 42.9 | -4.4 |
| | 0.2nm,0.6s,baz=344,slow=9.4,SNR=3.6 | | | | | | |
| ASAR | Alice Springs | 33.12 | 166 | P | P | 02 59 16.4 | -1.3 |
| | 0.4nm,0.6s,baz=345,slow=7.1,SNR=6.1 | | | | | | |
| USRK | Ussuriysk Ar. | 35.80 | 8 | P | P | 02 59 39.0 | -1.6 |
| | 2.8nm,0.7s,baz=190,slow=9.4,SNR=9.6 | | | | | | |
| H11S3 | WAKE ISLAND Hy | 40.89 | 72 | T | T | 03 43 27.7 | |
| | baz=262,slow=74,SNR=15 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 40.90 | 72 | T | T | 03 43 27.7 | |
| | baz=262,slow=74,SNR=11 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 40.90 | 72 | T | T | 03 43 25.5 | |
| | baz=262,slow=74,SNR=7.8 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 41.26 | 70 | T | T | 03 44 00.9 | |
| | baz=265,slow=74,SNR=5.8 | | | | | | |
| H11N2 | WAKE ISLAND Hy | 41.27 | 70 | T | T | 03 44 01.6 | |
| | baz=265,slow=74,SNR=4.6 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 41.28 | 70 | T | T | 03 44 02.8 | |
| | baz=265,slow=74,SNR=5.7 | | | | | | |
| MKAR | Makanchi Array | 52.98 | 324 | P | P | 03 01 58.1 | 0.0 |
| | 1.5nm,0.8s,baz=111,slow=7.9,SNR=2.9 | | | | | | |
| ZALV | Zalesovo Beam | 55.77 | 332 | P | P | 03 02 18.9 | +0.8 |
| | 0.5nm,0.4s,baz=127,slow=9.5,SNR=3.8 | | | | | | |
| KURK | Kurchatov | 57.09 | 326 | *e*P | P | 03 02 29.2 | +1.6 |
| | 3.4nm,0.8s | | | | | | |
| GEYT | Alibeck | 67.09 | 307 | P | P | 03 03 36.0 | +0.8 |
| | 1.2nm,0.3s,baz=172,slow=5.4,SNR=2.0 | | | | | | |
| GEYT | | | | LR | LR | 03 36 08.3 | |
| | comp=Z,30nm,18.7s,baz=110,slow=39 | | | | | | |
| ILAR | Eielson Array | 81.09 | 26 | P | P | 03 04 53.0 | -3.4 |
| | 0.8nm,1.2s,baz=248,slow=6.6,SNR=3.5 | | | | | | |
| ILAR | | | | LR | LR | 03 41 06.6 | |
| | comp=Z,28nm,20.6s,baz=348,slow=36 | | | | | | |
| ASF | Jabal al Asfar | 84.47 | 302 | LR | LR | 03 48 55.7 | |
| | comp=Z,64nm,19.9s,baz=318,slow=40 | | | | | | |
| FINES | FINESS Array B | 87.04 | 332 | P | P | 03 05 24.5 | -2.2 |
| | 6.7nm,1.1s,baz=94,slow=4.8,SNR=3.3 | | | | | | |

**MEX 29 03:00:47.8±1.1, 14°.79N×93°.52W, h16$^{km}_{\pm 999}$, MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PCIG | | 0.96 | 18 | *e*P | Pb | 03 01 02.8 | -3.2 |
| PCIG | | | | *e*S | Sb | 03 01 14.4 | -4.0 |

*IDC **29** 03:06:38.8±3.1, 25°.55S×67°.51W, h0$^{km}$, mb4.5/2, mb1 4.6/3, mb1mx3.9/16, mbtmp4.5/3, ML4.5/1, Error ellipse: s-maj=71.4km s-min=52.2km az=48.0*
*SJA **29** 03:07:01.6±0.7, 23°.81S×67°.15W, h212$^{km}_{\pm 17}$, MD3.7*
*ISCJB **29** 03:07:04.4±0.7, 23°.88S±0°.09×67°.16W±0°.09, h181$^{km}$, mb3.9/1, Error ellipse: s-maj=15.2km s-min=8.2km az=41.3*

**ISC 29 03:07:04.8±1.2, 23°.9S±0°.1×67°.19W±0°.09, h181$^{km}$, n12, σ0$^{s}$56/13, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SLA | San Lorenzo | 1.75 | 119 | *i* P | Pn | 03 07 39.1 | -0.4 |
| HJA | Humahuaca | 1.77 | 68 | *i* P | Pn | 03 07 39.9 | 0.0 |
| AZAP | Zapla | 1.97 | 100 | *i* P | Pn | 03 07 41.5 | -0.4 |
| LVC | Limon Verde | 2.02 | 308 | *i* P | Pn | 03 07 41.8 | -0.7 |
| LVC | | | | *i* S | Sn | 03 08 12.0 | +0.4 |
| YJA | Yavi | 2.30 | 43 | *i* P | Pn | 03 07 45.1 | -0.5 |
| FSA | Cafayete | 2.45 | 154 | *i* P | Pn | 03 07 47.8 | +0.7 |
| ASTB | Santa Barbara | 2.48 | 92 | *i* P | Pn | 03 07 46.5 | -1.0 |
| AHML | Horco Molle | 3.34 | 150 | *i* P | Pn | 03 07 57.2 | -0.5 |
| LPAZ | La Paz | 7.61 | 353 | Pn | Pn | 03 08 53.6 | +0.1 |
| | 2.1nm,0.3s,baz=172,slow=7.8,SNR=73 | | | | | | |
| BDFB | Brasilia | 19.81 | 69 | P | P | 03 11 22.0 | +0.3 |
| | 23nm,0.6s,baz=241,slow=11,SNR=35 | | | | | | |
| TORD | Torodi Ar. Bea | 76.69 | 69 | P | P | 03 18 36.5 | +0.1 |
| | 1.1nm,0.4s,baz=257,slow=5.6,SNR=46 | | | | | | |
| MKAR | Makanchi Array | 146.55 | 39 | PKPbc | PKPab | 03 26 26.4 | +0.2 |
| | 0.9nm,0.6s,baz=305,slow=4.3,SNR=6.3 | | | | | | |

*IDC **29** 03:07:42.7±1.1, 63°.55N×149°.89W, h120$^{km}_{\pm 11}$, mb3.6/11, mb1 3.7/14, mb1mx3.5/33, mbtmp4.0/14, Error ellipse: s-maj=19.7km s-min=10.5km az=116.0*
*NEIC **29** 03:07:44.5, 63°.60N×149°.79W, h128$^{km}$, mb3.6/1, After AEIC.*

**ISC 29 03:07:44.0±0.7, 63°.60N±0°.04×149°.81W±0°.03, h131$^{km}_{\pm 5}$, n100, σ0$^{s}$78/112, mb4.0/12, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TRF | Thorofare Moun | 0.26 | 235 | P | Pn | 03 08 02.7 | +0.3 |
| TRF | | | | S | Sn | 03 08 15.5 | -0.8 |
| MCK | McKinley | 0.41 | 71 | P | Pn | 03 08 03.1 | +0.3 |
| MCK | | | | S | Sn | 03 08 16.6 | -0.3 |
| RND | Reindeer | 0.47 | 114 | P | Pn | 03 08 03.2 | +0.1 |
| RND | | | | S | Sn | 03 08 17.3 | -0.3 |
| KTH | Kantishna Hill | 0.50 | 265 | P | Pn | 03 08 03.5 | +0.3 |
| KTH | | | | S | Sn | 03 08 17.1 | -0.7 |
| BWN | Browne | 0.59 | 15 | P | Pn | 03 08 04.2 | +0.5 |
| BWN | | | | S | Sn | 03 08 18.6 | -0.1 |
| BPAW | Bear Paw Mtn. | 0.72 | 315 | P | Pn | 03 08 04.7 | 0.0 |
| BPAW | | | | S | Sn | 03 08 19.2 | -1.2 |
| CAST | Castle Rocks | 1.03 | 261 | P | Pn | 03 08 07.3 | 0.0 |
| CHUM | Lake Minchumin | 1.15 | 285 | P | Pn | 03 08 08.6 | +0.2 |
| CHUM | | | | S | Sn | 03 08 26.2 | -0.7 |
| WRH | Wood River Hil | 1.16 | 40 | P | Pn | 03 08 08.5 | 0.0 |
| WRH | | | | S | Sn | 03 08 26.1 | -1.0 |
| CUT | Chulitna | 1.22 | 190 | P | Pn | 03 08 09.3 | +0.2 |
| PPLA | Purkeypile | 1.29 | 238 | P | Pn | 03 08 10.4 | +0.4 |
| CCB | Clear Creek Bu | 1.37 | 39 | P | Pn | 03 08 10.6 | 0.0 |
| CCB | | | | S | Sn | 03 08 30.2 | -0.8 |
| MLY | Manley | 1.49 | 345 | P | Pn | 03 08 12.0 | 0.0 |
| MLY | | | | S | Sn | 03 08 32.1 | -1.4 |
| HDA | Harding Lake | 1.50 | 56 | P | Pn | 03 08 12.1 | 0.0 |
| MDM | Murphy Dome | 1.53 | 26 | P | Pn | 03 08 12.7 | +0.2 |
| COLA | College | 1.54 | 33 | P | Pn | 03 08 12.6 | +0.1 |
| PS08 | TAPS Pump Stn8 | 1.62 | 53 | P | Pn | 03 08 13.5 | +0.1 |
| IL1 | Eielson

1.7nm,0.3s,baz=50,slow=6.2,SNR=50
KDAK S Sn 03 10 12.8 -4.7
8.7nm,0.3s,baz=180,slow=19,SNR=14
**KABR Katmai Barrier 6.04 207** P Pn 03 09 11.4 +0.5
**INK Inuvik 8.14 47** P Pn 03 09 37.9 -1.2
0.2nm,0.3s,baz=240,slow=14,SNR=7.3
**YKA Yellowknife Ar 15.88 78** P Pn 03 11 19.1 -0.6
0.9nm,0.3s,baz=284,slow=9.4,SNR=18
**EDM Edmonton 21.42 102** *e*P P 03 12 22.9 +1.7
9.8nm,0.6s
**RES Resolute Bay 21.46 36** P P 03 12 21.1 -0.3
1.0nm,0.5s,baz=238,slow=11,SNR=9.6
**RES Resolute Bay 21.46 36** *e*P P 03 12 21.1 -0.3
1.6nm,0.6s
**TXAR Lajitas Array 45.05 117** P P 03 15 47.4 +1.0
0.4nm,0.6s,baz=327,slow=6.3,SNR=7.6
**ARCES ARCESS Array B 47.10 2** P P 03 16 01.4 -0.5
4.9nm,1.0s,baz=3.4,slow=7.4,SNR=7.4
**KSRS Korea Array 53.88 283** P P 03 16 54.1 +1.0
1.3nm,0.7s,baz=28,slow=6.1,SNR=3.1
**SONM Songino Array 53.90 306** P P 03 16 54.7 +1.4
2.1nm,0.7s,baz=17,slow=6.7,SNR=8.7
**KSAR Wonju Array Be 53.90 283** P P 03 16 54.1 +0.8
**NOA NORSAR Array B 54.85 11** P P 03 16 59.3 -0.6
0.4nm,0.6s,baz=152,slow=12,SNR=2.8
**FINES FINESS Array B 55.23 2** P P 03 17 02.3 -0.2
4.4nm,0.9s,baz=358,slow=4.5,SNR=7.9
**ZALV Zalesovo Beam 55.35 324** P P 03 17 02.6 -0.9
0.9nm,0.4s,baz=1.7,slow=5.0,SNR=3.9
**MKAR Makanchi Array 62.53 322** P P 03 17 52.3 -0.9
0.8nm,0.3s,baz=44,slow=7.3,SNR=8.1
**AKASG Malin Array Be 66.04 1** P P 03 18 15.9 0.0
0.4nm,0.4s,baz=3.3,slow=6.5,SNR=3.7
**CMAR Chiang Mai Arr 82.66 297** P P 03 19 52.6 +0.1
0.9nm,0.4s,baz=4.0,slow=6.7,SNR=5.2

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**KRSC 29 03:16:47.0±1.9, 50°.34N×157°.02E, h48km±19km, ML3.8, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **0.67** | **301** | *e*P | Pn | 03 16 59.7 | -0.5 |
| SKR | | | | *e*S | Sn | 03 17 08.8 | -1.0 |
| **PAU** | **Pauzhetka** | **1.14** | **354** | *e*P | Pn | 03 17 08.4 | +2.0 |
| PAU | | | | *e*S | Sn | 03 17 23.6 | +2.7 |
| **ASAK** | **Asacha** | **2.12** | **15** | *e*P | Pn | 03 17 22.9 | +2.9 |
| **MTVR** | **Mutnovka** | **2.27** | **18** | *e*P | Pn | 03 17 25.5 | +3.4 |
| MTVR | | | | *e*S | Sn | 03 17 52.7 | +3.7 |
| **RUS** | **Russkaya** | **2.29** | **24** | *e*P | Pn | 03 17 24.8 | +2.5 |
| RUS | | | | *e*S | Sn | 03 17 52.7 | +3.4 |
| **UGLR** | **Uglovaya** | **3.08** | **21** | *e*P | Pn | 03 17 37.4 | +4.1 |
| **AVH** | **Avacha** | **3.12** | **19** | *e*P | Pn | 03 17 37.4 | +3.7 |
| **KOK** | **Koryaka** | **3.12** | **18** | *e*P | Pn | 03 17 37.7 | +3.9 |
| **SMAR** | **Somma** | **3.13** | **20** | *e*P | Pn | 03 17 38.0 | +4.0 |
| **SDLR** | **Sedlovina** | **3.16** | **21** | *e*P | Pn | 03 17 38.2 | +3.8 |
| **NLC** | **Nalytchevo** | **3.18** | **26** | *e*P | Pn | 03 17 37.5 | +3.1 |
| NLC | | | | *e*S | Sn | 03 18 13.4 | +2.3 |
| **KRX** | **Arik** | **3.19** | **18** | *e*P | Pn | 03 17 38.5 | +3.8 |
| **SPN** | **Mys Shipunski** | **3.33** | **33** | *e*P | Pn | 03 17 40.1 | +3.6 |
| SPN | | | | *e*S | Sn | 03 18 17.4 | +2.5 |
| **GNL** | **Ganaly** | **3.41** | **9** | *e*P | Pn | 03 17 41.8 | +3.9 |
| **MKZ** | **Mys Kozlova** | **5.11** | **33** | *e*P | Pn | 03 18 03.9 | +3.0 |
| **TUMR** | **Tumrok** | **5.30** | **20** | *e*P | Pn | 03 18 09.6 | +5.9 |
| **KBTR** | **Krutoberegovo** | **6.83** | **28** | *e*P | Pn | 03 18 27.8 | +3.4 |

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**GUC 29 03:26:45.4±0.5, 21°.97S×68°.79W, h119km±8km, ML3.7, 4C, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB06** | **IPOC Station P** | **1.03** | **224** | ↑*i*P | Pn | 03 27 08.3 | +0.5 |
| PB06 | | | | *i* S | Sn | 03 27 25.8 | +1.0 |
| PB06 | | | | AML | AML | 03 27 27.0 | |
| | comp=N,3μm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **1.05** | **283** | ↑*i*P | Pn | 03 27 08.8 | +0.8 |
| PB07 | | | | *i* S | Sn | 03 27 26.2 | +1.1 |
| PB07 | | | | AML | AML | 03 27 27.0 | |
| | comp=N,2μm,0.1s | | | | | | |
| **PB01** | **IPOC Station P** | **1.13** | **325** | ↑*i*P | Pn | 03 27 09.0 | +0.2 |
| PB01 | | | | *i* S | Sn | 03 27 27.2 | +0.8 |
| PB01 | | | | AML | AML | 03 27 28.4 | |
| | comp=E,2μm,0.5s | | | | | | |
| **PB04** | **IPOC Station P** | **1.31** | **254** | ↑*i*P | Pn | 03 27 11.4 | +0.6 |
| PB04 | | | | *i* S | Sn | 03 27 31.3 | +1.1 |
| PB04 | | | | AML | AML | 03 27 34.6 | |
| | comp=N,2μm,0.3s | | | | | | |

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**IDC 29 03:36:05.9±5.8, 6°.15S×148°.03E, h124km±62km, mb3.2/2, mb1 3.4/4, mb1mx3.1/35, mbtmp3.6/4, Error ellipse: s-maj=109.5km s-min=31.8km az=131.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.35** | **195** | P | Pn | 03 36 57.3 | +0.5 |
| PMG | 4.0nm,0.3s,baz=7.0,slow=6.0,SNR=11 | | | S | Sn | 03 37 36.4 | +0.1 |
| | 22nm,0.3s,baz=214,slow=22,SNR=14 | | | | | | |
| **WRA** | **Warramunga Arr** | **19.10** | **223** | P | P | 03 40 19.0 | -0.1 |
| **ASAR** | 0.2nm,0.3s,baz=46,slow=11,SNR=9.0<br>**Alice Springs** | **22.09** | **217** | P | P | 03 40 52.4 | +1.2 |
| **ILAR** | 0.8nm,0.5s,baz=50,slow=8.7,SNR=15<br>**Eielson Array** | **85.22** | **23** | P | P | 03 48 28.3 | +0.1 |
| **TORD** | 0.6nm,1.0s,baz=240,slow=5.7,SNR=3.6<br>**Torodi Ar. Bea** | **146.12** | **284** | PKPbc | PKPdf | 03 55 31.0 | -0.5 |
| | 0.5nm,0.4s,baz=60,slow=3.2,SNR=13 | | | | | | |

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*ATH **29** 03:38:24.7, 37°.26N×20°.15E, h20km±1km, MD3.8/54, ML3.8*
*ISCJB **29** 03:38:25.6±0.5, 37°.32N±0°.02×20°.09E±0°.02, h22km±4km, mb3.9/9, MS3.2/2, Error ellipse: s-maj=3.4km s-min=2.4km az=12.3*
*THE **29** 03:38:27.7, 37°.34N×20°.27E, h11km±1km, ML3.8/32, Error ellipse: s-maj=1.7km s-min=0.9km az=234.0*
*CSEM **29** 03:38:27.1±0.2, 37°.29N×20°.16E, h20km, ML4.0, Ms3.9, Error ellipse: s-maj=3.9km s-min=2.2km az=30.0*
*IDC **29** 03:38:30.5±1.8, 37°.45N×20°.20E, h52km±20km, mb3.7/9, mb1 3.7/19, mb1mx3.5/52, mbtmp3.8/19, ML3.7/10, MS3.1/3, Ms1 3.1/3, ms1mx2.5/41, Error ellipse: s-maj=17.6km s-min=13.5km az=141.0*
*VIE **29** 03:38:34.8±0.5, 37°.98N×19°.86E, h10km, mb3.3/3, Ms3.9/2, Error ellipse: s-maj=4.3km s-min=3.6km az=87.0*
*TIR **29** 03:38:53.0, 39°.40N×21°.70E, h7km*

**ISC 29 03:38:25.3±1.2, 37°.34N±0°.03×20°.14E±0°.03, h11km±8km, n296, σ1$^2$0/395, mb4.1/9, 26C-14D, Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFD** | **Strofades** | **0.71** | **97** | P | Pg | 03 38 37.6 | -1.4 |
| **VLS** | **Valsamata** | **0.91** | **23** | *e*PN | Pb | 03 38 43.2 | 0.0 |
| VLS | | | | *e*SN | Sn | 03 38 57.9 | +0.7 |
| **VLS** | **Valsamata** | **0.91** | **23** | P | Pb | 03 38 42.9 | -0.3 |
| VLS | | | | S | Sn | 03 38 57.8 | +0.6 |
| **VLS** | **Valsamata** | **0.91** | **23** | P | Pb | 03 38 42.9 | -0.3 |
| **VLS** | **Valsamata** | **0.91** | **23** | *e*Pn | Pb | 03 38 43.2 | 0.0 |
| VLS | | | | *e*Sn | Sn | 03 38 57.9 | +0.7 |
| **KFL** | **Anninata** | **0.93** | **34** | *e*PN | Pb | 03 38 43.2 | -0.2 |
| KFL | | | | *e*SN | Sn | 03 38 57.7 | +0.1 |
| **KFL** | **Anninata** | **0.93** | **34** | P | Pb | 03 38 43.2 | -0.2 |
| KFL | | | | S | Sn | 03 38 56.7 | -0.9 |
| **KFL** | **Anninata** | **0.93** | **34** | P | Pb | 03 38 43.4 | 0.0 |
| KFL | | | | S | Sn | 03 38 57.8 | +0.1 |
| **AMT** | **Artemida-Makis** | **1.27** | **81** | *e*PN | Pn | 03 38 49.0 | 0.0 |
| AMT | | | | *e*SN | Sg | 03 39 06.4 | +0.3 |
| **AMT** | **Artemida-Makis** | **1.27** | **81** | P | Pn | 03 38 48.9 | 0.0 |
| AMT | | | | S | Sg | 03 39 06.3 | +0.2 |
| **AMT** | **Artemida-Makis** | **1.27** | **81** | *e*Pn | Pn | 03 38 49.0 | 0.0 |
| AMT | | | | *e*Sn | Sg | 03 39 06.4 | +0.3 |
| **RLS** | **Riolos of Patr** | **1.28** | **55** | *e*PN | Pg | 03 38 49.8 | -0.1 |
| RLS | | | | *e*SN | Sg | 03 39 08.1 | +1.6 |
| **RLS** | **Riolos of Patr** | **1.28** | **55** | P | Pn | 03 38 49.1 | 0.0 |
| RLS | | | | S | Sg | 03 39 07.4 | +0.9 |
| **RLS** | **Riolos of Patr** | **1.28** | **55** | P | Pb | 03 38 49.4 | 0.0 |
| **RLS** | **Riolos of Patr** | **1.28** | **55** | *e*Pn | Pg | 03 38 49.8 | -0.1 |
| RLS | | | | S | Sg | 03 39 07.4 | +0.9 |
| RLS | | | | *e*Sn | Sg | 03 39 08.1 | +1.6 |
| **AXS** | **Araxos** | **1.30** | **48** | P | Pb | 03 38 50.0 | +0.2 |
| **AXS** | **Araxos** | **1.30** | **48** | P | Pg | 03 38 50.3 | -0.1 |
| **PYL** | **PYLOS** | **1.36** | **108** | *e*PN | Pn | 03 38 49.8 | -0.4 |
| PYL | | | | *e*SN | Sb | 03 39 07.4 | -0.7 |
| **PYL** | **PYLOS** | **1.36** | **108** | P | Pn | 03 38 49.8 | -0.4 |
| **PYL** | **PYLOS** | **1.36** | **108** | P | Pn | 03 38 49.8 | -0.4 |
| PYL | | | | S | Sb | 03 39 07.1 | -1.0 |
| PYL | | | | *e*Sn | Sb | 03 39 07.4 | -0.7 |
| **DRO** | **Drossia** | **1.39** | **63** | *e*PN | Pb | 03 38 51.3 | 0.0 |
| **DRO** | **Drossia** | **1.39** | **63** | P | Pb | 03 38 51.3 | 0.0 |
| DRO | | | | S | Sg | 03 39 09.6 | -0.6 |
| **DRO** | **Drossia** | **1.39** | **63** | P | Pb | 03 38 51.3 | 0.0 |
| DRO | | | | S | Sg | 03 39 09.5 | -0.6 |
| **ITM** | **Ithomi** | **1.44** | **96** | *e*PN | Pn | 03 38 51.5 | +0.2 |
| **ITM** | **Ithomi** | **1.44** | **96** | P | Pn | 03 38 51.2 | 0.0 |
| ITM | | | | S | Sb | 03 39 09.9 | -0.5 |
| **ITM** | **Ithomi** | **1.44** | **96** | P | Pn | 03 38 51.3 | 0.0 |
| ITM | | | | S | Sb | 03 39 09.9 | -0.5 |
| **LKD2** | **Lefkada island** | **1.51** | **16** | *e*PN | Pb | 03 38 53.7 | +0.4 |
| **LKD2** | **Lefkada island** | **1.51** | **16** | P | Pb | 03 38 54.0 | +0.7 |
| LKD2 | | | | S | Sg | 03 39 14.4 | +0.5 |
| **LKD2** | **Lefkada island** | **1.51** | **16** | *e*Pn | Pb | 03 38 53.7 | +0.4 |
| **LKD2** | **Lefkada island** | **1.51** | **16** | P | Pb | 03 38 54.0 | +0.7 |
| LKD2 | | | | S | Sg | 03 39 14.4 | +0.5 |
| **PDO** | **Prodromos** | **1.51** | **33** | *e*PN | Pg | 03 38 54.1 | -0.2 |
| **PDO** | **Prodromos** | **1.51** | **33** | P | Pb | 03 38 53.2 | -0.1 |
| PDO | | | | S | Sg | 03 39 13.6 | -0.2 |
| **PDO** | **Prodromos** | **1.51** | **33** | P | Pb | 03 38 53.2 | -0.1 |
| **PDO** | **Prodromos** | **1.51** | **33** | *e*Pn | Pg | 03 38 54.1 | -0.2 |
| PDO | | | | S | Sg | 03 39 13.6 | -0.2 |
| **UPR** | **University Cam** | **1.61** | **54** | *e*PN | Pb | 03 38 55.1 | 0.0 |
| **UPR** | **University Cam** | **1.61** | **54** | P | Pb | 03 38 55.3 | +0.2 |
| UPR | | | | S | Sb | 03 39 15.7 | +0.3 |
| **UPR** | **University Cam** | **1.61** | **54** | *e*Pn | Pb | 03 38 55.1 | 0.0 |
| UPR | | | | S | Sb | 03 39 15.7 | +0.3 |
| **PVO** | **Paravola** | **1.68** | **40** | *e*PN | Pb | 03 38 56.1 | -0.2 |
| **PVO** | **Paravola** | **1.68** | **40** | P | Pb | 03 38 56.7 | +0.4 |
| PVO | | | | S | Sn | 03 39 16.2 | -0.1 |
| **PVO** | **Paravola** | **1.68** | **40** | *e*Pn | Pb | 03 38 56.1 | -0.2 |
| **PVO** | **Paravola** | **1.68** | **40** | P | Pb | 03 38 56.7 | +0.4 |
| PVO | | | | S | Sn | 03 39 16.2 | -0.1 |
| **LAKA** | **Lakka** | **1.71** | **58** | *e*PN | Pb | 03 38 56.6 | -0.3 |
| **LAKA** | **Lakka** | **1.71** | **58** | P | Pb | 03 38 56.2 | -0.7 |
| LAKA | | | | S | Sn | 03 39 17.2 | +0.1 |
| **LAKA** | **Lakka** | **1.71** | **58** | P | Pb | 03 38 56.2 | -0.7 |
| **LAKA** | **Lakka** | **1.71** | **58** | *e*Pn | Pb | 03 38 56.6 | -0.3 |
| LAKA | | | | S | Sn | 03 39 17.2 | +0.1 |
| **KLV** | **Kalavryta, Ach** | **1.75** | **66** | *e*PN | Pb | 03 38 56.7 | -0.7 |
| **KLV** | **Kalavryta, Ach** | **1.75** | **66** | P | Pb | 03 38 56.7 | -0.7 |
| KLV | | | | S | Sn | 03 39 17.0 | -0.9 |
| **KLV** | **Kalavryta, Ach** | **1.75** | **66** | P | Pb | 03 38 56.7 | -0.7 |
| KLV | | | | S | Sn | 03 39 17.0 | -0.9 |
| **EFP** | **Efpalio** | **1.77** | **52** | *e*PN | Pb | 03 38 57.5 | -0.3 |
| **EFP** | **Efpalio** | **1.77** | **52** | P | Pb | 03 38 57.7 | -0.1 |
| EFP | | | | S | Sb | 03 39 20.2 | +0.1 |
| **EFP** | **Efpalio** | **1.77** | **52** | *e*Pn | Pb | 03 38 57.5 | -0.3 |
| EFP | | | | S | Sb | 03 39 20.2 | +0.1 |
| **VLX** | **Vlachokerasia** | **1.79** | **88** | *e*PN | Pn | 03 38 56.7 | +0.5 |
| **VLX** | **Vlachokerasia** | **1.79** | **88** | P | Pn | 03 38 56.5 | +0.3 |
| VLX | | | | S | Sn | 03 39 19.1 | +0.2 |
| **VLX** | **Vlachokerasia** | **1.79** | **88** | P | Pn | 03 38 56.5 | +0.3 |
| VLX | | | | S | Sn | 03 39 19.1 | +0.2 |
| **DYR** | **Agios Nikonas** | **1.85** | **107** | *e*PN | Pn | 03 38 57.4 | +0.4 |
| **DYR** | **Agios Nikonas** | **1.85** | **107** | P | Pn | 03 38 57.4 | +0.4 |
| DYR | | | | S | Sn | 03 39 20.3 | 0.0 |
| **DYR** | **Agios Nikonas** | **1.85** | **107** | P | Pn | 03 38 57.4 | +0.4 |
| DYR | | | | S | Sn | 03 39 20.3 | 0.0 |
| **GUR** | **Goura** | **1.85** | **70** | *e*PN | Pn | 03 38 57.9 | +0.8 |
| **GUR** | **Goura** | **1.85** | **70** | P | Pn | 03 38 57.9 | +0.8 |
| GUR | | | | S | Sb | 03 39 21.1 | -1.3 |
| **GUR** | **Goura** | **1.85** | **70** | P | Pn | 03 38 57.9 | +0.8 |
| GUR | | | | S | Sb | 03 39 21.1 | -1.3 |
| **SERG** | **Sergoula** | **1.86** | **54** | *e*PN | Pb | 03 38 58.8 | -0.5 |
| **SERG** | **Sergoula** | **1.86** | **54** | P | Pb | 03 38 58.9 | -0.4 |
| SERG | | | | S | Sn | 03 39 20.0 | -0.6 |
| **SERG** | **Sergoula** | **1.86** | **54** | *e*Pn | Pb | 03 38 58.8 | -0.5 |
| SERG | | | | S | Sn | 03 39 20.0 | -0.6 |
| **KALE** | **Kalithea** | **1.90** | **56** | *e*PN | Pb | 03 38 59.6 | -0.5 |
| **KALE** | **Kalithea** | **1.90** | **56** | P | Pb | 03 38 59.6 | -0.5 |
| KALE | | | | S | Sn | 03 39 21.1 | -0.6 |
| **KALE** | **Kalithea** | **1.90** | **56** | P | Pb | 03 38 59.6 | -0.5 |
| KALE | | | | S | Sn | 03 39 21.1 | -0.6 |
| **DSL** | **Palaion Diasel** | **1.95** | **23** | *e*PN | Pb | 03 39 00.0 | -0.8 |
| **DSL** | **Palaion Diasel** | **1.95** | **23** | P | Pb | 03 39 00.1 | -0.8 |
| DSL | | | | S | Sb | 03 39 24.7 | -0.4 |
| **DSL** | **Palaion Diasel** | **1.95** | **23** | *e*Pn | Pb | 03 39 00.0 | -0.8 |
| DSL | | | | S | Sb | 03 39 24.7 | -0.4 |
| **EVR** | **Evrytania** | **2.06** | **39** | *e*PN | Pn | 03 39 01.0 | +1.1 |
| **EVR** | **Evrytania** | **2.06** | **39** | P | Pb | 03 39 01.9 | -0.8 |
| EVR | | | | S | Sn | 03 39 25.5 | -0.1 |
| **EVR** | **Evrytania** | **2.06** | **39** | *e*Pn | Pn | 03 39 01.0 | +1.1 |
| **EVR** | **Evrytania** | **2.06** | **39** | P | Pb | 03 39 01.9 | -0.8 |
| EVR | | | | S | Sn | 03 39 25.5 | -0.1 |
| **THAL** | **Thalero** | **2.12** | **70** | *e*PN | Pn | 03 39 02.1 | +1.4 |
| **THAL** | **Thalero** | **2.12** | **70** | P | Pn | 03 39 01.2 | +0.5 |
| THAL | | | | S | Sn | 03 39 26.8 | -0.2 |
| **THAL** | **Thalero** | **2.12** | **70** | P | Pn | 03 39 01.2 | +0.5 |
| **THAL** | **Thalero** | **2.12** | **70** | *e*Pn | Pn | 03 39 02.1 | +1.4 |
| THAL | | | | S | Sn | 03 39 26.8 | -0.2 |
| **DSF** | **Desfina** | **2.17** | **60** | *e*PN | Pn | 03 39 02.7 | +1.2 |
| **DSF** | **Desfina** | **2.17** | **60** | P | Pn | 03 39 02.5 | +1.0 |
| DSF | | | | S | Sn | 03 39 28.6 | +0.2 |
| **DSF** | **Desfina** | **2.17** | **60** | P | Pn | 03 39 02.5 | +1.0 |
| DSF | | | | S | Sn | 03 39 28.6 | +0.2 |
| **DESF** | **Desfina** | **2.18** | **60** | *e*PN | Pn | 03 39 02.8 | +1.3 |
| **DESF** | **Desfina** | **2.18** | **60** | *e*Pn | Pn | 03 39 02.8 | +1.3 |
| **IGT** | **Igoumenitsa** | **2.20** | **4** | *e*PN | Pn | 03 39 02.6 | +0.8 |
| **IGT** | **Igoumenitsa** | **2.20** | **4** | P | Pn | 03 39 02.5 | +0.8 |
| IGT | | | | S | Sb | 03 39 32.3 | 0.0 |
| **IGT** | **Igoumenitsa** | **2.20** | **4** | *e*Pn | Pn | 03 39 02.6 | +0.8 |
| IGT | | | | S | Sb | 03 39 32.3 | 0.0 |
| **SGD** | **Sagiada** | **2.27** | **2** | *e*PN | Pn | 03 39 04.1 | +1.3 |
| **SGD** | **Sagiada** | **2.27** | **2** | P | Pn | 03 39 03.9 | +1.1 |
| SGD | | | | S | Sb | 03 39 33.6 | -0.9 |
| **SGD** | **Sagiada** | **2.27** | **2** | *e*Pn | Pn | 03 39 04.1 | +1.3 |
| SGD | | | | S | Sb | 03 39 33.6 | -0.9 |
| **MAKR** | **Makrakomi, Fth** | **2.30** | **43** | *e*PB | Pn | 03 39 04.9 | +1.8 |
| **MAKR** | **Makrakomi, Fth** | **2.30** | **43** | P | Pn | 03 39 04.8 | +1.7 |
| MAKR | | | | S | Sn | 03 39 32.3 | +0.9 |
| **MAKR** | **Makrakomi, Fth** | **2.30** | **43** | P | Pn | 03 39 04.8 | +1.7 |
| MAKR | | | | S | Sn | 03 39 32.3 | +0.9 |
| **VLI** | **Veliai** | **2.32** | **105** | *e*PB | Pn | 03 39 04.4 | +0.9 |
| **VLI** | **Veliai** | **2.32** | **105** | P | Pn | 03 39 04.7 | +1.2 |
| **VLI** | **Veliai** | **2.32** | **105** | *e*Pb | Pn | 03 39 04.4 | +0.9 |
| **VLI** | **Veliai** | **2.32** | **105** | P | Pn | 03 39 04.7 | +1.2 |
| **LTK** | **Loutraki** | **2.35** | **72** | *e*PN | Pn | 03 39 04.4 | +0.6 |
| **LTK** | **Loutraki** | **2.35** | **72** | P | Pn | 03 39 04.2 | +0.4 |
| LTK | | | | S | Sn | 03 39 32.5 | -0.1 |
| **LTK** | **Loutraki** | **2.35** | **72** | P | Pn | 03 39 04.2 | +0.4 |
| LTK | | | | S | Sn | 03 39 32.5 | -0.1 |
| **JAN** | **Janina** | **2.38** | **13** | *e*PB | Pn | 03 39 06.5 | +2.2 |
| **JAN** | **Janina** | **2.38** | **13** | P | Pn | 03 39 06.5 | +2.2 |
| JAN | | | | S | Sb | 03 39 36.0 | -1.7 |
| **JAN** | **Janina** | **2.38** | **13** | P | Pn | 03 39 06.5 | +2.2 |
| JAN | | | | S | Sb | 03 39 36.0 | -1.7 |
| **KEK** | **Kerkira** | **2.39** | **354** | P | Pn | 03 39 05.5 | +1.1 |
| KEK | | | | S | Sb | 03 39 37.0 | -0.8 |
| **KEK** | **Kerkira** | **2.39** | **354** | P | Pn | 03 39 05.5 | +1.1 |
| KEK | | | | S | Sb | 03 39 37.0 | -0.8 |
| **KRND** | **KRANIDI** | **2.40** | **88** | *e*PN | Pn | 03 39 04.8 | +0.2 |
| **KRND** | **KRANIDI** | **2.40** | **88** | P | Pn | 03 39 04.7 | +0.2 |
| KRND | | | | S | Sn | 03 39 34.4 | +0.5 |
| **KRND** | **KRANIDI** | **2.40** | **88** | P | Pn | 03 39 04.7 | +0.2 |
| KRND | | | | S | Sn | 03 39 34.4 | +0.5 |
| **AGG** | **Agios Georgios** | **2.41** | **45** | *e*PB | Pn | 03 39 06.6 | +1.9 |
| **AGG** | **Agios Georgios** | **2.41** | **45** | P | Pn | 03 39 06.7 | +2.0 |
| AGG | | | | S | Sn | 03 39 35.9 | +1.6 |
| **AGG** | **Agios Georgios** | **2.41** | **45** | *e*Pb | Pn | 03 39 06.6 | +1.9 |
| AGG | | | | S | Sn | 03 39 35.9 | +1.6 |
| **AXAR** | **Agios Charalam** | **2.45** | **54** | *e*PB | Pn | 03 39 07.2 | +2.0 |
| **AXAR** | **Agios Charalam** | **2.45** | **54** | P | Pn | 03 39 06.4 | +1.2 |
| AXAR | | | | S | Sn | 03 39 35.9 | +0.7 |
| **AXAR** | **Agios Charalam** | **2.45** | **54** | P | Pn | 03 39 06.4 | +1.2 |
| **AXAR** | **Agios Charalam** | **2.45** | **54** | *e*Pb | Pn | 03 39 07.2 | +2.0 |
| AXAR | | | | S | Sn | 03 39 35.9 | +0.7 |
| **DID** | **Didima** | **2.47** | **85** | *e*PN | Pn | 03 39 05.4 | -0.2 |
| **DID** | **Didima** | **2.47** | **85** | P | Pn | 03 39 05.6 | 0.0 |
| DID | | | | S | Sn | 03 39 36.4 | +0.6 |
| **DID** | **Didima** | **2.47** | **85** | P | Pn | 03 39 05.6 | 0.0 |
| DID | | | | S | Sn | 03 39 36.4 | +0.6 |
| **KYTH** | **Kithira** | **2.55** | **114** | *e*PB | Pn | 03 39 07.6 | +0.9 |
| **KYTH** | **Kithira** | **2.55** | **114** | P | Pn | 03 39 07.6 | +0.9 |
| **LKR** | **Lokris** | **2.61** | **59** | *e*PN | Pn | 03 39 08.2 | +0.7 |
| **LKR** | **Lokris** | **2.61** | **59** | P | Pn | 03 39 08.2 | +0.7 |
| LKR | | | | S | Sn | 03 39 39.5 | +0.3 |
| **LKR** | **Lokris** | **2.61** | **59** | P | Pn | 03 39 08.2 | +0.7 |
| LKR | | | | S | Sn | 03 39 39.5 | +0.3 |
| **VIL2** | **Platees** | **2.63** | **70** | *e*PN | Pn | 03 39 08.1 | +0.4 |
| **VILL** | **Villia** | **2.65** | **71** | P | Pn | 03 39 08.1 | +0.1 |
| VILL | | | | S | Sn | 03 39 39.4 | -0.7 |
| **VILL** | **Villia** | **2.65** | **71** | P | Pn | 03 39 08.1 | +0.1 |
| VILL | | | | S | Sn | 03 39 39.4 | -0.7 |
| **ATAL** | **Atalanti** | **2.65** | **58** | P | Pn | 03 39 08.9 | +0.9 |
| ATAL | | | | S | Sn | 03 39 40.1 | 0.0 |
| **ATAL** | **Atalanti** | **2.65** | **58** | P | Pn | 03 39 08.9 | +0.9 |
| ATAL | | | | S | Sn | 03 39 40.1 | 0.0 |
| **THL** | **Klokotos Trika** | **2.67** | **33** | *e*PN | Pn | 03 39 10.3 | +2.0 |
| **THL** | **Klokotos Trika** | **2.67** | **33** | P | Pn | 03 39 10.2 | +2.0 |
| THL | | | | S | Sn | 03 39 40.5 | 0.0 |
| **THL** | **Klokotos Trika** | **2.67** | **33** | P | Pn | 03 39 10.2 | +2.0 |
| THL | | | | S | Sn | 03 39 40.5 | 0.0 |
| **SMIA** | **Simia** | **2.87** | **57** | *e*PN | Pn | 03 39 11.8 | +0.8 |
| **SMIA** | **Simia** | **2.87** | **57** | P | Pn | 03 39 11.3 | +0.3 |
| SMIA | | | | S | Sn | 03 39 45.5 | -0.1 |
| **SMIA** | **Simia** | **2.87** | **57** | P | Pn | 03 39 11.3 | +0.3 |
| **SMIA** | **Simia** | **2.87** | **57** | *e*Pn | Pn | 03 39 11.8 | +0.8 |
| SMIA | | | | S | Sn | 03 39 45.5 | -0.1 |
| **ATH** | **Athens Observa** | **2.91** | **76** | *e*PN | Pn | 03 39 12.7 | +1.2 |
| **ATH** | **Athens Observa** | **2.91** | **76** | P | Pn | 03 39 12.4 | +0.9 |
| **ATH** | **Athens Observa** | **2.91** | **76** | P | Pn | 03 39 12.4 | +0.9 |
| **ATH** | **Athens Observa** | **2.91** | **76** | *e*Pn | Pn | 03 39 12.7 | +1.2 |
| **VLY** | **Voula,Athens** | **2.95** | **79** | *e*PN | Pn | 03 39 12.0 | -0.1 |
| **VLY** | **Voula,Athens** | **2.95** | **79** | P | Pn | 03 39 11.9 | -0.1 |
| **VLY** | **Voula,Athens** | **2.95** | **79** | *e*Pn | Pn | 03 39 12.0 | -0.1 |
| **PENT** | **Pentalofos** | **2.96** | **15** | *e*PB | Pn | 03 39 15.0 | +2.7 |
| **PENT** | **Pentalofos** | **2.96** | **15** | *e*Pn | Pn | 03 39 15.0 | +2.7 |
| **FYTO** | **Fytoko, Volos** | **3.02** | **46** | P | Pn | 03 39 13.7 | +0.6 |
| FYTO | | | | S | Sn | 03 39 49.0 | -0.2 |
| **FYTO** | **Fytoko, Volos** | **3.02** | **46** | P | Pn | 03 39 13.7 | +0.6 |
| FYTO | | | | S | Sn | 03 39 49.0 | -0.2 |
| **PTL** | **Penteli** | **3.04** | **75** | *e*PN | Pn | 03 39 13.6 | +0.2 |
| **PTL** | **Penteli** | **3.04** | **75** | P | Pn | 03 39 13.6 | +0.2 |
| **PTL** | **Penteli** | **3.04** | **75** | P | Pn | 03 39 13.6 | +0.2 |
| **MRKA** | **Markates** | **3.05** | **62** | *e*PN | Pn | 03 39 14.5 | +1.0 |
| **MRKA** | **Markates** | **3.05** | **62** | P | Pn | 03 39 14.4 | +1.0 |
| **MRKA** | **Markates** | **3.05** | **62** | P | Pn | 03 39 14.4 | +1.0 |
| **NEO** | **Neokhori** | **3.12** | **50** | *e*PN | Pn | 03 39 15.1 | +0.6 |
| **NEO** | **Neokhori** | **3.12** | **50** | *e*Pn | Pn | 03 39 15.1 | +0.6 |
| **XOR** | **Xorichti** | **3.14** | **49** | P | Pn | 03 39 15.2 | +0.4 |
| **XOR** | **Xorichti** | **3.14** | **49** | P | Pn | 03 39 15.2 | +0.4 |
| **NEST** | **Nestorio** | **3.15** | **13** | *e*PN | Pn | 03 39 17.8 | +2.8 |
| **NEST** | **Nestorio** | **3.15** | **13** | P | Pn | 03 39 17.6 | +2.6 |
| NEST | | | | S | Sn | 03 39 54.9 | +2.2 |
| **NEST** | **Nestorio** | **3.15** | **13** | P | Pn | 03 39 17.6 | +2.6 |
| NEST | | | | S | Sn | 03 39 54.9 | +2.2 |
| **EREA** | **Eretria** | **3.19** | **69** | *e*PN | Pn | 03 39 15.8 | +0.4 |
| **EREA** | **Eretria** | **3.19** | **69** | *e*Pn | Pn | 03 39 15.8 | +0.4 |
| **KZN** | **Kozani** | **3.23** | **23** | *e*PN | Pn | 03 39 18.2 | +2.2 |
| **KZN** | **Kozani** | **3.23** | **23** | P | Pn | 03 39 17.6 | +1.6 |
| KZN | | | | S | Sn | 03 39 55.5 | +1.0 |
| **KZN** | **Kozani** | **3.23** | **23** | P | Pn | 03 39 17.6 | +1.6 |
| **KZN** | **Kozani** | **3.23** | **23** | *e*Pn | Pn | 03 39 18.2 | +2.2 |
| KZN | | | | S | Sn | 03 39 55.5 | +1.0 |
| **TIP** | **Timpagrande** | **3.23** | **306** | ↑*i*P | Pn | 03 39 17.9 | +1.8 |
| **TIP** | **Timpagrande** | **3.23** | **306** | P | Pn | 03 39 18.2 | +2.1 |
| TIP | | | | S | Sb | 03 39 59.6 | -2.6 |
| **TIP** | **Timpagrande** | **3.23** | **306** | P | Pn | 03 39 18.2 | +2.1 |
| TIP | | | | S | Sb | 03 39 59.6 | -2.6 |
| **LIT** | **Litokhoron** | **3.32** | **33** | *e*PN | Pn | 03 39 18.4 | +1.2 |
| **LIT** | **Litokhoron** | **3.32** | **33** | P | Pn | 03 39 18.1 | +0.9 |
| LIT | | | | S | Sn | 03 39 57.7 | +1.1 |
| **LIT** | **Litokhoron** | **3.32** | **33** | P | Pn | 03 39 18.1 | +0.9 |
| **LIT** | **Litokhoron** | **3.32** | **33** | *e*Pn | Pn | 03 39 18.4 | +1.2 |
| LIT | | | | S | Sn | 03 39 57.7 | +1.1 |
| **AOS** | **Alonnisos** | **3.47** | **57** | *

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **PDG** | **Podgorica** | **5.13** | **353** | ⇑ | *i*P | **Pn** | **03 39 42.6** | **+0.5** |
| **PDG** | **Podgorica** | **5.13** | **353** | | S | **Sn** | **03 40 40.2** | **-1.1** |
| **PDG** | **Podgorica** | **5.13** | **353** | ⇑ | *i*P | **Pn** | 03 39 42.6 | +0.5 |
| **MS1** | **Monte Sant'Ang** | **5.44** | **325** | | *e*Pn | **Pn** | 03 39 49.3 | +3.0 |
| **BARS** | **Barje** | **5.62** | **13** | ⇑ | *i*Pn | **Pn** | 03 39 49.4 | +0.6 |
| **RDO** | **Rodhopi** | **5.66** | **46** | | *e*PN | **Pn** | 03 39 49.7 | +0.4 |
| **RDO** | **Rodhopi** | **5.66** | **46** | | *e*Pn | **Pn** | 03 39 49.7 | +0.4 |
| **SJES** | **Sjenica** | **5.92** | **359** | ⇑ | *i*Pn | **Pn** | 03 39 53.7 | +0.7 |
| **BOVS** | **Bovan** | **6.40** | **10** | ⇓ | *i*Pn | **Pn** | 03 39 59.6 | +0.1 |
| **BBLS** | **Lazići** | **6.55** | **355** | ⇑ | *i*Pn | **Pn** | 03 40 03.6 | +2.0 |
| **DIVS** | **Divibare** | **6.76** | **359** | ⇓ | *i*P | **Pn** | 03 40 04.6 | +0.1 |
| **DIVS** | **Divibare** | **6.76** | **359** | | S | **Sn** | 03 41 17.7 | -3.7 |
| **DIVS** | **Divibare** | **6.76** | **359** | ⇓ | *i*P | **Pn** | 03 40 04.6 | +0.1 |
| **TEKS** | **Tekeris** | **7.22** | **357** | ⇑ | *i*Pn | **Pn** | 03 40 10.5 | -0.3 |
| **BLY** | **Banja Luka** | **7.73** | **344** | ⇓ | *i*P | **Pn** | 03 40 18.7 | +0.9 |
| **BLY** | **Banja Luka** | **7.73** | **344** | | S | **Sn** | 03 41 41.3 | -4.0 |
| **BLY** | **Banja Luka** | **7.73** | **344** | ⇓ | *i*P | **Pn** | 03 40 18.7 | +0.9 |
| **GZR** | **Gura Zlata** | **8.29** | **13** | ⇑ | *i*P | **Pn** | 03 40 25.8 | +0.3 |
| **GZR** | **Gura Zlata** | **8.29** | **13** | ⇑ | *i*P | **Pn** | 03 40 25.8 | +0.3 |
| **BZS** | **Buzias** | **8.35** | **7** | ⇑ | *i*P | **Pn** | 03 40 26.8 | +0.6 |
| **BZS** | **Buzias** | **8.35** | **7** | | S | **Sn** | 03 41 55.4 | -5.0 |
| **BZS** | **Buzias** | **8.35** | **7** | ⇑ | *i*P | **Pn** | 03 40 26.8 | +0.6 |
| **KEST** | **Kesra** | **8.83** | **263** | | P | **Pn** | 03 40 35.7 | +2.7 |
| KEST | 0.3nm,0.3s,baz=112,slow=5.0,SNR=9.8 | | | | S | **Sn** | **03 42 13.5** | **+0.9** |
| **VOIR** | 0.1nm,0.3s,baz=72,slow=20,SNR=2.4 | **8.89** | **23** | ⇑ | *i*P | **Pn** | 03 40 34.1 | +0.3 |
| **VOIR** | | **8.89** | **23** | ⇑ | *i*P | **Pn** | 03 40 34.1 | +0.3 |
| **MLR** | **Muntele Rosu** | **9.24** | **26** | | P | **Pn** | 03 40 40.9 | +2.4 |
| | 0.2nm,0.3s,baz=132,slow=9.9,SNR=15 | | | | | | | |
| **MLR** | **Muntele Rosu** | **9.24** | **26** | ⇓ | *i*P | **Pn** | 03 40 40.7 | +2.1 |
| **MLR** | **Muntele Rosu** | **9.24** | **26** | ⇓ | *i*P | **Pn** | 03 40 40.7 | +2.1 |
| **DRGR** | | **9.64** | **11** | ⇑ | *i*P | **Pn** | 03 40 44.7 | +0.7 |
| **DRGR** | | **9.64** | **11** | ⇑ | *i*P | **Pn** | 03 40 44.7 | +0.7 |
| **PLOR** | **Plostina** | **9.80** | **28** | ⇓ | *i*P | **Pn** | 03 40 48.3 | +2.1 |
| **PLOR** | **Plostina** | **9.80** | **28** | ⇓ | *i*P | **Pn** | 03 40 48.3 | +2.1 |
| **VRI** | **Vrincioaia** | **9.84** | **28** | ⇑ | *i*P | **Pn** | 03 40 48.5 | +1.8 |
| **VRI** | **Vrincioaia** | **9.84** | **28** | ⇑ | *i*P | **Pn** | 03 40 48.5 | +1.8 |
| **OBKA** | **Obir** | **10.06** | **337** | ⇓ | *i*Pn | **Pn** | 03 40 50.2 | +0.4 |
| OBKA | | | | ⇑ | *i*Sn | Sn | 03 42 37.0 | -5.7 |
| **OBKA** | **Obir** | **10.06** | **337** | | Pn | **Pn** | **03 40 50.2** | **+0.4** |
| **SOKA** | **Soboth** | **10.07** | **339** | ⇑ | *i*Pn | **Pn** | **03 40 50.0** | **0.0** |
| SOKA | | | | ⇑ | *i*Sn | Sn | 03 42 37.1 | -5.9 |
| **SOKA** | **Soboth** | **10.07** | **339** | | Pn | **Pn** | **03 40 50.0** | **0.0** |
| **BRTR** | **Keskin Array B** | **10.84** | **73** | | P | Pn | 03 41 09.3 | +8.8 |
| | 0.1nm,0.3s,baz=252,slow=13,SNR=3.1 | | | | | | | |
| **VYHS** | **Vyhne** | **11.19** | **356** | | *e*PN | Pn | 03 41 10.2 | +5.0 |
| **MOA** | **Molln** | **11.36** | **340** | ⇓ | *i*Pn | **Pn** | **03 41 08.4** | **+1.0** |
| MOA | | | | ⇓ | *i*Sn | **Sn** | **03 43 09.1** | **-5.2** |
| **MOA** | **Molln** | **11.36** | **340** | | Pn | **Pn** | **03 41 08.4** | **+1.0** |
| **DAVOX** | **Davos/Dischmat** | **12.12** | **324** | | P | **Pn** | **03 41 18.4** | **+0.3** |
| DAVOX | 0.1nm,0.3s,baz=160,slow=4.0,SNR=3.0 | | | | S | Sn | 03 43 25.7 | -7.5 |
| **GERES** | 0.2nm,0.3s,baz=150,slow=18,SNR=2.7 **GERESS Array B** | **12.42** | **340** | | P | **Pn** | **03 41 22.2** | **+0.1** |
| GERES | 0.2nm,0.3s,baz=152,slow=12,SNR=5.0 | | | | S | Sn | 03 43 30.9 | -10 |
| **MMAI** | 0.3nm,0.3s,baz=155,slow=24,SNR=4.9 **Mount Meron Ar** | **13.21** | **105** | | P | Pn | 03 41 36.5 | +3.6 |
| **AKASG** | 1.4nm,0.3s,baz=301,slow=11,SNR=4.3 **Malin Array Be** | **14.86** | **23** | | P | **Pn** | **03 41 56.9** | **+1.7** |
| **KBZ** | 1.4nm,0.3s,baz=206,slow=8.4,SNR=4.8 **Khabaz** | **18.41** | **63** | | P | **Pn** | **03 42 41.2** | **+0.8** |
| **ESDC** | 0.2nm,0.3s,baz=276,slow=18,SNR=3.1 **Sonseca Array** | **19.00** | **284** | | P | **Pn** | **03 42 48.6** | **+1.0** |
| **HFS** | 0.1nm,0.3s,baz=80,slow=13,SNR=3.6 **Hagfors** | **23.18** | **352** | | P | **P** | **03 43 31.2** | **-0.6** |
| **NB2** | 1.7nm,0.3s,baz=161,slow=12,SNR=26 **NORSAR Subarra** | **24.39** | **349** | | P | **P** | **03 43 44.1** | **+0.8** |
| **NB2** | comp=Z,9.7nm,1.4s,baz=162,slow=11 **NORSAR Subarra** | **24.39** | **349** | | P | **P** | **03 43 44.1** | **+0.8** |
| **NOA** | comp=Z,0.7nm,0.6s,baz=158,slow=9.1,SNR=4.1 **NORSAR Array B** | **24.39** | **349** | | P | **P** | **03 43 44.2** | **+0.9** |
| **FINES** | comp=Z,0.7nm,0.6s,baz=158,slow=9.1,SNR=4.1 **FINESS Array B** | **24.42** | **7** | | P | **P** | **03 43 42.4** | **-1.2** |
| **TORD** | comp=Z,1.8nm,0.5s,baz=164,slow=12,SNR=8.1 **Torodi Ar. Bea** | **29.19** | **219** | | P | **P** | **03 44 28.6** | **+1.8** |
| **ARCES** | comp=Z,1.9nm,0.6s,baz=33,slow=9.1,SNR=30 **ARCESS Array B** | **32.39** | **4** | | P | **P** | **03 44 53.8** | **-0.8** |
| ARCES | comp=Z,3.3nm,1.0s,baz=186,slow=11,SNR=6.2 | | | | LR | LR | 04 01 05.3 | |
| **BVAR** | comp=Z,57nm,18.1s,baz=336,slow=42 **Borovoye Array** | **37.89** | **49** | | P | **P** | **03 45 41.4** | **-0.9** |
| **DBIC** | comp=Z,0.6nm,0.5s,baz=294,slow=1.4,SNR=3.3 **Dimbokro** | **38.07** | **223** | | P | **P** | **03 45 44.9** | **+0.8** |
| **MKAR** | comp=Z,2.8nm,0.6s,baz=13,slow=6.8,SNR=4.3 **Makanchi Array** | **46.00** | **58** | | P | **P** | **03 46 46.9** | **-1.7** |
| **ZALV** | comp=Z,0.5nm,0.3s,baz=276,slow=7.7,SNR=6.6 **Zalesovo Beam** | **46.48** | **47** | | P | **P** | **03 46 50.6** | **-1.5** |
| **PALK** | comp=Z,1.5nm,0.4s,baz=292,slow=8.5,SNR=4.3 **Pallekele** | **62.32** | **103** | | LR | LR | 04 17 43.1 | |
| | comp=Z,12nm,20.2s,baz=117,slow=38 | | | | | | | |

*NNC **29** 03:53:57.5±1.6, 40.69N×70.89E, h0km, mb2.8, mpv2.4, Error ellipse: s-maj=26.3km s-min=10.2km az=127.0*
*KRNET **29** 03:54:00.3±0.1, 40.76N×71.05E, mb1.9*
**ISC 29 03:53:57.1±3.4, 40.72N±0.05×70.91E±0.08, h3km±28km, n8, σ1§10/14, 7C-8D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ARK** | **Arkit** | **1.34** | **36** | ⇑ | *i*P | **Pn** | **03 54 22.8** | **0.0** |
| ARK | baz=34 | | | ⇑ | *i*S | **Sb** | **03 54 38.8** | **-1.7** |
| **ARSB** | **Arslanbob** | **1.68** | **68** | ⇓ | *i*P | **Pb** | **03 54 28.9** | **+0.2** |
| ARSB | baz=68 | | | ⇓ | *i*S | **Sn** | **03 54 48.8** | **-0.8** |
| **SFK** | **Sufi-Kurgan** | **2.10** | **109** | ⇓ | *i*P | **Pn** | **03 54 34.6** | **+1.3** |
| SFK | baz=111 | | | ⇓ | *i*S | **Sn** | **03 54 59.8** | **-0.3** |
| **MNAS** | **Manas** | **2.13** | **33** | ⇑ | Pn | **Pb** | **03 54 35.6** | **-1.0** |
| MNAS | 1.8nm,0.6s | | | ⇓ | Sn | **Sb** | **03 55 03.6** | **+0.2** |
| **MNAS** | 3.6nm,0.5s **Manas** | **2.13** | **33** | ⇓ | *e*P | **Pb** | **03 54 35.5** | **-1.0** |
| MNAS | baz=32 | | | ⇓ | *i*S | **Sn** | **03 55 01.6** | **+0.8** |
| **KK31** | baz=32 **Karatay Array** | **2.41** | **353** | | Pg | **Pb** | **03 54 41.9** | **+0.8** |
| KK31 | 0.4nm,0.3s,baz=167,slow=16,SNR=7.8 | | | ⇑ | Lg | Lg | 03 55 14.6 | |
| **DZET** | 1.5nm,0.3s,baz=176,slow=28,SNR=10 **Dzherino** | **2.50** | **221** | ⇓ | Pg | **Pb** | **03 54 41.8** | **-0.8** |
| DZET | 1.1nm,0.4s | | | ⇑ | Lg | Lg | 03 55 16.8 | |
| **ARLS** | 4.2nm,0.4s **Aral** | **2.81** | **65** | ⇑ | *i*P | **Pn** | **03 54 44.7** | **+1.6** |
| ARLS | baz=65 | | | ⇑ | *i*S | **Sn** | **03 55 17.0** | **-0.6** |
| | baz=65 | | | | | | | |

*KRNET **29** 04:00:54.0±0.1, 40.73N×71.12E, h22km, mb2.3*
*NNC **29** 04:00:54.2±1.3, 40.70N×70.87E, h0km, mb2.9, mpv2.5, Error ellipse: s-maj=21.9km s-min=9.2km az=126.0*
**ISC 29 04:00:53.1±1.6, 40.70N±0.05×71.06E±0.05, h2km±14km, n13, σ1§05/21, 20C-5D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **ARK** | **Arkit** | **1.29** | **32** | ⇓ | *i*P | **Pg** | **04 01 18.4** | **+0.6** |
| ARK | baz=31 | | | ⇓ | *i*S | **Sn** | **04 01 35.8** | **-0.5** |
| **ARSB** | **Arslanbob** | **1.58** | **66** | ⇑ | *e*P | **Pb** | **04 01 23.0** | **-0.2** |
| ARSB | baz=66 | | | ⇑ | *i*S | **Sg** | **04 01 45.2** | **+1.3** |
| **SFK** | **Sufi-Kurgan** | **1.99** | **109** | ⇑ | *i*P | **Pb** | **04 01 30.8** | **+0.7** |
| SFK | baz=110 | | | ⇑ | *i*S | **Sg** | **04 01 56.8** | **-0.2** |
| **MNAS** | **Manas** | **2.09** | **31** | ⇓ | Pn | **Pg** | **04 01 32.8** | **-0.3** |
| MNAS | 1.8nm,0.3s | | | ⇑ | Sn | **Sg** | **04 02 00.5** | **+0.3** |
| **MNAS** | 6.3nm,0.4s **Manas** | **2.09** | **31** | ⇑ | *i*P | **Pg** | **04 01 32.8** | **-0.3** |
| MNAS | baz=30 | | | ⇑ | *i*S | **Sg** | **04 01 59.9** | **-0.3** |
| **MNAS** | baz=30 **Manas** | **2.09** | **31** | ⇑ | *i*P | **Pg** | **04 01 32.8** | **-0.3** |
| MNAS | baz=30 | | | ⇑ | *i*S | **Sg** | **04 02 00.4** | **+0.3** |
| **KK31** | baz=30 **Karatay Array** | **2.44** | **351** | ⇑ | Pg | **Pb** | **04 01 38.0** | **+0.3** |
| KK31 | 0.6nm,0.2s,baz=132,slow=16,SNR=20 | | | | Lg | Lg | 04 02 10.0 | |
| **AML** | 5.9nm,0.5s,baz=140,slow=31,SNR=6.6 **Almayashu** | **2.44** | **53** | ⇑ | *i*P | **Pb** | **04 01 38.7** | **+0.7** |
| AML | baz=53 | | | ⇑ | *i*S | **Sg** | **04 02 10.3** | **-1.3** |
| **DZET** | baz=53 **Dzherino** | **2.56** | **223** | ⇑ | Pg | **Pb** | **04 01 38.8** | **-1.0** |
| DZET | 1.7nm,0.4s | | | ⇑ | Lg | Lg | 04 02 11.8 | |
| **ARLS** | 7.6nm,0.5s **Aral** | **2.72** | **64** | ⇓ | *i*P | **Pb** | **04 01 40.3** | **-2.2** |
| ARLS | baz=64 | | | ⇓ | *i*S | **Sb** | **04 02 15.1** | **-1.3** |
| **EKS2** | baz=64 **Erkin-Say** | **2.83** | **45** | ⇑ | *e*P | **Pb** | **04 01 43.1** | **-1.2** |
| EKS2 | baz=45 | | | ⇑ | *i*S | **Sb** | **04 02 18.6** | **-0.9** |
| **AAK** | baz=45 **Ala-Archa** | **3.22** | **52** | ⇑ | Pn | **Pn** | **04 01 46.7** | **+1.9** |
| AAK | 0.6nm,0.6s | | | ⇑ | Lg | Lg | 04 02 35.5 | |
| **TKM2** | 4.4nm,0.8s **Tokmak 2** | **4.05** | **55** | ⇑ | Pn | Pb | 04 02 00.7 | -4.6 |
| TKM2 | 0.4nm,0.3s | | | ⇑ | Lg | Lg | 04 03 03.9 | |
| | 3.7nm,0.6s | | | | | | | |

*ISCJB **29** 04:03:08.8±0.5, 32.11N±0.02×115.01W±0.03, h13km±4km, Error ellipse: s-maj=3.6km s-min=3.3km az=159.2*
*ECX **29** 04:03:10.9±0.5, 32.08N×115.07W, h8km, MD3.2, ML3.5*
*NEIC **29** 04:03:11.0, 32.08N×115.07W, h8km, MD3.5(MEX), ML3.5(PAS), ML3.9(ECX), After ECX.*
*MEX **29** 04:03:11.1±0.9, 32.16N×115.03W, h6km±434km, MD3.5*
**ISC 29 04:03:08.9±1.0, 32.11N±0.02×115.07W±0.02, h12km±8km, n50, σ1§26/82, 3C-9D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MBIG** | **Mexicali** | **0.32** | **339** | | *e*P | **Pb** | **04 03 17.1** | **+0.6** |
| MBIG | | | | | *i*S | **Sg** | **04 03 20.0** | **+0.3** |
| **MBIG** | **Mexicali** | **0.32** | **339** | ⇓ | *e*P | **Pb** | **04 03 17.7** | **+1.2** |
| **CPBX** | **Cerro Prieto** | **0.37** | **327** | ⇑ | *e*P | **Pb** | **04 03 18.3** | **+0.9** |
| CPBX | | | | | *e*S | **Sb** | **04 03 23.9** | **+0.8** |
| **CPBX** | **Cerro Prieto** | **0.37** | **327** | | *e*P | **Pb** | **04 03 18.1** | **+0.8** |
| CPBX | | | | | *i*S | **Sg** | **04 03 21.3** | **+0.1** |
| **YMD** | **Yuma Desert** | **0.62** | **45** | ⇓ | *e*P | **Pb** | **04 03 22.1** | **+0.3** |
| **EMSC** | **East Mesa** | **0.63** | **6** | ⇓ | *e*P | **Pb** | **04 03 22.6** | **+0.7** |
| **ECBX** | **El Chinero** | **0.64** | **179** | ⇓ | *e*P | **Pg** | **04 03 20.9** | **-0.3** |
| ECBX | | | | | *e*S | **Sg** | **04 03 29.5** | **-0.1** |
| **COA** | **Coachella** | **0.75** | **356** | ⇓ | *e*P | **Pb** | **04 03 24.2** | **+0.2** |
| **RDX** | **Rancho Dawling** | **0.77** | **257** | ⇓ | *e*P | **Pg** | **04 03 23.8** | **+0.1** |
| RDX | | | | | *e*S | **Sg** | **04 03 34.6** | **+0.8** |
| RDX | | | | ⇓ | *e* | | 04 03 36.3 | |
| RDX | comp=N,2μm,0.6s | | | | IAML | | 04 03 36.3 | |
| **RDX** | **Rancho Dawling** | **0.77** | **257** | | *e*P | **Pg** | **04 03 23.8** | **+0.1** |
| RDX | | | | | *e*S | **Sg** | **04 03 34.6** | **+0.8** |
| **SGL** | **Mount Signal** | **0.78** | **314** | | *e*P | **Pb** | **04 03 24.7** | **+0.3** |
| **YUH** | **Yuha Desert** | **0.90** | **307** | ⇓ | *i*P | **Pb** | **04 03 27.0** | **+0.5** |
| **GLA** | **Glamis** | **0.96** | **12** | | P | **Pb** | **04 03 27.1** | **-0.4** |
| GLA | baz=1.0,SNR=254 | | | | S | **Sg** | **04 03 39.8** | **-0.2** |
| **GLA** | baz=1.0 **Glamis** | **0.96** | **12** | | *e*Pg | **Pb** | **04 03 27.0** | **-0.6** |
| GLA | | | | | *e*Sg | **Sb** | **04 03 41.0** | **+0.8** |
| **RMX** | **La Rumorosa** | **0.99** | **300** | | IAML | | 04 03 42.6 | |
| **IBP** | comp=N,1μm,0.2s **Imperial Bould** | **1.03** | **303** | ⇓ | *e*P | **Pb** | **04 03 28.9** | **+0.2** |
| **IBP** | **Imperial Bould** | **1.03** | **303** | | P | **Pb** | **04 03 28.5** | **-0.2** |
| IBP | baz=1.0,SNR=246 | | | | S | **Sb** | **04 03 42.1** | **-0.1** |
| **SWSC** | baz=1.0 **Sam W. Stewart** | **1.03** | **324** | | P | **Pb** | **04 03 27.8** | **-0.9** |
| SWSC | baz=1.1,SNR=42 | | | | S | **Sb** | **04 03 42.3** | **0.0** |
| **SPIG** | baz=1.1 **San Pedro Mart** | **1.11** | **198** | | *e*P | **Pb** | **04 03 30.5** | **+0.2** |
| SPIG | | | | | *e*S | **Sb** | **04 03 45.2** | **+0.3** |
| **SPIG** | **San Pedro Mart** | **1.11** | **198** | ⇓ | *e*P | **Pb** | **04 03 30.0** | **-0.3** |
| **SPIG** | **San Pedro Mart** | **1.11** | **198** | | *e*P | **Pb** | **04 03 30.5** | **+0.2** |
| SPIG | | | | | *e*S | **Sb** | **04 03 45.2** | **+0.3** |
| **SPX** | **San Pedro Mart** | **1.11** | **198** | ⇓ | *e*P | **Pb** | **04 03 30.0** | **-0.3** |
| **SPX** | **San Pedro Mart** | **1.11** | **198** | | *e*P | **Pb** | **04 03 30.0** | **-0.3** |
| SPX | | | | | *e*S | **Sg** | **04 03 45.4** | **+0.5** |
| **CBX** | **Cerro Bola** | **1.37** | **279** | | *e*P | **Pn** | **04 03 33.4** | **-0.5** |
| CBX | | | | | *e*S | **Sn** | **04 03 51.1** | **-1.0** |
| **CBX** | **Cerro Bola** | **1.37** | **279** | | *e*P | **Pn** | **04 03 33.4** | **-0.5** |
| CBX | | | | | *e*S | **Sn** | **04 03 51.1** | **-1.0** |
| **MONP** | **Monument Peak** | **1.39** | **305** | | P | **Pn** | **04 03 33.4** | **-0.8** |
| MONP | baz=1.4,SNR=241 | | | | S | **Sn** | **04 03 52.4** | **-0.3** |
| **BAR** | baz=1.4 **Barrett** | **1.47** | **293** | | *e*Pn | **Pn** | **04 03 35.0** | **-0.3** |
| BAR | | | | | *e*Sn | **Sb** | **04 03 56.0** | **+1.0** |
| **BC3** | **Big Chuckawall** | **1.58** | **348** | | P | **Pn** | **04 03 35.9** | **-0.9** |
| BC3 | baz=1.6,SNR=56 | | | | S | **Sn** | **04 03 56.1** | **-1.2** |
| **Y12C** | baz=1.6 **Blythe** | **1.70** | **15** | | P | **Pn** | **04 03 38.0** | **-0.4** |
| **109C** | baz=1.7,SNR=89 **Camp Elliot, M** | **1.89** | **295** | | P | **Pn** | **04 03 41.2** | **+0.1** |
| 109C | baz=1.9 | | | | Sb | **Sb** | **04 04 07.9** | **+1.0** |
| **PFO** | baz=1.9 **Pinyon Flat Ob** | **1.90** | **322** | | P | **Pn** | **04 03 40.5** | **-0.8** |
| PFO | baz=1.9,SNR=29 | | | | S | **Sn** | **04 04 03.9** | **-1.3** |
| **PFO** | baz=1.9 **Pinyon Flat Ob** | **1.90** | **322** | | *e*Pn | **Pn** | **04 03 39.9** | **-1.3** |
| **214A** | **Organ Pipe Nat** | **1.92** | **94** | | P | **Pn** | **04 03 40.3** | **-1.2** |
| 214A | baz=1.9,SNR=50 | | | | S | **Sn** | **04 04 04.8** | **-0.8** |
| **214A** | baz=1.9 **Organ Pipe Nat** | **1.92** | **94** | | *e*Pn | **Pn** | **04 03 40.1** | **-1.4** |
| 214A | | | | | *e*Pg | **Pb** | **04 03 43.5** | **-0.4** |
| **IRM** | **Iron Mountain** | **2.05** | **358** | | P | **Pn** | **04 03 42.7** | **-0.5** |
| **MURC** | baz=2.1,SNR=60 **Murrieta** | **2.33** | **310** | | P | **Pn** | **04 03 47.1** | **-0.1** |
| **BBRC** | baz=2.3,SNR=16 **Big Bear Solar** | **2.65** | **325** | | S | **Sn** | **04 04 23.5** | **-0.4** |
| **GMRC** | baz=2.7 **Granite Mounta** | **2.71** | **350** | | P | **Pn** | **04 03 51.9** | **-0.5** |
| **CIS** | baz=2.8 **Catalina Islan** | **3.10** | **296** | | P | **Pn** | **04 03 57.9** | **+0.3** |
| **MWC** | baz=3.1,SNR=12 **Mount Wilson** | **3.28** | **311** | | *e*Pn | **Pn** | **04 04 03.1** | **+2.8** |
| MWC | | | | | *e*Sg | **Sg** | **04 04 52.8** | **-1.5** |
| **PASC** | **Pasadena Art C** | **3.33** | **309** | | *e*Pn | **Pn** | **04 04 02.9** | **+2.0** |
| PASC | | | | | *e*Pg | **Pg** | **04 04 11.0** | **-1.6** |
| PASC | | | | | *e*Sg | **Sg** | **04 04 52.8** | **-3.0** |
| **GSC** | **Goldstone** | **3.50** | **336** | | *e*Pn | **Pn** | **04 04 03.9** | **+0.7** |
| GSC | | | | | *e*Pg | **Pb** | **04 04 13.1** | **+2.3** |
| **TUC** | **Tucson** | **3.63** | **86** | | *e*Pn | **Pn** | **04 04 05.5** | **+0.5** |
| TUC | | | | | *e*Pg | **Pg** | **04 04 18.2** | **-0.3** |
| TUC | | | | | *e*Sg | **Sb** | **04 04 59.7** | **+2.5** |
| TUC | | | | | *e* | | 04 06 07.2 | |
| **SHPR** | **Sheep Range** | **4.39** | **359** | | *e*Pn | **Pn** | **04 04 17.3** | **+1.8** |
| SHPR | | | | | *e*Sg | **Sg** | **04 05 28.2** | **-1.5** |
| **ISA** | **Isabella** | **4.54** | **322** | | *e*Pn | **Pn** | **04 04 20.4** | **+2.9** |
| ISA | | | | | *e*Pg | **Pg** | **04 04 34.9** | **-1.0** |
| ISA | | | | | *e*Sg | **Sg** | **04 05 30.8** | **-3.8** |
| **WUAZ** | **Wupatki** | **4.58** | **41** | | P | **Pn** | **04 04 18.5** | **+0.4** |
| **WUAZ** | baz=4.6 **Wupatki** | **4.58** | **41** | | *e*Pn | **Pn** | **04 04 20.0** | **+1.8** |
| WUAZ | | | | | *e*Sg | **Sg** | **04 05 33.3** | **-2.7** |
| **CCUT** | **Cedar City** | **5.61** | **14** | | *e*Pn | **Pn** | **04 04 34.8** | **+2.5** |
| CCUT | comp=N,12nm,0.8s | | | | *e*Pg | Pg | 04 04 52.8 | -3.4 |
| CCUT | | | | | *e*Sn | **Sn** | **04 05 39.6** | **+2.8** |
| CCUT | | | | | *e*Sg | Sg | 04 06 03.0 | -5.9 |
| **121A** | **Cookes Peak, D** | **6.18** | **84** | | *e*Pn | **Pn** | **04 04 40.0** | **-0.1** |
| **R11A** | comp=N,9.1nm,0.6s **Troy Canyon, C** | **6.24** | **356** | | *e*Pn | **Pn** | **04 04 43.5** | **+2.5** |
| | comp=N,4.0nm,0.6s | | | | | | | |

*ISCJB **29** 04:04:12.9±0.5, 32.09N±0.02×115.02W±0.03, h23km±5km, Error ellipse: s-maj=4.4km s-min=3.8km az=175.9*
*ECX **29** 04:04:14.4±0.4, 32.07N×115.10W, h8km, MD3.7, ML3.9*
*MEX **29** 04:04:15.7±0.5, 32.16N×115.05W, h16km±456km, MD3.7*
**ISC 29 04:04:12.9±0.9, 32.09N±0.02×115.06W±0.03, h22km±9km, n41, σ0§73/63, 3C-5D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **MBIG** | **Mexicali** | **0.34** | **340** | | *e*P | **Pb** | **04 04 20.9** | **+0.5** |
| MBIG | | | | | *i*S | **Sb** | **04 04 24.7** | **-0.7** |
| **CPBX** | **Cerro Prieto** | **0.39** | **328** | | *e*P | **Pb** | **04 04 21.6** | **+0.4** |
| CPBX | | | | | *e*S | **Sb** | **04 04 26.9** | **+0.1** |
| **CPBX** | **Cerro Prieto** | **0.39** | **328** | | *e*P | **Pb** | **04 04 21.8** | **+0.6** |
| CPBX | | | | | *i*S | **Sb** | **04 04 25.1** | **-1.6** |
| **ECBX** | **El Chinero** | **0.62** | **179** | ⇓ | *e*P | **Pb** | **04 04 24.6** | **-0.4** |
| ECBX | | | | | *e*S | **Sb** | **04 04 33.2** | **0.0** |
| ECBX | | | | | *e* | | 04 04 35.1 | |
| ECBX | | | | | IAML | | 04 04 35.1 | |
| **EMSC** | comp=E,11μm,0.3s **East Mesa** | **0.65** | **6** | ⇓ | *i*P | **Pn** | **04 04 26.2** | **-0.6** |
| **RDX** | **Rancho Dawling** | **0.77** | **258** | | *e*P | **Pb** | **04 04 27.4** | **-0.4** |
| RDX | | | | | *e*S | **Sb** | **04 04 37.7** | **-0.1** |
| RDX | | | | | IAML | | 04 04 39.7 | |
| RDX | comp=N,3μm,0.3s | | | ⇓ | *e* | | 04 04 39.7 | |
| **RDX** | **Rancho Dawling** | **0.77** | **258** | | *e*P | **Pb** | **04 04 27.4** | **-0.4** |
| RDX | | | | | *e*S | **Sb** | **04 04 37.7** | **-0.1** |
| **DREC** | **Desert Rsrch C** | **0.79** | **335** | ⇑ | *i*P | **Pb** | **04 04 27.8** | **-0.1** |
| **SGL** | **Mount Signal** | **0.79** | **315** | ⇓ | *i*P | **Pn** | **04 04 28.4** | **-0.4** |
| **WESC** | **Westside Schoo** | **0.88** | **320** | | *e*P | **Pn** | **04 04 29.6** | **-0.3** |
| **YUH** | **Yuha Desert** | **0.92** | **308** | | *e*P | **Pb** | **04 04 30.2** | **0.0** |
| **GLA** | **Glamis** | **0.98** | **12** | | P | **Pn** | **04 04 30.6** | **-0.8** |
| GLA | baz=1.0 | | | | S | **Sb** | **04 04 44.2** | **+0.4** |
| **GLA** | baz=1.0 **Glamis** | **0.98** | **12** | | *e*Pg | **Pn** | **04 04 30.4** | **-1.0** |
| **RMX** | **La Rumorosa** | **1.00** | **301** | ⇑ | *e*P | **Pn** | **04 04 31.1** | **-0.7** |
| RMX | | | | | *e*S | **Sb** | **04 04 44.0** | **-0.5** |
| RMX | | | | | *e* | | 04 04 46.2 | |
| RMX | | | | | IAML | | 04 04 46.2 | |
| **RMX** | comp=N,3μm,0.2s **La Rumorosa** | **1.00** | **301** | | *e*P | **Pn** | **04 04 31.1** | **-0.7** |
| RMX | | | | | *e*S | **Sb** | **04 04 44.6** | **+0.1** |
| **IBP** | **Imperial Bould** | **1.04** | **303** | | *e*P | **Pn** | **04 04 32.1** | **-0.1** |
| **IBP** | **Imperial Bould** | **1.04** | **303** | | S | **Sn** | **04 04 46.4** | **+0.1** |
| **SPIG** | baz=1.0 **San Pedro Mart** | **1.10** | **199** | | *e*P | **Pn** | **04 04 33.2** | **-0.1** |
| SPIG | | | | | *e*S | **Sb** | **04 04 48.4** | **+1.0** |
| **SPIG** | **San Pedro Mart** | **1.10** | **199** | | *e*P | **Pn** | **04 04 33.3** | **+0.1** |
| SPIG | | | | | *e*S | **Sn** | **04 04 47.7** | **-0.2** |
| **SPIG** | **San Pedro Mart** | **1.10** | **199** | | *e*P | **Pn** | **04 04 33.2** | **-0.1** |
| SPIG | | | | | *e*S | **Sb** | **04 04 48.4** | **+1.0** |
| **SPX** | **San Pedro Mart** | **1.10** | **198** | | *e*P | **Pn** | **04 04 33.2** | **-0.1** |
| SPX | | | | | *e*S | **Sb** | **04 04 48.0** | **+0.6** |
| SPX | | | | | IAML | | 04 04 50.2 | |
| SPX | comp=N,1μm,0.2s | | | ⇓ | *e* | | 04 04 50.2 | |
| **SPX** | **San Pedro Mart** | **1.10** | **198** | | *e*P | **Pb** | **04 04 33.5** | **+0.1** |
| SPX | | | | | *e*S | **Sb** | **04 04 48.4** | **+1.0** |
| **ZAX** | **El Zacaton** | **1.18** | **241** | | *e*P | **Pn** | **04 04 34.0** | **-0.2** |
| ZAX | | | | | *e*S | **Sb** | **04 04 49.7** | **+0.1** |
| **CBX** | **Cerro Bola** | **1.38** | **280** | | *e*P | **Pn** | **04 04 36.9** | **-0.1** |
| CBX | | | | | *e*S | **Sn** | **04 04 53.1** | **-1.5** |
| **CBX** | **Cerro Bola** | **1.38** | **280** | | *e*P | **Pb** | **04 04 37.9** | **-0.2** |
| CBX | | | | | *e*S | **Sb** | **04 04 55.7** | **+0.3** |
| CBX | | | | ⇑ | *e* | | 04 04 58.0 | |
| CBX | | | | | IAML | | 04 04 58.0 | |
| **CBX** | comp=E,4μm,0.2s **Cerro Bola** | **1.38** | **280** | | *e*P | **Pb** | **04 04 37.9** | **-0.2** |
| CBX | | | | | *e*S | **Sb** | **04 04 55.7** | **+0.3** |
| **ECNX** | **Esteban Cantu** | **1.38** | **252** | | *e*P | **Pb** | **04 04 37.4** | **-0.6** |
| ECNX | | | | | *e*S | **Sb** | **04 04 55.4** | **+0.1** |
| **MONP** | **Monument Peak** | **1.40** | **305** | | Sb | **Sb** | **04 04 57.0** | **+1.0** |
| **PBX** | baz=1.4 **Punta Banda** | **1.46** | **257** | | *e*P | **Pn** | **04 04 38.4** | **+0.5** |
| PBX | | | | | *e*S | **Sb** | **04 04 57.6** | **+0.1** |
| **PBX** | **Punta Banda** | **1.46** | **257** | | *e*P | **Pn** | **04 04 38.4** | **+0.5** |
| PBX | | | | | *e*S | **Sb** | **04 04 57.6** | **+0.1** |
| **BAR** | **Barrett** | **1.49** | **294** | | *e*Pn | **Pb** | **04 04 40.1** | **+0.2** |
| **BC3** | **Big Chuckawall** | **1.60** | **348** | | P | **Pn** | **04 04 39.6** | **-0.3** |
| **109C** | baz=1.6 **Camp Elliot, M** | **1.90** | **295** | | Sb | **Sb** | **04 05 11.4** | **+1.1** |
| **214A** | baz=1.9 **Organ Pipe Nat** | **1.92

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **TKM2** | **Tokmak 2** | **51.50** | **337** | *e*P | | **P** | | **04 15 10.8** | **+1.2** |
| | 6.3nm,1.0s | | | | | | | | |
| **SONM** | **Songino Array** | **51.79** | **6** | P | | **P** | | **04 15 11.9** | **+0.4** |
| | 2.1nm,0.8s,baz=188,slow=9.3,SNR=12 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **52.01** | **336** | *e*P | | P | | 04 15 16.8 | +3.5 |
| | 1.8nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.79** | **345** | P | | **P** | | **04 15 19.4** | **+0.5** |
| | 0.9nm,0.9s,baz=158,slow=6.8,SNR=3.0 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.83** | **27** | P | | **P** | | **04 15 40.4** | **-0.6** |
| | 4.8nm,1.0s,baz=232,slow=4.6,SNR=6.0 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.97** | **350** | P | | **P** | | **04 16 02.5** | **-0.4** |
| | 0.7nm,0.3s,baz=151,slow=3.4,SNR=4.4 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **63.22** | **332** | *e*P | | **P** | | **04 16 31.4** | **-0.5** |
| | 2.2nm,0.8s | | | | | | | | |
| **MAW** | **Mawson** | **68.47** | **194** | LR | | LR | | 04 39 53.3 | |
| | comp=Z,24nm,20.4s,baz=65,slow=30 | | | | | | | | |
| **PSZ** | **Piszkesteto** | **86.17** | **318** | *e*P | | **P** | | **04 18 46.3** | **+1.3** |
| | 2.2nm,0.7s | | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.21** | **39** | PKPbc | | **PKPab** | | **04 25 47.2** | **+1.8** |
| | 0.4nm,0.7s,baz=197,slow=1.3,SNR=3.5 | | | | | | | | |

**IDC 29 04:14:11.5±10.0, 14°45S×167°03E, h137km±94km, mb3.0/2, mb1 3.3/3, mb1mx3.1/29, mbtmp3.5/3, Error ellipse: s-maj=82.6km s-min=43.6km az=177.0, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DZM** | **Mont Dzumac** | **7.60** | **184** | P | Pn | 04 15 59.8 | +0.1 |
| | 0.8nm,0.3s,baz=355,slow=14,SNR=13 | | | | | | |
| DZM | | | | S | Sn | 04 17 24.5 | +0.1 |
| | 0.6nm,0.3s,baz=0.0,slow=19,SNR=3.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **31.67** | **255** | P | P | 04 20 21.9 | -0.3 |
| | 0.2nm,0.3s,baz=86,slow=9.1,SNR=2.6 | | | | | | |
| **ASAR** | **Alice Springs** | **32.56** | **249** | P | P | 04 20 30.2 | +0.3 |
| | 0.5nm,0.4s,baz=76,slow=9.3,SNR=9.1 | | | | | | |
| **ARCES** | **ARCESS Array B** | **119.93** | **345** | PKP | PKPdf | 04 32 44.8 | -0.4 |
| | 3.4nm,0.8s,baz=11,slow=0.9,SNR=6.2 | | | | | | |

**MEX 29 04:16:38.9±0.6, 16°04N×98°30W, h7km±8km, MD3.9, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PNIG** | **Pinotepa** | **0.39** | **26** | *e*P | Pg | 04 16 45.7 | -0.9 |
| PNIG | | | | *e*S | Sg | 04 16 52.3 | +0.6 |
| **TLIG** | **Tlapa** | **1.54** | **351** | *e*P | Pn | 04 17 03.5 | -3.5 |
| TLIG | | | | *e*S | Sn | 04 17 21.8 | -5.5 |
| **HUIG** | **Huatulco** | **2.13** | **97** | *e*P | Pn | 04 17 12.1 | -2.8 |
| HUIG | | | | *e*S | Sn | 04 17 36.2 | -5.4 |
| **MEIG** | **Mezcala** | **2.26** | **326** | *e*P | Pn | 04 17 13.5 | -3.3 |
| MEIG | | | | *e*S | Sn | 04 17 41.7 | -3.4 |
| **TPIG** | **Tehuac#an** | **2.53** | **21** | *e*P | Pb | 04 17 24.2 | -0.8 |
| TPIG | | | | *i* S | Sb | 04 17 56.0 | -0.5 |

*FUNV **29** 04:32:09.3, 6°39N×73°59W, h139km, MW4.1*
*IDC **29** 04:32:09.2±1.7, 6°24N×73°48W, h139km±18km, mb3.4/5, mb1 3.7/5, mb1mx3.3/30, mbtmp3.8/5, Error ellipse: s-maj=29.9km s-min=26.1km az=87.0*
**ISC 29 04:32:08.3±0.8, 6°42N±0°07×73°44W±0°07, h150km, n28, σ2§48/39, mb3.1/5, 1C, Northern Colombia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ROSC** | **El Rosal** | **1.78** | **210** | P | **Pn** | **04 32 38.5** | **-2.9** |
| | 77nm,0.3s,baz=357,slow=2.0,SNR=205 | | | | | | |
| ROSC | | | | S | **Sn** | **04 33 03.1** | **-3.6** |
| | 142nm,0.3s,baz=254,slow=22,SNR=15 | | | | | | |
| **CAPV** | **Capacho** | **1.82** | **38** | *e*P | **Pn** | **04 32 42.2** | **+0.5** |
| CAPV | | | | *e*S | **Sn** | **04 33 07.5** | **+0.2** |
| **SOCV** | **Socops** | **3.17** | **54** | *e*P | **Pn** | **04 32 58.7** | **+0.9** |
| SOCV | | | | *e*S | **Sn** | **04 33 35.3** | **-0.9** |
| **VIGV** | **El Vigia** | **3.17** | **40** | *e*P | **Pn** | **04 32 58.4** | **+0.5** |
| VIGV | | | | *e*S | **Sn** | **04 33 35.3** | **-1.0** |
| **ELOV** | **Elorza** | **3.98** | **81⇑** | *e*P | **Pn** | **04 33 09.4** | **+1.1** |
| **VIRV** | **Villa del Rosa** | **4.19** | **14** | *e*P | **Pn** | **04 33 10.5** | **-0.6** |
| VIRV | | | | *e*S | **Sn** | **04 33 57.2** | **-2.7** |
| **QARV** | **Quebrada Arrib** | **4.75** | **37** | *e*P | **Pn** | **04 33 18.8** | **+0.4** |
| QARV | | | | *e*S | **Sn** | **04 34 10.8** | **-2.3** |
| **SANV** | **Sanarito** | **4.94** | **51** | *e*P | **Pn** | **04 33 21.0** | **0.0** |
| SANV | | | | *e*S | **Sn** | **04 34 14.8** | **-2.9** |
| **CURV** | **Curarigua** | **4.96** | **44** | *e*P | **Pn** | **04 33 21.4** | **+0.1** |
| CURV | | | | *e*S | **Sn** | **04 34 16.1** | **-2.2** |
| **DABV** | **Dabajuro** | **5.27** | **32** | *e*P | **Pn** | **04 33 25.9** | **+0.5** |
| DABV | | | | *e*S | **Sn** | **04 34 22.1** | **-3.4** |
| **TEPV** | **Terepaima** | **5.49** | **50** | *e*P | **Pn** | **04 33 29.3** | **+0.9** |
| **SIQV** | **Siquisique** | **5.53** | **40** | *e*P | **Pn** | **04 33 28.4** | **-0.5** |
| SIQV | | | | *e*S | **Sn** | **04 34 27.6** | **-4.3** |
| **BAUV** | **El Baul** | **5.91** | **65** | *e*P | **Pn** | **04 33 33.8** | **-0.1** |
| BAUV | | | | *e*S | **Sn** | **04 34 37.6** | **-3.2** |
| **MAPV** | **Macapo** | **5.99** | **55** | *e*P | **Pn** | **04 33 35.8** | **+0.8** |
| **MONV** | **Montecano** | **6.48** | **32** | *e*P | **Pn** | **04 33 41.7** | **+0.1** |
| **JACV** | **Jacura** | **6.50** | **44** | *e*S | **Sn** | **04 34 50.3** | **-4.8** |
| **TURV** | **Turiamo** | **6.84** | **54** | *e*P | **Pn** | **04 33 47.1** | **+0.8** |
| **MERV** | **Las Mercedes** | **7.62** | **68** | *e*P | **Pn** | **04 33 57.0** | **+0.3** |
| **BIRV** | **Birongo** | **8.16** | **60** | *e*P | **Pn** | **04 34 04.5** | **+0.5** |
| **CUPV** | **Cœpira** | **8.39** | **64** | *e*P | **Pn** | **04 34 07.6** | **+0.5** |
| **PCRV** | **Puerto La Cruz** | **9.48** | **66** | *e*P | **Pn** | **04 34 21.9** | **+0.3** |
| **TXAR** | **Lajitas Array** | **36.49** | **312** | P | **P** | **04 39 01.7** | **+2.3** |
| | 0.4nm,1.0s,baz=130,slow=9.7,SNR=2.4 | | | | | | |
| **SCHQ** | **Schefferville** | **48.57** | **5** | P | P | 04 40 40.0 | +3.7 |
| | 4.5nm,0.9s,baz=198,slow=13,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.13** | **78** | P | **P** | **04 43 31.0** | **+2.0** |
| | 0.4nm,1.0s,baz=286,slow=6.1,SNR=5.0 | | | | | | |
| **ILAR** | **Eielson Array** | **77.19** | **335** | P | **P** | **04 43 48.0** | **+2.6** |
| | 0.3nm,0.8s,baz=88,slow=5.2,SNR=3.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.16** | **20** | P | P | 04 44 40.8 | +3.6 |
| | 5.7nm,1.0s,baz=281,slow=4.1,SNR=7.4 | | | | | | |
| **ASAR** | **Alice Springs** | **148.62** | **234** | PKPbc | **PKPbc** | **04 51 40.2** | **+1.6** |
| | 0.3nm,0.6s,baz=119,slow=4.2,SNR=3.5 | | | | | | |
| ASAR | | | | pPKPbc | **pPKPbc** | **04 52 11.4** | **-6.7** |
| | 0.4nm,0.4s,baz=112,slow=3.1,SNR=4.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **149.86** | **241** | PKPbc | **PKPbc** | **04 51 42.9** | **+1.1** |
| | 0.4nm,0.4s,baz=109,slow=2.3,SNR=6.7 | | | | | | |
| WRA | | | | pPKPbc | **pPKPbc** | **04 52 15.2** | **-6.1** |
| | 0.6nm,0.4s,baz=109,slow=2.7,SNR=9.3 | | | | | | |

*ISCJB **29** 04:35:15.5±0.5, 50°16N±0°03×19°03E±0°03, h0km, Error ellipse: s-maj=5.1km s-min=2.4km az=19.6*
*CSEM **29** 04:35:16.3±0.3, 50°17N×19°07E, h2km, ML3.3/5, Error ellipse: s-maj=7.5km s-min=3.4km az=9.0*
**ISC 29 04:35:17.0±0.8, 50°07N±0°03×19°11E±0°02, h0km, n34, σ0§84/58, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OJC** | **Ojcow** | **0.47** | **71** | *e*Pg | **Pg** | **04 35 25.4** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **04 35 31.5** | **-0.4** |
| **OJC** | **Ojcow** | **0.47** | **71** | *e*Pg | **Pg** | **04 35 25.4** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **04 35 31.5** | **-0.4** |
| **OKC** | **Ostrava-Krasne** | **0.67** | **250** | *e*PG | **Pb** | **04 35 30.7** | **-0.8** |
| OKC | | | | *e*SG | **Sb** | **04 35 40.6** | **-0.7** |
| | comp=Z,52nm,0.4s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.67** | **250** | Pg | **Pb** | **04 35 30.7** | **-0.8** |
| OKC | | | | Sg | **Sb** | **04 35 40.6** | **-0.7** |
| | 52nm,0.4s | | | | | | |
| **LANS** | **Liptovska Anna** | **0.95** | **166** | *e*PG | **Pb** | **04 35 36.3** | **0.0** |
| LANS | | | | *e*SG | **Sb** | **04 35 49.8** | **+0.3** |
| **LANS** | **Liptovska Anna** | **0.95** | **166** | *e*Pg | **Pb** | **04 35 36.3** | **0.0** |
| LANS | | | | *e*Sg | **Sb** | **04 35 49.8** | **+0.3** |
| **NIE** | **Niedzica** | **1.01** | **130** | *e*Pg | **Pg** | **04 35 36.6** | **+0.3** |
| NIE | | | | *e*Sg | **Sn** | **04 35 52.7** | **-0.7** |
| **NIE** | **Niedzica** | **1.01** | **130** | *e*Pg | **Pg** | **04 35 36.6** | **+0.3** |
| NIE | | | | *e*Sg | **Sn** | **04 35 52.7** | **-0.7** |
| **MORC** | **Moravsky Berou** | **1.06** | **254** | *e*Pg | **Pg** | **04 35 37.4** | **+0.2** |
| MORC | | | | *e*Sg | **Sg** | **04 35 50.8** | **-0.1** |
| **KRLC** | **Kraliky** | **1.50** | **271** | *e*SG | **Sg** | **04 36 04.8** | **-0.4** |
| **KRLC** | **Kraliky** | **1.50** | **271** | Sg | **Sg** | **04 36 04.8** | **-0.4** |
| **STHS** | **Stebnicka Huta** | **1.53** | **115** | *e*PN | **Pg** | **04 35 46.6** | **+0.3** |
| STHS | | | | *e*SN | **Sn** | **04 36 08.8** | **+2.6** |
| **STHS** | **Stebnicka Huta** | **1.53** | **115** | *e*Pn | **Pg** | **04 35 46.6** | **+0.3** |
| STHS | | | | *e*Sn | **Sn** | **04 36 08.8** | **+2.6** |
| **VYHS** | **Vyhne** | **1.59** | **187** | *e*PN | **Pn** | **04 35 46.2** | **-0.2** |
| VYHS | | | | *e*SN | **Sg** | **04 36 07.9** | **-0.1** |
| **VYHS** | **Vyhne** | **1.59** | **187** | *e*Pn | **Pn** | **04 35 46.2** | **-0.2** |
| VYHS | | | | *e*Sn | **Sg** | **04 36 07.9** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **1.81** | **280** | *e*PG | **Pn** | **04 35 48.9** | **-0.6** |
| DPC | | | | *e*SG | **Sn** | **04 36 13.7** | **+0.4** |
| | comp=Z,52nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.81** | **280** | Pg | **Pn** | **04 35 48.9** | **-0.6** |
| DPC | | | | Sg | **Sn** | **04 36 13.7** | **+0.4** |
| | 52nm,0.4s | | | | | | |
| **SMOL** | **Smolenice** | **1.91** | **216** | *e*SN | **Sn** | **04 36 15.4** | **-0.1** |
| **SMOL** | **Smolenice** | **1.91** | **216** | *e*Sn | **Sn** | **04 36 15.5** | **-0.1** |
| **KSP** | **Ksiaz** | **1.96** | **294** | *e*Pn | **Pn** | **04 35 51.3** | **-0.2** |
| KSP | | | | *e*Pg | **Pg** | **04 35 54.3** | **-0.3** |
| KSP | | | | *e*Sg | **Sb** | **04 36 18.7** | **+0.1** |
| **PSZ** | **Piszkesteto** | **2.21** | **166** | *e*Sn | **Sb** | **04 36 25.3** | **-0.6** |
| **KOLS** | **Kolonicke sedl** | **2.35** | **118** | *e* | **Pg** | **04 36 01.3** | **-0.8** |
| **KOLS** | **Kolonicke sedl** | **2.35** | **118** | *e*SN | **Sn** | **04 36 26.0** | **-0.5** |
| **KOLS** | **Kolonicke sedl** | **2.35** | **118** | *e*Sn | **Sn** | **04 36 26.0** | **-0.5** |
| **GOPC** | **GO Pecny, Ondr** | **2.80** | **268** | *e*PN | **Pn** | **04 36 02.4** | **-0.6** |
| GOPC | | | | *e*PG | **Pb** | **04 36 07.8** | **0.0** |
| **GOPC** | **GO Pecny, Ondr** | **2.80** | **268** | Pn | **Pn** | **04 36 02.4** | **-0.6** |
| **PRU** | **Pruhonice** | **2.95** | **270** | *e*SG | **Sb** | **04 36 49.2** | **+2.2** |
| | comp=Z,10nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **2.95** | **270** | Sg | **Sb** | **04 36 49.2** | **+2.2** |
| | 10nm,0.4s | | | | | | |
| **PVCC** | **Panska Ves** | **2.95** | **281** | *e*SG | **Sg** | **04 36 51.4** | **-0.3** |
| | comp=Z,28nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **2.95** | **281** | Sg | **Sg** | **04 36 51.4** | **-0.3** |
| | 28nm,0.3s | | | | | | |
| **BRG** | **Berggiesshubel** | **3.40** | **286** | PG | **Pb** | **04 36 19.2** | **+1.1** |
| BRG | | | | SG | **Sg** | **04 37 05.8** | **-0.4** |
| | 12nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.72** | **257** | *e*PN | **Pn** | **04 36 15.3** | **-0.4** |
| KHC | | | | *e*SG | **Sg** | **04 37 15.6** | **-0.9** |
| | comp=Z,9.5nm,0.5s | | | | | | |
| **KHC** | **Kasperske Hory** | **3.72** | **257** | Pn | **Pn** | **04 36 15.3** | **-0.4** |
| KHC | | | | Sg | **Sg** | **04 37 15.6** | **-0.9** |
| | 9.5nm,0.5s | | | | | | |
| **CLL** | **Collm** | **4.08** | **290** | *i* Pg | Pg | 04 36 38.8 | +3.7 |
| CLL | | | | *e*Sg | **Sg** | **04 37 27.0** | **-0.9** |
| | comp=Z,7.0nm,0.5s | | | | | | |

*IDC **29** 04:45:38.1±1.6, 3°23S×100°00E, h0km, mb4.1/8, mb1 4.3/10, mb1mx3.9/37, mbtmp4.2/10, ML4.2/2, MS3.1/4, Ms1 3.2/4, ms1mx2.7/37, Error ellipse: s-maj=55.7km s-min=16.7km az=52.0*
*NEIC **29** 04:45:39.6±0.9, 3°25S×100°02E, h10km, mb4.2/5, Error ellipse: s-maj=32.9km s-min=7.5km az=45.0*
*ISCJB **29** 04:45:40.1±0.6, 3°24S±0°05×100°05E±0°06, h27km, mb4.2/12, MS3.0/4, Error ellipse: s-maj=10.6km s-min=4.5km az=143.0*
*DJA **29** 04:45:41.9±0.6, 3°S±4°×10°0E±°, h31km±4km, M4.4/12, mb4.8/2, MLv4.2/12*
**ISC 29 04:45:42.2±0.8, 3°18S±0°08×100°08E±0°09, h27km, n38, σ0§86/35, mb4.3/12, MS3.1/4, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.42** | **350** | P | **Pb** | **04 45 51.5** | **+0.2** |
| PPSI | | | | S | **Sn** | **04 45 59.2** | **-0.3** |
| **SISI** | **Saibi** | **2.09** | **332** | P | **Pn** | **04 46 14.8** | **-0.7** |
| SISI | | | | S | **Sn** | **04 46 40.4** | **-0.3** |
| **MASI** | **Maura Aman, Be** | **2.16** | **89** | P | **Pn** | **04 46 15.3** | **-1.1** |
| **PDSI** | **Padang** | **2.29** | **10** | P | **Pn** | **04 46 17.0** | **-1.2** |
| **SDSI** | **Sungai Dareh** | **2.61** | **31** | P | **Pn** | **04 46 22.2** | **-0.4** |
| SDSI | | | | S | **Sn** | **04 46 53.2** | **-0.3** |
| **PPI** | **Padang Panjang** | **2.73** | **7** | P | **Pn** | **04 46 23.9** | **-0.3** |
| **MNAI** | **Manna** | **3.10** | **112** | P | **Pn** | **04 46 29.1** | **-0.3** |
| **MNAI** | **Manna** | **3.10** | **112** | *e*Pn | **Pn** | **04 46 29.5** | **+0.1** |
| MNAI | | | | *e*Sn | **Sn** | **04 47 05.6** | **0.0** |
| **LHSI** | **Lahat** | **3.50** | **101** | P | **Pn** | **04 46 35.6** | **+0.8** |
| **MDSI** | **Maura Dua** | **4.29** | **108** | P | **Pn** | **04 46 46.4** | **+0.7** |
| **KASI** | **Kota Agung** | **4.98** | **118** | P | **Pn** | **04 46 55.0** | **-0.2** |
| **CGJI** | **Cibinong** | **6.55** | **122** | P | **Pn** | **04 47 16.0** | **-0.8** |
| | 37nm,0.9s,0.2nm | | | | | | |
| **LEM** | **Lembang** | **8.33** | **116** | Pn | **Pn** | **04 47 42.4** | **+0.9** |
| | 3.2nm,0.3s,baz=323,slow=20,SNR=2.4 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.84** | **120** | P | **Pn** | **04 47 46.5** | **-1.8** |
| **CISI** | **Cisompet, Garu** | **8.84** | **120** | *e*Pn | **Pn** | **04 47 46.1** | **-2.2** |
| | 32nm,0.5s | | | | | | |
| **KAPI** | **Kappang** | **19.70** | **96** | P | **Pn** | **04 50 11.5** | **+0.2** |
| | 0.7nm,0.3s,baz=261,slow=19,SNR=5.4 | | | | | | |
| **KAPI** | **Kappang** | **19.70** | **96** | *e*P | **P** | **04 50 10.1** | **+0.3** |
| | 7.5nm,0.8s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.53** | **357** | P | **P** | **04 50 28.7** | **-0.8** |
| | 0.8nm,0.3s,baz=181,slow=9.0,SNR=2.3 | | | | | | |
| CMAR | | | | LR | LR | 04 58 21.0 | |
| | comp=Z,36nm,19.1s,baz=177,slow=35 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.81** | **260** | T | T | 05 20 36.6 | |
| | baz=82,slow=75,SNR=2070 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.82** | **260** | T | T | 05 20 34.4 | |
| | baz=82,slow=75,SNR=1463 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.83** | **260** | T | T | 05 20 36.2 | |
| | baz=82,slow=75,SNR=1628 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.14** | **159** | T | T | 05 28 23.1 | |
| | baz=336,slow=76,SNR=117 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.15** | **159** | T | T | 05 28 24.1 | |
| | baz=336,slow=76,SNR=98 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.15** | **159** | T | T | 05 28 24.4 | |
| | baz=336,slow=76,SNR=93 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.34** | **119** | P | **P** | **04 52 52.0** | **-0.7** |
| | 0.9nm,0.5s,baz=306,slow=9.3,SNR=14 | | | | | | |
| WRA | | | | LR | LR | 05 09 45.6 | |
| | comp=Z,40nm,21.1s,baz=330,slow=39 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.34** | **119** | *e*P | **P** | **04 52 53.5** | **+0.7** |
| | 2.0nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **38.50** | **125** | P | **P** | **04 53 02.5** | **0.0** |
| | 0.8nm,0.5s,baz=301,slow=7.7,SNR=11 | | | | | | |
| ASAR | | | | LR | LR | 05 10 45.6 | |
| | comp=Z,33nm,20.5s,baz=329,slow=39 | | | | | | |
| **KSRS** | **Korea Array** | **47.99** | **30** | LR | LR | 05 15 54.4 | |
| | comp=Z,17nm,18.9s,baz=190,slow=38 | | | | | | |
| **CTAO** | **Charters Tower** | **48.03** | **114** | *e*P | **P** | **04 54 19.4** | **-0.2** |
| | 5.2nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **50.95** | **337** | *e*P | **P** | **04 54 42.8** | **+1.2** |
| | 1.9nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **51.11** | **5** | P | **P** | **04 54 43.3** | **+0.7** |
| | 3.0nm,0.7s,baz=187,slow=9.3,SNR=22 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.18** | **345** | P | **P** | **04 54 51.5** | **+0.9** |
| | 3.2nm,0.7s,baz=144,slow=8.5,SNR=18 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.16** | **28** | P | **P** | **04 55 11.7** | **-0.7** |
| | 3.5nm,0.7s,baz=227,slow=7.1,SNR=8.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.34** | **349** | P | **P** | **04 55 35.1** | **+0.4** |
| | 2.4nm,0.7s,baz=183,slow=5.5,SNR=8.8 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.71** | **332** | *e*P | **P** | **04 56 04.8** | **+0.1** |
| | 0.9nm,0.6s | | | | | | |
| **FINES** | **FINESS Array B** | **85.19** | **332** | P | **P** | **04 58 14.6** | **-1.3** |
| | 2.0nm,0.9s,baz=146,slow=11,SNR=3.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.46** | **40** | PKP | **PKPdf** | **05 04 52.4** | **+1.2** |
| | 0.2nm,0.3s,baz=212,slow=5.3,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.58** | **38** | PKPbc | **PKPab** | **05 05 20.1** | **+0.8** |
| | 2.0nm,0.7s,baz=225,slow=0.8,SNR=26 | | | | | | |

*IDC **29** 04:54:41.4±3.0, 25°63S×67°50W, h0km, mb4.0/2, mb1 4.2/3, mb1mx3.9/16, mbtmp4.1/3, ML4.4/1, Error ellipse: s-maj=70.7km s-min=52.4km az=48.0*
*SJA **29** 04:55:13.0±0.6, 23°30S×66°96W, h200km±24km, ML2.7, MW3.6*
*ISCJB **29** 04:55:14.6±1.2, 23°35S±0°07×66°9W±0°2, h196km, mb3.5/1, Error ellipse: s-maj=19.9km s-min=9.1km az=174.5*
**ISC 29 04:55:12.3±2.0, 23°29S±0°09×67°1W±0°2, h196km, n9, σ1§02/11, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HJA** | **Humahuaca** | **1.54** | **87** | *i* P | **Pn** | **04 55 47.7** | **+1.2** |
| HJA | | | | *i* S | **Sn** | **04 56 12.6** | **-0.2** |
| **YJA** | **Yavi** | **1.82** | **53** | *i* P | **Pn** | **04 55 50.6** | **+1.5** |
| **SLA** | **San Lorenzo** | **2.03** | **135** | *i* P | **Pn** | **04 55 51.9** | **+0.9** |
| SLA | | | | IAML | | 04 55 53.4 | |
| | comp=Z,28nm,0.6s | | | | | | |
| SLA | | | | *i* S | **Sn** | **04 56 20.7** | **-0.4** |
| **FSA** | **Cafayete** | **2.96** | **161** | *i* P | **Pn** | **04 56 02.7** | **+1.3** |
| FSA | | | | *i* S | **Sn** | **04 56 39.9** | **0.0** |
| **AHML** | **Horco Molle** | **3.83** | **156** | *i* P | **Pn** | **04 56 12.5** | **+0.7** |
| **LPAZ** | **La Paz** | **7.03** | **352** | Pn | Pn | 04 56 57.5 | +3.9 |
| | comp=Z,1.8nm,0.3s,baz=167,slow=11,SNR=46 | | | | | | |
| **BDFB** | **Brasilia** | **19.51** | **70** | P | **P** | **04 59 24.3** | **-0.6** |
| | comp=Z,6.3nm,0.8s,baz=251,slow=10,SNR=13 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.38** | **69** | P | **P** | **05 06 39.5** | **-0.9** |
| | comp=Z,0.5nm,0.4s,baz=259,slow=5.7,SNR=21 | | | | | | |
| **MKAR** | **Makanchi Array** | **146.02** | **39** | PKPbc | **PKPbc** | **05 14 28.5** | **-0.4** |
| | comp=Z,0.6nm,0.6s,baz=302,slow=6.3,SNR=2.9 | | | | | | |

*CSEM **29** 04:57:28.7±0.1, 44°74N×21°61E, h5km, ML2.1, Error ellipse: s-maj=3.4km s-min=2.2km az=116.0*
*BUC **29** 04:57:29.6±1.2, 44°78N×21°59E, h18km±9km, MD2.5/2, Error ellipse: s-maj=4.9km s-min=2.9km az=113.0*
*BEO **29** 04:57:29.2±0.2, 44°73N×21°64E, h0km, ML2.1/1*
**ISC 29 04:57:28.6±1.1, 44°73N±0°02×21°64E±0°02, h4km±10km, n46, σ0§37/74, 18C-9D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUBS** | **Kucevo** | **0.32** | **176** | ⇓*i*Pg | **Pg** | **04 57 34.1** | **-0.6** |
| **KUBS** | **Kucevo** | **0.32** | **176** | ⇓*i*Pg | **Pg** | **04 57 34.1** | **-0.6** |
| **BANR** | **Banloc** | **0.74** | **331** | ⇑*i*P | **Pg** | **04 57 43.3** | **+0.5** |
| BANR | | | | *i* S | **Sg** | **04 57 53.1** | **+0.6** |
| **BANR** | **Banloc** | **0.74** | **331** | ⇑*i*P | **Pg** | **04 57 43.3** | **+0.5** |
| **BANR** | **Banloc** | **0.74** | **331** | ⇑*i*P | **Pg** | **04 57 43.3** | **+0.5** |
| BANR | | | | S | **Sg** | **04 57 53.1** | **+0.6** |
| **BZS** | **Buzias** | **0.89** | **359** | *e*Pg | **Pg** | **04 57 45.5** | **0.0** |
| BZS | | | | *e*Sg | **Sg** | **04 57 57.7** | **+0.7** |
| **BZS** | **Buzias** | **0.89** | **359** | ⇑*i*P | **Pg** | **04 57 45.5** | **0.0** |
| BZS | | | | *i* S | **Sb** | **04 57 58.2** | **-0.5** |
| **BZS** | **Buzias** | **0.89** | **359** | ⇑*i*P | **Pg** | **04 57 45.5** | **0.0** |
| **BZS** | **Buzias** | **0.89** | **359** | ⇑*i*P | **Pg** | **04 57 45.5** | **0.0** |
| BZS | | | | *e*Sg | **Sg** | **04 57 57.7** | **+0.7** |
| BZS | | | | S | **Sb** | **04 57 58.2** | **-0.5** |
| **TRUS** | **Trudelj** | **1.02** | **241** | ⇑*i*Pg | **Pg** | **04 57 48.2** | **+0.1** |
| TRUS | | | | *e*Sg | **Sg** | **04 58 01.2** | **-0.1** |
| **TRUS** | **Trudelj** | **1.02** | **241** | ⇑*i*Pg | **Pg** | **04 57 48.2** | **+0.1** |
| TRUS | | | | *e*Sg | **Sg** | **04 58 01.2** | **-0.1** |
| **GZR** | **Gura Zlata** | **1.04** | **50** | ⇓*i*Pg | **Pg** | **04 57 48.2** | **-0.3** |
| GZR | | | | *i* Sg | **Sg** | **04 58 01.9** | **-0.2** |
| **GZR** | **Gura Zlata** | **1.04** | **50** | ⇑*i*P | **Pg** | **04 57 48.3** | **-0.3** |
| GZR | | | | *i* S | **Sb** | **04 58 03.0** | **-0.2** |
| **GZR** | **Gura Zlata** | **1.04** | **50** | ⇑*i*P | **Pg** | **04 57 48.3** | **-0.3** |
| **GZR** | **Gura Zlata** | **1.04** | **50** | ⇑*i*P | **Pg** | **04 57 48.3** | **-0.3** |
| GZR | | | | *i* Sg | **Sg** | **04 58 01.9** | **-0.2** |
| GZR | | | | S | **Sb** | **04 58 03.0** | **-0.2** |
| **GRUS** | **Gruza** | **1.07** | **219** | *e*Pg | **Pb** | **04 57 49.8** | **+0.1** |
| GRUS | | | | *e*Sg | **Sg** | **04 58 03.0** | **0.0** |
| **GRUS** | **Gruza** | **1.07** | **219** | *e*Pg | **Pb** | **04 57 49.8** | **+0.1** |
| GRUS | | | | *e*Sg | **Sg** | **04 58 03.0** | **0.0** |
| **BOVS** | **Bovan** | **1.10** | **178** | ⇑*i*Pg | **Pg** | **04 57 49.6** | **0.0** |
| BOVS | | | | *i* Sg | **Sb** | **04 58 05.1** | **+0.4** |
| **BOVS** | **Bovan** | **1.10** | **178** | ⇑*i*Pg | **Pg** | **04 57 49.6** | **0.0** |
| BOVS | | | | *i* Sg | **Sb** | **04 58 05.1** | **+0.4** |
| **SRE** | **Strehaia** | **1.12** | **93** | S | **Sn** | **04 58 07.4** | **+0.6** |
| **DIVS** | **Divibare** | **1.34** | **242** | *e*Pg | **Pn** | **04 57 54.2** | **+0.1** |
| DIVS | | | | *e*Sg | **Sb** | **04 58 11.6** | **-0.2** |
| **DIVS** | **Divibare** | **1.34** | **242** | ⇑*i*P | **Pn** | **04 57 54.0** | **-0.1** |
| DIVS | | | | *i* S | **Sb** | **04 58 11.6** | **-0.2** |
| **DIVS** | **Divibare** | **1.34** | **242** | ⇑*i*P | **Pn** | **04 57 54.0** | **-0.1** |
| **DIVS** | **Divibare** | **1.34** | **242** | *e*Pg | **Pn** | **04 57 54.2** | **+0.1** |
| DIVS | | | | S | **Sb** | **04 58 11.6** | **-0.2** |
| **TEKS** | **Tekeris** | **1.52** | **264** | *e*Pg | **Pn** | **04 57 56.0** | **-0.5** |
| **TEKS** | **Tekeris** | **1.52** | **264** | *e*Pg | **Pn** | **04 57 56.0** | **-0.5** |
| **SIRR** | **Siria** | **1.54** | **0** | ⇓*i*P | **Pn** | **04 57 56.4** | **-0.4** |
| SIRR | | | | *i* S | **Sn** | **04 58 16.5** | **-0.7** |
| **SIRR** | **Siria** | **1.54** | **0** | ⇓*i*P | **Pn** | **04 57 56.4** | **-0.4** |
| **SIRR** | **Siria** | **1.54** | **0** | ⇓*i*P | **Pn** | **04 57 56.4** | **-0.4** |
| SIRR | | | | S | **Sn** | **04 58 16.5** | **-0.7** |
| **SELS** | **Selova** | **1.56** | **194** | *e*Pn | **Pb** | **04 57 57.7** | **-0.3** |
| SELS | | | | *e*Sn | **Sb** | **04 58 18.5** | **+0.5** |
| **ZAPS** | **Zavoj**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **CGJI** | **Cibinong** | **6.99** | **118** | P | **Pn** | **05 09 16.2** | **-2.1** |
| **PALK** | **Pallekele** | **21.51** | **299** | LR | LR | 05 18 30.5 | |
| | comp=Z,21nm,19.2s,baz=33,slow=31 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.67** | **359** | P | **P** | **05 12 27.7** | **+1.5** |
| | 0.5nm,0.3s,baz=190,slow=9.7,SNR=9.5 | | | | | | |
| CMAR | | | | LR | LR | 05 21 26.8 | |
| | comp=Z,19nm,19.0s,baz=246,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.20** | **260** | T | T | 05 42 37.7 | |
| | baz=81,slow=75,SNR=20 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.21** | **260** | T | T | 05 42 37.1 | |
| | baz=81,slow=75,SNR=26 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.22** | **260** | T | T | 05 42 35.7 | |
| | baz=81,slow=75,SNR=15 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.21** | **158** | T | T | 05 50 54.6 | |
| | baz=333 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.22** | **158** | T | T | 05 50 56.3 | |
| | baz=333 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.22** | **158** | T | T | 05 50 57.7 | |
| | baz=333 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.78** | **119** | P | **P** | **05 14 48.8** | **-2.8** |
| | 0.6nm,0.6s,baz=297,slow=9.4,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.90** | **124** | P | **P** | **05 14 59.4** | **-1.6** |
| | 0.4nm,0.5s,baz=298,slow=7.3,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **51.32** | **6** | P | **P** | **05 16 40.2** | **+0.9** |
| | 1.1nm,0.7s,baz=188,slow=8.0,SNR=6.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.18** | **345** | P | **P** | **05 16 45.5** | **-0.1** |
| | 1.3nm,0.6s,baz=150,slow=8.4,SNR=7.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.39** | **350** | P | **P** | **05 17 30.8** | **+0.7** |
| | 1.9nm,0.5s,baz=186,slow=4.5,SNR=6.3 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.26** | **340** | P | **P** | **05 17 49.8** | **-0.1** |
| | 0.8nm,0.6s,baz=159,slow=13,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.07** | **38** | PKPbc | **PKPab** | **05 27 17.1** | **+0.9** |
| | 1.0nm,0.7s,baz=293,slow=0.4,SNR=14 | | | | | | |

*ISCJB **29** 05:13:57.2±0.8,51°.54N±0°.04×16°.07E±0°.04, h0km, Error ellipse: s-maj=5.9km s-min=3.1km az=17.3*
*CSEM **29** 05:13:59.3±0.4, 51°.51N×16°.04E, h2km, ML3.1/7, Error ellipse: s-maj=6.8km s-min=3.6km az=1.0*

**ISC 29 05:13:59.5±1.1, 51°.51N±0°.05×16°.03E±0°.03, h0km, n27, σ0s64/48, Poland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.69** | **166** | *e*Pg | **Pg** | **05 14 13.2** | **+0.6** |
| KSP | | | | *e*Sg | **Sb** | **05 14 23.0** | **-1.4** |
| **UPC** | **Upice** | **1.00** | **181** | *i* Pg | **Pg** | **05 14 19.1** | **+0.4** |
| UPC | | | | *e*SG | **Sb** | **05 14 33.2** | **-0.3** |
| | comp=Z,39nm,0.3s | | | | | | |
| **UPC** | **Upice** | **1.00** | **181** | Pg | **Pg** | **05 14 19.1** | **+0.4** |
| UPC | | | | Sg | **Sb** | **05 14 33.2** | **-0.3** |
| | 39nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.18** | **171** | *i* PG | **Pg** | **05 14 22.0** | **0.0** |
| DPC | | | | *e*SG | **Sg** | **05 14 37.7** | **+0.5** |
| | comp=Z,16nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.18** | **171** | Pg | **Pg** | **05 14 22.0** | **0.0** |
| DPC | | | | Sg | **Sg** | **05 14 37.7** | **+0.5** |
| | 16nm,0.3s | | | | | | |
| **PVCC** | **Panska Ves** | **1.35** | **224** | *i* PG | **Pb** | **05 14 25.9** | **+0.3** |
| PVCC | | | | *e*SG | **Sn** | **05 14 44.8** | **+0.7** |
| | comp=Z,71nm,0.2s | | | | | | |
| **PVCC** | **Panska Ves** | **1.35** | **224** | Pg | **Pb** | **05 14 25.9** | **+0.3** |
| PVCC | | | | Sg | **Sn** | **05 14 44.8** | **+0.7** |
| | 71nm,0.2s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.46** | **245** | PG | **Pb** | **05 14 27.6** | **+0.2** |
| BRG | | | | SG | **Sn** | **05 14 47.6** | **+0.8** |
| | 61nm,0.4s | | | | | | |
| **KRLC** | **Kraliky** | **1.52** | **161** | *e*PG | **Pn** | **05 14 27.3** | **-0.6** |
| KRLC | | | | *e*SG | **Sg** | **05 14 47.9** | **-0.2** |
| **KRLC** | **Kraliky** | **1.52** | **161** | Pg | **Pn** | **05 14 27.3** | **-0.6** |
| KRLC | | | | Sg | **Sg** | **05 14 47.9** | **-0.2** |
| **GOPC** | **GO Pecny, Ondr** | **1.78** | **207** | *e*PG | **Pb** | **05 14 33.1** | **+0.1** |
| **GOPC** | **GO Pecny, Ondr** | **1.78** | **207** | Pg | **Pb** | **05 14 33.1** | **+0.1** |
| **PRU** | **Pruhonice** | **1.79** | **212** | *e*PG | **Pb** | **05 14 32.9** | **-0.2** |
| PRU | | | | *e*SG | **Sg** | **05 14 57.2** | **+0.2** |
| | comp=Z,12nm,0.3s | | | | | | |
| **PRU** | **Pruhonice** | **1.79** | **212** | Pg | **Pb** | **05 14 32.9** | **-0.2** |
| PRU | | | | Sg | **Sg** | **05 14 57.2** | **+0.2** |
| | 12nm,0.3s | | | | | | |
| **CLL** | **Collm** | **1.91** | **265** | *i* Pn | **Pn** | **05 14 31.9** | **-1.3** |
| | comp=Z,6.0nm,0.4s | | | | | | |
| CLL | | | | *i* Pg | **Pb** | **05 14 34.6** | **-0.5** |
| CLL | | | | *i* | | 05 14 39.0 | |
| CLL | | | | *i* Sg | **Sg** | **05 15 00.8** | **+0.2** |
| | comp=Z,7.0nm,0.4s | | | | | | |
| **MORC** | **Moravsky Berou** | **1.99** | **150** | *e*Pn | **Pn** | **05 14 33.2** | **-1.1** |
| MORC | | | | *e*Sg | **Sg** | **05 15 02.3** | **-0.9** |
| **OKC** | **Ostrava-Krasne** | **2.15** | **140** | *e*SG | **Sg** | **05 15 08.2** | **-0.3** |
| | comp=Z,24nm,0.6s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.15** | **140** | Sg | **Sg** | **05 15 08.2** | **-0.3** |
| | comp=Z,24nm,0.6s | | | | | | |
| **VRAC** | **Vranov** | **2.23** | **170** | *e*Pn | **Pn** | **05 14 37.4** | **-0.3** |
| VRAC | | | | *e*Sg | **Sg** | **05 15 10.3** | **-0.9** |
| **NKC** | **Novy Kostel** | **2.60** | **242** | *e*PN | **Pn** | **05 14 43.0** | **+0.2** |
| NKC | | | | *e*PG | **Pg** | **05 14 49.0** | **-0.3** |
| NKC | | | | *e*SG | **Sg** | **05 15 23.5** | **+0.5** |
| | comp=Z,16nm,0.4s | | | | | | |
| **NKC** | **Novy Kostel** | **2.60** | **242** | Pn | **Pn** | **05 14 43.0** | **+0.2** |
| **OJC** | **Ojcow** | **2.72** | **117** | *e*Pg | **Pg** | **05 14 51.0** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **05 15 26.7** | **0.0** |
| **OJC** | **Ojcow** | **2.72** | **117** | *e*Pg | **Pg** | **05 14 51.0** | **-0.5** |
| OJC | | | | *e*Sg | **Sg** | **05 15 26.7** | **0.0** |
| **KHC** | **Kasperske Hory** | **2.85** | **214** | *e*PG | **Pb** | **05 14 51.2** | **0.0** |
| KHC | | | | *e*SG | **Sg** | **05 15 30.2** | **-0.9** |
| | comp=Z,5.2nm,0.4s | | | | | | |
| **VYHS** | **Vyhne** | **3.52** | **148** | *e*SG | Sg | 05 16 00.3 | +7.8 |
| **STHS** | **Stebnicka Huta** | **3.94** | **120** | *e*PG | **Pg** | **05 15 15.7** | **+0.8** |
| STHS | | | | *e*SG | **Sb** | **05 15 59.9** | **+2.0** |
| **STHS** | **Stebnicka Huta** | **3.94** | **120** | *e*Pg | **Pg** | **05 15 15.7** | **+0.8** |

**IDC 29 05:18:40.5±2.3, 17°.08S×177°.90W, h0km, mb3.7/4, mb1 4.0/4, mb1mx3.8/20, mbtmp3.7/4, Error ellipse: s-maj=134.8km s-min=29.1km az=151.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.27** | **259** | P | P | 05 27 00.0 | -0.3 |
| | 0.3nm,0.5s,baz=97,slow=7.0,SNR=6.0 | | | | | | |
| **ASAR** | **Alice Springs** | **45.49** | **253** | P | P | 05 27 02.0 | 0.0 |
| | 2.4nm,0.5s,baz=89,slow=8.7,SNR=37 | | | | | | |
| **ILAR** | **Eielson Array** | **84.98** | **13** | P | P | 05 31 16.8 | -0.5 |
| | 0.2nm,0.5s,baz=221,slow=5.5,SNR=5.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.14** | **57** | P | P | 05 31 19.6 | +0.5 |
| | 0.2nm,0.9s,baz=219,slow=5.6,SNR=3.6 | | | | | | |

**WEL 29 05:55:53.1±0.1, 43°.62S×172°.25E, h5km, ML3.5/14, 4C-5D, Error ellipse: s-maj=1.3km s-min=1.2km az=0.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.27** | **82** | PG | Pg | 05 55 58.6 | +0.2 |
| CRLZ | | | | SG | Sg | 05 56 02.4 | +0.4 |
| CRLZ | | | | AML | AML | 05 56 02.8 | |
| **MQZ** | **McQueen's Vall** | **0.31** | **108** | ⇓PG | Pg | 05 55 59.3 | +0.2 |
| MQZ | | | | SG | Sg | 05 56 03.7 | +0.6 |
| MQZ | | | | AML | AML | 05 56 05.1 | |
| **OXZ** | **Oxford** | **0.33** | **332** | PG | Pg | 05 55 59.4 | -0.1 |
| OXZ | | | | SG | Sg | 05 56 03.8 | 0.0 |
| **LTZ** | **Lake Taylor** | **0.83** | **1** | ⇑P* | Pg | 05 56 09.1 | -0.1 |
| LTZ | | | | AML | AML | 05 56 20.9 | |
| **RPZ** | **Rata Peaks** | **0.87** | **263** | ⇓P* | Pb | 05 56 10.6 | -0.2 |
| RPZ | | | | AML | AML | 05 56 26.1 | |
| RPZ | | | | AML | AML | 05 56 28.6 | |
| **WVZ** | **Waitaha Valley** | **1.23** | **296** | ⇓P* | Pg | 05 56 15.9 | -0.8 |
| WVZ | | | | AML | AML | 05 56 36.1 | |
| WVZ | | | | AML | AML | 05 56 38.8 | |
| **KHZ** | **Kahutara** | **1.53** | **39** | ⇑PN | Pn | 05 56 18.6 | -2.4 |
| **LBZ** | **Lake Benmore** | **1.68** | **242** | PN | Pn | 05 56 22.4 | -0.8 |
| LBZ | | | | AML | AML | 05 56 56.9 | |
| LBZ | | | | AML | AML | 05 56 57.4 | |
| **ODZ** | **Otahua Downs** | **1.84** | **218** | PN | Pn | 05 56 24.2 | -1.1 |
| ODZ | | | | AML | AML | 05 56 58.4 | |
| ODZ | | | | AML | AML | 05 57 02.3 | |
| ODZ | | | | AML | AML | 05 57 03.3 | |
| ODZ | | | | AML | AML | 05 57 03.3 | |
| **FOZ** | **Fox Glacier** | **1.86** | **271** | ⇓PN | Pn | 05 56 24.7 | -0.9 |
| FOZ | | | | AML | AML | 05 56 48.2 | |
| FOZ | | | | AML | AML | 05 56 48.3 | |
| FOZ | | | | AML | AML | 05 56 53.9 | |
| FOZ | | | | AML | AML | 05 56 56.5 | |
| **DSZ** | **Denniston Nort** | **1.90** | **350** | AML | AML | 05 56 54.9 | |
| DSZ | | | | AML | AML | 05 56 58.0 | |
| **THZ** | **Tophouse** | **1.91** | **15** | ⇑PN | Pn | 05 56 24.2 | -2.2 |
| THZ | | | | AML | AML | 05 56 57.6 | |
| THZ | | | | AML | AML | 05 56 57.9 | |
| **BSWZ** | **Blackbirch Sta** | **2.25** | **33** | *e*PN | Pn | 05 56 28.9 | -2.1 |
| **NNZ** | **Nelson** | **2.54** | **20** | PN | Pn | 05 56 33.3 | -1.6 |
| **JCZ** | **Jackson Bay** | **2.57** | **258** | ⇑PN | Pn | 05 56 34.6 | -0.9 |
| JCZ | | | | AML | AML | 05 57 24.5 | |
| **WKZ** | **Wanaka** | **2.62** | **241** | PN | Pn | 05 56 34.1 | -2.1 |
| **EAZ** | **Earnscleugh** | **2.66** | **231** | ⇓PN | Pn | 05 56 35.4 | -1.2 |
| EAZ | | | | AML | AML | 05 57 21.4 | |
| EAZ | | | | AML | AML | 05 57 21.4 | |
| EAZ | | | | AML | AML | 05 57 24.6 | |
| EAZ | | | | AML | AML | 05 57 25.1 | |
| **QRZ** | **Quartz Range** | **2.79** | **4** | PN | Pn | 05 56 36.7 | -1.8 |
| QRZ | | | | AML | AML | 05 57 10.6 | |
| **TUZ** | **Tuapeka** | **2.99** | **218** | PN | Pn | 05 56 40.3 | -0.8 |
| TUZ | | | | AML | AML | 05 57 39.9 | |
| TUZ | | | | AML | AML | 05 57 41.4 | |
| **CAW** | **Cannon Point** | **3.26** | **41** | PN | Pn | 05 56 41.8 | -3.2 |

*KRNET **29** 06:11:39.6±0.1, 40°.69N×71°.04E, h17km, mb2.2*
*NNC **29** 06:11:44.7±6.0, 40°.75N×71°.30E, h0km, mb2.8, mpv2.4, Error ellipse: s-maj=58.1km s-min=24.4km az=61.0*

**ISC 29 06:11:39.4±1.3, 40°.71N±0°.03×71°.01E±0°.07, h4km±14km, n9, σ0s99/17, 14C-4D, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BTK** | **Batken** | **0.67** | **193** | ⇑*i*P | **Pg** | **06 11 52.4** | **+0.1** |
| | baz=195 | | | | | | |
| BTK | | | | ⇑*i*S | **Sg** | **06 12 01.4** | **+0.4** |
| | baz=195 | | | | | | |
| **ARK** | **Arkit** | **1.30** | **33** | ⇑*i*P | **Pn** | **06 12 03.5** | **-1.0** |
| | baz=33 | | | | | | |
| ARK | | | | ⇑*i*S | **Sg** | **06 12 22.7** | **+1.4** |
| | baz=33 | | | | | | |
| **ARSB** | **Arslanbob** | **1.61** | **67** | ⇑*e*P | **Pn** | **06 12 08.5** | **-0.3** |
| | baz=66 | | | | | | |
| ARSB | | | | ⇑*i*S | **Sb** | **06 12 30.2** | **-0.4** |
| | baz=66 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.03** | **109** | ⇓Pn | **Pb** | **06 12 16.9** | **-0.1** |
| | 1.3nm,0.5s | | | | | | |
| SFK | | | | ⇑Sn | **Sb** | **06 12 43.0** | **+0.3** |
| | 5.7nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.03** | **109** | ⇑*i*P | **Pb** | **06 12 15.7** | **-1.3** |
| | baz=109 | | | | | | |
| SFK | | | | ⇑*i*S | **Sb** | **06 12 41.2** | **-1.5** |
| | baz=109 | | | | | | |
| **MNAS** | **Manas** | **2.10** | **32** | ⇓Pn | **Pg** | **06 12 19.4** | **-0.2** |
| | 2.1nm,0.4s | | | | | | |
| MNAS | | | | ⇑Sn | **Sg** | **06 12 46.9** | **+0.1** |
| | 3.5nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **2.10** | **32** | ⇓*e*P | **Pb** | **06 12 17.5** | **-0.6** |
| | baz=31 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sb** | **06 12 43.7** | **-0.9** |
| | baz=31 | | | | | | |
| **KK31** | **Karatay Array** | **2.42** | **351** | ⇑Pn | **Pb** | **06 12 23.4** | **-0.1** |
| | 0.6nm,0.2s,baz=162,slow=16,SNR=31 | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 06 12 57.5 | |
| | 3.4nm,0.5s,baz=151,slow=26,SNR=8.7 | | | | | | |
| **ARLS** | **Aral** | **2.75** | **64** | ⇑*e*P | **Pn** | **06 12 25.7** | **+1.3** |
| | baz=63 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **06 12 59.7** | **+1.6** |
| | baz=63 | | | | | | |

*ISCJB **29** 06:13:29.9±1.2, 11°.39S±0°.04×166°.23E±0°.04, h103km±11km, mb4.7/63, Error ellipse: s-maj=7.4km s-min=5.8km az=155.2*
*IDC **29** 06:13:29.5±0.6, 11°.28S×166°.32E, h90km±4km, mb4.2/22, mb1 4.3/24, mb1mx4.2/38, mbtmp4.5/24, MS3.3/3, Ms1 3.3/3, ms1mx3.0/22, Error ellipse: s-maj=11.7km s-min=11.4km az=67.0*
*NEIC **29** 06:13:32.7±0.8, 11°.32S×166°.24E, h116km±7km, mb5.0/49, Error ellipse: s-maj=5.2km s-min=3.9km az=100.0*
*BJI **29** 06:13:33.5, 10°.85S×166°.32E, h118km, mb4.8/29, mB5.0/21*

**ISC 29 06:13:33.7±0.4, 11°.46S±0°.05×166°.19E±0°.06, h124km±3km, h124km:pP-P, n173, σ1s31/201, mb4.8/64, 4C-1D, Santa Cruz Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **6.46** | **288** | P | **Pn** | **06 15 04.2** | **-2.3** |
| | 43nm,0.3s,baz=217,slow=3.5,SNR=10 | | | | | | |
| HNR | | | | S | **Sn** | **06 16 17.3** | **-1.6** |
| | 26nm,0.3s,baz=120,slow=20,SNR=2.5 | | | | | | |
| HNR | | | | LR | LR | 06 17 57.7 | |
| | comp=Z,172nm,18.8s,baz=104,slow=41 | | | | | | |
| **HNR** | **Honiara** | **6.46** | **288** | *e*P | Pn | 06 15 03.0 | -3.5 |
| HNR | | | | *e*S | **Sn** | **06 16 17.0** | **-2.0** |
| **DZM** | **Mont Dzumac** | **10.56** | **179** | *e*Pn | **Pn** | **06 16 01.5** | **-0.3** |
| | 18nm,0.2s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **06 17 52.7** | **-5.5** |
| | 12nm,0.3s | | | | | | |
| DZM | | | | *e*LR | LR | 06 18 27.9 | |
| | 366nm,28.6s | | | | | | |
| **DZM** | **Mont Dzumac** | **10.56** | **179** | P | **Pn** | **06 16 01.5** | **-0.3** |
| | 6.5nm,0.3s,baz=359,slow=5.1,SNR=46 | | | | | | |
| DZM | | | | S | **Sn** | **06 17 56.2** | **-2.0** |
| | 4.6nm,0.3s,baz=180,slow=19,SNR=11 | | | | | | |
| **DZM** | **Mont Dzumac** | **10.56** | **179** | *e*Pn | **Pn** | **06 16 01.6** | **-0.3** |
| | 40nm,0.6s | | | | | | |
| DZM | | | | *e*Sn | **Sn** | **06 17 55.2** | **-3.0** |
| **MSVF** | **Nonsavu** | **13.06** | **120** | *e*P | **P** | **06 16 42.5** | **+2.2** |
| **TARA** | **Tarawa** | **14.38** | **28** | *e*Pn | **Pn** | **06 16 51.2** | **-0.5** |
| **EIDS** | **Eidsvold** | **19.90** | **224** | *e*P | **Pn** | **06 17 58.3** | **-0.1** |
| | 21nm,1.3s | | | | | | |
| **CTA** | **Charters Tower** | **21.00** | **243** | P | **P** | **06 18 08.4** | **+0.9** |
| | 4.7nm,0.8s,baz=72,slow=14,SNR=3.5 | | | | | | |
| **LHI** | **Lord Howe Isla** | **21.02** | **197** | *e*P | **P** | **06 18 11.5** | **+3.9** |
| | 87nm,1.2s | | | | | | |
| **AFI** | **Afiamalu** | **21.63** | **99** | P | **P** | **06 18 13.5** | **-0.8** |
| | 35nm,0.7s,baz=63,slow=16,SNR=3.4 | | | | | | |
| AFI | | | | LR | LR | 06 25 41.0 | |
| | comp=Z,21nm,19.8s,baz=224,slow=34 | | | | | | |
| **ARMA** | **Armidale** | **23.21** | **213** | *e*P | **P** | **06 18 32.3** | **+2.3** |
| | 32nm,1.4s | | | | | | |
| **URZ** | **Urewera** | **28.42** | **162** | P | **P** | **06 19 16.6** | **-0.1** |
| | 5.2nm,0.4s,baz=286,slow=2.7,SNR=10 | | | | | | |
| **URZ** | **Urewera** | **28.42** | **162** | *e*P | **P** | **06 19 17.2** | **+0.5** |
| | 12nm,0.9s | | | | | | |
| **BKZ** | **Black Stump Fm** | **29.08** | **163** | *e*P | **P** | **06 19 23.2** | **+0.7** |
| | 32nm,0.5s | | | | | | |
| **KRHZ** | **Kereru** | **29.49** | **164** | PN | **P** | **06 19 26.3** | **+0.2** |
| **H11S2** | **WAKE ISLAND Hy** | **29.76** | **1** | T | T | 06 50 03.7 | |
| | baz=181,slow=76,SNR=31 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **29.77** | **1** | T | T | 06 50 04.9 | |
| | baz=181,slow=76,SNR=18 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **29.78** | **1** | T | T | 06 50 05.9 | |
| | baz=181,slow=76,SNR=15 | | | | | | |
| **BFZ** | **Birch Farm** | **30.43** | **165** | *e*P | **P** | **06 19 34.0** | **-0.4** |
| | 90nm,1.2s | | | | | | |
| **SNZO** | **South Karori** | **30.66** | **167** | *e*P | **P** | **06 19 36.1** | **-0.4** |
| | 147nm,1.2s | | | | | | |
| **THZ** | **Tophouse** | **30.76** | **170** | *e*P | **P** | **06 19 37.9** | **+0.6** |
| **H11N1** | **WAKE ISLAND Hy** | **30.98** | **1** | T | T | 06 51 41.7 | |
| | baz=182,slow=76,SNR=12 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **30.99** | **1** | T | T | 06 51 38.7 | |
| | baz=182,slow=76,SNR=6.6 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **31.00** | **1** | T | T | 06 51 44.2 | |
| | baz=182,slow=76,SNR=5.0 | | | | | | |
| **KHZ** | **Kahutara** | **31.50** | **170** | *e*P | **P** | **06 19 43.9** | **+0.1** |
| | 394nm,2.7s | | | | | | |
| **LTZ** | **Lake Taylor** | **31.65** | **171** | PN | **P** | **06 19 45.7** | **+0.5** |
| **WRA** | **Warramunga Arr** | **31.76** | **251** | P | **P** | **06 19 46.6** | **+0.2** |
| | 2.2nm,0.8s,baz=83,slow=9.0,SNR=18 | | | | | | |
| WRA | | | | pP | **pP** | **06 20 08.5** | **-4.9** |
| | 4.1nm,0.8s,baz=81,slow=9.3,SNR=10 | | | | | | |
| WRA | | | | PcP | **PcP** | **06 22 36.2** | **+1.2** |
| | 2.7nm,0.7s,baz=79,slow=3.3,SNR=15 | | | | | | |
| **OXZ** | **Oxford** | **32.15** | **172** | PN | **P** | **06 19 50.1** | **+0.5** |
| **OXZ** | **Oxford** | **32.15** | **172** | *e*P | **P** | **06 19 50.2** | **+0.7** |
| **RPZ** | **Rata Peaks** | **32.41** | **173** | P | **P** | **06 19 50.9** | **-1.0** |
| | 28nm,0.7s,baz=50,slow=0.3,SNR=11 | | | | | | |
| **RPZ** | **Rata Peaks** | **32.41** | **173** | *e*P | **P** | **06 19 53.1** | **+1.2** |
| | 32nm,0.8s | | | | | | |
| **JCZ** | **Jackson Bay** | **32.58** | **177** | PN | **P** | **06 19 55.3** | **+2.0** |
| **MQZ** | **McQueen's Vall** | **32.62** | **171** | PN | **P** | **06 19 53.9** | **+0.4** |
| **MQZ** | **McQueen's Vall** | **32.62** | **171** | *e*P | **P** | **06 19 54.5** | **+1.0** |
| **AS01** | **Alice Springs** | **32.96** | **244** | *e*P | **P** | **06 19 56.7** | **-0.2** |
| **ASAR** | **Alice Springs** | **33.00** | **244** | P | **P** | **06 19 57.0** | **-0.3** |
| | 1.1nm,0.7s,baz=73,slow=9.3,SNR=14 | | | | | | |
| ASAR | | | | pP | **pP** | **06 20 19.8** | **-4.6** |
| | 4.0nm,0.7s,baz=73,slow=9.5,SNR=12 | | | | | | |
| ASAR | | | | PcP | **PcP** | **06 22 39.2** | **+0.8** |
| | 3.4nm,0.6s,baz=76,slow=2.3,SNR=21 | | | | | | |
| **WKZ** | **Wanaka** | **33.34** | **176** | PN | **P** | **06 20 01.1** | **+1.2** |
| **WKZ** | **Wanaka** | **33.34** | **176** | *e*P | **P** | **06 20 01.1** | **+1.2** |
| **EAZ** | **Earnscleugh** | **33.76** | **176** | PN | **P** | **06 20 04.0** | **+0.5** |
| **WHZ** | **Wether Hill Ro** | **34.35** | **178** | *e*P | **P** | **06 20 09.0** | **+0.4** |
| | 49nm,1.5s | | | | | | |
| **TUZ** | **Tuapeka** | **34.51** | **176** | PN | **P** | **06 20 11.1** | **+1.3** |
| **BBOO** | **Buckleboo** | **34.87** | **228** | *e*P | **P** | **06 20 14.6** | **+1.3** |
| | 56nm,1.6s | | | | | | |
| **PPT2** | **Papeete2** | **43.17** | **103** | *e*LR | LR | 06 33 35.7 | |
| | 177nm,30.2s | | | | | | |
| **TBI** | **Tubuai** | **43.77** | **112** | *e*LR | LR | 06 34 08.2 | |
| | 214nm,31.2s | | | | | | |
| **MBWA** | **Marble Bar** | **45.48** | **252** | *e*P | **P** | **06 21 41.7** | **+0.7** |
| | 89nm,1.8s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **54.54** | **332** | P | **P** | **06 22 46.2** | **-2.8** |
| | 2.6nm,0.7s,baz=163,slow=9.2,SNR=6.5 | | | | | | |
| **YHNB** | **Yeheng** | **56.58** | **310** | *e*P | **P** | **06 23 04.0** | **+0.1** |
| | 835nm,2.4s | | | | | | |
| **KSRS** | **Korea Array** | **60.46** | **325** | P | **P** | **06 23 29.1** | **-1.3** |
| | 2.3nm,0.6s,baz=136,slow=7.2,SNR=7.3 | | | | | | |
| **KSAR** | **Wonju Array Be** | **60.48** | **325** | P | **P** | **06 23 29.1** | **-1.4** |
| **NJ2** | **Nanjing** | **62.62** | **315** | *e*P | **P** | **06 23 45.0** | **-0.1** |
| NJ2 | | | | PMZ | | | |
| | 42nm,0.5s | | | | | | |
| **QIZ** | **Qiongzhong** | **63.26** | **298** | P | **P** | **06 23 50.0** | **+0.4** |
| QIZ | | | | pP | **pP** | **06 24 19.5** | **-0.2** |
| QIZ | | | | PP | **PP** | **06 26 10.8** | **+0.4** |
| QIZ | | | | S | **S** | **06 32 13.3** | **+1.2** |
| QIZ | | | | sS | **sS** | **06 33 04.0** | **+0.1** |
| QIZ | | | | PMZ | | | |
| | 26nm,2.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **63.51** | **333** | P | **P** | **06 23 49.8** | **-0.9** |
| | 2.6nm,0.6s,baz=123,slow=7.0,SNR=7.4 | | | | | | |
| **VNDA** | **Vanda** | **66.09** | **181** | P | **P** | **06 24 07.4** | **+0.4** |
| | 6.5nm,0.8s,baz=354,slow=7.4,SNR=27 | | | | | | |
| **VNDA** | **Vanda** | **66.09** | **181** | *e*P | **P** | **06 24 08.0** | **+1.0** |
| | 31nm,1.5s | | | | | | |
| **CASY** | **Casey** | **66.16** | **201** | *e*P | **P** | **06 24 08.1** | **+0.6** |
| | 27nm,1.5s | | | | | | |
| **SBA** | **Scott Base** | **66.39** | **180** | *e*P | **P** | **06 24 10.9** | **+2.0** |
| | 20nm,0.8s | | | | | | |
| **PSI** | **Prapat** | **68.36** | **278** | P | **P** | **06 24 21.7** | **-0.9** |
| | 1.9nm,0.4s,baz=136,slow=6.7,SNR=3.9 | | | | | | |
| **PSI** | **Prapat** | **68.36** | **278** | *e*P | **P** | **06 24 21.9** | **-0.7** |
| | 85nm,1.3s | | | | | | |
| **GYA** | **Guiyang** | **69.01** | **304** | *e*P | **P** | **06 24 28.0** | **+1.6** |
| GYA | | | | pP | **pP** | **06 24 58.8** | **+1.8** |
| GYA | | | | sP | **sP** | **06 25 12.0** | **+1.6** |
| GYA | | | | PP | **PP** | **06 27 03.3** | **+2.7** |
| GYA | | | | S | **S** | **06 33 21.5** | **-0.3** |
| GYA | | | | SKS | **SKSac** | **06 34 12.0** | **-3.0** |
| GYA | | | | PMZ | | | |
| | 20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | 120nm,5.8s | | | | | | |
| **BJI** | **Beijing** | **69.08** | **321** | P | **P** | **06 24 26.5** | **+0.2** |
| BJI | | | | PMZ | | | |
| | 11nm,0.6s | | | | | | |
| **KMI** | **Kunming** | **71.71** | **301** | P | **P** | **06 24 44.5** | **+1.5** |
| KMI | | | | PMZ | | | |
| | 10.0nm,0.7s | | | | | | |
| KMI | | | | PMZ | | | |
| | 270nm,4.8s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **72.43** | **320** | *e*P | **P** | **06 24 47.8** | **+1.0** |
| HHC | | | | pP | **pP** | **06 25 18.5** | **+0.9** |
| HHC | | | | sP | **sP** | **06 25 33.8** | **+2.8** |
| HHC | | | | PP | **PP** | **06 27 33.0** | **+3.4** |
| HHC | | | | S | **S** | **06 34 01.3** | **+0.5** |
| HHC | | | | PMZ | | | |
| | 21nm,0.8s | | | | | | |
| HHC | | | | PMZ | | | |
| | 220nm,7.0s | | | | | | |
| **CM01** | **Chiang Mai Arr** | **72.65** | **293** | *e*P | **P** | **06 24 49.4** | **+1.0** |
| **CMAR** | **Chiang Mai Arr** | **72.68** | **294** | P | **P** | **06 24 49.5** | **+1.0** |
| | 3.1nm,0.8s,baz=113,slow=4.3,SNR=16 | | | | | | |
| **CD2** | **Chengdu** | **73.20** | **307** | *e*P | **P** | **06 24 51.5** | **0.0** |
| CD2 | | | | pP | **pP** | **06 25 21.8** | **-0.6** |
| CD2 | | | | sP | **sP** | **06 25 35.0** | **-0.7** |
| CD2 | | | | S | **S** | **06 34 10.5** | **+0.7** |
| CD2 | | | | SKS | **SKSac** | **06 34 45.5** | **-0.8** |
| CD2 | | | | sS | **sS** | **06 35 03.3** | **+0.3** |
| CD2 | | | | SS | **SS** | **06 38 55.5** | **+1.3** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| **SEY** | **Seymchan** | **74.93** | **354** | P | **P** | **06 24 59.2** | **-1.6** |
| | 1.9nm,0.6s,baz=199,slow=14,SNR=3.2 | | | | | | |
| **LZH** | **Lanzhou** | **75.36** | **312** | ⇑P | **P** | **06 25 06.3** | **+2.3** |
| LZH | | | | pP | **pP** | **06 25 34.5** | **-0.6** |
| LZH | | | | sP | **sP** | **06 25 50.5** | **+2.1** |
| LZH | | | | PP | PP | 06 28 00.5 | +5.8 |
| LZH | | | | S | **S** | **06 34 34.0** | **0.0** |
| LZH | | | | SS | **SS** | **06 39 27.3** | **+0.2** |
| LZH | | | | PMZ | | | |
| | 32nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | 140nm,6.4s | | | | | | |
| LZH | | | | LN | | | |
| | 320nm,14.3s | | | | | | |
| LZH | | | | LE | | | |
| | 350nm,14.0s | | | | | | |
| LZH | | | | LZ | | | |
| | 450nm,15.7s | | | | | | |
| **QSPA** | **South Pole Qui** | **78.55** | **180** | *e*P | **P** | **06 25 21.4** | **+0.1** |
| | 13nm,1.0s | | | | | | |
| **BRLK** | **Bradley Lake** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YBH** | **Yreka Blue Hor** 7.6nm,1.1s | **83.87** | **45** | *eP* | **P** | | **06 25 49.2** | **-0.6** |
| **DOT** | **Dot Lake** 28nm,0.8s | **83.91** | **20** | *eP* | **P** | | **06 25 48.6** | **-0.9** |
| **CMB** | **Columbia Colle** 3.7nm,1.0s | **84.27** | **50** | *eP* | **P** | | **06 25 51.3** | **-0.6** |
| **MAW** | **Mawson** 1.4nm,0.3s,baz=128,slow=10,SNR=5.5 | **84.51** | **202** | P | **P** | | **06 25 53.3** | **+0.8** |
| **COLD** | **Coldfoot** 75nm,2.5s | **84.58** | **16** | *eP* | **P** | | **06 25 52.3** | **-0.4** |
| **ISA** | **Isabella** baz=85 | **84.98** | **52** | P | **P** | | **06 25 55.2** | **-0.4** |
| **ISA** | **Isabella** 4.1nm,1.2s | **84.98** | **52** | *eP* | **P** | | **06 25 54.7** | **-0.8** |
| **EDW2** | **Edwards Air Fo** baz=85 | **85.12** | **53** | P | **P** | | **06 25 55.9** | **-0.4** |
| **BFSC** | **Mount Baldy Ra** baz=85 | **85.19** | **54** | P | **P** | | **06 25 55.7** | **-1.0** |
| **J05D** | **Fort Rock, OR** baz=85 | **85.44** | **44** | P | **P** | | **06 25 57.5** | **-0.2** |
| **K05A** | **Summer Lake** 236nm,2.8s | **85.48** | **45** | *eP* | **P** | | **06 25 57.9** | **-0.1** |
| **LRMC** | **Laurel Mountai** baz=86 | **85.53** | **53** | P | **P** | | **06 25 58.0** | **-0.4** |
| **EGAK** | **Eagle** 9.6nm,0.7s | **85.61** | **20** | *eP* | **P** | | **06 25 57.3** | **-0.6** |
| **MOD** | **Modoc** 2.5nm,0.7s | **85.61** | **46** | *eP* | **P** | | **06 25 57.7** | **-1.0** |
| **MONP** | **Monument Peak** baz=86 | **85.79** | **55** | P | **P** | | **06 25 59.2** | **-0.6** |
| **MPMC** | **Manual Prospec** baz=86 | **85.86** | **52** | P | **P** | | **06 25 59.5** | **-0.5** |
| **NV01** | **Mina Array Sit** | **85.95** | **50** | *eP* | **P** | | **06 25 59.8** | **-0.7** |
| **NVAR** | **Mina Array Bea** 1.6nm,0.7s,baz=237,slow=8.0,SNR=10.0 | **85.95** | **50** | P | **P** | | **06 26 00.2** | **-0.3** |
| NVAR | comp=Z,54nm,18.2s,baz=258,slow=32 | | | pP | pP | | 06 26 23.3 | -8.9 |
| **PFO** | **Pinyon Flat Ob** baz=86 | **85.96** | **55** | P | **P** | | **06 25 59.6** | **-1.0** |
| **PFO** | **Pinyon Flat Ob** 1.1nm,0.5s | **85.96** | **55** | *eP* | **P** | | **06 26 00.3** | **-0.3** |
| **GSC** | **Goldstone** baz=86 | **86.17** | **53** | P | **P** | | **06 26 01.4** | **-0.1** |
| **GRAC** | **Grapevine Rang** baz=86 | **86.23** | **51** | P | **P** | | **06 26 01.4** | **-0.2** |
| **BELC** | **Belle Mtn. Jos** baz=86 | **86.44** | **54** | P | **P** | | **06 26 02.2** | **-0.7** |
| **FURC** | **Furnace Creek,** baz=86 | **86.47** | **52** | P | **P** | | **06 26 02.6** | **-0.2** |
| **BC3** | **Big Chuckawall** baz=87 | **86.78** | **55** | P | **P** | | **06 26 04.1** | **-0.4** |
| **I07A** | **Izee** 85nm,2.8s | **86.89** | **44** | *eP* | **P** | | **06 26 04.6** | **-0.2** |
| **TUQ** | **Turquoise Moun** baz=87 | **86.90** | **53** | P | **P** | | **06 26 04.5** | **-0.6** |
| **GMRC** | **Granite Mounta** baz=87 | **86.92** | **54** | P | **P** | | **06 26 04.4** | **-0.9** |
| **TPNV** | **Topopah Spring** baz=87 | **87.07** | **52** | P | **P** | | **06 26 05.5** | **-0.4** |
| **GLA** | **Glamis** baz=87 | **87.12** | **56** | P | **P** | | **06 26 06.2** | **+0.1** |
| **IRM** | **Iron Mountain** baz=87 | **87.16** | **54** | P | **P** | | **06 26 06.1** | **-0.1** |
| **LTY** | **Liberty** 83nm,2.8s | **87.18** | **41** | *eP* | **P** | | **06 26 05.8** | **-0.3** |
| **SHPR** | **Sheep Range** 5.4nm,1.4s | **87.79** | **52** | *eP* | **P** | | **06 26 08.3** | **-1.0** |
| **R11A** | **Troy Canyon, C** baz=88 | **87.97** | **50** | P | **P** | | **06 26 09.6** | **-0.6** |
| **PDMCI** | **Parker Dam,Lak** baz=88 | **88.00** | **55** | P | **P** | | **06 26 10.0** | **-0.2** |
| **WMQ** | **Urumqi** | **89.70** | **315** | *eP* | **P** | | **06 26 18.0** | **0.0** |
| **NEW** | **Newport** 1.0nm,0.7s,baz=236,slow=4.3,SNR=3.6 | **89.77** | **41** | P | **P** | | **06 26 17.2** | **-1.1** |
| **NEW** | **Newport** baz=90 | **89.77** | **41** | P | **P** | | **06 26 17.5** | **-0.8** |
| **NEW** | **Newport** 4.2nm,1.4s | **89.77** | **41** | *eP* | **P** | | **06 26 18.0** | **-0.3** |
| **TUC** | **Tucson** 1.6nm,0.8s | **90.24** | **57** | *eP* | **P** | | **06 26 20.7** | **-0.2** |
| **HLID** | **Hailey** baz=90 | **90.25** | **46** | P | **P** | | **06 26 20.5** | **-0.3** |
| **HLID** | **Hailey** 1.8nm,0.8s | **90.25** | **46** | *eP* | **P** | | **06 26 20.4** | **-0.4** |
| **WUAZ** | **Wupatki** baz=90 | **90.51** | **54** | P | **P** | | **06 26 21.4** | **-0.7** |
| **DUG** | **Dugway** baz=90 | **90.53** | **49** | P | **P** | | **06 26 21.6** | **-0.6** |
| **BGU** | **Big Grassy Mou** 3.0nm,1.0s | **90.56** | **48** | *eP* | **P** | | **06 26 22.1** | **-0.2** |
| **HVU** | **Hansel Valley** 10nm,1.4s | **90.96** | **48** | *eP* | **P** | | **06 26 23.7** | **-0.4** |
| **NLU** | **North Lily Min** 2.2nm,0.7s | **91.03** | **50** | *eP* | **P** | | **06 26 24.4** | **-0.1** |
| **BSMT** | **Bassoo Peak** | **91.15** | **41** | *eP* | **P** | | **06 26 24.0** | **-0.8** |
| **DLMT** | **Dillon** 2.3nm,0.6s | **91.97** | **44** | *eP* | **P** | | **06 26 28.4** | **-0.3** |
| **MK01** | **Makanchi Array** | **94.11** | **317** | *eP* | **P** | | **06 26 38.2** | **-0.2** |
| **MKAR** | **Makanchi Array** 7.6nm,0.5s,baz=93,slow=6.0,SNR=47 | **94.12** | **317** | P | **P** | | **06 26 38.3** | **-0.1** |
| **ZAA0** | **Zalesovo Array** | **94.14** | **324** | *eP* | **P** | | **06 26 36.8** | **-1.5** |
| **ZALV** | **Zalesovo Beam** 3.5nm,0.6s,baz=112,slow=3.7,SNR=14 | **94.14** | **324** | P | **P** | | **06 26 36.9** | **-1.3** |
| **MAKZ** | **Makanchi** | **94.33** | **317** | *eP* | **P** | | **06 26 39.6** | **+0.2** |
| **TXAR** | **Lajitas Array** 0.3nm,0.6s,baz=243,slow=6.0,SNR=3.6 | **95.64** | **61** | P | **P** | | **06 26 44.9** | **-1.0** |
| **KSH** | **Kashi** | **97.35** | **309** | *eP* | | Pdif | 06 26 59.3 | +5.8 |
| KSH | | | | S | S | | 06 38 13.5 | +6.3 |
| KSH | 190nm,5.2s | | | PMZ | | | | |
| KSH | 140nm,5.1s | | | LN | | | | |
| KSH | 180nm,5.8s | | | LE | | | | |
| KSH | 130nm,5.9s | | | LZ | | | | |
| **GEYT** | **Alibeck** 3.1nm,0.3s,baz=26,slow=3.7,SNR=2.2 | **111.18** | **306** | Pdiff | **Pdif** | | **06 27 52.8** | **-2.0** |
| **ARA0** | **ARCESS Array S** | **116.84** | **346** | *e*PKPdf | **PKPdf** | | **06 32 02.6** | **-0.5** |
| **ARCES** | **ARCESS Array B** 3.5nm,0.5s,baz=75,slow=2.1,SNR=44 | **116.84** | **346** | PKP | **PKPdf** | | **06 32 02.3** | **-0.8** |
| ARCES | 4.6nm,0.9s,baz=79,slow=6.3,SNR=1.9 | | | pPKP | pPKPdf | | 06 32 27.2 | -9.3 |
| **FINES** | **FINESS Array B** 1.3nm,0.4s,baz=13,slow=1.3,SNR=10 | **122.31** | **339** | PKP | **PKPdf** | | **06 32 13.2** | **-0.6** |
| **BOSA** | **Boshof** 3.9nm,0.7s,baz=98,slow=1.9,SNR=12 | **125.11** | **223** | PKP | **PKPdf** | | **06 32 20.8** | **+0.4** |
| **BOSA** | **Boshof** | **125.11** | **223** | *e*PKPdf | **PKPdf** | | **06 32 21.3** | **+0.9** |
| **LBTB** | **Lobatse** | **127.17** | **226** | *e*PKPdf | **PKPdf** | | **06 32 25.7** | **+1.3** |
| **NB2** | **NORSAR Subarra** comp=Z,3.5nm,1.1s,baz=31,slow=1.9 | **127.21** | **345** | PKPdf | **PKPdf** | | **06 32 22.6** | **-0.7** |
| **NOA** | **NORSAR Array B** comp=Z,1.8nm,0.7s,baz=32,slow=2.0,SNR=5.6 | **127.21** | **345** | PKP | **PKPdf** | | **06 32 22.6** | **-0.7** |
| NOA | comp=Z,1.3nm,0.9s,baz=20,slow=16,SNR=2.5 | | | pPKP | pPKPdf | | 06 32 46.0 | -11 |
| **AKASG** | **Malin Array Be** comp=Z,0.3nm,0.4s,baz=65,slow=5.2,SNR=3.2 | **127.45** | **327** | PKP | **PKPdf** | | **06 32 23.5** | **-0.4** |
| **AK11** | **Malin Array Si** | **127.49** | **327** | *e*PKPdf | **PKPdf** | | **06 32 23.3** | **-0.7** |
| **BRTR** | **Keskin Array B** comp=Z,1.9nm,0.8s,baz=92,slow=8.7,SNR=4.6 | **129.56** | **313** | PKP | **PKPdf** | | **06 32 27.1** | **-1.5** |
| **BRTR** | **Keskin Array B** | **129.56** | **313** | *i* P | **PKPdf** | | **06 32 27.2** | **-1.4** |
| BRTR | comp=Z,2.0nm,0.9s | | | pmax | pmax | | | |
| **CONA** | **Conrad Observa** comp=Z,4.8nm,0.7s | **135.97** | **331** | ⇑*i*PKiKP | **PKPdf** | | **06 32 40.2** | **-0.1** |
| **GERES** | **GERESS Array B** comp=Z,0.7nm,0.4s,baz=93,slow=2.7,SNR=6.7 | **136.27** | **334** | PKP | **PKPdf** | | **06 32 40.2** | **-0.6** |
| **WTTA** | **Wattenberg** comp=Z,8.0nm,0.9s | **138.37** | **334** | ⇓*i*PKiKP | **PKPdf** | | **06 32 45.0** | **+0.1** |
| **FETA** | **Feichten** comp=Z,7.7nm,1.2s | **138.95** | **334** | ⇑*i*PKPdf | **PKPdf** | | **06 32 43.9** | **-2.0** |
| **VSL** | **Villasalto** | **145.32** | **328** | *e*PKPdf | **PKPdf** | | **06 32 56.9** | **-0.4** |
| **KEST** | **Kesra** comp=Z,11nm,0.9s,baz=292,slow=2.2,SNR=8.3 | **148.01** | **323** | PKPbc | **PKPdf** | | **06 33 02.4** | **+0.4** |
| **KEST** | **Kesra** | **148.01** | **323** | *e*PKPbc | **PKPbc** | | **06 33 06.0** | **+0.7** |
| **MVO** | **Moncorvo** | **149.81** | **350** | *e*PKP | **PKPbc** | | **06 33 09.6** | **0.0** |
| **ES19** | **SONSECA Array** | **150.53** | **344** | *e*PKPbc | **PKPbc** | | **06 33 10.6** | **-0.8** |
| **ESDC** | **Sonseca Array** comp=Z,1.4nm,0.5s,baz=28,slow=2.2,SNR=9.4 | **150.57** | **344** | PKPbc | **PKPbc** | | **06 33 10.9** | **-0.6** |
| **MTE** | **Manteigas** | **150.65** | **350** | *e*PKP | **PKPbc** | | **06 33 12.1** | **+0.5** |
| **PMRV** | **Marv??o** | **151.57** | **350** | *e*PKP | **PKPbc** | | **06 33 14.1** | **+0.4** |
| **SHEL** | **Horse Pasture** | **151.62** | **196** | *e*PKPbc | **PKPbc** | | **06 33 15.3** | **+0.9** |
| **TOA0** | **Torodi Ar. Sit** | **164.76** | **278** | *e*PKPdf | **PKPdf** | | **06 33 23.6** | **-0.3** |
| TOA0 | | | | *e*PKPab | **PKPab** | | **06 34 23.2** | **+2.8** |
| **TORD** | **Torodi Ar. Bea** | **164.76** | **278** | PKP | **PKPdf** | | **06 33 23.6** | **-0.4** |
| TORD | comp=Z,1.7nm,0.9s,baz=9.7,slow=1.5,SNR=9.6 | | | pPKP | pPKPdf | | 06 33 48.6 | -9.0 |
| TORD | comp=Z,0.8nm,1.0s,baz=75,slow=1.6,SNR=2.3 | | | PKPab | **PKPab** | | **06 34 20.7** | **+0.3** |
| | comp=Z,1.6nm,1.0s,baz=87,slow=5.4,SNR=5.9 | | | | | | | |

*BJI* ***29*** *06:19:11.4, 1.°81N×128.°79E, h75km, mb5.1/54, mB5.2/36, Ms4.9/28, Ms7 4.7/13*
*KLM* ***29*** *06:19:14.1, 2.°71N×128.°80E, h36km, mb5.2, MS5.9*
*ISCJB* ***29*** *06:19:18.6±0.5, 2.°83N±0.°02×128.°37E±0.°02, h63km±4km, mb5.1/140, Error ellipse: s-maj=4.2km s-min=3.5km az=152.1*
*MOS* ***29*** *06:19:19.3±1.0, 2.°88N×128.°26E, h70km, mb5.4/45, Error ellipse: s-maj=10.8km s-min=6.2km az=111.3*
*DJA* ***29*** *06:19:19.9±0.8, 3.°1N±2.°×12.°8E±.°, h40km±6km, M5.1/89, mb5.3/89, mB5.5/49, MLv5.3/18, Mw(mB)5.0/49*
*IDC* ***29*** *06:19:19.2±1.4, 2.°79N×128.°40E, h62km±11km, mb4.5/24, mb1 4.7/28, mb1mx4.5/39, mbtmp4.8/28, MS3.7/21, Ms1 3.7/21, ms1mx3.6/30, Error ellipse: s-maj=14.9km s-min=8.1km az=78.0*
*AUST* ***29*** *06:19:20.8±0.7, 2.°81N×128.°47E, h82km±6km, Error ellipse: s-maj=6.4km s-min=5.7km az=34.0*
*NEIC* ***29*** *06:19:21.6±0.6, 2.°78N×128.°29E, h76km±5km, mb5.2/75, Error ellipse: s-maj=5.1km s-min=3.9km az=77.0*
**ISC 29 06:19:21.3±0.3, 2.°78N±0.°03×128.°39E±0.°04, h76km±2km, h76km:pP-P,n442,σ1§29/488,mb5.2/150,10C-10D, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **TNTI** | **Ternate** | **2.24** | **207** | P | | **Pn** | **Pn** | **06 19 54.5** | **-1.9** |
| TNTI | | | | S | | **Sn** | **Sn** | **06 20 23.1** | **-0.1** |
| **TNTI** | **Ternate** | **2.24** | **207** | *e*Pn | | **Pn** | **Pn** | **06 19 54.4** | **-2.0** |
| TNTI | | | | eSn | | Sn | Sn | 06 20 29.2 | +6.1 |
| **SGSI** | **Sangihe** | **3.00** | **288** | P | | Pn | **Pn** | 06 20 02.4 | -4.2 |
| SGSI | | | | S | | **Sn** | **Sn** | **06 20 41.2** | **-0.3** |
| **LBMI** | **Labuha** | **3.51** | **195** | P | | **Pn** | **Pn** | **06 20 14.1** | **+0.5** |
| LBMI | | | | S | | **Sn** | **Sn** | **06 20 55.5** | **+1.6** |
| **SWI** | **Sorong** baz=4.6,SNR=36 | **4.62** | **142** | P | | **Pn** | **Pn** | **06 20 28.4** | **-0.2** |
| SWI | baz=4.6,SNR=23 | | | P | | **Pn** | **Pn** | **06 20 28.6** | **0.0** |
| **SWI** | **Sorong** | **4.62** | **142** | P | | **Pn** | **Pn** | **06 20 28.3** | **-0.3** |
| **SIJI** | **Sorong** 74nm,0.3s,baz=124,slow=12,SNR=277 | **4.62** | **142** | P | | **Pn** | **Pn** | **06 20 28.6** | **-0.2** |
| SIJI | 48nm,0.3s,baz=12,slow=24,SNR=19 | | | S | | | **Sn** | **06 21 19.2** | **-2.0** |
| SIJI | comp=Z,2μm,22.0s,baz=332,slow=40 | | | LR | | LR | LR | 06 22 24.4 | |
| **KMSI** | **Cibinong** | **4.92** | **244** | P | | **Pn** | **Pn** | **06 20 31.5** | **-1.3** |
| **DAV** | **Davao City (W)** 63nm,0.3s,baz=73,slow=14,SNR=5.1 | **5.10** | **327** | P | | **Pn** | **Pn** | **06 20 34.0** | **-1.3** |
| **DAV** | **Davao City (W)** | **5.10** | **327** | *e*Pn | | **Pn** | **Pn** | **06 20 35.4** | **+0.1** |
| **SANI** | **Sanana** 409nm,0.9s,3μm1.1nm | **5.36** | **207** | P | | **Pn** | **Pn** | **06 20 38.3** | **-0.6** |
| **GTOI** | **Gorontalo** 288nm,0.8s,2μm0.9nm | **5.79** | **249** | P | | **Pn** | **Pn** | **06 20 42.5** | **-2.1** |
| **CTBH** | **Cotabato--PC H** | **6.04** | **317** | *e*P | | **Pn** | **Pn** | **06 20 46.0** | **-2.1** |
| **MSAI** | **Masohi** 50nm,0.6s,2μm0.2nm | **6.11** | **175** | P | | **Pn** | **Pn** | **06 20 50.2** | **+1.2** |
| **NLAI** | **Namlea** 361nm,1.0s,3μm1.1nm | **6.12** | **192** | P | | **Pn** | **Pn** | **06 20 50.0** | **+0.9** |
| **AAI** | **Ambon** 241nm,0.9s,2μm0.8nm | **6.42** | **182** | P | | **Pn** | **Pn** | **06 20 54.2** | **+0.8** |
| **LUWI** | **Luwuk** baz=6.9,SNR=10.0 | **6.78** | **236** | P | | **Pn** | **Pn** | **06 20 58.7** | **+0.5** |
| **LUWI** | **Luwuk** 330nm,1.0s,5μm3.8nm | **6.78** | **236** | P | | **Pn** | **Pn** | **06 20 58.0** | **-0.2** |
| **LUWI** | **Luwuk** | **6.78** | **236** | *e*Pn | | **Pn** | **Pn** | **06 20 58.3** | **+0.1** |
| LUWI | | | | *e*Sn | | **Sn** | **Sn** | **06 22 14.5** | **+0.5** |
| **MRSI** | **Marisa** 788nm,0.8s,6μm2.3nm | **6.84** | **251** | P | | **Pn** | **Pn** | **06 20 57.3** | **-1.7** |
| **FAKI** | **Fak Fak** baz=6.9,SNR=69 | **6.85** | **146** | P | | **Pn** | **Pn** | **06 20 59.0** | **-0.1** |
| **FAKI** | **Fak Fak** 124nm,0.6s,0.4nm | **6.85** | **146** | P | | **Pn** | **Pn** | **06 20 59.6** | **+0.5** |
| **FAKI** | **Fak Fak** | **6.85** | **146** | *e*Pn | | **Pn** | **Pn** | **06 20 59.5** | **+0.3** |
| FAKI | | | | *e*Sn | | **Sn** | **Sn** | **06 22 13.7** | **-2.0** |
| **PALU** | **Palau** baz=7.5,SNR=11 | **7.57** | **53** | P | | **Pn** | **Pn** | **06 21 06.5** | **-2.4** |
| **APSI** | **Ampana** 268nm,0.8s,3μm2.8nm | **7.67** | **242** | P | | **Pn** | **Pn** | **06 21 09.6** | **-0.8** |
| **MPSI** | **Mapaga** 77nm,1.0s | **8.83** | **254** | P | | **Pn** | **Pn** | **06 21 25.1** | **-1.1** |
| **KDI** | **Kendari** 146nm,0.8s,1μm | **8.84** | **221** | P | | **Pn** | **Pn** | **06 21 25.7** | **-0.6** |
| **PCI** | **Palu** 164nm,0.7s | **9.30** | **247** | P | | **Pn** | **Pn** | **06 21 32.4** | **-0.3** |
| **MYLDM** | **Lahad Datu** | **10.15** | **284** | ⇓P | | **Pn** | **Pn** | **06 21 42.9** | **-1.4** |
| **MYLDM** | **Lahad Datu** | **10.15** | **284** | *e*Pn | | **Pn** | **Pn** | **06 21 44.2** | **-0.1** |
| **TTSI** | **Tana Toraja** 127nm,0.8s,2μm | **10.34** | **236** | P | | **Pn** | **Pn** | **06 21 44.3** | **-2.5** |
| **SPSI** | **Sidrap Palu** 201nm,0.8s,1μm | **10.91** | **232** | P | | **Pn** | **Pn** | **06 21 52.8** | **-1.9** |
| **SDKM** | **Sandakan** | **11.52** | **285** | ⇓P | | **Pn** | **Pn** | **06 22 01.7** | **-1.3** |
| **BKSI** | **Bulukumba** 67nm,0.9s,654nm | **11.53** | **226** | P | | **Pn** | **Pn** | **06 22 03.3** | **+0.2** |
| **KAPI** | **Kappang** 0.4nm,0.3s,baz=48,slow=5.3,SNR=8.9 | **11.60** | **228** | P | | **Pn** | **Pn** | **06 22 02.2** | **-1.8** |
| KAPI | 2.4nm,0.3s,baz=210,slow=20,SNR=3.1 | | | S | | **Sn** | **Sn** | **06 24 06.0** | **-5.7** |
| **KAPI** | **Kappang** SNR=8.2 | **11.60** | **228** | P | | **Pn** | **Pn** | **06 22 01.2** | **-2.7** |
| **KAPI** | **Kappang** | **11.60** | **228** | *e*Pn | | **Pn** | **Pn** | **06 22 02.8** | **-1.2** |
| KAPI | | | | S | | **Sn** | **Sn** | **06 24 06.0** | **-5.7** |
| KAPI | | | | *e*Sn | | Sn | Sn | 06 24 13.7 | +2.0 |
| **BSSI** | **Bau Bau, Buton** 110nm,0.9s | **11.87** | **222** | P | | **Pn** | **Pn** | **06 22 08.1** | **+0.4** |
| **KKM** | **Kota Kinabalu** | **12.57** | **285** | ⇓P | | **Pn** | **Pn** | **06 22 16.5** | **-0.8** |
| **KKM** | **Kota Kinabalu** | **12.57** | **285** | *e*Pn | | **Pn** | **Pn** | **06 22 17.1** | **-0.2** |
| **MMRI** | **Maumere** | **12.89** | **208** | *e*Pn | | **Pn** | **Pn** | **06 22 21.2** | **-0.4** |
| **GENI** | **Genyem** | **12.92** | **114** | P | | **P** | **P** | **06 22 31.1** | **+1.3** |
| **SOEI** | **Soe** baz=13,SNR=4.1 | **13.11** | **198** | P | | **Pn** | **Pn** | **06 22 26.1** | **+1.5** |
| **SOEI** | **Soe** 189nm,1.1s,2μm | **13.11** | **198** | P | | **Pn** | **Pn** | **06 22 25.9** | **+1.3** |
| **SOEI** | **Soe** | **13.11** | **198** | *e*Pn | | **Pn** | **Pn** | **06 22 26.7** | **+2.0** |
| **EDFI** | **Ende, Flores** 64nm,0.9s,1μm | **13.26** | **210** | P | | **Pn** | **Pn** | **06 22 25.4** | **-1.2** |
| **KBKI** | **Kotabaru** 46nm,0.9s,3μm | **13.63** | **244** | P | | **Pn** | **Pn** | **06 22 28.4** | **-3.0** |
| **BATI** | **Baumata** 5.4nm,0.3s,baz=297,slow=2.1,SNR=7.9 | **13.73** | **200** | P | | **Pn** | **Pn** | **06 22 31.2** | **-1.5** |
| BATI | comp=Z,178nm,19.3s,baz=17,slow=42 | | | LR | | LR | LR | 06 28 52.7 | |
| **BATI** | **Baumata** 74nm,1.2s | **13.73** | **200** | P | | **Pn** | **Pn** | **06 22 34.0** | **+1.3** |
| **BBKI** | **Banjar Baru** 79nm,0.9s | **14.90** | **245** | P | | **Pn** | **Pn** | **06 22 45.7** | **-2.2** |
| **BASI** | **Baing, Sumba** 204nm,0.9s,2μm | **15.07** | **211** | P | | **P** | **P** | **06 22 52.1** | **-1.6** |
| **MTN** | **Manton Dam** baz=16,SNR=6.2 | **15.76** | **170** | P | | **Pn** | **Pn** | **06 22 59.1** | **+0.3** |
| **MTN** | **Manton Dam** 37nm,1.0s | **15.76** | **170** | *e*Pn | | **Pn** | **Pn** | **06 22 58.2** | **-0.6** |
| **KDU** | **Kakadu** baz=16 | **15.89** | **165** | P | | **Pn** | **Pn** | **06 22 59.7** | **-0.8** |
| **SBUM** | **Sibu** | **16.16** | **269** | ⇓P | | **Pn** | **Pn** | **06 23 03.2** | **-0.7** |
| **SBUM** | **Sibu** 162nm,0.9s | **16.16** | **269** | *e*Pn | | **Pn** | **Pn** | **06 23 03.1** | **-0.8** |
| **TWSI** | **Taliwang, Sumb** 274nm,1.1s,2μm | **16.20** | **225** | P | | **P** | **P** | **06 23 06.1** | **-0.1** |
| **SRBI** | **Singaraja** 276nm,1.1s,3μm | **17.01** | **231** | P | | **P** | **P** | **06 23 16.9** | **+1.8** |
| **STKI** | **Sintang** 102nm,1.0s | **17.12** | **261** | P | | **Pn** | **Pn** | **06 23 15.3** | **-0.6** |
| **DNP** | **Denpasar** 692nm,1.2s | **17.39** | **229** | P | | **P** | **P** | **06 23 23.1** | **+3.8** |
| **IGBI** | **Denpasar** 372nm,0.8s,3μm | **17.52** | **229** | P | | **P** | **P** | **06 23 23.8** | **+3.0** |
| **ABJI** | **Asem Bagus** 139nm,1.2s,2μm | **17.60** | **233** | P | | **Pn** | **Pn** | **06 23 24.4** | **+2.7** |
| **JAGI** | **Jajag, Banyuwa** baz=18,SNR=12 | **18.07** | **232** | P | | **Pn** | **Pn** | **06 23 27.2** | **-0.2** |
| **JAGI** | **Jajag, Banyuwa** 291nm,1.1s,3μm | **18.07** | **232** | P | | **Pn** | **Pn** | **06 23 27.6** | **+0.2** |
| **JAGI** | **Jajag, Banyuwa** 264nm,1.1s | **18.07** | **232** | *e*P | | **P** | **P** | **06 23 27.0** | **+0.1** |
| **KSM** | **Kuching** baz=18,SNR=18 | **18.12** | **266** | P | | **Pn** | **Pn** | **06 23 27.6** | **-0.4** |
| **KSM** | **Kuching** | **18.12** | **266** | ⇑P | | **P** | **P** | **06 23 27.3** | **-0.1** |
| **KSM** | **Kuching** 133nm,1.0s | **18.12** | **266** | *e*P | | **P** | **P** | **06 23 27.1** | **-0.3** |
| **KNRA** | **Kununurra** baz=18,SNR=6.9 | **18.34** | **179** | P | | **Pn** | **Pn** | **06 23 30.5** | **-0.1** |
| **TBJI** | **Tambak Boyo** 138nm,1.0s,3μm | **19.07** | **240** | P | | **Pn** | **Pn** | **06 23 40.1** | **+0.7** |
| **UWJI** | **Ujung Watu** 181nm,1.0s,3μm | **19.67** | **242** | P | | **Pn** | **Pn** | **06 23 50.7** | **+4.3** |
| **NGJI** | **Ngawi** 129nm,0.9s | **19.67** | **239** | P | | **Pn** | **Pn** | **06 23 46.0** | **-0.5** |
| **PWJI** | **Pagerwojo** 232nm,0.8s,2μm | **19.72** | **237** | P | | **P** | **P** | **06 23 45.4** | **+0.5** |
| **PCJI** | **Pacitan** 545nm,1.0s,5μm | **20.34** | **237** | P | | Pn | Pn | 06 23 53.2 | -1.1 |
| **WOJI** | **Wonogiri, Jawa** 127nm,0.9s,11μm | **20.37** | **239** | P | | Pn | Pn | 06 23 57.2 | +2.5 |
| **SMRI** | **Semarang** 163nm,1.0s,4μm | **20.40** | **241** | P | | Pn | Pn | 06 23 53.8 | -1.3 |
| **SMRI** | **Semarang** 142nm,1.0s | **20.40** | **241** | *e*P | | **P** | **P** | **06 23 52.0** | **-0.3** |
| **UGM** | **Wanagama** baz=21,SNR=6.2 | **20.75** | **239** | P | | **P** | **P** | **06 23 57.1** | **+1.0** |
| **UGM** | **Wanagama** 224nm,1.1s | **20.75** | **239** | P | | Pn | Pn | 06 24 01.3 | +2.1 |
| **UGM** | **Wanagama** 237nm,1.1s | **20.75** | **239** | *e*P | | **P** | **P** | **06 23 56.7** | **+0.6** |
| **TPI** | **Tanjungpandan** 45nm,1.0s | **21.45** | **255** | P | | **P** | **P** | **06 24 03.5** | **0.0** |
| **YULB** | **Yu-li** 81nm,1.4s | **21.61** | **342** | *e*P | | **P** | **P** | **06 24 06.3** | **+1.1** |
| **DLV** | **T Lat** 302nm,1.6s | **21.72** | **296** | *e*P | | **P** | **P** | **06 24 07.1** | **+0.4** |
| **SSLB** | **Suanglung** 36nm,0.8s | **22.09** | **342** | *e*P | | **P** | **P** | **06 24 10.1** | **-0.2** |
| **COEN** | **Coen** 21nm,0.9s | **22.17** | **139** | *e*P | | **P** | **P** | **06 24 14.7** | **+3.4** |
| **PMG** | **Port Moresby** 6.7nm,0.6s,baz=304,slow=15,SNR=2.4 | **22.28** | **123** | P | | **P** | **P** | **06 24 09.9** | **-2.5** |
| PMG | comp=Z,346nm,21.8s,baz=299,slow=39 | | | LR | LR | | | 06 33 49.3 | |
| **PMG** | **Port Moresby** | **22.28** | **123** | *e*P | | **P** | **P** | **06 24 13.4** | **+1.0** |
| PMG | comp=Z,104nm,1.1s | | | pmax | pmax | | | | |
| **PPBI** | **Pangkal Pinang** comp=Z,30nm,0.9s,comp=Z,10μm | **22.78** | **258** | P | | **P** | **P** | **06 24 20.0** | **+2.2** |
| **YHNB** | **Yeheng** comp=Z,835nm,2.4s | **22.79** | **343** | *e*P | | **P** | **P** | **06 24 18.2** | **+0.3** |
| **LEM** | **Lembang** comp=Z,94nm,0.9s,baz=113,slow=17,SNR=6.3 | **22.83** | **245** | P | | **P** | **P** | **06 24 18.7** | **+0.3** |
| **LEM** | **Lembang** comp=Z,1μm,1.1s | **22.83** | **245** | P | | **P** | **P** | **06 24 20.4** | **+2.0** |
| **CISI** | **Cisompet, Garu** comp=Z,79nm,0.9s | **22.95** | **243** | *e*P | | **P** | **P** | **06 24 18.8** | **-0.9** |
| **WRAB** | **Tennant Creek** | **23.32** | **166** | *e*P | | **P** | **P** | **06 24 23.3** | **+0.3** |
| WRAB | comp=Z,74nm,0.6s | | | pmax | pmax | | | | |
| **WRAB** | **Tennant Creek** comp=Z,611nm,0.5s | **23.32** | **166** | P | | **P** | **P** | **06 24 23.0** | **+0.1** |
| **WRAB** | **Tennant Creek** comp=Z,74nm,0.6s | **23.32** | **166** | *e*P | | **P** | **P** | **06 24 23.3** | **+0.3** |
| **WRA** | **Warramunga Arr** comp=Z,32nm,0.4s,baz=347,slow=11,SNR=120 | **23.32** | **166** | P | | **P** | **P** | **06 24 22.3** | **-0.7** |
| WRA | | | | S | | **S** | **S** | **06 28 30.4** | **+0.6** |
| WRA | comp=Z,1.5nm,0.7s,baz=346,slow=15,SNR=2.4 | | | ScP | | **ScP** | **ScP** | **06 31 40.0** | **+0.4** |
| WRA | comp=Z,1.7nm,0.7s,baz=342,slow=3.2,SNR=6.9 | | | LR | LR | | | 06 34 49.7 | |
| **CBJI** | **Citeko** comp=Z,352nm,0.8s | **23.37** | **247** | P | | **P** | **P** | **06 24 25.4** | **+1.9** |
| **CNJI** | **Cibinong** comp=Z,160nm,1.1s,comp=Z,2μm | **23.47** | **245** | P | | **P** | **P** | **06 24 25.2** | **+0.8** |
| **QIZ** | **Qiongzhong** | **24.30** | **313** | P | | | **P** | **06 24 32.5** | **+0.7** |
| QIZ | | | | pP | | | **pP** | **06 24 49.0** | **-0.4** |
| QIZ | | | | sP | | | **sP** | **06 24 57.5** | **-1.0** |
| QIZ | | | | S | | | **S** | **06 28 47.5** | **+1.9** |
| QIZ | | | | sS | | | **sS** | **06 29 16.5** | **+0.5** |
| QIZ | comp=Z,29nm,1.1s | | | PMZ | | | | | |
| **QIZ** | **Qiongzhong** | **24.30** | **313** | sP | | | **P** | **06 24 32.5** | **+0.7** |
| **CGJI** | **Cibinong** comp=Z,123nm,0.9s | **24.51** | **248** | P | | | **P** | **06 24 33.9** | **+0.1** |
| **MYKOM** | **Kota Tinggi** | **24.54** | **268** | ⇓P | | | **P** | **06 24 34.3** | **+0.2** |
| **MYKOM** | **Kota Tinggi** comp=Z,69nm,1.0s | **24.54** | **268** | *e*P | | | **P** | **06 24 33.6** | **-0.5** |
| **KLI** | **Kotabumi** comp=Z,96nm,0.9s,comp=Z,4μm | **24.71** | **252** | P | | | **P** | **06 24 37.9** | **+2.3** |
| **GZH** | **Guangzhou** | **24.90** | **325** | *e*P | | | **P** | **06 24 38.5** | **+1.2** |
| **KGM** | **Kluang** | **25.06** | **269** | ⇓P | | | **P** | **06 24 39.6** | **+0.7** |
| **JMBI** | **JAMBI** comp=Z,595nm,1.1s | **25.13** | **260** | P | | | **P** | **06 24 44.0** | **+4.5** |
| **MDSI** | **Maura Dua** comp=Z,107nm,1.1s,comp=Z,2μm | **25.25** | **253** | P | | | **P** | **06 24 40.9** | **+0.4** |
| **KASI** | **Kota Agung** comp=Z,98nm,1.0s | **25.25** | **251** | P | | | **P** | **06 24 41.5** | **+0.9** |
| **MBWA** | **Marble Bar** comp=Z,154nm,2.0s | **25.26** | **199** | *e*P | | | **P** | **06 24 40.0** | **-0.5** |
| **KTGM** | **Kuala Trenggan** | **25.32** | **277** | ⇑P | | | **P** | **06 24 43.3** | **+2.1** |
| **LWLI** | **Liwa** comp=Z,102nm,0.8s

comp=Z,1µm,18.1s
**MEEK Meekatharra 30.73 197** P **P** **06 25 28.4 -0.9**
baz=31,SNR=8.5
**GSI Gunungsitoli 30.83 268** P **P** **06 25 29.0 -1.4**
baz=31
**GSI Gunungsitoli 30.83 268** P **P** **06 25 29.8 -0.6**
comp=Z,60nm,1.3s
**GSI Gunungsitoli 30.83 268** *e*P **P** **06 25 28.6 -1.9**
comp=Z,90nm,1.2s
**UTTA Uttaradit 31.09 300** P **P** **06 25 33.0 +0.4**
comp=Z,5.8nm,0.9s,comp=Z,61nm
**NANT Nan 31.43 302** P **P** **06 25 37.0 +1.3**
comp=Z,8.3nm,0.9s,comp=Z,285nm
**GYA Guiyang 31.45 320** P **P** **06 25 37.8 +2.0**
GYA pP **pP** **06 25 55.5 +1.7**
GYA PP **PnPn** **06 26 44.0 +2.4**
GYA S **S** **06 30 39.3 +0.8**
GYA sS **sS** **06 31 11.5 +2.2**
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,130nm,5.6s
GYA LN
comp=Z,620nm,18.4s
GYA LE
comp=Z,560nm,18.0s
**KHLT Khaolaem Dam 31.73 294** P **P** **06 25 39.6 +1.4**
comp=Z,17nm,1.0s
**MLSI Meulaboh, Aceh 31.96 274** P **P** **06 25 40.8 +0.5**
comp=Z,87nm,1.2s
**UMPA Umpang Tak 31.97 297** P **P** **06 25 41.5 +1.1**
comp=Z,6.5nm,0.9s,comp=Z,772nm
**LAMP Lampang 32.22 301** P **P** **06 25 43.4 +0.9**
comp=Z,9.5nm,0.8s
**ENH Enshi 32.69 329** *e*P **P** **06 25 46.5 0.0**
comp=Z,8.9nm,0.8s
**CM01 Chiang Mai Arr 32.75 300** *e*P **P** **06 25 46.8 -0.4**
**CMAR Chiang Mai Arr 32.78 300** P **P** **06 25 47.4 -0.1**
comp=Z,10.0nm,0.8s,baz=110,slow=6.7,SNR=28
CMAR ScP **ScP** **06 32 11.3 +2.6**
comp=Z,0.4nm,0.3s,baz=94,slow=2.9,SNR=6.5
CMAR LR LR 06 37 54.1
comp=Z,65nm,21.3s,baz=130,slow=34
**CMAR Chiang Mai Arr 32.78 300** *ce*P **P** **06 25 47.7 +0.2**
CMAR pmax pmax
comp=Z,10.0nm,0.8s
**CHTO Chiang Mai 32.93 301** P **P** **06 25 48.8 0.0**
comp=Z,110nm,1.4s
**CHTO Chiang Mai 32.93 301** *e*P **P** **06 25 48.9 +0.1**
CHTO pmax pmax
comp=Z,22nm,0.9s
**CHTO Chiang Mai 32.93 301** *e*P **P** **06 25 48.9 +0.1**
comp=Z,22nm,0.9s
**KMI Kunming 33.23 314** P **P** **06 25 53.3 +1.8**
KMI pP **pP** **06 26 11.5 +1.9**
KMI sP **sP** **06 26 21.0 +2.5**
KMI PMZ
comp=Z,31nm,1.0s
KMI PMZ
comp=Z,250nm,5.1s
KMI LN
comp=Z,170nm,6.9s
KMI LE
comp=Z,200nm,6.0s
**CMAI Chiengmai2 33.34 303** P **P** **06 25 52.5 0.0**
comp=Z,18nm,0.9s
**TJN Taejon 33.45 358** *ce*P **P** **06 25 53.6 +0.6**
**HNR Honiara 33.70 111** LR LR 06 40 52.5
comp=Z,72nm,18.7s,baz=288,slow=38
**KSAR Wonju Array Be 34.50 359** P **P** **06 26 01.3 -0.8**
KSAR 06 28 35.8
**KSAR Wonju Array Be 34.50 359** P **P** **06 26 01.2 -0.8**
KSAR PcP **PcP** **06 28 35.8 +0.1**
**KSRS Korea Array 34.51 359** P **P** **06 26 01.2 -0.9**
comp=Z,8.9nm,0.8s,baz=173,slow=9.8,SNR=20
KSRS PcP **PcP** **06 28 35.8 +0.1**
comp=Z,3.3nm,0.8s,baz=170,slow=2.6,SNR=7.6
KSRS LR LR 06 39 15.0
comp=Z,96nm,20.9s,baz=186,slow=35
**KS01 Wonju Array Si 34.53 359** *e*P **P** **06 26 01.5 -0.9**
**MJAR Matsushiro Arr 34.80 14** P **P** **06 26 03.0 -1.7**
comp=Z,14nm,0.8s,baz=185,slow=9.7,SNR=25
MJAR PcP **PcP** **06 28 37.2 +0.5**
comp=Z,4.7nm,0.7s,baz=185,slow=3.3,SNR=7.9
MJAR LR LR 06 38 30.0
comp=Z,158nm,21.6s,baz=200,slow=33
**MAJO Matsushiro 34.80 14** *e*P **P** **06 26 03.8 -1.0**
MAJO pmax pmax
comp=Z,150nm,0.9s
**MAJO Matsushiro 34.80 14** *e*P **P** **06 26 03.5 -1.2**
comp=Z,21nm,0.8s
**MAT Matsushiro 34.80 14** P **P** **06 26 02.8 -2.0**
**BLDU Ballidu 35.03 198** P **P** **06 26 06.2 -0.5**
baz=35,SNR=7.9
**KLBR Kellerberrin 35.65 196** P **P** **06 26 11.5 -0.5**
baz=36,SNR=14
**XAN Xi'an 36.02 332** P **P** **06 26 15.0 -0.3**
XAN pP **pP** **06 26 33.8 +0.3**
XAN PMZ
comp=Z,58nm,1.0s
**BBOO Buckleboo 36.13 169** P **P** **06 26 16.1 -0.1**
baz=36,SNR=16
**BBOO Buckleboo 36.13 169** *e*P **P** **06 26 16.0 -0.1**
comp=Z,18nm,0.9s
**CD2 Chengdu 36.39 323** P **P** **06 26 18.5 0.0**
CD2 sP **sP** **06 26 46.5 +0.9**
CD2 PP **PP** **06 27 43.0 +0.2**
CD2 S **S** **06 31 55.3 +0.7**
CD2 SS **SS** **06 34 38.3 +2.8**
CD2 ScS **ScS** **06 36 27.0 -1.0**
CD2 PMZ
comp=Z,50nm,0.4s
CD2 PMZ
comp=Z,120nm,5.4s
**NWAO Narrogin (SRO) 37.05 196** *e*P **P** **06 26 23.7 -0.3**
NWAO pmax pmax
comp=Z,26nm,1.0s
**NWAO Narrogin (SRO) 37.05 196** *e*P **P** **06 26 23.7 -0.3**
comp=Z,26nm,1.0s
**BJT Baijiatuau 38.69 345** *e*P **P** **06 26 36.7 -1.1**
BJT pmax pmax
comp=Z,36nm,1.0s
**BJT Baijiatuau 38.69 345** *e*P **P** **06 26 36.7 -1.1**
comp=Z,36nm,1.0s
**BJI Beijing 38.71 345** P **P** **06 26 40.5 +2.6**
BJI PP **PnPn** **06 28 10.3 -0.5**
BJI S **S** **06 32 31.8 +2.5**
BJI SS **SnSn** **06 35 28.0 +2.6**
BJI PMZ
comp=Z,35nm,0.8s
BJI PMZ
comp=Z,290nm,5.0s
BJI LN
comp=Z,100nm,4.6s
BJI LE
comp=Z,350nm,5.5s
**MSHR Mys Shultsa 39.70 3** ⇑*i*P **P** **06 26 47.6 +1.5**
**ARMA Armidale 39.77 148** P **P** **06 26 47.2 +0.2**
baz=40,SNR=11
**ARMA Armidale 39.77 148** *e*P **P** **06 26 48.3 +1.3**
comp=Z,12nm,1.1s
**LZH Lanzhou 40.17 329** ⇑P **P** **06 26 51.3 +1.0**
LZH pP **pP** **06 27 07.0 -1.8**
LZH sP **sP** **06 27 18.0 +0.5**
LZH S S 06 32 58.5 +6.8
LZH sS **sS** **06 33 27.0 +3.8**
LZH PMZ
comp=Z,160nm,1.4s
LZH PMZ
comp=Z,280nm,4.6s
LZH LN
comp=Z,490nm,13.2s
LZH LE
comp=Z,570nm,14.6s
LZH LZ
comp=Z,760nm,16.1s
**VLA Vladivostok 40.29 4** *e*P **P** **06 26 51.8 +0.8**
VLA pmax pmax
comp=Z,27nm,1.0s
**H11S3 WAKE ISLAND Hy 40.61 65** T T 07 10 18.6
baz=252,slow=75,SNR=70
**H11S2 WAKE ISLAND Hy 40.63 65** T T 07 10 21.4
baz=252,slow=75,SNR=70
**H11S1 WAKE ISLAND Hy 40.63 65** T T 07 10 18.0
baz=252,slow=75,SNR=50
**HHC Hu-ho-hao-te 40.83 340** *e*P **P** **06 26 56.5 +0.9**
HHC pP **pP** **06 27 14.8 +0.7**
HHC sP **sP** **06 27 24.5 +1.6**
HHC PP **PnPn** **06 28 34.8 -1.1**
HHC S **S** **06 33 02.5 +1.2**
HHC PMZ
comp=Z,17nm,0.8s
HHC PMZ
comp=Z,150nm,8.5s
**H11N1 WAKE ISLAND Hy 41.18 63** T T 07 10 49.8
baz=250,slow=75,SNR=100
**H11N2 WAKE ISLAND Hy 41.19 63** T T 07 10 56.9
baz=250,slow=75,SNR=62
**H11N3 WAKE ISLAND Hy 41.20 63** T T 07 10 54.2
baz=250,slow=75,SNR=80
**ARPS Mount Arapiles 41.29 164** P **P** **06 27 00.6 +1.3**
baz=42,SNR=5.1
**USRK Ussuriysk Ar. 41.37 4** P **P** **06 26 59.4 -0.5**
comp=Z,28nm,0.7s,baz=187,slow=7.5,SNR=57
**MDJ Mudanjiang 41.68 1** P **P** **06 27 03.3 +0.9**
MDJ pP **pP** **06 27 19.5 -1.4**
MDJ sP **sP** **06 27 27.5 -2.2**
MDJ PMZ
comp=Z,31nm,1.0s
MDJ PMZ
comp=Z,66nm,5.8s
**MDJ Mudanjiang 41.68 1** *e*P **P** **06 27 02.7 +0.3**
comp=Z,27nm,0.9s
**ASAJ Asahikawa 43.04 15** *e*P **P** **06 27 14.7 +1.2**
comp=Z,4.4nm,0.5s
**LSA Lhasa 44.31 311** P **P** **06 27 24.8 +0.3**
LSA PMZ
comp=Z,36nm,0.9s
**LSA Lhasa 44.31 311** *e*P **P** **06 27 25.3 +0.8**
LSA pmax pmax
comp=Z,41nm,0.8s
**LSA Lhasa 44.31 311** *e*P **P** **06 27 25.3 +0.8**
comp=Z,40nm,0.8s
**DZM Mont Dzumac 44.63 126** *e*LR LR 06 40 08.7
comp=Z,197nm,26.9s
**GTA Gaotai 44.77 328** ⇓P **P** **06 27 27.3 -0.2**
GTA pP **pP** **06 27 45.8 -0.5**
GTA sP **sP** **06 27 54.3 -0.7**
GTA S **S** **06 33 59.0 -0.2**
GTA ScS **ScS** **06 37 14.5 -3.5**
GTA PMZ
comp=Z,14nm,1.4s
GTA PMZ
comp=Z,100nm,4.8s
GTA LN
comp=Z,140nm,16.2s
GTA LE
comp=Z,220nm,15.9s
**YSS Yuzh-Sakhalins 45.74 14** *e*P **P** **06 27 34.3 -0.6**
**HABR Khabarovsk 45.88 6** *e*P **P** **06 27 33.1 -2.9**
HABR *e**PP **pP** **06 27 52.6 -2.2**
HABR *e**SP **sP** **06 28 02.1 -1.4**
HABR *e* 06 29 21.8
HABR *e*PPP PPP 06 30 04.2
HABR *e*S **S** **06 34 11.3 -3.3**
HABR *e**SS **sS** **06 34 45.3 -1.4**
HABR *e* 06 37 21.4
HABR *e*SSS SSS 06 38 34.0
HABR pmax pmax
HABR comp=Z,52nm,1.6s MLR MLR
comp=Z,111nm,18.0s
**TAPN Taplejung 45.91 306** *e*P **P** **06 27 36.9 -0.1**
comp=Z,138nm,1.0s
**ODAN Odare 45.97 305** *e*P **P** **06 27 37.2 -0.2**
comp=Z,93nm,0.7s
**CHLP Challavanipeta 46.12 293** *e*P **P** **06 27 38.2 -0.2**
CHLP IAmb IAmb 06 27 40.7
comp=Z,21nm,0.7s
**KLR Kul'dur 46.37 3** *e*P P 06 27 35.8 -4.0
**RAMN Ramite 46.65 305** *e*P **P** **06 27 42.7 0.0**
**GUN Gumba 47.62 306** *e*P **P** **06 27 50.3 -0.1**
comp=Z,169nm,0.8s
**PALK Pallekele 47.70 277** *e*P **P** **06 27 50.5 -0.3**
PALK pmax pmax
comp=Z,46nm,1.3s
**PALK Pallekele 47.70 277** *e*P **P** **06 27 50.5 -0.3**
comp=Z,46nm,1.3s
**PKI Pulchoki 47.87 305** *e*P **P** **06 27 51.7 -0.6**
comp=Z,46nm,0.8s
**KKN Kakani 48.06 306** *e*P **P** **06 27 53.3 -0.4**
**PVM Polavaram 48.09 291** *e*P **P** **06 27 54.1 +0.4**
PVM IAmb IAmb 06 27 55.8
comp=Z,24nm,0.8s
**DMN Daman 48.13 305** *e*P **P** **06 27 54.0 -0.3**
comp=Z,112nm,0.9s
**ULN Ulaanbaatar 48.54 341** *e*P **P** **06 27 56.5 -0.5**
ULN pmax pmax
comp=Z,15nm,0.9s
**ULN Ulaanbaatar 48.54 341** P **P** **06 27 56.2 -0.7**
SNR=7.8
**ULN Ulaanbaatar 48.54 341** *e*P **P** **06 27 56.5 -0.5**
comp=Z,15nm,0.9s
**GKN Gorkha 48.67 305** *e*P **P** **06 27 57.9 -0.4**
comp=Z,51nm,0.8s
**SONM Songino Array 48.73 340** P **P** **06 27 57.2 -1.2**
comp=Z,5.2nm,0.8s,baz=151,slow=7.5,SNR=18
SONM PcP **PcP** **06 29 22.8 +0.4**
comp=Z,6.5nm,0.7s,baz=157,slow=3.2,SNR=11
SONM LR LR 06 49 52.1
comp=Z,156nm,22.0s,baz=168,slow=38
**SONA1 Songino Array 48.74 340** *e*P **P** **06 27 57.3 -1.2**
**SKHT Srikalahasti 49.29 286** *e*P **P** **06 28 03.5 +0.5**
SKHT IAmb IAmb 06 28 05.0
comp=Z,78nm,1.4s
**KOLN Koldanda 49.43 305** *e*P **P** **06 28 04.2 +0.1**
comp=Z,194nm,0.8s
**DANN Dangsing 49.52 305** *e*P **P** **06 28 04.8 -0.1**
comp=Z,27nm,0.7s
**NJS Nagarjunasagar 50.13 289** *e*P **P** **06 28 09.1 -0.3**
NJS IAmb IAmb 06 28 11.1
comp=Z,33nm,0.9s
**RCLA Racherla 50.28 288** *e*P **P** **06 28 10.0 -0.5**
RCLA IAmb IAmb 06 28 12.1
comp=Z,57nm,1.0s
**SRLM Srisailam 50.44 289** *e*P **P** **06 28 11.1 -0.7**
SRLM IAmb IAmb 06 28 13.4
comp=Z,55nm,1.1s
**RPR Rampur 50.59 292** *e*P **P** **06 28 12.8 0.0**
RPR IAmb IAmb 06 28 14.3
comp=Z,23nm,0.8s
**HYB Hyderabad 51.00 290** *i*P **P** **06 28 15.0 -0.9**
**HYBB Hyderabad (bro 51.00 290** *e*P **P** **06 28 15.4 -0.6**
HYBB IAmb IAmb 06 28 17.7
comp=Z,46nm,0.9s
**SRSP Sriramsagar 51.49 292** *e*P **P** **06 28 18.8 -0.8**
SRSP IAmb IAmb 06 28 21.3
comp=Z,31nm,0.9s
**URV Uravakonda 51.82 287** *e*P **P** **06 28 20.9 -1.2**
URV IAmb IAmb 06 28 23.3
comp=Z,42nm,1.1s
**ZAK Zakamensk 51.98 340** *e*P **P** **06 28 21.7 -1.1**
ZAK *e* 06 29 34.6
ZAK pmax pmax
comp=Z,5.0nm,1.2s
ZAK pmax pmax
comp=Z,10.0nm,1.0s
**KLRI Killari 52.95 291** *e*P **P** **06 28 29.4 -1.1**
KLRI IAmb IAmb 06 28 31.9
comp=Z,72nm,1.0s
**TLY Talaya 52.95 341** *e*P P 06 28 33.7 +3.8
TLY *e* 06 30 37.0
TLY *e*PPP PPP 06 31 41.1
TLY *e*S **S** **06 35 48.6 -4.9**
TLY pmax pmax
comp=Z,11nm,1.1s
TLY MLR MLR
comp=Z,138nm,22.0s
**WMQ Urumqi 54.45 325** P **P** **06 28 41.5 +0.5**
WMQ PMZ
comp=Z,14nm,1.0s
**NDI New Delhi 55.03 303** *e*P **P** **06 28 44.0 -1.4**
**POO Poona 55.60 291** ⇑*i*P **P** **06 28 47.0 -2.7**
comp=Z,50nm,1.0s
**PEA0 Petropavlovsk- 55.70 21** *e*P **P** **06 28 50.4 +0.6**
**PETK Petropavlovsk- 55.70 21** P **P** **06 28 50.3 +0.5**
comp=Z,26nm,1.0s,baz=193,slow=5.3,SNR=14
**SMLA Simla 55.86 306** *i*P **P** **06 28 51.7 +0.4**
**YAK Yakutsk 59.12 1** *e*P **P** **06 29 10.9 -2.7**
YAK *e*S S 06 37 23.5 +8.7
YAK pmax pmax
comp=Z,20nm,0.8s
YAK pmax pmax
comp=E,3.0nm,0.8s
YAK pmax pmax
comp=N,14nm,1.5s
YAK pmax pmax
comp=Z,49nm,11.9s
YAK pmax pmax
comp=N,21nm,6.9s
YAK pmax pmax
comp=E,23nm,6.7s
YAK smax smax
comp=N,43nm,7.3s
YAK smax smax
comp=E,27nm,8.9s
YAK MLR MLR
comp=Z,66nm,18.0s
YAK MLR MLR
comp=E,28nm,18.0s
YAK MLR MLR
comp=N,30nm,16.0s
**PDGK Podgornoye 59.20 320** *i*P **P** **06 29 14.3 -0.2**
PDGK pmax pmax
comp=Z,56nm,0.9s
**MK01 Makanchi Array 59.26 325** *e*P **P** **06 29 14.4 -0.6**
**MK31 Makanchi Array 59.28 325** P **P** **06 29 14.7 -0.4**
MK31 pmax pmax
comp=Z,48nm,0.9s
**MKAR Makanchi Array 59.28 325** P **P** **06 29 14.6 -0.5**
comp=Z,36nm,0.8s,baz=120,slow=8.2,SNR=87
MKAR ScP **ScP** **06 33 58.0 +1.3**
comp=Z,1.9nm,0.9s,baz=124,slow=6.5,SNR=3.9
MKAR LR LR 06 56 16.5
comp=Z,87nm,19.9s,baz=117,slow=37
**MKAR Makanchi Array 59.28 325** *ce*P **P** **06 29 14.6 -0.5**
MKAR pmax pmax
comp=Z,37nm,0.8s
**MKAR Makanchi Array 59.28 325** *e*P **P** **06 29 15.0 -0.1**
MKAR ScP **ScP** **06 33 58.0 +1.3**
**MAKZ Makanchi 59.47 325** *e*P **P** **06 29 16.0 -0.4**
**KSH Kashi 59.89 315** P **P** **06 29 20.5 +1.0**
KSH *e*pP **pP** **06 29 40.0 +0.9**
KSH *e*PP **PP** **06 31 34.8 +2.3**
KSH PcS **PcS** **06 34 08.0 +0.3**
KSH S **S** **06 37 22.8 -3.1**
KSH PMZ
comp=Z,51nm,1.3s
KSH PMZ
comp=Z,120nm,6.3s
KSH LN
comp=Z,180nm,6.8s
KSH LE
comp=Z,170nm,5.5s
KSH LZ
comp=Z,170nm,8.3s
**ULHL Ulahol 60.84 318** P **P** **06 29 26.1 0.0**
SNR=13
**KZA Kyzart 61.43 317** P **P** **06 29 31.0 +0.6**
SNR=9.0
**TKM2 Tokmak 2 61.55 318** *e*P **P** **06 29 30.7 -0.2**
TKM2 pmax pmax
comp=Z,24nm,0.9s
**TKM2 Tokmak 2 61.55 318** P **P** **06 29 30.7 -0.2**
SNR=24
**TKM2 Tokmak 2 61.55 318** *e*P **P** **06 29 30.7 -0.2**
comp=Z,24nm,0.9s
**SFK Sufi-Kurgan 61.83 315** P **P** **06 29 32.9 0.0**
SFK pmax pmax
comp=Z,17nm,0.7s
**KBK Karagaybulak 61.88 318** P **P** **06 29 33.2 +0.2**
SNR=16
**UCH Uchtor 61.99 317** P **P** **06 29 34.4 +0.3**
SNR=45
**AAK Ala-Archa 62.17 318** P **P** **06 29 35.0 0.0**
AAK pmax pmax
comp=Z,16nm,1.1s
**AAK Ala-Archa 62.17 318** P **P** **06 29 35.7 +0.7**
SNR=8.3
**AAK Ala-Archa 62.17 318** *e*P **P** **06 29 35.0 0.0**
comp=Z,54nm,1.8s
**ZAA0 Zalesovo Array 62.19 333** *e*P **P** **06 29 32.8 -1.8**
**ZALV Zalesovo Beam 62.19 333** P **P** **06 29 32.9 -1.7**
comp=Z,12nm,0.8s,baz=115,slow=6.7,SNR=21
ZALV LR LR 06 57 52.2
comp=Z,88nm,18.8s,baz=70,slow=37
**ZALV Zalesovo Beam 62.19 333** *i*P **P** **06 29 33.2 -1.4**
ZALV pmax pmax
comp=Z,12nm,0.8s
**USP Ospenovka 62.43 318** P **P** **06 29 36.2 -0.3**
SNR=26
**AML Almayashu 62.51 317** P **P** **06 29 37.8 +0.3**
SNR=24
**SEY Seymchan 62.59 12** P **P** **06 29 36.8 -0.4**
comp=Z,5.4nm,0.9s,baz=212,slow=10,SNR=6.7
**SEY Seymchan 62.59 12** *e*P **P** **06 29 38.6 +1.4**
**EKS2 Erkin-Say 62.67 317** *e*P **P** **06 29 38.5 +0.2**
EKS2 pmax pmax
comp=Z,29nm,0.9s
**EKS2 Erkin-Say 62.67 317** P **P** **06 29 38.5 +0.2**
SNR=24
**EKS2 Erkin-Say 62.67 317** *e*P **P** **06 29 38.5 +0.2**
comp=Z,29nm,0.9s
**KBL Kabul 63.41 307** *e*P **P** **06 29 43.2 -0.3**
KBL pmax pmax
comp=Z,14nm,0.8s
**KBL Kabul 63.41 307** *e*P **P** **06 29 43.2 -0.3**
comp=Z,14nm,0.8s
**KURK Kurchatov 63.43 327** *e*P **P** **06 29 42.1 -0.9**
KURK pmax pmax
comp=Z,120nm,0.9s
**KURK Kurchatov 63.43 327** P **P** **06 29 42.5 -0.5**
comp=Z,406nm,0.9s,SNR=6.4
**KURK Kurchatov 63.43 327** *e*P **P** **06 29 42.1 -0.9**
comp=Z,120nm,0.9s
**MNAS Manas 63.47 317** P **P** **06 29 43.4 -0.2**
MNAS pmax pmax
comp=Z,28nm,1.0s
**NVS Novosibirsk 63.47 333** *e*P **P** **06 29 42.0 -1.1**
NVS pmax pmax
comp=Z,29nm,0.9s
NVS pmax pmax
comp=N,18nm,1.1s
NVS pmax pmax
comp=E,15nm,1.3s
**KK31 Karatay Array 65.06 317** *i*P **P** **06 29 53.0 -0.8**
KK31 pmax pmax
comp=Z,19nm,0.8s
**KKAR Karatay Array 65.06 317** *e*P **P** **06 29 53.2 -0.6**
KKAR pmax pmax
comp=Z,21nm,0.8s
**KKAR Karatay Array 65.06 317** *e*P **P** **06 29 53.2 -0.6**
comp=Z,21nm,0.8s
**OTUK Ortayu 65.88 323** P **P** **06 29 58.5 -0.5**
OTUK pmax pmax
comp=Z,29nm,0.9s
**BVA0 Borovoye Array 69.02 327** P **P** **06 30 17.9 -0.8**
BVA0 pmax pmax
comp=Z,54nm,1.3s
**BRVK Borovoye 69.09 327** *e*P **P** **06 30 18.3 -0.8**
BRVK pmax pmax
comp=Z,43nm,1.0s
**BRVK Borovoye 69.09 327** P **P** **06 30 18.1 -1.0**
comp=Z,234nm,0.9s,SNR=13
**BRVK Borovoye 69.09 327** P **P** **06 30 18.6 -0.5**
SNR=14
**BRVK Borovoye 69.09 327** *e*P **P** **06 30 18.3 -0.8**
comp=Z,43nm,1.0s
**BILL Bilibino 70.05 14** *i*P P 06 30 21.5 -3.3
BILL pmax pmax
comp=Z,8.0nm,1.1s
BILL MLR MLR
comp=Z,52nm,14.0s
**CASY Casey 70.09 188** *e*P **P** **06 30 25.4 +0.4**
comp=Z,10.0nm,0.8s
**GEYT Alibeck 72.78 309** P **P** **06 30 41.7 -0.1**
comp=Z,9.7nm,0.9s,baz=134,slow=4.3,SNR=10
GEYT LR LR 07 07 22.4
comp=Z,68nm,18.8s,baz=240,slow=40
**AB31 Akbulak array 73.93 321** *i*P **P** **06 30 47.2 -1.1**
AB31 pmax pmax
comp=Z,41nm,1.3s
**ABKAR Akbulak array 73.93 321** *e*P **P** **06 30 47.2 -1.1**
comp=Z,11nm,0.8s
**RBK Rabkut 74.09 287** P **P** **06 30 51.1 +1.1**
SNR=5.9
**ABTO Aybut 74.95 287** P **P** **06 30 53.9 -1.1**
SNR=7.5

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SVE** | **Sverdlovsk** | **75.64** | **328** | *e*P | | **P** | | **06 30 57.3** | **-0.7** |
| SVE | | | | | pmax | pmax | | | |
| | comp=Z,46nm,1.3s | | | | | | | | |
| **SDPT** | **Sand Point** | **77.05** | **34** | *e*P | | **P** | | **06 31 07.0** | **+1.0** |
| **OHAK** | **Old Harbor** | **81.35** | **33** | *e*P | | **P** | | **06 31 30.4** | **+1.0** |
| | comp=Z,386nm,2.1s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **81.81** | **32** | *e*P | | **P** | | **06 31 33.1** | **+1.3** |
| KDAK | | | | | pmax | pmax | | | |
| | comp=Z,48nm,1.2s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **81.81** | **32** | *e*P | | **P** | | **06 31 33.1** | **+1.3** |
| | comp=Z,48nm,1.2s | | | | | | | | |
| **RSO** | **Redoubt South** | **82.10** | **29** | *e*P | | **P** | | **06 31 36.0** | **+2.4** |
| | comp=Z,45nm,0.9s | | | | | | | | |
| **VNDA** | **Vanda** | **82.28** | **173** | P | | **P** | | **06 31 34.2** | **+0.3** |
| | comp=Z,7.5nm,0.7s,baz=319,slow=6.0,SNR=50 | | | | | | | | |
| VNDA | | | | | LR | LR | | 07 08 56.9 | |
| | comp=Z,53nm,18.6s,baz=334,slow=36 | | | | | | | | |
| **CNPM** | **China Poot** | **82.73** | **30** | *e*P | | **P** | | **06 31 38.0** | **+1.3** |
| | comp=Z,302nm,2.2s | | | | | | | | |
| **CAST** | **Castle Rocks** | **82.84** | **26** | *e*P | | **P** | | **06 31 38.3** | **+1.2** |
| | comp=Z,20nm,1.1s | | | | | | | | |
| **BRLK** | **Bradley Lake** | **82.93** | **30** | *e*P | | **P** | | **06 31 38.3** | **+0.6** |
| | comp=Z,762nm,2.8s | | | | | | | | |
| **SBA** | **Scott Base** | **83.17** | **172** | *e*P | | **P** | | **06 31 40.7** | **+2.2** |
| SBA | | | | | pmax | pmax | | | |
| | comp=Z,89nm,2.8s | | | | | | | | |
| **SBA** | **Scott Base** | **83.17** | **172** | *e*P | | **P** | | **06 31 40.7** | **+2.2** |
| | comp=Z,89nm,2.8s | | | | | | | | |
| **SUA** | **Susitna One** | **83.20** | **29** | *e*P | | **P** | | **06 31 40.0** | **+0.8** |
| | comp=Z,19nm,0.6s | | | | | | | | |
| **PPT** | **Papeete** | **83.24** | **108** | LR | | LR | | 07 04 59.5 | |
| | comp=Z,51nm,20.2s,baz=230,slow=33 | | | | | | | | |
| **PPT2** | **Papeete2** | **83.25** | **108** | *e*LR | | LR | | 06 58 02.8 | |
| | comp=Z,164nm,27.0s | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **83.41** | **26** | *e*P | | **P** | | **06 31 40.8** | **+0.7** |
| | comp=Z,3.3nm,1.1s | | | | | | | | |
| **MAW** | **Mawson** | **83.45** | **201** | P | | **P** | | **06 31 39.7** | **-0.4** |
| | comp=Z,1.9nm,0.4s,baz=25,slow=6.4,SNR=5.0 | | | | | | | | |
| MAW | | | | | LR | LR | | 07 05 30.8 | |
| | comp=Z,22nm,21.9s,baz=61,slow=33 | | | | | | | | |
| **DAMY** | **Dhamar** | **83.50** | **284** | *e*P | | **P** | | **06 31 42.8** | **+0.9** |
| | comp=Z,32nm,1.1s | | | | | | | | |
| **MLY** | **Manley** | **83.63** | **25** | *e*P | | **P** | | **06 31 42.6** | **+1.3** |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **83.64** | **27** | *e*P | | **P** | | **06 31 42.1** | **+0.6** |
| | comp=Z,28nm,1.0s | | | | | | | | |
| **RC01** | **Rabbit Creek A** | **83.64** | **29** | *e*P | | **P** | | **06 31 42.6** | **+1.3** |
| | comp=Z,267nm,2.4s | | | | | | | | |
| **PMR** | **Palmer** | **83.98** | **28** | *e*P | | **P** | | **06 31 43.5** | **+0.5** |
| PMR | | | | | pmax | pmax | | | |
| | comp=Z,31nm,1.0s | | | | | | | | |
| **PMR** | **Palmer** | **83.98** | **28** | *e*P | | **P** | | **06 31 43.5** | **+0.5** |
| | comp=Z,31nm,1.0s | | | | | | | | |
| **BWN** | **Browne** | **84.08** | **26** | *e*P | | **P** | | **06 31 45.3** | **+1.8** |
| | comp=Z,30nm,1.0s | | | | | | | | |
| **COLD** | **Coldfoot** | **84.12** | **23** | *e*P | | **P** | | **06 31 45.5** | **+1.9** |
| | comp=Z,35nm,0.8s | | | | | | | | |
| **MCK** | **McKinley** | **84.27** | **26** | *e*P | | **P** | | **06 31 44.7** | **+0.2** |
| MCK | | | | | pmax | pmax | | | |
| | comp=Z,55nm,1.5s | | | | | | | | |
| **MCK** | **McKinley** | **84.27** | **26** | *e*P | | **P** | | **06 31 44.7** | **+0.2** |
| | comp=Z,55nm,1.5s | | | | | | | | |
| **RND** | **Reindeer** | **84.28** | **27** | *e*P | | **P** | | **06 31 44.8** | **+0.2** |
| RND | | | | | pmax | pmax | | | |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **RND** | **Reindeer** | **84.28** | **27** | *e*P | | **P** | | **06 31 44.8** | **+0.2** |
| | comp=Z,21nm,0.9s | | | | | | | | |
| **NCK** | **Nalchik** | **84.32** | **313** | P | | **P** | | **06 31 45.0** | **-0.2** |
| **SML** | **Sawmill** | **84.38** | **28** | *e*P | | **P** | | **06 31 45.9** | **+0.8** |
| SML | | | | | pmax | pmax | | | |
| | comp=Z,41nm,0.9s | | | | | | | | |
| **SML** | **Sawmill** | **84.38** | **28** | *e*P | | **P** | | **06 31 45.9** | **+0.8** |
| | comp=Z,41nm,0.9s | | | | | | | | |
| **WRH** | **Wood River Hil** | **84.71** | **26** | *e*P | | **P** | | **06 31 47.2** | **+0.6** |
| | comp=Z,22nm,1.2s | | | | | | | | |
| **KBZ** | **Khabaz** | **84.83** | **313** | P | | **P** | | **06 31 47.1** | **-0.6** |
| | comp=Z,4.5nm,1.0s,baz=60,slow=8.1,SNR=3.5 | | | | | | | | |
| KBZ | | | | | LR | LR | | 07 13 56.3 | |
| | comp=Z,35nm,18.8s,baz=65,slow=39 | | | | | | | | |
| **CCB** | **Clear Creek Bu** | **84.84** | **25** | *e*P | | **P** | | **06 31 47.6** | **+0.3** |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **84.86** | **28** | *e*P | | **P** | | **06 31 49.2** | **+1.7** |
| SCM | | | | | pmax | pmax | | | |
| | comp=Z,50nm,1.0s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **84.86** | **28** | *e*P | | **P** | | **06 31 49.2** | **+1.7** |
| | comp=Z,50nm,1.0s | | | | | | | | |
| **NEY** | **Neytrino** | **84.95** | **313** | *e*P | | **P** | | **06 31 48.2** | **-0.4** |
| NEY | | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.2s | | | | | | | | |
| **HDA** | **Harding Lake** | **85.19** | **26** | *e*P | | **P** | | **06 31 50.9** | **+1.8** |
| | comp=Z,165nm,2.9s | | | | | | | | |
| **ILAR** | **Eielson Array** | **85.25** | **25** | P | | **P** | | **06 31 48.7** | **-0.7** |
| | comp=Z,2.3nm,0.9s,baz=248,slow=5.0,SNR=12 | | | | | | | | |
| **IL1** | **Eielson Array** | **85.25** | **25** | *e*P | | **P** | | **06 31 49.6** | **+0.3** |
| **KLU** | **Klutina** | **85.51** | **29** | *e*P | | **P** | | **06 31 52.6** | **+1.8** |
| | comp=Z,25nm,1.0s | | | | | | | | |
| **DIV** | **Divide** | **85.57** | **29** | *e*P | | **P** | | **06 31 52.7** | **+1.6** |
| | comp=Z,44nm,0.9s | | | | | | | | |
| **VRH** | **Novokhopyorsk** | **85.76** | **321** | *e*P | | **P** | | **06 31 50.9** | **-1.2** |
| VRH | | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.7s | | | | | | | | |
| VRH | | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.7s | | | | | | | | |
| VRH | | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.8s | | | | | | | | |
| **PAX** | **Paxson** | **85.78** | **27** | *e*P | | **P** | | **06 31 53.3** | **+1.1** |
| PAX | | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **PAX** | **Paxson** | **85.78** | **27** | *e*P | | **P** | | **06 31 53.3** | **+1.1** |
| | comp=Z,22nm,1.1s | | | | | | | | |
| **MENT** | **Mentasta** | **86.58** | **27** | *e*P | | **P** | | **06 31 58.2** | **+2.2** |
| **VORD** | **Divnogorie** | **87.29** | **321** | *e*P | | **P** | | **06 31 57.7** | **-1.9** |
| VORD | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | |
| VORD | | | | | pmax | pmax | | | |
| | comp=N,10.0nm,0.5s | | | | | | | | |
| VORD | | | | | pmax | pmax | | | |
| | comp=E,10.0nm,0.7s | | | | | | | | |
| **VSR** | **Storozhevoye** | **87.37** | **321** | *e*P | | **P** | | **06 31 58.7** | **-1.3** |
| VSR | | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.6s | | | | | | | | |
| VSR | | | | | pmax | pmax | | | |
| | comp=N,5.0nm,0.5s | | | | | | | | |
| VSR | | | | | pmax | pmax | | | |
| | comp=E,6.0nm,0.5s | | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **87.49** | **322** | *e*P | | **P** | | **06 31 59.4** | **-1.1** |
| LPSR | | | | | pmax | pmax | | | |
| | comp=Z,20nm,0.8s | | | | | | | | |
| LPSR | | | | | pmax | pmax | | | |
| | comp=N,6.0nm,1.2s | | | | | | | | |
| LPSR | | | | | pmax | pmax | | | |
| | comp=E,9.0nm,0.6s | | | | | | | | |
| **EGAK** | **Eagle** | **87.70** | **25** | *e*P | | **P** | | **06 32 01.4** | **+0.1** |
| | comp=E,114nm,2.5s | | | | | | | | |
| **DAWY** | **Dawson** | **88.50** | **26** | *e*P | | **P** | | **06 32 05.7** | **+0.5** |
| | comp=E,9.8nm,1.0s | | | | | | | | |
| **OBN** | **Obninsk** | **88.79** | **325** | *i* P | | **P** | | **06 32 05.6** | **-1.0** |
| OBN | | | | | pmax | pmax | | | |
| | comp=Z,36nm,1.2s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **91.19** | **269** | P | | **P** | | **06 32 17.5** | **-1.6** |
| | comp=Z,0.8nm,0.2s,baz=56,slow=6.6,SNR=2.9 | | | | | | | | |
| KMBO | | | | | S | | **SKSac** | **06 42 47.5** | **+2.1** |
| | comp=Z,1.2nm,0.4s,baz=221,slow=19,SNR=3.4 | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **91.19** | **269** | *e*P | | **P** | | **06 32 19.3** | **+0.2** |
| KMBO | | | | | S | | **SKSac** | **06 42 47.6** | **+2.1** |
| KMBO | | | | | pmax | pmax | | | |
| | comp=Z,40nm,2.5s | | | | | | | | |
| **KMBO** | **Kilima Mbogo** | **91.19** | **269** | *e*P | | **P** | | **06 32 19.3** | **+0.2** |
| | comp=Z,40nm,2.5s | | | | | | | | |
| KMBO | | | | | S | | **SKSac** | **06 42 47.5** | **+2.1** |
| **BRTR** | **Keskin Array B** | **91.90** | **310** | LR | | LR | | 07 19 51.6 | |
| | comp=Z,13nm,19.8s,baz=48,slow=40 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **91.91** | **340** | P | | **P** | | **06 32 19.2** | **-1.8** |
| | comp=Z,6.6nm,0.8s,baz=74,slow=6.7,SNR=6.0 | | | | | | | | |
| ARCES | | | | | LR | LR | | 07 18 01.7 | |
| | comp=Z,19nm,18.4s,baz=64,slow=38 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **92.69** | **180** | *e*P | | **P** | | **06 32 25.2** | **+0.5** |
| | comp=Z,7.0nm,0.8s | | | | | | | | |
| **FINES** | **FINESS Array B** | **93.45** | **332** | P | | **P** | | **06 32 26.6** | **-1.6** |
| | comp=Z,4.4nm,1.0s,baz=236,slow=1.5,SNR=3.7 | | | | | | | | |
| FINES | | | | | LR | LR | | 07 18 32.8 | |
| | comp=Z,91nm,19.0s,baz=62,slow=38 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **93.67** | **321** | P | | **P** | | **06 32 27.6** | **-1.8** |
| | comp=Z,1.8nm,0.7s,baz=66,slow=4.9,SNR=5.8 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **93.67** | **321** | *i* P | | **P** | | **06 32 27.1** | **-2.3** |
| AKASG | | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **KIEV** | **Kiev** | **93.68** | **321** | *e*P | | **P** | | **06 32 27.8** | **-1.7** |
| KIEV | | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.1s | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **98.97** | **321** | *e*P | | Pdif | | 06 32 53.9 | +0.3 |
| **STHS** | **Stebnicka Huta** | **98.97** | **321** | PDIF | | Pdif | | 06 32 53.9 | +0.3 |
| **YKA** | **Yellowknife Ar** | **99.67** | **25** | P | | **Pdif** | | **06 32 55.8** | **-0.5** |
| | comp=Z,2.5nm,0.8s,baz=298,slow=4.4,SNR=2.6 | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **100.37** | **334** | P | | **Pdif** | | **06 32 56.3** | **-3.2** |
| | comp=Z,3.5nm,0.8s,baz=64,slow=4.8 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **100.37** | **334** | P | | **Pdif** | | **06 32 57.9** | **-1.6** |
| | comp=Z,3.1nm,0.9s,baz=65,slow=4.6,SNR=4.3 | | | | | | | | |
| **G27A** | **Dupree** | **114.54** | **37** | P | | PKPdf | | 06 37 53.4 | +0.5 |
| | baz=114 | | | | | | | | |
| **T26A** | **Comanche Natio** | **117.54** | **45** | P | | **PKPdf** | | **06 37 59.7** | **+0.5** |
| | baz=118 | | | | | | | | |
| **Q29A** | **Oakley** | **118.52** | **42** | P | | **PKPdf** | | **06 38 01.3** | **+0.4** |
| | baz=118 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **118.55** | **52** | P | | **PKPdf** | | **06 38 01.8** | **+0.8** |
| | baz=118 | | | | | | | | |
| **MNTX** | **Cornudas Mount** | **118.55** | **52** | *e*PKPdf | | **PKPdf** | | **06 38 02.3** | **+1.2** |
| **ECSD** | **EROS Data Cent** | **118.60** | **36** | P | | **PKPdf** | | **06 38 00.8** | **0.0** |
| | baz=118 | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **118.60** | **36** | *e*PKPdf | | **PKPdf** | | **06 38 00.9** | **+0.1** |
| **D37A** | **Cotton** | **118.73** | **31** | P | | **PKPdf** | | **06 38 02.5** | **+1.6** |
| | baz=119 | | | | | | | | |
| **P32A** | **Huiting Farm,** | **119.71** | **41** | P | | **PKPdf** | | **06 38 03.4** | **+0.3** |
| | baz=120 | | | | | | | | |
| **R31A** | **Burdett** | **119.81** | **42** | P | | **PKPdf** | | **06 38 03.4** | **+0.1** |
| | baz=120 | | | | | | | | |
| **U30A** | **WK&E Inc. Balk** | **119.92** | **45** | P | | **PKPdf** | | **06 38 04.0** | **+0.3** |
| | baz=120 | | | | | | | | |
| **O33A** | **Hebron** | **120.12** | **40** | P | | **PKPdf** | | **06 38 03.6** | **-0.2** |
| | baz=120 | | | | | | | | |
| **K36A** | **Gilmore City** | **120.53** | **36** | P | | **PKPdf** | | **06 38 05.0** | **+0.5** |
| | baz=120 | | | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **120.70** | **48** | P | | **PKPdf** | | **06 38 05.4** | **+0.2** |
| | baz=121 | | | | | | | | |
| **I38A** | **Scanlan Farm,** | **120.83** | **33** | P | | **PKPdf** | | **06 38 05.2** | **+0.1** |
| | baz=121 | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **120.85** | **53** | *e*PKPdf | | **PKPdf** | | **06 38 06.7** | **+1.0** |
| **TXAR** | **Lajitas Array** | **120.85** | **53** | PKP | | **PKPdf** | | **06 38 04.3** | **-1.3** |
| | comp=Z,0.8nm,0.7s,baz=283,slow=0.3,SNR=11 | | | | | | | | |
| TXAR | | | | | PKKPbc | | **PKKPbc** | **06 48 10.7** | **+0.4** |
| | comp=Z,0.4nm,0.7s,baz=122,slow=7.6,SNR=5.8 | | | | | | | | |
| **129A** | **Stewart Farms,** | **120.86** | **49** | P | | **PKPdf** | | **06 38 05.9** | **+0.4** |
| | baz=121 | | | | | | | | |
| **P34A** | **Walnut Farm, R** | **120.89** | **40** | P | | **PKPdf** | | **06 38 05.5** | **+0.1** |
| | baz=121 | | | | | | | | |
| **W31A** | **Holland Ranch,** | **121.08** | **46** | P | | **PKPdf** | | **06 38 06.3** | **+0.4** |
| | baz=121 | | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **121.12** | **48** | P | | **PKPdf** | | **06 38 06.3** | **+0.3** |
| | baz=121 | | | | | | | | |
| **Q34A** | **Chapman** | **121.17** | **40** | P | | **PKPdf** | | **06 38 06.4** | **+0.6** |
| | baz=121 | | | | | | | | |
| **KSU1** | **Kansas State U** | **121.28** | **40** | P | | **PKPdf** | | **06 38 06.7** | **+0.6** |
| | baz=121 | | | | | | | | |
| **KSU1** | **Kansas State U** | **121.28** | **40** | *e*PKPdf | | **PKPdf** | | **06 38 06.3** | **+0.2** |
| **T33A** | **Patterson Ranc** | **121.30** | **43** | P | | **PKPdf** | | **06 38 06.9** | **+0.7** |
| | baz=121 | | | | | | | | |
| **R34A** | **Isabella, Hill** | **121.31** | **41** | P | | **PKPdf** | | **06 38 06.3** | **+0.1** |
| | baz=121 | | | | | | | | |
| **X31A** | **McDonald Ranch** | **121.33** | **46** | P | | **PKPdf** | | **06 38 07.0** | **+0.6** |
| | baz=121 | | | | | | | | |
| **Y31A** | **Rekieta Farm,** | **121.44** | **47** | P | | **PKPdf** | | **06 38 07.3** | **+0.7** |
| | baz=121 | | | | | | | | |
| **529A** | **Stev Forest Ra** | **121.67** | **52** | P | | **PKPdf** | | **06 38 07.0** | **-0.2** |
| | baz=122 | | | | | | | | |
| **429A** | **Davenport Ranc** | **121.72** | **51** | P | | **PKPdf** | | **06 38 07.2** | **-0.1** |
| | baz=122 | | | | | | | | |
| **Q35A** | **Mercer Eighty,** | **121.79** | **40** | P | | **PKPdf** | | **06 38 07.3** | **+0.2** |
| | baz=122 | | | | | | | | |
| **430A** | **Baggett Ranch,** | **122.16** | **51** | P | | **PKPdf** | | **06 38 08.6** | **+0.5** |
| | baz=122 | | | | | | | | |
| **S35A** | **Otter Creek Ra** | **122.27** | **41** | P | | **PKPdf** | | **06 38 08.4** | **+0.3** |
| | baz=122 | | | | | | | | |
| **231A** | **Bronte** | **122.35** | **49** | P | | **PKPdf** | | **06 38 08.7** | **+0.3** |
| | baz=122 | | | | | | | | |
| **530A** | **J-C Ranch, Com** | **122.36** | **51** | P | | **PKPdf** | | **06 38 09.2** | **+0.7** |
| | baz=122 | | | | | | | | |
| **R36A** | **Gordon, Harris** | **122.44** | **40** | P | | **PKPdf** | | **06 38 08.7** | **+0.4** |
| | baz=122 | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **122.53** | **48** | *e*PKPdf | | **PKPdf** | | **06 38 09.5** | **+0.8** |
| **331A** | **San Angelo** | **122.55** | **50** | P | | **PKPdf** | | **06 38 09.0** | **+0.2** |
| | baz=122 | | | | | | | | |
| **431A** | **Sonora** | **122.69** | **51** | P | | **PKPdf** | | **06 38 08.9** | **-0.2** |
| | baz=123 | | | | | | | | |
| **531A** | **Rocksprings** | **122.97** | **51** | P | | **PKPdf** | | **06 38 10.4** | **+0.7** |
| | baz=123 | | | | | | | | |
| **S37A** | **Fort Scott** | **123.20** | **40** | P | | **PKPdf** | | **06 38 10.1** | **+0.3** |
| | baz=123 | | | | | | | | |
| **432A** | **Menard** | **123.23** | **50** | P | | **PKPdf** | | **06 38 10.1** | **0.0** |
| | baz=123 | | | | | | | | |
| **W35A** | **Tecumseh** | **123.26** | **44** | P | | **PKPdf** | | **06 38 10.6** | **+0.6** |
| | baz=123 | | | | | | | | |
| **631A** | **Perdido Creek** | **123.27** | **52** | P | | **PKPdf** | | **06 38 11.0** | **+0.8** |
| | baz=123 | | | | | | | | |
| **JCT** | **Junction City** | **123.40** | **50** | *e*PKIKP | | **PKPdf** | | **06 38 11.4** | **+0.9** |
| **JCT** | **Junction City** | **123.40** | **50** | P | | **PKPdf** | | **06 38 11.2** | **+0.7** |
| | baz=123 | | | | | | | | |
| **JCT** | **Junction City** | **123.40** | **50** | *e*PKPdf | | **PKPdf** | | **06 38 11.4** | **+0.9** |
| **532A** | **Rocksprings** | **123.48** | **51** | P | | **PKPdf** | | **06 38 10.9** | **+0.3** |
| | baz=124 | | | | | | | | |
| **333A** | **Richland Sprin** | **123.64** | **49** | P | | **PKPdf** | | **06 38 11.4** | **+0.5** |
| | baz=124 | | | | | | | | |
| **134A** | **White-Moore Ra** | **123.71** | **47** | P | | **PKPdf** | | **06 38 11.1** | **+0.2** |
| | baz=124 | | | | | | | | |
| **Y35A** | **Marietta** | **123.80** | **45** | P | | **PKPdf** | | **06 38 11.4** | **+0.4** |
| | baz=124 | | | | | | | | |
| **433A** | **Art** | **123.82** | **50** | P | | **PKPdf** | | **06 38 11.7** | **+0.5** |
| | baz=124 | | | | | | | | |
| **632A** | **Uvalde** | **123.85** | **51** | P | | **PKPdf** | | **06 38 11.9** | **+0.6** |
| | baz=124 | | | | | | | | |
| **X36A** | **Centrahoma** | **123.93** | **44** | P | | **PKPdf** | | **06 38 11.4** | **+0.1** |
| | baz=124 | | | | | | | | |
| **234A** | **Clairette** | **123.95** | **48** | P | | **PKPdf** | | **06 38 11.9** | **+0.5** |
| | baz=124 | | | | | | | | |
| **V37A** | **Hulbert** | **124.05** | **42** | P | | **PKPdf** | | **06 38 11.5** | **0.0** |
| | baz=124 | | | | | | | | |
| **832A** | **Faith Ranch, C** | **124.23** | **53** | P | | **PKPdf** | | **06 38 12.8** | **+0.8** |
| | baz=124 | | | | | | | | |
| **U38A** | **Gravette** | **124.24** | **41** | P | | **PKPdf** | | **06 38 12.2** | **+0.3** |
| | baz=124 | | | | | | | | |
| **Y36A** | **Durant** | **124.33** | **45** | P | | **PKPdf** | | **06 38 12.6** | **+0.5** |
| | baz=124 | | | | | | | | |
| **V38A** | **Canehill** | **124.56** | **42** | P | | **PKPdf** | | **06 38 12.8** | **+0.4** |
| | baz=124 | | | | | | | | |
| **534A** | **Blanco** | **124.63** | **50** | P | | **PKPdf** | | **06 38 13.4** | **+0.6** |
| | baz=125 | | | | | | | | |
| **833A** | **Chaparral WMA,** | **124.68** | **53** | P | | **PKPdf** | | **06 38 13.1** | **+0.2** |
| | baz=125 | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **124.79** | **288** | *e*PKPdf | | **PKPdf** | | **06 38 13.1** | **-0.3** |
| **TORD** | **Torodi Ar. Bea** | **124.79** | **288** | PKP | | **PKPdf** | | **06 38 12.6** | **-0.9** |
| | comp=Z,1.9nm,0.8s,baz=32,slow=2.3,SNR=9.7 | | | | | | | | |
| TORD | | | | | PP | | **PP** | **06 40 00.2** | **-1.7** |
| | comp=Z,0.6nm,0.6s,baz=36,slow=7.2,SNR=2.9 | | | | | | | | |
| **335A** | **Moody** | **124.83** | **48** | P | | **PKPdf** | | **06 38 13.7** | **+0.5** |
| | baz=125 | | | | | | | | |
| **W38A** | **Poteau** | **124.93** | **43** | P | | **PKPdf** | | **06 38 14.3** | **+1.1** |
| | baz=125 | | | | | | | | |
| **X38A** | **Whitesboro** | **124.94** | **44** | P | | **PKPdf** | | **06 38 14.4** | **+1.1** |
| | baz=125 | | | | | | | | |
| **MIAR** | **Mount Ida** | **125.86** | **43** | *e*PKIKP | | **PKPdf** | | **06 38 16.5** | **+1.5** |
| **MIAR** | **Mount Ida** | **125.86** | **43** | *e*PKPdf | | **PKPdf** | | **06 38 16.5** | **+1.5** |
| **OLIL** | **Olney** | **126.73** | **35** | *e*PKPdf | | **PKPdf** | | **06 38 17.2** | **+0.7** |
| **DBIC** | **Dimbokro** | **132.40** | **282** | PKP | | **PKPdf** | | **06 38 28.4** | **+0.5** |
| | comp=Z,3.7nm,0.9s,baz=129,slow=6.5,SNR=3.0 | | | | | | | | |
| **LCO** | **Las Campanas** | **148.21** | **147** | *e*PKPbc | | **PKPbc** | | **06 39 00.7** | **+1.0** |
| **CPUP** | **Villa Florida** | **155.95** | **167** | PKP | | **PKPdf** | | **06 39 07.1** | **-0.4** |
| | comp=Z,1.4nm,0.9s,baz=90,slow=2.7,SNR=3.0 | | | | | | | | |
| CPUP | | | | | PKPab | | **PKPab** | **06 39 35.6** | **+1.0** |
| | comp=Z,3.0nm,0.8s,baz=210,slow=5.0,SNR=5.2 | | | | | | | | |
| **LPAZ** | **La Paz** | **158.92** | **131** | PKP | | **PKPdf** | | **06 39 12.6** | **+0.3** |
| | comp=Z,1.5nm,0.9s,baz=337,slow=9.9,SNR=4.6 | | | | | | | | |
| LPAZ | | | | | PKPab | | **PKPab** | **06 39 47.0** | **-1.6** |
| | comp=Z,1.7nm,0.7s,baz=5.8,slow=2.2,SNR=4.6 | | | | | | | | |
| **LPAZ** | **La Paz** | **158.92** | **131** | *e*PKIKP | | **PKPdf** | | **06 39 14.2** | **+1.9** |
| **LPAZ** | **La Paz** | **158.92** | **131** | *e*PKPdf | | **PKPdf** | | **06 39 14.2** | **+1.9** |
| LPAZ | | | | *e*PKPab | | **PKPab** | | **06 39 51.5** | **+2.9** |

*ISCJB **29** 06:29:47.2±0.7,23°.30S±0°.09×179°.8W±0°.1, h532km, mb4.0/9, Error ellipse: s-maj=16.0km s-min=12.3km az=177.8*
*IDC **29** 06:29:48.2±2.0,23°.19S×179°.84W, h534km±21km, mb3.6/9, mb1 3.7/11, mb1mx3.5/24, mbtmp4.4/11, Error ellipse: s-maj=19.9km s-min=16.0km az=29.0*

**ISC 29 06:29:47.9±0.8,23°.4S±0°.1×179°.8W±0°.1, h532km, n12, σ1=80/16, mb4.0/9, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **12.79** | **273** | P | **P** | **06 32 35.3** | **+0.5** |
| | 0.2nm,0.3s,baz=182,slow=14,SNR=2.6 | | | | | | |
| DZM | | | | S | **S** | **06 34 53.1** | **+0.9** |
| | 0.6nm,0.3s,baz=0.0,slow=19,SNR=3.9 | | | | | | |
| **URZ** | **Urewera** | **15.08** | **189** | P | **P** | **06 32 59.6** | **+1.2** |
| | 0.5nm,0.3s,baz=18,slow=3.2,SNR=4.2 | | | | | | |
| URZ | | | | S | **S** | **06 35 30.4** | **-4.8** |
| | 0.1nm,0.3s,baz=180,slow=20,SNR=2.3 | | | | | | |
| **CTA** | **Charters Tower** | **31.69** | **269** | P | **P** | **06 35 28.3** | **+0.3** |
| | 28nm,0.3s,baz=94,slow=10,SNR=43 | | | | | | |
| **PMG** | **Port Moresby** | **34.52** | **288** | P | **P** | **06 35 51.4** | **-0.6** |
| | 20nm,0.6s,baz=115,slow=3.4,SNR=8.5 | | | | | | |
| **ASAR** | **Alice Springs** | **42.33** | **260** | P | **P** | **06 36 55.0** | **-0.4** |
| | 6.6nm,0.6s,baz=101,slow=6.8,SNR=70 | | | | | | |
| ASAR | | | | ScP | **ScP** | **06 41 36.8** | **0.0** |
| | 0.7nm,0.8s,baz=107,slow=4.2,SNR=5.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.65** | **265** | P | **P** | **06 36 56.7** | **-1.2** |
| | 6.0nm,0.5s,baz=96,slow=8.4,SNR=116 | | | | | | |
| WRA | | | | ScP | **ScP** | **06 41 38.2** | **+0.1** |
| | 1.3nm,0.9s,baz=97,slow=4.3,SNR=7.3 | | | | | | |
| **VNDA** | **Vanda** | **54.93** | **185** | P | **P** | **06 38 30.4** | **+2.5** |
| | 0.8nm,0.8s,baz=1.2,slow=5.5,SNR=5.2 | | | | | | |
| **QSPA** | **South Pole Qui** | **66.71** | **180** | P | **P** | **06 39 47.1** | **+1.3** |
| | 2.6nm,0.5s,baz=298,slow=0.9,SNR=12 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.22** | **44** | P | **P** | **06 41 23.3** | **-0.3** |
| | 0.8nm,0.9s,baz=233,slow=8.9,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **89.97** | **58** | P | **P** | **06 41 51.8** | **+0.9** |
| | 1.0nm,0.8s,baz=210,slow=6.1,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **91.47** | **13** | P | **P** | **06 41 54.9** | **-1.9** |
| | 0.4nm,0.9s,baz=211,slow=6.9,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **169.74** | **188** | PKPab | **PKPab** | **06 50 11.2** | **-1.6** |
| | 0.5nm,0.8s,baz=150,slow=3.2,SNR=3.3 | | | | | | |

*ATH **29** 06:32:40.8, 40°.32N×25°.83E, h26km, MD3.8/31, ML3.9*
*ISCJB **29** 06:32:40.8±0.3, 40°.33N±0°.01×25°.82E±0°.01, h10km±2km, mb3.4/1, Error ellipse: s-maj=1.9km s-min=1.8km az=26.7*
*ISK **29** 06:32:41.2, 40°.32N×25°.87E, h13km, ML4.1*
*CSEM **29** 06:32:41.2±0.1, 40°.31N×25°.81E, h5km, ML4.1, Error ellipse: s-maj=1.4km s-min=1.2km az=3.0*
*THE **29** 06:32:41.7, 40°.31N×25°.86E, h8km, ML3.9/24, Error ellipse: s-maj=1.2km s-min=0.5km az=69.0*
*SOF **29** 06:32:42.2, 40°.46N×25°.78E, h3km, MD3.8*
*DDA **29** 06:32:42.0, 40°.31N×25°.95E, h7km, Ml4.0*

**ISC 29 06:32:42.0±0.8, 40°.31N±0°.01×25°.84E±0°.01, h13km±5km, n396, σ0=84/490, 19C-30D, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GADA** | **Gvkgeada** | **0.13** | **161** | *e*PG | **Pg** | **06 32 45.0** | **-0.4** |
| GADA | | | | *e*SG | **Sg** | **06 32 47.6** | **-0.2** |
| **GADA** | **Gvkgeada** | **0.13** | **161** | *e*Pg | **Pg** | **06 32 45.0** | **-0.4** |
| GADA | | | | *e*Sg | **Sg** | **06 32 47.6** | **-0.2** |
| **SMTH** | **Samothraki Isl** | **0.29** | **303** | *e*PB | **Pg** | **06 32 48.0** | **-0.1** |
| SMTH | | | | *e*SB | **Sg** | **06 32 52.2** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **0.29** | **303** | P | **Pg** | **06 32 47.9** | **-0.1** |
| SMTH | | | | S | **Sg** | **06 32 52.2** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **0.29** | **303** | P | **Pg** | **06 32 47.9** | **-0.1** |
| SMTH | | | | S | **Sg** | **06 32 52.2** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.49** | **80** | *e*PG | **Pg** | **06 32 51.1** | **-0.6** |
| **GELI** | **Tayfur-Gelibol** | **0.49** | **80** | *e*Pg | **Pg** | **06 32 51.1** | **-0.6** |
| **BOZC** | **Bozcaada** | **0.50** | **161** | P | **Pg** | **06 32 51.5** | **-0.4** |
| BOZC | | | | P | **Pb** | **06 32 51.8** | **-0.8** |
| BOZC | | | | S | **Sg** | **06 32 58.7** | **+0.2** |
| BOZC | |

| | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PLG | Polygyros | 1.83 | 273 | ePB | Pn | 06 33 12.9 | -0.3 | VLY | Voula,Athens | 2.93 | 214 | P | Pn | 06 33 27.4 | -0.9 | BOVS | Bovan | 4.53 | 318 | ⇑iPn | Pn | 06 33 50.9 | +0.6 |
| PLG | | | | eSN | Sn | 06 33 34.5 | -1.8 | VLY | Voula,Athens | 2.93 | 214 | P | Pn | 06 33 27.4 | -0.9 | TIRR | Tirgusor | 4.56 | 24 | ePN | Pn | 06 33 51.9 | +1.3 |
| PLG | Polygyros | 1.83 | 273 | P | Pn | 06 33 12.8 | -0.4 | SZH | Strazhica | 2.95 | 1 | P | Pn | 06 33 28.7 | +0.1 | TIRR | Tirgusor | 4.56 | 24 | ⇓iP | Pn | 06 33 51.2 | +0.6 |
| PLG | | | | S | Sn | 06 33 36.5 | +0.2 | SZH | Strazhica | 2.95 | 1 | P | Pn | 06 33 28.7 | +0.1 | TIRR | Tirgusor | 4.56 | 24 | ⇓iP | Pn | 06 33 51.2 | +0.6 |
| PLG | Polygyros | 1.83 | 273 | P | Pn | 06 33 12.8 | -0.4 | HRT | Hereke | 2.96 | 79 | ePN | Pn | 06 33 29.0 | +0.3 | TIRR | Tirgusor | 4.56 | 24 | ePn | Pn | 06 33 51.9 | +1.3 |
| PLG | | | | eSn | Sn | 06 33 34.5 | -1.8 | HRT | Hereke | 2.96 | 79 | ePn | Pn | 06 33 29.0 | +0.3 | PYL | PYLOS | 4.69 | 225 | ePN | Pn | 06 33 53.7 | +1.3 |
| PLG | | | | S | Sn | 06 33 36.5 | +0.2 | ADVT | Abdulvahap | 2.98 | 86 | ePN | Pn | 06 33 29.3 | +0.4 | PYL | PYLOS | 4.69 | 225 | ePn | Pn | 06 33 53.7 | +1.3 |
| SRS | Serrai | 1.89 | 296 | ePB | Pn | 06 33 13.1 | -0.9 | ADVT | Abdulvahap | 2.98 | 86 | ePn | Pn | 06 33 29.3 | +0.4 | SRE | Strehaia | 4.76 | 337 | ⇓iP | Pn | 06 33 54.0 | +0.5 |
| SRS | Serrai | 1.89 | 296 | P | Pn | 06 33 13.5 | -0.5 | AGG | Agios Georgios | 3.00 | 246 | ePN | Pn | 06 33 30.6 | +1.3 | SRE | Strehaia | 4.76 | 337 | ⇓iP | Pn | 06 33 54.0 | +0.5 |
| SRS | Serrai | 1.89 | 296 | ePb | Pn | 06 33 13.1 | -0.9 | AGG | Agios Georgios | 3.00 | 246 | ePN | Pn | 06 33 29.8 | +0.5 | ELL | Elmali | 4.78 | 137 | ePN | Pn | 06 33 55.4 | +1.6 |
| SRS | Serrai | 1.89 | 296 | P | Pn | 06 33 13.5 | -0.5 | AGG | Agios Georgios | 3.00 | 246 | P | Pn | 06 33 29.6 | +0.3 | ELL | Elmali | 4.78 | 137 | ePn | Pn | 06 33 55.4 | +1.6 |
| CHOS | Chios island | 1.93 | 175 | ePN | Pn | 06 33 14.6 | 0.0 | AGG | | | | S | Sn | 06 34 06.7 | +1.5 | ISR | Istrita | 4.83 | 6 | ⇑iP | Pn | 06 33 56.6 | +2.2 |
| CHOS | Chios island | 1.93 | 175 | ePN | Pn | 06 33 14.6 | 0.0 | AGG | Agios Georgios | 3.00 | 246 | P | Pn | 06 33 29.6 | +0.3 | KIZT | Kizilcal | 4.88 | 105 | ePN | Pn | 06 33 56.5 | +1.3 |
| CHOS | | | | eSN | Sn | 06 33 38.2 | -0.6 | AGG | | | | S | Sn | 06 34 06.7 | +1.5 | KIZT | Kizilcal | 4.88 | 105 | ePn | Pn | 06 33 56.5 | +1.3 |
| CHOS | Chios island | 1.93 | 175 | P | Pn | 06 33 14.5 | -0.1 | SILT | Sile | 3.01 | 73 | ePN | Pn | 06 33 28.9 | -0.4 | ARR | Arges | 5.13 | 350 | ⇓iP | Pn | 06 33 58.6 | +0.1 |
| CHOS | | | | S | Sn | 06 33 38.5 | -0.3 | SILT | Sile | 3.01 | 73 | ePn | Pn | 06 33 28.9 | -0.4 | ARR | Arges | 5.13 | 350 | ⇓iP | Pn | 06 33 58.6 | +0.1 |
| CHOS | Chios island | 1.93 | 175 | ePn | Pn | 06 33 14.6 | 0.0 | VTS | Vitosha | 3.02 | 320 | eP | Pn | 06 33 30.1 | +0.5 | KUBS | Kucevo | 5.13 | 324 | ⇑iPn | Pn | 06 33 57.2 | -1.3 |
| CHOS | | | | eSn | Sn | 06 33 38.2 | -0.6 | VTS | Vitosha | 3.02 | 320 | eP | Pn | 06 33 30.1 | +0.5 | CFR | Carcaliu | 5.14 | 18 | ⇑iP | Pn | 06 33 58.8 | +0.1 |
| CHOS | | | | S | Sn | 06 33 38.5 | -0.3 | THL | Klokotos Trika | 3.04 | 257 | ePN | Pn | 06 33 29.2 | -0.5 | VOIR | | 5.15 | 354 | ⇑iP | Pn | 06 33 59.1 | +0.2 |
| SOH | Sokhos | 1.96 | 286 | ePN | Pn | 06 33 14.6 | -0.4 | THL | Klokotos Trika | 3.04 | 257 | ePn | Pn | 06 33 29.2 | -0.5 | VOIR | | 5.15 | 354 | ⇑iP | Pn | 06 33 59.1 | +0.2 |
| SOH | Sokhos | 1.96 | 286 | P | Pn | 06 33 14.9 | -0.1 | CAVI | Cavuskoy | 3.06 | 91 | ePN | Pn | 06 33 30.5 | +0.4 | MLR | Muntele Rosu | 5.17 | 1 | ⇓iP | Pn | 06 34 00.4 | +1.2 |
| SOH | Sokhos | 1.96 | 286 | ePn | Pn | 06 33 14.6 | -0.4 | CAVI | Cavuskoy | 3.06 | 91 | ePn | Pn | 06 33 30.5 | +0.4 | MLR | Muntele Rosu | 5.17 | 1 | ⇓iP | Pn | 06 34 00.4 | +1.2 |
| SOH | Sokhos | 1.96 | 286 | P | Pn | 06 33 14.9 | -0.1 | PRD | Provadia | 3.11 | 21 | P | Pn | 06 33 30.7 | 0.0 | GRUS | Gruza | 5.22 | 315 | ⇓iPn | Pn | 06 33 59.7 | -0.1 |
| PLD | Plovdiv | 1.98 | 335 | P | Pn | 06 33 15.5 | +0.2 | PRD | Provadia | 3.11 | 21 | P | Pn | 06 33 30.7 | 0.0 | LOT | Lotru | 5.35 | 344 | ⇓iP | Pn | 06 34 01.6 | -0.1 |
| PLD | | | | Pg | Pb | 06 33 18.5 | +0.5 | KZN | Kozani | 3.12 | 271 | ePN | Pn | 06 33 31.2 | +0.3 | LOT | Lotru | 5.35 | 344 | ⇓iP | Pn | 06 34 01.6 | -0.1 |
| PLD | Plovdiv | 1.98 | 335 | P | Pn | 06 33 15.5 | +0.2 | KZN | Kozani | 3.12 | 271 | P | Pn | 06 33 31.1 | +0.2 | PDG | Podgorica | 5.39 | 295 | ⇑iP | Pn | 06 34 08.8 | +6.8 |
| MMB | Musomiste | 2.05 | 309 | P | Pn | 06 33 15.7 | -0.5 | KZN | Kozani | 3.12 | 271 | P | Pn | 06 33 31.1 | +0.2 | GZR | Gura Zlata | 5.55 | 337 | ⇓iP | Pn | 06 34 04.3 | -0.1 |
| MMB | Musomiste | 2.05 | 309 | P | Pn | 06 33 15.7 | -0.5 | NAIG | Nisos Aigina | 3.14 | 216 | ePN | Pn | 06 33 29.9 | -1.3 | GZR | Gura Zlata | 5.55 | 337 | S | Sn | 06 35 03.7 | -4.4 |
| AKS | Akhisar | 2.09 | 133 | ePN | Pn | 06 33 16.8 | +0.1 | NAIG | Nisos Aigina | 3.14 | 216 | ePn | Pn | 06 33 29.9 | -1.3 | GZR | Gura Zlata | 5.55 | 337 | ⇓iP | Pn | 06 34 04.3 | -0.1 |
| AKS | Akhisar | 2.09 | 133 | ePn | Pn | 06 33 16.8 | +0.1 | MAKR | Makrakomi, Fth | 3.15 | 247 | ePN | Pn | 06 33 30.9 | -0.4 | PLOR | Plostina | 5.57 | 6 | ⇑iP | Pn | 06 34 06.4 | +1.9 |
| AKHS | Akhisar | 2.09 | 133 | iP | Pn | 06 33 17.1 | +0.4 | MAKR | Makrakomi, Fth | 3.15 | 247 | P | Pn | 06 33 31.2 | -0.1 | PLOR | Plostina | 5.57 | 6 | ⇑iP | Pn | 06 34 06.4 | +1.9 |
| AKHS | Akhisar | 2.09 | 133 | P | Pn | 06 33 17.1 | +0.4 | MAKR | Makrakomi, Fth | 3.15 | 247 | ePn | Pn | 06 33 30.9 | -0.4 | VRI | Vrincioaia | 5.59 | 6 | ⇑iP | Pn | 06 34 06.5 | +1.7 |
| AKHS | | | | S | Sg | 06 33 49.1 | +0.1 | MAKR | Makrakomi, Fth | 3.15 | 247 | P | Pn | 06 33 31.2 | -0.1 | VRI | Vrincioaia | 5.59 | 6 | ⇑iP | Pn | 06 34 06.5 | +1.7 |
| HORT | Hortiatis | 2.11 | 279 | ePN | Pn | 06 33 17.6 | +0.5 | DESF | Desfina | 3.19 | 235 | ePN | Pn | 06 33 31.8 | -0.2 | KONT | Konya--Tatoy | 5.59 | 113 | ePN | Pn | 06 34 06.7 | +1.8 |
| HORT | Hortiatis | 2.11 | 279 | ePn | Pn | 06 33 16.3 | -0.8 | DESF | Desfina | 3.19 | 235 | ePn | Pn | 06 33 31.8 | -0.2 | KONT | Konya--Tatoy | 5.59 | 113 | ePn | Pn | 06 34 06.7 | +1.8 |
| HORT | | | | eSN | Sn | 06 33 42.6 | -0.7 | DSF | Desfina | 3.20 | 235 | ePN | Pn | 06 33 30.8 | -1.2 | DOPR | Dopca | 5.66 | 357 | ⇑iP | Pn | 06 34 06.8 | +1.0 |
| HORT | Hortiatis | 2.11 | 279 | P | Pn | 06 33 17.0 | -0.1 | DSF | Desfina | 3.20 | 235 | P | Pn | 06 33 31.7 | -0.3 | DOPR | Dopca | 5.66 | 357 | ⇑iP | Pn | 06 34 06.8 | +1.0 |
| HORT | | | | S | Sn | 06 33 43.6 | +0.3 | DSF | | | | S | Sn | 06 34 10.4 | +0.4 | DIVS | Divibare | 5.76 | 313 | ⇑iP | Pn | 06 34 07.2 | 0.0 |
| HORT | Hortiatis | 2.11 | 279 | P | Pn | 06 33 17.0 | -0.1 | DSF | Desfina | 3.20 | 235 | ePn | Pn | 06 33 30.8 | -1.2 | DIVS | Divibare | 5.76 | 313 | S | Sn | 06 35 10.1 | -3.1 |
| HORT | Hortiatis | 2.11 | 279 | ePn | Pn | 06 33 17.6 | +0.5 | DSF | Desfina | 3.20 | 235 | P | Pn | 06 33 31.7 | -0.3 | DIVS | Divibare | 5.76 | 313 | P | Pn | 06 34 07.3 | 0.0 |
| HORT | | | | eSn | Sn | 06 33 42.6 | -0.7 | DSF | | | | S | Sn | 06 34 10.4 | +0.4 | DIVS | Divibare | 5.76 | 313 | P | Pn | 06 34 07.3 | 0.0 |
| HORT | | | | S | Sn | 06 33 43.6 | +0.3 | LTK | Loutraki | 3.20 | 225 | ePN | Pn | 06 33 31.4 | -0.5 | KAMT | Kaman | 6.13 | 96 | ePN | Pn | 06 34 13.4 | +1.1 |
| SKIA | Skiathos | 2.16 | 239 | ePN | Pn | 06 33 16.9 | -0.8 | LTK | Loutraki | 3.20 | 225 | P | Pn | 06 33 31.5 | -0.5 | KAMT | Kaman | 6.13 | 96 | ePn | Pn | 06 34 13.4 | +1.1 |
| SKIA | | | | eSN | Sn | 06 33 43.1 | -1.3 | LTK | Loutraki | 3.20 | 225 | P | Pn | 06 33 31.5 | -0.5 | BZS | Buzias | 6.14 | 331 | ⇓iP | Pn | 06 34 12.1 | -0.3 |
| SKIA | Skiathos | 2.16 | 239 | P | Pn | 06 33 16.6 | -1.1 | APE | Apeiranthos | 3.25 | 184 | ePN | Pn | 06 33 33.4 | +0.7 | BZS | Buzias | 6.14 | 331 | ⇓iP | Pn | 06 34 12.1 | -0.3 |
| SKIA | | | | S | Sn | 06 33 45.5 | +1.1 | APE | Apeiranthos | 3.25 | 184 | ⇓iP | Pn | 06 33 32.3 | -0.5 | TESR | Tescani | 6.22 | 5 | ⇑iP | Pn | 06 34 14.7 | +1.2 |
| SKIA | Skiathos | 2.16 | 239 | P | Pn | 06 33 16.6 | -1.1 | APE | Apeiranthos | 3.25 | 184 | S | Sn | 06 34 11.1 | -0.2 | TESR | Tescani | 6.22 | 5 | ⇑iP | Pn | 06 34 14.7 | +1.2 |
| SKIA | Skiathos | 2.16 | 239 | ePn | Pn | 06 33 16.9 | -0.8 | APE | Apeiranthos | 3.25 | 184 | P | Pn | 06 33 32.2 | -0.5 | TEKS | Tekeris | 6.30 | 314 | ePn | Pn | 06 34 14.2 | -0.4 |
| SKIA | | | | eSn | Sn | 06 33 43.1 | -1.3 | APE | Apeiranthos | 3.25 | 184 | P | Pn | 06 33 32.3 | -0.5 | YESY | Yesilyurt | 6.65 | 110 | ePN | Pn | 06 34 21.4 | +1.9 |
| SKIA | | | | S | Sn | 06 33 45.5 | +1.1 | APE | Apeiranthos | 3.25 | 184 | ePn | Pn | 06 33 33.4 | +0.7 | YESY | Yesilyurt | 6.65 | 110 | ePn | Pn | 06 34 21.4 | +1.9 |
| CTYL | Yal??k??y-??at | 2.19 | 57 | ePN | Pn | 06 33 18.1 | +0.1 | ZIMR | | 3.36 | 354 | ⇑iP | Pn | 06 33 34.9 | +0.7 | SIRR | Siria | 6.69 | 334 | ⇓iP | Pn | 06 34 19.7 | -0.2 |
| CTYL | Yal??k??y-??at | 2.19 | 57 | ePn | Pn | 06 33 18.1 | +0.1 | EVR | Evrytania | 3.42 | 247 | ePN | Pn | 06 33 33.9 | -1.1 | SIRR | Siria | 6.69 | 334 | ⇓iP | Pn | 06 34 19.7 | -0.2 |
| IZM | Izmir | 2.21 | 150 | ePN | Pn | 06 33 18.5 | +0.1 | EVR | Evrytania | 3.42 | 247 | P | Pn | 06 33 34.8 | -0.2 | DRGR | | 6.86 | 342 | ⇓iP | Pn | 06 34 23.0 | +0.6 |
| IZM | Izmir | 2.21 | 150 | ePn | Pn | 06 33 18.5 | +0.1 | EVR | Evrytania | 3.42 | 247 | ePn | Pn | 06 33 33.9 | -1.1 | DRGR | | 6.86 | 342 | ⇓iP | Pn | 06 34 23.0 | +0.6 |
| THE | Thessaloniki | 2.22 | 279 | ePB | Pn | 06 33 18.5 | 0.0 | EVR | Evrytania | 3.42 | 247 | P | Pn | 06 33 34.8 | -0.2 | TIP | Timpagrande | 7.09 | 264 | ⇓iP | Pn | 06 34 25.4 | -0.1 |
| THE | Thessaloniki | 2.22 | 279 | P | Pn | 06 33 18.5 | 0.0 | GPA | Golpazari | 3.42 | 89 | ePN | Pn | 06 33 35.7 | +0.7 | TIP | Timpagrande | 7.09 | 264 | ⇓iP | Pn | 06 34 25.4 | -0.1 |
| THE | Thessaloniki | 2.22 | 279 | ePb | Pn | 06 33 18.5 | 0.0 | GPA | Golpazari | 3.42 | 89 | ePn | Pn | 06 33 35.7 | +0.7 | YOZ | Yozgat | 7.31 | 92 | ePN | Pn | 06 34 30.2 | +1.6 |
| DST | Dursunbey | 2.25 | 108 | ePN | Pn | 06 33 18.9 | 0.0 | MPEP | Malo Peshtene | 3.42 | 333 | P | Pn | 06 33 35.6 | +0.6 | YOZ | Yozgat | 7.31 | 92 | ePn | Pn | 06 34 30.2 | +1.6 |
| DST | Dursunbey | 2.25 | 108 | ePn | Pn | 06 33 18.9 | 0.0 | KHAL | Karahalli | 3.43 | 123 | iP | Pn | 06 33 36.3 | +1.0 | BURAR | Bucovina Array | 7.31 | 357 | ⇓iP | Pn | 06 34 29.9 | +1.3 |
| XOR | Xorichti | 2.25 | 246 | ePB | Pn | 06 33 18.9 | -0.1 | KHAL | Karahalli | 3.43 | 123 | P | Pn | 06 33 36.3 | +1.0 | BURAR | Bucovina Array | 7.31 | 357 | ⇓iP | Pn | 06 34 29.9 | +1.3 |
| XOR | Xorichti | 2.25 | 246 | P | Pn | 06 33 17.9 | -1.1 | FNA | Florina | 3.44 | 279 | ePN | Pn | 06 33 36.2 | +0.9 | PSZ | Piszkesteto | 8.72 | 333 | ⇓iP | Pn | 06 34 46.7 | -1.1 |
| XOR | Xorichti | 2.25 | 246 | P | Pn | 06 33 17.9 | -1.1 | FNA | Florina | 3.44 | 279 | P | Pn | 06 33 36.2 | +0.9 | PSZ | Piszkesteto | 8.72 | 333 | ⇓iP | Pn | 06 34 46.7 | -1.1 |
| XOR | Xorichti | 2.25 | 246 | ePb | Pn | 06 33 18.9 | -0.1 | FNA | | | | S | Sn | 06 34 17.7 | +1.8 | KOLS | Kolonicke sedl | 8.98 | 345 | ePN | Pn | 06 34 56.4 | +5.0 |
| ARMT | Armutlu | 2.32 | 83 | ePN | Pn | 06 33 20.0 | +0.1 | FNA | Florina | 3.44 | 279 | P | Pn | 06 33 36.2 | +0.9 | KOLS | | | | e | | 06 35 11.8 | |
| ARMT | Armutlu | 2.32 | 83 | ePn | Pn | 06 33 20.0 | +0.1 | FNA | | | | S | Sn | 06 34 17.7 | +1.8 | KOLS | Kolonicke sedl | 8.98 | 345 | eSG | Sg | 06 37 32.4 | +2.3 |
| MDNY | Mudanya-Bursa | 2.32 | 88 | ePN | Pn | 06 33 20.1 | +0.2 | KALE | Kalithea | 3.46 | 237 | ePN | Pn | 06 33 34.6 | -1.0 | VYHS | Vyhne | 9.59 | 331 | ePN | Pn | 06 34 59.1 | -0.6 |
| MDNY | Mudanya-Bursa | 2.32 | 88 | ePn | Pn | 06 33 20.1 | +0.2 | KALE | Kalithea | 3.46 | 237 | P | Pn | 06 33 35.5 | -0.1 | VYHS | Vyhne | 9.59 | 331 | ePn | Pn | 06 34 59.1 | -0.6 |
| ORLT | Orhaneli | 2.35 | 96 | ePN | Pn | 06 33 20.6 | +0.2 | KALE | Kalithea | 3.46 | 237 | ePn | Pn | 06 33 34.6 | -1.0 | KRLC | Kralky | 11.66 | 330 | eP | Pn | 06 35 34.0 | +6.0 |
| ORLT | Orhaneli | 2.35 | 96 | ePn | Pn | 06 33 20.6 | +0.2 | KALE | Kalithea | 3.46 | 237 | P | Pn | 06 33 35.5 | -0.1 | NB2 | NORSAR Subarra | 22.62 | 341 | P | P | 06 37 42.4 | +0.1 |
| MRKA | Markates | 2.37 | 228 | ePN | Pn | 06 33 19.7 | -0.9 | DID | Didima | 3.46 | 217 | ePN | Pn | 06 33 35.0 | -0.7 | | comp=Z,0.7nm,0.5s,baz=153,slow=11 | | | | | | |
| MRKA | | | | eSN | Sn | 06 33 48.1 | -1.5 | DID | Didima | 3.46 | 217 | P | Pn | 06 33 34.9 | -0.7 | NB2 | NORSAR Subarra | 22.62 | 341 | P | P | 06 37 42.4 | +0.1 |
| MRKA | Markates | 2.37 | 228 | P | Pn | 06 33 19.7 | -0.9 | DID | Didima | 3.46 | 217 | PN | Pn | 06 33 35.0 | -0.7 | | comp=Z,0.7nm,0.5s,SNR=2.7 | | | | | | |
| MRKA | Markates | 2.37 | 228 | P | Pn | 06 33 19.7 | -0.9 | KHL | Karahalli | 3.48 | 124 | ePN | Pn | 06 33 36.8 | +0.9 | | | | | | | | |
| MRKA | | | | eSn | Sn | 06 33 48.1 | -1.5 | KHL | Karahalli | 3.48 | 124 | ePn | Pn | 06 33 36.8 | +0.9 | | | | | | | | |
| KNT | Kendrikon | 2.39 | 292 | P | Pn | 06 33 21.1 | +0.2 | SERG | Sergoula | 3.50 | 238 | P | Pn | 06 33 36.6 | +0.5 | | | | | | | | |
| KNT | | | | S | Sn | 06 33 50.9 | +0.8 | SERG | Sergoula | 3.50 | 238 | P | Pn | 06 33 36.6 | +0.5 | | | | | | | | |
| KNT | Kendrikon | 2.39 | 292 | P | Pn | 06 33 21.1 | +0.2 | DENT | Denizli | 3.56 | 135 | ePN | Pn | 06 33 38.0 | +1.0 | | | | | | | | |
| KNT | | | | S | Sn | 06 33 50.9 | +0.8 | DENT | Denizli | 3.56 | 135 | ePn | Pn | 06 33 38.1 | +1.0 | | | | | | | | |
| EREA | Eretria | 2.40 | 219 | ePN | Pn | 06 33 19.5 | -1.6 | GULT | Gulveren | 3.57 | 87 | ePN | Pn | 06 33 37.8 | +0.6 | | | | | | | | |
| EREA | Eretria | 2.40 | 219 | P | Pn | 06 33 19.8 | -1.3 | GULT | Gulveren | 3.57 | 87 | ePn | Pn | 06 33 37.8 | +0.6 | | | | | | | | |
| EREA | | | | S | Sn | 06 33 50.5 | +0.1 | EFP | Efpalio | 3.59 | 240 | ePN | Pn | 06 33 38.0 | +0.7 | | | | | | | | |
| EREA | Eretria | 2.40 | 219 | ePn | Pn | 06 33 19.5 | -1.6 | EFP | Efpalio | 3.59 | 240 | ePn | Pn | 06 33 38.0 | +0.7 | | | | | | | | |
| EREA | Eretria | 2.40 | 219 | P | Pn | 06 33 19.8 | -1.3 | KRND | KRANIDI | 3.60 | 217 | ePN | Pn | 06 33 37.9 | +0.4 | | | | | | | | |
| EREA | | | | S | Sn | 06 33 50.5 | +0.1 | KRND | KRANIDI | 3.60 | 217 | ePn | Pn | 06 33 37.9 | +0.4 | | | | | | | | |
| FYTO | Fytoko, Volos | 2.41 | 249 | P | Pn | 06 33 17.1 | -0.4 | GUR | Goura | 3.61 | 237 | ePN | Pn | 06 33 37.5 | -0.3 | | | | | | | | |
| FYTO | | | | S | Sn | 06 33 50.9 | +0.4 | GUR | Goura | 3.61 | 230 | P | Pn | 06 33 37.5 | -0.3 | | | | | | | | |
| FYTO | Fytoko, Volos | 2.41 | 249 | P | Pn | 06 33 20.5 | -0.6 | GUR | | | | S | Sn | 06 34 20.9 | +0.6 | | | | | | | | |
| FYTO | | | | S | Sn | 06 33 50.9 | +0.4 | GUR | Goura | 3.61 | 230 | P | Pn | 06 33 37.5 | -0.3 | | | | | | | | |
| SMIA | Simia | 2.49 | 236 | ePN | Pn | 06 33 21.6 | -0.6 | GUR | | | | S | Sn | 06 34 20.9 | +0.6 | | | | | | | | |
| SMIA | Simia | 2.49 | 236 | P | Pn | 06 33 22.1 | -0.1 | DNZL | Cakiroluk | 3.62 | 135 | iP | Pn | 06 33 38.8 | +0.9 | | | | | | | | |
| SMIA | | | | S | Sn | 06 33 53.0 | +0.5 | DNZL | | | | iS | Sn | 06 34 21.4 | +0.8 | | | | | | | | |
| SMIA | Simia | 2.49 | 236 | ePn | Pn | 06 33 21.6 | -0.6 | DNZL | Cakiroluk | 3.62 | 135 | P | Pn | 06 33 38.8 | +0.9 | | | | | | | | |
| SMIA | Simia | 2.49 | 236 | P | Pn | 06 33 22.1 | -0.1 | DNZL | | | | S | Sn | 06 34 21.4 | +0.8 | | | | | | | | |
| SMIA | | | | S | Sn | 06 33 53.0 | +0.5 | LAKA | Lakka | 3.65 | 237 | ePN | Pn | 06 33 38.5 | +0.4 | | | | | | | | |
| KARY | Karystos | 2.53 | 206 | P | Pn | 06 33 22.2 | -0.5 | LAKA | Lakka | 3.65 | 237 | ePn | Pn | 06 33 38.5 | +0.4 | | | | | | | | |
| KARY | | | | S | Sn | 06 33 54.0 | +0.6 | KLV | Kalavryta, Ach | 3.66 | 233 | ePN | Pn | 06 33 37.7 | -0.6 | | | | | | | | |
| DEMI | Demirci | 2.55 | 119 | iP | Pn | 06 33 23.9 | +0.7 | KLV | Kalavryta, Ach | 3.66 | 233 | ePn | Pn | 06 33 37.7 | -0.6 | | | | | | | | |
| DEMI | | | | iS | Sn | 06 33 55.5 | +1.4 | NEST | Nestorio | 3.67 | 273 | ePN | Pn | 06 33 38.6 | +0.1 | | | | | | | | |
| DEMI | Demirci | 2.55 | 119 | P | Pn | 06 33 23.9 | +0.7 | NEST | Nestorio | 3.67 | 273 | ePn | Pn | 06 33 38.6 | +0.1 | | | | | | | | |
| DEMI | | | | S | Sn | 06 33 55.5 | +1.4 | YER | Yerkesik | 3.70 | 148 | ePN | Pn | 06 33 39.7 | +0.7 | | | | | | | | |
| ISK | Istanbul-Kandi | 2.56 | 72 | ePN | Pn | 06 33 23.3 | +0.2 | YER | Yerkesik | 3.70 | 148 | ePn | Pn | 06 33 39.7 | +0.7 | | | | | | | | |
| ISK | Istanbul-Kandi | 2.56 | 72 | ePn | Pn | 06 33 23.3 | +0.2 | SKO | Skopje | 3.71 | 298 | ePn | Pg | 06 33 39.3 | -2.9 | | | | | | | | |
| GEMT | Gemlik | 2.56 | 86 | ePN | Pn | 06 33 23.5 | +0.3 | DSL | Palaion Diasel | 3.85 | 254 | ePN | Pn | 06 33 41.4 | +0.5 | | | | | | | | |
| GEMT | Gemlik | 2.56 | 86 | ePn | Pn | 06 33 23.5 | +0.3 | DSL | Palaion Diasel | 3.85 | 254 | P | Pn | 06 33 41.9 | +1.0 | | | | | | | | |
| PGB | Panagyurishte | 2.56 | 331 | P | Pn | 06 33 23.2 | -0.1 | DSL | Palaion Diasel | 3.85 | 254 | ePn | Pn | 06 33 41.4 | +0.5 | | | | | | | | |
| PGB | | | | Pg | Pb | 06 33 28.2 | +0.3 | DSL | Palaion Diasel | 3.85 | 254 | P | Pn | 06 33 41.9 | +1.0 | | | | | | | | |
| PGB | Panagyurishte | 2.56 | 331 | P | Pn | 06 33 23.2 | -0.1 | NIS1 | Nisyros Isl. | 3.85 | 164 | ePN | Pn | 06 33 41.0 | 0.0 | | | | | | | | |
| LIT | Litokhoron | 2.58 | 266 | ePN | Pn | 06 33 23.0 | -0.4 | NIS1 | Nisyros Isl. | 3.85 | 164 | ePn | Pn | 06 33 41.0 | 0.0 | | | | | | | | |
| LIT | Litokhoron | 2.58 | 266 | P | Pn | 06 33 23.1 | -0.4 | OHR | Ohrid | 3.92 | 283 | iPn | Pb | 06 33 46.9 | -4.0 | | | | | | | | |
| LIT | Litokhoron | 2.58 | 266 | P | Pn | 06 33 23.1 | -0.4 | OHR | | | | iSn | Sg | 06 34 50.7 | +2.9 | | | | | | | | |
| KKB | Krupnik | 2.60 | 308 | P | Pn | 06 33 23.7 | -0.1 | BARS | Barje | 3.92 | 311 | ePn | Pn | 06 33 41.5 | -0.4 | | | | | | | | |
| KKB | Krupnik | 2.60 | 308 | P | Pn | 06 33 23.7 | -0.1 | ESKT | Eskisehir | 3.93 | 100 | ePN | Pn | 06 33 43.0 | +0.8 | | | | | | | | |
| VAY | Valandovo | 2.68 | 293 | iPn | Pb | 06 33 29.6 | -0.3 | ESKT | Eskisehir | 3.93 | 100 | ePn | Pn | 06 33 43.0 | +0.8 | | | | | | | | |
| VAY | | | | iSn | Sb | 06 34 02.7 | +0.1 | ESKT | Eskisehir | 3.93 | 100 | P | Pn | 06 33 43.3 | +1.1 | | | | | | | | |
| VAY | Valandovo | 2.68 | 293 | P | Pn | 06 33 25.0 | +0.2 | SEYT | Eskypehyr | 3.93 | 100 | iP | Pn | 06 33 43.3 | +1.2 | | | | | | | | |
| VAY | Valandovo | 2.68 | 293 | P | Pn | 06 33 25.0 | +0.2 | DRO | Drossia | 3.99 | 235 | ePN | Pn | 06 33 43.6 | +0.8 | | | | | | | | |
| VAY | Valandovo | 2.68 | 293 | iPn | Pb | 06 33 29.5 | -0.3 | DRO | Drossia | 3.99 | 235 | P | Pn | 06 33 43.7 | +0.9 | | | | | | | | |
| GRG | Griva | 2.70 | 285 | ePN | Pn | 06 33 26.1 | +1.1 | DRO | | | | S | Sn | 06 34 31.1 | +1.7 | | | | | | | | |
| GRG | Griva | 2.70 | 285 | ePB | Pn | 06 33 25.7 | +0.6 | DRO | Drossia | 3.99 | 235 | ePn | Pn | 06 33 43.6 | +0.8 | | | | | | | | |
| GRG | Griva | 2.70 | 285 | P | Pn | 06 33 25.7 | +0.6 | DRO | | | | S | Sn | 06 33 43.9 | +1.7 | | | | | | | | |
| GRG | | | | S | Sn | 06 33 58.2 | +6.0 | PDO | Prodromos | 3.99 | 246 | ePN | Pn | 06 33 43.3 | +0.4 | | | | | | | | |
| GRG | Griva | 2.70 | 285 | ePb | Pn | 06 33 25.7 | +0.6 | PDO | Prodromos | 3.99 | 246 | ePn | Pn | 06 33 43.3 | +0.4 | | | | | | | | |
| GRG | Griva | 2.70 | 285 | ePn | Pn | 06 33 26.2 | +1.1 | VLX | Vlachokerasia | 4.00 | 224 | ePN | Pn | 06 33 43.3 | +0.3 | | | | | | | | |
| GRG | | | | S | Sn | 06 33 58.2 | +0.6 | VLX | Vlachokerasia | 4.00 | 224 | P | Pn | 06 33 43.1 | +0.1 | | | | | | | | |
| SMG | Samos | 2.71 | 163 | P | Pn | 06 33 25.4 | +0.1 | VLX | Vlachokerasia | 4.00 | 224 | P | Pn | 06 33 43.1 | +0.1 | | | | | | | | |
| SMG | | | | S | Sn | 06 33 59.1 | +1.1 | SHUT | Suhut-Afyon | 4.05 | 114 | ePN | Pn | 06 33 44.7 | +0.9 | | | | | | | | |
| SMG | Samos | 2.71 | 163 | P | Pn | 06 33 25.4 | +0.1 | SHUT | Suhut-Afyon | 4.05 | 114 | ePn | Pn | 06 33 44.7 | +0.9 | | | | | | | | |
| SMG | | | | S | Sn | 06 33 59.1 | +1.1 | MSAB | Monastry St. A | 4.05 | 21 | ⇓iP | Pn | 06 33 44.8 | +1.1 | | | | | | | | |
| ATAL | Atalanti | 2.72 | 234 | P | Pn | 06 33 24.9 | -0.5 | MSAB | Monastry St. A | 4.05 | 21 | ⇓iP | Pn | 06 33 44.8 | +1.1 | | | | | | | | |
| ATAL | | | | S | Sn | 06 33 58.6 | +0.5 | MDUB | Mudurnu | 4.09 | 86 | ePN | Pn | 06 33 45.2 | +0.9 | | | | | | | | |
| ATAL | Atalanti | 2.72 | 234 | P | Pn | 06 33 24.9 | -0.5 | MDUB | Mudurnu | 4.09 | 86 | ePn | Pn | 06 33 45.2 | +0.9 | | | | | | | | |
| ATAL | | | | S | Sn | 06 33 58.6 | +0.5 | DALY | Dalyan (Mu˘la | 4.13 | 147 | ePN | Pn | 06 33 45.2 | +0.5 | | | | | | | | |
| PTL | Penteli | 2.74 | 215 | P | Pn | 06 33 25.7 | +0.1 | DALY | Dalyan (Mu˘la | 4.13 | 147 | ePn | Pn | 06 33 45.2 | +0.5 | | | | | | | | |
| PTL | Penteli | 2.74 | 215 | P | Pn | 06 33 25.7 | +0.1 | VLI | Veliai | 4.25 | 213 | ePN | Pn | 06 33 45.9 | -0.6 | | | | | | | | |
| LKR | Lokris | 2.76 | 234 | ePN | Pn | 06 33 25.1 | -0.8 | VLI | Veliai | 4.25 | 213 | ePn | Pn | 06 33 45.9 | -0.6 | | | | | | | | |
| LKR | Lokris | 2.76 | 234 | P | Pn | 06 33 25.3 | -0.6 | AMT | Artemida-Makis | 4.26 | 231 | ePN | Pn | 06 33 46.9 | +0.4 | | | | | | | | |
| LKR | Lokris | 2.76 | 234 | P | Pn | 06 33 25.3 | -0.6 | AMT | Artemida-Makis | 4.26 | 231 | P | Pn | 06 33 46.6 | +0.1 | | | | | | | | |
| IZI | Iznik | 2.77 | 88 | ePN | Pn | 06 33 26.4 | +0.2 | AMT | Artemida-Makis | 4.26 | 231 | P | Pn | 06 33 46.6 | +0.1 | | | | | | | | |
| IZI | Iznik | 2.77 | 88 | ePn | Pn | 06 33 26.4 | +0.2 | AMT | Artemida-Makis | 4.26 | 231 | ePn | Pn | 06 33 46.9 | +0.4 | | | | | | | | |
| KULA | Kula-Manisa | 2.83 | 129 | ePN | Pn | 06 33 27.3 | +0.4 | BOLV | Bolvadin | 4.26 | 110 | iP | Pn | 06 33 48.2 | +1.5 | | | | | | | | |
| KULA | Kula-Manisa | 2.83 | 129 | ePn | Pn | 06 33 27.3 | +0.4 | BOLV | Bolvadin | 4.26 | 110 | P | Pn | 06 33 48.2 | +1.5 | | | | | | | | |
| ATHU | Athens Univers | 2.84 | 215 | P | Pn | 06 33 26.6 | -0.4 | BOLV | | | | S | Sg | 06 34 58.0 | -0.7 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AYDN | | | | *i* | S | **Sb** | **07 05 23.1** | **+0.8** |
| **AYDN** | **Tasoluk** | **0.45** | **327** | | P | **Pb** | **07 05 15.5** | **+0.6** |
| AYDN | | | | | S | **Sb** | **07 05 23.1** | **+0.8** |
| **TURN** | **Turunc** | **0.52** | **141** | *i* | P | **Pg** | **07 05 12.5** | **-1.5** |
| TURN | | | | *i* | S | **Sg** | **07 05 19.7** | **-1.1** |
| **TURN** | **Turunc** | **0.52** | **141** | | P | **Pg** | **07 05 12.5** | **-1.5** |
| TURN | | | | | S | **Sg** | **07 05 19.7** | **-1.1** |
| **DALY** | **Dalyan (Mu¨la** | **0.59** | **141** | *e* | PG | **Pg** | **07 05 14.4** | **-0.9** |
| DALY | | | | *e* | SG | **Sg** | **07 05 23.7** | **+0.8** |
| **DALY** | **Dalyan (Mu¨la** | **0.59** | **141** | *e* | Pg | **Pg** | **07 05 14.4** | **-0.9** |
| **BDRM** | **Kayabasi** | **0.64** | **250** | *i* | P | **Pg** | **07 05 15.3** | **-0.9** |
| BDRM | | | | *i* | S | **Sg** | **07 05 25.2** | **+0.8** |
| **BDRM** | **Kayabasi** | **0.64** | **250** | | P | **Pg** | **07 05 15.3** | **-0.9** |
| BDRM | | | | | S | **Sg** | **07 05 25.1** | **+0.8** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.71** | **340** | *e* | PG | **Pg** | **07 05 16.2** | **-1.3** |
| **FETY** | **Fethiye** | **0.96** | **132** | *e* | PG | **Pg** | **07 05 21.8** | **-0.6** |
| FETY | | | | *e* | SG | **Sb** | **07 05 36.5** | **-0.3** |
| **FETY** | **Fethiye** | **0.96** | **132** | *e* | Pg | **Pg** | **07 05 21.8** | **-0.6** |
| **GOLH** | **Golhisar** | **1.09** | **92** | *i* | P | **Pg** | **07 05 24.3** | **-0.6** |
| **GOLH** | **Golhisar** | **1.09** | **92** | | P | **Pg** | **07 05 24.3** | **-0.6** |
| GOLH | | | | | S | **Sn** | **07 05 44.1** | **+1.6** |
| **MANT** | **Manisa** | **1.24** | **13** | *i* | P | **Pn** | **07 05 28.4** | **-0.4** |
| MANT | | | | *i* | S | **Sn** | **07 05 47.1** | **+0.7** |
| **MANT** | **Manisa** | **1.24** | **13** | | P | **Pn** | **07 05 28.4** | **-0.4** |
| MANT | | | | | S | **Sn** | **07 05 47.1** | **+0.7** |
| **KULA** | **Kula-Manisa** | **1.28** | **17** | *e* | PN | **Pg** | **07 05 27.9** | **-0.7** |
| **KULA** | **Kula-Manisa** | **1.28** | **17** | *e* | Pn | **Pg** | **07 05 27.9** | **-0.7** |
| **IZM** | **Izmir** | **1.34** | **327** | *e* | PN | **Pg** | **07 05 26.8** | **-2.8** |

*CSEM* ***29*** *07:10:04.1,35˚.88N×4˚.19W,h1km,ML1.6,After MDD*

**MDD 29 07:10:04.1±1.3,35˚.88N×4˚.19W,h1km±7km,mbLg1.6/8, Error ellipse: s-maj=11.9km s-min=5.2km az=18.0, PRXIMO,Strait of Gibraltar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **EMIJ** | **Mijas** | **0.83** | **326** | P | | Pg | 07 10 19.7 | -0.4 |
| | 1.3nm,0.1s,SNR=10 | | | | | | | |
| EMIJ | | | | S | | Sg | 07 10 30.6 | -0.5 |
| | 12nm,0.1s,SNR=16 | | | | | | | |
| **EMIJ** | **Mijas** | **0.83** | **326** | P | | Pg | 07 10 19.7 | -0.5 |
| | 1.3nm,0.1s,SNR=10 | | | | | | | |
| EMIJ | | | | S | | Sg | 07 10 30.5 | -0.5 |
| | 12nm,0.1s,SNR=16 | | | | | | | |
| **EALB** | **Alboran** | **0.94** | **86** | P | | Pg | 07 10 21.5 | -0.6 |
| | 5.5nm,2.3s,SNR=7.9 | | | | | | | |
| EALB | | | | S | | Sg | 07 10 33.2 | -1.1 |
| | 3.5nm,0.1s,SNR=7.9 | | | | | | | |
| **EALB** | **Alboran** | **0.94** | **86** | Lg | | Lg | 07 10 33.6 | |
| | 3.5nm,0.1s,SNR=7.9 | | | | | | | |
| **EALB** | **Alboran** | **0.94** | **86** | P | | Pg | 07 10 21.5 | -0.6 |
| | 5.5nm,2.3s,SNR=7.9 | | | | | | | |
| EALB | | | | S | | Sg | 07 10 33.2 | -1.1 |
| | 3.5nm,0.1s,SNR=7.9 | | | | | | | |
| **EGUA** | **Guajares** | **1.08** | **28** | P | | Pg | 07 10 23.6 | -1.3 |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | | |
| EGUA | | | | S | | Sg | 07 10 38.7 | -0.2 |
| | 2.6nm,0.1s,SNR=7.9 | | | | | | | |
| **EGUA** | **Guajares** | **1.08** | **28** | Pg | | Pg | 07 10 25.0 | +0.1 |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | | |
| EGUA | | | | Lg | | Lg | 07 10 37.9 | |
| | 2.6nm,0.1s,SNR=7.9 | | | | | | | |
| **EGUA** | **Guajares** | **1.08** | **28** | P | | Pg | 07 10 23.6 | -1.3 |
| | 0.9nm,0.1s,SNR=7.9 | | | | | | | |
| EGUA | | | | S | | Sg | 07 10 38.7 | -0.2 |
| | 2.6nm,0.1s,SNR=7.9 | | | | | | | |
| **EBER** | **Berja** | **1.46** | **45** | P | | Pn | 07 10 31.2 | -0.7 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| EBER | | | | S | | Sg | 07 10 50.0 | -1.5 |
| | 1.3nm,0.2s,SNR=7.9 | | | | | | | |
| **EBER** | **Berja** | **1.46** | **45** | Pg | | Pn | 07 10 31.2 | -0.8 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| EBER | | | | Lg | | Lg | 07 10 46.9 | |
| | 1.3nm,0.2s,SNR=7.9 | | | | | | | |
| **EBER** | **Berja** | **1.46** | **45** | P | | Pn | 07 10 31.2 | -0.8 |
| | 0.1nm,0.1s,SNR=7.9 | | | | | | | |
| EBER | | | | S | | Sg | 07 10 50.0 | -1.6 |
| | 1.3nm,0.2s,SNR=7.9 | | | | | | | |
| **EADA** | **Adamuz** | **2.31** | **352** | S | | Sn | 07 11 10.9 | -1.6 |
| | 1.1nm,0.1s,SNR=7.9 | | | | | | | |
| **EADA** | **Adamuz** | **2.31** | **352** | Sn | | Sn | 07 11 11.7 | -0.8 |
| | 0.5nm,0.1s,SNR=7.9 | | | | | | | |
| **EADA** | **Adamuz** | **2.31** | **352** | S | | Sn | 07 11 10.9 | -1.6 |
| | 1.1nm,0.1s,SNR=7.9 | | | | | | | |
| **ECAB** | **El Cabril** | **2.41** | **336** | S | | Sn | 07 11 13.0 | -1.9 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | | |
| **ECAB** | **El Cabril** | **2.41** | **336** | Sn | | Sn | 07 11 15.7 | +0.8 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | | |
| **ECAB** | **El Cabril** | **2.41** | **336** | S | | Sn | 07 11 13.0 | -1.9 |
| | 0.3nm,0.1s,SNR=7.9 | | | | | | | |
| **SESP** | **Santiago Espad** | **2.60** | **30** | P | | Pn | 07 10 45.9 | -1.6 |
| | 16nm,5.4s,SNR=7.9 | | | | | | | |
| SESP | | | | S | | Sn | 07 11 16.8 | -3.1 |
| | 2.8nm,0.9s,SNR=7.9 | | | | | | | |
| **SESP** | **Santiago Espad** | **2.60** | **30** | P | | Pn | 07 10 45.9 | -1.6 |
| | 16nm,5.4s,SNR=7.9 | | | | | | | |
| SESP | | | | S | | Sn | 07 11 16.8 | -3.1 |
| | 2.8nm,0.9s,SNR=7.9 | | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.75** | **314** | P | | Pn | 07 10 47.1 | -2.3 |
| | 1.5nm,2.9s,SNR=7.9 | | | | | | | |
| EMIN | | | | S | | Sn | 07 11 20.3 | -2.9 |
| | 3.2nm,1.0s,SNR=7.9 | | | | | | | |
| **EMIN** | **Mina Concepcio** | **2.75** | **314** | P | | Pn | 07 10 47.1 | -2.2 |
| | 1.5nm,2.9s,SNR=7.9 | | | | | | | |
| EMIN | | | | S | | Sn | 07 11 20.3 | -2.9 |
| | 3.2nm,1.0s,SNR=7.9 | | | | | | | |
| **EGRO** | **El Granado** | **3.12** | **303** | P | | Pn | 07 10 52.8 | -1.8 |
| | 0.5nm,0.7s,SNR=7.9 | | | | | | | |
| EGRO | | | | S | | Sn | 07 11 30.2 | -2.3 |
| | 4.5nm,1.1s,SNR=7.9 | | | | | | | |
| **EGRO** | **El Granado** | **3.12** | **303** | P | | Pn | 07 10 52.8 | -1.7 |
| | 0.5nm,0.7s,SNR=7.9 | | | | | | | |
| EGRO | | | | S | | Sn | 07 11 30.2 | -2.3 |
| | 4.5nm,1.1s,SNR=7.9 | | | | | | | |

*ISCJB* ***29*** *07:11:07.7±0.4,36˚.93N±0˚.03×71˚.80E±0˚.05,h150km, mb3.9/3,Error ellipse: s-maj=6.1km s-min=3.9km az=149.8*

*NNC* ***29*** *07:11:14.6±1.8,37˚.50N×71˚.66E,h176km±14km,mb3.2, mpv4.2,Error ellipse: s-maj=16.6km s-min=6.9km az=161.0*

*MOS* ***29*** *07:11:22.7±2.7,38˚.29N×71˚.77E,h78km,mb4.1/4,Error ellipse: s-maj=14.6km s-min=8.2km az=85.4*

**ISC 29 07:11:09.0±0.8,37˚.04N±0˚.06×71˚.94E±0˚.06,h150km,n59, σ1ϑ64/53,mb3.9/3,9C-7D,Afghanistan-Tajikistan border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **DZET** | **Dzherino** | **3.03** | **306** | ⇑P | | **Pn** | **07 11 58.0** | **+1.2** |
| | 122nm,0.5s | | | | | | | |
| DZET | | | | S | | **Sn** | **07 12 32.3** | **-1.5** |
| | 624nm,0.6s | | | | | | | |
| **DZET** | **Dzherino** | **3.03** | **306** | PN | | **Pn** | **07 11 58.0** | **+1.2** |
| DZET | | | | S | | **Sn** | **07 12 32.3** | **-1.5** |
| **SFK** | **Sufi-Kurgan** | **3.21** | **22** | ⇓P | | **Pn** | **07 12 02.1** | **+2.8** |
| | 194nm,0.3s | | | | | | | |
| SFK | | | | ⇑S | | **Sn** | **07 12 39.6** | **+1.5** |
| | 178nm,0.2s | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.21** | **22** | PN | | **Pn** | **07 12 02.0** | **+2.8** |
| SFK | | | | pmax | pmax | | | |
| | comp=Z,109nm,0.4s | | | | | | | |
| **CEP** | **Cherat** | **3.21** | **181** | P | | Pn | 07 12 03.0 | +3.8 |
| **CHCP** | **Chirah Chowk** | **3.54** | **162** | P | | Pn | 07 12 08.0 | +4.6 |
| **KSH** | **Kashi** | **4.02** | **51** | Pn | | **Pn** | **07 12 07.0** | **-2.6** |
| KSH | | | | Sn | | Sn | 07 12 47.8 | -8.9 |
| KSH | | | | smax | | smax | | |
| | comp=N,120nm,0.5s | | | | | | | |
| KSH | | | | smax | | smax | | |
| | comp=E,130nm,0.6s | | | | | | | |
| **THW** | **Thamme Wali** | **4.24** | **182** | P | | **Pn** | **07 12 15.5** | **+3.1** |
| **SARP** | **Sargodha** | **5.14** | **173** | P | | **Pn** | **07 12 26.5** | **+2.2** |
| **AML** | **Almayashu** | **5.26** | **14** | P | | **Pn** | **07 12 27.4** | **+1.3** |
| | SNR=160 | | | | | | | |
| **MNAS** | **Manas** | **5.46** | **4** | ⇓P | | **Pn** | **07 12 29.8** | **+1.3** |
| | comp=E,35nm,1.0s | | | | | | | |
| MNAS | | | | ⇑S | | **Sn** | **07 13 27.8** | **-2.9** |
| | comp=E,117nm,0.9s | | | | | | | |
| **MNAS** | **Manas** | **5.46** | **4** | PN | | **Pn** | **07 12 29.8** | **+1.3** |
| **UCH** | **Uchtor** | **5.55** | **20** | P | | **Pn** | **07 12 31.5** | **+1.5** |
| | SNR=54 | | | | | | | |
| **KZA** | **Kyzart** | **5.64** | **26** | P | | **Pn** | **07 12 32.3** | **+1.1** |
| | SNR=5.5 | | | | | | | |
| **EKS2** | **Erkin-Say** | **5.79** | **14** | P | | **Pn** | **07 12 33.9** | **+1.0** |
| | SNR=15 | | | | | | | |
| **AAK** | **Ala-Archa** | **5.92** | **19** | ⇓P | | **Pn** | **07 12 36.3** | **+1.6** |
| | comp=E,15nm,0.5s | | | | | | | |
| AAK | | | | ⇑S | | **Sn** | **07 13 39.4** | **-2.3** |
| | comp=E,53nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **5.92** | **19** | PN | | **Pn** | **07 12 36.3** | **+1.6** |
| AAK | | | | S | | **Sn** | **07 13 39.4** | **-2.3** |
| **AAK** | **Ala-Archa** | **5.92** | **19** | P | | **Pn** | **07 12 36.5** | **+1.8** |
| | SNR=25 | | | | | | | |
| **KBK** | **Karagaybulak** | **6.07** | **21** | P | | **Pn** | **07 12 39.5** | **+2.9** |
| | SNR=8.6 | | | | | | | |
| **KK31** | **Karatay Array** | **6.15** | **350** | ⇓P | | **Pn** | **07 12 38.7** | **+1.0** |
| | comp=E,2.6nm,0.2s,baz=168,slow=11,SNR=60 | | | | | | | |
| KK31 | | | | ⇓S | | **Sn** | **07 13 43.0** | **-4.1** |
| | comp=E,111nm,0.6s,baz=165,slow=20,SNR=48 | | | | | | | |
| **KK31** | **Karatay Array** | **6.15** | **350** | PN | | **Pn** | **07 12 38.6** | **+1.0** |
| KK31 | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.2s | | | | | | | |
| **ULHL** | **Ulahol** | **6.17** | **31** | P | | **Pn** | **07 12 39.7** | **+1.7** |
| | SNR=12 | | | | | | | |
| **CHMS** | **Chumysh** | **6.33** | **19** | P | | **Pn** | **07 12 41.5** | **+1.5** |
| | SNR=9.8 | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.51** | **24** | ⇑P | | **Pn** | **07 12 43.4** | **+0.8** |
| | comp=Z,13nm,1.0s | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.51** | **24** | PN | | **Pn** | **07 12 43.3** | **+0.8** |
| TKM2 | | | | pmax | pmax | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| **TKM2** | **Tokmak 2** | **6.51** | **24** | P | | **Pn** | **07 12 44.2** | **+1.7** |
| | SNR=9.4 | | | | | | | |
| **USP** | **Ospenovka** | **6.52** | **17** | P | | **Pn** | **07 12 43.1** | **+0.6** |
| | SNR=6.1 | | | | | | | |
| **SMLA** | **Simla** | **7.32** | **142** | *e* | P | **Pn** | **07 12 54.7** | **+1.5** |
| SMLA | | | | *e* | S | **Sn** | **07 14 14.1** | **-0.9** |
| SMLA | | | | | AML | AML | 07 14 18.3 | |
| | comp=N,104nm,0.0s | | | | | | | |
| SMLA | | | | | AML | AML | 07 14 18.4 | |
| | comp=E,111nm,0.3s | | | | | | | |
| **PDGK** | **Podgornoye** | **8.53** | **40** | ⇑P | | **Pn** | **07 13 09.5** | **+0.3** |
| | comp=E,7.8nm,0.8s | | | | | | | |
| **PDGK** | **Podgornoye** | **8.53** | **40** | *i* | P | **Pn** | **07 13 09.5** | **+0.3** |
| PDGK | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,0.8s | | | | | | | |
| **BHGR** | **Bahadurgarh** | **9.33** | **152** | *e* | S | Sn | 07 14 56.3 | -7.2 |
| **NDI** | **New Delhi** | **9.44** | **150** | *e* | S | Sn | 07 15 01.0 | -5.2 |
| **KHET** | **Khetri** | **9.52** | **159** | *e* | P | Pn | 07 13 15.3 | -7.3 |
| KHET | | | | *e* | S | Sn | 07 14 56.7 | -11 |
| KHET | | | | | AML | AML | 07 15 06.6 | |
| | comp=E,22nm,0.3s | | | | | | | |
| KHET | | | | | AML | AML | 07 15 07.3 | |
| | comp=N,13nm,0.3s | | | | | | | |
| **IMYA** | **Miami** | **9.54** | **269** | *e* | Pn | Pn | 07 13 20.1 | -2.9 |
| **SONA** | **Sohna** | **9.78** | **152** | *e* | P | Pn | 07 13 22.5 | -3.5 |
| SONA | | | | *e* | S | Sn | 07 15 06.3 | -8.0 |
| SONA | | | | | AML | AML | 07 15 12.0 | |
| | comp=N,24nm,0.2s | | | | | | | |
| SONA | | | | | AML | AML | 07 15 12.0 | |
| | comp=E,46nm,0.4s | | | | | | | |
| **IPAY** | **Payeh** | **10.41** | **271** | *e* | Pn | Pn | 07 13 30.1 | -4.5 |
| **IEMG** | **Emamgholi** | **10.61** | **276** | *e* | Pn | Pn | 07 13 35.0 | -2.2 |
| **ISFR** | **Sfrayin** | **11.15** | **274** | *e* | Pn | Pn | 07 13 41.8 | -2.5 |
| **MKAR** | **Makanchi Array** | **12.41** | **35** | *i* | P | **Pn** | **07 14 01.3** | **+0.8** |
| MKAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **KOLN** | **Koldanda** | **13.50** | **130** | *e* | P | **Pn** | **07 14 14.2** | **-0.5** |
| | comp=Z,21nm,0.5s | | | | | | | |
| **GKN** | **Gorkha** | **13.98** | **126** | *e* | P | **Pn** | **07 14 21.1** | **+0.3** |
| | comp=Z,26nm,0.5s | | | | | | | |
| **KURK** | **Kurchatov** | **14.48** | **17** | *e* | P | **P** | **07 14 29.7** | **+0.5** |
| **KKN** | **Kakani** | **14.54** | **126** | *e* | P | **Pn** | **07 14 28.1** | **+0.2** |
| **DMN** | **Daman** | **14.56** | **126** | *e* | P | **Pn** | **07 14 28.8** | **+0.7** |
| | comp=Z,14nm,0.3s | | | | | | | |
| **PKIN** | **Phulchoki** | **14.77** | **126** | *e* | P | **Pn** | **07 14 30.7** | **0.0** |
| | comp=Z,26nm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **14.78** | **126** | *e* | P | **Pn** | **07 14 30.9** | **-0.1** |
| | comp=Z,30nm,0.6s | | | | | | | |
| **GUN** | **Gumba** | **14.86** | **124** | *e* | P | **Pn** | **07 14 33.0** | **+1.0** |
| | comp=Z,24nm,0.5s | | | | | | | |
| **AB31** | **Akbulak array** | **15.00** | **328** | ⇓P | | **Pn** | **07 14 34.1** | **+0.9** |
| | comp=Z,1.3nm,0.4s,baz=150,slow=13,SNR=4.9 | | | | | | | |
| AB31 | | | | ⇑S | | Sn | 07 17 09.6 | -10 |
| | comp=Z,5.3nm,0.7s,baz=151,slow=22,SNR=9.4 | | | | | | | |
| **AB31** | **Akbulak array** | **15.00** | **328** | P | | **Pn** | **07 14 34.1** | **+0.9** |
| AB31 | | | | S | | Sn | 07 17 09.6 | -10 |
| **RAMN** | **Ramite** | **15.98** | **125** | *e* | P | **Pn** | **07 14 44.2** | **-1.5** |
| | comp=Z,44nm,0.8s | | | | | | | |
| **BRVK** | **Borovoye** | **16.06** | **356** | ⇓ *i* | P | **P** | **07 14 47.0** | **+0.4** |
| **TAPN** | **Taplejung** | **16.46** | **121** | *e* | P | **P** | **07 14 50.6** | **-1.0** |
| | comp=Z,9.6nm,0.4s | | | | | | | |
| **ODAN** | **Odare** | **16.56** | **123** | *e* | P | **P** | **07 14 51.0** | **-1.7** |
| | comp=Z,11nm,0.5s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.71** | **328** | ⇑P | | **P** | **07 14 54.5** | **+0.6** |
| | comp=Z,1.5nm,0.7s | | | | | | | |
| AKTO | | | | ⇑S | | S | 07 17 50.0 | -10 |
| | comp=Z,7.5nm,1.2s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.71** | **328** | P | | **P** | **07 14 54.5** | **+0.6** |
| AKTO | | | | S | | S | 07 17 49.9 | -10 |
| **KIV** | **Kislovodsk** | **23.22** | **296** | *i* | P | P | 07 16 20.7 | +18 |
| KIV | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| **OBN** | **Obninsk** | **30.03** | **318** | *e* | P | P | 07 17 16.9 | +14 |
| OBN | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **AKASG** | **Malin Array Be** | **33.20** | **308** | *i* | P | P | 07 17 49.0 | +18 |
| AKASG | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **KIEV** | **Kiev** | **33.21** | **308** | *e* | P | P | 07 17 47.3 | +16 |
| KIEV | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,1.1s | | | | | | | |

**IDC 29 07:32:32.1±2.2,1˚.19S×129˚.85E,h0km,mb3.5/2, mb1 3.7/3,mb1mx3.4/29,mbtmp3.6/3,ML3.7/1,Error ellipse: s-maj=131.8km s-min=25.6km az=70.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **WRA** | **Warramunga Arr** | **19.15** | **167** | P | | P | 07 36 56.2 | -1.1 |
| | 0.2nm,0.3s,baz=347,slow=11,SNR=14 | | | | | | | |
| **ASAR** | **Alice Springs** | **22.69** | **170** | P | | P | 07 37 35.9 | +0.3 |
| | 0.7nm,0.8s,baz=350,slow=9.9,SNR=8.6 | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.34** | **325** | P | | P | 07 43 03.4 | +0.2 |
| | 0.8nm,0.6s,baz=107,slow=9.7,SNR=7.4 | | | | | | | |

**TAP 29 07:35:34.6,21˚.12N×121˚.90E,h179km,ML3.9,2D,C, Taiwan region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **LAY** | **Lan-yu** | **0.97** | **341** | P | | Pn | 07 36 01.6 | -0.3 |
| | baz=341 | | | | | | | |
| LAY | | | | *e* | S | Sn | 07 36 21.5 | -1.8 |
| | baz=341 | | | | | | | |
| **TSEB** | **Hengchuen, Pin** | **1.21** | **310** | *e* | P | Pn | 07 36 03.6 | -0.2 |
| | baz=304 | | | | | | | |
| TSEB | | | | *e* | S | Sn | 07 36 26.3 | -0.1 |
| | baz=304 | | | | | | | |
| **TWK1** | **Hengchun** | **1.30** | **309** | *e* | P | Pn | 07 36 05.3 | +0.7 |
| | baz=307 | | | | | | | |
| TWK1 | | | | *e* | S | Sn | 07 36 27.1 | -0.8 |
| | baz=307 | | | | | | | |
| **HEN** | **Hengchun** | **1.39** | **309** | *e* | P | Pn | 07 36 05.8 | +0.3 |
| | baz=302 | | | | | | | |
| HEN | | | | *e* | S | Sn | 07 36 28.8 | -0.6 |
| | baz=302 | | | | | | | |
| **TAW** | **Tawu** | **1.54** | **323** | P | | Pn | 07 36 06.8 | 0.0 |
| | baz=323 | | | | | | | |
| TAW | | | | *e* | S | Sn | 07 36 30.3 | -1.7 |
| | baz=323 | | | | | | | |
| **EAST** | **Anshuo** | **1.59** | **322** | ⇓ *i* | P | Pn | 07 36 07.4 | 0.0 |
| | baz=323 | | | | | | | |
| EAST | | | | *e* | S | Sn | 07 36 31.1 | -1.8 |
| | baz=323 | | | | | | | |
| **SCZT** | **Fangliau** | **1.72** | **317** | ⇓ *i* | P | Pn | 07 36 09.2 | +0.5 |
| | baz=322 | | | | | | | |
| SCZT | | | | *e* | S | Sn | 07 36 33.6 | -1.4 |
| | baz=322 | | | | | | | |
| **TWP** | **Hsiaoliuchiu** | **1.88** | **311** | *e* | P | Pn | 07 36 11.8 | +1.5 |
| | baz=311 | | | | | | | |
| **SSD** | **Sandimen** | **2.00** | **324** | *e* | P | Pn | 07 36 12.0 | +0.5 |
| | baz=329 | | | | | | | |
| SSD | | | | *e* | S | Sn | 07 36 39.1 | -1.3 |
| | baz=329 | | | | | | | |
| **TWM1** | **Shoushan** | **2.18** | **321** | *e* | P | Pn | 07 36 15.1 | +1.5 |
| | baz=314 | | | | | | | |
| **ELDTW** | **Lidau** | **2.21** | **339** | *e* | P | Pn | 07 36 13.6 | -0.5 |
| | baz=341 | | | | | | | |
| **TWF1** | **Yuli** | **2.29** | **346** | *e* | P | Pn | 07 36 14.7 | -0.1 |
| | baz=339 | | | | | | | |
| TWF1 | | | | *e* | S | Sn | 07 36 44.2 | -2.0 |
| | baz=339 | | | | | | | |
| **STYT** | **Tauyuan** | **2.29** | **333** | *e* | P | Pn | 07 36 15.3 | +0.4 |
| | baz=333 | | | | | | | |
| **SGST** | **Jiashian** | **2.30** | **328** | *e* | P | Pn | 07 36 15.5 | +0.5 |
| | baz=328 | | | | | | | |
| SGST | | | | *e* | S | Sn | 07 36 45.9 | -0.6 |
| | baz=328 | | | | | | | |
| **CHN1** | **Nanshi** | **2.42** | **329** | *e* | P | Pn | 07 36 16.9 | +0.6 |
| | baz=334 | | | | | | | |
| CHN1 | | | | *e* | S | Sn | 07 36 48.4 | -0.4 |
| | baz=334 | | | | | | | |
| **WTP** | **Ta-pu** | **2.43** | **331** | *e* | P | Pn | 07 36 17.0 | +0.5 |
| | baz=331 | | | | | | | |
| WTP | | | | *e* | S | Sn | 07 36 48.3 | -0.8 |
| | baz=331 | | | | | | | |
| **EHY** | **Hungye** | **2.43** | **347** | *e* | P | Pn | 07 36 16.6 | +0.2 |
| | baz=347 | | | | | | | |
| **YUS** | **Yu-Shan** | **2.52** | **340** | *e* | P | Pn | 07 36 18.3 | +0.3 |
| | baz=334 | | | | | | | |
| YUS | | | | *e* | S | Sn | 07 36 51.5 | -0.4 |
| | baz=334 | | | | | | | |
| **CHN4** | **Tsaushan** | **2.53** | **332** | *e* | P | Pn | 07 36 17.9 | +0.3 |
| | baz=332 | | | | | | | |
| CHN4 | | | | *e* | S | Sn | 07 36 50.9 | -0.2 |
| | baz=332 | | | | | | | |
| **ALS** | **Alishan** | **2.58** | **337** | *e* | P | Pn | 07 36 18.7 | +0.1 |
| | baz=330 | | | | | | | |
| **CHN5** | **Tsauling** | **2.71** | **336** | *e* | P | Pn | 07 36 19.9 | +0.1 |
| | baz=335 | | | | | | | |
| **WDT** | **Danda** | **2.72** | **345** | *e* | P | Pn | 07 36 20.9 | +0.7 |
| | baz=349 | | | | | | | |
| WDT | | | | *e* | S | Sn | 07 36 56.4 | +0.6 |
| | baz=349 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **2.90** | **342** | *e* | P | Pn | 07 36 21.9 | -0.3 |
| | baz=335 | | | | | | | |
| SMLT | | | | *e* | S | Sn | 07 36 59.5 | +0.2 |
| | baz=335 | | | | | | | |
| **TYC** | **Yuchr** | **2.93** | **341** | *e* | P | Pn | 07 36 22.4 | +0.1 |
| | baz=341 | | | | | | | |
| TYC | | | | *e* | S | Sn | 07 36 58.4 | -1.3 |
| | baz=341 | | | | | | | |
| **WHF** | **Hehuan Shan** | **3.07** | **349** | *e* | P | Pn | 07 36 23.8 | -0.8 |
| | baz=355 | | | | | | | |
| WHF | | | | *e* | S | Sn | 07 37 01.9 | -1.6 |
| | baz=355 | | | | | | | |

**MEX 29 07:43:55.1±0.4,15˚.75N×93˚.84W,h91km±7km,MD3.5, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PCIG** | | **0.60** | **94** | *e* | P | Pn | 07 44 09.5 | -1.2 |
| PCIG | | | | *e* | S | Sn | 07 44 20.8 | -1.7 |
| **TGIG** | | **1.24** | **34** | *e* | P | Pn | 07 44 16.4 | -1.3 |
| TGIG | | | | *e* | S | Sn | 07 44 32.4 | -2.4 |
| **HUIG** | **Huatulco** | **2.18** | **271** | *e* | P | Pn | 07 44 28.9 | -0.9 |
| HUIG | | | | *e* | S | Sn | 07 44 54.7 | -1.6 |

**IDC 29 07:59:27.7±2.4,31˚.35S×178˚.13W,h0km,mb4.0/2, mb1 4.2/4,mb1mx3.8/40,mbtmp4.0/4,ML3.6/2,Error ellipse: s-maj=61.0km s-min=24.2km az=115.0, Kermadec Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **RAO** | **Raoul Island** | **2.10** | **5** | Pn | | Pn | 08 00 03.2 | -0.9 |
| | 28nm,0.3s,baz=90,slow=20,SNR=1.3 | | | | | | | |
| RAO | | | | Sn | | Sb | 08 00 32.7 | -0.5 |
| | 132nm,0.3s,baz=90,slow=20,SNR=3.4 | | | | | | | |
| **URZ** | **Urewera** | **7.93** | **208** | Pn | | Pn | 08 01 22.9 | -1.4 |
| | 0.7nm,0.3s,baz=183,slow=2.1,SNR=6.4 | | | | | | | |
| URZ | | | | Sn | | Sn | 08 02 51.5 | -3.1 |
| | 2.1nm,0.3s,baz=261,slow=22,SNR=13 | | | | | | | |
| **ASAR** | **Alice Springs** | **42.95** | **268** | P | | P | 08 07 28.6 | -0.1 |
| | 0.7nm,0.4s,baz=106,slow=7.7,SNR=19 | | | | | | | |
| **WRA** | **Warramunga Arr** | **44.03** | **273** | P | | P | 08 07 37.4 | 0.0 |
| | 1.7nm,0.4s,baz=112,slow=7.9,SNR=13 | | | | | | | |
| **FINES** | **FINESS Array B** | **145.99** | **339** | PKPbc | | PKPdf | 08 19 07.6 | -0.3 |
| | 0.9nm,0.5s,baz=27,slow=0.4,SNR=5.3 | | | | | | | |
| **BRTR** | **Keskin Array B** | **152.94** | **297** | PKPbc | | PKPbc | 08 19 27.9 | +0.7 |
| | 0.9nm,1.0s,baz=12,slow=3.7,SNR=1.7 | | | | | | | |

*IDC* ***29*** *08:03:55.1±1.4,2˚.02N×96˚.57E,h0km,mb4.0/8, mb1 4.0/10,mb1mx3.8/41,mbtmp4.0/10,ML3.7/2,MS3.1/7, Ms1 3.2/7,ms1mx2.9/37,Error ellipse: s-maj=40.8km s-min=18.3km az=50.0*

*ISCJB* ***29*** *08:03:57.6±0.7,2˚.01N±0˚.06×96˚.60E±0˚.07,h28km, mb4.0/11,MS3.3/4,Error ellipse: s-maj=10.3km s-min=8.3km az=154.8*

*NEIC* ***29*** *08:04:00.9±0.6,2˚.09N×96˚.68E,h35km,mb4.1/4,Error ellipse: s-maj=12.8km s-min=8.0km az=224.0*

*DJA* ***29*** *08:04:01.4±0.4,2˚.N±4˚×9˚7E±˚,h29km±8km,M3.9/7, MLv3.9/7*

**ISC 29 08:03:59.7±0.8,2˚.02N±0˚.06×96˚.63E±0˚.06,h28km,n35, σ0ϑ97/28,mb4.1/11,MS3.3/4,Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SNSI** | **Sinabang, Aceh** | **0.49** | **322** | P | | **Pn** | **08 04 11.3** | **+0.4** |
| SNSI | | | | S | | **Sn** | **08 04 19.5** | **+0.9** |
| **GSI** | **Gunungsitoli** | **1.18** | **127** | P | | **Pn** | **08 04 22.6** | **+1.1** |
| GSI | | | | S | | **Sb** | **08 04 38.5** | **+2.0** |
| **GSI** | **Gunungsitoli** | **1.18** | **127** | *e* | Pn | **Pb** | **08 04 21.9** | **+0.3** |
| **KCSI** | **Kotacane, Aceh** | **1.88** | **37** | P | | **Pn** | **08 04 30.0** | **-0.1** |
| KCSI | | | | S | | **Sn** | **08 04 51.6** | **-1.3** |
| **MLSI** | **Meulaboh, Aceh** | **2.25** | **354** | P | | **Pn** | **08 04 34.0** | **-1.1** |
| MLSI | | | | S | | **Sn** | **08 05 01.6** | **-0.3** |
| **PSI** | **Prapat** | **2.42** | **71** | Pn | | **Pn** | **08 04 37.3** | **-0.3** |
| | 2.8nm,0.3

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **52.67** | **351** | P | | **P** | **08 13 10.5** | **-0.9** |
| | 5.0nm,0.6s,baz=179,slow=6.9,SNR=16 | | | | | | | |
| **ABKAR** | **Akbulak array** | **56.53** | **332** | *e*P | | **P** | **08 13 39.9** | **+0.3** |
| | 1.6nm,0.8s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **58.25** | **332** | P | | **P** | **08 13 51.0** | **-0.7** |
| | 0.5nm,0.3s,baz=127,slow=10,SNR=3.3 | | | | | | | |
| AKTO | | | | LR | | LR | 08 39 38.0 | |
| | comp=Z,19nm,19.3s,slow=37 | | | | | | | |
| **YAK** | **Yakutsk** | **64.80** | **17** | LR | | LR | 08 44 50.7 | |
| | comp=Z,31nm,18.5s,baz=140,slow=38 | | | | | | | |
| **H09N1** | **TRISTAN DA CUNI** | **06.29** | **232** | T | | T | 10 16 04.8 | |
| | SNR=17 | | | | | | | |

**NEIC 29 08:08:17.4, 52.83N×169.50W, h12km, ML3.5**(AEIC), **After AEIC., Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKH** | **Nikolski High** | **0.42** | **69** | P | Pg | 08 08 25.9 | +0.2 |
| NIKH | | | | S | Sb | 08 08 32.6 | -0.5 |
| **OKSP** | **Okmok Steeple** | **0.85** | **59** | P | Pg | 08 08 33.8 | 0.0 |
| **OKSO** | **Okmok South** | **0.97** | **56** | P | Pg | 08 08 35.1 | -1.0 |
| OKSO | | | | S | Sb | 08 08 49.6 | +0.6 |
| **OKCE** | **Okmok Cone E** | **1.01** | **53** | P | Pb | 08 08 36.5 | -0.3 |
| OKCE | | | | S | Sn | 08 08 51.6 | +0.1 |
| **OKAK** | **Okmok** | **1.02** | **42** | P | Pb | 08 08 35.3 | -1.7 |
| **OKTU** | **Okmok Mt. Tuli** | **1.04** | **57** | P | Pb | 08 08 37.1 | -0.4 |
| **OKFG** | **Magazine Ridge** | **1.12** | **58** | P | Pb | 08 08 37.7 | -1.1 |
| OKFG | | | | S | Sg | 08 08 53.9 | +0.3 |
| **MSOM** | **Makushin Julie** | **1.83** | **56** | P | Pn | 08 08 48.5 | -0.1 |
| **MGOD** | **Makushin Gods** | **1.85** | **57** | P | Pn | 08 08 48.4 | -0.7 |
| **MSW** | **Makushin Switc** | **1.96** | **55** | P | Pn | 08 08 50.5 | 0.0 |
| MSW | | | | S | Sn | 08 09 15.9 | +0.8 |
| **MTBL** | **Makushin Table** | **2.04** | **55** | P | Pn | 08 08 52.3 | +0.6 |
| **ZRO** | **Akutan Zero** | **2.46** | **58** | P | Pn | 08 08 57.9 | +0.5 |
| **AKUT** | **Akutan** | **2.59** | **58** | *e*Pn | Pn | 08 08 59.7 | +0.6 |
| AKUT | | | | *e*Sg | Sb | 08 09 37.1 | +1.7 |

**IDC 29 08:43:35.2±2.7, 18.36S×177.68W, h0km, mb4.1/3, mb1 4.4/3, mb1mx3.6/21, mbtmp4.1/3, Error ellipse: s-maj=299.0km s-min=32.9km az=159.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **45.23** | **260** | P | P | 08 51 53.6 | -1.0 |
| | 0.8nm,0.6s,baz=97,slow=7.0,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **45.34** | **255** | P | P | 08 51 56.0 | +0.5 |
| | 9.3nm,0.7s,baz=88,slow=8.2,SNR=141 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.65** | **57** | P | P | 08 56 16.3 | +0.1 |
| | 0.5nm,0.8s,baz=213,slow=6.5,SNR=5.1 | | | | | | |

*ISK **29** 08:53:39.3, 37.25N×28.22E, h5km, MD2.6*
*ISCJB **29** 08:53:40.6±0.5, 37.23N±0.03×28.20E±0.04, h0km, Error ellipse: s-maj=5.0km s-min=3.4km az=147.1*
*CSEM **29** 08:53:40.5±0.3, 37.23N×28.21E, h1km, MD2.6, Error ellipse: s-maj=8.4km s-min=5.4km az=60.0, Mining explosion.*
*DDA **29** 08:53:40.9, 37.25N×28.16E, h7km, Md2.8*
**ISC 29 08:53:39.9±0.9, 37.23N±0.03×28.20E±0.03, h0km, n20, σ0.74, 34, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.12** | **143** | *e*PG | **Pg** | **08 53 42.4** | **+0.2** |
| YER | | | | *e*SG | **Sg** | **08 53 44.6** | **+0.9** |
| **YER** | **Yerkesik** | **0.12** | **143** | *e*Pg | **Pg** | **08 53 42.4** | **+0.2** |
| YER | | | | *e*Sg | **Sg** | **08 53 44.6** | **+0.9** |
| **TURN** | **Turunc** | **0.48** | **137** | *i* P | **Pg** | **08 53 48.1** | **-1.1** |
| TURN | | | | *i* S | **Sb** | **08 53 58.0** | **-0.9** |
| **TURN** | **Turunc** | **0.48** | **137** | P | **Pg** | **08 53 48.1** | **-1.1** |
| TURN | | | | S | **Sb** | **08 53 58.0** | **-0.9** |
| **AYDN** | **Tasoluk** | **0.50** | **330** | *i* P | **Pb** | **08 53 51.8** | **+0.2** |
| AYDN | | | | *i* S | **Sb** | **08 53 59.4** | **-0.1** |
| **AYDN** | **Tasoluk** | **0.50** | **330** | P | **Pb** | **08 53 51.8** | **+0.2** |
| AYDN | | | | S | **Sb** | **08 53 59.4** | **-0.1** |
| **DALY** | **Dalyan (Mu˘la** | **0.55** | **138** | *e*PG | **Pg** | **08 53 51.2** | **+0.7** |
| DALY | | | | *e*SG | **Sb** | **08 53 59.9** | **-1.0** |
| **DALY** | **Dalyan (Mu˘la** | **0.55** | **138** | *e*Pg | **Pg** | **08 53 51.2** | **+0.7** |
| DALY | | | | *e*Sg | **Sb** | **08 53 59.9** | **-1.0** |
| **BDRM** | **Kayabasi** | **0.62** | **255** | *i* P | **Pg** | **08 53 52.2** | **+0.4** |
| BDRM | | | | *i* S | **Sb** | **08 54 02.6** | **-0.4** |
| **BDRM** | **Kayabasi** | **0.62** | **255** | P | **Pg** | **08 53 52.2** | **+0.4** |
| BDRM | | | | S | **Sb** | **08 54 02.6** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.76** | **341** | *e*PG | **Pg** | **08 53 54.8** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.76** | **341** | *e*Pg | **Pg** | **08 53 54.8** | **+0.3** |
| **DNZL** | **Cakiroluk** | **0.82** | **56** | *i* P | **Pg** | **08 53 56.4** | **+0.7** |
| DNZL | | | | *i* S | **Sb** | **08 54 09.4** | **+0.6** |
| **DNZL** | **Cakiroluk** | **0.82** | **56** | P | **Pg** | **08 53 56.4** | **+0.7** |
| DNZL | | | | S | **Sb** | **08 54 09.4** | **+0.6** |
| **FETY** | **Fethiye** | **0.93** | **130** | *e*PG | **Pg** | **08 53 58.2** | **+0.5** |
| **FETY** | **Fethiye** | **0.93** | **130** | *e*Pg | **Pg** | **08 53 58.2** | **+0.5** |
| **MANT** | **Manisa** | **1.29** | **13** | *i* P | **Pg** | **08 54 03.3** | **-1.4** |
| MANT | | | | *i* S | **Sn** | **08 54 23.0** | **-0.6** |
| **MANT** | **Manisa** | **1.29** | **13** | P | **Pg** | **08 54 03.2** | **-1.4** |
| MANT | | | | S | **Sn** | **08 54 23.0** | **-0.6** |
| **KULA** | **Kula-Manisa** | **1.33** | **16** | *e*PN | **Pg** | **08 54 05.4** | **-0.1** |
| **KULA** | **Kula-Manisa** | **1.33** | **16** | *e*Pn | **Pg** | **08 54 05.4** | **-0.1** |

*ISCJB **29** 09:10:32.2±0.5, 40.35N±0.03×25.82E±0.03, h12km±3km, Error ellipse: s-maj=4.5km s-min=4.0km az=23.3*
*CSEM **29** 09:10:32.6±0.1, 40.34N×25.81E, h12km, MD3.0, Error ellipse: s-maj=3.3km s-min=2.6km az=7.0*
*ATH **29** 09:10:32.6, 40.36N×25.82E, h27km±1km, MD3.4/9*
*ISK **29** 09:10:32.3, 40.34N×25.85E, h13km, MD3.0*
*DDA **29** 09:10:35.4, 40.38N×26.11E, h31km, Md3.0*
**ISC 29 09:10:32.8±0.9, 40.35N±0.02×25.85E±0.02, h12km±7km, n64, σ0.44/81, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GADA** | **Gvkgeada** | **0.16** | **166** | *e*PG | **Pg** | **09 10 36.5** | **-0.1** |
| GADA | | | | *e*SG | **Sg** | **09 10 39.2** | **+0.1** |
| **GADA** | **Gvkgeada** | **0.16** | **166** | *e*Pg | **Pg** | **09 10 36.5** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **0.27** | **297** | *e*PB | **Pg** | **09 10 38.4** | **-0.1** |
| SMTH | | | | *e*SB | **Sb** | **09 10 43.4** | **-0.9** |
| **SMTH** | **Samothraki Isl** | **0.27** | **297** | *e*Pb | **Pg** | **09 10 38.4** | **-0.1** |
| SMTH | | | | *e*Sb | **Sb** | **09 10 43.4** | **-0.9** |
| **GELI** | **Tayfur-Gelibol** | **0.48** | **84** | *e*PG | **Pg** | **09 10 42.4** | **+0.1** |
| GELI | | | | *e*SG | **Sb** | **09 10 49.8** | **-0.5** |
| **GELI** | **Tayfur-Gelibol** | **0.48** | **84** | *e*Pg | **Pg** | **09 10 42.4** | **+0.1** |
| GELI | | | | *e*Sg | **Sb** | **09 10 49.8** | **-0.5** |
| **BOZC** | **Bozcaada** | **0.53** | **163** | P | Pn | 09 10 50.6 | +4.4 |
| BOZC | | | | S | **Sn** | **09 10 56.0** | **+0.9** |
| **ALN** | **Alexandroupoli** | **0.57** | **15** | *e*PG | **Pb** | **09 10 44.3** | **-0.4** |
| **ALN** | **Alexandroupoli** | **0.57** | **15** | *e*PN | **Pb** | **09 10 44.3** | **-0.4** |
| ALN | | | | *e*SN | **Sb** | **09 10 52.7** | **-0.1** |
| **ALN** | **Alexandroupoli** | **0.57** | **15** | *e*Pg | **Pb** | **09 10 44.3** | **-0.4** |
| ALN | | | | *e*Sn | **Sb** | **09 10 52.7** | **-0.1** |
| **ERIK** | **Erikli-Kesan** | **0.60** | **57** | *e*PG | **Pg** | **09 10 44.8** | **+0.2** |
| ERIK | | | | *e*SG | **Sb** | **09 10 53.2** | **-0.5** |
| **ERIK** | **Erikli-Kesan** | **0.60** | **57** | *e*Pg | **Pg** | **09 10 44.8** | **+0.2** |
| ERIK | | | | *e*Sg | **Sb** | **09 10 53.2** | **-0.5** |
| **EZN** | **Ezine** | **0.64** | **145** | *e*PG | **Pg** | **09 10 44.3** | **-0.9** |
| **EZN** | **Ezine** | **0.64** | **145** | *e*Pg | **Pg** | **09 10 44.3** | **-0.9** |
| **LIA** | **Limnos Island** | **0.68** | **229** | *e*PN | **Pb** | **09 10 46.9** | **+0.3** |
| LIA | | | | *e*SN | **Sb** | **09 10 56.1** | **+0.1** |
| **LIA** | **Limnos Island** | **0.68** | **229** | *e*Pn | **Pb** | **09 10 46.9** | **+0.3** |
| LIA | | | | *e*Sn | **Sb** | **09 10 56.1** | **+0.1** |
| **LPK** | **Lapseki** | **0.70** | **88** | *e*PG | **Pg** | **09 10 46.4** | **0.0** |
| **LPK** | **Lapseki** | **0.70** | **88** | *e*Pg | **Pg** | **09 10 46.4** | **0.0** |
| **RKY** | **Sarkoy-Tekirda** | **1.07** | **71** | *e*PG | **Pb** | **09 10 53.0** | **-0.3** |
| **RKY** | **Sarkoy-Tekirda** | **1.07** | **71** | *e*Pg | **Pb** | **09 10 53.0** | **-0.3** |
| **SIGR** | **SIGRI** | **1.14** | **180** | *e*PN | **Pb** | **09 10 54.7** | **0.0** |
| **SIGR** | **SIGRI** | **1.14** | **180** | *e*PN | **Pb** | **09 10 54.8** | **0.0** |
| SIGR | | | | *e*SN | **Sg** | **09 11 09.8** | **+0.3** |
| **SIGR** | **SIGRI** | **1.14** | **180** | *e*Pn | **Pg** | **09 10 54.7** | **0.0** |
| SIGR | | | | *e*Sn | **Sg** | **09 11 09.8** | **+0.3** |
| **PRK** | **Paraskevi** | **1.15** | **163** | *e*PN | **Pb** | **09 10 54.6** | **0.0** |
| PRK | | | | *e*SN | **Sn** | **09 11 10.6** | **+0.2** |
| **PRK** | **Paraskevi** | **1.15** | **163** | *e*Pn | **Pb** | **09 10 54.6** | **0.0** |
| PRK | | | | *e*Sn | **Sn** | **09 11 10.6** | **+0.2** |
| **AYVA** | **Ayvalik** | **1.23** | **148** | *i* P | **Pn** | **09 10 55.5** | **-0.3** |
| **AYVA** | **Ayvalik** | **1.23** | **148** | P | **Pn** | **09 10 55.5** | **-0.3** |
| **OUR** | **Ouranopolis** | **1.43** | **270** | *e*PN | **Pn** | **09 10 58.1** | **-0.4** |
| **OUR** | **Ouranopolis** | **1.43** | **270** | *e*PB | **Pn** | **09 10 57.7** | **-0.8** |
| **OUR** | **Ouranopolis** | **1.43** | **270** | *e*Pb | **Pn** | **09 10 57.7** | **-0.8** |
| **OUR** | **Ouranopolis** | **1.43** | **270** | *e*Pn | **Pn** | **09 10 58.2** | **-0.4** |
| **GONE** | **Gonen-Balikesi** | **1.44** | **102** | *e*PN | **Pn** | **09 10 58.9** | **+0.2** |
| **GONE** | **Gonen-Balikesi** | **1.44** | **102** | *e*Pn | **Pn** | **09 10 58.9** | **+0.2** |
| **BALY** | **Balya** | **1.49** | **114** | *i* P | **Pn** | **09 10 59.9** | **+0.4** |
| **BALY** | **Balya** | **1.49** | **114** | P | **Pn** | **09 10 59.9** | **+0.4** |
| **EDC** | **Edincik** | **1.54** | **89** | *e*PN | **Pn** | **09 11 00.4** | **+0.3** |
| **EDC** | **Edincik** | **1.54** | **89** | *e*Pn | **Pn** | **09 11 00.4** | **+0.3** |
| **EDRB** | **Edirne** | **1.64** | **24** | *e*PN | **Pn** | **09 11 02.0** | **+0.5** |
| **EDRB** | **Edirne** | **1.64** | **24** | *e*Pn | **Pn** | **09 11 02.0** | **+0.5** |
| **BALB** | **Balikesir** | **1.71** | **114** | *e*PN | **Pn** | **09 11 03.2** | **+0.7** |
| **BALB** | **Balikesir** | **1.71** | **114** | *e*Pn | **Pn** | **09 11 03.2** | **+0.7** |
| **NVR** | **Nevrokopi** | **1.81** | **304** | *e*PN | **Pn** | **09 11 04.1** | **+0.3** |
| **NVR** | **Nevrokopi** | **1.81** | **304** | *e*Pn | **Pn** | **09 11 04.1** | **+0.3** |
| **PLG** | **Polygyros** | **1.83** | **272** | *e*PB | **Pn** | **09 11 04.1** | **-0.1** |
| **PLG** | **Polygyros** | **1.83** | **272** | *e*Pb | **Pn** | **09 11 04.1** | **-0.1** |
| **SRS** | **Serrai** | **1.88** | **295** | *e*PN | **Pn** | **09 11 05.0** | **+0.2** |
| **SRS** | **Serrai** | **1.88** | **295** | *e*Pn | **Pn** | **09 11 05.0** | **+0.2** |
| **SOH** | **Sokhos** | **1.96** | **285** | *e*PB | **Pn** | **09 11 06.1** | **+0.2** |
| **SOH** | **Sokhos** | **1.96** | **285** | *e*Pb | **Pn** | **09 11 06.1** | **+0.2** |
| **CHOS** | **Chios island** | **1.97** | **175** | *e*PN | **Pn** | **09 11 05.5** | **-0.5** |
| **CHOS** | **Chios island** | **1.97** | **175** | *e*PN | **Pn** | **09 11 06.3** | **+0.2** |
| **CHOS** | **Chios island** | **1.97** | **175** | *e*Pn | **Pn** | **09 11 06.3** | **+0.2** |
| **DURS** | **Dursunbey** | **2.15** | **109** | *i* P | **Pg** | **09 11 13.1** | **-1.0** |
| DURS | | | | *i* S | **Sn** | **09 11 36.1** | **+0.8** |
| **DURS** | **Dursunbey** | **2.15** | **109** | P | **Pg** | **09 11 13.1** | **-1.0** |
| DURS | | | | S | **Sn** | **09 11 36.1** | **+0.8** |
| **IZM** | **Izmir** | **2.24** | **150** | *e*PN | **Pn** | **09 11 09.9** | **+0.2** |
| **IZM** | **Izmir** | **2.24** | **150** | *e*Pn | **Pn** | **09 11 09.9** | **+0.2** |
| **ARMT** | **Armutlu** | **2.31** | **84** | *e*PN | **Pn** | **09 11 11.1** | **+0.4** |
| **ARMT** | **Armutlu** | **2.31** | **84** | *e*Pn | **Pn** | **09 11 11.1** | **+0.4** |
| **KULA** | **Kula-Manisa** | **2.85** | **129** | *e*PN | **Pn** | **09 11 18.4** | **+0.3** |
| **KULA** | **Kula-Manisa** | **2.85** | **129** | *e*Pn | **Pn** | **09 11 18.4** | **+0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.88** | **146** | *e*PN | **Pn** | **09 11 18.8** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.88** | **146** | *e*Pn | **Pn** | **09 11 18.8** | **+0.2** |
| **TVSB** | **Tavsanli** | **2.92** | **107** | *e*PN | **Pn** | **09 11 18.9** | **-0.3** |
| **TVSB** | **Tavsanli** | **2.92** | **107** | *e*Pn | **Pn** | **09 11 18.9** | **-0.3** |

**WEL 29 09:22:03.0±0.3, 43.52S×173.25E, h5km, ML3.5**/12, **4C-2D, Error ellipse: s-maj=2.0km s-min=1.5km az=90.0, Off east coast of South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRLZ** | **Canterbury Las** | **0.46** | **262** | ⇓PG | Pg | 09 22 12.5 | +0.6 |
| CRLZ | | | | SG | Sg | 09 22 18.8 | +0.9 |
| CRLZ | | | | AML | AML | 09 22 22.6 | |
| **MQZ** | **McQueen's Vall** | **0.48** | **246** | ⇑PG | Pg | 09 22 12.7 | +0.6 |
| MQZ | | | | SG | Sg | 09 22 19.1 | +0.7 |
| MQZ | | | | AML | AML | 09 22 19.5 | |
| **OXZ** | **Oxford** | **0.91** | **282** | P* | Pg | 09 22 20.5 | +0.1 |
| OXZ | | | | S* | Sg | 09 22 32.1 | 0.0 |
| **LTZ** | **Lake Taylor** | **1.03** | **315** | ⇑P* | Pg | 09 22 22.8 | +0.1 |
| LTZ | | | | S* | Sg | 09 22 35.7 | -0.4 |
| LTZ | | | | AML | AML | 09 22 38.4 | |
| **KHZ** | **Kahutara** | **1.12** | **11** | ⇑P* | Pg | 09 22 24.5 | +0.1 |
| KHZ | | | | AML | AML | 09 22 49.7 | |
| KHZ | | | | AML | AML | 09 22 53.0 | |
| **RPZ** | **Rata Peaks** | **1.61** | **262** | ⇓PN | Pn | 09 22 31.1 | -1.0 |
| RPZ | | | | AML | AML | 09 22 59.6 | |
| RPZ | | | | AML | AML | 09 22 59.6 | |
| **THZ** | **Tophouse** | **1.77** | **352** | PN | Pn | 09 22 33.6 | -0.8 |
| THZ | | | | AML | AML | 09 22 58.4 | |
| THZ | | | | AML | AML | 09 22 58.8 | |
| **BSWZ** | **Blackbirch Sta** | **1.86** | **15** | PN | Pn | 09 22 35.4 | -0.1 |
| **WVZ** | **Waitaha Valley** | **1.89** | **283** | PN | Pn | 09 22 35.2 | -0.7 |
| **DSZ** | **Denniston Nort** | **2.07** | **328** | PN | Pn | 09 22 38.0 | -0.4 |
| DSZ | | | | AML | AML | 09 23 03.9 | |
| DSZ | | | | AML | AML | 09 23 03.9 | |
| DSZ | | | | AML | AML | 09 23 04.0 | |
| DSZ | | | | AML | AML | 09 23 04.6 | |
| **LBZ** | **Lake Benmore** | **2.38** | **248** | PN | Pn | 09 22 42.2 | -0.5 |
| LBZ | | | | AML | AML | 09 23 25.9 | |
| LBZ | | | | AML | AML | 09 23 28.3 | |
| **ODZ** | **Otahua Downs** | **2.42** | **230** | PN | Pn | 09 22 42.4 | -0.8 |
| ODZ | | | | AML | AML | 09 23 25.9 | |
| ODZ | | | | AML | AML | 09 23 34.9 | |
| **TCW** | **Tory Channel** | **2.42** | **19** | PN | Pn | 09 22 42.4 | -0.8 |
| **FOZ** | **Fox Glacier** | **2.59** | **268** | PN | Pn | 09 22 44.4 | -1.1 |
| **QRZ** | **Quartz Range** | **2.74** | **348** | PN | Pn | 09 22 47.5 | -0.1 |
| QRZ | | | | AML | AML | 09 23 22.2 | |
| QRZ | | | | AML | AML | 09 23 22.3 | |
| QRZ | | | | AML | AML | 09 23 22.5 | |
| QRZ | | | | AML | AML | 09 23 24.9 | |
| **CAW** | **Cannon Point** | **2.76** | **30** | PN | Pn | 09 22 46.8 | -1.1 |
| **KIW** | **Kapiti Island** | **2.92** | **25** | PN | Pn | 09 22 49.5 | -0.7 |
| **EAZ** | **Earnscleugh** | **3.31** | **237** | ⇑PN | Pn | 09 22 54.9 | -0.5 |
| **WKZ** | **Wanaka** | **3.32** | **245** | PN | Pn | 09 22 54.8 | -0.7 |
| **MRZ** | **Mangatainoka R** | **3.34** | **32** | PN | Pn | 09 22 54.5 | -1.3 |
| MRZ | | | | AML | AML | 09 23 04.6 | |
| **TUZ** | **Tuapeka** | **3.55** | **225** | PN | Pn | 09 22 58.0 | -0.7 |
| TUZ | | | | AML | AML | 09 24 03.6 | |
| TUZ | | | | AML | AML | 09 24 11.6 | |
| **VRZ** | **Vera Road** | **4.53** | **15** | PN | Pn | 09 23 12.5 | +0.3 |
| **WNVZ** | **Wahianoa** | **4.54** | **24** | PN | Pn | 09 23 13.2 | +0.6 |
| **HIZ** | **Hauiti** | **5.14** | **14** | PN | Pn | 09 23 20.8 | +0.2 |

**GUC 29 09:34:47.1±0.6, 34.80S×70.98W, h102km±4km, ML3.5, 3C-4D, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NICH** | **Los Niches** | **0.29** | **225** | *e*P | Pn | 09 35 01.5 | -0.4 |
| NICH | | | | *i* S | Sn | 09 35 13.7 | +0.8 |
| **TALC** | **Talca** | **0.81** | **221** | ⇑P | Pn | 09 35 05.7 | 0.0 |
| TALC | | | | *i* S | Sn | 09 35 19.7 | +0.1 |
| **CHCH** | **Chadas Angostu** | **0.90** | **18** | *e*P | Pn | 09 35 06.8 | 0.0 |
| CHCH | | | | *e*S | Sn | 09 35 21.7 | +0.2 |
| **LNV** | **Longovilo** | **0.91** | **337** | ⇑P | Pn | 09 35 07.0 | +0.3 |
| LNV | | | | *i* S | Sn | 09 35 21.9 | +0.5 |
| **CHPI** | **Pichilemu** | **0.94** | **295** | ⇓P | Pn | 09 35 07.5 | +0.5 |
| CHPI | | | | *i* S | Sn | 09 35 22.1 | +0.2 |
| **TACH** | **Talagante** | **1.14** | **2** | ⇓P | Pn | 09 35 09.4 | +0.2 |
| TACH | | | | *i* S | Sn | 09 35 26.1 | +0.1 |
| **PCH** | **Pirque** | **1.23** | **18** | *e*P | Pn | 09 35 10.7 | +0.2 |
| PCH | | | | *i* S | Sn | 09 35 28.8 | +0.7 |
| **ANTU** | **Antumapu** | **1.26** | **13** | ⇓P | Pn | 09 35 11.3 | +0.6 |
| ANTU | | | | *i* S | Sn | 09 35 29.8 | +1.3 |
| ANTU | | | | AML | AML | 09 35 30.1 | |
| | comp=E,895nm,0.2s | | | | | | |
| **SAN** | **Santiago** | **1.36** | **11** | *i* S | Sn | 09 35 31.1 | +0.5 |
| **CLCH** | **Cerro Calan** | **1.44** | **15** | ⇓P | Pn | 09 35 13.4 | +0.5 |
| CLCH | | | | *i* S | Sn | 09 35 33.0 | +0.6 |
| CLCH | | | | AML | AML | 09 35 34.3 | |
| | comp=E,785nm,0.5s | | | | | | |
| **PEL** | **Peldehue** | **1.67** | **9** | ⇑P | Pn | 09 35 16.0 | +0.3 |
| PEL | | | | *i* S | Sn | 09 35 37.8 | +0.5 |
| PEL | | | | AML | AML | 09 35 39.7 | |
| | comp=N,1μm,0.3s | | | | | | |

*IDC **29** 09:43:07.0±5.5, 52.04N×178.66W, h0km, mb3.8/6, mb1 4.2/7, mb1mx3.8/48, mbtmp4.0/7, ML4.7/1, Error ellipse: s-maj=98.7km s-min=44.6km az=79.0*
*NEIC **29** 09:43:42.6, 52.35N×176.25W, h221km, mb4.5/4, After AEIC.*
**ISC 29 09:43:41.9±0.9, 52.7N±0.1×176.32W±0.07, h200km, n37, σ1.21/32, mb3.8/5, Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GSTR** | **Great Sitkin T** | **0.64** | **166** | P | **Pn** | **09 44 10.6** | **+0.9** |
| **GSTD** | **Great Sitkin T** | **0.67** | **171** | P | **Pn** | **09 44 10.3** | **+0.5** |
| GSTD | | | | S | **Sn** | **09 44 33.3** | **+1.9** |
| **GSMY** | **Great Sitkin M** | **0.69** | **166** | P | **Pn** | **09 44 10.5** | **+0.6** |
| **GSCK** | **Great Sitkin C** | **0.71** | **172** | P | **Pn** | **09 44 10.1** | **+0.1** |
| GSCK | | | | S | **Sn** | **09 44 33.5** | **+1.9** |
| **ADAG** | **Mount Adagdak** | **0.76** | **193** | P | **Pn** | **09 44 11.3** | **+1.1** |
| **ETKA** | **Kagalaska Isla** | **0.85** | **184** | P | **Pn** | **09 44 11.3** | **+0.5** |
| **KIRH** | **Kanaga Island** | **0.94** | **211** | P | **Pn** | **09 44 12.2** | **+0.9** |
| **KIKV** | **Kanaga Island** | **0.99** | **212** | P | **Pn** | **09 44 12.5** | **+0.9** |
| **TAFP** | **Tanaga Falls P** | **1.31** | **232** | P | **Pn** | **09 44 15.0** | **+1.0** |
| TAFP | | | | S | **Sn** | **09 44 39.7** | **+0.9** |
| **TAFL** | **Tanaga Flats** | **1.36** | **226** | P | **Pn** | **09 44 15.1** | **+0.7** |
| **GANE** | **Gareloi Northe** | **1.76** | **240** | P | **Pn** | **09 44 18.1** | **+0.1** |
| GANE | | | | S | **Sn** | **09 44 47.0** | **+1.0** |
| **GAEA** | **Gareloi East** | **1.76** | **239** | P | **Pn** | **09 44 18.1** | **+0.1** |
| **GALAA** | **Gareloi Lava P** | **1.79** | **239** | P | **Pn** | **09 44 19.0** | **+0.8** |
| **CERAA** | **Semis' Rag'd T** | **2.58** | **253** | P | **Pn** | **09 44 27.8** | **+1.1** |
| **CERB** | **Semis' Cerberu** | **2.61** | **254** | P | **Pn** | **09 44 28.1** | **+1.1** |
| **CESW** | **Semis' Southwe** | **2.66** | **254** | P | **Pn** | **09 44 27.8** | **+0.3** |
| **AMKA** | **Amchitka** | **3.02** | **245** | P | **Pn** | **09 44 31.0** | **-0.7** |
| AMKA | | | | S | **Sn** | **09 45 09.4** | **-1.1** |
| **LSPA** | **Little Sitkin** | **3.23** | **258** | P | **Pn** | **09 44 35.2** | **+1.1** |
| **LSNW** | **Little Sitkin** | **3.25** | **259** | P | **Pn** | **09 44 35.2** | **+0.7** |
| **KDAK** | **Kodiak Island** | **14.42** | **60** | Pn | Pn | 09 46 52.5 | -4.1 |
| | 3.0nm,0.3s,baz=266,slow=9.2,SNR=33 | | | | | | |
| **PPLA** | **Purkeypile** | **16.30** | **42** | *e*P | **P** | **09 47 21.4** | **+2.5** |
| | 16nm,1.0s | | | | | | |
| **SEW** | **Seward** | **16.51** | **53** | *e*P | **P** | **09 47 20.9** | **-0.2** |
| | 7.0nm,0.3s | | | | | | |
| **RC01** | **Rabbit Creek A** | **16.66** | **49** | *e*P | **P** | **09 47 25.4** | **+2.6** |
| **KTH** | **Kantishna Hill** | **17.11** | **41** | *e*P | **P** | **09 47 27.8** | **+0.1** |
| | 19nm,0.7s | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **17.35** | **39** | *e*P | **P** | **09 47 30.6** | **+0.3** |
| | 1.8nm,0.7s | | | | | | |
| **ILAR** | **Eielson Array** | **19.24** | **40** | P | P | 09 47 47.1 | -3.6 |
| | 0.6nm,0.5s,baz=239,slow=9.3,SNR=12 | | | | | | |
| **INK** | **Inuvik** | **25.48** | **36** | P | P | 09 48 49.3 | -1.9 |
| | 0.6nm,0.3s,baz=255,slow=11,SNR=12 | | | | | | |
| **YKA** | **Yellowknife Ar** | **33.20** | **48** | P | P | 09 49 57.3 | -1.9 |
| | 2.0nm,0.7s,baz=276,slow=9.6,SNR=4.6 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **35.41** | **208** | T | T | 10 26 30.9 | |
| | baz=18,slow=76,SNR=3.2 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **35.42** | **208** | T | T | 10 26 29.8 | |
| | baz=18 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **35.43** | **208** | T | T | 10 26 31.5 | |
| | baz=18,slow=76,SNR=2.8 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **36.63** | **208** | T | T | 10 28 05.5 | |
| | baz=17,slow=76,SNR=5.8 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **36.64** | **208** | T | T | 10 28 08.6 | |
| | baz=17,slow=76,SNR=5.4 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **36.64** | **208** | T | T | 10 28 08.8 | |
| | baz=17,slow=76,SNR=6.3 | | | | | | |
| **YBH** | **Yreka Blue Hor** | **37.20** | **85** | P | **P** | **09 50 33.4** | **-0.4** |
| | 1.6nm,0.6s,baz=308,slow=9.2,SNR=6.1 | | | | | | |
| **NVAR** | **Mina Array Bea** | **41.90** | **86** | P | **P** | **09 51 11.5** | **-1.2** |
| | 1.0nm,0.6s,baz=311,slow=5.9,SNR=4.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **56.96** | **84** | P | **P** | **09 53 04.0** | **-2.5** |
| | 0.9nm,0.6s,baz=306,slow=5.7,SNR=16 | | | | | | |

*IDC **29** 09:45:45.2±1.1, 35.39N×140.18E, h0km, mb3.5/4, mb1 3.8/4, mb1mx3.5/40, mbtmp3.5/4, MS2.6/2, Ms1 2.6/2, ms1mx2.3/28, Error ellipse: s-maj=29.6km s-min=21.4km az=83.0*
*JMA **29** 09:45:45.5±0.1, 36.16N×140.86E, h44km±1km, M3.4*
*JMA Felt I J1.*
**ISC 29 09:45:43.0±1.6, 36.18N±0.06×140.93E±0.09, h17km±14km, n20, σ1.51/17, mb3.5/4, 4C-2D, Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHOJ** | **Chosi** | **0.48** | **186** | ⇑P | **Pn** | **09 45 55.7** | **+0.6** |
| CHOJ | | | | S | **Sb** | **09 46 02.7** | **+2.9** |
| **JHO** | **Hitachi** | **0.51** | **326** | ⇑P | **Pn** | **09 45 56.2** | **+0.7** |
| JHO | | | | S | **Sb** | **09 46 03.5** | **+2.8** |
| **JYT** | **Yasato** | **0.59** | **274** | ⇓P | **Pn** | **09 45 57.1** | **+0.5** |
| JYT | | | | S | **Sb** | **09 46 04.8** | **+1.8** |
| **ONAJ** | **Iwakimizuishiy** | **0.92** | **354** | ⇑P | **Pg** | **09 46 01.8** | **+0.9** |
| ONAJ | | | | S | **Sg** | **09 46 13.2** | **+0.1** |
| **JFK** | **Kawauchi** | **1.18** | **358** | ⇑P | **Pg** | **09 46 05.2** | **-0.6** |
| **JAG** | **Ashikaga** | **1.21** | **282** | ⇓P | **Pn** | **09 46 05.7** | **+0.6** |
| JAG | | | | S | **Sn** | **09 46 20.3** | **-0.9** |
| **MJAR** | **Matsushiro Arr** | **2.22** | **280** | Pn | **Pn** | **09 46 19.1** | **+0.1** |
| | 4.5nm,0.3s,baz=97,slow=8.5,SNR=40 | | | | | | |
| MJAR | | | | Sn | **Sn** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AYDN** | **Tasoluk** | **0.47** | **332** | *i* P | | **Pb** | **10 06 21.6** | **+0.2** |
| AYDN | | | | *i* S | | **Sb** | **10 06 29.4** | **+0.5** |
| **AYDN** | **Tasoluk** | **0.47** | **332** | P | | **Pb** | **10 06 21.6** | **+0.2** |
| AYDN | | | | S | | **Sb** | **10 06 29.4** | **+0.5** |
| **TURN** | **Turunc** | **0.52** | **136** | *i* P | | **Pg** | **10 06 18.8** | **-1.2** |
| TURN | | | | *i* S | | **Sg** | **10 06 26.2** | **-0.4** |
| **TURN** | **Turunc** | **0.52** | **136** | P | | **Pg** | **10 06 18.8** | **-1.2** |
| TURN | | | | S | | **Sg** | **10 06 26.2** | **-0.4** |
| **DALY** | **Dalyan (Mu¨la** | **0.58** | **137** | *e*PG | | **Pg** | **10 06 21.0** | **-0.3** |
| DALY | | | | *e*SG | | **Sg** | **10 06 29.3** | **+0.5** |
| **DALY** | **Dalyan (Mu¨la** | **0.58** | **137** | *e*Pg | | **Pg** | **10 06 21.0** | **-0.3** |
| DALY | | | | *e*Sg | | **Sg** | **10 06 29.3** | **+0.5** |
| **BDRM** | **Kayabasi** | **0.60** | **253** | *i* P | | **Pg** | **10 06 20.9** | **-0.7** |
| BDRM | | | | *i* S | | **Sb** | **10 06 32.9** | **+0.4** |
| **BDRM** | **Kayabasi** | **0.60** | **253** | P | | **Pg** | **10 06 20.9** | **-0.7** |
| BDRM | | | | S | | **Sb** | **10 06 32.9** | **+0.4** |
| **FETY** | **Fethiye** | **0.96** | **129** | *e*PG | | **Pg** | **10 06 27.9** | **-0.6** |
| FETY | | | | *e*SG | | **Sg** | **10 06 41.2** | **+0.3** |
| **FETY** | **Fethiye** | **0.96** | **129** | *e*Pg | | **Pg** | **10 06 27.9** | **-0.6** |
| FETY | | | | *e*Sg | | **Sg** | **10 06 41.2** | **+0.3** |
| **KULA** | **Kula-Manisa** | **1.33** | **17** | *e*PN | | **Pg** | **10 06 35.0** | **-0.6** |
| **KULA** | **Kula-Manisa** | **1.33** | **17** | *e*Pn | | **Pg** | **10 06 35.0** | **-0.6** |

*NAO* ***29*** *10:06:20.9±1.7, 67°.55N×34°.03E, ML2.4*
*CSEM* ***29*** *10:06:22.8±1.0, 67°.78N×33°.50E, h2km, ML2.4, Error ellipse: s-maj=17.7km s-min=9.9km az=68.0, Mining explosion.*

**HEL 29 10:06:20.4±0.6, 67°.87N×34°.12E, h0km, ML2.0, Explosion, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APZ9** | **Apatity** | **0.41** | **222** | Pg | Pg | 10 06 26.2 | -1.9 |
| APZ9 | | | | Lg | Lg | 10 06 29.8 | |
| **APZ9** | **Apatity** | **0.41** | **222** | Pg | Pg | 10 06 26.2 | -1.9 |
| APZ9 | | | | Lg | Lg | 10 06 29.8 | |
| **APZ9** | **Apatity** SNR=91 | **0.41** | **222** | Pg | Pg | 10 06 26.2 | -2.0 |
| APZ9 | | | | Lg | Lg | 10 06 29.8 | |
| **APA0** | **Apatity Array** baz=97,slow=18 | **0.51** | **239** | Pg | Pg | 10 06 28.6 | -1.5 |
| APA0 | | | | Lg | Lg | 10 06 34.2 | |
| | baz=63,slow=28 | | | | | | |
| APA0 | | | | Rg | Rg | 10 06 36.0 | |
| **APA0** | **Apatity Array** baz=97,slow=18 | **0.51** | **239** | Pg | Pg | 10 06 28.6 | -1.5 |
| APA0 | | | | Lg | Lg | 10 06 34.2 | |
| | baz=63,slow=28 | | | | | | |
| APA0 | | | | Rg | Rg | 10 06 36.0 | |
| **APA0** | **Apatity Array** SNR=90 | **0.51** | **239** | Pg | Pg | 10 06 28.6 | -1.5 |
| APA0 | | | | Lg | Lg | 10 06 34.2 | |
| | SNR=1.1 | | | | | | |
| **VRF** | **Varrio** baz=84 | **1.72** | **268** | PG | Pn | 10 06 51.5 | 0.0 |
| VRF | | | | MSG | | 10 07 11.7 | |
| | comp=Z,13nm,0.2s | | | | | | |
| VRF | | | | SG | Sn | 10 07 12.8 | -1.4 |
| **VRF** | **Varrio** | **1.72** | **268** | Pg | Pn | 10 06 51.5 | 0.0 |
| VRF | | | | Sg | Sn | 10 07 12.7 | -1.5 |
| **KU6** | **Riekki** baz=42 | **2.49** | **224** | PN | Pn | 10 07 00.9 | -1.2 |
| KU6 | | | | SN | Sn | 10 07 31.7 | -1.5 |
| KU6 | | | | MSG | | 10 07 34.0 | |
| | comp=Z,4.7nm,0.2s | | | | | | |
| **KU6** | **Riekki** | **2.49** | **224** | Pn | Pn | 10 07 00.9 | -1.2 |
| KU6 | | | | Sn | Sn | 10 07 31.7 | -1.5 |
| **MSF** | **Maaselka** | **2.81** | **228** | PN | Pn | 10 07 06.5 | 0.0 |
| MSF | | | | SN | Sn | 10 07 41.5 | +0.5 |
| **MSF** | **Maaselka** | **2.81** | **228** | Pn | Pn | 10 07 06.5 | 0.0 |
| MSF | | | | Sn | Sn | 10 07 41.5 | +0.5 |
| **SGF** | **Sodankyl** | **2.93** | **265** | PG | Pb | 10 07 13.4 | -0.1 |
| SGF | | | | SG | Sb | 10 07 49.4 | -0.5 |
| **SGF** | **Sodankyl** | **2.93** | **265** | Pg | Pb | 10 07 13.4 | -0.1 |
| SGF | | | | Sg | Sb | 10 07 49.3 | -0.5 |
| **KEV** | **Kevo** baz=123 | **3.20** | **310** | PB | Pn | 10 07 14.8 | +2.9 |
| KEV | | | | MSG | | 10 07 54.5 | |
| | comp=Z,6.3nm,0.2s | | | | | | |
| KEV | | | | SB | Sb | 10 07 54.5 | -3.0 |
| **RNF** | **Rovaniemi** | **3.40** | **252** | PN | Pn | 10 07 14.1 | -0.5 |
| RNF | | | | SN | Sn | 10 07 54.2 | -1.3 |
| **RNF** | **Rovaniemi** | **3.40** | **252** | Pn | Pn | 10 07 14.0 | -0.6 |
| RNF | | | | Sn | Sn | 10 07 54.2 | -1.3 |
| **ARA0** | **ARCESS Array S** baz=122,slow=16 | **3.56** | **302** | Pn | Pn | 10 07 18.9 | +2.1 |
| ARA0 | | | | Pg | Pg | 10 07 27.0 | -1.6 |
| | baz=120,slow=16 | | | | | | |
| ARA0 | | | | Sn | Sn | 10 08 00.3 | +0.7 |
| | baz=121,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 08 11.8 | |
| | baz=128,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** baz=122,slow=16 | **3.56** | **302** | Pn | Pn | 10 07 18.9 | +2.1 |
| ARA0 | | | | Pg | Pg | 10 07 27.0 | -1.6 |
| | baz=120,slow=16 | | | | | | |
| ARA0 | | | | Sn | Sn | 10 08 00.3 | +0.7 |
| | baz=121,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 08 11.8 | |
| | baz=128,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** SNR=50 | **3.56** | **302** | Pn | Pn | 10 07 19.0 | +2.2 |
| **ARA0** | **ARCESS Array S** SNR=1.4 | **3.56** | **302** | Pg | Pg | 10 07 27.0 | -1.6 |
| ARA0 | | | | Sn | Sn | 10 08 00.3 | +0.7 |
| | SNR=50 | | | | | | |
| ARA0 | | | | Lg | Lg | 10 08 11.8 | |
| | SNR=4.2 | | | | | | |
| **HEF** | **Hetta** | **3.95** | **283** | PG | Pb | 10 07 32.1 | +1.3 |
| HEF | | | | SN | Sn | 10 08 09.2 | 0.0 |
| **HEF** | **Hetta** | **3.95** | **283** | Pg | Pb | 10 07 32.1 | +1.3 |
| HEF | | | | Sn | Sn | 10 08 09.1 | -0.1 |
| **OUL** | **Oulu** | **4.32** | **234** | SG | Sb | 10 08 32.2 | +2.6 |
| **OUL** | **Oulu** | **4.32** | **234** | Sg | Sb | 10 08 32.2 | +2.5 |
| **LANU** | **Lannavaara** | **4.58** | **278** | PN | Pn | 10 07 30.5 | -0.3 |
| **LANU** | **Lannavaara** | **4.58** | **278** | Pn | Pn | 10 07 30.4 | -0.4 |
| **KALU** | **Kalix** | **4.70** | **250** | PG | Pb | 10 07 46.6 | +3.1 |
| **KALU** | **Kalix** | **4.70** | **250** | Pg | Pb | 10 07 46.6 | +3.1 |

*CSEM* ***29*** *10:07:14.5, 60°.45N×27°.24E, h0km, ML1.1, Mining explosion. After HEL*

**HEL 29 10:07:14.5±0.1, 60°.45N×27°.24E, h0km, ML1.1, Explosion, Finland-Karelia border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **VJF** | **Virojoki** baz=238 | **0.18** | **59** | PG | Pg | 10 07 17.9 | -0.1 |
| VJF | | | | SG | Sg | 10 07 20.2 | -0.1 |
| **VJF** | **Virojoki** | **0.18** | **59** | Pg | Pg | 10 07 17.9 | -0.1 |
| VJF | | | | Sg | Sg | 10 07 20.2 | -0.1 |
| **PVF** | **Pernaja** baz=97 | **0.69** | **279** | PB | Pg | 10 07 27.9 | +0.3 |
| **PVF** | **Pernaja** | **0.69** | **279** | Pb | Pg | 10 07 27.9 | +0.2 |
| **FIA0** | **FINESS Array S** baz=163 | **1.15** | **331** | PG | Pg | 10 07 35.0 | -1.6 |
| **FIA0** | **FINESS Array S** | **1.15** | **331** | Pg | Pg | 10 07 35.0 | -1.6 |
| **VSU** | **Vasula** | **2.01** | **188** | PG | Pn | 10 07 50.4 | +0.8 |
| **VSU** | **Vasula** | **2.01** | **188** | Pg | Pn | 10 07 50.3 | +0.7 |
| **SUF** | **Sumiainen** baz=163 | **2.34** | **348** | PN | Pn | 10 07 53.1 | -1.1 |
| SUF | | | | MSG | | 10 08 23.7 | |
| | comp=Z,0.6nm,0.2s | | | | | | |
| **SUF** | **Sumiainen** | **2.34** | **348** | Pn | Pn | 10 07 53.0 | -1.2 |
| **JOF** | **Joensuu** | **3.15** | **36** | SB | Sn | 10 08 46.2 | +2.7 |
| **JOF** | **Joensuu** | **3.15** | **36** | Sb | Sn | 10 08 46.2 | +2.7 |

*GUC* ***29*** *10:30:24.9±0.6, 33°.95S×72°.00W, h28km±9km, ML3.2*

**ISC 29 10:30:24.8±1.6, 33°.96S±0°.05×72°.00W±0°.09, h30km±11km, n22, σ1s 57°/33, 3C-4D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.42** | **180** ⇓ | *i*P | **Pb** | **10 30 33.8** | **-0.3** |
| CHPI | | | | *i* S | **Sb** | **10 30 40.4** | **0.0** |
| **LNV** | **Longovilo** | **0.49** | **89** ⇓ | *i*P | **Pb** | **10 30 35.0** | **-0.1** |
| LNV | | | | *i* S | **Sb** | **10 30 42.3** | **+0.1** |
| **TACH** | **Talagante** | **0.94** | **71** ⇑ | *i*P | **Pn** | **10 30 41.2** | **-0.8** |
| **RCDM** | **Rinconada Maip** | **1.10** | **65** | *e*P | **Pn** | **10 30 43.9** | **-0.3** |
| RCDM | | | | *e*S | **Sn** | **10 30 57.9** | **-0.6** |
| **CHCH** | **Chadas Angostu** | **1.12** | **89** ⇑ | *i*P | **Pn** | **10 30 44.7** | **+0.2** |
| CHCH | | | | *e*S | **Sn** | **10 30 59.3** | **+0.3** |
| **ANTU** | **Antumapu** | **1.21** | **71** | *e*P | **Pn** | **10 30 45.6** | **-0.1** |
| ANTU | | | | AML | AML | 10 31 04.1 | |
| | comp=N,840nm,0.2s | | | | | | |
| **NICH** | **Los Niches** | **1.22** | **149** | *e*P | **Pb** | **10 30 47.5** | **+0.2** |
| NICH | | | | *i* S | **Sb** | **10 31 03.6** | **+1.0** |
| **SAN** | **Santiago** | **1.23** | **66** | *e*P | **Pn** | **10 30 46.4** | **+0.4** |
| SAN | | | | *i* S | **Sb** | **10 31 02.7** | **-0.3** |
| **ROC1** | **El Roble** | **1.29** | **40** | *e*P | **Pn** | **10 30 47.3** | **+0.3** |
| ROC1 | | | | *e*S | **Sb** | **10 31 07.4** | **+2.5** |
| **PCH** | **Pirque** | **1.29** | **75** | *e*P | **Pn** | **10 30 46.8** | **0.0** |
| PCH | | | | *i* S | **Sb** | **10 31 05.3** | **+0.6** |
| **CLCH** | **Cerro Calan** | **1.35** | **66** ⇓ | *i*P | **Pn** | **10 30 48.1** | **+0.5** |
| CLCH | | | | *i* S | **Sb** | **10 31 06.0** | **-0.4** |
| CLCH | | | | AML | AML | 10 31 09.9 | |
| | comp=N,470nm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **1.37** | **54** ⇑ | *i*P | **Pn** | **10 30 48.8** | **+0.9** |
| PEL | | | | *i* S | **Sb** | **10 31 07.2** | **+0.1** |
| PEL | | | | AML | AML | 10 31 13.2 | |
| | comp=E,1μm,0.6s | | | | | | |
| **TALC** | **Talca** | **1.46** | **168** | *i* S | **Sb** | **10 31 09.6** | **0.0** |
| **AAGR** | **Agrelo** | **2.79** | **73** | *e*P | **Pb** | **10 31 13.0** | **-1.1** |
| AAGR | | | | *e*S | Sb | 10 31 55.4 | +7.4 |
| **AUSP** | **Uspallata** | **2.80** | **52** | *e*P | **Pb** | **10 31 12.7** | **-1.6** |
| AUSP | | | | *e*S | **Sb** | **10 31 50.5** | **+2.2** |
| **ARCO** | **CERRO ARCO** | **2.80** | **67** | *e*P | **Pb** | **10 31 12.7** | **-1.6** |
| ARCO | | | | IAML | | 10 31 19.2 | |
| | comp=Z,102nm,0.9s | | | | | | |
| ARCO | | | | *i* S | Sb | 10 31 54.4 | +6.1 |
| **ASAL** | **Salagasta** | **2.99** | **64** | *e*P | **Pb** | **10 31 16.2** | **-1.2** |
| ASAL | | | | *e*S | **Sb** | **10 31 57.9** | **+4.4** |
| **RTLS** | **Leoncito** | **3.14** | **47** | *e*P | Pn | 10 31 16.4 | +3.9 |
| RTLS | | | | *e*S | **Sb** | **10 32 02.5** | **+4.6** |
| **RTCV** | **Cerro Valdivia** | **3.59** | **55** | *e*P | **Pb** | **10 31 25.0** | **-2.6** |
| RTCV | | | | *e*S | Sb | 10 32 16.7 | +5.9 |
| **CFAA** | **Coronel Fontan** | **3.95** | **54** | *e*P | Pn | 10 31 28.0 | +4.6 |
| CFAA | | | | ⇓*e*S | **Sb** | **10 32 20.1** | **-1.0** |
| **RTLL** | **Cerro Villicun** | **3.97** | **50** | *e*P | Pb | 10 31 30.5 | -3.6 |
| RTLL | | | | *e*S | **Sb** | **10 32 21.6** | **-0.1** |
| **AVFE** | **Valle Fertil** | **5.07** | **51** | *e*P | Pn | 10 31 44.0 | +5.1 |
| AVFE | | | | *i* S | Sn | 10 32 44.1 | +7.8 |
| AVFE | | | | IAML | | 10 32 54.4 | |
| | comp=Z,12nm,0.7s | | | | | | |

*CSEM* ***29*** *10:30:48.6, 65°.15N×19°.62W, h3km, ML2.9, After REY*

**REY 29 10:30:48.6, 65°.15N×19°.62W, h3km, Iceland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IHVE** | **Hveravellir** baz=176 | **0.28** | **176** | P | Pg | 10 30 54.1 | +0.1 |
| IHVE | | | | S | Sg | 10 30 58.1 | +0.4 |
| | baz=176 | | | | | | |
| **IHVE** | **Hveravellir** | **0.28** | **176** | P | Pg | 10 30 54.1 | +0.1 |
| IHVE | | | | S | Sg | 10 30 58.1 | +0.4 |
| **ISKR** | **Skrokkalda** baz=138 | **0.79** | **138** | P | Pg | 10 31 02.9 | -0.9 |
| ISKR | | | | S | Sg | 10 31 13.7 | -0.4 |
| | baz=138 | | | | | | |
| **ISKR** | **Skrokkalda** | **0.79** | **138** | P | Pg | 10 31 02.9 | -0.9 |
| ISKR | | | | S | Sg | 10 31 13.7 | -0.4 |
| **IASB** | **`sbjarnarst** baz=242 | **0.83** | **242** | S | Sg | 10 31 14.8 | -0.5 |
| IASB | | | | P | Pg | 10 31 03.2 | -1.3 |
| | baz=242 | | | | | | |
| **IASB** | **`sbjarnarst** | **0.83** | **242** | P | Pg | 10 31 03.2 | -1.3 |
| IASB | | | | S | Sg | 10 31 14.8 | -0.4 |
| **IGYG** | **Gygjarholskot** baz=197 | **0.91** | **197** | S | Sg | 10 31 17.0 | -0.7 |
| IGYG | | | | P | Pg | 10 31 04.5 | -1.4 |
| | baz=197 | | | | | | |
| **IGYG** | **Gygjarholskot** | **0.91** | **197** | P | Pg | 10 31 04.5 | -1.4 |
| IGYG | | | | S | Sg | 10 31 17.0 | -0.7 |
| **IHLA** | **Hella** baz=32 | **0.95** | **32** | P | Pg | 10 31 05.4 | -1.4 |
| IHLA | | | | S | Sg | 10 31 18.4 | -0.8 |
| | baz=32 | | | | | | |
| **IHLA** | **Hella** | **0.95** | **32** | P | Pg | 10 31 05.4 | -1.5 |
| IHLA | | | | S | Sg | 10 31 18.4 | -0.8 |
| **IHRN** | **Hraun** baz=348 | **0.99** | **348** | P | Pg | 10 31 06.3 | -1.3 |
| IHRN | | | | S | Sg | 10 31 20.2 | -0.3 |
| | baz=348 | | | | | | |
| **IHRN** | **Hraun** | **0.99** | **348** | P | Pg | 10 31 06.3 | -1.3 |
| IHRN | | | | S | Sg | 10 31 20.2 | -0.3 |
| **IVAT** | **Vatnsfell** baz=162 | **1.01** | **162** | P | Pg | 10 31 05.9 | -2.1 |
| IVAT | | | | S | Sg | 10 31 19.7 | -1.4 |
| | baz=162 | | | | | | |
| **IVAT** | **Vatnsfell** | **1.01** | **162** | P | Pg | 10 31 05.9 | -2.1 |
| IVAT | | | | S | Sg | 10 31 19.7 | -1.4 |
| **IGRA** | **Granastaoir** baz=47 | **1.15** | **47** | P | Pg | 10 31 07.9 | -2.7 |
| IGRA | | | | S | Sg | 10 31 23.7 | -1.8 |
| | baz=47 | | | | | | |
| **IGRA** | **Granastaoir** | **1.15** | **47** | P | Pg | 10 31 07.9 | -2.7 |
| IGRA | | | | S | Sg | 10 31 23.7 | -1.8 |
| **IHEI** | **Heioarbar** baz=217 | **1.18** | **217** | P | Pg | 10 31 08.5 | -2.7 |
| IHEI | | | | S | Sg | 10 31 24.9 | -1.5 |
| | baz=217 | | | | | | |
| **IHEI** | **Heioarbar** | **1.18** | **217** | P | Pg | 10 31 08.5 | -2.7 |
| IHEI | | | | S | Sg | 10 31 24.9 | -1.5 |
| **IHAU** | **Haukadalur** baz=187 | **1.19** | **187** | P | Pg | 10 31 08.7 | -2.7 |
| IHAU | | | | S | Sg | 10 31 25.9 | -0.9 |
| | baz=187 | | | | | | |
| **IHAU** | **Haukadalur** | **1.19** | **187** | P | Pg | 10 31 08.7 | -2.7 |
| IHAU | | | | S | Sg | 10 31 25.9 | -0.9 |
| **IBRE** | **Brettingsstaoi** baz=35 | **1.21** | **35** | P | Pg | 10 31 09.5 | -2.3 |
| IBRE | | | | S | Sg | 10 31 25.6 | -1.9 |
| | baz=35 | | | | | | |
| **IBRE** | **Brettingsstaoi** | **1.21** | **35** | P | Pg | 10 31 09.5 | -2.3 |
| IBRE | | | | S | Sg | 10 31 25.6 | -1.9 |
| **IKRO** | **Krokur** baz=212 | **1.23** | **212** | P | Pg | 10 31 09.6 | -2.7 |
| IKRO | | | | S | Sg | 10 31 26.7 | -1.6 |
| | baz=212 | | | | | | |
| **IKRO** | **Krokur** | **1.23** | **212** | P | Pg | 10 31 09.6 | -2.7 |
| IKRO | | | | S | Sg | 10 31 26.7 | -1.6 |
| **IREN** | **Reynihlio** baz=65 | **1.24** | **65** | P | Pg | 10 31 09.4 | -3.0 |
| IREN | | | | S | Sg | 10 31 26.2 | -2.3 |
| | baz=65 | | | | | | |
| **IREN** | **Reynihlio** | **1.24** | **65** | P | Pg | 10 31 09.4 | -3.0 |
| IREN | | | | S | Sg | 10 31 26.2 | -2.3 |
| **IGRF** | **Grimsfjall** baz=125 | **1.25** | **125** | P | Pg | 10 31 10.2 | -2.6 |
| **IGRF** | **Grimsfjall** | **1.25** | **125** | P | Pg | 10 31 10.2 | -2.6 |
| **IFLA** | **Flatey** baz=35 | **1.26** | **35** | S | Sg | 10 31 27.1 | -1.9 |
| **IFLA** | **Flatey** | **1.26** | **35** | S | Sg | 10 31 27.1 | -1.8 |
| **IASK** | **Askja** baz=93 | **1.26** | **93** | P | Pg | 10 31 10.1 | -2.8 |
| IASK | | | | S | Sg | 10 31 27.3 | -2.0 |
| | baz=93 | | | | | | |
| **IASK** | **Askja** | **1.26** | **93** | P | Pg | 10 31 10.1 | -2.8 |
| IASK | | | | S | Sg | 10 31 27.3 | -2.0 |
| **IKUD** | **Kuludalsa** baz=230 | **1.27** | **231** | S | Sg | 10 31 28.1 | -1.4 |
| **IKUD** | **Kuludalsa** | **1.27** | **231** | S | Sg | 10 31 28.1 | -1.4 |
| **IKVO** | **Krokottuvotn** baz=62 | **1.28** | **62** | P | Pg | 10 31 10.0 | -3.2 |
| IKVO | | | | S | Sg | 10 31 27.3 | -2.5 |
| | baz=62 | | | | | | |
| **IKVO** | **Krokottuvotn** | **1.28** | **62** | P | Pg | 10 31 10.0 | -3.2 |
| IKVO | | | | S | Sg | 10 31 27.3 | -2.5 |
| **ISKI** | **Skildingah˜‡ls** baz=55 | **1.30** | **55** | P | Pg | 10 31 11.0 | -2.6 |
| ISKI | | | | S | Sg | 10 31 28.1 | -2.3 |
| | baz=55 | | | | | | |
| **ISKI** | **Skildingah˜‡ls** | **1.30** | **55** | P | Pg | 10 31 11.0 | -2.6 |
| ISKI | | | | S | Sg | 10 31 28.1 | -2.4 |
| **IMEL** | **Melhnausar** baz=70 | **1.31** | **70** | P | Pg | 10 31 11.1 | -2.7 |
| IMEL | | | | S | Sg | 10 31 28.6 | -2.2 |
| | baz=70 | | | | | | |
| **IMEL** | **Melhnausar** | **1.31** | **70** | P | Pg | 10 31 11.1 | -2.7 |
| IMEL | | | | S | Sg | 10 31 28.6 | -2.2 |
| **IHED** | **Heoinshofoi** baz=44 | **1.34** | **44** | P | Pn | 10 31 11.6 | -2.6 |
| IHED | | | | S | Sg | 10 31 29.4 | -2.3 |
| **IHED** | **Heoinshofoi** baz=44 | **1.34** | **44** | P | Pn | 10 31 11.6 | -2.7 |
| IHED | | | | S | Sg | 10 31 29.4 | -2.3 |
| **ISOL** | **Solvholt** baz=206 | **1.35** | **206** | S | Sg | 10 31 30.2 | -1.7 |
| ISOL | | | | P | Pn | 10 31 11.4 | -3.0 |
| | baz=206 | | | | | | |
| **ISOL** | **Solvholt** | **1.35** | **206** | P | Pn | 10 31 11.4 | -2.9 |
| ISOL | | | | S | Sg | 10 31 30.2 | -1.7 |
| **ISAN** | **Sandskeio** baz=218 | **1.38** | **219** | S | Sg | 10 31 31.1 | -1.8 |
| **ISAN** | **Sandskeio** | **1.38** | **219** | S | Sg | 10 31 31.1 | -1.8 |
| **IASM** | **Asmuli** baz=199 | **1.39** | **199** | P | Pn | 10 31 11.9 | -2.9 |
| IASM | | | | S | Sg | 10 31 30.9 | -2.1 |
| | baz=199 | | | | | | |
| **IASM** | **Asmuli** | **1.39** | **199** | P | Pn | 10 31 11.9 | -2.9 |
| IASM | | | | S | Sg | 10 31 30.9 | -2.2 |
| **IDIM** | **Dimmadals˜¡s** baz=52 | **1.39** | **52** | P | Pn | 10 31 11.9 | -2.9 |
| IDIM | | | | S | Sg | 10 31 30.9 | -2.3 |
| | baz=52 | | | | | | |
| **IDIM** | **Dimmadals˜¡s** | **1.39** | **52** | P | Pn | 10 31 11.9 | -3.0 |
| IDIM | | | | S | Sg | 10 31 30.9 | -2.3 |
| **IMKO** | **Mokollar** baz=95 | **1.40** | **95** | P | Pn | 10 31 12.2 | -2.9 |
| IMKO | | | | S | Sg | 10 31 31.0 | -2.7 |
| | baz=95 | | | | | | |
| **IMKO** | **Mokollar** | **1.40** | **95** | P | Pn | 10 31 12.2 | -2.9 |
| IMKO | | | | S | Sg | 10 31 31.0 | -2.7 |
| **IBJA** | **Bjarnastaoir** baz=212 | **1.41** | **212** | P | Pn | 10 31 12.7 | -2.5 |
| IBJA | | | | S | Sg | 10 31 31.1 | -2.7 |
| | baz=212 | | | | | | |
| **IBJA** | **Bjarnastaoir** | **1.41** | **212** | P | Pn | 10 31 12.7 | -2.4 |
| IBJA | | | | S | Sg | 10 31 31.1 | -2.7 |
| **IGHA** | **Grjothals** baz=59 | **1.42** | **59** | P | Pn | 10 31 12.0 | -3.3 |
| IGHA | | | | S | Sg | 10 31 31.3 | -2.9 |
| | baz=59 | | | | | | |
| **IGHA** | **Grjothals** | **1.42** | **59** | P | Pn | 10 31 12.0 | -3.3 |
| IGHA | | | | S | Sg | 10 31 31.3 | -2.9 |
| **IKAL** | **Kalfafell** baz=144 | **1.46** | **144** | P | Pn | 10 31 13.8 | -2.1 |
| IKAL | | | | S | Sb | 10 31 33.0 | -2.5 |
| | baz=144 | | | | | | |
| **IKAL** | **Kalfafell** | **1.46** | **144** | P | Pn | 10 31 13.8 | -2.1 |
| IKAL | | | | S | Sb | 10 31 33.0 | -2.4 |
| **ISNB** | **Snabyli** baz=163 | **1.48** | **163** | P | Pn | 10 31 14.5 | -1.6 |
| ISNB | | | | S | Sb | 10 31 33.7 | -2.2 |
| | baz=163 | | | | | | |
| **ISNB** | **Snabyli** | **1.48** | **163** | P | Pn | 10 31 14.5 | -1.6 |
| ISNB | | | | S | Sb | 10 31 33.7 | -2.2 |
| **IKAS** | **Kald??rsel** baz=222 | **1.48** | **222** | P | Pn | 10 31 13.6 | -2.6 |
| IKAS | | | | S | Sb | 10 31 34.1 | -1.9 |
| | baz=222 | | | | | | |
| **IKAS** | **Kald??rsel** | **1.48** | **222** | P | Pn | 10 31 13.6 | -2.6 |
| IKAS | | | | S | Sb | 10 31 34.1 | -1.9 |
| **IGOD** | **Go??abunga** baz=175 | **1.50** | **175** | P | Pn | 10 31 14.3 | -2.3 |
| **IGOD** | **Go??abunga** | **1.50** | **175** | P | Pn | 10 31 14.3 | -2.3 |
| **IMID** | **Miomork** baz=185 | **1.50** | **185** | P | Pn | 10 31 14.2 | -2.1 |
| IMID | | | | S | Sn | 10 31 34.1 | -2.3 |
| | baz=185 | | | | | | |
| **IMID** | **Miomork** | **1.50** | **185** | P | Pn | 10 31 14.2 | -2.2 |
| IMID | | | | S | Sn | 10 31 34.1 | -2.3 |
| **IBRU** | **Bruarjokull** baz=100 | **1.53** | **100** | P | Pn | 10 31 14.2 | -2.8 |
| IBRU | | | | S | Sn | 10 31 34.6 | -2.9 |
| | baz=100 | | | | | | |
| **IBRU** | **Bruarjokull** | **1.53** | **100** | P | Pn | 10 31 14.2 | -2.8 |
| IBRU | | | | S | Sn | 10 31 34.6 | -2.9 |
| **IGRS** | **Grimsstaoir** baz=70 | **1.54** | **70** | P | Pn | 10 31 14.2 | -2.9 |
| IGRS | | | | S | Sn | 10 31 35.0 | -2.6 |
| | baz=70 | | | | | | |
| **IGRS** | **Grimsstaoir** | **1.54** | **70** | P | Pn | 10 31 14.2 | -2.9 |
| IGRS | | | | S | Sn | 10 31 35.0 | -2.6 |
| **IGRI** | **Grimsey** baz=24 | **1.55** | **24** | P | Pn | 10 31 15.2 | -1.9 |
| IGRI | | | | S | Sn | 10 31 34.5 | -3.2 |
| | baz=24 | | | | | | |
| **IGRI** | **Grimsey** | **1.55** | **24** | P | Pn | 10 31 15.2 | -1.9 |
| IGRI | | | | S | Sn | 10 31 34.5 | -3.2 |
| **IVOS** | **Vogsosar** baz=216 | **1.58** | **216** | P | Pn | 10 31 15.7 | -1.8 |
| IVOS | | | | S | Sn | 10 31 36.8 | -1.6 |
| | baz=216 | | | | | | |
| **IVOS** | **Vogsosar** | **1.58** | **216** | P | Pn | 10 31 15.7 | -1.8 |
| IVOS | | | | S | Sn | 10 31 36.8 | -1.6 |
| **IHVA** | **Hvannstoosfjol** baz=95 | **1.60** | **95** | P | Pn | 10 31 14.9 | -3.0 |
| IHVA | | | | S | Sn | 10 31 36.4 | -2.7 |
| | baz=95 | | | | | | |
| **IHVA** | **Hvannstoosfjol** | **1.60** | **95** | P | Pn | 10 31 14.9 | -3.0 |
| IHVA | | | | S | Sn | 10 31 36.4 | -2.7 |
| **IESK** | **Eystri-Skogar** baz=177 | **1.63** | **177** | P | Pn | 10 31 16.2 | -1.9 |
| IESK | | | | S | Sn | 10 31 37.3 | -2.3 |
| | baz=177 | | | | | | |
| **IESK** | **Eystri-Skogar** | **1.63** | **177** | P | Pn | 10 31 16.2 | -2.0 |
| IESK | | | | S | Sn | 10 31 37.3 | -2.3 |
| **IGIL** | **Gilhagi** baz=54 | **1.65** | **54** | P | Pn | 10 31 16.2 | -2.3 |
| IGIL | | | | S | Sn | 10 31 37.5 | -2.7 |
| | baz=54 | | | | | | |
| **IGIL** | **Gilhagi** | **1.65** | **54** | P | Pn | 10 31 16.2 | -2.3 |
| IGIL | | | | S | Sn | 10 31 37.5 | -2.6 |
| **IVSH** | **V-Sauoahnukur** baz=100 | **1.69** | **100** | P | Pn | 10 31 16.8 | -2.3 |
| IVSH | | | | S | Sn | 10 31 38.7 | -2.6 |
| | baz=100 | | | | | | |
| **IVSH** | **V-Sauoahnukur** | **1.69** | **100** | P | Pn | 10 31 16.8 | -2.3 |
| IVSH | | | | S | Sn | 10 31 38.7 | -2.6 |

**IDC 29 11:37:55.4±0.9, 74°.94N×132°.91E, h0km, mb3.8/7, mb1 4.1/7, mb1mx3.7/36, mbtmpg3.8/7, MS3.1/6, Ms1 3.1/6, ms1mx2.6/60, Error ellipse: s-maj=49.9km s-min=19.5km az=147.0, Laptev Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** 1.0nm,0.9s,baz=322,slow=9.9,SNR=10.0 | **26.98** | **69** | P | P | 11 43 38.8 | +0.5 |
| ILAR | | | | LR | LR | 11 57 46.2 | |
| | comp=Z,28nm,19.3s,baz=336,slow=44 | | | | | | |
| **INK** | **Inuvik** comp=Z,20nm,19.1s,baz=298,slow=39 | **27.13** | **54** | LR | LR | 11 55 36.8 | |
| **ZALV** | **Zalesovo Beam** comp=Z,24nm,18.8s,baz=70,slow=39 | **28.14** | **249** | LR | LR | 11 56 20.2 | |
| **SONM** | **Songino Array** 1.1nm,0.8s,baz=7.8,slow=10.0,SNR=9.3 | **29.43** | **218** | P | P | 11 44 01.2 | +0.7 |
| **MKAR** | **Makanchi Array** 0.6nm,0.7s,baz=34,slow=5.7,SNR=2.2 | **35.38** | **247** | P | P | 11 44 51.5 | -0.9 |
| **FINES** | **FINESS Array B** comp=Z,27nm,19.8s,baz=323,slow=41 | **35.90** | **308** | LR | LR | 12 02 11.4 | |
| **GERES** | **GERESS Array B** comp=Z,27nm,18.9s,baz=317,slow=42 | **50.19** | **311** | LR | LR | 12 12 56.4 | |
| **NVAR** | **Mina Array Bea** 1.2nm,0.8s,baz=319,slow=4.3,SNR=5.1 | **57.91** | **61** | P | P | 11 47 48.5 | -0.5 |
| **MMAI** | **Mount Meron Ar** comp=Z,20nm,18.1s,baz=150,slow=40 | **60.35** | **287** | LR | LR | 12 17 53.5 | |
| **TXAR** | **Lajitas Array** 0.7nm,0.9s,baz=1.9,slow=3.8,SNR=5.1 | **69.84** | **51** | P | P | 11 49 07.2 | -0.3 |
| **TORD** | **Torodi Ar. Bea** 0.8nm,0.8s,baz=24,slow=5.3,SNR=5.2 | **87.12** | **313** | P | P | 11 50 43.5 | +0.7 |
| **WRA** | **Warramunga Arr** 0.7nm,0.8s,baz=357,slow=5.2,SNR=5.9 | **94

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ECBX** | **El Chinero** | **0.29** | **189**⇓ | *eP* | **Pg** | **11 39 25.2** | **0.0** |
| ECBX | | | | *eS* | **Sg** | **11 39 29.6** | **+0.2** |
| **MBIG** | **Mexicali** | **0.67** | **345** | *eP* | **Pb** | **11 39 32.1** | **+0.1** |
| MBIG | | | | *i* S | **Sb** | **11 39 41.0** | **+0.1** |
| **MBIG** | **Mexicali** | **0.67** | **345**⇑ | *eP* | **Pb** | **11 39 32.3** | **+0.3** |
| **CPBX** | **Cerro Prieto** | **0.70** | **338**⇓ | *eP* | **Pb** | **11 39 32.6** | **+0.1** |
| CPBX | | | | ⇓*eP* | **Pb** | **11 39 32.7** | **+0.1** |
| CPBX | | | | *eS* | **Sg** | **11 39 41.9** | **-0.1** |
| CPBX | | | | ⇑*e* | | 11 39 44.1 | |
| CPBX | | | | IAML | | 11 39 44.1 | |
| | comp=E,11μm,0.2s | | | | | | |
| **CPBX** | **Cerro Prieto** | **0.70** | **338** | *eP* | **Pg** | **11 39 32.3** | **-0.3** |
| CPBX | | | | *i* S | **Sg** | **11 39 40.7** | **-1.3** |
| **SPIG** | **San Pedro Mart** | **0.82** | **209** | *eP* | **Pg** | **11 39 35.1** | **+0.3** |
| SPIG | | | | *eS* | **Sb** | **11 39 45.6** | **0.0** |
| **SPIG** | **San Pedro Mart** | **0.82** | **209**⇓ | *eP* | **Pg** | **11 39 35.1** | **+0.3** |
| SPIG | | | | *eS* | **Sg** | **11 39 46.1** | **+0.4** |
| **SPIG** | **San Pedro Mart** | **0.82** | **209** | *eP* | **Pg** | **11 39 35.1** | **+0.3** |
| SPIG | | | | *eS* | **Sb** | **11 39 45.6** | **0.0** |
| **SPX** | **San Pedro Mart** | **0.82** | **209**⇓ | *eP* | **Pg** | **11 39 35.2** | **+0.3** |
| SPX | | | | *eS* | **Sg** | **11 39 46.5** | **+0.8** |
| SPX | | | | IAML | | 11 39 48.7 | |
| | comp=N,2μm,0.1s | | | | | | |
| SPX | | | | ⇓*e* | | 11 39 48.7 | |
| **SPX** | **San Pedro Mart** | **0.82** | **209** | *eP* | **Pb** | **11 39 35.0** | **+0.3** |
| SPX | | | | *eS* | **Sb** | **11 39 45.1** | **-0.5** |
| **RDX** | **Rancho Dawling** | **0.82** | **282**⇑ | *eP* | **Pb** | **11 39 33.9** | **-0.8** |
| RDX | | | | *eS* | **Sb** | **11 39 44.6** | **-1.0** |
| **SGL** | **Mount Signal** | **1.08** | **325**⇓ | *iP* | **Pb** | **11 39 39.0** | **0.0** |
| **DREC** | **Desert Rsrch C** | **1.11** | **340**⇑ | *eP* | **Pn** | **11 39 39.7** | **+0.2** |
| **ZAX** | **El Zacaton** | **1.11** | **258** | *eP* | **Pb** | **11 39 39.4** | **-0.3** |
| **WESC** | **Westside Schoo** | **1.17** | **328** | *eP* | **Pb** | **11 39 40.8** | **+0.2** |
| **YUH** | **Yuha Desert** | **1.18** | **319**⇑ | *iP* | **Pn** | **11 39 40.7** | **+0.1** |
| **RMX** | **La Rumorosa** | **1.24** | **313** | *eP* | **Pn** | **11 39 41.4** | **-0.1** |
| RMX | | | | *eS* | **Sb** | **11 39 56.7** | **-0.9** |
| RMX | | | | ⇑*e* | | 11 39 58.7 | |
| RMX | | | | IAML | | 11 39 58.7 | |
| | comp=N,1μm,0.1s | | | | | | |
| **COK** | **Cook Ranch** | **1.25** | **331**⇑ | *iP* | **Pb** | **11 39 41.9** | **0.0** |
| **IBP** | **Imperial Bould** | **1.29** | **314** | *eP* | **Pb** | **11 39 42.8** | **+0.2** |
| **IBP** | **Imperial Bould** baz=1.4,SNR=13 | **1.29** | **314** | Pb | **Pn** | **11 39 42.6** | **+0.5** |
| IBP | | | | S | **Sn** | **11 39 59.5** | **+0.5** |
| | baz=1.4 | | | | | | |
| **GLA** | **Glamis** baz=1.3,SNR=137 | **1.29** | **6** | P | **Pn** | **11 39 40.2** | **-1.9** |
| **GLA** | **Glamis** | **1.29** | **6** | *e*Pn | **Pn** | **11 39 40.4** | **-1.8** |
| GLA | | | | *e*Sn | **Sb** | **11 39 59.0** | **-0.1** |
| **SWSC** | **Sam W. Stewart** baz=1.4,SNR=24 | **1.36** | **330** | Pb | **Pn** | **11 39 43.4** | **+0.5** |
| SWSC | | | | S | **Sb** | **11 40 01.8** | **+1.0** |
| | baz=1.4 | | | | | | |
| **ECNX** | **Esteban Cantu** | **1.37** | **266** | *eP* | **Pn** | **11 39 43.4** | **+0.2** |
| **CBX** | **Cerro Bola** | **1.52** | **292** | *eP* | **Pn** | **11 39 44.8** | **-0.5** |
| CBX | | | | *eS* | **Sn** | **11 40 02.6** | **-2.1** |
| **CBX** | **Cerro Bola** | **1.52** | **292** | *eP* | **Pn** | **11 39 45.8** | **+0.5** |
| CBX | | | | ⇓*e* | | 11 40 09.2 | |
| CBX | | | | IAML | | 11 40 09.2 | |
| | comp=N,963nm,0.3s | | | | | | |
| **CBX** | **Cerro Bola** | **1.52** | **292** | *eP* | **Pn** | **11 39 44.8** | **-0.5** |
| CBX | | | | *eS* | **Sn** | **11 40 02.6** | **-2.1** |
| **MONP** | **Monument Peak** baz=1.8 | **1.65** | **313** | P | **Pn** | **11 39 45.9** | **-1.3** |
| MONP | | | | S | **Sb** | **11 40 09.9** | **+0.5** |
| | baz=1.8 | | | | | | |
| **BAR** | **Barrett** | **1.69** | **303** | *e*Pn | **Pn** | **11 39 46.7** | **-0.9** |
| BAR | | | | *e*Sn | **Sb** | **11 40 10.9** | **+0.5** |
| **214A** | **Organ Pipe Nat** baz=1.7,SNR=34 | **1.87** | **83** | P | **Pn** | **11 39 48.2** | **-1.8** |
| 214A | | | | S | **Sn** | **11 40 11.8** | **-1.5** |
| | baz=1.7 | | | | | | |
| **214A** | **Organ Pipe Nat** | **1.87** | **83** | *e*Pn | **Pn** | **11 39 48.5** | **-1.6** |
| 214A | | | | *e*Sn | **Sn** | **11 40 10.8** | **-2.5** |
| **BC3** | **Big Chuckawall** baz=2.0,SNR=14 | **1.93** | **349** | P | **Pn** | **11 39 49.9** | **-1.0** |
| **109C** | **Camp Elliot, M** baz=2.2 | **2.11** | **303** | P | **Pn** | **11 39 53.0** | **-0.3** |
| **PFO** | **Pinyon Flat Ob** baz=2.3 | **2.21** | **327** | Sb | **Sb** | **11 40 27.9** | **+2.3** |
| **PFO** | **Pinyon Flat Ob** | **2.21** | **327** | *e*Pn | **Pn** | **11 39 53.6** | **-1.3** |
| PFO | | | | *e*Sn | **Sn** | **11 40 20.7** | **-1.2** |
| **MURC** | **Murrieta** baz=2.7 | **2.61** | **315** | Sb | **Sb** | **11 40 39.3** | **+2.4** |
| **PDMCI** | **Parker Dam,Lak** baz=2.6 | **2.63** | **16** | Sb | **Sb** | **11 40 38.6** | **+1.0** |
| **CIS** | **Catalina Islan** baz=3.4 | **3.31** | **301** | P | **Pn** | **11 40 09.0** | **-0.9** |
| CIS | | | | Sb | **Sb** | **11 41 01.1** | **+4.0** |
| | baz=3.4 | | | | | | |
| **LDFC** | **Landfair** | **3.31** | **358** | *e*Pn | **Pn** | **11 40 12.0** | **+2.1** |
| LDFC | | | | *e*Pg | **Pg** | **11 40 22.9** | **+0.7** |
| LDFC | | | | Sn | **Sn** | **11 40 48.8** | **-0.1** |
| **BFSC** | **Mount Baldy Ra** baz=3.4 | **3.33** | **319** | Sb | **Sb** | **11 41 00.9** | **+3.1** |
| **MWC** | **Mount Wilson** | **3.56** | **314** | Pn | **Pn** | **11 40 14.3** | **+0.9** |
| **TUC** | **Tucson** | **3.62** | **80** | *e*Pn | **Pn** | **11 40 14.2** | **0.0** |
| TUC | | | | *e*Sn | **Sn** | **11 40 53.4** | **-3.1** |
| TUC | | | | *e*Sg | **Sb** | **11 41 10.1** | **+4.0** |
| **SHPR** | **Sheep Range** | **4.73** | **358** | *e*Pn | **Pn** | **11 40 30.8** | **+1.3** |
| SHPR | | | | *e*Sn | **Sn** | **11 41 25.4** | **+1.3** |
| **WUAZ** | **Wupatki** | **4.81** | **38** | *e*Pn | **Pn** | **11 40 30.8** | **+0.2** |
| WUAZ | | | | *e*Sn | **Sn** | **11 41 28.3** | **+2.3** |
| WUAZ | | | | *e*Sg | **Sg** | **11 41 49.7** | **-3.6** |
| **ISA** | **Isabella** | **4.85** | **324** | *e*Pn | **Pn** | **11 40 31.6** | **+0.5** |
| ISA | | | | *e*Pg | **Pg** | **11 40 50.0** | **-1.7** |
| **121A** | **Cookes Peak, D** comp=N,3.0nm,0.5s | **6.17** | **81** | *e*Pn | **Pn** | **11 40 47.3** | **-1.9** |
| 121A | | | | *e*Sn | **Sn** | **11 42 04.0** | **+4.6** |

*ISCJB **29** 11:39:31.5±1.1,29.°60S±0.°04×71.°4W±0.°1, h50km, Error ellipse: s-maj=13.0km s-min=5.0km az=5.2*
*GUC **29** 11:39:32.2±0.3,29.°63S×71.°15W, h42km±3km, ML3.7*
**ISC 29 11:39:31.2±1.9,29.°59S±0.°04×71.°5W±0.°1, h50km, n19, σ1§48/24, 2D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LSCH** | **La Serena** | **0.38** | **147** | *i* P | **Pn** | **11 39 40.5** | **-0.6** |
| LSCH | | | | *i* S | **Sn** | **11 39 46.9** | **-1.4** |
| **TLL** | **Tololo Astrono** | **0.83** | **134** | *i* P | **Pn** | **11 39 45.4** | **-1.5** |
| TLL | | | | *i* S | **Sn** | **11 39 55.3** | **-3.0** |
| TLL | | | | AML | AML | 11 39 56.1 | |
| | comp=E,7μm,0.3s | | | | | | |
| **LCO** | **Las Campanas** | **0.89** | **50** | *i* P | **Pn** | **11 39 47.1** | **-0.7** |
| LCO | | | | *i* S | **Sn** | **11 39 58.2** | **-1.7** |
| **LCO** | **Las Campanas** | **0.89** | **50** | *eP* | **Pn** | **11 39 47.1** | **-0.7** |
| LCO | | | | *eS* | **Sn** | **11 39 58.2** | **-1.7** |
| **VACH** | **Vallenar** | **1.19** | **32** | *i* P | **Pn** | **11 39 51.9** | **+0.3** |
| VACH | | | | *i* S | **Sn** | **11 40 07.1** | **+0.4** |
| **CPCH** | **Copiapo** | **2.44** | **24** | *eS* | **Sn** | **11 40 37.5** | **+0.4** |
| **AGUA** | **GUANDACOL** | **2.61** | **89**⇓ | *eP* | **Pn** | **11 40 12.7** | **+1.6** |
| **RTLS** | **Leoncito** | **2.90** | **140** | *eP* | **Pn** | **11 40 17.1** | **+1.9** |
| **AMOG** | **MOGNA** | **2.92** | **118** | *eP* | **Pn** | **11 40 17.2** | **+2.0** |
| **VCA** | **Vinchina** | **2.99** | **74** | *i* P | **Pn** | **11 40 18.6** | **+2.2** |
| **RTLL** | **Cerro Villicun** | **3.12** | **124** | *i* P | **Pn** | **11 40 18.9** | **+0.8** |
| **AUSP** | **Uspallata** | **3.19** | **146** | *eP* | **Pn** | **11 40 21.2** | **+2.1** |
| **RTCV** | **Cerro Valdivia** | **3.40** | **133** | *i* P | **Pn** | **11 40 22.2** | **+0.3** |
| **ROC1** | **El Roble** | **3.40** | **173** | *eP* | **Pn** | **11 40 23.0** | **+0.9** |
| **CFAA** | **Coronel Fontan** | **3.45** | **126** | *i* P | **Pn** | **11 40 22.8** | **+0.3** |
| **AVFE** | **Valle Fertil** | **3.65** | **108** | *eP* | **Pn** | **11 40 25.5** | **+0.2** |
| AVFE | | | | *i* S | **Sn** | **11 41 08.2** | **+1.0** |
| AVFE | | | | IAML | | 11 41 16.3 | |
| | comp=Z,80nm,0.6s | | | | | | |
| **ASAL** | **Salagasta** | **3.76** | **143** | *eP* | **Pn** | **11 40 28.3** | **+1.6** |
| **AAGR** | **Agrelo** | **4.16** | **148** | *eS* | Px | 11 40 54.5 | |
| **CYA** | **Choya** | **5.11** | **78**⇓ | *eP* | **Pn** | **11 40 45.1** | **-0.1** |

*ISCJB **29** 11:44:08.6±1.0, 10.°73N±0.°05×60.°95W±0.°06, h73km±8km, Error ellipse: s-maj=10.9km s-min=6.2km az=37.2*
*FUNV **29** 11:44:09.8, 10.°67N×60.°97W, h14km, MW2.5*
*TRN **29** 11:44:12.3, 10.°93N×61.°12W, h18km, MD3.0*
**ISC 29 11:44:10.0±1.6, 10.°73N±0.°06×60.°97W±0.°06, h59km±11km, n12, σ1§25/22, 1D, Trinidad**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TBH** | **Brigand Hill** | **0.26** | **201** | *eP* | **Pn** | **11 44 20.5** | **+0.7** |
| TBH | | | | *eS* | **Sn** | **11 44 29.0** | **+2.1** |
| **TRN** | **Trinidad (W)** | **0.43** | **259**⇓ | *iP* | **Pn** | **11 44 20.5** | **-0.7** |
| TRN | | | | *eS* | **Sn** | **11 44 26.8** | **-2.6** |
| **BOT** | **Bacolet** | **0.50** | **30** | *eP* | **Pn** | **11 44 21.4** | **-0.5** |
| BOT | | | | *eS* | **Sn** | **11 44 29.5** | **-1.0** |
| **TOSP** | **Speyside** | **0.71** | **37** | *eP* | **Pn** | **11 44 24.7** | **+0.5** |
| TOSP | | | | *eS* | **Sn** | **11 44 35.4** | **+0.7** |
| **GUIV** | **Guiria** | **1.23** | **266** | *eP* | **Pn** | **11 44 32.6** | **+1.5** |
| GUIV | | | | *eS* | **Sn** | **11 44 47.8** | **+0.9** |
| **GRW** | **Mount Saint Ca** | **1.57** | **335** | *eP* | **Pn** | **11 44 35.9** | **+0.2** |
| GRW | | | | *eS* | **Sn** | **11 44 54.7** | **-0.5** |
| **GUNV** | **Guanoco** | **2.02** | **254** | *eP* | **Pn** | **11 44 43.5** | **+1.8** |
| GUNV | | | | *eS* | **Sn** | **11 45 07.2** | **+1.2** |
| **CRUV** | **Carupano** | **2.23** | **269** | *eP* | **Pn** | **11 44 44.0** | **-0.5** |
| CRUV | | | | *eS* | **Sn** | **11 45 10.6** | **-0.4** |
| **SVB** | **Belmont** | **2.54** | **354** | *eP* | **Pn** | **11 44 50.0** | **+1.2** |
| SVB | | | | *eS* | **Sn** | **11 45 18.2** | **-0.4** |
| **CUPV** | **Cœpira** | **4.79** | **262** | *eP* | **Pn** | **11 45 20.1** | **+0.4** |
| CUPV | | | | *eS* | **Sn** | **11 46 12.3** | **-1.6** |
| **LUEV** | **Luepa** | **4.88** | **186** | *eP* | **Pn** | **11 45 20.2** | **-0.9** |
| **BAUV** | **El Baul** | **7.19** | **256** | *eP* | **Pn** | **11 45 52.0** | **-0.6** |

*IDC **29** 11:51:08.0±2.3, 67.°71N×34.°29E, h0km, mb1 3.6/5, mb1mx3.2/50, mbtmp3.6/5, ML3.2/5, Error ellipse: s-maj=28.8km s-min=11.0km az=91.0*
*KOLA **29** 11:51:10.0, 67.°65N×33.°88E, h0km*
*NAO **29** 11:51:09.9±1.3, 67.°67N×33.°80E, ML3.0*
*HEL **29** 11:51:09.7±0.3, 67.°63N×33.°88E, h0km, ML2.5, Explosion*
*CSEM **29** 11:51:11.4±0.6, 67.°55N×33.°40E, h1km, ML3.0, Error ellipse: s-maj=11.4km s-min=7.5km az=93.0, Mining explosion.*
**ISC 29 11:51:06.3±1.6, 67.°62N±0.°04×34.°23E±0.°08, h0km, n49, σ1§45/74, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **APA** | **Apatity** | **0.32** | **261** | P | **Pg** | **11 51 13.6** | **+1.1** |
| APA | | | | S | **Sg** | **11 51 16.2** | **-0.4** |
| **APZ9** | **Apatity** | **0.32** | **261** | Pg | **Pg** | **11 51 13.6** | **+1.1** |
| APZ9 | | | | Lg | Lg | 11 51 16.1 | |
| **APZ9** | **Apatity** | **0.32** | **261** | Pg | **Pg** | **11 51 13.6** | **+1.1** |
| APZ9 | | | | Lg | Lg | 11 51 16.1 | |
| **APZ9** | **Apatity** SNR=91 | **0.32** | **261** | Pg | **Pg** | **11 51 13.6** | **+1.1** |
| APZ9 | | | | Lg | Lg | 11 51 16.1 | |
| **APA0** | **Apatity Array** baz=101,slow=18 | **0.47** | **269** | Pg | **Pg** | **11 51 16.1** | **+0.7** |
| APA0 | | | | Lg | Lg | 11 51 20.7 | |
| | baz=82,slow=37 | | | | | | |
| **APA0** | **Apatity Array** baz=101,slow=18 | **0.47** | **269** | Pg | **Pg** | **11 51 16.1** | **+0.7** |
| APA0 | | | | Lg | Lg | 11 51 20.7 | |
| | baz=82,slow=37 | | | | | | |
| **APA0** | **Apatity Array** | **0.47** | **269** | P | **Pg** | **11 51 16.1** | **+0.7** |
| APA0 | | | | S | **Sg** | **11 51 20.6** | **-1.0** |
| **APA0** | **Apatity Array** SNR=90 | **0.47** | **269** | Pg | **Pg** | **11 51 16.1** | **+0.7** |
| APA0 | | | | Lg | Lg | 11 51 20.7 | |
| **VRF** | **Varrio** baz=88 | **1.77** | **276** | PG | **Pn** | **11 51 38.8** | **+0.6** |
| VRF | | | | MSG | | 11 51 58.7 | |
| | comp=Z,49nm,0.2s | | | | | | |
| VRF | | | | SG | **Sn** | **11 52 00.3** | **-1.0** |
| **VRF** | **Varrio** | **1.77** | **276** | Pg | **Pn** | **11 51 38.8** | **+0.6** |
| VRF | | | | Sg | **Sn** | **11 52 00.3** | **-1.0** |
| **KU6** | **Riekki** | **2.35** | **229** | PB | **Pn** | **11 51 48.7** | **+2.6** |
| KU6 | | | | MSG | | 11 52 16.6 | |
| | comp=Z,33nm,0.2s | | | | | | |
| KU6 | | | | SG | **Sb** | **11 52 19.2** | **+0.2** |
| **KU6** | **Riekki** | **2.35** | **229** | Pb | **Pn** | **11 51 48.7** | **+2.6** |
| KU6 | | | | Sg | **Sb** | **11 52 19.2** | **+0.2** |
| **MSF** | **Maaselka** | **2.68** | **233** | PB | **Pb** | **11 51 54.0** | **-1.2** |
| MSF | | | | SG | **Sb** | **11 52 29.5** | **+1.0** |
| **MSF** | **Maaselka** | **2.68** | **233** | Pb | **Pb** | **11 51 53.9** | **-1.2** |
| MSF | | | | Sg | **Sb** | **11 52 29.5** | **+1.0** |
| **SGF** | **Sodankyl** | **2.96** | **270** | PN | **Pn** | **11 51 56.5** | **+1.9** |
| SGF | | | | SG | **Sb** | **11 52 36.0** | **-0.7** |
| **SGF** | **Sodankyl** | **2.96** | **270** | Pn | **Pn** | **11 51 56.5** | **+1.9** |
| SGF | | | | Sg | **Sb** | **11 52 36.0** | **-0.7** |
| **RNF** | **Rovaniemi** | **3.37** | **256** | PN | **Pn** | **11 52 01.6** | **+1.5** |
| RNF | | | | SB | **Sn** | **11 52 42.3** | **+1.6** |
| **RNF** | **Rovaniemi** | **3.37** | **256** | Pn | **Pn** | **11 52 01.6** | **+1.5** |
| RNF | | | | Sb | **Sn** | **11 52 42.3** | **+1.6** |
| **KEV** | **Kevo** | **3.40** | **312** | PN | **Pn** | **11 52 02.6** | **+2.0** |
| KEV | | | | SG | **Sb** | **11 52 51.5** | **+2.4** |
| **KEV** | **Kevo** | **3.40** | **312** | Pn | **Pn** | **11 52 02.5** | **+2.0** |
| KEV | | | | Sg | **Sb** | **11 52 51.5** | **+2.4** |
| **ARA0** | **ARCESS Array S** baz=123,slow=16 | **3.73** | **305** | Pn | **Pn** | **11 52 06.8** | **+1.7** |
| ARA0 | | | | Sn | **Sn** | **11 52 48.7** | **-1.0** |
| | baz=125,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 11 52 58.5 | |
| | baz=115,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** baz=123,slow=16 | **3.73** | **305** | Pn | **Pn** | **11 52 06.8** | **+1.7** |
| ARA0 | | | | Sn | **Sn** | **11 52 48.7** | **-1.0** |
| | baz=125,slow=28 | | | | | | |
| ARA0 | | | | Lg | Lg | 11 52 58.5 | |
| | baz=115,slow=37 | | | | | | |
| **ARA0** | **ARCESS Array S** SNR=50 | **3.73** | **305** | Pn | **Pn** | **11 52 06.8** | **+1.7** |
| ARA0 | | | | Sn | **Sn** | **11 52 48.7** | **-1.0** |
| | SNR=50 | | | | | | |
| ARA0 | | | | Lg | Lg | 11 52 58.5 | |
| | SNR=8.3 | | | | | | |
| **ARCES** | **ARCESS Array B** comp=Z,8.2nm,0.3s,baz=118,slow=15,SNR=665 | **3.73** | **305** | Pn | **Pn** | **11 52 06.7** | **+1.6** |
| ARCES | | | | Sn | **Sn** | **11 52 48.6** | **-1.1** |
| | comp=Z,4.1nm,0.3s,baz=116,slow=24,SNR=9.0 | | | | | | |
| ARCES | | | | Lg | Lg | 11 52 58.8 | |
| | comp=Z,9.0nm,0.3s,baz=114,slow=33,SNR=12 | | | | | | |
| **ARE0** | **ARCESS Array S** | **3.73** | **305** | *eP* | **Pn** | **11 52 06.7** | **+1.6** |
| **ARE0** | **ARCESS Array S** baz=117 | **3.73** | **305** | PN | **Pn** | **11 52 06.3** | **+1.2** |
| ARE0 | | | | SN | **Sn** | **11 52 48.7** | **-1.0** |
| **ARE0** | **ARCESS Array S** | **3.73** | **305** | Pn | **Pn** | **11 52 06.3** | **+1.2** |
| **ARE0** | **ARCESS Array S** SNR=50 | **3.73** | **305** | *eP* | **Pn** | **11 52 06.7** | **+1.6** |
| ARE0 | | | | Sn | **Sn** | **11 52 48.7** | **-1.0** |
| **HEF** | **Hetta** baz=96 | **4.05** | **286** | PN | **Pn** | **11 52 10.4** | **+0.9** |
| **HEF** | **Hetta** | **4.05** | **286** | Pn | **Pn** | **11 52 10.4** | **+0.9** |
| **OUL** | **Oulu** | **4.21** | **237** | PN | **Pn** | **11 52 14.4** | **+2.7** |
| **OUL** | **Oulu** | **4.21** | **237** | Pn | **Pn** | **11 52 14.4** | **+2.7** |
| **KTK1** | **Kautokeino** | **4.31** | **294** | *eP* | **Pn** | **11 52 14.8** | **+1.7** |
| **KTK1** | **Kautokeino** SNR=49 | **4.31** | **294** | *eP* | **Pn** | **11 52 14.8** | **+1.7** |
| **LANU** | **Lannavaara** | **4.66** | **281** | PN | **Pn** | **11 52 17.9** | **0.0** |
| **LANU** | **Lannavaara** | **4.66** | **281** | Pn | **Pn** | **11 52 17.8** | **0.0** |
| **KALU** | **Kalix** baz=64 | **4.66** | **253** | PN | **Pn** | **11 52 19.2** | **+1.4** |
| **KALU** | **Kalix** | **4.66** | **253** | Pn | **Pn** | **11 52 19.2** | **+1.4** |
| **ERTU** | **Ertsjaerv** baz=69 | **4.83** | **263** | PN | **Pn** | **11 52 20.6** | **+0.5** |
| ERTU | | | | SN | **Sn** | **11 53 16.4** | **-0.2** |
| **ERTU** | **Ertsjaerv** | **4.83** | **263** | Pn | **Pn** | **11 52 20.6** | **+0.5** |
| ERTU | | | | Sn | **Sn** | **11 53 16.4** | **-0.2** |
| **FIA0** | **FINESS Array S** baz=30,slow=12 | **7.12** | **213** | Pn | **Pn** | **11 52 52.6** | **+1.0** |
| FIA0 | | | | Sn | **Sn** | **11 54 11.0** | **-2.1** |
| | baz=37,slow=22 | | | | | | |
| FIA0 | | | | Lg | Lg | 11 54 45.2 | |
| | baz=20,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** baz=30,slow=12 | **7.12** | **213** | Pn | **Pn** | **11 52 52.6** | **+1.0** |
| FIA0 | | | | Sn | **Sn** | **11 54 11.0** | **-2.1** |
| | baz=37,slow=22 | | | | | | |
| FIA0 | | | | Lg | Lg | 11 54 45.2 | |
| | baz=20,slow=28 | | | | | | |
| **FIA0** | **FINESS Array S** SNR=50 | **7.12** | **213** | Pn | **Pn** | **11 52 52.7** | **+1.0** |
| FIA0 | | | | Sn | **Sn** | **11 54 11.0** | **-2.1** |
| | SNR=50 | | | | | | |
| **FINES** | **FINESS Array B** comp=Z,0.2nm,0.3s,baz=28,slow=14,SNR=6.9 | **7.12** | **213** | Pn | **Pn** | **11 52 52.6** | **+1.0** |
| FINES | | | | Sn | **Sn** | **11 54 12.1** | **-1.1** |
| | comp=Z,0.4nm,0.3s,baz=32,slow=19,SNR=3.6 | | | | | | |
| FINES | | | | Lg | Lg | 11 54 46.0 | |
| | comp=Z,1.2nm,0.3s,baz=25,slow=23,SNR=8.3 | | | | | | |
| **HFS** | **Hagfors** comp=Z,0.1nm,0.3s,baz=38,slow=12,SNR=5.5 | **11.70** | **240** | Pn | **Pn** | **11 53 52.4** | **-1.9** |
| HFS | | | | Lg | Lg | 11 57 09.0 | |
| | comp=Z,0.2nm,0.3s,baz=45,slow=29,SNR=3.3 | | | | | | |
| **SPA0** | **Spitsbergen Ar** baz=146,slow=12 | **11.74** | **342** | Pn | **Pn** | **11 53 53.4** | **-1.4** |
| **SPA0** | **Spitsbergen Ar** baz=146,slow=12 | **11.74** | **342** | Pn | **Pn** | **11 53 53.4** | **-1.4** |
| **SPITS** | **Spitsbergen Ar** baz=137,slow=22,SNR=7.3 | **11.74** | **342** | Pn | Pn | 11 53 51.3 | -3.5 |
| **NOA** | **NORSAR Array B** comp=Z,0.2nm,0.3s,baz=44,slow=11,SNR=4.7 | **11.90** | **247** | Pn | **Pn** | **11 53 55.2** | **-1.8** |

**MEX 29 11:54:19.2±0.4, 27.°71N×111.°73W, h5km, MD4.3, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SRIG** | **Santa Rosalia** | **0.60** | **230** | *eP* | Pg | 11 54 30.0 | -0.7 |
| SRIG | | | | *i* S | Sg | 11 54 39.0 | +0.4 |
| **HSIG** | | **1.47** | **27** | *eP* | Pn | 11 54 43.6 | -2.9 |
| HSIG | | | | *i* S | Sn | 11 55 01.1 | -5.1 |

**DDA 29 11:54:26.9, 39.°86N×38.°16E, h4km, Md2.6, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CUZAR** | **Zara_SIVAS** | **0.30** | **275** | P | Pg | 11 54 32.6 | -0.2 |
| CUZAR | | | | S | Sg | 11 54 37.5 | +0.6 |
| **SUSE** | **Susehri** | **0.35** | **6** | P | Pg | 11 54 33.7 | -0.1 |
| SUSE | | | | S | Sb | 11 54 40.5 | -1.3 |
| **CUKAN** | **kangal_SIVAS** | **0.76** | **224** | P | Pg | 11 54 41.5 | -0.3 |
| CUKAN | | | | S | Sn | 11 54 56.4 | -0.3 |
| **KELT** | **Kelkit** | **0.89** | **71** | P | Pg | 11 54 43.7 | -0.5 |
| KELT | | | | S | Sb | 11 54 57.9 | +0.3 |

*IDC **29** 11:57:54.0±1.2, 10.°04N×124.°70E, h0km, mb3.8/6, mb1 3.9/6, mb1mx3.7/46, mbtmp3.8/6, MS2.8/2, Ms1 2.8/2, ms1mx2.4/40, Error ellipse: s-maj=115.1km s-min=18.3km az=67.0*
*ISCJB **29** 11:57:55.6±0.9, 10.°68N±0.°07×126.°45E±0.°07, h35km, mb3.8/6, MS2.8/2, Error ellipse: s-maj=9.9km s-min=9.7km az=18.3*
*MAN **29** 11:58:01, 10.°58N×126.°06E, h38km, mb4.6, ML3.5, MS3.5*
**ISC 29 11:57:58.0±1.1, 10.°63N±0.°08×126.°3E±0.°1, h35km, n21, σ1§46/15, mb3.9/6, 1C-2D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SCPH** | **Surigao** | **1.19** | **225**⇓ | *eP* | **Pn** | **11 58 18.8** | **+0.7** |
| SCPH | | | | *eS* | **Sn** | **11 58 33.1** | **+0.1** |
| **PLP** | **Palo** | **1.44** | **292**⇓ | *eP* | **Pn** | **11 58 21.8** | **+0.2** |
| PLP | | | | *i* S | **Sn** | **11 58 38.2** | **-1.1** |
| **MSLP** | **Maasin** | **1.54** | **251** | *eP* | **Pn** | **11 58 23.5** | **+0.6** |
| MSLP | | | | *eS* | **Sn** | **11 58 39.7** | **-2.0** |
| **OCLP** | **Ormoc** | **1.75** | **284** | *eP* | **Pn** | **11 58 28.7** | **+2.8** |
| **DCPH** | **Dipolog City** | **3.58** | **236** | *eP* | **Pn** | **11 58 52.6** | **+1.6** |
| **RCP** | **Roxas** | **3.65** | **285**⇑ | *eP* | Pn | 11 58 55.3 | +3.4 |
| **GUIM** | **Jordan** | **3.69** | **270** | *eP* | **Pn** | **11 58 54.1** | **+1.6** |
| **KSRS** | **Korea Array** comp=Z,18nm,18.5s,baz=99,slow=39 | **26.75** | **3** | LR | LR | 12 15 39.0 | |
| **WRA** | **Warramunga Arr** 0.7nm,0.6s,baz=341,slow=8.8,SNR=18 | **31.38** | **165** | P | **P** | **12 04 15.0** | **-0.8** |
| **ASAR** | **Alice Springs** 1.3nm,0.4s,baz=339,slow=7.4,SNR=36 | **34.88** | **168** | P | **P** | **12 04 46.4** | **+0.1** |
| **H11S3** | **WAKE ISLAND Hy** baz=265,slow=75,SNR=6.7 | **39.76** | **74** | T | T | 12 48 29.2 | |
| **H11S1** | **WAKE ISLAND Hy** baz=265,slow=75,SNR=3.9 | **39.77** | **74** | T | T | 12 48 31.4 | |
| **H11S2** | **WAKE ISLAND Hy** baz=265,slow=75,SNR=7.3 | **39.77** | **74** | T | T | 12 48 30.3 | |
| **H11N1** | **WAKE ISLAND Hy** baz=264,slow=74,SNR=16 | **40.08** | **72** | T | T | 12 48 45.7 | |
| **H11N2** | **WAKE ISLAND Hy** baz=264,slow=74,SNR=10 | **40.09** | **72** | T | T | 12 48 48.4 | |
| **H11N3** | **WAKE ISLAND Hy** baz=264,slow=74,SNR=11 | **40.10** | **72** | T | T | 12 48 46.7 | |
| **SONM** | **Songino Array** 0.3nm,0.7s,baz=162,slow=10.0,SNR=2.3 | **40.71** | **339** | P | **P** | **12 05 35.7** | **+0.3** |
| SONM | | | | PcP | **PcP** | **12 07 37.8** | **+1.3** |
| | 0.3nm,0.8s,baz=160,slow=4.6,SNR=2.7 | | | | | | |
| **PALK** | **Pallekele** comp=Z,12nm,18.1s,baz=116,slow=41 | **45.17** | **270** | LR | LR | 12 27 57.6 | |
| **MKAR** | **Makanchi Array** 0.9nm,0.5s,baz=121,slow=7.8,SNR=6.4 | **51.78** | **323** | P | **P** | **12 07 01.4** | **-1.0** |
| **KURBB** | **Kurchatov Arra** 0.8nm,0.5s,baz=125,slow=7.2,SNR=7.1 | **55.82** | **325** | P | **P** | **12 07 30.1** | **-1.7** |
| **BRTR** | **Keskin Array B** 0.3nm,0.6s,baz=80,slow=8.9,SNR=3.0 | **85.36** | **309** | P | P | 12 10 28.2 | -3.9 |

*IDC **29** 11:59:47.4±1.1, 20.°33N×145.°62E, h0km, mb3.6/8, mb1 3.8/8, mb1mx3.6/42, mbtmp3.6/8, Error ellipse: s-maj=37.2km s-min=23.1km az=89.0*
*ISCJB **29** 11:59:56.0±0.8, 20.°3N±0.°1×145.°5E±0.°2, h81km, mb3.5/8, Error ellipse: s-maj=29.9km s-min=17.5km az=177.2*
**ISC 29 11:59:57.6±1.0, 20.°3N±0.°2×145.°5E±0.°2, h81km, n14, σ1§00/8, mb3.6/8, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H11S3** | **WAKE ISLAND Hy** baz=278,slow=74,SNR=4.1 | **20.06** | **92** | T | T | 12 25 31.7 | |
| **H11S1** | **WAKE ISLAND Hy** baz=278,slow=74,SNR=2.7 | **20.07** | **91** | T | T | 12 25 29.4 | |
|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CHKZ** | **Chkalovo** | **3.54** | **309** | ⇑Pn | Pn | 12 01 25.4 | +0.2 | |
| | 0.8nm,0.5s | | | | | | | |
| CHKZ | | | | ⇓Pg | Pg | 12 01 34.7 | -2.1 | |
| | 1.8nm,0.7s | | | | | | | |
| CHKZ | | | | ⇑Sn | Sn | 12 02 08.4 | +0.7 | |
| | 2.2nm,0.7s | | | | | | | |
| CHKZ | | | | ⇑Lg | Lg | 12 02 22.3 | | |
| | 8.2nm,0.6s | | | | | | | |
| CHKZ | | | | ⇓Rg | Rg | 12 02 39.9 | | |
| | 15nm,1.6s | | | | | | | |
| **ZRNK** | **Zerenda** | **4.09** | **292** | ⇑Pn | Pn | 12 01 34.3 | +1.4 | |
| | 1.1nm,0.7s | | | | | | | |
| ZRNK | | | | ⇑Pg | Pb | 12 01 42.8 | +0.9 | |
| | 1.8nm,0.6s | | | | | | | |
| ZRNK | | | | ⇑Sn | Sn | 12 02 22.9 | +1.5 | |
| | 1.9nm,0.8s | | | | | | | |
| ZRNK | | | | ⇑Lg | Lg | 12 02 37.4 | | |
| | 13nm,1.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **6.63** | **133** | ⇑Sn | Sn | 12 03 24.6 | +0.5 | |
| | 0.8nm,0.6s,baz=0.0,slow=0.1,SNR=5.5 | | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 12 03 58.1 | | |
| | 1.8nm,0.6s,baz=328,slow=26,SNR=4.5 | | | | | | | |

*NSSP* ***29*** *12:10:46.5,40.90N×42.93E,h7km,Ms2.9*
*DDA* ***29*** *12:10:46.9,40.87N×42.95E,h7km,Md2.8*
*ISK* ***29*** *12:10:46.3,40.90N×42.84E,h5km,MD2.5*
*CSEM* ***29*** *12:10:47.4±0.2,40.83N×42.92E,h2km,MD2.5,Error ellipse: s-maj=4.1km s-min=2.6km az=15.0*
*TIF* ***29*** *12:10:47.2,40.84N×42.95E,h16km±1km*
**ISC 29 12:10:47.2**±1.0**, 40°85N**±0.02×**42°93E**±0.02**, h15**km±9km**, n29**, σ0**°48**/56**, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KARS** | **Kars** | **0.25** | **152** | *e*PG | **Pb** | **12 10 53.4** | **-0.1** |
| KARS | | | | *e*SG | **Sb** | **12 10 58.9** | **+1.2** |
| **KARS** | **Kars** | **0.25** | **152** | *e*Pg | **Pb** | **12 10 53.4** | **-0.1** |
| **EAK** | **Akyaka** | **0.54** | **107** | *i* P | **Pg** | **12 10 57.4** | **-0.5** |
| EAK | | | | *i* S | **Sb** | **12 11 06.1** | **0.0** |
| **EAK** | **Akyaka** | **0.54** | **107** | P | **Pg** | **12 10 57.5** | **-0.5** |
| EAK | | | | S | **Sb** | **12 11 06.1** | **0.0** |
| **DIGO** | **Kars** | **0.55** | **142** | *i* P | **Pg** | **12 10 57.5** | **-0.7** |
| DIGO | | | | *i* S | **Sg** | **12 11 05.9** | **+0.3** |
| **DIGO** | **Kars** | **0.55** | **142** | P | **Pg** | **12 10 57.5** | **-0.7** |
| DIGO | | | | S | **Sg** | **12 11 05.8** | **+0.3** |
| **AKH** | **Akhalkalaki** | **0.70** | **37** | *e*PG | **Pg** | **12 11 00.8** | **-0.2** |
| AKH | | | | *e*SG | **Sg** | **12 11 10.7** | **+0.4** |
| **AKH** | **Akhalkalaki** | **0.70** | **37** | P | **Pg** | **12 11 00.7** | **-0.3** |
| AKH | | | | S | **Sb** | **12 11 10.9** | **+0.1** |
| **AKH** | **Akhalkalaki** | **0.70** | **37** | P | **Pg** | **12 11 00.7** | **-0.2** |
| AKH | | | | S | **Sb** | **12 11 10.9** | **+0.1** |
| **ARTV** | **Artvin** | **0.83** | **294** | *i* P | **Pb** | **12 11 03.4** | **0.0** |
| ARTV | | | | *i* S | **Sn** | **12 11 15.8** | **-0.7** |
| **ARTV** | **Artvin** | **0.83** | **294** | P | **Pb** | **12 11 03.4** | **0.0** |
| ARTV | | | | S | **Sn** | **12 11 15.8** | **-0.7** |
| **DDEM** | **Demirkent** | **0.89** | **273** | *i* P | **Pb** | **12 11 04.5** | **+0.1** |
| DDEM | | | | *i* S | **Sn** | **12 11 17.6** | **-0.4** |
| **DDEM** | **Demirkent** | **0.89** | **273** | P | **Pb** | **12 11 04.5** | **+0.1** |
| DDEM | | | | S | **Sn** | **12 11 17.6** | **-0.4** |
| **DBAD** | **Bademkaya** | **0.95** | **281** | *i* P | **Pb** | **12 11 05.6** | **+0.3** |
| DBAD | | | | *i* S | **Sg** | **12 11 18.3** | **+0.3** |
| **DBAD** | **Bademkaya** | **0.95** | **281** | P | **Pb** | **12 11 05.6** | **+0.3** |
| DBAD | | | | S | **Sg** | **12 11 18.3** | **+0.3** |
| **DBOC** | **Borcka** | **1.07** | **298** | *i* P | **Pb** | **12 11 07.4** | **0.0** |
| DBOC | | | | *i* S | **Sg** | **12 11 22.1** | **+0.2** |
| **DBOC** | **Borcka** | **1.07** | **298** | P | **Pb** | **12 11 07.4** | **0.0** |
| DBOC | | | | S | **Sg** | **12 11 22.1** | **+0.2** |
| **STE** | **Stepanavan** | **1.10** | **82** | P | **Pb** | **12 11 08.0** | **0.0** |
| STE | | | | S | **Sg** | **12 11 24.0** | **+1.0** |
| **STEZ** | **Stepenevan** | **1.13** | **82** | *e*P | **Pb** | **12 11 08.0** | **-0.4** |
| STEZ | | | | *e*S | **Sg** | **12 11 24.0** | **+0.3** |
| **AGRB** | **Hanur-Agry** | **1.27** | **178** | *e*PN | **Pg** | **12 11 12.0** | **+0.2** |
| **AGRB** | **Hanur-Agry** | **1.27** | **178** | *e*Pn | **Pg** | **12 11 12.0** | **+0.2** |
| **GNI** | **Garni** | **1.55** | **116** | *i* P | **Pb** | **12 11 15.5** | **-0.2** |
| GNI | | | | *i* S | **Sg** | **12 11 37.2** | **0.0** |
| **GNI** | **Garni** | **1.55** | **116** | P | **Pb** | **12 11 15.5** | **-0.2** |
| GNI | | | | S | **Sg** | **12 11 37.2** | **0.0** |
| **TBLG** | **Delisi** | **1.62** | **57** | *e*PN | **Pb** | **12 11 17.3** | **+0.5** |
| TBLG | | | | *e*SN | **Sg** | **12 11 39.5** | **0.0** |
| **TBLG** | **Delisi** | **1.62** | **57** | P | **Pb** | **12 11 17.1** | **+0.2** |
| TBLG | | | | S | **Sg** | **12 11 39.2** | **-0.3** |
| **TBLG** | **Delisi** | **1.62** | **57** | *i* P | **Pb** | **12 11 17.4** | **+0.5** |
| TBLG | | | | *i* S | **Sg** | **12 11 39.5** | **-0.3** |
| TBLG | | | | *e*Sn | **Sg** | **12 11 39.5** | **0.0** |
| **ONI** | **Oni** | **1.78** | **13** | P | **Pb** | **12 11 20.2** | **+0.7** |
| ONI | | | | S | **Sg** | **12 11 44.3** | **-0.3** |
| **DGRG** | **David-gareji** | **1.94** | **71** | P | **Pb** | **12 11 22.6** | **+0.3** |
| DGRG | | | | S | **Sg** | **12 11 51.5** | **+1.8** |
| **DGRG** | **David-gareji** | **1.94** | **71** | P | **Pb** | **12 11 22.6** | **+0.3** |
| DGRG | | | | *i* S | **Sg** | **12 11 50.3** | **+0.6** |

*DJA* ***29*** *12:14:14.4±4.7,8°N±43°×12°8E±1°3,h131km±33km, M4.8/7,mb4.7/7,mB5.0/4,MLv5.0/2,Mw(mB)4.3/4*
*BJI* ***29*** *12:14:16.1,6.34N×127.60E,h58km,mb4.7/22,mB5.0/17, Ms4.8/13,Ms7 4.5/11*
*MAN* ***29*** *12:14:20,7.35N×127.49E,h21km,mb5.2,ML4.1,MS4.3*
*ISCJB* ***29*** *12:14:21.1±0.7,7.24N±0.03×127.47E±0.05,h45km±6km, mb4.4/30,MS3.4/5,Error ellipse: s-maj=9.3km s-min=4.4km az=156.7*
*IDC* ***29*** *12:14:23.9±0.6,7.23N×127.41E,h53km±5km,mb4.1/22, mb1 4.2/24,mb1mx4.1/45,mbtmp4.4/24,MS3.3/8, Ms1 3.4/8,ms1mx3.0/38,Error ellipse: s-maj=10.2km s-min=8.7km az=161.0*
*NEIC* ***29*** *12:14:23.6±0.2,7.26N×127.39E,mb4.7/12,Error ellipse: s-maj=6.2km s-min=3.8km az=81.0*
*NEIC Felt at Adtugan, Mindanao.*
**ISC 29 12:14:24.4**±0.4**, 7°21N**±0.05×**127°42E**±0.07**, h58**km±3km**, h58**km**:pP-P,n103,**σ**1§25/**116**,mb4.4/29,MS3.4/5,2C-2D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MATI** | **Mati** | **1.19** | **257** | *e*P | **Pn** | **12 14 42.0** | **-2.8** |
| MATI | | | | *e*S | Sn | 12 14 51.3 | -8.7 |
| **DAV** | **Davao City (W)** | **1.83** | **266** | P | **Pn** | **12 14 53.6** | **0.0** |
| | 310nm,0.3s,baz=60,slow=4.0,SNR=35 | | | | | | |
| DAV | | | | S | **Sn** | **12 15 15.6** | **-0.1** |
| | 284nm,0.3s,baz=265,slow=21,SNR=5.9 | | | | | | |
| DAV | | | | LR | LR | 12 15 52.6 | |
| | comp=Z,1μm,20.6s,baz=156,slow=49 | | | | | | |
| **BUKP** | **Musuan** | **2.43** | **286** | *e*P | **Pn** | **12 15 00.4** | **-1.3** |
| **CTBH** | **Cotabato--PC H** | **3.15** | **270** | ⇑*i*P | **Pn** | **12 15 10.1** | **-1.4** |
| CTBH | | | | *i* S | Sn | 12 15 23.3 | -25 |
| **SCPH** | **Surigao** | **3.19** | **323** | ⇓*e*P | Pn | 12 15 08.7 | -3.5 |
| SCPH | | | | *e*S | **Sn** | **12 15 46.5** | **-2.5** |
| **MSLP** | **Maasin** | **3.86** | **319** | *e*P | **Pn** | **12 15 18.4** | **-2.8** |
| **SGSI** | **Sangihe** | **3.97** | **208** | P | Pn | 12 15 15.5 | -7.3 |
| SGSI | | | | S | Sn | 12 15 53.2 | -15 |
| **PAGZ** | **Pagadian** | **4.06** | **279** | *e*P | **Pn** | **12 15 22.8** | **-1.2** |
| **DCPH** | **Dipolog City** | **4.26** | **289** | ⇓*e*P | **Pn** | **12 15 26.8** | **+0.1** |
| **RCP** | **Roxas** | **6.33** | **314** | ⇓*e*P | **Pn** | **12 15 54.1** | **-0.9** |
| **TNTI** | **Ternate** | **6.39** | **180** | P | **Pn** | **12 15 57.2** | **+1.2** |
| | 81nm,1.0s,2μm0.4nm | | | | | | |
| TNTI | | | | S | **Sn** | **12 17 08.7** | **+1.0** |
| | 81nm,1.0s,2μm0.4nm | | | | | | |
| **TNTI** | **Ternate** | **6.39** | **180** | *e*Pn | **Pn** | **12 15 57.3** | **+1.3** |
| TNTI | | | | *e*Sn | **Sn** | **12 17 06.9** | **-0.7** |
| **LBMI** | **Labuha** | **7.79** | **179** | P | **Pn** | **12 16 16.6** | **+1.4** |
| | 63nm,0.8s | | | | | | |
| **GTOI** | **Gorontalo** | **7.87** | **214** | P | **Pn** | **12 16 16.1** | **-0.2** |
| | 106nm,0.8s,843nm | | | | | | |
| **MRSI** | **Marisa** | **8.63** | **220** | P | **Pn** | **12 16 27.6** | **+0.9** |
| | 75nm,0.7s,1μm | | | | | | |
| **SIJI** | **Sorong** | **8.89** | **154** | P | **Pn** | **12 16 28.7** | **-1.6** |
| | 3.1nm,0.3s,baz=262,slow=23,SNR=7.8 | | | | | | |
| SIJI | | | | S | Sn | 12 18 00.6 | -8.4 |
| | 3.2nm,0.3s,baz=0.0,slow=19,SNR=8.4 | | | | | | |
| SIJI | | | | LR | LR | 12 19 40.9 | |
| | comp=Z,158nm,20.2s,baz=338,slow=36 | | | | | | |
| **MYLDM** | **Lahad Datu** | **9.10** | **258** | *e*Pn | **Pn** | **12 16 30.9** | **-2.2** |
| **SANI** | **Sanana** | **9.30** | **189** | P | Pn | 12 16 30.6 | -5.3 |
| **LUWI** | **Luwuk** | **9.42** | **210** | *e*Pn | **Pn** | **12 16 36.5** | **-0.9** |
| **APSI** | **Ampana** | **9.91** | **216** | P | Pn | 12 16 49.4 | +5.2 |
| **NLAI** | **Namlea** | **10.38** | **182** | P | **Pn** | **12 16 49.7** | **-0.9** |
| | 37nm,0.9s,634nm | | | | | | |
| **FAKI** | **Fak Fak** | **11.15** | **154** | *e*Pn | **Pn** | **12 17 00.9** | **-0.3** |
| **KAPI** | **Kappang** | **14.35** | **212** | LR | LR | 12 23 27.1 | |
| | comp=Z,38nm,19.4s,baz=25,slow=38 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SBUM** | **Sibu** | **15.86** | **253** | *e*Pn | **Pn** | **12 18 05.2** | **+1.0** | |
| | 36nm,0.7s | | | | | | | |
| **JAY** | **Jayapura** | **16.40** | **126** | LR | LR | 12 24 35.9 | | |
| | comp=Z,222nm,19.0s,baz=308,slow=37 | | | | | | | |
| **BATI** | **Baumata** | **17.70** | **192** | P | **P** | **12 18 27.3** | **+0.1** | |
| | 4.5nm,0.3s,baz=43,slow=2.4,SNR=4.0 | | | | | | | |
| **MTN** | **Manton Dam** | **20.26** | **169** | *e*P | **P** | **12 18 55.0** | **-0.2** | |
| | 19nm,0.8s | | | | | | | |
| **NJ2** | **Nanjing** | **25.98** | **343** | *e*P | **P** | **12 19 52.5** | **+0.8** | |
| NJ2 | | | | PMZ | | | | |
| | 30nm,0.8s | | | | | | | |
| **JNU** | **Nakatsue** | **25.99** | **7** | LR | LR | 12 30 28.8 | | |
| | comp=Z,52nm,19.1s,baz=44,slow=37 | | | | | | | |
| **WRAB** | **Tennant Creek** | **27.82** | **166** | *e*P | **P** | **12 20 07.8** | **-0.6** | |
| | 10nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **27.82** | **166** | P | **P** | **12 20 08.3** | **-0.1** | |
| | 2.1nm,0.6s,baz=349,slow=9.4,SNR=35 | | | | | | | |
| **KMI** | **Kunming** | **29.56** | **310** | P | **P** | **12 20 26.3** | **+2.2** | |
| KMI | | | | PMZ | | | | |
| | 5.0nm,0.6s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | 52nm,3.1s | | | | | | | |
| **CM31** | **Chiang Mai Arr** | **29.88** | **295** | *e*P | **P** | **12 20 26.6** | **-0.2** | |
| **CMAR** | **Chiang Mai Arr** | **29.88** | **295** | P | **P** | **12 20 26.6** | **-0.2** | |
| | 0.9nm,0.4s,baz=159,slow=35,SNR=3.5 | | | | | | | |
| CMAR | | | | LR | LR | 12 33 24.8 | | |
| | comp=Z,70nm,18.5s,baz=120,slow=38 | | | | | | | |
| **KS15** | **Wonju Array Si** | **30.10** | **1** | *e*P | **P** | **12 20 29.0** | **+0.6** | |
| KS15 | | | | *e*pP | **pP** | **12 20 42.0** | **-0.9** | |
| **KSAR** | **Wonju Array Be** | **30.10** | **1** | P | **P** | **12 20 29.0** | **+0.6** | |
| KSAR | | | | pP | **pP** | **12 20 42.0** | **-0.9** | |
| **KSRS** | **Korea Array** | **30.11** | **1** | P | **P** | **12 20 29.0** | **+0.5** | |
| | 2.4nm,0.7s,baz=185,slow=9.5,SNR=7.3 | | | | | | | |
| KSRS | | | | pP | **pP** | **12 20 42.0** | **-1.0** | |
| | 5.8nm,1.0s,baz=179,slow=10,SNR=7.6 | | | | | | | |
| **AS31** | **Alice Springs** | **31.33** | **169** | *e*P | **P** | **12 20 39.9** | **+0.4** | |
| | 2.3nm,1.0s | | | | | | | |
| **ASAR** | **Alice Springs** | **31.33** | **169** | P | **P** | **12 20 39.9** | **+0.4** | |
| | 0.9nm,0.3s,baz=337,slow=7.2,SNR=16 | | | | | | | |
| **AS01** | **Alice Springs** | **31.34** | **168** | *e*P | **P** | **12 20 39.5** | **0.0** | |
| **CD2** | **Chengdu** | **32.35** | **320** | *e*P | **P** | **12 20 49.0** | **+0.5** | |
| CD2 | | | | sP | **sP** | **12 21 10.0** | **+0.3** | |
| CD2 | | | | S | **S** | **12 26 00.0** | **+1.4** | |
| CD2 | | | | sS | **sS** | **12 26 24.5** | **+1.4** | |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | 120nm,5.0s | | | | | | | |
| **CTA** | **Charters Tower** | **32.85** | **146** | P | **P** | **12 20 54.0** | **+1.2** | |
| | 7.1nm,0.7s,baz=335,slow=11,SNR=7.6 | | | | | | | |
| **LZH** | **Lanzhou** | **35.94** | **326** | *e*P | **P** | **12 21 20.5** | **+0.9** | |
| LZH | | | | pP | **pP** | **12 21 34.0** | **-0.2** | |
| LZH | | | | sP | **sP** | **12 21 42.8** | **+1.8** | |
| LZH | | | | PMZ | | | | |
| | 20nm,1.0s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | 77nm,4.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **36.37** | **340** | *e*P | **P** | **12 21 25.5** | **+2.4** | |
| HHC | | | | pP | **pP** | **12 21 38.8** | **+1.1** | |
| HHC | | | | sP | **sP** | **12 21 46.0** | **+1.5** | |
| HHC | | | | S | **S** | **12 27 03.8** | **+3.4** | |
| HHC | | | | PMZ | | | | |
| | 16nm,0.8s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | 140nm,8.6s | | | | | | | |
| HHC | | | | LN | | | | |
| | 240nm,13.6s | | | | | | | |
| HHC | | | | LE | | | | |
| | 300nm,12.3s | | | | | | | |
| HHC | | | | LZ | | | | |
| | 140nm,14.8s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **37.06** | **5** | P | **P** | **12 21 29.1** | **+0.2** | |
| | 1.7nm,0.4s,baz=185,slow=7.9,SNR=7.2 | | | | | | | |
| USRK | | | | pP | **pP** | **12 21 43.9** | **+0.4** | |
| | 12nm,0.9s,baz=190,slow=8.8,SNR=9.3 | | | | | | | |
| **ASAJ** | **Asahikawa** | **39.09** | **17** | P | **P** | **12 21 46.2** | **+0.3** | |
| | 4.8nm,0.7s,baz=280,slow=9.1,SNR=5.4 | | | | | | | |
| **ASAJ** | **Asahikawa** | **39.09** | **17** | *e*P | **P** | **12 21 46.0** | **+0.1** | |
| | 87nm,1.8s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **39.80** | **70** | T | T | 13 05 33.7 | | |
| | baz=268 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **39.81** | **70** | T | T | 13 05 30.9 | | |
| | baz=268 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **39.81** | **70** | T | T | 13 05 30.9 | | |
| | baz=268 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.24** | **68** | T | T | 13 06 04.2 | | |
| | baz=267 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.24** | **68** | T | T | 13 06 04.8 | | |
| | baz=267 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.25** | **68** | T | T | 13 06 04.8 | | |
| | baz=267 | | | | | | | |
| **GTA** | **Gaotai** | **40.54** | **326** | *e*P | **P** | **12 21 58.8** | **+0.6** | |
| GTA | | | | pP | **pP** | **12 22 14.0** | **+1.0** | |
| GTA | | | | sP | **sP** | **12 22 21.5** | **+1.8** | |
| GTA | | | | S | **S** | **12 28 04.0** | **+0.5** | |
| GTA | | | | sS | **sS** | **12 28 30.3** | **+1.8** | |
| GTA | | | | PMZ | | | | |
| | 7.0nm,0.8s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | 55nm,5.0s | | | | | | | |
| GTA | | | | LN | | | | |
| | 91nm,15.2s | | | | | | | |
| GTA | | | | LE | | | | |
| | 100nm,14.0s | | | | | | | |
| GTA | | | | LZ | | | | |
| | 130nm,15.0s | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **41.07** | **193** | P | **P** | **12 22 02.5** | **+0.1** | |
| | 20nm,0.5s,baz=91,slow=0.0,SNR=30 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **41.07** | **193** | *e*P | **P** | **12 22 03.8** | **+1.3** | |
| | 24nm,0.6s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **44.07** | **340** | *e*P | **P** | **12 22 26.7** | **-0.1** | |
| | 37nm,2.4s | | | | | | | |
| **SONA0** | **Songino Array** | **44.27** | **340** | *e*P | **P** | **12 22 28.0** | **-0.3** | |
| **SONM** | **Songino Array** | **44.27** | **340** | P | **P** | **12 22 28.0** | **-0.3** | |
| | 1.1nm,0.6s,baz=139,slow=6.2,SNR=8.2 | | | | | | | |
| **SONA1** | **Songino Array** | **44.28** | **340** | *e*P | **P** | **12 22 27.9** | **-0.6** | |
| **WMQ** | **Urumqi** | **50.33** | **323** | *e*P | **P** | **12 23 16.0** | **+0.5** | |
| **PETK** | **Petropavlovsk-** | **51.97** | **23** | P | **P** | **12 23 26.9** | **-0.7** | |
| | 3.3nm,0.7s,baz=183,slow=3.0,SNR=7.9 | | | | | | | |
| **PEA1** | **Petropavlovsk-** | **51.98** | **23** | *e*P | **P** | **12 23 26.9** | **-0.7** | |
| **MK01** | **Makanchi Array** | **55.13** | **324** | *e*P | **P** | **12 23 50.3** | **-0.5** | |
| **MK32** | **Makanchi Array** | **55.15** | **324** | *e*P | **P** | **12 23 50.8** | **-0.2** | |
| **MKAR** | **Makanchi Array** | **55.15** | **324** | P | **P** | **12 23 50.8** | **-0.2** | |
| | 3.9nm,0.5s,baz=117,slow=7.9,SNR=22 | | | | | | | |
| **MKAR** | **Makanchi Array** | **55.15** | **324** | *e*P | **P** | **12 23 50.6** | **-0.4** | |
| **KSH** | **Kashi** | **56.13** | **313** | *e*P | **P** | **12 23 59.3** | **+1.0** | |
| KSH | | | | *e*sP | **sP** | **12 24 21.8** | **+1.5** | |
| KSH | | | | *e*PP | **PP** | **12 26 06.0** | **+2.1** | |
| KSH | | | | PcS | **PcS** | **12 28 56.8** | **+0.5** | |
| KSH | | | | S | **S** | **12 31 40.5** | **-2.9** | |
| KSH | | | | PMZ | | | | |
| | 140nm,4.6s | | | | | | | |
| KSH | | | | LN | | | | |
| | 210nm,5.8s | | | | | | | |
| KSH | | | | LE | | | | |
| | 120nm,6.0s | | | | | | | |
| KSH | | | | LZ | | | | |
| | 270nm,6.4s | | | | | | | |
| **TKM2** | **Tokmak 2** | **57.65** | **317** | *e*P | **P** | **12 24 09.0** | **-0.1** | |
| | 3.4nm,0.7s | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **57.84** | **332** | *e*P | **P** | **12 24 09.0** | **-0.9** | |
| **ZALV** | **Zalesovo Beam** | **57.84** | **332** | P | **P** | **12 24 08.7** | **-1.3** | |
| | 1.2nm,0.4s,baz=126,slow=6.2,SNR=6.6 | | | | | | | |
| **ZAA1** | **Zalesovo Array** | **57.85** | **332** | *e*P | **P** | **12 24 08.7** | **-1.3** | |
| **AAK** | **Ala-Archa** | **58.30** | **316** | LR | LR | 12 51 44.2 | | |
| | comp=Z,28nm,20.0s,baz=74,slow=38 | | | | | | | |
| **EKS2** | **Erkin-Say** | **58.80** | **316** | *e*P | **P** | **12 24 16.6** | **-0.4** | |
| | 5.8nm,0.6s | | | | | | | |
| **KURK** | **Kurchatov** | **59.23** | **326** | *e*P | **P** | **12 24 19.2** | **-0.4** | |
| | 7.5nm,1.1s | | | | | | | |
| **KKAR** | **Karatay Array** | **61.21** | **316** | *e*P | **P** | **12 24 32.6** | **-0.8** | |
| **GEYT** | **Alibeck** | **69.30** | **308** | P | **P** | **12 25 25.8** | **-0.1** | |
| | 3.0nm,0.6s,baz=141,slow=4.8,SNR=3.9 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **71.40** | **321** | P | **P** | **12 25 38.5** | **+0.1** | |
| | 1.6nm,0.3s,baz=99,slow=7.1,SNR=9.6 | | | | | | | |
| **KDAK** | **Kodiak Island** | **78.61** | **33** | P | **P** | **12 26 19.9** | **+0.1** | |
| | 4.7nm,0.5s,baz=209,slow=1.9,SNR=6.9 | | | | | | | |
| **RAYN** | **Ar Rayn** | **79.78** | **293** | *e*P | **P** | **12 26 26.6** | **-0.4** | |
| | 7.1nm,0.7s | | | | | | | |
| **MCK** | **McKinley** | **80.77** | **27** | *e*P | **P** | **12 26 31.9** | **+0.5** | |
| | 138nm,2.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **81.69** | **26** | P | **P** | **12 26 37.2** | **+0.9** | |
| | 1.8nm,0.8s,baz=233,slow=5.7,SNR=29 | | | | | | | |
| ILAR | | | | pP | **pP** | **12 26 51.2** | **-1.3** | |
| | 1.2nm,0.8s,baz=243,slow=4.9,SNR=3.8 | | | | | | | |
| **ILB** | **Eielson Array** | **81.69** | **26** | *e*P | **P** | **12 26 37.2** | **+0.9** | |
| ILB | | | | *e*pP | **pP** | **12 26 51.2** | **-1.3** | |
| **IL1** | **Eielson Array** | **81.69** | **26** | *e*P | **P** | **12 26 36.6** | **+0.3** | |
| **PPT** | **Papeete** | **85.53** | **108** | LR | LR | 12 58 42.6 | | |
| | comp=Z,19nm,19.0s,baz=324,slow=31 | | | | | | | |
| **VNDA** | **Vanda** | **86.77** | **173** | P | **P** | **12 27 01.5** | **-0.2** | |
| | 1.1nm,0.6s,baz=319,slow=6.4,SNR=10.0 | | | | | | | |
| **ARA0** | **ARCESS Array S** | **87.44** | **340** | *e*P | **P** | **12 27 04.7** | **-0.5** | |
| **ARCES** | **ARCESS Array B** | **87.44** | **340** | P | **P** | **12 27 04.7** | **-0.5** | |
| | 5.7nm,1.0s,baz=74,slow=5.2,SNR=6.6 | | | | | | | |
| **BR101** | **Keskin Array S** | **88.35** | **310** | *e*P | **P** | **12 27 08.9** | **-1.5** | |
| **BRTR** | **Keskin Array B** | **88.35** | **310** | P | **P** | **12 27 08.9** | **-1.5** | |
| | 0.7nm,0.7s,baz=101,slow=4.4,SNR=3.0 | | | | | | | |
| **FIA0** | **FINESS Array S** | **89.11** | **332** | *e*P | **P** | **12 27 12.9** | **-0.3** | |
| **FINES** | **FINESS Array B** | **89.11** | **332** | P | **P** | **12 27 12.9** | **-0.3** | |
| | 0.8nm,0.4s,baz=116,slow=4.4,SNR=4.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **89.64** | **321** | P | **P** | **12 27 14.1** | **-1.9** | |
| | 0.4nm,0.4s,baz=72,slow=3.7,SNR=4.3 | | | | | | | |
| AKASG | | | | pP | **pP** | **12 27 29.8** | **-2.7** | |
| | 1.4nm,0.5s,baz=60,slow=5.7,SNR=5.0 | | | | | | | |
| **AKBB** | **Malin Array Si** | **89.64** | **321** | *e*P | **P** | **12 27 14.1** | **-1.9** | |
| AKBB | | | | *e*pP | **pP** | **12 27 29.8** | **-2.7** | |
| **KOLS** | **Kolonicke sedl** | **94.43** | **320** | *e*P | **P** | **12 27 40.5** | **+2.2** | |
| **NOA** | **NORSAR Array B** | **95.99** | **334** | LR | LR | 13 19 29.8 | | |
| | comp=Z,18nm,20.8s,baz=55,slow=41 | | | | | | | |
| **VYHS** | **Vyhne** | **96.74** | **321** | *e*P | **P** | **12 27 48.5** | **-0.3** | |
| **QSPA** | **South Pole Qui** | **97.09** | **180** | P | Pdif | 12 27 50.1 | 0.0 | |
| | 1.2nm,0.8s,baz=196,slow=1.6,SNR=9.6 | | | | | | | |
| **LTX** | **Lajitas** | **118.91** | **51** | *e*PKPdf | **PKPdf** | **12 33 07.5** | **+0.3** | |
| **TXAR** | **Lajitas Array** | **118.91** | **51** | PKP | **PKPdf** | **12 33 07.5** | **+0.3** | |
| | 0.2nm,0.6s,baz=238,slow=2.7,SNR=5.2 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.43** | **290** | PKP | **PKPdf** | **12 33 14.2** | **0.0** | |
| | 0.4nm,0.4s,baz=23,slow=1.3,SNR=4.3 | | | | | | | |
| TORD | | | | pPKP | **pPKPdf** | **12 33 28.5** | **-2.8** | |
| | 0.6nm,0.6s,baz=49,slow=1.7,SNR=3.6 | | | | | | | |
| **TOA1** | **Torodi Ar. Sit** | **122.43** | **290** | *e*PKPdf | **PKPdf** | **12 33 14.2** | **0.0** | |
| TOA1 | | | | *ep*PKPdf | **pPKPdf** | **12 33 28.5** | **-2.8** | |
| **CFAA** | **Coronel Fontan** | **151.66** | **151** | PKPbc | **PKPbc** | **12 34 14.2** | **+1.2** | |
| | 0.5nm,0.5s,baz=167,slow=2.3,SNR=5.9 | | | | | | | |

*ISCJB* ***29*** *12:20:41.6±0.5,40.34N±0.02×25.80E±0.03,h10km±3km, Error ellipse: s-maj=4.4km s-min=3.7km az=178.4*
*ATH* ***29*** *12:20:41.8,40.33N×25.83E,h26km,MD2.9/8*
*CSEM* ***29*** *12:20:42.1±0.2,40.32N×25.82E,h10km,MD3.0, Error ellipse: s-maj=3.5km s-min=3.2km az=171.0*
*DDA* ***29*** *12:20:42.1,40.29N×25.90E,h7km,Md3.0*
*ISK* ***29*** *12:20:42.1,40.33N×25.88E,h8km,MD3.0*
**ISC 29 12:20:42.2**±0.9**, 40°34N**±0.02×**25°85E**±0.02**, h12**km±6km**, n51**, σ0**°49**/73**, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GADA** | **Gvkgeada** | **0.15** | **166** | PG | **Pg** | **12 20 45.6** | **-0.1** |
| GADA | | | | *e*SG | **Sg** | **12 20 48.2** | **0.0** |
| **GADA** | **Gvkgeada** | **0.15** | **166** | *i* Pg | **Pg** | **12 20 45.6** | **-0.1** |
| GADA | | | | *e*Sg | **Sg** | **12 20 48.2** | **0.0** |
| **SMTH** | **Samothraki Isl** | **0.28** | **299** | *e*PB | **Pg** | **12 20 48.4** | **+0.4** |
| SMTH | | | | *e*SB | **Sb** | **12 20 53.4** | **-0.4** |
| **SMTH** | **Samothraki Isl** | **0.28** | **299** | *e*Pb | **Pg** | **12 20 48.4** | **+0.4** |
| SMTH | | | | *e*Sb | **Sb** | **12 20 53.4** | **-0.4** |
| **GELI** | **Tayfur-Gelibol** | **0.48** | **82** | *e*PG | **Pg** | **12 20 51.6** | **0.0** |
| **GELI** | **Tayfur-Gelibol** | **0.48** | **82** | *e*Pg | **Pg** | **12 20 51.6** | **0.0** |
| **BOZC** | **Bozcaada** | **0.52** | **163** | P | **Pg** | **12 20 52.0** | **-0.3** |
| BOZC | | | | S | **Sb** | **12 21 00.8** | **+0.3** |
| **ALN** | **Alexandroupoli** | **0.58** | **15** | *e*PG | **Pg** | **12 20 53.9** | **+0.3** |
| ALN | | | | *e*SG | **Sb** | **12 21 02.3** | **-0.1** |
| **ALN** | **Alexandroupoli** | **0.58** | **15** | *e*PN | **Pg** | **12 20 53.8** | **+0.3** |
| ALN | | | | *e*SN | **Sb** | **12 21 02.5** | **+0.1** |
| **ALN** | **Alexandroupoli** | **0.58** | **15** | *e*Pg | **Pg** | **12 20 53.9** | **+0.3** |
| ALN | | | | *e*Sg | **Sb** | **12 21 02.3** | **-0.1** |
| **ERIK** | **Erikli-Kesan** | **0.60** | **56** | *e*PG | **Pg** | **12 20 54.0** | **0.0** |
| ERIK | | | | *e*SG | **Sb** | **12 21 02.7** | **-0.4** |
| **ERIK** | **Erikli-Kesan** | **0.60** | **56** | *e*Pg | **Pg** | **12 20 54.0** | **0.0** |
| ERIK | | | | *e*Sg | **Sb** | **12 21 02.7** | **-0.4** |
| **EZN** | **Ezine** | **0.62** | **144** | *e*PG | **Pg** | **12 20 54.1** | **-0.1** |
| **EZN** | **Ezine** | **0.62** | **144** | *e*Pg | **Pg** | **12 20 54.2** | **-0.1** |
| **L

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PB09 | | | | | AML | AML | 12 31 29.3 | |
| | comp=E,6μm,0.4s | | | | | | | |
| **LVC** | **Limon Verde** | **2.99** | **171** | P | **Pn** | | **12 31 05.1** | **+1.8** |
| | comp=E,1μm,0.3s,baz=337,slow=8.6,SNR=108 | | | | | | | |
| LVC | | | | S | **Sn** | | **12 31 40.2** | **+1.5** |
| | comp=E,4μm,0.3s,baz=302,slow=18,SNR=22 | | | | | | | |
| **LPAZ** | **La Paz** | **3.55** | **20** | P | **Pn** | | **12 31 13.7** | **+2.4** |
| | comp=E,0.4nm,0.3s,baz=186,slow=5.3,SNR=10 | | | | | | | |
| LPAZ | | | | LR | LR | | 12 32 10.8 | |
| | comp=E,40nm,22.0s,baz=247,slow=33 | | | | | | | |
| **SIV** | **San Ignacio** | **8.72** | **67** | P | **Pn** | | **12 32 19.5** | **-1.4** |
| | comp=E,4.0nm,0.3s,baz=270,slow=11,SNR=27 | | | | | | | |
| **CPUP** | **Villa Florida** | **12.95** | **123** | P | **Pn** | | **12 33 16.9** | **-0.7** |
| | comp=E,0.1nm,0.3s,baz=318,slow=16,SNR=2.1 | | | | | | | |
| **BDFB** | **Brasilia** | **20.76** | **82** | P | **P** | | **12 34 49.8** | **-0.7** |
| | comp=E,4.9nm,0.4s,baz=240,slow=7.5,SNR=7.1 | | | | | | | |
| **RCBR** | **Riachuelo** | **35.35** | **72** | P | **P** | | **12 37 03.3** | **-0.2** |
| | comp=E,18nm,1.1s,baz=237,slow=11,SNR=6.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **58.86** | **325** | P | **P** | | **12 40 06.1** | **+0.2** |
| | comp=E,0.1nm,0.6s,baz=148,slow=7.3,SNR=2.8 | | | | | | | |
| **SNAA** | **Sanae** | **64.17** | **161** | P | **P** | | **12 40 41.6** | **+0.6** |
| | comp=E,0.5nm,0.8s,baz=277,slow=6.3,SNR=9.7 | | | | | | | |
| **DBIC** | **Dimbokro** | **68.66** | **74** | P | **P** | | **12 41 08.2** | **-2.3** |
| | comp=E,1.0nm,0.4s,baz=237,slow=4.7,SNR=7.6 | | | | | | | |
| DBIC | | | | pP | **PcP** | | **12 41 35.2** | **+0.5** |
| | comp=E,1.8nm,0.5s,baz=249,slow=11,SNR=1.6 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **73.76** | **322** | P | **P** | | **12 41 41.9** | **+0.9** |
| | comp=E,0.2nm,0.3s,baz=158,slow=9.7,SNR=3.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.17** | **71** | P | **P** | | **12 42 00.2** | **-0.5** |
| | comp=E,1.4nm,0.4s,baz=245,slow=5.1,SNR=22 | | | | | | | |
| TORD | | | | pP | **pP** | | **12 42 25.9** | **-0.9** |
| | comp=E,0.8nm,0.7s,baz=254,slow=5.7,SNR=2.3 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **27.17** | **279** | T | T | | 15 08 43.0 | |
| | baz=102,slow=75,SNR=56 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **27.18** | **279** | T | T | | 15 08 41.2 | |
| | baz=102,slow=75,SNR=71 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **27.19** | **279** | T | T | | 15 08 41.9 | |
| | baz=102,slow=75,SNR=63 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hyl** | **27.20** | **280** | T | T | | 15 08 56.6 | |
| | baz=102 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hyl** | **27.22** | **280** | T | T | | 15 08 54.8 | |
| | baz=102 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hyl** | **27.22** | **280** | T | T | | 15 08 56.0 | |
| | baz=102 | | | | | | | |
| **ASAR** | **Alice Springs** | **131.32** | **209** | PKP | **PKPdf** | | **12 49 19.5** | **+0.8** |
| | comp=E,0.5nm,0.6s,baz=73,slow=1.1,SNR=7.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **134.29** | **212** | PKP | **PKPdf** | | **12 49 25.4** | **+1.0** |
| | comp=E,0.2nm,0.8s,baz=157,slow=1.9,SNR=5.8 | | | | | | | |
| **MKAR** | **Makanchi Array** | **144.38** | **34** | PKP | **PKPab** | | **12 49 40.6** | **+0.4** |
| | comp=E,0.4nm,0.8s,baz=313,slow=3.0,SNR=2.8 | | | | | | | |
| **SONM** | **Songino Array** | **151.68** | **6** | PKPbc | **PKPbc** | | **12 49 59.0** | **-1.2** |
| | comp=E,0.7nm,0.7s,baz=356,slow=2.6,SNR=3.5 | | | | | | | |
| SONM | | | | pPKPbc | **pPKPbc** | | **12 50 29.0** | **+1.0** |
| | comp=E,0.5nm,0.4s,baz=345,slow=2.1,SNR=2.8 | | | | | | | |

*NEIC **29** 12:37:20.5, 43.48S×172.18E, h8km, ML3.8(WEL), After WEL.*
*NEIC Felt in Canberra.*

**WEL 29 12:37:20.5±0.1, 43.48S×172.18E, h8km, ML3.8/23, 10C-2D, Error ellipse: s-maj=1.0km s-min=0.9km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| **OXZ** | **Oxford** | **0.19** | **327** | ↑PG | Pg | 12 | 37 24.2 | -0.1 |
| OXZ | | | | SG | Sg | 12 | 37 27.2 | +0.3 |
| **OXZ** | **Oxford** | **0.19** | **327** | ↑Pg | Pg | 12 | 37 24.2 | -0.1 |
| OXZ | | | | Sg | Sg | 12 | 37 27.2 | +0.3 |
| **CRLZ** | **Canterbury Las** | **0.34** | **107** | ↓PG | Pg | 12 | 37 27.5 | +0.4 |
| CRLZ | | | | SG | Sg | 12 | 37 32.4 | +0.9 |
| CRLZ | | | | AML | AML | 12 | 37 33.3 | |
| **CRLZ** | **Canterbury Las** | **0.34** | **107** | ↓Pg | Pg | 12 | 37 27.5 | +0.4 |
| CRLZ | | | | Sg | Sg | 12 | 37 32.4 | +0.9 |
| **MQZ** | **McQueen's Vall** | **0.41** | **124** | ↑PG | Pg | 12 | 37 28.6 | +0.2 |
| MQZ | | | | SG | Sg | 12 | 37 34.7 | +0.8 |
| MQZ | | | | AML | AML | 12 | 37 35.1 | |
| MQZ | | | | AML | AML | 12 | 37 35.2 | |
| **MQZ** | **McQueen's Vall** | **0.41** | **124** | Pg | Pg | 12 | 37 28.6 | +0.2 |
| MQZ | | | | Sg | Sg | 12 | 37 34.7 | +0.8 |
| **LTZ** | **Lake Taylor** | **0.70** | **5** | ↑P* | Pg | 12 | 37 34.5 | +0.4 |
| LTZ | | | | AML | AML | 12 | 37 46.4 | |
| LTZ | | | | AML | AML | 12 | 37 46.5 | |
| **LTZ** | **Lake Taylor** | **0.70** | **5** | ↑P* | Pg | 12 | 37 34.5 | +0.4 |
| **RPZ** | **Rata Peaks** | **0.85** | **254** | ↑P* | Pg | 12 | 37 36.6 | -0.3 |
| RPZ | | | | AML | AML | 12 | 37 50.0 | |
| RPZ | | | | AML | AML | 12 | 37 52.4 | |
| **RPZ** | **Rata Peaks** | **0.85** | **254** | P* | Pg | 12 | 37 36.6 | -0.3 |
| **WVZ** | **Waitaha Valley** | **1.13** | **291** | ↑P* | Pg | 12 | 37 41.5 | -0.6 |
| WVZ | | | | AML | AML | 12 | 38 02.8 | |
| **WVZ** | **Waitaha Valley** | **1.13** | **291** | P* | Pg | 12 | 37 41.5 | -0.6 |
| **KHZ** | **Kahutara** | **1.46** | **44** | ↑PN | Pn | 12 | 37 45.8 | -1.3 |
| KHZ | | | | AML | AML | 12 | 38 14.4 | |
| KHZ | | | | AML | AML | 12 | 38 16.4 | |
| **KHZ** | **Kahutara** | **1.46** | **44** | Pn | Pn | 12 | 37 45.8 | -1.3 |
| **LBZ** | **Lake Benmore** | **1.70** | **237** | PN | Pn | 12 | 37 49.4 | -1.1 |
| LBZ | | | | AML | AML | 12 | 38 14.9 | |
| LBZ | | | | AML | AML | 12 | 38 14.9 | |
| LBZ | | | | AML | AML | 12 | 38 16.9 | |
| LBZ | | | | AML | AML | 12 | 38 17.0 | |
| **LBZ** | **Lake Benmore** | **1.70** | **237** | Pn | Pn | 12 | 37 49.4 | -1.1 |
| **DSZ** | **Denniston Nort** | **1.75** | **351** | PN | Pn | 12 | 37 50.6 | -0.7 |
| DSZ | | | | AML | AML | 12 | 38 17.2 | |
| DSZ | | | | AML | AML | 12 | 38 17.2 | |
| DSZ | | | | AML | AML | 12 | 38 18.4 | |
| **DSZ** | **Denniston Nort** | **1.75** | **351** | Pn | Pn | 12 | 37 50.6 | -0.7 |
| **THZ** | **Tophouse** | **1.80** | **18** | PN | Pn | 12 | 37 50.6 | -1.3 |
| THZ | | | | AML | AML | 12 | 38 23.7 | |
| THZ | | | | AML | AML | 12 | 38 26.9 | |
| **THZ** | **Tophouse** | **1.80** | **18** | Pn | Pn | 12 | 37 50.6 | -1.3 |
| **FOZ** | **Fox Glacier** | **1.81** | **266** | PN | Pn | 12 | 37 50.8 | -1.2 |
| FOZ | | | | AML | AML | 12 | 38 14.4 | |
| FOZ | | | | AML | AML | 12 | 38 14.4 | |
| FOZ | | | | AML | AML | 12 | 38 19.6 | |
| FOZ | | | | AML | AML | 12 | 38 21.3 | |
| **FOZ** | **Fox Glacier** | **1.81** | **266** | Pn | Pn | 12 | 37 50.8 | -1.2 |
| **ODZ** | **Otahua Downs** | **1.91** | **215** | ↑PN | Pn | 12 | 37 51.5 | -1.9 |
| ODZ | | | | AML | AML | 12 | 38 20.9 | |
| ODZ | | | | AML | AML | 12 | 38 28.0 | |
| ODZ | | | | AML | AML | 12 | 38 28.5 | |
| ODZ | | | | AML | AML | 12 | 38 28.5 | |
| **ODZ** | **Otahua Downs** | **1.91** | **215** | Pn | Pn | 12 | 37 51.5 | -1.9 |
| **BSWZ** | **Blackbirch Sta** | **2.17** | **36** | PN | Pn | 12 | 37 56.1 | -0.7 |
| BSWZ | | | | AML | AML | 12 | 38 41.9 | |
| **BSWZ** | **Blackbirch Sta** | **2.17** | **36** | Pn | Pn | 12 | 37 56.1 | -0.7 |
| **TUWZ** | **Tuamarina** | **2.43** | **33** | AML | AML | 12 | 38 51.1 | |
| TUWZ | | | | AML | AML | 12 | 38 51.9 | |
| **NNZ** | **Nelson** | **2.43** | **22** | ↑PN | Pn | 12 | 37 59.8 | -0.6 |
| **NNZ** | **Nelson** | **2.43** | **22** | Pn | Pn | 12 | 37 59.8 | -0.6 |
| **JCZ** | **Jackson Bay** | **2.55** | **255** | PN | Pn | 12 | 38 01.1 | -1.2 |
| JCZ | | | | AML | AML | 12 | 38 52.2 | |
| JCZ | | | | AML | AML | 12 | 38 52.2 | |
| **JCZ** | **Jackson Bay** | **2.55** | **255** | Pn | Pn | 12 | 38 01.1 | -1.2 |
| **WKZ** | **Wanaka** | **2.64** | **238** | PN | Pn | 12 | 38 02.2 | -1.3 |
| WKZ | | | | AML | AML | 12 | 38 50.2 | |
| WKZ | | | | AML | AML | 12 | 38 50.3 | |
| WKZ | | | | AML | AML | 12 | 38 57.6 | |
| WKZ | | | | AML | AML | 12 | 38 57.6 | |
| **WKZ** | **Wanaka** | **2.64** | **238** | Pn | Pn | 12 | 38 02.2 | -1.3 |
| **QRZ** | **Quartz Range** | **2.66** | **6** | AML | AML | 12 | 38 13.1 | |
| QRZ | | | | AML | AML | 12 | 38 56.5 | |
| **EAZ** | **Earnscleugh** | **2.70** | **229** | PN | Pn | 12 | 38 02.8 | -1.5 |
| EAZ | | | | AML | AML | 12 | 38 50.6 | |
| EAZ | | | | AML | AML | 12 | 38 50.6 | |
| EAZ | | | | AML | AML | 12 | 38 51.9 | |
| EAZ | | | | AML | AML | 12 | 38 55.3 | |
| **EAZ** | **Earnscleugh** | **2.70** | **229** | Pn | Pn | 12 | 38 02.8 | -1.5 |
| **PLWZ** | **Palliser** | **2.97** | **51** | PN | Pn | 12 | 38 05.9 | -2.1 |
| **PLWZ** | **Palliser** | **2.97** | **51** | Pn | Pn | 12 | 38 05.9 | -2.1 |
| **TUZ** | **Tuapeka** | **3.07** | **215** | PN | Pn | 12 | 38 07.4 | -1.8 |
| TUZ | | | | AML | AML | 12 | 39 02.4 | |
| TUZ | | | | AML | AML | 12 | 39 02.5 | |
| TUZ | | | | AML | AML | 12 | 39 06.8 | |
| TUZ | | | | AML | AML | 12 | 39 06.8 | |
| **TUZ** | **Tuapeka** | **3.07** | **215** | Pn | Pn | 12 | 38 07.4 | -1.8 |
| **CAW** | **Cannon Point** | **3.20** | **43** | PN | Pn | 12 | 38 08.9 | -2.1 |
| CAW | | | | AML | AML | 12 | 38 48.7 | |
| **CAW** | **Cannon Point** | **3.20** | **43** | Pn | Pn | 12 | 38 08.9 | -2.1 |
| **MSZ** | **Milford Sound** | **3.29** | **247** | AML | AML | 12 | 39 08.8 | |
| MSZ | | | | AML | AML | 12 | 39 13.3 | |
| **MLZ** | **Mavora Lakes** | **3.42** | **236** | AML | AML | 12 | 39 20.1 | |
| **SYZ** | **Scrubby Hill** | **3.74** | **214** | PN | Pn | 12 | 38 17.3 | -1.2 |
| SYZ | | | | AML | AML | 12 | 39 24.4 | |
| SYZ | | | | AML | AML | 12 | 39 27.2 | |
| **SYZ** | **Scrubby Hill** | **3.74** | **214** | Pn | Pn | 12 | 38 17.3 | -1.2 |
| **MRZ** | **Mangatainoka R** | **3.79** | **43** | PN | Pn | 12 | 38 17.0 | -2.1 |
| MRZ | | | | AML | AML | 12 | 39 04.2 | |
| **MRZ** | **Mangatainoka R** | **3.79** | **43** | Pn | Pn | 12 | 38 17.0 | -2.1 |
| **WHZ** | **Wether Hill Ro** | **3.86** | **230** | PN | Pn | 12 | 38 17.5 | -2.7 |
| **WHZ** | **Wether Hill Ro** | **3.86** | **230** | Pn | Pn | 12 | 38 17.5 | -2.7 |
| **KHEZ** | **Kahui Hut** | **4.41** | **19** | *e*PN | Pn | 12 | 38 28.1 | +0.4 |
| **KHEZ** | **Kahui Hut** | **4.41** | **19** | *e*Pn | Pn | 12 | 38 28.1 | +0.4 |
| **APZ** | **The Paps** | **4.47** | **220** | PN | Pn | 12 | 38 26.2 | -2.4 |
| **APZ** | **The Paps** | **4.47** | **220** | Pn | Pn | 12 | 38 26.2 | -2.4 |
| **TKGZ** | **Te Karaka** | **6.62** | **42** | SN | Sn | 12 | 40 06.5 | -7.1 |

*ISCJB **29** 12:41:24.7±0.5, 40.34N±0.02×25.80E±0.04, h10km±4km, Error ellipse: s-maj=5.5km s-min=3.8km az=167.2*
*ISK **29** 12:41:24.8, 40.33N×25.86E, h4km, MD2.5*
*CSEM **29** 12:41:25.4±0.1, 40.32N×25.83E, h10km, MD2.5, Error ellipse: s-maj=3.4km s-min=2.9km az=83.0*
*ATH **29** 12:41:25.1, 40.35N×25.80E, h27km±1km, MD2.7/7*
*DDA **29** 12:41:26.9, 40.26N×25.98E, h4km, Md2.6*

**ISC 29 12:41:25.4±0.8, 40.32N±0.02×25.85E±0.02, h12km±6km, n34, σ0.938/55, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| **GADA** | **Gvkgeada** | **0.14** | **164** | *e*PG | **Pg** | **12** | **41 28.5** | **-0.3** |
| GADA | | | | *e*SG | **Sg** | **12** | **41 31.3** | **+0.1** |
| **GADA** | **Gvkgeada** | **0.14** | **164** | *e*Pg | **Pg** | **12** | **41 28.5** | **-0.3** |
| GADA | | | | *e*Sg | **Sg** | **12** | **41 31.3** | **+0.1** |
| **SMTH** | **Samothraki Isl** | **0.28** | **301** | *e*PB | **Pg** | **12** | **41 31.5** | **+0.2** |
| SMTH | | | | *e*SB | **Sg** | **12** | **41 35.9** | **+0.7** |
| **SMTH** | **Samothraki Isl** | **0.28** | **301** | *e*Pb | **Pg** | **12** | **41 31.5** | **+0.2** |
| SMTH | | | | *e*Sb | **Sg** | **12** | **41 35.9** | **+0.7** |
| **GELI** | **Tayfur-Gelibol** | **0.48** | **81** | *e*PG | **Pg** | **12** | **41 34.8** | **-0.1** |
| **GELI** | **Tayfur-Gelibol** | **0.48** | **81** | *e*Pg | **Pg** | **12** | **41 34.8** | **-0.1** |
| **BOZC** | **Bozcaada** | **0.51** | **162** | P | **Pg** | **12** | **41 35.0** | **-0.3** |
| BOZC | | | | S | **Sg** | **12** | **41 42.6** | **+0.6** |
| **ALN** | **Alexandroupoli** | **0.59** | **15** | *e*PG | **Pg** | **12** | **41 36.3** | **-0.7** |
| ALN | | | | *e*SG | **Sb** | **12** | **41 45.5** | **-0.5** |
| **ALN** | **Alexandroupoli** | **0.59** | **15** | *e*PN | **Pg** | **12** | **41 37.1** | **+0.1** |
| ALN | | | | *e*SN | **Sb** | **12** | **41 45.7** | **-0.3** |
| **ALN** | **Alexandroupoli** | **0.59** | **15** | *e*Pg | **Pg** | **12** | **41 36.3** | **-0.7** |
| **ALN** | **Alexandroupoli** | **0.59** | **15** | *e*Pn | **Pg** | **12** | **41 37.1** | **+0.1** |
| ALN | | | | *e*Sg | **Sb** | **12** | **41 45.5** | **-0.5** |
| ALN | | | | *e*Sn | **Sb** | **12** | **41 45.7** | **-0.3** |
| **ERIK** | **Erikli-Kesan** | **0.61** | **55** | *e*PG | **Pg** | **12** | **41 37.4** | **0.0** |
| ERIK | | | | *e*SG | **Sb** | **12** | **41 46.1** | **-0.5** |
| **ERIK** | **Erikli-Kesan** | **0.61** | **55** | *e*Pg | **Pg** | **12** | **41 37.4** | **0.0** |
| ERIK | | | | *e*Sg | **Sb** | **12** | **41 46.1** | **-0.5** |
| **EZN** | **Ezine** | **0.62** | **144** | *e*PG | **Pg** | **12** | **41 37.1** | **-0.3** |
| **EZN** | **Ezine** | **0.62** | **144** | *e*Pg | **Pg** | **12** | **41 37.1** | **-0.3** |
| **LIA** | **Limnos Island** | **0.67** | **230** | *e*PN | **Pb** | **12** | **41 38.7** | **-0.2** |
| LIA | | | | *e*SN | **Sb** | **12** | **41 48.0** | **0.0** |
| **LIA** | **Limnos Island** | **0.67** | **230** | *e*Pn | **Pb** | **12** | **41 38.7** | **-0.2** |
| LIA | | | | *e*Sn | **Sb** | **12** | **41 48.0** | **0.0** |
| **SIGR** | **SIGRI** | **1.11** | **180** | *e*PN | **Pg** | **12** | **41 46.9** | **+0.1** |
| **SIGR** | **SIGRI** | **1.11** | **180** | *e*PN | **Pb** | **12** | **41 46.5** | **0.0** |
| SIGR | | | | *e*SN | **Sn** | **12** | **42 02.1** | **+0.2** |
| **SIGR** | **SIGRI** | **1.11** | **180** | *e*Pn | **Pg** | **12** | **41 46.9** | **+0.1** |
| SIGR | | | | *e*Sn | **Sn** | **12** | **42 02.1** | **+0.2** |
| **PRK** | **Paraskevi** | **1.12** | **163** | *e*PN | **Pg** | **12** | **41 47.0** | **0.0** |
| PRK | | | | *e*SN | **Sn** | **12** | **42 03.1** | **+0.9** |
| **PRK** | **Paraskevi** | **1.12** | **163** | *e*Pn | **Pg** | **12** | **41 47.0** | **0.0** |
| PRK | | | | *e*Sn | **Sn** | **12** | **42 03.1** | **+0.9** |
| **AYVA** | **Ayvalik** | **1.20** | **147** | *i* P | **Pn** | **12** | **41 47.7** | **-0.3** |
| AYVA | | | | *i* S | **Sb** | **12** | **42 03.4** | **-0.1** |
| **AYVA** | **Ayvalik** | **1.20** | **147** | P | **Pn** | **12** | **41 47.7** | **-0.3** |
| AYVA | | | | S | **Sb** | **12** | **42 03.4** | **-0.1** |
| **OUR** | **Ouranopolis** | **1.43** | **271** | *e*PN | **Pn** | **12** | **41 50.3** | **-0.8** |
| **OUR** | **Ouranopolis** | **1.43** | **271** | *e*Pn | **Pn** | **12** | **41 50.3** | **-0.8** |
| **GONE** | **Gonen-Balikesi** | **1.43** | **101** | *e*PN | **Pb** | **12** | **41 52.3** | **+0.3** |
| **GONE** | **Gonen-Balikesi** | **1.43** | **101** | *e*Pn | **Pb** | **12** | **41 52.3** | **+0.3** |
| **BALY** | **Balya** | **1.48** | **113** | *i* P | **Pn** | **12** | **41 52.1** | **+0.3** |
| BALY | | | | *i* S | **Sg** | **12** | **42 12.9** | **-0.1** |
| **BALY** | **Balya** | **1.48** | **113** | P | **Pn** | **12** | **41 52.1** | **+0.3** |
| BALY | | | | S | **Sg** | **12** | **42 12.9** | **-0.1** |
| **NVR** | **Nevrokopi** | **1.82** | **305** | *e*PN | **Pn** | **12** | **41 56.5** | **-0.1** |
| **NVR** | **Nevrokopi** | **1.82** | **305** | *e*Pn | **Pn** | **12** | **41 56.5** | **-0.1** |
| **CHOS** | **Chios island** | **1.94** | **175** | *e*PN | **Pb** | **12** | **42 00.2** | **-0.4** |
| **CHOS** | **Chios island** | **1.94** | **175** | *e*Pn | **Pb** | **12** | **42 00.3** | **-0.4** |

**GUC 29 12:44:19.3±0.7, 35.35S×72.65W, h26km±9km, ML3.5, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| **COCH** | **Cobquecura** | **0.79** | **188** | *e*P | Pb | 12 | 44 33.9 | -0.5 |
| COCH | | | | *e*S | Sb | 12 | 44 44.5 | -0.3 |
| COCH | | | | AML | AML | 12 | 44 46.9 | |
| | comp=E,3μm,0.5s | | | | | | | |
| **TALC** | **Talca** | **0.83** | **94** | *e*P | Pb | 12 | 44 34.5 | -0.6 |
| TALC | | | | *e*S | Sb | 12 | 44 45.6 | -0.3 |
| **CHPI** | **Pichilemu** | **1.09** | **29** | *e*P | Pn | 12 | 44 38.6 | -0.4 |
| CHPI | | | | *e*S | Sn | 12 | 44 52.9 | -0.2 |
| **NICH** | **Los Niches** | **1.21** | **74** | *e*P | Pn | 12 | 44 40.7 | +0.1 |
| NICH | | | | *e*S | Sb | 12 | 44 56.7 | -0.2 |
| NICH | | | | AML | AML | 12 | 45 00.9 | |
| | comp=N,3μm,0.6s | | | | | | | |
| **CCHI** | **Chillan** | **1.34** | **160** | *e*P | Pb | 12 | 44 43.4 | -0.3 |
| CCHI | | | | *e*S | Sb | 12 | 45 00.9 | +0.5 |
| CCHI | | | | AML | AML | 12 | 45 05.7 | |
| | comp=E,926nm,0.2s | | | | | | | |
| **LNV** | **Longovilo** | **1.72** | **37** | *e*P | Pn | 12 | 44 48.6 | +1.0 |
| **ANTU** | **Antumapu** | **2.43** | **44** | AML | AML | 12 | 45 36.3 | |
| | comp=E,264nm,0.5s | | | | | | | |
| **CLCH** | **Cerro Calan** | **2.61** | **43** | *e*P | Pn | 12 | 45 02.7 | +2.7 |
| CLCH | | | | *e*S | Sb | 12 | 45 36.0 | -1.4 |
| CLCH | | | | AML | AML | 12 | 45 48.3 | |
| | comp=N,300nm,0.3s | | | | | | | |
| **PEL** | **Peldehue** | **2.73** | **37** | AML | AML | 12 | 45 51.6 | |
| | comp=E,282nm,0.4s | | | | | | | |

**IDC 29 12:50:29.2±1.8, 6.91S×128.93E, h0km, mb3.8/2, mb1 3.8/4, mb1mx3.4/34, mbtmp3.6/4, ML3.7/2, Error ellipse: s-maj=142.7km s-min=29.8km az=67.0, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| **WRA** | **Warramunga Arr** | **13.98** | **158** | Pn | Pn | 12 | 53 48.4 | -0.4 |
| | 0.5nm,0.3s,baz=341,slow=13,SNR=24 | | | | | | | |
| WRA | | | | Sn | Sn | 12 | 56 07.3 | -18 |
| | 1.2nm,0.3s,baz=334,slow=22,SNR=10.0 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.33** | **165** | P | Pn | 12 | 54 33.1 | +0.3 |
| | 0.1nm,0.3s,baz=336,slow=9.5,SNR=6.8 | | | | | | | |
| ASAR | | | | S | Sn | 12 | 57 29.9 | -17 |
| | 0.3nm,0.3s,baz=341,slow=24,SNR=4.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **67.57** | **327** | P | P | 13 | 01 27.9 | +0.3 |
| | 0.2nm,0.3s,baz=115,slow=8.2,SNR=7.4 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.88** | **329** | P | P | 13 | 01 53.8 | -0.3 |
| | 1.0nm,0.3s,baz=134,slow=5.3,SNR=5.7 | | | | | | | |

**OTT 29 12:58:22.1±0.7, 78.43N×95.88W, h18km, ML3.5/5, 270km southwest from Eureka, Nu 173km east from Isachsen, Nu Sverdrup Seismic Zone., Queen Elizabeth Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| **EUNU** | **Eureka** | **2.41** | **43** | PN | Pn | 12 | 59 01.3 | +0.6 |
| EUNU | | | | SN | Sn | 12 | 59 30.7 | +0.9 |
| EUNU | | | | Trac | | 12 | 59 33.5 | |
| | comp=Z,21nm,0.3s | | | | | | | |
| **RES** | **Resolute Bay** | **3.77** | **176** | PN | Pn | 12 | 59 19.1 | -0.1 |
| RES | | | | SN | Sn | 13 | 00 02.5 | -0.5 |
| RES | | | | LG | Lg | 13 | 00 20.9 | |
| RES | | | | Trac | | 13 | 00 36.4 | |
| | comp=Z,78nm,1.0s | | | | | | | |
| **GIFN** | **Gifford Fjord,** | **9.27** | **148** | PN | Pn | 13 | 00 32.4 | -2.3 |
| GIFN | | | | SN | Sn | 13 | 02 11.6 | -6.7 |
| GIFN | | | | Trac | | 13 | 02 16.5 | |
| | comp=Z,4.8nm,0.5s | | | | | | | |
| **ILON** | **Igloolik, Nuna** | **9.85** | **150** | PN | Pn | 13 | 00 40.5 | -2.1 |
| ILON | | | | SN | Sn | 13 | 02 25.0 | -7.5 |
| ILON | | | | Trac | | 13 | 02 30.2 | |
| | comp=Z,5.2nm,0.7s | | | | | | | |
| **SMLN** | **Simpson Lake,** | **9.95** | **172** | PN | Pn | 13 | 00 41.9 | -2.0 |
| SMLN | | | | SN | Sn | 13 | 02 28.4 | -6.4 |
| SMLN | | | | Trac | | 13 | 02 31.4 | |
| | comp=Z,1.3nm,0.3s | | | | | | | |
| **KUGN** | **Kugaaruk Camp,** | **10.52** | **168** | PN | Pn | 13 | 00 49.8 | -1.9 |
| KUGN | | | | SN | Sn | 13 | 02 40.5 | -8.3 |
| KUGN | | | | Trac | | 13 | 02 41.1 | |
| | comp=Z,5.4nm,1.1s | | | | | | | |
| **KUKN** | **Kugluktuk,NWT** | **11.91** | **217** | PN | Pn | 13 | 01 01.3 | -9.4 |
| KUKN | | | | SN | Sn | 13 | 03 13.8 | -9.1 |
| **DHRN** | **Dharma Camp** | **13.24** | **223** | PN | Pn | 13 | 01 26.9 | -1.9 |
| DHRN | | | | SN | Sn | 13 | 03 48.5 | -6.7 |

**JMA 29 12:58:48.8±0.1, 36.60N×140.72E, h89km±1km, M3.4, 5D Broadband fault plane solution: P waves. NP1:** $\phi_s$175.00000°, δ72.00000°, λ-100.00000°. **NP2:** $\phi_s$25.00000°, δ21.00000°, λ-61.00000°. **Principal axes:** T Plg26.0000°, Azm273.0000°; N Plg10.0000°, Azm178.0000°; P Plg62.0000°, Azm69.0000°; **Near east coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| **JHO** | **Hitachi** | **0.12** | **275** | ↓P | Pn | 12 | 59 01.6 | +0.2 |
| JHO | | | | S | Sn | 12 | 59 11.0 | +0.2 |
| **JFK** | **Kawauchi** | **0.78** | **9** | ↓P | Pn | 12 | 59 05.8 | -0.2 |
| JFK | | | | S | Sn | 12 | 59 18.2 | -0.7 |
| **JFT** | **Otama** | **0.97** | **342** | ↓P | Pn | 12 | 59 08.2 | +0.1 |
| JFT | | | | S | Sn | 12 | 59 22.6 | +0.1 |
| **JAG** | **Ashikaga** | **1.03** | **261** | ↓P | Pn | 12 | 59 09.1 | +0.3 |
| JAG | | | | S | Sn | 12 | 59 24.1 | +0.2 |
| **JFY** | **Yanaizu** | **1.14** | **315** | ↓P | Pn | 12 | 59 10.5 | +0.4 |
| JFY | | | | S | Sn | 12 | 59 27.3 | +1.1 |
| **JKT** | **Katashina** | **1.19** | **278** | P | Pn | 12 | 59 11.3 | +0.5 |
| JKT | | | | S | Sn | 12 | 59 28.7 | +1.3 |
| **JMM** | **Marumori** | **1.27** | **3** | P | Pn | 12 | 59 11.1 | -0.5 |
| JMM | | | | S | Sn | 12 | 59 27.8 | -0.9 |
| **JHK** | **Hiroka** | **1.51** | **296** | P | Pn | 12 | 59 15.1 | +0.5 |
| **MAT** | **Matsushiro** | **2.02** | **269** | P | Pn | 12 | 59 22.3 | +1.0 |
| MAT | | | | S | Sn | 12 | 59 47.9 | +1.8 |

*ISK **29** 13:04:38.4, 39.28N×36.46E, h15km, MD2.5*
*ISCJB **29** 13:04:39.1±0.5, 39.28N±0.03×36.48E±0.04, h11km±5km, Error ellipse: s-maj=5.1km s-min=4.8km az=169.8*
*DDA **29** 13:04:39.0, 39.30N×36.51E, h17km, Md2.6*
*CSEM **29** 13:04:40.1±0.5, 39.31N×36.45E, h20km, MD2.5, Error ellipse: s-maj=13.8km s-min=11.0km az=93.0*

**ISC 29 13:04:39.6±0.9, 39.28N±0.03×36.49E±0.02, h11km±7km, n19, σ1.924/34, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m s | ISC |
| **CUALT** | **Altinyayla-SIV** | **0.21** | **91** | P | **Pg** | **13** | **04 43.5** | **-0.6** |
| CUALT | | | | S | **Sg** | **13** | **04 48.4** | **+1.1** |
| **CUSAR** | **Sarkisla-SIVAS** | **0.23** | **307** | P | **Pg** | **13** | **04 44.3** | **-0.3** |
| CUSAR | | | | S | **Sg** | **13** | **04 48.9** | **+0.9** |
| **PINB** | **Pinarbasi** | **0.60** | **186** | *i* P | **Pg** | **13** | **04 50.9** | **-0.5** |
| PINB | | | | *i* S | **Sb** | **13** | **05 01.1** | **+0.2** |
| **PINB** | **Pinarbasi** | **0.60** | **186** | P | **Pg** | **13** | **04 50.9** | **-0.5** |
| PINB | | | | S | **Sb** | **13** | **05 01.1** | **+0.2** |
| **SVSK** | **Karacayir** | **0.75** | **32** | *e*PG | **Pg** | **13** | **04 53.5** | **-0.6** |
| SVSK | | | | *e*SG | **Sb** | **13** | **05 04.6** | **-0.2** |
| **SVSK** | **Karacayir** | **0.75** | **32** | *e*Pg | **Pg** | **13** | **04 53.5** | **-0.6** |
| SVSK | | | | *e*Sg | **Sb** | **13** | **05 04.6** | **-0.2** |
| **CUKAN** | **kangal_SIVAS** | **0.76** | **87** | P | **Pg** | **13** | **04 53.5** | **-0.9** |
| CUKAN | | | | S | **Sb** | **13** | **05 05.1** | **-0.2** |
| **SARI** | **SarD1z-Kayseri** | **0.87** | **184** | *e*PG | **Pg** | **13** | **04 55.7** | **-0.7** |
| SARI | | | | *e*SG | **Sb** | **13** | **05 08.3** | **-0.2** |
| **YOZ** | **Yozgat** | **0.97** | **292** | *e*PG | **Pb** | **13** | **04 57.2** | **-1.3** |
| **YOZ** | **Yozgat** | **0.97** | **292** | *e*Pg | **Pb** | **13** | **04 57.2** | **-1.3** |
| **DARE** | **Darende-Malaty** | **1.05** | **132** | *e*PG | **Pb** | **13** | **04 59.3** | **-0.5** |
| DARE | | | | *e*SG | **Sn** | **13** | **05 14.5** | **-0.4** |
| **DARE** | **

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 718nm,0.9s,48μm | | | | | | | |
| **LAMP** | **Lampang** | **22.08** | **0** | P | | **P** | **13 18 33.1** | **+3.0** |
| | 6.2nm,0.9s | | | | | | | |
| **CMMT** | **Chiang Mai** | **22.38** | **358** | P | | **P** | **13 18 33.5** | **+0.2** |
| | 9.3nm,1.2s | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.38** | **358** | P | | **P** | **13 18 33.6** | **+0.3** |
| | 41nm,0.8s | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.38** | **358** | *eP* | | **P** | **13 18 30.4** | **-2.9** |
| | 8.2nm,0.9s | | | | | | | |
| **SLVN** | **Son La** | **25.24** | **10** | *eP* | | **P** | **13 19 00.5** | **-0.6** |
| | 7.4nm,0.6s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.21** | **261** | T | | T | 13 48 48.2 | |
| | baz=82,slow=75,SNR=89 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.21** | **261** | T | | T | 13 48 50.4 | |
| | baz=82,slow=75,SNR=56 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.23** | **261** | T | | T | 13 48 49.6 | |
| | baz=82,slow=75,SNR=75 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.85** | **158** | T | | T | 13 56 35.0 | |
| | baz=336,slow=76,SNR=20 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.86** | **158** | T | | T | 13 56 36.0 | |
| | baz=336,slow=76,SNR=22 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.87** | **158** | T | | T | 13 56 38.4 | |
| | baz=336,slow=76,SNR=19 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.55** | **118** | P | | **P** | **13 20 49.3** | **-0.2** |
| | 1.3nm,0.6s,baz=303,slow=9.0,SNR=23 | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.56** | **118** | *eP* | | **P** | **13 20 48.9** | **-0.6** |
| | 2.6nm,0.6s | | | | | | | |
| **XAN** | **Xi'an** | **38.56** | **13** | P | | **P** | **13 20 57.3** | **-0.5** |
| XAN | | | | pP | | pP | 13 21 08.5 | +7.6 |
| XAN | | | | PMZ | | | | |
| | 11nm,0.9s | | | | | | | |
| **ASAR** | **Alice Springs** | **38.65** | **124** | P | | **P** | **13 20 59.1** | **+0.4** |
| | 0.8nm,0.6s,baz=297,slow=7.2,SNR=12 | | | | | | | |
| **CTA** | **Charters Tower** | **48.30** | **114** | P | | **P** | **13 22 17.8** | **+1.1** |
| | 2.9nm,0.8s,baz=84,slow=19,SNR=2.2 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.67** | **30** | P | | **P** | **13 22 19.3** | **+0.2** |
| **KSRS** | **Korea Array** | **48.70** | **30** | P | | **P** | **13 22 19.3** | **0.0** |
| | 6.2nm,0.8s,baz=224,slow=8.2,SNR=16 | | | | | | | |
| KSRS | | | | LR | | LR | 13 46 06.2 | |
| | comp=Z,26nm,18.1s,baz=305,slow=40 | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.21** | **338** | *eP* | | **P** | **13 22 36.0** | **-2.7** |
| | 8.2nm,1.1s | | | | | | | |
| **AAK** | **Ala-Archa** | **51.40** | **336** | P | | **P** | **13 22 40.4** | **+0.3** |
| | 0.5nm,0.3s,baz=130,slow=5.2,SNR=3.6 | | | | | | | |
| **SONM** | **Songino Array** | **51.67** | **6** | P | | **P** | **13 22 42.7** | **+0.8** |
| | 9.1nm,0.7s,baz=190,slow=8.9,SNR=54 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.77** | **6** | *eP* | | **P** | **13 22 40.0** | **-2.7** |
| | 8.2nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.54** | **345** | P | | **P** | **13 22 48.6** | **+0.3** |
| | 4.3nm,0.7s,baz=150,slow=8.7,SNR=29 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.87** | **39** | P | | **P** | **13 22 56.5** | **-1.7** |
| | 2.2nm,0.9s,baz=210,slow=7.0,SNR=4.4 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.85** | **28** | P | | **P** | **13 23 12.7** | **+0.2** |
| | 8.5nm,0.7s,baz=227,slow=6.2,SNR=21 | | | | | | | |
| **GEYT** | **Alibeck** | **56.47** | **321** | P | | **P** | **13 23 17.5** | **+0.5** |
| | 1.5nm,0.5s,baz=14,slow=5.7,SNR=3.4 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.05** | **344** | P | | **P** | **13 23 20.6** | **-0.2** |
| | 2.0nm,0.2s,baz=164,slow=6.7,SNR=9.0 | | | | | | | |
| **KURK** | **Kurchatov** | **57.11** | **344** | P | | **P** | **13 23 20.6** | **-0.6** |
| | 0.4nm,0.9s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.75** | **350** | P | | **P** | **13 23 32.6** | **-0.1** |
| | 4.7nm,0.4s,baz=181,slow=5.0,SNR=31 | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.62** | **340** | P | | **P** | **13 23 51.6** | **-0.8** |
| | 2.6nm,0.7s,baz=132,slow=8.9,SNR=13 | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.92** | **332** | *eP* | | **P** | **13 23 59.7** | **-1.5** |
| | 4.6nm,0.9s | | | | | | | |
| **ASF** | **Jabal al Asfar** | **69.22** | **306** | P | | **P** | **13 24 42.5** | **+0.3** |
| | 1.2nm,0.4s,baz=256,slow=18,SNR=2.7 | | | | | | | |
| **KBZ** | **Khabaz** | **69.30** | **320** | P | | **P** | **13 24 42.1** | **-0.2** |
| | 4.4nm,1.0s,baz=78,slow=4.5,SNR=5.2 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.14** | **313** | P | | **P** | **13 25 11.1** | **-0.7** |
| | 1.7nm,0.7s,baz=135,slow=5.8,SNR=6.8 | | | | | | | |
| **BOSA** | **Boshof** | **74.46** | **241** | LR | | LR | 13 54 25.8 | |
| | comp=Z,20nm,18.9s,baz=163,slow=33 | | | | | | | |
| **SEY** | **Seymchan** | **77.36** | **22** | P | | **P** | **13 25 29.6** | **+0.1** |
| | 1.4nm,0.4s,baz=258,slow=9.3 | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **84.45** | **320** | *eP* | | **P** | **13 26 08.8** | **+1.1** |
| **FINES** | **FINESS Array B** | **85.40** | **332** | P | | **P** | **13 26 12.1** | **-0.1** |
| | 1.1nm,0.8s,baz=113,slow=3.6,SNR=6.9 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.91** | **340** | P | | **P** | **13 26 24.7** | **+0.4** |
| | 3.7nm,0.8s,baz=106,slow=5.7,SNR=4.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **116.11** | **17** | PKP | | **PKPdf** | **13 32 18.5** | **+0.6** |
| | 2.5nm,0.8s,baz=323,slow=3.1,SNR=3.5 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.73** | **27** | *e*PKPdf | | PKPbc | 13 33 10.8 | -0.5 |
| **TXAR** | **Lajitas Array** | **146.31** | **38** | PKPbc | | **PKPab** | **13 33 17.1** | **-0.2** |
| | 2.5nm,0.7s,baz=291,slow=1.5,SNR=28 | | | | | | | |
| **JCT** | **Junction City** | **147.69** | **32** | *e*PKPbc | | **PKPbc** | **13 33 20.6** | **+0.3** |

**IDC 29 13:19:48.3±2.8,7°56S×129°06E,h0km,mb3.4/1, mb1 3.4/3,mb1mx3.2/34,mbtmp3.2/3,ML3.2/1,Error ellipse: s-maj=293.6km s-min=32.0km az=67.0,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **13.33** | **158** | Pn | | 13 22 58.1 | -0.9 |
| | 0.1nm,0.3s,baz=334,slow=13,SNR=5.3 | | | | | | |
| WRA | | | | Sn | | 13 25 17.4 | -11 |
| | 0.6nm,0.3s,baz=337,slow=20,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **16.67** | **164** | Pn | | 13 23 44.5 | +0.9 |
| | baz=350,slow=10,SNR=2.7 | | | | | | |
| ASAR | | | | Sn | | 13 26 36.3 | -13 |
| | 0.1nm,0.3s,baz=345,slow=25,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.19** | **327** | P | | 13 30 50.6 | 0.0 |
| | 0.2nm,0.5s,baz=127,slow=7.4,SNR=3.2 | | | | | | |

*IDC 29 13:22:17.7±0.8,13°29N×145°77E,h0km,mb4.1/20, mb1 4.3/20,mb1mx4.1/41,mbtmp4.1/20,MS3.6/9, Ms1 3.6/9,ms1mx3.2/31,Error ellipse: s-maj=24.6km s-min=17.5km az=100.0*
*NEIC 29 13:22:19.2±0.5,13°31N×145°72E,h10km,mb4.0/2,Error ellipse: s-maj=16.7km s-min=9.0km az=95.0*
*ISCJB 29 13:22:22.5±0.6,13°30N±0°08×145°6E±0°1,h45km, mb4.1/23,MS3.6/9,Error ellipse: s-maj=20.7km s-min=11.0km az=3.0*
**ISC 29 13:22:24.2±0.8,13°3N±0°1×145°7E±0°2,h45km,n31, σ0s81/28,mb4.1/23,MS3.6/9,Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **24.11** | **345** | P | | **P** | **13 27 34.6** | **-1.1** |
| | 1.3nm,0.4s,baz=259,slow=8.9,SNR=8.9 | | | | | | | |
| **MAJO** | **Matsushiro** | **24.11** | **345** | *eP* | | **P** | **13 27 34.4** | **-1.4** |
| | 2.7nm,0.6s | | | | | | | |
| **MAT** | **Matsushiro** | **24.11** | **345** | P | | **P** | **13 27 35.6** | **-0.2** |
| **KSRS** | **Korea Array** | **28.83** | **330** | P | | **P** | **13 28 17.7** | **-0.5** |
| | 0.8nm,0.6s,baz=140,slow=8.2,SNR=3.5 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **28.84** | **330** | P | | **P** | **13 28 17.7** | **-0.6** |
| **USRK** | **Ussuriysk Ar.** | **32.97** | **342** | P | | **P** | **13 28 54.7** | **+0.1** |
| | 0.8nm,0.5s,baz=183,slow=9.5,SNR=3.7 | | | | | | | |
| **WRAB** | **Tennant Creek** | **34.86** | **199** | *eP* | | **P** | **13 29 11.3** | **0.0** |
| | 1.6nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.87** | **199** | P | | **P** | **13 29 11.5** | **+0.1** |
| | 1.1nm,0.8s,baz=21,slow=9.6,SNR=4.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.51** | **198** | P | | **P** | **13 29 41.4** | **-1.0** |
| | 0.3nm,0.7s,baz=21,slow=11,SNR=4.6 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **40.85** | **11** | P | | **P** | **13 30 01.4** | **-0.1** |
| | 3.8nm,0.8s,baz=115,slow=19,SNR=3.1 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.18** | **283** | P | | **P** | **13 30 36.8** | **-0.3** |
| | 1.4nm,0.7s,baz=84,slow=5.6,SNR=11 | | | | | | | |
| CMAR | | | | LR | | LR | 13 50 18.0 | |
| | comp=Z,63nm,18.2s,baz=102,slow=37 | | | | | | | |
| **SONM** | **Songino Array** | **47.45** | **325** | P | | **P** | **13 30 54.5** | **-0.1** |
| | 0.4nm,0.3s,baz=121,slow=7.9,SNR=4.5 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **13 32 25.4** | **+0.9** |
| | 0.5nm,0.6s,baz=159,slow=3.7,SNR=2.5 | | | | | | | |
| **SEY** | **Seymchan** | **49.79** | **4** | P | | **P** | **13 31 12.1** | **-0.1** |
| | 2.2nm,0.8s,baz=223,slow=21,SNR=4.0 | | | | | | | |
| **MKAR** | **Makanchi Array** | **62.27** | **316** | P | | **P** | **13 32 42.4** | **+0.7** |
| | 3.0nm,0.6s,baz=91,slow=8.4,SNR=30 | | | | | | | |
| MKAR | | | | LR | | LR | 14 00 15.0 | |
| | comp=Z,30nm,18.6s,baz=83,slow=36 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **62.34** | **324** | P | | **P** | **13 32 41.6** | **-0.3** |
| | 0.5nm,0.4s,baz=76,slow=6.1,SNR=2.7 | | | | | | | |
| **KURK** | **Kurchatov** | **65.34** | **320** | P | | **P** | **13 33 02.2** | **+0.5** |
| **KURBB** | **Kurchatov Arra** | **65.38** | **320** | P | | **P** | **13 33 02.2** | **+0.2** |
| | 4.0nm,0.6s,baz=102,slow=6.5,SNR=36 | | | | | | | |
| **ILAR** | **Eielson Array** | **68.48** | **25** | P | | **P** | **13 33 21.0** | **-0.5** |
| | 1.1nm,0.5s,baz=250,slow=5.8,SNR=35 | | | | | | | |
| ILAR | | | | LR | | LR | 14 01 49.9 | |
| | comp=Z,33nm,20.4s,baz=283,slow=35 | | | | | | | |
| **BVAR** | **Borovoye Array** | **70.67** | **322** | P | | **P** | **13 33 35.4** | **+0.2** |
| | 1.5nm,0.4s,baz=101,slow=7.8,SNR=12 | | | | | | | |
| **PPT** | **Papeete** | **70.84** | **114** | LR | | LR | 13 59 29.1 | |
| | comp=Z,57nm,21.3s,baz=342,slow=32 | | | | | | | |
| **ABKAR** | **Akbulak array** | **77.31** | **318** | *eP* | | **P** | **13 34 12.9** | **-1.1** |
| | 5.7nm,0.6s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **78.42** | **319** | P | | **P** | **13 34 22.4** | **+2.1** |
| | 1.1nm,0.5s,baz=79,slow=16,SNR=2.5 | | | | | | | |
| **GEYT** | **Alibeck** | **80.09** | **307** | P | | **P** | **13 34 30.9** | **+1.2** |
| | 1.4nm,0.4s,baz=190,slow=7.3,SNR=3.3 | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **82.44** | **49** | LR | | LR | 14 07 36.7 | |
| | comp=Z,32nm,18.2s,baz=258,slow=33 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **82.74** | **27** | P | | **P** | **13 34 43.5** | **+0.4** |
| | 1.2nm,0.5s,baz=138,slow=45,SNR=3.4 | | | | | | | |
| **NEW** | **Newport** | **84.90** | **42** | LR | | LR | 14 08 25.4 | |
| | comp=Z,28nm,19.9s,baz=290,slow=33 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **86.46** | **52** | P | | **P** | **13 35 03.4** | **+0.7** |
| | 0.7nm,0.6s,baz=266,slow=9.0,SNR=5.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.61** | **342** | P | | **P** | **13 35 06.3** | **-1.1** |
| | 2.8nm,0.8s,baz=36,slow=8.0,SNR=4.6 | | | | | | | |
| ARCES | | | | LR | | LR | 14 18 04.8 | |
| | comp=Z,30nm,18.8s,baz=16,slow=38 | | | | | | | |
| **FINES** | **FINESS Array B** | **91.77** | **335** | P | | **P** | **13 35 26.4** | **-0.6** |
| | 2.7nm,0.5s,baz=80,slow=5.0,SNR=18 | | | | | | | |
| FINES | | | | LR | | LR | 14 18 49.8 | |
| | comp=Z,26nm,18.5s,baz=32,slow=37 | | | | | | | |
| **NOA** | **NORSAR Array B** | **97.61** | **339** | LR | | LR | 14 21 21.9 | |
| | comp=Z,19nm,22.0s,baz=285,slow=36 | | | | | | | |
| **DBIC** | **Dimbokro** | **144.67** | **302** | PKP | | **PKPdf** | **13 41 56.6** | **-0.5** |
| | 11nm,0.7s,baz=49,slow=2.9,SNR=17 | | | | | | | |

**NNC 29 13:27:00.6±2.7,36°98N×70°55E,h0km,mb3.5,mpv3.1, 6C-4D,Error ellipse: s-maj=21.9km s-min=9.8km az=0.0, Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.28** | **324** | ⇓P | | Pn | 13 27 40.3 | +0.7 |
| | 1.8nm,0.3s | | | | | | | |
| DZET | | | | ⇑S | | Sn | 13 28 09.6 | +1.1 |
| | 46nm,0.5s | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.82** | **37** | ⇓P | | Pn | 13 28 00.5 | -0.5 |
| | 2.9nm,0.3s | | | | | | | |
| SFK | | | | ⇓S | | Sn | 13 28 49.3 | +2.5 |
| | 3.7nm,0.2s | | | | | | | |
| **MNAS** | **Manas** | **5.71** | **15** | ⇑P | | Pn | 13 28 26.9 | 0.0 |
| | 2.0nm,0.9s | | | | | | | |
| MNAS | | | | ⇑S | | Sn | 13 29 33.7 | +0.5 |
| | 3.0nm,0.5s | | | | | | | |
| **KK31** | **Karatay Array** | **6.12** | **360** | ⇓P | | Pn | 13 28 32.4 | +0.1 |
| | 0.6nm,0.3s,baz=185,slow=14,SNR=12 | | | | | | | |
| KK31 | | | | S | | Sn | 13 29 44.5 | +1.4 |
| | 0.7nm,0.3s,baz=185,slow=17,SNR=7.0 | | | | | | | |
| **AAK** | **Ala-Archa** | **6.42** | **27** | ⇑P | | Pn | 13 28 35.0 | -1.6 |
| | 0.7nm,0.4s | | | | | | | |
| AAK | | | | ⇑S | | Sn | 13 29 49.3 | -1.4 |
| | 4.6nm,0.7s | | | | | | | |
| **AB31** | **Akbulak array** | **14.49** | **331** | ⇑P | | Pn | 13 30 22.7 | -4.2 |
| | 0.5nm,0.5s,baz=160,slow=12,SNR=17 | | | | | | | |

*ISCJB 29 13:27:49.4±0.8,43°06N±0°05×26°68E±0°06,h10km,Error ellipse: s-maj=7.0km s-min=6.8km az=151.8*
*CSEM 29 13:27:49.4±0.3,43°19N×26°67E,h2km,MD2.7,Error ellipse: s-maj=9.1km s-min=7.2km az=145.0*
*SOF 29 13:27:49.5,43°23N×26°66E,h11km,MD2.7*
**ISC 29 13:27:49.3±1.0,43°22N±0°05×26°64E±0°03,h10km,n23, σ1s15/26,10C,Bulgaria**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SZH** | **Strazhica** | **0.52** | **275** | *eP* | | **Pg** | **13 27 59.6** | **+0.2** |
| **SZH** | **Strazhica** | **0.52** | **275** | *eP* | | **Pg** | **13 27 59.6** | **+0.2** |
| **ROIA** | **ROIAK** | **0.56** | **103** | P | | **Pb** | **13 28 01.2** | **0.0** |
| **PRD** | **Provadia** | **0.56** | **92** | *eP* | | **Pg** | **13 28 00.0** | **-0.1** |
| **PRD** | **Provadia** | **0.56** | **92** | *eP* | | **Pg** | **13 28 00.0** | **-0.1** |
| **JMB** | **Yambol** | **0.76** | **183** | *eP* | | **Pg** | **13 28 03.5** | **-0.4** |
| **JMB** | **Yambol** | **0.76** | **183** | *eP* | | **Pg** | **13 28 03.5** | **-0.4** |
| **MSAB** | **Monastry St. A** | **1.22** | **44** | ⇑*i*P | | **Pn** | **13 28 11.8** | **-0.6** |
| **MSAB** | **Monastry St. A** | **1.22** | **44** | S | | **Sn** | **13 28 30.7** | **+1.7** |
| **MSAB** | **Monastry St. A** | **1.22** | **44** | ⇑*i*P | | **Pn** | **13 28 11.8** | **-0.6** |
| MSAB | | | | S | | **Sn** | **13 28 30.7** | **+1.7** |
| **TIRR** | **Tirgusor** | **1.78** | **46** | ⇑*i*P | | **Pn** | **13 28 20.6** | **+0.5** |
| **TIRR** | **Tirgusor** | **1.78** | **46** | S | | **Sg** | **13 28 46.5** | **0.0** |
| **TIRR** | **Tirgusor** | **1.78** | **46** | ⇑*i*P | | **Pn** | **13 28 20.6** | **+0.5** |
| TIRR | | | | S | | **Sg** | **13 28 46.5** | **0.0** |
| **ISR** | **Istrita** | **1.90** | **358** | S | | **Sg** | **13 28 51.1** | **+0.9** |
| **CFR** | **Carcaliu** | **2.23** | **28** | ⇑*i*P | | **Pn** | **13 28 27.3** | **+1.0** |
| **CFR** | **Carcaliu** | **2.23** | **28** | S | | **Sg** | **13 28 59.2** | **-1.8** |
| **CFR** | **Carcaliu** | **2.23** | **28** | ⇑*i*P | | **Pn** | **13 28 27.3** | **+1.0** |
| CFR | | | | S | | **Sg** | **13 28 59.2** | **-1.8** |
| **MLR** | **Muntele Rosu** | **2.32** | **348** | ⇑*i*P | | **Pn** | **13 28 29.5** | **+1.8** |
| **MLR** | **Muntele Rosu** | **2.32** | **348** | S | | **Sg** | **13 29 02.7** | **-1.2** |
| **MLR** | **Muntele Rosu** | **2.32** | **348** | ⇑*i*P | | **Pn** | **13 28 29.5** | **+1.8** |
| **VOIR** | | **2.49** | **333** | ⇑*i*P | | **Pb** | **13 28 32.6** | **-1.6** |
| **VOIR** | | **2.49** | **333** | S | | **Sg** | **13 29 08.1** | **-1.2** |
| **VOIR** | | **2.49** | **333** | ⇑*i*P | | **Pb** | **13 28 32.6** | **-1.6** |

*ISK 29 13:34:30.9,40°83N×34°82E,h13km,MD2.6*
*ISCJB 29 13:34:31.4±0.8,40°82N±0°03×34°83E±0°06,h5km±9km, Error ellipse: s-maj=8.4km s-min=5.1km az=21.0*
*CSEM 29 13:34:31.8±0.2,40°82N×34°81E,h12km,MD2.6,Error ellipse: s-maj=4.9km s-min=3.9km az=99.0*
*DDA 29 13:34:33.1,40°76N×34°88E,h23km,Md2.6*
**ISC 29 13:34:31.3±1.3,40°80N±0°03×34°86E±0°04,h3km±12km, n16,σ0s67/30,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CORM** | **Corum** | **0.65** | **196** | *e*PG | | **Pg** | **13 34 44.2** | **+0.6** |
| CORM | | | | *e*SG | | **Sb** | **13 34 54.1** | **-0.7** |
| **CORM** | **Corum** | **0.65** | **196** | *e*Pg | | **Pg** | **13 34 44.2** | **+0.6** |
| CORM | | | | *e*Sg | | **Sb** | **13 34 54.1** | **-0.7** |
| **BYBT** | **Boyabat** | **0.67** | **354** | *e*PG | | **Pg** | **13 34 43.9** | **-0.3** |
| BYBT | | | | *e*SG | | **Sg** | **13 34 53.3** | **+0.4** |
| **BYBT** | **Boyabat** | **0.67** | **354** | *e*Pg | | **Pg** | **13 34 43.9** | **-0.3** |
| BYBT | | | | *e*Sg | | **Sg** | **13 34 53.3** | **+0.4** |
| **TOS** | **Tosya** | **0.68** | **291** | *e*PG | | **Pg** | **13 34 43.7** | **-0.6** |
| TOS | | | | *e*SG | | **Sg** | **13 34 53.3** | **+0.2** |
| **TOS** | **Tosya** | **0.68** | **291** | *e*Pg | | **Pg** | **13 34 43.7** | **-0.6** |
| TOS | | | | *e*Sg | | **Sg** | **13 34 53.3** | **+0.2** |
| **HAVZ** | **Havza** | **0.70** | **67** | *i*P | | **Pb** | **13 34 46.5** | **+0.2** |
| HAVZ | | | | *i*S | | **Sb** | **13 34 56.8** | **+0.4** |
| **HAVZ** | **Havza** | **0.70** | **67** | P | | **Pb** | **13 34 46.5** | **+0.2** |
| HAVZ | | | | S | | **Sb** | **13 34 56.8** | **+0.4** |
| **ELDT** | **Eldivan** | **1.14** | **255** | *i*P | | **Pn** | **13 34 53.7** | **-0.6** |
| ELDT | | | | *i*S | | **Sn** | **13 35 11.9** | **+1.4** |
| **ELDT** | **Eldivan** | **1.14** | **255** | P | | **Pn** | **13 34 53.7** | **-0.6** |
| ELDT | | | | S | | **Sn** | **13 35 11.9** | **+1.4** |
| **YOZ** | **Yozgat** | **1.21** | **163** | *e*PN | | **Pn** | **13 34 54.4** | **-0.9** |
| YOZ | | | | *e*SN | | **Sn** | **13 35 11.9** | **-0.4** |
| **YOZ** | **Yozgat** | **1.21** | **163** | *e*Pn | | **Pn** | **13 34 54.4** | **-0.9** |
| YOZ | | | | *e*Sn | | **Sn** | **13 35 11.9** | **-0.4** |
| **CDAG** | **Cicekdag** | **1.23** | **198** | *i*P | | **Pn** | **13 34 54.7** | **-0.9** |
| CDAG | | | | *i*S | | **Sb** | **13 35 11.3** | **-0.4** |
| **CDAG** | **Cicekdag** | **1.23** | **198** | P | | **Pn** | **13 34 54.7** | **-0.9** |
| CDAG | | | | S | | **Sb** | **13 35 11.3** | **-0.4** |
| **YAYX** | **Yaylak** | **2.03** | **204** | *e*PN | | **Pn** | **13 35 06.8** | **+0.3** |
| **YAYX** | **Yaylak** | **2.03** | **204** | *e*Pn | | **Pn** | **13 35 06.8** | **+0.3** |

**IDC 29 13:40:16.4±8.1,3°00S×100°71E,h0km,mb3.3/3, mb1 3.5/3,mb1mx3.3/43,mbtmp3.3/3,Error ellipse: s-maj=401.2km s-min=29.4km az=52.0,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S2** | **Diego Garcia H** | **28.46** | **260** | T | T | 14 15 35.5 | |
| | baz=82,slow=75,SNR=12 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.47** | **260** | T | T | 14 15 20.7 | |
| | baz=82,slow=75,SNR=10 | | | | | | |
| **H08S1** | **Diego Carcia H** | **28.48** | **260** | T | T | 14 15 36.9 | |
| | baz=82,slow=75,SNR=12 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.09** | **160** | T | T | 14 22 52.7 | |
| | baz=334,slow=76 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.11** | **160** | T | T | 14 22 52.1 | |
| | baz=334,slow=76 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.11** | **160** | T | T | 14 22 50.8 | |
| | baz=334 | | | | | | |
| **WRA** | **Warramunga Arr** | **36.88** | **120** | P | P | 13 47 25.5 | -1.6 |
| | 0.2nm,0.6s,baz=302,slow=10,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.10** | **126** | P | P | 13 47 38.3 | +0.9 |
| | 0.3nm,0.8s,baz=298,slow=8.1,SNR=4.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.17** | **344** | P | P | 13 49 28.2 | -0.7 |
| | 0.3nm,0.5s,baz=159,slow=7.8,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.04** | **39** | PKPbc | PKPab | 13 59 56.2 | +0.2 |
| | 0.2nm,0.6s,baz=197,slow=0.9,SNR=3.3 | | | | | | |

*NSSC 29 13:46:38.5±3.4,37°42N×30°33E,h38km±999km,MD1.8, ML3.5*
*THE 29 13:46:43.5,36°94N×30°78E,h2km±1km,ML3.9/4,Error ellipse: s-maj=2.0km s-min=1.2km az=35.0*
*DDA 29 13:46:44.7,37°16N×30°68E,h102km,Ml4.4*
*MOS 29 13:46:44.1±1.1,37°08N×30°75E,h102km,mb4.3/17,Error ellipse: s-maj=9.7km s-min=5.7km az=75.9*
*ISCJB 29 13:46:44.1±0.1,37°04N±0°01×30°72E±0°02,h106km±2km, mb4.1/26,Error ellipse: s-maj=2.5km s-min=1.8km az=38.3*
*ISK 29 13:46:45.6,37°18N×30°66E,h86km,ML4.0*
*CSEM 29 13:46:45.2±0.1,37°04N×30°73E,h100km,mb4.2/23,Error ellipse: s-maj=2.6km s-min=2.0km az=40.0*
*IDC 29 13:46:45.6±1.1,37°09N×30°80E,h104km±11km,mb3.9/17, mb1 3.9/26,mb1mx3.8/49,mbtmp4.2/26,MS3.2/1, Ms1 3.2/1,ms1mx2.2/41,Error ellipse: s-maj=10.5km s-min=9.4km az=121.0*
*NEIC 29 13:46:45.0,37°18N×30°69E,h88km,mb4.0/2,After ISK.*
*NIC 29 13:46:46.5,37°05N×30°76E,h52km,mb4.3,ML4.0*
*HLW 29 13:46:57.6,36°07N×30°41E,h28km±14km,Md3.8,Ml3.8*
**ISC 29 13:46:45.2±0.5,37°12N±0°03×30°75E±0°02,h96km±5km, n432,σ1s42/514,mb4.2/26,19C-18D,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANTB** | **Antalya** | **0.24** | **198** | PG | **Pn** | **13 46 59.6** | **+0.6** |
| ANTB | | | | *e*SG | **Sn** | **13 47 08.5** | **-0.7** |
| **ANTB** | **Antalya** | **0.24** | **198** | *i* Pg | **Pn** | **13 46 59.6** | **+0.6** |
| ANTB | | | | *e*Sg | **Sn** | **13 47 08.5** | **-0.7** |
| **KORT** | **Korkueli** | **0.34** | **249** | *i* P | **Pn** | **13 47 00.8** | **+1.1** |
| KORT | | | | *i* S | **Sn** | **13 47 12.2** | **+1.8** |
| **KORT** | **Korkueli** | **0.34** | **249** | P | **Pn** | **13 47 00.8** | **+1.1** |
| KORT | | | | S | **Sn** | **13 47 12.2** | **+1.8** |
| **BCK** | **Bucak** | **0.36** | **340** | PG | **Pn** | **13 46 59.8** | **+0.1** |
| BCK | | | | *e*SG | **Sn** | **13 47 09.0** | **-1.5** |
| **BCK** | **Bucak** | **0.36** | **340** | *i* Pg | **Pn** | **13 46 59.8** | **+0.1** |
| **SUTC** | **Sutluce-Ispart** | **0.41** | **30** | PG | **Pn** | **13 46 59.8** | **-0.3** |
| SUTC | | | | *e*SG | **Sn** | **13 47 10.2** | **-0.9** |
| **SUTC** | **Sutluce-Ispart** | **0.41** | **30** | *i* Pg | **Pn** | **13 46 59.8** | **-0.3** |
| SUTC | | | | *e*Sg | **Sn** | **13 47 10.2** | **-0.9** |
| **ISP** | **Isparta** | **0.72** | **346** | *e*PG | **Pn** | **13 47 03.0** | **+0.4** |
| ISP | | | | *e*SG | **Sn** | **13 47 15.0** | **-0.5** |
| **ISP** | **Isparta** | **0.72** | **346** | *e*P | **Pn** | **13 47 03.0** | **+0.4** |
| ISP | | | | *e* | | 13 47 13.8 | |
| **ISP** | **Isparta** | **0.72** | **346** | ⇓*i*P | **Pn** | **13 47 03.2** | **+0.7** |
| ISP | | | | S | **Sn** | **13 47 16.6** | **+1.1** |
| **ISP** | **Isparta** | **0.72** | **346** | P | **Pn** | **13 47 01.6** | **-0.9** |
| ISP | | | | S | **Sn** | **13 47 16.0** | **+0.5** |
| **ISP** | **Isparta** | **0.72** | **346** | *e*Pn | **Pn** | **13 47 03.0** | **+0.4** |
| ISP | | | | *e*Sn | **Sn** | **13 47 13.8** | **-1.7** |
| **ISP** | **Isparta** | **0.72** | **346** | *e*Pg | **Pn** | **13 47 03.0** | **+0.4** |
| ISP | | | | *e*Sn | **Sn** | **13 47 13.8** | **-1.7** |
| ISP | | | | *e*Sg | **Sn** | **13 47 15.0** | **-0.5** |
| ISP | | | | S | **Sn** | **13 47 16.0** | **+0.5** |
| **ELL** | **Elmali** | **0.77** | **241** | *e*PG | **Pn** | **13 47 03.5** | **+0.5** |
| **ELL** | **Elmali** | **0.77** | **241** | *e*Pg | **Pn** | **13 47 03.5** | **+0.5** |
| **BAGO** | **Egridir - ISPA** | **0.86** | **2** | P | **Pn** | **13 47 04.8** | **+0.8** |
| BAGO | | | | S | **Sn** | **13 47 13.5** | **-4.5** |
| **GOLH** | **Golhisar** | **0.95** | **277** | *i* P | **Pn** | **13 47 06.0** | **+1.1** |
| GOLH | | | | *i* S | **Sn** | **13 47 20.3** | **+0.6** |
| **GOLH** | **Golhisar** | **0.95** | **277** | P | **Pn** | **13 47 06.0** | **+1.1** |
| GOLH | | | | S | **Sn** | **13 47 20.3** | **+0.6** |
| **AKAS** | **Kas** | **1.28** | **226** | *i* P | **Pn** | **13 47 09.7** | **+1.0** |
| AKAS | | | | *i* S | **Sn** | **13 47 26.8** | **+0.5** |
| **AKAS** | **Kas**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PPCY | Paphos | 2.58 | 149 | | P | | Pn | 13 47 25.4 | +0.1 |
| | baz=329 | | | | | | | | |
| PPCY | Paphos | 2.58 | 149 | | P | | Pn | 13 47 25.4 | +0.1 |
| KULU | Kulu | 2.62 | 42 | | ePN | | Pn | 13 47 27.8 | +2.0 |
| KULU | Kulu | 2.62 | 42 | | ePn | | Pn | 13 47 27.8 | +2.0 |
| MAMC | Mammari | 2.79 | 134 | | P | | Pn | 13 47 28.2 | +0.1 |
| | baz=314 | | | | | | | | |
| MAMC | Mammari | 2.79 | 134 | | P | | Pn | 13 47 28.2 | +0.1 |
| GCAM | G?zelcaml? | 2.85 | 283 | | *i* P | | Pn | 13 47 28.7 | -0.1 |
| GCAM | | | | | *i* S | | Sn | 13 48 00.3 | -2.2 |
| GCAM | G?zelcaml? | 2.85 | 283 | | P | | Pn | 13 47 28.7 | -0.1 |
| GCAM | | | | | S | | Sn | 13 48 00.3 | -2.2 |
| SERE | Sereflikochisa | 2.87 | 50 | | ePN | | Pn | 13 47 31.9 | +2.7 |
| SERE | Sereflikochisa | 2.87 | 50 | | ePn | | Pn | 13 47 31.9 | +2.7 |
| AKHS | Akhisar | 2.90 | 308 | | *i* P | | Pn | 13 47 29.8 | +0.3 |
| AKHS | | | | | *i* S | | Sn | 13 48 03.4 | -0.3 |
| AKHS | Akhisar | 2.90 | 308 | | P | | Pn | 13 47 29.8 | +0.3 |
| AKHS | | | | | S | | Sn | 13 48 03.4 | -0.2 |
| AKS | Akhisar | 2.90 | 308 | | ePN | | Pn | 13 47 29.9 | +0.3 |
| AKS | Akhisar | 2.90 | 308 | | ePn | | Pn | 13 47 29.9 | +0.3 |
| NIS1 | Nisyros Isl. | 2.91 | 261 | | ePN | | Pn | 13 47 30.9 | +1.3 |
| NIS1 | Nisyros Isl. | 2.91 | 261 | | eP | | Pn | 13 47 29.7 | +0.1 |
| NIS1 | Nisyros Isl. | 2.91 | 261 | | eP | | Pn | 13 47 29.7 | +0.1 |
| NIS1 | Nisyros Isl. | 2.91 | 261 | | P | | Pn | 13 47 29.8 | +0.1 |
| NIS1 | | | | | S | | Sn | 13 48 04.7 | +0.9 |
| NIS1 | Nisyros Isl. | 2.91 | 261 | | P | | Pn | 13 47 29.8 | +0.1 |
| NIS1 | Nisyros Isl. | 2.91 | 261 | | ePn | | Pn | 13 47 30.9 | +1.3 |
| NIS1 | | | | | S | | Sn | 13 48 04.7 | +0.9 |
| SZAC | Souni-Zanaja | 2.93 | 143 | | P | | Pn | 13 47 30.0 | 0.0 |
| | baz=323 | | | | | | | | |
| SZAC | | | | | S | | Sn | 13 48 04.2 | -0.2 |
| SZAC | Souni-Zanaja | 2.93 | 143 | | P | | Pn | 13 47 30.0 | 0.0 |
| SZAC | | | | | S | | Sn | 13 48 04.2 | -0.2 |
| AFSR | Af˘ar-Bala (A | 2.95 | 38 | | ePN | | Pn | 13 47 31.9 | +1.6 |
| AFSR | Af˘ar-Bala (A | 2.95 | 38 | | ePn | | Pn | 13 47 31.9 | +1.6 |
| DST | Dursunbey | 2.99 | 327 | | ePN | | Pn | 13 47 31.4 | +0.7 |
| DST | Dursunbey | 2.99 | 327 | | ePn | | Pn | 13 47 31.4 | +0.7 |
| CSS | Prodhromos | 3.01 | 135 | | S | | Sn | 13 48 06.5 | +0.3 |
| | baz=315 | | | | | | | | |
| CSS | Prodhromos | 3.01 | 135 | | eP | | Pn | 13 47 29.7 | -1.3 |
| CSS | Prodhromos | 3.01 | 135 | | eP | | Pn | 13 47 29.7 | -1.3 |
| CSS | Prodhromos | 3.01 | 135 | | P | | Pn | 13 47 27.9 | -3.1 |
| CSS | | | | | S | | Sn | 13 48 03.6 | -2.6 |
| CSS | Prodhromos | 3.01 | 135 | | ePn | | Pn | 13 47 30.4 | -0.6 |
| CSS | | | | | eSn | | Sn | 13 48 04.9 | -1.3 |
| CSS | Prodhromos | 3.01 | 135 | | P | | Pn | 13 47 27.9 | -3.1 |
| CSS | Prodhromos | 3.01 | 135 | | ePn | | Pn | 13 47 30.4 | -0.6 |
| CSS | | | | | eSn | | Sn | 13 48 04.9 | -1.3 |
| CSS | | | | | S | | Sn | 13 48 06.5 | +0.3 |
| GULA | Gulagac | 3.02 | 65 | | ePN | | Pn | 13 47 34.1 | +2.9 |
| GULA | Gulagac | 3.02 | 65 | | ePn | | Pn | 13 47 34.1 | +2.9 |
| IZM | Izmir | 3.04 | 296 | | ePN | | Pn | 13 47 31.7 | +0.3 |
| IZM | Izmir | 3.04 | 296 | | ePn | | Pn | 13 47 31.7 | +0.3 |
| CAVI | Cavuskoy | 3.15 | 347 | | ePN | | Pn | 13 47 33.4 | +0.5 |
| CAVI | Cavuskoy | 3.15 | 347 | | ePn | | Pn | 13 47 33.4 | +0.5 |
| SMG | Samos | 3.17 | 282 | | eP | | Pn | 13 47 32.9 | -0.2 |
| SMG | Samos | 3.17 | 282 | | eP | | Pn | 13 47 32.9 | -0.2 |
| SMG | Samos | 3.17 | 282 | | P | | Pn | 13 47 32.8 | -0.3 |
| SMG | Samos | 3.17 | 282 | | P | | Pn | 13 47 32.8 | -0.3 |
| ANTO | Ankara | 3.18 | 30 | | eP | | Pn | 13 47 30.8 | -2.5 |
| ANTO | | | | | e | | | 13 48 04.9 | |
| ANTO | Ankara | 3.18 | 30 | | ePn | | Pn | 13 47 30.8 | -2.5 |
| ANTO | | | | | eSn | | Sn | 13 48 04.9 | -5.4 |
| ANTO | Ankara | 3.18 | 30 | | eP | | Pn | 13 47 30.8 | -2.5 |
| GPA | Golpazari | 3.18 | 354 | | ePN | | Pn | 13 47 33.8 | +0.5 |
| GPA | Golpazari | 3.18 | 354 | | ePn | | Pn | 13 47 33.8 | +0.5 |
| LOD | Lodumlu | 3.18 | 29 | | ePN | | Pn | 13 47 34.1 | +0.7 |
| LOD | Lodumlu | 3.18 | 29 | | ePn | | Pn | 13 47 34.1 | +0.7 |
| NIG | Nigde | 3.22 | 71 | | ePN | | Pn | 13 47 36.1 | +2.0 |
| NIG | Nigde | 3.22 | 71 | | ePn | | Pn | 13 47 36.1 | +2.0 |
| KAMT | Kaman | 3.24 | 45 | | ePN | | Pn | 13 47 35.3 | +1.2 |
| KAMT | Kaman | 3.24 | 45 | | ePn | | Pn | 13 47 35.3 | +1.2 |
| ULDT | Uludag | 3.27 | 338 | | *i* P | | Pn | 13 47 35.4 | +0.8 |
| ULDT | Uludag | 3.27 | 338 | | P | | Pn | 13 47 35.4 | +0.8 |
| KARP | Karpathos | 3.29 | 243 | | eP | | Pn | 13 47 35.0 | +0.2 |
| KARP | Karpathos | 3.29 | 243 | | eP | | Pn | 13 47 35.0 | +0.2 |
| KARP | Karpathos | 3.29 | 243 | | P | | Pn | 13 47 34.3 | -0.5 |
| KARP | | | | | S | | Sn | 13 48 12.0 | -1.1 |
| KARP | Karpathos | 3.29 | 243 | | P | | Pn | 13 47 34.3 | -0.5 |
| KARP | | | | | S | | Sn | 13 48 12.0 | -1.1 |
| GULT | Gulveren | 3.31 | 357 | | ePN | | Pn | 13 47 36.0 | +1.0 |
| GULT | Gulveren | 3.31 | 357 | | ePn | | Pn | 13 47 36.0 | +1.0 |
| IZI | Iznik | 3.36 | 343 | | ePN | | Pn | 13 47 36.5 | +0.9 |
| IZI | Iznik | 3.36 | 343 | | ePn | | Pn | 13 47 36.6 | +0.9 |
| MDUB | Mudurnu | 3.36 | 6 | | ePN | | Pn | 13 47 36.9 | +1.1 |
| MDUB | Mudurnu | 3.36 | 6 | | ePn | | Pn | 13 47 36.9 | +1.1 |
| BALB | Balikesir | 3.37 | 319 | | ePN | | Pn | 13 47 36.6 | +0.8 |
| BALB | Balikesir | 3.37 | 319 | | ePn | | Pn | 13 47 36.6 | +0.8 |
| KARA | Karaisali | 3.44 | 86 | | ePN | | Pn | 13 47 39.0 | +2.2 |
| KARA | Karaisali | 3.44 | 86 | | ePn | | Pn | 13 47 39.0 | +2.2 |
| BRTR | Keskin Array B | 3.45 | 40 | | P | | Pn | 13 47 37.8 | +0.8 |
| | 2.8nm,0.3s,baz=137,slow=9.8,SNR=82 | | | | | | | | |
| BRTR | | | | | S | | Sn | 13 48 17.9 | +0.9 |
| | 17nm,0.3s,baz=205,slow=17,SNR=7.6 | | | | | | | | |
| BRTR | Keskin Array B | 3.45 | 40 | | P | | Pn | 13 47 37.8 | +0.8 |
| BRTR | | | | | S | | Sn | 13 48 17.9 | +0.9 |
| BRTR | | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.3s | | | | | | | | |
| BRTR | | | | | smax | | smax | | |
| | comp=N,17nm,0.3s | | | | | | | | |
| GEMT | Gemlik | 3.52 | 340 | | ePN | | Pn | 13 47 38.9 | +1.1 |
| GEMT | Gemlik | 3.52 | 340 | | ePn | | Pn | 13 47 38.9 | +1.1 |
| MDNY | Mudanya-Bursa | 3.55 | 336 | | ePN | | Pn | 13 47 39.1 | +1.0 |
| MDNY | Mudanya-Bursa | 3.55 | 336 | | ePn | | Pn | 13 47 39.2 | +1.0 |
| SPNC | Sapanca-Adapaz | 3.57 | 355 | | ePN | | Pn | 13 47 39.7 | +1.2 |
| SPNC | Sapanca-Adapaz | 3.57 | 355 | | ePn | | Pn | 13 47 39.7 | +1.2 |
| BALY | Balya | 3.58 | 318 | | *i* P | | Pn | 13 47 39.7 | +1.0 |
| BALY | | | | | *i* S | | Sn | 13 48 20.0 | -0.1 |
| BALY | Balya | 3.58 | 318 | | P | | Pn | 13 47 39.7 | +1.0 |
| BALY | | | | | S | | Sn | 13 48 20.0 | -0.1 |
| ARMT | Armutlu | 3.74 | 337 | | ePN | | Pn | 13 47 41.3 | +0.5 |
| ARMT | Armutlu | 3.74 | 337 | | ePn | | Pn | 13 47 41.3 | +0.5 |
| KRTS | Karatas | 3.75 | 97 | | ePN | | Pn | 13 47 43.1 | +2.2 |
| KRTS | Karatas | 3.75 | 97 | | ePn | | Pn | 13 47 43.1 | +2.2 |
| GONE | Gonen-Balikesi | 3.78 | 322 | | ePN | | Pn | 13 47 42.0 | +0.8 |
| GONE | Gonen-Balikesi | 3.78 | 322 | | ePn | | Pn | 13 47 42.0 | +0.8 |
| HRT | Hereke | 3.79 | 348 | | ePN | | Pn | 13 47 42.2 | +0.8 |
| HRT | Hereke | 3.79 | 348 | | ePn | | Pn | 13 47 42.2 | +0.8 |
| AYVA | Ayvalik | 3.87 | 306 | | *i* P | | Pn | 13 47 43.3 | +0.9 |
| AYVA | Ayvalik | 3.87 | 306 | | P | | Pn | 13 47 43.3 | +0.9 |
| EDC | Edincik | 3.93 | 326 | | ePN | | Pn | 13 47 44.0 | +0.7 |
| EDC | Edincik | 3.93 | 326 | | ePn | | Pn | 13 47 44.0 | +0.7 |
| CEYT | Ceyhan | 4.00 | 90 | | ePN | | Pn | 13 47 46.4 | +2.3 |
| CEYT | Ceyhan | 4.00 | 90 | | ePn | | Pn | 13 47 46.6 | +2.3 |
| PRK | Paraskevi | 4.11 | 302 | | eP | | Pn | 13 47 47.1 | +1.3 |
| PRK | Paraskevi | 4.11 | 302 | | eP | | Pn | 13 47 47.1 | +1.3 |
| PRK | Paraskevi | 4.11 | 302 | | P | | Pn | 13 47 46.9 | +1.1 |
| PRK | Paraskevi | 4.11 | 302 | | P | | Pn | 13 47 46.9 | +1.1 |
| ISK | Istanbul-Kandi | 4.15 | 342 | | ePN | | Pn | 13 47 46.4 | +0.1 |
| ISK | Istanbul-Kandi | 4.15 | 342 | | ePn | | Pn | 13 47 46.4 | +0.1 |
| APE | Apeiranthos | 4.17 | 271 | | ePN | | Pn | 13 47 47.5 | +0.9 |
| APE | Apeiranthos | 4.17 | 271 | ⇑ | *i*P | | Pn | 13 47 46.7 | +0.1 |
| APE | Apeiranthos | 4.17 | 271 | ⇑ | *i*P | | Pn | 13 47 46.8 | +0.1 |
| APE | Apeiranthos | 4.17 | 271 | | S | | Sn | 13 48 30.9 | -3.4 |
| APE | Apeiranthos | 4.17 | 271 | | P | | Pn | 13 47 46.6 | 0.0 |
| APE | | | | | S | | Sn | 13 48 36.3 | +2.0 |
| APE | Apeiranthos | 4.17 | 271 | | *i* P | | Pn | 13 47 46.7 | +0.1 |
| APE | Apeiranthos | 4.17 | 271 | | ePn | | Pn | 13 47 47.5 | +0.9 |
| APE | | | | | S | | Sn | 13 48 36.3 | +2.0 |
| MRMT | Marmara Adasi | 4.26 | 326 | | ePN | | Pn | 13 47 48.5 | +0.7 |
| MRMT | Marmara Adasi | 4.26 | 326 | | ePn | | Pn | 13 47 48.5 | +0.7 |
| CORM | Corum | 4.31 | 44 | | ePN | | Pn | 13 47 50.0 | +1.5 |
| CORM | Corum | 4.31 | 44 | | ePn | | Pn | 13 47 50.0 | +1.5 |
| SIGR | SIGRI | 4.38 | 300 | | ePN | | Pn | 13 47 50.2 | +0.9 |
| SIGR | SIGRI | 4.38 | 300 | | P | | Pn | 13 47 50.4 | +1.0 |
| SIGR | SIGRI | 4.38 | 300 | | ePn | | Pn | 13 47 50.3 | +0.9 |
| YOZ | Yozgat | 4.38 | 54 | | ePN | | Pn | 13 47 50.9 | +1.3 |
| YOZ | Yozgat | 4.38 | 54 | | ePn | | Pn | 13 47 50.9 | +1.3 |
| EZN | Ezine | 4.39 | 309 | | ePN | | Pn | 13 47 50.2 | +0.6 |
| EZN | Ezine | 4.39 | 309 | | ePn | | Pn | 13 47 50.2 | +0.6 |
| TAHT | Tahtakopru-Hat | 4.43 | 98 | | ePN | | Pn | 13 47 52.1 | +1.9 |
| TAHT | Tahtakopru-Hat | 4.43 | 98 | | ePn | | Pn | 13 47 52.1 | +1.9 |
| LPK | Lapseki | 4.50 | 317 | | ePN | | Pn | 13 47 51.7 | +0.7 |
| LPK | Lapseki | 4.50 | 317 | | ePn | | Pn | 13 47 51.7 | +0.7 |
| RKY | Sarkoy-Tekirda | 4.52 | 323 | | ePN | | Pn | 13 47 51.9 | +0.6 |
| RKY | Sarkoy-Tekirda | 4.52 | 323 | | ePn | | Pn | 13 47 51.9 | +0.6 |
| NPS | Neapolis | 4.55 | 247 | | eP | | Pn | 13 47 50.6 | -1.1 |
| NPS | Neapolis | 4.55 | 247 | | eP | | Pn | 13 47 50.6 | -1.1 |
| GELI | Tayfur-Gelibol | 4.67 | 316 | | ePN | | Pn | 13 47 53.8 | +0.4 |
| GELI | Tayfur-Gelibol | 4.67 | 316 | | ePn | | Pn | 13 47 53.8 | +0.4 |
| SARI | SarD1z-Kayseri | 4.67 | 72 | | ePN | | Pn | 13 47 55.3 | +1.7 |
| LAST | Lasithi | 4.69 | 247 | ⇓ | *i*P | | Pn | 13 47 53.8 | +0.1 |
| LAST | Lasithi | 4.69 | 247 | | S | | Sn | 13 48 43.7 | -3.3 |
| LAST | Lasithi | 4.69 | 247 | | eP | | Pn | 13 47 52.8 | -0.9 |
| LAST | Lasithi | 4.69 | 247 | | eP | | Pn | 13 47 52.8 | -0.9 |
| LAST | Lasithi | 4.69 | 247 | ⇓ | *i*P | | Pn | 13 47 53.8 | +0.1 |
| CTYL | Yal??k??y-??at | 4.74 | 337 | | ePN | | Pn | 13 47 54.8 | +0.5 |
| CTYL | Yal??k??y-??at | 4.74 | 337 | | ePn | | Pn | 13 47 54.8 | +0.5 |
| ERIK | Erikli-Kesan | 4.84 | 318 | | ePN | | Pn | 13 47 56.1 | +0.4 |
| ERIK | Erikli-Kesan | 4.84 | 318 | | ePn | | Pn | 13 47 56.1 | +0.4 |
| WRDH | Warideh | 4.85 | 108 | | eP | | Pn | 13 47 55.8 | -0.1 |
| WRDH | | | | | eS | | Sn | 13 48 48.2 | -2.7 |
| WRDH | Warideh | 4.85 | 108 | | eP | | Pn | 13 47 55.8 | -0.1 |
| WRDH | | | | | eS | | Sn | 13 48 48.2 | -2.7 |
| GADA | Gvkgeada | 4.88 | 310 | | ePN | | Pn | 13 47 56.7 | +0.6 |
| GADA | Gvkgeada | 4.88 | 310 | | ePn | | Pn | 13 47 56.7 | +0.6 |
| BIDA | Albida | 4.98 | 113 | | eP | | Pn | 13 47 58.1 | +0.4 |
| BIDA | | | | | eS | | Sn | 13 48 53.1 | -1.0 |
| BIDA | | | | | AML | | AML | 13 48 55.8 | |
| | comp=N,118nm,0.8s | | | | | | | | |
| BIDA | | | | | AML | | AML | 13 48 58.3 | |
| | comp=E,437nm,0.4s | | | | | | | | |
| BIDA | Albida | 4.98 | 113 | | eP | | Pn | 13 47 57.5 | -0.2 |
| BIDA | | | | | eS | | Sn | 13 48 52.5 | -1.6 |
| BIDA | | | | | AML | | AML | 13 48 56.6 | |
| | comp=N,191nm,0.3s | | | | | | | | |
| BIDA | | | | | AML | | AML | 13 48 58.4 | |
| | comp=E,437nm,0.4s | | | | | | | | |
| BIDA | Albida | 4.98 | 113 | | eP | | Pn | 13 47 57.5 | -0.2 |
| BIDA | | | | | eS | | Sn | 13 48 52.5 | -1.6 |
| | comp=E,437nm,0.4s | | | | | | | | |
| IDI | Anoyia | 5.08 | 251 | | P | | Pn | 13 47 58.5 | -0.5 |
| | comp=E,2.0nm,0.3s,baz=58,slow=19,SNR=7.5 | | | | | | | | |
| IDI | | | | | S | | Sn | 13 48 52.9 | -3.5 |
| | comp=E,3.3nm,0.3s,baz=119,slow=19,SNR=2.7 | | | | | | | | |
| IDI | Anoyia | 5.08 | 251 | ⇑ | *i*P | | Pn | 13 47 58.5 | -0.5 |
| IDI | Anoyia | 5.08 | 251 | | S | | Sn | 13 48 54.7 | -1.7 |
| IDI | Anoyia | 5.08 | 251 | | eP | | Pn | 13 47 58.1 | -0.9 |
| IDI | Anoyia | 5.08 | 251 | | eP | | Pn | 13 47 58.1 | -0.9 |
| HWQ | Hawqa | 5.10 | 122 | | eP | | Pn | 13 47 59.0 | -0.3 |
| HWQ | Hawqa | 5.10 | 122 | | eP | | Pn | 13 47 59.0 | -0.3 |
| BHL | Bhannes | 5.13 | 127 | | eP | | Pn | 13 47 58.6 | -1.2 |
| BHL | Bhannes | 5.13 | 127 | | eP | | Pn | 13 47 58.6 | -1.2 |
| LIA | Limnos Island | 5.17 | 304 | | eP | | Pn | 13 48 01.8 | +1.7 |
| LIA | Limnos Island | 5.17 | 304 | | eP | | Pn | 13 48 01.8 | +1.7 |
| DQRL | Deir Qamar | 5.21 | 129 | | eP | | Pn | 13 47 59.9 | -1.0 |
| DQRL | Deir Qamar | 5.21 | 129 | | eP | | Pn | 13 47 59.8 | -1.0 |
| SIVA | Sivas | 5.25 | 248 | ⇓ | *i*P | | Pn | 13 48 01.1 | -0.1 |
| SIVA | Sivas | 5.25 | 248 | | S | | Sn | 13 49 00.3 | -0.1 |
| SIVA | Sivas | 5.25 | 248 | ⇓ | *i*P | | Pn | 13 48 01.1 | -0.1 |
| KFRA | Kufra | 5.26 | 109 | | eP | | Pn | 13 48 01.8 | +0.4 |
| KFRA | | | | | eS | | Sn | 13 49 00.9 | +0.2 |
| KFRA | | | | | AML | | AML | 13 49 01.8 | |
| | comp=N,4µm,0.2s | | | | | | | | |
| KFRA | | | | | AML | | AML | 13 49 07.9 | |
| | comp=E,232nm,0.6s | | | | | | | | |
| KFRA | Kufra | 5.26 | 109 | | eP | | Pn | 13 47 57.5 | -3.9 |
| KFRA | | | | | eS | | Sn | 13 48 55.2 | -5.5 |
| KFRA | | | | | AML | | AML | 13 49 00.2 | |
| | comp=N,394nm,0.7s | | | | | | | | |
| KFRA | | | | | AML | | AML | 13 49 04.2 | |
| | comp=E,232nm,0.6s | | | | | | | | |
| KFRA | Kufra | 5.26 | 109 | | eP | | Pn | 13 47 57.5 | -3.9 |
| KFRA | | | | | eS | | Sn | 13 48 55.2 | -5.5 |
| | comp=E,232nm,0.6s | | | | | | | | |
| SMTH | Samothraki Isl | 5.27 | 311 | | eP | | Pn | 13 48 02.7 | +1.2 |
| SMTH | Samothraki Isl | 5.27 | 311 | | eP | | Pn | 13 48 02.7 | +1.2 |
| HAWK | Haweek | 5.28 | 118 | | eP | | Pn | 13 48 01.6 | -0.2 |
| HAWK | | | | | AML | | AML | 13 49 03.6 | |
| | comp=E,150nm,0.6s | | | | | | | | |
| HAWK | | | | | AML | | AML | 13 49 04.0 | |
| | comp=N,163nm,0.7s | | | | | | | | |
| HAWK | Haweek | 5.28 | 118 | | eP | | Pn | 13 47 58.7 | -3.1 |
| HAWK | | | | | AML | | AML | 13 49 00.9 | |
| | comp=E,150nm,0.6s | | | | | | | | |
| HAWK | | | | | AML | | AML | 13 49 01.4 | |
| | comp=N,163nm,0.7s | | | | | | | | |
| HAWK | Haweek | 5.28 | 118 | | eP | | Pn | 13 47 58.7 | -3.1 |
| RCY | Rachaya | 5.51 | 130 | | eP | | Pn | 13 48 04.8 | -0.2 |
| RCY | Rachaya | 5.51 | 130 | | eP | | Pn | 13 48 04.8 | -0.2 |
| MMAI | Mount Meron Ar | 5.60 | 136 | | P | | Pn | 13 48 05.5 | -0.6 |
| | comp=N,186nm,0.3s,baz=326,slow=13,SNR=430 | | | | | | | | |
| MMAI | | | | | S | | Sn | 13 49 05.5 | -3.7 |
| | comp=N,35nm,0.3s,baz=315,slow=20,SNR=3.9 | | | | | | | | |
| EDRB | Edirne | 5.64 | 328 | | ePN | | Pn | 13 48 07.0 | +0.5 |
| EDRB | Edirne | 5.64 | 328 | | ePn | | Pn | 13 48 07.0 | +0.5 |
| BRBR | Barbar | 5.64 | 129 | | eP | | Pn | 13 48 06.6 | -0.2 |
| BRBR | | | | | AML | | AML | 13 48 08.3 | |
| | comp=E,147nm,0.2s | | | | | | | | |
| BRBR | | | | | eS | | Sn | 13 49 10.6 | +0.2 |
| BRBR | | | | | AML | | AML | 13 49 14.7 | |
| | comp=N,148nm,0.5s | | | | | | | | |
| RABH | Abou Rabah | 5.90 | 115 | | eP | | Pn | 13 48 10.4 | +0.3 |
| RABH | | | | | AML | | AML | 13 48 12.1 | |
| | comp=N,85nm,0.6s | | | | | | | | |
| RABH | | | | | AML | | AML | 13 48 19.9 | |
| | comp=E,45nm,0.5s | | | | | | | | |
| RABH | | | | | eS | | Sn | 13 49 16.4 | +0.1 |
| RABH | Abou Rabah | 5.90 | 115 | | eP | | Pn | 13 48 10.9 | +0.8 |
| RABH | | | | | eS | | Sn | 13 49 14.7 | -1.6 |
| RABH | Abou Rabah | 5.90 | 115 | | eP | | Pn | 13 48 10.9 | +0.8 |
| RABH | | | | | eS | | Sn | 13 49 14.7 | -1.6 |
| TOTH | TOTAH | 5.97 | 127 | | eP | | Pn | 13 48 11.9 | +0.7 |
| TOTH | | | | | AML | | AML | 13 48 13.3 | |
| | comp=N,146nm,0.4s | | | | | | | | |
| TOTH | | | | | AML | | AML | 13 48 39.4 | |
| | comp=E,27nm,0.7s | | | | | | | | |
| TOTH | | | | | eS | | Sn | 13 49 18.3 | +0.1 |
| TOTH | TOTAH | 5.97 | 127 | | eP | | Pn | 13 48 11.9 | +0.7 |
| TOTH | | | | | eS | | Sn | 13 49 15.2 | -3.1 |
| TOTH | TOTAH | 5.97 | 127 | | eP | | Pn | 13 48 11.9 | +0.7 |
| TOTH | | | | | eS | | Sn | 13 49 15.2 | -3.1 |
| ROOS | tl_alroos | 6.09 | 117 | | eP | | Pn | 13 48 13.6 | +0.8 |
| ROOS | | | | | eS | | Sn | 13 49 19.9 | -1.2 |
| ROOS | tl_alroos | 6.09 | 117 | | eP | | Pn | 13 48 13.6 | +0.8 |
| ROOS | | | | | eS | | Sn | 13 49 20.6 | -0.5 |
| ROOS | | | | | AML | | AML | 13 49 24.8 | |
| | comp=N,152nm,0.8s | | | | | | | | |
| ROOS | | | | | AML | | AML | 13 49 36.9 | |
| | comp=E,128nm,0.7s | | | | | | | | |
| ROOS | tl_alroos | 6.09 | 117 | | eP | | Pn | 13 48 13.6 | +0.8 |
| ROOS | | | | | eS | | Sn | 13 49 20.5 | -0.5 |
| | comp=E,128nm,0.7s | | | | | | | | |
| KDZ | Kurdzhali | 6.12 | 319 | | eP | | Pn | 13 48 14.4 | +1.3 |
| KDZ | Kurdzhali | 6.12 | 319 | | eP | | Pn | 13 48 14.4 | +1.3 |
| TCHB | Talchebab | 6.18 | 134 | | eP | | Pn | 13 48 14.3 | +0.4 |
| TCHB | | | | | AML | | AML | 13 48 15.5 | |
| | comp=N,214nm,0.3s | | | | | | | | |
| TCHB | | | | | AML | | AML | 13 48 26.4 | |
| | comp=E,129nm,0.3s | | | | | | | | |
| TCHB | | | | | eS | | Sn | 13 49 21.9 | -1.2 |
| MALT | Malatya | 6.20 | 77 | ⇑ | *i*P | | Pn | 13 48 17.2 | +2.9 |
| MALT | Malatya | 6.20 | 77 | | S | | Sn | 13 49 33.6 | +10 |
| JMB | Yambol | 6.22 | 330 | | eP | | Pn | 13 48 16.2 | +1.8 |
| JMB | Yambol | 6.22 | 330 | | eP | | Pn | 13 48 16.2 | +1.8 |
| VLI | Veliai | 6.27 | 269 | | eP | | Pn | 13 48 09.4 | -5.7 |
| VLI | Veliai | 6.27 | 269 | | eP | | Pn | 13 48 09.4 | -5.7 |
| MATC | Matruh | 6.46 | 208 | | P | | Pn | 13 48 15.0 | -2.6 |
| | baz=211 | | | | | | | | |
| RZN | Rozhen | 6.52 | 316 | | eP | | Pn | 13 48 19.9 | +1.2 |
| RZN | Rozhen | 6.52 | 316 | | eP | | Pn | 13 48 19.9 | +1.2 |
| HBRG | Burj al 'Arab | 6.58 | 187 | | P | | Pn | 13 48 16.1 | -3.2 |
| | baz=186 | | | | | | | | |
| SALA | Sala | 6.60 | 130 | | eP | | Pn | 13 48 20.9 | +1.2 |
| SALA | | | | | AML | | AML | 13 48 46.9 | |
| | comp=E,2.7nm,0.4s | | | | | | | | |
| SALA | | | | | eS | | Sn | 13 49 34.5 | +0.9 |
| SALA | | | | | AML | | AML | 13 49 38.8 | |
| | comp=N,42nm,0.4s | | | | | | | | |
| SALA | Sala | 6.60 | 130 | | eP | | Pn | 13 48 21.0 | +1.2 |
| SALA | | | | | eS | | Sn | 13 49 32.0 | -1.6 |
| SALA | Sala | 6.60 | 130 | | eP | | Pn | 13 48 21.0 | +1.2 |
| SALA | | | | | eS | | Sn | 13 49 32.0 | -1.6 |
| HMAT | Matruh | 6.73 | 208 | | AMP | | | 13 49 00.0 | |
| | comp=N,150µm,0.5s,logA/T=5.4,baz=211 | | | | | | | | |
| KSRV | Kasrt alli | 6.77 | 98 | | eP | | Pn | 13 48 19.1 | -2.8 |
| KSRV | Kasrt alli | 6.77 | 98 | | eP | | Pn | 13 48 19.1 | -2.8 |
| ZALF | Zalf | 6.84 | 126 | | eP | | Pn | 13 48 22.9 | 0.0 |
| ZALF | | | | | AML | | AML | 13 48 45.2 | |
| | comp=N,13nm,0.4s | | | | | | | | |
| ZALF | | | | | AML | | AML | 13 49 00.2 | |
| | comp=E,15nm,0.6s | | | | | | | | |
| ZALF | | | | | eS | | Sn | 13 49 43.9 | +4.7 |
| ZALF | Zalf | 6.84 | 126 | | eP | | Pn | 13 48 22.9 | 0.0 |
| ZALF | Zalf | 6.84 | 126 | | eP | | Pn | 13 48 22.9 | 0.0 |
| MNKR | ALMNKUR | 6.96 | 97 | | eP | | Pn | 13 48 20.1 | -4.5 |
| MNKR | ALMNKUR | 6.96 | 97 | | eP | | Pn | 13 48 20.1 | -4.5 |
| ASF | Jabal al Asfar | 7.08 | 132 | | P | | Pn | 13 48 27.2 | +1.0 |
| | comp=E,4.7nm,0.3s,baz=261,slow=6.6,SNR=23 | | | | | | | | |
| ASF | | | | | S | | Sn | 13 49 46.0 | +0.9 |
| | baz=294,slow=18,SNR=2.7 | | | | | | | | |
| ASF | Jabal al Asfar | 7.08 | 132 | | P | | Pn | 13 48 27.2 | +1.0 |
| ASF | | | | | S | | Sn | 13 49 46.0 | +0.9 |
| ASF | | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.3s | | | | | | | | |
| KOT | Kottamia | 7.23 | 173 | | P | | Pn | 13 48 26.4 | -1.9 |
| | baz=168 | | | | | | | | |
| KOT | Kottamia | 7.23 | 173 | | P | | Pn | 13 48 26.4 | -1.9 |
| SQR | | 7.23 | 177 | | P | | Pn | 13 48 26.0 | -2.3 |
| | baz=173 | | | | | | | | |
| SQR | | 7.23 | 177 | | P | | Pn | 13 48 26.0 | -2.3 |
| HHAG | Hagoal | 7.24 | 171 | | P | | Pn | 13 48 26.5 | -1.9 |
| | baz=166 | | | | | | | | |
| HHAG | Hagoal | 7.24 | 171 | | P | | Pn | 13 48 26.5 | -1.9 |
| SLUM | | 7.25 | 221 | | P | | Pn | 13 48 27.2 | -1.2 |
| | baz=225 | | | | | | | | |
| SLUM | | 7.25 | 221 | | P | | Pn | 13 48 27.2 | -1.2 |
| HLW | Helwan | 7.26 | 176 | | P | | Pn | 13 48 26.5 | -2.2 |
| | baz=172 | | | | | | | | |
| HLW | Helwan | 7.26 | 176 | | P | | Pn | 13 48 26.5 | -2.2 |
| AYT | Al 'Ayyat | 7.41 | 177 | | P | | Pn | 13 48 28.5 | -2.2 |
| | baz=174 | | | | | | | | |
| AYT | Al 'Ayyat | 7.41 | 177 | | P | | Pn | 13 48 28.5 | -2.2 |
| FYM | Al Fayyum | 7.42 | 178 | | P | | Pn | 13 48 28.1 | -2.7 |
| | baz=175 | | | | | | | | |
| FYM | Al Fayyum | 7.42 | 178 | | P | | Pn | 13 48 28.1 | -2.7 |
| HNAT | Natroun | 7.47 | 181 | | P | | Pn | 13 48 29.1 | -2.4 |
| | baz=178 | | | | | | | | |
| HNAT | Natroun | 7.47 | 181 | | P | | Pn | 13 48 29.1 | -2.4 |
| HSAF | As Saff | 7.52 | 175 | | P | | Pn | 13 48 29.8 | -2.4 |
| | baz=171 | | | | | | | | |
| HSAF | As Saff | 7.52 | 175 | | P | | Pn | 13 48 29.8 | -2.4 |
| TIRR | Tirgusor | 7.54 | 347 | ⇑ | *i*P | | Pn | 13 48 33.6 | +1.3 |
| TIRR | Tirgusor | 7.54 | 347 | ⇑ | *i*P | | Pn | 13 48 33.6 | +1.3 |
| SEV | Sevastopol' | 7.74 | 16 | | eP | | Pn | 13 48 35.4 | +0.4 |
| SEV | | | | | eS | | Sn | 13 50 01.6 | +0.7 |
| SEV | Sevastopol' | 7.74 | 16 | | eP | | Pn | 13 48 35.4 | +0.4 |
| SEV | | | | | eS | | Sn | 13 50 01.6 | +0.7 |
| YAL | Yalta | 7.80 | 18 | | eP | | Pn | 13 48 37.2 | +1.4 |
| YAL | Yalta | 7.80 | 18 | | eP | | Pn | 13 48 37.2 | +1.4 |
| VTS | Vitosha | 7.96 | 316 | | eP | | Pn | 13 48 39.8 | +1.6 |
| VTS | Vitosha | 7.96 | 316 | | eP | | Pn | 13 48 39.8 | +1.6 |
| MPEP | Malo Peshtene | 8.21 | 321 | | eP | | Pn | 13 48 43.2 | +1.7 |
| MPEP | Malo Peshtene | 8.21 | 321 | | eP | | Pn | 13 48 43.2 | +1.7 |
| EIL | Elat | 8.22 | 153 | | P | | Pn | 13 48 39.9 | -1.9 |
| | comp=Z,6.9nm,0.3s,baz=326,slow=3.0,SNR=97 | | | | | | | | |
| EIL | | | | | S | | Sn | 13 50 06.3 | -6.7 |
| | comp=Z,3.4nm,0.3s,baz=58,slow=13,SNR=2.5 | | | | | | | | |
| CFR | Carcaliu | 8.28 | 347 | ⇑ | *i*P | | Pn | 13 48 44.0 | +1.6 |
| CFR | Carcaliu | 8.28 | 347 | ⇑ | *i*P | | Pn | 13 48 44.0 | +1.6 |
| SUDU | Sudak | 8.40 | 21 | | eP | | Pn | 13 48 44.6 | +0.6 |
| SUDU | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **FINES** | **FINES Array B** | **24.52** | **355** | P | **P** | **13 51 54.9** | **-0.5** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **HFS** | **Hagfors** | **25.48** | **340** | P | **P** | **13 52 05.3** | **+1.1** |
| | comp=Z,4.4nm,0.5s,baz=141,slow=9.6,SNR=14 | | | | | | | |
| **HFS** | **Hagfors** | **25.48** | **340** | P | **P** | **13 52 05.3** | **+1.1** |
| HFS | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | |
| **NB2** | **NORSAR Subarra** | **26.92** | **339** | P | **P** | **13 52 19.3** | **+2.1** |
| | comp=Z,2.1nm,0.5s,baz=158,slow=9.3 | | | | | | | |
| **NB2** | **NORSAR Subarra** | **26.92** | **339** | P | **P** | **13 52 19.3** | **+2.1** |
| | comp=Z,2.1nm,0.5s,SNR=6.8 | | | | | | | |
| **NOA** | **NORSAR Array B** | **26.92** | **339** | P | **P** | **13 52 18.7** | **+1.5** |
| | comp=Z,0.7nm,0.5s,baz=162,slow=9.8,SNR=9.1 | | | | | | | |
| **NOA** | **NORSAR Array B** | **26.92** | **339** | P | **P** | **13 52 18.7** | **+1.5** |
| NOA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **29.28** | **319** | P | **P** | **13 52 36.7** | **-1.5** |
| | comp=Z,1.8nm,0.5s,baz=122,slow=12,SNR=4.9 | | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **29.28** | **319** | P | **P** | **13 52 36.7** | **-1.5** |
| EKA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **BRVK** | **Borovoye** | **31.66** | **47** | *e*P | **P** | **13 52 59.5** | **+0.4** |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| **BRVK** | **Borovoye** | **31.66** | **47** | *e*P | **P** | **13 52 59.5** | **+0.4** |
| | comp=Z,1.0nm,1.0s | | | | | | | |
| **CHKZ** | **Chkalovo** | **32.01** | **46** | P | **P** | **13 53 02.4** | **+0.2** |
| CHKZ | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **CHKZ** | **Chkalovo** | **32.01** | **46** | P | P | **13 53 02.4** | **+0.2** |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **OTUK** | **Ortayu** | **32.16** | **56** | P | **P** | **13 53 04.0** | **+0.3** |
| OTUK | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **OTUK** | **Ortayu** | **32.16** | **56** | P | P | **13 53 04.0** | **+0.3** |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.59** | **357** | P | **P** | **13 53 06.7** | **-0.5** |
| | comp=Z,3.6nm,0.7s,baz=171,slow=9.4,SNR=12 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **32.59** | **357** | P | **P** | **13 53 06.7** | **-0.5** |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **33.73** | **67** | *i*P | **P** | **13 53 18.8** | **+1.2** |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **33.73** | **67** | *e*P | **P** | **13 53 15.5** | **-2.1** |
| | comp=Z,2.4nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **33.73** | **67** | *i*P | **P** | **13 53 18.8** | **+1.2** |
| | comp=Z,3.0nm,0.8s | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.27** | **235** | P | **P** | **13 53 30.9** | **0.0** |
| | comp=Z,2.1nm,0.7s,baz=31,slow=9.2,SNR=16 | | | | | | | |
| **MK31** | **Makanchi Array** | **38.91** | **59** | *i*P | **P** | **13 54 01.4** | **0.0** |
| MK31 | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.2s | | | | | | | |
| **MK31** | **Makanchi Array** | **38.91** | **59** | *i*P | **P** | **13 54 01.4** | **0.0** |
| | comp=Z,2.0nm,0.2s | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.91** | **59** | P | **P** | **13 54 01.4** | **0.0** |
| | comp=Z,6.4nm,0.5s,baz=274,slow=7.6,SNR=71 | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.91** | **59** | P | **P** | **13 54 01.4** | **0.0** |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.5s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.36** | **48** | P | **P** | **13 54 12.5** | **-0.8** |
| | comp=Z,3.5nm,0.5s,baz=264,slow=8.8,SNR=13 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.36** | **48** | P | **P** | **13 54 12.5** | **-0.8** |
| ZALV | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **41.61** | **356** | P | **P** | **13 54 23.1** | **-0.2** |
| | comp=Z,4.6nm,0.7s,baz=146,slow=9.1,SNR=7.2 | | | | | | | |
| **SPITS** | **Spitsbergen Ar** | **41.61** | **356** | P | **P** | **13 54 23.1** | **-0.2** |
| SPITS | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **DBIC** | **Dimbokro** | **44.37** | **236** | P | **P** | **13 54 45.8** | **-0.4** |
| | comp=Z,1.6nm,0.4s,baz=23,slow=8.3,SNR=7.7 | | | | | | | |
| **DBIC** | **Dimbokro** | **44.37** | **236** | P | **P** | **13 54 45.8** | **-0.4** |
| DBIC | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **SONM** | **Songino Array** | **54.72** | **53** | P | **P** | **13 56 04.2** | **-0.5** |
| | comp=Z,2.6nm,0.5s,baz=288,slow=7.6,SNR=22 | | | | | | | |
| **SONM** | **Songino Array** | **54.72** | **53** | P | **P** | **13 56 04.2** | **-0.5** |
| SONM | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **55.13** | **53** | *e*P | **P** | **13 56 07.7** | **0.0** |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **55.13** | **53** | *e*P | **P** | **13 56 07.7** | **0.0** |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.91** | **87** | P | **P** | **13 56 54.0** | **-1.0** |
| | comp=Z,0.7nm,0.4s,baz=296,slow=8.6,SNR=7.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.91** | **87** | P | **P** | **13 56 54.0** | **-1.0** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **61.91** | **87** | P | **P** | **13 56 54.0** | **-1.0** |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **BOSA** | **Boshof** | **65.59** | **185** | P | **P** | **13 57 18.6** | **-0.3** |
| | comp=Z,1.6nm,0.5s,baz=347,slow=6.6,SNR=3.8 | | | | | | | |
| **BOSA** | **Boshof** | **65.59** | **185** | P | **P** | **13 57 18.6** | **-0.3** |
| BOSA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **72.22** | **48** | P | **P** | **13 57 58.2** | **-1.6** |
| | comp=Z,1.4nm,0.5s,baz=273,slow=5.1,SNR=5.2 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **73.46** | **55** | P | **P** | **13 58 06.2** | **-1.0** |
| **KSAR** | **Wonju Array Be** | **73.46** | **55** | P | **P** | **13 58 06.2** | **-1.0** |
| **KSAR** | **Wonju Array Be** | **73.46** | **55** | P | **P** | **13 58 06.2** | **-1.0** |
| **KSRS** | **Korea Array** | **73.47** | **55** | P | **P** | **13 58 06.2** | **-1.1** |
| | comp=Z,1.5nm,0.7s,baz=296,slow=4.1,SNR=6.3 | | | | | | | |
| **KSRS** | **Korea Array** | **73.47** | **55** | P | **P** | **13 58 06.2** | **-1.1** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |

*IDC **29** 14:00:21.9±0.6,5°.25S×133°.90E, h0km, mb4.2/12, mb1 4.3/19, mb1mx4.2/32, mbtmp4.2/19, ML3.7/5, MS3.2/1, Ms1 3.2/1, ms1mx2.6/26, Error ellipse: s-maj=24.0km s-min=10.3km az=81.0*

*NEIC **29** 14:00:22.9±0.4, 5°.28S×133°.90E, h10km, mb4.4/5, Error ellipse: s-maj=8.8km s-min=7.0km az=66.0*

*ISCJB **29** 14:00:23.6±0.3, 5°.26S±0°.04×133°.87E±0°.04, h28km, mb4.2/16, Error ellipse: s-maj=6.3km s-min=4.8km az=144.9*

*AUST **29** 14:00:25.2±0.9, 5°.13S×134°.01E, h37km, Error ellipse: s-maj=1.2km s-min=0.8km az=241.0*

*DJA **29** 14:00:27.5±1.0, 5°S±4°×13°4E±°, h41km±50km, M4.7/14, mb4.8/14, mB5.2/6, MLv4.6/11, Mw(mB)4.6/6*

**ISC 29 14:00:25.6±0.5, 5°.23S±0°.05×133°.89E±0°.06, h28km, n65, σ1°.38/67, mb4.3/16, Aru Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.82** | **325** | P | | **Pn** | **14 01 07.4** | **-1.4** |
| | baz=2.8,SNR=54 | | | | | | | |
| **FAKI** | **Fak Fak** | **2.82** | **325** | P | | **Pn** | **14 01 07.8** | **-1.0** |
| **FAKI** | **Fak Fak** | **2.82** | **325** | *e*Pn | | **Pn** | **14 01 07.2** | **-1.6** |
| **BNDI** | **Bandanaira** | **4.03** | **280** | P | | **Pn** | **14 01 26.5** | **+1.0** |
| **SIJI** | **Sorong** | **5.06** | **329** | Pn | | **Pn** | **14 01 38.5** | **-1.1** |
| | 4.8nm,0.3s,baz=191,slow=22,SNR=15 | | | | | | | |
| SIJI | | | | Sn | | **Sn** | **14 02 32.6** | **-4.7** |
| | 7.9nm,0.3s,baz=166,slow=21,SNR=8.6 | | | | | | | |
| SIJI | | | | LR | | LR | 14 04 23.4 | |
| | comp=Z,231nm,20.3s,baz=178,slow=48 | | | | | | | |
| **SWI** | **Sorong** | **5.07** | **329** | P | | **Pn** | **14 01 39.3** | **-0.5** |
| | baz=5.1,SNR=10 | | | | | | | |
| **SWI** | **Sorong** | **5.07** | **329** | P | | **Pn** | **14 01 39.0** | **-0.8** |
| | 41nm,0.9s,0.4nm | | | | | | | |
| **MSAI** | **Masohi** | **5.29** | **291** | P | | **Pn** | **14 01 43.1** | **+0.3** |
| | 39nm,0.8s,572nm0.2nm | | | | | | | |
| **AAI** | **Ambon** | **5.88** | **285** | P | | **Pn** | **14 01 51.6** | **+0.7** |
| | baz=6.0,SNR=13 | | | | | | | |
| **AAI** | **Ambon** | **5.88** | **285** | P | | **Pn** | **14 01 51.1** | **+0.2** |
| | 212nm,0.7s,3µm0.8nm | | | | | | | |
| **NLAI** | **Namlea** | **7.05** | **286** | P | | **Pn** | **14 02 09.1** | **+2.1** |
| | 57nm,0.9s,1µm0.2nm | | | | | | | |
| **JAY** | **Jayapura** | **7.32** | **69** | Pn | | **Pn** | **14 02 10.6** | **-0.1** |
| | 0.3nm,0.3s,baz=124,slow=11,SNR=2.9 | | | | | | | |
| **KDU** | **Kakadu** | **7.54** | **191** | P | | **Pn** | **14 02 15.0** | **+1.3** |
| | baz=7.7,SNR=21 | | | | | | | |
| **LBMI** | **Labuha** | **7.84** | **305** | P | | **Pn** | **14 02 17.8** | **-0.1** |
| | 78nm,1.2s,0.3nm | | | | | | | |
| **SANI** | **Sanana** | **8.49** | **292** | P | | **Pn** | **14 02 25.9** | **-0.9** |
| | 31nm,0.9s | | | | | | | |
| **SOEI** | **Soe** | **10.54** | **244** | P | | **Pn** | **14 02 55.6** | **+0.6** |
| | baz=11,SNR=4.3 | | | | | | | |
| **SOEI** | **Soe** | **10.54** | **244** | P | | **Pn** | **14 02 55.5** | **+0.5** |
| | 129nm,1.0s | | | | | | | |
| **SOEI** | **Soe** | **10.54** | **244** | *e*Pn | | **Pn** | **14 02 54.3** | **-0.7** |
| | 102nm,0.9s | | | | | | | |
| SOEI | | | | *e*Sn | | **Sn** | **14 04 53.0** | **+0.7** |
| **BATI** | **Baumata** | **11.27** | **243** | Pn | | **Pn** | **14 03 04.6** | **-0.3** |
| | 5.0nm,0.3s,baz=88,slow=2.1,SNR=6.7 | | | | | | | |
| BATI | | | | Sn | | **Sn** | **14 05 06.6** | **-3.5** |
| | 4.7nm,0.3s,baz=87,slow=3.8,SNR=4.9 | | | | | | | |
| **BATI** | **Baumata** | **11.27** | **243** | P | | **Pn** | **14 03 05.3** | **+0.4** |
| | 32nm,0.9s | | | | | | | |
| **BBSI** | **Bau Bau** | **11.27** | **268** | P | | Pn | 14 03 12.2 | +7.3 |
| **KNRA** | **Kununurra** | **11.54** | **205** | P | | **Pn** | **14 03 08.0** | **-0.5** |
| | baz=12,SNR=37 | | | | | | | |
| **LUWI** | **Luwuk** | **11.85** | **290** | P | | **Pn** | **14 03 11.1** | **-1.7** |
| | baz=12,SNR=4.0 | | | | | | | |
| **LUWI** | **Luwuk** | **11.85** | **290** | P | | **Pn** | **14 03 11.9** | **-0.9** |
| | 75nm,1.3s,2µm | | | | | | | |
| **LUWI** | **Luwuk** | **11.85** | **290** | Pn | | Pn | 14 03 07.9 | -5.0 |
| | 100nm,1.3s | | | | | | | |
| **COEN** | **Coen** | **12.61** | **134** | P | | **Pn** | **14 03 22.9** | **-0.2** |
| | baz=13,SNR=13 | | | | | | | |
| **APSI** | **Ampana** | **12.95** | **289** | P | | **Pn** | **14 03 27.8** | **-0.1** |
| **PMG** | **Port Moresby** | **13.80** | **108** | Pn | | **Pn** | **14 03 37.8** | **-1.7** |
| | 0.4nm,0.3s,baz=0.0,slow=20,SNR=2.1 | | | | | | | |
| **WRAB** | **Tennant Creek** | **14.62** | **178** | *e*Pn | | **Pn** | **14 03 47.5** | **-3.2** |
| | 9.9nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **14.63** | **178** | Pn | | **Pn** | **14 03 48.1** | **-2.7** |
| | 0.4nm,0.3s,baz=358,slow=13,SNR=17 | | | | | | | |
| WRA | | | | Sn | | Sn | 14 06 22.9 | -9.3 |
| | 0.5nm,0.3s,baz=0.6,slow=22,SNR=4.4 | | | | | | | |
| WRA | | | | Lg | | Lg | 14 08 06.2 | |
| | 1.0nm,0.3s,baz=358,slow=24,SNR=7.5 | | | | | | | |
| **QIS** | **Mount Isa** | **16.22** | **160** | P | | **Pn** | **14 04 12.0** | **+0.4** |
| | baz=16,SNR=4.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **18.33** | **180** | P | | **P** | **14 04 36.3** | **-1.5** |
| | 0.2nm,0.3s,baz=353,slow=12,SNR=25 | | | | | | | |
| ASAR | | | | S | | **S** | **14 08 04.1** | **-1.9** |
| | 0.2nm,0.3s,baz=0.0,slow=26,SNR=4.5 | | | | | | | |
| **CTA** | **Charters Tower** | **19.05** | **142** | P | | **Pn** | **14 04 46.7** | **+0.1** |
| | 0.3nm,0.3s,baz=295,slow=17,SNR=4.5 | | | | | | | |
| **CTAO** | **Charters Tower** | **19.05** | **142** | *e*P | | **P** | **14 04 44.5** | **-1.2** |
| **WRKA** | **Warakurna** | **20.41** | **195** | P | | Pn | 14 05 03.5 | +0.6 |
| | baz=21,SNR=11 | | | | | | | |
| **MBWA** | **Marble Bar** | **20.96** | **220** | *e*P | | **P** | **14 05 07.1** | **+0.5** |
| | 7.3nm,0.8s | | | | | | | |
| **QLP** | **Quilpie** | **23.42** | **156** | P | | **P** | **14 05 34.4** | **+1.9** |
| | baz=24,SNR=4.4 | | | | | | | |
| **LHI** | **Lord Howe Isla** | **35.23** | **141** | P | | **P** | **14 07 18.6** | **+0.9** |
| | baz=35,SNR=3.2 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.72** | **305** | P | | **P** | **14 08 13.3** | **+0.8** |
| | 3.3nm,1.0s,baz=133,slow=6.9,SNR=22 | | | | | | | |
| CMAR | | | | | PcP | **PcP** | **14 10 11.4** | **+2.6** |
| | 0.5nm,0.6s,baz=158,slow=2.6,SNR=4.1 | | | | | | | |
| **CHTO** | **Chiang Mai** | **41.91** | **306** | *e*P | | **P** | **14 08 14.4** | **+0.4** |
| | 8.4nm,1.3s | | | | | | | |
| **KSAR** | **Wonju Array Be** | **42.82** | **353** | P | | **P** | **14 08 22.1** | **+1.1** |
| **KSRS** | **Korea Array** | **42.83** | **353** | P | | **P** | **14 08 22.1** | **+1.0** |
| | 4.0nm,0.9s,baz=164,slow=9.7,SNR=9.2 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **49.23** | **358** | P | | **P** | **14 09 12.6** | **+1.1** |
| | 2.2nm,0.3s,baz=138,slow=6.6,SNR=5.9 | | | | | | | |
| **TAPN** | **Taplejung** | **55.11** | **309** | *e*P | | **P** | **14 09 56.2** | **+0.2** |
| | 5.5nm,0.6s | | | | | | | |
| **ODAN** | **Odare** | **55.13** | **308** | *e*P | | **P** | **14 09 56.2** | **+0.2** |
| | 19nm,1.0s | | | | | | | |
| **RAMN** | **Ramite** | **55.79** | **308** | *e*P | | **P** | **14 10 01.4** | **+0.6** |
| **GUN** | **Gumba** | **56.81** | **308** | *e*P | | **P** | **14 10 08.4** | **+0.2** |
| **PKI** | **Pulchoki** | **57.02** | **308** | *e*P | | **P** | **14 10 09.6** | **-0.1** |
| **KKN** | **Kakani** | **57.22** | **308** | *e*P | | **P** | **14 10 10.6** | **-0.3** |
| | 7.6nm,0.5s | | | | | | | |
| **DMN** | **Daman** | **57.28** | **307** | *e*P | | **P** | **14 10 11.9** | **+0.5** |
| | 6.2nm,0.6s | | | | | | | |
| **GKN** | **Gorkha** | **57.83** | **308** | *e*P | | **P** | **14 10 15.4** | **+0.3** |
| **SONM** | **Songino Array** | **58.11** | **339** | P | | **P** | **14 10 17.3** | **+0.6** |
| | 0.3nm,0.4s,baz=168,slow=7.4,SNR=2.9 | | | | | | | |
| **KOLN** | **Koldanda** | **58.54** | **307** | *e*P | | **P** | **14 10 20.9** | **+0.7** |
| | 12nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.95** | **325** | P | | **P** | **14 11 29.3** | **+1.1** |
| | 4.2nm,0.8s,baz=123,slow=8.0,SNR=32 | | | | | | | |
| **TKM2** | **Tokmak 2** | **71.15** | **319** | *e*P | | **P** | **14 11 41.2** | **-0.9** |
| | 6.7nm,1.4s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.78** | **332** | P | | **P** | **14 11 45.4** | **0.0** |
| | 0.8nm,0.3s,baz=115,slow=5.7,SNR=7.0 | | | | | | | |
| **KURK** | **Kurchatov** | **73.09** | **327** | *e*P | | **P** | **14 11 50.3** | **-2.9** |
| | 11nm,1.0s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **73.09** | **327** | P | | **P** | **14 11 53.7** | **+0.4** |
| | 3.1nm,0.9s,baz=126,slow=4.8,SNR=22 | | | | | | | |
| **VNDA** | **Vanda** | **73.75** | **174** | P | | **P** | **14 11 58.2** | **+1.5** |
| | 1.8nm,0.9s,baz=287,slow=4.3,SNR=4.4 | | | | | | | |
| **KKAR** | **Karatay Array** | **74.62** | **317** | *e*P | | **P** | **14 12 02.2** | **-0.2** |
| | 3.1nm,0.9s | | | | | | | |
| **MAW** | **Mawson** | **78.00** | **202** | P | | **P** | **14 12 21.0** | **-0.1** |
| | 1.9nm,1.0s,baz=56,slow=10,SNR=3.9 | | | | | | | |
| **GEYT** | **Alibeck** | **82.06** | **309** | P | | **P** | **14 12 45.3** | **+1.6** |
| | 3.1nm,0.8s,baz=212,slow=7.0,SNR=6.5 | | | | | | | |
| **QSPA** | **South Pole Qui** | **84.73** | **180** | P | | **P** | **14 12 57.6** | **+0.6** |
| | 3.2nm,0.9s,baz=350,slow=1.6,SNR=7.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **90.12** | **25** | P | | **P** | **14 13 22.1** | **-0.7** |
| | 0.4nm,0.8s,baz=282,slow=4.2,SNR=2.8 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **132.22** | **283** | PKP | | **PKPdf** | **14 19 40.0** | **+1.9** |
| | 0.7nm,0.8s,baz=53,slow=3.5,SNR=4.0 | | | | | | | |

*ISCJB **29** 14:01:49.9±0.6, 40°.49N±0°.03×21°.55E±0°.04, h11km±5km, Error ellipse: s-maj=5.3km s-min=4.3km az=24.7*

*CSEM **29** 14:01:49.7±0.2, 40°.50N×21°.61E, h2km, MD2.8, Error ellipse: s-maj=4.4km s-min=3.7km az=26.0*

*ATH **29** 14:01:49.9, 40°.48N×21°.58E, h12km±3km, MD2.8/10*

*SKO **29** 14:01:51.0, 40°.46N×21°.54E, h3km, M1.5, ML2.1*

**ISC 29 14:01:50.3±1.0, 40°.49N±0°.03×21°.57E±0°.02, h9km±9km, n22, σ0°.37/38, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **KZN** | **Kozani** | **0.23** | **140** | *e*PG | | **Pg** | **14 01 54.9** | **-0.2** |
| KZN | | | | *e*SG | | **Sg** | **14 01 58.9** | **+0.6** |
| **KZN** | **Kozani** | **0.23** | **140** | *e*Pb | | **Pg** | **14 01 54.9** | **-0.2** |
| KZN | | | | *e*Sb | | **Sg** | **14 01 58.9** | **+0.6** |
| **FNA** | **Florina** | **0.33** | **333** | *e*PB | | **Pg** | **14 01 56.6** | **-0.3** |
| FNA | | | | *e*SB | | **Sg** | **14 02 01.6** | **+0.3** |
| **FNA** | **Florina** | **0.33** | **333** | *e*Pb | | **Pg** | **14 01 56.6** | **-0.3** |
| FNA | | | | *e*Sb | | **Sg** | **14 02 01.6** | **+0.3** |
| **NEST** | **Nestorio** | **0.41** | **260** | *e*PG | | **Pg** | **14 01 57.6** | **-0.7** |
| NEST | | | | *e*SB | | **Sg** | **14 02 04.3** | **+0.6** |
| **NEST** | **Nestorio** | **0.41** | **260** | *e*Pb | | **Pg** | **14 01 57.6** | **-0.7** |
| NEST | | | | *e*Sb | | **Sg** | **14 02 04.3** | **+0.6** |
| **PENT** | **Pentalofos** | **0.44** | **229** | *e*PB | | **Pg** | **14 01 58.3** | **-0.7** |
| PENT | | | | *e*SB | | **Sg** | **14 02 04.8** | **0.0** |
| **PENT** | **Pentalofos** | **0.44** | **229** | *e*Pb | | **Pg** | **14 01 58.3** | **-0.7** |
| PENT | | | | *e*Sb | | **Sg** | **14 02 04.8** | **0.0** |
| **GRG** | **Griva** | **0.79** | **53** | *e*PB | | **Pg** | **14 02 05.1** | **-0.3** |
| GRG | | | | *e*SB | | **Sg** | **14 02 15.6** | **-0.1** |
| **GRG** | **Griva** | **0.79** | **53** | *e*Pn | | **Pg** | **14 02 05.1** | **-0.3** |
| GRG | | | | *e*Sn | | **Sg** | **14 02 15.6** | **-0.1** |
| **LIT** | **Litokhoron** | **0.80** | **119** | *e*PB | | **Pg** | **14 02 05.5** | **-0.2** |
| LIT | | | | *e*SB | | **Sg** | **14 02 15.9** | **-0.2** |
| **LIT** | **Litokhoron** | **0.80** | **119** | *e*Pn | | **Pg** | **14 02 05.5** | **-0.2** |
| LIT | | | | *e*Sn | | **Sg** | **14 02 15.9** | **-0.2** |
| **OHR** | **Ohrid** | **0.86** | **317** | *i*Pg | | **Pg** | **14 02 06.8** | **-0.1** |
| OHR | | | | *i*Sg | | **Sb** | **14 02 19.2** | **+0.1** |
| OHR | | | | *e*Lg | | Lg | 14 02 19.7 | |
| | comp=N,27nm,0.5s | | | | | | | |
| OHR | | | | *e*Lg | | Lg | 14 02 20.0 | |
| | comp=E,26nm,0.4s | | | | | | | |
| **OHR** | **Ohrid** | **0.86** | **317** | *i*Pg | | **Pg** | **14 02 06.7** | **-0.1** |
| OHR | | | | *i*Sg | | **Sb** | **14 02 19.1** | **+0.1** |
| OHR | | | | *e*Lg | | Lg | 14 02 19.6 | |
| | comp=E,27nm,0.5s | | | | | | | |
| **KNT** | **Kendrikon** | **1.21** | **56** | *e*PB | | **Pg** | **14 02 13.2** | **-0.3** |
| KNT | | | | *e*SB | | **Sn** | **14 02 30.0** | **0.0** |
| **KNT** | **Kendrikon** | **1.21** | **56** | *e*Pn | | **Pg** | **14 02 13.2** | **-0.3** |
| KNT | | | | *e*Sn | | **Sn** | **14 02 30.0** | **0.0** |
| **PLG** | **Polygyros** | **1.43** | **94** | *e*PB | | **Pn** | **14 02 16.3** | **-0.2** |
| **PLG** | **Polygyros** | **1.43** | **94** | *e*Pn | | **Pn** | **14 02 16.3** | **-0.2** |
| **MAKR** | **Makrakomi, Fth** | **1.53** | **164** | *e*PB | | **Pb** | **14 02 19.0** | **+0.1** |
| **MAKR** | **Makrakomi, Fth** | **1.53** | **164** | *e*Pn | | **Pb** | **14 02 19.0** | **+0.1** |
| **AGG** | **Agios Georgios** | **1.57** | **158** | *e*PG | | **Pn** | **14 02 18.8** | **+0.3** |
| **AGG** | **Agios Georgios** | **1.57** | **158** | *e*Pn | | **Pn** | **14 02 18.8** | **+0.3** |

**IDC 29 14:10:32.3±2.3, 3°.73S×99°.65E, h0km, mb3.9/8, mb1 4.0/8, mb1mx3.7/42, mbtmp3.9/8, Error ellipse: s-maj=81.1km s-min=20.8km az=56.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **22.05** | **358** | P | | P | 14 15 29.2 | +0.3 |
| | 1.3nm,0.6s,baz=187,slow=10,SNR=13 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.30** | **261** | T | | T | 14 45 45.0 | |
| | baz=82,slow=75,SNR=16 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.30** | **261** | T | | T | 14 45 46.8 | |
| | baz=82,slow=75,SNR=19 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.32** | **261** | T | | T | 14 46 02.7 | |
| | baz=82,slow=75,SNR=19 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.79** | **158** | T | | T | 14 53 28.8 | |
| | baz=336,slow=74 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.80** | **158** | T | | T | 14 53 32.2 | |
| | baz=336,slow=74 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.81** | **158** | T | | T | 14 53 24.9 | |
| | baz=336 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.45** | **118** | P | | P | 14 17 47.5 | -0.4 |
| | 0.3nm,0.5s,baz=288,slow=8.2,SNR=4.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.55** | **124** | P | | P | 14 17 57.0 | -0.2 |
| | 0.5nm,0.9s,baz=295,slow=7.5,SNR=4.0 | | | | | | | |
| **SONM** | **Songino Array** | **51.69** | **6** | P | | P | 14 19 41.8 | +0.5 |
| | 1.3nm,0.7s,baz=188,slow=8.9,SNR=11 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.59** | **345** | P | | P | 14 19 48.3 | +0.4 |
| | 1.0nm,0.6s,baz=149,slow=8.6,SNR=8.5 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.83** | **28** | P | | P | 14 20 10.8 | -0.7 |
| | 2.7nm,0.7s,baz=243,slow=6.6,SNR=7.3 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.10** | **344** | P | | P | 14 20 18.9 | -1.6 |
| | 0.2nm,0.4s,baz=162,slow=7.6,SNR=4.9 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.79** | **350** | P | | P | 14 20 32.1 | -0.1 |
| | 2.2nm,0.7s,baz=170,slow=4.4,SNR=9.7 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.27** | **38** | PKPbc | | PKPbc | 14 30 16.0 | +0.2 |
| | 0.5nm,0.6s,baz=304,slow=1.9,SNR=6.8 | | | | | | | |

*IDC **29** 14:11:47.2±0.4, 29°.49S×71°.71W, h0km, mb5.0/14, mb1 4.9/17, mb1mx4.8/22, mbtmp5.0/17, ML4.3/2, MS4.5/25, Ms1 4.5/25, ms1mx4.5/28, Error ellipse: s-maj=18.6km s-min=11.5km az=92.0*

*ISCJB **29** 14:11:50.7±1.2, 29°.45S±0°.03×71°.93W±0°.04, h32km±8km, mb5.0/59, MS4.6/23, Error ellipse: s-maj=5.8km s-min=4.5km az=159.7*

*GCMT **29** 14:11:51.0±0.2, 29°.62S×72°.03W, h30km±1km, MW5.2/82, Moment Tensor Solution. s52,c70; s82,c115; Duration: 1s0 Moment tensor: Scale 10¹⁶Nm; Mrr4.29±.21; Mθθ 1.16±.14; Mϕϕ-5.44±.17; Mrθ-2.33±.21; Mrϕ2.38±.11; Mθϕ-5.66±.33; Best double couple: M⊙8.23400×10¹⁶ NP1:ϕs192.00000°, δ72.00000°, λ116.00000°. NP2: ϕs313.00000°, δ31.00000°, λ36.00000°. Principal axes: T 8.2670, Plg55.0000°, Azm135.0000°; N -0.0560, Plg25.0000°, Azm3.0000°; P -8.2010, Plg23.0000°, Azm262.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*MOS **29** 14:11:51.6±1.3, 29°.65S×71°.68W, h33km, mb5.2/24 Error ellipse: s-maj=16.1km s-min=11.3km az=101.4*

*NEIC **29** 14:11:51.0, 29°.45S×71°.74W, h42km, mb5.0/43, After GUC.*

*NEIC Felt [IV] at Coquimbo, La Higuera and La Serena; [III] at Andacollo, Rio Hurtado and Vicuna; [II] at Freirina, Huasco, Monte Patria, Ovalle, Paihuano and Vallenar.*

*BJI **29** 14:11:51.7, 28°.90S×72°.04W, h33km, mB5.4/17, Ms5.6/10, Ms7 5.2/13*

*GUC **29** 14:11:51.9±0.6, 29°.46S×71°.74W, h42km±3km, ML5.2*

**ISC 29 14:11:52.0±0.7, 29°.43S±0°.03×71°.82W±0°.05, h33km±4km, n341, σ1°55/333, mb5.1/59, MS4.6/23, 4C-4D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **LSCH** | **La Serena** | **0.69** | **134** | *e*P | | **Pn** | **14 12 04.8** | **-0.7** |
| LSCH | | | | *e*S | | **Sb** | **14 12 14.0** | **-1.0** |
| **LCO** | **Las Campanas** | **1.06** | **67** | *i*P | | **Pn** | **14 12 10.5** | **-0.4** |
| LCO | | | | *e*S | | **Sn** | **14 12 25.4** | **+0.8** |
| LCO | | | | AML | | AML | 14 12 27.4 | |
| | comp=E,111µm,0.4s | | | | | | | |
| **LCO** | **Las Campanas** | **1.06** | **67** | *e*Pn | | **Pn** | **14 12 11.0** | **+0.1** |
| LCO | | | | *e*Sn | | **Sn** | **14 12 23.4** | **-1.3** |
| **LCO** | **Las Campanas** | **1.06** | **67

comp=Z,35nm,1.0s,baz=1.1,slow=6.3,SNR=5.7
**SDV Santo Domingo 38.11 2** *e*P P **14 19 06.0 -2.2**
comp=Z,48nm,1.5s
**CELP Cerrillos 47.50 7** *e*P P 14 20 19.4 -4.6
**VNA3 Neumayer Olymp 53.53 159** P **P** **14 21 09.2 +0.1**
**VNA1 Neumayer--Stat 53.82 158** P **P** **14 21 11.8 +0.7**
**VNA2 Neumayer--Watz 54.16 159** P **P** **14 21 14.0 +0.3**
baz=288,slow=8.2
**SNAA Sanae 55.76 159** P **P** **14 21 24.7 -0.6**
**SNAA Sanae 55.76 159** P **P** **14 21 24.9 -0.4**
comp=Z,34nm,1.0s,baz=282,slow=7.5,SNR=239
**SNAA Sanae 55.76 159** *c i*P **P** **14 21 24.2 -1.1**
SNAA pmax pmax
comp=Z,67nm,1.3s
**SNAA Sanae 55.76 159** *e*P **P** **14 21 23.9 -1.4**
comp=Z,65nm,1.2s
**RKT Rikitea 56.39 261** *e*S **S** **14 29 22.6 +3.4**
comp=Z,427nm,29.5s
RKT *e*LR LR 14 38 05.9
comp=Z,703nm,25.2s,baz=114
**RKT Rikitea 56.39 261** *e*T T 15 22 40.1
comp=Z,12nm,0.3s
**NVL N'lazarevskaya 60.45 158** *i* P **P** **14 21 56.8 -1.2**
NVL pmax pmax
comp=Z,60nm,1.0s
**QSPA South Pole Qui 60.79 180** P **P** **14 22 00.9 +0.2**
comp=Z,40nm,1.0s,baz=149,slow=2.1,SNR=93
**QSPA South Pole Qui 60.79 180** *e*P **P** **14 21 58.6 -2.0**
**H06S1 SOCORRO T 60.98 317** T T 15 28 51.6
SNR=13
**H06E1 SOCORRO T-PHAS 60.99 317** T T 15 28 54.0
SNR=10
**833A Chaparral WMA, 63.19 333** P **P** **14 22 18.1 +1.2**
baz=64
**832A Faith Ranch, C 63.39 332** P **P** **14 22 19.6 +1.3**
baz=64
**732A Laxson Ranch, 63.78 332** P **P** **14 22 22.2 +1.3**
baz=64
**632A Uvalde 64.40 333** P **P** **14 22 26.3 +1.3**
baz=65
**533A Kerrville 64.61 334** P **P** **14 22 27.7 +1.3**
baz=65
**631A Perdido Creek 64.63 332** P **P** **14 22 27.1 +0.6**
baz=65
**434A Burnet 64.99 335** P **P** **14 22 29.6 +0.9**
baz=65
**532A Rocksprings 65.00 333** P **P** **14 22 30.1 +1.2**
baz=65
**433A Art 65.24 334** P **P** **14 22 31.2 +0.8**
baz=66
**JCT Junction City 65.27 334** *e*P **P** **14 22 27.7 -2.9**
JCT pmax pmax
comp=Z,125nm,1.6s
**JCT Junction City 65.27 334** *e*P **P** **14 22 27.7 -2.9**
comp=Z,125nm,1.6s
**531A Rocksprings 65.28 333** P **P** **14 22 31.6 +0.8**
baz=66
**334A Lometa 65.44 335** P **P** **14 22 32.8 +1.1**
baz=66
**530A J-C Ranch, Com 65.59 332** P **P** **14 22 34.0 +1.3**
baz=66
**SWET Sewanee 65.66 347** *e*P P 14 22 29.9 -3.2
comp=Z,142nm,2.0s
**333A Richland Sprin 65.71 335** P **P** **14 22 34.5 +1.0**
baz=66
**WHTX Lake Whitney 65.76 336** P **P** **14 22 36.1 +2.4**
baz=66
**WHTX Lake Whitney 65.76 336** *e*P P 14 22 29.4 -4.3
comp=Z,26nm,1.0s
**431A Sonora 65.77 333** P **P** **14 22 35.0 +1.2**
baz=66
**TXAR Lajitas Array 65.87 330** P **P** **14 22 36.0 +1.4**
comp=Z,1.0nm,0.7s,baz=154,slow=7.9,SNR=8.0
TXAR LR LR 14 47 11.3
comp=Z,368nm,18.9s,baz=0.0,slow=32
**TXAR Lajitas Array 65.87 330** P **P** **14 22 36.0 +1.4**
**TX31 Lajitas Ar. Si 65.87 330** *e*P **P** **14 22 35.6 +1.0**
**529A Stev Forest Ra 65.94 331** P **P** **14 22 36.4 +1.5**
baz=66
**234A Clairette 66.01 336** P **P** **14 22 36.6 +1.3**
baz=66
**332A Millersview 66.05 334** P **P** **14 22 36.6 +1.0**
baz=66
**430A Baggett Ranch, 66.11 332** P **P** **14 22 37.6 +1.5**
baz=66
**429A Davenport Ranc 66.24 332** P **P** **14 22 38.1 +1.2**
baz=67
**233A Rising Star 66.30 335** P **P** **14 22 38.7 +1.4**
baz=67
**232A Coleman 66.47 334** P **P** **14 22 39.5 +1.2**
baz=67
**MIAR Mount Ida 66.87 341** *e*P P 14 22 34.7 -6.0
MIAR pmax pmax
comp=Z,16nm,1.1s
**MIAR Mount Ida 66.87 341** *e*P P 14 22 34.7 -6.0
comp=Z,16nm,1.1s
**WVT Waverly 66.93 346** *e*P P 14 22 38.0 -3.1
WVT pmax pmax
comp=Z,48nm,1.4s
**WVT Waverly 66.93 346** *e*P P 14 22 38.0 -3.1
comp=Z,48nm,1.4s
**ABTX Abilene, Hawle 67.12 335** *e*P **P** **14 22 40.0 -2.5**
comp=Z,55nm,1.1s
**X38A Whitesboro 67.36 340** P **P** **14 22 44.7 +0.8**
baz=68
**Z33A Whitaker Ranch 67.40 336** P **P** **14 22 45.2 +1.0**
baz=68
**X36A Centrahoma 67.74 338** P **P** **14 22 46.3 0.0**
baz=68
**W37A Quinton 67.97 339** P **P** **14 22 48.3 +0.6**
baz=68
**PBMO Poplar Bluff 68.14 344** *e*P **P** **14 22 49.4 +0.7**
comp=Z,38nm,0.9s
**X34A Smith Ranch, M 68.26 337** P **P** **14 22 50.1 +0.5**
baz=69
**V38A Canehill 68.34 340** P **P** **14 22 50.6 +0.6**
baz=69
**V37A Hulbert 68.58 340** P **P** **14 22 52.3 +0.8**
baz=69
**VNDA Vanda 68.61 191** P **P** **14 22 52.0 +0.7**
comp=Z,4.6nm,1.1s,baz=131,slow=5.7,SNR=12
VNDA LR LR 14 47 36.9
comp=Z,140nm,21.6s,baz=150,slow=31
**VNDA Vanda 68.61 191** *e*P **P** **14 22 52.3 +1.0**
VNDA pmax pmax
comp=Z,18nm,1.4s
**VNDA Vanda 68.61 191** *e*P **P** **14 22 52.2 +1.0**
comp=Z,18nm,1.4s
**MNTX Cornudas Mount 68.65 330** P **P** **14 22 52.5 +0.4**
baz=69
**MNTX Cornudas Mount 68.65 330** *e*P **P** **14 22 49.7 -2.4**
comp=Z,15nm,1.1s
**V36A Jenks 68.73 339** P **P** **14 22 53.3 +0.8**
baz=69
**TUL1 Tulsa 68.80 339** P **P** **14 22 53.8 +0.9**
baz=69
**TUL1 Tulsa 68.80 339** *e*P **P** **14 22 50.8 -2.1**
comp=Z,31nm,1.0s
**U37A Salina 69.05 340** P **P** **14 22 54.6 +0.1**
baz=69
**MCWV Mont Chateau 69.14 353** *e*P **P** **14 22 57.4 +2.5**
comp=Z,143nm,2.4s
**W32A Sentinel 69.22 336** P **P** **14 22 55.7 +0.2**
baz=70
**MSTX Muleshoe 69.52 333** P **P** **14 22 55.0 -2.6**
comp=Z,36nm,1.1s
**CCM Cathedral Cave 69.55 344** P **P** **14 22 55.3 -2.2**
CCM pmax pmax
comp=Z,34nm,1.0s
**CCM Cathedral Cave 69.55 344** P **P** **14 22 55.3 -2.2**
comp=Z,34nm,1.0s
**T37A Cheneyville 18 69.66 340** P **P** **14 22 58.5 +0.3**
baz=70
**MEH Mehetia 69.72 260** *e*T T 15 39 19.0
comp=Z,29nm,0.2s
**AMTX Amarillo 69.90 334** P P 14 22 56.5 -3.4
**SYO Syowa Base 70.05 159** ‖ *i*P **P** **14 22 58.0 -2.2**
**S36A Lake Cedric, C 70.42 340** P **P** **14 23 03.2 +0.4**
baz=71
**S35A Otter Creek Ra 70.59 340** P **P** **14 23 03.6 -0.3**
baz=71
**TVO Taravao 70.78 260** *e*T T 15 40 38.4
comp=Z,0.9nm,0.2s
**V28A Channing 70.87 334** P **P** **14 23 05.5 -0.3**
baz=71
**TIAR Tiarei 70.96 260** *e*T T 15 40 51.7
comp=Z,11nm,0.3s
**PPT2 Papeete2 71.14 260** *e*S **S** **14 32 27.3 +4.5**
comp=Z,229nm,27.8s
**PPT2 Papeete2 71.14 260** *e*LR LR 14 44 57.5
comp=Z,946nm,22.8s,baz=106
**PPT Papeete 71.15 260** LR LR 14 46 29.6
comp=Z,546nm,18.4s,baz=170,slow=29
**HDIL Hopedale 71.50 346** P **P** **14 23 10.0 +0.7**
baz=72
**ANMO Albuquerque 71.89 331** *e*P P 14 23 15.5 +3.5
ANMO pmax pmax
comp=Z,12nm,1.7s
**S26A Kim 72.99 334** P **P** **14 23 19.7 +1.2**
baz=73
**LIC Lamto 73.19 73** *e*P **P** **14 23 19.4 -0.7**
comp=Z,57nm,1.5s
**M37A Trindle Farm, 73.42 343** P **P** **14 23 21.8 +1.0**
baz=74
**TIC Toumodi 73.43 72** *e*P **P** **14 23 21.3 -0.2**
**KIC Kosan Boka 73.50 73** *e*P **P** **14 23 21.9 0.0**
comp=Z,158nm,1.4s
**DBIC Dimbokro 73.58 72** P **P** **14 23 22.5 +0.2**
comp=Z,18nm,0.5s,baz=213,slow=6.6,SNR=48
DBIC LR LR 14 53 42.2
comp=Z,470nm,19.1s,baz=214,slow=34
**SDCO Great Sand Dun 73.89 333** *e*P **P** **14 23 22.8 -1.2**
comp=Z,21nm,1.6s
**KSCO Kaye Shedlock' 73.90 335** P **P** **14 23 24.3 +0.5**
baz=74
**KSCO Kaye Shedlock' 73.90 335** *e*P **P** **14 23 21.8 -2.0**
comp=Z,33nm,1.2s
**WUAZ Wupatki 74.58 327** P **P** **14 23 29.4 +1.5**
baz=75
**WUAZ Wupatki 74.58 327** *e*P **P** **14 23 26.5 -1.3**
comp=Z,21nm,1.1s
**MVCO Mesa Verde 74.68 330** P **P** **14 23 30.4 +1.8**
baz=75
**Q24A Divide 74.81 334** P **P** **14 23 30.4 +1.1**
baz=75
**ISCO Idaho Springs 75.71 334** *e*P **P** **14 23 36.4 +1.9**
**ISCO Idaho Springs 75.71 334** *e*P **P** **14 23 36.4 +1.9**
**SMCO Snowmass 75.71 332** *e*P P 14 23 30.9 -3.7
comp=Z,38nm,1.2s
**PV04 Paradox Valley 75.85 331** *e*P P 14 23 30.2 -5.0
**J33A Davis 75.99 341** P **P** **14 23 36.5 +0.9**
baz=76
**H37A Dierke Farm, C 76.13 345** P **P** **14 23 37.0 +0.6**
baz=76
**ECSD EROS Data Cent 76.27 342** P **P** **14 23 37.9 +0.7**
baz=77
**ECSD EROS Data Cent 76.27 342** *e*P **P** **14 23 34.9 -2.3**
comp=Z,25nm,0.9s
**CCUT Cedar City 77.16 327** *e*P **P** **14 23 45.2 +2.6**
comp=Z,13nm,1.1s
**F36A Milaca 77.48 345** P **P** **14 23 44.7 +0.8**
baz=78
**MAW Mawson 77.50 164** P **P** **14 23 44.0 0.0**
comp=Z,18nm,0.7s,baz=208,slow=6.7,SNR=57
MAW LR LR 14 58 56.0
comp=Z,450nm,19.6s,baz=238,slow=36
**MAW Mawson 77.50 164** *e*P **P** **14 23 43.8 -0.1**
MAW pmax pmax
comp=Z,13nm,1.3s
**MAW Mawson 77.50 164** *e*P **P** **14 23 43.8 -0.1**
comp=Z,13nm,1.3s
**I29A Vivian Onida 77.61 339** P **P** **14 23 45.7 +0.9**
baz=78
**MPMC Manuel Prospec 78.03 324** P **P** **14 23 46.6 -0.9**
baz=78
**E36A McGregor 78.04 345** P **P** **14 23 47.7 +0.6**
baz=78
**RAR Rarotonga 78.18 252** LR LR 14 49 55.0
comp=Z,432nm,18.5s,baz=128,slow=29
**O16A Springville 78.47 330** *e*P P 14 23 46.3 -3.6
comp=Z,13nm,1.0s
**K22A Casper 78.52 335** *e*P P 14 23 47.0 -3.0
comp=Z,33nm,1.2s
**F31A Hecla 78.68 342** P **P** **14 23 51.2 +0.5**
baz=79
**H27A Howes 78.71 338** P **P** **14 23 52.2 +1.3**
baz=79
**I25A Rochford 78.71 337** P **P** **14 23 52.6 +1.5**
baz=79
**G28A Parade 78.75 339** P **P** **14 23 51.9 +0.8**
baz=79
**RSSD Black Hills 78.91 337** *e*P P 14 23 48.6 -3.6
RSSD pmax pmax
comp=Z,7.0nm,0.9s
**RSSD Black Hills 78.91 337** *e*P P 14 23 48.5 -3.6
comp=Z,7.1nm,0.9s
**DUG Dugway 79.04 329** *e*P **P** **14 23 54.4 +1.5**
DUG pmax pmax
comp=Z,14nm,1.1s
**DUG Dugway 79.04 329** *e*P **P** **14 23 54.4 +1.5**
comp=Z,14nm,1.1s
**C36A Pine Crest Far 79.13 346** P **P** **14 23 53.7 +0.7**
baz=80
**G27A Dupree 79.33 339** P **P** **14 23 55.2 +1.0**
baz=80
**G26A Maurine 79.47 338** P **P** **14 23 55.8 +0.8**
baz=80
**G25A Newell 79.65 338** P **P** **14 23 57.0 +1.0**
baz=80
**HWUT Hardware Ranch 79.65 331** *e*P P 14 23 51.6 -4.7
comp=Z,10nm,0.8s
**BW06 Boulder Array 79.79 333** *e*P **P** **14 23 57.5 +0.4**
**SPUT South Promonto 79.79 330** *e*P **P** **14 23 54.2 -2.8**
comp=Z,52nm,1.8s
**F27A Lemmon 79.80 339** P **P** **14 23 57.9 +1.1**
baz=80
**B35A Bob, Littlefor 79.89 345** P **P** **14 23 57.4 +0.2**
baz=80
**D30A Buchanan 79.97 342** P **P** **14 23 58.6 +1.0**
baz=80
**F26A Lodgepole 79.99 339** P **P** **14 23 58.7 +0.8**
baz=80
**B34A Aery, Baudette 80.22 345** P **P** **14 23 59.9 +1.0**
baz=81
**NVAR Mina Array Bea 80.26 325** P **P** **14 23 59.5 -0.2**
comp=Z,0.2nm,0.3s,baz=150,slow=4.2,SNR=2.9
NVAR LR LR 14 53 18.3
comp=Z,264nm,21.1s,baz=150,slow=31
**HVU Hansel Valley 80.31 330** *e*P **P** **14 23 57.0 -2.8**
HVU pmax pmax
comp=Z,10.0nm,1.1s
**HVU Hansel Valley 80.31 330** *e*P **P** **14 23 57.0 -2.8**
comp=Z,10nm,1.1s
**AGMN Agassiz Nation 80.32 344** P **P** **14 24 00.1 +0.6**
baz=81
**C31A Landman Farms, 80.32 343** P **P** **14 24 00.2 +0.7**
baz=81
**C30A Mose, Pekin 80.44 342** P **P** **14 24 01.1 +0.9**
baz=81
**E26A Carlson Angus 80.48 339** P **P** **14 24 01.1 +0.6**
baz=81
**ELK Elko 80.58 328** *e*P **P** **14 24 02.9 +1.5**
ELK pmax pmax
comp=Z,6.0nm,1.1s
**ELK Elko 80.58 328** *e*P **P** **14 24 02.9 +1.5**
comp=Z,6.3nm,1.1s
**REDW Red Top Meadow 80.81 332** *e*P **P** **14 24 00.9 -1.6**
comp=Z,16nm,1.2s
**A33A Warroad 80.81 345** P **P** **14 24 02.4 +0.3**
baz=81
**MDND Maddock 80.88 341** P **P** **14 24 03.2 +0.7**
baz=81
**LOHW Long Hollow 80.92 333** *e*P **P** **14 24 04.4 +1.4**
comp=Z,8.6nm,1.2s
**TPAW Teton Pass 80.95 332** *e*P **P** **14 24 04.8 +1.5**
comp=Z,9.5nm,1.2s
**D26A Manning 80.97 339** P **P** **14 24 04.0 +1.0**
baz=81
**A32A Rocking H Ranc 81.05 344** P **P** **14 24 04.0 +0.6**
baz=81
**B30A Myrvik Farm, E 81.08 342** P **P** **14 24 04.2 +0.6**
baz=82
**A31A Linda, St. Vin 81.24 343** P **P** **14 24 05.8 +1.5**
baz=82
**IMW Indian Meadow 81.29 333** *e*P **P** **14 24 07.2 +2.1**
comp=Z,12nm,1.3s
**FLWY Flagg Ranch 81.34 333** *e*P **P** **14 24 03.3 -2.1**
comp=Z,38nm,1.7s
**D25A Fairfield 81.35 339** P **P** **14 24 06.4 +1.3**
baz=82
**B29A Wagenman Farm, 81.37 342** P **P** **14 24 06.2 +1.1**
baz=82
**A30A Hoffart Farm, 81.53 343** P **P** **14 24 06.7 +0.7**
baz=82
**RLMT Red Lodge 81.66 334** P **P** **14 24 07.7 +0.7**
baz=82
**A29A Manning Farm, 81.76 342** P **P** **14 24 07.8 +0.7**
baz=82
**LAO LASA Array 81.90 337** *e*P P 14 24 04.5 -3.5
**YMR Madison River 81.94 333** *e*P **P** **14 24 10.8 +2.3**
comp=Z,26nm,1.3s
**BOSA Boshof 82.04 118** P **P** **14 24 08.3 -1.2**
comp=Z,8.2nm,0.6s,baz=262,slow=4.6,SNR=9.4
BOSA LR LR 14 57 01.5
comp=Z,338nm,18.9s,baz=237,slow=33
**BOSA Boshof 82.04 118** *e*P **P** **14 24 09.6 +0.1**
**BOSA Boshof 82.04 118** *e*P **P** **14 24 09.6 +0.1**
**ULM Lac du Bonnet 82.15 345** P **P** **14 24 08.5 -0.7**
comp=Z,5.7nm,0.7s,baz=152,slow=5.9,SNR=5.4
ULM LR LR 15 02 21.8
comp=Z,107nm,18.0s,baz=130,slow=37
**ULM Lac du Bonnet 82.15 345** *e*P **P** **14 24 09.5 +0.4**
**ULM Lac du Bonnet 82.15 345** *e*P **P** **14 24 09.5 +0.4**
**HLID Hailey 82.47 330** P **P** **14 24 12.6 +1.4**
baz=83
**HLID Hailey 82.47 330** P **P** **14 24 10.8 -0.4**
comp=Z,12nm,1.2s
**TOA0 Torodi Ar. Sit 82.49 70** *e*P **P** **14 24 10.7 -1.1**
**TOA0 Torodi Ar. Sit 82.49 70** *e*P **P** **14 24 11.7 -0.1**
**TORD Torodi Ar. Bea 82.49 70** P **P** **14 24 11.9 +0.2**
comp=Z,35nm,0.9s,baz=258,slow=4.5,SNR=127
TORD LR LR 14 59 26.3
comp=Z,593nm,19.5s,baz=230,slow=35
**A26A Wade Farm, Ken 82.52 340** P **P** **14 24 12.0 +0.8**
baz=83
**DGMT Dagmar 82.79 339** P **P** **14 24 13.7 +1.1**
baz=83
**DGMT Dagmar 82.79 339** P P 14 24 09.5 -3.1
comp=Z,44nm,1.1s
**MCMT McKenzie Canyo 82.83 332** *e*P **P** **14 24 11.1 -2.0**
**LRM Limekiln Ridge 83.48 333** *e*P **P** **14 24 15.7 -0.8**
comp=Z,98nm,1.7s
**WVOR Wild Horse Val 83.49 327** *e*P **P** **14 24 17.9 +1.4**
WVOR pmax pmax
comp=Z,16nm,1.8s
**WVOR Wild Horse Val 83.49 327** *e*P **P** **14 24 17.9 +1.4**
comp=Z,16nm,1.8s
**MOD Modoc 83.89 326** *e*P **P** **14 24 20.1 +1.6**
comp=Z,9.2nm,1.1s
**SCHQ Schefferville 84.03 3** P **P** **14 24 18.7 -0.1**
comp=Z,8.2nm,0.9s,baz=324,slow=4.1,SNR=2.8
SCHQ LR LR 15 00 50.3
comp=Z,88nm,21.7s,baz=148,slow=35
**LBTB Lobatse 84.06 115** *e*P **P** **14 24 19.6 -0.4**
**LBTB Lobatse 84.06 115** *e*P **P** **14 24 19.6 -0.4**
**CASY Casey 84.58 181** *e*P **P** **14 24 19.2 -2.4**
**YBH Yreka Blue Hor 84.97 324** LR LR 14 56 09.8
comp=Z,207nm,19.7s,baz=149,slow=31
**WALA Waterton Lakes 86.70 334** *e*P **P** **14 24 34.0 +1.6**
**URZ Urewera 86.87 227** LR LR 14 55 47.9
comp=Z,226nm,19.0s,baz=154,slow=30
**NEW Newport 87.35 332** LR LR 15 01 23.5
comp=Z,384nm,18.0s,baz=153,slow=34
**TAM Tamanrasset 90.68 64** *e*P **P** **14 24 52.6 +0.7**
**TAM Tamanrasset 90.68 64** *e*P **P** **14 24 52.6 +0.7**
**LSZ Lusaka 91.05 108** *e*P **P** **14 24 55.4 +1.6**
**LSZ Lusaka 91.05 108** *e*P **P** **14 24 55.4 +1.6**
**AFI Afiamalu 91.70 253** LR LR 14 56 03.0
comp=Z,387nm,21.1s,baz=104,slow=29
**ESDC Sonseca Array 93.27 46** LR LR 15 07 14.4
comp=Z,364nm,18.4s,baz=225,slow=36
**BBB Bella Bella 95.00 329** LR LR 15 03 01.6
comp=Z,104nm,19.9s,baz=176,slow=32
**DZM Mont Dzumac 104.07 234** *e*LR LR 15 00 13.9
comp=Z,279nm,22.9s
**GERES GERESS Array B 108.78 44** PKiKP **PKiKP** **14 30 17.3 -0.3**
comp=Z,0.8nm,0.7s,baz=244,slow=4.3,SNR=5.4
**ILAR Eielson Array 110.20 334** PP PP 14 31 08.3 +14
comp=Z,0.8nm,1.1s,baz=149,slow=4.2,SNR=3.6
**VYHS Vyhne 111.82 46** *e*P **Pdif** **14 26 30.9 +4.7**
**VYHS Vyhne 111.82 46** *e* **Pdif** **14 26 30.8 +4.6**
**KIEV Kiev 118.90 45** *e*PKIKP **PKPdf** **14 30 32.8 -3.9**
**AKASG Malin Array Be 118.92 45** PKP **PKPdf** **14 30 36.2 -0.6**
comp=Z,2.1nm,0.7s,baz=266,slow=2.6,SNR=7.4
**AKASG Malin Array Be 118.92 45** *i* PKIKP **PKPdf** **14 30 32.2 -4.5**
AKASG pmax pmax
comp=Z,1.0nm,0.3s
**VSU Vasula 118.95 36** *e*PKIKP **PKPdf** **14 30 35.2 -1.4**
**FINES FINESS Array B 119.10 33** PKP **PKPdf** **14 30 36.6 -0.2**
comp=Z,2.6nm,1.0s,baz=222,slow=1.9,SNR=3.6
**BRTR Keskin Array B 119.37 59** PKP **PKPdf** **14 30 38.5 +0.2**
comp=Z,2.8nm,0.8s,baz=192,slow=3.6,SNR=7.8
**ARCES ARCESS Array B 119.78 24** PKP **PKPdf** **14 30 38.0 +0.1**
comp=Z,1.8nm,0.8s,baz=235,slow=2.9,SNR=3.6
ARCES PKKPbc **PKKPab** **14 40 47.7 0.0**
comp=Z,2.3nm,0.8s,baz=90,slow=5.4,SNR=4.4
**ASAR Alice Springs 121.70 208** PKP **PKPdf** **14 30 42.2 -1.0**
comp=Z,1.4nm,0.6s,baz=135,slow=1.7,SNR=21
ASAR PKKPbc **PKKPbc** **14 40 42.4 +0.5**
comp=Z,0.7nm,0.5s,baz=335,slow=3.3,SNR=4.7
**OBN Obninsk 123.93 41** *i* PKIKP **PKPdf** **14 30 45.6 -0.6**
OBN *i* 14 31 00.7
OBN pmax pmax
comp=Z,12nm,1.1s
OBN MLR MLR
comp=Z,211nm,18.0s
**WRA Warramunga Arr 124.81 210** PKP **PKPdf** **14 30 48.4 -0.8**
comp=Z,4.4nm,0.6s,baz=154,slow=1.6,SNR=87
**LPSR Galich'ya Gora 125.16 44** *e*PKIKP **PKPdf** **14 30 47.6 -1.1**
LPSR pmax pmax
comp=Z,10.0nm,1.0s
LPSR pmax pmax
comp=N,8.0nm,1.1s
LPSR pmax pmax
comp=E,10.0nm,1.4s
**VSR Storozhevoye 125.21 46** *e*PKIKP **PKPdf** **14 30 47.6 -1.2**
VSR pmax pmax
comp=Z,9.0nm,1.1s
VSR pmax pmax
comp=N,8.0nm,1.5s
VSR pmax pmax
comp=E,10.0nm,1.6s
**VORD Divnogorie 125.27 46** *e*PKIKP **PKPdf** **14 30 47.6 -1.3**
VORD pmax pmax
comp=Z,7.0nm,1.2s
VORD pmax pmax
comp=N,8.0nm,0.9s
VORD pmax pmax
comp=E,10.0nm,0.9s
**H11S2 WAKE ISLAND Hyl 125.90 272** T T 16 49 45.7
baz=112
**H11S1 WAKE ISLAND Hyl 125.91 272** T T 16 49 51.0
baz=112
**H11S3 WAKE ISLAND Hyl 125.92 272** T T 16 49 50.3
baz=112
**H11N3 WAKE ISLAND Hyl 126.20 274** T T 16 50 12.2
baz=120
**H11N1 WAKE ISLAND Hyl 126.21 274** T T 16 50 10.7
baz=120
**H11N2 WAKE ISLAND Hyl 126.21 274** T T 16 50 12.8
baz=120
**VRH Novokhopyorsk 126.81 46** *e*PKIKP **PKPdf** **14 30 50.8 -1.1**
VRH pmax pmax
comp=N,10.0nm,0.9s
VRH pmax pmax
comp=Z,6.0nm,0.9s
VRH pmax pmax
comp=E,7.0nm,0.7s
**KIV Kislovodsk 126.83 55** *e*PKIKP **PKPdf** **14 30 51.9 -0.4**
KIV pmax pmax
comp=Z,18nm,1.3s
**KBZ Khabaz 126.95 55** PKP **PKPdf** **14 30 53.0 +0.6**
comp=Z,6.1nm,1.0s,baz=133,slow=2.9,SNR=7.0
**KBZ Khabaz 126.95 55** PKIKP **PKPdf** **14 30 53.0 +0.6**
**BILL Bilibino 128.78 336** *i* PKIKP **PKPdf** **14 30 55.5 +0.3**
BILL *i* 14 33 06.1
BILL pmax pmax
comp=Z,6.0nm,1.0s
BILL MLR MLR
comp=Z,149nm,16.0s
**GEYT Alibeck 137.91 65** PKP **PKPdf** **14 31 11.5 -1.8**
comp=Z,4.8nm,0.7s,baz=250,slow=4.3,SNR=6.5
**AB31 Akbulak array 138.59 48** *i* PKIKP **PKPdf** **14 31 14.9 +0.8**
AB31 pmax pmax
comp=Z,13nm,0.9s
**ABKAR Akbulak array 138.59 48** *e*PKPdf **PKPdf** **14 31 11.3 -2.8**
**LEM Lembang 143.95 179** PKP PKPbc 14 31 23.4 +0.5
comp=Z,86nm,0.8s,baz=301,slow=0.6,SNR=7.7
**KAPI Kappang 144.00 200** PKP PKPab 14 31 22.7 +0.5
comp=Z,17nm,0.8s,baz=217,slow=7.8,SNR=6.2
**VOSK Vostochnaya 144.16 39** PKIKP PKPbc 14 31 23.1 +0.9
VOSK pmax pmax

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,17nm,0.9s | | | | | | | |
| **YAK** | **Yakutsk** | **144.47** | **343** | *c i* PKIKP | PKPbc | 14 31 23.1 | +0.3 | |
| YAK | | | | *e*SS | SS | 14 54 01.3 | +37 | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,62nm,0.9s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,7.0nm,1.0s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,8.0nm,1.3s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,138nm,4.7s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=E,35nm,1.9s | | | | | | | |
| YAK | | | | pmax | pmax | | | |
| | comp=N,48nm,2.3s | | | | | | | |
| **KUR** | **Kuril'sk** | **145.11** | **308** | *e* PKP2 | **PKPbc** | **14 31 24.0** | **-1.4** | |
| **DZET** | **Dzherino** | **146.32** | **63** | PKP2 | **PKPbc** | **14 31 29.8** | **+0.2** | |
| DZET | | | | pmax | pmax | | | |
| | comp=Z,45nm,0.7s | | | | | | | |
| **OTUK** | **Ortayu** | **146.75** | **46** | PKP2 | **PKPbc** | **14 31 30.0** | **-0.4** | |
| OTUK | | | | pmax | pmax | | | |
| | comp=Z,29nm,0.7s | | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **146.78** | **306** | *e*PKIKP | **PKPdf** | **14 31 28.3** | **-0.5** | |
| YUK | | | | SS | SS | 14 54 01.8 | +9.5 | |
| **KK31** | **Karatay Array** | **146.99** | **55** | *i* PKP2 | **PKPbc** | **14 31 31.3** | **0.0** | |
| KK31 | | | | pmax | pmax | | | |
| | comp=Z,30nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **146.99** | **55** | *e*PKIKP | **PKPdf** | **14 31 30.3** | **+1.1** | |
| **KKAR** | **Karatay Array** | **146.99** | **55** | *e*PKPbc | **PKPdf** | **14 31 30.3** | **+1.1** | |
| **URV** | **Uravakonda** | **148.07** | **110** | *e*PKPbc | **PKPdf** | **14 31 32.0** | **+0.2** | |
| **MNAS** | **Manas** | **148.55** | **56** | PKIKP | **PKPdf** | **14 31 33.2** | **+1.2** | |
| MNAS | | | | pmax | pmax | | | |
| | comp=Z,49nm,1.3s | | | | | | | |
| **NVS** | **Novosibirsk** | **148.90** | **28** | *i* PKIKP | **PKPdf** | **14 31 33.3** | **+1.4** | |
| NVS | | | | pmax | pmax | | | |
| | comp=Z,96nm,1.7s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=N,1.0nm,0.4s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=E,6.0nm,0.5s | | | | | | | |
| **KLRI** | **Killari** | **149.05** | **104** | *e*PKiKP | **PKPbc** | **14 31 36.1** | **-1.4** | |
| **KURK** | **Kurchatov** | **149.29** | **38** | PKHKP | **PKPdf** | **14 31 33.8** | **+1.1** | |
| KURK | | | | | | 14 31 38.0 | | |
| **KURK** | **Kurchatov** | **149.29** | **38** | PKP | **PKPdf** | **14 31 33.8** | **+1.1** | |
| KURK | | | | PKPbc | **PKPbc** | **14 31 38.0** | **+1.0** | |
| **KURBB** | **Kurchatov Arra** | **149.29** | **38** | PKP | **PKPdf** | **14 31 33.8** | **+1.1** | |
| | comp=E,13nm,0.5s,baz=304,slow=3.1,SNR=49 | | | | | | | |
| KURBB | | | | PKPbc | **PKPbc** | **14 31 38.0** | **+1.0** | |
| | comp=E,13nm,0.5s,baz=296,slow=3.0,SNR=191 | | | | | | | |
| **SKHT** | **Srikalahasti** | **149.38** | **115** | *e*PKiKP | **PKPbc** | **14 31 37.3** | **-1.0** | |
| **EKS2** | **Erkin-Say** | **149.43** | **55** | *e*PKHKP | **PKPdf** | **14 31 35.2** | **+1.8** | |
| **EKS2** | **Erkin-Say** | **149.43** | **55** | P | **PKPdf** | **14 31 35.0** | **+1.6** | |
| | SNR=16 | | | | | | | |
| **EKS2** | **Erkin-Say** | **149.43** | **55** | *e*PKPbc | **PKPdf** | **14 31 35.2** | **+1.8** | |
| **AML** | **Almayashu** | **149.49** | **56** | P | **PKPdf** | **14 31 36.3** | **+2.5** | |
| | SNR=20 | | | | | | | |
| **RCLA** | **Racherla** | **149.72** | **111** | *e*PKiKP | **PKPbc** | **14 31 38.0** | **-1.2** | |
| **SFK** | **Sufi-Kurgan** | **149.77** | **60** | PKP2 | **PKPbc** | **14 31 39.4** | **+0.5** | |
| SFK | | | | pmax | pmax | | | |
| | comp=Z,57nm,0.8s | | | | | | | |
| **USP** | **Ospenovka** | **149.78** | **54** | P | **PKPdf** | **14 31 35.1** | **+1.3** | |
| | SNR=10 | | | | | | | |
| **AAK** | **Ala-Archa** | **149.95** | **55** | *e*PKP2 | **PKPbc** | **14 31 40.5** | **+1.3** | |
| **AAK** | **Ala-Archa** | **149.95** | **55** | P | **PKPdf** | **14 31 35.3** | **+1.0** | |
| | SNR=27 | | | | | | | |
| **AAK** | **Ala-Archa** | **149.95** | **55** | *e*PKPab | **PKPbc** | **14 31 40.5** | **+1.3** | |
| **FRU** | **Bishkek** | **149.98** | **54** | *i* PKIKP | **PKPdf** | **14 31 35.0** | **+0.9** | |
| FRU | | | | pmax | pmax | | | |
| | comp=Z,190nm,1.8s | | | | | | | |
| **SRLM** | **Srisailam** | **150.01** | **110** | *e*PKiKP | **PKPbc** | **14 31 39.4** | **-0.5** | |
| **CHMS** | **Chumysh** | **150.03** | **54** | P | **PKPbc** | **14 31 40.5** | **+1.4** | |
| | SNR=15 | | | | | | | |
| **UCH** | **Uchtor** | **150.06** | **56** | P | **PKPdf** | **14 31 36.4** | **+1.5** | |
| | SNR=9.1 | | | | | | | |
| **CLNS** | **Chul'man** | **150.18** | **341** | *e*PKIKP | **PKPbc** | **14 31 38.2** | **-0.9** | |
| CLNS | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | |
| CLNS | | | | pmax | pmax | | | |
| | comp=E,20nm,0.9s | | | | | | | |
| CLNS | | | | pmax | pmax | | | |
| | comp=N,10.0nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **150.19** | **28** | PKP | **PKPdf** | **14 31 34.9** | **+0.9** | |
| | comp=N,21nm,1.1s,baz=292,slow=2.8,SNR=36 | | | | | | | |
| ZALV | | | | PKPbc | **PKiKP** | **14 31 40.0** | **+0.1** | |
| | comp=N,66nm,0.7s,baz=299,slow=3.4,SNR=111 | | | | | | | |
| **KBK** | **Karagaybulak** | **150.26** | **55** | P | **PKPbc** | **14 31 41.4** | **+1.4** | |
| | SNR=24 | | | | | | | |
| **HYB** | **Hyderabad** | **150.39** | **107** | *i* PKP | **PKPbc** | **14 31 40.0** | **-0.8** | |
| **HYBB** | **Hyderabad (bro** | **150.39** | **107** | *e*PKiKP | **PKPbc** | **14 31 40.4** | **-0.4** | |
| **NJS** | **Nagarjunasagar** | **150.58** | **109** | *e*PKiKP | **PKPbc** | **14 31 40.4** | **-0.8** | |
| **KZA** | **Kyzart** | **150.63** | **56** | P | **PKPbc** | **14 31 42.8** | **+1.6** | |
| | SNR=11 | | | | | | | |
| **TKM2** | **Tokmak 2** | **150.65** | **54** | P | **PKPdf** | **14 31 36.2** | **+0.8** | |
| | SNR=6.4 | | | | | | | |
| **ADKI** | **Addanki** | **150.75** | **111** | *e*PKiKP | **PKPbc** | **14 31 41.2** | **-0.4** | |
| **SRSP** | **Sriramsagar** | **150.92** | **104** | *e*PKiKP | **PKPbc** | **14 31 41.1** | **-0.8** | |
| **ULHL** | **Ulahol** | **151.30** | **55** | P | **PKPbc** | **14 31 44.0** | **+1.6** | |
| | SNR=8.5 | | | | | | | |
| **BOD** | **Bodaibo** | **151.33** | **354** | *e*PKIKP | **PKPdf** | **14 31 35.5** | **-0.2** | |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.4s | | | | | | | |
| **RPR** | **Rampur** | **151.69** | **105** | *e*PKiKP | **PKPbc** | **14 31 42.9** | **-0.8** | |
| **KSH** | **Kashi** | **151.74** | **61** | *e*PKPbc | **PKPdf** | **14 31 38.0** | **+0.9** | |
| KSH | | | | *ep*PKP | **pPKPdf** | **14 31 49.0** | **+1.2** | |
| KSH | | | | sPKP | | 14 31 52.5 | | |
| KSH | | | | *e*PP | **PP** | **14 35 28.3** | **+4.2** | |
| KSH | | | | SKS | **SKSdf** | **14 38 41.0** | **-1.2** | |
| KSH | | | | SKKS | **SKKSac** | **14 42 12.5** | **+0.3** | |
| KSH | | | | PPMZ | | | | |
| | comp=Z,160nm,6.1s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,210nm,6.0s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,220nm,5.1s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,190nm,6.2s | | | | | | | |
| **PSI** | **Prapat** | **152.09** | **160** | PKPbc | **PKPbc** | **14 31 43.7** | **-1.3** | |
| | comp=Z,5.5nm,0.4s,baz=235,slow=8.0,SNR=6.2 | | | | | | | |
| **KLR** | **Kul'dur** | **153.29** | **324** | *e*PKIKP | **PKPdf** | **14 31 36.2** | **-2.7** | |
| **MK31** | **Makanchi Array** | **153.43** | **42** | *i* PKIKP | **PKPbc** | **14 31 46.8** | **0.0** | |
| MK31 | | | | pmax | pmax | | | |
| | comp=Z,23nm,1.0s | | | | | | | |
| **MKAR** | **Makanchi Array** | **153.43** | **42** | PKP | **PKPdf** | **14 31 39.1** | **-0.1** | |
| | comp=Z,2.6nm,0.8s,baz=322,slow=0.8,SNR=16 | | | | | | | |
| MKAR | | | | PKPbc | **PKPbc** | **14 31 47.1** | **+0.3** | |
| | comp=Z,8.5nm,0.8s,baz=326,slow=2.3,SNR=28 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **153.90** | **294** | PKPab | **PKPab** | **14 32 02.1** | **+0.6** | |
| | comp=Z,1.9nm,0.7s,baz=93,slow=2.5,SNR=5.1 | | | | | | | |
| **CHLP** | **Challavanipeta** | **155.47** | **111** | *e*PKPdf | **PKPdf** | **14 31 41.8** | **-1.0** | |
| **USRK** | **Ussuriysk Ar.** | **156.02** | **314** | PKPab | **PKPab** | **14 32 11.0** | **+0.9** | |
| | comp=Z,1.0nm,0.6s,baz=116,slow=3.4,SNR=2.9 | | | | | | | |
| **IRK** | **Irkutsk** | **157.02** | **6** | *e*PKIKP | **PKPdf** | **14 31 44.4** | **+0.5** | |
| IRK | | | | pmax | pmax | | | |
| | comp=Z,42nm,1.8s | | | | | | | |
| **WMQ** | **Urumqi** | **158.25** | **43** | PKP | PKPdf | 14 31 38.0 | -7.7 | |
| WMQ | | | | PP | **PP** | **14 35 59.0** | **-0.9** | |
| WMQ | | | | SKS | SKSdf | 14 38 30.0 | -19 | |
| **ZAK** | **Zakamensk** | **158.75** | **9** | *e*PKIKP | **PKPdf** | **14 31 46.5** | **+0.3** | |
| ZAK | | | | *e* | | 14 32 21.9 | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.7s | | | | | | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.4s | | | | | | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.4s | | | | | | | |
| **SONM** | **Songino Array** | **161.57** | **4** | PKP | **PKPdf** | **14 31 50.0** | **+0.5** | |
| | comp=Z,1.9nm,1.0s,baz=236,slow=0.4,SNR=9.6 | | | | | | | |
| SONM | | | | PKPab | **PKPab** | **14 32 34.8** | **+0.6** | |
| | comp=Z,2.2nm,1.0s,baz=350,slow=3.5,SNR=5.4 | | | | | | | |
| **KSRS** | **Korea Array** | **161.71** | **301** | PKP | **PKPdf** | **14 31 48.6** | **-1.1** | |
| | comp=Z,1.2nm,0.9s,baz=219,slow=1.6,SNR=4.9 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **161.74** | **301** | PKIKP | **PKPdf** | **14 31 48.6** | **-1.1** | |
| **KSAR** | **Wonju Array Be** | **161.74** | **301** | PKP | **PKPdf** | **14 31 48.6** | **-1.1** | |
| **CMAR** | **Chiang Mai Arr** | **166.20** | **140** | PKP | **PKPdf** | **14 31 55.0** | **+0.7** | |
| | comp=Z,1.0nm,0.8s,baz=216,slow=1.6,SNR=9.6 | | | | | | | |
| CMAR | | | | PKPab | **PKPab** | **14 32 53.8** | **-1.4** | |
| | comp=Z,2.5nm,1.1s,baz=227,slow=4.8,SNR=6.9 | | | | | | | |
| **GTA** | **Gaotai** | **167.89** | **33** | *e*PKP | **PKPdf** | **14 31 56.3** | **+1.1** | |
| GTA | | | | pPKP | **pPKPdf** | **14 32 05.3** | **-0.7** | |
| GTA | | | | sPKP | | 14 32 10.5 | | |
| GTA | | | | PKPab | **PKPab** | **14 33 03.0** | **+0.7** | |
| GTA | | | | PP | **PP** | **14 36 54.5** | **+3.9** | |
| GTA | | | | SKS | **SKSdf** | **14 38 54.5** | **-2.2** | |
| GTA | | | | SKKS | **SKKSac** | **14 43 36.3** | **+0.4** | |
| GTA | | | | SS | **SS** | **14 57 37.3** | **+0.2** | |
| GTA | | | | PPMZ | | | | |
| | comp=Z,220nm,5.9s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,150nm,15.2s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,180nm,15.7s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,180nm,16.9s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **168.28** | **347** | *e*PKP | **PKPdf** | **14 31 55.5** | **+0.1** | |
| HHC | | | | sPKP | | 14 32 12.0 | | |
| HHC | | | | PP | **PP** | **14 36 56.8** | **+4.7** | |
| HHC | | | | LN | | | | |
| | comp=Z,360nm,14.8s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,410nm,14.8s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,300nm,14.8s | | | | | | | |
| **QIZ** | **Qiongzhong** | **169.54** | **189** | PKP | **PKPdf** | **14 31 56.8** | **+0.1** | |
| QIZ | | | | PP | **PP** | **14 37 00.0** | **+1.8** | |
| QIZ | | | | SS | SS | 14 57 55.8 | +3.5 | |
| QIZ | | | | LZ | | | | |
| | comp=Z,120nm,26.2s | | | | | | | |
| **LZH** | **Lanzhou** | **172.42** | **28** | *e*PKP | **PKPdf** | **14 32 00.5** | **+2.6** | |
| LZH | | | | pPKP | **pPKPdf** | **14 32 10.8** | **+2.1** | |
| LZH | | | | sPKP | | 14 32 14.8 | | |
| LZH | | | | LN | | | | |
| | comp=Z,110nm,17.4s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,120nm,18.7s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,150nm,20.1s | | | | | | | |
| **XAN** | **Xi'an** | **175.36** | **352** | PKP | **PKPdf** | **14 31 59.3** | **+0.4** | |
| XAN | | | | pPKP | **pPKPdf** | **14 32 11.0** | **+1.4** | |
| **CD2** | **Chengdu** | **175.90** | **68** | PKP | **PKPdf** | **14 31 59.0** | **-0.1** | |
| CD2 | | | | pPKP | **pPKPdf** | **14 32 10.3** | **+0.4** | |
| CD2 | | | | sPKP | | 14 32 14.5 | | |
| CD2 | | | | PP | **PP** | **14 37 30.0** | **-1.3** | |
| CD2 | | | | SKS | **SKSdf** | **14 38 59.3** | **-0.6** | |
| CD2 | | | | SKKS | **SKKSac** | **14 44 13.0** | **-2.1** | |
| CD2 | | | | SS | **SS** | **14 58 55.0** | **-2.5** | |
| CD2 | | | | PPMZ | | | | |
| | comp=Z,120nm,5.2s | | | | | | | |
| **GYA** | **Guiyang** | **176.75** | **155** | *e*PKP | **PKPdf** | **14 31 58.8** | **-0.7** | |
| GYA | | | | sPKP | | 14 32 14.0 | | |
| GYA | | | | PKPab | **PKPab** | **14 33 42.5** | **+0.7** | |
| GYA | | | | PKS | **PKSdf** | **14 35 29.5** | **-2.4** | |
| GYA | | | | PP | **PP** | **14 37 36.0** | **+2.0** | |
| GYA | | | | PPMZ | | | | |
| | comp=Z,120nm,8.3s | | | | | | | |

*IDC **29** 14:12:32.4±1.1, 11°.14N×125°.86E, h0km, mb3.9/11, mb1 4.0/11, mb1mx3.9/37, mbtmp3.9/11, MS3.6/3, Ms1 3.6/3, ms1mx2.8/43, Error ellipse: s-maj=56.3km s-min=17.8km az=66.0*

*ISCJB **29** 14:12:37.4±0.6, 11°.23N±0°.05×125°.94E±0°.06, h49km, mb3.9/11, MS3.9/2, Error ellipse: s-maj=9.1km s-min=7.0km az=33.2*

*MAN **29** 14:12:39, 11°.14N×125°.74E, h19km, mb4.5, ML3.4, MS3.3*

**ISC 29 14:12:39.6±0.8, 11°.24N±0°.06×125°.83E±0°.09, h49km, n39, σ1§20/32, mb4.1/11, 1C-2D, Samar**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **PLP** | **Palo** | **0.84** | **265** | *i*↓P | | **Pn** | **14 12 53.7** | **-1.4** |
| PLP | | | | *i* S | | **Sn** | **14 13 06.2** | **-0.3** |
| **OCLP** | **Ormoc** | **1.21** | **261** | *e*P | | **Pn** | **14 13 01.1** | **+1.0** |
| OCLP | | | | *e*S | | **Sn** | **14 13 16.3** | **+0.8** |
| **MSLP** | **Maasin** | **1.45** | **221** | *e*P | | **Pn** | **14 13 04.2** | **+0.7** |
| MSLP | | | | *e*S | | **Sn** | **14 13 21.0** | **-0.4** |
| **SCPH** | **Surigao** | **1.49** | **193** | *e*P | | **Pn** | **14 13 03.6** | **-0.4** |
| SCPH | | | | *e*S | | **Sn** | **14 13 26.3** | **+4.1** |
| **CNP** | **Catarman** | **1.70** | **318** | *e*P | | **Pn** | **14 13 08.5** | **+1.7** |
| **BUTP** | **Butuan** | **2.27** | **185** | *e*P | | Pn | 14 13 20.8 | +6.2 |
| **RCP** | **Roxas** | **3.04** | **276** | *e*P | | Pn | 14 13 28.6 | +3.4 |
| **GUIM** | **Jordan** | **3.24** | **259** | *e*P | | **Pn** | **14 13 29.0** | **+1.0** |
| **PAGZ** | **Pagadian** | **4.14** | **216** | *e*P | | **Pn** | **14 13 41.9** | **+1.5** |
| **DAV** | **Davao City (W)** | **4.15** | **183** | Pn | | Pn | 14 13 30.7 | -10 |
| | 169nm,0.3s,baz=77,slow=6.8,SNR=4.5 | | | | | | | |
| DAV | | | | LR | | LR | 14 14 56.9 | |
| | comp=Z,244nm,21.2s,baz=330,slow=36 | | | | | | | |
| **KSRS** | **Korea Array** | **26.17** | **4** | LR | | LR | 14 28 27.8 | |
| | comp=Z,52nm,18.9s,baz=310,slow=36 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **26.93** | **289** | P | | **P** | **14 18 16.2** | **-0.4** |
| | 0.8nm,0.3s,baz=104,slow=7.6,SNR=7.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **32.10** | **165** | P | | **P** | **14 19 00.5** | **-1.8** |
| | 0.4nm,0.8s,baz=343,slow=9.2,SNR=3.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **35.58** | **167** | P | | **P** | **14 19 30.9** | **-1.7** |
| | 0.6nm,0.8s,baz=350,slow=7.0,SNR=9.8 | | | | | | | |
| **TAPN** | **Taplejung** | **39.19** | **300** | *e*P | | **P** | **14 20 03.3** | **-0.2** |
| | 5.1nm,0.5s | | | | | | | |
| **ODAN** | **Odare** | **39.33** | **299** | *e*P | | **P** | **14 20 04.4** | **-0.2** |
| | 20nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **39.96** | **340** | P | | **P** | **14 20 10.1** | **+0.6** |
| | 0.7nm,0.6s,baz=162,slow=8.8,SNR=4.4 | | | | | | | |
| **RAMN** | **Ramite** | **40.03** | **299** | *e*P | | **P** | **14 20 10.4** | **-0.1** |
| | 7.1nm,0.5s | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.08** | **75** | T | | T | 15 03 07.8 | |
| | baz=149,slow=71,SNR=7.7 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.09** | **75** | T | | T | 15 03 12.8 | |
| | baz=149,slow=71,SNR=4.9 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.09** | **75** | T | | T | 15 03 12.6 | |
| | baz=149,slow=71,SNR=4.9 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.38** | **73** | T | | T | 15 03 32.7 | |
| | baz=265,slow=75,SNR=27 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.38** | **73** | T | | T | 15 03 30.4 | |
| | baz=265,slow=75,SNR=21 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.39** | **73** | T | | T | 15 03 29.2 | |
| | baz=265,slow=75,SNR=22 | | | | | | | |
| **GUN** | **Gumba** | **40.91** | **300** | *e*P | | **P** | **14 20 17.7** | **-0.1** |
| | 22nm,0.8s | | | | | | | |
| **PKI** | **Pulchoki** | **41.22** | **299** | *e*P | | **P** | **14 20 19.6** | **-0.8** |
| | 4.2nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **41.23** | **299** | *e*P | | **P** | **14 20 19.9** | **-0.5** |
| | 3.6nm,0.5s | | | | | | | |
| **KKN** | **Kakani** | **41.39** | **299** | *e*P | | **P** | **14 20 20.3** | **-1.3** |
| | 3.6nm,0.4s | | | | | | | |
| **DMN** | **Daman** | **41.49** | **299** | *e*P | | **P** | **14 20 21.7** | **-0.8** |
| | 7.8nm,0.5s | | | | | | | |
| **GKN** | **Gorkha** | **41.99** | **299** | *e*P | | **P** | **14 20 24.8** | **-1.7** |
| | 4.0nm,0.4s | | | | | | | |
| **KOLN** | **Koldanda** | **42.82** | **299** | *e*P | | **P** | **14 20 32.6** | **-0.7** |
| | 14nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.00** | **322** | P | | **P** | **14 21 37.1** | **+0.5** |
| | 0.7nm,0.3s,baz=115,slow=7.3,SNR=15 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.57** | **331** | P | | **P** | **14 21 55.5** | **0.0** |
| | 1.2nm,0.5s,baz=118,slow=7.2,SNR=5.6 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.03** | **325** | P | | **P** | **14 22 06.8** | **+0.5** |
| | 1.8nm,0.6s,baz=127,slow=6.9,SNR=9.6 | | | | | | | |
| **GEYT** | **Alibeck** | **65.62** | **307** | P | | **P** | **14 23 18.6** | **-0.3** |
| | 0.9nm,0.5s,baz=67,slow=3.7,SNR=2.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.14** | **340** | P | | **P** | **14 25 00.2** | **+0.1** |
| | 1.2nm,0.6s,baz=90,slow=6.3,SNR=4.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **84.58** | **309** | P | | **P** | **14 25 09.0** | **+0.7** |
| | 0.8nm,0.8s,baz=67,slow=11,SNR=3.3 | | | | | | | |
| **FINES** | **FINESS Array B** | **84.84** | **332** | P | | **P** | **14 25 08.3** | **-0.5** |
| | 3.5nm,1.1s,baz=121,slow=6.7,SNR=4.8 | | | | | | | |
| **GERES** | **GERESS Array B** | **95.67** | **322** | LR | | LR | 15 12 10.3 | |
| | comp=Z,239nm,21.7s,baz=234,slow=37 | | | | | | | |

*IDC **29** 14:30:19.7±0.7, 10°.46N×125°.99E, h0km, mb4.1/14, mb1 4.2/15, mb1mx4.1/36, mbtmp4.1/15, ML4.5/1, MS3.3/7, Ms1 3.4/7, ms1mx3.1/38, Error ellipse: s-maj=31.0km s-min=14.0km az=80.0*

*NEIC **29** 14:30:24.8±0.4, 10°.43N×125°.90E, h35km, mb4.1/5, Error ellipse: s-maj=17.6km s-min=7.3km az=71.0*

*ISCJB **29** 14:30:26.2±0.9, 10°.45N±0°.04×126°.11E±0°.07, h67km±8km, mb4.0/19, Error ellipse: s-maj=12.7km s-min=5.4km az=154.9*

*MAN **29** 14:30:27, 10°.44N×126°.06E, h45km, mb5.0, ML4.0, MS4.1*

**ISC 29 14:30:26.3±1.6, 10°.48N±0°.06×126°.16E±0°.09, h52km±14km, n45, σ1§35/47, mb4.1/19, MS3.1/6, 4C-4D, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | | |
| **SCPH** | **Surigao** | **0.96** | **224** | ↓*e*P | | **Pn** | **14 30 42.3** | **-1.2** |
| SCPH | | | | *e*S | | **Sn** | **14 30 54.5** | **-1.6** |
| **MSLP** | **Maasin** | **1.33** | **255** | *e*P | | **Pn** | **14 30 47.5** | **-1.0** |
| MSLP | | | | *e*S | | **Sn** | **14 31 04.7** | **-0.4** |
| **PLP** | **Palo** | **1.35** | **301** | ↓*i*P | | **Pn** | **14 30 47.9** | **-0.8** |
| PLP | | | | *i* S | | **Sn** | **14 31 06.4** | **+0.8** |
| **BUTP** | **Butuan** | **1.59** | **200** | *e*P | | **Pn** | **14 30 52.8** | **+0.7** |
| **OCLP** | **Ormoc** | **1.63** | **291** | *e*P | | **Pn** | **14 30 53.4** | **+0.9** |
| OCLP | | | | *e*S | | **Sn** | **14 31 13.5** | **+1.1** |
| **BIPH** | **Bislig** | **2.29** | **175** | ↑*i*P | | **Pn** | **14 31 02.1** | **+0.5** |
| BIPH | | | | *i* S | | **Sn** | **14 31 28.8** | **+0.1** |
| **TBP** | **Tagbilaran** | **2.40** | **251** | ↓*e*P | | **Pn** | **14 31 05.0** | **+1.9** |
| TBP | | | | *e*S | | **Sn** | **14 31 31.2** | **-0.1** |
| **BUKP** | **Musuan** | **2.80** | **203** | *e*P | | **Pn** | **14 31 11.0** | **+2.3** |
| **DCPH** | **Dipolog City** | **3.35** | **236** | ↑*e*P | | **Pn** | **14 31 16.7** | **+0.5** |
| **DAV** | **Davao City (W)** | **3.44** | **190** | Pn | | **Pn** | **14 31 15.0** | **-2.4** |
| | 48nm,0.3s,baz=240,slow=6.1,SNR=2.7 | | | | | | | |
| DAV | | | | Sn | | **Sn** | **14 31 56.9** | **0.0** |
| | 48nm,0.3s,baz=73,slow=18,SNR=6.9 | | | | | | | |
| **GUIM** | **Jordan** | **3.52** | **273** | *e*P | | **Pn** | **14 31 19.0** | **+0.5** |
| **RCP** | **Roxas** | **3.52** | **288** | ↑*e*P | | **Pn** | **14 31 20.8** | **+2.2** |
| **KCP** | **Kidapawan** | **3.61** | **197** | ↓*e*P | | **Pn** | **14 31 19.4** | **-0.4** |
| KCP | | | | *i* S | | **Sn** | **14 32 05.2** | **+4.0** |
| **CTBH** | **Cotabato--PC H** | **3.75** | **210** | ↑*e*P | | **Pn** | **14 31 23.2** | **+1.5** |
| **PAGZ** | **Pagadian** | **3.79** | **227** | *e*P | | **Pn** | **14 31 23.8** | **+1.6** |
| **IPIL** | **Ipil** | **4.44** | **233** | *e*P | | **Pn** | **14 31 32.6** | **+1.5** |
| **SIJI** | **Sorong** | **12.37** | **155** | LR | | LR | 14 40 04.8 | |
| | comp=Z,88nm,18.1s,baz=357,slow=47 | | | | | | | |
| **BATI** | **Baumata** | **20.70** | **187** | P | | Pn | 14 35 10.5 | +5.4 |
| | 21nm,0.6s,baz=67,slow=4.3,SNR=7.9 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **26.89** | **3** | P | | **P** | **14 36 03.8** | **+1.4** |
| **KSRS** | **Korea Array** | **26.91** | **3** | P | | **P** | **14 36 03.8** | **+1.3** |
| | 1.9nm,0.8s,baz=181,slow=10,SNR=5.0 | | | | | | | |
| KSRS | | | | LR | | LR | 14 47 00.7 | |
| | comp=Z,35nm,20.8s,baz=187,slow=37 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.50** | **290** | P | | **P** | **14 36 06.9** | **-1.1** |
| | 2.6nm,0.6s,baz=130,slow=7.3,SNR=20 | | | | | | | |
| CMAR | | | | LR | | LR | 14 46 60.0 | |
| | comp=Z,48nm,19.3s,baz=80,slow=37 | | | | | | | |
| **CHTO** | **Chiang Mai** | **27.57** | **291** | P | | **P** | **14 36 06.1** | **-2.7** |
| | 2.0nm,1.0s | | | | | | | |
| **WRAB** | **Tennant Creek** | **31.28** | **165** | *e*P | | **P** | **14 36 43.0** | **+1.5** |
| | 0.6nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **31.28** | **165** | P | | **P** | **14 36 41.5** | **-0.1** |
| | 0.4nm,0.5s,baz=352,slow=9.0,SNR=4.9 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.97** | **8** | P | | **P** | **14 37 05.2** | **+0.4** |
| | 1.9nm,0.7s,baz=214,slow=7.7,SNR=5.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **34.77** | **167** | P | | **P** | **14 37 12.7** | **+0.6** |
| | 0.4nm,0.3s,baz=350,slow=7.4,SNR=26 | | | | | | | |
| ASAR | | | | LR | | LR | 14 52 55.4 | |
| | comp=Z,39nm,18.1s,baz=31,slow=39 | | | | | | | |
| **CTAO** | **Charters Tower** | **36.25** | **147** | P | | **P** | **14 37 24.3** | **-0.4** |
| **HNR** | **Honiara** | **39.00** | **119** | LR | | LR | 14 52 01.6 | |
| | comp=Z,30nm,21.7s,baz=252,slow=33 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.29** | **72** | T | | T | 15 21 16.7 | |
| | baz=264,slow=74,SNR=183 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.30** | **72** | T | | T | 15 21 12.9 | |
| | baz=264,slow=74,SNR=124 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.31** | **72** | T | | T | 15 21 13.7 | |
| | baz=264,slow=74,SNR=219 | | | | | | | |
| **SONM** | **Songino Array** | **40.79** | **340** | P | | **P** | **14 38 03.1** | **+0.4** |
| | 0.5nm,0.4s,baz=150,slow=9.1,SNR=4.2 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **14 40 03.7** | **+0.7** |
| | 0.6nm,0.6s,baz=154,slow=2.8,SNR=3.6 | | | | | | | |
| **TLY** | **Talaya** | **45.00** | **340** | LR | | LR | 14 57 34.3 | |
| | comp=Z,36nm,21.7s,baz=119,slow=36 | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.80** | **323** | P | | **P** | **14 39 29.2** | **+0.2** |
| | 4.4nm,0.7s,baz=120,slow=8.4,SNR=20 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **54.39** | **331** | P | | **P** | **14 39 47.8** | **-0.1** |
| | 1.7nm,0.7s,baz=118,slow=6.5,SNR=6.4 | | | | | | | |
| **KURK** | **Kurchatov** | **55.84** | **325** | *e*P | | **P** | **14 39 57.8** | **-0.6** |
| | 16nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **55.84** | **325** | P | | **P** | **14 39 58.6** | **+0.2** |
| | 3.6nm,0.7s,baz=127,slow=6.9,SNR=31 | | | | | | | |
| **ABKAR** | **Akbulak array** | **66.65** | **319** | *e*P | | **P** | **14 41 10.8** | **-0.8** |
| | 1.3nm,0.7s | | | | | | | |
| **RAYN** | **Ar Rayn** | **77.39** | **292** | *e*P | | **P** | **14 42 14.8** | **-1.6** |
| | 2.6nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **79.30** | **26** | P | | **P** | **14 42 27.5** | **+1.4** |
| | 0.6nm,0.8s,baz=235,slow=5.3,SNR=12 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **83.96** | **340** | P | | **P** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | baz=10.0 | | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.41** | **209** | *e*P | | Pb | 14 56 46.4 | -0.5 | |
| | baz=219 | | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.43** | **259** | ⇑*i*P | | Pg | 14 56 46.7 | -0.2 | |
| | baz=259 | | | | | | | | |
| WHF | | | | *e*S | | Sg | 14 56 52.0 | -1.0 | |
| | baz=259 | | | | | | | | |
| **ENTT** | **Nioudou** | **0.43** | **341** | ⇑*i*P | | Pg | 14 56 46.9 | +0.4 | |
| | baz=340 | | | | | | | | |
| ENTT | | | | *i* S | | Sg | 14 56 52.7 | +0.4 | |
| | baz=340 | | | | | | | | |
| **ESL** | **Shilin** | **0.49** | **213** | ⇓P | | Pg | 14 56 47.4 | -0.2 | |
| | baz=219 | | | | | | | | |
| ESL | | | | *e*S | | Sg | 14 56 54.3 | +0.2 | |
| | baz=219 | | | | | | | | |
| **TWE** | **Neicheng** | **0.49** | **354** | ⇑*i*P | | Pg | 14 56 47.8 | +0.3 | |
| TWE | | | | *i* S | | Sg | 14 56 54.4 | +0.3 | |
| **TWT** | **Tachien** | **0.50** | **273** | ⇑*i*P | | Pb | 14 56 48.6 | -0.1 | |
| | baz=272 | | | | | | | | |
| TWT | | | | *e*S | | Sg | 14 56 54.7 | -0.1 | |
| | baz=272 | | | | | | | | |
| **ILA** | **Ilan** | **0.53** | **2** | *e*P | | Pg | 14 56 48.4 | +0.1 | |
| | baz=357 | | | | | | | | |
| ILA | | | | *e*S | | Sb | 14 56 56.6 | 0.0 | |
| | baz=357 | | | | | | | | |
| **NSK** | **Sanguang** | **0.56** | **323** | ⇑*i*P | | Pg | 14 56 49.1 | +0.3 | |
| | baz=323 | | | | | | | | |
| NSK | | | | S | | Sg | 14 56 55.9 | -0.4 | |
| | baz=323 | | | | | | | | |
| **EGS** | | **0.64** | **17** | *e*P | | Pg | 14 56 49.9 | -0.4 | |
| | baz=25 | | | | | | | | |
| EGS | | | | *e*S | | Sb | 14 56 59.7 | -0.1 | |
| | baz=25 | | | | | | | | |
| **WDT** | **Danda** | **0.72** | **229** | ⇓*i*P | | Pg | 14 56 52.0 | -0.1 | |
| | baz=229 | | | | | | | | |
| WDT | | | | S | | Sg | 14 57 01.9 | 0.0 | |
| | baz=229 | | | | | | | | |
| **TWA** | **Mucha** | **0.76** | **350** | *e*P | | Pb | 14 56 53.2 | +0.3 | |
| | baz=350 | | | | | | | | |
| TWA | | | | *e*S | | Sg | 14 57 02.3 | -0.2 | |
| | baz=350 | | | | | | | | |
| **EHY** | **Hungye** | **0.81** | **207** | *e*P | | Pg | 14 56 53.2 | -0.3 | |
| | baz=215 | | | | | | | | |
| EHY | | | | *e*S | | Sn | 14 57 05.8 | -1.0 | |
| | baz=215 | | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.81** | **17** | *e*P | | Pg | 14 56 53.5 | 0.0 | |
| | baz=17 | | | | | | | | |
| TWB1 | | | | *e*S | | Sg | 14 57 03.6 | -0.6 | |
| | baz=17 | | | | | | | | |
| **TAP1** | **Taipei** | **0.83** | **347** | *e*P | | Pb | 14 56 54.2 | +0.2 | |
| | baz=346 | | | | | | | | |
| TAP1 | | | | *e*S | | Sb | 14 57 05.8 | +0.8 | |
| | baz=346 | | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.83** | **246** | ⇓*i*P | | Pb | 14 56 54.2 | 0.0 | |
| | baz=238 | | | | | | | | |
| SMLT | | | | *e*S | | Sb | 14 57 05.2 | -0.2 | |
| | baz=238 | | | | | | | | |
| **TAP** | **Taipei** | **0.83** | **346** | *e*P | | Pb | 14 56 54.2 | +0.1 | |
| | baz=346 | | | | | | | | |
| TAP | | | | *e*S | | Sb | 14 57 05.5 | +0.3 | |
| | baz=346 | | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.84** | **4** | *e*P | | Pg | 14 56 54.2 | 0.0 | |
| | baz=354 | | | | | | | | |
| NWF | | | | *e*S | | Sg | 14 57 05.1 | -0.2 | |
| | baz=354 | | | | | | | | |
| **TYC** | **Yuchr** | **0.86** | **248** | *e*P | | Pb | 14 56 54.6 | 0.0 | |
| | baz=241 | | | | | | | | |
| TYC | | | | *e*S | | Sb | 14 57 05.8 | -0.1 | |
| | baz=241 | | | | | | | | |
| **TWQ1** | **Liyutan** | **0.88** | **278** | *e*P | | Pn | 14 56 55.6 | -0.3 | |
| | baz=278 | | | | | | | | |
| **NCU** | **National Centr** | **0.88** | **327** | *e*P | | Pn | 14 56 56.3 | +0.3 | |
| | baz=326 | | | | | | | | |
| NCU | | | | *e*S | | Sn | 14 57 08.1 | -0.6 | |
| | baz=326 | | | | | | | | |
| **HSN** | **Hsinchu** | **0.89** | **310** | *e*P | | Pn | 14 56 56.0 | 0.0 | |
| | baz=303 | | | | | | | | |
| HSN | | | | *e*S | | Sn | 14 57 08.6 | -0.3 | |
| | baz=303 | | | | | | | | |
| **NSY** | **Sanyi** | **0.90** | **282** | *e*P | | Pn | 14 56 56.3 | +0.1 | |
| | baz=282 | | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.91** | **342** | *e*P | | Pn | 14 56 56.6 | +0.3 | |
| | baz=350 | | | | | | | | |
| TWS1 | | | | *e*S | | Sn | 14 57 09.2 | -0.1 | |
| | baz=350 | | | | | | | | |
| **TWF1** | **Yuli** | **0.96** | **204** | *e*P | | Pb | 14 56 55.6 | -0.7 | |
| | baz=215 | | | | | | | | |
| TWF1 | | | | *e*S | | Sn | 14 57 09.7 | -0.8 | |
| | baz=215 | | | | | | | | |
| **TCU** | **Taichung** | **0.96** | **265** | *e*P | | Pn | 14 56 57.8 | +0.8 | |
| | baz=265 | | | | | | | | |
| **WNT** | **Mingjian** | **1.01** | **250** | *e*P | | Pn | 14 56 58.6 | +0.9 | |
| | baz=247 | | | | | | | | |
| WNT | | | | *e*S | | Sn | 14 57 13.3 | +1.4 | |
| | baz=247 | | | | | | | | |
| **YUS** | **Yu-Shan** | **1.02** | **224** | P | | Pb | 14 56 57.8 | -0.2 | |
| | baz=225 | | | | | | | | |
| YUS | | | | *e*S | | Sg | 14 57 12.2 | +0.3 | |
| | baz=225 | | | | | | | | |
| **ALS** | **Alishan** | **1.10** | **230** | *e*P | | Pb | 14 56 59.2 | 0.0 | |
| | baz=217 | | | | | | | | |
| ALS | | | | *e*S | | Sg | 14 57 14.2 | -0.1 | |
| | baz=217 | | | | | | | | |
| **CHN5** | **Tsauling** | **1.15** | **237** | *e*P | | Pg | 14 57 00.1 | +0.1 | |
| | baz=239 | | | | | | | | |
| CHN5 | | | | *e*S | | Sn | 14 57 16.3 | +1.0 | |
| | baz=239 | | | | | | | | |
| **CHKT** | **Chengkung** | **1.17** | **196** | *e*P | | Pn | 14 56 59.4 | -0.6 | |
| | baz=216 | | | | | | | | |
| CHKT | | | | *e*S | | Sn | 14 57 16.4 | +0.7 | |
| | baz=216 | | | | | | | | |
| **WGK** | **Gukeng** | **1.19** | **243** | *e*P | | Pg | 14 57 01.0 | +0.2 | |
| | baz=244 | | | | | | | | |
| **ELDTW** | **Lidau** | **1.22** | **212** | *e*P | | Pn | 14 56 59.8 | -0.9 | |
| | baz=213 | | | | | | | | |
| **CHN2** | **Minshiung** | **1.34** | **239** | *e*P | | Pg | 14 57 03.7 | +0.1 | |
| | baz=240 | | | | | | | | |
| **CHN4** | **Tsaushan** | **1.36** | **230** | *e*P | | Pg | 14 57 03.6 | -0.3 | |
| | baz=232 | | | | | | | | |
| CHN4 | | | | *e*S | | Sg | 14 57 22.2 | +0.6 | |
| | baz=232 | | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.37** | **255** | *e*P | | Pb | 14 57 03.6 | +0.4 | |
| | baz=255 | | | | | | | | |
| **STYT** | **Tauyuan** | **1.38** | **220** | *e*P | | Pn | 14 57 02.9 | 0.0 | |
| | baz=222 | | | | | | | | |
| STYT | | | | *e*S | | Sg | 14 57 22.1 | -0.5 | |
| | baz=222 | | | | | | | | |
| **CHY** | **Chiayi** | **1.40** | **239** | *e*P | | Pg | 14 57 05.1 | +0.4 | |
| | baz=225 | | | | | | | | |
| **WTP** | **Ta-pu** | **1.41** | **226** | *e*P | | Pb | 14 57 04.4 | +0.3 | |
| | baz=229 | | | | | | | | |
| WTP | | | | *e*S | | Sg | 14 57 24.7 | +1.2 | |
| | baz=229 | | | | | | | | |
| **TWK** | **Hsinying** | **1.48** | **230** | *e*P | | Pn | 14 57 04.6 | +0.3 | |
| | baz=233 | | | | | | | | |
| TWK | | | | *e*S | | Sg | 14 57 25.8 | 0.0 | |
| | baz=233 | | | | | | | | |
| **WSF** | **Szhu** | **1.50** | **247** | *e*P | | Pb | 14 57 05.0 | -0.5 | |
| | baz=248 | | | | | | | | |
| **CHN1** | **Nanshi** | **1.51** | **227** | *e*P | | Pb | 14 57 06.1 | +0.4 | |
| | baz=230 | | | | | | | | |
| CHN1 | | | | *e*S | | Sg | 14 57 27.2 | +0.6 | |
| | baz=230 | | | | | | | | |
| **SGST** | **Jiashian** | **1.55** | **223** | *e*P | | Pb | 14 57 06.8 | +0.4 | |
| | baz=225 | | | | | | | | |
| SGST | | | | *e*S | | Sb | 14 57 26.8 | +0.8 | |
| | baz=225 | | | | | | | | |
| **CHN3** | **Shinhua** | **1.69** | **228** | *e*P | | Pg | 14 57 10.0 | -0.4 | |
| | baz=230 | | | | | | | | |
| **ECL** | **Taimali** | **1.77** | **204** | *e*P | | Pb | 14 57 09.5 | -0.7 | |
| | baz=192 | | | | | | | | |
| **SSD** | **Sandimen** | **1.79** | **214** | *e*P | | Pn | 14 57 09.1 | +0.7 | |
| | baz=218 | | | | | | | | |
| SSD | | | | *e*S | | Sb | 14 57 32.1 | -0.6 | |
| | baz=218 | | | | | | | | |
| **TWM1** | **Shoushan** | **1.84** | **221** | *e*P | | Pg | 14 57 13.4 | +0.2 | |
| | baz=221 | | | | | | | | |
| **EAST** | **Anshuo** | **2.01** | **204** | *e*P | | Pn | 14 57 12.0 | +0.5 | |
| | baz=194 | | | | | | | | |
| **SCZT** | **Fangliau** | **2.11** | **209** | *e*P | | Pb | 14 57 15.2 | -0.7 | |
| | baz=216 | | | | | | | | |
| SCZT | | | | *e*S | | Sb | 14 57 41.0 | -1.0 | |
| | baz=216 | | | | | | | | |

*BJI **29** 15:11:09.2, 3.80S×99.80E, h7km, mb4.4/6, mB5.0/3*
*NEIC **29** 15:11:12.0±0.6, 3.84S×99.75E, h10km, mb4.4/7, Error ellipse: s-maj=18.6km s-min=8.7km az=48.0*

*IDC **29** 15:11:11.5±1.1, 3.67S×99.80E, h0km, mb4.0/10, mb1 4.2/12, mb1mx3.9/39, mbtmp4.1/12, ML4.4/2, MS3.6/2, Ms1 3.6/2, ms1mx3.0/44, Error ellipse: s-maj=36.1km s-min=16.2km az=48.0*
*ISCJB **29** 15:11:13.8±0.5, 3.69S±0.04×99.87E±0.05, h33km, mb4.2/18, MS3.6/2, Error ellipse: s-maj=8.8km s-min=4.3km az=142.9*
*DJA **29** 15:11:14.3±1.1, 4.5S±4×10°0E±°, h33km±9km, M4.6/9, mb4.9/9, mB4.8/1, MLv4.4/9, Mw(mB)4.0/1*

**ISC 29 15:11:15.6±0.7, 3.72S±0.07×99.84E±0.08, h35km, n59, σ1§44/53, mb4.1/18, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.96** | **10** | P | | **Pn** | **15 11 30.2** | **-2.4** |
| PPSI | | | | S | | **Sn** | **15 11 42.9** | **-2.2** |
| **SISI** | **Saibi** | **2.49** | **342** | P | | **Pn** | **15 11 51.4** | **-2.3** |
| **KSI** | **Kapahiang** | **2.74** | **89** | P | | Pn | 15 12 06.4 | +9.2 |
| **PDSI** | **Padang** | **2.85** | **13** | P | | **Pn** | **15 11 55.9** | **-2.8** |
| PDSI | | | | S | | **Sn** | **15 12 29.0** | **-2.9** |
| **MNAI** | **Manna** | **3.17** | **102** | P | | **Pn** | **15 12 03.6** | **+0.6** |
| MNAI | | | | S | | **Sn** | **15 12 38.9** | **-0.8** |
| **SDSI** | **Sungai Dareh** | **3.19** | **30** | P | | **Pn** | **15 12 02.1** | **-1.2** |
| **PPI** | **Padang Panjang** | **3.28** | **10** | P | | **Pn** | **15 12 03.4** | **-1.2** |
| **LHSI** | **Lahat** | **3.67** | **92** | P | | **Pn** | **15 12 11.8** | **+1.9** |
| **MDSI** | **Maura Dua** | **4.39** | **100** | P | | **Pn** | **15 12 20.5** | **+0.7** |
| **LWLI** | **Liwa** | **4.40** | **107** | P | | **Pn** | **15 12 20.0** | **0.0** |
| **MNSI** | **Mandailing Nat** | **4.49** | **357** | P | | **Pn** | **15 12 23.9** | **+2.7** |
| **KASI** | **Kota Agung** | **4.97** | **111** | P | | **Pn** | **15 12 27.7** | **-0.1** |
| | 80nm,0.8s,0.4nm | | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.47** | **76** | P | | **Pn** | **15 12 50.7** | **+2.3** |
| **CGJI** | **Cibinong** | **6.50** | **117** | P | | **Pn** | **15 12 47.9** | **-0.9** |
| | 75nm,0.9s,0.3nm | | | | | | | |
| **PSI** | **Prapat** | **6.54** | **352** | Pn | | **Pn** | **15 12 51.9** | **+2.4** |
| | 1.4nm,0.3s,baz=157,slow=5.9,SNR=4.0 | | | | | | | |
| **CBJI** | **Citeko** | **7.48** | **111** | P | | **Pn** | **15 13 04.1** | **+1.8** |
| | 349nm,0.9s,2.1nm | | | | | | | |
| **CNJI** | **Cibinong** | **8.08** | **117** | P | | **Pn** | **15 13 09.3** | **-1.3** |
| | 131nm,0.8s | | | | | | | |
| **LEM** | **Lembang** | **8.33** | **112** | Pn | | **Pn** | **15 13 15.7** | **+1.5** |
| | 5.3nm,0.3s,baz=194,slow=7.6,SNR=3.8 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.80** | **116** | P | | **Pn** | **15 13 19.1** | **-1.4** |
| | 148nm,0.6s | | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.80** | **116** | *e*Pn | | **Pn** | **15 13 18.4** | **-2.1** |
| | 101nm,0.6s | | | | | | | |
| CISI | | | | *e*Sn | | **Sn** | **15 14 56.2** | **-2.4** |
| **CMJI** | **Cimerak** | **9.47** | **116** | P | | **Pn** | **15 13 29.0** | **-0.6** |
| | 92nm,1.4s | | | | | | | |
| **BBKI** | **Banjar Baru** | **14.97** | **90** | P | | **P** | **15 14 50.2** | **+0.3** |
| **KAPI** | **Kappang** | **19.89** | **94** | P | | **P** | **15 15 44.6** | **+0.4** |
| | 0.9nm,0.3s,baz=264,slow=11,SNR=5.2 | | | | | | | |
| **KAPI** | **Kappang** | **19.89** | **94** | *e*P | | **P** | **15 15 43.2** | **-1.0** |
| | 20nm,0.9s | | | | | | | |
| **BKSI** | **Bulukumba** | **20.28** | **95** | P | | **P** | **15 15 48.6** | **+0.2** |
| | 31nm,1.1s,391nm | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.05** | **358** | P | | **P** | **15 16 07.4** | **-0.1** |
| | 2.3nm,0.6s,baz=187,slow=10.0,SNR=19 | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.41** | **358** | *e*P | | **P** | **15 16 12.0** | **+0.7** |
| | 8.7nm,1.2s | | | | | | | |
| **BATI** | **Baumata** | **24.49** | **106** | LR | | LR | 15 25 43.6 | |
| | comp=Z,194nm,20.9s,baz=224,slow=36 | | | | | | | |
| **SLVN** | **San La** | **25.21** | **9** | *e*P | | **P** | **15 16 38.9** | **+0.6** |
| | 12nm,0.9s | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.49** | **261** | T | | T | 15 46 45.1 | |
| | baz=82,slow=75,SNR=96 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.50** | **261** | T | | T | 15 46 39.0 | |
| | baz=82,slow=75,SNR=104 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.51** | **261** | T | | T | 15 46 22.0 | |
| | baz=82,slow=75,SNR=119 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.73** | **159** | T | | T | 15 53 58.5 | |
| | baz=336,slow=76,SNR=28 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.74** | **159** | T | | T | 15 53 52.1 | |
| | baz=336,slow=76,SNR=26 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.74** | **159** | T | | T | 15 53 59.7 | |
| | baz=336,slow=76,SNR=24 | | | | | | | |
| **LSA** | **Lhasa** | **34.26** | **346** | *e*P | | **P** | **15 17 58.7** | **-0.2** |
| | 12nm,1.1s | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.29** | **118** | P | | **P** | **15 18 25.8** | **+1.2** |
| | 1.9nm,0.9s,baz=298,slow=8.3,SNR=17 | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.30** | **118** | *e*P | | **P** | **15 18 24.7** | **0.0** |
| | 1.7nm,0.6s | | | | | | | |
| **ASAR** | **Alice Springs** | **38.40** | **124** | P | | **P** | **15 18 35.4** | **+1.4** |
| | 0.9nm,0.7s,baz=297,slow=7.7,SNR=17 | | | | | | | |
| **XAN** | **Xi'an** | **38.52** | **12** | P | | **P** | **15 18 35.5** | **+0.7** |
| XAN | | | | pP | | **pP** | **15 18 43.5** | **-1.5** |
| **CTAO** | **Charters Tower** | **48.03** | **114** | P | | P | 15 19 48.5 | -3.3 |
| **KSAR** | **Wonju Array Be** | **48.54** | **30** | P | | **P** | **15 19 55.5** | **+0.1** |
| **KSRS** | **Korea Array** | **48.57** | **30** | P | | **P** | **15 19 55.5** | **-0.1** |
| | 1.0nm,0.8s,baz=240,slow=10,SNR=3.3 | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.34** | **337** | *e*P | | **P** | **15 20 17.2** | **+0.3** |
| | 4.8nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **51.66** | **6** | P | | **P** | **15 20 20.6** | **+1.6** |
| | 2.4nm,1.0s,baz=189,slow=8.7,SNR=10 | | | | | | | |
| **CN2** | **Changchun** | **52.61** | **23** | *e*P | | P | 15 20 35.0 | +8.9 |
| CN2 | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.63** | **345** | P | | **P** | **15 20 27.2** | **+1.0** |
| | comp=Z,1.8nm,0.7s,baz=147,slow=8.0,SNR=12 | | | | | | | |
| **ABPO** | **Ambohimpanom** | **53.55** | **249** | *e*P | | **P** | **15 20 32.5** | **-1.2** |
| **USRK** | **Ussuriysk Ar.** | **55.74** | **28** | P | | **P** | **15 20 49.5** | **+0.7** |
| | comp=Z,2.5nm,0.6s,baz=214,slow=5.6,SNR=13 | | | | | | | |
| **KURK** | **Kurchatov** | **57.20** | **344** | *e*P | | **P** | **15 20 58.7** | **-0.4** |
| | comp=Z,12nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.82** | **350** | P | | **P** | **15 21 11.1** | **+0.8** |
| | comp=Z,3.1nm,0.5s,baz=269,slow=10,SNR=5.0 | | | | | | | |
| **ABKAR** | **Akbulak array** | **63.07** | **332** | *e*P | | **P** | **15 21 36.8** | **-2.6** |
| | comp=Z,2.2nm,0.7s | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.36** | **313** | P | | **P** | **15 22 50.6** | **+0.4** |
| | comp=Z,0.9nm,0.9s,baz=136,slow=6.5,SNR=2.8 | | | | | | | |
| **BOSA** | **Boshof** | **74.70** | **241** | LR | | LR | 15 52 09.0 | |
| | comp=Z,32nm,18.4s,baz=42,slow=33 | | | | | | | |
| **GERES** | **GERESS Array B** | **90.23** | **319** | P | | **P** | **15 24 14.0** | **+1.2** |
| | comp=Z,0.4nm,0.5s,baz=60,slow=5.8,SNR=2.9 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **131.01** | **40** | PKP | | **PKPdf** | **15 30 25.6** | **+1.2** |
| | comp=Z,0.5nm,0.5s,baz=276,slow=2.6,SNR=3.0 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.62** | **27** | *e*PKPdf | | PKPbc | 15 30 48.5 | +0.6 |
| **TXAR** | **Lajitas Array** | **146.14** | **39** | PKPbc | | **PKPab** | **15 30 54.7** | **+1.0** |
| | comp=Z,2.5nm,0.6s,baz=285,slow=1.0,SNR=29 | | | | | | | |
| **JCT** | **Junction City** | **147.55** | **33** | *e*PKPdf | | **PKPdf** | **15 30 54.0** | **-0.4** |
| JCT | | | | *e*PKPab | | **PKPab** | **15 30 58.8** | **-0.2** |

*ISCJB **29** 15:16:00.8±1.9, 46.76N±0.10×141.8E±0.2, h14km, Error ellipse: s-maj=20.0km s-min=6.1km az=40.3*
*JMA **29** 15:16:00.4±0.4, 46.85N×141.84E, h25km, M3.0*
*SKHL **29** 15:16:00.8±0.6, 46.60N×141.90E, h10km, mb3.5/1*

**ISC 29 15:16:02.4±2.1, 46.66N±0.10×142.0E±0.1, h14km, n7, σ0§54/11, Sakhalin Island**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **YSS** | **Yuzh-Sakhalins** | **0.62** | **62** | *e*Pg | | **Pg** | **15 16 14.2** | **-0.4** |
| YSS | | | | | AMB | AMB | 15 16 16.0 | |
| | 45nm,0.5s | | | | | | | |
| YSS | | | | *e*Sg | | **Sb** | **15 16 24.0** | **+0.3** |
| YSS | | | | A | | A | 15 16 25.2 | |
| | 830nm,0.3s | | | | | | | |
| YSS | | | | | AMS | AMS | 15 16 50.0 | |
| | 500nm,6.0s | | | | | | | |
| **JWK2** | **Keihoku** | **1.35** | **182** | P | | **Pn** | **15 16 26.5** | **-0.2** |
| JWK2 | | | | *e*S | | **Sg** | **15 16 45.5** | **-0.3** |
| **JRR** | **Rishiri** | **1.59** | **197** | P | | **Pn** | **15 16 30.1** | **0.0** |
| JRR | | | | *e*S | | **Sb** | **15 16 51.7** | **+0.3** |
| **JSE** | **Soyaes** | **1.76** | **165** | P | | **Pn** | **15 16 32.4** | **0.0** |
| JSE | | | | *e*S | | **Sb** | **15 16 56.0** | **-0.3** |
| **ASAJ** | **Asahikawa** | **2.58** | **170** | P | | **Pn** | **15 16 44.8** | **+1.0** |
| **JKK2** | **Kamakawa 2** | **2.84** | **168** | P | | **Pn** | **15 16 48.2** | **+0.8** |
| **JTKR** | **Abashiri--Toko** | **3.02** | **152** | P | | **Pn** | **15 16 50.0** | **+0.2** |

**IDC 29 15:18:01.9±4.7, 2.71S×139.14E, h0km, mb3.3/3, mb1 3.4/4, mb1mx3.3/23, mbtmp3.3/4, ML3.1/1, Error ellipse: s-maj=205.6km s-min=25.0km az=88.0, Near north coast of Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **17.76** | **195** | P | | Pn | 15 22 09.0 | -1.8 |
| | 0.1nm,0.3s,baz=16,slow=12,SNR=4.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.44** | **193** | P | | P | 15 22 52.6 | +0.6 |
| | 1.0nm,0.4s,baz=18,slow=8.8,SNR=33 | | | | | | | |
| **SONM** | **Songino Array** | **57.90** | **335** | P | | P | 15 27 56.2 | +0.2 |
| | 0.2nm,0.4s,baz=149,slow=3.4,SNR=5.5 | | | | | | | |
| **MKAR** | **Makanchi Array** | **70.05** | **322** | P | | P | 15 29 15.7 | -0.2 |
| | 0.2nm,0.4s,baz=134,slow=10,SNR=2.5 | | | | | | | |

**TAP 29 15:26:29.9, 24.23N×121.73E, h14km, ML3.5, 8C-2D, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.08** | **6** | ⇑*e*P | | Pg | 15 26 33.7 | +0.9 |
| | baz=11 | | | | | | | |
| EHP | | | | *e*S | | Sg | 15 26 35.7 | +0.9 |
| | baz=11 | | | | | | | |
| **TWD** | **Chiawan** | **0.19** | **220** | ⇓*i*P | | Pg | 15 26 34.4 | +0.2 |
| | baz=219 | | | | | | | |
| TWD | | | | *i* S | | Sg | 15 26 37.6 | +0.4 |
| | baz=219 | | | | | | | |
| **ENA** | **Nanau** | **0.20** | **3** | ⇑*i*P | | Pg | 15 26 34.5 | +0.1 |
| | baz=4.0 | | | | | | | |
| ENA | | | | *e*S | | Sg | 15 26 37.4 | -0.1 |
| | baz=4.0 | | | | | | | |
| **HWA** | **Hwalien** | **0.27** | **205** | *e*P | | Pg | 15 26 36.0 | +0.4 |
| | baz=209 | | | | | | | |
| **NNS** | **Nan Shan** | **0.39** | **303** | ⇑*i*P | | Pg | 15 26 38.0 | +0.1 |
| | baz=303 | | | | | | | |
| NNS | | | | *i* S | | Sg | 15 26 43.6 | +0.3 |
| | baz=303 | | | | | | | |
| **TWC** | **Suao** | **0.40** | **16** | *i* P | | Pg | 15 26 38.0 | +0.1 |
| | baz=9.0 | | | | | | | |
| TWC | | | | *e*S | | Sg | 15 26 43.1 | -0.1 |
| | baz=9.0 | | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.41** | **210** | *e*P | | Pb | 15 26 39.0 | +0.1 |
| | baz=221 | | | | | | | |
| **WHF** | **Hehuan Shan** | **0.43** | **259** | ⇑*i*P | | Pg | 15 26 38.8 | -0.3 |
| | baz=259 | | | | | | | |
| WHF | | | | *e*S | | Sg | 15 26 44.6 | -0.7 |
| | baz=259 | | | | | | | |
| **ENTT** | **Nioudou** | **0.44** | **340** | ⇑*i*P | | Pg | 15 26 39.0 | +0.3 |
| | baz=340 | | | | | | | |
| ENTT | | | | S | | Sg | 15 26 45.0 | +0.4 |
| | baz=340 | | | | | | | |
| **ESL** | **Shilin** | **0.49** | **214** | *e*P | | Pg | 15 26 39.5 | -0.1 |
| | baz=220 | | | | | | | |
| ESL | | | | *e*S | | Sg | 15 26 46.6 | +0.3 |
| | baz=220 | | | | | | | |
| **TWE** | **Neicheng** | **0.49** | **353** | ⇑*i*P | | Pb | 15 26 40.1 | -0.3 |
| | baz=360 | | | | | | | |
| TWE | | | | S | | Sg | 15 26 46.3 | 0.0 |
| | baz=360 | | | | | | | |
| **TWT** | **Tachien** | **0.51** | **273** | P | | Pg | 15 26 40.5 | +0.3 |
| | baz=273 | | | | | | | |
| TWT | | | | S | | Sg | 15 26 47.3 | +0.2 |
| | baz=273 | | | | | | | |
| **ILA** | **Ilan** | **0.54** | **2** | *e*P | | Pb | 15 26 41.1 | 0.0 |
| | baz=356 | | | | | | | |
| ILA | | | | *e*S | | Sg | 15 26 48.0 | +0.4 |
| | baz=356 | | | | | | | |
| **NSK** | **Sanguang** | **0.56** | **323** | ⇑*i*P | | Pg | 15 26 41.2 | +0.2 |
| | baz=323 | | | | | | | |
| NSK | | | | S | | Sg | 15 26 48.6 | 0.0 |
| | baz=323 | | | | | | | |
| **WDT** | **Danda** | **0.72** | **230** | ⇓*i*P | | Pg | 15 26 44.1 | -0.2 |
| | baz=230 | | | | | | | |
| WDT | | | | *e*S | | Sg | 15 26 53.9 | -0.2 |
| | baz=230 | | | | | | | |
| **TWA** | **Mucha** | **0.76** | **350** | *e*P | | Pb | 15 26 45.6 | +0.6 |
| | baz=350 | | | | | | | |
| **EHY** | **Hungye** | **0.81** | **208** | *e*P | | Pg | 15 26 45.1 | -0.5 |
| | baz=216 | | | | | | | |
| EHY | | | | *e*S | | Sn | 15 26 57.9 | -0.9 |
| | baz=216 | | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.81** | **17** | *e*P | | Pg | 15 26 45.2 | -0.4 |
| | baz=16 | | | | | | | |
| TWB1 | | | | *e*S | | Sg | 15 26 55.5 | -0.8 |
| | baz=16 | | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.83** | **246** | *e*P | | Pb | 15 26 46.4 | +0.1 |
| | baz=239 | | | | | | | |
| SMLT | | | | *e*S | | Sb | 15 26 57.9 | +0.4 |
| | baz=239 | | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.84** | **3** | *e*P | | Pb | 15 26 46.5 | +0.1 |
| | baz=2.0 | | | | | | | |
| **TYC** | **Yuchr** | **0.86** | **248** | P | | Pg | 15 26 46.5 | 0.0 |
| | baz=242 | | | | | | | |
| TYC | | | | *e*S | | Sg | 15 26 57.8 | 0.0 |
| | baz=242 | | | | | | | |
| **TWQ1** | **Liyutan** | **0.88** | **278** | *e*P | | Pn | 15 26 48.0 | +0.1 |
| | baz=278 | | | | | | | |
| **NCU** | **National Centr** | **0.89** | **326** | *e*P | | Pn | 15 26 48.1 | +0.1 |
| | baz=326 | | | | | | | |
| NCU | | | | *e*S | | Sn | 15 27 01.3 | +0.5 |
| | baz=326 | | | | | | | |
| **HSN** | **Hsinchu** | **0.90** | **310** | *e*P | | Pg | 15 26 47.6 | +0.3 |
| | baz=304 | | | | | | | |
| HSN | | | | *e*S | | Sn | 15 27 02.0 | +1.0 |
| | baz=304 | | | | | | | |
| **NSY** | **Sanyi** | **0.91** | **282** | *e*P | | Pn | 15 26 49.7 | +1.4 |
| | baz=282 | | | | | | | |
| NSY | | | | *e*S | | Sn | 15 27 01.4 | +0.3 |
| | baz=282 | | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.92** | **342** | *e*P | | Pn | 15 26 48.4 | 0.0 |
| | baz=350 | | | | | | | |
| TWS1 | | | | *e*S | | Sn | 15 27 01.5 | +0.1 |
| | baz=350 | | | | | | | |
| **TWF1** | **Yuli** | **0.96** | **205** | *e*P | | Pb | 15 26 46.8 | -1.5 |
| | baz=218 | | | | | | | |
| **TCU** | **Taichung** | **0.97** | **266** | *e*P | | Pn | 15 26 49.0 | -0.1 |
| | baz=266 | | | | | | | |
| **WNT** | **Mingjian** | **1.02** | **250** | *e*P | | Pn | 15 26 50.5 | +0.7 |
| | baz=248 | | | | | | | |
| WNT | | | | *e*S | | Sn | 15 27 05.3 | +1.4 |
| | baz=248 | | | | | | | |
| **YUS** | **Yu-Shan** | **1.02** | **224** | *e*P | | Pb | 15 26 49.7 | -0.3 |
| | baz=226 | | | | | | | |
| YUS | | | | *e*S | | Sb | 15 27 03.8 | 0.0 |
| | baz=226 | | | | | | | |
| **ALS** | **Alishan** | **1.11** | **230** | *e*P | | Pn | 15 26 51.4 | 0.0 |
| | baz=231 | | | | | | | |
| ALS | | | | *e*S | | Sn | 15 27 07.3 | +0.5 |
| | baz=231 | | | | | | | |
| **CHN5** | **Tsauling** | **1.15** | **237** | ⇑*e*P | | Pg | 15 26 52.5 | +0.4 |
| | baz=239 | | | | | | | |
| CHN5 | | | | *e*S | | Sn | 15 27 08.7 | +1.3 |
| | baz=239 | | | | | | | |
| **WGK** | **Gukeng** | **1.20** | **244** | *e*P | | Pg | 15 26 53.3 | +0.4 |
| | baz=244 | | | | | | | |
| **ELDTW** | **Lidau** | **1.22** | **212** | *e*P | | Pn | 15 26 52.2 | -0.5 |
| | baz=214 | | | | | | | |
| **CHN2** | **Minshiung** | **1.34** | **239** | *e*P | | Pg | 15 26 56.3 | +0.6 |
| | baz=241 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.36** | **230** | *e*P | | Pb | 15 26 55.6 | +0.4 |
| | baz=233 | | | | | | | |
| CHN4 | | | | *e*S | | Sg | 15 27 15.0 | +1.3 |
| | ba

*ML4.2/3,Ms4.3/6,Ms7 4.1/4*
*IDC* ***29*** *15:27:49.7±4.8,24°.25N×121°.88E,h98km±45km,mb3.7/17, mb1 3.9/18,mb1mx3.7/40,mbtmp4.0/18,MS3.7/4, Ms1 3.8/4,ms1mx3.1/52,Error ellipse: s-maj=21.4km s-min=13.7km az=71.0*

**ISC 29 15:27:41.2±0.6,24°23N±0'.02×121°75E±0'.02,h14km±3km, n102,σ0s89/139,mb4.0/17,MS3.8/4,8C-6D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** baz=14 | **0.08** | **352** | P | **Pg** | **15 27 45.1** | **+0.9** |
| EHP | | | | S | **Sg** | **15 27 47.3** | **+1.1** |
| **ENA** | **Nanau** baz=5.0 | **0.20** | **357** | ⇑*i*P | **Pg** | **15 27 45.9** | **+0.1** |
| **TWD** | **Chiawan** baz=224 | **0.21** | **224** | *i* P | **Pg** | **15 27 46.0** | **+0.1** |
| TWD | | | | *e*S | **Sg** | **15 27 49.2** | **+0.2** |
| **HWA** | **Hwalien** baz=208 | **0.29** | **208** | P | **Pb** | **15 27 48.1** | **+0.1** |
| **TWC** | **Suao** baz=13 | **0.39** | **13** | *i* P | **Pb** | **15 27 49.5** | **-0.3** |
| **NNS** | **Nan Shan** baz=303 | **0.41** | **301** | ⇑P | **Pg** | **15 27 49.5** | **+0.1** |
| NNS | | | | *e*S | **Sg** | **15 27 54.9** | **-0.1** |
| **ESF** | **Shoufeng Towns** baz=220 | **0.42** | **212** | *e*P | **Pb** | **15 27 50.4** | **0.0** |
| **ENTT** | **Nioudou** baz=340 | **0.44** | **337** | ⇑*i*P | **Pb** | **15 27 50.5** | **-0.3** |
| **WHF** | **Hehuan Shan** baz=258 | **0.45** | **259** | P | **Pg** | **15 27 50.2** | **-0.2** |
| **TWE** | **Neicheng** baz=354 | **0.50** | **351** | P | **Pb** | **15 27 51.4** | **-0.2** |
| TWE | | | | *i* S | **Sb** | **15 27 58.1** | **-0.6** |
| **ESL** | **Shilin** baz=220 | **0.51** | **215** | ⇓P | **Pg** | **15 27 51.3** | **+0.1** |
| ESL | | | | *e*S | **Sg** | **15 27 57.7** | **-0.3** |
| **TWT** | **Tachien** baz=273 | **0.53** | **273** | *e*P | **Pg** | **15 27 52.1** | **+0.4** |
| TWT | | | | *e*S | **Sg** | **15 27 59.0** | **+0.2** |
| **ILA** | **Ilan** baz=356 | **0.53** | **359** | P | **Pb** | **15 27 52.4** | **+0.1** |
| ILA | | | | S | **Sb** | **15 28 00.3** | **+0.4** |
| **TEGC** | **Jichi Village** baz=192 | **0.55** | **201** | *e*P | **Pb** | **15 27 53.5** | **+0.9** |
| **NSK** | **Sanguang** baz=323 | **0.57** | **321** | ⇑*i*P | **Pg** | **15 27 52.6** | **+0.1** |
| NSK | | | | S | **Sg** | **15 27 59.9** | **-0.3** |
| **EGS** | baz=323 | **0.63** | **15** | P | **Pb** | **15 27 54.2** | **+0.2** |
| **WDT** | **Danda** baz=23 | **0.74** | **230** | P | **Pg** | **15 27 55.5** | **-0.1** |
| **TWA** | **Mucha** baz=237 | **0.76** | **348** | *e*P | **Pb** | **15 27 56.7** | **+0.4** |
| **TWB1** | **Santiao Chiao** baz=350 | **0.80** | **15** | ⇑P | **Pb** | **15 27 57.1** | **+0.2** |
| TWB1 | baz=14 | | | S | **Sg** | **15 28 07.1** | **-0.3** |
| **EHY** | **Hungye** baz=14 | **0.82** | **209** | *e*P | **Pb** | **15 27 57.5** | **+0.2** |
| **TAP1** | **Taipei** baz=219 | **0.83** | **345** | *e*P | **Pn** | **15 27 57.9** | **-0.5** |
| TAP1 | baz=345 | | | *e*S | **Sb** | **15 28 08.4** | **-0.1** |
| **TAP** | **Taipei** baz=345 | **0.84** | **344** | *e*P | **Pn** | **15 27 58.0** | **-0.5** |
| TAP | baz=345 | | | *e*S | **Sb** | **15 28 08.7** | **+0.1** |
| **NWF** | **Wu-fen Shan** baz=355 | **0.84** | **2** | *e*P | **Pb** | **15 27 58.0** | **+0.5** |
| NWF | baz=355 | | | S | **Sb** | **15 28 08.7** | **0.0** |
| **SMLT** | **Sun Moon Lake** baz=239 | **0.85** | **246** | ⇓P | **Pb** | **15 27 57.8** | **0.0** |
| SMLT | baz=239 | | | S | **Sg** | **15 28 08.6** | **-0.4** |
| **TYC** | **Yuchr** baz=248 | **0.88** | **249** | ⇓P | **Pb** | **15 27 58.1** | **-0.1** |
| **NCU** | **National Centr** baz=326 | **0.90** | **325** | *e*P | **Pn** | **15 27 59.1** | **-0.3** |
| NCU | baz=326 | | | *e*S | **Sn** | **15 28 11.8** | **-0.4** |
| **TWQ1** | **Liyutan** baz=278 | **0.90** | **278** | ⇓*e*P | **Pn** | **15 27 59.4** | **0.0** |
| **HSN** | **Hsinchu** baz=312 | **0.91** | **309** | *e*P | **Pb** | **15 27 58.7** | **-0.1** |
| **TWS1** | **Kuangyinshan** baz=348 | **0.92** | **341** | *e*P | **Pn** | **15 27 59.8** | **+0.1** |
| TWS1 | baz=348 | | | *e*S | **Sn** | **15 28 12.3** | **-0.4** |
| **NSY** | **Sanyi** baz=282 | **0.92** | **282** | *e*P | **Pn** | **15 28 00.1** | **+0.4** |
| **TWF1** | **Yuli** baz=216 | **0.97** | **206** | *e*P | **Pb** | **15 27 59.7** | **0.0** |
| **TCU** | **Taichung** baz=265 | **0.99** | **265** | ⇓*e*P | **Pn** | **15 28 01.8** | **+1.3** |
| **WNT** | **Mingjian** baz=248 | **1.04** | **251** | *e*P | **Pg** | **15 28 01.6** | **+0.3** |
| WNT | baz=248 | | | *e*S | **Sn** | **15 28 16.1** | **+0.6** |
| **YUS** | **Yu-Shan** baz=216 | **1.04** | **225** | P | **Pb** | **15 28 01.1** | **-0.1** |
| YUS | baz=216 | | | S | **Sb** | **15 28 15.8** | **+0.9** |
| **TWY** | **Chenhua** baz=340 | **1.05** | **352** | *e*P | **Pg** | **15 28 03.2** | **+1.7** |
| **JYNG** | **Yonaguni jima** | **1.11** | **78** | P | **Pg** | **15 28 02.8** | **+0.2** |
| **ALS** | **Alishan** baz=219 | **1.12** | **231** | ⇓*i*P | **Pb** | **15 28 02.6** | **+0.1** |
| ALS | baz=219 | | | S | **Sg** | **15 28 18.1** | **+0.4** |
| **CHN5** | **Tsauling** baz=239 | **1.17** | **238** | *e*P | **Pb** | **15 28 03.5** | **+0.4** |
| CHN5 | baz=239 | | | *e*S | **Sg** | **15 28 20.4** | **+1.4** |
| **YOJ** | **Yonaguni jima** | **1.17** | **78** | P | **Pg** | **15 28 03.7** | **0.0** |
| **YOJ** | **Yonaguni jima** baz=64 | **1.17** | **78** | *e*P | **Pg** | **15 28 03.6** | **-0.2** |
| YOJ | baz=64 | | | *e*S | **Sg** | **15 28 19.2** | **+0.2** |
| **CHKT** | **Chengkung** baz=181 | **1.18** | **198** | *e*P | **Pn** | **15 28 02.4** | **-0.8** |
| **WGK** | **Gukeng** baz=245 | **1.22** | **244** | *e*P | **Pg** | **15 28 05.1** | **+0.5** |
| WGK | baz=245 | | | *e*S | **Sg** | **15 28 21.4** | **+0.9** |
| **ELDTW** | **Lidau** baz=214 | **1.24** | **213** | *e*P | **Pn** | **15 28 04.2** | **+0.1** |
| **CHN2** | **Minshiung** baz=241 | **1.36** | **240** | *e*P | **Pg** | **15 28 07.3** | **-0.1** |
| CHN2 | baz=241 | | | *e*S | **Sg** | **15 28 26.1** | **+1.0** |
| **CHN4** | **Tsaushan** baz=232 | **1.38** | **231** | ⇑P | **Pg** | **15 28 07.5** | **-0.2** |
| CHN4 | baz=232 | | | *e*S | **Sg** | **15 28 27.0** | **+1.4** |
| **WTCT** | **Ta-ch'eng** baz=255 | **1.39** | **255** | *e*P | **Pb** | **15 28 07.0** | **0.0** |
| **STYT** | **Tauyuan** baz=223 | **1.40** | **221** | ⇑P | **Pn** | **15 28 06.7** | **+0.4** |
| STYT | baz=223 | | | *e*S | **Sg** | **15 28 26.3** | **-0.1** |
| **CHY** | **Chiayi** baz=241 | **1.42** | **239** | *e*P | **Pg** | **15 28 08.2** | **-0.3** |
| CHY | baz=241 | | | *e*S | **Sg** | **15 28 27.6** | **+0.6** |
| **PCYT** | **Pengchaiyu** baz=9.0 | **1.42** | **12** | *e*P | **Pb** | **15 28 07.2** | **-0.3** |
| **WTP** | **Ta-pu** baz=229 | **1.43** | **227** | *e*P | **Pb** | **15 28 07.8** | **+0.1** |
| WTP | baz=229 | | | *e*S | **Sg** | **15 28 27.6** | **+0.2** |
| **TWK** | **Hsinying** baz=231 | **1.50** | **231** | *e*P | **Pb** | **15 28 08.8** | **-0.1** |
| **WSF** | **Szhu** baz=258 | **1.52** | **248** | *e*P | **Pb** | **15 28 08.7** | **-0.4** |
| WSF | baz=258 | | | *e*S | **Sg** | **15 28 29.8** | **-0.3** |
| **CHN1** | **Nanshi** baz=230 | **1.53** | **227** | ⇑P | **Pb** | **15 28 09.7** | **+0.4** |
| CHN1 | baz=230 | | | *e*S | **Sg** | **15 28 30.2** | **-0.4** |
| **TWG** | **Pinlang** baz=189 | **1.54** | **204** | *e*P | **Pn** | **15 28 07.9** | **-0.2** |
| **SGST** | **Jiashian** baz=226 | **1.57** | **223** | *e*P | **Pb** | **15 28 09.7** | **-0.3** |
| SGST | baz=226 | | | *e*S | **Sg** | **15 28 32.0** | **+0.3** |
| **CHN8** | **Yiju** baz=226 | **1.66** | **238** | *e*P | **Pb** | **15 28 11.1** | **-0.5** |
| CHN8 | baz=226 | | | *e*S | **Sg** | **15 28 33.8** | **-1.0** |
| **CHN3** | **Shinhua** baz=230 | **1.71** | **228** | *e*P | **Pb** | **15 28 12.4** | **0.0** |
| **SCLT** | **Jiali** baz=237 | **1.77** | **234** | *e*P | **Pb** | **15 28 13.5** | **0.0** |
| SCLT | baz=237 | | | *e*S | **Sg** | **15 28 37.1** | **-1.1** |
| **ECL** | **Taimali** baz=192 | **1.78** | **204** | *e*P | **Pn** | **15 28 12.0** | **+0.5** |
| **SSD** | **Sandimen** baz=229 | **1.80** | **215** | *e*P | **Pn** | **15 28 12.9** | **+1.2** |
| SSD | baz=229 | | | *e*S | **Sb** | **15 28 37.5** | **+1.2** |
| **IRIF** | **Iriomote-Funau** | **1.81** | **86** | P | **Pn** | **15 28 12.2** | **+0.4** |
| IRIF | | | | S | **Sb** | **15 28 37.3** | **+0.8** |
| **TAI1** | **Yung-k'ang** baz=232 | **1.83** | **230** | *e*P | **Pb** | **15 28 14.2** | **-0.3** |
| **TWM1** | **Shoushan** baz=222 | **1.86** | **221** | *e*P | **Pb** | **15 28 15.2** | **+0.3** |
| **HATJ** | **Hateruma jima** | **1.88** | **95** | P | **Pn** | **15 28 13.1** | **+0.2** |
| HATJ | | | | S | **Sb** | **15 28 37.9** | **-0.8** |
| **SGLT** | **Jiouru** baz=221 | **1.89** | **218** | *e*P | **Pb** | **15 28 15.4** | **-0.1** |
| **EAST** | **Anshuo** baz=193 | **2.02** | **205** | *e*P | **Pn** | **15 28 15.6** | **+0.8** |
| **TAW** | **Tawu** baz=192 | **2.02** | **203** | *e*P | **Pn** | **15 28 15.3** | **+0.5** |
| **JKRS** | **Kuro-shima** | **2.06** | **89** | P | **Pn** | **15 28 16.8** | **+1.5** |
| JKRS | | | | S | **Sb** | **15 28 43.6** | **-0.2** |
| **PNG** | **Penghu** baz=253 | **2.12** | **252** | *e*P | **Pn** | **15 28 16.1** | **-0.1** |
| **SCZT** | **Fangliau** baz=193 | **2.12** | **210** | *e*P | **Pn** | **15 28 17.5** | **+1.3** |
| **WDGT** | **Dungji** baz=246 | **2.15** | **244** | *e*P | **Pn** | **15 28 17.1** | **+0.6** |
| WDGT | baz=246 | | | *e*S | **Sn** | **15 28 44.0** | **+1.0** |
| **JIJ** | **Ishigaki jima** | **2.18** | **86** | P | **Pn** | **15 28 17.4** | **+0.4** |
| JIJ | | | | S | **Sn** | **15 28 45.1** | **+1.2** |
| **JISG** | **Ishigakijimahi** | **2.36** | **81** | P | **Pn** | **15 28 19.4** | **0.0** |
| JISG | | | | S | **Sb** | **15 28 51.5** | **-0.9** |
| **TWK1** | **Hengchun** baz=192 | **2.44** | **201** | *e*P | **Pn** | **15 28 22.0** | **+1.4** |
| **JTJ** | **Tarama** | **2.72** | **81** | P | **Pn** | **15 28 26.5** | **+2.1** |
| **QZH** | **Quanzhou** | **2.96** | **285** | Pn | **Pn** | **15 28 30.5** | **+2.7** |
| QZH | | | | Sn | **Sn** | **15 29 04.0** | **+0.9** |
| QZH | 1μm,1.0s | | | SMN | | | |
| QZH | 740nm,0.9s | | | SME | | | |
| **KNM** | **Kinmen** baz=272 | **3.03** | **274** | *e*P | **Pn** | **15 28 30.6** | **+1.9** |
| **JIRB** | **Irabujima** | **3.17** | **78** | P | **Pn** | **15 28 33.6** | **+3.0** |
| **WHN** | **Wuhan** | **9.10** | **315** | P | Pn | 15 29 58.0 | +5.9 |
| WHN | 3μm,10.9s | | | LN | | | |
| WHN | 3μm,9.4s | | | LE | | | |
| WHN | 4μm,9.3s | | | LZ | | | |
| **KSRS** | **Korea Array** 0.2nm,0.3s,baz=206,slow=13,SNR=4.7 | **14.20** | **20** | P | **Pn** | **15 31 04.9** | **+3.1** |
| **XAN** | **Xi'an** | **14.86** | **314** | P | **P** | **15 31 18.3** | **+1.6** |
| **CD2** | **Chengdu** | **17.28** | **297** | P | **Pn** | **15 31 42.5** | **+0.4** |
| CD2 | | | | pP | **pP** | **15 31 46.5** | **-1.1** |
| CD2 | | | | sP | **sP** | **15 31 47.8** | **-1.6** |
| CD2 | | | | S | **Sn** | **15 34 55.5** | **+1.3** |
| CD2 | 10.0nm,0.5s | | | PMZ | | | |
| **LZH** | **Lanzhou** | **19.44** | **312** | *e*P | Pn | 15 32 14.3 | +5.6 |
| LZH | 18nm,1.0s | | | PMZ | | | |
| **USRK** | **Ussuriysk Ar.** 2.2nm,0.9s,baz=217,slow=12,SNR=3.9 | **21.61** | **20** | P | **P** | **15 32 32.0** | **+1.4** |
| **CMAR** | **Chiang Mai Arr** 0.6nm,0.3s,baz=65,slow=8.4,SNR=5.3 | **22.00** | **259** | P | **P** | **15 32 36.9** | **+1.8** |
| CMAR | comp=Z,74nm,19.8s,baz=280,slow=38 | | | LR | LR | 15 41 38.3 | |
| **GTA** | **Gaotai** | **23.92** | **314** | P | P | 15 33 00.3 | +5.5 |
| GTA | | | | pP | pP | 15 33 06.3 | +7.1 |
| GTA | | | | sP | sP | 15 33 09.3 | +8.3 |
| GTA | 9.0nm,1.4s | | | PMZ | | | |
| GTA | 140nm,4.3s | | | PMZ | | | |
| GTA | 180nm,15.2s | | | LN | | | |
| GTA | 200nm,17.6s | | | LE | | | |
| GTA | 200nm,16.9s | | | LZ | | | |
| **SONM** | **Songino Array** 4.5nm,1.2s,baz=156,slow=9.7,SNR=7.3 | **26.53** | **336** | P | **P** | **15 33 18.6** | **+0.1** |
| **MKAR** | **Makanchi Array** 1.9nm,0.8s,baz=111,slow=9.4,SNR=13 | **38.67** | **316** | P | **P** | **15 35 04.5** | **+0.1** |
| **ZALV** | **Zalesovo Beam** 0.8nm,0.5s,baz=123,slow=7.1,SNR=3.5 | **40.49** | **327** | P | **P** | **15 35 18.3** | **-1.1** |
| **KURBB** | **Kurchatov Arra** 0.5nm,0.2s,baz=110,slow=8.0,SNR=3.3 | **42.41** | **320** | P | **P** | **15 35 35.2** | **+0.1** |
| **WRA** | **Warramunga Arr** 0.9nm,0.6s,baz=345,slow=8.6,SNR=10.0 | **45.59** | **163** | P | **P** | **15 35 58.7** | **-2.2** |
| **ASAR** | **Alice Springs** 0.8nm,0.9s,baz=338,slow=7.3,SNR=10 | **49.05** | **165** | P | **P** | **15 36 27.2** | **-0.7** |
| **GEYT** | **Alibeck** 1.9nm,0.9s,baz=187,slow=9.0,SNR=4.1 | **55.22** | **300** | P | **P** | **15 37 14.2** | **+0.4** |
| **NWAO** | **Narrogin (SRO)** 14nm,1.1s,baz=44,slow=0.0,SNR=2.1 | **57.00** | **185** | P | **P** | **15 37 26.8** | **+0.4** |
| **KBZ** | **Khabaz** 3.4nm,1.0s,baz=119,slow=6.1,SNR=3.7 | **65.86** | **309** | P | **P** | **15 38 24.8** | **-1.5** |
| **ILAR** | **Eielson Array** 0.3nm,0.7s,baz=214,slow=5.1,SNR=4.1 | **68.93** | **27** | P | **P** | **15 38 44.0** | **-1.4** |
| **FINES** | **FINESS Array B** 6.5nm,1.1s,baz=94,slow=2.5,SNR=5.1 | **71.67** | **330** | P | **P** | **15 39 01.0** | **-1.2** |
| FINES | comp=Z,130nm,18.4s,baz=64,slow=38 | | | LR | LR | 16 13 44.1 | |
| **AKASG** | **Malin Array Be** 0.3nm,0.2s,baz=59,slow=6.0,SNR=4.4 | **73.18** | **318** | P | **P** | **15 39 09.3** | **-2.2** |
| **BRTR** | **Keskin Array B** 1.7nm,0.9s,baz=104,slow=5.2,SNR=6.5 | **73.56** | **307** | P | **P** | **15 39 13.6** | **-0.5** |
| BRTR | comp=Z,25nm,18.7s,baz=60,slow=38 | | | LR | LR | 16 14 58.2 | |
| **NOA** | **NORSAR Array B** comp=Z,87nm,18.9s,baz=75,slow=40 | **78.43** | **332** | LR | LR | 16 20 32.8 | |
| **YKA** | **Yellowknife Ar** 3.1nm,0.8s,baz=316,slow=5.6,SNR=3.4 | **82.72** | **23** | P | P | 15 40 00.6 | -3.6 |
| **NVAR** | **Mina Array Bea** 0.3nm,0.5s,baz=291,slow=2.8,SNR=3.5 | **96.04** | **43** | P | **P** | **15 41 07.0** | **-1.6** |

*NIED* ***29*** *15:30:00,24°.20N×121°.70E,h5km,Mw4.5 Best double couple: M0 7.38000×10^15 NP1:φs266.00000°,δ12.00000°, λ117.00000°. NP2:φs59.00000°,δ79.00000°,λ84.00000°.*
*BJI* ***29*** *15:30:14.1,24°.19N×121°.82E,h13km,mb4.0/3,ML3.9/2*
*TAP* ***29*** *15:30:15.8,24°.23N×121°.73E,h14km,ML4.4,B*
*JMA* ***29*** *15:30:15.4±0.1,24°.19N×121°.65E,h22km±1km,M3.8*
*ISCJB* ***29*** *15:30:16.4±0.3,24°.24N±0°.02×121°.80E±0°.02,h16km±3km, mb3.7/10,Error ellipse: s-maj=3.3km s-min=2.1km az=35.4*
*IDC* ***29*** *15:30:32.2±5.0,24°.27N×122°.22E,h180km±49km, mb3.4/10,mb1 3.5/11,mb1mx3.2/40,mbtmp3.9/11,MS3.5/1, Ms1 3.5/1,ms1mx2.7/25,Error ellipse: s-maj=25.4km s-min=16.4km az=70.0*

**ISC 29 15:30:16.3±0.6,24°23N±0'.02×121°74E±0'.02,h19km±1km, n89,σ0s91/132,mb3.7/10,8C-8D,Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** baz=11 | **0.08** | **358** | *e*P | **Pg** | **15 30 19.7** | **-0.2** |
| EHP | | | | *e*S | **Sg** | **15 30 22.0** | **-0.4** |
| **TWD** | **Chiawan** baz=219 | **0.20** | **223** | *i* P | **Pg** | **15 30 20.5** | **-0.8** |
| TWD | | | | *i* S | **Sg** | **15 30 23.6** | **-1.1** |
| **ENA** | **Nanau** baz=4.0 | **0.20** | **359** | ⇑*i*P | **Pg** | **15 30 20.5** | **-0.9** |
| **HWA** | **Hwalien** baz=209 | **0.28** | **207** | *e*P | **Pb** | **15 30 22.7** | **+0.1** |
| **TWC** | **Suao** baz=9.0 | **0.39** | **14** | ⇑*i*P | **Pg** | **15 30 24.0** | **-0.5** |
| TWC | baz=9.0 | | | *i* S | **Sg** | **15 30 29.1** | **-0.9** |
| **NNS** | **Nan Shan** baz=303 | **0.40** | **302** | ⇑*i*P | **Pg** | **15 30 24.0** | **-0.7** |
| NNS | baz=303 | | | *e*S | **Sg** | **15 30 29.4** | **-0.9** |
| **ESF** | **Shoufeng Towns** baz=221 | **0.41** | **212** | *e*P | **Pb** | **15 30 25.3** | **+0.2** |
| **ENTT** | **Nioudou** baz=340 | **0.44** | **339** | ⇑*i*P | **Pg** | **15 30 25.0** | **-0.4** |
| **WHF** | **Hehuan Shan** baz=259 | **0.45** | **260** | ⇑*i*P | **Pg** | **15 30 24.8** | **-0.8** |
| **TWE** | **Neicheng** baz=359 | **0.50** | **352** | ⇑*i*P | **Pg** | **15 30 26.0** | **-0.4** |
| TWE | baz=359 | | | S | **Sg** | **15 30 32.7** | **-0.5** |
| **ESL** | **Shilin** baz=219 | **0.50** | **215** | *e*P | **Pg** | **15 30 25.6** | **-0.8** |
| **TWT** | **Tachien** baz=273 | **0.52** | **273** | ⇑*i*P | **Pb** | **15 30 26.6** | **-0.3** |
| TWT | baz=273 | | | S | **Sg** | **15 30 33.6** | **-0.3** |
| **ILA** | **Ilan** baz=356 | **0.54** | **0** | *e*P | **Pb** | **15 30 27.1** | **0.0** |
| ILA | baz=356 | | | *e*S | **Sb** | **15 30 34.6** | **+0.1** |
| **TEGC** | **Jichi Village** baz=190 | **0.55** | **200** | *e*P | **Pb** | **15 30 27.8** | **+0.6** |
| **NSK** | **Sanguang** baz=323 | **0.57** | **322** | ⇑*i*P | **Pg** | **15 30 27.2** | **-0.6** |
| NSK | baz=323 | | | *e*S | **Sg** | **15 30 34.5** | **-0.9** |
| **EGS** | baz=24 | **0.64** | **15** | *e*P | **Pb** | **15 30 28.9** | **+0.1** |
| **WDT** | **Danda** baz=230 | **0.73** | **230** | *e*P | **Pg** | **15 30 29.9** | **-0.8** |
| WDT | baz=230 | | | *e*S | **Sb** | **15 30 40.4** | **+0.2** |
| **TWA** | **Mucha** baz=350 | **0.77** | **349** | ⇓*e*P | **Pb** | **15 30 31.2** | **+0.2** |
| **TWB1** | **Santiao Chiao** baz=16 | **0.81** | **16** | *e*P | **Pg** | **15 30 31.5** | **-0.6** |
| TWB1 | baz=16 | | | S | **Sg** | **15 30 41.7** | **-1.2** |
| **EHY** | **Hungye** baz=221 | **0.81** | **208** | *e*P | **Pg** | **15 30 30.6** | **-1.6** |
| **TAP1** | **Taipei** baz=346 | **0.83** | **346** | *e*P | **Pb** | **15 30 32.5** | **+0.3** |
| **TAP** | **Taipei** baz=346 | **0.84** | **345** | *e*P | **Pn** | **15 30 32.8** | **-0.4** |
| **NWF** | **Wu-fen Shan** baz=355 | **0.84** | **2** | *e*P | **Pb** | **15 30 32.8** | **+0.4** |
| NWF | baz=355 | | | *e*S | **Sg** | **15 30 43.4** | **-0.6** |
| **SMLT** | **Sun Moon Lake** baz=239 | **0.84** | **246** | ⇓*i*P | **Pb** | **15 30 32.3** | **-0.2** |
| SMLT | baz=239 | | | S | **Sg** | **15 30 43.1** | **-0.9** |
| **TYC** | **Yuchr** baz=242 | **0.87** | **249** | ⇓*i*P | **Pb** | **15 30 32.7** | **-0.1** |
| TYC | baz=242 | | | *e*S | **Sg** | **15 30 43.8** | **-1.1** |
| **TWQ1** | **Liyutan** baz=278 | **0.89** | **278** | ⇓P | **Pn** | **15 30 34.2** | **+0.3** |
| TWQ1 | baz=278 | | | *e*S | **Sn** | **15 30 46.2** | **-0.2** |
| **NCU** | **National Centr** baz=326 | **0.90** | **326** | *e*P | **Pn** | **15 30 34.2** | **+0.2** |
| NCU | baz=326 | | | *e*S | **Sn** | **15 30 46.4** | **0.0** |
| **HSN** | **Hsinchu** baz=304 | **0.91** | **309** | *e*P | **Pn** | **15 30 34.2** | **+0.2** |
| HSN | baz=304 | | | *e*S | **Sn** | **15 30 46.3** | **-0.4** |
| **NSY** | **Sanyi** baz=282 | **0.92** | **282** | *e*P | **Pn** | **15 30 34.5** | **+0.3** |
| NSY | baz=282 | | | *e*S | **Sn** | **15 30 46.8** | **-0.1** |
| **TWS1** | **Kuangyinshan** baz=341 | **0.92** | **341** | *e*P | **Pn** | **15 30 34.4** | **+0.2** |
| **TWF1** | **Yuli** baz=218 | **0.96** | **205** | *e*P | **Pb** | **15 30 34.1** | **-0.3** |
| **TCU** | **Taichung** baz=266 | **0.98** | **266** | ⇓*e*P | **Pn** | **15 30 35.9** | **+0.8** |
| TCU | baz=266 | | | *e*S | **Sn** | **15 30 49.6** | **+1.2** |
| **WNT** | **Mingjian** baz=248 | **1.03** | **251** | ⇓*i*P | **Pn** | **15 30 36.6** | **+0.8** |
| WNT | baz=248 | | | *e*S | **Sn** | **15 30 51.1** | **+1.5** |
| **YUS** | **Yu-Shan** baz=226 | **1.03** | **225** | ⇓*i*P | **Pb** | **15 30 35.6** | **-0.2** |
| YUS | baz=226 | | | *e*S | **Sg** | **15 30 50.2** | **+0.1** |
| **TWY** | **Chenhua** baz=339 | **1.05** | **353** | *e*P | **Pb** | **15 30 35.9** | **-0.1** |
| **ALS** | **Alishan** baz=218 | **1.12** | **231** | ⇓*i*P | **Pb** | **15 30 37.2** | **0.0** |
| ALS | baz=218 | | | *e*S | **Sn** | **15 30 52.9** | **+0.6** |
| **JYNG** | **Yonagunijimaku** | **1.12** | **78** | P | **Pn** | **15 30 37.2** | **+0.2** |
| **CHN5** | **Tsauling** baz=239 | **1.16** | **238** | *e*P | **Pg** | **15 30 38.3** | **-0.4** |
| CHN5 | baz=239 | | | *e*S | **Sn** | **15 30 54.8** | **+1.8** |
| **CHKT** | **Chengkung** baz=180 | **1.17** | **197** | *e*P | **Pn** | **15 30 36.7** | **-1.0** |
| **YOJ** | **Yonaguni jima** | **1.18** | **78** | P | **Pn** | **15 30 38.1** | **+0.3** |
| YOJ | | | | S | **Sg** | **15 30 55.5** | **+0.9** |
| **YOJ** | **Yonaguni jima** baz=66 | **1.18** | **78** | *e*P | **Pn** | **15 30 37.6** | **-0.2** |
| **WGK** | **Gukeng** baz=245 | **1.21** | **244** | *e*P | **Pg** | **15 30 39.3** | **-0.4** |
| WGK | baz=245 | | | *e*S | **Sg** | **15 30 56.4** | **+0.9** |
| **ELDTW** | **Lidau** baz=214 | **1.23** | **213** | *e*P | **Pn** | **15 30 38.6** | **0.0** |
| **CHN2** | **Minshiung** baz=241 | **1.35** | **240** | *e*P | **Pg** | **15 30 41.9** | **-0.6** |
| CHN2 | baz=241 | | | *e*S | **Sg** | **15 31 00.8** | **+0.7** |
| **CHN4** | **Tsaushan** baz=233 | **1.37** | **231** | P | **Pg** | **15 30 41.8** | **-0.9** |
| CHN4 | | | | *e*S | **Sg** | **15 31 01.0** | **+0.4** |
| WHF | baz=259 | | | *e*S | Sg | 15 30 22.5 | -0.7 |
| **ENTT** | **Nioudou** baz=341 | **0.43** | **340** | *e*P | Pb | 15 30 17.0 | -0.1 |
| **TWE** | **Neicheng** baz=355 | **0.49** | **354** | *e*P | Pg | 15 30 17.7 | +0.1 |
| **NSK** | **Sanguang** baz=323 | **0.55** | **323** | *e*P | Pb | 15 30 19.2 | -0.1 |

**TAP 29 15:30:07.8,24°23N×121°73E,h15km±1km,ML2.4,D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** baz=16 | **0.08** | **11** | *e*P | Pg | 15 30 11.7 | +0.8 |
| EHP | baz=16 | | | *e*S | Sg | 15 30 13.7 | +0.8 |
| **TWD** | **Chiawan** baz=217 | **0.19** | **218** | *i* P | Pg | 15 30 12.6 | +0.3 |
| TWD | baz=217 | | | *i* S | Sg | 15 30 15.7 | +0.3 |
| **ENA** | **Nanau** baz=5.0 | **0.20** | **4** | *i* P | Pg | 15 30 12.5 | +0.1 |
| ENA | baz=5.0 | | | S | Sg | 15 30 15.4 | -0.1 |
| **NNS** | **Nan Shan** baz=303 | **0.38** | **303** | P | Pg | 15 30 16.0 | +0.3 |
| NNS | baz=303 | | | S | Sg | 15 30 21.4 | +0.3 |
| **TWC** | **Suao** baz=13 | **0.39** | **17** | *e*P | Pb | 15 30 17.0 | +0.6 |
| TWC | baz=13 | | | *e*S | Sg | 15 30 21.3 | +0.2 |
| **WHF** | **Hehuan Shan** baz=259 | **0.43** | **258** | P | Pg | 15 30 16.6 | -0.3 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=233 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.39** | **255** | *e*P | | **Pb** | 15 30 41.6 | **0.0** |
| | baz=256 | | | | | | | |
| WTCT | | | | *e*S | | **Sg** | 15 31 01.1 | **-0.1** |
| | baz=256 | | | | | | | |
| **STYT** | **Tauyuan** | **1.39** | **221** | *e*P | | **Pn** | 15 30 41.2 | **+0.4** |
| | baz=223 | | | | | | | |
| STYT | | | | *e*S | | **Sg** | 15 31 00.9 | **-0.5** |
| | baz=223 | | | | | | | |
| **CHY** | **Chiayi** | **1.41** | **239** | *e*P | | **Pg** | 15 30 42.7 | **-0.8** |
| | baz=241 | | | | | | | |
| CHY | | | | *e*S | | **Sg** | 15 31 01.6 | **-0.3** |
| | baz=241 | | | | | | | |
| **WTP** | **Ta-pu** | **1.42** | **227** | P | | **Pb** | 15 30 42.4 | **+0.2** |
| | baz=229 | | | | | | | |
| WTP | | | | *e*S | | **Sg** | 15 31 02.4 | **+0.1** |
| | baz=229 | | | | | | | |
| **TWK** | **Hsinying** | **1.50** | **231** | *e*P | | **Pb** | 15 30 43.1 | **-0.4** |
| | baz=233 | | | | | | | |
| TWK | | | | *e*S | | **Sg** | 15 31 03.6 | **-1.1** |
| | baz=233 | | | | | | | |
| **WSF** | **Szhu** | **1.51** | **248** | *e*P | | **Pb** | 15 30 43.7 | **0.0** |
| | baz=259 | | | | | | | |
| WSF | | | | *e*S | | **Sg** | 15 31 04.9 | **-0.2** |
| | baz=259 | | | | | | | |
| **CHN1** | **Nanshi** | **1.52** | **227** | *e*P | | **Pb** | 15 30 44.2 | **+0.2** |
| | baz=231 | | | | | | | |
| CHN1 | | | | *e*S | | **Sg** | 15 31 04.9 | **-0.6** |
| | baz=231 | | | | | | | |
| **SGST** | **Jiashian** | **1.56** | **223** | *e*P | | **Pb** | 15 30 44.4 | **-0.1** |
| | baz=226 | | | | | | | |
| SGST | | | | *e*S | | **Sg** | 15 31 06.2 | **-0.5** |
| | baz=226 | | | | | | | |
| **CHN8** | **Yiju** | **1.66** | **238** | *e*P | | **Pn** | 15 30 45.2 | **+0.9** |
| | baz=227 | | | | | | | |
| CHN8 | | | | *e*S | | **Sg** | 15 31 08.9 | **-0.8** |
| | baz=227 | | | | | | | |
| **CHN3** | **Shinhua** | **1.71** | **228** | *e*P | | **Pb** | 15 30 47.1 | **+0.1** |
| | baz=233 | | | | | | | |
| CHN3 | | | | *e*S | | **Sg** | 15 31 10.7 | **-0.7** |
| | baz=233 | | | | | | | |
| **SCLT** | **Jiali** | **1.76** | **234** | *e*P | | **Pb** | 15 30 47.1 | **-1.0** |
| | baz=238 | | | | | | | |
| SCLT | | | | *e*S | | **Sb** | 15 31 10.1 | **+0.3** |
| | baz=238 | | | | | | | |
| **ECL** | **Taimali** | **1.78** | **204** | *e*P | | **Pn** | 15 30 45.1 | **-0.9** |
| | baz=192 | | | | | | | |
| **SSD** | **Sandimen** | **1.79** | **215** | *e*P | | **Pn** | 15 30 47.4 | **+1.1** |
| | baz=231 | | | | | | | |
| SSD | | | | *e*S | | **Sb** | 15 31 11.8 | **+1.2** |
| | baz=231 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.82** | **86** | P | | **Pn** | 15 30 46.5 | **0.0** |
| **TAI1** | **Yung-k'ang** | **1.82** | **230** | *e*P | | **Pb** | 15 30 48.6 | **-0.5** |
| | baz=233 | | | | | | | |
| **TWM1** | **Shoushan** | **1.85** | **221** | *e*P | | **Pb** | 15 30 49.6 | **+0.1** |
| | baz=224 | | | | | | | |
| **SGLT** | **Jiouru** | **1.89** | **218** | *e*P | | **Pb** | 15 30 49.0 | **-1.1** |
| | baz=222 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.89** | **95** | P | | **Pn** | 15 30 48.0 | **+0.4** |
| HATJ | | | | S | | **Sn** | 15 31 12.2 | **+1.3** |
| **EAST** | **Anshuo** | **2.01** | **204** | *e*P | | **Pn** | 15 30 49.9 | **+0.6** |
| | baz=194 | | | | | | | |
| **TAW** | **Tawu** | **2.02** | **203** | *e*P | | **Pn** | 15 30 50.5 | **+1.2** |
| | baz=192 | | | | | | | |
| **JKRS** | **Kuro-shima** | **2.07** | **89** | P | | **Pn** | 15 30 50.7 | **+0.7** |
| **PNG** | **Penghu** | **2.11** | **252** | *e*P | | **Pn** | 15 30 51.1 | **+0.5** |
| | baz=255 | | | | | | | |
| PNG | | | | *e*S | | **Sb** | 15 31 18.1 | **-1.6** |
| | baz=255 | | | | | | | |
| **SCZT** | **Fangliau** | **2.12** | **209** | *e*P | | **Pn** | 15 30 52.1 | **+1.5** |
| | baz=195 | | | | | | | |
| **WDGT** | **Dungji** | **2.14** | **244** | *e*P | | **Pn** | 15 30 52.4 | **+1.4** |
| | baz=245 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.19** | **86** | P | | **Pn** | 15 30 51.9 | **+0.1** |
| **JISG** | **Ishigakijimahi** | **2.37** | **81** | P | | **Pn** | 15 30 54.3 | **+0.2** |
| **TWK1** | **Hengchun** | **2.43** | **201** | *e*P | | **Pn** | 15 30 57.0 | **+2.0** |
| | baz=190 | | | | | | | |
| **JTJ** | **Tarama** | **2.73** | **81** | P | | **Pn** | 15 31 00.3 | **+1.2** |
| **QZH** | **Quanzhou** | **2.96** | **285** | Pn | | **Pn** | 15 31 04.8 | **+2.5** |
| QZH | | | | Sn | | **Sn** | 15 31 36.0 | **-1.2** |
| QZH | | | | SMN | | | | |
| | 790nm,0.9s | | | | | | | |
| QZH | | | | SME | | | | |
| | 660nm,0.9s | | | | | | | |
| **KNM** | **Kinmen** | **3.03** | **274** | *e*P | | **Pn** | 15 31 04.6 | **+1.4** |
| | baz=273 | | | | | | | |
| **JNU** | **Nakatsue** | **11.95** | **40** | LR | | LR | 15 38 18.1 | |
| | comp=Z,233nm,18.2s,baz=297,slow=40 | | | | | | | |
| **KSRS** | **Korea Array** | **14.21** | **20** | P | | **P** | 15 33 44.1 | **+0.4** |
| | 0.3nm,0.3s,baz=194,slow=12,SNR=7.8 | | | | | | | |
| **CD2** | **Chengdu** | **17.27** | **297** | P | | **Pn** | 15 34 16.5 | **0.0** |
| CD2 | | | | pP | | **pP** | 15 34 22.0 | **-1.2** |
| CD2 | | | | sP | | **sP** | 15 34 24.0 | **-1.7** |
| CD2 | | | | S | | **Sn** | 15 37 30.5 | **+2.2** |
| CD2 | | | | PMZ | | | | |
| | 10.0nm,0.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.99** | **259** | P | | P | 15 35 17.6 | +8.1 |
| | 0.5nm,0.5s,baz=62,slow=9.4,SNR=4.3 | | | | | | | |
| **GTA** | **Gaotai** | **23.92** | **314** | *e*P | | **P** | 15 35 30.3 | **+1.0** |
| GTA | | | | pP | | **pP** | 15 35 37.0 | **+2.1** |
| GTA | | | | sP | | **sP** | 15 35 40.3 | **+3.0** |
| GTA | | | | PMZ | | | | |
| | 6.0nm,1.3s | | | | | | | |
| **SONM** | **Songino Array** | **26.53** | **336** | P | | **P** | 15 35 53.4 | **+0.5** |
| | 1.1nm,0.8s,baz=140,slow=5.6,SNR=4.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.66** | **316** | P | | **P** | 15 37 39.1 | **+0.4** |
| | 1.0nm,0.7s,baz=108,slow=9.4,SNR=4.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **40.49** | **327** | P | | **P** | 15 37 54.0 | **+0.2** |
| | 0.6nm,0.3s,baz=133,slow=6.1,SNR=5.6 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **42.41** | **320** | P | | **P** | 15 38 11.8 | **+2.3** |
| | 3.7nm,0.2s,baz=114,slow=7.1,SNR=4.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.58** | **163** | P | | **P** | 15 38 33.2 | **-2.1** |
| | 0.7nm,0.6s,baz=348,slow=8.8,SNR=13 | | | | | | | |
| **ILAR** | **Eielson Array** | **68.94** | **27** | P | | P | 15 41 16.5 | -3.3 |
| | 0.3nm,0.6s,baz=271,slow=8.7,SNR=3.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **71.67** | **330** | P | | **P** | 15 41 35.6 | **-1.0** |
| | 0.5nm,0.4s,baz=48,slow=6.2,SNR=3.3 | | | | | | | |
| **AKASG** | **Malin Array Be** | **73.18** | **318** | P | | **P** | 15 41 44.1 | **-1.7** |
| | 0.2nm,0.2s,baz=60,slow=4.5,SNR=3.3 | | | | | | | |
| **BRTR** | **Keskin Array B** | **73.56** | **307** | P | | **P** | 15 41 48.2 | **-0.2** |
| | 1.7nm,0.9s,baz=90,slow=5.4,SNR=5.0 | | | | | | | |

**IDC 29 15:31:27.9±3.4, 3.74S×99.75E, h0km, mb3.6/5, mb1 3.7/5, mb1mx3.5/38, mbtmp3.6/5, MS4.4/1, Ms1 4.4/1, ms1mx2.9/42, Error ellipse: s-maj=141.5km s-min=26.4km az=59.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **22.07** | **358** | P | P | 15 36 24.1 | -0.5 |
| | 0.6nm,0.7s,baz=186,slow=10,SNR=3.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.39** | **261** | T | T | 16 06 41.3 | |
| | baz=82,slow=75,SNR=17 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.40** | **261** | T | T | 16 06 51.9 | |
| | baz=82,slow=75,SNR=18 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.41** | **261** | T | T | 16 06 53.7 | |
| | baz=82,slow=75,SNR=23 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.74** | **158** | T | T | 16 14 14.7 | |
| | baz=337,slow=74 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.75** | **158** | T | T | 16 14 06.1 | |
| | baz=337,slow=74 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.76** | **158** | T | T | 16 14 16.3 | |
| | baz=337 | | | | | | |
| **ASAR** | **Alice Springs** | **38.46** | **124** | P | P | 15 38 51.2 | -0.7 |
| | 0.3nm,0.5s,baz=296,slow=7.7,SNR=5.5 | | | | | | |
| **SONM** | **Songino Array** | **51.69** | **6** | P | P | 15 40 37.2 | +0.4 |
| | 0.8nm,0.7s,baz=187,slow=6.0,SNR=4.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.63** | **345** | P | P | 15 40 43.4 | -0.3 |
| | 0.4nm,0.5s,baz=138,slow=8.9,SNR=3.9 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **52.70** | **43** | LR | LR | 16 03 09.3 | |
| | comp=Z,408nm,20.0s,slow=36 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.82** | **350** | P | P | 15 41 27.4 | -0.6 |
| | 1.1nm,0.5s,baz=181,slow=5.9,SNR=7.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.22** | **39** | PKPbc | PKPab | 15 51 11.6 | -0.2 |
| | 0.7nm,0.7s,baz=258,slow=0.8,SNR=7.3 | | | | | | |

*DDA 29 15:32:59.8, 38°.89N×27°.07E, h7km, Md2.8*
*ISK 29 15:32:59.9, 38°.89N×27°.07E, h11km, MD2.7*
*ISCJB 29 15:33:00.1±0.5, 38°.91N±0°.02×27°.03E±0°.03, h9km±4km, Error ellipse: s-maj=3.7km s-min=3.5km az=178.6*
*CSEM 29 15:33:00.5±0.1, 38°.89N×27°.05E, h15km, MD2.8, Error ellipse: s-maj=3.0km s-min=2.7km az=5.0*
*ATH 29 15:33:00.2, 38°.91N×27°.05E, h26km±2km, MD3.0/4*
**ISC 29 15:33:00.3±0.9, 38°91N±0°.02×27°.07E±0°.02, h14km±9km, n48, σ0s49/72, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AYVA** | **Ayvalik** | **0.50** | **324** | *i* P | **Pg** | 15 33 09.7 | **-0.5** |
| AYVA | | | | *i* S | **Sg** | 15 33 17.1 | **+0.3** |
| **AYVA** | **Ayvalik** | **0.50** | **324** | P | **Pg** | 15 33 09.7 | **-0.5** |
| AYVA | | | | S | **Sg** | 15 33 17.1 | **+0.3** |
| **IZM** | **Izmir** | **0.53** | **163** | *e*PG | **Pg** | 15 33 10.5 | **-0.3** |
| IZM | | | | *e*SG | **Sb** | 15 33 18.3 | **-0.7** |
| **IZM** | **Izmir** | **0.53** | **163** | *e*Pg | **Pg** | 15 33 10.5 | **-0.3** |
| IZM | | | | *e*Sg | **Sb** | 15 33 18.3 | **-0.7** |
| **AKHS** | **Akhisar** | **0.58** | **93** | *i* P | **Pg** | 15 33 11.7 | **-0.1** |
| AKHS | | | | *i* S | **Sb** | 15 33 20.0 | **-0.4** |
| **AKHS** | **Akhisar** | **0.58** | **93** | P | **Pg** | 15 33 11.7 | **-0.1** |
| AKHS | | | | S | **Sb** | 15 33 20.0 | **-0.4** |
| **AKS** | **Akhisar** | **0.58** | **93** | *e*PG | **Pg** | 15 33 11.5 | **-0.3** |
| AKS | | | | *e*SG | **Sb** | 15 33 20.4 | **0.0** |
| **AKS** | **Akhisar** | **0.58** | **93** | *e*Pg | **Pg** | 15 33 11.5 | **-0.3** |
| AKS | | | | *e*Sg | **Sb** | 15 33 20.4 | **0.0** |
| **URLA** | **Izmir** | **0.66** | **214** | *i* S | **Sb** | 15 33 23.7 | **+1.0** |
| **URLA** | **Izmir** | **0.66** | **214** | P | **Pn** | 15 33 16.0 | **+0.7** |
| URLA | | | | S | **Sb** | 15 33 23.7 | **+1.0** |
| **PRK** | **Paraskevi** | **0.71** | **299** | *e*PN | **Pg** | 15 33 14.0 | **-0.1** |
| PRK | | | | *e*SN | **Sb** | 15 33 24.2 | **+0.2** |
| **PRK** | **Paraskevi** | **0.71** | **299** | *e*Pn | **Pg** | 15 33 14.0 | **-0.1** |
| PRK | | | | *e*Sn | **Sb** | 15 33 24.2 | **+0.2** |
| **BALY** | **Balya** | **0.93** | **27** | *i* P | **Pg** | 15 33 18.6 | **+0.2** |
| BALY | | | | *i* S | **Sn** | 15 33 32.0 | **-0.3** |
| **BALY** | **Balya** | **0.93** | **27** | P | **Pg** | 15 33 18.6 | **+0.2** |
| BALY | | | | S | **Sn** | 15 33 32.0 | **-0.3** |
| **CHOS** | **Chios island** | **0.95** | **237** | *e*PG | **Pb** | 15 33 18.4 | **-0.2** |
| **CHOS** | **Chios island** | **0.95** | **237** | *e*PN | **Pg** | 15 33 18.6 | **-0.1** |
| CHOS | | | | *e*SN | **Sg** | 15 33 31.5 | **+0.3** |
| **CHOS** | **Chios island** | **0.95** | **237** | *e*Pg | **Pb** | 15 33 18.4 | **-0.2** |
| **CHOS** | **Chios island** | **0.95** | **237** | *e*Pn | **Pg** | 15 33 18.6 | **-0.1** |
| CHOS | | | | *e*Sn | **Sg** | 15 33 31.5 | **+0.3** |
| **BALB** | **Balikesir** | **0.96** | **40** | *e*PG | **Pg** | 15 33 19.2 | **+0.2** |
| **BALB** | **Balikesir** | **0.96** | **40** | *e*Pg | **Pg** | 15 33 19.2 | **+0.2** |
| **SIGR** | **SIGRI** | **0.99** | **288** | *e*PG | **Pn** | 15 33 19.7 | **-0.2** |
| **SIGR** | **SIGRI** | **0.99** | **288** | *e*PN | **Pb** | 15 33 19.2 | **-0.1** |
| SIGR | | | | *e*SN | **Sg** | 15 33 32.9 | **+0.4** |
| **SIGR** | **SIGRI** | **0.99** | **288** | *e*Pn | **Pb** | 15 33 19.2 | **-0.1** |
| **SIGR** | **SIGRI** | **0.99** | **288** | *e*Pg | **Pn** | 15 33 19.7 | **-0.2** |
| SIGR | | | | *e*Sn | **Sg** | 15 33 32.9 | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.16** | **146** | *e*PN | **Pb** | 15 33 22.2 | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.16** | **146** | *e*Pn | **Pb** | 15 33 22.2 | **0.0** |
| **SMG** | **Samos** | **1.21** | **189** | *e*PN | **Pn** | 15 33 22.7 | **-0.2** |
| SMG | | | | *e*SN | **Sg** | 15 33 40.2 | **+0.7** |
| **SMG** | **Samos** | **1.21** | **189** | *e*Pn | **Pn** | 15 33 22.7 | **-0.2** |
| SMG | | | | *e*Sn | **Sg** | 15 33 40.2 | **+0.7** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **23** | *e*PN | **Pb** | 15 33 23.8 | **+0.4** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **23** | *e*Pn | **Pb** | 15 33 23.8 | **+0.4** |
| **DEMI** | **Demirci** | **1.29** | **84** | *i* P | **Pn** | 15 33 24.0 | **0.0** |
| DEMI | | | | *i* S | **Sg** | 15 33 42.1 | **+0.1** |
| **DEMI** | **Demirci** | **1.29** | **84** | P | **Pn** | 15 33 24.0 | **0.0** |
| DEMI | | | | S | **Sg** | 15 33 42.1 | **+0.1** |
| **DURS** | **Dursunbey** | **1.29** | **57** | *i* P | **Pb** | 15 33 24.6 | **+0.1** |
| DURS | | | | *i* S | **Sg** | 15 33 41.8 | **-0.2** |
| **DURS** | **Dursunbey** | **1.29** | **57** | P | **Pb** | 15 33 24.6 | **+0.1** |
| DURS | | | | S | **Sg** | 15 33 41.8 | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.31** | **107** | *e*PN | **Pb** | 15 33 24.6 | **-0.1** |
| **KULA** | **Kula-Manisa** | **1.31** | **107** | *e*Pn | **Pb** | 15 33 24.6 | **-0.1** |
| **DST** | **Dursunbey** | **1.39** | **60** | *e*PN | **Pb** | 15 33 26.0 | **-0.1** |
| **DST** | **Dursunbey** | **1.39** | **60** | *e*Pn | **Pb** | 15 33 26.0 | **-0.1** |
| **AYDN** | **Tasoluk** | **1.40** | **153** | *i* P | **Pb** | 15 33 25.7 | **-0.6** |
| **AYDN** | **Tasoluk** | **1.40** | **153** | P | **Pb** | 15 33 25.7 | **-0.6** |
| AYDN | | | | S | **Sg** | 15 33 46.1 | **+0.6** |
| **GELI** | **Tayfur-Gelibol** | **1.56** | **343** | *e*PN | **Pb** | 15 33 28.4 | **-0.6** |
| **GELI** | **Tayfur-Gelibol** | **1.56** | **343** | *e*Pn | **Pb** | 15 33 28.4 | **-0.6** |
| **ERIK** | **Erikli-Kesan** | **1.81** | **346** | *e*PN | **Pn** | 15 33 31.9 | **+0.8** |
| **ERIK** | **Erikli-Kesan** | **1.81** | **346** | *e*Pn | **Pn** | 15 33 31.9 | **+0.8** |
| **TVSB** | **Tavsanli** | **1.94** | **73** | *e*PN | **Pn** | 15 33 33.7 | **+0.8** |
| **TVSB** | **Tavsanli** | **1.94** | **73** | *e*Pn | **Pn** | 15 33 33.7 | **+0.8** |
| **ALN** | **Alexandroupoli** | **2.14** | **339** | *e*PN | **Pb** | 15 33 37.3 | **-1.5** |
| **ALN** | **Alexandroupoli** | **2.14** | **339** | *e*Pn | **Pb** | 15 33 37.3 | **-1.5** |

*CSEM 29 15:35:00.6±1.2, 38°.87N×27°.02E, h10km, MD2.6, Error ellipse: s-maj=35.8km s-min=9.0km az=91.0*
*DDA 29 15:35:01.5, 38°.87N×27°.15E, h7km, Md2.6*
**ISC 29 15:35:00.9±1.6, 38°.87N±0°.04×27°.12E±0°.07, h5km±13km, n8, σ0s69/15, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IZM** | **Izmir** | **0.48** | **167** | *e*PG | **Pg** | 15 35 09.3 | **-0.7** |
| IZM | | | | *e*SG | **Sb** | 15 35 20.2 | **+1.1** |
| **ZEY** | **˙zmir** | **0.79** | **218** | P | **Pb** | 15 35 17.1 | **+0.1** |
| ZEY | | | | S | **Sb** | 15 35 28.6 | **+0.5** |
| **BALY** | **Balya** | **0.95** | **24** | *i* P | **Pg** | 15 35 19.4 | **+0.2** |
| BALY | | | | *i* S | **Sn** | 15 35 34.0 | **-1.0** |
| **BALY** | **Balya** | **0.95** | **24** | P | **Pg** | 15 35 19.4 | **+0.2** |
| BALY | | | | S | **Sn** | 15 35 34.0 | **-1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.10** | **146** | *e*PG | **Pn** | 15 35 23.1 | **+0.1** |
| AYDB | | | | *e*SG | **Sb** | 15 35 38.0 | **+1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.10** | **146** | *e*Pg | **Pn** | 15 35 23.1 | **+0.1** |
| **DURS** | **Dursunbey** | **1.28** | **55** | *i* P | **Pb** | 15 35 25.4 | **-0.1** |
| DURS | | | | *i* S | **Sn** | 15 35 42.6 | **-0.4** |
| **DURS** | **Dursunbey** | **1.28** | **55** | P | **Pb** | 15 35 25.4 | **-0.1** |
| DURS | | | | S | **Sn** | 15 35 42.6 | **-0.4** |

*ISCJB 29 15:37:04.0±1.2, 2°.90S±0°.09×99°.4E±0°.1, h10km, mb3.5/7, Error ellipse: s-maj=21.0km s-min=7.6km az=149.5*
*DJA 29 15:37:08.1±1.2, 3°S±7°×10°0E±1°1, h26km±6km, M3.9/11, mb4.2/2, MLv3.8/7, MLv4.0/11*
*IDC 29 15:37:13.8±3.5, 1°.83S×101°.40E, h0km, mb3.5/6, mb1 3.7/6, mb1mx3.5/34, mbtmp3.5/6, Error ellipse: s-maj=147.1km s-min=19.8km az=57.0*
**ISC 29 15:37:06.2±1.4, 2°.83S±0°.09×99°.5E±0°.1, h10km, n25, σ0s85/16, mb3.6/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.51** | **83** | P | **Pb** | 15 37 18.1 | **+0.9** |
| **SISI** | **Saibi** | **1.55** | **344** | P | **Pn** | 15 37 33.9 | **+0.1** |
| **PDSI** | **Padang** | **2.13** | **27** | P | **Pn** | 15 37 40.8 | **-1.0** |
| **PPI** | **Padang Panjang** | **2.52** | **21** | P | **Pn** | 15 37 46.7 | **-0.4** |
| **SDSI** | **Sungai Dareh** | **2.69** | **46** | P | **Pn** | 15 37 49.3 | **-0.2** |
| **MNSI** | **Mandailing Nat** | **3.60** | **1** | P | **Pn** | 15 38 02.8 | **+0.8** |
| **MNAI** | **Manna** | **3.77** | **114** | P | **Pn** | 15 38 04.5 | **+0.2** |
| **MDSI** | **Maura Dua** | **4.95** | **110** | P | **Pn** | 15 38 21.1 | **+0.5** |
| **LWLI** | **Liwa** | **5.04** | **116** | P | **Pn** | 15 38 21.3 | **+0.6** |
| **KASI** | **Kota Agung** | **5.65** | **118** | P | **Pn** | 15 38 30.1 | **-0.2** |
| | 59nm,2.0s,0.3nm | | | | | | |
| **CGJI** | **Cibinong** | **7.22** | **122** | P | **Pn** | 15 38 49.7 | **-2.2** |
| **CMAR** | **Chiang Mai Arr** | **21.16** | **359** | P | **P** | 15 41 50.6 | **-1.0** |
| | 0.5nm,0.3s,baz=188,slow=11,SNR=5.6 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.31** | **259** | T | T | 16 11 48.4 | |
| | baz=81,slow=75,SNR=34 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.32** | **259** | T | T | 16 11 52.7 | |
| | baz=81,slow=75,SNR=31 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.33** | **259** | T | T | 16 11 51.7 | |
| | baz=81,slow=75,SNR=41 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.68** | **159** | T | T | 16 20 28.0 | |
| | baz=330 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.69** | **159** | T | T | 16 20 35.6 | |
| | baz=330 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.69** | **159** | T | T | 16 20 43.9 | |
| | baz=330 | | | | | | |
| **WRA** | **Warramunga Arr** | **38.01** | **119** | P | **P** | 15 44 24.9 | **0.0** |
| | 0.3nm,0.8s,baz=305,slow=9.8,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **39.18** | **125** | P | **P** | 15 44 35.1 | **+0.4** |
| | 0.8nm,0.8s,baz=297,slow=7.6,SNR=5.2 | | | | | | |
| **SONM** | **Songino Array** | **50.81** | **6** | P | **P** | 15 46 07.1 | **+0.2** |
| | 0.4nm,0.5s,baz=187,slow=10,SNR=3.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.69** | **345** | P | P | 15 46 17.8 | +4.3 |
| | 0.3nm,0.4s,baz=145,slow=9.3,SNR=3.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.11** | **28** | P | **P** | 15 46 38.4 | **-0.1** |
| | 0.6nm,0.5s,baz=216,slow=7.1,SNR=3.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.89** | **350** | P | P | 15 47 04.9 | +6.8 |
| | 1.0nm,0.8s,baz=182,slow=8.7,SNR=2.5 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.65** | **38** | PKP | PKPab | 15 56 56.2 | +10 |
| | 0.4nm,0.5s,baz=293,slow=1.8,SNR=4.9 | | | | | | |

*ISK 29 15:43:27.7, 38°.91N×26°.82E, h11km, MD2.7*
*ISCJB 29 15:43:30.0±0.9, 38°.93N±0°.04×27°.02E±0°.05, h8km±8km, Error ellipse: s-maj=7.6km s-min=5.4km az=39.4*
*CSEM 29 15:43:30.0±0.3, 38°.93N×26°.98E, h15km, MD2.7, Error ellipse: s-maj=7.3km s-min=4.7km az=104.0*
*DDA 29 15:43:30.3, 38°.90N×27°.06E, h7km, Md2.7*
**ISC 29 15:43:29.8±1.4, 38°.92N±0°.03×26°.99E±0°.04, h15km±11km, n23, σ0s61/34, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IZM** | **Izmir** | **0.56** | **157** | *e*PG | **Pg** | 15 43 40.2 | **-0.7** |
| IZM | | | | *e*SG | **Sb** | 15 43 49.2 | **-0.1** |
| **IZM** | **Izmir** | **0.56** | **157** | *e*Pg | **Pg** | 15 43 40.2 | **-0.7** |
| IZM | | | | *e*Sg | **Sb** | 15 43 49.2 | **-0.1** |
| **URLA** | **Izmir** | **0.64** | **209** | *i* P | **Pb** | 15 43 43.3 | **+0.7** |
| URLA | | | | *i* S | **Sb** | 15 43 52.2 | **+0.8** |
| **URLA** | **Izmir** | **0.64** | **209** | P | **Pb** | 15 43 43.3 | **+0.7** |
| URLA | | | | S | **Sb** | 15 43 52.1 | **+0.8** |
| **AKS** | **Akhisar** | **0.65** | **93** | *e*PG | **Pb** | 15 43 43.2 | **+0.4** |
| **AKS** | **Akhisar** | **0.65** | **93** | *e*Pg | **Pb** | 15 43 43.2 | **+0.4** |
| **ZEY** | **˙zmir** | **0.78** | **209** | P | **Pn** | 15 43 46.1 | **-0.1** |
| ZEY | | | | S | **Sn** | 15 43 57.2 | **-0.4** |
| **BALY** | **Balya** | **0.95** | **31** | *i* P | **Pb** | 15 43 48.2 | **+0.1** |
| BALY | | | | *i* S | **Sn** | 15 44 02.2 | **+0.1** |
| **BALY** | **Balya** | **0.95** | **31** | P | **Pb** | 15 43 48.2 | **+0.1** |
| BALY | | | | S | **Sn** | 15 44 02.2 | **+0.1** |
| **BALB** | **Balikesir** | **1.00** | **44** | *e*PN | **Pg** | 15 43 49.3 | **+0.2** |
| **BALB** | **Balikesir** | **1.00** | **44** | *e*Pn | **Pg** | 15 43 49.3 | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.20** | **144** | *e*PN | **Pn** | 15 43 52.1 | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.20** | **144** | *e*Pn | **Pn** | 15 43 52.1 | **-0.1** |
| **GONE** | **Gonen-Balikesi** | **1.25** | **25** | *e*PN | **Pn** | 15 43 52.8 | **+0.1** |
| **GONE** | **Gonen-Balikesi** | **1.25** | **25** | *e*Pn | **Pn** | 15 43 52.8 | **+0.1** |
| **MANT** | **Manisa** | **1.30** | **109** | *i* P | **Pg** | 15 43 55.3 | **+0.4** |
| MANT | | | | *i* S | **Sb** | 15 44 09.8 | **-0.9** |
| **MANT** | **Manisa** | **1.30** | **109** | P | **Pg** | 15 43 55.3 | **+0.4** |
| MANT | | | | S | **Sb** | 15 44 09.8 | **-0.9** |
| **DEMI** | **Demirci** | **1.35** | **84** | *i* P | **Pn** | 15 43 54.7 | **+0.5** |
| DEMI | | | | *i* S | **Sn** | 15 44 11.0 | **-0.9** |
| **DEMI** | **Demirci** | **1.35** | **84** | P | **Pn** | 15 43 54.7 | **+0.5** |
| DEMI | | | | S | **Sn** | 15 44 11.0 | **-0.9** |
| **DST** | **Dursunbey** | **1.44** | **61** | *e*PN | **Pn** | 15 43 56.2 | **+0.8** |
| **DST** | **Dursunbey** | **1.44** | **61** | *e*Pn | **Pn** | 15 43 56.2 | **+0.8** |
| **ERIK** | **Erikli-Kesan** | **1.79** | **348** | *e*PN | **Pn** | 15 43 59.2 | **-0.9** |
| **ERIK** | **Erikli-Kesan** | **1.79** | **348** | *e*Pn | **Pn** | 15 43 59.2 | **-0.9** |

*IDC 29 15:53:38.9±1.3, 23°.87N×121°.19E, h0km, mb3.4/4, mb1 3.5/5, mb1mx3.4/49, mbtmp3.4/5, ML3.4/1, Error ellipse: s-maj=73.1km s-min=22.8km az=70.0*
*ISCJB 29 15:53:41.0±0.3, 24°.23N±0°.01×121°.77E±0°.02, h9km±2km, mb3.3/4, Error ellipse: s-maj=3.1km s-min=2.0km az=30.0*
*TAP 29 15:53:41.0, 24°.23N×121°.72E, h13km, ML4.0, B*
*JMA 29 15:53:40.7±0.1, 24°.22N×121°.75E, h9km±1km, M3.5*
**ISC 29 15:53:41.0±0.8, 24°.23N±0°.02×121°.75E±0°.02, h15km±5km, n71, σ0s54/106, mb3.3/4, 7C-3D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **EHP** | **Heping Village** | **0.08** | **356** | *e*P | **Pg** | 15 53 44.4 | **+0.2** |
| | baz=17 | | | | | | |
| EHP | | | | *e*S | **Sg** | 15 53 46.4 | **+0.3** |
| | baz=17 | | | | | | |
| **ENA** | **Nanau** | **0.20** | **358** | *i* P | **Pg** | 15 53 45.4 | **-0.2** |
| | baz=7.0 | | | | | | |
| **TWD** | **Chiawan** | **0.20** | **223** | ⇓*i* P | **Pg** | 15 53 45.5 | **-0.3** |
| | baz=216 | | | | | | |
| TWD | | | | *i* S | **Sg** | 15 53 48.4 | **-0.5** |
| | baz=216 | | | | | | |
| **HWA** | **Hwalien** | **0.28** | **207** | *e*P | **Pg** | 15 53 47.4 | **+0.3** |
| | baz=202 | | | | | | |
| **TWC** | **Suao** | **0.39** | **14** | P | **Pg** | 15 53 48.9 | **0.0** |
| | baz=11 | | | | | | |
| TWC | | | | *e*S | **Sg** | 15 53 53.9 | **-0.4** |
| | baz=11 | | | | | | |
| **NNS** | **Nan Shan** | **0.40** | **302** | ⇑*i* P | **Pg** | 15 53 49.0 | **-0.2** |
| | baz=303 | | | | | | |
| NNS | | | | S | **Sg** | 15 53 54.4 | **-0.4** |
| | baz=303 | | | | | | |
| **ESF** | **Shoufeng Towns** | **0.42** | **212** | *e*P | **Pb** | 15 53 50.1 | **-0.1** |
| | baz=218 | | | | | | |
| **ENTT** | **Nioudou** | **0.44** | **338** | ⇑*i

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **YUS** | **Yu-Shan** | **1.04** | **225** | ⇓P | | **Pb** | **15 54 00.7** | **-0.2** |
| | baz=225 | | | | | | | |
| YUS | | | | *e*S | | **Sb** | **15 54 14.5** | **0.0** |
| | baz=225 | | | | | | | |
| **ALS** | **Alishan** | **1.12** | **230** | *e*P | | **Pb** | **15 54 02.4** | **0.0** |
| | baz=215 | | | | | | | |
| **CHN5** | **Tsauling** | **1.16** | **237** | *e*P | | **Pg** | **15 54 03.5** | **0.0** |
| | baz=238 | | | | | | | |
| CHN5 | | | | *e*S | | **Sg** | **15 54 19.4** | **+0.7** |
| | baz=238 | | | | | | | |
| **YOJ** | **Yonaguni jima** | **1.18** | **78** | P | | **Pn** | **15 54 02.7** | **-0.2** |
| YOJ | | | | S | | **Sg** | **15 54 19.1** | **0.0** |
| **YOJ** | **Yonaguni jima** | **1.18** | **78** | *e*P | | **Pn** | **15 54 03.0** | **0.0** |
| | baz=67 | | | | | | | |
| **CHKT** | **Chengkung** | **1.18** | **197** | *e*P | | **Pn** | **15 54 02.0** | **-1.0** |
| | baz=179 | | | | | | | |
| **WGK** | **Gukeng** | **1.21** | **244** | *e*P | | **Pg** | **15 54 04.3** | **-0.2** |
| | baz=226 | | | | | | | |
| **ELDTW** | **Lidau** | **1.23** | **213** | *e*P | | **Pn** | **15 54 03.6** | **-0.3** |
| | baz=214 | | | | | | | |
| ELDTW | | | | *e*S | | **Sn** | **15 54 20.2** | **-0.1** |
| | baz=214 | | | | | | | |
| **CHN2** | **Minshiung** | **1.36** | **239** | *e*P | | **Pg** | **15 54 07.2** | **0.0** |
| | baz=239 | | | | | | | |
| **CHN4** | **Tsaushan** | **1.37** | **231** | ⇑P | | **Pg** | **15 54 07.0** | **-0.4** |
| | baz=232 | | | | | | | |
| CHN4 | | | | *e*S | | **Sg** | **15 54 25.5** | **+0.2** |
| | baz=232 | | | | | | | |
| **WTCT** | **Ta-ch'eng** | **1.39** | **255** | *e*P | | **Pn** | **15 54 05.8** | **-0.1** |
| | baz=255 | | | | | | | |
| **STYT** | **Tauyuan** | **1.40** | **221** | *e*P | | **Pn** | **15 54 06.4** | **+0.3** |
| | baz=222 | | | | | | | |
| STYT | | | | *e*S | | **Sg** | **15 54 25.5** | **-0.7** |
| | baz=222 | | | | | | | |
| **CHY** | **Chiayi** | **1.41** | **239** | *e*P | | **Pb** | **15 54 06.8** | **-0.3** |
| | baz=224 | | | | | | | |
| **WTP** | **Ta-pu** | **1.43** | **227** | ⇑*e*P | | **Pb** | **15 54 07.5** | **+0.2** |
| | baz=217 | | | | | | | |
| WTP | | | | *e*S | | **Sg** | **15 54 27.8** | **+0.7** |
| | baz=217 | | | | | | | |
| **TWK** | **Hsinying** | **1.50** | **231** | *e*P | | **Pb** | **15 54 08.5** | **-0.1** |
| | baz=231 | | | | | | | |
| **WSF** | **Szhu** | **1.52** | **247** | *e*P | | **Pb** | **15 54 09.0** | **+0.1** |
| | baz=247 | | | | | | | |
| **CHN1** | **Nanshi** | **1.53** | **227** | *e*P | | **Pb** | **15 54 08.9** | **-0.2** |
| | baz=228 | | | | | | | |
| **TWG** | **Pinlang** | **1.53** | **204** | *e*P | | **Pb** | **15 54 09.5** | **+0.3** |
| | baz=189 | | | | | | | |
| **SGST** | **Jiashian** | **1.56** | **223** | *e*P | | **Pb** | **15 54 09.7** | **0.0** |
| | baz=225 | | | | | | | |
| SGST | | | | *e*S | | **Sg** | **15 54 31.5** | **0.0** |
| | baz=225 | | | | | | | |
| **CHN3** | **Shinhua** | **1.71** | **228** | *e*P | | **Pb** | **15 54 11.5** | **-0.7** |
| | baz=230 | | | | | | | |
| **ECL** | **Taimali** | **1.78** | **204** | *e*P | | **Pn** | **15 54 11.9** | **+0.7** |
| | baz=192 | | | | | | | |
| **SSD** | **Sandimen** | **1.80** | **215** | *e*P | | **Pb** | **15 54 13.0** | **-0.7** |
| | baz=218 | | | | | | | |
| SSD | | | | *e*S | | **Sb** | **15 54 36.9** | **+0.9** |
| | baz=218 | | | | | | | |
| **IRIF** | **Iriomote-Funau** | **1.81** | **86** | P | | **Pn** | **15 54 11.9** | **+0.2** |
| **TWM1** | **Shoushan** | **1.85** | **221** | *e*P | | **Pb** | **15 54 15.0** | **+0.4** |
| | baz=223 | | | | | | | |
| **HATJ** | **Hateruma jima** | **1.89** | **95** | S | | **Sb** | **15 54 38.2** | **-0.4** |
| **EAST** | **Anshuo** | **2.02** | **204** | *e*P | | **Pn** | **15 54 15.5** | **+1.0** |
| | baz=194 | | | | | | | |
| **JKRS** | **Kuro-shima** | **2.06** | **89** | P | | **Pn** | **15 54 16.0** | **+0.8** |
| **PNG** | **Penghu** | **2.11** | **252** | *e*P | | **Pn** | **15 54 16.9** | **+1.1** |
| | baz=252 | | | | | | | |
| **SCZT** | **Fangliau** | **2.12** | **209** | *e*P | | **Pn** | **15 54 16.7** | **+0.8** |
| | baz=195 | | | | | | | |
| **WDGT** | **Dungji** | **2.14** | **244** | *e*P | | **Pn** | **15 54 17.3** | **+1.1** |
| | baz=246 | | | | | | | |
| WDGT | | | | *e*S | | **Sn** | **15 54 43.7** | **+1.2** |
| | baz=246 | | | | | | | |
| **JIJ** | **Ishigaki jima** | **2.19** | **86** | P | | **Pn** | **15 54 17.0** | **+0.1** |
| JIJ | | | | S | | **Sn** | **15 54 44.1** | **+0.4** |
| **JISG** | **Ishigakijimahi** | **2.36** | **81** | P | | **Pn** | **15 54 19.3** | **0.0** |
| JISG | | | | S | | **Sn** | **15 54 49.3** | **+1.3** |
| **KNM** | **Kinmen** | **3.03** | **274** | *e*P | | **Pn** | **15 54 30.2** | **+1.8** |
| | baz=273 | | | | | | | |
| **KSRS** | **Korea Array** | **14.20** | **20** | Pn | | **P** | **15 57 09.7** | **+0.7** |
| | 0.2nm,0.3s,baz=205,slow=12,SNR=7.2 | | | | | | | |
| **SONM** | **Songino Array** | **26.53** | **336** | P | | **P** | **15 59 18.3** | **+0.1** |
| | 0.5nm,0.8s,baz=131,slow=5.9,SNR=3.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **38.66** | **316** | P | | **P** | **16 01 04.1** | **+0.1** |
| | 0.2nm,0.3s,baz=99,slow=8.9,SNR=3.1 | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.59** | **163** | P | | **P** | **16 01 59.1** | **-1.6** |
| | 0.4nm,0.7s,baz=345,slow=8.7,SNR=5.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **49.05** | **165** | P | | **P** | **16 02 26.4** | **-1.3** |
| | 0.3nm,0.9s,baz=343,slow=6.8,SNR=4.8 | | | | | | | |

**IDC 29 16:03:29.0±2.9, 7°.52N×93°.64E, h0km, mb3.5/4, mb1 3.6/5, mb1mx3.3/47, mbtmp3.4/5, ML3.3/1, Error ellipse: s-maj=95.3km s-min=24.3km az=70.0, Nicobar Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **12.04** | **25** | Pn | Pn | 16 06 22.4 | +0.4 |
| | 0.1nm,0.3s,baz=217,slow=15,SNR=4.5 | | | | | | |
| **H08S3** | **Diego Garcia H** | **25.91** | **235** | T | T | 16 35 55.9 | |
| | baz=54,slow=75,SNR=13 | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.91** | **235** | T | T | 16 36 02.3 | |
| | baz=54,slow=75,SNR=14 | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.93** | **235** | T | T | 16 35 54.5 | |
| | baz=54,slow=75,SNR=13 | | | | | | |
| **SONM** | **Songino Array** | **41.62** | **13** | P | P | 16 11 18.4 | -0.7 |
| | 0.4nm,0.6s,baz=209,slow=7.7,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **46.84** | **353** | P | P | 16 12 00.8 | +0.2 |
| | 0.4nm,0.3s,baz=186,slow=8.9,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **48.46** | **125** | P | P | 16 12 13.9 | +0.2 |
| | 0.4nm,0.8s,baz=301,slow=9.5,SNR=7.7 | | | | | | |
| **ASAR** | **Alice Springs** | **50.07** | **129** | P | P | 16 12 25.9 | -0.2 |
| | 0.6nm,0.9s,baz=302,slow=8.1,SNR=6.9 | | | | | | |

*CRAAG **29** 16:08:17.5, 35°.74N×1°.69W, Ml3.3*
*MDD **29** 16:08:17.2±0.7, 35°.31N×1°.42W, h50km, mb3.6/14, Error ellipse: s-maj=10.7km s-min=5.6km az=15.0, PRXIMO*
*CSEM **29** 16:08:20.7±0.3, 35°.62N×1°.75W, h20km, mb3.6, Error ellipse: s-maj=7.7km s-min=5.9km az=41.0*

**ISC 29 16:08:21.2±1.3, 35°.62N±0°.05×1°.73W±0°.04, h31km±15km, n42, σ1°925/55, Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **OLHC** | **Oulhaca** | **0.45** | **146** | P | **Pb** | **16 08 30.8** | **-0.2** |
| **OLHC** | **Oulhaca** | **0.45** | **146** | P | **Pb** | **16 08 30.8** | **-0.2** |
| **OLHC** | **Oulhaca** | **0.45** | **146** | P | **Pb** | **16 08 30.8** | **-0.2** |
| **OTSS** | **Djebel Tessala** | **0.83** | **114** | P | **Pn** | **16 08 37.3** | **+0.4** |
| **OTSS** | **Djebel Tessala** | **0.83** | **114** | S | **Pn** | **16 08 37.3** | **+0.4** |
| **OTSS** | **Djebel Tessala** | **0.83** | **114** | P | **Pn** | **16 08 37.3** | **+0.4** |
| OTSS | | | | S | **Pn** | **16 08 37.3** | **+0.4** |
| **EMLI** | **Melilla** | **1.05** | **252** | P | Pn | 16 08 37.5 | -2.2 |
| | 16nm,0.1s,SNR=7.9 | | | | | | |
| EMLI | | | | S | **Sn** | **16 08 53.0** | **-0.3** |
| | 167nm,1.4s,SNR=7.9 | | | | | | |
| **EMEL** | **Melilla** | **1.05** | **253** | P | Pn | 16 08 37.5 | -2.3 |
| | 16nm,0.1s,SNR=7.9 | | | | | | |
| EMEL | | | | S | **Sn** | **16 08 53.0** | **-0.4** |
| | 167nm,1.4s,SNR=7.9 | | | | | | |
| **EALB** | **Alboran** | **1.11** | **287** | P | **Pn** | **16 08 40.4** | **-0.1** |
| | 5.0nm,0.1s,SNR=12 | | | | | | |
| EALB | | | | S | **Sn** | **16 08 56.2** | **+1.4** |
| | 13nm,0.2s,SNR=7.7 | | | | | | |
| **EALB** | **Alboran** | **1.11** | **287** | P | **Pn** | **16 08 40.4** | **-0.1** |
| | 5.0nm,0.1s,SNR=12 | | | | | | |
| EALB | | | | S | **Sn** | **16 08 56.2** | **+1.4** |
| | 13nm,0.2s,SNR=7.7 | | | | | | |
| **ENIJ** | **Nijar** | **1.40** | **344** | P | Pn | 16 08 43.8 | -0.8 |
| | 4.4nm,0.1s,SNR=7.9 | | | | | | |
| ENIJ | | | | S | **Sn** | **16 08 59.4** | **-2.6** |
| | 16nm,0.2s,SNR=7.9 | | | | | | |
| **ENIJ** | **Nijar** | **1.40** | **344** | P | Pn | 16 08 43.8 | -0.8 |
| | 4.4nm,0.1s,SNR=7.9 | | | | | | |
| ENIJ | | | | S | **Sn** | **16 08 59.4** | **-2.6** |
| | 16nm,0.2s,SNR=7.9 | | | | | | |
| **EBER** | **Berja** | **1.58** | **324** | P | **Pn** | **16 08 47.1** | **-0.2** |
| | 3.3nm,0.2s,SNR=15 | | | | | | |
| EBER | | | | S | **Sn** | **16 09 05.8** | **-0.9** |
| | 0.2nm,0.4s,SNR=5.0 | | | | | | |
| **EBER** | **Berja** | **1.58** | **324** | P | **Pn** | **16 08 47.1** | **-0.2** |
| | 3.3nm,0.2s,SNR=15 | | | | | | |
| EBER | | | | S | **Sn** | **16 09 05.8** | **-0.9** |
| | 0.2nm,0.4s,SNR=5.0 | | | | | | |
| **EGUA** | **Guajares** | **1.92** | **310** | P | **Pn** | **16 08 52.4** | **+0.7** |
| | 1.7nm,0.1s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sn** | **16 09 12.0** | **-2.7** |
| | 1.6nm,0.2s,SNR=7.9 | | | | | | |
| **EGUA** | **Guajares** | **1.92** | **310** | P | **Pn** | **16 08 52.4** | **+0.7** |
| | 1.7nm,0.1s,SNR=7.9 | | | | | | |
| EGUA | | | | S | **Sn** | **16 09 12.0** | **-2.7** |
| | 1.6nm,0.2s,SNR=7.9 | | | | | | |
| **EQUE** | **Quentar** | **2.10** | **319** | P | **Pn** | **16 08 55.6** | **+1.3** |
| | 3.9nm,0.2s,SNR=28 | | | | | | |
| **EQUE** | **Quentar** | **2.10** | **319** | P | **Pn** | **16 08 55.6** | **+1.3** |
| | 3.9nm,0.2s,SNR=28 | | | | | | |
| **GORA** | **Gorafe** | **2.13** | **331** | P | **Pn** | **16 08 56.0** | **+1.3** |
| | 26nm,2.2s,SNR=7.9 | | | | | | |
| **GORA** | **Gorafe** | **2.13** | **331** | P | **Pn** | **16 08 56.0** | **+1.3** |
| | 26nm,2.2s,SNR=7.9 | | | | | | |
| **ECOG** | **Cogollos-Vega** | **2.22** | **319** | P | **Pn** | **16 08 57.3** | **+1.4** |
| | 0.4nm,0.6s,SNR=7.9 | | | | | | |
| ECOG | | | | S | **Sn** | **16 09 19.9** | **-2.4** |
| | 92nm,3.8s,SNR=7.9 | | | | | | |
| **ECOG** | **Cogollos-Vega** | **2.22** | **319** | P | **Pn** | **16 08 57.3** | **+1.4** |
| | 0.4nm,0.6s,SNR=7.9 | | | | | | |
| ECOG | | | | S | **Sn** | **16 09 19.9** | **-2.4** |
| | 92nm,3.8s,SNR=7.9 | | | | | | |
| **EMUR** | **La Murta** | **2.25** | **10** | P | Pn | 16 08 55.2 | -1.1 |
| | 2.4nm,0.5s,SNR=7.9 | | | | | | |
| EMUR | | | | S | Sn | 16 09 16.1 | -6.9 |
| | 1.8nm,0.3s,SNR=7.9 | | | | | | |
| **EMUR** | **La Murta** | **2.25** | **10** | P | Pn | 16 08 55.2 | -1.1 |
| | 2.4nm,0.5s,SNR=7.9 | | | | | | |
| EMUR | | | | S | Sn | 16 09 16.1 | -6.9 |
| | 1.8nm,0.3s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **2.28** | **316** | P | **Pn** | **16 08 58.0** | **+1.3** |
| | 2.3nm,1.1s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **2.28** | **316** | P | **Pn** | **16 08 58.0** | **+1.3** |
| | 2.3nm,1.1s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **2.29** | **343** | P | **Pn** | **16 08 58.0** | **+1.0** |
| | 1.3nm,0.1s,SNR=7.9 | | | | | | |
| EHUE | | | | S | Sn | 16 09 19.9 | -4.3 |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EHUE** | **Huescar** | **2.29** | **343** | P | **Pn** | **16 08 58.0** | **+1.0** |
| | 1.3nm,0.1s,SNR=7.9 | | | | | | |
| EHUE | | | | S | Sn | 16 09 19.9 | -4.3 |
| | 0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **2.43** | **334** | P | **Pn** | **16 09 00.1** | **+1.3** |
| | 1.6nm,0.2s,SNR=8.6 | | | | | | |
| EQES | | | | S | **Sn** | **16 09 29.4** | **+1.9** |
| | 3.3nm,0.2s,SNR=5.0 | | | | | | |
| **EQES** | **Quesada** | **2.43** | **334** | P | **Pn** | **16 09 00.1** | **+1.3** |
| | 1.6nm,0.2s,SNR=8.6 | | | | | | |
| EQES | | | | S | **Sn** | **16 09 29.4** | **+1.9** |
| | 3.3nm,0.2s,SNR=5.0 | | | | | | |
| **SESP** | **Santiago Espad** | **2.58** | **345** | P | **Pn** | **16 09 01.9** | **+1.0** |
| | 2.7nm,0.2s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **16 09 31.9** | **+0.7** |
| | 1.2nm,0.3s,SNR=7.9 | | | | | | |
| **SESP** | **Santiago Espad** | **2.58** | **345** | P | **Pn** | **16 09 01.9** | **+1.0** |
| | 2.7nm,0.2s,SNR=7.9 | | | | | | |
| SESP | | | | S | **Sn** | **16 09 31.9** | **+0.7** |
| | 1.2nm,0.3s,SNR=7.9 | | | | | | |
| **EMIJ** | **Mijas** | **2.64** | **292** | P | **Pn** | **16 09 01.4** | **-0.2** |
| | 0.5nm,0.1s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | **Sn** | **16 09 32.8** | **+0.2** |
| | 0.9nm,0.3s,SNR=7.9 | | | | | | |
| **EMIJ** | **Mijas** | **2.64** | **292** | P | **Pn** | **16 09 01.4** | **-0.2** |
| | 0.5nm,0.1s,SNR=7.9 | | | | | | |
| EMIJ | | | | S | **Sn** | **16 09 32.8** | **+0.2** |
| | 0.9nm,0.3s,SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **3.02** | **3** | P | **Pn** | **16 09 07.0** | **+0.1** |
| | 7.4nm,0.2s,SNR=104 | | | | | | |
| ETOB | | | | S | **Sn** | **16 09 41.6** | **-0.4** |
| | 2.1nm,0.2s,SNR=5.0 | | | | | | |
| **ETOB** | **Tobarra** | **3.02** | **3** | P | **Pn** | **16 09 07.0** | **+0.1** |
| | 7.4nm,0.2s,SNR=104 | | | | | | |
| ETOB | | | | S | **Sn** | **16 09 41.6** | **-0.4** |
| | 2.1nm,0.2s,SNR=5.0 | | | | | | |
| **EADA** | **Adamuz** | **3.42** | **319** | P | **Pn** | **16 09 13.2** | **+0.9** |
| | 0.5nm,4.1s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **3.42** | **319** | P | **Pn** | **16 09 13.2** | **+0.9** |
| | 0.5nm,4.1s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **3.84** | **311** | P | **Pn** | **16 09 18.7** | **+0.5** |
| | 0.3nm,0.5s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **3.84** | **311** | P | **Pn** | **16 09 18.7** | **+0.5** |
| | 0.3nm,0.5s,SNR=7.9 | | | | | | |
| **EIBI** | **Ibiza** | **4.19** | **35** | S | Sn | 16 10 03.9 | -6.8 |
| | 10nm,1.5s,SNR=7.9 | | | | | | |
| **EIBI** | **Ibiza** | **4.19** | **35** | S | Sn | 16 10 03.9 | -6.8 |
| | 10nm,1.5s,SNR=7.9 | | | | | | |

*IGIL **29** 16:16:53.1, 36°.38N×11°.27W, h32km, ML1.5*
*MDD **29** 16:16:54.1±1.9, 36°.43N×11°.22W, h45km, mb3.8/7, Error ellipse: s-maj=22.6km s-min=15.9km az=142.0, PRXIMO*
*INMG **29** 16:16:55.0±1.2, 36°.41N×11°.19W, h31km, ML1.9, Error ellipse: s-maj=8.2km s-min=6.2km az=122.0*
*CSEM **29** 16:16:56.2±0.4, 36°.56N×11°.01W, h40km, ML2.9/4, Error ellipse: s-maj=8.4km s-min=7.0km az=123.0*

**ISC 29 16:16:54.3±3.7, 36°.5N±0°.1×11°.1W±0°.2, h35km, n50, σ0s99/93, 2C, Azores-Cape St. Vincent Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PFVI** | **Vila Bisbo** | **1.93** | **71** | ⇑*e*Pn | **Pn** | **16 17 25.2** | **+0.5** |
| PFVI | | | | *e*Sn | **Sn** | **16 17 48.1** | **+0.4** |
| PFVI | | | | A | A | 16 17 49.3 | |
| | 4.4nm,0.1s | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.93** | **71** | P | **Pn** | **16 17 25.0** | **+0.3** |
| | 4.7nm,0.1s,SNR=8.7 | | | | | | |
| PFVI | | | | S | **Sn** | **16 17 47.6** | **-0.1** |
| | 8.3nm,0.2s,SNR=6.8 | | | | | | |
| **PFVI** | **Vila Bisbo** | **1.93** | **71** | ⇑*e*Pn | **Pn** | **16 17 25.2** | **+0.5** |
| PFVI | | | | S | **Sn** | **16 17 47.6** | **-0.1** |
| | 8.3nm,0.2s,SNR=6.8 | | | | | | |
| PFVI | | | | *e*Sn | Sn | 16 17 48.1 | +0.3 |
| | 4.4nm,0.1s | | | | | | |
| **MORF** | **Marmelete** | **2.12** | **67** | *e*P | **Pn** | **16 17 27.7** | **+0.4** |
| MORF | | | | *e*S | **Sn** | **16 17 52.6** | **0.0** |
| MORF | | | | AML | AML | 16 17 54.2 | |
| | comp=E,6.1nm,0.3s | | | | | | |
| **MORF** | **Marmelete** | **2.12** | **67** | *e*Pn | **Pn** | **16 17 28.0** | **+0.6** |
| MORF | | | | *e*Sn | **Sn** | **16 17 53.4** | **+0.9** |
| MORF | | | | A | A | 16 17 59.8 | |
| | comp=E,4.1nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **2.12** | **67** | P | **Pn** | **16 17 28.0** | **+0.6** |
| MORF | | | | S | **Sn** | **16 17 53.4** | **+0.9** |
| | comp=E,4.1nm,0.2s | | | | | | |
| **MORF** | **Marmelete** | **2.12** | **67** | P | **Pn** | **16 17 28.0** | **+0.6** |
| MORF | | | | S | **Sn** | **16 17 53.4** | **+0.9** |
| | comp=E,4.1nm,0.2s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.17** | **61** | *e*Pn | **Pn** | **16 17 29.2** | **+1.3** |
| PTEO | | | | *e*Sn | **Sn** | **16 17 54.4** | **+0.9** |
| PTEO | | | | A | A | 16 18 03.1 | |
| | comp=E,9.0nm,0.7s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.17** | **61** | P | **Pn** | **16 17 29.2** | **+1.3** |
| PTEO | | | | S | **Sn** | **16 17 54.4** | **+0.9** |
| | comp=E,4.5nm,0.7s | | | | | | |
| **PTEO** | **Sao Teotonio** | **2.17** | **61** | P | **Pn** | **16 17 29.2** | **+1.3** |
| PTEO | | | | S | **Sn** | **16 17 54.4** | **+0.9** |
| | comp=E,4.5nm,0.7s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.60** | **51** | *e*Pn | **Pn** | **16 17 34.7** | **+0.8** |
| PNCL | | | | *e*Sn | **Sn** | **16 18 05.3** | **+1.1** |
| PNCL | | | | A | A | 16 18 08.8 | |
| | comp=E,2.1nm,0.2s | | | | | | |
| **PNCL** | **Nicolau / Gran** | **2.60** | **51** | *e*Pn | **Pn** | **16 17 34.7** | **+0.8** |
| PNCL | | | | *e*Sn | **Sn** | **16 18 05.3** | **+1.1** |
| | comp=E,2.1nm,0.2s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.65** | **73** | *e*Pn | **Pn** | **16 17 35.5** | **+0.9** |
| PBDV | | | | *e*Sn | **Sn** | **16 18 05.6** | **+0.1** |
| PBDV | | | | A | A | 16 18 09.6 | |
| | comp=E,1.5nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.65** | **73** | P | **Pn** | **16 17 35.5** | **+0.9** |
| PBDV | | | | S | **Sn** | **16 18 05.6** | **+0.1** |
| | comp=E,1.5nm,0.1s | | | | | | |
| **PBDV** | **Barranco-do-Ve** | **2.65** | **73** | P | **Pn** | **16 17 35.5** | **+0.9** |
| PBDV | | | | S | **Sn** | **16 18 05.6** | **+0.1** |
| | comp=E,1.5nm,0.1s | | | | | | |
| **MESJ** | **Messejana** | **2.66** | **59** | *e*P | **Pn** | **16 17 35.1** | **+0.5** |
| MESJ | | | | *e*S | **Sn** | **16 18 05.6** | **0.0** |
| MESJ | | | | AML | AML | 16 18 06.9 | |
| | comp=E,0.7nm,0.1s | | | | | | |
| MESJ | | | | AML | AML | 16 18 07.1 | |
| | comp=N,2.4nm,0.5s | | | | | | |
| **MESJ** | **Messejana** | **2.66** | **59** | *e*Pn | **Pn** | **16 17 35.9** | **+1.2** |
| MESJ | | | | *e*Sn | **Sn** | **16 18 05.7** | **0.0** |
| MESJ | | | | A | A | 16 18 07.4 | |
| | comp=N,4.4nm,0.7s | | | | | | |
| **MESJ** | **Messejana** | **2.66** | **59** | P | **Pn** | **16 17 35.9** | **+1.2** |
| MESJ | | | | S | **Sn** | **16 18 05.7** | **0.0** |
| | comp=N,4.4nm,0.7s | | | | | | |
| **PCVE** | **Castro Verde** | **2.70** | **65** | *e*Pn | **Pn** | **16 17 36.1** | **+0.9** |
| PCVE | | | | *e*Sn | **Sn** | **16 18 07.4** | **+0.8** |
| PCVE | | | | A | A | 16 18 09.3 | |
| | comp=N,1.5nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **2.70** | **65** | P | **Pn** | **16 17 36.1** | **+0.9** |
| PCVE | | | | S | **Sn** | **16 18 07.4** | **+0.8** |
| | comp=N,1.5nm,0.2s | | | | | | |
| **PCVE** | **Castro Verde** | **2.70** | **65** | P | **Pn** | **16 17 36.1** | **+0.9** |
| PCVE | | | | S | **Sn** | **16 18 07.4** | **+0.8** |
| | comp=N,1.5nm,0.2s | | | | | | |
| **PMAFR** | **Mafra** | **2.83** | **30** | *e*Sn | **Sn** | **16 18 10.4** | **+0.4** |
| PMAFR | | | | A | A | 16 18 13.4 | |
| | comp=N,19nm,0.7s | | | | | | |
| **PMAFR** | **Mafra** | **2.83** | **30** | S | **Sn** | **16 18 09.6** | **-0.4** |
| | comp=N,3.8nm,0.1s,SNR=7.9 | | | | | | |
| **PMAFR** | **Mafra** | **2.83** | **30** | S | **Sn** | **16 18 09.6** | **-0.4** |
| | comp=N,3.8nm,0.1s,SNR=7.9 | | | | | | |
| PMAFR | | | | *e*Sn | Sn | 16 18 10.4 | +0.4 |
| | comp=N,19nm,0.7s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.86** | **71** | *e*Pn | **Pn** | **16 17 38.5** | **+1.1** |
| PVAQ | | | | *e*Sn | **Sn** | **16 18 10.3** | **-0.3** |
| PVAQ | | | | A | A | 16 18 15.1 | |
| | comp=N,2.2nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.86** | **71** | P | **Pn** | **16 17 38.5** | **+1.1** |
| PVAQ | | | | S | **Sn** | **16 18 10.3** | **-0.3** |
| | comp=N,2.2nm,0.2s | | | | | | |
| **PVAQ** | **Vaqueiros** | **2.86** | **71** | P | **Pn** | **16 17 38.5** | **+1.1** |
| PVAQ | | | | S | **Sn** | **16 18 10.3** | **-0.3** |
| | comp=N,2.2nm,0.2s | | | | | | |
| **EGRO** | **El Granado** | **3.08** | **70** | P | **Pn** | **16 17 41.1** | **+0.7** |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | |
| EGRO | | | | S | **Sn** | **16 18 14.8** | **-1.1** |
| | comp=N,1.2nm,0.1s,SNR=7.9 | | | | | | |
| **EGRO** | **El Granado** | **3.08** | **70** | P | **Pn** | **16 17 41.1** | **+0.7** |
| | comp=N,0.3nm,0.1s,SNR=7.9 | | | | | | |
| EGRO | | | | S | **Sn** | **16 18 14.8** | **-1.1** |
| | comp=N,1.2nm,0.1s,SNR=7.9 | | | | | | |
| **PMTG** | **Montargil** | **3.42** | **41** | *e*Pn | **Pn** | **16 17 45.6** | **+0.4** |
| PMTG | | | | *e*Sn | **Sn** | **16 18 24.8** | **+0.3** |
| PMTG | | | | A | A | 16 18 27.5 | |
| | comp=N,1.0nm,0.1s | | | | | | |
| **PMTG** | **Montargil** | **3.42** | **41** | *e*Pn | **Pn** | **16 17 45.6** | **+0.4** |
| PMTG | | | | *e*Sn | **Sn** | **16 18 24.8** | **+0.3** |
| | comp=N,1.0nm,0.1s | | | | | | |
| **PBAR** | **Barrancos** | **3.64** | **62** | *e*Pn | **Pn** | **16 17 49.6** | **+1.4** |
| PBAR | | | | *e*Sn | **Sn** | **16 18 30.0** | **+0.1** |
| PBAR | | | | A | A | 16 18 33.3 | |
| | comp=N,1.7nm,0.1s | | | | | | |
| **PBAR** | **Barrancos** | **3.64** | **62** | P | **Pn** | **16 17 49.6** | **+1.4** |
| PBAR | | | | S | **Sn** | **16 18 30.0** | **+0.1** |
| | comp=N,1.7nm,0.1s | | | | | | |
| **PBAR** | **Barrancos** | **3.64** | **62** | P | **Pn** | **16 17 49.6** | **+1.4** |
| PBAR | | | | S | **Sn** | **16 18 30.0** | **+0.1** |
| | comp=N,1.7nm,0.1s | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.76** | **69** | P | **Pn** | **16 17 50.4** | **+0.6** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| EMIN | | | | S | **Sn** | **16 18 31.3** | **-1.5** |
| | comp=N,0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EMIN** | **Mina Concepcio** | **3.76** | **69** | P | **Pn** | **16 17 50.4** | **+0.6** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| EMIN | | | | S | **Sn** | **16 18 31.3** | **-1.5** |
| | comp=N,0.6nm,0.2s,SNR=7.9 | | | | | | |
| **EBAD** | **Badajoz** | **3.94** | **54** | P | **Pn** | **16 17 52.4** | **+0.1** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| EBAD | | | | S | **Sn** | **16 18 36.2** | **-1.2** |
| | comp=N,1.9nm,0.2s,SNR=7.9 | | | | | | |
| **EBAD** | **Badajoz** | **3.94** | **54** | P | **Pn** | **16 17 52.4** | **+0.1** |
| | comp=N,0.4nm,0.1s,SNR=7.9 | | | | | | |
| EBAD | | | | S | **Sn** | **16 18 36.2** | **-1.2** |
| | comp=N,1.9nm,0.2s,SNR=7.9 | | | | | | |
| **PMRV** | **Marv??o** | **4.13** | **44** | *e*Pn | **Pn** | **16 17 55.4** | **+0.4** |
| PMRV | | | | *e*Sn | **Sn** | **16 18 41.7** | **-0.4** |
| **PMRV** | **Marv??o** | **4.13** | **44** | P | **Pn** | **16 17 55.4** | **+0.4** |
| PMRV | | | | S | **Sn** | **16 18 41.7** | **-0.4** |
| **PMRV** | **Marv??o** | **4.13** | **44** | P | **Pn** | **16 17 55.4** | **+0.4** |
| PMRV | | | | S | **Sn** | **16 18 41.7** | **-0.4** |
| **ECEU** | **Ceuta** | **4.68** | **96** | P | **Pn** | **16 18 02.7** | **+0.3** |
| | comp=N,3.0nm,0.1s,SNR=7.9 | | | | | | |
| **ECEU** | **Ceuta** | **4.68** | **96** | P | **Pn** | **16 18 02.7** | **+0.3** |
| | comp=N,3.0nm,0.1s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **4.80** | **69** | P | **Pn** | **16 18 04.5** | **+0.4** |
| | comp=N,0.7nm,0.2s,SNR=14 | | | | | | |
| ECAB | | | | S | **Sn** | **16 18 56.7** | **-1.8** |
| | comp=N,0.0nm,0.3s,SNR=7.9 | | | | | | |
| **ECAB** | **El Cabril** | **4.80** | **69** | P | **Pn** | **16 18 04.5** | **+0.4** |
| | comp=N,0.7nm,0.2s,SNR=14 | | | | | | |
| ECAB | | | | S | **Sn** | **16 18 56.7** | **-1.8** |
| | SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **5.46** | **70** | P | **Pn** | **16 18 13.3** | **+0.1** |
| | comp=N,0.4nm,0.2s,SNR=4.0 | | | | | | |
| EADA | | | | S | **Sn** | **16 19 12.1** | **-2.7** |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | |
| **EADA** | **Adamuz** | **5.46** | **70** | P | **Pn** | **16 18 13.3** | **+0.1** |
| | comp=N,0.4nm,0.2s,SNR=4.0 | | | | | | |
| EADA | | | | S | **Sn** | **16 19 12.1** | **-2.7** |
| | comp=N,0.5nm,0.2s,SNR=7.9 | | | | | | |
| **MVO** |

**H08S3 Diego Garcia H 27.42 260** T T 17 05 07.1
baz=81,slow=75,SNR=34
**H08S1 Diego Carcia H 27.44 260** T T 17 05 04.6
baz=81,slow=75,SNR=50
**H01W3 Cape Leeuwin H 34.26 159** T T 17 13 37.4
baz=336,slow=76,SNR=9.0
**H01W2 Cape Leeuwin H 34.28 159** T T 17 13 21.1
baz=336,slow=76,SNR=11
**H01W1 Cape Leeuwin H 34.28 159** T T 17 13 25.5
baz=336,slow=76,SNR=8.8
**WRA Warramunga Arr 37.68 119** P **P 16 37 21.6 +0.3**
0.5nm,0.7s,baz=303,slow=9.2,SNR=7.3
**ASAR Alice Springs 38.82 125** P **P 16 37 31.4 +0.4**
0.4nm,0.6s,baz=297,slow=7.5,SNR=11
**MKAR Makanchi Array 52.10 345** P **P 16 39 16.8 +1.1**
0.8nm,0.5s,baz=161,slow=7.8,SNR=7.7
**TXAR Lajitas Array 145.84 38** PKPbc **PKPab 16 49 47.1 +1.1**
0.5nm,0.6s,baz=268,slow=1.3,SNR=5.9

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*MOS* ***29*** *16:30:24.6± 1.1, 23.˙61N× 142.˙77E, h43km, mb5.2/30, Error ellipse: s-maj=10.2km s-min=5.0km az=115.8*
*ISCJB* ***29*** *16:30:24.0± 0.7, 23.˙46N± 0.˙02× 142.˙95E± 0.˙04, h44km± 5km, mb5.1/125, MS3.8/25, Error ellipse: s-maj=5.6km s-min=3.7km az=15.4*
*BJI* ***29*** *16:30:24.7, 23.˙55N× 143.˙00E, h56km, mb5.1/65, mB5.1/41, Ms4.7/38, Ms7 4.3/28*
*NEIC* ***29*** *16:30:25.9± 1.3, 23.˙45N× 142.˙87E, h47km± 12km, mb5.2/30, Error ellipse: s-maj=8.2km s-min=5.3km az=121.0*
*JMA* ***29*** *16:30:27.2± 0.1, 23.˙76N× 143.˙40E, h133km± 4km, M5.4*
*IDC* ***29*** *16:30:28.8± 1.8, 23.˙42N× 142.˙83E, h72km± 14km, mb4.6/32, mb1 4.7/34, mb1mx4.6/43, mbtmp4.9/34, MS3.7/24, Ms1 3.8/24, ms1mx3.7/35, Error ellipse: s-maj=13.4km s-min=8.1km az=96.0*
**ISC 29 16:30:27.6± 0.4, 23˚52N± 0.˙03× 142˚90E± 0.˙05, h61km± 2km, h61km:pP-P, n421, σ1§41/473, mb5.2/126, 25C-20D, Volcano Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHHJ** | **Haha-jima-NKT** | **3.16** | **348** | P | **Pn** | **16 31 15.3** | **+0.4** |
| JHHJ | | | | S | **Sn** | **16 31 52.5** | **+1.1** |
| **CBIJ** | **Chichi jima** | **3.62** | **350** | P | **Pn** | **16 31 21.0** | **-0.1** |
| CBIJ | | | | S | **Sn** | **16 32 02.1** | **-0.5** |
| **CBIJ** | **Chichi jima** | **3.62** | **350** | *e*Pn | **Pn** | **16 31 20.1** | **-1.0** |
| CBIJ | | | | *e*Sn | **Sn** | **16 32 02.8** | **+0.2** |
| **JMZ** | **Minamidaito 2** | **10.86** | **285** | P | Pn | 16 33 04.5 | +4.2 |
| **BSO1** | **Boso 1** | **11.22** | **352** | P | **Pn** | **16 33 03.3** | **-1.3** |
| **TK02** | **Tokai 2** | **11.32** | **338** | P | **Pn** | **16 33 05.8** | **-0.5** |
| **BSO3** | **Boso 3** | **11.43** | **350** | P | **Pn** | **16 33 05.3** | **-2.5** |
| BSO3 | | | | S | Sn | 16 35 07.7 | -6.0 |
| **JOD2** | **Odawara 2** | **12.16** | **345** | P | Pn | 16 33 15.0 | -3.0 |
| JOD2 | | | | S | Sn | 16 35 25.9 | -6.0 |
| **JRY** | **Ryogami san** | **12.92** | **345** | P | Pn | 16 33 25.3 | -3.1 |
| JRY | | | | S | Sn | 16 35 43.0 | -7.6 |
| **MJAR** | **Matsushiro Arr** | **13.59** | **344** | P | Pn | 16 33 33.0 | -4.5 |
| | 4.2nm,0.3s,baz=277,slow=8.7,SNR=33 | | | | | | |
| MJAR | | | | S | **Sn** | **16 36 02.4** | **-4.5** |
| | 1.4nm,0.3s,baz=159,slow=18,SNR=5.0 | | | | | | |
| MJAR | | | | LR | LR | 16 38 47.5 | |
| | comp=Z,423nm,20.5s,baz=165,slow=36 | | | | | | |
| **MAJO** | **Matsushiro** | **13.59** | **344** | *e*P | Pn | 16 33 34.4 | -3.1 |
| MAJO | | | | *e* | | 16 36 07.6 | |
| **MAJO** | **Matsushiro** | **13.59** | **344** | *e*Pn | Pn | 16 33 34.4 | -3.1 |
| MAJO | | | | *e*Sn | **Sn** | **16 36 07.6** | **+0.7** |
| **JOW** | **Kunigami** | **13.64** | **287** | P | **P** | **16 33 47.7** | **+2.6** |
| **JSJ** | **Shimokoshiki** | **14.22** | **308** | P | **P** | **16 33 52.7** | **+1.2** |
| **JNU** | **Nakatsue** | **14.25** | **315** | P | **Pn** | **16 33 47.5** | **+1.1** |
| | 0.5nm,0.3s,baz=90,slow=1.0,SNR=3.9 | | | | | | |
| JNU | | | | LR | LR | 16 38 28.8 | |
| | comp=Z,246nm,20.7s,baz=123,slow=34 | | | | | | |
| **JHS** | **Saijyo** | **14.26** | **326** | P | **Pn** | **16 33 47.0** | **+0.6** |
| **KSBUS** | **Busan** | **16.74** | **317** | P | **P** | **16 34 21.3** | **+1.9** |
| | SNR=7.0 | | | | | | |
| **KSBUS** | **Busan** | **16.74** | **317** | P | **P** | **16 34 21.3** | **+1.9** |
| | SNR=7.0 | | | | | | |
| **KSDAG** | **Daegu** | **17.21** | **318** | P | **P** | **16 34 25.7** | **+1.1** |
| | SNR=8.6 | | | | | | |
| **KSDAG** | **Daegu** | **17.21** | **318** | P | **P** | **16 34 25.7** | **+1.1** |
| | SNR=8.6 | | | | | | |
| **KSPHA** | **Pohang** | **17.21** | **320** | P | **P** | **16 34 25.6** | **+1.0** |
| | SNR=9.0 | | | | | | |
| **KSPHA** | **Pohang** | **17.21** | **320** | P | **P** | **16 34 25.5** | **+0.8** |
| | SNR=10.0 | | | | | | |
| **KSNAH** | **Namhae** | **17.23** | **314** | P | **P** | **16 34 27.4** | **+2.6** |
| | SNR=10 | | | | | | |
| **KSYOC** | **YEONGCHEON** | **17.31** | **319** | P | **P** | **16 34 27.0** | **+1.2** |
| | SNR=6.0 | | | | | | |
| **KSYOC** | **YEONGCHEON** | **17.31** | **319** | P | **P** | **16 34 27.0** | **+1.2** |
| | SNR=6.0 | | | | | | |
| **KSJIN** | **Jinju** | **17.37** | **315** | P | **P** | **16 34 27.9** | **+1.5** |
| | SNR=25 | | | | | | |
| **KSJIN** | **Jinju** | **17.37** | **315** | P | **P** | **16 34 27.9** | **+1.5** |
| | SNR=25 | | | | | | |
| **KSKOH** | **Goheung** | **17.54** | **313** | P | **P** | **16 34 29.7** | **+1.4** |
| | SNR=7.3 | | | | | | |
| **KSKOH** | **Goheung** | **17.54** | **313** | P | **P** | **16 34 29.7** | **+1.4** |
| | SNR=7.3 | | | | | | |
| **KSULJ** | **Uljin** | **17.54** | **322** | P | **P** | **16 34 29.0** | **+0.7** |
| | SNR=20 | | | | | | |
| **KSULJ** | **Uljin** | **17.54** | **322** | P | **P** | **16 34 29.0** | **+0.7** |
| | SNR=20 | | | | | | |
| **KSEUS** | **ULSEONG** | **17.73** | **319** | P | **P** | **16 34 31.1** | **+0.8** |
| | SNR=8.3 | | | | | | |
| **KSEUS** | **ULSEONG** | **17.73** | **319** | P | **P** | **16 34 31.1** | **+0.8** |
| | SNR=8.3 | | | | | | |
| **KSKWJ** | **Gwangju** | **18.05** | **314** | P | **Pn** | **16 34 34.9** | **+0.8** |
| | SNR=21 | | | | | | |
| **KSKWJ** | **Gwangju** | **18.05** | **314** | P | **Pn** | **16 34 34.9** | **+0.8** |
| | SNR=21 | | | | | | |
| **KSSAJ** | **Sangju** | **18.08** | **319** | P | **Pn** | **16 34 34.5** | **0.0** |
| | SNR=10 | | | | | | |
| **KSJDO** | **Jindo** | **18.12** | **311** | P | **Pn** | **16 34 35.4** | **+0.4** |
| | SNR=7.5 | | | | | | |
| **KSJDO** | **Jindo** | **18.12** | **311** | P | **Pn** | **16 34 35.4** | **+0.4** |
| | SNR=7.5 | | | | | | |
| **KSGWJ** | **Gwangju-acc** | **18.12** | **313** | P | **Pn** | **16 34 35.7** | **+0.7** |
| | SNR=8.9 | | | | | | |
| **KSGWJ** | **Gwangju-acc** | **18.12** | **313** | P | **Pn** | **16 34 35.7** | **+0.7** |
| | SNR=8.9 | | | | | | |
| **KSJEU** | **Jeongeup** | **18.29** | **314** | P | **Pn** | **16 34 37.2** | **+0.2** |
| | SNR=8.5 | | | | | | |
| **KSJEU** | **Jeongeup** | **18.29** | **314** | P | **Pn** | **16 34 37.2** | **+0.2** |
| | SNR=8.5 | | | | | | |
| **KSBON** | **Boeun** | **18.36** | **318** | P | **Pn** | **16 34 37.7** | **-0.2** |
| | SNR=7.8 | | | | | | |
| **KSCEA** | **Cheonan** | **18.90** | **318** | P | **P** | **16 34 42.8** | **-0.4** |
| | SNR=6.5 | | | | | | |
| **KSRS** | **Korea Array** | **18.92** | **321** | P | **P** | **16 34 42.6** | **-0.7** |
| | 2.9nm,0.3s,baz=137,slow=11,SNR=64 | | | | | | |
| KSRS | | | | LR | LR | 16 41 03.9 | |
| | comp=Z,250nm,21.4s,baz=140,slow=34 | | | | | | |
| **KSAR** | **Wonju Array Be** | **18.93** | **321** | P | **P** | **16 34 42.7** | **-0.9** |
| **KSAR** | **Wonju Array Be** | **18.93** | **321** | P | **P** | **16 34 42.6** | **-0.9** |
| **KS01** | **Wonju Array Si** | **18.95** | **321** | *e*P | **P** | **16 34 41.8** | **-2.0** |
| **SEHB** | **SEOHWA** | **19.30** | **323** | P | **P** | **16 34 47.1** | **-0.5** |
| | SNR=39 | | | | | | |
| **KSSES** | **Seosan** | **19.38** | **317** | P | **P** | **16 34 47.4** | **-1.1** |
| | SNR=8.1 | | | | | | |
| **YHNB** | **Yeheng** | **19.68** | **278** | *e*P | **Pn** | **16 34 53.5** | **-0.4** |
| | 48nm,0.8s | | | | | | |
| **YULB** | **Yu-li** | **19.82** | **274** | *e*P | **P** | **16 34 51.5** | **-1.9** |
| | 52nm,0.9s | | | | | | |
| **YNCB** | **YEONCHEON** | **19.90** | **320** | P | **P** | **16 34 52.7** | **-1.4** |
| | SNR=7.2 | | | | | | |
| **KSGAH** | **Ganghwa** | **19.96** | **319** | P | **P** | **16 34 53.4** | **-1.4** |
| | SNR=18 | | | | | | |
| **TWG** | **Pinlang** | **20.08** | **272** | *e*P | **P** | **16 34 54.8** | **-1.4** |
| | 2μm,2.2s | | | | | | |
| **SSLB** | **Suanglung** | **20.10** | **275** | *e*P | **P** | **16 34 56.0** | **-0.5** |
| | 194nm,0.8s | | | | | | |
| **TPUB** | **Ta-pu** | **20.44** | **274** | *e*P | **P** | **16 35 01.0** | **+0.9** |
| | 77nm,0.8s | | | | | | |
| **ASAJ** | **Asahikawa** | **20.54** | **359** | P | Pn | 16 35 03.4 | -0.3 |
| | 30nm,0.7s,baz=222,slow=12,SNR=23 | | | | | | |
| ASAJ | | | | LR | LR | 16 44 00.1 | |
| | comp=Z,159nm,21.3s,baz=200,slow=39 | | | | | | |
| **ASAJ** | **Asahikawa** | **20.54** | **359** | *e*P | **P** | **16 35 01.7** | **+0.7** |
| | 43nm,0.9s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **20.60** | **6** | ↑*i*P | Pn | 16 35 04.2 | -0.2 |
| YUK | | | | *e*S | **S** | **16 38 48.7** | **+0.2** |
| **VLA** | **Vladivostok** | **21.57** | **338** | *c i*P | **P** | **16 35 11.9** | **0.0** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,35nm,1.0s | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **22.48** | **339** | P | **P** | **16 35 19.9** | **-2.0** |
| | comp=Z,12nm,0.6s,baz=154,slow=12,SNR=27 | | | | | | |
| USRK | | | | LR | LR | 16 44 45.5 | |
| | comp=Z,153nm,18.2s,baz=140,slow=38 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **22.62** | **95** | T | T | 16 59 34.9 | |
| | baz=283,slow=75,SNR=195 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **22.62** | **95** | T | T | 16 59 35.8 | |
| | baz=283,slow=75,SNR=268 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **22.63** | **95** | T | T | 16 59 36.9 | |
| | baz=283,slow=75,SNR=213 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **22.75** | **98** | T | T | 16 59 14.9 | |
| | baz=295,slow=75,SNR=29 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **22.76** | **98** | T | T | 16 59 24.2 | |
| | baz=295,SNR=21 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **22.77** | **98** | T | T | 16 59 25.2 | |
| | baz=295,slow=75,SNR=19 | | | | | | |
| **NJ2** | **Nanjing** | **22.87** | **297** | *e*P | **P** | **16 35 27.3** | **+1.3** |
| NJ2 | | | | PMZ | | | |
| | comp=Z,80nm,0.7s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **23.38** | **360** | *e*P | **P** | **16 35 28.0** | **-2.8** |
| YSS | | | | *e**PP | **pP** | **16 35 44.8** | **+0.1** |
| YSS | | | | *e*S | S | 16 39 31.0 | -8.1 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,50nm,1.2s | | | | | | |
| **MDJ** | **Mudanjiang** | **23.69** | **336** | P | **P** | **16 35 34.8** | **+1.1** |
| MDJ | | | | pP | **pP** | **16 35 47.3** | **-0.8** |
| MDJ | | | | sP | **sP** | **16 35 53.5** | **-2.0** |
| MDJ | | | | S | **S** | **16 39 48.5** | **+4.3** |
| MDJ | | | | PMZ | | | |
| | comp=Z,10.0nm,0.9s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,120nm,5.9s | | | | | | |
| **MDJ** | **Mudanjiang** | **23.69** | **336** | *e*P | **P** | **16 35 34.2** | **+0.4** |
| | comp=Z,7.7nm,0.6s | | | | | | |
| **SNY** | **Shenyang** | **24.35** | **323** | ↓P | **P** | **16 35 38.8** | **-0.9** |
| SNY | | | | PMZ | | | |
| | comp=Z,50nm,1.1s | | | | | | |
| **CN2** | **Changchun** | **24.80** | **329** | *e*P | **P** | **16 35 43.5** | **-0.4** |
| **TIA** | **Tai'an** | **25.59** | **306** | ↑P | **P** | **16 35 50.3** | **-0.8** |
| TIA | | | | S | **S** | **16 40 12.3** | **-2.5** |
| TIA | | | | PMZ | | | |
| | comp=Z,40nm,0.6s | | | | | | |
| TIA | | | | LN | | | |
| | comp=Z,360nm,6.0s | | | | | | |
| TIA | | | | LE | | | |
| | comp=Z,420nm,4.2s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=Z,320nm,6.2s | | | | | | |
| **HABR** | **Khabarovsk** | **25.67** | **348** | *e*P | **P** | **16 35 49.8** | **-1.8** |
| HABR | | | | *e**PP | **pP** | **16 36 06.4** | **0.0** |
| HABR | | | | *e* | | 16 36 29.0 | |
| HABR | | | | *e* | | 16 39 19.3 | |
| HABR | | | | eS | **S** | **16 40 12.8** | **-2.9** |
| HABR | | | | eSS | **SnSn** | **16 41 14.1** | **-1.4** |
| HABR | | | | *e* | | 16 46 41.4 | |
| HABR | | | | pmax | pmax | | |
| | comp=E,24nm,1.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,44nm,1.9s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=N,25nm,1.9s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,104nm,21.0s | | | | | | |
| **WHN** | **Wuhan** | **26.33** | **292** | P | **P** | **16 35 58.3** | **+0.5** |
| WHN | | | | PMZ | | | |
| | comp=Z,90nm,0.6s | | | | | | |
| **SIJI** | **Sorong** | **26.75** | **207** | P | **P** | **16 36 01.2** | **-0.6** |
| | comp=Z,8.1nm,0.7s,baz=24,slow=9.8,SNR=8.7 | | | | | | |
| SIJI | | | | PcP | **PcP** | **16 39 23.7** | **-0.1** |
| | comp=Z,5.2nm,0.8s,baz=344,slow=9.4,SNR=3.8 | | | | | | |
| **KLR** | **Kul'dur** | **27.12** | **344** | *e*P | **P** | **16 36 02.2** | **-2.5** |
| KLR | | | | pmax | pmax | | |
| | comp=E,57nm,1.6s | | | | | | |
| KLR | | | | pmax | pmax | | |
| | comp=Z,130nm,1.6s | | | | | | |
| **BJI** | **Beijing** | **27.91** | **312** | P | **P** | **16 36 12.8** | **+0.9** |
| BJI | | | | S | **S** | **16 40 54.8** | **+3.6** |
| BJI | | | | PMZ | | | |
| | comp=Z,14nm,0.5s | | | | | | |
| BJI | | | | LN | | | |
| | comp=Z,380nm,5.4s | | | | | | |
| BJI | | | | LE | | | |
| | comp=Z,220nm,5.2s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=Z,240nm,25.2s | | | | | | |
| **LBMI** | **Labuha** | **28.30** | **214** | P | **P** | **16 36 15.0** | **-0.6** |
| | comp=Z,44nm,1.0s | | | | | | |
| **MYLDM** | **Lahad Datu** | **29.76** | **236** | ↓P | **P** | **16 36 31.2** | **+2.7** |
| **MYLDM** | **Lahad Datu** | **29.76** | **236** | *e*P | **P** | **16 36 30.1** | **+1.6** |
| | comp=Z,76nm,1.1s | | | | | | |
| **KDM** | **Kudat** | **30.00** | **241** | ↑P | **P** | **16 36 31.1** | **+0.4** |
| **SANI** | **Sanana** | **30.28** | **215** | P | **P** | **16 36 31.8** | **-1.4** |
| | comp=Z,12nm,1.1s | | | | | | |
| **SDKM** | **Sandakan** | **30.48** | **238** | ↑P | **P** | **16 36 34.2** | **-0.7** |
| **MRSI** | **Marisa** | **30.64** | **225** | P | **P** | **16 36 36.2** | **-0.1** |
| | comp=Z,74nm,0.9s,comp=Z,656nm | | | | | | |
| **TSM** | **Tawau** | **30.80** | **235** | ↓P | **P** | **16 36 37.1** | **-0.7** |
| **KKM** | **Kota Kinabalu** | **31.00** | **240** | ↑P | **P** | **16 36 40.3** | **+0.6** |
| **QIZ** | **Qiongzhong** | **31.08** | **268** | P | **P** | **16 36 41.3** | **+1.0** |
| QIZ | | | | pP | **pP** | **16 36 54.0** | **-1.3** |
| QIZ | | | | sP | **sP** | **16 37 00.0** | **-2.4** |
| QIZ | | | | S | **S** | **16 41 43.5** | **+1.9** |
| QIZ | | | | sS | **sS** | **16 42 06.0** | **-1.1** |
| **LUWI** | **Luwuk** | **31.29** | **221** | P | **P** | **16 36 40.1** | **-2.0** |
| | comp=Z,50nm,1.2s,comp=Z,804nm | | | | | | |
| **LUWI** | **Luwuk** | **31.29** | **221** | *e*P | **P** | **16 36 40.3** | **-1.8** |
| | comp=Z,49nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **31.43** | **311** | *e*P | **P** | **16 36 45.5** | **+2.3** |
| HHC | | | | pP | **pP** | **16 37 00.8** | **+2.6** |
| HHC | | | | sP | **sP** | **16 37 08.0** | **+2.6** |
| HHC | | | | PP | **PnPn** | **16 37 51.5** | **+3.5** |
| HHC | | | | S | **S** | **16 41 49.3** | **+2.6** |
| HHC | | | | PMZ | | | |
| | comp=Z,42nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,130nm,8.4s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,270nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,390nm,14.8s | | | | | | |
| **XAN** | **Xi'an** | **31.44** | **297** | P | **P** | **16 36 43.0** | **-0.3** |
| XAN | | | | PMZ | | | |
| | comp=Z,22nm,0.4s | | | | | | |
| **HIA** | **Hailar** | **31.50** | **330** | *e*P | **P** | **16 36 42.2** | **-1.4** |
| HIA | | | | pmax | pmax | | |
| | comp=Z,5.0nm,0.8s | | | | | | |
| **PETK** | **Petropavlovsk-** | **31.61** | **17** | P | **P** | **16 36 45.9** | **+1.4** |
| | comp=Z,7.0nm,1.0s,baz=234,slow=8.7,SNR=2.8 | | | | | | |
| PETK | | | | LR | LR | 16 47 47.1 | |
| | comp=Z,78nm,22.0s,baz=195,slow=33 | | | | | | |
| **GYA** | **Guiyang** | **32.91** | **283** | P | **P** | **16 36 57.8** | **+1.5** |
| GYA | | | | pP | **pP** | **16 37 12.5** | **+1.1** |
| GYA | | | | PP | **PnPn** | **16 38 09.0** | **+2.0** |
| GYA | | | | PcP | **PcP** | **16 39 41.3** | **+1.6** |
| GYA | | | | S | **S** | **16 42 10.5** | **+0.4** |
| GYA | | | | sS | **sS** | **16 42 35.8** | **+0.1** |
| GYA | | | | SS | **SnSn** | **16 44 12.0** | **-0.2** |
| GYA | | | | PMZ | | | |
| | comp=Z,20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | comp=Z,130nm,5.3s | | | | | | |
| GYA | | | | LN | | | |
| | comp=Z,660nm,18.2s | | | | | | |
| GYA | | | | LE | | | |
| | comp=Z,540nm,18.4s | | | | | | |
| GYA | | | | LZ | | | |
| | comp=Z,550nm,17.8s | | | | | | |
| **PCI** | **Palu** | **33.05** | **226** | P | **P** | **16 36 58.1** | **+0.6** |
| | comp=Z,47nm,1.1s | | | | | | |
| **BBSI** | **Bau Bau** | **35.00** | **217** | P | **P** | **16 37 15.7** | **+1.3** |
| | comp=Z,44nm,1.0s | | | | | | |
| **BTM** | **Bintulu** | **35.20** | **239** | ↓P | **P** | **16 37 16.7** | **+0.6** |
| **SPSI** | **Sidrap Palu** | **35.43** | **223** | P | **P** | **16 37 17.9** | **-0.2** |
| | comp=Z,78nm,0.8s,comp=Z,733nm | | | | | | |
| **CD2** | **Chengdu** | **35.44** | **291** | ↑P | **P** | **16 37 18.0** | **-0.2** |
| CD2 | | | | pP | **pP** | **16 37 32.5** | **-0.8** |
| CD2 | | | | sP | **sP** | **16 37 39.5** | **-0.9** |
| CD2 | | | | PP | **PP** | **16 38 39.3** | **-0.2** |
| CD2 | | | | S | **S** | **16 42 49.3** | **+0.3** |
| CD2 | | | | sS | **sS** | **16 43 14.8** | **+0.1** |
| CD2 | | | | PMZ | | | |
| | comp=Z,60nm,0.6s | | | | | | |
| CD2 | | | | PMZ | | | |
| | comp=Z,470nm,5.5s | | | | | | |
| **LZH** | **Lanzhou** | **35.90** | **299** | *e*P | **P** | **16 37 23.0** | **+0.9** |
| LZH | | | | pP | **pP** | **16 37 38.5** | **+1.2** |
| LZH | | | | sP | **sP** | **16 37 43.8** | **-0.6** |
| LZH | | | | PP | **PP** | **16 38 46.0** | **+1.4** |
| LZH | | | | PcP | **PcP** | **16 39 48.5** | **+0.3** |
| LZH | | | | S | **S** | **16 42 55.0** | **-1.1** |
| LZH | | | | sS | **sS** | **16 43 18.0** | **-3.9** |
| LZH | | | | SS | **SnSn** | **16 45 16.3** | **-8.2** |
| LZH | | | | PMZ | | | |
| | comp=Z,35nm,1.2s | | | | | | |
| LZH | | | | PMZ | | | |
| | comp=Z,86nm,4.9s | | | | | | |
| LZH | | | | LN | | | |
| | comp=Z,570nm,14.8s | | | | | | |
| LZH | | | | LE | | | |
| | comp=Z,710nm,14.0s | | | | | | |
| LZH | | | | LZ | | | |
| | comp=Z,860nm,16.3s | | | | | | |
| **SLVN** | **Son La** | **36.04** | **274** | *e*P | **P** | **16 37 24.0** | **+0.6** |
| **KAPI** | **Kappang** | **36.26** | **221** | P | **P** | **16 37 25.2** | **0.0** |
| | comp=Z,21nm,0.7s,baz=89,slow=3.9,SNR=12 | | | | | | |
| **KAPI** | **Kappang** | **36.26** | **221** | *e*P | **P** | **16 37 24.9** | **-0.2** |
| | comp=Z,25nm,0.8s | | | | | | |
| **SBUM** | **Sibu** | **36.34** | **239** | ↓P | **P** | **16 37 27.2** | **+1.3** |
| **SBUM** | **Sibu** | **36.34** | **239** | *e*P | **P** | **16 37 27.0** | **+1.1** |
| | comp=Z,17nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **36.54** | **281** | ↓P | **P** | **16 37 29.3** | **+1.5** |
| KMI | | | | pP | **pP** | **16 37 45.0** | **+2.0** |
| KMI | | | | sP | **sP** | **16 37 52.5** | **+2.4** |
| KMI | | | | PMZ | | | |
| | comp=Z,10.0nm,0.7s | | | | | | |
| KMI | | | | PMZ | | | |
| | comp=Z,100nm,4.4s | | | | | | |
| **BSSI** | **Bau Bau, Buton** | **36.72** | **219** | P | **P** | **16 37 28.2** | **-0.9** |
| | comp=Z,49nm,0.7s | | | | | | |
| **KBKI** | **Kotabaru** | **37.27** | **228** | P | **P** | **16 37 33.2** | **-0.6** |
| | comp=Z,38nm,1.1s,comp=Z,384nm | | | | | | |
| **ULN** | **Ulaanbaatar** | **37.40** | **320** | *e*P | P | 16 37 31.5 | -3.3 |
| ULN | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **ULN** | **Ulaanbaatar** | **37.40** | **320** | *e*P | P | 16 37 31.4 | -3.3 |
| | comp=Z,6.3nm,0.8s | | | | | | |
| **NONG** | **Nongkai** | **37.47** | **269** | P | **P** | **16 37 36.7** | **+1.2** |
| | comp=Z,83nm,1.0s,comp=Z,8μm | | | | | | |
| **SOEI** | **Soe** | **37.76** | **211** | P | **P** | **16 37 36.0** | **-2.1** |
| | comp=Z,27nm,1.2s | | | | | | |
| **SOEI** | **Soe** | **37.76** | **211** | *e*P | P | 16 37 34.9 | -3.2 |
| | comp=Z,18nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **37.78** | **319** | P | **P** | **16 37 36.8** | **-1.2** |
| | comp=Z,6.9nm,0.6s,baz=122,slow=7.9,SNR=43 | | | | | | |
| SONM | | | | PP | **PnPn** | **16 39 08.5** | **+1.7** |
| | comp=Z,1.8nm,0.9s,baz=95,slow=6.2,SNR=3.7 | | | | | | |
| SONM | | | | PcP | **PcP** | **16 39 54.1** | **+0.5** |
| | comp=Z,0.7nm,0.5s,baz=48,slow=0.5,SNR=4.1 | | | | | | |
| SONM | | | | ScP | **ScP** | **16 43 36.1** | **+0.2** |
| | comp=Z,0.7nm,0.8s,baz=145,slow=2.7,SNR=4.1 | | | | | | |
| SONM | | | | LR | LR | 16 53 27.1 | |
| | comp=Z,136nm,18.7s,baz=135,slow=36 | | | | | | |
| **SONA1** | **Songino Array** | **37.78** | **319** | *e*P | **P** | **16 37 36.5** | **-1.5** |
| **MMRI** | **Maumere** | **37.81** | **215** | P | **P** | **16 37 40.6** | **+2.2** |
| | comp=Z,46nm,0.9s | | | | | | |
| **MMRI** | **Maumere** | **37.81** | **215** | *e*P | **P** | **16 37 36.6** | **-1.7** |
| | comp=Z,30nm,0.7s | | | | | | |
| **MTN** | **Manton Dam** | **37.93** | **199** | *e*P | **P** | **16 37 37.5** | **-1.9** |
| | comp=Z,28nm,1.3s | | | | | | |
| **EDFI** | **Ende, Flores** | **38.20** | **215** | P | **P** | **16 37 41.1** | **-0.6** |
| | comp=Z,62nm,1.0s,comp=Z,994nm | | | | | | |
| **BBKI** | **Banjar Baru** | **38.30** | **229** | P | **P** | **16 37 42.0** | **-0.5** |
| | comp=Z,88nm,0.8s | | | | | | |
| **STKI** | **Sintang** | **38.40** | **237** | P | **P** | **16 37 43.5** | **+0.2** |
| | comp=Z,53nm,0.7s | | | | | | |
| **KSM** | **Kuching** | **38.44** | **240** | ↓P | **P** | **16 37 43.8** | **+0.1** |
| **BATI** | **Baumata** | **38.44** | **211** | P | **P** | **16 37 42.7** | **-1.0** |
| | comp=Z,18nm,0.4s,baz=89,slow=1.8,SNR=9.9 | | | | | | |
| **BATI** | **Baumata** | **38.44** | **211** | P | **P** | **16 37 41.9** | **-1.8** |
| | comp=Z,24nm,1.2s | | | | | | |
| **CHAI** | **Chaiyaphum** | **39.15** | **266** | P | **P** | **16 37 51.1** | **+1.4** |
| | comp=Z,8.2nm,0.8s,comp=Z,132nm | | | | | | |
| **LOEI** | **Loei** | **39.35** | **269** | P | **P** | **16 37 48.8** | **-2.5** |
| | comp=Z,31nm,0.9s,comp=Z,5μm | | | | | | |
| **CRAI** | **Chiangrai** | **39.50** | **274** | P | P | 16 37 45.5 | -7.1 |
| **YAK** | **Yakutsk** | **39.53** | **350** | *c i*P | **P** | **16 37 52.4** | **+0.2** |
| YAK | | | | *e**PP | **pP** | **16 38 09.2** | **+1.6** |
| YAK | | | | *e* | | 16 39 59.7 | |
| YAK | | | | *e* | | 16 47 18.4 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,44nm,0.9s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,4.0nm,0.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,10.0nm,1.1s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,177nm,4.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,31nm,1.6s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,80nm,3.2s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=Z,177nm,20.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=N,131nm,20.0s | | | | | | |
| YAK | | | | MLR | MLR | | |
| | comp=E,36nm,16.0s | | | | | | |
| **GTA** | **Gaotai** | **39.62** | **304** | *e*P | **P** | **16 37 52.8** | **-0.7** |
| GTA | | | | pP | **pP** | **16 38 08.5** | **-0.3** |
| GTA | | | | sP | **sP** | **16 38 15.5** | **-0.4** |
| GTA | | | | PcP | **PcP** | **16 40 00.5** | **+0.9** |
| GTA | | | | S | **S** | **16 43 49.8** | **-2.5** |
| GTA | | | | sS | **sS** | **16 44 17.5** | **-0.9** |
| GTA | | | | SS | **SS** | **16 46 41.0** | **-8.3** |
| GTA | | | | PMZ | | | |
| | comp=E,6.0nm,1.1s | | | | | | |
| GTA | | | | PMZ | | | |
| | comp=E,130nm,5.9s | | | | | | |
| GTA | | | | LN | | | |
| | comp=E,170nm,16.6s | | | | | | |
| GTA | | | | LE | | | |
| | comp=E,150nm,16.4s | | | | | | |
| **WSI** | **Waingapu** | **39.71** | **216** | P | P | 16 38 01.9 | +7.7 |
| **PBKT** | **Sadao Pong** | **39.88** | **268** | P | **P** | **16 37 56.9** | **+1.2** |
| | comp=E,23nm,1.1s | | | | | | |
| **SEY** | **Seymchan** | **39.91** | **7** | P | **P** | **16 37 56.3** | **+0.9** |
| | comp=E,6.2nm,0.7s,baz=178,slow=8.7,SNR=11 | | | | | | |
| **SEY** | **Seymchan** | **39.91** | **7** | *c*eP | **P** | **16 37 54.5** | **-0.9** |
| **UTTA** | **Uttaradit** | **39.94** | **270** | P | **P** | **16 37 57.0** | **+0.8** |
| | comp=E,19nm,0.9s,comp=E,188nm | | | | | | |
| **BASI** | **Baing, Sumba** | **40.02** | **216** | P | **P** | **16 37 54.4** | **-2.4** |
| | comp=E,118nm,0.7s,comp=E,2μm | | | | | | |
| **PHRA** | **Phrae** | **40.04** | **271** | P | **P** | **16 37 57.9** | **+0.9** |
| | comp=E,479nm,0.9s,comp=E,35μm | | | | | | |
| **PBKI** | **Pangkalan Bun** | **40.06** | **234** | P | **P** | **16 37 56.9** | **-0.3** |
| | comp=E,205nm,1.0s,comp=E,2μm | | | | | | |
| **BOD** | **Bodaibo** | **40.06** | **336** | *e*P | **P** | **16 37 56.0** | **-0.7** |
| BOD | | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | | |
| **NAYO** | **Nakonayok** | **40.26** | **264** | P | P | 16 38 02.7 | +3.8 |
| | comp=Z,46nm,1.4s | | | | | | |
| **LAMP** | **

**UMPA Umpang Tak 41.92 268** P **P** **16 38 14.9 +2.3**
comp=Z,5.4nm,1.1s
**MHMT Maesarieng 42.23 272** P **P** **16 38 15.9 +0.9**
comp=Z,28nm,0.8s
**KTGM Kuala Trenggan 42.34 251** ⇑P **P** **16 38 16.8 +0.8**
**JAGI Jajag, Banyuwa 42.44 225** *e*P **P** **16 38 14.8 -1.9**
comp=Z,54nm,0.8s
**MOY Mondy 42.61 322** *e*P **P** **16 38 17.5 -0.4**
**TPI Tanjungpandan 43.13 237** P **P** **16 38 21.3 -1.0**
comp=Z,29nm,0.9s
**CTA Charters Tower 43.47 175** P **P** **16 38 24.1 -0.8**
comp=Z,5.6nm,0.5s,baz=3.1,slow=11,SNR=7.4
MYKOM **Kota Tinggi 43.55 246** ⇑P **P** **16 38 26.4 +0.7**
**PWJI Pagerwojo 43.67 228** P **P** **16 38 28.2 +1.6**
comp=Z,80nm,0.8s
**KGM Kluang 43.87 247** ⇓P **P** **16 38 29.6 +1.3**
**PPBI Pangkal Pinang 43.95 240** P **P** **16 38 29.0 +0.1**
comp=Z,19nm,0.9s,comp=Z,920nm
**WRAB Tennant Creek 43.99 192***d* iP **P** **16 38 28.1 -1.1**
WRAB pmax pmax
comp=Z,34nm,0.8s
**WRAB Tennant Creek 43.99 192** P **P** **16 38 28.0 -1.1**
comp=Z,318nm,0.4s,SNR=84
**WRAB Tennant Creek 43.99 192** *e*P **P** **16 38 27.9 -1.2**
comp=Z,29nm,0.4s
WRAB *e*ScP **ScP** **16 44 00.9 +0.3**
**WRA Warramunga Arr 44.00 192** P **P** **16 38 28.2 -1.0**
comp=Z,15nm,0.5s,baz=13,slow=8.5,SNR=254
WRA PcP **PcP** **16 40 14.0 0.0**
comp=Z,2.6nm,0.5s,baz=11,slow=3.8,SNR=4.7
WRA ScP **ScP** **16 43 59.9 -0.7**
comp=Z,2.6nm,0.8s,baz=6.0,slow=4.4,SNR=9.2
WRA S **S** **16 44 53.3 -3.7**
comp=Z,0.6nm,0.9s,baz=3.7,slow=12,SNR=4.6
**KRAB Krabi 44.50 257** P **P** **16 38 34.8 +1.4**
comp=Z,56nm,0.6s,comp=Z,498nm
**KULM Kulim 44.53 253** ⇑P **P** **16 38 34.3 +0.8**
**IPM Ipoh 44.59 251** ⇑P **P** **16 38 34.9 +0.9**
**FRIM Kepong 44.68 249** ⇑P **P** **16 38 36.2 +1.3**
**LEM Lembang 45.80 233** P **P** **16 38 44.1 +0.3**
comp=Z,148nm,0.7s,baz=20,slow=7.5,SNR=44
**LEM Lembang 45.80 233** P **P** **16 38 43.9 +0.1**
comp=Z,2µm,0.8s
**CBJI Citeko 46.10 234** P **P** **16 38 46.6 +0.6**
**LSA Lhasa 46.37 289** P **P** **16 38 50.3 +1.8**
LSA PMZ
comp=Z,31nm,0.9s
**LSA Lhasa 46.37 289** P **P** **16 38 47.5 -1.0**
LSA pmax pmax
comp=Z,25nm,0.6s
**LSA Lhasa 46.37 289** P **P** **16 38 47.5 -1.0**
comp=Z,25nm,0.6s
**HVS Khovu-Aksy 46.68 319** *e*P **P** **16 38 49.9 -0.3**
HVS pmax pmax
comp=Z,7.0nm,0.9s
**BILL Bilibino 46.79 12***c i*P **P** **16 38 51.8 +1.1**
BILL *i* 16 40 24.6
BILL *i* 16 40 42.0
BILL pmax pmax
comp=Z,17nm,1.2s
**PSI Prapat 47.23 251** *e*P **P** **16 38 55.4 +0.4**
PSI pmax pmax
comp=Z,20nm,0.7s
**PSI Prapat 47.23 251** *e*P **P** **16 38 55.4 +0.4**
comp=Z,20nm,0.7s
**AS01 Alice Springs 47.70 191** *e*P **P** **16 38 56.6 -1.8**
**ASAR Alice Springs 47.72 191** P **P** **16 38 56.8 -1.7**
comp=Z,3.4nm,0.4s,baz=12,slow=7.7,SNR=100
ASAR ScP **ScP** **16 44 15.3 -0.7**
comp=Z,0.9nm,0.8s,baz=12,slow=4.2,SNR=6.5
ASAR S **S** **16 45 46.5 -3.8**
comp=Z,0.9nm,0.8s,baz=20,slow=19,SNR=5.3
ASAR LR LR 16 57 09.4
comp=Z,76nm,21.9s,baz=5.5,slow=34
**KRAR Krasnoyarsk 48.73 325** *e*P **P** **16 39 03.8 -2.1**
KRAR pmax pmax
comp=Z,10.0nm,1.1s
**GSI Gunungsitoli 49.14 250** *e*P **P** **16 39 09.4 -0.3**
comp=Z,37nm,0.9s
**WMQ Urumqi 49.23 308** P **P** **16 39 11.5 +1.4**
WMQ pP **pP** **16 39 28.0 +2.2**
WMQ sP **sP** **16 39 34.0 +1.2**
WMQ PP **PP** **16 41 07.0 +2.8**
WMQ S **S** **16 46 13.0 +1.4**
WMQ SS **SS** **16 49 42.0 -1.5**
WMQ PMZ
comp=Z,21nm,0.9s
WMQ PMZ
comp=Z,160nm,5.0s
WMQ LN
comp=Z,72nm,18.0s
WMQ LE
comp=Z,120nm,18.0s
WMQ LZ
comp=Z,130nm,18.0s
**TAPN Taplejung 49.65 287** *e*P **P** **16 39 14.7 +0.9**
comp=Z,44nm,0.4s
**MBWA Marble Bar 49.82 209** *e*P **P** **16 39 11.8 -2.7**
**ODAN Odare 50.01 286** *e*P **P** **16 39 17.2 +0.8**
comp=Z,123nm,0.6s
**RAMN Ramite 50.69 286** *e*P **P** **16 39 22.3 +0.7**
comp=Z,72nm,0.6s
**DZM Mont Dzumac 50.78 151** *e*LR LR 16 54 00.4
comp=Z,312nm,23.2s
**DZM Mont Dzumac 50.78 151** LR LR 16 58 33.8
comp=Z,170nm,21.6s,baz=354,slow=33
**GUN Gumba 51.17 288** *e*P **P** **16 39 26.4 +1.1**
comp=Z,118nm,0.4s
**PKI Pulchoki 51.64 287** *e*P **P** **16 39 29.1 +0.3**
comp=Z,25nm,0.4s
**PKIN Phulchoki 51.65 287** *e*P **P** **16 39 29.5 +0.7**
comp=Z,27nm,0.5s
**KKN Kakani 51.72 288** *e*P **P** **16 39 29.7 +0.5**
comp=Z,35nm,0.5s
**DMN Daman 51.90 287** *e*P **P** **16 39 31.2 +0.6**
**GKN Gorkha 52.24 288** *e*P **P** **16 39 33.8 +0.7**
comp=Z,42nm,0.4s
**ZALV Zalesovo Beam 52.63 321** P **P** **16 39 34.5 -0.8**
comp=Z,7.4nm,0.4s,baz=111,slow=7.2,SNR=38
ZALV PcP **PcP** **16 40 43.6 -1.0**
comp=Z,3.1nm,0.4s,baz=127,slow=3.2,SNR=5.3
ZALV LR LR 17 02 42.4
comp=Z,76nm,19.5s,baz=70,slow=37
**DANN Dangsing 52.95 289** *e*P **P** **16 39 39.8 +1.3**
comp=Z,47nm,0.8s
**KOLN Koldanda 53.19 288** *e*P **P** **16 39 40.4 +0.3**
comp=Z,138nm,0.9s
**MK01 Makanchi Array 53.27 312** *e*P **P** **16 39 40.0 -0.2**
**MK31 Makanchi Array 53.28 312** *i*P **P** **16 39 40.2 -0.1**
MK31 pmax pmax
comp=Z,21nm,0.6s
**MKAR Makanchi Array 53.28 312** P **P** **16 39 40.2 -0.1**
comp=Z,26nm,0.6s,baz=91,slow=8.7,SNR=137
MKAR PcP **PcP** **16 40 47.7 +0.5**
comp=Z,2.3nm,0.5s,baz=76,slow=6.1,SNR=1.7
MKAR LR LR 17 02 57.3
comp=Z,72nm,21.7s,baz=92,slow=37
**NVS Novosibirsk 53.71 322** *e*P **P** **16 39 42.8 -0.4**
**CHLP Challavanipeta 54.84 277** *e*P **P** **16 39 52.3 +0.4**
**KURK Kurchatov 55.97 316** *e*P **P** **16 39 58.5 -1.1**
KURK pmax pmax
comp=Z,44nm,0.5s
**KURK Kurchatov 55.97 316** P **P** **16 39 59.1 -0.5**
comp=Z,266nm,0.5s,SNR=29
**KURK Kurchatov 55.97 316** *e*P **P** **16 39 58.5 -1.1**
comp=Z,44nm,0.5s
**KDAK Kodiak Island 56.86 35** P **P** **16 40 07.3 +1.5**
comp=Z,8.4nm,0.7s,baz=299,slow=8.8,SNR=5.4
**PVM Polavaram 57.42 276** *e*P **P** **16 40 10.5 +0.1**
**ULHL Ulahol 57.60 306** P **P** **16 40 12.6 +1.0**
SNR=13
**KSH Kashi 58.01 303** P P 16 40 18.5 +4.1
KSH *es*P sP 16 40 41.5 +4.1
KSH *e*PcP **PcP** **16 41 09.3 +3.4**
KSH S **S** **16 48 13.0 +2.4**
KSH ScS **ScS** **16 49 59.0 +0.1**
KSH SS **SS** **16 52 07.5 +5.1**
KSH PMZ
comp=Z,16nm,0.9s
KSH PMZ
comp=Z,190nm,4.9s
KSH LN
comp=Z,130nm,5.3s
KSH LE
comp=Z,220nm,5.5s
KSH LZ

comp=Z,210nm,7.1s
**TKM2 Tokmak 2 58.03 307** *e*P **P** **16 40 14.5 -0.1**
TKM2 *e* 16 41 06.0
TKM2 pmax pmax
comp=Z,18nm,0.4s
**TKM2 Tokmak 2 58.03 307** P **P** **16 40 15.5 +0.9**
SNR=23
**TKM2 Tokmak 2 58.03 307** *e*P **P** **16 40 14.5 -0.1**
comp=Z,18nm,0.4s
TKM2 *e*PcP **PcP** **16 41 06.0 0.0**
**CAST Castle Rocks 58.07 29** *e*P **P** **16 40 15.5 +1.2**
comp=Z,11nm,0.8s
**SMLA Simla 58.15 293** *i*P **P** **16 40 16.1 +0.8**
**KZA Kyzart 58.34 306** P **P** **16 40 18.2 +1.2**
SNR=22
**KBK Karagaybulak 58.52 307** P **P** **16 40 18.9 +0.9**
SNR=22
**NDI New Delhi 58.56 290** *e*P **P** **16 40 18.5 +0.2**
**CHMS Chumysh 58.65 307** P **P** **16 40 20.0 +1.4**
SNR=5.2
**KKR Kurukshetra 58.65 292** *e*P **P** **16 40 19.9 +1.0**
**BPAW Bear Paw Mtn. 58.68 28** *e*P **P** **16 40 19.2 +0.7**
**USP Ospenovka 58.81 307** P **P** **16 40 20.4 +0.6**
SNR=6.2
**AAK Ala-Archa 58.86 307** P **P** **16 40 21.1 +0.7**
comp=Z,8.8nm,0.4s,baz=108,slow=5.9,SNR=32
**AAK Ala-Archa 58.86 307** *e*P **P** **16 40 20.1 -0.2**
AAK *e* 16 41 08.6
AAK pmax pmax
comp=Z,12nm,0.5s
**AAK Ala-Archa 58.86 307** P **P** **16 40 21.0 +0.7**
comp=Z,130nm,0.4s,SNR=9.5
**AAK Ala-Archa 58.86 307** P **P** **16 40 20.9 +0.6**
SNR=13
**AAK Ala-Archa 58.86 307** *e*P **P** **16 40 20.1 -0.2**
comp=Z,12nm,0.5s
AAK *e*PcP **PcP** **16 41 08.6 -0.7**
**TRF Thorofare Moun 58.87 29** *e*P **P** **16 40 20.2 +0.2**
TRF *e*PcP **PcP** **16 41 07.9 -0.9**
**UCH Uchtor 58.88 306** P **P** **16 40 22.3 +1.4**
SNR=40
**MLY Manley 58.97 27** *e*P **P** **16 40 22.7 +2.2**
comp=Z,35nm,1.9s
**RPR Rampur 59.07 279** *e*P **P** **16 40 21.8 -0.1**
**RTK Rohtak 59.18 291** *ex* P 16 40 18.9 -3.6
RTK AMB AMB 16 40 23.5
comp=Z,60nm,0.6s
**KUDL Kundal 59.30 290** *e*P **P** **16 40 23.0 -0.3**
KUDL AMB AMB 16 40 23.8
comp=Z,27nm,1.3s
**ADKI Addanki 59.35 275** *e*P **P** **16 40 24.3 +0.4**
**EKS2 Erkin-Say 59.38 307** *e*P **P** **16 40 23.2 -0.7**
EKS2 *e* 16 41 11.6
**EKS2 Erkin-Say 59.38 307** P **P** **16 40 21.7 -2.2**
SNR=10
**EKS2 Erkin-Say 59.38 307** *e*P **P** **16 40 23.2 -0.7**
EKS2 *e*PcP **PcP** **16 41 11.6 +0.3**
**AML Almayashu 59.49 306** P **P** **16 40 26.3 +1.3**
SNR=36
**RND Reindeer 59.50 29** *e*P **P** **16 40 25.2 +0.9**
**RND Reindeer 59.50 29** *e*P **P** **16 40 25.2 +0.9**
**MCK McKinley 59.52 29** P **P** **16 40 22.1 -2.2**
**MCK McKinley 59.52 29** P **P** **16 40 22.1 -2.2**
**SML Sawmill 59.53 31** *e*P **P** **16 40 25.3 +0.9**
SML *e* 16 41 09.0
**SML Sawmill 59.53 31** *e*P **P** **16 40 25.3 +0.9**
SML *e*PcP **PcP** **16 41 08.9 -2.4**
**COLD Coldfoot 59.62 25** *e*P **P** **16 40 25.6 +0.6**
**NJS Nagarjunasagar 59.74 276** *e*P **P** **16 40 26.6 0.0**
**SFK Sufi-Kurgan 59.85 304** P **P** **16 40 28.3 +1.0**
SFK pmax pmax
comp=Z,17nm,0.6s
**KHET Khetri 59.90 290** *e*P **P** **16 40 28.0 +0.5**
KHET AMB AMB 16 40 28.8
comp=Z,34nm,0.7s
**SRSP Sriramsagar 59.92 279** *e*P **P** **16 40 27.5 -0.3**
**WRH Wood River Hil 59.99 28** *e*P **P** **16 40 29.2 +1.7**
**MDM Murphy Dome 60.00 27** *e*P **P** **16 40 29.7 +2.1**
**OTUK Ortayu 60.04 313** P **P** **16 40 28.4 +0.2**
OTUK pmax pmax
comp=Z,21nm,0.6s
**HYB Hyderabad 60.17 277** *i*P **P** **16 40 28.0 -1.5**
**HYBB Hyderabad (bro 60.17 277** *e*P **P** **16 40 29.7 +0.2**
**SRLM Srisailam 60.26 276** *e*P **P** **16 40 30.1 -0.1**
**SKHT Srikalahasti 60.27 273** *e*P **P** **16 40 30.1 -0.1**
**MNAS Manas 60.34 307** P **P** **16 40 31.1 +0.6**
MNAS pmax pmax
comp=Z,4.0nm,0.5s
**RCLA Racherla 60.40 275** *e*P **P** **16 40 30.6 -0.5**
**HDA Harding Lake 60.47 28** *e*P **P** **16 40 31.4 +0.6**
**ILAR Eielson Array 60.55 28** P **P** **16 40 31.4 +0.1**
comp=Z,5.2nm,0.7s,baz=255,slow=5.6,SNR=60
ILAR LR LR 17 04 42.6
comp=Z,43nm,20.9s,baz=268,slow=34
**PAX Paxson 60.98 30** *e*P **P** **16 40 32.0 -2.4**
**PAX Paxson 60.98 30** *e*P **P** **16 40 32.0 -2.4**
**BVA0 Borovoye Array 61.12 319** *i*P **P** **16 40 36.0 +0.5**
BVA0 pmax pmax
comp=Z,31nm,0.6s
**BVAR Borovoye Array 61.12 319** P **P** **16 40 35.6 +0.1**
comp=Z,28nm,0.5s,baz=92,slow=7.6,SNR=98
**BRVK Borovoye 61.19 319** *e*P **P** **16 40 36.0 +0.1**
BRVK pmax pmax
comp=Z,19nm,0.7s
**BRVK Borovoye 61.19 319** P **P** **16 40 36.3 +0.4**
comp=Z,162nm,0.6s,SNR=7.4
**BRVK Borovoye 61.19 319** P **P** **16 40 33.4 -2.5**
**DOT Dot Lake 61.66 29** *e*P **P** **16 40 38.2 -0.8**
**PALK Pallekele 61.66 266** P **P** **16 40 39.3 -0.4**
comp=Z,10nm,0.9s,baz=122,slow=2.4,SNR=5.1
**KK31 Karatay Array 61.73 308** *i*P **P** **16 40 40.5 +0.8**
KK31 pmax pmax
comp=Z,25nm,0.5s
**KKAR Karatay Array 61.73 308** *e*P **P** **16 40 40.2 +0.5**
**KKAR Karatay Array 61.73 308** *e*P **P** **16 40 40.2 +0.5**
**KLRI Killari 61.75 279** *e*P **P** **16 40 40.1 -0.2**
**URV Uravakonda 62.12 275** *e*P **P** **16 40 42.3 -0.4**
**EGAK Eagle 62.99 28** *e*P **P** **16 40 46.8 -0.9**
**DZET Dzherino 63.61 303** P **P** **16 40 53.7 +1.3**
DZET pmax pmax
comp=Z,52nm,0.7s
**POO Poona 64.10 280** *e*P **P** **16 40 55.0 -0.9**
**KBL Kabul 64.23 298** *e*P **P** **16 40 57.5 +0.7**
**KBL Kabul 64.23 298** *e*P **P** **16 40 57.5 +0.7**
**JASL Jaisalmer 64.40 290** *e*P **P** **16 40 58.4 +0.7**
JASL AMB AMB 16 40 59.7
comp=Z,94nm,0.1s
**INK Inuvik 66.01 24** P **P** **16 41 08.5 +1.1**
comp=Z,5.2nm,0.6s,baz=287,slow=5.5,SNR=15
**INK Inuvik 66.01 24** *e*P **P** **16 41 08.1 +0.8**
**INK Inuvik 66.01 24** *e*P **P** **16 41 08.1 +0.8**
**SVE Sverdlovsk 66.45 324**⇓*e*P **P** **16 41 11.0 +0.6**
SVE pmax pmax
comp=Z,66nm,0.9s
**AB31 Akbulak array 68.06 315** *i*P **P** **16 41 20.6 -0.1**
AB31 pmax pmax
comp=Z,31nm,0.6s
ABKAR **Akbulak array 68.06 315** *e*P **P** **16 41 20.9 +0.2**
**AKTO Aktyubinsk 69.06 317** P **P** **16 41 26.7 -0.2**
comp=Z,17nm,0.7s,baz=92,slow=7.1,SNR=51
**AKTO Aktyubinsk 69.06 317** P **P** **16 41 26.6 -0.3**
AKTO pmax pmax
comp=Z,22nm,0.8s
**URZ Urewera 69.34 152** P **P** **16 41 28.3 -0.4**
comp=Z,3.5nm,0.4s,baz=280,slow=9.5,SNR=6.8
**IMYA Miami 70.91 302** *e*P **P** **16 41 40.1 +1.3**
**ISRO Mashad 71.41 302** *e*P **P** **16 41 42.8 +1.1**
**RPZ Rata Peaks 71.73 159** P **P** **16 41 41.3 -1.8**
comp=Z,12nm,0.8s,baz=68,slow=5.8,SNR=4.5
**IEMG Emamgholi 71.74 303** *e*P **P** **16 41 45.5 +1.6**
**IPAY Payeh 71.74 302** *e*P **P** **16 41 45.7 +1.9**
**IAKL Akhelmad 71.88 303** *e*P **P** **16 41 46.2 +1.5**
**ABKT Ailbek 72.00 304** P **P** **16 41 46.5 +1.3**
comp=Z,304nm,1.0s,SNR=12
**GEYT Alibeck 72.00 304** P **P** **16 41 46.4 +1.2**
comp=Z,35nm,0.9s,baz=64,slow=3.4,SNR=54
GEYT LR LR 17 18 08.5
comp=Z,78nm,18.1s,baz=80,slow=40
**IKRD Kardeh 72.02 303** *e*P **P** **16 41 42.5 -3.1**
**IDAH Dahanechah 72.09 298** *e*P **P** **16 41 47.5 +1.4**
**IMON Monand 72.12 299** *e*P **P** **16 41 47.2 +0.9**
**ISFR Sfrayin 72.34 303** *e*P **P** **16 41 49.2 +1.7**
**ISHV Shirvan 72.43 304** *e*P **P** **16 41 49.5 +1.6**
**ALE Alert 73.48 3** P **P** **16 41 54.0 +0.9**

comp=Z,112nm,0.8s,SNR=5.0
**SPA0 Spitsbergen Ar 74.00 350** *e*P **P** **16 41 57.6 +1.4**
**KBS Kingsbay 74.15 351** *e*P **P** **16 41 58.6 +1.6**
KBS *e*pP **pP** **16 42 13.0 -0.8**
**HSPB Hornsund (broa 74.90 349** *e*P **P** **16 42 01.5 +0.1**
**YKA Yellowknife Ar 74.97 28** P **P** **16 42 03.0 +0.9**
comp=Z,6.0nm,0.7s,baz=292,slow=6.0,SNR=6.8
**YKA Yellowknife Ar 74.97 28** P **P** **16 42 03.0 +0.9**
**YKA Yellowknife Ar 74.97 28** P **P** **16 42 03.0 +0.9**
**TMCR Tamitsa 75.31 334** *e*P **P** **16 42 04.1 +0.2**
TMCR pmax pmax
comp=Z,20nm,0.6s
**APA Apatity 75.58 338**⇑*i*P **P** **16 42 06.4 +0.9**
APA *i* 16 42 17.4
APA *i*S **S** **16 51 38.0 -3.4**
APA *i* 16 52 10.0
APA *i*SS **SS** **16 56 30.0 -2.6**
APA pmax pmax
comp=Z,27nm,0.6s
APA MLR MLR
comp=Z,1µm,21.0s
**IGLO Ghaloghah 75.69 304** *e*P **P** **16 42 08.2 +1.1**
**IKIA Kiasar 75.90 304** *e*P **P** **16 42 09.9 +1.7**
**IANJ Anjilo 75.96 303** *e*P **P** **16 42 09.5 +0.9**
**ISHM Shahmirzad 76.33 303** *e*P **P** **16 42 12.3 +1.6**
**HAMF Hammerfest 77.01 343** *e*P **P** **16 42 13.9 +0.4**
**ARCES ARCESS Array B 77.11 341** P **P** **16 42 14.8 +0.7**
comp=Z,9.7nm,0.6s,baz=78,slow=8.3,SNR=55
ARCES LR LR 17 20 32.6
comp=Z,68nm,20.3s,baz=54,slow=39
**ARE0 ARCESS Array S 77.11 341** *e*P **P** **16 42 15.1 +1.0**
ARE0 *e*pP **pP** **16 42 30.8 -0.1**
**PPT Papeete 77.55 115** LR LR 17 10 03.3
comp=Z,47nm,20.4s,baz=332,slow=31
**PPT2 Papeete2 77.56 116** *e*LR LR 17 05 54.5
comp=Z,218nm,34.2s
**UOSS Wadi Hilu 77.61 292** *e*P **P** **16 42 18.2 +0.4**
**B08A Colville Reser 77.70 43** *e*P **P** **16 42 19.4 +1.5**
**PMOR Pomariorio Ree 77.72 112** *e*T T 18 07 35.1
comp=Z,3.5nm,0.2s
**IZEF Zefreh 78.06 301** *e*P **P** **16 42 21.5 +1.0**
**KTK1 Kautokeino 78.08 341** *e*P **P** **16 42 20.0 +0.5**
**IGZV Ghazvin 78.48 305** *e*P **P** **16 42 23.7 +1.1**
**IKLH Kolahrood 78.50 301** *e*P **P** **16 42 23.7 +0.8**
**IPAR Pars 78.55 298** *e*P **P** **16 42 24.0 +0.7**
**ISRV Sarvestan 78.65 297** *e*P **P** **16 42 23.9 0.0**
**VRH Novokhopyorsk 78.66 321** *e*P **P** **16 42 22.9 -0.1**
VRH pmax pmax
comp=Z,10.0nm,0.7s
VRH pmax pmax
comp=N,30nm,1.4s
VRH pmax pmax
comp=E,40nm,1.6s
**TRO Tromso 78.92 343** *e*P **P** **16 42 24.3 +0.2**
**IPIR Pirpir 79.27 301** *e*P **P** **16 42 27.8 +0.6**
**DAG Danmarks Havn 79.30 356** *i*P **P** **16 42 26.2 +0.1**
DAG pmax pmax
comp=Z,8.0nm,0.9s
**DAG Danmarks Havn 79.30 356** *i*P **P** **16 42 26.2 +0.1**
comp=Z,3.5nm,0.9s
**IKAZ Kazeroun 79.55 298** *e*P **P** **16 42 29.1 +0.3**
**LPSR Galich'ya Gora 79.67 323** *e*P **P** **16 42 28.3 -0.2**
LPSR pmax pmax
comp=Z,20nm,1.2s
LPSR pmax pmax
comp=N,4.0nm,0.5s
LPSR pmax pmax
comp=E,10.0nm,1.2s
**OBN Obninsk 79.83 326** *i*P P 16 42 25.2 -4.1
OBN *i* 16 42 38.4
OBN pmax pmax
comp=Z,8.0nm,0.9s
**VSR Storozhevoye 80.12 322** *e*P **P** **16 42 30.9 -0.1**
VSR pmax pmax
comp=Z,10.0nm,0.5s
VSR pmax pmax
comp=N,10.0nm,1.5s
VSR pmax pmax
comp=E,7.0nm,1.5s
**IHRS Heris 80.13 307** *e*P **P** **16 42 32.0 +0.4**
**DGRG David-gareji 80.13 311** P **P** **16 42 34.0 +2.6**
**DGRG David-gareji 80.13 311** P **P** **16 42 33.9 +2.6**
**J08A Circle Bar Ran 80.15 47** *e*P **P** **16 42 33.1 +1.7**
**VORD Divnogorie 80.16 321** *e*P **P** **16 42 31.0 -0.2**
VORD pmax pmax
comp=Z,10.0nm,0.6s
VORD pmax pmax
comp=N,10.0nm,1.1s
VORD pmax pmax
comp=E,10.0nm,0.9s
**BMO Blue Mountains 80.33 45** *e*P **P** **16 42 33.9 +1.5**
**BMO Blue Mountains 80.33 45** *e*P **P** **16 42 33.9 +1.5**
**NCK Nalchik 80.55 313** *e*P **P** **16 42 32.8 -0.7**
**KBZ Khabaz 80.92 314** P **P** **16 42 36.4 +1.0**
comp=E,17nm,0.8s,baz=108,slow=3.8,SNR=34
KBZ LR LR 17 21 26.4
comp=E,67nm,20.1s,baz=54,slow=38
**KIV Kislovodsk 80.97 314***c i*P **P** **16 42 36.0 +0.2**
KIV pmax pmax
comp=Z,23nm,1.1s
KIV MLR MLR
comp=Z,67nm,19.0s
**ONI Oni 81.00 312** P **P** **16 42 38.3 +2.2**
**ONI Oni 81.00 312** P **P** **16 42 38.2 +2.2**
**STEI Steigen 81.05 342** *e*P **P** **16 42 36.2 +0.6**
STEI IAmb IAmb 16 42 36.5
comp=Z,33nm,0.7s
**GNI Garni 81.08 310***d i*P **P** **16 42 37.9 +1.3**
GNI pmax pmax
comp=Z,95nm,1.2s
**ISHB Shabestar 81.18 308** *e*P **P** **16 42 37.9 +0.6**
**FINES FINESS Array B 81.43 334** P **P** **16 42 37.3 -0.5**
comp=Z,10nm,0.4s,baz=74,slow=4.8,SNR=160
FINES LR LR 17 20 00.9
comp=Z,37nm,20.6s,baz=27,slow=36
**AKH Akhalkalaki 81.45 311**⇑P **P** **16 42 40.3 +1.8**
**AKH Akhalkalaki 81.45 311**⇑*i*P **P** **16 42 40.3 +1.8**
**IVIS Veis 81.72 304** *e*P **P** **16 42 39.8 -0.2**
**CHVG Ch'k'valeri 81.88 313**⇑*i*P **P** **16 42 41.9 +1.4**
**MFID Camas Ranch 81.89 46** *e*P **P** **16 42 41.2 +0.5**
comp=Z,8.7nm,1.1s
**IGHG Ghaleghazi 82.01 304** *e*P **P** **16 42 41.2 -0.5**
**NVAR Mina Array Bea 82.22 52** P **P** **16 42 44.3 +1.6**
comp=Z,1.0nm,0.7s,baz=276,slow=4.2,SNR=6.4
NVAR LR LR 17 12 20.1
comp=Z,130nm,19.6s,baz=263,slow=30
**MOR8 Moi Rana 82.49 341** *e*P **P** **16 42 42.6 -0.7**
**ANN Anapa 84.00 316** *e*P **P** **16 42 51.7 +0.2**
ANN pmax pmax
comp=Z,192nm,1.7s
**SUMG Summit 84.15 0** *e*P **P** **16 42 51.3 -0.9**
SUMG pmax pmax
comp=Z,8.0nm,0.8s
**SUMG Summit 84.15 0** *i*P **P** **16 42 53.6 +1.4**
comp=Z,19nm,1.1s
**SUMG Summit 84.15 0** *e*P **P** **16 42 51.3 -0.9**
comp=Z,7.9nm,0.8s
**TPNV Topopah Spring 84.31 52** *e*P **P** **16 42 54.8 +1.4**
**TPNV Topopah Spring 84.31 52** *e*P **P** **16 42 54.8 +1.4**
AKASG **Malin Array Be 85.88 324** P **P** **16 42 59.5 -1.2**
comp=Z,4.1nm,0.4s,baz=52,slow=5.2,SNR=29
AKASG LR LR 17 24 15.7
comp=Z,44nm,18.7s,baz=70,slow=38
**KIEV Kiev 85.89 324** *e*P **P** **16 42 58.4 -2.4**
KIEV pmax pmax
comp=Z,7.0nm,0.4s
**KIEV Kiev 85.89 324** *e*P **P** **16 42 58.4 -2.4**
comp=Z,7.1nm,0.4s
**MALT Malatya 86.30 310**⇑P **P** **16 43 04.3 +1.1**
**MALT Malatya 86.30 310**⇑*i*P **P** **16 43 04.3 +1.1**
**SUW Suwalki 87.03 329** *e*P **P** **16 43 05.4 -0.9**
**SUW Suwalki 87.03 329** *e*P **P** **16 43 05.5 -0.9**
**NB2 NORSAR Subarra 87.16 339** P **P** **16 43 05.4 -1.5**
comp=Z,6.5nm,0.9s,baz=44,slow=5.1
**NB2 NORSAR Subarra 87.16 339** P **P** **16 43 05.4 -1.5**
baz=44,slow=5.1
**NOA NORSAR Array B 87.16 339** P **P** **16 43 06.0 -0.8**
comp=Z,4.0nm,0.8s,baz=28,slow=5.5,SNR=12
NOA LR LR 17 25 32.3
comp=Z,44nm,18.6s,baz=25,slow=38
**RAYN Ar Rayn 87.19 294** P **P** **16 43 07.0 -0.7**
comp=Z,136nm,0.5s,SNR=25
**RAYN Ar Rayn 87.19 294** *e*P **P** **16 43 07.1 -0.7**
comp=Z,13nm,0.6s
**BRTR Keskin Array B 88.90 313** P **P** **16 43 15.2 -0.6**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,6.1nm,0.7s,baz=78,slow=3.6,SNR=20 | | | | | | | |
| BRTR | | | | | LR | LR | 17 27 23.6 | |
| | comp=Z,20nm,18.5s,baz=48,slow=38 | | | | | | | |
| **TESR** | **Tescani** | | **89.62** | **322** | ⇑ *i* P | **P** | **16 43 17.8** | **-1.0** |
| **BURAR** | **Bucovina Array** | | **89.78** | **323** | ⇓ P | **P** | **16 43 19.5** | **-0.2** |
| **BURAR** | **Bucovina Array** | | **89.78** | **323** | ⇓ *i* P | **P** | **16 43 19.5** | **-0.2** |
| **KWP** | **Kalwaria Pacla** | | **89.92** | **326** | ⇓ P | **P** | **16 43 19.3** | **-0.8** |
| **KWP** | **Kalwaria Pacla** | | **89.92** | **326** | ⇓ *i* P | **P** | **16 43 19.3** | **-0.8** |
| **KOLS** | **Kolonicke sedl** | | **90.57** | **325** | *e*P | **P** | **16 43 23.3** | **+0.1** |
| KOLS | | | | | pmax | pmax | | |
| | comp=Z,406nm,4.4s | | | | | | | |
| **KOLS** | **Kolonicke sedl** | | **90.57** | **325** | *e*P | **P** | **16 43 23.3** | **+0.1** |
| **DOPR** | **Dopca** | | **90.65** | **322** | ⇑ *i* P | **P** | **16 43 24.0** | **+0.4** |
| **STHS** | **Stebnicka Huta** | | **90.80** | **326** | *e*P | **P** | **16 43 24.3** | **0.0** |
| STHS | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.6s | | | | | | | |
| **STHS** | **Stebnicka Huta** | | **90.80** | **326** | *e*P | **P** | **16 43 24.3** | **0.0** |
| **VOIR** | | | **91.15** | **321** | ⇓ P | **P** | **16 43 26.3** | **+0.3** |
| **VOIR** | | | **91.15** | **321** | ⇓ *i* P | **P** | **16 43 26.3** | **+0.3** |
| **DRGR** | | | **91.65** | **324** | ⇓ P | **P** | **16 43 28.1** | **-0.3** |
| **DRGR** | | | **91.65** | **324** | ⇓ *i* P | **P** | **16 43 28.0** | **-0.3** |
| **ANMO** | **Albuquerque** | | **92.27** | **50** | ⇑ *i* P | **P** | **16 43 33.5** | **+1.9** |
| ANMO | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.0s | | | | | | | |
| **VYHS** | **Vyhne** | | **92.62** | **327** | *e*P | **P** | **16 43 32.2** | **-0.5** |
| VYHS | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| **VYHS** | **Vyhne** | | **92.62** | **327** | *e*P | **P** | **16 43 32.2** | **-0.5** |
| **DPC** | **Dobruska-Polom** | | **92.62** | **329** | *e*P | **P** | **16 43 32.5** | **-0.2** |
| **DPC** | **Dobruska-Polom** | | **92.62** | **329** | *e*P | **P** | **16 43 32.5** | **-0.2** |
| **CLL** | **Collm** | | **93.47** | **331** | *e*P | **P** | **16 43 37.0** | **+0.5** |
| CLL | | | | | LV | | 17 33 00.0 | |
| | comp=Z,100nm,19.3s | | | | | | | |
| **KHC** | **Kasperske Hory** | | **94.75** | **329** | *e*P | **P** | **16 43 42.0** | **-0.5** |
| **KHC** | **Kasperske Hory** | | **94.75** | **329** | *e*P | **P** | **16 43 42.0** | **-0.5** |
| **GERES** | **GERESS Array B** | | **94.89** | **329** | P | **P** | **16 43 42.5** | **-0.7** |
| | comp=Z,0.9nm,0.6s,baz=343,slow=4.2,SNR=5.3 | | | | | | | |
| GERES | | | | | LR | LR | 17 28 48.5 | |
| | comp=Z,50nm,19.3s,baz=55,slow=37 | | | | | | | |
| **TXAR** | **Lajitas Array** | | **97.20** | **54** | LR | LR | 17 21 12.8 | |
| | comp=Z,67nm,21.6s,baz=0.0,slow=31 | | | | | | | |
| **SYO** | **Syowa Base** | | **116.51** | **203** | ⇓ *e*PKPdf | **PKPdf** | **16 49 02.0** | **-1.8** |
| **BOSA** | **Boshof** | | **124.30** | **251** | PKP | **PKPdf** | **16 49 19.9** | **-0.3** |
| | comp=Z,2.4nm,0.7s,baz=312,slow=3.8,SNR=4.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | | **127.38** | **310** | PKP | **PKPdf** | **16 49 25.4** | **-1.0** |
| | comp=Z,2.4nm,0.9s,baz=27,slow=2.9,SNR=9.1 | | | | | | | |
| TORD | | | | | PP | PP | 16 51 15.8 | -10 |
| | comp=Z,1.6nm,0.8s,baz=37,slow=6.5,SNR=4.1 | | | | | | | |
| **SNAA** | **Sanae** | | **128.06** | **193** | P | **PKPdf** | **16 49 25.4** | **-0.7** |
| **VNA2** | **Neumayer--Watz** | | **129.56** | **192** | P | **PKPdf** | **16 49 28.5** | **-0.3** |
| | baz=55,slow=0.5 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | | **129.72** | **191** | P | **PKPdf** | **16 49 28.5** | **-0.6** |
| **VNA3** | **Neumayer Olymp** | | **129.72** | **191** | P | SKPab | 16 52 45.6 | 0.0 |
| **VNA1** | **Neumayer--Stat** | | **129.95** | **192** | P | SKPab | 16 52 46.4 | -0.2 |
| **DBIC** | **Dimbokro** | | **136.50** | **310** | PKP | **PKPdf** | **16 49 44.8** | **+1.3** |
| | comp=Z,1.5nm,0.5s,baz=234,slow=1.8,SNR=3.6 | | | | | | | |
| DBIC | | | | | PP | **PP** | **16 52 24.1** | **-0.6** |
| | comp=Z,4.6nm,0.9s,baz=38,slow=7.9,SNR=3.0 | | | | | | | |
| **LPAZ** | **La Paz** | | **150.00** | **82** | PKP | **PKPdf** | **16 50 08.2** | **+0.4** |
| | comp=Z,4.3nm,0.6s,baz=243,slow=1.3,SNR=18 | | | | | | | |
| LPAZ | | | | | PKPbc | **PKPbc** | **16 50 13.2** | **+0.5** |
| | comp=Z,4.5nm,0.6s,baz=298,slow=4.2,SNR=21 | | | | | | | |
| **SAML** | **Samuel** | | **151.14** | **64** | *e*PKPbc | **PKPbc** | **16 50 14.4** | **-0.4** |

**TAP 29 16:54:16.4, 24.49N×121.85E, h14km±1km, ML1.5, D, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ENA** | **Nanau** | **0.11** | **240** | *e*P | Pg | 16 54 19.8 | +0.2 |
| | baz=236 | | | | | | |
| ENA | | | | *e*S | Sb | 16 54 22.9 | -0.1 |
| | baz=236 | | | | | | |
| **TWC** | **Suao** | **0.12** | **0** | P | Pb | 16 54 20.4 | -0.2 |
| | baz=5.0 | | | | | | |
| **ENTT** | **Nioudou** | **0.30** | **301** | P | Pb | 16 54 23.3 | -0.2 |
| | baz=301 | | | | | | |
| ENTT | | | | *e*S | Sb | 16 54 28.2 | -0.2 |
| | baz=301 | | | | | | |
| **NSK** | **Sanguang** | **0.48** | **293** | *e*P | Pg | 16 54 26.4 | +0.3 |
| | baz=293 | | | | | | |
| NSK | | | | *e*S | Sb | 16 54 34.0 | +0.2 |
| | baz=293 | | | | | | |

*ISCJB **29** 16:56:14.9±0.4, 17°.91N±0°.04×67°.80W±0°.03, h32km, mb4.0/5, MS3.4/1, Error ellipse: s-maj=6.3km s-min=3.5km az=178.9*
*IDC **29** 16:56:17.6±3.7, 18°.02N×67°.70W, h54km±37km, mb3.7/4, mb1 3.9/4, mb1mx3.4/22, mbtmp3.9/4, MS3.4/1, Ms1 3.3/1, ms1mx2.6/22, Error ellipse: s-maj=35.1km s-min=23.9km az=30.0*
*NEIC **29** 16:56:18.1, 18°.13N×67°.73W, h51km±1km, mb4.3/2, MD4.0(RSPR), After RSPR.*
*RSPR **29** 16:56:18.1, 18°.13N×67°.73W, h51km±1km, MD4.0/18*
**ISC 29 16:56:16.5±0.7, 18°.03N±0°.05×67°.74W±0°.04, h32km, n66, σ1§14/84, mb4.0/5, 17C-10D, Mona Passage**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IDE** | **Isla Desecheo** | **0.43** | **35** | ⇑ *i* P | **Pb** | **16 56 26.6** | **+0.6** |
| **IDE** | **Isla Desecheo** | **0.43** | **35** | *i* Pu | **Pb** | **16 56 26.6** | **+0.6** |
| **MPR** | **Mayaguez** | **0.59** | **72** | ⇑ *i* P | **Pn** | **16 56 29.2** | **+0.6** |
| **MPR** | **Mayaguez** | **0.59** | **72** | ⇓ *e*P | **Pn** | **16 56 29.5** | **+0.8** |
| MPR | | | | *e*S | **Sn** | **16 56 38.5** | **+1.3** |
| **MPR** | **Mayaguez** | **0.59** | **72** | ⇓ *e*P | **Pn** | **16 56 29.5** | **+0.8** |
| MPR | | | | *e*S | **Sn** | **16 56 38.5** | **+1.3** |
| **CRPR** | **Cabo Rojo, PR** | **0.59** | **92** | ⇑ *i* P | **Pn** | **16 56 30.0** | **+1.3** |
| **CRPR** | **Cabo Rojo, PR** | **0.59** | **92** | *e*S | **Sn** | **16 56 39.5** | **+2.3** |
| **CRPR** | **Cabo Rojo, PR** | **0.59** | **92** | *i* Pu | **Pn** | **16 56 30.0** | **+1.3** |
| CRPR | | | | *e*S | **Sn** | **16 56 39.5** | **+2.3** |
| **LSP** | **Las Mesas** | **0.63** | **77** | ⇓ *e*P | **Pn** | **16 56 30.0** | **+0.7** |
| **AGPR** | **Aguadilla, PR** | **0.73** | **54** | ⇑ *i* P | **Pn** | **16 56 30.8** | **+0.1** |
| **AGPR** | **Aguadilla, PR** | **0.73** | **54** | *e*S | **Sb** | **16 56 40.8** | **+0.1** |
| **AGPR** | **Aguadilla, PR** | **0.73** | **54** | *i* Pu | **Pn** | **16 56 30.8** | **+0.1** |
| AGPR | | | | *e*S | **Sb** | **16 56 40.8** | **+0.1** |
| **GBPR** | **Guanica, Bosqu** | **0.82** | **94** | ⇓ *i* P | **Pb** | **16 56 32.9** | **+0.7** |
| **GBPR** | **Guanica, Bosqu** | **0.82** | **94** | *e*S | **Sb** | **16 56 43.7** | **+0.8** |
| **GBPR** | **Guanica, Bosqu** | **0.82** | **94** | ⇓ *i* P | **Pb** | **16 56 32.9** | **+0.7** |
| GBPR | | | | *e*S | **Sb** | **16 56 43.7** | **+0.8** |
| **LRS** | **Lares** | **0.88** | **73** | ⇑ *i* P | **Pn** | **16 56 32.9** | **+0.2** |
| **LRS** | **Lares** | **0.88** | **73** | *e*Pn | **Pn** | **16 56 33.0** | **+0.2** |
| **AOPR** | **Arecibo Observ** | **0.98** | **71** | ⇑ *i* P | **Pn** | **16 56 34.3** | **+0.3** |
| **AOPR** | **Arecibo Observ** | **0.98** | **71** | ⇑ *e*P | **Pn** | **16 56 34.4** | **+0.3** |
| AOPR | | | | *e*S | **Sn** | **16 56 47.4** | **+0.5** |
| **AOPR** | **Arecibo Observ** | **0.98** | **71** | *i* Pu | **Pn** | **16 56 34.3** | **+0.3** |
| AOPR | | | | *e*S | **Sn** | **16 56 47.4** | **+0.5** |
| **OBIP** | **Obispado Ponce** | **1.07** | **89** | ⇑ *i* P | **Pn** | **16 56 36.0** | **+0.7** |
| **OBIP** | **Obispado Ponce** | **1.07** | **89** | *e*S | **Sb** | **16 56 50.3** | **0.0** |
| **CELP** | **Cerrillos** | **1.10** | **88** | ⇑ *e*P | **Pn** | **16 56 36.5** | **+0.8** |
| **CELP** | **Cerrillos** | **1.10** | **88** | ⇑ *e*P | **Pn** | **16 56 36.5** | **+0.8** |
| **SJG** | **San Juan** | **1.51** | **87** | ⇑ *e*P | **Pn** | **16 56 41.7** | **+0.5** |
| SJG | | | | *e*S | **Sn** | **16 56 59.8** | **0.0** |
| **SJG** | **San Juan** | **1.51** | **87** | ⇑ *e*P | **Pn** | **16 56 41.8** | **+0.5** |
| SJG | | | | *e*S | **Sn** | **16 57 01.1** | **+1.3** |
| **SJG** | **San Juan** | **1.51** | **87** | ⇑ *e*P | **Pn** | **16 56 41.8** | **+0.5** |
| SJG | | | | *e*S | **Sn** | **16 56 59.8** | **0.0** |
| SJG | | | | *e*S | **Sn** | **16 57 01.1** | **+1.3** |
| **CPD** | **Cerro la Pandu** | **1.73** | **90** | ⇑ *e*P | **Pn** | **16 56 44.5** | **+0.2** |
| **CPD** | **Cerro la Pandu** | **1.73** | **90** | *e*S | **Sn** | **16 57 05.4** | **0.0** |
| **CPD** | **Cerro la Pandu** | **1.73** | **90** | ⇑ *e*P | **Pn** | **16 56 44.5** | **+0.2** |
| CPD | | | | *e*S | **Sn** | **16 57 05.4** | **0.0** |
| **DR12** | **Loma Pena Alta** | **1.73** | **296** | ⇓ *i* P | **Pn** | **16 56 44.6** | **+0.2** |
| **DR12** | **Loma Pena Alta** | **1.73** | **296** | ⇓ *i* P | **Pn** | **16 56 44.6** | **+0.2** |
| **HUMP** | **Col San Antoni** | **1.80** | **86** | ⇑ *e*P | **Pn** | **16 56 45.3** | **+0.1** |
| **HUMP** | **Col San Antoni** | **1.80** | **86** | ⇑ *e*P | **Pn** | **16 56 45.8** | **+0.5** |
| HUMP | | | | *e*S | **Sn** | **16 57 07.5** | **+0.6** |
| **HUMP** | **Col San Antoni** | **1.80** | **86** | ⇑ *e*P | **Pn** | **16 56 45.8** | **+0.5** |
| HUMP | | | | *e*S | **Sn** | **16 57 07.5** | **+0.6** |
| HUMP | | | | *e*S | **Sb** | **16 57 07.6** | **-3.2** |
| **SMN1** | **Samana, DR** | **1.86** | **308** | ⇑ *e*P | **Pn** | **16 56 46.9** | **+0.8** |
| **SMN1** | **Samana, DR** | **1.86** | **308** | *e*S | **Sn** | **16 57 08.2** | **-0.4** |
| **SMN1** | **Samana, DR** | **1.86** | **308** | ⇑ *e*P | **Pn** | **16 56 46.9** | **+0.8** |
| SMN1 | | | | *e*S | **Sn** | **16 57 08.2** | **-0.4** |
| **STVI** | **Saint Thomas** | **2.66** | **83** | ⇓ *e*P | **Pn** | **16 56 58.1** | **+1.0** |
| **STVI** | **Saint Thomas** | **2.66** | **83** | ⇑ *e*P | **Pn** | **16 56 58.1** | **+1.0** |
| STVI | | | | *e*S | **Sn** | **16 57 28.2** | **-0.1** |
| **STVI** | **Saint Thomas** | **2.66** | **83** | *e*S | **Sn** | **16 57 27.9** | **-0.4** |
| **STVI** | **Saint Thomas** | **2.66** | **83** | ⇑ *e*P | **Pn** | **16 56 58.1** | **+1.0** |
| STVI | | | | *e*S | **Sn** | **16 57 28.2** | **-0.1** |
| **SDDR** | **Presa de Saban** | **3.50** | **286** | ⇑ *i* P | Pn | 16 57 13.6 | +4.9 |
| **SDDR** | **Presa de Saban** | **3.50** | **286** | *i* Pu | Pn | 16 57 13.6 | +4.9 |
| **SABA** | **Saba** | **4.30** | **95** | ⇓ *e*P | **Pn** | **16 57 20.4** | **+0.7** |
| **SABA** | **Saba** | **4.30** | **95** | *e*S | **Sn** | **16 58 09.6** | **+0.9** |
| **SABA** | **Saba** | **4.30** | **95** | ⇓ *e*P | **Pn** | **16 57 20.4** | **+0.7** |
| SABA | | | | *e*S | **Sn** | **16 58 09.6** | **+0.9** |
| **SMRT** | **St. Maarten** | **4.43** | **89** | ⇑ *e*P | **Pn** | **16 57 22.2** | **+0.6** |
| **SMRT** | **St. Maarten** | **4.43** | **89** | *e*S | **Sn** | **16 58 11.2** | **-0.9** |
| **SMRT** | **St. Maarten** | **4.43** | **89** | ⇑ *e*P | **Pn** | **16 57 22.2** | **+0.6** |
| SMRT | | | | *e*S | **Sn** | **16 58 11.2** | **-0.9** |
| **GRTK** | **Grand Turk** | **4.71** | **318** | *e*Pn | **Pn** | **16 57 23.4** | **-1.9** |
| **MBWH** | | **5.45** | **103** | *e*P | **Pn** | **16 57 35.9** | **+0.4** |
| **LZG** | **Guadaloupe-1** | **6.00** | **107** | *e*P | **Pn** | **16 57 43.7** | **+0.6** |
| **MLG** | **Mont-d'or** | **6.09** | **108** | *e*P | **Pn** | **16 57 44.7** | **+0.4** |
| **FNG** | **Fond-Bernard** | **6.11** | **108** | *e*P | **Pn** | **16 57 44.7** | **0.0** |
| **H05N1** | **Guadeloupe/Mar** | **6.61** | **104** | P | **Pn** | **16 57 50.8** | **-0.6** |
| H05N1 | | | | S | **Sn** | **16 59 00.9** | **-4.8** |
| **GTBY** | **Guantanamo Bay** | **7.23** | **286** | *e*Pn | **Pn** | **16 57 59.4** | **-0.6** |
| **H05S1** | **Guadeloupe/Mar** | **7.53** | **117** | P | **Pn** | **16 58 05.2** | **+1.1** |
| H05S1 | | | | S | **Sn** | **16 59 24.3** | **-4.2** |
| **SDV** | **Santo Domingo** | **9.52** | **198** | *e*P | **Pn** | **16 58 33.5** | **+1.9** |
| | 14nm,0.5s | | | | | | |
| **OTAV** | **Otavalo** | **20.59** | **212** | *e*P | **P** | **17 00 53.8** | **+0.4** |
| | 21nm,1.1s | | | | | | |
| **SAML** | **Samuel** | **27.18** | **170** | *e*P | **P** | **17 01 56.0** | **-1.4** |
| | 7.6nm,1.0s | | | | | | |
| **LPAZ** | **La Paz** | **34.11** | **181** | P | **P** | **17 02 58.8** | **-0.4** |
| | 1.3nm,0.8s,baz=342,slow=9.6,SNR=3.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **34.65** | **296** | P | **P** | **17 03 02.4** | **-0.8** |
| | 1.5nm,0.7s,baz=106,slow=8.8,SNR=14 | | | | | | |
| **ULM** | **Lac du Bonnet** | **39.24** | **331** | LR | LR | 17 20 33.5 | |
| | comp=Z,53nm,19.5s,baz=124,slow=37 | | | | | | |
| **CPUP** | **Villa Florida** | **45.24** | **167** | P | P | 17 04 27.9 | -3.0 |
| | 1.3nm,0.6s,baz=323,slow=5.1,SNR=3.2 | | | | | | |
| **DBIC** | **Dimbokro** | **62.20** | **92** | P | **P** | **17 06 34.1** | **-1.3** |
| | 1.1nm,0.6s,baz=282,slow=9.3,SNR=2.9 | | | | | | |

*KRSC **29** 17:07:23.1±1.4, 49°.88N×156°.86E, h42km±21km, ML4.2*
*IDC **29** 17:07:27.4±7.8, 50°.17N×155°.90E, h108km±59km, mb3.2/2, mb1 3.4/3, mb1mx3.0/38, mbtmp3.4/3, Error ellipse: s-maj=132.9km s-min=29.0km az=151.0*
*MOS **29** 17:07:29.1±0.7, 50°.23N×156°.63E, h39km, mb4.4/1, Error ellipse: s-maj=27.4km s-min=7.0km az=75.3*
**ISC 29 17:07:24.4±4.1, 49°.8N±0°.2×156°.45E±0°.10, h55km, n37, σ1§02/37, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKR** | **Severo-Kuril's** | **0.87** | **346** | *i* P | **Pn** | **17 07 40.0** | **-0.6** |
| SKR | | | | *i* S | **Sn** | **17 07 52.0** | **-0.5** |
| **SKR** | **Severo-Kuril's** | **0.87** | **346** | *i* PN | **Pn** | **17 07 40.0** | **-0.6** |
| SKR | | | | *i* S | **Sn** | **17 07 51.9** | **-0.5** |
| SKR | | | | smax | smax | | |
| | comp=N,3μm,0.2s | | | | | | |
| **PAU** | **Pauzhetka** | **1.65** | **8** | *i* P | **Pn** | **17 07 50.8** | **-0.2** |
| PAU | | | | *i* S | **Sn** | **17 08 10.7** | **-0.3** |
| **PAU** | **Pauzhetka** | **1.65** | **8** | PN | **Pn** | **17 07 50.8** | **-0.2** |
| PAU | | | | S | **Sn** | **17 08 10.7** | **-0.3** |
| **RUS** | **Russkaya** | **2.91** | **26** | *e*P | **Pn** | **17 08 07.9** | **-0.2** |
| RUS | | | | *e*S | **Sn** | **17 08 40.3** | **-1.5** |
| **RUS** | **Russkaya** | **2.91** | **26** | PN | **Pn** | **17 08 07.9** | **-0.2** |
| RUS | | | | S | **Sn** | **17 08 40.3** | **-1.5** |
| **APC** | **Apacha** | **3.12** | **8** | *e*P | **Pn** | **17 08 12.9** | **+1.8** |
| **APC** | **Apacha** | **3.12** | **8** | PN | **Pn** | **17 08 12.9** | **+1.8** |
| **PETK** | **Petropavlovsk-** | **3.37** | **13** | P | **Pn** | **17 08 15.3** | **+0.8** |
| | comp=N,2.2nm,0.3s,baz=185,slow=14,SNR=30 | | | | | | |
| **PETK** | **Petropavlovsk-** | **3.37** | **13** | PN | **Pn** | **17 08 15.3** | **+0.8** |
| PETK | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | |
| **PET** | **Petropavlovsk** | **3.48** | **23** | *e*P | **Pn** | **17 08 16.7** | **+0.8** |
| PET | | | | *e*S | **Sn** | **17 08 56.0** | **+0.2** |
| **PET** | **Petropavlovsk** | **3.48** | **23** | PN | **Pn** | **17 08 16.7** | **+0.8** |
| PET | | | | S | **Sn** | **17 08 56.0** | **+0.2** |
| **UGLR** | **Uglovaya** | **3.69** | **23** | *e*P | **Pn** | **17 08 20.6** | **+1.6** |
| **AVH** | **Avacha** | **3.72** | **22** | *e*P | **Pn** | **17 08 21.1** | **+1.8** |
| **AVH** | **Avacha** | **3.72** | **22** | PN | **Pn** | **17 08 21.1** | **+1.8** |
| **SMAR** | **Somma** | **3.73** | **22** | *e*P | **Pn** | **17 08 21.0** | **+1.3** |
| **SMAR** | **Somma** | **3.73** | **22** | PN | **Pn** | **17 08 21.0** | **+1.3** |
| **SDLR** | **Sedlovina** | **3.77** | **23** | *e*P | **Pn** | **17 08 20.8** | **+0.8** |
| **SDLR** | **Sedlovina** | **3.77** | **23** | PN | **Pn** | **17 08 20.8** | **+0.8** |
| **SPN** | **Mys Shipunski** | **3.96** | **33** | *e*P | **Pn** | **17 08 23.1** | **+0.6** |
| SPN | | | | *e*S | **Sn** | **17 09 06.8** | **-0.8** |
| **SPN** | **Mys Shipunski** | **3.96** | **33** | PN | **Pn** | **17 08 23.1** | **+0.6** |
| SPN | | | | S | **Sn** | **17 09 06.8** | **-0.8** |
| **GNL** | **Ganaly** | **3.97** | **13** | *e*P | **Pn** | **17 08 23.7** | **+0.8** |
| **GNL** | **Ganaly** | **3.97** | **13** | PN | **Pn** | **17 08 23.7** | **+0.8** |
| **MKZ** | **Mys Kozlova** | **5.73** | **32** | *e*P | **Pn** | **17 08 46.3** | **-0.5** |
| **MKZ** | **Mys Kozlova** | **5.73** | **32** | PN | **Pn** | **17 08 46.3** | **-0.5** |
| **KUR** | **Kuril'sk** | **7.41** | **235** | *i* PN | Pn | 17 09 22.9 | +13 |
| **KBTR** | **Krutoberegovo** | **7.45** | **29** | *e*P | **Pn** | **17 09 11.5** | **+1.2** |
| **KBTR** | **Krutoberegovo** | **7.45** | **29** | PN | **Pn** | **17 09 11.5** | **+1.2** |
| **YSS** | **Yuzh-Sakhalins** | **9.55** | **258** | *i* PN | Pn | 17 09 49.7 | +11 |
| **H11N2** | **WAKE ISLAND Hy** | **31.18** | **161** | T | T | 17 47 28.7 | |
| | baz=348,slow=76,SNR=8.1 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **31.19** | **161** | T | T | 17 47 32.4 | |
| | baz=348,slow=76,SNR=6.0 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **31.19** | **161** | T | T | 17 47 29.1 | |
| | baz=348,slow=76,SNR=5.5 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **32.32** | **162** | T | T | 17 48 10.0 | |
| | baz=347,slow=76,SNR=25 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **32.33** | **162** | T | T | 17 48 04.9 | |
| | baz=347,slow=76,SNR=24 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **32.34** | **162** | T | T | 17 48 11.4 | |
| | baz=347,slow=76,SNR=16 | | | | | | |
| **ILAR** | **Eielson Array** | **32.75** | **41** | P | P | 17 13 49.3 | -2.3 |
| | comp=Z,0.4nm,0.9s,baz=270,slow=5.9,SNR=3.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.25** | **257** | P | P | 17 16 47.4 | -4.6 |
| | comp=Z,0.5nm,0.6s,baz=34,slow=7.5,SNR=5.7 | | | | | | |

*ISCJB **29** 17:09:24.9±1.1, 5°.10S±0°.08×133°.83E±0°.09, h28km, Error ellipse: s-maj=14.9km s-min=8.1km az=143.8*
*DJA **29** 17:09:26.3±2.3, 5°.S±12°×13°.4E±2°.0, h102km±28km, M4.0/8, mb4.1/8, mB4.5/3, MLv4.0/6, Mw(mB)3.7/3*
*AUST **29** 17:09:26.1, 4°.96S×134°.03E, h100km*
**ISC 29 17:09:26.3±1.3, 5°.0S±0°.1×133°.8E±0°.1, h28km, n17, σ1§30/16, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **2.61** | **322** | P | **Pn** | **17 10 08.3** | **+1.6** |
| | baz=2.7,SNR=5.1 | | | | | | |
| **FAKI** | **Fak Fak** | **2.61** | **322** | P | **Pn** | **17 10 06.9** | **+0.3** |
| **BNDI** | **Bandanaira** | **3.95** | **277** | P | **Pn** | **17 10 26.6** | **+1.5** |
| BNDI | | | | S | **Sn** | **17 11 08.5** | **-2.1** |
| **SWI** | **Sorong** | **4.85** | **328** | P | Pn | 17 10 42.7 | +5.2 |
| | baz=4.9,SNR=4.8 | | | | | | |
| **SWI** | **Sorong** | **4.85** | **328** | P | **Pn** | **17 10 38.2** | **+0.7** |
| **MSAI** | **Masohi** | **5.17** | **288** | P | **Pn** | **17 10 43.1** | **+1.2** |
| | 7.4nm,0.7s,306nm0.1nm | | | | | | |
| **AAI** | **Ambon** | **5.78** | **283** | P | **Pn** | **17 10 51.9** | **+1.5** |
| | baz=6.0,SNR=7.4 | | | | | | |
| **AAI** | **Ambon** | **5.78** | **283** | P | **Pn** | **17 10 51.8** | **+1.5** |
| | 21nm,0.7s,0.2nm | | | | | | |
| **NLAI** | **Namlea** | **6.95** | **284** | P | Pn | 17 11 09.4 | +3.1 |
| **KDU** | **Kakadu** | **7.76** | **190** | P | **Pn** | **17 11 18.6** | **+1.1** |
| | baz=7.9,SNR=24 | | | | | | |
| **MTN** | **Manton Dam** | **8.24** | **199** | P | **Pn** | **17 11 25.0** | **+0.9** |
| | baz=8.4,SNR=23 | | | | | | |
| **SANI** | **Sanana** | **8.37** | **290** | P | **Pn** | **17 11 25.5** | **-0.3** |
| | 7.5nm,0.8s | | | | | | |
| **SOEI** | **Soe** | **10.61** | **243** | P | **Pn** | **17 11 58.0** | **+1.4** |
| | baz=11,SNR=5.5 | | | | | | |
| **SOEI** | **Soe** | **10.61** | **243** | P | **Pn** | **17 11 57.7** | **+1.0** |
| | 13nm,1.2s | | | | | | |
| **BATI** | **Baumata** | **11.34** | **242** | P | **Pn** | **17 12 06.9** | **+0.3** |
| **KNRA** | **Kununurra** | **11.73** | **205** | P | **Pn** | **17 12 11.5** | **-0.4** |
| | baz=12,SNR=20 | | | | | | |
| **COEN** | **Coen** | **12.80** | **135** | P | **Pn** | **17 12 25.9** | **-0.7** |
| | baz=13,SNR=6.2 | | | | | | |

**TAP 29 17:10:18.9, 23°.04N×120°.80E, h9km, ML1.4, C, Taiwan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **STYT** | **Tauyuan** | **0.13** | **341** | *i* S | Sg | 17 10 24.5 | +0.4 |
| | baz=344 | | | | | | |
| **SGST** | **Jiashian** | **0.21** | **282** | *i* P | Pg | 17 10 23.8 | +0.6 |
| | baz=282 | | | | | | |
| **WTP** | **Ta-pu** | **0.27** | **320** | *i* P | Pb | 17 10 25.4 | -0.7 |
| | baz=320 | | | | | | |
| WTP | | | | S | Sb | 17 10 30.2 | -0.7 |
| | baz=320 | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **CHN1** | **Nanshi** | | **0.29** | **300** | *e*S | Sg | 17 10 28.4 | -0.4 |
| | baz=300 | | | | | | | |
| **SSD** | **Sandimen** | | **0.33** | **209** | *i* P | Pg | 17 10 25.8 | +0.3 |
| | baz=208 | | | | | | | |
| SSD | | | | | *e*S | Sg | 17 10 29.9 | 0.0 |
| | baz=208 | | | | | | | |

**IDC 29 17:12:59.9±5.7, 2°.32S×100°.80E, h0km, mb3.3/2, mb1 3.6/2, mb1mx3.2/37, mbtmp3.3/2, Error ellipse: s-maj=349.7km s-min=72.7km az=46.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **37.14** | **121** | P | P | 17 20 11.7 | -1.1 |
| | 0.2nm,0.5s,baz=294,slow=8.2,SNR=4.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.41** | **126** | P | P | 17 20 24.4 | +0.8 |
| | 0.4nm,0.6s,baz=301,slow=8.3,SNR=5.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **144.46** | **38** | PKP | PKPdf | 17 32 38.8 | -0.5 |
| | 0.3nm,0.7s,baz=300,slow=1.8,SNR=3.6 | | | | | | |

*IDC **29** 17:15:18.9±1.2, 3°.77S×99°.58E, h0km, mb3.9/10, mb1 4.0/11, mb1mx3.8/39, mbtmp3.9/11, ML4.3/1, MS2.8/3, Ms1 2.9/3, ms1mx2.6/30, Error ellipse: s-maj=43.4km s-min=17.2km az=47.0*
*NEIC **29** 17:15:20.5±1.0, 3°.68S×99°.67E, h10km, mb4.2/3, Error ellipse: s-maj=37.7km s-min=10.1km az=47.0*
**ISC 29 17:15:24.6±1.2, 3°.3S±0°.2×100°.1E±0°.2, h35km, n26, σ2§69/18, mb4.1/13, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **GSI** | **Gunungsitoli** | **5.25** | **331** | *e*Pn | **Pn** | **17 16 38.6** | **-2.1** |
| GSI | | | | *e*Sn | **Sn** | **17 17 35.1** | **-4.9** |
| **LEM** | **Lembang** | **8.25** | **115** | Pn | **Pn** | **17 17 24.9** | **+2.8** |
| | 3.7nm,0.3s,baz=300,slow=20,SNR=3.0 | | | | | | |
| LEM | | | | LR | LR | 17 20 52.9 | |
| | comp=Z,78nm,21.2s,baz=212,slow=39 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.75** | **119** | *e*Pn | **Pn** | **17 17 26.9** | **-1.8** |
| | 62nm,0.6s | | | | | | |
| CISI | | | | *e*Sn | **Sn** | **17 19 00.8** | **-5.5** |
| **CMAR** | **Chiang Mai Arr** | **21.68** | **357** | P | **P** | **17 20 14.2** | **+1.7** |
| | 1.3nm,0.8s,baz=185,slow=10,SNR=8.3 | | | | | | |
| CMAR | | | | LR | LR | 17 30 13.3 | |
| | comp=Z,23nm,19.4s,baz=105,slow=40 | | | | | | |
| **CHTO** | **Chiang Mai** | **22.04** | **357** | *e*P | **P** | **17 20 20.6** | **+4.3** |
| | 2.1nm,0.9s | | | | | | |
| **PALK** | **Pallekele** | **22.04** | **299** | LR | LR | 17 27 04.5 | |
| | comp=Z,26nm,20.4s,baz=116,slow=32 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.80** | **260** | T | T | 17 51 18.2 | |
| | baz=86,slow=75,SNR=11 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.81** | **260** | T | T | 17 50 41.0 | |
| | baz=86,SNR=12 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.82** | **260** | T | T | 17 51 19.5 | |
| | baz=86,slow=75,SNR=11 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.99** | **159** | T | T | 17 58 03.7 | |
| | baz=336,slow=76,SNR=5.2 | | | | | | |
| **H01W2** | **Cape

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | 0.5nm,0.4s,baz=188,slow=11,SNR=4.8 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.40** | **261** | T | T | 18 25 47.6 | |
| | baz=82,slow=75,SNR=8.6 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.41** | **261** | T | T | 18 26 03.9 | |
| | baz=82,slow=75,SNR=11 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.42** | **261** | T | T | 18 25 55.2 | |
| | baz=82,slow=75,SNR=9.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.36** | **118** | P | P | 17 59 41.2 | -0.6 |
| | 0.3nm,0.8s,baz=302,slow=9.7,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **38.46** | **124** | P | P | 17 59 51.5 | +0.4 |
| | 0.2nm,0.5s,baz=300,slow=7.4,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **51.69** | **6** | P | P | 18 01 36.0 | 0.0 |
| | 0.6nm,0.6s,baz=183,slow=8.5,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.63** | **345** | P | P | 18 01 42.9 | 0.0 |
| | 0.7nm,0.7s,baz=156,slow=8.5,SNR=5.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.82** | **350** | P | P | 18 02 26.7 | -0.5 |
| | 1.2nm,0.6s,baz=181,slow=5.9,SNR=6.3 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.21** | **39** | PKPbc | PKPbc | 18 12 09.9 | -0.4 |
| | 0.4nm,0.6s,baz=280,slow=1.3,SNR=5.2 | | | | | | |

*ISCJB **29** 18:02:34.9±0.5, 12°.47S±0'.09×14°.78W±0'.09, h15km, mb4.0/17, Error ellipse: s-maj=15.1km s-min=10.6km az=42.1*
*IDC **29** 18:02:34.3±0.8, 12°.53S×14°.81W, h0km, mb3.9/12, mb1 4.0/12, mb1mx3.8/37, mbtmp3.9/12, Error ellipse: s-maj=27.9km s-min=19.0km az=111.0*
*NEIC **29** 18:02:35.8±0.4, 12°.50S×14°.79W, h10km, mb4.4/5, Error ellipse: s-maj=12.7km s-min=10.6km az=141.0*
**ISC 29 18:02:36.6±0.6, 12°.5S±0'.1×14°.8W±0'.1, h15km, n29, σ0§85/21, mb4.0/17, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **H10S2** | **ASCENSION HYDR** | **3.52** | **3** | T | T | 18 07 24.5 | |
| | baz=179,slow=74,SNR=410 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **3.53** | **2** | T | T | 18 07 18.2 | |
| | baz=179,slow=74,SNR=226 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **3.54** | **3** | T | T | 18 07 13.0 | |
| | baz=179,slow=74,SNR=131 | | | | | | |
| **H10N1** | **ASCENSION HYDR** | **4.64** | **4** | T | T | 18 08 36.6 | |
| | baz=181 | | | | | | |
| **H10N3** | **ASCENSION HYDR** | **4.64** | **4** | T | T | 18 08 40.6 | |
| | baz=181,slow=74,SNR=48 | | | | | | |
| **H10N2** | **ASCENSION HYDR** | **4.66** | **4** | T | T | 18 08 38.9 | |
| | baz=181,slow=74,SNR=10 | | | | | | |
| **LIC** | **Lamto** | **20.99** | **28** | *e*P | **P** | **18 07 20.5** | **+0.9** |
| | 48nm,0.9s | | | | | | |
| **KIC** | **Kosan Boka** | **21.24** | **29** | *e*P | **P** | **18 07 22.0** | **-0.3** |
| | 20nm,0.9s | | | | | | |
| **TIC** | **Toumodi** | **21.36** | **28** | *e*P | **P** | **18 07 23.4** | **-0.2** |
| **DBIC** | **Dimbokro** | **21.46** | **28** | P | **P** | **18 07 24.3** | **-0.4** |
| | 3.1nm,0.7s,baz=187,slow=8.7,SNR=4.3 | | | | | | |
| **RCBR** | **Riachuelo** | **21.85** | **286** | P | **P** | **18 07 29.1** | **+0.2** |
| | 13nm,1.0s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.28** | **33** | P | **P** | **18 08 46.8** | **-0.7** |
| | 1.1nm,0.9s,baz=215,slow=10,SNR=5.4 | | | | | | |
| **LSZ** | **Lusaka** | **41.78** | **99** | P | **P** | **18 10 26.7** | **+0.7** |
| | 0.7nm,0.3s,baz=239,slow=5.9,SNR=3.5 | | | | | | |
| **LSZ** | **Lusaka** | **41.78** | **99** | P | **P** | **18 10 26.1** | **+0.1** |
| | 4.1nm,1.0s | | | | | | |
| **MDT** | **Midelt** | **46.10** | **12** | P | **P** | **18 10 59.7** | **-0.7** |
| | 1.9nm,0.8s,baz=225,slow=4.3,SNR=3.7 | | | | | | |
| **SAML** | **Samuel** | **47.62** | **269** | P | **P** | **18 11 13.2** | **+0.7** |
| | 4.8nm,1.2s | | | | | | |
| **LPAZ** | **La Paz** | **51.67** | **259** | P | **P** | **18 11 44.6** | **+0.4** |
| | 0.9nm,0.7s,baz=94,slow=4.9,SNR=5.4 | | | | | | |
| **LCO** | **Las Campanas** | **54.31** | **243** | P | P | 18 11 59.2 | -3.9 |
| | 39nm,1.4s | | | | | | |
| **SDV** | **Santo Domingo** | **59.40** | **288** | P | **P** | **18 12 39.6** | **+0.3** |
| **SNAA** | **Sanae** | **59.58** | **176** | P | **P** | **18 12 38.7** | **-0.8** |
| | 0.4nm,0.9s,baz=336,slow=12,SNR=3.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **68.73** | **38** | P | **P** | **18 13 42.1** | **+2.0** |
| | 0.7nm,0.7s,baz=248,slow=5.6,SNR=3.0 | | | | | | |
| **MSEY** | **Mahe Island** | **69.77** | **90** | P | P | 18 13 40.8 | -6.1 |
| **AKASG** | **Malin Array Be** | **73.71** | **27** | P | **P** | **18 14 10.0** | **+0.2** |
| | 1.1nm,0.6s,baz=228,slow=6.9,SNR=6.6 | | | | | | |
| **MAW** | **Mawson** | **73.83** | **157** | P | **P** | **18 14 09.7** | **-0.6** |
| | 1.1nm,0.8s,baz=288,slow=9.6,SNR=3.9 | | | | | | |
| **QSPA** | **South Pole Qui** | **77.65** | **180** | P | **P** | **18 14 33.1** | **+0.7** |
| | 2.7nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **80.44** | **19** | P | **P** | **18 14 46.9** | **-0.5** |
| | 1.5nm,0.8s,baz=168,slow=9.8,SNR=3.9 | | | | | | |
| **MIAR** | **Mount Ida** | **87.96** | **306** | P | **P** | **18 15 24.5** | **-1.8** |
| **VNDA** | **Vanda** | **90.12** | **179** | P | **P** | **18 15 35.5** | **-0.2** |
| | 0.7nm,1.0s,baz=214,slow=3.6,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **95.04** | **299** | P | **P** | **18 16 00.1** | **+0.7** |
| | 0.3nm,0.8s,baz=111,slow=5.1,SNR=3.4 | | | | | | |

*IDC **29** 18:03:02.6±0.9, 12°.48S×14°.61W, h0km, mb3.9/8, mb1 4.0/8, mb1mx3.6/37, mbtmp4.0/8, Error ellipse: s-maj=35.0km s-min=20.8km az=124.0*
*ISCJB **29** 18:03:03.6±0.6, 12°.4S±0'.1×14°.6W±0'.1, h18km, mb3.9/11, Error ellipse: s-maj=22.8km s-min=13.7km az=151.0*
*NEIC **29** 18:03:04.0±0.8, 12°.44S×14°.65W, h10km, mb4.3/3, Error ellipse: s-maj=26.3km s-min=15.9km az=157.0*
**ISC 29 18:03:05.4±0.7, 12°.5S±0'.2×14°.6W±0'.1, h18km, n14, σ1§60/13, mb4.0/11, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DBIC** | **Dimbokro** | **21.32** | **28** | P | **P** | **18 07 52.5** | **+1.0** |
| | 2.9nm,0.7s,baz=198,slow=13,SNR=2.5 | | | | | | |
| **RCBR** | **Riachuelo** | **22.03** | **285** | *e*P | **P** | **18 07 55.6** | **-3.7** |
| | 32nm,1.3s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **30.12** | **33** | P | **P** | **18 09 14.4** | **0.0** |
| | 0.5nm,0.7s,baz=210,slow=11,SNR=2.8 | | | | | | |
| **BDFB** | **Brasilia** | **32.56** | **260** | P | **P** | **18 09 37.3** | **+1.2** |
| | 2.4nm,0.6s,baz=120,slow=8.1,SNR=3.3 | | | | | | |
| **MBAR** | **Mbarara** | **46.46** | **79** | P | **P** | **18 11 30.2** | **-1.8** |
| | 0.5nm,0.7s | | | | | | |
| **LPAZ** | **La Paz** | **51.89** | **259** | P | **P** | **18 12 12.5** | **-1.6** |
| | 1.3nm,0.7s,baz=72,slow=3.2,SNR=4.7 | | | | | | |
| **NNA** | **Nana** | **60.71** | **263** | P | **P** | **18 13 17.5** | **+1.1** |
| **OTAV** | **Otavalo** | **64.56** | **276** | P | P | 18 13 40.0 | -2.7 |
| | 2.1nm,0.8s | | | | | | |
| **GTBY** | **Guantanamo Bay** | **67.68** | **298** | P | **P** | **18 14 02.7** | **+0.7** |
| **BCIP** | **Isla Barro Col** | **68.28** | **285** | P | **P** | **18 14 07.0** | **+1.0** |
| **AKASG** | **Malin Array Be** | **73.57** | **27** | P | **P** | **18 14 37.1** | **-0.1** |
| | 0.4nm,0.4s,baz=228,slow=6.5,SNR=4.8 | | | | | | |
| **MAW** | **Mawson** | **73.80** | **157** | P | **P** | **18 14 38.2** | **-0.2** |
| | 1.3nm,0.8s,baz=350,slow=15,SNR=3.9 | | | | | | |
| **FINES** | **FINESS Array B** | **80.32** | **19** | P | **P** | **18 15 15.7** | **+0.6** |
| | 0.9nm,0.6s,baz=220,slow=5.0,SNR=5.5 | | | | | | |
| **VNDA** | **Vanda** | **90.17** | **179** | P | **P** | **18 16 05.1** | **+0.9** |
| | 0.9nm,1.0s,baz=243,slow=7.4,SNR=5.4 | | | | | | |

*ISCJB **29** 18:03:20.8±0.2, 32°.82N±0'.02×115°.93W±0'.02, h22km±2km, Error ellipse: s-maj=3.0km s-min=2.6km az=10.2*
*NEIC **29** 18:03:21.8, 32°.83N×115°.95W, h12km, ML3.9(ECX), ML3.9(PAS), After PAS.*
*NEIC Felt [II] at El Centro. Felt in the Brawley-San Diego area. Also felt at Mexicali, Baja California.*
*ECX **29** 18:03:22.2±0.7, 32°.83N×115°.95W, h4km, MD3.7, ML3.9*
*MEX **29** 18:03:25.2±0.5, 32°.57N×115°.91W, h16km±8km, MD4.1*
**ISC 29 18:03:20.8±0.8, 32°.78N±0'.02×115°.93W±0'.02, h19km±1km, n77, σ1§14/111, 6C-6D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CRR** | **Carrizo Plain** | **0.11** | **344** | ⇑*iP* | **Pg** | **18 03 23.6** | **-1.1** |
| **YUH** | **Yuha Desert** | **0.13** | **176** | ⇓*iP* | **Pg** | **18 03 25.5** | **+0.5** |
| **WESC** | **Westside Schoo** | **0.17** | **98** | ⇑*iP* | **Pg** | **18 03 26.1** | **+0.7** |
| WESC | | | | *eS* | **Sg** | **18 03 29.6** | **+1.0** |
| **IBP** | **Imperial Bould** | **0.18** | **228** | ⇑*iP* | **Pg** | **18 03 26.2** | **+0.6** |
| **IBP** | **Imperial Bould** | **0.18** | **228** | P | **Pg** | **18 03 26.2** | **+0.6** |
| | baz=0.2,SNR=1000 | | | | | | |
| IBP | | | | S | **Sg** | **18 03 29.6** | **+0.6** |
| | baz=0.2 | | | | | | |
| **SWSC** | **Sam W. Stewart** | **0.20** | **36** | ⇑*iP* | **Pb** | **18 03 25.2** | **+0.1** |
| SWSC | | | | *i* S | **Sb** | **18 03 27.9** | **0.0** |
| **SWSC** | **Sam W. Stewart** | **0.20** | **36** | P | **Pb** | **18 03 25.2** | **+0.1** |
| | baz=0.2,SNR=1000 | | | | | | |
| SWSC | | | | S | **Sb** | **18 03 27.8** | **0.0** |
| | baz=0.2 | | | | | | |
| **RMX** | **La Rumorosa** | **0.22** | **214** | *e*P | **Pg** | **18 03 26.4** | **+0.1** |
| RMX | | | | *e*S | **Sg** | **18 03 30.1** | **+0.2** |
| RMX | | | | IAML | | 18 03 30.7 | |
| | comp=N,15μm,0.2s | | | | | | |
| **SGL** | **Mount Signal** | **0.22** | **127** | ⇓*iP* | **Pg** | **18 03 27.0** | **+0.8** |
| **CBKC** | **Canebrake** | **0.29** | **294** | ⇑*iP* | **Pb** | **18 03 27.5** | **0.0** |
| **DREC** | **Desert Rsrch C** | **0.41** | **87** | ⇑*iP* | **Pb** | **18 03 30.5** | **+1.0** |
| **MONP** | **Monument Peak** | **0.42** | **285** | P | **Pg** | **18 03 29.5** | **-0.1** |
| | baz=0.4,SNR=1000 | | | | | | |
| MONP | | | | S | **Sg** | **18 03 35.1** | **-0.5** |
| | baz=0.4 | | | | | | |
| **BAR** | **Barrett** | **0.63** | **261** | *e*P | **Pg** | **18 03 33.4** | **+0.1** |
| **BAR** | **Barrett** | **0.63** | **261** | *e*Pg | **Pb** | **18 03 33.2** | **0.0** |
| BAR | | | | *e*Sg | **Sb** | **18 03 41.4** | **-0.2** |
| **CPBX** | **Cerro Prieto** | **0.64** | **124** | *e*P | **Pn** | **18 03 34.7** | **-0.2** |
| CPBX | | | | *e*S | **Sn** | **18 03 44.4** | **-0.2** |
| **CPBX** | **Cerro Prieto** | **0.64** | **124** | *e*P | **Pn** | **18 03 34.8** | **-0.2** |
| CPBX | | | | *i* S | **Sg** | **18 03 42.8** | **+0.5** |
| **MBIG** | **Mexicali** | **0.72** | **121** | *e*P | **Pg** | **18 03 35.5** | **+0.5** |
| MBIG | | | | *e*S | **Sb** | **18 03 43.1** | **-1.2** |
| **CBX** | **Cerro Bola** | **0.77** | **233** | *e*P | **Pg** | **18 03 36.2** | **+0.2** |
| CBX | | | | *i* S | **Sb** | **18 03 44.7** | **-1.2** |
| **CBX** | **Cerro Bola** | **0.77** | **233** | *e*P | **Pg** | **18 03 36.6** | **+0.5** |
| CBX | | | | *e* | | 18 03 50.3 | |
| CBX | | | | IAML | | 18 03 50.3 | |
| | comp=E,4μm,0.4s | | | | | | |
| **CBX** | **Cerro Bola** | **0.77** | **233** | *e*P | **Pg** | **18 03 36.2** | **+0.2** |
| CBX | | | | *i* S | **Sb** | **18 03 44.7** | **-1.2** |
| **RDX** | **Rancho Dawling** | **0.85** | **180** | ⇓*e*P | **Pb** | **18 03 37.5** | **+0.4** |
| RDX | | | | ⇓*e* | | 18 03 50.6 | |
| RDX | | | | IAML | | 18 03 50.6 | |
| | comp=N,3μm,0.3s | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **0.93** | **332** | P | **Pb** | **18 03 37.6** | **-0.8** |
| | baz=0.9,SNR=402 | | | | | | |
| PFO | | | | S | **Sb** | **18 03 49.7** | **-0.8** |
| | baz=0.9 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **0.93** | **332** | *e*Pg | **Pb** | **18 03 37.4** | **-1.1** |
| PFO | | | | *e*Sg | **Sb** | **18 03 49.5** | **-1.0** |
| **BC3** | **Big Chuckawall** | **0.96** | **25** | P | **Pb** | **18 03 37.9** | **-1.0** |
| | baz=0.9,SNR=758 | | | | | | |
| BC3 | | | | S | **Sb** | **18 03 50.9** | **-0.4** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.97** | **74** | P | **Pb** | **18 03 38.6** | **-0.4** |
| | baz=1.0,SNR=948 | | | | | | |
| GLA | | | | S | **Sb** | **18 03 51.6** | **+0.2** |
| | baz=1.0 | | | | | | |
| **GLA** | **Glamis** | **0.97** | **74** | *e*Pg | **Pb** | **18 03 38.3** | **-0.7** |
| GLA | | | | *e*Sg | **Sg** | **18 03 52.3** | **-0.2** |
| **109C** | **Camp Elliot, M** | **0.99** | **276** | P | **Pb** | **18 03 39.3** | **-0.1** |
| | baz=1.0,SNR=99 | | | | | | |
| 109C | | | | S | **Sb** | **18 03 52.0** | **-0.1** |
| | baz=1.0 | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **1.22** | **357** | P | **Pn** | **18 03 41.7** | **-1.3** |
| | baz=1.2,SNR=170 | | | | | | |
| BELC | | | | S | **Sb** | **18 03 57.7** | **-1.0** |
| | baz=1.2 | | | | | | |
| **PBX** | **Punta Banda** | **1.23** | **213** | *e*P | **Pb** | **18 03 44.2** | **+0.6** |
| PBX | | | | *e*S | **Sg** | **18 04 00.8** | **-0.1** |
| **ZAX** | **El Zacaton** | **1.30** | **193** | *e*P | **Pg** | **18 03 45.5** | **-0.4** |
| ZAX | | | | IAML | | 18 04 03.9 | |
| | comp=N,2μm,0.4s | | | | | | |
| ZAX | | | | ⇓*e* | | 18 04 03.9 | |
| ZAX | | | | IAML | | 18 04 07.1 | |
| | comp=E,3μm,1.1s | | | | | | |
| ZAX | | | | ⇓*e* | | 18 04 07.1 | |
| **MURC** | **Murrieta** | **1.34** | **308** | P | **Pn** | **18 03 43.9** | **-0.6** |
| | baz=1.3,SNR=118 | | | | | | |
| MURC | | | | S | **Sn** | **18 04 01.8** | **-0.1** |
| | baz=1.3 | | | | | | |
| **ECBX** | **El Chinero** | **1.51** | **150** | *e*P | **Pb** | **18 03 48.8** | **+0.7** |
| ECBX | | | | *e*S | **Sg** | **18 04 09.5** | **0.0** |
| ECBX | | | | *e* | | 18 04 11.0 | |
| ECBX | | | | IAML | | 18 04 11.0 | |
| | comp=N,1μm,0.3s | | | | | | |
| ECBX | | | | *e* | | 18 04 15.1 | |
| ECBX | | | | IAML | | 18 04 15.1 | |
| | comp=E,1μm,0.5s | | | | | | |
| **IRM** | **Iron Mountain** | **1.52** | **25** | P | **Pn** | **18 03 46.2** | **-0.9** |
| | baz=1.5,SNR=112 | | | | | | |
| IRM | | | | Sb | **Sb** | **18 04 07.8** | **+0.4** |
| | baz=1.5 | | | | | | |
| **Y12C** | **Blythe** | **1.53** | **50** | P | **Pn** | **18 03 46.5** | **-0.6** |
| | baz=1.5,SNR=132 | | | | | | |
| Y12C | | | | S | **Sn** | **18 04 06.2** | **-0.2** |
| | baz=1.5 | | | | | | |
| **BBRC** | **Big Bear Solar** | **1.69** | **331** | P | **Pn** | **18 03 49.3** | **-0.3** |
| | baz=1.6,SNR=13 | | | | | | |
| BBRC | | | | Sb | **Sb** | **18 04 12.7** | **+0.3** |
| | baz=1.6 | | | | | | |
| **SPIG** | **San Pedro Mart** | **1.78** | **167** | *e*P | **Pn** | **18 03 49.1** | **-1.7** |
| SPIG | | | | *e*S | **Sn** | **18 04 09.0** | **-4.0** |
| **SPIG** | **San Pedro Mart** | **1.78** | **167** | *e*P | **Pb** | **18 03 53.2** | **+0.2** |
| **SPIG** | **San Pedro Mart** | **1.78** | **167** | *e*P | **Pn** | **18 03 49.1** | **-1.7** |
| SPIG | | | | *e*S | **Sn** | **18 04 09.0** | **-4.0** |
| **SPX** | **San Pedro Mart** | **1.78** | **167** | *e*P | **Pb** | **18 03 54.0** | **+1.0** |
| **SPX** | **San Pedro Mart** | **1.78** | **167** | *e*P | **Pn** | **18 03 49.0** | **-1.8** |
| SPX | | | | *e*S | **Sn** | **18 04 07.7** | **-5.4** |
| **GMRC** | **Granite Mounta** | **2.01** | **6** | P | **Pn** | **18 03 53.1** | **-0.7** |
| | baz=2.0,SNR=31 | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **2.05** | **316** | P | **Pn** | **18 03 53.8** | **-0.5** |
| | baz=2.0,SNR=54 | | | | | | |
| BFSC | | | | Sb | **Sb** | **18 04 23.0** | **+0.4** |
| | baz=2.0 | | | | | | |
| **HEC** | **Hector,Ludlow** | **2.07** | **351** | P | **Pn** | **18 03 53.8** | **-0.8** |
| | baz=2.0,SNR=43 | | | | | | |
| **CIS** | **Catalina Islan** | **2.16** | **287** | P | **Pn** | **18 03 57.2** | **+1.4** |
| | baz=2.1 | | | | | | |
| **FMP** | **Fort Macarthur** | **2.18** | **296** | Sb | **Sb** | **18 04 27.7** | **+1.3** |
| | baz=2.1 | | | | | | |
| **SCI** | **San Clemente I** | **2.21** | **276** | P | **Pn** | **18 03 58.0** | **+1.6** |
| | baz=2.2,SNR=21 | | | | | | |
| **MWC** | **Mount Wilson** | **2.28** | **310** | *e*Pn | **Pn** | **18 03 58.9** | **+1.3** |
| MWC | | | | *e*Sn | **Sb** | **18 04 28.9** | **-0.6** |
| **PASC** | **Pasadena Art C** | **2.34** | **307** | *e*Pn | **Pn** | **18 03 56.5** | **-1.8** |
| PASC | | | | *e*Pg | **Pb** | **18 04 02.5** | **+0.2** |
| PASC | | | | *e*Sn | **Sn** | **18 04 27.2** | **+0.8** |
| **LDFC** | **Landfair** | **2.39** | **16** | *e*Pn | **Pn** | **18 03 59.5** | **+0.5** |
| **GSC** | **Goldstone** | **2.62** | **344** | P | **Pn** | **18 04 01.6** | **-0.6** |
| | baz=2.6 | | | | | | |
| **GSC** | **Goldstone** | **2.62** | **344** | *e*Pn | **Pn** | **18 04 01.6** | **-0.6** |
| GSC | | | | *e*Pg | **Pb** | **18 04 08.5** | **+1.4** |
| **TUQ** | **Turquoise Moun** | **2.65** | **0** | P | **Pn** | **18 04 02.0** | **-0.6** |
| | baz=2.6 | | | | | | |
| **EDW2** | **Edwards Air Fo** | **2.70** | **321** | P | **Pn** | **18 04 03.2** | **-0.2** |
| | baz=2.7,SNR=43 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.77** | **106** | P | **Pn** | **18 04 04.5** | **+0.3** |
| | baz=2.8,SNR=20 | | | | | | |
| **214A** | **Organ Pipe Nat** | **2.77** | **106** | *e*Pn | **Pn** | **18 04 04.1** | **-0.1** |
| **OSI** | **Osito Adit** | **2.96** | **309** | Pn | **Pn** | **18 04 07.9** | **+1.1** |
| **SNCC** | **San Nicolas Is** | **3.05** | **280** | *e*Pn | **Pn** | **18 04 10.5** | **+2.5** |
| **LRMC** | **Laurel Mountai** | **3.06** | **332** | P | **Pn** | **18 04 08.1** | **-0.2** |
| | baz=3.0,SNR=8.7 | | | | | | |
| **ARVC** | **Arvin** | **3.36** | **315** | P | **Pn** | **18 04 12.5** | **+0.3** |
| | baz=3.3 | | | | | | |
| **MPMC** | **Manual Prospec** | **3.51** | **339** | P | **Pn** | **18 04 14.2** | **-0.4** |
| | baz=3.5,SNR=19 | | | | | | |
| **ISA** | **Isabella** | **3.56** | **324** | P | **Pn** | **18 04 14.9** | **-0.2** |
| | baz=3.5,SNR=12 | | | | | | |
| **ISA** | **Isabella** | **3.56** | **324** | *e*Pn | **Pn** | **18 04 14.8** | **-0.4** |
| **DAC** | **Darwin (Calif)** | **3.75** | **339** | *e*Pn | **Pn** | **18 04 17.6** | **-0.2** |
| **SHPR** | **Sheep Range** | **3.77** | **10** | Pn | **Pn** | **18 04 18.2** | **+0.2** |
| SHPR | | | | *e*Pg | **Pg** | **18 04 31.9** | **-1.2** |
| **VES** | **Vestal, Richgr** | **4.01** | **320** | P | **Pn** | **18 04 21.5** | **+0.3** |
| | baz=4.0 | | | | | | |
| **TPNV** | **Topopah Spring** | **4.17** | **357** | P | **Pn** | **18 04 24.1** | **+0.6** |
| | baz=4.1,SNR=8.1 | | | | | | |
| **TUC** | **Tucson** | **4.37** | **95** | *e*Pn | **Pn** | **18 04 25.8** | **-0.5** |
| **CCUT** | **Cedar City** | **5.20** | **23** | *e*Pn | **Pn** | **18 04 39.0** | **+1.2** |
| | comp=E,8.3nm,0.8s | | | | | | |
| **R11A** | **Troy Canyon, C** | **5.56** | **3** | *e*Pn | **Pn** | **18 04 43.3** | **+0.6** |
| | comp=E,4.2nm,0.6s | | | | | | |
| R11A | | | | *e*Pg | **Pg** | **18 05 05.8** | **-1.5** |
| **W18A** | **Petrified Fore** | **5.65** | **64** | *e*Pn | **Pn** | **18 04 46.2** | **+2.2** |
| | comp=E,13nm,0.5s | | | | | | |
| **121A** | **Cookes Peak, D** | **6.88** | **90** | P | **Pn** | **18 05 01.8** | **+1.0** |
| | baz=6.9,SNR=7.5 | | | | | | |
| **121A** | **Cookes Peak, D** | **6.88** | **90** | *e*Pn | **Pn** | **18 05 01.8** | **+1.0** |
| | comp=E,8.8nm,0.3s | | | | | | |
| **MVCO** | **Mesa Verde** | **7.53** | **52** | *e*Pn | Pn | 18 05 13.7 | +3.9 |
| | comp=E,7.2nm,0.5s | | | | | | |
| **SRU** | **San Rafael** | **7.69** | **33** | *e*Pn | **Pn** | **18 05 12.9** | **+1.0** |
| | comp=E,5.1nm,0.7s | | | | | | |
| **PV04** | **Paradox Valley** | **8.01** | **44** | *e*Pn | **Pn** | **18 05 18.2** | **+1.9** |
| **PV01** | **Paradox Valley** | **8.04** | **46** | Pn | **Pn** | **18 05 18.2** | **+1.5** |
| | comp=E,369nm,0.5s | | | | | | |
| **MNTX** | **Cornudas Mount** | **9.00** | **94** | *e*Pn | **Pn** | **18 05 31.0** | **+1.2** |
| | comp=E,1.4nm,0.6s | | | | | | |

*BJI **29** 18:05:21.4, 4°.05S×99°.61E, h31km, mb4.9/60, mB5.1/43, Ms4.8/34, Ms7 4.4/32*
*NEIC **29** 18:05:23.7±2.5, 3°.42S×99°.65E, h5km±15km, mb5.0/39, Error ellipse: s-maj=7.6km s-min=4.3km az=51.0*
*IDC **29** 18:05:23.1±0.4, 3°.42S×99°.60E, h0km, mb4.7/32, mb1 4.8/34, mb1mx4.8/36, mbtmp4.7/34, ML4.5/2, MS3.6/12, Ms1 3.6/12, ms1mx3.4/32, Error ellipse: s-maj=13.1km s-min=10.4km az=57.0*
*AUST **29** 18:05:25.0±3.2, 3°.43S×99°.70E, h13km±19km, Error ellipse: s-maj=14.0km s-min=5.6km az=58.0*
*MOS **29** 18:05:25.2±1.2, 3°.29S×99°.70E, h24km, mb5.2/44, Error ellipse: s-maj=8.8km s-min=4.8km az=114.2*
*KLM **29** 18:05:26.5, 3°.43S×99°.45E, h32km, mb4.9, ML4.7, MS5.7*
*DJA **29** 18:05:26.5±0.6, 3°.S±2'×10°.0E±°, h17km±4km, M4.9/77, mB5.4/34, mb5.0/77, MLv5.0/33, Mw(mB)4.9/34, Mwp7.0/1*
*ISCJB **29** 18:05:26.2±0.2, 3°.42S±0'.02×99°.67E±0'.02, h33km, mb5.0/107, MS3.8/16, Error ellipse: s-maj=3.7km s-min=2.3km az=35.7*
**ISC 29 18:05:28.3±0.4, 3°.44S±0'.03×99°.60E±0'.04, h34km±1km, h35km:pP-P, n576, σ1§25/592, mb5.0/108, MS3.7/16, 28C-26D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.79** | **31** | P | **Pn** | **18 05 41.8** | **-1.2** |
| PPSI | | | | S | **Sn** | **18 05 53.6** | **0.0** |
| **SISI** | **Saibi** | **2.16** | **346** | P | **Pn** | **18 05 59.4** | **-2.5** |
| SISI | | | | S | **Sn** | **18 06 26.7** | **-0.9** |
| **PDSI** | **Padang** | **2.66** | **19** | P | **Pn** | **18 06 07.0** | **-1.8** |
| **KSI** | **Kapahiang** | **2.99** | **94** | P | **Pn** | **18 06 13.6** | **+0.2** |
| KSI | | | | S | **Sn** | **18 06 49.6** | **+1.4** |
| **PPI** | **Padang Panjang** | **3.07** | **15** | P | **Pn** | **18 06 12.9** | **-1.4** |
| | baz=3.1,SNR=57 | | | | | | |
| PPI | | | | P | **Pn** | **18 06 13.0** | **-1.4** |
| | baz=3.1,SNR=58 | | | | | | |
| **PPI** | **Padang Panjang** | **3.07** | **15** | P | **Pn** | **18 06 13.0** | **-1.4** |
| PPI | | | | S | **Sn** | **18 06 48.7** | **-1.3** |
| **SDSI** | **Sungai Dareh** | **3.09** | **36** | P | **Pn** | **18 06 13.9** | **-0.8** |
| **MNAI** | **Manna** | **3.47** | **105** | P | **Pn** | **18 06 18.5** | **-1.4** |
| | baz=3.4,SNR=27 | | | | | | |
| **MNAI** | **Manna** | **3.47** | **105** | P | **Pn** | **18 06 18.7** | **-1.2** |
| **MNAI** | **Manna** | **3.47** | **105** | *e*Pn | **Pn** | **18 06 18.3** | **-1.6** |
| MNAI | | | | *e*Sn | **Sn** | **18 06 57.7** | **-2.2** |
| **LHSI** | **Lahat** | **3.93** | **96** | P | **Pn** | **18 06 26.2** | **-0.1** |
| LHSI | | | | S | **Sn** | **18 07 12.3** | **+1.0** |
| **BKNI** | **Bangkinang** | **4.01** | **21** | P | **Pn** | **18 06 26.7** | **-0.6** |
| | baz=4.0,SNR=7.7 | | | | | | |
| **BKNI** | **Bangkinang** | **4.01** | **21** | P | **Pn** | **18 06 26.5** | **-0.9** |
| **BKNI** | **Bangkinang** | **4.01** | **21** | *e*Pn | **Pn** | **18 06 26.2** | **-1.1** |
| **RGRI** | **Rengat** | **4.11** | **42** | P | **Pn** | **18 06 27.8** | **-0.9** |
| **MNSI** | **Mandailing Nat** | **4.21** | **360** | P | **Pn** | **18 06 27.8** | **-2.3** |
| **JMBI** | **JAMBI** | **4.42** | **66** | P | **Pn** | **18 06 32.4** | **-0.6** |
| **MDSI** | **Maura Dua** | **4.68** | **103** | P | **Pn** | **18 06 35.7** | **-0.9** |
| MDSI | | | | S | **Sn** | **18 07 28.8** | **-1.0** |
| **LWLI** | **Liwa** | **4.71** | **110** | P | **Pn** | **18 06 35.8** | **-1.3** |
| **GSI** | **Gunungsitoli** | **5.13** | **337** | P | Pn | 18 06 39.3 | -3.5 |
| | 132nm,0.7s,2μm0.8nm | | | | | | |
| GSI | | | | S | **Sn** | **18 07 36.8** | **-4.1** |
| | 132nm,0.7s,2μm0.8nm | | | | | | |
| **GSI** | **Gunungsitoli** | **5.13** | **337** | *e*Pn | Pn | 18 06 38.9 | -3.8 |
| GSI | | | | *e*Sn | Sn | 18 07 28.4 | -13 |
| **PMBI** | **Palembang** | **5.19** | **84** | P | **Pn** | **18 06 43.0** | **-0.5** |
| | 338nm,0.9s,4μm1.9nm | | | | | | |
| **KASI** | **Kota Agung** | **5.30** | **113** | P | **Pn** | **18 06 43.3** | **-1.8** |
| | 284nm,0.8s,9μm2.9nm | | | | | | |
| KASI | | | | S | **Sn** | **18 07 39.3** | **-5.7** |
| | 284nm,0.8s,9μm2.9nm | | | | | | |
| **KLI** | **Kotabumi** | **5.43** | **105** | P | **Pn** | **18 06 46.3** | **-0.5** |
| | 170nm,1.1s,3μm1.4nm | | | | | | |
| **PSI** | **Prapat** | **6.24** | **354** | Pn | Pn | 18 06 53.0 | -5.1 |
| | 4.7nm,0.3s,baz=333,slow=4.0,SNR=16 | | | | | | |
| **PSI** | **Prapat** | **6.24** | **354** | *e*P | Pn | 18 06 53.3 | -4.8 |
| **PSI** | **Prapat** | **6.24** | **354** | *e*Pn | Pn | 18 06 53.3 | -4.8 |
| **TPRI** | **Tanjung Pinang** | **6.56** | **49** | P | **Pn** | **18 07 00.7** | **-1.7** |
| | 88nm,0.9s,0.4nm | | | | | | |
| **KGM** | **Kluang** | **6.57** | **34** | ⇓P | **Pn** | **18 07 02.3** | **-0.3** |
| **PPBI** | **Pangkal Pinang** | **6.65** | **79** | P | **Pn** | **18 07 03.6** | **-0.1** |
| | 41nm,0.9s,751nm0.2nm | | | | | | |
| **MYKOM** | **Kota Tinggi** | **6.71** | **39** | ⇑P | **Pn** | **18 07 03.9** | **-0.6** |
| **MYKOM** | **Kota Tinggi** | **6.71** | **39** | *e*Pn | **Pn** | **18 07 04.2** | **-0.3** |
| **CGJI** | **Cibinong** | **6.84** | **118** | P | **Pn** | **18 07 03.4** | **-

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TSM | Tawau | 19.81 | 67 | ⇓P | | P | 18 09 55.7 | -0.4 | | |
| KHON | Khomkaen | 19.91 | 9 | P | | Pn | 18 10 02.7 | +3.7 | | |
| PBKT | Sadao Pong | 19.93 | 4 | P | | P | 18 09 58.1 | +0.8 | | |
| | 22nm,1.4s,3µm | | | | | | | | | |
| KDM | Kudat | 20.04 | 59 | ⇓P | | P | 18 09 58.6 | 0.0 | | |
| SPSI | Sidrap Palu | 20.13 | 92 | P | | P | 18 09 58.0 | -1.6 | | |
| | 45nm,0.8s,509nm | | | | | | | | | |
| KAPI | Kappang | 20.16 | 95 | P | | P | 18 09 58.8 | -1.1 | | |
| | 108nm,1.2s,baz=276,slow=9.1,SNR=12 | | | | | | | | | |
| KAPI | | | | LR | | LR | 18 18 48.0 | | | |
| | comp=Z,241nm,19.0s,baz=283,slow=40 | | | | | | | | | |
| KAPI | Kappang | 20.16 | 95 | P | | P | 18 09 58.6 | -1.3 | | |
| | 384nm,1.1s,SNR=8.7 | | | | | | | | | |
| KAPI | Kappang | 20.16 | 95 | *e*P | | P | 18 09 59.3 | -0.6 | | |
| | 89nm,1.1s | | | | | | | | | |
| PCI | Palu | 20.38 | 83 | P | | P | 18 10 02.0 | -0.3 | | |
| | 68nm,1.0s,728nm | | | | | | | | | |
| BKSI | Bulukumba | 20.55 | 96 | P | | P | 18 10 03.5 | -0.6 | | |
| | 71nm,1.1s,712nm | | | | | | | | | |
| MPSI | Mapaga | 20.63 | 80 | P | | P | 18 10 05.2 | +0.2 | | |
| | 41nm,0.9s,854nm | | | | | | | | | |
| MYLDM | Lahad Datu | 20.73 | 66 | ⇓P | | P | 18 10 06.5 | +0.4 | | |
| MYLDM | Lahad Datu | 20.73 | 66 | *e*P | | P | 18 10 06.7 | +0.5 | | |
| | 89nm,1.0s | | | | | | | | | |
| MHMT | Maesarieng | 21.55 | 356 | P | | P | 18 10 15.5 | +0.7 | | |
| | 58nm,0.9s,497nm | | | | | | | | | |
| PALK | Pallekele | 21.66 | 299 | P | | P | 18 10 14.0 | -2.1 | | |
| | 14nm,1.0s,baz=117,slow=7.0,SNR=4.5 | | | | | | | | | |
| PALK | | | | LR | | LR | 18 17 10.7 | | | |
| | comp=Z,187nm,19.8s,baz=116,slow=33 | | | | | | | | | |
| PALK | Pallekele | 21.66 | 299 | *e*P | | P | 18 10 16.3 | +0.2 | | |
| PALK | | | | pmax | | pmax | | | | |
| | comp=Z,32nm,1.1s | | | | | | | | | |
| PALK | Pallekele | 21.66 | 299 | *e*P | | P | 18 10 16.3 | +0.2 | | |
| | comp=Z,32nm,1.1s | | | | | | | | | |
| CM01 | Chiang Mai Arr | 21.73 | 358 | *e*P | | P | 18 10 16.6 | -0.3 | | |
| CM01 | | | | *e*S | | S | 18 14 18.5 | +2.9 | | |
| CMAR | Chiang Mai Arr | 21.77 | 358 | P | | P | 18 10 16.0 | -1.2 | | |
| | comp=Z,34nm,0.8s,baz=188,slow=9.3,SNR=6.4 | | | | | | | | | |
| CMAR | | | | PcP | | PcP | 18 14 18.3 | +1.2 | | |
| | comp=Z,1.9nm,0.8s,baz=216,slow=3.5,SNR=4.5 | | | | | | | | | |
| CMAR | | | | LR | | LR | 18 19 38.7 | | | |
| | comp=Z,69nm,19.0s,baz=186,slow=39 | | | | | | | | | |
| CMAR | Chiang Mai Arr | 21.77 | 358 | *ce*P | | P | 18 10 14.6 | -2.6 | | |
| CMAR | | | | pmax | | pmax | | | | |
| | comp=Z,34nm,0.8s | | | | | | | | | |
| LAMP | Lampang | 21.83 | 0 | P | | P | 18 10 18.1 | +0.3 | | |
| | comp=Z,19nm,1.1s,comp=Z,158nm | | | | | | | | | |
| BASI | Baing, Sumba | 21.88 | 109 | P | | P | 18 10 19.9 | +1.5 | | |
| | comp=Z,211nm,1.1s,comp=Z,2µm | | | | | | | | | |
| CHTO | Chiang Mai | 22.13 | 358 | P | | P | 18 10 20.7 | -0.4 | | |
| | comp=Z,103nm,1.2s | | | | | | | | | |
| CHTO | Chiang Mai | 22.13 | 358 | *e*P | | P | 18 10 20.1 | -0.9 | | |
| CHTO | | | | pmax | | pmax | | | | |
| | comp=Z,57nm,1.5s | | | | | | | | | |
| CHTO | Chiang Mai | 22.13 | 358 | *e*P | | P | 18 10 20.1 | -0.9 | | |
| | comp=Z,57nm,1.5s | | | | | | | | | |
| MRSI | Marisa | 22.66 | 81 | P | | P | 18 10 26.9 | 0.0 | | |
| | comp=Z,39nm,0.9s | | | | | | | | | |
| CMAI | Chiengmai2 | 23.24 | 359 | P | | P | 18 10 34.7 | +1.8 | | |
| | comp=Z,58nm,1.2s,comp=Z,6µm | | | | | | | | | |
| LUWI | Luwuk | 23.27 | 85 | P | | P | 18 10 32.3 | -0.9 | | |
| | comp=Z,58nm,1.1s,comp=Z,1µm | | | | | | | | | |
| LUWI | Luwuk | 23.27 | 85 | *e*P | | P | 18 10 30.2 | -3.0 | | |
| | comp=Z,164nm,1.6s | | | | | | | | | |
| GTOI | Gorontalo | 23.75 | 81 | P | | P | 18 10 36.7 | -1.0 | | |
| | comp=Z,35nm,1.2s | | | | | | | | | |
| QIZ | Qiongzhong | 24.50 | 24 | P | | P | 18 10 45.3 | +0.7 | | |
| QIZ | | | | S | | S | 18 15 04.5 | +1.5 | | |
| QIZ | | | | LN | | | | | | |
| | comp=Z,530nm,6.9s | | | | | | | | | |
| KMSI | Cibinong | 24.69 | 81 | P | | P | 18 10 47.0 | +0.6 | | |
| | comp=Z,107nm,1.0s,comp=Z,1µm | | | | | | | | | |
| BATI | Baumata | 24.80 | 107 | P | | P | 18 10 47.0 | -0.5 | | |
| | comp=Z,24nm,0.5s,baz=36,slow=1.4,SNR=8.4 | | | | | | | | | |
| BATI | | | | S | | S | 18 15 06.7 | -1.4 | | |
| | comp=Z,10.0nm,0.6s,baz=292,slow=19,SNR=5.9 | | | | | | | | | |
| BATI | | | | LR | | LR | 18 22 08.1 | | | |
| | comp=Z,315nm,21.4s,baz=304,slow=40 | | | | | | | | | |
| BATI | Baumata | 24.80 | 107 | P | | P | 18 10 46.6 | -0.9 | | |
| | comp=Z,30nm,1.2s | | | | | | | | | |
| SLVN | Son La | 24.98 | 10 | *e*P | | P | 18 10 49.3 | +0.3 | | |
| SLVN | | | | *e* | | | 18 11 09.3 | | | |
| SOEI | Soe | 25.28 | 106 | P | | P | 18 10 48.4 | -3.5 | | |
| | baz=25 | | | | | | | | | |
| SOEI | Soe | 25.28 | 106 | P | | P | 18 10 54.0 | +2.1 | | |
| | comp=Z,48nm,0.9s | | | | | | | | | |
| SOEI | Soe | 25.28 | 106 | *e*P | | P | 18 10 44.9 | -7.0 | | |
| | comp=Z,34nm,0.8s | | | | | | | | | |
| SOEI | | | | *e*S | | S | 18 15 12.2 | -3.7 | | |
| SANI | Sanana | 26.39 | 88 | P | | P | 18 11 01.8 | -0.1 | | |
| | comp=Z,16nm,1.4s | | | | | | | | | |
| H08S2 | Diego Garcia H | 27.30 | 260 | T | | T | 18 40 42.6 | | | |
| | baz=83,slow=74,SNR=356 | | | | | | | | | |
| H08S3 | Diego Garcia H | 27.30 | 260 | T | | T | 18 41 16.0 | | | |
| | baz=83,SNR=279 | | | | | | | | | |
| DGAR | Diego Garcia | 27.31 | 261 | P | | P | 18 11 12.6 | +2.5 | | |
| DGAR | Diego Garcia | 27.31 | 261 | P | | P | 18 11 12.6 | +2.5 | | |
| H08S1 | Diego Garcia H | 27.31 | 260 | T | | T | 18 41 01.5 | | | |
| | baz=83,slow=74,SNR=92 | | | | | | | | | |
| DAV | Davao City (W) | 27.95 | 68 | LR | | LR | 18 23 19.5 | | | |
| | comp=Z,372nm,19.4s,baz=324,slow=38 | | | | | | | | | |
| LBMI | Labuha | 28.02 | 85 | P | | P | 18 11 27.6 | +11 | | |
| KMI | Kunming | 28.56 | 6 | ⇓P | | P | 18 11 22.3 | +0.9 | | |
| KMI | | | | pP | | pP | 18 11 34.0 | +2.8 | | |
| KMI | | | | PMZ | | | | | | |
| | comp=Z,13nm,0.7s | | | | | | | | | |
| KMI | | | | PMZ | | | | | | |
| | comp=Z,180nm,4.4s | | | | | | | | | |
| KMI | | | | LZ | | | | | | |
| | comp=Z,320nm,11.5s | | | | | | | | | |
| GYA | Guiyang | 30.50 | 13 | P | | P | 18 11 41.0 | +2.5 | | |
| GYA | | | | pP | | pP | 18 11 50.3 | +2.0 | | |
| GYA | | | | PP | | PnPn | 18 12 41.8 | +3.7 | | |
| GYA | | | | PcP | | PcP | 18 14 39.0 | +1.8 | | |
| GYA | | | | S | | S | 18 16 39.5 | +1.7 | | |
| GYA | | | | sS | | sS | 18 16 55.5 | +1.3 | | |
| GYA | | | | SS | | ScP | 18 18 23.0 | +5.6 | | |
| GYA | | | | PMZ | | | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | | |
| GYA | | | | PMZ | | | | | | |
| | comp=Z,120nm,5.5s | | | | | | | | | |
| GYA | | | | LN | | | | | | |
| | comp=Z,530nm,18.0s | | | | | | | | | |
| GYA | | | | LE | | | | | | |
| | comp=Z,520nm,18.1s | | | | | | | | | |
| GYA | | | | LZ | | | | | | |
| | comp=Z,490nm,17.9s | | | | | | | | | |
| KNRA | Kununurra | 31.16 | 115 | P | | P | 18 11 43.0 | -1.3 | | |
| | baz=31,SNR=8.8 | | | | | | | | | |
| SWI | Sorong | 31.74 | 86 | P | | P | 18 11 47.8 | -1.6 | | |
| | baz=32,SNR=5.1 | | | | | | | | | |
| SWI | Sorong | 31.74 | 86 | P | | P | 18 11 47.7 | -1.7 | | |
| | comp=Z,36nm,1.2s | | | | | | | | | |
| SIJI | Sorong | 31.74 | 86 | P | | P | 18 11 47.6 | -1.9 | | |
| | comp=Z,27nm,1.1s,baz=183,slow=23,SNR=20 | | | | | | | | | |
| ODAN | Odare | 32.35 | 339 | *e*P | | P | 18 11 55.5 | +0.6 | | |
| | comp=Z,18nm,0.6s | | | | | | | | | |
| MTN | Manton Dam | 32.54 | 109 | P | | P | 18 11 54.8 | -1.6 | | |
| | baz=32,SNR=4.8 | | | | | | | | | |
| MTN | Manton Dam | 32.54 | 109 | *e*P | | P | 18 11 53.8 | -2.7 | | |
| | comp=Z,12nm,0.9s | | | | | | | | | |
| FAKI | Fak Fak | 32.60 | 90 | P | | P | 18 11 54.6 | -2.5 | | |
| | baz=32,SNR=4.2 | | | | | | | | | |
| FAKI | Fak Fak | 32.60 | 90 | P | | P | 18 11 57.1 | +0.1 | | |
| | comp=Z,26nm,1.3s | | | | | | | | | |
| FAKI | Fak Fak | 32.60 | 90 | *e*P | | P | 18 11 55.1 | -1.9 | | |
| | comp=Z,45nm,1.4s | | | | | | | | | |
| TAPN | Taplejung | 32.69 | 340 | *e*P | | P | 18 11 57.9 | -0.1 | | |
| | comp=Z,48nm,1.1s | | | | | | | | | |
| RAMN | Ramite | 32.72 | 338 | *e*P | | P | 18 11 59.0 | +0.8 | | |
| | comp=Z,15nm,0.6s | | | | | | | | | |
| NWAO | Narrogin (SRO) | 33.66 | 153 | P | | P | 18 12 05.6 | -0.4 | | |
| | comp=Z,15nm,0.8s,baz=30,slow=0.2,SNR=6.4 | | | | | | | | | |
| NWAO | Narrogin (SRO) | 33.66 | 153 | P | | P | 18 11 59.6 | -6.4 | | |
| NWAO | | | | pmax | | pmax | | | | |
| | comp=Z,28nm,1.0s | | | | | | | | | |
| NWAO | Narrogin (SRO) | 33.66 | 153 | P | | P | 18 12 05.9 | -0.1 | | |
| | baz=34,SNR=4.2 | | | | | | | | | |
| NWAO | Narrogin (SRO) | 33.66 | 153 | P | | P | 18 11 59.6 | -6.4 | | |
| | comp=Z,28nm,1.0s | | | | | | | | | |
| PKI | Pulchoki | 33.73 | 337 | *e*P | | P | 18 12 07.2 | +0.1 | | |
| PKIN | Phulchoki | 33.74 | 337 | *e*P | | P | 18 12 08.0 | +0.9 | | |
| | comp=Z,5.8nm,0.6s | | | | | | | | | |
| KDU | Kakadu | 33.78 | 108 | P | | P | 18 12 04.8 | -2.4 | | |
| | baz=34,SNR=3.8 | | | | | | | | | |
| GUN | Gumba | 33.86 | 338 | *e*P | | P | 18 12 08.8 | +0.6 | | |
| | comp=Z,38nm,0.6s | | | | | | | | | |
| DMN | Daman | 33.89 | 337 | *e*P | | P | 18 12 08.6 | +0.3 | | |
| LSA | Lhasa | 33.94 | 347 | P | | P | 18 12 10.0 | +1.0 | | |
| LSA | | | | PMZ | | | | | | |
| | comp=Z,30nm,1.1s | | | | | | | | | |
| LSA | Lhasa | 33.94 | 347 | *e*P | | P | 18 12 10.0 | +1.0 | | |
| LSA | | | | pmax | | pmax | | | | |
| | comp=Z,13nm,0.6s | | | | | | | | | |
| LSA | Lhasa | 33.94 | 347 | *e*P | | P | 18 12 10.0 | +1.0 | | |
| | comp=Z,13nm,0.6s | | | | | | | | | |
| KKN | Kakani | 33.98 | 337 | *e*P | | P | 18 12 09.3 | +0.2 | | |
| | comp=Z,27nm,1.0s | | | | | | | | | |
| H01W3 | Cape Leeuwin H | 34.07 | 158 | T | | T | 18 48 56.3 | | | |
| | baz=336,slow=76,SNR=19 | | | | | | | | | |
| H01W2 | Cape Leeuwin H | 34.08 | 158 | T | | T | 18 48 55.9 | | | |
| | baz=336,slow=76,SNR=20 | | | | | | | | | |
| H01W1 | Cape Leeuwin H | 34.09 | 158 | T | | T | 18 49 14.9 | | | |
| | baz=336,slow=76,SNR=17 | | | | | | | | | |
| CD2 | Chengdu | 34.39 | 6 | *e*P | | P | 18 12 13.3 | +0.9 | | |
| CD2 | | | | pP | | pP | 18 12 22.5 | +0.2 | | |
| CD2 | | | | sP | | sP | 18 12 26.5 | 0.0 | | |
| CD2 | | | | PP | | PP | 18 13 31.8 | +1.0 | | |
| CD2 | | | | S | | S | 18 17 40.5 | +2.3 | | |
| CD2 | | | | sS | | sS | 18 17 56.5 | +1.9 | | |
| CD2 | | | | PMZ | | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | | |
| CD2 | | | | PMZ | | | | | | |
| | comp=Z,120nm,5.2s | | | | | | | | | |
| GKN | Gorkha | 34.43 | 336 | *e*P | | P | 18 12 13.1 | +0.2 | | |
| | comp=Z,21nm,0.7s | | | | | | | | | |
| KOLN | Koldanda | 34.65 | 335 | *e*P | | P | 18 12 15.4 | +0.5 | | |
| | comp=Z,81nm,0.8s | | | | | | | | | |
| KMBL | Kambalda | 34.81 | 145 | P | | P | 18 12 16.5 | +0.4 | | |
| | baz=35,SNR=5.4 | | | | | | | | | |
| ENH | Enshi | 34.83 | 15 | *e*P | | P | 18 12 15.6 | -0.6 | | |
| | comp=Z,6.1nm,0.6s | | | | | | | | | |
| DANN | Dangsing | 35.09 | 335 | *e*P | | P | 18 12 19.0 | +0.2 | | |
| WHN | Wuhan | 36.62 | 22 | ⇓P | | P | 18 12 33.0 | +1.6 | | |
| WHN | | | | S | | S | 18 18 08.8 | -3.4 | | |
| WHN | | | | LZ | | | | | | |
| | comp=Z,890nm,19.0s | | | | | | | | | |
| WRA | Warramunga Arr | 37.63 | 119 | P | | P | 18 12 39.8 | -0.5 | | |
| | comp=Z,11nm,0.8s,baz=303,slow=9.0,SNR=133 | | | | | | | | | |
| WRA | | | | PcP | | PcP | 18 14 58.1 | +0.5 | | |
| | comp=Z,2.2nm,0.8s,baz=307,slow=1.9,SNR=4.2 | | | | | | | | | |
| WRAB | Tennant Creek | 37.64 | 119 | *c i*P | | P | 18 12 40.2 | -0.2 | | |
| WRAB | | | | pmax | | pmax | | | | |
| | comp=Z,50nm,0.8s | | | | | | | | | |
| WRAB | Tennant Creek | 37.64 | 119 | P | | P | 18 12 39.0 | -1.4 | | |
| | comp=Z,163nm,0.6s,SNR=30 | | | | | | | | | |
| WRAB | Tennant Creek | 37.64 | 119 | *e*P | | P | 18 12 39.6 | -0.7 | | |
| | comp=Z,25nm,0.9s | | | | | | | | | |
| XAN | Xi'an | 38.30 | 13 | P | | P | 18 12 45.5 | -0.3 | | |
| XAN | | | | pP | | pP | 18 12 55.0 | -0.8 | | |
| XAN | | | | PMZ | | | | | | |
| | comp=Z,33nm,0.9s | | | | | | | | | |
| ASAR | Alice Springs | 38.75 | 124 | P | | P | 18 12 49.6 | -0.1 | | |
| | comp=Z,7.5nm,0.7s,baz=299,slow=7.8,SNR=190 | | | | | | | | | |
| ASAR | | | | PcP | | PcP | 18 15 01.4 | +0.3 | | |
| | comp=Z,3.0nm,0.9s,baz=293,slow=3.5,SNR=4.4 | | | | | | | | | |
| ASAR | | | | S | | S | 18 18 54.7 | +10 | | |
| | comp=Z,0.6nm,0.7s,baz=297,slow=15,SNR=3.4 | | | | | | | | | |
| ASAR | | | | LR | | LR | 18 29 37.9 | | | |
| | comp=Z,33nm,21.7s,baz=302,slow=38 | | | | | | | | | |
| AS01 | Alice Springs | 38.79 | 124 | *e*P | | P | 18 12 49.2 | -0.9 | | |
| LZH | Lanzhou | 39.52 | 5 | *e*P | | P | 18 12 57.0 | +0.9 | | |
| LZH | | | | pP | | pP | 18 13 04.0 | -2.2 | | |
| LZH | | | | sP | | sP | 18 13 07.5 | -2.8 | | |
| LZH | | | | PP | | PnPn | 18 14 31.3 | +0.9 | | |
| LZH | | | | S | | S | 18 18 57.0 | +0.5 | | |
| LZH | | | | sS | | sS | 18 19 14.5 | +1.5 | | |
| LZH | | | | SS | | SS | 18 21 52.3 | +0.2 | | |
| LZH | | | | PMZ | | | | | | |
| | comp=Z,30nm,1.0s | | | | | | | | | |
| LZH | | | | PMZ | | | | | | |
| | comp=Z,130nm,5.4s | | | | | | | | | |
| LZH | | | | LN | | | | | | |
| | comp=Z,710nm,14.1s | | | | | | | | | |
| LZH | | | | LE | | | | | | |
| | comp=Z,560nm,14.9s | | | | | | | | | |
| LZH | | | | LZ | | | | | | |
| | comp=Z,890nm,16.0s | | | | | | | | | |
| NJ2 | Nanjing | 39.76 | 26 | *e*P | | P | 18 12 57.3 | -0.6 | | |
| NJ2 | | | | PMZ | | | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | | | |
| QIS | Mount Isa | 42.49 | 117 | P | | P | 18 13 20.6 | -0.1 | | |
| | baz=42,SNR=6.3 | | | | | | | | | |
| GTA | Gaotai | 42.64 | 0 | ⇓P | | P | 18 13 22.0 | +0.3 | | |
| GTA | | | | pP | | pP | 18 13 32.0 | +0.2 | | |
| GTA | | | | sP | | sP | 18 13 36.0 | +0.1 | | |
| GTA | | | | PcP | | PcP | 18 15 10.3 | -3.1 | | |
| GTA | | | | S | | S | 18 19 44.0 | +1.3 | | |
| GTA | | | | sS | | sS | 18 19 59.8 | +0.5 | | |
| GTA | | | | SS | | SS | 18 22 48.3 | -5.6 | | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,5.0nm,1.3s | | | | | | | | | |
| GTA | | | | PMZ | | | | | | |
| | comp=Z,170nm,6.2s | | | | | | | | | |
| GTA | | | | LN | | | | | | |
| | comp=Z,220nm,18.0s | | | | | | | | | |
| GTA | | | | LE | | | | | | |
| | comp=Z,150nm,15.9s | | | | | | | | | |
| GTA | | | | LZ | | | | | | |
| | comp=Z,200nm,16.9s | | | | | | | | | |
| TIA | Tai'an | 42.72 | 21 | ⇑P | | P | 18 13 22.3 | +0.1 | | |
| TIA | | | | PMZ | | | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| HHC | Hu-ho-hao-te | 45.42 | 13 | *e*P | | P | 18 13 45.5 | +1.6 | | |
| HHC | | | | sP | | sP | 18 13 59.5 | +1.3 | | |
| HHC | | | | PP | | PP | 18 15 33.0 | +2.4 | | |
| HHC | | | | S | | S | 18 20 25.5 | +2.5 | | |
| HHC | | | | PMZ | | | | | | |
| | comp=Z,32nm,0.9s | | | | | | | | | |
| HHC | | | | PMZ | | | | | | |
| | comp=Z,210nm,7.8s | | | | | | | | | |
| HHC | | | | LN | | | | | | |
| | comp=Z,270nm,14.8s | | | | | | | | | |
| HHC | | | | LE | | | | | | |
| | comp=Z,310nm,14.2s | | | | | | | | | |
| HHC | | | | LZ | | | | | | |
| | comp=Z,250nm,14.1s | | | | | | | | | |
| BJT | Baijiatuau | 45.85 | 18 | *e*P | | P | 18 13 48.1 | +0.9 | | |
| BJT | | | | pmax | | pmax | | | | |
| | comp=Z,53nm,1.2s | | | | | | | | | |
| BJT | Baijiatuau | 45.85 | 18 | *e*P | | P | 18 13 48.1 | +0.9 | | |
| | comp=Z,53nm,1.2s | | | | | | | | | |
| BJI | Beijing | 45.87 | 18 | P | | P | 18 13 48.5 | +1.2 | | |
| BJI | | | | PP | | PP | 18 15 36.3 | +1.0 | | |
| BJI | | | | S | | S | 18 20 32.5 | +3.2 | | |
| BJI | | | | PMZ | | | | | | |
| | comp=Z,34nm,1.1s | | | | | | | | | |
| BJI | | | | PMZ | | | | | | |
| | comp=Z,270nm,4.2s | | | | | | | | | |
| BJI | | | | LN | | | | | | |
| | comp=Z,440nm,9.6s | | | | | | | | | |
| BJI | | | | LE | | | | | | |
| | comp=Z,180nm,5.8s | | | | | | | | | |
| BJI | | | | LZ | | | | | | |
| | comp=Z,190nm,16.4s | | | | | | | | | |
| MTSU | Mount Surprise | 46.13 | 112 | P | | P | 18 13 49.9 | 0.0 | | |
| | baz=46,SNR=9.0 | | | | | | | | | |
| JNU | Nakatsue | 46.88 | 37 | P | | P | 18 13 55.6 | +0.1 | | |
| | comp=Z,43nm,1.0s,baz=186,slow=6.8,SNR=3.2 | | | | | | | | | |
| JNU | Nakatsue | 46.88 | 37 | *e*P | | P | 18 13 54.0 | -1.4 | | |
| | comp=Z,24nm,1.1s | | | | | | | | | |
| PMG | Port Moresby | 47.59 | 100 | *ce*P | | P | 18 14 01.3 | 0.0 | | |
| PMG | | | | pmax | | pmax | | | | |
| | comp=Z,108nm,2.5s | | | | | | | | | |
| PMG | Port Moresby | 47.59 | 100 | *e*P | | P | 18 14 00.3 | -1.0 | | |
| | comp=Z,56nm,1.3s | | | | | | | | | |
| KSH | Kashi | 47.96 | 335 | P | | P | 18 14 02.5 | -1.4 | | |
| KSH | | | | *e*pP | | pP | 18 14 12.5 | -1.6 | | |
| KSH | | | | *e*sP | | sP | 18 14 16.5 | -1.7 | | |
| KSH | | | | *e*PP | | PP | 18 15 53.5 | -2.7 | | |
| KSH | | | | *e*ScP | | ScP | 18 19 22.5 | -1.4 | | |
| KSH | | | | S | | S | 18 20 53.8 | -5.7 | | |
| KSH | | | | ScS | | ScS | 18 23 51.8 | -3.0 | | |
| KSH | | | | PMZ | | | | | | |
| | comp=Z,14nm,0.9s | | | | | | | | | |
| KSH | | | | PMZ | | | | | | |
| | comp=Z,170nm,5.8s | | | | | | | | | |
| KSH | | | | LN | | | | | | |
| | comp=Z,160nm,5.4s | | | | | | | | | |
| KSH | | | | LE | | | | | | |
| | comp=Z,230nm,5.2s | | | | | | | | | |
| KSH | | | | LZ | | | | | | |
| | comp=Z,230nm,5.5s | | | | | | | | | |
| WMQ | Urumqi | 48.25 | 348 | P | | P | 18 14 07.5 | +1.5 | | |
| WMQ | | | | pP | | pP | 18 14 17.0 | +0.8 | | |
| WMQ | | | | PP | | PP | 18 15 59.0 | +0.3 | | |
| WMQ | | | | S | | S | 18 21 00.0 | -3.4 | | |
| WMQ | | | | SS | | SS | 18 24 29.0 | -4.3 | | |
| WMQ | | | | PMZ | | | | | | |
| | comp=Z,52nm,1.0s | | | | | | | | | |
| WMQ | | | | PMZ | | | | | | |
| | comp=Z,140nm,5.0s | | | | | | | | | |
| WMQ | | | | LN | | | | | | |
| | comp=Z,71nm,15.0s | | | | | | | | | |
| WMQ | | | | LE | | | | | | |
| | comp=Z,64nm,15.0s | | | | | | | | | |
| CTAO | Charters Tower | 48.37 | 114 | *e*P | | P | 18 14 06.9 | -0.3 | | |
| CTAO | | | | pmax | | pmax | | | | |
| | comp=Z,22nm,1.1s | | | | | | | | | |
| CTAO | Charters Tower | 48.37 | 114 | *e*P | | P | 18 14 06.9 | -0.3 | | |
| | comp=Z,22nm,1.1s | | | | | | | | | |
| KSAR | Wonju Array Be | 48.43 | 30 | P | | P | 18 14 07.6 | +0.2 | | |
| KSAR | Wonju Array Be | 48.43 | 30 | P | | P | 18 14 07.5 | +0.2 | | |
| KSRS | Korea Array | 48.46 | 30 | P | | P | 18 14 07.5 | 0.0 | | |
| | comp=Z,18nm,1.0s,baz=224,slow=8.2,SNR=30 | | | | | | | | | |
| KSRS | | | | LR | | LR | 18 34 30.9 | | | |
| | comp=Z,52nm,20.2s,baz=209,slow=36 | | | | | | | | | |
| KS01 | Wonju Array Si | 48.46 | 30 | *e*P | | P | 18 14 07.6 | 0.0 | | |
| SFK | Sufi-Kurgan | 49.44 | 334 | P | | P | 18 14 15.6 | +0.2 | | |
| SFK | | | | pmax | | pmax | | | | |
| | comp=Z,22nm,1.1s | | | | | | | | | |
| PDGK | Podgornoye | 49.97 | 341 | *i*P | | P | 18 14 20.0 | +1.0 | | |
| PDGK | | | | pmax | | pmax | | | | |
| | comp=Z,49nm,1.1s | | | | | | | | | |
| KZA | Kyzart | 50.42 | 337 | P | | P | 18 14 23.5 | +0.6 | | |
| | SNR=5.7 | | | | | | | | | |
| UCH | Uchtor | 50.84 | 336 | P | | P | 18 14 26.6 | +0.4 | | |
| | SNR=9.0 | | | | | | | | | |
| TKM2 | Tokmak 2 | 51.00 | 337 | *e*P | | P | 18 14 27.4 | +0.3 | | |
| TKM2 | | | | pmax | | pmax | | | | |
| | comp=Z,29nm,0.8s | | | | | | | | | |
| TKM2 | Tokmak 2 | 51.00 | 337 | P | | P | 18 14 27.4 | +0.3 | | |
| | SNR=30 | | | | | | | | | |
| TKM2 | Tokmak 2 | 51.00 | 337 | *e*P | | P | 18 14 27.4 | +0.3 | | |
| | comp=Z,29nm,0.8s | | | | | | | | | |
| KBK | Karagaybulak | 51.02 | 337 | P | | P | 18 14 27.8 | +0.5 | | |
| | SNR=17 | | | | | | | | | |
| AML | Almayashu | 51.09 | 335 | P | | P | 18 14 28.4 | +0.4 | | |
| | SNR=14 | | | | | | | | | |
| AAK | Ala-Archa | 51.19 | 336 | *d i*P | | P | 18 14 28.8 | +0.3 | | |
| AAK | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,0.9s | | | | | | | | | |
| AAK | Ala-Archa | 51.19 | 336 | P | | P | 18 14 28.0 | -0.5 | | |
| | comp=Z,55nm,0.6s,SNR=6.3 | | | | | | | | | |
| AAK | Ala-Archa | 51.19 | 336 | P | | P | 18 14 29.0 | +0.6 | | |
| | SNR=8.1 | | | | | | | | | |
| AAK | Ala-Archa | 51.19 | 336 | *e*P | | P | 18 14 28.6 | +0.2 | | |
| | comp=Z,8.1nm,0.9s | | | | | | | | | |
| FRU | Bishkek | 51.30 | 337 | *e*P | | P | 18 14 29.0 | -0.2 | | |
| CHMS | Chumysh | 51.39 | 337 | P | | P | 18 14 29.9 | +0.1 | | |
| | SNR=7.0 | | | | | | | | | |
| SONM | Songino Array | 51.41 | 6 | P | | P | 18 14 31.0 | +1.0 | | |
| | comp=Z,16nm,0.8s,baz=190,slow=9.1,SNR=89 | | | | | | | | | |
| SONM | | | | PcP | | PcP | 18 15 45.0 | +0.8 | | |
| | comp=Z,2.6nm,0.7s,baz=188,slow=5.7,SNR=4.0 | | | | | | | | | |
| SONA1 | Songino Array | 51.42 | 6 | *e*P | | P | 18 14 30.5 | +0.4 | | |
| EKS2 | Erkin-Say | 51.50 | 336 | *e*P | | P | 18 14 31.5 | +0.7 | | |
| EKS2 | | | | pmax | | pmax | | | | |
| | comp=Z,24nm,0.8s | | | | | | | | | |
| EKS2 | Erkin-Say | 51.50 | 336 | P | | P | 18 14 31.5 | +0.7 | | |
| | SNR=24 | | | | | | | | | |
| EKS2 | Erkin-Say | 51.50 | 336 | *e*P | | P | 18 14 31.5 | +0.7 | | |
| | comp=Z,24nm,0.8s | | | | | | | | | |
| ULN | Ulaanbaatar | 51.51 | 6 | *de*P | | P | 18 14 31.5 | +0.7 | | |
| ULN | | | | pmax | | pmax | | | | |
| | comp=Z,28nm,1.2s | | | | | | | | | |
| ULN | Ulaanbaatar | 51.51 | 6 | *e*P | | P | 18 14 31.5 | +0.7 | | |
| | comp=Z,19nm,0.9s | | | | | | | | | |
| USP | Ospenovka | 51.72 | 337 | P | | P | 18 14 32.5 | +0.3 | | |
| | SNR=32 | | | | | | | | | |
| MNAS | Manas | 51.89 | 335 | P | | P | 18 14 33.5 | -0.2 | | |
| MNAS | | | | pmax | | pmax | | | | |
| | comp=Z,14nm,0.7s | | | | | | | | | |
| MK01 | Makanchi Array | 52.28 | 345 | *e*P | | P | 18 14 36.2 | -0.2 | | |
| MK31 | Makanchi Array | 52.31 | 345 | *e*P | | P | 18 14 36.5 | -0.1 | | |
| MK31 | | | | pmax | | pmax | | | | |
| | comp=Z,20nm,0.8s | | | | | | | | | |
| MKAR | Makanchi Array | 52.31 | 345 | P | | P | 18 14 36.3 | -0.2 | | |
| | comp=Z,13nm,0.6s,baz=152,slow=9.2,SNR=98 | | | | | | | | | |
| MKAR | Makanchi Array | 52.31 | 345 | *e*P | | P | 18 14 36.6 | 0.0 | | |
| MKAR | Makanchi Array | 52.31 | 345 | *e*P | | P | 18 14 36.6 | 0.0 | | |
| MAKZ | Makanchi | 52.40 | 345 | *e*P | | P | 18 14 37.2 | 0.0 | | |
| CN2 | Changchun | 52.46 | 23 | *e*P | | P | 18 14 37.8 | +0.1 | | |
| CN2 | | | | PMZ | | | | | | |
| | comp=Z,30nm,1.2s | | | | | | | | | |
| JHJ2 | Mitsune | 52.60 | 43 | *e*P | | P | 18 14 37.2 | -1.8 | | |
| | comp=Z,8µm,2.4s | | | | | | | | | |
| KK31 | Karatay Array | 53.25 | 334 | *i*P | | P | 18 14 42.7 | -0.9 | | |
| KK31 | | | | pmax | | pmax | | | | |
| | comp=Z,2.0nm,0.5s | | | | | | | | | |
| KKAR | Karatay Array | 53.25 | 334 | *e*P | | P | 18 14 42.8 | -0.9 | | |
| KKAR | Karatay Array | 53.25 | 334 | *e*P | | P | 18 14 42.8 | -0.9 | | |
| MAJO | Matsushiro | 53.64 | 39 | *e*P | | P | 18 14 45.0 | -1.6 | | |
| MAJO | | | | pmax | | pmax | | | | |
| | comp=Z,11nm,1.0s | | | | | | | | | |
| MAJO | Matsushiro | 53.64 | 39 | *e*P | | P | 18 14 45.0 | -1.6 | | |
| | comp=Z,11nm,1.0s | | | | | | | | | |
| MAT | Matsushiro | 53.64 | 39 | P | | P | 18 14 45.1 | -1.5 | | |
| MJAR | Matsushiro Arr | 53.64 | 39 | P | | P | 18 14 45.9 | -0.7 | | |
| | comp=Z,11nm,1.0s,baz=219,slow=8.1,SNR=15 | | | | | | | | | |
| MJAR | | | | LR | | LR | 18 39 09.8 | | | |
| | comp=Z,51nm,18.0s,baz=230,slow=38 | | | | | | | | | |
| ZAK | Zakamensk | 53.71 | 3 | *e*P | | P | 18 14 46.5 | -0.4 | | |
| ZAK | | | | pmax | | pmax | | | | |
| | comp=Z,5.0nm,1.1s | | | | | | | | | |
| EIDS | Eidsvold | 54.00 | 119 | *e*P | | P | 18 14 49.8 | +0.4 | | |
| | comp=Z,21nm,1.1s | | | | | | | | | |
| HVS | Khovu-Aksy | 54.60 | 355 | *e*P | | P | 18 14 54.0 | +0.6 | | |
| HVS | | | | pmax | | pmax | | | | |
| | comp=Z,9.0nm,1.1s | | | | | | | | | |
| MDJ | Mudanjiang | 54.85 | 26 | P | | P | 18 14 56.0 | +0.8 | | |
| MDJ | | | | PMZ |

comp=Z,32nm,1.2s
**NVS Novosibirsk 59.65 349** ⇑*i*P **P 18 15 28.7 -0.2**
NVS *i* 18 15 39.1
NVS pmax pmax
comp=Z,12nm,0.9s
NVS pmax pmax
comp=N,4.0nm,0.6s
NVS pmax pmax
comp=E,4.0nm,0.7s
**HNR Honiara 60.20 99** *e*P **P 18 15 32.8 -0.7**
HNR pmax pmax
comp=Z,53nm,0.9s
**HNR Honiara 60.20 99** *e*P **P 18 15 32.8 -0.7**
comp=Z,53nm,0.9s
**HABR Khabarovsk 60.22 26** *e*P **P 18 15 30.1 -2.9**
HABR *e**PP **pP 18 15 40.3 -3.1**
HABR *e* 18 16 15.5
HABR *e* 18 17 42.6
HABR *e*S **S 18 23 41.4 -3.1**
HABR *e* 18 23 53.8
HABR *e* 18 25 17.7
HABR *e*SS **SS 18 27 39.7 -2.7**
HABR pmax pmax
comp=E,126nm,3.0s
HABR pmax pmax
comp=Z,38nm,3.0s
HABR pmax pmax
comp=N,79nm,3.0s
HABR MLR MLR
comp=Z,102nm,20.0s
**VOSK Vostochnaya 60.95 341** P **P 18 15 36.7 -1.2**
VOSK pmax pmax
comp=Z,8.0nm,0.6s
**ASAJ Asahikawa 61.02 34** *e*P **P 18 15 38.6 +0.1**
comp=Z,127nm,1.7s
**BVA0 Borovoye Array 61.40 340** *i*P **P 18 15 39.9 -1.0**
BVA0 pmax pmax
comp=Z,15nm,1.3s
**BRVK Borovoye 61.46 340** *e*P **P 18 15 40.5 -0.8**
BRVK pmax pmax
comp=Z,15nm,1.2s
**BRVK Borovoye 61.46 340** P **P 18 15 40.6 -0.8**
comp=Z,68nm,0.6s,SNR=5.9
**BRVK Borovoye 61.46 340** *e*P **P 18 15 40.0 -1.3**
comp=Z,22nm,1.3s
**ZRNK Zerenda 61.81 340** P **P 18 15 42.6 -1.1**
ZRNK pmax pmax
comp=Z,11nm,1.1s
**CHKZ Chkalovo 61.87 341** P **P 18 15 43.3 -0.7**
CHKZ pmax pmax
comp=Z,25nm,1.2s
**BOD Bodaibo 62.16 9** *e*P **P 18 15 45.5 -0.4**
BOD pmax pmax
comp=Z,19nm,1.0s
**KMBO Kilima Mbogo 62.33 271** P **P 18 15 49.1 +0.8**
comp=Z,1.3nm,0.8s,baz=55,slow=9.7,SNR=5.5
KMBO LR LR 18 37 19.2
comp=Z,50nm,21.4s,baz=96,slow=31
**KMBO Kilima Mbogo 62.33 271** *e*P **P 18 15 48.9 +0.6**
KMBO pmax pmax
comp=Z,3.0nm,1.0s
**KMBO Kilima Mbogo 62.33 271** *e*P **P 18 15 48.9 +0.6**
comp=Z,2.9nm,1.0s
**AB31 Akbulak array 62.71 332** *i*P **P 18 15 48.9 -0.9**
AB31 pmax pmax
comp=Z,15nm,0.7s
**ABKAR Akbulak array 62.71 332** *e*P **P 18 15 48.4 -1.4**
**YSS Yuzh-Sakhalins 62.91 32** *e*P **P 18 15 50.2 -0.9**
YSS *e* 18 16 05.0
YSS pmax pmax
comp=Z,60nm,1.2s
**CASY Casey 63.19 175** *e*P **P 18 15 52.7 +0.1**
**AKTO Aktyubinsk 64.43 332** P **P 18 15 59.8 -1.3**
AKTO pmax pmax
comp=Z,23nm,1.3s
**GNI Garni 66.29 317** P **P 18 16 10.7 -2.9**
**GNI Garni 66.29 317** P **P 18 16 10.7 -2.9**
**DGRG David-gareji 66.47 318** P **P 18 16 15.4 +0.8**
**DGRG David-gareji 66.47 318** P **P 18 16 15.3 +0.8**
**SVE Sverdlovsk 67.86 338** ⇓*i*P **P 18 16 23.1 +0.1**
SVE pmax pmax
comp=Z,31nm,1.2s
**NCK Nalchik 68.58 320** *e*P **P 18 16 26.4 -1.4**
**MAW Mawson 68.80 194** P **P 18 16 29.8 +1.1**
comp=Z,5.3nm,1.0s,baz=32,slow=9.5,SNR=8.8
**MAW Mawson 68.80 194** *e*P **P 18 16 29.2 +0.5**
MAW pmax pmax
comp=Z,1.0nm,1.0s
**MAW Mawson 68.80 194** P **P 18 16 30.0 +1.4**
baz=69,SNR=6.2
**MAW Mawson 68.80 194** *e*P **P 18 16 29.2 +0.5**
comp=Z,1.4nm,1.0s
**MBAR Mbarara 68.86 271** *e*P **P 18 16 30.9 +0.5**
MBAR pmax pmax
comp=Z,5.0nm,0.9s
**MBAR Mbarara 68.86 271** *e*P **P 18 16 30.9 +0.5**
comp=Z,5.0nm,0.9s
**KBZ Khabaz 69.14 320** P **P 18 16 31.2 0.0**
comp=Z,12nm,0.8s,baz=119,slow=5.2,SNR=22
**YAK Yakutsk 69.23 15***d* *i*P **P 18 16 30.4 -1.0**
YAK *e* 18 16 41.3
YAK *e*S S 18 25 28.0 -7.0
YAK *e* 18 26 19.4
YAK *e*SS **SS 18 30 02.7 +0.6**
YAK pmax pmax
comp=Z,58nm,1.2s
YAK pmax pmax
comp=N,19nm,1.1s
YAK pmax pmax
comp=E,15nm,1.4s
YAK pmax pmax
comp=Z,193nm,5.2s
YAK pmax pmax
comp=E,98nm,3.5s
YAK pmax pmax
comp=N,119nm,4.8s
YAK smax smax
comp=N,191nm,5.6s
YAK smax smax
comp=E,42nm,2.7s
YAK MLR MLR
comp=Z,77nm,17.0s
YAK MLR MLR
comp=N,46nm,18.0s
YAK MLR MLR
comp=E,42nm,18.0s
**KIV Kislovodsk 69.37 320** *i*P **P 18 16 31.1 -1.7**
KIV *i* 18 16 41.9
KIV pmax pmax
comp=Z,17nm,1.2s
KIV MLR MLR
comp=Z,39nm,18.0s
**EIL Elat 69.97 303** P **P 18 16 37.0 +0.4**
baz=70,SNR=8.2
**MALT Malatya 70.02 313** ⇑P **P 18 16 37.2 +0.3**
**MALT Malatya 70.02 313** ⇑*i*P **P 18 16 37.2 +0.3**
**SOC Sochi 71.16 318** *e*P **P 18 16 41.8 -1.8**
SOC *e*S **S 18 25 57.9 -0.3**
SOC pmax pmax
comp=Z,17nm,0.7s
**LSZ Lusaka 71.17 255** P **P 18 16 44.0 -0.4**
LSZ pmax pmax
comp=Z,4.0nm,1.1s
**LSZ Lusaka 71.17 255** P **P 18 16 44.0 -0.4**
comp=Z,4.3nm,1.1s
**VRH Novokhopyorsk 73.29 326** *e*P **P 18 16 53.9 -2.3**
VRH pmax pmax
comp=Z,20nm,0.9s
VRH pmax pmax
comp=N,30nm,1.0s
VRH pmax pmax
comp=E,40nm,1.2s
**BRTR Keskin Array B 74.00 313** P **P 18 16 59.5 -1.3**
comp=E,5.4nm,0.8s,baz=134,slow=7.1,SNR=20
**BRTR Keskin Array B 74.00 313** *i*P **P 18 16 59.5 -1.3**
BRTR pmax pmax
comp=Z,5.0nm,0.7s
**PETK Petropavlovsk- 74.31 32** P **P 18 17 02.2 0.0**
comp=Z,4.6nm,0.6s,baz=188,slow=4.1,SNR=4.5
**VORD Divnogorie 74.55 325** *e*P **P 18 17 02.1 -1.5**
VORD pmax pmax
comp=Z,10.0nm,1.1s
VORD pmax pmax
comp=N,30nm,2.3s
VORD pmax pmax
comp=E,10.0nm,0.6s
**BOSA Boshof 74.62 241** P **P 18 17 06.5 +1.9**
comp=E,2.8nm,0.8s,baz=56,slow=3.0,SNR=3.3
BOSA LR LR 18 45 36.7
comp=E,72nm,18.6s,baz=142,slow=32
**BR231 Keskin MP Arra 74.67 313** *e*P P 18 17 00.3 -4.4
**VSR Storozhevoye 74.73 325** *e*P **P 18 17 02.9 -1.7**
VSR pmax pmax
comp=Z,30nm,1.3s
VSR pmax pmax
comp=N,10.0nm,1.0s
VSR pmax pmax
comp=E,10.0nm,0.8s
**PET Petropavlovsk 74.78 32** *e*P **P 18 17 04.6 -0.2**
PET pmax pmax
comp=Z,25nm,1.1s
**LPSR Galich'ya Gora 75.47 327** *e*P **P 18 17 07.9 -0.9**
LPSR pmax pmax
comp=Z,10.0nm,0.9s
LPSR pmax pmax
comp=N,6.0nm,1.0s
LPSR pmax pmax
comp=E,10.0nm,1.6s
**SEY Seymchan 77.11 22** *e*P **P 18 17 16.8 -1.1**
**BKZ Black Stump Fm 77.67 129** *e*P **P 18 17 22.2 +0.5**
**OBN Obninsk 77.80 328** *i*P **P 18 17 20.4 -1.6**
OBN *i* 18 17 30.9
OBN pmax pmax
comp=Z,37nm,1.7s
**URZ Urewera 78.07 128** P P 18 17 18.7 -5.2
**KLMR Klimovskoe 78.95 334** *e*P **P 18 17 26.6 -1.6**
KLMR pmax pmax
comp=Z,39nm,2.2s
**AKASG Malin Array Be 80.38 323** P **P 18 17 35.1 -1.2**
comp=Z,0.7nm,0.4s,baz=86,slow=5.2,SNR=9.5
**AKASG Malin Array Be 80.38 323** *i*P **P 18 17 35.0 -1.2**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**VRI Vrincioaia 80.64 317** ⇑P **P 18 17 38.3 +0.6**
**VRI Vrincioaia 80.64 317** ⇑*i*P **P 18 17 38.3 +0.6**
**PLOR Plostina 80.68 317** ⇑P **P 18 17 37.1 -0.9**
**PLOR Plostina 80.68 317** ⇑*i*P **P 18 17 37.1 -0.9**
**VNDA Vanda 80.83 169** P **P 18 17 38.5 +0.3**
comp=Z,2.7nm,1.1s,baz=298,slow=4.2,SNR=8.2
**VNDA Vanda 80.83 169** *e*P **P 18 17 38.6 +0.4**
**TESR Tescani 80.85 318** ⇑*i*P **P 18 17 39.0 +0.1**
**MLR Muntele Rosu 81.07 317** ⇑P **P 18 17 40.6 +0.4**
**MLR Muntele Rosu 81.07 317** ⇑*i*P **P 18 17 40.6 +0.4**
**TMCR Tamitsa 81.10 337** *e*P **P 18 17 39.7 -0.1**
TMCR pmax pmax
comp=Z,18nm,0.8s
**DOPR Dopca 81.57 317** ⇓*i*P **P 18 17 43.3 +0.6**
**VOIR 81.67 317** ⇑P P 18 17 48.3 +5.0
**VOIR 81.67 317** ⇑*i*P P 18 17 48.3 +5.0
**SBA Scott Base 81.93 169** *e*P **P 18 17 44.2 +0.2**
SBA pmax pmax
comp=Z,4.0nm,0.8s
**SBA Scott Base 81.93 169** *e*P **P 18 17 44.2 +0.2**
comp=Z,4.1nm,0.8s
**BURAR Bucovina Array 82.08 319** ⇓P **P 18 17 46.4 +1.0**
**BURAR Bucovina Array 82.08 319** ⇓*i*P **P 18 17 46.4 +1.0**
**BUR04 Bucovina Ar. S 82.08 319** *e*P **P 18 17 46.0 +0.5**
**GZR Gura Zlata 83.22 316** ⇓P **P 18 17 51.4 0.0**
**GZR Gura Zlata 83.22 316** ⇓*i*P **P 18 17 51.4 0.0**
**DRGR 83.56 318** ⇑P **P 18 17 53.5 +0.4**
**DRGR 83.56 318** ⇑*i*P **P 18 17 53.5 +0.4**
**VSU Vasula 84.04 330***ce*P **P 18 17 54.5 -0.7**
VSU pmax pmax
comp=Z,224nm,2.5s
**BZS Buzias 84.07 316** ⇓P **P 18 17 55.7 +0.1**
**BZS Buzias 84.07 316** ⇓*i*P **P 18 17 55.7 +0.1**
**KWP Kalwaria Pacla 84.15 320** ⇑P P 18 17 50.9 -5.1
**KWP Kalwaria Pacla 84.15 320** ⇑*i*P P 18 17 50.8 -5.2
**SIRR Siria 84.16 317** ⇑*i*P **P 18 17 56.6 +0.4**
**KOLS Kolonicke sedl 84.29 320** *e*P **P 18 17 57.7 +1.0**
KOLS pmax pmax
comp=Z,14nm,1.0s
**KOLS Kolonicke sedl 84.29 320** *e*P **P 18 17 57.7 +1.0**
**APA Apatity 84.29 339** *e*P P 18 18 10.0 +14
APA MLR MLR
comp=Z,2μm,17.0s
**BILL Bilibino 84.64 20** *e*P **P 18 17 58.8 +0.7**
BILL pmax pmax
comp=Z,8.0nm,1.1s
**SUW Suwalki 84.83 325** *e*P **P 18 17 59.0 -0.2**
**SUW Suwalki 84.83 325** *e*P **P 18 17 59.1 -0.2**
**DIVS Divibare 84.93 315** ⇑*i*P **P 18 18 00.1 -0.1**
**STHS Stebnicka Huta 85.04 320** *e*P **P 18 18 01.1 +0.6**
STHS pmax pmax
comp=Z,4.0nm,1.0s
**STHS Stebnicka Huta 85.04 320** *e*P **P 18 18 01.1 +0.6**
STHS *e* 18 27 52.8
**PDG Podgorica 85.19 313** ⇑*i*P **P 18 18 01.1 -0.3**
**FINES FINESS Array B 85.20 332** P **P 18 18 01.0 0.0**
comp=Z,3.4nm,0.5s,baz=117,slow=5.9,SNR=40
**FINES FINESS Array B 85.20 332** *i*P **P 18 18 01.0 0.0**
FINES pmax pmax
comp=Z,3.0nm,0.5s
**PSZ Piszkesteto 85.65 318** ⇓P **P 18 18 03.8 +0.1**
**PSZ Piszkesteto 85.65 318** ⇓*i*P **P 18 18 03.8 +0.1**
**VYHS Vyhne 86.44 319** *e*P **P 18 18 07.6 +0.1**
VYHS pmax pmax
comp=Z,43nm,2.9s
**VYHS Vyhne 86.44 319** *e*P **P 18 18 07.6 +0.1**
**QSPA South Pole Qui 86.53 180** P **P 18 18 08.0 +0.3**
comp=Z,5.6nm,1.0s,baz=308,slow=2.3,SNR=10
**QSPA South Pole Qui 86.53 180** *e*P **P 18 18 07.3 -0.4**
QSPA *e* 18 18 17.0
**ARCES ARCESS Array B 87.69 340** P **P 18 18 13.5 +0.4**
comp=Z,13nm,1.0s,baz=110,slow=4.7,SNR=19
**KRLC Kraliky 88.01 320** *e*P **P 18 18 15.9 +0.8**
**KRLC Kraliky 88.01 320** *e*P **P 18 18 15.9 +0.8**
**DPC Dobruska-Polom 88.34 320** *e*P **P 18 18 17.7 +1.1**
**DPC Dobruska-Polom 88.34 320** *e*P **P 18 18 17.7 +1.1**
**GEC2 GERESS Array S 89.86 319** *e*P **P 18 18 24.5 +0.6**
**GEC2 GERESS Array S 89.86 319** *e*P **P 18 18 24.5 +0.6**
**GERES GERESS Array B 89.86 319** P **P 18 18 24.4 +0.6**
comp=Z,3.9nm,1.0s,baz=101,slow=4.2,SNR=18
**BRG Berggiesshubel 89.90 321** *e*P **P 18 18 24.2 +0.3**
comp=Z,12nm,1.4s
**BRG Berggiesshubel 89.90 321** *e*P **P 18 18 24.2 +0.3**
BRG pmax pmax
comp=Z,12nm,1.4s
**SNAA Sanae 90.66 198** P **P 18 18 27.5 +0.4**
**SNAA Sanae 90.66 198** P **P 18 18 27.3 +0.2**
comp=Z,1.3nm,1.1s,baz=13,slow=1.5,SNR=8.1
**SNAA Sanae 90.66 198** *e*P **P 18 18 26.7 -0.4**
SNAA pmax pmax
comp=Z,2.0nm,1.3s
**SNAA Sanae 90.66 198** *e*P **P 18 18 26.7 -0.4**
comp=Z,2.0nm,1.3s
**KEST Kesra 92.19 305** P **P 18 18 36.4 +1.4**
comp=Z,8.9nm,0.9s,baz=311,slow=2.2,SNR=9.2
**NOA NORSAR Array B 92.20 331** P **P 18 18 34.2 -0.2**
comp=Z,2.7nm,0.9s,baz=94,slow=4.7,SNR=4.7
**VNA2 Neumayer--Watz 92.27 198** P **P 18 18 35.5 +1.0**
baz=72,slow=4.8
**TORD Torodi Ar. Bea 98.47 283** P **P 18 19 03.5 -0.4**
comp=Z,0.6nm,0.8s,baz=92,slow=4.3,SNR=4.2
TORD LR LR 18 58 56.1
comp=Z,40nm,21.9s,baz=65,slow=33
**ILAR Eielson Array 102.98 24** PP PP 18 23 36.2 -1.0
comp=Z,0.5nm,0.9s,baz=294,slow=6.9,SNR=4.1
**B05A Bryant 122.85 32** P **PKPdf 18 24 21.4 +0.4**
baz=123
**I03D Drain, OR 124.82 37** P **PKPdf 18 24 25.5 +0.6**
baz=125
**G05D Wamic, OR 125.11 34** P **PKPdf 18 24 26.3 +0.8**
baz=125
**I04A Tendick Farm, 125.33 36** P **PKPdf 18 24 26.7 +0.8**
baz=125
**NEW Newport 125.38 29** P **PKPdf 18 24 26.4 +0.5**
baz=125
**J04D Umpqua Nationa 125.82 37** P **PKPdf 18 24 27.4 +0.3**
baz=126
**J05D Fort Rock, OR 126.32 36** P **PKPdf 18 24 28.1 +0.1**
baz=126
**M02C Callahan 126.40 39** P **PKPdf 18 24 28.6 +0.5**
baz=126
**N02D Trinity Center 126.72 39** P **PKPdf 18 24 29.1 +0.4**
baz=127
**M04C Macdoel 126.82 38** P **PKPdf 18 24 29.5 +0.6**
baz=127
**O03D Paynes Creek 127.67 40** P **PKPdf 18 24 30.4 -0.2**
baz=128
**MSO Missoula 127.92 29** P **PKPdf 18 24 30.9 -0.1**
baz=128
**EGMT Eagleton 128.92 25** P **PKPdf 18 24 32.8 +0.1**
baz=129
**HLID Hailey 129.97 32** P **PKPdf 18 24 35.6 +0.6**
baz=130
**A25A Svangstu Ranch 130.69 20** P **PKPdf 18 24 36.2 +0.2**
baz=130
**DGMT Dagmar 130.72 21** P **PKPdf 18 24 36.0 -0.1**
baz=130
**NVAR Mina Array Bea 130.96 40** PKP **PKPdf 18 24 38.3 +1.2**
comp=Z,1.3nm,0.7s,baz=267,slow=1.9,SNR=6.8
**A26A Wade Farm, Ken 131.08 19** P **PKPdf 18 24 36.6 -0.1**
baz=131
**ULM Lac du Bonnet 131.56 13** PKP **PKPdf 18 24 37.8 +0.2**
comp=Z,1.4nm,0.3s,baz=0.0,slow=5.1,SNR=2.6
**A32A Rocking H Ranc 132.65 14** P **PKPdf 18 24 40.3 +0.7**
baz=132
**R11A Troy Canyon, C 132.71 38** P **PKPdf 18 24 40.8 +0.4**
baz=133
**MPMC Manual Prospec 132.85 42** P **PKPdf 18 24 40.4 -0.3**
baz=133
**A33A Warroad 132.90 13** P **PKPdf 18 24 40.7 +0.5**
baz=133
**DUG Dugway 133.15 34** P **PKPdf 18 24 41.2 +0.1**
baz=133
**TPNV Topopah Spring 133.15 40** P **PKPdf 18 24 41.7 +0.5**
baz=133
**EDW2 Edwards Air Fo 133.18 43** P **PKPdf 18 24 41.4 +0.2**
baz=133
**C31A Landman Farms, 133.36 16** P **PKPdf 18 24 41.0 0.0**
baz=133
**B34A Aery, Baudette 133.49 13** P **PKPdf 18 24 41.5 +0.3**
baz=133
**G26A Maurine 134.00 22** P **PKPdf 18 24 42.6 +0.2**
baz=134
**G27A Dupree 134.17 21** P **PKPdf 18 24 43.2 +0.5**
baz=134
**RSSD Black Hills 134.43 24** *e*PKIKP **PKPdf 18 24 43.0 -0.5**
**RSSD Black Hills 134.43 24** *e*PKPdf **PKPdf 18 24 43.0 -0.5**
**I25A Rochford 134.63 24** P **PKPdf 18 24 44.0 +0.2**
baz=134
**EYMN Ely 134.65 10** P **PKPdf 18 24 43.8 +0.3**
baz=134
**D35A Remer 134.95 13** P **PKPdf 18 24 43.0 -1.1**
baz=135
**C39A Grand Marais 135.00 9** P **PKPdf 18 24 43.1 -1.0**
baz=135
**J25A Sunshine Ranch 135.13 24** P **PKPdf 18 24 44.7 +0.1**
baz=135
**D37A Cotton 135.22 12** P **PKPdf 18 24 45.0 +0.4**
baz=135
**J26A Sides Ranch, S 135.49 24** P **PKPdf 18 24 45.9 +0.6**
baz=135
**E36A McGregor 135.66 13** P **PKPdf 18 24 46.3 +0.9**
baz=136
**F36A Milaca 136.22 13** P **PKPdf 18 24 45.2 -1.2**
baz=136
**ECSD EROS Data Cent 137.38 17** P **PKPdf 18 24 49.2 +0.5**
baz=137
**I35A Creekview Farm 137.73 16** P **PKPdf 18 24 48.2 -1.1**
baz=138
**K32A Verdigre 137.92 19** P **PKPdf 18 24 50.2 +0.5**
baz=138
**I38A Scandia Farm, 138.22 13** P **PKPdf 18 24 50.5 +0.3**
baz=138
**214A Organ Pipe Nat 138.40 43** P **PKPdf 18 24 51.4 +0.5**
baz=138
**SDCO Great Sand Dun 138.85 31** P **PKPdf 18 24 52.3 +0.4**
baz=139
**T25A Trinidad 139.87 30** P **PKPdf 18 24 53.9 +0.2**
baz=140
**S26A Kim 139.95 29** P **PKPdf 18 24 54.4 +0.6**
baz=140
**Q29A Oakley 140.05 25** P **PKPdf 18 24 54.6 +0.8**
baz=140
**P31A Stockton 140.17 23** P **PKPdf 18 24 54.8 +0.8**
baz=140
**T26A Comanche Natio 140.24 29** P **PKPdf 18 24 54.8 +0.4**
baz=140
**BB16B Bebedouro 140.46 231** ⇑*i*P **PKPdf 18 24 52.6 -2.4**
BB16B *i* 18 24 53.4
BB16B *i* 18 24 56.0
**P35A Duane Minner, 141.38 19** P **PKPdf 18 24 56.4 +0.3**
baz=141
**Q35A Mercer Eighty, 141.98 20** P **PKPdf 18 24 56.2 -0.9**
baz=142
**R34A Isabella, Hill 142.04 22** P **PKPdf 18 24 55.6 -1.7**
baz=142
**R36A Gordon, Harris 142.64 20** P **PKPdf 18 24 56.8 -1.6**
baz=142
**BDFB Brasilia 142.76 239** PKP **PKPdf 18 24 59.9 +0.6**
comp=Z,2.4nm,0.7s,baz=180,slow=6.1,SNR=3.5
**CPUP Villa Florida 142.93 216** PKhKP PKPpre 18 24 54.8
comp=Z,1.8nm,0.7s,baz=75,slow=1.6,SNR=3.9
**MNTX Cornudas Mount 143.37 37** P PKPbc 18 24 57.7 +0.8
baz=143
**MNTX Cornudas Mount 143.37 37** *e*PKPdf PKPbc 18 24 57.4 +0.4
**Y28A McKinney Farm, 143.48 31** P PKPbc 18 24 57.9 +0.6
baz=143
**T35A Sooner Cattle 143.54 22** P PKPbc 18 24 58.0 +0.7
baz=143
**V32A Arapaho 143.54 26** P PKPbc 18 24 57.9 +0.5
baz=143
**U34A Anderson Ranch 143.56 24** P PKPbc 18 24 58.0 +0.7
baz=143
**W31A Holland Ranch, 143.59 27** P PKPbc 18 24 58.2 +0.7
baz=143
**T36A Boggs Farm, Ca 143.64 21** P PKPbc 18 24 57.9 +0.4
baz=144
**T37A Cheneyville 18 143.92 20** P PKPbc 18 24 58.7 +0.3
baz=144
**U35A Pawnee 143.94 23** P PKPbc 18 24 58.6 +0.1
baz=144
**W32A Sentinel 143.96 27** P PKPbc 18 24 58.9 +0.2
baz=144
**X31A McDonald Ranch 144.03 28** P PKPbc 18 24 59.0 +0.1
baz=144
**V34A Guthrie 144.09 24** P PKPbc 18 24 59.1 +0.1
baz=144
**Y30A Stafford Cattl 144.19 30** P PKPbc 18 25 00.0 +0.6
baz=144
**Z29A Hungry Hill Ra 144.27 31** P PKPbc 18 25 00.0 +0.3
baz=144
**W33A Caddo, Fort Co 144.28 26** P PKPbc 18 24 59.8 +0.2
baz=144,SNR=8.2
**U36A Oologah 144.29 21** P PKPbc 18 24 59.8 +0.2
baz=144
**128A Castleberry Fa 144.35 33** P PKPbc 18 24 59.9 -0.1
baz=144
**V35A Meyer Ranch, C 144.43 23** P **PKPab 18 24 59.9 +0.2**
baz=144,SNR=5.2
**Y31A Rekieta Farm, 144.44 29** P **PKPab 18 25 00.1 +0.2**
baz=144
**WMOK Wichita Mounta 144.49 27** *e*PKIKP **PKPab 18 24 59.8 -0.3**
**WMOK Wichita Mounta 144.49 27** *e*PKPdf **PKPab 18 24 59.8 -0.3**
**U37A Salina 144.50 21** P **PKPab 18 24 59.8 -0.2**
baz=144,SNR=9.0
**W34A Bridge Creek, 144.50 25** P **PKPab 18 24 59.9 -0.2**
baz=144
**X32A Elmer 144.52 27** P **PKPab 18 24 59.8 -0.3**
baz=144,SNR=6.1
**Z30A Sanderson Ranc 144.55 31** P **PKPab 18 25 00.3 -0.1**
baz=144,SNR=8.8
**228A UT Block 9, Go 144.67 34** P **PKPab 18 25 00.9 0.0**
baz=144,SNR=5.7
**129A Stewart Farms, 144.68 32** P PKPbc 18 25 01.1 +0.1
baz=144
**TUL1 Tulsa 144.70 22** P **PKPab 18 25 00.6 -0.1**
baz=144,SNR=6.4
**TUL1 Tulsa 144.70 22** *e*PKPdf **PKPab 18 24 59.7 -1.0**
**U38A Gravette 144.72 20** P **PKPab 18 25 00.2 -0.7**
baz=144,SNR=12
**V36A Jenks 144.75 22** P **PKPab 18 25 01.0 0.0**
baz=145,SNR=9.6
**X33A Lawton 144.78 26** P **PKPab 18 25 00.0 -1.1**
baz=145
**Y32A R-V Farms, Ver 144.79 28** P **PKPab 18 25 00.7 -0.5**
baz=145,SNR=7.0
**W35A Tecumseh 144.94 24** P **PKPab 18 25 01.3 -0.3**
baz=145
**V37A Hulbert 144.96 21** P **PKPab 18 25 01.4 -0.3**
baz=145,SNR=9.8
**WCI Wyandotte Cave 144.96 8** *e*PKIKP **PKPab 18 25 01.4 -0.3**
**WCI Wyandotte Cave 144.96 8** *e*PKPdf **PKPab 18 25 01.4 -0.3**
**Z31A Sharp Cattle R 145.01 30** P **PKPbc 18 25 01.7 -0.3**
baz=145,SNR=21
**X34A Smith Ranch, M 145.02 26** P **PKPab 18 25 02.1 +0.1**
baz=145,SNR=5.2

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Y33A** | **Hilltop Ranch,** baz=145 | **145.17** | **27** | P | **PKPbc** | **18 25 02.2** | **-0.2** |
| **130A** | **Snyder** baz=145,SNR=5.5 | **145.18** | **31** | P | **PKPbc** | **18 25 02.5** | **-0.1** |
| **W36A** | **Wetumka** baz=145,SNR=6.0 | **145.21** | **23** | P | **PKPbc** | **18 25 02.3** | **-0.2** |
| **229A** | **Bryant Ranch,** baz=145 | **145.22** | **33** | P | **PKPbc** | **18 25 02.4** | **-0.4** |
| **V38A** | **Canehill** baz=145,SNR=14 | **145.24** | **20** | P | **PKPbc** | **18 25 01.9** | **-0.7** |
| **Z32A** | **Haskell** baz=145,SNR=7.3 | **145.35** | **29** | P | **PKPbc** | **18 25 02.9** | **-0.1** |
| **131A** | **Roby** baz=145,SNR=9.2 | **145.41** | **31** | P | **PKPbc** | **18 25 03.4** | **+0.1** |
| **329A** | **Wagon Wheel Ra** baz=145,SNR=11 | **145.49** | **34** | P | **PKPab** | **18 25 04.0** | **+0.2** |
| **W37A** | **Quinton** baz=145,SNR=7.4 | **145.52** | **22** | P | **PKPdf** | **18 25 03.2** | **-0.3** |
| **X35A** | **Drake** baz=145,SNR=6.0 | **145.55** | **25** | P | **PKPdf** | **18 25 03.2** | **-0.4** |
| **Y34A** | **Reagan Ranch,** baz=145,SNR=8.0 | **145.60** | **26** | P | **PKPbc** | **18 25 03.9** | **0.0** |
| **230A** | **Sterling City** baz=146,SNR=17 | **145.65** | **32** | P | **PKPdf** | **18 25 04.1** | **+0.2** |
| **X36A** | **Centrahoma** baz=146,SNR=7.3 | **145.66** | **24** | P | **PKPdf** | **18 25 03.5** | **-0.2** |
| **Z33A** | **Whitaker Ranch** baz=146,SNR=5.7 | **145.70** | **28** | P | **PKPdf** | **18 25 04.1** | **+0.2** |
| **ABTX** | **Abilene, Hawle** baz=146,SNR=6.2 | **145.82** | **30** | P | **PKPdf** | **18 25 04.2** | **+0.1** |
| **ABTX** | **Abilene, Hawle** | **145.82** | **30** | *e*PKPdf | **PKPab** | **18 25 04.9** | **-0.1** |
| **W38A** | **Poteau** baz=146 | **145.91** | **21** | P | **PKPdf** | **18 25 04.3** | **+0.2** |
| **Y35A** | **Marietta** baz=146 | **145.95** | **25** | P | **PKPdf** | **18 25 04.6** | **+0.4** |
| **330A** | **Mertzon** baz=146 | **145.99** | **33** | P | **PKPbc** | **18 25 05.0** | **-0.3** |
| **Z34A** | **Collier Ranch,** baz=146 | **146.02** | **27** | P | **PKPbc** | **18 25 05.0** | **-0.2** |
| **X37A** | **Clayton** baz=146 | **146.03** | **22** | P | **PKPbc** | **18 25 05.2** | **+0.1** |
| **231A** | **Bronte** baz=146 | **146.03** | **31** | P | **PKPbc** | **18 25 05.3** | **0.0** |
| **TXAR** | **Lajitas Array** comp=Z,14nm,0.7s,baz=298,slow=0.8,SNR=121 | **146.08** | **38** | PKPbc | **PKPbc** | **18 25 05.4** | **-0.2** |
| **X38A** | **Whitesboro** baz=146 | **146.16** | **22** | P | **PKPbc** | **18 25 05.3** | **-0.2** |
| **429A** | **Davenport Ranc** baz=146,SNR=8.6 | **146.19** | **35** | P | **PKPbc** | **18 25 05.6** | **-0.3** |
| **133A** | **Hamilton Ranch** baz=146 | **146.19** | **29** | P | **PKPbc** | **18 25 05.4** | **-0.3** |
| **Y36A** | **Durant** baz=146,SNR=5.6 | **146.27** | **24** | P | **PKPbc** | **18 25 05.5** | **-0.4** |
| **Z35A** | **Perchaven, San** baz=146 | **146.35** | **26** | P | **PKPbc** | **18 25 06.0** | **-0.1** |
| **529A** | **Stev Forest Ra** baz=146,SNR=6.5 | **146.37** | **36** | P | **PKPbc** | **18 25 06.9** | **+0.4** |
| **232A** | **Coleman** baz=146,SNR=11 | **146.41** | **30** | P | **PKPbc** | **18 25 06.5** | **+0.1** |
| **430A** | **Baggett Ranch,** baz=146,SNR=6.7 | **146.43** | **34** | P | **PKPbc** | **18 25 06.7** | **+0.1** |
| **331A** | **San Angelo** baz=146,SNR=7.0 | **146.47** | **32** | P | **PKPbc** | **18 25 06.5** | **-0.1** |
| **Y37A** | **Hugo** baz=146 | **146.47** | **23** | P | **PKPbc** | **18 25 06.0** | **-0.5** |
| **MIAR** | **Mount Ida** | **146.72** | **20** | *e*PKP2 | **PKPdf** | **18 25 05.8** | **+0.3** |
| **MIAR** | **Mount Ida** baz=146 | **146.72** | **20** | P | **PKPbc** | **18 25 07.1** | **0.0** |
| **MIAR** | **Mount Ida** | **146.72** | **20** | *e*PKPdf | **PKPdf** | **18 25 05.8** | **+0.3** |
| **Z36A** | **Blue Ridge** baz=147 | **146.75** | **25** | P | **PKPbc** | **18 25 07.2** | **-0.1** |
| **WVT** | **Waverly** | **146.76** | **11** | *e*PKP2 | **PKPdf** | **18 25 06.4** | **+0.9** |
| **WVT** | **Waverly** | **146.76** | **11** | *e*PKPdf | **PKPdf** | **18 25 06.4** | **+0.9** |
| **Y38A** | **Idabel** baz=147 | **146.86** | **22** | P | **PKPbc** | **18 25 07.4** | **-0.2** |
| **431A** | **Sonora** baz=147,SNR=10.0 | **146.86** | **33** | P | **PKPbc** | **18 25 08.0** | **+0.2** |
| **TZTN** | **Tazewell** | **146.93** | **5** | *e*PKPdf | **PKPdf** | **18 25 06.8** | **+1.0** |
| **234A** | **Clairette** baz=147 | **147.06** | **28** | P | **PKPbc** | **18 25 08.0** | **-0.3** |
| **432A** | **Menard** baz=147,SNR=7.0 | **147.14** | **32** | P | **PKPbc** | **18 25 08.0** | **-0.6** |
| **333A** | **Richland Sprin** baz=147,SNR=14 | **147.20** | **30** | P | **PKPbc** | **18 25 08.7** | **0.0** |
| **531A** | **Rocksprings** baz=147,SNR=15 | **147.29** | **34** | P | **PKPbc** | **18 25 09.3** | **+0.2** |
| **JCT** | **Junction City** | **147.45** | **32** | *e*PKP2 | **PKPdf** | **18 25 07.5** | **+0.6** |
| **JCT** | **Junction City** baz=147,SNR=13 | **147.45** | **32** | P | **PKPbc** | **18 25 09.4** | **-0.1** |
| **JCT** | **Junction City** | **147.45** | **32** | *e*PKPdf | **PKPdf** | **18 25 07.5** | **+0.6** |
| JCT | | | | *e*PKPbc | **PKPbc** | **18 25 10.0** | **+0.6** |
| **334A** | **Lometa** baz=147 | **147.56** | **29** | P | **PKPbc** | **18 25 09.4** | **-0.2** |
| **433A** | **Art** baz=147 | **147.60** | **31** | P | **PKPbc** | **18 25 09.6** | **-0.2** |
| **532A** | **Rocksprings** baz=148 | **147.67** | **33** | P | **PKPbc** | **18 25 10.0** | **-0.1** |
| **631A** | **Perdido Creek** baz=148 | **147.85** | **34** | P | **PKPbc** | **18 25 10.5** | **0.0** |
| **434A** | **Burnet** baz=148 | **147.97** | **30** | P | **PKPbc** | **18 25 10.7** | **-0.1** |
| **335A** | **Moody** baz=148 | **148.00** | **28** | P | **PKPbc** | **18 25 10.9** | **+0.1** |
| **237A** | **Washetta, Mont** baz=148 | **148.11** | **25** | P | **PKPbc** | **18 25 11.4** | **+0.3** |
| **533A** | **Kerrville** baz=148 | **148.18** | **32** | P | **PKPbc** | **18 25 11.8** | **+0.4** |
| **336A** | **Riesel** baz=148 | **148.18** | **27** | P | **PKPbc** | **18 25 11.3** | **0.0** |
| **632A** | **Uvalde** baz=148 | **148.22** | **33** | P | **PKPbc** | **18 25 11.8** | **+0.3** |
| **435B** | **Jarrell** baz=148 | **148.33** | **29** | P | **PKPbc** | **18 25 12.4** | **+0.7** |
| **238A** | **Jacksonville** baz=148 | **148.40** | **24** | P | **PKPbc** | **18 25 12.3** | **+0.4** |
| **KMSC** | **Kings Mountain** baz=148 | **148.45** | **1** | P | **PKPbc** | **18 25 11.5** | **-0.4** |
| **KMSC** | **Kings Mountain** | **148.45** | **1** | *e*PKPbc | **PKPbc** | **18 25 11.0** | **-0.9** |
| **534A** | **Blanco** baz=148 | **148.50** | **31** | P | **PKPbc** | **18 25 11.7** | **-0.5** |
| **633A** | **Saathoff Ranch** baz=148 | **148.59** | **33** | P | **PKPbc** | **18 25 12.6** | **+0.2** |
| **239A** | **Gary** baz=148 | **148.65** | **23** | P | **PKPbc** | **18 25 12.9** | **+0.4** |
| **337A** | **Centerville** baz=148 | **148.67** | **26** | P | **PKPbc** | **18 25 12.7** | **+0.1** |
| **732A** | **Laxson Ranch,** baz=149 | **148.71** | **35** | P | **PKPbc** | **18 25 13.2** | **+0.4** |
| **436A** | **Wall Ranch, Ga** baz=149 | **148.72** | **28** | P | **PKPbc** | **18 25 13.2** | **+0.5** |
| **NATX** | **Nacogdoches** baz=149 | **148.80** | **24** | P | **PKPbc** | **18 25 13.4** | **+0.5** |
| **338A** | **Crockett** baz=149 | **148.88** | **25** | P | **PKPbc** | **18 25 13.4** | **+0.3** |
| **535A** | **Dale** baz=149 | **148.96** | **30** | P | **PKPbc** | **18 25 14.1** | **+0.7** |
| **832A** | **Faith Ranch, C** baz=149 | **149.05** | **35** | P | **PKPbc** | **18 25 14.4** | **+0.7** |
| **733A** | **Divot King Ran** baz=149 | **149.10** | **34** | P | **PKPbc** | **18 25 14.2** | **+0.4** |
| **536A** | **Bastrop** baz=149 | **149.17** | **29** | P | **PKPbc** | **18 25 14.7** | **+0.8** |
| **438A** | **Sam Houston St** baz=149 | **149.33** | **26** | P | **PKPbc** | **18 25 14.9** | **+0.6** |
| **833A** | **Chaparral WMA,** baz=149 | **149.35** | **34** | P | **PKPbc** | **18 25 14.5** | **+0.1** |
| **635A** | **Leesville** baz=149 | **149.38** | **31** | P | **PKPbc** | **18 25 15.2** | **+0.8** |
| **734A** | **La Parita Cree** baz=149 | **149.40** | **32** | P | **PKPbc** | **18 25 15.3** | **+0.8** |
| **340A** | **Bronson** baz=149 | **149.41** | **23** | P | **PKPbc** | **18 25 14.7** | **+0.2** |
| **537A** | **Green Hill Far** baz=149 | **149.52** | **28** | P | **PKPbc** | **18 25 15.7** | **+1.0** |
| **439A** | **Center Grove,** baz=149 | **149.60** | **25** | P | **PKPbc** | **18 25 15.5** | **+0.5** |
| **636A** | **Smothers Creek** baz=150 | **149.66** | **30** | P | **PKPbc** | **18 25 16.4** | **+1.3** |
| **735A** | **Kenedy** baz=150 | **149.79** | **31** | P | **PKPbc** | **18 25 16.5** | **+1.1** |
| **VBMS** | **Vicksburg** baz=150 | **149.84** | **17** | P | **PKPbc** | **18 25 16.1** | **+0.6** |
| **933A** | **Laredo** baz=150 | **149.96** | **35** | P | **PKPbc** | **18 25 16.9** | **+1.0** |
| **834A** | **Tilden** baz=150 | **149.97** | **33** | P | **PKPbc** | **18 25 16.9** | **+1.0** |
| **637A** | **Eagle Lake** baz=150 | **150.05** | **29** | P | **PKPbc** | **18 25 17.7** | **+1.6** |
| **736A** | **Circle Diamond** baz=150 | **150.09** | **30** | P | **PKPbc** | **18 25 17.7** | **+1.6** |
| **835A** | **Beeville** baz=150 | **150.23** | **32** | P | **PKPbc** | **18 25 18.2** | **+1.7** |
| **934A** | **Benavides** baz=150 | **150.39** | **34** | P | **PKPbc** | **18 25 18.3** | **+1.4** |
| **540A** | **Vidor** baz=150 | **150.44** | **24** | P | **PKPbc** | **18 25 18.1** | **+1.2** |
| **034A** | **Hebbronville** baz=151 | **150.72** | **35** | P | **PKPbc** | **18 25 19.1** | **+1.4** |
| **035A** | **Encino** baz=151 | **151.14** | **34** | P | **PKPbc** | **18 25 20.4** | **+1.7** |
| **035Z** | **Hargill** baz=151 | **151.53** | **35** | P | **PKPbc** | **18 25 21.1** | **+1.5** |
| **LVC** | **Limon Verde** comp=Z,7.6nm,0.3s,baz=207,slow=2.3,SNR=11 | **151.78** | **203** | PKPbc | **PKPbc** | **18 25 20.9** | **+0.2** |
| **TIGA** | **Tifton** baz=152 | **151.99** | **6** | P | **PKPbc** | **18 25 21.0** | **+0.5** |
| **SIV** | **San Ignacio** comp=Z,3.8nm,0.8s,baz=121,slow=5.1,SNR=6.9 | **152.83** | **224** | PKPbc | **PKPbc** | **18 25 22.3** | **-0.6** |
| SIV | | | | PKPab | **PKPab** | **18 25 32.2** | **-1.5** |
| **LPAZ** | **La Paz** comp=Z,2.6nm,1.2s,baz=120,slow=2.8,SNR=5.6 | **156.95** | **211** | PKP | **PKPdf** | **18 25 22.8** | **+0.7** |
| LPAZ | | | | PKPab | **PKPab** | **18 25 51.6** | **-0.4** |

*IDC **29** 18:10:26.3±2.4, 4˚.68S×101˚.94E, h0km, mb3.8/7, mb1 3.9/7, mb1mx3.6/34, mbtmp3.8/7, Error ellipse: s-maj=84.6km s-min=19.7km az=56.0*
*DJA **29** 18:10:30.8±0.8, 5˚S±3˚×10˚2E±˚, h21km±8km, M4.6/15, mb5.0/3, MLv4.5/9, MLv4.6/15*
*NEIC **29** 18:10:30.2±0.7, 4˚.86S×101˚.72E, h35km, mb4.2/2, Error ellipse: s-maj=19.0km s-min=11.0km az=47.0*

**ISC 29 18:10:27.3±2.4, 4˚.61S±0˚.09×101˚.93E±0˚.07, h5km±13km, n35, σ1˚61/33, mb4.2/10, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNAI** | **Manna** | **1.05** | **76** | P | **Pn** | **18 10 50.2** | **+1.4** |
| MNAI | | | | S | **Sn** | **18 11 04.0** | **+0.1** |
| **MNAI** | **Manna** | **1.05** | **76** | *e*Pg | **Pn** | **18 10 49.7** | **+0.9** |
| MNAI | | | | *e*Sg | **Sn** | **18 11 03.2** | **-0.7** |
| **KSI** | **Kapahiang** | **1.16** | **35** | P | **Pn** | **18 10 52.1** | **+1.8** |
| **LHSI** | **Lahat** | **1.77** | **64** | P | **Pg** | **18 11 01.2** | **-0.1** |
| LHSI | | | | S | **Sg** | **18 11 25.1** | **+0.8** |
| **LWLI** | **Liwa** | **2.16** | **101** | P | **Pb** | **18 11 05.6** | **-1.4** |
| LWLI | | | | S | **Sb** | **18 11 32.5** | **-1.7** |
| **MDSI** | **Maura Dua** | **2.25** | **87** | P | **Pb** | **18 11 06.8** | **-1.6** |
| MDSI | | | | S | **Sn** | **18 11 34.0** | **+0.7** |
| **KASI** | **Kota Agung** | **2.71** | **110** | P | **Pn** | **18 11 12.3** | **+0.7** |
| **JMBI** | **JAMBI** | **3.42** | **30** | P | **Pb** | **18 11 25.7** | **-2.7** |
| **PDSI** | **Padang** | **3.96** | **338** | P | **Pn** | **18 11 31.5** | **+2.7** |
| **CGJI** | **Cibinong** | **4.24** | **118** | P | **Pn** | **18 11 32.8** | **+0.2** |
| **SISI** | **Saibi** | **4.32** | **319** | P | **Pn** | **18 11 36.4** | **+2.6** |
| **PPI** | **Padang Panjang** | **4.40** | **340** | P | Pn | 18 11 39.5 | +4.6 |
| **CBJI** | **Citeko** 457nm,0.9s,1.7nm1.7nm | **5.22** | **110** | P | Pn | 18 11 50.3 | +4.2 |
| **LEM** | **Lembang** 3.6nm,0.3s,baz=163,slow=19,SNR=3.0 | **6.07** | **111** | Pn | Pn | 18 12 01.8 | +3.8 |
| **CISI** | **Cisompet, Garu** 87nm,1.4s,0.5nm | **6.54** | **117** | P | **Pn** | **18 12 04.3** | **-0.1** |
| **CMJI** | **Cimerak** | **7.21** | **116** | P | **Pn** | **18 12 13.8** | **+0.4** |
| **GSI** | **Gunungsitoli** | **7.31** | **323** | *e*Pn | **Pn** | **18 12 16.2** | **+1.4** |
| GSI | | | | *e*Sn | **Sn** | **18 13 33.9** | **-4.5** |
| **KULM** | **Kulim** | **9.92** | **353** | Pn | **Pn** | **18 12 53.0** | **+2.3** |
| **CMAR** | **Chiang Mai Arr** 0.8nm,0.4s,baz=185,slow=8.9,SNR=4.2 | **23.11** | **353** | P | **P** | **18 15 35.8** | **+1.4** |
| **H08S2** | **Diego Garcia H** baz=85,slow=75,SNR=19 | **29.42** | **263** | T | T | 18 46 55.6 | |
| **H08S3** | **Diego Garcia H** baz=85,slow=75,SNR=24 | **29.42** | **263** | T | T | 18 46 53.7 | |
| **H08S1** | **Diego Garcia H** baz=85,slow=75,SNR=17 | **29.43** | **263** | T | T | 18 46 57.0 | |
| **WRA** | **Warramunga Arr** 0.4nm,0.5s,baz=300,slow=8.8,SNR=5.2 | **35.04** | **119** | P | **P** | **18 17 20.6** | **-0.8** |
| **ASAR** | **Alice Springs** 0.3nm,0.4s,baz=295,slow=8.0,SNR=5.0 | **36.18** | **125** | P | **P** | **18 17 30.6** | **-0.7** |
| **HHC** | **Hu-ho-hao-te** | **46.09** | **10** | *e*P | **P** | **18 18 55.0** | **+2.4** |
| HHC | comp=Z,36nm,0.8s | | | pmax | pmax | | |
| HHC | comp=Z,64nm,3.7s | | | pmax | pmax | | |
| **KSAR** | **Wonju Array Be** | **48.32** | **28** | P | **P** | **18 19 09.4** | **-0.4** |
| **KSRS** | **Korea Array** comp=Z,0.6nm,0.6s,baz=227,slow=6.3,SNR=3.9 | **48.34** | **28** | P | **P** | **18 19 09.4** | **-0.6** |
| **SONM** | **Songino Array** comp=Z,1.8nm,0.6s,baz=187,slow=9.7,SNR=9.9 | **52.37** | **4** | P | **P** | **18 19 40.9** | **+0.3** |
| **TKM2** | **Tokmak 2** comp=Z,1.8nm,0.6s | **52.98** | **336** | P | **P** | **18 19 46.2** | **+0.9** |
| **MKAR** | **Makanchi Array** comp=Z,1.0nm,0.5s,baz=155,slow=9.3,SNR=10 | **54.06** | **343** | P | **P** | **18 19 52.7** | **-0.1** |
| **ZALV** | **Zalesovo Beam** comp=Z,1.6nm,0.4s,baz=166,slow=5.5,SNR=9.1 | **60.09** | **348** | P | **P** | **18 20 35.2** | **-0.2** |
| **CASY** | **Casey** | **61.85** | **176** | P | P | 18 20 43.1 | -4.1 |
| **ABKAR** | **Akbulak array** comp=Z,1.4nm,0.6s | **64.84** | **331** | *e*P | **P** | **18 21 07.3** | **0.0** |
| **LSZ** | **Lusaka** | **73.12** | **256** | P | P | 18 21 53.9 | -5.8 |
| **TXAR** | **Lajitas Array** comp=Z,0.5nm,0.4s,baz=273,slow=1.1,SNR=7.1 | **145.48** | **42** | PKPbc | **PKPdf** | **18 30 07.0** | **-0.5** |

**GUC 29 18:12:11.8±0.4, 36˚.33S×72˚.34W, h47km±2km, ML4.4, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CCHI** | **Chillan** | **0.35** | **142** | *e*P | Pn | 18 12 20.9 | -0.3 |
| CCHI | | | | *e*S | Sn | 18 12 27.6 | -0.2 |
| CCHI | comp=N,33µm,0.6s | | | AML | AML | 18 12 28.9 | |
| **COCH** | **Cobquecura** | **0.41** | **298** | *e*P | Pn | 18 12 21.6 | -0.2 |
| COCH | | | | *e*S | Sn | 18 12 28.7 | -0.1 |
| **CCSP** | **San Pedro de C** | **0.81** | **230** | *e*P | Pn | 18 12 26.7 | -0.2 |
| CCSP | | | | *e*S | Sn | 18 12 37.8 | 0.0 |
| **TALC** | **Talca** | **1.09** | **32** | *e*P | Pn | 18 12 30.6 | -0.1 |
| TALC | | | | *e*S | Sn | 18 12 44.7 | +0.1 |
| **NICH** | **Los Niches** | **1.60** | **35** | *e*P | Pn | 18 12 38.1 | +0.4 |
| NICH | | | | *e*S | Sn | 18 12 57.8 | +0.7 |
| **CHPI** | **Pichilemu** | **1.95** | **8** | *e*P | Pn | 18 12 42.4 | 0.0 |
| **LNV** | **Longovilo** | **2.48** | **18** | *e*P | Pn | 18 12 49.6 | -0.1 |
| **CHCH** | **Chadas Angostu** | **2.76** | **31** | *e*P | Pn | 18 12 53.8 | +0.1 |
| **ANTU** | **Antumapu** | **3.09** | **28** | *e*P | Pn | 18 12 58.4 | +0.2 |
| ANTU | | | | *e*S | Sn | 18 13 33.9 | 0.0 |
| ANTU | comp=E,595nm,2.4s | | | AML | AML | 18 13 53.7 | |
| **PEL** | **Peldehue** comp=E,909nm,1.7s | **3.46** | **24** | AML | AML | 18 13 59.2 | |

**IDC 29 18:21:21.7±3.6, 3˚.80S×99˚.85E, h0km, mb3.3/5, mb1 3.5/5, mb1mx3.3/40, mbtmp3.3/5, Error ellipse: s-maj=138.0km s-min=21.5km az=58.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** 0.8nm,0.5s,baz=187,slow=10,SNR=12 | **22.13** | **358** | P | P | 18 26 18.4 | -0.7 |
| **H08S2** | **Diego Garcia H** baz=80,slow=74,SNR=6.5 | **27.48** | **261** | T | T | 18 56 22.9 | |
| **H08S3** | **Diego Garcia H** baz=80,SNR=4.1 | **27.49** | **261** | T | T | 18 56 52.9 | |
| **H08S1** | **Diego Garcia H** baz=80,slow=74,SNR=7.7 | **27.50** | **261** | T | T | 18 56 14.3 | |
| **WRA** | **Warramunga Arr** 0.1nm,0.6s,baz=304,slow=8.9,SNR=3.5 | **37.25** | **118** | P | P | 18 28 35.1 | -0.4 |
| **ASAR** | **Alice Springs** 0.2nm,0.5s,baz=300,slow=7.4,SNR=5.5 | **38.35** | **124** | P | P | 18 28 44.5 | -0.3 |
| **SONM** | **Songino Array** 0.3nm,0.6s,baz=184,slow=11,SNR=2.9 | **51.73** | **6** | P | P | 18 30 31.5 | +0.5 |
| **MKAR** | **Makanchi Array** 0.3nm,0.6s,baz=147,slow=8.1,SNR=3.2 | **52.71** | **345** | P | P | 18 30 37.4 | -0.7 |
| **TXAR** | **Lajitas Array** 0.2nm,0.7s,baz=258,slow=4.4,SNR=2.5 | **146.20** | **39** | PKPbc | PKPbc | 18 41 05.1 | +0.1 |

*CSEM **29** 18:28:29.2±0.3, 79˚.44N×3˚.21E, h2km, ML4.3, Error ellipse: s-maj=18.6km s-min=9.7km az=30.0*
*ISCJB **29** 18:28:29.6±0.5, 79˚.21N±0˚.07×3˚.3E±0˚.2, h16km, mb3.9/11, MS3.4/21, Error ellipse: s-maj=10.6km s-min=5.2km az=18.0*
*IDC **29** 18:28:30.6±0.7, 79˚.42N×2˚.85E, h0km, mb3.8/8, mb1 4.0/14, mb1mx3.7/64, mbtmp3.9/14, ML3.7/5, MS3.4/27, Ms1 3.5/27, ms1mx3.3/48, Error ellipse: s-maj=22.1km s-min=13.7km az=46.0*
*NEIC **29** 18:28:31.4±0.6, 79˚.40N×2˚.85E, h10km, mb4.3/3, Error ellipse: s-maj=17.2km s-min=10.2km az=206.0*
*NAO **29** 18:28:32.8±2.8, 79˚.56N×5˚.30E, ML4.3*
*BER **29** 18:28:32.1±3.4, 79˚.46N×4˚.10E, h10km, MD2.7, ML3.1, ML4.3(NAO)*

**ISC 29 18:28:31.3±0.5, 79˚33N±0˚.08×3˚56E±0˚.05, h16km, n74, σ2˚10/69, mb4.0/11, MS3.4/20, 1C, Greenland Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBS** | **Kingsbay** | **1.64** | **100** | Pg | **Pn** | **18 28 58.6** | **-0.8** |
| KBS | | | | Lg | Lg | 18 29 17.5 | |
| **KBS** | **Kingsbay** | **1.64** | **100** | *i*P | **Pn** | **18 28 58.4** | **-1.0** |
| KBS | | | | *e*S | **Sn** | **18 29 17.3** | **-2.8** |
| **KBS** | **Kingsbay** | **1.64** | **100** | *e*Pn | **Pn** | **18 28 58.0** | **-1.4** |
| KBS | | | | *e*Sn | **Sn** | **18 29 15.8** | **-4.3** |
| **KBS** | **Kingsbay** | **1.64** | **100** | *e*Pn | **Pn** | **18 28 58.0** | **-1.4** |
| **KBS** | **Kingsbay** | **1.64** | **100** | Pg | **Pn** | **18 28 58.6** | **-0.8** |
| KBS | | | | *e*Sn | **Sn** | **18 29 15.9** | **-4.3** |
| KBS | | | | Lg | Lg | 18 29 17.5 | |
| **SPA0** | **Spitsbergen Ar** baz=312,slow=10 | **2.76** | **108** | Pn | **Pn** | **18 29 15.2** | **+0.3** |
| SPA0 | baz=313,slow=16 | | | Sn | **Sn** | **18 29 45.8** | **-2.0** |
| SPA0 | baz=301,slow=22 | | | Lg | Lg | 18 29 52.6 | |
| **SPA0** | **Spitsbergen Ar** baz=312,slow=10 | **2.76** | **108** | Pn | **Pn** | **18 29 15.2** | **+0.3** |
| SPA0 | baz=313,slow=16 | | | Sn | **Sn** | **18 29 45.8** | **-2.0** |
| SPA0 | baz=301,slow=22 | | | Lg | Lg | 18 29 52.6 | |
| **SPA0** | **Spitsbergen Ar** SNR=999 | **2.76** | **108** | Pn | **Pn** | **18 29 15.1** | **+0.3** |
| SPA0 | | | | Sn | **Sn** | **18 29 45.8** | **-2.0** |
| SPA0 | | | | Lg | Lg | 18 29 52.7 | |
| **SPITS** | **Spitsbergen Ar** baz=302,slow=8.4,SNR=4242 | **2.76** | **108** | Pn | **Pn** | **18 29 15.1** | **+0.3** |
| SPITS | baz=327,slow=17,SNR=5.1 | | | Sn | **Sn** | **18 29 46.0** | **-1.8** |
| SPITS | comp=Z,759nm,20.4s,baz=315,slow=41 | | | LR | LR | 18 30 29.6 | |
| **HSP** | **Hornsund** | **3.39** | **127** | Pn | **Pn** | **18 29 22.1** | **-1.4** |
| **HSPB** | **Hornsund (broa** | **3.39** | **128** | *e*P | **Pn** | **18 29 22.1** | **-1.4** |
| HSPB | | | | *e*S | **Sn** | **18 30 00.3** | **-3.0** |
| HSPB | comp=Z,109nm,0.7s | | | IAML | | 18 30 03.8 | |
| **HSPB** | **Hornsund (broa** SNR=50 | **3.39** | **128** | *e*P | **Pn** | **18 29 22.1** | **-1.4** |
| **DAG** | **Danmarks Havn** | **5.25** | **252** | *i*P | **Pn** | **18 29 47.0** | **-1.9** |
| DAG | | | | *i*S | Sn | 18 30 41.3 | -7.7 |
| **HOPEN** | **Hopen** | **5.29** | **111** | Pn | **Pn** | **18 29 49.2** | **-0.3** |
| HOPEN | | | | Sn | **Sn** | **18 30 46.6** | **-3.3** |
| **HOPEN** | **Hopen** | **5.29** | **111** | *e*P | **Pn** | **18 29 49.1** | **-0.3** |
| HOPEN | | | | *e*S | **Sn** | **18 30 46.2** | **-3.7** |
| HOPEN | comp=Z,54nm,0.3s | | | IAML | | 18 30 51.0 | |
| **HOPEN** | **Hopen** | **5.29** | **111** | Pn | **Pn** | **18 29 49.2** | **-0.3** |
| HOPEN | SNR=49 | | | *e*S | **Sn** | **18 30 46.2** | **-3.7** |
| HOPEN | | | | Sn | **Sn** | **18 30 46.6** | **-3.3** |
| **JNW** | **Jan Mayen West** | **8.86** | **206** | *e*Pn | **Pn** | **18 30 39.0** | **+0.6** |
| **HAMF** | **Hammerfest** | **10.07** | **139** | *e*Pn | **Pn** | **18 30 55.9** | **+0.9** |
| **HAMF** | **Hammerfest** SNR=50 | **10.07** | **139** | *e*Pn | **Pn** | **18 30 55.9** | **+0.9** |
| **KEV** | **Kevo** | **11.32** | **135** | *e*Pn | **Pn** | **18 31 14.0** | **+2.0** |
| **KEV** | **Kevo** | **11.32** | **135** | *e*Pn | **Pn** | **18 31 14.0** | **+2.0** |
| **ARA0** | **ARCESS Array S** baz=351,slow=12 | **11.33** | **138** | Pn | **Pn** | **18 31 13.1** | **+0.8** |
| ARA0 | baz=357,slow=22 | | | Sn | **Sn** | **18 33 15.3** | **-3.0** |
| **ARA0** | **ARCESS Array S** baz=351,slow=12 | **11.33** | **138** | Pn | **Pn** | **18 31 13.1** | **+0.8** |
| ARA0 | baz=357,slow=22 | | | Sn | **Sn** | **18 33 15.3** | **-3.0** |
| **ARA0** | **ARCESS Array S** SNR=0.7 | **11.33** | **138** | Pn | **Pn** | **18 31 13.1** | **+0.8** |
| **ARCES** | **ARCESS Array B** comp=Z,1.8nm,0.3s,baz=346,slow=12,SNR=20 | **11.33** | **138** | Pn | **Pn** | **18 31 13.1** | **+0.8** |
| ARCES | comp=Z,0.3nm,0.3s,baz=358,slow=19,SNR=2.8 | | | Sn | **Sn** | **18 33 15.1** | **-3.2** |
| ARCES | comp=Z,104nm,21.1s,baz=348,slow=37 | | | LR | LR | 18 35 31.5 | |
| **ARE0** | **ARCESS Array S** | **11.33** | **138** | *e*Pn | **Pn** | **18 31 13.3** | **+1.1** |
| **SUMG** | **Summit** | **11.89** | **258** | *i*P | **Pn** | **18 31 17.2** | **-3.0** |
| SUMG | | | | *i* | | 18 31 18.8 | |
| **SUMG** | **Summit** comp=Z,9.9nm,0.6s | **11.89** | **258** | *e*Pn | **Pn** | **18 31 17.6** | **-2.6** |
| SUMG | | | | *e*Sn | Sn | 18 33 11.9 | -21 |
| **SUMG** | **Summit** comp=Z,9.9nm,0.6s | **11.89** | **258** | *e*Pn | **Pn** | **18 31 17.6** | **-2.6** |
| **NOA** | **NORSAR Array B** comp=Z,0.1nm,0.3s,baz=3.6,slow=12,SNR=3.1 | **18.53** | **168** | P | **Pn** | **18 32 50.8** | **+3.9** |
| NOA | comp=Z,77nm,21.6s,baz=0.0,slow=33 | | | LR | LR | 18 38 44.8 | |
| **SFJD** | **Kangerlussuaq** comp=Z,149nm,21.1s,baz=20,slow=38 | **18.86** | **260** | LR | LR | 18 40 21.4 | |
| **SFJD** | **Kangerlussuaq** | **18.86** | **260** | P | **P** | **18 32 48.6** | **-1.7** |
| **SFJD** | **Kangerlussuaq** | **18.86** | **260** | P | **P** | **18 32 48.6** | **-1.7** |
| **FIA0** | **FINESS Array S** baz=350,slow=18 | **19.20** | **146** | P | **Pn** | **18 32 56.1** | **+1.1** |
| **FIA0** | **FINESS Array S** baz=350,slow=18 | **19.20** | **146** | P | **Pn** | **18 32 56.1** | **+1.1** |
| **FIA0** | **FINESS Array S** SNR=1.4 | **19.20** | **146** | P | **Pn** | **18 32 56.1** | **+1.1** |
| **FINES** | **FINESS Array B** comp=Z,0.3nm,0.3s,baz=348,slow=7.5,SNR=14 | **19.20** | **146** | P | **Pn** | **18 32 57.2** | **+2.2** |
| FINES | comp=Z,133nm,21.6s,baz=358,slow=36 | | | LR | LR | 18 40 07.0 | |
| **HFS** | **Hagfors** comp=Z,0.1nm,0.3s,baz=40,slow=10.0,SNR=4.9 | **19.54** | **165** | P | **Pn** | **18 33 01.0** | **+2.0** |
| HFS | comp=Z,159nm,18.2s,baz=21,slow=33 | | | LR | LR | 18 39 16.6 | |
| **RES** | **Resolute Bay** comp=Z,0.6nm,0.3s,baz=32,slow=12,SNR=8.5 | **19.97** | **310** | P | **P** | **18 33 00.1** | **-2.1** |
| RES | comp=Z,152nm,18.3s,baz=74,slow=36 | | | LR | LR | 18 40 33.8 | |
| **RES** | **Resolute Bay** | **19.97** | **310** | *e*P | **P** | **18 32 60.0** | **-2.3** |
| **RES** | **Resolute Bay** | **19.97** | **310** | *e*P | **P** | **18 33 00.0** | **-2.3** |
| **OBN** | **Obninsk** comp=Z,57nm,18.5s,baz=272,slow=37 | **26.63** | **136** | LR | LR | 18 45 05.3 | |
| **AKASG** | **Malin Array Be** comp=Z,0.2nm,0.3s,baz=350,slow=9.4,SNR=2.2 | **30.11** | **147** | P | P | 18 34 42.9 | +3.3 |
| AKASG | comp=Z,84nm,21.5s,baz=325,slow=36 | | | LR | LR | 18 46 38.3 | |
| **VRAC** | **Vranov** comp=Z,74nm,19.6s,baz=336,slow=34 | **30.50** | **163** | LR | LR | 18 46 07.2 | |
| **INK** | **Inuvik** comp=Z,49nm,21.4s,baz=44,slow=38 | **30.53** | **330** | LR | LR | 18 47 31.8 | |
| **GERES** | **GERESS Array B** comp

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **WALA** | **Waterton Lakes** | **46.88** | **307** | P | **P** | **18 36 58.0** | **-2.3** |
| **WALA** | **Waterton Lakes** | **46.88** | **307** | P | **P** | **18 36 58.0** | **-2.3** |
| **TKL** | **Tuckaleechee C** | **54.74** | **275** | LR | LR | 19 00 52.3 | |
| | comp=Z,58nm,19.6s,baz=20,slow=36 | | | | | | |
| **NVAR** | **Mina Array Bea** | **57.93** | **308** | LR | LR | 19 03 45.9 | |
| | comp=Z,74nm,20.3s,baz=268,slow=37 | | | | | | |
| **WMOK** | **Wichita Mounta** | **58.37** | **289** | P | **P** | **18 38 25.9** | **+0.6** |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **58.37** | **289** | P | **P** | **18 38 25.9** | **+0.6** |
| | comp=Z,2.4nm,0.8s | | | | | | |
| **ANMO** | **Albuquerque** | **59.48** | **296** | LR | LR | 19 04 28.3 | |
| | comp=Z,77nm,19.4s,baz=33,slow=36 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **61.51** | **41** | P | **P** | **18 38 48.8** | **+2.0** |
| | comp=Z,2.0nm,1.0s,baz=340,slow=6.6,SNR=2.8 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **62.39** | **305** | LR | LR | 19 06 40.5 | |
| | comp=Z,83nm,21.3s,baz=318,slow=37 | | | | | | |
| **TXAR** | **Lajitas Array** | **64.49** | **292** | P | **P** | **18 39 07.8** | **+0.9** |
| | comp=Z,0.6nm,0.6s,baz=34,slow=4.6,SNR=9.8 | | | | | | |
| TXAR | | | | LR | LR | 19 05 58.3 | |
| | comp=Z,50nm,18.8s,baz=0.0,slow=35 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.20** | **182** | P | **P** | **18 39 20.0** | **+2.1** |
| | comp=Z,0.8nm,0.6s,baz=357,slow=6.0,SNR=7.7 | | | | | | |
| **LPIG** | **La Paz** | **70.73** | **298** | LR | LR | 19 11 42.4 | |
| | comp=Z,65nm,19.7s,baz=28,slow=37 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **72.99** | **81** | P | **P** | **18 40 01.7** | **+1.9** |
| | comp=Z,1.1nm,0.8s,baz=339,slow=7.2,SNR=6.3 | | | | | | |
| CMAR | | | | LR | LR | 19 17 22.1 | |
| | comp=Z,21nm,19.3s,baz=351,slow=40 | | | | | | |
| **MAW** | **Mawson** | **150.58** | **138** | PKPbc | **PKPbc** | **18 48 21.7** | **+1.6** |
| | comp=Z,1.5nm,0.7s,baz=313,slow=6.2,SNR=5.9 | | | | | | |

**SJA 29 18:37:21.1±0.8, 31°.75S×69°.45W, h106km±4km, ML2.9, MW3.5, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTLS** | **Leoncito** | **0.14** | **111** | *i* P | Pn | 18 37 37.4 | +1.2 |
| RTLS | | | | *i* S | Sn | 18 37 49.3 | +1.8 |
| **AUSP** | **Uspallata** | **0.47** | **174** | *i* P | Pn | 18 37 38.9 | +1.1 |
| AUSP | | | | *i* S | Sn | 18 37 51.6 | +1.3 |
| **RTCV** | **Cerro Valdivia** | **0.78** | **98** | *i* P | Pn | 18 37 40.8 | +0.9 |
| RTCV | | | | *i* S | Sn | 18 37 55.2 | +1.2 |
| **ASAL** | **Salagasta** | **0.99** | **148** | *i* P | Pn | 18 37 43.0 | +1.0 |
| ASAL | | | | *i* S | Sn | 18 37 59.0 | +1.3 |
| **CFAA** | **Coronel Fontan** | **1.04** | **82** | *i* P | Pn | 18 37 43.0 | +0.5 |
| CFAA | | | | *i* S | Sn | 18 37 59.1 | +0.5 |
| **AMOG** | **MOGNA** | **1.15** | **46** | *i* P | Pn | 18 37 44.9 | +1.1 |
| **ARCO** | **CERRO ARCO** | **1.17** | **158** | *i* P | Pn | 18 37 45.3 | +1.1 |
| ARCO | | | | IAML | | 18 38 05.1 | |
| | comp=Z,171nm,0.3s | | | | | | |
| **AAGR** | **Agrelo** | **1.43** | **159** | *i* P | Pn | 18 37 47.9 | +0.9 |
| **ROC1** | **El Roble** | **1.80** | **227** | *i* P | Pn | 18 37 52.4 | +0.6 |

*ISCJB **29** 18:37:53.5±0.4, 0°.61N±0°.04×122°.33E±0°.03, h111km±3km, mb3.6/10, Error ellipse: s-maj=7.4km s-min=4.8km az=171.7*
*DJA **29** 18:37:55.9±0.3, 1°.1N±3°×12°.2E±°, h81km±4km, M4.2/19, mb4.3/12, mB4.6/3, MLv4.2/19, Mw(mB)3.8/3*
*AUST **29** 18:37:55.9, 0.50N×122°.00E, h100km*
*IDC **29** 18:37:56.0±5.3, 0°.53N×122°.45E, h121km±46km, mb3.4/10, mb1 3.5/11, mb1mx3.3/41, mbtmp3.8/11, MS2.6/1, Ms1 2.6/1, ms1mx2.3/17, Error ellipse: s-maj=68.7km s-min=13.7km az=60.0*

**ISC 29 18:37:54.5±0.8, 0°.63N±0°.06×122°.33E±0°.04, h103km±6km, n36, σ1§14/45, mb3.8/10, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MRSI** | **Marisa** | **0.41** | **249** | P | **Pn** | **18 38 10.0** | **-0.1** |
| MRSI | | | | S | **Sn** | **18 38 20.9** | **-0.8** |
| **GTOI** | **Gorontalo** | **0.68** | **89** | P | **Pn** | **18 38 11.7** | **-0.4** |
| GTOI | | | | S | **Sn** | **18 38 24.3** | **-0.9** |
| **KMSI** | **Cibinong** | **1.65** | **92** | P | **Pn** | **18 38 24.3** | **+1.5** |
| KMSI | | | | S | **Sn** | **18 38 45.7** | **+1.3** |
| **APSI** | **Ampana** | **1.67** | **204** | P | **Pn** | **18 38 23.5** | **+0.4** |
| APSI | | | | S | **Sn** | **18 38 46.2** | **+1.4** |
| **LUWI** | **Luwuk** | **1.71** | **165** | P | **Pn** | **18 38 24.7** | **+1.0** |
| | baz=1.7,SNR=121 | | | | | | |
| **LUWI** | **Luwuk** | **1.71** | **165** | P | **Pn** | **18 38 24.5** | **+0.9** |
| LUWI | | | | S | **Sn** | **18 38 47.5** | **+1.8** |
| **MPSI** | **Mapaga** | **2.45** | **263** | P | **Pn** | **18 38 33.2** | **+0.1** |
| MPSI | | | | S | **Sn** | **18 39 02.2** | **-0.4** |
| **PCI** | **Palu** | **2.92** | **239** | P | **Pn** | **18 38 38.4** | **-0.9** |
| PCI | | | | S | **Sn** | **18 39 13.2** | **-0.6** |
| **TTSI** | **Tana Toraja** | **4.42** | **215** | P | **Pn** | **18 39 00.1** | **+0.6** |
| TTSI | | | | S | **Sn** | **18 39 50.2** | **+0.2** |
| **SANI** | **Sanana** | **4.52** | **126** | P | **Pn** | **18 39 00.6** | **-0.3** |
| SANI | | | | S | **Sn** | **18 39 49.8** | **-2.6** |
| **TNTI** | **Ternate** | **5.04** | **88** | P | **Pn** | **18 39 08.4** | **+0.5** |
| | 26nm,0.8s,0.1nm | | | | | | |
| **SPSI** | **Sidrap Palu** | **5.23** | **209** | P | **Pn** | **18 39 11.1** | **+0.7** |
| | 44nm,0.5s,609nm0.2nm | | | | | | |
| **LBMI** | **Labuha** | **5.32** | **104** | P | **Pn** | **18 39 11.5** | **-0.2** |
| | 37nm,0.9s,740nm0.2nm | | | | | | |
| LBMI | | | | S | **Sn** | **18 40 11.0** | **-0.8** |
| | 37nm,0.9s,740nm0.2nm | | | | | | |
| **BKB** | **Balikpapan** | **5.75** | **251** | P | **Pn** | **18 39 17.1** | **-0.3** |
| | 277nm,1.3s,1.0nm | | | | | | |
| **BBSI** | **Bau Bau** | **6.08** | **178** | P | **Pn** | **18 39 22.3** | **+0.3** |
| | 32nm,1.1s,0.1nm | | | | | | |
| **KAPI** | **Kappang** | **6.16** | **205** | P | **Pn** | **18 39 23.3** | **+0.2** |
| | 3.0nm,0.3s,baz=35,slow=5.8,SNR=9.6 | | | | | | |
| KAPI | | | | LR | LR | 18 41 41.7 | |
| | comp=Z,51nm,18.6s,baz=22,slow=37 | | | | | | |
| **BKSI** | **Bulukumba** | **6.30** | **200** | P | **Pn** | **18 39 25.6** | **+0.6** |
| | 20nm,0.7s,485nm0.1nm | | | | | | |
| **KKM** | **Kota Kinabalu** | **8.14** | **312** | P | Pn | 18 39 54.4 | +4.3 |
| | baz=8.0,SNR=4.1 | | | | | | |
| **BBKI** | **Banjar Baru** | **8.51** | **241** | P | **Pn** | **18 39 55.7** | **+0.6** |
| **KNRA** | **Kununurra** | **17.40** | **159** | P | **Pn** | **18 41 51.1** | **+0.1** |
| | baz=18,SNR=7.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.59** | **151** | P | **P** | **18 42 54.1** | **-2.1** |
| | 0.3nm,0.3s,baz=337,slow=9.8,SNR=14 | | | | | | |
| **ASAR** | **Alice Springs** | **26.64** | **156** | P | **P** | **18 43 23.4** | **-0.3** |
| | 0.4nm,0.6s,baz=337,slow=14,SNR=8.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 46 44.5** | **-1.0** |
| | 0.8nm,0.5s,baz=345,slow=2.0,SNR=18 | | | | | | |
| **MEEK** | **Meekatharra** | **27.34** | **187** | P | **P** | **18 43 28.6** | **-1.4** |
| | baz=27,SNR=9.7 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.00** | **309** | P | **P** | **18 43 47.4** | **+2.5** |
| | 0.5nm,0.8s,baz=136,slow=6.6,SNR=4.4 | | | | | | |
| **MORW** | **Morawa** | **30.13** | **191** | P | **P** | **18 43 53.5** | **-1.2** |
| | baz=30,SNR=3.4 | | | | | | |
| **BLDU** | **Ballidu** | **31.52** | **189** | P | **P** | **18 44 05.4** | **-1.6** |
| | baz=32,SNR=8.2 | | | | | | |
| **LHI** | **Lord Howe Isla** | **47.25** | **136** | P | **P** | **18 46 19.1** | **+1.5** |
| | baz=48,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.73** | **328** | P | **P** | **18 47 35.4** | **+0.7** |
| | 0.7nm,0.3s,baz=126,slow=8.7,SNR=9.0 | | | | | | |
| **AAK** | **Ala-Archa** | **59.82** | **321** | P | **P** | **18 47 51.5** | **+2.1** |
| | 0.9nm,0.4s,baz=101,slow=4.4,SNR=4.6 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **61.47** | **336** | P | **P** | **18 48 00.3** | **+0.2** |
| | 0.5nm,0.5s,baz=123,slow=5.3,SNR=2.8 | | | | | | |
| **BVAR** | **Borovoye Array** | **67.61** | **329** | P | **P** | **18 48 40.3** | **+0.2** |
| | 0.7nm,0.6s,baz=144,slow=8.3,SNR=4.3 | | | | | | |
| **GEYT** | **Alibeck** | **69.47** | **311** | P | **P** | **18 48 52.4** | **+0.2** |
| | 1.9nm,0.8s,baz=109,slow=3.6,SNR=5.0 | | | | | | |
| **AKTO** | **Aktyubinsk** | **73.41** | **323** | P | **P** | **18 49 14.6** | **-0.9** |
| | 1.2nm,0.7s,baz=134,slow=7.7,SNR=5.3 | | | | | | |
| **MAW** | **Mawson** | **79.36** | **200** | P | P | 18 49 54.9 | +6.2 |
| | baz=79,SNR=9.6 | | | | | | |
| **VNDA** | **Vanda** | **80.95** | **172** | P | **P** | **18 49 56.2** | **-0.9** |
| | 0.5nm,1.0s,baz=305,slow=4.0,SNR=3.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.60** | **285** | PKP | **PKPdf** | **18 56 31.4** | **-2.0** |
| | 0.2nm,0.3s,baz=44,slow=1.5,SNR=6.8 | | | | | | |

**IDC 29 18:42:06.7±3.8, 2°.82S×100°.49E, h0km, mb3.3/4, mb1 3.6/4, mb1mx3.3/38, mbtmp3.3/4, Error ellipse: s-maj=161.3km s-min=22.9km az=57.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.20** | **356** | P | P | 18 46 55.1 | +1.0 |
| | 0.7nm,0.8s,baz=190,slow=9.5,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.17** | **120** | P | P | 18 49 19.8 | 0.0 |
| | 0.2nm,0.7s,baz=305,slow=8.9,SNR=3.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.38** | **126** | P | P | 18 49 29.3 | -0.8 |
| | 0.6nm,1.1s,baz=296,slow=7.8,SNR=3.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.94** | **344** | P | P | 18 51 16.2 | -1.3 |
| | 0.5nm,0.8s,baz=170,slow=8.8,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.04** | **39** | PKPbc | PKPdf | 19 01 46.9 | -0.1 |
| | 0.4nm,0.8s,baz=293,slow=0.7,SNR=3.5 | | | | | | |

*ISCJB **29** 18:45:44.9±0.5, 31°.92N±0°.02×115°.05W±0°.03, h2km±5km, Error ellipse: s-maj=4.0km s-min=3.6km az=16.1*
*MEX **29** 18:45:45.9±0.4, 31°.92N×114°.82W, h61km±10km, MD3.6*
*NEIC **29** 18:45:46.7, 31°.90N×115°.02W, h10km, ML2.6(PAS), ML3.0(ECX), After ECX.*
*ECX **29** 18:45:46.3±0.5, 31°.90N×115°.00W, h10km, MD2.8, ML3.0*

**ISC 29 18:45:45.6±1.0, 31°.90N±0°.02×115°.06W±0°.02, h11km±10km, n27, σ1§23/45, 1C-4D, Baja California**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ECBX** | **El Chinero** | **0.42** | **179** | *e*P | **Pg** | **18 45 53.6** | **-0.3** |
| ECBX | | | | *e*S | **Sg** | **18 45 59.5** | **0.0** |
| ECBX | | | | ⇓*e* | | 18 46 02.0 | |
| ECBX | | | | IAML | | 18 46 02.0 | |
| | comp=E,869nm,0.4s | | | | | | |
| **MBIG** | **Mexicali** | **0.52** | **347** | *e*P | **Pn** | **18 45 57.9** | **-1.1** |
| MBIG | | | | *i* S | **Sb** | **18 46 06.0** | **+1.6** |
| **CPBX** | **Cerro Prieto** | **0.56** | **338** | *e*P | **Pb** | **18 45 57.6** | **+0.1** |
| CPBX | | | | *e*S | **Sb** | **18 46 05.5** | **0.0** |
| **CPBX** | **Cerro Prieto** | **0.56** | **338** | *e*P | **Pb** | **18 45 57.5** | **+0.1** |
| CPBX | | | | *e*S | **Sb** | **18 46 06.7** | **+1.2** |
| **RDX** | **Rancho Dawling** | **0.75** | **273** | *e*P | **Pg** | **18 46 00.4** | **+0.2** |
| RDX | | | | *e*S | **Sb** | **18 46 11.6** | **+0.4** |
| RDX | | | | IAML | | 18 46 13.8 | |
| | comp=N,260nm,0.6s | | | | | | |
| **YMD** | **Yuma Desert** | **0.79** | **33** | ⇑*i*P | **Pg** | **18 45 59.6** | **-1.3** |
| **EMSC** | **East Mesa** | **0.84** | **4** | *e*P | **Pg** | **18 46 01.1** | **-0.8** |
| **SPIG** | **San Pedro Mart** | **0.92** | **202** | *e*P | **Pg** | **18 46 03.0** | **-0.3** |
| SPIG | | | | *e*S | **Sb** | **18 46 16.6** | **+0.6** |
| **SPIG** | **San Pedro Mart** | **0.92** | **202** | *e*P | **Pg** | **18 46 03.0** | **-0.3** |
| SPIG | | | | *e*S | **Sb** | **18 46 16.6** | **+0.6** |
| **SPX** | **San Pedro Mart** | **0.92** | **202** | IAML | | 18 46 17.6 | |
| | comp=E,347nm,0.3s | | | | | | |
| SPX | | | | *e* | | 18 46 17.6 | |
| **SPX** | **San Pedro Mart** | **0.92** | **202** | *e*P | **Pg** | **18 46 03.0** | **-0.3** |
| SPX | | | | *e*S | **Sb** | **18 46 16.6** | **+0.6** |
| **SGL** | **Mount Signal** | **0.94** | **323** | *e*P | **Pb** | **18 46 03.9** | **-0.1** |
| **YUH** | **Yuha Desert** | **1.05** | **316** | ⇓*i*P | **Pb** | **18 46 04.3** | **-1.5** |
| **ZAX** | **El Zacaton** | **1.10** | **250** | *e*P | **Pb** | **18 46 06.5** | **-0.2** |
| ZAX | | | | *e*S | **Sg** | **18 46 21.5** | **+0.3** |
| **RMX** | **La Rumorosa** | **1.12** | **309** | *e*P | **Pb** | **18 46 06.6** | **-0.4** |
| RMX | | | | *e*S | **Sg** | **18 46 21.8** | **+0.2** |
| RMX | | | | ⇓*e* | | 18 46 24.6 | |
| RMX | | | | IAML | | 18 46 24.6 | |
| | comp=N,322nm,0.2s | | | | | | |
| **GLA** | **Glamis** | **1.17** | **10** | *e*Pg | Pb | 18 46 04.0 | -3.9 |
| GLA | | | | *e*Sg | **Sb** | **18 46 22.3** | **-0.8** |
| **CBX** | **Cerro Bola** | **1.42** | **287** | *e*P | **Pn** | **18 46 10.7** | **-0.8** |
| CBX | | | | *e*S | **Sn** | **18 46 30.0** | **-0.4** |
| **CBX** | **Cerro Bola** | **1.42** | **287** | ⇓*e* | **Sg** | **18 46 36.1** | **+4.6** |
| CBX | | | | IAML | | 18 46 36.1 | |
| | comp=N,228nm,0.4s | | | | | | |
| **CBX** | **Cerro Bola** | **1.42** | **287** | *e*P | **Pn** | **18 46 10.7** | **-0.8** |
| CBX | | | | *e*S | **Sn** | **18 46 30.0** | **-0.4** |
| **PBX** | **Punta Banda** | **1.43** | **264** | *e*P | **Pb** | **18 46 11.8** | **-0.5** |
| PBX | | | | *e*S | **Sg** | **18 46 31.3** | **-0.2** |
| **BAR** | **Barrett** | **1.57** | **300** | *e*Pn | **Pn** | **18 46 12.4** | **-1.1** |
| BAR | | | | *e*Pg | **Pg** | **18 46 15.3** | **-0.5** |
| BAR | | | | *e*Sn | **Sn** | **18 46 32.3** | **-1.6** |
| BAR | | | | *e*Sg | **Sg** | **18 46 35.9** | **-0.4** |
| **214A** | **Organ Pipe Nat** | **1.91** | **88** | *e*Pn | Pn | 18 46 14.6 | -3.6 |
| 214A | | | | *e*Pg | **Pb** | **18 46 18.9** | **-1.7** |
| 214A | | | | *e*Sn | **Sb** | **18 46 44.9** | **+0.5** |
| 214A | | | | *e*Sg | **Sg** | **18 46 47.5** | **+0.4** |
| **PFO** | **Pinyon Flat Ob** | **2.08** | **326** | *e*Pn | **Pn** | **18 46 21.0** | **+0.5** |
| **LDFC** | **Landfair** | **3.17** | **359** | P | **Pn** | **18 46 37.9** | **+2.2** |
| **TUC** | **Tucson** | **3.65** | **82** | P | **Pb** | **18 46 49.5** | **-0.7** |
| TUC | | | | *e*Sn | **Sb** | **18 47 36.2** | **+1.6** |
| **GSC** | **Goldstone** | **3.70** | **337** | *e*Pg | **Pg** | **18 46 55.4** | **-1.0** |
| **WUAZ** | **Wupatki** | **4.74** | **39** | P | **Pn** | **18 47 00.2** | **+3.0** |

**DJA 29 18:55:50.2±0.5, 7°.S±7°×107°.6E±°, h68km±5km, M3.6/12, MLv3.6/12, Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SKJI** | **Sukabumi** | **0.33** | **118** | P | Pn | 18 56 02.9 | +1.5 |
| SKJI | | | | S | Sn | 18 56 13.8 | +4.2 |
| **CGJI** | **Cibinong** | **0.61** | **293** | P | Pn | 18 56 05.0 | +1.0 |
| CGJI | | | | S | Sn | 18 56 16.8 | +2.7 |
| **CBJI** | **Citeko** | **0.72** | **54** | P | Pn | 18 56 06.2 | +0.9 |
| **SBJI** | **Serang** | **0.74** | **350** | P | Pn | 18 56 06.1 | +0.7 |
| SBJI | | | | S | Sn | 18 56 18.6 | +2.0 |
| **CNJI** | **Cibinong** | **0.98** | **118** | P | Pn | 18 56 08.5 | +0.2 |
| CNJI | | | | S | Sn | 18 56 22.6 | +0.9 |
| **LEM** | **Lembang** | **1.35** | **89** | P | Pn | 18 56 14.7 | +1.4 |
| **CISI** | **Cisompet, Garu** | **1.69** | **115** | P | Pn | 18 56 17.8 | 0.0 |
| CISI | | | | S | Sn | 18 56 39.3 | +0.6 |
| **KASI** | **Kota Agung** | **2.19** | **307** | P | Pn | 18 56 24.6 | +0.2 |
| **CMJI** | **Cimerak** | **2.36** | **113** | P | Pn | 18 56 26.8 | +0.1 |
| CMJI | | | | S | Sn | 18 56 55.4 | +0.8 |
| **KLI** | **Kotabumi** | **2.42** | **325** | P | Pn | 18 56 27.7 | +0.2 |
| **LWLI** | **Liwa** | **2.85** | **310** | P | Pn | 18 56 34.2 | +0.7 |
| **MDSI** | **Maura Dua** | **3.13** | **318** | P | Pn | 18 56 37.6 | +0.4 |

*ISCJB **29** 19:00:38.1±0.5, 1°.87N±0°.05×99°.26E±0°.08, h200km, mb3.6/6, Error ellipse: s-maj=11.5km s-min=6.0km az=161.0*
*IDC **29** 19:00:38.7±1.1, 1°.97N×99°.42E, h174km±7km, mb3.6/6, mb1 3.6/7, mb1mx3.2/35, mbtmp4.0/7, Error ellipse: s-maj=70.2km s-min=14.3km az=57.0*
*DJA **29** 19:00:39.3±0.4, 2°.N±3°×9°.9E±°, h171km±5km, M3.6/13, MLv3.6/13*

**ISC 29 19:00:39.6±0.7, 1°.86N±0°.07×99°.26E±0°.09, h200km, n17, σ1§61/22, mb3.8/6, Northern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SBSI** | **Sibolga** | **0.48** | **231** | P | **Pn** | **19 01 04.5** | **-2.2** |
| SBSI | | | | S | **Sn** | **19 01 23.8** | **-3.8** |
| **PSI** | **Prapat** | **1.00** | **340** | P | Pn | 19 01 06.2 | -3.3 |
| | 73nm,0.3s,baz=349,slow=6.2,SNR=112 | | | | | | |
| PSI | | | | S | Sn | 19 01 25.7 | -7.1 |
| | 4.6nm,0.3s,baz=199,slow=23,SNR=9.7 | | | | | | |
| **MNSI** | **Mandailing Nat** | **1.10** | **163** | P | **Pn** | **19 01 08.8** | **-1.3** |
| MNSI | | | | S | **Pn** | **19 01 09.8** | **-0.3** |
| **GSI** | **Gunungsitoli** | **1.77** | **252** | P | **Pn** | **19 01 16.6** | **+0.7** |
| GSI | | | | S | **Sn** | **19 01 43.3** | **-0.7** |
| **TSI** | **Tuntungan** | **1.77** | **337** | P | **Pn** | **19 01 14.0** | **-1.9** |
| **KCSI** | **Kotacane, Aceh** | **2.23** | **318** | P | **Pn** | **19 01 18.6** | **-1.9** |
| **PPI** | **Padang Panjang** | **2.56** | **154** | P | **Pn** | **19 01 23.8** | **-0.4** |
| **PDSI** | **Padang** | **3.00** | **156** | P | **Pn** | **19 01 28.4** | **-0.9** |
| PDSI | | | | S | **Sn** | **19 02 06.2** | **-2.1** |
| **SISI** | **Saibi** | **3.17** | **183** | P | **Pn** | **19 01 29.4** | **-1.9** |
| SISI | | | | S | **Sn** | **19 02 10.7** | **-1.1** |
| **MLSI** | **Meulaboh, Aceh** | **3.73** | **310** | P | **Pn** | **19 01 37.0** | **-1.0** |
| **CMAR** | **Chiang Mai Arr** | **16.50** | **359** | P | **P** | **19 04 17.9** | **-1.2** |
| | 0.1nm,0.3s,baz=188,slow=12,SNR=5.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.66** | **124** | P | **P** | **19 08 01.8** | **+1.1** |
| | 3.4nm,0.4s,baz=303,slow=9.0,SNR=50 | | | | | | |
| **ASAR** | **Alice Springs** | **42.17** | **129** | P | **P** | **19 08 13.7** | **+0.8** |
| | 0.4nm,0.5s,baz=301,slow=7.3,SNR=6.4 | | | | | | |
| **SONM** | **Songino Array** | **46.21** | **7** | P | **P** | **19 08 45.1** | **+0.4** |
| | 0.5nm,0.5s,baz=190,slow=9.8,SNR=6.0 | | | | | | |
| SONM | | | | PcP | **PcP** | **19 10 17.4** | **+0.4** |
| | 0.3nm,0.6s,baz=187,slow=3.5,SNR=3.6 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.14** | **344** | P | **P** | **19 08 53.3** | **+1.5** |
| | 1.4nm,0.5s,baz=163,slow=7.6,SNR=21 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **53.27** | **349** | P | **P** | **19 09 38.9** | **+1.3** |
| | 4.4nm,0.4s,baz=171,slow=6.9,SNR=28 | | | | | | |
| **FINES** | **FINESS Array B** | **80.38** | **332** | P | **P** | **19 12 29.6** | **+1.2** |
| | 2.2nm,0.9s,baz=107,slow=11,SNR=4.6 | | | | | | |

**MEX 29 19:00:45.3±0.6, 16°.23N×94°.98W, h16km±19km, MD4.2, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HUIG** | **Huatulco** | **1.18** | **247** | *e*P | Pn | 19 01 03.4 | -3.8 |
| HUIG | | | | *e*S | Sb | 19 01 17.5 | -5.0 |
| **PCIG** | | **1.77** | **107** | *e*P | Pn | 19 01 12.5 | -2.8 |
| PCIG | | | | *i* S | Sn | 19 01 31.8 | -5.7 |
| **TGIG** | | **1.86** | **73** | *e*P | Pn | 19 01 13.0 | -3.6 |
| TGIG | | | | *e*S | Sn | 19 01 35.3 | -4.6 |
| **PNIG** | **Pinotepa** | **3.03** | **273** | *e*P | Pn | 19 01 30.7 | -2.0 |
| PNIG | | | | *e*S | Sn | 19 02 05.0 | -3.7 |

*ISCJB **29** 19:21:01.5±0.4, 32°.38N±0°.02×115°.43W±0°.03, h13km±3km, Error ellipse: s-maj=3.7km s-min=3.1km az=8.3*
*ECX **29** 19:21:02.9±0.6, 32°.35N×115°.45W, h6km, MD2.9, ML3.1*
*NEIC **29** 19:21:02.9, 32°.35N×115°.46W, h6km, ML2.9(PAS), ML3.1(ECX), After ECX.*
*NEIC Felt at Mexicali.*
*MEX **29** 19:21:03.4±0.9, 32°.49N×115°.32W, h10km±532km, MD3.7*

**ISC 29 19:21:00.9±0.9, 32°.39N±0°.02×115°.43W±0°.02, h15km±8km, n43, σ0§72/66, 4C-7D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CPBX** | **Cerro Prieto** | **0.11** | **73** | *e*P | **Pb** | **19 21 05.4** | **+0.7** |
| CPBX | | | | *e*S | **Sb** | **19 21 07.9** | **+0.6** |
| **CPBX** | **Cerro Prieto** | **0.11** | **73** | *e*P | **Pb** | **19 21 05.2** | **+0.5** |
| CPBX | | | | *i* S | **Sb** | **19 21 07.4** | **+0.1** |
| **MBIG** | **Mexicali** | **0.20** | **84** | *e*P | **Pb** | **19 21 06.7** | **+0.5** |
| MBIG | | | | *e*S | **Sg** | **19 21 08.4** | **-0.1** |
| **MBIG** | **Mexicali** | **0.20** | **84** | *e*P | **Pb** | **19 21 07.2** | **+1.0** |
| **SGL** | **Mount Signal** | **0.36** | **317** | ⇓*i*P | **Pb** | **19 21 09.4** | **+0.4** |
| **ERPC** | **Ernies Place** | **0.41** | **331** | ⇓*i*P | **Pb** | **19 21 11.0** | **+1.2** |
| **DREC** | **Desert Rsrch C** | **0.42** | **358** | *e*P | **Pb** | **19 21 11.3** | **+1.4** |
| **WESC** | **Westside Schoo** | **0.45** | **326** | ⇓*i*P | **Pb** | **19 21 11.5** | **+1.0** |
| **YUH** | **Yuha Desert** | **0.49** | **302** | ⇓*i*P | **Pb** | **19 21 11.4** | **+0.2** |
| **EMSC** | **East Mesa** | **0.52** | **47** | ⇑*i*P | **Pb** | **19 21 12.8** | **+1.2** |
| **COK** | **Cook Ranch** | **0.53** | **332** | ⇓*i*P | **Pb** | **19 21 12.8** | **+1.0** |
| **COA** | **Coachella** | **0.54** | **29** | ⇑*i*P | **Pb** | **19 21 13.1** | **+1.0** |
| **RMX** | **La Rumorosa** | **0.59** | **292** | *e*P | **Pg** | **19 21 12.7** | **+0.2** |
| RMX | | | | ⇑*e* | | 19 21 23.4 | |
| RMX | | | | IAML | | 19 21 23.4 | |
| | comp=N,1μm,0.2s | | | | | | |
| **IBP** | **Imperial Bould** | **0.62** | **296** | *e*P | **Pb** | **19 21 13.9** | **+0.4** |
| **IBP** | **Imperial Bould** | **0.62** | **296** | P | **Pb** | **19 21 13.8** | **+0.4** |
| | baz=0.6,SNR=312 | | | | | | |
| IBP | | | | S | **Sb** | **19 21 22.8** | **+0.7** |
| | baz=0.6 | | | | | | |
| **RDX** | **Rancho Dawling** | **0.63** | **224** | *e*P | **Pg** | **19 21 13.1** | **-0.1** |
| RDX | | | | *e*S | **Sg** | **19 21 21.2** | **-0.4** |
| RDX | | | | ⇑*e* | | 19 21 21.5 | |
| RDX | | | | IAML | | 19 21 21.5 | |
| | comp=N,498nm,0.3s | | | | | | |
| **SWSC** | **Sam W. Stewart** | **0.63** | **331** | P | **Pb** | **19 21 14.2** | **+0.6** |
| | baz=0.7,SNR=46 | | | | | | |
| SWSC | | | | S | **Sb** | **19 21 23.0** | **+0.7** |
| | baz=0.7 | | | | | | |
| **CLIC** | **Calipatria** | **0.76** | **354** | *e*P | **Pb** | **19 21 16.2** | **+0.5** |
| **GLA** | **Glamis** | **0.84** | **37** | P | **Pg** | **19 21 17.2** | **+0.1** |
| | baz=0.9,SNR=13 | | | | | | |
| GLA | | | | S | **Sg** | **19 21 28.4** | **+0.2** |
| | baz=0.9 | | | | | | |
| **GLA** | **Glamis** | **0.84** | **37** | *e*Pg | **Pg** | **19 21 17.1** | **-0.1** |
| GLA | | | | *e*Sg | **Sg** | **19 21 28.8** | **+0.7** |
| **ECBX** | **El Chinero** | **0.97** | **160** | *e*P | **Pb** | **19 21 18.3** | **-1.0** |
| ECBX | | | | *e*S | **Sb** | **19 21 31.4** | **-0.5** |
| **MONP** | **Monument Peak** | **0.97** | **301** | P | **Pb** | **19 21 19.9** | **+0.3** |
| | baz=1.0,SNR=140 | | | | | | |
| MONP | | | | S | **Sb** | **19 21 33.1** | **+0.7** |
| | baz=1.0 | | | | | | |
| **CBX** | **Cerro Bola** | **1.05** | **266** | *e*P | **Pn** | **19 21 21.6** | **+0.5** |
| CBX | | | | *e*S | **Sn** | **19 21 35.9** | **+0.4** |
| **CBX** | **Cerro Bola** | **1.05** | **266** | *e*P | **Pb** | **19 21 21.2** | **+0.5** |
| CBX | | | | *e*S | **Sb** | **19 21 34.9** | **+0.6** |
| CBX | | | | ⇓*e* | | 19 21 37.1 | |
| CBX | | | | IAML | | 19 21 37.1 | |
| | comp=E,749nm,0.2s | | | | | | |
| **CBX** | **Cerro Bola** | **1.05** | **266** | *e*P | **Pn** | **19 21 21.6** | **+0.5** |
| CBX | | | | *e*S | **Sn** | **19 21 35.9** | **+0.4** |
| **BAR** | **Barrett** | **1.09** | **286** | *e*P | **Pb** | **19 21 21.9** | **+0.5** |
| **BAR** | **Barrett** | **1.09** | **286** | *e*Pg | **Pb** | **19 21 21.7** | **+0.3** |
| BAR | | | | *e*Sg | **Sb** | **19 21 35.4** | **0.0** |
| **ZAX** | **El Zacaton** | **1.13** | **220** | *e*P | **Pb** | **19 21 21.8** | **-0.3** |
| ZAX | | | | *e*S | **Sb** | **19 21 36.9** | **+0.4** |
| **ECNX** | **Esteban Cantu** | **1.23** | **234** | *e*P | **Pn** | **19 21 23.4** | **-0.2** |
| **BC3** | **Big Chuckawall** | **1.27** | **359** | P | **Pn** | **19 21 23.6** | **-0.5** |
| | baz=1.3 | | | | | | |
| BC3 | | | | S | **Sb** | **19 21 39.2** | **-1.5**

1.0nm,0.6s,baz=147,slow=8.5,SNR=6.2
**SONM Songino Array 39.35 321** P **P** 19 46 30.9 **+0.9**
0.3nm,0.5s,baz=137,slow=6.5,SNR=3.3
**CMAR Chiang Mai Arr 41.50 274** P **P** 19 46 48.5 **+0.7**
0.3nm,0.6s,baz=98,slow=6.2,SNR=4.4
**WRA Warramunga Arr 42.18 192** P **P** 19 46 53.0 **-0.1**
0.9nm,0.8s,baz=22,slow=7.5,SNR=13
**ASAR Alice Springs 45.89 192** P **P** 19 47 21.9 **-0.4**
0.2nm,0.6s,baz=15,slow=7.0,SNR=4.5
**ZALV Zalesovo Beam 54.22 322** P **P** 19 48 24.0 **-0.1**
0.8nm,0.3s,baz=128,slow=9.3,SNR=4.5
ZALV PcP **PcP** 19 49 23.4 **-0.7**
0.6nm,0.3s,baz=116,slow=3.4,SNR=3.5
**MKAR Makanchi Array 54.69 313** P **P** 19 48 27.8 **+0.1**
0.4nm,0.6s,baz=86,slow=10.0,SNR=5.9
MKAR PcP **PcP** 19 49 26.2 **+0.1**
0.4nm,0.6s,baz=81,slow=3.6,SNR=4.1
**KURBB Kurchatov Arra 57.52 317** P **P** 19 48 46.2 **-1.2**
1.2nm,0.4s,baz=93,slow=7.6,SNR=10
**ILAR Eielson Array 62.15 27** P **P** 19 49 17.5 **-1.0**
0.4nm,0.6s,baz=255,slow=5.6,SNR=5.8
**BVAR Borovoye Array 62.68 320** P **P** 19 49 22.3 **+0.2**
2.4nm,0.3s,baz=101,slow=8.0,SNR=20
**ARCES ARCESS Array B 78.97 341** P **P** 19 50 59.5 **+0.1**
2.0nm,0.7s,baz=69,slow=7.7,SNR=15
**FINES FINESS Array B 83.22 334** P **P** 19 51 20.9 **-0.8**
1.4nm,0.5s,baz=97,slow=4.3,SNR=16
**NVAR Mina Array Bea 83.26 51** P **P** 19 51 24.1 **+1.4**
0.3nm,0.2s,baz=291,slow=7.6,SNR=2.9

**MEX 29 19:55:41.1±0.7, 16.77N×99.69W, h23km±12km, MD3.6, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ACX** | **Acapulco** | **0.19** | **301** | *eP* | Pb | 19 55 46.8 | +0.2 |
| ACX | | | | *i* S | Sb | 19 55 50.7 | +0.5 |
| **ACP2** | **Acapulco** | **0.22** | **299** | *eP* | Pb | 19 55 45.2 | -1.7 |
| ACP2 | | | | *i* S | Sb | 19 55 49.4 | -1.4 |
| **CAIG** | **El Cayaco** | **0.62** | **297** | *i* P | Pb | 19 55 51.2 | -2.1 |
| CAIG | | | | *eS* | Sb | 19 55 59.9 | -1.9 |
| **MEIG** | **Mezcala** | **1.15** | **3** | *eP* | Pn | 19 55 58.9 | -3.0 |
| MEIG | | | | *eS* | Sn | 19 56 12.7 | -4.5 |
| **TLIG** | **Tlapa** | **1.33** | **53** | *eP* | Pn | 19 56 01.7 | -2.7 |
| TLIG | | | | *eS* | Sn | 19 56 17.8 | -3.8 |
| **PNIG** | **Pinotepa** | **1.54** | **104** | *eP* | Pn | 19 56 04.1 | -3.1 |
| PNIG | | | | *eS* | Sn | 19 56 23.6 | -2.9 |

*ISCJB **29** 20:05:06.8±0.3, 63.39N±0.03×128.39W±0.04, h10km, mb3.9/1, Error ellipse: s-maj=4.3km s-min=2.8km az=177.0*
*IDC **29** 20:05:08.4±0.9, 63.47N×128.31W, h0km, mb3.9/1, mb1 3.9/6, mb1mx3.5/54, mbtmp3.7/6, ML3.7/5, MS2.5/2, Ms1 2.5/2, ms1mx2.2/52, Error ellipse: s-maj=14.5km s-min=11.1km az=21.0*
*PGC **29** 20:05:09.8±0.0, 63.45N×128.54W, h1km, ML3.8/5, 226km southwest of Norman Wells, Nt Northwest Territories, Canada*
**ISC 29 20:05:09.7±0.6, 63.49N±0.04×128.24W±0.03, h10km, n39, σ1s88/74, Northwest Territories**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CLVN** | **Colville Lake** | **3.68** | **13** | Pn | **Pn** | **20 06 07.8** | **+1.3** |
| CLVN | | | | Sn | **Sn** | **20 06 50.8** | **+0.9** |
| **WHY** | **Whitehorse** | **4.22** | **231** | Pn | **Pn** | **20 06 11.8** | **-2.3** |
| WHY | | | | Pg | **Pb** | **20 06 24.0** | **0.0** |
| WHY | | | | Sg | **Sb** | **20 07 13.4** | **-1.5** |
| **SMPN** | **Simpson Lake** | **4.79** | **7** | Pn | **Pn** | **20 06 22.9** | **+1.2** |
| SMPN | | | | Sn | **Sn** | **20 07 17.6** | **+0.4** |
| SMPN | | | | Sg | **Sg** | **20 07 40.6** | **-2.6** |
| **DAWY** | **Dawson** | **4.98** | **282** | Pn | **Pn** | **20 06 22.7** | **-1.8** |
| DAWY | | | | Pg | **Pb** | **20 06 37.6** | **+0.7** |
| DAWY | | | | Sg | **Sb** | **20 07 39.9** | **+3.1** |
| **HYT** | **Haines Junctio** | **5.10** | **243** | Pn | **Pn** | **20 06 24.1** | **-2.1** |
| HYT | | | | Pg | **Pb** | **20 06 40.1** | **+1.1** |
| HYT | | | | Sn | Sn | 20 07 18.5 | -6.6 |
| HYT | | | | Sg | **Sb** | **20 07 42.5** | **+2.2** |
| **DLBC** | **Dease Lake** | **5.14** | **191** | Pn | **Pn** | **20 06 26.2** | **-0.5** |
| 1.6nm,0.3s,baz=20,slow=15,SNR=3.3 | | | | | | | |
| DLBC | | | | Lg | Lg | 20 07 45.3 | |
| 7.1nm,0.3s,baz=249,slow=26,SNR=5.3 | | | | | | | |
| DLBC | | | | LR | LR | 20 08 51.0 | |
| comp=Z,39nm,18.4s,baz=316,slow=44 | | | | | | | |
| **DLBC** | **Dease Lake** | **5.14** | **191** | Pn | **Pn** | **20 06 26.2** | **-0.5** |
| DLBC | | | | Sg | **Sb** | **20 07 45.8** | **+4.3** |
| **FNBB** | **Fort Nelson** | **5.26** | **149** | Pn | **Pn** | **20 06 28.9** | **+0.6** |
| FNBB | | | | Sn | **Sn** | **20 07 26.2** | **-2.7** |
| FNBB | | | | Sg | **Sg** | **20 07 58.1** | **-0.3** |
| **YUK4** | **Talbot Arm** | **5.29** | **251** | Pn | **Pn** | **20 06 26.5** | **-2.4** |
| YUK4 | | | | Pg | **Pb** | **20 06 42.2** | **-0.1** |
| YUK4 | | | | Sg | **Sb** | **20 07 45.6** | **-0.3** |
| **INK** | **Inuvik** | **5.30** | **338** | Pn | **Pn** | **20 06 27.9** | **-0.9** |
| 4.5nm,0.3s,baz=154,slow=12,SNR=48 | | | | | | | |
| INK | | | | Sn | **Sn** | **20 07 27.4** | **-2.4** |
| 3.6nm,0.3s,baz=204,slow=12,SNR=3.8 | | | | | | | |
| INK | | | | Lg | Lg | 20 07 53.0 | |
| 2.1nm,0.3s,baz=72,slow=20,SNR=3.3 | | | | | | | |
| INK | | | | LR | LR | 20 08 05.9 | |
| comp=Z,48nm,20.7s,baz=158,slow=34 | | | | | | | |
| **INK** | **Inuvik** | **5.30** | **338** | Pn | **Pn** | **20 06 27.6** | **-1.1** |
| INK | | | | Sn | **Sn** | **20 07 26.7** | **-3.1** |
| **YUK7** | **Dusty Glacier** | **5.53** | **242** | Pn | **Pn** | **20 06 30.7** | **-1.4** |
| YUK7 | | | | Sn | **Sn** | **20 07 32.1** | **-3.6** |
| YUK7 | | | | Sg | **Sb** | **20 07 55.9** | **+3.2** |
| **PLBC** | **Pleasant Camp** | **5.61** | **228** | Pn | **Pn** | **20 06 32.1** | **-1.0** |
| PLBC | | | | Sg | **Sb** | **20 07 57.0** | **+2.1** |
| **YUK1** | **Sand Pete Hill** | **5.79** | **262** | Pn | **Pn** | **20 06 34.2** | **-1.5** |
| YUK1 | | | | Sg | **Sb** | **20 08 03.9** | **+3.7** |
| **BVCY** | **Beaver Creek** | **5.86** | **265** | Pn | **Pn** | **20 06 35.1** | **-1.4** |
| BVCY | | | | Sg | **Sb** | **20 08 05.6** | **+3.5** |
| **YUK3** | **Moose Creek** | **5.89** | **259** | Pn | **Pn** | **20 06 35.2** | **-2.0** |
| YUK3 | | | | Sg | **Sb** | **20 08 06.7** | **+3.5** |
| **YUK2** | **White River** | **6.06** | **259** | Pn | **Pn** | **20 06 37.5** | **-1.8** |
| YUK2 | | | | Sg | **Sb** | **20 08 10.7** | **+2.9** |
| **YKR1** | **Yellowknife Ar** | **6.14** | **93** | Pn | **Pn** | **20 06 41.5** | **+1.2** |
| **YKR2** | **Yellowknife Ar** | **6.16** | **93** | Pn | **Pn** | **20 06 41.7** | **+1.2** |
| YKR2 | | | | Sn | **Sn** | **20 07 52.5** | **+1.5** |
| **YKR4** | **Yellowknife Ar** | **6.20** | **93** | Pn | **Pn** | **20 06 42.6** | **+1.4** |
| YKR4 | | | | Sn | **Sn** | **20 07 53.6** | **+1.6** |
| **YKR5** | **Yellowknife Ar** | **6.23** | **93** | Pn | **Pn** | **20 06 42.5** | **+1.1** |
| **YKB0** | **Yellowknife Ar** | **6.26** | **92** | Pn | **Pn** | **20 06 43.3** | **+1.3** |
| **YKB9** | **Yellowknife Ar** | **6.27** | **92** | Pn | **Pn** | **20 06 43.6** | **+1.6** |
| **YKW3** | **Yellowknife Ar** | **6.27** | **92** | Pn | **Pn** | **20 06 43.5** | **+1.4** |
| YKW3 | | | | Sn | **Sn** | **20 07 55.0** | **+1.4** |
| YKW3 | | | | Sg | **Sg** | **20 08 27.6** | **-3.1** |
| **YKB8** | **Yellowknife Ar** | **6.27** | **92** | Pn | **Pn** | **20 06 43.7** | **+1.5** |
| YKB8 | | | | Sn | **Sn** | **20 07 55.1** | **+1.3** |
| **YKB7** | **Yellowknife Ar** | **6.28** | **93** | Pn | **Pn** | **20 06 43.7** | **+1.5** |
| YKB7 | | | | Sn | **Sn** | **20 07 55.2** | **+1.2** |
| **YKB6** | **Yellowknife Ar** | **6.29** | **93** | Pn | **Pn** | **20 06 43.8** | **+1.5** |
| YKB6 | | | | Sn | **Sn** | **20 07 55.5** | **+1.5** |
| **YKA** | **Yellowknife Ar** | **6.29** | **93** | Pn | **Pn** | **20 06 42.5** | **+0.1** |
| 1.1nm,0.3s,baz=280,slow=13,SNR=14 | | | | | | | |
| YKA | | | | Lg | Lg | 20 08 24.6 | |
| 0.8nm,0.3s,baz=286,slow=26,SNR=3.2 | | | | | | | |
| **YKB4** | **Yellowknife Ar** | **6.30** | **93** | Pn | **Pn** | **20 06 43.9** | **+1.5** |
| **YKB3** | **Yellowknife Ar** | **6.30** | **93** | Pn | **Pn** | **20 06 44.0** | **+1.4** |
| YKB3 | | | | Sn | **Sn** | **20 07 55.0** | **+0.5** |
| YKB3 | | | | Sg | **Sg** | **20 08 31.1** | **-0.7** |
| **YKB2** | **Yellowknife Ar** | **6.31** | **94** | Pn | **Pn** | **20 06 44.0** | **+1.4** |
| YKB2 | | | | Sn | **Sn** | **20 07 54.5** | **-0.1** |
| **YKR9** | **Yellowknife Ar** | **6.31** | **93** | Pn | **Pn** | **20 06 44.0** | **+1.4** |
| **YKB1** | **Yellowknife Ar** | **6.32** | **94** | Pn | **Pn** | **20 06 44.5** | **+1.8** |
| **KUKN** | **Kugluktuk,NWT** | **6.95** | **46** | Pn | **Pn** | **20 06 54.4** | **+3.0** |
| KUKN | | | | Sn | **Sn** | **20 08 09.6** | **-0.9** |
| **ILAR** | **Eielson Array** | **8.25** | **287** | Pn | **Pn** | **20 07 08.4** | **-0.8** |
| 0.2nm,0.3s,baz=102,slow=12,SNR=9.7 | | | | | | | |
| ILAR | | | | Lg | Lg | 20 09 26.4 | |
| 0.3nm,0.3s,baz=93,slow=28,SNR=7.8 | | | | | | | |
| **SNLN** | **Sandy Lake, NW** | **9.35** | **85** | Pn | **Pn** | **20 07 25.4** | **+1.3** |
| SNLN | | | | Sn | **Sn** | **20 09 08.9** | **-0.3** |
| **RES** | **Resolute Bay** | **16.02** | **32** | Pn | **Pn** | **20 08 54.3** | **-0.4** |
| 0.4nm,0.3s,baz=269,slow=18,SNR=4.2 | | | | | | | |
| RES | | | | Sn | Sn | 20 11 40.8 | -11 |
| 0.1nm,0.3s,baz=276,slow=9.2,SNR=3.3 | | | | | | | |
| **RES** | **Resolute Bay** | **16.02** | **32** | Pn | **Pn** | **20 08 53.0** | **-1.7** |
| RES | | | | Sn | Sn | 20 11 42.9 | -9.2 |
| **FINES** | **FINESS Array B** | **53.89** | **15** | P | **P** | **20 14 33.4** | **+1.0** |
| 1.3nm,0.8s,baz=357,slow=7.0,SNR=3.6 | | | | | | | |

*PRE **29** 20:18:38.2±3.0, 52.56S×29.30E, h5km*
*ISCJB **29** 20:18:46.7±0.5, 51.99S±0.06×28.2E±0.2, h10km, mb4.1/13, Error ellipse: s-maj=17.9km s-min=7.7km az=169.1*
*IDC **29** 20:18:46.0±0.7, 52.06S×28.00E, h0km, mb3.9/11, mb1 4.0/11, mb1mx3.9/29, mbtmp3.9/11, Error ellipse: s-maj=30.3km s-min=15.1km az=76.0*
*NEIC **29** 20:18:47.7±0.5, 52.06S×27.96E, h10km, mb4.6/4, Error ellipse: s-maj=21.3km s-min=10.3km az=77.0*
**ISC 29 20:18:47.8±0.7, 52.07S±0.09×28.2E±0.2, h10km, n27, σ1s51/23, mb4.1/13, South of Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ELIM** | **Elim** | **18.50** | **337** | *eP* | **P** | **20 23 03.9** | **-0.1** |
| **SOE** | **Somerset East** | **19.45** | **353** | *eP* | **P** | **20 23 15.0** | **+0.5** |
| **CER** | **Ceres** | **19.79** | **337** | *eP* | **Pn** | **20 23 21.5** | **+1.8** |
| **SUR** | **Sutherland** | **20.41** | **342** | P | **P** | **20 23 25.3** | **+0.3** |
| 1.1nm,1.1s,baz=138,slow=11,SNR=4.6 | | | | | | | |
| SUR | | | | S | S | 20 26 58.4 | -15 |
| 0.5nm,0.8s,baz=252,slow=20,SNR=2.4 | | | | | | | |
| **MAW** | **Mawson** | **22.88** | **146** | P | **P** | **20 23 53.6** | **+2.5** |
| 8.7nm,0.9s,baz=285,slow=7.9,SNR=18 | | | | | | | |
| MAW | | | | S | **S** | **20 27 57.6** | **-2.8** |
| 2.7nm,0.3s,baz=269,slow=21,SNR=6.8 | | | | | | | |
| **BOSA** | **Boshof** | **23.54** | **353** | P | **P** | **20 23 58.5** | **+0.2** |
| 5.2nm,0.8s,baz=175,slow=8.6,SNR=7.9 | | | | | | | |
| **SNAA** | **Sanae** | **23.98** | **204** | P | **P** | **20 24 02.7** | **+0.6** |
| **SNAA** | **Sanae** | **23.98** | **204** | P | **P** | **20 24 03.0** | **+0.9** |
| 0.7nm,0.5s,baz=313,slow=1.5,SNR=34 | | | | | | | |
| **SNAA** | **Sanae** | **23.98** | **204** | *eP* | **P** | **20 24 02.3** | **+0.1** |
| 2.6nm,0.8s | | | | | | | |
| **VNA2** | **Neumayer--Watz** | **24.77** | **207** | P | **P** | **20 24 10.4** | **+1.2** |
| baz=51,slow=10 | | | | | | | |
| **VNA1** | **Neumayer--Stat** | **24.88** | **208** | P | **P** | **20 24 12.0** | **+1.8** |
| **LBTB** | **Lobatse** | **27.09** | **355** | P | **P** | **20 24 29.9** | **-0.8** |
| 4.1nm,0.8s,baz=185,slow=11,SNR=5.8 | | | | | | | |
| **LSZ** | **Lusaka** | **36.71** | **360** | *eP* | **P** | **20 25 54.7** | **-0.5** |
| 6.7nm,0.9s | | | | | | | |
| **QSPA** | **South Pole Qui** | **38.15** | **180** | P | **P** | **20 26 06.3** | **-0.6** |
| 1.1nm,0.4s,baz=240,slow=1.7,SNR=7.1 | | | | | | | |
| **VNDA** | **Vanda** | **47.52** | **168** | P | **P** | **20 27 22.8** | **+0.3** |
| 0.5nm,0.6s,baz=219,slow=8.3,SNR=3.8 | | | | | | | |
| **SBA** | **Scott Base** | **47.86** | **169** | P | P | 20 27 29.2 | +4.1 |
| **H10S2** | **ASCENSION HYDR** | **55.34** | **305** | T | T | 21 28 18.1 | |
| baz=149,slow=75,SNR=8.8 | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **55.36** | **305** | T | T | 21 28 01.3 | |
| baz=149,slow=75,SNR=1.7 | | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **55.36** | **305** | T | T | 21 28 01.5 | |
| baz=149,slow=75,SNR=1.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **68.89** | **332** | P | **P** | **20 29 52.9** | **+0.3** |
| 0.2nm,0.4s,baz=179,slow=7.7,SNR=6.0 | | | | | | | |
| **RCBR** | **Riachuelo** | **69.67** | **287** | P | **P** | **20 29 55.3** | **-2.4** |
| 31nm,1.3s | | | | | | | |
| **ASAR** | **Alice Springs** | **80.73** | **117** | P | **P** | **20 31 01.2** | **-0.1** |
| 1.3nm,0.6s,baz=218,slow=4.9,SNR=31 | | | | | | | |
| **LPAZ** | **La Paz** | **81.16** | **255** | P | **P** | **20 31 01.8** | **-2.6** |
| 1.6nm,0.5s,baz=156,slow=2.4,SNR=8.6 | | | | | | | |
| **SAML** | **Samuel** | **83.88** | **263** | *eP* | **P** | **20 31 18.5** | **+0.6** |
| 6.5nm,1.0s | | | | | | | |
| **WRA** | **Warramunga Arr** | **83.94** | **115** | P | **P** | **20 31 17.6** | **-0.6** |
| 0.7nm,0.8s,baz=216,slow=4.4,SNR=5.7 | | | | | | | |
| **NNA** | **Nana** | **89.69** | **251** | P | P | 20 31 40.4 | -5.9 |
| **NVAR** | **Mina Array Bea** | **153.04** | **253** | PKPab | **PKPab** | **20 38 59.5** | **+2.7** |
| 0.4nm,0.5s,baz=145,slow=4.0,SNR=4.3 | | | | | | | |

**IDC 29 20:18:56.3±1.1, 51.88S×27.38E, h0km, mb4.4/6, mb1 4.6/6, mb1mx4.0/28, mbtmp4.4/6, Error ellipse: s-maj=35.1km s-min=23.4km az=47.0, South of Africa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SUR** | **Sutherland** | **20.07** | **344** | P | P | 20 23 30.9 | -0.4 |
| 0.4nm,0.3s,baz=151,slow=14,SNR=58 | | | | | | | |
| **CVNA** | **Calvinia** | **21.13** | **342** | *eP* | P | 20 23 45.9 | +3.1 |
| **MAW** | **Mawson** | **23.34** | **146** | P | P | 20 24 04.4 | -1.3 |
| 4.5nm,0.3s,baz=295,slow=11,SNR=30 | | | | | | | |
| **UPI** | **Upington** | **23.93** | **347** | *eP* | P | 20 24 21.1 | +9.1 |
| **QSPA** | **South Pole Qui** | **38.34** | **180** | P | P | 20 26 19.1 | +0.4 |
| 11nm,0.9s,baz=242,slow=4.4,SNR=12 | | | | | | | |
| **CPUP** | **Villa Florida** | **66.58** | **257** | P | P | 20 29 47.2 | -1.0 |
| 1.4nm,0.6s,baz=135,slow=5.7,SNR=3.0 | | | | | | | |
| **LPAZ** | **La Paz** | **80.70** | **256** | P | P | 20 31 12.7 | +0.5 |
| 2.6nm,0.6s,baz=180,slow=4.0,SNR=8.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **81.28** | **117** | P | P | 20 31 14.8 | +0.4 |
| 1.6nm,0.6s,baz=214,slow=4.7,SNR=11 | | | | | | | |
| **WRA** | **Warramunga Arr** | **84.49** | **115** | P | P | 20 31 31.5 | +0.3 |
| 0.9nm,0.8s,baz=214,slow=4.3,SNR=4.7 | | | | | | | |

**TRN 29 20:19:27.3, 15.08N×61.05W, h152km, MD3.7, M2.4(FDF), 5C-7D, Leeward Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVN** | **Savane Anatole** | **0.26** | **206** | *eP* | Pn | 20 19 49.4 | +1.4 |
| **BAMF** | **Morne Balai** | **0.28** | **200** | *eP* | Pn | 20 19 49.5 | +1.3 |
| **CXM** | **Morne La Croix** | **0.29** | **204** | *eP* | Pn | 20 19 49.4 | +1.1 |
| CXM | | | | *eS* | Sn | 20 20 04.7 | +0.5 |
| **DSTT** | **Stowe** | **0.30** | **304** | *eP* | Pn | 20 19 49.6 | +1.6 |
| DSTT | | | | *eS* | Sn | 20 20 04.9 | +1.0 |
| **GBMF** | **Grand Be** | **0.30** | **202** | *eP* | Pn | 20 19 49.5 | +1.3 |
| **PCM** | **Pelee Case Pet** | **0.30** | **211** | *eP* | Pn | 20 19 49.4 | +1.3 |
| **PCM** | **Pelee Case Pet** | **0.30** | **211** | *eP* | Pn | 20 19 49.8 | +1.6 |
| **DLPL** | **La Plaine** | **0.32** | **323** | *eP* | Pn | 20 19 49.1 | +0.9 |
| DLPL | | | | *eS* | Sn | 20 20 04.9 | +0.9 |
| **PML** | **Morne Lenard** | **0.32** | **204** | *eP* | Pn | 20 19 49.5 | +1.3 |
| **BVM** | **Bellevue** | **0.34** | **182** | *eP* | Pn | 20 19 49.6 | +1.3 |
| **FDF** | **Fort de France** | **0.36** | **196** | *iP* | Pn | 20 19 49.2 | +0.8 |
| **FDF** | **Fort de France** | **0.36** | **196** | *eP* | Pn | 20 19 49.4 | +1.1 |
| FDF | | | | *eS* | Sn | 20 20 04.6 | +0.2 |
| **ZAM** | **Aeronautique** | **0.50** | **178** | *eP* | Pn | 20 19 50.0 | +1.1 |
| **LPMF** | **Morne Lapointe** | **0.51** | **171** | *eP* | Pn | 20 19 49.7 | +0.8 |
| **TRMF** | **Trois Ilets** | **0.54** | **180** | *eP* | Pn | 20 19 50.3 | +1.2 |
| **MVM** | **Montagne Vaucl** | **0.54** | **164** | *eP* | Pn | 20 19 49.4 | +0.2 |
| **BIM** | **Bigot** | **0.56** | **182** | *eP* | Pn | 20 19 50.7 | +1.4 |
| BIM | | | | *eS* | Sn | 20 20 06.9 | +0.9 |
| **BBL** | **Barber's Block** | **0.60** | **318** | *iP* | Pn | 20 19 50.5 | +1.0 |
| **MGG** | **Marie-Galante** | **0.87** | **343** | *iP* | Pn | 20 19 52.1 | +0.9 |
| **TBG** | **Guadaloupe-3** | **0.96** | **323** | *iP* | Pn | 20 19 52.6 | +0.7 |
| **PHG** | **Guadaloupe-2** | **1.09** | **328** | *eP* | Pn | 20 19 54.1 | +0.9 |
| **SCG** | **Saint Claude** | **1.12** | **327** | *eP* | Pn | 20 19 54.5 | +1.1 |
| **FNG** | **Fond-Bernard** | **1.15** | **328** | *eP* | Pn | 20 19 54.8 | +1.1 |
| **MLG** | **Mont-d'or** | **1.17** | **327** | *iP* | Pn | 20 19 54.8 | +1.0 |
| MLG | | | | *eS* | Sn | 20 20 14.3 | +0.2 |
| **DEG** | **La Desirade** | **1.23** | **359** | *eP* | Pn | 20 19 55.3 | +1.0 |
| **LZG** | **Guadaloupe-1** | **1.27** | **327** | *eP* | Pn | 20 19 55.6 | +1.0 |
| **MCLT** | **Moule a Chique** | **1.36** | **176** | *eP* | Pn | 20 19 56.2 | +0.5 |
| MCLT | | | | *eS* | Sn | 20 20 17.9 | +0.5 |
| **SEG** | **Port Louis** | **1.39** | **342** | *iP* | Pn | 20 19 56.9 | +1.0 |
| **SVV** | **Soufriere Volc** | **1.76** | **185** | *eP* | Pn | 20 20 01.6 | +1.7 |
| **SVB** | **Belmont** | **1.81** | **186** | *eP* | Pn | 20 20 01.0 | +0.6 |
| SVB | | | | *eS* | Sn | 20 20 25.8 | -0.1 |
| **FCV** | **Fort Charlotte** | **1.92** | **186** | *eP* | Pn | 20 20 03.1 | +1.5 |
| **MBWH** | | **1.99** | **327** | *eP* | Pn | 20 20 02.9 | +0.5 |
| **ANWB** | **Willy Bob** | **2.67** | **345** | *eP* | Pn | 20 20 10.6 | 0.0 |
| ANWB | | | | *eS* | Sn | 20 20 42.3 | -1.8 |
| **GRSS** | **Sisters** | **2.82** | **191** | *eP* | Pn | 20 20 13.6 | +1.2 |
| **GRSS** | **Sisters** | **2.82** | **191** | *eP* | Pn | 20 20 13.8 | +1.4 |
| **GRW** | **Mount Saint Ca** | **2.96** | **192** | *eP* | Pn | 20 20 15.5 | +1.1 |
| GRW | | | | *eS* | Sn | 20 20 50.8 | -0.1 |
| **GRGR** | **Grenville** | **2.99** | **191** | *eP* | Pn | 20 20 15.2 | +0.6 |
| GRGR | | | | *eS* | Sn | 20 20 51.3 | +0.1 |
| **TOSP** | **Speyside** | **3.79** | **172** | *eP* | Pn | 20 20 25.7 | +0.8 |

**IDC 29 20:23:08.5±6.6, 10.46N×91.01E, h0km, mb3.4/5, mb1 3.5/5, mb1mx3.3/43, mbtmp3.4/5, Error ellipse: s-maj=329.5km s-min=21.1km az=60.0, Andaman Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S3** | **Diego Garcia H** | **25.75** | **226** | T | T | 20 56 40.7 | |
| baz=46,slow=75,SNR=44 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **25.75** | **226** | T | T | 20 56 36.7 | |
| baz=46,slow=75,SNR=42 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **25.77** | **226** | T | T | 20 56 38.7 | |
| baz=46,slow=75,SNR=43 | | | | | | | |
| **MKAR** | **Makanchi Array** | **36.96** | **350** | P | P | 20 30 19.6 | +0.1 |
| 1.1nm,0.8s,baz=168,slow=8.3,SNR=9.6 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **41.34** | **348** | P | P | 20 30 56.3 | +0.3 |
| 0.4nm,0.7s,baz=164,slow=7.3,SNR=3.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **43.66** | **355** | P | P | 20 31 13.7 | -1.0 |
| 0.4nm,0.3s,baz=161,slow=6.1,SNR=3.6 | | | | | | | |
| **WRA** | **Warramunga Arr** | **52.27** | **125** | P | P | 20 32 21.2 | -0.9 |
| 0.2nm,0.3s,baz=301,slow=10.0,SNR=5.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **53.94** | **129** | P | P | 20 32 35.1 | +0.8 |
| 0.2nm,0.6s,baz=300,slow=7.4,SNR=2.5 | | | | | | | |

**GUC 29 20:29:52.0±0.5, 19.79S×70.59W, h22km±3km, ML3.8, Near coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB11** | **IPOC Station P** | **0.88** | **88** | *eP* | Pn | 20 30 07.8 | -1.0 |
| PB11 | | | | *eS* | Sb | 20 30 19.5 | -0.8 |
| PB11 | | | | AML | AML | 20 30 21.2 | |
| comp=N,8μm,0.2s | | | | | | | |
| **MNMC** | **Minimini** | **1.15** | **55** | *eP* | Pn | 20 30 12.4 | -0.7 |
| MNMC | | | | *eS* | Sb | 20 30 27.4 | -0.8 |
| MNMC | | | | AML | AML | 20 30 29.6 | |
| comp=E,3μm,0.4s | | | | | | | |
| **PB01** | **IPOC Station P** | **1.62** | **140** | *eP* | Pn | 20 30 19.7 | +0.4 |
| PB01 | | | | *eS* | Sb | 20 30 40.8 | -0.7 |
| **PB13** | **IPOC Station P** | **1.78** | **36** | *eP* | Pn | 20 30 23.2 | +1.0 |
| PB13 | | | | *eS* | Sb | 20 30 47.0 | -0.1 |
| PB13 | | | | AML | AML | 20 30 47.6 | |
| comp=E,3μm,0.5s | | | | | | | |
| **PB07** | **IPOC Station P** | **2.03** | **161** | *eP* | Pn | 20 30 26.5 | +1.3 |
| **PB09** | **IPOC Station P** | **2.36** | **148** | *eP* | Pn | 20 30 31.8 | +2.1 |
| PB09 | | | | *eS* | Sb | 20 31 01.7 | -1.2 |
| PB09 | | | | AML | AML | 20 31 08.4 | |
| comp=E,556nm,0.8s | | | | | | | |

*MOS **29** 20:31:22.1±2.1, 50.65N×157.96E, h50km, mb4.2/1, Error ellipse: s-maj=27.7km s-min=7.2km az=84.0*
**KRSC 29 20:31:22.2±1.4, 50.66N×157.96E, h50km±22km, ML3.9, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PAU** | **Pauzhetka** | **1.09** | **319** | *eP* | Pn | 20 31 42.8 | +1.8 |
| PAU | | | | *eS* | Sn | 20 31 56.6 | +1.6 |
| **PAU** | **Pauzhetka** | **1.09** | **319** | PN | Pn | 20 31 42.8 | +1.8 |
| PAU | | | | S | Sn | 20 31 56.6 | +1.6 |
| **SKR** | **Severo-Kuril's** | **1.17** | **272** | *i* P | Pn | 20 31 43.5 | +1.4 |
| SKR | | | | *eS* | Sn | 20 31 56.9 | -0.1 |
| **SKR** | **Severo-Kuril's** | **1.17** | **272** | *e*PN | Pn | 20 31 32.4 | -10 |
| SKR | | | | pmax | pmax | | |
| comp=E,80nm,0.5s | | | | | | | |
| SKR | | | | pmax | pmax | | |
| comp=Z,140nm,0.5s | | | | | | | |
| **ASAK** | **Asacha** | **1.73** | **359** | *eP* | Pn | 20 31 51.2 | +1.3 |
| **RUS** | **Russkaya** | **1.81** | **11** | *eP* | Pn | 20 31 53.1 | +2.2 |
| RUS | | | | *eS* | Sn | 20 32 14.4 | +1.7 |
| **RUS** | **Russkaya** | **1.81** | **11** | PN | Pn | 20 31 53.1 | +2.2 |
| RUS | | | | S | Sn | 20 32 14.4 | +1.7 |
| **APC** | **Apacha** | **2.33** | **348** | *eP* | Pn | 20 32 01.0 | +3.1 |
| **APC** | **Apacha** | **2.33** | **348** | PN | Pn | 20 32 01.0 | +3.1 |
| **PET** | **Petropavlovsk** | **2.41** | **10** | *i* P | Pn | 20 32 01.8 | +2.7 |
| PET | | | | *eS* | Sn | 20 32 31.0 | +3.6 |
| **PET** | **Petropavlovsk** | **2.41** | **10** | PN | Pn | 20 32 01.8 | +2.7 |
| PET | | | | S | Sn | 20 32 31.0 | +3.6 |
| **UGLR** | **Uglovaya** | **2.61** | **12** | *eP* | Pn | 20 32 05.5 | +3.5 |
| **AVH** | **Avacha** | **2.66** | **10** | *eP* | Pn | 20 32 06.5 | +3.9 |
| **AVH** | **Avacha** | **2.66** | **10** | PN | Pn | 20 32 06.5 | +3.9 |
| **SMAR** | **Somma** | **2.66** | **11** | *eP* | Pn | 20 32 06.6 | +3.7 |
| **SMAR** | **Somma** | **2.66** | **11** | PN | Pn | 20 32 06.6 | +3.7 |
| **KOK** | **Koryaka** | **2.67** | **9** | *eP* | Pn | 20 32 06.6 | +3.7 |
| **KOK** | **Koryaka** | **2.67** | **9** | PN | Pn | 20 32 06.6 | +3.7 |
| **SDLR** | **Sedlovina** | **2.69** | **12** | *eP* | Pn | 20 32 05.9 | +2.8 |
| **SDLR** | **Sedlovina** | **2.69** | **12** | PN | Pn | 20 32 05.9 | +2.8 |
| **SPN** | **Mys Shipunski** | **2.76** | **27** | *eP* | Pn | 20 32 07.4 | +3.5 |
| SPN | | | | *eS* | Sn | 20 32 39.5 | +3.5 |
| **SPN** | **Mys Shipunski** | **2.76** | **27** | PN | Pn | 20 32 07.4 | +3.5 |
| SPN | | | | S | Sn | 20 32 39.5 | +3.5 |
| **GNL** | **Ganaly** | **3.04** | **360** | *eP* | Pn | 20 32 11.8 | +3.8 |
| **GNL** | **Ganaly** | **3.04** | **360** | PN | Pn | 20 32 11.8 | +3.8 |
| **MKZ** | **Mys Kozlova** | **4.53** | **29** | *eP* | Pn | 20 32 30.4 | +2.3 |
| **MKZ** | **Mys Kozlova** | **4.53**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **ALN** | **Alexandroupoli** | **0.60** | **17** | *e*Pn | **Pg** | **20 50 53.0** | **-0.9** |
| ALN | | | | *e*Sn | **Sg** | **20 51 02.1** | **+0.3** |
| **LIA** | **Limnos Island** | **0.65** | **229** | *e*Pn | **Pb** | **20 50 55.4** | **+0.1** |
| LIA | | | | *e*SN | **Sb** | **20 51 03.7** | **-0.5** |
| **LIA** | **Limnos Island** | **0.65** | **229** | *e*Pn | **Pb** | **20 50 55.4** | **+0.1** |
| LIA | | | | *e*Sn | **Sb** | **20 51 03.7** | **-0.5** |
| **SIGR** | **SIGRI** | **1.11** | **178** | *e*PN | **Pb** | **20 51 03.1** | **-0.2** |
| SIGR | | | | *e*SN | **Sn** | **20 51 19.1** | **+0.4** |
| **SIGR** | **SIGRI** | **1.11** | **178** | *e*Pn | **Pb** | **20 51 03.1** | **-0.2** |
| SIGR | | | | *e*Sn | **Sn** | **20 51 19.1** | **+0.4** |
| **PRK** | **Paraskevi** | **1.14** | **162** | *e*PN | **Pg** | **20 51 03.9** | **-0.1** |
| PRK | | | | *e*SN | **Sg** | **20 51 18.6** | **-0.2** |
| **PRK** | **Paraskevi** | **1.14** | **162** | *e*Pn | **Pg** | **20 51 03.9** | **-0.1** |
| PRK | | | | *e*Sn | **Sg** | **20 51 18.6** | **-0.2** |
| **AYVA** | **Ayvalik** | **1.22** | **146** | *i* P | **Pb** | **20 51 05.1** | **0.0** |
| AYVA | | | | *i* S | **Sb** | **20 51 20.5** | **-0.3** |
| **AYVA** | **Ayvalik** | **1.22** | **146** | P | **Pb** | **20 51 05.1** | **0.0** |
| AYVA | | | | S | **Sb** | **20 51 20.5** | **-0.3** |
| **OUR** | **Ouranopolis** | **1.40** | **271** | *e*PN | **Pn** | **20 51 06.9** | **-0.5** |
| **OUR** | **Ouranopolis** | **1.40** | **271** | *e*Pb | **Pn** | **20 51 06.9** | **-0.5** |
| **BALY** | **Balya** | **1.50** | **112** | *i* P | **Pn** | **20 51 09.3** | **+0.3** |
| BALY | | | | *i* S | **Sn** | **20 51 28.7** | **+0.2** |
| **BALY** | **Balya** | **1.50** | **112** | P | **Pn** | **20 51 09.3** | **+0.3** |
| BALY | | | | S | **Sn** | **20 51 28.6** | **+0.2** |
| **NVR** | **Nevrokopi** | **1.80** | **305** | *e*PN | **Pn** | **20 51 13.2** | **+0.2** |
| **NVR** | **Nevrokopi** | **1.80** | **305** | *e*Pn | **Pn** | **20 51 13.2** | **+0.2** |
| **SRS** | **Serrai** | **1.86** | **296** | *e*PN | **Pn** | **20 51 14.6** | **+0.7** |
| **SRS** | **Serrai** | **1.86** | **296** | *e*Pn | **Pn** | **20 51 14.6** | **+0.7** |
| **DURS** | **Dursunbey** | **2.17** | **109** | *i* P | **Pn** | **20 51 18.3** | **+0.2** |
| DURS | | | | *i* S | **Sn** | **20 51 46.1** | **+1.2** |
| **DURS** | **Dursunbey** | **2.17** | **109** | P | **Pn** | **20 51 18.3** | **+0.2** |
| DURS | | | | S | **Sn** | **20 51 46.1** | **+1.2** |

*IDC **29** 21:07:24.4±1.4, 3.80S×99.26E, h0km, mb3.9/9, mb1 4.0/9, mb1mx3.7/39, mbtmp3.9/9, MS2.8/2, Ms1 2.8/2, ms1mx2.4/44, Error ellipse: s-maj=44.1km s-min=24.0km az=46.0*

*ISCJB **29** 21:07:27.6±1.3, 3.7S±0.2×99.4E±0.2, h33km, mb3.9/9, MS2.9/1, Error ellipse: s-maj=39.1km s-min=21.4km az=137.0*

**ISC 29 21:07:29.6±1.4, 3.8S±0.2×99.3E±0.2, h35km, n12, σ0s49/10, mb3.9/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSI** | **Prapat** | **6.55** | **356** | LR | LR | 21 11 14.8 | |
| | comp=Z,73nm,19.0s,baz=148,slow=36 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.10** | **359** | P | **P** | **21 12 21.8** | **-0.2** |
| | 2.7nm,0.8s,baz=186,slow=10.0,SNR=21 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.71** | **118** | P | **P** | **21 14 42.2** | **0.0** |
| | 0.4nm,1.0s,baz=305,slow=8.4,SNR=4.7 | | | | | | |
| **SONM** | **Songino Array** | **51.77** | **6** | P | **P** | **21 16 34.6** | **+0.7** |
| | 1.3nm,0.7s,baz=192,slow=8.5,SNR=14 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.56** | **345** | P | **P** | **21 16 40.0** | **+0.3** |
| | 1.1nm,0.7s,baz=158,slow=9.0,SNR=11 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **56.02** | **28** | P | **P** | **21 17 04.3** | **-0.6** |
| | 1.4nm,0.9s,baz=212,slow=6.8,SNR=4.3 | | | | | | |
| **GEYT** | **Alibeck** | **56.40** | **321** | P | **P** | **21 17 07.2** | **-0.5** |
| | 0.5nm,0.4s,baz=140,slow=11,SNR=3.0 | | | | | | |
| **ATD** | **Arta Tunnel** | **58.20** | **286** | LR | LR | 21 38 05.8 | |
| | comp=Z,11nm,20.6s,baz=98,slow=32 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.79** | **350** | P | **P** | **21 17 24.1** | **0.0** |
| | 2.0nm,0.6s,baz=185,slow=6.0,SNR=12 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.03** | **313** | P | **P** | **21 19 02.1** | **-0.2** |
| | 1.1nm,0.8s,baz=87,slow=4.9,SNR=3.5 | | | | | | |
| **FINES** | **FINESS Array B** | **85.37** | **333** | P | **P** | **21 20 03.6** | **+0.5** |
| | 2.8nm,0.9s,baz=115,slow=13,SNR=4.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.50** | **38** | PKPbc | **PKPab** | **21 27 08.9** | **-0.1** |
| | 1.5nm,1.0s,baz=245,slow=0.8,SNR=8.8 | | | | | | |

*ISCJB **29** 21:27:31.6±1.3, 3.66S±0.05×99.85E±0.04, h27km±9km, mb4.2/25, MS2.9/1, Error ellipse: s-maj=9.6km s-min=4.5km az=43.1*

*NEIC **29** 21:27:33.9±0.3, 3.78S×99.74E, mb4.5/7, Error ellipse: s-maj=8.7km s-min=6.9km az=54.0*

*DJA **29** 21:27:33.3±0.5, 4.°S±4.°×10.°0E±.°, h30km, M4.5/18, mb4.8/6, MLv4.4/18*

*IDC **29** 21:27:34.4±0.5, 3.71S×99.72E, h31km±2km, mb3.9/20, mb1 4.1/21, mb1mx3.9/49, mbtmp4.1/21, ML4.3/1, MS3.2/2, Ms1 3.2/2, ms1mx2.6/31, Error ellipse: s-maj=14.7km s-min=11.5km az=66.0*

**ISC 29 21:27:34.2±0.5, 3.66S±0.06×99.80E±0.06, h32km±3km, h32km:pP-P, n64, σ1s31/81, mb4.2/25, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.92** | **13** | P | **Pn** | **21 27 49.2** | **-1.7** |
| PPSI | | | | S | **Sn** | **21 28 01.8** | **-1.2** |
| **SISI** | **Saibi** | **2.42** | **343** | P | **Pn** | **21 28 09.2** | **-2.4** |
| SISI | | | | S | **Sn** | **21 28 39.0** | **-1.2** |
| **KSI** | **Kapahiang** | **2.79** | **90** | P | **Pn** | **21 28 17.0** | **+0.3** |
| **PDSI** | **Padang** | **2.81** | **14** | P | **Pn** | **21 28 14.7** | **-2.3** |
| **SDSI** | **Sungai Dareh** | **3.16** | **31** | P | **Pn** | **21 28 21.3** | **-0.5** |
| **MNAI** | **Manna** | **3.23** | **103** | P | **Pn** | **21 28 21.8** | **-0.9** |
| MNAI | | | | S | **Sn** | **21 28 59.3** | **-0.8** |
| **PPI** | **Padang Panjang** | **3.24** | **11** | P | **Pn** | **21 28 21.2** | **-1.6** |
| PPI | | | | S | **Sn** | **21 28 58.7** | **-1.6** |
| **LHSI** | **Lahat** | **3.72** | **93** | P | **Pn** | **21 28 29.0** | **-0.5** |
| LHSI | | | | S | **Sn** | **21 29 09.9** | **-2.4** |
| **BKNI** | **Bangkinang** | **4.15** | **17** | P | Pb | 21 28 40.9 | -5.7 |
| **MNSI** | **Mandailing Nat** | **4.43** | **357** | P | **Pn** | **21 28 38.3** | **-1.0** |
| **MDSI** | **Maura Dua** | **4.45** | **101** | P | **Pn** | **21 28 38.6** | **-0.9** |
| MDSI | | | | S | **Sn** | **21 29 27.8** | **-2.4** |
| **LWLI** | **Liwa** | **4.46** | **108** | P | **Pn** | **21 28 38.4** | **-1.3** |
| **KASI** | **Kota Agung** | **5.04** | **112** | P | **Pn** | **21 28 45.7** | **-1.9** |
| **GSI** | **Gunungsitoli** | **5.41** | **336** | P | **Pn** | **21 28 50.7** | **-2.0** |
| | 53nm,0.9s,0.2nm | | | | | | |
| GSI | | | | S | **Sn** | **21 29 48.5** | **-5.4** |
| | 53nm,0.9s,0.2nm | | | | | | |
| **PPBI** | **Pangkal Pinang** | **6.50** | **77** | P | **Pn** | **21 29 05.8** | **-2.0** |
| | 19nm,1.1s,0.2nm | | | | | | |
| **CGJI** | **Cibinong** | **6.56** | **117** | P | **Pn** | **21 29 05.6** | **-3.0** |
| | 85nm,0.9s,0.3nm | | | | | | |
| **CNJI** | **Cibinong** | **8.15** | **117** | P | Pn | 21 29 25.8 | -4.6 |
| **LEM** | **Lembang** | **8.40** | **112** | Pn | **Pn** | **21 29 34.3** | **+0.4** |
| | 3.8nm,0.3s,baz=342,slow=20,SNR=2.9 | | | | | | |
| **LEM** | **Lembang** | **8.40** | **112** | P | **Pn** | **21 29 34.0** | **+0.1** |
| | 583nm,0.8s | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.87** | **116** | P | **Pn** | **21 29 37.5** | **-2.8** |
| **CISI** | **Cisompet, Garu** | **8.87** | **116** | *e*P | **Pn** | **21 29 37.4** | **-2.8** |
| | 85nm,0.6s | | | | | | |
| **KULM** | **Kulim** | **8.93** | **5** | *e*Pn | **Pn** | **21 29 41.8** | **+0.7** |
| **COCO** | **West Island** | **8.97** | **199** | *e*Pn | Pn | 21 29 37.0 | -4.6 |
| **KSM** | **Kuching** | **11.68** | **64** | *e*Pn | **Pn** | **21 30 20.6** | **+1.9** |
| **KAPI** | **Kappang** | **19.94** | **95** | P | **Pn** | **21 32 04.5** | **-1.1** |
| | 2.0nm,0.3s,baz=211,slow=12,SNR=2.4 | | | | | | |
| KAPI | | | | LR | LR | 21 40 46.4 | |
| | comp=Z,90nm,18.2s,baz=291,slow=40 | | | | | | |
| **KAPI** | **Kappang** | **19.94** | **95** | *e*P | **P** | **21 32 04.0** | **+0.3** |
| | 25nm,1.1s | | | | | | |
| **PALK** | **Pallekele** | **21.93** | **300** | LR | LR | 21 39 24.1 | |
| | comp=Z,40nm,18.8s,baz=116,slow=32 | | | | | | |
| **PALK** | **Pallekele** | **21.93** | **300** | *e*P | **P** | **21 32 25.0** | **-0.3** |
| | 23nm,1.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.00** | **358** | P | **P** | **21 32 25.4** | **-0.4** |
| | 3.0nm,0.8s,baz=187,slow=10,SNR=15 | | | | | | |
| CMAR | | | | pP | **pP** | **21 32 35.3** | **+0.9** |
| | 3.8nm,0.8s,baz=187,slow=10,SNR=11 | | | | | | |
| **CHTO** | **Chiang Mai** | **22.35** | **358** | *e*P | **P** | **21 32 29.9** | **+0.3** |
| | 1.4nm,0.4s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.45** | **261** | T | T | 22 03 23.0 | |
| | baz=80,slow=75,SNR=54 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.46** | **261** | T | T | 22 03 23.8 | |
| | baz=80,slow=75,SNR=121 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.47** | **261** | T | T | 22 03 40.9 | |
| | baz=80,slow=75,SNR=44 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.80** | **159** | T | T | 22 10 22.6 | |
| | baz=336,slow=76,SNR=22 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.81** | **159** | T | T | 22 10 20.4 | |
| | baz=336,slow=76,SNR=22 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.81** | **159** | T | T | 22 10 23.9 | |
| | baz=336,slow=76,SNR=20 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.36** | **118** | P | **P** | **21 34 44.5** | **+0.3** |
| | 3.6nm,1.2s,baz=292,slow=8.3,SNR=9.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **21 37 02.9** | **-0.2** |
| | 0.6nm,0.8s,baz=307,slow=2.7,SNR=3.0 | | | | | | |
| WRA | | | | pPcP | | 21 37 12.9 | |
| | 0.2nm,0.5s,baz=303,slow=2.4,SNR=5.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.36** | **118** | *e*P | **P** | **21 34 44.7** | **+0.4** |
| | 4.1nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **38.47** | **124** | P | **P** | **21 34 53.6** | **+0.1** |
| | 0.9nm,0.5s,baz=299,slow=7.3,SNR=8.9 | | | | | | |
| ASAR | | | | PcP | **PcP** | **21 37 06.8** | **+0.3** |
| | 1.1nm,0.8s,baz=301,slow=2.1,SNR=6.0 | | | | | | |
| ASAR | | | | pPcP | | 21 37 16.4 | |
| | 2.1nm,0.8s,baz=319,slow=3.0,SNR=8.6 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.52** | **30** | P | **P** | **21 36 15.2** | **+0.9** |
| KSAR | | | | pP | **pP** | **21 36 24.3** | **+0.5** |
| **KSRS** | **Korea Array** | **48.55** | **30** | P | **P** | **21 36 15.2** | **+0.7** |
| | 6.7nm,1.2s,baz=231,slow=7.9,SNR=5.7 | | | | | | |
| KSRS | | | | pP | **pP** | **21 36 24.3** | **+0.3** |
| | 3.1nm,0.9s,baz=227,slow=8.1,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **51.61** | **6** | P | **P** | **21 36 39.0** | **+1.3** |
| | 2.0nm,0.7s,baz=192,slow=7.5,SNR=17 | | | | | | |
| SONM | | | | pP | **pP** | **21 36 48.2** | **+0.9** |
| | 5.4nm,0.8s,baz=190,slow=8.3,SNR=22 | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.70** | **6** | *e*P | **P** | **21 36 39.7** | **+1.2** |
| | 2.7nm,1.0s | | | | | | |
| ULN | | | | *e*pP | **pP** | **21 36 49.0** | **+0.9** |
| **MKAR** | **Makanchi Array** | **52.57** | **345** | P | **P** | **21 36 45.9** | **+1.1** |
| | 2.8nm,0.8s,baz=151,slow=8.0,SNR=19 | | | | | | |
| MKAR | | | | pP | **pP** | **21 36 54.8** | **+0.4** |
| | 1.8nm,0.4s,baz=153,slow=9.9,SNR=14 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.69** | **38** | P | **P** | **21 36 54.0** | **+0.8** |
| | 2.0nm,0.9s,baz=224,slow=10,SNR=4.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.71** | **28** | P | **P** | **21 37 08.2** | **+0.6** |
| | 4.8nm,0.9s,baz=226,slow=6.4,SNR=8.7 | | | | | | |
| USRK | | | | pP | **pP** | **21 37 17.6** | **+0.2** |
| | 6.3nm,0.7s,baz=224,slow=6.4,SNR=12 | | | | | | |
| **GEYT** | **Alibeck** | **56.59** | **321** | P | **P** | **21 37 14.6** | **+0.4** |
| | 0.6nm,0.4s,baz=186,slow=1.4,SNR=3.4 | | | | | | |
| **KURK** | **Kurchatov** | **57.14** | **344** | *e*P | **P** | **21 37 17.5** | **-0.2** |
| | 6.6nm,0.8s | | | | | | |
| KURK | | | | *e*pP | **pP** | **21 37 27.8** | **+0.4** |
| **ZALV** | **Zalesovo Beam** | **58.75** | **350** | P | **P** | **21 37 29.4** | **+0.4** |
| | 3.7nm,0.8s,baz=188,slow=5.7,SNR=8.7 | | | | | | |
| ZALV | | | | pP | **pP** | **21 37 38.7** | **0.0** |
| | 13nm,0.7s,baz=180,slow=4.7,SNR=16 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.99** | **332** | *e*P | **P** | **21 37 57.5** | **-0.4** |
| | 7.5nm,0.9s | | | | | | |
| ABKAR | | | | *e*pP | **pP** | **21 38 07.2** | **-0.6** |
| **MAW** | **Mawson** | **68.64** | **194** | P | **P** | **21 38 33.5** | **-0.4** |
| | 0.8nm,0.7s,baz=29,slow=10,SNR=2.4 | | | | | | |
| **KBZ** | **Khabaz** | **69.43** | **320** | P | **P** | **21 38 39.6** | **+0.3** |
| | 1.9nm,0.9s,baz=164,slow=7.4,SNR=3.2 | | | | | | |
| KBZ | | | | pP | **pP** | **21 38 48.8** | **-0.4** |
| | 2.9nm,0.8s,baz=138,slow=5.2,SNR=3.2 | | | | | | |
| **MATP** | **Matopo** | **71.21** | **250** | P | **P** | **21 38 51.8** | **+1.0** |
| | 4.8nm,1.0s,baz=80,slow=6.7,SNR=8.0 | | | | | | |
| MATP | | | | pP | **pP** | **21 39 01.1** | **+0.2** |
| | 6.0nm,0.6s,baz=88,slow=5.3,SNR=9.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.29** | **313** | P | **P** | **21 39 08.0** | **-0.9** |
| | 0.7nm,0.6s,baz=133,slow=7.7,SNR=4.3 | | | | | | |
| BRTR | | | | pP | **pP** | **21 39 17.8** | **-1.1** |
| | 2.0nm,0.6s,baz=132,slow=7.0,SNR=7.4 | | | | | | |
| **BOSA** | **Boshof** | **74.69** | **241** | pP | pP | 21 39 21.0 | -0.3 |
| | 3.0nm,0.7s,baz=96,slow=6.8,SNR=3.0 | | | | | | |
| **VNDA** | **Vanda** | **80.58** | **169** | P | **P** | **21 39 42.6** | **-0.5** |
| | 1.9nm,1.2s,baz=336,slow=2.6,SNR=3.4 | | | | | | |
| VNDA | | | | pP | **pP** | **21 39 52.7** | **-0.5** |
| | 1.0nm,0.9s,baz=307,slow=4.6,SNR=3.6 | | | | | | |
| **AKASG** | **Malin Array Be** | **80.67** | **323** | P | **P** | **21 39 43.0** | **-1.0** |
| | 0.6nm,0.4s,baz=105,slow=7.8,SNR=3.3 | | | | | | |
| AKASG | | | | pP | **pP** | **21 39 53.0** | **-1.1** |
| | 0.9nm,0.5s,baz=89,slow=4.9,SNR=3.2 | | | | | | |
| **KOLS** | **Kolonicke sedl** | **84.58** | **320** | *e*P | **P** | **21 40 05.8** | **+1.4** |
| KOLS | | | | *e*pP | **pP** | **21 40 14.8** | **+0.2** |
| **STHS** | **Stebnicka Huta** | **85.34** | **320** | *e*P | **P** | **21 40 09.1** | **+0.8** |
| STHS | | | | *e*pP | **pP** | **21 40 18.7** | **+0.3** |
| **FINES** | **FINESS Array B** | **85.48** | **332** | P | **P** | **21 40 09.2** | **+0.5** |
| | 1.9nm,0.8s,baz=140,slow=9.2,SNR=7.0 | | | | | | |
| FINES | | | | pP | **pP** | **21 40 18.6** | **-0.2** |
| | 0.8nm,0.3s,baz=124,slow=4.9,SNR=2.5 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.96** | **340** | P | **P** | **21 40 21.1** | **+0.5** |
| | 2.1nm,0.9s,baz=112,slow=7.1,SNR=2.9 | | | | | | |
| ARCES | | | | pP | **pP** | **21 40 31.1** | **+0.3** |
| | 2.1nm,0.8s,baz=99,slow=7.6,SNR=1.8 | | | | | | |
| **GERES** | **GERESS Array B** | **90.16** | **319** | P | **P** | **21 40 32.4** | **+0.8** |
| | 0.8nm,0.8s,baz=101,slow=5.1,SNR=4.7 | | | | | | |
| GERES | | | | pP | **pP** | **21 40 41.7** | **0.0** |
| | 1.1nm,0.7s,baz=76,slow=4.1,SNR=6.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.13** | **39** | PKPbc | **PKPab** | **21 47 13.4** | **+0.8** |
| | 1.1nm,0.7s,baz=295,slow=0.6,SNR=13 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 21 47 23.1 | +0.7 |
| | 2.6nm,0.6s,baz=296,slow=1.1,SNR=21 | | | | | | |
| **LVC** | **Limon Verde** | **151.65** | **202** | pPKPbc | pPKPbc | 21 47 37.8 | +0.7 |
| | 19nm,0.6s,baz=288,slow=3.2,SNR=3.4 | | | | | | |

**IDC 29 21:30:53.9±7.1, 15.94S×175.91W, h0km, mb4.0/3, mb1 4.3/3, mb1mx3.8/31, mbtmp4.0/3, Error ellipse: s-maj=328.5km s-min=31.6km az=141.0, Tonga Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **47.37** | **257** | P | P | 21 39 28.8 | -1.4 |
| | 0.3nm,0.5s,baz=91,slow=6.8,SNR=4.5 | | | | | | |
| **ASAR** | **Alice Springs** | **47.65** | **252** | P | P | 21 39 33.5 | +1.1 |
| | 5.0nm,0.7s,baz=85,slow=8.2,SNR=46 | | | | | | |
| **ILAR** | **Eielson Array** | **83.45** | **12** | P | P | 21 43 23.8 | +0.8 |
| | 0.9nm,0.6s,baz=216,slow=5.5,SNR=11 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.00** | **318** | PKPbc | PKPbc | 21 50 31.1 | -2.0 |
| | 1.5nm,0.9s,baz=93,slow=2.5,SNR=3.9 | | | | | | |
| **GERES** | **GERESS Array B** | **146.25** | **349** | PKPbc | PKPdf | 21 50 35.3 | -0.3 |
| | 0.6nm,0.7s,baz=29,slow=3.0,SNR=5.8 | | | | | | |

*IDC **29** 21:35:45.2±1.1, 4.25N×125.12E, h0km, mb3.7/4, mb1 3.9/6, mb1mx3.6/38, mbtmp3.8/6, ML4.0/2, MS3.1/4, Ms1 3.1/4, ms1mx2.7/32, Error ellipse: s-maj=58.0km s-min=18.3km az=68.0*

*ISCJB **29** 21:35:47.8±0.7, 4.23N±0.06×125.1E±0.2, h35km, mb4.4/10, MS2.9/3, Error ellipse: s-maj=20.8km s-min=7.3km az=170.8*

*NEIC **29** 21:35:50.5±1.6, 4.20N×125.05E, h44km±14km, mb4.2/4, Error ellipse: s-maj=28.7km s-min=9.3km az=74.0*

**ISC 29 21:35:49.8±0.7, 4.23N±0.07×125.1E±0.2, h35km, n18, σ1s07/15, mb4.0/10, MS2.9/3, Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **2.87** | **11** | Pn | **Pn** | **21 36 33.9** | **+0.8** |
| | 42nm,0.3s,baz=183,slow=4.0,SNR=3.6 | | | | | | |
| DAV | | | | Sn | **Sn** | **21 37 04.8** | **-1.7** |
| | 44nm,0.3s,baz=255,slow=17,SNR=5.6 | | | | | | |
| DAV | | | | LR | LR | 21 37 57.4 | |
| | comp=Z,835nm,18.1s,baz=51,slow=46 | | | | | | |
| **TNTI** | **Ternate** | **4.14** | **146** | *e*Pn | **Pn** | **21 36 50.8** | **+0.3** |
| **SIJI** | **Sorong** | **8.01** | **129** | Pn | **Pn** | **21 37 43.6** | **-0.1** |
| | 1.2nm,0.3s,baz=335,slow=19,SNR=5.4 | | | | | | |
| **LEM** | **Lembang** | **20.57** | **238** | LR | LR | 21 50 11.5 | |
| | comp=Z,64nm,18.9s,baz=52,slow=42 | | | | | | |
| **WRAB** | **Tennant Creek** | **25.69** | **159** | *e*P | **P** | **21 41 17.0** | **+0.2** |
| | 6.9nm,1.1s | | | | | | |
| **WRA** | **Warramunga Arr** | **25.70** | **159** | P | **P** | **21 41 16.9** | **+0.1** |
| | 1.9nm,0.7s,baz=343,slow=10,SNR=12 | | | | | | |
| **PMG** | **Port Moresby** | **25.86** | **122** | *e*P | **P** | **21 41 17.7** | **-0.7** |
| | 7.9nm,1.0s | | | | | | |
| **ASAR** | **Alice Springs** | **29.04** | **163** | P | **P** | **21 41 47.3** | **+0.5** |
| | 0.4nm,0.6s,baz=357,slow=8.6,SNR=9.7 | | | | | | |
| **KSRS** | **Korea Array** | **33.17** | **4** | LR | LR | 21 56 36.7 | |
| | comp=Z,22nm,19.1s,baz=196,slow=38 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **34.36** | **19** | LR | LR | 21 55 20.6 | |
| | comp=Z,18nm,20.1s,baz=235,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.20** | **326** | P | **P** | **21 45 27.6** | **+1.2** |
| | 0.5nm,0.5s,baz=110,slow=7.8,SNR=5.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.40** | **334** | P | **P** | **21 45 48.4** | **-0.2** |
| | 0.4nm,0.4s,baz=121,slow=7.5,SNR=3.0 | | | | | | |
| **RAO** | **Raoul Island** | **63.98** | **125** | *e*P | **P** | **21 46 20.1** | **+0.1** |
| | 464nm,1.6s | | | | | | |
| **CASY** | **Casey** | **71.12** | **186** | *e*P | **P** | **21 47 02.7** | **-1.5** |
| | 0.3nm,0.3s | | | | | | |
| **RSO** | **Redoubt South** | **82.49** | **30** | *e*P | P | 21 48 04.7 | -4.1 |
| | 111nm,0.4s | | | | | | |
| **MCK** | **McKinley** | **84.47** | **26** | *e*P | **P** | **21 48 18.7** | **0.0** |
| **COLA** | **College** | **84.97** | **25** | *e*P | **P** | **21 48 21.2** | **+0.1** |
| | 2.3nm,0.6s | | | | | | |
| **SNAA** | **Sanae** | **105.26** | **195** | *e*PKPdf | **PKiKP** | **21 54 05.9** | **-2.4** |

*ISCJB **29** 21:44:11.8±0.7, 48.96S±0.09×121.5E±0.4, h13km, mb3.8/7, MS3.3/5, Error ellipse: s-maj=33.5km s-min=12.1km az=5.6*

*IDC **29** 21:44:11.6±0.9, 48.94S×121.47E, h0km, mb3.9/7, mb1 4.1/8, mb1mx3.9/23, mbtmp3.9/8, ML2.2/1, MS3.4/5, Ms1 3.4/5, ms1mx3.1/14, Error ellipse: s-maj=48.0km s-min=17.1km az=101.0*

**ISC 29 21:44:13.4±0.9, 48.9S±0.1×121.3E±0.3, h13km, n11, σ0s77/8, mb3.9/7, MS3.4/5, Western Indian-Antarctic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H01W1** | **Cape Leeuwin H** | **14.95** | **337** | T | T | 22 03 02.1 | |
| | baz=160,slow=74,SNR=58 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **14.95** | **337** | T | T | 22 03 02.7 | |
| | baz=160,slow=74,SNR=72 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **14.96** | **337** | T | T | 22 03 03.6 | |
| | baz=160,slow=74,SNR=46 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **16.23** | **348** | Pn | **P** | **21 48 03.2** | **-0.9** |
| | 0.5nm,0.3s,baz=331,slow=0.1,SNR=4.3 | | | | | | |
| **ASAR** | **Alice Springs** | **27.07** | **26** | P | **P** | **21 49 56.0** | **+0.3** |
| | 2.5nm,0.9s,baz=193,slow=9.5,SNR=11 | | | | | | |
| ASAR | | | | LR | LR | 21 59 22.9 | |
| | comp=Z,173nm,20.4s,baz=194,slow=34 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.72** | **25** | P | **P** | **21 50 27.7** | **-0.4** |
| | 2.1nm,1.0s,baz=196,slow=9.9,SNR=5.4 | | | | | | |
| WRA | | | | LR | LR | 22 02 15.0 | |
| | comp=Z,80nm,18.1s,baz=135,slow=35 | | | | | | |
| **VNDA** | **Vanda** | **32.62** | **165** | P | **P** | **21 50 44.7** | **+0.4** |
| | 0.9nm,1.0s,baz=310,slow=9.6,SNR=3.6 | | | | | | |
| VNDA | | | | LR | LR | 22 03 17.4 | |
| | comp=Z,134nm,18.5s,baz=323,slow=35 | | | | | | |
| **MAW** | **Mawson** | **34.28** | **215** | P | **P** | **21 50 58.7** | **-0.1** |
| | 2.1nm,1.0s,baz=86,slow=14,SNR=4.3 | | | | | | |
| MAW | | | | LR | LR | 22 01 53.5 | |
| | comp=Z,18nm,21.7s,baz=63,slow=31 | | | | | | |
| **QSPA** | **South Pole Qui** | **41.24** | **180** | P | **P** | **21 51 57.2** | **-0.6** |
| | 3.1nm,0.9s,baz=320,slow=3.3,SNR=7.8 | | | | | | |
| **SNAA** | **Sanae** | **53.46** | **199** | P | **P** | **21 53 32.6** | **-0.1** |
| | 1.2nm,1.0s,baz=148,slow=6.3,SNR=7.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.94** | **337** | P | **P** | **21 55 25.3** | **+1.1** |
| | 1.1nm,1.1s,baz=190,slow=5.8,SNR=4.2 | | | | | | |
| CMAR | | | | LR | LR | 22 27 48.1 | |
| | comp=Z,8.9nm,18.0s,baz=150,slow=37 | | | | | | |

**GUC 29 21:50:56.8±0.5, 20.85S×69.44W, h94km±2km, ML3.7, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB01** | **IPOC Station P** | **0.20** | **192** | *e*P | Pn | 21 51 10.6 | +0.2 |
| PB01 | | | | *e*S | Sn | 21 51 20.7 | +0.2 |
| PB01 | | | | AML | AML | 21 51 21.6 | |
| | comp=E,10μm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **0.96** | **169** | *e*P | Pn | 21 51 16.9 | +0.2 |
| PB09 | | | | *e*S | Sn | 21 51 32.7 | +1.2 |
| PB09 | | | | AML | AML | 21 51 34.6 | |
| | comp=E,9μm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **0.97** | **205** | *e*P | Pn | 21 51 17.3 | +0.6 |
| PB07 | | | | *e*S | Sn | 21 51 32.6 | +1.0 |
| PB07 | | | | AML | AML | 21 51 33.2 | |
| | comp=N,3μm,0.5s | | | | | | |
| **PB11** | **IPOC Station P** | **1.10** | **349** | *e*P | Pn | 21 51 18.6 | +0.4 |
| PB11 | | | | *e*S | Sn | 21 51 35.1 | +1.0 |
| **PB04** | **IPOC Station P** | **1.62** | **204** | *e*P | Pn | 21 51 25.0 | +0.5 |
| PB04 | | | | AML | AML | 21 51 53.9 | |
| | comp=N,623nm,0.5s | | | | | | |
| **MNMC** | **Minimini** | **1.71** | **355** | *e*P | Pn | 21 51 26.4 | +0.6 |
| MNMC | | | | *e*S | Sn | 21 51 49.0 | +1.2 |
| **PB06** | **IPOC Station P** | **1.86** | **184** | *e*P | Pn | 21 51 28.3 | +0.8 |
| PB06 | | | | *e*S | Sn | 21 51 52.0 | +1.1 |
| PB06 | | | | AML | AML | 21 51 55.8 | |
| | comp=N,453nm,0.7s | | | | | | |

**IDC 29 22:14:05.8±60.0, 4.17S×99.53E, h0km, mb3.6/3, mb1 3.6/3, mb1mx3.2/33, mbtmp3.6/3, Error ellipse: s-maj=1223.0km s-min=186.9km az=171.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **52.14** | **6** | P | P | 22 23 18.1 | -0.1 |
| | 0.2nm,0.7s,baz=195,slow=7.3,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.99** | **345** | P | P | 22 23 24.3 | 0.0 |
| | 0.6nm,0.8s,baz=141,slow=8.5,SNR=3.7 | | | | | | |
| **ZALV** |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| | baz=229 | | | | | | |
| **TWA** | **Mucha** | **0.76** | **351** | *e*P | Pb | 22 21 38.6 | +0.5 |
| | baz=351 | | | | | | |
| **EHY** | **Hungye** | **0.80** | **207** | *e*P | Pg | 22 21 37.2 | -1.3 |
| | baz=207 | | | | | | |
| **TWB1** | **Santiao Chiao** | **0.82** | **17** | *e*P | Pb | 22 21 39.3 | +0.3 |
| | baz=17 | | | | | | |
| TWB1 | | | | *e*S | Sg | 22 21 49.1 | -0.4 |
| | baz=17 | | | | | | |
| **SMLT** | **Sun Moon Lake** | **0.82** | **246** | P | Pg | 22 21 39.1 | +0.1 |
| | baz=239 | | | | | | |
| SMLT | | | | S | Sg | 22 21 50.0 | +0.1 |
| | baz=239 | | | | | | |
| **NWF** | **Wu-fen Shan** | **0.84** | **4** | *e*P | Pb | 22 21 39.7 | +0.1 |
| | baz=4.0 | | | | | | |
| **TYC** | **Yuchr** | **0.85** | **248** | ⇓ *i*P | Pg | 22 21 39.4 | 0.0 |
| | baz=241 | | | | | | |
| TYC | | | | *e*S | Sg | 22 21 50.7 | +0.2 |
| | baz=241 | | | | | | |
| **TWQ1** | **Liyutan** | **0.87** | **278** | *e*P | Pn | 22 21 41.1 | +0.2 |
| | baz=278 | | | | | | |
| TWQ1 | | | | *e*S | Sn | 22 21 52.8 | -0.9 |
| | baz=278 | | | | | | |
| **NCU** | **National Centr** | **0.89** | **327** | *e*P | Pb | 22 21 40.6 | +0.4 |
| | baz=322 | | | | | | |
| **NSY** | **Sanyi** | **0.90** | **282** | *e*P | Pn | 22 21 41.4 | +0.1 |
| | baz=283 | | | | | | |
| **TWS1** | **Kuangyinshan** | **0.91** | **343** | *e*P | Pn | 22 21 42.0 | +0.5 |
| | baz=343 | | | | | | |
| **TWF1** | **Yuli** | **0.95** | **204** | *e*P | Pg | 22 21 39.3 | -2.1 |
| | baz=217 | | | | | | |
| **TCU** | **Taichung** | **0.96** | **266** | *e*P | Pn | 22 21 42.8 | +0.6 |
| | baz=266 | | | | | | |
| **WNT** | **Mingjian** | **1.01** | **250** | *e*P | Pn | 22 21 42.9 | +0.1 |
| | baz=247 | | | | | | |
| WNT | | | | *e*S | Sn | 22 21 58.1 | +1.2 |
| | baz=247 | | | | | | |
| **YUS** | **Yu-Shan** | **1.02** | **224** | *e*P | Pb | 22 21 42.3 | -0.7 |
| | baz=225 | | | | | | |
| YUS | | | | *e*S | Sg | 22 21 57.1 | +0.3 |
| | baz=225 | | | | | | |
| **ALS** | **Alishan** | **1.10** | **230** | ⇓ *i*P | Pb | 22 21 44.0 | -0.3 |
| | baz=231 | | | | | | |
| ALS | | | | *e*S | Sn | 22 22 00.3 | +0.5 |
| | baz=231 | | | | | | |
| **CHN5** | **Tsauling** | **1.14** | **237** | ⇑ *i*P | Pg | 22 21 45.2 | +0.1 |
| | baz=239 | | | | | | |
| CHN5 | | | | S | Sn | 22 22 01.5 | +1.1 |
| | baz=239 | | | | | | |
| **CHKT** | **Chengkung** | **1.17** | **196** | *e*P | Pb | 22 21 43.6 | -1.4 |
| | baz=179 | | | | | | |
| **WGK** | **Gukeng** | **1.19** | **243** | *e*P | Pg | 22 21 45.9 | +0.1 |
| | baz=244 | | | | | | |
| **ELDTW** | **Lidau** | **1.22** | **212** | *e*P | Pn | 22 21 43.4 | -2.4 |
| | baz=212 | | | | | | |
| **CHN2** | **Minshiung** | **1.33** | **239** | *e*P | Pg | 22 21 49.1 | +0.5 |
| | baz=240 | | | | | | |
| **CHN4** | **Tsaushan** | **1.35** | **230** | *e*P | Pg | 22 21 48.6 | -0.3 |
| | baz=232 | | | | | | |
| CHN4 | | | | *e*S | Sg | 22 22 08.2 | +1.7 |
| | baz=232 | | | | | | |
| **STYT** | **Tauyuan** | **1.38** | **220** | *e*P | Pn | 22 21 47.5 | -0.5 |
| | baz=222 | | | | | | |
| STYT | | | | *e*S | Sn | 22 22 05.8 | -0.4 |
| | baz=222 | | | | | | |
| **CHY** | **Chiayi** | **1.39** | **239** | *e*P | Pg | 22 21 50.2 | +0.5 |
| | baz=239 | | | | | | |
| **WTP** | **Ta-pu** | **1.41** | **226** | *e*P | Pb | 22 21 49.2 | 0.0 |
| | baz=229 | | | | | | |
| WTP | | | | *e*S | Sg | 22 22 08.4 | 0.0 |
| | baz=229 | | | | | | |
| **TWK** | **Hsinying** | **1.48** | **230** | *e*P | Pb | 22 21 50.3 | -0.1 |
| | baz=231 | | | | | | |
| **CHN1** | **Nanshi** | **1.51** | **227** | *e*P | Pb | 22 21 50.5 | -0.4 |
| | baz=230 | | | | | | |
| CHN1 | | | | *e*S | Sg | 22 22 12.5 | +0.9 |
| | baz=230 | | | | | | |
| **SGST** | **Jiashian** | **1.54** | **223** | *e*P | Pb | 22 21 51.2 | -0.3 |
| | baz=224 | | | | | | |
| **ECL** | **Taimali** | **1.77** | **204** | *e*P | Pb | 22 21 54.5 | -0.7 |
| | baz=192 | | | | | | |
| **SSD** | **Sandimen** | **1.78** | **214** | *e*P | Pn | 22 21 54.0 | +0.6 |
| | baz=216 | | | | | | |
| **EAST** | **Anshuo** | **2.00** | **204** | *e*P | Pn | 22 21 57.9 | +1.3 |
| | baz=193 | | | | | | |
| **SCZT** | **Fangliau** | **2.10** | **209** | *e*P | Pn | 22 21 59.4 | +1.5 |
| | baz=195 | | | | | | |

*GUC* ***29*** *22:38:44.8±0.6, 35.°45S×72.°70W, h22km±6km, ML3.8*
**ISC 29 22:38:44.1±1.6, 35.°47S±0.°05×72.°65W±0.°07, h11km±12km, n12, σ1§31/20, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **COCH** | **Cobquecura** | **0.67** | **190** | *e*P | **Pg** | **22 38 56.8** | **-0.3** |
| COCH | | | | *e*S | **Sg** | **22 39 06.0** | **+0.1** |
| COCH | | | | AML | AML | 22 39 08.7 | |
| | comp=E,5μm,0.3s | | | | | | |
| **TALC** | **Talca** | **0.83** | **85** | *e*P | **Pg** | **22 38 59.7** | **-0.5** |
| TALC | | | | *e*S | **Sg** | **22 39 11.1** | **0.0** |
| **CCHI** | **Chillan** | **1.22** | **158** | *e*P | **Pn** | **22 39 05.6** | **-1.5** |
| CCHI | | | | *e*S | **Sb** | **22 39 22.2** | **-0.9** |
| **NICH** | **Los Niches** | **1.25** | **69** | *e*P | **Pn** | **22 39 06.8** | **-0.8** |
| NICH | | | | *e*S | **Sb** | **22 39 23.3** | **-0.6** |
| **CANA** | **Caviahue** | **2.73** | **153** | *e*P | **Pn** | **22 39 29.5** | **+1.4** |
| CANA | | | | *i* S | **Sg** | **22 40 14.1** | **+2.2** |
| **ROC1** | **El Roble** | **2.83** | **29** | *e*P | **Pn** | **22 39 29.3** | **-0.3** |
| ROC1 | | | | *e*S | **Sb** | **22 40 09.0** | **-0.6** |
| **PEL** | **Peldehue** | **2.83** | **36** | *e*P | **Pn** | **22 39 29.6** | **+0.2** |
| PEL | | | | *e*S | **Sn** | **22 40 03.8** | **+0.3** |
| PEL | | | | AML | AML | 22 40 17.4 | |
| | comp=E,438nm,0.4s | | | | | | |
| **AUSP** | **Uspallata** | **4.22** | **41** | *i* P | **Pn** | **22 39 50.4** | **+1.7** |
| AUSP | | | | *e*S | **Sb** | **22 40 48.0** | **-1.7** |
| **ASAL** | **Salagasta** | **4.28** | **49** | *e*P | **Pn** | **22 39 51.9** | **+2.6** |
| **RTLS** | **Leoncito** | **4.61** | **38** | *e*P | **Pn** | **22 39 55.6** | **+1.7** |
| **RTLL** | **Cerro Villicun** | **5.41** | **41** | *i* P | **Pn** | **22 40 05.1** | **+0.3** |
| **AMOG** | **MOGNA** | **5.70** | **39** | *i* P | **Pn** | **22 40 08.7** | **-0.2** |

**IDC 29 22:49:43.7±6.2, 29.°06S×178.°43W, h0km, mb3.4/2, mb1 3.7/2, mb1mx3.5/16, mbtmp3.4/2, Error ellipse: s-maj=343.3km s-min=86.9km az=165.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ASAR** | **Alice Springs** | **42.82** | **266** | P | P | 22 57 43.1 | -0.6 |
| | 0.3nm,0.7s,baz=98,slow=6.6,SNR=3.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.69** | **271** | P | P | 22 57 51.0 | +0.4 |
| | 0.4nm,0.4s,baz=111,slow=7.8,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **143.77** | **340** | PKP | PKPdf | 23 09 19.5 | -0.6 |
| | 1.6nm,0.7s,baz=56,slow=4.8,SNR=8.6 | | | | | | |

**GUC 29 22:51:24.2±0.3, 23.°05S×69.°27W, h107km±5km, ML3.5, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB04** | **IPOC Station P** | **1.08** | **311** | *e*P | Pn | 22 51 46.6 | +0.4 |
| PB04 | | | | *e*S | Sn | 22 52 03.6 | +0.8 |
| PB04 | | | | AML | AML | 22 52 06.0 | |
| | comp=N,1μm,0.2s | | | | | | |
| **PB09** | **IPOC Station P** | **1.24** | **1** | *e*P | Pn | 22 51 48.4 | +0.3 |
| PB09 | | | | *e*S | Sn | 22 52 06.8 | +0.7 |
| PB09 | | | | AML | AML | 22 52 08.1 | |
| | comp=N,3μm,0.4s | | | | | | |
| **PB10** | **IPOC Station P** | **1.27** | **248** | *e*P | Pn | 22 51 48.3 | +0.2 |
| PB10 | | | | *e*S | Sn | 22 52 06.5 | +0.3 |
| PB10 | | | | AML | AML | 22 52 09.2 | |
| | comp=E,622nm,0.3s | | | | | | |
| **PB07** | **IPOC Station P** | **1.43** | **336** | *e*P | Pn | 22 51 50.6 | +0.3 |
| PB07 | | | | *e*S | Sn | 22 52 10.6 | +0.6 |
| PB07 | | | | AML | AML | 22 52 12.6 | |
| | comp=E,858nm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **2.00** | **354** | *e*P | Pn | 22 51 57.6 | +0.3 |
| PB01 | | | | *e*S | Sn | 22 52 23.1 | +0.7 |
| PB01 | | | | AML | AML | 22 52 27.4 | |
| | comp=E,411nm,0.2s | | | | | | |

**MAN 29 22:52:38, 13.°62N×120.°43E, h34km, mb3.9, ML2.7, MS2.4, 1D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LUBP** | **Lubang** | **0.21** | **302** | *e*P | Pb | 22 52 46.4 | +1.6 |
| **PGP** | **Puerto Galera** | **0.53** | **103** | ⇓ *e*P | Pb | 22 52 50.0 | +0.9 |
| PGP | | | | *e*S | Sb | 22 52 56.3 | -0.5 |
| **SJMP** | **San Jose** | **1.34** | **150** | *e*P | Pb | 22 53 01.7 | -0.9 |
| SJMP | | | | *e*S | Sn | 22 53 17.8 | +0.9 |
| **BUSP** | **Coron** | **1.63** | **188** | *e*P | Pn | 22 53 04.7 | +0.4 |
| BUSP | | | | *e*S | Sn | 22 53 13.8 | -10 |

*ISCJB* ***29*** *22:55:45.8±0.5, 9.°52S±0.°06×33.°91E±0.°08, h10km, mb3.7/6, MS3.3/8, Error ellipse: s-maj=12.0km s-min=7.8km az=23.3*
*NEIC* ***29*** *22:55:50.1±0.4, 9.°57S×33.°96E, mb4.2/5, Error ellipse: s-maj=11.3km s-min=7.3km az=110.0*
*IDC* ***29*** *22:55:50.2±0.9, 9.°68S×33.°91E, h26km±5km, mb3.5/6, mb1 3.9/10, mb1mx3.6/45, mbtmp3.9/10, ML4.1/4, MS3.3/11, Ms1 3.3/11, ms1mx3.0/32, Error ellipse: s-maj=29.1km s-min=17.5km az=114.0*
**ISC 29 22:55:48.4±0.6, 9.°53S±0.°08×33.°9E±0.°1, h10km, n34, σ2§56/26, mb3.6/7, MS3.3/8, Tanzania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LSZ** | **Lusaka** | **7.95** | **223** | Pn | **Pn** | **22 57 44.6** | **+0.4** |
| | 3.0nm,0.3s,baz=50,slow=12,SNR=20 | | | | | | |
| LSZ | | | | Sn | **Sn** | **22 59 11.5** | **-2.9** |
| | 3.7nm,0.3s,baz=88,slow=11,SNR=3.1 | | | | | | |
| LSZ | | | | Lg | Lg | 22 59 52.0 | |
| | 11nm,0.3s,baz=298,slow=18,SNR=6.0 | | | | | | |
| LSZ | | | | LR | LR | 23 00 54.6 | |
| | comp=Z,163nm,20.6s,baz=298,slow=39 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **9.01** | **22** | Pn | **Pn** | **22 57 56.4** | **-2.4** |
| | 5.3nm,0.3s,baz=199,slow=15,SNR=78 | | | | | | |
| KMBO | | | | Sn | Sn | 22 59 32.1 | -8.4 |
| | 4.9nm,0.3s,baz=141,slow=9.8,SNR=6.4 | | | | | | |
| KMBO | | | | Lg | Lg | 23 00 22.9 | |
| | 4.7nm,0.3s,baz=99,slow=22,SNR=3.1 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **9.01** | **22** | *e*Pn | **Pn** | **22 57 56.3** | **-2.5** |
| KMBO | | | | *e*Sn | Sn | 22 59 33.0 | -7.6 |
| **MBAR** | **Mbarara** | **9.39** | **341** | Pn | Pn | 22 57 57.7 | -6.4 |
| | 16nm,0.3s,baz=284,slow=23,SNR=26 | | | | | | |
| MBAR | | | | Sn | Sn | 22 59 40.4 | -9.5 |
| | 10.0nm,0.3s,baz=221,slow=23,SNR=6.5 | | | | | | |
| MBAR | | | | Lg | Lg | 23 00 34.9 | |
| | 18nm,0.3s,baz=155,slow=15,SNR=4.9 | | | | | | |
| **MATP** | **Matopo** | **12.00** | **205** | Pn | Pn | 22 58 37.2 | -2.6 |
| | 0.7nm,0.3s,baz=29,slow=14,SNR=17 | | | | | | |
| MATP | | | | Lg | Lg | 23 01 57.6 | |
| | 2.0nm,0.3s,baz=85,slow=19,SNR=5.7 | | | | | | |
| MATP | | | | LR | LR | 23 03 20.0 | |
| | comp=Z,194nm,21.2s,baz=34,slow=38 | | | | | | |
| **OPO** | **Ambohidratompo** | **15.75** | **126** | Pn | **Pn** | **22 59 27.9** | **-2.8** |
| | 0.2nm,0.3s,baz=276,slow=15,SNR=2.5 | | | | | | |
| OPO | | | | Sn | Sn | 23 02 13.8 | -12 |
| | 0.1nm,0.3s,baz=288,slow=3.2,SNR=2.5 | | | | | | |
| **ABPO** | **Ambohimpanom** | **16.03** | **128** | *e*Pn | **Pn** | **22 59 33.7** | **-0.6** |
| **SLR** | **Silverton** | **16.96** | **197** | P | **Pn** | **22 59 47.4** | **+1.2** |
| | 83nm,1.7s | | | | | | |
| **LBTB** | **Lobatse** | **17.29** | **206** | Pn | **Pn** | **22 59 48.3** | **-1.9** |
| | 0.7nm,0.3s,baz=33,slow=14,SNR=10 | | | | | | |
| LBTB | | | | Lg | Lg | 23 04 44.7 | |
| | 0.6nm,0.3s,baz=312,slow=21,SNR=5.6 | | | | | | |
| LBTB | | | | LR | LR | 23 06 21.4 | |
| | comp=Z,114nm,18.8s,baz=52,slow=37 | | | | | | |
| **ERPM** | **east rand prop** | **17.55** | **197** | P | **Pn** | **22 59 52.8** | **-0.6** |
| | 45nm,2.1s | | | | | | |
| **KLOF** | **Kloof** | **17.75** | **199** | P | **P** | **23 00 00.9** | **+4.2** |
| | 8.3nm,0.5s | | | | | | |
| **POGA** | **Pongola** | **17.88** | **186** | P | P | 23 00 05.5 | +7.5 |
| | 18nm,1.3s | | | | | | |
| **SEK** | **Senekal** | **19.59** | **197** | P | **Pn** | **23 00 20.8** | **+2.5** |
| **BOSA** | **Boshof** | **20.63** | **202** | P | **P** | **23 00 27.1** | **-1.2** |
| | 1.5nm,0.4s,baz=8.6,slow=13,SNR=7.0 | | | | | | |
| BOSA | | | | LR | LR | 23 08 40.6 | |
| | comp=Z,117nm,18.5s,baz=12,slow=38 | | | | | | |
| **KSD** | **Kokstad** | **21.31** | **191** | P | **P** | **23 00 39.4** | **+3.7** |
| **MSEY** | **Mahe Island** | **22.00** | **79** | *e*P | **P** | **23 00 41.1** | **-1.9** |
| | 15nm,1.2s | | | | | | |
| **UPI** | **Upington** | **22.17** | **211** | P | **P** | **23 00 42.6** | **-2.2** |
| | 369nm,3.2s | | | | | | |
| **HVD** | **Gariep Dam** | **22.37** | **199** | P | **P** | **23 00 47.8** | **+0.7** |
| | 412nm,3.0s | | | | | | |
| **ATD** | **Arta Tunnel** | **22.75** | **23** | LR | LR | 23 08 41.7 | |
| | comp=Z,21nm,22.0s,baz=148,slow=34 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **39.07** | **305** | P | **P** | **23 03 15.8** | **-0.3** |
| | 0.7nm,0.9s,baz=125,slow=8.5,SNR=5.3 | | | | | | |
| TORD | | | | LR | LR | 23 19 24.9 | |
| | comp=Z,60nm,21.4s,baz=125,slow=36 | | | | | | |
| **DBIC** | **Dimbokro** | **41.78** | **291** | LR | LR | 23 21 38.5 | |
| | comp=Z,35nm,18.1s,baz=91,slow=37 | | | | | | |
| **KEST** | **Kesra** | **50.60** | **334** | LR | LR | 23 28 18.5 | |
| | comp=Z,58nm,18.1s,baz=236,slow=38 | | | | | | |
| **GEYT** | **Alibeck** | **52.38** | **24** | LR | LR | 23 30 36.6 | |
| | comp=Z,45nm,18.7s,baz=190,slow=40 | | | | | | |
| **AKASG** | **Malin Array Be** | **60.11** | **357** | pP | pP | 23 06 04.2 | +5.2 |
| | 0.9nm,0.7s,baz=174,slow=6.0,SNR=3.4 | | | | | | |
| **ESDC** | **Sonseca Array** | **60.20** | **327** | P | **P** | **23 05 57.3** | **+0.5** |
| | 0.1nm,0.3s,baz=131,slow=6.8,SNR=4.5 | | | | | | |
| **GERES** | **GERESS Array B** | **60.77** | **345** | P | **P** | **23 06 01.0** | **+0.5** |
| | 0.1nm,0.2s,baz=152,slow=4.3,SNR=2.7 | | | | | | |
| GERES | | | | pP | pP | 23 06 09.6 | +5.8 |
| | 0.3nm,0.6s,baz=178,slow=3.7,SNR=3.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **69.97** | **66** | LR | LR | 23 35 19.7 | |
| | comp=Z,16nm,19.6s,baz=190,slow=34 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.72** | **33** | P | **P** | **23 07 04.6** | **-0.2** |
| | 1.7nm,0.8s,baz=230,slow=6.5,SNR=6.6 | | | | | | |
| MKAR | | | | pP | **pP** | **23 07 13.1** | **+5.0** |
| | 1.9nm,0.8s,baz=232,slow=5.7,SNR=9.6 | | | | | | |
| MKAR | | | | LR | LR | 23 39 39.9 | |
| | comp=Z,15nm,18.1s,baz=308,slow=37 | | | | | | |
| **FINES** | **FINESS Array B** | **71.01** | **356** | pP | pP | 23 07 14.1 | +4.8 |
| | 1.9nm,0.9s,baz=123,slow=10,SNR=1.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **71.34** | **28** | P | **P** | **23 07 08.3** | **0.0** |
| | 0.2nm,0.3s,baz=231,slow=6.3,SNR=4.6 | | | | | | |
| KURBB | | | | pP | **pP** | **23 07 16.4** | **+4.8** |
| | 1.2nm,0.8s,baz=234,slow=6.9,SNR=4.8 | | | | | | |
| **KURK** | **Kurchatov** | **71.44** | **28** | P | **P** | **23 07 08.3** | **-0.7** |
| KURK | | | | pP | **pP** | **23 07 16.4** | **+4.2** |
| **ZALV** | **Zalesovo Beam** | **76.44** | **28** | pP | pP | 23 07 45.6 | +4.1 |
| | 0.6nm,0.5s,baz=265,slow=8.4,SNR=2.4 | | | | | | |
| **ASAR** | **Alice Springs** | **95.30** | **115** | pP | pP | 23 09 20.3 | +3.5 |
| | 0.4nm,0.6s,baz=265,slow=4.4,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **135.67** | **302** | PKP | **PKPdf** | **23 15 09.3** | **-0.7** |
| | 0.3nm,0.8s,baz=75,slow=3.8,SNR=4.6 | | | | | | |

*DJA* ***29*** *23:03:29.3±0.9, 3.°S±4.°×10.°0E±.°, h27km±5km, M3.9/6, MLv3.9/6*
*IDC* ***29*** *23:03:30.1±3.8, 2.°86S×99.°86E, h0km, mb3.3/5, mb1 3.5/5, mb1mx3.3/48, mbtmp3.3/5, MS3.0/2, Ms1 3.0/2, ms1mx2.6/16, Error ellipse: s-maj=144.9km s-min=21.3km az=59.0*
**ISC 29 23:03:33.4±1.2, 2.°91S±0.°09×99.°72E±0.°09, h27km, n20, σ1§22/15, mb3.3/5, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.33** | **64** | P | **Pb** | **23 03 40.7** | **-0.3** |
| PPSI | | | | S | **Sn** | **23 03 49.9** | **+1.6** |
| **SISI** | **Saibi** | **1.69** | **338** | P | **Pn** | **23 04 00.6** | **-0.6** |
| SISI | | | | S | **Sb** | **23 04 26.1** | **+1.5** |
| **PDSI** | **Padang** | **2.12** | **21** | P | **Pn** | **23 04 06.1** | **-1.0** |
| PDSI | | | | S | **Sb** | **23 04 37.8** | **+0.8** |
| **PPI** | **Padang Panjang** | **2.52** | **16** | P | **Pn** | **23 04 13.1** | **+0.4** |
| PPI | | | | S | **Sb** | **23 04 46.7** | **-2.0** |
| **MNSI** | **Mandailing Nat** | **3.68** | **358** | P | **Pn** | **23 04 26.8** | **-1.7** |
| **MDSI** | **Maura Dua** | **4.72** | **110** | P | Pn | 23 04 38.6 | -4.3 |
| **LEM** | **Lembang** | **8.78** | **117** | LR | LR | 23 09 06.6 | |
| | comp=Z,48nm,19.2s,baz=8.0,slow=39 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.24** | **358** | P | **P** | **23 08 18.1** | **+0.6** |
| | 0.5nm,0.3s,baz=189,slow=11,SNR=4.1 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.50** | **259** | T | T | 23 37 47.3 | |
| | baz=82,slow=75,SNR=199 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.51** | **259** | T | T | 23 37 49.2 | |
| | baz=82,slow=75,SNR=206 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.52** | **259** | T | T | 23 37 50.2 | |
| | baz=82,slow=75,SNR=239 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.53** | **159** | T | T | 23 46 16.1 | |
| | baz=335,slow=76,SNR=14 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.54** | **159** | T | T | 23 46 16.2 | |
| | baz=335,slow=76,SNR=12 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.54** | **159** | T | T | 23 46 20.6 | |
| | baz=335,slow=76,SNR=10.0 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **37.79** | **119** | P | **P** | **23 10 46.9** | **-0.9** |
| | 0.2nm,0.5s,baz=296,slow=8.3,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **38.96** | **125** | P | **P** | **23 10 57.5** | **-0.1** |
| | 0.6nm,0.9s,baz=304,slow=7.4,SNR=4.4 | | | | | | |
| **AAK** | **Ala-Archa** | **50.74** | **336** | LR | LR | 23 36 33.1 | |
| | comp=Z,26nm,18.5s,baz=220,slow=39 | | | | | | |
| **SONM** | **Songino Array** | **50.87** | **6** | P | **P** | **23 12 31.8** | **-0.2** |
| | 0.1nm,0.4s,baz=183,slow=6.5,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.82** | **345** | P | **P** | **23 12 39.0** | **0.0** |
| | 0.5nm,0.9s,baz=143,slow=5.0,SNR=3.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.59** | **38** | PKPbc | **PKPab** | **23 23 12.1** | **+1.6** |
| | 0.4nm,0.7s,baz=355,slow=0.8,SNR=3.8 | | | | | | |

*IDC* ***29*** *23:04:55.6±1.2, 37.°39N×20.°36E, h0km, mb3.7/5, mb1 3.8/7, mb1mx3.6/36, mbtmp3.7/7, ML3.3/2, Error ellipse: s-maj=30.6km s-min=20.7km az=117.0*
*ISCJB* ***29*** *23:04:56.3±0.7, 37.°40N±0.°02×20.°30E±0.°03, h2km±5km, mb3.6/5, Error ellipse: s-maj=5.3km s-min=3.1km az=141.9*
*ATH* ***29*** *23:04:57.8, 37.°41N×20.°35E, h18km±1km, MD3.6/38, ML3.6*
*CSEM* ***29*** *23:04:58.7±0.3, 37.°46N×20.°42E, h2km, ML3.5, Error ellipse: s-maj=6.3km s-min=3.1km az=46.0*
*THE* ***29*** *23:04:59.2, 37.°48N×20.°45E, h0km±1km, ML3.5/10, Error ellipse: s-maj=1.9km s-min=0.7km az=235.0*
**ISC 29 23:04:58.5±1.2, 37.°45N±0.°03×20.°41E±0.°03, h13km±8km, n214, σ1§30/249, mb3.8/5, 13C-16D, Ionian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SFD** | **Strofades** | **0.52** | **112** | *e*PN | **Pb** | **23 05 09.3** | **-0.2** |
| SFD | | | | *e*SN | **Sb** | **23 05 16.8** | **-0.1** |
| **SFD** | **Strofades** | **0.52** | **112** | P | **Pb** | **23 05 09.2** | **-0.2** |
| SFD | | | | S | **Sb** | **23 05 16.9** | **0.0** |
| **SFD** | **Strofades** | **0.52** | **112** | P | **Pb** | **23 05 09.2** | **-0.2** |
| SFD | | | | *e*Sn | **Sb** | **23 05 16.8** | **-0.1** |
| **KFL** | **Anninata** | **0.72** | **24** | *e*PN | **Pg** | **23 05 12.0** | **-0.6** |
| KFL | | | | *e*SN | **Sb** | **23 05 24.5** | **+1.8** |
| **KFL** | **Anninata** | **0.72** | **24** | P | **Pg** | **23 05 12.0** | **-0.6** |
| KFL | | | | S | **Sg** | **23 05 22.4** | **+0.3** |
| **KFL** | **Anninata** | **0.72** | **24** | *e*Pb | **Pg** | **23 05 12.0** | **-0.6** |
| KFL | | | | *e*Sb | **Sb** | **23 05 24.5** | **+1.8** |
| **VLS** | **Valsamata** | **0.74** | **11** | *e*PN | **Pg** | **23 05 12.3** | **-0.6** |
| VLS | | | | *e*SN | **Sb** | **23 05 24.8** | **+1.6** |
| **VLS** | **Valsamata** | **0.74** | **11** | P | **Pg** | **23 05 11.9** | **-1.0** |
| VLS | | | | S | **Sb** | **23 05 23.4** | **+0.2** |
| **VLS** | **Valsamata** | **0.74** | **11** | *e*Pn | **Pg** | **23 05 12.3** | **-0.6** |
| VLS | | | | S | **Sb** | **23 05 23.4** | **+0.2** |
| VLS | | | | *e*Sn | **Sb** | **23 05 24.8** | **+1.6** |
| **RLS** | **Riolos of Patr** | **1.03** | **54** | *e*PN | **Pg** | **23 05 17.6** | **-0.2** |
| RLS | | | | *e*SB | **Sn** | **23 05 34.1** | **+1.2** |
| **RLS** | **Riolos of Patr** | **1.03** | **54** | P | **Pg** | **23 05 17.6** | **-0.8** |
| RLS | | | | S | **Sb** | **23 05 32.3** | **+0.7** |
| **RLS** | **Riolos of Patr** | **1.03** | **54** | P | **Pg** | **23 05 17.6** | **-0.8** |
| **RLS** | **Riolos of Patr** | **1.03** | **54** | *e*Pn | **Pg** | **23 05 18.2** | **-0.2** |
| RLS | | | | S | **Sb** | **23 05 32.3** | **+0.7** |
| RLS | | | | *e*Sn | **Sn** | **23 05 34.1** | **+1.2** |
| **AMT** | **Artemida-Makis** | **1.03** | **85** | *e*PN | **Pg** | **23 05 18.5** | **0.0** |
| AMT | | | | *e*SB | **Sn** | **23 05 34.3** | **+1.3** |
| **AMT** | **Artemida-Makis** | **1.03** | **85** | P | **Pg** | **23 05 18.0** | **-0.5** |
| AMT | | | | S | **Sn** | **23 05 33.4** | **+0.4** |
| **AMT** | **Artemida-Makis** | **1.03** | **85** | P | **Pg** | **23 05 18.0** | **-0.5** |
| **AMT** | **Artemida-Makis** | **1.03** | **85** | *e*Pn | **Pg** | **23 05 18.5** | **0.0** |
| AMT | | | | S | **Sn** | **23 05 33.4** | **+0.4** |
| AMT | | | | *e*Sn | **Sn** | **23 05 34.3** | **+1.3** |
| **AXS** | **Araxos** | **1.07** | **45** | P | **Pg** | **23 05 17.5** | **-1.6** |
| **DRO** | **Drossia** | **1.15** | **64** | *e*PB | **Pb** | **23 05 19.8** | **-0.4** |
| **DRO** | **Drossia** | **1.15** | **64** | P | **Pb** | **23 05 19.8** | **-0.4** |
| DRO | | | | S | **Sn** | **23 05 37.1** | **+1.3** |
| **DRO** | **Drossia** | **1.15** | **64** | P | **Pb** | **23 05 19.8** | **-0.4** |
| DRO | | | | S | **Sn** | **23 05 37.1** | **+1.3** |
| **PYL** | **PYLOS** | **1.20** | **117** | *e*PN | **Pb** | **23 05 21.0** | **0.0** |
| PYL | | | | *e*SB | **Sg** | **23 05 37.3** | **+0.1** |
| **PYL** | **PYLOS** | **1.20** | **117** | P | **Pb** | **23 05 20.7** | **-0.3** |
| PYL | | | | S | **Sn** | **23 05 38.4** | **+1.4** |
| **PYL** | **PYLOS** | **1.20** | **117** | P | **Pb** | **23 05 20.7** | **-0.3** |
| **PYL** | **PYLOS** | **1.20** | **117** | *e*Pn | **Pb** | **23 05 21.0** | **0.0** |
| PYL | | | | *e*Sb | **Sg** | **23 05 37.3** | **+0.1** |
| PYL | | | | S | **Sn** | **23 05 38.4** | **+1.4** |
| **ITM** | **Ithomi** | **1.24** | **102** | *e*PN | **Pn** | **23 05 21.8** | **+0.3** |
| ITM | | | | *e*SN | **Sn** | **23 05 39.9** | **+1.9** |
| **ITM** | **Ithomi** | **1.24** | **102** | P | **Pn** | **23 05 21.9** | **+0.4** |
| ITM | | | | S | **Sn** | **23 05 39.1** | **+1.1** |
| **ITM** | **Ithomi** | **1.24** | **102** | P | **Pn** | **23 05 21.9** | **+0.4** |
| ITM | | | | S | **Sn** | **23 05 39.1** | **+1.1** |
| ITM | | | | *e*Sn | **Sn** | **23 05 39.9** | **+1.9** |
| **PO0** | **Prodromos** | **1.30** | **28** | P | **Pn** | **23 05 22.4** | **+0.1** |
| PDO | | | | S | **Sg** | **23 05 41.6** | **+1.2** |
| **PDO** | **Prodromos** | **1.30** | **28** | P | **Pn** | **23 05 22.4** | **+0.1** |
| PDO | | | | S | **Sg** | **23 05 41.6** | **+1.2** |
| **LKD2** | **Lefkada island** | **1.35** | **8** | *e*PN | **Pb** | **23 05 23.9** | **+0.2** |
| LKD2 | | | | *e*SN | **Sg** | **23 05 43.7** | **+1.6** |
| **LKD2** | **Lefkada island** | **1.35** | **8** | P | **Pn** | **23 05 23.1** | **+0.1** |
| LKD2 | | | | S | **Sg** | **23 05 42.8** | **+0.7** |
| **LKD2** | **Lefkada island** | **1.35** | **8** | P | **Pn** | **23 05 23.1** | **+0.1** |
| **LKD2** | **Lefkada island** | **1.35** | **8** | *e*Pn | **Pb** | **23 05 23.9** | **+0.2** |
| LKD2 | | | | S | **Sg** | **23 05 42.8** | **+0.7** |
| LKD2 | | | | *e*Sn | **Sg** | **23 05 43.7** | **+1.6** |
| **UPR** | **University Cam** | **1.37** | **52** | *e*PN | **Pg** | **23 05 25.3** | **+0.5** |
| **UPR** | **University Cam** | **1.37** | **52** | *e*Pn | **Pg** | **23 05 25.3** | **+0.5** |
| **P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| VLI | Veliai | 2.15 | 109 | ePN | Pb | 23 05 36.3 | -0.9 | | |
| VLI | Veliai | 2.15 | 109 | ePn | Pb | 23 05 36.3 | -0.9 | | |
| SGD | Sagiada | 2.16 | 356 | ePN | Pn | 23 05 36.2 | +2.0 | | |
| SGD | Sagiada | 2.16 | 356 | P | Pn | 23 05 35.1 | +0.9 | | |
| SGD | Sagiada | 2.16 | 356 | P | Pn | 23 05 35.1 | +0.9 | | |
| SGD | Sagiada | 2.16 | 356 | ePn | Pn | 23 05 36.2 | +2.0 | | |
| AGG | Agios Georgios | 2.18 | 43 | ePN | Pb | 23 05 36.9 | -0.9 | | |
| AGG | Agios Georgios | 2.18 | 43 | P | Pn | 23 05 35.2 | +0.8 | | |
| AGG | Agios Georgios | 2.18 | 43 | P | Pn | 23 05 35.2 | +0.8 | | |
| AGG | Agios Georgios | 2.18 | 43 | ePn | Pb | 23 05 36.9 | -0.9 | | |
| KRND | KRANIDI | 2.18 | 91 | ePN | Pn | 23 05 36.1 | +1.7 | | |
| KRND | KRANIDI | 2.18 | 91 | ePn | Pn | 23 05 36.1 | +1.7 | | |
| AXAR | Agios Charalam | 2.21 | 53 | ePB | Pn | 23 05 36.5 | +1.7 | | |
| AXAR | Agios Charalam | 2.21 | 53 | P | Pn | 23 05 36.0 | +1.2 | | |
| AXAR | Agios Charalam | 2.21 | 53 | P | Pn | 23 05 36.0 | +1.2 | | |
| AXAR | Agios Charalam | 2.21 | 53 | ePb | Pn | 23 05 36.5 | +1.7 | | |
| JAN | Janina | 2.23 | 9 | ePB | Pb | 23 05 37.6 | -1.0 | | |
| JAN | Janina | 2.23 | 9 | P | Pn | 23 05 37.2 | +2.1 | | |
| JAN | Janina | 2.23 | 9 | P | Pn | 23 05 37.2 | +2.1 | | |
| JAN | Janina | 2.23 | 9 | ePb | Pb | 23 05 37.6 | -1.0 | | |
| KEK | Kerkira | 2.31 | 348 | ePB | Pn | 23 05 37.6 | +1.4 | | |
| KEK | Kerkira | 2.31 | 348 | ePn | Pn | 23 05 37.6 | +1.4 | | |
| LKR | Lokris | 2.37 | 59 | ePN | Pn | 23 05 38.7 | +1.7 | | |
| LKR | Lokris | 2.37 | 59 | ePn | Pn | 23 05 38.7 | +1.7 | | |
| VIL2 | Platees | 2.39 | 71 | ePN | Pn | 23 05 38.7 | +1.4 | | |
| VILL | Villia | 2.41 | 72 | ePn | Pn | 23 05 38.7 | +1.1 | | |
| KYTH | Kithira | 2.41 | 118 | ePB | Pn | 23 05 39.5 | +1.9 | | |
| KYTH | Kithira | 2.41 | 118 | ePb | Pn | 23 05 39.5 | +1.9 | | |
| MEV | Metsovon | 2.42 | 15 | ePB | Pb | 23 05 40.5 | -1.4 | | |
| MEV | Metsovon | 2.42 | 15 | ePb | Pb | 23 05 40.5 | -1.4 | | |
| THL | Klokotos Trika | 2.46 | 30 | ePN | Pn | 23 05 40.2 | +2.0 | | |
| THL | Klokotos Trika | 2.46 | 30 | P | Pn | 23 05 38.9 | +0.7 | | |
| THL | Klokotos Trika | 2.46 | 30 | P | Pn | 23 05 38.9 | +0.7 | | |
| THL | Klokotos Trika | 2.46 | 30 | ePn | Pn | 23 05 40.2 | +2.0 | | |
| NAIG | Nisos Aigina | 2.46 | 82 | ePN | Pn | 23 05 40.0 | +1.7 | | |
| NAIG | Nisos Aigina | 2.46 | 82 | ePn | Pn | 23 05 40.0 | +1.7 | | |
| SMIA | Simia | 2.63 | 56 | ePN | Pn | 23 05 42.0 | +1.4 | | |
| SMIA | Simia | 2.63 | 56 | ePn | Pn | 23 05 42.0 | +1.4 | | |
| ATH | Athens Observa | 2.67 | 78 | ePN | Pn | 23 05 43.4 | +2.2 | | |
| ATH | Athens Observa | 2.67 | 78 | ePn | Pn | 23 05 43.4 | +2.2 | | |
| VLY | Voula,Athens | 2.71 | 80 | ePN | Pn | 23 05 42.3 | +0.5 | | |
| VLY | Voula,Athens | 2.71 | 80 | ePn | Pn | 23 05 42.3 | +0.5 | | |
| PENT | Pentalofos | 2.80 | 11 | ePB | Pn | 23 05 45.6 | +2.6 | | |
| PENT | Pentalofos | 2.80 | 11 | ePb | Pn | 23 05 45.6 | +2.6 | | |
| MRKA | Markates | 2.80 | 62 | ePN | Pn | 23 05 44.7 | +1.7 | | |
| MRKA | Markates | 2.80 | 62 | ePn | Pn | 23 05 44.7 | +1.7 | | |
| NEO | Neokhori | 2.88 | 49 | ePN | Pn | 23 05 45.3 | +1.2 | | |
| NEO | Neokhori | 2.88 | 49 | ePn | Pn | 23 05 45.3 | +1.2 | | |
| XOR | Xorichti | 2.90 | 48 | ePN | Pn | 23 05 45.9 | +1.5 | | |
| XOR | Xorichti | 2.90 | 48 | ePn | Pn | 23 05 45.9 | +1.5 | | |
| SKIA | Skiathos | 2.95 | 54 | ePN | Pn | 23 05 46.0 | +1.0 | | |
| SKIA | Skiathos | 2.95 | 54 | ePn | Pn | 23 05 46.0 | +1.0 | | |
| NEST | Nestorio | 3.00 | 9 | ePN | Pn | 23 05 48.4 | +2.6 | | |
| NEST | Nestorio | 3.00 | 9 | ePn | Pn | 23 05 48.4 | +2.6 | | |
| KZN | Kozani | 3.04 | 20 | ePN | Pn | 23 05 48.4 | +2.0 | | |
| KZN | Kozani | 3.04 | 20 | ePn | Pn | 23 05 48.4 | +2.0 | | |
| LIT | Litokhoron | 3.10 | 31 | ePN | Pn | 23 05 48.6 | +1.4 | | |
| LIT | Litokhoron | 3.10 | 31 | ePn | Pn | 23 05 48.6 | +1.4 | | |
| AOS | Alonnisos | 3.22 | 57 | ePN | Pn | 23 05 49.0 | +0.2 | | |
| AOS | Alonnisos | 3.22 | 57 | ePn | Pn | 23 05 49.0 | +0.2 | | |
| TIP | Timpagrande | 3.35 | 302 | ⇑iP | Pg | 23 06 07.3 | +4.6 | | |
| TIP | Timpagrande | 3.35 | 302 | P | Pn | 23 05 53.5 | +2.9 | | |
| TIP | Timpagrande | 3.35 | 302 | P | Pn | 23 05 53.5 | +2.9 | | |
| FNA | Florina | 3.41 | 12 | ePN | Pn | 23 05 53.3 | +1.9 | | |
| FNA | Florina | 3.41 | 12 | P | Pn | 23 05 52.5 | +1.1 | | |
| FNA | Florina | 3.41 | 12 | P | Pn | 23 05 52.5 | +1.1 | | |
| FNA | Florina | 3.41 | 12 | ePn | Pn | 23 05 53.3 | +1.9 | | |
| OHR | Ohrid | 3.67 | 5 | i Pn | Pn | 23 05 57.5 | +2.5 | | |
| OHR | | | | i Sn | Sg | 23 07 14.2 | +18 | | |
| OHR | Ohrid | 3.67 | 5 | i Pn | Pn | 23 05 57.4 | +2.5 | | |
| THE | Thessaloniki | 3.75 | 31 | ePN | Pn | 23 05 57.5 | +1.6 | | |
| THE | Thessaloniki | 3.75 | 31 | ePn | Pn | 23 05 57.5 | +1.6 | | |
| PLG | Polygyros | 3.76 | 38 | ePN | Pn | 23 05 56.7 | +0.6 | | |
| PLG | Polygyros | 3.76 | 38 | ePn | Pn | 23 05 56.7 | +0.6 | | |
| HORT | Hortiatis | 3.78 | 33 | ePN | Pn | 23 05 57.0 | +0.6 | | |
| HORT | Hortiatis | 3.78 | 33 | ePn | Pn | 23 05 57.0 | +0.6 | | |
| GRG | Griva | 3.83 | 23 | ePN | Pn | 23 05 58.9 | +1.8 | | |
| GRG | Griva | 3.83 | 23 | ePn | Pn | 23 05 58.9 | +1.8 | | |
| TIR | Tirane | 3.92 | 354 | ⇓iP | Pn | 23 06 01.0 | +2.7 | | |
| TIR | Tirane | 3.92 | 354 | ⇓iP | Pn | 23 06 01.0 | +2.7 | | |
| TAR1 | Taranto | 3.92 | 323 | ePn | Pn | 23 05 59.6 | +1.3 | | |
| SOH | Sokhos | 4.07 | 33 | ePN | Pn | 23 06 02.3 | +1.9 | | |
| SOH | Sokhos | 4.07 | 33 | ePn | Pn | 23 06 02.3 | +1.9 | | |
| PE1 | Pezze di Greco | 4.08 | 326 | ePn | Pn | 23 06 01.5 | +1.0 | | |
| KNT | Kendrikon | 4.18 | 27 | ePN | Pn | 23 06 03.2 | +1.3 | | |
| KNT | Kendrikon | 4.18 | 27 | ePn | Pn | 23 06 03.2 | +1.3 | | |
| IDI | Anoyia | 4.21 | 120 | Pn | Pn | 23 06 03.3 | +0.9 | | |
| | 0.9nm,0.3s,baz=355,slow=11,SNR=5.3 | | | | | | | | |
| IDI | | | | Sn | Sn | 23 06 50.4 | -1.0 | | |
| | 5.5nm,0.3s,baz=332,slow=19,SNR=12 | | | | | | | | |
| VAY | Valandovo | 4.21 | 23 | i Pn | Pn | 23 06 04.3 | +2.0 | | |
| VAY | | | | i Sn | Sg | 23 07 09.9 | -3.8 | | |
| VAY | Valandovo | 4.21 | 23 | i Pn | Pn | 23 06 04.3 | +2.0 | | |
| MATE | Matera | 4.30 | 319 | ⇓iP | Pb | 23 06 16.1 | +2.1 | | |
| SIVA | Sivas | 4.30 | 123 | ⇑iP | Sn | 23 06 47.5 | -6.2 | | |
| SRS | Serrai | 4.42 | 33 | ePN | Pn | 23 06 06.1 | +0.9 | | |
| SRS | Serrai | 4.42 | 33 | ePn | Pn | 23 06 06.1 | +0.9 | | |
| LAST | Lasithi | 4.69 | 118 | ePN | Pn | 23 06 11.3 | +2.3 | | |
| LAST | Lasithi | 4.69 | 118 | ePn | Pn | 23 06 11.3 | +2.3 | | |
| NVR | Nevrokopi | 4.72 | 33 | ePN | Pn | 23 06 10.6 | +1.2 | | |
| NVR | Nevrokopi | 4.72 | 33 | ePn | Pn | 23 06 10.6 | +1.2 | | |
| PDG | Podgorica | 5.05 | 350 | ⇑iP | Pn | 23 06 14.0 | +0.1 | | |
| PDG | Podgorica | 5.05 | 350 | ⇑iP | Pn | 23 06 14.0 | +0.1 | | |
| BARS | Barje | 5.47 | 11 | ePn | Pn | 23 06 18.7 | -0.9 | | |
| DIVS | Divibare | 6.65 | 357 | ⇓iP | Pn | 23 06 34.3 | -1.6 | | |
| DIVS | Divibare | 6.65 | 357 | ePn | Pn | 23 06 38.3 | +2.4 | | |
| HUMR | Humele | 7.87 | 25 | ⇓iP | Pn | 23 06 52.7 | +0.2 | | |
| HUMR | Humele | 7.87 | 25 | ⇓iP | Pn | 23 06 52.7 | +0.2 | | |
| GZR | Gura Zlata | 8.13 | 12 | ⇓iP | Pn | 23 06 57.7 | +1.5 | | |
| GZR | Gura Zlata | 8.13 | 12 | ⇓iP | Pn | 23 06 57.7 | +1.5 | | |
| ARR | Arges | 8.52 | 21 | ⇑iP | Pn | 23 07 02.7 | +1.1 | | |
| ARR | Arges | 8.52 | 21 | ⇑iP | Pn | 23 07 02.7 | +1.1 | | |
| VOIR | | 8.70 | 22 | ⇑iP | Pn | 23 07 05.9 | +1.8 | | |
| VOIR | | 8.70 | 22 | ⇑iP | Pn | 23 07 05.9 | +1.8 | | |
| MLR | Muntele Rosu | 9.04 | 26 | Pn | Pn | 23 07 11.8 | +3.1 | | |
| | 0.1nm,0.3s,baz=198,slow=3.2,SNR=17 | | | | | | | | |
| MLR | Muntele Rosu | 9.04 | 26 | ⇓iP | Pn | 23 07 12.2 | +3.5 | | |
| MLR | Muntele Rosu | 9.04 | 26 | ⇓iP | Pn | 23 07 12.2 | +3.5 | | |
| DOPR | Dopca | 9.29 | 22 | ⇑iP | Pn | 23 07 13.5 | +1.5 | | |
| DOPR | Dopca | 9.29 | 22 | ⇑iP | Pn | 23 07 13.5 | +1.5 | | |
| GRER | | 9.33 | 30 | ⇓iP | Pn | 23 07 15.5 | +3.0 | | |
| GRER | | 9.33 | 30 | ⇓iP | Pn | 23 07 15.5 | +3.0 | | |
| PLOR | Plostina | 9.60 | 27 | ⇑iP | Pn | 23 07 19.6 | +3.3 | | |
| PLOR | Plostina | 9.60 | 27 | ⇑iP | Pn | 23 07 19.6 | +3.3 | | |
| VRI | Vrincioaia | 9.64 | 27 | ⇓iP | Pn | 23 07 20.5 | +3.6 | | |
| VRI | Vrincioaia | 9.64 | 27 | ⇓iP | Pn | 23 07 20.5 | +3.6 | | |
| CFR | Carcaliu | 9.66 | 35 | ⇑iP | Pn | 23 07 21.4 | +4.4 | | |
| TESR | Tescani | 10.17 | 25 | ⇓iP | Pn | 23 07 23.5 | -0.6 | | |
| TESR | Tescani | 10.17 | 25 | ⇓iP | Pn | 23 07 23.5 | -0.6 | | |
| FINES | FINESS Array B | 24.28 | 7 | P | P | 23 10 14.0 | -1.1 | | |
| | 2.2nm,0.9s,baz=170,slow=17,SNR=2.9 | | | | | | | | |
| TORD | Torodi Ar. Bea | 29.41 | 220 | P | P | 23 11 00.6 | -1.1 | | |
| | 1.6nm,0.9s,baz=32,slow=9.7,SNR=10 | | | | | | | | |
| MKAR | Makanchi Array | 45.76 | 58 | P | P | 23 13 18.2 | -1.3 | | |
| | 0.4nm,0.7s,baz=284,slow=5.3,SNR=5.7 | | | | | | | | |
| ZALV | Zalesovo Beam | 46.24 | 48 | P | P | 23 13 21.4 | -1.7 | | |
| | 0.6nm,0.4s,baz=270,slow=7.2,SNR=2.8 | | | | | | | | |
| SONM | Songino Array | 60.99 | 50 | P | P | 23 15 11.4 | -0.1 | | |
| | 0.4nm,0.9s,baz=283,slow=9.6,SNR=2.8 | | | | | | | | |

*IDC **29** 23:09:28.7±3.5,3.73S×150.93E,h0km,mb3.5/2, mb1 3.8/2,mb1mx3.4/25,mbtmp3.5/2,MS4.3/1,Ms1 4.3/1, ms1mx2.8/18,Error ellipse: s-maj=145.0km s-min=46.1km az=116.0*

*ISCJB **29** 23:09:31.5±1.0,3.8S±0.2×151.0E±0.1,h33km,mb3.8/5, MS4.3/1,Error ellipse: s-maj=22.7km s-min=15.5km az=168.3*

*NEIC **29** 23:09:33.5±0.7,3.77S×150.98E,h35km,mb4.1/3,Error ellipse: s-maj=17.5km s-min=12.0km az=166.0*

**ISC 29 23:09:33.4±1.0,3.8S±0.2×151.0E±0.1,h35km,n8,σ0.66/8, mb3.7/5,New Ireland region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HNR | Honiara | 10.53 | 123 | ePn | Pn | 23 12 01.8 | -0.2 |
| | 5.1nm,1.2s | | | | | | |
| TARA | Tarawa | 22.51 | 77 | eP | P | 23 14 30.9 | +0.6 |
| | 6.1nm,0.3s | | | | | | |
| TARA | | | | epP | pP | 23 14 39.4 | -0.2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| WRAB | Tennant Creek | 22.83 | 224 | eP | P | 23 14 33.5 | 0.0 | | |
| | 2.4nm,0.8s | | | | | | | | |
| WRA | Warramunga Arr | 22.84 | 224 | P | P | 23 14 34.8 | +1.0 | | |
| | 0.9nm,0.4s,baz=50,slow=10,SNR=22 | | | | | | | | |
| ASAR | Alice Springs | 25.76 | 218 | P | P | 23 15 00.2 | -0.8 | | |
| | 0.2nm,0.4s,baz=51,slow=9.0,SNR=4.4 | | | | | | | | |
| PSI | Prapat | 52.44 | 276 | LR | LR | 23 43 09.4 | | | |
| | comp=Z,263nm,18.8s,baz=47,slow=39 | | | | | | | | |
| BJT | Baijiatuau | 54.03 | 327 | eP | P | 23 18 54.1 | -0.2 | | |
| | 0.9nm,0.4s | | | | | | | | |
| TORD | Torodi Ar. Bea | 148.26 | 289 | PKPbc | PKPbc | 23 29 16.9 | 0.0 | | |
| | 0.3nm,0.7s,baz=93,slow=2.7,SNR=5.8 | | | | | | | | |

*ISCJB **29** 23:11:37.8±0.9,36.30N±0.04×22.06E±0.05,h22km±5km, Error ellipse: s-maj=8.1km s-min=4.9km az=36.9*

*CSEM **29** 23:11:38.5±0.3,36.36N×22.11E,h15km,MD3.5, Error ellipse: s-maj=8.0km s-min=4.6km az=41.0*

*ATH **29** 23:11:38.3,36.37N×22.10E,h29km,MD3.5/38,ML2.9*

*THE **29** 23:11:39.2,36.38N×22.08E,h7km±1km,ML3.0/9,Error ellipse: s-maj=1.8km s-min=0.9km az=49.0*

**ISC 29 23:11:39.1±1.3,36.39N±0.04×22.10E±0.03,h15km±10km, n105,σ0.87/136,2C,Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DYR | Agios Nikonas | 0.41 | 27 | ePB | Pb | 23 11 48.0 | -0.2 |
| DYR | | | | eSB | Sb | 23 11 55.2 | +0.9 |
| DYR | Agios Nikonas | 0.41 | 27 | P | Pb | 23 11 47.9 | -0.2 |
| DYR | | | | S | Sb | 23 11 54.5 | +0.2 |
| DYR | Agios Nikonas | 0.41 | 27 | ePb | Pb | 23 11 48.0 | -0.2 |
| DYR | | | | S | Sb | 23 11 54.5 | +0.2 |
| DYR | | | | eSb | Sb | 23 11 55.2 | +0.9 |
| PYL | PYLOS | 0.58 | 330 | ePN | Pb | 23 11 50.5 | -0.5 |
| PYL | | | | eSN | Sb | 23 12 00.1 | +1.1 |
| PYL | PYLOS | 0.58 | 330 | P | Pb | 23 11 50.4 | -0.5 |
| PYL | | | | S | Sb | 23 11 59.8 | +0.8 |
| PYL | PYLOS | 0.58 | 330 | P | Pb | 23 11 50.4 | -0.5 |
| PYL | | | | S | Sb | 23 11 59.8 | +0.8 |
| PYL | | | | eSn | Sb | 23 12 00.1 | +1.1 |
| VLI | Veliai | 0.75 | 64 | ePN | Pb | 23 11 53.6 | -0.3 |
| VLI | | | | eSN | Sb | 23 12 04.6 | +0.7 |
| VLI | Veliai | 0.75 | 64 | P | Pb | 23 11 53.8 | -0.1 |
| VLI | | | | S | Sb | 23 12 04.9 | +1.0 |
| VLI | Veliai | 0.75 | 64 | P | Pb | 23 11 53.8 | -0.1 |
| VLI | | | | eSn | Sb | 23 12 04.6 | +0.7 |
| VLI | | | | S | Sb | 23 12 04.9 | +1.0 |
| KYTH | Kithira | 0.77 | 98 | ePN | Pg | 23 11 53.2 | -0.8 |
| KYTH | Kithira | 0.77 | 98 | ePn | Pg | 23 11 53.2 | -0.8 |
| ITM | Ithomi | 0.80 | 350 | ePN | Pg | 23 11 54.1 | -0.5 |
| ITM | | | | eSN | Sb | 23 12 06.4 | +1.1 |
| ITM | Ithomi | 0.80 | 350 | P | Pg | 23 11 54.1 | -0.5 |
| ITM | | | | S | Sb | 23 12 06.2 | +0.9 |
| ITM | Ithomi | 0.80 | 350 | P | Pg | 23 11 54.1 | -0.5 |
| ITM | | | | S | Sb | 23 12 06.2 | +0.9 |
| VLX | Vlachokerasia | 1.00 | 13 | ePN | Pg | 23 11 57.8 | -0.7 |
| VLX | | | | eSN | Sn | 23 12 13.3 | +0.6 |
| VLX | Vlachokerasia | 1.00 | 13 | P | Pg | 23 11 57.6 | -0.9 |
| VLX | | | | S | Sn | 23 12 12.6 | -0.1 |
| VLX | Vlachokerasia | 1.00 | 13 | P | Pg | 23 11 57.6 | -0.9 |
| VLX | | | | S | Sn | 23 12 12.6 | -0.1 |
| VLX | | | | eSn | Sn | 23 12 13.3 | +0.6 |
| ANKY | Antikythira Is | 1.11 | 118 | ePN | Pb | 23 11 59.5 | -0.5 |
| ANKY | Antikythira Is | 1.11 | 118 | P | Pb | 23 11 59.9 | -0.1 |
| ANKY | | | | S | Sn | 23 12 16.4 | +1.3 |
| ANKY | Antikythira Is | 1.11 | 118 | ePn | Pb | 23 11 59.5 | -0.5 |
| ANKY | Antikythira Is | 1.11 | 118 | P | Pb | 23 11 59.9 | -0.1 |
| ANKY | | | | S | Sn | 23 12 16.4 | +1.3 |
| AMT | Artemida-Makis | 1.18 | 345 | ePN | Pb | 23 12 01.2 | 0.0 |
| AMT | Artemida-Makis | 1.18 | 345 | P | Pb | 23 12 00.7 | -0.5 |
| AMT | | | | S | Sn | 23 12 19.0 | +2.0 |
| AMT | Artemida-Makis | 1.18 | 345 | P | Pb | 23 12 00.7 | -0.5 |
| AMT | Artemida-Makis | 1.18 | 345 | ePn | Pb | 23 12 01.2 | 0.0 |
| AMT | | | | S | Sn | 23 12 19.0 | +2.0 |
| KRND | KRANIDI | 1.30 | 40 | ePN | Pn | 23 12 02.3 | -0.4 |
| KRND | KRANIDI | 1.30 | 40 | P | Pn | 23 12 02.3 | -0.4 |
| KRND | | | | S | Sg | 23 12 22.6 | +1.6 |
| KRND | KRANIDI | 1.30 | 40 | P | Pn | 23 12 02.3 | -0.4 |
| KRND | | | | S | Sg | 23 12 22.6 | +1.6 |
| DID | Didima | 1.44 | 39 | ePB | Pn | 23 12 03.9 | -0.8 |
| DID | Didima | 1.44 | 39 | ePb | Pn | 23 12 03.9 | -0.8 |
| GUR | Goura | 1.55 | 7 | ePN | Pn | 23 12 06.8 | +0.5 |
| GUR | Goura | 1.55 | 7 | P | Pb | 23 12 07.5 | -0.1 |
| GUR | Goura | 1.55 | 7 | ePn | Pn | 23 12 06.8 | +0.5 |
| GUR | Goura | 1.55 | 7 | P | Pb | 23 12 07.5 | -0.1 |
| DRO | Drossia | 1.59 | 349 | ePN | Pn | 23 12 06.9 | +0.2 |
| DRO | Drossia | 1.59 | 349 | P | Pn | 23 12 06.8 | +0.1 |
| DRO | | | | S | Sb | 23 12 28.8 | +0.7 |
| DRO | Drossia | 1.59 | 349 | ePn | Pn | 23 12 06.9 | +0.2 |
| DRO | | | | S | Sb | 23 12 28.8 | +0.7 |
| KLV | Kalavryta, Ach | 1.65 | 1 | ePN | Pb | 23 12 08.0 | +0.4 |
| KLV | Kalavryta, Ach | 1.65 | 1 | P | Pb | 23 12 08.9 | -0.3 |
| KLV | | | | S | Sb | 23 12 30.1 | +0.2 |
| KLV | Kalavryta, Ach | 1.65 | 1 | ePn | Pn | 23 12 08.0 | +0.4 |
| KLV | Kalavryta, Ach | 1.65 | 1 | P | Pb | 23 12 08.9 | -0.3 |
| KLV | | | | S | Sb | 23 12 30.1 | +0.2 |
| RLS | Riolos of Patr | 1.73 | 343 | ePN | Pn | 23 12 09.7 | +0.9 |
| RLS | Riolos of Patr | 1.73 | 343 | ePn | Pn | 23 12 09.7 | +0.9 |
| LTK | Loutraki | 1.77 | 23 | ePB | Pn | 23 12 08.7 | -0.5 |
| LTK | Loutraki | 1.77 | 23 | ePb | Pn | 23 12 08.7 | -0.5 |
| IMMV | Iera Moni Meta | 1.79 | 121 | ePN | Pn | 23 12 09.1 | -0.4 |
| IMMV | Iera Moni Meta | 1.79 | 121 | ePn | Pn | 23 12 09.1 | -0.4 |
| LAKA | Lakka | 1.84 | 357 | ePB | Pn | 23 12 10.8 | +0.5 |
| LAKA | Lakka | 1.84 | 357 | P | Pn | 23 12 11.2 | +0.9 |
| LAKA | Lakka | 1.84 | 357 | ePb | Pn | 23 12 10.8 | +0.5 |
| LAKA | Lakka | 1.84 | 357 | P | Pn | 23 12 11.2 | +0.9 |
| VLY | Voula,Athens | 1.99 | 42 | ePN | Pn | 23 12 11.9 | -0.4 |
| VLY | Voula,Athens | 1.99 | 42 | ePn | Pn | 23 12 11.9 | -0.4 |
| KALE | Kalithea | 1.99 | 1 | ePN | Pn | 23 12 12.4 | 0.0 |
| KALE | Kalithea | 1.99 | 1 | ePn | Pn | 23 12 12.4 | 0.0 |
| VILL | Villia | 2.02 | 28 | ePn | Pn | 23 12 11.8 | -0.9 |
| SERG | Sergoula | 2.02 | 359 | ePN | Pn | 23 12 12.9 | +0.2 |
| SERG | Sergoula | 2.02 | 359 | ePn | Pn | 23 12 12.9 | +0.2 |
| EFP | Efpalio | 2.04 | 356 | ePN | Pn | 23 12 12.9 | 0.0 |
| EFP | Efpalio | 2.04 | 356 | ePn | Pn | 23 12 12.9 | 0.0 |
| ATH | Athens Observa | 2.04 | 39 | ePN | Pn | 23 12 13.1 | +0.2 |
| ATH | Athens Observa | 2.04 | 39 | ePn | Pn | 23 12 13.1 | +0.2 |
| VIL2 | Platees | 2.04 | 27 | ePN | Pn | 23 12 11.8 | -1.2 |
| DSF | Desfina | 2.04 | 9 | ePN | Pn | 23 12 12.2 | -0.8 |
| DSF | Desfina | 2.04 | 9 | ePn | Pn | 23 12 12.2 | -0.8 |
| VLS | Valsamata | 2.15 | 326 | ePN | Pn | 23 12 13.8 | -0.7 |
| VLS | Valsamata | 2.15 | 326 | P | Pn | 23 12 13.5 | -1.0 |
| VLS | Valsamata | 2.15 | 326 | P | Pn | 23 12 13.5 | -1.0 |
| VLS | Valsamata | 2.15 | 326 | ePn | Pn | 23 12 13.8 | -0.7 |
| PTL | Penteli | 2.17 | 40 | ePN | Pn | 23 12 13.9 | -0.9 |
| PTL | Penteli | 2.17 | 40 | ePn | Pn | 23 12 13.9 | -0.9 |
| PDO | Prodromos | 2.32 | 342 | ePB | Pn | 23 12 17.9 | +1.1 |
| PDO | Prodromos | 2.32 | 342 | ePb | Pn | 23 12 17.9 | +1.1 |
| LKR | Lokris | 2.36 | 17 | ePN | Pn | 23 12 16.6 | -0.8 |
| LKR | Lokris | 2.36 | 17 | ePn | Pn | 23 12 16.6 | -0.8 |
| EVR | Evrytania | 2.53 | 355 | ePN | Pn | 23 12 19.5 | -0.3 |
| EVR | Evrytania | 2.53 | 355 | ePn | Pn | 23 12 19.5 | -0.3 |
| MAKR | Makrakomi, Fth | 2.62 | 1 | ePN | Pn | 23 12 21.8 | +0.9 |
| MAKR | Makrakomi, Fth | 2.62 | 1 | ePn | Pn | 23 12 21.8 | +0.9 |
| AGG | Agios Georgios | 2.63 | 4 | ePN | Pn | 23 12 22.3 | +1.2 |
| AGG | Agios Georgios | 2.63 | 4 | ePn | Pn | 23 12 22.3 | +1.2 |
| SMIA | Simia | 2.63 | 19 | ePN | Pn | 23 12 20.5 | -0.6 |
| SMIA | Simia | 2.63 | 19 | ePn | Pn | 23 12 20.5 | -0.6 |
| LKD2 | Lefkada island | 2.65 | 335 | ePN | Pn | 23 12 21.8 | +0.4 |
| LKD2 | Lefkada island | 2.65 | 335 | ePn | Pn | 23 12 21.8 | +0.4 |
| DSL | Palaion Diasel | 2.85 | 344 | ePN | Pn | 23 12 24.7 | +0.6 |
| DSL | Palaion Diasel | 2.85 | 344 | ePn | Pn | 23 12 24.7 | +0.6 |
| SKIA | Skiathos | 2.97 | 21 | ePN | Pn | 23 12 26.0 | +0.2 |
| SKIA | Skiathos | 2.97 | 21 | ePn | Pn | 23 12 26.0 | +0.2 |
| NEO | Neokhori | 3.04 | 17 | ePN | Pn | 23 12 26.1 | -0.6 |
| NEO | Neokhori | 3.04 | 17 | ePn | Pn | 23 12 26.1 | -0.6 |
| THL | Klokotos Trika | 3.17 | 359 | ePN | Pn | 23 12 28.6 | +0.2 |
| THL | Klokotos Trika | 3.17 | 359 | ePn | Pn | 23 12 28.6 | +0.2 |
| MEV | Metsovon | 3.45 | 349 | ePN | Pn | 23 12 33.5 | +1.0 |
| MEV | Metsovon | 3.45 | 349 | ePn | Pn | 23 12 33.5 | +1.0 |
| PENT | Pentalofos | 3.87 | 349 | ePN | Pn | 23 12 38.8 | +0.6 |
| PENT | Pentalofos | 3.87 | 349 | ePn | Pn | 23 12 38.8 | +0.6 |
| NEST | Nestorio | 4.10 | 349 | ePN | Pn | 23 12 41.8 | +0.5 |
| NEST | Nestorio | 4.10 | 349 | ePn | Pn | 23 12 41.8 | +0.5 |
| OHR | Ohrid | 4.82 | 348 | i Pn | Pn | 23 12 50.6 | -0.6 |
| OHR | | | | i Sn | Sn | 23 13 43.1 | -3.7 |
| OHR | Ohrid | 4.82 | 348 | i Pn | Pn | 23 12 50.6 | -0.6 |
| OHR | | | | i Sn | Sn | 23 13 43.0 | -3.7 |
| VAY | Valandovo | 4.93 | 4 | i Sn | Sn | 23 13 49.7 | +0.2 |
| VAY | Valandovo | 4.93 | 4 | i Sn | Sn | 23 13 49.7 | +0.2 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| BARS | Barje | 6.42 | 358 | ⇑iPn | Pn | 23 13 11.9 | -1.2 | | |
| BOVS | Bovan | 7.24 | 358 | ⇑iPn | Pn | 23 13 22.2 | -2.2 | | |

*MOS **29** 23:21:13.3±1.3,50.12N×156.89E,h106km,mb4.4/1, Error ellipse: s-maj=40.9km s-min=7.2km az=76.5*

**KRSC 29 23:21:18.4±2.0,50.54N×157.19E,h64km±22km,ML4.3, 1C,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| SKR | Severo-Kuril's | 0.70 | 283 | i P | Pn | 23 21 33.7 | +0.8 |
| SKR | | | | i S | Sn | 23 21 43.9 | +0.3 |
| SKR | Severo-Kuril's | 0.70 | 283 | ⇑iPN | Pn | 23 21 33.8 | +0.9 |
| SKR | | | | i S | Sn | 23 21 43.9 | +0.3 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,11µm,0.2s | | | | | | |
| PAU | Pauzhetka | 0.96 | 346 | i P | Pn | 23 21 37.6 | +1.4 |
| PAU | | | | i S | Sn | 23 21 50.9 | +1.6 |
| PAU | Pauzhetka | 0.96 | 346 | PN | Pn | 23 21 37.6 | +1.4 |
| MTVR | Mutnovka | 2.05 | 17 | eP | Pn | 23 21 53.8 | +3.0 |
| MTVR | | | | eS | Sn | 23 22 18.4 | +3.0 |
| RUS | Russkaya | 2.07 | 23 | eP | Pn | 23 21 53.1 | +2.2 |
| RUS | | | | eS | Sn | 23 22 17.7 | +2.0 |
| RUS | Russkaya | 2.07 | 23 | PN | Pn | 23 21 53.1 | +2.2 |
| RUS | | | | S | Sn | 23 22 17.7 | +2.0 |
| APC | Apacha | 2.39 | 360 | eP | Pn | 23 21 56.2 | +0.9 |
| APC | Apacha | 2.39 | 360 | PN | Pn | 23 21 56.2 | +0.9 |
| UGLR | Uglovaya | 2.86 | 20 | eP | Pn | 23 22 05.6 | +3.8 |
| AVH | Avacha | 2.90 | 19 | eP | Pn | 23 22 06.0 | +3.8 |
| AVH | Avacha | 2.90 | 19 | PN | Pn | 23 22 06.0 | +3.8 |
| KOK | Koryaka | 2.90 | 17 | eP | Pn | 23 22 05.6 | +3.3 |
| KOK | Koryaka | 2.90 | 17 | PN | Pn | 23 22 05.6 | +3.3 |
| SMAR | Somma | 2.91 | 19 | eP | Pn | 23 22 06.2 | +3.6 |
| SMAR | Somma | 2.91 | 19 | PN | Pn | 23 22 06.2 | +3.6 |
| SDLR | Sedlovina | 2.94 | 20 | eP | Pn | 23 22 06.0 | +3.1 |
| SDLR | Sedlovina | 2.94 | 20 | PN | Pn | 23 22 06.0 | +3.1 |
| NLC | Nalytchevo | 2.96 | 26 | eP | Pn | 23 22 04.3 | +1.4 |
| NLC | | | | eS | Sn | 23 22 39.3 | +2.1 |
| NLC | Nalytchevo | 2.96 | 26 | PN | Pn | 23 22 04.3 | +1.4 |
| NLC | | | | S | Sn | 23 22 39.3 | +2.1 |
| KRX | Arik | 2.97 | 17 | eP | Pn | 23 22 05.8 | +2.5 |
| SPN | Mys Shipunski | 3.11 | 33 | eP | Pn | 23 22 08.2 | +3.2 |
| SPN | | | | eS | Sn | 23 22 45.0 | +4.0 |
| SPN | Mys Shipunski | 3.11 | 33 | PN | Pn | 23 22 08.2 | +3.2 |
| SPN | | | | S | Sn | 23 22 45.0 | +4.0 |
| GNL | Ganaly | 3.20 | 8 | eP | Pn | 23 22 08.7 | +2.3 |
| GNL | Ganaly | 3.20 | 8 | PN | Pn | 23 22 08.7 | +2.3 |
| MKZ | Mys Kozlova | 4.89 | 33 | eP | Pn | 23 22 30.8 | +1.5 |
| MKZ | Mys Kozlova | 4.89 | 33 | PN | Pn | 23 22 30

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| WTVZ | | | | AML | AML | 23 23 30.9 | |
| **NGZ** | **Ngauruhoe** | **1.90** | **244** | PN | **Pn** | **23 22 48.9** | **-0.8** |
| NGZ | | | | AML | AML | 23 23 25.2 | |
| NGZ | | | | AML | AML | 23 23 30.9 | |
| **TUVZ** | **Tukino** | **1.91** | **241** | PN | **Pn** | **23 22 49.1** | **-0.6** |
| TUVZ | | | | AML | AML | 23 23 23.8 | |
| TUVZ | | | | AML | AML | 23 23 25.5 | |
| **MOVZ** | **Moawhango** | **1.91** | **236** | PN | **Pn** | **23 22 48.8** | **-0.9** |
| MOVZ | | | | AML | AML | 23 23 20.1 | |
| MOVZ | | | | AML | AML | 23 23 22.0 | |
| **TOZ** | **Tahuroa Road** | **1.92** | **288** | ⇑PN | **Pn** | **23 22 48.6** | **-1.2** |
| TOZ | | | | AML | AML | 23 23 12.2 | |
| TOZ | | | | AML | AML | 23 23 27.4 | |
| **COVZ** | **Chateau Observ** | **1.95** | **244** | PN | **Pn** | **23 22 49.8** | **-0.6** |
| **WHVZ** | **Whangaehu Hut** | **1.96** | **241** | PN | **Pn** | **23 22 49.6** | **-0.9** |
| **FWVZ** | **Far West T-bar** | **1.97** | **242** | PN | **Pn** | **23 22 49.7** | **-1.0** |
| FWVZ | | | | AML | AML | 23 23 14.4 | |
| FWVZ | | | | AML | AML | 23 23 26.0 | |
| **DRZ** | **Dome Shelter** | **1.97** | **242** | AML | AML | 23 23 23.0 | |
| DRZ | | | | AML | AML | 23 23 25.3 | |
| **WNVZ** | **Wahianoa** | **1.97** | **240** | ⇓PN | **Pn** | **23 22 49.7** | **-1.0** |
| **TWVZ** | **Taurewa** | **1.98** | **248** | PN | **Pn** | **23 22 50.0** | **-0.7** |
| TWVZ | | | | AML | AML | 23 23 27.2 | |
| TWVZ | | | | AML | AML | 23 23 37.9 | |
| **PNHZ** | **Pukenui** | **1.99** | **218** | PN | **Pn** | **23 22 48.5** | **-2.2** |
| **PRHZ** | **Porangahau** | **2.11** | **205** | PN | Pn | 23 22 49.2 | -3.1 |
| **PKVZ** | **Pokaka** | **2.13** | **243** | AML | AML | 23 23 36.0 | |
| PKVZ | | | | AML | AML | 23 23 48.0 | |
| **TSZ** | **Takapari Road** | **2.22** | **219** | PN | **Pn** | **23 22 51.5** | **-2.4** |
| **KUZ** | **Kuaotunu** | **2.31** | **314** | ⇓PN | **Pn** | **23 22 53.1** | **-1.9** |
| KUZ | | | | AML | AML | 23 23 21.7 | |
| KUZ | | | | AML | AML | 23 23 44.2 | |
| **DVHZ** | **Dannevirke** | **2.32** | **213** | PN | Pn | 23 22 51.9 | -3.3 |
| **HIZ** | **Hauiti** | **2.32** | **265** | ⇑PN | **Pn** | **23 22 55.4** | **+0.2** |
| HIZ | | | | AML | AML | 23 23 34.1 | |
| HIZ | | | | AML | AML | 23 23 38.8 | |
| **MKAZ** | **Moumakai** | **2.43** | **300** | PN | **Pn** | **23 22 55.6** | **-1.2** |
| MKAZ | | | | AML | AML | 23 23 10.3 | |
| MKAZ | | | | AML | AML | 23 23 41.7 | |
| **VRZ** | **Vera Road** | **2.50** | **251** | PN | **Pn** | **23 22 57.6** | **-0.1** |
| VRZ | | | | AML | AML | 23 23 35.9 | |
| VRZ | | | | AML | AML | 23 23 38.5 | |
| **WAZ** | **Wanganui** | **2.60** | **237** | PN | **Pn** | **23 22 59.1** | **0.0** |
| WAZ | | | | AML | AML | 23 23 40.4 | |
| WAZ | | | | AML | AML | 23 23 49.7 | |
| **BFZ** | **Birch Farm** | **2.61** | **207** | PN | Pn | 23 22 55.6 | -3.6 |
| BFZ | | | | AML | AML | 23 23 33.3 | |
| BFZ | | | | AML | AML | 23 23 33.3 | |
| BFZ | | | | AML | AML | 23 24 16.2 | |
| BFZ | | | | AML | AML | 23 24 16.2 | |
| **WIAZ** | **Waiheke Island** | **2.63** | **306** | PN | **Pn** | **23 22 58.2** | **-1.4** |
| **LREZ** | **Lake Rotokare** | **2.87** | **246** | ⇓PN | **Pn** | **23 23 03.7** | **+0.9** |
| **MRZ** | **Mangatainoka R** | **2.87** | **216** | PN | Pn | 23 22 59.2 | -3.6 |
| MRZ | | | | AML | AML | 23 24 03.4 | |
| MRZ | | | | AML | AML | 23 24 12.4 | |
| **NEZ** | **North Egmont** | **3.03** | **251** | PN | **Pn** | **23 23 06.1** | **+0.9** |
| **HOWZ** | **Holdsworth Sta** | **3.09** | **214** | PN | Pn | 23 23 01.6 | -4.2 |
| **PKE** | **Pukeiti** | **3.09** | **253** | PN | **Pn** | **23 23 07.6** | **+1.7** |
| PKE | | | | AML | AML | 23 23 53.1 | |
| PKE | | | | AML | AML | 23 23 55.4 | |
| **KHEZ** | **Kahui Hut** | **3.10** | **251** | PN | **Pn** | **23 23 07.1** | **+1.0** |
| **TMWZ** | **Te Maipa** | **3.12** | **208** | PN | Pn | 23 23 02.1 | -4.1 |
| **MTW** | **Mount Morrison** | **3.31** | **212** | AML | AML | 23 23 43.8 | |
| MTW | | | | AML | AML | 23 24 40.6 | |
| **KIW** | **Kapiti Island** | **3.35** | **221** | PN | Pn | 23 23 05.7 | -3.7 |
| KIW | | | | AML | AML | 23 23 48.1 | |
| KIW | | | | AML | AML | 23 23 49.5 | |
| **TRWZ** | **Traveller** | **3.44** | **207** | AML | AML | 23 23 47.4 | |
| TRWZ | | | | AML | AML | 23 24 34.1 | |
| **CAW** | **Cannon Point** | **3.46** | **217** | PN | Pn | 23 23 06.3 | -4.6 |
| CAW | | | | AML | AML | 23 24 29.0 | |
| CAW | | | | AML | AML | 23 24 32.6 | |
| **PAWZ** | **Paruwai Farm** | **3.53** | **210** | AML | AML | 23 23 50.4 | |
| PAWZ | | | | AML | AML | 23 24 35.6 | |
| **MSWZ** | **Moikau Station** | **3.63** | **212** | AML | AML | 23 23 51.2 | |
| MSWZ | | | | AML | AML | 23 24 47.0 | |
| **WCZ** | **Waipu Caves** | **3.67** | **310** | ⇑PN | **Pn** | **23 23 13.0** | **-0.8** |
| **DUWZ** | **D'Urville Isla** | **3.87** | **230** | AML | AML | 23 24 16.6 | |
| DUWZ | | | | AML | AML | 23 24 23.5 | |
| **TCW** | **Tory Channel** | **3.94** | **222** | AML | AML | 23 24 02.5 | |
| TCW | | | | AML | AML | 23 24 23.7 | |
| **NNZ** | **Nelson** | **4.44** | **229** | AML | AML | 23 24 35.9 | |
| NNZ | | | | AML | AML | 23 24 42.8 | |
| **BSWZ** | **Blackbirch Sta** | **4.50** | **221** | AML | AML | 23 24 41.5 | |
| BSWZ | | | | AML | AML | 23 24 42.0 | |
| **OUZ** | **Omahuta** | **4.60** | **312** | *e*Pn | **Pn** | **23 23 26.0** | **-0.7** |
| **QRZ** | **Quartz Range** | **4.76** | **237** | AML | AML | 23 24 33.5 | |
| QRZ | | | | AML | AML | 23 24 36.4 | |
| **THZ** | **Tophouse** | **5.07** | **226** | PN | Pn | 23 23 28.9 | -4.1 |
| THZ | | | | AML | AML | 23 24 33.3 | |
| THZ | | | | AML | AML | 23 24 49.9 | |
| **DSZ** | **Denniston Nort** | **5.71** | **232** | PN | Pn | 23 23 37.1 | -4.8 |
| DSZ | | | | AML | AML | 23 24 58.7 | |
| **LTZ** | **Lake Taylor** | **6.10** | **222** | PN | Pn | 23 23 42.6 | -4.6 |
| LTZ | | | | AML | AML | 23 25 17.9 | |
| LTZ | | | | AML | AML | 23 25 21.8 | |
| **MQZ** | **McQueen's Vall** | **6.61** | **214** | PN | Pn | 23 23 47.7 | -6.4 |
| **CTZ** | **Chatham Island** | **6.83** | **144** | *e*PN | **Pn** | **23 23 54.9** | **-2.3** |
| **RPZ** | **Rata Peaks** | **7.39** | **221** | AML | AML | 23 25 19.6 | |
| **RPZ** | **Rata Peaks** | **7.39** | **221** | Pn | Pn | 23 24 00.7 | -4.3 |
| | 1.7nm,0.3s,baz=70,slow=3.0,SNR=7.7 | | | | | | |
| RPZ | | | | Sn | Sn | 23 25 16.8 | -11 |
| | 7.0nm,0.3s,baz=94,slow=22,SNR=15 | | | | | | |
| **RPZ** | **Rata Peaks** | **7.39** | **221** | *e*Pn | Pn | 23 24 01.5 | -3.4 |
| RPZ | | | | *e*Sn | Sn | 23 25 17.9 | -10 |
| **FOZ** | **Fox Glacier** | **8.04** | **227** | PN | Pn | 23 24 08.1 | -5.7 |
| **LBZ** | **Lake Benmore** | **8.31** | **221** | PN | Pn | 23 24 12.3 | -5.2 |
| **ODZ** | **Otahua Downs** | **8.56** | **216** | PN | Pn | 23 24 14.7 | -6.2 |
| **JCZ** | **Jackson Bay** | **8.89** | **227** | PN | Pn | 23 24 20.3 | -5.2 |
| **ASAR** | **Alice Springs** | **39.99** | **278** | P | P | 23 29 48.9 | -2.5 |
| | 3.5nm,0.6s,baz=125,slow=8.4,SNR=61 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.72** | **284** | P | P | 23 30 02.7 | -2.9 |
| | 2.1nm,0.7s,baz=124,slow=7.3,SNR=24 | | | | | | |
| **FINES** | **FINESS Array B** | **151.01** | **332** | PKPbc | **PKPbc** | **23 42 12.6** | **+4.4** |
| | 2.1nm,0.9s,baz=91,slow=5.7,SNR=3.5 | | | | | | |

**IDC 29 23:33:51.0±4.2, 18°45N×121°83E, h0km, mb3.3/3, mb1 3.5/3, mb1mx3.3/25, mbtmp3.3/3, MS3.2/2, Ms1 3.2/2, ms1mx2.6/19, Error ellipse: s-maj=356.1km s-min=28.0km az=61.0, Luzon**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **40.08** | **162** | P | P | 23 41 27.9 | -0.4 |
| | 0.4nm,1.0s,baz=342,slow=8.8,SNR=5.4 | | | | | | |
| WRA | | | | LR | LR | 00 00 13.9 | |
| | comp=Z,42nm,20.6s,baz=205,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **42.99** | **320** | P | P | 23 41 52.0 | -0.1 |
| | 0.5nm,0.7s,baz=113,slow=8.8,SNR=4.9 | | | | | | |
| **ASAR** | **Alice Springs** | **43.48** | **164** | P | P | 23 41 56.4 | +0.2 |
| | 0.3nm,0.7s,baz=340,slow=6.1,SNR=4.5 | | | | | | |
| **GEYT** | **Allbeck** | **58.34** | **304** | LR | LR | 00 14 47.1 | |
| | comp=Z,16nm,18.5s,baz=135,slow=42 | | | | | | |

*ISCJB **29** 23:34:34.6±0.2, 63°.19N±0°.02×150°.74W±0°.05, h139km±2km, mb3.6/10, Error ellipse: s-maj=3.6km s-min=3.0km az=8.4*

*IDC **29** 23:34:34.1±1.7, 63°.28N×150°.98W, h115km±15km, mb3.5/10, mb1 3.6/14, mb1mx3.5/38, mbtmp3.8/14, MS2.3/1, Ms1 2.4/1, ms1mx2.2/26, Error ellipse: s-maj=16.5km s-min=14.1km az=58.0*

*NEIC **29** 23:34:35.9, 63°.18N×150°.72W, h135km, MG3.5(AEIC), After AEIC.*

**ISC 29 23:34:35.8±0.7, 63°.18N±0°.03×150°.76W±0°.03, h137km±5km, n111, σ0°89/132, mb3.7/10, Central Alaska**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **TRF** | **Thorofare Moun** | **0.34** | **38** | P | **Pn** | **23 34 55.1** | **0.0** |
| TRF | | | | S | **Sn** | **23 35 08.9** | **-0.9** |
| **KTH** | **Kantishna Hill** | **0.38** | **349** | P | **Pn** | **23 34 55.1** | **0.0** |
| KTH | | | | S | **Sn** | **23 35 09.2** | **-0.7** |
| KTH | | | | *e*Sn | Sn | 23 35 09.4 | -0.4 |
| **CAST** | **Castle Rocks** | **0.64** | **292** | P | **Pn** | **23 34 56.3** | **-0.2** |
| CAST | | | | S | **Sn** | **23 35 10.9** | **-1.3** |
| **PPLA** | **Purkeypile** | **0.71** | **247** | P | **Pn** | **23 34 57.2** | **+0.1** |
| PPLA | | | | S | **Sn** | **23 35 13.1** | **-0.1** |
| **CUT** | **Chulitna** | **0.81** | **164** | P | **Pn** | **23 34 57.7** | **0.0** |
| **RND** | **Reindeer** | **0.89** | **74** | P | **Pn** | **23 34 58.2** | **-0.2** |
| RND | | | | S | **Sn** | **23 35 15.5** | **-0.2** |
| **BPAW** | **Bear Paw Mtn.** | **0.93** | **354** | P | **Pn** | **23 34 58.4** | **-0.3** |
| BPAW | | | | S | **Sn** | **23 35 15.2** | **-1.0** |
| **MCK** | **McKinley** | **0.99** | **55** | P | **Pn** | **23 34 59.1** | **-0.1** |
| MCK | | | | S | **Sn** | **23 35 16.2** | **-0.8** |
| **CHUM** | **Lake Minchumin** | **0.99** | **316** | P | **Pn** | **23 34 59.2** | **+0.1** |
| CHUM | | | | S | **Sn** | **23 35 16.4** | **-0.6** |
| **BWN** | **Browne** | **1.15** | **30** | P | **Pn** | **23 35 01.1** | **+0.4** |
| **SKT** | **Skwentna** | **1.26** | **197** | P | **Pn** | **23 35 01.5** | **-0.3** |
| SKT | | | | S | **Sn** | **23 35 21.5** | **-0.1** |
| **DHY** | **Denali Highway** | **1.54** | **92** | P | **Pn** | **23 35 05.0** | **0.0** |
| **SUA** | **Susitna One** | **1.72** | **180** | P | **Pn** | **23 35 06.8** | **-0.2** |
| SUA | | | | S | **Sn** | **23 35 31.0** | **+0.2** |
| **WRH** | **Wood River Hil** | **1.75** | **41** | P | **Pn** | **23 35 06.8** | **-0.4** |
| **STLK** | **Strandline Lak** | **1.76** | **197** | P | **Pn** | **23 35 07.1** | **-0.3** |
| **PMR** | **Palmer** | **1.77** | **154** | *e*Pn | **Pn** | **23 35 06.8** | **-0.6** |
| PMR | | | | *e*Sn | **Sn** | **23 35 30.9** | **-0.5** |
| **SML** | **Sawmill** | **1.78** | **140** | P | **Pn** | **23 35 06.9** | **-0.7** |
| SML | | | | S | **Sn** | **23 35 31.9** | **0.0** |
| **MLY** | **Manley** | **1.86** | **0** | P | **Pn** | **23 35 08.1** | **-0.4** |
| **CCB** | **Clear Creek Bu** | **1.97** | **40** | P | **Pn** | **23 35 09.3** | **-0.4** |
| **SPCG** | **Spurr Capps Gl** | **1.99** | **198** | P | **Pn** | **23 35 10.0** | **-0.1** |
| **FIB** | **Fire Island** | **2.04** | **172** | P | **Pn** | **23 35 11.9** | **+1.3** |
| **BGL** | **Barrier Glacie** | **2.07** | **202** | P | **Pn** | **23 35 11.2** | **+0.2** |
| **CKN** | **Chakachatna No** | **2.07** | **199** | P | **Pn** | **23 35 11.4** | **+0.4** |
| **HDA** | **Harding Lake** | **2.09** | **52** | P | **Pn** | **23 35 10.7** | **-0.5** |
| **SCM** | **Sheep Creek Mo** | **2.09** | **129** | P | **Pn** | **23 35 10.5** | **-0.8** |
| SCM | | | | S | **Sn** | **23 35 38.9** | **+0.5** |
| **MDM** | **Murphy Dome** | **2.10** | **31** | P | **Pn** | **23 35 11.0** | **-0.3** |
| **CKL** | **Chakachamna La** | **2.12** | **201** | P | **Pn** | **23 35 11.8** | **+0.1** |
| **COLA** | **College** | **2.13** | **36** | P | **Pn** | **23 35 11.4** | **-0.2** |
| **RC01** | **Rabbit Creek A** | **2.15** | **167** | *e*Pn | **Pn** | **23 35 11.2** | **-0.8** |
| RC01 | | | | S | **Sn** | **23 35 39.0** | **-0.7** |
| RC01 | | | | *e*Sn | Sn | 23 35 39.0 | -0.7 |
| **PS08** | **TAPS Pump Stn8** | **2.22** | **50** | P | **Pn** | **23 35 12.5** | **-0.2** |
| **PS10** | **TAPS Pump St10** | **2.27** | **82** | P | **Pn** | **23 35 14.2** | **+0.8** |
| **IL1** | **Eielson Array** | **2.34** | **45** | P | **Pn** | **23 35 13.6** | **-0.6** |
| **ILAR** | **Eielson Array** | **2.34** | **45** | P | **Pn** | **23 35 13.6** | **-0.6** |
| | 25nm,0.3s,baz=228,slow=12,SNR=1723 | | | | | | |
| ILAR | | | | S | **Sn** | **23 35 40.8** | **-2.9** |
| | 14nm,0.3s,baz=229,slow=21,SNR=32 | | | | | | |
| ILAR | | | | LR | LR | 23 36 07.1 | |
| | comp=Z,69nm,21.6s,baz=186,slow=40 | | | | | | |
| **ILB** | **Eielson Array** | **2.34** | **45** | P | **Pn** | **23 35 13.6** | **-0.6** |
| **TTA** | **Tatalina** | **2.41** | **266** | P | **Pn** | **23 35 14.7** | **-0.5** |
| **TT01** | **Tatalina** | **2.41** | **266** | P | **Pn** | **23 35 14.8** | **-0.3** |
| **PAX** | **Paxson** | **2.42** | **93** | *e*Pn | **Pn** | **23 35 15.2** | **-0.1** |
| PAX | | | | *e*Sn | **Sn** | **23 35 45.0** | **-0.7** |
| **PTE** | **Portage** | **2.46** | **160** | P | **Pn** | **23 35 15.2** | **-0.6** |
| **PWL** | **Port Wells** | **2.60** | **153** | P | **Pn** | **23 35 16.8** | **-0.7** |
| **PS11** | **TAPS Pump St11** | **2.68** | **112** | P | **Pn** | **23 35 18.7** | **+0.1** |
| **HARP** | **HAARP** | **2.69** | **104** | P | **Pn** | **23 35 18.7** | **+0.1** |
| **SLKM** | **Skilak Lake** | **2.69** | **174** | P | **Pn** | **23 35 18.5** | **-0.3** |
| **PS06** | **TAPS Pump Stn6** | **2.72** | **9** | P | **Pn** | **23 35 19.1** | **+0.1** |
| **DFR** | **Drift River** | **2.75** | **200** | P | **Pn** | **23 35 19.9** | **+0.4** |
| **RDJH** | **Redoubt Jeurge** | **2.77** | **201** | P | **Pn** | **23 35 19.6** | **-0.2** |
| **KLU** | **Klutina** | **2.82** | **125** | P | **Pn** | **23 35 19.2** | **-1.2** |
| **RDN** | **Redoubt North** | **2.84** | **200** | P | **Pn** | **23 35 21.1** | **+0.3** |
| **RDWB** | **Redoubt West** | **2.88** | **201** | P | **Pn** | **23 35 21.0** | **-0.2** |
| **GLI** | **Glacier Island** | **2.88** | **142** | P | **Pn** | **23 35 20.1** | **-1.1** |
| **RSO** | **Redoubt South** | **2.89** | **200** | *e*Pn | **Pn** | **23 35 21.4** | **+0.1** |
| RSO | | | | *e*Sn | **Sn** | **23 35 54.1** | **-2.3** |
| **JPK** | **Jack Peak** | **2.89** | **136** | P | **Pn** | **23 35 20.1** | **-1.2** |
| **VLZ** | **Valdez** | **2.92** | **133** | P | **Pn** | **23 35 20.3** | **-1.3** |
| **DOT** | **Dot Lake** | **3.05** | **78** | P | **Pn** | **23 35 22.6** | **-0.7** |
| **SVW2** | **Sparrevohn** | **3.08** | **229** | P | **Pn** | **23 35 23.3** | **-0.4** |
| **IM3** | **Indian Mountai** | **3.10** | **337** | P | **Pn** | **23 35 23.4** | **-0.4** |
| **DIV** | **Divide** | **3.12** | **129** | *e*Pn | **Pn** | **23 35 22.7** | **-1.5** |
| DIV | | | | *e*Sn | **Sn** | **23 35 59.2** | **-2.3** |
| **SEW** | **Seward** | **3.15** | **168** | P | **Pn** | **23 35 23.8** | **-0.7** |
| **FID** | **Port Fidalgo** | **3.17** | **138** | P | **Pn** | **23 35 23.6** | **-1.1** |
| **MENT** | **Mentasta** | **3.21** | **91** | *e*Pn | **Pn** | **23 35 24.7** | **-0.7** |
| MENT | | | | *e*Sn | **Sn** | **23 36 03.2** | **-0.5** |
| **ILW** | **Iliamna West** | **3.33** | **201** | P | **Pn** | **23 35 27.1** | **0.0** |
| **BRLK** | **Bradley Lake** | **3.43** | **181** | P | **Pn** | **23 35 27.9** | **-0.4** |
| **EYAK** | **Cordova Ski Ar** | **3.55** | **136** | P | **Pn** | **23 35 29.8** | **+0.1** |
| **PS05** | **TAPS Pump Stn5** | **3.65** | **1** | P | **Pn** | **23 35 31.0** | **+0.1** |
| **BMRM** | **Bremner River** | **3.65** | **125** | P | **Pn** | **23 35 30.0** | **-1.1** |
| **CNPM** | **China Poot** | **3.68** | **184** | P | **Pn** | **23 35 31.0** | **-0.4** |
| **GLB** | **Gilahina Butte** | **3.68** | **115** | P | **Pn** | **23 35 31.1** | **-0.5** |
| **OPT** | **Oil Point** | **3.73** | **200** | P | **Pn** | **23 35 31.9** | **-0.3** |
| **SGAM** | **Sherman Glacie** | **3.76** | **133** | P | **Pn** | **23 35 31.5** | **-1.0** |
| **VRDI** | **Verde Repeater** | **3.94** | **117** | P | **Pn** | **23 35 34.2** | **-0.9** |
| **MCARA** | **McCarthy VSAT** | **4.04** | **113** | P | **Pn** | **23 35 36.5** | **+0.3** |
| **COLD** | **Coldfoot** | **4.07** | **3** | *i* Pn | **Pn** | **23 35 36.5** | **0.0** |
| COLD | | | | *e*Sn | **Sn** | **23 36 22.8** | **-0.9** |
| **BCA3** | **Beaver Creek A** | **4.08** | **88** | P | **Pn** | **23 35 35.8** | **-0.9** |
| **FYU** | **Fort Yukon** | **4.13** | **32** | P | **Pn** | **23 35 37.0** | **-0.4** |
| **BERG** | **Berg Lake** | **4.36** | **127** | P | **Pn** | **23 35 39.9** | **-0.6** |
| **PTPK** | **Patty Peak** | **4.37** | **114** | P | **Pn** | **23 35 40.5** | **-0.3** |
| **NICHA** | **Nichawak Mount** | **4.38** | **129** | P | **Pn** | **23 35 39.8** | **-0.9** |
| **CDD** | **Cape Douglas** | **4.49** | **199** | P | **Pn** | **23 35 42.4** | **+0.2** |
| **KHIT** | **Khitrov Hills** | **4.50** | **124** | P | **Pn** | **23 35 41.2** | **-1.1** |
| **BALM** | **Baldy** | **4.50** | **115** | P | **Pn** | **23 35 41.6** | **-0.8** |
| **EGAK** | **Eagle** | **4.52** | **65** | P | **Pn** | **23 35 41.5** | **-1.0** |
| **KIAG** | **Kiagna River** | **4.56** | **116** | P | **Pn** | **23 35 42.5** | **-0.7** |
| **GRIN** | **Grindle Hills** | **4.58** | **126** | P | **Pn** | **23 35 43.5** | **+0.1** |
| **FOPK** | **Fourpeaked Vol** | **4.63** | **198** | P | **Pn** | **23 35 43.4** | **-0.6** |
| **ISLE** | **Juniper Island** | **4.75** | **119** | P | **Pn** | **23 35 44.4** | **-1.3** |
| **BARN** | **Barnard Glacie** | **4.77** | **112** | P | **Pn** | **23 35 46.1** | **0.0** |
| **BARK** | **Barkley Ridge** | **4.81** | **122** | P | **Pn** | **23 35 46.1** | **-0.4** |
| **KULT** | **Kultieth River** | **4.82** | **124** | P | **Pn** | **23 35 46.5** | **-0.1** |
| **BAGL** | **Bagley Icefiel** | **4.92** | **119** | P | **Pn** | **23 35 46.7** | **-1.1** |
| **BM3** | **Burnt Mountain** | **4.97** | **29** | P | **Pn** | **23 35 47.8** | **-0.8** |
| **DAWY** | **Dawson** | **5.15** | **75** | P | **Pn** | **23 35 50.1** | **-0.8** |
| **MESA** | **MESA** | **5.16** | **122** | P | **Pn** | **23 35 51.4** | **+0.1** |
| **LOGN** | **Logan Glacier** | **5.17** | **113** | P | **Pn** | **23 35 51.5** | **+0.2** |
| **TABL** | **Table Mountain** | **5.32** | **117** | P | **Pn** | **23 35 53.1** | **-0.3** |
| **RKAV** | **Rock Avalanche** | **5.33** | **119** | P | **Pn** | **23 35 52.6** | **-0.8** |
| **KAKN** | **Katmai Knife C** | **5.33** | **205** | P | **Pn** | **23 35 53.3** | **-0.2** |
| **KABR** | **Katmai Barrier** | **5.47** | **204** | P | **Pn** | **23 35 54.7** | **-0.6** |
| **KDAK** | **Kodiak Island** | **5.49** | **190** | P | **Pn** | **23 35 52.8** | **-2.7** |
| | 2.0nm,0.3s,baz=45,slow=10,SNR=44 | | | | | | |
| KDAK | | | | S | **Sn** | **23 36 53.4** | **-4.2** |
| | 5.3nm,0.3s,baz=292,slow=23,SNR=14 | | | | | | |
| **CHX** | **Chaix Hills** | **5.56** | **120** | P | **Pn** | **23 35 56.5** | **0.0** |
| **PCA** | **Pinnacle** | **5.88** | **117** | P | **Pn** | **23 36 00.9** | **+0.1** |
| **INK** | **Inuvik** | **8.74** | **46** | P | **Pn** | **23 36 37.5** | **-1.4** |
| | 0.3nm,0.3s,baz=244,slow=15,SNR=9.5 | | | | | | |
| **YKA** | **Yellowknife Ar** | **16.39** | **76** | P | **P** | **23 38 18.5** | **+0.6** |
| | 0.4nm,0.3s,baz=286,slow=9.3,SNR=5.2 | | | | | | |
| **RES** | **Resolute Bay** | **22.06** | **36** | P | **P** | **23 39 19.2** | **+0.2** |
| | 1.7nm,0.5s,baz=254,slow=12,SNR=11 | | | | | | |
| **NEW** | **Newport** | **23.74** | **113** | P | **P** | **23 39 36.5** | **+1.3** |
| | 0.8nm,0.5s,baz=330,slow=14,SNR=2.4 | | | | | | |
| **SEY** | **Seymchan** | **25.05** | **295** | P | **P** | **23 39 46.5** | **-0.3** |
| | 1.0nm,0.3s,baz=172,slow=23,SNR=6.2 | | | | | | |
| **NVAR** | **Mina Array Bea** | **31.54** | **126** | P | **P** | **23 40 47.1** | **+2.1** |
| | 0.6nm,0.7s,baz=325,slow=7.1,SNR=5.4 | | | | | | |
| **TXAR** | **Lajitas Array** | **45.25** | **116** | P | **P** | **23 42 40.7** | **+1.4** |
| | 0.5nm,0.6s,baz=336,slow=5.9,SNR=5.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **47.52** | **2** | P | **P** | **23 42 56.0** | **-0.7** |
| | 3.6nm,1.0s,baz=8.5,slow=7.3,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **53.80** | **306** | P | **P** | **23 43 44.7** | **+0.8** |
| | 0.7nm,0.7s,baz=23,slow=6.5,SNR=5.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.44** | **324** | P | **P** | **23 43 55.0** | **-0.4** |
| | 1.3nm,0.5s,baz=18,slow=6.9,SNR=7.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.60** | **322** | P | **P** | **23 44 43.5** | **-1.4** |
| | 0.6nm,0.5s,baz=48,slow=6.2,SNR=9.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **66.46** | **0** | P | **P** | **23 45 09.0** | **-0.9** |
| | 0.6nm,0.4s,baz=5.2,slow=6.5,SNR=5.1 | | | | | | |

*GUC **29** 23:43:13.9±0.5, 28°.67S×69°.97W, h76km±11km, ML3.7*

*ISCJB **29** 23:43:14.9±1.0, 28°.61S±0°.04×70°.48W±0°.09, h104km±10km, Error ellipse: s-maj=12.9km s-min=6.5km az=174.4*

**ISC 29 23:43:15.3±1.7, 28°.60S±0°.04×70°.54W±0°.08, h102km±14km, n16, σ0°99/24, Central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VACH** | **Vallenar** | **0.20** | **278** | *e*P | **Pn** | **23 43 29.6** | **-0.2** |
| VACH | | | | *e*S | **Sn** | **23 43 41.3** | **+0.6** |
| **CPCH** | **Copiapo** | **1.25** | **8** | *e*P | **Pn** | **23 43 37.7** | **-1.1** |
| CPCH | | | | *e*S | **Sn** | **23 43 55.2** | **-1.3** |
| **CDCH** | **Caldera** | **1.55** | **351** | *e*P | **Pn** | **23 43 43.1** | **+0.8** |
| CDCH | | | | *e*S | **Sn** | **23 44 04.7** | **+1.9** |
| **TLL** | **Tololo Astrono** | **1.57** | **188** | *e*P | **Pn** | **23 43 42.2** | **-0.7** |
| TLL | | | | *e*S | **Sn** | **23 44 03.5** | **-0.3** |
| TLL | | | | AML | AML | 23 44 07.9 | |
| | comp=E,1μm,0.5s | | | | | | |
| **AGUA** | **GUANDACOL** | **2.00** | **117** | *i* P | **Pn** | **23 43 48.9** | **+0.9** |
| **VCA** | **Vinchina** | **2.06** | **94** | *i* P | **Pn** | **23 43 49.7** | **+0.9** |
| **RTLL** | **Cerro Villicun** | **3.25** | **147** | *i* P | **Pn** | **23 44 05.2** | **+0.6** |
| RTLL | | | | *i* S | **Sn** | **23 44 42.6** | **0.0** |
| **RTLS** | **Leoncito** | **3.36** | **162** | *i* P | **Pn** | **23 44 08.0** | **+1.8** |
| **AVFE** | **Valle Fertil** | **3.38** | **128** | *i* P | **Pn** | **23 44 06.1** | **-0.1** |
| AVFE | | | | *i* S | **Sn** | **23 44 44.4** | **-1.1** |
| **CFAA** | **Coronel Fontan** | **3.59** | **147** | *i* P | **Pn** | **23 44 09.8** | **+0.7** |
| **RTCV** | **Cerro Valdivia** | **3.68** | **152** | *i* P | **Pn** | **23 44 10.9** | **+0.6** |
| RTCV | | | | *i* S | **Sn** | **23 44 52.3** | **-0.5** |
| **AUSP** | **Uspallata** | **3.74** | **165** | *i* P | **Pn** | **23 44 12.4** | **+1.1** |
| **CYA** | **Choya** | **4.17** | **89** | *i* P | **Pn** | **23 44 16.0** | **-0.9** |
| CYA | | | | IAML | | 23 44 17.5 | |
| | comp=Z,65nm,0.5s | | | | | | |
| **ASAL** | **Salagasta** | **4.24** | **160** | *i* P | **Pn** | **23 44 18.7** | **+0.9** |
| **ROCH** | **El Roble** | **4.37** | **185** | *e*P | **Pn** | **23 44 19.1** | **-0.7** |
| ROCH | | | | *e*P | **Pn** | **23 44 19.1** | **-0.7** |
| **ACAN** | **Cantantal** | **4.66** | **142** | *i* P | **Pn** | **23 44 23.1** | **-0.4** |

*IDC **29** 23:47:32.5±1.2, 3°.54S×99°.46E, h0km, mb4.0/11, mb1 4.1/11, mb1mx3.9/37, mbtmp4.1/11, Error ellipse: s-maj=40.1km s-min=18.6km az=53.0*

*NEIC **29** 23:47:34.1±0.4, 3°.54S×99°.44E, h10km, mb4.0/4, Error ellipse: s-maj=11.9km s-min=8.9km az=58.0*

*ISCJB **29** 23:47:35.6±0.5, 3°.46S±0°.04×99°.57E±0°.05, h33km, mb4.0/15, Error ellipse: s-maj=7.7km s-min=4.9km az=44.9*

*DJA **29** 23:47:38.1±0.9, 3°S±6°×10°0E±°, h54km±7km, M4.1/8, MLv4.1/8*

**ISC 29 23:47:37.7±0.7, 3°.46S±0°.07×99°.54E±0°.07, h35km, n30, σ1°08/30, mb4.1/15, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.83** | **34** | P | **Pn** | **23 47 51.6** | **-1.3** |
| PPSI | | | | S | **Sn** | **23 48 03.3** | **-0.7** |
| **SISI** | **Saibi** | **2.16** | **348** | P | **Pn** | **23 48 09.2** | **-2.1** |
| SISI | | | | S | **Sn** | **23 48 35.8** | **-1.1** |
| **MNAI** | **Manna** | **3.52** | **105** | P | **Pn** | **23 48 28.3** | **-1.7** |
| MNAI | | | | S | **Sn** | **23 49 08.1** | **-2.4** |
| **LHSI** | **Lahat** | **3.99** | **95** | P | **Pn** | **23 48 36.1** | **-0.3** |
| LHSI | | | | S | **Sn** | **23 49 22.1** | **+0.1** |
| **BKNI** | **Bangkinang** | **4.04** | **22** | P | Pn | 23 48 33.2 | -4.0 |
| **MNSI** | **Mandailing Nat** | **4.22** | **1** | P | **Pn** | **23 48 38.1** | **-1.5** |
| MNSI | | | | S | **Sn** | **23 49 27.3** | **-0.4** |
| **MDSI** | **Maura Dua** | **4.74** | **103** | P | **Pn** | **23 48 46.1** | **-0.6** |
| MDSI | | | | S | **Sn** | **23 49 38.5** | **-1.9** |
| **CMAR** | **Chiang Mai Arr** | **21.78** | **358** | P | **P** | **23 52 26.9** | **+0.2** |
| | 3.0nm,0.7s,baz=189,slow=9.7,SNR=15 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.23** | **260** | T | T | 00 23 00.5 | |
| | baz=80,slow=75,SNR=21 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.24** | **260** | T | T | 00 23 18.2 | |
| | baz=80,slow=

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **COLA** | **College** | **87.47** | **22** | *e*P | | **P** | **00 11 13.3** | **-0.1** |
| | 3.2nm,0.9s | | | | | | | | |
| **ILAR** | **Eielson Array** | **87.78** | **22** | P | | **P** | **00 11 14.4** | **-0.5** |
| | 1.2nm,0.8s,baz=254,slow=5.0,SNR=4.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.93** | **279** | PKPbc | | **PKPbc** | **00 18 15.3** | **+0.2** |
| | 0.9nm,0.5s,baz=56,slow=2.4,SNR=18 | | | | | | | | |

*ISCJB **30** 00:01:41.7±0.6,34.°15N±0.°03×135.°11E±0.°03,h12km±4km, mb3.6/1,Error ellipse: s-maj=4.9km s-min=4.4km az=33.3*
*IDC **30** 00:01:41.8±1.5,33.°99N×135.°19E,h0km,mb3.6/1, mb1 3.5/4,mb1mx3.2/42,mbtmp3.3/4,ML2.8/3,Error ellipse: s-maj=29.9km s-min=14.2km az=149.0*
*JMA **30** 00:01:41.8,34.°15N×135.°11E,h7km±1km,M3.1*
*JMA Felt II J1.*

**ISC 30 00:01:42.3±1.0,34.°15N±0.°03×135.°14E±0.°03,h8km±9km, n16,σ0$^{s}$91/24,Near south coast of western Honshu**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JWM** | **Minabe** | **0.34** | **149** | P | | **Pg** | | **00 01 49.1** | **+0.1** |
| JWM | | | | S | | **Sg** | | **00 01 53.9** | **+0.3** |
| **JAJ2** | **Tsuna** | **0.35** | **322** | P | | **Pg** | | **00 01 48.6** | **-0.5** |
| JAJ2 | | | | S | | **Sg** | | **00 01 53.2** | **-0.5** |
| **JWY** | **Kouya** | **0.38** | **79** | P | | **Pg** | | **00 01 49.6** | **-0.1** |
| JWY | | | | S | | **Sg** | | **00 01 55.7** | **+0.9** |
| **JAI** | **Aioi** | **0.67** | **239** | P | | **Pg** | | **00 01 54.1** | **-1.1** |
| JAI | | | | S | | **Sg** | | **00 02 03.3** | **-0.7** |
| **JHE** | **Heguri** | **0.68** | **41** | P | | **Pg** | | **00 01 55.2** | **-0.1** |
| JHE | | | | S | | **Sg** | | **00 02 04.5** | **+0.3** |
| **JWZ** | **Kozaga** | **0.78** | **142** | P | | **Pb** | | **00 01 57.2** | **-0.8** |
| JWZ | | | | S | | **Sb** | | **00 02 08.0** | **-0.7** |
| **JKS** | **Kasai** | **0.87** | **344** | P | | **Pg** | | **00 01 58.4** | **-0.6** |
| JKS | | | | S | | **Sg** | | **00 02 09.7** | **-0.7** |
| **JKN2** | **Miekihoku** | **0.94** | **84** | P | | **Pg** | | **00 02 00.1** | **-0.3** |
| JKN2 | | | | S | | **Sb** | | **00 02 13.3** | **-0.1** |
| **MAT** | **Matsushiro** | **3.46** | **45** | P | | **Pn** | | **00 02 36.6** | **+0.1** |
| MAT | | | | *e*S | | **Sn** | | **00 03 17.0** | **-0.7** |
| **MJAR** | **Matsushiro Arr** | **3.46** | **45** | Pn | | **Pn** | | **00 02 38.0** | **+1.6** |
| | 0.7nm,0.3s,baz=245,slow=13,SNR=3.2 | | | | | | | | |
| MJAR | | | | Pg | | **Pg** | | **00 02 47.4** | **-1.2** |
| | 1.6nm,0.3s,baz=228,slow=14,SNR=9.5 | | | | | | | | |
| MJAR | | | | Lg | | Lg | | 00 03 34.9 | |
| | 0.4nm,0.3s,baz=226,slow=28,SNR=4.4 | | | | | | | | |
| **JNU** | **Nakatsue** | **3.70** | **255** | Pn | | **Pn** | | **00 02 41.0** | **+1.2** |
| | 0.9nm,0.3s,baz=62,slow=15,SNR=1.2 | | | | | | | | |
| JNU | | | | Pg | | **Pb** | | **00 02 49.6** | **+1.7** |
| | 3.4nm,0.3s,baz=76,slow=6.8,SNR=14 | | | | | | | | |
| JNU | | | | Lg | | Lg | | 00 03 40.1 | |
| | 1.1nm,0.3s,baz=300,slow=20,SNR=1.6 | | | | | | | | |
| **KSRS** | **Korea Array** | **6.73** | **301** | Pn | | **Pn** | | **00 03 22.7** | **+1.4** |
| | 0.4nm,0.3s,baz=120,slow=15,SNR=2.9 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **32.12** | **111** | T | | T | | 00 41 21.2 | |
| | baz=312 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **32.12** | **111** | T | | T | | 00 41 23.0 | |
| | baz=312 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **32.14** | **111** | T | | T | | 00 41 24.1 | |
| | baz=312 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **53.79** | **181** | P | | **P** | | **00 11 04.7** | **-0.7** |
| | 0.8nm,0.9s,baz=357,slow=7.4,SNR=4.8 | | | | | | | | |

*MOS **30** 00:13:09.1±1.2,50.°54N×155.°09E,h325km,mb4.3/1,Error ellipse: s-maj=99.9km s-min=28.2km az=62.3*

**KRSC 30 00:13:09.1±1.2,50.°54N×155.°09E,h325km±10km,ML4.2, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RUS** | **Russkaya** | **2.86** | **47** | *e*P | | Pn | | 00 14 06.7 | +1.6 |
| RUS | | | | *e*S | | S | | 00 14 50.7 | +0.6 |
| **RUS** | **Russkaya** | **2.86** | **47** | PN | | Pn | | 00 14 06.7 | +1.6 |
| RUS | | | | S | | S | | 00 14 50.7 | +0.6 |
| **GNL** | **Ganaly** | **3.62** | **28** | P | | Pn | | 00 14 13.3 | +0.6 |
| **GNL** | **Ganaly** | **3.62** | **28** | PN | | Pn | | 00 14 13.3 | +0.6 |
| **SPN** | **Mys Shipunski** | **4.00** | **48** | *e*P | | Pn | | 00 14 17.3 | +0.9 |
| SPN | | | | *e*S | | S | | 00 15 01.0 | -10 |
| **SPN** | **Mys Shipunski** | **4.00** | **48** | PN | | Pn | | 00 14 17.3 | +0.9 |
| SPN | | | | S | | S | | 00 15 10.0 | -0.6 |
| **MKZ** | **Mys Kozlova** | **5.71** | **43** | *e*P | | Pn | | 00 14 37.4 | +1.9 |
| MKZ | | | | *e*S | | S | | 00 15 43.9 | -1.5 |
| **MKZ** | **Mys Kozlova** | **5.71** | **43** | PN | | Pn | | 00 14 37.4 | +1.9 |
| MKZ | | | | S | | S | | 00 15 43.9 | -1.5 |
| **KBTR** | **Krutoberegovo** | **7.32** | **36** | *e*P | | Pn | | 00 14 57.6 | +3.1 |
| **KBTR** | **Krutoberegovo** | **7.32** | **36** | PN | | Pn | | 00 14 57.6 | +3.1 |

*ISCJB **30** 00:20:53.5±0.4,7.°11S±0.°04×129.°51E±0.°06,h139km, mb3.8/10,Error ellipse: s-maj=8.2km s-min=5.1km az=9.3*
*IDC **30** 00:20:55.5±2.3,7.°09S×129.°55E,h146km±20km,mb3.6/10, mb1 3.8/13,mb1mx3.7/24,mbtmp4.1/13,Error ellipse: s-maj=25.9km s-min=13.4km az=88.0*
*AUST **30** 00:20:55.7,6.°98S×129.°54E,h200km*
*DJA **30** 00:20:57.3±0.5,7.°S±3.°×13.°0E±.°,h185km±13km,M4.5/7, mb4.4/4,mB5.3/3,MLv4.5/7,Mw(mB)4.7/3*

**ISC 30 00:20:54.7±0.5,7.°14S±0.°05×129.°59E±0.°07,h139km,n39, σ1$^{s}$77/39,mb3.9/10,Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BNDI** | **Bandanaira** | **2.62** | **7** | P | | Pn | | 00 21 40.4 | +3.5 |
| BNDI | | | | S | | **Sn** | | **00 22 14.0** | **+4.6** |
| **AAI** | **Ambon** | **3.71** | **338** | P | | Pn | | 00 21 54.8 | +3.9 |
| | baz=3.6,SNR=7.0 | | | | | | | | |
| **AAI** | **Ambon** | **3.71** | **338** | P | | Pn | | 00 21 54.6 | +3.7 |
| **MSAI** | **Masohi** | **3.83** | **350** | P | | **Pn** | | **00 21 55.5** | **+3.0** |
| **NLAI** | **Namlea** | **4.61** | **327** | P | | Pn | | 00 22 07.2 | +4.4 |
| **FAKI** | **Fak Fak** | **4.96** | **32** | P | | **Pn** | | **00 22 08.8** | **+1.3** |
| | baz=4.9,SNR=21 | | | | | | | | |
| **FAKI** | **Fak Fak** | **4.96** | **32** | P | | **Pn** | | **00 22 07.1** | **-0.4** |
| FAKI | | | | S | | **Sn** | | **00 23 01.6** | **-2.6** |
| **MTN** | **Manton Dam** | **5.86** | **165** | P | | **Pn** | | **00 22 20.2** | **+0.7** |
| | baz=6.1,SNR=78 | | | | | | | | |
| **SOEI** | **Soe** | **5.87** | **243** | P | | Pn | | 00 22 28.9 | +9.1 |
| **KDU** | **Kakadu** | **6.20** | **153** | P | | **Pn** | | **00 22 25.2** | **+1.2** |
| | baz=6.4,SNR=151 | | | | | | | | |
| **SANI** | **Sanana** | **6.21** | **324** | P | | Pn | | 00 22 28.9 | +4.7 |
| | 22nm,0.7s,0.1nm | | | | | | | | |
| **SIJI** | **Sorong** | **6.45** | **15** | P | | **Pn** | | **00 22 28.0** | **+0.5** |
| | 9.3nm,0.3s,baz=56,slow=9.2,SNR=45 | | | | | | | | |
| SIJI | | | | S | | **Sn** | | **00 23 36.5** | **-3.6** |
| | 9.8nm,0.3s,baz=252,slow=23,SNR=10.0 | | | | | | | | |
| **SWI** | **Sorong** | **6.46** | **15** | P | | **Pn** | | **00 22 29.6** | **+2.0** |
| | baz=6.4,SNR=4.3 | | | | | | | | |
| **SWI** | **Sorong** | **6.46** | **15** | P | | **Pn** | | **00 22 27.8** | **+0.3** |
| | 26nm,0.7s,3µm0.6nm | | | | | | | | |
| SWI | | | | S | | **Sn** | | **00 23 37.8** | **-2.3** |
| | 26nm,0.7s,3µm0.6nm | | | | | | | | |
| **BATI** | **Baumata** | **6.61** | **242** | P | | **Pn** | | **00 22 30.2** | **+0.7** |
| | 14nm,0.3s,baz=83,slow=5.6,SNR=6.3 | | | | | | | | |
| BATI | | | | S | | **Sn** | | **00 23 41.5** | **-2.2** |
| | 12nm,0.3s,baz=72,slow=23,SNR=11 | | | | | | | | |
| **LBMI** | **Labuha** | **6.79** | **342** | P | | **Pn** | | **00 22 35.2** | **+3.2** |
| **KNRA** | **Kununurra** | **8.52** | **185** | P | | **Pn** | | **00 22 54.9** | **-0.3** |
| | baz=8.7,SNR=42 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **13.53** | **161** | P | | **Pn** | | **00 23 58.8** | **-2.4** |
| | 3.3nm,0.3s,baz=343,slow=13,SNR=133 | | | | | | | | |
| WRA | | | | S | | Sn | | 00 26 21.3 | -10 |
| | 5.3nm,0.3s,baz=333,slow=22,SNR=7.6 | | | | | | | | |
| **COEN** | **Coen** | **14.96** | **118** | P | | **P** | | **00 24 22.0** | **+0.5** |
| | baz=15,SNR=15 | | | | | | | | |
| **QIS** | **Mount Isa** | **16.49** | **145** | P | | **P** | | **00 24 40.0** | **+1.7** |
| | baz=17,SNR=13 | | | | | | | | |
| **ASAR** | **Alice Springs** | **16.94** | **166** | P | | **P** | | **00 24 42.5** | **-0.8** |
| | 1.9nm,0.3s,baz=342,slow=12,SNR=78 | | | | | | | | |
| ASAR | | | | S | | S | | 00 27 40.6 | -12 |
| | 0.4nm,0.3s,baz=333,slow=18,SNR=4.0 | | | | | | | | |
| **WRKA** | **Warakurna** | **17.84** | **184** | P | | **Pn** | | **00 24 54.5** | **+0.1** |
| | baz=18,SNR=16 | | | | | | | | |
| **MTSU** | **Mount Surprise** | **18.03** | **129** | P | | **Pn** | | **00 24 58.1** | **+1.4** |
| | baz=18,SNR=7.9 | | | | | | | | |
| **MEEK** | **Meekatharra** | **22.02** | **207** | P | | **P** | | **00 25 38.4** | **+0.3** |
| | baz=22,SNR=3.3 | | | | | | | | |
| **QLP** | **Quilpie** | **23.83** | **146** | P | | **P** | | **00 25 58.2** | **+3.0** |
| | baz=24,SNR=3.6 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.52** | **310** | P | | **P** | | **00 28 11.2** | **-1.0** |
| | 1.1nm,0.6s,baz=139,slow=7.5,SNR=7.7 | | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.20** | **10** | P | | **P** | | **00 28 48.5** | **-1.5** |
| | 1.0nm,0.4s,baz=191,slow=10,SNR=3.7 | | | | | | | | |
| **KSRS** | **Korea Array** | **44.39** | **358** | P | | **P** | | **00 28 52.2** | **+0.8** |
| | 0.9nm,0.6s,baz=178,slow=8.9,SNR=3.3 | | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **51.15** | **2** | P | | **P** | | **00 29 43.9** | **+0.5** |
| | 1.5nm,0.7s,baz=185,slow=6.8,SNR=3.3 | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **SONM** | **Songino Array** | **58.45** | **342** | P | | **P** | | **00 30 36.4** | **+0.3** |
| | 0.4nm,0.4s,baz=162,slow=7.4,SNR=5.7 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **68.13** | **327** | P | | **P** | | **00 31 39.5** | **-0.2** |
| | 3.7nm,0.5s,baz=114,slow=8.6,SNR=92 | | | | | | | | |
| MKAR | | | | PcP | | **PcP** | | **00 32 04.3** | **-0.5** |
| | 0.7nm,0.6s,baz=123,slow=5.3,SNR=3.9 | | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.53** | **334** | P | | **P** | | **00 31 59.0** | **-1.3** |
| | 1.5nm,0.5s,baz=131,slow=4.5,SNR=9.0 | | | | | | | | |
| **VNDA** | **Vanda** | **72.35** | **173** | P | | **P** | | **00 32 05.2** | **+0.3** |
| | 0.3nm,0.5s,baz=329,slow=5.9,SNR=3.5 | | | | | | | | |
| **MAW** | **Mawson** | **74.67** | **201** | P | | **P** | | **00 32 19.2** | **+0.6** |
| | 1.2nm,0.5s,baz=82,slow=13,SNR=7.5 | | | | | | | | |
| **ILAR** | **Eielson Array** | **93.65** | **25** | P | | **P** | | **00 33 53.7** | **-1.4** |
| | 0.6nm,0.8s,baz=248,slow=5.5,SNR=6.5 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **125.35** | **59** | PKP | | **PKPdf** | | **00 39 38.4** | **-1.6** |
| | 0.3nm,0.8s,baz=292,slow=4.8,SNR=3.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **128.44** | **281** | PKP | | **PKPdf** | | **00 39 45.0** | **-1.1** |
| | 0.6nm,0.6s,baz=91,slow=2.0,SNR=9.0 | | | | | | | | |
| **CPUP** | **Villa Florida** | **146.05** | **169** | PKPbc | | **PKPbc** | | **00 40 19.1** | **0.0** |
| | 1.6nm,0.6s,baz=270,slow=2.0,SNR=4.4 | | | | | | | | |
| **LPAZ** | **La Paz** | **150.85** | **143** | PKPbc | | **PKPbc** | | **00 40 33.6** | **+0.9** |
| | 2.4nm,0.4s,baz=174,slow=0.9,SNR=23 | | | | | | | | |

*ISCJB **30** 00:33:34.8±0.8,19.°05S±0.°04×69.°3W±0.°1,h132km±9km, mb3.0/1,Error ellipse: s-maj=19.6km s-min=7.1km az=4.4*
*GUC **30** 00:33:35.9±0.4,19.°10S×69.°25W,h118km±2km,ML4.0*
*IDC **30** 00:33:38.3±5.0,19.°03S×68.°60W,h133km±30km,mb3.1/1, mb1 3.3/3,mb1mx3.1/18,mbtmp3.5/3,Error ellipse: s-maj=75.6km s-min=30.5km az=68.0*

**ISC 30 00:33:35.0±1.0,19.°06S±0.°05×69.°2W±0.°1,h121km±10km, n13,σ1$^{s}$44/15,3C-1D,Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MNMC** | **Minimini** | **0.42** | **260** | ⇓*i*P | | **Pn** | | **00 33 53.3** | **+0.3** |
| MNMC | | | | *i* S | | **Sn** | | **00 34 06.6** | **+0.1** |
| MNMC | | | | AML | | AML | | 00 34 08.9 | |
| | comp=E,6µm,0.1s | | | | | | | | |
| **ARCH** | **Arica** | **1.22** | **297** | ⇑*i*P | | **Pn** | | **00 33 59.7** | **+0.3** |
| ARCH | | | | *i* S | | **Sn** | | **00 34 17.8** | **0.0** |
| **PB01** | **IPOC Station P** | **2.00** | **189** | ⇑*i*P | | **Pn** | | **00 34 09.5** | **+0.9** |
| PB01 | | | | *i* S | | **Sn** | | **00 34 35.1** | **+0.7** |
| PB01 | | | | AML | | AML | | 00 34 38.5 | |
| | comp=E,995nm,0.2s | | | | | | | | |
| **PB09** | **IPOC Station P** | **2.73** | **182** | ⇑*i*P | | **Pn** | | **00 34 19.6** | **+1.6** |
| PB09 | | | | *i* S | | **Sn** | | **00 34 52.3** | **+1.3** |
| PB09 | | | | AML | | AML | | 00 35 00.3 | |
| | comp=N,1µm,0.5s | | | | | | | | |
| **PB07** | **IPOC Station P** | **2.74** | **194** | *e*P | | **Pn** | | **00 34 19.6** | **+1.4** |
| PB07 | | | | AML | | AML | | 00 34 59.9 | |
| | comp=E,458nm,0.5s | | | | | | | | |
| **LPAZ** | **La Paz** | **2.92** | **20** | P | | **Pn** | | **00 34 22.9** | **+2.0** |
| | comp=E,4.4nm,0.3s,baz=204,slow=7.0,SNR=160 | | | | | | | | |
| LPAZ | | | | S | | **Sn** | | **00 34 57.1** | **+0.9** |
| | comp=E,1.4nm,0.3s,baz=22,slow=24,SNR=3.6 | | | | | | | | |
| **PB04** | **IPOC Station P** | **3.39** | **196** | *e*P | | **Pn** | | **00 34 27.6** | **+1.0** |
| PB04 | | | | AML | | AML | | 00 35 23.4 | |
| | comp=N,194nm,1.0s | | | | | | | | |
| **CPUP** | **Villa Florida** | **13.09** | **126** | P | | **Pn** | | **00 36 33.8** | **-2.6** |
| | comp=N,0.2nm,0.3s,baz=314,slow=16,SNR=3.1 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.77** | **71** | P | | **P** | | **00 45 12.8** | **-1.0** |
| | comp=N,0.2nm,0.5s,baz=261,slow=5.3,SNR=9.1 | | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.31** | **279** | T | | T | | 03 11 58.4 | |
| | baz=101,slow=75,SNR=4.2 | | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.31** | **279** | T | | T | | 03 12 04.5 | |
| | baz=101,slow=75,SNR=3.8 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.33** | **279** | T | | T | | 03 12 00.1 | |
| | baz=101,slow=75,SNR=4.6 | | | | | | | | |
| **SONM** | **Songino Array** | **151.07** | **6** | PKPbc | | **PKPbc** | | **00 53 15.4** | **+1.4** |
| | comp=N,0.1nm,0.3s,baz=355,slow=1.3,SNR=4.2 | | | | | | | | |

**IDC 30 00:55:32.1±2.2,5.°24S×152.°47E,h0km,mb3.2/3, mb1 3.6/3,mb1mx3.3/35,mbtmp3.3/3,Error ellipse: s-maj=151.5km s-min=30.2km az=127.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **22.91** | **229** | P | | P | | 01 00 38.1 | +0.3 |
| | 0.2nm,0.4s,baz=53,slow=10.0,SNR=2.7 | | | | | | | | |
| **ASAR** | **Alice Springs** | **25.61** | **222** | P | | P | | 01 01 02.4 | -1.0 |
| | 0.4nm,0.7s,baz=58,slow=9.4,SNR=5.1 | | | | | | | | |
| **ILAR** | **Eielson Array** | **82.69** | **22** | P | | P | | 01 07 56.8 | -0.6 |
| | 0.2nm,0.5s,baz=234,slow=6.2,SNR=4.3 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.12** | **287** | PKPbc | | PKPbc | | 01 15 27.1 | +1.1 |
| | 0.3nm,0.6s,baz=60,slow=4.0,SNR=1.5 | | | | | | | | |

*BJI **30** 00:55:26.6,4.°52S×99.°42E,h20km,mb4.7/40,mB5.0/27, Ms4.8/19,Ms7 4.5/15*
*ISCJB **30** 00:55:32.6±1.0,3.°62S±0.°03×99.°52E±0.°03,h15km±6km, mb4.6/65,MS3.4/15,Error ellipse: s-maj=6.1km s-min=3.7km az=43.3*
*AUST **30** 00:55:32.6±4.5,3.°62S×99.°42E,h6km,Error ellipse: s-maj=2.0km s-min=1.1km az=226.0*
*MOS **30** 00:55:35.8±1.2,3.°36S×99.°65E,h30km,mb4.8/31,Error ellipse: s-maj=12.8km s-min=6.4km az=109.3*
*DJA **30** 00:55:36.5±0.6,3.°S±2.°×10.°0E±.°,h23km±5km,M4.8/16, mB5.5/8,mb4.7/16,MLv4.7/4,Mw(mB)5.0/8*
*IDC **30** 00:55:36.8±0.7,3.°52S×99.°56E,h29km±4km,mb4.3/31, mb1 4.4/31,mb1mx4.3/47,mbtmp4.5/31,MS3.4/15, Ms1 3.4/15,ms1mx3.1/47,Error ellipse: s-maj=18.5km s-min=11.1km az=39.0*
*NEIC **30** 00:55:36.8±1.5,3.°62S×99.°50E,h31km±10km,mb4.6/19, Error ellipse: s-maj=6.6km s-min=4.1km az=48.0*

**ISC 30 00:55:36.1±0.4,3.°59S±0.°04×99.°53E±0.°04,h24km±2km, h24km:pP-P,n207,σ1$^{s}$47/232,mb4.6/64,MS3.4/15,6C-2D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.95** | **30** | P | | **Pb** | | **00 55 52.1** | **-1.8** |
| PPSI | | | | S | | **Sb** | | **00 56 04.2** | **-1.8** |
| **SISI** | **Saibi** | **2.29** | **349** | P | | **Pn** | | **00 56 09.9** | **-2.5** |
| SISI | | | | S | | **Sn** | | **00 56 36.4** | **-3.4** |
| **PDSI** | **Padang** | **2.81** | **19** | P | | **Pn** | | **00 56 17.9** | **-1.7** |
| **KSI** | **Kapahiang** | **3.06** | **91** | P | | **Pn** | | **00 56 22.4** | **-0.6** |
| KSI | | | | S | | **Sn** | | **00 56 57.3** | **-1.6** |
| **PPI** | **Padang Panjang** | **3.23** | **16** | P | | **Pn** | | **00 56 23.8** | **-1.5** |
| | baz=3.3,SNR=21 | | | | | | | | |
| **PPI** | **Padang Panjang** | **3.23** | **16** | P | | **Pn** | | **00 56 23.7** | **-1.5** |
| PPI | | | | S | | **Sn** | | **00 56 59.3** | **-3.7** |
| **SDSI** | **Sungai Dareh** | **3.25** | **36** | P | | **Pn** | | **00 56 25.1** | **-0.5** |
| SDSI | | | | S | | **Sn** | | **00 57 02.0** | **-1.5** |
| **MNAI** | **Manna** | **3.50** | **103** | P | | **Pn** | | **00 56 30.5** | **+1.4** |
| | baz=3.6,SNR=4.7 | | | | | | | | |
| **MNAI** | **Manna** | **3.50** | **103** | P | | **Pn** | | **00 56 28.8** | **-0.3** |
| MNAI | | | | S | | **Sn** | | **00 57 10.2** | **+0.4** |
| **MNAI** | **Manna** | **3.50** | **103** | *e*Pn | | **Pn** | | **00 56 29.8** | **+0.7** |
| MNAI | | | | *e*Sn | | **Sn** | | **00 57 09.3** | **-0.5** |
| **LHSI** | **Lahat** | **3.99** | **94** | P | | **Pn** | | **00 56 35.3** | **-0.5** |
| LHSI | | | | S | | **Sn** | | **00 57 22.1** | **+0.2** |
| **BKNI** | **Bangkinang** | **4.17** | **21** | P | | **Pn** | | **00 56 37.6** | **-0.7** |
| **BKNI** | **Bangkinang** | **4.17** | **21** | *e*Pn | | **Pn** | | **00 56 38.4** | **+0.1** |
| **RGRI** | **Rengat** | **4.26** | **41** | P | | **Pn** | | **00 56 38.0** | **-1.6** |
| **MNSI** | **Mandailing Nat** | **4.35** | **7** | P | | **Pn** | | **00 56 39.4** | **-1.4** |
| **JMBI** | **JAMBI** | **4.54** | **65** | P | | **Pb** | | **00 56 54.0** | **-1.2** |
| **MDSI** | **Maura Dua** | **4.72** | **101** | P | | **Pn** | | **00 56 45.4** | **-0.4** |
| MDSI | | | | S | | **Sn** | | **00 57 39.1** | **-0.8** |
| **LWLI** | **Liwa** | **4.73** | **108** | P | | **Pn** | | **00 56 46.0** | **-0.1** |
| **GSI** | **Gunungsitoli** | **5.24** | **338** | P | | **Pn** | | **00 56 52.5** | **-0.4** |
| **GSI** | **Gunungsitoli** | **5.24** | **338** | *e*Pn | | **Pn** | | **00 56 54.5** | **+1.6** |
| **KASI** | **Kota Agung** | **5.31** | **111** | P | | **Pn** | | **00 56 53.1** | **-0.9** |
| KASI | | | | S | | **Sn** | | **00 57 50.4** | **-4.0** |
| **PSI** | **Prapat** | **6.37** | **355** | Pn | | Pn | | 00 57 03.8 | -4.9 |
| | 0.4nm,0.3s,baz=332,slow=18,SNR=8.6 | | | | | | | | |
| **CGJI** | **Cibinong** | **6.83** | **116** | P | | **Pn** | | **00 57 13.2** | **-1.7** |
| **SKJI** | **Sukabumi** | **7.78** | **116** | P | | **Pn** | | **00 57 26.4** | **-1.4** |
| **CNJI** | **Cibinong** | **8.42** | **116** | P | | **Pn** | | **00 57 34.7** | **-2.0** |
| **LEM** | **Lembang** | **8.67** | **112** | LR | | LR | | 01 01 35.1 | |
| | comp=Z,122nm,20.4s,slow=41 | | | | | | | | |
| **LEM** | **Lembang** | **8.67** | **112** | P | | **Pn** | | **00 57 40.2** | **-0.1** |
| **COCO** | **West Island** | **8.96** | **197** | *e*P | | **Pn** | | **00 57 43.6** | **-0.4** |
| **COCO** | **West Island** | **8.96** | **197** | *e*Pn | | **Pn** | | **00 57 43.6** | **-0.4** |
| **CISI** | **Cisompet, Garu** | **9.14** | **116** | P | | **Pn** | | **00 57 44.7** | **-1.9** |
| | baz=9.2,SNR=16 | | | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.14** | **116** | P | | **Pn** | | **00 57 44.7** | **-1.9** |
| | 449nm,0.6s,6µm | | | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.14** | **116** | *e*Pn | | **Pn** | | **00 57 44.5** | **-2.1** |
| CISI | | | | *e*Sn | | Sn | | 00 59 21.1 | -7.7 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CMJI** | **Cimerak** | **9.80** | **116** | P | | **Pn** | | **00 57 52.9** | **-2.8** |
| **UGM** | **Wanagama** | **11.75** | **112** | P | | **Pn** | | **00 58 21.1** | **-1.3** |
| | baz=12,SNR=5.4 | | | | | | | | |
| **SBUM** | **Sibu** | **14.03** | **65** | *e*Pn | | **Pn** | | **00 58 55.6** | **+2.1** |
| **KMMI** | **Kalianget** | **14.78** | **104** | P | | P | | 00 59 13.4 | +3.9 |
| **ABJI** | **Asem Bagus** | **15.21** | **107** | P | | **Pn** | | **00 59 09.2** | **-0.3** |
| | 56nm,0.7s | | | | | | | | |
| **BBKI** | **Banjar Baru** | **15.28** | **90** | P | | **P** | | **00 59 13.7** | **-1.4** |
| **JAGI** | **Jajag, Banyuwa** | **15.32** | **109** | P | | **Pn** | | **00 59 09.7** | **-1.3** |
| | baz=15,SNR=3.8 | | | | | | | | |
| **KKM** | **Kota Kinabalu** | **19.21** | **60** | *e*P | | **Pn** | | **00 59 59.3** | **-0.4** |
| | 12nm,0.9s | | | | | | | | |
| **UMPA** | **Umpang Tak** | **19.68** | **358** | P | | **Pn** | | **01 00 04.7** | **-0.4** |
| | 6.5nm,0.9s,570nm | | | | | | | | |
| **SPSI** | **Sidrap Palu** | **20.20** | **92** | P | | Pn | | 01 00 12.6 | +1.3 |
| | 25nm,0.8s | | | | | | | | |
| **KAPI** | **Kappang** | **20.21** | **95** | P | | **P** | | **01 00 08.2** | **-1.3** |
| | 14nm,1.0s,baz=262,slow=14,SNR=9.7 | | | | | | | | |
| KAPI | | | | LR | | LR | | 01 09 09.1 | |
| | comp=Z,65nm,19.8s,baz=287,slow=40 | | | | | | | | |
| **KAPI** | **Kappang** | **20.21** | **95** | *e*P | | **P** | | **01 00 09.6** | **+0.1** |
| | 28nm,0.9s | | | | | | | | |
| **PCI** | **Palu** | **20.46** | **83** | P | | Pn | | 01 00 16.1 | +1.6 |
| **BKSI** | **Bulukumba** | **20.60** | **96** | P | | **P** | | **01 00 13.5** | **-0.2** |
| | 37nm,1.2s | | | | | | | | |
| **MPSI** | **Mapaga** | **20.73** | **80** | P | | **P** | | **01 00 15.4** | **+0.3** |
| | 22nm,0.8s,2µm | | | | | | | | |
| **MYLDM** | **Lahad Datu** | **20.86** | **65** | *e*P | | Pn | | 01 00 17.5 | -1.5 |
| | 129nm,1.6s | | | | | | | | |
| **UTTA** | **Uttaradit** | **21.22** | **3** | P | | **P** | | **01 00 25.0** | **+4.7** |
| | 6.5nm,0.9s | | | | | | | | |
| **PALK** | **Pallekele** | **21.67** | **300** | P | | **P** | | **01 00 26.5** | **+1.3** |
| | 4.5nm,0.9s,baz=119,slow=19,SNR=2.2 | | | | | | | | |
| **PALK** | **Pallekele** | **21.67** | **300** | P | | **P** | | **01 00 26.5** | **+1.3** |
| PALK | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.9s | | | | | | | | |
| **PALK** | **Pallekele** | **21.67** | **300** | *e*P | | **P** | | **01 00 25.3** | **0.0** |
| | comp=Z,18nm,1.2s | | | | | | | | |
| **NONG** | **Nongkai** | **21.81** | **9** | P | | **P** | | **01 00 28.7** | **+2.1** |
| | comp=Z,27nm,2.1s,comp=Z,11µm | | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **21.88** | **359** | *e*P | | **P** | | **01 00 27.1** | **-0.2** |
| **BASI** | **Baing, Sumba** | **21.90** | **109** | P | | **P** | | **01 00 27.5** | **-0.2** |
| | comp=Z,117nm,1.1s,comp=Z,2µm | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.91** | **359** | P | | **P** | | **01 00 27.3** | **-0.4** |
| | comp=Z,30nm,0.8s,baz=186,slow=10,SNR=113 | | | | | | | | |
| CMAR | | | | LR | | LR | | 01 08 32.3 | |
| | comp=Z,75nm,19.7s,baz=184,slow=36 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.91** | **359** | *e*P | | **P** | | **01 00 28.1** | **+0.3** |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,30nm,0.8s | | | | | | | | |
| **LAMP** | **Lampang** | **21.97** | **0** | P | | **P** | | **01 00 31.6** | **+3.2** |
| | comp=Z,7.8nm,0.9s,comp=Z,61nm | | | | | | | | |
| **APSI** | **Ampana** | **22.26** | **84** | P | | P | | 01 00 42.9 | +11 |
| **CHTO** | **Chiang Mai** | **22.27** | **359** | P | | **P** | | **01 00 31.7** | **+0.1** |
| | comp=Z,64nm,1.0s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.27** | **359** | *e*P | | **P** | | **01 00 31.2** | **-0.4** |
| CHTO | | | | pmax | | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | | |
| **CHTO** | **Chiang Mai** | **22.27** | **359** | *e*P | | **P** | | **01 00 31.2** | **-0.4** |
| | comp=Z,10nm,0.9s | | | | | | | | |
| **CMAI** | **Chiengmai2** | **23.38** | **359** | P | | **P** | | **01 00 45.9** | **+2.6** |
| | comp=Z,50nm,1.1s | | | | | | | | |
| **GTOI** | **Gorontalo** | **23.84** | **80** | P | | **P** | | **01 00 46.2** | **-1.5** |
| | comp=Z,19nm,1.2s,comp=Z,1µm | | | | | | | | |
| **QIZ** | **Qiongzhong** | **24.66** | **24** | P | | **P** | | **01 00 56.5** | **+1.3** |
| QIZ | | | | S | | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| HHC | | | | | S | **S** | 01 10 39.3 | +4.0 |
| HHC | | | | | PMZ | | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| HHC | | | | | PMZ | | | |
| | comp=Z,120nm,10.0s | | | | | | | |
| HHC | | | | | LN | | | |
| | comp=Z,280nm,14.8s | | | | | | | |
| HHC | | | | | LE | | | |
| | comp=Z,290nm,14.8s | | | | | | | |
| HHC | | | | | LZ | | | |
| | comp=Z,170nm,14.3s | | | | | | | |
| **BJI** | **Beijing** | **46.03** | **18** | | P | **P** | 01 03 59.0 | +1.3 |
| BJI | | | | | S | **S** | 01 10 46.0 | +4.4 |
| BJI | | | | | PMZ | | | |
| | comp=Z,12nm,0.9s | | | | | | | |
| BJI | | | | | LN | | | |
| | comp=Z,160nm,6.8s | | | | | | | |
| BJI | | | | | LE | | | |
| | comp=Z,510nm,6.6s | | | | | | | |
| **MTSU** | **Mount Surprise** | **46.15** | **112** | | P | **P** | 01 04 00.1 | +1.0 |
| | baz=46,SNR=5.2 | | | | | | | |
| **JNU** | **Nakatsue** | **47.04** | **37** | | P | **P** | 01 04 05.8 | -0.1 |
| | comp=Z,25nm,1.0s,baz=99,slow=4.8,SNR=3.9 | | | | | | | |
| JNU | | | | | LR | LR | 01 25 52.9 | |
| | comp=Z,58nm,18.5s,baz=120,slow=39 | | | | | | | |
| **HTT** | **Hallett** | **47.23** | **134** | | P | P | 01 04 01.8 | -5.6 |
| | baz=47,SNR=3.7 | | | | | | | |
| **PMG** | **Port Moresby** | **47.64** | **99** | | LR | LR | 01 26 59.4 | |
| | comp=Z,34nm,18.8s,baz=212,slow=40 | | | | | | | |
| **PMG** | **Port Moresby** | **47.64** | **99** | *e*P | **P** | **P** | 01 04 11.2 | +0.4 |
| PMG | | | | | pmax | pmax | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| **PMG** | **Port Moresby** | **47.64** | **99** | *e*P | **P** | **P** | 01 04 11.2 | +0.4 |
| | comp=Z,18nm,1.0s | | | | | | | |
| **MANU** | **Manus Island** | **47.80** | **90** | | P | **P** | 01 04 13.2 | +1.1 |
| | baz=48,SNR=4.0 | | | | | | | |
| **KSH** | **Kashi** | **48.06** | **335** | | P | **P** | 01 04 11.8 | -2.0 |
| KSH | | | | *es*P | | **sP** | 01 04 22.5 | -1.8 |
| KSH | | | | *e*PP | | **PP** | 01 06 01.8 | -4.4 |
| KSH | | | | *e*ScP | | **ScP** | 01 09 32.8 | -1.9 |
| KSH | | | | PcS | | **PcS** | 01 09 35.8 | -1.5 |
| KSH | | | | S | | S | 01 11 03.0 | -8.0 |
| KSH | | | | PMZ | | | | |
| | comp=Z,7.0nm,0.9s | | | | | | | |
| KSH | | | | PMZ | | | | |
| | comp=Z,110nm,6.0s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,140nm,5.4s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,200nm,5.3s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,170nm,7.0s | | | | | | | |
| **CTA** | **Charters Tower** | **48.37** | **114** | | P | **P** | 01 04 16.6 | +0.1 |
| | comp=Z,5.4nm,0.9s,baz=272,slow=8.7,SNR=3.1 | | | | | | | |
| **CTAO** | **Charters Tower** | **48.37** | **114** | *e*P | | **P** | 01 04 16.2 | -0.2 |
| CTAO | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| **CTAO** | **Charters Tower** | **48.37** | **114** | *e*P | | **P** | 01 04 16.2 | -0.2 |
| | comp=Z,11nm,1.2s | | | | | | | |
| **WMQ** | **Urumqi** | **48.38** | **349** | | P | **P** | 01 04 17.0 | +0.9 |
| WMQ | | | | | pP | **pP** | 01 04 25.0 | +1.4 |
| WMQ | | | | | PP | **PP** | 01 06 08.0 | -1.0 |
| WMQ | | | | | S | **S** | 01 11 15.0 | -0.2 |
| WMQ | | | | | PMZ | | | |
| | comp=Z,25nm,1.0s | | | | | | | |
| WMQ | | | | | PMZ | | | |
| | comp=Z,100nm,5.0s | | | | | | | |
| WMQ | | | | | LN | | | |
| | comp=Z,47nm,15.0s | | | | | | | |
| WMQ | | | | | LE | | | |
| | comp=Z,39nm,16.0s | | | | | | | |
| **QLP** | **Quilpie** | **48.48** | **123** | | P | **P** | 01 04 18.8 | +1.6 |
| | baz=49,SNR=8.2 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.59** | **30** | | P | **P** | 01 04 17.6 | -0.1 |
| **KSAR** | **Wonju Array Be** | **48.59** | **30** | | P | **P** | 01 04 17.6 | -0.1 |
| **KSRS** | **Korea Array** | **48.62** | **30** | | P | **P** | 01 04 17.6 | -0.3 |
| | comp=Z,12nm,1.0s,baz=219,slow=8.9,SNR=22 | | | | | | | |
| KSRS | | | | | LR | LR | 01 24 52.5 | |
| | comp=Z,32nm,19.6s,baz=216,slow=36 | | | | | | | |
| **KSRS** | **Korea Array** | **48.62** | **30** | | P | **P** | 01 04 17.6 | -0.3 |
| KSRS | | | | | pmax | pmax | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| KSRS | | | | | MLR | MLR | | |
| | comp=Z,32nm,19.6s | | | | | | | |
| **KS01** | **Wonju Array Si** | **48.62** | **30** | *e*P | | **P** | 01 04 17.9 | -0.1 |
| **SFK** | **Sufi-Kurgan** | **49.53** | **334** | | P | **P** | 01 04 25.5 | +0.2 |
| **PDGK** | **Podgornoye** | **50.08** | **341** | *i* P | | **P** | 01 04 29.9 | +0.9 |
| PDGK | | | | | pmax | pmax | | |
| | comp=Z,14nm,0.9s | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.10** | **337** | *e*P | | **P** | 01 04 37.6 | +0.5 |
| TKM2 | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.10** | **337** | *e*P | | **P** | 01 04 37.6 | +0.5 |
| | comp=Z,10.0nm,0.8s | | | | | | | |
| **AAK** | **Ala-Archa** | **51.29** | **336** | | P | **P** | 01 04 38.6 | +0.2 |
| | comp=Z,1.6nm,0.6s,baz=168,slow=6.2,SNR=6.8 | | | | | | | |
| **AAK** | **Ala-Archa** | **51.29** | **336** | *i* P | | **P** | 01 04 39.0 | +0.6 |
| AAK | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **AAK** | **Ala-Archa** | **51.29** | **336** | *e*P | | **P** | 01 04 38.5 | +0.1 |
| | comp=Z,5.4nm,1.0s | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **51.49** | **128** | | P | **P** | 01 04 41.7 | +1.7 |
| | baz=52,SNR=12 | | | | | | | |
| **SONM** | **Songino Array** | **51.56** | **6** | | P | **P** | 01 04 41.4 | +1.1 |
| | comp=Z,8.4nm,0.8s,baz=188,slow=9.0,SNR=52 | | | | | | | |
| SONM | | | | | PcP | **PcP** | 01 05 53.4 | -0.7 |
| | comp=Z,2.3nm,0.8s,baz=184,slow=5.4,SNR=1.9 | | | | | | | |
| SONM | | | | | LR | LR | 01 28 03.1 | |
| | comp=Z,66nm,18.9s,baz=172,slow=38 | | | | | | | |
| **SONA1** | **Songino Array** | **51.57** | **6** | *e*P | | **P** | 01 04 41.1 | +0.7 |
| **EKS2** | **Erkin-Say** | **51.60** | **336** | *e*P | | **P** | 01 04 41.3 | +0.6 |
| EKS2 | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| **EKS2** | **Erkin-Say** | **51.60** | **336** | *e*P | | **P** | 01 04 41.3 | +0.6 |
| | comp=Z,8.9nm,0.8s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.66** | **6** | *e*P | | **P** | 01 04 42.0 | +0.9 |
| ULN | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.66** | **6** | *e*P | | **P** | 01 04 42.0 | +0.9 |
| | comp=Z,10nm,0.9s | | | | | | | |
| **MNAS** | **Manas** | **51.99** | **335** | | P | **P** | 01 04 43.6 | 0.0 |
| MNAS | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **MK01** | **Makanchi Array** | **52.40** | **345** | *e*P | | **P** | 01 04 46.3 | -0.2 |
| **MK31** | **Makanchi Array** | **52.43** | **345** | *i* P | | **P** | 01 04 46.7 | 0.0 |
| MK31 | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.43** | **345** | | P | **P** | 01 04 46.5 | -0.1 |
| | comp=Z,6.3nm,0.8s,baz=152,slow=8.4,SNR=41 | | | | | | | |
| MKAR | | | | | LR | LR | 01 32 54.2 | |
| | comp=Z,14nm,19.6s,baz=166,slow=43 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.43** | **345** | *ce*P | | **P** | 01 04 46.7 | 0.0 |
| MKAR | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.43** | **345** | *e*P | | **P** | 01 04 46.9 | +0.3 |
| **MAKZ** | **Makanchi** | **52.52** | **345** | *e*P | | **P** | 01 04 47.2 | -0.2 |
| **KK31** | **Karatay Array** | **53.35** | **334** | *i* P | | **P** | 01 04 52.4 | -1.1 |
| KK31 | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **53.35** | **334** | *e*P | | **P** | 01 04 52.7 | -0.8 |
| KKAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **KKAR** | **Karatay Array** | **53.35** | **334** | *e*P | | **P** | 01 04 52.7 | -0.8 |
| | comp=Z,2.4nm,0.9s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.80** | **39** | | P | **P** | 01 04 55.8 | -1.1 |
| | comp=Z,5.3nm,0.9s,baz=218,slow=8.1,SNR=10.0 | | | | | | | |
| MJAR | | | | | LR | LR | 01 29 49.3 | |
| | comp=Z,29nm,18.1s,baz=200,slow=38 | | | | | | | |
| **IPAR** | **Pars** | **55.50** | **310** | *e*P | | **P** | 01 05 10.2 | +0.4 |
| **USRK** | **Ussuriysk Ar.** | **55.77** | **28** | | P | **P** | 01 05 11.2 | +0.2 |
| | comp=Z,12nm,1.0s,baz=225,slow=6.0,SNR=15 | | | | | | | |
| **GEYT** | **Alibeck** | **56.37** | **321** | | P | **P** | 01 05 15.1 | -0.5 |
| | comp=Z,3.0nm,0.9s,baz=160,slow=9.0,SNR=7.0 | | | | | | | |
| **OTUK** | **Ortayu** | **56.83** | **339** | | P | **P** | 01 05 17.5 | -1.1 |
| OTUK | | | | | pmax | pmax | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.93** | **344** | | P | **P** | 01 05 18.8 | -0.4 |
| | comp=Z,1.2nm,0.4s,baz=131,slow=3.8,SNR=5.7 | | | | | | | |
| **KURK** | **Kurchatov** | **56.99** | **344** | *e*P | | **P** | 01 05 19.5 | -0.1 |
| KURK | | | | | pmax | pmax | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **KURK** | **Kurchatov** | **56.99** | **344** | *e*P | | **P** | 01 05 19.5 | -0.1 |
| | comp=Z,11nm,0.9s | | | | | | | |
| **IPIR** | **Pirpir** | **58.48** | **312** | *e*P | | **P** | 01 05 30.9 | 0.0 |
| **ZAA0** | **Zalesovo Array** | **58.63** | **350** | | P | **P** | 01 05 31.2 | +0.1 |
| | baz=59,SNR=3.3 | | | | | | | |
| **ZAA0** | **Zalesovo Array** | **58.63** | **350** | *e*P | | **P** | 01 05 30.8 | -0.3 |
| **ZALV** | **Zalesovo Beam** | **58.63** | **350** | | P | **P** | 01 05 30.7 | -0.4 |
| | comp=Z,13nm,0.8s,baz=185,slow=5.2,SNR=55 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.63** | **350** | *i* P | | **P** | 01 05 31.2 | +0.1 |
| ZALV | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | | | |
| **KLR** | **Kul'dur** | **59.56** | **24** | *e*P | | P | 01 05 34.2 | -3.4 |
| KLR | | | | | pmax | pmax | | |
| | comp=Z,34nm,1.2s | | | | | | | |
| **HABR** | **Khabarovsk** | **60.38** | **26** | *e*P | | **P** | 01 05 40.8 | -2.5 |
| HABR | | | | *e**SP | | **sP** | 01 05 49.7 | -4.1 |
| HABR | | | | *e* | | | 01 06 25.5 | |
| HABR | | | | *e* | | | 01 07 53.8 | |
| HABR | | | | *e*S | | **S** | 01 13 55.1 | -1.6 |
| HABR | | | | *e**SS | | **sS** | 01 14 05.8 | -3.5 |
| HABR | | | | *e* | | | 01 15 30.3 | |
| HABR | | | | *e*SS | | **SS** | 01 17 53.8 | -1.0 |
| HABR | | | | | pmax | pmax | | |
| | comp=Z,25nm,2.2s | | | | | | | |
| HABR | | | | | MLR | MLR | | |
| | comp=Z,80nm,18.0s | | | | | | | |
| **VOSK** | **Vostochnaya** | **61.06** | **341** | | P | **P** | 01 05 46.5 | -1.3 |
| VOSK | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.51** | **340** | | P | **P** | 01 05 49.2 | -1.6 |
| | comp=Z,2.7nm,0.6s,baz=145,slow=8.8,SNR=15 | | | | | | | |
| BVAR | | | | | pP | **pP** | 01 05 59.5 | +1.0 |
| | comp=Z,2.3nm,0.6s,baz=133,slow=8.3,SNR=7.6 | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.51** | **340** | | P | **P** | 01 05 49.2 | -1.6 |
| BVAR | | | | | *PP | **pP** | 01 05 59.5 | +1.0 |
| BVAR | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| BVAR | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **61.57** | **340** | *e*P | | **P** | 01 05 50.6 | -0.7 |
| BRVK | | | | | pmax | pmax | | |
| | comp=Z,8.0nm,1.7s | | | | | | | |
| **BRVK** | **Borovoye** | **61.57** | **340** | *e*P | | **P** | 01 05 50.5 | -0.8 |
| | comp=Z,2.4nm,0.5s | | | | | | | |
| **ZRNK** | **Zerenda** | **61.92** | **340** | | P | P | 01 05 45.7 | -7.9 |
| ZRNK | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | | |
| **CHKZ** | **Chkalovo** | **61.98** | **341** | | P | **P** | 01 05 51.6 | -2.4 |
| CHKZ | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | | | |
| **BOD** | **Bodaibo** | **62.31** | **9** | *e*P | | **P** | 01 05 56.1 | 0.0 |
| BOD | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.3s | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.80** | **332** | *e*P | | **P** | 01 05 58.9 | -0.8 |
| | comp=Z,5.3nm,0.7s | | | | | | | |
| ABKAR | | | | | pP | **pP** | 01 06 09.2 | +1.9 |
| **YSS** | **Yuzh-Sakhalins** | **63.07** | **32** | *e*P | | **P** | 01 06 01.6 | +0.2 |
| YSS | | | | | pmax | pmax | | |
| | comp=Z,30nm,1.0s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **64.52** | **332** | | P | **P** | 01 06 09.2 | -1.8 |
| | comp=Z,1.4nm,0.6s,baz=118,slow=1.8,SNR=5.9 | | | | | | | |
| **SVE** | **Sverdlovsk** | **67.97** | **338** | *e*P | | **P** | 01 06 32.9 | 0.0 |
| SVE | | | | | pmax | pmax | | |
| | comp=Z,16nm,2.0s | | | | | | | |
| **MAW** | **Mawson** | **68.64** | **194** | | P | **P** | 01 06 38.1 | +1.2 |
| | comp=Z,2.0nm,0.8s,baz=23,slow=7.7,SNR=5.5 | | | | | | | |
| MAW | | | | | LR | LR | 01 29 30.2 | |
| | comp=Z,61nm,20.1s,baz=62,slow=30 | | | | | | | |
| **MAW** | **Mawson** | **68.64** | **194** | *e*P | | P | 01 06 40.3 | +3.4 |
| MAW | | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **MAW** | **Mawson** | **68.64** | **194** | *e*P | | P | 01 06 40.3 | +3.4 |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **KBZ** | **Khabaz** | **69.20** | **320** | | P | **P** | 01 06 40.8 | 0.0 |
| | comp=Z,3.4nm,0.7s,baz=113,slow=7.5,SNR=8.1 | | | | | | | |
| **YAK** | **Yakutsk** | **69.39** | **15** | | P | **P** | 01 06 40.9 | -0.7 |
| | comp=Z,3.4nm,0.3s,baz=239,slow=5.9,SNR=2.2 | | | | | | | |
| **YAK** | **Yakutsk** | **69.39** | **15** | *e*P | | **P** | 01 06 41.2 | -0.4 |
| YAK | | | | | pmax | pmax | | |
| | comp=Z,22nm,1.1s | | | | | | | |
| **KIV** | **Kislovodsk** | **69.44** | **320** | *e*P | | **P** | 01 06 42.9 | +0.4 |
| KIV | | | | | *SP | **sP** | 01 06 52.0 | -1.1 |
| KIV | | | | | | | 01 07 05.0 | |
| **MMAI** | **Mount Meron Ar** | **70.60** | **307** | LR | | LR | 01 37 47.0 | |
| | comp=Z,27nm,19.9s,baz=160,slow=36 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.05** | **313** | | P | **P** | 01 07 09.4 | -0.9 |
| | comp=Z,2.3nm,0.7s,baz=136,slow=7.0,SNR=12 | | | | | | | |
| BRTR | | | | | pP | **pP** | 01 07 18.4 | +0.2 |
| | comp=Z,1.9nm,0.6s,baz=136,slow=6.9,SNR=6.7 | | | | | | | |
| **BOSA** | **Boshof** | **74.49** | **241** | LR | | LR | 01 35 16.8 | |
| | comp=Z,35nm,18.9s,baz=170,slow=32 | | | | | | | |
| **BR231** | **Keskin MP Arra** | **74.71** | **313** | *e*P | | P | 01 07 10.2 | -4.0 |
| BR231 | | | | | *epP | pP | 01 07 19.2 | -2.9 |
| **SEY** | **Seymchan** | **77.26** | **22** | | P | **P** | 01 07 28.4 | +0.3 |
| | comp=Z,3.9nm,0.8s,baz=197,slow=14,SNR=4.7 | | | | | | | |
| **SEY** | **Seymchan** | **77.26** | **22** | *e*P | | **P** | 01 07 27.8 | -0.3 |
| **OBN** | **Obninsk** | **77.89** | **328** | | P | **P** | 01 07 31.0 | -0.7 |
| OBN | | | | *i* | | | 01 07 41.9 | |
| OBN | | | | *e* | | | 01 17 39.4 | |
| OBN | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.2s | | | | | | | |
| **AKASG** | **Malin Array Be** | **80.45** | **323** | | P | **P** | 01 07 44.2 | -1.6 |
| | comp=Z,0.2nm,0.2s,baz=92,slow=3.6,SNR=4.2 | | | | | | | |
| **AKASG** | **Malin Array Be** | **80.45** | **323** | *ce*P | | **P** | 01 07 46.2 | +0.4 |
| **BUR04** | **Bucovina Ar. S** | **82.14** | **319** | *e*P | | **P** | 01 07 55.5 | +0.5 |
| **KOLS** | **Kolonicke sedl** | **84.35** | **320** | *e*P | | **P** | 01 08 07.3 | +1.0 |
| KOLS | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,1.2s | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **84.35** | **320** | *e*P | | **P** | 01 08 07.3 | +1.0 |
| **BILL** | **Bilibino** | **84.80** | **20** | | P | **P** | 01 08 05.0 | -3.1 |
| BILL | | | | *e* | | | 01 08 12.3 | |
| BILL | | | | *e* | | | 01 08 18.6 | |
| BILL | | | | | | | 01 11 32.0 | |
| BILL | | | | | PPP | PPP | 01 13 25.0 | |
| BILL | | | | | pmax | pmax | | |
| | comp=Z,6.0nm,1.1s | | | | | | | |
| **STHS** | **Stebnicka Huta** | **85.11** | **320** | *e*P | | **P** | 01 08 11.3 | +1.2 |
| STHS | | | | | pmax | pmax | | |
| | comp=Z,3.0nm,1.4s | | | | | | | |
| **STHS** | **Stebnicka Huta** | **85.11** | **320** | *e*P | | **P** | 01 08 11.3 | +1.2 |
| **FINES** | **FINESS Array B** | **85.29** | **332** | | P | **P** | 01 08 10.9 | +0.2 |
| | comp=Z,1.2nm,0.5s,baz=151,slow=4.4,SNR=8.9 | | | | | | | |
| FINES | | | | | pP | **pP** | 01 08 20.5 | +1.9 |
| | comp=Z,1.7nm,0.7s,baz=111,slow=8.4,SNR=1.4 | | | | | | | |
| **FINES** | **FINESS Array B** | **85.29** | **332** | *ce*P | | **P** | 01 08 09.8 | -0.9 |
| FINES | | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.80** | **340** | | P | **P** | 01 08 23.1 | +0.2 |
| | comp=Z,3.6nm,0.9s,baz=96,slow=7.3,SNR=4.5 | | | | | | | |
| ARCES | | | | | pP | **pP** | 01 08 32.8 | +1.9 |
| | comp=Z,3.7nm,0.9s,baz=104,slow=5.1,SNR=2.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **89.92** | **319** | | P | **P** | 01 08 33.7 | +0.2 |
| | comp=Z,0.8nm,0.7s,baz=96,slow=5.4,SNR=7.8 | | | | | | | |
| GERES | | | | | pP | **pP** | 01 08 43.3 | +1.9 |
| | comp=Z,0.4nm,0.6s,baz=73,slow=4.9,SNR=2.8 | | | | | | | |
| **CLL** | **Collm** | **90.60** | **321** | *e*P | | **P** | 01 08 35.0 | -1.4 |
| **CLL** | **Collm** | **90.60** | **321** | *e*P | | **P** | 01 08 35.0 | -1.4 |
| **KEST** | **Kesra** | **92.22** | **305** | | P | **P** | 01 08 44.8 | +0.3 |
| | comp=Z,3.7nm,0.8s,baz=21,slow=8.6,SNR=5.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **98.43** | **283** | | P | Pdif | 01 09 13.4 | +0.3 |
| | comp=Z,1.1nm,1.2s,baz=104,slow=6.3,SNR=2.6 | | | | | | | |
| TORD | | | | | LR | LR | 01 51 22.7 | |
| | comp=Z,8.6nm,20.0s,baz=320,slow=34 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **131.12** | **40** | | PKP | **PKPdf** | 01 14 47.4 | +0.7 |
| | comp=Z,0.6nm,0.7s,baz=256,slow=3.3,SNR=5.0 | | | | | | | |
| **MNTX** | **Cornudas Mount** | **143.52** | **37** | *e*PKPdf | | **PKPdf** | 01 15 08.7 | -0.8 |
| **WMOK** | **Wichita Mounta** | **144.65** | **27** | *e*PKIKP | | PKPbc | 01 15 10.2 | +0.1 |
| WMOK | | | | *e* | | | 01 15 20.1 | |
| **WMOK** | **Wichita Mounta** | **144.65** | **27** | *e*PKPdf | | PKPbc | 01 15 10.2 | 0.0 |
| WMOK | | | | *ep*PKPdf | | pPKPdf | 01 15 20.1 | +0.5 |
| **WCI** | **Wyandotte Cave** | **145.11** | **8** | *e*PKIKP | | **PKPbc** | 01 15 11.0 | -0.5 |
| WCI | | | | *e* | | | 01 15 21.7 | |
| **WCI** | **Wyandotte Cave** | **145.11** | **8** | *e*PKPbc | | **PKPbc** | 01 15 11.0 | -0.5 |
| WCI | | | | *es*PKPdf | | **sPKPdf** | 01 15 21.6 | -1.4 |
| **PBMO** | **Poplar Bluff** | **145.72** | **14** | *e*PKPdf | | **PKPdf** | 01 15 13.1 | 0.0 |
| **TXAR** | **Lajitas Array** | **146.24** | **38** | PKPbc | | **PKPbc** | 01 15 15.5 | +0.1 |
| | comp=Z,6.1nm,0.8s,baz=285,slow=1.4,SNR=61 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.88** | **20** | *e*PKP2 | | **PKPbc** | 01 15 16.8 | -0.1 |
| **MIAR** | **Mount Ida** | **146.88** | **20** | *e*PKPbc | | **PKPbc** | 01 15 16.8 | -0.1 |
| MIAR | | | | *es*PKPdf | | **sPKPdf** | 01 15 27.1 | +1.0 |
| **WVT** | **Waverly** | **146.91** | **11** | *e*PKP2 | | **PKPbc** | 01 15 17.0 | 0.0 |
| **WVT** | **Waverly** | **146.91** | **11** | *e*PKPbc | | **PKPbc** | 01 15 17.0 | 0.0 |
| WVT | | | | *es*PKPdf | | **sPKPdf** | 01 15 26.0 | -0.1 |
| **JCT** | **Junction City** | **147.61** | **32** | *e*PKP2 | | **PKPbc** | 01 15 19.3 | +0.1 |
| **JCT** | **Junction City** | **147.61** | **32** | *e*PKPbc | | **PKPbc** | 01 15 19.3 | +0.1 |
| **CPCT** | **Cooper Cave** | **148.07** | **6** | *e*PKPbc | | **PKPbc** | 01 15 20.0 | -0.3 |

**NEIC 30 01:09:25.2,20.15N×155.50W,h35km,MD4.1**(HVO),

**5C-30D, After HVO., Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HPAH** | **Hawaii Prepara** | **0.22** | **238** | *e*P | Pn | 01 09 31.1 | -0.5 |
| HPAH | | | | *e*S | Sn | 01 09 35.4 | +0.5 |
| **KKU** | **Keanakolu** | **0.29** | **149** | *i*P | Pn | 01 09 32.4 | -0.9 |
| **WKH** | **Waikii** | **0.32** | **208** | *i*P | Pb | 01 09 32.6 | -1.0 |
| **HPU** | **Hale Pohaku** | **0.36** | **173** | *i*P | Pb | 01 09 33.0 | -1.5 |
| **MHA** | **Mahukona** | **0.38** | **277** | *i*P | Pb | 01 09 32.9 | -1.2 |
| MHA | | | | *e*S | Sn | 01 09 38.9 | -1.3 |
| **POHA** | **Pohakuloa** | **0.39** | **184** | *e*Pg | Pb | 01 09 32.7 | -1.9 |
| POHA | | | | *e*Sg | Sb | 01 09 38.1 | -2.9 |
| **HUH** | **Hualalai** | **0.56** | **214** | *i*P | Pn | 01 09 35.5 | -1.5 |
| **MLOA** | **Mauna Loa Obse** | **0.61** | **187** | *i*P | Pn | 01 09 36.3 | -1.6 |
| **NGH** | **National Guard** | **0.63** | **135** | *i*P | Pn | 01 09 36.1 | -1.5 |
| **MLH** | **Mauna Loa** | **0.66** | **170** | *i*P | Pn | 01 09 36.5 | -1.9 |
| **MWH** | **Moku'aweowe** | **0.66** | **188** | *i*P | Pn | 01 09 36.6 | -2.2 |
| **WIH** | **Wilkes Camp** | **0.68** | **187** | *i*P | Pn | 01 09 36.8 | -2.2 |
| **KIH** | **Kanekii** | **0.68** | **201** | *e*P | Pn | 01 09 37.1 | -1.5 |
| **KKH** | **Kailua Kona** | **0.69** | **225** | *e*Pn | Pn | 01 09 36.6 | -1.8 |
| **SWH** | **Southwest Rift** | **0.69** | **188** | *i*P | Pn | 01 09 36.7 | -2.5 |
| **TRH** | **Trail** | **0.73** | **183** | *i*P | Pn | 01 09 37.5 | -2.1 |
| **RCO** | **Red Cone** | **0.74** | **189** | *i*P | Pn | 01 09 37.2 | -2.7 |
| **UWE** | **Uwekahuna** | **0.75** | **165** | *e*Pn | Pn | 01 09 37.4 | -2.1 |
| UWE | | | | *e*Sn | Sn | 01 09 45.9 | -3.8 |
| **CPH** | **Captain Cook** | **0.76** | **211** | *i*P | Pn | 01 09 37.5 | -2.0 |
| **CPK** | **Cone Peak** | **0.76** | **168** | *i*P | Pn | 01 09 37.6 | -2.1 |
| **AIN** | **Ainahou** | **0.77** | **177** | *i*P | Pn | 01 09 38.0 | -1.9 |
| **OUT** | **Outlet** | **0.78** | **165** | *i*P | Pn | 01 09 37.7 | -2.2 |
| **AHA** | **Ahua** | **0.80** | **164** | *i*P | Pn | 01 09 38.0 | -2.2 |
| **DAH** | **Dandelion** | **0.80** | **191** | *i*P | Pn | 01 09 38.0 | -2.5 |
| **DES** | **Desert** | **0.81** | **172** | *i*P | Pn | 01 09 38.3 | -2.0 |
| **KNHH** | **Kane Nui o Ham** | **0.82** | **158** | *i*P | Pn | 01 09 38.4 | -2.1 |
| **HLP** | **Hilina Pali** | **0.86** | **168** | *i*P | Pn | 01 09 38.8 | -2.2 |
| **HUL** | **Heiheiahulu** | **0.87** | **146** | *i*P | Pn | 01 09 39.0 | -2.1 |
| **PKL** | **Puu Kaliu** | **0.88** | **141** | *i*P | Pn | 01 09 39.0 | -2.1 |
| **WOH** | **Wood Valley** | **0.89** | **180** | *i*P | Pn | 01 09 39.3 | -2.1 |
| **PWH** | **Poliokeawe Pal** | **0.90** | **163** | *i*P | Pn | 01 09 39.2 | -2.2 |
| **HTC** | **Hot Caves** | **0.91** | **174** | *i*P | Pn | 01 09 39.6 | -2.0 |
| **KAE** | **Kaena** | **0.92** | **158** | *i*P | Pn | 01 09 39.7 | -2.0 |
| **HLK** | **Haleakala** | **0.93** | **311** | *i*P | Pn | 01 09 39.6 | -2.5 |
| HLK | | | | *e*Sn | Sn | 01 09 49.5 | -5.0 |
| **KUH** | **Kaapuna** | **0.94** | **202** | *i*P | Pn | 01 09 39.9 | -2.1 |
| **PPL** | **Puu Pili** | **0.98** | **178** | *i*P | Pn | 01 09 40.5 | -2.0 |
| **HPO** | **Honuapo** | **1.05** | **183** | *e*Pn | Pn | 01 09 41.4 | -2.1 |
| **SPT** | **South Point** | **1.17** | **188** | *i*P | Pn | 01 09 42.8 | -2.3 |
| **WMR** | **Waimanalo Ridg** | **2.35** | **300** | *i*P | Pn | 01 09 58.9 | -2.5 |
| **HON** | **Honolulu** | **2.62** | **297** | *e*Pn | Pn | 01 10 02.8 | -2.3 |
| HON | | | | *e*Sn | Sn | 01 10 29.4 | -6.2 |
| **OPA** | **Opana** | **2.80** | **304** | *e*Pn | Pn | 01 10 04.9 | -2.7 |
| OPA | | | | *e*Sn | Sn | 01 10 33.5 | -6.7 |
| **KEKH** | **Kekaha** | **4.33** | **296** | *e*P | Pn | 01 10 25.8 | -2.9 |

*IDC* ***30*** *01:29:39.4±15.0, 17.25N×39.86E, h0km, mb3.6/3, mb1 3.6/3, mb1mx3.2/44, mbtmp3.6/3, Error ellipse: s-maj=638.9km s-min=29.9km az=154.0*
*ISCJB* ***30*** *01:29:50.6±1.4, 20.3N±0.2×38.3E±0.1, h10km, mb3.6/3, Error ellipse: s-maj=25.4km s-min=13.9km az=37.6*
*HLW* ***30*** *01:29:51.2, 20.08N×38.36E, h13km±12km, Md3.1*

**ISC 30 01:29:52.2±1.7, 20.3N±0.2×38.3E±0.2, h10km, n7, σ0.94/8, mb3.6/3, Red Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HSHL** | **Bi'r Shalatayn** | **3.85** | **317** | P | **Pn** | **01 30 51.5** | **-0.1** |
| | baz=319 | | | | | | |
| **HAGS** | **Hagol** | **5.06** | **324** | P | **Pn** | **01 31 08.2** | **-0.1** |
| | baz=325 | | | | | | |
| HAGS | | | | S | **Sn** | **01 32 06.7** | **-0.1** |
| | baz=325 | | | | | | |
| **EMRS** | **Mersa Alam** | **5.65** | **327** | P | **Pn** | **01 31 16.1** | **-0.2** |
| | baz=328 | | | | | | |
| **HADB** | | **6.04** | **327** | P | **Pn** | **01 31 21.8** | **+0.2** |
| | baz=328 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **35.68** | **264** | P | **P** | **01 36 51.0** | **0.0** |
| | 0.9nm,1.0s,baz=68,slow=8.5,SNR=5.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **44.41** | **43** | P | **P** | **01 38 01.8** | **-1.3** |
| | 0.3nm,0.4s,baz=239,slow=7.3,SNR=4.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **48.71** | **35** | P | **P** |

comp=N,4.3nm,1.3s
ABKAR **Akbulak array** 143.92 54 *e*PKPdf PKPbc 01 52 24.4 -0.1
ZALV **Zalesovo Beam** 156.64 33 PKPab **PKPab** 01 53 14.5 -0.9
comp=N,0.4nm,0.4s,baz=300,slow=3.3,SNR=3.8

**MAN 30 01:43:53,8.75N×122.74E,h33km,mb4.2,ML3.0,MS2.7, 1C,Mindanao**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DCPH** | **Dipolog City** | **0.63** | **105** | ⇑*i* P | Pb | 01 44 06.8 | +1.1 |
| **IPIL** | **Ipil** | **0.97** | **190** | *e*P | Pb | 01 44 11.6 | +0.2 |
| IPIL | | | | *e*S | Sb | 01 44 24.0 | 0.0 |
| **PAGZ** | **Pagadian** | **1.10** | **145** | *e*P | Pb | 01 44 15.0 | +1.5 |
| PAGZ | | | | *e*S | Sb | 01 44 26.9 | -0.6 |
| **GUIM** | **Jordan** | **1.87** | **355** | *e*P | Pn | 01 44 24.0 | +1.3 |

*ATH **30** 01:48:44.4,37.11N×28.59E,h20km±2km,MD3.5/8*
*ISCJB **30** 01:48:45.6±0.5,37.03N±0.02×28.51E±0.02,h5km±4km, Error ellipse: s-maj=3.4km s-min=2.9km az=29.8*
*DDA **30** 01:48:45.6,37.05N×28.53E,h24km,Md3.1*
*ISK **30** 01:48:45.2,37.02N×28.49E,h9km,ML3.9*
*CSEM **30** 01:48:46.0±0.1,37.02N×28.51E,h5km,ML3.9, Error ellipse: s-maj=3.1km s-min=2.7km az=24.0*
**ISC 30 01:48:46.3±1.1,37.05N±0.02×28.50E±0.02,h4km±9km, n103,σ0§96/139,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.20** | **296** | PG | **Pg** | **01 48 49.9** | **-0.3** |
| YER | | | | *e*SG | **Sg** | **01 48 53.2** | **+0.4** |
| **YER** | **Yerkesik** | **0.20** | **296** | *i* Pg | **Pg** | **01 48 49.9** | **-0.3** |
| YER | | | | *e*Sg | **Sg** | **01 48 53.2** | **+0.4** |
| **DALY** | **Dalyan (Mu¨la** | **0.26** | **152** | *e*PG | **Pg** | **01 48 50.5** | **-0.8** |
| DALY | | | | *e*SG | **Sg** | **01 48 54.4** | **-0.4** |
| **DALY** | **Dalyan (Mu¨la** | **0.26** | **152** | *e*Pg | **Pg** | **01 48 50.5** | **-0.8** |
| DALY | | | | *e*Sg | **Sg** | **01 48 54.4** | **-0.4** |
| **FETY** | **Fethiye** | **0.62** | **131** | *e*PG | **Pg** | **01 48 57.4** | **-0.9** |
| FETY | | | | *e*SG | **Sg** | **01 49 06.4** | **+0.1** |
| **FETY** | **Fethiye** | **0.62** | **131** | *e*Pg | **Pg** | **01 48 57.4** | **-0.9** |
| FETY | | | | *e*Sg | **Sg** | **01 49 06.4** | **+0.1** |
| **DNZL** | **Cakiroluk** | **0.77** | **34** | *i* P | **Pg** | **01 49 00.1** | **-1.1** |
| DNZL | | | | *i* S | **Sb** | **01 49 12.9** | **-0.6** |
| **DNZL** | **Cakiroluk** | **0.77** | **34** | P | **Pg** | **01 49 00.1** | **-1.1** |
| DNZL | | | | S | **Sb** | **01 49 12.9** | **-0.6** |
| **AYDN** | **Tasoluk** | **0.79** | **321** | *i* P | **Pb** | **01 49 02.9** | **+0.2** |
| AYDN | | | | *i* S | **Sb** | **01 49 13.7** | **-0.1** |
| **AYDN** | **Tasoluk** | **0.79** | **321** | P | **Pb** | **01 49 02.9** | **+0.2** |
| AYDN | | | | S | **Sb** | **01 49 13.8** | **-0.1** |
| **BDRM** | **Kayabasi** | **0.85** | **271** | *i* P | **Pg** | **01 49 02.3** | **-0.3** |
| BDRM | | | | *i* S | **Sb** | **01 49 15.6** | **+0.2** |
| **BDRM** | **Kayabasi** | **0.85** | **271** | P | **Pg** | **01 49 02.3** | **-0.3** |
| BDRM | | | | S | **Sb** | **01 49 15.6** | **+0.2** |
| **GOLH** | **Golhisar** | **0.87** | **77** | *i* P | **Pg** | **01 49 02.1** | **-0.9** |
| GOLH | | | | *i* S | **Sg** | **01 49 15.0** | **+0.8** |
| **GOLH** | **Golhisar** | **0.87** | **77** | P | **Pg** | **01 49 02.1** | **-0.9** |
| GOLH | | | | S | **Sg** | **01 49 15.0** | **+0.8** |
| **ARG** | **Arkhangelos** | **0.88** | **200** | *e*PB | **Pg** | **01 49 02.2** | **-1.1** |
| ARG | | | | *e*SN | **Sb** | **01 49 16.9** | **+0.5** |
| **ARG** | **Arkhangelos** | **0.88** | **200** | *e*Pb | **Pg** | **01 49 02.2** | **-1.1** |
| ARG | | | | *e*Sn | **Sb** | **01 49 16.9** | **+0.5** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.02** | **332** | *e*PG | **Pg** | **01 49 05.6** | **-0.3** |
| AYDB | | | | *e*SG | **Sb** | **01 49 20.5** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.02** | **332** | *e*Pg | **Pg** | **01 49 05.6** | **-0.3** |
| AYDB | | | | *e*Sg | **Sb** | **01 49 20.5** | **0.0** |
| **NIS1** | **Nisyros Isl.** | **1.15** | **248** | *e*PN | **Pg** | **01 49 07.9** | **-0.5** |
| NIS1 | | | | *e*SN | **Sn** | **01 49 25.1** | **-0.5** |
| **NIS1** | **Nisyros Isl.** | **1.15** | **248** | *e*Pn | **Pg** | **01 49 07.9** | **-0.5** |
| NIS1 | | | | *e*Sn | **Sn** | **01 49 25.1** | **-0.5** |
| **ELL** | **Elmali** | **1.17** | **104** | *e*PN | **Pg** | **01 49 08.1** | **-0.6** |
| **ELL** | **Elmali** | **1.17** | **104** | *e*Pn | **Pg** | **01 49 08.1** | **-0.6** |
| **AKAS** | **Kas** | **1.20** | **132** | *i* P | **Pg** | **01 49 08.5** | **-0.9** |
| **AKAS** | **Kas** | **1.20** | **132** | P | **Pg** | **01 49 08.5** | **-0.9** |
| AKAS | | | | S | **Sn** | **01 49 30.7** | **+3.8** |
| **GCAM** | **G?zelcaml?** | **1.20** | **303** | *i* P | **Pg** | **01 49 08.9** | **-0.5** |
| GCAM | | | | *i* S | **Sn** | **01 49 26.4** | **-0.4** |
| **GCAM** | **G?zelcaml?** | **1.20** | **303** | P | **Pg** | **01 49 08.8** | **-0.5** |
| GCAM | | | | S | **Sn** | **01 49 26.4** | **-0.4** |
| **KSL** | **Kastellorizon** | **1.25** | **136** | *e*PN | **Pg** | **01 49 08.3** | **-2.0** |
| **MANT** | **Manisa** | **1.44** | **2** | *i* P | **Pn** | **01 49 12.4** | **-1.1** |
| MANT | | | | *i* S | **Sg** | **01 49 32.7** | **+0.1** |
| **MANT** | **Manisa** | **1.44** | **2** | P | **Pn** | **01 49 12.4** | **-1.1** |
| MANT | | | | S | **Sg** | **01 49 32.8** | **+0.1** |
| **KULA** | **Kula-Manisa** | **1.47** | **5** | *e*PN | **Pn** | **01 49 13.0** | **-0.7** |
| **KULA** | **Kula-Manisa** | **1.47** | **5** | *e*Pn | **Pn** | **01 49 13.0** | **-0.7** |
| **KORT** | **Korkueli** | **1.48** | **91** | *i* P | **Pg** | **01 49 14.8** | **+0.1** |
| **KORT** | **Korkueli** | **1.48** | **91** | P | **Pg** | **01 49 14.8** | **+0.1** |
| KORT | | | | S | **Sg** | **01 49 38.0** | **+4.2** |
| **SMG** | **Samos** | **1.48** | **297** | *e*PN | **Pn** | **01 49 12.6** | **-1.2** |
| **SMG** | **Samos** | **1.48** | **297** | *e*Pn | **Pn** | **01 49 12.6** | **-1.2** |
| **KHL** | **Karahalli** | **1.51** | **32** | *e*PN | **Pn** | **01 49 13.5** | **-0.8** |
| **KHL** | **Karahalli** | **1.51** | **32** | *e*Pn | **Pn** | **01 49 13.5** | **-0.8** |
| **KHAL** | **Karahalli** | **1.54** | **30** | *i* P | **Pn** | **01 49 13.7** | **-1.0** |
| KHAL | | | | *i* S | **Sb** | **01 49 34.9** | **-0.4** |
| **KHAL** | **Karahalli** | **1.54** | **30** | P | **Pn** | **01 49 13.7** | **-1.0** |
| KHAL | | | | S | **Sb** | **01 49 34.9** | **-0.4** |
| **IZM** | **Izmir** | **1.67** | **324** | *e*PN | **Pn** | **01 49 15.3** | **-1.2** |
| **IZM** | **Izmir** | **1.67** | **324** | *e*Pn | **Pn** | **01 49 15.3** | **-1.2** |
| **BCK** | **Bucak** | **1.71** | **75** | *e*PN | **Pn** | **01 49 16.5** | **-0.6** |
| **BCK** | **Bucak** | **1.71** | **75** | *e*Pn | **Pn** | **01 49 16.5** | **-0.6** |
| **ANTB** | **Antalya** | **1.73** | **94** | *e*PN | **Pn** | **01 49 16.3** | **-0.9** |
| **ANTB** | **Antalya** | **1.73** | **94** | *e*Pn | **Pn** | **01 49 16.3** | **-0.9** |
| **KARP** | **Karpathos** | **1.85** | **216** | *e*PN | **Pn** | **01 49 18.2** | **-0.7** |
| **KARP** | **Karpathos** | **1.85** | **216** | *e*Pn | **Pn** | **01 49 18.2** | **-0.7** |
| **AKHS** | **Akhisar** | **1.91** | **344** | *i* P | **Pn** | **01 49 18.5** | **-1.2** |
| **AKHS** | **Akhisar** | **1.91** | **344** | P | **Pn** | **01 49 18.5** | **-1.2** |
| **AKS** | **Akhisar** | **1.91** | **344** | *e*PN | **Pn** | **01 49 18.6** | **-1.1** |
| **AKS** | **Akhisar** | **1.91** | **344** | *e*Pn | **Pn** | **01 49 18.6** | **-1.1** |
| **ZEY** | **¨zmir** | **1.98** | **307** | P | **Pn** | **01 49 19.3** | **-1.4** |
| **DEMI** | **Demirci** | **2.00** | **5** | *i* P | **Pn** | **01 49 20.0** | **-1.0** |
| DEMI | | | | *i* S | **Sn** | **01 49 45.3** | **-1.3** |
| **DEMI** | **Demirci** | **2.00** | **5** | P | **Pn** | **01 49 20.0** | **-1.0** |
| DEMI | | | | S | **Sn** | **01 49 45.3** | **-1.3** |
| **URLA** | **Izmir** | **2.00** | **311** | *i* P | **Pg** | **01 49 24.7** | **0.0** |
| **URLA** | **Izmir** | **2.00** | **311** | P | **Pg** | **01 49 24.7** | **0.0** |
| URLA | | | | S | **Sg** | **01 49 55.0** | **+4.3** |
| **SUTC** | **Sutluce-Ispart** | **2.04** | **77** | *e*PN | **Pn** | **01 49 20.9** | **-0.7** |
| **SUTC** | **Sutluce-Ispart** | **2.04** | **77** | *e*Pn | **Pn** | **01 49 20.9** | **-0.7** |
| **BAGO** | **Egridir - ISPA** | **2.05** | **62** | P | **Pn** | **01 49 22.1** | **+0.4** |
| **SHUT** | **Suhut-Afyon** | **2.21** | **47** | *e*PN | **Pn** | **01 49 23.6** | **-0.4** |
| **SHUT** | **Suhut-Afyon** | **2.21** | **47** | *e*Pn | **Pn** | **01 49 23.6** | **-0.4** |
| **APE** | **Apeiranthos** | **2.38** | **271** | *e*PN | **Pn** | **01 49 25.2** | **-1.0** |
| **APE** | **Apeiranthos** | **2.38** | **271** | *e*Pn | **Pn** | **01 49 25.2** | **-1.0** |
| **TVSB** | **Tavsanli** | **2.51** | **17** | *e*PN | **Pn** | **01 49 27.8** | **-0.3** |
| **TVSB** | **Tavsanli** | **2.51** | **17** | *e*Pn | **Pn** | **01 49 27.8** | **-0.3** |
| **BALB** | **Balikesir** | **2.63** | **349** | *e*PN | **Pn** | **01 49 29.6** | **-0.1** |
| **BALB** | **Balikesir** | **2.63** | **349** | *e*Pn | **Pn** | **01 49 29.6** | **-0.1** |
| **NPS** | **Neapolis** | **2.94** | **234** | *e*PN | **Pn** | **01 49 33.5** | **-0.4** |
| **NPS** | **Neapolis** | **2.94** | **234** | *e*Pn | **Pn** | **01 49 33.5** | **-0.4** |
| **SIGR** | **SIGRI** | **3.00** | **317** | *e*PN | **Pn** | **01 49 34.9** | **+0.1** |
| **SIGR** | **SIGRI** | **3.00** | **317** | *e*Pn | **Pn** | **01 49 34.9** | **+0.1** |
| **LAST** | **Lasithi** | **3.09** | **233** | *e*PN | **Pn** | **01 49 36.0** | **0.0** |
| **LAST** | **Lasithi** | **3.09** | **233** | *e*Pn | **Pn** | **01 49 36.0** | **0.0** |
| **KONT** | **Konya--Tatoy** | **3.19** | **73** | *e*PN | **Pn** | **01 49 37.3** | **-0.1** |
| **KONT** | **Konya--Tatoy** | **3.19** | **73** | *e*Pn | **Pn** | **01 49 37.3** | **-0.1** |
| **KIZT** | **Kizilcal** | **3.23** | **55** | *e*PN | **Pn** | **01 49 38.0** | **0.0** |
| **KIZT** | **Kizilcal** | **3.23** | **55** | *e*Pn | **Pn** | **01 49 38.0** | **0.0** |
| **EZN** | **Ezine** | **3.26** | **329** | *e*PN | **Pn** | **01 49 38.4** | **+0.1** |
| **EZN** | **Ezine** | **3.26** | **329** | *e*Pn | **Pn** | **01 49 38.4** | **+0.1** |
| **EDC** | **Edincik** | **3.33** | **352** | *e*PN | **Pn** | **01 49 39.5** | **+0.2** |
| **EDC** | **Edincik** | **3.33** | **352** | *e*Pn | **Pn** | **01 49 39.5** | **+0.2** |
| **SVRH** | **Sivrihisar-ESK** | **3.37** | **44** | *e*PN | **Pn** | **01 49 40.2** | **+0.3** |
| **SVRH** | **Sivrihisar-ESK** | **3.37** | **44** | *e*Pn | **Pn** | **01 49 40.2** | **+0.3** |
| **IDI** | **Anoyia** | **3.41** | **240** | *e*PN | **Pn** | **01 49 40.4** | **0.0** |
| **IDI** | **Anoyia** | **3.41** | **240** | *e*Pn | **Pn** | **01 49 40.4** | **0.0** |
| **SIVA** | **Sivas** | **3.62** | **237** | *e*PN | **Pn** | **01 49 43.4** | **+0.3** |
| **SIVA** | **Sivas** | **3.62** | **237** | *e*Pn | **Pn** | **01 49 43.4** | **+0.3** |
| **GELI** | **Tayfur-Gelibol** | **3.70** | **335** | *e*PN | **Pn** | **01 49 44.7** | **+0.4** |
| **GELI** | **Tayfur-Gelibol** | **3.70** | **335** | *e*Pn | **Pn** | **01 49 44.7** | **+0.4** |
| **GULT** | **Gulveren** | **3.73** | **24** | *e*PN | **Pn** | **01 49 45.1** | **+0.3** |
| **GULT** | **Gulveren** | **3.73** | **24** | *e*Pn | **Pn** | **01 49 45.1** | **+0.3** |
| **MDUB** | **Mudurnu** | **4.01** | **31** | *e*PN | **Pn** | **01 49 49.1** | **+0.4** |
| **MDUB** | **Mudurnu** | **4.01** | **31** | *e*Pn | **Pn** | **01 49 49.2** | **+0.4** |
| **ALN** | **Alexandroupoli** | **4.29** | **334** | *e*PN | **Pn** | **01 49 53.6** | **+1.2** |
| **ALN** | **Alexandroupoli** | **4.29** | **334** | *e*Pn | **Pn** | **01 49 53.7** | **+1.2** |
| **AFSR** | **Af¨ar-Bala (A** | **4.32** | **55** | *e*PN | **Pn** | **01 49 53.6** | **+0.7** |
| **AFSR** | **Af¨ar-Bala (A** | **4.32** | **55** | *e*Pn | **Pn** | **01 49 53.6** | **+0.7** |
| **CSS** | **Prodhromos** | **4.43** | **117** | *e*PN | **Pn** | **01 49 55.1** | **+0.7** |
| **CSS** | **Prodhromos** | **4.43** | **117** | *e*Pn | **Pn** | **01 49 55.1** | **+0.7** |
| **CORM** | **Corum** | **5.72** | **55** | *e*PN | **Pn** | **01 50 13.7** | **+1.4** |
| **CORM** | **Corum** | **5.72** | **55** | *e*Pn | **Pn** | **01 50 13.7** | **+1.4** |
| **TAHT** | **Tahtakopru-Hat** | **6.21** | **94** | *e*PN | **Pn** | **01 50 20.4** | **+1.6** |
| **TAHT** | **Tahtakopru-Hat** | **6.21** | **94** | *e*Pn | **Pn** | **01 50 20.4** | **+1.6** |

*NIED **30** 02:08:00,33.60N×131.80E,h92km,Mw4.1 Best double couple: M0 1.50000×10^15 NP1:φs50.00000°,δ2.00000°, λ-44.00000°. NP2:φs184.00000°,δ89.00000°, λ-91.00000°.*
*ISCJB **30** 02:08:41.4±0.3,33.59N±0.03×131.80E±0.03,h97km±2km, mb3.8/12,Error ellipse: s-maj=5.8km s-min=4.1km az=17.2*
*IDC **30** 02:08:42.4±0.6,33.60N×131.70E,h94km±4km,mb3.5/12, mb1 3.8/16,mb1mx3.7/33,mbtmp4.0/16,MS2.5/3, Ms1 2.6/3,ms1mx2.4/32,Error ellipse: s-maj=13.8km s-min=10.0km az=124.0*
*JMA **30** 02:08:42.9,33.61N×131.80E,h87km±1km,M3.8 Broadband fault plane solution: P waves. NP1: φs189.00000°,δ73.00000°,λ-109.00000°. NP2: φs58.00000°,δ26.00000°,λ-44.00000°. Principal axes: T Plg25.0000°, Azm294.0000°; N Plg18.0000°, Azm195.0000°; P Plg58.0000°, Azm73.0000°;*
*JMA Felt II J1.*
**ISC 30 02:08:42.1±0.6,33.59N±0.04×131.82E±0.04,h93km±4km, n64,σ1§03/83,mb3.8/12,10C-3D,Kyushu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JKI** | **Kunimi** | **0.21** | **281** | ⇓P | **Pn** | **02 08 55.6** | **+0.1** |
| JKI | | | | S | **Sn** | **02 09 05.2** | **-0.3** |
| **JBEP** | **Beppuamama** | **0.43** | **233** | ⇓P | **Pn** | **02 08 57.0** | **+0.3** |
| **JKD** | **Kudamatsu** | **0.46** | **6** | ⇓P | **Pn** | **02 08 57.0** | **0.0** |
| JKD | | | | S | **Sn** | **02 09 07.2** | **-0.8** |
| **JNA** | **Nagahama** | **0.56** | **94** | ⇑P | **Pn** | **02 08 58.0** | **+0.4** |
| JNA | | | | S | **Sn** | **02 09 09.4** | **+0.2** |
| **UWA2** | **Uwa jima 2** | **0.78** | **119** | ⇑P | **Pn** | **02 08 59.9** | **+0.2** |
| UWA2 | | | | S | **Sn** | **02 09 13.1** | **+0.3** |
| **JHM** | **Kurahashi** | **0.81** | **47** | ⇑P | **Pn** | **02 09 00.3** | **+0.3** |
| JHM | | | | S | **Sn** | **02 09 13.2** | **-0.1** |
| **JNU** | **Nakatsue** | **0.91** | **239** | P | **Pn** | **02 09 01.7** | **+0.5** |
| JNU | 801nm,0.3s,baz=356,slow=14,SNR=2675 | | | LR | LR | 02 09 10.7 | |
| JNU | comp=Z,37nm,21.0s,baz=116,slow=34 | | | S | **Sn** | **02 09 15.3** | **-0.1** |
| **JET** | 232nm,0.3s,baz=127,slow=23,SNR=36 **Tanbara** | **1.04** | **79** | ⇑P | **Pn** | **02 09 03.1** | **+0.5** |
| JET | | | | S | **Sn** | **02 09 17.8** | **-0.2** |
| **JKU** | **Kubokawa** | **1.08** | **105** | ⇑P | **Pn** | **02 09 03.3** | **+0.3** |
| JKU | | | | S | **Sn** | **02 09 18.6** | **-0.1** |
| **JTO** | **Tosashimizu** | **1.10** | **131** | ⇑P | **Pn** | **02 09 03.4** | **+0.2** |
| JTO | | | | S | **Sn** | **02 09 19.1** | **0.0** |
| **JHT** | **Toyohira** | **1.18** | **25** | ⇑P | **Pn** | **02 09 04.8** | **+0.6** |
| JHT | | | | S | **Sn** | **02 09 20.5** | **-0.2** |
| **JGT** | **Gotsu** | **1.50** | **17** | ⇑P | **Pn** | **02 09 08.8** | **+0.8** |
| JGT | | | | S | **Sn** | **02 09 27.6** | **+0.1** |
| **JMN** | **Monobe** | **1.73** | **85** | ⇑P | **Pn** | **02 09 11.3** | **+0.4** |
| JMN | | | | S | **Sn** | **02 09 32.1** | **-0.7** |
| **JHS** | **Saijyo** | **1.77** | **37** | ⇑P | **Pn** | **02 09 12.3** | **+0.8** |
| JHS | | | | S | **Sn** | **02 09 33.3** | **-0.5** |
| **KSBUS** | **Busan** SNR=8.2 | **2.78** | **307** | P | **Pn** | **02 09 24.9** | **+0.2** |
| **KSBUS** | **Busan** SNR=26 | **2.78** | **307** | P | **Pn** | **02 09 24.8** | **0.0** |
| **KSDAG** | **Daegu** SNR=5.5 | **3.24** | **313** | P | **Pn** | **02 09 31.1** | **+0.1** |
| **KSDAG** | **Daegu** SNR=28 | **3.24** | **313** | P | **Pn** | **02 09 31.0** | **+0.1** |
| **KSPHA** | **Pohang** SNR=7.1 | **3.28** | **323** | P | **Pn** | **02 09 31.5** | **+0.1** |
| **KSPHA** | **Pohang** SNR=7.1 | **3.28** | **323** | P | **Pn** | **02 09 31.5** | **+0.1** |
| **KSYOC** | **YEONGCHEON** SNR=13 | **3.34** | **316** | P | **Pn** | **02 09 32.7** | **+0.4** |
| **KSYOC** | **YEONGCHEON** SNR=13 | **3.34** | **316** | P | **Pn** | **02 09 32.7** | **+0.4** |
| **KSNAH** | **Namhae** SNR=13 | **3.45** | **292** | P | **Pn** | **02 09 34.2** | **+0.5** |
| **KSNAH** | **Namhae** SNR=13 | **3.45** | **292** | P | **Pn** | **02 09 34.2** | **+0.5** |
| **KSJIN** | **Jinju** SNR=8.2 | **3.50** | **298** | P | **Pn** | **02 09 35.0** | **+0.6** |
| **KSJIN** | **Jinju** SNR=8.2 | **3.50** | **298** | P | **Pn** | **02 09 35.0** | **+0.6** |
| **KSULJ** | **Uljin** SNR=22 | **3.67** | **328** | P | **Pn** | **02 09 36.8** | **+0.1** |
| **KSULJ** | **Uljin** SNR=22 | **3.67** | **328** | P | **Pn** | **02 09 36.8** | **+0.1** |
| **KSEUS** | **ULSEONG** SNR=15 | **3.76** | **318** | P | **Pn** | **02 09 38.7** | **+0.7** |
| **KSEUS** | **ULSEONG** SNR=15 | **3.76** | **318** | P | **Pn** | **02 09 38.7** | **+0.7** |
| **KSKOH** | **Goheung** SNR=9.5 | **3.90** | **286** | P | **Pn** | **02 09 40.7** | **+0.9** |
| **KSKOH** | **Goheung** SNR=9.5 | **3.90** | **286** | P | **Pn** | **02 09 40.7** | **+0.9** |
| **KSCPR** | **CHUPUNGNYEONG** SNR=6.0 | **4.10** | **311** | P | **Pn** | **02 09 43.5** | **+0.9** |
| **KSCPR** | **CHUPUNGNYEONG** SNR=6.0 | **4.10** | **311** | P | **Pn** | **02 09 43.5** | **+0.9** |
| **KSTBA** | **Taebaek** SNR=23 | **4.23** | **327** | P | **Pn** | **02 09 45.2** | **+0.9** |
| **KSTBA** | **Taebaek** SNR=23 | **4.23** | **327** | P | **Pn** | **02 09 45.2** | **+0.9** |
| **KSKWJ** | **Gwangju** SNR=10 | **4.29** | **293** | P | **Pn** | **02 09 45.7** | **+0.7** |
| **KSKWJ** | **Gwangju** SNR=10 | **4.29** | **293** | P | **Pn** | **02 09 45.7** | **+0.7** |
| **KSJEU** | **Jeongeup** SNR=12 | **4.46** | **297** | P | **Pn** | **02 09 48.3** | **+1.0** |
| **KSCHJ** | **Chungju** SNR=13 | **4.54** | **317** | P | **Pn** | **02 09 49.3** | **+0.9** |
| **KSCHJ** | **Chungju** SNR=13 | **4.54** | **317** | P | **Pn** | **02 09 49.3** | **+0.9** |
| **KSJMJ** | **Jumunjin** SNR=9.0 | **4.95** | **331** | P | **Pn** | **02 09 55.1** | **+1.1** |
| **KSRS** | **Korea Array** 3.4nm,0.3s,baz=142,slow=14,SNR=30 | **4.99** | **322** | P | **Pn** | **02 09 55.9** | **+1.3** |
| KSRS | 2.4nm,0.3s,baz=138,slow=26,SNR=6.6 | | | S | **Sn** | **02 10 50.3** | **-0.7** |
| KSRS | comp=Z,20nm,21.2s,baz=85,slow=32 | | | LR | LR | 02 11 22.7 | |
| **SEHB** | **SEOHWA** SNR=21 | **5.49** | **329** | P | **Pn** | **02 10 03.2** | **+1.8** |
| **YNCB** | **YEONCHEON** SNR=9.1 | **5.96** | **320** | P | **Pn** | **02 10 09.5** | **+1.8** |
| **MAT** | **Matsushiro** | **6.01** | **59** | P | **Pn** | **02 10 10.9** | **+2.4** |
| MAT | | | | *e*S | **Sn** | **02 11 14.2** | **-1.7** |
| **MJAR** | **Matsushiro Arr** 10.0nm,0.3s,baz=240,slow=14,SNR=33 | **6.01** | **59** | P | **Pn** | **02 10 11.0** | **+2.5** |
| MJAR | 2.7nm,0.3s,baz=218,slow=17,SNR=5.3 | | | S | **Sn** | **02 11 10.8** | **-5.2** |
| **JHJ** | **Hachijo jima 2** 59nm,0.3s,baz=263,slow=6.4,SNR=3.5 | **6.68** | **92** | P | **Pn** | **02 10 19.5** | **+1.9** |
| **ASAJ** | **Asahikawa** 0.7nm,0.3s,baz=218,slow=17,SNR=2.6 | **13.44** | **35** | P | **Pn** | **02 11 50.0** | **+1.1** |
| **SONM** | **Songino Array** 4.0nm,0.7s,baz=132,slow=10.0,SNR=17 | **23.81** | **314** | P | **P** | **02 13 46.8** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** comp=Z,14nm,19.9s,baz=55,slow=38 | **32.99** | **251** | LR | LR | 02 29 32.8 | |
| **ZALV** | **Zalesovo Beam** 0.7nm,0.5s,baz=77,slow=15,SNR=3.2 | **38.67** | **316** | P | **P** | **02 15 56.3** | **-0.2** |
| **MKAR** | **Makanchi Array** 0.7nm,0.6s,baz=91,slow=11,SNR=6.5 | **39.43** | **305** | P | **P** | **02 16 02.8** | **-0.2** |
| MKAR | 1.0nm,0.8s,baz=94,slow=9.8,SNR=4.6 | | | pP | **pP** | **02 16 24.3** | **-0.4** |
| MKAR | 0.6nm,0.6s,baz=98,slow=8.9,SNR=3.5 | | | sP | **sP** | **02 16 34.0** | **-1.3** |
| MKAR | 0.4nm,0.7s,baz=90,slow=5.8,SNR=3.2 | | | ScP | **ScP** | **02 21 47.2** | **-2.1** |
| **WRA** | **Warramunga Arr** 0.7nm,0.5s,baz=354,slow=8.2,SNR=13 | **53.29** | **177** | P | **P** | **02 17 51.4** | **-0.1** |
| WRA | 0.7nm,0.8s,baz=352,slow=7.7,SNR=3.3 | | | pP | **pP** | **02 18 13.6** | **-0.6** |
| **ILAR** | **Eielson Array** 0.4nm,0.7s,baz=270,slow=7.2,SNR=7.4 | **56.52** | **31** | P | **P** | **02 18 15.6** | **+1.3** |
| ILAR | 0.6nm,0.8s,baz=282,slow=7.7,SNR=4.8 | | | pP | **pP** | **02 18 38.0** | **+0.8** |
| **ASAR** | **Alice Springs** 0.6nm,0.7s,baz=358,slow=5.9,SNR=8.7 | **56.98** | **178** | P | **P** | **02 18 18.6** | **+0.6** |
| **ARCES** | **ARCESS Array B** 1.2nm,0.5s,baz=55,slow=7.8,SNR=7.8 | **64.34** | **338** | P | **P** | **02 19 07.3** | **-0.1** |
| **FINES** | **FINESS Array B** | **68.03** | **330** | P | **P** | **02 19 30.4** | **-0.6** |
| FINES | 0.8nm,0.4s,baz=76,slow=4.9,SNR=10 | | | pP | **pP** | **02 19 54.0** | **-0.8** |
| **AKASG** | 1.0nm,0.8s,baz=93,slow=4.7,SNR=0.9 **Malin Array Be** | **71.98** | **319** | P | **P** | **02 19 54.9** | **-0.6** |
| **NOA** | 0.3nm,0.4s,baz=55,slow=6.2,SNR=2.3 **NORSAR Array B** | **74.08** | **334** | P | **P** | **02 20 06.5** | **-1.2** |
| **MMAI** | 1.5nm,1.0s,baz=48,slow=6.7,SNR=2.4 **Mount Meron Ar** | **77.27** | **301** | LR | LR | 02 56 14.2 | |
| **VRAC** | comp=Z,6.4nm,21.3s,baz=305,slow=37 **Vranov** | **79.42** | **323** | LR | LR | 03 02 00.6 | |
| **NVAR** | comp=Z,62nm,18.5s,baz=288,slow=40 **Mina Array Bea** | **83.23** | **48** | P | **P** | **02 20 59.2** | **+0.6** |
| **ULM** | 0.6nm,0.7s,baz=301,slow=5.8,SNR=5.4 **Lac du Bonnet** | **86.47** | **28** | P | **P** | **02 21 14.4** | **+0.1** |
| | 1.2nm,0.4s,baz=344,slow=6.5,SNR=2.4 | | | | | | |

*IDC **30** 02:38:56.4±2.6,51.72N×179.19E,h0km,mb3.6/6, mb1 3.9/7,mb1mx3.6/51,mbtmp3.8/7,ML3.7/1,Error ellipse: s-maj=66.2km s-min=29.0km az=4.0*
*NEIC **30** 02:38:58.4,51.09N×179.33E,h20km,ML2.8(AEIC),After AEIC.*
**ISC 30 02:38:55.1±1.5,50.96N±0.09×179.48E±0.06,h10km,n24, σ1§33/19,mb3.9/6,Rat Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AMKA** | **Amchitka** | **0.44** | **345** | P | **Pb** | **02 39 05.5** | **+0.7** |
| AMKA | | | | S | **Sg** | **02 39 11.4** | **+2.0** |
| **CESW** | **Semis' Southwe** | **0.95** | **3** | P | **Pg** | **02 39 14.0** | **+0.7** |
| **CERAA** | **Semis' Rag'd T** | **0.96** | **8** | P | **Pg** | **02 39 14.4** | **+0.9** |
| **CERB** | **Semis' Cerberu** | **0.98** | **5** | P | **Pg** | **02 39 14.7** | **+0.7** |
| CERB | | | | S | **Sg** | **02 39 26.8** | **+0.1** |
| **CEAP** | **Semis' Anvil P** | **1.05** | **3** | P | **Pg** | **02 39 15.7** | **+0.4** |
| **LSPA** | **Little Sitkin** | **1.15** | **331** | P | **Pb** | **02 39 16.6** | **-0.4** |
| LSPA | | | | S | **Sb** | **02 39 30.3** | **-1.7** |
| **LSSA** | **Little Sitkin** | **1.16** | **329** | P | **Pb** | **02 39 16.7** | **-0.6** |
| **LSNW** | **Little Sitkin** | **1.18** | **330** | P | **Pb** | **02 39 16.7** | **-0.8** |
| **GALAA** | **Gareloi Lava P** | **1.36** | **53** | P | **Pg** | **02 39 21.4** | **+0.2** |
| **GANE** | **Gareloi Northe** | **1.39** | **51** | P | **Pg** | **02 39 22.2** | **+0.4** |
| **TAFP** | **Tanaga Falls P** | **1.85** | **58** | P | **Pb** | **02 39 28.8** | **-0.2** |
| TAFP | | | | S | **Sg** | **02 39 54.2** | **-0.2** |
| **KDAK** | **Kodiak Island** 0.3nm,0.3s,baz=207,slow=4.6,SNR=2.2 | **17.56** | **56** | P | **Pn** | **02 42 58.1** | **-1.5** |
| KDAK | 0.2nm,0.3s,baz=340,slow=12,SNR=1.8 | | | S | Sn | 02 46 05.2 | -10 |
| **ILAR** | **Eielson Array** 0.2nm,0.6s,baz=248,slow=9.6,SNR=5.1 | **22.25** | **39** | P | **P** | **02 43 49.8** | **-1.9** |
| **H11N2** | **WAKE ISLAND Hy** baz=11,slow=76,SNR=5.8 | **32.71** | **202** | T | T | 03 20 32.1 | |
| **H11N3** | **WAKE ISLAND Hy** baz=11,slow=76,SNR=6.1 | **32.72** | **202** | T | T | 03 20 32.1 | |
| **H11N1** | **WAKE ISLAND Hy** baz=11,slow=76,SNR=12 | **32.72** | **202** | T | T | 03 20 32.1 | |
| **H11S1** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=5.6 | **33.93** | **202** | T | T | 03 22 05.5 | |
| **H11S2** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=4.5 | **33.95** | **202** | T | T | 03 22 05.5 | |
| **H11S3** | **WAKE ISLAND Hy** baz=18,slow=76,SNR=3.6 | **33.95** | **202** | T | T | 03 22 05.5 | |
| **SPITS** | **Spitsbergen Ar** 6.7nm,1.0s,baz=36,slow=7.2,SNR=5.0 | **50.72** | **356** | P | P | 02 47 51.5 | -2.8 |
| **MKAR** | **Makanchi Array** 0.3nm,0.4s,baz=42,slow=8.0,SNR=2.9 | **59.44** | **308** | P | P | 02 48 55.6 | -2.1 |
| **TXAR** | **Lajitas Array** 0.2nm,0.6s,baz=313,slow=6.6,SNR=3.6 | **59.79** | **80** | P | **P** | **02 49 03.6** | **+3.2** |
| **AKTO** | **Aktyubinsk** 0.8nm,0.6s,baz=30,slow=8.1 | **67.39** | **324** | P | **P** | **02 49 49.2** | **-1.0** |
| **NOA** | **NORSAR Array B** 1.2nm,1.0s,baz=11,slow=6.8,SNR=2.9 | **67.96

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KHAL** | **Karahalli** | **1.54** | **30** | *i* P | | **Pn** | 02 50 25.1 | -0.1 |
| KHAL | | | | *i* S | | **Sb** | 02 50 45.8 | -0.2 |
| **KHAL** | **Karahalli** | **1.54** | **30** | P | | **Pn** | 02 50 25.1 | -0.1 |
| KHAL | | | | S | | **Sb** | 02 50 45.8 | -0.2 |
| **IZM** | **Izmir** | **1.69** | **324** | *e*PN | | **Pn** | 02 50 25.8 | -1.3 |
| **IZM** | **Izmir** | **1.69** | **324** | *e*Pn | | **Pn** | 02 50 25.8 | -1.3 |
| **BCK** | **Bucak** | **1.71** | **75** | *e*PN | | **Pn** | 02 50 27.5 | 0.0 |
| **BCK** | **Bucak** | **1.71** | **75** | *e*Pn | | **Pn** | 02 50 27.5 | 0.0 |
| **ANTB** | **Antalya** | **1.72** | **94** | *e*PN | | **Pn** | 02 50 27.9 | +0.4 |
| **ANTB** | **Antalya** | **1.72** | **94** | *e*Pn | | **Pn** | 02 50 27.9 | +0.4 |
| **KARP** | **Karpathos** | **1.84** | **217** | *e*PN | | **Pn** | 02 50 30.0 | +0.7 |
| **KARP** | **Karpathos** | **1.84** | **217** | P | | **Pn** | 02 50 29.1 | -0.2 |
| KARP | | | | S | | **Sb** | 02 50 54.6 | +0.1 |
| **AKHS** | **Akhisar** | **1.92** | **343** | *i* P | | **Pn** | 02 50 29.5 | -0.9 |
| **AKHS** | **Akhisar** | **1.92** | **343** | P | | **Pn** | 02 50 29.5 | -0.9 |
| AKHS | | | | S | | **Sg** | 02 51 01.4 | +2.1 |
| **AKS** | **Akhisar** | **1.93** | **343** | *e*PN | | **Pn** | 02 50 29.5 | -0.9 |
| **AKS** | **Akhisar** | **1.93** | **343** | *e*Pn | | **Pn** | 02 50 29.5 | -0.9 |
| **ZEY** | **˙zmir** | **2.00** | **308** | P | | **Pn** | 02 50 30.1 | -1.2 |
| ZEY | | | | S | | **Sb** | 02 50 59.1 | +0.1 |
| **DEMI** | **Demirci** | **2.01** | **4** | *i* P | | **Pn** | 02 50 31.3 | -0.4 |
| DEMI | | | | *i* S | | **Sb** | 02 50 58.8 | -0.6 |
| **DEMI** | **Demirci** | **2.01** | **4** | P | | **Pn** | 02 50 31.3 | -0.4 |
| DEMI | | | | S | | **Sb** | 02 50 58.8 | -0.6 |
| **URLA** | **Izmir** | **2.02** | **312** | P | | **Pg** | 02 50 36.0 | -0.1 |
| URLA | | | | S | | **Sg** | 02 51 04.8 | +2.6 |
| **SUTC** | **Sutluce-Ispart** | **2.03** | **77** | *e*PN | | **Pn** | 02 50 32.1 | +0.2 |
| **SUTC** | **Sutluce-Ispart** | **2.03** | **77** | *e*Pn | | **Pn** | 02 50 32.1 | +0.2 |
| **SHUT** | **Suhut-Afyon** | **2.21** | **46** | *e*PN | | **Pn** | 02 50 34.6 | +0.1 |
| **SHUT** | **Suhut-Afyon** | **2.21** | **46** | *e*Pn | | **Pn** | 02 50 34.6 | +0.1 |
| **CHOS** | **Chios island** | **2.37** | **305** | *e*PN | | **Pn** | 02 50 34.1 | -2.5 |
| **CHOS** | **Chios island** | **2.37** | **305** | *e*Pn | | **Pn** | 02 50 34.1 | -2.5 |
| **APE** | **Apeiranthos** | **2.39** | **272** | *e*PN | | **Pn** | 02 50 35.7 | -1.0 |
| **APE** | **Apeiranthos** | **2.39** | **272** | ⇑*i*P | | **Sn** | 02 51 07.7 | +1.5 |
| APE | | | | S | | **Sg** | 02 51 17.7 | +3.6 |
| **APE** | **Apeiranthos** | **2.39** | **272** | *e*Pn | | **Pn** | 02 50 35.7 | -1.0 |
| **TVSB** | **Tavsanli** | **2.53** | **17** | *e*PN | | **Pn** | 02 50 38.6 | -0.1 |
| **TVSB** | **Tavsanli** | **2.53** | **17** | *e*Pn | | **Pn** | 02 50 38.6 | -0.1 |
| **BALB** | **Balikesir** | **2.65** | **349** | *e*PN | | **Pn** | 02 50 39.9 | -0.4 |
| **BALB** | **Balikesir** | **2.65** | **349** | *e*Pn | | **Pn** | 02 50 39.9 | -0.4 |
| **ZKR** | **Zakros** | **2.67** | **225** | *e*PN | | **Pn** | 02 50 41.7 | +1.1 |
| **ZKR** | **Zakros** | **2.67** | **225** | *e*Pn | | **Pn** | 02 50 41.7 | +1.1 |
| **PRK** | **Paraskevi** | **2.83** | **322** | *e*PN | | **Pn** | 02 50 41.0 | -1.8 |
| **PRK** | **Paraskevi** | **2.83** | **322** | P | | **Pn** | 02 50 42.6 | -0.2 |
| **PRK** | **Paraskevi** | **2.83** | **322** | *e*Pn | | **Pn** | 02 50 41.0 | -1.8 |
| **PRK** | **Paraskevi** | **2.83** | **322** | P | | **Pn** | 02 50 42.6 | -0.2 |
| **NPS** | **Neapolis** | **2.94** | **234** | *e*PN | | **Pn** | 02 50 44.7 | +0.4 |
| **NPS** | **Neapolis** | **2.94** | **234** | *e*Pn | | **Pn** | 02 50 44.7 | +0.4 |
| **SIGR** | **SIGRI** | **3.02** | **317** | *e*PN | | **Pn** | 02 50 45.5 | +0.1 |
| **SIGR** | **SIGRI** | **3.02** | **317** | *e*PN | | **Pn** | 02 50 42.9 | -2.5 |
| **SIGR** | **SIGRI** | **3.02** | **317** | *e*Pn | | **Pn** | 02 50 45.5 | +0.1 |
| **LAST** | **Lasithi** | **3.09** | **234** | ⇓*i*P | | **Sn** | 02 51 26.2 | +2.7 |
| **KONT** | **Konya--Tatoy** | **3.19** | **72** | *e*PN | | **Pn** | 02 50 48.9 | +1.1 |
| **KONT** | **Konya--Tatoy** | **3.19** | **72** | *e*Pn | | **Pn** | 02 50 48.9 | +1.1 |
| **KIZT** | **Kizilcal** | **3.24** | **54** | *e*PN | | **Pn** | 02 50 49.0 | +0.5 |
| **KIZT** | **Kizilcal** | **3.24** | **54** | *e*Pn | | **Pn** | 02 50 49.0 | +0.5 |
| **EDC** | **Edincik** | **3.35** | **351** | *e*PN | | **Pn** | 02 50 49.9 | 0.0 |
| **EDC** | **Edincik** | **3.35** | **351** | *e*Pn | | **Pn** | 02 50 49.9 | 0.0 |
| **SVRH** | **Sivrihisar-ESK** | **3.38** | **44** | *e*PN | | **Pn** | 02 50 51.1 | +0.7 |
| **SVRH** | **Sivrihisar-ESK** | **3.38** | **44** | *e*Pn | | **Pn** | 02 50 51.1 | +0.7 |
| **IDI** | **Anoyia** | **3.41** | **240** | Pn | | **Pn** | 02 50 51.0 | +0.2 |
| | 3.4nm,0.3s,baz=311,slow=10,SNR=23 | | | | | | | |
| IDI | | | | Sn | | **Sn** | 02 51 30.7 | -0.8 |
| | 5.7nm,0.3s,baz=335,slow=16,SNR=3.9 | | | | | | | |
| **IDI** | **Anoyia** | **3.41** | **240** | ⇑*i*P | | **Sn** | 02 51 29.9 | -1.6 |
| **ADVT** | **Abdulvahap** | **3.53** | **15** | *e*PN | | **Pn** | 02 50 52.8 | +0.4 |
| **ADVT** | **Abdulvahap** | **3.53** | **15** | *e*Pn | | **Pn** | 02 50 52.8 | +0.4 |
| **ARMT** | **Armutlu** | **3.54** | **4** | *e*PN | | **Pn** | 02 50 52.9 | +0.3 |
| **ARMT** | **Armutlu** | **3.54** | **4** | *e*Pn | | **Pn** | 02 50 52.9 | +0.3 |
| **GELI** | **Tayfur-Gelibol** | **3.72** | **335** | *e*PN | | **Pn** | 02 50 55.0 | 0.0 |
| **GELI** | **Tayfur-Gelibol** | **3.72** | **335** | *e*Pn | | **Pn** | 02 50 55.0 | 0.0 |
| **RKY** | **Sarkoy-Tekirda** | **3.80** | **344** | *e*PN | | **Pn** | 02 50 56.2 | 0.0 |
| **RKY** | **Sarkoy-Tekirda** | **3.80** | **344** | *e*Pn | | **Pn** | 02 50 56.2 | 0.0 |
| **PTL** | **Penteli** | **3.83** | **287** | *e*PN | | **Pn** | 02 50 55.7 | -0.9 |
| **PTL** | **Penteli** | **3.83** | **287** | *e*Pn | | **Pn** | 02 50 55.7 | -0.9 |
| **VLY** | **Voula,Athens** | **3.84** | **284** | *e*PN | | **Pn** | 02 50 55.9 | -0.9 |
| **VLY** | **Voula,Athens** | **3.84** | **284** | *e*Pn | | **Pn** | 02 50 55.9 | -0.9 |
| **LIA** | **Limnos Island** | **3.88** | **319** | *e*PB | | **Pn** | 02 50 56.1 | -1.1 |
| **LIA** | **Limnos Island** | **3.88** | **319** | *e*Pb | | **Pn** | 02 50 56.1 | -1.1 |
| **LEF** | **Lefka** | **4.03** | **117** | *e*PN | | **Pn** | 02 50 59.4 | +0.2 |
| **LEF** | **Lefka** | **4.03** | **117** | *e*Pn | | **Pn** | 02 50 59.4 | +0.2 |
| **ALN** | **Alexandroupoli** | **4.31** | **334** | *e*PN | | **Pn** | 02 51 00.3 | -2.9 |
| **ALN** | **Alexandroupoli** | **4.31** | **334** | *e*Pn | | **Pn** | 02 51 00.3 | -2.9 |
| **AFSR** | **Af˙ar-Bala (A** | **4.32** | **55** | *e*PN | | **Pn** | 02 51 04.6 | +1.2 |
| **AFSR** | **Af˙ar-Bala (A** | **4.32** | **55** | *e*Pn | | **Pn** | 02 51 04.6 | +1.2 |
| **LOD** | **Lodumlu** | **4.39** | **48** | *e*PN | | **Pn** | 02 51 05.5 | +1.2 |
| **LOD** | **Lodumlu** | **4.39** | **48** | *e*Pn | | **Pn** | 02 51 05.5 | +1.2 |
| **CSS** | **Prodhromos** | **4.42** | **116** | *e*PN | | **Pn** | 02 51 07.0 | +2.3 |
| **LFK** | **Lefkose** | **4.42** | **112** | *e*PN | | **Pn** | 02 51 06.1 | +1.4 |
| **LFK** | **Lefkose** | **4.42** | **112** | *e*Pn | | **Pn** | 02 51 06.1 | +1.4 |
| **VLI** | **Veliai** | **4.48** | **268** | *e*PN | | **Pn** | 02 51 06.2 | +0.7 |
| **VLI** | **Veliai** | **4.48** | **268** | *e*Pn | | **Pn** | 02 51 06.2 | +0.7 |
| **BRTR** | **Keskin Array B** | **4.84** | **55** | Pn | | **Pn** | 02 51 11.7 | +1.1 |
| | 3.0nm,0.3s,baz=242,slow=17,SNR=123 | | | | | | | |
| BRTR | | | | Sn | | **Sn** | 02 52 07.0 | +0.2 |
| | 1.3nm,0.3s,baz=182,slow=31,SNR=7.6 | | | | | | | |
| **HORT** | **Hortiatis** | **5.53** | **312** | *e*PN | | **Pn** | 02 51 19.4 | -0.5 |
| **HORT** | **Hortiatis** | **5.53** | **312** | *e*Pn | | **Pn** | 02 51 19.4 | -0.5 |
| **NVR** | **Nevrokopi** | **5.62** | **321** | *e*PN | | **Pn** | 02 51 20.4 | -0.9 |
| **NVR** | **Nevrokopi** | **5.62** | **321** | *e*Pn | | **Pn** | 02 51 20.4 | -0.9 |
| **HMAT** | **Matruh** | **6.04** | **192** | AMP | | | 02 52 00.0 | |
| | comp=N,50µm,0.8s,logA/T=4.8,baz=193 | | | | | | | |
| **WRDH** | **Warideh** | **6.56** | **101** | ⇑*e*P | | Pn | 02 51 37.3 | +3.2 |
| WRDH | | | | *e*S | | **Sn** | 02 52 50.6 | +1.5 |
| WRDH | | | | AML | AML | | 02 53 00.4 | |
| | comp=Z,15nm,0.4s | | | | | | | |
| WRDH | | | | AML | AML | | 02 53 03.9 | |
| | comp=N,7.2nm,0.4s | | | | | | | |
| **BIDA** | **Albida** | **6.64** | **105** | *e*P | | **Pn** | 02 51 37.4 | +2.1 |
| BIDA | | | | *e*S | | **Sn** | 02 52 50.8 | -0.3 |
| BIDA | | | | AML | AML | | 02 52 52.7 | |
| | comp=E,32nm,0.4s | | | | | | | |
| BIDA | | | | AML | AML | | 02 52 54.3 | |
| | comp=Z,59nm,0.4s | | | | | | | |
| BIDA | | | | AML | AML | | 02 52 55.3 | |
| | comp=N,25nm,0.5s | | | | | | | |
| **BIDA** | **Albida** | **6.64** | **105** | *e*P | | **Pn** | 02 51 37.4 | +2.1 |
| BIDA | | | | *e*S | | **Sn** | 02 52 50.8 | -0.3 |
| | comp=N,25nm,0.5s | | | | | | | |
| **HAWK** | **Haweek** | **6.89** | **109** | *e*P | | **Pn** | 02 51 39.8 | +1.2 |
| HAWK | | | | *e*S | | **Sn** | 02 52 56.4 | -0.8 |
| HAWK | | | | AML | AML | | 02 52 57.7 | |
| | comp=Z,19nm,0.7s | | | | | | | |
| HAWK | | | | AML | AML | | 02 53 00.9 | |
| | comp=E,9.6nm,0.7s | | | | | | | |
| HAWK | | | | AML | AML | | 02 53 10.5 | |
| | comp=N,17nm,0.7s | | | | | | | |
| **HAWK** | **Haweek** | **6.89** | **109** | *e*P | | **Pn** | 02 51 39.8 | +1.2 |
| HAWK | | | | *e*S | | **Sn** | 02 52 56.4 | -0.8 |
| | comp=N,17nm,0.7s | | | | | | | |
| **MMAI** | **Mount Meron Ar** | **6.93** | **123** | Pn | | **Pn** | 02 51 37.8 | -1.4 |
| | comp=N,12nm,0.3s,baz=304,slow=12,SNR=45 | | | | | | | |
| MMAI | | | | Sn | | **Sn** | 02 52 53.2 | -5.0 |
| | comp=N,6.8nm,0.3s,baz=316,slow=28,SNR=7.2 | | | | | | | |
| **BRBR** | **Barbar** | **7.08** | **119** | *e*P | | **Pn** | 02 51 41.0 | -0.3 |
| BRBR | | | | *e*S | | **Sn** | 02 52 58.2 | -3.8 |
| BRBR | | | | AML | AML | | 02 53 00.8 | |
| | comp=E,23nm,0.4s | | | | | | | |
| BRBR | | | | AML | AML | | 02 53 05.8 | |
| | comp=N,13nm,0.3s | | | | | | | |
| BRBR | | | | AML | AML | | 02 53 07.1 | |
| | comp=Z,12nm,0.6s | | | | | | | |
| **BRBR** | **Barbar** | **7.08** | **119** | *e*P | | **Pn** | 02 51 41.0 | -0.3 |
| BRBR | | | | *e*S | | **Sn** | 02 52 58.2 | -3.8 |
| | comp=Z,12nm,0.6s | | | | | | | |
| **TIRR** | **Tirgusor** | **7.42** | **359** | ⇓*i*P | | **Pn** | 02 51 44.6 | -1.2 |
| **TIRR** | **Tirgusor** | **7.42** | **359** | ⇓*i*P | | **Pn** | 02 51 44.6 | -1.2 |
| **TOTH** | **TOTAH** | **7.44** | **117** | *e*P | | **Pn** | 02 51 46.8 | +0.6 |
| TOTH | | | | *e*S | | **Sn** | 02 53 07.6 | -3.2 |
| TOTH | | | | AML | AML | | 02 53 12.7 | |
| | comp=E,19nm,0.5s | | | | | | | |
| TOTH | | | | AML | AML | | 02 53 14.1 | |
| | comp=N,10nm,0.5s | | | | | | | |
| TOTH | | | | AML | AML | | 02 53 21.9 | |
| | comp=Z,14nm,0.5s | | | | | | | |
| **TOTH** | **TOTAH** | **7.44** | **117** | *e*P | | **Pn** | 02 51 46.8 | +0.6 |
| TOTH | | | | *e*S | | **Sn** | 02 53 07.6 | -3.2 |
| | comp=Z,14nm,0.5s | | | | | | | |
| **TCHB** | **Talchebab** | **7.51** | **123** | *e*P | | **Pn** | 02 51 46.7 | -0.5 |
| TCHB | | | | *e*S | | **Sn** | 02 53 06.9 | -5.7 |
| TCHB | | | | AML | AML | | 02 53 18.6 | |
| | comp=E,27nm,0.4s | | | | | | | |
| TCHB | | | | AML | AML | | 02 53 19.3 | |
| | comp=Z,41nm,0.7s | | | | | | | |
| **TCHB** | **Talchebab** | **7.51** | **123** | *e*P | | **Pn** | 02 51 46.7 | -0.5 |
| TCHB | | | | *e*S | | **Sn** | 02 53 06.9 | -5.7 |
| | comp=Z,41nm,0.7s | | | | | | | |
| **RABH** | **Abou Rabah** | **7.53** | **108** | *e*P | | **Pn** | 02 51 49.7 | +2.3 |
| RABH | | | | *e*S | | **Sn** | 02 53 12.9 | 0.0 |
| RABH | | | | AML | AML | | 02 53 27.1 | |
| | comp=Z,8.6nm,0.6s | | | | | | | |
| RABH | | | | AML | AML | | 02 53 27.4 | |
| | comp=E,5.7nm,0.4s | | | | | | | |
| RABH | | | | AML | AML | | 02 53 41.7 | |
| | comp=N,4.1nm,0.6s | | | | | | | |
| **RABH** | **Abou Rabah** | **7.53** | **108** | *e*P | | **Pn** | 02 51 49.7 | +2.3 |
| RABH | | | | *e*S | | **Sn** | 02 53 12.9 | 0.0 |
| | comp=N,4.0nm,0.6s | | | | | | | |
| **HNAT** | **Natroun** | **7.59** | **166** | P | | **Pn** | 02 51 47.6 | -0.6 |
| | baz=167 | | | | | | | |
| **HNAT** | **Natroun** | **7.59** | **166** | P | | **Pn** | 02 51 47.6 | -0.6 |
| **ROOS** | **tl_alroos** | **7.70** | **109** | *e*P | | **Pn** | 02 51 51.8 | +2.0 |
| ROOS | | | | *e*S | | **Sn** | 02 53 15.5 | -1.6 |
| ROOS | | | | AML | AML | | 02 53 21.8 | |
| | comp=E,13nm,0.6s | | | | | | | |
| ROOS | | | | AML | AML | | 02 53 30.6 | |
| | comp=N,21nm,0.6s | | | | | | | |
| ROOS | | | | AML | AML | | 02 53 34.3 | |
| | comp=Z,18nm,0.5s | | | | | | | |
| **ROOS** | **tl_alroos** | **7.70** | **109** | *e*P | | **Pn** | 02 51 51.8 | +2.0 |
| ROOS | | | | *e*S | | **Sn** | 02 53 15.5 | -1.6 |
| | comp=Z,18nm,0.5s | | | | | | | |
| **HSAF** | **As Saff** | **7.82** | **160** | P | | **Pn** | 02 51 50.9 | -0.5 |
| | baz=161 | | | | | | | |
| **HSAF** | **As Saff** | **7.82** | **160** | P | | **Pn** | 02 51 50.9 | -0.5 |
| **GLL** | **Jalalah** | **7.90** | **159** | P | | **Pn** | 02 51 51.5 | -1.0 |
| | baz=160 | | | | | | | |
| **GLL** | **Jalalah** | **7.90** | **159** | P | | **Pn** | 02 51 51.5 | -1.0 |
| **MALT** | **Malatya** | **7.96** | **78** | ⇑*i*P | | Pn | 02 51 58.5 | +5.0 |
| **SWA2** | | **8.18** | **199** | P | | **Pn** | 02 51 56.5 | +0.2 |
| | baz=200 | | | | | | | |
| **SWA2** | | **8.18** | **199** | P | | **Pn** | 02 51 56.5 | +0.2 |
| **ZALF** | **Zalf** | **8.32** | **117** | *e*P | | **Pn** | 02 51 59.6 | +1.4 |
| ZALF | | | | *e*S | | **Sn** | 02 53 29.0 | -3.3 |
| ZALF | | | | AML | AML | | 02 53 34.0 | |
| | comp=Z,2.5nm,0.7s | | | | | | | |
| ZALF | | | | AML | AML | | 02 53 47.8 | |
| | comp=E,6.3nm,0.6s | | | | | | | |
| ZALF | | | | AML | AML | | 02 54 10.5 | |
| | comp=N,5.1nm,0.7s | | | | | | | |
| **ZALF** | **Zalf** | **8.32** | **117** | *e*P | | **Pn** | 02 51 59.6 | +1.4 |
| ZALF | | | | *e*S | | **Sn** | 02 53 29.0 | -3.3 |
| | comp=N,5.0nm,0.7s | | | | | | | |
| **HNKL** | **Nakhl** | **8.43** | **146** | P | | **Pn** | 02 51 57.9 | -1.8 |
| | baz=147 | | | | | | | |
| HNKL | | | | S | | Sn | 02 53 28.2 | -6.8 |
| | baz=147 | | | | | | | |
| **HNKL** | **Nakhl** | **8.43** | **146** | P | | **Pn** | 02 51 57.9 | -1.8 |
| **ASF** | **Jabal al Asfar** | **8.44** | **123** | Pn | | **Pn** | 02 51 57.3 | -2.6 |
| | comp=N,0.5nm,0.3s,baz=250,slow=2.8,SNR=5.8 | | | | | | | |
| ASF | | | | Sn | | **Sn** | 02 53 36.3 | +0.8 |
| | comp=N,0.3nm,0.3s,baz=252,slow=20,SNR=2.5 | | | | | | | |
| **MLR** | **Muntele Rosu** | **8.67** | **348** | Pn | | **Pn** | 02 52 03.5 | +0.4 |
| | comp=N,0.0nm,0.3s,baz=162,slow=6.4,SNR=8.1 | | | | | | | |
| MLR | | | | Sn | | **Sn** | 02 53 42.6 | +1.6 |
| | baz=306,slow=19 | | | | | | | |
| **MLR** | **Muntele Rosu** | **8.67** | **348** | ⇑*i*P | | **Pn** | 02 52 03.8 | +0.7 |
| **MLR** | **Muntele Rosu** | **8.67** | **348** | ⇑*i*P | | **Pn** | 02 52 03.8 | +0.7 |
| **AWBH** | | **8.69** | **178** | P | | **Pn** | 02 52 03.5 | +0.1 |
| | baz=178 | | | | | | | |
| **AWBH** | | **8.69** | **178** | P | | **Pn** | 02 52 03.5 | +0.1 |
| **PLOR** | **Plostina** | **8.92** | **352** | ⇑*i*P | | **Pn** | 02 52 05.1 | -1.4 |
| **PLOR** | **Plostina** | **8.92** | **352** | ⇑*i*P | | **Pn** | 02 52 05.1 | -1.4 |
| **VRI** | **Vrincioaia** | **8.93** | **352** | ⇓*i*P | | **Pn** | 02 52 07.5 | +1.0 |
| **VRI** | **Vrincioaia** | **8.93** | **352** | ⇓*i*P | | **Pn** | 02 52 07.5 | +1.0 |
| **EIL** | **Elat** | **9.10** | **142** | Pn | | **Pn** | 02 52 07.7 | -1.3 |
| | comp=N,2.6nm,0.3s,baz=329,slow=3.2,SNR=43 | | | | | | | |
| EIL | | | | Sn | | Sn | 02 53 43.2 | -8.4 |
| | comp=N,0.6nm,0.3s,baz=252,slow=20,SNR=3.7 | | | | | | | |
| **BURAR** | **Bucovina Array** | **10.85** | **348** | ⇑*i*P | | **Pn** | 02 52 34.6 | +1.6 |
| **BURAR** | **Bucovina Array** | **10.85** | **348** | ⇑*i*P | | **Pn** | 02 52 34.6 | +1.6 |
| **KBZ** | **Khabaz** | **12.84** | **54** | LR | | LR | 02 58 22.2 | |
| | comp=N,42nm,21.8s,baz=261,slow=40 | | | | | | | |
| **GERES** | **GERESS Array B** | **16.00** | **322** | Pn | | **P** | 02 53 47.2 | +1.0 |
| | comp=N,0.1nm,0.3s,baz=134,slow=11,SNR=8.6 | | | | | | | |
| **GEYT** | **Alibeck** | **23.47** | **79** | P | | **P** | 02 55 07.7 | +0.4 |
| | comp=N,1.1nm,0.3s,baz=322,slow=4.4,SNR=2.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **24.48** | **357** | P | | **P** | 02 55 17.1 | +0.5 |
| | comp=N,2.0nm,0.7s,baz=162,slow=14,SNR=6.3 | | | | | | | |
| FINES | | | | LR | | LR | 03 05 01.5 | |
| | comp=N,19nm,18.6s,baz=1.5,slow=37 | | | | | | | |
| **ESDC** | **Sonseca Array** | **25.53** | **286** | P | | **P** | 02 55 26.6 | +0.2 |
| | comp=N,0.3nm,0.5s,baz=78,slow=9.6,SNR=3.0 | | | | | | | |
| **NOA** | **NORSAR Array B** | **26.40** | **341** | LR | | LR | 03 06 48.0 | |
| | comp=N,24nm,18.2s,baz=50,slow=38 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **33.78** | **232** | P | | **P** | 02 56 39.0 | -0.6 |
| | comp=N,1.7nm,0.8s,baz=39,slow=8.3,SNR=23 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **37.83** | **53** | P | | **P** | 02 57 13.2 | -0.9 |
| | comp=N,0.3nm,0.4s,baz=276,slow=9.1,SNR=2.9 | | | | | | | |
| **MKAR** | **Makanchi Array** | **40.48** | **59** | P | | **P** | 02 57 35.3 | -1.1 |
| | comp=N,0.3nm,0.7s,baz=288,slow=5.1,SNR=3.4 | | | | | | | |
| **KSRS** | **Korea Array** | **74.99** | **54** | LR | | LR | 03 36 34.7 | |
| | comp=N,19nm,18.8s,baz=150,slow=37 | | | | | | | |

*IDC **30** 02:57:18.3±2.9,5˚.07S×102˚.45E, h0km, mb3.7/7, mb1 3.9/7, mb1mx3.6/44, mbtmp3.7/7, Error ellipse: s-maj=127.9km s-min=17.9km az=55.0*
*DJA **30** 02:57:25.5±0.8,5˚S±4˚×107˚3E±˚, h20km±7km, M3.9/6, MLv3.9/6*

**ISC 30 02:57:21.0±2.1,5˚.09S±0˚.07×102˚.53E±0˚.10, h17km±11km, n19, σ0s59/19, mb3.8/7, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **MNAI** | **Manna** | **0.84** | **30** | P | | **Pn** | **02 57 38.9** | **+0.8** |
| MNAI | | | | S | | **Sn** | **02 57 49.7** | **-0.3** |
| **KSI** | **Kapahiang** | **1.43** | **2** | P | | **Pg** | **02 57 48.6** | **0.0** |
| KSI | | | | S | | **Sg** | **02 58 07.4** | **+0.1** |
| **LHSI** | **Lahat** | **1.60** | **38** | P | | **Pb** | **02 57 50.1** | **0.0** |
| LHSI | | | | S | | **Sn** | **02 58 08.6** | **-0.1** |
| **MDSI** | **Maura Dua** | **1.75** | **70** | P | | **Pb** | **02 57 52.2** | **-0.5** |
| MDSI | | | | S | | **Sn** | **02 58 12.0** | **-0.4** |
| **KASI** | **Kota Agung** | **2.00** | **103** | P | | **Pb** | **02 57 56.3** | **-0.7** |
| KASI | | | | S | | **Sn** | **02 58 19.2** | **+0.4** |
| **CMAR** | **Chiang Mai Arr** | **23.66** | **351** | P | | **P** | **03 02 31.1** | **-0.7** |
| | 0.8nm,0.3s,baz=167,slow=8.2,SNR=4.6 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **26.02** | **122** | P | | **P** | **03 02 53.3** | **-0.2** |
| | 0.5nm,0.4s,baz=335,slow=7.4,SNR=3.5 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **29.96** | **264** | T | | T | 03 35 52.8 | |
| | baz=85 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **29.97** | **264** | T | | T | 03 35 55.1 | |
| | baz=85 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **29.98** | **264** | T | | T | 03 35 52.4 | |
| | baz=85 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **31.53** | **162** | T | | T | 03 37 23.5 | |
| | baz=335 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **31.55** | **162** | T | | T | 03 37 26.6 | |
| | baz=335 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **31.55** | **162** | T | | T | 03 37 25.0 | |
| | baz=335 | | | | | | | |
| **WRA** | **Warramunga Arr** | **34.28** | **118** | P | | **P** | **03 04 07.2** | **+0.4** |
| | 0.3nm,0.3s,baz=310,slow=9.0,SNR=18 | | | | | | | |
| WRA | | | | PcP | | **PcP** | **03 06 43.4** | **+0.3** |
| | 0.9nm,1.2s,baz=289,slow=2.0,SNR=4.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **35.42** | **125** | P | | **P** | **03 04 17.5** | **+1.0** |
| | 0.4nm,0.3s,baz=300,slow=8.0,SNR=11 | | | | | | | |
| **SONM** | **Songino Array** | **52.81** | **3** | P | | **P** | **03 06 36.0** | **+0.4** |
| | 0.4nm,0.5s,baz=187,slow=10,SNR=3.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **54.68** | **343** | P | | **P** | **03 06 48.9** | **-0.3** |
| | 0.6nm,0.5s,baz=141,slow=9.3,SNR=6.2 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.67** | **348** | P | | **P** | **03 07 30.1** | **-1.1** |
| | 1.0nm,0.4s,baz=162,slow=5.6,SNR=4.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.42** | **43** | PKPbc | | **PKPbc** | **03 16 58.8** | **-0.2** |
| | 0.2nm,0.6s,baz=316,slow=2.5,SNR=3.0 | | | | | | | |

**MAN 30 03:10:18,13˚.50N×120˚.11E, h32km, mb4.2, ML3.0, MS2.8, 1D, Mindoro**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **PGP** | **Puerto Galera** | **0.82** | **90** | ⇓*e*P | | Pn | 03 10 33.1 | -0.3 |
| PGP | | | | *i* S | | Sb | 03 10 45.5 | +0.7 |
| **SJMP** | **San Jose** | **1.43** | **136** | *e*P | | Pb | 03 10 43.2 | -0.9 |
| SJMP | | | | *e*S | | Sn | 03 10 59.7 | +0.2 |
| **BUSP** | **Coron** | **1.49** | **177** | *e*P | | Pn | 03 10 43.2 | +0.6 |
| BUSP | | | | *e*S | | Sn | 03 11 01.5 | +0.5 |
| **ENPP** | **El Nido** | **2.38** | **196** | *e*P | | Pn | 03 10 55.6 | +0.8 |
| ENPP | | | | *e*S | | Sn | 03 11 21.8 | -1.0 |
| **CUYO** | **Cuyo Island** | **2.78** | **161** | *e*P | | Pn | 03 11 00.8 | +0.5 |

**MEX 30 04:04:31.6±0.4, 16˚.97N×99˚.45W, h20km±999km, MD3.5, Near coast of Guerrero**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **ACX** | **Acapulco** | **0.40** | **256** | *e*P | | Pn | 04 04 42.7 | +0.4 |
| ACX | | | | *e*S | | Sn | 04 04 48.4 | -0.9 |
| **CAIG** | **El Cayaco** | **0.79** | **276** | *e*P | | Pb | 04 04 44.4 | -2.2 |
| CAIG | | | | *e*S | | Sb | 04 04 53.4 | -3.4 |
| **MEIG** | **Mezcala** | **0.96** | **350** | *e*P | | Pb | 04 04 46.2 | -3.5 |
| MEIG | | | | *e*S | | Sb | 04 04 58.7 | -3.5 |
| **TLIG** | **Tlapa** | **1.03** | **55** | *e*P | | Pb | 04 04 47.6 | -3.4 |
| TLIG | | | | *i* S | | Sb | 04 04 60.0 | -4.2 |
| **PLIG** | **Platanillo** | **1.42** | **358** | *e*P | | Pn | 04 04 55.3 | -1.1 |
| PLIG | | | | *i* S | | Sn | 04 05 09.1 | -5.4 |
| **ARIG** | **Puente Sto Nin** | **1.56** | **327** | *e*P | | Pn | 04 04 55.2 | -3.1 |
| ARIG | | | | *e*S | | Sn | 04 05 13.9 | -4.0 |

**JMA 30 04:10:54.8±0.2, 29˚.63N×132˚.31E, h51km, M3.5, Southeast of Shikoku**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **JTN** | **Tanegashima 3** | **1.54** | **312** | P | | Pn | 04 11 20.3 | +0.4 |
| JTN | | | | S | | Sn | 04 11 39.7 | +0.9 |
| **JYAK** | **Yakushimahirau** | **1.68** | **292** | P | | Pn | 04 11 22.5 | +0.8 |
| JYAK | | | | S | | Sn | 04 11 43.1 | +1.0 |
| **JTSR** | **Tashiro 2** | **1.94** | **322** | P | | Pn | 04 11 25.9 | +0.4 |
| JTSR | | | | S | | Sn | 04 11 48.5 | -0.3 |
| **JKC** | **Kuchinoerabu** | **2.01** | **295** | P | | Pn | 04 11 27.8 | +1.5 |
| JKC | | | | S | | Sn | 04 11 50.5 | +0.2 |
| **JNAR** | **Kushima--Naru** | **2.09** | **335** | P | | Pn | 04 11 28.7 | +1.3 |
| JNAR | | | | S | | Sn | 04 11 52.7 | +0.4 |
| **JNN** | **Nakanoshima** | **2.13** | **276** | P | | Pn | 04 11 29.1 | +1.2 |
| JNN | | | | S | | Sn | 04 11 55.1 | +1.9 |
| **JTZ** | **Takazaki** | **2.50** | **335** | P | | Pn | 04 11 34.0 | +1.0 |
| JTZ | | | | S | | Sn | 04 12 02.8 | +0.6 |
| **JTAJ** | **Takarajima** | **2.75** | **261** | P | | Pn | 04 11 37.2 | +0.8 |
| **JSJ** | **Shimokoshiki** | **3.03** | **313** | P | | Pn | 04 11 39.7 | -0.5 |
| **JAMN** | **Amaminishikomi** | **3.08** | **244** | P | | Pn | 04 11 41.1 | +0.2 |
| JAMN | | | | S | | Sn | 04 12 15.8 | -0.6 |
| **JTO** | **Tosashimizu** | **3.25** | **7** | P | | Pn | 04 11 44.0 | +0.7 |
| JTO | | | | S | | Sn | 04 12 17.8 | -2.9 |
| **JTK** | **Tokunoshima** | **3.48** | **239** | P | | Pn | 04 11 46.7 | +0.3 |

*ISCJB **30** 04:28:38.9±0.7, 40˚.97N±0

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AAK** | **Ala-Archa** | **53.28** | **335** | LR | LR | 05 17 45.8 | |
| | comp=Z,12nm,18.9s,baz=0.0,slow=40 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.15** | **343** | P | **P** | **04 51 40.3** | **-0.1** |
| | 0.8nm,0.5s,baz=152,slow=8.1,SNR=6.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.18** | **348** | P | **P** | **04 52 22.6** | **-0.3** |
| | 1.3nm,0.4s,baz=175,slow=5.6,SNR=5.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.58** | **42** | PKPbc | **PKPdf** | **05 01 53.9** | **-0.3** |
| | 0.3nm,0.5s,baz=192,slow=1.0,SNR=7.4 | | | | | | |

**JMA 30 04:46:51.1, 36°.16N×136°.12E, h13km, M2.8, Near west coast of eastern Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JKG** | **Kaga** | **0.21** | **56** | P | Pg | 04 46 55.7 | 0.0 |
| JKG | | | | S | Sg | 04 46 59.0 | +0.2 |
| **JGM** | **Miyama** | **0.67** | **133** | P | Pg | 04 47 03.8 | -0.4 |
| JGM | | | | S | Sg | 04 47 12.8 | -0.3 |
| **JKY** | **Yasaka** | **0.98** | **238** | P | Pb | 04 47 09.0 | -1.0 |
| JKY | | | | S | Sb | 04 47 22.3 | -0.5 |
| **JWT** | **Wachi** | **1.05** | **214** | P | Pb | 04 47 10.7 | -0.5 |
| **MAT** | **Matsushiro** | **1.73** | **77** | P | Pg | 04 47 23.6 | -0.7 |
| MAT | | | | *e*S | Sg | 04 47 47.7 | +0.9 |

*ISK **30** 04:48:42.6, 36°.77N×30°.38E, h16km, MD2.4*
*CSEM **30** 04:48:43.0±0.4, 36°.71N×30°.44E, h2km, MD2.9, Error ellipse: s-maj=8.3km s-min=4.2km az=152.0*
*DDA **30** 04:48:44.2, 36°.78N×30°.34E, h13km, Md2.9*

**ISC 30 04:48:44.1±1.0, 36°.77N±0°.04×30°.41E±0°.03, h11km±6km, n21, σ1§01/39, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANTB** | **Antalya** | **0.24** | **56** | *e*PG | **Pg** | **04 48 48.7** | **-0.4** |
| ANTB | | | | *e*SG | **Sb** | **04 48 53.0** | **+0.6** |
| **ANTB** | **Antalya** | **0.24** | **56** | *e*Pg | **Pg** | **04 48 48.7** | **-0.4** |
| ANTB | | | | *e*Sg | **Sb** | **04 48 53.0** | **+0.6** |
| **KORT** | **Korkueli** | **0.24** | **349** | *i* P | **Pg** | **04 48 48.0** | **-1.2** |
| KORT | | | | *i* S | **Sg** | **04 48 52.8** | **+0.2** |
| **KORT** | **Korkueli** | **0.24** | **349** | P | **Pg** | **04 48 48.0** | **-1.2** |
| KORT | | | | S | **Sg** | **04 48 52.8** | **+0.2** |
| **ELL** | **Elmali** | **0.40** | **268** | *e*PG | **Pg** | **04 48 50.8** | **-1.4** |
| ELL | | | | *e*SG | **Sg** | **04 48 56.9** | **-0.6** |
| **ELL** | **Elmali** | **0.40** | **268** | *e*Pg | **Pg** | **04 48 50.8** | **-1.4** |
| ELL | | | | *e*Sg | **Sg** | **04 48 56.9** | **-0.6** |
| **BCK** | **Bucak** | **0.71** | **12** | *e*PG | **Pg** | **04 48 57.0** | **-0.9** |
| BCK | | | | *e*SG | **Sb** | **04 49 07.5** | **-0.8** |
| **BCK** | **Bucak** | **0.71** | **12** | *e*Pg | **Pg** | **04 48 57.0** | **-0.9** |
| BCK | | | | *e*Sg | **Sb** | **04 49 07.5** | **-0.8** |
| **GOLH** | **Golhisar** | **0.83** | **305** | *i* P | **Pg** | **04 48 59.7** | **-0.4** |
| GOLH | | | | *i* S | **Sb** | **04 49 11.7** | **0.0** |
| **GOLH** | **Golhisar** | **0.83** | **305** | P | **Pg** | **04 48 59.7** | **-0.4** |
| GOLH | | | | S | **Sb** | **04 49 11.7** | **0.0** |
| **AKAS** | **Kas** | **0.84** | **231** | *i* P | **Pg** | **04 48 59.9** | **-0.4** |
| **AKAS** | **Kas** | **0.84** | **231** | P | **Pg** | **04 48 59.9** | **-0.4** |
| AKAS | | | | S | **Sn** | **04 49 16.4** | **+2.1** |
| **SUTC** | **Sutluce-Ispart** | **0.85** | **33** | *e*PG | **Pg** | **04 48 59.9** | **-0.8** |
| SUTC | | | | *e*SG | **Sb** | **04 49 12.1** | **-0.4** |
| **SUTC** | **Sutluce-Ispart** | **0.85** | **33** | *e*Pg | **Pg** | **04 48 59.9** | **-0.8** |
| SUTC | | | | *e*Sg | **Sb** | **04 49 12.1** | **-0.4** |
| **BAGO** | **Egridir - ISPA** | **1.26** | **14** | P | **Pg** | **04 49 07.5** | **-0.9** |
| BAGO | | | | S | **Sg** | **04 49 27.0** | **+2.3** |
| **DNZL** | **Cakiroluk** | **1.43** | **311** | *i* P | **Pg** | **04 49 11.3** | **-0.3** |
| DNZL | | | | *i* S | **Sg** | **04 49 32.1** | **+2.0** |
| **DNZL** | **Cakiroluk** | **1.43** | **311** | P | **Pg** | **04 49 11.3** | **-0.3** |
| DNZL | | | | S | **Sg** | **04 49 32.1** | **+2.0** |
| **KONT** | **Konya--Tatoy** | **1.95** | **52** | *e*PN | **Pn** | **04 49 16.2** | **-1.0** |
| **KONT** | **Konya--Tatoy** | **1.95** | **52** | *e*Pn | **Pn** | **04 49 16.2** | **-1.0** |
| **MANT** | **Manisa** | **2.26** | **320** | *i* P | **Pn** | **04 49 22.0** | **+0.3** |
| MANT | | | | *i* S | **Sb** | **04 49 52.5** | **-0.8** |
| **MANT** | **Manisa** | **2.26** | **320** | P | **Pn** | **04 49 22.0** | **+0.3** |
| MANT | | | | S | **Sb** | **04 49 52.5** | **-0.8** |

**IDC 30 04:50:50.9±9.8, 5.78N×127.23E, h156km±89km, mb3.1/5, mb1 3.3/5, mb1mx3.0/32, mbtmp3.6/5, Error ellipse: s-maj=120.2km s-min=20.2km az=68.0, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FITZ** | **Fitzroy Crossi** | **23.79** | **184** | P | P | 04 55 50.0 | +0.5 |
| | 1.1nm,0.7s,baz=1.0,slow=10.0,SNR=4.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **26.50** | **165** | P | P | 04 56 13.8 | -0.3 |
| | 0.4nm,0.4s,baz=346,slow=10,SNR=9.9 | | | | | | |
| **ASAR** | **Alice Springs** | **29.99** | **168** | P | P | 04 56 44.9 | -0.1 |
| | 0.2nm,0.3s,baz=340,slow=7.2,SNR=5.8 | | | | | | |
| ASAR | | | | PcP | PcP | 04 59 43.9 | +0.2 |
| | 0.3nm,0.5s,baz=359,slow=2.8,SNR=5.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.17** | **324** | P | P | 05 00 14.2 | -0.4 |
| | 0.5nm,0.4s,baz=117,slow=7.8,SNR=6.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **59.00** | **332** | P | P | 05 00 34.7 | +0.6 |
| | 0.5nm,0.5s,baz=139,slow=8.7,SNR=2.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **122.73** | **290** | PKP | PKPdf | 05 09 28.3 | -1.1 |
| | 0.2nm,0.6s,baz=75,slow=1.6,SNR=3.4 | | | | | | |

*IDC **30** 05:12:50.4±1.1, 13°.24N×145°.89E, h0km, mb3.9/8, mb1 4.0/8, mb1mx3.7/46, mbtmp3.9/8, MS3.2/2, Ms1 3.3/2, ms1mx2.7/30, Error ellipse: s-maj=42.7km s-min=19.6km az=98.0*
*ISCJB **30** 05:12:55.4±1.1, 13°.2N±0°.1×145°.9E±0°.3, h50km, mb3.9/8, MS3.2/2, Error ellipse: s-maj=36.5km s-min=16.9km az=5.8*

**ISC 30 05:12:57.1±1.2, 13°.2N±0°.1×145°.9E±0°.3, h50km, n15, σ0§59/9, mb3.9/8, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H11S3** | **WAKE ISLAND Hy** | **20.68** | **73** | T | T | 05 39 10.4 | |
| | baz=254 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **20.70** | **73** | T | T | 05 39 01.6 | |
| | baz=254 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **20.70** | **73** | T | T | 05 39 07.1 | |
| | baz=254 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **21.15** | **69** | T | T | 05 39 56.7 | |
| | baz=256 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **21.16** | **69** | T | T | 05 39 56.7 | |
| | baz=256 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **21.17** | **69** | T | T | 05 39 56.7 | |
| | baz=256 | | | | | | |
| **WRA** | **Warramunga Arr** | **34.83** | **199** | P | **P** | **05 19 43.4** | **-0.1** |
| | 0.5nm,0.8s,baz=7.9,slow=9.6,SNR=8.8 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **36.96** | **213** | P | **P** | **05 20 02.0** | **+0.3** |
| | 1.0nm,0.5s,baz=58,slow=9.5,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.46** | **198** | P | **P** | **05 20 14.4** | **0.0** |
| | 0.3nm,0.5s,baz=19,slow=9.0,SNR=6.6 | | | | | | |
| ASAR | | | | LR | LR | 05 37 33.8 | |
| | comp=Z,34nm,18.1s,baz=354,slow=38 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.38** | **283** | P | **P** | **05 21 11.4** | **+0.4** |
| | 0.5nm,0.4s,baz=92,slow=5.8,SNR=3.4 | | | | | | |
| CMAR | | | | LR | LR | 05 40 31.8 | |
| | comp=Z,23nm,19.0s,baz=45,slow=37 | | | | | | |
| **MKAR** | **Makanchi Array** | **62.47** | **316** | P | **P** | **05 23 15.6** | **+0.2** |
| | 0.7nm,0.3s,baz=94,slow=8.4,SNR=9.3 | | | | | | |
| **ILAR** | **Eielson Array** | **68.50** | **25** | P | **P** | **05 23 54.8** | **+0.8** |
| | 0.3nm,0.5s,baz=251,slow=5.8,SNR=7.2 | | | | | | |
| **BVAR** | **Borovoye Array** | **70.86** | **322** | P | **P** | **05 24 08.6** | **-0.2** |
| | 1.1nm,0.3s,baz=109,slow=7.9,SNR=4.7 | | | | | | |
| **FINES** | **FINESS Array B** | **91.94** | **335** | P | **P** | **05 25 59.1** | **-1.0** |
| | 1.0nm,0.6s,baz=92,slow=4.2,SNR=9.7 | | | | | | |
| **DBIC** | **Dimbokro** | **144.88** | **302** | PKP | **PKPdf** | **05 32 29.3** | **-0.4** |
| | 3.1nm,0.6s,baz=45,slow=3.6,SNR=7.8 | | | | | | |

*IDC **30** 05:17:54.0±0.8, 12°.27N×126°.39E, h0km, mb4.0/11, mb1 4.1/11, mb1mx4.0/38, mbtmp4.0/11, MS3.2/4, Ms1 3.2/4, ms1mx2.7/33, Error ellipse: s-maj=45.2km s-min=15.2km az=71.0*
*ISCJB **30** 05:17:57.9±0.7, 12°.26N±0°.08×126°.5E±0°.1, h41km, mb4.0/13, MS3.4/3, Error ellipse: s-maj=18.2km s-min=11.5km az=172.3*
*NEIC **30** 05:17:59.2±0.7, 12°.38N×126°.62E, h35km, mb4.4/3, Error ellipse: s-maj=29.2km s-min=10.7km az=80.0*

**ISC 30 05:18:00.1±0.8, 12°.3N±0°.1×126°.5E±0°.2, h41km, n19, σ1§03/19, mb3.9/13, MS3.5/3, 1C, Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RCP** | **Roxas** | **3.71** | **258** | *e*P | **Pn** | **05 18 54.1** | **-0.9** |
| **KAPI** | **Kappang** | **18.48** | **202** | LR | LR | 05 29 54.9 | |
| | comp=Z,23nm,19.3s,baz=32,slow=39 | | | | | | |
| **KAPI** | **Kappang** | **18.48** | **202** | *e*Pn | **Pn** | **05 22 16.0** | **+2.7** |
| **KSAR** | **Wonju Array Be** | **25.03** | **3** | P | **P** | **05 23 20.8** | **+0.4** |
| **KSRS** | **Korea Array** | **25.04** | **3** | P | **P** | **05 23 20.8** | **+0.3** |
| | 2.2nm,0.6s,baz=184,slow=9.7,SNR=6.5 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **27.19** | **286** | P | **P** | **05 23 39.3** | **-0.9** |
| | 1.6nm,0.4s,baz=99,slow=7.2,SNR=6.7 | | | | | | |
| **PSI** | **Prapat** | **28.86** | **253** | LR | LR | 05 37 04.6 | |
| | comp=Z,52nm,20.6s,baz=48,slow=40 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.26** | **182** | P | **P** | **05 24 07.2** | **-0.2** |
| | 2.0nm,0.9s,baz=6.3,slow=9.2,SNR=4.1 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **30.26** | **182** | *e*P | **P** | **05 24 07.2** | **-0.2** |
| | 10nm,1.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **33.01** | **166** | P | **P** | **05 24 30.0** | **-1.5** |
| | 0.8nm,0.5s,baz=346,slow=9.2,SNR=7.6 | | | | | | |
| WRA | | | | PcP | **PcP** | **05 27 14.9** | **0.0** |
| | 0.5nm,0.9s,baz=344,slow=2.9,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **36.52** | **168** | P | **P** | **05 25 01.0** | **-0.8** |
| | 0.7nm,0.4s,baz=348,slow=8.3,SNR=10 | | | | | | |
| ASAR | | | | PcP | **PcP** | **05 27 24.9** | **-0.1** |
| | 0.5nm,0.5s,baz=353,slow=3.0,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **39.16** | **339** | P | **P** | **05 25 24.5** | **+0.5** |
| | 0.7nm,0.6s,baz=165,slow=8.5,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **50.51** | **322** | P | **P** | **05 26 54.5** | **+0.2** |
| | 1.8nm,0.7s,baz=112,slow=6.7,SNR=17 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **52.91** | **331** | P | **P** | **05 27 12.3** | **+0.3** |
| | 0.4nm,0.3s,baz=120,slow=5.8,SNR=3.6 | | | | | | |
| ZALV | | | | LR | LR | 05 50 45.4 | |
| | comp=Z,41nm,19.7s,baz=70,slow=37 | | | | | | |
| **KURK** | **Kurchatov** | **54.48** | **325** | *e*P | **P** | **05 27 24.4** | **+0.9** |
| | 6.1nm,1.0s | | | | | | |
| **BVAR** | **Borovoye Array** | **60.08** | **325** | P | **P** | **05 28 03.3** | **+0.3** |
| | 0.5nm,0.5s,baz=80,slow=7.9,SNR=3.0 | | | | | | |
| **RAYN** | **Ar Rayn** | **76.98** | **292** | *e*P | **P** | **05 29 50.4** | **+1.2** |
| | 1.7nm,0.7s | | | | | | |
| **FINES** | **FINESS Array B** | **84.16** | **332** | P | **P** | **05 30 26.5** | **-0.3** |
| | 2.4nm,0.9s,baz=72,slow=4.8,SNR=4.3 | | | | | | |
| **AKASG** | **Malin Array Be** | **85.08** | **321** | P | **P** | **05 30 30.3** | **-1.4** |
| | 0.4nm,0.4s,baz=64,slow=4.6,SNR=4.6 | | | | | | |
| AKASG | | | | LR | LR | 06 11 44.8 | |
| | comp=Z,29nm,19.3s,baz=265,slow=38 | | | | | | |

**MEX 30 05:48:31.9±0.4, 14°.56N×92°.93W, h20km±999km, MD3.7, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PCIG** | | **1.18** | **346** | *e*P | Pn | 05 48 50.4 | -2.9 |
| PCIG | | | | *e*S | Sb | 05 49 04.0 | -4.4 |

**GUC 30 05:57:00.9±0.7, 34°.93S×72°.70W, h20km±12km, ML3.7, 1C-1D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.79** | **47** | *e*P | Pb | 05 57 15.4 | -0.5 |
| CHPI | | | | *i* S | Sb | 05 57 26.2 | 0.0 |
| **TALC** | **Talca** | **0.99** | **118** | *i* P | Pb | 05 57 18.7 | -0.6 |
| TALC | | | | *i* S | Sb | 05 57 31.8 | -0.1 |
| **NICH** | **Los Niches** | **1.21** | **94** | *e*P | Pn | 05 57 22.5 | -0.2 |
| NICH | | | | *e*S | Sn | 05 57 38.6 | +0.1 |
| **CHCH** | **Chadas Angostu** | **1.96** | **60** | *e*P | Pn | 05 57 33.7 | +0.6 |
| **ANTU** | **Antumapu** | **2.19** | **52** | *e*P | Pb | 05 57 38.1 | -1.8 |
| ANTU | | | | AML | AML | 05 58 10.7 | |
| | comp=N,469nm,0.8s | | | | | | |
| **CLCH** | **Cerro Calan** | **2.36** | **50** | *i* P | Pb | 05 57 40.9 | -1.9 |
| CLCH | | | | *i* S | Sb | 05 58 10.6 | -1.0 |
| CLCH | | | | AML | AML | 05 58 20.8 | |
| | comp=N,499nm,0.7s | | | | | | |
| **PEL** | **Peldehue** | **2.44** | **44** | *e*P | Pn | 05 57 41.1 | +1.3 |
| PEL | | | | AML | AML | 05 58 21.0 | |
| | comp=N,589nm,0.5s | | | | | | |

*NEIC **30** 06:00:21.0, 37°.49N×118°.84W, h10km, MD3.2(NCEDC), After NCEDC.*

**ISC 30 06:00:20.8±0.9, 37°.50N±0°.02×118°.86W±0°.03, h12km±7km, n24, σ1§17/44, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MLAC** | **Mammoth Lakes** | **0.13** | **7** | P | **Pg** | **06 00 24.5** | **+0.2** |
| | baz=0.1,SNR=1000 | | | | | | |
| MLAC | | | | S | **Sg** | **06 00 27.0** | **+0.3** |
| | baz=0.1 | | | | | | |
| **TIN** | **Tinemaha** | **0.67** | **132** | P | **Pg** | **06 00 33.6** | **-0.3** |
| | baz=0.7,SNR=11 | | | | | | |
| TIN | | | | S | **Sg** | **06 00 42.8** | **0.0** |
| | baz=0.7 | | | | | | |
| **CWC** | **Cottonwood Cre** | **1.23** | **149** | P | **Pg** | **06 00 43.4** | **-1.1** |
| | baz=1.2,SNR=64 | | | | | | |
| CWC | | | | S | **Sg** | **06 00 59.2** | **-1.4** |
| | baz=1.2 | | | | | | |
| **RCTC** | **Rector, Farmer** | **1.23** | **195** | P | **Pg** | **06 00 43.6** | **-0.9** |
| | baz=1.2,SNR=8.8 | | | | | | |
| RCTC | | | | S | **Sg** | **06 00 59.4** | **-1.1** |
| | baz=1.2 | | | | | | |
| **GRAC** | **Grapevine Rang** | **1.29** | **113** | P | **Pn** | **06 00 45.4** | **+0.7** |
| | baz=1.3,SNR=63 | | | | | | |
| GRAC | | | | S | **Sb** | **06 01 02.4** | **+0.9** |
| | baz=1.3 | | | | | | |
| **CMB** | **Columbia Colle** | **1.32** | **294** | *e*Pn | **Pn** | **06 00 45.2** | **-0.1** |
| CMB | | | | *e*Sg | **Sg** | **06 01 02.4** | **-1.1** |
| **DAC** | **Darwin (Calif)** | **1.59** | **140** | *e*Pn | **Pn** | **06 00 49.5** | **+0.5** |
| DAC | | | | *e*Sg | **Sn** | **06 01 10.4** | **+0.8** |
| **VES** | **Vestal, Richgr** | **1.67** | **186** | Pb | **Pn** | **06 00 51.1** | **+1.2** |
| | baz=1.7,SNR=30 | | | | | | |
| VES | | | | S | **Sb** | **06 01 12.7** | **+0.2** |
| | baz=1.7 | | | | | | |
| **MPMC** | **Manual Prospec** | **1.81** | **142** | Pb | **Pb** | **06 00 53.9** | **-0.2** |
| | baz=1.8,SNR=24 | | | | | | |
| MPMC | | | | Sb | **Sb** | **06 01 17.5** | **+0.8** |
| | baz=1.8 | | | | | | |
| **ISA** | **Isabella** | **1.86** | **170** | Pb | **Pb** | **06 00 54.7** | **-0.2** |
| | baz=1.9,SNR=31 | | | | | | |
| ISA | | | | Sb | **Sb** | **06 01 19.1** | **+0.9** |
| | baz=1.9 | | | | | | |
| **ISA** | **Isabella** | **1.86** | **170** | *e*Pn | **Pb** | **06 00 54.5** | **-0.4** |
| ISA | | | | *e*Sg | **Sb** | **06 01 18.4** | **+0.2** |
| **FURC** | **Furnace Creek,** | **1.90** | **122** | Pb | **Pg** | **06 00 56.5** | **-0.8** |
| | baz=1.9,SNR=21 | | | | | | |
| **TPNV** | **Topopah Spring** | **2.15** | **104** | P | **Pn** | **06 00 57.5** | **+0.8** |
| | baz=2.1,SNR=12 | | | | | | |
| **LRMC** | **Laurel Mountai** | **2.23** | **155** | Pb | **Pb** | **06 01 01.4** | **+0.3** |
| | baz=2.2,SNR=18 | | | | | | |
| LRMC | | | | Sb | **Sg** | **06 01 30.7** | **-1.8** |
| | baz=2.2 | | | | | | |
| **ARVC** | **Arvin** | **2.37** | **179** | Sb | **Sb** | **06 01 33.8** | **+1.1** |
| | baz=2.4 | | | | | | |
| **R11A** | **Troy Canyon, C** | **2.72** | **71** | Pb | **Pb** | **06 01 10.2** | **+0.6** |
| | baz=2.7,SNR=14 | | | | | | |
| **R11A** | **Troy Canyon, C** | **2.72** | **71** | *e*Pg | **Pb** | **06 01 09.9** | **+0.3** |
| R11A | | | | *e*Sg | **Sg** | **06 01 47.4** | **-0.8** |
| **GSC** | **Goldstone** | **2.75** | **142** | Pb | **Pb** | **06 01 10.5** | **+0.5** |
| | baz=2.7,SNR=7.8 | | | | | | |
| **GSC** | **Goldstone** | **2.75** | **142** | *e*Pn | **Pn** | **06 01 05.9** | **+1.0** |
| GSC | | | | *e*Pg | **Pg** | **06 01 11.8** | **-1.8** |
| **SHPR** | **Sheep Range** | **3.12** | **107** | *e*Pn | **Pn** | **06 01 11.6** | **+1.5** |
| SHPR | | | | *e*Pg | **Pg** | **06 01 19.3** | **-1.3** |
| SHPR | | | | *e*Sg | **Sg** | **06 01 59.4** | **-1.7** |
| **BMN** | **Battle Mountai** | **3.19** | **23** | *e*Pg | **Pg** | **06 01 20.1** | **-1.8** |
| BMN | | | | *e*Sg | **Sg** | **06 02 02.8** | **-0.5** |
| **MWC** | **Mount Wilson** | **3.34** | **169** | *e*Pg | **Pb** | **06 01 22.0** | **+2.0** |
| MWC | | | | *e*Sg | **Sg** | **06 02 06.4** | **-1.6** |
| **ELK** | **Elko** | **4.29** | **40** | *e*Pn | **Pn** | **06 01 27.9** | **+1.7** |
| ELK | | | | *e*Pg | **Pg** | **06 01 40.1** | **-2.8** |
| ELK | | | | *e*Sg | **Sg** | **06 02 36.8** | **-1.7** |
| **P32A** | **Huiting Farm,** | **15.98** | **76** | P | **Pn** | **06 04 06.0** | **+0.4** |
| | baz=16,SNR=7.1 | | | | | | |

**PGC 30 06:18:02.7±1.1, 65°.65N×133°.75W, h1km, ML3.5/3, 201km Sse of Fort McPherson, Nt Northern Yukon Territory, Canada, Northern Yukon Territory**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **INK** | **Inuvik** | **2.67** | **2** | Pn | Pn | 06 18 45.8 | -0.9 |
| **DAWY** | **Dawson** | **2.89** | **239** | Pn | Pn | 06 18 49.1 | -0.7 |
| DAWY | | | | Sg | Sb | 06 19 33.2 | +2.3 |
| **CLVN** | **Colville Lake** | **3.39** | **62** | Pn | Pn | 06 18 55.8 | -0.8 |
| CLVN | | | | Sn | Sn | 06 19 35.8 | -1.7 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **SMPN** | **Simpson Lake** | **3.79** | **44** | Pn | Pn | 06 19 01.3 | -0.9 |
| SMPN | | | | Sg | Sb | 06 19 57.5 | +0.7 |
| **BVCY** | **Beaver Creek** | **4.51** | **227** | Pn | Pn | 06 19 11.3 | -0.7 |
| **YUK1** | **Sand Pete Hill** | **4.61** | **224** | Pn | Pn | 06 19 12.1 | -1.6 |
| YUK1 | | | | Sg | Sb | 06 20 24.2 | +3.5 |
| **YUK4** | **Talbot Arm** | **4.85** | **209** | Pn | Pn | 06 19 15.5 | -1.4 |
| YUK4 | | | | Sn | Sn | 06 20 08.8 | -5.1 |
| YUK4 | | | | Sg | Sb | 06 20 30.8 | +3.3 |
| **YUK5** | **Granite Creek** | **4.90** | **204** | Pn | Pn | 06 19 17.2 | -0.4 |
| YUK5 | | | | Sg | Sb | 06 20 33.4 | +4.5 |
| **YUK3** | **Moose Creek** | **4.90** | **221** | Pn | Pn | 06 19 17.2 | -0.5 |
| YUK3 | | | | Sg | Sb | 06 20 32.9 | +3.8 |
| **YUK2** | **White River** | **5.00** | **222** | Pn | Pn | 06 19 18.6 | -0.2 |
| **WHY** | **Whitehorse** | **5.04** | **186** | Pn | Pn | 06 19 18.7 | -0.7 |
| **HYT** | **Haines Junctio** | **5.13** | **201** | Pn | Pn | 06 19 20.6 | -0.1 |
| **YUK7** | **Dusty Glacier** | **5.51** | **203** | Pn | Pn | 06 19 25.8 | -0.2 |
| YUK7 | | | | Sg | Sb | 06 20 53.0 | +6.3 |
| **DLBC** | **Dease Lake** | **7.45** | **165** | Pn | Pn | 06 19 51.8 | -0.6 |
| **KUKN** | **Kugluktuk,NWT** | **7.69** | **65** | Pn | Pn | 06 19 53.8 | -1.8 |
| **YKR1** | **Yellowknife Ar** | **8.81** | **102** | Pn | Pn | 06 20 08.8 | -2.2 |
| **YKR2** | **Yellowknife Ar** | **8.83** | **102** | Pn | Pn | 06 20 09.1 | -2.2 |
| **YKR4** | **Yellowknife Ar** | **8.87** | **102** | Pn | Pn | 06 20 10.0 | -1.8 |
| **YKR5** | **Yellowknife Ar** | **8.89** | **102** | Pn | Pn | 06 20 10.3 | -1.7 |
| **YKB0** | **Yellowknife Ar** | **8.90** | **101** | Pn | Pn | 06 20 10.3 | -1.9 |
| **YKB9** | **Yellowknife Ar** | **8.91** | **101** | Pn | Pn | 06 20 10.5 | -1.8 |
| **YKW3** | **Yellowknife Ar** | **8.91** | **101** | Pn | Pn | 06 20 10.8 | -1.6 |
| **YKB8** | **Yellowknife Ar** | **8.92** | **101** | Pn | Pn | 06 20 10.8 | -1.7 |
| **YKB7** | **Yellowknife Ar** | **8.93** | **102** | Pn | Pn | 06 20 10.8 | -1.7 |
| **YKB6** | **Yellowknife Ar** | **8.94** | **102** | Pn | Pn | 06 20 10.8 | -1.9 |
| **YKB4** | **Yellowknife Ar** | **8.96** | **102** | Pn | Pn | 06 20 10.8 | -2.2 |
| **YKR9** | **Yellowknife Ar** | **8.97** | **102** | Pn | Pn | 06 20 11.0 | -2.2 |
| **YKB3** | **Yellowknife Ar** | **8.97** | **102** | Pn | Pn | 06 20 10.9 | -2.2 |
| **YKB2** | **Yellowknife Ar** | **8.98** | **102** | Pn | Pn | 06 20 10.9 | -2.4 |
| **YKB1** | **Yellowknife Ar** | **8.99** | **102** | Pn | Pn | 06 20 11.1 | -2.4 |
| **SNLN** | **Sandy Lake, NW** | **11.67** | **92** | Pn | Pn | 06 20 47.9 | -2.2 |

*BJI **30** 06:23:36.8, 7°.83S×103°.86E, h22km, mb4.8/12, mB5.0/12, Ms4.8/9, Ms7 4.5/8*
*IDC **30** 06:23:41.0±0.7, 6°.62S×104°.27E, h0km, mb4.0/11, mb1 4.2/13, mb1mx4.0/44, mbtmp4.1/13, ML4.3/2, MS3.1/6, Ms1 3.1/6, ms1mx2.8/41, Error ellipse: s-maj=24.6km s-min=15.5km az=57.0*
*AUST **30** 06:23:43.6±4.8, 6°.82S×104°.24E, h3km, Error ellipse: s-maj=1.1km s-min=0.9km az=243.0*
*ISCJB **30** 06:23:43.7±0.4, 6°.97S±0°.03×104°.18E±0°.05, h24km, mb4.2/14, MS3.2/4, Error ellipse: s-maj=7.4km s-min=4.1km az=151.9*
*DJA **30** 06:23:43.3±0.5, 7°.5S±4°×107°.4E±°, h10km, M4.5/3, mb4.5/2, MLv4.4/3*
*NEIC **30** 06:23:46.2±3.3, 6°.80S×104°.20E, h34km±23km, mb4.6/6, Error ellipse: s-maj=16.9km s-min=8.1km az=56.0*

**ISC 30 06:23:45.2±0.5, 6°.94S±0°.04×104°.14E±0°.07, h24km, n81, σ1§74/84, mb4.3/14, MS3.0/4, Sunda Strait**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KASI** | **Kota Agung** | **1.46** | **14** | P | **Pn** | **06 24 07.9** | **-2.1** |
| **CGJI** | **Cibinong** | **1.58** | **78** | P | **Pn** | **06 24 09.4** | **-2.3** |
| **LWLI** | **Liwa** | **1.92** | **358** | P | **Pn** | **06 24 15.6** | **-0.8** |
| **SBJI** | **Serang** | **2.14** | **68** | P | **Pn** | **06 24 18.8** | **-0.7** |
| **KLI** | **Kotabumi** | **2.19** | **19** | P | **Pn** | **06 24 20.5** | **+0.4** |
| **SKJI** | **Sukabumi** | **2.40** | **92** | P | **Pn** | **06 24 22.4** | **-0.7** |
| **MDSI** | **Maura Dua** | **2.44** | **1** | P | **Pn** | **06 24 23.4** | **-0.2** |
| **CBJI** | **Citeko** | **2.75** | **79** | P | **Pn** | **06 24 27.9** | **+0.1** |
| **MNAI** | **Manna** | **2.82** | **335** | P | **Pn** | **06 24 29.4** | **+0.6** |
| | baz=2.8,SNR=14 | | | | | | |
| **MNAI** | **Manna** | **2.82** | **335** | P | **Pn** | **06 24 28.9** | **+0.1** |
| **MNAI** | **Manna** | **2.82** | **335** | *e*Pn | **Pn** | **06 24 29.2** | **+0.4** |
| **CNJI** | **Cibinong** | **2.99** | **97** | P | **Pn** | **06 24 30.6** | **-0.6** |
| **LHSI** | **Lahat** | **3.16** | **349** | P | **Pn** | **06 24 33.7** | **+0.3** |
| **LEM** | **Lembang** | **3.46** | **88** | Pn | **Pn** | **06 24 36.6** | **-1.1** |
| | 6.7nm,0.3s,baz=298,slow=15,SNR=2.9 | | | | | | |
| LEM | | | | LR | LR | 06 26 00.5 | |
| | comp=Z,73nm,20.5s,baz=228,slow=42 | | | | | | |
| **LEM** | **Lembang** | **3.46** | **88** | P | **Pn** | **06 24 37.0** | **-0.7** |
| **KSI** | **Kapahiang** | **3.61** | **335** | P | **Pn** | **06 24 40.1** | **+0.3** |
| **CISI** | **Cisompet, Garu** | **3.70** | **100** | P | **Pn** | **06 24 41.1** | **+0.1** |
| | baz=3.6,SNR=6.1 | | | | | | |
| **CISI** | **Cisompet, Garu** | **3.70** | **100** | P | **Pn** | **06 24 40.3** | **-0.7** |
| **CISI** | **Cisompet, Garu** | **3.70** | **100** | *e*Pn | **Pn** | **06 24 42.5** | **+1.5** |
| **XMI** | **Christmas Isla** | **3.81** | **156** | P | **Pn** | **06 24 40.7** | **-1.7** |
| | baz=3.9,SNR=6.5 | | | | | | |
| **XMIS** | **Christmas Isla** | **3.82** | **157** | P | **Pn** | **06 24 42.2** | **-0.3** |
| | baz=3.9,SNR=4.1 | | | | | | |
| **XMIS** | **Christmas Isla** | **3.82** | **157** | *e*Pn | **Pn** | **06 24 40.4** | **-2.2** |
| XMIS | | | | *e*Sn | **Sn** | **06 25 25.5** | **-1.3** |
| **PMBI** | **Palembang** | **4.04** | **9** | P

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 420nm,17.6s | | | | | | | | |
| GYA | | | | | LZ | | | | |
| | 440nm,17.9s | | | | | | | | |
| **CD2** | **Chengdu** | **37.64** | **359** | *e*P | | **P** | | **06 30 58.5** | **0.0** |
| CD2 | | | | sP | | **sP** | | **06 31 09.0** | **+0.3** |
| CD2 | | | | S | | **S** | | **06 36 48.8** | **+1.8** |
| CD2 | | | | SS | | **SS** | | **06 39 36.0** | **+3.1** |
| CD2 | | | | PMZ | | | | | |
| | 10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | 120nm,5.2s | | | | | | | | |
| **WHN** | **Wuhan** | **38.54** | **14** | P | | **P** | | **06 31 08.5** | **+2.5** |
| **NJ2** | **Nanjing** | **41.24** | **19** | *e*P | | **P** | | **06 31 27.0** | **-1.4** |
| NJ2 | | | | PMZ | | | | | |
| | 20nm,1.0s | | | | | | | | |
| **LZH** | **Lanzhou** | **42.80** | **360** | *e*P | | **P** | | **06 31 42.3** | **+1.0** |
| LZH | | | | pP | | **pP** | | **06 31 47.8** | **-0.9** |
| LZH | | | | sP | | **sP** | | **06 31 50.3** | **-1.3** |
| LZH | | | | PP | | **PcP** | | **06 33 27.5** | **-4.9** |
| LZH | | | | S | | **S** | | **06 38 05.5** | **+1.2** |
| LZH | | | | PMZ | | | | | |
| | 16nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | 100nm,5.2s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | 370nm,13.8s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | 430nm,13.0s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | 490nm,15.4s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **48.05** | **8** | *e*P | | **P** | | **06 32 25.0** | **+2.3** |
| HHC | | | | pP | | **pP** | | **06 32 32.5** | **+2.3** |
| HHC | | | | sP | | **sP** | | **06 32 36.5** | **+3.4** |
| HHC | | | | S | | **S** | | **06 39 22.0** | **+2.2** |
| HHC | | | | PMZ | | | | | |
| | 16nm,0.7s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | 230nm,8.6s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | 260nm,14.8s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | 290nm,14.8s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | 180nm,13.6s | | | | | | | | |
| **WMQ** | **Urumqi** | **52.67** | **345** | *e*P | | **P** | | **06 32 58.0** | **+0.3** |
| WMQ | | | | PMZ | | | | | |
| | 12nm,0.8s | | | | | | | | |
| **KSH** | **Kashi** | **53.07** | **333** | *e*P | | **P** | | **06 33 00.8** | **+0.1** |
| KSH | | | | *e*PP | | **PP** | | **06 35 02.3** | **+1.5** |
| KSH | | | | PcS | | **PcS** | | **06 38 05.8** | **-2.1** |
| KSH | | | | S | | **S** | | **06 40 27.0** | **-2.6** |
| KSH | | | | ScS | | **ScS** | | **06 42 45.5** | **-3.7** |
| KSH | | | | PMZ | | | | | |
| | 210nm,5.3s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | 170nm,4.8s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | 160nm,5.9s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | 170nm,6.5s | | | | | | | | |
| **SONM** | **Songino Array** | **54.58** | **2** | P | | **P** | | **06 33 09.0** | **-2.6** |
| | 0.9nm,0.6s,baz=183,slow=8.6,SNR=5.3 | | | | | | | | |
| **SONA1** | **Songino Array** | **54.59** | **2** | *e*P | | **P** | | **06 33 09.3** | **-2.5** |
| **USRK** | **Ussuriysk Ar.** | **56.78** | **24** | P | | P | | 06 33 23.8 | -3.5 |
| | 2.2nm,0.7s,baz=219,slow=6.1,SNR=6.0 | | | | | | | | |
| **MK01** | **Makanchi Array** | **56.89** | **342** | *e*P | | **P** | | **06 33 26.3** | **-1.9** |
| **MKAR** | **Makanchi Array** | **56.92** | **342** | P | | **P** | | **06 33 25.4** | **-3.0** |
| | 0.9nm,0.6s,baz=153,slow=8.2,SNR=10 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **56.92** | **342** | *e*P | | **P** | | **06 33 26.6** | **-1.7** |
| **ZAA0** | **Zalesovo Array** | **62.81** | **347** | *e*P | | **P** | | **06 34 06.3** | **-2.4** |
| **ZALV** | **Zalesovo Beam** | **62.81** | **347** | P | | **P** | | **06 34 06.0** | **-2.7** |
| | 3.3nm,0.4s,baz=150,slow=5.5,SNR=15 | | | | | | | | |
| **MAW** | **Mawson** | **66.62** | **196** | P | | **P** | | **06 34 34.5** | **+1.3** |
| | 1.1nm,0.5s,baz=36,slow=8.7,SNR=3.1 | | | | | | | | |
| **ABKAR** | **Akbulak array** | **67.94** | **330** | *e*P | | **P** | | **06 34 41.1** | **-0.9** |
| | 2.5nm,0.5s | | | | | | | | |
| **BKZ** | **Black Stump Fm** | **71.97** | **129** | *e*P | | **P** | | **06 35 07.3** | **+0.1** |
| **URZ** | **Urewera** | **72.37** | **128** | LR | | LR | | 07 06 36.8 | |
| | comp=Z,86nm,20.8s,baz=183,slow=36 | | | | | | | | |
| **MATP** | **Matopo** | **74.18** | **251** | P | | **P** | | **06 35 22.3** | **+1.6** |
| | 1.0nm,0.5s,baz=102,slow=5.9,SNR=4.1 | | | | | | | | |
| **VNDA** | **Vanda** | **76.55** | **169** | P | | **P** | | **06 35 34.5** | **+1.5** |
| | 0.4nm,0.8s,baz=330,slow=7.5,SNR=6.0 | | | | | | | | |
| **VNDA** | **Vanda** | **76.55** | **169** | *e*P | | **P** | | **06 35 34.7** | **+1.7** |
| | 48nm,2.8s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **83.05** | **180** | *e*P | | **P** | | **06 36 10.2** | **+1.6** |
| | 7.9nm,1.3s | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **145.62** | **46** | *e*PKPdf | | **PKPbc** | | **06 43 22.2** | **-0.4** |
| **TXAR** | **Lajitas Array** | **145.62** | **46** | PKPbc | | **PKPbc** | | **06 43 22.2** | **-0.4** |
| | 0.5nm,0.5s,baz=299,slow=0.9,SNR=12 | | | | | | | | |

*IDC* ***30*** *06:28:47.7±1.3,5.°39S×152.°47E, h0km, mb4.0/9, mb1 4.3/9, mb1mx4.0/30, mbtmp4.0/9, Error ellipse: s-maj=47.0km s-min=20.9km az=125.0*
*ISCJB* ***30*** *06:28:52.7±0.9,5.°3S±0.°2×152.°3E±0.°2, h40km, mb4.0/12, Error ellipse: s-maj=34.2km s-min=9.6km az=40.9*
*NEIC* ***30*** *06:28:57.5±2.0,5.°48S×152.°39E, h74km±18km, mb4.2/4, Error ellipse: s-maj=23.5km s-min=12.6km az=129.0*

**ISC 30 06:28:54.0±1.2,5.°4S±0.°2×152.°4E±0.°2, h40km, n17, σ1§16/20, mb4.0/12, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.56** | **232** | Pn | | **Pn** | **06 30 29.0** | **+1.0** |
| | 1.5nm,0.3s,baz=48,slow=15,SNR=3.5 | | | | | | | |
| PMG | | | | Sn | | **Sn** | **06 31 39.3** | **-2.3** |
| | 1.4nm,0.3s,baz=240,slow=20,SNR=3.6 | | | | | | | |
| **PMG** | **Port Moresby** | **6.56** | **232** | P | | **Sn** | **06 31 39.3** | **-2.3** |
| | baz=42,SNR=3.3 | | | | | | | |
| **PMG** | **Port Moresby** | **6.56** | **232** | *e*Pn | | **Pn** | **06 30 30.6** | **+2.6** |
| PMG | | | | *e*Sn | | **Sn** | **06 31 42.9** | **+1.3** |
| **WRAB** | **Tennant Creek** | **22.75** | **229** | *e*P | | **P** | **06 33 53.2** | **+0.2** |
| | 3.8nm,0.6s | | | | | | | |
| **WRA** | **Warramunga Arr** | **22.76** | **229** | P | | **P** | **06 33 52.2** | **-1.0** |
| | 1.8nm,0.7s,baz=52,slow=10,SNR=15 | | | | | | | |
| **ASAR** | **Alice Springs** | **25.45** | **223** | P | | **P** | **06 34 18.5** | **+0.1** |
| | 1.1nm,0.6s,baz=60,slow=8.7,SNR=22 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.03** | **242** | P | | **P** | **06 34 49.7** | **-0.9** |
| | 2.6nm,0.6s,baz=72,slow=8.8,SNR=5.9 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.03** | **242** | *e*P | | **P** | **06 34 50.3** | **-0.3** |
| | 2.7nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.76** | **296** | P | | **P** | **06 38 42.1** | **+0.5** |
| | 1.0nm,0.3s,baz=95,slow=4.5,SNR=4.4 | | | | | | | |
| **SONM** | **Songino Array** | **66.60** | **328** | P | | **P** | **06 39 40.8** | **+0.3** |
| | 0.5nm,0.5s,baz=126,slow=7.3,SNR=3.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **80.50** | **319** | P | | **P** | **06 41 01.6** | **-0.5** |
| | 0.7nm,0.9s,baz=99,slow=7.5,SNR=4.0 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.41** | **326** | P | | **P** | **06 41 06.4** | **-0.3** |
| | 1.0nm,0.6s,baz=116,slow=6.7,SNR=3.1 | | | | | | | |
| **MCK** | **McKinley** | **81.55** | **23** | *e*P | | **P** | **06 41 07.4** | **+0.1** |
| | 6.2nm,0.9s | | | | | | | |
| **COLA** | **College** | **82.53** | **22** | *e*P | | **P** | **06 41 12.5** | **+0.1** |
| | 3.2nm,0.7s | | | | | | | |
| **ILAR** | **Eielson Array** | **82.84** | **22** | P | | **P** | **06 41 13.6** | **-0.4** |
| | 2.6nm,0.8s,baz=247,slow=4.9,SNR=25 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.76** | **52** | P | | **P** | **06 42 02.6** | **-0.2** |
| | 0.3nm,0.3s,baz=271,slow=7.0,SNR=3.5 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **150.10** | **287** | PKPbc | | **PKPbc** | **06 48 41.1** | **-0.5** |
| | 1.9nm,0.8s,baz=97,slow=3.1,SNR=5.5 | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **06 48 47.5** | **-0.1** |
| | 1.0nm,0.7s,baz=87,slow=3.2,SNR=3.9 | | | | | | | |

**IDC 30 06:33:46.5±3.2,6.°18S×150.°68E, h0km, mb3.6/3, mb1 3.9/4, mb1mx3.5/31, mbtmp3.7/4, ML1.5/1, MS3.2/1, Ms1 3.2/1, ms1mx2.5/31, Error ellipse: s-maj=110.9km s-min=41.8km az=123.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.74** | **227** | Pn | | Pn | 06 34 57.8 | -1.4 |
| | 1.3nm,0.3s,baz=54,slow=6.6,SNR=2.7 | | | | | | | |
| PMG | | | | Sn | | Sn | 06 35 50.2 | -4.7 |
| | 3.6nm,0.3s,baz=156,slow=20,SNR=6.5 | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.96** | **228** | P | | P | 06 38 30.7 | -0.6 |
| | 3.3nm,1.0s,baz=53,slow=11,SNR=13 | | | | | | | |
| **DZM** | **Mont Dzumac** | **21.95** | **138** | LR | | LR | 06 45 08.8 | |
| | comp=Z,74nm,21.8s,baz=96,slow=31 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.72** | **221** | P | | P | 06 39 00.3 | -0.1 |
| | 0.7nm,0.6s,baz=58,slow=8.7,SNR=4.7 | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **27.15** | **242** | P | | P | 06 39 32.6 | +0.9 |
| | 1.0nm,0.7s,baz=49,slow=11,SNR=3.4 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.68** | **285** | PKPbc | | PKPbc | 06 53 36.1 | -0.7 |
| | 0.5nm,0.6s,baz=86,slow=2.7,SNR=7.8 | | | | | | | |

**IDC 30 06:39:38.4±4.0,5.°77S×150.°13E, h0km, mb2.8/2, mb1 3.2/2, mb1mx3.1/27, mbtmp2.9/2, Error ellipse: s-maj=160.5km s-min=48.0km az=116.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **20.83** | **226** | P | | P | 06 44 20.3 | -1.6 |
| | 0.3nm,0.5s,baz=52,slow=11,SNR=5.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.67** | **220** | P | | P | 06 44 52.9 | +1.0 |
| | 0.5nm,0.9s,baz=59,slow=8.7,SNR=3.1 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.04** | **286** | PKPbc | | PKPbc | 06 59 26.4 | -0.7 |
| | 0.5nm,1.0s,baz=85,slow=1.7,SNR=3.3 | | | | | | | |

**IDC 30 06:42:09.8±6.7,19.°64S×176.°61W, h0km, mb3.9/2, mb1 4.1/2, mb1mx3.7/23, mbtmp3.9/2, Error ellipse: s-maj=294.2km s-min=105.0km az=154.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **45.99** | **256** | P | | P | 06 50 35.0 | -0.2 |
| | 1.1nm,0.5s,baz=97,slow=7.6,SNR=20 | | | | | | | |
| **WRA** | **Warramunga Arr** | **46.02** | **261** | P | | P | 06 50 35.3 | -0.1 |
| | 0.4nm,0.3s,baz=97,slow=7.6,SNR=21 | | | | | | | |
| **AKASG** | **Malin Array Be** | **142.87** | **333** | PKP | | PKPdf | 07 01 44.5 | -0.7 |
| | 0.4nm,0.4s,baz=39,slow=3.6,SNR=4.9 | | | | | | | |

**IDC 30 06:58:07.9±7.4,3.°26S×100.°10E, h0km, mb3.4/4, mb1 3.5/4, mb1mx3.3/48, mbtmp3.4/4, Error ellipse: s-maj=351.4km s-min=27.0km az=53.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **H08S2** | **Diego Garcia H** | **27.82** | **260** | T | | T | 07 31 27.1 | |
| | baz=79 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.83** | **260** | T | | T | 07 31 28.1 | |
| | baz=79 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.84** | **260** | T | | T | 07 31 29.3 | |
| | baz=79 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.28** | **119** | P | | P | 07 05 21.5 | -0.5 |
| | 0.2nm,0.7s,baz=295,slow=8.7,SNR=3.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.44** | **125** | P | | P | 07 05 31.5 | -0.3 |
| | 0.2nm,0.7s,baz=291,slow=7.8,SNR=2.7 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.26** | **345** | P | | P | 07 07 20.8 | -0.3 |
| | 0.4nm,0.5s,baz=164,slow=8.1,SNR=3.3 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.42** | **349** | P | | P | 07 08 04.7 | -0.5 |
| | 0.7nm,0.4s,baz=166,slow=7.5,SNR=2.5 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.63** | **39** | PKPbc | | PKPab | 07 17 49.7 | 0.0 |
| | 0.4nm,0.7s,baz=281,slow=1.5,SNR=3.6 | | | | | | | |

*SJA* ***30*** *06:58:07.9±0.6,22.°07S×67.°59W, h125km±999km, ML2.6, MW3.1*
*ISCJB* ***30*** *06:58:09.1±0.6,22.°15S±0.°07×67.°35W±0.°05, h178km, Error ellipse: s-maj=11.0km s-min=5.0km az=29.0*
*GUC* ***30*** *06:58:10.0±0.4,22.°02S×67.°64W, h200km, ML3.4*

**ISC 30 06:58:09.2±1.3,22.°13S±0.°08×67.°31W±0.°06, h178km, n8, σ0§82/14, 3D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **YJA** | **Yavi** | **1.67** | **92** | *i* P | | **Pn** | **06 58 42.5** | **-0.5** |
| YJA | | | | *i* S | | **Sn** | **06 59 08.7** | **-0.5** |
| **HJA** | **Humahuaca** | **2.06** | **122** | *i* P | | **Pn** | **06 58 47.8** | **+0.7** |
| HJA | | | | *i* S | | **Sn** | **06 59 16.6** | **+0.1** |
| **PB01** | **IPOC Station P** | **2.30** | **298** | ↓*i* P | | **Pn** | **06 58 50.4** | **+0.9** |
| PB01 | | | | *i* S | | **Sn** | **06 59 20.6** | **-0.2** |
| PB01 | | | | AML | | AML | 06 59 23.6 | |
| | comp=E,143nm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **2.43** | **279** | *i* P | | **Pn** | **06 58 51.6** | **+0.5** |
| PB07 | | | | *i* S | | **Sn** | **06 59 22.6** | **-1.1** |
| PB07 | | | | AML | | AML | 06 59 22.9 | |
| | comp=N,203nm,0.1s | | | | | | | |
| **PB04** | **IPOC Station P** | **2.64** | **265** | *i* S | | **Sn** | **06 59 26.9** | **-1.2** |
| PB04 | | | | AML | | AML | 06 59 28.9 | |
| | comp=N,100nm,0.2s | | | | | | | |
| **SLA** | **San Lorenzo** | **3.06** | **148** | *i* P | | **Pn** | **06 58 59.1** | **+0.5** |
| SLA | | | | IAML | | | 06 58 59.5 | |
| | comp=Z,14nm,0.3s | | | | | | | |
| **MNMC** | **Minimini** | **3.68** | **324** | ↓*i* P | | **Pn** | **06 59 06.8** | **+0.4** |
| MNMC | | | | *e*S | | **Sn** | **06 59 50.1** | **-1.0** |
| **PB13** | **IPOC Station P** | **4.30** | **331** | ↓*i* P | | **Pn** | **06 59 15.8** | **+1.0** |
| PB13 | | | | *i* S | | **Sn** | **07 00 05.6** | **-0.4** |

*IDC* ***30*** *06:58:25.2±1.8,3.°51S×99.°81E, h0km, mb3.9/9, mb1 4.0/9, mb1mx3.7/47, mbtmp3.9/9, Error ellipse: s-maj=68.8km s-min=20.2km az=55.0*
*ISCJB* ***30*** *06:58:28.4±1.5,3.°4S±0.°2×99.°9E±0.°3, h33km, mb4.0/9, Error ellipse: s-maj=55.1km s-min=16.2km az=145.4*

**ISC 30 06:58:30.4±1.8,3.°5S±0.°3×99.°8E±0.°4, h35km, n16, σ0§83/10, mb3.9/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.82** | **358** | P | | **P** | **07 03 18.9** | **-1.0** |
| | 1.1nm,0.2s,baz=186,slow=11,SNR=4.6 | | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.53** | **260** | T | | T | 07 33 29.1 | |
| | baz=82,slow=74 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.54** | **260** | T | | T | 07 33 29.7 | |
| | baz=82 | | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.55** | **260** | T | | T | 07 33 29.0 | |
| | baz=82,slow=74 | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.94** | **159** | T | | T | 07 41 19.2 | |
| | baz=336,slow=76,SNR=7.0 | | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.96** | **159** | T | | T | 07 41 17.3 | |
| | baz=336,slow=76,SNR=6.8 | | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.96** | **159** | T | | T | 07 41 19.2 | |
| | baz=336,slow=76,SNR=7.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.40** | **119** | P | | **P** | **07 05 39.3** | **-1.1** |
| | 0.8nm,0.9s,baz=297,slow=8.1,SNR=3.7 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.53** | **124** | P | | **P** | **07 05 50.4** | **+0.5** |
| | 1.9nm,1.2s,baz=305,slow=8.0,SNR=4.3 | | | | | | | |
| **SONM** | **Songino Array** | **51.43** | **6** | P | | **P** | **07 07 33.0** | **+0.8** |
| | 1.3nm,0.9s,baz=192,slow=7.3,SNR=5.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.41** | **345** | P | | **P** | **07 07 39.7** | **+0.3** |
| | 1.0nm,0.7s,baz=146,slow=8.0,SNR=5.5 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.53** | **28** | P | | **P** | **07 08 02.3** | **+0.2** |
| | 2.2nm,0.8s,baz=207,slow=6.1,SNR=4.8 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.59** | **350** | P | | **P** | **07 08 23.7** | **+0.1** |
| | 2.2nm,0.6s,baz=163,slow=7.8,SNR=7.3 | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.52** | **340** | P | | **P** | **07 08 42.7** | **-1.0** |
| | 0.5nm,0.5s,baz=134,slow=6.2,SNR=2.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **85.35** | **332** | P | | **P** | **07 11 04.0** | **+0.3** |
| | 1.6nm,0.8s,baz=116,slow=5.1,SNR=5.0 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.96** | **38** | PKPbc | | **PKPab** | **07 18 08.5** | **+0.7** |
| | 0.6nm,0.6s,baz=338,slow=1.0,SNR=8.6 | | | | | | | |

*ISCJB* ***30*** *06:58:47.7±0.8,38.°90N±0.°04×27.°03E±0.°05, h10km±7km, Error ellipse: s-maj=7.4km s-min=5.1km az=137.6*
*DDA* ***30*** *06:58:47.5,38.°88N×27.°04E, h7km, Md2.5*
*ISK* ***30*** *06:58:47.3,38.°90N×27.°05E, h17km, MD2.8*
*CSEM* ***30*** *06:58:48.1±0.1,38.°87N×27.°04E, h20km, MD2.8, Error ellipse: s-maj=3.4km s-min=2.9km az=38.0*

**ISC 30 06:58:47.7±1.3,38.°89N±0.°03×27.°05E±0.°03, h14km±12km, n21, σ0§27/32, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **IZM** | **Izmir** | **0.52** | **161** | *e*PG | | **Pg** | **06 58 58.1** | **+0.1** |
| IZM | | | | *e*SG | | **Sb** | **06 59 06.2** | **0.0** |
| **IZM** | **Izmir** | **0.52** | **161** | *e*Pg | | **Pg** | **06 58 58.2** | **+0.1** |
| IZM | | | | *e*Sg | | **Sb** | **06 59 06.2** | **0.0** |
| **AKS** | **Akhisar** | **0.60** | **91** | *e*PG | | **Pg** | **06 58 59.6** | **+0.1** |
| AKS | | | | *e*SG | | **Sb** | **06 59 08.5** | **+0.2** |
| **AKS** | **Akhisar** | **0.60** | **91** | *e*Pg | | **Pg** | **06 58 59.6** | **+0.1** |
| AKS | | | | *e*Sg | | **Sb** | **06 59 08.5** | **+0.2** |
| **AKHS** | **Akhisar** | **0.60** | **91** | *i* P | | **Pb** | **06 58 59.9** | **-0.1** |
| AKHS | | | | *i* S | | **Sb** | **06 59 08.9** | **+0.6** |
| **AKHS** | **Akhisar** | **0.60** | **91** | P | | **Pb** | **06 58 59.9** | **-0.1** |
| AKHS | | | | S | | **Sb** | **06 59 08.9** | **+0.6** |
| **ZEY** | **¨zmir** | **0.78** | **213** | P | | **Pn** | **06 59 04.0** | **-0.3** |
| ZEY | | | | S | | **Sb** | **06 59 14.0** | **+0.6** |
| **BALY** | **Balya** | **0.96** | **28** | *i* P | | **Pb** | **06 59 05.8** | **-0.4** |
| BALY | | | | *i* S | | **Sn** | **06 59 20.4** | **+0.2** |
| **BALY** | **Balya** | **0.96** | **28** | P | | **Pb** | **06 59 05.8** | **-0.4** |
| BALY | | | | S | | **Sn** | **06 59 20.4** | **+0.2** |
| **SIGR** | **SIGRI** | **0.98** | **289** | *e*PG | | **Pg** | **06 59 06.7** | **0.0** |
| **SIGR** | **SIGRI** | **0.98** | **289** | *e*Pg | | **Pg** | **06 59 06.7** | **0.0** |
| **EZN** | **Ezine** | **1.09** | **329** | *e*PN | | **Pb** | **06 59 08.2** | **0.0** |
| **EZN** | **Ezine** | **1.09** | **329** | *e*Pn | | **Pb** | **06 59 08.3** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.16** | **145** | *e*PN | | **Pb** | **06 59 09.3** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.16** | **145** | *e*Pn | | **Pb** | **06 59 09.3** | **-0.2** |
| **DURS** | **Dursunbey** | **1.32** | **57** | *i* P | | **Pn** | **06 59 11.9** | **+0.1** |
| DURS | | | | *i* S | | **Sb** | **06 59 28.7** | **-0.4** |
| **DURS** | **Dursunbey** | **1.32** | **57** | P | | **Pn** | **06 59 11.9** | **+0.1** |
| DURS | | | | S | | **Sb** | **06 59 28.6** | **-0.4** |
| **KULA** | **Kula-Manisa** | **1.32** | **106** | *e*PN | | **Pn** | **06 59 11.5** | **-0.3** |
| **KULA** | **Kula-Manisa** | **1.32** | **106** | *e*Pn | | **Pn** | **06 59 11.5** | **-0.3** |
| **TVSB** | **Tavsanli** | **1.96** | **73** | *e*PN | | **Pn** | **06 59 20.7** | **+0.1** |
| **TVSB** | **Tavsanli** | **1.96** | **73** | *e*Pn | | **Pn** | **06 59 20.7** | **+0.1** |

*SZGRF* ***30*** *07:06:16.2,21.°87S×176.°68W, h33km*
*IDC* ***30*** *07:07:19.6±1.3,20.°86S×178.°49W, h568km±13km, mb3.9/19, mb1 4.1/22, mb1mx4.0/32, mbtmp4.8/22, Error ellipse: s-maj=14.1km s-min=10.6km az=101.0*
*ISCJB* ***30*** *07:07:20.5±0.6,20.°93S±0.°04×178.°60W±0.°05, h591km±8km, mb4.7/94, Error ellipse: s-maj=6.7km s-min=5.8km az=33.7*
*BJI* ***30*** *07:07:21.0,20.°67S×178.°30W, h600km, mb4.8/26, mB5.2/14*
*NEIC* ***30*** *07:07:22.0±0.6,20.°89S×178.°57W, h598km±6km, mb4.9/77, Error ellipse: s-maj=6.4km s-min=5.4km az=114.0*
*MOS* ***30*** *07:07:23.2±2.7,20.°79S×179.°03W, h585km, mb4.7/17, Error ellipse: s-maj=13.1km s-min=9.3km az=112.1*
*AUST* ***30*** *07:07:24.4±8.0,20.°97S×178.°74W, h607km±1km, Error ellipse: s-maj=5.1km s-min=1.6km az=239.0*

**ISC 30 07:07:20.9±0.4,20.°88S±0.°05×178.°50W±0.°05, h585km±3km, h586km:pP-P, n402, σ1§01/447, mb4.8/96, 49C-20D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **MSVF** | **Nonsavu** | **4.52** | **313** | *e*P | | **P** | **07 08 49.9** | **+0.6** |
| **MSVF** | **Nonsavu** | **4.52** | **313** | P | | **P** | **07 08 50.2** | **+0.9** |
| | 206nm,0.7s,SNR=8.5 | | | | | | | |
| **MSVF** | **Nonsavu** | **4.52** | **313** | *e*Pn | | **P** | **07 08 49.9** | **+0.6** |
| **RAO** | **Raoul Island** | **8.35** | **177** | S | | **S** | **07 11 00.9** | **-2.3** |
| | 92nm,0.3s,baz=80,slow=22,SNR=3.6 | | | | | | | |
| **RAO** | **Raoul Island** | **8.35** | **177** | *e*P | | **P** | **07 09 25.6** | **+2.6** |
| RAO | | | | S | | **S** | **07 11 00.9** | **-2.3** |
| **RAO** | **Raoul Island** | **8.35** | **177** | *e*Pn | | **P** | **07 09 25.6** | **+2.6** |
| RAO | | | | S | | **S** | **07 11 00.9** | **-2.3** |
| **AFI** | **Afiamalu** | **9.44** | **44** | P | | **P** | **07 09 31.2** | **-2.9** |
| | 8.3nm,0.3s,baz=39,slow=20,SNR=12 | | | | | | | |
| AFI | | | | S | | S | 07 11 15.8 | -7.4 |
| | 10nm,0.3s,baz=197,slow=19,SNR=6.2 | | | | | | | |
| **AFI** | **Afiamalu** | **9.44** | **44** | *e*P | | **P** | **07 09 31.5** | **-2.5** |
| **DZM** | **Mont Dzumac** | **14.07** | **262** | *e*P | | **P** | **07 10 19.7** | **-1.1** |
| | 53nm,0.9s | | | | | | | |
| **DZM** | **Mont Dzumac** | **14.07** | **262** | P | | **P** | **07 10 19.7** | **-1.1** |
| | 2.5nm,0.3s,baz=291,slow=1.4,SNR=23 | | | | | | | |
| DZM | | | | S | | **S** | **07 12 51.0** | **+2.8** |
| | baz=108,slow=20,SNR=2.6 | | | | | | | |
| **NFK** | **Norfolk Island** | **14.73** | **234** | P | | **P** | **07 10 28.4** | **+1.4** |
| | baz=14,SNR=4.0 | | | | | | | |
| **OUZ** | **Omahuta** | **15.89** | **204** | *e*P | | **P** | **07 10 39.3** | **+1.6** |
| | 71nm,0.8s | | | | | | | |
| **URZ** | **Urewera** | **17.73** | **191** | P | | **P** | **07 10 53.1** | **-1.4** |
| | 5.9nm,0.3s,baz=5.4,slow=14,SNR=31 | | | | | | | |
| URZ | | | | S | | **S** | **07 13 43.6** | **-4.6** |
| | 0.5nm,0.3s,baz=342,slow=19,SNR=4.7 | | | | | | | |
| **URZ** | **Urewera** | **17.73** | **191** | *e*P | | **P** | **07 10 52.8** | **-1.7** |
| | 24nm,0.7s | | | | | | | |
| URZ | | | | S | | **S** | **07 13 43.6** | **-4.6** |
| **HIZ** | **Hauiti** | **18.49** | **197** | *e*P | | **P** | **07 11 04.4** | **+3.0** |
| **BKZ** | **Black Stump Fm** | **18.73** | **192** | *e*P | | **P** | **07 11 01.7** | **-1.9** |
| | 139nm,1.9s | | | | | | | |
| **BFZ** | **Birch Farm** | **20.24** | **192** | *e*P | | **P** | **07 11 15.8** | **-1.5** |
| | 128nm,1.5s | | | | | | | |
| **SNZO** | **South Karori** | **21.17** | **194** | *e*P | | **P** | **07 11 24.0** | **-1.6** |
| | 176nm,1.4s | | | | | | | |
| **THZ** | **Tophouse** | **22.05** | **197** | *e*P | | **P** | **07 11 32.8** | **-0.8** |
| **KHZ** | **Kahutara** | **22.50** | **196** | *e*P | | **P** | **07 11 36.6** | **-0.8** |
| | 236nm,2.4s | | | | | | | |
| **TARA** | **Tarawa** | **23.64** | **338** | *e*P | | **P** | **07 11 48.0** | **0.0** |
| | 72nm,0.6s | | | | | | | |
| **OXZ** | **Oxford** | **23.74** | **197** | *e*P | | **P** | **07 11 48.2** | **-0.3** |
| **RPZ** | **Rata Peaks** | **24.38** | **199** | P | | **P** | **07 11 54.3** | **+0.1** |
| | 7.8nm,0.6s,baz=347,slow=7.7,SNR=3.6 | | | | | | | |
| **RPZ** | **Rata Peaks** | **24.38** | **199** | *e*P | | **P** | **07 11 54.5** | **+0.4** |
| | 11nm,0.7s | | | | | | | |
| **WKZ** | **Wanaka** | **26.02** | **201** | *e*P | | **P** | **07 12 09.4** | **+0.8** |
| **DCZ** | **Deep Cove** | **27.23** | **202** | *e*P | | **P** | **07 12 19.9** | **+0.8** |
| | 59nm,1.5s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **27.32** | **201** | *e*P | | **P** | **07 12 20.4** | **+0.4** |
| | 320nm,2.8s | | | | | | | |
| **PPT** | **Papeete** | **27.49** | **88** | *e*P | | **P** | **07 12 22.5** | **+0.7** |
| **PPT** | **Papeete** | **27.49** | **88** | *e*P | | **P** | **07 12 22.5** | **+0.7** |
| **EIDS** | **Eidsvold** | **28.30** | **255** |

comp=Z,52nm,0.6s
**WRKA Warakurna 48.91 255** P **P** 07 15 14.1 -0.8
baz=49,SNR=49
**KNRA Kununurra 50.17 267** P **P** 07 15 23.2 -0.9
baz=50,SNR=31
**FITZ Fitzroy Crossi 52.52 263** P **P** 07 15 40.8 -0.2
comp=Z,12nm,0.5s,baz=100,slow=4.9,SNR=102
FITZ S **S** 07 22 24.7 -0.3
comp=Z,1.7nm,0.8s,baz=102,slow=14,SNR=3.9
**FITZ Fitzroy Crossi 52.52 263** P **P** 07 15 40.5 -0.5
baz=52,SNR=71
**FITZ Fitzroy Crossi 52.52 263** *e*P **P** 07 15 40.9 -0.1
comp=Z,14nm,0.5s
FITZ S **S** 07 22 24.7 -0.3
**SWI Sorong 52.90 285** P **P** 07 15 43.7 0.0
baz=53,SNR=9.0
**KMBL Kambalda 53.98 246** P **P** 07 15 50.6 -0.6
baz=54,SNR=9.0
**SOEI Soe 56.05 272** P **P** 07 16 07.1 +1.1
baz=56,SNR=5.9
**SOEI Soe 56.05 272** *e*P **P** 07 16 06.5 +0.6
comp=Z,93nm,0.7s
**BATI Baumata 56.47 271** P **P** 07 16 09.8 +1.0
comp=Z,40nm,0.7s,baz=73,slow=17
**TNTI Ternate 57.11 285** *e*P **P** 07 16 12.8 -0.2
comp=Z,118nm,0.8s
**MBWA Marble Bar 57.32 258** *e*P **P** 07 16 13.4 -1.0
comp=Z,43nm,0.7s
**MEEK Meekatharra 57.35 251** P **P** 07 16 13.3 -1.3
baz=57,SNR=25
**SBA Scott Base 57.46 184** *e*P **P** 07 16 17.4 +3.0
SBA pmax pmax
comp=Z,13nm,1.1s
**SBA Scott Base 57.46 184** *e*P **P** 07 16 17.4 +3.0
comp=Z,13nm,1.1s
**KLBR Kellerberrin 57.47 245** P **P** 07 16 14.8 -0.5
baz=57,SNR=28
**VNDA Vanda 57.49 185** P **P** 07 16 15.9 +1.3
comp=Z,2.2nm,0.8s,baz=2.9,slow=6.3,SNR=21
VNDA ScP **ScP** 07 20 05.5 +1.4
comp=Z,1.3nm,0.9s,baz=12,slow=4.2,SNR=5.2
**VNDA Vanda 57.49 185** *e*P **P** 07 16 16.4 +1.8
VNDA 07 20 05.5
VNDA pmax pmax
comp=Z,3.0nm,0.9s
**VNDA Vanda 57.49 185** *e*P **P** 07 16 16.4 +1.8
comp=Z,2.7nm,0.9s
VNDA ScP **ScP** 07 20 05.5 +1.4
**NWAO Narrogin (SRO) 57.78 244** *e*P **P** 07 16 17.3 -0.1
NWAO pmax pmax
comp=Z,11nm,0.6s
**NWAO Narrogin (SRO) 57.78 244** P **P** 07 16 17.1 -0.2
baz=58,SNR=6.7
**NWAO Narrogin (SRO) 57.78 244** *e*P **P** 07 16 17.3 -0.1
comp=Z,11nm,0.6s
**RKGY Rocky Gully 57.85 242** P **P** 07 16 18.1 +0.3
baz=58,SNR=12
**MMRI Maumere 58.30 273** *e*P **P** 07 16 20.5 -0.7
comp=Z,21nm,0.6s
**BLDU Ballidu 58.47 246** P **P** 07 16 21.6 -0.5
baz=58,SNR=28
**MORW Morawa 59.25 248** P **P** 07 16 26.8 -0.5
baz=59,SNR=6.9
**LUWI Luwuk 60.55 281** *e*P **P** 07 16 36.2 +0.1
comp=Z,438nm,0.5s
**GIRL Giralia 62.00 255** P **P** 07 16 46.3 +0.9
baz=62,SNR=6.7
**CASY Casey 63.42 205** *e*P **P** 07 16 53.9 +0.1
comp=Z,6.1nm,0.5s
**MYLDM Lahad Datu 66.98 285** *e*P **P** 07 17 19.1 +2.2
comp=Z,16nm,0.8s
**QSPA South Pole Qui 69.19 180** *e*P **P** 07 17 30.3 +0.7
comp=Z,14nm,0.9s
**KKM Kota Kinabalu 69.41 285** *e*P **P** 07 17 31.9 +0.2
comp=Z,33nm,0.8s
**UGM Wanagama 69.49 269** P **P** 07 17 31.8 -0.4
baz=69,SNR=4.4
**UGM Wanagama 69.49 269** *e*P **P** 07 17 32.0 -0.2
comp=Z,650nm,2.0s
**MJAR Matsushiro Arr 70.24 324** P **P** 07 17 35.4 -0.7
comp=Z,6.3nm,0.5s,baz=155,slow=6.2,SNR=17
**MAJO Matsushiro 70.24 324**⇓*e*P **P** 07 17 34.9 -1.2
MAJO pmax pmax
comp=Z,62nm,0.9s
**MAJO Matsushiro 70.24 324** *e*P **P** 07 17 35.8 -0.3
comp=Z,18nm,0.8s
**ERM Erimo 71.93 331** *e*P **P** 07 17 48.2 +2.4
ERM pmax pmax
comp=Z,6.0nm,0.6s
**ERM Erimo 71.93 331** *e*P **P** 07 17 48.2 +2.4
comp=Z,6.3nm,0.6s
**JNU Nakatsue 72.23 317** P **P** 07 17 47.4 -0.4
comp=Z,11nm,0.8s,baz=92,slow=12,SNR=3.6
**JNU Nakatsue 72.23 317** *e*P **P** 07 17 48.0 +0.2
comp=Z,150nm,1.8s
**KSM Kuching 73.00 278** *e*P **P** 07 17 53.2 +0.5
comp=Z,31nm,0.7s
**YULB Yu-li 73.32 304** *e*P **P** 07 17 53.3 -0.9
comp=Z,328nm,2.7s
**NACB Ninganchiao 73.51 304** *e*P **P** 07 17 54.5 -0.7
comp=Z,73nm,1.2s
**TPUB Ta-pu 73.79 303** *e*P **P** 07 17 55.5 -1.4
comp=Z,44nm,0.8s
**SSLB Suanglung 73.80 304** *e*P **P** 07 17 55.7 -1.2
comp=Z,30nm,1.0s
**ASAJ Asahikawa 73.84 332** P **P** 07 17 58.1 +1.5
comp=Z,12nm,0.6s,baz=206,slow=6.2,SNR=5.9
**ASAJ Asahikawa 73.84 332** P **P** 07 17 58.2 +1.5
ASAJ pmax pmax
comp=Z,12nm,0.6s
**ASAJ Asahikawa 73.84 332** *e*P **P** 07 17 57.7 +1.0
comp=Z,4.0nm,0.5s
**YHNB Yeheng 73.94 305** *e*P **P** 07 17 57.7 0.0
comp=Z,101nm,1.5s
**YSS Yuzh-Sakhalins 76.03 334** *e*P **P** 07 18 09.9 +1.1
YSS pmax pmax
comp=Z,12nm,0.9s
**PEA0 Petropavlovsk- 76.52 346** *e*P **P** 07 18 11.6 +0.3
**PETK Petropavlovsk- 76.52 346** P **P** 07 18 11.4 +0.1
comp=Z,9.2nm,0.6s,baz=145,slow=8.3,SNR=6.8
**KSRS Korea Array 76.86 319** P **P** 07 18 13.9 +0.3
comp=Z,3.3nm,0.6s,baz=132,slow=6.0,SNR=13
**KSRS Korea Array 76.86 319** P **P** 07 18 13.9 +0.3
KSRS pmax pmax
comp=Z,3.0nm,0.6s
**KSAR Wonju Array Be 76.88 319** P **P** 07 18 13.9 +0.2
**KSAR Wonju Array Be 76.88 319** P **P** 07 18 13.9 +0.2
**KS01 Wonju Array Si 76.90 319** *e*P **P** 07 18 13.7 -0.1
**VLA Vladivostok 78.33 325**⇓*e*P **P** 07 18 20.3 -1.1
VLA pmax pmax
comp=Z,18nm,0.7s
**MSHR Mys Shultsa 78.35 325***de*P **P** 07 18 22.9 +1.4
**USRK Ussuriysk Ar. 79.02 326** P **P** 07 18 26.2 +1.2
comp=Z,11nm,0.7s,baz=120,slow=3.4,SNR=25
**MYKOM Kota Tinggi 79.11 276** *e*P **P** 07 18 26.3 +0.1
comp=Z,27nm,0.8s
**NJ2 Nanjing 79.77 310** *e*P **P** 07 18 29.5 +0.3
NJ2 PMZ
comp=Z,10.0nm,0.6s
**HABR Khabarovsk 80.55 331** *e*P **P** 07 18 32.2 -0.7
HABR *e**SP **sP** 07 21 33.8 -1.9
HABR *e* 07 21 46.3
HABR *e*PPP PPP 07 23 41.1
HABR *e*S **S** 07 27 52.7 +0.6
HABR *e*SS **SS** 07 33 22.6 -0.1
HABR *e*SSS SSS 07 36 56.3
HABR pmax pmax
comp=Z,30nm,1.4s
HABR MLR MLR
comp=Z,87nm,20.0s
**MDJ Mudanjiang 80.56 325** P **P** 07 18 34.0 +0.9
MDJ PMZ
comp=Z,17nm,1.0s
MDJ PMZ
comp=Z,230nm,4.7s
**MDJ Mudanjiang 80.56 325** *e*P **P** 07 18 34.0 +0.9
comp=Z,23nm,1.0s
**QIZ Qiongzhong 80.59 294** P **P** 07 18 34.5 +0.7
**YBH Yreka Blue Hor 80.88 39** *e*P **P** 07 18 36.6 +1.7
YBH pmax pmax
comp=Z,2.0nm,0.9s
**YBH Yreka Blue Hor 80.88 39** *e*P **P** 07 18 36.6 +1.7
comp=Z,1.5nm,0.9s
**MAW Mawson 81.05 200** P **P** 07 18 35.5 +0.3
comp=Z,1.8nm,0.5s,baz=148,slow=7.5,SNR=6.6
**MAW Mawson 81.05 200** *e*P **P** 07 18 35.7 +0.4
MAW pmax pmax
comp=Z,5.0nm,1.8s
**MAW Mawson 81.05 200** P **P** 07 18 35.6 +0.3
baz=81,SNR=4.8
**MAW Mawson 81.05 200** *e*P **P** 07 18 35.7 +0.4
comp=Z,4.8nm,1.8s
**NVAR Mina Array Bea 81.62 44** P **P** 07 18 39.7 +0.8
comp=Z,0.8nm,0.6s,baz=224,slow=7.6,SNR=3.9
**WHN Wuhan 82.30 307** P P 07 18 39.0 -3.2
**CN2 Changchun 82.32 323** *e*P **P** 07 18 42.5 +0.4
CN2 PMZ
comp=Z,10.0nm,1.0s
**MOD Modoc 82.41 40** *e*P **P** 07 18 43.9 +1.2
comp=Z,1.2nm,0.5s
**K05A Summer Lake 82.55 39** *e*P **P** 07 18 45.2 +1.7
comp=Z,152nm,3.0s
**KLR Kul'dur 82.62 330** *e*P **P** 07 18 44.3 +0.9
**IPM Ipoh 82.72 278** *e*P **P** 07 18 45.3 +0.5
comp=Z,26nm,0.8s
**KULM Kulim 83.36 278** *e*P **P** 07 18 48.8 +0.8
comp=Z,10nm,0.5s
**PSI Prapat 84.06 275** *e*P **P** 07 18 51.2 -0.4
PSI pmax pmax
comp=Z,14nm,0.8s
**PSI Prapat 84.06 275** *e*P **P** 07 18 51.2 -0.4
comp=Z,14nm,0.8s
**I07A Izee 84.17 38** *e*P **P** 07 18 52.6 +1.2
comp=Z,21nm,2.0s
**GSI Gunungsitoli 84.78 273** *e*P **P** 07 18 56.0 +1.0
comp=Z,57nm,0.7s
**SUA Susitna One 85.03 13** *e*P **P** 07 18 55.1 -0.1
comp=Z,72nm,1.9s
**G08A Pilot Rock 85.20 38** *e*P **P** 07 18 57.7 +1.3
comp=Z,62nm,2.8s
**LTY Liberty 85.43 35** *e*P **P** 07 18 59.0 +1.6
comp=Z,37nm,2.1s
**PMR Palmer 85.50 14** *e*P **P** 07 18 56.9 -0.3
PMR pmax pmax
comp=Z,18nm,1.4s
**PMR Palmer 85.50 14** *e*P **P** 07 18 56.9 -0.3
comp=Z,18nm,1.4s
**BJI Beijing 85.84 316** P **P** 07 19 00.0 +0.6
BJI PMZ
comp=Z,10.0nm,0.8s
**SCM Sheep Creek Mo 86.11 14** *e*P **P** 07 19 00.5 +0.2
SCM pmax pmax
comp=Z,110nm,2.1s
**SCM Sheep Creek Mo 86.11 14** *e*P **P** 07 19 00.5 +0.2
comp=Z,110nm,2.1s
**KLU Klutina 86.15 15** *e*P **P** 07 19 01.4 +0.9
comp=Z,97nm,2.5s
**SYO Syowa Base 86.25 193**⇑*e*P **P** 07 18 59.0 -1.9
**D08A Wollman Farm, 86.26 36** *e*P **P** 07 19 02.8 +1.5
comp=Z,54nm,2.3s
**GYA Guiyang 86.43 300** P **P** 07 19 03.3 +0.6
GYA pP **pP** 07 21 10.5 +1.9
GYA sP **sP** 07 22 07.0 -0.4
GYA PP **PP** 07 22 37.8 +2.2
GYA SKS **SKSac** 07 28 33.0 -1.2
GYA S **S** 07 28 50.5 -0.4
GYA PMZ
comp=Z,20nm,1.0s
**CAST Castle Rocks 86.54 12** *e*P **P** 07 19 01.0 -1.2
comp=Z,6.0nm,0.8s
**F10A Beach Ranch, E 86.59 38** *e*P **P** 07 19 03.8 +0.9
comp=Z,5.6nm,0.8s
**SEY Seymchan 86.64 347** P **P** 07 19 02.9 +0.2
comp=Z,7.3nm,0.5s,baz=151,slow=5.4,SNR=20
**B08A Colville Reser 86.81 35** *e*P **P** 07 19 04.4 +0.6
comp=Z,3.6nm,0.8s
**TRF Thorofare Moun 86.92 12** *e*P **P** 07 19 03.7 -0.5
comp=Z,12nm,0.8s
**NAIU Northern Antel 86.95 44** *e*P **P** 07 19 03.7 -1.1
**RND Reindeer 87.17 13** *e*P **P** 07 19 05.2 -0.1
RND pmax pmax
comp=Z,17nm,0.8s
**RND Reindeer 87.17 13** *e*P **P** 07 19 05.2 -0.1
comp=Z,17nm,0.8s
**MCK McKinley 87.44 13** *e*P **P** 07 19 06.0 -0.5
MCK pmax pmax
comp=Z,12nm,1.0s
**MCK McKinley 87.44 13** *e*P **P** 07 19 06.0 -0.5
comp=Z,12nm,1.0s
**SNAA Sanae 87.64 179** P **P** 07 19 07.9 +0.4
**SNAA Sanae 87.64 179**⇑*e*P **P** 07 19 07.2 -0.3
SNAA pmax pmax
comp=Z,1.0nm,1.3s
**TXAR Lajitas Array 87.65 58** P **P** 07 19 08.8 +0.5
comp=Z,0.6nm,0.8s,baz=219,slow=8.1,SNR=5.4
TXAR PKKPbc **PKKPbc** 07 36 53.1 +0.2
comp=Z,0.3nm,0.5s,baz=96,slow=2.7,SNR=5.6
**PV10 Paradox Valley 87.78 47** *e*P **P** 07 19 09.3 +0.4
**VNA3 Neumayer Olymp 87.79 176** P **P** 07 19 07.9 -0.3
**XAN Xi'an 87.99 308** P **P** 07 19 10.8 +1.0
XAN PMZ
comp=Z,22nm,1.0s
**VNA2 Neumayer--Watz 88.23 177** P **P** 07 19 10.2 0.0
baz=183,slow=3.6
**MLY Manley 88.26 11** *e*P **P** 07 19 09.5 -0.7
comp=Z,90nm,2.8s
**WRH Wood River Hil 88.27 13** *e*P **P** 07 19 10.0 -0.3
comp=Z,9.2nm,0.8s
**DOT Dot Lake 88.45 15** *e*P **P** 07 19 11.4 +0.2
comp=Z,117nm,2.2s
**HDA Harding Lake 88.45 13** *e*P **P** 07 19 10.9 -0.2
comp=Z,12nm,0.9s
**VNA1 Neumayer--Stat 88.46 177** P **P** 07 19 11.3 +0.1
**CCB Clear Creek Bu 88.49 13** *e*P **P** 07 19 10.8 -0.5
comp=Z,8.5nm,0.7s
**COLA College 88.68 13***de*P **P** 07 19 11.8 -0.3
COLA pmax pmax
comp=Z,8.0nm,0.9s
**COLA College 88.68 13** *e*P **P** 07 19 11.7 -0.4
comp=Z,10nm,0.8s
**HIA Hailar 88.73 325**⇓*e*P **P** 07 19 12.5 -0.3
HIA *i* *PP **pP** 07 21 16.6 -3.0
HIA pmax pmax
comp=Z,7.0nm,1.0s
**IL1 Eielson Array 88.79 13** *e*P **P** 07 19 12.1 -0.6
**ILAR Eielson Array 88.79 13** P **P** 07 19 11.8 -0.8
comp=Z,1.9nm,0.4s,baz=217,slow=5.1,SNR=51
**REDW Red Top Meadow 89.03 42** *e*P **P** 07 19 16.0 +1.4
comp=Z,18nm,1.9s
**KMI Kunming 89.11 297** P **P** 07 19 16.3 +0.9
KMI PMZ
comp=Z,16nm,1.0s
KMI PMZ
comp=Z,190nm,4.2s
**SNOW Snow King Moun 89.14 42** *e*P **P** 07 19 16.3 +1.2
comp=Z,2.9nm,0.8s
**HHC Hu-ho-hao-te 89.29 315** *e*P **P** 07 19 14.8 -0.9
HHC S **S** 07 29 14.5 -2.1
HHC PMZ
comp=Z,19nm,0.6s
HHC PMZ
comp=Z,140nm,9.6s
**LOHW Long Hollow 89.31 42** *e*P **P** 07 19 16.6 +0.7
comp=Z,1.3nm,0.6s
**PLCA Paso Flores 89.35 134** *e*P **P** 07 19 17.5 +1.4
PLCA pmax pmax
comp=Z,116nm,2.3s
**PLCA Paso Flores 89.35 134** *e*P **P** 07 19 17.5 +1.4
comp=Z,116nm,2.3s
**BW06 Boulder Array 89.56 43** *e*P **P** 07 19 17.5 +0.4
comp=Z,1.5nm,0.7s
**CM01 Chiang Mai Arr 89.78 290** *e*P **P** 07 19 19.5 +1.2
**CMAR Chiang Mai Arr 89.80 290** P **P** 07 19 19.8 +1.3
comp=Z,5.3nm,0.4s,baz=125,slow=3.2,SNR=32
**CMAR Chiang Mai Arr 89.80 290** *i* P **P** 07 19 19.7 +1.3
CMAR pmax pmax
comp=Z,12nm,0.9s
**CHTO Chiang Mai 89.94 290** *e*P **P** 07 19 20.2 +1.1
CHTO pmax pmax
comp=Z,16nm,0.6s
**CHTO Chiang Mai 89.94 290** *e*P **P** 07 19 20.2 +1.1
comp=Z,16nm,0.6s
**DAWY Dawson 89.95 16** *e*P **P** 07 19 18.4 +0.2
comp=Z,7.1nm,1.0s
**EGAK Eagle 90.09 15** *e*P **P** 07 19 18.6 0.0
comp=Z,138nm,3.0s
**COLD Coldfoot 90.34 11** *e*P **P** 07 19 20.6 +0.8
comp=Z,110nm,2.8s
**CD2 Chengdu 90.60 303** *e*P **P** 07 19 21.5 -0.4
CD2 pP **pP** 07 21 28.5 -0.6
CD2 PP **PP** 07 23 07.5 -0.6
CD2 SKS **SKSac** 07 28 57.0 -1.2
CD2 S **S** 07 29 28.3 -0.4
CD2 sS **sS** 07 33 16.3 +0.4
CD2 SS **SS** 07 35 50.0 +0.9
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**YAK Yakutsk 92.29 338** *e*P **P** 07 19 28.3 -0.5
YAK pmax pmax
comp=Z,14nm,1.1s
**LZH Lanzhou 92.63 308** *e*P **P** 07 19 32.3 +1.0
LZH sP **sP** 07 22 40.0 +3.1
LZH PMZ
comp=Z,19nm,1.0s
LZH PMZ
comp=Z,82nm,4.7s
**ULN Ulaanbaatar 95.35 319**⇑*e*P **P** 07 19 43.0 -0.4
ULN *i* *PP **pP** 07 21 49.5 -1.4
ULN pmax pmax
comp=Z,2.0nm,1.0s
**SONM Songino Array 95.73 319** P **P** 07 19 45.0 -0.1
comp=Z,0.7nm,0.9s,baz=103,slow=4.6,SNR=2.7
**SONM Songino Array 95.73 319** P **P** 07 19 45.0 -0.1
**ZAA0 Zalesovo Array 110.50 321** *e*PKiKP **PKiKP** 07 24 45.8 -1.4
**ZALV Zalesovo Beam 110.50 321** PKiKP **PKiKP** 07 24 45.8 -1.4
comp=Z,2.9nm,0.6s,baz=218,slow=0.9,SNR=11
**MK01 Makanchi Array 111.11 313** *e*PKiKP **PKiKP** 07 24 47.1 -1.5
**MKAR Makanchi Array 111.12 313** Pdiff **Pdif** 07 20 57.1 +3.6
comp=Z,0.3nm,0.6s,baz=74,slow=7.9,SNR=3.8
MKAR PKiKP **PKiKP** 07 24 47.4 -1.3
comp=Z,1.1nm,0.4s,baz=153,slow=0.6,SNR=28
MKAR PKKPbc **PKKPbc** 07 35 47.0 -0.7
comp=Z,0.5nm,0.6s,baz=288,slow=3.0,SNR=5.3
MKAR PKKPab **PKKPab** 07 35 57.8 -0.3
comp=Z,0.9nm,1.2s,baz=292,slow=0.8,SNR=4.0
**MKAR Makanchi Array 111.12 313** *i* PKiKP **PKiKP** 07 24 51.5 +2.8
**MAKZ Makanchi 111.33 313** *e*PKiKP **PKiKP** 07 24 47.9 -1.2
**KURK Kurchatov 113.96 317** PKiKP **PKiKP** 07 24 52.4 -1.5
**KURK Kurchatov 113.96 317** PKiKP **PKiKP** 07 24 52.4 -1.5
KURK PP PP 07 25 53.6 -5.9
**KURBB Kurchatov Arra 114.01 317** PKiKP PKPdf 07 24 52.4 -1.6
comp=Z,2.0nm,0.7s,baz=95,slow=1.9,SNR=16
KURBB PP PP 07 25 53.6 -6.3
comp=Z,1.4nm,0.4s,baz=94,slow=8.1,SNR=12
**KSH Kashi 114.72 305** *e*PKP PKPdf 07 24 55.3 -0.6
KSH *e*PP PP 07 26 14.3 +9.0
KSH *es*PKP 07 28 11.0
KSH PKS **PKSdf** 07 28 30.8 -1.9
KSH SKS **SKSdf** 07 31 13.5 +0.3
KSH SKKS **SKKSac** 07 32 05.0 -0.8
KSH PPMZ
comp=Z,110nm,6.3s
**AAK Ala-Archa 116.17 308** PKP **PKPdf** 07 24 57.7 -0.9
comp=Z,0.6nm,0.3s,baz=175,slow=6.7,SNR=4.0
**BVAR Borovoye Array 119.07 320** PKP **PKPdf** 07 25 02.6 -1.1
comp=Z,7.5nm,0.4s,baz=120,slow=2.2,SNR=43
**KKAR Karatay Array 119.12 308** *e*PKiKP **PKPdf** 07 25 03.3 -0.9
**KKAR Karatay Array 119.12 308** *e*PKPdf **PKPdf** 07 25 03.2 -0.9
**BRVK Borovoye 119.13 320***c* *i*PKiKP **PKPdf** 07 25 02.7 -1.1
**BRVK Borovoye 119.13 320** *e*PKPdf **PKPdf** 07 25 02.6 -1.2
**KBL Kabul 119.66 299** *e*PKiKP **PKPdf** 07 25 04.6 -1.1
**KBL Kabul 119.66 299** *e*PKPdf **PKPdf** 07 25 04.6 -1.1
**SPB5 Spitsbergen Ar 122.21 356** *e*PKPdf **PKPdf** 07 25 08.4 -0.7
**SPB1 Spitsbergen Ar 122.21 356** *e*PKPdf **PKPdf** 07 25 08.6 -0.5
**SPA1 Spitsbergen Ar 122.21 356** *e*PKPdf **PKPdf** 07 25 08.5 -0.6
**SPA0 Spitsbergen Ar 122.22 356** *e*PKPdf **PKPdf** 07 25 08.7 -0.4
**SPB4 Spitsbergen Ar 122.22 356** *e*PKPdf **PKPdf** 07 25 08.6 -0.6
**SPA2 Spitsbergen Ar 122.22 356** *e*PKPdf **PKPdf** 07 25 08.7 -0.4
**SPA3 Spitsbergen Ar 122.22 356** *e*PKPdf **PKPdf** 07 25 08.4 -0.7
**SPB2 Spitsbergen Ar 122.22 356** *e*PKPdf **PKPdf** 07 25 08.6 -0.5
**SPB3 Spitsbergen Ar 122.22 356** *e*PKPdf **PKPdf** 07 25 08.6 -0.5
**BOSA Boshof 125.71 206** PKP **PKPdf** 07 25 17.5 0.0
comp=Z,2.1nm,0.8s,baz=0,slow=0.0,SNR=3.5
**ABKAR Akbulak array 126.04 316** *e*PKPdf **PKPdf** 07 25 16.9 -0.2
**AKTO Aktyubinsk 127.04 318** PKP **PKPdf** 07 25 19.1 +0.1
comp=Z,4.1nm,0.7s,baz=95,slow=3.6,SNR=15
**GEYT Alibeck 128.59 302** PKP **PKPdf** 07 25 23.2 +0.8
comp=Z,3.3nm,0.5s,baz=290,slow=4.3,SNR=2.9
**ARA0 ARCESS Array S 129.21 349** *e*PKPdf **PKPdf** 07 25 21.9 -0.7
**ARCES ARCESS Array B 129.21 349** PKP **PKPdf** 07 25 22.2 -0.4
comp=Z,4.8nm,0.5s,baz=32,slow=0.8,SNR=31
**LSZ Lusaka 135.53 218** *e*PKiKP **PKPdf** 07 25 38.0 +1.7
**LSZ Lusaka 135.53 218** *e*PKPdf **PKPdf** 07 25 38.0 +1.7
**FINES FINESS Array B 136.00 343** PKhKP PKPpre 07 25 22.8
comp=Z,1.6nm,0.7s,baz=44,slow=5.8,SNR=6.0
FINES PKP **PKiKP** 07 25 36.6 -0.7
comp=Z,1.8nm,0.5s,baz=82,slow=3.6,SNR=11
FINES SKPbc **SKPbc** 07 28 13.8 +0.7
comp=Z,1.3nm,0.5s,baz=90,slow=3.8,SNR=10.0
**OBN Obninsk 136.87 331** *i* PKiKP **PKPdf** 07 25 38.0 +0.7
**NB2 NORSAR Subarra 139.30 353** PKP PKPpre 07 25 34.5
comp=Z,1.4nm,0.7s,baz=10,slow=3.2
**NOA NORSAR Array B 139.30 353** PKhKP PKPpre 07 25 35.0
comp=Z,0.6nm,0.7s,baz=6.6,slow=2.3,SNR=6.5
NOA PKP **PKPdf** 07 25 42.4 +0.6
comp=Z,1.0nm,0.6s,baz=13,slow=3.8,SNR=3.9
**SUW Suwalki 143.03 339** *e*PKP PKPab 07 25 46.3 +0.1
**SUW Suwalki 143.03 339** *e*PKHKP PKPab 07 25 46.4 +0.2
**AKASG Malin Array Be 143.12 330** PKhKP PKPpre 07 25 45.8
comp=Z,22nm,0.4s,baz=42,slow=4.2,SNR=120
**KIEV Kiev 143.13 330***c* *i*PKHKP PKPpre 07 25 46.0
**AK11 Malin Array Si 143.16 330** *e*PKPpre PKPpre 07 25 46.0
**MALT Malatya 143.79 307** ⇑PKiKP **PKPdf** 07 25 50.6 +0.1
**MALT Malatya 143.79 307** ⇑*i*P **PKPdf** 07 25 50.6 +0.1
**SORM Soroca 145.28 328** ⇓PKiKP **PKPdf** 07 25 53.1 +0.5
**SORM Soroca 145.28 328** ⇓*i*P **PKPdf** 07 25 53.1 +0.5
**GKP Gorka Klasztor 145.48 343** *e*PKP PKPpre 07 25 47.3
**GKP Gorka Klasztor 145.48 343** *e*PKHKP PKPpre 07 25 47.3
**BEL Belsk 145.64 339** *e*PKP **PKPbc** 07 25 55.2 +0.5
**BEL Belsk 145.64 339** *e*PKiKP **PKPbc** 07 25 55.3 +0.5
**RABH Abou Rabah 145.80 301** *e*P **PKPbc** 07 25 56.4 +0.6
**MILM Milestii Mici 145.85 326** ⇑*i*P **PKPbc** 07 25 54.9 -0.6
**ZALF Zalf 146.03 298** *e*P **PKPbc** 07 25 56.7 +0.2
**LVV L'vov 146.04 334** *e*PKiKP **PKPbc** 07 25 55.2 -0.7
**WRDH Warideh 146.16 303** *e*P **PKPbc** 07 25 57.0 +0.2
**BSEG Bad Segeberg 146.32 351** *e*PKPbc **PKPbc** 07 25 56.8 +0.3
baz=16,slow=2.4
**BIDA Albida 146.36 302** *e*P **PKPbc** 07 25 57.7 +0.3
**HAWK Haweek 146.42 301** *e*P **PKPbc** 07 25 58.2 +0.6
**KWP Kalwaria Pacla 146.73 335** *e*PKP **PKPbc** 07 25 58.0 +0.2
**KWP Kalwaria Pacla 146.73 335** *e*PKiKP **PKPbc** 07 25 58.0 +0.2
**BRTR Keskin Array B 146.75 312** PKPbc **PKPbc** 07 25 57.9 -0.5
comp=Z,8.2nm,0.6s,baz=138,slow=4.9,SNR=34
**TLCR 146.94 323** ⇑PKiKP **PKPbc** 07 25 58.5 0.0
**TLCR 146.94 323** ⇑*i*P **PKPbc** 07 25 58.5 0.0
**BRBR Barbar 147.06 300** *e*P **PKPbc** 07 25 59.8 +0.3
**BUR04 Bucovina Ar. S 147.16 330** *e*PKPbc **PKPbc** 07 25 59.5 +0.3
**BURAR Bucovina Array 147.16 330** ⇑PKiKP **PKPbc** 07 25 59.8 +0.6
**BURAR Bucovina Array 147.16 330** ⇑*i*P **PKPbc** 07 25 59.8 +0.6
**TESR Tescani 147.23 327** ⇑*i*P **PKPbc** 07 25 59.3 +0.1
**ANTO Ankara 147.27 312** *e*PKiKP **PKPbc** 07 25 59.6 -0.1
**ANTO Ankara 147.27 312** *e*PKPdf **PKPbc** 07 25 59.6 -0.1
**BR231 Keskin MP Arra 147.30 312** *e*PKPbc **PKPbc** 07 25 58.6 -1.2
**CFR Carcaliu 147.32 324** ⇓PKiKP **PKPbc** 07 25 59.3 -0.2
**CFR Carcaliu 147.32 324** ⇓*i*P **PKPbc** 07 25 59.3 -0.2
**OJC Ojcow 147.34 338** *e*PKP **PKPbc** 07 25 59.4 0.0
**OJC Ojcow 147.34 338** *e*PKiKP **PKPbc** 07 25 59.5 0.0
**OJC Ojcow 147.34 338** *e*PKPbc **PKPbc** 07 25 59.3 -0.1
**KOLS Kolonicke sedl 147.45 334** *e*PKiKP **PKPbc** 07 26 00.3 +0.6
**KOLS Kolonicke sedl 147.45 334** *e*PKP **PKPbc** 07 26 00.3 +0.6
KOLS *e* 07 44 35.7
**STHS Stebnicka Huta 147.47 336** *e*PKiKP **PKPbc** 07 26 00.4 +0.6
STHS *e* 07 26 05.3
**STHS Stebnicka Huta 147.47 336** *e*PKP **PKPbc** 07 26 00.4 +0.6
STHS *e* 07 26 05.3
**MMAI Mount Meron Ar 147.59 299** PKPbc **PKPbc** 07 26 01.1 +0.4
comp=Z,17nm,0.5s,baz=60,slow=3.5,SNR=16
**TIRR Tirgusor 147.62 323** ⇑PKiKP **PKPbc** 07 26 00.3 +0.1
**TIRR Tirgusor 147.62 323** ⇑*i*P **PKPbc** 07 26 00.3 +0.1
**VRI Vrincioaia 147.63 326** ⇑PKiKP **PKPbc** 07 26 00.2 -0.1
**VRI Vrincioaia 147.63 326** ⇑*i*P **PKPbc** 07 26 00.2 -0.1
**PLOR Plostina 147.68 326** ⇑PKiKP **PKPbc** 07 26 00.2 -0.3
**PLOR Plostina 147.68 326** ⇑*i*P **PKPbc** 07 26 00.2 -0.3
**UZH Uzhgorod 147.68 334**⇓*i*PKiKP **PKPbc** 07 26 00.5 +0.2
UZH *e* 07 28 15.9
**NRDL Niedersach Rie 147.75 350** *e*PKPbc **PKPbc** 07 26 00.6 +0.3
baz=16,slow=2.4
**NIE Niedzica 147.83 337** *e*PKP **PKPbc** 07 26 01.4 +0.7
**NIE Niedzica 147.83 337** *e*PKiKP **PKPbc** 07 26 01.5 +0.7
**KSP Ksiaz 147.91 342** *e*PKP **PKPbc** 07 26 01.4 +0.6
**KSP Ksiaz 147.91 342** *e*PKiKP **PKPbc** 07 26 01.5 +0.6
**OKC Ostrava-Krasne 148.23 339** *e*PKHKP **PKPbc** 07 26 01.8 +0.2
**OKC Ostrava-Krasne 148.23 339**⇑*e*PKP **PKPbc** 07 26 01.8 +0.2
**DOPR Dopca 148.24 328**⇓*i*P **PKPbc** 07 26 02.5 +0.6

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **IBBN** | **Ibbenburen** | **148.26** | **353** | *e*PKPbc | **PKPbc** | **07 26 01.8** | **+0.2** |
| | baz=16,slow=2.4 | | | | | | | | |
| **MLR** | **Muntele Rosu** | **148.29** | **326** | ⇑PKHKP | **PKPbc** | **07 26 01.8** | **-0.3** |
| **MLR** | **Muntele Rosu** | **148.29** | **326** | ⇑*i*P | **PKPbc** | **07 26 01.8** | **-0.3** |
| **UPC** | **Upice** | **148.29** | **342** | ⇑*e*PKP | **PKPbc** | **07 26 01.8** | **0.0** |
| UPC | | | | *e*PKPAB | **PKPab** | **07 26 07.4** | **+0.2** |
| **CLL** | **Collm** | **148.32** | **346** | ⇓*i*PKHKP | **PKPbc** | **07 26 01.8** | **0.0** |
| CLL | | | | *i* | | 07 26 06.9 | |
| CLL | | | | pmax | pmax | | |
| | comp=Z,26nm,1.0s | | | | | | |
| CLL | | | | pmax | pmax | | |
| | comp=Z,141nm,0.7s | | | | | | |
| **CLL** | **Collm** | **148.32** | **346** | *e*PKPbc | **PKPbc** | **07 26 02.1** | **+0.2** |
| | baz=16,slow=2.4 | | | | | | | | |
| **CLL** | **Collm** | **148.32** | **346** | *e*PKPdf | **PKPdf** | **07 25 58.0** | **+0.5** |
| | comp=Z,5.0nm,1.1s | | | | | | | | |
| CLL | | | | ⇓*i*PKPbc | **PKPbc** | **07 26 01.8** | **0.0** |
| | comp=Z,26nm,1.0s | | | | | | | | |
| CLL | | | | *i* PKPab | **PKPab** | **07 26 06.9** | **-0.4** |
| | comp=Z,14nm,0.7s | | | | | | | | |
| **CLZ** | **Clausthal** | **148.33** | **350** | *e*PKPbc | **PKPbc** | **07 26 02.4** | **+0.5** |
| | baz=16,slow=2.4 | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **148.34** | **342** | *e*PKHKP | **PKPbc** | **07 26 02.2** | **+0.2** |
| DPC | | | | *e* | | 07 26 08.2 | |
| **DPC** | **Dobruska-Polom** | **148.34** | **342** | ⇑*e*PKP | **PKPbc** | **07 26 02.2** | **+0.2** |
| DPC | | | | *e*PKPAB | **PKPab** | **07 26 08.2** | **+0.7** |
| **LANS** | **Liptovska Anna** | **148.35** | **337** | *e*PKHKP | **PKPbc** | **07 26 03.3** | **+1.2** |
| LANS | | | | *e* | | 07 26 08.7 | |
| **LANS** | **Liptovska Anna** | **148.35** | **337** | *e*PKP | **PKPbc** | **07 26 03.3** | **+1.2** |
| LANS | | | | *e* | | 07 26 08.7 | |
| **BRG** | **Berggiesshubel** | **148.51** | **345** | *i* PKP | **PKPbc** | **07 26 02.3** | **0.0** |
| | comp=Z,16nm,1.1s | | | | | | | | |
| BRG | | | | *e* | | 07 26 07.9 | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **148.51** | **345** | *i* PKHKP | **PKPbc** | **07 26 02.3** | **0.0** |
| BRG | | | | *e* | | 07 26 07.9 | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,16nm,1.2s | | | | | | |
| BRG | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| **BRG** | **Berggiesshubel** | **148.51** | **345** | *e*PKPbc | **PKPbc** | **07 26 02.7** | **+0.4** |
| | baz=16,slow=2.4 | | | | | | | | |
| **SECR** | | **148.53** | **326** | ⇑*i*P | **PKPbc** | **07 26 02.8** | **+0.2** |
| **FBE** | **Freiberg** | **148.60** | **346** | *e*PKPbc | **PKPbc** | **07 26 03.3** | **+0.7** |
| | baz=16,slow=2.4 | | | | | | | | |
| **PVCC** | **Panska Ves** | **148.67** | **344** | *e*PKHKP | **PKPbc** | **07 26 03.1** | **+0.4** |
| **PVCC** | **Panska Ves** | **148.67** | **344** | ⇑*e*PKP | **PKPbc** | **07 26 03.1** | **+0.4** |
| **NEUB** | **Neuenburg** | **148.68** | **348** | *e*PKPbc | **PKPbc** | **07 26 03.1** | **+0.4** |
| | baz=16,slow=2.4 | | | | | | | | |
| **GTTG** | **Gvttingen** | **148.69** | **350** | *e*PKPbc | **PKPbc** | **07 26 03.1** | **+0.4** |
| | baz=16,slow=2.4 | | | | | | | | |
| **CSS** | **Prodhromos** | **148.73** | **303** | *e*PKPbc | **PKPbc** | **07 26 02.6** | **-0.8** |
| **VOIR** | | **148.78** | **327** | ⇑PKHKP | **PKPbc** | **07 26 03.1** | **-0.2** |
| **VOIR** | | **148.78** | **327** | ⇑*i*P | **PKPbc** | **07 26 03.1** | **-0.2** |
| **DRGR** | | **148.92** | **331** | ⇑PKHKP | **PKPbc** | **07 26 03.5** | **-0.1** |
| **DRGR** | | **148.92** | **331** | ⇑*i*P | **PKPbc** | **07 26 03.5** | **-0.1** |
| **ARR** | **Arges** | **149.04** | **327** | ⇑*i*P | **PKPbc** | **07 26 04.8** | **+0.9** |
| **PRA** | **Prague** | **149.12** | **344** | *e*PKHKP | **PKPbc** | **07 26 03.6** | **-0.2** |
| **PRA** | **Prague** | **149.12** | **344** | ⇑*e*PKP | **PKPbc** | **07 26 03.6** | **-0.2** |
| **PRU** | **Pruhonice** | **149.17** | **343** | *e*PKHKP | **PKPbc** | **07 26 04.0** | **+0.1** |
| PRU | | | | *e* | | 07 26 11.3 | |
| **PRU** | **Pruhonice** | **149.17** | **343** | ⇑*e*PKP | **PKPbc** | **07 26 04.0** | **+0.1** |
| PRU | | | | *e*PKPAB | **PKPab** | **07 26 11.3** | **+0.5** |
| **GOPC** | **GO Pecny, Ondr** | **149.17** | **343** | *e*PKHKP | **PKPbc** | **07 26 04.3** | **+0.3** |
| GOPC | | | | *e* | | 07 26 11.0 | |
| **GOPC** | **GO Pecny, Ondr** | **149.17** | **343** | ⇑*e*PKP | **PKPbc** | **07 26 04.3** | **+0.3** |
| GOPC | | | | *e*PKPAB | **PKPab** | **07 26 11.0** | **+0.1** |
| **VRAC** | **Vranov** | **149.19** | **341** | ⇑PKHKP | **PKPbc** | **07 26 04.4** | **+0.4** |
| **VRAC** | **Vranov** | **149.19** | **341** | ⇑*i*P | **PKPbc** | **07 26 04.4** | **+0.4** |
| **PSZ** | **Piszkesteto** | **149.21** | **336** | *e*PKHKP | **PKPbc** | **07 26 03.9** | **-0.3** |
| **PSZ** | **Piszkesteto** | **149.21** | **336** | ⇑*i*P | **PKPbc** | **07 26 03.9** | **-0.3** |
| **PSZ** | **Piszkesteto** | **149.21** | **336** | *e*PKPbc | **PKPbc** | **07 26 03.9** | **-0.3** |
| **MOX** | **Moxa** | **149.25** | **347** | *e*PKPbc | **PKPbc** | **07 26 04.4** | **+0.3** |
| | baz=16,slow=2.4 | | | | | | | | |
| **TANN** | **Tannenbergstha** | **149.28** | **346** | *e*PKPbc | **PKPbc** | **07 26 04.6** | **+0.3** |
| | baz=16,slow=2.4 | | | | | | | | |
| **PLN** | **Plauen** | **149.28** | **347** | *e*PKPbc | **PKPbc** | **07 26 04.6** | **+0.4** |
| | baz=16,slow=2.4 | | | | | | | | |
| **WERD** | **Werda** | **149.28** | **346** | *e*PKPbc | **PKPbc** | **07 26 04.6** | **+0.4** |
| | baz=16,slow=2.4 | | | | | | | | |
| **GUNZ** | **Gunzen** | **149.36** | **346** | *e*PKPbc | **PKPbc** | **07 26 04.9** | **+0.5** |
| | baz=16,slow=2.4 | | | | | | | | |
| **LOT** | **Lotru** | **149.41** | **328** | ⇑*i*P | **PKPbc** | **07 26 04.2** | **-0.6** |
| **WERN** | **Wernitzgruen** | **149.42** | **346** | *e*PKPbc | **PKPbc** | **07 26 05.2** | **+0.6** |
| | baz=16,slow=2.4 | | | | | | | | |
| **NKC** | **Novy Kostel** | **149.46** | **346** | *e*PKHKP | **PKPbc** | **07 26 04.8** | **+0.1** |
| NKC | | | | *e* | | 07 26 12.2 | |
| **NKC** | **Novy Kostel** | **149.46** | **346** | ⇑*e*PKP | **PKPbc** | **07 26 04.8** | **+0.1** |
| NKC | | | | *e*PKPAB | **PKPab** | **07 26 12.2** | **+0.2** |
| **TREC** | **Trest** | **149.53** | **342** | *e*PKHKP | **PKPbc** | **07 26 05.0** | **+0.1** |
| **TREC** | **Trest** | **149.53** | **342** | ⇑*e*PKP | **PKPbc** | **07 26 05.0** | **+0.1** |
| **MANZ** | **Manzenberg** | **149.76** | **346** | *e*PKPbc | **PKPbc** | **07 26 05.8** | **+0.4** |
| | baz=16,slow=2.4 | | | | | | | | |
| **SIRR** | **Siria** | **149.79** | **332** | ⇓*i*P | **PKPbc** | **07 26 05.6** | **0.0** |
| **GZR** | **Gura Zlata** | **149.93** | **329** | ⇓PKHKP | **PKPbc** | **07 26 05.5** | **-0.6** |
| **GZR** | **Gura Zlata** | **149.93** | **329** | ⇓*i*P | **PKPbc** | **07 26 05.4** | **-0.6** |
| **ROTZ** | **Rotzenmuhle** | **149.95** | **346** | *e*PKPbc | **PKPbc** | **07 26 06.3** | **+0.5** |
| | baz=16,slow=2.4 | | | | | | | | |
| **MEM** | **Membach** | **150.12** | **354** | PKPbc | **PKPbc** | **07 26 06.1** | **-0.1** |
| **DYA** | **Yadsworthy** | **150.20** | **7** | *e*PKPbc | **PKPbc** | **07 26 05.9** | **-0.4** |
| **KHC** | **Kasperske Hory** | **150.21** | **344** | *e*PKHKP | **PKPbc** | **07 26 06.5** | **+0.1** |
| KHC | | | | *e* | | 07 26 15.5 | |
| **KHC** | **Kasperske Hory** | **150.21** | **344** | ⇑*e*PKP | **PKPbc** | **07 26 06.5** | **+0.1** |
| KHC | | | | *e*PKPAB | **PKPab** | **07 26 15.5** | **+0.3** |
| **KHC** | **Kasperske Hory** | **150.21** | **344** | *e*PKPbc | **PKPbc** | **07 26 06.6** | **+0.1** |
| KHC | | | | *e*PKPab | **PKPab** | **07 26 15.6** | **+0.3** |
| **TNS** | **Taunus Mts** | **150.21** | **351** | *e*PKPbc | **PKPbc** | **07 26 06.7** | **+0.2** |
| | baz=16,slow=2.4 | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **150.23** | **347** | *e*PKPbc | **PKPbc** | **07 26 06.9** | **+0.4** |
| | baz=16,slow=2.4 | | | | | | | | |
| **GRFO** | **Grafenberg** | **150.23** | **347** | *e*PKIKP | **PKPbc** | **07 26 06.2** | **-0.3** |
| GRFO | | | | *e* | | 07 26 15.8 | |
| **GRFO** | **Grafenberg** | **150.23** | **347** | *e*PKPbc | **PKPbc** | **07 26 06.2** | **-0.3** |
| GRFO | | | | *e*PKPab | **PKPab** | **07 26 15.8** | **+0.5** |
| **BZS** | **Buzias** | **150.31** | **331** | ⇓PKHKP | **PKPbc** | **07 26 06.6** | **-0.2** |
| **BZS** | **Buzias** | **150.31** | **331** | ⇓*i*P | **PKPbc** | **07 26 06.6** | **-0.2** |
| **SNF** | **Seneffe** | **150.35** | **356** | PKPbc | **PKPbc** | **07 26 06.8** | **+0.2** |
| **GEC2** | **GERESS Array S** | **150.44** | **344** | *e*PKIKP | **PKPbc** | **07 26 06.9** | **-0.2** |
| **GEC2** | **GERESS Array S** | **150.44** | **344** | *e*PKPbc | **PKPbc** | **07 26 07.1** | **0.0** |
| | baz=16,slow=2.4 | | | | | | | | |
| **GEC2** | **GERESS Array S** | **150.44** | **344** | *e*PKPbc | **PKPbc** | **07 26 06.9** | **-0.2** |
| **GERES** | **GERESS Array B** | **150.44** | **344** | PKPbc | **PKPbc** | **07 26 06.9** | **-0.2** |
| | comp=Z,7.7nm,0.8s,baz=30,slow=2.6,SNR=42 | | | | | | | | |
| GERES | | | | PKPab | **PKPab** | **07 26 16.4** | **+0.1** |
| | comp=Z,0.8nm,0.5s,baz=28,slow=6.0,SNR=4.8 | | | | | | | | |
| **CONA** | **Conrad Observa** | **150.63** | **340** | ⇑*i*PKiKP | **PKiKP** | **07 26 07.8** | **-0.2** |
| | comp=Z,13nm,0.6s | | | | | | | | |
| **DOU** | **Dourbes** | **150.74** | **356** | PKPbc | **PKPbc** | **07 26 07.5** | **-0.1** |
| **WLF** | **Walferdange** | **151.04** | **354** | PKPbc | **PKPbc** | **07 26 08.9** | **+0.6** |
| **STU** | **Stuttgart** | **151.50** | **349** | *e*PKPbc | **PKPbc** | **07 26 09.7** | **+0.3** |
| | baz=16,slow=2.4 | | | | | | | | |
| **FUR** | **Furstenfeldbru** | **151.66** | **346** | *e*PKPbc | **PKPbc** | **07 26 09.9** | **+0.1** |
| | baz=16,slow=2.4 | | | | | | | | |
| **SOKA** | **Soboth** | **152.00** | **340** | ⇑*i*PKPbc | **PKPbc** | **07 26 09.8** | **-0.9** |
| | comp=Z,4.1nm,0.5s | | | | | | | | |
| **PERS** | **Pernice** | **152.01** | **340** | *i* PKPbc | **PKPbc** | **07 26 09.9** | **-0.8** |
| **BFO** | **Black Forest** | **152.07** | **350** | *e*PKIKP | **PKPbc** | **07 26 10.1** | **-0.6** |
| BFO | | | | *e* | | 07 26 22.5 | |
| **BFO** | **Black Forest** | **152.07** | **350** | *e*PKPbc | **PKPbc** | **07 26 10.1** | **-0.6** |
| BFO | | | | *e*PKPab | **PKPab** | **07 26 22.5** | **-0.6** |
| **KBA** | **Koelnbreinsper** | **152.15** | **343** | ⇑*i*PKPbc | **PKPbc** | **07 26 10.0** | **-1.1** |
| | comp=Z,4.3nm,0.5s | | | | | | | | |
| **DIVS** | **Divibare** | **152.21** | **331** | ⇑*i*P | **PKPbc** | **07 26 11.1** | **-0.1** |
| **WTTA** | **Wattenberg** | **152.43** | **345** | ⇑*i*PKiKP | **PKPbc** | **07 26 11.4** | **-0.3** |
| | comp=Z,9.0nm,0.5s | | | | | | | | |
| **MOTA** | **Moosalm** | **152.47** | **346** | ⇑*i*PKPbc | **PKPbc** | **07 26 11.2** | **-0.6** |
| | comp=Z,5.7nm,0.8s | | | | | | | | |
| **ABTA** | **Abfaltersbach** | **152.68** | **343** | ⇑*i*PKPbc | **PKPbc** | **07 26 11.2** | **-0.9** |
| | comp=Z,10nm,0.6s | | | | | | | | |
| **VISS** | **Visnje** | **152.84** | **339** | *i* PKPbc | **PKPbc** | **07 26 11.9** | **-0.5** |
| VISS | | | | *i* | | 07 26 26.0 | |
| **FETA** | **Feichten** | **152.87** | **346** | ⇑*i*PKiKP | **PKPbc** | **07 26 12.4** | **-0.2** |
| | comp=Z,7.7nm,1.0s | | | | | | | | |
| **BOJS** | **Bojanci** | **152.96** | **338** | *i* PKPbc | **PKPbc** | **07 26 12.7** | **0.0** |
| **JAVS** | **Javornik** | **153.01** | **340** | *i* PKPbc | **PKPbc** | **07 26 12.1** | **-0.8** |
| JAVS | | | | *i* | | 07 26 26.5 | |
| **TUE** | **Stuetta** | **153.68** | **348** | *e*PKPbc | **PKPbc** | **07 26 14.2** | **-0.2** |
| **SENIN** | **Lac Senin/Sane** | **154.14** | **351** | *e*PKPbc | **PKPbc** | **07 26 15.4** | **-0.1** |
| SENIN | | | | *e*PKPab | **PKPab** | **07 26 32.3** | **+0.1** |
| **AGG** | **Agios Georgios** | **154.56** | **320** | *e*PKIKP | **PKPbc** | **07 26 15.1** | **-1.2** |
| **AGG** | **Agios Georgios** | **154.56** | **320** | *e*PKPbc | **PKPbc** | **07 26 15.1** | **-1.2** |
| **LAST** | **Lasithi** | **154.59** | **309** | *e*PKPab | **PKPab** | **07 26 33.6** | **-0.8** |
| **ESDC** | **Sonseca Array** | **160.69** | **13** | PKPab | **PKPab** | **07 27 00.6** | **0.0** |
| | comp=Z,0.8nm,0.7s,baz=336,slow=3.3,SNR=5.8 | | | | | | | | |
| **KEST** | **Kesra** | **163.68** | **337** | PKPab | **PKPab** | **07 27 14.2** | **+0.3** |
| | comp=Z,1.6nm,0.4s,baz=48,slow=1.7,SNR=4.1 | | | | | | | | |
| **DBIC** | **Dimbokro** | **164.59** | **156** | PKP | **PKPdf** | **07 26 17.6** | **-1.6** |
| | comp=Z,3.1nm,0.7s,baz=273,slow=16,SNR=3.5 | | | | | | | | |
| DBIC | | | | PKPab | **PKPab** | **07 27 19.2** | **+0.9** |
| | comp=Z,6.5nm,1.1s,baz=195,slow=4.3,SNR=3.4 | | | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **172.31** | **181** | *e*PKPdf | **PKPdf** | **07 26 23.1** | **-1.1** |
| TOA0 | | | | *e*PKPab | **PKPab** | **07 27 53.1** | **+0.8** |
| **TORD** | **Torodi Ar. Bea** | **172.31** | **181** | PKP | **PKPdf** | **07 26 23.0** | **-1.2** |
| | comp=Z,2.2nm,0.8s,baz=296,slow=0.4,SNR=13 | | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **07 27 51.5** | **-0.9** |
| | comp=Z,1.2nm,0.7s,baz=170,slow=4.1,SNR=7.1 | | | | | | | | |
| TORD | | | | PP | **PP** | **07 31 42.3** | **-0.7** |
| | comp=Z,0.7nm,1.0s,baz=167,slow=4.7,SNR=2.9 | | | | | | | | |

**SJA 30 07:13:38.2±0.7, 32°31'S×69°71'W, h113km±5km, ML2.4, MW3.9, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **AUSP** | **Uspallata** | **0.29** | **72** | *i* P | | Pn | 07 13 55.3 | +0.6 |
| **RTLS** | **Leoncito** | **0.62** | **34** | *i* P | | Pn | 07 13 58.0 | +1.3 |
| RTLS | | | | *i* S | | Sn | 07 14 12.2 | +1.7 |
| **ASAL** | **Salagasta** | **0.79** | **111** | *i* P | | Pn | 07 13 58.7 | +1.0 |
| ASAL | | | | *i* S | | Sn | 07 14 14.0 | +1.5 |
| **ARCO** | **CERRO ARCO** | **0.84** | **129** | *i* P | | Pn | 07 13 59.0 | +0.7 |
| ARCO | | | | IAML | | | 07 14 15.8 | |
| | comp=Z,71nm,0.5s | | | | | | | |
| **AAGR** | **Agrelo** | **1.07** | **136** | *i* P | | Pn | 07 14 01.4 | +0.9 |
| AAGR | | | | *i* S | | Sn | 07 14 18.5 | +1.1 |
| **RTCV** | **Cerro Valdivia** | **1.09** | **66** | *i* P | | Pn | 07 14 01.1 | +0.5 |
| RTCV | | | | *i* S | | Sn | 07 14 18.3 | +0.6 |
| **RTLL** | **Cerro Villicun** | **1.44** | **47** | *i* P | | Pn | 07 14 05.6 | +1.0 |
| RTLL | | | | *i* S | | Sn | 07 14 25.9 | +1.3 |
| **AMOG** | **MOGNA** | **1.72** | **37** | *i* P | | Pn | 07 14 09.1 | +1.1 |
| AMOG | | | | *i* S | | Sn | 07 14 31.4 | +0.8 |

*CSEM 30 07:17:52.7±0.7, 51°51'N×16°13'E, h2km, ML2.6/4, Error ellipse: s-maj=11.1km s-min=6.7km az=6.0*
*PRU 30 07:17:55.1, 51°42'N×16°17'E, h0km*
**ISC 30 07:17:53.9±1.7, 51°46'N±0°07'×16°16'E±0°06, h0km, n17, σ0.957/33, Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **KSP** | **Ksiaz** | **0.62** | **172** | *e*Pg | | **Pg** | **07 18 06.1** | **+0.2** |
| KSP | | | | *e*Sg | | **Sg** | **07 18 15.1** | **+1.1** |
| **KSP** | **Ksiaz** | **0.62** | **172** | *e*Pg | | **Pg** | **07 18 06.1** | **+0.2** |
| KSP | | | | *e*Sg | | **Sg** | **07 18 15.1** | **+1.1** |
| **UPC** | **Upice** | **0.96** | **185** | *e*PG | | **Pg** | **07 18 12.2** | **-0.1** |
| UPC | | | | *e*SG | | **Sg** | **07 18 25.0** | **+0.3** |
| | comp=Z,8.9nm,0.4s | | | | | | | |
| **UPC** | **Upice** | **0.96** | **185** | Pg | | **Pg** | **07 18 12.2** | **-0.1** |
| UPC | | | | Sg | | **Sg** | **07 18 25.0** | **+0.3** |
| | 8.9nm,0.4s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.12** | **175** | *e*PG | | **Pg** | **07 18 15.0** | **-0.3** |
| DPC | | | | *e*SG | | **Sg** | **07 18 30.0** | **+0.2** |
| | comp=Z,5.9nm,0.4s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.12** | **175** | Pg | | **Pg** | **07 18 15.0** | **-0.3** |
| DPC | | | | Sg | | **Sg** | **07 18 30.0** | **+0.2** |
| | 5.9nm,0.4s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.37** | **228** | *e*PG | | **Pg** | **07 18 20.2** | **0.0** |
| PVCC | | | | *e*SG | | **Sn** | **07 18 38.7** | **-0.4** |
| | comp=Z,16nm,0.2s | | | | | | | |
| **PVCC** | **Panska Ves** | **1.37** | **228** | Pg | | **Pg** | **07 18 20.2** | **0.0** |
| PVCC | | | | Sg | | **Sn** | **07 18 38.7** | **-0.4** |
| | 16nm,0.2s | | | | | | | |
| **BRG** | **Berggiesshubel** | **1.51** | **248** | PG | | **Pn** | **07 18 22.4** | **+0.2** |
| BRG | | | | SG | | **Sn** | **07 18 42.7** | **+0.1** |
| | 7.3nm,0.5s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.78** | **210** | *e*PG | | **Pb** | **07 18 27.1** | **-0.3** |
| **GOPC** | **GO Pecny, Ondr** | **1.78** | **210** | Pg | | **Pb** | **07 18 27.1** | **-0.3** |
| **PRU** | **Pruhonice** | **1.80** | **215** | *e*SG | | **Sb** | **07 18 50.6** | **-0.1** |
| | comp=Z,4.2nm,0.5s | | | | | | | |
| **PRU** | **Pruhonice** | **1.80** | **215** | Sg | | **Sb** | **07 18 50.6** | **-0.1** |
| | 4.2nm,0.5s | | | | | | | |
| **MORC** | **Moravsky Berou** | **1.90** | **152** | *e*Pn | | **Pn** | **07 18 27.0** | **-0.7** |
| MORC | | | | *e*Sg | | **Sb** | **07 18 54.5** | **+0.6** |
| **CLL** | **Collm** | **1.98** | **267** | *i* Pn | | **Pb** | **07 18 30.3** | **-0.5** |
| CLL | | | | *i* Pg | | **Pg** | **07 18 31.8** | **-0.1** |
| CLL | | | | *i* | | | 07 18 34.1 | |
| CLL | | | | *e*Sg | | **Sg** | **07 18 59.0** | **+1.5** |
| | comp=Z,4.0nm,0.4s | | | | | | | |
| **KHC** | **Kasperske Hory** | **2.86** | **216** | *e*PG | | **Pb** | **07 18 46.6** | **+0.8** |
| KHC | | | | *e*SN | | **Sn** | **07 19 15.1** | **-0.8** |
| KHC | | | | *e*SG | | **Sg** | **07 19 25.5** | **-0.2** |
| **KHC** | **Kasperske Hory** | **2.86** | **216** | Pg | | **Pb** | **07 18 46.6** | **+0.8** |
| KHC | | | | Sn | | **Sn** | **07 19 15.1** | **-0.8** |
| KHC | | | | Sg | | **Sg** | **07 19 25.5** | **-0.2** |

*ISCJB 30 07:37:46.2±0.6, 21°61'S±0°04×68°52'W±0°10, h118km±9km, mb3.6/3, Error ellipse: s-maj=15.1km s-min=6.8km az=2.0*
*IDC 30 07:37:47.6±0.9, 21°67'S×68°37'W, h107km±13km, mb3.5/3, mb1 3.6/5, mb1mx3.4/22, mbtmp3.9/5, Error ellipse: s-maj=28.0km s-min=19.5km az=109.0*
*GUC 30 07:37:47.3±0.4, 21°57'S×68°68'W, h119km±7km, ML3.6*
**ISC 30 07:37:46.0±0.8, 21°61'S±0°05×68°32'W±0°08, h93km±10km, n16, σ1°56/20, mb3.6/3, 2D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **LVC** | **Limon Verde** | **1.14** | **209** | P | | **Pn** | **07 38 10.1** | **+2.4** |
| | 7µm,0.3s,baz=25,slow=9.6,SNR=1863 | | | | | | | |
| LVC | | | | S | | **Sn** | **07 38 26.3** | **+2.3** |
| | 5µm,0.3s,baz=270,slow=20,SNR=58 | | | | | | | |
| **PB01** | **IPOC Station P** | **1.22** | **297** | *i* P | | **Pn** | **07 38 08.9** | **+0.3** |
| PB01 | | | | *i* S | | **Sn** | **07 38 25.4** | **-0.3** |
| PB01 | | | | AML | | AML | 07 38 25.8 | |
| | comp=N,3µm,0.2s | | | | | | | |
| **PB07** | **IPOC Station P** | **1.46** | **265** | ⇓*i*P | | **Pn** | **07 38 11.6** | **+0.1** |
| PB07 | | | | *i* S | | **Sn** | **07 38 29.7** | **-1.2** |
| PB07 | | | | AML | | AML | 07 38 30.4 | |
| | comp=N,2µm,0.2s | | | | | | | |
| **PB06** | **IPOC Station P** | **1.59** | **227** | ⇓*i*P | | **Pn** | **07 38 14.5** | **+1.3** |
| PB06 | | | | *i* S | | **Sn** | **07 38 34.9** | **+1.2** |
| PB06 | | | | AML | | AML | 07 38 35.2 | |
| | comp=E,852nm,0.1s | | | | | | | |
| **PB04** | **IPOC Station P** | **1.84** | **247** | *i* P | | **Pn** | **07 38 16.1** | **-0.3** |
| PB04 | | | | *e*S | | **Sn** | **07 38 38.0** | **-1.5** |
| PB04 | | | | AML | | AML | 07 38 43.3 | |
| | comp=N,585nm,0.3s | | | | | | | |
| **MNMC** | **Minimini** | **2.74** | **334** | *i* P | | **Pn** | **07 38 29.3** | **+0.9** |
| MNMC | | | | *e*S | | **Sn** | **07 39 00.7** | **-0.3** |
| MNMC | | | | AML | | AML | 07 39 06.6 | |
| | comp=N,220nm,0.1s | | | | | | | |
| **LPAZ** | **La Paz** | **5.30** | **2** | P | | Pn | 07 39 06.6 | +3.3 |
| | comp=N,1.5nm,0.3s,baz=176,slow=18,SNR=44 | | | | | | | |
| LPAZ | | | | S | | **Sn** | **07 40 05.0** | **+1.6** |
| | comp=N,0.1nm,0.3s,baz=338,slow=19,SNR=2.0 | | | | | | | |
| **SIV** | **San Ignacio** | **8.85** | **52** | P | | **Pn** | **07 39 52.3** | **+1.0** |
| | comp=N,1.3nm,0.3s,baz=253,slow=12,SNR=37 | | | | | | | |
| SIV | | | | S | | **Sn** | **07 41 25.5** | **-3.8** |
| | comp=N,0.1nm,0.3s,baz=332,slow=17,SNR=1.8 | | | | | | | |
| **CFAA** | **Coronel Fontan** | **9.95** | **180** | P | | **Pn** | **07 40 05.2** | **-0.8** |
| | comp=N,0.0nm,0.3s,baz=10,slow=11,SNR=3.4 | | | | | | | |
| CFAA | | | | S | | Sn | 07 41 48.7 | -7.2 |
| | comp=N,0.0nm,0.3s,baz=162,slow=20,SNR=2.6 | | | | | | | |
| **TXAR** | **Lajitas Array** | **61.03** | **325** | P | | **P** | **07 47 49.4** | **-0.7** |
| | comp=N,0.2nm,0.5s,baz=149,slow=7.3,SNR=4.5 | | | | | | | |
| **DBIC** | **Dimbokro** | **68.24** | **73** | P | | **P** | **07 48 37.8** | **+0.6** |
| | comp=N,1.8nm,0.8s,baz=225,slow=5.7,SNR=3.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **76.88** | **70** | P | | **P** | **07 49 28.8** | **+0.3** |
| | comp=N,0.3nm,0.3s,baz=254,slow=5.8,SNR=9.2 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hyl** | **28.43** | **277** | T | | T | 10 16 47.3 | |
| | baz=102 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hyl** | **28.44** | **277** | T | | T | 10 16 47.9 | |
| | baz=102 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hyl** | **28.45** | **277** | T | | T | 10 16 46.4 | |
| | baz=102 | | | | | | | |
| **MKAR** | **Makanchi Array** | **145.40** | **36** | PKPbc | | **PKPab** | **07 57 13.9** | **+0.4** |
| | comp=N,0.3nm,0.7s,baz=314,slow=2.8,SNR=4.1 | | | | | | | |

*ATH 30 07:42:38.2, 41°39N×21°04E, h14km±2km, MD3.2/14*
*THE 30 07:42:38.8, 41°34N×21°06E, h4km±2km, ML3.0/3, Error ellipse: s-maj=2.1km s-min=0.5km az=246.0*
*SKO 30 07:42:38.5, 41°31N×21°07E, h23km, M2.1, ML2.7*
*CSEM 30 07:42:39.2±0.1, 41°32N×21°17E, h2km, ML2.5, Error ellipse: s-maj=4.5km s-min=2.9km az=66.0*

*BEO 30 07:42:41.5±0.7, 41°44N×21°15E, h15km±3km, ML2.5/6*
*PDG 30 07:42:42.0±0.3, 41°48N×21°25E, h23km, ML2.8/11, Error ellipse: s-maj=0.5km s-min=0.9km az=0.0*
**ISC 30 07:42:39.2±1.0, 41°34N±0°01×21°11E±0°02, h7km±9km, n95, σ0.993/152, 15C-8D, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| **OHR** | **Ohrid** | **0.33** | **226** | *i* Pg | | **Pg** | **07 42 45.0** | **-0.6** |
| OHR | | | | *i* Sg | | **Sg** | **07 42 50.1** | **+0.1** |
| OHR | | | | *e*Lg | | Lg | 07 42 50.1 | |
| | comp=N,2µm,0.3s | | | | | | | |
| OHR | | | | *e*Lg | | Lg | 07 42 50.3 | |
| | comp=E,2µm,0.3s | | | | | | | |
| **FNA** | **Florina** | **0.59** | **160** | *e*PB | | **Pg** | **07 42 50.5** | **0.0** |
| FNA | | | | *e*SB | | **Sb** | **07 42 59.6** | **-0.7** |
| **FNA** | **Florina** | **0.59** | **160** | P | | **Pg** | **07 42 50.5** | **0.0** |
| FNA | | | | S | | **Sg** | **07 42 59.1** | **+0.9** |
| **FNA** | **Florina** | **0.59** | **160** | P | | **Pg** | **07 42 50.5** | **0.0** |
| FNA | | | | S | | **Sg** | **07 42 59.1** | **+0.9** |
| FNA | | | | *e*Sb | | **Sb** | **07 42 59.6** | **-0.7** |
| **SKO** | **Skopje** | **0.68** | **21** | *i* Pg | | **Pg** | **07 42 52.8** | **-0.5** |
| SKO | | | | *e*Lg | | Lg | 07 43 04.7 | |
| | comp=N,35nm,0.3s | | | | | | | |
| SKO | | | | *e*Lg | | Lg | 07 43 04.8 | |
| | comp=E,23nm,0.4s | | | | | | | |
| **SKO** | **Skopje** | **0.68** | **21** | ⇑*i*Pg | | **Pg** | **07 42 52.4** | **+0.1** |
| SKO | | | | *e*Sg | | **Sg** | **07 43 01.2** | **+0.1** |
| **SKO** | **Skopje** | **0.68** | **21** | P | | **Pg** | **07 42 52.4** | **+0.1** |
| **SKO** | **Skopje** | **0.68** | **21** | P | | **Pg** | **07 42 52.4** | **+0.1** |
| **SKO** | **Skopje** | **0.68** | **21** | *i* Pg | | **Pb** | **07 42 52.8** | **-0.5** |
| SKO | | | | *e*Sg | | **Sg** | **07 43 01.2** | **+0.1** |
| SKO | | | | *e*Lg | | Lg | 07 43 04.6 | |
| | comp=E,35nm,0.3s | | | | | | | |
| **NEST** | **Nestorio** | **0.92** | **183** | *e*PG | | **Pg** | **07 42 56.2** | **-0.7** |
| NEST | | | | *e*SB | | **Sn** | **07 43 11.4** | **-0.7** |
| **NEST** | **Nestorio** | **0.92** | **183** | P | | **Pg** | **07 42 56.0** | **-0.9** |
| NEST | | | | S | | **Sb** | **07 43 09.8** | **-0.2** |
| **NEST** | **Nestorio** | **0.92** | **183** | *e*Pg | | **Pg** | **07 42 56.2** | **-0.7** |
| NEST | | | | S | | **Sb** | **07 43 09.8** | **-0.2** |
| NEST | | | | *e*Sb | | **Sn** | **07 43 11.4** | **-0.7** |
| **GRG** | **Griva** | **1.04** | **111** | *e*PB | | **Pg** | **07 42 59.4** | **+0.2** |
| GRG | | | | *e*SB | | **Sn** | **07 43 16.0** | **+0.9** |
| **GRG** | **Griva** | **1.04** | **111** | P | | **Pg** | **07 42 59.3** | **+0.1** |
| **GRG** | **Griva** | **1.04** | **111** | *e*Pb | | **Pg** | **07 42 59.4** | **+0.2** |
| GRG | | | | *e*Sb | | **Sn** | **07 43

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **AGG** | **Agios Georgios** | **2.49** | **158** | *e*PB | | **Pn** | **07 43 21.7** | **+1.5** |
| AGG | | | | *e*SN | | **Sb** | **07 43 54.0** | **-1.2** |
| **AGG** | **Agios Georgios** | **2.49** | **158** | *e*Pb | | **Pn** | **07 43 21.7** | **+1.5** |
| AGG | | | | *e*Sn | | **Sb** | **07 43 54.0** | **-1.2** |
| **BOLS** | **Boljevac** | **2.57** | **14** | *e*Pn | | **Pn** | **07 43 20.6** | **-0.5** |
| **BOLS** | **Boljevac** | **2.57** | **14** | *e*Pn | | **Pn** | **07 43 20.6** | **-0.5** |
| **GRUS** | **Gruza** | **2.57** | **354** | *e*Pn | | **Pn** | **07 43 21.4** | **+0.3** |
| **GRUS** | **Gruza** | **2.57** | **354** | *e*Pn | | **Pn** | **07 43 21.4** | **+0.3** |
| **LKD2** | **Lefkada island** | **2.57** | **188** | *e*PN | | **Pb** | **07 43 23.7** | **-1.9** |
| **LKD2** | **Lefkada island** | **2.57** | **188** | *e*Pn | | **Pb** | **07 43 23.7** | **-1.9** |
| **BBLS** | **Lazići** | **2.82** | **334** | *e*Pn | | **Pn** | **07 43 25.9** | **+1.2** |
| **BBLS** | **Lazići** | **2.82** | **334** | *e*Pn | | **Pn** | **07 43 25.9** | **+1.2** |
| **DIVS** | **Divibare** | **2.88** | **344** | *e*Pn | | **Pn** | **07 43 26.1** | **+0.6** |
| **DIVS** | **Divibare** | **2.88** | **344** | *e*Pn | | **Pn** | **07 43 26.1** | **+0.6** |
| **KUBS** | **Kucevo** | **3.10** | **7** | *e*Pn | | **Pn** | **07 43 27.2** | **-1.3** |
| **KUBS** | **Kucevo** | **3.10** | **7** | *e*Pn | | **Pn** | **07 43 27.2** | **-1.3** |

*ISCJB **30** 07:42:46.2±0.6, 18°.98N±0°.09×145°.4E±0°.2, h214km, mb3.6/10, Error ellipse: s-maj=25.2km s-min=12.8km az=178.0*

*IDC **30** 07:42:52.4±5.5, 18°.97N×145°.41E, h262km±55km, mb3.4/10, mb1 3.6/11, mb1mx3.4/43, mbtmp4.0/11, Error ellipse: s-maj=24.9km s-min=11.4km az=88.0*

**ISC 30 07:42:47.5±0.8, 19°.0N±0°.1×145°.5E±0°.2, h214km, n18, σ1§14/12, mb3.7/10, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MJAR** | **Matsushiro Arr** | **18.63** | **341** | P | **P** | **07 46 50.5** | **+1.3** |
| | 0.4nm,0.3s,baz=165,slow=10,SNR=5.8 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **20.09** | **88** | T | T | 08 08 34.4 | |
| | baz=275 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **20.10** | **88** | T | T | 08 08 34.2 | |
| | baz=275 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **20.11** | **88** | T | T | 08 08 36.5 | |
| | baz=275 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **20.22** | **84** | T | T | 08 08 49.1 | |
| | baz=275 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **20.22** | **84** | T | T | 08 08 44.7 | |
| | baz=275 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **20.24** | **84** | T | T | 08 08 43.1 | |
| | baz=275 | | | | | | |
| **WRA** | **Warramunga Arr** | **40.19** | **196** | P | **P** | **07 50 03.4** | **+0.1** |
| | 4.7nm,0.7s,baz=6.4,slow=8.8,SNR=72 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **41.69** | **209** | P | **P** | **07 50 15.7** | **+0.2** |
| | 2.6nm,0.2s,baz=18,slow=8.1 | | | | | | |
| **SONM** | **Songino Array** | **42.80** | **321** | P | **P** | **07 50 24.7** | **+0.4** |
| | 0.5nm,0.6s,baz=132,slow=8.0,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **43.86** | **195** | P | **P** | **07 50 32.9** | **-0.1** |
| | 1.7nm,0.7s,baz=16,slow=8.0,SNR=28 | | | | | | |
| **DZM** | **Mont Dzumac** | **45.66** | **152** | P | **P** | **07 50 47.6** | **+0.4** |
| | 3.6nm,0.5s,baz=360,slow=13,SNR=7.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.12** | **314** | P | **P** | **07 52 18.9** | **+0.1** |
| | 0.5nm,0.6s,baz=91,slow=8.4,SNR=6.7 | | | | | | |
| **ILAR** | **Eielson Array** | **63.49** | **26** | P | **P** | **07 52 53.0** | **-1.6** |
| | 0.6nm,0.8s,baz=262,slow=5.0,SNR=6.1 | | | | | | |
| **INK** | **Inuvik** | **69.20** | **23** | P | **P** | **07 53 31.8** | **+1.2** |
| | 0.4nm,0.3s,baz=297,slow=9.0,SNR=3.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **83.13** | **52** | P | **P** | **07 54 50.9** | **+0.9** |
| | 0.8nm,0.6s,baz=260,slow=4.5,SNR=4.6 | | | | | | |
| **FINES** | **FINESS Array B** | **86.55** | **335** | P | **P** | **07 55 04.1** | **-2.1** |
| | 0.6nm,0.4s,baz=80,slow=5.5,SNR=10.0 | | | | | | |
| **LPAZ** | **La Paz** | **147.88** | **91** | PKPbc | **PKPbc** | **08 02 08.2** | **-0.8** |
| | 0.6nm,0.3s,baz=281,slow=5.2,SNR=8.5 | | | | | | |

**IDC 30 07:46:26.8±6.3, 43°.96N×45°.46E, h0km, Error ellipse: s-maj=162.1km s-min=43.5km az=173.0, Eastern Caucasus**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KBZ** | **Khabaz** | **1.87** | **264** | Pg | Pg | 07 47 04.0 | +1.5 |
| | 0.6nm,0.3s,baz=84,slow=5.8,SNR=13 | | | | | | |
| KBZ | | | | Lg | Lg | 07 47 25.6 | |
| | 0.3nm,0.3s,baz=232,slow=19,SNR=3.8 | | | | | | |
| **I31KZ** | **AKTYUBINSK INF** | **10.71** | **49** | *i* | | 08 49 00.0 | |
| | baz=234,slow=308,SNR=1.1 | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **27.38** | **55** | *i* | | 10 31 30.0 | |
| | baz=265,slow=316,SNR=1.2 | | | | | | |

*ATH **30** 07:46:41.6, 41°.42N×21°.02E, h4km, MD3.0/5*
*SKO **30** 07:46:42.8, 41°.32N×21°.06E, h17km, M1.4, ML2.0*
*CSEM **30** 07:46:43.4±0.2, 41°.31N×21°.10E, h2km, ML1.8, Error ellipse: s-maj=6.3km s-min=4.2km az=100.0*
*BEO **30** 07:46:46.9±0.9, 41°.51N×21°.08E, h0km, ML1.6/3*

**ISC 30 07:46:42.6±1.1, 41°.36N±0°.02×21°.07E±0°.03, h4km±10km, n32, σ0§73/51, 2C, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OHR** | **Ohrid** | **0.32** | **219** | ⇑*i*Pg | **Pg** | **07 46 48.9** | **0.0** |
| OHR | | | | *i* Sg | **Sg** | **07 46 53.9** | **+0.7** |
| OHR | | | | *e*Lg | Lg | 07 46 54.0 | |
| | comp=N,385nm,0.3s | | | | | | |
| OHR | | | | *e*Lg | Lg | 07 46 54.2 | |
| | comp=E,293nm,0.3s | | | | | | |
| **OHR** | **Ohrid** | **0.32** | **219** | ⇑*i*Pg | **Pg** | **07 46 48.8** | **0.0** |
| OHR | | | | *i* Sg | **Sg** | **07 46 53.8** | **+0.7** |
| OHR | | | | *e*Lg | Lg | 07 46 54.0 | |
| | comp=E,385nm,0.3s | | | | | | |
| **FNA** | **Florina** | **0.62** | **158** | *e*PG | **Pg** | **07 46 54.4** | **-0.2** |
| FNA | | | | *e*SG | **Sg** | **07 47 03.2** | **+0.5** |
| **FNA** | **Florina** | **0.62** | **158** | *e*Pg | **Pg** | **07 46 54.4** | **-0.2** |
| FNA | | | | *e*Sg | **Sg** | **07 47 03.2** | **+0.5** |
| **SKO** | **Skopje** | **0.67** | **24** | *i* Pg | **Pb** | **07 46 57.0** | **+0.2** |
| SKO | | | | *e*Lg | Lg | 07 47 10.9 | |
| | comp=E,4.4nm,0.2s | | | | | | |
| SKO | | | | *e*Lg | Lg | 07 47 11.2 | |
| | comp=N,9.3nm,0.4s | | | | | | |
| **SKO** | **Skopje** | **0.67** | **24** | *e*Pg | **Pb** | **07 46 56.3** | **-0.5** |
| SKO | | | | *e*Sg | **Sg** | **07 47 03.0** | **-1.1** |
| **SKO** | **Skopje** | **0.67** | **24** | *i* Pg | **Pb** | **07 46 57.0** | **+0.2** |
| SKO | | | | *e*Sg | **Sg** | **07 47 03.0** | **-1.1** |
| SKO | | | | *e*Lg | Lg | 07 47 10.9 | |
| | comp=N,4.4nm,0.2s | | | | | | |
| **NEST** | **Nestorio** | **0.95** | **181** | *e*PG | **Pg** | **07 47 00.1** | **-0.7** |
| NEST | | | | *e*SG | **Sb** | **07 47 14.8** | **+0.2** |
| **NEST** | **Nestorio** | **0.95** | **181** | *e*Pg | **Pg** | **07 47 00.1** | **-0.7** |
| NEST | | | | *e*Sg | **Sb** | **07 47 14.8** | **+0.2** |
| **GRG** | **Griva** | **1.09** | **112** | *e*PB | **Pg** | **07 47 03.8** | **+0.4** |
| GRG | | | | *e*SB | **Sn** | **07 47 19.4** | **-0.7** |
| **GRG** | **Griva** | **1.09** | **112** | *e*Pb | **Pg** | **07 47 03.8** | **+0.4** |
| GRG | | | | *e*Sb | **Sn** | **07 47 19.4** | **-0.7** |
| **VAY** | **Valandovo** | **1.13** | **92** | *i* Pg | **Pn** | **07 47 05.6** | **+0.4** |
| VAY | | | | *i* Sg | **Sn** | **07 47 20.9** | **-0.3** |
| VAY | | | | *e*Lg | Lg | 07 47 23.1 | |
| | comp=E,14nm,0.4s | | | | | | |
| VAY | | | | *e*Lg | Lg | 07 47 24.5 | |
| | comp=N,17nm,0.7s | | | | | | |
| **VAY** | **Valandovo** | **1.13** | **92** | *i* Pg | **Pn** | **07 47 05.6** | **+0.4** |
| VAY | | | | *i* Sg | **Sn** | **07 47 20.8** | **-0.3** |
| VAY | | | | *e*Lg | Lg | 07 47 23.0 | |
| | comp=N,14nm,0.4s | | | | | | |
| **PENT** | **Pentalofos** | **1.17** | **177** | *e*PB | **Pb** | **07 47 04.6** | **-0.8** |
| PENT | | | | *e*SB | **Sn** | **07 47 22.0** | **-0.2** |
| **PENT** | **Pentalofos** | **1.17** | **177** | *e*Pb | **Pb** | **07 47 04.6** | **-0.8** |
| PENT | | | | *e*Sb | **Sn** | **07 47 22.0** | **-0.2** |
| **KNT** | **Kendrikon** | **1.39** | **98** | *e*PB | **Pn** | **07 47 08.6** | **-0.2** |
| KNT | | | | *e*SB | **Sg** | **07 47 27.5** | **+0.1** |
| **KNT** | **Kendrikon** | **1.39** | **98** | *e*Pb | **Pn** | **07 47 08.6** | **-0.2** |
| KNT | | | | *e*Sb | **Sg** | **07 47 27.5** | **+0.1** |
| **BARS** | **Barje** | **1.55** | **21** | *e*Pg | **Pg** | **07 47 12.0** | **-0.4** |
| BARS | | | | *e*Sg | **Sg** | **07 47 33.2** | **+0.7** |
| **BARS** | **Barje** | **1.55** | **21** | *e*Pg | **Pg** | **07 47 12.0** | **-0.4** |
| BARS | | | | *e*Sg | **Sg** | **07 47 33.2** | **+0.7** |
| **SELS** | **Selova** | **1.85** | **1** | *e*Pn | **Pg** | **07 47 17.4** | **-0.7** |
| **KEK** | **Kerkira** | **1.91** | **211** | *e*PN | **Pb** | **07 47 17.4** | **-0.6** |
| **KEK** | **Kerkira** | **1.91** | **211** | *e*Pn | **Pb** | **07 47 17.4** | **-0.6** |
| **IGT** | **Igoumenitsa** | **1.91** | **197** | *e*PB | **Pn** | **07 47 16.7** | **+0.7** |
| **IGT** | **Igoumenitsa** | **1.91** | **197** | *e*Pb | **Pn** | **07 47 16.7** | **+0.7** |
| **THL** | **Klokotos Trika** | **1.94** | **158** | *e*PG | **Pg** | **07 47 19.3** | **-0.4** |
| **THL** | **Klokotos Trika** | **1.94** | **158** | *e*Pg | **Pg** | **07 47 19.3** | **-0.4** |
| **SJES** | **Sjenica** | **2.06** | **337** | *e*Pn | **Pg** | **07 47 21.7** | **-0.4** |
| SJES | | | | *e*Sg | **Sg** | **07 47 48.0** | **-0.8** |
| **ZAPS** | **Zavoj** | **2.23** | **31** | *e*Pn | **Pb** | **07 47 23.8** | **+0.3** |
| **IVAS** | **Ivanjica** | **2.31** | **343** | *e*Pn | **Pb** | **07 47 23.9** | **-1.0** |
| **IVAS** | **Ivanjica** | **2.31** | **343** | *e*Pn | **Pb** | **07 47 23.9** | **-1.0** |
| **KUBS** | **Kucevo** | **3.08** | **8** | *e*Pn | **Pn** | **07 47 34.2** | **+2.2** |
| **KUBS** | **Kucevo** | **3.08** | **8** | *e*Pn | **Pn** | **07 47 34.2** | **+2.2** |

*IDC **30** 07:49:49.3±0.7, 5°.29S×152°.28E, h0km, mb4.3/15, mb1 4.5/16, mb1mx4.3/36, mbtmp4.3/16, ML2.5/1, MS3.3/6, Ms1 3.3/6, ms1mx3.0/26, Error ellipse: s-maj=23.1km s-min=16.7km az=107.0*

*ISCJB **30** 07:49:54.2±0.3, 5°.36S±0°.05×152°.31E±0°.06, h40km, mb4.6/33, MS3.4/5, Error ellipse: s-maj=9.8km s-min=6.0km az=33.7*

*NEIC **30** 07:49:58.9±1.7, 5°.37S×152°.23E, h71km±16km, mb4.7/20, Error ellipse: s-maj=10.6km s-min=9.2km az=116.0*

*BJI **30** 07:50:01.1, 5°.02S×151°.75E, h58km, mb4.8/12, mB5.1/8, Ms4.9/5, Ms7 4.6/5*

**ISC 30 07:49:56.0±0.6, 5°.40S±0°.07×152°.35E±0°.09, h40km, n59, σ1§38/70, mb4.6/33, MS3.4/5, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.50** | **232** | Pn | **Pn** | **07 51 28.6** | **-0.6** |
| | 5.8nm,0.3s,baz=42,slow=12,SNR=17 | | | | | | |
| PMG | | | | Sn | **Sn** | **07 52 42.6** | **+0.4** |
| | 8.4nm,0.3s,baz=78,slow=20,SNR=6.2 | | | | | | |
| **PMG** | **Port Moresby** | **6.50** | **232** | *e*Pn | **Pn** | **07 51 30.4** | **+1.1** |
| PMG | | | | *e*Sn | **Sn** | **07 52 44.1** | **+1.9** |
| **HNR** | **Honiara** | **8.53** | **118** | LR | LR | 07 55 44.2 | |
| | comp=Z,99nm,18.6s,baz=291,slow=41 | | | | | | |
| **CTA** | **Charters Tower** | **15.76** | **202** | Pn | **Pn** | **07 53 36.4** | **+1.2** |
| | 0.4nm,0.3s,baz=24,slow=13,SNR=8.0 | | | | | | |
| **CTAO** | **Charters Tower** | **15.76** | **202** | *e*P | **P** | **07 53 38.1** | **-0.5** |
| | 16nm,1.1s | | | | | | |
| **EIDS** | **Eidsvold** | **19.89** | **183** | *e*P | **Pn** | **07 54 26.6** | **+0.5** |
| | 21nm,1.0s | | | | | | |
| **DZM** | **Mont Dzumac** | **21.46** | **142** | P | **P** | **07 54 41.3** | **0.0** |
| | 12nm,0.6s,baz=173,slow=4.9,SNR=15 | | | | | | |
| DZM | | | | LR | LR | 08 01 47.3 | |
| | comp=Z,163nm,20.8s,baz=101,slow=33 | | | | | | |
| **SIJI** | **Sorong** | **21.52** | **281** | P | **P** | **07 54 42.4** | **+0.5** |
| | 9.9nm,0.6s,baz=86,slow=9.1,SNR=5.6 | | | | | | |
| **MTN** | **Manton Dam** | **22.20** | **249** | *e*P | **P** | **07 54 50.0** | **+0.9** |
| | 17nm,0.8s | | | | | | |
| **WRAB** | **Tennant Creek** | **22.70** | **229** | *e*P | **P** | **07 54 54.7** | **+0.2** |
| | 14nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.71** | **229** | P | **P** | **07 54 53.0** | **-1.6** |
| | 9.4nm,0.5s,baz=54,slow=9.9,SNR=106 | | | | | | |
| WRA | | | | PcP | **PcP** | **07 58 45.8** | **-0.2** |
| | 0.8nm,0.7s,baz=59,slow=2.1,SNR=4.6 | | | | | | |
| WRA | | | | S | **S** | **07 58 58.9** | **-1.7** |
| | 0.7nm,0.9s,baz=55,slow=18,SNR=4.6 | | | | | | |
| WRA | | | | ScP | **ScP** | **08 02 23.4** | **+2.6** |
| | 0.7nm,1.2s,baz=60,slow=2.5,SNR=2.4 | | | | | | |
| **AS01** | **Alice Springs** | **25.37** | **222** | *e*P | **P** | **07 55 20.0** | **+0.3** |
| **ASAR** | **Alice Springs** | **25.40** | **223** | P | **P** | **07 55 18.7** | **-1.3** |
| | 7.6nm,0.5s,baz=59,slow=8.8,SNR=114 | | | | | | |
| ASAR | | | | PcP | **PcP** | **07 58 51.7** | **-0.1** |
| | 0.4nm,0.6s,baz=72,slow=3.0,SNR=4.6 | | | | | | |
| ASAR | | | | ScP | **ScP** | **08 02 32.3** | **+4.2** |
| | 0.5nm,0.8s,baz=37,slow=2.8,SNR=4.0 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.98** | **242** | P | **P** | **07 55 50.7** | **-1.4** |
| | 5.0nm,0.6s,baz=64,slow=7.6,SNR=27 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **28.98** | **242** | *e*P | **P** | **07 55 51.0** | **-1.1** |
| | 10nm,1.2s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.77** | **343** | LR | LR | 08 14 00.7 | |
| | comp=Z,34nm,20.6s,baz=195,slow=33 | | | | | | |
| **NJ2** | **Nanjing** | **49.03** | **322** | *e*P | **P** | **07 58 39.3** | **+0.2** |
| NJ2 | | | | PMZ | | | |
| | 30nm,0.7s | | | | | | |
| **WHN** | **Wuhan** | **50.98** | **317** | P | **P** | **07 58 53.0** | **-1.0** |
| **GYA** | **Guiyang** | **54.40** | **308** | *e*P | **P** | **07 59 21.3** | **+1.8** |
| GYA | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| **KMI** | **Kunming** | **56.95** | **305** | P | **P** | **07 59 38.8** | **+0.8** |
| KMI | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | 240nm,5.4s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **57.73** | **296** | P | **P** | **07 59 42.6** | **-0.7** |
| | 1.4nm,0.4s,baz=104,slow=5.1,SNR=5.5 | | | | | | |
| **CD2** | **Chengdu** | **58.79** | **311** | *e*P | **P** | **07 59 49.8** | **-0.8** |
| CD2 | | | | pP | **pP** | **08 00 06.5** | **+4.2** |
| CD2 | | | | PP | **PP** | **08 02 00.3** | **-0.7** |
| CD2 | | | | PcS | **PcS** | **08 04 40.8** | **-1.1** |
| CD2 | | | | S | **S** | **08 07 50.5** | **-2.8** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **59.27** | **325** | *e*P | **P** | **07 59 55.8** | **+2.0** |
| HHC | | | | pP | pP | 08 00 11.5 | +5.9 |
| HHC | | | | sP | sP | 08 00 18.8 | +8.6 |
| HHC | | | | PP | **PP** | **08 02 08.5** | **+3.3** |
| HHC | | | | S | **S** | **08 07 57.5** | **-1.9** |
| HHC | | | | PMZ | | | |
| | 27nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | 200nm,6.9s | | | | | | |
| HHC | | | | LN | | | |
| | 230nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | 240nm,14.8s | | | | | | |
| HHC | | | | LZ | | | |
| | 140nm,14.8s | | | | | | |
| **LZH** | **Lanzhou** | **61.35** | **316** | *e*P | **P** | **08 00 07.5** | **-0.7** |
| LZH | | | | PMZ | | | |
| | 14nm,1.0s | | | | | | |
| **SONM** | **Songino Array** | **66.59** | **328** | P | P | 08 00 39.3 | -3.1 |
| | 0.9nm,0.6s,baz=137,slow=5.7,SNR=6.5 | | | | | | |
| SONM | | | | LR | LR | 08 31 09.9 | |
| | comp=Z,21nm,18.1s,baz=130,slow=37 | | | | | | |
| **VNDA** | **Vanda** | **72.25** | **178** | P | **P** | **08 01 16.0** | **-0.7** |
| | 0.6nm,0.7s,baz=316,slow=4.8,SNR=3.9 | | | | | | |
| **WMQ** | **Urumqi** | **75.88** | **318** | *e*P | **P** | **08 01 39.0** | **+0.4** |
| **CAST** | **Castle Rocks** | **80.23** | **22** | *e*P | **P** | **08 02 01.8** | **-0.4** |
| | 8.2nm,0.9s | | | | | | |
| **MK01** | **Makanchi Array** | **80.47** | **319** | *e*P | **P** | **08 02 02.5** | **-1.4** |
| **MKAR** | **Makanchi Array** | **80.48** | **319** | P | **P** | **08 02 02.8** | **-1.2** |
| | 2.3nm,1.0s,baz=100,slow=5.4,SNR=10 | | | | | | |
| MKAR | | | | LR | LR | 08 37 44.7 | |
| | comp=Z,17nm,18.8s,baz=59,slow=36 | | | | | | |
| **MKAR** | **Makanchi Array** | **80.48** | **319** | *e*P | **P** | **08 02 03.5** | **-0.4** |
| **MAKZ** | **Makanchi** | **80.69** | **319** | *e*P | **P** | **08 02 03.8** | **-1.2** |
| **KTH** | **Kantishna Hill** | **80.74** | **22** | *e*P | **P** | **08 02 03.5** | **-1.5** |
| | 30nm,1.7s | | | | | | |
| **SML** | **Sawmill** | **80.85** | **24** | *e*P | **P** | **08 02 05.8** | **+0.2** |
| | 17nm,0.8s | | | | | | |
| **SCM** | **Sheep Creek Mo** | **81.28** | **25** | *e*P | **P** | **08 02 08.6** | **+0.7** |
| | 149nm,2.4s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **81.40** | **326** | P | **P** | **08 02 06.5** | **-2.1** |
| | 1.0nm,0.4s,baz=123,slow=5.5,SNR=3.6 | | | | | | |
| ZALV | | | | LR | LR | 08 39 15.0 | |
| | comp=Z,21nm,19.6s,baz=70,slow=36 | | | | | | |
| **RND** | **Reindeer** | **81.45** | **23** | *e*P | **P** | **08 02 08.1** | **-0.7** |
| | 10nm,0.8s | | | | | | |
| **MCK** | **McKinley** | **81.59** | **23** | *e*P | **P** | **08 02 08.6** | **-0.9** |
| | 18nm,1.0s | | | | | | |
| **MLY** | **Manley** | **81.60** | **21** | *e*P | **P** | **08 02 09.6** | **0.0** |
| | 8.6nm,0.7s | | | | | | |
| **KLU** | **Klutina** | **81.71** | **25** | *e*P | **P** | **08 02 10.8** | **+0.5** |
| | 128nm,2.5s | | | | | | |
| **WRH** | **Wood River Hil** | **82.28** | **22** | *e*P | **P** | **08 02 12.5** | **-0.5** |
| | 16nm,1.2s | | | | | | |
| **CCB** | **Clear Creek Bu** | **82.48** | **22** | *e*P | **P** | **08 02 13.1** | **-1.0** |
| | 6.9nm,0.9s | | | | | | |
| **COLA** | **College** | **82.57** | **22** | *e*P | **P** | **08 02 13.6** | **-0.9** |
| | 13nm,0.9s | | | | | | |
| **ILAR** | **Eielson Array** | **82.88** | **22** | P | **P** | **08 02 14.7** | **-1.4** |
| | 5.7nm,0.8s,baz=252,slow=5.3,SNR=44 | | | | | | |
| **IL1** | **Eielson Array** | **82.88** | **22** | *e*P | **P** | **08 02 14.4** | **-1.8** |
| **COLD** | **Coldfoot** | **82.97** | **19** | *e*P | **P** | **08 02 16.7** | **+0.2** |
| | 9.7nm,1.2s | | | | | | |
| **KSH** | **Kashi** | **82.98** | **311** | *e*P | P | 08 02 22.5 | +5.1 |
| KSH | | | | *es*P | sP | 08 02 46.0 | +12 |
| KSH | | | | S | **SKSac** | **08 12 37.3** | **+0.9** |
| KSH | | | | PMZ | | | |
| | 130nm,5.0s | | | | | | |
| KSH | | | | LN | | | |
| | 210nm,5.6s | | | | | | |
| KSH | | | | LE | | | |
| | 110nm,5.7s | | | | | | |
| KSH | | | | LZ | | | |
| | 210nm,6.4s | | | | | | |
| **DOT** | **Dot Lake** | **83.46** | **24** | *e*P | **P** | **08 02 19.2** | **0.0** |
| | 19nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **83.96** | **322** | P | **P** | **08 02 21.3** | **-0.7** |
| **KURBB** | **Kurchatov Arra** | **83.99** | **322** | P | **P** | **08 02 21.3** | **-0.8** |
| | 0.2nm,0.3s,baz=101,slow=4.8,SNR=3.8 | | | | | | |
| **QSPA** | **South Pole Qui** | **84.56** | **180** | *e*P | **P** | **08 02 24.4** | **-0.6** |
| | 2.1nm,0.7s | | | | | | |
| **MAW** | **Mawson** | **84.84** | **203** | P | **P** | **08 02 24.8** | **-1.3** |
| | 0.9nm,0.2s,baz=114,slow=6.4,SNR=3.7 | | | | | | |
| **EGAK** | **Eagle** | **85.09** | **23** | *e*P | **P** | **08 02 27.1** | **-0.3** |
| | 5.8nm,0.9s | | | | | | |
| **INK** | **Inuvik** | **89.17** | **21** | P | **P** | **08 02 46.5** | **-0.5** |
| | 4.6nm,1.0s,baz=238,slow=10,SNR=5.7 | | | | | | |
| **INK** | **Inuvik** | **89.17** | **21** | *e*P | **P** | **08 02 47.2** | **+0.1** |
| **BVAR** | **Borovoye Array** | **89.45** | **323** | P | **P** | **08 02 47.7** | **-1.0** |
| | 2.2nm,0.8s,baz=104,slow=6.1,SNR=5.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **92.81** | **52** | P | **P** | **08 03 05.7** | **+0.7** |
| | 0.8nm,0.7s,baz=263,slow=6.3,SNR=3.4 | | | | | | |
| **BBGH** | **Gun Hill** | **147.62** | **74** | *e*PKPbc | **PKPdf** | **08 09 36.0** | **+1.5** |
| **TORD** | **Torodi Ar. Bea** | **150.06** | **287** | PKPbc | **PKPbc** | **08 09 42.2** | **-1.2** |
| | 1.2nm,0.6s,baz=82,slow=3.1,SNR=9.5 | | | | | | |
| TORD | | | | PKPab | **PKPab** | **08 09 48.7** | **-0.6** |
| | 1.7nm,0.7s,baz=81,slow=3.6,SNR=5.8 | | | | | | |

**IDC 30 07:54:26.9±3.2, 5°.14S×152°.35E, h0km, mb3.8/3, mb1 4.0/4, mb1mx3.6/39, mbtmp3.9/4, ML1.7/1, Error ellipse: s-maj=115.2km s-min=44.7km az=126.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **6.66** | **230** | Pn | Pn | 07 56 07.7 | +1.5 |
| | 0.8nm,0.3s,baz=66,slow=10.0,SNR=3.3 | | | | | | |
| PMG | | | | Sn | Sn | 07 57 20.9 | -2.0 |
| | 0.2nm,0.3s,baz=282,slow=19,SNR=2.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.88** | **228** | P | P | 07 59 32.1 | -0.3 |
| | 1.4nm,0.5s,baz=53,slow=10.0,SNR=9.4 | | | | | | |
| **ASAR** | **Alice Springs** | **25.59** | **222** | P | P | 07 59 57.6 | -0.5 |
| | 1.0nm,0.6s,baz=58,slow=9.0,SNR=16 | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **29.10** | **242** | P | P | 08 00 29.4 | -0.2 |
| | 1.1nm,0.7s,baz=61,slow=10,SNR=3.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.98** | **287** | PKPbc | PKPbc | 08 14 20.6 | +0.1 |
| | 0.2nm,0.7s,baz=70,slow=4.4,SNR=2.4 | | | | | | |

**KRSC 30 07:57:49.2±1.6, 51°.97N×160°.28E, h108km±19km, ML3.5, Off east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SPN** | **Mys Shipunski** | **1.14** | **352** | *e*P | Pn | 07 58 11.1 | -0.6 |
| SPN | | | | *e*S | Sn | 07 58 29.5 | +0.8 |
| **RUS** | **Russkaya** | **1.18** | **294** | *e*P | Pn | 07 58 11.7 | -0.4 |
| RUS | | | | *e*S | Sn | 07 58 30.5 | +1.0 |
| **NLC** | **Nalytchevo** | **1.33** | **335** | *e*P | Pn | 07 58 15.4 | +1.6 |
| NLC | | | | *e*S | Sn | 07 58 36.1 | +3.6 |
| **MTVR** | **Mutnovka** | **1.39** | **293** | P | Pn | 07 58 14.9 | +0.2 |
| MTVR | | | | *e*S | Sn | 07 58 35.8 | +1.7 |
| **ASAK** | **Asacha** | **1.52** | **287** | *i* P | Pn | 07 58 16.9 | +0.6 |
| ASAK | | | | *i* S | Sn | 07 58 39.2 | +2.4 |
| **UGLR** | **Uglovaya** | **1.53** | **325** | *e*P | Pn | 07 58 17.6 | +1.3 |
| **SDLR** | **Sedlovina** | **1.56** | **328** | *e*P | Pn | 07 58 18.5 | +1.7 |
| **SMAR** | **Somma** | **1.58** | **326** | *e*P | Pn | 07 58 18.3 | +1.2 |
| **AVH** | **Avacha** | **1.60** | **325** | *e*P | Pn | 07 58 19.2 | +2.0 |
| **KOK** | **Koryaka** | **1.66** | **324** | *e*P | Pn | 07 58 19.5 | +1.5 |
| **KRX** | **Arik** | **1.71** | **325** | *e*P | Pn | 07 58 20.9 | +2.3 |
| **GNA** | **Ganaly** | **2.24** | **322** | *e*P | Pn | 07 58 28.8 | +3.3 |
| **MKZ** | **Mys Kozlova** | **2.73** | **18** | *e*P | Pn | 07 58 32.0 | +0.5 |
| MKZ | | | | *e*S | Sn | 07 59 06.5 | +2.4 |
| **KBTR** | **Krutoberegovo** | **4.50** | **18** | *e*P | Pn | 07 58 57.9 | +2.7 |

**NNC 30 08:05:52.3±3.9, 54°.24N×86°.55E, h0km, mb3.7, mpv3.2, 5C-3D, Error ellipse: s-maj=30.3km s-min=22.2km az=56.0, Southwestern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KURBB** | **Kurchatov Arra** | **6.10** | **237** | ⇓Pn | Pn | 08 07 23.3 | -0.2 |
| | 5.5nm,1.2s | | | | | | |
| KURBB | | | | ⇓Sn | Sn | 08 08 36.1 | +2.1 |
| | 5.3nm,0.8s | | | | | | |
| KURBB | | | | ⇓Lg | Lg | 08 09 07.5 | |
| | 9.7nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **7.93** | **202** | ⇑Pn | Pn | 08 07 48.9 | +0.1 |
| | 0.5nm,0.7s,baz=25,slow=13,SNR=8.4 | | | | | | |
| MK31 | | | | ⇑Sn | Sn | 08 09 19.5 | +0.2 |
| | 0.7nm,0.6s | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 08 10 04.1 | |
| | 2.6nm,0.8s,baz=34,slow=29,SNR=5.0 | | | | | | |
| **VOSK** | **Vostochnaya** | **9.41** | **267** | ⇑Pn | Pn | 08 08 10.2 | +1.2 |
| | 2.8nm,1.0s | | | | | | |
| VOSK | | | | ⇑Sn | Sn | 08 09 53.9 | -1.5 |
| | 4.4nm,0.9s | | | | | | |

**IGQ 30 08:11:02±1.1, 0°.23S×81°.22W, h5km±26km, Mb4.0, 8C-5D, Error ellipse: s-maj=8.2km s-min=3.3km az=21.2, Off coast of Ecuador**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ISPT** | **Isla de la

2.0nm,0.4s,baz=182,slow=10,SNR=8.3
CMAR LR LR 08 31 57.1
comp=Z,39nm,19.0s,baz=161,slow=35
**BATI Baumata 24.56 107** LR LR 08 36 18.5
comp=Z,49nm,18.3s,baz=319,slow=42
**H08S2 Diego Garcia H 27.44 261** T T 08 54 12.6
baz=87
**H08S3 Diego Garcia H 27.45 261** T T 08 54 12.6
baz=87,slow=74
**H08S1 Diego Garcia H 27.46 261** T T 08 54 12.6
baz=87,slow=74
**FITZ Fitzroy Crossi 29.09 121** P **P 08 24 53.8 -0.7**
3.6nm,1.3s,baz=281,slow=10,SNR=3.0
**H01W3 Cape Leeuwin H 33.79 159** T T 09 01 40.5
baz=336,slow=76,SNR=12
**H01W2 Cape Leeuwin H 33.80 159** T T 09 01 37.9
baz=336,slow=76,SNR=18
**H01W1 Cape Leeuwin H 33.81 159** T T 09 01 37.2
baz=336,slow=76,SNR=14
**WRA Warramunga Arr 37.36 118** P **P 08 26 05.8 -0.7**
0.6nm,0.6s,baz=300,slow=8.9,SNR=3.0
**WRAB Tennant Creek 37.37 118** *e*P **P 08 26 07.3 +0.7**
5.3nm,1.0s
**ASAR Alice Springs 38.47 124** P **P 08 26 15.4 -0.4**
0.5nm,0.5s,baz=296,slow=7.5,SNR=8.3
ASAR PcP **PcP 08 28 28.8 +0.2**
0.3nm,0.5s,baz=299,slow=2.6,SNR=4.1
**TKM2 Tokmak 2 51.28 337** *e*P **P 08 27 58.5 +0.8**
2.3nm,0.8s
**AAK Ala-Archa 51.47 336** P **P 08 27 58.5 -0.5**
0.8nm,0.4s,baz=155,slow=4.9,SNR=3.6
**AAK Ala-Archa 51.47 336** *e*P **P 08 27 59.2 +0.2**
1.2nm,0.6s
**SONM Songino Array 51.61 6** P **P 08 28 01.2 +1.1**
2.3nm,0.8s,baz=188,slow=10,SNR=8.2
**MKAR Makanchi Array 52.57 345** P **P 08 28 07.6 +0.5**
1.5nm,0.5s,baz=148,slow=7.9,SNR=14
**USRK Ussuriysk Ar. 55.72 28** P **P 08 28 31.1 +1.1**
1.9nm,0.8s,baz=0.0,slow=1.9,SNR=6.3
**KURK Kurchatov 57.14 344** *e*P **P 08 28 40.1 +0.1**
3.4nm,0.8s
**ZALV Zalesovo Beam 58.76 350** P **P 08 28 51.7 +0.4**
2.3nm,0.5s,baz=186,slow=6.4,SNR=14
**ABKAR Akbulak array 63.00 332** *e*P **P 08 29 19.6 -0.6**
3.8nm,0.8s
**BRTR Keskin Array B 74.29 313** P **P 08 30 30.1 -1.0**
1.0nm,0.5s,baz=149,slow=6.4,SNR=5.7
**FINES FINESS Array B 85.48 332** P **P 08 31 31.1 +0.2**
1.3nm,0.8s,baz=131,slow=8.6,SNR=6.9
**QSPA South Pole Qui 86.31 180** *e*P **P 08 31 35.6 +0.5**
15nm,1.9s
**GERES GERESS Array B 90.16 319** P **P 08 31 54.1 +0.3**
0.1nm,0.3s,baz=64,slow=8.9,SNR=3.9
**TXAR Lajitas Array 146.14 39** PKPbc **PKPab 08 38 35.4 +0.5**
1.4nm,0.7s,baz=290,slow=0.9,SNR=22
**MIAR Mount Ida 146.86 20** *e*PKPbc **PKPbc 08 38 36.0 -0.2**
**JCT Junction City 147.54 33** *e*PKPbc **PKPbc 08 38 38.6 +0.5**

*ISCJB **30** 08:43:58.4±0.5,50.°12N±0.°03×18.°38E±0.°03, h0km, Error ellipse: s-maj=5.1km s-min=2.7km az=13.2*
*IPEC **30** 08:43:59.5±0.2,50.°05N×18.°46E, h2km,2km, ML2.0/3, Error ellipse: s-maj=2.1km s-min=1.1km az=160.0*
*CSEM **30** 08:43:59.3±0.3,50.°10N×18.°40E, h1km, ML2.7/8, Error ellipse: s-maj=7.9km s-min=3.6km az=5.0*
*PRU **30** 08:44:01.0,50.°06N×18.°34E, h0km*
**ISC 30 08:43:59.8±0.8,50.°10N±0.°04×18.°40E±0.°02,h0km,n26, σ1§04/45,Poland**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RAC** | **Raciborz** | **0.14** | **265** | | | **Pg** | **Pg** | **08 44 03.5** | **+1.2** |
| RAC | | | | | | *e*Sg | **Sg** | **08 44 06.6** | **+2.5** |
| **OKC** | **Ostrava-Krasne** | **0.31** | **213** | | | *e*PG | **Pg** | **08 44 05.7** | **+0.1** |
| OKC | | | | | | *e*SG | **Sg** | **08 44 10.2** | **+0.6** |
| | comp=Z,60nm,0.5s | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.31** | **213** | Pg | | | **Pg** | **08 44 05.7** | **+0.1** |
| OKC | | | | Sg | | | **Sg** | **08 44 10.2** | **+0.6** |
| | 60nm,0.5s | | | | | | | | |
| **MORC** | **Moravsky Berou** | **0.64** | **241** | | | *e*Pg | **Pg** | **08 44 12.1** | **+0.1** |
| MORC | | | | | | *e*Sg | **Sg** | **08 44 20.3** | **0.0** |
| | 21nm,0.3s | | | | | | | | |
| **OJC** | **Ojcow** | **0.91** | **82** | | | *e*Pg | **Pg** | **08 44 16.3** | **-0.8** |
| OJC | | | | | | *e*Sg | **Sg** | **08 44 28.7** | **-0.1** |
| **OJC** | **Ojcow** | **0.91** | **82** | | | *e*PG | **Pg** | **08 44 16.3** | **-0.8** |
| OJC | | | | | | *e*SG | **Sg** | **08 44 28.7** | **-0.1** |
| **KRLC** | **Kraliky** | **1.04** | **270** | | | *e*PG | **Pg** | **08 44 19.2** | **-0.6** |
| KRLC | | | | | | *e*SG | **Sg** | **08 44 33.0** | **-0.3** |
| **KRLC** | **Kraliky** | **1.04** | **270** | Pg | | | **Pg** | **08 44 19.2** | **-0.6** |
| KRLC | | | | Sg | | | **Sg** | **08 44 33.0** | **-0.3** |
| **LANS** | **Liptovska Anna** | **1.17** | **143** | | | *e*PG | **Pg** | **08 44 21.7** | **-0.5** |
| LANS | | | | | | *e*SG | **Sb** | **08 44 38.4** | **-0.2** |
| **LANS** | **Liptovska Anna** | **1.17** | **143** | | | *e*Pg | **Pg** | **08 44 21.7** | **-0.5** |
| LANS | | | | | | *e*Sg | **Sb** | **08 44 38.4** | **-0.2** |
| **DPC** | **Dobruska-Polom** | **1.36** | **282** | | | *e*PG | **Pg** | **08 44 25.3** | **-0.5** |
| DPC | | | | | | *e*SG | **Sg** | **08 44 43.8** | **+0.3** |
| | comp=Z,32nm,0.5s | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.36** | **282** | Pg | | | **Pg** | **08 44 25.3** | **-0.5** |
| DPC | | | | Sg | | | **Sg** | **08 44 43.8** | **+0.3** |
| | 32nm,0.5s | | | | | | | | |
| **NIE** | **Niedzica** | **1.40** | **118** | | | *e*Pg | **Pn** | **08 44 26.4** | **-0.2** |
| NIE | | | | | | *e*Sg | **Sn** | **08 44 45.8** | **-0.1** |
| **VRAC** | **Vranov** | **1.42** | **237** | | | *e*Pg | **Pn** | **08 44 25.8** | **-1.0** |
| VRAC | | | | | | *e*Sg | **Sg** | **08 44 44.2** | **-1.0** |
| | 25nm,0.3s | | | | | | | | |
| **KSP** | **Ksiaz** | **1.54** | **300** | | | *e*Pg | **Pn** | **08 44 27.8** | **-0.7** |
| KSP | | | | | | *e*Sg | **Sg** | **08 44 50.1** | **+0.8** |
| **UPC** | **Upice** | **1.59** | **286** | | | *e*SG | **Sg** | **08 44 51.0** | **+0.2** |
| | comp=Z,9.4nm,0.4s | | | | | | | | |
| **UPC** | **Upice** | **1.59** | **286** | Sg | | | **Sg** | **08 44 51.0** | **+0.2** |
| | 9.4nm,0.4s | | | | | | | | |
| **KRUC** | **Moravsky** | **1.67** | **232** | | | *e*Pn | **Pn** | **08 44 29.9** | **-0.3** |
| KRUC | | | | | | *e*Sg | **Sn** | **08 44 51.3** | **-1.0** |
| | 16nm,0.4s | | | | | | | | |
| **STHS** | **Stebnicka Huta** | **1.96** | **109** | | | *e*PN | **Pg** | **08 44 37.2** | **-0.2** |
| STHS | | | | | | *e*SN | **Sg** | **08 45 05.9** | **+3.1** |
| **PRU** | **Pruhonice** | **2.49** | **269** | | | *e*SG | **Sb** | **08 45 17.5** | **+0.9** |
| | comp=Z,3.1nm,0.5s | | | | | | | | |
| **PRU** | **Pruhonice** | **2.49** | **269** | Sg | | | **Sb** | **08 45 17.5** | **+0.9** |
| | 3.1nm,0.5s | | | | | | | | |
| **PVCC** | **Panska Ves** | **2.50** | **281** | | | *e*SG | **Sg** | **08 45 20.4** | **+0.5** |
| | comp=Z,9.6nm,0.4s | | | | | | | | |
| **PVCC** | **Panska Ves** | **2.50** | **281** | Sg | | | **Sg** | **08 45 20.4** | **+0.5** |
| | 9.6nm,0.4s | | | | | | | | |
| **BRG** | **Berggiesshubel** | **2.95** | **287** | SG | | | **Sg** | **08 45 33.1** | **-1.5** |
| | 4.7nm,0.6s | | | | | | | | |
| **KHC** | **Kasperske Hory** | **3.28** | **255** | | | *e*PG | **Pb** | **08 45 00.0** | **+1.1** |
| KHC | | | | | | *e*SG | **Sg** | **08 45 42.7** | **-2.5** |
| **KHC** | **Kasperske Hory** | **3.28** | **255** | Pg | | | **Pb** | **08 45 00.0** | **+1.1** |
| KHC | | | | Sg | | | **Sg** | **08 45 42.7** | **-2.5** |

*CSEM **30** 08:58:59.1,39.°13N×22.°57E, h50km, MD2.7, After ATH*
**ATH 30 08:58:59.1,39.°13N×22.°57E,h50km±2km,MD2.7/6, Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AGG** | **Agios Georgios** | **0.21** | **240** | | | *e*P | Pn | 08 59 07.6 | 0.0 |
| AGG | | | | | | *e*S | Sn | 08 59 13.8 | +0.1 |
| **AGG** | **Agios Georgios** | **0.21** | **240** | | | *e*P | Pn | 08 59 07.6 | 0.0 |
| AGG | | | | | | *e*S | Sn | 08 59 13.8 | +0.1 |
| **MAKR** | **Makrakomi, Fth** | **0.36** | **251** | | | *e*P | Pn | 08 59 09.4 | +0.5 |
| MAKR | | | | | | *e*S | Sn | 08 59 17.0 | +1.2 |
| **MAKR** | **Makrakomi, Fth** | **0.36** | **251** | | | *e*P | Pn | 08 59 09.4 | +0.5 |
| MAKR | | | | | | *e*S | Sn | 08 59 17.0 | +1.2 |
| **AXAR** | **Agios Charalam** | **0.37** | **169** | | | *e*P | Pn | 08 59 09.7 | +0.7 |
| **AXAR** | **Agios Charalam** | **0.37** | **169** | | | *e*P | Pn | 08 59 09.7 | +0.7 |
| **THL** | **Klokotos Trika** | **0.61** | **315** | | | *e*P | Pn | 08 59 12.3 | +0.6 |
| **THL** | **Klokotos Trika** | **0.61** | **315** | | | *e*P | Pn | 08 59 12.3 | +0.6 |
| **DESF** | **Desfina** | **0.72** | **182** | | | *e*P | Pn | 08 59 14.1 | +0.9 |
| **DESF** | **Desfina** | **0.72** | **182** | | | *e*P | Pn | 08 59 14.1 | +0.9 |
| **DSF** | **Desfina** | **0.72** | **183** | | | *e*P | Pn | 08 59 14.6 | +1.4 |
| DSF | | | | | | *e*S | Sn | 08 59 24.0 | +0.6 |
| **DSF** | **Desfina** | **0.72** | **183** | | | *e*P | Pn | 08 59 14.6 | +1.4 |
| DSF | | | | | | *e*S | Sn | 08 59 24.0 | +0.6 |
| **KALE** | **Kalithea** | **0.81** | **205** | | | *e*P | Pn | 08 59 15.4 | +1.0 |
| KALE | | | | | | *e*S | Sn | 08 59 26.9 | +1.3 |
| **KALE** | **Kalithea** | **0.81** | **205** | | | *e*P | Pn | 08 59 15.4 | +1.0 |
| KALE | | | | | | *e*S | Sn | 08 59 26.9 | +1.3 |
| **SERG** | **Sergoula** | **0.82** | **209** | | | *e*P | Pn | 08 59 16.0 | +1.5 |
| SERG | | | | | | *e*S | Sn | 08 59 27.1 | +1.4 |
| **SERG** | **Sergoula** | **0.82** | **209** | | | *e*P | Pn | 08 59 16.0 | +1.5 |
| SERG | | | | | | *e*S | Sn | 08 59 27.1 | +1.4 |
| **EFP** | **Efpalio** | **0.87** | **217** | | | *e*P | Pn | 08 59 15.3 | +0.2 |
| EFP | | | | | | *e*S | Sn | 08 59 28.0 | +1.2 |
| **EFP** | **Efpalio** | **0.87** | **217** | | | *e*P | Pn | 08 59 15.3 | +0.2 |
| EFP | | | | | | *e*S | Sn | 08 59 28.0 | +1.2 |

**BEO 30 09:00:50.7±0.6,44.°26N×18.°40E,h0km,ML1.7/3, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BBLS** | **Lazići** | **0.82** | **118** | | | *e*Pg | Pg | 09 01 04.3 | -2.3 |
| **TEKS** | **Tekeris** | **0.86** | **70** | | | *e*Pg | Pg | 09 01 04.4 | -2.8 |
| **BLY** | **Banja Luka** | **1.00** | **300** | | | *e*Pg | Pb | 09 01 10.4 | -0.5 |
| **DIVS** | **Divibare** | **1.16** | **97** | | | *e*Pg | Pg | 09 01 10.3 | -2.7 |
| DIVS | | | | | | *e*Sg | Sg | 09 01 28.3 | +0.2 |
| **IVAS** | **Ivanjica** | **1.44** | **118** | | | *e*Pg | Pn | 09 01 16.4 | -1.7 |
| IVAS | | | | | | *e*Sg | Sg | 09 01 36.5 | -0.6 |
| **TRUS** | **Trudelj** | **1.44** | **91** | | | *e*Sg | Sb | 09 01 37.5 | +0.1 |
| **SJES** | **Sjenica** | **1.52** | **131** | | | *e*Pg | Pn | 09 01 17.0 | -2.2 |

*NEIC **30** 09:15:58.7±0.5, 18.°27N×94.°50E, h10km, mb4.2/1, Error ellipse: s-maj=14.9km s-min=7.4km az=219.0*
*ISCJB **30** 09:16:01.0±0.6, 18.°48N±0.°09×94.°73E±0.°05, h33km, mb3.9/13, MS3.5/2, Error ellipse: s-maj=14.1km s-min=4.0km az=22.4*
*IDC **30** 09:16:06.1±5.5, 18.°50N×94.°91E, h64km±48km, mb3.6/12, mb1 3.7/13, mb1mx3.5/42, mbtmp3.9/13, ML4.1/1, MS2.7/2, Ms1 2.7/2, ms1mx2.4/48, Error ellipse: s-maj=44.1km s-min=15.5km az=52.0*
*BKK **30** 09:16:11.4±5.1, 18.°№ 12°×9.°5E±1.°9, h31km±86km, M4.0/5, mb3.9/1, mB4.4/1, MLv4.0/5, Mw(mB)3.5/1*
**ISC 30 09:16:03.0±0.8,18.°4N±0.°1×94.°72E±0.°07,h35km,n36, σ1§17/36,mb4.0/13,Myanmar**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **MHMT** | **Maesarieng** | **3.06** | **94** | | | P | **Pn** | **09 16 50.8** | **+1.8** |
| MHMT | | | | | | S | **Sn** | **09 17 22.5** | **-1.9** |
| **CMAR** | **Chiang Mai Arr** | **4.01** | **89** | | | P | **Pn** | **09 17 03.9** | **+1.9** |
| | 3.3nm,0.3s,baz=266,slow=15,SNR=14 | | | | | | | | |
| CMAR | | | | | | S | **Sn** | **09 17 46.4** | **-1.5** |
| | 13nm,0.3s,baz=273,slow=23,SNR=18 | | | | | | | | |
| **CHTO** | **Chiang Mai** | **4.03** | **84** | | | P | **Pn** | **09 17 04.1** | **+1.9** |
| **CHTO** | **Chiang Mai** | **4.03** | **84** | | | *e*Pn | **Pn** | **09 17 04.0** | **+1.7** |
| CHTO | | | | | | *e*Sn | **Sn** | **09 17 47.0** | **-1.2** |
| **CMAI** | **Chiengmai2** | **4.36** | **69** | | | P | **Pn** | **09 17 09.8** | **+2.9** |
| **UMPA** | **Umpang Tak** | **4.53** | **118** | | | P | **Pn** | **09 17 11.5** | **+2.3** |
| **UTTA** | **Uttaradit** | **5.59** | **96** | | | P | **Pn** | **09 17 25.6** | **+1.8** |
| UTTA | | | | | | S | **Sn** | **09 18 25.9** | **-0.9** |
| **CRAI** | **Chiangrai** | **5.64** | **70** | | | P | Pn | 09 17 19.0 | -5.4 |
| **LOEI** | **Loei** | **6.30** | **97** | | | P | Pn | 09 17 40.9 | +7.4 |
| **ODAN** | **Odare** | **10.78** | **322** | | | *e*P | **Pn** | **09 18 35.2** | **0.0** |
| | 7.9nm,0.3s | | | | | | | | |
| **TAPN** | **Taplejung** | **10.98** | **325** | | | *e*P | **Pn** | **09 18 38.1** | **+0.1** |
| | 3.4nm,0.2s | | | | | | | | |
| **RAMN** | **Ramite** | **11.32** | **320** | | | *e*P | **Pn** | **09 18 42.3** | **-0.2** |
| | 12nm,0.4s | | | | | | | | |
| **LSA** | **Lhasa** | **11.69** | **345** | | | *e*Pn | **Pn** | **09 18 47.3** | **-0.5** |
| **GUN** | **Gumba** | **12.45** | **321** | | | *e*P | **Pn** | **09 18 58.9** | **+0.8** |
| | 3.8nm,0.3s | | | | | | | | |
| **PKI** | **Pulchoki** | **12.50** | **318** | | | *e*P | **Pn** | **09 18 59.3** | **+0.5** |
| | 4.7nm,0.2s | | | | | | | | |
| **PKIN** | **Phulchoki** | **12.51** | **318** | | | *e*P | **Pn** | **09 18 59.1** | **+0.2** |
| | 4.6nm,0.3s | | | | | | | | |
| **DMN** | **Daman** | **12.72** | **318** | | | *e*P | **Pn** | **09 19 01.5** | **-0.2** |
| | 4.0nm,0.3s | | | | | | | | |
| **GKN** | **Gorkha** | **13.29** | **318** | | | *e*P | **Pn** | **09 19 08.3** | **-1.1** |
| | 13nm,0.3s | | | | | | | | |
| **KOLN** | **Koldanda** | **13.82** | **314** | | | *e*P | **Pn** | **09 19 16.7** | **0.0** |
| | 4.3nm,0.3s | | | | | | | | |
| **PALK** | **Pallekele** | **17.58** | **233** | | | LR | LR | 09 27 59.4 | |
| | comp=Z,13nm,18.4s,baz=116,slow=40 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **30.09** | **343** | | | P | **P** | **09 22 10.3** | **+1.1** |
| | 0.2nm,0.4s,baz=150,slow=12,SNR=3.5 | | | | | | | | |
| MKAR | | | | | | LR | LR | 09 35 18.0 | |
| | comp=Z,18nm,18.2s,baz=313,slow=38 | | | | | | | | |
| **SONM** | **Songino Array** | **30.85** | **15** | | | P | **P** | **09 22 16.1** | **+0.1** |
| | 0.3nm,0.3s,baz=206,slow=9.6,SNR=3.6 | | | | | | | | |
| **TLY** | **Talaya** | **33.93** | **10** | | | LR | LR | 09 39 13.9 | |
| | comp=Z,667nm,21.3s,baz=340,slow=41 | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **34.62** | **342** | | | P | **P** | **09 22 49.1** | **+0.4** |
| | baz=158,slow=7.9 | | | | | | | | |
| **KURK** | **Kurchatov** | **34.68** | **342** | | | P | **P** | **09 22 49.1** | **-0.1** |
| **ZALV** | **Zalesovo Beam** | **36.27** | **350** | | | P | **P** | **09 23 03.2** | **+0.3** |
| | 1.2nm,0.4s,baz=162,slow=9.3,SNR=5.5 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.45** | **132** | | | P | **P** | **09 25 26.6** | **-0.7** |
| | 0.3nm,0.6s,baz=320,slow=7.3,SNR=5.6 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **54.45** | **132** | | | *e*P | **P** | **09 25 26.6** | **-0.6** |
| | 2.0nm,0.8s | | | | | | | | |
| **ASAR** | **Alice Springs** | **56.68** | **136** | | | P | **P** | **09 25 43.4** | **+0.1** |
| | 0.7nm,0.6s,baz=317,slow=7.0,SNR=12 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **60.47** | **318** | | | P | **P** | **09 26 08.7** | **-0.6** |
| | 0.4nm,0.4s,baz=78,slow=7.3,SNR=3.5 | | | | | | | | |
| **FINES** | **FINESS Array B** | **63.79** | **330** | | | P | **P** | **09 26 31.2** | **-0.1** |
| | 1.4nm,0.7s,baz=108,slow=6.2,SNR=8.0 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **65.64** | **339** | | | P | **P** | **09 26 42.9** | **-0.4** |
| | 3.6nm,0.9s,baz=96,slow=8.5,SNR=3.8 | | | | | | | | |
| **HFS** | **Hagfors** | **69.75** | **328** | | | P | **P** | **09 27 09.4** | **0.0** |
| | 1.3nm,0.4s,baz=103,slow=6.5,SNR=8.4 | | | | | | | | |
| **GERES** | **GERESS Array B** | **70.50** | **316** | | | P | **P** | **09 27 14.3** | **0.0** |
| | 0.8nm,0.6s,baz=69,slow=4.4,SNR=6.2 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **70.93** | **329** | | | P | **P** | **09 27 16.1** | **-0.5** |
| | 0.6nm,0.6s,baz=87,slow=6.1,SNR=2.8 | | | | | | | | |
| **ILAR** | **Eielson Array** | **84.82** | **22** | | | P | **P** | **09 28 32.6** | **-1.0** |
| | 0.3nm,0.7s,baz=300,slow=4.9,SNR=4.6 | | | | | | | | |

*ISK **30** 09:33:41.4,37.°27N×28.°22E, h5km, MD2.9*
*DDA **30** 09:33:42.9,37.°21N×28.°23E, h4km, Md2.6*
*ISCJB **30** 09:33:43.1±0.6,37.°25N±0.°04×28.°22E±0.°05, h0km, Error ellipse: s-maj=7.3km s-min=3.1km az=140.9*
*CSEM **30** 09:33:43.1±0.3,37.°23N×28.°22E, h1km, MD2.9, Error ellipse: s-maj=10.7km s-min=4.5km az=50.0, Mining explosion.*
**ISC 30 09:33:42.6±1.0,37.°26N±0.°03×28.°24E±0.°04,h0km,n14, σ0§77/28,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.13** | **163** | | | *e*PG | **Pg** | **09 33 44.8** | **-0.2** |
| YER | | | | | | *e*SG | **Sg** | **09 33 47.3** | **+0.7** |
| **YER** | **Yerkesik** | **0.13** | **163** | | | *e*Pg | **Pg** | **09 33 44.8** | **-0.2** |
| YER | | | | | | *e*Sg | **Sg** | **09 33 47.3** | **+0.7** |
| **TURN** | **Turunc** | **0.48** | **142** | | | *i*P | **Pg** | **09 33 51.4** | **-0.4** |
| TURN | | | | | | *i*S | **Sb** | **09 34 00.6** | **-1.0** |
| **TURN** | **Turunc** | **0.48** | **142** | | | P | **Pg** | **09 33 51.4** | **-0.4** |
| TURN | | | | | | S | **Sb** | **09 34 00.6** | **-1.0** |
| **AYDN** | **Tasoluk** | **0.49** | **325** | | | *i*P | **Pb** | **09 33 54.2** | **-0.1** |
| AYDN | | | | | | *i*S | **Sb** | **09 34 01.2** | **-0.9** |
| **AYDN** | **Tasoluk** | **0.49** | **325** | | | P | **Pb** | **09 33 54.2** | **-0.1** |
| AYDN | | | | | | S | **Sb** | **09 34 01.2** | **-0.9** |
| **DALY** | **Dalyan (Mu˘la** | **0.55** | **142** | | | *e*PG | **Pg** | **09 33 53.4** | **+0.2** |
| DALY | | | | | | *e*SG | **Sb** | **09 34 02.2** | **-1.3** |
| **DALY** | **Dalyan (Mu˘la** | **0.55** | **142** | | | *e*Pg | **Pg** | **09 33 53.4** | **+0.2** |
| DALY | | | | | | *e*Sg | **Sb** | **09 34 02.2** | **-1.3** |
| **BDRM** | **Kayabasi** | **0.66** | **254** | | | *i*P | **Pg** | **09 33 54.9** | **-0.3** |
| BDRM | | | | | | *i*S | **Sg** | **09 34 05.1** | **+1.3** |
| **BDRM** | **Kayabasi** | **0.66** | **254** | | | P | **Pg** | **09 33 54.9** | **-0.3** |
| BDRM | | | | | | S | **Sg** | **09 34 05.1** | **+1.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.74** | **338** | | | *e*PG | **Pg** | **09 33 56.5** | **-0.3** |
| AYDB | | | | | | *e*SG | **Sg** | **09 34 07.6** | **+1.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.74** | **338** | | | *e*Pg | **Pg** | **09 33 56.6** | **-0.3** |
| AYDB | | | | | | *e*Sg | **Sg** | **09 34 07.6** | **+1.1** |
| **FETY** | **Fethiye** | **0.92** | **132** | | | *e*PG | **Pg** | **09 34 00.4** | **+0.2** |
| FETY | | | | | | *e*SG | **Sb** | **09 34 14.3** | **+0.1** |
| **FETY** | **Fethiye** | **0.92** | **132** | | | *e*Pg | **Pg** | **09 34 00.4** | **+0.2** |
| FETY | | | | | | *e*Sg | **Sb** | **09 34 14.3** | **+0.1** |

**NNC 30 09:40:44.7±1.4,43.°36N×81.°25E,h0km,mb3.2,mpv3.0, 6C-4D,Error ellipse: s-maj=16.4km s-min=4.9km az=156.0,Northern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PDGK** | **Podgornoye** | **1.29** | **269** | | | ⇑P | Pg | 09 41 09.2 | -0.3 |
| | 9.4nm,0.2s | | | | | | | | |
| PDGK | | | | | | ⇑S | Sb | 09 41 26.8 | -0.2 |
| | 46nm,0.4s | | | | | | | | |
| **MK31** | **Makanchi Array** | **3.52** | **12** | | | ⇓Pn | Pn | 09 41 40.2 | -0.5 |
| | 0.3nm,0.2s,baz=186,slow=14 | | | | | | | | |
| MK31 | | | | | | ⇓Pg | Pb | 09 41 49.4 | +1.6 |
| | 1.0nm,0.3s | | | | | | | | |
| MK31 | | | | | | ⇑Lg | Lg | 09 42 36.6 | |
| | 1.8nm,0.3s,baz=193,slow=29,SNR=3.8 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.16** | **266** | | | ⇑Pg | Pb | 09 42 00.4 | +1.3 |
| | 1.4nm,0.6s | | | | | | | | |
| TKM2 | | | | | | ⇑Lg | Lg | 09 42 57.1 | |
| | 7.3nm,0.6s | | | | | | | | |
| **AAK** | **Ala-Archa** | **5.01** | **264** | | | ⇓Pg | Pb | 09 42 16.7 | +3.1 |
| | 1.4nm,0.5s | | | | | | | | |
| AAK | | | | | | ⇑Lg | Lg | 09 43 22.8 | |
| | 3.9nm,0.6s | | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **7.50** | **347** | | | ⇓Lg | Lg | 09 44 40.8 | |
| | 4.5nm,0.7s | | | | | | | | |

*AUST **30** 09:46:44.3±3.0,1.°34S×143.°04E, h43km, Error ellipse: s-maj=2.7km s-min=1.6km az=265.0*
*IDC **30** 09:46:52.9±0.8,3.°08S×142.°64E, h0km, mb4.1/11, mb1 4.3/14, mb1mx4.1/36, mbtmp4.2/14, ML4.0/3, MS3.3/9, Ms1 3.3/9, ms1mx3.0/29, Error ellipse: s-maj=23.2km s-min=16.6km az=95.0*
*ISCJB **30** 09:46:55.2±0.5,3.°05S±0.°05×142.°67E±0.°06, h27km, mb4.0/11, MS3.2/6, Error ellipse: s-maj=8.4km s-min=7.2km az=169.7*
*NEIC **30** 09:46:58.3±0.5,3.°06S×142.°60E, h35km, mb4.2/2, Error ellipse: s-maj=10.6km s-min=9.0km az=57.0*
**ISC 30 09:46:57.4±0.6,3.°05S±0.°07×142.°55E±0.°07,h27km,n39, σ1§59/32,mb4.2/11,MS3.2/6,Near north coast of New Guinea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **1.92** | **286** | | | Pn | **Pn** | **09 47 27.5** | **-0.9** |
| | baz=141,slow=6.5 | | | | | | | | |
| JAY | | | | | | Sn | **Sb** | **09 47 55.7** | **+0.2** |
| | baz=90,slow=20 | | | | | | | | |
| **JAY** | **Jayapura** | **1.92** | **286** | | | P | **Pn** | **09 47 28.2** | **-0.2** |
| | baz=2.6,SNR=8.8 | | | | | | | | |
| **PMG** | **Port Moresby** | **7.79** | **144** | | | LR | LR | 09 52 50.4 | |
| | comp=Z,230nm,18.8s,baz=68,slow=46 | | | | | | | | |
| **PMG** | **Port Moresby** | **7.79** | **144** | | | Pn | **Pn** | **09 48 49.9** | **+0.7** |
| **FAKI** | **Fak Fak** | **10.29** | **270** | | | *e*Pn | **Pn** | **09 49 23.9** | **+0.4** |
| **COEN** | **Coen** | **10.85** | **177** | | | Pn | Pn | 09 49 27.0 | -4.1 |
| **SIJI** | **Sorong** | **11.49** | **281** | | | Pn | **Pn** | **09 49 39.1** | **-0.7** |
| | 0.4nm,0.3s,baz=252,slow=20,SNR=3.4 | | | | | | | | |
| SIJI | | | | | | LR | LR | 09 55 00.5 | |
| | comp=Z,260nm,20.1s,baz=85,slow=42 | | | | | | | | |
| **KDU** | **Kakadu** | **13.82** | **226** | | | P | **Pn** | **09 50 13.8** | **+2.0** |
| | baz=15,SNR=3.9 | | | | | | | | |
| **MTN** | **Manton Dam** | **14.91** | **229** | | | P | **P** | **09 50 31.7** | **-0.2** |
| | baz=16,SNR=4.0 | | | | | | | | |
| **HNR** | **Honiara** | **18.41** | **111** | | | P | **P** | **09 51 08.8** | **-1.9** |
| | 4.8nm,0.3s,baz=319,slow=9.3,SNR=1.9 | | | | | | | | |
| HNR | | | | | | LR | LR | 09 57 57.3 | |
| | comp=Z,40nm,19.5s,baz=338,slow=36 | | | | | | | | |
| **KNRA** | **Kununurra** | **18.49** | **226** | | | P | **Pn** | **09 51 14.7** | **+2.9** |
| | baz=20,SNR=9.2 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **18.59** | **205** | | | *e*P | **Pn** | **09 51 12.9** | **-0.2** |
| | 13nm,0.9s | | | | | | | | |
| WRAB | | | | | | *e*Sn | **Sn** | **09 54 34.6** | **-5.7** |
| **WRA** | **Warramunga Arr** | **18.60** | **205** | | | P | **P** | **09 51 12.8** | **-0.1** |
| | 0.3nm,0.3s,baz=29,slow=11,SNR=18 | | | | | | | | |
| **BATI** | **Baumata** | **20.05** | **248** | | | P | Pn | 09 51 31.2 | +0.5 |
| | 20nm,0.5s,baz=105,slow=3.0,SNR=5.0 | | | | | | | | |
| **ASAR** | **Alice Springs** | **22.13** | **201** | | | P | **P** | **09 51 50.1** | **-1.0** |
| | 2.2nm,0.7s,baz=29,slow=9.8,SNR=25 | | | | | | | | |
| ASAR | | | | | | LR | LR | 10 00 36.7 | |
| | comp=Z,101nm,18.0s,baz=22,slow=37 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.33** | **227** | | | P | **P** | **09 51 53.7** | **+0.4** |
| | 4.2nm,0.8s,baz=74,slow=7.8,SNR=7.5 | | | | | | | | |
| FITZ | | | | | | S | **S** | **09 55 58.4** | **+0.9** |
| | 1.4nm,0.7s,baz=307,slow=20,SNR=1.9 | | | | | | | | |
| FITZ | | | | | | LR | LR | 10 02 35.5 | |
| | comp=Z,51nm,18.6s,baz=45,slow=42 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.33** | **227** | | | P | **P** | **09 51 54.4** | **+1.2** |
| | baz=24,SNR=4.9 | | | | | | | | |
| **FITZ** | **Fitzroy Crossi** | **22.33** | **227** | | | P | **P** | **09 51 53.7** | **+0.4** |
| | 8.5nm,1.1s | | | | | | | | |
| FITZ | | | | | | S | **S** | **09 55 58.4** | **+0.9** |
| **KAPI** | **Kappang** | **22.83** | **264** | | | LR | LR | 10 02 32.6 | |
| | comp=Z,35nm,18.1s,baz=102,slow=41 | | | | | | | | |
| **QLP** | **Quilpie** | **23.45** | **176** | | | P | **P** | **09 52 06.2** | **+1.5** |
| | baz=25,SNR=3.8 | | | | | | | | |
| **EIDS** | **Eidsvold** | **23.66** | **160** | | | P | **P** | **09 52 09.8** | **+3.0** |
| | baz=25,SNR=3.2 | | | | | | | | |
| **WRKA** | **Warakurna** | **25.81** | **211** | | | P | **P** | **09 52 27.0** | **+0.4** |
| | baz=28,SNR=8.7 | | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **31.99** | **47** | |

*mb4.6/194, Error ellipse: s-maj=6.6km s-min=3.4km az=143.9*

*NEIC **30** 09:53:59.9± 0.1, 7°.98S× 71°.23W, mb4.7/134, Error ellipse: s-maj=5.6km s-min=3.1km az=59.0*

*MOS **30** 09:53:59.0± 0.9, 7°.95S× 71°.33W, h626km, mb4.6/42, Error ellipse: s-maj=12.6km s-min=5.9km az=113.7*

*IDC **30** 09:54:00.0± 0.4, 8°.01S× 71°.33W, h623km± 4km, mb4.0/28, mb1 4.2/35, mb1mx4.1/39, mbtmp5.0/35, Error ellipse: s-maj=9.7km s-min=6.9km az=51.0*

*BJI **30** 09:54:01.0, 7°.90S× 71°.20W, h617km, mB5.2/3*

**ISC 30 09:54:00.2± 0.3, 8°.00S± 0°.04× 71°.32W± 0°.05, h626km± 3km, h627km: pP-P, n834, σ 1°.900/958, mb4.6/192, 10C-2D, Western Brazil**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **NNA** | **Nana** | **6.73** | **234** | P | **P** | **09 55 48.9** | **-0.1** |
| | 120nm,0.3s,baz=49,slow=8.3,SNR=182 | | | | | | |
| NNA | | | | S | **S** | **09 57 16.4** | **-1.7** |
| | 2.4nm,0.3s,baz=166,slow=22,SNR=6.9 | | | | | | |
| **NNA** | **Nana** | **6.73** | **234** | *e*P | **P** | **09 55 48.9** | **-0.1** |
| NNA | | | | e*S* | **S** | **09 57 17.1** | **-1.0** |
| **NNA** | **Nana** | **6.73** | **234** | *e*P | **P** | **09 55 48.9** | **-0.1** |
| NNA | | | | e*S* | **S** | **09 57 17.1** | **-1.0** |
| **ATAH** | **Atahualpa** | **7.07** | **277** | P | **P** | **09 55 53.6** | **+1.1** |
| | 25nm,0.3s,baz=111,slow=7.1,SNR=203 | | | | | | |
| ATAH | | | | S | **S** | **09 57 27.6** | **+3.4** |
| | 3.7nm,0.3s,baz=2.4,slow=22,SNR=8.1 | | | | | | |
| **SAML** | **Samuel** | **8.10** | **97** | *e*P | **P** | **09 56 01.6** | **+0.1** |
| SAML | | | | e*S* | **S** | **09 57 41.3** | **+0.5** |
| **ARE** | **Arequipa** | **8.41** | **181** | *e*P | **P** | **09 56 04.0** | **-0.6** |
| ARE | | | | e*S* | S | 09 57 39.0 | -7.5 |
| **ARE** | **Arequipa** | **8.41** | **181** | *e*P | **P** | **09 56 04.0** | **-0.6** |
| ARE | | | | e*S* | S | 09 57 39.0 | -7.5 |
| **LPAZ** | **La Paz** | **8.80** | **160** | P | **P** | **09 56 08.5** | **-0.2** |
| | 11nm,0.3s,baz=339,slow=6.7,SNR=198 | | | | | | |
| LPAZ | | | | S | **S** | **09 57 51.1** | **-2.8** |
| | 2.1nm,0.3s,baz=37,slow=20,SNR=1.5 | | | | | | |
| **LPAZ** | **La Paz** | **8.80** | **160** | P | **P** | **09 56 08.5** | **-0.2** |
| LPAZ | | | | S | **S** | **09 57 51.1** | **-2.8** |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.3s | | | | | | |
| LPAZ | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| **OTAV** | **Otavalo** | **10.84** | **319** | *e*P | **P** | **09 56 28.7** | **+0.3** |
| OTAV | | | | e*S* | **S** | **09 58 30.9** | **+1.1** |
| **SIV** | **San Ignacio** | **12.78** | **129** | P | **P** | **09 56 46.8** | **+0.3** |
| | comp=N,16nm,0.3s,baz=311,slow=11,SNR=163 | | | | | | |
| SIV | | | | S | **S** | **09 59 07.6** | **+4.8** |
| | comp=N,1.1nm,0.3s,baz=287,slow=20,SNR=13 | | | | | | |
| **ROSC** | **El Rosal** | **13.12** | **347** | P | **P** | **09 56 51.6** | **+1.3** |
| | comp=N,9.5nm,0.3s,baz=96,slow=3.6,SNR=17 | | | | | | |
| ROSC | | | | S | **S** | **09 59 07.9** | **-1.6** |
| | baz=73,slow=19,SNR=1.8 | | | | | | |
| **LVC** | **Limon Verde** | **14.71** | **171** | P | **P** | **09 57 05.9** | **+0.9** |
| | comp=N,428nm,0.3s,baz=351,slow=7.5,SNR=96 | | | | | | |
| LVC | | | | S | **S** | **09 59 38.9** | **+3.4** |
| | comp=N,46nm,0.3s,baz=157,slow=20,SNR=8.5 | | | | | | |
| **LVC** | **Limon Verde** | **14.71** | **171** | *e*P | **P** | **09 57 05.2** | **+0.3** |
| LVC | | | | e*S* | **S** | **09 59 39.1** | **+3.5** |
| **YJA** | **Yavi** | **15.16** | **159** | *i* P | **P** | **09 57 08.1** | **-1.1** |
| **HJA** | **Humahuaca** | **16.15** | **160** | *i* P | **P** | **09 57 15.9** | **-2.3** |
| **SDV** | **Santo Domingo** | **16.79** | **2** | *e*P | **P** | **09 57 23.4** | **-0.5** |
| | comp=N,23nm,0.7s | | | | | | |
| SDV | | | | e*S* | **S** | **10 00 09.7** | **+0.1** |
| **ASTB** | **Santa Barbara** | **17.16** | **158** | *i* P | **P** | **09 57 26.5** | **-0.6** |
| **AZAP** | **Zapla** | **17.20** | **160** | *i* P | **P** | **09 57 26.4** | **-1.2** |
| **ALOL** | **LOMAS DE OLMED** | **17.23** | **157** | *i* P | **P** | **09 57 27.9** | **+0.3** |
| **SLA** | **San Lorenzo** | **17.53** | **162** | *i* P | **P** | **09 57 28.6** | **-1.9** |
| SLA | | | | IAML | | 09 57 43.2 | |
| | comp=Z,14nm,0.5s | | | | | | |
| **FSA** | **Cafayete** | **18.68** | **165** | *i* P | **P** | **09 57 41.3** | **+0.2** |
| **BCIP** | **Isla Barro Col** | **19.05** | **333** | *e*P | **P** | **09 57 46.2** | **+1.9** |
| | comp=Z,111nm,0.6s | | | | | | |
| **PCRV** | **Puerto La Cruz** | **19.25** | **20** | P | **P** | **09 57 48.3** | **+2.2** |
| | comp=Z,2.5nm,0.3s,baz=97,slow=2.7,SNR=9.8 | | | | | | |
| **PAYG** | **Puerto Ayora** | **20.25** | **290** | *e*P | **P** | **09 57 56.4** | **+1.2** |
| | comp=Z,87nm,0.8s | | | | | | |
| **LCO** | **Las Campanas** | **20.91** | **178** | *e*P | **P** | **09 58 01.5** | **+0.4** |
| | comp=Z,51nm,1.0s | | | | | | |
| **CPUP** | **Villa Florida** | **22.56** | **146** | P | **P** | **09 58 14.8** | **-0.7** |
| | comp=Z,15nm,1.0s,baz=330,slow=8.8,SNR=16 | | | | | | |
| CPUP | | | | ScP | **ScP** | **10 04 22.8** | **-1.1** |
| | comp=Z,4.1nm,0.5s,baz=326,slow=2.7,SNR=8.6 | | | | | | |
| **CPUP** | **Villa Florida** | **22.56** | **146** | P | **P** | **09 58 14.8** | **-0.7** |
| CPUP | | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | | |
| CPUP | | | | pmax | pmax | | |
| | comp=N,4.0nm,0.5s | | | | | | |
| **CPUP** | **Villa Florida** | **22.56** | **146** | *e*P | **P** | **09 58 14.8** | **-0.7** |
| CPUP | | | | e*S*cP | **ScP** | **10 04 23.1** | **-0.8** |
| **JTS** | **JuntasAbangare** | **22.68** | **323** | P | **P** | **09 58 18.2** | **+1.3** |
| | comp=N,49nm,0.7s,baz=174,slow=1.0,SNR=35 | | | | | | |
| **CFAA** | **Coronel Fontan** | **23.66** | **173** | P | **P** | **09 58 25.1** | **-0.2** |
| | comp=N,1.0nm,0.3s,baz=342,slow=9.9,SNR=13 | | | | | | |
| CFAA | | | | S | **S** | **10 01 57.9** | **0.0** |
| | comp=N,1.0nm,0.4s,baz=149,slow=20,SNR=14 | | | | | | |
| **BDFB** | **Brasilia** | **24.02** | **111** | P | **P** | **09 58 29.6** | **+0.8** |
| | comp=N,30nm,0.8s,baz=264,slow=10,SNR=33 | | | | | | |
| BDFB | | | | ScP | **ScP** | **10 04 27.2** | **-1.1** |
| | comp=N,5.4nm,0.5s,baz=14,slow=22,SNR=4.3 | | | | | | |
| **BDFB** | **Brasilia** | **24.02** | **111** | *e*P | **P** | **09 58 30.0** | **+1.2** |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,61nm,0.9s | | | | | | |
| **BDFB** | **Brasilia** | **24.02** | **111** | *e*P | **P** | **09 58 30.0** | **+1.2** |
| | comp=Z,61nm,0.9s | | | | | | |
| BDFB | | | | ScP | **ScP** | **10 04 27.2** | **-1.1** |
| **CRPR** | **Cabo Rojo, PR** | **26.18** | **9** | *e*P | **P** | **09 58 48.5** | **+1.0** |
| **SJG** | **San Juan** | **26.45** | **11** | P | **P** | **09 58 50.0** | **+0.1** |
| | comp=Z,8.0nm,0.2s,baz=250,slow=14,SNR=2.9 | | | | | | |
| SJG | | | | S | **S** | **10 02 38.9** | **-2.8** |
| | comp=Z,13nm,0.5s,baz=290,slow=20,SNR=12 | | | | | | |
| **TGUH** | **Tegucigalpa,Un** | **27.04** | **324** | *e*P | **P** | **09 58 56.5** | **+1.4** |
| **ANWB** | **Willy Bob** | **27.19** | **20** | *e*P | **P** | **09 58 54.8** | **-1.6** |
| | comp=Z,168nm,0.6s | | | | | | |
| **TRQA** | **Tornquist** | **31.09** | **166** | *e*P | **P** | **09 59 29.1** | **-0.6** |
| | comp=Z,424nm,2.6s | | | | | | |
| **PLCA** | **Paso Flores** | **32.60** | **179** | *e*P | **P** | **09 59 42.9** | **+0.4** |
| PLCA | | | | pmax | pmax | | |
| | comp=Z,31nm,0.8s | | | | | | |
| **PLCA** | **Paso Flores** | **32.60** | **179** | *e*P | **P** | **09 59 42.9** | **+0.4** |
| | comp=Z,31nm,0.8s | | | | | | |
| **CMIG** | **Matias Romero** | **34.13** | **317** | P | **P** | **09 59 56.5** | **+1.0** |
| | comp=Z,71nm,0.7s,baz=105,slow=6.1,SNR=120 | | | | | | |
| CMIG | | | | ScP | **ScP** | **10 04 59.7** | **-1.0** |
| | comp=Z,8.5nm,0.9s,baz=112,slow=4.9,SNR=4.6 | | | | | | |
| **RCBR** | **Riachuelo** | **35.22** | **89** | P | **P** | **10 00 05.7** | **+1.0** |
| | comp=Z,25nm,0.8s,baz=259,slow=8.8,SNR=13 | | | | | | |
| **RPN** | **Rapa Nui** | **40.70** | **237** | P | **P** | **10 00 49.1** | **+0.4** |
| | comp=Z,16nm,0.5s,baz=45,slow=2.9,SNR=3.8 | | | | | | |
| **TIGA** | **Tifton** | **40.94** | **344** | P | **P** | **10 00 51.3** | **+0.8** |
| | baz=41 | | | | | | |
| **NHSC** | **New Hope** | **41.74** | **349** | *e*P | **P** | **10 00 57.5** | **+0.8** |
| | comp=Z,126nm,1.2s | | | | | | |
| **GOGA** | **Godfrey** | **42.77** | **345** | *e*P | **P** | **10 01 04.5** | **-0.2** |
| GOGA | | | | pmax | pmax | | |
| | comp=Z,25nm,0.6s | | | | | | |
| **GOGA** | **Godfrey** | **42.77** | **345** | *e*P | **P** | **10 01 04.5** | **-0.2** |
| | comp=Z,25nm,0.6s | | | | | | |
| GOGA | | | | e*S*cP | **ScP** | **10 05 32.7** | **-1.0** |
| **035Z** | **Hargill** | **42.99** | **324** | P | **P** | **10 01 08.0** | **+1.5** |
| | baz=43,SNR=12 | | | | | | |
| **035A** | **Encino** | **43.37** | **324** | P | **P** | **10 01 10.9** | **+1.5** |
| | baz=44,SNR=11 | | | | | | |
| **LRAL** | **Lakeview Retre** | **43.45** | **341** | *e*P | **P** | **10 01 09.5** | **-0.5** |
| | comp=Z,25nm,0.7s | | | | | | |
| LRAL | | | | e*S*cP | **ScP** | **10 05 36.6** | **+0.1** |
| **KVTX** | **Kingsville** | **43.71** | **325** | *e*P | **P** | **10 01 14.7** | **+2.6** |
| | comp=Z,149nm,1.0s | | | | | | |
| **540A** | **Vidor** | **43.79** | **331** | P | **P** | **10 01 14.6** | **+1.9** |
| | baz=44 | | | | | | |
| **034A** | **Hebbronville** | **43.80** | **324** | P | **P** | **10 01 14.2** | **+1.4** |
| | baz=44,SNR=38 | | | | | | |
| **737A** | **Port Lavaca** | **43.86** | **327** | P | **P** | **10 01 14.7** | **+1.5** |
| | baz=44,SNR=7.8 | | | | | | |
| **KMSC** | **Kings Mountain** | **43.94** | **348** | P | **P** | **10 01 14.1** | **+0.4** |
| | baz=44,SNR=6.6 | | | | | | |
| **KMSC** | **Kings Mountain** | **43.94** | **348** | *e*P | **P** | **10 01 14.1** | **+0.4** |
| | comp=Z,24nm,1.0s | | | | | | |
| **VBMS** | **Vicksburg** | **43.99** | **336** | P | **P** | **10 01 13.7** | **-0.5** |
| | baz=44 | | | | | | |
| **539A** | **Cross D Ranch,** | **44.06** | **330** | P | **P** | **10 01 16.3** | **+1.6** |
| | baz=44,SNR=5.1 | | | | | | |
| **934A** | **Benavides** | **44.11** | **324** | P | **P** | **10 01 16.7** | **+1.5** |
| | baz=44,SNR=27 | | | | | | |
| **835A** | **Beeville** | **44.24** | **326** | P | **P** | **10 01 17.7** | **+1.5** |
| | baz=44,SNR=12 | | | | | | |
| **637A** | **Eagle Lake** | **44.34** | **328** | P | **P** | **10 01 18.6** | **+1.7** |
| | baz=44,SNR=74 | | | | | | |
| **736A** | **Circle Diamond** | **44.34** | **327** | P | **P** | **10 01 18.5** | **+1.6** |
| | baz=44,SNR=49 | | | | | | |
| **HKT** | **Hockley** | **44.49** | **329** | *e*P | **P** | **10 01 18.8** | **+0.9** |
| HKT | | | | pmax | pmax | | |
| | comp=Z,58nm,1.3s | | | | | | |
| **HKT** | **Hockley** | **44.49** | **329** | *e*P | **P** | **10 01 18.8** | **+0.9** |
| | comp=Z,58nm,1.3s | | | | | | |
| HKT | | | | e*S*cP | **ScP** | **10 05 40.8** | **0.0** |
| **834A** | **Tilden** | **44.53** | **325** | P | **P** | **10 01 19.7** | **+1.4** |
| | baz=45,SNR=33 | | | | | | |
| **538A** | **Harpers Horsep** | **44.54** | **330** | P | **P** | **10 01 19.9** | **+1.5** |
| | baz=45,SNR=5.5 | | | | | | |
| **933A** | **Laredo** | **44.56** | **324** | P | **P** | **10 01 20.0** | **+1.3** |
| | baz=45,SNR=42 | | | | | | |
| **439A** | **Center Grove,** | **44.65** | **331** | P | **P** | **10 01 20.4** | **+1.1** |
| | baz=45,SNR=10 | | | | | | |
| **735A** | **Kenedy** | **44.67** | **326** | P | **P** | **10 01 20.8** | **+1.3** |
| | baz=45,SNR=16 | | | | | | |
| **636A** | **Smothers Creek** | **44.75** | **327** | P | **P** | **10 01 21.5** | **+1.5** |
| | baz=45,SNR=47 | | | | | | |
| **340A** | **Bronson** | **44.76** | **332** | P | **P** | **10 01 20.2** | **+0.2** |
| | baz=45,SNR=6.0 | | | | | | |
| **537A** | **Green Hill Far** | **44.84** | **329** | P | **P** | **10 01 22.0** | **+1.3** |
| | baz=45,SNR=16 | | | | | | |
| **EFI** | **East Falkland** | **44.89** | **168** | *d* iP | **P** | **10 01 20.0** | **-0.7** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,40nm,0.9s | | | | | | |
| **438A** | **Sam Houston St** | **44.96** | **330** | P | **P** | **10 01 22.8** | **+1.2** |
| | baz=45,SNR=18 | | | | | | |
| **CPCT** | **Cooper Cave** | **44.98** | **345** | *e*P | **P** | **10 01 21.7** | **0.0** |
| CPCT | | | | e*S*cP | **ScP** | **10 05 42.1** | **-0.7** |
| **TKL** | **Tuckaleechee C** | **44.99** | **346** | *e*P | **P** | **10 01 21.4** | **-0.3** |
| **TKL** | **Tuckaleechee C** | **44.99** | **346** | *e*P | **P** | **10 01 21.4** | **-0.3** |
| **339A** | **Huntington** | **45.00** | **331** | P | **P** | **10 01 22.6** | **+0.7** |
| | baz=45,SNR=5.6 | | | | | | |
| **635A** | **Leesville** | **45.07** | **327** | P | **P** | **10 01 22.9** | **+0.5** |
| | baz=45,SNR=9.6 | | | | | | |
| **734A** | **La Parita Cree** | **45.08** | **325** | P | **P** | **10 01 23.5** | **+0.9** |
| | baz=45,SNR=10 | | | | | | |
| **SWET** | **Sewanee** | **45.15** | **343** | *e*P | **P** | **10 01 22.3** | **-0.7** |
| | comp=Z,28nm,0.7s | | | | | | |
| SWET | | | | e*S*cP | **ScP** | **10 05 43.2** | **-0.3** |
| **833A** | **Chaparral WMA,** | **45.16** | **324** | P | **P** | **10 01 23.9** | **+0.7** |
| | baz=45,SNR=26 | | | | | | |
| **536A** | **Bastrop** | **45.23** | **328** | P | **P** | **10 01 24.8** | **+1.1** |
| | baz=45,SNR=21 | | | | | | |
| **437A** | **Phantom Ranch,** | **45.36** | **330** | P | **P** | **10 01 26.1** | **+1.5** |
| | baz=46 | | | | | | |
| **338A** | **Crockett** | **45.38** | **331** | P | **P** | **10 01 26.0** | **+1.3** |
| | baz=46,SNR=22 | | | | | | |
| **634A** | **China Grove, S** | **45.38** | **326** | P | **P** | **10 01 26.1** | **+1.3** |
| | baz=46,SNR=8.4 | | | | | | |
| **NATX** | **Nacogdoches** | **45.40** | **332** | P | **P** | **10 01 26.0** | **+1.1** |
| | baz=46 | | | | | | |
| **NATX** | **Nacogdoches** | **45.40** | **332** | *e*P | **P** | **10 01 26.1** | **+1.1** |
| | comp=Z,20nm,0.6s | | | | | | |
| **733A** | **Divot King Ran** | **45.40** | **325** | P | **P** | **10 01 26.1** | **+1.1** |
| | baz=46,SNR=18 | | | | | | |
| **535A** | **Dale** | **45.46** | **327** | P | **P** | **10 01 26.4** | **+1.0** |
| | baz=46,SNR=13 | | | | | | |
| **832A** | **Faith Ranch, C** | **45.47** | **324** | P | **P** | **10 01 26.4** | **+0.8** |
| | baz=46,SNR=62 | | | | | | |
| **239A** | **Gary** | **45.53** | **332** | P | **P** | **10 01 27.1** | **+1.2** |
| | baz=46 | | | | | | |
| **337A** | **Centerville** | **45.62** | **330** | P | **P** | **10 01 28.0** | **+1.3** |
| | baz=46,SNR=7.2 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **45.64** | **329** | P | **P** | **10 01 27.9** | **+1.2** |
| | baz=46,SNR=10 | | | | | | |
| **TZTN** | **Tazewell** | **45.78** | **346** | *e*P | **P** | **10 01 27.4** | **-0.3** |
| | comp=Z,16nm,0.7s | | | | | | |
| **BLA** | **Blacksburg** | **45.78** | **350** | *e*P | **P** | **10 01 28.5** | **+0.8** |
| BLA | | | | pmax | pmax | | |
| | comp=Z,35nm,1.4s | | | | | | |
| **BLA** | **Blacksburg** | **45.78** | **350** | *e*P | **P** | **10 01 28.5** | **+0.8** |
| | comp=Z,35nm,1.4s | | | | | | |
| **732A** | **Laxson Ranch,** | **45.80** | **324** | P | **P** | **10 01 28.7** | **+0.7** |
| | baz=46,SNR=36 | | | | | | |
| **238A** | **Jacksonville** | **45.82** | **331** | P | **P** | **10 01 29.3** | **+1.2** |
| | baz=46 | | | | | | |
| **633A** | **Saathoff Ranch** | **45.90** | **325** | P | **P** | **10 01 29.5** | **+0.8** |
| | baz=46,SNR=37 | | | | | | |
| **534A** | **Blanco** | **45.95** | **327** | P | **P** | **10 01 29.3** | **+0.2** |
| | baz=46,SNR=15 | | | | | | |
| **139A** | **Bunkhouse Ranc** | **46.05** | **333** | P | **P** | **10 01 30.8** | **+1.0** |
| | baz=46,SNR=5.7 | | | | | | |
| **435B** | **Jarrell** | **46.06** | **328** | P | **P** | **10 01 31.2** | **+1.2** |
| | baz=46,SNR=6.9 | | | | | | |
| **237A** | **Washetta, Mont** | **46.15** | **331** | P | **P** | **10 01 31.8** | **+1.3** |
| | baz=46,SNR=23 | | | | | | |
| **336A** | **Riesel** | **46.16** | **329** | P | **P** | **10 01 31.8** | **+1.1** |
| | baz=46,SNR=6.1 | | | | | | |
| **632A** | **Uvalde** | **46.28** | **325** | P | **P** | **10 01 32.4** | **+0.8** |
| | baz=46,SNR=45 | | | | | | |
| **533A** | **Kerrville** | **46.29** | **326** | P | **P** | **10 01 32.3** | **+0.6** |
| | baz=46,SNR=26 | | | | | | |
| **138A** | **Matatall Enter** | **46.35** | **332** | P | **P** | **10 01 33.3** | **+1.3** |
| | baz=47,SNR=35 | | | | | | |
| **335A** | **Moody** | **46.38** | **329** | P | **P** | **10 01 33.2** | **+0.9** |
| | baz=47,SNR=49 | | | | | | |
| **Z39A** | **Irene McRaven,** | **46.42** | **333** | P | **P** | **10 01 33.6** | **+1.0** |
| | baz=47 | | | | | | |
| **434A** | **Burnet** | **46.45** | **327** | P | **P** | **10 01 33.4** | **+0.5** |
| | baz=47,SNR=14 | | | | | | |
| **236A** | **Katherine and** | **46.50** | **330** | P | **P** | **10 01 34.3** | **+1.1** |
| | baz=47,SNR=11 | | | | | | |
| **WVT** | **Waverly** | **46.57** | **342** | *e*P | **P** | **10 01 31.9** | **-1.7** |
| WVT | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | |
| **WVT** | **Waverly** | **46.57** | **342** | *e*P | **P** | **10 01 31.9** | **-1.7** |
| | comp=Z,12nm,0.8s | | | | | | |
| **137A** | **Hen Place, G** | **46.61** | **331** | P | **P** | **10 01 35.4** | **+1.4** |
| | baz=47,SNR=37 | | | | | | |
| **631A** | **Perdido Creek** | **46.66** | **324** | P | **P** | **10 01 35.0** | **+0.5** |
| | baz=47,SNR=49 | | | | | | |
| **USHA** | **Ushuaia** | **46.76** | **178** | P | **P** | **10 01 35.5** | **+0.8** |
| | comp=Z,24nm,0.8s,baz=348,slow=7.3,SNR=8.8 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **46.79** | **333** | P | **P** | **10 01 36.1** | **+0.8** |
| | baz=47,SNR=13 | | | | | | |
| **532A** | **Rosprings** | **46.81** | **325** | P | **P** | **10 01 36.4** | **+0.7** |
| | baz=47,SNR=29 | | | | | | |
| **334A** | **Lometa** | **46.84** | **328** | P | **P** | **10 01 36.3** | **+0.6** |
| | baz=47,SNR=13 | | | | | | |
| **433A** | **Art** | **46.84** | **327** | P | **P** | **10 01 36.2** | **+0.4** |
| | baz=47,SNR=51 | | | | | | |
| **136A** | **Ennis** | **46.88** | **330** | P | **P** | **10 01 37.0** | **+0.9** |
| | baz=47,SNR=36 | | | | | | |
| **WHTX** | **Lake Whitney** | **46.96** | **329** | P | **P** | **10 01 37.4** | **+0.8** |
| | baz=47,SNR=32 | | | | | | |
| **WHTX** | **Lake Whitney** | **46.96** | **329** | *e*P | **P** | **10 01 37.3** | **+0.7** |
| | comp=Z,59nm,0.7s | | | | | | |
| WHTX | | | | e*S*cP | **ScP** | **10 05 50.8** | **-0.4** |
| **UALR** | **University of** | **46.96** | **336** | *e*P | **P** | **10 01 35.8** | **-0.8** |
| | comp=Z,26nm,0.7s | | | | | | |
| **Y39A** | **Lockesburg** | **46.98** | **334** | P | **P** | **10 01 36.8** | **+0.1** |
| | baz=47,SNR=67 | | | | | | |
| **JCT** | **Junction City** | **47.02** | **326** | *e*P | **P** | **10 01 37.7** | **+0.4** |
| JCT | | | | pmax | pmax | | |
| | comp=Z,19nm,0.8s | | | | | | |
| **JCT** | **Junction City** | **47.02** | **326** | P | **P** | **10 01 37.6** | **+0.4** |
| | baz=47,SNR=13 | | | | | | |
| **JCT** | **Junction City** | **47.02** | **326** | *e*P | **P** | **10 01 37.7** | **+0.4** |
| | comp=Z,19nm,0.8s | | | | | | |
| JCT | | | | e*S*cP | **ScP** | **10 05 51.3** | **-0.2** |
| **Z37A** | **Pogue Cattle C** | **47.05** | **332** | P | **P** | **10 01 38.1** | **+0.8** |
| | baz=47,SNR=10 | | | | | | |
| **GNAR** | **Gosnell** | **47.14** | **339** | *e*P | **P** | **10 01 37.4** | **-0.5** |
| **531A** | **Rocksprings** | **47.21** | **325** | P | **P** | **10 01 39.4** | **+0.8** |
| | baz=47,SNR=31 | | | | | | |
| **333A** | **Richland Sprin** | **47.23** | **327** | P | **P** | **10 01 38.8** | **+0.1** |
| | baz=47,SNR=25 | | | | | | |
| **Y38A** | **Idabel** | **47.25** | **333** | P | **P** | **10 01 38.7** | **-0.1** |
| | baz=48,SNR=13 | | | | | | |
| **MIAR** | **Mount Ida** | **47.27** | **335** | *e*P | **P** | **10 01 38.3** | **-0.6** |
| MIAR | | | | pmax | pmax | | |
| | comp=Z,24nm,0.8s | | | | | | |
| **MIAR** | **Mount Ida** | **47.27** | **335** | P | **P** | **10 01 38.9** | **-0.1** |
| | baz=48,SNR=19 | | | | | | |
| **MIAR** | **Mount Ida** | **47.27** | **335** | *e*P | **P** | **10 01 38.3** | **-0.6** |
| | comp=Z,24nm,0.8s | | | | | | |
| **234A** | **Clairette** | **47.31** | **329** | P | **P** | **10 01 40.0** | **+0.7** |
| | baz=48,SNR=52 | | | | | | |
| **432A** | **Menard** | **47.32** | **326** | P | **P** | **10 01 39.9** | **+0.5** |
| | baz=48,SNR=22 | | | | | | |
| **135A** | **Vickery Place,** | **47.39** | **330** | P | **P** | **10 01 40.8** | **+0.9** |
| | baz=48,SNR=14 | | | | | | |
| **Z36A** | **Blue Ridge** | **47.49** | **331** | P | **P** | **10 01 41.8** | **+1.3** |
| | baz=48,SNR=34 | | | | | | |
| **431A** | **Sonora** | **47.63** | **325** | P | **P** | **10 01 42.7** | **+0.9** |
| | baz=48,SNR=55 | | | | | | |
| **530A** | **J-C Ranch, Com** | **47.65** | **324** | P | **P** | **10 01 42.9** | **+1.0** |
| | baz=48 | | | | | | |
| **332A** | **Millersview** | **47.68** | **327** | P | **P** | **10 01 42.6** | **+0.5** |
| | baz=48,SNR=47 | | | | | | |
| **PARMO** | **Parma** | **47.68** | **340** | *e*P | **P** | **10 01 41.7** | **-0.2** |
| **Y37A** | **Hugo** | **47.69** | **332** | P | **P** | **10 01 42.8** | **+0.7** |
| | baz=48,SNR=71 | | | | | | |
| **233A** | **Rising Star** | **47.72** | **328** | P | **P** | **10 01 43.0** | **+0.6** |
| | baz=48,SNR=62 | | | | | | |
| **134A** | **White-Moore Ra** | **47.74** | **329** | P | **P** | **10 01 43.2** | **+0.7** |
| | baz=48,SNR=19 | | | | | | |
| **X38A** | **Whitesboro** | **47.92** | **334** | P | **P** | **10 01 44.0** | **+0.2** |
| | baz=48,SNR=27 | | | | | | |
| **Z35A** | **Perchaven, San** | **47.93** | **330** | P | **P** | **10 01 44.5** | **+0.6** |
| | baz=48,SNR=20 | | | | | | |
| **Y36A** | **Durant** | **47.93** | **332** | P | **P** | **10 01 44.6** | **+0.7** |
| | baz=48,SNR=81 | | | | | | |
| **331A** | **San Angelo** | **48.00** | **326** | P | **P** | **10 01 44.9** | **+0.4** |
| | baz=48,SNR=70 | | | | | | |
| **232A** | **Coleman** | **48.02** | **327** | P | **P** | **10 01 45.2** | **+0.6** |
| | baz=48,SNR=26 | | | | | | |
| **PBMO** | **Poplar Bluff** | **48.02** | **339** | *e*P | **P** | **10 01 43.2** | **-1.2** |
| | comp=Z,33nm,1.0s | | | | | | |
| PBMO | | | | e*S*cP | **ScP** | **10 05 53.7** | **-1.8** |
| **430A** | **Baggett Ranch,** | **48.06** | **325** | P | **P** | **10 01 45.3** | **+0.3** |
| | baz=48,SNR=70 | | | | | | |
| **WCI** | **Wyandotte Cave** | **48.07** | **344** | *e*P | **P** | **10 01 43.7** | **-1.1** |
| WCI | | | | pmax | pmax | | |
| | comp=Z,21nm,0.5s | | | | | | |
| **WCI** | **Wyandotte Cave** | **48.07** | **344** | *e*P | **P** | **10 01 43.7** | **-1.1** |
| | comp=Z,21nm,0.5s | | | | | | |
| WCI | | | | e*S*cP | **ScP** | **10 05 54.7** | **-1.0** |
| **MCWV** | **Mont Chateau** | **48.07** | **351** | *e*pP | pP | 10 03 37.0 | +0.6 |
| **X37A** | **Clayton** | **48.09** | **333** | P | **P** | **10 01 45.5** | **+0.5** |
| | baz=48,SNR=34 | | | | | | |
| **W38A** | **Poteau** | **48.12** | **334** | P | **P** | **10 01 45.3** | **+0.1** |
| | baz=48,SNR=24 | | | | | | |
| **529A** | **Stev Forest Ra** | **48.15** | **323** | P | **P** | **10 01 46.3** | **+0.6** |
| | baz=48,SNR=80 | | | | | | |
| **133A** | **Hamilton Ranch** | **48.20** | **328** | P | **P** | **10 01 46.7** | **+0.8** |
| | baz=48,SNR=71 | | | | | | |
| **USIN** | **University of** | **48.21** | **343** | *e*P | **P** | **10 01 44.9** | **-0.9** |
| | comp=Z,54nm,0.6s | | | | | | |
| **Z34A** | **Collier Ranch,** | **48.29** | **330** | P | **P** | **10 01 47.4** | **+0.9** |
| | baz=48,SNR=21 | | | | | | |
| **Y35A** | **Marietta** | **48.30** | **331** | P | **P** | **10 01 47.6** | **+1.0** |
| | baz=48 | | | | | | |
| **429A** | **Davenport Ranc** | **48.33** | **324** | P | **P** | **10 01 47.4** | **+0.5** |
| | baz=48,SNR=53 | | | | | | |
| **231A** | **Bronte** | **48.42** | **327** | P | **P** | **10 01 47.9** | **+0.3** |
| | baz=49,SNR=24 | | | | | | |
| **TXAR** | **Lajitas Array** | **48.46** | **321** | P | **P** | **10 01 47.9** | **0.0** |
| | comp=Z,5.6nm,0.3s,baz=144,slow=7.4,SNR=243 | | | | | | |
| TXAR | | | | ScP | **ScP** | **10 05 57.1** | **-0.6** |
| | comp=Z,2.5nm,1.0s,baz=140,slow=6.6,SNR=5.0 | | | | | | |
| **SIUC** | **Southern Illin** | **48.46** | **341** | *e*P | **P** | **10 01 46.9** | **-0.8** |
| | comp=Z,79nm,0.6s | | | | | | |
| SIUC | | | | e*S*cP | **ScP** | **10 05 56.5** | **-0.9** |
| **TX31** | **Lajitas Ar. Si** | **48.46** | **321** | *e*P | **P** | **10 01 47.8** | **-0.2** |
| TX31 | | | | e*S*cP | **ScP** | **10 05 57.0** | **-0.7** |
| **330A** | **Mertzon** | **48.49** | **325** | P | **P** | **10 01 48.4** | **+0.2** |
| | baz=49,SNR=30 | | | | | | |
| **X36A** | **Centrahoma** | **48.52** | **332** | P | **P** | **10 01 48.5** | **+0.3** |
| | baz=49,SNR=44 | | | | | | |
| **W37A** | **Quinton** | **48.58** | **333** | P | **P** | **10 01 48.8** | **+0.2** |
| | baz=49,SNR=25 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **48.59** | **328** | P | **P** | **10 01 49.5** | **+0.7** |
| | baz=49,SNR=18 | | | | | | |
| **ABTX** | **Abilene, Hawle** | **48.59** | **328** | *e*P | **P** | **10 01 49.3** | **+0.5** |
| | comp=Z,70nm,0.8s | | | | | | |
| **Z33A** | **Whitaker Ranch** | **48.65** | **329** | P | **P** | **10 01 50.0** | **+0.8** |
| | baz=49,SNR=98 | | | | | | |
| **X35A** | **Drake** | **48.67** | **332** | P | **P** | **10 01 49.7** | **+0.4** |
| | baz=49,SNR=103 | | | | | | |
| **Y34A** | **Reagan Ranch,** | **48.69** | **330** | P | **P** | **10 01 50.1** | **+0.7** |
| | baz=49,SNR=36 | | | | | | |
| **V38A** | **Canehill** | **48.75** | **335** | P | **P** | **10 01 49.3** | **-0.5** |
| | baz=49,SNR=31 | | | | | | |
| **230A** | **Sterling City** | **48.82** | **326** | P | **P** | **10 01 51.2** | **+0.7** |
| | baz=49,SNR=28 | | | | | | |
| **W36A** | **Wetumka** | **48.93** | **333** | P | **P** | **10 01 51.6** | **+0.4** |
| | baz=49,SNR=23 | | | | | | |
| **329A** | **Wagon Wheel Ra** | **49.01** | **325** | P | **P** | **10 01 52.2** | **+0.2** |
| | baz=49,SNR=49 | | | | | | |
| **BLO** | **Bloomington** | **49.01** | **344** | *e*P | **P** | **10 01 50.8** | **-0.9** |
| BLO | | | | pmax | pmax | | |
| | comp=Z,34nm,0.6s | | | | | | |
| **BLO** | **Bloomington** | **49.01** | **344** | *e*P | **P** | **10 01 50.8** | **-0.9** |
| | comp=Z,34nm,0.6s | | | | | | |
| BLO | | | | e*S*cP | **ScP** | **10 05 58.8** | **-0.9** |
| **131A** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | baz=50,SNR=13 | | | | | | | | |
| Z30A | **Sanderson Ranc** | 49.89 327 | P | | P | | 10 01 58.9 | +0.6 | |
| | baz=50,SNR=96 | | | | | | | | |
| Y31A | **Rekieta Farm,** | 49.95 328 | P | | P | | 10 01 59.5 | +0.7 | |
| | baz=50,SNR=80 | | | | | | | | |
| W33A | **Caddo, Fort Co** | 49.99 331 | P | | P | | 10 01 59.7 | +0.7 | |
| | baz=50,SNR=49 | | | | | | | | |
| T37A | **Cheneyville 18** | 50.04 335 | P | | P | | 10 01 58.8 | -0.5 | |
| | baz=50,SNR=35 | | | | | | | | |
| V34A | **Guthrie** | 50.10 332 | P | | P | | 10 01 59.9 | +0.1 | |
| | baz=50,SNR=16 | | | | | | | | |
| V34A | **Guthrie** | 50.10 332 | *e*P | | P | | 10 01 59.8 | +0.1 | |
| | comp=Z,221nm,0.8s | | | | | | | | |
| 128A | **Castleberry Fa** | 50.14 325 | P | | P | | 10 02 00.3 | +0.1 | |
| | baz=50,SNR=25 | | | | | | | | |
| U35A | **Pawnee** | 50.19 333 | P | | P | | 10 02 00.4 | +0.1 | |
| | baz=50,SNR=40 | | | | | | | | |
| Z29A | **Hungry Hill Ra** | 50.19 327 | P | | P | | 10 02 00.6 | +0.1 | |
| | baz=50,SNR=17 | | | | | | | | |
| Y30A | **Stafford Cattl** | 50.22 328 | P | | P | | 10 02 01.2 | +0.5 | |
| | baz=50,SNR=11 | | | | | | | | |
| SFIN | **Scholer Farm** | 50.30 344 | P | | P | | 10 01 59.4 | -1.7 | |
| | baz=50,SNR=5.1 | | | | | | | | |
| SFIN | **Scholer Farm** | 50.30 344 | *e*P | | P | | 10 01 59.4 | -1.7 | |
| | comp=Z,16nm,0.5s | | | | | | | | |
| X31A | **McDonald Ranch** | 50.33 329 | P | | P | | 10 02 01.9 | +0.4 | |
| | baz=50,SNR=83 | | | | | | | | |
| W32A | **Sentinel** | 50.35 330 | P | | P | | 10 02 02.2 | +0.5 | |
| | baz=51,SNR=99 | | | | | | | | |
| T36A | **Boggs Farm, Ca** | 50.39 334 | P | | P | | 10 02 01.5 | -0.3 | |
| | baz=51,SNR=27 | | | | | | | | |
| V33A | **Lossen Ranch,** | 50.45 331 | P | | P | | 10 02 02.6 | +0.3 | |
| | baz=51,SNR=26 | | | | | | | | |
| T35A | **Sooner Cattle** | 50.54 334 | P | | P | | 10 02 02.8 | -0.1 | |
| | baz=51,SNR=15 | | | | | | | | |
| S37A | **Fort Scott** | 50.55 336 | P | | P | | 10 02 02.1 | -0.8 | |
| | baz=51,SNR=35 | | | | | | | | |
| Z28A | **Tucker Farm, M** | 50.58 326 | P | | P | | 10 02 03.3 | -0.1 | |
| | baz=51,SNR=28 | | | | | | | | |
| U34A | **Anderson Ranch** | 50.60 333 | P | | P | | 10 02 03.6 | +0.2 | |
| | baz=51,SNR=29 | | | | | | | | |
| U34A | **Anderson Ranch** | 50.60 333 | *e*P | | P | | 10 02 03.5 | +0.1 | |
| | comp=Z,110nm,0.9s | | | | | | | | |
| U34A | | | *e*ScP | | ScP | | 10 06 06.7 | 0.0 | |
| Y29A | **Porterfield Fa** | 50.62 327 | P | | P | | 10 02 03.8 | +0.2 | |
| | baz=51,SNR=38 | | | | | | | | |
| X30A | **Coker Ranch, T** | 50.65 328 | P | | P | | 10 02 04.1 | +0.3 | |
| | baz=51,SNR=52 | | | | | | | | |
| CLNB | **Carlsbad** | 50.68 324 | *e*P | | P | | 10 02 05.0 | +0.9 | |
| | comp=Z,13nm,1.3s | | | | | | | | |
| V32A | **Arapaho** | 50.73 331 | P | | P | | 10 02 05.0 | +0.7 | |
| | baz=51,SNR=27 | | | | | | | | |
| W31A | **Holland Ranch,** | 50.75 330 | P | | P | | 10 02 04.8 | +0.3 | |
| | baz=51,SNR=10 | | | | | | | | |
| S36A | **Lake Cedric, C** | 50.83 335 | P | | P | | 10 02 04.4 | -0.6 | |
| | baz=51,SNR=19 | | | | | | | | |
| U33A | **Lingo Farm, Me** | 50.87 332 | P | | P | | 10 02 05.4 | +0.2 | |
| | baz=51,SNR=32 | | | | | | | | |
| T34A | **McClaskey Farm** | 50.93 333 | P | | P | | 10 02 05.8 | 0.0 | |
| | baz=51,SNR=24 | | | | | | | | |
| Y28A | **McKinney Farm,** | 50.97 327 | P | | P | | 10 02 05.9 | -0.3 | |
| | baz=51,SNR=8.8 | | | | | | | | |
| R37A | **Teagarden Farm** | 51.02 336 | P | | P | | 10 02 05.4 | -1.0 | |
| | baz=51,SNR=5.5 | | | | | | | | |
| W30A | **Crocket Farms** | 51.07 329 | P | | P | | 10 02 07.3 | +0.5 | |
| | baz=51 | | | | | | | | |
| X29A | **Tulia** | 51.08 328 | P | | P | | 10 02 07.0 | +0.1 | |
| | baz=51,SNR=7.6 | | | | | | | | |
| HDIL | **Hopedale** | 51.08 342 | P | | P | | 10 02 07.4 | +0.6 | |
| | baz=51 | | | | | | | | |
| S35A | **Otter Creek Ra** | 51.10 334 | P | | P | | 10 02 06.8 | -0.2 | |
| | baz=51,SNR=28 | | | | | | | | |
| V31A | **Spring Creek L** | 51.16 330 | P | | P | | 10 02 08.4 | +1.0 | |
| | baz=51 | | | | | | | | |
| MNTX | **Cornudas Mount** | 51.17 322 | P | | P | | 10 02 07.4 | -0.2 | |
| | baz=51,SNR=25 | | | | | | | | |
| MNTX | **Cornudas Mount** | 51.17 322 | *e*P | | P | | 10 02 07.0 | -0.6 | |
| | comp=Z,80nm,1.7s | | | | | | | | |
| MNTX | | | *e*ScP | | ScP | | 10 06 08.0 | -1.3 | |
| MNTX | | | *e* | | | | 10 08 40.9 | | |
| CPRX | **Cap Rock** | 51.23 325 | *e*P | | P | | 10 02 09.0 | +0.9 | |
| | comp=Z,16nm,0.9s | | | | | | | | |
| U32A | **Winter Ranch,** | 51.24 331 | P | | P | | 10 02 08.5 | +0.5 | |
| | baz=52,SNR=14 | | | | | | | | |
| MSTX | **Muleshoe** | 51.30 326 | P | | P | | 10 02 08.4 | -0.2 | |
| | baz=52,SNR=27 | | | | | | | | |
| MSTX | **Muleshoe** | 51.30 326 | *e*P | | P | | 10 02 08.5 | -0.2 | |
| | comp=Z,42nm,0.7s | | | | | | | | |
| MSTX | | | *e*ScP | | ScP | | 10 06 10.0 | +0.1 | |
| R36A | **Gordon, Harris** | 51.30 336 | P | | P | | 10 02 07.9 | -0.5 | |
| | baz=52,SNR=15 | | | | | | | | |
| Q37A | **Longview Farm,** | 51.36 337 | P | | P | | 10 02 08.2 | -0.6 | |
| | baz=52,SNR=5.4 | | | | | | | | |
| X28A | **Dimmitt** | 51.40 327 | P | | P | | 10 02 09.3 | 0.0 | |
| | baz=52 | | | | | | | | |
| AMTX | **Amarillo** | 51.41 328 | P | | P | | 10 02 09.7 | +0.4 | |
| | baz=52 | | | | | | | | |
| AMTX | **Amarillo** | 51.41 328 | *e*P | | P | | 10 02 09.7 | +0.4 | |
| | comp=Z,45nm,0.6s | | | | | | | | |
| AMTX | | | *e*ScP | | ScP | | 10 06 10.6 | +0.2 | |
| T33A | **Patterson Ranc** | 51.46 332 | P | | P | | 10 02 10.3 | +0.8 | |
| | baz=52,SNR=11 | | | | | | | | |
| S34A | **Willow Spring** | 51.46 334 | P | | P | | 10 02 09.7 | +0.2 | |
| | baz=52,SNR=5.1 | | | | | | | | |
| W29A | **Amraillo** | 51.57 328 | P | | P | | 10 02 10.7 | +0.2 | |
| | baz=52,SNR=15 | | | | | | | | |
| V30A | **Spur Ranch, Mi** | 51.58 329 | P | | P | | 10 02 11.3 | +0.8 | |
| | baz=52 | | | | | | | | |
| R35A | **Emporia Munici** | 51.59 335 | P | | P | | 10 02 10.4 | 0.0 | |
| | baz=52,SNR=15 | | | | | | | | |
| U31A | **Nine Bar Ranch** | 51.64 331 | P | | P | | 10 02 11.8 | +0.9 | |
| | baz=52 | | | | | | | | |
| S33A | **Kaszmaul Farm,** | 51.77 333 | P | | P | | 10 02 12.1 | +0.4 | |
| | baz=52 | | | | | | | | |
| Q36A | **Arnold C. Orve** | 51.83 336 | P | | P | | 10 02 11.5 | -0.7 | |
| | baz=52,SNR=8.4 | | | | | | | | |
| T32A | **Huddler Ranch,** | 51.85 332 | P | | P | | 10 02 13.3 | +0.9 | |
| | baz=52,SNR=19 | | | | | | | | |
| W28A | **Vega** | 51.97 328 | P | | P | | 10 02 13.6 | +0.3 | |
| | baz=52 | | | | | | | | |
| Q35A | **Mercer Eighty,** | 51.98 336 | P | | P | | 10 02 12.7 | -0.5 | |
| | baz=52,SNR=26 | | | | | | | | |
| R34A | **Isabella, Hill** | 52.02 334 | P | | P | | 10 02 13.6 | +0.1 | |
| | baz=52,SNR=26 | | | | | | | | |
| V29A | **Stinnett** | 52.09 329 | P | | P | | 10 02 14.7 | +0.5 | |
| | baz=52 | | | | | | | | |
| T31A | **Randall Ranch,** | 52.14 331 | P | | P | | 10 02 15.1 | +0.7 | |
| | baz=52,SNR=15 | | | | | | | | |
| U30A | **WK&E Inc. Balk** | 52.16 330 | P | | P | | 10 02 15.3 | +0.7 | |
| | baz=52,SNR=14 | | | | | | | | |
| S32A | **Newby Ranch, P** | 52.28 332 | P | | P | | 10 02 15.9 | +0.5 | |
| | baz=52,SNR=16 | | | | | | | | |
| P36A | **Good Intent, A** | 52.30 337 | P | | P | | 10 02 14.5 | -1.0 | |
| | baz=52,SNR=14 | | | | | | | | |
| R33A | **Olander Ranch,** | 52.35 334 | P | | P | | 10 02 16.4 | +0.6 | |
| | baz=53,SNR=9.9 | | | | | | | | |
| V28A | **Channing** | 52.36 328 | P | | P | | 10 02 16.8 | +0.7 | |
| | baz=53,SNR=8.5 | | | | | | | | |
| Q34A | **Chapman** | 52.41 335 | P | | P | | 10 02 15.9 | -0.4 | |
| | baz=53,SNR=22 | | | | | | | | |
| U29A | **Oasis Ranch, S** | 52.41 329 | P | | P | | 10 02 17.2 | +0.8 | |
| | baz=53 | | | | | | | | |
| KSU1 | **Kansas State U** | 52.42 335 | P | | P | | 10 02 15.8 | -0.6 | |
| | baz=53,SNR=16 | | | | | | | | |
| KSU1 | **Kansas State U** | 52.42 335 | *e*P | | P | | 10 02 15.7 | -0.6 | |
| | comp=Z,78nm,0.8s | | | | | | | | |
| S31A | **Mullinville** | 52.47 332 | P | | P | | 10 02 17.5 | +0.8 | |
| | baz=53,SNR=12 | | | | | | | | |
| T30A | **Plains** | 52.51 331 | P | | P | | 10 02 18.0 | +0.9 | |
| | baz=53,SNR=5.3 | | | | | | | | |
| P35A | **Duane Minner,** | 52.54 336 | P | | P | | 10 02 16.5 | -0.7 | |
| | baz=53,SNR=10 | | | | | | | | |
| O36A | **Bolckow** | 52.64 337 | P | | P | | 10 02 16.7 | -1.2 | |
| | baz=53,SNR=7.0 | | | | | | | | |
| V27A | **Dan Oppiter Fa** | 52.68 328 | P | | P | | 10 02 18.9 | +0.5 | |
| | baz=53,SNR=17 | | | | | | | | |
| R32A | **Long Quarter,** | 52.77 333 | P | | P | | 10 02 19.1 | +0.3 | |
| | baz=53,SNR=17 | | | | | | | | |
| U28A | **Mallet** | 52.84 329 | P | | P | | 10 02 19.7 | +0.2 | |
| | baz=53 | | | | | | | | |
| Q33A | **Connelly Farm,** | 52.85 334 | P | | P | | 10 02 19.5 | +0.1 | |
| | baz=53 | | | | | | | | |
| P34A | **Walnut Farm, R** | 52.89 335 | P | | P | | 10 02 19.4 | -0.2 | |
| | baz=53,SNR=32 | | | | | | | | |
| N37A | **Lee Faris, Mou** | 52.91 338 | P | | P | | 10 02 18.9 | -0.8 | |
| | baz=53 | | | | | | | | |
| S30A | **Montezuma** | 52.95 331 | P | | P | | 10 02 20.9 | +0.7 | |
| | baz=53,SNR=8.6 | | | | | | | | |
| T29A | **Hugoton** | 52.97 330 | P | | P | | 10 02 21.3 | +0.9 | |
| | baz=53,SNR=20 | | | | | | | | |
| R31A | **Burdett** | 53.03 332 | P | | P | | 10 02 21.1 | +0.3 | |
| | baz=53,SNR=12 | | | | | | | | |
| O35A | **Humboldt** | 53.13 337 | P | | P | | 10 02 20.2 | -1.1 | |
| | baz=53,SNR=6.9 | | | | | | | | |
| Q32A | **Meitler Ranch,** | 53.16 334 | P | | P | | 10 02 21.6 | -0.1 | |
| | baz=53,SNR=19 | | | | | | | | |
| U27A | **Thompson Grove** | 53.18 328 | P | | P | | 10 02 22.2 | +0.2 | |
| | baz=53,SNR=22 | | | | | | | | |
| 121A | **Cookes Peak, D** | 53.22 321 | P | | P | | 10 02 23.3 | +0.9 | |
| | baz=53,SNR=30 | | | | | | | | |
| 121A | **Cookes Peak, D** | 53.22 321 | *e*P | | P | | 10 02 22.8 | +0.5 | |
| | comp=Z,29nm,0.7s | | | | | | | | |
| S29A | **Ulysses** | 53.25 330 | P | | P | | 10 02 23.1 | +0.8 | |
| | baz=54,SNR=32 | | | | | | | | |
| T28A | **Walsh** | 53.35 329 | P | | P | | 10 02 23.5 | +0.3 | |
| | baz=54,SNR=23 | | | | | | | | |
| O34A | **Beatrice** | 53.37 336 | P | | P | | 10 02 22.7 | -0.4 | |
| | baz=54,SNR=11 | | | | | | | | |
| R30A | **Dighton** | 53.37 332 | P | | P | | 10 02 23.6 | +0.4 | |
| | baz=54,SNR=27 | | | | | | | | |
| M37A | **Trindle Farm,** | 53.42 339 | P | | P | | 10 02 23.1 | -0.2 | |
| | baz=54 | | | | | | | | |
| JFWS | **Jewell Farm** | 53.53 343 | *e*P | | P | | 10 02 22.9 | -1.2 | |
| JFWS | | | pmax | | pmax | | | | |
| | comp=Z,31nm,0.6s | | | | | | | | |
| JFWS | **Jewell Farm** | 53.53 343 | *e*P | | P | | 10 02 22.9 | -1.2 | |
| | comp=Z,31nm,0.6s | | | | | | | | |
| N35A | **Tabor** | 53.53 337 | P | | P | | 10 02 23.6 | -0.6 | |
| | baz=54,SNR=11 | | | | | | | | |
| Q31A | **Ellis** | 53.55 333 | P | | P | | 10 02 24.6 | +0.2 | |
| | baz=54,SNR=9.7 | | | | | | | | |
| CBKS | **Cedar Bluff** | 53.55 332 | *e*P | | P | | 10 02 24.7 | +0.3 | |
| CBKS | | | pmax | | pmax | | | | |
| | comp=Z,56nm,0.7s | | | | | | | | |
| CBKS | **Cedar Bluff** | 53.55 332 | P | | P | | 10 02 24.9 | +0.5 | |
| | baz=54,SNR=20 | | | | | | | | |
| CBKS | **Cedar Bluff** | 53.55 332 | *e*P | | P | | 10 02 24.7 | +0.3 | |
| | comp=Z,56nm,0.7s | | | | | | | | |
| CBKS | | | *e*ScP | | ScP | | 10 06 19.1 | -0.4 | |
| SCIA | **State Center** | 53.57 340 | *e*P | | P | | 10 02 23.6 | -0.8 | |
| | comp=Z,44nm,0.6s | | | | | | | | |
| S28A | **Manter** | 53.61 330 | P | | P | | 10 02 25.3 | +0.4 | |
| | baz=54,SNR=23 | | | | | | | | |
| T27A | **Campo** | 53.62 329 | P | | P | | 10 02 25.5 | +0.5 | |
| | baz=54,SNR=32 | | | | | | | | |
| BNM | **Barren Site** | 53.63 323 | *e*P | | P | | 10 02 26.1 | +0.8 | |
| BNM | | | *e*ScP | | ScP | | 10 06 20.7 | +0.5 | |
| O33A | **Hebron** | 53.65 335 | P | | P | | 10 02 24.7 | -0.3 | |
| | baz=54,SNR=32 | | | | | | | | |
| P32A | **Huiting Farm,** | 53.70 334 | P | | P | | 10 02 25.2 | -0.3 | |
| | baz=54,SNR=20 | | | | | | | | |
| LPM | **Los Pinos Moun** | 53.75 324 | *e*P | | P | | 10 02 26.8 | +0.7 | |
| Y22D | **IRIS PASSCAL I** | 53.75 323 | P | | P | | 10 02 26.7 | +0.7 | |
| | baz=54 | | | | | | | | |
| N34A | **Lincoln** | 53.85 336 | P | | P | | 10 02 25.6 | -0.8 | |
| | baz=54,SNR=16 | | | | | | | | |
| R29A | **Marienthal** | 53.89 331 | P | | P | | 10 02 27.4 | +0.5 | |
| | baz=54,SNR=37 | | | | | | | | |
| Q30A | **Quinter** | 53.90 332 | P | | P | | 10 02 27.5 | +0.6 | |
| | baz=54,SNR=51 | | | | | | | | |
| HOPE | **Hope Point** | 53.93 156 | *e*P | | P | | 10 02 27.3 | +0.5 | |
| | comp=Z,58nm,0.8s | | | | | | | | |
| P31A | **Stockton** | 53.96 333 | P | | P | | 10 02 27.4 | +0.2 | |
| | baz=54,SNR=12 | | | | | | | | |
| K38A | **Parkersburg** | 54.08 341 | P | | P | | 10 02 27.5 | -0.4 | |
| | baz=54 | | | | | | | | |
| M35A | **Neola** | 54.08 337 | P | | P | | 10 02 27.5 | -0.4 | |
| | baz=54,SNR=14 | | | | | | | | |
| O32A | **Brockman Farm,** | 54.09 335 | P | | P | | 10 02 27.8 | -0.3 | |
| | baz=54,SNR=10 | | | | | | | | |
| ANMO | **Albuquerque** | 54.09 324 | *d i* P | | P | | 10 02 29.2 | +0.7 | |
| ANMO | | | *i* *PP | | pP | | 10 04 24.2 | -0.2 | |
| ANMO | | | pmax | | pmax | | | | |
| | comp=Z,12nm,0.9s | | | | | | | | |
| ANMO | **Albuquerque** | 54.09 324 | *e*P | | P | | 10 02 28.8 | +0.4 | |
| | comp=Z,14nm,0.8s | | | | | | | | |
| ANMO | | | *e*pP | | pP | | 10 04 24.6 | +0.2 | |
| ANMO | | | *e*ScP | | ScP | | 10 06 22.3 | +0.1 | |
| LAZ | **Ladron** | 54.11 323 | *e*P | | P | | 10 02 29.1 | +0.5 | |
| LAZ | | | *e*pP | | pP | | 10 04 26.7 | +2.2 | |
| N33A | **J Bar K, Exete** | 54.15 336 | P | | P | | 10 02 28.2 | -0.3 | |
| | baz=54,SNR=7.0 | | | | | | | | |
| R28A | **Tribune** | 54.15 331 | P | | P | | 10 02 29.1 | +0.4 | |
| | baz=54,SNR=20 | | | | | | | | |
| T26A | **Comanche Natio** | 54.15 328 | P | | P | | 10 02 29.2 | +0.3 | |
| | baz=54,SNR=19 | | | | | | | | |
| S27A | **Las Animas** | 54.18 329 | P | | P | | 10 02 29.3 | +0.4 | |
| | baz=54 | | | | | | | | |
| Q29A | **Oakley** | 54.19 332 | P | | P | | 10 02 29.4 | +0.5 | |
| | baz=54,SNR=17 | | | | | | | | |
| P30A | **Selden** | 54.37 333 | P | | P | | 10 02 30.5 | +0.4 | |
| | baz=55,SNR=5.3 | | | | | | | | |
| S26A | **Kim** | 54.43 329 | P | | P | | 10 02 31.4 | +0.7 | |
| | baz=55,SNR=31 | | | | | | | | |
| M34A | **Aspy Farms, Fr** | 54.45 337 | P | | P | | 10 02 30.0 | -0.6 | |
| | baz=55 | | | | | | | | |
| O31A | **Woolen Ranch,** | 54.45 334 | P | | P | | 10 02 30.5 | -0.1 | |
| | baz=55,SNR=8.1 | | | | | | | | |
| N32A | **Stulken Farm,** | 54.52 335 | P | | P | | 10 02 31.1 | 0.0 | |
| | baz=55 | | | | | | | | |
| T25A | **Trinidad** | 54.56 328 | P | | P | | 10 02 32.4 | +0.8 | |
| | baz=55,SNR=33 | | | | | | | | |
| T25A | **Trinidad** | 54.56 328 | *e*P | | P | | 10 02 32.5 | +0.8 | |
| | comp=Z,37nm,0.8s | | | | | | | | |
| T25A | | | *e*ScP | | ScP | | 10 06 24.8 | +0.5 | |
| L35A | **Bielow Farm, R** | 54.58 338 | P | | P | | 10 02 30.7 | -0.8 | |
| | baz=55,SNR=21 | | | | | | | | |
| R27A | **Eads** | 54.60 330 | P | | P | | 10 02 31.9 | +0.1 | |
| | baz=55,SNR=18 | | | | | | | | |
| K36A | **Gilmore City** | 54.64 339 | P | | P | | 10 02 31.4 | -0.5 | |
| | baz=55 | | | | | | | | |
| Q28A | **Sharon Springs** | 54.73 331 | P | | P | | 10 02 33.5 | +0.8 | |
| | baz=55,SNR=9.4 | | | | | | | | |
| P29A | **Atwood** | 54.73 332 | P | | P | | 10 02 33.5 | +0.8 | |
| | baz=55,SNR=22 | | | | | | | | |
| M33A | **Taylor Creek F** | 54.75 336 | P | | P | | 10 02 31.9 | -0.7 | |
| | baz=55,SNR=6.3 | | | | | | | | |
| L34A | **Svendsen Farm,** | 54.77 337 | P | | P | | 10 02 31.9 | -0.9 | |
| | baz=55,SNR=19 | | | | | | | | |
| O30A | **MW Ranch, Wils** | 54.80 333 | P | | P | | 10 02 33.4 | +0.3 | |
| | baz=55,SNR=15 | | | | | | | | |
| N31A | **Bailey Ranch,** | 54.85 334 | P | | P | | 10 02 33.7 | +0.3 | |
| | baz=55 | | | | | | | | |
| TUC | **Tucson** | 54.98 319 | *e*P | | P | | 10 02 34.9 | +0.4 | |
| TUC | | | *e**PP | | pP | | 10 04 32.0 | +0.9 | |
| TUC | | | pmax | | pmax | | | | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| TUC | **Tucson** | 54.98 319 | *e*P | | P | | 10 02 34.9 | +0.4 | |
| | comp=Z,23nm,1.1s | | | | | | | | |
| TUC | | | *e*pP | | pP | | 10 04 32.0 | +0.9 | |
| K35A | **Storm Lake** | 54.99 339 | P | | P | | 10 02 33.7 | -0.6 | |
| | baz=55 | | | | | | | | |
| BGNE | **Belgrade** | 55.00 336 | P | | P | | 10 02 34.3 | -0.1 | |
| | baz=55,SNR=13 | | | | | | | | |
| BGNE | **Belgrade** | 55.00 336 | *e*P | | P | | 10 02 34.1 | -0.3 | |
| | comp=Z,93nm,0.9s | | | | | | | | |
| KSCO | **Kaye Shedlock'** | 55.07 330 | P | | P | | 10 02 36.3 | +1.2 | |
| | baz=55,SNR=16 | | | | | | | | |
| KSCO | **Kaye Shedlock'** | 55.07 330 | *e*P | | P | | 10 02 36.0 | +0.9 | |
| | comp=Z,37nm,0.8s | | | | | | | | |
| O29A | **4D Ranch, Culb** | 55.09 333 | P | | P | | 10 02 36.2 | +1.0 | |
| | baz=55 | | | | | | | | |
| P28A | **Saint Francis** | 55.09 331 | P | | P | | 10 02 35.9 | +0.6 | |
| | baz=55,SNR=12 | | | | | | | | |
| I38A | **Scanlan Farm,** | 55.19 342 | P | | P | | 10 02 34.6 | -1.1 | |
| | baz=55,SNR=24 | | | | | | | | |
| J36A | **Seneca 1, Swea** | 55.21 340 | P | | P | | 10 02 34.5 | -1.3 | |
| | baz=55 | | | | | | | | |
| K34A | **Le Mars** | 55.28 338 | P | | P | | 10 02 35.4 | -0.9 | |
| | baz=56,SNR=8.2 | | | | | | | | |
| L33A | **Hoskins** | 55.28 337 | P | | P | | 10 02 35.8 | -0.6 | |
| | baz=56,SNR=11 | | | | | | | | |
| M31A | **Lambtecht Ranc** | 55.29 335 | P | | P | | 10 02 36.5 | +0.1 | |
| | baz=56,SNR=5.3 | | | | | | | | |
| N30A | **Hueftle Ranch,** | 55.32 334 | P | | P | | 10 02 36.5 | -0.2 | |
| | baz=56 | | | | | | | | |
| L32A | **Elgin** | 55.44 336 | P | | P | | 10 02 36.8 | -0.6 | |
| | baz=56,SNR=6.8 | | | | | | | | |
| I37A | **Lemond, Waseca** | 55.50 341 | P | | P | | 10 02 36.9 | -0.9 | |
| | baz=56,SNR=9.1 | | | | | | | | |
| O28A | **Krutsinger Ran** | 55.54 332 | P | | P | | 10 02 39.0 | +0.7 | |
| | baz=56,SNR=15 | | | | | | | | |
| J35A | **Milford** | 55.55 339 | P | | P | | 10 02 37.0 | -1.2 | |
| | baz=56,SNR=5.5 | | | | | | | | |
| K33A | **Hardington** | 55.55 337 | P | | P | | 10 02 37.7 | -0.5 | |
| | baz=56,SNR=9.8 | | | | | | | | |
| N29A | **Votaw Ranch, W** | 55.57 333 | P | | P | | 10 02 38.8 | +0.3 | |
| | baz=56,SNR=8.5 | | | | | | | | |
| SDCO | **Great Sand Dun** | 55.59 327 | P | | P | | 10 02 39.8 | +0.9 | |
| | baz=56,SNR=57 | | | | | | | | |
| SDCO | **Great Sand Dun** | 55.59 327 | *e*P | | P | | 10 02 39.4 | +0.5 | |
| | comp=Z,31nm,0.8s | | | | | | | | |
| SDCO | | | *e*ScP | | ScP | | 10 06 29.0 | +0.2 | |
| J34A | **George** | 55.74 338 | P | | P | | 10 02 38.6 | -0.9 | |
| | baz=56,SNR=5.3 | | | | | | | | |
| M30A | **Dale-Ortello V** | 55.83 334 | P | | P | | 10 02 40.0 | -0.2 | |
| | baz=56 | | | | | | | | |
| H37A | **Dierke Farm, C** | 55.86 341 | P | | P | | 10 02 39.7 | -0.6 | |
| | baz=56,SNR=8.4 | | | | | | | | |
| N28A | **Pribbeno Ranch** | 55.88 332 | P | | P | | 10 02 41.1 | +0.5 | |
| | baz=56,SNR=6.7 | | | | | | | | |
| I35A | **Creekview Farm** | 55.90 339 | P | | P | | 10 02 39.8 | -0.7 | |
| | baz=56 | | | | | | | | |
| L31A | **Butterfield Fa** | 55.92 336 | P | | P | | 10 02 40.6 | -0.2 | |
| | baz=56,SNR=16 | | | | | | | | |
| K32A | **Verdigre** | 55.98 336 | P | | P | | 10 02 40.4 | -0.7 | |
| | baz=56 | | | | | | | | |
| L30A | **Spencer Herefo** | 56.10 335 | P | | P | | 10 02 42.3 | +0.2 | |
| | baz=56 | | | | | | | | |
| 214A | **Organ Pipe Nat** | 56.10 317 | P | | P | | 10 02 43.2 | +1.0 | |
| | baz=56,SNR=16 | | | | | | | | |
| 214A | **Organ Pipe Nat** | 56.10 317 | *e*P | | P | | 10 02 42.8 | +0.6 | |
| | comp=Z,76nm,0.7s | | | | | | | | |
| M29A | **Burnside Ranch** | 56.11 334 | P | | P | | 10 02 42.8 | +0.7 | |
| | baz=56,SNR=6.8 | | | | | | | | |
| J33A | **Davis** | 56.15 338 | P | | P | | 10 02 41.5 | -0.8 | |
| | baz=56,SNR=10.0 | | | | | | | | |
| W18A | **Petrified Fore** | 56.16 322 | P | | P | | 10 02 43.5 | +0.7 | |
| | baz=56,SNR=8.6 | | | | | | | | |
| W18A | **Petrified Fore** | 56.16 322 | *e*P | | P | | 10 02 43.8 | +1.1 | |
| | comp=Z,50nm,1.1s | | | | | | | | |
| H36A | **Jessenland, He** | 56.18 341 | P | | P | | 10 02 41.8 | -0.6 | |
| | baz=56,SNR=40 | | | | | | | | |
| K31A | **O'Neill** | 56.26 336 | P | | P | | 10 02 43.1 | 0.0 | |
| | baz=56,SNR=8.2 | | | | | | | | |
| Q24A | **Divide** | 56.31 329 | P | | P | | 10 02 44.4 | +0.6 | |
| | baz=56,SNR=19 | | | | | | | | |
| Q24A | **Divide** | 56.31 329 | *e*P | | P | | 10 02 44.8 | +1.0 | |
| | comp=Z,38nm,1.1s | | | | | | | | |
| OGNE | **Ogallala** | 56.31 332 | P | | P | | 10 02 44.2 | +0.7 | |
| | baz=56,SNR=9.6 | | | | | | | | |
| OGNE | **Ogallala** | 56.31 332 | *e*P | | P | | 10 02 44.1 | +0.5 | |
| | comp=Z,66nm,0.9s | | | | | | | | |
| M28A | **Bar X Bar Ranc** | 56.37 333 | P | | P | | 10 02 44.6 | +0.7 | |
| | baz=57,SNR=11 | | | | | | | | |
| ECSD | **EROS Data Cent** | 56.37 338 | P | | P | | 10 02 43.2 | -0.6 | |
| | baz=57,SNR=9.6 | | | | | | | | |
| ECSD | **EROS Data Cent** | 56.37 338 | *e*P | | P | | 10 02 42.6 | -1.2 | |
| | comp=Z,15nm,1.1s | | | | | | | | |
| ECSD | | | *e*ScP | | ScP | | 10 06 31.1 | -0.7 | |
| SPMN | **St. Paul** | 56.40 342 | P | | P | | 10 02 43.2 | -0.8 | |
| | baz=57,SNR=7.0 | | | | | | | | |
| SPMN | **St. Paul** | 56.40 342 | *e*P | | P | | 10 02 43.0 | -0.9 | |
| | comp=Z,13nm,0.6s | | | | | | | | |
| L29A | **Maesberg Ranch** | 56.52 334 | P | | P | | 10 02 45.7 | +0.8 | |
| | baz=57,SNR=8.1 | | | | | | | | |
| J32A | **Parkston** | 56.53 337 | P | | P | | 10 02 44.0 | -0.9 | |
| | baz=57 | | | | | | | | |
| H35A | **Sunnyside Ranc** | 56.58 340 | P | | P | | 10 02 44.2 | -1.0 | |
| | baz=57,SNR=22 | | | | | | | | |
| K30A | **Basset** | 56.65 335 | P | | P | | 10 02 45.7 | -0.1 | |
| | baz=57,SNR=21 | | | | | | | | |
| G36A | **St. Michael** | 56.70 341 | P | | P | | 10 02 45.5 | -0.5 | |
| | baz=57 | | | | | | | | |
| I33A | **Coleman** | 56.71 338 | P | | P | | 10 02 45.6 | -0.5 | |
| | baz=57 | | | | | | | | |
| J31A | **Geddes** | 56.81 336 | P | | P | | 10 02 46.5 | -0.3 | |
| | baz=57 | | | | | | | | |
| MVCO | **Mesa Verde** | 56.86 325 | P | | P | | 10 02 48.5 | +1.0 | |
| | baz=57,SNR=43 | | | | | | | | |
| MVCO | **Mesa Verde** | 56.86 325 | *e*P | | P | | 10 02 47.8 | +0.3 | |
| | comp=Z,46nm,0.8s | | | | | | | | |
| H34A | **Spellman Lake,** | 56.88 339 | P | | P | | 10 02 46.6 | -0.7 | |
| | baz=57,SNR=9.7 | | | | | | | | |
| L28A | **Connealy Angus** | 56.93 333 | P | | P | | 10 02 48.8 | +1.1 | |
| | baz=57 | | | | | | | | |
| G35A | **Watkins** | 56.93 341 | P | | P | | 10 02 47.0 | -0.5 | |
| | baz=57,SNR=8.8 | | | | | | | | |
| I32A | **Karley and Nic** | 56.94 338 | P | | P | | 10 02 47.3 | -0.4 | |
| | baz=57,SNR=5.3 | | | | | | | | |
| K29A | **Lazy Trails An** | 57.02 335 | P | | P | | 10 02 49.0 | +0.7 | |
| | baz=57,SNR=11 | | | | | | | | |
| J30A | **Dallas** | 57.14 336 | P | | P | | 10 02 48.9 | -0.2 | |
| | baz=57,SNR=16 | | | | | | | | |
| ISCO | **Idaho Springs** | 57.17 329 | *e*P | | P | | 10 02 50.5 | +0.8 | |
| ISCO | | | pmax | | pmax | | | | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| ISCO | **Idaho Springs** | 57.17 329 | P | | P | | 10 02 50.6 | +0.8 | |
| | baz=57,SNR=33 | | | | | | | | |
| ISCO | **Idaho Springs** | 57.17 329 | *e*P | | P | | 10 02 50.5 | +0.8 | |
| | comp=Z,22nm,0.8s | | | | | | | | |
| F36A | **Milaca** | 57.19 342 | P | | P | | 10 02 48.8 | -0.6 | |
| | baz=57,SNR=10.0 | | | | | | | | |
| H33A | **Prehn Over Nor** | 57.24 339 | P | | P | | 10 02 49.4 | -0.3 | |
| | baz=58,SNR=13 | | | | | | | | |
| G34A | **Benson** | 57.34 340 | P | | P | | 10 02 49.4 | -0.9 | |
| | baz=58 | | | | | | | | |
| H32A | **Carlson Farm,** | 57.34 338 | P | | P | | 10 02 50.4 | 0.0 | |
| | baz=58,SNR=5.7 | | | | | | | | |
| I31A | **Royce, Wessing** | 57.35 337 | P | | P | | 10 02 50.3 | -0.1 | |
| | baz=58 | | | | | | | | |
| SMCO | **Snowmass** | 57.42 327 | *e*P | | P | | 10 02 52.2 | +0.7 | |
| | comp=Z,15nm,0.8s | | | | | | | | |
| SMCO | | | *e*pP | | pP | | 10 04 55.9 | +6.3 | |
| SMCO | | | *e*ScP | | ScP | | 10 06 37.4 | +0.3 | |
| WUAZ | **Wupatki** | 57.42 321 | P | | P | | 10 02 52.3 | +1.0 | |
| | baz=58,SNR=29 | | | | | | | | |
| WUAZ | **Wupatki** | 57.42 321 | *e*P | | P | | 10 02 52.5 | +1.2 | |
| | comp=Z,46nm,0.9s | | | | | | | | |
| K28A | **Ten Mile Ranch** | 57.43 334 | P | | P | | 10 02 51.9 | +0.8 | |
| | baz=58,SNR=32 | | | | | | | | |
| F35A | **Swanville** | 57.52 341 | P | | P | | 10 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| I28A | Midland | 58.39 | 335 | P | | P | 10 02 57.6 | +0.2 |
| | baz=59,SNR=14 | | | | | | | |
| PDMCI | Parker Dam,Lak | 58.41 | 319 | P | | P | 10 02 58.7 | +0.9 |
| | baz=59 | | | | | | | |
| D35A | Remer | 58.45 | 342 | P | | P | 10 02 57.0 | -0.7 |
| | baz=59,SNR=6.4 | | | | | | | |
| C37A | Embarrass | 58.48 | 344 | P | | P | 10 02 57.3 | -0.7 |
| | baz=59,SNR=7.8 | | | | | | | |
| EYMN | Ely | 58.49 | 344 | P | | P | 10 02 57.0 | -1.0 |
| | baz=59,SNR=6.3 | | | | | | | |
| EYMN | Ely | 58.49 | 344 | eP | | P | 10 02 57.2 | -0.8 |
| | comp=Z,24nm,0.5s | | | | | | | |
| H29A | Onida | 58.51 | 336 | P | | P | 10 02 58.0 | -0.3 |
| | baz=59,SNR=7.5 | | | | | | | |
| G30A | Faulkton | 58.51 | 337 | P | | P | 10 02 58.2 | 0.0 |
| | baz=59,SNR=9.6 | | | | | | | |
| E33A | Westby DABS, E | 58.56 | 340 | P | | P | 10 02 57.6 | -0.9 |
| | baz=59,SNR=6.5 | | | | | | | |
| J26A | Sides Ranch, S | 58.66 | 333 | P | | P | 10 03 00.1 | +0.8 |
| | baz=59,SNR=30 | | | | | | | |
| C36A | Pine Crest Far | 58.70 | 343 | P | | P | 10 02 58.9 | -0.5 |
| | baz=59,SNR=14 | | | | | | | |
| O20A | White River Ci | 58.79 | 327 | P | | P | 10 03 01.2 | +0.7 |
| | baz=59,SNR=17 | | | | | | | |
| O20A | White River Ci | 58.79 | 327 | eP | | P | 10 03 01.2 | +0.7 |
| | comp=Z,27nm,0.9s | | | | | | | |
| F31A | Hecla | 58.80 | 338 | P | | P | 10 02 60.0 | -0.1 |
| | baz=59,SNR=6.0 | | | | | | | |
| D34A | Park Rapids | 58.81 | 341 | P | | P | 10 02 59.4 | -0.7 |
| | baz=59,SNR=5.5 | | | | | | | |
| I27A | Quinn | 58.82 | 334 | P | | P | 10 03 00.7 | +0.3 |
| | baz=59,SNR=26 | | | | | | | |
| G29A | Hoven | 58.87 | 337 | P | | P | 10 03 00.6 | -0.1 |
| | baz=59,SNR=13 | | | | | | | |
| H28A | Mission Ridge | 58.88 | 336 | P | | P | 10 03 01.0 | +0.2 |
| | baz=59,SNR=24 | | | | | | | |
| BC3 | Big Chuckawall | 58.90 | 317 | P | | P | 10 03 02.5 | +1.3 |
| | baz=59,SNR=7.6 | | | | | | | |
| C35A | Jirik Farms, M | 58.98 | 342 | P | | P | 10 03 00.4 | -0.9 |
| | baz=59 | | | | | | | |
| IRM | Iron Mountain | 58.99 | 318 | P | | P | 10 03 03.0 | +1.2 |
| | baz=59,SNR=22 | | | | | | | |
| J25A | Sunshine Ranch | 59.05 | 333 | P | | P | 10 03 02.8 | +0.9 |
| | baz=59,SNR=6.0 | | | | | | | |
| MONP | Monument Peak | 59.11 | 316 | P | | P | 10 03 03.8 | +1.1 |
| | baz=59 | | | | | | | |
| I26A | New Underwood | 59.13 | 334 | P | | P | 10 03 03.2 | +0.7 |
| | baz=59,SNR=19 | | | | | | | |
| BAR | Barrett | 59.16 | 316 | eP | | P | 10 03 04.0 | +1.1 |
| | comp=Z,29nm,1.4s | | | | | | | |
| BAR | | | | ePP | | pP | 10 05 00.0 | -2.1 |
| G28A | Parade | 59.16 | 336 | P | | P | 10 03 02.9 | +0.2 |
| | baz=59,SNR=16 | | | | | | | |
| C34A | RKJ Ranch, Bem | 59.22 | 342 | P | | P | 10 03 02.0 | -0.9 |
| | baz=59,SNR=15 | | | | | | | |
| E31A | Nome | 59.26 | 339 | P | | P | 10 03 02.7 | -0.5 |
| | baz=60,SNR=6.2 | | | | | | | |
| H27A | Howes | 59.28 | 335 | P | | P | 10 03 03.6 | +0.1 |
| | baz=60,SNR=24 | | | | | | | |
| SRU | San Rafael | 59.33 | 325 | eP | | P | 10 03 04.4 | +0.4 |
| SRU | San Rafael | 59.33 | 325 | eP | | P | 10 03 04.4 | +0.4 |
| F29A | Eureka | 59.37 | 337 | P | | P | 10 03 03.8 | -0.1 |
| | baz=60,SNR=24 | | | | | | | |
| BELC | Belle Mtn. Jos | 59.47 | 317 | P | | P | 10 03 06.1 | +1.1 |
| | baz=60,SNR=12 | | | | | | | |
| B35A | Bob, Littlefor | 59.50 | 343 | P | | P | 10 03 04.0 | -0.7 |
| | baz=60,SNR=9.9 | | | | | | | |
| I25A | Rochford | 59.51 | 333 | P | | P | 10 03 06.5 | +1.3 |
| | baz=60,SNR=71 | | | | | | | |
| PFO | Pinyon Flat Ob | 59.55 | 317 | eP | | P | 10 03 06.6 | +1.1 |
| PFO | | | | | pmax | pmax | | |
| | comp=Z,11nm,1.0s | | | | | | | |
| PFO | Pinyon Flat Ob | 59.55 | 317 | P | | P | 10 03 06.6 | +1.1 |
| | baz=60 | | | | | | | |
| PFO | Pinyon Flat Ob | 59.55 | 317 | eP | | P | 10 03 06.6 | +1.1 |
| | comp=Z,10nm,1.0s | | | | | | | |
| E30A | Jud | 59.58 | 338 | P | | P | 10 03 05.5 | +0.2 |
| | baz=60,SNR=9.8 | | | | | | | |
| C33A | Trail | 59.59 | 341 | P | | P | 10 03 04.9 | -0.4 |
| | baz=60,SNR=7.7 | | | | | | | |
| P17A | Butcher Ranch, | 59.70 | 325 | eP | | P | 10 03 07.4 | +0.9 |
| | comp=Z,40nm,1.0s | | | | | | | |
| GMRC | Granite Mounta | 59.70 | 318 | P | | P | 10 03 07.6 | +1.1 |
| | baz=60,SNR=19 | | | | | | | |
| RSSD | Black Hills | 59.73 | 333 | eP | | P | 10 03 07.6 | +1.0 |
| RSSD | | | | | pmax | pmax | | |
| | comp=Z,26nm,0.6s | | | | | | | |
| RSSD | Black Hills | 59.73 | 333 | eP | | P | 10 03 07.6 | +1.0 |
| | comp=Z,26nm,0.6s | | | | | | | |
| F28A | McLaughlin | 59.76 | 337 | P | | P | 10 03 06.9 | +0.4 |
| | baz=60,SNR=19 | | | | | | | |
| K22A | Casper | 59.76 | 331 | P | | P | 10 03 07.5 | +0.7 |
| | baz=60,SNR=19 | | | | | | | |
| K22A | Casper | 59.76 | 331 | eP | | P | 10 03 07.7 | +0.9 |
| | comp=Z,31nm,0.6s | | | | | | | |
| G27A | Dupree | 59.83 | 335 | P | | P | 10 03 07.2 | +0.2 |
| | baz=60,SNR=18 | | | | | | | |
| TMUT | Trail Mountain | 59.84 | 325 | eP | | P | 10 03 08.1 | +0.6 |
| | comp=Z,52nm,0.6s | | | | | | | |
| TMUT | | | | eScP | | ScP | 10 06 47.0 | -0.7 |
| B34A | Aery, Baudette | 59.88 | 342 | P | | P | 10 03 06.8 | -0.5 |
| | baz=60,SNR=9.0 | | | | | | | |
| E29A | Napoleon | 59.91 | 338 | P | | P | 10 03 07.6 | +0.1 |
| | baz=60,SNR=6.6 | | | | | | | |
| H25A | Fruitdale | 59.93 | 334 | P | | P | 10 03 08.5 | +0.7 |
| | baz=60,SNR=13 | | | | | | | |
| CCUT | Cedar City | 59.96 | 322 | eP | | P | 10 03 09.9 | +1.6 |
| | comp=Z,17nm,0.9s | | | | | | | |
| SGU | Sterling | 60.01 | 324 | eP | | P | 10 03 09.7 | +1.1 |
| G26A | Maurine | 60.03 | 335 | P | | P | 10 03 08.5 | +0.1 |
| | baz=60,SNR=42 | | | | | | | |
| D30A | Buchanan | 60.04 | 339 | P | | P | 10 03 08.5 | +0.1 |
| | baz=60,SNR=15 | | | | | | | |
| MURC | Murrieta | 60.05 | 316 | P | | P | 10 03 10.0 | +1.3 |
| | baz=60,SNR=5.8 | | | | | | | |
| AGMN | Agassiz Nation | 60.09 | 341 | P | | P | 10 03 08.0 | -0.6 |
| | baz=60,SNR=9.9 | | | | | | | |
| AGMN | Agassiz Nation | 60.09 | 341 | eP | | P | 10 03 08.1 | -0.6 |
| | comp=Z,18nm,0.6s | | | | | | | |
| HEC | Hector,Ludlow | 60.18 | 318 | P | | P | 10 03 11.1 | +1.5 |
| | baz=60,SNR=10 | | | | | | | |
| F27A | Lemmon | 60.27 | 336 | P | | P | 10 03 10.6 | +0.7 |
| | baz=60,SNR=24 | | | | | | | |
| TUQ | Turquoise Moun | 60.27 | 319 | P | | P | 10 03 11.4 | +1.1 |
| | baz=60,SNR=7.4 | | | | | | | |
| C31A | Landman Farms, | 60.27 | 340 | P | | P | 10 03 09.5 | -0.3 |
| | baz=60,SNR=15 | | | | | | | |
| G25A | Newell | 60.30 | 334 | P | | P | 10 03 10.5 | +0.4 |
| | baz=60,SNR=19 | | | | | | | |
| D29A | Pettibone, Tap | 60.31 | 338 | P | | P | 10 03 10.4 | +0.2 |
| | baz=60 | | | | | | | |
| E28A | Huff | 60.32 | 337 | P | | P | 10 03 10.6 | +0.4 |
| | baz=60,SNR=58 | | | | | | | |
| B32A | Ashes, Strandq | 60.39 | 341 | P | | P | 10 03 10.0 | -0.6 |
| | baz=61,SNR=10 | | | | | | | |
| SHPR | Sheep Range | 60.42 | 320 | eP | | P | 10 03 12.5 | +1.2 |
| C30A | Mose, Pekin | 60.45 | 339 | P | | P | 10 03 11.0 | 0.0 |
| | baz=61,SNR=9.0 | | | | | | | |
| A33A | Warroad | 60.51 | 342 | P | | P | 10 03 10.8 | -0.5 |
| | baz=61,SNR=8.2 | | | | | | | |
| F26A | Lodgepole | 60.51 | 335 | P | | P | 10 03 12.0 | +0.5 |
| | baz=61 | | | | | | | |
| E27A | Carson | 60.54 | 336 | P | | P | 10 03 12.3 | +0.6 |
| | baz=61,SNR=24 | | | | | | | |
| O16A | Springville | 60.62 | 325 | eP | | P | 10 03 06.3 | -6.2 |
| | comp=Z,14nm,0.6s | | | | | | | |
| BFSC | Mount Baldy Ra | 60.73 | 317 | P | | P | 10 03 13.4 | +0.1 |
| | baz=61 | | | | | | | |
| GSC | Goldstone | 60.77 | 318 | eP | | P | 10 03 14.6 | +1.1 |
| GSC | | | | | pmax | pmax | | |
| | comp=Z,24nm,0.9s | | | | | | | |
| GSC | Goldstone | 60.77 | 318 | P | | P | 10 03 14.7 | +1.3 |
| | baz=61,SNR=12 | | | | | | | |
| GSC | Goldstone | 60.77 | 318 | eP | | P | 10 03 14.6 | +1.1 |
| | comp=Z,24nm,0.9s | | | | | | | |
| CIS | Catalina Islan | 60.77 | 315 | P | | P | 10 03 14.6 | +1.2 |
| | baz=61 | | | | | | | |
| SHOC | Shoshone | 60.78 | 319 | P | | P | 10 03 14.7 | +1.3 |
| | baz=61,SNR=8.6 | | | | | | | |
| NLU | North Lily Min | 60.78 | 325 | eP | | P | 10 03 14.5 | +0.9 |
| | comp=Z,22nm,1.0s | | | | | | | |
| D28A | Regan | 60.78 | 338 | P | | P | 10 03 13.9 | +0.7 |
| | baz=61 | | | | | | | |
| B31A | Greenbush Farm | 60.78 | 340 | P | | P | 10 03 12.3 | -0.9 |
| | baz=61 | | | | | | | |
| A32A | Rocking H Ranc | 60.84 | 341 | P | | P | 10 03 12.8 | -0.7 |
| | baz=61,SNR=7.4 | | | | | | | |
| F25A | Bowman | 60.90 | 335 | P | | P | 10 03 14.7 | +0.6 |
| | baz=61,SNR=12 | | | | | | | |
| E26A | Carlson Angus | 60.93 | 336 | P | | P | 10 03 14.7 | +0.5 |
| | baz=61,SNR=20 | | | | | | | |
| MDND | Maddock | 60.97 | 339 | P | | P | 10 03 15.1 | +0.7 |
| | baz=61,SNR=22 | | | | | | | |
| MDND | Maddock | 60.97 | 339 | eP | | P | 10 03 15.1 | +0.7 |
| | comp=Z,141nm,0.7s | | | | | | | |
| B30A | Myrvik Farm, E | 61.04 | 340 | P | | P | 10 03 14.5 | -0.3 |
| | baz=61,SNR=7.5 | | | | | | | |
| PASC | Pasadena Art C | 61.05 | 316 | eP | | P | 10 03 16.6 | +1.3 |
| | comp=Z,41nm,1.2s | | | | | | | |
| D27A | Center | 61.08 | 337 | P | | P | 10 03 16.0 | +0.8 |
| | baz=61,SNR=6.5 | | | | | | | |
| CTU | Camp Tracy | 61.09 | 326 | eP | | P | 10 03 16.4 | +0.8 |
| | comp=Z,14nm,0.7s | | | | | | | |
| C28A | Hausauer Farms | 61.15 | 338 | P | | P | 10 03 16.1 | +0.5 |
| | baz=61 | | | | | | | |
| DECC | Green Verdugo | 61.19 | 316 | P | | P | 10 03 17.2 | +1.1 |
| | baz=61,SNR=5.4 | | | | | | | |
| TCUT | Toone Canyon | 61.19 | 326 | eP | | P | 10 03 17.3 | +0.9 |
| | comp=Z,31nm,0.7s | | | | | | | |
| TCUT | | | | ePP | | pP | 10 05 16.3 | -0.5 |
| EDW2 | Edwards Air Fo | 61.32 | 317 | P | | P | 10 03 17.7 | +0.7 |
| | baz=62,SNR=14 | | | | | | | |
| E25A | Miller Ranch, | 61.34 | 335 | P | | P | 10 03 17.6 | +0.7 |
| | baz=62,SNR=19 | | | | | | | |
| DUG | Dugway | 61.36 | 325 | eP | | P | 10 03 17.6 | +0.3 |
| DUG | | | | e*PP | | pP | 10 05 18.4 | +0.5 |
| DUG | | | | | pmax | pmax | | |
| | comp=Z,27nm,0.8s | | | | | | | |
| DUG | Dugway | 61.36 | 325 | P | | P | 10 03 18.5 | +1.2 |
| | baz=62,SNR=40 | | | | | | | |
| DUG | Dugway | 61.36 | 325 | eP | | P | 10 03 17.6 | +0.3 |
| | comp=Z,27nm,0.8s | | | | | | | |
| DUG | | | | ePP | | pP | 10 05 18.4 | +0.5 |
| BW06 | Boulder Array | 61.36 | 329 | eP | | P | 10 03 17.4 | 0.0 |
| BW06 | | | | ePP | | pP | 10 05 17.8 | -0.1 |
| BW06 | | | | eScP | | ScP | 10 06 53.7 | -0.6 |
| D26A | Manning | 61.37 | 336 | P | | P | 10 03 17.7 | +0.6 |
| | baz=62,SNR=8.0 | | | | | | | |
| FSU | Fish Springs | 61.38 | 324 | eP | | P | 10 03 18.7 | +1.2 |
| TPNV | Topopah Spring | 61.39 | 320 | eP | | P | 10 03 18.6 | +1.1 |
| TPNV | | | | | pmax | pmax | | |
| | comp=Z,26nm,0.9s | | | | | | | |
| TPNV | Topopah Spring | 61.39 | 320 | P | | P | 10 03 19.0 | +1.5 |
| | baz=62,SNR=26 | | | | | | | |
| TPNV | Topopah Spring | 61.39 | 320 | eP | | P | 10 03 18.6 | +1.1 |
| | comp=Z,26nm,0.9s | | | | | | | |
| B29A | Wagenman Farm, | 61.41 | 339 | P | | P | 10 03 17.5 | +0.3 |
| | baz=62,SNR=13 | | | | | | | |
| A30A | Hoffart Farm, | 61.45 | 340 | P | | P | 10 03 17.1 | -0.4 |
| | baz=62,SNR=8.1 | | | | | | | |
| LRMC | Laurel Mountai | 61.46 | 318 | P | | P | 10 03 19.3 | +1.3 |
| | baz=62 | | | | | | | |
| FURC | Furnace Creek, | 61.49 | 319 | P | | P | 10 03 19.4 | +1.4 |
| | baz=62 | | | | | | | |
| RSUT | Red Spur Mount | 61.55 | 327 | eP | | P | 10 03 19.4 | +0.6 |
| C27A | Sayler Ranch, | 61.57 | 337 | P | | P | 10 03 19.1 | +0.8 |
| | baz=62 | | | | | | | |
| HWUT | Hardware Ranch | 61.62 | 327 | eP | | P | 10 03 19.2 | +0.2 |
| | comp=Z,21nm,0.8s | | | | | | | |
| HWUT | | | | ePP | | pP | 10 05 18.9 | -0.9 |
| MPMC | Manual Prospec | 61.66 | 318 | P | | P | 10 03 20.4 | +0.9 |
| | baz=62,SNR=12 | | | | | | | |
| OSI | Osito Adit | 61.66 | 316 | eP | | P | 10 03 20.3 | +1.1 |
| | comp=Z,16nm,0.6s | | | | | | | |
| A29A | Manning Farm, | 61.75 | 339 | P | | P | 10 03 19.1 | -0.4 |
| | baz=62,SNR=12 | | | | | | | |
| B28A | Dugan Ranch, T | 61.76 | 338 | P | | P | 10 03 19.8 | +0.3 |
| | baz=62,SNR=8.8 | | | | | | | |
| ULM | Lac du Bonnet | 61.82 | 342 | P | | P | 10 03 19.0 | -0.8 |
| | comp=Z,19nm,0.4s,baz=150,slow=5.6,SNR=46 | | | | | | | |
| ULM | | | | | pP | pP | 10 05 17.2 | -3.5 |
| | comp=Z,7.3nm,1.0s,baz=198,slow=6.1,SNR=3.5 | | | | | | | |
| ULM | Lac du Bonnet | 61.82 | 342 | P | | P | 10 03 19.0 | -0.8 |
| ULM | | | | *PP | | pP | 10 05 17.2 | -3.5 |
| ULM | | | | | pmax | pmax | | |
| | comp=Z,19nm,0.4s | | | | | | | |
| ULM | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,1.0s | | | | | | | |
| ULM | Lac du Bonnet | 61.82 | 342 | eP | | P | 10 03 18.6 | -1.2 |
| | comp=Z,29nm,0.8s | | | | | | | |
| ULM | | | | pP | | pP | 10 05 17.2 | -3.5 |
| R11A | Troy Canyon, C | 61.83 | 321 | P | | P | 10 03 21.4 | +1.0 |
| | baz=62,SNR=32 | | | | | | | |
| R11A | Troy Canyon, C | 61.83 | 321 | eP | | P | 10 03 21.6 | +1.2 |
| | comp=Z,13nm,0.9s | | | | | | | |
| D25A | Fairfield | 61.83 | 336 | P | | P | 10 03 21.3 | +1.3 |
| | baz=62,SNR=17 | | | | | | | |
| DAC | Darwin (Calif) | 61.86 | 319 | eP | | P | 10 03 21.7 | +1.0 |
| DAC | | | | | pmax | pmax | | |
| | comp=Z,26nm,1.1s | | | | | | | |
| DAC | Darwin (Calif) | 61.86 | 319 | eP | | P | 10 03 21.6 | +1.0 |
| | comp=Z,26nm,1.1s | | | | | | | |
| C26A | Wahner Farm, P | 61.89 | 337 | P | | P | 10 03 21.4 | +1.0 |
| | baz=62,SNR=5.2 | | | | | | | |
| SPUT | South Promonto | 61.90 | 326 | eP | | P | 10 03 21.6 | +0.9 |
| | comp=Z,45nm,1.5s | | | | | | | |
| BSC | Santa Cruz Isl | 61.95 | 315 | P | | P | 10 03 22.2 | +1.1 |
| | baz=62 | | | | | | | |
| ARVC | Arvin | 62.02 | 317 | P | | P | 10 03 22.8 | +1.3 |
| | baz=62,SNR=7.2 | | | | | | | |
| B27A | Peters Farms, | 62.05 | 338 | P | | P | 10 03 22.3 | +0.9 |
| | baz=62 | | | | | | | |
| BEI | Bear River Ran | 62.08 | 327 | eP | | P | 10 03 22.4 | +0.4 |
| ISA | Isabella | 62.09 | 317 | eP | | P | 10 03 23.6 | +1.6 |
| ISA | | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| ISA | Isabella | 62.09 | 317 | P | | P | 10 03 23.2 | +1.2 |
| | baz=62,SNR=8.1 | | | | | | | |
| ISA | Isabella | 62.09 | 317 | eP | | P | 10 03 23.6 | +1.6 |
| | comp=Z,20nm,0.8s | | | | | | | |
| A28A | Rude Farm, Bot | 62.11 | 339 | P | | P | 10 03 22.2 | +0.4 |
| | baz=62 | | | | | | | |
| GRAC | Grapevine Rang | 62.14 | 319 | P | | P | 10 03 23.6 | +1.4 |
| | baz=62,SNR=12 | | | | | | | |
| AHID | Auburn Hatcher | 62.17 | 328 | eP | | P | 10 03 23.1 | +0.6 |
| | comp=Z,17nm,0.7s | | | | | | | |
| MLI | Malad Range | 62.21 | 327 | eP | | P | 10 03 23.5 | +0.7 |
| C25A | Freed Ranch, W | 62.25 | 336 | P | | P | 10 03 23.7 | +1.0 |
| | baz=62,SNR=9.9 | | | | | | | |
| B26A | Jensen Ranch, | 62.39 | 337 | P | | P | 10 03 24.5 | +0.9 |
| | baz=63,SNR=6.8 | | | | | | | |
| REDW | Red Top Meadow | 62.45 | 328 | eP | | P | 10 03 25.1 | +0.6 |
| | comp=Z,24nm,1.3s | | | | | | | |
| SNOW | Snow King Moun | 62.48 | 329 | eP | | P | 10 03 25.1 | +0.5 |
| | comp=Z,15nm,0.6s | | | | | | | |
| A27A | Ledoux Ranch, | 62.50 | 338 | P | | P | 10 03 25.3 | +1.1 |
| | baz=63 | | | | | | | |
| LOHW | Long Hollow | 62.50 | 329 | eP | | P | 10 03 25.1 | +0.4 |
| | comp=Z,13nm,0.8s | | | | | | | |
| PKM | Peak Mountain | 62.57 | 316 | P | | P | 10 03 26.3 | +1.0 |
| | baz=63,SNR=7.1 | | | | | | | |
| TPAW | Teton Pass | 62.60 | 328 | eP | | P | 10 03 26.1 | +0.7 |
| | comp=Z,11nm,0.8s | | | | | | | |
| VES | Vesal, Richgr | 62.60 | 317 | P | | P | 10 03 26.2 | +1.0 |
| | baz=63,SNR=16 | | | | | | | |
| B25A | Knox Farm, Ray | 62.67 | 337 | P | | P | 10 03 26.9 | +1.5 |
| | baz=63 | | | | | | | |
| MOOW | Moose Ponds | 62.67 | 329 | eP | | P | 10 03 25.9 | +0.1 |
| | comp=Z,16nm,1.3s | | | | | | | |
| LAO | LASA Array | 62.69 | 334 | P | | P | 10 03 26.5 | +0.8 |
| | baz=63,SNR=11 | | | | | | | |
| LAO | LASA Array | 62.69 | 334 | eP | | P | 10 03 26.3 | +0.7 |
| | comp=Z,21nm,0.8s | | | | | | | |
| SCHQ | Schefferville | 62.71 | 3 | P | | P | 10 03 24.3 | -1.2 |
| | comp=Z,3.6nm,0.9s,baz=169,slow=5.2,SNR=2.6 | | | | | | | |
| SCHQ | | | | | pP | pP | 10 05 24.9 | -2.0 |
| | comp=Z,5.3nm,0.8s,baz=165,slow=6.2,SNR=4.2 | | | | | | | |
| FXWY | Fox Creek | 62.74 | 329 | eP | | P | 10 03 26.6 | +0.4 |
| | comp=Z,8.8nm,0.9s | | | | | | | |
| A26A | Wade Farm, Ken | 62.75 | 338 | P | | P | 10 03 26.3 | +0.4 |
| | baz=63,SNR=9.3 | | | | | | | |
| IMW | Indian Meadow | 62.88 | 329 | eP | | P | 10 03 27.9 | +0.7 |
| | comp=Z,22nm,0.8s | | | | | | | |
| FLWY | Flagg Ranch | 62.88 | 329 | eP | | P | 10 03 28.2 | +1.1 |
| | comp=Z,34nm,1.1s | | | | | | | |
| RLMT | Red Lodge | 62.92 | 331 | P | | P | 10 03 28.7 | +1.4 |
| | baz=63 | | | | | | | |
| RLMT | Red Lodge | 62.92 | 331 | eP | | P | 10 03 28.9 | +1.5 |
| | comp=Z,13nm,0.9s | | | | | | | |
| SMMC | Simmler | 62.92 | 316 | P | | P | 10 03 28.8 | +1.5 |
| | baz=63,SNR=9.1 | | | | | | | |
| H17A | Grant Village | 63.04 | 329 | P | | P | 10 03 29.2 | +1.0 |
| | baz=63,SNR=9.3 | | | | | | | |
| H17A | Grant Village | 63.04 | 329 | eP | | P | 10 03 29.8 | +1.6 |
| | comp=Z,7.7nm,0.6s | | | | | | | |
| MTUM | Tungsten Hills | 63.12 | 319 | eP | | P | 10 03 30.0 | +1.3 |
| ELK | Elko | 63.12 | 324 | eP | | P | 10 03 29.4 | +0.7 |
| ELK | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,1.2s | | | | | | | |
| ELK | Elko | 63.12 | 324 | eP | | P | 10 03 29.4 | +0.7 |
| | comp=Z,9.3nm,1.2s | | | | | | | |
| A25A | Svangstu Ranch | 63.19 | 337 | P | | P | 10 03 29.8 | +1.1 |
| | baz=63,SNR=6.7 | | | | | | | |
| YFT | Old Faithful | 63.22 | 329 | eP | | P | 10 03 31.8 | +2.5 |
| | comp=Z,18nm,1.0s | | | | | | | |
| DGMT | Dagmar | 63.24 | 336 | P | | P | 10 03 30.2 | +1.1 |
| | baz=64,SNR=12 | | | | | | | |
| DGMT | Dagmar | 63.24 | 336 | eP | | P | 10 03 30.1 | +1.1 |
| | comp=Z,29nm,0.6s | | | | | | | |
| YNR | Norris Junctio | 63.32 | 330 | eP | | P | 10 03 31.8 | +1.8 |
| | comp=Z,14nm,0.6s | | | | | | | |
| YPM | Purple Mountai | 63.38 | 329 | eP | | P | 10 03 32.0 | +1.7 |
| YMR | Madison River | 63.43 | 329 | eP | | P | 10 03 32.4 | +1.8 |
| | comp=Z,39nm,0.7s | | | | | | | |
| MLAC | Mammoth Lakes | 63.45 | 319 | P | | P | 10 03 32.2 | +1.3 |
| | baz=64 | | | | | | | |
| YHH | Holmes Hill | 63.46 | 330 | eP | | P | 10 03 32.7 | +1.8 |
| NV01 | Mina Array Sit | 63.58 | 320 | eP | | P | 10 03 32.4 | +0.7 |
| NV01 | | | | e | | | 10 05 34.0 | |
| NVAR | Mina Array Bea | 63.58 | 320 | P | | P | 10 03 32.1 | +0.5 |
| | comp=Z,4.7nm,0.8s,baz=155,slow=6.5,SNR=29 | | | | | | | |
| NVAR | | | | pP | | pP | 10 05 32.0 | -1.6 |
| | comp=Z,2.8nm,0.7s,baz=120,slow=6.7,SNR=7.3 | | | | | | | |
| GCMT | Greycliff | 63.60 | 331 | eP | | P | 10 03 32.6 | +1.0 |
| GCMT | | | | epP | | pP | 10 05 31.9 | -1.5 |
| QLMT | Earthquake Lak | 63.78 | 329 | eP | | P | 10 03 34.6 | +1.8 |
| QLMT | | | | epP | | pP | 10 05 36.8 | +2.0 |
| BMN | Battle Mountai | 64.11 | 322 | eP | | P | 10 03 35.4 | +0.5 |
| BMN | | | | e*PP | | pP | 10 05 37.2 | +0.1 |
| BMN | | | | | pmax | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| BMN | Battle Mountai | 64.11 | 322 | eP | | P | 10 03 35.4 | +0.5 |
| | comp=Z,9.9nm,0.5s | | | | | | | |
| BMN | | | | epP | | pP | 10 05 37.2 | +0.1 |
| LRV | Little Rabbit | 64.22 | 317 | eP | | P | 10 03 37.4 | +1.9 |
| BOZ | Bozeman (W) | 64.46 | 330 | eP | | P | 10 03 37.0 | 0.0 |
| BOZ | | | | e*PP | | pP | 10 05 38.0 | -1.4 |
| BOZ | | | | | pmax | pmax | | |
| | comp=Z,12nm,0.8s | | | | | | | |
| BOZ | Bozeman (W) | 64.46 | 330 | P | | P | 10 03 37.5 | +0.5 |
| | baz=65,SNR=24 | | | | | | | |
| BOZ | Bozeman (W) | 64.46 | 330 | eP | | P | 10 03 37.0 | 0.0 |
| | comp=Z,12nm,0.8s | | | | | | | |
| BOZ | | | | epP | | pP | 10 05 38.0 | -1.4 |
| HLID | Hailey | 64.49 | 327 | P | | P | 10 03 38.3 | +1.0 |
| | baz=65,SNR=23 | | | | | | | |
| HLID | Hailey | 64.49 | 327 | eP | | P | 10 03 38.2 | +1.0 |
| | comp=Z,24nm,1.3s | | | | | | | |
| MCMT | McKenzie Canyo | 64.51 | 328 | eP | | P | 10 03 39.0 | +1.5 |
| MCMT | | | | epP | | pP | 10 05 40.6 | +0.8 |
| CMB | Columbia Colle | 64.69 | 319 | eP | | P | 10 03 39.3 | +0.8 |
| CMB | | | | | pmax | pmax | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| CMB | Columbia Colle | 64.69 | 319 | eP | | P | 10 03 39.3 | +0.8 |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| DLMT | Dillon | 64.75 | 329 | eP | | P | 10 03 39.8 | +0.9 |
| | comp=Z,6.9nm,0.8s | | | | | | | |
| LRM | Limekiln Ridge | 64.99 | 329 | eP | | P | 10 03 41.4 | +1.0 |
| MFID | Camas Ranch | 65.17 | 326 | eP | | P | 10 03 42.6 | +1.2 |
| | comp=Z,39nm,0.8s | | | | | | | |
| MFID | | | | epP | | pP | 10 05 44.8 | +0.5 |
| EGMT | Eagleton | 65.28 | 333 | P | | P | 10 03 42.7 | +0.7 |
| | baz=66,SNR=20 | | | | | | | |
| EGMT | Eagleton | 65.28 | 333 | eP | | P | 10 03 42.2 | +0.3 |
| | comp=Z,32nm,0.8s | | | | | | | |
| HRY | Holter Researc | 65.31 | 331 | eP | | P | 10 03 43.6 | +1.3 |
| OHCM | Honcut | 66.13 | 319 | eP | | P | 10 03 48.5 | +1.2 |
| OHCM | | | | epP | | pP | 10 05 51.4 | +0.7 |
| CHMT | Chamberlain Mo | 66.15 | 330 | eP | | P | 10 03 48.4 | +0.8 |
| WVOR | Wild Horse Val | 66.17 | 323 | eP | | P | 10 03 48.4 | +0.7 |
| WVOR | | | | e*PP | | pP | 10 05 51.3 | +0.3 |
| WVOR | | | | | pmax | pmax | | |
| | comp=Z,33nm,1.7s | | | | | | | |
| WVOR | Wild Horse Val | 66.17 | 323 | eP | | P | 10 03 48.4 | +0.7 |
| | comp=Z,33nm,1.7s | | | | | | | |
| WVOR | | | | epP | | pP | 10 05 51.3 | +0.3 |
| MSO | Missoula | 66.43 | 330 | P | | P | 10 03 50.0 | +0.8 |
| | baz=67,SNR=19 | | | | | | | |
| MSO | Missoula | 66.43 | 330 | eP | | P | 10 03 50.0 | +0.8 |
| | comp=Z,23nm,1.0s | | | | | | | |
| MSO | | | | epP | | pP | 10 05 53.0 | +0.3 |
| SLMT | Seeley Lake | 66.49 | 330 | eP | | P | 10 03 50.7 | +1.1 |
| J08A | Circle Bar Ran | 66.64 | 324 | eP | | P | 10 03 51.4 | +0.9 |
| | comp=Z,8.2nm,0.9s | | | | | | | |
| J08A | | | | epP | | pP | 10 05 54.8 | +0.6 |
| MOD | Modoc | 66.85 | 322 | eP | | P | 10 03 52.8 | +0.9 |
| | comp=Z,30nm,0.8s | | | | | | | |
| O03D | Paynes Creek | 66.86 | 320 | P | | P | 10 03 52.4 | +0.5 |
| | baz=67,SNR=8.6 | | | | | | | |
| BMO | Blue Mountains | 66.91 | 326 | eP | | P | 10 03 52.7 | +0.6 |
| | comp=Z,26nm,1.8s | | | | | | | |
| SWMT | Swartz Lake | 66.93 | 330 | eP | | P | 10 03 53.5 | +1.3 |
| YBMT | Yellow Bay | 67.18 | 330 | eP | | P | 10 03 54.9 | +1.2 |
| JTMT | Jette | 67.23 | 330 | eP | | P | 10 03 55.1 | +1.1 |
| JTMT | | | | epP | | pP | 10 05 59.4 | +1.4 |
| WDC | Whiskeytown Da | 67.49 | 320 | eP | | P | 10 03 54.9 | -0.8 |
| WDC | | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| WDC | Whiskeytown Da | 67.49 | 320 | eP | | P | 10 03 54.9 | -0.8 |
| | comp=Z,9.4nm,0.6s | | | | | | | |
| BSMT | Bassoo Peak | 67.55 | 330 | eP | | P | 10 03 57.3 | +1.2 |
| BSMT | | | | epP | | pP | 10 06 01.4 | +1.2 |
| F10A | Beach Ranch, E | 67.58 | 327 | eP | | P | 10 03 57.8 | +1.6 |
| | comp=Z,14nm,0.9s | | | | | | | |
| F10A | | | | epP | | pP | 10 06 01.6 | +1.3 |
| I07A | Izee | 67.67 | 325 | eP | | P | 10 03 57.9 | +1.1 |
| | comp=Z,38nm,1.3s | | | | | | | |
| I07A | | | | epP | | pP | 10 06 01.2 | +0.2 |
| K05A | Summer Lake | 67.68 | 323 | eP | | P | 10 03 58.8 | +1.8 |
| | comp=Z,36nm,1.0s | | | | | | | |
| K05A | | | | epP | | pP | 10 06 02.3 | +1.1 |
| M04C | Macdoel | 67.72 | 321 | P | | P | 10 03 57.7 | +0.6 |
| | baz=68,SNR=37 | | | | | | | |
| N02D | Trinity Center | 67.81 | 320 | P | | P | 10 03 57.7 | 0.0 |
| | baz=68,SNR=6.6 | | | | | | | |
| DBIC | Dimbokro | 67.86 | 79 | P | | P | 10 03 58.5 | +0.1 |
| | comp=Z,56nm,0.4s,baz=240,slow=5.2,SNR=161 | | | | | | | |
| DBIC | | | | pP | | pP | 10 06 01.3 | -1.3 |
| | comp=Z,8.8nm,0.7s,baz=239,slow=7.3,SNR=5.6 | | | | | | | |
| DBIC | Dimbokro | 67.86 | 79 | eP | | P | 10 03 58.6 | +0.2 |
| DBIC | | | | e | | | 10 06 03.2 | |
|

baz=69,SNR=6.1
**NEW Newport 69.00 329** *e*P **P 10 04 04.2 -0.4**
NEW *epP* **pP 10 06 07.7 -1.8**
**G06A Carlson Farm, 69.00 325** *e*P **P 10 04 06.4 +1.7**
comp=Z,14nm,1.0s
G06A *epP* **pP 10 06 10.4 +0.8**
**L02D Cave Junction, 69.02 321** P **P 10 04 06.0 +1.1**
baz=69,SNR=6.1
**HAWA Hanford 69.09 326** *e*P **P 10 04 06.2 +1.0**
comp=Z,8.8nm,0.6s
**D08A Wollman Farm, 69.17 327** *e*P **P 10 04 07.0 +1.4**
comp=Z,17nm,0.8s
D08A *epP* **pP 10 06 11.8 +1.3**
**I04A Tendick Farm, 69.20 323** P **P 10 04 06.6 +0.6**
baz=69,SNR=10
**C09A Chrisman Ranch 69.29 328** *e*P **P 10 04 07.7 +1.3**
comp=Z,13nm,0.8s
C09A *epP* **pP 10 06 12.0 +0.6**
**E07A Sunnyside 69.37 326** *e*P **P 10 04 08.6 +1.8**
comp=Z,13nm,0.8s
**G05D Wamic, OR 69.40 325** P **P 10 04 08.1 +1.1**
baz=70,SNR=9.4
**H04A Detroit Lake 69.58 324** *e*P **P 10 04 09.0 +0.9**
comp=Z,18nm,0.9s
H04A *epP* **pP 10 06 13.6 +0.3**
**I03D Drain, OR 69.71 322** P **P 10 04 10.2 +1.3**
baz=70,SNR=9.4
**B08A Colville Reser 70.20 328** *e*P **P 10 04 11.7 0.0**
comp=Z,8.8nm,0.9s
B08A *epP* **pP 10 06 16.6 -0.6**
**LTY Liberty 70.23 327** *e*P **P 10 04 12.6 +0.6**
LTY *epP* **pP 10 06 18.6 +1.0**
**G03D McMinnville, O 70.51 324** P **P 10 04 15.0 +1.4**
baz=71
**LON Longmire 70.56 326** *e*P **P 10 04 14.9 +1.0**
LON *e**PP **pP 10 06 20.2 +0.6**
**LON Longmire 70.56 326** *e*P **P 10 04 14.9 +1.0**
LON *epP* **pP 10 06 20.2 +0.6**
**EDM Edmonton 70.62 335** *e*P **P 10 04 13.9 -0.2**
EDM *e**PP **pP 10 06 17.7 -2.2**
EDM pmax pmax
comp=Z,35nm,0.6s
**EDM Edmonton 70.62 335** *e*P **P 10 04 13.9 -0.2**
comp=Z,35nm,0.6s
EDM *epP* **pP 10 06 17.7 -2.2**
**D05A Enumclaw 70.92 326** *e*P **P 10 04 17.1 +1.2**
comp=Z,30nm,0.8s
D05A *epP* **pP 10 06 23.1 +1.3**
**B06A Marblemount 71.43 327** *e*P **P 10 04 19.3 +0.5**
comp=Z,18nm,0.8s
**B05A Bryant 71.61 327** P **P 10 04 20.3 +0.4**
baz=72,SNR=6.9
**VNA3 Neumayer Olymp 73.56 163** P **P 10 04 30.9 +0.2**
**VNA1 Neumayer--Stat 73.74 162** P **P 10 04 32.5 +0.8**
**MORF Marmelete 73.79 48** *e*P **P 10 04 33.0 +0.3**
MORF AMb AMB 10 04 35.5
comp=Z,129nm,1.6s
**MORF Marmelete 73.79 48** *e*P **P 10 04 34.8 +2.1**
comp=Z,111nm,1.2s
**MORF Marmelete 73.79 48** *e*P **P 10 04 33.0 +0.3**
MORF pmax pmax
comp=Z,129nm,1.6s
**VNA2 Neumayer--Watz 74.11 162** P **P 10 04 33.7 -0.1**
baz=297,slow=5.7
**PNCL Nicolau / Gran 74.20 47** *e*P **P 10 04 37.0 +2.1**
comp=Z,34nm,1.5s
**PBDV Barranco-do-Ve 74.29 48** *e*P **P 10 04 37.6 +2.1**
comp=Z,61nm,1.7s
**PCVE Castro Verde 74.37 47** *e*P **P 10 04 37.9 +2.1**
comp=Z,28nm,1.3s
**PVAQ Vaqueiros 74.51 48** *e*P **P 10 04 38.5 +1.8**
comp=Z,40nm,2.1s
**PBEJ Beja 74.65 47** *e*P **P 10 04 39.2 +1.8**
comp=Z,40nm,1.7s
**PMTG Montargil 74.81 46** *e*P **P 10 04 39.8 +1.5**
comp=Z,48nm,1.9s
**PTOM Tomar 74.90 45** *e*P **P 10 04 40.2 +1.4**
comp=Z,75nm,1.0s
**PCAS Casmilo, Conde 75.01 45** *e*P **P 10 04 40.6 +1.2**
comp=Z,126nm,1.8s
**MDT Midelt 75.21 53** P **P 10 04 41.8 +1.0**
comp=Z,17nm,1.0s,baz=274,slow=4.3,SNR=18
**TOA0 Torodi Ar. Sit 75.49 74** *e*P **P 10 04 41.9 -0.6**
**TORD Torodi Ar. Bea 75.49 74** P **P 10 04 42.1 -0.4**
comp=Z,46nm,0.8s,baz=274,slow=5.0,SNR=198
TORD pP **pP 10 06 50.2 -0.4**
comp=Z,4.7nm,0.8s,baz=274,slow=4.5,SNR=8.8
TORD S **S 10 13 31.7 -2.5**
comp=Z,1.4nm,1.1s,baz=256,slow=17,SNR=5.4
**PMRV Marv??o 75.54 46** *e*P **P 10 04 41.0 -1.4**
comp=Z,3.8nm,0.7s
**PCBR Castelo Branco 75.64 46** *e*P **P 10 04 44.0 +1.1**
comp=Z,43nm,2.0s
**PVIS Viseu 75.70 45** *e*P **P 10 04 44.4 +1.1**
comp=Z,15nm,0.6s
**SNAA Sanae 75.75 162** P **P 10 04 42.5 -0.4**
**SNAA Sanae 75.75 162** *e*P **P 10 04 41.9 -1.0**
SNAA pmax pmax
comp=Z,16nm,0.9s
**SNAA Sanae 75.75 162** *e*P **P 10 04 41.9 -1.0**
comp=Z,16nm,0.9s
**MTE Manteigas 75.82 45** *e*P **P 10 04 45.0 +1.1**
comp=Z,122nm,1.7s
**MVO Moncorvo 76.48 44** *e*P **P 10 04 48.8 +1.2**
comp=Z,52nm,1.8s
**PBRG Braganca 76.94 44** *e*P **P 10 04 51.3 +1.3**
comp=Z,40nm,1.9s
**YKA Yellowknife Ar 77.75 341** P **P 10 04 53.6 -0.2**
comp=Z,3.0nm,0.4s,baz=116,slow=8.4,SNR=25
YKA pP **pP 10 07 01.5 -1.5**
comp=Z,4.4nm,0.9s,baz=234,slow=8.6,SNR=4.7
**YKA Yellowknife Ar 77.75 341** P **P 10 04 53.6 -0.2**
YKA *PP **pP 10 07 01.5 -1.5**
YKA pmax pmax
comp=Z,3.0nm,0.4s
YKA pmax pmax
comp=Z,4.0nm,0.9s
**ESDC Sonseca Array 78.09 47** P **P 10 04 57.6 +1.4**
comp=Z,8.3nm,0.9s,baz=258,slow=5.6,SNR=19
**ES19 SONSECA Array 78.15 47** *e*P **P 10 04 57.7 +1.1**
**NVL N'lazarevskaya 80.23 160** *e*P **P 10 05 06.1 -0.7**
NVL pmax pmax
comp=Z,43nm,0.9s
**TAM Tamanrasset 81.09 65** *e*P **P 10 05 13.5 +1.1**
**TAM Tamanrasset 81.09 65** *e*P **P 10 05 13.5 +1.1**
**DLBC Dease Lake 81.20 333** P **P 10 05 13.2 +1.1**
comp=Z,0.9nm,0.4s,baz=64,slow=3.6,SNR=15
DLBC pP **pP 10 07 22.6 -0.3**
comp=Z,9.1nm,1.0s,baz=131,slow=6.1,SNR=7.1
**SUMG Summit 83.18 9** *i* P **P 10 05 22.6 +0.5**
SUMG pmax pmax
comp=Z,25nm,0.7s
**SUMG Summit 83.18 9** *i* P **P 10 05 22.6 +0.5**
comp=Z,25nm,0.7s
**SUMG Summit 83.18 9** *e*P **P 10 05 22.2 +0.1**
**SNF Seneffe 87.09 38** P **P 10 05 40.8 -0.1**
**KEST Kesra 87.12 54** P **P 10 05 41.4 -0.1**
comp=Z,9.9nm,0.9s,baz=266,slow=5.9,SNR=9.1
**KEST Kesra 87.12 54** *e*P **P 10 05 42.2 +0.8**
**DOU Dourbes 87.17 39** P **P 10 05 41.3 +0.1**
**UCC Uccle 87.22 38** P **P 10 05 42.7 +1.3**
**BCLA Clavier 87.69 39** P **P 10 05 44.0 +0.3**
**WLF Walferdange 88.02 39** P **P 10 05 46.0 +0.7**
comp=Z,13nm,1.1s
**WLF Walferdange 88.02 39** *e*P **P 10 05 45.6 +0.3**
**WLF Walferdange 88.02 39** *e*P **P 10 05 45.6 +0.3**
**MEM Membach 88.17 38** P **P 10 05 46.0 0.0**
**SBA Scott Base 88.61 190** *e*P **P 10 05 48.7 +1.2**
SBA pmax pmax
comp=Z,13nm,1.3s
**SBA Scott Base 88.61 190** *e*P **P 10 05 48.6 +1.2**
comp=Z,13nm,1.3s
**VNDA Vanda 89.66 190** P **P 10 05 52.6 +0.3**
comp=Z,2.8nm,0.8s,baz=134,slow=3.3,SNR=14
VNDA pP **pP 10 08 06.3 -0.3**
comp=Z,1.0nm,0.8s,baz=114,slow=3.8,SNR=3.9
**DAG Danmarks Havn 89.79 11** *i* P **P 10 05 52.3 -0.6**
DAG pmax pmax
comp=Z,4.0nm,0.7s
**DAG Danmarks Havn 89.79 11** *i* P **P 10 05 52.3 -0.6**
comp=Z,5.6nm,0.7s
**WTTA Wattenberg 91.06 43**⇑ *i*PcP **PcP 10 06 00.0 -0.2**
comp=Z,20nm,1.3s
**ILAR Eielson Array 91.10 335** P **P 10 05 59.0 -0.1**
comp=Z,0.7nm,0.8s,baz=120,slow=3.3,SNR=13
ILAR pP **pP 10 08 12.0 -1.7**
comp=Z,2.6nm,0.9s,baz=126,slow=3.8,SNR=14
ILAR PP PP 10 09 42.0 -5.6
comp=Z,1.0nm,0.8s,baz=107,slow=6.5,SNR=7.1
ILAR S **SKSac 10 15 28.7 -3.1**
comp=Z,0.3nm,1.0s,baz=126,slow=6.1,SNR=5.0
**COLA College 91.53 335**⇑ *e*P **P 10 06 01.5 +0.4**
COLA *i* *PP **pP 10 08 15.3 -0.3**
COLA pmax pmax
comp=Z,5.0nm,0.9s
**ABTA Abfaltersbach 91.56 43**⇑ *i*P **P 10 06 02.1 +0.3**
comp=Z,15nm,1.1s
**BOSA Boshof 91.94 119** P **P 10 06 03.5 -0.6**
comp=Z,8.7nm,0.9s,baz=295,slow=2.0,SNR=8.3
**KBA Koelnbreinsper 92.18 43**⇑ *i*P **P 10 06 04.7 -0.1**
comp=Z,8.9nm,1.1s
**KHC Kasperske Hory 92.66 41** *e*P **P 10 06 07.2 +0.4**
**KHC Kasperske Hory 92.66 41** *e*P **P 10 06 07.2 +0.4**
**GERES GERESS Array B 92.70 41** P **P 10 06 07.0 0.0**
comp=Z,3.0nm,0.8s,baz=242,slow=2.9,SNR=16
**LBTB Lobatse 92.87 116** *e*P **P 10 06 08.1 -0.3**
**LBTB Lobatse 92.87 116** *e*P **P 10 06 08.1 -0.3**
**MOA Molln 92.92 42**⇑ *i*P **P 10 06 08.2 +0.2**
comp=Z,20nm,1.2s
**NOA NORSAR Array B 93.34 29** P **P 10 06 09.7 +0.1**
comp=Z,2.6nm,0.9s,baz=309,slow=2.8,SNR=3.6
**PRU Pruhonice 93.41 40** *e*P **P 10 06 10.8 +0.7**
**PRU Pruhonice 93.41 40** *e*P **P 10 06 10.8 +0.7**
**ARSA Arzberg 93.67 43**⇑ *i*P **P 10 06 11.4 0.0**
comp=Z,9.9nm,1.3s
**CONA Conrad Observa 93.99 42**⇑ *i*PcP **PcP 10 06 13.2 +0.2**
comp=Z,7.9nm,0.9s
**DPC Dobruska-Polom 94.59 40** *e*P **P 10 06 15.0 -0.5**
**DPC Dobruska-Polom 94.59 40** *e*P **P 10 06 15.0 -0.5**
**LSZ Lusaka 96.99 106** *e*P **P 10 06 27.0 -0.1**
LSZ pmax pmax
comp=Z,4.0nm,0.6s
**LSZ Lusaka 96.99 106** *e*P **P 10 06 27.0 -0.1**
comp=Z,3.8nm,0.6s
**SPITS Spitsbergen Ar 97.30 12** PKKPbc PKKPbc 10 23 03.2 -2.5
comp=Z,14nm,1.1s,baz=109,slow=4.5,SNR=5.1
**MAW Mawson 97.86 164** P Pdif 10 06 29.3 -0.5
comp=Z,2.1nm,0.7s,baz=279,slow=9.5,SNR=5.4
**ARCES ARCESS Array B 99.84 21** P **Pdif 10 06 38.1 -0.4**
comp=Z,2.4nm,0.8s,baz=305,slow=4.1,SNR=4.6
**BUR04 Bucovina Ar. S 100.26 43** *e*Pdif **Pdif 10 06 42.1 +1.1**
**SEY Seymchan 116.78 339** PKP **PKPdf 10 11 34.2 -0.3**
comp=Z,1.0nm,0.5s,baz=144,slow=18,SNR=4.1
**YAK Yakutsk 123.91 348** *e*PKIKP **PKPdf 10 11 47.6 -0.5**
**BRVK Borovoye 125.36 27**⇑ *i*PKIKP **PKPdf 10 11 50.8 -0.4**
**GEYT Alibeck 125.60 49** PKP **PKPdf 10 11 52.0 -0.2**
comp=Z,3.3nm,0.4s,baz=266,slow=5.9,SNR=3.8
**NVS Novosibirsk 129.06 19** *e*PKIKP **PKPdf 10 11 59.3 +1.1**
NVS *e* 10 14 20.8
**ZALV Zalesovo Beam 130.31 18** PKP **PKPdf 10 12 00.8 +0.2**
comp=Z,14nm,0.8s,baz=300,slow=2.9,SNR=49
ZALV pPKP **PP 10 14 23.1 -0.4**
comp=Z,18nm,0.8s,baz=285,slow=2.8,SNR=26
**AAK Ala-Archa 134.26 35** *c i*PKIKP **PKPdf 10 12 09.6 +0.9**
**AAK Ala-Archa 134.26 35** *e*PKPdf **PKPdf 10 12 09.4 +0.7**
**MKAR Makanchi Array 135.24 26** PKhKP PKPpre 10 12 01.0
comp=Z,0.4nm,0.6s,baz=240,slow=2.4,SNR=3.7
MKAR PKP **PKPdf 10 12 10.0 -0.1**
comp=Z,3.0nm,0.6s,baz=321,slow=1.7,SNR=24
MKAR pPKP pPKPdf 10 14 33.7 -0.3
comp=Z,1.2nm,0.8s,baz=321,slow=1.6,SNR=6.2
MKAR SKPbc **SKPbc 10 14 41.6 -1.9**
comp=Z,3.0nm,0.8s,baz=336,slow=2.7,SNR=12
**KSH Kashi 137.08 38** PKP **PKPdf 10 12 15.0 +1.1**
KSH *e*PP **PP 10 15 08.5 +1.9**
KSH *es*PKP 10 15 31.0
KSH PKS **PKSdf 10 15 50.0 -0.2**
KSH SKS **SKSdf 10 18 28.5 +1.9**
KSH SKKS **SKKSac 10 20 59.5 +0.7**
KSH PPMZ
comp=Z,250nm,5.5s
**USRK Ussuriysk Ar. 138.62 335** SKPbc **SKPbc 10 14 52.5 -0.8**
comp=Z,6.6nm,0.8s,baz=29,slow=2.5,SNR=15
**WMQ Urumqi 139.88 24** *e*PKP **PKPdf 10 12 20.0 +1.2**
**ASAR Alice Springs 140.02 217** PKhKP PKPpre 10 12 11.8
comp=Z,0.7nm,0.4s,baz=143,slow=3.6,SNR=14
ASAR pPKP pPKPdf 10 14 42.5 -1.1
comp=Z,1.1nm,0.7s,baz=138,slow=1.8,SNR=5.8
ASAR SKPbc **SKPbc 10 14 55.8 -2.1**
comp=Z,8.8nm,0.5s,baz=132,slow=3.5,SNR=55
**ULN Ulaanbaatar 140.25** 2⇑ *e*PKHKP PKPpre 10 12 14.6
**SONM Songino Array 140.26 2** PKhKP PKPpre 10 12 13.6
comp=Z,1.1nm,0.7s,baz=323,slow=3.5,SNR=7.5
SONM PKP **PKPdf 10 12 19.2 -0.3**
comp=Z,1.8nm,0.8s,baz=302,slow=1.6,SNR=8.0
SONM pPKP pPKPdf 10 14 42.1 -1.3
comp=Z,0.7nm,0.5s,baz=284,slow=0.6,SNR=3.7
SONM SKPbc **SKPbc 10 14 57.0 -0.8**
comp=Z,3.8nm,0.7s,baz=345,slow=1.6,SNR=15
SONM SKKPbc **SKKPbc 10 23 26.2 -5.2**
comp=Z,0.6nm,0.6s,baz=177,slow=3.4,SNR=4.4
**MJAR Matsushiro Arr 140.90 321** PKhKP PKPpre 10 12 15.3
comp=Z,1.0nm,0.7s,baz=63,slow=1.5,SNR=4.2
**WRAB Tennant Creek 142.46 222** *e*PKHKP **PKPdf 10 12 20.5 -3.5**
**WRAB Tennant Creek 142.46 222** *e*PKPdf **PKPdf 10 12 20.5 -3.5**
WRAB *e*SKPbc **SKPbc 10 15 02.7 -1.3**
**WRA Warramunga Arr 142.46 222** PKhKP PKPpre 10 12 20.3
comp=Z,4.5nm,0.5s,baz=141,slow=3.0,SNR=43
WRA pPKP pPKPdf 10 14 46.9 -1.1
comp=Z,1.1nm,0.7s,baz=136,slow=1.8,SNR=4.8
WRA SKPbc **SKPbc 10 15 02.6 -1.4**
comp=Z,5.2nm,0.5s,baz=137,slow=2.2,SNR=14
WRA SKKPbc **SKKPbc 10 23 19.2 -1.6**
comp=Z,0.9nm,0.8s,baz=321,slow=4.1,SNR=7.0
**NDI New Delhi 143.93 51** *e*P **PKPdf 10 12 27.0 +0.7**
**KSRS Korea Array 145.88 332** PKPbc **PKPdf 10 12 30.2 +0.9**
comp=Z,6.5nm,0.8s,baz=24,slow=1.9,SNR=16
KSRS pPKPbc pPKPbc 10 14 51.8 -0.7
comp=Z,8.1nm,1.1s,baz=41,slow=2.7,SNR=10
KSRS SKPbc **SKPbc 10 15 10.5 -0.9**
comp=Z,4.1nm,1.0s,baz=324,slow=0.3,SNR=5.1
**KSRS Korea Array 145.88 332** PKIKP **PKPdf 10 12 30.3 +0.9**
KSRS 10 14 51.8
KSRS pmax pmax
comp=Z,7.0nm,0.8s
KSRS pmax pmax
comp=Z,8.0nm,1.1s
KSRS pmax pmax
comp=N,4.0nm,1.0s
**KSAR Wonju Array Be 145.91 332** PKIKP **PKPdf 10 12 30.3 +0.8**
KSAR 10 14 51.8
**KSAR Wonju Array Be 145.91 332** PKPbc **PKPdf 10 12 30.2 +0.8**
KSAR pPKPbc pPKPbc 10 14 51.8 -0.8
KSAR SKPbc **SKPbc 10 15 10.5 -1.0**
**HHC Hu-ho-hao-te 147.19 356** *e*PKPbc **PKPbc 10 12 34.3 -0.7**
**KLRI Killari 147.23 69** *e*PKPbc **PKPbc 10 12 35.2 -0.4**
**GTA Gaotai 147.73 13** *e*PKPbc **PKPdf 10 12 33.3 +0.7**
**URV Uravakonda 148.47 74** *e*PKiKP **PKPbc 10 12 38.7 0.0**
**SRSP Sriramsagar 148.62 67** *e*PKiKP **PKPbc 10 12 38.7 -0.3**
**FITZ Fitzroy Crossi 149.13 213** *e*PKPdf **PKPdf 10 12 35.5 +0.2**
FITZ *e*PKPbc **PKPbc 10 12 40.3 0.0**
FITZ *e*PKPab **PKPab 10 12 47.2 0.0**
FITZ *ep*PKPdf **pPKPdf 10 15 00.1 +0.6**
**HYBB Hyderabad (bro 149.20 69** *e*PKiKP **PKPbc 10 12 40.7 +0.2**
**HYB Hyderabad 149.20 69** *i* PKP **PKPbc 10 12 39.0 -1.5**
HYB *e* 10 12 46.0
**PPR Rampur 149.50 66** *e*PKiKP **PKPbc 10 12 41.0 -0.1**
**SRLM Srisailam 149.81 72** *e*PKPbc **PKPbc 10 12 40.7 -1.3**
SRLM *e*PKiKP **PKiKP 10 12 41.8 -0.8**
**RCLA Racherla 149.99 73** *e*PKPbc **PKPbc 10 12 41.0 -1.4**
**NJS Nagarjunasagar 150.10 71** *e*PKPbc **PKPbc 10 12 41.2 -1.4**
**ADKI Addanki 150.87 72** *e*PKiKP **PKPbc 10 12 43.9 -0.5**
**SKHT Srikalahasti 151.00 76** *e*PKiKP **PKPbc 10 12 44.2 -0.5**
**LZH Lanzhou 151.70 8** *e*PKPbc **PKPdf 10 12 42.3 +3.4**
LZH PKPab **PKPab 10 12 58.0 +0.3**
LZH pPKP **pPKPdf 10 15 07.5 +4.1**
**PVM Polavaram 152.08 68** *e*PKPdf **PKPdf 10 12 39.6 -0.1**
PVM *e*PKiKP **PKPbc 10 12 47.1 +0.1**
**CHLP Challavanipeta 153.89 64** *e*PKPbc **PKPbc 10 12 49.6 -1.3**
**CD2 Chengdu 156.75 11** PKP **PKPdf 10 12 43.8 -2.1**
**KMI Kunming 162.06 18** PKP **PKPdf 10 12 50.8 -1.4**
**CMAR Chiang Mai Arr 165.94 41** PKP **PKPdf 10 12 55.4 -0.2**
comp=N,2.6nm,0.7s,baz=267,slow=1.9,SNR=16
CMAR PKPab **PKPab 10 14 00.2 +0.2**
comp=N,1.6nm,0.6s,baz=316,slow=5.3,SNR=6.4

*GUC **30** 10:25:46.9±0.4,33.47S×71.85W,h31km±5km, ML3.7*
*SJA **30** 10:25:47.4±0.9,33.00S×71.95W,h13km±12km, ML3.4, MW4.3*

**ISC 30 10:25:45.7±1.9,33.42S±0.05×71.92W±0.07,h7km±12km, n21,σ1ᵗ10/29,2D,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **TACH** | **Talagante** | **0.85** | **106** | *i* P | | **Pg** | **10 26 02.3** | **+0.2** |
| TACH | | | | *i* S | | **Sg** | **10 26 13.6** | **+0.4** |
| TACH | | | | *e*S | | **Sb** | **10 26 13.9** | **-0.5** |
| **ROC1** | **El Roble** | **0.88** | **60** | *e*P | | **Pg** | **10 26 02.9** | **+0.3** |
| ROC1 | | | | *e*S | | **Sg** | **10 26 14.5** | **+0.5** |
| **CHPI** | **Pichilemu** | **0.97** | **184** | *i* P | | **Pg** | **10 26 04.3** | **-0.1** |
| CHPI | | | | *e*S | | **Sb** | **10 26 17.7** | **-0.1** |
| **SAN** | **Santiago** | **1.05** | **92** | *i* P | | **Pg** | **10 26 06.0** | **+0.1** |
| SAN | | | | *i* S | | **Sg** | **10 26 19.9** | **+0.3** |
| SAN | | | | AML | | AML | 10 26 23.0 | |
| | comp=N,3μm,0.6s | | | | | | | |
| **PEL** | **Peldehue** | **1.07** | **75**⇓ | *i* P | | **Pg** | **10 26 06.2** | **0.0** |
| PEL | | | | *i* S | | **Sg** | **10 26 20.6** | **+0.4** |
| PEL | | | | AML | | AML | 10 26 21.1 | |
| | comp=N,6μm,0.4s | | | | | | | |
| **CLCH** | **Cerro Calan** | **1.16** | **89**⇓ | *i* P | | **Pg** | **10 26 07.3** | **-0.6** |
| CLCH | | | | *i* S | | **Sg** | **10 26 23.1** | **+0.1** |
| CLCH | | | | AML | | AML | 10 26 29.3 | |
| | comp=N,2μm,0.4s | | | | | | | |
| **PCH** | **Pirque** | **1.19** | **100** | *e*P | | **Pb** | **10 26 08.4** | **-0.2** |
| PCH | | | | *i* S | | **Sg** | **10 26 23.8** | **-0.2** |
| **NICH** | **Los Niches** | **1.68** | **160** | *i* S | | **Sn** | **10 26 36.8** | **-0.5** |
| NICH | | | | AML | | AML | 10 26 41.9 | |
| | comp=E,1μm,0.5s | | | | | | | |
| **TALC** | **Talca** | **1.99** | **173** | *i* S | | **Sn** | **10 26 45.5** | **+0.7** |
| TALC | | | | AML | | AML | 10 26 52.6 | |
| | comp=E,1μm,0.4s | | | | | | | |
| **AUSP** | **Uspallata** | **2.44** | **61** | *i* P | | **Pn** | **10 26 27.6** | **+1.4** |
| **ARCO** | **CERRO ARCO** | **2.57** | **78** | *e*P | | **Pb** | **10 26 30.6** | **-1.7** |
| ARCO | | | | IAML | | | 10 26 38.0 | |
| | comp=Z,174nm,0.4s | | | | | | | |
| **AAGR** | **Agrelo** | **2.61** | **84** | *e*P | | **Pb** | **10 26 32.6** | **-0.3** |
| **ASAL** | **Salagasta** | **2.72** | **73** | *i* P | | **Pb** | **10 26 32.5** | **-2.2** |
| **RTLS** | **Leoncito** | **2.74** | **55** | *e*P | | **Pn** | **10 26 32.1** | **+1.9** |
| **RTCV** | **Cerro Valdivia** | **3.25** | **62** | *i* P | | **Pn** | **10 26 38.2** | **+1.1** |
| RTCV | | | | *e*S | | **Sg** | **10 27 33.0** | **+3.0** |
| **RTLL** | **Cerro Villicun** | **3.58** | **55** | *e*S | | **Sg** | **10 27 38.9** | **-1.9** |
| **AMOG** | **MOGNA** | **3.81** | **51** | *e*P | | **Pn** | **10 26 45.7** | **+0.8** |
| **ACAN** | **Cantantal** | **4.14** | **75** | *e*P | | **Pn** | 10 26 52.9 | **+3.5** |
| **AVFE** | **Valle Fertil** | **4.68** | **55** | *e*P | | **Pn** | **10 26 56.8** | **0.0** |
| **ACHE** | **Chepes** | **4.99** | **65** | *e*P | | **Pn** | **10 27 01.2** | **+0.1** |
| **VCA** | **Vinchina** | **5.65** | **35** | *e*P | | **Pn** | **10 27 10.5** | **+0.3** |

*AUST **30** 10:39:23.0,24.69S×179.36E,h450km*
*MOS **30** 10:39:23.7±0.9,24.88S×179.53E,h500km,mb4.8/4, Error ellipse: s-maj=13.6km s-min=13.1km az=130.4*
*IDC **30** 10:39:23.8±1.1,24.82S×179.66E,h494km±10km, mb3.9/15,mb1 4.1/17,mb1mx4.0/23,mbtmp4.7/17, Error ellipse: s-maj=14.9km s-min=9.8km az=65.0*
*BJI **30** 10:39:23.0,25.00S×179.60E,h490km,mb4.8/14, mB5.2/12*
*NEIC **30** 10:39:24.7±0.6,24.96S×179.62E,h506km±7km,mb5.0/20, Error ellipse: s-maj=7.5km s-min=6.5km az=125.0*
*ISCJB **30** 10:39:24.1±0.1,24.96S±0.03×179.58E±0.04,h507km, mb4.5/28, Error ellipse: s-maj=4.7km s-min=3.3km az=23.0*

**ISC 30 10:39:24.8±0.3,24.92S±0.05×179.65E±0.07,h507km, n241,σ1ᵗ28/276,mb4.5/28,3C,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | | h m s | ISC |
| **RAO** | **Raoul Island** | **4.83** | **154** | P | | **P** | **10 40 51.0** | **+0.4** |
| | 410nm,0.3s,baz=148,slow=1.5,SNR=20 | | | | | | | |
| RAO | | | | S | | **S** | **10 42 00.8** | **+0.2** |
| | 71nm,0.3s,baz=270,slow=20,SNR=2.3 | | | | | | | |
| **RAO** | **Raoul Island** | **4.83** | **154** | *e*P | | **P** | **10 40 51.1** | **+0.6** |
| RAO | | | | *e*S | | **S** | **10 42 00.6** | **-0.1** |
| **RAO** | **Raoul Island** | **4.83** | **154** | *e*P | | **P** | **10 40 51.1** | **+0.6** |
| RAO | | | | *e*S | | **S** | **10 42 00.6** | **-0.1** |
| **MSVF** | **Nonsavu** | **7.30** | **348** | *e*P | | **P** | **10 41 13.2** | **-1.3** |
| MSVF | | | | *e*S | | **S** | **10 42 43.2** | **-1.1** |
| **MSVF** | **Nonsavu** | **7.30** | **348** | P | | **P** | **10 41 13.0** | **-1.5** |
| | 281nm,0.6s,SNR=20 | | | | | | | |
| **MSVF** | **Nonsavu** | **7.30** | **348** | *e*P | | **P** | **10 41 13.2** | **-1.3** |
| MSVF | | | | *e*S | | **S** | **10 42 43.2** | **-1.1** |
| **DZM** | **Mont Dzumac** | **12.44** | **280** | P | | **P** | **10 42 08.9** | **+0.7** |
| | 4.1nm,0.3s,baz=0.2,slow=23,SNR=37 | | | | | | | |
| **DZM** | **Mont Dzumac** | **12.44** | **280** | *e*P | | **P** | **10 42 09.9** | **+1.7** |
| | 68nm,1.0s | | | | | | | |
| **HAZ** | **Te Kaha** | **12.90** | **187** | PN | | **P** | **10 42 13.1** | **+0.5** |
| HAZ | | | | *e*SN | | **S** | **10 44 25.2** | **-5.7** |
| **WMGZ** | **Waiomatatini S** | **12.90** | **184** | *e*PN | | **P** | **10 42 15.1** | **+2.4** |
| **URZ** | **Urewera** | **13.47** | **189** | P | | **P** | **10 42 17.2** | **-1.5** |
| | 3.0nm,0.3s,baz=259,slow=1.8,SNR=18 | | | | | | | |
| URZ | | | | S | | **S** | **10 44 42.5** | **+0.4** |
| | 3.4nm,0.3s,baz=359,slow=23,SNR=12 | | | | | | | |
| **URZ** | **Urewera** | **13.47** | **189** | *e*PN | | **P** | **10 42 16.2** | **-2.4** |
| URZ | | | | *e*SN | | **S** | **10 44 39.7** | **-2.3** |
| **URZ** | **Urewera** | **13.47** | **189** | *e*P | | **P** | **10 42 16.3** | **-2.4** |
| URZ | | | | *e*S | | **S** | **10 44 45.6** | **+3.5** |
| **RIGZ** | **Rimuhau** | **13.84** | **186** | *e*PN | | **P** | **10 42 22.1** | **-0.5** |
| RIGZ | | | | *e*SN | | **S** | **10 44 44.2** | **-5.0** |
| **BKZ** | **Black Stump Fm** | **14.46** | **190** | *e*PN | | **P** | **10 42 27.3** | **-1.8** |
| BKZ | | | | *e*SN | | S | 10 44 53.4 | -7.6 |
| **MCHZ** | **McNeill Hill** | **14.70** | **189** | *e*PN | | **P** | **10 42 30.3** | **-1.3** |
| **BHHZ** | **Black Hill Sta** | **14.84** | **191** | *e*PN | | **P** | **10 42 30.9** | **-2.2** |
| **KRHZ** | **Kereru** | **14.94** | **190** | *e*PN | | **P** | **10 42 35.9** | **+1.8** |
| **PXZ** | **Pawanui** | **15.25** | **188** | *e*PN | | **P** | **10 42 36.2** | **-1.1** |
| **TSZ** | **Takapari Road** | **15.41** | **191** | PN | | **P** | **10 42 36.8** | **-2.2** |
| TSZ | | | | *e*SN | | S | 10 45 10.1 | -9.1 |
| **MRZ** | **Mangatainoka R** | **16.06** | **191** | *e*PN | | **P** | **10 42 41.7** | **-4.1** |
| MRZ | | | | *e*SN | | S | 10 45 21.1 | -10 |
| **KIW** | **Kapiti Island** | **16.39** | **193** | *e*PN | | **P** | **10 42 47.1** | **-2.0** |
| **CAW** | **Cannon Point** | **16.59** | **192** | *e*PN | | **P** | **10 42 50.0** | **-1.3** |
| **SNZO** | **South Karori** | **16.86** | **193** | *e*P | | **P** | **10 42 52.8** | **-1.1** |
| | 4.6nm,0.5s | | | | | | | |
| SNZO | | | | *e*S | | **S** | **10 45 44.1** | **-1.0** |
| SNZO | | | | *e*S | | S | 10 45 46.3 | +1.2 |
| **QRZ** | **Quartz Range** | **16.94** | **199** | *e*PN | | **P** | **10 42 53.6** | **-1.1** |
| **NNZ** | **Nelson** | **17.07** | **196** | *e*PN | | **P** | **10 42 53.9** | **-2.1** |
| **TUWZ** | **Tuamarina** | **17.14** | **195** | *e*PN | | **P** | **10 42 54.9** | **-1.8** |
| **THZ** | **Tophouse** | **17.71** | **197** | *e*PN | | **P** | **10 43 00.9** | **-1.2** |
| **THZ** | **Tophouse** | **17.71** | **197** | *e*P | | **P** | **10 43 00.8** | **-1.2** |
| | 270nm,2.4s | | | | | | | |
| **DSZ** | **Denniston Nort** | **18.00** | **199** | PN | | **P** | **10 43 04.2** | **-0.5** |
| **KHZ** | **Kahutara** | **18.17** | **195** | *e*PN | | **P** | **10 43 04.8** | **-1.4** |
| **KHZ** | **Kahutara** | **18.17** | **195** | *e*P | | **P** | **10 43 04.8** | **-1.4** |
| | 29nm,0.5s | | | | | | | |
| KHZ | | | | *e*S | | **S** | **10 46 05.9** | **-0.7** |
| **LTZ** | **Lake Taylor** | **18.83** | **197** | PN | | **P** | **10 43 10.3** | **-2.0** |
| **LHI** | **Lord Howe Isla** | **19.28** | **245** | P | | **P** | **10 43 19.6** | **+3.1** |
| | baz=19,SNR=3.2 | | | | | | | |
| **OXZ** | **Oxford** | **19.39** | **197** | *e*PN | | **P** | **10 43 15.1** | **-2.3** |
| **OXZ** | **Oxford** | **19.39** | **197** | *e*P | | **P** | **10 43 15.1** | **-2.3** |
| | 82nm,0.4s | | | | | | | |
| **RPZ** | **Rata Peaks** | **20.03** | **198** | P | | **P** | **10 43 23.1** | **0.0** |
| | 18nm,0.5s,baz=24,slow=1.6,SNR=20 | | | | | | | |
| **RPZ** | **Rata Peaks** | **20.03** | **198** | *e*P | | **P** | **10 43 23.1** | **0.0** |
| | 361nm,2.6s | | | | | | | |
| **FOZ** | **Fox Glacier** | **20.31** | **201** | *e*PN | | **P** | **10 43 24.5** | **-1.1** |
| **ODZ** | **Otahua Downs** | **21.36** | **198** | *e*P | | **P** | **10 43 31.4** | **-3.8** |
| **HNR** | **Honiara** | **24.27** | **306** | P | | **P** | **10 44 00.3** | **-1.3** |
| | 247nm,0.7s,baz=145,slow=3.7,SNR=20 | | | | | | | |
| **HNR

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| CTAO | **Charters Tower** | **31.17** | **272** | *e*P | | **P** | **10 45 02.5** | **+0.4** |
| CTAO | | | | pmax | | pmax | | | |
| | comp=Z,82nm,0.6s | | | | | | | | |
| CTAO | **Charters Tower** | **31.17** | **272** | *e*P | | **P** | **10 45 02.5** | **+0.4** |
| | comp=Z,82nm,0.6s | | | | | | | | |
| QLP | **Quilpie** | **31.88** | **259** | P | | **P** | **10 45 08.4** | **+0.4** |
| | baz=32,SNR=21 | | | | | | | | |
| MTSU | **Mount Surprise** | **33.48** | **275** | P | | **P** | **10 45 22.6** | **+0.9** |
| | baz=33,SNR=202 | | | | | | | | |
| RABL | **Rabaul** | **33.51** | **304** | P | | **P** | **10 45 21.4** | **-0.6** |
| | baz=33,SNR=4.2 | | | | | | | | |
| PMG | **Port Moresby** | **34.54** | **291** | *e*P | | **P** | **10 45 30.2** | **-0.4** |
| PMG | | | | pmax | | pmax | | | |
| | comp=Z,50nm,0.7s | | | | | | | | |
| PMG | **Port Moresby** | **34.54** | **291** | P | | **P** | **10 45 30.5** | **-0.1** |
| | baz=34,SNR=7.8 | | | | | | | | |
| PMG | **Port Moresby** | **34.54** | **291** | *e*P | | **P** | **10 45 30.2** | **-0.4** |
| | comp=Z,50nm,0.7s | | | | | | | | |
| COEN | **Coen** | **35.97** | **281** | P | | **P** | **10 45 43.1** | **+0.6** |
| | baz=36,SNR=27 | | | | | | | | |
| COEN | **Coen** | **35.97** | **281** | *e*P | | **P** | **10 45 43.2** | **+0.6** |
| | comp=Z,35nm,0.7s | | | | | | | | |
| HTT | **Hallett** | **36.37** | **247** | P | | P | 10 45 39.2 | -6.6 |
| | baz=36,SNR=8.0 | | | | | | | | |
| QIS | **Mount Isa** | **37.09** | **268** | P | | **P** | **10 45 52.1** | **+0.3** |
| | baz=37,SNR=8.7 | | | | | | | | |
| BBOO | **Buckleboo** | **38.76** | **248** | P | | **P** | **10 46 04.8** | **-0.4** |
| | baz=38,SNR=8.9 | | | | | | | | |
| BBOO | **Buckleboo** | **38.76** | **248** | *e*P | | **P** | **10 46 05.2** | **0.0** |
| AS01 | **Alice Springs** | **41.52** | **262** | *e*P | | **P** | **10 46 27.2** | **-0.4** |
| ASAR | **Alice Springs** | **41.56** | **262** | P | | **P** | **10 46 28.1** | **+0.2** |
| | comp=Z,15nm,0.7s,baz=89,slow=9.4,SNR=164 | | | | | | | | |
| ASAR | | | | ScP | | **ScP** | **10 51 15.9** | **+0.8** |
| | comp=Z,1.1nm,0.7s,baz=109,slow=4.4,SNR=4.6 | | | | | | | | |
| ASAR | | | | S | | **S** | **10 52 06.4** | **-0.6** |
| | comp=Z,1.3nm,0.6s,baz=93,slow=17,SNR=7.4 | | | | | | | | |
| WRAB | **Tennant Creek** | **42.02** | **267** | *e*P | | **P** | **10 46 30.9** | **-0.6** |
| WRAB | | | | pmax | | pmax | | | |
| | comp=Z,16nm,0.6s | | | | | | | | |
| WRAB | **Tennant Creek** | **42.02** | **267** | P | | **P** | **10 46 30.0** | **-1.5** |
| | comp=Z,206nm,0.5s,SNR=71 | | | | | | | | |
| WRAB | **Tennant Creek** | **42.02** | **267** | *e*P | | **P** | **10 46 30.9** | **-0.6** |
| | comp=Z,16nm,0.6s | | | | | | | | |
| WRAB | | | | *e*ScP | | **ScP** | **10 51 19.9** | **+2.9** |
| WRA | **Warramunga Arr** | **42.03** | **267** | P | | **P** | **10 46 31.0** | **-0.6** |
| | comp=Z,16nm,0.5s,baz=99,slow=7.0,SNR=125 | | | | | | | | |
| WRA | | | | ScP | | **ScP** | **10 51 20.4** | **+3.3** |
| | comp=Z,3.7nm,0.6s,baz=102,slow=3.8,SNR=16 | | | | | | | | |
| WRA | | | | S | | **S** | **10 52 11.5** | **-2.3** |
| | comp=Z,2.7nm,0.9s,baz=102,slow=15,SNR=9.8 | | | | | | | | |
| KDU | **Kakadu** | **46.07** | **276** | P | | **P** | **10 47 01.9** | **-1.1** |
| | baz=46,SNR=9.4 | | | | | | | | |
| WRKA | **Warakurna** | **46.31** | **258** | P | | **P** | **10 47 04.3** | **-0.4** |
| | baz=46,SNR=42 | | | | | | | | |
| MTN | **Manton Dam** | **47.22** | **275** | P | | **P** | **10 47 11.0** | **-0.7** |
| | baz=47,SNR=11 | | | | | | | | |
| KNRA | **Kununurra** | **48.37** | **271** | P | | **P** | **10 47 19.9** | **-0.4** |
| | baz=48,SNR=28 | | | | | | | | |
| FITZ | **Fitzroy Crossi** | **50.44** | **267** | P | | **P** | **10 47 35.8** | **+0.2** |
| | comp=Z,9.0nm,0.5s,baz=117,slow=6.8,SNR=45 | | | | | | | | |
| FITZ | **Fitzroy Crossi** | **50.44** | **267** | P | | **P** | **10 47 35.7** | **+0.2** |
| | baz=50,SNR=42 | | | | | | | | |
| FITZ | **Fitzroy Crossi** | **50.44** | **267** | *e*P | | **P** | **10 47 35.3** | **-0.2** |
| | comp=Z,12nm,0.8s | | | | | | | | |
| FAKI | **Fak Fak** | **50.58** | **288** | P | | **P** | **10 47 36.0** | **-0.6** |
| | baz=50,SNR=6.5 | | | | | | | | |
| SWI | **Sorong** | **52.47** | **289** | P | | **P** | **10 47 49.8** | **-0.6** |
| | baz=52,SNR=6.0 | | | | | | | | |
| VNDA | **Vanda** | **53.34** | **185** | P | | **P** | **10 47 56.9** | **+1.3** |
| | comp=Z,3.8nm,0.5s,baz=5.9,slow=8.1,SNR=44 | | | | | | | | |
| VNDA | **Vanda** | **53.34** | **185** | *e*P | | **P** | **10 47 56.6** | **+1.0** |
| VNDA | | | | pmax | | pmax | | | |
| | comp=Z,19nm,1.7s | | | | | | | | |
| VNDA | **Vanda** | **53.34** | **185** | *e*P | | **P** | **10 47 56.6** | **+1.0** |
| | comp=Z,19nm,1.7s | | | | | | | | |
| SBA | **Scott Base** | **53.35** | **183** | *e*P | | **P** | **10 47 56.4** | **+0.8** |
| SBA | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| SBA | **Scott Base** | **53.35** | **183** | *e*P | | **P** | **10 47 56.4** | **+0.8** |
| | comp=Z,13nm,0.8s | | | | | | | | |
| KLBR | **Kellerberrin** | **54.30** | **248** | P | | **P** | **10 48 02.7** | **-0.5** |
| | baz=54,SNR=12 | | | | | | | | |
| MEEK | **Meekatharra** | **54.52** | **254** | P | | **P** | **10 48 03.9** | **-0.9** |
| | baz=54,SNR=5.7 | | | | | | | | |
| SOEI | **Soe** | **54.62** | **276** | *e*P | | **P** | **10 48 06.4** | **+0.6** |
| | comp=Z,51nm,0.4s | | | | | | | | |
| BLDU | **Ballidu** | **55.36** | **249** | P | | **P** | **10 48 10.0** | **-0.6** |
| | baz=55,SNR=14 | | | | | | | | |
| MORW | **Morawa** | **56.23** | **251** | P | | **P** | **10 48 16.1** | **-0.6** |
| | baz=56,SNR=6.4 | | | | | | | | |
| CASY | **Casey** | **59.06** | **206** | *e*P | | **P** | **10 48 34.9** | **-0.4** |
| | comp=Z,16nm,0.8s | | | | | | | | |
| QSPA | **South Pole Qui** | **65.17** | **180** | P | | **P** | **10 49 16.0** | **+0.8** |
| | comp=Z,16nm,0.6s,baz=355,slow=0.4,SNR=66 | | | | | | | | |
| QSPA | **South Pole Qui** | **65.17** | **180** | *e*P | | **P** | **10 49 15.6** | **+0.4** |
| | comp=Z,20nm,0.7s | | | | | | | | |
| UGM | **Wanagama** | **67.80** | **271** | P | | **P** | **10 49 31.9** | **-0.5** |
| | baz=68,SNR=3.7 | | | | | | | | |
| MJAR | **Matsushiro Arr** | **72.56** | **326** | P | | **P** | **10 49 59.1** | **-0.9** |
| | comp=Z,5.6nm,0.6s,baz=156,slow=6.0,SNR=28 | | | | | | | | |
| MAW | **Mawson** | **76.69** | **201** | P | | **P** | **10 50 23.8** | **+1.0** |
| | comp=Z,12nm,0.6s,baz=134,slow=7.2,SNR=22 | | | | | | | | |
| MAW | **Mawson** | **76.69** | **201** | *e*P | | **P** | **10 50 23.6** | **+0.8** |
| MAW | **Mawson** | **76.69** | **201** | P | | **P** | **10 50 23.6** | **+0.8** |
| | baz=77,SNR=13 | | | | | | | | |
| MAW | **Mawson** | **76.69** | **201** | *e*P | | **P** | **10 50 23.6** | **+0.8** |
| KSRS | **Korea Array** | **78.82** | **320** | P | | **P** | **10 50 34.6** | **-0.1** |
| | comp=Z,3.7nm,0.6s,baz=130,slow=6.0,SNR=16 | | | | | | | | |
| KSAR | **Wonju Array Be** | **78.83** | **320** | P | | **P** | **10 50 34.7** | **-0.2** |
| KSAR | **Wonju Array Be** | **78.83** | **320** | P | | **P** | **10 50 34.6** | **-0.2** |
| PETK | **Petropavlovsk-** | **80.01** | **347** | P | | **P** | **10 50 40.6** | **-0.1** |
| | comp=Z,3.5nm,0.6s,baz=138,slow=6.8,SNR=7.1 | | | | | | | | |
| NJ2 | **Nanjing** | **81.09** | **311** | *e*P | | **P** | **10 50 47.5** | **+0.7** |
| NJ2 | | | | PMZ | | | | | |
| | comp=Z,40nm,0.9s | | | | | | | | |
| USRK | **Ussuriysk Ar.** | **81.44** | **327** | P | | **P** | **10 50 48.9** | **+0.5** |
| | comp=Z,1.4nm,0.5s,baz=140,slow=39,SNR=6.0 | | | | | | | | |
| SYO | **Syowa Base** | **81.95** | **194**⇑ | *e*P | | **P** | **10 50 51.7** | **+1.0** |
| WHN | **Wuhan** | **83.37** | **308** | *e*P | | **P** | **10 51 00.5** | **+2.1** |
| SNAA | **Sanae** | **83.66** | **179** | P | | **P** | **10 50 58.3** | **-1.1** |
| SNAA | **Sanae** | **83.66** | **179** | P | | **P** | **10 50 58.7** | **-0.7** |
| | comp=Z,1.5nm,0.5s,baz=208,slow=9.1,SNR=23 | | | | | | | | |
| SNAA | **Sanae** | **83.66** | **179** | *e*P | | **P** | **10 50 58.2** | **-1.1** |
| SNAA | **Sanae** | **83.66** | **179** | *e*P | | **P** | **10 50 58.2** | **-1.1** |
| MONP | **Monument Peak** | **83.73** | **49** | P | | **P** | **10 51 01.2** | **+0.7** |
| | baz=84 | | | | | | | | |
| IBP | **Imperial Bould** | **83.83** | **50** | P | | **P** | **10 51 01.4** | **+0.6** |
| | baz=84 | | | | | | | | |
| VNA3 | **Neumayer Olymp** | **83.88** | **177** | P | | **P** | **10 51 00.4** | **0.0** |
| ISA | **Isabella** | **83.96** | **46** | *e*P | | **P** | **10 51 02.3** | **+0.9** |
| ISA | **Isabella** | **83.96** | **46** | P | | **P** | **10 51 02.1** | **+0.7** |
| | baz=84 | | | | | | | | |
| ISA | **Isabella** | **83.96** | **46** | *e*P | | **P** | **10 51 02.3** | **+0.9** |
| CMB | **Columbia Colle** | **84.16** | **43** | *e*P | | **P** | **10 51 02.8** | **+0.5** |
| CMB | **Columbia Colle** | **84.16** | **43** | *e*P | | **P** | **10 51 02.8** | **+0.5** |
| SWSC | **Sam W. Stewart** | **84.19** | **50** | P | | **P** | **10 51 03.4** | **+0.9** |
| | baz=84 | | | | | | | | |
| NVL | **N'lazarevskaya** | **84.19** | **184** | *e*P | | P | 10 50 57.9 | -4.0 |
| NVL | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | | |
| VNA2 | **Neumayer--Watz** | **84.29** | **178** | P | | **P** | **10 51 02.2** | **-0.2** |
| | baz=184,slow=4.2 | | | | | | | | |
| WDC | **Whiskeytown Da** | **84.44** | **40** | *e*P | | **P** | **10 51 04.5** | **+1.0** |
| WDC | **Whiskeytown Da** | **84.44** | **40** | *e*P | | **P** | **10 51 04.5** | **+1.0** |
| VNA1 | **Neumayer--Stat** | **84.53** | **177** | P | | **P** | **10 51 03.6** | **+0.1** |
| N02D | **Trinity Center** | **84.59** | **40** | P | | **P** | **10 51 05.5** | **+1.1** |
| | baz=85 | | | | | | | | |
| BELC | **Belle Mtn. Jos** | **84.65** | **49** | P | | **P** | **10 51 05.0** | **+0.1** |
| | baz=85 | | | | | | | | |
| CWC | **Cottonwood Cre** | **84.67** | **46** | P | | **P** | **10 51 05.1** | **+0.1** |
| | baz=85 | | | | | | | | |
| O03D | **Paynes Creek** | **84.70** | **41** | P | | **P** | **10 51 05.3** | **+0.4** |
| | baz=85 | | | | | | | | |
| M02C | **Callahan** | **84.78** | **40** | P | | **P** | **10 51 06.2** | **+0.9** |
| | baz=85 | | | | | | | | |
| MPMC | **Manual Prospec** | **84.84** | **46** | P | | **P** | **10 51 05.6** | **-0.3** |
| | baz=85 | | | | | | | | |
| GSC | **Goldstone** | **84.85** | **47** | P | | **P** | **10 51 05.9** | **+0.1** |
| | baz=85 | | | | | | | | |
| HEC | **Hector,Ludlow** | **84.90** | **48** | P | | **P** | **10 51 06.1** | **+0.1** |
| | baz=85 | | | | | | | | |
| GLA | **Glamis** | **84.92** | **50** | *e*P | | **P** | **10 51 07.8** | **+1.6** |
| GLA | **Glamis** | **84.92** | **50** | *e*P | | **P** | **10 51 07.8** | **+1.6** |
| IRM | **Iron Mountain** | **85.32** | **49** | P | | **P** | **10 51 09.1** | **+1.0** |
| | baz=86 | | | | | | | | |
| GMRC | **Granite Mounta** | **85.32** | **48** | P | | **P** | **10 51 08.8** | **+0.6** |
| | baz=86 | | | | | | | | |
| GRAC | **Grapevine Rang** | **85.46** | **46** | P | | **P** | **10 51 09.1** | **+0.4** |
| | baz=86 | | | | | | | | |
| FURC | **Furnace Creek,** | **85.49** | **46** | P | | **P** | **10 51 09.1** | **+0.4** |
| | baz=86 | | | | | | | | |
| Y12C | **Blythe** | **85.52** | **50** | P | | **P** | **10 51 09.3** | **+0.3** |
| | baz=86 | | | | | | | | |
| NVAR | **Mina Array Bea** | **85.71** | **44** | P | | **P** | **10 51 10.5** | **+0.4** |
| | comp=Z,2.5nm,0.7s,baz=221,slow=8.5,SNR=13 | | | | | | | | |
| 214A | **Organ Pipe Nat** | **85.75** | **52** | P | | **P** | **10 51 10.6** | **+0.4** |
| | baz=86 | | | | | | | | |
| I03D | **Drain, OR** | **85.98** | **38** | P | | **P** | **10 51 11.6** | **+0.7** |
| | baz=86 | | | | | | | | |
| PDMCI | **Parker Dam,Lak** | **86.09** | **49** | P | | **P** | **10 51 12.5** | **+0.8** |
| | baz=86 | | | | | | | | |
| TPNV | **Topopah Spring** | **86.17** | **46** | *e*P | | **P** | **10 51 12.6** | **+0.4** |
| TPNV | **Topopah Spring** | **86.17** | **46** | P | | **P** | **10 51 12.5** | **+0.4** |
| | baz=86 | | | | | | | | |
| TPNV | **Topopah Spring** | **86.17** | **46** | *e*P | | **P** | **10 51 12.6** | **+0.4** |
| J04D | **Umpqua Nationa** | **86.38** | **39** | P | | **P** | **10 51 13.8** | **+0.7** |
| | baz=87 | | | | | | | | |
| I04A | **Tendick Farm,** | **86.56** | **38** | P | | **P** | **10 51 13.9** | **+0.1** |
| | baz=87 | | | | | | | | |
| MOD | **Modoc** | **86.58** | **40** | *e*P | | **P** | **10 51 14.6** | **+0.6** |
| K05A | **Summer Lake** | **86.75** | **39** | *e*P | | **P** | **10 51 15.7** | **+0.8** |
| J05D | **Fort Rock, OR** | **86.90** | **39** | P | | **P** | **10 51 16.2** | **+0.7** |
| | baz=87 | | | | | | | | |
| GYA | **Guiyang** | **86.99** | **301** | P | | **P** | **10 51 17.0** | **+0.7** |
| GYA | | | | pP | | **pP** | **10 53 09.5** | **+1.2** |
| GYA | | | | sP | | **sP** | **10 53 59.8** | **-0.1** |
| GYA | | | | PP | | **PP** | **10 54 51.3** | **+2.3** |
| GYA | | | | SKS | | **SKSac** | **11 00 55.0** | **-0.2** |
| GYA | | | | S | | **S** | **11 01 13.8** | **+1.2** |
| GYA | | | | PMZ | | | | | |
| | comp=Z,20nm,1.0s | | | | | | | | |
| GYA | | | | PMZ | | | | | |
| | comp=Z,130nm,5.4s | | | | | | | | |
| TUC | **Tucson** | **87.39** | **53** | *e*P | | **P** | **10 51 19.3** | **+1.3** |
| TUC | **Tucson** | **87.39** | **53** | *e*P | | **P** | **10 51 19.3** | **+1.3** |
| I05D | **Terrebonne, OR** | **87.50** | **38** | P | | **P** | **10 51 18.7** | **+0.6** |
| | baz=88 | | | | | | | | |
| BJI | **Beijing** | **87.54** | **317** | P | | **P** | **10 51 19.3** | **+0.9** |
| BJI | | | | PMZ | | | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | | |
| WVOR | **Wild Horse Val** | **87.89** | **41** | *e*P | | **P** | **10 51 20.6** | **+0.5** |
| WVOR | **Wild Horse Val** | **87.89** | **41** | *e*P | | **P** | **10 51 20.6** | **+0.5** |
| I07A | **Izee** | **88.38** | **39** | *e*P | | **P** | **10 51 22.8** | **+0.4** |
| CCUT | **Cedar City** | **88.41** | **47** | *e*P | | **P** | **10 51 23.7** | **+0.9** |
| J08A | **Circle Bar Ran** | **88.54** | **40** | *e*P | | **P** | **10 51 23.6** | **+0.5** |
| D05A | **Enumclaw** | **88.95** | **36** | *e*P | | **P** | **10 51 26.4** | **+1.7** |
| G08A | **Pilot Rock** | **89.42** | **38** | *e*P | | **P** | **10 51 27.6** | **+0.4** |
| KMI | **Kunming** | **89.45** | **298** | P | | **P** | **10 51 29.0** | **+1.1** |
| KMI | | | | PMZ | | | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | | |
| KMI | | | | PMZ | | | | | |
| | comp=Z,220nm,5.3s | | | | | | | | |
| B05A | **Bryant** | **89.57** | **35** | P | | **P** | **10 51 27.5** | **-0.2** |
| | baz=90 | | | | | | | | |
| CMAR | **Chiang Mai Arr** | **89.58** | **290** | P | | **P** | **10 51 29.9** | **+1.5** |
| | comp=Z,1.0nm,0.7s,baz=148,slow=2.9,SNR=6.1 | | | | | | | | |
| 121A | **Cookes Peak, D** | **89.69** | **54** | P | | **P** | **10 51 29.4** | **+0.5** |
| | baz=90 | | | | | | | | |
| BMO | **Blue Mountains** | **90.10** | **39** | *e*P | | **P** | **10 51 30.5** | **+0.2** |
| NLU | **North Lily Min** | **90.56** | **46** | *e*P | | **P** | **10 51 33.8** | **+1.1** |
| TMUT | **Trail Mountain** | **90.77** | **46** | *e*P | | **P** | **10 51 34.6** | **+0.7** |
| | comp=Z,26nm,0.6s | | | | | | | | |
| F10A | **Beach Ranch, E** | **90.81** | **38** | *e*P | | **P** | **10 51 33.4** | **-0.2** |
| HHC | **Hu-ho-hao-te** | **90.91** | **315** | *e*P | | **P** | **10 51 34.0** | **-0.2** |
| HHC | | | | pP | | **pP** | **10 53 28.3** | **+1.2** |
| HHC | | | | sP | | **sP** | **10 54 18.8** | **+0.5** |
| HHC | | | | S | | **S** | **11 01 46.5** | **-1.3** |
| HHC | | | | PMZ | | | | | |
| | comp=Z,33nm,0.8s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,120nm,9.9s | | | | | | | | |
| SPUT | **South Promonto** | **91.05** | **44** | *e*P | | **P** | **10 51 35.6** | **+0.7** |
| MNTX | **Cornudas Mount** | **91.06** | **55** | P | | **P** | **10 51 35.3** | **+0.4** |
| | baz=91 | | | | | | | | |
| MNTX | **Cornudas Mount** | **91.06** | **55** | *e*P | | **P** | **10 51 35.4** | **+0.4** |
| O16A | **Springville** | **91.06** | **46** | *e*P | | **P** | **10 51 34.0** | **-1.0** |
| HLID | **Hailey** | **91.07** | **42** | P | | **P** | **10 51 35.3** | **+0.3** |
| | baz=91 | | | | | | | | |
| HVU | **Hansel Valley** | **91.09** | **44** | *e*P | | **P** | **10 51 35.5** | **+0.4** |
| HVU | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | |
| HVU | **Hansel Valley** | **91.09** | **44** | *e*P | | **P** | **10 51 35.5** | **+0.4** |
| | comp=Z,3.2nm,0.6s | | | | | | | | |
| TXAR | **Lajitas Array** | **91.24** | **58** | P | | **P** | **10 51 36.5** | **+0.6** |
| | comp=Z,3.2nm,0.8s,baz=213,slow=6.5,SNR=44 | | | | | | | | |
| CD2 | **Chengdu** | **91.37** | **304** | *e*P | | **P** | **10 51 36.3** | **-0.2** |
| CD2 | | | | pP | | **pP** | **10 53 28.0** | **-1.4** |
| CD2 | | | | PP | | **PP** | **10 55 22.5** | **-0.7** |
| CD2 | | | | SKS | | **SKSac** | **11 01 19.5** | **-0.7** |
| CD2 | | | | S | | **S** | **11 01 52.0** | **-0.1** |
| CD2 | | | | sS | | **sS** | **11 05 13.3** | **-1.0** |
| CD2 | | | | SS | | **SS** | **11 08 14.3** | **+0.9** |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | | |
| CD2 | | | | PMZ | | | | | |
| | comp=Z,120nm,5.2s | | | | | | | | |
| HWUT | **Hardware Ranch** | **91.77** | **44** | *e*P | | **P** | **10 51 37.9** | **-0.4** |
| | comp=Z,1.6nm,0.6s | | | | | | | | |
| ANMO | **Albuquerque** | **91.84** | **52** | *e*P | | **P** | **10 51 39.1** | **+0.4** |
| ANMO | **Albuquerque** | **91.84** | **52** | *e*P | | **P** | **10 51 39.1** | **+0.4** |
| 529A | **Stev Forest Ra** | **92.72** | **58** | P | | **P** | **10 51 42.5** | **-0.2** |
| | baz=93 | | | | | | | | |
| 429A | **Davenport Ranc** | **93.20** | **58** | P | | **P** | **10 51 44.7** | **-0.2** |
| | baz=93 | | | | | | | | |
| SMCO | **Snowmass** | **93.54** | **48** | *e*P | | **P** | **10 51 46.9** | **+0.2** |
| 128A | **Castleberry Fa** | **93.66** | **56** | P | | **P** | **10 51 46.9** | **-0.1** |
| | baz=94 | | | | | | | | |
| 631A | **Perdido Creek** | **93.68** | **59** | P | | **P** | **10 51 47.0** | **0.0** |
| | baz=94 | | | | | | | | |
| LZH | **Lanzhou** | **93.75** | **308** | *e*P | | **P** | **10 51 48.5** | **+1.1** |
| LZH | | | | pP | | **pP** | **10 53 38.3** | **-2.2** |
| LZH | | | | sP | | sP | 10 54 25.8 | -5.9 |
| LZH | | | | PMZ | | | | | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=Z,79nm,4.9s | | | | | | | | |
| SDCO | **Great Sand Dun** | **93.86** | **50** | P | | **P** | **10 51 47.9** | **-0.1** |
| | baz=94 | | | | | | | | |
| BOZ | **Bozeman (W)** | **93.87** | **41** | P | | **P** | **10 51 47.5** | **-0.2** |
| | baz=94 | | | | | | | | |
| 531A | **Rocksprings** | **94.03** | **59** | P | | **P** | **10 51 47.8** | **-0.9** |
| | baz=94 | | | | | | | | |
| 833A | **Chaparral WMA,** | **94.13** | **61** | P | | **P** | **10 51 48.0** | **-1.1** |
| | baz=94 | | | | | | | | |
| 532A | **Rocksprings** | **94.52** | **59** | P | | **P** | **10 51 50.2** | **-0.7** |
| | baz=95 | | | | | | | | |
| 633A | **Saathoff Ranch** | **94.79** | **60** | P | | **P** | **10 51 51.3** | **-0.8** |
| | baz=95 | | | | | | | | |
| 432A | **Menard** | **94.93** | **58** | P | | **P** | **10 51 52.0** | **-0.7** |
| | baz=95 | | | | | | | | |
| T26A | **Comanche Natio** | **94.93** | **51** | P | | **P** | **10 51 51.9** | **-0.9** |
| | baz=95 | | | | | | | | |
| 231A | **Bronte** | **94.99** | **57** | P | | **P** | **10 51 51.7** | **-1.3** |
| | baz=95 | | | | | | | | |
| 332A | **Millersview** | **95.19** | **58** | P | | **P** | **10 51 53.2** | **-0.7** |
| | baz=95 | | | | | | | | |
| 433A | **Art** | **95.42** | **59** | P | | **P** | **10 51 54.6** | **-0.3** |
| | baz=96 | | | | | | | | |
| 635A | **Leesville** | **95.87** | **60** | P | | **P** | **10 51 56.9** | **-0.1** |
| | baz=96 | | | | | | | | |
| MKAR | **Makanchi Array** | **112.60** | **312** | PKiKP | | **PKiKP** | **10 57 01.9** | **-1.2** |
| | comp=Z,0.4nm,0.5s,baz=90,slow=0.9,SNR=4.9 | | | | | | | | |
| MKAR | | | | PKKPbc | | **PKKPbc** | **11 07 53.5** | **-0.7** |
| | comp=Z,0.8nm,0.6s,baz=288,slow=4.1,SNR=8.5 | | | | | | | | |
| KSH | **Kashi** | **115.57** | **304** | *e*PKP | | **PKPdf** | **10 57 13.0** | **+3.8** |
| KSH | | | | *es*PKP | | | 10 59 53.5 | | |
| KSH | | | | SKS | | **SKSdf** | **11 03 38.5** | **+5.4** |
| KSH | | | | PPMZ | | | | | |
| | comp=Z,83nm,4.8s | | | | | | | | |
| KKAR | **Karatay Array** | **120.22** | **307** | *e*PKiKP | | **PKPdf** | **10 57 16.6** | **-1.3** |
| KKAR | **Karatay Array** | **120.22** | **307** | *e*PKPdf | | **PKPdf** | **10 57 16.6** | **-1.3** |
| BOSA | **Boshof** | **121.35** | **206** | PKP | | **PKPdf** | **10 57 20.2** | **-0.6** |
| | comp=Z,2.5nm,0.7s,baz=276,slow=4.0,SNR=4.1 | | | | | | | | |
| GEYT | **Alibeck** | **129.19** | **300** | SKPbc | | SKPbc | 11 00 09.7 | +0.6 |
| | comp=Z,2.7nm,0.5s,baz=166,slow=1.2,SNR=4.3 | | | | | | | | |
| ARCES | **ARCESS Array B** | **132.81** | **348** | PKP | | **PKPdf** | **10 57 40.5** | **-0.7** |
| | comp=Z,3.0nm,0.6s,baz=86,slow=1.7,SNR=17 | | | | | | | | |
| ARCES | | | | SKPbc | | **SKPbc** | **11 00 21.6** | **+0.6** |
| | comp=Z,5.6nm,0.8s,baz=2.0,slow=3.3,SNR=9.9 | | | | | | | | |
| FINES | **FINESS Array B** | **139.30** | **341** | PKhKP | | PKPpre | 10 57 45.5 | | |
| | comp=Z,1.4nm,0.7s,baz=92,slow=2.8,SNR=6.7 | | | | | | | | |
| FINES | | | | PKP | | **PKPdf** | **10 57 51.6** | **-1.7** |
| | comp=Z,1.2nm,0.5s,baz=118,slow=2.4,SNR=7.8 | | | | | | | | |
| FINES | | | | SKPbc | | **SKPbc** | **11 00 41.2** | **+0.5** |
| | comp=Z,6.9nm,0.5s,baz=61,slow=3.2,SNR=47 | | | | | | | | |
| NB2 | **NORSAR Subarra** | **143.03** | **351** | PKP | | PKPab | 10 57 57.0 | -0.5 |
| | comp=Z,6.6nm,1.1s,baz=16,slow=3.2 | | | | | | | | |
| NOA | **NORSAR Array B** | **143.03** | **351** | PKhKP | | PKPpre | 10 57 56.5 | | |
| | comp=Z,3.2nm,0.8s,baz=15,slow=2.4,SNR=6.9 | | | | | | | | |
| NOA | | | | SKPbc | | **SKiKP** | **11 00 51.1** | **-0.2** |
| | comp=Z,3.1nm,0.8s,baz=15,slow=4.2,SNR=5.8 | | | | | | | | |
| AKASG | **Malin Array Be** | **145.64** | **326** | PKPbc | | **PKPdf** | **10 58 04.9** | **+0.1** |
| | comp=Z,1.8nm,0.5s,baz=45,slow=4.3,SNR=11 | | | | | | | | |
| AKASG | | | | SKPbc | | **SKiKP** | **11 00 57.4** | **+0.4** |
| | comp=Z,2.2nm,0.5s,baz=49,slow=3.0,SNR=7.0 | | | | | | | | |
| BRTR | **Keskin Array B** | **147.92** | **306** | PKPbc | | **PKPdf** | **10 58 10.4** | **+1.3** |
| | comp=Z,1.9nm,0.7s,baz=139,slow=4.1,SNR=7.5 | | | | | | | | |
| BRTR | | | | PKPab | | **PKPab** | **10 58 16.9** | **-0.5** |
| | comp=Z,2.7nm,0.6s,baz=98,slow=3.3,SNR=10 | | | | | | | | |
| LVV | **L'vov** | **148.75** | **329** | *e*PKiKP | | **PKPdf** | **10 58 06.8** | **-3.2** |
| KWP | **Kalwaria Pacla** | **149.49** | **330** | *e*PKP | | **PKPbc** | **10 58 16.4** | **+0.1** |
| KWP | **Kalwaria Pacla** | **149.49** | **330** | *e*PKHKP | | **PKPbc** | **10 58 16.5** | **+0.1** |
| KOLS | **Kolonicke sedl** | **150.19** | **329** | *e*PKiKP | | **PKPbc** | **10 58 18.3** | **+0.3** |
| KOLS | **Kolonicke sedl** | **150.19** | **329** | *e*PKP | | **PKPbc** | **10 58 18.3** | **+0.3** |
| STHS | **Stebnicka Huta** | **150.30** | **331** | *e*PKiKP | | **PKPbc** | **10 58 18.7** | **+0.4** |
| STHS | **Stebnicka Huta** | **150.30** | **331** | *e*PKP | | **PKPbc** | **10 58 18.6** | **+0.3** |
| OJC | **Ojcow** | **150.31** | **333** | *e*PKP | | **PKPbc** | **10 58 17.9** | **-0.3** |
| OJC | **Ojcow** | **150.31** | **333** | *e*PKiKP | | **PKPbc** | **10 58 18.0** | **-0.3** |
| NIE | **Niedzica** | **150.71** | **332** | *e*PKP | | **PKPbc** | **10 58 19.7** | **+0.5** |
| NIE | **Niedzica** | **150.71** | **332** | *e*PKiKP | | **PKPbc** | **10 58 19.7** | **+0.5** |
| KSP | **Ksiaz** | **151.11** | **338** | *e*PKP | | **PKPbc** | **10 58 20.1** | **+0.1** |
| KSP | **Ksiaz** | **151.11** | **338** | *e*PKiKP | | **PKPbc** | **10 58 20.1** | **+0.1** |
| LANS | **Liptovska Anna** | **151.27** | **332** | *e*PKiKP | | **PKPbc** | **10 58 21.4** | **+0.9** |
| LANS | **Liptovska Anna** | **151.27** | **332** | *e*PKP | | **PKPbc** | **10 58 21.4** | **+0.9** |
| CLL | **Collm** | **151.73** | **342**⇑ | *i*PKiKP | | **PKPbc** | **10 58 21.1** | **-0.3** |
| CLL | | | | pmax | | pmax | | | |
| | comp=Z,13nm,0.8s | | | | | | | | |
| CLL | **Collm** | **151.73** | **342**⇑ | *i*PKPbc | | **PKPbc** | **10 58 21.1** | **-0.3** |
| | comp=Z,13nm,0.8s | | | | | | | | |
| BRG | **Berggiesshubel** | **151.84** | **341** | *e*PKP | | **PKPbc** | **10 58 21.3** | **-0.4** |
| | comp=Z,6.9nm,0.5s | | | | | | | | |
| BRG | **Berggiesshubel** | **151.84** | **341** | *e*PKiKP | | **PKPbc** | **10 58 21.3** | **-0.4** |
| BRG | | | | pmax | | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | | |
| KIC | **Kosan Boka** | **161.07** | **166** | *e*PKP1 | | **PKPab** | **10 59 13.9** | **0.0** |
| | comp=Z,12nm,0.7s | | | | | | | | |
| TIC | **Toumodi** | **161.29** | **165** | *e*PKP1 | | **PKPab** | **10 59 14.6** | **-0.2** |
| DBIC | **Dimbokro** | **161.35** | **166** | PKPab | | **PKPab** | **10 59 15.2** | **+0.2** |
| | comp=Z,4.2nm,0.7s,baz=168,slow=3.0,SNR=5.9 | | | | | | | | |
| TOA0 | **Torodi Ar. Sit** | **168.13** | **190** | *e*PKP1 | | **PKPab** | **10 59 44.4** | **-0.5** |
| TORD | **Torodi Ar. Bea** | **168.13** | **190** | PKP | | **PKPdf** | **10 58 32.5** | **-1.1** |
| | comp=Z,1.0nm,0.7s,baz=348,slow=0.8,SNR=8.3 | | | | | | | | |
| TORD | | | | PKPab | | **PKPab** | **10 59 44.6** | **-0.3** |
| | comp=Z,3.3nm,0.8s,baz=194,slow=5.2,SNR=16 | | | | | | | | |

**MAN 30 10:49:46,14°.07N×120°.40E,h72km,mb4.4,ML3.2,MS3.1, 2C-1D,Luzon**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | | Op | ISC | h m s | ISC |
| LUBP | **Lubang** | **0.37** | **204** | *e*P | | Pn | 10 50 01.1 | +3.2 |
| TGY | **Tagaytay City** | **0.52** | **87**⇓ | *e*P | | Pn | 10 50 03.2 | +3.9 |
| TGY | | | | *e*S | | Sn | 10 50 12.7 | +3.6 |
| PGP | **Puerto Galera** | **0.78** | **137**⇓ | *e*P | | Pn | 10 50 04.7 | +2.7 |
| PGP | | | | *i*S | | Sn | 10 50 17.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RAMN** | **Ramite** | **16.90** | **97** | *e*P | **Pn** | **11 46 37.8** | **-0.2** |
| **ODAN** | **Odare** | **17.60** | **97** | *e*P | **P** | **11 46 48.1** | **+0.4** |
| **TAPN** | **Taplejung** | **17.75** | **95** | *e*P | **P** | **11 46 49.4** | **0.0** |
| **MKAR** | **Makanchi Array** | **19.82** | **31** | P | **P** | **11 47 12.3** | **+0.5** |
| | 0.2nm,0.3s,baz=209,slow=9.7,SNR=8.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **26.52** | **23** | P | **P** | **11 48 21.4** | **+2.9** |
| | 1.4nm,0.6s,baz=234,slow=12,SNR=3.4 | | | | | | |
| **ARCES** | **ARCESS Array B** | **45.81** | **341** | P | **P** | **11 51 00.6** | **-2.1** |
| | 1.1nm,0.8s,baz=108,slow=6.5,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **62.91** | **270** | P | **P** | **11 53 08.5** | **+0.6** |
| | 0.4nm,0.7s,baz=60,slow=5.3,SNR=2.7 | | | | | | |

*ISCJB* ***30*** *11:49:32.5±2.2,41.2°N±0.1°×39.05°E±0.07°,h9km,Error ellipse: s-maj=17.5km s-min=6.9km az=169.6*
*DDA* ***30*** *11:49:33.2,41.24°N×39.00°E,h10km,Md2.6*
*CSEM* ***30*** *11:49:34.0±1.1,41.12°N×39.07°E,h10km,MD2.6,Error ellipse: s-maj=22.5km s-min=8.5km az=171.0*

**ISC 30 11:49:34.4±1.8, 41°09N±0°09×39°11E±0°04, h9km, n12, σ0s62/18, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **ESPY** | **Espiye-Giresun** | **0.34** | **240** | *e*PG | | **Pg** | | **11 49 41.0** | **0.0** |
| **ESPY** | **Espiye-Giresun** | **0.34** | **240** | *e*Pg | | **Pg** | | **11 49 41.0** | **0.0** |
| **MACK** | **Trabzon** | **0.52** | **106** | *i*P | | **Pb** | | **11 49 45.5** | **-0.2** |
| MACK | | | | *i*S | | **Sb** | | **11 49 54.5** | **+1.1** |
| **MACK** | **Trabzon** | **0.52** | **106** | P | | **Pb** | | **11 49 45.5** | **-0.2** |
| MACK | | | | S | | **Sb** | | **11 49 54.5** | **+1.1** |
| **GUMT** | **Gumushane** | **0.69** | **156** | *e*PG | | **Pg** | | **11 49 47.4** | **-0.3** |
| **GUMT** | **Gumushane** | **0.69** | **156** | *e*Pg | | **Pg** | | **11 49 47.4** | **-0.3** |
| **KELT** | **Kelkit** | **0.94** | **173** | *i*P | | **Pb** | | **11 49 53.6** | **+0.6** |
| KELT | | | | *i*S | | **Sn** | | **11 50 07.1** | **-0.7** |
| **KELT** | **Kelkit** | **0.94** | **173** | P | | **Pb** | | **11 49 53.6** | **+0.6** |
| KELT | | | | S | | **Sn** | | **11 50 07.1** | **-0.7** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **1.05** | **131** | *e*PG | | **Pg** | | **11 49 54.1** | **-0.4** |
| **BAYT** | **Ayd¯–ntepe-Bay** | **1.05** | **131** | *e*Pg | | **Pg** | | **11 49 54.1** | **-0.4** |
| **SUSE** | **Susehri** | **1.12** | **218** | *i*P | | **Pg** | | **11 49 55.2** | **-0.6** |
| SUSE | | | | *i*S | | **Sb** | | **11 50 11.0** | **+0.4** |
| **SUSE** | **Susehri** | **1.12** | **218** | P | | **Pg** | | **11 49 55.2** | **-0.6** |
| SUSE | | | | S | | **Sb** | | **11 50 11.0** | **+0.4** |

*AWI* ***30*** *11:54:50.1,55.58°×27.16°W*
*ISCJB* ***30*** *11:55:00.5±0.5,56.16°S±0.09°×27.5°W±0.2,h112km, mb4.3/11,Error ellipse: s-maj=15.7km s-min=10.8km az=137.8*
*NEIC* ***30*** *11:55:03.2±0.3,56.19°S×27.47°W,mb4.3/5,Error ellipse: s-maj=11.5km s-min=8.8km az=48.0*
*IDC* ***30*** *11:55:03.6±5.2,56.10°S×27.30°W,h123km±47km,mb3.9/9, mb1 4.0/10,mb1mx3.8/18,mbtmp4.3/10,Error ellipse: s-maj=21.3km s-min=14.7km az=67.0*

**ISC 30 11:55:02.3±0.5, 56.16°S±0.10°×27.4°W±0.1, h112km, n29, σ1s07/29, mb4.2/11, South Sandwich Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **VNA2** | **Neumayer--Watz** | **17.13** | **158** | P | | P | P | 11 58 40.7 | -14 |
| | baz=312,slow=11 | | | | | | | | |
| **EFI** | **East Falkland** | **18.52** | **271** | *e*P | | **P** | **P** | **11 59 09.5** | **-0.1** |
| | 2.7nm,0.4s | | | | | | | | |
| **SNAA** | **Sanae** | **18.69** | **156** | P | | **P** | **P** | **11 59 11.5** | **+0.1** |
| **SNAA** | **Sanae** | **18.69** | **156** | P | | **P** | **P** | **11 59 11.8** | **+0.4** |
| | 1.6nm,0.3s,baz=306,slow=10,SNR=85 | | | | | | | | |
| **SNAA** | **Sanae** | **18.69** | **156** | P | | **P** | **P** | **11 59 11.8** | **+0.4** |
| | 0.4nm,0.5s | | | | | | | | |
| **PMSA** | **Palmer Station** | **19.74** | **229** | *e*P | | **P** | **P** | **11 59 20.0** | **-2.8** |
| | 423nm,1.5s | | | | | | | | |
| **TRQA** | **Tornquist** | **29.26** | **294** | *e*P | | **P** | **P** | **12 00 53.4** | **-0.2** |
| | 48nm,1.9s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.09** | **180** | P | | **P** | **P** | **12 01 36.4** | **+0.6** |
| | 2.6nm,0.6s,baz=198,slow=1.8,SNR=36 | | | | | | | | |
| **QSPA** | **South Pole Qui** | **34.09** | **180** | *e*P | | **P** | **P** | **12 01 35.9** | **+0.2** |
| | 2.4nm,0.6s | | | | | | | | |
| QSPA | | | | *e*PP | | **PP** | **PP** | **12 02 55.9** | **+1.1** |
| QSPA | | | | *e*PcP | | **PcP** | **PcP** | **12 04 09.9** | **-0.5** |
| **CPUP** | **Villa Florida** | **36.80** | **312** | P | | **P** | **P** | **12 01 58.6** | **-0.5** |
| | 0.9nm,0.5s,baz=103,slow=14,SNR=2.9 | | | | | | | | |
| **MAW** | **Mawson** | **40.13** | **144** | P | | **P** | **P** | **12 02 26.5** | **+0.1** |
| | 2.1nm,0.4s,baz=196,slow=9.1,SNR=6.5 | | | | | | | | |
| **LVC** | **Limon Verde** | **45.26** | **300** | *e*P | | **P** | **P** | **12 03 09.4** | **+0.7** |
| | 12nm,0.8s | | | | | | | | |
| **BOSA** | **Boshof** | **46.11** | **76** | P | | **P** | **P** | **12 03 15.4** | **+0.2** |
| | 3.5nm,0.9s,baz=271,slow=1.4,SNR=4.1 | | | | | | | | |
| **VNDA** | **Vanda** | **46.45** | **183** | P | | **P** | **P** | **12 03 18.4** | **+1.2** |
| | 2.3nm,0.8s,baz=185,slow=6.8,SNR=19 | | | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **48.14** | **17** | T | | T | T | 12 55 27.5 | |
| | baz=189,slow=75,SNR=5.8 | | | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **48.15** | **17** | T | | T | T | 12 55 19.9 | |
| | baz=189,slow=75,SNR=7.1 | | | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **48.16** | **17** | T | | T | T | 12 55 30.5 | |
| | baz=189,slow=75,SNR=5.8 | | | | | | | | |
| **LPAZ** | **La Paz** | **50.35** | **306** | P | | **P** | **P** | **12 03 49.0** | **+0.5** |
| | 2.1nm,0.3s,baz=127,slow=3.6,SNR=24 | | | | | | | | |
| LPAZ | | | | pP | | **pP** | **pP** | **12 04 17.7** | **+2.9** |
| | 1.4nm,0.6s,baz=172,slow=2.3,SNR=4.0 | | | | | | | | |
| **SAML** | **Samuel** | **54.80** | **315** | *e*P | | **P** | **P** | **12 04 19.9** | **-0.6** |
| SAML | | | | *e*pP | | **pP** | **pP** | **12 04 49.1** | **+1.9** |
| **DBIC** | **Dimbokro** | **65.32** | **25** | P | | **P** | **P** | **12 05 31.4** | **-0.8** |
| | 1.6nm,0.7s,baz=175,slow=12,SNR=3.2 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **73.21** | **30** | P | | **P** | **P** | **12 06 21.1** | **+0.3** |
| | 2.3nm,0.5s,baz=198,slow=6.3,SNR=15 | | | | | | | | |
| **ASAR** | **Alice Springs** | **98.92** | **163** | P | | **P** | **P** | **12 08 29.0** | **-0.9** |
| | 0.5nm,0.6s,baz=187,slow=3.9,SNR=11 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **121.33** | **293** | PKP | | **PKPdf** | **PKPdf** | **12 13 42.2** | **+0.5** |
| | 0.3nm,0.5s,baz=71,slow=3.9,SNR=2.8 | | | | | | | | |
| **FINES** | **FINESS Array B** | **124.54** | **28** | PKP | | **PKPdf** | **PKPdf** | **12 13 45.8** | **-1.0** |
| | 1.8nm,0.5s,baz=170,slow=3.5,SNR=11 | | | | | | | | |
| **ARCES** | **ARCESS Array B** | **131.09** | **22** | PKP | | **PKPdf** | **PKPdf** | **12 13 58.3** | **-0.8** |
| | 0.9nm,0.6s,baz=316,slow=5.1,SNR=4.7 | | | | | | | | |
| **ILAR** | **Eielson Array** | **150.10** | **312** | PKPbc | | **PKPbc** | **PKPbc** | **12 14 37.9** | **-0.4** |
| | 2.6nm,0.8s,baz=137,slow=3.2,SNR=36 | | | | | | | | |
| ILAR | | | | pPKPbc | | **pPKPbc** | **pPKPbc** | **12 15 08.7** | **+0.2** |
| | 1.6nm,0.8s,baz=144,slow=2.5,SNR=8.0 | | | | | | | | |
| **SONM** | **Songino Array** | **150.85** | **87** | PKPbc | | **PKPbc** | **PKPbc** | **12 14 39.9** | **-0.9** |
| | 3.1nm,0.6s,baz=224,slow=3.3,SNR=16 | | | | | | | | |
| **BPAW** | **Bear Paw Mtn.** | **151.71** | **309** | *e*PKPbc | | **PKPbc** | **PKPbc** | **12 14 41.6** | **-0.5** |
| **JHJ2** | **Mitsune** | **155.30** | **154** | *e*PKPbc | | PKPdf | PKPdf | 12 14 49.6 | +7.9 |

**NNC 30 12:02:15.2±0.9, 40°96N×69°80E, h0km, mb3.5, mpv3.1, 5C-7D, Error ellipse: s-maj=10.2km s-min=5.9km az=117.0, Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KK31** | **Karatay Array** | **2.21** | **14** | ⇑P | | g | P | 12 02 55.7 | -0.4 |
| | 4.6nm,0.2s,baz=197,slow=16,SNR=262 | | | | | | | | |
| KK31 | | | | ⇑L | | g | L | 12 03 26.5 | |
| | 31nm,0.5s,baz=198,slow=26,SNR=20 | | | | | | | | |
| **DZET** | **Dzherino** | **2.27** | **200** | ⇑P | | g | P | 12 02 57.0 | -0.3 |
| | 4.3nm,0.3s | | | | | | | | |
| DZET | | | | ⇓L | | g | L | 12 03 29.0 | |
| | 31nm,0.5s | | | | | | | | |
| **MNAS** | **Manas** | **2.54** | **52** | ⇓P | | g | P | 12 03 01.2 | -0.6 |
| | 3.3nm,0.3s | | | | | | | | |
| MNAS | | | | ⇑L | | g | L | 12 03 36.3 | |
| | 8.1nm,0.5s | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.97** | **107** | ⇓P | | g | P | 12 03 08.1 | -1.2 |
| | 1.6nm,0.3s | | | | | | | | |
| SFK | | | | ⇓L | | g | L | 12 03 48.4 | |
| | 9.8nm,0.5s | | | | | | | | |
| **AAK** | **Ala-Archa** | **3.89** | **63** | ⇑P | | g | P | 12 03 27.2 | +2.3 |
| | 2.2nm,0.3s | | | | | | | | |
| AAK | | | | ⇓L | | g | L | 12 04 18.6 | |
| | 6.1nm,0.6s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **4.75** | **64** | Pg | | Pg | Pg | 12 03 43.0 | -3.4 |
| | 3.6nm,0.8s | | | | | | | | |
| TKM2 | | | | ⇓L | | g | L | 12 04 46.6 | |
| | 7.9nm,0.9s | | | | | | | | |
| **AB31** | **Akbulak array** | **10.83** | **323** | ⇓Pn | | Pn | Pn | 12 04 47.7 | -3.6 |
| | 0.4nm,0.6s,baz=133,slow=15,SNR=6.9 | | | | | | | | |

**IDC 30 12:08:24.2±2.1, 0.71N×127.56E, h0km, mb3.4/3, mb1 3.7/3, mb1mx3.4/22, mbtmp3.5/3, MS2.8/1, Ms1 2.8/1, ms1mx2.3/21, Error ellipse: s-min=25.1km az=67.0, Halmahera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **11.52** | **200** | | | LR | LR | 12 16 31.1 | |
| | comp=Z,42nm,18.1s,slow=42 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **21.57** | **162** | P | | P | P | 12 13 14.8 | -0.8 |
| | 1.2nm,0.6s,baz=341,slow=11,SNR=5.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **25.00** | **166** | P | | P | P | 12 13 50.5 | +0.5 |
| | 1.2nm,0.7s,baz=348,slow=12,SNR=19 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.50** | **326** | P | | P | P | 12 18 36.0 | -0.1 |
| | 0.1nm,0.3s,baz=114,slow=8.5,SNR=2.3 | | | | | | | | |

*IDC* ***30*** *12:16:29.4±1.6,0.49°S×132.89°E,h0km,mb3.5/2, mb1 3.8/3,mb1mx3.4/32,mbtmp3.5/3,ML3.7/1,MS2.8/1, Ms1 2.8/1,ms1mx2.3/18,Error ellipse: s-maj=26.2km s-min=17.2km az=177.0*
*DJA* ***30*** *12:16:35.8±0.5,1°S±5°×13°E±°,h10km,M4.2/7,mb4.6/2, MLv3.9/7*

**ISC 30 12:16:31.0±3.2, 0.5S±0.2°×132.9E±0.2, h10km, n10, σ0s82/10, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SIJI** | **Sorong** | **1.70** | **257** | Pg | | **Pn** | | **12 17 00.8** | **+0.1** |
| | 52nm,0.3s,baz=49,slow=13,SNR=168 | | | | | | | | |
| SIJI | | | | Lg | | Lg | | 12 17 21.5 | |
| | 60nm,0.3s,baz=347,slow=17,SNR=7.0 | | | | | | | | |
| **SWI** | **Sorong** | **1.71** | **257** | P | | **Pn** | | **12 17 00.4** | **-0.4** |
| SWI | | | | S | | **Sn** | | **12 17 22.4** | **-0.3** |
| **FAKI** | **Fak Fak** | **2.52** | **195** | P | | **Pn** | | **12 17 12.5** | **+0.4** |
| FAKI | | | | S | | **Sn** | | **12 17 41.7** | **-1.2** |
| **MSAI** | **Masohi** | **4.91** | **234** | P | | **Pn** | | **12 17 45.7** | **+0.8** |
| **BNDI** | **Bandanaira** | **5.03** | **217** | P | | **Pn** | | **12 17 47.4** | **+0.9** |
| **AAI** | **Ambon** | **5.70** | **236** | P | | **Pn** | | **12 17 56.9** | **+1.1** |
| | 46nm,0.8s,0.2nm | | | | | | | | |
| **PMG** | **Port Moresby** | **16.72** | **122** | LR | | LR | | 12 28 25.1 | |
| | comp=Z,29nm,18.6s,baz=188,slow=43 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.40** | **176** | P | | **P** | | **12 20 57.2** | **-0.1** |
| | 0.2nm,0.3s,baz=355,slow=12,SNR=8.5 | | | | | | | | |
| **ASAR** | **Alice Springs** | **23.08** | **178** | P | | **P** | | **12 21 36.6** | **-0.4** |
| | 1.6nm,0.6s,baz=3.6,slow=10,SNR=39 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **64.54** | **324** | P | | P | | 12 27 08.3 | -0.1 |
| | 0.1nm,0.3s,baz=120,slow=5.7,SNR=2.5 | | | | | | | | |

*NSSC* ***30*** *12:18:30.1±1.0,36.44°N×36.79°E,h0km±13km,ML1.9*
*CSEM* ***30*** *12:18:32.0±0.5,36.33°N×36.87°E,h2km,MD3.0,Error ellipse: s-maj=16.4km s-min=9.1km az=115.0*
*DDA* ***30*** *12:18:32.9,36.51°N×36.76°E,h5km,Md3.0*

**ISC 30 12:18:30.9±1.2, 36°39N±0°03×36°80E±0°05, h2km±11km, n15, σ0s78/30, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **KUZU** | **Kuzuini** | **0.44** | **30** | *i*P | | **Pg** | | **12 18 39.2** | **-0.2** |
| KUZU | | | | *i*S | | **Sb** | | **12 18 47.5** | **-1.1** |
| **KUZU** | **Kuzuini** | **0.44** | **30** | P | | **Pg** | | **12 18 39.2** | **-0.2** |
| KUZU | | | | S | | **Sb** | | **12 18 47.5** | **-1.1** |
| **YAYL** | **Yayladag** | **0.67** | **238** | *i*P | | **Pb** | | **12 18 46.2** | **+0.9** |
| YAYL | | | | *i*S | | **Sn** | | **12 18 59.0** | **+0.5** |
| **YAYL** | **Yayladag** | **0.67** | **238** | P | | **Pb** | | **12 18 46.2** | **+0.9** |
| YAYL | | | | S | | **Sn** | | **12 18 59.0** | **+0.5** |
| **WRDH** | **Warideh** | **0.94** | **200** | *e*P | | **Pg** | | **12 18 48.5** | **-0.4** |
| WRDH | | | | *i*S | | **Sb** | | **12 19 02.8** | **0.0** |
| WRDH | | | | AML | | AML | | 12 19 11.8 | |
| | comp=N,29nm,0.5s | | | | | | | | |
| **WRDH** | **Warideh** | **0.94** | **200** | *e*P | | **Pg** | | **12 18 48.5** | **-0.4** |
| WRDH | | | | *i*S | | **Sb** | | **12 19 02.8** | **0.0** |
| | comp=N,29nm,0.5s | | | | | | | | |
| **HCB** | **Kahramanmara¯** | **0.96** | **5** | P | | **Pb** | | **12 18 50.4** | **+0.2** |
| HCB | | | | S | | **Sn** | | **12 19 05.3** | **-0.6** |
| **BIDA** | **Albida** | **1.43** | **196** | *e*P | | **Pn** | | **12 18 56.3** | **-1.6** |
| BIDA | | | | *i*S | | **Sg** | | **12 19 16.3** | **-0.5** |
| BIDA | | | | AML | | AML | | 12 19 23.1 | |
| | comp=E,45nm,0.3s | | | | | | | | |
| BIDA | | | | AML | | AML | | 12 19 23.6 | |
| | comp=N,22nm,0.3s | | | | | | | | |
| **BIDA** | **Albida** | **1.43** | **196** | *e*P | | **Pn** | | **12 18 56.3** | **-1.6** |
| BIDA | | | | *i*S | | **Sg** | | **12 19 16.3** | **-0.5** |
| | comp=N,22nm,0.3s | | | | | | | | |
| **JHLN** | **Al Jahlan** | **1.51** | **118** | *e*P | | **Pn** | | **12 18 58.7** | **-0.3** |
| JHLN | | | | *i*S | | **Sb** | | **12 19 18.5** | **-0.7** |
| **JHLN** | **Al Jahlan** | **1.51** | **118** | *e*P | | **Pn** | | **12 18 58.7** | **-0.3** |
| JHLN | | | | *i*S | | **Sb** | | **12 19 18.5** | **-0.7** |
| **AKCD** | **Akcadag** | **2.10** | **25** | *i*P | | **Pg** | | **12 19 11.3** | **+0.1** |
| AKCD | | | | *i*S | | **Sg** | | **12 19 39.4** | **+0.9** |
| **AKCD** | **Akcadag** | **2.10** | **25** | P | | **Pg** | | **12 19 11.3** | **+0.1** |
| AKCD | | | | S | | **Sg** | | **12 19 39.4** | **+0.9** |
| **ROOS** | **tl_alroos** | **2.25** | **170** | *e*P | | **Pn** | | **12 19 10.2** | **+0.9** |
| ROOS | | | | *i*S | | **Sn** | | **12 19 38.2** | **+0.6** |
| **ROOS** | **tl_alroos** | **2.25** | **170** | *e*P | | **Pn** | | **12 19 10.2** | **+0.9** |
| ROOS | | | | *i*S | | **Sn** | | **12 19 38.2** | **+0.6** |

**NEIC 30 12:23:05.8, 51.12N×179.30W, h25km, ML3.5**(AEIC), **After AEIC., Andreanof Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **GALAA** | **Gareloi Lava P** | **0.72** | **27** | P | | P | Pb | 12 23 19.6 | -0.2 |
| **GAEA** | **Gareloi East** | **0.75** | **27** | P | | P | Pb | 12 23 19.8 | -0.4 |
| **GANE** | **Gareloi Northe** | **0.77** | **25** | P | | P | Pb | 12 23 20.0 | -0.6 |
| **AMKA** | **Amchitka** | **0.92** | **287** | P | | P | Pb | 12 23 22.5 | -0.5 |
| AMKA | | | | S | | S | Sb | 12 23 34.7 | -0.1 |
| **CERAA** | **Semis' Rag'd T** | **1.01** | **322** | P | | P | Pb | 12 23 24.6 | 0.0 |
| **CERB** | **Semis' Cerberu** | **1.05** | **321** | P | | P | Pb | 12 23 25.1 | +0.1 |
| CERB | | | | S | | S | Sn | 12 23 39.6 | +0.7 |
| **TASE** | **Tanaga Southea** | **1.06** | **47** | P | | P | Pn | 12 23 24.6 | -0.6 |
| **TAFL** | **Tanaga Flats** | **1.08** | **53** | P | | P | Pn | 12 23 24.7 | -0.7 |
| **TAFP** | **Tanaga Falls P** | **1.13** | **46** | P | | P | Pn | 12 23 25.2 | -0.9 |
| **TAPA** | **Tanaga Point A** | **1.16** | **53** | P | | P | Pn | 12 23 25.8 | -0.7 |
| **KIKV** | **Kanaga Island** | **1.53** | **59** | P | | P | Pn | 12 23 31.7 | +0.2 |
| KIKV | | | | S | | S | Sb | 12 23 51.7 | -0.8 |
| **KIRH** | **Kanaga Island** | **1.58** | **60** | P | | P | Pn | 12 23 32.0 | -0.3 |
| **ADAG** | **Mount Adagdak** | **1.89** | **62** | P | | P | Pn | 12 23 36.8 | +0.3 |
| **ETKA** | **Kagalaska Isla** | **1.96** | **67** | P | | P | Pn | 12 23 37.1 | -0.2 |
| **GSCK** | **Great Sitkin C** | **2.15** | **64** | P | | P | Pn | 12 23 40.8 | +0.7 |
| **GSTD** | **Great Sitkin T** | **2.18** | **63** | P | | P | Pn | 12 23 41.5 | +0.9 |
| GSTD | | | | S | | S | Sn | 12 24 08.6 | +1.8 |
| **GSMY** | **Great Sitkin M** | **2.22** | **64** | P | | P | Pn | 12 23 41.7 | +0.6 |
| **GSTR** | **Great Sitkin T** | **2.24** | **63** | *e*Pn | | P | Pn | 12 23 40.9 | -0.4 |
| GSTR | | | | *e*Sn | | S | Sb | 12 24 10.6 | -2.4 |
| **KOWE** | **Korovin West** | **3.38** | **66** | P | | P | Pn | 12 23 58.4 | +1.5 |
| **KOFP** | **Korovin Flat P** | **3.44** | **68** | P | | P | Pn | 12 23 59.0 | +1.3 |

**IDC 30 12:36:15.7±999.0, 54.21N×48.53E, h0km, Error ellipse: s-maj=504.2km s-min=157.4km az=110.0, Baltic States - Belarus - Northwestern Russia**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **I31KZ** | **AKTYUBINSK INF** | **6.96** | **119** | *i* | | | | 13 21 30.0 | |
| | baz=306,slow=316,SNR=2.6 | | | | | | | | |
| **I46RU** | **ZALESOVO INFRA** | **21.15** | **76** | *i* | | | | 14 45 20.0 | |
| | baz=285,slow=323,SNR=0.7 | | | | | | | | |
| **I34MN** | **SONGINO INFRAS** | **36.07** | **76** | *i* | | | | 16 15 40.0 | |
| | baz=301,slow=327,SNR=0.4 | | | | | | | | |

**CASC 30 13:20:39.4±1.1, 13.31N×89.59W, h48km±12km, MD3.7, ML4.3, 2D, El Salvador**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **SNET** | **Serv Nac Est T** | **0.51** | **42** | *e*P | | Pn | | 13 20 51.0 | +0.2 |
| SNET | | | | *e*P | | Pn | | 13 20 51.0 | +0.2 |
| SNET | | | | AML | | AML | | 13 21 02.9 | |
| | comp=Z,15μm,0.2s | | | | | | | | |
| **BOQS** | **Boqueron** | **0.52** | **35** | *e*P | | Pn | | 13 20 51.5 | +0.4 |
| BOQS | | | | ⇓*i*P | | Pn | | 13 20 51.6 | +0.4 |
| BOQS | | | | *e*S | | Sn | | 13 21 00.3 | +0.8 |
| **SBLS** | **San Blas** | **0.53** | **356** | *e*P | | Pn | | 13 20 51.2 | 0.0 |
| SBLS | | | | *e*P | | Pn | | 13 20 51.3 | 0.0 |
| **SNJE** | **San Jose** | **0.56** | **358** | *e*P | | Pn | | 13 20 51.8 | +0.2 |
| SNJE | | | | *e*S | | Sn | | 13 21 00.9 | +0.6 |
| **RTR** | **El Retiro** | **0.59** | **354** | *e*P | | Pn | | 13 20 52.0 | +0.1 |
| **LFRS** | **El Faro** | **0.60** | **58** | *e*P | | Pn | | 13 20 51.7 | -0.3 |
| **LBRS** | **Las Brisas** | **0.68** | **51** | *e*P | | Pn | | 13 20 52.8 | -0.2 |
| **SNVI** | **San Vicente** | **0.79** | **67** | *e*P | | Pn | | 13 20 54.6 | +0.1 |
| SNVI | | | | *e*P | | Pn | | 13 20 54.6 | +0.1 |
| SNVI | | | | *e*S | | Sn | | 13 21 06.1 | +0.7 |
| **RBDL** | **Robledal** | **0.81** | **353** | ⇓*e*P | | Pn | | 13 20 54.7 | 0.0 |
| **VSM** | **San Miguel** | **1.28** | **85** | *e*P | | Pn | | 13 21 00.9 | -0.4 |
| VSM | | | | *e*P | | Pn | | 13 21 01.4 | +0.1 |
| VSM | | | | *e*S | | Sn | | 13 21 18.8 | +1.2 |
| **CAHU** | **Cacacuatique** | **1.41** | **71** | *e*P | | Pn | | 13 21 02.7 | -0.3 |
| CAHU | | | | *e*P | | Pn | | 13 21 02.8 | -0.2 |
| CAHU | | | | *e*S | | Sn | | 13 21 21.3 | +0.6 |
| CAHU | | | | *e*S | | Sn | | 13 21 22.1 | +1.4 |
| **PCG** | **Pacaya** | **1.47** | **318** | *e*P | | Pn | | 13 21 04.5 | +0.8 |
| PCG | | | | *e*S | | Sn | | 13 21 22.5 | +0.4 |
| **NBG** | **Las Nubes** | **1.47** | **330** | *e*P | | Pn | | 13 21 04.7 | +0.8 |
| **FUG** | **Fuego 3** | **1.67** | **313** | *e*P | | Pn | | 13 21 06.6 | +0.2 |
| **CNCH** | **Conchagua** | **1.71** | **91** | *e*P | | Pn | | 13 21 06.8 | -0.1 |
| **MRL** | **Marmol** | **1.75** | **357** | *e*P | | Pn | | 13 21 08.9 | +1.3 |
| **TGUH** | **Tegucigalpa,Un** | **2.37** | **71** | *e*P | | Pn | | 13 21 15.6 | -0.2 |

**DDA 30 13:23:20.3, 41.17N×32.51E, h7km, Md2.5, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **BCAM** | **Yenicaga** | **0.49** | **224** | P | | P | Pg | 13 23 29.6 | -0.4 |
| BCAM | | | | S | | S | Sg | 13 23 37.8 | +1.2 |
| **ILGA** | **Ilgaz** | **0.92** | **97** | P | | P | Pg | 13 23 38.1 | -0.1 |
| ILGA | | | | S | | S | Sn | 13 23 53.5 | -0.1 |
| **ELDT** | **Eldivan** | **0.97** | **134** | P | | P | Pg | 13 23 36.6 | -2.6 |
| ELDT | | | | S | | S | Sb | 13 23 52.9 | 0.0 |

*ISCJB* ***30*** *13:28:12.7±0.5,23.41S±0.04°×69.80W±0.06°,h65km±5km, mb3.9/7,Error ellipse: s-maj=9.2km s-min=6.4km az=18.3*
*NEIC* ***30*** *13:28:13.6±0.5,23.44S×69.81W,mb4.2/1,Error ellipse: s-maj=12.2km s-min=7.7km az=94.0*
*GUC* ***30*** *13:28:13.6±0.3,23.31S×69.82W,h60km±3km,ML4.3*
*IDC* ***30*** *13:28:14.1±0.8,23.46S×69.75W,h60km±6km,mb3.8/6, mb1 4.0/10,mb1mx3.8/23,mbtmp4.0/10,MS2.7/5, Ms1 2.8/5,ms1mx2.7/23,Error ellipse: s-maj=20.9km s-min=10.5km az=125.0*

**ISC 30 13:28:14.0±0.6, 23.34S±0.05×69.83W±0.06, h57km±6km, n31, σ1s37/36, mb4.1/7, Northern Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **PB06** | **IPOC Station P** | **0.67** | **21** | *e*P | | **Pn** | | **13 28 27.6** | **-0.4** |
| PB06 | | | | *e*S | | **Sn** | | **13 28 38.4** | **+0.4** |
| PB06 | | | | AML | | AML | | 13 28 39.6 | |
| | comp=N,17μm,0.8s | | | | | | | | |
| **PB10** | **IPOC Station P** | **0.69** | **255** | *e*P | | **Pn** | | **13 28 28.0** | **+0.1** |
| PB10 | | | | *e*S | | **Sn** | | **13 28 39.2** | **+1.1** |
| PB10 | | | | AML | | AML | | 13 28 41.7 | |
| | comp=E,58μm,0.3s | | | | | | | | |
| **PB04** | **IPOC Station P** | **1.04** | **343** | *e*P | | **Pn** | | **13 28 32.8** | **+0.1** |
| PB04 | | | | *e*S | | **Sn** | | **13 28 47.1** | **+0.6** |
| PB04 | | | | AML | | AML | | 13 28 51.2 | |
| | comp=E,7μm,0.5s | | | | | | | | |
| **LVC** | **Limon Verde** | **1.11** | **50** | P | | **Pn** | | **13 28 34.8** | **+1.1** |
| | comp=E,10μm,0.3s,baz=190,slow=8.6,SNR=4658 | | | | | | | | |
| LVC | | | | S | | **Sn** | | **13 28 49.5** | **+1.3** |
| | comp=E,81μm,0.3s,baz=1.7,slow=19,SNR=106 | | | | | | | | |
| LVC | | | | LR | | LR | | 13 29 06.7 | |
| | comp=E,2μm,19.8s,baz=270,slow=46 | | | | | | | | |
| **PB07** | **IPOC Station P** | **1.60** | **358** | *e*P | | **Pn** | | **13 28 40.3** | **0.0** |
| PB07 | | | | *e*S | | **Sn** | | **13 29 00.6** | **+0.6** |
| PB07 | | | | AML | | AML | | 13 29 08.3 | |
| | comp=E,3μm,7.9s | | | | | | | | |
| **PB01** | **IPOC Station P** | **2.31** | **8** | *e*P | | **Pn** | | **13 28 50.2** | **+0.5** |
| PB01 | | | | *e*S | | **Sn** | | **13 29 17.6** | **+0.6** |
| **LCO** | **Las Campanas** | **5.70** | **188** | Pn | | Pn | | **13 29 33.5** | **-2.9** |
| | comp=E,35nm,0.4s | | | | | | | | |
| **ARE** | **Arequipa** | **7.02** | **347** | *e*P | | **Pn** | | **13 29 55.0** | **+0.5** |
| ARE | | | | *e*S | | **Sn** | | **13 31 12.0** | **-1.1** |
| **LPAZ** | **La Paz** | **7.19** | **13** | P | | **Pn** | | **13 29 59.4** | **+2.2** |
| | comp=E,0.9nm,0.3s,baz=28,slow=0.9,SNR=18 | | | | | | | | |
| LPAZ | | | | LR | | LR | | 13 33 12.4 | |
| | comp=E,98nm,20.6s,baz=195,slow=41 | | | | | | | | |
| **CFAA** | **Coronel Fontan** | **8.36** | **171** | P | | **Pn** | | **13 30 11.2** | **-1.3** |
| | comp=E,0.1nm,0.3s,baz=356,slow=13,SNR=6.4 | | | | | | | | |
| CFAA | | | | S | | **Sn** | | **13 31 50.6** | **+5.2** |
| | comp=E,0.3nm,0.3s,baz=152,slow=15,SNR=6.2 | | | | | | | | |
| CFAA | | | | LR | | LR | | 13 33 10.9 | |
| | comp=E,7.7nm,19.9s,baz=14,slow=36 | | | | | | | | |
| **SIV** | **San Ignacio** | **11.02** | **50** | P | | **Pn** | | **13 30 48.1** | **-0.9** |
| | comp=E,4.9nm,0.3s,baz=252,slow=11,SNR=44 | | | | | | | | |
| SIV | | | | LR | | LR | | 13 34 52.9 | |
| | comp=E,38nm,18.1s,baz=328,sl

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | baz=4.2,SNR=12 | | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **4.13** | **271** | P | **Pn** | **13 32 52.0** | **-1.3** |
| **BATI** | **Baumata** | **5.52** | **108** | P | **Pn** | **13 33 10.6** | **-1.0** |
| | 18nm,0.3s,baz=293,slow=2.2,SNR=22 | | | | | | | |
| BATI | | | | S | **Sn** | **13 34 10.4** | **-4.0** |
| | 11nm,0.3s,baz=311,slow=23,SNR=6.8 | | | | | | | |
| **BATI** | **Baumata** | **5.52** | **108** | P | **Pn** | **13 33 10.6** | **-1.0** |
| **SOEI** | **Soe** | **5.99** | **102** | P | **Pn** | **13 33 17.0** | **-0.9** |
| | baz=5.9,SNR=7.7 | | | | | | | |
| **KNRA** | **Kununurra** | **12.42** | **126** | P | **Pn** | **13 34 40.9** | **-2.0** |
| | baz=12,SNR=26 | | | | | | | |
| **MTN** | **Manton Dam** | **13.29** | **110** | P | **Pn** | **13 34 52.8** | **-1.3** |
| | baz=13,SNR=10.0 | | | | | | | |
| **KDU** | **Kakadu** | **14.50** | **108** | P | **Pn** | **13 35 10.0** | **+0.6** |
| | baz=14,SNR=3.9 | | | | | | | |
| **FAKI** | **Fak Fak** | **14.93** | **69** | P | **Pn** | **13 35 15.1** | **+0.3** |
| | baz=15,SNR=4.1 | | | | | | | |
| **DAV** | **Davao City (W)** | **17.11** | **25** | LR | LR | 13 42 22.2 | | |
| | comp=Z,82nm,21.2s,baz=274,slow=37 | | | | | | | |
| **MEEK** | **Meekatharra** | **18.00** | **179** | P | Pn | 13 35 58.6 | +6.6 | |
| | baz=18,SNR=3.6 | | | | | | | |
| **WRKA** | **Warakurna** | **18.96** | **151** | P | **Pn** | **13 36 03.0** | **-0.3** |
| | baz=19,SNR=19 | | | | | | | |
| **WRA** | **Warramunga Arr** | **19.19** | **128** | P | **P** | **13 36 03.4** | **-0.1** |
| | 0.2nm,0.3s,baz=302,slow=12,SNR=6.5 | | | | | | | |
| WRA | | | | S | **S** | **13 39 32.0** | **-1.0** |
| | 0.2nm,0.3s,baz=302,slow=22,SNR=3.8 | | | | | | | |
| **ASAR** | **Alice Springs** | **21.18** | **137** | P | **P** | **13 36 25.8** | **+1.0** |
| | 0.7nm,0.5s,baz=314,slow=9.3,SNR=32 | | | | | | | |
| ASAR | | | | S | **S** | **13 40 17.1** | **+5.4** |
| | 0.3nm,0.7s,baz=306,slow=22,SNR=3.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **63.75** | **333** | P | **P** | **13 42 07.5** | **+0.6** |
| | 0.2nm,0.4s,baz=155,slow=7.8,SNR=4.8 | | | | | | | |

**IDC 30 14:02:46.0±8.6, 30°26S×178°04W, h0km, mb3.4/2, mb1 3.7/2, mb1mx3.5/18, mbtmp3.4/2, Error ellipse: s-maj=367.7km s-min=55.5km az=155.0, Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **43.08** | **267** | P | P | 14 10 46.5 | -1.5 |
| | 0.2nm,0.5s,baz=106,slow=7.2,SNR=7.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.06** | **272** | P | P | 14 10 54.8 | -1.2 |
| | 0.4nm,0.4s,baz=110,slow=8.0,SNR=2.7 | | | | | | |
| **FINES** | **FINESS Array B** | **145.00** | **340** | PKPbc | PKPbc | 14 22 22.3 | -1.5 |
| | 2.6nm,1.0s,baz=48,slow=3.0,SNR=9.6 | | | | | | |

*IDC **30** 14:04:51.2±0.9, 40°.33N×73°.12E, h0km, mb3.9/8, mb1 3.9/15, mb1mx3.7/49, mbtmp3.7/15, ML3.2/4, MS3.1/3, Ms1 3.1/3, ms1mx2.5/29, Error ellipse: s-maj=16.6km s-min=11.0km az=133.0*

*KRNET **30** 14:04:52.6±0.1, 40°.48N×73°.06E, h13km, mb3.8*

*NNC **30** 14:04:53.3±0.4, 40°.53N×73°.14E, h0km, mb4.0, mpv3.8, Error ellipse: s-maj=4.9km s-min=1.9km az=67.0*

*MOS **30** 14:04:53.4±1.8, 40°.49N×73°.08E, h21km, mb4.1/4, Error ellipse: s-maj=12.6km s-min=6.0km az=92.5*

**ISC 30 14:04:53.7±1.1, 40°.50N±0°.02×73°.12E±0°.03, h9km±8km, n84, σ1°26/105, mb4.0/9, 45C-22D, Kyrgyzstan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SFK** | **Sufi-Kurgan** | **0.57** | **149** | ⇓P | **Pg** | **14 05 04.0** | **-0.7** |
| | 94nm,0.5s | | | | | | |
| SFK | | | | ⇑S | **Sg** | **14 05 13.2** | **+0.8** |
| | 497nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.57** | **149** | PG | **Pg** | **14 05 04.0** | **-0.7** |
| SFK | | | | S | **Sg** | **14 05 13.1** | **+0.8** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,95nm,0.5s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,497nm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.57** | **149** | ⇑*e*P | **Pg** | **14 05 04.1** | **-0.7** |
| | baz=144 | | | | | | |
| SFK | | | | ⇑*e*S | **Sg** | **14 05 11.8** | **-0.5** |
| | baz=144 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **0.57** | **149** | ⇑*i*P | **Pg** | **14 05 04.1** | **-0.7** |
| | baz=144 | | | | | | |
| SFK | | | | ⇑*i*S | **Sg** | **14 05 13.0** | **+0.7** |
| | baz=144 | | | | | | |
| **ARSB** | **Arslanbob** | **0.83** | **353** | ⇓*e*P | **Pg** | **14 05 08.3** | **-1.3** |
| | baz=355 | | | | | | |
| ARSB | | | | ⇓*e*S | **Sn** | **14 05 22.7** | **-1.4** |
| | baz=355 | | | | | | |
| **ARK** | **Arkit** | **1.56** | **326** | ⇓*e*P | **Pn** | **14 05 21.9** | **+0.2** |
| | baz=328 | | | | | | |
| ARK | | | | ⇓*e*S | **Sg** | **14 05 43.9** | **0.0** |
| | baz=328 | | | | | | |
| **ARLS** | **Aral** | **1.63** | **33** | ⇑*e*P | **Pb** | **14 05 24.1** | **+0.1** |
| | baz=34 | | | | | | |
| ARLS | | | | ⇑*e*S | **Sg** | **14 05 46.1** | **0.0** |
| | baz=34 | | | | | | |
| **AML** | **Almayashu** | **1.68** | **15** | ⇓*i*P | **Pb** | **14 05 24.7** | **-0.4** |
| | baz=15 | | | | | | |
| AML | | | | ⇓*i*S | **Sg** | **14 05 50.2** | **+2.4** |
| | baz=15 | | | | | | |
| **AML** | **Almayashu** | **1.68** | **15** | P | **Pb** | **14 05 24.6** | **-0.4** |
| | SNR=293 | | | | | | |
| **BTK** | **Batken** | **1.82** | **257** | ⇑*e*P | **Pn** | **14 05 25.1** | **-0.1** |
| | baz=257 | | | | | | |
| BTK | | | | ⇑*e*S | **Sb** | **14 05 50.4** | **+0.3** |
| | baz=257 | | | | | | |
| **UCH** | **Uchtor** | **2.02** | **31** | ⇑*i*P | **Pb** | **14 05 31.0** | **+0.2** |
| | baz=32 | | | | | | |
| UCH | | | | ⇑*i*S | **Sg** | **14 05 59.0** | **+0.5** |
| | baz=32 | | | | | | |
| **UCH** | **Uchtor** | **2.02** | **31** | P | **Pb** | **14 05 30.9** | **+0.2** |
| | SNR=137 | | | | | | |
| **MNAS** | **Manas** | **2.04** | **347** | ⇑Pg | **Pb** | **14 05 30.1** | **-0.9** |
| MNAS | | | | ⇑Lg | Lg | 14 05 58.4 | |
| | comp=N,34nm,0.3s | | | | | | |
| **MNAS** | **Manas** | **2.04** | **347** | PN | **Pb** | **14 05 30.0** | **-0.9** |
| MNAS | | | | | | 14 05 58.4 | |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,108nm,0.5s | | | | | | |
| MNAS | | | | smax | smax | | |
| | comp=N,138nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **2.04** | **347** | ⇑*e*P | **Pb** | **14 05 30.3** | **-0.6** |
| | baz=348 | | | | | | |
| MNAS | | | | ⇑*e*S | **Sg** | **14 05 58.2** | **-0.9** |
| | baz=348 | | | | | | |
| **MNAS** | **Manas** | **2.04** | **347** | ⇑*i*P | **Pb** | **14 05 29.9** | **-1.0** |
| | baz=348 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sg** | **14 05 58.2** | **-0.9** |
| | baz=348 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.21** | **13** | ⇑*i*P | **Pb** | **14 05 33.9** | **0.0** |
| | baz=14 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sg** | **14 06 04.5** | **-0.2** |
| | baz=14 | | | | | | |
| **EKS2** | **Erkin-Say** | **2.21** | **13** | P | **Pb** | **14 05 34.0** | **+0.1** |
| | SNR=75 | | | | | | |
| **KZA** | **Kyzart** | **2.25** | **45** | ⇑*i*P | **Pb** | **14 05 34.8** | **+0.2** |
| | baz=45 | | | | | | |
| KZA | | | | ⇑*i*S | **Sg** | **14 06 05.7** | **-0.2** |
| | baz=45 | | | | | | |
| **KZA** | **Kyzart** | **2.25** | **45** | P | **Pb** | **14 05 35.0** | **+0.4** |
| | SNR=37 | | | | | | |
| **AAK** | **Ala-Archa** | **2.36** | **25** | ⇑Pg | **Pb** | **14 05 36.1** | **-0.4** |
| | comp=N,47nm,0.5s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 14 06 08.9 | |
| | comp=N,183nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **2.36** | **25** | Pn | **Pb** | **14 05 36.3** | **-0.2** |
| | comp=N,17nm,0.3s,baz=194,slow=8.9,SNR=64 | | | | | | |
| AAK | | | | Lg | Lg | 14 06 09.3 | |
| | comp=N,65nm,0.3s,baz=42,slow=16,SNR=32 | | | | | | |
| **AAK** | **Ala-Archa** | **2.36** | **25** | ⇑*i*P | **Pb** | **14 05 35.7** | **-0.8** |
| | baz=26 | | | | | | |
| AAK | | | | ⇑*i*S | **Sg** | **14 06 08.7** | **-0.9** |
| | baz=26 | | | | | | |
| **AAK** | **Ala-Archa** | **2.36** | **25** | P | **Pb** | **14 05 36.4** | **-0.1** |
| | SNR=54 | | | | | | |
| **NRN** | **Naryn** | **2.37** | **66** | ⇓*i*P | **Pb** | **14 05 35.6** | **-1.1** |
| | baz=66 | | | | | | |
| NRN | | | | ⇓*i*S | **Sb** | **14 06 06.8** | **+0.7** |
| | baz=66 | | | | | | |
| **KSH** | **Kashi** | **2.40** | **113** | Pn | **Pb** | **14 05 36.3** | **-0.8** |
| KSH | | | | Sn | **Sb** | **14 06 06.0** | **-0.8** |
| KSH | | | | smax | smax | | |
| | comp=N,370nm,0.6s | | | | | | |
| KSH | | | | smax | smax | | |
| | comp=E,260nm,0.4s | | | | | | |
| **KBK** | **Karagaybulak** | **2.55** | **32** | ⇓*i*P | **Pb** | **14 05 39.5** | **-0.2** |
| | baz=32 | | | | | | |
| KBK | | | | ⇓*i*S | **Sg** | **14 06 13.9** | **-1.7** |
| | baz=32 | | | | | | |
| **KBK** | **Karagaybulak** | **2.55** | **32** | P | **Pb** | **14 05 39.6** | **-0.2** |
| | SNR=22 | | | | | | |
| **CHMS** | **Chumysh** | **2.77** | **26** | P | **Pb** | **14 05 42.3** | **-1.2** |
| | SNR=22 | | | | | | |
| **BOOM** | **Boomskoye usch** | **2.90** | **46** | ⇑*e*P | **Pb** | **14 05 43.7** | **-2.0** |
| | baz=46 | | | | | | |
| BOOM | | | | ⇑*e*S | **Sb** | **14 06 23.4** | **+2.1** |
| | baz=46 | | | | | | |
| **ULHL** | **Ulahol** | **2.92** | **52** | ⇑*i*P | **Pb** | **14 05 43.6** | **-2.5** |
| | baz=53 | | | | | | |
| ULHL | | | | ⇑*i*S | **Sb** | **14 06 21.3** | **-0.6** |
| | baz=53 | | | | | | |
| **ULHL** | **Ulahol** | **2.92** | **52** | P | **Pb** | **14 05 45.7** | **-0.4** |
| | SNR=27 | | | | | | |
| **USP** | **Ospenovka** | **2.95** | **20** | ⇑*i*P | **Pb** | **14 05 43.9** | **-2.5** |
| | baz=21 | | | | | | |
| USP | | | | ⇑*i*S | **Sb** | **14 06 22.8** | **+0.3** |
| | baz=21 | | | | | | |
| **USP** | **Ospenovka** | **2.95** | **20** | P | **Pb** | **14 05 44.0** | **-2.3** |
| | SNR=9.1 | | | | | | |
| **TKM2** | **Tokmak 2** | **3.04** | **37** | ⇑Pg | **Pb** | **14 05 47.4** | **-0.7** |
| | comp=E,17nm,0.5s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 14 06 28.6 | |
| | comp=E,52nm,0.6s | | | | | | |
| **TKM2** | **Tokmak 2** | **3.04** | **37** | PN | **Pb** | **14 05 47.4** | **-0.7** |
| TKM2 | | | | LG | Lg | 14 06 28.6 | |
| **TKM2** | **Tokmak 2** | **3.04** | **37** | P | **Pb** | **14 05 45.9** | **-2.3** |
| | SNR=31 | | | | | | |
| **KK31** | **Karatay Array** | **3.25** | **324** | ⇓Pn | **Pn** | **14 05 46.4** | **+1.6** |
| | comp=E,7.1nm,0.5s,baz=140,slow=13,SNR=374 | | | | | | |
| KK31 | | | | ⇑Pg | **Pb** | **14 05 52.3** | **+0.8** |
| | comp=E,9.4nm,0.3s | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 14 06 32.8 | |
| | comp=E,41nm,0.5s,baz=136,slow=32,SNR=4.4 | | | | | | |
| **KK31** | **Karatay Array** | **3.25** | **324** | *e*PN | **Pn** | **14 05 47.3** | **+2.5** |
| KK31 | | | | | | 14 06 31.8 | |
| KK31 | | | | pmax | pmax | | |
| | comp=Z,12nm,0.4s | | | | | | |
| KK31 | | | | pmax | pmax | | |
| | comp=N,67nm,0.6s | | | | | | |
| **DZET** | **Dzherino** | **3.73** | **244** | ⇑Pn | **Pn** | **14 05 54.4** | **+3.0** |
| | comp=N,12nm,0.5s | | | | | | |
| DZET | | | | ⇓Sn | **Sn** | **14 06 38.8** | **+3.3** |
| | comp=N,72nm,0.6s | | | | | | |
| DZET | | | | ⇓Lg | Lg | 14 06 52.1 | |
| | comp=N,86nm,0.5s | | | | | | |
| **DZET** | **Dzherino** | **3.73** | **244** | PN | **Pn** | **14 05 54.2** | **+2.8** |
| DZET | | | | | | 14 06 38.2 | |
| DZET | | | | pmax | pmax | | |
| | comp=Z,36nm,0.5s | | | | | | |
| DZET | | | | smax | smax | | |
| | comp=N,73nm,0.6s | | | | | | |
| DZET | | | | pmax | pmax | | |
| | comp=N,100nm,0.6s | | | | | | |
| **KNDC** | **Almaty** | **3.95** | **45** | ⇑Pg | **Pb** | **14 06 04.8** | **+1.3** |
| KNDC | | | | ⇑Lg | Lg | 14 06 59.5 | |
| **AAA** | **Alma-Ata** | **3.97** | **45** | *e*PN | **Pg** | **14 06 11.0** | **+1.2** |
| AAA | | | | pmax | pmax | | |
| | comp=Z,59nm,0.2s | | | | | | |
| **ANVS** | **Anan'yevo** | **4.10** | **55** | ⇓*e*P | **Pn** | **14 05 59.4** | **+2.8** |
| | baz=55 | | | | | | |
| ANVS | | | | ⇓*i*S | **Sb** | **14 06 57.5** | **+1.8** |
| | baz=55 | | | | | | |
| **PDGK** | **Podgornoye** | **5.52** | **57** | ⇑Pn | **Pn** | **14 06 17.1** | **+1.1** |
| | comp=Z,5.0nm,0.6s | | | | | | |
| PDGK | | | | ⇑Pg | Pg | 14 06 34.8 | -4.6 |
| | comp=Z,12nm,0.7s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 14 07 49.1 | |
| | comp=Z,31nm,0.7s | | | | | | |
| **PDGK** | **Podgornoye** | **5.52** | **57** | PN | **Pn** | **14 06 17.1** | **+1.1** |
| PDGK | | | | PG | Pg | 14 06 34.8 | -4.6 |
| **OTUK** | **Ortayu** | **7.76** | **356** | ⇑Pn | **Pn** | **14 06 48.1** | **+1.4** |
| | comp=Z,4.0nm,1.4s | | | | | | |
| OTUK | | | | ⇑Pg | Pb | 14 07 14.3 | +6.0 |
| | comp=Z,3.3nm,0.6s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 14 08 58.2 | |
| | comp=Z,15nm,1.0s | | | | | | |
| **OTUK** | **Ortayu** | **7.76** | **356** | P | **Pn** | **14 06 48.1** | **+1.4** |
| **MK31** | **Makanchi Array** | **9.14** | **44** | Pn | **Pn** | **14 07 08.2** | **+2.5** |
| | comp=Z,0.5nm,0.6s,baz=224,slow=16,SNR=12 | | | | | | |
| MK31 | | | | ⇓Lg | Lg | 14 09 42.5 | |
| | comp=Z,4.3nm,0.8s | | | | | | |
| **MK31** | **Makanchi Array** | **9.14** | **44** | P | **Pn** | **14 07 08.2** | **+2.5** |
| **MKAR** | **Makanchi Array** | **9.14** | **44** | Pn | **Pn** | **14 07 07.8** | **+2.1** |
| | comp=Z,0.2nm,0.3s,baz=224,slow=14,SNR=13 | | | | | | |
| MKAR | | | | Lg | Lg | 14 09 41.6 | |
| | comp=Z,0.2nm,0.3s,baz=236,slow=29,SNR=3.8 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **10.80** | **19** | ⇑Lg | Lg | 14 10 37.4 | |
| | comp=Z,19nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **10.80** | **19** | Pn | **Pn** | **14 07 29.8** | **+1.4** |
| | comp=Z,0.1nm,0.3s,baz=208,slow=13,SNR=5.2 | | | | | | |
| KURBB | | | | Lg | Lg | 14 10 36.2 | |
| | comp=Z,0.1nm,0.3s,baz=209,slow=27,SNR=5.2 | | | | | | |
| **KURK** | **Kurchatov** | **10.91** | **19** | P | **Pn** | **14 07 29.8** | **0.0** |
| **GEYT** | **Alibeck** | **11.92** | **262** | Pn | Pn | 14 07 40.1 | -3.7 |
| | baz=134,slow=6.4,SNR=4.2 | | | | | | |
| **VOSK** | **Vostochnaya** | **12.31** | **354** | ⇓Pn | **Pn** | **14 07 50.0** | **+0.9** |
| | comp=Z,2.0nm,1.0s | | | | | | |
| **VOSK** | **Vostochnaya** | **12.31** | **354** | P | **Pn** | **14 07 49.9** | **+0.9** |
| **BVA0** | **Borovoye Array** | **12.66** | **352** | Pn | **Pn** | **14 07 53.7** | **-0.1** |
| | comp=Z,4.0nm,1.4s,baz=149,slow=14,SNR=4.7 | | | | | | |
| **BVA0** | **Borovoye Array** | **12.66** | **352** | P | **Pn** | **14 07 53.7** | **-0.1** |
| **BVAR** | **Borovoye Array** | **12.66** | **352** | Pn | **Pn** | **14 07 53.4** | **-0.5** |
| | baz=144,slow=10,SNR=3.5 | | | | | | |
| **ZRNK** | **Zerenda** | **12.77** | **349** | ⇑Pn | **Pn** | **14 07 54.7** | **-0.5** |
| | comp=Z,2.4nm,1.0s | | | | | | |
| **ZRNK** | **Zerenda** | **12.77** | **349** | P | **Pn** | **14 07 54.7** | **-0.5** |
| **AB31** | **Akbulak array** | **12.79** | **318** | ⇓Pn | **Pn** | **14 07 53.8** | **-1.7** |
| | comp=Z,0.7nm,0.5s | | | | | | |
| **AB31** | **Akbulak array** | **12.79** | **318** | P | **Pn** | **14 07 53.8** | **-1.7** |
| **CHKZ** | **Chkalovo** | **13.29** | **353** | ⇑Pn | **Pn** | **14 08 02.5** | **+0.2** |
| | comp=Z,0.9nm,0.7s | | | | | | |
| **CHKZ** | **Chkalovo** | **13.29** | **353** | P | **Pn** | **14 08 02.5** | **+0.2** |
| **AKTO** | **Aktyubinsk** | **14.50** | **318** | ⇓Pn | **Pn** | **14 08 19.5** | **+0.6** |
| | comp=Z,3.9nm,0.8s | | | | | | |
| **AKTO** | **Aktyubinsk** | **14.50** | **318** | Pn | **Pn** | **14 08 18.7** | **-0.2** |
| | comp=Z,0.1nm,0.3s,baz=131,slow=14,SNR=8.3 | | | | | | |
| AKTO | | | | LR | LR | 14 14 09.9 | |
| | comp=Z,36nm,18.6s,baz=126,slow=38 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **15.59** | **26** | Pn | **Pn** | **14 08 34.9** | **+1.4** |
| | baz=209,slow=14,SNR=1.7 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **29.00** | **77** | *e*P | **P** | **14 10 53.0** | **-0.8** |
| HHC | | | | pmax | pmax | | |
| | comp=Z,17nm,0.8s | | | | | | |
| HHC | | | | pmax | pmax | | |
| | comp=Z,100nm,4.1s | | | | | | |
| **AKASG** | **Malin Array Be** | **31.93** | **304** | P | **P** | **14 11 20.0** | **+0.6** |
| | comp=Z,0.3nm,0.4s,baz=80,slow=7.3,SNR=5.2 | | | | | | |
| **AKASG** | **Malin Array Be** | **31.93** | **304** | P | **P** | **14 11 20.0** | **+0.6** |
| **FINES** | **FINESS Array B** | **35.21** | **322** | P | **P** | **14 11 47.0** | **-0.7** |
| | comp=Z,1.9nm,0.9s,baz=114,slow=14,SNR=3.4 | | | | | | |
| FINES | | | | LR | LR | 14 25 39.7 | |
| | comp=Z,45nm,18.2s,baz=174,slow=35 | | | | | | |
| **FINES** | **FINESS Array B** | **35.21** | **322** | P | **P** | **14 11 47.1** | **-0.7** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | |
| FINES | | | | MLR | MLR | | |
| | comp=Z,45nm,18.2s | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.15** | **335** | P | **P** | **14 12 12.0** | **-0.8** |
| | comp=Z,2.5nm,0.9s,baz=86,slow=6.4,SNR=4.8 | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.15** | **335** | P | **P** | **14 12 12.0** | **-0.8** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **GERES** | **GERESS Array B** | **42.10** | **302** | P | **P** | **14 12 45.6** | **-0.3** |
| | comp=Z,0.7nm,0.6s,baz=57,slow=9.7,SNR=5.9 | | | | | | |
| **GERES** | **GERESS Array B** | **42.10** | **302** | P | **P** | **14 12 45.6** | **-0.3** |
| GERES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **NOA** | **NORSAR Array B** | **42.27** | **320** | LR | LR | 14 32 38.2 | |
| | comp=Z,24nm,21.5s,baz=315,slow=39 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **67.49** | **268** | P | **P** | **14 15 48.4** | **-1.9** |
| | comp=Z,2.1nm,0.4s,baz=52,slow=5.6,SNR=32 | | | | | | |
| **INK** | **Inuvik** | **69.68** | **10** | P | **P** | **14 16 03.5** | **+0.4** |
| | comp=Z,1.0nm,0.6s,baz=326,slow=4.7,SNR=5.5 | | | | | | |
| **INK** | **Inuvik** | **69.68** | **10** | P | **P** | **14 16 03.5** | **+0.4** |
| INK | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **82.76** | **124** | P | **P** | **14 17 17.3** | **-0.8** |
| | comp=Z,0.3nm,0.5s,baz=325,slow=4.8,SNR=3.6 | | | | | | |
| **ASAR** | **Alice Springs** | **85.24** | **127** | P | **P** | **14 17 28.8** | **-2.0** |
| | comp=Z,0.3nm,0.6s,baz=316,slow=5.3,SNR=7.0 | | | | | | |

**WEL 30 14:09:11.1±0.3, 36°.75S×176°.50E, h202km±4km, ML3.5/11,**

**2C-1D, Error ellipse: s-maj=4.6km s-min=4.5km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HAZ** | **Te Kaha** | **1.43** | **135** | PN | PN | 14 09 44.5 | +0.1 |
| HAZ | | | | SN | S | 14 10 09.3 | -0.6 |
| **URZ** | **Urewera** | **1.58** | **162** | PN | PN | 14 09 45.9 | +0.3 |
| URZ | | | | SN | S | 14 10 12.7 | +0.3 |
| **PKGZ** | **Pakihiroa** | **1.68** | **132** | PN | PN | 14 09 47.0 | +0.4 |
| PKGZ | | | | SN | S | 14 10 13.4 | -0.5 |
| **MWZ** | **Matawai** | **1.78** | **153** | PN | PN | 14 09 47.7 | +0.1 |
| MWZ | | | | SN | S | 14 10 15.7 | 0.0 |
| **TWGZ** | **Tauwhareparae** | **1.85** | **141** | PN | PN | 14 09 48.2 | 0.0 |
| TWGZ | | | | SN | S | 14 10 16.7 | -0.1 |
| **PUZ** | **Puketiti** | **1.92** | **134** | ⇑PN | PN | 14 09 48.4 | -0.6 |
| PUZ | | | | SN | S | 14 10 17.0 | -1.1 |
| **SNGZ** | **Shannon Statio** | **2.13** | **162** | PN | Pn | 14 09 50.9 | -0.2 |
| **RIGZ** | **Rimuhau** | **2.19** | **153** | PN | Pn | 14 09 51.4 | -0.3 |
| **CNGZ** | **Carnagh Statio** | **2.20** | **142** | *e*PN | Pn | 14 09 51.6 | -0.2 |
| **BKZ** | **Black Stump Fm** | **2.41** | **180** | PN | Pn | 14 09 53.5 | -0.7 |
| **KNZ** | **Kokohu** | **2.45** | **158** | PN | Pn | 14 09 53.1 | -1.4 |
| KNZ | | | | AML | AML | 14 10 35.0 | |
| **WNVZ** | **Wahianoa** | **2.67** | **195** | PN | Pn | 14 09 57.5 | +0.3 |
| **BHHZ** | **Black Hill Sta** | **2.75** | **187** | PN | Pn | 14 09 57.6 | -0.4 |
| **KAHZ** | **Kahuranaki** | **3.05** | **175** | PN | Pn | 14 10 00.6 | -0.9 |
| **PNHZ** | **Pukenui** | **3.17** | **184** | PN | Pn | 14 10 01.1 | -1.7 |
| **WAZ** | **Wanganui** | **3.23** | **201** | PN | Pn | 14 10 03.0 | -0.4 |
| **TSZ** | **Takapari Road** | **3.33** | **187** | PN | Pn | 14 10 02.9 | -1.9 |
| **ANWZ** | **Angora Road** | **3.70** | **180** | PN | Pn | 14 10 07.1 | -2.1 |
| **MRZ** | **Mangatainoka R** | **3.97** | **190** | ⇑PN | Pn | 14 10 09.6 | -2.9 |
| **HOWZ** | **Holdsworth Sta** | **4.21** | **190** | PN | Pn | 14 10 12.4 | -3.1 |
| **KIW** | **Kapiti Island** | **4.29** | **196** | PN | Pn | 14 10 13.7 | -2.7 |
| **CAW** | **Cannon Point** | **4.49** | **194** | PN | Pn | 14 10 15.8 | -3.2 |
| **TUWZ** | **Tuamarina** | **5.08** | **202** | PN | Pn | 14 10 23.7 | -2.7 |
| **NNZ** | **Nelson** | **5.08** | **208** | PN | Pn | 14 10 23.8 | -2.6 |
| **THZ** | **Tophouse** | **5.73** | **208** | *e*PN | Pn | 14 10 32.4 | -2.5 |
| **KHZ** | **Kahutara** | **6.10** | **201** | ⇓PN | Pn | 14 10 36.1 | -3.5 |

*AUST **30** 15:03:36.7, 22°.64S×174°.27W, h60km*

*SZGRF **30** 15:03:44.5, 21°.99S×176°.08W, h33km*

*IDC **30** 15:04:47.1±3.6, 20°.73S×178°.55W, h548km±40km, mb3.5/14, mb1 3.7/15, mb1mx3.6/27, mbtmp4.4/15, Error ellipse: s-maj=19.8km s-min=13.4km az=71.0*

*ISCJB **30** 15:04:48.8±0.7, 20°.8S±0°.1×178°.7W±0°.1, h579km, mb4.0/14, Error ellipse: s-maj=17.9km s-min=12.4km az=157.0*

**ISC 30 15:04:49.8±0.6, 20°.8S±0°.1×178°.7W±0°.1, h579km, n68, σ0s81/69, mb4.1/14, 5C-7D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **13.93** | **262** | P | **P** | **15 07 45.6** | **-2.8** |
| | 1.1nm,0.3s,baz=0.9,slow=3.4,SNR=14 | | | | | | |
| **EIDS** | **Eidsvold** | **28.17** | **255** | P | **P** | **15 09 57.2** | **+0.3** |
| | baz=32,SNR=3.3 | | | | | | |
| **CTA** | **Charters Tower** | **32.85** | **265** | P | **P** | **15 10 37.3** | **+0.2** |
| | 4.8nm,0.4s,baz=92,slow=14,SNR=14 | | | | | | |
| **QLP** | **Quilpie** | **34.38** | **253** | P | **P** | **15 10 50.0** | **+0.2** |
| | baz=38,SNR=6.4 | | | | | | |
| **PMG** | **Port Moresby** | **34.81** | **284** | P | **P** | **15 10 53.0** | **-0.5** |
| | 22nm,1.0s,baz=112,slow=8.7,SNR=3.7 | | | | | | |
| **MTSU** | **Mount Surprise** | **34.96** | **268** | P | **P** | **15 10 55.2** | **+0.5** |
| | baz=39,SNR=8.8 | | | | | | |
| **COEN** | **Coen** | **36.99** | **274** | P | **P** | **15 11 12.2** | **+0.8** |
| | baz=41,SNR=4.4 | | | | | | |
| **MMPI** | **Merauke** | **41.36** | **281** | P | P | 15 11 53.2 | +6.7 |
| | baz=46,SNR=5.2 | | | | | | |
| **ASAR** | **Alice Springs** | **43.85** | **257** | P | **P** | **15 12 06.0** | **0.0** |
| | 4.1nm,0.5s,baz=94,slow=8.0,SNR=93 | | | | | | |
| ASAR | | | | PcP | **PcP** | **15 13 39.6** | **+0.3** |
| | 1.7nm,0.6s,baz=106,slow=3.4,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.95** | **262** | P | **P** | **15 12 06.5** | **-0.2** |
| | 1.8nm,0.2s,baz=96,slow=7.1,SNR=14 | | | | | | |
| **MTN** | **Manton Dam** | **48.55** | **271** | P | **P** | **15 12 41.5** | **0.0** |
| | baz=53,SNR=5.3 | | | | | | |
| **WRKA** | **Warakurna** | **48.79** | **254** | P | **P** | **15 12 43.3** | **0.0** |
| | baz=52,SNR=23 | | | | | | |
| **KNRA** | **Kununurra** | **50.02** | **267** | P | **P** | **15 12 52.4** | **+0.1** |
| | baz=54,SNR=5.2 | | | | | | |
| **SIJI** | **Sorong** | **52.72** | **285** | P | **P** | **15 13 11.8** | **0.0** |
| | 8.4nm,0.8s,baz=128,slow=8.6,SNR=5.3 | | | | | | |
| **SOEI** | **Soe** | **55.90** | **272** | P | **P** | **15 13 36.1** | **+1.9** |
| | baz=60,SNR=4.4 | | | | | | |
| **MEEK** | **Meekatharra** | **57.24** | **251** | P | **P** | **15 13 42.7** | **-0.4** |
| | baz=60,SNR=3.4 | | | | | | |
| **VNDA** | **Vanda** | **57.56** | **185** | P | **P** | **15 13 45.4** | **+1.0** |
| | 1.0nm,0.5s,baz=360,slow=6.5,SNR=18 | | | | | | |
| **QSPA** | **South Pole Qui** | **69.27** | **180** | P | **P** | **15 14 59.9** | **+0.5** |
| | 8.5nm,0.7s,baz=300,slow=0.6,SNR=86 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **70.09** | **324** | P | **P** | **15 15 04.3** | **-0.3** |
| | 1.4nm,0.7s,baz=162,slow=5.9,SNR=5.6 | | | | | | |
| **CISI** | **Cisompet, Garu** | **71.99** | **269** | P | **P** | **15 15 16.6** | **+0.3** |
| | baz=76,SNR=3.7 | | | | | | |
| **ASAJ** | **Asahikawa** | **73.70** | **332** | P | **P** | **15 15 26.7** | **+1.4** |
| | 5.2nm,0.8s,baz=63,slow=2.3 | | | | | | |
| **KSRS** | **Korea Array** | **76.70** | **319** | P | **P** | **15 15 43.0** | **+0.9** |
| | 0.5nm,0.5s,baz=110,slow=4.9,SNR=2.7 | | | | | | |
| **NVAR** | **Mina Array Bea** | **81.66** | **44** | P | **P** | **15 16 07.7** | **-0.9** |
| | 2.2nm,0.7s,baz=223,slow=8.5,SNR=18 | | | | | | |
| **TXAR** | **Lajitas Array** | **87.73** | **58** | P | **P** | **15 16 38.5** | **+0.4** |
| | 1.7nm,0.9s,baz=216,slow

comp=Z,2.0nm,0.6s,baz=36,slow=2.5,SNR=16
**CONA Conrad Observa 150.50 340** ⇓*i*PKPbc **PKPbc 15 23 36.8 +0.1**
comp=Z,4.3nm,0.6s
**MOA Molln 151.06 342** ⇑*i*PKPbc **PKPbc 15 23 37.7 -0.3**
comp=Z,2.3nm,0.5s
**STU Stuttgart 151.39 349** *e*PKPbc **PKPbc 15 23 38.9 +0.3**
baz=14,slow=2.4
**FUR Furstenfeldbru 151.55 346** *e*PKPbc **PKPbc 15 23 39.2 +0.2**
baz=14,slow=2.4
**BFO Black Forest 151.96 350** *e*PKPbc **PKPbc 15 23 40.0 +0.1**
baz=14,slow=2.4
**KBA Koelnbreinsper 152.03 342** ⇓*i*PKPbc **PKPbc 15 23 39.6 -0.7**
comp=Z,2.8nm,0.6s
**DIVS Divibare 152.07 331** ⇓*i*P **PKPbc 15 23 39.9 -0.5**
**WTTA Wattenberg 152.31 345** ⇑*i*PKPbc **PKPbc 15 23 40.6 -0.3**
comp=Z,3.4nm,0.5s
**FETA Feichten 152.75 346** ⇓*i*PKPbc **PKPbc 15 23 40.7 -1.2**
comp=Z,1.6nm,0.6s
**DBIC Dimbokro 164.72 156** PKPab **PKPab 15 24 47.6 -0.7**
comp=Z,1.4nm,0.7s,baz=54,slow=2.2,SNR=3.2
**TORD Torodi Ar. Bea 172.38 183** PKP **PKPdf 15 23 52.0 -1.6**
comp=Z,0.9nm,0.8s,baz=227,slow=0.7,SNR=5.0
TORD PKPab **PKPab 15 25 21.4 -0.7**
comp=Z,1.0nm,0.9s,baz=174,slow=3.2,SNR=5.2

*NEIC **30** 15:06:05.5,38˚.00S×179˚.48E,h33km,ML4.0(WEL),After WEL.*
**WEL 30 15:06:08.9±0.3,37˚.89S×179˚.09E,h33km,ML3.8/10, 3C-5D,Error ellipse: s-maj=2.7km s-min=1.6km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WMGZ** | **Waiomatatini S** | **0.54** | **278** | ⇑PN | Pb | 15 06 19.3 | -0.8 |
| WMGZ | | | | SN | Sb | 15 06 27.6 | -0.1 |
| **PUZ** | **Puketiti** | **0.68** | **254** | PN | Pn | 15 06 21.3 | -0.9 |
| PUZ | | | | SN | Sb | 15 06 31.3 | -0.4 |
| PUZ | | | | AML | AML | 15 06 32.1 | |
| **MXZ** | **Matakaoa Point** | **0.70** | **298** | PN | Pn | 15 06 22.1 | -0.4 |
| MXZ | | | | SN | Sn | 15 06 32.0 | -0.1 |
| MXZ | | | | AML | AML | 15 06 33.0 | |
| MXZ | | | | AML | AML | 15 06 34.5 | |
| MXZ | | | | AML | AML | 15 06 34.5 | |
| **PKGZ** | **Pakihiroa** | **0.80** | **272** | ⇑PN | Pn | 15 06 23.0 | -0.9 |
| **CNGZ** | **Carnagh Statio** | **0.91** | **229** | ⇓PN | Pn | 15 06 25.3 | -0.1 |
| **TWGZ** | **Tauwhareparae** | **0.92** | **252** | ⇓PN | Pn | 15 06 25.1 | -0.4 |
| **HAZ** | **Te Kaha** | **1.04** | **277** | PN | Pn | 15 06 26.8 | -0.3 |
| **TKGZ** | **Te Karaka** | **1.12** | **240** | ⇓PN | Pn | 15 06 27.8 | -0.4 |
| **MWZ** | **Matawai** | **1.31** | **250** | ⇓PN | Pn | 15 06 30.1 | -0.8 |
| MWZ | | | | AML | AML | 15 06 47.8 | |
| MWZ | | | | AML | AML | 15 06 47.8 | |
| MWZ | | | | AML | AML | 15 06 49.0 | |
| MWZ | | | | AML | AML | 15 06 49.0 | |
| **RIGZ** | **Rimuhau** | **1.32** | **232** | PN | Pn | 15 06 30.6 | -0.5 |
| **PRGZ** | **Paritu Road** | **1.40** | **222** | PN | Pn | 15 06 31.6 | -0.5 |
| **MHGZ** | **Mahia Peninsul** | **1.56** | **216** | PN | Pn | 15 06 33.7 | -0.7 |
| **KNZ** | **Kokohu** | **1.58** | **224** | PN | Pn | 15 06 33.6 | -0.9 |
| KNZ | | | | AML | AML | 15 07 14.6 | |
| KNZ | | | | AML | AML | 15 07 34.7 | |
| **URZ** | **Urewera** | **1.60** | **256** | ⇓PN | Pn | 15 06 34.8 | 0.0 |
| URZ | | | | AML | AML | 15 07 00.5 | |
| URZ | | | | AML | AML | 15 07 02.0 | |
| **URZ** | **Urewera** | **1.60** | **256** | *e*Pn | Pn | 15 06 35.0 | +0.2 |
| URZ | | | | *e*Sn | Sb | 15 06 57.6 | -0.1 |
| **SNGZ** | **Shannon Statio** | **1.64** | **237** | PN | Pn | 15 06 34.8 | -0.6 |
| **WHHZ** | **Waihua** | **1.87** | **230** | PN | Pn | 15 06 38.0 | -0.6 |
| **RAHZ** | **Arahi** | **1.88** | **236** | PN | Pn | 15 06 38.5 | -0.2 |
| **OPRZ** | **Ohinepanea** | **2.00** | **271** | PN | Pn | 15 06 39.7 | -0.7 |
| **RRRZ** | **Republican Roa** | **2.08** | **257** | PN | Pn | 15 06 41.6 | +0.1 |
| **ARHZ** | **Aropaoanui** | **2.13** | **230** | PN | Pn | 15 06 41.7 | -0.5 |
| **NMHZ** | **Naumai** | **2.16** | **235** | PN | Pn | 15 06 42.4 | -0.2 |
| **PRRZ** | **Plateau Road** | **2.21** | **253** | PN | Pn | 15 06 43.5 | +0.3 |
| **CKHZ** | **Cape Kidnapper** | **2.36** | **221** | PN | Pn | 15 06 44.3 | -1.0 |
| **BKZ** | **Black Stump Fm** | **2.40** | **237** | PN | Pn | 15 06 45.4 | -0.5 |
| BKZ | | | | AML | AML | 15 07 15.1 | |
| BKZ | | | | AML | AML | 15 07 18.1 | |
| **MCHZ** | **McNeill Hill** | **2.43** | **230** | PN | Pn | 15 06 45.6 | -0.6 |
| **KAHZ** | **Kahuranaki** | **2.57** | **222** | PN | Pn | 15 06 46.8 | -1.4 |
| **KAHZ** | **Kahuranaki** | **2.57** | **222** | Pn | Pn | 15 06 46.8 | -1.4 |
| **KWHZ** | **Kaweka Forest** | **2.59** | **233** | PN | Pn | 15 06 47.8 | -0.7 |
| **KRHZ** | **Kereru** | **2.75** | **230** | PN | Pn | 15 06 49.5 | -1.2 |
| **PXZ** | **Pawanui** | **2.75** | **218** | PN | Pn | 15 06 48.3 | -2.3 |
| PXZ | | | | AML | AML | 15 07 26.2 | |
| PXZ | | | | AML | AML | 15 12 51.6 | |
| **PXZ** | **Pawanui** | **2.75** | **218** | Pn | Pn | 15 06 48.4 | -2.2 |
| **BHHZ** | **Black Hill Sta** | **2.85** | **235** | PN | Pn | 15 06 51.3 | -0.9 |
| **BHHZ** | **Black Hill Sta** | **2.85** | **235** | Pn | Pn | 15 06 51.3 | -0.9 |
| BHHZ | | | | Sn | Sn | 15 07 24.0 | -1.4 |
| **KUZ** | **Kuaotunu** | **2.92** | **292** | PN | Pn | 15 06 52.8 | -0.1 |
| KUZ | | | | AML | AML | 15 07 26.3 | |
| **KUZ** | **Kuaotunu** | **2.92** | **292** | Pn | Pn | 15 06 52.9 | -0.1 |
| **KRVZ** | **Karewarewa** | **2.96** | **245** | PN | Pn | 15 06 53.0 | -0.7 |
| **KRVZ** | **Karewarewa** | **2.96** | **245** | Pn | Pn | 15 06 53.1 | -0.6 |
| **WPHZ** | **Waipukurau** | **2.99** | **223** | PN | Pn | 15 06 52.1 | -1.9 |
| **WPHZ** | **Waipukurau** | **2.99** | **223** | Pn | Pn | 15 06 52.1 | -1.9 |
| **MOVZ** | **Moawhango** | **3.02** | **239** | PN | Pn | 15 06 53.5 | -0.9 |
| **MOVZ** | **Moawhango** | **3.02** | **239** | Pn | Pn | 15 06 53.5 | -0.9 |
| **PNHZ** | **Pukenui** | **3.02** | **227** | PN | Pn | 15 06 52.6 | -1.9 |
| **PNHZ** | **Pukenui** | **3.02** | **227** | Pn | Pn | 15 06 52.6 | -1.9 |
| PNHZ | | | | Sn | Sn | 15 07 27.5 | -2.2 |
| **PRHZ** | **Porangahau** | **3.04** | **218** | PN | Pn | 15 06 52.2 | -2.5 |
| **PRHZ** | **Porangahau** | **3.04** | **218** | Pn | Pn | 15 06 52.2 | -2.5 |
| **WHVZ** | **Whangaehu Hut** | **3.07** | **242** | PN | Pn | 15 06 54.6 | -0.8 |
| **WHVZ** | **Whangaehu Hut** | **3.07** | **242** | Pn | Pn | 15 06 54.5 | -0.9 |
| **FWVZ** | **Far West T-bar** | **3.09** | **243** | PN | Pn | 15 06 54.8 | -0.8 |
| FWVZ | | | | AML | AML | 15 07 30.6 | |
| **FWVZ** | **Far West T-bar** | **3.09** | **243** | Pn | Pn | 15 06 54.8 | -0.8 |
| **WNVZ** | **Wahianoa** | **3.09** | **241** | PN | Pn | 15 06 54.6 | -0.9 |
| **WNVZ** | **Wahianoa** | **3.09** | **241** | Pn | Pn | 15 06 54.6 | -0.9 |
| **TRVZ** | **Turoa** | **3.11** | **242** | PN | Pn | 15 06 55.6 | -0.3 |
| **TRVZ** | **Turoa** | **3.11** | **242** | Pn | Pn | 15 06 55.1 | -0.8 |
| **MKAZ** | **Moumakai** | **3.21** | **283** | PN | Pn | 15 06 57.2 | +0.2 |
| **MKAZ** | **Moumakai** | **3.21** | **283** | Pn | Pn | 15 06 57.2 | +0.2 |
| **TSZ** | **Takapari Road** | **3.26** | **227** | PN | Pn | 15 06 55.5 | -2.2 |
| **TSZ** | **Takapari Road** | **3.26** | **227** | Pn | Pn | 15 06 55.3 | -2.4 |
| **ANWZ** | **Angora Road** | **3.27** | **218** | PN | Pn | 15 06 56.0 | -1.8 |
| **DVHZ** | **Dannevirke** | **3.31** | **222** | ⇑PN | Pn | 15 06 56.1 | -2.3 |
| **DVHZ** | **Dannevirke** | **3.31** | **222** | Pn | Pn | 15 06 56.1 | -2.3 |
| **BFZ** | **Birch Farm** | **3.55** | **218** | PN | Pn | 15 06 58.7 | -2.9 |
| **BFZ** | **Birch Farm** | **3.55** | **218** | Pn | Pn | 15 06 58.5 | -3.2 |
| BFZ | | | | Sn | Sn | 15 07 38.6 | -3.9 |
| **POWZ** | **Post Office Ro** | **3.59** | **225** | PN | Pn | 15 07 00.5 | -1.7 |
| **POWZ** | **Post Office Ro** | **3.59** | **225** | Pn | Pn | 15 07 00.3 | -2.0 |
| **PRWZ** | **Pori Road** | **3.60** | **221** | PN | Pn | 15 06 60.0 | -2.3 |
| **PRWZ** | **Pori Road** | **3.60** | **221** | Pn | Pn | 15 07 00.0 | -2.3 |
| **VRZ** | **Vera Road** | **3.61** | **249** | PN | Pn | 15 07 02.6 | +0.1 |
| **VRZ** | **Vera Road** | **3.61** | **249** | Pn | Pn | 15 07 02.6 | +0.1 |
| **WAZ** | **Wanganui** | **3.71** | **239** | PN | Pn | 15 07 03.8 | 0.0 |
| **WAZ** | **Wanganui** | **3.71** | **239** | Pn | Pn | 15 07 03.8 | 0.0 |
| **MRZ** | **Mangatainoka R** | **3.88** | **223** | PN | Pn | 15 07 03.4 | -2.8 |
| MRZ | | | | AML | AML | 15 07 47.8 | |
| MRZ | | | | AML | AML | 15 07 48.6 | |
| **MRZ** | **Mangatainoka R** | **3.88** | **223** | Pn | Pn | 15 07 03.4 | -2.8 |
| MRZ | | | | Sn | Sn | 15 07 46.2 | -4.5 |
| **HOWZ** | **Holdsworth Sta** | **4.08** | **222** | PN | Pn | 15 07 05.9 | -3.1 |
| **HOWZ** | **Holdsworth Sta** | **4.08** | **222** | Pn | Pn | 15 07 05.9 | -3.1 |
| **MTW** | **Mount Morrison** | **4.28** | **219** | PN | Pn | 15 07 08.1 | -3.6 |
| **MTW** | **Mount Morrison** | **4.28** | **219** | Pn | Pn | 15 07 08.1 | -3.6 |
| **KIW** | **Kapiti Island** | **4.39** | **226** | *e*PN | Pn | 15 07 10.2 | -3.0 |
| **KIW** | **Kapiti Island** | **4.39** | **226** | Pn | Pn | 15 07 10.1 | -3.1 |
| **CAW** | **Cannon Point** | **4.47** | **223** | PN | Pn | 15 07 10.8 | -3.5 |
| **CAW** | **Cannon Point** | **4.47** | **223** | Pn | Pn | 15 07 10.5 | -3.8 |
| **PAWZ** | **Paruwai Farm** | **4.49** | **218** | PN | Pn | 15 07 10.2 | -4.3 |
| **PAWZ** | **Paruwai Farm** | **4.49** | **218** | Pn | Pn | 15 07 10.3 | -4.2 |
| **PLWZ** | **Palliser** | **4.71** | **218** | PN | Pn | 15 07 13.6 | -4.1 |
| **PLWZ** | **Palliser** | **4.71** | **218** | Pn | Pn | 15 07 13.5 | -4.2 |
| **TCW** | **Tory Channel** | **4.98** | **227** | PN | Pn | 15 07 17.5 | -3.8 |
| **TUWZ** | **Tuamarina** | **5.31** | **227** | Pn | Pn | 15 07 21.2 | -4.7 |
| **NNZ** | **Nelson** | **5.52** | **231** | PN | Pn | 15 07 25.0 | -3.7 |
| **NNZ** | **Nelson** | **5.52** | **231** | Pn | Pn | 15 07 25.0 | -3.7 |
| **QRZ** | **Quartz Range** | **5.87** | **238** | PN | Pn | 15 07 29.5 | -4.0 |
| **QRZ** | **Quartz Range** | **5.87** | **238** | Pn | Pn | 15 07 29.3 | -4.1 |
| **KHZ** | **Kahutara** | **6.20** | **222** | Pn | Pn | 15 07 34.2 | -3.9 |
| **CTZ** | **Chatham Island** | **6.68** | **152** | PN | Pn | 15 07 45.2 | +0.5 |
| **DSZ** | **Denniston Nort** | **6.80** | **233** | Pn | Pn | 15 07 41.8 | -4.5 |
| **ODZ** | **Otahua Downs** | **9.54** | **219** | Pn | Pn | 15 08 18.6 | -5.3 |

**DJA 30 15:08:25.4±0.5,8˚S±3˚×10˚7E±˚,h22km±5km,M3.9/9, MLv3.9/9,Jawa**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CNJI** | **Cibinong** | **0.59** | **350** | P | Pb | 15 08 37.5 | +0.5 |
| CNJI | | | | S | Sb | 15 08 45.7 | +0.8 |
| **CISI** | **Cisompet, Garu** | **0.67** | **60** | P | Pb | 15 08 38.1 | -0.4 |
| CISI | | | | S | Sb | 15 08 46.3 | -1.1 |
| **SKJI** | **Sukabumi** | **1.10** | **323** | P | Pn | 15 08 45.3 | -0.3 |
| SKJI | | | | S | Sb | 15 08 59.8 | 0.0 |
| **LEM** | **Lembang** | **1.12** | **20** | P | Pn | 15 08 44.7 | -1.4 |
| LEM | | | | S | Sb | 15 09 00.5 | -0.2 |
| **CMJI** | **Cimerak** | **1.21** | **85** | P | Pn | 15 08 46.4 | -0.6 |
| CMJI | | | | S | Sn | 15 08 59.4 | -3.4 |
| **CGJI** | **Cibinong** | **1.98** | **310** | P | Pn | 15 08 56.8 | -0.9 |
| CGJI | | | | S | Sn | 15 09 18.5 | -3.3 |

*ISCJB **30** 15:11:25.0±0.7,36˚.66N±0˚.05×70˚.84E±0˚.09,h200km, Error ellipse: s-maj=10.7km s-min=5.5km az=155.3*
*NNC **30** 15:11:29.4±2.9,36˚.95N×70˚.72E,h198km±22km,mb2.6, mpv3.6,Error ellipse: s-maj=28.6km s-min=13.8km az=164.0*
**ISC 30 15:11:25.6±1.1,36˚.67N±0˚.08×70˚.84E±0˚.08,h200km,n17, σ1º40/23,9C-3D,Hindu Kush region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZET** | **Dzherino** | **2.66** | **324** | ⇑P | **Pn** | **15 12 11.8** | **+0.5** |
| | 54nm,0.4s | | | | | | |
| DZET | | | | ⇑S | **Sn** | **15 12 45.8** | **-1.4** |
| | 73nm,0.5s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.94** | **31** | ⇓P | **Pn** | **15 12 27.8** | **+1.0** |
| | 2.8nm,0.2s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **15 13 15.1** | **+0.2** |
| | 26nm,0.5s | | | | | | |
| **MNAS** | **Manas** | **5.95** | **12** | ⇓P | **Pn** | **15 12 53.1** | **+0.9** |
| | 3.2nm,0.5s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **15 13 59.0** | **-1.8** |
| | 19nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **6.43** | **358** | ⇑P | **Pn** | **15 12 59.1** | **+0.8** |
| | 1.1nm,0.3s,baz=178,slow=12,SNR=18 | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **15 14 08.6** | **-3.3** |
| | 6.3nm,0.4s,baz=186,slow=23,SNR=16 | | | | | | |
| **AAK** | **Ala-Archa** | **6.59** | **24** | P | **Pn** | **15 13 01.0** | **+0.5** |
| | 1.1nm,0.3s | | | | | | |
| AAK | | | | ⇑S | **Sn** | **15 14 15.7** | **-0.1** |
| | 7.6nm,0.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **7.24** | **29** | ⇑P | **Pn** | **15 13 09.5** | **+0.5** |
| | 4.1nm,0.6s | | | | | | |
| **GKN** | **Gorkha** | **14.51** | **123** | *e*P | **Pn** | **15 14 42.5** | **+0.5** |
| | 6.3nm,0.5s | | | | | | |
| **AB31** | **Akbulak array** | **14.87** | **331** | P | **P** | **15 14 48.3** | **+1.5** |
| | 1.9nm,0.8s,baz=149,slow=12,SNR=18 | | | | | | |
| AB31 | | | | ⇑S | **S** | **15 17 30.8** | **-0.2** |
| | 1.0nm,0.8s | | | | | | |
| **DMN** | **Daman** | **15.08** | **123** | *e*P | **Pn** | **15 14 48.8** | **-0.2** |
| **KKN** | **Kakani** | **15.08** | **122** | *e*P | **Pn** | **15 14 49.3** | **+0.3** |
| | 5.8nm,0.4s | | | | | | |
| **PKIN** | **Phulchoki** | **15.29** | **122** | *e*P | **Pn** | **15 14 50.8** | **-0.9** |
| **PKI** | **Pulchoki** | **15.31** | **122** | *e*P | **Pn** | **15 14 51.8** | **-0.1** |
| | 21nm,0.7s | | | | | | |
| **GUN** | **Gumba** | **15.42** | **120** | *e*P | **P** | **15 14 54.7** | **+1.2** |
| | 3.9nm,0.4s | | | | | | |
| **RAMN** | **Ramite** | **16.52** | **121** | *e*P | **P** | **15 15 02.4** | **-3.1** |
| | 6.1nm,0.5s | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.57** | **330** | ⇑P | **Pn** | **15 15 07.3** | **+0.8** |
| | 3.4nm,0.8s | | | | | | |
| **TAPN** | **Taplejung** | **17.04** | **118** | *e*P | **P** | **15 15 10.9** | **-0.4** |
| **ODAN** | **Odare** | **17.12** | **120** | *e*P | **P** | **15 15 09.9** | **-2.2** |
| | 5.7nm,0.6s | | | | | | |

**WEL 30 15:11:37.2±0.3,37˚.91S×179˚.10E,h26km±1km,ML3.8/7, 3C-5D,Error ellipse: s-maj=2.5km s-min=1.2km az=90.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WMGZ** | **Waiomatatini S** | **0.55** | **279** | ⇑P* | Pb | 15 11 48.3 | -0.1 |
| WMGZ | | | | S* | Sb | 15 11 56.1 | +0.2 |
| **PUZ** | **Puketiti** | **0.69** | **256** | ⇑P* | Pb | 15 11 50.3 | -0.3 |
| PUZ | | | | S* | Sb | 15 12 00.1 | +0.3 |
| PUZ | | | | AML | AML | 15 12 02.3 | |
| **MXZ** | **Matakaoa Point** | **0.72** | **298** | ⇑P* | Pb | 15 11 51.1 | -0.1 |
| MXZ | | | | S* | Sn | 15 12 01.3 | -0.5 |
| MXZ | | | | AML | AML | 15 12 03.4 | |
| MXZ | | | | AML | AML | 15 12 03.4 | |
| MXZ | | | | AML | AML | 15 12 03.6 | |
| **PKGZ** | **Pakihiroa** | **0.81** | **273** | PN | Pb | 15 11 52.0 | -0.7 |
| PKGZ | | | | S* | Sn | 15 12 03.7 | -0.4 |
| **CNGZ** | **Carnagh Statio** | **0.91** | **230** | PN | Pn | 15 11 54.2 | -0.1 |
| **TWGZ** | **Tauwhareparae** | **0.92** | **253** | ⇓PN | Pn | 15 11 54.1 | -0.5 |
| **HAZ** | **Te Kaha** | **1.05** | **278** | ⇓PN | Pn | 15 11 55.7 | -0.5 |
| **TKGZ** | **Te Karaka** | **1.12** | **241** | ⇓PN | Pn | 15 11 56.8 | -0.4 |
| **MWZ** | **Matawai** | **1.31** | **251** | ⇓PN | Pn | 15 11 59.0 | -0.9 |
| MWZ | | | | AML | AML | 15 12 17.4 | |
| MWZ | | | | AML | AML | 15 12 17.4 | |
| MWZ | | | | AML | AML | 15 12 17.9 | |
| MWZ | | | | AML | AML | 15 12 17.9 | |
| **RIGZ** | **Rimuhau** | **1.32** | **232** | PN | Pn | 15 11 59.5 | -0.5 |
| **PRGZ** | **Paritu Road** | **1.39** | **223** | PN | Pn | 15 12 00.5 | -0.5 |
| **MHGZ** | **Mahia Peninsul** | **1.56** | **217** | PN | Pn | 15 12 02.7 | -0.6 |
| **KNZ** | **Kokohu** | **1.58** | **225** | PN | Pn | 15 12 02.6 | -0.9 |
| **URZ** | **Urewera** | **1.61** | **257** | PN | Pn | 15 12 03.8 | -0.1 |
| URZ | | | | AML | AML | 15 12 29.4 | |
| URZ | | | | AML | AML | 15 12 30.9 | |
| **SNGZ** | **Shannon Statio** | **1.64** | **237** | PN | Pn | 15 12 03.7 | -0.6 |
| **WHHZ** | **Waihua** | **1.87** | **231** | PN | Pn | 15 12 07.0 | -0.6 |
| **RAHZ** | **Arahi** | **1.88** | **237** | PN | Pn | 15 12 07.4 | -0.3 |
| **OPRZ** | **Ohinepanea** | **2.02** | **271** | PN | Pn | 15 12 08.8 | -0.7 |
| **ARHZ** | **Aropaoanui** | **2.13** | **230** | PN | Pn | 15 12 11.0 | -0.2 |
| **NMHZ** | **Naumai** | **2.16** | **236** | PN | Pn | 15 12 11.4 | -0.2 |
| **PRRZ** | **Plateau Road** | **2.21** | **254** | PN | Pn | 15 12 12.4 | +0.1 |
| **BKZ** | **Black Stump Fm** | **2.40** | **238** | ⇓PN | Pn | 15 12 14.5 | -0.4 |
| BKZ | | | | AML | AML | 15 12 44.2 | |
| **MCHZ** | **McNeill Hill** | **2.43** | **230** | PN | Pn | 15 12 14.6 | -0.6 |
| **KAHZ** | **Kahuranaki** | **2.56** | **222** | PN | Pn | 15 12 15.8 | -1.3 |
| **BHHZ** | **Black Hill Sta** | **2.85** | **235** | PN | Pn | 15 12 20.2 | -0.9 |
| **TOZ** | **Tahuroa Road** | **2.85** | **272** | *e*PN | Pn | 15 12 21.0 | 0.0 |
| **WPHZ** | **Waipukurau** | **2.99** | **223** | PN | Pn | 15 12 21.2 | -1.7 |
| **MOVZ** | **Moawhango** | **3.02** | **239** | *e*PN | Pn | 15 12 22.5 | -1.0 |
| **PNHZ** | **Pukenui** | **3.02** | **228** | PN | Pn | 15 12 21.6 | -1.8 |
| **PRHZ** | **Porangahau** | **3.04** | **218** | PN | Pn | 15 12 21.1 | -2.5 |
| **WNVZ** | **Wahianoa** | **3.09** | **242** | PN | Pn | 15 12 23.5 | -1.0 |
| **FWVZ** | **Far West T-bar** | **3.09** | **243** | PN | Pn | 15 12 23.8 | -0.7 |
| **MKAZ** | **Moumakai** | **3.23** | **283** | PN | Pn | 15 12 26.1 | -0.1 |
| **TSZ** | **Takapari Road** | **3.26** | **228** | PN | Pn | 15 12 24.4 | -2.3 |
| **ANWZ** | **Angora Road** | **3.27** | **218** | *e*PN | Pn | 15 12 25.6 | -1.1 |
| **DVHZ** | **Dannevirke** | **3.30** | **223** | PN | Pn | 15 12 25.0 | -2.3 |
| **HIZ** | **Hauiti** | **3.40** | **258** | PN | Pn | 15 12 28.9 | +0.4 |
| HIZ | | | | AML | AML | 15 17 57.8 | |
| HIZ | | | | AML | AML | 15 20 04.8 | |
| **BFZ** | **Birch Farm** | **3.55** | **218** | *e*PN | Pn | 15 12 27.6 | -3.0 |
| **POWZ** | **Post Office Ro** | **3.59** | **225** | PN | Pn | 15 12 29.2 | -2.0 |
| **PRWZ** | **Pori Road** | **3.59** | **222** | PN | Pn | 15 12 29.0 | -2.2 |
| **WAZ** | **Wanganui** | **3.71** | **239** | PN | Pn | 15 12 32.2 | -0.6 |
| **MRZ** | **Mangatainoka R** | **3.88** | **224** | PN | Pn | 15 12 32.1 | -3.0 |
| MRZ | | | | AML | AML | 15 13 17.9 | |
| MRZ | | | | AML | AML | 15 13 19.3 | |
| **HOWZ** | **Holdsworth Sta** | **4.08** | **222** | PN | Pn | 15 12 34.8 | -3.1 |
| **MTW** | **Mount Morrison** | **4.28** | **219** | *e*PN | Pn | 15 12 36.6 | -4.0 |
| **KIW** | **Kapiti Island** | **4.39** | **226** | *e*PN | Pn | 15 12 39.2 | -3.0 |
| **CAW** | **Cannon Point** | **4.46** | **223** | PN | Pn | 15 12 39.6 | -3.6 |
| **PLWZ** | **Palliser** | **4.71** | **218** | *e*PN | Pn | 15 12 42.5 | -4.1 |
| **TUWZ** | **Tuamarina** | **5.31** | **227** | PN | Pn | 15 12 50.9 | -3.9 |
| **NNZ** | **Nelson** | **5.52** | **231** | *e*PN | Pn | 15 12 53.8 | -3.9 |
| **QRZ** | **Quartz Range** | **5.87** | **238** | *e*PN | Pn | 15 12 58.4 | -4.0 |
| **KHZ** | **Kahutara** | **6.20** | **222** | *e*PN | Pn | 15 13 02.8 | -4.1 |

*IDC **30** 15:12:07.7±0.9,5˚.41S×149˚.95E,h0km,mb4.1/8, mb1 4.4/10,mb1mx4.1/32,mbtmp4.3/10,ML3.3/2,MS3.1/2, Ms1 3.1/2,ms1mx2.7/28,Error ellipse: s-maj=22.2km s-min=16.9km az=102.0*
*ISCJB **30** 15:12:08.5±0.6,5˚.32S±0˚.07×149˚.70E±0˚.08,h10km, mb4.0/7,Error ellipse: s-maj=12.7km s-min=8.0km az=38.2*
*NEIC **30** 15:12:09.7±10.0,5˚.39S×149˚.95E,h13km±66km,mb4.4/1, Error ellipse: s-maj=24.8km s-min=19.9km az=213.0*
*AUST **30** 15:12:12.6±3.1,5˚.09S×149˚.53E,h34km,Error ellipse: s-maj=1.8km s-min=1.1km az=322.0*
**ISC 30 15:12:09.6±0.7,5˚.36S±0˚.08×149˚.91E±0˚.09,h10km,n29, σ1º91/29,mb4.3/7,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **2.53** | **63** | P | **Pb** | **15 12 54.1** | **-1.1** |
| | baz=2.8,SNR=9.7 | | | | | | |
| **PMG** | **Port Moresby** | **4.86** | **214** | Pn | **Pn** | **15 13 23.7** | **+1.0** |
| | 31nm,0.3s,baz=40,slow=5.4,SNR=54 | | | | | | |
| PMG | | | | Sn | **Sn** | **15 14 16.6** | **-2.6** |
| | 9.5nm,0.3s,baz=219,slow=14,SNR=3.6 | | | | | | |
| PMG | | | | LR | LR | 15 15 20.0 | |
| | comp=Z,346nm,20.2s,baz=40,slow=40 | | | | | | |
| **PMG** | **Port Moresby** | **4.86** | **214** | P | **Pn** | **15 13 24.3** | **+1.6** |
| | baz=4.9,SNR=51 | | | | | | |
| **HNR** | **Honiara** | **10.75** | **113** | LR | LR | 15 18 25.6 | |
| | comp=Z,74nm,21.5s,baz=189,slow=35 | | | | | | |
| **COEN** | **Coen** | **10.81** | **217** | P | **Pn** | **15 14 45.1** | **+0.5** |
| | baz=11,SNR=11 | | | | | | |
| **MTSU** | **Mount Surprise** | **13.82** | **203** | P | **Pn** | **15 15 28.6** | **+2.8** |
| | baz=14,SNR=7.1 | | | | | | |
| **QIS** | **Mount Isa** | **18.12** | **213** | P | **P** | **15 16 22.8** | **+0.9** |
| | baz=18,SNR=6.6 | | | | | | |
| **KDU** | **Kakadu** | **18.68** | **246** | P | P | 15 16 23.4 | -4.7 |
| | baz=18,SNR=4.4 | | | | | | |
| **SIJI** | **Sorong** | **19.13** | **283** | P | **Pn** | **15 16 34.3** | **+0.3** |
| | 0.3nm,0.3s,baz=96,slow=13,SNR=6.5 | | | | | | |
| **PALU** | **Palau** | **19.91** | **309** | P | **Pn** | **15 16 47.1** | **+3.9** |
| | baz=20,SNR=4.2 | | | | | | |
| **EIDS** | **Eidsvold** | **19.93** | **177** | P | **Pn** | **15 16 45.1** | **+1.8** |
| | baz=20,SNR=3.4 | | | | | | |
| **MTN** | **Manton Dam** | **19.96** | **247** | P | **P** | **15 16 40.5** | **-1.6** |
| | baz=20,SNR=11 | | | | | | |
| **WRAB** | **Tennant Creek** | **20.95** | **225** | *e*P | **P** | **15 16 51.6** | **-1.3** |
| | 7.4nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.96** | **225** | P | **P** | **15 16 51.8** | **-1.3** |
| | 28nm,0.9s,baz=48,slow=11,SNR=48 | | | | | | |
| WRA | | | | S | **S** | **15 20 43.0** | **-3.9** |
| | 1.4nm,1.0s,baz=49,slow=22,SNR=4.9 | | | | | | |
| **RMQ** | **Roma** | **21.04** | **183** | P | **P** | **15 16 57.5** | **+3.8** |
| | baz=21,SNR=5.9 | | | | | | |
| **QLP** | **Quilpie** | **21.79** | **194** | P | P | 15 17 06.6 | +4.8 |
| | baz=22,SNR=11 | | | | | | |
| **DZM** | **Mont Dzumac** | **23.07** | **138** | P | **P** | **15 17 14.3** | **-1.2** |
| | 16nm,0.8s,baz=359,slow=16,SNR=14 | | | | | | |
| **KNRA** | **Kununurra** | **23.15** | **242** | P | **P** | **15 17 14.9** | **-1.5** |
| | baz=23,SNR=82 | | | | | | |
| **ASAR** | **Alice Springs** | **23.85** | **219** | P | **P** | **15 17 22.4** | **-0.9** |
| | 5.6nm,0.6s,baz=50,slow=9.3,SNR=44 | | | | | | |
| ASAR | | | | S | **S** | **15 21 40.3** | **+0.8** |
| | 1.5nm,1.0s,baz=31,slow=22,SNR=6.9 | | | | | | |
| **WRKA** | **Warakurna** | **28.51** | **224** | P | **P** | **15 18 03.6** | **-1.8** |
| | baz=28,SNR=18 | | | | | | |
| **MEEK** | **Meekatharra** | **36.59** | **231** | P | **P** | **15 19 13.8** | **-2.3** |
| | baz=36,SNR=14 | | | | | | |
| **MORW** | **Morawa** | **39.77** | **230** | P | **P** | **15 19 43.6** | **+0.7** |
| | baz=40,SNR=4.5 | | | | | | |
| **KLBR** | **Kellerberrin** | **39.85** | **225** | P | **P** | **15 19 43.6** | **+0.1** |
| | baz=40,SNR=4.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **55.52** | **297** | P | **P** | **15 21 45.0** | **-0.5** |
| | 0.7nm,0.5s,baz=118,slow=5.2,SNR=4.8 | | | | | | |
| **SONM** | **Songino Array** | **65.29** | **329** | P | **P** | **15 22 52.8** | **+0.9** |
| | 0.6nm,0.8s,baz=123,slow=5.3,SNR=2.9 | | | | | | |
| **VNDA** | **Vanda** | **72.39** | **177** | P | **P** | **15 23 36.5** | **+1.1** |
| | 1.8nm,0.7s,baz=324,slow=7.2,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **83.77** | **23** | P | **P** | **15 24 37.2** | **-1.6** |
| | 0.3nm,0.7s,baz=236,slow=4.2,SNR=6.1 | | | | | | |
| **QSPA** | **South Pole Qui** | **84.61** | **180** | P | **P** | **15 24 41.7** | **-1.5** |
| | 2.1nm,0.7s,baz=322,slow=0.9,SNR=16 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.71** | **286** | PKPbc | **PKPbc** | **15 31 56.4** | **+0.7** |
| | 0.6nm,0.8s,baz=70,slow=3.3,SNR=3.8 | | | | | | |

*IDC **30** 15:18:28.9±0.5,56˚.47

RPZ LR LR
comp=Z,51µm,20.0s
**BKZ Black Stump Fm 32.13 286** PFAKE 15 25 10.0 +6.6
BKZ LR LR
comp=Z,60µm,22.0s
**WHZ Wether Hill Ro 32.16 269** *eP* **P 15 25 02.3 -1.2**
comp=Z,73nm,1.2s
WHZ LR LR
comp=Z,32µm,19.0s
**MCQ Macquarie Isla 32.18 249** PFAKE 15 25 10.0 +6.5
MCQ LR LR
comp=Z,27µm,22.0s
**THZ Tophouse 32.19 279** PFAKE 15 25 10.0 +6.1
THZ LR LR
comp=Z,38µm,22.0s
**WKZ Wanaka 32.25 271** PFAKE 15 25 10.0 +5.6
WKZ LR LR
comp=Z,45µm,21.0s
**URZ Urewera 32.49 288** LR LR 15 33 40.7
comp=Z,12µm,20.8s,baz=146,slow=28
**URZ Urewera 32.49 288** *eP* **P 15 25 06.5 +0.1**
comp=Z,31nm,1.2s
**DCZ Deep Cove 32.85 269** PFAKE 15 25 20.0 +10
DCZ LR LR
comp=Z,32µm,18.0s
**QSPA South Pole Qui 33.04 180** P **P 15 25 11.5 +0.2**
comp=Z,10nm,0.9s,baz=119,slow=1.7,SNR=15
QSPA LR LR 15 36 54.2
comp=Z,8µm,20.3s,baz=68,slow=33
**PTCN Pitcairn Islan 33.23 21** PFAKE 15 25 20.0 +7.0
PTCN LR LR
comp=Z,23µm,20.0s
**HIZ Hauiti 33.48 285** PFAKE 15 25 20.0 +4.9
HIZ LR LR
comp=Z,34µm,20.0s
**TBI Tubuai 34.12 348** *eS* S 15 30 35.5 -11
comp=Z,9µm,28.8s
TBI *e*LR LR 15 33 52.7
comp=Z,101µm,28.8s,baz=175
**TBI Tubuai 34.12 348** *eT* T 16 00 09.1
comp=Z,671nm,0.3s
**RKT Rikitea 34.39 12** *e*S S 15 30 41.4 -9.4
comp=Z,8µm,30.2s
RKT *e*LQ LQ 15 32 46.5
comp=Z,37µm,31.5s
RKT *e*LR LR 15 34 10.6
comp=Z,67µm,29.2s,baz=187
**RKT Rikitea 34.39 12** *eT* T 16 00 29.8
comp=Z,115nm,0.2s
**DRV Dumont d'Urvil 35.36 222** P P 15 25 27.0 -4.1
DRV S **S 15 31 00.0 -5.0**
DRV L L 15 33 00.0
DRV R 15 36 00.0
**OUZ Omahuta 36.62 288** PFAKE 15 25 50.0 +7.8
OUZ LR LR
comp=Z,40µm,18.0s
**RAO Raoul Island 37.29 303** LR LR 15 37 01.3
comp=Z,7µm,21.9s,baz=158,slow=30
RAO T T 16 04 30.8
comp=Z,396nm,0.4s,baz=262,slow=23,SNR=4.5
**RAR Rarotonga 38.06 333** T T 16 05 17.0
comp=Z,122nm,0.3s,baz=38,slow=20,SNR=7.0
**RAR Rarotonga 38.06 333** PFAKE 15 26 00.0 +5.5
RAR TT 16 05 17.0
RAR LR LR
comp=Z,36µm,20.0s
**MEH Mehetia 39.41 352** *eP* **P 15 26 06.9 +1.1**
**MEH Mehetia 39.41 352** *eT* T 16 06 45.0
comp=Z,306nm,0.3s
**TVO Taravao 39.60 350** *eP* **P 15 26 08.9 +1.4**
comp=Z,59nm,1.4s
**TVO Taravao 39.60 350** *eT* T 16 07 00.2
comp=Z,23nm,0.3s
**PAE Paea 39.75 349** *eT* T 16 07 05.6
comp=Z,30nm,0.2s
**PPT2 Papeete2 39.83 349** *eP* **P 15 26 11.0 +1.6**
comp=Z,88nm,1.4s
PPT2 *e*S S 15 31 59.5 -14
comp=Z,12µm,26.5s
PPT2 *e*LQ LQ 15 35 15.6
comp=Z,8µm,25.5s
PPT2 *e*LR LR 15 36 28.6
comp=Z,107µm,28.0s,baz=178
**PPT2 Papeete2 39.83 349** *eT* T 16 07 12.0
comp=Z,86nm,0.3s
**TIAR Tiarei 39.83 350** *eT* T 16 07 11.1
comp=Z,39nm,0.3s
**PPT Papeete 39.85 349** T T 16 07 28.7
comp=Z,80nm,0.3s,baz=275,slow=17,SNR=6.1
**VAH Vaihoa 41.99 352** *eT* T 16 09 57.8
comp=Z,577nm,0.2s
**PMOR Pomariorio Ree 42.24 352** *eT* T 16 10 17.4
comp=Z,55nm,0.3s
**TAU Tasmania Unive 45.26 257** PFAKE 15 27 00.0 +6.7
TAU LR LR
comp=Z,23µm,21.0s
**CASY Casey 45.43 213** *eP* **P 15 26 56.3 +2.0**
comp=Z,59nm,0.9s
CASY LR LR
comp=Z,13µm,21.0s
**EFI East Falkland 46.43 121**⇑ *eP* **P 15 27 02.7 +0.3**
EFI pmax pmax
comp=Z,18nm,1.0s
**LHI Lord Howe Isla 47.21 277** PFAKE 15 27 20.0 +11
LHI LR LR
comp=Z,22µm,20.0s
**VNA3 Neumayer Olymp 47.68 161** P P 15 27 08.7 -3.3
**TAOE Nuku Hiva Isla 48.18 3** *e*S **S 15 34 13.9 -1.6**
comp=Z,6µm,25.8s
TAOE *e*LQ LQ 15 38 14.6
comp=Z,40µm,28.0s
TAOE *e*LR LR 15 40 30.7
comp=Z,63µm,28.2s,baz=196
**TAOE Nuku Hiva Isla 48.18 3** *eT* T 16 17 43.6
comp=Z,142nm,0.3s
**VNA2 Neumayer--Watz 48.34 162** P **P 15 27 15.4 -1.7**
baz=211,slow=7.4
**SNAA Sanae 48.42 164** P **P 15 27 15.8 -2.0**
**SNAA Sanae 48.42 164** P **P 15 27 15.7 -2.1**
comp=Z,1.8nm,0.6s,baz=190,slow=12,SNR=9.3
**SNAA Sanae 48.42 164** *eP* P 15 27 14.8 -3.0
comp=Z,26nm,1.1s
SNAA LR LR
comp=Z,898nm,18.0s
**VNA1 Neumayer--Stat 48.43 161** P **P 15 27 16.1 -1.6**
**AFI Afiamalu 48.56 321** LR LR 15 41 34.6
comp=Z,13µm,20.9s,baz=158,slow=29
**MSVF Nonsavu 49.10 307** P P 15 27 18.5 -5.1
MSVF MLR MLR
comp=Z,11µm,18.0s
**MSVF Nonsavu 49.10 307** P P 15 27 18.4 -5.1
MSVF LR LR
comp=Z,11µm,18.0s
**CAN Canberra 49.81 265** PFAKE 15 27 40.0 +11
CAN LR LR
comp=Z,17µm,21.0s
**DZM Mont Dzumac 50.91 291** *e*S **S 15 34 55.2 +1.5**
comp=Z,3µm,27.2s
DZM *e*LQ LQ 15 39 58.3
comp=Z,44µm,25.9s
DZM *e*LR LR 15 42 11.5
comp=Z,30µm,24.6s
**DZM Mont Dzumac 50.91 291** *eP* P 15 27 33.3 -4.0
comp=Z,63nm,1.4s
**NVL N'lazarevskaya 51.10 169** *eP* P 15 27 43.1 +5.0
**ARMA Armidale 52.10 271** *eP* **P 15 27 43.6 -2.6**
comp=Z,44nm,1.1s
ARMA LR LR
comp=Z,21µm,19.0s
**HOPE Hope Point 53.76 136** PFAKE 15 28 10.0 +12
HOPE LR LR
comp=Z,5µm,21.0s
**TRQA Tornquist 54.13 106** *eP* P 15 27 57.0 -3.9
TRQA LR LR
comp=Z,3µm,20.0s
**SYO Syowa Base 54.17 181**⇓ *iP* **P 15 28 01.0 +0.3**
**MAW Mawson 54.19 192** P **P 15 27 59.6 -1.3**
comp=Z,4.1nm,0.8s,baz=155,slow=10,SNR=2.8
MAW LR LR 15 49 57.1
comp=Z,4µm,18.7s,baz=156,slow=34
**MAW Mawson 54.19 192** *eP* **P 15 28 03.5 +2.6**
MAW pmax pmax
comp=Z,10.0nm,1.0s
**MAW Mawson 54.19 192** *eP* **P 15 28 03.5 +2.6**
comp=Z,9.5nm,1.0s
**EIDS Eidsvold 56.36 275** *eP* P 15 28 09.4 -7.8
comp=Z,85nm,1.4s
EIDS LR LR
comp=Z,22µm,19.0s
**BBOO Buckleboo 58.69 257** PFAKE 15 28 40.0 +6.5
BBOO LR LR
comp=Z,16µm,18.0s
**XMAS Kiritimati 60.21 343** PFAKE 15 28 50.0 +6.0
XMAS LR LR
comp=Z,11µm,19.0s
**LVC Limon Verde 62.39 89** *eP* P 15 28 54.4 -4.8
comp=Z,26nm,0.8s
**CTA Charters Tower 63.24 274** P P 15 28 57.0 -7.5
comp=Z,7.6nm,1.0s,baz=92,slow=14,SNR=2.3
**CTAO Charters Tower 63.24 274** *eP* P 15 28 59.7 -4.9
CTAO pmax pmax
comp=Z,69nm,1.2s
CTAO MLR MLR
comp=Z,12µm,19.0s
**CTAO Charters Tower 63.24 274** *eP* P 15 28 59.6 -4.9
comp=Z,69nm,1.2s
CTAO LR LR
comp=Z,12µm,19.0s
**HNR Honiara 64.88 293** P P 15 29 10.4 -4.9
HNR pmax pmax
comp=Z,211nm,1.2s
**HNR Honiara 64.88 293** Pn P 15 29 10.4 -4.9
comp=Z,211nm,1.2s
**CPUP Villa Florida 65.69 101** P P 15 29 16.7 -3.8
comp=Z,2.2nm,0.8s,baz=229,slow=9.3,SNR=2.9
CPUP LR LR 15 54 02.9
comp=Z,3µm,19.6s,baz=216,slow=32
**CPUP Villa Florida 65.69 101** *eP* **P 15 29 21.2 +0.7**
**CPUP Villa Florida 65.69 101** *eP* **P 15 29 21.2 +0.7**
**NNA Nana 66.82 76** *eP* **P 15 29 26.4 -1.5**
NNA pmax pmax
comp=Z,47nm,1.0s
NNA MLR MLR
comp=Z,6µm,21.0s
**NNA Nana 66.82 76** *eP* **P 15 29 26.4 -1.5**
comp=Z,47nm,1.0s
NNA LR LR
comp=Z,6µm,21.0s
**ASAR Alice Springs 67.07 262** P P 15 29 22.2 -7.2
comp=Z,9.6nm,0.8s,baz=144,slow=6.5,SNR=45
**AS31 Alice Springs 67.07 262** PFAKE 15 29 40.0 +11
AS31 LR LR
comp=Z,200nm,20.0s
**LPAZ La Paz 67.95 86** P P 15 29 30.8 -4.9
comp=Z,2.5nm,0.8s,baz=195,slow=6.2,SNR=7.2
LPAZ LR LR 15 53 15.6
comp=Z,2µm,21.7s,baz=201,slow=31
**H01W1 Cape Leeuwin H 68.09 240** T T 16 44 48.7
baz=144,slow=76,SNR=4466
**H01W2 Cape Leeuwin H 68.10 240** T T 16 44 49.1
baz=144,slow=76,SNR=4107
**H01W3 Cape Leeuwin H 68.11 240** T T 16 44 50.0
baz=144,slow=76,SNR=5638
**TARA Tarawa 68.39 311** PFAKE 15 29 40.0 +2.3
TARA LR LR
comp=Z,11µm,22.0s
**WB2 Warramunga Arr 69.84 264** PFAKE 15 30 00.0 +13
WB2 LR LR
comp=Z,8µm,20.0s
**PAYG Puerto Ayora 69.84 57** PFAKE 15 29 50.0 +3.2
PAYG LR LR
comp=Z,2µm,21.0s
**WRA Warramunga Arr 69.84 264** P P 15 29 40.3 -6.5
comp=Z,13nm,1.1s,baz=147,slow=5.5,SNR=19
WRA LR LR 15 56 05.0
comp=Z,8µm,20.9s,baz=140,slow=32
**WRAB Tennant Creek 69.85 264**⇓ *eP* P 15 29 42.5 -4.3
WRAB pmax pmax
comp=Z,30nm,1.0s
**WRAB Tennant Creek 69.85 264** P P 15 29 42.3 -4.5
comp=Z,170nm,0.9s,SNR=6.9
**WRAB Tennant Creek 69.85 264** *eP* P 15 29 40.8 -6.0
comp=Z,238nm,1.9s
WRAB LR LR
comp=Z,10µm,20.0s
**COEN Coen 69.92 275** *eP* P 15 29 38.4 -9.0
comp=Z,93nm,1.8s
COEN LR LR
comp=Z,12µm,18.0s
**PMG Port Moresby 71.55 281** *eP* P 15 29 51.1 -6.1
PMG pmax pmax
comp=Z,65nm,1.3s
PMG MLR MLR
comp=Z,11µm,20.0s
**PMG Port Moresby 71.55 281** *eP* P 15 29 51.1 -6.1
comp=Z,65nm,1.3s
PMG LR LR
comp=Z,11µm,20.0s
**OTAV Otavalo 76.35 68** *eP* P 15 30 19.2 -6.6
comp=Z,74nm,1.5s
OTAV LR LR
comp=Z,900nm,20.0s
**MBWA Marble Bar 76.63 252** *eP* P 15 30 20.0 -6.9
comp=Z,222nm,2.2s
MBWA LR LR
comp=Z,8µm,18.0s
**SAML Samuel 76.69 86** *eP* P 15 30 20.3 -6.9
comp=Z,48nm,1.4s
**JOHN Johnston Islan 76.97 333** PFAKE 15 30 30.0 +1.5
JOHN LR LR
comp=Z,11µm,19.0s
**KWAJ Kwajalein Atol 77.33 309** PFAKE 15 30 40.0 +9.3
KWAJ LR LR
comp=Z,4µm,22.0s
**POHA Pohakuloa 77.36 347** PFAKE 15 30 40.0 +9.0
POHA LR LR
comp=Z,9µm,20.0s
**MTN Manton Dam 77.40 266** *eP* **P 15 30 30.3 -0.9**
comp=Z,730nm,2.9s
MTN LR LR
comp=Z,16µm,19.0s
**BDFB Brasilia 79.39 102** P **P 15 30 40.6 -1.7**
comp=Z,4.8nm,0.9s,baz=255,slow=3.2,SNR=4.4
BDFB LR LR 16 02 18.0
comp=Z,4µm,20.3s,baz=199,slow=33
**H06S1 SOCORRO T 80.02 30** T T 16 58 17.9
SNR=118
**H06E1 SOCORRO T-PHAS 80.07 30** T T 16 58 15.3
SNR=136
**H06N1 SOCORRO T-PHAS 80.13 30** T T 16 58 10.2
**SAUI Saumlaki 81.33 269** PFAKE 15 31 00.0 +7.3
SAUI LR LR
comp=Z,25µm,20.0s
**ROSC El Rosal 82.39 69** LR LR 16 01 29.2
comp=Z,1µm,19.2s,baz=198,slow=31
**BCIP Isla Barro Col 83.37 62** PFAKE 15 31 10.0 +6.8
BCIP LR LR
comp=Z,2µm,18.0s
**BATI Baumata 83.64 261** P P 15 30 60.0 -4.8
comp=Z,4.3nm,0.3s,baz=90,slow=20,SNR=1.7
**SOEI Soe 83.69 262** *eP* P 15 30 59.4 -5.7
comp=Z,37nm,0.9s
SOEI LR LR
comp=Z,16µm,19.0s
**TGUH Tegucigalpa,Un 84.25 53** PFAKE 15 31 10.0 +2.4
TGUH LR LR
comp=Z,2µm,22.0s
**SLBS Sierra La Lagu 85.00 30** PFAKE 15 31 20.0 +8.6
SLBS LR LR
comp=Z,5µm,21.0s
**FAKI Fak Fak 85.02 272** PFAKE 15 31 20.0 +8.3
FAKI LR LR
comp=Z,12µm,20.0s
**LPIG La Paz 85.30 29** LR LR 15 59 52.1
comp=Z,4µm,20.6s,baz=358,slow=29
**MMRI Maumere 85.71 261** P P 15 31 11.0 -4.2
comp=Z,55nm,1.1s
MMRI LR LR
comp=Z,10µm,19.0s
**H11S2 WAKE ISLAND Hy 86.42 312** T T 17 06 59.4
baz=180,slow=74,SNR=169
**H11S3 WAKE ISLAND Hy 86.43 312** T T 17 06 58.0
SNR=103
**H11S1 WAKE ISLAND Hy 86.44 312** T T 17 06 59.4
baz=150,slow=74,SNR=53
**H11N3 WAKE ISLAND Hy 87.44 313** T T 17 08 15.6
baz=148,slow=76,SNR=20
**H11N1 WAKE ISLAND Hy 87.45 313** T T 17 08 21.5
baz=148,slow=76,SNR=26
**H11N2 WAKE ISLAND Hy 87.46 313** T T 17 08 17.7
baz=148,slow=76,SNR=20
**SDV Santo Domingo 87.72 70** PFAKE 15 31 30.0 +4.9
SDV LR LR
comp=Z,1µm,21.0s
**TEIG Tepich 89.31 50** PFAKE 15 31 40.0 +7.8
TEIG LR LR
comp=Z,100nm,21.0s
**SUR Sutherland 89.73 166** PFAKE 15 31 50.0 +15
SUR LR LR
comp=Z,3µm,22.0s
**MIDW Midway 89.98 330** PFAKE 15 31 40.0 +4.9
MIDW LR LR
comp=Z,5µm,22.0s
**KAPI Kappang 90.07 261** *eP* P 15 31 28.1 -8.0
comp=Z,51nm,1.4s
KAPI LR LR
comp=Z,13µm,20.0s
**JAGI Jajag, Banyuwa 90.15 254** PFAKE 15 31 50.0 +14
JAGI LR LR
comp=Z,6µm,21.0s
**LUWI Luwuk 91.75 265** PFAKE 15 31 50.0 +6.1
LUWI LR LR
comp=Z,4µm,20.0s
**BAR Barrett 92.06 22** PFAKE 15 31 50.0 +5.2
BAR LR LR
comp=Z,7µm,21.0s
**TXAR Lajitas Array 92.12 33** P P 15 31 38.1 -7.1
comp=Z,0.2nm,0.7s,baz=171,slow=6.1,SNR=2.3
TXAR PKKPbc PKKPbc 15 49 05.6 +5.7
comp=Z,0.1nm,0.3s,baz=20,slow=4.0,SNR=3.6
TXAR LR LR 16 04 46.6
comp=Z,2µm,20.4s,baz=0.0,slow=30
**214A Organ Pipe Nat 92.19 25** P P 15 31 39.8 -5.6
comp=Z,70nm,1.0s
**MTDJ Mount Denham 92.32 59** PFAKE 15 31 50.0 +3.6
MTDJ LR LR
comp=Z,2µm,22.0s
**UGM Wanagama 92.52 251** PFAKE 15 32 00.0 +13
UGM LR LR
comp=Z,5µm,20.0s
**833A Chaparral WMA, 92.52 37** P **P 15 31 47.6 +0.7**
baz=93
**GLA Glamis 92.80 23** PFAKE 15 31 50.0 +1.8
GLA LR LR
comp=Z,6µm,20.0s
**XMIS Christmas Isla 92.80 246** PFAKE 15 32 00.0 +11
XMIS LR LR
comp=Z,3µm,21.0s
**MURC Murrieta 92.85 21** P **P 15 31 48.9 +0.5**
baz=93
**733A Divot King Ran 92.92 37** P **P 15 31 49.5 +0.7**
baz=93
**PFO Pinyon Flat Ob 93.01 21** P **P 15 31 49.6 +0.4**
baz=93
**PFO Pinyon Flat Ob 93.01 21** PFAKE 15 32 00.0 +11
PFO LR LR
comp=Z,8µm,20.0s
**TUC Tucson 93.01 26** *eP* P 15 31 42.6 -6.6
TUC pmax pmax
comp=Z,12nm,1.0s
TUC MLR MLR
comp=Z,5µm,20.0s
**TUC Tucson 93.01 26** *eP* P 15 31 42.6 -6.6
comp=Z,12nm,1.0s
TUC LR LR
comp=Z,5µm,20.0s
**631A Perdido Creek 93.15 36** P **P 15 31 50.2 +0.4**
baz=93
**PASC Pasadena Art C 93.22 20** PFAKE 15 32 00.0 +10
PASC LR LR
comp=Z,10µm,22.0s
**BC3 Big Chuckawall 93.25 22** P **P 15 31 50.7 +0.4**
baz=93
**SMRI Semarang 93.29 252** PFAKE 15 32 00.0 +9.0
SMRI LR LR
comp=Z,7µm,22.0s
**MWC Mount Wilson 93.29 20** PFAKE 15 32 00.0 +9.4
MWC LR LR
comp=Z,10µm,22.0s
**529A Stev Forest Ra 93.30 34** P **P 15 31 51.4 +0.8**
baz=93
**BFSC Mount Baldy Ra 93.38 20** P **P 15 31 51.4 +0.4**
baz=94
**BELC Belle Mtn. Jos 93.48 22** P **P 15 31 52.0 +0.6**
baz=94
**632A Uvalde 93.49 36** P **P 15 31 52.0 +0.6**
baz=94
**Y12C Blythe 93.54 23** P **P 15 31 52.2 +0.6**
baz=94
**OSI Osito Adit 93.55 19** P **P 15 31 52.1 +0.5**
baz=94
**OSI Osito Adit 93.55 19** PFAKE 15 32 00.0 +8.4
OSI LR LR
comp=Z,9µm,21.0s
**530A J-C Ranch, Com 93.59 35** P **P 15 31 52.1 +0.2**
baz=94
**IRM Iron Mountain 93.81 22** P **P 15 31 53.3 +0.5**
baz=94
**MNTX Cornudas Mount 93.84 31** P **P 15 31 53.2 +0.2**
baz=94
**MNTX Cornudas Mount 93.84 31** *eP* P 15 31 43.5 -9.5
comp=Z,78nm,2.5s
MNTX LR LR
comp=Z,5µm,19.0s
**531A Rocksprings 93.86 35** P **P 15 31 53.4 +0.3**
baz=94
**429A Davenport Ranc 93.86 34** P **P 15 31 53.8 +0.6**
baz=94
**EDW2 Edwards Air Fo 93.94 20** P **P 15 31 53.9 +0.5**
baz=94
**BOSA Boshof 93.97 169** P **P 15 31 52.7 -1.5**
comp=Z,1.3nm,0.8s,baz=156,slow=5.5,SNR=1.4
BOSA LR LR 16 09 08.2
comp=Z,2µm,21.9s,baz=186,slow=32
**121A Cookes Peak, D 93.98 29** P **P 15 31 54.0 +0.2**
baz=94
**RCBR Riachuelo 94.00 107** PFAKE 15 32 00.0 +5.7
RCBR LR LR
comp=Z,2µm,22.0s
**532A Rocksprings 94.03 36** P **P 15 31 54.3 +0.4**
baz=94
**PDMCI Parker Dam,Lak 94.15 23** P **P 15 31 54.9 +0.6**
baz=94
**CISI Cisompet, Garu 94.21 249** PFAKE 15 32 00.0 +4.7
CISI LR LR
comp=Z,4µm,20.0s
**HEC Hector,Ludlow 94.21 21** P **P 15 31 55.2 +0.5**
baz=94
**430A Baggett Ranch, 94.22 35** P **P 15 31 55.5 +0.7**
baz=94
**JCT Junction City 94.38 36** *eP* P 15 31 46.1 -9.4
JCT pmax pmax
comp=Z,17nm,1.2s
JCT MLR MLR
comp=Z,3µm,22.0s
**JCT Junction City 94.38 36** *eP* P 15 31 46.1 -9.4
comp=Z,17nm,1.2s
JCT LR LR
comp=Z,3µm,22.0s
**GSC Goldstone 94.58 21** P **P 15 31 56.8 +0.4**
baz=95
**GSC Goldstone 94.58 21** PFAKE 15 32 00.0 +3.6
GSC LR LR
comp=Z,8µm,21.0s
**ISA Isabella 94.62 19** PFAKE 15 32 00.0 +3.5
ISA LR LR
comp=Z,8µm,20.0s
**VES Vestal, Richgr 94.68 19** P **P 15 31 57.3 +0.6**
baz=95
**LDFC Landfair 94.70 22** PFAKE 15 32 00.0 +3.0
LDFC LR LR
comp=Z,8µm,20.0s
**432A Menard 94.75 36** P **P 15 31 57.9 +0.6**
baz=95
**330A Mertzon 94.81 34** P **P 15 31 58.0 +0.5**
baz=95
**433A Art 94.87 36** P **P 15 31 58.3 +0.5**
baz=95
**LGNH LØogne 94.92 63** PFAKE 15 32 10.0 +12
LGNH LR LR
comp=Z,1µm,22.0s
**GTBY Guantanamo Bay 94.93 61** PFAKE 15 32 00.0 +1.8
GTBY LR LR
comp=Z,1µm,19.0s
**GRGR Grenville 95.13 76** PFAKE 15 32 10.0 +11
GRGR LR LR
comp=Z,2µm,21.0s
**MPMC Manual Prospec 95.18 20** P **P 15 31 59.6 +0.4**
baz=95
**SAO San Andreas Ge 95.19 17** PFAKE 15 32 00.0 +1.0
SAO LR LR

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,6µm,20.0s | | | | | | |
| DAC | Darwin (Calif) | 95.37 | 20 | PFAKE | | 15 32 10.0 | +10 |
| DAC | | | | LR | LR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| 128A | Castleberry Fa | 95.55 | 33 | P | P | 15 32 00.9 | 0.0 |
| | baz=96 | | | | | | |
| 231A | Bronte | 95.57 | 35 | P | P | 15 32 01.2 | +0.2 |
| | baz=96 | | | | | | |
| 334A | Lometa | 95.68 | 37 | P | P | 15 32 01.9 | +0.5 |
| | baz=96 | | | | | | |
| FURC | Furnace Creek, | 95.70 | 20 | P | P | 15 32 01.8 | +0.5 |
| | baz=96 | | | | | | |
| WUAZ | Wupatki | 95.94 | 25 | PFAKE | | 15 32 10.0 | +7.3 |
| WUAZ | | | | LR | LR | | |
| | comp=Z,7µm,22.0s | | | | | | |
| W18A | Petrified Fore | 95.94 | 26 | PFAKE | | 15 32 10.0 | +7.2 |
| W18A | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| TPNV | Topopah Spring | 96.28 | 21 | PFAKE | | 15 32 10.0 | +5.8 |
| TPNV | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| ABTX | Abilene, Hawle | 96.42 | 35 | P | P | 15 32 05.3 | +0.5 |
| | baz=96 | | | | | | |
| ABTX | Abilene, Hawle | 96.42 | 35 | PFAKE | | 15 32 10.0 | +5.2 |
| ABTX | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| 337A | Centerville | 96.45 | 39 | P | P | 15 32 05.1 | +0.2 |
| | baz=97 | | | | | | |
| Z30A | Sanderson Ranc | 96.57 | 34 | P | P | 15 32 06.0 | +0.5 |
| | baz=97 | | | | | | |
| 440A | Kirbyville | 96.60 | 40 | P | P | 15 32 05.8 | +0.2 |
| | baz=97 | | | | | | |
| CMB | Columbia Colle | 96.60 | 17 | PFAKE | | 15 32 10.0 | +4.5 |
| CMB | | | | LR | LR | | |
| | comp=Z,7µm,22.0s | | | | | | |
| ANMO | Albuquerque | 96.61 | 29⇑ | eP | P | 15 32 05.2 | -0.6 |
| ANMO | | | | pmax | pmax | | |
| | comp=Z,2.0nm,1.2s | | | | | | |
| ANMO | Albuquerque | 96.61 | 29 | PFAKE | | 15 32 10.0 | +4.2 |
| ANMO | | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| 133A | Hamilton Ranch | 96.64 | 36 | P | P | 15 32 06.3 | +0.5 |
| | baz=97 | | | | | | |
| 338A | Crockett | 96.68 | 39 | P | P | 15 32 06.3 | +0.3 |
| | baz=97 | | | | | | |
| MSTX | Muleshoe | 96.72 | 32 | PFAKE | | 15 32 10.0 | +3.8 |
| MSTX | | | | LR | LR | | |
| | comp=Z,6µm,19.0s | | | | | | |
| Y28A | McKinney Farm, | 96.82 | 33 | P | P | 15 32 07.2 | +0.5 |
| | baz=97 | | | | | | |
| Z32A | Haskell | 97.10 | 35 | P | Pdif | 15 32 08.5 | +0.5 |
| | baz=97 | | | | | | |
| HOPS | Hopland | 97.13 | 15 | PFAKE | | 15 32 10.0 | +2.1 |
| HOPS | | | | LR | LR | | |
| | comp=Z,8µm,22.0s | | | | | | |
| CRPR | Cabo Rojo, PR | 97.23 | 68 | PFAKE | | 15 32 20.0 | +11 |
| CRPR | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| CCUT | Cedar City | 97.45 | 23 | PFAKE | | 15 32 20.0 | +10 |
| CCUT | | | | LR | LR | | |
| | comp=Z,7µm,20.0s | | | | | | |
| AGP | Aguadilla | 97.55 | 68 | PFAKE | | 15 32 20.0 | +10 |
| AGP | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| AOPR | Arecibo Observ | 97.70 | 68 | PFAKE | | 15 32 20.0 | +9.1 |
| AOPR | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| KCPM | Cahto Peak | 97.74 | 15 | PFAKE | | 15 32 20.0 | +9.3 |
| KCPM | | | | LR | LR | | |
| | comp=Z,4µm,18.0s | | | | | | |
| R11A | Troy Canyon, C | 97.77 | 21 | P | Pdif | 15 32 10.9 | -0.1 |
| | baz=98 | | | | | | |
| R11A | Troy Canyon, C | 97.77 | 21 | PFAKE | | 15 32 20.0 | +9.0 |
| R11A | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| SJG | San Juan | 97.81 | 69 | PFAKE | | 15 32 20.0 | +8.6 |
| SJG | | | | LR | LR | | |
| | comp=Z,800nm,21.0s | | | | | | |
| CPD | Cerro la Pandu | 97.86 | 69 | PFAKE | | 15 32 20.0 | +8.3 |
| CPD | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| AMTX | Amarillo | 97.89 | 33 | PFAKE | | 15 32 20.0 | +8.5 |
| AMTX | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| HUMP | Col San Antoni | 97.98 | 69 | PFAKE | | 15 32 20.0 | +7.8 |
| HUMP | | | | LR | LR | | |
| | comp=Z,1µm,22.0s | | | | | | |
| MVCO | Mesa Verde | 98.24 | 27 | P | P | 15 32 12.9 | -0.2 |
| | baz=98 | | | | | | |
| MVCO | Mesa Verde | 98.24 | 27 | PFAKE | | 15 32 20.0 | +6.8 |
| MVCO | | | | LR | LR | | |
| | comp=Z,4µm,22.0s | | | | | | |
| KMRM | Mail Ridge | 98.25 | 14 | PFAKE | | 15 32 20.0 | +7.1 |
| KMRM | | | | LR | LR | | |
| | comp=Z,9µm,21.0s | | | | | | |
| Y34A | Reagan Ranch, | 98.25 | 36 | P | Pdif | 15 32 13.5 | +0.5 |
| | baz=98 | | | | | | |
| Z37A | Pogue Cattle C | 98.26 | 38 | P | Pdif | 15 32 13.5 | +0.4 |
| | baz=98 | | | | | | |
| WMOK | Wichita Mounta | 98.64 | 35 | PFAKE | | 15 32 20.0 | +5.2 |
| WMOK | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| WDC | Whiskeytown Da | 98.76 | 15 | PFAKE | | 15 32 20.0 | +4.9 |
| WDC | | | | LR | LR | | |
| | comp=Z,9µm,21.0s | | | | | | |
| SABA | Saba | 98.89 | 71 | PFAKE | | 15 32 20.0 | +3.8 |
| SABA | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| KHMM | Horse Mountain | 98.89 | 14 | PFAKE | | 15 32 20.0 | +4.1 |
| KHMM | | | | LR | LR | | |
| | comp=Z,10µm,21.0s | | | | | | |
| SEUS | St. Eustatius | 98.91 | 72 | PFAKE | | 15 32 20.0 | +3.7 |
| SEUS | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| T25A | Trinidad | 99.23 | 30 | PFAKE | | 15 32 20.0 | +2.4 |
| T25A | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| MYLDM | Lahad Datu | 99.26 | 265 | PFAKE | | 15 32 30.0 | +12 |
| MYLDM | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| W34A | Bridge Creek, | 99.42 | 36 | PFAKE | | 15 32 20.0 | +1.8 |
| W34A | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| BMN | Battle Mountai | 99.48 | 19 | PFAKE | | 15 32 20.0 | +1.5 |
| BMN | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| T26A | Comanche Natio | 99.49 | 31 | P | Pdif | 15 32 18.7 | 0.0 |
| | baz=100 | | | | | | |
| SDCO | Great Sand Dun | 99.51 | 29 | PFAKE | | 15 32 20.0 | +1.1 |
| SDCO | | | | LR | LR | | |
| | comp=Z,6µm,19.0s | | | | | | |
| SRU | San Rafael | 99.57 | 25 | PFAKE | | 15 32 20.0 | +1.0 |
| SRU | | | | LR | LR | | |
| | comp=Z,6µm,21.0s | | | | | | |
| P17A | Butcher Ranch, | 99.87 | 24 | PFAKE | | 15 32 30.0 | +10 |
| P17A | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| YBH | Yreka Blue Hor | 99.87 | 15 | PFAKE | | 15 32 30.0 | +10 |
| YBH | | | | LR | LR | | |
| | comp=Z,11µm,22.0s | | | | | | |
| NLU | North Lily Min | 100.03 | 23 | PFAKE | | 15 32 30.0 | +8.9 |
| NLU | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| V34A | Guthrie | 100.05 | 36 | PFAKE | | 15 32 30.0 | +9.0 |
| V34A | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| DUG | Dugway | 100.11 | 23 | ePKKPbc | PKKPbc | 15 48 41.0 | +2.4 |
| DUG | | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| P18A | Preston Nutter | 100.12 | 25 | PFAKE | | 15 32 30.0 | +8.4 |
| P18A | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| KBO | Bosley Butte | 100.14 | 14 | PFAKE | | 15 32 30.0 | +8.7 |
| KBO | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| SBUM | Sibu | 100.37 | 258 | PFAKE | | 15 32 30.0 | +7.0 |
| SBUM | | | | LR | LR | | |
| | comp=Z,6µm,19.0s | | | | | | |
| MOD | Modoc | 100.39 | 17 | PFAKE | | 15 32 30.0 | +7.5 |
| MOD | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| O16A | Springville | 100.40 | 24 | PFAKE | | 15 32 30.0 | +7.4 |
| O16A | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| KSM | Kuching | 100.56 | 256 | PFAKE | | 15 32 30.0 | +6.1 |
| KSM | | | | LR | LR | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | comp=Z,4µm,19.0s | | | | | | |
| U34A | Anderson Ranch | 100.60 | 35 | PFAKE | | 15 32 30.0 | +6.6 |
| U34A | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| Q24A | Divide | 100.75 | 29 | PFAKE | | 15 32 30.0 | +5.6 |
| Q24A | | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| KEBM | Edson Butte | 100.77 | 13 | PFAKE | | 15 32 30.0 | +5.9 |
| KEBM | | | | LR | LR | | |
| | comp=Z,10µm,20.0s | | | | | | |
| CTU | Camp Tracy | 100.81 | 23 | PFAKE | | 15 32 30.0 | +5.5 |
| CTU | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| O20A | White River Ci | 101.08 | 26 | PFAKE | | 15 32 30.0 | +4.3 |
| O20A | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| WVOR | Wild Horse Val | 101.18 | 18 | PFAKE | | 15 32 30.0 | +4.0 |
| WVOR | | | | LR | LR | | |
| | comp=Z,6µm,21.0s | | | | | | |
| KKM | Kota Kinabalu | 101.22 | 264 | PFAKE | | 15 32 40.0 | +13 |
| KKM | | | | LR | LR | | |
| | comp=Z,4µm,22.0s | | | | | | |
| SPUT | South Promonto | 101.25 | 23 | PFAKE | | 15 32 30.0 | +3.6 |
| SPUT | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| ISCO | Idaho Springs | 101.41 | 28 | PFAKE | | 15 32 30.0 | +2.7 |
| ISCO | | | | LR | LR | | |
| | comp=Z,5µm,18.0s | | | | | | |
| KSCO | Kaye Shedlock' | 101.47 | 31 | PFAKE | | 15 32 30.0 | +2.6 |
| KSCO | | | | LR | LR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| H10S3 | ASCENSION HYDR | 101.56 | 127 | T | T | 17 27 21.0 | |
| | baz=206,slow=74,SNR=94 | | | | | | |
| H10S2 | ASCENSION HYDR | 101.56 | 127 | T | T | 17 27 22.6 | |
| | baz=206,slow=74,SNR=121 | | | | | | |
| H10S1 | ASCENSION HYDR | 101.58 | 127 | T | T | 17 27 28.6 | |
| | baz=206,slow=74,SNR=110 | | | | | | |
| HWUT | Hardware Ranch | 101.72 | 23 | PFAKE | | 15 32 30.0 | +1.5 |
| HWUT | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| J08A | Circle Bar Ran | 102.11 | 18 | PFAKE | | 15 32 40.0 | +10 |
| J08A | | | | LR | LR | | |
| | comp=Z,6µm,21.0s | | | | | | |
| CBKS | Cedar Bluff | 102.11 | 33 | PFAKE | | 15 32 40.0 | +10 |
| CBKS | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| COR | Corvallis | 102.59 | 14 | PFAKE | | 15 32 40.0 | +8.0 |
| COR | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| MFID | Camas Ranch | 102.62 | 20 | PFAKE | | 15 32 40.0 | +7.6 |
| MFID | | | | LR | LR | | |
| | comp=Z,8µm,22.0s | | | | | | |
| H10N3 | ASCENSION HYDR | 102.62 | 127 | T | T | 17 28 49.2 | |
| | baz=206,slow=75,SNR=72 | | | | | | |
| H10N1 | ASCENSION HYDR | 102.63 | 127 | T | T | 17 28 48.8 | |
| | baz=206,slow=75,SNR=87 | | | | | | |
| H10N2 | ASCENSION HYDR | 102.64 | 127 | T | T | 17 28 42.1 | |
| | baz=206,slow=75,SNR=78 | | | | | | |
| I07A | Izee | 102.65 | 17 | PFAKE | | 15 32 40.0 | +7.6 |
| I07A | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| AHID | Auburn Hatcher | 102.93 | 23 | PFAKE | | 15 32 40.0 | +6.1 |
| AHID | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| HLID | Hailey | 103.03 | 21 | PFAKE | | 15 32 40.0 | +5.8 |
| HLID | | | | LR | LR | | |
| | comp=Z,11µm,21.0s | | | | | | |
| BW06 | Boulder Array | 103.27 | 24 | PFAKE | | 15 32 40.0 | +4.6 |
| BW06 | | | | LR | LR | | |
| | comp=Z,7µm,22.0s | | | | | | |
| KSU1 | Kansas State U | 103.33 | 35 | PFAKE | | 15 32 40.0 | +4.5 |
| KSU1 | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| OGNE | Ogallala | 103.44 | 30 | PFAKE | | 15 32 40.0 | +4.0 |
| OGNE | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| REDW | Red Top Meadow | 103.56 | 23 | PFAKE | | 15 32 40.0 | +3.3 |
| REDW | | | | LR | LR | | |
| | comp=Z,4µm,18.0s | | | | | | |
| G06A | Carlson Farm, | 103.60 | 16 | PFAKE | | 15 32 40.0 | +3.4 |
| G06A | | | | LR | LR | | |
| | comp=Z,11µm,22.0s | | | | | | |
| TPAW | Teton Pass | 103.66 | 23 | PFAKE | | 15 32 40.0 | +2.8 |
| TPAW | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| ABPO | Ambohimpanom | 103.73 | 189 | PFAKE | | 15 32 50.0 | +12 |
| ABPO | | | | LR | LR | | |
| | comp=Z,13µm,21.0s | | | | | | |
| BMO | Blue Mountains | 103.75 | 18 | PFAKE | | 15 32 40.0 | +2.7 |
| BMO | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| FXWY | Fox Creek | 103.78 | 23 | PFAKE | | 15 32 40.0 | +2.3 |
| FXWY | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| LOHW | Long Hollow | 103.85 | 23 | PFAKE | | 15 32 40.0 | +2.0 |
| LOHW | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| K22A | Casper | 103.87 | 26 | PFAKE | | 15 32 40.0 | +2.0 |
| K22A | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| F03A | Seaside | 103.88 | 13 | PFAKE | | 15 32 40.0 | +2.3 |
| F03A | | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| MOOW | Moose Ponds | 103.95 | 23 | PFAKE | | 15 32 40.0 | +1.6 |
| MOOW | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| F04A | Amboy | 104.03 | 14 | PFAKE | | 15 32 40.0 | +1.6 |
| F04A | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| IMW | Indian Meadow | 104.05 | 23 | PFAKE | | 15 32 50.0 | +11 |
| IMW | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| MYKOM | Kota Tinggi | 104.21 | 251 | PFAKE | | 15 32 50.0 | +10 |
| MYKOM | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| FLWY | Flagg Ranch | 104.28 | 23 | PFAKE | | 15 32 50.0 | +10 |
| FLWY | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| BKNI | Bangkinang | 104.39 | 247 | PFAKE | | 15 32 50.0 | +9.1 |
| BKNI | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| E03A | Lebam | 104.49 | 13 | PFAKE | | 15 32 50.0 | +10 |
| E03A | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| SIUC | Southern Illin | 104.56 | 41 | PFAKE | | 15 32 50.0 | +9.1 |
| SIUC | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| YMR | Madison River | 104.78 | 23 | PFAKE | | 15 32 50.0 | +7.9 |
| YMR | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| F10A | Beach Ranch, E | 104.86 | 18 | PFAKE | | 15 32 50.0 | +7.8 |
| F10A | | | | LR | LR | | |
| | comp=Z,5µm,21.0s | | | | | | |
| YNR | Norris Junctio | 104.89 | 23 | PFAKE | | 15 32 50.0 | +7.4 |
| YNR | | | | LR | LR | | |
| | comp=Z,4µm,20.0s | | | | | | |
| HAWA | Hanford | 104.90 | 16 | PFAKE | | 15 32 50.0 | +7.8 |
| HAWA | | | | LR | LR | | |
| | comp=Z,7µm,21.0s | | | | | | |
| LON | Longmire | 104.92 | 15 | PFAKE | | 15 32 50.0 | +7.6 |
| LON | | | | LR | LR | | |
| | comp=Z,4µm,18.0s | | | | | | |
| BGNE | Belgrade | 104.98 | 33 | PFAKE | | 15 32 50.0 | +7.2 |
| BGNE | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| DLMT | Dillon | 105.11 | 21 | PFAKE | | 15 32 50.0 | +6.6 |
| DLMT | | | | LR | LR | | |
| | comp=Z,6µm,21.0s | | | | | | |
| NLWA | Neilton Lookou | 105.28 | 13 | PFAKE | | 15 32 50.0 | +6.0 |
| NLWA | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| D05A | Enumclaw | 105.32 | 14 | PFAKE | | 15 32 50.0 | +5.9 |
| D05A | | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| J26A | Sides Ranch, S | 105.36 | 29 | P | PKiKP | 15 36 58.8 | +0.6 |
| | baz=106 | | | | | | |
| LTY | Liberty | 105.57 | 15 | PFAKE | | 15 37 10.0 | |
| LTY | | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| BOZ | Bozeman (W) | 105.58 | 22 | PFAKE | | 15 37 10.0 | |
| BOZ | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| D08A | Wollman Farm, | 105.64 | 16 | PFAKE | | 15 37 10.0 | |
| D08A | | | | LR | LR | | |
| | comp=Z,7µm,21.0s | | | | | | |
| RSSD | Black Hills | 105.87 | 28 | PFAKE | | 15 37 10.0 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| RSSD | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| MSO | Missoula | 106.27 | 20 | PFAKE | | 15 37 10.0 | |
| MSO | | | | LR | LR | | |
| | comp=Z,8µm,21.0s | | | | | | |
| C09A | Chrisman Ranch | 106.46 | 17 | PFAKE | | 15 37 10.0 | |
| C09A | | | | LR | LR | | |
| | comp=Z,7µm,21.0s | | | | | | |
| PGC | Sidney | 106.57 | 13 | PFAKE | | 15 37 10.0 | |
| PGC | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| B06A | Marblemount | 106.69 | 14 | PFAKE | | 15 37 10.0 | |
| B06A | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| B08A | Colville Reser | 106.84 | 16 | PFAKE | | 15 37 10.0 | |
| B08A | | | | LR | LR | | |
| | comp=Z,7µm,20.0s | | | | | | |
| SCIA | State Center | 106.96 | 36 | PFAKE | | 15 37 10.0 | |
| SCIA | | | | LR | LR | | |
| | comp=Z,3µm,19.0s | | | | | | |
| NEW | Newport | 107.10 | 17 | PFAKE | | 15 37 10.0 | |
| NEW | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| LSZ | Lusaka | 107.46 | 170 | PFAKE | | 15 37 10.0 | |
| LSZ | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| ECSD | EROS Data Cent | 107.56 | 33 | PFAKE | | 15 37 10.0 | |
| ECSD | | | | LR | LR | | |
| | comp=Z,7µm,20.0s | | | | | | |
| PSI | Prapat | 107.58 | 247 | PFAKE | | 15 37 10.0 | |
| PSI | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| LAO | LASA Array | 107.75 | 25 | PFAKE | | 15 37 10.0 | |
| LAO | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| IPM | Ipoh | 107.95 | 250 | PFAKE | | 15 37 10.0 | |
| IPM | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| EGMT | Eagleton | 108.23 | 22 | PFAKE | | 15 37 10.0 | |
| EGMT | | | | LR | LR | | |
| | comp=Z,3µm,18.0s | | | | | | |
| WALA | Waterton Lakes | 108.42 | 19 | PFAKE | | 15 37 10.0 | |
| WALA | | | | LR | LR | | |
| | comp=Z,4µm,18.0s | | | | | | |
| KULM | Kulim | 108.83 | 250 | PFAKE | | 15 37 10.0 | |
| KULM | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| JFWS | Jewell Farm | 108.83 | 38 | PFAKE | | 15 37 10.0 | |
| JFWS | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| DGAR | Diego Garcia | 109.66 | 217 | PFAKE | | 15 37 20.0 | |
| DGAR | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| DGMT | Dagmar | 109.90 | 26 | PFAKE | | 15 37 10.0 | |
| DGMT | | | | LR | LR | | |
| | comp=Z,5µm,19.0s | | | | | | |
| SPMN | St. Paul | 110.07 | 35 | PFAKE | | 15 37 10.0 | |
| SPMN | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| H02S1 | DAWSON INLET T | 110.26 | 6 | T | T | 17 35 52.1 | |
| | SNR=6.5 | | | | | | |
| DLV | T Lat | 110.30 | 260 | PFAKE | | 15 37 20.0 | |
| DLV | | | | LR | LR | | |
| | comp=Z,4µm,21.0s | | | | | | |
| MDND | Maddock | 110.48 | 29 | PFAKE | | 15 37 20.0 | |
| MDND | | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| LHMI | Lhok Sumawe | 110.65 | 246 | PFAKE | | 15 37 20.0 | |
| LHMI | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| MVL | Millersville | 111.51 | 49 | PFAKE | | 15 37 20.0 | |
| MVL | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |
| AGMN | Agassiz Nation | 111.92 | 32 | PFAKE | | 15 37 20.0 | |
| AGMN | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| AKUT | Akutan | 112.51 | 345 | PFAKE | | 15 37 20.0 | |
| AKUT | | | | LR | LR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| EDM | Edmonton | 112.52 | 18 | PFAKE | | 15 37 20.0 | |
| EDM | | | | LR | LR | | |
| | comp=Z,5µm,20.0s | | | | | | |
| YULB | Yu-li | 112.69 | 278 | PFAKE | | 15 37 20.0 | |
| YULB | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| EYMN | Ely | 112.91 | 35 | PFAKE | | 15 37 20.0 | |
| EYMN | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| TPUB | Ta-pu | 112.98 | 278 | PFAKE | | 15 37 20.0 | |
| TPUB | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| SDPT | Sand Point | 113.06 | 349 | PFAKE | | 15 37 20.0 | |
| SDPT | | | | LR | LR | | |
| | comp=Z,6µm,19.0s | | | | | | |
| SSLB | Suanglung | 113.19 | 278 | PFAKE | | 15 37 20.0 | |
| SSLB | | | | LR | LR | | |
| | comp=Z,3µm,22.0s | | | | | | |
| WRAK | Wrangell Islan | 113.47 | 6 | PFAKE | | 15 37 20.0 | |
| WRAK | | | | LR | LR | | |
| | comp=Z,8µm,22.0s | | | | | | |
| ULM | Lac du Bonnet | 113.69 | 31 | PFAKE | | 15 37 20.0 | |
| ULM | | | | LR | LR | | |
| | comp=Z,6µm,22.0s | | | | | | |
| SII | Sitkinak Islan | 113.72 | 353 | PFAKE | | 15 37 20.0 | |
| SII | | | | LR | LR | | |
| | comp=Z,14µm,19.0s | | | | | | |
| KDAK | Kodiak Island | 114.84 | 354 | PFAKE | | 15 37 20.0 | +4.6 |
| KDAK | | | | LR | LR | | |
| | comp=Z,16µm,21.0s | | | | | | |
| BRYW | Bryant College | 115.12 | 51 | PFAKE | | 15 37 20.0 | +3.5 |
| BRYW | | | | LR | LR | | |
| | comp=Z,2µm,22.0s | | | | | | |
| QIZ | Qiongzhong | 115.39 | 266 | PKP | PKPdf | 15 37 18.0 | +0.3 |
| QIZ | | | | PP | PP | 15 38 21.0 | +1.9 |
| QIZ | | | | SS | SS | 15 54 20.0 | +2.6 |
| QIZ | | | | LN | | | |
| | comp=Z,2µm,22.3s | | | | | | |
| QIZ | | | | LZ | | | |
| | comp=Z,3µm,24.2s | | | | | | |
| HRV | Adam Dziewonsk | 115.59 | 51 | PFAKE | | 15 37 30.0 | +13 |
| HRV | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| DLBC | Dease Lake | 115.63 | 7 | PFAKE | | 15 37 20.0 | +3.0 |
| DLBC | | | | LR | LR | | |
| | comp=Z,11µm,21.0s | | | | | | |
| DHAK | Deception Hill | 115.91 | 2 | PFAKE | | 15 37 30.0 | +13 |
| DHAK | | | | LR | LR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| FFC | Flin Flon | 116.22 | 25 | PFAKE | | 15 37 30.0 | +12 |
| FFC | | | | LR | LR | | |
| | comp=Z,5µm,18.0s | | | | | | |
| MID | Middleton Isla | 116.24 | 358 | PFAKE | | 15 37 30.0 | +12 |
| MID | | | | LR | LR | | |
| | comp=Z,8µm,21.0s | | | | | | |
| SKAG | Skagway | 116.37 | 4 | PFAKE | | 15 37 30.0 | +12 |
| SKAG | | | | LR | LR | | |
| | comp=Z,9µm,20.0s | | | | | | |
| CNPM | China Poot | 116.51 | 355 | PFAKE | | 15 37 30.0 | +11 |
| CNPM | | | | LR | LR | | |
| | comp=Z,12µm,20.0s | | | | | | |
| HOM | Homer | 116.66 | 355 | PFAKE | | 15 37 30.0 | +11 |
| HOM | | | | LR | LR | | |
| | comp=Z,11µm,20.0s | | | | | | |
| ERM | Erimo | 116.73 | 307 | PFAKE | | 15 37 30.0 | +10 |
| ERM | | | | LR | LR | | |
| | comp=Z,5µm,22.0s | | | | | | |
| BRLK | Bradley Lake | 116.73 | 355 | PFAKE | | 15 37 30.0 | +11 |
| BRLK | | | | LR | LR | | |
| | comp=Z,13µm,22.0s | | | | | | |
| PCA | Pinnacle | 116.88 | 1 | PFAKE | | 15 37 30.0 | +11 |
| PCA | | | | LR | LR | | |
| | comp=Z,12µm,18.0s | | | | | | |
| SEW | Seward | 117.01 | 356 | PFAKE | | 15 37 30.0 | +11 |
| SEW | | | | LR | LR | | |
| | comp=Z,14µm,21.0s | | | | | | |
| RAGM | Ragged Mountai | 117.17 | 359 | PFAKE | | 15 37 30.0 | +10 |
| RAGM | | | | LR | LR | | |
| | comp=Z,8µm,20.0s | | | | | | |
| EYAK | Cordova Ski Ar | 117.35 | 358 | PFAKE | | 15 37 30.0 | +10 |
| EYAK | | | | LR | LR | | |
| | comp=Z,11µm,20.0s | | | | | | |
| BMRM | Bremner River | 117.76 | 359 | PFAKE | | 15 37 30.0 | +9.0 |
| BMRM | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| DIV | Divide | 117.94 | 358 | PFAKE | | 15 37 30.0 | +8.6 |

DIV LR LR
comp=Z,10µm,21.0s
**RC01 Rabbit Creek A 118.01 356** PFAKE 15 37 30.0 +8.6
RC01 LR LR
comp=Z,11µm,20.0s
**WVL Waterville 118.07 51** PFAKE 15 37 30.0 +8.0
WVL LR LR
comp=Z,2µm,18.0s
**KLU Klutina 118.30 358** PFAKE 15 37 30.0 +7.9
KLU LR LR
comp=Z,8µm,20.0s
**SVW2 Sparrevohn 118.33 353** PFAKE 15 37 30.0 +8.0
SVW2 LR LR
comp=Z,7µm,21.0s
**SUA Susitna One 118.42 355** PFAKE 15 37 30.0 +7.6
SUA LR LR
comp=Z,10µm,20.0s
**PMR Palmer 118.49 356** PFAKE 15 37 30.0 +7.7
PMR LR LR
comp=Z,10µm,21.0s
**ASAJ Asahikawa 118.66 308** PFAKE 15 37 30.0 +6.8
ASAJ LR LR
comp=Z,3µm,22.0s
**SCM Sheep Creek Mo 118.67 357** PFAKE 15 37 30.0 +7.2
SCM LR LR
comp=Z,8µm,22.0s
**SML Sawmill 118.68 357** PFAKE 15 37 30.0 +7.3
SML LR LR
comp=Z,8µm,20.0s
**PKME Peaks-Kenny Pk 118.79 50** PFAKE 15 37 30.0 +6.6
PKME LR LR
comp=Z,800nm,20.0s
**SSE Sheshan 118.87 283** *e*PKP **PKPdf 15 37 22.8 -1.2**
SSE LN
comp=Z,2µm,31.6s
SSE LE
comp=Z,1µm,32.2s
SSE LZ
comp=Z,3µm,28.2s
**EMMW East Machias 119.12 52** PFAKE 15 37 30.0 +6.0
EMMW LR LR
comp=Z,2µm,21.0s
**HARP HAARP 119.21 359** PFAKE 15 37 30.0 +6.3
HARP LR LR
comp=Z,7µm,21.0s
**PAX Paxson 119.78 358** PFAKE 15 37 30.0 +5.1
PAX LR LR
comp=Z,8µm,20.0s
**PPLA Purkeypile 119.92 355** PFAKE 15 37 30.0 +4.8
PPLA LR LR
comp=Z,15µm,20.0s
**PALK Pallekele 120.03 232** PFAKE 15 37 40.0 +13
PALK LR LR
comp=Z,4µm,20.0s
**RND Reindeer 120.30 357** PFAKE 15 37 30.0 +4.1
RND LR LR
comp=Z,10µm,20.0s
**TRF Thorofare Moun 120.39 356** PFAKE 15 37 30.0 +3.8
TRF LR LR
comp=Z,9µm,21.0s
**CAST Castle Rocks 120.44 355** PFAKE 15 37 30.0 +3.9
CAST LR LR
comp=Z,16µm,22.0s
**DOT Dot Lake 120.44 359** PFAKE 15 37 30.0 +3.9
DOT LR LR
comp=Z,18µm,20.0s
**MCK McKinley 120.62 357** PFAKE 15 37 30.0 +3.6
MCK LR LR
comp=Z,10µm,20.0s
**CM01 Chiang Mai Arr 120.75 256** *e*PKPdf **PKPdf 15 37 26.8 -1.2**
**CMAR Chiang Mai Arr 120.79 256** PKP PKPpre 15 37 22.8
comp=Z,0.4nm,0.7s,baz=200,slow=2.4,SNR=2.9
**YSS Yuzh-Sakhalins 120.85 310** *i* PKIKP **PKPdf 15 37 25.0 -2.3**
YSS *e*PS **PS 15 48 46.0 -1.3**
YSS *e*SS SS 15 55 30.0 +2.1
YSS *e*SSS SSS 15 59 47.0
**DAWY Dawson 120.88 2** *e*PKPdf **PKPdf 15 37 27.6 +0.7**
DAWY LR LR
comp=Z,9µm,18.0s
**INCN Inchon 121.00 292** PFAKE 15 37 40.0 +12
INCN LR LR
comp=Z,2µm,20.0s
**BPAW Bear Paw Mtn. 121.07 356** *e*PKPdf **PKPdf 15 37 27.3 0.0**
BPAW LR LR
comp=Z,8µm,19.0s
**BWN Browne 121.08 356** PFAKE 15 37 30.0 +2.8
BWN LR LR
comp=Z,8µm,22.0s
**CHTO Chiang Mai 121.08 256** PFAKE 15 37 40.0 +11
CHTO LR LR
comp=Z,4µm,22.0s
**HDA Harding Lake 121.25 358** PFAKE 15 37 40.0 +12
HDA LR LR
comp=Z,9µm,22.0s
**WRH Wood River Hil 121.34 357** *e*PKPdf **PKPdf 15 37 28.8 +1.1**
WRH LR LR
comp=Z,7µm,20.0s
**CCB Clear Creek Bu 121.51 357** *e*PKPdf **PKPdf 15 37 25.6 -2.4**
CCB LR LR
comp=Z,8µm,19.0s
**EGAK Eagle 121.57 1** *e*PKPdf **PKPdf 15 37 28.0 -0.2**
EGAK LR LR
comp=Z,7µm,19.0s
**ILAR Eielson Array 121.61 358** PKP PKPpre 15 37 20.5
comp=Z,1.4nm,0.9s,baz=224,slow=1.2,SNR=5.7
ILAR PKKPbc PKKPbc 15 47 35.2 +7.5
comp=Z,0.3nm,0.6s,baz=333,slow=3.8,SNR=5.5
**COLA College 121.74 357** *e*PKIKP **PKPdf 15 37 27.7 -0.7**
COLA MLR MLR
comp=Z,9µm,20.0s
**COLA College 121.74 357** *e*PKPdf **PKPdf 15 37 27.7 -0.7**
COLA LR LR
comp=Z,9µm,20.0s
**FCC Fort Churchill 121.75 27** PFAKE 15 37 40.0 +11
FCC LR LR
comp=Z,8µm,18.0s
**MDM Murphy Dome 121.83 357** PFAKE 15 37 40.0 +11
MDM LR LR
comp=Z,7µm,19.0s
**KMBO Kilima Mbogo 121.94 180** *i* PKIKP **PKPdf 15 37 27.3 -3.6**
KMBO pmax pmax
comp=Z,4.0nm,0.2s
**KMBO Kilima Mbogo 121.94 180** PFAKE 15 37 40.0 +9.1
KMBO LR LR
comp=Z,5µm,22.0s
**MLY Manley 121.99 356** *e*PKPdf **PKPdf 15 37 27.8 -1.2**
MLY LR LR
comp=Z,8µm,19.0s
**WHN Wuhan 122.11 277** PKP **PKPdf 15 37 29.0 -1.3**
WHN PP PP 15 39 12.3 +6.7
WHN SS SS 15 55 46.3 +2.0
WHN LN
comp=Z,2µm,15.4s
WHN LE
comp=Z,6µm,21.0s
WHN LZ
comp=Z,6µm,22.8s
**GAMB Gambell 122.65 345** PFAKE 15 37 40.0 +10
GAMB LR LR
comp=Z,7µm,20.0s
**GYA Guiyang 123.09 268** Pdif **Pdif 15 34 04.8 +1.0**
GYA PKP **PKiKP 15 37 33.0 +0.3**
GYA PP **PP 15 39 16.8 +4.4**
GYA PKS **PKSdf 15 41 09.0 -0.3**
GYA SKKS 15 46 07.5
GYA SS **SS 15 55 57.8 +0.8**
GYA PPMZ
comp=Z,310nm,10.2s
GYA LN
comp=Z,350nm,23.4s
GYA LE
comp=Z,220nm,24.8s
GYA LZ
comp=Z,440nm,22.2s
**FYU Fort Yukon 123.38 359** *e*PKPdf **PKPdf 15 37 30.4 -1.1**
FYU LR LR
comp=Z,7µm,22.0s
**TNA Tin City 123.87 348** PFAKE 15 37 40.0 +7.5
TNA LR LR
comp=Z,9µm,20.0s
**COLD Coldfoot 124.17 356** *e*PKPdf **PKPdf 15 37 33.8 +0.7**
COLD LR LR
comp=Z,6µm,20.0s
**KMI Kunming 124.17 264** PKP **PKPdf 15 37 37.0 +2.3**
KMI sPKP 15 37 47.0
KMI PP PP 15 39 27.0 +7.3
KMI PKS **PKSdf 15 41 12.5 +0.8**
KMI SKS **SKSdf 15 44 43.5 -3.2**
KMI SKKS **SKKSac 15 46 14.8 -3.4**
KMI S **Sdif 15 47 15.0 -2.5**
KMI SS **SS 15 56 11.5 +0.7**
KMI PPMZ
comp=Z,330nm,7.4s
KMI LN
comp=Z,1µm,20.2s
KMI LE
comp=Z,2µm,21.6s
KMI LZ
comp=Z,3µm,22.4s
**ENH Enshi 124.54 273** PFAKE 15 37 40.0 +5.0
ENH LR LR
comp=Z,1µm,22.0s
**DL2 Dalian 124.64 289** PKP PKPpre 15 37 28.0
DL2 PP PP 15 39 05.5 -17
**MDJ Mudanjiang 124.96 299** PFAKE 15 37 40.0 +4.7
MDJ LR LR
comp=Z,4µm,22.0s
**HABR Khabarovsk 125.34 306** *e*PKIKP **PKPdf 15 37 33.9 -2.0**
HABR *e* 15 37 40.7
HABR PP **PP 15 39 23.9 -3.3**
HABR *e* 15 42 03.3
HABR pmax pmax
comp=Z,7.0nm,1.3s
**CN2 Changchun 126.35 296** *e*PKP PKPdf 15 37 46.0 +8.0
CN2 PP **PP 15 39 37.3 +3.3**
CN2 PPMZ
comp=Z,310nm,6.0s
CN2 LN
comp=Z,770nm,21.0s
CN2 LE
comp=Z,1µm,21.0s
CN2 LZ
comp=Z,1µm,21.0s
**KLR Kul'dur 127.37 305** *e*PKIKP **PKPdf 15 37 35.0 -4.8**
**MNGI Mangalore 127.58 228** *e*P **PKPdf 15 37 45.0 +3.8**
**XAN Xi'an 127.73 276** PKP PKPdf 15 37 48.8 +7.8
XAN PP PP 15 39 51.0 +7.8
XAN SKKS 15 46 35.0
XAN SS **SS 15 56 51.8 -3.3**
XAN PPMZ
comp=Z,310nm,7.4s
XAN LE
comp=Z,960nm,20.6s
XAN LZ
comp=Z,2µm,24.4s
**CD2 Chengdu 128.15 269** PKP **PKPdf 15 37 43.3 +1.4**
CD2 sPKP 15 37 53.5
CD2 PP PP 15 39 54.3 +8.3
CD2 SKS **SKSdf 15 44 53.5 0.0**
CD2 SKKS **SKKSac 15 46 41.3 -1.6**
CD2 SS **SS 15 57 01.0 +0.6**
CD2 PPMZ
comp=Z,540nm,5.8s
CD2 LN
comp=Z,3µm,26.0s
CD2 LE
comp=Z,3µm,20.6s
CD2 LZ
comp=Z,3µm,28.0s
**BJT Baijiatuau 128.29 286** PFAKE 15 37 50.0 +8.2
BJT LR LR
comp=Z,4µm,22.0s
**BJI Beijing 128.31 286** PKP **PKPdf 15 37 44.0 +2.2**
BJI PP **PP 15 39 48.3 +1.4**
BJI SKS **SKSdf 15 44 54.8 +1.7**
BJI SS **SS 15 57 02.8 +0.7**
BJI PPMZ
comp=Z,330nm,4.4s
BJI LN
comp=Z,1µm,26.2s
BJI LE
comp=Z,2µm,24.0s
BJI LZ
comp=Z,5µm,27.7s
**TOA0 Torodi Ar. Sit 128.31 133** *e*PKPpre PKPpre 15 37 38.9
**TORD Torodi Ar. Bea 128.31 133** PKP PKPpre 15 37 38.0
comp=Z,0.7nm,0.9s,baz=197,slow=3.1,SNR=3.5
TORD PP **PP 15 39 48.2 +1.7**
comp=Z,1.9nm,1.1s,baz=208,slow=4.2,SNR=3.6
**BILL Bilibino 130.41 337** ⇓ *i* PKIKP **PKPdf 15 37 42.2 -2.8**
BILL *e* 15 39 56.3
BILL PPP PPP 15 42 45.0
BILL *e*SSS SSS 16 02 08.8
BILL pmax pmax
comp=Z,14nm,1.7s
**HHC Hu-ho-hao-te 131.32 284** *e*PKP **PKPdf 15 37 47.8 +0.1**
HHC sPKP 15 38 02.0
HHC PP **PP 15 40 06.5 -0.2**
HHC PPMZ
comp=Z,130nm,11.1s
HHC LN
comp=Z,1µm,22.2s
HHC LE
comp=Z,2µm,21.0s
HHC LZ
comp=Z,3µm,22.4s
**FURI Furi 131.89 181** PFAKE 15 38 00.0 +10
FURI LR LR
comp=Z,2µm,22.0s
**LZH Lanzhou 132.02 274** *e*PKP **PKPdf 15 37 49.0 -0.3**
LZH sPKP 15 37 58.5
LZH PP PP 15 40 20.0 +8.7
LZH PKS **PKSdf 15 41 22.0 -3.8**
LZH PPMZ
comp=Z,490nm,6.4s
LZH LN
comp=Z,1µm,17.3s
LZH LE
comp=Z,2µm,17.0s
LZH LZ
comp=Z,2µm,19.9s
**HIA Hailar 133.00 297** ⇓ *i* PKIKP **PKPdf 15 37 49.5 -1.0**
**HIA Hailar 133.00 297** PFAKE 15 38 00.0 +9.5
HIA LR LR
comp=Z,3µm,22.0s
**ODAN Odare 133.72 251** *e*P **PKPdf 15 37 54.8 +1.9**
comp=Z,50nm,1.3s
**TAPN Taplejung 133.95 251** *e*P **PKPdf 15 37 57.7 +4.3**
comp=Z,47nm,1.6s
**LSA Lhasa 134.03 257** PKP PKPdf 15 37 59.5 +5.8
**RAMN Ramite 134.20 250** *e*P **PKPdf 15 37 55.8 +2.0**
comp=Z,64nm,1.3s
**RES Resolute Bay 135.24 16** PFAKE 15 38 00.0 +6.1
RES LR LR
comp=Z,6µm,20.0s
**PKI Pulchoki 135.31 249** *e*P **PKPdf 15 37 56.1 +0.1**
comp=Z,22nm,1.0s
**PKIN Phulchoki 135.33 249** *e*P **PKPdf 15 37 55.7 -0.2**
**GUN Gumba 135.35 250** *e*P **PKPdf 15 37 56.3 +0.3**
comp=Z,24nm,1.0s
**DMN Daman 135.50 249** *e*P **PKPdf 15 37 56.0 -0.2**
comp=Z,41nm,1.1s
**KKN Kakani 135.56 249** *e*P **PKPdf 15 37 56.6 +0.3**
**PMOZ Porto Moniz, M 135.81 99** eLR LR 16 20 50.0
comp=Z,727nm,22.0s
**GKN Gorkha 136.06 249** *e*P **PKPdf 15 37 57.0 -0.1**
comp=Z,25nm,1.2s
**GTA Gaotai 136.62 274** *e*PKP **PKPdf 15 38 01.8 +4.0**
GTA PP PP 15 40 46.5 +6.0
GTA SKS **SKSdf 15 45 07.3 -1.1**
GTA SKKS **SKKSac 15 47 34.0 -0.5**
GTA SS **SS 15 58 45.3 +1.8**
GTA PPMZ
comp=Z,450nm,7.1s
GTA LN
comp=Z,1µm,19.5s
GTA LE
comp=Z,1µm,20.9s
GTA LZ
comp=Z,1µm,19.5s
**YAK Yakutsk 136.86 316** *e*PKIKP **PKPdf 15 37 55.8 -1.4**
**DAMY Dhamar 137.22 190** PFAKE 15 38 10.0 +10
DAMY LR LR
comp=Z,2µm,20.0s
**ULN Ulaanbaatar 138.46 288** ⇑ *e*PKIKP **PKPdf 15 38 00.5 -0.4**
**ULN Ulaanbaatar 138.46 288** PFAKE 15 38 10.0 +9.1
ULN LR LR
comp=Z,2µm,20.0s
**TAM Tamanrasset 138.54 132** *e*PKIKP **PKPdf 15 38 03.3 +1.5**
**TAM Tamanrasset 138.54 132** *e*PKPdf **PKPdf 15 38 03.3 +1.5**
**SONM Songino Array 138.78 288** PKP PKPpre 15 37 54.2
comp=Z,0.4nm,0.6s,baz=145,slow=5.3,SNR=2.7
SONM PP **PP 15 40 51.2 -2.7**
comp=Z,1.1nm,0.9s,baz=165,slow=6.2,SNR=4.9
**BOD Bodaibo 140.94 304** *e*PKIKP PKPpre 15 37 57.9
BOD pmax pmax
comp=Z,8.0nm,1.6s
**ZAK Zakamensk 141.96 289** *e*PKIKP **PKPdf 15 38 03.8 -3.3**
ZAK *e* 15 41 15.6
ZAK pmax pmax
comp=Z,5.0nm,1.3s
ZAK pmax pmax
comp=Z,8.0nm,1.5s
**TLY Talaya 142.53 291** *i* PKIKP PKPpre 15 38 01.2
TLY pmax pmax
comp=Z,15nm,1.5s
TLY MLR MLR
comp=Z,2µm,21.0s
**MORF Marmelete 143.77 103** *e*PKPdf **PKPdf 15 38 12.1 +1.4**
**MOY Mondy 143.88 289** *e*PKHKP PKPpre 15 38 02.9
MOY pmax pmax
comp=Z,37nm,2.1s
**PTEO Sao Teotonio 143.91 103** *e*PKPdf **PKPdf 15 38 14.0 +3.2**
**PBDV Barranco-do-Ve 144.11 104** *e*PKPdf **PKPdf 15 38 10.7 -0.5**
**PCVE Castro Verde 144.34 103** *e*PKPdf **PKPdf 15 38 12.6 +1.0**
**PVAQ Vaqueiros 144.34 104** *e*PKPdf PKPbc 15 38 10.1 +0.1
**PVAQ Vaqueiros 144.34 104** *e*LR LR 16 27 10.0
comp=Z,683nm,22.0s
**MESJ Messejana 144.40 103** *e*PKPdf **PKPdf 15 38 15.9 +4.3**
**PBEJ Beja 144.72 103** *e*PKPdf **PKPdf 15 38 13.2 +1.0**
**ASHO Ashiyiah 144.96 210** ⇑ *i* PKPbc **PKPbc 15 38 11.8 -0.5**
SNR=8.7
**EVO Evora 145.02 102** *e*PKPdf **PKPdf 15 38 13.6 +0.9**
**EVO Evora 145.02 102** *e*PP PP 15 41 31.6 +0.1
**HATD Hatta, Dubai 145.07 210** ⇑ *i* PKPbc **PKPbc 15 38 12.4 -0.3**
SNR=20
**ASUD Al Ashush, Dub 145.10 209** ⇑ *i* PKPdf **PKPdf 15 38 15.1 +1.9**
SNR=7.8
**UOSS Wadi Hilu 145.16 210** *e*PKPbc **PKPbc 15 38 12.5 -0.4**
UOSS LR LR
comp=Z,2µm,21.0s
**PBAR Barrancos 145.27 104** *e*PKPdf **PKPdf 15 38 14.6 +1.4**
**PBAR Barrancos 145.27 104** *e*PP PP 15 41 36.4 +3.4
**PMTG Montargil 145.30 101** *e*PKPdf **PKPbc 15 38 12.6 -0.4**
**NAZ Nazwa, Dubai 145.35 210** ⇓ *i* PKiKP **PKiKP 15 38 18.3 +0.6**
SNR=9.7
**RAYN Ar Rayn 145.95 193** *e*PKPdf **PKPdf 15 38 12.2 -2.6**
RAYN LR LR
comp=Z,2µm,21.0s
**PMRV Marv??o 146.00 102** *e*LR LR 16 28 30.8
comp=Z,676nm,22.0s
**WMQ Urumqi 146.25 269** PKPbc **PKPdf 15 38 15.3 +0.6**
WMQ PP **PP 15 41 44.0 +5.0**
WMQ SKS **SKSdf 15 45 25.0 +1.7**
WMQ SKKS **SKKSac 15 48 30.0 -0.2**
WMQ PPMZ
comp=Z,150nm,12.0s
WMQ LN
comp=Z,5µm,29.0s
WMQ LE
comp=Z,3µm,28.0s
WMQ LZ
comp=Z,3µm,28.0s
**PCBR Castelo Branco 146.25 101** *e*PKPdf **PKPbc 15 38 16.2 +0.3**
**MTE Manteigas 146.62 100** *e*PKPdf **PKPbc 15 38 16.5 -0.6**
**MTE Manteigas 146.62 100** eLR LR 16 28 30.9
comp=Z,767nm,20.0s
**MTE Manteigas 146.62 100** *e*PKPbc **PKPdf 15 38 16.0 +0.5**
**PVIS Viseu 146.65 100** *e*PKPdf **PKPbc 15 38 16.3 -0.9**
**SUMG Summit 147.02 32** *i* PKP2 **PKPbc 15 38 18.2 +0.5**
SUMG pmax pmax
comp=Z,56nm,1.1s
**SUMG Summit 147.02 32** *i* P **PKPbc 15 38 18.2 +0.5**
comp=Z,56nm,1.1s
**SUMG Summit 147.02 32** *e*PKPab **PKPbc 15 38 17.4 -0.3**
**POLO Lamas de Olo 147.17 99** *e*PKPdf **PKPdf 15 38 17.2 +0.8**
**PGAV Gavieira, Arco 147.32 98** eLR LR 16 26 10.7
comp=Z,482nm,20.0s
**MVO Moncorvo 147.43 100** eLR LR 16 29 08.6
comp=Z,735nm,22.0s
**PAB San Pablo 147.70 105** *e*PKP2 **PKPab 15 38 22.3 -0.2**
**PAB San Pablo 147.70 105** *e*PKPab **PKPab 15 38 22.3 -0.2**
**ESDC Sonseca Array 148.00 105** PKPbc **PKPdf 15 38 14.8 -2.9**
comp=Z,2.3nm,0.8s,baz=248,slow=3.4,SNR=8.9
**PBRG Braganca 148.03 99** *e*PKPdf **PKPbc 15 38 21.6 +0.7**
**ES19 SONSECA Array 148.05 105** *e*PKPdf **PKPdf 15 38 18.2 +0.3**
**KSH Kashi 149.53 251** *e*PKPbc **PKPdf 15 38 22.3 +1.9**
KSH *e*pPKP **PKPab 15 38 33.3 +3.3**
KSH *es*PKP 15 38 36.5
KSH PKS **PKSdf 15 41 55.3 0.0**
KSH *e*PP PP 15 42 07.0 +8.8
KSH SKS **SKSdf 15 45 24.3 -3.9**
KSH SKKS **SKKSac 15 48 50.0 +1.2**
KSH SS **SS 16 01 18.0 +5.7**
KSH PPMZ
comp=Z,490nm,6.4s
KSH LN
comp=Z,520nm,14.2s
KSH LE
comp=Z,810nm,15.9s
KSH LZ
comp=Z,3µm,25.0s
**MK01 Makanchi Array 151.06 268** *e*PKPdf **PKPdf 15 38 20.9 -1.5**
MK01 *e*PP **PP 15 42 10.5 +3.5**
**MKAR Makanchi Array 151.08 268** PKPbc **PKPdf 15 38 20.4 -2.0**
comp=Z,4.4nm,0.8s,baz=113,slow=1.8,SNR=16
**MKAR Makanchi Array 151.08 268** *e*PKIKP **PKPdf 15 38 22.6 +0.1**
MKAR *e* 15 42 11.8
**MKAR Makanchi Array 151.08 268** *e*PKPdf **PKPdf 15 38 22.6 +0.1**
MKAR *e*PP **PP 15 42 11.8 +4.7**
**MAKZ Makanchi 151.26 268** *e*PKPdf **PKPdf 15 38 23.4 +0.7**
MAKZ LR LR
comp=Z,4µm,22.0s
**KEST Kesra 151.44 126** PKPbc **PKPdf 15 38 25.4 +2.0**
comp=Z,3.1nm,0.9s,baz=194,slow=12,SNR=2.4
**KEST Kesra 151.44 126** *e*PKPbc **PKPbc 15 38 30.8 +1.2**
**TKM2 Tokmak 2 152.18 256** *e*PKIKP **PKPbc 15 38 30.1 -1.0**
TKM2 MLR MLR
comp=Z,2µm,21.0s
**TKM2 Tokmak 2 152.18 256** *e*PKPbc **PKPbc 15 38 30.1 -1.0**
TKM2 LR LR
comp=Z,2µm,21.0s
**DAG Danmarks Havn 152.30 24** *i* P **PKPbc 15 38 28.8 -1.3**
comp=Z,16nm,1.3s
**AAK Ala-Archa 152.56 254** ⇑ *e*PKIKP **PKPdf 15 38 24.7 -0.3**
**AAK Ala-Archa 152.56 254** *e*PKPbc **PKPbc 15 38 32.8 +0.9**
AAK LR LR
comp=Z,2µm,20.0s
**EKS2 Erkin-Say 152.95 253** *e*PKPbc **PKPbc 15 38 33.5 +0.7**
**ZAA0 Zalesovo Array 153.50 283** *e*PKPdf **PKPdf 15 38 27.2 +1.5**
**ZALV Zalesovo Beam 153.50 283** PKPbc **PKPdf 15 38 28.1 +2.4**
comp=Z,0.8nm,0.5s,baz=151,slow=3.3,SNR=4.8
**VSL Villasalto 154.54 122** PFAKE 15 38 40.0 +3.9
VSL LR LR
comp=Z,2µm,19.0s
**CLTB Caltabellotta 154.66 130** PFAKE 15 38 40.0 +3.4
CLTB LR LR
comp=Z,2µm,20.0s
**KKAR Karatay Array 154.96 250** *e*PKIKP PKPdf 15 38 36.0 +7.8
**KKAR Karatay Array 154.96 250** *e*PKPbc PKPdf 15 38 36.0 +7.8
**GEYT Alibeck 156.49 224** PKP PKPpre 15 38 25.4
comp=Z,0.6nm,0.3s,baz=279,slow=2.8,SNR=1.9
GEYT PKPab **PKPab 15 38 54.2 -5.0**
comp=Z,2.9nm,0.7s,baz=35,slow=5.4,SNR=4.4
**IDI Anoyia 156.54 153** PFAKE 15 38 40.0 +9.4
IDI LR LR
comp=Z,2µm,22.0s
**KBS Kingsbay 156.54 12** PFAKE 15 38 40.0 +11
KBS LR LR
comp=Z,4µm,19.0s
**LAST Lasithi 156.56 154** PFAKE 15 38 40.0 +9.3
LAST LR LR
comp=Z,1µm,21.0s
**BNI Bardonecchia 157.36 109** PFAKE 15 38 40.0 +8.6
BNI LR LR
comp=Z,2µm,21.0s
**TIP Timpagrande 157.46 134** ⇑ *i*P **PKPdf 15 38 34.8 +3.1**
**TIP Timpagrande 157.46 134** *e*PKPdf **PKPdf 15 38 30.3 -1.4**
TIP *e*PKPbc PKPbc 15 38 37.4
TIP LR LR
comp=Z,900nm,20.0s
**CSS Prodhromos 157.66 171** *e*PKPab **PKPab 15 39 06.9 +2.7**
CSS LR LR
comp=Z,500nm,21.0s

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SANT** | **Santorini** | **157.71** | **153** | PFAKE | | | 15 38 40.0 | +8.0 |
| SANT | | | | LR | LR | | | |
| | comp=Z,3μm,22.0s | | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **158.57** | **107** | PFAKE | | | 15 38 40.0 | +7.0 |
| SENIN | | | | LR | LR | | | |
| | comp=Z,3μm,20.0s | | | | | | | |
| **AGG** | **Agios Georgios** | **159.31** | **145** | PFAKE | | | 15 38 40.0 | +6.2 |
| AGG | | | | LR | LR | | | |
| | comp=Z,2μm,21.0s | | | | | | | |
| **BFO** | **Black Forest** | **160.36** | **104** | *e*PKPdf | PKPdf | | 15 38 40.5 | +5.8 |
| | baz=236,slow=1.0 | | | | | | | |
| **DAVA** | **Damuels** | **160.51** | **108** | ⇑*s*PKPdf | **PKPdf** | | **15 38 39.2** | **+4.1** |
| | comp=Z,37nm,1.4s | | | | | | | |
| **OHR** | **Ohrid** | **160.67** | **139** | *i* PKP | **PKPdf** | | **15 38 39.5** | **+4.2** |
| **BRVK** | **Borovoye** | **160.96** | **272** | *e*PKP2 | **PKPab** | | **15 39 13.7** | **-4.5** |
| **BRVK** | **Borovoye** | **160.96** | **272** | *e*PKPab | **PKPab** | | **15 39 13.7** | **-4.5** |
| **MALT** | **Malatya** | **161.18** | **182** | ⇑*i*P | PKPab | | 15 39 25.5 | +6.0 |
| **PDG** | **Podgorica** | **161.22** | **134** | ⇓*i*P | PKPdf | | 15 38 44.7 | +8.9 |
| **WTTA** | **Wattenberg** | **161.40** | **111** | ⇓*i*sPKPdf | PKPdf | | 15 38 41.9 | +5.8 |
| | comp=Z,29nm,1.6s | | | | | | | |
| **VAY** | **Valandovo** | **161.47** | **142** | *i* PKP | PKPdf | | 15 38 42.3 | +6.2 |
| **SKO** | **Skopje** | **161.65** | **139** | *i* PKP | PKPdf | | 15 38 42.5 | +6.2 |
| **KBA** | **Koelnbreinsper** | **162.13** | **114** | ⇓*i*sPKPdf | PKPdf | | 15 38 43.2 | +6.3 |
| | comp=Z,9.0nm,1.1s | | | | | | | |
| **BLY** | **Banja Luka** | **162.24** | **125** | ⇓*i*P | **PKPdf** | | **15 38 39.6** | **+2.8** |
| **RJOB** | **Jochberg** | **162.30** | **111** | *e*PKPdf | **PKPdf** | | **15 38 40.3** | **+3.4** |
| | baz=236,slow=1.0 | | | | | | | |
| **BRTR** | **Keskin Array B** | **162.41** | **170** | PKP | **PKPdf** | | **15 38 32.5** | **-4.9** |
| | comp=Z,0.3nm,0.5s,baz=206,slow=6.3,SNR=2.7 | | | | | | | |
| **SOKA** | **Soboth** | **162.69** | **117** | ⇓*i*PKPdf | **PKPdf** | | **15 38 35.0** | **-2.2** |
| | comp=Z,18nm,1.5s | | | | | | | |
| **GRF** | **Grafenberg Arr** | **162.70** | **104** | *e*L | L | | 16 58 00.4 | |
| | comp=Z,4μm,20.6s | | | | | | | |
| **DIVS** | **Divibare** | **162.91** | **132** | ⇓*i*P | **PKPdf** | | **15 38 39.9** | **+2.3** |
| **ARSA** | **Arzberg** | **163.33** | **117** | ⇓*i*sPKPdf | **PKPdf** | | **15 38 42.7** | **+4.9** |
| | comp=Z,19nm,1.8s | | | | | | | |
| **MOX** | **Moxa** | **163.44** | **102** | *e*L | L | | 16 54 51.9 | |
| | comp=Z,3μm,21.1s | | | | | | | |
| **GERES** | **GERESS Array B** | **163.48** | **110** | PKP | **PKPdf** | | **15 38 33.8** | **-4.2** |
| | comp=Z,0.4nm,0.8s,baz=225,slow=0.8,SNR=2.0 | | | | | | | |
| **KHC** | **Kasperske Hory** | **163.59** | **109** | *e*PKPDF | PKPdf | | 15 38 47.0 | +9.0 |
| KHC | | | | *e*PKPAB | PKPab | | 15 39 36.2 | +6.3 |
| KHC | | | | *e*SS | SS | | 16 03 46.0 | +2.8 |
| KHC | | | | AMS | AMS | | 17 05 30.0 | |
| | comp=Z,4μm,20.1s | | | | | | | |
| **WERN** | **Wernitzgruen** | **163.65** | **104** | *e*PKPdf | PKPdf | | 15 38 43.7 | +5.7 |
| | baz=236,slow=1.0 | | | | | | | |
| **GUNZ** | **Gunzen** | **163.67** | **104** | *e*PKPdf | PKPdf | | 15 38 43.7 | +5.6 |
| | baz=236,slow=1.0 | | | | | | | |
| **WERD** | **Werda** | **163.70** | **103** | *e*PKPdf | PKPdf | | 15 38 43.5 | +5.5 |
| | baz=236,slow=1.0 | | | | | | | |
| **TANN** | **Tannenbergstha** | **163.77** | **104** | *e*PKPdf | PKPdf | | 15 38 43.4 | +5.3 |
| | baz=236,slow=1.0 | | | | | | | |
| **MAK** | **Makhachkala** | **164.49** | **208** | PKIKP | **PKPdf** | | **15 38 39.3** | **+0.4** |
| MAK | | | | *e* | | | 15 43 30.2 | |
| MAK | | | | *e*SS | SS | | 16 03 57.2 | +5.9 |
| MAK | | | | pmax | pmax | | | |
| | comp=Z,350nm,1.6s | | | | | | | |
| MAK | | | | MLR | MLR | | | |
| | comp=Z,4μm,20.0s | | | | | | | |
| **ABKAR** | **Akbulak array** | **164.51** | **249** | *e*PKPab | **PKPab** | | **15 39 34.3** | **+0.5** |
| **FBE** | **Freiberg** | **164.52** | **103** | *e*PKPdf | **PKPdf** | | **15 38 41.3** | **+2.6** |
| | baz=236,slow=1.0 | | | | | | | |
| **CLL** | **Collm** | **164.54** | **102** | *i* PKIKP | **PKPdf** | | **15 38 38.4** | **-0.3** |
| CLL | | | | *e* | **PKPab** | | **15 39 32.0** | **-1.9** |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,38nm,2.0s | | | | | | | |
| CLL | | | | pmax | pmax | | | |
| | comp=Z,30nm,1.5s | | | | | | | |
| CLL | | | | MLR | MLR | | | |
| | comp=Z,3μm,21.1s | | | | | | | |
| **CLL** | **Collm** | **164.54** | **102** | *i* PKPdf | **PKPdf** | | **15 38 38.4** | **-0.3** |
| | comp=Z,38nm,2.0s | | | | | | | |
| CLL | | | | *e*PKPab | **PKPab** | | **15 39 32.0** | **-1.9** |
| | comp=Z,30nm,1.5s | | | | | | | |
| CLL | | | | *e*PP | **PP** | | **15 43 22.0** | **+1.2** |
| CLL | | | | *e*PPP | PPP | | 15 47 13.0 | |
| CLL | | | | *e*SKKSac | SKKSac | | 15 50 10.0 | +2.5 |
| CLL | | | | *e*PPPrev | | | 15 50 41.0 | |
| CLL | | | | *e*PSKS | | | 15 53 52.0 | |
| CLL | | | | *e*PPS | PPS | | 15 57 06.0 | |
| CLL | | | | *e*SS | **SS** | | **16 03 49.0** | **-3.9** |
| CLL | | | | *e*SSrev | | | 16 08 41.0 | |
| CLL | | | | *e*SSS | SSS | | 16 10 19.0 | |
| CLL | | | | *e*SSSS | | | 16 14 30.0 | |
| CLL | | | | L | L | | 16 58 00.0 | |
| | comp=Z,3μm,21.1s | | | | | | | |
| **CLL** | **Collm** | **164.54** | **102** | *e*PKPab | **PKPab** | | **15 39 35.6** | **+1.7** |
| **PRA** | **Prague** | **164.60** | **107** | *e*SS | SS | | 16 03 56.2 | +2.7 |
| PRA | | | | AMS | AMS | | 17 04 40.0 | |
| | comp=Z,4μm,21.9s | | | | | | | |
| **PRU** | **Pruhonice** | **164.61** | **108** | *e*PKPDF | PKPdf | | 15 38 45.8 | +7.0 |
| PRU | | | | *e*PKPAB | **PKPab** | | **15 39 36.5** | **+2.2** |
| PRU | | | | *e*SS | SS | | 16 03 58.7 | +5.1 |
| PRU | | | | AMS | AMS | | 17 04 40.0 | |
| | comp=Z,4μm,21.6s | | | | | | | |
| **TREC** | **Trest** | **164.67** | **111** | *e*PKIKP | PKPdf | | 15 38 44.6 | +5.7 |
| TREC | | | | *e*SS | SS | | 16 03 59.0 | +4.7 |
| TREC | | | | MLR | MLR | | | |
| | comp=Z,4μm,20.7s | | | | | | | |
| **TREC** | **Trest** | **164.67** | **111** | *e*PKPDF | PKPdf | | 15 38 44.6 | +5.7 |
| TREC | | | | *e*SS | SS | | 16 03 59.0 | +4.7 |
| TREC | | | | AMS | AMS | | 16 58 20.0 | |
| | comp=Z,4μm,20.7s | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **164.70** | **108** | *e*SS | SS | | 16 03 56.7 | +2.2 |
| GOPC | | | | AMS | AMS | | 17 05 00.0 | |
| | comp=Z,4μm,21.9s | | | | | | | |
| **BRG** | **Berggiesshubel** | **164.81** | **104** | *e*PKP | **PKPdf** | | **15 38 43.7** | **+4.8** |
| | comp=Z,22nm,1.8s | | | | | | | |
| BRG | | | | SS | SS | | 16 03 38.0 | -18 |
| **PVCC** | **Panska Ves** | **164.94** | **106** | *e*PKPDF | PKPdf | | 15 38 44.3 | +5.2 |
| PVCC | | | | AMS | AMS | | 17 04 20.0 | |
| | comp=Z,3μm,19.5s | | | | | | | |
| **UPC** | **Upice** | **165.68** | **108** | *e*SS | SS | | 16 04 07.8 | +3.2 |
| UPC | | | | AMS | AMS | | 16 59 20.0 | |
| | comp=Z,4μm,21.9s | | | | | | | |
| **ARR** | **Arges** | **165.75** | **140** | ⇓*i*P | PKPdf | | 15 38 50.9 | +11 |
| **DPC** | **Dobruska-Polom** | **165.75** | **109** | *e*PKIKP | **PKPdf** | | **15 38 44.8** | **+4.9** |
| DPC | | | | *e* | | | 15 39 38.6 | |
| DPC | | | | *e*SS | SS | | 16 04 10.3 | +5.0 |
| DPC | | | | MLR | MLR | | | |
| | comp=Z,4μm,19.7s | | | | | | | |
| **DPC** | **Dobruska-Polom** | **165.75** | **109** | *e*PKPDF | **PKPdf** | | **15 38 44.8** | **+4.9** |
| DPC | | | | *e*PKPAB | **PKPab** | | **15 39 38.6** | **-0.7** |
| DPC | | | | *e*SS | SS | | 16 04 10.3 | +5.0 |
| DPC | | | | AMS | AMS | | 16 58 30.0 | |
| | comp=Z,4μm,19.7s | | | | | | | |
| **KRLC** | **Kraliky** | **165.82** | **111** | *e*PKIKP | **PKPdf** | | **15 38 45.1** | **+5.2** |
| **KRLC** | **Kraliky** | **165.82** | **111** | *e*PKPDF | **PKPdf** | | **15 38 45.1** | **+5.2** |
| **PSZ** | **Piszkesteto** | **165.87** | **123** | ⇓PKIKP | **PKPdf** | | **15 38 44.5** | **+4.4** |
| **PSZ** | **Piszkesteto** | **165.87** | **123** | ⇓*i*P | **PKPdf** | | **15 38 44.5** | **+4.4** |
| **VOIR** | | **165.95** | **141** | ⇑PKIKP | **PKPdf** | | **15 38 44.3** | **+4.1** |
| **VOIR** | | **165.95** | **141** | ⇑*i*P | **PKPdf** | | **15 38 44.3** | **+4.1** |
| **TIRR** | **Tirgusor** | **166.08** | **152** | ⇑*i*P | PKPdf | | 15 38 50.3 | +10 |
| **DRGR** | | **166.22** | **132** | ⇑PKIKP | **PKPdf** | | **15 38 45.3** | **+4.9** |
| **DRGR** | | **166.22** | **132** | ⇑*i*P | **PKPdf** | | **15 38 45.3** | **+4.9** |
| **MLR** | **Muntele Rosu** | **166.30** | **143** | ⇓PKIKP | **PKPdf** | | **15 38 43.9** | **+3.3** |
| **MLR** | **Muntele Rosu** | **166.30** | **143** | ⇓*i*P | **PKPdf** | | **15 38 43.9** | **+3.3** |
| **OKC** | **Ostrava-Krasne** | **166.36** | **114** | *e*PKPDF | PKPdf | | 15 38 45.9 | +5.6 |
| OKC | | | | *ex* | x | | 16 04 26.2 | |
| OKC | | | | AMS | AMS | | 17 05 30.0 | |
| | comp=Z,2μm,19.2s | | | | | | | |
| **SOC** | **Sochi** | **166.38** | **187** | *e*PKIKP | PKPdf | | 15 38 47.8 | +7.3 |
| SOC | | | | *e* | | | 15 43 37.9 | |
| SOC | | | | *e*SS | SS | | 16 04 13.4 | +3.1 |
| SOC | | | | MLR | MLR | | | |
| | comp=Z,5μm,22.0s | | | | | | | |
| **KIV** | **Kislovodsk** | **166.44** | **196** | PKIKP | **PKPdf** | | **15 38 40.0** | **-0.7** |
| KIV | | | | *e* | | | 15 43 27.9 | |
| KIV | | | | *e*PPP | PPP | | 15 47 37.9 | |
| KIV | | | | SSS | SSS | | 16 10 56.0 | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,19nm,1.6s | | | | | | | |
| KIV | | | | pmax | pmax | | | |
| | comp=Z,27nm,1.1s | | | | | | | |
| **CFR** | **Carcaliu** | **166.68** | **150** | ⇓PKIKP | **PKPdf** | | **15 38 42.6** | **+2.0** |
| **CFR** | **Carcaliu** | **166.68** | **150** | ⇓*i*P | **PKPdf** | | **15 38 42.6** | **+2.0** |
| **UZH** | **Uzhgorod** | **167.48** | **126** | *e*PKP2 | PKPab | | 15 39 52.5 | +5.6 |
| UZH | | | | *e*SS | SS | | 16 04 33.1 | +11 |
| UZH | | | | MLR | MLR | | | |
| | comp=N,2μm,18.0s | | | | | | | |
| UZH | | | | MLR | MLR | | | |
| | comp=E,2μm,18.0s | | | | | | | |
| **ANN** | **Anapa** | **167.67** | **180** | *e*PKP2 | PKPab | | 15 39 56.6 | +8.9 |
| ANN | | | | *e*SS | SS | | 16 04 32.1 | +8.9 |
| ANN | | | | pmax | pmax | | | |
| | comp=Z,118nm,1.7s | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **167.69** | **125** | *e* | PKPdf | | 15 38 48.8 | +7.5 |
| KOLS | | | | *e* | | | 15 39 54.4 | |
| **BUR04** | **Bucovina Ar. S** | **167.87** | **136** | *e*PKPab | **PKPab** | | **15 39 51.0** | **+2.2** |
| BUR04 | | | | *e*PP | PP | | 15 43 43.9 | +6.1 |
| **KWP** | **Kalwaria Pacla** | **168.40** | **124** | ⇓PKIKP | **PKPdf** | | **15 38 43.4** | **+1.6** |
| **KWP** | **Kalwaria Pacla** | **168.40** | **124** | ⇓*i*P | **PKPdf** | | **15 38 43.4** | **+1.6** |
| **KIS** | **Kishinev** | **168.53** | **148** | *e*PP | PP | | 15 43 40.0 | -0.9 |
| KIS | | | | *e*SKKS | | | 15 50 20.0 | |
| **APA** | **Apatity** | **169.33** | **9** | ⇑*i*PKIKP | PKPpre | | 15 38 35.0 | |
| APA | | | | *i* | | | 15 43 44.6 | |
| APA | | | | MLR | MLR | | | |
| | comp=Z,5μm,17.0s | | | | | | | |
| **AKASG** | **Malin Array Be** | **171.90** | **139** | PKP | **PKPdf** | | **15 38 39.0** | **-4.7** |
| | comp=Z,0.1nm,0.3s,baz=242,slow=2.0,SNR=2.9 | | | | | | | |
| AKASG | | | | PP | **PP** | | **15 44 00.9** | **+3.0** |
| | comp=Z,0.1nm,0.3s,baz=226,slow=5.2,SNR=5.9 | | | | | | | |
| **VRH** | **Novokhopyorsk** | **173.60** | **204** | *e*PKP2 | **PKPab** | | **15 40 12.6** | **-1.3** |
| VRH | | | | pmax | pmax | | | |
| | comp=N,20nm,0.9s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=E,20nm,0.9s | | | | | | | |
| VRH | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.9s | | | | | | | |
| **VSR** | **Storozhevoye** | **174.01** | **190** | *e*PKP2 | **PKPab** | | **15 40 17.6** | **+1.9** |
| VSR | | | | pmax | pmax | | | |
| | comp=N,10.0nm,1.1s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=E,8.0nm,1.1s | | | | | | | |
| VSR | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.1s | | | | | | | |
| **LPSR** | **Galich'ya Gora** | **175.41** | **190** | *e*PKP2 | **PKPab** | | **15 40 21.1** | **-0.8** |
| LPSR | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=N,5.0nm,0.6s | | | | | | | |
| LPSR | | | | pmax | pmax | | | |
| | comp=E,6.0nm,0.8s | | | | | | | |
| **KLMR** | **Klimovskoe** | **176.12** | **346** | *e*PKIKP | **PKPdf** | | **15 38 47.4** | **+2.6** |
| KLMR | | | | pmax | pmax | | | |
| | comp=Z,43nm,2.0s | | | | | | | |
| **OBN** | **Obninsk** | **177.91** | **164** | ⇓*e*PKIKP | **PKPdf** | | **15 38 45.0** | **-0.3** |
| OBN | | | | *e* | | | 15 38 53.3 | |
| OBN | | | | *i* | | | 15 44 30.4 | |
| OBN | | | | *e*PPP | PPP | | 15 48 51.8 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,38nm,1.6s | | | | | | | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,70nm,1.6s | | | | | | | |

**WEL 30 15:20:18.4±0.4, 36°97S×177°38E, h158km±3km, ML3.8/16, 10C-1D, Error ellipse: s-maj=3.3km s-min=2.8km az=0.0, Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **HAZ** | **Te Kaha** | **0.85** | **158** | ⇑PN | Pn | 15 20 42.6 | -0.2 |
| HAZ | | | | SN | Sn | 15 21 01.6 | 0.0 |
| **MXZ** | **Matakaoa Point** | **0.95** | **129** | PN | Pn | 15 20 43.4 | -0.1 |
| MXZ | | | | SN | Sn | 15 21 03.1 | +0.2 |
| **PKGZ** | **Pakihiroa** | **1.06** | **148** | PN | Pn | 15 20 44.9 | +0.4 |
| **OPRZ** | **Ohinepanea** | **1.09** | **216** | ⇑PN | Pn | 15 20 45.1 | +0.3 |
| **WMGZ** | **Waiomatatini S** | **1.19** | **136** | ⇑PN | Pn | 15 20 45.6 | 0.0 |
| WMGZ | | | | eSN | Sn | 15 21 06.1 | -0.4 |
| **TWGZ** | **Tauwhareparae** | **1.30** | **158** | PN | Pn | 15 20 47.3 | +0.6 |
| **PUZ** | **Puketiti** | **1.31** | **148** | PN | Pn | 15 20 46.6 | -0.2 |
| **URZ** | **Urewera** | **1.31** | **189** | ⇑PN | Pn | 15 20 46.7 | 0.0 |
| URZ | | | | SN | Sn | 15 21 08.6 | 0.0 |
| **MWZ** | **Matawai** | **1.37** | **175** | ⇑PN | Pn | 15 20 47.3 | -0.1 |
| MWZ | | | | AML | AML | 15 21 11.0 | |
| MWZ | | | | AML | AML | 15 21 11.2 | |
| **TKGZ** | **Te Karaka** | **1.52** | **166** | ⇑PN | Pn | 15 20 48.7 | 0.0 |
| **CNGZ** | **Carnagh Statio** | **1.65** | **157** | PN | Pn | 15 20 50.5 | +0.3 |
| **PRRZ** | **Plateau Road** | **1.72** | **207** | ⇑PN | Pn | 15 20 51.3 | +0.4 |
| **RIGZ** | **Rimuhau** | **1.76** | **170** | ⇑PN | Pn | 15 20 51.2 | -0.2 |
| **ALRZ** | **Allen Road** | **1.79** | **207** | *e*PN | Pn | 15 20 52.1 | +0.3 |
| **SNGZ** | **Shannon Statio** | **1.81** | **181** | PN | Pn | 15 20 51.7 | -0.2 |
| **RAHZ** | **Arahi** | **1.96** | **187** | PN | Pn | 15 20 53.7 | 0.0 |
| **PRGZ** | **Paritu Road** | **2.00** | **169** | PN | Pn | 15 20 53.5 | -0.6 |
| **KNZ** | **Kokohu** | **2.06** | **174** | ⇑PN | Pn | 15 20 54.2 | -0.5 |
| **WHHZ** | **Waihua** | **2.11** | **183** | PN | Pn | 15 20 55.0 | -0.3 |
| **NMHZ** | **Naumai** | **2.17** | **192** | PN | Pn | 15 20 56.4 | +0.2 |
| **MHGZ** | **Mahia Peninsul** | **2.22** | **169** | PN | Pn | 15 20 56.1 | -0.5 |
| **BKZ** | **Black Stump Fm** | **2.31** | **197** | PN | Pn | 15 20 56.6 | -1.1 |
| **ARHZ** | **Aropaoanui** | **2.31** | **187** | PN | Pn | 15 20 57.2 | -0.5 |
| **MCHZ** | **McNeill Hill** | **2.53** | **192** | PN | Pn | 15 20 59.8 | -0.6 |
| **FWVZ** | **Far West T-bar** | **2.70** | **212** | PN | Pn | 15 21 02.0 | -0.7 |
| **BHHZ** | **Black Hill Sta** | **2.72** | **202** | PN | Pn | 15 21 01.4 | -1.4 |
| **WNVZ** | **Wahianoa** | **2.74** | **210** | PN | Pn | 15 21 02.2 | -1.0 |
| **MOVZ** | **Moawhango** | **2.75** | **207** | PN | Pn | 15 21 01.7 | -1.4 |
| **KAHZ** | **Kahuranaki** | **2.85** | **188** | PN | Pn | 15 21 03.1 | -1.2 |
| **PNHZ** | **Pukenui** | **3.08** | **197** | ⇓PN | Pn | 15 21 05.3 | -1.9 |
| **PXZ** | **Pawanui** | **3.09** | **187** | PN | Pn | 15 21 05.1 | -2.0 |
| **WPHZ** | **Waipukurau** | **3.18** | **193** | *e*PN | Pn | 15 21 05.9 | -2.5 |
| **TSZ** | **Takapari Road** | **3.28** | **199** | PN | Pn | 15 21 07.4 | -2.3 |
| **PRHZ** | **Porangahau** | **3.35** | **190** | PN | Pn | 15 21 08.4 | -2.1 |
| **DVHZ** | **Dannevirke** | **3.46** | **196** | PN | Pn | 15 21 09.3 | -2.7 |
| **ANWZ** | **Angora Road** | **3.56** | **191** | PN | Pn | 15 21 10.9 | -2.2 |
| **POWZ** | **Post Office Ro** | **3.65** | **200** | PN | Pn | 15 21 11.6 | -2.7 |
| **PRWZ** | **Pori Road** | **3.75** | **197** | PN | Pn | 15 21 13.1 | -2.5 |
| **BFZ** | **Birch Farm** | **3.81** | **193** | PN | Pn | 15 21 13.6 | -2.9 |
| **MRZ** | **Mangatainoka R** | **3.95** | **200** | ⇑PN | Pn | 15 21 15.0 | -3.2 |
| **TIWZ** | **Tintock** | **3.98** | **197** | AML | AML | 15 22 04.0 | |
| TIWZ | | | | AML | AML | 15 22 04.3 | |
| TIWZ | | | | AML | AML | 15 22 05.1 | |
| **HOWZ** | **Holdsworth Sta** | **4.19** | **200** | PN | Pn | 15 21 17.7 | -3.6 |
| **OGWZ** | **Otaki Gorge** | **4.21** | **203** | PN | Pn | 15 21 18.4 | -3.2 |
| **KIW** | **Kapiti Island** | **4.34** | **206** | PN | Pn | 15 21 19.7 | -3.6 |
| **MTW** | **Mount Morrison** | **4.43** | **199** | PN | Pn | 15 21 20.6 | -3.9 |
| **CAW** | **Cannon Point** | **4.51** | **203** | *e*PN | Pn | 15 21 21.4 | -4.1 |
| **TRWZ** | **Traveller** | **4.62** | **196** | PN | Pn | 15 21 23.3 | -3.6 |
| **WEL** | **Wellington** | **4.77** | **204** | PN | Pn | 15 21 25.0 | -3.9 |
| **TCW** | **Tory Channel** | **4.88** | **209** | PN | Pn | 15 21 26.2 | -4.1 |
| **TUWZ** | **Tuamarina** | **5.19** | **210** | PN | Pn | 15 21 30.0 | -4.4 |
| **KHZ** | **Kahutara** | **6.20** | **207** | AML | AML | 15 25 16.2 | |

**SJA 30 15:23:25.1±0.8, 32°08S×69°33W, h102km±4km, ML2.0, MW3.6, Mendoza Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AUSP** | **Uspallata** | **0.15** | **197** | *i* P | Pn | 15 23 40.4 | +0.6 |
| AUSP | | | | *i* S | Sn | 15 23 52.0 | +1.2 |
| **RTLS** | **Leoncito** | **0.28** | **7** | *i* P | Pn | 15 23 41.2 | +1.0 |
| RTLS | | | | *i* S | Sn | 15 23 53.4 | +2.0 |
| **ASAL** | **Salagasta** | **0.67** | **141** | *i* P | Pn | 15 23 43.3 | +0.7 |
| ASAL | | | | *i* S | Sn | 15 23 57.1 | +1.5 |
| **RTCV** | **Cerro Valdivia** | **0.71** | **73** | *i* P | Pn | 15 23 43.7 | +0.8 |
| RTCV | | | | *i* S | Sn | 15 23 57.2 | +1.1 |
| **ARCO** | **CERRO ARCO** | **0.84** | **156** | *i* P | Pn | 15 23 45.0 | +0.8 |
| ARCO | | | | IAML | | 15 24 28.1 | |
| | comp=Z,31nm,0.5s | | | | | | |
| **CFAA** | **Coronel Fontan** | **1.04** | **64** | *i* P | Pn | 15 23 46.5 | +0.3 |
| CFAA | | | | *i* S | Sn | 15 24 02.9 | +0.8 |
| **AMOG** | **MOGNA** | **1.34** | **33** | *i* P | Pn | 15 23 50.9 | +1.2 |
| AMOG | | | | *i* S | Sn | 15 24 09.6 | +1.3 |

*IDC **30** 15:25:34.6±13.0, 32°.52N×142°.68E, h0km, mb3.5/3, mb1 3.6/4, mb1mx3.4/47, mbtmp3.4/4, ML3.4/1, Error ellipse: s-maj=469.9km s-min=25.6km az=66.0*
*JMA **30** 15:25:35.6±0.6, 32°.88N×142°.53E, h0km, M4.0*
**ISC 30 15:25:34.6±1.6, 32°.9N±0°.1×143°.0E±0°.2, h10km, n14, σ1°45/19, mb3.6/3, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BSO1** | **Boso 1** | **2.43** | **317** | P | **Pn** | **15 26 14.2** | **+0.3** |
| **BSO3** | **Boso 3** | **2.81** | **314** | P | **Pn** | **15 26 19.6** | **+0.2** |
| BSO3 | | | | *e*S | **Sn** | **15 26 52.5** | **-0.6** |
| **BSO4** | **Boso 4** | **3.04** | **315** | P | **Pn** | **15 26 23.4** | **+0.7** |
| BSO4 | | | | S | **Sn** | **15 26 58.2** | **-0.9** |
| **JYT** | **Yasato** | **4.05** | **326** | P | **Pn** | **15 26 38.6** | **+1.9** |
| **JHO** | **Hitachi** | **4.22** | **333** | P | **Pn** | **15 26 38.8** | **-0.2** |
| **JHU** | **Hanno** | **4.26** | **315** | P | **Pn** | **15 26 41.4** | **+1.9** |
| JHU | | | | *e*S | **Sn** | **15 27 27.6** | **-1.7** |
| **JYN** | **Shimob** | **4.51** | **307** | P | **Pn** | **15 26 44.0** | **+1.0** |
| **JAG** | **Ashikaga** | **4.58** | **322** | P | **Pn** | **15 26 44.6** | **+0.7** |
| JAG | | | | *e*S | **Sn** | **15 27 35.2** | **-1.9** |
| **JNY** | **Yasuok** | **4.91** | **302** | P | **Pn** | **15 26 49.9** | **+1.3** |
| **JFT** | **Otama** | **5.11** | **336** | P | **Pn** | **15 26 51.9** | **+0.7** |
| JFT | | | | *e*S | Sn | 15 27 45.9 | -4.4 |
| **MJAR** | **Matsushiro Arr** | **5.36** | **314** | Pn | **Pn** | **15 26 54.6** | **-0.1** |
| | 1.3nm,0.3s,baz=157,slow=11,SNR=20 | | | | | | |
| MJAR | | | | Sn | **Sn** | **15 27 54.5** | **-2.1** |
| | 1.0nm,0.3s,baz=154,slow=16,SNR=6.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **47.49** | **306** | P | **P** | **15 34 12.3** | **+2.4** |
| | 0.2nm,0.3s,baz=87,slow=9.3,SNR=3.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **53.17** | **190** | P | **P** | **15 34 51.5** | **-1.4** |
| | 0.5nm,0.6s,baz=7.3,slow=7.6,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **56.89** | **190** | P | **P** | **15 35 18.4** | **-1.4** |
| | 0.4nm,1.0s,baz=9.4,slow=6.7,SNR=3.5 | | | | | | |

*IPEC **30** 15:36:18.4±0.2, 49°.68N×18°.35E, h0km, ML1.1/3, Error ellipse: s-maj=1.8km s-min=1.1km az=158.0*
*PRU **30** 15:36:19.9, 49°.69N×18°.25E, h0km*
**CSEM 30 15:36:18.6±0.6, 49°.67N×18°.25E, h1km, ML1.9/5, 3D, Error ellipse: s-maj=8.0km s-min=4.6km az=108.0, Czech and Slovak Republics**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OKC** | **Ostrava-Krasne** | **0.18** | **338** | ⇓*i*Pg | Pg | 15 36 22.7 | +0.5 |
| OKC | | | | *e*SG | Sg | 15 36 25.5 | +0.8 |
| | comp=Z,16nm,0.2s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **0.18** | **338** | Pg | Pg | 15 36 22.7 | +0.5 |
| OKC | | | | Sg | Sg | 15 36 25.5 | +0.8 |
| | 16nm,0.2s | | | | | | |
| **MORC** | **Moravsky Berou** | **0.47** | **284** | *e*Pg | Pg | 15 36 28.0 | +0.2 |
| MORC | | | | *e*Sg | Sg | 15 36 35.1 | +1.0 |
| | 5.3nm,0.3s,baz=101 | | | | | | |
| **KRLC** | **Kraliky** | **1.04** | **294** | *e*PG | Pg | 15 36 38.1 | -0.5 |
| KRLC | | | | *e*SG | Sg | 15 36 51.9 | -0.2 |
| **KRLC** | **Kraliky** | **1.04** | **294** | Pg | Pg | 15 36 38.1 | -0.5 |
| KRLC | | | | Sg | Sg | 15 36 51.9 | -0.2 |
| **VRAC** | **Vranov** | **1.14** | **252** | *e*Pg | Pb | 15 36 41.3 | +0.1 |
| | baz=72 | | | | | | |
| VRAC | | | | *e*Sg | Sb | 15 36 56.2 | -0.3 |
| | 4.8nm,0.3s,baz=72 | | | | | | |
| **KRUC** | **Moravsky** | **1.36** | **244** | *e*Pg | Pg | 15 36 44.1 | -0.5 |
| | baz=64 | | | | | | |
| KRUC | | | | *e*Sg | Sn | 15 37 03.2 | -0.1 |
| | 1.8nm,0.2s,baz=64 | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.42** | **300** | *e*PG | Pn | 15 36 45.2 | -0.5 |
| DPC | | | | *e*SG | Sg | 15 37 04.5 | 0.0 |
| | comp=Z,3.6nm,0.3s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.42** | **300** | Pg | Pn | 15 36 45.2 | -0.5 |
| DPC | | | | Sg | Sg | 15 37 04.5 | 0.0 |
| | 3.6nm,0.3s | | | | | | |
| **UPC** | **Upice** | **1.67** | **301** | ⇓*e*SG | Sg | 15 37 12.7 | +0.3 |
| **UPC** | **Upice** | **1.67** | **301** | Sg | Sg | 15 37 12.7 | +0.3 |
| **PRU** | **Pruhonice** | **2.42** | **279** | ⇓*e*SG | Sg | 15 37 35.1 | -1.5 |
| **PRU** | **Pruhonice** | **2.42** | **279** | Sg | Sg | 15 37 35.1 | -1.5 |

**CSEM 30 15:36:36.7, 42°.70N×12°.88E, h9km, MD1.9/9, After ROM, Central Italy**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LNSS** | **Leonessa** | **0.15** | **128** | Pg | Pg | 15 36 40.9 | +0.7 |
| LNSS | | | | Sg | Sg | 15 36 43.5 | +0.9 |
| | 254nm,0.2s | | | | | | |
| **NRCA** | **Norcia** | **0.22** | **51** | Pg | Pg | 15 36 41.9 | +0.5 |
| NRCA | | | | Sg | Sg | 15 36 45.4 | +0.8 |
| | 114nm,0.1s | | | | | | |
| **CESX** | **Cesi** | **0.24** | **249** | Pg | Pg | 15 36 42.5 | +0.9 |
| CESX | | | | Sg | Sg | 15 36 46.1 | +1.3 |
| | 41nm,0.3s | | | | | | |
| **CESI** | **CESI - Serrava** | **0.31** | **3** | Pg | Pg | 15 36 43.6 | +0.6 |
| CESI | | | | Sg | Sb | 15 36 48.8 | -1.0 |
| | 18nm,0.3s | | | | | | |
| **RM33** | **Pellescritta (** | **0.31** | **127** | Pg | Pg | 15 36 43.6 | +0.5 |
| RM33 | | | | Sg | Sg | 15 36 48.5 | +1.2 |
| **SMA1** | **SAN MARTINO** | **0.34** | **101** | Pg | Pb | 15 36 44.6 | -0.5 |
| SMA1 | | | | Sg | Sb | 15 36 49.8 | -1.0 |
| **MNS** | **Montasola** | **0.34** | **205** | Pg | Pg | 15 36 44.3 | +0.7 |
| | 35nm,0.4s | | | | | | |
| **FDMO** | **Fiordimonte** | **0.37** | **24** | Pg | Pg | 15 36 44.6 | +0.4 |
| FDMO | | | | Sg | Sb | 15 36 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ERIK** | **Erikli-Kesan** | **1.03** | **305** | *e*PG | **Pg** | **16 38 29.4** | **-0.9** |
| **ERIK** | **Erikli-Kesan** | **1.03** | **305** | *e*Pg | **Pg** | **16 38 29.4** | **-0.9** |
| **ARMT** | **Armutlu** | **1.06** | **63** | *e*PN | **Pn** | **16 38 31.3** | **+0.2** |
| **ARMT** | **Armutlu** | **1.06** | **63** | *e*Pn | **Pn** | **16 38 31.3** | **+0.2** |
| **AYVA** | **Ayvalik** | **1.06** | **223** | *i* P | **Pn** | **16 38 31.8** | **+0.7** |
| AYVA | | | | *i* S | **Sn** | **16 38 45.6** | **-0.1** |
| **AYVA** | **Ayvalik** | **1.06** | **223** | P | **Pn** | **16 38 31.8** | **+0.7** |
| AYVA | | | | S | **Sn** | **16 38 45.6** | **-0.1** |
| **ULDT** | **Uludag** | **1.16** | **87** | *i* P | **Pb** | **16 38 31.9** | **-0.6** |
| ULDT | | | | *i* S | **Sg** | **16 38 48.1** | **+0.2** |
| **ULDT** | **Uludag** | **1.16** | **87** | P | **Pb** | **16 38 31.9** | **-0.6** |
| ULDT | | | | S | **Sg** | **16 38 48.1** | **+0.2** |
| **IGD** | **Bursa** | **1.22** | **81** | P | **Pb** | **16 38 32.5** | **-0.8** |
| IGD | | | | S | **Sg** | **16 38 49.8** | **0.0** |
| **GADA** | **Gvkgeada** | **1.33** | **275** | *e*PN | **Pn** | **16 38 34.8** | **0.0** |
| **GADA** | **Gvkgeada** | **1.33** | **275** | *e*Pn | **Pn** | **16 38 34.8** | **0.0** |
| **IZI** | **Iznik** | **1.44** | **79** | *e*PN | **Pg** | **16 38 37.6** | **-0.4** |
| **IZI** | **Iznik** | **1.44** | **79** | *e*Pn | **Pg** | **16 38 37.7** | **-0.4** |
| **ALN** | **Alexandroupoli** | **1.45** | **304** | *e*PN | **Pb** | **16 38 37.5** | **+0.2** |
| **ALN** | **Alexandroupoli** | **1.45** | **304** | *e*Pn | **Pb** | **16 38 37.5** | **+0.2** |
| **TVSB** | **Tavsanli** | **1.55** | **114** | *e*PN | **Pb** | **16 38 39.3** | **+0.1** |
| **TVSB** | **Tavsanli** | **1.55** | **114** | *e*PN | **Pb** | **16 38 39.3** | **+0.1** |
| **CAVI** | **Cavuskoy** | **1.71** | **85** | *e*PN | **Pb** | **16 38 41.5** | **-0.1** |
| **CAVI** | **Cavuskoy** | **1.71** | **85** | *e*Pn | **Pb** | **16 38 41.6** | **-0.1** |
| **EDRB** | **Edirne** | **1.88** | **340** | *e*PN | **Pn** | **16 38 43.4** | **+1.0** |
| **EDRB** | **Edirne** | **1.88** | **340** | *e*Pn | **Pn** | **16 38 43.4** | **+1.0** |

**SJA 30 16:44:49.3±0.6, 24°25S×67°04W, h204km±11km, ML2.5, MW3.6, Chile-Argentina border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SLA** | **San Lorenzo** | **1.48** | **109** | *i* P | Pn | 16 45 24.3 | +0.9 |
| SLA | | | | *i* S | S | 16 45 49.7 | +0.2 |
| SLA | | | | IAML | | 16 45 50.9 | |
| | comp=Z,26nm,0.6s | | | | | | |
| **AZAP** | **Zapla** | **1.80** | **90** | *i* P | Pn | 16 45 27.3 | +0.8 |
| AZAP | | | | *i* S | S | 16 45 55.0 | +0.1 |
| **HJA** | **Humahuaca** | **1.81** | **56** | *i* P | Pn | 16 45 27.7 | +0.8 |
| HJA | | | | *i* S | S | 16 45 56.1 | +0.6 |
| **FSA** | **Cafayete** | **2.06** | **153** | *i* P | Pn | 16 45 29.7 | +0.7 |
| **ASTB** | **Santa Barbara** | **2.35** | **83** | *i* P | Pn | 16 45 33.0 | +1.0 |

*AUST **30** 16:55:44.1,9°49S×119°46E, h35km*
*ISCJB **30** 16:55:45.0±0.3,9°40S±0°03×119°45E±0°03, h107km±4km, mb4.1/6, Error ellipse: s-maj=5.8km s-min=4.1km az=33.5*
*BJI **30** 16:55:45.3,9.26S×118°98E, h82km, mb4.6/5, mB5.1/3*
*NEIC **30** 16:55:45.5±0.9,9°40S×119°35E, h96km±9km, mb4.0/3, Error ellipse: s-maj=15.2km s-min=8.3km az=215.0*
*DJA **30** 16:55:46.8±0.3,9°S±2°×11°9E±°, h61km±6km, M4.8/15, MLv4.8/15*
*IDC **30** 16:55:50.0±3.2,9°18S×119°83E, h136km±26km, mb3.8/4, mb1 3.8/9, mb1mx3.5/30, mbtmp4.3/9, Error ellipse: s-maj=46.1km s-min=8.1km az=53.0*

**ISC 30 16:55:45.5±0.8,9°43S±0°04×119°43E±0°04, h93km±8km, n61,σ1°69/68, mb4.2/6, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WSI** | **Waingapu** | **0.89** | **105** | P | **Pn** | **16 56 04.7** | **+0.5** |
| WSI | | | | S | **Sn** | **16 56 16.2** | **-2.0** |
| **BASI** | **Baing, Sumba** | **1.38** | **125** | P | **Pn** | **16 56 10.7** | **+0.8** |
| BASI | | | | S | **Sn** | **16 56 30.3** | **+2.0** |
| **EDFI** | **Ende, Flores** | **2.33** | **73** | P | **Pn** | **16 56 23.3** | **+0.9** |
| EDFI | | | | S | **Sn** | **16 56 48.2** | **-2.4** |
| **TWSI** | **Taliwang, Sumb** | **2.61** | **285** | P | **Pn** | **16 56 26.1** | **+0.2** |
| TWSI | | | | S | **Sn** | **16 56 56.5** | **-0.4** |
| **MMRI** | **Maumere** | **2.88** | **74** | P | **Pn** | **16 56 31.2** | **+1.6** |
| MMRI | | | | S | **Sn** | **16 57 05.1** | **+1.6** |
| **MMRI** | **Maumere** | **2.88** | **74** | *e*Pn | **Pn** | **16 56 31.0** | **+1.4** |
| MMRI | | | | *e*Sn | **Sn** | **16 57 01.2** | **-2.4** |
| **BSSI** | **Bau Bau, Buton** | **3.43** | **18** | P | **Pn** | **16 56 37.5** | **+0.5** |
| BSSI | | | | S | **Sn** | **16 57 16.8** | **0.0** |
| **BKSI** | **Bulukumba** | **4.14** | **10** | P | **Pn** | **16 56 48.0** | **+1.4** |
| **DNP** | **Denpasar** | **4.23** | **280** | P | **Pn** | **16 56 50.4** | **+2.6** |
| **BATI** | **Baumata** | **4.24** | **101** | P | **Pn** | **16 56 49.9** | **+1.9** |
| | 146nm,0.3s,baz=299,slow=4.2,SNR=290 | | | | | | |
| BATI | | | | S | **Sn** | **16 57 35.6** | **-0.8** |
| | 70nm,0.3s,baz=20,slow=18,SNR=14 | | | | | | |
| **BATI** | **Baumata** | **4.24** | **101** | P | **Pn** | **16 56 49.9** | **+1.9** |
| BATI | | | | S | **Sn** | **16 57 36.1** | **-0.3** |
| **SRBI** | **Singaraja** | **4.38** | **287** | P | **Pn** | **16 56 49.2** | **-0.6** |
| **KAPI** | **Kappang** | **4.40** | **4** | P | **Pn** | **16 56 50.9** | **+0.8** |
| | 14nm,0.3s,baz=189,slow=9.3,SNR=22 | | | | | | |
| KAPI | | | | S | **Sn** | **16 57 38.6** | **-1.6** |
| | 75nm,0.3s,baz=7.4,slow=22,SNR=20 | | | | | | |
| **SOEI** | **Soe** | **4.78** | **94** | P | **Pn** | **16 56 57.1** | **+1.7** |
| | baz=4.7,SNR=46 | | | | | | |
| **SOEI** | **Soe** | **4.78** | **94** | P | **Pn** | **16 56 57.3** | **+1.9** |
| **SOEI** | **Soe** | **4.78** | **94** | *e*Pn | **Pn** | **16 56 56.5** | **+1.2** |
| SOEI | | | | *e*Sn | **Sn** | **16 57 49.4** | **-0.3** |
| **BBSI** | **Bau Bau** | **5.01** | **39** | P | **Pn** | **16 56 59.7** | **+1.4** |
| **JAGI** | **Jajag, Banyuwa** | **5.30** | **280** | P | **Pn** | **16 56 60.0** | **-2.3** |
| | baz=5.3,SNR=24 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **5.30** | **280** | P | Pn | 16 56 59.5 | -2.8 |
| **JAGI** | **Jajag, Banyuwa** | **5.30** | **280** | *e*Pn | **Pn** | **16 57 00.0** | **-2.3** |
| | 91nm,0.3s | | | | | | |
| **ABJI** | **Asem Bagus** | **5.39** | **287** | P | **Pn** | **16 57 04.6** | **+1.1** |
| **SPSI** | **Sidrap Palu** | **5.44** | **4** | P | **Pn** | **16 57 06.9** | **+2.6** |
| SPSI | | | | S | **Sn** | **16 58 07.5** | **+1.9** |
| **KBKI** | **Kotabaru** | **6.90** | **332** | P | **Pn** | **16 57 26.6** | **+2.5** |
| **BBKI** | **Banjar Baru** | **7.48** | **322** | P | **Pn** | **16 57 34.1** | **+2.1** |
| **PWJI** | **Pagerwojo** | **7.67** | **280** | P | Pn | 16 57 41.6 | +7.1 |
| **UGM** | **Wanagama** | **8.93** | **279** | P | **Pn** | **16 57 52.1** | **+0.3** |
| | baz=9.0,SNR=6.1 | | | | | | |
| **NLAI** | **Namlea** | **9.79** | **52** | P | Pn | 16 58 12.6 | +9.0 |
| **PBKI** | **Pangkalan Bun** | **10.21** | **310** | P | Pn | 16 58 14.8 | +5.6 |
| **KNRA** | **Kununurra** | **11.02** | **125** | P | **Pn** | **16 58 19.8** | **-0.5** |
| | baz=11,SNR=42 | | | | | | |
| **MTN** | **Manton Dam** | **11.97** | **108** | P | **Pn** | **16 58 31.3** | **-1.7** |
| | baz=12,SNR=104 | | | | | | |
| **GIRL** | **Giralia** | **14.05** | **200** | P | **Pn** | **16 59 01.1** | **+0.7** |
| | baz=14,SNR=5.8 | | | | | | |
| **FAKI** | **Fak Fak** | **14.29** | **64** | P | **Pn** | **16 59 02.1** | **-1.5** |
| | baz=14,SNR=6.8 | | | | | | |
| **FAKI** | **Fak Fak** | **14.29** | **64** | *e*Pn | **Pn** | **16 59 01.5** | **-2.1** |
| | 28nm,0.8s | | | | | | |
| **SWI** | **Sorong** | **14.53** | **55** | P | **P** | **16 59 10.1** | **-0.6** |
| | baz=15,SNR=3.5 | | | | | | |
| **SIJI** | **Sorong** | **14.53** | **55** | P | **Pn** | **16 59 04.7** | **-2.0** |
| | 2.5nm,0.3s,baz=229,slow=10,SNR=10 | | | | | | |
| **MEEK** | **Meekatharra** | **17.13** | **182** | P | **P** | **16 59 40.4** | **+1.0** |
| | baz=17,SNR=16 | | | | | | |
| **WRKA** | **Warakurna** | **17.66** | **153** | P | **Pn** | **16 59 47.2** | **+1.5** |
| | baz=18,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.79** | **128** | P | **P** | **16 59 46.7** | **-0.1** |
| | 0.5nm,0.3s,baz=303,slow=14,SNR=13 | | | | | | |
| WRA | | | | S | Sn | 17 02 50.7 | -15 |
| | 0.2nm,0.3s,baz=293,slow=23,SNR=4.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **17.80** | **128** | *e*P | **Pn** | **16 59 47.9** | **+0.6** |
| | 7.2nm,0.9s | | | | | | |
| WRAB | | | | *e*S | **Sn** | **17 03 05.5** | **-0.2** |
| **MORW** | **Morawa** | **19.79** | **189** | P | **Pn** | **17 00 15.5** | **+4.6** |
| | baz=20,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **19.79** | **137** | P | **P** | **17 00 09.7** | **+1.0** |
| | 0.5nm,0.3s,baz=318,slow=11,SNR=52 | | | | | | |
| ASAR | | | | S | **S** | **17 03 42.5** | **-4.3** |
| | 0.2nm,0.3s,baz=311,slow=22,SNR=9.6 | | | | | | |
| **COEN** | **Coen** | **23.68** | **103** | P | **P** | **17 00 51.6** | **+2.6** |
| | baz=24,SNR=4.3 | | | | | | |
| **MTSU** | **Mount Surprise** | **25.64** | **112** | P | **P** | **17 01 09.6** | **+2.8** |
| | baz=26,SNR=5.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **34.30** | **324** | P | **P** | **17 02 23.6** | **+0.3** |
| | 2.0nm,0.6s,baz=153,slow=7.1,SNR=12 | | | | | | |
| **H08S2** | **Diego Garcia H** | **46.42** | **268** | T | T | 17 53 26.9 | |
| | baz=95,slow=75,SNR=31 | | | | | | |
| **H08S3** | **Diego Garcia H** | **46.44** | **268** | T | T | 17 53 27.7 | |
| | baz=95,slow=75,SNR=22 | | | | | | |
| **H08S1** | **Diego Carcia H** | **46.44** | **268** | T | T | 17 53 28.3 | |
| | baz=95,slow=75,SNR=30 | | | | | | |
| **LSA** | **Lhasa** | **47.49** | **326** | *e*P | **P** | **17 04 10.7** | **-1.2** |
| | 3.2nm,0.6s | | | | | | |
| **ODAN** | **Odare** | **47.62** | **320** | *e*P | **P** | **17 04 11.8** | **-1.0** |
| | 12nm,0.8s | | | | | | |
| **TAPN** | **Taplejung** | **47.77** | **321** | *e*P | **P** | **17 04 13.9** | **0.0** |
| | 17nm,0.6s | | | | | | |
| **RAMN** | **Ramite** | **48.19** | **320** | *e*P | **P** | **17 04 15.8** | **-1.3** |
| | 9.1nm,0.5s | | | | | | |
| **GUN** | **Gumba** | **49.32** | **320** | *e*P | **P** | **17 04 24.7** | **-1.2** |
| | 11nm,0.6s | | | | | | |
| **PKI** | **Pulchoki** | **49.38** | **319** | *e*P | **P** | **17 04 25.2** | **-1.2** |
| | 4.8nm,0.5s | | | | | | |
| **GKN** | **Gorkha** | **50.18** | **319** | *e*P | **P** | **17 04 31.1** | **-1.1** |
| | 7.0nm,0.4s | | | | | | |
| **KOLN** | **Koldanda** | **50.70** | **318** | *e*P | **P** | **17 04 34.4** | **-1.8** |
| **GTA** | **Gaotai** | **51.90** | **341** | *e*P | **P** | **17 04 46.0** | **+1.2** |
| GTA | | | | PMZ | | | |
| | 7.0nm,1.1s | | | | | | |
| **SONM** | **Songino Array** | **58.18** | **350** | P | **P** | **17 05 29.6** | **-0.3** |
| | 2.2nm,0.6s,baz=167,slow=9.3,SNR=18 | | | | | | |
| **MKAR** | **Makanchi Array** | **65.03** | **333** | P | **P** | **17 06 15.5** | **-0.4** |
| | 2.1nm,0.6s,baz=149,slow=6.7,SNR=7.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **69.59** | **339** | P | **P** | **17 06 43.4** | **-1.0** |
| | 1.5nm,0.4s,baz=147,slow=4.0,SNR=9.9 | | | | | | |
| **ABKAR** | **Akbulak array** | **78.16** | **325** | *e*P | **P** | **17 07 33.0** | **-1.6** |
| | 0.8nm,0.5s | | | | | | |
| **LPAZ** | **La Paz** | **153.37** | **164** | PKPbc | **PKPbc** | **17 15 35.0** | **+0.2** |
| | 1.6nm,0.6s,baz=341,slow=7.0,SNR=4.3 | | | | | | |

*IDC **30** 17:27:27.9±1.0,41°42N×77°64E, h0km, mb3.8/11, mb1 3.9/18, mb1mx3.7/46, mbtmp3.7/18, ML3.4/7, Error ellipse: s-maj=17.4km s-min=12.5km az=176.0*
*KRNET **30** 17:27:29.6±0.1,41°71N×77°58E, h16km, mb4.1*
*NNC **30** 17:27:31.2±0.6,41°73N×77°61E, h0km, mb4.3, mpv4.0, Error ellipse: s-maj=4.7km s-min=3.4km az=123.0*
*MOS **30** 17:27:32.9±1.4,41°71N×77°70E, h33km, mb4.3/7, Error ellipse: s-maj=9.1km s-min=5.8km az=109.0*
*BJI **30** 17:27:32.9,41°69N×77°85E, h9km, ML3.7/9*
*NEIC **30** 17:27:35.4±1.6,41°71N×77°63E, h48km±12km, mb4.2/3, Error ellipse: s-maj=19.6km s-min=9.1km az=167.0*

**ISC 30 17:27:32.3±1.3, 41°69N±0°04×77°77E±0°03, h23km±10km, n114,σ1°55/136, mb4.0/14, 38C-39D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PRZ** | **Przheval'sk** | **0.92** | **30** | ⇓*i*P | **Pn** | **17 27 48.9** | **-1.1** |
| | baz=39 | | | | | | |
| PRZ | | | | ⇓*i*S | **Sn** | **17 28 02.4** | **-0.3** |
| | baz=39 | | | | | | |
| **ANVS** | **Anan'yevo** | **1.09** | **356** | ⇓*i*P | **Pn** | **17 27 51.0** | **-1.5** |
| | baz=3.0 | | | | | | |
| ANVS | | | | ⇓*i*S | **Sn** | **17 28 05.8** | **-1.2** |
| | baz=3.0 | | | | | | |
| **ULHL** | **Ulahol** | **1.27** | **296** | ⇓*i*P | Pn | 17 27 51.6 | -3.2 |
| | baz=298 | | | | | | |
| ULHL | | | | ⇓*i*S | **Sn** | **17 28 07.4** | **-3.8** |
| | baz=298 | | | | | | |
| **ULHL** | **Ulahol** | **1.27** | **296** | P | Pn | 17 27 51.6 | -3.2 |
| | SNR=1063 | | | | | | |
| **NRN** | **Naryn** | **1.35** | **260** | ⇑*i*P | **Pn** | **17 27 53.7** | **-2.4** |
| | baz=257 | | | | | | |
| NRN | | | | ⇑*i*S | **Sn** | **17 28 10.8** | **-2.7** |
| | baz=257 | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.58** | **301** | ⇑*i*P | **Pn** | **17 27 57.4** | **-1.7** |
| | baz=303 | | | | | | |
| BOOM | | | | ⇑*i*S | **Sn** | **17 28 18.2** | **-0.7** |
| | baz=303 | | | | | | |
| **KNDC** | **Almaty** | **1.64** | **339** | ⇑P | **Pn** | **17 28 00.0** | **+0.2** |
| | 780nm,0.5s | | | | | | |
| KNDC | | | | ⇓S | **Sn** | **17 28 21.5** | **+1.3** |
| | 1μm,0.5s | | | | | | |
| **AAA** | **Alma-Ata** | **1.69** | **339** | *i* PN | **Pn** | **17 28 00.3** | **-0.3** |
| AAA | | | | *i* S | **Sn** | **17 28 22.5** | **+0.9** |
| AAA | | | | pmax | pmax | | |
| | comp=Z,4μm,0.2s | | | | | | |
| AAA | | | | smax | smax | | |
| | comp=E,2μm,0.3s | | | | | | |
| **KZA** | **Kyzart** | **1.92** | **282** | ⇑*i*P | **Pn** | **17 28 03.0** | **-1.0** |
| | baz=283 | | | | | | |
| KZA | | | | ⇑*i*S | **Sn** | **17 28 27.1** | **-0.5** |
| | baz=283 | | | | | | |
| **KZA** | **Kyzart** | **1.92** | **282** | P | Pn | 17 28 03.2 | -0.8 |
| | SNR=231 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.03** | **308** | ⇑Pg | **Pn** | **17 28 05.6** | **+0.3** |
| | comp=E,150nm,0.3s | | | | | | |
| TKM2 | | | | ⇓Lg | Lg | 17 28 31.7 | |
| | comp=E,503nm,0.3s | | | | | | |
| **TKM2** | **Tokmak 2** | **2.03** | **308** | *e*PN | **Pn** | **17 28 05.5** | **+0.3** |
| TKM2 | | | | *e* | | 17 28 29.7 | |
| **TKM2** | **Tokmak 2** | **2.03** | **308** | ⇓*i*P | **Pn** | **17 28 05.8** | **+0.5** |
| | baz=310 | | | | | | |
| TKM2 | | | | ⇓*i*S | **Sn** | **17 28 31.4** | **+1.4** |
| | baz=310 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.03** | **308** | P | **Pn** | **17 28 05.8** | **+0.5** |
| | SNR=476 | | | | | | |
| **TKM2** | **Tokmak 2** | **2.03** | **308** | *e*Pn | **Pn** | **17 28 05.5** | **+0.3** |
| KURK | | | | *e*Sn | **Sn** | **17 28 29.7** | **-0.3** |
| **PDGK** | **Podgornoye** | **2.07** | **37** | ⇑Pg | **Pb** | **17 28 08.9** | **-0.3** |
| | comp=E,175nm,0.7s | | | | | | |
| PDGK | | | | ⇑Lg | Lg | 17 28 37.5 | |
| | comp=E,1μm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **2.07** | **37** | PN | **Pb** | **17 28 08.9** | **-0.3** |
| PDGK | | | | LG | Lg | 17 28 37.5 | |
| **KBK** | **Karagaybulak** | **2.31** | **296** | ⇓*i*P | **Pn** | **17 28 10.6** | **+1.5** |
| | baz=297 | | | | | | |
| KBK | | | | ⇓*i*S | **Sb** | **17 28 40.2** | **-1.4** |
| | baz=297 | | | | | | |
| **KBK** | **Karagaybulak** | **2.31** | **296** | P | Pn | 17 28 10.6 | +1.5 |
| | SNR=268 | | | | | | |
| **UCH** | **Uchtor** | **2.49** | **284** | ⇓*i*P | **Pn** | **17 28 13.2** | **+1.4** |
| | baz=284 | | | | | | |
| UCH | | | | ⇓*i*S | **Sb** | **17 28 45.3** | **-1.6** |
| | baz=284 | | | | | | |
| **UCH** | **Uchtor** | **2.49** | **284** | P | **Pn** | **17 28 13.3** | **+1.5** |
| | SNR=116 | | | | | | |
| **KSH** | **Kashi** | **2.57** | **213** | Pn | Pb | 17 28 22.5 | +4.8 |
| KSH | | | | Sn | Sb | 17 28 58.8 | +10 |
| KSH | | | | SMN | | | |
| | comp=E,480nm,0.5s | | | | | | |
| KSH | | | | SME | | | |
| | comp=E,460nm,0.4s | | | | | | |
| **ARLS** | **Aral** | **2.58** | **275** | ⇑*i*P | **Pn** | **17 28 13.3** | **+0.4** |
| | baz=275 | | | | | | |
| ARLS | | | | ⇑*i*S | **Sn** | **17 28 45.6** | **+2.0** |
| | baz=275 | | | | | | |
| **CHMS** | **Chumysh** | **2.59** | **301** | ⇑*i*P | **Pn** | **17 28 14.7** | **+1.8** |
| | baz=303 | | | | | | |
| CHMS | | | | ⇑*i*S | **Sb** | **17 28 47.8** | **-1.7** |
| | baz=303 | | | | | | |
| **CHMS** | **Chumysh** | **2.59** | **301** | P | Pn | 17 28 14.9 | +2.0 |
| | SNR=91 | | | | | | |
| **FRU** | **Bishkek** | **2.60** | **297** | *i* PN | **Pn** | **17 28 15.0** | **+2.0** |
| FRU | | | | *i* S | **Sb** | **17 28 49.0** | **-0.9** |
| FRU | | | | pmax | pmax | | |
| | comp=Z,440nm,1.4s | | | | | | |
| FRU | | | | smax | smax | | |
| | comp=E,2μm,1.4s | | | | | | |
| **FRU** | **Bishkek** | **2.60** | **297** | ⇓*i*P | **Pn** | **17 28 15.9** | **+2.9** |
| | baz=298 | | | | | | |
| FRU | | | | ⇓*i*S | **Sb** | **17 28 50.2** | **+0.3** |
| | baz=298 | | | | | | |
| **AAK** | **Ala-Archa** | **2.61** | **292** | ⇓Pg | **Pn** | **17 28 15.6** | **+2.2** |
| | comp=E,51nm,0.6s | | | | | | |
| AAK | | | | ⇑Lg | Lg | 17 28 49.3 | |
| | comp=E,409nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **2.61** | **292** | Pn | **Pn** | **17 28 13.6** | **+0.4** |
| | comp=E,28nm,0.3s,baz=116,slow=11,SNR=217 | | | | | | |
| AAK | | | | Lg | Lg | 17 28 49.2 | |
| | comp=E,125nm,0.3s,baz=295,slow=15,SNR=28 | | | | | | |
| **AAK** | **Ala-Archa** | **2.61** | **292** | PN | **Pn** | **17 28 15.5** | **+2.2** |
| AAK | | | | | | 17 28 49.2 | |
| AAK | | | | pmax | pmax | | |
| | comp=Z,241nm,1.1s | | | | | | |
| AAK | | | | smax | smax | | |
| | comp=N,409nm,0.6s | | | | | | |
| **AAK** | **Ala-Archa** | **2.61** | **292** | ⇑*i*P | **Pn** | **17 28 15.7** | **+2.4** |
| | baz=293 | | | | | | |
| AAK | | | | ⇑*i*S | **Sb** | **17 28 48.3** | **-1.9** |
| | baz=293 | | | | | | |
| **AAK** | **Ala-Archa** | **2.61** | **292** | P | Pn | 17 28 15.5 | +2.2 |
| | SNR=138 | | | | | | |
| **AAK** | **Ala-Archa** | **2.61** | **292** | *e*Pn | **Pn** | **17 28 15.1** | **+1.9** |
| AAK | | | | *e*Sn | **Sn** | **17 28 40.7** | **-3.6** |
| AAK | | | | Lg | Lg | 17 28 49.2 | |
| **USP** | **Ospenovka** | **2.89** | **304** | ⇑*i*P | **Pn** | **17 28 19.1** | **+2.2** |
| | baz=305 | | | | | | |
| USP | | | | ⇑*i*S | **Sb** | **17 28 55.7** | **-2.3** |
| | baz=305 | | | | | | |
| **USP** | **Ospenovka** | **2.89** | **304** | P | Pn | 17 28 18.9 | +1.9 |
| | SNR=121 | | | | | | |
| **AML** | **Almayashu** | **3.07** | **280** | ⇓*i*P | **Pn** | **17 28 21.0** | **+1.1** |
| | baz=280 | | | | | | |
| AML | | | | ⇓*i*S | **Sb** | **17 29 03.6** | **-0.2** |
| | baz=280 | | | | | | |
| **AML** | **Almayashu** | **3.07** | **280** | P | **Pn** | **17 28 20.9** | **+1.1** |
| | SNR=58 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.12** | **289** | *e*PN | **Pn** | **17 28 22.5** | **+2.2** |
| **EKS2** | **Erkin-Say** | **3.12** | **289** | ⇑*i*P | **Pn** | **17 28 22.7** | **+2.5** |
| | baz=290 | | | | | | |
| EKS2 | | | | ⇑*i*S | **Sb** | **17 29 05.9** | **+1.0** |
| | baz=290 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.12** | **289** | P | **Pn** | **17 28 22.8** | **+2.5** |
| | SNR=272 | | | | | | |
| **EKS2** | **Erkin-Say** | **3.12** | **289** | *e*Pn | **Pn** | **17 28 22.5** | **+2.2** |
| EKS2 | | | | *e*Sn | **Sn** | **17 28 54.6** | **-2.2** |
| **SFK** | **Sufi-Kurgan** | **3.64** | **244** | ⇑Pn | **Pn** | **17 28 28.7** | **+1.2** |
| | comp=N,1.7nm,0.3s | | | | | | |
| SFK | | | | ⇑Pg | **Pb** | **17 28 36.1** | **-0.1** |
| | comp=N,62nm,1.1s | | | | | | |
| SFK | | | | ⇓Lg | Lg | 17 29 25.2 | |
| | comp=N,162nm,1.0s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.64** | **244** | PN | **Pn** | **17 28 28.7** | **+1.2** |
| SFK | | | | LG | Lg | 17 29 25.2 | |
| **SFK** | **Sufi-Kurgan** | **3.64** | **244** | ⇓*i*P | **Pn** | **17 28 27.9** | **+0.4** |
| | baz=243 | | | | | | |
| SFK | | | | ⇓*i*S | **Sn** | **17 29 13.5** | **+3.6** |
| | baz=243 | | | | | | |
| **MNAS** | **Manas** | **4.00** | **283** | ⇓Pn | **Pn** | **17 28 34.0** | **+1.7** |
| | comp=N,3.7nm,0.6s | | | | | | |
| MNAS | | | | ⇑Pg | **Pb** | **17 28 40.6** | **-1.6** |
| | comp=N,22nm,0.5s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 17 29 32.0 | |
| | comp=N,107nm,0.6s | | | | | | |
| **MNAS** | **Manas** | **4.00** | **283** | PN | **Pn** | **17 28 34.0** | **+1.7** |
| MNAS | | | | LG | Lg | 17 29 31.9 | |
| **MNAS** | **Manas** | **4.00** | **283** | ⇓*i*P | **Pn** | **17 28 34.9** | **+2.6** |
| | baz=283 | | | | | | |
| MNAS | | | | ⇓*i*S | **Sb** | **17 29 30.3** | **+0.2** |
| | baz=283 | | | | | | |
| **ARK** | **Arkit** | **4.34** | **273** | ⇓*i*P | **Pn** | **17 28 38.6** | **+1.5** |
| | baz=273 | | | | | | |
| ARK | | | | ⇓*i*S | **Sb** | **17 29 42.2** | **+2.1** |
| | baz=273 | | | | | | |
| **BTK** | **Batken** | **5.52** | **255** | ⇓*i*P | **Pn** | **17 28 53.5** | **+0.4** |
| | baz=254 | | | | | | |
| BTK | | | | ⇓*i*S | Sb | 17 30 05.6 | -8.1 |
| | baz=254 | | | | | | |
| **KK31** | **Karatay Array** | **5.56** | **287** | ⇑Pg | **Pb** | **17 29 08.8** | **+0.2** |
| | comp=N,18nm,0.7s,baz=104,slow=14,SNR=100 | | | | | | |
| KK31 | | | | Lg | Lg | 17 30 21.2 | |
| | comp=N,29nm,0.4s,baz=98,slow=30,SNR=13 | | | | | | |
| **KK31** | **Karatay Array** | **5.56** | **287** | PN | **Pb** | **17 29 08.8** | **+0.2** |
| KK31 | | | | LG | Lg | 17 30 21.2 | |
| **KKAR** | **Karatay Array** | **5.56** | **287** | *e*PN | **Pn** | **17 28 54.9** | **+1.3** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,14nm,0.4s | | | | | | |
| **KKAR** | **Karatay Array** | **5.56** | **287** | *e*Pn | **Pn** | **17 28 54.9** | **+1.3** |
| | comp=Z,14nm,0.4s | | | | | | |
| KKAR | | | | *e*Sg | **Sb** | **17 30 15.6** | **+0.8** |
| **MK31** | **Makanchi Array** | **6.05** | **31** | ⇓Pn | **Pn** | **17 29 03.3** | **+3.0** |
| | comp=Z,1.6nm,0.3s,baz=205,slow=14,SNR=24 | | | | | | |
| MK31 | | | | ⇑Lg | Lg | 17 30 37.8 | |
| | comp=Z,23nm,0.7s,baz=210,slow=29,SNR=4.4 | | | | | | |
| **MK31** | **Makanchi Array** | **6.05** | **31** | PN | Pn | 17 29 03.9 | +3.6 |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.5s | | | | | | |
| MK31 | | | | pmax | pmax | | |
| | comp=Z,32nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **6.05** | **31** | Pn | **Pn** | **17 29 03.2** | **+2.9** |
| | comp=Z,0.5nm,0.3s,baz=193,slow=14,SNR=20 | | | | | | |
| MKAR | | | | Lg | Lg | 17 30 38.1 | |
| | comp=Z,2.2nm,0.3s,baz=210,slow=24,SNR=4.2 | | | | | | |
| **DZET** | **Dzherino** | **7.42** | **250** | ⇓Pn | **Pn** | **17 29 19.4** | **+0.1** |
| | comp=Z,4.4nm,0.4s | | | | | | |
| DZET | | | | ⇑Lg | Lg | 17 31 25.0 | |
| | comp=Z,22nm,0.7s | | | | | | |
| **DZET** | **Dzherino** | **7.42** | **250** | P | **Pn** | **17 29 19.4** | **+0.1** |
| **OTUK** | **Ortayu** | **7.60** | **331** | ⇑Pn | **Pn** | **17 29 22.5** | **+0.8** |
| | comp=Z,3.7nm,0.6s | | | | | | |
| OTUK | | | | ⇑Pg | Pb | 17 29 48.5 | +5.1 |
| | comp=Z,1.7nm,0.5s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 17 31 24.4 | |
| **OTUK** | **Ortayu** | **7.60** | **331** | P | **Pn** | **17 29 22.5** | **+0.8** |
| **KURBB** | **Kurchatov Arra** | **8.95** | **3** | ⇑Lg | Lg | 17 32 13.2 | |
| | comp=Z,91nm,0.8s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.95** | **3** | Pn | **Pn** | **17 29 41.7** | **+1.6** |
| | comp=Z,0.2nm,0.3s,baz=200,slow=11,SNR=4.2 | | | | | | |
| KURBB | | | | Lg | Lg | 17 32 08.6 | |
| | comp=Z,0.6nm,0.3s,baz=191,slow=30,SNR=7.5 | | | | | | |
| **KURK** | **Kurchatov** | **9.05** | **3** | P | **Pn** | **17 29 41.7** | **+0.3** |
| **KURK** | **Kurchatov** | **9.05** | **3** | *e*Pn | Pn | 17 29 37.5 | -4.0 |
| | comp=Z,11nm,0.6s | | | | | | |
| KURK | | | | Lg | Lg | 17 32 08.6 | |
| KURK | | | | *e*Sg | Sn | 17 32 10.8 | +48 |
| **VOSK** | **Vostochnaya** | **11.96** | **340** | ⇑Pn | **Pn** | **17 30 22.6** | **+1.4** |
| | comp=Z,4.8nm,1.1s | | | | | | |
| VOSK | | | | ⇓Lg | Lg | 17 33 41.6 | |
| | comp=Z,31nm,0.9s | | | | | | |
| **VOSK** | **Vostochnaya** | **11.96** | **340** | P | **Pn** | **17 30 22.6** | **+1.4** |
| **BVA0** | **Borovoye Array** | **12.39** | **339** | Pn | **Pn** | **17 30 28.4** | **+1.3** |
| | comp=Z,5.1nm,1.0s,baz=150,slow=15,SNR=6.0 | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 17 34 03.0 | |
| | comp=Z,59nm,1.6s,baz=149,slow=27,SNR=3.8 | | | | | | |
| **BVA0** | **Borovoye

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **BRTR** | **Keskin Array B** | **33.24** | **282** | P | **P** | **17 34 07.0** | **-0.8** |
| BRTR | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.8s | | | | | | |
| **AKASG** | **Malin Array Be** | **34.24** | **302** | P | **P** | **17 34 15.7** | **-0.4** |
| | comp=Z,0.6nm,0.5s,baz=72,slow=8.9,SNR=2.7 | | | | | | |
| **AKASG** | **Malin Array Be** | **34.24** | **302** | P | **P** | **17 34 15.7** | **-0.4** |
| AKASG | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.5s | | | | | | |
| **CSS** | **Prodhromos** | **35.19** | **274** | P | P | 17 34 30.7 | +6.1 |
| | comp=Z,2.6nm,0.9s | | | | | | |
| **FINES** | **FINESS Array B** | **36.47** | **321** | P | **P** | **17 34 35.8** | **+0.6** |
| | comp=Z,1.4nm,0.6s,baz=106,slow=9.5,SNR=11 | | | | | | |
| **FINES** | **FINESS Array B** | **36.47** | **321** | P | **P** | **17 34 35.8** | **+0.6** |
| FINES | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.60** | **334** | P | **P** | **17 34 53.3** | **+0.1** |
| | comp=Z,2.6nm,0.9s,baz=98,slow=8.7,SNR=11 | | | | | | |
| **ARCES** | **ARCESS Array B** | **38.60** | **334** | P | **P** | **17 34 53.3** | **+0.1** |
| ARCES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **NB2** | **NORSAR Subarra** | **43.62** | **320** | P | **P** | **17 35 34.8** | **+0.2** |
| | comp=Z,1.7nm,0.5s,baz=87,slow=8.6 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.62** | **320** | P | **P** | **17 35 35.0** | **+0.4** |
| | comp=Z,1.5nm,0.5s,baz=87,slow=7.9,SNR=5.0 | | | | | | |
| **NOA** | **NORSAR Array B** | **43.62** | **320** | P | **P** | **17 35 35.0** | **+0.4** |
| NOA | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.5s | | | | | | |
| **GERES** | **GERESS Array B** | **44.45** | **302** | P | **P** | **17 35 41.6** | **+0.1** |
| | comp=Z,0.3nm,0.5s,baz=78,slow=8.3,SNR=5.3 | | | | | | |
| **ESDC** | **Sonseca Array** | **59.70** | **298** | P | **P** | **17 37 34.4** | **-0.7** |
| | comp=Z,0.2nm,0.3s,baz=61,slow=7.1,SNR=4.1 | | | | | | |
| **RES** | **Resolute Bay** | **63.81** | **358** | P | P | 17 37 57.6 | -4.4 |
| RES | | | | pmax | pmax | | |
| | comp=Z,3.0nm,0.9s | | | | | | |
| **RES** | **Resolute Bay** | **63.81** | **358** | P | P | 17 37 57.6 | -4.4 |
| | comp=Z,3.2nm,0.9s | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **71.01** | **271** | P | **P** | **17 38 47.5** | **-1.0** |
| | comp=Z,1.5nm,0.6s,baz=54,slow=5.4,SNR=14 | | | | | | |
| **KDAK** | **Kodiak Island** | **72.33** | **26** | P | **P** | **17 38 56.1** | **+0.4** |
| | comp=Z,4.4nm,1.0s,baz=318,slow=7.7,SNR=4.6 | | | | | | |
| **KDAK** | **Kodiak Island** | **72.33** | **26** | P | **P** | **17 38 56.1** | **+0.4** |
| KDAK | | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **80.59** | **127** | P | **P** | **17 39 41.5** | **-1.6** |
| | comp=Z,0.2nm,0.6s,baz=328,slow=5.1,SNR=6.9 | | | | | | |

*CSEM **30** 17:28:49.9±0.2, 35.55N×26.33E, h18km±1km, MD3.1, Error ellipse: s-maj=4.7km s-min=2.7km az=147.0*
*ATH **30** 17:28:49.7, 35.54N×26.33E, h37km±2km, MD3.1/9*
*ISCJB **30** 17:28:50.4±0.5, 35.54N±0.04×26.33E±0.03, h25km±6km, Error ellipse: s-maj=7.3km s-min=3.9km az=156.9*
*THE **30** 17:28:50.1, 35.53N×26.36E, h10km±1km, Error ellipse: s-maj=2.0km s-min=0.4km az=137.0*
*ISK **30** 17:28:56.0, 35.95N×26.35E, h16km, ML2.9*

**ISC 30 17:28:50.1±1.1, 35.54N±0.03×26.34E±0.02, h19km±3km, n42, σ0.945/66, Crete**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZKR** | **Zakros** | **0.44** | **194** | P | **Pg** | **17 28 58.9** | **-0.3** |
| ZKR | | | | S | **Sg** | **17 29 05.5** | **+0.2** |
| **ZKR** | **Zakros** | **0.44** | **194** | P | **Pg** | **17 28 58.9** | **-0.3** |
| ZKR | | | | S | **Sg** | **17 29 05.5** | **+0.2** |
| **NPS** | **Neapolis** | **0.66** | **245** | *e*PN | **Pg** | **17 29 03.3** | **+0.1** |
| NPS | | | | *e*SN | **Sb** | **17 29 11.9** | **+0.2** |
| **NPS** | **Neapolis** | **0.66** | **245** | *e*Pn | **Pg** | **17 29 03.3** | **+0.1** |
| NPS | | | | *e*Sn | **Sb** | **17 29 11.9** | **+0.2** |
| **KARP** | **Karpathos** | **0.67** | **89** | *e*PN | **Pb** | **17 29 02.8** | **-0.3** |
| KARP | | | | *e*SN | **Sn** | **17 29 14.1** | **-0.4** |
| **KARP** | **Karpathos** | **0.67** | **89** | P | **Pb** | **17 29 02.8** | **-0.3** |
| KARP | | | | S | **Sg** | **17 29 12.3** | **0.0** |
| **KARP** | **Karpathos** | **0.67** | **89** | P | **Pb** | **17 29 02.8** | **-0.3** |
| KARP | | | | S | **Sg** | **17 29 12.3** | **0.0** |
| KARP | | | | *e*Sn | **Sn** | **17 29 14.1** | **-0.4** |
| **LAST** | **Lasithi** | **0.80** | **242** | *e*PN | **Pb** | **17 29 05.4** | **-0.1** |
| LAST | | | | *e*SN | **Sg** | **17 29 16.8** | **+0.2** |
| **LAST** | **Lasithi** | **0.80** | **242** | P | **Pb** | **17 29 05.7** | **+0.2** |
| LAST | | | | S | **Sn** | **17 29 17.4** | **-0.5** |
| **LAST** | **Lasithi** | **0.80** | **242** | *e*Pn | **Pb** | **17 29 05.4** | **-0.1** |
| **LAST** | **Lasithi** | **0.80** | **242** | P | **Pb** | **17 29 05.7** | **+0.2** |
| LAST | | | | *e*Sn | **Sg** | **17 29 16.8** | **+0.2** |
| LAST | | | | S | **Sn** | **17 29 17.4** | **-0.5** |
| **SANT** | **Santorini** | **1.09** | **319** | *e*PN | **Pb** | **17 29 10.5** | **+0.1** |
| SANT | | | | *e*SN | **Sn** | **17 29 25.1** | **+0.1** |
| **SANT** | **Santorini** | **1.09** | **319** | *e*Pn | **Pb** | **17 29 10.5** | **+0.1** |
| SANT | | | | *e*Sn | **Sn** | **17 29 25.1** | **+0.1** |
| **THR6** | **Thira Island,** | **1.12** | **317** | P | **Pn** | **17 29 10.5** | **-0.2** |
| **THR6** | **Thira Island,** | **1.12** | **317** | P | **Pn** | **17 29 10.5** | **-0.2** |
| **THR3** | **Thira Island,** | **1.15** | **319** | P | **Pn** | **17 29 11.1** | **-0.1** |
| **THR3** | **Thira Island,** | **1.15** | **319** | P | **Pn** | **17 29 11.1** | **-0.1** |
| **THR5** | **Thira Island,** | **1.19** | **317** | P | **Pn** | **17 29 11.6** | **-0.1** |
| **THR5** | **Thira Island,** | **1.19** | **317** | P | **Pn** | **17 29 11.6** | **-0.1** |
| **IDI** | **Anoyia** | **1.21** | **258** | *e*PN | **Pn** | **17 29 11.5** | **-0.6** |
| IDI | | | | *e*SN | **Sb** | **17 29 27.7** | **-0.1** |
| **IDI** | **Anoyia** | **1.21** | **258** | P | **Pn** | **17 29 11.4** | **-0.6** |
| IDI | | | | S | **Sn** | **17 29 28.9** | **+0.9** |
| **IDI** | **Anoyia** | **1.21** | **258** | *e*Pn | **Pn** | **17 29 11.5** | **-0.6** |
| IDI | | | | *e*Sn | **Sb** | **17 29 27.7** | **-0.1** |
| IDI | | | | S | **Sn** | **17 29 28.9** | **+0.9** |
| **NIS1** | **Nisyros Isl.** | **1.25** | **32** | *e*PG | **Pg** | **17 29 14.5** | **+0.1** |
| **NIS1** | **Nisyros Isl.** | **1.25** | **32** | *e*Pg | **Pg** | **17 29 14.5** | **+0.1** |
| **SIVA** | **Sivas** | **1.36** | **248** | *e*PN | **Pb** | **17 29 14.6** | **-0.3** |
| **SIVA** | **Sivas** | **1.36** | **248** | P | **Pn** | **17 29 14.1** | **+0.1** |
| SIVA | | | | S | **Sb** | **17 29 32.4** | **+0.5** |
| **SIVA** | **Sivas** | **1.36** | **248** | P | **Pn** | **17 29 14.1** | **+0.1** |
| **SIVA** | **Sivas** | **1.36** | **248** | *e*Pn | **Pb** | **17 29 14.6** | **-0.3** |
| SIVA | | | | S | **Sb** | **17 29 32.4** | **+0.5** |
| **ARG** | **Arkhangelos** | **1.60** | **65** | *e*PN | **Pn** | **17 29 17.3** | **0.0** |
| ARG | | | | *e*SN | **Sn** | **17 29 37.4** | **0.0** |
| **ARG** | **Arkhangelos** | **1.60** | **65** | *e*Pn | **Pn** | **17 29 17.3** | **0.0** |
| ARG | | | | *e*Sn | **Sn** | **17 29 37.4** | **0.0** |
| **APE** | **Apeiranthos** | **1.66** | **337** | *e*PN | **Pb** | **17 29 20.0** | **0.0** |
| APE | | | | *e*SN | **Sn** | **17 29 37.4** | **-1.6** |
| **APE** | **Apeiranthos** | **1.66** | **337** | *e*PN | **Pn** | **17 29 17.9** | **-0.3** |
| **APE** | **Apeiranthos** | **1.66** | **337** | *e*Pn | **Pn** | **17 29 17.9** | **-0.3** |
| APE | | | | *e*Sn | **Sn** | **17 29 37.4** | **-1.6** |
| **VAM** | **Vamos** | **1.75** | **266** | *e*PB | **Pn** | **17 29 19.9** | **+0.4** |
| **VAM** | **Vamos** | **1.75** | **266** | *e*Pb | **Pn** | **17 29 19.9** | **+0.4** |
| **SMG** | **Samos** | **2.20** | **10** | *e*PN | **Pn** | **17 29 26.2** | **+0.6** |
| **SMG** | **Samos** | **2.20** | **10** | *e*Pn | **Pn** | **17 29 26.2** | **+0.6** |
| **YER** | **Yerkesik** | **2.23** | **44** | *e*PN | **Pb** | **17 29 29.6** | **-0.2** |
| **YER** | **Yerkesik** | **2.23** | **44** | *e*Pn | **Pb** | **17 29 29.6** | **-0.2** |
| **DALY** | **Dalyan (Mu˘la** | **2.26** | **55** | *e*PN | **Pb** | **17 29 30.8** | **+0.5** |
| **DALY** | **Dalyan (Mu˘la** | **2.26** | **55** | *e*Pn | **Pb** | **17 29 30.8** | **+0.5** |
| **FETY** | **Fethiye** | **2.47** | **63** | *e*PN | **Pb** | **17 29 34.5** | **+0.6** |

**SJA 30 17:39:59.1±0.5, 24.84S×65.56W, h23km±1km, ML2.8, MW3.5, Salta Province**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SLA** | **San Lorenzo** | **0.13** | **25** | *i* P | Pb | 17 40 04.0 | +0.1 |
| SLA | | | | *i* S | Sb | 17 40 08.2 | +1.0 |
| SLA | | | | IAML | | 17 40 08.4 | |
| | comp=Z,2µm,0.5s | | | | | | |
| **AZAP** | **Zapla** | **0.76** | **37** | *i* P | Pn | 17 40 14.7 | -0.1 |
| **FSA** | **Cafayete** | **1.31** | **198** | *i* P | Pb | 17 40 24.6 | +1.2 |
| **HJA** | **Humahuaca** | **1.63** | **5** | *i* P | Pb | 17 40 29.3 | +0.3 |
| **AHML** | **Horco Molle** | **1.95** | **174** | *i* P | Pb | 17 40 33.1 | -1.0 |
| **YJA** | **Yavi** | **2.65** | **1** | *i* P | Pb | 17 40 44.3 | -2.2 |

*NEIC **30** 17:43:48.0±0.5, 4.79S×133.93E, h10km, mb4.6/10, Error ellipse: s-maj=15.3km s-min=9.0km az=66.0*
*AUST **30** 17:43:47.6±3.2, 4.82S×133.96E, h0km, Error ellipse: s-maj=1.3km s-min=0.7km az=228.0*
*IDC **30** 17:43:47.0±0.8, 4.83S×133.85E, h0km, mb3.8/8, mb1 4.1/12, mb1mx4.0/25, mbtmp4.0/12, ML4.3/4, MS3.7/1, Ms1 3.7/1, ms1mx2.9/31, Error ellipse: s-maj=42.5km s-min=17.1km az=69.0*
*ISCJB **30** 17:43:49.2±0.4, 4.81S±0.04×133.86E±0.05, h28km, mb4.1/16, Error ellipse: s-maj=8.2km s-min=5.1km az=145.8*
*DJA **30** 17:44:01.8±0.7, 4.4°S±4.4°×13.3E±°, h50km, M4.8/9, mb5.1/7, mB5.3/5, MLv4.7/9, Mw(mB)4.8/5*

**ISC 30 17:43:51.2±0.6, 4.77S±0.07×133.86E±0.08, h28km, n49, σ1.967/47, mb4.2/16, Irian Jaya region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **2.44** | **319** | P | **Pn** | **17 44 27.9** | **-1.2** |
| | baz=2.6,SNR=221 | | | | | | |
| **FAKI** | **Fak Fak** | **2.44** | **319** | P | **Pn** | **17 44 27.1** | **-2.1** |
| FAKI | | | | S | Sn | 17 44 48.0 | -10 |
| **FAKI** | **Fak Fak** | **2.44** | **319** | *e*Pn | **Pn** | **17 44 27.8** | **-1.4** |
| FAKI | | | | *e*Pg | **Pb** | **17 44 34.4** | **+0.1** |
| **BNDI** | **Bandanaira** | **3.95** | **273** | P | Pn | 17 44 53.3 | +3.4 |
| BNDI | | | | S | **Sn** | **17 45 35.8** | **+0.4** |
| **SIJI** | **Sorong** | **4.66** | **326** | Pn | **Pn** | **17 44 58.8** | **-1.0** |
| | 4.3nm,0.3s,baz=247,slow=21,SNR=21 | | | | | | |
| **SWI** | **Sorong** | **4.67** | **326** | P | **Pn** | **17 44 59.4** | **-0.4** |
| | baz=4.8,SNR=12 | | | | | | |
| **SWI** | **Sorong** | **4.67** | **326** | P | **Pn** | **17 44 59.2** | **-0.6** |
| SWI | | | | S | Sn | 17 45 43.9 | -9.2 |
| **MSAI** | **Masohi** | **5.12** | **286** | P | **Pn** | **17 45 07.3** | **+1.3** |
| MSAI | | | | S | **Sn** | **17 45 58.6** | **-5.6** |
| **AAI** | **Ambon** | **5.75** | **281** | P | **Pn** | **17 45 16.1** | **+1.4** |
| | baz=5.9,SNR=31 | | | | | | |
| **AAI** | **Ambon** | **5.75** | **281** | P | **Pn** | **17 45 15.6** | **+0.9** |
| | 211nm,0.7s,2µm0.7nm | | | | | | |
| **NLAI** | **Namlea** | **6.91** | **282** | P | **Pn** | **17 45 33.2** | **+2.5** |
| | 88nm,0.6s,1µm0.6nm | | | | | | |
| **LBMI** | **Labuha** | **7.56** | **303** | P | **Pn** | **17 45 39.6** | **0.0** |
| | 80nm,0.8s,0.4nm | | | | | | |
| **SANI** | **Sanana** | **8.31** | **289** | P | **Pn** | **17 45 49.2** | **-0.6** |
| | 39nm,0.6s,0.4nm | | | | | | |
| **MTN** | **Manton Dam** | **8.46** | **198** | P | **Pn** | **17 45 51.8** | **-0.2** |
| | baz=8.5,SNR=158 | | | | | | |
| **SOEI** | **Soe** | **10.72** | **242** | P | **Pn** | **17 46 24.0** | **+0.8** |
| | baz=11,SNR=7.6 | | | | | | |
| **SOEI** | **Soe** | **10.72** | **242** | *e*Pn | **Pn** | **17 46 23.6** | **+0.4** |
| | 4µm,0.8s | | | | | | |
| **BBSI** | **Bau Bau** | **11.27** | **266** | P | Pn | 17 46 34.4 | +4.0 |
| **KNRA** | **Kununurra** | **11.94** | **204** | P | **Pn** | **17 46 38.5** | **-1.2** |
| | baz=12,SNR=110 | | | | | | |
| **COEN** | **Coen** | **12.95** | **135** | P | Pn | 17 46 50.2 | -3.3 |
| | baz=13,SNR=17 | | | | | | |
| **PMG** | **Port Moresby** | **13.98** | **110** | *e*Pn | Pn | 17 47 03.2 | -4.3 |
| **WRAB** | **Tennant Creek** | **15.08** | **178** | *e*Pn | **Pn** | **17 47 19.7** | **-2.8** |
| | 36nm,1.0s | | | | | | |
| **WRA** | **Warramunga Arr** | **15.09** | **178** | Pn | **Pn** | **17 47 19.4** | **-3.3** |
| | 1.3nm,0.3s,baz=3.3,slow=12,SNR=16 | | | | | | |
| **QIS** | **Mount Isa** | **16.66** | **161** | P | **Pn** | **17 47 42.7** | **-0.2** |
| | baz=17,SNR=3.3 | | | | | | |
| **MTSU** | **Mount Surprise** | **16.77** | **143** | P | **Pn** | **17 47 43.4** | **-0.8** |
| | baz=17,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **18.79** | **180** | P | **P** | **17 48 07.2** | **-1.4** |
| | 1.8nm,0.3s,baz=5.9,slow=10,SNR=60 | | | | | | |
| ASAR | | | | | LR | LR | 17 55 46.2 |
| | comp=Z,224nm,21.2s,baz=318,slow=38 | | | | | | |
| **CTA** | **Charters Tower** | **19.43** | **143** | P | **P** | **17 48 15.8** | **+0.2** |
| | 0.8nm,0.3s,baz=318,slow=14,SNR=11 | | | | | | |
| **CTAO** | **Charters Tower** | **19.43** | **143** | *e*P | **Pn** | **17 48 17.4** | **+0.5** |
| | 9.5nm,0.7s | | | | | | |
| **WRKA** | **Warakurna** | **20.85** | **194** | P | **P** | **17 48 31.7** | **+0.7** |
| | baz=21,SNR=39 | | | | | | |
| **MBWA** | **Marble Bar** | **21.30** | **219** | *e*P | **P** | **17 48 36.9** | **+1.1** |
| | 23nm,0.8s | | | | | | |
| **QLP** | **Quilpie** | **23.86** | **156** | P | **P** | **17 49 02.7** | **+0.4** |
| | baz=24,SNR=11 | | | | | | |
| **KSM** | **Kuching** | **24.33** | **284** | P | **P** | **17 49 11.2** | **+4.3** |
| | baz=24,SNR=6.6 | | | | | | |
| **GIRL** | **Giralia** | **26.00** | **225** | P | P | 17 49 27.3 | +5.5 |
| | baz=26,SNR=44 | | | | | | |
| **EIDS** | **Eidsvold** | **26.32** | **143** | P | **P** | **17 49 27.0** | **+2.2** |
| | baz=26,SNR=4.8 | | | | | | |
| **BLDU** | **Ballidu** | **30.37** | **210** | P | **P** | **17 50 02.4** | **+1.6** |
| | baz=30,SNR=11 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.43** | **305** | P | **P** | **17 51 35.6** | **-0.1** |
| | 0.5nm,0.8s,baz=130,slow=8.4,SNR=3.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **48.77** | **358** | P | **P** | **17 52 34.9** | **+1.3** |
| | 2.0nm,0.7s,baz=164,slow=4.2,SNR=6.0 | | | | | | |
| **MDJ** | **Mudanjiang** | **49.31** | **356** | P | **P** | **17 52 39.3** | **+1.6** |
| | 11nm,1.2s | | | | | | |
| **SONM** | **Songino Array** | **57.67** | **338** | P | **P** | **17 53 38.7** | **-0.5** |
| | 0.3nm,0.6s,baz=115,slow=6.5,SNR=3.0 | | | | | | |
| **CASY** | **Casey** | **63.53** | **190** | *e*P | **P** | **17 54 16.4** | **-2.3** |
| | 16nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **68.55** | **325** | P | **P** | **17 54 52.0** | **+0.6** |
| | 1.4nm,0.5s,baz=112,slow=9.3,SNR=14 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **71.36** | **332** | P | **P** | **17 55 09.0** | **+0.6** |
| | 0.4nm,0.5s,baz=132,slow=8.4,SNR=2.8 | | | | | | |
| **AAK** | **Ala-Archa** | **71.39** | **318** | P | **P** | **17 55 09.5** | **+0.4** |
| | 3.2nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **72.69** | **327** | *e*P | **P** | **17 55 16.7** | **+0.3** |
| | 15nm,1.0s | | | | | | |
| **VNDA** | **Vanda** | **74.22** | **174** | P | **P** | **17 55 24.7** | **-0.3** |
| | 1.2nm,0.9s,baz=311,slow=5.2,SNR=5.4 | | | | | | |
| **KKAR** | **Karatay Array** | **74.26** | **317** | *e*P | **P** | **17 55 24.4** | **-1.5** |
| | 0.5nm,0.5s | | | | | | |
| **BRVK** | **Borovoye** | **78.35** | **327** | P | **P** | **17 55 48.4** | **-0.5** |
| | 5.0nm,0.7s | | | | | | |
| **GEYT** | **Alibeck** | **81.74** | **309** | P | **P** | **17 56 09.7** | **+2.0** |
| | 0.7nm,0.5s,baz=143,slow=3.6,SNR=2.3 | | | | | | |
| **ABKAR** | **Akbulak array** | **83.19** | **321** | P | **P** | **17 56 13.5** | **-1.4** |
| | 1.7nm,0.8s | | | | | | |
| **ILAR** | **Eielson Array** | **89.71** | **25** | P | **P** | **17 56 46.3** | **-0.2** |
| | 0.2nm,0.8s,baz=213,slow=8.1,SNR=3.0 | | | | | | |

**JMA 30 17:45:07.4±0.4, 32.26N×140.78E, h53km, M3.7, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JHJ2** | **Mitsune** | **1.18** | **317** | P | Pn | 17 45 28.3 | +0.8 |
| JHJ2 | | | | *e*S | Sn | 17 45 42.5 | 0.0 |
| **JKO** | **Kozu shima** | **2.36** | **325** | P | Pn | 17 45 44.8 | +1.0 |
| **BSO3** | **Boso 3** | **2.54** | **355** | P | Pn | 17 45 46.5 | +0.6 |
| BSO3 | | | | *e*S | Sn | 17 46 16.4 | +1.0 |
| **BSO4** | **Boso 4** | **2.75** | **352** | P | Pn | 17 45 49.6 | +0.7 |
| **JYN** | **Shimob** | **3.73** | **331** | P | Pn | 17 46 05.4 | +2.9 |
| **JHU** | **Hanno** | **3.79** | **341** | P | Pn | 17 46 04.8 | +1.5 |
| JHU | | | | *e*S | Sn | 17 46 46.6 | -0.1 |
| **JNY** | **Yasuok** | **3.93** | **323** | P | Pn | 17 46 08.0 | +2.7 |
| **JRY** | **Ryogami san** | **4.06** | **338** | P | Pn | 17 46 09.6 | +2.6 |
| **JAG** | **Ashikaga** | **4.30** | **346** | P | Pn | 17 46 12.4 | +2.1 |
| **JHO** | **Hitachi** | **4.34** | **358** | P | Pn | 17 46 11.1 | +0.2 |
| **JMK** | **Ichinoseki** | **6.69** | **3** | P | Pn | 17 46 43.8 | +0.8 |
| JMK | | | | *e*S | Sn | 17 47 54.8 | -3.0 |

*BJI **30** 17:45:39.5, 8.36S×122.94E, h260km, mb4.5/48, mB4.6/33*
*MOS **30** 17:45:43.9±0.8, 7.63S×122.51E, h248km, mb4.5/21, Error ellipse: s-maj=11.3km s-min=6.3km az=112.6*
*ISCJB **30** 17:45:45.9±0.2, 7.80S±0.02×122.44E±0.02, h268km±2km, mb4.5/58, Error ellipse: s-maj=3.4km s-min=3.0km az=42.9*
*IDC **30** 17:45:46.0±0.6, 7.71S×122.51E, h252km±5km, mb4.1/19, mb1 4.4/25, mb1mx4.3/31, mbtmp4.9/25, Error ellipse: s-maj=11.4km s-min=6.4km az=64.0*
*NEIC **30** 17:45:46.6±0.4, 7.73S×122.47E, h262km±4km, mb4.9/37, Error ellipse: s-maj=5.9km s-min=4.3km az=48.0*
*KLM **30** 17:45:47.1, 7.88S×122.49E, h251km, mb5.1, ML4.7, MS6.2*
*AUST **30** 17:45:47.4±0.2, 7.75S×122.43E, h267km, Error ellipse: s-maj=0.6km s-min=0.6km az=19.0*
*DJA **30** 17:45:47.5±0.1, 8.1°S±2.1°×122.3°E±°, h235km±2km, M4.7/52, mb5.0/52, mB5.2/34, MLv5.1/27, Mw(mB)4.5/34*

**ISC 30 17:45:46.4±0.3, 7.84S±0.03×122.46E±0.04, h258km±2km, h258km:pP-P, n291, σ1.953/338, mb4.6/58, 16C-12D, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MMRI** | **Maumere** | **0.82** | **195** | P | **Pn** | **17 46 19.5** | **-1.8** |
| MMRI | | | | S | **S** | **17 46 44.3** | **-4.7** |
| **MMRI** | **Maumere** | **0.82** | **195** | *e*Pn | **Pn** | **17 46 22.6** | **+1.2** |
| **EDFI** | **Ende, Flores** | **1.18** | **220** | P | **Pn** | **17 46 21.7** | **-1.7** |
| EDFI | | | | S | **S** | **17 46 48.5** | **-4.1** |
| **BBSI** | **Bau Bau** | **2.34** | **3** | P | **Pn** | **17 46 33.1** | **+0.5** |
| BBSI | | | | S | **S** | **17 47 10.1** | **+0.8** |
| **BSSI** | **Bau Bau, Buton** | **2.58** | **311** | P | **Pn** | **17 46 35.9** | **+0.9** |
| BSSI | | | | S | **S** | **17 47 14.3** | **+0.8** |
| **SOEI** | **Soe** | **2.61** | **137** | P | **Pn** | **17 46 35.4** | **0.0** |
| **SOEI** | **Soe** | **2.61** | **137** | *e*Pn | **Pn** | **17 46 36.4** | **+0.9** |
| SOEI | | | | *e*S | **S** | **17 47 14.2** | **-0.1** |
| **BATI** | **Baumata** | **2.64** | **153** | P | **Pn** | **17 46 36.6** | **+1.0** |
| | 526nm,0.3s,baz=358,slow=2.7,SNR=690 | | | | | | |
| BATI | | | | S | **S** | **17 47 13.9** | **-0.7** |
| | 3µm,0.3s,baz=140,slow=23,SNR=22 | | | | | | |

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BATI** | **Baumata** | **2.64** | **153** | P | **Pn** | **17 46 34.0** | **-1.6** |
| BATI | | | | S | **S** | **17 47 14.6** | **0.0** |
| **WSI** | **Waingapu** | **2.81** | **229** | P | **Pn** | **17 46 36.9** | **-0.4** |
| WSI | | | | S | **S** | **17 47 15.6** | **-2.0** |
| **BASI** | **Baing, Sumba** | **3.01** | **218** | P | **Pn** | **17 46 38.9** | **-0.5** |
| BASI | | | | S | **S** | **17 47 20.3** | **-1.2** |
| **BKSI** | **Bulukumba** | **3.41** | **317** | P | **Pn** | **17 46 44.5** | **+0.7** |
| **KDI** | **Kendari** | **3.86** | **2** | P | **Pn** | **17 46 49.0** | **+0.1** |
| **KDI** | **Kendari** | **3.86** | **2** | P | **Pn** | **17 46 49.5** | **+0.6** |
| **KAPI** | **Kappang** | **3.89** | **316** | P | **Pn** | **17 46 49.8** | **+0.6** |
| | 24nm,0.3s,baz=144,slow=7.4,SNR=160 | | | | | | |
| KAPI | | | | S | **S** | **17 47 38.0** | **-1.2** |
| | baz=127,slow=20,SNR=1.5 | | | | | | |
| **KAPI** | **Kappang** | **3.89** | **316** | *e*Pn | **Pn** | **17 46 50.8** | **+1.6** |
| KAPI | | | | S | **S** | **17 47 38.0** | **-1.2** |
| **SPSI** | **Sidrap Palu** | **4.69** | **325** | P | **Pn** | **17 46 59.3** | **+0.6** |
| **TTSI** | **Tana Toraja** | **5.44** | **331** | P | **Pn** | **17 47 08.0** | **+0.2** |
| **TWSI** | **Taliwang, Sumb** | **5.59** | **260** | P | **Pn** | **17 47 09.3** | **-0.3** |
| | 473nm,0.8s,6µm2.8nm | | | | | | |
| TWSI | | | | S | **S** | **17 48 13.3** | **-2.9** |
| | 473nm,0.8s,6µm2.8nm | | | | | | |
| **NLAI** | **Namlea** | **6.50** | **46** | P | **Pn** | **17 47 22.8** | **+1.9** |
| | 162nm,1.0s,1µm0.6nm | | | | | | |
| **SANI** | **Sanana** | **6.74** | **32** | P | **Pn** | **17 47 25.5** | **+1.6** |
| | 131nm,1.1s,2µm0.4nm | | | | | | |
| **LUWI** | **Luwuk** | **6.76** | **3** | P | **Pn** | **17 47 24.7** | **+0.6** |
| | baz=6.7,SNR=9.1 | | | | | | |
| **LUWI** | **Luwuk** | **6.76** | **3** | P | **Pn** | **17 47 24.8** | **+0.6** |
| | 306nm,1.1s,2µm1.0nm | | | | | | |
| **LUWI** | **Luwuk** | **6.76** | **3** | *e*Pn | **Pn** | **17 47 24.7** | **+0.6** |
| **APSI** | **Ampana** | **6.93** | **353** | P | **Pn** | **17 47 27.3** | **+1.0** |
| | 376nm,1.1s,4µm1.4nm | | | | | | |
| **APSI** | **Ampana** | **6.93** | **353** | P | **Pn** | **17 47 27.7** | **+1.4** |
| **AAI** | **Ambon** | **7.04** | **54** | P | **Pn** | **17 47 30.6** | **+2.9** |
| | baz=7.0,SNR=7.0 | | | | | | |
| **AAI** | **Ambon** | **7.04** | **54** | P | **Pn** | **17 47 28.9** | **+1.2** |
| | 150nm,1.1s,2µm0.5nm | | | | | | |
| **SRBI** | **Singaraja** | **7.18** | **268** | P | **Pn** | **17 47 29.9** | **+0.5** |
| | 163nm,0.9s,2µm0.5nm | | | | | | |
| **DNP** | **Denpasar** | **7.22** | **263** | S | **S** | **17 48 55.0** | **+1.7** |
| **IGBI** | **Denpasar** | **7.30** | **262** | P | **Pn** | **17 47 30.2** | **-0.8** |
| | 278nm,0.9s,17µm3.3nm | | | | | | |
| IGBI | | | | S | **S** | **17 48 49.8** | **-5.3** |
| | 278nm,0.9s,17µm3.3nm | | | | | | |
| **PCI** | **Palu** | **7.37** | **339** | P | **Pn** | **17 47 33.2** | **+1.4** |
| | 452nm,1.1s,5µm1.4nm | | | | | | |
| **KBKI** | **Kotabaru** | **7.71** | **305** | P | **Pn** | **17 47 39.0** | **+2.8** |
| | 25nm,0.8s,750nm0.1nm | | | | | | |
| **MSAI** | **Masohi** | **7.83** | **56** | P | **Pn** | **17 47 39.5** | **+1.8** |
| | 53nm,0.7s,402nm0.3nm | | | | | | |
| **ABJI** | **Asem Bagus** | **8.15** | **270** | P | **Pn** | **17 47 43.0** | **+1.4** |
| | 107nm,0.7s | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **8.25** | **265** | P | **Pn** | **17 47 40.8** | **-2.1** |
| | baz=8.2,SNR=38 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **8.25** | **265** | P | **Pn** | **17 47 40.6** | **-2.3** |
| **JAGI** | **Jajag, Banyuwa** | **8.25** | **265** | *e*Pn | **Pn** | **17 47 40.4** | **-2.5** |
| JAGI | | | | *e*S | S | 17 49 09.8 | -7.1 |
| **MRSI** | **Marisa** | **8.28** | **356** | P | **Pn** | **17 47 43.9** | **+0.7** |
| | 190nm,0.9s,2µm | | | | | | |
| **GTOI** | **Gorontalo** | **8.44** | **4** | P | **Pn** | **17 47 48.3** | **+3.0** |
| | 71nm,1.1s,845nm | | | | | | |
| **KMMI** | **Kalianget** | **8.46** | **275** | P | **Pn** | **17 47 48.1** | **+2.6** |
| | 116nm,1.1s,1µm | | | | | | |
| **KMSI** | **Cibinong** | **8.49** | **10** | P | **Pn** | **17 47 48.0** | **+2.0** |
| | 474nm,1.1s,4µm | | | | | | |
| **MPSI** | **Mapaga** | **8.51** | **342** | P | **Pn** | **17 47 49.3** | **+3.1** |
| | 72nm,1.1s,964nm | | | | | | |
| **BBKI** | **Banjar Baru** | **8.74** | **299** | P | **Pn** | **17 47 52.2** | **+3.1** |
| | 71nm,1.0s | | | | | | |
| **LBMI** | **Labuha** | **8.74** | **35** | P | **Pn** | **17 47 51.6** | **+2.5** |
| | 110nm,0.9s,1µm | | | | | | |
| **SAUI** | **Saumlaki** | **8.76** | **92** | *e*Pn | **Pn** | **17 47 48.5** | **-0.8** |
| SAUI | | | | *e*S | S | 17 49 22.2 | -6.5 |
| **TNTI** | **Ternate** | **9.85** | **30** | P | **Pn** | **17 48 04.2** | **+1.1** |
| | 140nm,1.2s | | | | | | |
| **TNTI** | **Ternate** | **9.85** | **30** | *e*Pn | **Pn** | **17 48 04.0** | **+0.8** |
| **MTN** | **Manton Dam** | **9.88** | **121** | *e*Pn | **Pn** | **17 48 02.9** | **-0.5** |
| MTN | | | | *e*S | S | 17 49 48.6 | -6.0 |
| **KNRA** | **Kununurra** | **9.94** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| AS01 | **Alice Springs** | 19.21 | 146 | *e*P | | **P** | 17 49 52.6 | +0.9 |
| PALU | **Palau** | 19.26 | 39 | P | | **P** | 17 49 51.9 | -0.3 |
| | baz=19,SNR=13 | | | | | | | |
| MNAI | **Manna** | 19.70 | 279 | *e*P | | **P** | 17 49 56.9 | 0.0 |
| | 499nm,1.3s | | | | | | | |
| QIS | **Mount Isa** | 20.86 | 129 | P | | **P** | 17 50 09.6 | +0.5 |
| | baz=21,SNR=125 | | | | | | | |
| COEN | **Coen** | 21.22 | 108 | P | | **P** | 17 50 12.8 | 0.0 |
| | baz=21,SNR=8.1 | | | | | | | |
| COEN | **Coen** | 21.22 | 108 | *e*P | | **P** | 17 50 11.2 | -1.6 |
| | 49nm,0.8s | | | | | | | |
| MORW | **Morawa** | 21.97 | 195 | P | | **P** | 17 50 20.5 | +1.0 |
| | baz=22,SNR=138 | | | | | | | |
| BLDU | **Ballidu** | 23.29 | 193 | P | | **P** | 17 50 32.3 | +0.7 |
| | baz=24,SNR=90 | | | | | | | |
| KMBL | **Kambalda** | 23.42 | 181 | P | | **P** | 17 50 33.6 | +0.9 |
| | baz=24,SNR=40 | | | | | | | |
| MTSU | **Mount Surprise** | 23.60 | 118 | P | | **P** | 17 50 35.6 | +1.1 |
| | baz=24,SNR=20 | | | | | | | |
| KLBR | **Kellerberrin** | 24.04 | 190 | P | | **P** | 17 50 39.2 | +0.9 |
| | baz=24,SNR=48 | | | | | | | |
| PMG | **Port Moresby** | 24.47 | 95 | P | | **P** | 17 50 42.9 | +0.5 |
| | 18nm,0.6s,baz=158,slow=1.7,SNR=9.0 | | | | | | | |
| PMG | **Port Moresby** | 24.47 | 95 | P | | **P** | 17 50 42.9 | +0.5 |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,18nm,0.6s | | | | | | | |
| PMG | **Port Moresby** | 24.47 | 95 | P | | **P** | 17 50 42.7 | +0.3 |
| | baz=24,SNR=4.0 | | | | | | | |
| PMG | **Port Moresby** | 24.47 | 95 | *e*P | | **P** | 17 50 42.3 | -0.1 |
| | comp=Z,19nm,0.8s | | | | | | | |
| IPM | **Ipoh** | 24.64 | 299 | *e*P | | **P** | 17 50 41.5 | -2.4 |
| | comp=Z,270nm,2.7s | | | | | | | |
| KULM | **Kulim** | 25.36 | 300 | *e*P | | **P** | 17 50 50.3 | -0.2 |
| | comp=Z,224nm,2.4s | | | | | | | |
| NWAO | **Narrogin (SRO)** | 25.43 | 190 | P | | **P** | 17 50 51.9 | +1.0 |
| | comp=Z,32nm,0.5s,baz=182,slow=0.0,SNR=75 | | | | | | | |
| NWAO | **Narrogin (SRO)** | 25.43 | 190 | P | | **P** | 17 50 51.9 | +1.0 |
| NWAO | | | | pmax | pmax | | | |
| | comp=Z,32nm,0.5s | | | | | | | |
| NWAO | **Narrogin (SRO)** | 25.43 | 190 | P | | **P** | 17 50 51.9 | +1.0 |
| | baz=26,SNR=7.2 | | | | | | | |
| NWAO | **Narrogin (SRO)** | 25.43 | 190 | *e*P | | **P** | 17 50 51.2 | +0.4 |
| | comp=Z,31nm,0.8s | | | | | | | |
| CTA | **Charters Tower** | 26.06 | 120 | P | | **P** | 17 50 57.8 | +1.1 |
| | comp=Z,3.3nm,0.6s,baz=288,slow=12,SNR=3.7 | | | | | | | |
| CTAO | **Charters Tower** | 26.06 | 120 | *e*P | | **P** | 17 50 56.8 | +0.1 |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | |
| CTAO | **Charters Tower** | 26.06 | 120 | *e*P | | **P** | 17 50 56.8 | +0.1 |
| | comp=Z,12nm,1.0s | | | | | | | |
| GSI | **Gununguitoli** | 26.43 | 289 | *e*P | | **P** | 17 50 58.8 | -1.2 |
| | comp=Z,75nm,1.7s | | | | | | | |
| RKGY | **Rocky Gully** | 27.12 | 190 | P | | **P** | 17 51 08.2 | +2.4 |
| | baz=27,SNR=36 | | | | | | | |
| QLP | **Quilpie** | 27.84 | 135 | P | | **P** | 17 51 14.3 | +1.8 |
| | baz=28,SNR=19 | | | | | | | |
| BBOO | **Buckleboo** | 27.87 | 155 | P | | **P** | 17 51 13.6 | +1.0 |
| | baz=28,SNR=139 | | | | | | | |
| BBOO | **Buckleboo** | 27.87 | 155 | *e*P | | **P** | 17 51 13.6 | +1.0 |
| | comp=Z,125nm,0.9s | | | | | | | |
| QIZ | **Qiongzhong** | 29.45 | 335 | P | | **P** | 17 51 27.0 | +0.3 |
| QIZ | | | | PMZ | | | | |
| | comp=Z,31nm,1.4s | | | | | | | |
| QIZ | **Qiongzhong** | 29.45 | 335 | P | | **P** | 17 51 24.9 | -1.8 |
| HTT | **Hallett** | 29.67 | 151 | P | | P | 17 51 23.1 | -5.5 |
| | baz=30,SNR=53 | | | | | | | |
| TPUB | **Ta-pu** | 31.00 | 357 | *e*P | | **P** | 17 51 38.8 | -1.5 |
| | comp=Z,178nm,1.7s | | | | | | | |
| RMQ | **Roma** | 31.11 | 130 | P | | **P** | 17 51 43.1 | +1.9 |
| | baz=31,SNR=18 | | | | | | | |
| SSLB | **Suanglung** | 31.47 | 357 | *e*P | | **P** | 17 51 42.6 | -1.7 |
| | comp=Z,125nm,1.8s | | | | | | | |
| NACB | **Ninganchiao** | 31.83 | 359 | *e*P | | **P** | 17 51 45.1 | -2.3 |
| CMSA | **Cobar Meteorol** | 32.02 | 141 | P | | **P** | 17 51 51.0 | +1.9 |
| | baz=32,SNR=96 | | | | | | | |
| ARPS | **Mount Arapiles** | 33.77 | 151 | P | | **P** | 17 52 06.1 | +1.9 |
| | baz=34,SNR=257 | | | | | | | |
| CM01 | **Chiang Mai Arr** | 34.91 | 319 | *e*P | | **P** | 17 52 13.6 | -0.5 |
| CMAR | **Chiang Mai Arr** | 34.94 | 319 | P | | **P** | 17 52 14.9 | +0.6 |
| | comp=Z,1.4nm,0.5s,baz=148,slow=6.6,SNR=10 | | | | | | | |
| CMAR | | | | PcP | | **PcP** | 17 54 42.0 | +1.2 |
| | comp=Z,1.7nm,0.6s,baz=175,slow=2.8,SNR=12 | | | | | | | |
| CMAR | | | | ScP | | **ScP** | 17 58 01.8 | +0.1 |
| | comp=Z,1.7nm,1.1s,baz=165,slow=3.4,SNR=5.1 | | | | | | | |
| CHTO | **Chiang Mai** | 35.20 | 319 | *e*P | | **P** | 17 52 13.9 | -2.7 |
| CHTO | | | | pmax | pmax | | | |
| | comp=Z,65nm,2.6s | | | | | | | |
| CHTO | **Chiang Mai** | 35.20 | 319 | *e*P | | **P** | 17 52 13.9 | -2.7 |
| | comp=Z,65nm,2.6s | | | | | | | |
| ARMA | **Armidale** | 35.36 | 133 | P | | **P** | 17 52 20.7 | +2.7 |
| | baz=36,SNR=18 | | | | | | | |
| ARMA | **Armidale** | 35.36 | 133 | *e*P | | **P** | 17 52 20.5 | +2.6 |
| | comp=Z,183nm,2.5s | | | | | | | |
| YNG | **Young** | 35.55 | 141 | P | | **P** | 17 52 21.8 | +2.4 |
| | baz=36,SNR=88 | | | | | | | |
| TOO | **Toolangi** | 36.22 | 148 | P | | **P** | 17 52 27.9 | +2.8 |
| | baz=36,SNR=41 | | | | | | | |
| MGCD | **Mangrove Creek** | 36.60 | 138 | P | | **P** | 17 52 31.4 | +3.1 |
| | baz=37,SNR=8.5 | | | | | | | |
| CNB | **Canberra Magne** | 36.82 | 142 | P | | **P** | 17 52 32.4 | +2.2 |
| | baz=37,SNR=14 | | | | | | | |
| GYA | **Guiyang** | 37.38 | 336⇑ | *i*P | | **P** | 17 52 34.8 | -0.2 |
| GYA | | | | pP | | **pP** | 17 53 29.3 | +2.0 |
| GYA | | | | sP | | **sP** | 17 53 58.0 | +1.3 |
| GYA | | | | PP | | **PnPn** | 17 54 11.5 | +0.9 |
| GYA | | | | PcP | | **PcP** | 17 54 49.5 | +1.3 |
| GYA | | | | S | | **S** | 17 58 05.8 | +2.1 |
| GYA | | | | ScS | | **ScS** | 18 02 18.0 | -1.8 |
| GYA | | | | PMZ | | | | |
| | comp=Z,20nm,0.8s | | | | | | | |
| GYA | | | | PMZ | | | | |
| | comp=Z,120nm,4.9s | | | | | | | |
| KMI | **Kunming** | 37.98 | 330 | P | | **P** | 17 52 41.5 | +1.4 |
| KMI | | | | PMZ | | | | |
| | comp=Z,13nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,170nm,4.5s | | | | | | | |
| WHN | **Wuhan** | 38.95 | 349 | ⇓P | | **P** | 17 52 48.8 | +1.0 |
| NJ2 | **Nanjing** | 39.81 | 355 | *e*P | | **P** | 17 52 54.3 | -0.6 |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,40nm,0.7s | | | | | | | |
| MOO | **Moorlands** | 40.78 | 152 | P | | **P** | 17 53 05.7 | +3.0 |
| | baz=41,SNR=4.0 | | | | | | | |
| TAU | **Tasmania Unive** | 41.20 | 152 | *e*P | | **P** | 17 53 07.8 | +1.6 |
| TAU | | | | pmax | pmax | | | |
| | comp=Z,1μm,2.9s | | | | | | | |
| TAU | **Tasmania Unive** | 41.20 | 152 | *e*P | | **P** | 17 53 07.8 | +1.6 |
| | comp=Z,1μm,2.9s | | | | | | | |
| XAN | **Xi'an** | 43.58 | 344 | P | | **P** | 17 53 24.5 | -0.9 |
| XAN | | | | PMZ | | | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| TJN | **Taejon** | 44.22 | 6⇑ | *e*P | | **P** | 17 53 29.4 | -0.9 |
| PALK | **Pallekele** | 44.26 | 289 | P | | **P** | 17 53 30.5 | -0.6 |
| | comp=Z,4.3nm,0.8s,baz=109,slow=7.5,SNR=3.5 | | | | | | | |
| KSAR | **Wonju Array Be** | 45.33 | 6 | P | | **P** | 17 53 37.7 | -1.3 |
| KSAR | | | | | | | 17 55 14.4 | |
| KSAR | **Wonju Array Be** | 45.33 | 6 | P | | **P** | 17 53 37.7 | -1.3 |
| KSAR | | | | PcP | | **PcP** | 17 55 14.4 | +0.5 |
| KSRS | **Korea Array** | 45.34 | 6 | P | | **P** | 17 53 37.7 | -1.4 |
| | comp=Z,3.9nm,0.9s,baz=178,slow=9.6,SNR=12 | | | | | | | |
| KSRS | | | | PcP | | **PcP** | 17 55 14.4 | +0.4 |
| | comp=Z,1.4nm,0.7s,baz=182,slow=3.2,SNR=5.3 | | | | | | | |
| KSRS | **Korea Array** | 45.34 | 6 | P | | **P** | 17 53 37.7 | -1.4 |
| KSRS | | | | | | | 17 55 14.4 | |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| KS01 | **Wonju Array Si** | 45.36 | 6 | *e*P | | **P** | 17 53 38.0 | -1.3 |
| MAJO | **Matsushiro** | 46.56 | 18 | *d*/P | | **P** | 17 53 47.4 | -1.3 |
| MAJO | | | | pmax | pmax | | | |
| | comp=Z,111nm,1.0s | | | | | | | |
| MAJO | **Matsushiro** | 46.56 | 18 | *e*P | | **P** | 17 53 47.0 | -1.6 |
| | comp=Z,270nm,2.8s | | | | | | | |
| MAT | **Matsushiro** | 46.56 | 18 | P | | **P** | 17 53 47.0 | -1.7 |
| MJAR | **Matsushiro Arr** | 46.56 | 18 | P | | **P** | 17 53 47.0 | -1.7 |
| | comp=Z,14nm,0.5s,baz=191,slow=9.0,SNR=96 | | | | | | | |
| LZH | **Lanzhou** | 47.07 | 339 | *e*P | | **P** | 17 53 53.8 | +1.0 |
| LZH | | | | pP | | **pP** | 17 54 48.3 | +0.9 |
| LZH | | | | S | | **S** | 18 00 26.5 | +1.6 |
| LZH | | | | sS | | **sS** | 18 02 01.3 | -0.4 |
| LZH | | | | PMZ | | | | |
| | comp=Z,30nm,1.0s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,140nm,4.5s | | | | | | | |
| LSA | **Lhasa** | 47.95 | 322 | P | | **P** | 17 54 00.3 | +0.2 |
| LSA | **Lhasa** | 47.95 | 322 | *e*P | | **P** | 17 53 59.9 | -0.2 |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| LSA | **Lhasa** | 47.95 | 322 | *e*P | | **P** | 17 53 59.9 | -0.2 |
| | comp=Z,7.2nm,0.6s | | | | | | | |
| BJT | **Baijiatuan** | 47.97 | 353 | *e*P | | **P** | 17 53 58.0 | -1.4 |
| BJT | | | | pmax | pmax | | | |
| | comp=Z,44nm,1.3s | | | | | | | |
| BJT | **Baijiatuan** | 47.97 | 353 | *e*P | | **P** | 17 53 58.0 | -1.4 |
| | comp=Z,44nm,1.3s | | | | | | | |
| BJI | **Beijing** | 47.99 | 354 | P | | **P** | 17 53 58.3 | -1.2 |
| BJI | | | | pP | | **pP** | 17 54 54.0 | -0.4 |
| BJI | | | | sP | | **sP** | 17 55 22.0 | -1.1 |
| BJI | | | | S | | **S** | 18 00 39.5 | +2.2 |
| BJI | | | | SS | | **SS** | 18 04 13.5 | +3.3 |
| BJI | | | | PMZ | | | | |
| | comp=Z,31nm,0.8s | | | | | | | |
| BJI | | | | LN | | | | |
| | comp=Z,110nm,4.1s | | | | | | | |
| BJI | | | | LE | | | | |
| | comp=Z,200nm,6.1s | | | | | | | |
| BJI | | | | LZ | | | | |
| | comp=Z,110nm,20.0s | | | | | | | |
| ODAN | **Odare** | 48.43 | 317 | *e*P | | **P** | 17 54 03.0 | -0.5 |
| | comp=Z,6.0nm,0.4s | | | | | | | |
| TAPN | **Taplejung** | 48.53 | 317 | *e*P | | **P** | 17 54 04.0 | -0.3 |
| | comp=Z,14nm,0.5s | | | | | | | |
| RAMN | **Ramite** | 49.03 | 316 | *e*P | | **P** | 17 54 08.2 | +0.2 |
| | comp=Z,34nm,0.6s | | | | | | | |
| HHC | **Hu-ho-hao-te** | 49.47 | 349 | *e*P | | **P** | 17 54 13.3 | +2.4 |
| HHC | | | | pP | | **pP** | 17 55 08.3 | +2.2 |
| HHC | | | | sP | | **sP** | 17 55 36.5 | +1.7 |
| HHC | | | | PP | | **PP** | 17 56 11.3 | +3.3 |
| HHC | | | | S | | **S** | 18 01 01.0 | +2.7 |
| HHC | | | | PMZ | | | | |
| | comp=Z,32nm,0.5s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,120nm,6.0s | | | | | | | |
| GUN | **Gumba** | 50.13 | 317 | *e*P | | **P** | 17 54 16.1 | -0.3 |
| | comp=Z,20nm,0.5s | | | | | | | |
| PKI | **Pulchoki** | 50.24 | 316 | *e*P | | **P** | 17 54 16.6 | -0.6 |
| | comp=Z,16nm,0.3s | | | | | | | |
| PKIN | **Phulchoki** | 50.25 | 316 | *e*P | | **P** | 17 54 17.1 | -0.1 |
| | comp=Z,6.3nm,0.2s | | | | | | | |
| KKN | **Kakani** | 50.47 | 316 | *e*P | | **P** | 17 54 18.9 | +0.1 |
| | comp=Z,15nm,0.6s | | | | | | | |
| DMN | **Daman** | 50.47 | 316 | *e*P | | **P** | 17 54 18.4 | -0.5 |
| | comp=Z,20nm,0.7s | | | | | | | |
| MSHR | **Mys Shultsa** | 50.80 | 8 | *c i*P | | **P** | 17 54 19.5 | -1.2 |
| GKN | **Gorkha** | 51.04 | 316 | *e*P | | **P** | 17 54 22.5 | -0.5 |
| | comp=Z,17nm,0.3s | | | | | | | |
| VLA | **Vladivostok** | 51.44 | 9 | *c i*P | | **P** | 17 54 24.3 | -1.1 |
| VLA | | | | pmax | pmax | | | |
| | comp=Z,15nm,1.0s | | | | | | | |
| GTA | **Gaotai** | 51.48 | 338 | ⇑P | | **P** | 17 54 26.3 | +0.3 |
| GTA | | | | S | | **S** | 18 01 28.8 | +2.8 |
| GTA | | | | SS | | **SS** | 18 05 07.0 | +1.1 |
| GTA | | | | PMZ | | | | |
| | comp=Z,11nm,1.2s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,100nm,5.5s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,110nm,15.2s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,100nm,15.9s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,150nm,16.9s | | | | | | | |
| KOLN | **Koldanda** | 51.62 | 315 | *e*P | | **P** | 17 54 27.0 | -0.3 |
| | comp=Z,23nm,0.7s | | | | | | | |
| DANN | **Dangsing** | 51.86 | 316 | *e*P | | **P** | 17 54 29.2 | 0.0 |
| | comp=Z,9.2nm,0.6s | | | | | | | |
| USRK | **Ussuryisk Ar.** | 52.51 | 9 | P | | **P** | 17 54 31.9 | -1.4 |
| | comp=Z,20nm,0.6s,baz=190,slow=6.8,SNR=50 | | | | | | | |
| MDJ | **Mudanjiang** | 52.61 | 6 | P | | **P** | 17 54 33.0 | -1.0 |
| MDJ | | | | PMZ | | | | |
| | comp=Z,33nm,0.8s | | | | | | | |
| MDJ | | | | PMZ | | | | |
| | comp=Z,66nm,6.9s | | | | | | | |
| MDJ | **Mudanjiang** | 52.61 | 6 | *e*P | | **P** | 17 54 32.9 | -1.0 |
| | comp=Z,24nm,0.8s | | | | | | | |
| ASAJ | **Asahikawa** | 54.83 | 18 | *e*P | | **P** | 17 54 49.8 | -0.2 |
| | comp=Z,40nm,0.8s | | | | | | | |
| MSVF | **Nonsavu** | 54.93 | 106 | *e*P | | **P** | 17 54 48.8 | -2.6 |
| MSVF | | | | pmax | pmax | | | |
| | comp=Z,224nm,2.3s | | | | | | | |
| MSVF | **Nonsavu** | 54.93 | 106 | *e*P | | **P** | 17 54 48.8 | -2.6 |
| | comp=Z,224nm,2.3s | | | | | | | |
| RPZ | **Rata Peaks** | 55.36 | 139 | *e*P | | **P** | 17 54 54.7 | +0.8 |
| | comp=Z,31nm,0.7s | | | | | | | |
| HIA | **Hailar** | 56.91 | 358 | *e*P | | **P** | 17 55 03.7 | -1.0 |
| HIA | **Hailar** | 56.91 | 358 | *e*P | | **P** | 17 55 03.7 | -1.0 |
| ULN | **Ulaanbaatar** | 57.11 | 348 | *e*P | | **P** | 17 55 05.4 | -0.9 |
| ULN | | | | pmax | pmax | | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| ULN | **Ulaanbaatar** | 57.11 | 348 | *e*P | | **P** | 17 55 05.4 | -0.9 |
| | comp=Z,7.8nm,1.0s | | | | | | | |
| HABR | **Khabarovsk** | 57.16 | 10 | *e*P | | **P** | 17 55 03.5 | -2.8 |
| HABR | | | | *e* | | | 17 55 55.4 | |
| HABR | | | | *e**PP | | **pP** | 17 56 00.7 | -2.5 |
| HABR | | | | *e**SP | | **sP** | 17 56 29.5 | -2.0 |
| HABR | | | | *e* | | | 17 57 13.3 | |
| HABR | | | | *e*S | | **S** | 18 02 37.5 | -3.5 |
| HABR | | | | *e* | | | 18 04 25.7 | |
| HABR | | | | *e*SS | | **SS** | 18 06 31.7 | -3.0 |
| HABR | | | | pmax | pmax | | | |
| | comp=E,12nm,1.6s | | | | | | | |
| HABR | | | | pmax | pmax | | | |
| | comp=Z,22nm,1.6s | | | | | | | |
| HABR | | | | pmax | pmax | | | |
| | comp=N,6.0nm,0.8s | | | | | | | |
| HABR | | | | MLR | MLR | | | |
| | comp=Z,107nm,18.0s | | | | | | | |
| SONM | **Songino Array** | 57.22 | 347 | P | | **P** | 17 55 05.7 | -1.3 |
| | comp=Z,3.5nm,0.5s,baz=163,slow=8.5,SNR=24 | | | | | | | |
| SONA1 | **Songino Array** | 57.23 | 347 | *e*P | | **P** | 17 55 06.4 | -0.8 |
| KLR | **Kul'dur** | 57.41 | 7 | *i*P | | **P** | 17 55 07.2 | -0.9 |
| YSS | **Yuzh-Sakhalins** | 57.46 | 16 | *e*P | | **P** | 17 55 09.5 | +1.0 |
| YSS | | | | pmax | pmax | | | |
| | comp=Z,19nm,0.9s | | | | | | | |
| CASY | **Casey** | 58.93 | 186 | *e*P | | **P** | 17 55 18.6 | +0.3 |
| | comp=Z,14nm,1.0s | | | | | | | |
| WMQ | **Urumqi** | 60.29 | 332 | *e*P | | **P** | 17 55 29.0 | +0.9 |
| ZAK | **Zakamensk** | 60.33 | 346 | *e*P | | **P** | 17 55 27.1 | -1.2 |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.3s | | | | | | | |
| TLY | **Talaya** | 61.45 | 347 | *e*P | | **P** | 17 55 34.9 | -0.8 |
| TLY | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| HVS | **Khovu-Aksy** | 63.77 | 340⇑ | *i*P | | **P** | 17 55 50.5 | -0.5 |
| HVS | | | | pmax | pmax | | | |
| | comp=Z,14nm,1.0s | | | | | | | |
| KSH | **Kashi** | 63.78 | 321 | P | | **P** | 17 55 52.3 | +0.9 |
| KSH | | | | *e*pP | | **pP** | 17 56 50.8 | +1.2 |
| KSH | | | | *e*sP | | **sP** | 17 57 17.5 | 0.0 |
| KSH | | | | *e*PP | | **PP** | 17 58 18.0 | +2.7 |
| KSH | | | | *e*ScP | | | 18 00 03.0 | |
| KSH | | | | PcS | | | 18 00 29.0 | |
| KSH | | | | S | | **S** | 18 04 03.0 | -2.5 |
| KSH | | | | ScS | | **SKSac** | 18 05 17.5 | -2.0 |
| KSH | | | | SS | | **SS** | 18 08 20.0 | +1.0 |
| KSH | | | | PMZ | | | | |
| | comp=Z,130nm,5.4s | | | | | | | |
| KSH | | | | LN | | | | |
| | comp=Z,130nm,4.5s | | | | | | | |
| KSH | | | | LE | | | | |
| | comp=Z,120nm,5.0s | | | | | | | |
| KSH | | | | LZ | | | | |
| | comp=Z,180nm,5.3s | | | | | | | |
| MK01 | **Makanchi Array** | 65.03 | 331 | *e*P | | **P** | 17 55 58.8 | -0.5 |
| MKAR | **Makanchi Array** | 65.06 | 331 | P | | **P** | 17 55 59.0 | -0.4 |
| | comp=Z,7.8nm,0.5s,baz=140,slow=6.3,SNR=34 | | | | | | | |
| MKAR | **Makanchi Array** | 65.06 | 331 | *e*P | | **P** | 17 55 59.0 | -0.4 |
| MAKZ | **Makanchi** | 65.22 | 331 | *e*P | | **P** | 17 55 60.0 | -0.4 |
| KBL | **Kabul** | 65.73 | 313 | *e*P | | **P** | 17 56 04.1 | -0.1 |
| KBL | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.7s | | | | | | | |
| KBL | **Kabul** | 65.73 | 313 | *e*P | | **P** | 17 56 04.1 | -0.1 |
| | comp=Z,9.9nm,0.7s | | | | | | | |
| BOD | **Bodaibo** | 65.79 | 355 | *e*P | | **P** | 17 56 01.8 | -2.0 |
| BOD | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | | |
| TKM2 | **Tokmak 2** | 66.06 | 324 | *e*P | | **P** | 17 56 05.3 | -0.8 |
| TKM2 | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| TKM2 | **Tokmak 2** | 66.06 | 324 | *e*P | | **P** | 17 56 05.3 | -0.8 |
| | comp=Z,4.4nm,0.7s | | | | | | | |
| AAK | **Ala-Archa** | 66.54 | 323 | *c i*P | | **P** | 17 56 08.9 | -0.2 |
| AAK | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | |
| AAK | **Ala-Archa** | 66.54 | 323 | *e*P | | **P** | 17 56 08.8 | -0.2 |
| | comp=Z,6.5nm,0.6s | | | | | | | |
| EKS2 | **Erkin-Say** | 66.98 | 323 | *e*P | | **P** | 17 56 11.2 | -0.6 |
| EKS2 | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | |
| EKS2 | **Erkin-Say** | 66.98 | 323 | *e*P | | **P** | 17 56 11.2 | -0.6 |
| | comp=Z,3.6nm,0.8s | | | | | | | |
| PEA0 | **Petropavlovsk-** | 67.68 | 22 | *e*P | | **P** | 17 56 16.9 | +1.1 |
| PETK | **Petropavlovsk-** | 67.68 | 22 | P | | **P** | 17 56 16.1 | +0.3 |
| | comp=Z,9.6nm,0.8s,baz=243,slow=1.4,SNR=9.9 | | | | | | | |
| KKAR | **Karatay Array** | 69.20 | 322 | *e*P | | **P** | 17 56 25.2 | -0.2 |
| KKAR | **Karatay Array** | 69.20 | 322 | *e*P | | **P** | 17 56 25.2 | -0.2 |
| ZAA0 | **Zalesovo Array** | 69.24 | 337 | P | | **P** | 17 56 23.9 | -1.5 |
| | baz=69,SNR=5.5 | | | | | | | |
| ZAA0 | **Zalesovo Array** | 69.24 | 337 | *e*P | | **P** | 17 56 23.5 | -1.8 |
| ZALV | **Zalesovo Beam** | 69.24 | 337 | P | | **P** | 17 56 23.4 | -2.0 |
| | comp=Z,5.5nm,0.4s,baz=136,slow=4.9,SNR=28 | | | | | | | |
| KURK | **Kurchatov** | 69.53 | 332 | *e*P | | **P** | 17 56 26.1 | -1.1 |
| KURK | | | | pmax | pmax | | | |
| | comp=Z,35nm,1.1s | | | | | | | |
| KURK | **Kurchatov** | 69.53 | 332 | *e*P | | **P** | 17 56 26.1 | -1.1 |
| | comp=Z,35nm,1.1s | | | | | | | |
| YAK | **Yakutsk** | 69.88 | 4 | *e*P | | **P** | 17 56 28.7 | -0.4 |
| YAK | | | | pmax | pmax | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| NVS | **Novosibirsk** | 70.52 | 337 | *e*P | | **P** | 17 56 31.8 | -1.3 |
| NVS | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,1.3s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=N,7.0nm,1.5s | | | | | | | |
| NVS | | | | pmax | pmax | | | |
| | comp=E,10.0nm,1.5s | | | | | | | |
| MAW | **Mawson** | 71.50 | 200 | P | | **P** | 17 56 40.1 | +1.3 |
| | comp=E,5.9nm,0.6s,baz=232,slow=22,SNR=5.9 | | | | | | | |
| MAW | **Mawson** | 71.50 | 200 | *e*P | | **P** | 17 56 40.4 | +1.6 |
| MAW | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,1.2s | | | | | | | |
| MAW | **Mawson** | 71.50 | 200 | *e*P | | **P** | 17 56 40.4 | +1.6 |
| | comp=Z,2.7nm,1.2s | | | | | | | |
| VNDA | **Vanda** | 72.61 | 172 | P | | **P** | 17 56 46.6 | +1.3 |
| | comp=Z,6.7nm,0.7s,baz=315,slow=6.5,SNR=49 | | | | | | | |
| VNDA | **Vanda** | 72.61 | 172 | P | | **P** | 17 56 46.6 | +1.3 |
| VNDA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.7s | | | | | | | |
| VNDA | **Vanda** | 72.61 | 172 | *e*P | | **P** | 17 56 46.5 | +1.3 |
| | comp=Z,5.4nm,0.7s | | | | | | | |
| IMYA | **Miami** | 73.07 | 312 | *e*P | | **P** | 17 56 49.6 | +0.7 |
| SBA | **Scott Base** | 73.58 | 171 | *e*P | | **P** | 17 56 52.6 | +1.7 |
| SBA | | | | pmax | pmax | | | |
| | comp=Z,116nm,2.7s | | | | | | | |
| SBA | **Scott Base** | 73.58 | 171 | *e*P | | **P** | 17 56 52.6 | +1.7 |
| | comp=Z,116nm,2.7s | | | | | | | |
| SEY | **Seymchan** | 74.20 | 14⇑ | *e*P | | **P** | 17 56 54.7 | +0.1 |
| BRVK | **Borovoye** | 75.01 | 330⇓ | *e*P | | **P** | 17 56 58.6 | -0.9 |
| BRVK | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| BRVK | **Borovoye** | 75.01 | 330 | *e*P | | **P** | 17 56 57.9 | -1.6 |
| | comp=Z,6.3nm,1.2s | | | | | | | |
| GEYT | **Alibeck** | 75.15 | 312 | P | | **P** | 17 57 00.5 | -0.2 |
| | comp=Z,2.6nm,0.6s,baz=90,slow=5.9,SNR=5.0 | | | | | | | |
| ISRV | **Sarvestan** | 76.18 | 303 | *e*P | | **P** | 17 57 07.5 | +0.4 |
| IPAR | **Pars** | 76.37 | 303 | *e*P | | **P** | 17 57 08.5 | +0.4 |
| ISAD | **Sadrabad** | 76.48 | 305 | *e*P | | **P** | 17 57 08.8 | +0.1 |
| IKAZ | **Kazeroun** | 77.36 | 303 | *e*P | | **P** | 17 57 12.9 | -0.7 |
| IRAM | **Ramesheh** | 77.50 | 305 | *e*P | | **P** | 17 57 12.9 | -1.4 |
| ABKAR | **Akbulak array** | 78.62 | 324 | *e*P | | **P** | 17 57 18.7 | -1.0 |
| IPIR | **Pirpir** | 78.97 | 305 | *e*P | | **P** | 17 57 22.4 | 0.0 |
| SYO | **Syowa Base** | 80.17 | 201⇓ | *e*P | | **P** | 17 57 27.4 | -0.3 |
| RAYN | **Ar Rayn** | 81.29 | 295 | *e*P | | **P** | 17 57 34.5 | -0.1 |
| | comp=Z,9.8nm,0.8s | | | | | | | |
| QSPA | **South Pole Qui** | 82.15 | 180 | *e*P | | **P** | 17 57 38.9 | +0.6 |
| | comp=Z,6.2nm,0.7s | | | | | | | |
| QSPA | | | | *e*pP | | **pP** | 17 58 41.5 | +2.0 |
| GNI | **Garni** | 85.72 | 311⇓ | *e*P | | **P** | 17 57 55.2 | -1.7 |
| GNI | | | | pmax | pmax | | | |
| | comp=Z,127nm,1.3s | | | | | | | |
| KBZ | **Khabaz** | 87.89 | 314 | P | | **P** | 17 58 06.8 | -0.1 |
| | comp=Z,3.1nm,0.8s,baz=105,slow=4.2,SNR=4.4 | | | | | | | |
| LSZ | **Lusaka** | 92.05 | 254 | *e*P | | **P** | 17 58 28.0 | +0.9 |
| LSZ | **Lusaka** | 92.05 | 254 | *e*P | | **P** | 17 58 28.0 | +0.9 |
| BOSA | **Boshof** | 92.56 | 241 | P | | **P** | 17 58 29.4 | +0.2 |
| | comp=Z,2.3nm,0.8s,baz=97,slow=7.1,SNR=4.5 | | | | | | | |
| SNAA | **Sanae** | 93.02 | 195 | P | | **P** | 17 58 32.0 | +1.6 |
| SNAA | **Sanae** | 93.02 | 195⇑ | *e*P | | **P** | 17 58 31.4 | +1.0 |
| SNAA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,1.1s | | | | | | | |
| SNAA | **Sanae** | 93.02 | 195 | *e*P | | **P** | 17 58 29.8 | -0.6 |
| OBN | **Obninsk** | 94.02 | 325⇑ | *e*P | | **P** | 17 58 34.5 | -0.6 |
| OBN | | | | *PP | | **pP** | 17 59 37.0 | -0.5 |
| OBN | | | | *e*SSS | | SSS | 18 19 28.4 | |
| OBN | | | | pmax | pmax | | | |
| | comp=Z,51nm,2.6s | | | | | | | |
| BRTR | **Keskin Array B** | 94.04 | 309 | P | | **P** | 17 58 34.6 | -1.2 |
| | comp=Z,2.2nm,0.9s,baz=136,slow=4.9,SNR=10.0 | | | | | | | |
| BRTR | **Keskin Array B** | 94.04 | 309 | *ce*P | | **P** | 17 58 34.9 | -0.9 |
| BRTR | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| BR231 | **Keskin MP Arra** | 94.72 | 309 | *e*P | | **P** | 17 58 35.7 | -3.1 |
| ILAR | **Eielson Array** | 97.31 | 26 | PKKPbc | PKKPbc | | 18 15 31.4 | +0.9 |
| | comp=Z,0.3nm,0.7s,baz=102,slow=1.8,SNR=4.1 | | | | | | | |
| AKASG | **Malin Array Be** | 98.05 | 320 | P | | **P** | 17 58 53.0 | -0.5 |
| | comp=Z,2.1nm,0.9s,baz=76,slow=4.2,SNR=5.8 | | | | | | | |
| AKASG | | | | PKKPbc | | **PKKPbc** | 18 15 27.3 | -0.5 |
| | comp=Z,0.3nm,0.3s,baz=273,slow=3.5,SNR=4.1 |

*s-maj=1.2km s-min=0.8km az=26.0*
*DJA **30** 18:08:57.2±1.1,1°N:4°×12°5E±°, h27km±14km, M4.6/15, mb4.7/7, mB5.1/4, MLv4.7/15, Mw(mB)4.4/4*
**ISC 30 18:08:55.8**±0.5,**0°72N**±0°.04×**125°40E**±0°.04,**h83**km±4km,
**n120,**σ1°65/141,**mb4.3**/26,**2C-3D**,**Northern Moluccas Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KMSI** | **Cibinong** | **1.43** | **264** | P | **Pn** | **18 09 19.4** | **-0.8** |
| KMSI | | | | S | **Sn** | **18 09 37.5** | **-1.2** |
| **TNTI** | **Ternate** | **1.97** | **88** | P | **Pn** | **18 09 29.8** | **+2.5** |
| TNTI | | | | S | **Sn** | **18 09 55.0** | **+3.7** |
| **TNTI** | **Ternate** | **1.97** | **88** | *e*Pn | **Pn** | **18 09 29.8** | **+2.5** |
| TNTI | | | | *e*Sn | **Sn** | **18 09 50.8** | **-0.5** |
| **GTOI** | **Gorontalo** | **2.39** | **268** | P | **Pn** | **18 09 34.1** | **+1.1** |
| GTOI | | | | S | **Sn** | **18 10 06.1** | **+4.6** |
| **LBMI** | **Labuha** | **2.50** | **123** | P | **Pn** | **18 09 36.0** | **+1.6** |
| LBMI | | | | S | **Sn** | **18 10 05.9** | **+1.9** |
| **SANI** | **Sanana** | **2.81** | **168** | P | **Pn** | **18 09 38.5** | **-0.2** |
| SANI | | | | S | **Sn** | **18 10 07.6** | **-4.0** |
| **LUWI** | **Luwuk** | **3.16** | **236** | P | **Pn** | **18 09 44.4** | **+1.0** |
| | baz=3.2,SNR=22 | | | | | | |
| **LUWI** | **Luwuk** | **3.16** | **236** | P | **Pn** | **18 09 44.6** | **+1.3** |
| LUWI | | | | S | **Sn** | **18 10 20.6** | **+0.6** |
| **LUWI** | **Luwuk** | **3.16** | **236** | *e*Pn | **Pn** | **18 09 43.9** | **+0.6** |
| LUWI | | | | *e*Sn | **Sn** | **18 10 21.3** | **+1.2** |
| **MRSI** | **Marisa** | **3.47** | **266** | P | **Pn** | **18 09 48.7** | **+1.2** |
| **APSI** | **Ampana** | **4.09** | **247** | P | **Pn** | **18 09 57.4** | **+1.5** |
| APSI | | | | S | **Sn** | **18 10 46.8** | **+4.2** |
| **NLAI** | **Namlea** | **4.28** | **157** | P | **Pn** | **18 09 58.8** | **+0.2** |
| NLAI | | | | S | **Sn** | **18 10 45.0** | **-2.4** |
| **AAI** | **Ambon** | **5.19** | **147** | P | **Pn** | **18 10 12.4** | **+1.4** |
| | baz=5.3,SNR=75 | | | | | | |
| **AAI** | **Ambon** | **5.19** | **147** | P | **Pn** | **18 10 12.7** | **+1.7** |
| | 299nm,0.6s,8μm1.9nm | | | | | | |
| AAI | | | | S | **Sn** | **18 11 08.8** | **-0.8** |
| | 299nm,0.6s,8μm1.9nm | | | | | | |
| **GSPH** | **General Santos** | **5.35** | **355** | *e*P | **Pn** | **18 10 15.7** | **+2.4** |
| **MSAI** | **Masohi** | **5.36** | **139** | P | **Pn** | **18 10 15.6** | **+2.3** |
| MSAI | | | | S | **Sn** | **18 11 16.0** | **+2.2** |
| **MPSI** | **Mapaga** | **5.52** | **266** | P | **Pn** | **18 10 17.0** | **+1.6** |
| | 53nm,0.6s,683nm0.2nm | | | | | | |
| **PCI** | **Palu** | **5.79** | **254** | P | **Pn** | **18 10 20.1** | **+0.9** |
| | 51nm,0.7s,642nm0.3nm | | | | | | |
| **SWI** | **Sorong** | **6.07** | **105** | P | Pn | 18 10 26.9 | +3.9 |
| | baz=6.1,SNR=7.9 | | | | | | |
| **SWI** | **Sorong** | **6.07** | **105** | P | **Pn** | **18 10 25.5** | **+2.6** |
| **SIJI** | **Sorong** | **6.07** | **105** | P | **Pn** | **18 10 24.7** | **+1.7** |
| | 4.9nm,0.3s,baz=296,slow=12,SNR=21 | | | | | | |
| SIJI | | | | LR | LR | 18 13 08.9 | |
| | comp=Z,243nm,19.5s,baz=70,slow=40 | | | | | | |
| **TTSI** | **Tana Toraja** | **6.72** | **236** | P | **Pn** | **18 10 33.9** | **+2.1** |
| **BNDI** | **Bandanaira** | **6.88** | **139** | P | **Pn** | **18 10 34.9** | **+0.8** |
| **SPSI** | **Sidrap Palu** | **7.30** | **230** | P | **Pn** | **18 10 39.6** | **-0.2** |
| **FAKI** | **Fak Fak** | **7.74** | **118** | P | **Pn** | **18 10 47.2** | **+1.4** |
| | baz=7.8,SNR=9.1 | | | | | | |
| **FAKI** | **Fak Fak** | **7.74** | **118** | P | **Pn** | **18 10 48.2** | **+2.4** |
| | 33nm,0.9s,0.1nm | | | | | | |
| **FAKI** | **Fak Fak** | **7.74** | **118** | *e*Pn | **Pn** | **18 10 47.0** | **+1.2** |
| **BKSI** | **Bulukumba** | **7.99** | **221** | P | **Pn** | **18 10 49.3** | **+0.1** |
| **KAPI** | **Kappang** | **8.02** | **225** | P | **Pn** | **18 10 46.8** | **-2.8** |
| | 0.6nm,0.3s,baz=52,slow=17,SNR=3.7 | | | | | | |
| KAPI | | | | LR | LR | 18 14 19.8 | |
| | comp=Z,103nm,19.2s,baz=334,slow=42 | | | | | | |
| **KAPI** | **Kappang** | **8.02** | **225** | *e*Pn | **Pn** | **18 10 49.5** | **0.0** |
| KAPI | | | | *e*Sn | **Sn** | **18 12 20.8** | **+2.0** |
| **MYLDM** | **Lahad Datu** | **8.19** | **303** | ⇑P | Pn | 18 10 55.8 | +3.9 |
| **MYLDM** | **Lahad Datu** | **8.19** | **303** | *e*Pn | **Pn** | **18 10 54.4** | **+2.4** |
| **TSM** | **Tawau** | **8.32** | **295** | ⇓P | **Pn** | **18 10 52.9** | **-0.7** |
| **BSSI** | **Bau Bau, Buton** | **8.40** | **216** | P | **Pn** | **18 10 54.3** | **-0.5** |
| **SDKM** | **Sandakan** | **9.54** | **301** | ⇓P | **Pn** | **18 11 12.7** | **+2.3** |
| **SOEI** | **Soe** | **10.47** | **186** | P | Pn | 18 11 29.0 | +5.8 |
| | baz=11,SNR=3.6 | | | | | | |
| **SOEI** | **Soe** | **10.47** | **186** | *e*Pn | **Pn** | **18 11 22.7** | **-0.4** |
| **KKM** | **Kota Kinabalu** | **10.58** | **300** | P | **Pn** | **18 11 27.4** | **+2.7** |
| | baz=11,SNR=5.0 | | | | | | |
| **KKM** | **Kota Kinabalu** | **10.58** | **300** | ⇑P | **Pn** | **18 11 27.1** | **+2.4** |
| **KKM** | **Kota Kinabalu** | **10.58** | **300** | *e*Pn | **Pn** | **18 11 26.3** | **+1.6** |
| **KMMI** | **Kalianget** | **13.77** | **236** | P | **P** | **18 12 15.5** | **+2.3** |
| **JAGI** | **Jajag, Banyuwa** | **14.46** | **231** | *e*P | **P** | **18 12 21.2** | **+0.3** |
| **MTN** | **Manton Dam** | **14.63** | **157** | P | **Pn** | **18 12 18.4** | **-0.1** |
| | baz=15,SNR=16 | | | | | | |
| **MTN** | **Manton Dam** | **14.63** | **157** | *e*Pn | **Pn** | **18 12 18.5** | **-0.1** |
| **KDU** | **Kakadu** | **15.05** | **152** | P | **Pn** | **18 12 23.9** | **-0.2** |
| | baz=15,SNR=5.4 | | | | | | |
| **KSM** | **Kuching** | **15.11** | **273** | ⇓P | **P** | **18 12 28.7** | **+0.6** |
| **KSM** | **Kuching** | **15.11** | **273** | *e*P | **P** | **18 12 27.7** | **-0.4** |
| **KNRA** | **Kununurra** | **16.63** | **169** | P | **P** | **18 12 45.3** | **+0.4** |
| | baz=17,SNR=8.4 | | | | | | |
| **LEM** | **Lembang** | **19.26** | **247** | P | **P** | **18 13 10.7** | **-3.4** |
| | 1.6nm,0.3s,baz=154,slow=7.1,SNR=5.1 | | | | | | |
| **WRAB** | **Tennant Creek** | **22.32** | **157** | *e*P | **P** | **18 13 47.2** | **+0.4** |
| | 7.1nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **22.33** | **157** | P | **P** | **18 13 47.5** | **+0.6** |
| | 4.5nm,0.4s,baz=333,slow=11,SNR=12 | | | | | | |
| **MBWA** | **Marble Bar** | **22.44** | **194** | *e*P | **P** | **18 13 46.8** | **-1.3** |
| **COEN** | **Coen** | **22.86** | **130** | P | **P** | **18 13 53.8** | **+1.3** |
| | baz=23,SNR=4.0 | | | | | | |
| **NACB** | **Ninganchiao** | **23.61** | **351** | P | **P** | **18 13 59.3** | **-0.1** |
| **QIS** | **Mount Isa** | **25.31** | **147** | P | **P** | **18 14 17.0** | **+2.1** |
| | baz=26,SNR=7.6 | | | | | | |
| **ASAR** | **Alice Springs** | **25.61** | **162** | P | **P** | **18 14 18.6** | **+1.0** |
| | 3.9nm,0.6s,baz=353,slow=17,SNR=49 | | | | | | |
| ASAR | | | | PcP | **PcP** | **18 17 48.2** | **+1.4** |
| | 1.5nm,0.6s,baz=349,slow=2.2,SNR=12 | | | | | | |
| **AS01** | **Alice Springs** | **25.62** | **162** | *e*P | **P** | **18 14 20.3** | **+2.6** |
| **WRKA** | **Warakurna** | **25.76** | **174** | P | **P** | **18 14 22.7** | **+3.7** |
| | baz=26,SNR=7.1 | | | | | | |
| **RABL** | **Rabaul** | **27.18** | **101** | P | P | 18 14 36.9 | +5.0 |
| | baz=27,SNR=32 | | | | | | |
| **CM01** | **Chiang Mai Arr** | **31.36** | **306** | *e*P | **P** | **18 15 06.6** | **-2.3** |
| **CMAR** | **Chiang Mai Arr** | **31.39** | **306** | P | **P** | **18 15 08.1** | **-1.1** |
| | 1.3nm,0.7s,baz=135,slow=7.6,SNR=11 | | | | | | |
| **CHTO** | **Chiang Mai** | **31.57** | **306** | *e*P | **P** | **18 15 10.2** | **-0.6** |
| | 4.2nm,0.7s | | | | | | |
| **NJ2** | **Nanjing** | **31.77** | **349** | *e*P | **P** | **18 15 10.5** | **-1.8** |
| NJ2 | | | | PMZ | | | |
| | 20nm,0.8s | | | | | | |
| **KMI** | **Kunming** | **32.68** | **320** | P | **P** | **18 15 21.0** | **+0.4** |
| KMI | | | | PMZ | | | |
| | 8.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | 180nm,5.4s | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **34.34** | **192** | P | **P** | **18 15 34.4** | **-0.3** |
| | 9.8nm,1.0s,baz=260,slow=0.0,SNR=3.0 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **34.34** | **192** | P | **P** | **18 15 35.0** | **+0.3** |
| **CD2** | **Chengdu** | **36.37** | **328** | *e*P | **P** | **18 15 51.0** | **-1.2** |
| **KSAR** | **Wonju Array Be** | **36.61** | **3** | P | **P** | **18 15 56.0** | **+1.9** |
| **KSRS** | **Korea Array** | **36.63** | **3** | P | **P** | **18 15 56.0** | **+1.8** |
| | 2.6nm,0.7s,baz=176,slow=9.5,SNR=11 | | | | | | |
| **KS01** | **Wonju Array Si** | **36.65** | **3** | *e*P | **P** | **18 15 52.0** | **-2.4** |
| **MAJO** | **Matsushiro** | **37.57** | **17** | P | **P** | **18 16 02.4** | **+0.1** |
| | 10nm,0.9s | | | | | | |
| **MJAR** | **Matsushiro Arr** | **37.57** | **17** | P | **P** | **18 16 02.5** | **+0.3** |
| | 3.0nm,0.8s,baz=190,slow=8.7,SNR=9.4 | | | | | | |
| **LZH** | **Lanzhou** | **40.48** | **333** | *e*P | **P** | **18 16 25.0** | **-1.8** |
| LZH | | | | PMZ | | | |
| | 16nm,1.0s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **41.87** | **344** | *e*P | **P** | **18 16 39.5** | **+1.5** |
| HHC | | | | pP | **pP** | **18 16 57.3** | **-0.5** |
| HHC | | | | sP | **sP** | **18 17 05.8** | **-1.4** |
| HHC | | | | PP | **PnPn** | **18 18 21.0** | **-1.2** |
| HHC | | | | S | **S** | **18 22 51.0** | **+0.9** |
| HHC | | | | PMZ | | | |
| | 17nm,0.7s | | | | | | |
| HHC | | | | PMZ | | | |
| | 170nm,6.3s | | | | | | |
| HHC | | | | LN | | | |
| | 170nm,17.3s | | | | | | |
| HHC | | | | LE | | | |
| | 260nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | 120nm,18.5s | | | | | | |
| **LSA** | **Lhasa** | **43.51** | **315** | *e*P | **P** | **18 16 50.9** | **-0.9** |
| | 3.1nm,0.6s | | | | | | |
| **USRK** | **Usuriysk Ar.** | **43.69** | **7** | P | **P** | **18 16 53.7** | **+1.2** |
| | 2.0nm,0.5s,baz=183,slow=7.4,SNR=14 | | | | | | |
| **MDJ** | **Mudanjiang** | **43.87** | **4** | P | **P** | **18 16 54.4** | **+0.5** |
| **TAPN** | **Taplejung** | **44.81** | **309** | *e*P | **P** | **18 17 02.0** | **-0.1** |
| **ODAN** | **Odare** | **44.81** | **309** | *e*P | **P** | **18 17 00.9** | **-1.2** |
| **RAMN** | **Ramite** | **45.48** | **308** | *e*P | **P** | **18 17 06.3** | **-1.0** |
| **ASAJ** | **Asahikawa** | **45.84** | **17** | P | **P** | **18 17 11.8** | **+2.3** |
| | 3.2nm,0.3s,baz=228,slow=10,SNR=26 | | | | | | |
| **GUN** | **Gumba** | **46.49** | **309** | *e*P | **P** | **18 17 15.4** | **-0.1** |
| **PKI** | **Pulchoki** | **46.70** | **308** | *e*P | **P** | **18 17 16.1** | **-1.0** |
| **PKIN** | **Phulchoki** | **46.71** | **308** | *e*P | **P** | **18 17 15.7** | **-1.4** |
| **KKN** | **Kakani** | **46.91** | **309** | *e*P | **P** | **18 17 17.8** | **-0.7** |
| **DMN** | **Daman** | **46.96** | **308** | *e*P | **P** | **18 17 17.5** | **-1.5** |
| **GKN** | **Gorkha** | **47.51** | **308** | *e*P | **P** | **18 17 22.8** | **-0.3** |
| **KOLN** | **Koldanda** | **48.22** | **308** | *e*P | **P** | **18 17 28.3** | **-0.4** |
| **SONM** | **Songino Array** | **49.74** | **343** | P | **P** | **18 17 39.4** | **-0.5** |
| | 0.4nm,0.4s,baz=158,slow=9.5,SNR=5.1 | | | | | | |
| SONM | | | | PcP | **PcP** | **18 18 59.9** | **+0.2** |
| | 0.5nm,0.7s,baz=70,slow=0.6,SNR=3.8 | | | | | | |
| **SONA1** | **Songino Array** | **49.75** | **343** | *e*P | **P** | **18 17 38.2** | **-1.8** |
| **WMQ** | **Urumqi** | **54.46** | **327** | P | **P** | **18 18 16.0** | **+1.1** |
| **PETK** | **Petropavlovsk-** | **58.70** | **22** | P | **P** | **18 18 45.6** | **+0.9** |
| | 3.9nm,0.6s,baz=186,slow=3.2,SNR=8.2 | | | | | | |
| **KSH** | **Kashi** | **59.27** | **317** | *e*P | **P** | **18 18 51.5** | **+2.4** |
| KSH | | | | *e*pP | **pP** | **18 19 11.0** | **+1.0** |
| KSH | | | | *e*PP | **PP** | **18 21 05.0** | **+4.1** |
| KSH | | | | PcS | **PcS** | **18 23 37.0** | **-1.7** |
| KSH | | | | S | **S** | **18 26 51.5** | **+0.3** |
| KSH | | | | ScS | **ScS** | **18 28 31.0** | **-0.9** |
| KSH | | | | PMZ | | | |
| | 120nm,4.7s | | | | | | |
| KSH | | | | LN | | | |
| | 110nm,5.4s | | | | | | |
| KSH | | | | LE | | | |
| | 120nm,5.5s | | | | | | |
| KSH | | | | LZ | | | |
| | 110nm,5.7s | | | | | | |
| **MK01** | **Makanchi Array** | **59.28** | **327** | *e*P | **P** | **18 18 47.9** | **-0.9** |
| **MKAR** | **Makanchi Array** | **59.30** | **327** | P | **P** | **18 18 48.1** | **-0.9** |
| | 2.3nm,0.3s,baz=123,slow=8.0,SNR=36 | | | | | | |
| MKAR | | | | PcP | **PcP** | **18 19 36.5** | **+0.2** |
| | 1.0nm,0.5s,baz=121,slow=5.0,SNR=3.8 | | | | | | |
| **MAKZ** | **Makanchi** | **59.48** | **327** | *e*P | **P** | **18 18 49.2** | **-1.0** |
| **YAK** | **Yakutsk** | **61.24** | **2** | P | **P** | **18 19 02.0** | **+0.1** |
| | 4.6nm,0.3s,baz=131,slow=0.5,SNR=4.4 | | | | | | |
| **YAK** | **Yakutsk** | **61.24** | **2** | P | **P** | **18 19 02.0** | **+0.1** |
| **AAK** | **Ala-Archa** | **61.72** | **319** | P | **P** | **18 19 04.0** | **-1.8** |
| **EKS2** | **Erkin-Say** | **62.20** | **319** | *e*P | **P** | **18 19 07.3** | **-1.6** |
| **ZAA0** | **Zalesovo Array** | **62.68** | **334** | *e*P | **P** | **18 19 09.5** | **-2.2** |
| **ZALV** | **Zalesovo Beam** | **62.68** | **334** | P | **P** | **18 19 10.1** | **-1.6** |
| | 1.1nm,0.5s,baz=149,slow=5.4,SNR=5.9 | | | | | | |
| **KURK** | **Kurchatov** | **63.58** | **329** | *e*P | **P** | **18 19 16.4** | **-1.3** |
| | 16nm,0.6s | | | | | | |
| **KKAR** | **Karatay Array** | **64.55** | **318** | *e*P | **P** | **18 19 23.4** | **-0.9** |
| **BRVK** | **Borovoye** | **69.20** | **328** | *e*P | **P** | **18 19 52.2** | **-1.4** |
| | 4.1nm,1.1s | | | | | | |
| **ABKAR** | **Akbulak array** | **73.65** | **322** | *e*P | **P** | **18 20 18.8** | **-1.6** |
| **OPA** | **Opana** | **77.27** | **68** | *e*P | **P** | **18 20 40.9** | **-0.8** |
| **VNDA** | **Vanda** | **80.63** | **172** | P | **P** | **18 20 59.4** | **+0.4** |
| | 1.0nm,0.8s,baz=319,slow=6.3,SNR=6.6 | | | | | | |
| **SBA** | **Scott Base** | **81.56** | **172** | P | **P** | **18 21 05.5** | **+1.6** |
| **KMBO** | **Kilima Mbogo** | **88.16** | **269** | P | **P** | **18 21 38.9** | **+0.2** |
| | 2.9nm,0.8s,baz=42,slow=7.8,SNR=10 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **88.16** | **269** | *e*P | **P** | **18 21 38.6** | **0.0** |
| | 3.0nm,0.6s | | | | | | |
| **ILAR** | **Eielson Array** | **88.37** | **25** | P | **P** | **18 21 38.5** | **+0.2** |
| | 0.2nm,0.5s,baz=250,slow=5.0,SNR=4.8 | | | | | | |
| **BRTR** | **Keskin Array B** | **90.90** | **310** | P | **P** | **18 21 49.6** | **-1.3** |
| | 0.5nm,0.7s,baz=159,slow=4.3,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **92.79** | **340** | P | **P** | **18 21 58.2** | **-0.6** |
| | 1.6nm,0.6s,baz=87,slow=4.6,SNR=8.3 | | | | | | |
| ARCES | | | | pP | **pP** | **18 22 17.8** | **-3.3** |
| | 3.6nm,1.0s,baz=82,slow=6.5,SNR=1.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **93.37** | **321** | P | **P** | **18 21 60.0** | **-1.8** |
| | 0.3nm,0.4s,baz=69,slow=4.4,SNR=5.4 | | | | | | |
| **FINES** | **FINESS Array B** | **93.84** | **332** | P | **P** | **18 22 02.6** | **-1.1** |
| | 5.7nm,1.1s,baz=5.7,slow=2.8,SNR=7.0 | | | | | | |
| **BUR04** | **Bucovina Ar. S** | **96.34** | **318** | *e*P | **P** | **18 22 15.1** | **-0.5** |
| **KOLS** | **Kolonicke sedl** | **98.07** | **320** | PDIF | **P** | **18 22 21.2** | **-2.0** |
| **STHS** | **Stebnicka Huta** | **98.64** | **320** | PDIF | Pdif | 18 22 26.2 | +0.4 |
| **TORD** | **Torodi Ar. Bea** | **122.53** | **286** | PKP | **PKPdf** | **18 27 42.9** | **+0.1** |
| | 1.4nm,0.6s,baz=82,slow=1.6,SNR=16 | | | | | | |

*ISCJB **30** 18:42:59.4±0.4,38°.83N±0°.01×27°.74E±0°.02,h4km±3km, mb3.5/1,Error ellipse: s-maj=2.4km s-min=2.2km az=22.4*
*CSEM **30** 18:42:59.7±0.1,38°.82N×27°.75E,h2km,ML3.9,Error ellipse: s-maj=1.7km s-min=1.5km az=65.0*
*DDA **30** 18:42:59.4,38°.81N×27°.85E,h6km,Ml3.9*
*ISK **30** 18:42:59.0,38°.80N×27°.75E,h3km,ML3.7*
*THE **30** 18:43:00.9,38°.80N×27°.75E,h4km±4km,ML3.8/5,Error ellipse: s-maj=5.3km s-min=0.8km az=79.0*
*ATH **30** 18:43:01.7,38°.80N×27°.72E,h45km,MD3.5/11*
*IDC **30** 18:43:02.6±1.4,38°.66N×28°.18E,h0km,mb3.6/1, mb1 3.5/5,mb1mx3.3/39,mbtmp3.4/5,ML3.4/4,MS3.2/1, Ms1 3.2/1,ms1mx2.3/49,Error ellipse: s-maj=24.6km s-min=14.3km az=151.0*
*SOF **30** 18:43:04.3,39°.29N×27°.64E,h2km,MD4.5*
**ISC 30 18:43:00.1**±0.9,**38°.81N**±0°.01×**27°.77E**±0°.01,**h4**km±7km,
**n246,**σ0°89/305,**10C-12D,Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **AKHS** | **Akhisar** | **0.08** | **29** | *i* P | **Pg** | **18 43 01.4** | **-0.4** |
| AKHS | | | | *i* S | **Sg** | **18 43 02.9** | **0.0** |
| **AKHS** | **Akhisar** | **0.08** | **29** | P | **Pg** | **18 43 01.4** | **-0.4** |
| AKHS | | | | S | **Sg** | **18 43 02.9** | **0.0** |
| **AKS** | **Akhisar** | **0.08** | **28** | *e*PG | **Pg** | **18 43 01.3** | **-0.5** |
| **AKS** | **Akhisar** | **0.08** | **28** | *e*Pg | **Pg** | **18 43 01.3** | **-0.5** |
| **IZM** | **Izmir** | **0.57** | **224** | *e*PG | **Pg** | **18 43 10.5** | **-0.6** |
| IZM | | | | *e*SG | **Sg** | **18 43 18.9** | **+0.4** |
| **IZM** | **Izmir** | **0.57** | **224** | *e*Pg | **Pg** | **18 43 10.5** | **-0.6** |
| IZM | | | | *e*Sg | **Sg** | **18 43 18.9** | **+0.4** |
| **DEMI** | **Demirci** | **0.78** | **72** | *i* P | **Pg** | **18 43 13.5** | **-1.5** |
| DEMI | | | | *i* S | **Sb** | **18 43 26.7** | **-0.5** |
| **DEMI** | **Demirci** | **0.78** | **72** | P | **Pg** | **18 43 13.5** | **-1.5** |
| DEMI | | | | S | **Sb** | **18 43 26.7** | **-0.5** |
| **BALB** | **Balikesir** | **0.83** | **6** | *e*PG | **Pg** | **18 43 16.0** | **-0.1** |
| BALB | | | | *e*SG | **Sb** | **18 43 28.5** | **-0.2** |
| **BALB** | **Balikesir** | **0.83** | **6** | *e*Pg | **Pg** | **18 43 16.0** | **-0.1** |
| BALB | | | | *e*Sg | **Sb** | **18 43 28.5** | **-0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.87** | **174** | *e*PG | **Pg** | **18 43 16.2** | **-0.6** |
| AYDB | | | | *e*SG | **Sb** | **18 43 29.0** | **-0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.87** | **174** | *e*Pg | **Pg** | **18 43 16.2** | **-0.6** |
| AYDB | | | | *e*Sg | **Sb** | **18 43 29.0** | **-0.9** |
| **BALY** | **Balya** | **0.93** | **353** | *i* P | **Pg** | **18 43 17.7** | **-0.3** |
| BALY | | | | *i* S | **Sg** | **18 43 31.2** | **+1.0** |
| **BALY** | **Balya** | **0.93** | **353** | P | **Pg** | **18 43 17.7** | **-0.3** |
| BALY | | | | S | **Sg** | **18 43 31.2** | **+1.0** |
| **DURS** | **Dursunbey** | **0.96** | **35** | *i* P | **Pg** | **18 43 17.4** | **-1.1** |
| DURS | | | | *i* S | **Sg** | **18 43 30.8** | **-0.3** |
| **DURS** | **Dursunbey** | **0.96** | **35** | P | **Pg** | **18 43 17.4** | **-1.1** |
| DURS | | | | S | **Sg** | **18 43 30.8** | **-0.3** |
| **AYVA** | **Ayvalik** | **0.97** | **301** | *i* P | **Pb** | **18 43 19.2** | **-0.3** |
| **AYVA** | **Ayvalik** | **0.97** | **301** | P | **Pb** | **18 43 19.2** | **-0.3** |
| AYVA | | | | S | **Sn** | **18 43 35.4** | **+0.6** |
| **URLA** | **Izmir** | **1.02** | **244** | *i* P | **Pg** | **18 43 19.8** | **+0.1** |
| **URLA** | **Izmir** | **1.02** | **244** | P | **Pg** | **18 43 19.8** | **+0.1** |
| URLA | | | | S | **Sn** | **18 43 35.6** | **-0.5** |
| **DST** | **Dursunbey** | **1.03** | **40** | *e*PG | **Pg** | **18 43 19.8** | **-0.1** |
| DST | | | | *e*SG | **Sb** | **18 43 35.1** | **+0.6** |
| **DST** | **Dursunbey** | **1.03** | **40** | *e*Pg | **Pg** | **18 43 19.8** | **-0.1** |
| DST | | | | *e*Sg | **Sb** | **18 43 35.1** | **+0.6** |
| **ZEY** | **˙zmir** | **1.14** | **240** | P | **Pg** | **18 43 21.6** | **-0.4** |
| ZEY | | | | S | **Sn** | **18 43 38.4** | **-0.6** |
| **AYDN** | **Tasoluk** | **1.15** | **176** | *i* P | **Pn** | **18 43 23.1** | **0.0** |
| **AYDN** | **Tasoluk** | **1.15** | **176** | P | **Pn** | **18 43 23.1** | **0.0** |
| AYDN | | | | S | **Sn** | **18 43 41.5** | **+2.1** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **357** | *e*PN | **Pg** | **18 43 23.6** | **-0.2** |
| **GONE** | **Gonen-Balikesi** | **1.23** | **357** | *e*Pn | **Pg** | **18 43 23.6** | **-0.2** |
| **PRK** | **Paraskevi** | **1.24** | **291** | *e*P | **Pg** | **18 43 23.8** | **-0.1** |
| PRK | | | | *e*S | **Sg** | **18 43 39.0** | **-1.1** |
| **PRK** | **Paraskevi** | **1.24** | **291** | P | **Pg** | **18 43 23.8** | **-0.1** |
| PRK | | | | S | **Sn** | **18 43 41.5** | **0.0** |
| **PRK** | **Paraskevi** | **1.24** | **291** | *e*P | **Pg** | **18 43 23.8** | **-0.1** |
| PRK | | | | *e*S | **Sg** | **18 43 39.0** | **-1.1** |
| **SMG** | **Samos** | **1.32** | **214** | *e*P | **Pn** | **18 43 24.5** | **-0.9** |
| SMG | | | | *e*S | **Sg** | **18 43 40.9** | **-1.7** |
| **SMG** | **Samos** | **1.32** | **214** | P | **Pn** | **18 43 24.5** | **-0.9** |
| SMG | | | | S | **Sn** | **18 43 43.1** | **-0.4** |
| **SMG** | **Samos** | **1.32** | **214** | *e*P | **Pn** | **18 43 24.5** | **-0.9** |
| SMG | | | | *e*S | **Sg** | **18 43 40.9** | **-1.7** |
| **CHOS** | **Chios island** | **1.41** | **253** | *e*PN | **Pn** | **18 43 26.2** | **-0.4** |
| CHOS | | | | *e*SN | **Sn** | **18 43 45.9** | **+0.2** |
| **CHOS** | **Chios island** | **1.41** | **253** | *e*P | **Pn** | **18 43 25.9** | **-0.7** |
| CHOS | | | | *e*S | **Sb** | **18 43 42.3** | **-3.0** |
| **CHOS** | **Chios island** | **1.41** | **253** | P | **Pn** | **18 43 25.8** | **-0.8** |
| CHOS | | | | S | **Sb** | **18 43 44.8** | **-0.5** |
| **CHOS** | **Chios island** | **1.41** | **253** | *e*P | **Pn** | **18 43 25.9** | **-0.7** |
| **CHOS** | **Chios island** | **1.41** | **253** | *e*Pn | **Pn** | **18 43 26.2** | **-0.4** |
| CHOS | | | | S | **Sb** | **18 43 44.8** | **-0.5** |
| CHOS | | | | *e*Sn | **Sn** | **18 43 45.9** | **+0.2** |
| **KHAL** | **Karahalli** | **1.42** | **108** | *i* P | **Pn** | **18 43 25.3** | **-1.5** |
| KHAL | | | | *i* S | **Sb** | **18 43 45.8** | **0.0** |
| **KHAL** | **Karahalli** | **1.42** | **108** | P | **Pn** | **18 43 25.3** | **-1.5** |
| KHAL | | | | S | **Sb** | **18 43 45.8** | **0.0** |
| **DENT** | **Denizli** | **1.45** | **136** | *e*PN | **Pn** | **18 43 27.0** | **-0.2** |
| **DENT** | **Denizli** | **1.45** | **136** | *e*Pn | **Pn** | **18 43 27.0** | **-0.2** |
| **KHL** | **Karahalli** | **1.46** | **109** | *e*PN | **Pn** | **18 43 27.2** | **-0.2** |
| **KHL** | **Karahalli** | **1.46** | **109** | *e*Pn | **Pn** | **18 43 27.2** | **-0.2** |
| **TVSB** | **Tavsanli** | **1.46** | **64** | *e*PN | **Pn** | **18 43 26.7** | **-0.8** |
| **TVSB** | **Tavsanli** | **1.46** | **64** | *e*Pn | **Pn** | **18 43 26.7** | **-0.8** |
| **DNZL** | **Cakiroluk** | **1.51** | **138** | *i* P | **Pn** | **18 43 27.3** | **-0.8** |
| DNZL | | | | *i* S | **Sb** | **18 43 48.3** | **0.0** |
| **DNZL** | **Cakiroluk** | **1.51** | **138** | P | **Pn** | **18 43 27.3** | **-0.8** |
| DNZL | | | | S | **Sb** | **18 43 48.3** | **0.0** |
| **EZN** | **Ezine** | **1.51** | **313** | *e*PN | **Pn** | **18 43 27.2** | **-0.8** |
| **EZN** | **Ezine** | **1.51** | **313** | *e*Pn | **Pn** | **18 43 27.2** | **-0.8** |
| **ORLT** | **Orhaneli** | **1.51** | **35** | *e*PN | **Pn** | **18 43 28.0** | **0.0** |
| **ORLT** | **Orhaneli** | **1.51** | **35** | *e*Pn | **Pn** | **18 43 28.0** | **0.0** |
| **EDC** | **Edincik** | **1.54** | **3** | *e*PN | **Pn** | **18 43 27.3** | **-1.0** |
| **EDC** | **Edincik** | **1.54** | **3** | *e*Pn | **Pn** | **18 43 27.3** | **-1.0** |
| **SIGR** | **SIGRI** | **1.54** | **286** | *e*PN | **Pn** | **18 43 28.4** | **0.0** |
| **SIGR** | **SIGRI** | **1.54** | **286** | *e*P | **Pn** | **18 43 27.5** | **-0.8** |
| **SIGR** | **SIGRI** | **1.54** | **286** | P | **Pn** | **18 43 27.6** | **-0.8** |
| SIGR | | | | S | **Sb** | **18 43 49.0** | **-0.1** |
| **SIGR** | **SIGRI** | **1.54** | **286** | P | **Pn** | **18 43 27.6** | **-0.8** |
| **SIGR** | **SIGRI** | **1.54** | **286** | *e*Pn | **Pn** | **18 43 28.4** | **0.0** |
| SIGR | | | | S | **Sb** | **18 43 49.0** | **-0.1** |
| **BNT** | **Bandirma** | **1.55** | **4** | *e*PN | **Pn** | **18 43 28.4** | **-0.1** |
| **BNT** | **Bandirma** | **1.55** | **4** | *e*Pn | **Pn** | **18 43 28.4** | **-0.1** |
| **BOZC** | **Bozcaada** | **1.68** | **308** | P | **Pg** | **18 43 32.3** | **0.0** |
| BOZC | | | | P | **Pg** | **18 43 32.3** | **0.0** |
| BOZC | | | | S | **Sb** | **18 43 52.9** | **-0.3** |
| BOZC | | | | S | **Sb** | **18 43 52.9** | **-0.3** |
| BOZC | | | | S | **Sg** | **18 43 55.6** | **+1.4** |
| BOZC | | | | S | **Sg** | **18 43 55.6** | **+1.4** |
| **ULDT** | **Uludag** | **1.70** | **38** | *i* P | **Pn** | **18 43 30.7** | **-0.1** |
| ULDT | | | | *i* S | **Sn** | **18 43 53.2** | **+0.1** |
| **ULDT** | **Uludag** | **1.70** | **38** | P | **Pn** | **18 43 30.7** | **-0.1** |
| ULDT | | | | S | **Sn** | **18 43 53.2** | **+0.1** |
| **YER** | **Yerkesik** | **1.72** | **166** | *e*PN | **Pn** | **18 43 30.6** | **-0.3** |
| **YER** | **Yerkesik** | **1.72** | **166** | *e*Pn | **Pn** | **18 43 30.6** | **-0.3** |
| **BDRM** | **Kayabasi** | **1.76** | **188** | *i* P | **Pb** | **18 43 32.6** | **-0.4** |
| BDRM | | | | *i* S | **Sb** | **18 43 55.8** | **+0.3** |
| **BDRM** | **Kayabasi** | **1.76** | **188** | P | **Pb** | **18 43 32.6** | **-0.4** |
| BDRM | | | | S | **Sb** | **18 43 55.8** | **+0.3** |
| **MDNY** | **Mudanya-Bursa** | **1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| OUR | Ouranopolis | 3.30 | 299 | *e*P | Pn | 18 43 52.0 | -0.5 |
| KDZ | Kurdzhali | 3.36 | 328 | *i* P | Pn | 18 43 53.2 | -0.2 |
| KDZ | Kurdzhali | 3.36 | 328 | *i* P | Pn | 18 43 53.2 | -0.2 |
| PAIG | Paliouri | 3.36 | 291 | *e*P | Pn | 18 43 53.5 | +0.1 |
| PAIG | Paliouri | 3.36 | 291 | *e*P | Pn | 18 43 53.5 | +0.1 |
| XOR | Xorichti | 3.60 | 280 | *e*P | Pn | 18 43 56.6 | -0.2 |
| XOR | Xorichti | 3.60 | 280 | *e*P | Pn | 18 43 56.6 | -0.2 |
| DIM | Dimitrovgrad | 3.66 | 333 | P | Pn | 18 43 57.1 | -0.4 |
| DIM | Dimitrovgrad | 3.66 | 333 | P | Pn | 18 43 57.1 | -0.4 |
| PLG | Polygyros | 3.69 | 296 | *e*P | Pn | 18 43 57.0 | -0.9 |
| PLG | Polygyros | 3.69 | 296 | *e*P | Pn | 18 43 57.0 | -0.9 |
| RZN | Rozhen | 3.70 | 322 | *i* P | Pn | 18 43 58.1 | -0.2 |
| RZN | Rozhen | 3.70 | 322 | *i* P | Pn | 18 43 58.1 | -0.2 |
| KONT | Konya--Tatoy | 3.71 | 102 | *e*PN | Pn | 18 43 59.2 | +0.9 |
| KONT | Konya--Tatoy | 3.71 | 102 | *e*Pn | Pn | 18 43 59.2 | +0.9 |
| JMB | Yambol | 3.76 | 347 | *e*P | Pn | 18 44 02.1 | +3.2 |
| JMB | Yambol | 3.76 | 347 | *e*P | Pn | 18 44 02.1 | +3.2 |
| BCAM | Yenicaga | 3.87 | 57 | P | Pb | 18 44 11.6 | +2.6 |
| NVR | Nevrokopi | 3.92 | 311 | *e*P | Pn | 18 44 01.0 | -0.2 |
| NVR | Nevrokopi | 3.92 | 311 | P | Pn | 18 44 01.0 | -0.2 |
| NVR | Nevrokopi | 3.92 | 311 | *e*P | Pn | 18 44 01.0 | -0.2 |
| SRS | Serrai | 3.95 | 307 | *e*P | Pn | 18 44 01.1 | -0.4 |
| SRS | Serrai | 3.95 | 307 | *e*P | Pn | 18 44 01.1 | -0.4 |
| HORT | Hortiatis | 4.02 | 298 | *e*P | Pn | 18 44 02.5 | 0.0 |
| HORT | Hortiatis | 4.02 | 298 | *e*P | Pn | 18 44 02.5 | 0.0 |
| PLD | Plovdiv | 4.04 | 326 | P | Pn | 18 44 02.9 | +0.2 |
| PLD | Plovdiv | 4.04 | 326 | P | Pn | 18 44 02.9 | +0.2 |
| MMB | Musomiste | 4.16 | 313 | P | Pn | 18 44 03.4 | -1.0 |
| MMB | Musomiste | 4.16 | 313 | P | Pn | 18 44 03.4 | -1.0 |
| IDI | Anoyia | 4.20 | 214 | Pn | Pn | 18 44 07.3 | +2.2 |
| | 0.7nm,0.3s,baz=59,slow=14,SNR=4.7 | | | | | | |
| IDI | | | | Pg | Pg | 18 44 22.1 | +1.5 |
| | 1.1nm,0.3s,baz=10.0,slow=17,SNR=4.9 | | | | | | |
| IDI | | | | Lg | Lg | 18 45 19.9 | |
| | 1.8nm,0.3s,baz=131,slow=22,SNR=4.2 | | | | | | |
| PGB | Panagyurishte | 4.63 | 325 | P | Pn | 18 44 10.0 | -0.9 |
| PGB | Panagyurishte | 4.63 | 325 | P | Pn | 18 44 10.0 | -0.9 |
| BRTR | Keskin Array B | 4.65 | 77 | Pn | Pn | 18 44 10.7 | -0.6 |
| | 1.6nm,0.3s,baz=253,slow=14,SNR=28 | | | | | | |
| BRTR | | | | Pg | Pb | 18 44 24.3 | +2.0 |
| | 1.1nm,0.3s,baz=260,slow=19,SNR=15 | | | | | | |
| BRTR | | | | Lg | Lg | 18 45 25.1 | |
| | baz=266,slow=20,SNR=2.5 | | | | | | |
| SZH | Strazhica | 4.66 | 343 | P | Pn | 18 44 10.3 | -1.0 |
| SZH | Strazhica | 4.66 | 343 | P | Pn | 18 44 10.3 | -1.0 |
| KKB | Krupnik | 4.70 | 312 | P | Pn | 18 44 11.6 | -0.3 |
| KKB | Krupnik | 4.70 | 312 | P | Pn | 18 44 11.6 | -0.3 |
| PSN | Preselentsi | 4.88 | 4 | P | Pn | 18 44 12.6 | -1.6 |
| PSN | Preselentsi | 4.88 | 4 | P | Pn | 18 44 12.6 | -1.6 |
| VTS | Vitosha | 5.12 | 319 | *i* P | Pn | 18 44 18.2 | +0.4 |
| VTS | Vitosha | 5.12 | 319 | *i* P | Pn | 18 44 18.2 | +0.4 |
| MSAB | Monastry St. A | 5.28 | 0 | ⇑*i* P | Pn | 18 44 18.8 | -0.9 |
| MSAB | Monastry St. A | 5.28 | 0 | S | Sn | 18 45 16.2 | -4.7 |
| MSAB | Monastry St. A | 5.28 | 0 | ⇑*i* P | Pn | 18 44 18.8 | -0.9 |
| MSAB | | | | S | Sn | 18 45 16.2 | -4.7 |
| MPEP | Malo Peshtene | 5.46 | 327 | P | Pn | 18 44 22.3 | 0.0 |
| TIRR | Tirgusor | 5.66 | 5 | ⇓*i* P | Pn | 18 44 23.8 | -1.2 |
| TIRR | Tirgusor | 5.66 | 5 | ⇓*i* P | Pn | 18 44 23.8 | -1.2 |
| CFR | Carcaliu | 6.37 | 2 | ⇑*i* P | Pn | 18 44 33.5 | -1.2 |
| CFR | Carcaliu | 6.37 | 2 | ⇑*i* P | Pn | 18 44 33.5 | -1.2 |
| BOVS | Bovan | 6.64 | 318 | *e*Pn | Pn | 18 44 38.7 | +0.3 |
| BOLS | Boljevac | 6.65 | 321 | *e*Pn | Pn | 18 44 37.4 | -1.2 |
| SELS | Selova | 6.68 | 313 | *e*Pn | Pn | 18 44 38.8 | -0.3 |
| MLR | Muntele Rosu | 6.81 | 349 | Pn | Pn | 18 44 41.6 | +0.6 |
| | 0.0nm,0.3s,baz=239,slow=11,SNR=7.6 | | | | | | |
| MLR | | | | Lg | Lg | 18 46 45.9 | |
| | 0.1nm,0.3s,baz=346,slow=21,SNR=3.9 | | | | | | |
| MLR | Muntele Rosu | 6.81 | 349 | ⇓*i* P | Pn | 18 44 39.9 | -1.0 |
| MLR | Muntele Rosu | 6.81 | 349 | ⇓*i* P | Pn | 18 44 39.9 | -1.0 |
| VOIR | | 6.92 | 344 | ⇓*i* P | Pn | 18 44 42.1 | -0.3 |
| VOIR | | 6.92 | 344 | ⇓*i* P | Pn | 18 44 42.1 | -0.3 |
| VRI | Vrincioaia | 7.09 | 354 | ⇑*i* P | Pn | 18 44 44.2 | -0.5 |
| VRI | Vrincioaia | 7.09 | 354 | ⇑*i* P | Pn | 18 44 44.2 | -0.5 |
| KUBS | Kucevo | 7.22 | 323 | *e*Pn | Pn | 18 44 45.1 | -1.3 |
| GRUS | Gruza | 7.34 | 316 | *e*Pn | Pn | 18 44 48.1 | +0.1 |
| PDG | Podgorica | 7.41 | 302 | ⇓*i* P | Pn | 18 44 52.1 | +3.0 |
| IVAS | Ivanjica | 7.46 | 312 | *e*Pn | Pn | 18 44 48.0 | -1.7 |
| GZR | Gura Zlata | 7.55 | 332 | ⇓*i* P | Pn | 18 44 50.0 | -1.0 |
| GZR | Gura Zlata | 7.55 | 332 | ⇓*i* P | Pn | 18 44 50.0 | -1.0 |
| TESR | Tescani | 7.74 | 354 | ⇓*i* P | Pn | 18 44 53.4 | -0.2 |
| TESR | Tescani | 7.74 | 354 | ⇓*i* P | Pn | 18 44 53.4 | -0.2 |
| BZS | Buzias | 8.19 | 328 | ⇑*i* P | Pn | 18 44 58.4 | -1.3 |
| BZS | Buzias | 8.19 | 328 | S | Sn | 18 46 31.8 | -0.8 |
| BZS | Buzias | 8.19 | 328 | ⇑*i* P | Pn | 18 44 58.4 | -1.3 |
| BZS | Buzias | 8.19 | 328 | *e*Pn | Pn | 18 44 59.0 | -0.7 |
| BZS | | | | S | Sn | 18 46 31.8 | -0.8 |
| MMAI | Mount Meron Ar | 8.47 | 131 | Pn | Pn | 18 45 01.8 | -1.9 |
| | 1.3nm,0.3s,baz=319,slow=11,SNR=6.0 | | | | | | |
| BURAR | Bucovina Array | 8.99 | 349 | ⇑*i* P | Pn | 18 45 09.8 | -1.0 |
| BURAR | Bucovina Array | 8.99 | 349 | ⇑*i* P | Pn | 18 45 09.8 | -1.0 |
| GERES | GERESS Array B | 14.25 | 319 | Pn | P | 18 46 31.6 | +1.4 |
| | 0.1nm,0.3s,baz=125,slow=12,SNR=5.0 | | | | | | |
| DAVOX | Davos/Dischmat | 15.33 | 307 | LR | LR | 18 53 20.6 | |
| | comp=Z,78nm,18.2s,baz=86,slow=39 | | | | | | |
| MKAR | Makanchi Array | 40.09 | 60 | P | P | 18 50 37.3 | +0.7 |
| | 0.8nm,0.7s,baz=288,slow=5.7,SNR=8.0 | | | | | | |

**MEX 30 18:43:37.9±0.7, 16°.88N×95°.12W, h70$^{km}$±29$^{km}$, MD4.0, Oaxaca**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| HUIG | Huatulco | 1.46 | 221 | *e*P | Pn | 18 44 00.3 | -2.0 |
| HUIG | | | | *e*S | Sn | 18 44 19.3 | -1.4 |
| TGIG | | 1.91 | 93 | *e*P | Pn | 18 44 07.8 | -0.6 |
| TGIG | | | | *e*S | Sn | 18 44 29.6 | -2.1 |
| PCIG | | 2.17 | 122 | *e*P | Pn | 18 44 10.3 | -1.5 |
| PCIG | | | | *i* S | Sn | 18 44 35.9 | -1.7 |
| CCIG | Comitan | 2.92 | 101 | *e*P | Pn | 18 44 21.2 | -1.0 |
| CCIG | | | | *e*S | Sn | 18 44 55.3 | -1.1 |
| PNIG | Pinotepa | 2.93 | 261 | *e*P | Pn | 18 44 21.2 | -1.0 |
| PNIG | | | | *e*S | Sn | 18 44 54.5 | -1.7 |

*NIED* ***30*** *19:06:00,34°.40N×141°.50E,h8$^{km}$,Mw5.0 Best double couple: M$_0$3.80000×10$^{16}$ NP1:$\phi_s$150.00000°,δ45.00000°, λ58.00000°. NP2:$\phi_s$11.00000°,δ53.00000°,λ118.00000°.*

*BJI* ***30*** *19:06:13.6,34°.45N×141°.75E,h31$^{km}$,mb4.8/67,mB5.0/52, Ms5.0/72,Ms7 4.8/70*

*IDC* ***30*** *19:06:13.4±0.4,34°.38N×141°.43E,h0$^{km}$,mb4.8/33, mb1 4.9/34,mb1mx4.8/43,mbtmp4.8/34,ML2.9/1,MS4.5/32, Ms1 4.5/32,ms1mx4.4/40,Error ellipse: s-maj=14.1km s-min=9.5km az=113.0*

*MOS* ***30*** *19:06:15.4±1.0,34°.40N×141°.35E,h19$^{km}$,mb5.1/67, MS4.9/32,Error ellipse: s-maj=7.1km s-min=4.4km az=120.0*

*ISCJB* ***30*** *19:06:15.7±0.7,34°.30N±0°.03×141°.39E±0°.02,h25$^{km}$±4$^{km}$, mb4.9/135,MS4.8/52,Error ellipse: s-maj=4.4km s-min=2.8km az=164.4*

*JMA* ***30*** *19:06:16.0±0.2,34°.39N×141°.47E,h33$^{km}$±1$^{km}$,M4.5*

*GCMT* ***30*** *19:06:17.9±0.2,34°.33N×141°.43E,h16$^{km}$,MW5.2/86, Moment Tensor Solution. s32,c41; s86,c137; Duration: 0 Moment tensor: Scale 10$^{16}$Nm; M$_{rr}$5.73±.29; M$_{\theta\theta}$0.28±.18; M$_{\phi\phi}$-6.01±.20; M$_{r\theta}$2.37±.61; M$_{\theta\phi}$1.72±.12; M$_{\phi r}$1.87±.49; Best double couple: M$_0$6.81400×10$^{16}$ NP1:$\phi_s$8.00000°,δ55.00000°,λ119.00000°. NP2: $\phi_s$144.00000°,δ44.00000°,λ55.00000°. Principal axes: T 7.0450, Plg66.0000°, Azm334.0000°; N -0.4630, Plg23.0000°, Azm171.0000°; P -6.5830, Plg6.0000°, Azm78.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC* ***30*** *19:06:17.9±1.7,34°.32N×141°.27E,h26$^{km}$±11$^{km}$,mb5.1/48, MW5.0(NIED) Error ellipse: s-maj=4.8km s-min=3.4km az=133.0*

**ISC 30 19:06:18.6±0.4, 34°.38N±0°.03×141°.40E±0°.03, h34$^{km}$, h34$^{km}$:pP-P,n630,σ1$^s$38/661,mb5.0/148,MS4.9/52, 36C-25D,Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| BSO1 | Boso 1 | 0.44 | 308 | ⇓P | Pb | 19 06 26.1 | -1.8 |
| BSO3 | Boso 3 | 0.84 | 300 | ⇓P | Pn | 19 06 32.8 | -1.0 |
| BSO4 | Boso 4 | 1.06 | 305 | P | Pn | 19 06 36.3 | -0.7 |
| KTR | Katsuura | 1.17 | 311 | P | Pn | 19 06 37.5 | -1.1 |
| KTR | | | | S | Sn | 19 06 52.6 | -0.8 |
| CHOJ | Chosi | 1.39 | 342 | P | Pn | 19 06 40.3 | -1.3 |
| CHOJ | | | | S | Sn | 19 06 57.8 | -0.9 |
| JIM2 | Oshima 3 | 1.66 | 282 | P | Pn | 19 06 44.4 | -0.9 |
| JIM2 | | | | S | Sn | 19 07 06.3 | +0.9 |
| JHJ2 | Mitsune | 1.83 | 227 | P | Pn | 19 06 47.8 | +0.2 |
| JHJ2 | | | | S | Sn | 19 07 07.9 | -1.7 |
| JHJ2 | Mitsune | 1.83 | 227 | *e*Pn | Pn | 19 06 47.9 | +0.3 |
| JHJ | Hachijo jima 2 | 1.84 | 227 | Pn | Pn | 19 06 48.0 | +0.2 |
| | 350nm,0.3s,baz=351,slow=23,SNR=24 | | | | | | |
| JHJ | | | | Sn | Sb | 19 07 12.6 | -1.9 |
| | 797nm,0.3s,baz=55,slow=23,SNR=26 | | | | | | |
| JKO | Kozu shima | 1.88 | 265 | P | Pn | 19 06 47.9 | -0.5 |
| MJAR | Matsushiro Arr | 3.38 | 310 | Pn | Pn | 19 07 10.1 | +1.1 |
| | 60nm,0.3s,baz=224,slow=50,SNR=447 | | | | | | |
| MJAR | | | | LR | LR | 19 08 47.3 | |
| | comp=Z,6μm,19.9s,baz=130,slow=46 | | | | | | |
| MJAR | Matsushiro Arr | 3.38 | 310 | P | Pn | 19 07 10.1 | +1.1 |
| MJAR | | | | pmax | pmax | | |
| | comp=Z,60nm,0.3s | | | | | | |
| MJAR | | | | MLR | MLR | | |
| | comp=Z,6μm,19.9s | | | | | | |
| MAJO | Matsushiro | 3.38 | 310 | *c i*P | Pn | 19 07 09.9 | +0.9 |
| MAJO | Matsushiro | 3.38 | 310 | *e*Pn | Pn | 19 07 09.8 | +0.9 |
| MAT | Matsushiro | 3.38 | 310 | P | Pn | 19 07 09.1 | +0.1 |
| MAT | | | | S | Sn | 19 07 52.4 | +4.5 |
| CBIJ | Chichi jima | 7.30 | 174 | *e*Pn | Pn | 19 08 01.0 | -1.8 |
| | comp=Z,125nm,0.3s | | | | | | |
| CBIJ | | | | *e*Sn | Sn | 19 09 11.4 | -13 |
| ERM | Erimo | 7.74 | 10 | *e*P | Pn | 19 08 04.1 | -4.7 |
| ERM | | | | *e* | | 19 09 28.3 | |
| ERM | Erimo | 7.74 | 10 | Pn | Pn | 19 08 04.2 | -4.7 |
| | comp=Z,939nm,0.8s,SNR=34 | | | | | | |
| ERM | Erimo | 7.74 | 10 | *e*Pn | Pn | 19 08 04.1 | -4.7 |
| ERM | | | | *e*Sn | Sn | 19 09 28.2 | -7.1 |
| JNU | Nakatsue | 8.85 | 265 | Pn | Pn | 19 08 26.3 | +2.1 |
| | comp=Z,1.9nm,0.3s,baz=5.1,slow=0.3,SNR=21 | | | | | | |
| JNU | | | | LR | LR | 19 11 53.5 | |
| | comp=Z,3μm,20.8s,baz=90,slow=38 | | | | | | |
| JNU | Nakatsue | 8.85 | 265 | *e*Pn | Pn | 19 08 27.1 | +2.9 |
| ASAJ | Asahikawa | 9.76 | 5 | Pn | Pn | 19 08 32.9 | -3.7 |
| | comp=Z,11nm,0.3s,baz=215,slow=12,SNR=110 | | | | | | |
| ASAJ | | | | Sn | Sn | 19 10 20.1 | -4.8 |
| | comp=Z,1.5nm,0.3s,baz=24,slow=16,SNR=3.9 | | | | | | |
| ASAJ | Asahikawa | 9.76 | 5 | P | Pn | 19 08 32.9 | -3.7 |
| ASAJ | | | | | | 19 10 20.2 | |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,11nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | |
| ASAJ | Asahikawa | 9.76 | 5 | *e*Pn | Pn | 19 08 32.1 | -4.4 |
| ASAJ | | | | *e*Sn | Sn | 19 10 09.0 | -16 |
| ASAJ | | | | Sn | Sn | 19 10 20.1 | -4.8 |
| YUK | Yuzh-Kuril'sk | 10.24 | 18 | *c i*P | Pn | 19 08 39.4 | -3.6 |
| YUK | | | | pmax | pmax | | |
| | comp=Z,249nm,2.2s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=N,28nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,35nm,0.5s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,69nm,0.5s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=Z,917nm,13.0s | | | | | | |
| YUK | | | | MLR | MLR | | |
| | comp=E,2μm,13.0s | | | | | | |
| SHO | Shikotan | 10.37 | 22 | *d i*P | Pn | 19 08 40.2 | -4.6 |
| SHO | | | | pmax | pmax | | |
| | comp=N,19nm,0.8s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=E,15nm,0.8s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,37nm,0.8s | | | | | | |
| SHO | | | | pmax | pmax | | |
| | comp=Z,6μm,4.8s | | | | | | |
| SHO | | | | MLR | MLR | | |
| | comp=N,54μm,15.0s | | | | | | |
| SHO | | | | MLR | MLR | | |
| | comp=Z,39μm,15.0s | | | | | | |
| SHO | | | | MLR | MLR | | |
| | comp=E,82μm,15.0s | | | | | | |
| KSRS | Korea Array | 11.35 | 290 | Pn | Pn | 19 09 01.4 | +3.1 |
| | comp=E,0.4nm,0.3s,baz=104,slow=14,SNR=27 | | | | | | |
| KSRS | | | | LR | LR | 19 13 56.0 | |
| | comp=E,3μm,18.9s,baz=100,slow=41 | | | | | | |
| KS01 | Wonju Array Si | 11.38 | 290 | *e*Pn | Pn | 19 09 00.2 | +1.5 |
| KSAR | Wonju Array Be | 11.38 | 289 | P | Pn | 19 09 01.4 | +2.7 |
| KSAR | Wonju Array Be | 11.38 | 289 | Pn | Pn | 19 09 01.4 | +2.7 |
| VLA | Vladivostok | 11.45 | 322 | *ce*P | Pn | 19 09 00.3 | +0.7 |
| MSHR | Mys Shultsa | 11.46 | 319 | ⇑*e*P | Pn | 19 08 59.9 | +0.2 |
| TJN | Taejon | 11.63 | 284 | ⇓*e*P | Pn | 19 09 04.9 | +2.8 |
| KUR | Kuril'sk | 11.92 | 23 | *i* P | Pn | 19 09 04.0 | -2.0 |
| KUR | | | | pmax | pmax | | |
| | comp=Z,26nm,0.8s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=N,13nm,0.4s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,9.0nm,0.8s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=N,826nm,11.0s | | | | | | |
| KUR | | | | MLR | MLR | | |
| | comp=Z,941nm,11.0s | | | | | | |
| USRK | Ussuriysk Ar. | 12.21 | 326 | Pn | Pn | 19 09 09.2 | -0.8 |
| | comp=Z,0.6nm,0.3s,baz=135,slow=12,SNR=67 | | | | | | |
| USRK | | | | LR | LR | 19 14 03.0 | |
| | comp=Z,3μm,19.1s,baz=135,slow=38 | | | | | | |
| YSS | Yuzh-Sakhalins | 12.60 | 4 | ⇑*i* P | Pn | 19 09 11.4 | -3.9 |
| YSS | | | | pmax | pmax | | |
| | comp=Z,110nm,0.9s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=N,2μm,14.0s | | | | | | |
| YSS | | | | MLR | MLR | | |
| | comp=Z,2μm,14.0s | | | | | | |
| MDJ | Mudanjiang | 13.68 | 322 | P | Pn | 19 09 29.5 | -0.6 |
| MDJ | | | | S | Sn | 19 11 58.0 | -2.7 |
| MDJ | | | | PcP | PcP | 19 14 55.3 | +1.8 |
| MDJ | | | | ScP | ScP | 19 18 22.3 | -2.0 |
| MDJ | | | | ScS | ScS | 19 21 59.0 | -2.2 |
| MDJ | | | | PMZ | | | |
| | comp=Z,14nm,0.8s | | | | | | |
| MDJ | | | | PMZ | | | |
| | comp=Z,280nm,7.4s | | | | | | |
| MDJ | | | | LN | | | |
| | comp=Z,3μm,19.0s | | | | | | |
| MDJ | | | | LE | | | |
| | comp=Z,3μm,16.9s | | | | | | |
| MDJ | | | | LZ | | | |
| | comp=Z,3μm,12.9s | | | | | | |
| MDJ | Mudanjiang | 13.68 | 322 | *e*Pn | Pn | 19 09 28.2 | -1.9 |
| | comp=Z,12nm,0.6s | | | | | | |
| HABR | Khabarovsk | 14.85 | 343 | *ce*P | Pn | 19 09 42.6 | -3.4 |
| HABR | | | | pmax | pmax | | |
| | comp=Z,20nm,2.0s | | | | | | |
| CN2 | Changchun | 15.53 | 312 | *e*P | Pn | 19 09 56.0 | +1.1 |
| CN2 | | | | PMZ | | | |
| | comp=Z,10.0nm,0.6s | | | | | | |
| CN2 | | | | PMZ | | | |
| | comp=Z,340nm,5.0s | | | | | | |
| CN2 | | | | LN | | | |
| | comp=Z,4μm,18.0s | | | | | | |
| CN2 | | | | LE | | | |
| | comp=Z,3μm,18.0s | | | | | | |
| CN2 | | | | LZ | | | |
| | comp=Z,3μm,19.0s | | | | | | |
| SNY | Shenyang | 15.86 | 303 | ⇓P | P | 19 10 01.0 | -1.6 |
| SNY | | | | S | Sn | 19 12 58.8 | +5.0 |
| SNY | | | | PMZ | | | |
| | comp=Z,14nm,0.6s | | | | | | |
| SNY | | | | PMZ | | | |
| | comp=Z,450nm,8.3s | | | | | | |
| SNY | | | | LN | | | |
| | comp=Z,2μm,13.9s | | | | | | |
| SNY | | | | LE | | | |
| | comp=Z,2μm,17.6s | | | | | | |
| SNY | | | | LZ | | | |
| | comp=Z,2μm,17.6s | | | | | | |
| KLR | Kul'dur | 16.46 | 337 | *e*P | Pn | 19 10 01.8 | -5.1 |
| DL2 | Dalian | 16.49 | 292 | P | P | 19 10 09.8 | +0.2 |
| DL2 | | | | S | Sn | 19 13 14.0 | +4.8 |
| DL2 | | | | PMZ | | | |
| | comp=Z,34nm,0.6s | | | | | | |
| DL2 | | | | PMZ | | | |
| | comp=Z,340nm,7.0s | | | | | | |
| DL2 | | | | LN | | | |
| | comp=Z,1μm,12.4s | | | | | | |
| DL2 | | | | LE | | | |
| | comp=Z,2μm,14.1s | | | | | | |
| DL2 | | | | LZ | | | |
| | comp=Z,3μm,13.8s | | | | | | |
| TYV | Tymovskoe | 16.50 | 3 | *e*P | Pn | 19 10 06.0 | -1.2 |
| TYV | | | | pmax | pmax | | |
| | comp=N,20nm,0.8s | | | | | | |
| TYV | | | | MLR | MLR | | |
| | comp=Z,3μm,14.0s | | | | | | |
| TYV | | | | MLR | MLR | | |
| | comp=E,3μm,16.0s | | | | | | |
| SSE | Sheshan | 17.32 | 265 | P | Pn | 19 10 17.3 | -0.4 |
| SSE | | | | S | Sn | 19 13 26.5 | -2.8 |
| SSE | | | | PMZ | | | |
| | comp=E,57nm,0.7s | | | | | | |
| SSE | | | | PMZ | | | |
| | comp=E,320nm,7.0s | | | | | | |
| SSE | | | | LN | | | |
| | comp=E,1μm,15.0s | | | | | | |
| SSE | | | | LE | | | |
| | comp=E,4μm,14.7s | | | | | | |
| SSE | | | | LZ | | | |
| | comp=E,6μm,15.3s | | | | | | |
| NJ2 | Nanjing | 19.00 | 269 | *e*P | Pn | 19 10 38.0 | -0.3 |
| NJ2 | | | | S | Sn | 19 14 09.3 | -0.8 |
| NJ2 | | | | PMZ | | | |
| | comp=E,30nm,0.7s | | | | | | |
| NJ2 | | | | LN | | | |
| | comp=E,2μm,18.8s | | | | | | |
| NJ2 | | | | LE | | | |
| | comp=E,2μm,17.2s | | | | | | |
| NJ2 | | | | LZ | | | |
| | comp=E,2μm,16.4s | | | | | | |
| TIA | Tai'an | 19.89 | 282 | ⇑P | Pn | 19 10 51.3 | +2.4 |
| TIA | | | | PMZ | | | |
| | comp=E,10.0nm,0.6s | | | | | | |
| TIA | | | | PMZ | | | |
| | comp=E,440nm,9.8s | | | | | | |
| TIA | | | | LN | | | |
| | comp=E,3μm,14.3s | | | | | | |
| TIA | | | | LE | | | |
| | comp=E,4μm,14.3s | | | | | | |
| TIA | | | | LZ | | | |
| | comp=E,4μm,16.7s | | | | | | |
| YHNB | Yeheng | 19.90 | 246 | *e*P | P | 19 10 46.0 | -1.3 |
| NACB | Ninganchiao | 20.02 | 245 | *e*P | P | 19 10 45.3 | -3.2 |
| SSLB | Suanglung | 20.72 | 245 | *e*P | P | 19 10 54.7 | -1.4 |
| | comp=E,493nm,2.9s | | | | | | |
| BJI | Beijing | 20.84 | 293 | P | P | 19 10 57.0 | -0.3 |
| BJI | | | | pP | pP | 19 11 05.5 | -0.8 |
| BJI | | | | sP | sP | 19 11 09.5 | -1.1 |
| BJI | | | | S | S | 19 14 46.0 | -1.8 |
| BJI | | | | PMZ | | | |
| | comp=E,10.0nm,0.8s | | | | | | |
| BJI | | | | LN | | | |
| | comp=E,2μm,15.8s | | | | | | |
| BJI | | | | LE | | | |
| | comp=E,2μm,14.8s | | | | | | |
| BJI | | | | LZ | | | |
| | comp=E,1μm,27.1s | | | | | | |
| BJT | Baijiatuau | 20.84 | 293 | P | P | 19 10 53.2 | -4.1 |
| BJT | Baijiatuau | 20.84 | 293 | P | P | 19 10 53.2 | -4.1 |
| TPUB | Ta-pu | 21.24 | 244 | *e*P | P | 19 11 00.6 | -1.2 |
| | comp=E,258nm,2.1s | | | | | | |
| HIA | Hailar | 21.84 | 319 | *e*P | P | 19 11 05.1 | -2.9 |
| HIA | | | | pmax | pmax | | |
| | comp=Z,14nm,0.6s | | | | | | |
| HIA | Hailar | 21.84 | 319 | *e*P | P | 19 11 05.1 | -2.9 |
| | comp=Z,14nm,0.6s | | | | | | |
| PETK | Petropavlovsk- | 22.02 | 27 | P | P | 19 11 09.1 | -0.8 |
| | comp=Z,9.4nm,0.8s,baz=208,slow=7.1,SNR=9.4 | | | | | | |
| PETK | | | | LR | LR | 19 23 17.4 | |
| | comp=Z,409nm,18.1s,baz=212,slow=46 | | | | | | |
| PETK | Petropavlovsk- | 22.02 | 27 | P | P | 19 11 09.1 | -0.8 |
| PETK | | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.8s | | | | | | |
| PETK | | | | MLR | MLR | | |
| | comp=Z,409nm,18.1s | | | | | | |
| PET | Petropavlovsk | 22.32 | 28 | *e*P | P | 19 11 19.1 | +6.1 |
| PET | | | | *e*S | S | 19 15 16.2 | 0.0 |
| PET | | | | pmax | pmax | | |
| | comp=Z,200nm,17.7s | | | | | | |
| PET | | | | MLR | MLR | | |
| | comp=Z,1μm,18.0s | | | | | | |
| WHN | Wuhan | 23.11 | 268 | ⇑P | P | 19 11 21.5 | -0.1 |
| WHN | | | | S | S | 19 15 25.5 | -5.1 |
| WHN | | | | LN | | | |
| | comp=Z,6μm,16.2s | | | | | | |
| WHN | | | | LE | | | |
| | comp=Z,6μm,20.0s | | | | | | |
| WHN | | | | LZ | | | |
| | comp=Z,8μm,16.3s | | | | | | |
| HHC | Hu-ho-hao-te | 24.43 | 294 | *e*P | P | 19 11 34.5 | +0.4 |
| HHC | | | | pP | pP | 19 11 43.5 | -0.4 |
| HHC | | | | sP | sP | 19 11 48.5 | +0.5 |
| HHC | | | | PP | PnPn | 19 12 10.8 | +5.5 |
| HHC | | | | S | S | 19 15 49.0 | -2.8 |
| HHC | | | | sS | sS | 19 16 06.8 | -1.0 |
| HHC | | | | PMZ | | | |
| | comp=Z,16nm,0.9s | | | | | | |
| HHC | | | | PMZ | | | |
| | comp=Z,220nm,10.2s | | | | | | |
| HHC | | | | LN | | | |
| | comp=Z,1μm,15.3s | | | | | | |
| HHC | | | | LE | | | |
| | comp=Z,2μm,14.7s | | | | | | |
| HHC | | | | LZ | | | |
| | comp=Z,2μm,15.1s | | | | | | |
| MA2 | Magadan | 25.95 | 11 | *e*P | P | 19 11 47.9 | +0.3 |
| CIT | Chita | 26.64 | 320 | *e*P | P | 19 11 54.6 | +0.6 |
| CIT | | | | *e* | | 19 12 05.4 | |
| CIT | | | | pmax | pmax | | |
| | comp=Z,65nm,1.7s | | | | | | |
| XAN | Xi'an | 26.80 | 279 | P | P | 19 11 55.5 | -0.1 |
| XAN | | | | pP | pP | 19 12 04.0 | -1.4 |
| XAN | | | | S | S | 19 16 23.3 | -6.3 |
| XAN | | | | PMZ | | | |
| | comp=Z,5.0nm,1.1s | | | | | | |
| XAN | | | | LN | | | |
| | comp=Z,1μm,16.0s | | | | | | |
| XAN | | | | LE | | | |
| | comp=Z,3μm,15.3s | | | | | | |
| XAN | | | | LZ | | | |
| | comp=Z,4μm,15.3s | | | | | | |
| H11N2 | WAKE ISLAND Hy | 26.89 | 116 | T | T | 19 41 05.6 | |
| | baz=321,slow=74,SNR=13 | | | | | | |
| H11N1 | WAKE ISLAND Hy | 26.90 | 116 | T | T | 19 40 16.6 | |
| | SNR=15 | | | | | | |
| H11N3 | WAKE ISLAND Hy | 26.91 | 116 | T | T | 19 41 26.6 | |
| | baz=313,slow=74,SNR=10 | | | | | | |
| ENH | Enshi | 27.21 | 270 | *e*P | P | 19 11 58.3 | -1.0 |
| | comp=Z,8.0nm,0.6s | | | | | | |
| H11S3 | WAKE ISLAND Hy | 27.52 | 119 | T | T | 19 40 59.6 | |
| | baz=312,slow=75,SNR=9.6 | | | | | | |
| H11S1 | WAKE ISLAND Hy | 27.52 | 119 | T | T | 19 41 00.6 | |
| | baz=312,slow=75,SNR=11 | | | | | | |
| H11S2 | WAKE ISLAND Hy | 27.53 | 119 | T | T | 19 41 01.7 | |
| | baz=312,slow=75,SNR=9.5 | | | | | | |
| YAK | Yakutsk | 28.65 | 348 | P | P | 19 12 11.5 | -0.3 |
| | comp=Z,5.0nm,0.4s,baz=274,slow=0.7,SNR=17 | | | | | | |
| YAK | | | | LR | LR | 19 24 00.7 | |
| | comp=Z,451nm,21.4s,baz=160,slow=37 | | | | | | |
| YAK | Yakutsk | 28.65 | 348 | *c i*P | P | 19 12 11.0 | -0.8 |
| YAK | | | | *e* | | 19 13 02.6 | |
| YAK | | | | *e*PPP | PPP | 19 13 12.2 | |
| YAK | | | | *e* | | 19 15 22.7 | |
| YAK | | | | *e*S | S | 19 17 00.0 | +2.0 |
| YAK | | | | *e*SS | SnSn | 19 18 27.6 | +7.9 |
| YAK | | | | *e*SSS | SSS | 19 18 45.6 | |
| YAK | | | | *e* | | 19 22 58.6 | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,21nm,0.8s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,18nm,1.5s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,10.0nm,1.7s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=Z,132nm,3.0s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=N,131nm,2.5s | | | | | | |
| YAK | | | | pmax | pmax | | |
| | comp=E,56nm,2.4s | |

YAK MLR MLR
comp=E,395nm,13.0s
**ULN Ulaanbaatar 28.91 308***c i*P **P** **19 12 15.4 +0.9**
ULN pmax pmax
comp=Z,15nm,1.0s
**ULN Ulaanbaatar 28.91 308** *e*P **P** **19 12 15.1 +0.6**
comp=Z,14nm,0.8s
**SONA1 Songino Array 29.33 308** *e*P **P** **19 12 19.3 +1.1**
**SONM Songino Array 29.33 308** P **P** **19 12 18.5 +0.4**
comp=Z,8.9nm,0.7s,baz=104,slow=8.9,SONR=69
SONM PcP **PcP** **19 15 24.0 0.0**
comp=Z,1.0nm,0.6s,baz=127,slow=2.8,SNR=4.3
SONM LR LR 19 25 09.1
comp=Z,3µm,18.4s,baz=108,slow=39
**SONM Songino Array 29.33 308** P **P** **19 12 18.5 +0.4**
SONM 19 15 24.0
SONM pmax pmax
comp=Z,9.0nm,0.7s
SONM pmax pmax
comp=Z,1.0nm,0.6s
SONM MLR MLR
comp=Z,3µm,18.4s
**SEY Seymchan 29.39 10** P **P** **19 12 18.4 +0.1**
comp=Z,4.5nm,0.7s,baz=191,slow=8.0,SNR=15
**SEY Seymchan 29.39 10**‖ *e*P **P** **19 12 18.7 +0.4**
**BOD Bodaibo 29.79 330** *e*P **P** **19 12 21.4 -0.5**
BOD pmax pmax
comp=Z,26nm,1.5s
**LZH Lanzhou 30.60 284** *e*P P 19 12 35.3 +5.7
LZH pP pP 19 12 46.0 +6.6
LZH sP sP 19 12 51.5 +8.0
LZH PP **PP** **19 13 45.0 +6.1**
LZH S S 19 17 36.3 +6.7
LZH sS sS 19 17 58.0 +12
LZH SS SS 19 20 11.0 +30
LZH pmax pmax
comp=Z,34nm,1.0s
LZH pmax pmax
comp=Z,190nm,5.7s
LZH LR LR
comp=N,1µm,14.3s
LZH LR LR
comp=E,1µm,12.7s
LZH LR LR
comp=Z,2µm,15.4s
**DAV Davao City (W) 30.86 212** LR LR 19 23 38.2
comp=Z,688nm,19.5s,baz=54,slow=34
**GYA Guiyang 30.86 265** P **P** **19 12 33.0 +1.1**
GYA pP **pP** **19 12 44.5 +2.8**
GYA PP **PnPn** **19 13 34.3 +1.4**
GYA S **S** **19 17 32.0 -1.7**
GYA sS **sS** **19 17 50.8 +0.9**
GYA SS **SnSn** **19 19 15.5 +1.0**
GYA PMZ
comp=Z,30nm,0.8s
GYA PMZ
comp=Z,140nm,4.8s
GYA LN
comp=Z,720nm,17.9s
GYA LE
comp=Z,680nm,17.6s
GYA LZ
comp=Z,740nm,17.4s
**CD2 Chengdu 31.77 274** *e*P **P** **19 12 38.0 -1.7**
CD2 sP **sP** **19 12 53.8 +0.1**
CD2 PP **PP** **19 13 49.8 -1.9**
CD2 S **S** **19 17 45.0 -2.6**
CD2 sS **sS** **19 18 03.5 -0.3**
CD2 PMZ
comp=Z,30nm,0.5s
CD2 PMZ
comp=Z,170nm,4.9s
CD2 LN
comp=Z,3µm,16.6s
CD2 LE
comp=Z,4µm,16.6s
CD2 LZ
comp=Z,4µm,14.9s
**QIZ Qiongzhong 31.91 249** P **P** **19 12 41.5 +0.5**
QIZ sP **sP** **19 12 54.5 -0.5**
QIZ S **S** **19 17 50.8 +0.9**
QIZ sS **sS** **19 18 06.5 +0.4**
QIZ LN
comp=Z,900nm,17.6s
QIZ LZ
comp=Z,880nm,12.9s
**IRK Irkutsk 31.92 315** *e*P **P** **19 12 39.9 -0.9**
IRK pmax pmax
comp=Z,35nm,2.3s
**ZAK Zakamensk 31.96 312** *e*P **P** **19 12 42.1 +0.8**
ZAK pmax pmax
comp=Z,12nm,0.9s
**TLY Talaya 32.11 314** *e*P **P** **19 12 43.2 +0.7**
TLY *e* 19 13 52.8
TLY *e*PPP PPP 19 14 01.9
TLY *e*S S 19 18 01.9 +9.3
TLY *e*SS **SnSn** **19 19 50.9 +6.8**
TLY pmax pmax
comp=Z,16nm,0.9s
TLY MLR MLR
comp=Z,2µm,17.0s
**GTA Gaotai 33.42 291** P **P** **19 12 54.0 -0.2**
GTA pP **pP** **19 13 03.8 -0.3**
GTA sP **sP** **19 13 07.5 -0.7**
GTA PcP **PcP** **19 15 36.3 +1.2**
GTA S **S** **19 18 10.8 -2.5**
GTA sS **sS** **19 18 27.0 -2.6**
GTA PMZ
comp=Z,7.0nm,1.2s
GTA PMZ
comp=Z,120nm,4.7s
GTA LN
comp=Z,1µm,17.6s
GTA LE
comp=Z,1µm,15.7s
GTA LZ
comp=Z,2µm,16.1s
**MOY Mondy 33.69 313** *e*P **P** **19 12 57.1 +0.7**
**KMI Kunming 34.64 265** P **P** **19 13 05.8 +0.8**
KMI pP **pP** **19 13 16.8 +1.9**
KMI sP **sP** **19 13 21.3 +2.3**
KMI PP **PP** **19 14 22.8 -1.0**
KMI S **S** **19 18 30.5 -2.1**
KMI sS **sS** **19 18 49.3 +0.4**
KMI ScP **ScP** **19 19 21.5 -0.1**
KMI SS **SnSn** **19 20 42.5 -3.8**
KMI PMZ
comp=Z,14nm,1.0s
KMI PMZ
comp=Z,230nm,6.2s
KMI LN
comp=Z,2µm,14.1s
KMI LE
comp=Z,3µm,14.7s
KMI LZ
comp=Z,4µm,14.2s
**SIJI Sorong 36.33 197** P **P** **19 13 18.9 -0.5**
comp=Z,14nm,0.7s,baz=140,slow=20,SNR=2.6
**BILL Bilibino 36.57 15**‖ *e*P **P** **19 13 21.8 +0.9**
BILL *i* *PP **pP** **19 13 32.7 +1.9**
BILL 19 14 45.0
BILL PPP PPP 19 15 00.0
BILL 19 15 46.0
BILL SS SS 19 21 27.0 -14
BILL pmax pmax
comp=Z,7.0nm,1.1s
BILL MLR MLR
comp=Z,659nm,19.0s
**HVS Khovu-Aksy 38.07 311***ce*P **P** **19 13 34.7 +0.8**
HVS pmax pmax
comp=Z,29nm,0.9s
**LOEI Loei 39.52 255** P **P** **19 13 43.6 -2.7**
comp=Z,79nm,0.8s
**CHAI Chaiyaphum 39.84 252** P **P** **19 13 48.7 -0.2**
comp=Z,81nm,0.8s
**UTTA Uttaradit 39.96 256** P P 19 13 55.7 +5.8
**PBKT Sadao Pong 40.27 254** P **P** **19 13 53.8 +1.3**
comp=Z,23nm,1.0s,comp=Z,2µm
**LAMP Lampang 40.29 258** P **P** **19 13 53.8 +1.1**
comp=Z,6.3nm,0.7s
**CHTO Chiang Mai 40.70 259** P **P** **19 13 56.2 +0.1**
comp=Z,56nm,0.8s
**CHTO Chiang Mai 40.70 259** *e*P **P** **19 13 55.4 -0.6**
CHTO pmax pmax
comp=Z,7.0nm,0.6s
**CHTO Chiang Mai 40.70 259** *e*P **P** **19 13 55.4 -0.6**
comp=Z,6.9nm,0.6s
**CMAR Chiang Mai Arr 40.88 258** P **P** **19 13 57.0 -0.5**
comp=Z,7.1nm,0.7s,baz=47,slow=7.6,SNR=51
CMAR LR LR 19 32 04.1
comp=Z,423nm,18.4s,baz=62,slow=38
**CMAR Chiang Mai Arr 40.88 258** P **P** **19 13 57.1 -0.5**
CMAR pmax pmax
comp=Z,7.0nm,0.7s
CMAR MLR MLR
comp=Z,423nm,18.4s
**CM01 Chiang Mai Arr 40.89 258** *e*P **P** **19 13 56.3 -1.4**
**WMQ Urumqi 42.08 299** P **P** **19 14 09.0 +1.8**
WMQ pP **pP** **19 14 20.0 +2.8**
WMQ sP **sP** **19 14 25.0 +3.7**
WMQ PP **PP** **19 15 49.0 +4.2**
WMQ S **S** **19 20 26.0 +1.7**
WMQ SS **SS** **19 23 32.0 -0.2**
WMQ PMZ
comp=Z,45nm,1.0s
WMQ PMZ
comp=Z,320nm,4.5s
WMQ LN
comp=Z,990nm,15.0s
WMQ LE
comp=Z,360nm,15.0s
WMQ LZ
comp=Z,360nm,15.0s
**LSA Lhasa 42.50 278** P **P** **19 14 13.3 +2.0**
LSA PMZ
comp=Z,6.0nm,0.9s
**LSA Lhasa 42.50 278** *e*P **P** **19 14 11.4 +0.1**
LSA pmax pmax
comp=Z,8.0nm,0.8s
**LSA Lhasa 42.50 278** *e*P **P** **19 14 11.4 +0.1**
comp=Z,7.7nm,0.8s
**ZALV Zalesovo Beam 43.72 314** P **P** **19 14 20.5 +0.2**
comp=Z,7.7nm,0.6s,baz=90,slow=6.4,SNR=38
ZALV PcP **PcP** **19 16 06.9 +0.1**
comp=Z,9.3nm,0.6s,baz=104,slow=3.1,SNR=7.0
ZALV LR LR 19 33 46.8
comp=Z,514nm,18.4s,baz=70,slow=38
**ZALV Zalesovo Beam 43.72 314** P **P** **19 14 20.5 +0.2**
ZALV 19 16 06.9
ZALV pmax pmax
comp=Z,8.0nm,0.6s
ZALV pmax pmax
comp=Z,9.0nm,0.6s
ZALV MLR MLR
comp=Z,514nm,18.4s
**KSM Kuching 43.75 228** *e*P **P** **19 14 19.6 -1.4**
**KAPI Kappang 44.19 212** P **P** **19 14 24.5 +0.1**
comp=Z,4.8nm,0.6s,baz=31,slow=5.9,SNR=5.3
**NVS Novosibirsk 44.69 316** *e*P **P** **19 14 28.3 +0.3**
NVS pmax pmax
comp=N,4.0nm,0.8s
NVS pmax pmax
comp=E,13nm,0.8s
NVS pmax pmax
comp=Z,21nm,0.8s
**MK01 Makanchi Array 45.55 304** *e*P **P** **19 14 35.3 +0.2**
**MK31 Makanchi Array 45.56 304** *i* P **P** **19 14 35.3 +0.2**
MK31 pmax pmax
comp=Z,26nm,0.7s
**MKAR Makanchi Array 45.56 304** P **P** **19 14 35.3 +0.2**
comp=Z,5.6nm,0.5s,baz=83,slow=9.4,SNR=60
MKAR LR LR 19 34 54.0
comp=Z,586nm,18.5s,baz=85,slow=38
**MKAR Makanchi Array 45.56 304** P **P** **19 14 35.3 +0.2**
MKAR pmax pmax
comp=Z,6.0nm,0.5s
MKAR MLR MLR
comp=Z,586nm,18.5s
**MKAR Makanchi Array 45.56 304** *e*P **P** **19 14 34.9 -0.2**
**MAKZ Makanchi 45.77 304** *e*P **P** **19 14 36.5 -0.2**
**TAPN Taplejung 46.17 277** *e*P **P** **19 14 40.1 -0.4**
comp=Z,10nm,0.4s
**MMRI Maumere 46.48 207** *e*P **P** **19 14 41.9 -0.7**
**ODAN Odare 46.62 276** *e*P **P** **19 14 43.5 -0.5**
comp=Z,30nm,0.8s
**SOEI Soe 46.81 203** *e*P **P** **19 14 44.5 -0.8**
comp=Z,57nm,0.9s
**RAMN Ramite 47.24 277** *e*P **P** **19 14 48.6 -0.2**
comp=Z,68nm,0.6s
**BATI Baumata 47.43 204** P **P** **19 14 49.5 -0.5**
comp=Z,26nm,0.7s,baz=12,slow=3.1,SNR=7.2
**GUN Gumba 47.46 278** *e*P **P** **19 14 50.3 -0.3**
**KULM Kulim 47.52 242** *e*P **P** **19 14 50.1 -0.6**
**KURK Kurchatov 47.59 310** *e*P **P** **19 14 50.6 -0.3**
KURK pmax pmax
comp=Z,124nm,0.7s
**KURK Kurchatov 47.59 310** P **P** **19 14 50.3 -0.6**
comp=Z,351nm,0.5s,SNR=42
**KURK Kurchatov 47.59 310** *e*P **P** **19 14 50.6 -0.3**
comp=Z,124nm,0.7s
**MTN Manton Dam 47.97 194** *e*P **P** **19 14 54.0 -0.1**
comp=Z,78nm,0.6s
**PKI Pulchoki 47.98 278** *e*P **P** **19 14 54.3 -0.3**
comp=Z,33nm,0.7s
**PKIN Phulchoki 47.98 278** *e*P **P** **19 14 53.8 -0.8**
comp=Z,25nm,0.7s
**KKN Kani 48.00 278** *e*P **P** **19 14 54.1 -0.5**
comp=Z,45nm,0.8s
**PDGK Podgornoye 48.05 300** *i* P **P** **19 14 54.9 +0.4**
PDGK pmax pmax
comp=Z,34nm,0.8s
**DMN Daman 48.21 278** *e*P **P** **19 14 55.5 -0.8**
comp=Z,34nm,0.9s
**GKN Gorkha 48.44 279** *e*P **P** **19 14 57.6 -0.4**
comp=Z,104nm,0.9s
**DANN Dangsing 49.03 280** *e*P **P** **19 15 02.7 0.0**
**KDAK Kodiak Island 49.10 40** P **P** **19 15 02.4 0.0**
comp=Z,14nm,0.7s,baz=253,slow=6.6,SNR=12
KDAK LR LR 19 33 21.3
comp=Z,241nm,20.5s,baz=258,slow=33
**KDAK Kodiak Island 49.10 40** P **P** **19 15 02.4 0.0**
KDAK pmax pmax
comp=Z,14nm,0.7s
KDAK MLR MLR
comp=Z,241nm,20.5s
**KDAK Kodiak Island 49.10 40** P **P** **19 15 02.9 +0.5**
comp=Z,120nm,0.8s,SNR=6.7
**KDAK Kodiak Island 49.10 40** *e*P **P** **19 15 01.6 -0.8**
comp=Z,214nm,2.1s
**PPLA Purkeypile 49.36 34** *e*P **P** **19 15 06.0 +1.5**
comp=Z,75nm,1.6s
**SPU Mount Spurr 49.37 36** *e*P **P** **19 15 03.8 -0.7**
**KOLN Koldanda 49.38 279** *e*P **P** **19 15 05.0 -0.3**
comp=Z,41nm,0.8s
**KTH Kantishna Hill 49.96 33** *e*P **P** **19 15 09.5 +0.4**
comp=Z,14nm,1.0s
**MLY Manley 50.11 31** *e*P **P** **19 15 10.9 +0.8**
comp=Z,16nm,0.9s
**COLD Coldfoot 50.48 28** *e*P **P** **19 15 13.3 +0.5**
comp=Z,34nm,1.8s
**PMR Palmer 50.77 35** *e*P **P** **19 15 15.6 +0.6**
PMR pmax pmax
comp=Z,7.0nm,0.8s
**PMR Palmer 50.77 35** *e*P **P** **19 15 15.6 +0.6**
comp=Z,7.2nm,0.8s
**MCK McKinley 50.85 33** *e*P **P** **19 15 16.5 +0.8**
MCK pmax pmax
comp=Z,15nm,1.0s
**MCK McKinley 50.85 33** *e*P **P** **19 15 16.5 +0.8**
comp=Z,16nm,1.0s
**RND Reindeer 50.89 33** *e*P **P** **19 15 16.9 +0.9**
RND pmax pmax
comp=Z,14nm,0.8s
**RND Reindeer 50.89 33** *e*P **P** **19 15 16.9 +0.9**
comp=Z,14nm,0.8s
**TKM2 Tokmak 2 50.92 300** *e*P **P** **19 15 17.5 +0.8**
TKM2 pmax pmax
comp=Z,24nm,0.8s
**TKM2 Tokmak 2 50.92 300** P **P** **19 15 17.9 +1.2**
SNR=22
**TKM2 Tokmak 2 50.92 300** *e*P **P** **19 15 17.5 +0.8**
comp=Z,24nm,0.8s
**SML Sawmill 51.15 35** *e*P **P** **19 15 18.6 +0.7**
SML pmax pmax
comp=Z,17nm,0.9s
**SML Sawmill 51.15 35** *e*P **P** **19 15 18.6 +0.7**
comp=Z,18nm,0.9s
**WRH Wood River Hil 51.23 32** *e*P **P** **19 15 18.6 +0.1**
comp=Z,29nm,1.4s
**COLA College 51.34 31***de*P **P** **19 15 20.5 +1.3**
COLA pmax pmax
comp=Z,12nm,0.9s
**COLA College 51.34 31** *e*P **P** **19 15 20.4 +1.2**
comp=Z,19nm,0.6s
**KZA Kyzart 51.37 299** P **P** **19 15 22.0 +1.6**
SNR=9.8
**KBK Karagaybulak 51.44 300** P **P** **19 15 21.6 +1.0**
SNR=16
**KSH Kashi 51.52 296** *e*P P 19 15 25.3 +4.1
KSH *e*pP pP 19 15 35.3 +3.9
KSH *e*sP sP 19 15 39.5 +4.1
KSH S **S** **19 22 42.5 +3.2**
KSH SS **SS** **19 26 18.3 +3.0**
KSH PMZ
comp=Z,7.0nm,0.8s
KSH PMZ
comp=Z,190nm,5.6s
KSH LN
comp=Z,240nm,6.0s
KSH LE
comp=Z,700nm,15.7s
KSH LZ
comp=Z,880nm,14.8s
**USP Ospenovka 51.62 301** P **P** **19 15 22.3 +0.6**
SNR=9.5
**SCM Sheep Creek Mo 51.62 35** *e*P **P** **19 15 22.6 +1.0**
SCM pmax pmax
comp=Z,37nm,1.0s
**SCM Sheep Creek Mo 51.62 35** *e*P **P** **19 15 22.6 +1.0**
comp=Z,37nm,1.0s
**FRU Bishkek 51.64 300** *e*P **P** **19 15 21.0 -0.9**
FRU *e* 19 15 30.0
FRU pmax pmax
comp=Z,60nm,1.6s
**ILAR Eielson Array 51.75 31** P **P** **19 15 22.1 -0.2**
comp=Z,14nm,0.7s,baz=264,slow=5.5,SNR=137
ILAR LR LR 19 39 56.0
comp=Z,129nm,20.0s,baz=252,slow=39
**ILAR Eielson Array 51.75 31** P **P** **19 15 22.2 -0.2**
ILAR pmax pmax
comp=Z,14nm,0.7s
ILAR MLR MLR
comp=Z,129nm,20.0s
**AAK Ala-Archa 51.77 300** *e*P **P** **19 15 23.4 +0.3**
AAK pmax pmax
comp=Z,12nm,0.9s
**AAK Ala-Archa 51.77 300** P **P** **19 15 23.2 +0.1**
comp=Z,54nm,0.6s,SNR=6.5
**AAK Ala-Archa 51.77 300** P **P** **19 15 24.0 +0.9**
SNR=8.8
**AAK Ala-Archa 51.77 300** *e*P **P** **19 15 23.4 +0.3**
comp=Z,12nm,0.9s
**UCH Uchtor 51.86 300** P **P** **19 15 25.2 +1.1**
SNR=9.1
**LEM Lembang 51.96 225** P **P** **19 15 25.2 +0.5**
comp=Z,35nm,0.7s,baz=350,slow=7.7,SNR=15
**LEM Lembang 51.96 225** P **P** **19 15 25.2 +0.5**
LEM pmax pmax
comp=Z,35nm,0.7s
**OTUK Ortayu 52.00 308** P **P** **19 15 24.8 +0.3**
OTUK pmax pmax
comp=Z,27nm,0.8s
**EKS2 Erkin-Say 52.28 300** *e*P **P** **19 15 27.1 +0.3**
EKS2 pmax pmax
comp=Z,8.0nm,0.8s
**EKS2 Erkin-Say 52.28 300** P **P** **19 15 27.3 +0.5**
SNR=12
**EKS2 Erkin-Say 52.28 300** *e*P **P** **19 15 27.1 +0.3**
comp=Z,7.7nm,0.8s
**KLU Klutina 52.31 35** *e*P **P** **19 15 27.8 +1.1**
comp=Z,255nm,2.8s
**DIV Divide 52.41 36** *e*P **P** **19 15 28.4 +1.0**
comp=Z,42nm,1.2s
**FYU Fort Yukon 52.42 29** *e*P **P** **19 15 29.2 +2.0**
comp=Z,40nm,1.1s
**BRVK Borovoye 52.43 314** *e*P **P** **19 15 27.7 +0.1**
BRVK pmax pmax
comp=Z,18nm,0.7s
**BRVK Borovoye 52.43 314** P **P** **19 15 27.0 -0.6**
comp=Z,109nm,0.7s,SNR=9.1
**BRVK Borovoye 52.43 314** *e*P **P** **19 15 27.7 +0.1**
comp=Z,18nm,0.7s
**PAX Paxson 52.43 33** *e*P **P** **19 15 29.2 +1.6**
PAX pmax pmax
comp=Z,130nm,2.5s
**PAX Paxson 52.43 33** *e*P **P** **19 15 29.2 +1.6**
comp=Z,130nm,2.5s
**GSI Gunungsitoli 52.47 241** *e*P **P** **19 15 28.2 -0.2**
comp=Z,25nm,0.8s
**AML Almayashu 52.48 300** P **P** **19 15 29.9 +1.3**
SNR=29
**RIDG Independ'e Rid 52.67 32** *e*P **P** **19 15 30.0 +0.7**
comp=Z,12nm,0.8s
**BMRM Bremner River 52.99 36** *e*P **P** **19 15 32.4 +0.7**
comp=Z,30nm,1.1s
**DOT Dot Lake 53.02 33** *e*P **P** **19 15 31.7 -0.2**
comp=Z,31nm,0.8s
**CHLP Challavanipeta 53.07 268** *e*P **P** **19 15 33.2 +0.4**
CHLP IAmb IAmb 19 15 36.8
comp=Z,38nm,1.3s
**SFK Sufi-Kurgan 53.20 297** P **P** **19 15 33.8 0.0**
SFK pmax pmax
comp=Z,12nm,0.8s
**MNAS Manas 53.23 301** P **P** **19 15 33.0 -0.9**
MNAS pmax pmax
comp=Z,35nm,1.7s
**EGAK Eagle 54.20 31** *e*P **P** **19 15 40.1 -0.3**
comp=Z,7.2nm,0.8s
**CTA Charters Tower 54.37 174** P **P** **19 15 40.6 -1.4**
comp=Z,1.3nm,0.2s,baz=302,slow=12,SNR=3.4
**CTA Charters Tower 54.37 174** P **P** **19 15 40.7 -1.4**
CTA pmax pmax
comp=Z,1.0nm,0.2s
**CTAO Charters Tower 54.37 174** *e*P **P** **19 15 40.9 -1.2**
**CTAO Charters Tower 54.37 174** *e*P **P** **19 15 40.9 -1.2**
**WRAB Tennant Creek 54.43 188** *e*P **P** **19 15 41.5 -1.0**
WRAB pmax pmax
comp=Z,23nm,0.6s
**WRAB Tennant Creek 54.43 188** P **P** **19 15 42.0 -0.5**
comp=Z,82nm,0.4s,SNR=9.4
**WRAB Tennant Creek 54.43 188** *e*P **P** **19 15 41.5 -1.0**
comp=Z,23nm,0.6s
**WRA Warramunga Arr 54.44 188** P **P** **19 15 42.1 -0.5**
comp=Z,5.5nm,0.4s,baz=5.8,slow=7.7,SNR=28
**WRA Warramunga Arr 54.44 188** P **P** **19 15 42.1 -0.5**
WRA pmax pmax
comp=Z,6.0nm,0.4s
**KK31 Karatay Array 54.47 302** P **P** **19 15 42.7 -0.1**
KK31 pmax pmax
comp=Z,22nm,0.8s
**KKAR Karatay Array 54.47 302** *e*P **P** **19 15 42.9 +0.1**
**KKAR Karatay Array 54.47 302** *e*P **P** **19 15 42.9 +0.1**
**DAWY Dawson 55.04 32** *e*P **P** **19 15 46.6 0.0**
**PVM Polavaram 55.70 268** *e*P **P** **19 15 52.0 +0.1**
PVM IAmb IAmb 19 15 53.8
comp=Z,26nm,0.8s
**INK Inuvik 56.76 26** P **P** **19 15 59.2 +0.5**
comp=Z,23nm,0.7s,baz=300,slow=6.6,SNR=82
**INK Inuvik 56.76 26** P **P** **19 15 59.2 +0.5**
INK pmax pmax
comp=Z,23nm,0.7s
**INK Inuvik 56.76 26** *e*P **P** **19 15 58.5 -0.1**
comp=Z,27nm,0.8s
**RPR Rampur 56.84 271** *e*P **P** **19 15 59.8 -0.2**
RPR IAmb IAmb 19 16 01.5
comp=Z,23nm,0.7s
**DZET Dzherino 57.02 297** P **P** **19 16 01.5 +0.3**
DZET pmax pmax
comp=Z,20nm,0.5s
**SVE Sverdlovsk 57.14 320** *e*P **P** **19 16 01.9 +0.3**
SVE pmax pmax
comp=Z,22nm,0.9s
SVE MLR MLR
comp=Z,1µm,16.0s
**SRSP Sriramsagar 57.59 272** *e*P **P** **19 16 04.8 -0.5**
SRSP IAmb IAmb 19 16 05.7
comp=Z,30nm,0.6s
**ADKI Addanki 57.78 268** *e*P **P** **19 16 06.8 +0.1**
ADKI IAmb IAmb 19 16 08.8
comp=Z,13nm,0.9s
**NJS Nagarjunasagar 57.97 269** *e*P **P** **19 16 07.4 -0.6**
NJS IAmb IAmb 19 16 09.1
comp=Z,19nm,1.0s
**HYB Hyderabad 58.16 270** *i* P **P** **19 16 08.0 -1.4**
HYB *e* 19 16 21.5
**HYBB Hyderabad (bro 58.16 270** *e*P **P** **19 16 09.0 -0.4**
HYBB IAmb IAmb 19 16 10.3
comp=Z,30nm,0.7s

**AS01 Alice Springs 58.16 188** *e*P **P** 19 16 07.7 -1.4
**ASAR Alice Springs 58.17 188** P **P** 19 16 09.2 +0.1
comp=Z,6.1nm,0.8s,baz=13,slow=9.5,SNR=16
ASAR LR LR 19 38 53.1
comp=Z,181nm,21.9s,baz=3.0,slow=34
**ASAR Alice Springs 58.17 188** P **P** 19 16 09.3 +0.1
ASAR pmax pmax
comp=Z,6.0nm,0.8s
ASAR MLR MLR
comp=Z,181nm,21.9s
**KBL Kabul 58.38 293** *e*P **P** 19 16 10.9 -0.1
**KBL Kabul 58.38 293** *e*P **P** 19 16 10.9 -0.1
**SRLM Srisailam 58.54 269** *e*P **P** 19 16 11.6 -0.4
SRLM IAmb IAmb 19 16 15.0
comp=Z,19nm,1.0s
**RCLA Racherla 58.81 268** *e*P **P** 19 16 13.7 -0.2
RCLA IAmb IAmb 19 16 15.6
comp=Z,28nm,1.1s
**MBWA Marble Bar 58.96 204** *e*P **P** 19 16 14.5 -0.1
comp=Z,28nm,0.8s
**SKHT Srikalahasti 59.08 266** *e*P **P** 19 16 16.3 +0.5
SKHT IAmb IAmb 19 16 17.7
comp=Z,20nm,0.7s
**KLRI Killari 59.45 272** *e*P **P** 19 16 17.8 -0.6
KLRI IAmb IAmb 19 16 19.0
comp=Z,60nm,0.7s
**AB31 Akbulak array 59.66 311** P **P** 19 16 19.1 -0.2
AB31 pmax pmax
comp=Z,21nm,0.8s
**ABKAR Akbulak array 59.66 311** *e*P **P** 19 16 19.1 -0.2
**AKTO Aktyubinsk 60.45 313** P **P** 19 16 24.7 -0.1
comp=Z,17nm,0.8s,baz=77,slow=13,SNR=26
AKTO LR LR 19 44 23.1
comp=Z,556nm,18.6s,baz=63,slow=38
**AKTO Aktyubinsk 60.45 313** P **P** 19 16 24.7 -0.1
AKTO pmax pmax
comp=Z,17nm,0.8s
AKTO MLR MLR
comp=Z,556nm,18.6s
**URV Uravakonda 60.48 268** *e*P **P** 19 16 24.9 -0.6
URV IAmb IAmb 19 16 26.5
comp=Z,14nm,0.8s
**DLBC Dease Lake 60.73 37** P **P** 19 16 26.8 +0.2
comp=Z,8.8nm,0.8s,baz=292,slow=8.7,SNR=13
DLBC LR LR 19 42 53.9
comp=Z,68nm,19.6s,baz=166,slow=36
**DZM Mont Dzumac 60.99 153** *e*P **P** 19 16 31.4 +2.7
comp=Z,54nm,1.3s
**DZM Mont Dzumac 60.99 153** *e*LR LR 19 34 42.1
comp=Z,349nm,20.4s
**POO Poona 61.50 274** *e*P **P** 19 16 30.0 -2.4
**PALK Pallekele 61.82 259** *i* P **P** 19 16 36.4 +1.8
**PALK Pallekele 61.82 259** *e*P **P** 19 16 32.8 -1.8
**IMYA Miami 64.36 298** *e*P **P** 19 16 51.8 +0.4
**TMCR Tamitsa 65.07 332** *e*P P 19 16 51.8 -3.4
TMCR pmax pmax
comp=Z,24nm,0.9s
**APA Apatity 65.10 336**⇑ *i*P **P** 19 16 55.8 +0.4
APA pmax pmax
comp=Z,22nm,0.8s
APA MLR MLR
comp=Z,2µm,17.0s
**ABKT Ailbek 65.13 300** P **P** 19 16 56.1 0.0
comp=Z,73nm,0.8s,SNR=6.1
**GEYT Alibeck 65.13 300** P **P** 19 16 56.7 +0.6
comp=Z,8.1nm,0.7s,baz=35,slow=3.6,SNR=28
GEYT LR LR 19 48 23.5
comp=Z,398nm,18.0s,baz=85,slow=39
**RES Resolute Bay 65.17 14** *e*P **P** 19 16 56.0 +0.3
**RES Resolute Bay 65.17 14** *e*P **P** 19 16 56.0 +0.3
**IKRD Kardeh 65.33 299** *e*P P 19 16 54.2 -3.6
**KLMR Klimovskoe 65.99 328** *e*P **P** 19 16 59.5 -1.8
KLMR pmax pmax
comp=Z,43nm,1.8s
KLMR MLR MLR
comp=Z,929nm,18.0s
**IDAH Dahanechah 66.09 294** *e*P **P** 19 17 03.5 +0.7
**YKA Yellowknife Ar 66.11 30** P **P** 19 17 02.0 +0.1
comp=Z,1.7nm,0.6s,baz=308,slow=6.5,SNR=4.8
**YKA Yellowknife Ar 66.11 30** P **P** 19 17 02.0 +0.1
YKA pmax pmax
comp=Z,2.0nm,0.6s
**ARCES ARCESS Array B 66.47 340** P **P** 19 17 04.1 -0.1
comp=Z,5.5nm,0.7s,baz=60,slow=8.3,SNR=17
ARCES LR LR 19 49 06.9
comp=Z,485nm,21.8s,baz=51,slow=39
**ARCES ARCESS Array B 66.47 340** P **P** 19 17 04.1 -0.1
ARCES pmax pmax
comp=Z,6.0nm,0.7s
ARCES MLR MLR
comp=Z,485nm,21.8s
**IKOO Kooshah 66.89 294** *e*P **P** 19 17 08.6 +0.7
**DAG Danmarks Havn 68.41 355** *i* P **P** 19 17 16.0 -0.3
DAG pmax pmax
comp=Z,5.0nm,0.8s
**DAG Danmarks Havn 68.41 355** *i* P **P** 19 17 16.0 -0.3
comp=Z,6.7nm,0.8s
**E03A Lebam 69.11 47** *e*P **P** 19 17 23.8 +2.6
**B05A Bryant 69.17 45** P **P** 19 17 20.9 -0.6
baz=69
**IANJ Anjilo 69.25 299** *e*P **P** 19 17 23.0 +0.5
**MOS Moscow 69.38 324** *e*P **P** 19 17 22.5 -0.2
MOS *e* 19 17 46.5
MOS *e*S **S** 19 26 25.9 -1.1
MOS pmax pmax
comp=Z,34nm,0.6s
**VRH Novokhopyorsk 69.54 319** *e*P **P** 19 17 22.7 -1.1
VRH pmax pmax
comp=N,9.0nm,0.6s
VRH pmax pmax
comp=E,6.0nm,0.6s
VRH pmax pmax
comp=Z,20nm,0.6s
VRH MLR MLR
comp=Z,890nm,19.0s
VRH MLR MLR
comp=N,250nm,15.0s
VRH MLR MLR
comp=E,560nm,15.0s
**F04A Amboy 70.10 48** *e*P **P** 19 17 29.6 +2.3
**OBN Obninsk 70.22 324**⇓ *e*P **P** 19 17 28.2 +0.4
OBN *PP **pP** 19 17 38.0 -0.4
OBN 19 17 51.0
OBN *e*S **S** 19 26 39.3 +2.5
OBN pmax pmax
comp=Z,36nm,1.7s
OBN MLR MLR
comp=Z,1µm,17.0s
**LPSR Galich'ya Gora 70.33 321** *e*P **P** 19 17 28.2 -0.4
LPSR pmax pmax
comp=N,4.0nm,0.9s
LPSR pmax pmax
comp=E,8.0nm,0.9s
LPSR pmax pmax
comp=Z,20nm,0.9s
**ICHK Chekchek 70.41 296** *e*P **P** 19 17 29.7 -0.1
**I03D Drain, OR 70.61 50** P **P** 19 17 30.0 -0.5
baz=70,SNR=6.4
**IMEH Mehriz 70.67 295** *e*P **P** 19 17 30.7 -0.6
**NWAO Narrogin (SRO) 70.70 201** *e*P **P** 19 17 31.1 +0.1
NWAO pmax pmax
comp=Z,16nm,0.7s
**NWAO Narrogin (SRO) 70.70 201** *e*P **P** 19 17 31.1 +0.1
comp=Z,16nm,0.7s
**B08A Colville Reser 70.73 44** *e*P **P** 19 17 32.1 +0.9
**H04A Detroit Lake 70.85 49** *e*P **P** 19 17 33.6 +1.6
**VSR Storozhevoye 70.92 319** *e*P **P** 19 17 31.7 -0.5
VSR pmax pmax
comp=N,6.0nm,0.8s
VSR pmax pmax
comp=E,9.0nm,0.8s
VSR pmax pmax
comp=Z,20nm,0.8s
VSR MLR MLR
comp=N,580nm,18.0s
VSR MLR MLR
comp=E,380nm,18.0s
VSR MLR MLR
comp=Z,1µm,18.0s
**VORD Divnogorie 70.98 319** *e*P **P** 19 17 32.6 0.0
VORD pmax pmax
comp=N,20nm,0.6s
VORD pmax pmax
comp=E,100nm,0.6s
VORD pmax pmax
comp=Z,20nm,0.6s
VORD MLR MLR
comp=Z,780nm,20.0s
VORD MLR MLR
comp=N,370nm,19.0s
VORD MLR MLR
comp=E,580nm,20.0s
**ISAD Sadrabad 71.11 296** *e*P **P** 19 17 34.0 -0.1
**G05D Wamic, OR 71.11 48** P **P** 19 17 32.9 -0.6
baz=71
**I04A Tendick Farm, 71.15 50** P **P** 19 17 33.3 -0.5
baz=71
**FINES FINESS Array B 71.15 333** P **P** 19 17 33.5 +0.1
comp=E,6.8nm,0.6s,baz=111,slow=6.2,SNR=28
FINES LR LR 19 52 18.2
comp=E,590nm,18.4s,baz=24,slow=39
**FINES FINESS Array B 71.15 333** P **P** 19 17 33.6 +0.1
FINES pmax pmax
comp=Z,7.0nm,0.6s
FINES MLR MLR
comp=Z,590nm,18.4s
**L02D Cave Junction, 71.20 51** P **P** 19 17 33.9 -0.2
baz=71
**EDM Edmonton 71.44 38** *e*P **P** 19 17 36.2 +0.8
**EDM Edmonton 71.44 38** *e*P **P** 19 17 36.1 +0.8
**G06A Carlson Farm, 71.53 48** *e*P **P** 19 17 37.4 +1.3
**I05D Terrebonne, OR 71.55 49** P **P** 19 17 35.7 -0.6
baz=72,SNR=6.2
**HAWA Hanford 71.61 46** *e*P **P** 19 17 38.5 +2.0
**J04D Umpqua Nationa 71.61 50** P **P** 19 17 36.1 -0.8
baz=72,SNR=7.2
**C09A Chrisman Ranch 71.62 44** *e*P **P** 19 17 38.1 +1.6
**D08A Wollman Farm, 71.63 45** *e*P **P** 19 17 37.6 +1.0
**IZEF Zefreh 71.63 298** *e*P **P** 19 17 37.6 +0.4
**KHMM Horse Mountain 71.75 53** *e*P **P** 19 17 40.4 +2.8
**IKLH Kolahrood 71.97 298** *e*P **P** 19 17 39.7 +0.5
**YBH Yreka Blue Hor 71.98 52** *e*P **P** 19 17 40.8 +1.9
**YBH Yreka Blue Hor 71.98 52** *e*P **P** 19 17 40.8 +1.9
**NEW Newport 72.05 43** *e*P **P** 19 17 40.1 +0.9
**NEW Newport 72.05 43** P **P** 19 17 38.5 -0.6
baz=72
**NEW Newport 72.05 43** *e*P **P** 19 17 40.0 +0.9
**M02C Callahan 72.06 52** P **P** 19 17 38.8 -0.7
baz=72,SNR=5.8
**IRAM Rameshen 72.13 297** *e*P **P** 19 17 40.0 -0.1
**IRAZ Razeghan 72.13 301** *e*P **P** 19 17 40.5 +0.4
**J05D Fort Rock, OR 72.14 50** P **P** 19 17 39.1 -0.8
baz=72,SNR=9.4
**K04D Chiloquin, OR 72.15 50** P **P** 19 17 39.7 -0.3
baz=72
**NCK Nalchik 72.31 311** *c e*P **P** 19 17 40.1 -0.7
**N02D Trinity Center 72.37 52** P **P** 19 17 40.8 -0.4
baz=72,SNR=7.1
**G08A Pilot Rock 72.52 47** *e*P **P** 19 17 43.7 +1.6
**M04C Macdoel 72.52 51** P **P** 19 17 41.8 -0.4
baz=72,SNR=7.7
**KBZ Khabaz 72.63 311** P **P** 19 17 43.1 +0.5
comp=Z,15nm,0.9s,baz=99,slow=5.0,SNR=9.8
KBZ LR LR 19 51 52.5
comp=Z,671nm,18.6s,baz=78,slow=38
**KBZ Khabaz 72.63 311** P **P** 19 17 43.1 +0.5
KBZ pmax pmax
comp=Z,15nm,0.9s
KBZ MLR MLR
comp=Z,671nm,18.6s
**KIV Kislovodsk 72.64 312** *c i*P **P** 19 17 43.3 +0.5
KIV *PP **pP** 19 17 52.0 -1.4
KIV *SP **sP** 19 17 58.0 +0.6
KIV pmax pmax
comp=Z,28nm,0.9s
KIV MLR MLR
comp=Z,374nm,16.0s
**WDC Whiskeytown Da 72.68 53** *e*P **P** 19 17 44.8 +1.8
**WDC Whiskeytown Da 72.68 53** *e*P **P** 19 17 44.8 +1.8
**IHRS Heris 72.68 305** *e*P **P** 19 17 44.2 +0.9
**IPIR Pirpir 72.79 298** *e*P **P** 19 17 44.3 +0.1
**I07A Izee 72.81 48** *e*P **P** 19 17 45.7 +1.8
**F10A Beach Ranch, E 73.19 46** *e*P **P** 19 17 48.0 +1.9
**GNI Garni 73.29 307**⇑ *e*P **P** 19 17 48.2 +1.4
GNI pmax pmax
comp=Z,133nm,1.3s
**O03D Paynes Creek 73.31 52** P **P** 19 17 46.4 -0.4
baz=73
**SUMG Summit 73.33 360** *i* P **P** 19 17 47.8 +1.0
**SUMG Summit 73.33 360** *i* P **P** 19 17 47.8 +1.0
**IMRD Marand 73.39 306** *e*P **P** 19 17 48.0 +0.6
**MOD Modoc 73.44 50** *e*P **P** 19 17 49.0 +1.3
**BLMT Blacktail Moun 73.74 43** *e*P **P** 19 17 51.2 +1.8
**BMO Blue Mountains 73.74 47** *e*P **P** 19 17 50.2 +0.9
**J08A Circle Bar Ran 73.83 48** *e*P **P** 19 17 51.4 +1.5
**JTMT Jette 73.93 43** *e*P **P** 19 17 52.0 +1.5
**YBMT Yellow Bay 74.02 43** *e*P **P** 19 17 52.6 +1.7
**WVOR Wild Horse Val 74.22 49** *e*P **P** 19 17 53.5 +1.3
**WVOR Wild Horse Val 74.22 49** *e*P **P** 19 17 53.5 +1.3
**SWMT Swartz Lake 74.22 43** *e*P **P** 19 17 53.8 +1.6
**MSO Missoula 74.63 44** P **P** 19 17 53.9 -0.6
baz=74
**MSO Missoula 74.63 44** *e*P **P** 19 17 56.0 +1.5
**SLMT Seeley Lake 74.66 43** *e*P **P** 19 17 55.3 +0.6
**CHMT Chamberlain Mo 74.98 43** *e*P **P** 19 17 54.6 -2.1
comp=Z,1.7nm,1.1s
**IGHG Ghaleghazi 75.05 301** *e*P **P** 19 17 57.3 0.0
**ANN Anapa 75.36 314** *e*P P 19 18 07.4 +8.8
**MFID Camas Ranch 75.42 47** *e*P **P** 19 18 00.1 +1.0
**CMB Columbia Colle 75.43 54** *e*P **P** 19 18 00.8 +1.6
**CMB Columbia Colle 75.43 54** *e*P **P** 19 18 00.8 +1.6
**HRY Holter Researc 75.89 43** *e*P **P** 19 18 02.1 +0.4
**FFC Flin Flon 75.94 32** *e*P **P** 19 18 01.2 -0.5
**FFC Flin Flon 75.94 32** *e*P **P** 19 18 01.2 -0.5
**LRM Limekiln Ridge 76.06 44** *e*P **P** 19 18 03.2 +0.4
**HLID Hailey 76.19 47** P **P** 19 18 03.0 -0.6
baz=76
**HLID Hailey 76.19 47** *e*P **P** 19 18 04.5 +0.9
**BMN Battle Mountai 76.20 50** *e*P **P** 19 18 05.2 +1.5
**BMN Battle Mountai 76.20 50** *e*P **P** 19 18 05.2 +1.5
**DLMT Dillon 76.24 44** *e*P **P** 19 18 03.9 +0.1
**EGMT Eagleton 76.27 41** P **P** 19 18 03.2 -0.6
baz=76
**EGMT Eagleton 76.27 41** *e*P **P** 19 18 01.2 -2.6
**AKASG Malin Array Be 76.39 323** P **P** 19 18 04.1 -0.2
comp=Z,8.1nm,0.6s,baz=47,slow=6.0,SNR=34
AKASG LR LR 19 55 29.2
comp=Z,1µm,18.1s,baz=55,slow=39
**AKASG Malin Array Be 76.39 323** P **P** 19 18 04.1 -0.2
AKASG pmax pmax
comp=Z,8.0nm,0.6s
AKASG MLR MLR
comp=Z,1µm,18.1s
**MCMT McKenzie Canyo 76.40 45** *e*P **P** 19 18 05.8 +0.9
comp=Z,2.0nm,1.0s
**KIEV Kiev 76.40 323** *c i*P **P** 19 18 04.1 -0.3
KIEV pmax pmax
comp=Z,10.0nm,0.9s
**KIEV Kiev 76.40 323** *e*P **P** 19 18 03.8 -0.6
**HFS Hagfors 76.50 336** P **P** 19 18 04.8 +0.1
comp=Z,4.4nm,0.4s,baz=51,slow=0.9,SNR=34
HFS LR LR 19 54 20.6
comp=Z,741nm,22.0s,baz=32,slow=38
**HFS Hagfors 76.50 336** P **P** 19 18 04.8 +0.1
HFS pmax pmax
comp=Z,4.0nm,0.4s
HFS MLR MLR
comp=Z,741nm,22.0s
**NVAR Mina Array Bea 76.59 53** P **P** 19 18 06.7 +0.7
comp=Z,6.4nm,0.8s,baz=279,slow=6.7,SNR=36
NVAR LR LR 19 47 01.5
comp=Z,221nm,19.9s,baz=280,slow=32
**NB2 NORSAR Subarra 76.62 338** P **P** 19 18 05.5 0.0
comp=Z,4.9nm,0.5s,baz=41,slow=5.9
**NOA NORSAR Array B 76.62 338** P **P** 19 18 05.5 0.0
comp=Z,8.2nm,0.7s,baz=40,slow=5.7,SNR=32
**NOA NORSAR Array B 76.62 338** P **P** 19 18 05.5 0.0
NOA pmax pmax
comp=Z,8.0nm,0.7s
**SIM Simferopol' 77.21 316** *e*P **P** 19 18 09.8 +0.7
SIM S S 19 28 14.0 +18
**QLMT Earthquake Lak 77.22 44** *e*P **P** 19 18 11.1 +1.7
**ELK Elko 77.27 49** *e*P **P** 19 18 11.3 +1.5
**ELK Elko 77.27 49** *e*P **P** 19 18 11.3 +1.5
**VES Vestal, Richgr 77.49 55** P **P** 19 18 10.5 -0.3
baz=77
**YMR Madison River 77.58 44** *e*P **P** 19 18 14.0 +2.5
**YNR Norris Junctio 77.72 44** *e*P P 19 18 15.5 +3.2
**YFT Old Faithful 77.78 44** *e*P **P** 19 18 15.5 +2.9
**H17A Grant Village 77.97 44** *e*P **P** 19 18 16.5 +2.8
comp=Z,25nm,1.0s
**LKWY Lake 77.97 44** *e*P **P** 19 18 16.4 +2.7
**LKWY Lake 77.97 44** *e*P **P** 19 18 16.4 +2.7
**IMW Indian Meadow 78.05 45** *e*P **P** 19 18 16.5 +2.3
**FLWY Flagg Ranch 78.08 44** *e*P **P** 19 18 16.4 +2.1
**FXWY Fox Creek 78.15 45** *e*P **P** 19 18 17.3 +2.6
**HVU Hansel Valley 78.20 47** *e*P **P** 19 18 16.2 +1.3
HVU pmax pmax
comp=Z,17nm,0.9s
**HVU Hansel Valley 78.20 47** *e*P **P** 19 18 16.2 +1.3
comp=Z,16nm,0.9s
**MOOW Moose Ponds 78.25 45** *e*P **P** 19 18 16.8 +1.6
**DAC Darwin (Calif) 78.25 54** *e*P **P** 19 18 16.5 +1.2
**DAC Darwin (Calif) 78.25 54** *e*P **P** 19 18 16.5 +1.2
**TPAW Teton Pass 78.29 45** *e*P **P** 19 18 17.2 +1.8
**MALT Malatya 78.40 309**⇑ *i*P **P** 19 18 16.4 +0.4
**MALT Malatya 78.40 309**⇑ *i*P **P** 19 18 16.4 +0.4
**LOHW Long Hollow 78.42 45** *e*P **P** 19 18 18.1 +2.0
**SNOW Snow King Moun 78.42 45** *e*P **P** 19 18 18.3 +2.1
**MPMC Manual Prospec 78.44 54** P **P** 19 18 15.8 -0.6
baz=78,SNR=5.1
**BLG Laguna Peak 78.46 57** P **P** 19 18 15.9 -0.3
baz=78
**AHID Auburn Hatcher 78.63 46** *e*P **P** 19 18 19.4 +2.1
**SPUT South Promonto 78.68 48** *e*P **P** 19 18 19.6 +2.1
**EDW2 Edwards Air Fo 78.77 55** P **P** 19 18 17.5 -0.5
baz=79
**TPNV Topopah Spring 78.77 53** *e*P **P** 19 18 19.6 +1.5
**TPNV Topopah Spring 78.77 53** P **P** 19 18 17.5 -0.6
baz=79
**TPNV Topopah Spring 78.77 53** *e*P **P** 19 18 19.6 +1.5
**HWUT Hardware Ranch 79.04 47** *e*P **P** 19 18 21.1 +1.6
**DUG Dugway 79.10 49** *e*P **P** 19 18 20.8 +0.9
**DUG Dugway 79.10 49** P **P** 19 18 19.1 -0.8
baz=79
**DUG Dugway 79.10 49** *e*P **P** 19 18 20.8 +0.9
**RRX Edison Barstow 79.44 55** P **P** 19 18 21.2 -0.4
baz=79
**CTU Camp Tracy 79.47 48** *e*P **P** 19 18 24.1 +2.2
**LVV L'vov 79.51 324** *e*P **P** 19 18 20.8 -0.9
LVV MLR MLR
comp=N,300nm,17.0s
LVV MLR MLR
comp=Z,800nm,17.0s
LVV MLR MLR
comp=E,900nm,18.0s
**NLU North Lily Min 79.70 49** *e*P **P** 19 18 24.8 +1.5
**A26A Wade Farm, Ken 79.73 37** P **P** 19 18 22.4 -0.6
baz=80
**SHPR Sheep Range 79.74 53** *e*P **P** 19 18 25.2 +1.8
**O16A Springville 79.91 48** *e*P P 19 18 31.2 +6.9
**MPU Maple Canyon 79.94 48** *e*P **P** 19 18 25.2 +0.7
comp=E,72nm,1.0s
**KWP Kalwaria Pacla 80.28 325**⇑ *i*P P 19 18 17.1 -8.8
**CCUT Cedar City 80.31 51** *e*P **P** 19 18 28.9 +2.3
**TESR Tescani 80.36 320**⇓ *i*P **P** 19 18 26.9 +0.5
**BURAR Bucovina Array 80.38 322**⇑ P **P** 19 18 26.9 +0.3
**BURAR Bucovina Array 80.38 322**⇑ *i*P **P** 19 18 26.9 +0.3
**GMRC Granite Mounta 80.40 54** P **P** 19 18 26.3 -0.7
baz=80
**C26A Wahner Farm, P 80.41 38** P **P** 19 18 26.0 -0.7
baz=80
**CFR Carcaliu 80.42 319**⇓ P **P** 19 18 26.8 +0.1
**CFR Carcaliu 80.42 319**⇓ *i*P **P** 19 18 26.8 +0.1
**A28A Rude Farm, Bot 80.59 36** P **P** 19 18 27.3 -0.3
baz=80,SNR=5.2
**BRTR Keskin Array B 80.60 312** P **P** 19 18 28.6 +0.6
comp=E,5.9nm,0.8s,baz=105,slow=3.5,SNR=23
BRTR LR LR 19 58 58.4
comp=E,258nm,18.8s,baz=42,slow=39
**BRTR Keskin Array B 80.60 312** P **P** 19 18 28.6 +0.6
BRTR pmax pmax
comp=Z,6.0nm,0.8s
BRTR MLR MLR
comp=Z,258nm,18.8s
**E25A Miller Ranch, 80.61 39** P **P** 19 18 27.0 -0.7
baz=80
**BELC Belle Mtn. Jos 80.62 55** P **P** 19 18 27.6 -0.6
baz=80
**TMUT Trail Mountain 80.63 49** *e*P **P** 19 18 29.6 +1.3
comp=Z,17nm,0.8s
**TIRR Tirgusor 80.73 318**⇑ P **P** 19 18 28.9 +0.6
**TIRR Tirgusor 80.73 318**⇑ *i*P **P** 19 18 28.9 +0.6
**VRI Vrincioaia 80.74 320**⇑ P **P** 19 18 29.7 +1.3
**VRI Vrincioaia 80.74 320**⇑ *i*P **P** 19 18 29.7 +1.3
**D26A Manning 80.76 38** P **P** 19 18 28.0 -0.6
baz=81
**C27A Sayler Ranch, 80.78 38** P **P** 19 18 28.3 -0.3
baz=81,SNR=6.0
**PLOR Plostina 80.79 320**⇓ P **P** 19 18 29.6 +0.9
**PLOR Plostina 80.79 320**⇓ *i*P **P** 19 18 29.6 +0.9
**P17A Butcher Ranch, 80.82 48** *e*P **P** 19 18 30.8 +1.6
**B28A Dugan Ranch, T 80.86 36** P **P** 19 18 28.4 -0.6
baz=81
**F25A Bowman 80.95 40** P **P** 19 18 29.2 -0.4
baz=81
**KOLS Kolonicke sedl 80.96 324** *e*P **P** 19 18 29.6 +0.1
KOLS pmax pmax
comp=Z,230nm,3.8s
**KOLS Kolonicke sedl 80.96 324** *e*P **P** 19 18 29.6 +0.1
**P18A Preston Nutter 81.03 48** *e*P **P** 19 18 32.4 +1.9
**ANTO Ankara 81.03 312** *e*P **P** 19 18 31.3 +1.1
**ANTO Ankara 81.03 312** *e*P **P** 19 18 31.3 +1.1
**A29A Manning Farm, 81.08 36** P **P** 19 18 29.7 -0.6
baz=81
**IRM Iron Mountain 81.10 55** P **P** 19 18 30.6 -0.1
baz=81
**E26A Carlson Angus 81.11 39** P **P** 19 18 30.0 -0.5
baz=81
**STHS Stebnicka Huta 81.12 325** *e*P **P** 19 18 33.2 +2.8
STHS pmax pmax
comp=Z,4.0nm,1.0s
**STHS Stebnicka Huta 81.12 325** *e*P **P** 19 18 33.2 +2.8
**UZH Uzhgorod 81.16 324** *e*P P 19 18 33.9 +3.4
UZH *e* 19 18 36.9
**SRU San Rafael 81.17 48** *e*P **P** 19 18 32.0 +0.9
**SRU San Rafael 81.17 48** *e*P **P** 19 18 32.0 +0.9
**OJC Ojcow 81.23 326** *e*P **P** 19 18 31.6 +0.6
**OJC Ojcow 81.23 326** *e*P **P** 19 18 31.7 +0.7
**MSAB Monastry St. A 81.29 318**⇑ *i*P **P** 19 18 32.2 +0.9
**ISR Istrita 81.32 319**⇓ P **P** 19 18 33.0 +1.4
**ISR Istrita 81.32 319**⇓ *i*P **P** 19 18 33.0 +1.4
**DOPR Dopca 81.38 321**⇑ *i*P **P** 19 18 33.1 +1.2
**MLR Muntele Rosu 81.40 320**⇓ P **P** 19 18 34.1 +2.0
**MLR Muntele Rosu 81.40 320**⇓ *i*P **P** 19 18 34.1 +2.0
**A30A Hoffart Farm, 81.52 35** P **P** 19 18 32.4 -0.1
baz=81
**NIE Niedzica 81.56 326** *e*P **P** 19 18 33.7 +0.9
**NIE Niedzica 81.56 326** *e*P **P** 19 18 33.7 +0.9
**D28A Regan 81.60 37** P **P** 19 18 32.4 -0.7
baz=81
**SECR 81.63 320**⇓ *i*P **P** 19 18 34.9 +1.7
**MDND Maddock 81.64 37** P **P** 19 18 32.9 -0.3
baz=82
**MDND Maddock 81.64 37** *e*P **P** 19 18 33.8 +0.6
comp=Z,26nm,1.1s
**RAYN Ar Rayn 81.66 293** P **P** 19 18 34.0 +0.3
comp=Z,56nm,0.6s,SNR=10
**RAYN Ar Rayn 81.66 293** *e*P **P** 19 18 33.4 -0.3
comp=Z,11nm,0.8s
**ULM Lac du Bonnet 81.72 33** P **P** 19 18 33.1 -0.4
comp=Z,6.7nm,0.8s,baz=307,slow=9.4,SNR=5.8
**ULM Lac du Bonnet 81.72 33** P **P** 19 18 33.1 -0.4
ULM pmax pmax
comp=Z,7.0nm,0.9s
**G26A Maurine 81.82 40** P **P** 19 18 33.6 -0.7
baz=82
**B30A Myrvik Farm, E 81.84 36** P **P** 19 18 33.4 -0.8
baz=82,SNR=8.0
**VOIR 81.91 320**⇓ P **P** 19 18 35.7 +1.0
**VOIR 81.91 320**⇓ *i*P **P** 19 18 35.7 +1.0
**E28A Huff 81.95 38** P **P** 19 18 34.2 -0.7
baz=82
**GLA Glamis 81.97 55** *e*P **P** 19 18 36.9 +1.7
**GLA Glamis 81.97 55** *e*P **P** 19 18 36.9 +1.7
**G27A Dupree 82.12 39** P **P** 19 18 35.0 -0.8
baz=82,SNR=6.6
**LANS Liptovska Anna 82.14 326** *e*P **P** 19 18 38.0 +2.2
**LANS Liptovska Anna 82.14 326** *e*P **P** 19 18 38.0 +2.2
**B31A Greenbush Farm 82.19 35** P **P** 19 18 35.5 -0.5
baz=82
**DRGR 82.20 323**⇓ P **P** 19 18 37.1 +0.8
**DRGR 82.20 323**⇓ *i*P **P** 19 18 37.0 +0.8
**OKC Ostrava-Krasne 82.25 327** *e*P **P** 19 18 38.0 +1.7

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OKC | | | | | | MLR | MLR | | | | |
| | comp=Z,700nm,12.4s | | | | | | | | | | |
| **OKC** | **Ostrava-Krasne** | **82.25** | **327** | *eP* | | **P** | **19 18 38.0 +1.7** |
| OKC | | | | | | AMS | AMS | 20 00 20.0 | | | |
| | comp=Z,700nm,12.4s | | | | | | | | | | |
| **C30A** | **Mose, Pekin** | **82.29** | **36** | P | | **P** | **19 18 36.2 -0.3** |
| | baz=82 | | | | | | | | | | |
| **KSP** | **Ksiaz** | **82.35** | **328** | *eP* | | **P** | **19 18 38.8 +2.0** |
| **KSP** | **Ksiaz** | **82.35** | **328** | *eP* | | **P** | **19 18 38.8 +2.0** |
| **A32A** | **Rocking H Ranc** | **82.38** | **34** | P | | **P** | **19 18 36.3 -0.7** |
| | baz=82 | | | | | | | | | | |
| **E29A** | **Napoleon** | **82.49** | **38** | P | | **P** | **19 18 37.2 -0.5** |
| | baz=82 | | | | | | | | | | |
| **H27A** | **Howes** | **82.53** | **40** | P | | **P** | **19 18 37.5 -0.5** |
| | baz=82,SNR=7.7 | | | | | | | | | | |
| **MORC** | **Moravsky Berou** | **82.57** | **327** | *eP* | | **P** | **19 18 39.0 +0.9** |
| **MORC** | **Moravsky Berou** | **82.57** | **327** | *eP* | | **P** | **19 18 39.0 +0.9** |
| **LOT** | **Lotru** | **82.57** | **321** | ⇓ *iP* | | **P** | **19 18 39.7 +1.5** |
| **DPC** | **Dobruska-Polom** | **82.69** | **328** | *eP* | | **P** | **19 18 39.8 +1.1** |
| DPC | | | | | | MLR | MLR | | | | |
| | comp=Z,700nm,15.4s | | | | | | | | | | |
| **DPC** | **Dobruska-Polom** | **82.69** | **328** | *eP* | | **P** | **19 18 39.8 +1.1** |
| DPC | | | | | | AMS | AMS | 20 00 20.0 | | | |
| | comp=Z,700nm,15.4s | | | | | | | | | | |
| **UPC** | **Upice** | **82.71** | **328** | AMS | | AMS | AMS | 20 01 00.0 | | | |
| | comp=Z,800nm,15.5s | | | | | | | | | | |
| **B32A** | **Ashes, Strandq** | **82.73** | **35** | P | | **P** | **19 18 38.4 -0.5** |
| | baz=83 | | | | | | | | | | |
| **PSZ** | **Piszkesteto** | **82.81** | **325** | *eP* | | **P** | **19 18 40.6 +1.3** |
| PSZ | | | | | | pmax | pmax | | | | |
| | comp=Z,19nm,1.4s | | | | | | | | | | |
| **PSZ** | **Piszkesteto** | **82.81** | **325** | *eP* | | **P** | **19 18 40.6 +1.3** |
| | comp=Z,19nm,1.4s | | | | | | | | | | |
| **N23A** | **Red Feather La** | **82.81** | **45** | P | | **P** | **19 18 39.1 -0.7** |
| | baz=83,SNR=7.5 | | | | | | | | | | |
| **J26A** | **Sides Ranch, S** | **82.87** | **42** | P | | **P** | **19 18 39.1 -0.7** |
| | baz=83 | | | | | | | | | | |
| **E30A** | **Jud** | **82.91** | **37** | P | | **P** | **19 18 39.2 -0.6** |
| | baz=83,SNR=7.0 | | | | | | | | | | |
| **ASF** | **Jabal al Asfar** | **82.98** | **304** | P | | **P** | **19 18 40.6 0.0** |
| **H28A** | **Mission Ridge** | **83.07** | **40** | P | | **P** | **19 18 40.3 -0.4** |
| | baz=83,SNR=11 | | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **83.12** | **34** | P | | **P** | **19 18 40.5 -0.3** |
| | baz=83 | | | | | | | | | | |
| **AGMN** | **Agassiz Nation** | **83.12** | **34** | *eP* | | **P** | **19 18 40.7 -0.2** |
| **GZR** | **Gura Zlata** | **83.12** | **321** | ⇑P | | **P** | **19 18 42.0 +1.0** |
| **GZR** | **Gura Zlata** | **83.12** | **321** | ⇑ *iP* | | **P** | **19 18 42.0 +1.0** |
| **PMOR** | **Pomariorio Ree** | **83.14** | **113** | *eT* | | T | 20 50 16.7 |
| | comp=Z,1.9nm,0.2s | | | | | | | | | | |
| **PVCC** | **Panska Ves** | **83.32** | **329** | *eP* | | **P** | **19 18 43.6 +1.8** |
| PVCC | | | | | | MLR | MLR | | | | |
| | comp=Z,600nm,15.3s | | | | | | | | | | |
| **PVCC** | **Panska Ves** | **83.32** | **329** | *eP* | | **P** | **19 18 43.6 +1.8** |
| PVCC | | | | | | AMS | AMS | 20 00 40.0 | | | |
| | comp=Z,600nm,15.3s | | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **83.33** | **330** | *eP* | | **P** | **19 18 43.2 +1.3** |
| | comp=Z,11nm,1.3s | | | | | | | | | | |
| | comp=N,467nm,14.3s | | | | | | | | | | |
| | comp=E,702nm,16.1s | | | | | | | | | | |
| | comp=Z,708nm,16.9s | | | | | | | | | | |
| **BRG** | **Berggiesshubel** | **83.33** | **330** | *eP* | | **P** | **19 18 43.2 +1.3** |
| BRG | | | | | | pmax | pmax | | | | |
| | comp=Z,11nm,1.3s | | | | | | | | | | |
| BRG | | | | | | MLR | MLR | | | | |
| | comp=N,467nm,14.3s | | | | | | | | | | |
| BRG | | | | | | MLR | MLR | | | | |
| | comp=E,702nm,16.1s | | | | | | | | | | |
| BRG | | | | | | MLR | MLR | | | | |
| | comp=Z,708nm,16.9s | | | | | | | | | | |
| **VRAC** | **Vranov** | **83.34** | **327** | ⇑P | | **P** | **19 18 42.6 +0.6** |
| **VRAC** | **Vranov** | **83.34** | **327** | ⇑ *iP* | | **P** | **19 18 42.6 +0.6** |
| **CLL** | **Collm** | **83.39** | **330** | *i* P | | **P** | **19 18 42.0 -0.2** |
| CLL | | | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.2s | | | | | | | | | | |
| CLL | | | | | | MLR | MLR | | | | |
| | comp=Z,500nm,16.9s | | | | | | | | | | |
| **CLL** | **Collm** | **83.39** | **330** | *eP* | | **P** | **19 18 41.7 -0.5** |
| | comp=Z,4.0nm,0.9s,baz=40,slow=4.9 | | | | | | | | | | |
| **CLL** | **Collm** | **83.39** | **330** | *i* P | | **P** | **19 18 42.0 -0.2** |
| | comp=Z,13nm,1.2s | | | | | | | | | | |
| CLL | | | | | *i* sP | | **sP** | **19 18 53.3 -3.5** |
| CLL | | | | | | LmH | | 19 54 00.0 | | | |
| | comp=N,300nm,19.3s | | | | | | | | | | |
| CLL | | | | | | LmH | | 19 54 00.0 | | | |
| | comp=E,400nm,21.1s | | | | | | | | | | |
| **I28A** | **Midland** | **83.44** | **40** | P | | **P** | **19 18 41.9 -0.8** |
| | baz=83 | | | | | | | | | | |
| **PPT** | **Papeete** | **83.47** | **116** | LR | | LR | 19 50 27.2 | | | | |
| | comp=E,98nm,19.8s,baz=352,slow=32 | | | | | | | | | | |
| **PPT2** | **Papeete2** | **83.48** | **116** | *e*LR | | LR | 19 44 26.0 | | | | |
| | comp=E,479nm,33.0s | | | | | | | | | | |
| **H29A** | **Onida** | **83.53** | **39** | P | | **P** | **19 18 42.9 -0.2** |
| | baz=83 | | | | | | | | | | |
| **FBE** | **Freiberg** | **83.53** | **330** | *eP* | | **P** | **19 18 43.4 +0.5** |
| | comp=E,14nm,1.2s,baz=40,slow=4.9 | | | | | | | | | | |
| **SMOL** | **Smolenice** | **83.53** | **326** | *eP* | | **P** | **19 18 46.1 +3.1** |
| **SMOL** | **Smolenice** | **83.53** | **326** | *eP* | | **P** | **19 18 46.1 +3.1** |
| **B34A** | **Aery, Baudette** | **83.55** | **34** | P | | **P** | **19 18 42.5 -0.6** |
| | baz=83 | | | | | | | | | | |
| **BZS** | **Buzias** | **83.56** | **322** | ⇑P | | **P** | **19 18 43.3 +0.1** |
| **BZS** | **Buzias** | **83.56** | **322** | ⇑ *iP* | | **P** | **19 18 43.3 +0.1** |
| **MVCO** | **Mesa Verde** | **83.59** | **49** | P | | **P** | **19 18 43.4 -0.4** |
| | baz=84,SNR=5.5 | | | | | | | | | | |
| **MVCO** | **Mesa Verde** | **83.59** | **49** | *eP* | | **P** | **19 18 45.8 +2.0** |
| **GOPC** | **GO Pecny, Ondr** | **83.68** | **329** | *eP* | | **P** | **19 18 45.5 +1.7** |
| GOPC | | | | | | MLR | MLR | | | | |
| | comp=Z,800nm,12.2s | | | | | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **83.68** | **329** | *eP* | | **P** | **19 18 45.5 +1.7** |
| GOPC | | | | | | AMS | AMS | 20 01 10.0 | | | |
| | comp=Z,800nm,12.2s | | | | | | | | | | |
| **G30A** | **Faulkton** | **83.73** | **38** | P | | **P** | **19 18 43.5 -0.6** |
| | baz=84 | | | | | | | | | | |
| **PRU** | **Pruhonice** | **83.73** | **329** | *eP* | | **P** | **19 18 44.7 +0.7** |
| PRU | | | | | | MLR | MLR | | | | |
| | comp=Z,1μm,15.5s | | | | | | | | | | |
| **PRU** | **Pruhonice** | **83.73** | **329** | *eP* | | **P** | **19 18 44.7 +0.7** |
| PRU | | | | | | AMS | AMS | 20 00 50.0 | | | |
| | comp=Z,1μm,15.5s | | | | | | | | | | |
| **J28A** | **Allard Ranch,** | **83.80** | **41** | P | | **P** | **19 18 44.0 -0.5** |
| | baz=84 | | | | | | | | | | |
| **TREC** | **Trest** | **83.84** | **328** | AMS | | AMS | AMS | 20 01 10.0 | | | |
| | comp=Z,700nm,14.2s | | | | | | | | | | |
| **MPEP** | **Malo Peshtene** | **84.00** | **319** | P | | **P** | **19 18 46.4 +0.9** |
| **CLZ** | **Clausthal** | **84.03** | **332** | *eP* | | **P** | **19 18 47.9 +2.4** |
| | comp=Z,5.8nm,0.7s,baz=40,slow=4.9 | | | | | | | | | | |
| **K28A** | **Ten Mile Ranch** | **84.20** | **41** | P | | **P** | **19 18 45.9 -0.8** |
| | baz=84 | | | | | | | | | | |
| **SUSD** | **South Dakota S** | **84.30** | **39** | P | | **P** | **19 18 46.6 -0.5** |
| | baz=84 | | | | | | | | | | |
| **WERD** | **Werda** | **84.33** | **330** | *eP* | | **P** | **19 18 48.0 +1.0** |
| | comp=Z,1.8nm,0.8s,baz=40,slow=4.9 | | | | | | | | | | |
| **E33A** | **Westby DABS, E** | **84.33** | **36** | P | | **P** | **19 18 46.8 -0.4** |
| | baz=84 | | | | | | | | | | |
| **GUNZ** | **Gunzen** | **84.38** | **330** | *eP* | | **P** | **19 18 48.5 +1.1** |
| | comp=Z,5.1nm,0.8s,baz=40,slow=4.9 | | | | | | | | | | |
| **WERN** | **Wernitzgruen** | **84.42** | **330** | *eP* | | **P** | **19 18 48.4 +0.8** |
| | comp=Z,4.8nm,0.7s,baz=40,slow=4.9 | | | | | | | | | | |
| **C35A** | **Jirik Farms, M** | **84.43** | **34** | P | | **P** | **19 18 47.2 -0.3** |
| | baz=84 | | | | | | | | | | |
| **NKC** | **Novy Kostel** | **84.43** | **330** | *eP* | | **P** | **19 18 49.0 +1.4** |
| NKC | | | | | | MLR | MLR | | | | |
| | comp=Z,600nm,15.2s | | | | | | | | | | |
| **NKC** | **Novy Kostel** | **84.43** | **330** | *eP* | | **P** | **19 18 49.0 +1.4** |
| NKC | | | | | | AMS | AMS | 20 00 40.0 | | | |
| | comp=Z,600nm,15.2s | | | | | | | | | | |
| **MOX** | **Moxa** | **84.46** | **331** | *eP* | | **P** | **19 18 48.3 +0.6** |
| | comp=Z,3.1nm,0.9s,baz=40,slow=4.9 | | | | | | | | | | |
| MOX | | | | | | *e*L | L | 19 59 27.9 | | | |
| | comp=Z,431nm,18.1s | | | | | | | | | | |
| **Q24A** | **Divide** | **84.52** | **46** | P | | **P** | **19 18 47.8 -0.9** |
| | baz=84,SNR=5.0 | | | | | | | | | | |
| **RZN** | **Rozhen** | **84.59** | **318** | P | | **P** | **19 18 49.9 +1.1** |
| **IBBN** | **Ibbenburen** | **84.65** | **333** | *eP* | | **P** | **19 18 48.5 -0.1** |
| | comp=Z,6.4nm,0.7s,baz=40,slow=4.9 | | | | | | | | | | |
| **CONA** | **Conrad Observa** | **84.68** | **327** | ⇑ *i* PcP | | **P** | **19 18 49.8 +0.8** |
| | comp=Z,15nm,1.1s | | | | | | | | | | |
| **MANZ** | **Manzenberg** | **84.76** | **330** | *eP* | | **P** | **19 18 49.6 +0.3** |
| | comp=Z,3.9nm,0.9s,baz=40,slow=4.9 | | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **84.79** | **329** | *eP* | | **P** | **19 18 49.2 -0.2** |
| KHC | | | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **84.79** | **329** | *eP* | | **P** | **19 18 49.6 +0.2** |
| KHC | | | | | *e*pP | | **pP** | **19 19 00.9 +0.7** |
| KHC | | | | | | AMS | AMS | 20 01 20.0 | | | |
| | comp=Z,1μm,16.7s | | | | | | | | | | |
| **KHC** | **Kasperske Hory** | **84.79** | **329** | *eP* | | **P** | **19 18 49.2 -0.2** |
| | comp=Z,6.9nm,1.3s | | | | | | | | | | |
| **J30A** | **Dallas** | **84.79** | **40** | P | | **P** | **19 18 48.9 -0.6** |
| | baz=85 | | | | | | | | | | |
| **ROTZ** | **Rotzenmuhle** | **84.89** | **330** | *eP* | | **P** | **19 18 50.7 +0.8** |
| | comp=Z,35nm,1.6s,baz=40,slow=4.9 | | | | | | | | | | |
| **GEC2** | **GERESS Array S** | **84.95** | **328** | *eP* | | **P** | **19 18 50.6 +0.2** |
| | comp=Z,1.8nm,0.8s,baz=40,slow=4.9 | | | | | | | | | | |
| **GERES** | **GERESS Array B** | **84.95** | **328** | P | | **P** | **19 18 50.5 +0.1** |
| | comp=Z,1.9nm,0.6s,baz=38,slow=5.4,SNR=19 | | | | | | | | | | |
| GERES | | | | | | LR | LR | 20 01 16.1 | | | |
| | comp=Z,407nm,18.8s,baz=28,slow=39 | | | | | | | | | | |
| **GERES** | **GERESS Array B** | **84.95** | **328** | P | | **P** | **19 18 50.5 +0.1** |
| GERES | | | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | | | |
| GERES | | | | | | MLR | MLR | | | | |
| | comp=Z,407nm,18.8s | | | | | | | | | | |
| **OGNE** | **Ogallala** | **85.02** | **43** | P | | **P** | **19 18 50.1 -0.7** |
| | baz=85 | | | | | | | | | | |
| **H32A** | **Carson Farm,** | **85.04** | **38** | P | | **P** | **19 18 50.4 -0.4** |
| | baz=85 | | | | | | | | | | |
| **WET** | **Wettzell** | **85.08** | **329** | *eP* | | **P** | **19 18 51.0 +0.1** |
| | comp=Z,1.6nm,0.8s,baz=40,slow=4.9 | | | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **85.10** | **47** | P | | **P** | **19 18 50.9 -0.6** |
| | baz=85,SNR=6.6 | | | | | | | | | | |
| **SDCO** | **Great Sand Dun** | **85.10** | **47** | *eP* | | **P** | **19 18 52.7 +1.1** |
| | comp=Z,8.2nm,1.2s | | | | | | | | | | |
| **K30A** | **Basset** | **85.18** | **40** | P | | **P** | **19 18 51.0 -0.5** |
| | baz=85 | | | | | | | | | | |
| **MMB** | **Musomiste** | **85.20** | **318** | P | | **P** | **19 18 52.0 +0.4** |
| **C37A** | **Embarrass** | **85.22** | **33** | P | | **P** | **19 18 50.8 -0.8** |
| | baz=85 | | | | | | | | | | |
| **H33A** | **Prehn Over Nor** | **85.27** | **37** | P | | **P** | **19 18 51.2 -0.7** |
| | baz=85 | | | | | | | | | | |
| **GRF** | **Grafenberg Arr** | **85.36** | **330** | *eP* | | **P** | **19 18 52.7 +0.5** |
| | comp=Z,5.7nm,0.8s,baz=40,slow=4.9 | | | | | | | | | | |
| GRF | | | | | | *e*L | L | 20 01 52.9 | | | |
| | comp=Z,341nm,20.5s | | | | | | | | | | |
| **DIVS** | **Divibare** | **85.45** | **322** | ⇓ *iP* | | **P** | **19 18 53.4 +0.5** |
| **E36A** | **McGregor** | **85.63** | **34** | P | | **P** | **19 18 53.1 -0.5** |
| | baz=86 | | | | | | | | | | |
| **PERS** | **Pernice** | **85.98** | **326** | *eP* | | **P** | **19 18 55.9 +0.5** |
| **SOKA** | **Soboth** | **85.98** | **326** | ⇑ *iP* | | **P** | **19 18 54.8 -0.7** |
| | comp=Z,15nm,1.4s | | | | | | | | | | |
| **F36A** | **Milaca** | **85.99** | **35** | P | | **P** | **19 18 54.9 -0.6** |
| | baz=86 | | | | | | | | | | |
| **ECSD** | **EROS Data Cent** | **86.00** | **38** | P | | **P** | **19 18 54.9 -0.6** |
| | baz=86 | | | | | | | | | | |
| **TNS** | **Taunus Mts** | **86.05** | **332** | *eP* | | **P** | **19 18 55.3 -0.4** |
| | comp=Z,3.2nm,0.7s,baz=40,slow=4.9 | | | | | | | | | | |
| **T25A** | **Trinidad** | **86.15** | **47** | P | | **P** | **19 18 56.0 -0.7** |
| | baz=86 | | | | | | | | | | |
| **RJOB** | **Jochberg** | **86.19** | **328** | *eP* | | **P** | **19 18 58.5 +2.0** |
| | comp=Z,5.0nm,0.8s,baz=40,slow=4.9 | | | | | | | | | | |
| **R27A** | **Eads** | **86.36** | **45** | P | | **P** | **19 18 57.2 -0.3** |
| | baz=86 | | | | | | | | | | |
| **T26A** | **Comanche Natio** | **86.62** | **46** | P | | **P** | **19 18 58.2 -0.7** |
| | baz=86 | | | | | | | | | | |
| **MEM** | **Membach** | **86.67** | **333** | P | | **P** | **19 18 58.0 -0.7** |
| **H36A** | **Jessenland, He** | **86.73** | **36** | P | | **P** | **19 18 58.5 -0.6** |
| | baz=87 | | | | | | | | | | |
| **BOJS** | **Bojanci** | **86.76** | **325** | *i* P | | **P** | **19 18 59.5 +0.3** |
| **R28A** | **Tribune** | **86.89** | **45** | P | | **P** | **19 18 59.4 -0.7** |
| | baz=87 | | | | | | | | | | |
| **STU** | **Stuttgart** | **86.91** | **331** | P | | **P** | **19 18 59.4 -0.5** |
| **STU** | **Stuttgart** | **86.91** | **331** | P | | **P** | **19 18 59.4 -0.5** |
| **JAVS** | **Javornik** | **87.02** | **326** | *eP* | | **P** | **19 18 58.8 -1.8** |
| **TBI** | **Tubuai** | **87.18** | **121** | *e*LR | | LR | 19 46 49.2 | | | | |
| | comp=Z,268nm,22.0s | | | | | | | | | | |
| **APE** | **Apeiranthos** | **87.20** | **314** | ⇓ *eP* | | **P** | **19 19 01.5 -0.1** |
| APE | | | | | | pmax | pmax | | | | |
| | comp=Z,61nm,1.3s | | | | | | | | | | |
| **BFO** | **Black Forest** | **87.61** | **331** | *eP* | | **P** | **19 19 03.2 -0.1** |
| | baz=40,slow=4.9 | | | | | | | | | | |
| **R30A** | **Dighton** | **87.82** | **44** | P | | **P** | **19 19 03.8 -0.8** |
| | baz=88 | | | | | | | | | | |
| **SCHQ** | **Schefferville** | **87.88** | **16** | P | | **P** | **19 19 04.2 -0.2** |
| | comp=Z,8.8nm,0.9s,baz=350,slow=5.3,SNR=4.0 | | | | | | | | | | |
| SCHQ | | | | | | LR | LR | 20 02 01.9 | | | |
| | comp=Z,184nm,19.8s,baz=312,slow=38 | | | | | | | | | | |
| **J38A** | **Wedel Dairy, R** | **88.37** | **36** | P | | **P** | **19 19 06.2 -0.8** |
| | baz=88 | | | | | | | | | | |
| **P34A** | **Walnut Farm, R** | **88.87** | **41** | P | | **P** | **19 19 08.8 -0.7** |
| | baz=89 | | | | | | | | | | |
| **Q35A** | **Mercer Eighty,** | **89.79** | **41** | P | | **P** | **19 19 13.2 -0.6** |
| | baz=90 | | | | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **90.72** | **48** | P | | **P** | **19 19 17.7 -0.6** |
| | baz=91 | | | | | | | | | | |
| **S36A** | **Lake Cedric, C** | **90.84** | **42** | P | | **P** | **19 19 18.2 -0.5** |
| | baz=91 | | | | | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **91.16** | **42** | P | | **P** | **19 19 19.4 -0.8** |
| | baz=91 | | | | | | | | | | |
| **U35A** | **Pawnee** | **91.17** | **43** | P | | **P** | **19 19 19.8 -0.5** |
| | baz=91 | | | | | | | | | | |
| **S37A** | **Fort Scott** | **91.24** | **41** | P | | **P** | **19 19 19.7 -0.8** |
| | baz=91 | | | | | | | | | | |
| **Z32A** | **Haskell** | **91.71** | **47** | P | | **P** | **19 19 22.1 -0.7** |
| | baz=92 | | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.75** | **52** | P | | **P** | **19 19 23.6 +0.4** |
| | comp=Z,1.5nm,0.7s,baz=300,slow=3.6,SNR=16 | | | | | | | | | | |
| TXAR | | | | | | LR | LR | 20 00 34.1 | | | |
| | comp=Z,215nm,18.5s,baz=0.0,slow=36 | | | | | | | | | | |
| **TXAR** | **Lajitas Array** | **91.75** | **52** | P | | **P** | **19 19 23.6 +0.4** |
| TXAR | | | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | | | |
| TXAR | | | | | | MLR | MLR | | | | |
| | comp=Z,215nm,18.5s | | | | | | | | | | |
| **V37A** | **Hulbert** | **92.42** | **43** | P | | **P** | **19 19 25.4 -0.6** |
| | baz=92 | | | | | | | | | | |
| **530A** | **J-C Ranch, Com** | **92.71** | **50** | P | | **P** | **19 19 27.2 -0.3** |
| | baz=93 | | | | | | | | | | |
| **431A** | **Sonora** | **92.81** | **50** | P | | **P** | **19 19 27.6 -0.3** |
| | baz=93 | | | | | | | | | | |
| **V38A** | **Canehill** | **92.85** | **42** | P | | **P** | **19 19 27.4 -0.6** |
| | baz=93 | | | | | | | | | | |
| **SADO** | **Sadowa** | **93.05** | **28** | LR | | LR | 20 03 47.8 | | | | |
| | comp=Z,108nm,21.1s,baz=358,slow=37 | | | | | | | | | | |
| **531A** | **Rocksprings** | **93.20** | **50** | P | | **P** | **19 19 29.2 -0.6** |
| | baz=93 | | | | | | | | | | |
| **H06S1** | **SOCORRO T** | **93.33** | **65** | T | | T | 21 04 05.1 | | | | |
| | SNR=10 | | | | | | | | | | |
| **KEST** | **Kesra** | **97.12** | **322** | LR | | LR | 20 08 42.7 | | | | |
| | comp=Z,398nm,18.1s,baz=284,slow=39 | | | | | | | | | | |
| **RKT** | **Rikitea** | **97.76** | **113** | *e*LR | | LR | 19 51 21.5 | | | | |
| | comp=Z,278nm,32.2s | | | | | | | | | | |
| **TKL** | **Tukaleechee C** | **98.54** | **36** | LR | | LR | 20 03 42.5 | | | | |
| | comp=Z,42nm,19.9s,slow=35 | | | | | | | | | | |
| **ESDC** | **Sonseca Array** | **99.66** | **334** | LR | | LR | 20 09 19.6 | | | | |
| | comp=Z,366nm,21.0s,baz=55,slow=38 | | | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **119.17** | **314** | PKP | | **PKPdf** | **19 25 04.0 -0.6** |
| | comp=Z,1.0nm,0.5s,baz=18,slow=2.0,SNR=15 | | | | | | | | | | |
| **MATP** | **Matopo** | **119.79** | **265** | PKP | | **PKPdf** | **19 25 05.5 -0.3** |
| | comp=Z,1.0nm,0.7s,baz=40,slow=1.3,SNR=5.6 | | | | | | | | | | |
| **QSPA** | **South Pole Qui** | **124.13** | **180** | *e*PKPdf | | **PKPdf** | **19 25 12.3 -0.3** |
| **LBTB** | **Lobatse** | **124.26** | **261** | PKP | | **PKPdf** | **19 25 14.6 +0.4** |
| | comp=Z,2.7nm,0.6s,baz=126,slow=1.0,SNR=7.1 | | | | | | | | | | |
| **LBTB** | **Lobatse** | **124.26** | **261** | PKIKP | | **PKPdf** | **19 25 14.6 +0.4** |
| LBTB | | | | | | pmax | pmax | | | | |
| | comp=Z,3.0nm,0.6s | | | | | | | | | | |
| **BOSA** | **Boshof** | **126.03** | **257** | PKP | | **PKPdf** | **19 25 17.6 0.0** |
| | comp=Z,1.3nm,0.6s,baz=20,slow=2.0,SNR=5.9 | | | | | | | | | | |
| **BOSA** | **Boshof** | **126.03** | **257** | PKIKP | | **PKPdf** | **19 25 17.6 0.0** |
| BOSA | | | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | | | |
| **DBIC** | **Dimbokro** | **128.19** | **315** | PKP | | **PKPdf** | **19 25 21.5 -0.5** |
| | comp=Z,2.3nm,0.7s,baz=34,slow=1.0,SNR=3.9 | | | | | | | | | | |
| **DBIC** | **Dimbokro** | **128.19** | **315** | PKIKP | | **PKPdf** | **19 25 21.5 -0.5** |
| DBIC | | | | | | pmax | pmax | | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | | | |
| **SAML** | **Samuel** | **146.09** | **47** | *e*PKPdf | | **PKPdf** | **19 25 55.2 +0.4** |
| **LPAZ** | **La Paz** | **147.97** | **63** | PKPbc | | **PKPbc** | **19 26 02.1 +0.5** |
| | comp=Z,11nm,0.7s,baz=265,slow=2.1,SNR=42 | | | | | | | | | | |
| **LPAZ** | **La Paz** | **147.97** | **63** | PKP2 | | **PKPbc** | **19 26 02.2 +0.5** |
| LPAZ | | | | | | pmax | pmax | | | | |
| | comp=Z,11nm,0.7s | | | | | | | | | | |
| **LVC** | **Limon Verde** | **151.00** | **74** | *e*PKPbc | | **PKPbc** | **19 26 09.5 +0.9** |
| LVC | | | | | | *e*PKPab | **PKPab** | **19 26 17.3 +1.1** |
| **LCO** | **Las Campanas** | **152.24** | **88** | *e*PKPbc | | **PKPbc** | **19 26 11.7 +0.4** |

*CSEM **30** 19:16:29.8±0.4,35°.21N×26°.88E,h5km,MD3.2,Error ellipse: s-maj=16.9km s-min=4.2km az=154.0*
*ATH **30** 19:16:29.2,35°.26N×26°.93E,h22km±1km, MD3.2/9*
*ISCJB **30** 19:16:30.3±1.7,35°.3N×0°.1×26°.86E±0°.07,h12km±14km, Error ellipse: s-maj=18.8km s-min=4.8km az=153.6*
*ISK **30** 19:16:32.1,35°.36N×27°.18E,h5km,MD3.8*
**ISC 30 19:16:29.4±1.5,35°.23N±0°.07×26°.92E±0°.04,h5km±11km, n32,σ0§88/41,Crete**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KARP** | **Karpathos** | **0.38** | **32** | *e*PB | | **Pg** | **19 16 36.5** | **-0.3** |
| KARP | | | | *e*SB | | **Sg** | **19 16 42.2** | **+0.5** |
| **KARP** | **Karpathos** | **0.38** | **32** | *e*Pb | | **Pg** | **19 16 36.5** | **-0.3** |
| KARP | | | | *e*Sb | | **Sg** | **19 16 42.2** | **+0.5** |
| **ZKR** | **Zakros** | **0.58** | **259** | *e*PB | | **Pg** | **19 16 40.5** | **-0.2** |
| ZKR | | | | *e*SN | | **Sb** | **19 16 49.8** | **-1.0** |
| **ZKR** | **Zakros** | **0.58** | **259** | *e*Pb | | **Pg** | **19 16 40.5** | **-0.2** |
| **NPS** | **Neapolis** | **1.07** | **272** | *e*PN | | **Pb** | **19 16 50.4** | **-0.1** |
| **NPS** | **Neapolis** | **1.07** | **272** | *e*Pn | | **Pb** | **19 16 50.4** | **-0.1** |
| **LAST** | **Lasithi** | **1.18** | **267** | *e*PN | | **Pg** | **19 16 52.3** | **+0.2** |
| LAST | | | | *e*SN | | **Sb** | **19 17 08.2** | **+0.2** |
| **LAST** | **Lasithi** | **1.18** | **267** | *e*Pn | | **Pg** | **19 16 52.3** | **+0.2** |
| LAST | | | | *e*Sn | | **Sb** | **19 17 08.2** | **+0.2** |
| **ARG** | **Arkhangelos** | **1.40** | **45** | *e*PN | | **Pn** | **19 16 55.6** | **0.0** |
| ARG | | | | *e*SN | | **Sb** | **19 17 13.4** | **-0.7** |
| **ARG** | **Arkhangelos** | **1.40** | **45** | *e*Pn | | **Pn** | **19 16 55.6** | **0.0** |
| ARG | | | | *e*Sn | | **Sb** | **19 17 13.4** | **-0.7** |
| **IDI** | **Anoyia** | **1.66** | **273** | *e*PN | | **Pn** | **19 16 59.1** | **-0.2** |
| **IDI** | **Anoyia** | **1.66** | **273** | *e*Pn | | **Pn** | **19 16 59.1** | **-0.2** |
| **DALY** | **Dalyan (Mu˘la** | **2.12** | **41** | *e*PN | | **Pn** | **19 17 06.5** | **+0.9** |
| **DALY** | **Dalyan (Mu˘la** | **2.12** | **41** | *e*Pn | | **Pn** | **19 17 06.5** | **+0.9** |
| **APE** | **Apeiranthos** | **2.15** | **329** | *e*PN | | **Pg** | **19 17 10.7** | **-0.1** |
| **APE** | **Apeiranthos** | **2.15** | **329** | *e*PB | | **Pn** | **19 17 05.6** | **-0.5** |
| **APE** | **Apeiranthos** | **2.15** | **329** | *e*Pn | | **Pg** | **19 17 10.7** | **-0.1** |
| **YER** | **Yerkesik** | **2.20** | **30** | *e*PN | | **Pb** | **19 17 08.6** | **-1.2** |
| YER | | | | *e*SN | | **Sn** | **19 17 34.4** | **-0.1** |
| **YER** | **Yerkesik** | **2.20** | **30** | *e*Pn | | **Pb** | **19 17 08.6** | **-1.2** |
| YER | | | | *e*Sn | | **Sn** | **19 17 34.4** | **-0.1** |
| **VAM** | **Vamos** | **2.23** | **275** | *e*PN | | **Pn** | **19 17 07.4** | **+0.3** |
| **VAM** | **Vamos** | **2.23** | **275** | *e*Pn | | **Pn** | **19 17 07.4** | **+0.3** |
| **FETY** | **Fethiye** | **2.25** | **51** | *e*PN | | **Pn** | **19 17 08.4** | **+1.0** |
| **FETY** | **Fethiye** | **2.25** | **51** | *e*Pn | | **Pn** | **19 17 08.4** | **+1.0** |
| **KSL** | **Kastellorizon** | **2.36** | **66** | *e*PN | | **Pn** | **19 17 08.5** | **-0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.83** | **16** | *e*PN | | **Pn** | **19 17 16.8** | **+1.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.83** | **16** | *e*Pn | | **Pn** | **19 17 16.8** | **+1.4** |
| **ELL** | **Elmali** | **2.86** | **57** | *e*PN | | **Pn** | **19 17 17.0** | **+1.1** |
| **ELL** | **Elmali** | **2.86** | **57** | *e*Pn | | **Pn** | **19 17 17.0** | **+1.1** |
| **KULA** | **Kula-Manisa** | **3.57** | **23** | *e*PN | | **Pn** | **19 17 27.5** | **+1.9** |
| **KULA** | **Kula-Manisa** | **3.57** | **23** | *e*Pn | | **Pn** | **19 17 27.5** | **+1.9** |
| **SUTC** | **Sutluce-Ispart** | **3.99** | **55** | *e*PN | | **Pn** | **19 17 33.0** | **+1.6** |
| **SUTC** | **Sutluce-Ispart** | **3.99** | **55** | *e*Pn | | **Pn** | **19 17 33.0** | **+1.6** |

*ISCJB **30** 19:29:10.8±0.6,43°.13N±0°.02×126°.31W±0°.07,h10km, mb4.0/8,MS3.7/2,Error ellipse: s-maj=6.9km s-min=3.3km az=175.1*
*NEIC **30** 19:29:12.1±1.0,43°.12N×126°.39W,h10km,mb4.2/14, Error ellipse: s-maj=12.4km s-min=5.6km az=80.0*
*IDC **30** 19:29:12.7±1.3,43°.37N×125°.88W,h0km,mb3.6/5, mb1 3.9/10,mb1mx3.7/37,mbtmp3.7/10,ML3.2/4,MS3.5/7, Ms1 3.5/7,ms1mx3.2/33,Error ellipse: s-maj=24.6km s-min=10.9km az=52.0*
**ISC 30 19:29:12.9±1.0,43°.11N±0°.04×126°.15W±0°.07,h10km, n133,σ1§45/112,mb4.2/8,3C,Off coast of Oregon**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **KEBM** | **Edson Butte** | **1.35** | **99** | *e*Pn | | **Pn** | **19 29 36.6** | **-1.3** |
| **TAKO** | **Tahkenitch** | **1.64** | **66** | ⇑P | | **Pn** | **19 29 41.0** | **-0.7** |
| **KBO** | **Bosley Butte** | **1.68** | **122** | *e*Pn | | **Pn** | **19 29 40.4** | **-2.0** |
| **RNO** | **Roman Nose** | **1.93** | **65** | ⇑P | | **Pn** | **

comp=Z,715nm,18.1s,baz=244,slow=42
**NEW Newport 8.15 48** *e*Pn **Pn 19 31 10.6 -0.7**
9.3nm,1.1s
**ELK Elko 8.47 102** Pn **Pn 19 31 17.4 +1.6**
0.2nm,0.3s,baz=211,slow=1.0,SNR=6.7
ELK LR LR 19 34 54.3
comp=Z,201nm,19.7s,baz=316,slow=41
**ELK Elko 8.47 102** *e*Pn Pn 19 31 19.1 +3.3
6.3nm,1.2s
**HLID Hailey 8.57 83** *e*Pn **Pn 19 31 18.7 +1.6**
**BSMT Bassoo Peak 9.28 55** *e*Pn **Pn 19 31 27.9 +1.0**
**MSO Missoula 9.42 63** *e*Pn **Pn 19 31 29.4 +0.8**
**ISA Isabella 9.51 139** *e*Pn Pn 19 31 33.0 +3.0
**JTMT Jette 9.54 57** *e*Pn **Pn 19 31 32.3 +1.9**
**BLMT Blacktail Moun 9.61 55** *e*Pn **Pn 19 31 31.8 +0.4**
**SWMT Swartz Lake 9.62 59** *e*Pn **Pn 19 31 31.8 +0.3**
**MCMT McKenzie Canyo 9.74 75** *e*Pn **Pn 19 31 33.1 -0.2**
**YBMT Yellow Bay 9.76 57** *e*Pn **Pn 19 31 31.2 -2.1**
**SLMT Seeley Lake 9.85 61** *e*Pn **Pn 19 31 34.7 +0.1**
**CHMT Chamberlain Mo 9.89 63** *e*Pn **Pn 19 31 35.6 +0.4**
**DLMT Dillon 9.99 72** *e*Pn **Pn 19 31 38.1 +1.6**
**BGU Big Grassy Mou 10.01 98** *e*Pn Pn 19 31 39.7 +2.9
21nm,1.5s
**LRM Limekiln Ridge 10.16 70** *e*Pn **Pn 19 31 40.6 +1.6**
**DUG Dugway 10.40 102** *e*Pn **Pn 19 31 44.4 +2.3**
**BOZ Bozeman (W) 10.70 71** *e*Pn **Pn 19 31 48.0 +1.7**
**SHPR Sheep Range 10.71 124** *e*Pn Pn 19 31 50.0 +3.5
**QLMT Earthquake Lak 10.75 76** *e*Pn Pn 19 31 50.4 +3.4
**FXWY Fox Creek 11.03 82** *e*Pn Pn 19 31 54.5 +3.7
**AHID Auburn Hatcher 11.04 87** *e*Pn Pn 19 31 54.3 +3.3
**YMR Madison River 11.07 77** *e*P Pn 19 31 55.3 +3.9
**IMW Indian Meadow 11.08 81** *e*Pn Pn 19 31 54.2 +2.6
**TPAW Teton Pass 11.09 83** *e*Pn Pn 19 31 55.4 +3.7
**YFT Old Faithful 11.16 78** *e*Pn Pn 19 31 57.3 +4.7
**REDW Red Top Meadow 11.17 83** *e*Pn Pn 19 31 56.9 +4.1
REDW *e*Sn Sn 19 34 13.4 +15
**CCUT Cedar City 11.22 115** *e*Pn **Pn 19 31 55.5 +1.9**
**MOOW Moose Ponds 11.22 81** *e*Pn Pn 19 31 57.4 +3.9
**SNOW Snow King Moun 11.23 83** *e*Pn Pn 19 31 56.6 +3.0
**FLWY Flagg Ranch 11.25 80** *e*Pn Pn 19 31 58.2 +4.4
**YNR Norris Junctio 11.28 77** *e*Pn Pn 19 31 58.4 +4.1
**LOHW Long Hollow 11.33 82** *e*Pn Pn 19 31 58.6 +3.6
**H17A Grant Village 11.34 78** *e*Pn Pn 19 32 00.1 +4.9
**LKWY Lake 11.47 77** *e*Pn Pn 19 32 01.9 +4.9
**GCMT Greycliff 12.08 72** *e*Pn **Pn 19 32 07.5 +2.3**
**PFO Pinyon Flat Ob 12.15 138** LR LR 19 36 49.2
comp=Z,400nm,19.5s,baz=314,slow=37
**BW06 Boulder Array 12.17 86** *e*Pn Pn 19 32 09.0 +2.5
**SRU San Rafael 12.44 103** *e*Pn Pn 19 32 16.7 +6.5
**DLBC Dease Lake 15.54 352** Pn **P 19 32 55.6 -0.7**
0.1nm,0.3s,baz=170,slow=14,SNR=5.8
**ISCO Idaho Springs 15.74 95** *e*Pn **Pn 19 32 54.9 0.0**
4.8nm,1.0s
**RSSD Black Hills 16.05 79** *e*Pn **P 19 33 05.4 +3.3**
4.4nm,0.7s
**SDCO Great Sand Dun 16.60 102** *e*Pn **P 19 33 07.4 -1.0**
59nm,1.9s
**ANMO Albuquerque 17.31 112** Pn **P 19 33 16.1 -0.1**
0.1nm,0.3s,baz=312,slow=12,SNR=12
ANMO LR LR 19 39 38.6
comp=Z,130nm,20.6s,baz=298,slow=36
**ANMO Albuquerque 17.31 112** *e*Pn **P 19 33 16.8 +0.6**
6.5nm,1.0s
**T25A Trinidad 17.64 102** *e*Pn **P 19 33 22.1 +2.2**
12nm,1.4s
**BNM Barren Site 17.65 114** *e*Pn **P 19 33 22.4 +2.3**
**121A Cookes Peak, D 17.91 120** *e*Pn **Pn 19 33 21.4 -0.7**
13nm,1.1s
**FFC Flin Flon 19.57 45** *e*P **Pn 19 33 41.9 -0.1**
14nm,1.1s
**MNTX Cornudas Mount 19.99 118** *e*P Pn 19 33 50.5 +3.2
59nm,2.8s
**YKA Yellowknife Ar 20.57 15** P **P 19 33 50.5 -1.0**
1.4nm,0.8s,baz=199,slow=38,SNR=3.4
**AMTX Amarillo 20.66 105** *e*P Pn 19 33 55.7 +0.5
24nm,1.0s
**ECSD EROS Data Cent 21.42 78** *e*P **P 19 34 02.1 +1.3**
45nm,1.9s
**AGMN Agassiz Nation 21.70 66** *e*P **P 19 34 05.3 +1.5**
11nm,0.9s
**ULM Lac du Bonnet 21.86 60** P **P 19 34 04.2 -1.2**
5.8nm,0.8s,baz=268,slow=8.9,SNR=5.4
ULM LR LR 19 42 35.1
comp=Z,188nm,20.6s,baz=303,slow=37
**ULM Lac du Bonnet 21.86 60** *e*P **P 19 34 06.7 +1.2**
11nm,0.9s
**TX31 Lajitas Ar. Si 22.67 120** *e*P P 19 34 21.3 +6.9
**TXAR Lajitas Array 22.67 120** P **P 19 34 16.3 +1.9**
1.0nm,0.8s,baz=302,slow=8.4,SNR=4.3
**WMOK Wichita Mounta 22.80 102** *e*P **P 19 34 16.8 +1.1**
22nm,1.5s
**ILAR Eielson Array 24.67 339** P **P 19 34 33.0 -0.6**
1.0nm,0.7s,baz=147,slow=8.4,SNR=13
**CCM Cathedral Cave 26.86 89** *e*P **P 19 34 57.3 +3.7**
21nm,1.5s
**H11N3 WAKE ISLAND Hy 60.09 270** T T 20 44 17.7
baz=51,slow=75,SNR=158
**H11N2 WAKE ISLAND Hy 60.09 270** T T 20 44 28.0
baz=51,slow=75,SNR=102
**H11N1 WAKE ISLAND Hy 60.11 270** T T 20 44 11.2
baz=51,slow=75,SNR=122
**H11S1 WAKE ISLAND Hy 61.01 269** T T 20 45 22.1
baz=50,slow=75,SNR=134
**H11S2 WAKE ISLAND Hy 61.01 269** T T 20 45 19.9
baz=50,slow=75,SNR=179
**H11S3 WAKE ISLAND Hy 61.02 269** T T 20 45 21.8
baz=50,slow=75,SNR=118
**SONM Songino Array 78.28 327** P **P 19 41 14.0 +1.1**
0.7nm,1.0s,baz=18,slow=5.0,SNR=2.5
**MKAR Makanchi Array 87.00 341** LR LR 20 24 25.1
comp=Z,46nm,18.2s,baz=326,slow=38

*ISK **30** 19:35:02.3,37°.13N×28°.56E,h17km,MD2.5*
*CSEM **30** 19:35:03.8±0.2,37°.09N×28°.51E,h10km,MD2.5,Error ellipse: s-maj=7.4km s-min=4.6km az=46.0*
*DDA **30** 19:35:04.2,37°.08N×28°.48E,h7km,Md2.7*
**ISC 30 19:35:04.2**±1.1,**37°.12N**±0°.03×**28°.52E**±0°.03,**h5**km±9km,
**n18,σ0°92/34,Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.19** | **275** | *e*PG | **Pg** | **19 35 07.7** | **-0.3** |
| YER | | | | *e*SG | **Sg** | **19 35 11.5** | **+1.0** |
| **YER** | **Yerkesik** | **0.19** | **275** | *e*Pg | **Pg** | **19 35 07.7** | **-0.3** |
| YER | | | | *e*Sg | **Sg** | **19 35 11.5** | **+1.0** |
| **TURN** | **Turunc** | **0.25** | **165** | *i* P | **Pg** | **19 35 09.6** | **+0.5** |
| TURN | | | | *i* S | **Sb** | **19 35 16.5** | **+0.5** |
| **TURN** | **Turunc** | **0.25** | **165** | P | **Pg** | **19 35 09.6** | **+0.5** |
| TURN | | | | S | **Sb** | **19 35 16.4** | **+0.5** |
| **DALY** | **Dalyan (Mu˘la** | **0.32** | **160** | *e*PG | **Pg** | **19 35 09.5** | **-0.9** |
| **DALY** | **Dalyan (Mu˘la** | **0.32** | **160** | *e*Pg | **Pg** | **19 35 09.5** | **-0.9** |
| **FETY** | **Fethiye** | **0.66** | **137** | *e*PG | **Pg** | **19 35 15.4** | **-1.4** |
| FETY | | | | *e*SG | **Sg** | **19 35 25.1** | **-0.4** |
| **FETY** | **Fethiye** | **0.66** | **137** | *e*Pg | **Pg** | **19 35 15.5** | **-1.4** |
| FETY | | | | *e*Sg | **Sg** | **19 35 25.1** | **-0.4** |
| **DNZL** | **Cakiroluk** | **0.71** | **36** | *i* P | **Pg** | **19 35 18.0** | **+0.1** |
| DNZL | | | | *i* S | **Sb** | **19 35 30.0** | **+0.7** |
| **DNZL** | **Cakiroluk** | **0.71** | **36** | P | **Pg** | **19 35 18.0** | **+0.1** |
| DNZL | | | | S | **Sb** | **19 35 30.0** | **+0.7** |
| **AYDN** | **Tasoluk** | **0.74** | **317** | *i* P | **Pg** | **19 35 19.2** | **+0.7** |
| AYDN | | | | *i* S | **Sn** | **19 35 32.1** | **-1.1** |
| **AYDN** | **Tasoluk** | **0.74** | **317** | P | **Pg** | **19 35 19.2** | **+0.7** |
| AYDN | | | | S | **Sn** | **19 35 32.1** | **-1.1** |
| **BDRM** | **Kayabasi** | **0.86** | **267** | *i* P | **Pg** | **19 35 20.3** | **-0.5** |
| BDRM | | | | *i* S | **Sn** | **19 35 36.0** | **-0.1** |
| **BDRM** | **Kayabasi** | **0.86** | **267** | P | **Pg** | **19 35 20.2** | **-0.5** |
| BDRM | | | | S | **Sn** | **19 35 36.0** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **329** | *e*PG | **Pg** | **19 35 21.4** | **-1.4** |
| AYDB | | | | *e*SG | **Sg** | **19 35 35.4** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.97** | **329** | *e*Pg | **Pg** | **19 35 21.4** | **-1.4** |
| AYDB | | | | *e*Sg | **Sg** | **19 35 35.4** | **+0.1** |
| **AKAS** | **Kas** | **1.24** | **135** | *i* P | **Pn** | **19 35 28.0** | **-0.4** |
| AKAS | | | | *i* S | **Sn** | **19 35 47.5** | **+1.9** |
| **AKAS** | **Kas** | **1.24** | **135** | P | **Pn** | **19 35 28.0** | **-0.4** |
| AKAS | | | | S | **Sn** | **19 35 47.5** | **+1.9** |

*ISCJB **30** 20:19:47.3±0.6,34°.77S±0°.03×71°.86W±0°.07,h40km±15km,*
*Error ellipse: s-maj=9.3km s-min=4.5km az=14.7*
*GUC **30** 20:19:47.4±0.4,34°.76S×71°.83W,h44km±1km,ML4.0*
**ISC 30 20:19:47.0**±1.4,**34°.76S**±0°.03×**71°.91W**±0°.06,**h24**km±14km,
**n21,σ1°22/32,Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CHPI** | **Pichilemu** | **0.38** | **348** | *e*P | **Pn** | **20 19 56.6** | **-0.3** |
| CHPI | | | | *e*S | **Sn** | **20 20 03.6** | **+0.3** |
| **NICH** | **Los Niches** | **0.61** | **114** | *e*P | **Pb** | **20 19 58.4** | **-0.6** |
| NICH | | | | *e*S | **Sb** | **20 20 07.2** | **0.0** |
| **TALC** | **Talca** | **0.68** | **161** | *e*P | **Pb** | **20 20 00.1** | **0.0** |
| TALC | | | | *e*S | **Sn** | **20 20 10.0** | **-0.8** |
| **LNV** | **Longovilo** | **0.90** | **27** | *e*P | **Pb** | **20 20 03.0** | **-0.9** |
| **CHCH** | **Chadas Angostu** | **1.33** | **52** | *e*P | **Pn** | **20 20 08.7** | **-1.3** |
| **COCH** | **Cobquecura** | **1.55** | **207** | *e*P | **Pn** | **20 20 12.9** | **0.0** |
| COCH | | | | *e*S | **Sn** | **20 20 32.5** | **+0.3** |
| COCH | | | | AML | AML | 20 20 39.9 | |
| comp=N,1μm,0.5s | | | | | | | |
| **ANTU** | **Antumapu** | **1.59** | **42** | *e*P | **Pn** | **20 20 12.8** | **-0.8** |
| ANTU | | | | *e*S | **Sn** | **20 20 32.2** | **-1.2** |
| **CLCH** | **Cerro Calan** | **1.77** | **40** | *e*P | **Pn** | **20 20 15.5** | **-0.7** |
| CLCH | | | | *e*S | **Sn** | **20 20 36.9** | **-1.0** |
| CLCH | | | | AML | AML | 20 20 45.1 | |
| comp=N,4μm,0.4s | | | | | | | |
| **CCHI** | **Chillan** | **1.84** | **184** | *e*S | **Sn** | **20 20 39.1** | **-0.5** |
| **PEL** | **Peldehue** | **1.91** | **33** | *e*P | **Pn** | **20 20 17.5** | **-0.5** |
| PEL | | | | *e*S | **Sn** | **20 20 40.0** | **-1.2** |
| PEL | | | | AML | AML | 20 20 44.8 | |
| comp=N,3μm,1.7s | | | | | | | |
| **ROC1** | **El Roble** | **1.93** | **23** | *e*P | **Pn** | **20 20 18.1** | **-0.4** |
| ROC1 | | | | *e*S | **Sb** | **20 20 44.9** | **-0.4** |
| **AAGR** | **Agrelo** | **3.06** | **58** | *i* P | **Pn** | **20 20 35.5** | **+1.7** |
| **ARCO** | **CERRO ARCO** | **3.13** | **53** | *i* P | **Pn** | **20 20 35.9** | **+1.0** |
| ARCO | | | | IAML | | 20 20 46.2 | |
| comp=Z,135nm,0.5s | | | | | | | |
| ARCO | | | | *i* S | Sb | 20 21 26.1 | +6.3 |
| **CANA** | **Caviahue** | **3.20** | **168** | *e*P | **Pb** | **20 20 43.0** | **-0.1** |
| **AUSP** | **Uspallata** | **3.29** | **41** | *e*P | **Pn** | **20 20 38.5** | **+1.2** |
| AUSP | | | | *e*S | **Sb** | **20 21 26.1** | **+1.5** |
| **ASAL** | **Salagasta** | **3.35** | **51** | *i* P | **Pn** | **20 20 38.4** | **+0.5** |
| **RTLS** | **Leoncito** | **3.67** | **37** | *e*P | **Pn** | **20 20 43.5** | **+1.0** |
| RTLS | | | | *e*S | **Sb** | **20 21 38.2** | **+2.6** |
| **RTCV** | **Cerro Valdivia** | **4.04** | **45** | *i* P | **Pn** | **20 20 45.7** | **-1.5** |
| **CFAA** | **Coronel Fontan** | **4.40** | **45** | *e*P | **Pn** | **20 20 52.5** | **+0.2** |
| **AMOG** | **MOGNA** | **4.77** | **38** | *e*P | **Pn** | **20 20 57.4** | **-0.1** |
| **AVFE** | **Valle Fertil** | **5.55** | **44** | *e*P | **Pn** | **20 21 06.0** | **-2.1** |
| AVFE | | | | *i* S | **Sn** | **20 22 14.2** | **+3.1** |
| AVFE | | | | IAML | | 20 22 27.6 | |
| comp=Z,24nm,0.6s | | | | | | | |

**MEX 30 20:38:23.9**±0.4,**17°.39N×94°.87W,h116**km±22km,**MD3.8,**
**Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TGIG** | | **1.78** | **110** | *e*P | Pn | 20 38 53.1 | -1.4 |
| TGIG | | | | *e*S | Sn | 20 39 16.3 | -1.5 |
| **HUIG** | **Huatulco** | **2.00** | **217** | *e*P | Pn | 20 38 55.9 | -1.3 |
| HUIG | | | | *e*S | Sn | 20 39 21.2 | -1.5 |

*IDC **30** 20:40:55.9±3.3,3°.46S×98°.83E,h0km,mb3.4/6,mb1 3.6/6,*
*mb1mx3.4/28,mbtmp3.5/6,Error ellipse: s-maj=126.9km*
*s-min=20.7km az=58.0*
*DJA **30** 20:40:59.7±0.7,3°.S±5°×10°.0E±°,h55km±6km,M2.9/3,*
*MLv2.9/3*
*ISCJB **30** 20:41:01.5±1.0,2°.64S±0°.06×100°.21E±0°.07,h23km±9km,*
*mb3.5/5,Error ellipse: s-maj=11.0km s-min=9.8km*
*az=17.7*
**ISC 30 20:41:04.0**±1.0,**2°.6S**±0°.1×**100°.1E**±0°.1,**h26**km±11km,**n14,**
**σ2°35/13,mb3.6/5,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PPSI** | **Pulau Pagai** | **0.17** | **222** | P | **Pb** | **20 41 07.9** | **-1.5** |
| PPSI | | | | S | **Sb** | **20 41 15.5** | **+2.5** |
| **SISI** | **Saibi** | **1.66** | **322** | P | Pn | 20 41 28.2 | -3.3 |
| SISI | | | | S | **Sn** | **20 41 49.9** | **-2.1** |
| **PDSI** | **Padang** | **1.75** | **11** | P | **Pn** | **20 41 30.5** | **-2.2** |
| **SDSI** | **Sungai Dareh** | **2.14** | **38** | P | **Pn** | **20 41 36.1** | **-2.0** |
| **PPI** | **Padang Panjang** | **2.18** | **7** | P | **Pn** | **20 41 36.9** | **-1.8** |
| PPI | | | | S | **Sn** | **20 42 05.9** | **+1.0** |
| **KSI** | **Kapahiang** | **2.67** | **112** | P | Pn | 20 41 40.5 | -4.9 |
| **LHSI** | **Lahat** | **3.60** | **109** | P | Pn | 20 41 53.2 | -4.9 |
| **CMAR** | **Chiang Mai Arr** | **20.99** | **357** | P | **P** | **20 45 49.3** | **+3.7** |
| 0.6nm,0.6s,baz=189,slow=9.9,SNR=5.8 | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.57** | **120** | P | P | 20 48 20.2 | +3.6 |
| 0.3nm,0.3s,baz=303,slow=8.4,SNR=3.1 | | | | | | | |
| **ASAR** | **Alice Springs** | **38.78** | **126** | P | **P** | **20 48 26.5** | **-0.4** |
| 0.1nm,0.3s,baz=296,slow=7.9,SNR=4.0 | | | | | | | |
| **SONM** | **Songino Array** | **50.56** | **5** | P | **P** | **20 50 02.9** | **+2.4** |
| 0.2nm,0.4s,baz=194,slow=4.0,SNR=2.4 | | | | | | | |
| **MKAR** | **Makanchi Array** | **51.67** | **344** | P | **P** | **20 50 09.2** | **+0.4** |
| 0.5nm,0.6s,baz=144,slow=7.2,SNR=5.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.81** | **349** | P | **P** | **20 50 53.0** | **-0.1** |
| 0.9nm,0.5s,baz=156,slow=7.5,SNR=4.2 | | | | | | | |
| **TXAR** | **Lajitas Array** | **145.13** | **38** | PKPbc | **PKPbc** | **21 00 37.4** | **-2.2** |
| 0.2nm,0.6s,baz=344,slow=2.0,SNR=4.3 | | | | | | | |

*IDC **30** 20:46:45.3±7.6,33°.43S×179°.24E,h0km,mb3.7/2,*
*mb1 4.0/2,mb1mx3.7/17,mbtmp3.7/2,Error ellipse:*
*s-maj=349.7km s-min=57.7km az=163.0*
*NEIC **30** 20:47:10.9,35°.09S×178°.87E,h256km,MG4.4(WEL),*
*After WEL.*
*WEL **30** 20:47:11.7±0.4,35°.07S×178°.76E,h244km±4km,ML4.3/5,*
*Error ellipse: s-maj=9.8km s-min=4.4km az=90.0*
*ISCJB **30** 20:47:12.4±1.2,35°.15S±0°.08×178°.6E±0°.2,h250km,*
*mb3.3/2,Error ellipse: s-maj=21.9km s-min=10.3km*
*az=172.9*
**ISC 30 20:47:13.5**±1.6,**35°.2S**±0°.1×**178°.6E**±0°.2,**h250**km,**n46,**
**σ0°94/54,Off east coast of North Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MXZ** | **Matakaoa Point** | **2.36** | **185** | PN | **Pn** | **20 47 58.5** | **-0.8** |
| MXZ | | | | AML | AML | 20 48 37.3 | |
| MXZ | | | | AML | AML | 20 48 45.1 | |
| **MXZ** | **Matakaoa Point** | **2.36** | **185** | Pn | **Pn** | **20 47 58.5** | **-0.8** |
| **WMGZ** | **Waiomatatini S** | **2.60** | **183** | PN | **Pn** | **20 48 01.7** | **0.0** |
| WMGZ | | | | SN | **S** | **20 48 39.8** | **-0.2** |
| **WMGZ** | **Waiomatatini S** | **2.60** | **183** | Pn | **Pn** | **20 48 01.6** | **-0.1** |
| WMGZ | | | | Sn | **S** | **20 48 40.5** | **+0.6** |
| **HAZ** | **Te Kaha** | **2.62** | **194** | PN | **Pn** | **20 48 01.9** | **0.0** |
| HAZ | | | | SN | **S** | **20 48 40.3** | **+0.1** |
| **PKGZ** | **Pakihiroa** | **2.68** | **188** | PN | **Pn** | **20 48 02.2** | **-0.3** |
| **PUZ** | **Puketiti** | **2.87** | **185** | PN | **Pn** | **20 48 04.3** | **-0.3** |
| PUZ | | | | AML | AML | 20 48 47.5 | |
| PUZ | | | | AML | AML | 20 48 49.1 | |
| **PUZ** | **Puketiti** | **2.87** | **185** | Pn | **Pn** | **20 48 04.3** | **-0.3** |
| **TWGZ** | **Tauwhareparae** | **3.00** | **189** | PN | **Pn** | **20 48 06.3** | **+0.3** |
| TWGZ | | | | SN | **S** | **20 48 48.5** | **+1.0** |
| **TWGZ** | **Tauwhareparae** | **3.00** | **189** | Pn | **Pn** | **20 48 05.7** | **-0.3** |
| **MWZ** | **Matawai** | **3.23** | **195** | PN | **Pn** | **20 48 08.6** | **+0.2** |
| MWZ | | | | *e*SN | **S** | **20 48 53.2** | **+1.1** |
| MWZ | | | | AML | AML | 20 48 55.7 | |
| **MWZ** | **Matawai** | **3.23** | **195** | Pn | **Pn** | **20 48 08.4** | **0.0** |
| MWZ | | | | SN | **S** | **20 48 53.7** | **+1.6** |
| **URZ** | **Urewera** | **3.26** | **201** | PN | **Pn** | **20 48 08.7** | **-0.1** |
| URZ | | | | AML | AML | 20 48 57.2 | |
| URZ | | | | AML | AML | 20 48 57.8 | |
| **URZ** | **Urewera** | **3.26** | **201** | Pn | **Pn** | **20 48 08.7** | **-0.1** |
| URZ | | | | SN | **S** | **20 48 55.0** | **+2.4** |
| **CNGZ** | **Carnagh Statio** | **3.28** | **185** | *e*PN | **Pn** | **20 48 09.1** | **+0.1** |
| **RIGZ** | **Rimuhau** | **3.55** | **190** | *e*PN | **Pn** | **20 48 11.9** | **-0.1** |
| **SNGZ** | **Shannon Statio** | **3.70** | **195** | PN | **Pn** | **20 48 14.0** | **+0.2** |
| **SNGZ** | **Shannon Statio** | **3.70** | **195** | Pn | **Pn** | **20 48 13.8** | **+0.1** |
| **PRGZ** | **Paritu Road** | **3.75** | **188** | PN | **Pn** | **20 48 15.3** | **+1.0** |
| **KNZ** | **Kokohu** | **3.87** | **190** | *e*PN | **Pn** | **20 48 15.6** | **-0.1** |
| KNZ | | | | AML | AML | 20 52 40.8 | |
| KNZ | | | | AML | AML | 20 56 13.9 | |
| **KNZ** | **Kokohu** | **3.87** | **190** | *e*Pn | **Pn** | **20 48 15.2** | **-0.4** |
| **RAHZ** | **Arahi** | **3.88** | **197** | PN | **Pn** | **20 48 17.2** | **+1.2** |
| **MHGZ** | **Mahia Peninsul** | **3.97** | **188** | PN | **Pn** | **20 48 17.7** | **+0.8** |
| **BKZ** | **Black Stump Fm** | **4.28** | **202** | PN | **Pn** | **20 48 20.8** | **+0.1** |
| **BKZ** | **Black Stump Fm** | **4.28** | **202** | Pn | **Pn** | **20 48 21.3** | **+0.6** |
| **BHHZ** | **Black Hill Sta** | **4.71** | **204** | *e*PN | **Pn** | **20 48 26.4** | **+0.6** |
| **BHHZ** | **Black Hill Sta** | **4.71** | **204** | *e*Pn | **Pn** | **20 48 26.0** | **+0.2** |
| **WNVZ** | **Wahianoa** | **4.75** | **209** | PN | **Pn** | **20 48 26.9** | **+0.6** |
| **WNVZ** | **Wahianoa** | **4.75** | **209** | Pn | **Pn** | **20 48 27.3** | **+1.0** |
| **KRHZ** | **Kereru** | **4.76** | **201** | PN | **Pn** | **20 48 26.0** | **-0.4** |
| **PNHZ** | **Pukenui** | **5.06** | **201** | *e*PN | **Pn** | **20 48 29.3** | **-0.7** |
| **PNHZ** | **Pukenui** | **5.06** | **201** | *e*Pn | **Pn** | **20 48 29.2** | **-0.8** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DVHZ** | **Dannevirke** | **5.42** | **200** | PN | **Pn** | **20 48 34.0** | **-0.5** |
| **POWZ** | **Post Office Ro** | **5.63** | **202** | PN | **Pn** | **20 48 37.6** | **+0.6** |
| **BFZ** | **Birch Farm** | **5.76** | **198** | PN | **Pn** | **20 48 38.7** | **+0.1** |
| **MRZ** | **Mangatainoka R** | **5.93** | **203** | PN | **Pn** | **20 48 39.7** | **-1.0** |
| **MRZ** | **Mangatainoka R** | **5.93** | **203** | Pn | **Pn** | **20 48 39.7** | **-1.0** |
| MRZ | | | | Sn | **S** | **20 49 47.6** | **-2.9** |
| **HOWZ** | **Holdsworth Sta** | **6.17** | **202** | *e*PN | **Pn** | **20 48 42.1** | **-1.6** |
| **HOWZ** | **Holdsworth Sta** | **6.17** | **202** | *e*Pn | **Pn** | **20 48 42.1** | **-1.6** |
| **OGWZ** | **Otaki Gorge** | **6.21** | **205** | Pn | **Pn** | **20 48 42.9** | **-1.2** |
| **OGWZ** | **Otaki Gorge** | **6.21** | **205** | Pn | **Pn** | **20 48 43.0** | **-1.2** |
| **KIW** | **Kapiti Island** | **6.34** | **206** | PN | **Pn** | **20 48 44.4** | **-1.4** |
| **KIW** | **Kapiti Island** | **6.34** | **206** | Pn | **Pn** | **20 48 44.4** | **-1.4** |
| **ASAR** | **Alice Springs** | **40.27** | **274** | P | **P** | **20 54 27.6** | **+1.0** |
| 0.6nm,0.4s,baz=114,slow=8.0,SNR=20 | | | | | | | |
| **WRA** | **Warramunga Arr** | **41.71** | **279** | P | **P** | **20 54 38.6** | **+0.3** |
| 0.5nm,0.4s,baz=117,slow=7.7,SNR=3.6 | | | | | | | |
| **FINES** | **FINESS Array B** | **148.48** | **335** | PKPbc | **PKPbc** | **21 06 28.6** | **-1.2** |
| 1.8nm,0.7s,baz=42,slow=3.1,SNR=6.4 | | | | | | | |

*DDA **30** 21:06:52.3,36°.75N×28°.43E,h7km,Md2.8*
*ISK **30** 21:06:52.9,37°.09N×28°.85E,h5km,MD2.9*
*ISCJB **30** 21:06:53.7±0.8,36°.66N±0°.06×28°.46E±0°.05,h36km±10km,*
*Error ellipse: s-maj=10.9km s-min=5.3km az=23.9*
*CSEM **30** 21:06:53.2±0.5,36°.64N×28°.47E,h33km±4km,MD2.9,*
*Error ellipse: s-maj=14.3km s-min=6.5km az=26.0*
**ISC 30 21:06:53.9**±1.1,**36°.67N**±0°.05×**28°.45E**±0°.03,**h31**km±7km,
**n26,σ1°09/46,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DALY** | **Dalyan (Mu˘la** | **0.22** | **49** | PG | **Pb** | **21 07 00.0** | **-0.4** |
| DALY | | | | *e*SG | **Sb** | **21 07 05.9** | **+1.0** |
| **DALY** | **Dalyan (Mu˘la** | **0.22** | **49** | *i* Pg | **Pb** | **21 07 00.0** | **-0.4** |
| DALY | | | | *e*Sg | **Sb** | **21 07 05.9** | **+1.0** |
| **TURN** | **Turunc** | **0.23** | **32** | *i* P | **Pb** | **21 07 01.0** | **+0.4** |
| TURN | | | | *i* S | **Sn** | **21 07 07.5** | **+1.7** |
| **TURN** | **Turunc** | **0.23** | **32** | P | **Pb** | **21 07 01.0** | **+0.4** |
| TURN | | | | S | **Sn** | **21 07 07.5** | **+1.7** |
| **YER** | **Yerkesik** | **0.48** | **344** | PG | **Pb** | **21 07 03.1** | **-1.0** |
| YER | | | | *e*SG | **Sb** | **21 07 10.4** | **-0.7** |
| **YER** | **Yerkesik** | **0.48** | **344** | *i* Pg | **Pb** | **21 07 03.1** | **-1.0** |
| YER | | | | *e*Sg | **Sb** | **21 07 10.4** | **-0.7** |
| **FETY** | **Fethiye** | **0.51** | **94** | PG | **Pb** | **21 07 03.8** | **-0.8** |
| FETY | | | | *e*SG | **Sb** | **21 07 11.6** | **-0.3** |
| **FETY** | **Fethiye** | **0.51** | **94** | *i* Pg | **Pb** | **21 07 03.8** | **-0.8** |
| FETY | | | | *e*Sg | **Sb** | **21 07 11.6** | **-0.3** |
| **BDRM** | **Kayabasi** | **0.90** | **296** | *i* P | **Pn** | **21 07 09.2** | **-1.1** |
| BDRM | | | | *i* S | **Sb** | **21 07 23.1** | **+0.5** |
| **BDRM** | **Kayabasi** | **0.90** | **296** | P | **Pn** | **21 07 09.2** | **-1.1** |
| BDRM | | | | S | **Sb** | **21 07 23.1** | **+0.5** |
| **AKAS** | **Kas** | **1.03** | **115** | *i* P | **Pn** | **21 07 12.4** | **+0.1** |
| AKAS | | | | *i* S | **Sb** | **21 07 28.5** | **+2.0** |
| **AKAS** | **Kas** | **1.03** | **115** | P | **Pn** | **21 07 12.4** | **+0.1** |
| AKAS | | | | S | **Sb** | **21 07 28.5** | **+2.0** |
| **GOLH** | **Golhisar** | **1.05** | **57** | *i* P | **Pn** | **21 07 12.1** | **-0.4** |
| GOLH | | | | *i* S | **Sn** | **21 07 27.1** | **+0.9** |
| **GOLH** | **Golhisar** | **1.05** | **57** | P | **Pn** | **21 07 12.1** | **-0.4** |
| GOLH | | | | S | **Sn** | **21 07 27.1** | **+0.9** |
| **AYDN** | **Tasoluk** | **1.09** | **335** | *i* P | **Pb** | **21 07 14.8** | **+0.6** |
| AYDN | | | | *i* S | **Sb** | **21 07 28.4** | **+0.4** |
| **AYDN** | **Tasoluk** | **1.09** | **335** | P | **Pb** | **21 07 14.8** | **+0.6** |
| AYDN | | | | S | **Sb** | **21 07 28.4** | **+0.4** |
| **DNZL** | **Cakiroluk** | **1.12** | **25** | *i* P | **Pn** | **21 07 13.1** | **-0.5** |
| DNZL | | | | *i* S | **Sn** | **21 07 27.0** | **-1.0** |
| **DNZL** | **Cakiroluk** | **1.12** | **25** | P | **Pn** | **21 07 13.1** | **-0.5** |
| DNZL | | | | S | **Sn** | **21 07 27.0** | **-1.0** |
| **ELL** | **Elmali** | **1.17** | **86** | *e*PG | **Pn** | **21 07 11.6** | **-2.6** |
| **ELL** | **Elmali** | **1.17** | **86** | *e*Pg | **Pn** | **21 07 11.6** | **-2.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.35** | **341** | *e*PN | **Pn** | **21 07 16.0** | **-0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.35** | **341** | *e*Pn | **Pn** | **21 07 16.0** | **-0.6** |
| **GCAM** | **G?zelcaml?** | **1.41** | **317** | *i* P | **Pn** | **21 07 16.7** | **-0.7** |
| GCAM | | | | *i* S | **Sn** | **21 07 34.8** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **1.41** | **317** | P | **Pn** | **21 07 16.7** | **-0.7** |
| GCAM | | | | S | **Sn** | **21 07 34.8** | **-0.1** |
| **IZM** | **Izmir** | **1.96** | **332** | *e*PN | **Pn** | **21 07 26.6** | **+1.6** |
| **IZM** | **Izmir** | **1.96** | **332** | *e*Pn | **Pn** | **21 07 26.6** | **+1.6** |

**BUC 30 21:08:35.8**±1.2,**44°.98N×26°.40E,h2**km,**MD2.4/4,6C-2D,**
**Error ellipse: s-maj=9.4km s-min=6.1km az=0.0,**
**Romania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PLOR** | **Plostina** | **0.89** | **12** | *i* P | Pn | 21 08 55.1 | -0.4 |
| PLOR | | | | *i* S | Sn | 21 09 08.1 | -0.9 |
| **PLOR** | **Plostina** | **0.89** | **12** | *i* P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PKS7 | Kunszentmiklos | 1.81 | 230 | *e*Pn | Pb | 21 | 25 | 21.9 -1.0 |
| PKS7 | | | | *e*Sn | Sb | 21 | 25 | 46.0 0.0 |
| SIRR | Siria | 1.98 | 171 ⇑ | *i*P | Pb | 21 | 25 | 25.2 -0.5 |
| SIRR | Siria | 1.98 | 171 | S | Sg | 21 | 25 | 52.0 -0.6 |
| SIRR | Siria | 1.98 | 171 ⇑ | *i*P | Pb | 21 | 25 | 25.2 -0.5 |
| SIRR | | | | S | Sg | 21 | 25 | 52.0 -0.6 |
| RAK | Rakhov | 2.01 | 94 | *e*Pn | Pn | 21 | 25 | 23.5 -0.4 |
| RAK | | | | Pm | | 21 | 25 | 25.7 |
| RAK | | | | *e*Sn | Sn | 21 | 25 | 49.5 -0.1 |
| RAK | | | | Sm | | 21 | 25 | 51.7 |
| NSLU | Nyzhne Selyshc | 2.18 | 89 | *i* Pn | Pn | 21 | 25 | 16.3 -10 |
| NSLU | | | | *i* Sn | Sn | 21 | 25 | 38.1 -16 |
| OJC | Ojcow | 2.20 | 336 | *e*P | Pb | 21 | 25 | 30.1 +0.6 |
| OJC | | | | *e*S | Sg | 21 | 25 | 59.1 -0.6 |
| OJC | Ojcow | 2.20 | 336 | *e*P | Pb | 21 | 25 | 30.1 +0.6 |
| OJC | | | | *e*S | Sg | 21 | 25 | 59.1 -0.6 |
| CJR | Cluj-Napoca | 2.22 | 132 | ⇓*i*P | Pb | 21 | 25 | 28.5 -1.3 |
| CJR | Cluj-Napoca | 2.22 | 132 | ⇓*i*P | Pb | 21 | 25 | 28.5 -1.3 |
| OKC | Ostrava-Krasne | 2.58 | 310 | *e*PG | Pb | 21 | 26 | 36.9 +1.0 |
| OKC | | | | *e*SG | Sg | 21 | 26 | 10.9 -1.0 |
| | comp=Z,8.2nm,0.8s | | | | | | | |
| OKC | Ostrava-Krasne | 2.58 | 310 | Pg | Pb | 21 | 25 | 36.9 +1.0 |
| OKC | | | | Sg | Sg | 21 | 26 | 10.9 -1.0 |
| | 8.2nm,0.8s | | | | | | | |
| BZS | Buzias | 2.62 | 174 | *e*Pg | Pn | 21 | 25 | 30.8 -1.5 |
| BZS | | | | *e*Sg | Pg | 21 | 25 | 42.7 +3.4 |
| BZS | Buzias | 2.62 | 174 ⇑ | *i*P | Pn | 21 | 25 | 33.7 +1.4 |
| BZS | Buzias | 2.62 | 174 ⇑ | *i*P | Pn | 21 | 25 | 33.7 +1.4 |
| BURAR | Bucovina Array | 2.77 | 101 | ⇓*i*P | Pn | 21 | 25 | 35.2 +0.8 |
| BURAR | Bucovina Array | 2.77 | 101 | S | Sg | 21 | 26 | 16.7 -1.2 |
| BURAR | Bucovina Array | 2.77 | 101 | ⇓*i*P | Pn | 21 | 25 | 35.2 +0.8 |
| MORC | Moravsky Berou | 2.87 | 304 | ⇓*i*P | Pn | 21 | 25 | 36.2 +0.5 |
| MORC | Moravsky Berou | 2.87 | 304 | S | Sb | 21 | 26 | 14.1 -2.3 |
| MORC | Moravsky Berou | 2.87 | 304 | ⇓*i*P | Pn | 21 | 25 | 36.2 +0.5 |
| GZR | Gura Zlata | 3.03 | 159 ⇑ | *i*P | Pn | 21 | 25 | 39.3 +1.4 |
| GZR | Gura Zlata | 3.03 | 159 ⇑ | *i*P | Pn | 21 | 25 | 39.3 +1.4 |
| FRGS | Fruska Gora | 3.21 | 198 | *e*Pg | Pb | 21 | 25 | 47.5 +0.8 |
| FRGS | | | | *e*Sg | Sn | 21 | 26 | 10.4 -8.8 |
| FGSL | Fruska Gora | 3.21 | 198 | *e*Pg | Pb | 21 | 25 | 47.5 +0.8 |
| VRAC | Vranov | 3.24 | 291 | S | Sn | 21 | 26 | 22.3 +2.5 |
| LOT | Lotru | 3.29 | 147 | ⇓*i*P | Pn | 21 | 25 | 42.1 +0.6 |
| LOT | Lotru | 3.29 | 147 | S | Sn | 21 | 26 | 21.6 +0.4 |
| LOT | Lotru | 3.29 | 147 | ⇓*i*P | Pn | 21 | 25 | 42.1 +0.6 |
| LOT | | | | S | Sn | 21 | 26 | 21.6 +0.4 |
| DOPR | Dopca | 3.64 | 127 ⇑ | *i*P | Pn | 21 | 25 | 47.6 +1.3 |
| DOPR | Dopca | 3.64 | 127 ⇑ | *i*P | Pn | 21 | 25 | 47.6 +1.3 |
| ARR | Arges | 3.70 | 139 | ⇓*i*P | Pn | 21 | 25 | 47.8 +0.6 |
| ARR | Arges | 3.70 | 139 | S | Sb | 21 | 26 | 40.3 -0.1 |
| ARR | Arges | 3.70 | 139 | ⇓*i*P | Pn | 21 | 25 | 47.8 +0.6 |
| KUBS | Kucevo | 3.83 | 175 | *e*Pn | Pn | 21 | 25 | 51.0 +2.2 |
| KUBS | | | | *e*Sn | Sn | 21 | 26 | 19.8 -15 |
| KUBS | Kucevo | 3.83 | 175 | *e*Pn | Pn | 21 | 25 | 51.0 +2.2 |
| VOIR | | 3.84 | 135 | S | Sn | 21 | 26 | 37.1 +2.4 |
| VOIR | | 3.84 | 135 | S | Sn | 21 | 26 | 37.1 +2.4 |
| DPC | Dobruska-Polom | 3.84 | 306 | *e*SG | Sg | 21 | 26 | 51.9 -0.4 |
| DPC | Dobruska-Polom | 3.84 | 306 | Sg | Sg | 21 | 26 | 51.9 -0.4 |
| TEKS | Tekeris | 3.85 | 198 | *e*Sg | Sn | 21 | 26 | 30.4 -4.6 |

*ISCJB **30** 21:37:40.7±1.1,39°.57N±0°.04×25°.21E±0°.08, h26km±6km, Error ellipse: s-maj=10.9km s-min=6.1km az=155.8*
*ATH **30** 21:37:40.0,39°.56N×25°.24E, h22km±3km, MD2.9/6*
*CSEM **30** 21:37:41.1±0.5,39°.59N×25°.30E, h15km, MD2.9, Error ellipse: s-maj=11.3km s-min=5.2km az=70.0*
*ISK **30** 21:37:44.0,39°.62N×25°.57E, h22km, MD2.5*
*DDA **30** 21:37:48.8, 40°.03N×26°.07E, h7km, Md2.7*
**ISC 30 21:37:41.5±1.2, 39°.59N±0°.03×25°.30E±0°.05, h20km±4km, n27, σ0§78/44, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| LIA | Limnos Island | 0.32 | 344 | *e*PB | Pg | 21 | 37 | 47.8 -0.7 |
| LIA | | | | *e*SB | Sg | 21 | 37 | 52.6 -0.6 |
| LIA | Limnos Island | 0.32 | 344 | *e*Pb | Pg | 21 | 37 | 47.8 -0.7 |
| LIA | | | | *e*Sb | Sg | 21 | 37 | 52.6 -0.6 |
| SIGR | SIGRI | 0.57 | 131 | *e*PG | Pg | 21 | 37 | 54.0 +1.0 |
| SIGR | SIGRI | 0.57 | 131 | *e*PN | Pb | 21 | 37 | 51.6 -1.2 |
| SIGR | | | | *e*SN | Sb | 21 | 37 | 59.5 -1.0 |
| SIGR | SIGRI | 0.57 | 131 | *e*Pn | Pb | 21 | 37 | 51.6 -1.2 |
| SIGR | SIGRI | 0.57 | 131 | *e*Pg | Pg | 21 | 37 | 54.0 +1.0 |
| SIGR | | | | *e*Sn | Sb | 21 | 37 | 59.5 -1.0 |
| BOZC | Bozcaada | 0.63 | 66 | P | Pb | 21 | 37 | 53.0 -0.8 |
| BOZC | | | | S | Sn | 21 | 38 | 04.5 -0.4 |
| GADA | Gvkgeada | 0.76 | 37 | *e*PG | Pg | 21 | 37 | 56.9 +0.6 |
| GADA | | | | *e*SG | Sg | 21 | 38 | 06.4 +0.6 |
| GADA | Gvkgeada | 0.76 | 37 | *e*Pg | Pg | 21 | 37 | 56.9 +0.6 |
| GADA | | | | *e*Sg | Sb | 21 | 38 | 06.4 +0.6 |
| PRK | Paraskevi | 0.83 | 114 | *e*PN | Pb | 21 | 37 | 56.4 -0.8 |
| PRK | | | | *e*SN | Sg | 21 | 38 | 09.2 +0.5 |
| PRK | Paraskevi | 0.83 | 114 | *e*Pn | Pb | 21 | 37 | 56.4 -0.8 |
| PRK | | | | *e*Sn | Sg | 21 | 38 | 09.2 +0.5 |
| SMTH | Samothraki Isl | 0.90 | 11 | *e*PN | Pb | 21 | 37 | 58.3 -0.1 |
| SMTH | | | | *e*SN | Sg | 21 | 38 | 11.4 +0.5 |
| SMTH | Samothraki Isl | 0.90 | 11 | *e*Pn | Pb | 21 | 37 | 58.3 -0.1 |
| SMTH | | | | *e*Sn | Sg | 21 | 38 | 11.4 +0.5 |
| AYVA | Ayvalik | 1.11 | 104 | *i* P | Pn | 21 | 38 | 01.0 -1.0 |
| AYVA | | | | *i* S | Sg | 21 | 38 | 18.1 +0.4 |
| AYVA | Ayvalik | 1.11 | 104 | P | Pn | 21 | 38 | 01.0 -1.0 |
| AYVA | | | | S | Sg | 21 | 38 | 18.1 +0.4 |
| GELI | Tayfur-Gelibol | 1.21 | 48 | *e*PG | Pn | 21 | 38 | 03.9 +0.6 |
| GELI | | | | *e*SG | Sb | 21 | 38 | 18.4 -0.5 |
| GELI | Tayfur-Gelibol | 1.21 | 48 | *e*Pg | Pn | 21 | 38 | 03.9 +0.6 |
| GELI | | | | *e*Sg | Sb | 21 | 38 | 18.4 -0.5 |
| CHOS | Chios island | 1.34 | 154 | *e*PN | Pb | 21 | 38 | 07.2 +1.3 |
| CHOS | Chios island | 1.34 | 154 | *e*PN | Pn | 21 | 38 | 05.7 +0.6 |
| CHOS | Chios island | 1.34 | 154 | *e*Pn | Pn | 21 | 38 | 05.7 +0.6 |
| ALN | Alexandroupoli | 1.42 | 23 | *e*PN | Pb | 21 | 38 | 08.0 +0.6 |
| ALN | Alexandroupoli | 1.42 | 23 | *e*PN | Pn | 21 | 38 | 06.5 +0.3 |
| ALN | Alexandroupoli | 1.42 | 23 | *e*Pn | Pn | 21 | 38 | 06.5 +0.3 |
| ERIK | Erikli-Kesan | 1.42 | 40 | *e*PN | Pn | 21 | 38 | 07.1 +0.9 |
| ERIK | Erikli-Kesan | 1.42 | 40 | *e*Pn | Pn | 21 | 38 | 07.1 +0.9 |
| BALY | Balya | 1.80 | 85 | *i* P | Pn | 21 | 38 | 12.0 +0.6 |
| BALY | | | | *i* S | Sg | 21 | 38 | 38.3 -1.1 |
| BALY | Balya | 1.80 | 85 | P | Pn | 21 | 38 | 12.0 +0.6 |
| BALY | | | | S | Sg | 21 | 38 | 38.3 -1.1 |

*CSEM **30** 21:39:57.3±0.4, 45°.85N×22°.71E, h2km, ML1.6, Error ellipse: s-maj=14.8km s-min=7.6km az=116.0*
*BEO **30** 21:39:59.2±1.0, 45°.78N×22°.66E, h0km, ML1.6/2*
**BUC 30 21:39:56.6±0.6, 45°.86N×22°.72E, h11km±4km, MD2.5/5, 9C-14D, Error ellipse: s-maj=4.9km s-min=4.4km az=118.0, Romania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| DEV | Deva | 0.13 | 77 ⇑ | *i*P | Pg | 21 | 39 | 59.7 -0.1 |
| DEV | | | | *i* S | Sg | 21 | 40 | 01.6 -0.4 |
| DEV | Deva | 0.13 | 77 ⇑ | *i*P | Pg | 21 | 39 | 59.7 -0.1 |
| DEV | | | | S | Sg | 21 | 40 | 01.6 -0.4 |
| GZR | Gura Zlata | 0.46 | 175 ⇑ | *i*P | Pb | 21 | 40 | 06.8 -0.1 |
| GZR | | | | *i* S | Sb | 21 | 40 | 13.4 -0.4 |
| GZR | Gura Zlata | 0.46 | 175 ⇑ | *i*P | Pb | 21 | 40 | 06.8 -0.1 |
| GZR | Gura Zlata | 0.46 | 175 | S | Sb | 21 | 40 | 13.4 -0.4 |
| BZS | Buzias | 0.81 | 253 | *e*Pg | Pg | 21 | 40 | 12.3 0.0 |
| BZS | | | | *e*Sg | Sg | 21 | 40 | 23.0 +0.1 |
| BZS | Buzias | 0.81 | 253 | ⇓*i*P | Pg | 21 | 40 | 12.2 -0.1 |
| BZS | | | | *i* S | Sg | 21 | 40 | 23.2 +0.3 |
| BZS | Buzias | 0.81 | 253 | ⇓*i*P | Pg | 21 | 40 | 12.2 -0.1 |
| BZS | Buzias | 0.81 | 253 | *e*Pg | Pg | 21 | 40 | 12.3 0.0 |
| BZS | | | | *e*Sg | Sg | 21 | 40 | 23.0 +0.1 |
| LOT | Lotru | 0.84 | 119 | ⇓*i*P | Pb | 21 | 40 | 13.4 0.0 |
| LOT | Lotru | 0.84 | 119 | ⇓*i*P | Pb | 21 | 40 | 13.4 0.0 |
| SIRR | Siria | 0.85 | 300 | ⇓*i*P | Pn | 21 | 40 | 15.0 +0.5 |
| SIRR | | | | *i* S | Sb | 21 | 40 | 25.3 +0.5 |
| SIRR | Siria | 0.85 | 300 | ⇓*i*P | Pn | 21 | 40 | 15.0 +0.5 |
| DRGR | | 0.94 | 360 | ⇑*i*P | Pn | 21 | 40 | 15.6 -0.2 |
| DRGR | | | | *i* S | Sn | 21 | 40 | 29.0 -0.3 |
| DRGR | | 0.94 | 360 | ⇑*i*P | Pn | 21 | 40 | 15.6 -0.2 |
| DRGR | | 0.94 | 360 | ⇑*i*P | Pn | 21 | 40 | 15.6 -0.2 |
| DRGR | | | | S | Sn | 21 | 40 | 29.0 -0.3 |
| CJR | Cluj-Napoca | 1.05 | 35 | ⇓*i*P | Pb | 21 | 40 | 16.8 -0.1 |
| CJR | | | | *i* S | Sn | 21 | 40 | 31.7 -0.4 |
| CJR | Cluj-Napoca | 1.05 | 35 | ⇓*i*P | Pb | 21 | 40 | 16.8 -0.1 |
| CJR | Cluj-Napoca | 1.05 | 35 | ⇓*i*P | Pb | 21 | 40 | 16.8 -0.1 |
| CJR | | | | S | Sn | 21 | 40 | 31.7 -0.4 |
| MDB | Medias | 1.19 | 75 | *i* S | Sg | 21 | 40 | 35.0 -0.1 |
| MDB | Medias | 1.19 | 75 | S | Sg | 21 | 40 | 35.0 -0.1 |
| ARR | Arges | 1.43 | 109 | ⇓*i*P | Pb | 21 | 40 | 23.3 0.0 |
| ARR | | | | *i* S | Sg | 21 | 40 | 42.3 -0.5 |
| ARR | Arges | 1.43 | 109 | ⇓*i*P | Pb | 21 | 40 | 23.3 0.0 |
| KUBS | Kucevo | 1.62 | 208 | *e*Pg | Pn | 21 | 40 | 25.8 +0.7 |
| KUBS | | | | *e*Sg | Sg | 21 | 40 | 48.5 -0.3 |
| KUBS | Kucevo | 1.62 | 208 | *e*Pg | Pn | 21 | 40 | 25.8 +0.7 |
| KUBS | | | | *e*Sg | Sg | 21 | 40 | 48.5 -0.3 |
| VOIR | | 1.69 | 104 ⇑ | *i*P | Pb | 21 | 40 | 27.0 -0.8 |
| VOIR | | | | *i* S | Sb | 21 | 40 | 49.1 0.0 |
| VOIR | | 1.69 | 104 ⇑ | *i*P | Pb | 21 | 40 | 27.0 -0.8 |
| DOPR | Dopca | 1.86 | 86 | ⇓*i*P | Pn | 21 | 40 | 29.6 +1.1 |
| DOPR | Dopca | 1.86 | 86 | ⇓*i*P | Pn | 21 | 40 | 29.6 +1.1 |
| DOPR | Dopca | 1.86 | 86 | ⇓*i*P | Pn | 21 | 40 | 29.6 +1.1 |
| BMR | Baia Mare | 1.90 | 16 | *i* S | Sb | 21 | 40 | 54.8 -0.1 |
| BMR | Baia Mare | 1.90 | 16 | S | Sb | 21 | 40 | 54.8 -0.1 |
| BOVS | Bovan | 2.33 | 198 | *e*Pn | Pb | 21 | 40 | 38.1 -0.6 |
| BOVS | Bovan | 2.33 | 198 | *e*Pn | Pb | 21 | 40 | 38.1 -0.6 |
| BURAR | Bucovina Array | 2.46 | 43 | *i* S | Sn | 21 | 41 | 08.2 +1.3 |
| BURAR | Bucovina Array | 2.46 | 43 | S | Sn | 21 | 41 | 08.2 +1.3 |
| ZAPS | Zavoj | 2.58 | 181 | *e*Pn | Pb | 21 | 40 | 41.0 -2.0 |
| ZAPS | | | | *e*Sg | Sg | 21 | 41 | 18.2 -1.5 |
| BARS | Barje | 3.11 | 192 | *e*Pn | Pb | 21 | 40 | 49.1 -2.8 |
| BARS | Barje | 3.11 | 192 | *e*Pn | Pb | 21 | 40 | 49.1 -2.8 |

*ISK **30** 21:40:57.6, 37°.03N×28°.52E, h7km, MD2.5*
*ISCJB **30** 21:40:58.2±0.5, 37°.02N±0°.02×28°.48E±0°.03, h7km±4km, Error ellipse: s-maj=4.2km s-min=3.4km az=138.3*
*CSEM **30** 21:40:58.3±0.2, 37°.02N×28°.48E, h10km, MD2.9, Error ellipse: s-maj=4.0km s-min=3.4km az=44.0*
*DDA **30** 21:40:58.0, 37°.06N×28°.50E, h7km, Md2.9*
*ATH **30** 21:40:58.6, 37°.05N×28°.48E, h30km±3km, MD3.1/5*
**ISC 30 21:40:59.0±0.8, 37°.05N±0°.02×28°.49E±0°.02, h12km±6km, n46, σ1§14/74, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| YER | Yerkesik | 0.19 | 296 | *e*PG | Pg | 21 | 41 | 02.3 -0.9 |
| YER | | | | *e*SG | Sg | 21 | 41 | 06.1 -0.1 |
| YER | Yerkesik | 0.19 | 296 | *e*Pg | Pg | 21 | 41 | 02.3 -0.9 |
| YER | | | | *e*Sg | Sg | 21 | 41 | 06.1 -0.1 |
| TURN | Turunc | 0.20 | 154 | *i* P | Pg | 21 | 41 | 04.2 +0.9 |
| TURN | Turunc | 0.20 | 154 | P | Pg | 21 | 41 | 04.2 +0.9 |
| TURN | | | | S | Sg | 21 | 41 | 10.3 +4.0 |
| DALY | Dalyan (Mu¨la | 0.27 | 151 | *e*PG | Pg | 21 | 41 | 02.6 -1.9 |
| DALY | | | | *e*SG | Sg | 21 | 41 | 06.8 -1.4 |
| DALY | Dalyan (Mu¨la | 0.27 | 151 | *e*Pg | Pg | 21 | 41 | 02.6 -1.9 |
| DALY | | | | *e*Sg | Sg | 21 | 41 | 06.8 -1.4 |
| FETY | Fethiye | 0.63 | 131 | *e*PG | Pg | 21 | 41 | 09.7 -1.6 |
| FETY | | | | *e*SG | Sg | 21 | 41 | 18.5 -1.1 |
| FETY | Fethiye | 0.63 | 131 | *e*Pg | Pg | 21 | 41 | 09.7 -1.6 |
| FETY | | | | *e*Sg | Sg | 21 | 41 | 18.5 -1.1 |
| DNZL | Cakiroluk | 0.77 | 34 | *i* P | Pg | 21 | 41 | 12.6 -1.5 |
| DNZL | | | | *i* S | Sb | 21 | 41 | 26.4 +0.9 |
| DNZL | Cakiroluk | 0.77 | 34 | P | Pg | 21 | 41 | 12.6 -1.5 |
| DNZL | | | | S | Sb | 21 | 41 | 26.0 +0.9 |
| AYDN | Tasoluk | 0.78 | 321 | *i* P | Pb | 21 | 41 | 15.0 +0.4 |
| AYDN | | | | *i* S | Sb | 21 | 41 | 26.2 +1.0 |
| AYDN | Tasoluk | 0.78 | 321 | P | Pb | 21 | 41 | 15.0 +0.4 |
| AYDN | | | | S | Sb | 21 | 41 | 26.2 +1.0 |
| DENT | Denizli | 0.82 | 31 | *e*PG | Pg | 21 | 41 | 14.0 -0.9 |
| DENT | Denizli | 0.82 | 31 | *e*Pg | Pg | 21 | 41 | 14.0 -0.9 |
| BDRM | Kayabasi | 0.84 | 271 | *i* P | Pg | 21 | 41 | 14.3 -1.0 |
| BDRM | Kayabasi | 0.84 | 271 | P | Pg | 21 | 41 | 14.3 -1.0 |
| BDRM | | | | S | Sn | 21 | 41 | 30.9 +1.9 |
| GOLH | Golhisar | 0.87 | 77 | *i* P | Pg | 21 | 41 | 13.9 -2.0 |
| GOLH | | | | *i* S | Sn | 21 | 41 | 29.7 -0.2 |
| GOLH | Golhisar | 0.87 | 77 | P | Pg | 21 | 41 | 13.9 -2.0 |
| GOLH | | | | S | Sn | 21 | 41 | 29.7 -0.2 |
| ARG | Arkhangelos | 0.89 | 200 | *e*PB | Pg | 21 | 41 | 15.2 -0.9 |
| ARG | | | | *e*SN | Sb | 21 | 41 | 28.8 +0.8 |
| ARG | Arkhangelos | 0.89 | 200 | *e*Pb | Pg | 21 | 41 | 15.2 -0.9 |
| ARG | | | | *e*Sn | Sb | 21 | 41 | 28.8 +0.8 |
| AYDB | Zeytinkoy-Aydi | 1.01 | 332 | *e*PG | Pg | 21 | 41 | 17.9 -0.7 |
| AYDB | Zeytinkoy-Aydi | 1.01 | 332 | *e*Pg | Pg | 21 | 41 | 17.9 -0.7 |
| NIS1 | Nisyros Isl. | 1.15 | 247 | *e*PN | Pn | 21 | 41 | 20.9 0.0 |
| NIS1 | Nisyros Isl. | 1.15 | 247 | *e*PN | Pb | 21 | 41 | 20.1 -0.7 |
| NIS1 | | | | *e*SN | Sb | 21 | 41 | 35.2 -0.4 |
| NIS1 | Nisyros Isl. | 1.15 | 247 | *e*Pn | Pb | 21 | 41 | 20.1 -0.7 |
| NIS1 | | | | *e*Sn | Sb | 21 | 41 | 35.2 -0.4 |
| GCAM | G?zelcaml? | 1.20 | 303 | *i* P | Pg | 21 | 41 | 21.9 -0.1 |
| GCAM | G?zelcaml? | 1.20 | 303 | P | Pg | 21 | 41 | 21.9 -0.1 |
| GCAM | | | | S | Sn | 21 | 41 | 39.6 +2.0 |
| AKAS | Kas | 1.21 | 132 | *i* P | Pg | 21 | 41 | 22.4 +0.1 |
| AKAS | Kas | 1.21 | 132 | P | Pg | 21 | 41 | 22.4 +0.1 |
| AKAS | | | | S | Sn | 21 | 41 | 40.9 +2.6 |
| KSL | Kastellorizon | 1.26 | 135 | *e*PN | Pn | 21 | 41 | 21.9 -0.5 |
| KSL | | | | *e*SN | Sg | 21 | 41 | 39.0 -0.5 |
| MANT | Manisa | 1.44 | 2 | *i* P | Pn | 21 | 41 | 24.5 -0.6 |
| MANT | | | | *i* S | Sb | 21 | 41 | 44.8 +0.6 |
| MANT | Manisa | 1.44 | 2 | P | Pn | 21 | 41 | 24.5 -0.6 |
| MANT | | | | S | Sb | 21 | 41 | 44.8 +0.6 |
| KULA | Kula-Manisa | 1.47 | 5 | *e*PN | Pn | 21 | 41 | 25.2 -0.1 |
| KULA | Kula-Manisa | 1.47 | 5 | *e*Pn | Pn | 21 | 41 | 25.2 -0.1 |
| SMG | Samos | 1.47 | 297 | *e*PN | Pn | 21 | 41 | 24.8 -0.6 |
| SMG | | | | *e*SN | Sn | 21 | 41 | 43.9 -0.7 |
| SMG | Samos | 1.47 | 297 | *e*Pn | Pn | 21 | 41 | 24.8 -0.6 |
| SMG | | | | *e*Sn | Sn | 21 | 41 | 43.9 -0.7 |
| KORT | Korkueli | 1.49 | 91 | *i* P | Pg | 21 | 41 | 27.4 -0.2 |
| KORT | Korkueli | 1.49 | 91 | P | Pg | 21 | 41 | 27.4 -0.2 |
| KORT | | | | S | Sg | 21 | 41 | 49.8 +2.9 |
| KHL | Karahalli | 1.51 | 32 | *e*PN | Pn | 21 | 41 | 26.1 +0.1 |
| KHL | Karahalli | 1.51 | 32 | *e*Pn | Pn | 21 | 41 | 26.1 +0.1 |
| KHAL | Karahalli | 1.54 | 31 | *i* P | Pn | 21 | 41 | 26.2 -0.1 |
| KHAL | | | | *i* S | Sn | 21 | 41 | 46.4 +0.1 |
| KHAL | Karahalli | 1.54 | 31 | P | Pn | 21 | 41 | 26.2 -0.1 |
| KHAL | | | | S | Sn | 21 | 41 | 46.4 +0.1 |
| KARP | Karpathos | 1.85 | 216 | *e*PB | Pn | 21 | 41 | 30.5 0.0 |
| KARP | Karpathos | 1.85 | 216 | *e*Pb | Pn | 21 | 41 | 30.5 0.0 |
| SUTC | Sutluce-Ispart | 2.04 | 77 | *e*PN | Pn | 21 | 41 | 33.0 -0.3 |
| SUTC | Sutluce-Ispart | 2.04 | 77 | *e*Pn | Pn | 21 | 41 | 33.0 -0.3 |

*ISCJB **30** 21:41:11.9±1.0, 3°.75±0°.1×99°.6E±0°.1, h10km, mb3.7/9, Error ellipse: s-maj=20.0km s-min=9.1km az=43.5*
*IDC **30** 21:41:12.7±1.1, 3°.68S×99°.64E, h0km, mb3.8/10, mb1 4.0/11, mb1mx3.8/37, mbtmp3.9/11, ML4.6/1, Error ellipse: s-maj=36.5km s-min=16.5km az=53.0*
*DJA **30** 21:41:14.4±1.0, 2°.5±3°×10°.0E±°, h13km±11km, M4.7/4, mb5.8/1, MLv4.2/4*
**ISC 30 21:41:14.2±1.1, 3°.7S±0°.1×99°.8E±0°.1, h10km, n24, σ1§04/19, mb3.7/9, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| PPSI | Pulau Pagai | 0.92 | 16 | P | Pg | 21 | 41 | 31.1 -0.8 |
| KSI | Kapahiang | 2.84 | 90 | P | Pn | 21 | 42 | 00.0 +0.3 |
| MNAI | Manna | 3.28 | 103 | P | Pb | 21 | 42 | 10.7 -1.8 |
| LHSI | Lahat | 3.77 | 93 | P | Pn | 21 | 42 | 14.5 +2.1 |
| MDSI | Maura Dua | 4.50 | 101 | P | Pn | 21 | 42 | 24.2 +1.8 |
| LWLI | Liwa | 4.51 | 108 | P | Pb | 21 | 42 | 28.8 -4.7 |
| LEM | Lembang | 8.45 | 112 | Pn | Pn | 21 | 43 | 18.0 +1.1 |
| | 7.0nm,0.3s,baz=149,slow=18,SNR=5.0 | | | | | | | |
| LEM | Lembang | 8.45 | 112 | P | Pn | 21 | 43 | 21.7 +4.8 |
| CISI | Cisompet, Garu | 8.92 | 116 | P | Pn | 21 | 43 | 22.4 -0.8 |
| KAPI | Kappang | 19.99 | 95 | P | P | 21 | 45 | 47.3 +0.2 |
| | 6.0nm,0.4s,baz=265,slow=7.7,SNR=5.4 | | | | | | | |
| CMAR | Chiang Mai Arr | 21.98 | 358 | P | P | 21 | 46 | 08.2 -0.3 |
| | 1.1nm,0.6s,baz=182,slow=10,SNR=8.1 | | | | | | | |
| H08S2 | Diego Garcia H | 27.41 | 260 | T | T | 22 | 16 | 22.8 |
| | baz=82,slow=75,SNR=64 | | | | | | | |
| H08S3 | Diego Garcia H | 27.41 | 261 | T | T | 22 | 16 | 21.2 |
| | baz=82,slow=75,SNR=66 | | | | | | | |
| H08S1 | Diego Carcia H | 27.42 | 260 | T | T | 22 | 16 | 24.2 |
| | baz=82,slow=75,SNR=66 | | | | | | | |
| WRA | Warramunga Arr | 37.41 | 118 | P | P | 21 | 48 | 28.4 +0.7 |
| | 0.7nm,0.5s,baz=298,slow=8.5,SNR=5.6 | | | | | | | |
| ASAR | Alice Springs | 38.51 | 124 | P | P | 21 | 48 | 37.9 +0.8 |
| | 1.4nm,0.8s,baz=295,slow=7.3,SNR=11 | | | | | | | |
| SONM | Songino Array | 51.60 | 6 | P | P | 21 | 50 | 21.1 +0.2 |
| | 0.4nm,0.4s,baz=183,slow=7.4,SNR=4.1 | | | | | | | |
| MKAR | Makanchi Array | 52.54 | 345 | P | P | 21 | 50 | 28.4 +0.6 |
| | 0.4nm,0.5s,baz=156,slow=9.2,SNR=4.3 | | | | | | | |
| USRK | Ussuriysk Ar. | 55.72 | 28 | P | P | 21 | 50 | 51.3 +0.3 |
| | 2.8nm,0.6s,baz=223,slow=6.3,SNR=13 | | | | | | | |
| KURBB | Kurchatov Arra | 57.05 | 344 | P | P | 21 | 51 | 00.6 +0.3 |
| | 0.1nm,0.3s,baz=168,slow=6.6,SNR=2.8 | | | | | | | |
| ZALV | Zalesovo Beam | 58.73 | 350 | P | P | 21 | 51 | 12.5 +0.4 |
| | 0.9nm,0.4s,baz=165,slow=6.2,SNR=8.9 | | | | | | | |
| BVAR | Borovoye Array | 61.64 | 340 | P | P | 21 | 51 | 31.5 -0.5 |
| | 0.3nm,0.5s,baz=127,slow=9.6,SNR=2.5 | | | | | | | |
| TXAR | Lajitas Array | 146.15 | 39 | PKPbc | PKPab | 22 | 00 | 56.5 +0.3 |
| | 1.1nm,0.6s,baz=290,slow=1.2,SNR=15 | | | | | | | |
| LPAZ | La Paz | 156.85 | 211 | PKPab | PKPab | 22 | 01 | 40.0 -1.3 |
| | 0.7nm,0.5s,baz=225,slow=4.3,SNR=3.4 | | | | | | | |

**NEIC 30 21:51:54.0, 19°.32N×155°.12W, h9km, ML3.7(HVO), After HVO., Hawaiian Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| POHA | Pohakuloa | 0.58 | 318 | *e*Pg | Pg | 21 | 52 | 04.4 -1.2 |
| POHA | | | | *e*Sg | Sg | 21 | 52 | 12.8 -0.7 |
| HON | Honolulu | 3.36 | 307 | *e*Pn | Pn | 21 | 52 | 42.5 -4.2 |
| HON | | | | *e*Sn | Sn | 21 | 53 | 19.9 -6.8 |
| KIP | Kipapa | 3.42 | 308 | *e*Pn | Pn | 21 | 52 | 46.1 -1.5 |
| KIP | | | | *e*Sn | Sn | 21 | 53 | 23.5 -4.9 |

*CSEM **30** 22:06:03.2, 38°.78N×26°.70W, h0km, ML2.8, After PDA*
**PDA 30 22:06:03.2±1.1, 38°.78N×26°.70W, h0km±6km, MD3.5, ML2.8, Error ellipse: s-maj=9.9km s-min=2.2km az=26.0, Azores Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h | m | s ISC |
| ADH | Angra Heroismo | 0.44 | 254 | *e*P | Pg | 22 | 06 | 10.4 -1.2 |
| ADH | | | | *e*S | Sg | 22 | 06 | 16.2 -1.0 |
| ADH | | | | A | A | 22 | 06 | 18.3 |
| | 341nm,0.5s | | | | | | | |
| ADH | Angra Heroismo | 0.44 | 254 | *e*P | Pg | 22 | 06 | 10.4 -1.2 |
| ADH | | | | *e*S | Sg | 22 | 06 | 16.2 -1.0 |
| PGRA | Graciosa | 1.03 | 285 | *e*P | Pg | 22 | 06 | 19.9 -3.1 |
| PGRA | | | | *e*S | Sg | 22 | 06 | 32.6 -3.9 |
| PGRA | | | | A | A | 22 | 06 | 35.9 |
| | 39nm,0.1s | | | | | | | |
| PGRA | Graciosa | 1.03 | 285 | *e*P | Pg | 22 | 06 | 19.9 -3.1 |
| PGRA | | | | *e*S | Sg | 22 | 06 | 32.6 -3.9 |
| PMAN | Manadas | 1.10 | 263 | *e*P | Pg | 22 | 06 | 20.4 -3.9 |
| PMAN | | | | *e*S | Sg | 22 | 06 | 33.8 -4.7 |
| PMAN | | | | A | A | 22 | 06 | 34.0 |
| | 83nm,0.4s | | | | | | | |
| PMAN | Manadas | 1.10 | 263 | *e*P | Pg | 22 | 06 | 20.4 -3.9 |
| PMAN | | | | *e*S | Sg | 22 | 06 | 33.8 -4.7 |
| PID | Ribeirinha | 1.16 | 254 | *e*P | Pg | 22 | 06 | 22.2 -3.3 |
| PID | | | | *e*S | Sg | 22 | 06 | 35.6 -5.1 |
| PID | Ribeirinha | 1.16 | 254 | *e*P | Pg | 22 | 06 | 22.2 -3.3 |
| PID | | | | *e*S | Sg | 22 | 06 | 35.6 -5.1 |
| ROSA | Rosais | 1.21 | 268 | *e*P | Pg | 22 | 06 | 22.3 -4.1 |
| ROSA | | | | *e*S | Sg | 22 | 06 | 37.3 -4.8 |
| ROSA | | | | A | A | 22 | 06 | 37.3 |
| | 55nm,0.8s | | | | | | | |
| ROSA | Rosais | 1.21 | 268 | *e*P | Pg | 22 | 06 | 22.3 -4.1 |
| ROSA | | | | *e*S | Sg | 22 | 06 | 37.3 -4.8 |
| PSET | Sete Cidades | 1

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| PRK | | | | S | | **Sb** | **22 16 49.0** | **+0.2** | |
| **PRK** | **Paraskevi** | **1.13** | **165** | P | | **Pg** | **22 16 33.8** | **-0.4** | |
| PRK | | | | S | | **Sb** | **22 16 49.0** | **+0.2** | |
| **AYVA** | **Ayvalik** | **1.20** | **149** | *i* P | | **Pn** | **22 16 35.4** | **+0.2** | |
| AYVA | | | | *i* S | | **Sn** | **22 16 51.9** | **+0.4** | |
| **AYVA** | **Ayvalik** | **1.20** | **149** | P | | **Pn** | **22 16 35.4** | **+0.2** | |
| AYVA | | | | S | | **Sn** | **22 16 51.9** | **+0.4** | |
| **KAVA** | **Kavala** | **1.23** | **303** | P | | **Pn** | **22 16 35.2** | **-0.4** | |
| **KAVA** | **Kavala** | **1.23** | **303** | P | | **Pn** | **22 16 35.2** | **-0.4** | |
| **MRMT** | **Marmara Adasi** | **1.33** | **78** | *e*PN | | **Pn** | **22 16 36.9** | **-0.2** | |
| **MRMT** | **Marmara Adasi** | **1.33** | **78** | *e*Pn | | **Pn** | **22 16 36.9** | **-0.2** | |
| **GONE** | **Gonen-Balikesi** | **1.41** | **101** | *e*PN | | **Pn** | **22 16 38.0** | **0.0** | |
| **GONE** | **Gonen-Balikesi** | **1.41** | **101** | *e*Pn | | **Pn** | **22 16 38.0** | **0.0** | |
| **TKR** | **Tekirdag** | **1.41** | **62** | *e*PN | | **Pn** | **22 16 38.5** | **+0.4** | |
| **TKR** | **Tekirdag** | **1.41** | **62** | *e*Pn | | **Pn** | **22 16 38.5** | **+0.4** | |
| **OUR** | **Ouranopolis** | **1.45** | **270** | P | | **Pn** | **22 16 37.5** | **-1.1** | |
| **OUR** | **Ouranopolis** | **1.45** | **270** | P | | **Pn** | **22 16 37.5** | **-1.1** | |
| **BALY** | **Balya** | **1.46** | **114** | *i* P | | **Pn** | **22 16 39.3** | **+0.5** | |
| BALY | | | | *i* S | | **Sg** | **22 16 59.9** | **+0.5** | |
| **BALY** | **Balya** | **1.46** | **114** | P | | **Pn** | **22 16 39.3** | **+0.5** | |
| BALY | | | | S | | **Sg** | **22 16 59.9** | **+0.5** | |
| **EDC** | **Edincik** | **1.51** | **89** | *e*PN | | **Pn** | **22 16 39.7** | **+0.2** | |
| **EDC** | **Edincik** | **1.51** | **89** | *e*Pn | | **Pn** | **22 16 39.7** | **+0.2** | |
| **BNT** | **Bandirma** | **1.56** | **89** | *e*PN | | **Pn** | **22 16 40.1** | **+0.1** | |
| **BNT** | **Bandirma** | **1.56** | **89** | *e*Pn | | **Pn** | **22 16 40.1** | **+0.1** | |
| **CRLT** | **Corlu** | **1.61** | **60** | *e*PN | | **Pn** | **22 16 41.6** | **+0.8** | |
| **CRLT** | **Corlu** | **1.61** | **60** | *e*Pn | | **Pn** | **22 16 41.6** | **+0.8** | |
| **EDRB** | **Edirne** | **1.64** | **23** | *e*PN | | **Pb** | **22 16 42.9** | **+0.3** | |
| **EDRB** | **Edirne** | **1.64** | **23** | *e*Pn | | **Pb** | **22 16 42.9** | **+0.3** | |
| **BALB** | **Balikesir** | **1.69** | **114** | *e*PN | | **Pn** | **22 16 41.9** | **+0.1** | |
| **BALB** | **Balikesir** | **1.69** | **114** | *e*Pn | | **Pn** | **22 16 41.9** | **+0.1** | |
| **NVR** | **Nevrokopi** | **1.83** | **304** | *e*PN | | **Pn** | **22 16 43.2** | **-0.8** | |
| **NVR** | **Nevrokopi** | **1.83** | **304** | P | | **Pn** | **22 16 43.2** | **-0.7** | |
| **NVR** | **Nevrokopi** | **1.83** | **304** | P | | **Pn** | **22 16 43.2** | **-0.7** | |
| **SRS** | **Serrai** | **1.91** | **295** | *e*PN | | **Pn** | **22 16 44.3** | **-0.6** | |
| **SRS** | **Serrai** | **1.91** | **295** | P | | **Pn** | **22 16 45.6** | **+0.7** | |
| **SRS** | **Serrai** | **1.91** | **295** | *e*Pn | | **Pn** | **22 16 44.3** | **-0.6** | |
| **SRS** | **Serrai** | **1.91** | **295** | P | | **Pn** | **22 16 45.6** | **+0.7** | |
| **CHOS** | **Chios island** | **1.96** | **176** | *e*PN | | **Pn** | **22 16 46.5** | **+0.9** | |
| **CHOS** | **Chios island** | **1.96** | **176** | *e*PN | | **Pn** | **22 16 46.1** | **+0.5** | |
| **CHOS** | **Chios island** | **1.96** | **176** | *e*Pb | | **Pn** | **22 16 46.1** | **+0.5** | |
| **CHOS** | **Chios island** | **1.96** | **176** | *e*Pn | | **Pn** | **22 16 46.5** | **+0.9** | |
| **HORT** | **Hortiatis** | **2.14** | **278** | *e*PN | | **Pb** | **22 16 51.3** | **+0.1** | |
| **DST** | **Dursunbey** | **2.23** | **108** | *e*PN | | **Pn** | **22 16 49.6** | **+0.3** | |
| **DST** | **Dursunbey** | **2.23** | **108** | *e*Pn | | **Pn** | **22 16 49.6** | **+0.3** | |
| **ARMT** | **Armutlu** | **2.28** | **83** | *e*PN | | **Pn** | **22 16 50.7** | **+0.6** | |
| **ARMT** | **Armutlu** | **2.28** | **83** | *e*Pn | | **Pn** | **22 16 50.7** | **+0.6** | |
| **ULDT** | **Uludag** | **2.50** | **94** | P | | **Pg** | **22 16 59.3** | **-0.9** | |
| **GRG** | **Griva** | **2.72** | **284** | *e*PN | | **Pb** | **22 17 00.1** | **-1.0** | |
| **KULA** | **Kula-Manisa** | **2.82** | **129** | *e*PN | | **Pn** | **22 16 58.1** | **+0.6** | |
| **KULA** | **Kula-Manisa** | **2.82** | **129** | *e*Pn | | **Pn** | **22 16 58.1** | **+0.6** | |
| **AYDB** | **Zeytinkoy-Aydi** | **2.85** | **146** | *e*PN | | **Pn** | **22 16 58.4** | **+0.4** | |
| **AYDB** | **Zeytinkoy-Aydi** | **2.85** | **146** | *e*Pn | | **Pn** | **22 16 58.4** | **+0.4** | |
| **TVSB** | **Tavsanli** | **2.89** | **107** | *e*PN | | **Pn** | **22 16 58.9** | **+0.4** | |
| **TVSB** | **Tavsanli** | **2.89** | **107** | *e*Pn | | **Pn** | **22 16 58.9** | **+0.4** | |

*ISCJB **30** 22:17:58.8±0.5, 40˚.35N±0˚.02×25˚.86E±0˚.04, h7km±4km, Error ellipse: s-maj=4.6km s-min=4.0km az=15.2*
*CSEM **30** 22:17:58.8±0.1, 40˚.34N×25˚.85E, h10km, MD2.4, Error ellipse: s-maj=3.2km s-min=2.8km az=111.0*
*ATH **30** 22:17:58.9, 40˚.33N×25˚.87E, h14km±3km, MD2.8/5*
*ISK **30** 22:17:58.9, 40˚.35N×25˚.90E, h13km, MD2.4*
*DDA **30** 22:17:60.0, 40˚.30N×25˚.95E, h7km, Md2.9*

**ISC 30 22:17:58.7**±0.9, **40˚.35N**±0˚.02×**25˚.89E**±0˚.03, **h14**km±9km, **n31**, σ0**936**/50, **Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GADA** | **Gvkgeada** | **0.16** | **177** | *e*PG | **Pb** | **22 18 03.1** | **-0.3** |
| **GADA** | **Gvkgeada** | **0.16** | **177** | *e*Pg | **Pb** | **22 18 03.1** | **-0.3** |
| **SMTH** | **Samothraki Isl** | **0.30** | **294** | *e*PG | **Sg** | **22 18 09.9** | **+0.1** |
| SMTH | | | | *e*SG | **Sg** | **22 18 09.4** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **0.30** | **294** | *e*Pg | **Pg** | **22 18 04.9** | **-0.1** |
| SMTH | | | | *e*Sg | **Sg** | **22 18 09.4** | **+0.2** |
| **GELI** | **Tayfur-Gelibol** | **0.45** | **84** | *e*PG | **Pb** | **22 18 08.1** | **-0.3** |
| GELI | | | | *e*SG | **Sb** | **22 18 14.7** | **-0.3** |
| **GELI** | **Tayfur-Gelibol** | **0.45** | **84** | *e*Pg | **Pb** | **22 18 08.1** | **-0.3** |
| GELI | | | | *e*Sg | **Sb** | **22 18 14.7** | **-0.3** |
| **BOZC** | **Bozcaada** | **0.52** | **166** | P | **Pg** | **22 18 09.0** | **0.0** |
| BOZC | | | | S | **Sg** | **22 18 16.2** | **+0.3** |
| **ALN** | **Alexandroupoli** | **0.56** | **12** | *e*PG | **Pb** | **22 18 10.2** | **-0.1** |
| **ALN** | **Alexandroupoli** | **0.56** | **12** | *e*PB | **Pb** | **22 18 10.2** | **-0.1** |
| ALN | | | | *e*SB | **Sb** | **22 18 18.5** | **+0.3** |
| **ALN** | **Alexandroupoli** | **0.56** | **12** | *e*Pb | **Pb** | **22 18 10.2** | **-0.1** |
| ALN | | | | *e*Sb | **Sb** | **22 18 18.5** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **0.58** | **56** | *e*PG | **Pb** | **22 18 10.4** | **-0.1** |
| ERIK | | | | *e*SG | **Sb** | **22 18 18.9** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **0.58** | **56** | *e*Pg | **Pb** | **22 18 10.5** | **-0.1** |
| ERIK | | | | *e*Sg | **Sb** | **22 18 18.9** | **+0.3** |
| **LIA** | **Limnos Island** | **0.70** | **230** | *e*PB | **Pg** | **22 18 12.3** | **-0.1** |
| LIA | | | | *e*SB | **Sg** | **22 18 21.5** | **-0.2** |
| **LIA** | **Limnos Island** | **0.70** | **230** | *e*Pb | **Pg** | **22 18 12.3** | **-0.1** |
| LIA | | | | *e*Sb | **Sg** | **22 18 21.5** | **-0.2** |
| **SIGR** | **SIGRI** | **1.14** | **181** | *e*PN | **Pg** | **22 18 22.0** | **+1.4** |
| **SIGR** | **SIGRI** | **1.14** | **181** | *e*PB | **Pb** | **22 18 20.1** | **0.0** |
| SIGR | | | | *e*SB | **Sn** | **22 18 35.5** | **0.0** |
| **SIGR** | **SIGRI** | **1.14** | **181** | *e*Pn | **Pb** | **22 18 20.1** | **0.0** |
| SIGR | | | | *e*Sb | **Sn** | **22 18 35.5** | **0.0** |
| **PRK** | **Paraskevi** | **1.14** | **165** | *e*PG | **Pb** | **22 18 19.9** | **-0.3** |
| PRK | | | | *e*SB | **Sg** | **22 18 35.6** | **0.0** |
| **PRK** | **Paraskevi** | **1.14** | **165** | *e*Pg | **Pb** | **22 18 19.9** | **-0.3** |
| PRK | | | | *e*Sb | **Sg** | **22 18 35.6** | **0.0** |
| **AYVA** | **Ayvalik** | **1.21** | **149** | *i* P | **Pg** | **22 18 21.7** | **-0.3** |
| AYVA | | | | *i* S | **Sg** | **22 18 37.9** | **+0.2** |
| **AYVA** | **Ayvalik** | **1.21** | **149** | P | **Pg** | **22 18 21.7** | **-0.3** |
| AYVA | | | | S | **Sg** | **22 18 37.9** | **+0.2** |
| **MRMT** | **Marmara Adasi** | **1.33** | **78** | *e*PN | **Pb** | **22 18 23.5** | **+0.1** |
| **MRMT** | **Marmara Adasi** | **1.33** | **78** | *e*Pn | **Pb** | **22 18 23.5** | **+0.1** |
| **BALY** | **Balya** | **1.46** | **114** | *i* P | **Pg** | **22 18 26.8** | **0.0** |
| BALY | | | | *i* S | **Sg** | **22 18 46.3** | **+0.5** |
| **BALY** | **Balya** | **1.46** | **114** | P | **Pg** | **22 18 26.8** | **0.0** |
| BALY | | | | S | **Sg** | **22 18 46.3** | **+0.5** |
| **EDC** | **Edincik** | **1.51** | **89** | *e*PN | **Pb** | **22 18 26.2** | **-0.3** |
| **EDC** | **Edincik** | **1.51** | **89** | *e*Pn | **Pb** | **22 18 26.2** | **-0.3** |
| **EDRB** | **Edirne** | **1.63** | **23** | *e*PN | **Pb** | **22 18 28.1** | **-0.5** |
| **EDRB** | **Edirne** | **1.63** | **23** | *e*Pn | **Pb** | **22 18 28.1** | **-0.5** |
| **BALB** | **Balikesir** | **1.69** | **114** | *e*PN | **Pb** | **22 18 28.6** | **-0.8** |
| **BALB** | **Balikesir** | **1.69** | **114** | *e*Pn | **Pb** | **22 18 28.7** | **-0.8** |

*IDC **30** 22:22:35.0±3.2, 39˚.99N×49˚.80E, h0km, mb3.8/2, mb1 3.8/4, mb1mx3.4/25, mbtmp3.7/4, ML3.1/2, MS3.4/1, Ms1 3.4/1, ms1mx2.4/36, Error ellipse: s-maj=80.3km s-min=16.4km az=23.0*
*ISCJB **30** 22:22:40.2±0.5, 39˚.94N±0˚.04×50˚.35E±0˚.04, h85km±6km, mb3.5/2, Error ellipse: s-maj=6.2km s-min=5.5km az=0.7*
*CSEM **30** 22:22:40.9±0.4, 39˚.89N×50˚.44E, h40km, mb3.5, Error ellipse: s-maj=7.8km s-min=6.7km az=135.0*
*AZER **30** 22:22:41.4±2.0, 39˚.89N×50˚.17E, h41km, Error ellipse: s-maj=3.2km s-min=1.6km az=302.0*
*NNC **30** 22:22:49.8±5.4, 40˚.73N×51˚.41E, h0km, mb3.5, Error ellipse: s-maj=70.0km s-min=35.5km az=93.0*

**ISC 30 22:22:42.4**±1.0, **39˚.91N**±0˚.04×**50˚.25E**±0˚.05, **h63**km±9km, **n45**, σ1**518**/67, **18C-19D, Caspian Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **GALA** | **Gala** SNR=12 | **0.50** | **352** | ⇑P | **Pn** | **22 22 53.9** | **-0.7** |
| GALA | | | | ⇓S | **Sn** | **22 23 05.3** | **+1.8** |
| **GALA** | **Gala** SNR=12 | **0.50** | **352** | P | **Pn** | **22 22 53.9** | **-0.7** |
| GALA | | | | S | **Sn** | **22 23 05.3** | **+1.8** |
| **GOBA** | **Gobu** SNR=4.3 | **0.63** | **321** | ⇓P | **Pn** | **22 22 55.9** | **-0.1** |
| GOBA | | | | ⇑S | **Sn** | **22 23 05.3** | **-0.7** |
| **GOBA** | **Gobu** SNR=4.3 | **0.63** | **321** | P | **Pn** | **22 22 55.9** | **-0.1** |
| GOBA | | | | S | **Sn** | **22 23 05.3** | **-0.7** |
| **NDR** | **Nardaran** SNR=18 | **0.70** | **343** | ⇓P | **Pn** | **22 22 56.3** | **-0.5** |
| NDR | | | | ⇓S | **Sn** | **22 23 09.2** | **+1.9** |
| **NDR** | **Nardaran** SNR=18 | **0.70** | **343** | P | **Pn** | **22 22 56.3** | **-0.5** |
| NDR | | | | S | **Sn** | **22 23 09.2** | **+1.9** |
| **ATGJ** | **Altiaghaj** SNR=5.1 | **1.38** | **314** | ⇓Pn | **Pn** | **22 23 05.7** | **+0.1** |
| ATGJ | | | | ⇑Sn | **Sn** | **22 23 24.8** | **+1.7** |
| **ATGJ** | **Altiaghaj** SNR=5.1 | **1.38** | **314** | Pn | **Pn** | **22 23 05.7** | **+0.1** |
| ATGJ | | | | Sn | **Sn** | **22 23 24.8** | **+1.7** |
| **SAAT** | **Saatly** | **1.41** | **269** | ⇑Pn | **Pn** | **22 23 05.2** | **-0.7** |
| **SAAT** | **Saatly** | **1.41** | **269** | Pn | **Pn** | **22 23 05.2** | **-0.7** |
| **PQL** | **Pirkuli** | **1.54** | **305** | ⇑Pn | **Pn** | **22 23 08.0** | **+0.2** |
| PQL | | | | ⇑Sn | **Sn** | **22 23 29.7** | **+2.7** |
| **PQL** | **Pirkuli** | **1.54** | **305** | Pn | **Pn** | **22 23 08.0** | **+0.2** |
| PQL | | | | Sn | **Sn** | **22 23 29.7** | **+2.7** |
| **SIZA** | **Siyzn** | **1.55** | **319** | ⇑Pn | Pn | 22 23 10.0 | +2.0 |
| SIZA | | | | ⇑Sn | **Sn** | **22 23 28.9** | **+1.7** |
| **SIZA** | **Siyzn** | **1.55** | **319** | Pn | Pn | 22 23 10.0 | +2.0 |
| SIZA | | | | Sn | **Sn** | **22 23 28.9** | **+1.7** |
| **GLBA** | **Clilabad** SNR=3.3 | **1.58** | **246** | ⇑Pn | **Pn** | **22 23 08.4** | **+0.2** |
| GLBA | | | | ⇓Sn | **Sn** | **22 23 28.9** | **+1.2** |
| **GLBA** | **Clilabad** SNR=3.3 | **1.58** | **246** | Pn | **Pn** | **22 23 08.4** | **+0.2** |
| GLBA | | | | Sn | **Sn** | **22 23 28.9** | **+1.2** |
| **KDMR** | **Kurdemir** SNR=14 | **1.65** | **287** | ⇑Pn | **Pn** | **22 23 09.2** | **+0.1** |
| KDMR | | | | ⇓Sn | **Sn** | **22 23 29.9** | **+0.6** |
| **KDMR** | **Kurdemir** SNR=14 | **1.65** | **287** | Pn | **Pn** | **22 23 09.2** | **+0.1** |
| KDMR | | | | Sn | **Sn** | **22 23 29.9** | **+0.6** |
| **LKRN** | **Lenkeran, Azer** SNR=7.3 | **1.66** | **224** | ⇓Pn | **Pn** | **22 23 09.7** | **+0.5** |
| LKRN | | | | ⇑Sn | **Sn** | **22 23 30.2** | **+0.7** |
| **LKRN** | **Lenkeran, Azer** SNR=7.3 | **1.66** | **224** | Pn | **Pn** | **22 23 09.7** | **+0.5** |
| LKRN | | | | Sn | **Sn** | **22 23 30.2** | **+0.7** |
| **IML** | **Ismayilli** SNR=18 | **1.81** | **300** | ⇓Pn | **Pn** | **22 23 10.9** | **-0.4** |
| IML | | | | ⇓Sn | **Sn** | **22 23 35.2** | **+1.9** |
| **IML** | **Ismayilli** SNR=18 | **1.81** | **300** | Pn | **Pn** | **22 23 10.9** | **-0.4** |
| IML | | | | Sn | **Sn** | **22 23 35.2** | **+1.9** |
| **LRK** | **Lerik** | **1.95** | **230** | ⇑Pn | **Pn** | **22 23 13.5** | **+0.1** |
| LRK | | | | ⇓Sn | **Sn** | **22 23 37.1** | **+0.2** |
| **LRK** | **Lerik** | **1.95** | **230** | Pn | **Pn** | **22 23 13.5** | **+0.1** |
| LRK | | | | Sn | **Sn** | **22 23 37.1** | **+0.2** |
| **QUBA** | **Quba, Azerbaij** | **1.97** | **318** | ⇑Pn | **Pn** | **22 23 13.3** | **-0.2** |
| QUBA | | | | ⇓Sn | **Sn** | **22 23 36.4** | **-0.7** |
| **QUBA** | **Quba, Azerbaij** | **1.97** | **318** | Pn | **Pn** | **22 23 13.3** | **-0.2** |
| QUBA | | | | Sn | **Sn** | **22 23 36.4** | **-0.7** |
| **BRDA** | **Brd** | **2.38** | **279** | ⇓Pn | **Pn** | **22 23 18.8** | **-0.2** |
| **BRDA** | **Brd** | **2.38** | **279** | Pn | **Pn** | **22 23 18.8** | **-0.2** |
| **SEKA** | **Sheki** SNR=8.0 | **2.66** | **300** | ⇓Pn | **Pn** | **22 23 22.3** | **-0.7** |
| SEKA | | | | ⇓Sn | **Sn** | **22 23 53.3** | **-0.8** |
| **SEKA** | **Sheki** SNR=8.0 | **2.66** | **300** | Pn | **Pn** | **22 23 22.3** | **-0.7** |
| SEKA | | | | Sn | **Sn** | **22 23 53.3** | **-0.8** |
| **GANJ** | **Ganja** SNR=9.2 | **3.09** | **285** | ⇓Pn | **Pn** | **22 23 27.8** | **-1.0** |
| **GANJ** | **Ganja** SNR=9.2 | **3.09** | **285** | Pn | **Pn** | **22 23 27.8** | **-1.0** |
| **ZKTA** | **Zakatala** SNR=7.1 | **3.25** | **303** | ⇑Pn | **Pn** | **22 23 30.3** | **-0.6** |
| ZKTA | | | | ⇑Sn | **Sn** | **22 24 08.6** | **+0.2** |
| **QZX** | **Qazax, Azerbai** SNR=10 | **3.89** | **289** | Pn | **Pn** | **22 23 38.9** | **-0.8** |
| QZX | | | | ⇑Sn | **Sn** | **22 24 22.0** | **-2.2** |
| **QZX** | **Qazax, Azerbai** SNR=10 | **3.89** | **289** | Pn | **Pn** | **22 23 38.9** | **-0.8** |
| **GEYT** | **Alibeck** 2.8nm,0.3s,baz=289,slow=13,SNR=25 | **6.45** | **105** | Pn | **Pn** | **22 24 15.1** | **+0.4** |
| GEYT | 0.7nm,0.3s,baz=290,slow=15,SNR=2.2 | | | Sn | **Sn** | **22 25 24.8** | **-2.1** |
| **KBZ** | **Khabaz** 0.0nm,0.3s,baz=158,slow=5.4,SNR=1.9 | **6.69** | **307** | Pn | Pn | 22 24 14.2 | -3.7 |
| KBZ | 0.1nm,0.3s,baz=127,slow=3.6,SNR=1.9 | | | Sn | Sn | 22 25 24.4 | -8.1 |
| **AB31** | **Akbulak array** 0.2nm,0.4s,baz=204,slow=12,SNR=5.0 | **11.61** | **33** | ⇓Pn | Pn | 22 25 21.5 | -3.6 |
| AB31 | 0.4nm,0.3s,baz=216,slow=22,SNR=6.4 | | | ⇓Sn | Sn | 22 27 20.1 | -13 |
| **AB31** | **Akbulak array** 0.2nm,0.4s,baz=204,SNR=5.0 | **11.61** | **33** | Pn | Pn | 22 25 21.5 | -3.6 |
| **AKTO** | **Aktyubinsk** 3.6nm,1.2s | **11.86** | **25** | ⇑Pn | Pn | 22 25 24.3 | -4.2 |
| AKTO | 3.0nm,0.6s | | | ⇑Sn | Sn | 22 27 26.8 | -12 |
| **KK31** | **Karatay Array** 0.3nm,0.5s,baz=269,slow=9.2,SNR=5.4 | **15.51** | **72** | ⇓Pn | **Pn** | **22 26 15.0** | **-2.1** |
| **KK31** | **Karatay Array** 0.3nm,0.5s,SNR=5.4 | **15.51** | **72** | Pn | **Pn** | **22 26 15.0** | **-2.1** |
| **MKAR** | **Makanchi Array** 0.7nm,0.4s,baz=258,slow=9.5,SNR=9.6 | **24.18** | **63** | P | **P** | **22 27 55.2** | **+2.5** |
| **FINES** | **FINESS Array B** 2.4nm,0.9s,baz=132,slow=9.5,SNR=2.2 | **26.15** | **333** | P | **P** | **22 28 09.6** | **-0.8** |
| **OPO** | **Ambohidratompo** comp=Z,34nm,19.2s,baz=188,slow=37 | **58.25** | **183** | LR | LR | 22 58 26.8 | |

*NIED **30** 22:43:00, 46˚.40N×153˚.80E, h20km, Mw4.7 Best double couple: M0 1.37000×10^16 NP1:φs56.00000°, δ33.00000°, λ112.00000°. NP2:φs211.00000°, δ59.00000°, λ76.00000°.*
*JMA **30** 22:43:48.6±0.9, 46˚.39N×153˚.79E, h30km, M5.4*
*ISCJB **30** 22:43:48.5±0.7, 46˚.62N±0˚.03×153˚.48E±0˚.02, h27km±5km, mb5.0/209, MS4.1/25, Error ellipse: s-maj=4.6km s-min=2.0km az=161.5*
*MOS **30** 22:43:50.0±0.8, 46˚.71N×153˚.44E, h33km, mb5.1/77, Error ellipse: s-maj=6.0km s-min=4.8km az=77.2*
*SKHL **30** 22:43:51.0±0.5, 46˚.55N×153˚.70E, h52km±2km, mb5.8/1, Ms4.8/8, msh5.7/2*
*IDC **30** 22:43:53.0±2.3, 46˚.73N×153˚.36E, h49km±20km, mb4.4/23, mb1 4.6/27, mb1mx4.5/38, mbtmp4.7/27, ML4.3/3, MS4.0/28, Ms1 4.0/28, ms1mx3.9/36, Error ellipse: s-maj=15.2km s-min=10.6km az=135.0*
*NEIC **30** 22:43:53.4±0.6, 46˚.74N×153˚.34E, h48km±5km, mb5.1/140, Error ellipse: s-maj=5.2km s-min=2.4km az=159.0*
*BJI **30** 22:43:53.6, 46˚.92N×153˚.20E, h59km, mb4.8/61, mB5.0/47, Ms4.6/50, Ms7 4.3/51*
*SZGRF **30** 22:43:54.7, 47˚.51N×153˚.10E, h51km, mb4.6/21(BGR), Ms4.2/2(BGR)*

**ISC 30 22:43:53.4**±0.4, **46˚.67N**±0˚.04×**153˚.38E**±0˚.03, **h52**km±2km, **h52**km:**pP-P, n922,** σ1**911**/975, **mb5.0**/210, **MS4.1**/26, **35C-17D, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KUR** | **Kuril'sk** | **4.10** | **252** | *e* PN | **Pn** | **22 44 53.8** | **+0.3** |
| KUR | | | | *i* S | **Sn** | **22 45 41.5** | **+1.3** |
| KUR | comp=Z,424nm,0.4s | | | pmax | pmax | | |
| KUR | comp=N,159nm,0.2s | | | pmax | pmax | | |
| KUR | comp=E,96nm,0.2s | | | pmax | pmax | | |
| KUR | comp=N,715nm,0.6s | | | smax | smax | | |
| KUR | comp=E,924nm,0.6s | | | smax | smax | | |
| KUR | comp=Z,2μm,15.0s | | | MLR | MLR | | |
| KUR | comp=N,2μm,15.0s | | | MLR | MLR | | |
| **KUR** | **Kuril'sk** | **4.10** | **252** | *i* P | **Pn** | **22 44 53.8** | **+0.3** |
| KUR | | | | AMB | AMB | 22 44 56.7 | |
| KUR | comp=N,159nm,0.3s | | | AMB | AMB | 22 44 56.7 | |
| KUR | comp=N,96nm,0.3s | | | AMB | AMB | 22 44 56.7 | |
| KUR | comp=N,424nm,0.3s | | | *i* S | **Sn** | **22 45 40.6** | **+0.4** |
| KUR | | | | A | A | 22 45 51.1 | |
| KUR | comp=N,720nm,0.6s | | | A | A | 22 45 51.1 | |
| KUR | comp=N,924nm,0.6s | | | AMS | AMS | 22 46 29.0 | |
| KUR | comp=N,20μm,15.0s | | | *e* PN | **Pn** | **22 44 55.4** | **-2.3** |
| **SKR** | **Severo-Kuril's** | **4.41** | **23** | *e* P | **Pn** | **22 44 55.5** | **-2.3** |
| SKR | comp=N,900nm,0.8s | | | AMB | AMB | 22 45 06.9 | |
| SKR | comp=N,2μm,0.8s | | | *e*S | **Sn** | **22 45 44.0** | **-3.8** |
| SKR | comp=N,3μm,12.0s | | | A | A | 22 46 03.9 | |
| SKR | | | | AMS | AMS | 22 46 47.0 | |
| **PAU** | **Pauzhetka** | **5.31** | **24** | *e* P | **Pn** | **22 45 08.8** | **-1.3** |
| PAU | comp=N,500nm,0.7s | | | AMB | AMB | 22 45 21.1 | |
| PAU | comp=N,1μm,0.7s | | | *e*S | **Sn** | **22 46 06.8** | **-3.0** |
| PAU | | | | A | A | 22 46 29.5 | |
| **SHO** | **Shikotan** | **5.40** | **241** | *d i* PN | **Pn** | **22 45 08.5** | **-2.8** |
| SHO | comp=N,73nm,0.4s | | | pmax | pmax | | |
| SHO | comp=E,87nm,0.4s | | | pmax | pmax | | |
| SHO | comp=Z,324nm,0.4s | | | pmax | pmax | | |
| SHO | comp=E,44μm,21.0s | | | MLR | MLR | | |
| SHO | comp=N,33μm,21.0s | | | MLR | MLR | | |
| SHO | comp=E,45μm,21.0s | | | MLR | MLR | | |
| **SHO** | **Shikotan** | **5.40** | **241** | *i* P | **Pn** | **22 45 10.5** | **-0.8** |
| SHO | comp=E,320nm,0.4s | | | AMB | AMB | 22 45 22.3 | |
| SHO | comp=E,17μm,6.0s | | | *i* S | **Sn** | **22 46 10.9** | **-1.2** |
| SHO | comp=E,16μm,6.0s | | | A | A | 22 46 15.9 | |
| SHO | comp=E,700nm,0.6s | | | A | A | 22 46 15.9 | |
| SHO | comp=E,250nm,0.6s | | | A | A | 22 46 18.3 | |
| SHO | comp=E,45μm,21.0s | | | AMS | AMS | 22 46 18.3 | |
| SHO | comp=E,44μm,21.0s | | | AMS | AMS | 22 47 30.0 | |
| SHO | comp=E,33μm,21.0s | | | AMS | AMS | 22 47 30.0 | |
| **YUK** | **Yuzh-Kuril'sk** | **5.91** | **246** | *c i* PN | **Pn** | **22 45 17.9** | **-0.5** |
| YUK | comp=Z,373nm,0.6s | | | pmax | pmax | | |
| YUK | comp=N,77nm,0.3s | | | pmax | pmax | | |
| YUK | comp=E,125nm,0.3s | | | pmax | pmax | | |
| YUK | comp=Z,994nm,15.0s | | | MLR | MLR | | |
| **YUK** | **Yuzh-Kuril'sk** | **5.91** | **246** | *i* P | **Pn** | **22 45 17.9** | **-0.5** |
| YUK | comp=Z,77nm,0.4s | | | AMB | AMB | 22 45 27.9 | |
| YUK | comp=Z,125nm,0.4s | | | AMB | AMB | 22 45 27.9 | |
| YUK | comp=Z,373nm,0.4s | | | AMB | AMB | 22 45 27.9 | |
| YUK | | | | *i* S | **Sn** | **22 46 23.1** | **-1.6** |
| YUK | comp=Z,700nm,0.6s | | | A | A | 22 46 32.0 | |
| YUK | comp=Z,230nm,0.6s | | | A | A | 22 46 32.0 | |
| YUK | comp=Z,10μm,15.0s | | | AMS | AMS | 22 47 35.0 | |
| **NEM2** | **Nemuro 2** | **6.34** | **241** | P | Pn | 22 45 21.1 | -3.1 |
| NEM2 | | | | *e*S | Sn | 22 46 29.7 | -5.4 |
| **JRA** | **Rausu** | **6.43** | **248** | P | **Pn** | **22 45 25.1** | **-0.3** |
| **JNK** | **Nakash** | **6.86** | **246** | P | **Pn** | **22 45 30.1** | **-1.2** |
| JNK | | | | *e*S | **Sn** | **22 46 45.4** | **-2.5** |
| **PEA0** | **Petropavlovsk-** | **7.03** | **22** | *e*Pn | **Pn** | **22 45 32.0** | **-1.6** |
| PEA0 | | | | *e*Sn | **Sn** | **22 46 50.5** | **-1.6** |
| **PETK** | **Petropavlovsk-** comp=Z,9.4nm,0.3s,baz=180,slow=14,SNR=111 | **7.03** | **22** | P | **Pn** | **22 45 31.9** | **-1.7** |
| PETK | baz=163,slow=21,SNR=1.9 | | | S | **Sn** | **22 46 52.7** | **+0.7** |
| PETK | comp=Z,734nm,20.6s,baz=202,slow=39 | | | LR | LR | 22 48 25.4 | |
| **JAK** | **Akkeshi** | **7.18** | **242** | P | Pn | 22 45 32.8 | -2.9 |
| JAK | | | | *e*S | Sn | 22 46 49.6 | -6.2 |
| **JTKR** | **Abashiri--Toko** | **7.20** | **251** | P | **Pn** | **22 45 35.9** | **-0.1** |
| **PET** | **Petropavlovsk** | **7.22** | **26** | *e*PN | **Pn** | **22 45 34.0** | **-2.2** |
| PET | comp=Z,184nm,1.0s | | | pmax | pmax | | |
| PET | comp=Z,800nm,15.0s | | | MLR | MLR | | |
| PET | comp=Z,900nm,13.0s | | | MLR | MLR | | |
| **PET** | **Petropavlovsk** | **7.22** | **26** | *e*P | **Pn** | **22 45 34.7** | **-1.5** |
| PET | comp=Z,100nm,1.1s | | | AMB | AMB | 22 45 45.6 | |
| PET | | | | *e*S | **Sn** | **22 46 52.1** | **-4.6** |
| PET | comp=Z,350nm,0.9s | | | A | A | 22 46 59.1 | |
| PET | comp=Z,360nm,0.9s | | | A | A | 22 46 59.1 | |
| PET | comp=Z,1μm,3.0s | | | A | A | 22 47 17.6 | |
| PET | comp=Z,890nm,13.0s | | | AMS | AMS | 22 49 56.6 | |
| **YSS** | **Yuzh-Sakhalins** | **7.30** | **276** | ⇑*i* PN | **Pn** | **22 45 39.2** | **+1.9** |
| YSS | comp=Z,120nm,1.0s | | | pmax | pmax | | |
| YSS | comp=Z,2μm,16.0s | | | MLR | MLR | | |
| YSS | comp=E,2μm,17.0s | | | MLR | MLR | | |
| **YSS** | **Yuzh-Sakhalins** | **7.30** | **276** | *i* P | **Pn** | **22 45 39.2** | **+1.9** |
| YSS | comp=E,120nm,1.0s | | | AMB | AMB | 22 45 41.0 | |
| YSS | comp=E,100nm,0.8s | | | *e*S | **Sn** | **22 47 00.5** | **+1.8** |
| YSS | comp=E,2μm,17.0s | | | A | A | 22 47 04.8 | |
| YSS | comp=E,2μm,17.0s | | | AMS | AMS | 22 48 12.0 | |
| **JMP** | **Maruseppu** | **7.54** | **253** | P | **Pn** | **22 45 41.3** | **+0.6** |
| **JAR** | **Ashorobuto** | **7.60** | **247** | P | **Pn** | **22 45 40.6** | **-0.9** |
| JAR | | | | *e*S | **Sn** | **22 47 04.3** | **-1.8** |
| **JSE** | **Soyaes** | **7.73** | **261** | P | **Pn** | **22 45 45.8** | **+2.5** |
| **JOB** | **Onbets** | **7.76** | **244** | P | **Pn** | **22 45 41.4** | **-2.3** |
| JOB | | | | *e*S | Sn | 22 47 03.8 | -6.3 |
| **HRK** | **Horoka** | **7.93** | **250** | *e*P | **Pn** | **22 45 46.0** | **0.0** |
| **UGL** | **Uglegorsk** | **7.98** | **292** | *e*PN | **Pn** | **22 45 48.0** | **+1.4** |
| UGL | | | | *e* | | 22 47 28.0 | |
| UGL | comp=Z,700nm,1.4s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ERM** | **Erimo** | **8.67 241** | *ce*PN | **Pn** | **22 45 56.2** | **0.0** |
| ERM | | | pmax | pmax | | |
| | comp=Z,173nm,1.2s | | | | | |
| **ERM** | **Erimo** | **8.67 241** | Pn | **Pn** | **22 45 55.0** | **-1.2** |
| | comp=Z,1μm,0.6s,SNR=27 | | | | | |
| **ERM** | **Erimo** | **8.67 241** | *e*P | **Pn** | **22 45 56.2** | **0.0** |
| **ERM** | **Erimo** | **8.67 241** | *e*Pn | **Pn** | **22 45 55.5** | **-0.6** |
| **JHR** | **Hokuryu** | **8.73 255** | P | **Pn** | **22 45 58.4** | **+1.4** |
| **JBT2** | **Biratori 2** | **8.75 248** | P | **Pn** | **22 45 55.7** | **-1.5** |
| **JNBK** | **Urakawa-nobuka** | **8.77 244** | P | **Pn** | **22 45 54.7** | **-2.8** |
| JNBK | | | *e*S | Sn | 22 47 27.8 | -7.0 |
| **JEW** | **Eniwo** | **9.31 250** | P | **Pn** | **22 46 02.2** | **-2.6** |
| **OKH** | **Okha** | **9.61 320** | AMS | AMS | 22 52 30.0 | |
| | comp=Z,5μm,10.0s | | | | | |
| **JNB** | **Noboribetsu** | **9.75 249** | P | **Pn** | **22 46 09.0** | **-1.9** |
| JNB | | | *e*S | Sn | 22 47 53.8 | -5.1 |
| **JKB** | **Kayabe** | **10.06 246** | P | Pn | 22 46 12.0 | -3.1 |
| JKB | | | *e*S | Sn | 22 47 57.6 | -8.7 |
| **JSH** | **Shimam** | **10.31 252** | P | **Pn** | **22 46 17.9** | **-0.7** |
| **JYM2** | **Yakumo 2** | **10.36 249** | P | **Pn** | **22 46 17.1** | **-2.1** |
| **NKL** | **Nikolayevsk** | **10.44 313** | *e*PN | **Pn** | **22 46 20.5** | **+0.2** |
| NKL | | | pmax | pmax | | |
| | comp=Z,500nm,2.0s | | | | | |
| NKL | | | pmax | pmax | | |
| | comp=N,52nm,1.0s | | | | | |
| NKL | | | pmax | pmax | | |
| | comp=E,86nm,1.0s | | | | | |
| NKL | | | pmax | pmax | | |
| | comp=Z,200nm,1.0s | | | | | |
| NKL | | | MLR | MLR | | |
| | comp=N,1μm,16.0s | | | | | |
| NKL | | | MLR | MLR | | |
| | comp=E,2μm,16.0s | | | | | |
| NKL | | | MLR | MLR | | |
| | comp=Z,2μm,16.0s | | | | | |
| **NKL** | **Nikolayevsk** | **10.44 313** | *e*P | **Pn** | **22 46 21.8** | **+1.5** |
| NKL | | | AMB | AMB | 22 46 25.0 | |
| | comp=Z,500nm,2.0s | | | | | |
| NKL | | | AMB | AMB | 22 46 25.5 | |
| | comp=Z,52nm,1.0s | | | | | |
| NKL | | | AMB | AMB | 22 46 25.5 | |
| | comp=Z,86nm,1.0s | | | | | |
| NKL | | | AMB | AMB | 22 46 25.5 | |
| | comp=Z,200nm,1.0s | | | | | |
| NKL | | | AMS | AMS | 22 50 45.0 | |
| | comp=Z,1μm,16.0s | | | | | |
| NKL | | | AMS | AMS | 22 50 45.0 | |
| | comp=Z,2μm,16.0s | | | | | |
| NKL | | | AMS | AMS | 22 50 45.0 | |
| | comp=Z,2μm,16.0s | | | | | |
| **JSR** | **Shiriuchi** | **10.64 246** | P | Pn | 22 46 19.9 | -3.1 |
| **JANG** | **Nango** | **10.66 238** | P | Pn | 22 46 17.9 | -5.5 |
| JANG | | | *e*S | Sn | 22 48 08.4 | -13 |
| **JTH** | **Tenmabayashi** | **10.67 241** | *e*S | Sn | 22 48 09.8 | -12 |
| **JTH** | **Tanohata** | **10.74 235** | *e*S | Sn | 22 48 09.6 | -14 |
| **JOSM** | **Okushiri--Mats** | **10.95 250** | P | **Pn** | **22 46 25.3** | **-2.0** |
| **JRG** | **Rokugo** | **11.81 237** | P | Pn | 22 46 34.2 | -4.9 |
| JRG | | | *e*S | Sn | 22 48 29.5 | -20 |
| **TEY** | **Ternei** | **11.81 268** | *e*P | **Pn** | **22 46 40.7** | **+1.6** |
| TEY | | | AMB | AMB | 22 46 41.2 | |
| | comp=Z,43nm,1.0s | | | | | |
| **GRNR** | **Gornyy** | **11.92 296** | *e*P | **Pn** | **22 46 42.9** | **+2.3** |
| GRNR | | | AMB | AMB | 22 46 45.0 | |
| | comp=Z,84nm,1.0s | | | | | |
| **HABR** | **Khabarovsk** | **12.51 285** | *e*PN | **Pn** | **22 46 49.7** | **+1.2** |
| HABR | | | pmax | pmax | | |
| | comp=E,61nm,1.5s | | | | | |
| HABR | | | pmax | pmax | | |
| | comp=Z,79nm,1.5s | | | | | |
| HABR | | | pmax | pmax | | |
| | comp=N,6.0nm,0.8s | | | | | |
| HABR | | | MLR | MLR | | |
| | comp=Z,1μm,17.0s | | | | | |
| **HABR** | **Khabarovsk** | **12.51 285** | *e*P | **Pn** | **22 46 49.7** | **+1.2** |
| **KLR** | **Kul'dur** | **14.71 288** | *e*P | **Pn** | **22 47 16.9** | **-1.3** |
| KLR | | | pmax | pmax | | |
| | comp=E,78nm,1.8s | | | | | |
| KLR | | | pmax | pmax | | |
| | comp=Z,70nm,1.8s | | | | | |
| KLR | | | MLR | MLR | | |
| | comp=E,1μm,17.0s | | | | | |
| KLR | | | MLR | MLR | | |
| | comp=Z,3μm,12.0s | | | | | |
| **KLR** | **Kul'dur** | **14.71 288** | *e*P | **Pn** | **22 47 16.9** | **-1.3** |
| KLR | | | AMB | AMB | 22 47 20.6 | |
| | comp=Z,78nm,2.0s | | | | | |
| KLR | | | AMB | AMB | 22 47 20.6 | |
| | comp=Z,70nm,2.0s | | | | | |
| KLR | | | AMS | AMS | 22 56 20.6 | |
| | comp=Z,1μm,15.0s | | | | | |
| KLR | | | AMS | AMS | 22 56 20.6 | |
| | comp=Z,3μm,15.0s | | | | | |
| **MJAR** | **Matsushiro Arr** | **15.17 234** | P | Pn | 22 47 19.7 | -4.6 |
| | comp=Z,0.4nm,0.3s,baz=28,slow=13,SNR=15 | | | | | |
| MJAR | | | LR | LR | 22 53 41.9 | |
| | comp=Z,552nm,21.9s,baz=45,slow=39 | | | | | |
| **MAJO** | **Matsushiro** | **15.18 234** | *e*P | **Pn** | **22 47 20.5** | **-3.9** |
| MAJO | | | pmax | pmax | | |
| | comp=Z,47nm,0.8s | | | | | |
| **MAJO** | **Matsushiro** | **15.18 234** | *e*Pn | **Pn** | **22 47 20.5** | **-3.9** |
| | comp=Z,47nm,0.8s | | | | | |
| **MAT** | **Matsushiro** | **15.18 234** | P | Pn | 22 47 19.3 | -5.0 |
| MAT | | | *e*S | **Sn** | **22 50 06.8** | **-4.5** |
| **USRK** | **Ussuriysk Ar.** | **15.21 268** | P | **Pn** | **22 47 23.0** | **-1.8** |
| | comp=Z,0.4nm,0.3s,baz=77,slow=12,SNR=21 | | | | | |
| USRK | | | LR | LR | 22 53 10.4 | |
| | comp=Z,903nm,19.0s,baz=68,slow=37 | | | | | |
| **VLA** | **Vladivostok** | **15.63 265** | *ce*P | **Pn** | **22 47 30.8** | **+0.7** |
| VLA | | | pmax | pmax | | |
| | comp=Z,41nm,0.8s | | | | | |
| **VLA** | **Vladivostok** | **15.63 265** | *e*P | **Pn** | **22 47 30.8** | **+0.7** |
| **SEY** | **Seymchan** | **16.31 358** | P | **Pn** | **22 47 37.1** | **-1.6** |
| | comp=Z,1.1nm,0.3s,baz=176,slow=9.8,SNR=25 | | | | | |
| **MSHR** | **Mys Shultsa** | **16.32 264**⇑ | *e*P | **Pn** | **22 47 39.8** | **+0.9** |
| **MDJ** | **Mudanjiang** | **16.75 272** | P | **Pn** | **22 47 44.0** | **-0.2** |
| MDJ | | | pP | **pP** | **22 47 57.5** | **0.0** |
| MDJ | | | sP | **sP** | **22 48 03.8** | **-0.3** |
| MDJ | | | S | **Sn** | **22 50 46.5** | **-2.7** |
| MDJ | | | ScS | **ScS** | **22 59 40.3** | **+0.8** |
| MDJ | | | PMZ | | | |
| | comp=Z,15nm,1.0s | | | | | |
| MDJ | | | PMZ | | | |
| | comp=Z,30nm,3.0s | | | | | |
| MDJ | | | LN | | | |
| | comp=Z,260nm,17.3s | | | | | |
| MDJ | | | LE | | | |
| | comp=Z,520nm,18.4s | | | | | |
| MDJ | | | LZ | | | |
| | comp=Z,750nm,20.0s | | | | | |
| **MDJ** | **Mudanjiang** | **16.75 272** | *e*Pn | **Pn** | **22 47 43.4** | **-0.8** |
| | comp=Z,47nm,1.0s | | | | | |
| **BMKR** | **Bomnak** | **17.44 306** | *e*P | **P** | **22 47 54.6** | **+1.3** |
| BMKR | | | AMB | AMB | 22 47 57.0 | |
| | comp=Z,29nm,1.0s | | | | | |
| **ZEA** | **Zeya** | **18.09 303** | *e*P | **Pn** | **22 48 03.6** | **+2.9** |
| ZEA | | | AMB | AMB | 22 48 05.8 | |
| | comp=Z,46nm,1.0s | | | | | |
| ZEA | | | AMS | AMS | 22 55 35.0 | |
| | comp=Z,900nm,17.0s | | | | | |
| **KROS** | **Kirovskiy** | **18.41 305** | *e*P | **Pn** | **22 48 04.7** | **+0.1** |
| KROS | | | AMB | AMB | 22 48 08.6 | |
| | comp=Z,7.0nm,0.8s | | | | | |
| KROS | | | AMB | AMB | 22 48 08.6 | |
| | comp=Z,10.0nm,0.8s | | | | | |
| KROS | | | AMB | AMB | 22 48 08.6 | |
| | comp=Z,15nm,0.8s | | | | | |
| **CN2** | **Changchun** | **19.84 272** | *e*P | **P** | **22 48 19.0** | **-0.7** |
| CN2 | | | PMZ | | | |
| | comp=Z,10.0nm,0.8s | | | | | |
| CN2 | | | PMZ | | | |
| | comp=Z,100nm,5.0s | | | | | |
| CN2 | | | LN | | | |
| | comp=Z,350nm,16.0s | | | | | |
| CN2 | | | LE | | | |
| | comp=Z,590nm,16.0s | | | | | |
| CN2 | | | LZ | | | |
| | comp=Z,760nm,18.0s | | | | | |
| **CLNS** | **Chul'man** | **20.21 311** | *e*P | **P** | **22 48 24.1** | **+0.4** |
| CLNS | | | pmax | pmax | | |
| | comp=Z,21nm,1.2s | | | | | |
| CLNS | | | pmax | pmax | | |
| | comp=E,19nm,1.0s | | | | | |
| CLNS | | | pmax | pmax | | |
| | comp=N,13nm,0.9s | | | | | |
| CLNS | | | MLR | MLR | | |
| | comp=E,496nm,16.0s | | | | | |
| CLNS | | | MLR | MLR | | |
| | comp=N,291nm,15.0s | | | | | |
| CLNS | | | MLR | MLR | | |
| | comp=Z,514nm,11.0s | | | | | |
| **CLNS** | **Chul'man** | **20.21 311** | *e*P | **P** | **22 48 24.1** | **+0.4** |
| **YAK** | **Yakutsk** | **20.49 327** | P | **P** | **22 48 25.7** | **-0.9** |
| | comp=Z,3.1nm,0.3s,baz=304,slow=19,SNR=5.7 | | | | | |
| YAK | | | LR | LR | 22 56 12.6 | |
| | comp=Z,341nm,20.3s,baz=132,slow=36 | | | | | |
| **YAK** | **Yakutsk** | **20.49 327** | *e*P | **P** | **22 48 26.6** | **0.0** |
| YAK | | | *e* | | 22 48 43.5 | |
| YAK | | | *e*S | **S** | **22 52 10.3** | **-2.4** |
| YAK | | | *e**SS | Sn | 22 52 24.8 | +5.7 |
| YAK | | | *e* | | 22 59 57.2 | |
| YAK | | | pmax | pmax | | |
| | comp=Z,16nm,1.0s | | | | | |
| YAK | | | pmax | pmax | | |
| | comp=E,65nm,1.6s | | | | | |
| YAK | | | pmax | pmax | | |
| | comp=N,74nm,1.9s | | | | | |
| YAK | | | pmax | pmax | | |
| | comp=Z,53nm,0.9s | | | | | |
| YAK | | | smax | smax | | |
| | comp=E,208nm,2.3s | | | | | |
| YAK | | | smax | smax | | |
| | comp=N,165nm,2.8s | | | | | |
| YAK | | | MLR | MLR | | |
| | comp=Z,230nm,14.0s | | | | | |
| YAK | | | MLR | MLR | | |
| | comp=N,371nm,13.0s | | | | | |
| YAK | | | MLR | MLR | | |
| | comp=E,215nm,12.0s | | | | | |
| **YAK** | **Yakutsk** | **20.49 327** | *e*P | **P** | **22 48 26.8** | **+0.2** |
| **KSRS** | **Korea Array** | **20.95 253** | P | **P** | **22 48 32.8** | **+1.0** |
| | comp=E,36nm,1.0s,baz=56,slow=10,SNR=31 | | | | | |
| KSRS | | | LR | LR | 22 55 54.1 | |
| | comp=E,383nm,18.1s,baz=60,slow=34 | | | | | |
| **KSRS** | **Korea Array** | **20.95 253** | P | **P** | **22 48 32.8** | **+1.0** |
| KSRS | | | pmax | pmax | | |
| | comp=Z,36nm,1.0s | | | | | |
| KSRS | | | MLR | MLR | | |
| | comp=Z,383nm,18.1s | | | | | |
| **KS01** | **Wonju Array Si** | **20.95 253** | *e*P | **P** | **22 48 33.1** | **+1.3** |
| **KSAR** | **Wonju Array Be** | **20.98 253** | P | **P** | **22 48 32.8** | **+0.7** |
| **KSAR** | **Wonju Array Be** | **20.98 253** | P | **P** | **22 48 32.8** | **+0.7** |
| **JNU** | **Nakatsue** | **21.83 240** | P | **P** | **22 48 41.6** | **+0.3** |
| | comp=Z,29nm,1.1s,baz=14,slow=15,SNR=5.5 | | | | | |
| **JNU** | **Nakatsue** | **21.83 240** | *e*P | **P** | **22 48 41.8** | **+0.5** |
| | comp=Z,44nm,1.1s | | | | | |
| **TJN** | **Taejon** | **21.93 251** | *ce*P | **P** | **22 48 43.6** | **+1.3** |
| **BILL** | **Bilibino** | **22.43 13** | *ce*P | **P** | **22 48 47.8** | **+0.3** |
| BILL | | | pmax | pmax | | |
| | comp=Z,45nm,1.2s | | | | | |
| **BILL** | **Bilibino** | **22.43 13** | *e*P | **P** | **22 48 47.8** | **+0.3** |
| **DL2** | **Dalian** | **24.43 263** | P | **P** | **22 49 06.5** | **-0.5** |
| **BOD** | **Bodaibo** | **26.18 310** | *e*P | **P** | **22 49 21.0** | **-1.7** |
| BOD | | | *e*S | **S** | **22 53 55.6** | **+4.9** |
| BOD | | | pmax | pmax | | |
| | comp=Z,13nm,1.1s | | | | | |
| **BJI** | **Beijing** | **27.66 270** | P | **P** | **22 49 37.8** | **+1.7** |
| BJI | | | S | **S** | **22 54 16.3** | **+2.1** |
| BJI | | | LN | | | |
| | comp=Z,250nm,16.2s | | | | | |
| BJI | | | LE | | | |
| | comp=Z,800nm,17.6s | | | | | |
| BJI | | | LZ | | | |
| | comp=Z,660nm,19.3s | | | | | |
| **BJT** | **Baijiatuao** | **27.67 270** | *e*P | **P** | **22 49 37.3** | **+1.0** |
| BJT | | | pmax | pmax | | |
| | comp=Z,13nm,0.8s | | | | | |
| **BJT** | **Baijiatuao** | **27.67 270** | *e*P | **P** | **22 49 37.2** | **+1.0** |
| | comp=Z,13nm,0.8s | | | | | |
| **TNA** | **Tin City** | **28.00 34** | *e*P | **P** | **22 49 36.0** | **-2.8** |
| | comp=Z,83nm,1.1s | | | | | |
| **JOW** | **Kunigami** | **28.02 234** | P | **P** | **22 49 38.6** | **-0.8** |
| | comp=Z,8.7nm,0.6s,baz=0.4,slow=30,SNR=12 | | | | | |
| **TIA** | **Tai'an** | **28.88 262** | ⇑P | **P** | **22 49 48.0** | **+0.9** |
| TIA | | | PMZ | | | |
| | comp=Z,10.0nm,0.9s | | | | | |
| TIA | | | PMZ | | | |
| | comp=Z,260nm,3.7s | | | | | |
| TIA | | | LN | | | |
| | comp=Z,330nm,8.3s | | | | | |
| TIA | | | LE | | | |
| | comp=Z,520nm,16.7s | | | | | |
| TIA | | | LZ | | | |
| | comp=Z,400nm,14.6s | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **29.06 153** | T | T | 23 21 22.9 | |
| | baz=340,slow=76,SNR=723 | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **29.07 153** | T | T | 23 21 23.2 | |
| | baz=340,slow=76,SNR=651 | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **29.08 153** | T | T | 23 21 23.8 | |
| | baz=340,slow=76,SNR=476 | | | | | |
| **SSE** | **Sheshan** | **29.24 249** | P | **P** | **22 49 49.5** | **-0.7** |
| SSE | | | S | **S** | **22 54 40.3** | **+1.1** |
| SSE | | | PMZ | | | |
| | comp=Z,35nm,0.9s | | | | | |
| SSE | | | PMZ | | | |
| | comp=Z,140nm,4.8s | | | | | |
| SSE | | | LN | | | |
| | comp=Z,130nm,26.9s | | | | | |
| SSE | | | LE | | | |
| | comp=Z,160nm,26.2s | | | | | |
| SSE | | | LZ | | | |
| | comp=Z,290nm,30.0s | | | | | |
| **NJ2** | **Nanjing** | **30.15 253** | *e*P | **P** | **22 50 01.3** | **+3.0** |
| NJ2 | | | PMZ | | | |
| | comp=Z,30nm,0.7s | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **30.15 154** | T | T | 23 22 45.1 | |
| | baz=340,slow=76,SNR=757 | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **30.16 154** | T | T | 23 22 43.0 | |
| | baz=340,slow=76,SNR=901 | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **30.17 154** | T | T | 23 22 44.1 | |
| | baz=340,slow=76,SNR=1079 | | | | | |
| **HHC** | **Hu-ho-hao-te** | **30.48 274** | *e*P | **P** | **22 50 01.5** | **+0.2** |
| HHC | | | pP | **pP** | **22 50 16.0** | **+1.3** |
| HHC | | | sP | **sP** | **22 50 23.8** | **+2.9** |
| HHC | | | PP | **PnPn** | **22 51 01.0** | **-0.6** |
| HHC | | | S | **S** | **22 54 55.8** | **-3.0** |
| HHC | | | PMZ | | | |
| | comp=Z,23nm,0.9s | | | | | |
| HHC | | | PMZ | | | |
| | comp=Z,160nm,4.4s | | | | | |
| HHC | | | LN | | | |
| | comp=Z,390nm,15.9s | | | | | |
| HHC | | | LE | | | |
| | comp=Z,390nm,18.0s | | | | | |
| HHC | | | LZ | | | |
| | comp=Z,430nm,17.8s | | | | | |
| **ULN** | **Ulaanbaatar** | **31.10 289** | *e*P | P | 22 50 10.3 | +3.6 |
| ULN | | | pmax | pmax | | |
| | comp=Z,17nm,1.2s | | | | | |
| **ULN** | **Ulaanbaatar** | **31.10 289** | *e*P | P | 22 50 10.3 | +3.6 |
| **ULN** | **Ulaanbaatar** | **31.10 289** | *e*P | P | 22 50 10.0 | +3.2 |
| | comp=Z,17nm,1.2s | | | | | |
| **SONA1** | **Songino Array** | **31.52 290** | *e*P | **P** | **22 50 13.0** | **+2.6** |
| **SONM** | **Songino Array** | **31.53 290** | P | **P** | **22 50 09.4** | **-1.1** |
| | comp=Z,0.8nm,0.9s,baz=82,slow=8.0,SNR=3.4 | | | | | |
| SONM | | | LR | LR | 23 04 06.5 | |
| | comp=Z,703nm,18.2s,baz=73,slow=38 | | | | | |
| **TLY** | **Talaya** | **32.38 297** | LR | LR | 23 04 18.4 | |
| | comp=Z,541nm,20.1s,baz=75,slow=38 | | | | | |
| **TLY** | **Talaya** | **32.38 297** | *e*P | **P** | **22 50 16.2** | **-1.6** |
| TLY | | | *e* | | 22 51 29.4 | |
| TLY | | | *e*S | S | 22 55 34.6 | +6.5 |
| TLY | | | *e*SS | **SS** | **22 57 45.6** | **-2.9** |
| TLY | | | pmax | pmax | | |
| | comp=Z,6.0nm,0.9s | | | | | |
| TLY | | | MLR | MLR | | |
| | comp=Z,553nm,16.0s | | | | | |
| **ZAK** | **Zakamensk** | **32.88 295** | *e*P | **P** | **22 50 21.4** | **-0.9** |
| ZAK | | | pmax | pmax | | |
| | comp=Z,4.0nm,1.5s | | | | | |
| **OHAK** | **Old Harbor** | **33.69 52** | *e*P | **P** | **22 50 28.0** | **-1.1** |
| | comp=Z,59nm,1.4s | | | | | |
| **RSO** | **Redoubt South** | **33.80 46** | *e*P | **P** | **22 50 30.1** | **-0.2** |
| | comp=Z,34nm,1.0s | | | | | |
| **KDAK** | **Kodiak Island** | **34.02 51** | *e*P | **P** | **22 50 30.9** | **-1.0** |
| KDAK | | | pmax | pmax | | |
| | comp=Z,530nm,2.9s | | | | | |
| **KDAK** | **Kodiak Island** | **34.02 51** | P | **P** | **22 50 30.2** | **-1.7** |
| | comp=Z,168nm,0.8s,SNR=5.7 | | | | | |
| **KDAK** | **Kodiak Island** | **34.02 51** | *e*P | **P** | **22 50 30.6** | **-1.3** |
| **KDAK** | **Kodiak Island** | **34.02 51** | *e*P | **P** | **22 50 30.8** | **-1.1** |
| **WHN** | **Wuhan** | **34.09 256** | P | **P** | **22 50 32.8** | **0.0** |
| WHN | | | S | **S** | **22 55 56.0** | **+1.2** |
| WHN | | | LZ | | | |
| | comp=Z,770nm,15.3s | | | | | |
| **PPLA** | **Purkeypile** | **34.11 42** | *e*P | **P** | **22 50 33.5** | **+0.7** |
| | comp=Z,73nm,1.6s | | | | | |
| **SPU** | **Mount Spurr** | **34.14 45** | *e*P | **P** | **22 50 33.7** | **+0.7** |
| **BPAW** | **Bear Paw Mtn.** | **34.70 40** | *e*P | **P** | **22 50 37.7** | **-0.1** |
| | comp=Z,2.6nm,1.0s | | | | | |
| **KTH** | **Kantishna Hill** | **34.71 41** | *e*P | **P** | **22 50 38.1** | **+0.2** |
| | comp=Z,50nm,1.4s | | | | | |
| **MLY** | **Manley** | **34.87 38** | *e*P | **P** | **22 50 40.1** | **+0.8** |
| | comp=Z,9.8nm,1.0s | | | | | |
| **TRF** | **Thorofare Moun** | **34.99 41** | *e*P | **P** | **22 50 40.6** | **+0.2** |
| **COLD** | **Coldfoot** | **35.30 34** | *e*P | **P** | **22 50 43.4** | **+0.5** |
| | comp=Z,14nm,0.8s | | | | | |
| **BWN** | **Browne** | **35.37 39** | *e*P | **P** | **22 50 43.6** | **+0.1** |
| | comp=Z,191nm,1.5s | | | | | |
| **PMR** | **Palmer** | **35.53 44** | *e*P | **P** | **22 50 44.9** | **0.0** |
| PMR | | | pmax | pmax | | |
| | comp=Z,40nm,1.6s | | | | | |
| **PMR** | **Palmer** | **35.53 44** | *e*P | **P** | **22 50 44.9** | **0.0** |
| **PMR** | **Palmer** | **35.53 44** | *e*P | **P** | **22 50 44.9** | **0.0** |
| | comp=Z,40nm,1.6s | | | | | |
| **MCK** | **McKinley** | **35.60 40** | *e*P | **P** | **22 50 45.7** | **+0.1** |
| MCK | | | pmax | pmax | | |
| | comp=Z,15nm,1.0s | | | | | |
| **MCK** | **McKinley** | **35.60 40** | *e*P | **P** | **22 50 45.6** | **+0.1** |
| **MCK** | **McKinley** | **35.60 40** | *e*P | **P** | **22 50 45.6** | **+0.1** |
| | comp=Z,14nm,1.0s | | | | | |
| **RND** | **Reindeer** | **35.63 41** | *e*P | **P** | **22 50 44.1** | **-1.8** |
| RND | | | pmax | pmax | | |
| | comp=Z,52nm,1.7s | | | | | |
| **RND** | **Reindeer** | **35.63 41** | *e*P | **P** | **22 50 44.1** | **-1.8** |
| | comp=Z,52nm,1.7s | | | | | |
| **XAN** | **Xi'an** | **35.69 265** | P | **P** | **22 50 46.8** | **+0.1** |
| XAN | | | pP | **pP** | **22 51 01.0** | **+0.8** |
| XAN | | | PMZ | | | |
| | comp=Z,24nm,1.2s | | | | | |
| XAN | | | LE | | | |
| | comp=Z,240nm,13.7s | | | | | |
| XAN | | | LZ | | | |
| | comp=Z,420nm,17.6s | | | | | |
| **SML** | **Sawmill** | **35.91 44** | *e*P | **P** | **22 50 48.0** | **-0.2** |
| SML | | | pmax | pmax | | |
| | comp=Z,9.0nm,0.7s | | | | | |
| **SML** | **Sawmill** | **35.91 44** | *e*P | **P** | **22 50 48.0** | **-0.2** |
| | comp=Z,9.0nm,0.7s | | | | | |
| **WRH** | **Wood River Hil** | **35.98 39** | *e*P | **P** | **22 50 49.4** | **+0.7** |
| | comp=Z,39nm,1.6s | | | | | |
| **COLA** | **College** | **36.09 38** | *ce*P | **P** | **22 50 50.0** | **+0.3** |
| COLA | | | *i* *PP | **pP** | **22 51 02.8** | **-0.4** |
| COLA | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | |
| **COLA** | **College** | **36.09 38** | *e*P | **P** | **22 50 50.0** | **+0.3** |
| **COLA** | **College** | **36.09 38** | *e*P | **P** | **22 50 49.9** | **+0.3** |
| | comp=Z,21nm,0.9s | | | | | |
| **CCB** | **Clear Creek Bu** | **36.10 39** | *e*P | **P** | **22 50 50.0** | **+0.2** |
| | comp=Z,11nm,1.1s | | | | | |
| **SCM** | **Sheep Creek Mo** | **36.38 43** | *e*P | **P** | **22 50 52.1** | **-0.2** |
| SCM | | | pmax | pmax | | |
| | comp=Z,198nm,2.2s | | | | | |
| **SCM** | **Sheep Creek Mo** | **36.38 43** | *e*P | **P** | **22 50 52.1** | **-0.2** |
| | comp=Z,198nm,2.2s | | | | | |
| **ILAR** | **Eielson Array** | **36.50 38** | P | **P** | **22 50 52.2** | **-1.0** |
| | comp=Z,3.7nm,0.8s,baz=253,slow=7.7,SNR=35 | | | | | |
| ILAR | | | LR | LR | 23 08 06.1 | |
| | comp=Z,170nm,18.4s,baz=296,slow=40 | | | | | |
| **ILAR** | **Eielson Array** | **36.50 38** | P | **P** | **22 50 52.2** | **-1.0** |
| ILAR | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.8s | | | | | |
| ILAR | | | MLR | MLR | | |
| | comp=Z,170nm,18.5s | | | | | |
| **IL1** | **Eielson Array** | **36.50 38** | *e*P | **P** | **22 50 52.5** | **-0.7** |
| **KLU** | **Klutina** | **37.08 44** | *e*P | **P** | **22 50 58.6** | **+0.3** |
| | comp=Z,29nm,1.3s | | | | | |
| **PAX** | **Paxson** | **37.18 41** | *e*P | P | 22 51 02.2 | +3.1 |
| PAX | | | pmax | pmax | | |
| | comp=Z,42nm,2.0s | | | | | |
| **PAX** | **Paxson** | **37.18 41** | *e*P | P | 22 51 02.2 | +3.1 |
| | comp=Z,42nm,2.0s | | | | | |
| **DIV** | **Divide** | **37.18 45** | *e*P | **P** | **22 50 59.3** | **+0.2** |
| **DIV** | **Divide** | **37.18 45** | *e*P | **P** | **22 50 59.0** | **-0.1** |
| **FYU** | **Fort Yukon** | **37.21 35** | *e*P | **P** | **22 51 00.5** | **+1.4** |
| | comp=Z,48nm,1.1s | | | | | |
| **RIDG** | **Independ'e Rid** | **37.42 40** | *e*P | **P** | **22 51 01.1** | **+0.1** |
| | comp=Z,28nm,1.2s | | | | | |
| **DOT** | **Dot Lake** | **37.77 40** | *e*P | **P** | **22 51 03.4** | **-0.6** |
| | comp=Z,87nm,1.8s | | | | | |
| **KRAR** | **Krasnoyarsk** | **37.78 307**⇑ | *i*P | **P** | **22 51 04.5** | **+0.4** |
| KRAR | | | pmax | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | |
| **LZH** | **Lanzhou** | **38.07 272** | ⇑P | **P** | **22 51 08.5** | **+1.5** |
| LZH | | | pP | **pP** | **22 51 21.0** | **+0.3** |
| LZH | | | sP | **sP** | **22 51 28.3** | **+1.5** |
| LZH | | | PP | **PnPn** | **22 52 38.3** | **+1.8** |
| LZH | | | S | **S** | **22 56 54.8** | **-1.3** |
| LZH | | | sS | **sS** | **22 57 16.0** | **-3.0** |
| LZH | | | PMZ | | | |
| | comp=Z,70nm,1.4s | | | | | |
| LZH | | | PMZ | | | |
| | comp=Z,220nm,4.4s | | | | | |
| LZH | | | LN | | | |
| | comp=Z,640nm,14.0s | | | | | |
| LZH | | | LE | | | |
| | comp=Z,750nm,15.2s | | | | | |
| LZH | | | LZ | | | |
| | comp=Z,840nm,16.3s | | | | | |
| **EGAK** | **Eagle** | **38.95 38** | *e*P | **P** | **22 51 13.7** | **-0.2** |
| | comp=Z,23nm,1.1s | | | | | |
| **GTA** | **Gaotai** | **39.16 279** | P | **P** | **22 51 17.0** | **+0.9** |
| GTA | | | S | **S** | **22 57 11.3** | **-1.1** |
| GTA | | | SS | **SS** | **23 00 00.5** | **-6.0** |
| GTA | | | PMZ | | | |
| | comp=Z,4.0nm,1.5s | | | | | |
| GTA | | | PMZ | | | |
| | comp=Z,120nm,4.8s | | | | | |
| GTA | | | LN | | | |
| | comp=Z,210nm,15.2s | | | | | |
| GTA | | | LE | | | |
| | comp=Z,250nm,14.5s | | | | | |
| GTA | | | LZ | | | |
| | comp=Z,320nm,16.9s | | | | | |
| **DAWY** | **Dawson** | **39.79 39** | *e*P | **P** | **22 51 21.8** | **+0.8** |
| | comp=Z,10nm,1.2s | | | | | |
| **CD2** | **Chengdu** | **41.05 265** | P | **P** | **22 51 32.3** | **+0.6** |
| CD2 | | | pP | **pP** | **22 51 46.5** | **+1.0** |
| CD2 | | | PP | **PP** | **22 53 07.8** | **+0.7** |
| CD2 | | | PcS | **PcS** | **22 57 22.5** | **+0.6** |
| CD2 | | | S | **S** | **22 57 41.0** | **+0.4** |
| CD2 | | | sS | **sS** | **22 58 05.8** | **+2.1** |
| CD2 | | | PMZ | | | |
| | comp=Z,50nm,1.0s | | | | | |
| CD2 | | | PMZ | | | |
| | comp=Z,160nm,5.8s | | | | | |
| CD2 | | | LN | | | |
| | comp=Z,350nm,11.7s | | | | | |
| CD2 | | | LZ | | | |
| | comp=Z,560nm,14.2s | | | | | |
| **INK** | **Inuvik** | **41.63 32** | *e*P | **P** | **22 51 36.9** | **+1.0** |
| INK | | | pmax | pmax | | |
| | comp=Z,13nm,0.9s | | | | | |
| **INK** | **Inuvik** | **41.63 32** | *e*P | **P** | **22 51 36.9** | **+1.0** |
| **INK** | **Inuvik** | **41.63 32** | *e*P | **P** | **22 51 36.6** | **+0.7** |
| | comp=Z,14nm,0.9s | | | | | |
| **GYA** | **Guiyang** | **41.87 258**⇑ | *i*P | **P** | **22 51 39.3** | **+0.7** |
| GYA | | | pP | **pP** | **22 51 54.8** | **+2.4** |
| GYA | | | sP | **sP** | **22 52 02.0** | **+3.5** |
| GYA | | | S | **S** | **22 57 54.5** | **+1.5** |
| GYA | | | sS | **sS** | **22 58 19.3** | **+3.2** |
| GYA | | | SS | **SS** | **23 00 55.8** | **-4.9** |
| GYA | | | PMZ | | | |
| | comp=Z,20nm,0.9s | | | | | |
| GYA | | | PMZ | | | |
| | comp=Z,120nm,5.8s | | | | | |
| GYA | | | LN | | | |
| | comp=Z,520nm,20.2s | | | | | |
| GYA | | | LE | | | |
| | comp=Z,490nm,21.0s | | | | | |
| GYA | | | LZ | | | |
| | comp=Z,540nm,20.4s | | | | | |
| **ZAA0** | **Zalesovo Array** | **42.81 306** | *e*P | **P** | **22 51 45.5** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **42.81 306** | P | **P** | **22 51 44.6** | **-1.1** |
| | comp=Z,1.2nm,0.6s,baz=81,slow=6.9,SNR=7.3 | | | | | |
| ZALV | | | PcP | **PcP** | **22 53 36.5** | **+0.5** |
| | comp=Z,2.6nm,0.8s,baz=52,slow=2.2,SNR=5.5 | | | | | |
| ZALV | | | LR | LR | 23 10 55.3 | |
| | comp=Z,563nm,19.0s,baz=70,slow=38 | | | | | |

**ZALV Zalesovo Beam 42.81 306** P **P** 22 51 44.6 -1.1
ZALV 22 53 36.5
ZALV pmax pmax
comp=Z,1.0nm,0.6s
ZALV MLR MLR
comp=Z,563nm,19.0s
**QIZ Qiongzhong 44.98 247** P **P** 22 52 04.8 +1.3
QIZ S **S** 22 58 40.5 +2.2
QIZ LZ
comp=Z,150nm,22.8s
**WMQ Urumqi 45.13 291** P **P** 22 52 07.0 +2.5
WMQ sP sP 22 52 30.0 +5.5
WMQ PP **PP** 22 53 53.0 +2.5
WMQ S **S** 22 58 42.0 +2.0
WMQ SS **ScS** 23 01 50.0 -6.5
WMQ PMZ
comp=Z,13nm,1.0s
WMQ PMZ
comp=Z,110nm,5.0s
WMQ LN
comp=Z,240nm,18.0s
WMQ LE
comp=Z,180nm,16.0s
WMQ LZ
comp=Z,290nm,16.0s
**KMI Kunming 45.41 260** P **P** 22 52 08.5 +1.4
KMI pP **pP** 22 52 24.3 +3.3
KMI sP **sP** 22 52 30.5 +3.4
KMI PcP **PcP** 22 53 48.5 +2.8
KMI PP **PP** 22 53 57.0 +3.0
KMI S **S** 22 58 44.0 -0.7
KMI sS **sS** 22 59 11.0 +2.9
KMI SS **ScS** 23 02 01.3 +2.2
KMI PMZ
comp=Z,12nm,1.1s
KMI PMZ
comp=Z,150nm,5.6s
KMI LN
comp=Z,310nm,6.5s
KMI LE
comp=Z,290nm,5.8s
KMI LZ
comp=Z,240nm,10.4s
**DLBC Dease Lake 45.52 46** *e*P **P** 22 52 07.7 +0.2
**MKAR Makanchi Array 47.14 298** P **P** 22 52 19.2 -1.1
comp=Z,4.0nm,0.9s,baz=69,slow=6.6,SNR=21
MKAR PcP **PcP** 22 53 51.6 +0.4
comp=Z,1.1nm,0.7s,baz=55,slow=2.5,SNR=2.6
MKAR LR LR 23 13 21.8
comp=Z,774nm,18.5s,baz=75,slow=38
**MKAR Makanchi Array 47.14 298** P **P** 22 52 19.2 -1.1
MKAR 22 53 51.6
MKAR pmax pmax
comp=Z,4.0nm,0.9s
MKAR MLR MLR
comp=Z,774nm,18.5s
**MKAR Makanchi Array 47.14 298** *e*P **P** 22 52 20.3 0.0
MKAR PcP **PcP** 22 53 51.6 +0.4
**MK01 Makanchi Array 47.15 298** *e*P **P** 22 52 19.8 -0.5
**MAKZ Makanchi 47.33 298** *e*P **P** 22 52 22.3 +0.6
**KURK Kurchatov 47.56 304** *e*P **P** 22 52 23.2 -0.2
**KURK Kurchatov 47.56 304** *e*P **P** 22 52 23.2 -0.2
**KURK Kurchatov 47.56 304** P **P** 22 52 23.0 -0.4
comp=Z,58nm,0.8s,SNR=9.6
**KURK Kurchatov 47.56 304** *e*P **P** 22 52 23.2 -0.2
**ALE Alert 49.81 6** P **P** 22 52 40.0 -0.3
comp=Z,132nm,0.7s,SNR=10
**NONG Nongkai 50.02 253** P P 22 52 50.3 +7.7
comp=Z,29nm,1.2s,comp=Z,10um
**LSA Lhasa 50.46 273** P **P** 22 52 47.8 +1.4
LSA PMZ
comp=Z,13nm,1.2s
**LSA Lhasa 50.46 273** *e*P **P** 22 52 48.5 +2.1
LSA pmax pmax
comp=Z,24nm,1.0s
**LSA Lhasa 50.46 273** *e*P **P** 22 52 48.5 +2.1
comp=Z,24nm,1.0s
**RES Resolute Bay 50.86 19** *e*P **P** 22 52 49.1 +0.9
RES pmax pmax
comp=Z,10.0nm,0.8s
**RES Resolute Bay 50.86 19** *e*P **P** 22 52 49.1 +0.9
**RES Resolute Bay 50.86 19** *e*P **P** 22 52 48.5 +0.3
comp=Z,14nm,0.9s
**YKA Yellowknife Ar 50.88 37** P **P** 22 52 48.5 -0.1
comp=Z,13nm,0.8s,baz=298,slow=7.3,SNR=12
**YKA Yellowknife Ar 50.88 37** P **P** 22 52 48.5 -0.1
YKA pmax pmax
comp=Z,13nm,0.8s
**BRVK Borovoye 51.09 310** *ce*P **P** 22 52 50.8 +0.5
BRVK pmax pmax
comp=Z,11nm,1.2s
**BRVK Borovoye 51.09 310** *e*P **P** 22 52 50.8 +0.5
**BRVK Borovoye 51.09 310** *e*P **P** 22 52 49.5 -0.8
comp=Z,3.6nm,0.6s
**KHON Khomkaen 51.48 251** P P 22 52 58.1 +4.5
comp=Z,8.3nm,1.0s
**LOEI Loei 51.66 254** P **P** 22 52 56.3 +1.3
comp=Z,111nm,1.7s,comp=Z,8um
**UTTA Uttaradit 51.96 255** P P 22 53 01.2 +4.0
comp=Z,4.8nm,0.9s
**LAMP Lampang 52.02 256** P P 22 53 01.8 +4.1
comp=Z,7.3nm,0.9s
**CHTO Chiang Mai 52.28 257** P **P** 22 53 02.0 +2.4
comp=Z,79nm,1.3s
**CHTO Chiang Mai 52.28 257** *e*P **P** 22 53 01.2 +1.6
CHTO pmax pmax
comp=Z,12nm,0.8s
**CHTO Chiang Mai 52.28 257** *e*P **P** 22 53 01.2 +1.6
comp=Z,12nm,0.8s
**CMAR Chiang Mai Arr 52.53 257** P **P** 22 53 02.9 +1.5
comp=Z,4.4nm,0.9s,baz=29,slow=7.4,SNR=18
CMAR LR LR 23 16 48.7
comp=Z,159nm,19.1s,baz=62,slow=38
**CMAR Chiang Mai Arr 52.53 257** P **P** 22 53 02.9 +1.5
CMAR pmax pmax
comp=Z,4.0nm,0.9s
CMAR MLR MLR
comp=Z,159nm,19.1s
**CMAR Chiang Mai Arr 52.53 257** *e*P **P** 22 53 03.4 +2.0
**CM01 Chiang Mai Arr 52.54 257** *e*P **P** 22 53 03.4 +1.9
**ULHL Ulahol 53.16 295** P **P** 22 53 07.4 +1.2
SNR=6.8
**TKM2 Tokmak 2 53.20 296** *e*P **P** 22 53 08.0 +1.6
TKM2 pmax pmax
comp=Z,12nm,1.4s
**TKM2 Tokmak 2 53.20 296** *e*P **P** 22 53 08.0 +1.6
comp=Z,12nm,1.4s
**USP Ospenovka 53.69 297** P **P** 22 53 10.3 +0.6
SNR=14
**KBK Karagaybulak 53.74 296** P **P** 22 53 11.5 +1.1
SNR=8.1
**KZA Kyzart 53.87 296** P **P** 22 53 12.3 +0.7
SNR=8.0
**SVE Sverdlovsk 54.02 317** *e*P **P** 22 53 12.2 +0.3
**SVE Sverdlovsk 54.02 317** *e*P **P** 22 53 12.2 +0.3
**AAK Ala-Archa 54.03 297** *e*P **P** 22 53 12.8 +0.4
AAK pmax pmax
comp=Z,23nm,1.6s
**AAK Ala-Archa 54.03 297** *e*P **P** 22 53 12.8 +0.4
**AAK Ala-Archa 54.03 297** P **P** 22 53 12.9 +0.4
SNR=6.8
**AAK Ala-Archa 54.03 297** *e*P **P** 22 53 12.8 +0.4
comp=Z,23nm,1.6s
**TAPN Taplejung 54.29 273** *e*P **P** 22 53 16.1 +1.5
comp=Z,50nm,1.0s
**B05A Bryant 54.31 55** P **P** 22 53 13.1 -1.0
baz=54
**EKS2 Erkin-Say 54.46 297** *e*P **P** 22 53 16.6 +1.1
EKS2 pmax pmax
comp=Z,25nm,1.8s
**EKS2 Erkin-Say 54.46 297** P **P** 22 53 16.3 +0.8
SNR=7.7
**EKS2 Erkin-Say 54.46 297** *e*P **P** 22 53 16.6 +1.1
comp=Z,25nm,1.8s
**ODAN Odare 54.82 273** *e*P **P** 22 53 19.1 +0.7
comp=Z,85nm,1.3s
**KSH Kashi 54.85 293** *e*P P 22 53 22.5 +4.1
KSH *es*P sP 22 53 45.3 +6.7
KSH PcS **PcS** 22 58 22.0 +2.1
KSH S **S** 23 00 56.5 +0.8
KSH sS sS 23 01 25.5 +5.9
KSH SS **SS** 23 04 42.8 +3.7
KSH PMZ
comp=Z,7.0nm,1.1s
KSH PMZ
comp=Z,150nm,4.7s
KSH LN
comp=Z,240nm,7.4s
KSH LE
KSH comp=Z,150nm,6.0s
KSH LZ
comp=Z,520nm,14.8s
**D05A Enumclaw 54.96 56** *e*P **P** 22 53 19.5 +0.6
comp=Z,41nm,1.2s
**GUN Gumba 55.19 275** *e*P **P** 22 53 22.0 +0.8
**RAMN Ramite 55.30 274** *e*P **P** 22 53 22.7 +0.8
comp=Z,102nm,1.0s
**ETW Entiat 55.67 55** P **P** 22 53 24.4 +0.2
**LTY Liberty 55.67 55** *e*P **P** 22 53 24.2 +0.1
comp=Z,111nm,1.0s
**KKN Kakani 55.68 276** *e*P **P** 22 53 26.1 +1.5
comp=Z,42nm,0.9s
**PKI Pulchoki 55.73 275** *e*P **P** 22 53 25.8 +0.8
comp=Z,80nm,1.3s
**PKIN Phulchoki 55.73 275** *e*P **P** 22 53 25.6 +0.6
**B08A Colville Reser 55.81 54** *e*P **P** 22 53 25.1 +0.1
comp=Z,34nm,1.1s
**WTV Waterville 55.83 55** P **P** 22 53 25.4 +0.2
**DMN Daman 55.91 275** *e*P **P** 22 53 27.5 +1.2
comp=Z,150nm,1.2s
**GKN Gorkha 55.98 276** *e*P **P** 22 53 27.7 +1.0
**PHET Kaeng Krachan 56.08 251** P P 22 53 33.8 +6.6
comp=Z,12nm,1.0s
**PMG Port Moresby 56.09 187** *ce*P **P** 22 53 27.9 +0.7
PMG pmax pmax
comp=Z,63nm,1.2s
**I03D Drain, OR 56.11 60** P **P** 22 53 26.2 -0.9
baz=56
**SAW Saint Andrews 56.14 54** P **P** 22 53 27.1 -0.2
**KKAR Karatay Array 56.20 299** *e*P **P** 22 53 28.2 +0.3
**KKAR Karatay Array 56.20 299** *e*P **P** 22 53 28.2 +0.3
**H04A Detroit Lake 56.24 59** *e*P **P** 22 53 28.9 +0.8
comp=Z,49nm,1.2s
**EDM Edmonton 56.24 46** *e*P **P** 22 53 28.3 +0.3
EDM pmax pmax
comp=Z,65nm,0.8s
**EDM Edmonton 56.24 46** *e*P **P** 22 53 28.3 +0.3
**EDM Edmonton 56.24 46** *e*P **P** 22 53 28.3 +0.3
comp=Z,65nm,0.8s
**VFP Flag Point 56.30 58** P **P** 22 53 29.5 +0.7
**DANN Dangsing 56.36 277** *e*P **P** 22 53 31.0 +1.4
**G05D Wamic, OR 56.43 58** P **P** 22 53 28.5 -1.0
baz=56
**E07A Sunnyside 56.53 56** *e*P **P** 22 53 31.0 +0.9
comp=Z,21nm,1.0s
**I04A Tendick Farm, 56.61 60** P **P** 22 53 29.8 -1.0
baz=56,SNR=8.1
**C09A Chrisman Ranch 56.71 54** *e*P **P** 22 53 31.6 +0.2
comp=Z,20nm,0.8s
**DAG Danmarks Havn 56.74 358** ⇑ *i*P **P** 22 53 30.4 -0.7
DAG pmax pmax
comp=Z,9.0nm,0.8s
**DAG Danmarks Havn 56.74 358** ⇑ *i*P **P** 22 53 30.4 -0.7
comp=Z,12nm,0.8s
**CROR Criterion Ridg 56.77 58** P **P** 22 53 32.7 +0.8
**RSW Rattlesnake Hi 56.77 56** P **P** 22 53 32.7 +0.8
**D08A Wollman Farm, 56.77 55** *e*P **P** 22 53 31.9 +0.1
comp=Z,17nm,1.1s
**HAWA Hanford 56.80 56** *e*P **P** 22 53 32.4 +0.3
comp=Z,21nm,1.1s
**G06A Carlson Farm, 56.83 57** *e*P **P** 22 53 33.3 +1.0
comp=Z,102nm,2.3s
**L02D Cave Junction, 56.83 62** P **P** 22 53 31.4 -1.0
baz=57
**KOLN Koldanda 56.84 277** *e*P **P** 22 53 33.9 +1.1
comp=Z,82nm,1.0s
**I05D Terrebonne, OR 56.93 59** P **P** 22 53 32.0 -1.1
baz=57,SNR=7.7
**NEW Newport 57.08 53** *e*P **P** 22 53 34.2 +0.1
NEW pmax pmax
comp=Z,29nm,1.2s
**NEW Newport 57.08 53** *e*P **P** 22 53 34.2 +0.1
**NEW Newport 57.08 53** P **P** 22 53 33.1 -1.0
baz=57,SNR=8.3
**NEW Newport 57.08 53** *e*P **P** 22 53 34.2 +0.1
comp=Z,29nm,1.2s
**J05D Fort Rock, OR 57.60 60** P **P** 22 53 36.9 -1.1
baz=57,SNR=7.2
**YBH Yreka Blue Hor 57.62 62** *e*P **P** 22 53 39.2 +1.2
YBH pmax pmax
comp=Z,23nm,1.4s
**YBH Yreka Blue Hor 57.62 62** *e*P **P** 22 53 39.2 +1.2
comp=Z,23nm,1.4s
**G08A Pilot Rock 57.77 56** *e*P **P** 22 53 39.6 +0.6
comp=Z,16nm,1.1s
**ARCES ARCESS Array B 57.99 341** P **P** 22 53 39.6 -0.5
comp=Z,2.6nm,0.8s,baz=27,slow=9.5,SNR=9.0
ARCES LR LR 23 23 59.6
comp=Z,128nm,18.6s,baz=51,slow=42
**ARCES ARCESS Array B 57.99 341** P **P** 22 53 39.6 -0.5
ARCES pmax pmax
comp=Z,3.0nm,0.8s
ARCES MLR MLR
comp=Z,128nm,18.6s
**N02D Trinity Center 58.07 63** P **P** 22 53 40.0 -1.2
baz=58
**M04C Macdoel 58.12 61** P **P** 22 53 40.4 -1.2
baz=58
**I07A Izee 58.16 58** *e*P **P** 22 53 42.5 +0.8
comp=Z,20nm,1.2s
**F10A Beach Ranch, E 58.35 55** *e*P **P** 22 53 43.5 +0.4
comp=Z,10nm,0.9s
**WALA Waterton Lakes 58.35 51** *e*P **P** 22 53 43.5 +0.4
comp=Z,28nm,0.8s
**WDC Whiskeytown Da 58.41 63** *e*P **P** 22 53 44.1 +0.7
WDC pmax pmax
comp=Z,8.0nm,0.9s
**WDC Whiskeytown Da 58.41 63** *e*P **P** 22 53 43.9 +0.5
comp=Z,7.9nm,0.8s
**BSMT Bassoo Peak 58.60 52** *e*P **P** 22 53 45.5 +0.6
**ABKAR Akbulak array 58.62 310** *e*P **P** 22 53 44.4 -0.4
**BLMT Blacktail Moun 58.73 52** *e*P **P** 22 53 46.5 +0.7
**JTMT Jette 58.93 52** *e*P **P** 22 53 47.7 +0.6
**BMO Blue Mountains 58.97 56** *e*P **P** 22 53 45.1 -2.3
comp=Z,61nm,1.8s
**MOD Modoc 58.97 60** *e*P **P** 22 53 48.2 +0.7
comp=Z,40nm,1.5s
**YBMT Yellow Bay 59.01 52** *e*P **P** 22 53 48.6 +0.9
**J08A Circle Bar Ran 59.19 58** *e*P **P** 22 53 49.9 +0.9
comp=Z,16nm,1.0s
**SWMT Swartz Lake 59.23 52** *e*P **P** 22 53 49.6 +0.4
**WVOR Wild Horse Val 59.65 59** *e*P **P** 22 53 52.8 +0.7
WVOR pmax pmax
comp=Z,21nm,1.1s
**WVOR Wild Horse Val 59.65 59** *e*P **P** 22 53 52.8 +0.7
comp=Z,21nm,1.1s
**SLMT Seeley Lake 59.66 52** *e*P **P** 22 53 52.7 +0.5
**MSO Missoula 59.67 53** P **P** 22 53 51.2 -1.0
baz=59,SNR=22
**MSO Missoula 59.67 53** *e*P **P** 22 53 52.6 +0.4
comp=Z,39nm,1.1s
**OHCM Honcut 59.80 63** *e*P **P** 22 53 53.4 +0.4
**CHMT Chamberlain Mo 59.99 52** *e*P **P** 22 53 54.7 +0.2
**KLMR Klimovskoe 60.27 329** *e*P **P** 22 53 57.7 +1.8
KLMR pmax pmax
comp=Z,39nm,1.9s
**FFC Flin Flon 60.69 40** *e*P **P** 22 53 59.4 +0.6
FFC pmax pmax
comp=Z,27nm,0.8s
**FFC Flin Flon 60.69 40** P **P** 22 53 59.0 +0.1
comp=Z,212nm,0.6s,SNR=12
**FFC Flin Flon 60.69 40** *e*P **P** 22 53 59.5 +0.6
**FFC Flin Flon 60.69 40** *e*P **P** 22 53 59.4 +0.6
comp=Z,27nm,0.8s
**MFID Camas Ranch 60.69 57** *e*P **P** 22 53 59.8 +0.6
comp=Z,12nm,0.9s
**SUMG Summit 60.77 4** *e*P **P** 22 53 59.9 +0.3
SUMG pmax pmax
comp=Z,27nm,0.9s
**SUMG Summit 60.77 4** *i*P **P** 22 54 00.0 +0.3
comp=Z,16nm,0.9s
**SUMG Summit 60.77 4** *e*P **P** 22 53 59.9 +0.3
comp=Z,27nm,0.9s
**HRY Holter Researc 60.89 52** *e*P **P** 22 54 01.4 +0.8
**COEN Coen 61.03 191** *e*P **P** 22 54 02.1 +0.5
comp=Z,18nm,1.0s
**LRM Limekiln Ridge 61.10 53** *e*P **P** 22 54 02.7 +0.5
**EGMT Eagleton 61.18 50** P **P** 22 54 01.3 -1.1
baz=61,SNR=17
**EGMT Eagleton 61.18 50** *e*P **P** 22 54 02.7 +0.3
comp=Z,48nm,1.1s
**CMB Columbia Colle 61.28 64** *e*P **P** 22 54 03.7 +0.5
CMB pmax pmax
comp=Z,41nm,1.6s
**CMB Columbia Colle 61.28 64** *e*P **P** 22 54 03.7 +0.5
comp=Z,41nm,1.6s
**DLMT Dillon 61.31 53** *e*P **P** 22 54 03.9 +0.4
comp=Z,46nm,1.8s
**HLID Hailey 61.41 56** P **P** 22 54 03.3 -0.9
baz=61,SNR=14
**HLID Hailey 61.41 56** *e*P **P** 22 54 04.7 +0.5
comp=Z,11nm,1.0s
**MCMT McKenzie Canyo 61.50 54** *e*P **P** 22 54 05.3 +0.5
**BOZ Bozeman (W) 61.66 53** *e*P **P** 22 54 06.7 +0.9
BOZ pmax pmax
comp=Z,80nm,1.5s
**BOZ Bozeman (W) 61.66 53** *e*P **P** 22 54 06.7 +0.9
**BOZ Bozeman (W) 61.66 53** P **P** 22 54 04.7 -1.1
baz=61,SNR=36
**BOZ Bozeman (W) 61.66 53** *e*P **P** 22 54 06.7 +0.9
comp=Z,80nm,1.5s
**BMN Battle Mountai 61.71 60** *e*P **P** 22 54 07.2 +0.9
BMN *e**PP **pP** 22 54 19.7 -1.0
BMN pmax pmax
comp=Z,58nm,1.6s
**BMN Battle Mountai 61.71 60** *e*P **P** 22 54 07.2 +0.9
comp=Z,58nm,1.6s
BMN *ep*P **pP** 22 54 19.7 -1.0
**KBL Kabul 62.27 292** *e*P **P** 22 54 11.0 +0.9
KBL *e**PP **pP** 22 54 22.1 -2.5
KBL pmax pmax
comp=Z,12nm,1.0s
**KBL Kabul 62.27 292** *e*P **P** 22 54 11.0 +0.9
comp=Z,12nm,1.0s
KBL *ep*P **pP** 22 54 22.1 -2.5
**QLMT Earthquake Lak 62.28 53** *e*P **P** 22 54 11.0 +0.9
comp=Z,6.1nm,1.2s
**NV01 Mina Array Sit 62.31 62** *e*P **P** 22 54 10.3 0.0
**NVAR Mina Array Bea 62.31 62** P **P** 22 54 10.7 +0.3
comp=Z,7.9nm,0.7s,baz=292,slow=7.7,SNR=53
NVAR LR LR 23 18 15.9
comp=Z,35nm,20.5s,baz=258,slow=33
**GCMT Greycliff 62.63 51** *e*P **P** 22 54 13.4 +1.1
comp=Z,29nm,1.3s
**YMR Madison River 62.64 53** *e*P **P** 22 54 13.7 +1.1
comp=Z,34nm,1.3s
**ELK Elko 62.69 59** *e*P **P** 22 54 13.6 +0.7
ELK pmax pmax
comp=Z,75nm,2.5s
**ELK Elko 62.69 59** *e*P **P** 22 54 13.5 +0.6
comp=Z,76nm,2.5s
**YNR Norris Junctio 62.77 53** *e*P **P** 22 54 15.3 +1.9
comp=Z,29nm,1.3s
**MTUM Tungsten Hills 62.83 64** *e*P **P** 22 54 14.8 +0.9
**YFT Old Faithful 62.85 53** *e*P **P** 22 54 16.1 +2.2
comp=Z,22nm,1.1s
**H17A Grant Village 63.03 53** *e*P **P** 22 54 17.4 +2.3
comp=Z,28nm,1.1s
**IMW Indian Meadow 63.15 54** *e*P **P** 22 54 17.3 +1.3
comp=Z,27nm,1.2s
**FLWY Flagg Ranch 63.16 53** *e*P **P** 22 54 17.2 +1.3
comp=Z,17nm,1.0s
**FXWY Fox Creek 63.27 54** *e*P **P** 22 54 17.9 +1.3
comp=Z,49nm,1.8s
**RLMT Red Lodge 63.28 52** P **P** 22 54 15.9 -0.8
baz=63
**MOOW Moose Ponds 63.35 54** *e*P **P** 22 54 18.4 +1.2
comp=Z,35nm,1.5s
**TPAW Teton Pass 63.40 54** *e*P **P** 22 54 19.0 +1.4
comp=Z,45nm,1.0s
**HVU Hansel Valley 63.47 57** *e*P **P** 22 54 18.4 +0.4
HVU pmax pmax
comp=Z,14nm,1.1s
**HVU Hansel Valley 63.47 57** *e*P **P** 22 54 18.4 +0.4
comp=Z,14nm,1.1s
**LOHW Long Hollow 63.52 54** *e*P **P** 22 54 19.5 +1.2
comp=Z,44nm,1.4s
**SNOW Snow King Moun 63.53 54** *e*P **P** 22 54 18.4 0.0
comp=Z,35nm,1.1s
**REDW Red Top Meadow 63.54 54** *e*P **P** 22 54 19.6 +1.2
comp=Z,45nm,1.1s
**PKM Peak Mountain 63.61 66** P **P** 22 54 18.2 -0.8
baz=63
**DGMT Dagmar 63.73 46** P **P** 22 54 18.1 -1.4
baz=63,SNR=8.3
**DGMT Dagmar 63.73 46** *e*P **P** 22 54 19.9 +0.5
comp=Z,31nm,0.8s
**AHID Auburn Hatcher 63.79 55** *e*P **P** 22 54 21.1 +1.0
comp=Z,14nm,0.9s
**LAO LASA Array 63.88 49** P **P** 22 54 19.1 -1.4
baz=64,SNR=15
**LAO LASA Array 63.88 49** *e*P **P** 22 54 21.4 +1.0
comp=Z,34nm,0.9s
**A25A Svangstu Ranch 63.96 46** P **P** 22 54 19.7 -1.2
baz=64,SNR=6.9
**ISA Isabella 63.96 65** *e*P **P** 22 54 20.7 -0.5
ISA pmax pmax
comp=Z,9.0nm,0.9s
**ISA Isabella 63.96 65** P **P** 22 54 20.4 -0.7
baz=64,SNR=5.9
**ISA Isabella 63.96 65** *e*P **P** 22 54 20.7 -0.5
comp=Z,9.2nm,0.9s
**R11A Troy Canyon, C 64.01 61** P **P** 22 54 21.3 -0.3
baz=64,SNR=20
**R11A Troy Canyon, C 64.01 61** *e*P **P** 22 54 21.8 +0.2
comp=Z,35nm,1.5s
**ARVC Arvin 64.08 66** P **P** 22 54 22.0 +0.1
baz=64
**DAC Darwin (Calif) 64.11 64** *e*P **P** 22 54 22.5 +0.2
DAC pmax pmax
comp=Z,7.0nm,0.8s
**DAC Darwin (Calif) 64.11 64** *e*P **P** 22 54 22.5 +0.2
comp=Z,7.1nm,0.8s
**FINES FINESS Array B 64.19 335** P **P** 22 54 21.5 -0.7
comp=Z,12nm,0.7s,baz=38,slow=6.1,SNR=36
FINES LR LR 23 25 14.6
comp=Z,213nm,18.1s,baz=33,slow=39
**FINES FINESS Array B 64.19 335** *i*P **P** 22 54 21.7 -0.4
FINES pmax pmax
comp=Z,12nm,0.7s
**FINES FINESS Array B 64.19 335** *e*P **P** 22 54 21.6 -0.5
**HWUT Hardware Ranch 64.27 56** *e*P **P** 22 54 24.0 +0.7
comp=Z,36nm,1.4s
**BSC Santa Cruz Isl 64.31 67** P **P** 22 54 23.4 0.0
baz=64
**MPMC Manual Prospec 64.32 64** P **P** 22 54 23.5 -0.2
baz=64,SNR=20
**DUG Dugway 64.47 58** *e*P **P** 22 54 25.2 +0.7
DUG pmax pmax
comp=Z,38nm,1.2s
**DUG Dugway 64.47 58** *e*P **P** 22 54 25.2 +0.7
**DUG Dugway 64.47 58** P **P** 22 54 24.0 -0.5
baz=64,SNR=21
**DUG Dugway 64.47 58** *e*P **P** 22 54 25.2 +0.7
comp=Z,38nm,1.2s
**OSI Osito Adit 64.48 66** P **P** 22 54 23.7 -0.8
baz=64
**OSI Osito Adit 64.48 66** *e*P **P** 22 54 25.4 +0.9
comp=Z,25nm,0.8s
**TPNV Topopah Spring 64.51 63** *e*P **P** 22 54 25.1 +0.2
TPNV pmax pmax
comp=Z,53nm,1.5s
**TPNV Topopah Spring 64.51 63** P **P** 22 54 23.6 -1.2
baz=64,SNR=19
**TPNV Topopah Spring 64.51 63** *e*P **P** 22 54 25.1 +0.2
comp=Z,52nm,1.5s
**A26A Wade Farm, Ken 64.51 45** P **P** 22 54 23.5 -1.0
baz=64
**BW06 Boulder Array 64.65 54** *e*P **P** 22 54 25.8 0.0
**CTU Camp Tracy 64.76 57** *e*P **P** 22 54 27.4 +1.0
comp=Z,23nm,1.3s
**B26A Jensen Ranch, 64.77 46** P **P** 22 54 26.0 -0.2
baz=64
**EDW2 Edwards Air Fo 64.77 65** P **P** 22 54 26.6 +0.1
baz=65,SNR=18
**A27A Ledoux Ranch, 64.86 45** P **P** 22 54 25.8 -1.0
baz=65,SNR=6.8
**DECC Green Verdugo 64.96 66** P **P** 22 54 27.0 -0.6
baz=65
**NLU North Lily Min 65.05 58** *e*P **P** 22 54 29.1 +0.7
comp=Z,21nm,1.1s
**D25A Fairfield 65.05 47** P **P** 22 54 27.8 -0.3
baz=65
**MWC Mount Wilson 65.15 66** *e*P **P** 22 54 29.5 +0.4
MWC pmax pmax
comp=Z,43nm,1.5s
**MWC Mount Wilson 65.15 66** *e*P **P** 22 54 29.5 +0.4
comp=Z,43nm,1.5s
**PVM Polavaram 65.18 269** *e*P **P** 22 54 31.7 +2.5

C26A **Wahner Farm, P** 65.21 46 P P 22 54 28.8 -0.2
baz=65,SNR=8.0
O16A **Springville** 65.22 57 eP P 22 54 37.3 +7.8
comp=Z,34nm,1.3s
GSC **Goldstone** 65.23 64 eP P 22 54 29.7 +0.2
GSC pmax pmax
comp=Z,13nm,0.8s
GSC **Goldstone** 65.23 64 P P 22 54 29.5 0.0
baz=65,SNR=12
GSC **Goldstone** 65.23 64 eP P 22 54 29.7 +0.2
comp=Z,13nm,0.8s
MPU **Maple Canyon** 65.27 57 eP P 22 54 29.9 +0.2
comp=Z,64nm,1.0s
A28A **Rude Farm, Bot** 65.36 44 P P 22 54 28.8 -1.2
baz=65,SNR=6.0
BFSC **Mount Baldy Ra** 65.39 66 P P 22 54 30.4 -0.2
baz=65,SNR=5.5
E25A **Miller Ranch,** 65.45 48 P P 22 54 29.4 -1.3
baz=65
SHPR **Sheep Range** 65.46 62 eP P 22 54 31.5 +0.5
CIS **Catalina Islan** 65.47 67 P P 22 54 30.7 -0.2
baz=65
C27A **Sayler Ranch,** 65.58 46 P P 22 54 31.0 -0.5
baz=65,SNR=5.2
RPR **Rampur** 65.68 272 eP P 22 54 34.2 +1.7
TUQ **Turquoise Moun** 65.69 64 P P 22 54 32.7 +0.2
baz=66
F25A **Bowman** 65.81 48 P P 22 54 32.0 -1.1
baz=66
BBRC **Big Bear Solar** 65.84 65 P P 22 54 33.1 -0.5
baz=66
A29A **Manning Farm,** 65.84 44 P P 22 54 33.0 -0.2
baz=66,SNR=13
CCUT **Cedar City** 65.86 60 eP P 22 54 34.4 +0.7
comp=Z,30nm,1.5s
D27A **Center** 65.98 46 P P 22 54 33.7 -0.3
baz=66
TMUT **Trail Mountain** 65.99 58 eP P 22 54 34.2 -0.4
comp=Z,69nm,1.3s
TMUT epP pP 22 54 48.2 -1.0
MURC **Murrieta** 66.10 66 P P 22 54 35.2 +0.1
baz=66,SNR=6.3
B29A **Wagenman Farm,** 66.11 44 P P 22 54 34.0 -0.8
baz=66,SNR=12
P17A **Butcher Ranch,** 66.14 57 eP P 22 54 36.1 +0.7
comp=Z,47nm,1.3s
VRH **Novokhopyorsk** 66.19 320 eP P 22 54 46.0 +11
VRH pmax pmax
comp=N,40nm,0.6s
VRH pmax pmax
comp=E,20nm,0.6s
VRH pmax pmax
comp=Z,10.0nm,0.6s
F26A **Lodgepole** 66.27 48 P P 22 54 35.2 -0.8
baz=66,SNR=8.9
A30A **Hoffart Farm,** 66.27 43 P P 22 54 35.2 -0.7
baz=66,SNR=7.9
GMRC **Granite Mounta** 66.28 64 P P 22 54 36.3 -0.1
baz=66,SNR=12
SRSP **Sriramsagar** 66.29 273 eP P 22 54 36.8 +0.4
P18A **Preston Nutter** 66.33 57 eP P 22 54 37.9 +1.2
comp=Z,26nm,1.4s
G25A **Newell** 66.33 49 P P 22 54 35.8 -0.6
baz=66
LPSR **Galich'ya Gora** 66.38 323 eP P 22 54 35.9 -0.5
LPSR pmax pmax
comp=N,2.0nm,0.8s
LPSR pmax pmax
comp=E,4.0nm,0.8s
LPSR pmax pmax
comp=Z,9.0nm,0.8s
D28A **Regan** 66.40 46 P P 22 54 36.4 -0.3
baz=66
K22A **Casper** 66.40 52 eP P 22 54 35.5 -1.5
comp=Z,21nm,1.0s
MDND **Maddock** 66.41 45 P P 22 54 36.1 -0.7
baz=66
ULM **Lac du Bonnet** 66.47 41 P P 22 54 36.6 -0.5
comp=Z,16nm,0.7s,baz=313,slow=6.4,SNR=18
ULM LR LR 23 24 12.8
comp=Z,59nm,20.1s,baz=336,slow=36
ULM **Lac du Bonnet** 66.47 41 eP P 22 54 36.8 -0.2
ULM pmax pmax
comp=Z,17nm,0.8s
ULM **Lac du Bonnet** 66.47 41 eP P 22 54 36.8 -0.2
comp=Z,17nm,0.8s
SRU **San Rafael** 66.51 58 eP P 22 54 38.4 +0.6
SRU pmax pmax
comp=Z,32nm,1.0s
SRU **San Rafael** 66.51 58 eP P 22 54 38.4 +0.6
comp=Z,32nm,1.0s
PFO **Pinyon Flat Ob** 66.56 65 eP P 22 54 38.2 +0.1
PFO pmax pmax
comp=Z,13nm,1.0s
PFO **Pinyon Flat Ob** 66.56 65 P P 22 54 37.8 -0.3
baz=66
PFO **Pinyon Flat Ob** 66.56 65 eP P 22 54 38.2 +0.1
comp=Z,13nm,1.0s
F27A **Lemmon** 66.58 47 P P 22 54 37.7 -0.3
baz=66
BELC **Belle Mtn. Jos** 66.59 65 P P 22 54 37.8 -0.5
baz=66,SNR=7.2
B30A **Myrvik Farm, E** 66.60 44 P P 22 54 36.9 -1.1
baz=66,SNR=23
109C **Camp Elliot, M** 66.63 66 P P 22 54 37.5 -0.8
baz=66
H25A **Fruitdale** 66.63 49 P P 22 54 37.5 -0.8
baz=66
G26A **Maurine** 66.68 48 P P 22 54 37.9 -0.7
baz=66,SNR=15
RSSD **Black Hills** 66.74 50 eP P 22 54 39.2 0.0
RSSD pmax pmax
comp=Z,33nm,1.0s
RSSD **Black Hills** 66.74 50 eP P 22 54 39.2 0.0
comp=Z,33nm,1.0s
E28A **Huff** 66.76 46 P P 22 54 38.8 -0.3
baz=66
A31A **Linda, St. Vin** 66.80 43 P P 22 54 38.3 -0.9
baz=66
GEYT **Alibeck** 66.80 301 P P 22 54 39.1 -0.3
comp=Z,2.4nm,0.6s,baz=353,slow=3.4,SNR=5.0
GEYT LR LR 23 26 10.5
comp=Z,341nm,18.6s,baz=40,slow=38
D29A **Pettibone, Tap** 66.97 45 P P 22 54 39.3 -1.0
baz=67
G27A **Dupree** 66.97 48 P P 22 54 39.1 -1.3
baz=67,SNR=7.2
I25A **Rochford** 66.97 50 P P 22 54 39.3 -1.3
baz=67,SNR=10
IRM **Iron Mountain** 67.01 64 P P 22 54 40.0 -0.8
baz=67,SNR=16
MONP **Monument Peak** 67.06 66 P P 22 54 41.2 -0.2
baz=67
C30A **Mose, Pekin** 67.06 44 P P 22 54 39.7 -1.2
baz=67
A32A **Rocking H Ranc** 67.13 42 P P 22 54 41.1 -0.2
baz=67,SNR=6.2
O20A **White River Ci** 67.14 55 P P 22 54 40.9 -0.9
baz=67,SNR=6.3
O20A **White River Ci** 67.14 55 eP P 22 54 42.0 +0.2
comp=Z,15nm,1.0s
BC3 **Big Chuckawall** 67.16 65 P P 22 54 41.5 -0.3
baz=67,SNR=6.1
HYBB **Hyderabad (bro** 67.18 271 eP P 22 54 42.3 +0.2
HYB **Hyderabad** 67.18 271 i P P 22 54 44.0 +1.9
F28A **McLaughlin** 67.22 47 P P 22 54 41.3 -0.6
baz=67
NJS **Nagarjunasagar** 67.26 270 eP P 22 54 42.2 -0.4
E29A **Napoleon** 67.29 46 P P 22 54 41.6 -0.8
baz=67
VSR **Storozhevoye** 67.29 322 eP P 22 54 41.4 -0.9
VSR pmax pmax
comp=N,7.0nm,0.7s
VSR pmax pmax
comp=Z,6.0nm,0.7s
VSR pmax pmax
comp=E,1.0nm,0.6s
D30A **Buchanan** 67.34 45 P P 22 54 42.3 -0.4
baz=67
C31A **Landman Farms,** 67.35 44 P P 22 54 42.2 -0.5
baz=67,SNR=9.0
IBP **Imperial Bould** 67.42 66 P P 22 54 42.7 -0.7
baz=67
SWSC **Sam W. Stewart** 67.42 66 P P 22 54 42.7 -0.7
baz=67
I26A **New Underwood** 67.42 49 P P 22 54 42.7 -0.6
baz=67
VORD **Divnogorie** 67.42 321 eP P 22 54 42.7 -0.4
VORD pmax pmax
comp=N,20nm,0.8s
VORD pmax pmax
comp=E,20nm,0.8s
VORD pmax pmax
comp=Z,9.0nm,0.8s
A33A **Warroad** 67.63 42 P P 22 54 44.2 -0.3
baz=67,SNR=13
Y12C **Blythe** 67.67 64 P P 22 54 45.2 +0.3
baz=68,SNR=6.4
E30A **Jud** 67.69 45 P P 22 54 44.4 -0.5
baz=67
G28A **Parade** 67.69 47 P P 22 54 44.2 -0.8
baz=67
F29A **Eureka** 67.71 46 P P 22 54 44.4 -0.7
baz=67
I27A **Quinn** 67.81 49 P P 22 54 45.5 -0.3
baz=68
SRLM **Srisailam** 67.86 270 eP P 22 54 47.0 +0.7
AGMN **Agassiz Nation** 67.87 42 P P 22 54 45.2 -0.8
baz=68,SNR=8.2
AGMN **Agassiz Nation** 67.87 42 eP P 22 54 45.7 -0.3
comp=Z,26nm,1.0s
D31A **Mcclaflin, Tow** 67.88 44 P P 22 54 45.5 -0.7
baz=68,SNR=7.4
N23A **Red Feather La** 67.91 54 P P 22 54 45.2 -1.5
baz=68,SNR=12
H28A **Mission Ridge** 67.92 48 P P 22 54 45.5 -0.9
baz=68,SNR=12
GLA **Glamis** 67.95 65 eP P 22 54 47.6 +0.8
GLA pmax pmax
comp=Z,24nm,0.9s
GLA **Glamis** 67.95 65 eP P 22 54 47.6 +0.8
comp=Z,24nm,0.9s
B33A **Robert and Kas** 68.02 42 P P 22 54 46.4 -0.5
baz=68
PV05 **Paradox Valley** 68.03 58 eP P 22 54 48.6 +1.2
KLRI **Killari** 68.08 273 eP P 22 54 48.1 +0.4
G29A **Hoven** 68.11 47 P P 22 54 47.1 -0.6
baz=68
E31A **Nome** 68.15 45 P P 22 54 47.4 -0.4
baz=68
D32A **Dogwood Acres,** 68.16 44 P P 22 54 47.4 -0.4
baz=68,SNR=5.7
RCLA **Racherla** 68.26 270 eP P 22 54 49.5 +0.7
B34A **Aery, Baudette** 68.29 42 P P 22 54 47.8 -0.8
baz=68,SNR=8.7
PV01 **Paradox Valley** 68.30 57 eP P 22 54 50.0 +0.9
comp=Z,4μm,0.8s
C33A **Trail** 68.30 43 P P 22 54 48.3 -0.4
baz=68,SNR=7.9
I28A **Midland** 68.32 48 P P 22 54 48.8 -0.1
baz=68
NB2 **NORSAR Subarra** 68.37 341 P P 22 54 48.5 -0.4
comp=Z,11nm,0.6s,baz=28,slow=6.5
NB2 **NORSAR Subarra** 68.37 341 P P 22 54 48.5 -0.4
baz=28,slow=6.5
NOA **NORSAR Array B** 68.37 341 P P 22 54 48.6 -0.4
comp=Z,8.9nm,0.6s,baz=28,slow=6.5,SNR=37
NOA LR LR 23 28 18.9
comp=Z,109nm,18.6s,baz=10.0,slow=39
NOA **NORSAR Array B** 68.37 341 P P 22 54 48.6 -0.4
NOA pmax pmax
comp=Z,9.0nm,0.6s
NOA MLR MLR
comp=Z,109nm,18.6s
H29A **Onida** 68.37 47 P P 22 54 48.9 -0.3
baz=68
WUAZ **Wupatki** 68.41 61 eP P 22 54 51.0 +1.2
comp=Z,13nm,0.9s
NBO02 **NORSAR Array S** 68.44 341 eP P 22 54 49.2 -0.1
F31A **Hecla** 68.47 45 P P 22 54 49.3 -0.5
baz=68
WRAB **Tennant Creek** 68.48 199 ceP P 22 54 50.5 +0.5
WRAB pmax pmax
comp=Z,23nm,1.0s
WRAB **Tennant Creek** 68.48 199 eP P 22 54 49.7 -0.3
WRA **Warramunga Arr** 68.49 199 P P 22 54 49.5 -0.6
comp=Z,4.8nm,0.8s,baz=16,slow=6.8,SNR=15
WRA LR LR 23 25 59.4
comp=Z,27nm,19.1s,baz=290,slow=37
WRA **Warramunga Arr** 68.49 199 P P 22 54 49.5 -0.6
WRA pmax pmax
comp=Z,5.0nm,0.8s
WRA MLR MLR
comp=Z,27nm,19.1s
E32A **Braaten, Kindr** 68.52 44 P P 22 54 49.8 -0.3
baz=68
G30A **Faulkton** 68.55 47 P P 22 54 49.8 -0.5
baz=68
J28A **Allard Ranch,** 68.69 49 P P 22 54 50.6 -0.6
baz=68,SNR=6.8
D33A **AnnSam, Waubun** 68.71 43 P P 22 54 50.4 -0.9
baz=68
I29A **Vivian Onida** 68.75 48 P P 22 54 50.9 -0.7
baz=68
C34A **RKJ Ranch, Bem** 68.78 42 P P 22 54 51.4 -0.3
baz=68
B35A **Bob, Littlefor** 68.81 41 P P 22 54 51.4 -0.4
baz=68,SNR=6.2
ISCO **Idaho Springs** 68.84 54 eP P 22 54 53.2 +0.6
ISCO e*PP pP 22 55 06.7 -0.6
ISCO pmax pmax
comp=Z,19nm,1.1s
ISCO **Idaho Springs** 68.84 54 P P 22 54 51.5 -1.1
baz=69,SNR=14
ISCO **Idaho Springs** 68.84 54 eP P 22 54 53.1 +0.6
comp=Z,20nm,1.1s
ISCO epP pP 22 55 06.7 -0.6
SKHT **Srikalahasti** 68.94 268 eP P 22 54 55.0 +1.9
G31A **Conde** 68.95 46 P P 22 54 52.2 -0.5
baz=69
MVCO **Mesa Verde** 68.97 58 P P 22 54 52.8 -0.5
baz=69,SNR=9.5
MVCO **Mesa Verde** 68.97 58 eP P 22 54 54.0 +0.7
comp=Z,21nm,1.1s
F32A **Veblen** 69.02 45 P P 22 54 52.5 -0.6
baz=69
D34A **Park Rapids** 69.06 43 P P 22 54 53.1 -0.3
baz=69,SNR=7.7
E33A **Westby DABS, E** 69.10 44 P P 22 54 53.5 -0.1
baz=69,SNR=5.3
K28A **Ten Mile Ranch** 69.12 50 P P 22 54 53.5 -0.4
baz=69
SUSD **South Dakota S** 69.13 47 P P 22 54 53.5 -0.5
baz=69
J29A **Okreek** 69.17 48 P P 22 54 54.0 -0.2
baz=69
C35A **Jirik Farms, M** 69.17 42 P P 22 54 53.7 -0.4
baz=69,SNR=6.0
I30A **Oacoma** 69.27 48 P P 22 54 54.5 -0.3
baz=69
G32A **Webster** 69.27 46 P P 22 54 54.6 -0.3
baz=69
H31A **Wolsey** 69.34 47 P P 22 54 54.9 -0.4
baz=69
DZM **Mont Dzumac** 69.43 167 eLR LR 23 16 11.2
comp=Z,98nm,21.6s
D35A **Remer** 69.59 42 P P 22 54 56.2 -0.5
baz=69,SNR=5.3
I31A **Royce, Wessing** 69.64 47 P P 22 54 56.8 -0.3
baz=69
C36A **Pine Crest Far** 69.65 41 P P 22 54 56.8 -0.3
baz=69,SNR=5.9
J30A **Dallas** 69.66 48 P P 22 54 57.1 -0.2
baz=69,SNR=5.1
W18A **Petrified Fore** 69.66 60 P P 22 54 57.3 -0.3
baz=69
Q24A **Divide** 69.68 55 eP P 22 54 58.4 +0.6
comp=Z,55nm,2.1s
URV **Uravakonda** 69.78 271 eP P 22 54 58.0 -0.3
G33A **Ortonville** 69.84 45 P P 22 54 57.9 -0.3
baz=70
H32A **Carlson Farm,** 69.85 46 P P 22 54 58.0 -0.4
baz=70
214A **Organ Pipe Nat** 69.94 65 P P 22 54 58.3 -0.9
baz=70
C37A **Embarrass** 69.97 41 P P 22 54 58.5 -0.5
baz=70
F34A **Alexandria** 69.97 44 P P 22 54 58.5 -0.5
baz=70
OGNE **Ogallala** 70.01 51 P P 22 54 58.4 -1.1
baz=70
OGNE **Ogallala** 70.01 51 eP P 22 55 00.1 +0.6
comp=Z,56nm,0.9s
M28A **Bar X Bar Ranc** 70.04 51 P P 22 54 58.9 -0.8
baz=70
K30A **Basset** 70.06 49 P P 22 54 58.5 -1.2
baz=70
H33A **Prehn Over Nor** 70.06 46 P P 22 54 59.1 -0.6
baz=70
J31A **Geddes** 70.06 48 P P 22 54 59.2 -0.6
baz=70
EYMN **Ely** 70.12 40 P P 22 54 59.4 -0.5
baz=70
EYMN **Ely** 70.12 40 eP P 22 54 59.9 -0.1
comp=Z,26nm,1.0s
D37A **Cotton** 70.28 41 P P 22 54 59.8 -1.1
baz=70
SDCO **Great Sand Dun** 70.33 56 P P 22 55 00.4 -1.3
baz=70
SDCO **Great Sand Dun** 70.33 56 eP P 22 55 02.6 +0.8
comp=Z,31nm,1.7s
E36A **McGregor** 70.38 42 P P 22 55 00.3 -1.2
baz=70,SNR=12
C38A **Sawbill Land.** 70.39 40 P P 22 55 00.4 -1.2
baz=70
K31A **O'Neill** 70.53 48 P P 22 55 01.4 -1.2
baz=70
F36A **Milaca** 70.74 43 P P 22 55 02.6 -1.2
baz=70
ECSD **EROS Data Cent** 70.81 46 P P 22 55 03.5 -0.7
baz=70,SNR=12
ECSD **EROS Data Cent** 70.81 46 eP P 22 55 03.8 -0.5
comp=Z,39nm,1.3s
L31A **Butterfield Fa** 70.81 49 P P 22 55 04.0 -0.4
baz=70
C39A **Grand Marais** 70.82 40 P P 22 55 03.3 -0.9
baz=70
K32A **Verdigre** 70.91 48 P P 22 55 04.6 -0.3
baz=71
TUC **Tucson** 70.95 63 eP P 22 55 06.1 +0.7
TUC e*PP pP 22 55 18.9 -1.2
TUC pmax pmax
comp=Z,14nm,1.1s
TUC **Tucson** 70.95 63 eP P 22 55 06.1 +0.7
comp=Z,14nm,1.1s
TUC epP pP 22 55 18.9 -1.2
H35A **Sunnyside Ranc** 70.98 44 P P 22 55 04.2 -1.0
baz=71,SNR=6.9
KBZ **Khabaz** 71.05 314 P P 22 55 05.2 -0.5
comp=Z,6.0nm,0.9s,baz=45,slow=2.0,SNR=5.0
KBZ LR LR 23 29 58.5
comp=Z,156nm,19.3s,baz=38,slow=39
KBZ **Khabaz** 71.05 314 P P 22 55 05.2 -0.5
KBZ pmax pmax
comp=Z,6.0nm,0.9s
KBZ MLR MLR
comp=Z,156nm,19.3s
G36A **St. Michael** 71.10 43 P P 22 55 05.3 -0.6
baz=71
T25A **Trinidad** 71.37 56 P P 22 55 06.5 -1.5
baz=71,SNR=7.1
T25A **Trinidad** 71.37 56 eP P 22 55 08.3 +0.3
comp=Z,18nm,1.1s
R27A **Eads** 71.47 54 P P 22 55 07.4 -1.1
baz=71
H36A **Jessenland, He** 71.50 44 P P 22 55 06.9 -1.4
baz=71
SPMN **St. Paul** 71.55 43 P P 22 55 07.9 -0.8
baz=71,SNR=5.0
SPMN **St. Paul** 71.55 43 eP P 22 55 08.7 0.0
comp=Z,29nm,1.0s
S26A **Kim** 71.56 55 P P 22 55 07.6 -1.4
baz=71,SNR=5.7
LAZ **Ladron** 71.70 59 eP P 22 55 11.0 +1.0
AKASG **Malin Array Be** 71.72 326 P P 22 55 08.6 -0.9
comp=Z,10nm,0.7s,baz=34,slow=6.2,SNR=34
AKASG LR LR 23 29 31.3
comp=Z,149nm,18.4s,baz=5.0,slow=38
AKASG **Malin Array Be** 71.72 326 i P P 22 55 09.1 -0.5
AKASG pmax pmax
comp=Z,10.0nm,0.7s
ANMO **Albuquerque** 71.72 58 eP P 22 55 10.6 +0.5
ANMO pmax pmax
comp=Z,9.0nm,0.9s
ANMO **Albuquerque** 71.72 58 eP P 22 55 10.6 +0.5
comp=Z,8.8nm,0.9s
KIEV **Kiev** 71.73 326 eP P 22 55 09.2 -0.4
KIEV pmax pmax
comp=Z,13nm,0.7s
KIEV **Kiev** 71.73 326 eP P 22 55 09.2 -0.4
comp=Z,13nm,0.7s
T26A **Comanche Natio** 71.81 55 P P 22 55 09.5 -1.2
baz=72,SNR=11
P30A **Selden** 71.96 51 P P 22 55 10.6 -0.7
baz=72
R28A **Tribune** 71.97 53 P P 22 55 10.2 -1.2
baz=72
H37A **Dierke Farm, C** 71.98 43 P P 22 55 09.9 -1.4
baz=72
O31A **Woolen Ranch,** 72.02 50 P P 22 55 10.6 -1.0
baz=72
Q29A **Oakley** 72.03 52 P P 22 55 10.9 -0.9
baz=72,SNR=7.5
M33A **Taylor Creek F** 72.09 48 P P 22 55 11.0 -1.0
baz=72
N32A **Stulken Farm,** 72.11 49 P P 22 55 11.0 -1.2
baz=72
AS01 **Alice Springs** 72.17 199 eP P 22 55 13.0 +0.5
I37A **Lemond, Waseca** 72.17 44 P P 22 55 11.2 -1.2
baz=72,SNR=16
BNM **Barren Site** 72.18 59 eP P 22 55 13.6 +0.7
ASAR **Alice Springs** 72.19 199 P P 22 55 13.2 +0.6
comp=Z,3.6nm,0.8s,baz=15,slow=5.7,SNR=30
ASAR LR LR 23 28 24.8
comp=Z,26nm,19.2s,baz=352,slow=37
ASAR **Alice Springs** 72.19 199 P P 22 55 13.2 +0.6
ASAR pmax pmax
comp=Z,4.0nm,0.8s
ASAR MLR MLR
comp=Z,26nm,19.2s
L34A **Svendsen Farm,** 72.22 47 P P 22 55 11.6 -1.2
baz=72
R29A **Marienthal** 72.28 53 P P 22 55 12.5 -0.8
baz=72,SNR=5.5
Q30A **Quinter** 72.38 52 P P 22 55 13.2 -0.7
baz=72,SNR=6.5
P31A **Stockton** 72.44 51 P P 22 55 13.6 -0.6
baz=72
S28A **Manter** 72.46 54 P P 22 55 13.9 -0.5
baz=72,SNR=5.4
121A **Cookes Peak, D** 72.62 61 P P 22 55 14.2 -1.3
baz=72,SNR=12
121A **Cookes Peak, D** 72.62 61 eP P 22 55 15.3 -0.2
comp=Z,28nm,1.2s
121A pP pP 22 55 29.5 -0.8
J37A **Redenius Farm,** 72.63 45 P P 22 55 14.1 -1.0
baz=72
I38A **Scanlan Farm,** 72.67 44 P P 22 55 14.2 -1.1
baz=72
T28A **Walsh** 72.68 54 P P 22 55 14.6 -1.1
baz=72,SNR=5.4
U27A **Thompson Grove** 72.78 55 P P 22 55 15.5 -0.8
baz=72
P32A **Huiting Farm,** 72.78 50 P P 22 55 15.0 -1.1
baz=72
R30A **Dighton** 72.85 52 P P 22 55 16.0 -0.6
baz=73,SNR=6.7
S29A **Ulysses** 72.87 53 P P 22 55 16.1 -0.7
baz=73
M35A **Neola** 72.94 47 P P 22 55 16.1 -0.9
baz=73
O33A **Hebron** 72.99 49 P P 22 55 16.5 -0.9
baz=73
N34A **Lincoln** 72.99 48 P P 22 55 16.5 -0.8
baz=73
K37A **Belmond** 72.99 45 P P 22 55 16.5 -0.8
baz=73
T29A **Hugoton** 73.11 54 P P 22 55 17.2 -1.0
baz=73
J38A **Wedel Dairy, R** 73.14 44 P P 22 55 17.0 -1.2
baz=73
U28A **Mallet** 73.14 55 P P 22 55 17.7 -0.8
baz=73
S30A **Montezuma** 73.22 53 P P 22 55 18.1 -0.7
baz=73
V27A **Dan Oppiter Fa** 73.24 56 P P 22 55 18.2 -0.9
baz=73
R31A **Burdett** 73.26 52 P P 22 55 18.1 -1.0
baz=73
Q32A **Meitler Ranch,** 73.27 51 P P 22 55 18.1 -1.0
baz=73
SCHQ **Schefferville** 73.32 23 P P 22 55 18.9 -0.1
comp=Z,9.3nm,0.8s,baz=301,slow=4.8,SNR=4.8
SCHQ LR LR 23 32 15.0

comp=Z,57nm,18.3s,baz=44,slow=40
**O34A Beatrice** 73.37 49 P **P** 22 55 18.6 -1.0
baz=73,SNR=5.6
**U29A Oasis Ranch, S** 73.63 54 P **P** 22 55 20.6 -0.7
baz=73
**Q33A Connelly Farm,** 73.65 50 P **P** 22 55 20.2 -1.0
baz=73,SNR=10
**P34A Walnut Farm, R** 73.77 49 P **P** 22 55 20.9 -1.1
baz=74,SNR=7.2
**SCIA State Center** 73.84 45 *e*P **P** 22 55 22.5 +0.1
comp=Z,47nm,0.7s
**R33A Olander Ranch,** 74.07 51 P **P** 22 55 22.5 -1.2
baz=74
**Q34A Chapman** 74.17 50 P **P** 22 55 23.0 -1.3
baz=74
**P35A Duane Minner,** 74.21 49 P **P** 22 55 23.4 -1.1
baz=74
**KSU1 Kansas State U** 74.22 49 P **P** 22 55 23.8 -0.8
baz=74
**LVV L'vov** 74.36 329 *e*P **P** 22 55 24.4 -0.8
**R34A Isabella, Hill** 74.47 50 P **P** 22 55 25.4 -0.7
baz=74
**AMTX Amarillo** 74.53 56 *e*P **P** 22 55 26.9 +0.4
comp=Z,26nm,0.9s
**P36A Good Intent, A** 74.56 48 P **P** 22 55 25.6 -1.0
baz=74
**MSTX Muleshoe** 74.56 57 P **P** 22 55 25.5 -1.3
baz=74
**MSTX Muleshoe** 74.56 57 *e*P **P** 22 55 27.0 +0.2
**MNTX Cornudas Mount** 74.65 60 P **P** 22 55 26.6 -0.6
baz=74,SNR=13
**MNTX Cornudas Mount** 74.65 60 *e*P **P** 22 55 27.6 +0.3
comp=Z,13nm,1.1s
MNTX *e*pP **pP** 22 55 41.2 -0.8
**Q35A Mercer Eighty,** 74.69 49 P **P** 22 55 25.9 -1.4
baz=74
**X29A Tulia** 74.83 56 P **P** 22 55 28.2 -0.1
baz=75,SNR=6.2
**MILM Milestii Mici** 74.93 324⇑ *i*P **P** 22 55 28.6 +0.1
**KWP Kalwaria Pacla** 74.99 329 *e*P **P** 22 55 29.5 +0.6
**KWP Kalwaria Pacla** 74.99 329 *e*P **P** 22 55 29.5 +0.6
**R35A Emporia Munici** 75.01 50 P **P** 22 55 28.4 -0.7
baz=75
**X30A Coker Ranch, T** 75.30 55 P **P** 22 55 30.6 -0.4
baz=75
**R36A Gordon, Harris** 75.37 49 P **P** 22 55 30.6 -0.7
baz=75
**U33A Lingo Farm, Me** 75.38 52 P **P** 22 55 30.7 -0.7
baz=75,SNR=5.1
**S35A Otter Creek Ra** 75.42 50 P **P** 22 55 30.6 -0.9
baz=75
**T34A McClaskey Farm** 75.44 51 P **P** 22 55 31.0 -0.7
baz=75
**OJC Ojcow** 75.48 331 *e*P **P** 22 55 32.4 +0.8
**OJC Ojcow** 75.48 331 *e*P **P** 22 55 32.5 +0.8
OJC pmax pmax
comp=Z,13nm,1.0s
**OJC Ojcow** 75.48 331 *e*P **P** 22 55 32.5 +0.8
**OJC Ojcow** 75.48 331 *e*P **P** 22 55 32.5 +0.8
comp=Z,13nm,1.0s
**X31A McDonald Ranch** 75.67 55 P **P** 22 55 32.6 -0.4
baz=75
**STHS Stebnicka Huta** 75.68 330 *e*P **P** 22 55 34.0 +1.2
STHS pmax pmax
comp=Z,8.0nm,0.8s
**STHS Stebnicka Huta** 75.68 330 *e*P **P** 22 55 34.0 +1.2
**Z29A Hungry Hill Ra** 75.69 57 P **P** 22 55 33.2 -0.1
baz=75,SNR=8.2
**U34A Anderson Ranch** 75.69 52 P **P** 22 55 32.8 -0.4
baz=75,SNR=5.9
**U34A Anderson Ranch** 75.69 52 *e*P **P** 22 55 33.2 0.0
**128A Castleberry Fa** 75.70 58 P **P** 22 55 33.4 +0.1
baz=76
**Y30A Stafford Cattl** 75.70 56 P **P** 22 55 33.3 0.0
baz=75
**W32A Sentinel** 75.72 54 P **P** 22 55 32.8 -0.5
baz=76,SNR=5.1
**R37A Teagarden Farm** 75.73 49 P **P** 22 55 32.3 -1.0
baz=75
**KOLS Kolonicke sedl** 75.73 329 *e*P **P** 22 55 33.9 +0.8
KOLS pmax pmax
comp=Z,9.0nm,0.9s
**KOLS Kolonicke sedl** 75.73 329 *e*P **P** 22 55 33.9 +0.8
**V33A Lossen Ranch,** 75.74 53 P **P** 22 55 32.8 -0.6
baz=76
**BUR04 Bucovina Ar. S** 75.76 327 *e*P **P** 22 55 33.3 -0.1
**BURAR Bucovina Array** 75.76 327⇓ *i*P **P** 22 55 33.8 +0.4
**S36A Lake Cedric, C** 75.77 50 P **P** 22 55 33.0 -0.5
baz=76,SNR=5.6
**T35A Sooner Cattle** 75.89 51 P **P** 22 55 34.0 -0.2
baz=76,SNR=5.4
**UZH Uzhgorod** 75.98 329 *e*P **P** 22 55 35.3 +0.8
UZH *e* 22 55 51.7
**Z30A Sanderson Ranc** 76.00 56 P **P** 22 55 34.9 -0.1
baz=76,SNR=14
**228A UT Block 9, Go** 76.00 58 P **P** 22 55 35.1 0.0
baz=76
**Y31A Rekieta Farm,** 76.00 55 P **P** 22 55 34.8 -0.2
baz=76
**NIE Niedzica** 76.00 331 *e*P **P** 22 55 35.8 +1.1
**NIE Niedzica** 76.00 331 *e*P **P** 22 55 35.8 +1.1
**129A Stewart Farms,** 76.05 57 P **P** 22 55 34.9 -0.4
baz=76
**KSP Ksiaz** 76.06 334 *e*P **P** 22 55 35.7 +0.8
**KSP Ksiaz** 76.06 334 *e*P **P** 22 55 35.8 +0.8
**T36A Boggs Farm, Ca** 76.12 50 P **P** 22 55 35.2 -0.3
baz=76,SNR=7.4
**TESR Tescani** 76.12 325⇓ *i*P **P** 22 55 35.6 +0.2
**S37A Fort Scott** 76.14 49 P **P** 22 55 34.9 -0.8
baz=76,SNR=8.2
**V34A Guthrie** 76.15 52 P **P** 22 55 35.4 -0.3
baz=76
**U35A Pawnee** 76.17 51 P **P** 22 55 35.7 -0.2
baz=76,SNR=11
**X32A Elmer** 76.21 54 P **P** 22 55 36.1 -0.1
baz=76
**WMOK Wichita Mounta** 76.26 54 *e*P **P** 22 55 36.1 -0.3
WMOK pmax pmax
comp=Z,11nm,0.9s
**WMOK Wichita Mounta** 76.26 54 *e*P **P** 22 55 36.1 -0.3
comp=Z,11nm,0.9s
**NRDL Niedersach Rie** 76.33 338 *e*P **P** 22 55 38.1 +1.7
comp=Z,3.7nm,0.8s,baz=25,slow=5.6
**OKC Ostrava-Krasne** 76.35 332 *e*P **P** 22 55 37.0 +0.4
**OKC Ostrava-Krasne** 76.35 332 *e*P **P** 22 55 37.0 +0.4
**Y32A R-V Farms, Ver** 76.43 55 P **P** 22 55 37.2 -0.2
baz=76
**DPC Dobruska-Polom** 76.48 333 *e*P **P** 22 55 38.5 +1.1
DPC *e* 22 55 52.5
**DPC Dobruska-Polom** 76.48 333 *e*P **P** 22 55 38.5 +1.1
DPC *e*pP **pP** 22 55 52.5 +0.2
**LANS Liptovska Anna** 76.51 331 *e*P **P** 22 55 39.1 +1.4
**LANS Liptovska Anna** 76.51 331 *e*P **P** 22 55 39.0 +1.4
**Z31A Sharp Cattle R** 76.54 56 P **P** 22 55 37.8 -0.2
baz=76,SNR=8.8
**X33A Lawton** 76.56 54 P **P** 22 55 37.8 -0.3
baz=76
**V35A Meyer Ranch, C** 76.57 52 P **P** 22 55 37.4 -0.7
baz=76
**T37A Cheneyville 18** 76.58 50 P **P** 22 55 37.6 -0.5
baz=76,SNR=18
**KRLC Kraliky** 76.58 333 *e*P **P** 22 55 39.2 +1.2
**KRLC Kraliky** 76.58 333 *e*P **P** 22 55 39.2 +1.2
**MORC Moravsky Berou** 76.60 332 *e*P **P** 22 55 38.3 +0.2
MORC pmax pmax
comp=Z,45nm,1.0s
**MORC Moravsky Berou** 76.60 332⇑ *i*P **P** 22 55 38.9 +0.8
**MORC Moravsky Berou** 76.60 332 *e*P **P** 22 55 38.3 +0.2
comp=Z,45nm,1.0s
**CFR Carcaliu** 76.61 324⇑ *i*P **P** 22 55 38.8 +0.6
**CLL Collm** 76.62 336 *i* P **P** 22 55 38.0 -0.1
CLL pmax pmax
comp=Z,13nm,0.7s
**CLL Collm** 76.62 336 *e*P **P** 22 55 38.5 +0.4
comp=Z,10.0nm,0.8s,baz=25,slow=5.6
CLL *e*pP **pP** 22 55 52.5 -0.4
**CLL Collm** 76.62 336 *e*P **P** 22 55 38.0 -0.1
**CLL Collm** 76.62 336 *i* P **P** 22 55 38.0 -0.1
comp=Z,13nm,0.7s
CLL *e*pP **pP** 22 55 52.0 -1.0
CLL *e*S S 23 05 12.0 -8.1
CLL *e*SKSac **SKSac** 23 05 45.0 -0.1
CLL *e*SS **SS** 23 10 18.0 +3.1
CLL L L 23 34 00.0
comp=Z,100nm,19.8s
**CLL Collm** 76.62 336 *e*P **P** 22 55 38.0 -0.1

**PLOR Plostina** 76.66 325⇓ *i*P **P** 22 55 39.5 +1.0
**BRG Berggiesshubel** 76.73 335 *e*P **P** 22 55 39.1 +0.3
comp=Z,7.9nm,1.1s
BRG *e* 22 55 53.0
comp=Z,20nm,1.5s
**BRG Berggiesshubel** 76.73 335 *e*P **P** 22 55 39.1 +0.3
BRG *e* 22 55 53.0
BRG pmax pmax
comp=Z,8.0nm,1.1s
**BRG Berggiesshubel** 76.73 335 *e*P **P** 22 55 39.0 +0.2
comp=Z,3.2nm,0.8s,baz=25,slow=5.6
BRG *e*pP **pP** 22 55 53.5 -0.2
**HDIL Hopedale** 76.78 44 P **P** 22 55 38.8 -0.4
baz=76,SNR=5.1
**HDIL Hopedale** 76.78 44 *e*P **P** 22 55 39.2 0.0
comp=Z,42nm,0.8s
**329A Wagon Wheel Ra** 76.81 58 P **P** 22 55 39.7 0.0
baz=77,SNR=9.5
**CLZ Clausthal** 76.86 337 *e*P **P** 22 55 40.2 +0.7
comp=Z,6.1nm,0.8s,baz=25,slow=5.6
**PVCC Panska Ves** 76.86 334 *e*P **P** 22 55 40.4 +0.9
**PVCC Panska Ves** 76.86 334 *e*P **P** 22 55 40.4 +0.9
**FBE Freiberg** 76.86 335 *e*P **P** 22 55 39.4 -0.1
comp=Z,5.1nm,0.8s,baz=25,slow=5.6
FBE *e*pP **pP** 22 55 54.3 0.0
**131A Roby** 76.87 56 P **P** 22 55 39.9 0.0
baz=77
**Y33A Hilltop Ranch,** 76.89 54 P **P** 22 55 39.8 -0.1
baz=77,SNR=7.1
**X34A Smith Ranch, M** 76.89 53 P **P** 22 55 39.8 -0.1
baz=77
**Z32A Haskell** 76.92 55 P **P** 22 55 39.8 -0.4
baz=77,SNR=7.7
**UOSS Wadi Hilu** 76.94 292 *e*P **P** 22 55 41.1 +0.8
comp=Z,14nm,0.9s
**W35A Tecumseh** 77.00 52 P **P** 22 55 40.2 -0.4
baz=77
**U37A Salina** 77.01 50 P **P** 22 55 40.2 -0.4
baz=77,SNR=9.2
**TUL1 Tulsa** 77.02 51 P **P** 22 55 40.3 -0.4
baz=77
**TUL1 Tulsa** 77.02 51 *e*P **P** 22 55 40.5 -0.2
**230A Sterling City** 77.03 57 P **P** 22 55 40.6 -0.2
baz=77,SNR=8.8
**V36A Jenks** 77.03 51 P **P** 22 55 40.4 -0.4
baz=77
**NEUB Neuenburg** 77.05 336 *e*P **P** 22 55 40.4 -0.1
comp=Z,6.5nm,0.8s,baz=25,slow=5.6
**DOPR Dopca** 77.06 326⇓ *i*P **P** 22 55 38.6 -2.1
**TIRR Tirgusor** 77.09 323 *e*P **P** 22 55 41.2 +0.4
**TIRR Tirgusor** 77.09 323⇑ *i*P **P** 22 55 41.6 +0.8
**IBBN Ibbenburen** 77.10 339 *e*P **P** 22 55 41.1 +0.4
comp=Z,11nm,0.9s,baz=25,slow=5.6
**CJR Cluj-Napoca** 77.12 327⇑ *i*P **P** 22 55 40.1 -1.0
**MLR Muntele Rosu** 77.24 325⇑ *i*P **P** 22 55 43.3 +1.4
**ISR Istrita** 77.31 324⇓ *i*P **P** 22 55 43.2 +1.0
**VRAC Vranov** 77.31 333⇑ *i*P **P** 22 55 41.8 -0.3
**ABTX Abilene, Hawle** 77.33 56 *e*P **P** 22 55 42.9 +0.4
**GOPC GO Pecny, Ondr** 77.33 334 *e*P **P** 22 55 43.3 +1.1
**GOPC GO Pecny, Ondr** 77.33 334 *e*P **P** 22 55 43.3 +1.1
**Z33A Whitaker Ranch** 77.34 55 P **P** 22 55 42.1 -0.4
baz=77
**330A Mertzon** 77.34 58 P **P** 22 55 42.3 -0.3
baz=77
**PRU Pruhonice** 77.34 334 *e*P **P** 22 55 43.2 +1.0
**PRU Pruhonice** 77.34 334 *e*P **P** 22 55 43.2 +1.0
**PRU Pruhonice** 77.34 334 *e*P **P** 22 55 43.2 +1.0
**MALT Malatya** 77.34 313⇑ *i*P **P** 22 55 44.7 +2.1
**W36A Wetumka** 77.37 52 P **P** 22 55 42.2 -0.4
baz=77
**TX31 Lajitas Ar. Si** 77.37 61 *e*P **P** 22 55 42.1 -0.7
**TXAR Lajitas Array** 77.38 61 P **P** 22 55 43.1 +0.2
comp=Z,20nm,0.8s,baz=298,slow=4.2,SNR=206
**TXAR Lajitas Array** 77.38 61 P **P** 22 55 43.1 +0.2
TXAR pmax pmax
comp=Z,20nm,0.8s
**DRGR** 77.38 328⇑ *i*P **P** 22 55 42.4 -0.2
**V37A Hulbert** 77.39 51 P **P** 22 55 42.3 -0.4
baz=77,SNR=7.7
**Y34A Reagan Ranch,** 77.41 54 P **P** 22 55 42.5 -0.4
baz=77,SNR=6.0
**PSZ Piszkesteto** 77.42 330 *e*P **P** 22 55 43.3 +0.5
PSZ *e**PP **pP** 22 55 57.1 -0.6
PSZ pmax pmax
comp=Z,18nm,1.4s
**PSZ Piszkesteto** 77.42 330⇓ *i*P **P** 22 55 43.6 +0.8
**PSZ Piszkesteto** 77.42 330 *e*P **P** 22 55 43.3 +0.5
comp=Z,18nm,1.4s
PSZ *e*pP **pP** 22 55 57.1 -0.6
**231A Bronte** 77.45 57 P **P** 22 55 42.9 -0.3
baz=77,SNR=5.7
**429A Davenport Ranc** 77.49 59 P **P** 22 55 43.0 -0.4
baz=77,SNR=13
**X35A Drake** 77.51 53 P **P** 22 55 42.9 -0.6
baz=77,SNR=6.1
**TANN Tannbergstha** 77.57 336 *e*P **P** 22 55 44.1 +0.6
comp=Z,1.4nm,0.7s,baz=25,slow=5.6
**WERD Werda** 77.58 336 *e*P **P** 22 55 44.3 +0.7
comp=Z,2.6nm,0.8s,baz=25,slow=5.6
WERD *e*pP **pP** 22 55 58.7 +0.2
**MOX Moxa** 77.60 336 *e*P **P** 22 55 44.0 +0.4
comp=Z,3.7nm,0.8s,baz=25,slow=5.6
MOX *e*L L 23 30 32.9
comp=Z,129nm,18.1s
**MSAB Monastry St. A** 77.63 323⇓ *i*P **P** 22 55 44.8 +0.9
**VOIR** 77.63 326⇓ *i*P **P** 22 55 44.9 +0.9
**GUNZ Gunzen** 77.65 336 *e*P **P** 22 55 44.6 +0.6
comp=Z,4.1nm,0.8s,baz=25,slow=5.6
GUNZ *e*pP **pP** 22 55 59.1 +0.2
**529A Stev Forest Ra** 77.66 59 P **P** 22 55 44.2 -0.2
baz=77,SNR=6.7
**WERN Wernitzgruen** 77.71 336 *e*P **P** 22 55 44.9 +0.6
comp=Z,6.9nm,0.9s,baz=25,slow=5.6
WERN *e*pP **pP** 22 55 59.5 +0.3
**X36A Centrahoma** 77.72 52 P **P** 22 55 44.1 -0.5
baz=77
**Z34A Collier Ranch,** 77.75 54 P **P** 22 55 44.5 -0.3
baz=78,SNR=5.4
**133A Hamilton Ranch** 77.76 55 P **P** 22 55 44.4 -0.5
baz=78
**CCM Cathedral Cave** 77.76 47 *e*P **P** 22 55 44.4 -0.3
**CCM Cathedral Cave** 77.76 47 *e*P **P** 22 55 44.4 -0.3
**430A Baggett Ranch,** 77.76 58 P **P** 22 55 44.8 -0.2
baz=78,SNR=10
**SULR** 77.79 324⇓ *i*P **P** 22 55 45.5 +0.8
**V38A Canehill** 77.80 50 P **P** 22 55 44.6 -0.4
baz=78,SNR=10
**W37A Quinton** 77.80 51 P **P** 22 55 44.6 -0.4
baz=78
**Y35A Marietta** 77.84 53 P **P** 22 55 44.9 -0.4
baz=78
**331A San Angelo** 77.85 57 P **P** 22 55 45.3 -0.2
baz=78,SNR=7.1
**ARR Arges** 77.85 326⇑ *i*P **P** 22 55 46.5 +1.3
**232A Coleman** 77.87 56 P **P** 22 55 45.4 -0.2
baz=78,SNR=19
**SFIN Scholer Farm** 77.96 43 P **P** 22 55 45.3 -0.5
baz=78
**BUG Bochum--Univer** 78.01 339 *e*P **P** 22 55 45.9 0.0
comp=Z,2.7nm,0.7s,baz=25,slow=5.6
**MANZ Manzenberg** 78.06 336 *e*P **P** 22 55 47.8 +1.6
comp=Z,2.2nm,0.8s,baz=25,slow=5.6
**Z35A Perchaven, San** 78.15 54 P **P** 22 55 46.6 -0.5
baz=78
**530A J-C Ranch, Com** 78.17 59 P **P** 22 55 47.2 0.0
baz=78,SNR=12
**332A Millersview** 78.19 57 P **P** 22 55 47.1 -0.1
baz=78,SNR=11
**233A Rising Star** 78.20 56 P **P** 22 55 47.3 -0.1
baz=78
**431A Sonora** 78.20 58 P **P** 22 55 47.3 -0.1
baz=78,SNR=11
**ROTZ Rotzenmuhle** 78.22 335 *e*P **P** 22 55 49.2 +2.1
comp=Z,3.1nm,0.8s,baz=25,slow=5.6
**134A White-Moore Ra** 78.25 55 P **P** 22 55 47.3 -0.3
baz=78
**Y36A Durant** 78.26 53 P **P** 22 55 47.5 -0.1
baz=78
**W38A Poteau** 78.34 51 P **P** 22 55 47.6 -0.4
baz=78
**KHC Kasperske Hory** 78.39 334 *e*P **P** 22 55 48.7 +0.6
KHC *e* 22 55 55.0
KHC *e* 22 56 03.7
**KHC Kasperske Hory** 78.39 334 *e*P **P** 22 55 48.7 +0.6
KHC *e*PCP **PcP** 22 55 55.0 -2.2
KHC *e*pP **pP** 22 56 03.7 +0.7

**KHC Kasperske Hory** 78.39 334 *e*P **P** 22 55 48.7 +0.6
**KHC Kasperske Hory** 78.39 334 *e*P **P** 22 55 48.6 +0.5
**X38A Whitesboro** 78.47 51 P **P** 22 55 48.4 -0.4
baz=78
**432A Menard** 78.53 57 P **P** 22 55 48.9 -0.3
baz=78,SNR=11
**GRF Grafenberg Arr** 78.57 336 *e*P **P** 22 55 50.0 +1.0
comp=Z,7.4nm,0.7s,baz=25,slow=5.6
GRF *e*pP **pP** 22 56 04.6 +0.7
GRF *e*L L 23 31 51.1
comp=Z,110nm,19.3s
**BRTR Keskin Array B** 78.58 317 P **P** 22 55 49.5 +0.1
comp=Z,8.4nm,0.9s,baz=68,slow=4.4,SNR=34
BRTR LR LR 23 36 11.4
comp=Z,50nm,18.2s,baz=51,slow=40
**BRTR Keskin Array B** 78.58 317 *i* P **P** 22 55 50.2 +0.8
BRTR pmax pmax
comp=Z,9.0nm,0.9s
**WET Wettzell** 78.59 335 *e*P **P** 22 55 50.0 +0.8
comp=Z,3.6nm,0.8s,baz=25,slow=5.6
**GEC2 GERESS Array S** 78.61 334 *e*P **P** 22 55 50.0 +0.6
**GEC2 GERESS Array S** 78.61 334 *e*P **P** 22 55 49.5 +0.1
comp=Z,2.2nm,0.8s,baz=25,slow=5.6
GEC2 *e*pP **pP** 22 56 04.2 -0.1
**GEC2 GERESS Array S** 78.61 334 *e*P **P** 22 55 50.0 +0.6
**GERES GERESS Array B** 78.61 334 P **P** 22 55 49.1 -0.3
comp=Z,2.0nm,0.7s,baz=31,slow=5.5,SNR=19
GERES LR LR 23 35 07.6
comp=Z,156nm,18.0s,baz=16,slow=39
**GERES GERESS Array B** 78.61 334 P **P** 22 55 49.1 -0.3
GERES pmax pmax
comp=Z,2.0nm,0.7s
GERES MLR MLR
comp=Z,156nm,18.0s
**531A Rocksprings** 78.62 58 P **P** 22 55 49.5 -0.2
baz=78,SNR=12
**234A Clairette** 78.64 55 P **P** 22 55 49.2 -0.6
baz=78
**Z36A Blue Ridge** 78.65 53 P **P** 22 55 49.3 -0.4
baz=78
**333A Richland Sprin** 78.67 56 P **P** 22 55 49.4 -0.5
baz=78,SNR=9.0
**CONA Conrad Observa** 78.75 332⇓ *i*P **P** 22 55 50.4 +0.2
comp=Z,6.4nm,0.7s
**BZS Buzias** 78.78 328⇑ *i*P **P** 22 55 50.6 +0.3
**JCT Junction City** 78.82 57 *e*P **P** 22 55 50.9 +0.1
JCT pmax pmax
comp=Z,25nm,1.1s
**JCT Junction City** 78.82 57 *e*P **P** 22 55 50.9 +0.1
comp=Z,25nm,1.1s
**ANTO Ankara** 78.86 318 *e*P **P** 22 55 52.3 +1.4
ANTO pmax pmax
comp=Z,15nm,0.8s
**ANTO Ankara** 78.86 318 *e*P **P** 22 55 51.6 +0.7
comp=Z,15nm,0.8s
**BR231 Keskin MP Arra** 78.89 318 *e*P **P** 22 55 50.8 -0.3
**532A Rocksprings** 79.02 58 P **P** 22 55 51.6 -0.3
baz=79,SNR=14
**SIUC Southern Illin** 79.03 46 *e*P **P** 22 55 51.6 -0.2
**334A Lometa** 79.09 56 P **P** 22 55 52.2 0.0
baz=79,SNR=7.5
**MEM Membach** 79.09 340 P **P** 22 55 51.8 0.0
**Z37A Pogue Cattle C** 79.15 53 P **P** 22 55 52.2 -0.3
baz=79
**PBMO Poplar Bluff** 79.15 47 *e*P **P** 22 55 52.1 -0.3
**631A Perdido Creek** 79.16 59 P **P** 22 55 52.5 -0.1
baz=79,SNR=20
**136A Ennis** 79.20 54 P **P** 22 55 52.6 -0.2
baz=79
**MIAR Mount Ida** 79.24 51 *e*P **P** 22 55 52.6 -0.3
**MIAR Mount Ida** 79.24 51 P **P** 22 55 52.6 -0.3
baz=79,SNR=6.3
**MIAR Mount Ida** 79.24 51 *e*P **P** 22 55 52.6 -0.3
**Y39A Lockesburg** 79.42 51 P **P** 22 55 53.7 -0.3
baz=79
**BCLA Clavier** 79.43 340 P **P** 22 55 54.4 +0.7
**434A Burnet** 79.45 56 P **P** 22 55 54.1 -0.2
baz=79,SNR=5.4
**Z38A Mt. Pleasant** 79.46 52 P **P** 22 55 53.9 -0.2
baz=79
**632A Uvalde** 79.55 58 P **P** 22 55 54.8 +0.1
baz=79,SNR=6.1
**236A Katherine and** 79.55 54 P **P** 22 55 54.3 -0.3
baz=79
**USIN University of** 79.59 45 *e*P **P** 22 55 55.1 +0.3
**336A Riesel** 79.84 55 P **P** 22 55 55.9 -0.3
baz=80
**138A Matatall Enter** 79.85 53 P **P** 22 55 56.1 -0.2
baz=80
**RJOB Jochberg** 79.87 334 *e*P **P** 22 55 56.4 +0.1
comp=Z,3.0nm,0.8s,baz=25,slow=5.6
**633A Saathoff Ranch** 79.94 58 P **P** 22 55 56.6 -0.3
baz=80
**732A Laxson Ranch,** 80.02 59 P **P** 22 55 57.3 +0.1
baz=80,SNR=12
**WCI Wyandotte Cave** 80.04 44 *e*P **P** 22 55 57.4 +0.1
**WCI Wyandotte Cave** 80.04 44 *e*P **P** 22 55 57.4 +0.1
**SOKA Soboth** 80.12 332⇑ *i*P **P** 22 55 57.5 -0.1
comp=Z,10nm,1.0s
**PERS Pernice** 80.13 332 *e*P **P** 22 55 57.8 +0.1
**KBA Koelnbreinsper** 80.30 334⇓ *i*P **P** 22 55 59.6 +0.9
comp=Z,12nm,0.7s
**BFO Black Forest** 80.60 337 *e*P **P** 22 56 00.6 +0.5
BFO pmax pmax
comp=Z,5.0nm,1.0s
**BFO Black Forest** 80.60 337 *e*P **P** 22 56 00.6 +0.5
comp=Z,5.0nm,1.0s,baz=25,slow=5.6
**BFO Black Forest** 80.60 337 *e*P **P** 22 56 00.6 +0.5
comp=Z,5.2nm,1.0s
**WTTA Wattenberg** 80.64 335⇑ *i*P **P** 22 56 01.0 +0.5
comp=Z,10nm,0.8s
**DIVS Divibare** 80.68 328⇓ *i*P **P** 22 56 00.4 -0.3
**338A Crockett** 80.72 54 P **P** 22 56 00.1 -0.8
baz=80
**MOTA Moosalm** 80.73 335⇑ *i*P **P** 22 56 01.2 +0.3
comp=Z,10nm,1.0s
**VAL Valentia** 80.77 350⇓ *i*P **P** 22 56 03.3 +2.4
**ABTA Abfaltersbach** 80.85 334⇑ *i*PcP **P** 22 56 04.0 +2.4
comp=Z,4.1nm,0.8s
**PMOR Pomariorio Ree** 80.85 123 *e*T T 00 24 42.1
comp=Z,13nm,0.2s
**WVT Waverly** 80.96 46 *e*P **P** 22 56 01.9 -0.3
**WVT Waverly** 80.96 46 *e*P **P** 22 56 01.9 -0.3
**FETA Feichten** 81.13 335⇓ *i*PcP **P** 22 56 05.0 +1.8
comp=Z,8.5nm,1.2s
**DAVA Damuels** 81.13 336⇑ *i*P **P** 22 56 03.7 +0.6
comp=Z,8.0nm,0.8s
**JAVS Javornik** 81.13 333 *i* P **P** 22 56 05.0 +1.9
**933A Laredo** 81.25 59 P **P** 22 56 03.1 -0.8
baz=81,SNR=8.7
**OXF Oxford** 81.44 48 *e*P **P** 22 56 04.8 0.0
**OXF Oxford** 81.44 48 *e*P **P** 22 56 04.8 0.0
**HKT Hockley** 81.49 55 *e*P **P** 22 56 05.6 +0.6
**HKT Hockley** 81.49 55 *e*P **P** 22 56 05.6 +0.6
**736A Circle Diamond** 81.54 57 P **P** 22 56 04.7 -0.6
baz=81
**SKO Skopje** 81.96 326 *i* P **P** 22 56 08.6 +1.2
**PPT Papeete** 81.96 126 LR LR 23 25 20.3
comp=Z,114nm,19.5s,baz=358,slow=30
**PPT2 Papeete2** 81.98 126 *e*LR LR 23 21 50.6
comp=Z,195nm,22.8s
**034A Hebbronville** 82.01 59 P **P** 22 56 07.1 -0.8
baz=82
**TUE Stuetta** 82.02 336 *e*P **P** 22 56 07.7 -0.2
**VAY Valandovo** 82.07 325 *i* P **P** 22 56 09.0 +1.1
**PDG Podgorica** 82.39 328⇓ *i*P **P** 22 56 08.7 -0.9
**SWET Sewanee** 82.62 45 *e*P **P** 22 56 10.5 -0.5
**OHR Ohrid** 82.94 326 *e*P **P** 22 56 09.9 -2.7
**CPCT Cooper Cave** 83.12 44 *e*P **P** 22 56 13.5 0.0
**TKL Tuckaleechee C** 83.31 44 *e*P **P** 22 56 14.6 +0.1
**TKL Tuckaleechee C** 83.31 44 *e*P **P** 22 56 14.6 +0.1
**BLA Blacksburg** 83.58 40 *e*P **P** 22 56 16.0 +0.1
**BLA Blacksburg** 83.58 40 *e*P **P** 22 56 16.0 +0.1
**RAYN Ar Rayn** 84.62 299 P **P** 22 56 22.0 +0.5
comp=Z,44nm,1.5s,SNR=5.3
**RAYN Ar Rayn** 84.62 299 *e*P **P** 22 56 22.2 +0.8
comp=Z,6.1nm,1.0s
**KMSC Kings Mountain** 84.87 42 P **P** 22 56 21.4 -1.1
baz=84
**LAST Lasithi** 86.04 320⇑ *i*P **P** 22 56 26.3 -2.1
**TIP Timpagrande** 86.15 328⇓ *i*P **P** 22 56 26.3 -2.5
**TBI Tubuai** 86.70 129 *e*T T 00 31 55.2
comp=Z,9.7nm,0.3s
**TIGA Tifton** 86.82 46 *e*P **P** 22 56 32.7 +0.6
**URZ Urewera** 87.18 162 LR LR 23 29 21.6
comp=Z,61nm,19.1s,baz=352,slow=31

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **RPZ** | **Rata Peaks** | **91.35** | **167** | LR | LR | 23 34 04.3 | | |
| | comp=Z,58nm,19.1s,baz=7.5,slow=33 | | | | | | | |
| **ESDC** | **Sonseca Array** | **91.69** | **343** | P | **P** | **22 56 53.9** | **-1.1** | |
| | comp=Z,1.6nm,0.8s,baz=18,slow=4.3,SNR=6.3 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **115.26** | **329** | PKP | **PKPdf** | **23 02 28.6** | **-0.7** | |
| | comp=Z,0.7nm,0.8s,baz=337,slow=0.9,SNR=4.2 | | | | | | | |
| TORD | | | | PKKPbc | **PKKPbc** | **23 13 04.0** | **+1.8** | |
| | comp=Z,0.9nm,1.0s,baz=219,slow=1.7,SNR=4.0 | | | | | | | |
| **VNDA** | **Vanda** | **124.02** | **178** | PKP | **PKPdf** | **23 02 43.8** | **-0.4** | |
| | comp=Z,1.5nm,0.8s,baz=300,slow=4.9,SNR=8.6 | | | | | | | |
| **VNDA** | **Vanda** | **124.02** | **178** | PKIKP | **PKPdf** | **23 02 43.8** | **-0.4** | |
| VNDA | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **LSZ** | **Lusaka** | **124.95** | **286** | PKP | **PKPdf** | **23 02 47.6** | **-0.3** | |
| | comp=Z,1.8nm,0.7s,baz=38,slow=8.1,SNR=6.4 | | | | | | | |
| **LSZ** | **Lusaka** | **124.95** | **286** | PKIKP | **PKPdf** | **23 02 47.6** | **-0.3** | |
| LSZ | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **MATP** | **Matopo** | **128.38** | **281** | PKP | **PKPdf** | **23 02 53.5** | **-0.8** | |
| | comp=Z,2.8nm,1.1s,baz=80,slow=2.9,SNR=4.3 | | | | | | | |
| **MAW** | **Mawson** | **132.22** | **211** | PKP | **PKPdf** | **23 03 00.2** | **+0.2** | |
| | comp=Z,2.1nm,0.8s,baz=359,slow=6.7,SNR=6.3 | | | | | | | |
| **MAW** | **Mawson** | **132.22** | **211** | PKIKP | **PKPdf** | **23 03 00.2** | **+0.2** | |
| MAW | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | |
| **LPAZ** | **La Paz** | **134.22** | **63** | PKP | **PKPdf** | **23 03 05.8** | **-0.3** | |
| | comp=Z,1.7nm,0.7s,baz=358,slow=5.4,SNR=4.8 | | | | | | | |
| **LPAZ** | **La Paz** | **134.22** | **63** | PKIKP | **PKPdf** | **23 03 05.8** | **-0.3** | |
| LPAZ | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **QSPA** | **South Pole Qui** | **136.40** | **180** | *e*PKPdf | **PKPdf** | **23 03 08.5** | **+0.5** | |
| **BDFB** | **Brasilia** | **144.30** | **37** | PKP | **PKPab** | **23 03 21.7** | **-0.2** | |
| | comp=Z,4.9nm,0.8s,baz=359,slow=5.7,SNR=7.2 | | | | | | | |
| **BDFB** | **Brasilia** | **144.30** | **37** | PKIKP | **PKPab** | **23 03 21.7** | **-0.2** | |
| BDFB | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.8s | | | | | | | |
| **CFAA** | **Coronel Fontan** | **144.83** | **80** | PKP | **PKPab** | **23 03 22.9** | **-0.6** | |
| | comp=Z,3.0nm,0.7s,baz=284,slow=2.5,SNR=11 | | | | | | | |
| **CPUP** | **Villa Florida** | **148.35** | **61** | PKPbc | **PKPbc** | **23 03 33.4** | **-0.4** | |
| | comp=Z,9.1nm,0.9s,baz=322,slow=3.3,SNR=12 | | | | | | | |
| **CPUP** | **Villa Florida** | **148.35** | **61** | PKP2 | **PKPbc** | **23 03 33.4** | **-0.4** | |
| CPUP | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,1.0s | | | | | | | |
| **NVL** | **N'lazarevskaya** | **149.63** | **204** | *e*PKHKP | **PKPbc** | **23 03 34.9** | **-0.7** | |
| NVL | | | | pmax | pmax | | | |
| | comp=Z,12nm,1.1s | | | | | | | |
| **SNAA** | **Sanae** | **152.52** | **196** | P | **PKPbc** | **23 03 41.3** | **-1.2** | |
| **SNAA** | **Sanae** | **152.52** | **196** | PKPbc | **PKPbc** | **23 03 41.7** | **-0.7** | |
| | comp=Z,2.3nm,0.8s,baz=169,slow=1.9,SNR=18 | | | | | | | |
| **SNAA** | **Sanae** | **152.52** | **196** | *e*PKIKP | **PKPdf** | **23 03 35.2** | **-0.3** | |
| SNAA | | | | *e* | | 23 03 41.6 | | |
| SNAA | | | | *e* | | 23 03 53.0 | | |
| **SNAA** | **Sanae** | **152.52** | **196** | *e*PKPdf | **PKPdf** | **23 03 35.2** | **-0.3** | |
| SNAA | | | | *e*PKPbc | **PKPbc** | **23 03 41.6** | **-0.9** | |
| SNAA | | | | *e*PKPab | **PKPab** | **23 03 53.0** | **-0.1** | |
| **VNA2** | **Neumayer--Watz** | **153.97** | **194** | P | **PKPbc** | **23 03 45.2** | **-0.4** | |
| | baz=128,slow=1.1 | | | | | | | |
| **VNA3** | **Neumayer Olymp** | **154.05** | **192** | P | **PKPbc** | **23 03 42.2** | **-3.6** | |
| **VNA1** | **Neumayer--Stat** | **154.35** | **194** | P | PKPpre | 23 03 25.2 | | |

*NEIC **30** 22:48:44.1±0.6, 3.47S×99.73E, h10km, mb4.3/6, Error ellipse: s-maj=18.9km s-min=6.1km az=224.0*
*ISCJB **30** 22:48:45.3±0.4, 3.47S±0.04×99.73E±0.04, h33km, mb4.4/22, Error ellipse: s-maj=6.3km s-min=3.8km az=136.5*
*DJA **30** 22:48:46.5±0.7, 3°S±3°×10°0E±°, h39km±6km, M4.5/7, mb4.8/2, MLv4.3/7*
*IDC **30** 22:48:47.8±1.0, 3.45S×99.71E, h32km±5km, mb4.1/16, mb1 4.2/17, mb1mx3.9/39, mbtmp4.3/17, ML4.2/1, Error ellipse: s-maj=27.1km s-min=14.0km az=44.0*

**ISC 30 22:48:47.7±0.6, 3.46S±0.06×99.73E±0.07, h35km, n52, σ1§16/61, mb4.4/22, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PPSI** | **Pulau Pagai** | **0.75** | **22** | P | **Pn** | **22 49 00.4** | **-1.4** |
| PPSI | | | | S | **Sn** | **22 49 10.9** | **-1.0** |
| **SISI** | **Saibi** | **2.22** | **343** | P | **Pn** | **22 49 19.7** | **-2.3** |
| SISI | | | | S | **Sn** | **22 49 46.8** | **-1.4** |
| **PDSI** | **Padang** | **2.64** | **16** | P | **Pn** | **22 49 25.9** | **-1.9** |
| PDSI | | | | S | **Sn** | **22 49 58.1** | **-0.5** |
| **KSI** | **Kapahiang** | **2.87** | **94** | P | **Pn** | **22 49 29.7** | **-1.2** |
| KSI | | | | S | **Sn** | **22 50 04.2** | **-0.1** |
| **SDSI** | **Sungai Dareh** | **3.04** | **34** | P | **Pn** | **22 49 32.8** | **-0.4** |
| SDSI | | | | S | **Sn** | **22 50 08.2** | **-0.2** |
| **PPI** | **Padang Panjang** | **3.06** | **13** | P | **Pn** | **22 49 32.2** | **-1.4** |
| PPI | | | | S | **Sn** | **22 50 07.9** | **-1.1** |
| **MNAI** | **Manna** | **3.34** | **106** | P | **Pn** | **22 49 36.1** | **-1.3** |
| MNAI | | | | S | **Sn** | **22 50 14.5** | **-1.4** |
| **LHSI** | **Lahat** | **3.81** | **96** | P | **Pn** | **22 49 44.8** | **+1.0** |
| LHSI | | | | S | **Sn** | **22 50 28.5** | **+1.1** |
| **BKNI** | **Bangkinang** | **3.99** | **19** | P | **Pn** | **22 49 44.1** | **-2.2** |
| **MNSI** | **Mandailing Nat** | **4.23** | **358** | P | **Pn** | **22 49 47.6** | **-2.1** |
| **MDSI** | **Maura Dua** | **4.55** | **103** | P | **Pn** | **22 49 53.6** | **-0.5** |
| MDSI | | | | S | **Sn** | **22 50 46.2** | **+0.3** |
| **LWLI** | **Liwa** | **4.59** | **110** | P | Pn | 22 49 50.7 | -4.0 |
| **KASI** | **Kota Agung** | **5.18** | **113** | P | **Pn** | **22 50 01.8** | **-0.9** |
| | 58nm,0.5s,0.6nm | | | | | | |
| KASI | | | | S | **Sn** | **22 50 57.7** | **-3.5** |
| | 58nm,0.5s,0.6nm | | | | | | |
| **CGJI** | **Cibinong** | **6.71** | **118** | P | **Pn** | **22 50 21.3** | **-2.5** |
| **LEM** | **Lembang** | **8.54** | **113** | Pn | **Pn** | **22 50 48.2** | **-0.8** |
| | 2.7nm,0.3s,baz=300,slow=20,SNR=2.6 | | | | | | |
| **CISI** | **Cisompet, Garu** | **9.02** | **117** | *e*Pn | **Pn** | **22 50 52.9** | **-2.6** |
| | 89nm,0.6s | | | | | | |
| **KAPI** | **Kappang** | **20.03** | **95** | P | **P** | **22 53 17.8** | **0.0** |
| | 4.6nm,0.6s,baz=262,slow=13,SNR=3.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.80** | **358** | P | **P** | **22 53 36.3** | **-0.5** |
| | 2.2nm,0.5s,baz=185,slow=10,SNR=9.7 | | | | | | |
| **CHTO** | **Chiang Mai** | **22.15** | **358** | *e*P | **P** | **22 53 38.9** | **-1.7** |
| | 4.1nm,0.9s | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.42** | **260** | T | T | 23 23 14.9 | |
| | baz=86,slow=75 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.42** | **260** | T | T | 23 23 15.9 | |
| | baz=86,slow=75 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.43** | **260** | T | T | 23 23 16.8 | |
| | baz=86,slow=75 | | | | | | |
| **LSA** | **Lhasa** | **33.98** | **347** | *e*P | **P** | **22 55 29.1** | **+0.5** |
| **H01W3** | **Cape Leeuwin H** | **34.00** | **159** | T | T | 23 31 37.2 | |
| | baz=336,slow=76,SNR=23 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.02** | **159** | T | T | 23 31 38.3 | |
| | baz=336,slow=76,SNR=24 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.02** | **159** | T | T | 23 31 39.4 | |
| | baz=336,slow=76,SNR=21 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.51** | **119** | P | **P** | **22 55 58.3** | **-0.3** |
| | 2.3nm,0.6s,baz=305,slow=9.4,SNR=6.5 | | | | | | |
| WRA | | | | PcP | **PcP** | **22 58 16.8** | **+0.3** |
| | 0.6nm,0.6s,baz=297,slow=2.0,SNR=2.9 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.52** | **119** | *e*P | **P** | **22 55 58.7** | **0.0** |
| **ASAR** | **Alice Springs** | **38.63** | **124** | P | **P** | **22 56 08.4** | **+0.4** |
| | 1.1nm,0.5s,baz=295,slow=8.0,SNR=9.6 | | | | | | |
| ASAR | | | | PcP | **PcP** | **22 58 20.9** | **+0.9** |
| | 0.7nm,0.6s,baz=292,slow=2.5,SNR=4.7 | | | | | | |
| **JAY** | **Jayapura** | **40.93** | **90** | P | **P** | **22 56 28.7** | **+1.4** |
| | 108nm,0.5s,baz=176,slow=0.4,SNR=3.1 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.38** | **30** | P | **P** | **22 57 26.0** | **-0.2** |
| **KSRS** | **Korea Array** | **48.41** | **30** | P | **P** | **22 57 26.0** | **-0.4** |
| | 2.4nm,0.9s,baz=241,slow=9.3,SNR=5.6 | | | | | | |
| **TKM2** | **Tokmak 2** | **51.06** | **337** | *e*P | **P** | **22 57 46.9** | **0.0** |
| | 2.6nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **51.26** | **336** | *e*P | **P** | **22 57 48.6** | **+0.3** |
| | 1.1nm,0.6s | | | | | | |
| **SONM** | **Songino Array** | **51.42** | **6** | P | **P** | **22 57 50.5** | **+1.1** |
| | 3.7nm,0.7s,baz=188,slow=9.0,SNR=17 | | | | | | |
| SONM | | | | pP | **pP** | **22 57 59.7** | **-0.1** |
| | 3.0nm,0.7s,baz=188,slow=9.2,SNR=8.4 | | | | | | |
| SONM | | | | PcP | **PcP** | **22 59 03.3** | **-0.2** |
| | 0.4nm,0.5s,baz=198,slow=3.9,SNR=2.1 | | | | | | |
| **EKS2** | **Erkin-Say** | **51.57** | **336** | *e*P | **P** | **22 57 51.6** | **+1.0** |
| | 3.5nm,0.8s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.36** | **345** | P | **P** | **22 57 56.8** | **+0.5** |
| | 4.0nm,0.7s,baz=149,slow=8.6,SNR=24 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.57** | **28** | P | **P** | **22 58 20.0** | **+0.4** |
| | 7.0nm,0.7s,baz=225,slow=6.2,SNR=16 | | | | | | |
| USRK | | | | pP | **pP** | **22 58 29.7** | **-0.5** |
| | 5.0nm,0.6s,baz=222,slow=5.6,SNR=9.1 | | | | | | |
| **GEYT** | **Alibeck** | **56.40** | **321** | P | **P** | **22 58 25.4** | **-0.4** |
| | 0.9nm,0.4s,baz=160,slow=4.6,SNR=3.6 | | | | | | |
| **KURK** | **Kurchatov** | **56.93** | **344** | *e*P | **P** | **22 58 29.4** | **+0.2** |
| | 6.0nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.55** | **350** | P | **P** | **22 58 40.9** | **+0.3** |
| | 7.2nm,0.7s,baz=180,slow=5.7,SNR=31 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.79** | **332** | *e*P | **P** | **22 59 09.2** | **-0.4** |
| | 4.5nm,0.9s | | | | | | |
| ABKAR | | | | *e* | | 22 59 20.0 | |
| **YAK** | **Yakutsk** | **69.22** | **15** | P | **P** | **22 59 50.2** | **-0.3** |
| | 4.6nm,0.4s,baz=225,slow=4.5,SNR=2.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.11** | **313** | P | **P** | **23 00 20.1** | **-0.6** |
| | 1.3nm,0.8s,baz=130,slow=6.8,SNR=6.3 | | | | | | |
| **SEY** | **Seymchan** | **77.08** | **22** | P | **P** | **23 00 37.7** | **+0.7** |
| | 3.0nm,0.7s,baz=247,slow=6.4,SNR=6.8 | | | | | | |
| **FINES** | **FINESS Array B** | **85.28** | **332** | P | **P** | **23 01 21.0** | **+0.4** |
| | 1.2nm,0.4s,baz=122,slow=6.1,SNR=23 | | | | | | |
| FINES | | | | pP | **pP** | **23 01 31.6** | **-0.1** |
| | 1.6nm,0.5s,baz=112,slow=5.1,SNR=2.6 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.75** | **340** | P | **P** | **23 01 33.2** | **+0.6** |
| | 2.6nm,0.8s,baz=92,slow=4.5,SNR=5.5 | | | | | | |
| **GERES** | **GERESS Array B** | **89.96** | **319** | P | **P** | **23 01 44.1** | **+0.5** |
| | 0.8nm,0.8s,baz=104,slow=5.6,SNR=6.3 | | | | | | |
| GERES | | | | pP | **pP** | **23 01 54.6** | **-0.2** |
| | 0.5nm,0.6s,baz=96,slow=6.7,SNR=3.8 | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.90** | **40** | PKP | **PKPdf** | **23 07 58.0** | **+1.8** |
| | 0.2nm,0.5s,baz=289,slow=2.8,SNR=2.5 | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.45** | **27** | *e*PKPdf | PKPbc | 23 08 19.7 | +0.2 |
| **TXAR** | **Lajitas Array** | **146.02** | **38** | PKPbc | **PKPab** | **23 08 26.1** | **+0.8** |
| | 2.3nm,0.7s,baz=295,slow=1.2,SNR=34 | | | | | | |
| **JCT** | **Junction City** | **147.40** | **32** | *e*PKPbc | **PKPab** | **23 08 29.7** | **-0.8** |

**GUC 30 22:57:38.2±0.6, 34.17S×72.33W, h12km±2km, ML3.7, 2C-5D, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **0.35** | **129** | *i*P | Pg | 22 57 44.9 | -0.3 |
| CHPI | | | | *i* S | Sg | 22 57 49.6 | -0.3 |
| **LNV** | **Longovilo** | **0.79** | **74** | *i*P | Pg | 22 57 52.5 | -1.1 |
| LNV | | | | *i* S | Sg | 22 58 03.1 | -0.8 |
| **NICH** | **Los Niches** | **1.23** | **133** | *i*P | Pn | 22 57 59.4 | -1.8 |
| NICH | | | | *i* S | Sb | 22 58 15.5 | -1.7 |
| **TACH** | **Talagante** | **1.27** | **66** | P | Pn | 22 57 59.6 | -2.2 |
| TACH | | | | *i* S | Sb | 22 58 16.4 | -1.9 |
| **TALC** | **Talca** | **1.35** | **155** | *i*P | Pn | 22 58 01.4 | -1.5 |
| TALC | | | | *i* S | Sb | 22 58 18.2 | -2.5 |
| **CHCH** | **Chadas Angostu** | **1.41** | **81** | *e*P | Pn | 22 58 01.9 | -1.9 |
| CHCH | | | | *e*S | Sn | 22 58 19.9 | -2.4 |
| **RCDM** | **Rinconada Maip** | **1.44** | **62** | *e*P | Pn | 22 58 01.3 | -2.8 |
| RCDM | | | | *e*S | Sn | 22 58 19.3 | -3.6 |
| **ANTU** | **Antumapu** | **1.53** | **67** | *e*P | Pn | 22 58 04.1 | -1.3 |
| ANTU | | | | *e*S | Sn | 22 58 24.0 | -1.4 |
| ANTU | | | | AML | AML | 22 58 30.2 | |
| | comp=N,2μm,0.6s | | | | | | |
| **SAN** | **Santiago** | **1.56** | **63** | *e*P | Pn | 22 58 04.0 | -1.8 |
| SAN | | | | *i* S | Sn | 22 58 24.7 | -1.3 |
| **PCH** | **Pirque** | **1.60** | **71** | *i*P | Pn | 22 58 05.3 | -1.2 |
| PCH | | | | *i* S | Sn | 22 58 25.5 | -1.7 |
| **CLCH** | **Cerro Calan** | **1.68** | **63** | *i*P | Pn | 22 58 06.5 | -1.0 |
| CLCH | | | | *i* S | Sn | 22 58 27.9 | -1.1 |
| CLCH | | | | AML | AML | 22 58 40.5 | |
| | comp=N,1μm,0.6s | | | | | | |
| **PEL** | **Peldehue** | **1.71** | **54** | *e*P | Pn | 22 58 07.3 | -0.6 |
| PEL | | | | *e*S | Sn | 22 58 28.5 | -1.2 |
| PEL | | | | AML | AML | 22 58 40.3 | |
| | comp=N,2μm,0.5s | | | | | | |
| **YECH** | **El Yeso** | **1.93** | **75** | AML | AML | 22 58 42.7 | |
| | comp=N,1μm,0.5s | | | | | | |

*DDA **30** 23:00:42.6, 39.04N×27.38E, h7km, Md2.8*
*CSEM **30** 23:00:43.4±0.4, 39.04N×27.41E, h2km, MD2.7, Error ellipse: s-maj=9.9km s-min=5.7km az=107.0*
*ISK **30** 23:00:43.0, 38.97N×27.53E, h7km, MD2.7*

**ISC 30 23:00:43.5±1.1, 39.02N±0.02×27.47E±0.04, h5km±11km, n21, σ0§85/38, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **IZM** | **Izmir** | **0.65** | **194** | *e*PG | **Pg** | **23 00 55.0** | **-0.8** |
| IZM | | | | *e*SG | **Sg** | **23 01 03.9** | **-0.4** |
| **IZM** | **Izmir** | **0.65** | **194** | *e*Pg | **Pg** | **23 00 55.0** | **-0.8** |
| IZM | | | | *e*Sg | **Sg** | **23 01 03.9** | **-0.4** |
| **BALB** | **Balikesir** | **0.69** | **27** | *e*PG | **Pg** | **23 00 57.4** | **+0.6** |
| BALB | | | | *e*SG | **Sb** | **23 01 07.9** | **0.0** |
| **BALB** | **Balikesir** | **0.69** | **27** | *e*Pg | **Pg** | **23 00 57.4** | **+0.6** |
| BALB | | | | *e*Sg | **Sb** | **23 01 07.9** | **0.0** |
| **BALY** | **Balya** | **0.72** | **9** | *i*P | **Pg** | **23 00 56.7** | **-0.7** |
| BALY | | | | *i* S | **Sg** | **23 01 07.0** | **+0.1** |
| **BALY** | **Balya** | **0.72** | **9** | P | **Pg** | **23 00 56.7** | **-0.7** |
| BALY | | | | S | **Sg** | **23 01 07.0** | **+0.1** |
| **DEMI** | **Demirci** | **0.97** | **89** | *i*P | **Pb** | **23 01 03.5** | **+0.6** |
| DEMI | | | | *i* S | **Sn** | **23 01 17.5** | **-0.6** |
| **DEMI** | **Demirci** | **0.97** | **89** | P | **Pb** | **23 01 03.5** | **+0.6** |
| DEMI | | | | S | **Sn** | **23 01 17.5** | **-0.6** |
| **MANT** | **Manisa** | **1.01** | **122** | *i*P | **Pn** | **23 01 05.0** | **+0.6** |
| MANT | | | | *i* S | **Sn** | **23 01 18.6** | **-0.5** |
| **MANT** | **Manisa** | **1.01** | **122** | P | **Pn** | **23 01 05.0** | **+0.6** |
| MANT | | | | S | **Sn** | **23 01 18.6** | **-0.5** |
| **DST** | **Dursunbey** | **1.07** | **57** | *e*PG | **Pg** | **23 01 03.5** | **-0.4** |
| DST | | | | *e*SG | **Sb** | **23 01 18.7** | **0.0** |
| **DST** | **Dursunbey** | **1.07** | **57** | *e*Pg | **Pg** | **23 01 03.5** | **-0.4** |
| DST | | | | *e*Sg | **Sb** | **23 01 18.7** | **0.0** |
| **ZEY** | **¨zmir** | **1.09** | **224** | P | **Pg** | **23 01 02.7** | **-1.6** |
| ZEY | | | | S | **Sg** | **23 01 18.3** | **-0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.13** | **163** | *e*PG | **Pg** | **23 01 03.9** | **-1.2** |
| AYDB | | | | *e*SG | **Sg** | **23 01 18.7** | **-1.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.13** | **163** | *e*Pg | **Pg** | **23 01 03.9** | **-1.2** |
| AYDB | | | | *e*Sg | **Sg** | **23 01 18.7** | **-1.0** |
| **CHOS** | **Chios island** | **1.27** | **240** | *e*PN | **Pg** | **23 01 08.8** | **+0.9** |
| **CHOS** | **Chios island** | **1.27** | **240** | *e*Pn | **Pg** | **23 01 08.8** | **+0.9** |
| **AYDN** | **Tasoluk** | **1.40** | **166** | *i*P | **Pg** | **23 01 12.2** | **+1.9** |
| AYDN | | | | *i* S | **Sg** | **23 01 29.2** | **+0.8** |
| **AYDN** | **Tasoluk** | **1.40** | **166** | P | **Pg** | **23 01 12.2** | **+1.9** |
| AYDN | | | | S | **Sg** | **23 01 29.2** | **+0.8** |
| **TVSB** | **Tavsanli** | **1.61** | **74** | *e*PN | **Pn** | **23 01 12.0** | **-0.6** |
| **TVSB** | **Tavsanli** | **1.61** | **74** | *e*Pn | **Pn** | **23 01 12.0** | **-0.6** |

**IDC 30 23:07:43.6±7.4, 20.92N×145.15E, h649km±110km, mb2.6/6, mb1 2.7/6, mb1mx2.5/25, mbtmp3.6/6, Error ellipse: s-maj=41.8km s-min=23.4km az=79.0, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **41.10** | **320** | P | P | 23 14 33.7 | -0.1 |
| | 0.3nm,0.5s,baz=126,slow=7.3,SNR=2.1 | | | | | | |
| **WRA** | **Warramunga Arr** | **41.97** | **195** | P | P | 23 14 40.8 | 0.0 |
| | 0.3nm,0.3s,baz=13,slow=8.5,SNR=2.3 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **55.95** | **322** | P | P | 23 16 23.3 | +0.7 |
| | 0.2nm,0.3s,baz=101,slow=7.5,SNR=2.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **56.57** | **313** | P | P | 23 16 26.8 | -0.2 |
| | 0.5nm,0.5s,baz=93,slow=7.1,SNR=4.3 | | | | | | |
| **ILAR** | **Eielson Array** | **61.89** | **27** | P | P | 23 17 02.0 | +0.1 |
| | 0.3nm,0.5s,baz=237,slow=7.0,SNR=4.5 | | | | | | |
| **FINES** | **FINESS Array B** | **84.66** | **335** | P | P | 23 19 10.7 | +0.1 |
| | 1.9nm,1.0s,baz=72,slow=4.5,SNR=7.1 | | | | | | |

**IDC 30 23:24:39.5±4.1, 5.77S×150.28E, h146km±34km, mb3.3/5, mb1 3.5/6, mb1mx3.3/29, mbtmp3.8/6, MS3.1/1, Ms1 3.1/1, ms1mx2.5/12, Error ellipse: s-maj=60.6km s-min=26.5km az=114.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.76** | **220** | P | Pn | 23 25 50.0 | +0.3 |
| | 3.2nm,0.3s,baz=5.2,slow=11,SNR=8.1 | | | | | | |
| PMG | | | | S | Sn | 23 26 44.8 | +0.3 |
| | 18nm,0.3s,baz=315,slow=22,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.95** | **226** | P | P | 23 29 10.4 | -0.7 |
| | 0.8nm,0.5s,baz=51,slow=11,SNR=5.4 | | | | | | |
| **ASAR** | **Alice Springs** | **23.78** | **220** | P | P | 23 29 39.8 | +0.8 |
| | 1.2nm,0.4s,baz=56,slow=8.5,SNR=28 | | | | | | |
| **BATI** | **Baumata** | **26.72** | **259** | LR | LR | 23 41 13.9 | |
| | comp=Z,42nm,19.1s,baz=154,slow=37 | | | | | | |
| **SONM** | **Songino Array** | **65.83** | **329** | P | P | 23 35 10.4 | +1.0 |
| | 0.3nm,0.4s,baz=142,slow=5.4,SNR=3.1 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **80.58** | **327** | P | P | 23 36 34.7 | -1.0 |
| | 0.4nm,0.4s,baz=101,slow=7.5,SNR=2.5 | | | | | | |
| **ILAR** | **Eielson Array** | **84.00** | **23** | P | P | 23 36 53.2 | 0.0 |
| | 0.8nm,0.7s,baz=248,slow=5.2,SNR=11 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.19** | **286** | PKPbc | PKPbc | 23 44 08.3 | -1.1 |
| | 0.1nm,0.4s,baz=93,slow=2.7,SNR=5.8 | | | | | | |

**IDC 30 23:25:35.5±12.0, 22.13S×176.96W, h353km±110km, mb3.2/3, mb1 3.4/5, mb1mx3.2/28, mbtmp4.2/5, Error ellipse: s-maj=100.1km s-min=46.7km az=39.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **15.39** | **267** | P | P | 23 28 55.0 | +0.7 |
| | 0.3nm,0.3s,baz=15,slow=3.5,SNR=6.9 | | | | | | |
| **URZ** | **Urewera** | **16.87** | **196** | P | P | 23 29 09.6 | -0.4 |
| | 1.4nm,0.3s,baz=300,slow=2.7,SNR=7.8 | | | | | | |
| URZ | | | | S | S | 23 32 06.3 | -1.7 |
| | 0.4nm,0.3s,baz=84,slow=10,SNR=4.8 | | | | | | |
| **CTA** | **Charters Tower** | **34.33** | **266** | P | P | 23 31 50.1 | -0.3 |
| | 3.0nm,0.7s,baz=102,slow=11,SNR=5.1 | | | | | | |
| **ASAR** | **Alice Springs** | **45.12** | **258** | P | P | 23 33 18.9 | +0.5 |
| | 1.7nm,0.8s,baz=99,slow=7.6,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.36** | **263** | P | P | 23 33 18.6 | -1.6 |
| | 0.6nm,0.4s,baz=96,slow=7.9,SNR=4.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **148.64** | **311** | PKPbc | PKPbc | 23 44 41.3 | -0.4 |
| | 0.4nm,0.6s,baz=121,slow=3.8,SNR=2.9 | | | | | | |

*AUST **31** 00:01:47.9±0.4, 3.62S×99.61E, h0km, Error ellipse: s-maj=14.4km s-min=5.5km az=48.0*
*ISCJB **31** 00:01:48.6±1.2, 3.59S±0.04×99.82E±0.04, h8km±8km, mb4.8/81, MS3.6/14, Error ellipse: s-maj=8.8km s-min=5.0km az=40.8*
*IDC **31** 00:01:48.9±0.6, 3.57S×99.75E, h0km, mb4.6/25, mb1 4.7/28, mb1mx4.5/42, mbtmp4.6/28, ML4.3/3, MS3.6/13, Ms1 3.6/13, ms1mx3.4/33, Error ellipse: s-maj=19.8km s-min=11.7km az=38.0*
*NEIC **31** 00:01:50.2±2.8, 3.66S×99.74E, h10km±16km, mb4.8/12, Error ellipse: s-maj=12.4km s-min=4.3km az=50.0*
*MOS **31** 00:01:53.5±1.3, 3.42S×99.91E, h41km, mb5.1/38, Error ellipse: s-maj=12.0km s-min=5.8km az=111.4*

**ISC 31 00:01:52.6±0.9, 3.63S±0.06×99.77E±0.07, h24km±5km, n228, σ1§35/240, mb4.8/81, MS3.7/14, 15C-4D, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MNAI** | **Manna** | **3.26** | **103** | P | **Pn** | **00 02 42.1** | **-0.2** |
| | baz=3.4,SNR=10.0 | | | | | | |
| **MNAI** | **Manna** | **3.26** | **103** | *e*Pn | **Pn** | **00 02 42.2** | **-0.1** |
| **BKNI** | **Bangkinang** | **4.12** | **18** | *e*Pn | **Pn** | **00 02 54.0** | **-0.2** |
| **GSI** | **Gunungsitoli** | **5.37** | **336** | *e*Pn | **Pn** | **00 03 10.7** | **-0.6** |
| GSI | | | | *e*Sn | Sn | 00 04 06.5 | -5.9 |
| **PSI** | **Prapat** | **6.44** | **352** | Pn | **Pn** | **00 03 23.1** | **-3.1** |
| | 0.9nm,0.3s,baz=181,slow=15,SNR=5.3 | | | | | | |
| **PSI** | **Prapat** | **6.44** | **352** | P | **Pn** | **00 03 23.1** | **-3.1** |
| PSI | | | | pmax | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | |
| **PSI** | **Prapat** | **6.44** | **352** | *e*Pn | **Pn** | **00 03 23.5** | **-2.7** |
| **LEM** | **Lembang** | **8.43** | **112** | Pn | **Pn** | **00 03 53.0** | **-0.5** |
| | comp=Z,26nm,0.3s,baz=310,slow=22,SNR=8.5 | | | | | | |
| LEM | | | | LR | LR | 00 07 35.7 | |
| | comp=Z,367nm,19.1s,baz=300,slow=41 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.90** | **116** | *e*Pn | **Pn** | **00 03 57.7** | **-2.2** |
| **UGM** | **Wanagama** | **11.51** | **112** | P | **Pn** | **00 04 34.6** | **-1.0** |
| | baz=12,SNR=15 | | | | | | |
| **KAPI** | **Kappang** | **19.97** | **95** | P | **P** | **00 06 22.5** | **-0.9** |
| | comp=Z,1.2nm,0.3s,baz=274,slow=9.7,SNR=15 | | | | | | |
| KAPI | | | | LR | LR | 00 15 48.2 | |
| | comp=Z,260nm,18.5s,baz=289,slow=42 | | | | | | |
| **KAPI** | **Kappang** | **19.97** | **95** | P | **P** | **00 06 23.9** | **+0.5** |
| | comp=Z,194nm,1.0s,SNR=8.4 | | | | | | |
| **KAPI** | **Kappang** | **19.97** | **95** | *e*P | **P** | **00 06 23.2** | **-0.2** |
| | comp=Z,50nm,1.1s | | | | | | |
| **LOEI** | **Loei** | **21.05** | **4** | P | **P** | **00 06 38.7** | **+3.6** |
| | comp=Z,236nm,1.0s,comp=Z,15μm | | | | | | |
| **UTTA** | **Uttaradit** | **21.25** | **2** | P | **P** | **00 06 41.0** | **+3.8** |
| | comp=Z,4.1nm,1.2s | | | | | | |
| **MHMT** | **Maesariang** | **21.74** | **355** | P | **P** | **00 06 43.2** | **+0.7** |
| | comp=Z,25nm,1.2s | | | | | | |
| **CM11** | **Chiang Mai Arr** | **21.88** | **358** | P | **P** | **00 06 43.9** | **0.

GYA LZ
comp=Z,540nm,17.8s
**SRSP Sriramsagar 30.78 317** *e*P **P** **00 08 06.9 +0.3**
**KLRI Killari 31.41 314** *e*P **P** **00 08 13.0 +0.7**
**SIJI Sorong 31.58 86** P **P** **00 08 12.1 -1.7**
comp=Z,4.7nm,0.6s,baz=268,slow=5.2,SNR=7.0
**H01W3 Cape Leeuwin H 33.84 159** T T 00 44 49.8
baz=336,slow=76,SNR=22
**H01W2 Cape Leeuwin H 33.85 159** T T 00 44 40.3
baz=336,slow=76,SNR=30
**H01W1 Cape Leeuwin H 33.85 159** T T 00 44 53.2
baz=336,slow=76,SNR=23
**LSA Lhasa 34.15 347** P **P** **00 08 37.5 +0.9**
LSA PMZ
comp=Z,22nm,1.1s
**LSA Lhasa 34.15 347** *e*P **P** **00 08 37.5 +0.9**
LSA pmax pmax
comp=Z,9.0nm,0.8s
**LSA Lhasa 34.15 347** *e*P **P** **00 08 37.5 +0.9**
comp=Z,8.6nm,0.8s
**CD2 Chengdu 34.55 6** *e*P **P** **00 08 41.0 +1.5**
CD2 pP pP 00 08 50.0 +3.3
CD2 PP **PP** **00 10 00.3 +2.2**
CD2 S **S** **00 14 10.5 +3.2**
CD2 sS sS 00 14 26.3 +7.1
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.4s
**KMBL Kambalda 34.56 145** P **P** **00 08 40.2 +0.6**
baz=35
**WRA Warramunga Arr 37.39 118** P **P** **00 09 04.0 -0.1**
comp=Z,8.7nm,0.9s,baz=291,slow=9.1,SNR=31
WRA PcP **PcP** **00 11 22.9 +0.1**
comp=Z,1.5nm,0.7s,baz=294,slow=2.6,SNR=5.4
**WRAB Tennant Creek 37.40 118**⇑ *e*P **P** **00 09 04.6 +0.5**
WRAB pmax pmax
comp=Z,49nm,1.2s
**WRAB Tennant Creek 37.40 118** P **P** **00 09 04.9 +0.8**
comp=Z,118nm,1.0s,SNR=12
**WRAB Tennant Creek 37.40 118** *e*P **P** **00 09 04.3 +0.2**
comp=Z,18nm,0.9s
**XAN Xi'an 38.45 12** P **P** **00 09 11.8 -0.9**
XAN PMZ
comp=Z,19nm,1.0s
XAN PMZ
comp=Z,120nm,5.4s
XAN LE
comp=Z,460nm,18.3s
XAN LZ
comp=Z,320nm,13.2s
**AS13 Alice Springs 38.49 124** P **P** **00 09 13.6 +0.3**
baz=39
**ASAR Alice Springs 38.51 124** P **P** **00 09 13.8 +0.4**
comp=Z,4.5nm,0.7s,baz=298,slow=7.8,SNR=43
ASAR PcP **PcP** **00 11 26.8 +0.6**
comp=Z,3.1nm,0.9s,baz=305,slow=3.2,SNR=8.8
**AS01 Alice Springs 38.54 124** *e*P **P** **00 09 13.5 -0.3**
AS01 *e*PcP **PcP** **00 11 26.4 +0.1**
**LZH Lanzhou 39.69 5**⇑P **P** **00 09 23.8 +0.6**
LZH pP pP 00 09 33.8 +3.3
LZH sP sP 00 09 38.0 +4.5
LZH PP **PnPn** **00 11 03.5 +5.6**
LZH S **S** **00 15 25.5 -0.1**
LZH sS sS 00 15 42.0 +4.4
LZH PMZ
comp=Z,38nm,1.0s
LZH PMZ
comp=Z,130nm,4.4s
LZH LN
comp=Z,680nm,15.4s
LZH LE
comp=Z,620nm,14.0s
LZH LZ
comp=Z,770nm,17.3s
**NJ2 Nanjing 39.85 26** *e*P **P** **00 09 25.8 +1.4**
NJ2 PMZ
comp=Z,12nm,0.9s
**JAY Jayapura 40.88 90** P **P** **00 09 33.1 -0.2**
baz=41
**QIS Mount Isa 42.26 117** P **P** **00 09 44.9 +0.4**
baz=42,SNR=5.9
**GTA Gaotai 42.82 0** P **P** **00 09 49.0 +0.1**
GTA pP pP 00 09 59.0 +2.8
GTA sP sP 00 10 03.0 +3.8
GTA S **S** **00 16 11.3 -0.7**
GTA sS sS 00 16 28.5 +4.4
GTA SS SS 00 19 17.3 -6.4
GTA PMZ
comp=Z,7.0nm,1.3s
GTA PMZ
comp=Z,88nm,3.8s
GTA LN
comp=Z,290nm,12.8s
GTA LE
comp=Z,210nm,15.2s
GTA LZ
comp=Z,250nm,13.5s
**HHC Hu-ho-hao-te 45.56 13** *e*P **P** **00 10 12.0 +1.2**
HHC S **S** **00 16 52.8 +1.1**
HHC sS sS 00 17 07.0 +3.1
HHC SS **ScS** **00 20 09.5 +3.6**
HHC PMZ
comp=Z,32nm,0.9s
HHC PMZ
comp=Z,170nm,5.6s
HHC LN
comp=Z,170nm,14.6s
HHC LE
comp=Z,320nm,19.1s
HHC LZ
comp=Z,130nm,16.0s
**MTSU Mount Surprise 45.90 112** P **P** **00 10 14.0 +0.2**
baz=46,SNR=11
**BJI Beijing 45.99 18** P **P** **00 10 14.8 +0.8**
BJI S **S** **00 16 59.0 +1.3**
BJI PMZ
comp=Z,23nm,0.8s
BJI PMZ
comp=Z,170nm,4.2s
BJI LN
comp=Z,300nm,15.5s
BJI LE
comp=Z,170nm,18.4s
BJI LZ
comp=Z,180nm,19.1s
**PMG Port Moresby 47.39 99**⇑ *e*P **P** **00 10 25.4 -0.1**
PMG pmax pmax
comp=Z,106nm,1.7s
**PMG Port Moresby 47.39 99** *e*P **P** **00 10 25.3 -0.2**
comp=Z,16nm,1.0s
**CTA Charters Tower 48.13 114** P **P** **00 10 31.7 +0.5**
baz=48
**CTAO Charters Tower 48.13 114** *e*P **P** **00 10 31.7 +0.5**
CTAO pmax pmax
comp=Z,311nm,0.9s
**CTAO Charters Tower 48.13 114** *e*P **P** **00 10 31.7 +0.5**
comp=Z,311nm,0.9s
**KSH Kashi 48.20 335** P **P** **00 10 29.5 -2.0**
KSH *e*pP **pP** **00 10 39.5 +0.6**
KSH *e*PP **PP** **00 12 21.3 -2.8**
KSH PcS **PcS** **00 15 56.3 +1.8**
KSH S S 00 17 21.8 -7.8
KSH ScS **ScS** **00 20 18.3 -5.1**
KSH PMZ
comp=Z,5.0nm,0.9s
KSH PMZ
comp=Z,110nm,4.9s
KSH LN
comp=Z,160nm,5.3s
KSH LE
comp=Z,96nm,4.4s
KSH LZ
comp=Z,170nm,7.2s
**QLP Quilpie 48.25 123** P **P** **00 10 32.8 +0.8**
baz=48,SNR=8.8
**WMQ Urumqi 48.47 348** P **P** **00 10 34.5 +1.1**
WMQ pP pP 00 10 45.0 +4.2
WMQ sP sP 00 10 50.0 +6.3
WMQ PP **PP** **00 12 27.0 +0.7**
WMQ S **S** **00 17 32.0 -1.1**
WMQ PMZ
comp=Z,45nm,1.0s
WMQ PMZ
comp=Z,180nm,5.0s
WMQ LN
comp=Z,71nm,15.0s
WMQ LE
comp=Z,64nm,15.0s
WMQ LZ
comp=Z,44nm,15.0s
**KSAR Wonju Array Be 48.50 30** P **P** **00 10 33.8 +0.2**
**KSAR Wonju Array Be 48.50 30** P **P** **00 10 33.8 +0.2**
**KSRS Korea Array 48.53 30** P **P** **00 10 33.8 -0.1**
comp=Z,9.1nm,1.0s,baz=222,slow=7.9,SNR=18
KSRS LR LR 00 33 21.4
comp=Z,65nm,18.0s,baz=228,slow=39
**KSRS Korea Array 48.53 30** P **P** **00 10 33.8 -0.1**
KSRS pmax pmax
comp=Z,9.0nm,1.0s
KSRS MLR MLR
comp=Z,65nm,18.0s
**KS01 Wonju Array Si 48.53 30** *e*P **P** **00 10 33.6 -0.3**
**ULHL Ulaho l 50.41 337** P **P** **00 10 48.6 +0.2**
SNR=5.2
**KZA Kyzart 50.65 336** P **P** **00 10 52.0 +1.5**
SNR=5.7
**UCH Uchtor 51.08 336** P **P** **00 10 54.4 +0.6**
SNR=6.4
**TKM2 Tokmak 2 51.23 337** *e*P **P** **00 10 54.7 +0.1**
TKM2 pmax pmax
comp=Z,17nm,0.9s
**TKM2 Tokmak 2 51.23 337** P **P** **00 10 54.9 +0.3**
SNR=16
**TKM2 Tokmak 2 51.23 337** *e*P **P** **00 10 54.7 +0.1**
comp=Z,16nm,0.9s
**KBK Karagaybulak 51.26 337** P **P** **00 10 55.7 +0.9**
SNR=7.2
**CMSA Cobar Meteorol 51.28 128** P **P** **00 10 55.8 +0.9**
baz=52,SNR=15
**AML Almayashu 51.33 335** P **P** **00 10 55.8 +0.1**
SNR=5.3
**AAK Ala-Archa 51.42 336** P **P** **00 10 56.4 +0.4**
comp=Z,2.2nm,0.7s,baz=158,slow=5.4,SNR=9.5
**AAK Ala-Archa 51.42 336**⇑ *e*P **P** **00 10 56.8 +0.8**
AAK pmax pmax
comp=Z,8.0nm,1.0s
**AAK Ala-Archa 51.42 336** *e*P **P** **00 10 56.1 +0.1**
**SONM Songino Array 51.57 6** P **P** **00 10 57.6 +0.6**
comp=Z,16nm,0.8s,baz=187,slow=8.5,SNR=84
SONM LR LR 00 33 46.1
comp=Z,85nm,18.3s,baz=186,slow=37
**SONA1 Songino Array 51.59 6** *e*P **P** **00 10 58.2 +1.1**
**ULN Ulaanbaatar 51.67 6** *e*P **P** **00 10 58.5 +0.7**
ULN pmax pmax
comp=Z,8.0nm,0.8s
**ULN Ulaanbaatar 51.67 6** *e*P **P** **00 10 58.5 +0.7**
comp=Z,8.5nm,0.8s
**EKS2 Erkin-Say 51.74 336** *e*P **P** **00 10 58.8 +0.5**
EKS2 pmax pmax
comp=Z,12nm,0.8s
**EKS2 Erkin-Say 51.74 336** P **P** **00 10 59.0 +0.7**
SNR=12
**EKS2 Erkin-Say 51.74 336** *e*P **P** **00 10 58.8 +0.5**
comp=Z,12nm,0.8s
**USP Ospenovka 51.95 337** P **P** **00 11 00.3 +0.5**
SNR=8.9
**RMQ Roma 52.06 121** P **P** **00 10 58.9 -2.0**
baz=52
**MNAS Manas 52.13 335** P **P** **00 11 00.0 -1.3**
MNAS pmax pmax
comp=Z,20nm,1.6s
**MK07 Makanchi Array 52.48 345** P **P** **00 11 03.9 +0.2**
baz=53
**MK01 Makanchi Array 52.50 345** *e*P **P** **00 11 04.0 +0.2**
**MK31 Makanchi Array 52.53 345** *i* P **P** **00 11 02.9 -1.1**
MK31 pmax pmax
comp=Z,8.0nm,0.7s
**MKAR Makanchi Array 52.53 345** P **P** **00 11 04.0 0.0**
comp=Z,10nm,0.8s,baz=149,slow=8.4,SNR=83
MKAR LR LR 00 39 49.7
comp=Z,28nm,18.4s,baz=176,slow=44
**MKAR Makanchi Array 52.53 345** P **P** **00 11 04.0 0.0**
MKAR pmax pmax
comp=Z,10.0nm,0.8s
**MKAR Makanchi Array 52.53 345** *e*P **P** **00 11 04.3 +0.3**
**CN2 Changchun 52.56 23**⇑P **P** **00 11 04.0 -0.2**
CN2 *es*P sP 00 11 18.0 +3.4
CN2 *e*S **S** **00 18 29.0 -0.8**
CN2 PMZ
comp=Z,20nm,0.7s
CN2 PMZ
comp=Z,300nm,4.0s
CN2 LN
comp=Z,1μm,15.0s
CN2 LE
comp=Z,1μm,15.0s
CN2 LZ
comp=Z,1μm,16.0s
**MAKZ Makanchi 52.62 345** *e*P **P** **00 11 05.1 +0.4**
**MJAR Matsushiro Arr 53.68 38** P **P** **00 11 11.5 -1.1**
comp=Z,4.9nm,1.0s,baz=231,slow=7.6,SNR=9.1
MJAR LR LR 00 35 03.8
comp=Z,38nm,19.7s,baz=245,slow=37
**EIDS Eidsvold 53.76 119** P **P** **00 11 13.3 -0.2**
baz=54
**EIDS Eidsvold 53.76 119** *e*P **P** **00 11 12.9 -0.5**
comp=Z,23nm,1.2s
**MDJ Mudanjiang 54.94 26** P **P** **00 11 21.5 -0.2**
MDJ PMZ
comp=Z,10.0nm,1.0s
MDJ PMZ
comp=Z,100nm,5.2s
MDJ LN
comp=Z,200nm,7.4s
MDJ LE
comp=Z,88nm,7.4s
MDJ LZ
comp=Z,260nm,11.5s
**TLY Talaya 55.19 3** P **P** **00 11 23.6 +0.2**
comp=Z,5.0nm,0.8s,baz=231,slow=2.2,SNR=7.5
**TLY Talaya 55.19 3** *e*P **P** **00 11 22.9 -0.5**
TLY pmax pmax
comp=Z,5.0nm,0.6s
TLY MLR MLR
comp=Z,100nm,13.0s
**USRK Ussuriysk Ar. 55.69 28** P **P** **00 11 26.9 -0.1**
comp=Z,22nm,0.9s,baz=218,slow=6.6,SNR=33
USRK LR LR 00 39 49.7
comp=Z,118nm,18.1s,baz=209,slow=41
**GEYT Alibeck 56.55 321** P **P** **00 11 32.7 -0.7**
comp=Z,5.3nm,0.9s,baz=156,slow=7.7,SNR=10
**OTUK Ortayu 56.95 338** P **P** **00 11 34.7 -1.3**
OTUK pmax pmax
comp=Z,14nm,0.9s
**KURK Kurchatov 57.10 344** *e*P **P** **00 11 36.6 -0.3**
KURK pmax pmax
comp=Z,5.0nm,0.7s
**KURK Kurchatov 57.10 344** P **P** **00 11 36.9 -0.1**
comp=Z,75nm,0.9s,SNR=7.8
**KURK Kurchatov 57.10 344** *e*P **P** **00 11 36.6 -0.3**
comp=Z,4.6nm,0.7s
**ZAA0 Zalesovo Array 58.72 350** P **P** **00 11 48.1 -0.2**
baz=59,SNR=17
**ZALV Zalesovo Beam 58.72 350** P **P** **00 11 48.0 -0.3**
comp=Z,43nm,0.9s,baz=181,slow=5.2,SNR=116
**ZALV Zalesovo Beam 58.72 350** P **P** **00 11 48.0 -0.3**
**KLR Kul'dur 59.50 24** *e*P P 00 11 50.2 -3.6
KLR pmax pmax
comp=Z,48nm,1.4s
**KRAR Krasnoyarsk 59.70 356**⇑ *e*P **P** **00 11 55.5 +0.5**
KRAR pmax pmax
comp=Z,23nm,0.9s
**NVS Novosibirsk 59.86 349** *e*P **P** **00 11 55.6 -0.5**
NVS pmax pmax
comp=N,8.0nm,1.0s
NVS pmax pmax
comp=E,3.0nm,1.0s
NVS pmax pmax
comp=Z,14nm,1.0s
**HABR Khabarovsk 60.31 26** *e*P **P** **00 11 57.1 -2.3**
HABR *e**PP **pP** **00 12 07.2 +0.3**
HABR *e**SP sP 00 12 11.3 +1.5
HABR *e* 00 12 41.9
HABR *e* 00 14 10.1
HABR *e*PPP PPP 00 15 33.2
HABR *e*S **S** **00 20 09.5 -2.8**
HABR *e* 00 20 21.8
HABR *e**SS sS 00 20 26.6 +1.8
HABR *e* 00 21 45.1
HABR *e*SS **SS** **00 24 08.3 -2.0**
HABR pmax pmax
comp=Z,15nm,1.7s
HABR MLR MLR
comp=Z,61nm,19.0s
**VOSK Vostochnaya 61.18 340** P **P** **00 12 02.5 -2.7**
VOSK pmax pmax
comp=Z,7.0nm,0.8s
**BRVK Borovoye 61.69 340** *e*P **P** **00 12 07.7 -1.0**
BRVK pmax pmax
comp=Z,6.0nm,0.8s
**BRVK Borovoye 61.69 340** *e*P **P** **00 12 07.7 -1.0**
comp=Z,5.6nm,0.8s
**ZRNK Zerenda 62.04 339** P **P** **00 12 08.5 -2.5**
ZRNK pmax pmax
comp=Z,7.0nm,0.9s
**CHKZ Chkalovo 62.09 341** P **P** **00 12 09.8 -1.5**
CHKZ pmax pmax
comp=Z,12nm,1.0s
**BOD Bodaibo 62.31 9** *e*P **P** **00 12 12.2 -0.5**
BOD pmax pmax
comp=Z,15nm,1.1s
**AB31 Akbulak array 62.95 332** P **P** **00 12 15.1 -2.1**
AB31 pmax pmax
comp=Z,24nm,1.0s
**ABKAR Akbulak array 62.95 332** *e*P **P** **00 12 16.3 -0.9**
comp=Z,12nm,0.8s
**YSS Yuzh-Sakhalins 62.97 32** *e*P **P** **00 12 17.0 -0.4**
YSS pmax pmax
comp=Z,30nm,0.9s
**AKTO Aktyubinsk 64.67 332** P **P** **00 12 26.9 -1.7**
comp=Z,4.7nm,0.9s,baz=122,slow=8.2,SNR=11
**SVE Sverdlovsk 68.09 338**⇓ *i* P **P** **00 12 50.3 0.0**
SVE pmax pmax
comp=Z,23nm,1.1s
**MAW Mawson 68.66 194** LR LR 00 36 12.2
comp=Z,76nm,21.1s,baz=61,slow=30
**YAK Yakutsk 69.36 15** *c i* P **P** **00 12 57.2 -0.9**
YAK pmax pmax
comp=Z,44nm,0.9s
YAK pmax pmax
comp=E,10.0nm,1.2s
YAK pmax pmax
comp=N,15nm,1.1s
**KBZ Khabaz 69.39 320** P **P** **00 12 58.4 -0.2**
comp=N,6.5nm,0.8s,baz=122,slow=5.7,SNR=7.0
**MATP Matopo 71.20 250** P **P** **00 13 11.1 +0.7**
comp=N,2.5nm,0.9s,baz=66,slow=6.7
**ANN Anapa 73.40 319** *e*P **P** **00 13 21.2 -1.6**
ANN pmax pmax
comp=Z,42nm,1.2s
**VRH Novokhopyorsk 73.54 326** *e*P **P** **00 13 22.7 -0.8**
VRH pmax pmax
comp=Z,20nm,0.8s
VRH pmax pmax
comp=N,10.0nm,0.9s
VRH pmax pmax
comp=E,9.0nm,0.9s
**BR103 Keskin Array S 74.24 313** P **P** **00 13 26.1 -2.0**
baz=74
**BRTR Keskin Array B 74.25 313** P **P** **00 13 26.5 -1.7**
comp=E,2.3nm,0.8s,baz=134,slow=7.6,SNR=15
**BOSA Boshof 74.68 241** LR LR 00 43 11.2
comp=E,36nm,19.0s,baz=136,slow=33
**BR231 Keskin MP Arra 74.92 313** *e*P P 00 13 27.9 -4.1
**VSR Storozhevoye 74.98 325** *e*P **P** **00 13 30.9 -1.0**
VSR pmax pmax
comp=Z,10.0nm,0.7s
VSR pmax pmax
comp=N,5.0nm,0.6s
VSR pmax pmax
comp=E,4.0nm,0.6s
**LPSR Galich'ya Gora 75.71 327** *e*P **P** **00 13 35.4 -0.7**
LPSR pmax pmax
comp=N,3.0nm,0.9s
LPSR pmax pmax
comp=E,8.0nm,0.9s
LPSR pmax pmax
comp=Z,9.0nm,0.9s
**SEY Seymchan 77.21 22**⇑ *e*P **P** **00 13 45.0 +0.6**
**MOS Moscow 77.77 329** *e*P **P** **00 13 50.0 +2.4**
**OBN Obninsk 78.05 328**⇑ *e*P **P** **00 13 49.1 -0.1**
OBN pmax pmax
comp=Z,19nm,1.2s
**KLMR Klimovskoe 79.19 334** *e*P **P** **00 13 53.3 -2.0**
KLMR pmax pmax
comp=Z,25nm,1.5s
**LEOM Leova 80.03 318**⇓ *i* P P 00 14 03.3 +3.1
**AKASG Malin Array Be 80.63 323** P **P** **00 14 01.9 -1.4**
comp=Z,0.9nm,0.5s,baz=89,slow=4.6,SNR=7.8
**KIEV Kiev 80.64 323**⇑ *e*P **P** **00 14 02.7 -0.7**
KIEV pmax pmax
comp=Z,4.0nm,0.9s
**VRI Vrincioaia 80.89 317**⇓ *i* P **P** **00 14 05.6 +0.7**
**TESR Tescani 81.10 318**⇑ *i* P **P** **00 14 06.2 +0.1**
**TMCR Tamitsa 81.34 337** *e*P **P** **00 14 07.3 +0.4**
TMCR pmax pmax
comp=Z,39nm,1.2s
**BURAR Bucovina Array 82.33 319**⇑ *i* P **P** **00 14 13.6 +1.0**
**DRGR 83.81 318**⇑ *i* P **P** **00 14 20.9 +0.6**
**BZS Buzias 84.32 316**⇑ *i* P **P** **00 14 23.2 +0.4**
**KOLS Kolonicke sedl 84.54 320** *e*P **P** **00 14 24.9 +1.1**
KOLS pmax pmax
comp=Z,13nm,1.0s
**KOLS Kolonicke sedl 84.54 320** *e*P **P** **00 14 24.9 +1.1**
**BILL Bilibino 84.75 20** *e*P **P** **00 14 24.1 -0.4**
BILL pmax pmax
comp=Z,48nm,2.6s
**STHS Stebnicka Huta 85.30 320** *e*P **P** **00 14 28.6 +0.9**
STHS pmax pmax
comp=Z,5.0nm,1.0s
**STHS Stebnicka Huta 85.30 320** *e*P **P** **00 14 28.6 +0.9**
**FINES FINESS Array B 85.44 332** P **P** **00 14 27.5 -0.5**
comp=Z,2.8nm,0.6s,baz=123,slow=6.0,SNR=18
FINES LR LR 00 56 49.8
comp=Z,32nm,18.4s,baz=25,slow=39
**NIE Niedzica 85.90 320** *e*P **P** **00 14 31.6 +0.9**
**NIE Niedzica 85.90 320** *e*P **P** **00 14 31.6 +0.9**
**OJC Ojcow 86.36 321** *e*P **P** **00 14 33.4 +0.5**
**OJC Ojcow 86.36 321** *e*P **P** **00 14 33.4 +0.5**
**LANS Liptovska Anna 86.39 320** *e*P **P** **00 14 34.7 +1.6**
**LANS Liptovska Anna 86.39 320** *e*P **P** **00 14 34.7 +1.6**
**MORC Moravsky Berou 87.73 320**⇓ *i* P **P** **00 14 40.2 +0.6**
**ARCES ARCESS Array B 87.92 340** P **P** **00 14 39.1 -0.9**
comp=Z,4.7nm,0.8s,baz=106,slow=5.6,SNR=6.7
**DPC Dobruska-Polom 88.59 320** *e*P **P** **00 14 44.6 +0.9**
**DPC Dobruska-Polom 88.59 320** *e*P **P** **00 14 44.6 +0.9**
**KSP Ksiaz 88.67 321** *e*P **P** **00 14 41.7 -2.3**
**KSP Ksiaz 88.67 321** *e*P **P** **00 14 41.7 -2.3**
**PRU Pruhonice 89.68 320** *e*P **P** **00 14 49.2 +0.5**
**PRU Pruhonice 89.68 320** *e*P **P** **00 14 49.2 +0.5**
**GEC2 GERESS Array S 90.11 319** *e*P **P** **00 14 51.8 +0.8**
comp=Z,3.5nm,0.9s,baz=93,slow=4.6
**GERES GERESS Array B 90.11 319** P **P** **00 14 51.1 +0.2**
comp=Z,3.1nm,0.9s,baz=94,slow=5.4,SNR=20
**BRG Berggiesshubel 90.15 321** *e*P **P** **00 14 51.4 +0.5**
comp=Z,11nm,1.3s
**BRG Berggiesshubel 90.15 321** *e*P **P** **00 14 51.4 +0.5**
BRG pmax pmax
comp=Z,11nm,1.3s
**BRG Berggiesshubel 90.15 321** *e*P **P** **00 14 52.0 +1.1**
comp=Z,3.1nm,0.9s,baz=93,slow=4.6
**RUE Ruedersdorf 90.41 322** *e*P **P** **00 14 53.2 +1.2**
comp=Z,8.8nm,0.7s,baz=93,slow=4.6
**FBE Freiberg 90.53 321** *e*P **P** **00 14 54.0 +1.3**
comp=Z,3.2nm,0.8s,baz=93,slow=4.6
**WET Wettzell 90.68 319** *e*P **P** **00 14 54.4 +0.9**
comp=Z,3.7nm,0.9s,baz=93,slow=4.6
**CLL Collm 90.78 321** *i* P **P** **00 14 54.2 +0.4**
CLL pmax pmax
comp=Z,8.0nm,1.3s
**CLL Collm 90.78 321** *e*P **P** **00 14 54.4 +0.6**
comp=Z,3.1nm,1.0s,baz=93,slow=4.6
**CLL Collm 90.78 321** *i* P **P** **00 14 54.2 +0.4**
comp=Z,8.0nm,1.3s
**WERD Werda 91.15 320** *e*P **P** **00 14 56.4 +0.7**
comp=Z,2.0nm,0.8s,baz=93,slow=4.6
**HFS Hagfors 91.16 330** P **P** **00 14 55.6 +0.2**
comp=Z,3.6nm,0.8s,baz=116,slow=6.6,SNR=3.6
**ROTZ Rotzenmuhle 91.17 320** *e*P **P** **00 14 56.9 +1.2**
comp=Z,2.7nm,1.0s,baz=93,slow=4.6
**MANZ Manzenberg 91.25 320** *e*P **P** **00 14 57.3 +1.2**
comp=Z,4.9nm,0.8s,baz=93,slow=4.6
**PLN Plauen 91.25 320** *e*P **P** **00 14 56.9 +0.8**
comp=Z,2.3nm,0.9s,baz=93,slow=4.6
**NEUB Neuenburg 91.54 321** *e*P **P** **00 14 58.2 +0.8**
comp=Z,9.6nm,0.9s,baz=93,slow=4.6
**MOX Moxa 91.61 320** *e*P **P** **00 14 58.4 +0.7**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | comp=Z,1.0nm,0.9s,baz=93,slow=4.6 | | | | | | | |
| **GRF** | **Grafenberg Arr** | **91.80** | **319** | *e*P | **P** | **00 14 59.7** | **+1.1** |
| | comp=Z,3.1nm,0.8s,baz=93,slow=4.6 | | | | | | | |
| **KEST** | **Kesra** | **92.44** | **305** | P | **P** | **00 15 03.0** | **+1.0** |
| | comp=Z,5.3nm,0.8s,baz=181,slow=4.1,SNR=4.5 | | | | | | | |
| **NOA** | **NORSAR Array B** | **92.45** | **331** | P | **P** | **00 15 00.7** | **-0.7** |
| | comp=Z,1.6nm,0.8s,baz=95,slow=4.7,SNR=3.8 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.99** | **40** | PKP | **PKPdf** | **00 21 04.5** | **+1.4** |
| | comp=Z,0.8nm,0.7s,baz=264,slow=2.9,SNR=6.8 | | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.57** | **27** | *e*PKIKP | **PKPab** | **00 21 26.1** | **-0.1** |
| **WMOK** | **Wichita Mounta** | **144.57** | **27** | *e*PKPdf | **PKPab** | **00 21 26.1** | **-0.1** |
| **TUL1** | **Tulsa** | **144.80** | **22** | *e*PKPbc | **PKPbc** | **00 21 27.1** | **+0.1** |
| **WCI** | **Wyandotte Cave** | **145.12** | **8** | *e*PKIKP | **PKPbc** | **00 21 27.9** | **-0.2** |
| **WCI** | **Wyandotte Cave** | **145.12** | **8** | *e*PKPbc | **PKPbc** | **00 21 27.9** | **-0.2** |
| **ABTX** | **Abilene, Hawle** | **145.89** | **30** | *e*PKPbc | **PKPbc** | **00 21 30.5** | **-0.2** |
| **TXAR** | **Lajitas Array** | **146.11** | **39** | PKPbc | **PKPab** | **00 21 32.4** | **+0.2** |
| | comp=Z,5.6nm,0.7s,baz=289,slow=1.2,SNR=67 | | | | | | | |
| **MIAR** | **Mount Ida** | **146.83** | **20** | *e*PKP2 | **PKPbc** | **00 21 33.6** | **+0.2** |
| **MIAR** | **Mount Ida** | **146.83** | **20** | *e*PKPbc | **PKPbc** | **00 21 33.6** | **+0.2** |
| **TZTN** | **Tazewell** | **147.10** | **5** | *e*PKPbc | **PKPbc** | **00 21 33.8** | **-0.3** |
| **JCT** | **Junction City** | **147.51** | **33** | *e*PKP2 | **PKPdf** | **00 21 34.0** | **+1.0** |
| **JCT** | **Junction City** | **147.51** | **33** | *e*PKPbc | **PKPdf** | **00 21 34.0** | **+1.0** |
| **CPCT** | **Cooper Cave** | **148.09** | **7** | *e*PKPbc | **PKPbc** | **00 21 36.9** | **0.0** |
| **SWET** | **Sewanee** | **148.12** | **9** | *e*PKPbc | **PKPbc** | **00 21 36.5** | **-0.6** |
| **KMSC** | **Kings Mountain** | **148.62** | **2** | *e*PKPbc | **PKPbc** | **00 21 37.9** | **-0.4** |
| **HKT** | **Hockley** | **149.94** | **28** | *e*PKP2 | **PKPbc** | **00 21 42.9** | **+1.3** |
| **HKT** | **Hockley** | **149.94** | **28** | *e*PKPbc | **PKPbc** | **00 21 42.9** | **+1.3** |

*IDC **31** 00:04:36.2±0.9, 3.6°S×99.6°E, h0km, mb4.0/11, mb1 4.2/11,mb1mx3.9/41, mbtmp4.0/11, MS3.5/2, Ms1 3.5/2, ms1mx3.0/27, Error ellipse: s-maj=39.7km s-min=17.3km az=50.0*
*NEIC **31** 00:04:37.9±0.8, 3.6°S×99.7°E, h10km, mb4.3/2, Error ellipse: s-maj=28.6km s-min=8.1km az=224.0*
*ISCJB **31** 00:04:39.5±0.9, 3.6°S±0.2'×99.8°E±0.2, h33km, mb4.1/12, MS3.6/2, Error ellipse: s-maj=32.7km s-min=10.9km az=44.2*

**ISC 31 00:04:41.4±1.0, 3.6°S±0.2'×99.8°E±0.2', h35km, n22, σ0s91/17, mb4.1/12, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CISI** | **Cisompet, Garu** | **8.88** | **116** | *e*Pn | **Pn** | **00 06 45.4** | **-1.9** |
| **JAGI** | **Jajag, Banyuwa** | **15.06** | **109** | *e*Pn | **Pn** | **00 08 11.7** | **0.0** |
| | 16nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.97** | **358** | P | **P** | **00 09 31.7** | **-0.7** |
| | 1.7nm,0.5s,baz=186,slow=10,SNR=5.4 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.45** | **260** | T | T | 00 39 46.0 | |
| | baz=82 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.46** | **261** | T | T | 00 39 52.6 | |
| | baz=82 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.47** | **260** | T | T | 00 39 45.0 | |
| | baz=82 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.82** | **159** | T | T | 00 46 58.9 | |
| | baz=331 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.83** | **159** | T | T | 00 47 00.6 | |
| | baz=331 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.84** | **159** | T | T | 00 47 15.1 | |
| | baz=331 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.37** | **118** | P | **P** | **00 11 51.5** | **+0.4** |
| | 1.6nm,0.7s,baz=288,slow=8.6,SNR=5.0 | | | | | | |
| WRA | | | | PcP | **PcP** | **00 14 10.7** | **+0.9** |
| | 0.5nm,0.3s,baz=296,slow=2.4,SNR=6.4 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.38** | **118** | *e*P | **P** | **00 11 52.0** | **+0.9** |
| | 2.2nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **38.48** | **124** | P | **P** | **00 12 01.0** | **+0.6** |
| | 0.9nm,0.5s,baz=296,slow=7.6,SNR=5.5 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 14 14.4** | **+1.2** |
| | 0.4nm,0.6s,baz=310,slow=2.4,SNR=5.0 | | | | | | |
| **SONM** | **Songino Array** | **51.58** | **6** | P | **P** | **00 13 44.8** | **+0.6** |
| | 2.3nm,0.8s,baz=188,slow=9.1,SNR=5.2 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.54** | **345** | P | **P** | **00 13 51.4** | **+0.1** |
| | 2.0nm,0.7s,baz=142,slow=8.6,SNR=5.1 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.69** | **28** | P | **P** | **00 14 14.5** | **+0.3** |
| | 3.3nm,0.8s,baz=138,slow=36,SNR=5.8 | | | | | | |
| **GEYT** | **Alibeck** | **56.57** | **321** | P | **P** | **00 14 19.7** | **-1.0** |
| | 1.5nm,0.8s,baz=116,slow=3.4,SNR=2.9 | | | | | | |
| GEYT | | | | LR | LR | 00 39 14.0 | |
| | comp=Z,44nm,19.4s,baz=145,slow=37 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.73** | **350** | P | **P** | **00 14 35.1** | **-0.4** |
| | 2.4nm,0.4s,baz=175,slow=6.5,SNR=6.1 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.28** | **313** | P | **P** | **00 16 14.3** | **-1.1** |
| | 0.7nm,0.8s,baz=94,slow=5.8,SNR=2.8 | | | | | | |
| **FINES** | **FINESS Array B** | **85.46** | **332** | P | **P** | **00 17 15.7** | **+0.5** |
| | 1.4nm,0.6s,baz=108,slow=4.5,SNR=8.1 | | | | | | |
| **GERES** | **GERESS Array B** | **90.14** | **319** | P | **P** | **00 17 38.7** | **+0.6** |
| | 0.3nm,0.5s,baz=104,slow=4.1,SNR=3.2 | | | | | | |
| **NOA** | **NORSAR Array B** | **92.47** | **331** | LR | LR | 01 03 01.6 | |
| | comp=Z,19nm,18.3s,baz=5.0,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.11** | **39** | PKPbc | **PKPab** | **00 24 19.9** | **+0.7** |
| | 0.8nm,0.6s,baz=286,slow=1.0,SNR=4.8 | | | | | | |

*IDC **31** 00:07:33.7±1.1, 3.7°S×99.5°E, h0km, mb4.0/11, mb1 4.2/12, mb1mx3.8/48, mbtmp4.1/12, ML4.4/1, Error ellipse: s-maj=44.0km s-min=16.6km az=50.0*
*NEIC **31** 00:07:35.0±0.6, 3.7°S×99.5°E, h10km, mb4.1/4, Error ellipse: s-maj=24.3km s-min=6.9km az=46.0*
*ISCJB **31** 00:07:36.7±1.0, 3.7°S±0.2'×99.7°E±0.2, h33km, mb4.1/15, Error ellipse: s-maj=34.9km s-min=10.4km az=136.3*

**ISC 31 00:07:39.0±1.2, 3.7°S±0.2'×99.7°E±0.2', h35km, n24, σ0s58/19, mb4.2/15, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LEM** | **Lembang** | **8.50** | **112** | Pn | **Pn** | **00 09 39.2** | **-0.6** |
| | 4.7nm,0.3s,baz=300,slow=20,SNR=2.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.00** | **358** | P | **P** | **00 12 30.4** | **0.0** |
| | 1.9nm,0.5s,baz=187,slow=10,SNR=6.8 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.34** | **261** | T | T | 00 42 25.2 | |
| | baz=83 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.34** | **261** | T | T | 00 42 25.6 | |
| | baz=83 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.36** | **261** | T | T | 00 42 37.7 | |
| | baz=83 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.83** | **158** | T | T | 00 50 23.0 | |
| | baz=336 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.84** | **158** | T | T | 00 50 20.7 | |
| | baz=336 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.84** | **158** | T | T | 00 50 23.6 | |
| | baz=336 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.45** | **118** | P | **P** | **00 14 49.2** | **-0.2** |
| | 1.4nm,0.6s,baz=294,slow=9.1,SNR=5.6 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.46** | **118** | *e*P | **P** | **00 14 49.8** | **+0.3** |
| | 2.3nm,0.6s | | | | | | |
| **ASAR** | **Alice Springs** | **38.55** | **124** | P | **P** | **00 14 59.2** | **+0.4** |
| | 1.0nm,0.6s,baz=299,slow=7.8,SNR=6.9 | | | | | | |
| ASAR | | | | PcP | **PcP** | **00 17 11.9** | **+0.9** |
| | 0.3nm,0.5s,baz=286,slow=2.2,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **51.63** | **6** | P | **P** | **00 16 43.0** | **+0.8** |
| | 2.5nm,0.8s,baz=190,slow=8.8,SNR=11 | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.73** | **6** | *e*P | **P** | **00 16 43.6** | **+0.5** |
| | 2.4nm,0.9s | | | | | | |
| **EKS2** | **Erkin-Say** | **51.74** | **336** | *e*P | **P** | **00 16 42.9** | **-0.3** |
| | 1.4nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.55** | **345** | P | **P** | **00 16 49.2** | **+0.2** |
| | 2.0nm,0.7s,baz=154,slow=8.8,SNR=11 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.77** | **28** | P | **P** | **00 17 12.2** | **-0.3** |
| | 2.9nm,0.8s,baz=242,slow=4.3,SNR=5.9 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **57.06** | **344** | P | **P** | **00 17 21.1** | **-0.5** |
| | 0.5nm,0.6s,baz=165,slow=7.7,SNR=3.5 | | | | | | |
| **KURK** | **Kurchatov** | **57.12** | **344** | P | **P** | **00 17 21.1** | **-0.9** |
| **ZALV** | **Zalesovo Beam** | **58.75** | **350** | P | **P** | **00 17 33.2** | **-0.1** |
| | 2.3nm,0.5s,baz=186,slow=6.1,SNR=11 | | | | | | |
| **BVAR** | **Borovoye Array** | **61.64** | **340** | P | **P** | **00 17 52.6** | **-0.6** |
| | 1.1nm,0.7s,baz=142,slow=7.2 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.95** | **332** | *e*P | **P** | **00 18 01.7** | **-0.3** |
| | 1.5nm,0.7s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.22** | **313** | P | **P** | **00 19 11.9** | **-0.9** |
| | 0.7nm,0.9s,baz=119,slow=5.1,SNR=2.9 | | | | | | |
| **FINES** | **FINESS Array B** | **85.44** | **332** | P | **P** | **00 20 13.4** | **+0.7** |
| | 0.7nm,0.4s,baz=122,slow=6.9,SNR=8.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.21** | **38** | PKPbc | **PKPab** | **00 27 17.7** | **+0.4** |
| | 1.0nm,0.7s,baz=272,slow=1.1,SNR=12 | | | | | | |

**IDC 31 00:13:57.0±7.8, 5.48°S×146.89°E, h148km±75km, mb3.2/1, mb1 3.4/3, mb1mx3.0/33, mbtmp3.7/3, Error ellipse: s-maj=99.0km s-min=51.0km az=128.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.91** | **176** | P | Pn | 00 14 57.5 | +1.5 |
| | 1.4nm,0.3s,baz=51,slow=11,SNR=10 | | | | | | |
| PMG | | | | S | Sn | 00 15 41.8 | -0.2 |
| | 1.9nm,0.3s,baz=209,slow=19,SNR=4.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.86** | **219** | P | P | 00 18 06.7 | +0.9 |
| | 0.6nm,0.3s,baz=38,slow=11,SNR=8.7 | | | | | | |
| **ASAR** | **Alice Springs** | **21.98** | **213** | P | P | 00 18 39.8 | +0.4 |
| | 1.8nm,0.5s,baz=35,slow=12,SNR=25 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **144.85** | **285** | PKP | PKPbc | 00 33 15.0 | -1.9 |
| | 0.1nm,0.5s,baz=61,slow=3.1,SNR=3.2 | | | | | | |

*ATH **31** 00:19:39.0, 41.42°N×21.03°E, h8km±4km, MD3.2/11*
*SKO **31** 00:19:39.7, 41.31°N×21.03°E, h24km, M1.5, ML2.2*
*CSEM **31** 00:19:41.1±0.2, 41.32°N×21.11°E, h2km, ML2.0, Error ellipse: s-maj=4.5km s-min=3.7km az=93.0*
*BEO **31** 00:19:42.4±0.4, 41.38°N×21.09°E, h0km, ML2.0/5*

**ISC 31 00:19:40.4±1.1, 41.36°N±0.02×21.10°E±0.02, h1km±11km, n46, σ0s82/68, 4C, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OHR** | **Ohrid** | **0.34** | **223** | ↑ *i* Pg | **Pg** | **00 19 46.3** | **-0.5** |
| OHR | | | | *i* Sg | **Sg** | **00 19 51.3** | **+0.2** |
| OHR | | | | *e*Lg | Lg | 00 19 51.5 | |
| | comp=E,439nm,0.4s | | | | | | |
| OHR | | | | *e*Lg | Lg | 00 19 51.6 | |
| | comp=N,392nm,0.3s | | | | | | |
| **OHR** | **Ohrid** | **0.34** | **223** | ↑ *i* Pg | **Pg** | **00 19 46.3** | **-0.5** |
| OHR | | | | *i* Sg | **Sg** | **00 19 51.3** | **+0.2** |
| OHR | | | | *e*Lg | Lg | 00 19 51.5 | |
| | comp=N,392nm,0.3s | | | | | | |
| **FNA** | **Florina** | **0.61** | **160** | *e*PG | **Pg** | **00 19 51.9** | **-0.1** |
| FNA | | | | *e*SB | **Sg** | **00 20 00.9** | **+1.0** |
| **FNA** | **Florina** | **0.61** | **160** | *e*Pg | **Pg** | **00 19 51.9** | **-0.1** |
| FNA | | | | *e*Sb | **Sg** | **00 20 00.9** | **+1.0** |
| **SKO** | **Skopje** | **0.67** | **22** | *i* Pg | **Pb** | **00 19 54.3** | **-0.6** |
| SKO | | | | *i* Sg | **Sb** | **00 20 04.0** | **-0.5** |
| SKO | | | | *e*Lg | Lg | 00 20 07.0 | |
| | comp=N,14nm,0.4s | | | | | | |
| | | | | *e*Lg | Lg | 00 20 07.3 | |
| | comp=E,7.0nm,0.2s | | | | | | |
| **SKO** | **Skopje** | **0.67** | **22** | *i* Pg | **Pb** | **00 19 54.2** | **-0.6** |
| SKO | | | | *i* Sg | **Sb** | **00 20 04.0** | **-0.5** |
| SKO | | | | *e*Lg | Lg | 00 20 07.0 | |
| | comp=E,14nm,0.4s | | | | | | |
| **TIR** | **Tirane** | **0.93** | **270** | *e*Pg | **Pg** | **00 19 58.4** | **+0.2** |
| TIR | | | | *i* Sg | **Sb** | **00 20 11.7** | **-0.5** |
| **TIR** | **Tirane** | **0.93** | **270** | *e*Pg | **Pg** | **00 19 58.4** | **+0.2** |
| TIR | | | | *i* Sg | **Sb** | **00 20 11.7** | **-0.5** |
| **NEST** | **Nestorio** | **0.94** | **183** | *e*PG | **Pg** | **00 19 57.6** | **-0.8** |
| NEST | | | | *e*SB | **Sb** | **00 20 12.6** | **+0.1** |
| **NEST** | **Nestorio** | **0.94** | **183** | *e*Pg | **Pg** | **00 19 57.6** | **-0.8** |
| NEST | | | | *e*Sb | **Sb** | **00 20 12.6** | **+0.1** |
| **GRG** | **Griva** | **1.06** | **112** | *e*PG | **Pg** | **00 20 00.1** | **-0.5** |
| GRG | | | | *e*SB | **Sb** | **00 20 16.4** | **+0.6** |
| **GRG** | **Griva** | **1.06** | **112** | *e*Pg | **Pg** | **00 20 00.1** | **-0.5** |
| GRG | | | | *e*Sb | **Sb** | **00 20 16.4** | **+0.6** |
| **VAY** | **Valandovo** | **1.10** | **91** | *i* Pg | **Pb** | **00 20 02.6** | **+0.3** |
| VAY | | | | *i* Sg | **Sn** | **00 20 18.3** | **-0.5** |
| VAY | | | | *e*Lg | Lg | 00 20 21.2 | |
| | comp=E,18nm,0.4s | | | | | | |
| VAY | | | | *e*Lg | Lg | 00 20 22.1 | |
| | comp=N,22nm,0.6s | | | | | | |
| **VAY** | **Valandovo** | **1.10** | **91** | *e*Pg | **Pb** | **00 20 02.2** | **-0.1** |
| VAY | | | | *e*Sg | **Sn** | **00 20 18.4** | **-0.5** |
| **VAY** | **Valandovo** | **1.10** | **91** | *i* Pg | **Pb** | **00 20 02.5** | **+0.3** |
| VAY | | | | *i* Sg | **Sn** | **00 20 18.3** | **-0.5** |
| VAY | | | | *e*Lg | Lg | 00 20 21.1 | |
| | comp=N,18nm,0.4s | | | | | | |
| **KZN** | **Kozani** | **1.16** | **154** | *e*PG | **Pg** | **00 20 02.4** | **-0.3** |
| KZN | | | | *e*SB | **Sn** | **00 20 20.6** | **+0.2** |
| **KZN** | **Kozani** | **1.16** | **154** | *e*Pg | **Pg** | **00 20 02.4** | **-0.3** |
| KZN | | | | *e*Sb | **Sn** | **00 20 20.6** | **+0.2** |
| **KNT** | **Kendrikon** | **1.37** | **98** | *e*PB | **Pn** | **00 20 06.4** | **-0.2** |
| **KNT** | **Kendrikon** | **1.37** | **98** | *e*Pb | **Pn** | **00 20 06.4** | **-0.2** |
| **BARS** | **Barje** | **1.55** | **201** | ↑ *i* Pg | **Pb** | **00 20 09.4** | **-0.5** |
| BARS | | | | *e*Sg | **Sg** | **00 20 30.6** | **+0.3** |
| **BARS** | **Barje** | **1.55** | **201** | ↑ *i* Pg | **Pb** | **00 20 09.4** | **-0.5** |
| BARS | | | | *e*Sg | **Sg** | **00 20 30.6** | **+0.3** |
| **PDG** | **Podgorica** | **1.75** | **308** | *e*Pn | **Pg** | **00 20 13.4** | **-0.5** |
| PDG | | | | *i* Sg | **Sg** | **00 20 37.8** | **+1.3** |
| **PDG** | **Podgorica** | **1.75** | **308** | *e*Pn | **Pg** | **00 20 13.4** | **-0.5** |
| PDG | | | | *i* Sg | **Sg** | **00 20 37.8** | **+1.3** |
| **SGD** | **Sagiada** | **1.86** | **201** | *e*PG | **Pb** | **00 20 14.5** | **-0.7** |
| **SGD** | **Sagiada** | **1.86** | **201** | *e*Pg | **Pb** | **00 20 14.5** | **-0.7** |
| **IGT** | **Igoumenitsa** | **1.91** | **198** | *e*PN | **Pn** | **00 20 15.0** | **+0.9** |
| **IGT** | **Igoumenitsa** | **1.91** | **198** | *e*Pn | **Pn** | **00 20 15.0** | **+0.9** |
| **KEK** | **Kerkira** | **1.92** | **212** | *e*PN | **Pn** | **00 20 14.8** | **+0.6** |
| **KEK** | **Kerkira** | **1.92** | **212** | *e*Pn | **Pn** | **00 20 14.8** | **+0.6** |
| **NVR** | **Nevrokopi** | **2.08** | **89** | *e*PN | **Pn** | **00 20 16.9** | **+0.5** |
| **NVR** | **Nevrokopi** | **2.08** | **89** | *e*Pn | **Pn** | **00 20 16.9** | **+0.5** |
| **SJES** | **Sjenica** | **2.08** | **337** | *e*Pn | **Pn** | **00 20 17.4** | **+0.9** |
| SJES | | | | *e*Sn | **Sb** | **00 20 44.9** | **-0.5** |
| **DSL** | **Palaion Diasel** | **2.22** | **180** | *e*PN | **Pb** | **00 20 20.4** | **-0.9** |
| **DSL** | **Palaion Diasel** | **2.22** | **180** | *e*Pn | **Pb** | **00 20 20.4** | **-0.9** |
| **ZAPS** | **Zavoj** | **2.23** | **30** | *e*Pn | **Pb** | **00 20 20.2** | **-1.2** |
| **ZAPS** | **Zavoj** | **2.23** | **30** | *e*Pn | **Pb** | **00 20 20.2** | **-1.2** |
| **IVAS** | **Ivanjica** | **2.33** | **343** | *e*Pn | **Pn** | **00 20 21.1** | **+1.2** |
| **IVAS** | **Ivanjica** | **2.33** | **343** | *e*Pn | **Pn** | **00 20 21.1** | **+1.2** |
| **AGG** | **Agios Georgios** | **2.51** | **158** | *e*PB | **Pn** | **00 20 22.7** | **+0.3** |
| **AGG** | **Agios Georgios** | **2.51** | **158** | *e*Pb | **Pn** | **00 20 22.7** | **+0.3** |
| **GRUS** | **Gruza** | **2.55** | **354** | *e*Pn | **Pb** | **00 20 25.8** | **-1.1** |
| **GRUS** | **Gruza** | **2.55** | **354** | *e*Pn | **Pb** | **00 20 25.8** | **-1.1** |
| **BOLS** | **Boljevac** | **2.55** | **14** | *e*Pn | **Pb** | **00 20 25.2** | **-1.7** |
| **BOLS** | **Boljevac** | **2.55** | **14** | *e*Pn | **Pb** | **00 20 25.2** | **-1.7** |
| **KUBS** | **Kucevo** | **3.08** | **8** | *e*Pn | **Pn** | **00 20 32.4** | **+2.2** |
| **KUBS** | **Kucevo** | **3.08** | **8** | *e*Pn | **Pn** | **00 20 32.4** | **+2.2** |

*ISK **31** 00:23:09.8, 38.15°N×39.01°E, h2km, MD3.5*
*DDA **31** 00:23:10.1, 38.13°N×39.02°E, h5km, Md3.0*
*CSEM **31** 00:23:10.8±0.2, 38.14°N×39.00°E, h2km, MD3.5, Error ellipse: s-maj=5.5km s-min=4.3km az=1.0*

**ISC 31 00:23:11.2±1.0, 38.13°N±0.02×39.01°E±0.02, h6km±11km, n50, σ0s83/69, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SVRC** | **Sivrice-ELAZID** | **0.34** | **43** | *e*PG | **Pg** | **00 23 17.2** | **-0.7** |
| SVRC | | | | *e*SG | **Sg** | **00 23 22.3** | **-0.1** |
| **SVRC** | **Sivrice-ELAZID** | **0.34** | **43** | *e*Pg | **Pg** | **00 23 17.2** | **-0.7** |
| SVRC | | | | *e*Sg | **Sg** | **00 23 22.3** | **-0.1** |
| **ELZG** | **Elazig** | **0.37** | **357** | *i* P | **Pg** | **00 23 18.0** | **-0.4** |
| ELZG | | | | *i* S | **Sg** | **00 23 24.1** | **+0.8** |
| **ELZG** | **Elazig** | **0.37** | **357** | P | **Pg** | **00 23 18.0** | **-0.4** |
| ELZG | | | | S | **Sg** | **00 23 24.1** | **+0.8** |
| **MALT** | **Malatya** | **0.49** | **292** | *e*PG | **Pg** | **00 23 20.3** | **-0.5** |
| MALT | | | | *e*SG | **Sg** | **00 23 28.0** | **+0.7** |
| **MALT** | **Malatya** | **0.49** | **292** | *e*Pg | **Pg** | **00 23 20.3** | **-0.5** |
| MALT | | | | *e*Sg | **Sg** | **00 23 28.0** | **+0.7** |
| **URFA** | **Urfa** | **0.71** | **192** | *e*PG | **Pg** | **00 23 24.4** | **-0.4** |
| URFA | | | | *e*SG | **Sb** | **00 23 35.3** | **-0.6** |
| **URFA** | **Urfa** | **0.71** | **192** | *e*Pg | **Pg** | **00 23 24.4** | **-0.4** |
| URFA | | | | *e*Sg | **Sb** | **00 23 35.3** | **-0.6** |
| **PTK** | **Pertek** | **0.81** | **21** | *e*PG | **Pg** | **00 23 26.1** | **-0.8** |
| **PTK** | **Pertek** | **0.81** | **21** | *e*Pg | **Pg** | **00 23 26.1** | **-0.8** |
| **AKCD** | **Akcadag** | **0.87** | **281** | *i* P | **Pg** | **00 23 27.3** | **-0.7** |
| AKCD | | | | *i* S | **Sg** | **00 23 40.2** | **+0.8** |
| **AKCD** | **Akcadag** | **0.87** | **281** | P | **Pg** | **00 23 27.3** | **-0.7** |
| AKCD | | | | S | **Sg** | **00 23 40.2** | **+0.8** |
| **DYBB** | **Diyarbakir** | **0.91** | **101** | *e*PG | **Pg** | **00 23 28.2** | **-0.4** |
| **DIY** | **Diyarbakir** | **0.99** | **103** | *e*Pg | **Pg** | **00 23 28.2** | **-2.0** |
| **DARE** | **Darende-Malaty** | **1.28** | **291** | *e*PN | **Pn** | **00 23 34.0** | **-1.7** |
| **DARE** | **Darende-Malaty** | **1.28** | **291** | *e*Pn | **Pn** | **00 23 34.0** | **-1.7** |
| **MAZI** | **Mazidag** | **1.32** | **120** | *e*PN | **Pn** | **00 23 35.9** | **-0.4** |
| **MAZI** | **Mazidag** | **1.32** | **120** | *e*Pn | **Pn** | **00 23 35.9** | **-0.4** |
| **ILIC** | **ilic-Erzincan** | **1.36** | **345** | *e*PN | **Pn** | **00 23 36.1** | **-0.8** |
| **ILIC** | **ilic-Erzincan** | **1.36** | **345** | *e*Pn | **Pn** | **00 23 36.1** | **-0.8** |
| **BINT** | **Bingol** | **1.38** | **57** | *e*Pn | **Pg** | **00 23 39.4** | **+1.8** |
| **GZT** | **Gaziantep** | **1.39** | **236** | P | **Pg** | **00 23 38.2** | **+0.4** |
| GZT | | | | S | **Sg** | **00 23 57.6** | **+1.9** |
| **CUGUR** | **Gurin_S¨VAS** | **1.49** | **294** | P | **Pg** | **00 23 40.8** | **+1.0** |
| **BNGB** | **Bing¨l** | **1.56** | **56** | *e*PN | **Pn** | **00 23 39.4** | **-0.2** |
| **MARD** | **Mardin** | **1.62** | **120** | P | **Pn** | **00 23 40.6** | **+0.1** |
| MARD | | | | S | **Sg** | **00 24 03.2** | **-0.1** |
| **CUKAN** | **kangal_SIVAS** | **1.69** | **315** | P | **Pg** | **00 23 43.2** | **-0.4** |
| CUKAN | | | | S | **Sg** | **00 24 05.7** | **+0.2** |
| **SVAN** | **Silvan-Diyarba** | **1.72** | **89** | *e*PN | **Pn** | **00 23 41.9** | **+0.1** |
| **SVAN** | **Silvan-Diyarba** | **1.72** | **89** | *e*Pn | **Pn** | **00 23 41.9** | **+0.1** |
| **KMRS** | **Kahramanmaras** | **1.79** | **250** | *e*PN | **Pn** | **00 23 42.5** | **-0.1** |
| **KMRS** | **Kahramanmaras** | **1.79** | **250** | *e*Pn | **Pn** | **00 23 42.5** | **-0.1** |
| **BEST** | **Besiri** | **1.80** | **97** | P | **Pn** | **00 23 42.4** | **-0.5** |
| BEST | | | | S | **Sb** | **00 24 08.1** | **+0.6** |
| **HCB** | **Kahramanmara¯** | **1.84** | **245** | P | **Pn** | **00 23 42.7** | **-0.7** |
| HCB | | | | S | **Sn** | **00 24 06.6** | **-0.5** |
| **BTMT** | **Batman** | **1.95** | **87** | *e*PN | **Pn** | **00 23 45.2** | **+0.2** |
| **BTMT** | **Batman** | **1.95** | **87** | *e*Pn | **Pn** | **00 23 45.2** | **+0.2** |
| **KUZU** | **Kuzuini** | **2.05** | **229** | *i* P | **Pg** | **00 23 49.9** | **-0.7** |
| KUZU | | | | *i* S | **Sg** | **00 24 17.0** | **-0.2** |
| **KUZU** | **Kuzuini** | **2.05** | **229** | P | **Pg** | **00 23 49.9** | **-0.7** |
| KUZU | | | | S | **Sg** | **00 24 17.0** | **-0.2** |
| **KAMA** | **Osmaniye** | **2.09** | **244** | P | **Pg** | **00 23 50.5** | **-0.7** |
| KAMA | | | | S | **Sg** | **00 24 19.4** | **+1.2** |
| **VRTB** | **Varto-Mus** | **2.17** | **61** | *e*PN | **Pn** | **00 23 48.1** | **+0.1** |
| **VRTB** | **Varto-Mus** | **2.17** | **61** | *e*Pn | **Pn** | **00 23 48.1** | **+0.1** |
| **SVSK** | **Karacayir** | **2.37** | **319** | *e*PN | **Pn** | **00 23 50.6** | **0.0** |
| **SVSK** | **Karacayir** | **2.37** | **319** | *e*Pn | **Pn** | **00 23 50.6** | **0.0** |
| **SIRN** | **S¨¨rnak** | **2.77** | **102** | P | **Pb** | **00 24 01.2** | **+0.1** |
| SIRN | | | | S | **Sg** | **00 24 38.9** | **-1.2** |
| **SIRT** | **Sirnak** | **2.79** | **102** | *e*PN | **Pn** | **00 23 57.6** | **+1.2** |
| **SIRT** | **Sirnak** | **2.79** | **102** | *e*Pn | **Pn** | **00 23 57.6** | **+1.2** |
| **TAHT** | **Tahtakopru-Hat** | **2.86** | **233** | *e*PN | **Pn** | **00 23 58.1** | **+0.8** |
| **TAHT** | **Tahtakopru-Hat** | **2.86** | **233** | *e*Pn | **Pn** | **00 23 58.1** | **+0.8** |
| **CUKT** | **Cukurca** | **3.75** | **102** | *e*PN | **Pn** | **00 24 11.0** | **+1.3** |
| **CUKT** | **Cukurca** | **3.75** | **102** | *e*Pn | **Pn** | **00 24 11.0** | **+1.3** |
| **HKR** | **Hakkari** | **3.78** | **97** | *e*PN | **Pn** | **00 24 11.4** | **+1.2** |
| **HKR** | **Hakkari** | **3.78** | **97** | *e*Pn | **Pn** | **00 24 11.4** | **+1.2** |

**IDC 31 00:43:49.8±4.6, 3.88°S×99.29°E, h0km, mb3.5/5, mb1 3.6/5, mb1mx3.3/43, mbtmp3.5/5, Error ellipse: s-maj=193.3km s-min=25.1km az=55.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **37.71** | **118** | P | P | 00 51 06.8 | -0.7 |
| | 0.3nm,0.4s,baz=304,slow=9.1,SNR=2.9 | | | | | | |
| **ASAR** | **Alice Springs** | **38.77** | **124** | P | P | 00 51 16.3 | -0.2 |
| | 0.3nm,0.9s,baz=298,slow=8.0,SNR=3.1 | | | | | | |
| **SONM** | **Songino Array** | **51.87** | **6** | P | P | 00 53 00.4 | +0.2 |
| | 0.5nm,0.7s,baz=191,slow=7.0,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.64** | **345** | P | P | 00 53 05.8 | 0.0 |
| | 0.5nm,0.8s,baz=138,slow=5.0,SNR=5.0 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.87** | **350** | P | P | 00 53 49.0 | -1.3 |
| | 0.6nm,0.5s,baz=160,slow=4.7,SNR=3.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.61** | **38** | PKPbc | PKPab | 01 03 35.1 | -0.2 |
| | 0.3nm,0.8s,baz=318,slow=1.2,SNR=3.6 | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MSZ | | | | AML | AML | 01 01 25.8 | |
| **JCZ** | **Jackson Bay** | **0.82** | **62** | P* | Pb | 01 01 33.1 | -0.5 |
| JCZ | | | | AML | AML | 01 01 48.6 | |
| JCZ | | | | AML | AML | 01 01 49.7 | |
| **MLZ** | **Mavora Lakes** | **0.93** | **162** | P* | Pg | 01 01 34.4 | -0.3 |
| MLZ | | | | AML | AML | 01 01 51.4 | |
| MLZ | | | | AML | AML | 01 01 52.2 | |
| **WKZ** | **Wanaka** | **0.97** | **113** | P* | Pg | 01 01 35.0 | -0.4 |
| WKZ | | | | S* | Sg | 01 01 48.1 | +0.1 |
| WKZ | | | | AML | AML | 01 01 48.9 | |
| WKZ | | | | AML | AML | 01 01 49.0 | |
| WKZ | | | | AML | AML | 01 01 49.0 | |
| **DCZ** | **Deep Cove** | **1.10** | **203** | P* | Pg | 01 01 37.2 | -0.6 |
| DCZ | | | | S* | Sg | 01 01 52.4 | +0.3 |
| DCZ | | | | AML | AML | 01 01 52.8 | |
| DCZ | | | | AML | AML | 01 01 52.8 | |
| DCZ | | | | AML | AML | 01 01 57.7 | |
| **EAZ** | **Earnscleugh** | **1.34** | **125** | PN | Pn | 01 01 41.5 | -0.6 |
| EAZ | | | | AML | AML | 01 02 02.6 | |
| EAZ | | | | AML | AML | 01 02 02.6 | |
| EAZ | | | | AML | AML | 01 02 04.9 | |
| EAZ | | | | AML | AML | 01 02 04.9 | |
| **WHZ** | **Wether Hill Ro** | **1.44** | **175** | PN | Pn | 01 01 42.8 | -0.7 |
| WHZ | | | | AML | AML | 01 02 06.1 | |
| WHZ | | | | AML | AML | 01 02 08.8 | |
| **FOZ** | **Fox Glacier** | **1.66** | **58** | PN | Pn | 01 01 46.8 | +0.4 |
| FOZ | | | | AML | AML | 01 02 18.5 | |
| FOZ | | | | AML | AML | 01 02 18.5 | |
| FOZ | | | | AML | AML | 01 02 18.9 | |
| FOZ | | | | AML | AML | 01 02 18.9 | |
| **LBZ** | **Lake Benmore** | **1.74** | **88** | PN | Pb | 01 01 49.2 | +0.1 |
| LBZ | | | | AML | AML | 01 02 13.6 | |
| LBZ | | | | AML | AML | 01 02 14.8 | |
| **PYZ** | **Puysegur Point** | **1.87** | **204** | PN | Pn | 01 01 48.7 | -0.6 |
| **TUZ** | **Tuapeka** | **1.99** | **139** | PN | Pn | 01 01 51.7 | +0.6 |
| TUZ | | | | AML | AML | 01 02 20.3 | |
| TUZ | | | | AML | AML | 01 02 20.3 | |
| TUZ | | | | AML | AML | 01 02 22.1 | |
| TUZ | | | | AML | AML | 01 02 22.2 | |
| **ODZ** | **Otahua Downs** | **2.14** | **107** | PN | Pn | 01 01 53.7 | +0.7 |
| ODZ | | | | AML | AML | 01 02 25.4 | |
| ODZ | | | | AML | AML | 01 02 25.4 | |
| ODZ | | | | AML | AML | 01 02 26.8 | |
| ODZ | | | | AML | AML | 01 02 26.8 | |
| **SYZ** | **Scrubby Hill** | **2.29** | **155** | PN | Pn | 01 01 55.8 | +0.7 |
| SYZ | | | | AML | AML | 01 02 28.0 | |
| **APZ** | **The Paps** | **2.38** | **176** | PN | Pn | 01 01 57.5 | +1.1 |
| **RPZ** | **Rata Peaks** | **2.49** | **74** | AML | AML | 01 02 38.3 | |
| RPZ | | | | AML | AML | 01 02 39.8 | |
| **WVZ** | **Waitaha Valley** | **2.56** | **58** | AML | AML | 01 02 41.1 | |

*NEIC **31** 01:02:05.3, 38°.63N×119°.54W, h12km, mb4.2/8, ML4.6(REN), MW4.3(BRK), After REN.*

*NEIC Felt [IV] at Topaz and [III] at Alta, Arnold, Coleville, Columbia, Grizzly Flats, Markleeville, Mountain Ranch, San Andreas, Twain Harte, Volcano and West Point. Felt [III] at Gardnerville, Minden, Smith and Wellington, Nevada. Felt in much of east-central California and in the Reno-Fallon-Yerington area, Nevada.*

*IDC **31** 01:02:06.6±1.8, 38°.60N×119°.44W, h0km, mb3.7/3, mb1 4.0/4, mb1mx3.7/26, mbtmp3.7/4, ML3.5/1, MS3.7/4, Ms1 3.7/4, ms1mx3.1/24, Error ellipse: s-maj=31.8km s-min=14.4km az=31.0*

**ISC 31 01:02:06.4±0.7, 38°61N±0°.02×119°46W±0°.02, h8km±4km, n162, σ2s08/201, mb4.2/8, MS3.9/4, California-Nevada border region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NVAR** | **Mina Array Bea** | **0.92** | **101** | Pg | **Pg** | **01 02 24.0** | **-0.1** |
| | 3µm,0.3s,baz=272,slow=18 | | | | | | |
| NVAR | | | | LR | LR | 01 02 34.1 | |
| | comp=Z,262nm,20.3s,baz=40,slow=27 | | | | | | |
| NVAR | | | | Lg | Lg | 01 02 40.5 | |
| | 2µm,0.3s,baz=260,slow=30,SNR=19 | | | | | | |
| **NV01** | **Mina Array Sit** | **0.92** | **101** | *e*Pg | **Pg** | **01 02 21.4** | **-2.8** |
| **CMB** | **Columbia Colle** | **0.93** | **232** | *e*Pg | **Pg** | **01 02 21.7** | **-2.5** |
| CMB | | | | *e*Sg | **Sg** | **01 02 33.6** | **-2.6** |
| **MLAC** | **Mammoth Lakes** | **1.09** | **153** | P | **Pg** | **01 02 27.3** | **-0.1** |
| | baz=1.1 | | | | | | |
| MLAC | | | | S | **Sn** | **01 02 43.6** | **+0.1** |
| | baz=1.1 | | | | | | |
| **MTUM** | **Tungsten Hills** | **1.44** | **150** | *e*Pn | **Pb** | **01 02 33.2** | **-0.3** |
| **OHCM** | **Honcut** | **1.74** | **295** | *e*Pn | **Pn** | **01 02 34.9** | **-1.9** |
| **TIN** | **Tinemaha** | **1.83** | **147** | Pb | **Pb** | **01 02 40.4** | **+0.3** |
| | baz=1.9 | | | | | | |
| TIN | | | | Sb | **Sg** | **01 03 06.3** | **+1.1** |
| | baz=1.9 | | | | | | |
| **RCTC** | **Rector, Farmer** | **2.30** | **176** | P | **Pn** | **01 02 45.4** | **+0.9** |
| | baz=2.3 | | | | | | |
| RCTC | | | | Sb | **Sg** | **01 03 18.3** | **-2.0** |
| | baz=2.3 | | | | | | |
| **GRAC** | **Grapevine Rang** | **2.30** | **133** | P | **Pn** | **01 02 45.0** | **+0.3** |
| | baz=2.4 | | | | | | |
| **CWC** | **Cottonwood Cre** | **2.42** | **153** | Pb | **Pb** | **01 02 51.3** | **+1.0** |
| | baz=2.5 | | | | | | |
| **SAO** | **San Andreas Ge** | **2.42** | **221** | *e*Pn | **Pn** | **01 02 46.1** | **-0.1** |
| **NSHM** | **Saint Helena R** | **2.47** | **269** | *e*Pn | **Pn** | **01 02 45.7** | **-1.2** |
| NSHM | | | | *e*Sn | Sn | 01 03 10.1 | -7.1 |
| **O03D** | **Paynes Creek** | **2.48** | **314** | P | **Pn** | **01 02 46.3** | **-0.8** |
| | baz=2.4,SNR=1000 | | | | | | |
| O03D | | | | Sb | **Sn** | **01 03 19.9** | **+2.4** |
| | baz=2.4 | | | | | | |
| **LRV** | **Little Rabbit** | **2.51** | **210** | *e*Pn | **Pn** | **01 02 48.1** | **+0.7** |
| **BMN** | **Battle Mountai** | **2.51** | **43** | *e*Pn | **Pn** | **01 02 46.2** | **-1.4** |
| BMN | | | | *e*Pg | **Pb** | **01 02 51.1** | **-0.8** |
| BMN | | | | *e*Sg | **Sb** | **01 03 24.8** | **+1.8** |
| **SAC** | **San Andreas** | **2.55** | **247** | *e*Pn | **Pn** | **01 02 47.5** | **-0.4** |
| SAC | | | | *e*Sn | **Sn** | **01 03 18.6** | **-0.5** |
| **WLHM** | **Little Horse** | **2.61** | **159** | *e*Pn | **Pn** | **01 02 50.3** | **+1.1** |
| **MCCM** | **Marconi Confer** | **2.73** | **261** | *e*Pn | **Pn** | **01 02 49.5** | **-0.9** |
| MCCM | | | | *e*Sn | **Sn** | **01 03 21.1** | **-2.5** |
| **GASB** | **Alder Springs** | **2.74** | **293** | *e*Pn | **Pn** | **01 02 49.8** | **-1.0** |
| **DAC** | **Darwin (Calif)** | **2.76** | **147** | *e*Pn | **Pn** | **01 02 52.2** | **+1.1** |
| DAC | | | | *e*Pg | **Pg** | **01 02 58.0** | **-1.2** |
| DAC | | | | *e*Sg | **Sg** | **01 03 35.2** | **+0.2** |
| **VES** | **Vestal, Richgr** | **2.78** | **174** | P | **Pn** | **01 02 52.1** | **+1.0** |
| | baz=2.8 | | | | | | |
| VES | | | | Sb | **Sb** | **01 03 32.6** | **+2.2** |
| | baz=2.8 | | | | | | |
| **HOPS** | **Hopland** | **2.85** | **279** | *e*Pn | **Pn** | **01 02 51.3** | **-0.8** |
| **RCWM** | **Renegade Canyo** | **3.02** | **151** | *e*Pn | **Pn** | **01 02 56.0** | **+1.4** |
| RCWM | | | | *e*Pg | **Pb** | **01 03 02.0** | **+1.6** |
| **TPNV** | **Topopah Spring** | **3.03** | **122** | P | **Pn** | **01 02 55.3** | **+0.5** |
| | baz=3.1 | | | | | | |
| **TPNV** | **Topopah Spring** | **3.03** | **122** | *e*Pn | **Pn** | **01 02 55.2** | **+0.5** |
| TPNV | | | | *e*Pg | **Pb** | **01 03 01.8** | **+1.1** |
| **ISA** | **Isabella** | **3.04** | **165** | Pb | **Pb** | **01 03 00.6** | **-0.2** |
| | baz=3.1 | | | | | | |
| ISA | | | | Sb | **Sb** | **01 03 40.9** | **+2.8** |
| | baz=3.1 | | | | | | |
| **ISA** | **Isabella** | **3.04** | **165** | *e*Pn | **Pn** | **01 02 56.7** | **+1.9** |
| ISA | | | | *e*Sg | **Sb** | **01 03 40.7** | **+2.6** |
| **R11A** | **Troy Canyon, C** | **3.05** | **94** | P | **Pn** | **01 02 54.2** | **-0.8** |
| | baz=3.1 | | | | | | |
| R11A | | | | Sb | **Sg** | **01 03 42.4** | **-1.9** |
| | baz=3.1 | | | | | | |
| **R11A** | **Troy Canyon, C** | **3.05** | **94** | *e*Pn | **Pn** | **01 02 54.1** | **-0.9** |
| R11A | | | | *e*Pg | **Pg** | **01 03 03.1** | **-1.7** |
| R11A | | | | *e*Sg | **Sg** | **01 03 42.7** | **-1.7** |
| **WDC** | **Whiskeytown Da** | **3.09** | **311** | *e*Pn | **Pn** | **01 02 54.0** | **-1.4** |
| WDC | | | | *e*Sg | **Sn** | **01 03 36.2** | **+3.6** |
| **KIPM** | **Iron Peak** | **3.35** | **292** | *e*Pn | **Pn** | **01 02 59.1** | **0.0** |
| **MOD** | **Modoc** | **3.35** | **349** | *e*Pn | **Pn** | **01 02 59.3** | **+0.1** |
| MOD | | | | *e*Pg | **Pb** | **01 03 05.5** | **-0.7** |
| **KCPM** | **Cahto Peak** | **3.38** | **290** | *e*Pn | **Pn** | **01 02 59.2** | **-0.3** |
| **LRMC** | **Laurel Mountai** | **3.43** | **155** | Sb | **Sg** | **01 03 54.7** | **-1.9** |
| | baz=3.5 | | | | | | |
| **N02D** | **Trinity Center** | **3.44** | **314** | P | **Pn** | **01 02 58.8** | **-1.6** |
| | baz=3.4,SNR=34 | | | | | | |
| **ARVC** | **Arvin** | **3.51** | **172** | P | **Pn** | **01 03 02.9** | **+1.7** |
| | baz=3.6 | | | | | | |
| ARVC | | | | Sb | **Sg** | **01 03 55.7** | **-3.4** |
| | baz=3.6 | | | | | | |
| **M04C** | **Macdoel** | **3.66** | **331** | P | **Pn** | **01 03 03.9** | **+0.5** |
| | baz=3.6,SNR=7.5 | | | | | | |
| M04C | | | | Sb | **Sb** | **01 03 57.4** | **+1.5** |
| | baz=3.6 | | | | | | |
| **KMRM** | **Mail Ridge** | **3.67** | **297** | *e*Pn | **Pn** | **01 03 04.7** | **+1.2** |
| **PKM** | **Peak Mountain** | **3.71** | **185** | P | **Pn** | **01 03 05.0** | **+0.8** |
| | baz=3.8 | | | | | | |
| **M02C** | **Callahan** | **3.81** | **318** | P | **Pn** | **01 03 05.3** | **-0.2** |
| | baz=3.7,SNR=65 | | | | | | |
| **WVOR** | **Wild Horse Val** | **3.87** | **9** | *e*Pn | **Pn** | **01 03 06.7** | **+0.4** |
| WVOR | | | | *e*Pg | **Pb** | **01 03 16.1** | **+1.1** |
| WVOR | | | | *e*Sg | **Sg** | **01 04 07.8** | **-3.0** |
| **ELK** | **Elko** | **3.89** | **55** | *e*Pn | **Pn** | **01 03 05.6** | **-1.1** |
| ELK | | | | *e*Sn | **Sn** | **01 03 54.2** | **+1.5** |
| ELK | | | | *e*Sg | **Sb** | **01 04 07.3** | **+4.6** |
| **EDW2** | **Edwards Air Fo** | **3.90** | **162** | Sb | **Sg** | **01 04 07.5** | **-4.2** |
| | baz=4.0 | | | | | | |
| **GSC** | **Goldstone** | **3.92** | **146** | P | **Pn** | **01 03 08.3** | **+1.3** |
| | baz=4.0 | | | | | | |
| **GSC** | **Goldstone** | **3.92** | **146** | *e*Pn | **Pn** | **01 03 08.0** | **+1.0** |
| GSC | | | | *e*Pg | **Pg** | **01 03 18.8** | **-2.8** |
| GSC | | | | *e*Sg | **Sg** | **01 04 12.2** | **-0.1** |
| **YBH** | **Yreka Blue Hor** | **3.99** | **322** | *e*Pn | **Pn** | **01 03 08.2** | **+0.3** |
| YBH | | | | *e*Pg | **Pb** | **01 03 18.2** | **+1.1** |
| YBH | | | | *e*Sg | **Sb** | **01 04 08.6** | **+3.1** |
| **KHMM** | **Horse Mountain** | **4.00** | **306** | *e*Pn | **Pn** | **01 03 08.3** | **+0.3** |
| **SHPR** | **Sheep Range** | **4.01** | **120** | *e*Pn | **Pn** | **01 03 08.9** | **+0.7** |
| SHPR | | | | *e*Pg | **Pg** | **01 03 20.5** | **-2.7** |
| SHPR | | | | *e*Sn | **Sn** | **01 03 58.8** | **+3.4** |
| SHPR | | | | *e*Sg | **Sg** | **01 04 15.5** | **+0.4** |
| **OSI** | **Osito Adit** | **4.03** | **171** | Sb | **Sb** | **01 04 09.0** | **+2.5** |
| | baz=4.1 | | | | | | |
| **OSI** | **Osito Adit** | **4.03** | **171** | *e*Pn | **Pn** | **01 03 10.5** | **+2.1** |
| OSI | | | | *e*Pg | **Pb** | **01 03 19.5** | **+1.9** |
| OSI | | | | *e*Sg | **Sg** | **01 04 13.2** | **-2.5** |
| **BLG** | **Laguna Peak** | **4.50** | **176** | P | **Pn** | **01 03 16.5** | **+1.7** |
| | baz=4.5 | | | | | | |
| **MWC** | **Mount Wilson** | **4.52** | **165** | *e*Pn | **Pn** | **01 03 16.4** | **+1.1** |
| MWC | | | | *e*Pg | **Pg** | **01 03 30.2** | **-2.7** |
| MWC | | | | *e*Sn | **Sn** | **01 04 10.4** | **+2.4** |
| MWC | | | | *e*Sg | **Sg** | **01 04 26.5** | **-5.0** |
| **PASC** | **Pasadena Art C** | **4.54** | **167** | *e*Pn | Pn | 01 03 19.6 | +4.1 |
| PASC | | | | *e*Sg | **Sg** | **01 04 29.1** | **-3.2** |
| **BFSC** | **Mount Baldy Ra** | **4.59** | **161** | P | Pn | 01 03 19.4 | +3.2 |
| | baz=4.6 | | | | | | |
| **L02D** | **Cave Junction,** | **4.75** | **320** | P | **Pn** | **01 03 20.3** | **+2.0** |
| | baz=4.7 | | | | | | |
| **J08A** | **Circle Bar Ran** | **4.80** | **9** | *e*Pn | **Pn** | **01 03 20.6** | **+1.5** |
| J08A | | | | *e*Pg | **Pb** | **01 03 33.5** | **+2.7** |
| **ARUT** | **Antelope Range** | **4.81** | **98** | *e*Pn | **Pn** | **01 03 19.9** | **+0.7** |
| **FSU** | **Fish Springs** | **4.84** | **75** | *e*Pn | **Pn** | **01 03 19.4** | **-0.3** |
| **J05D** | **Fort Rock, OR** | **4.86** | **345** | P | **Pn** | **01 03 21.7** | **+1.8** |
| | baz=4.8,SNR=8.4 | | | | | | |
| **CCUT** | **Cedar City** | **4.92** | **100** | *e*Pn | **Pn** | **01 03 20.9** | **+0.1** |
| CCUT | | | | *e*Pg | Pb | 01 03 36.5 | +3.5 |
| CCUT | | | | *e*Sg | **Sg** | **01 04 42.7** | **-1.8** |
| **KBO** | **Bosley Butte** | **5.12** | **316** | *e*Pn | **Pn** | **01 03 24.3** | **+0.9** |
| KBO | | | | *e*Pg | **Pb** | **01 03 37.1** | **+0.9** |
| **BELC** | **Belle Mtn. Jos** | **5.38** | **148** | P | **Pn** | **01 03 28.3** | **+1.3** |
| | baz=5.4 | | | | | | |
| **DUG** | **Dugway** | **5.39** | **71** | P | **Pn** | **01 03 27.5** | **+0.4** |
| | baz=5.4 | | | | | | |
| **DUG** | **Dugway** | **5.39** | **71** | *e*Pn | **Pn** | **01 03 27.2** | **+0.1** |
| DUG | | | | *e*Pg | **Pg** | **01 03 47.0** | **-2.5** |
| DUG | | | | *e*Sn | **Sn** | **01 04 31.6** | **+2.3** |
| DUG | | | | *e*Sg | **Sg** | **01 04 55.0** | **-4.3** |
| **I07A** | **Izee** | **5.47** | **360** | *e*Pn | **Pn** | **01 03 31.1** | **+2.9** |
| I07A | | | | *e*Pg | **Pb** | **01 03 45.0** | **+2.7** |
| **MFID** | **Camas Ranch** | **5.53** | **29** | *e*Pn | **Pn** | **01 03 30.2** | **+1.1** |
| MFID | | | | *e*Pg | Pg | 01 03 48.4 | -4.0 |
| MFID | | | | *e*Sn | **Sn** | **01 04 33.0** | **0.0** |
| MFID | | | | *e*Sg | Sg | 01 04 57.5 | -6.5 |
| **PFO** | **Pinyon Flat Ob** | **5.55** | **153** | P | Pn | 01 03 34.4 | +5.1 |
| | baz=5.6 | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **5.55** | **153** | *e*Pn | Pn | 01 03 34.7 | +5.4 |
| PFO | | | | *e*Pg | Pb | 01 03 47.8 | +4.3 |
| PFO | | | | *e*Sg | **Sg** | **01 05 01.0** | **-3.5** |
| **I04A** | **Tendick Farm,** | **5.64** | **338** | P | **Pn** | **01 03 33.2** | **+2.6** |
| | baz=5.6,SNR=23 | | | | | | |
| **FLU** | **Fool Peak** | **5.73** | **80** | *e*Pn | **Pn** | **01 03 33.3** | **+1.4** |
| **SNUT** | **Stansbury Nort** | **5.82** | **65** | *e*Pn | **Pn** | **01 03 33.7** | **+0.6** |
| **I03D** | **Drain, OR** | **5.87** | **331** | P | **Pn** | **01 03 36.6** | **+3.0** |
| | baz=5.8,SNR=14 | | | | | | |
| **NLU** | **North Lily Min** | **5.88** | **74** | *e*Pn | **Pn** | **01 03 34.8** | **+0.8** |
| NLU | | | | *e*Pg | **Pg** | **01 03 56.5** | **-2.6** |
| NLU | | | | *e*Sn | **Sn** | **01 04 44.9** | **+3.2** |
| NLU | | | | *e*Sg | **Sg** | **01 05 12.6** | **-2.7** |
| **I05D** | **Terrebonne, OR** | **5.90** | **347** | P | **Pn** | **01 03 37.0** | **+3.0** |
| | baz=5.9,SNR=8.3 | | | | | | |
| **FRIS** | **Frissel Point** | **5.94** | **341** | *e*Sn | **Sn** | **01 04 48.9** | **+5.8** |
| **CWU** | **Camp Williams** | **5.98** | **70** | *e*Pn | **Pn** | **01 03 36.4** | **+1.1** |
| **SPUT** | **South Promonto** | **6.02** | **61** | *e*Pn | **Pn** | **01 03 36.2** | **+0.3** |
| SPUT | | | | *e*Pg | Pg | 01 03 57.9 | -3.8 |
| SPUT | | | | *e*Sg | **Sg** | **01 05 14.5** | **-5.2** |
| **NAIU** | **Northern Antel** | **6.06** | **64** | *e*Pn | **Pn** | **01 03 37.3** | **+0.8** |
| **HLID** | **Hailey** | **6.25** | **36** | *e*Pn | **Pn** | **01 03 41.1** | **+2.1** |
| HLID | | | | *e*Pg | Pg | 01 04 02.5 | -3.5 |
| HLID | | | | *e*Sg | Sb | 01 05 18.9 | +8.5 |
| **CTU** | **Camp Tracy** | **6.30** | **68** | *e*Pn | **Sn** | **01 03 41.3** | **+1.5** |
| CTU | | | | *e*Sn | **Sn** | **01 04 53.9** | **+1.9** |
| CTU | | | | *e*Sg | **Sg** | **01 05 26.1** | **-2.6** |
| **BAR** | **Barrett** | **6.33** | **158** | *e*Pn | Pn | 01 03 44.0 | +3.9 |
| BAR | | | | *e*Sg | Sg | 01 05 23.4 | -6.3 |
| **O16A** | **Springville** | **6.37** | **73** | *e*Pn | Pn | 01 03 44.9 | +4.3 |
| **NPI** | **North Pocatell** | **6.37** | **54** | *e*Pn | **Pn** | **01 03 41.3** | **+0.7** |
| **GZU** | **Grizzly Peak** | **6.40** | **62** | *e*Pn | **Pn** | **01 03 42.3** | **+1.2** |
| **H04A** | **Detroit Lake** | **6.41** | **342** | *e*Pn | Pn | 01 03 44.6 | +3.5 |
| **BMO** | **Blue Mountains** | **6.45** | **14** | *e*Pn | **Pn** | **01 03 44.0** | **+2.4** |
| **TMUT** | **Trail Mountain** | **6.47** | **81** | *e*Pn | **Pn** | **01 03 44.4** | **+2.3** |
| TMUT | | | | *e*Pg | Pg | 01 04 06.3 | -3.9 |
| **LDJ** | **Lady** | **6.52** | **70** | *e*Pn | **Pn** | **01 03 44.3** | **+1.5** |
| **TCUT** | **Toone Canyon** | **6.68** | **65** | *e*Pn | **Pn** | **01 03 46.2** | **+1.2** |
| TCUT | | | | *e*Sn | **Sn** | **01 05 03.3** | **+1.9** |
| TCUT | | | | *e*Sg | **Sg** | **01 05 37.8** | **-3.0** |
| **G06A** | **Carlson Farm,** | **6.68** | **353** | *e*Pn | Pn | 01 03 48.6 | +3.8 |
| **G08A** | **Pilot Rock** | **6.69** | **3** | *e*Pn | Pn | 01 03 48.7 | +3.7 |
| **GLA** | **Glamis** | **6.70** | **144** | *e*Pn | **Pn** | **01 03 47.1** | **+2.0** |
| GLA | | | | *e*Pg | **Pg** | **01 04 11.9** | **-2.7** |
| GLA | | | | *e*Sg | **Sg** | **01 05 36.3** | **-5.1** |
| **HWUT** | **Hardware Ranch** | **6.75** | **61** | *e*Pn | **Pn** | **01 03 47.5** | **+1.6** |
| HWUT | | | | *e*Pg | Pg | 01 04 12.2 | -3.5 |
| HWUT | | | | *e*Sg | Sg | 01 05 34.5 | -8.6 |
| **P17A** | **Butcher Ranch,** | **6.84** | **80** | *e*Pn | **Pn** | **01 03 50.0** | **+2.9** |
| **SRU** | **San Rafael** | **6.99** | **83** | *e*Pn | **Pn** | **01 03 51.5** | **+2.3** |
| SRU | | | | *e*Sg | Sg | 01 05 43.4 | -7.4 |
| **WUAZ** | **Wupatki** | **7.16** | **113** | *e*Pn | **Pn** | **01 03 53.1** | **+1.6** |
| WUAZ | | | | *e*Pg | Pg | 01 04 18.7 | -4.8 |
| WUAZ | | | | *e*Sg | **Sg** | **01 05 54.9** | **-1.4** |
| **P18A** | **Preston Nutter** | **7.24** | **79** | *e*Pn | **Pn** | **01 03 51.2** | **-1.5** |
| **F10A** | **Beach Ranch, E** | **7.54** | **12** | *e*Pn | Pn | 01 04 01.0 | +4.3 |
| F10A | | | | *e*Pg | **Pg** | **01 04 28.6** | **-2.3** |
| F10A | | | | *e*Lg | Lg | 01 06 11.1 | |
| **AHID** | **Auburn Hatcher** | **7.59** | **54** | *e*Pn | **Pn** | **01 03 56.6** | **+1.2** |
| AHID | | | | *e*Pg | Pg | 01 04 26.6 | -5.1 |
| AHID | | | | *e*Sg | Sg | 01 06 02.5 | -7.4 |
| **HAWA** | **Hanford** | **7.78** | **360** | *e*Pn | **Pn** | **01 04 03.0** | **+3.1** |
| **MCMT** | **McKenzie Canyo** | **7.94** | **36** | *e*Pn | **Pn** | **01 04 03.0** | **+0.8** |
| MCMT | | | | *e*Pg | Pb | 01 04 29.1 | +4.8 |
| MCMT | | | | *e*Sg | Sg | 01 06 11.4 | -10 |
| **E07A** | **Sunnyside** | **7.95** | **358** | *e*Pn | Pn | 01 04 06.4 | +4.2 |
| **REDW** | **Red Top Meadow** | **8.06** | **51** | *e*Pn | **Pn** | **01 04 05.6** | **+1.8** |
| REDW | | | | *e*Pg | Pb | 01 04 32.4 | +6.0 |
| REDW | | | | *e*Sg | Sg | 01 06 17.5 | -7.5 |
| **TPAW** | **Teton Pass** | **8.07** | **50** | *e*Pn | **Pn** | **01 04 05.2** | **+1.2** |
| TPAW | | | | *e*Pg | Pb | 01 04 33.7 | +7.2 |
| TPAW | | | | *e*Sg | Sg | 01 06 17.6 | -7.7 |
| **SNOW** | **Snow King Moun** | **8.17** | **51** | *e*Pn | Pn | 01 04 08.9 | +3.4 |
| SNOW | | | | *e*Pg | Pb | 01 04 35.4 | +7.1 |
| SNOW | | | | *e*Sg | Sb | 01 06 15.3 | +9.2 |
| **PV10** | **Paradox Valley** | **8.18** | **88** | *e*Pn | Pn | 01 04 08.7 | +3.2 |
| **IMW** | **Indian Meadow** | **8.31** | **48** | *e*Pn | **Pn** | **01 03 58.6** | **+2.4** |
| IMW | | | | *e*Pg | Pb | 01 04 40.1 | -5.4 |
| IMW | | | | *e*Sg | Sb | 01 06 19.5 | +9.3 |
| **LON** | **Longmire** | **8.32** | **349** | *e*Pn | **Pn** | **01 04 05.9** | **-1.4** |
| **MOOW** | **Moose Ponds** | **8.34** | **49** | *e*Pn | **Pn** | **01 04 10.7** | **+3.0** |
| MOOW | | | | *e*Pg | Pg | 01 04 39.0 | -7.0 |
| MOOW | | | | *e*Sg | Sg | 01 06 23.4 | -11 |
| **LOHW** | **Long Hollow** | **8.35** | **50** | *e*Pn | **Pn** | **01 04 09.4** | **+1.6** |
| LOHW | | | | *e*Pg | Pg | 01 04 41.8 | -4.4 |
| LOHW | | | | *e*Sg | Sg | 01 06 24.4 | -10 |
| **D08A** | **Wollman Farm,** | **8.46** | **2** | *e*Pn | Pn | 01 04 12.8 | +3.8 |
| **DLMT** | **Dillon** | **8.46** | **35** | *e*Pn | **Pn** | **01 04 10.5** | **+1.2** |
| DLMT | | | | *e*Pg | Pg | 01 04 42.8 | -5.6 |
| DLMT | | | | *e*Sg | Sb | 01 06 25.7 | +11 |
| **FLWY** | **Flagg Ranch** | **8.56** | **47** | *e*Pn | **Pn** | **01 04 11.6** | **+0.9** |
| FLWY | | | | *e*Pg | Pg | 01 04 39.6 | -11 |
| FLWY | | | | *e*Sg | Sg | 01 06 26.4 | -15 |
| **BW06** | **Boulder Array** | **8.59** | **58** | *e*Pn | **Pn** | **01 04 14.1** | **+2.9** |
| BW06 | | | | *e*Sn | **Sn** | **01 05 49.8** | **+1.4** |
| BW06 | | | | *e*Sg | Sg | 01 06 33.8 | -8.2 |
| **QLMT** | **Earthquake Lak** | **8.64** | **41** | *e*Pn | **Pn** | **01 04 13.3** | **+1.4** |
| QLMT | | | | *e*Pg | Pg | 01 04 36.2 | -16 |
| QLMT | | | | *e*Sg | Sg | 01 06 35.4 | -8.2 |
| **LTY** | **Liberty** | **8.69** | **355** | *e*Pn | Pn | 01 04 18.5 | +6.1 |
| **D05A** | **Enumclaw** | **8.78** | **349** | *e*Pn | Pn | 01 04 19.5 | +6.0 |
| **YMR** | **Madison River** | **8.78** | **44** | *e*Pn | **Pn** | **01 04 15.1** | **+1.3** |
| YMR | | | | *e*Pg | Pg | 01 04 46.6 | -7.8 |
| YMR | | | | *e*Sg | Sg | 01 06 41.1 | -6.9 |
| **O20A** | **White River Ci** | **8.82** | **77** | P | Pn | 01 04 17.9 | +3.6 |
| | baz=8.9 | | | | | | |
| **O20A** | **White River Ci** | **8.82** | **77** | *e*Pn | **Pn** | **01 04 15.6** | **+1.3** |
| O20A | | | | *e*Sg | **Sg** | **01 06 44.4** | **-5.0** |
| **LRM** | **Limekiln Ridge** | **8.88** | **34** | *e*Pn | **Pn** | **01 04 15.6** | **+0.4** |
| LRM | | | | *e*Pg | Pg | 01 04 49.4 | -7.0 |
| LRM | | | | *e*Sg | Sg | 01 06 42.1 | -10 |
| **BOZ** | **Bozeman (W)** | **9.12** | **37** | *e*Pn | **Pn** | **01 04 19.7** | **+1.3** |
| **MSO** | **Missoula** | **9.16** | **24** | P | **Pn** | **01 04 22.1** | **+3.2** |
| | baz=9.2 | | | | | | |
| **MSO** | **Missoula** | **9.16** | **24** | *e*Pn | Pn | 01 04 22.4 | +3.5 |
| **TUC** | **Tucson** | **9.46** | **129** | *e*Pn | **Pn** | **01 04 24.4** | **+1.5** |
| TUC | | | | *e*Lg | Lg | 01 07 06.3 | |
| **CHMT** | **Chamberlain Mo** | **9.47** | **27** | *e*Pn | **Pn** | **01 04 25.8** | **+2.6** |
| **SLMT** | **Seeley Lake** | **9.67** | **25** | *e*Pn | **Pn** | **01 04 27.4** | **+1.4** |
| **SWMT** | **Swartz Lake** | **9.75** | **22** | *e*Pn | **Pn** | **01 04 28.8** | **+1.8** |
| **NEW** | **Newport** | **9.80** | **9** | *e*Pn | **Pn** | **01 04 30.1** | **+2.5** |
| **HRY** | **Holter Researc** | **9.85** | **32** | *e*Pn | **Pn** | **01 04 28.3** | **-0.1** |
| **K22A** | **Casper** | **10.63** | **64** | P | Pn | 01 04 42.3 | +3.3 |
| | baz=11 | | | | | | |
| **K22A** | **Casper** | **10.63** | **64** | *e*Pn | **Pn** | **01 04 40.5** | **+1.5** |
| K22A | | | | *e*Lg | Lg | 01 07 51.5 | |
| **SDCO** | **Great Sand Dun** | **11.02** | **90** | *e*Pn | **Pn** | **01 04 46.6** | **+2.0** |
| **PHWY** | **Pilot Hill** | **11.08** | **72** | *e*Pn | Pn | 01 04 38.8 | -6.6 |
| **WALA** | **Waterton Lakes** | **11.19** | **19** | *e*Pn | Pn | 01 04 51.9 | +5.3 |
| **121A** | **Cookes Peak, D** | **11.27** | **119** | *e*Pn | **Pn** | **01 04 49.8** | **+2.0** |
| **RSSD** | **Black Hills** | **12.82** | **60** | *e*Pn | **Pn** | **01 05 10.0** | **+1.0** |
| **MNTX** | **Cornudas Mount** | **13.41** | **117** | *e*Pn | **Pn** | **01 05 18.6** | **+1.6** |
| **MSTX** | **Muleshoe** | **14.23** | **104** | *e*Pn | **P** | **01 05 33.6** | **-2.1** |
| **AMTX** | **Amarillo** | **14.73** | **99** | *e*Pn | **Pn** | **01 05 36.8** | **+1.7** |
| **EDM** | **Edmonton** | **15.21** | **14** | *e*Pn | **Pn** | **01 05 38.5** | **-2.9** |
| | 8.7nm,0.8s | | | | | | |
| **CBKS** | **Cedar Bluff** | **15.40** | **83** | *e*Pn | **Pn** | **01 05 44.0** | **+0.1** |
| | 4.1nm,0.5s | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **16.02** | **121** | *e*Pn | **P** | **01 05 56.3** | **+0.7** |
| **TXAR** | **Lajitas Array** | **16.02** | **121** | Pn | **P** | **01 05 57.1** | **+1.6** |
| | 0.0nm,0.3s,baz=302,slow=11,SNR=11 | | | | | | |
| TXAR | | | | LR | LR | 01 12 48.8 | |
| | comp=Z,162nm,19.8s,baz=0.0,slow=40 | | | | | | |
| **WMOK** | **Wichita Mounta** | **17.03** | **97** | *e*Pn | **P** | **01 06 07.7** | **+1.0** |
| **ECSD** | **EROS Data Cent** | **17.93** | **66** | *e*Pn | P | 01 06 22.1 | +5.6 |
| | 151nm,2.8s | | | | | | |
| **FFC** | **Flin Flon** | **20.00** | **31** | *e*P | **P** | **01 06 38.9** | **-0.3** |
| | 11nm,0.9s | | | | | | |
| **ULM** | **Lac du Bonnet** | **20.38** | **48** | P | Pn | 01 06 46.5 | +1.1 |
| | 4.8nm,1.0s,baz=254,slow=7.4,SNR=3.4 | | | | | | |
| **HKT** | **Hockley** | **21.30** | **107** | *e*P | **P** | **01 06 55.1** | **+1.7** |
| | 6.7nm,1.2s | | | | | | |
| **OXF** | **Oxford** | **24.43** | **90** | *e*P | **P** | **01 07 27.9** | **+2.5** |
| | 22nm,0.9s | | | | | | |
| **WVT** | **Waverly** | **25.20** | **86** | *e*P | **P** | **01 07 33.5** | **+1.2**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **OUR** | **Ouranopolis** | **1.27** | **308** | P | **Pn** | **01 04 42.8** | **-0.3** |
| OUR | | | | S | **Sg** | **01 05 00.5** | **+0.2** |
| **OUR** | **Ouranopolis** | **1.27** | **308** | *e*Pn | **Pn** | **01 04 42.7** | **-0.3** |
| OUR | | | | S | **Sg** | **01 05 00.5** | **+0.2** |
| **PAIG** | **Paliouri** | **1.29** | **287** | *e*PN | **Pn** | **01 04 42.9** | **-0.5** |
| **PAIG** | **Paliouri** | **1.29** | **287** | P | **Pn** | **01 04 42.8** | **-0.6** |
| PAIG | | | | S | **Sg** | **01 05 01.4** | **+0.4** |
| **PAIG** | **Paliouri** | **1.29** | **287** | *e*Pn | **Pn** | **01 04 42.9** | **-0.5** |
| PAIG | | | | S | **Sg** | **01 05 01.4** | **+0.4** |
| **CHOS** | **Chios island** | **1.31** | **152** | *e*PN | **Pg** | **01 04 44.5** | **-0.2** |
| **CHOS** | **Chios island** | **1.31** | **152** | *e*PN | **Pn** | **01 04 43.5** | **-0.3** |
| **CHOS** | **Chios island** | **1.31** | **152** | P | **Pn** | **01 04 43.5** | **-0.3** |
| CHOS | | | | S | **Sg** | **01 05 02.1** | **+0.3** |
| **CHOS** | **Chios island** | **1.31** | **152** | P | **Pn** | **01 04 43.5** | **-0.3** |
| CHOS | | | | S | **Sg** | **01 05 02.1** | **+0.3** |
| **ERIK** | **Erikli-Kesan** | **1.46** | **40** | *e*PN | **Pn** | **01 04 45.6** | **0.0** |
| **ERIK** | **Erikli-Kesan** | **1.46** | **40** | *e*Pn | **Pn** | **01 04 45.7** | **0.0** |
| **SKIA** | **Skiathos** | **1.46** | **255** | *e*PN | **Pn** | **01 04 45.5** | **-0.2** |
| **SKIA** | **Skiathos** | **1.46** | **255** | *e*Pn | **Pn** | **01 04 45.5** | **-0.2** |
| **ALN** | **Alexandroupoli** | **1.46** | **23** | *e*PN | **Pb** | **01 04 46.3** | **-0.3** |
| **ALN** | **Alexandroupoli** | **1.46** | **23** | *e*PN | **Pn** | **01 04 45.2** | **-0.5** |
| **ALN** | **Alexandroupoli** | **1.46** | **23** | *e*Pn | **Pb** | **01 04 46.3** | **-0.3** |
| **EREA** | **Eretria** | **1.55** | **223** | *e*PN | **Pn** | **01 04 46.3** | **-0.6** |
| **EREA** | **Eretria** | **1.55** | **223** | *e*Pn | **Pn** | **01 04 46.3** | **-0.6** |
| **KAVA** | **Kavala** | **1.56** | **338** | P | **Pn** | **01 04 46.8** | **-0.2** |
| KAVA | | | | S | **Sb** | **01 05 07.9** | **0.0** |
| **KAVA** | **Kavala** | **1.56** | **338** | P | **Pn** | **01 04 46.8** | **-0.2** |
| KAVA | | | | S | **Sb** | **01 05 07.9** | **0.0** |
| **MRKA** | **Markates** | **1.57** | **238** | *e*PN | **Pn** | **01 04 46.5** | **-0.7** |
| **MRKA** | **Markates** | **1.57** | **238** | *e*Pn | **Pn** | **01 04 46.5** | **-0.7** |
| **URLA** | **Izmir** | **1.57** | **139** | *i* P | **Pn** | **01 04 47.8** | **+0.5** |
| URLA | | | | *i* S | **Sn** | **01 05 07.0** | **-0.6** |
| **URLA** | **Izmir** | **1.57** | **139** | P | **Pn** | **01 04 47.8** | **+0.5** |
| URLA | | | | S | **Sn** | **01 05 07.0** | **-0.6** |
| **NEO** | **Neokhori** | **1.61** | **262** | *e*PN | **Pn** | **01 04 47.4** | **-0.5** |
| **NEO** | **Neokhori** | **1.61** | **262** | P | **Pn** | **01 04 47.6** | **-0.3** |
| **NEO** | **Neokhori** | **1.61** | **262** | *e*Pn | **Pn** | **01 04 47.4** | **-0.5** |
| **ZEY** | **˙zmir** | **1.62** | **144** | P | **Pb** | **01 04 49.0** | **-0.4** |
| ZEY | | | | S | **Sn** | **01 05 08.3** | **-0.5** |
| **XOR** | **Xorichti** | **1.63** | **264** | *e*PN | **Pn** | **01 04 48.2** | **+0.1** |
| **XOR** | **Xorichti** | **1.63** | **264** | *e*Pn | **Pn** | **01 04 48.2** | **+0.1** |
| **PLG** | **Polygyros** | **1.63** | **301** | *e*PN | **Pn** | **01 04 47.6** | **-0.5** |
| **PLG** | **Polygyros** | **1.63** | **301** | *e*Pn | **Pn** | **01 04 47.6** | **-0.5** |
| **SMIA** | **Simia** | **1.75** | **248** | *e*PN | **Pn** | **01 04 49.7** | **0.0** |
| **SMIA** | **Simia** | **1.75** | **248** | *e*Pn | **Pn** | **01 04 49.7** | **0.0** |
| **BALY** | **Balya** | **1.81** | **83** | *i* P | **Pn** | **01 04 50.6** | **-0.1** |
| BALY | | | | *i* S | **Sg** | **01 05 18.1** | **+0.3** |
| **BALY** | **Balya** | **1.81** | **83** | P | **Pn** | **01 04 50.5** | **-0.1** |
| BALY | | | | S | **Sg** | **01 05 18.1** | **+0.3** |
| **SART** | **Tekirdag** | **1.84** | **52** | *i* P | **Pb** | **01 04 52.6** | **-0.6** |
| SART | | | | *i* S | **Sb** | **01 05 16.6** | **+0.3** |
| **SART** | **Tekirdag** | **1.84** | **52** | P | **Pb** | **01 04 52.6** | **-0.6** |
| SART | | | | S | **Sb** | **01 05 16.6** | **+0.3** |
| **PTL** | **Penteli** | **1.87** | **217** | *e*PB | **Pn** | **01 04 50.4** | **-1.0** |
| **PTL** | **Penteli** | **1.87** | **217** | *e*Pb | **Pn** | **01 04 50.4** | **-1.0** |
| **GONE** | **Gonen-Balikesi** | **1.92** | **74** | *e*PN | **Pn** | **01 04 51.9** | **0.0** |
| **GONE** | **Gonen-Balikesi** | **1.92** | **74** | *e*Pn | **Pn** | **01 04 51.9** | **0.0** |
| **IZM** | **Izmir** | **1.93** | **126** | *e*PN | **Pn** | **01 04 52.6** | **+0.4** |
| **IZM** | **Izmir** | **1.93** | **126** | *e*Pn | **Pn** | **01 04 52.6** | **+0.4** |
| **SOH** | **Sokhos** | **1.94** | **311** | *e*PB | **Pn** | **01 04 51.9** | **-0.5** |
| **SOH** | **Sokhos** | **1.94** | **311** | P | **Pn** | **01 04 52.0** | **-0.5** |
| **SOH** | **Sokhos** | **1.94** | **311** | P | **Pn** | **01 04 52.0** | **-0.5** |
| **HORT** | **Hortiatis** | **1.97** | **303** | *e*PN | **Pb** | **01 04 54.1** | **-1.3** |
| **HORT** | **Hortiatis** | **1.97** | **303** | *e*Pn | **Pb** | **01 04 54.1** | **-1.3** |
| **BALB** | **Balikesir** | **2.01** | **87** | *e*PN | **Pn** | **01 04 53.2** | **0.0** |
| **BALB** | **Balikesir** | **2.01** | **87** | *e*Pn | **Pn** | **01 04 53.2** | **0.0** |
| **SRS** | **Serrai** | **2.02** | **321** | *e*PB | **Pn** | **01 04 52.2** | **-1.3** |
| **SRS** | **Serrai** | **2.02** | **321** | P | **Pn** | **01 04 53.3** | **-0.2** |
| **SRS** | **Serrai** | **2.02** | **321** | *e*Pb | **Pn** | **01 04 52.2** | **-1.3** |
| **SRS** | **Serrai** | **2.02** | **321** | P | **Pn** | **01 04 53.3** | **-0.2** |
| **MRMT** | **Marmara Adasi** | **2.06** | **59** | *e*PN | **Pn** | **01 04 54.3** | **+0.3** |
| **MRMT** | **Marmara Adasi** | **2.06** | **59** | *e*Pn | **Pn** | **01 04 54.3** | **+0.3** |
| **VLY** | **Voula,Athens** | **2.06** | **215** | *e*PB | **Pn** | **01 04 52.8** | **-1.2** |
| **VLY** | **Voula,Athens** | **2.06** | **215** | *e*Pb | **Pn** | **01 04 52.8** | **-1.2** |
| **VIL2** | **Platees** | **2.07** | **230** | *e*PB | **Pn** | **01 04 53.3** | **-0.8** |
| **VILL** | **Villia** | **2.07** | **229** | *e*Pb | **Pn** | **01 04 53.3** | **-0.9** |
| **AKHS** | **Akhisar** | **2.08** | **108** | *i* P | **Pg** | **01 04 58.4** | **-0.9** |
| **AKHS** | **Akhisar** | **2.08** | **108** | P | **Pg** | **01 04 58.4** | **-0.9** |
| AKHS | | | | S | **Sg** | **01 05 27.2** | **+1.0** |
| **AKS** | **Akhisar** | **2.08** | **108** | *e*PN | **Pn** | **01 04 54.3** | **+0.1** |
| **AKS** | **Akhisar** | **2.08** | **108** | *e*Pn | **Pn** | **01 04 54.3** | **+0.1** |
| **NVR** | **Nevrokopi** | **2.10** | **329** | *e*PB | **Pn** | **01 04 54.3** | **-0.2** |
| **NVR** | **Nevrokopi** | **2.10** | **329** | P | **Pn** | **01 04 54.3** | **-0.2** |
| **NVR** | **Nevrokopi** | **2.10** | **329** | P | **Pn** | **01 04 54.3** | **-0.2** |
| **EDC** | **Edincik** | **2.12** | **67** | *e*PN | **Pn** | **01 04 55.5** | **+0.5** |
| **EDC** | **Edincik** | **2.13** | **67** | *e*Pn | **Pn** | **01 04 55.5** | **+0.5** |
| **BNT** | **Bandirma** | **2.18** | **68** | *e*PN | **Pn** | **01 04 55.9** | **+0.3** |
| **BNT** | **Bandirma** | **2.18** | **68** | *e*Pn | **Pn** | **01 04 55.9** | **+0.3** |
| **SMG** | **Samos** | **2.21** | **146** | *e*PB | **Pn** | **01 04 56.6** | **+0.6** |
| **SMG** | **Samos** | **2.21** | **146** | *e*Pb | **Pn** | **01 04 56.6** | **+0.6** |
| **AGG** | **Agios Georgios** | **2.35** | **258** | *e*PN | **Pn** | **01 04 57.8** | **-0.2** |
| **AGG** | **Agios Georgios** | **2.35** | **258** | *e*Pn | **Pn** | **01 04 57.8** | **-0.2** |
| **KNT** | **Kendrikon** | **2.43** | **312** | *e*PB | **Pn** | **01 04 59.5** | **+0.5** |
| **KNT** | **Kendrikon** | **2.43** | **312** | *e*Pb | **Pn** | **01 04 59.5** | **+0.5** |
| **CRLT** | **Corlu** | **2.45** | **49** | *e*PN | **Pn** | **01 05 00.1** | **+0.8** |
| **CRLT** | **Corlu** | **2.45** | **49** | *e*Pn | **Pn** | **01 05 00.1** | **+0.8** |
| **APE** | **Apeiranthos** | **2.49** | **175** | *e*PN | **Pn** | **01 05 02.0** | **+2.1** |
| **APE** | **Apeiranthos** | **2.49** | **175** | *e*Pn | **Pn** | **01 05 02.1** | **+2.1** |
| **MAKR** | **Makrakomi, Fth** | **2.50** | **259** | *e*PB | **Pn** | **01 05 00.5** | **+0.4** |
| **MAKR** | **Makrakomi, Fth** | **2.50** | **259** | *e*Pb | **Pn** | **01 05 00.5** | **+0.4** |
| **THL** | **Klokotos Trika** | **2.53** | **271** | *e*PN | **Pn** | **01 05 00.6** | **+0.2** |
| **THL** | **Klokotos Trika** | **2.53** | **271** | *e*Pn | **Pn** | **01 05 00.6** | **+0.2** |
| **EDRB** | **Edirne** | **2.54** | **25** | *e*PN | **Pn** | **01 05 01.7** | **+1.1** |
| **EDRB** | **Edirne** | **2.54** | **25** | *e*Pn | **Pn** | **01 05 01.7** | **+1.1** |
| **DST** | **Dursunbey** | **2.58** | **88** | *e*PN | **Pn** | **01 05 01.9** | **+0.7** |
| **DST** | **Dursunbey** | **2.58** | **88** | *e*Pn | **Pn** | **01 05 01.9** | **+0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.60** | **127** | *e*PN | **Pn** | **01 05 01.7** | **+0.2** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.60** | **127** | *e*Pn | **Pn** | **01 05 01.7** | **+0.2** |
| **GRG** | **Griva** | **2.61** | **303** | *e*PN | **Pn** | **01 05 03.1** | **+1.5** |
| **GRG** | **Griva** | **2.61** | **303** | *e*PB | **Pn** | **01 05 02.7** | **+1.1** |
| **GRG** | **Griva** | **2.61** | **303** | *e*Pb | **Pn** | **01 05 02.7** | **+1.1** |
| **GRG** | **Griva** | **2.61** | **303** | *e*Pn | **Pn** | **01 05 03.1** | **+1.5** |
| **KALE** | **Kalithea** | **2.71** | **246** | *e*PN | **Pn** | **01 05 03.5** | **+0.5** |
| **KALE** | **Kalithea** | **2.71** | **246** | *e*Pn | **Pn** | **01 05 03.5** | **+0.5** |
| **DEMI** | **Demirci** | **2.71** | **100** | P | **Pg** | **01 05 10.4** | **-1.1** |
| DEMI | | | | S | **Sg** | **01 05 47.6** | **+1.0** |
| **VAY** | **Valandovo** | **2.72** | **311** | *i* Pn | **Pg** | **01 05 13.6** | **+2.0** |
| VAY | | | | *i* Sn | **Sg** | **01 05 45.9** | **-0.9** |
| **ORLT** | **Orhaneli** | **2.83** | **79** | *e*PN | **Pn** | **01 05 05.4** | **+0.9** |
| **ORLT** | **Orhaneli** | **2.83** | **79** | *e*Pn | **Pn** | **01 05 05.4** | **+0.9** |
| **KULA** | **Kula-Manisa** | **2.83** | **110** | *e*PN | **Pn** | **01 05 05.1** | **+0.5** |
| **KULA** | **Kula-Manisa** | **2.83** | **110** | *e*Pn | **Pn** | **01 05 05.1** | **+0.5** |
| **KLV** | **Kalavryta, Ach** | **2.88** | **239** | *e*PN | **Pn** | **01 05 05.2** | **0.0** |
| **KLV** | **Kalavryta, Ach** | **2.88** | **239** | *e*Pn | **Pn** | **01 05 05.2** | **0.0** |
| **MDNY** | **Mudanya-Bursa** | **2.88** | **72** | *e*PN | **Pn** | **01 05 06.1** | **+0.8** |
| **MDNY** | **Mudanya-Bursa** | **2.88** | **72** | *e*Pn | **Pn** | **01 05 06.1** | **+0.8** |
| **ARMT** | **Armutlu** | **2.93** | **69** | *e*PN | **Pn** | **01 05 06.9** | **+1.0** |
| **ARMT** | **Armutlu** | **2.93** | **69** | *e*Pn | **Pn** | **01 05 06.9** | **+1.0** |
| **ULDT** | **Uludag** | **3.02** | **78** | *i* P | **Pn** | **01 05 09.5** | **+2.1** |
| **ULDT** | **Uludag** | **3.02** | **78** | P | **Pn** | **01 05 09.5** | **+2.1** |
| ULDT | | | | S | **Sb** | **01 05 51.0** | **+0.6** |
| **IGD** | **Bursa** | **3.10** | **76** | P | **Pn** | **01 05 08.6** | **+0.4** |
| IGD | | | | S | **Sg** | **01 05 57.3** | **-1.6** |
| **VLX** | **Vlachokerasia** | **3.15** | **227** | *e*PN | **Pn** | **01 05 08.1** | **-1.0** |
| **VLX** | **Vlachokerasia** | **3.15** | **227** | *e*Pn | **Pn** | **01 05 08.1** | **-1.0** |
| **TVSB** | **Tavsanli** | **3.23** | **91** | *e*PN | **Pn** | **01 05 11.3** | **+1.1** |
| **TVSB** | **Tavsanli** | **3.23** | **91** | *e*Pn | **Pn** | **01 05 11.3** | **+1.1** |
| **ISK** | **Istanbul-Kandi** | **3.26** | **61** | *e*PN | **Pn** | **01 05 11.7** | **+1.3** |
| **ISK** | **Istanbul-Kandi** | **3.26** | **61** | *e*Pn | **Pn** | **01 05 11.7** | **+1.3** |
| **PDO** | **Prodromos** | **3.33** | **255** | *e*PN | **Pn** | **01 05 10.3** | **-1.1** |
| **PDO** | **Prodromos** | **3.33** | **255** | *e*Pn | **Pn** | **01 05 10.3** | **-1.1** |
| **ADVT** | **Abdulvahap** | **3.53** | **74** | *e*PN | **Pn** | **01 05 15.4** | **+1.2** |
| **ADVT** | **Abdulvahap** | **3.53** | **74** | *e*Pn | **Pn** | **01 05 15.4** | **+1.2** |
| **TIRR** | **Tirgusor** | **5.42** | **24** | ||*i*P | **Pn** | **01 05 41.1** | **+0.9** |
| **TIRR** | **Tirgusor** | **5.42** | **24** | ||*i*P | **Pn** | **01 05 41.1** | **+0.9** |
| **MLR** | **Muntele Rosu** | **5.95** | **4** | ||*i*P | **Pn** | **01 05 49.5** | **+1.9** |
| **MLR** | **Muntele Rosu** | **5.95** | **4** | ||*i*P | **Pn** | **01 05 49.5** | **+1.9** |
| **CFR** | **Carcaliu** | **6.00** | **20** | ||*i*P | **Pn** | **01 05 49.6** | **+1.5** |
| **CFR** | **Carcaliu** | **6.00** | **20** | ||*i*P | **Pn** | **01 05 49.6** | **+1.5** |
| **GZR** | **Gura Zlata** | **6.12** | **343** | ||*i*P | **Pn** | **01 05 49.8** | **0.0** |
| **GZR** | **Gura Zlata** | **6.12** | **343** | ||*i*P | **Pn** | **01 05 49.8** | **0.0** |
| **PLOR** | **Plostina** | **6.37** | **9** | ||*i*P | **Pn** | **01 05 56.1** | **+2.9** |
| **BURAR** | **Bucovina Array** | **8.06** | **360** | ||*i*P | Pn | 01 06 20.5 | +4.1 |

**IDC 31 01:25:27.7±1.4,3°.09N×121°.88E,h0km,mb3.6/5,**
**mb1 3.7/5,mb1mx3.5/30,mbtmp3.6/5,Error ellipse:**
**s-maj=89.9km s-min=22.2km az=71.0,Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **25.95** | **152** | P | P | 01 31 02.0 | -0.1 |
| | 0.3nm,0.3s,baz=336,slow=9.5,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **29.06** | **157** | P | P | 01 31 30.1 | +0.1 |
| | 0.3nm,0.6s,baz=340,slow=7.9,SNR=4.7 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **41.90** | **11** | P | P | 01 33 19.8 | -0.1 |
| | 1.1nm,0.5s,baz=193,slow=5.9,SNR=4.3 | | | | | | |
| **SONM** | **Songino Array** | **46.53** | **346** | P | P | 01 33 57.8 | +0.6 |
| | 0.3nm,0.3s,baz=165,slow=7.9,SNR=3.7 | | | | | | |
| **MKAR** | **Makanchi Array** | **55.42** | **328** | P | P | 01 35 03.0 | -0.9 |
| | 0.3nm,0.3s,baz=126,slow=7.9,SNR=3.0 | | | | | | |

*DDA **31** 01:28:45.5,36°.88N×27°.62E,h7km,Md2.6*
*CSEM **31** 01:28:46.0±0.8,36°.86N×27°.56E,h2km,MD2.6,Error ellipse: s-maj=16.5km s-min=7.6km az=31.0*
*ISK **31** 01:28:51.4,37°.40N×28°.54E,h25km,MD2.7*
**ISC 31 01:28:46.1±1.5,36°.93N±0°.07×27°.63E±0°.04,h1km±14km,**
**n14,σ0°89/24,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BDRM** | **Kayabasi** | **0.20** | **312** | *i* P | **Pg** | **01 28 49.7** | **-0.3** |
| BDRM | | | | *i* S | **Sg** | **01 28 53.5** | **+0.9** |
| **BDRM** | **Kayabasi** | **0.20** | **312** | P | **Pg** | **01 28 49.7** | **-0.3** |
| BDRM | | | | S | **Sg** | **01 28 53.5** | **+0.9** |
| **YER** | **Yerkesik** | **0.56** | **69** | *e*PG | **Pb** | **01 28 59.2** | **+0.5** |
| YER | | | | *e*SG | **Sg** | **01 29 05.1** | **+1.0** |
| **YER** | **Yerkesik** | **0.56** | **69** | *e*Pg | **Pb** | **01 28 59.2** | **+0.5** |
| YER | | | | *e*Sg | **Sg** | **01 29 05.1** | **+1.0** |
| **AYDN** | **Tasoluk** | **0.75** | **15** | *i* P | **Pb** | **01 29 02.5** | **+0.4** |
| AYDN | | | | *i* S | **Sb** | **01 29 14.2** | **+1.3** |
| **AYDN** | **Tasoluk** | **0.75** | **15** | P | **Pb** | **01 29 02.5** | **+0.4** |
| AYDN | | | | S | **Sb** | **01 29 14.2** | **+1.3** |
| **TURN** | **Turunc** | **0.78** | **94** | *i* P | Pg | 01 28 55.4 | -5.6 |
| TURN | | | | *i* S | Sg | 01 29 04.0 | -7.2 |
| **TURN** | **Turunc** | **0.78** | **94** | P | Pg | 01 28 55.4 | -5.6 |
| TURN | | | | S | Sg | 01 29 04.0 | -7.2 |
| **DALY** | **Dalyan (Mu˘la** | **0.83** | **98** | *e*PG | **Pn** | **01 29 03.8** | **-1.1** |
| DALY | | | | *e*SG | **Sg** | **01 29 12.6** | **-0.1** |
| **DALY** | **Dalyan (Mu˘la** | **0.83** | **98** | *e*Pg | **Pn** | **01 29 03.8** | **-1.1** |
| DALY | | | | *e*Sg | **Sg** | **01 29 12.6** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **0.83** | **338** | *i* P | **Pb** | **01 29 03.4** | **+0.1** |
| GCAM | | | | *i* S | **Sb** | **01 29 15.7** | **+0.7** |
| **GCAM** | **G?zelcaml?** | **0.83** | **338** | P | **Pb** | **01 29 03.4** | **+0.1** |
| GCAM | | | | S | **Sb** | **01 29 15.7** | **+0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.03** | **11** | *e*PG | **Pb** | **01 29 06.7** | **-0.2** |
| AYDB | | | | *e*SG | **Sg** | **01 29 17.9** | **-1.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.03** | **11** | *e*Pg | **Pb** | **01 29 06.7** | **-0.2** |
| AYDB | | | | *e*Sg | **Sg** | **01 29 17.9** | **-1.4** |

*DDA **31** 01:31:44.1,36°.88N×27°.58E,h7km,Md2.9*
*ISK **31** 01:31:44.3,36°.96N×27°.63E,h14km,MD2.5*
*ISCJB **31** 01:31:45.1±0.6,36°.94N±0°.04×27°.64E±0°.04,h4km±7km,Error ellipse: s-maj=6.5km s-min=5.0km az=175.9*
*CSEM **31** 01:31:45.0±0.3,36°.93N×27°.63E,h10km,MD2.9,Error ellipse: s-maj=7.0km s-min=6.0km az=152.0*
**ISC 31 01:31:44.2±1.1,36°.91N±0°.04×27°.66E±0°.03,h11km±8km,**
**n17,σ0°38/29,Dodecanese Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BDRM** | **Kayabasi** | **0.23** | **312** | *i* P | **Pg** | **01 31 48.6** | **-0.4** |
| BDRM | | | | *i* S | **Sg** | **01 31 52.4** | **+0.2** |
| **BDRM** | **Kayabasi** | **0.23** | **312** | P | **Pg** | **01 31 48.6** | **-0.4** |
| BDRM | | | | S | **Sg** | **01 31 52.4** | **+0.2** |
| **NIS1** | **Nisyros Isl.** | **0.49** | **231** | *e*PG | **Pb** | **01 31 55.2** | **+0.3** |
| NIS1 | | | | *e*SG | **Sb** | **01 32 02.0** | **-0.1** |
| **NIS1** | **Nisyros Isl.** | **0.49** | **231** | *e*Pg | **Pb** | **01 31 55.2** | **+0.3** |
| NIS1 | | | | *e*Sg | **Sb** | **01 32 02.0** | **-0.1** |
| **YER** | **Yerkesik** | **0.55** | **66** | *e*PG | **Pb** | **01 31 55.8** | **-0.1** |
| YER | | | | *e*SG | **Sb** | **01 32 03.8** | **0.0** |
| **YER** | **Yerkesik** | **0.55** | **66** | *e*Pg | **Pb** | **01 31 55.8** | **-0.1** |
| YER | | | | *e*Sg | **Sb** | **01 32 03.8** | **0.0** |
| **TURN** | **Turunc** | **0.76** | **93** | P | Pg | 01 31 54.5 | -4.3 |
| TURN | | | | S | Sg | 01 32 02.9 | -5.9 |
| **AYDN** | **Tasoluk** | **0.77** | **13** | *i* P | **Pn** | **01 32 01.3** | **+0.2** |
| **AYDN** | **Tasoluk** | **0.77** | **13** | P | **Pn** | **01 32 01.3** | **+0.2** |
| AYDN | | | | S | **Sn** | **01 32 12.9** | **+0.2** |
| **DALY** | **Dalyan (Mu˘la** | **0.81** | **97** | *e*PG | **Pb** | **01 32 00.8** | **+0.6** |
| DALY | | | | *e*SG | **Sn** | **01 32 13.1** | **-0.3** |
| **DALY** | **Dalyan (Mu˘la** | **0.81** | **97** | *e*Pg | **Pb** | **01 32 00.8** | **+0.6** |
| DALY | | | | *e*Sg | **Sn** | **01 32 13.1** | **-0.3** |
| **GCAM** | **G?zelcaml?** | **0.85** | **337** | *i* P | **Pb** | **01 32 01.4** | **+0.3** |
| GCAM | | | | *i* S | **Sb** | **01 32 12.9** | **+0.4** |
| **GCAM** | **G?zelcaml?** | **0.85** | **337** | P | **Pb** | **01 32 01.4** | **+0.3** |
| GCAM | | | | S | **Sb** | **01 32 12.9** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.05** | **10** | *e*PG | **Pg** | **01 32 04.2** | **-0.2** |
| AYDB | | | | *e*SG | **Sn** | **01 32 18.8** | **-0.9** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.05** | **10** | *e*Pg | **Pg** | **01 32 04.2** | **-0.2** |
| AYDB | | | | *e*Sg | **Sn** | **01 32 18.8** | **-0.9** |
| **KULA** | **Kula-Manisa** | **1.79** | **26** | *e*PN | **Pn** | **01 32 15.1** | **0.0** |
| **KULA** | **Kula-Manisa** | **1.79** | **26** | *e*Pn | **Pn** | **01 32 15.1** | **0.0** |

*IDC **31** 01:32:44.8±1.3,3°.75S×99°.56E,h0km,mb4.1/9,mb1 4.2/9, mb1mx3.9/34,mbtmp4.1/9,MS2.5/1,Ms1 2.7/1, ms1mx2.3/35,Error ellipse: s-maj=47.6km s-min=18.9km az=52.0*
*NEIC **31** 01:32:46.2±0.6,3°.76S×99°.59E,h10km,mb4.1/6,Error ellipse: s-maj=23.1km s-min=7.7km az=46.0*
*ISCJB **31** 01:32:48.1±1.0,3°.7S±0°.2×99°.7E±0°.2,h33km,mb4.1/14, MS2.3/1,Error ellipse: s-maj=33.0km s-min=11.6km az=136.0*
**ISC 31 01:32:50.0±1.3,3°.7S±0°.2×99°.7E±0°.2,h35km,n22,**
**σ0°48/16,mb4.1/14,Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **20.09** | **94** | *e*P | **P** | **01 37 20.3** | **-0.4** |
| | 3.4nm,0.5s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.04** | **358** | P | **P** | **01 37 41.5** | **-0.2** |
| | 1.4nm,0.5s,baz=188,slow=9.7,SNR=6.2 | | | | | | |
| CMAR | | | | LR | LR | 01 44 59.0 | |
| | comp=Z,13nm,21.8s,baz=105,slow=33 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.30** | **261** | T | T | 02 07 55.6 | |
| | baz=82,slow=75,SNR=30 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.30** | **261** | T | T | 02 07 56.1 | |
| | baz=82,slow=75,SNR=27 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.32** | **261** | T | T | 02 07 52.9 | |
| | baz=82,slow=75,SNR=38 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.81** | **158** | T | T | 02 15 46.0 | |
| | baz=336,slow=76,SNR=4.9 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.82** | **158** | T | T | 02 15 38.1 | |
| | baz=336,slow=76,SNR=5.7 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.82** | **158** | T | T | 02 15 42.4 | |
| | baz=336,slow=76,SNR=4.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.47** | **118** | P | **P** | **01 40 00.3** | **-0.2** |
| | 1.6nm,0.8s,baz=292,slow=8.6,SNR=7.7 | | | | | | |
| **WRAB** | **Tennant Creek** | **37.47** | **118** | *e*P | **P** | **01 40 00.5** | **0.0** |
| | 2.8nm,0.7s | | | | | | |
| **ASAR** | **Alice Springs** | **38.56** | **124** | P | **P** | **01 40 10.2** | **+0.4** |
| | 0.7nm,0.5s,baz=297,slow=8.2,SNR=10 | | | | | | |
| **TKM2** | **Tokmak 2** | **51.26** | **337** | *e*P | **P** | **01 41 51.0** | **+0.3** |
| | 1.6nm,0.7s | | | | | | |
| **SONM** | **Songino Array** | **51.67** | **6** | P | **P** | **01 41 54.2** | **+0.7** |
| | 1.7nm,0.7s,baz=194,slow=8.0,SNR=10 | | | | | | |
| **EKS2** | **Erkin-Say** | **51.76** | **336** | *e*P | **P** | **01 41 54.4** | **+0.1** |
| | 1.2nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **51.77** | **6** | *e*P | **P** | **01 41 54.5** | **+0.2** |
| | 1.5nm,0.5s | | | | | | |
| **MKAR** | **Makanchi Array** | **52.58** | **345** | P | **P** | **01 42 00.7** | **+0.6** |
| | 1.2nm,0.5s,baz=151,slow=9.3,SNR=9.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.82** | **28** | P | **P** | **01 42 23.5** | **-0.3** |
| | 1.9nm,0.6s,baz=221,slow=6.6,SNR=5.9 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.78** | **350** | P | **P** | **01 42 44.3** | **-0.1** |
| | 2.1nm,0.5s,baz=181,slow=5.5,SNR=14 | | | | | | |
| **ABKAR** | **Akbulak array** | **62.97** | **332** | *e*P | **P** | **01 43 12.3** | **-0.8** |
| | 2.6nm,0.9s | | | | | | |
| **BRTR** | **Keskin Array B** | **74.22** | **313** | P | **P** | **01 44 23.2** | **-0.5** |
| | 0.3nm,0.6s,baz=128,slow=5.3,SNR=3.0 | | | | | | |
| **FINES** | **FINESS Array B** | **85.45** | **332** | P | **P** | **01 45 24.4** | **+0.5** |
| | 4.4nm,1.0s,baz=131,slow=5.7,SNR=8.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.26** | **38** | PKPbc | **PKPab** | **01 52 29.1** | **+0.6** |
| | 0.7nm,0.7s,baz=289,slow=0.8,SNR=12 | | | | | | |

*IDC **31** 01:43:55.2±2.1,3°.56S×99°.81E,h0km,mb3.9/7,mb1 4.0/7, mb1mx3.7/27,mbtmp3.9/7,MS3.1/3,Ms1 3.2/3,*
*ms1mx2.6/43,Error ellipse: s-maj=87.8km s-min=20.5km az=55.0*
*NEIC **31** 01:43:56.8±0.9,3°.56S×99°.82E,h10km,mb4.0/3,Error ellipse: s-maj=31.9km s-min=9.6km az=47.0*
*ISCJB **31** 01:43:58.7±1.4,3°.5S±0°.2×100°.0E±0°.2,h33km,mb3.9/9, MS3.1/3,Error ellipse: s-maj=45.9km s-min=13.4km az=136.4*
**ISC 31 01:44:00.9±1.7,3°.5S±0°.3×100°.0E±0°.3,h35km,n19,**
**σ0°53/11,mb4.0/9,MS3.2/3,Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KAPI** | **Kappang** | **19.75** | **95** | *e*P | **Pn** | **01 48 29.4** | **-0.3** |
| | 4.0nm,0.7s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.80** | **357** | P | **P** | **01 48 49.6** | **-0.4** |
| | 2.3nm,0.3s,baz=180,slow=10,SNR=6.0 | | | | | | |
| CMAR | | | | LR | LR | 01 57 53.8 | |
| | comp=Z,14nm,19.1s,baz=325,slow=38 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.69** | **260** | T | T | 02 19 14.5 | |
| | baz=80,slow=75,SNR=19 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.70** | **260** | T | T | 02 19 13.3 | |
| | baz=80,slow=75,SNR=19 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.71** | **260** | T | T | 02 19 11.6 | |
| | baz=80,slow=75,SNR=23 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.91** | **159** | T | T | 02 26 51.0 | |
| | baz=336 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.93** | **159** | T | T | 02 26 52.2 | |
| | baz=336 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.93** | **159** | T | T | 02 26 49.6 | |
| | baz=336 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.27** | **119** | P | **P** | **01 51 09.5** | **-0.3** |
| | 0.7nm,0.9s,baz=290,slow=10,SNR=3.0 | | | | | | |
| **ASAR** | **Alice Springs** | **38.41** | **125** | P | **P** | **01 51 19.6** | **+0.2** |
| | 0.7nm,0.9s,baz=301,slow=9.3,SNR=4.5 | | | | | | |
| **TKM2** | **Tokmak 2** | **51.16** | **337** | *e*P | **P** | **01 53 00.5** | **-0.3** |
| | 0.9nm,0.5s | | | | | | |
| **SONM** | **Songino Array**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| AKAS | | | | | S | | **Sn** | **02 02 31.6** | **+4.9** |
| **GCAM** | **G?zelcami?** | **1.21** | **301** | *i* | P | | **Pg** | **02 02 10.8** | **-0.1** |
| GCAM | | | | *i* | S | | **Sn** | **02 02 27.7** | **+1.0** |
| **GCAM** | **G?zelcami?** | **1.21** | **301** | | P | | **Pg** | **02 02 10.8** | **-0.1** |
| GCAM | | | | | S | | **Sn** | **02 02 27.7** | **+1.0** |
| **KSL** | **Kastellorizon** | **1.25** | **138** | *e* | PB | | **Pn** | **02 02 09.2** | **-1.7** |
| KSL | | | | *e* | SB | | **Sb** | **02 02 26.5** | **-0.7** |
| **MANT** | **Manisa** | **1.41** | **0** | *i* | P | | **Pn** | **02 02 13.2** | **-0.1** |
| MANT | | | | *i* | S | | **Sg** | **02 02 33.8** | **+0.9** |
| **MANT** | **Manisa** | **1.41** | **0** | | P | | **Pn** | **02 02 13.2** | **-0.1** |
| MANT | | | | | S | | **Sg** | **02 02 33.8** | **+0.9** |
| **KULA** | **Kula-Manisa** | **1.43** | **4** | *e* | PN | | **Pn** | **02 02 13.3** | **-0.2** |
| **KULA** | **Kula-Manisa** | **1.43** | **4** | *e* | Pn | | **Pn** | **02 02 13.3** | **-0.2** |
| **KORT** | **Korkueli** | **1.45** | **93** | *i* | P | | **Pg** | **02 02 15.7** | **+0.3** |
| **KORT** | **Korkueli** | **1.45** | **93** | | P | | **Pg** | **02 02 15.7** | **+0.3** |
| KORT | | | | | S | | **Sg** | **02 02 38.8** | **+4.5** |
| **KHL** | **Karahalli** | **1.46** | **32** | *e* | PN | | **Pb** | **02 02 14.2** | **-0.6** |
| **KHL** | **Karahalli** | **1.46** | **32** | *e* | Pn | | **Pb** | **02 02 14.2** | **-0.6** |
| **KHAL** | **Karahalli** | **1.49** | **30** | *i* | P | | **Pb** | **02 02 14.6** | **-0.7** |
| KHAL | | | | *i* | S | | **Sg** | **02 02 35.3** | **-0.3** |
| **KHAL** | **Karahalli** | **1.49** | **30** | | P | | **Pb** | **02 02 14.6** | **-0.7** |
| KHAL | | | | | S | | **Sg** | **02 02 35.2** | **-0.3** |
| **SMG** | **Samos** | **1.50** | **295** | *e* | PG | | **Pn** | **02 02 13.5** | **-0.8** |
| **SMG** | **Samos** | **1.50** | **295** | *e* | Pb | | **Pn** | **02 02 13.5** | **-0.8** |
| **IZM** | **Izmir** | **1.66** | **323** | *e* | PN | | **Pb** | **02 02 17.1** | **-1.1** |
| **IZM** | **Izmir** | **1.66** | **323** | *e* | Pn | | **Pb** | **02 02 17.1** | **-1.1** |
| **BCK** | **Bucak** | **1.68** | **76** | *e* | PN | | **Pn** | **02 02 17.0** | **+0.2** |
| **BCK** | **Bucak** | **1.68** | **76** | *e* | Pn | | **Pn** | **02 02 17.0** | **+0.2** |
| **ANTB** | **Antalya** | **1.70** | **96** | *e* | PN | | **Pn** | **02 02 17.1** | **0.0** |
| **ANTB** | **Antalya** | **1.70** | **96** | *e* | Pn | | **Pn** | **02 02 17.1** | **0.0** |
| **AKHS** | **Akhisar** | **1.88** | **342** | *i* | P | | **Pn** | **02 02 18.6** | **-1.0** |
| AKHS | | | | *i* | S | | **Sb** | **02 02 46.0** | **+0.5** |
| **AKHS** | **Akhisar** | **1.88** | **342** | | P | | **Pn** | **02 02 18.6** | **-1.0** |
| AKHS | | | | | S | | **Sb** | **02 02 46.0** | **+0.5** |
| **AKS** | **Akhisar** | **1.88** | **342** | *e* | PN | | **Pn** | **02 02 19.6** | **0.0** |
| **AKS** | **Akhisar** | **1.88** | **342** | *e* | Pn | | **Pn** | **02 02 19.7** | **0.0** |
| **KARP** | **Karpathos** | **1.90** | **216** | *e* | PN | | **Pb** | **02 02 20.5** | **-1.7** |
| **KARP** | **Karpathos** | **1.90** | **216** | *e* | Pn | | **Pb** | **02 02 20.5** | **-1.7** |
| **ZEY** | **˙zmir** | **1.99** | **306** | | P | | **Pn** | **02 02 20.5** | **-0.5** |
| ZEY | | | | | S | | **Sb** | **02 02 48.2** | **-0.2** |
| **SUTC** | **Sutluce-Ispart** | **2.00** | **78** | *e* | PN | | **Pn** | **02 02 21.9** | **+0.5** |
| **SUTC** | **Sutluce-Ispart** | **2.00** | **78** | *e* | Pn | | **Pn** | **02 02 21.9** | **+0.5** |
| **URLA** | **Izmir** | **2.00** | **310** | | P | | **Pg** | **02 02 26.8** | **+0.8** |
| URLA | | | | | S | | **Sg** | **02 02 56.2** | **+4.2** |
| **SHUT** | **Suhut-Afyon** | **2.17** | **47** | *e* | PN | | **Pb** | **02 02 24.9** | **-1.9** |
| **SHUT** | **Suhut-Afyon** | **2.17** | **47** | *e* | Pn | | **Pb** | **02 02 24.9** | **-1.9** |
| **CHOS** | **Chios island** | **2.36** | **304** | *e* | PN | | **Pn** | **02 02 27.6** | **+1.3** |
| **CHOS** | **Chios island** | **2.36** | **304** | *e* | Pn | | **Pn** | **02 02 27.6** | **+1.3** |
| **TVSB** | **Tavsanli** | **2.47** | **17** | *e* | PN | | **Pn** | **02 02 28.9** | **+1.0** |
| **TVSB** | **Tavsanli** | **2.47** | **17** | *e* | Pn | | **Pn** | **02 02 28.9** | **+1.0** |
| **BALB** | **Balikesir** | **2.61** | **349** | *e* | PN | | **Pn** | **02 02 30.9** | **+1.3** |
| **BALB** | **Balikesir** | **2.61** | **349** | *e* | Pn | | **Pn** | **02 02 30.9** | **+1.3** |
| **ZKR** | **Zakros** | **2.72** | **224** | *e* | PN | | **Pn** | **02 02 33.0** | **+1.9** |
| **ZKR** | **Zakros** | **2.72** | **224** | *e* | Pn | | **Pn** | **02 02 33.0** | **+1.9** |
| **BALY** | **Balya** | **2.75** | **345** | *i* | P | | **Pn** | **02 02 32.9** | **+1.3** |
| **BALY** | **Balya** | **2.75** | **345** | | P | | **Pn** | **02 02 32.9** | **+1.3** |
| BALY | | | | | S | | **Sg** | **02 03 14.4** | **-1.6** |
| **LAST** | **Lasithi** | **3.13** | **233** | *e* | PN | | **Pn** | **02 02 38.5** | **+1.6** |
| **LAST** | **Lasithi** | **3.13** | **233** | *e* | Pn | | **Pn** | **02 02 38.5** | **+1.6** |
| **IDI** | **Anoyia** | **3.45** | **240** | *e* | PN | | **Pn** | **02 02 42.8** | **+1.5** |
| **IDI** | **Anoyia** | **3.45** | **240** | *e* | Pn | | **Pn** | **02 02 42.8** | **+1.5** |

*IDC* ***31*** *02:09:34.8±1.6, 30˚.46N×50˚.48E, h0km, mb3.8/15, mb1 3.8/19, mb1mx3.7/46, mbtmp3.8/19, ML3.6/4, MS3.3/1, Ms1 3.3/1, ms1mx2.5/36, Error ellipse: s-maj=35.6km s-min=14.6km az=168.0*

*ISCJB* ***31*** *02:09:34.7±0.4, 30˚.39N±0˚.05×50˚.32E±0˚.04, h10km, mb3.7/14, MS3.2/1, Error ellipse: s-maj=7.1km s-min=4.4km az=23.3*

*CSEM* ***31*** *02:09:35.5±0.3, 30˚.42N×50˚.32E, h2km, ML3.8, Error ellipse: s-maj=8.8km s-min=5.9km az=34.0*

*THR* ***31*** *02:09:37.8±0.3, 30˚.51N×50˚.48E, h39km±6km, ML3.8*

*TEH* ***31*** *02:09:40.5, 30˚.58N×50˚.61E, h8km, ML3.8*

*ISN* ***31*** *02:09:46.1±2.2, 29˚.45N×48˚.68E, h0km±8km, ML3.8*

**ISC 31 02:09:36.6±0.7, 30˚.47N±0˚.06×50˚.38E±0˚.04, h10km, n57, σ1§32/54, mb3.8/14, Northern and central Iran**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **IKAZ** | **Kazeroun** | **1.44** | **118** | *e*Sg | **Sn** | **02 10 22.6** | **+0.4** |
| IKAZ | | | | *e*Pg | **Pn** | **02 10 04.0** | **+1.0** |
| IKAZ | | | | *e* | | 02 10 24.9 | |
| | comp=Z,37µm,0.1s | | | | | | |
| **AHBU** | **AHRAM** | **1.79** | **153** | *e*Pg | **Pn** | **02 10 09.9** | **+2.4** |
| **SHGR** | **Shooshtar-Gavs** | **2.12** | **321** | *e*Pg | **Pb** | **02 10 16.0** | **+0.9** |
| SHGR | | | | AML | AML | 02 10 57.3 | |
| | comp=N,650nm,0.5s | | | | | | |
| SHGR | | | | AML | AML | 02 10 57.4 | |
| | comp=E,735nm,0.2s | | | | | | |
| **SHGR** | **Shooshtar-Gavs** | **2.12** | **321** | *e*Pg | **Pb** | **02 10 16.0** | **+0.9** |
| **IRAM** | **Ramesheh** | **2.18** | **52** | *e*Pn | **Pn** | **02 10 14.0** | **+0.9** |
| IRAM | | | | *e* | | 02 10 15.4 | |
| | comp=Z,7µm,0.1s | | | | | | |
| IRAM | | | | *e*Sg | **Sn** | **02 10 41.5** | **+1.3** |
| **IRAM** | **Ramesheh** | **2.18** | **52** | *e*Pn | **Pn** | **02 10 14.0** | **+0.9** |
| IRAM | | | | *e*Sg | **Sn** | **02 10 41.5** | **+1.3** |
| **IPIR** | **Pirpir** | **2.25** | **11** | *e*Pn | **Pn** | **02 10 16.4** | **+2.2** |
| IPIR | | | | *e* | | 02 10 50.2 | |
| | comp=Z,6µm,0.3s | | | | | | |
| **IPIR** | **Pirpir** | **2.25** | **11** | *e*Pn | **Pn** | **02 10 16.4** | **+2.2** |
| **IGAR** | **Gharneh** | **2.40** | **36** | *e*Pn | **Pn** | **02 10 17.3** | **+1.2** |
| IGAR | | | | *e* | | 02 10 21.7 | |
| | comp=Z,5µm,0.1s | | | | | | |
| **IZEF** | **Zefreh** | **2.94** | **34** | *e*Pn | **Pn** | **02 10 24.5** | **+0.9** |
| IZEF | | | | *e* | | 02 10 26.1 | |
| | comp=Z,1µm,0.1s | | | | | | |
| **IZEF** | **Zefreh** | **2.94** | **34** | *e*Pn | **Pn** | **02 10 24.5** | **+0.9** |
| **IKLH** | **Kolahrood** | **3.02** | **19** | *e*Pn | **Pn** | **02 10 26.1** | **+1.4** |
| IKLH | | | | *e* | | 02 11 26.4 | |
| | comp=Z,2µm,0.3s | | | | | | |
| **IKLH** | **Kolahrood** | **3.02** | **19** | *e*Pn | **Pn** | **02 10 26.1** | **+1.4** |
| **GHIR** | **Ghir-Karzin** | **3.15** | **133** | *e*Pn | **Pn** | **02 10 26.3** | **-0.1** |
| **GHIR** | **Ghir-Karzin** | **3.15** | **133** | *e*Pn | **Pn** | **02 10 26.3** | **-0.1** |
| **ISAD** | **Sadrabad** | **3.18** | **62** | *e*Pn | **Pn** | **02 10 28.0** | **+1.1** |
| ISAD | | | | *e* | | 02 11 17.9 | |
| | comp=Z,5µm,0.4s | | | | | | |
| **ISAD** | **Sadrabad** | **3.18** | **62** | *e*Pn | **Pn** | **02 10 28.0** | **+1.1** |
| **QAM** | **Ghamsar** | **3.41** | **15** | *e*Pn | **Pn** | **02 10 32.0** | **+2.1** |
| QAM | | | | *e* | | 02 10 33.8 | |
| | comp=Z,4µm,0.1s | | | | | | |
| **NSR** | **Nassriya** | **3.69** | **279** | *e*PG | x | 02 10 44.4 | |
| NSR | | | | *e*SG | x | 02 11 24.8 | |
| **NSR** | **Nassriya** | **3.69** | **279** | *e*Pg | **Pb** | **02 10 44.3** | **+2.5** |
| | SNR=90 | | | | | | |
| NSR | | | | *e*Sg | **Sb** | **02 11 24.8** | **-1.7** |
| | SNR=90 | | | | | | |
| **IMEH** | **Mehriz** | **3.75** | **75** | *e*Pn | **Pn** | **02 10 35.2** | **+0.4** |
| IMEH | | | | *e* | | 02 10 37.6 | |
| | comp=Z,1µm,0.1s | | | | | | |
| **IMEH** | **Mehriz** | **3.75** | **75** | *e*Pn | **Pn** | **02 10 35.2** | **+0.4** |
| **ICHK** | **Chekchek** | **3.88** | **62** | *e*Pn | **Pn** | **02 10 36.9** | **+0.4** |
| ICHK | | | | *e* | | 02 10 38.3 | |
| | comp=Z,2µm,0.1s | | | | | | |
| **ICHK** | **Chekchek** | **3.88** | **62** | *e*Pn | **Pn** | **02 10 36.9** | **+0.4** |
| **IBDR** | **Badra** | **4.61** | **306** | *e*PN | x | 02 10 54.2 | |
| IBDR | | | | *e*SN | x | 02 11 43.2 | |
| **IRAZ** | **Razeghan** | **4.94** | **356** | *e*Pn | **Pn** | **02 10 52.8** | **+1.8** |
| IRAZ | | | | *e* | | 02 11 59.2 | |
| | comp=Z,603nm,0.3s | | | | | | |
| **IRAZ** | **Razeghan** | **4.94** | **356** | *e*Pn | **Pn** | **02 10 52.8** | **+1.8** |
| **IVIS** | **Veis** | **5.02** | **325** | *e*Pn | Pn | 02 10 56.5 | +4.4 |
| IVIS | | | | *e* | | 02 11 57.8 | |
| | comp=Z,659nm,0.3s | | | | | | |
| **IVIS** | **Veis** | **5.02** | **325** | *e*Pn | Pn | 02 10 56.5 | +4.4 |
| **IDMV** | **Damavand** | **5.28** | **15** | *e*Pn | **Pn** | **02 10 56.4** | **+0.5** |
| IDMV | | | | *e* | | 02 10 57.1 | |
| | comp=Z,620nm,0.3s | | | | | | |
| **IDMV** | **Damavand** | **5.28** | **15** | *e*Pn | **Pn** | **02 10 56.3** | **+0.5** |
| **BHD** | **Baghdad** | **5.81** | **300** | *e*Pn | x | 02 11 06.1 | |
| BHD | | | | *e*SN | x | 02 12 05.8 | |
| **BHD** | **Baghdad** | **5.81** | **300** | *e*Pn | Pn | 02 11 06.1 | +3.3 |
| | SNR=3.0 | | | | | | |
| BHD | | | | *e*Sn | **Sn** | **02 12 05.8** | **-3.8** |
| | SNR=39 | | | | | | |
| **TABS** | **Tabas** | **6.54** | **59** | *e*Pn | **Pn** | **02 11 12.3** | **-0.7** |
| **TABS** | **Tabas** | **6.54** | **59** | *e*Pn | **Pn** | **02 11 12.3** | **-0.7** |
| **IKRK** | **Kirkuk** | **7.07** | **316** | *e*PN | x | 02 11 31.2 | |
| IKRK | | | | *e*Sn | x | 02 12 44.8 | |
| **RTB** | **Rutbah** | **8.95** | **289** | *e*PN | x | 02 11 46.8 | |
| RTB | | | | *e*SN | x | 02 13 10.6 | |
| **RTB** | **Rutbah** | **8.95** | **289** | *e*Pn | **Pn** | **02 11 46.8** | **+0.9** |
| | SNR=39 | | | | | | |
| RTB | | | | *e*Sn | Sn | 02 13 10.6 | -16 |
| | SNR=39 | | | | | | |
| **GEYT** | **Alibeck** | **9.82** | **39** | Pn | **Pn** | **02 11 56.6** | **-1.2** |
| | comp=Z,2.0nm,0.3s,baz=225,slow=15,SNR=9.0 | | | | | | |
| **ASF** | **Jabal al Asfar** | **11.65** | **282** | Pn | **Pn** | **02 12 22.6** | **-0.4** |
| | comp=Z,0.5nm,0.3s,baz=213,slow=2.2,SNR=11 | | | | | | |
| **MMAI** | **Mount Meron Ar** | **12.99** | **285** | Pn | **Pn** | **02 12 41.3** | **-0.1** |
| | comp=Z,0.4nm,0.3s,baz=97,slow=16,SNR=3.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **16.50** | **309** | Pn | **Pn** | **02 13 30.2** | **+2.0** |
| | comp=Z,0.0nm,0.3s,baz=107,slow=9.2,SNR=2.7 | | | | | | |
| **AKTO** | **Aktyubinsk** | **20.75** | **14** | P | **P** | **02 14 16.6** | **-0.7** |
| | comp=Z,0.9nm,0.6s,baz=220,slow=7.9,SNR=3.1 | | | | | | |
| **IDI** | **Anoyia** | **21.91** | **289** | P | **P** | **02 14 30.9** | **+0.8** |
| | comp=Z,3.3nm,0.3s,baz=90,slow=7.1,SNR=12 | | | | | | |
| **AAK** | **Ala-Archa** | **22.78** | **51** | P | **P** | **02 14 39.3** | **-0.1** |
| | comp=Z,0.3nm,0.3s,baz=342,slow=20,SNR=2.7 | | | | | | |
| **MLR** | **Muntele Rosu** | **24.28** | **315** | P | **P** | **02 14 54.9** | **+0.8** |
| | comp=Z,0.4nm,0.8s,baz=188,slow=7.1,SNR=6.8 | | | | | | |
| **AKASG** | **Malin Array Be** | **25.65** | **328** | P | **P** | **02 15 07.2** | **+0.9** |
| | comp=Z,1.0nm,0.5s,baz=135,slow=8.1,SNR=2.9 | | | | | | |
| **BVAR** | **Borovoye Array** | **26.86** | **27** | P | **P** | **02 15 16.4** | **-0.8** |
| | comp=Z,1.1nm,0.5s,baz=211,slow=6.0,SNR=6.7 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **29.09** | **38** | P | **P** | **02 15 37.2** | **0.0** |
| | comp=Z,0.7nm,0.7s,baz=239,slow=9.3,SNR=6.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **29.53** | **47** | P | **P** | **02 15 40.5** | **-0.7** |
| | comp=Z,0.7nm,0.6s,baz=234,slow=7.6,SNR=5.4 | | | | | | |
| MKAR | | | | LR | LR | 02 29 15.4 | |
| | comp=Z,52nm,19.5s,baz=300,slow=40 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **34.12** | **37** | P | **P** | **02 16 20.5** | **-0.8** |
| | comp=Z,1.1nm,0.5s,baz=259,slow=10,SNR=6.0 | | | | | | |
| **FINES** | **FINESS Array B** | **34.86** | **340** | P | **P** | **02 16 26.1** | **-1.5** |
| | comp=Z,4.1nm,0.9s,baz=145,slow=9.4,SNR=6.8 | | | | | | |
| **NOA** | **NORSAR Array B** | **39.95** | **331** | P | **P** | **02 17 12.5** | **+1.6** |
| | comp=Z,0.9nm,0.8s,baz=120,slow=7.1,SNR=2.7 | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.60** | **347** | P | **P** | **02 17 23.7** | **-0.6** |
| | comp=Z,2.2nm,0.8s,baz=161,slow=8.6,SNR=2.6 | | | | | | |
| **SONM** | **Songino Array** | **45.74** | **51** | P | **P** | **02 17 57.5** | **-0.6** |
| | comp=Z,0.2nm,0.3s,baz=268,slow=10,SNR=2.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **47.98** | **260** | P | **P** | **02 18 16.4** | **+0.5** |
| | comp=Z,1.0nm,0.5s,baz=58,slow=8.1,SNR=27 | | | | | | |
| **KSRS** | **Korea Array** | **63.02** | **61** | P | **P** | **02 20 02.1** | **-1.7** |
| | comp=Z,1.4nm,0.7s,baz=278,slow=8.0,SNR=4.0 | | | | | | |

**WEL 31 02:17:29.2±0.3, 40˚.45S×173˚.42E, h165km±2km, ML3.5/12, 3C-3D, Error ellipse: s-maj=2.0km s-min=1.4km az=90.0, Cook Strait**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DUWZ** | **D'Urville Isla** | **0.52** | **133** | ⇑PN | Pn | 02 17 52.5 | +0.2 |
| DUWZ | | | | SN | Sn | 02 18 09.2 | -0.9 |
| **NNZ** | **Nelson** | **0.77** | **182** | PN | Pn | 02 17 53.8 | +0.1 |
| NNZ | | | | SN | Sn | 02 18 11.9 | -0.8 |
| **QRZ** | **Quartz Range** | **0.78** | **241** | PN | Pn | 02 17 53.6 | -0.1 |
| QRZ | | | | SN | Sn | 02 18 11.2 | -1.5 |
| **TCW** | **Tory Channel** | **1.00** | **140** | PN | Pn | 02 17 55.9 | +0.5 |
| TCW | | | | SN | Sn | 02 18 14.2 | -1.4 |
| TCW | | | | AML | AML | 02 18 15.9 | |
| **TUWZ** | **Tuamarina** | **1.06** | **158** | PN | Pn | 02 17 56.0 | +0.2 |
| TUWZ | | | | AML | AML | 02 18 16.0 | |
| TUWZ | | | | AML | AML | 02 18 16.2 | |
| **KIW** | **Kapiti Island** | **1.20** | **111** | PN | Pn | 02 17 57.0 | -0.1 |
| KIW | | | | AML | AML | 02 18 17.7 | |
| KIW | | | | AML | AML | 02 18 18.7 | |
| **KHEZ** | **Kahui Hut** | **1.24** | **22** | PN | Pn | 02 17 57.3 | -0.3 |
| KHEZ | | | | SN | Sn | 02 18 18.8 | -0.5 |
| **BSWZ** | **Blackbirch Sta** | **1.31** | **165** | PN | Pn | 02 17 58.4 | +0.4 |
| BSWZ | | | | AML | AML | 02 18 20.0 | |
| BSWZ | | | | AML | AML | 02 18 20.7 | |
| **THZ** | **Tophouse** | **1.37** | **196** | ⇓PN | Pn | 02 17 58.5 | -0.2 |
| THZ | | | | SN | Sn | 02 18 19.9 | -1.7 |
| **OGWZ** | **Otaki Gorge** | **1.38** | **106** | ⇓PN | Pn | 02 17 58.8 | +0.1 |
| **WAZ** | **Wanganui** | **1.38** | **61** | PN | Pn | 02 17 59.1 | +0.3 |
| **CAW** | **Cannon Point** | **1.41** | **118** | PN | Pn | 02 17 59.0 | 0.0 |
| CAW | | | | AML | AML | 02 18 21.7 | |
| CAW | | | | AML | AML | 02 18 22.7 | |
| **BHW** | **Baring Head** | **1.46** | **132** | AML | AML | 02 18 21.3 | |
| BHW | | | | AML | AML | 02 18 23.0 | |
| **HOWZ** | **Holdsworth Sta** | **1.65** | **107** | ⇑PN | Pn | 02 18 01.2 | -0.3 |
| **MRZ** | **Mangatainoka R** | **1.66** | **98** | ⇑PN | Pn | 02 18 01.1 | -0.4 |
| MRZ | | | | AML | AML | 02 18 28.8 | |
| **VRZ** | **Vera Road** | **1.67** | **38** | PN | Pn | 02 18 00.7 | -0.9 |
| **MSWZ** | **Moikau Station** | **1.69** | **126** | PN | Pn | 02 18 01.5 | -0.3 |
| MSWZ | | | | AML | AML | 02 18 25.3 | |
| MSWZ | | | | AML | AML | 02 18 26.2 | |
| **MTW** | **Mount Morrison** | **1.73** | **115** | PN | Pn | 02 18 02.0 | -0.2 |
| MTW | | | | AML | AML | 02 18 26.0 | |
| MTW | | | | AML | AML | 02 18 26.5 | |
| **PAWZ** | **Paruwai Farm** | **1.78** | **122** | PN | Pn | 02 18 02.5 | -0.3 |
| PAWZ | | | | AML | AML | 02 18 26.9 | |
| PAWZ | | | | AML | AML | 02 18 28.5 | |
| **PLWZ** | **Palliser** | **1.78** | **130** | PN | Pn | 02 18 02.5 | -0.4 |
| **DSZ** | **Denniston Nort** | **1.79** | **223** | PN | Pn | 02 18 02.3 | -0.6 |
| **TIWZ** | **Tintock** | **1.90** | **101** | ⇓PN | Pn | 02 18 03.9 | -0.3 |
| TIWZ | | | | AML | AML | 02 18 30.4 | |
| TIWZ | | | | AML | AML | 02 18 31.1 | |
| **PRWZ** | **Pori Road** | **1.94** | **94** | PN | Pn | 02 18 04.5 | -0.1 |
| **TRWZ** | **Traveller** | **1.96** | **120** | PN | Pn | 02 18 04.6 | -0.2 |
| TRWZ | | | | AML | AML | 02 18 31.1 | |
| **KHZ** | **Kahutara** | **1.97** | **177** | PN | Pn | 02 18 04.5 | -0.3 |
| **TMWZ** | **Te Maipa** | **1.99** | **110** | PN | Pn | 02 18 04.8 | -0.3 |
| **TRVZ** | **Turoa** | **2.00** | **56** | PN | Pn | 02 18 04.3 | -1.2 |
| **WNVZ** | **Wahianoa** | **2.01** | **57** | PN | Pn | 02 18 04.6 | -1.0 |
| **FWVZ** | **Far West T-bar** | **2.02** | **55** | PN | Pn | 02 18 04.7 | -1.2 |
| **MOVZ** | **Moawhango** | **2.07** | **61** | PN | Pn | 02 18 04.8 | -1.4 |
| **DVHZ** | **Dannevirke** | **2.10** | **87** | PN | Pn | 02 18 05.6 | -0.8 |
| **BFZ** | **Birch Farm** | **2.16** | **97** | PN | Pn | 02 18 06.5 | -0.5 |
| **PNHZ** | **Pukenui** | **2.19** | **77** | PN | Pn | 02 18 06.4 | -1.1 |
| **ANWZ** | **Angora Road** | **2.33** | **91** | PN | Pn | 02 18 08.5 | -0.4 |
| **WPHZ** | **Waipukurau** | **2.34** | **82** | PN | Pn | 02 18 08.7 | -0.5 |
| **KRHZ** | **Kereru** | **2.40** | **71** | PN | Pn | 02 18 08.8 | -1.1 |
| **LTZ** | **Lake Taylor** | **2.49** | **200** | PN | Pn | 02 18 09.9 | -1.0 |
| **OXZ** | **Oxford** | **3.06** | **199** | PN | Pn | 02 18 15.9 | -1.9 |
| **MQZ** | **McQueen's Vall** | **3.31** | **190** | PN | Pn | 02 18 18.5 | -2.4 |

*TIR* ***31*** *02:18:38.6, 41˚.71N×20˚.30E, h0km, ML3.1*

*ISCJB* ***31*** *02:18:45.4±0.4, 41˚.97N±0˚.02×20˚.17E±0˚.02, h1km±4km, Error ellipse: s-maj=3.2km s-min=2.6km az=154.7*

*CSEM* ***31*** *02:18:45.8±0.1, 41˚.97N×20˚.12E, h8km, ML2.8, Error ellipse: s-maj=2.5km s-min=2.0km az=34.0*

*BEO* ***31*** *02:18:46.5±0.3, 41˚.96N×20˚.14E, h14km±3km, ML2.3/9*

*PDG* ***31*** *02:18:46.0±0.2, 41˚.94N×20˚.13E, h8km, ML2.8/10, Error ellipse: s-maj=0.3km s-min=0.4km az=0.0*

*THE* ***31*** *02:18:48.4, 41˚.93N×20˚.40E, h0km±7km, ML2.8/1, Error ellipse: s-maj=11.9km s-min=0.8km az=323.0*

**ISC 31 02:18:46.2±1.1, 41.95N±0˚.02×20.14E±0˚.02, h6km±10km, n116, σ0§83/155, 15C-12D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ZATK** | **Zatriq** | **0.61** | **35** | P | **Pg** | **02 18 58.0** | **0.0** |
| **TIR** | **Tirane** | **0.64** | **199** | *i* PG | **Pg** | **02 18 58.4** | **-0.2** |
| TIR | | | | *i* SG | **Sb** | **02 19 08.3** | **-0.6** |
| **TIR** | **Tirane** | **0.64** | **199** | *i* Pg | **Pg** | **02 18 58.6** | **+0.1** |
| TIR | | | | *i* Sg | **Sb** | **02 19 08.5** | **-0.5** |
| **TIR** | **Tirane** | **0.64** | **199** | *i* Pg | **Pg** | **02 18 58.3** | **-0.2** |
| TIR | | | | *i* Sg | **Sb** | **02 19 08.3** | **-0.6** |
| **PVY** | **Plav** | **0.66** | **348** | ⇓*i*Pg | **Pg** | **02 18 58.5** | **-0.4** |
| PVY | | | | *e*Sg | **Sb** | **02 19 09.1** | **-0.5** |
| **PVY** | **Plav** | **0.66** | **348** | ⇓*i*Pg | **Pg** | **02 18 58.5** | **-0.4** |
| PVY | | | | *e*Sg | **Sb** | **02 19 09.1** | **-0.5** |
| **ULC** | **Ulcinj** | **0.67** | **271** | ⇑*i*Pg | **Pg** | **02 18 58.2** | **-0.9** |
| ULC | | | | *e*Sg | **Sg** | **02 19 08.7** | **+0.9** |
| **ULC** | **Ulcinj** | **0.67** | **271** | ⇑*i*Pg | **Pg** | **02 18 58.2** | **-0.9** |
| **ULC** | **Ulcinj** | **0.67** | **271** | P | **Pg** | **02 18 58.4** | **-0.7** |
| ULC | | | | *e*Sg | **Sg** | **02 19 08.7** | **+0.9** |
| **PEJK** | **Peje** | **0.70** | **8** | P | **Pg** | **02 18 59.5** | **-0.1** |
| **DRME** | **Dracevica, Mon** | **0.75** | **288** | *e*Pg | **Pg** | **02 18 59.7** | **-1.0** |
| DRME | | | | *e*Sg | **Sb** | **02 19 11.8** | **-0.4** |
| **DRME** | **Dracevica, Mon** | **0.75** | **288** | *e*Pg | **Pg** | **02 18 59.7** | **-1.0** |
| DRME | | | | *e*Sg | **Sb** | **02 19 11.8** | **-0.4** |
| **PDG** | **Podgorica** | **0.81** | **306** | ⇑*i*Pg | **Pg** | **02 19 00.5** | **-1.3** |
| PDG | | | | *i* Sg | **Sg** | **02 19 12.2** | **-0.3** |
| **PDG** | **Podgorica** | **0.81** | **306** | ⇑*i*Pg | **Pg** | **02 19 00.6** | **-1.3** |
| PDG | | | | *i* Sg | **Sg** | **02 19 12.2** | **-0.3** |
| **TTG** | **Podgorica** | **0.81** | **306** | ⇑*i*Pg | **Pg** | **02 19 00.6** | **-1.3** |
| TTG | | | | *e*Sg | **Sb** | **02 19 14.1** | **+0.1** |
| **BEY** | **Berane** | **0.94** | **349** | ⇑*i*Pg | **Pg** | **02 19 03.7** | **-0.5** |
| **BEY** | **Berane** | **0.94** | **349** | P | **Pg** | **02 19 03.9** | **-0.3** |
| **IVA** | **Berane** | **0.94** | **349** | ⇑*i*Pg | **Pg** | **02 19 03.7** | **-0.5** |
| IVA | | | | *e*Sg | **Sb** | **02 19 18.2** | **+0.5** |
| **SKO** | **Skopje** | **0.97** | **88** | *i* Pg | **Pg** | **02 19 04.8** | **0.0** |
| SKO | | | | *i* Sg | **Sb** | **02 19 18.6** | **+0.2** |
| **SKO** | **Skopje** | **0.97** | **88** | P | **Pg** | **02 19 04.3** | **-0.4** |
| SKO | | | | S | **Sg** | **02 19 17.1** | **-0.2** |
| **SKO** | **Skopje** | **0.97** | **88** | P | **Pg** | **02 19 04.3** | **-0.4** |
| **SKO** | **Skopje** | **0.97** | **88** | *i* Pg | **Pg** | **02 19 04.7** | **0.0** |
| SKO | | | | S | **Sg** | **02 19 17.1** | **-0.2** |
| SKO | | | | *i* Sg | **Sb** | **02 19 18.6** | **+0.2** |
| **OHR** | **Ohrid** | **0.97** | **149** | *i* Pg | **Pg** | **02 19 04.3** | **-0.6** |
| OHR | | | | *i* Sg | **Sb** | **02 19 18.8** | **+0.1** |
| **OHR** | **Ohrid** | **0.97** | **149** | *i* Pg | **Pg** | **02 19 04.2** | **-0.6** |
| OHR | | | | *i* Sg | **Sb** | **02 19 18.7** | **+0.1** |
| **BUM** | **Brajici-Budva** | **0.99** | **291** | ⇓*i*Pg | **Pg** | **02 19 04.1** | **-1.2** |
| BUM | | | | *e*Sg | **Sb** | **02 19 20.1** | **+0.8** |
| **BUM** | **Brajici-Budva** | **0.99** | **291** | ⇓*i*Pg | **Pg** | **02 19 04.1** | **-1.2** |
| BUM | | | | *e*Sg | **Sb** | **02 19 20.1** | **+0.8** |
| **GJIK** | **Gjilan** | **1.09** | **62** | P | **Pb** | **02 19 07.4** | **0.0** |
| GJIK | | | | S | **Sb** | **02 19 22.2** | **+0.3** |
| **SMRK** | **Smrekonice** | **1.09** | **32** | P | **Pg** | **02 19 07.3** | **+0.1** |
| **NKME** | **Niksic** | **1.20** | **313** | ⇑*i*Pg | **Pg** | **02 19 08.2** | **-1.1** |
| NKME | | | | *e*Sg | **Sn** | **02 19 26.8** | **+0.5** |
| **NKME** | **Niksic** | **1.20** | **313** | ⇑*i*Pg | **Pg** | **02 19 08.2** | **-1.1** |
| **NKY** | **Niksic** | **1.21** | **316** | ⇓*i*Pg | **Pg** | **02 19 08.4** | **-1.1** |
| NKY | | | | *e*Sg | **Sn** | **02 19 27.5** | **+0.9** |
| **NKY** | **Niksic** | **1.21** | **316** | ⇓*i*Pg | **Pg** | **02 19 08.4** | **-1.1** |
| **SJES** | **Sjenica** | **1.31** | **355** | *e*Pg | **Pn** | **02 19 10.5** | **-0.7** |
| SJES | | | | *i* Sg | **Sg** | **02 19 28.7** | **+0.2** |
| **SJES** | **Sjenica** | **1.31** | **355** | *e*Pg | **Pn** | **02 19 10.5** | **-0.7** |
| SJES | | | | *i* Sg | **Sg** | **02 19 28.7** | **+0.2** |
| **HCY** | **Herceg Novi** | **1.32** | **293** | ⇑*i*Pg | **Pn** | **02 19 09.8** | **-1.4** |
| HCY | | | | *e*Sg | **Sn** | **02 19 31.0** | **+1.8** |
| **HCY** | **Herceg Novi** | **1.32** | **293** | ⇑*i*Pg | **Pn** | **02 19 09.8** | **-1.4** |
| **SELS** | **Selova** | **1.46** | **29** | *e*Pg | **Pn** | **02 19 12.2** | **-0.9** |
| SELS | | | | *i* Sg | **Sb** | **02 19 32.7** | **+0.1** |
| **PLE** | **Pljevlja** | **1.48** | **338** | ⇓*i*Pg | **Pb** | **02 19 14.1** | **-0.2** |
| PLE | | | | *e*Sg | **Sg** | **02 19 36.1** | **+2.1** |
| **PLE** | **Pljevlja** | **1.48** | **338** | ⇓*i*Pg | **P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **ARIG** | **Puente Sto Nin** | **1.83** | **79** | *e*P | **Pn** | 02 22 29.5 | -1.2 |
| ARIG | | | | *e*S | **Sn** | 02 22 52.4 | -0.5 |
| **MOIG** | **Morelia** | **2.00** | **30** | *e*P | **Pn** | 02 22 31.4 | -1.8 |
| MOIG | | | | *e*S | **Sn** | 02 22 55.9 | -1.3 |
| **MOIG** | **Morelia** | **2.00** | **30** | *e*P | **Pn** | 02 22 31.4 | -1.8 |
| MOIG | | | | *e*S | **Sn** | 02 22 55.9 | -1.3 |
| **EZ5V** | | **2.01** | **320** | *i* P | **Pn** | 02 22 33.9 | +0.4 |
| EZ5V | | | | *e*S | **Sn** | 02 22 57.2 | -0.3 |
| **R15V** | | **2.06** | **307** | *e*P | **Pn** | 02 22 33.9 | -0.1 |
| R15V | | | | *e*S | **Sn** | 02 22 59.0 | +0.4 |
| **CAIG** | **El Cayaco** | **2.08** | **115** | *e*P | **Pn** | 02 22 33.9 | -0.2 |
| CAIG | | | | *i* S | **Sn** | 02 22 58.5 | -0.3 |
| **CAIG** | **El Cayaco** | **2.08** | **115** | *e*P | **Pn** | 02 22 33.9 | -0.2 |
| CAIG | | | | *i* S | **Sn** | 02 22 58.5 | -0.3 |
| **ACP2** | **Acapulco** | **2.48** | **115** | *e*P | Pn | 02 22 43.3 | +3.6 |
| ACP2 | | | | *e*S | **Sn** | 02 23 13.3 | +4.6 |
| **MEIG** | **Mezcala** | **2.49** | **90** | *e*P | **Pn** | 02 22 40.4 | +0.6 |
| MEIG | | | | *e*S | **Sn** | 02 23 09.7 | +0.6 |
| **MEIG** | **Mezcala** | **2.49** | **90** | *e*P | **Pn** | 02 22 40.4 | +0.6 |
| MEIG | | | | *e*S | **Sn** | 02 23 09.7 | +0.6 |
| **ACX** | **Acapulco** | **2.51** | **115** | *e*P | **Pn** | 02 22 40.1 | +0.1 |
| ACX | | | | *i* S | **Sn** | 02 23 09.2 | -0.2 |
| **ACX** | **Acapulco** | **2.51** | **115** | *e*P | **Pn** | 02 22 40.1 | +0.1 |
| ACX | | | | *i* S | **Sn** | 02 23 09.2 | -0.2 |
| **PLIG** | **Platanillo** | **2.64** | **80** | *e*P | **Pn** | 02 22 42.5 | +0.6 |
| PLIG | | | | *e*S | **Sn** | 02 23 13.2 | +0.5 |
| **PLIG** | **Platanillo** | **2.64** | **80** | *e*P | **Pn** | 02 22 42.5 | +0.6 |
| PLIG | | | | *e*S | **Sn** | 02 23 13.2 | +0.5 |
| **TOVM** | **TOLUCA** | **2.77** | **61** | *e*P | **Pn** | 02 22 44.1 | +0.2 |
| TOVM | | | | *e*S | **Sn** | 02 23 15.4 | -0.9 |
| **MAVM** | **Malinalco, Edo** | **2.79** | **68** | *e*P | **Pn** | 02 22 44.2 | +0.1 |
| MAVM | | | | *i* S | **Sn** | 02 23 15.8 | -0.9 |
| **CJM** | **Chamela** | **3.08** | **301** | *e*P | **Pn** | 02 22 48.2 | +0.3 |
| CJM | | | | *e*S | Sn | 02 23 29.8 | +6.3 |
| **CJM** | **Chamela** | **3.08** | **301** | *e*P | **Pn** | 02 22 48.2 | +0.3 |
| CJM | | | | *e*S | Sn | 02 23 29.8 | +6.3 |
| **MZVM** | | **3.11** | **66** | *e*P | **Pn** | 02 22 48.5 | +0.2 |
| MZVM | | | | *e*S | **Sn** | 02 23 29.3 | +5.1 |
| **YAIG** | **Yautepec** | **3.15** | **73** | *e*P | **Pn** | 02 22 48.6 | -0.3 |
| YAIG | | | | *e*S | **Sn** | 02 23 25.9 | +0.6 |
| **YAIG** | **Yautepec** | **3.15** | **73** | *e*P | **Pn** | 02 22 48.6 | -0.3 |
| YAIG | | | | *e*S | **Sn** | 02 23 25.9 | +0.6 |
| **UNM** | **Universidad Na** | **3.21** | **64** | *e*P | **Pn** | 02 22 49.3 | -0.7 |
| UNM | | | | *i* S | **Sn** | 02 23 27.1 | 0.0 |
| **UNM** | **Universidad Na** | **3.21** | **64** | *e*P | **Pn** | 02 22 49.3 | -0.7 |
| UNM | | | | *i* S | **Sn** | 02 23 27.1 | 0.0 |
| **PBIG** | **Penon de los B** | **3.34** | **63** | *e*P | Pn | 02 22 54.4 | +3.0 |
| PBIG | | | | *e*S | Sn | 02 23 36.8 | +6.9 |
| **PTVM** | **Pico Tres Padr** | **3.39** | **60** | *e*P | **Pn** | 02 22 54.2 | +1.9 |
| PTVM | | | | *e*S | **Sn** | 02 23 35.5 | +4.1 |
| **PTVM** | **Pico Tres Padr** | **3.39** | **60** | *e*P | **Pn** | 02 22 54.2 | +1.9 |
| PTVM | | | | *e*S | **Sn** | 02 23 35.5 | +4.1 |
| **TLIG** | **Tlapa** | **3.52** | **96** | *e*P | **Pn** | 02 22 54.8 | +0.8 |
| TLIG | | | | *e*S | **Sn** | 02 23 35.3 | +0.9 |
| **PPM** | **Popocatepetl** | **3.60** | **71** | *e*P | **Pn** | 02 22 56.8 | +1.3 |
| PPM | | | | *e*S | **Sn** | 02 23 38.1 | +1.0 |
| **PPM** | **Popocatepetl** | **3.60** | **71** | *e*P | **Pn** | 02 22 56.8 | +1.3 |
| PPM | | | | *e*S | **Sn** | 02 23 38.1 | +1.0 |
| **IIO** | **Organos** | **3.71** | **63** | *e*P | **Pn** | 02 22 56.1 | -0.7 |
| IIO | | | | *e*S | **Sn** | 02 23 38.6 | -0.9 |
| **IIO** | **Organos** | **3.71** | **63** | *e*P | **Pn** | 02 22 56.1 | -0.7 |
| IIO | | | | *e*S | **Sn** | 02 23 38.6 | -0.9 |
| **VTVM** | **Tizayuca** | **3.75** | **60** | *e*P | **Pn** | 02 22 56.6 | -0.7 |
| VTVM | | | | *e*S | **Sn** | 02 23 39.1 | -1.3 |
| **ANIG** | **Ahuacatlan** | **3.77** | **326** | *e*P | **Pn** | 02 22 57.7 | +0.2 |
| **ANIG** | **Ahuacatlan** | **3.77** | **326** | *e*P | **Pn** | 02 22 57.7 | +0.2 |
| **TPIG** | **Tehuac#an** | **4.66** | **83** | *e*P | **Pn** | 02 23 07.7 | -2.0 |
| **TPIG** | **Tehuac#an** | **4.66** | **83** | *e*P | **Pn** | 02 23 07.7 | -2.0 |
| **CMIG** | **Matias Romero** | **7.07** | **96** | Pn | **Pn** | 02 23 43.7 | +1.2 |
| | 2.4nm,0.3s,baz=276,slow=10,SNR=33 | | | | | | |
| CMIG | | | | Lg | Lg | 02 25 40.0 | |
| | 5.7nm,0.3s,baz=346,slow=17,SNR=12 | | | | | | |
| CMIG | | | | LR | LR | 02 26 34.8 | |
| | comp=Z,368nm,18.5s,baz=278,slow=38 | | | | | | |
| **SLBS** | **Sierra La Lagu** | **9.20** | **310** | *e*Pn | Pn | 02 24 15.2 | +3.4 |
| **LPIG** | **La Paz** | **9.72** | **311** | LR | LR | 02 26 26.8 | |
| | comp=Z,12nm,20.4s,baz=151,slow=28 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **11.42** | **354** | *e*Pn | Pn | 02 24 45.8 | +3.6 |
| **TXAR** | **Lajitas Array** | **11.42** | **354** | Pn | **Pn** | **02 24 43.2** | **+1.1** |
| | 0.1nm,0.3s,baz=175,slow=15,SNR=14 | | | | | | |
| TXAR | | | | Lg | Lg | 02 27 56.8 | |
| | 0.1nm,0.3s,baz=168,slow=26,SNR=4.7 | | | | | | |
| TXAR | | | | LR | LR | 02 29 32.0 | |
| | comp=Z,196nm,19.9s,baz=0.0,slow=40 | | | | | | |
| **JCT** | **Junction City** | **12.68** | **10** | *e*Pn | Pn | 02 25 04.0 | +4.7 |
| | 29nm,1.5s | | | | | | |
| **HKT** | **Hockley** | **13.31** | **25** | *e*Pn | **Pn** | **02 25 07.5** | **-0.3** |
| **TEIG** | **Tepich** | **13.39** | **78** | LR | LR | 02 31 02.4 | |
| | comp=Z,1µm,18.9s,baz=280,slow=40 | | | | | | |
| **MNTX** | **Cornudas Mount** | **13.99** | **349** | *e*Pn | **P** | **02 25 21.1** | **-2.4** |
| | 5.0nm,1.1s | | | | | | |
| **ABTX** | **Abilene, Hawle** | **14.81** | **9** | *e*Pn | **P** | **02 25 32.1** | **-0.4** |
| | 16nm,0.6s | | | | | | |
| **MSTX** | **Muleshoe** | **15.97** | **358** | *e*Pn | **P** | **02 25 46.0** | **+0.5** |
| | 55nm,1.9s | | | | | | |
| **AMTX** | **Amarillo** | **16.89** | **2** | *e*Pn | **Pn** | **02 25 54.0** | **-0.3** |
| | 8.0nm,0.8s | | | | | | |
| **WMOK** | **Wichita Mounta** | **17.01** | **10** | *e*P | **P** | **02 25 58.4** | **+1.4** |
| | 5.9nm,0.9s | | | | | | |
| **ANMO** | **Albuquerque** | **17.35** | **348** | P | **Pn** | **02 26 00.3** | **+0.1** |
| | 0.1nm,0.3s,baz=159,slow=14,SNR=2.6 | | | | | | |
| ANMO | | | | LR | LR | 02 33 15.5 | |
| | comp=Z,135nm,19.3s,baz=188,slow=39 | | | | | | |
| **MIAR** | **Mount Ida** | **18.26** | **23** | *e*P | **P** | **02 26 10.0** | **-0.7** |
| | 18nm,1.4s | | | | | | |
| **PFO** | **Pinyon Flat Ob** | **20.15** | **323** | LR | LR | 02 34 43.7 | |
| | comp=Z,81nm,18.5s,baz=162,slow=38 | | | | | | |
| **CBKS** | **Cedar Bluff** | **20.91** | **5** | *e*P | **P** | **02 26 40.7** | **+1.1** |
| | 9.3nm,0.6s | | | | | | |
| **SMCO** | **Snowmass** | **21.56** | **350** | *e*P | **P** | **02 26 49.9** | **+3.0** |
| | 24nm,2.0s | | | | | | |
| **ISCO** | **Idaho Springs** | **21.98** | **353** | *e*P | **P** | **02 26 53.9** | **+2.6** |
| | 4.1nm,1.0s | | | | | | |
| **WVT** | **Waverly** | **22.16** | **32** | *e*P | **P** | **02 26 51.1** | **-1.8** |
| | 4.4nm,0.8s | | | | | | |
| **TPNV** | **Topopah Spring** | **22.61** | **330** | *e*P | **P** | **02 27 00.8** | **+2.9** |
| | 4.2nm,0.9s | | | | | | |
| **DAC** | **Darwin (Calif)** | **22.76** | **326** | *e*P | **P** | **02 27 00.1** | **+0.5** |
| | 3.3nm,0.8s | | | | | | |
| **ISA** | **Isabella** | **22.78** | **324** | *e*P | **P** | **02 27 02.9** | **+3.2** |
| | 6.2nm,0.8s | | | | | | |
| **R11A** | **Troy Canyon, C** | **23.45** | **333** | *e*P | **P** | **02 27 08.1** | **+1.8** |
| | 43nm,2.9s | | | | | | |
| **TKL** | **Tuckaleechee C** | **24.07** | **39** | LR | LR | 02 40 09.0 | |
| | comp=Z,32nm,18.1s,baz=300,slow=45 | | | | | | |
| **WCI** | **Wyandotte Cave** | **24.56** | **31** | *e*P | **P** | **02 27 14.0** | **-2.3** |
| | 37nm,0.8s | | | | | | |
| **NV01** | **Mina Array Sit** | **24.77** | **329** | *e*P | **P** | **02 27 20.5** | **+1.9** |
| **NVAR** | **Mina Array Bea** | **24.77** | **329** | P | **P** | **02 27 19.2** | **+0.7** |
| | 3.7nm,0.8s,baz=146,slow=12,SNR=28 | | | | | | |
| NVAR | | | | LR | LR | 02 36 53.5 | |
| | comp=Z,111nm,20.4s,baz=86,slow=36 | | | | | | |
| **ELK** | **Elko** | **25.34** | **336** | LR | LR | 02 38 12.6 | |
| | comp=Z,83nm,20.1s,baz=351,slow=39 | | | | | | |
| **BW06** | **Boulder Array** | **25.52** | **347** | *e*P | **P** | **02 27 25.2** | **-0.1** |
| **REDW** | **Red Top Meadow** | **26.37** | **346** | *e*P | **P** | **02 27 33.2** | **+0.2** |
| | 41nm,2.3s | | | | | | |
| **SNOW** | **Snow King Moun** | **26.45** | **346** | *e*P | **P** | **02 27 33.7** | **0.0** |
| | 3.0nm,0.7s | | | | | | |
| **TPAW** | **Teton Pass** | **26.52** | **346** | *e*P | **P** | **02 27 35.0** | **+0.7** |
| | 48nm,2.5s | | | | | | |
| **LOHW** | **Long Hollow** | **26.55** | **346** | *e*P | **P** | **02 27 35.2** | **+0.6** |
| | 7.0nm,1.4s | | | | | | |
| **MOOW** | **Moose Ponds** | **26.72** | **346** | *e*P | **P** | **02 27 36.5** | **+0.4** |
| | 44nm,2.6s | | | | | | |
| **IMW** | **Indian Meadow** | **26.90** | **346** | *e*P | **P** | **02 27 37.4** | **-0.4** |
| | 26nm,2.2s | | | | | | |
| **YBH** | **Yreka Blue Hor** | **29.48** | **328** | LR | LR | 02 40 09.7 | |
| | comp=Z,41nm,18.1s,baz=102,slow=37 | | | | | | |
| **AGMN** | **Agassiz Nation** | **30.73** | **8** | *e*P | **P** | **02 28 09.9** | **-1.5** |
| | 171nm,3.0s | | | | | | |
| **YKA** | **Yellowknife Ar** | **45.34** | **352** | P | **P** | **02 30 12.4** | **-1.6** |
| | 2.1nm,0.7s,baz=161,slow=7.7,SNR=3.4 | | | | | | |
| **LPAZ** | **La Paz** | **47.80** | **133** | P | **P** | **02 30 34.7** | **+0.1** |
| | 1.0nm,0.9s,baz=252,slow=9.6,SNR=3.2 | | | | | | |
| **ILAR** | **Eielson Array** | **55.47** | **339** | P | **P** | **02 31 30.1** | **-0.4** |
| | 0.6nm,0.5s,baz=151,slow=5.2,SNR=16 | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **113.62** | **333** | *e*PKP | **PKiKP** | **02 40 30.0** | **-4.3** |
| HHC | | | | PP | **PP** | **02 41 30.5** | **+4.6** |
| **HHC** | **Hu-ho-hao-te** | **113.62** | **333** | SS | SS | 02 57 15.5 | +6.6 |
| HHC | | | | AMB | AMB | | |
| | comp=Z,100nm,5.7s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=N,120nm,13.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=E,120nm,13.6s | | | | | | |
| HHC | | | | LR | LR | | |
| | comp=Z,45nm,14.8s | | | | | | |

**IDC 31 02:29:19.5±4.2, 3°53S×99°46E, h0km, mb3.6/3, mb1 3.8/3, mb1mx3.4/45, mbtmp3.7/3, Error ellipse: s-maj=167.6km s-min=66.4km az=70.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.85** | **359** | P | P | 02 34 13.8 | 0.0 |
| | 0.8nm,0.3s,baz=189,slow=11,SNR=4.1 | | | | | | |
| **SONM** | **Songino Array** | **51.51** | **6** | P | P | 02 38 27.0 | 0.0 |
| | 1.0nm,0.8s,baz=191,slow=6.8,SNR=3.8 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.35** | **345** | P | P | 02 38 33.1 | -0.2 |
| | 0.8nm,0.9s,baz=142,slow=7.3,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.23** | **38** | PKPbc | PKPdf | 02 49 01.9 | +0.1 |
| | 0.3nm,0.7s,baz=316,slow=2.5,SNR=4.5 | | | | | | |

**IDC 31 02:29:24.0±3.7, 4°75S×151°30E, h0km, mb3.3/2, mb1 3.7/3, mb1mx3.4/31, mbtmp3.5/3, ML1.8/1, Error ellipse: s-maj=180.2km s-min=37.3km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **6.18** | **221** | Pn | Pn | 02 30 58.4 | +1.7 |
| | 1.4nm,0.3s,baz=79,slow=10,SNR=2.7 | | | | | | |
| PMG | | | | Sn | Sn | 02 32 07.7 | -0.4 |
| | 0.5nm,0.3s,baz=311,slow=20,SNR=1.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **22.38** | **226** | P | P | 02 34 23.6 | -0.5 |
| | 0.3nm,0.4s,baz=52,slow=10,SNR=2.3 | | | | | | |
| **ASAR** | **Alice Springs** | **25.20** | **220** | P | P | 02 34 51.5 | -0.2 |
| | 0.8nm,0.5s,baz=54,slow=9.5,SNR=5.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.87** | **288** | PKPbc | PKPbc | 02 49 14.4 | -0.5 |
| | 1.1nm,1.1s,baz=92,slow=1.4,SNR=6.5 | | | | | | |

*ISCJB **31** 02:29:26.8±0.8, 6°20S±0°05×130°7E±0°3, h10km, mb3.3/1, Error ellipse: s-maj=36.0km s-min=7.4km az=0.2*
*IDC **31** 02:29:28.6±1.9, 6°16S×130°77E, h0km, mb3.4/1, mb1 3.8/4, mb1mx3.5/31, mbtmp3.6/4, ML3.8/3, Error ellipse: s-maj=89.1km s-min=27.9km az=81.0*
*AUST **31** 02:29:33.5, 5°82S×130°74E, h20km*
**ISC 31 02:29:28.9±1.0, 6°25S±0°07×130°7E±0°2, h10km, n9, σ1§89/9, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **FAKI** | **Fak Fak** | **3.63** | **24** | P | **Pn** | **02 30 24.8** | **-0.4** |
| | baz=3.3,SNR=14 | | | | | | |
| **SIJI** | **Sorong** | **5.37** | **6** | Pn | **Pn** | **02 30 46.9** | **-2.2** |
| | 4.3nm,0.3s,baz=49,slow=5.0,SNR=53 | | | | | | |
| SIJI | | | | Sn | Sn | 02 31 40.5 | -10 |
| | 8.5nm,0.3s,baz=233,slow=20,SNR=16 | | | | | | |
| **SWI** | **Sorong** | **5.37** | **6** | P | **Pn** | **02 30 47.5** | **-1.6** |
| | baz=5.0,SNR=10 | | | | | | |
| **MTN** | **Manton Dam** | **6.57** | **177** | P | Pb | 02 31 15.6 | -7.6 |
| | baz=7.0,SNR=10 | | | | | | |
| **KDU** | **Kakadu** | **6.62** | **165** | P | Pn | 02 31 14.1 | +7.7 |
| | baz=7.1,SNR=20 | | | | | | |
| **KNRA** | **Kununurra** | **9.57** | **192** | P | **Pn** | **02 31 46.7** | **-0.1** |
| | baz=10.0,SNR=3.5 | | | | | | |
| **WRA** | **Warramunga Arr** | **14.06** | **166** | Pn | **Pn** | **02 32 49.9** | **+1.7** |
| | 0.5nm,0.3s,baz=345,slow=14,SNR=11 | | | | | | |
| WRA | | | | Sn | **Sn** | **02 35 22.7** | **-1.8** |
| | 0.7nm,0.3s,baz=339,slow=21,SNR=7.8 | | | | | | |
| **ASAR** | **Alice Springs** | **17.59** | **170** | P | **P** | **02 33 35.6** | **+0.3** |
| | 0.3nm,0.3s,baz=5.6,slow=11,SNR=12 | | | | | | |
| ASAR | | | | S | **Sn** | **02 36 48.4** | **-1.9** |
| | 0.2nm,0.3s,baz=356,slow=29,SNR=6.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **68.01** | **326** | P | **P** | **02 40 30.4** | **+2.0** |
| | 0.2nm,0.6s,baz=119,slow=5.4,SNR=2.6 | | | | | | |

*CSEM **31** 02:35:31.1, 65°16N×19°57W, h0km, ML3.0, After REY*
**REY 31 02:35:31.1, 65°16N×19°57W, h0km, Iceland**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ISKR** | **Skrokkalda** | **0.79** | **139** | P | Pg | 02 35 45.4 | -0.9 |
| | baz=139 | | | | | | |
| ISKR | | | | S | Sg | 02 35 56.4 | -0.1 |
| | baz=139 | | | | | | |
| **ISKR** | **Skrokkalda** | **0.79** | **139** | P | Pg | 02 35 45.4 | -0.9 |
| ISKR | | | | S | Sg | 02 35 56.4 | -0.1 |
| **IASB** | **`sbjarnarst** | **0.85** | **242** | P | Pg | 02 35 46.5 | -0.8 |
| | baz=242 | | | | | | |
| IASB | | | | S | Sg | 02 35 57.9 | -0.5 |
| | baz=242 | | | | | | |
| **IASB** | **`sbjarnarst** | **0.85** | **242** | P | Pg | 02 35 46.5 | -0.9 |
| IASB | | | | S | Sg | 02 35 57.9 | -0.5 |
| **IGYG** | **Gygjarholskot** | **0.92** | **198** | P | Pg | 02 35 47.2 | -1.5 |
| | baz=198 | | | | | | |
| IGYG | | | | S | Sg | 02 35 60.0 | -0.7 |
| | baz=198 | | | | | | |
| **IGYG** | **Gygjarholskot** | **0.92** | **198** | P | Pg | 02 35 47.2 | -1.5 |
| IGYG | | | | S | Sg | 02 36 00.0 | -0.7 |
| **IHLA** | **Hella** | **0.93** | **31** | P | Pg | 02 35 47.6 | -1.3 |
| | baz=32 | | | | | | |
| IHLA | | | | S | Sg | 02 36 00.4 | -0.6 |
| | baz=32 | | | | | | |
| **IHLA** | **Hella** | **0.93** | **31** | P | Pg | 02 35 47.7 | -1.2 |
| IHLA | | | | S | Sg | 02 36 00.4 | -0.6 |
| **IVAT** | **Vatnsfell** | **1.01** | **164** | P | Pg | 02 35 49.3 | -1.3 |
| | baz=164 | | | | | | |
| IVAT | | | | S | Sg | 02 36 03.1 | -0.7 |
| | baz=164 | | | | | | |
| **IVAT** | **Vatnsfell** | **1.01** | **164** | P | Pg | 02 35 49.3 | -1.3 |
| IVAT | | | | S | Sg | 02 36 03.1 | -0.7 |
| **IGRA** | **Granastaoir** | **1.13** | **46** | P | Pg | 02 35 51.0 | -1.7 |
| | baz=46 | | | | | | |
| **IGRA** | **Granastaoir** | **1.13** | **46** | P | Pg | 02 35 51.0 | -1.7 |
| **IHEI** | **Heioarbar** | **1.20** | **217** | P | Pg | 02 35 51.9 | -2.1 |
| | baz=217 | | | | | | |
| IHEI | | | | S | Sg | 02 36 08.2 | -1.3 |
| | baz=217 | | | | | | |
| **IHEI** | **Heioarbar** | **1.20** | **217** | P | Pg | 02 35 51.9 | -2.1 |
| IHEI | | | | S | Sg | 02 36 08.2 | -1.3 |
| **IHAU** | **Haukadalur** | **1.21** | **188** | P | Pg | 02 35 52.1 | -2.0 |
| | baz=188 | | | | | | |
| IHAU | | | | S | Sg | 02 36 08.8 | -1.0 |
| | baz=188 | | | | | | |
| **IHAU** | **Haukadalur** | **1.21** | **188** | P | Pg | 02 35 52.1 | -2.1 |
| IHAU | | | | S | Sg | 02 36 08.8 | -1.0 |
| **IREN** | **Reynihlio** | **1.22** | **65** | P | Pg | 02 35 52.3 | -2.2 |
| | baz=65 | | | | | | |
| **IREN** | **Reynihlio** | **1.22** | **65** | P | Pg | 02 35 52.3 | -2.2 |
| **ISAU** | **Saurbar** | **1.23** | **198** | P | Pg | 02 35 52.1 | -2.4 |
| | baz=198 | | | | | | |
| ISAU | | | | S | Sg | 02 36 08.5 | -1.9 |
| | baz=198 | | | | | | |
| **ISAU** | **Saurbar** | **1.23** | **198** | P | Pg | 02 35 52.1 | -2.5 |
| ISAU | | | | S | Sg | 02 36 08.5 | -2.0 |
| **IASK** | **Askja** | **1.24** | **94** | P | Pg | 02 35 52.7 | -2.4 |
| | baz=94 | | | | | | |
| **IASK** | **Askja** | **1.24** | **94** | P | Pg | 02 35 52.7 | -2.3 |
| **IKRO** | **Krokur** | **1.25** | **213** | P | Pg | 02 35 53.0 | -2.1 |
| | baz=213 | | | | | | |
| IKRO | | | | S | Sg | 02 36 10.0 | -1.4 |
| | baz=213 | | | | | | |
| **IKRO** | **Krokur** | **1.25** | **213** | P | Pg | 02 35 53.0 | -2.1 |
| IKRO | | | | S | Sg | 02 36 10.0 | -1.4 |
| **IKVO** | **Krokottuvotn** | **1.26** | **62** | P | Pg | 02 35 53.0 | -2.3 |
| | baz=62 | | | | | | |
| **IKVO** | **Krokottuvotn** | **1.26** | **62** | P | Pg | 02 35 53.0 | -2.2 |
| **ISKI** | **Skildingah`‡ls** | **1.28** | **55** | P | Pg | 02 35 53.5 | -2.2 |
| | baz=55 | | | | | | |
| **ISKI** | **Skildingah`‡ls** | **1.28** | **55** | P | Pg | 02 35 53.5 | -2.1 |
| **IMEL** | **Melhnausar** | **1.29** | **70** | P | Pg | 02 35 53.5 | -2.4 |
| | baz=70 | | | | | | |
| **IMEL** | **Melhnausar** | **1.29** | **70** | P | Pg | 02 35 53.5 | -2.3 |
| **IDIM** | **Dimmadals`¡s** | **1.36** | **52** | P | Pg | 02 35 55.0 | -2.3 |
| | baz=52 | | | | | | |
| **IDIM** | **Dimmadals`¡s** | **1.36** | **52** | P | Pg | 02 35 55.0 | -2.2 |
| **ISOL** | **Solvholt** | **1.37** | **206** | P | Pg | 02 35 54.5 | -2.8 |
| | baz=206 | | | | | | |
| ISOL | | | | S | Sg | 02 36 12.9 | -2.1 |
| | baz=206 | | | | | | |
| **ISOL** | **Solvholt** | **1.37** | **206** | P | Pg | 02 35 54.5 | -2.8 |
| ISOL | | | | S | Sg | 02 36 12.9 | -2.1 |
| **IMKO** | **Mokollar** | **1.38** | **96** | P | Pn | 02 35 54.8 | -2.8 |
| | baz=96 | | | | | | |
| **IMKO** | **Mokollar** | **1.38** | **96** | P | Pn | 02 35 54.8 | -2.8 |
| **IGHA** | **Grjothals** | **1.40** | **59** | P | Pn | 02 35 55.1 | -2.6 |
| | baz=59 | | | | | | |
| **IGHA** | **Grjothals** | **1.40** | **59** | P | Pn | 02 35 55.1 | -2.7 |
| **ISAN** | **Sandskeio** | **1.40** | **219** | P | Pn | 02 35 55.2 | -2.6 |
| | baz=219 | | | | | | |
| ISAN | | | | S | Sg | 02 36 14.0 | -2.1 |
| | baz=219 | | | | | | |
| **ISAN** | **Sandskeio** | **1.40** | **219** | P | Pn | 02 35 55.2 | -2.6 |
| ISAN | | | | S | Sg | 02 36 14.0 | -2.1 |
| **IASM** | **Asmuli** | **1.40** | **199** | P | Pn | 02 35 55.3 | -2.5 |
| | baz=199 | | | | | | |
| IASM | | | | S | Sg | 02 36 13.8 | -2.2 |
| | baz=199 | | | | | | |
| **IASM** | **Asmuli** | **1.40** | **199** | P | Pn | 02 35 55.3 | -2.5 |
| IASM | | | | S | Sg | 02 36 13.9 | -2.2 |
| **IKRE** | **Kreppuhraun** | **1.41** | **104** | P | Pn | 02 35 55.3 | -2.7 |
| | baz=104 | | | | | | |
| IKRE | | | | S | Sg | 02 36 14.7 | -1.7 |
| | baz=104 | | | | | | |
| **IKRE** | **Kreppuhraun** | **1.41** | **104** | P | Pn | 02 35 55.3 | -2.7 |
| IKRE | | | | S | Sg | 02 36 14.7 | -1.8 |
| **IBJA** | **Bjarnastaoir** | **1.43** | **212** | P | Pn | 02 35 55.8 | -2.3 |
| | baz=212 | | | | | | |
| IBJA | | | | S | Sg | 02 36 14.8 | -2.0 |
| | baz=212 | | | | | | |
| **IBJA** | **Bjarnastaoir** | **1.43** | **212** | P | Pn | 02 35 55.8 | -2.3 |
| IBJA | | | | S | Sg | 02 36 14.9 | -2.0 |
| **IKAL** | **Kalfafell** | **1.46** | **145** | P | Pn | 02 35 56.3 | -2.3 |
| | baz=145 | | | | | | |
| IKAL | | | | S | Sg | 02 36 15.7 | -2.4 |
| | baz=145 | | | | | | |
| **IKAL** | **Kalfafell** | **1.46** | **145** | P | Pn | 02 35 56.3 | -2.3 |
| IKAL | | | | S | Sg | 02 36 15.6 | -2.4 |
| **ISNB** | **Snabyli** | **1.48** | **164** | S | Sg | 02 36 16.5 | -2.3 |
| | baz=164 | | | | | | |
| ISNB | | | | P | Pn | 02 35 56.9 | -2.1 |
| | baz=164 | | | | | | |
| **ISNB** | **Snabyli** | **1.48** | **164** | P | Pn | 02 35 56.9 | -2.1 |
| ISNB | | | | S | Sg | 02 36 16.5 | -2.3 |
| **IKAS** | **Kald??rsel** | **1.50** | **222** | P | Pn | 02 35 57.0 | -2.2 |
| | baz=222 | | | | | | |
| IKAS | | | | S | Sg | 02 36 17.7 | -1.7 |
| | baz=222 | | | | | | |
| **IKAS** | **Kald??rsel** | **1.50** | **222** | P | Pn | 02 35 57.0 | -2.2 |
| IKAS | | | | S | Sg | 02 36 17.7 | -1.7 |
| **IGOD** | **Go??abunga** | **1.51** | **176** | P | Pn | 02 35 57.5 | -1.9 |
| | baz=176 | | | | | | |
| IGOD | | | | S | Sb | 02 36 17.4 | -2.3 |
| | baz=176 | | | | | | |
| **IGOD** | **Go??abunga** | **1.51** | **176** | P | Pn | 02 35 57.5 | -1.9 |
| IGOD | | | | S | Sb | 02 36 17.5 | -2.3 |
| **IMID** | **Miomork** | **1.51** | **185** | P | Pn | 02 35 57.3 | -2.0 |
| | baz=185 | | | | | | |
| IMID | | | | S | Sb | 02 36 17.7 | -1.9 |
| | baz=185 | | | | | | |
| **IMID** | **Miomork** | **1.51** | **185** | P | Pn | 02 35 57.3 | -2.0 |
| IMID | | | | S | Sb | 02 36 17.7 | -1.9 |
| **IBRU** | **Bruarjokull** | **1.52** | **101** | P | Pn | 02 35 57.0 | -2.5 |
| | baz=101 | | | | | | |
| IBRU | | | | S | Sb | 02 36 17.8 | -2.1 |
| | baz=101 | | | | | | |
| **IBRU** | **Bruarjokull** | **1.52** | **101** | P | Pn | 02 35 57.0 | -2.5 |
| IBRU | | | | S | Sb | 02 36 17.8 | -2.1 |
| **IGRS** | **Grimsstaoir** | **1.52** | **70** | P | Pn | 02 35 57.1 | -2.4 |
| | baz=70 | | | | | | |
| IGRS | | | | S | Sb | 02 36 17.8 | -2.2 |
| | baz=70 | | | | | | |
| **IGRS** | **Grimsstaoir** | **1.52** | **70** | P | Pn | 02 35 57.1 | -2.4 |
| IGRS | | | | S | Sb | 02 36 17.8 | -2.2 |
| **IGRI** | **Grimsey** | **1.53** | **24** | S | Sn | 02 36 17.3 | -2.8 |
| | baz=24 | | | | | | |
| **IGRI** | **Grimsey** | **1.53** | **24** | S | Sn | 02 36 17.3 | -2.8 |
| **IHVA** | **Hvannstoosfjol** | **1.58** | **96** | P | Pn | 02 35 58.1 | -2.3 |
| | baz=96 | | | | | | |
| IHVA | | | | S | Sn | 02 36 19.6 | -2.0 |
| | baz=96 | | | | | | |
| **IHVA** | **Hvannstoosfjol** | **1.58** | **96** | P | Pn | 02 35 58.1 | -2.3 |
| IHVA | | | | S | Sn | 02 36 19.5 | -2.1 |
| **IGIL** | **Gilhagi** | **1.62** | **54** | P | Pn | 02 35 58.9 | -1.9 |
| | baz=54 | | | | | | |
| IGIL | | | | S | Sn | 02 36 20.7 | -1.8 |
| | baz=54 | | | | | | |
| **IGIL** | **Gilhagi** | **1.62** | **54** | P | Pn | 02 35 58.9 | -2.0 |
| IGIL | | | | S | Sn | 02 36 20.7 | -1.7 |
| **IESK** | **Eystri-Skogar** | **1.64** | **178** | P | Pn | 02 35 59.1 | -2.0 |
| | baz=178 | | | | | | |
| IESK | | | | S | Sn | 02 36 20.9 | -1.9 |
| | baz=178 | | | | | | |
| **IESK** | **Eystri-Skogar** | **1.64** | **178** | P | Pn | 02 35 59.1 | -2.0 |
| IESK | | | | S | Sn | 02 36 20.9 | -1.9 |
| **IHVO** | **Lagu-Hvolar** | **1.67** | **169** | P | Pn | 02 35 59.8 | -1.7 |
| | baz=169 | | | | | | |
| IHVO | | | | S | Sn | 02 36 22.0 | -1.5 |
| | baz=169 | | | | | | |
| **IHVO** | **Lagu-Hvolar** | **1.67** | **169** | P | Pn | 02 35 59.8 | -1.7 |
| IHVO | | | | S | Sn | 02 36 22.0 | -1.5 |
| **IVSH** | **V-Sauoahnukur** | **1.67** | **100** | P | Pn | 02 35 59.4 | -2.2 |
| | baz=100 | | | | | | |
| IVSH | | | | S | Sn | 02 36 22.3 | -1.5 |
| | baz=100 | | | | | | |
| **IVSH** | **V-Sauoahnukur** | **1.67** | **100** | P | Pn | 02 35 59.4 | -2.2 |
| IVSH | | | | S | Sn | 02 36 22.3 | -1.5 |
| **IKRI** | **Krysuvik** | **1.68** | **221** | P | Pn | 02 35 59.6 | -2.0 |
| | baz=221 | | | | | | |
| IKRI | | | | S | Sn | 02 36 21.9 | -1.8 |
| | baz=221 | | | | | | |
| **IKRI** | **Krysuvik**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| PB04 | | | | *i* S | Sn | 02 42 11.7 | +1.1 |
| PB04 | | | | AML | AML | 02 42 17.2 | |
| | comp=N,588nm,0.2s | | | | | | |
| **PB06** | **IPOC Station P** | **1.69** | **200** | ⇑*i* P | Pn | 02 41 48.9 | +0.9 |
| PB06 | | | | *i* S | Sn | 02 42 12.4 | +1.0 |
| PB06 | | | | AML | AML | 02 42 14.2 | |
| | comp=E,488nm,0.3s | | | | | | |
| **MNMC** | **Minimini** | **2.06** | **343** | ⇓*i* P | Pn | 02 41 53.4 | +0.7 |
| MNMC | | | | *i* S | Sn | 02 42 21.1 | +1.4 |
| MNMC | | | | AML | AML | 02 42 22.8 | |
| | comp=E,1µm,0.2s | | | | | | |
| **PB13** | **IPOC Station P** | **2.81** | **349** | *e*P | Pn | 02 42 03.8 | +1.3 |
| **PB10** | **IPOC Station P** | **2.82** | **212** | ⇓*i* P | Pn | 02 42 02.5 | +0.8 |
| PB10 | | | | AML | AML | 02 43 01.6 | |
| | comp=N,324nm,0.5s | | | | | | |

*ISCJB **31** 02:56:45.9±1.4, 41°.13N±0°.09×39°.07E±0°.05, h9km, Error ellipse: s-maj=12.6km s-min=5.0km az=0.6*
*DDA **31** 02:56:45.2, 40°.59N×39°.00E, h7km, Md2.6*
*ISK **31** 02:56:46.0, 41°.05N×39°.09E, h10km, MD2.6*
*CSEM **31** 02:56:46.4±0.6, 41°.10N×39°.07E, h10km, MD2.6, Error ellipse: s-maj=13.4km s-min=5.3km az=2.0*

**ISC 31 02:56:46.5±1.4, 41°.0N±0°.1×39°.06E±0°.03, h9km, n15, σ0s52/22, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ESPY** | **Espiye-Giresun** | **0.28** | **246** | *e*PG | **Pg** | **02 56 52.6** | **+0.5** |
| ESPY | | | | *e*SG | **Sb** | **02 56 57.4** | **-1.1** |
| **ESPY** | **Espiye-Giresun** | **0.28** | **246** | *e*Pg | **Pg** | **02 56 52.6** | **+0.5** |
| ESPY | | | | *e*Sg | **Sb** | **02 56 57.4** | **-1.1** |
| **MACK** | **Trabzon** | **0.54** | **99** | *i* P | **Pb** | **02 56 57.9** | **-0.3** |
| MACK | | | | *i* S | **Sb** | **02 57 05.8** | **-0.3** |
| **MACK** | **Trabzon** | **0.54** | **99** | P | **Pb** | **02 56 57.9** | **-0.3** |
| MACK | | | | S | **Sb** | **02 57 05.8** | **-0.3** |
| **KELT** | **Kelkit** | **0.89** | **171** | *i* P | **Pn** | **02 57 05.6** | **+0.2** |
| KELT | | | | *i* S | **Sn** | **02 57 18.8** | **+0.3** |
| **KELT** | **Kelkit** | **0.89** | **171** | P | **Pn** | **02 57 05.6** | **+0.2** |
| KELT | | | | S | **Sn** | **02 57 18.8** | **+0.3** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.04** | **127** | *e*PG | **Pg** | **02 57 06.1** | **-0.3** |
| BAYT | | | | *e*SG | **Sb** | **02 57 20.9** | **+0.4** |
| **BAYT** | **Ayd¨–ntepe-Bay** | **1.04** | **127** | *e*Pg | **Pg** | **02 57 06.1** | **-0.3** |
| BAYT | | | | *e*Sg | **Sb** | **02 57 20.9** | **+0.4** |
| **RSDY** | **Resadiye-TOKAT** | **1.46** | **245** | *e*PN | **Pb** | **02 57 13.5** | **-0.4** |
| **RSDY** | **Resadiye-TOKAT** | **1.46** | **245** | *e*Pn | **Pb** | **02 57 13.5** | **-0.4** |
| **REFA** | **Refahiye_ERZ¨** | **1.65** | **188** | P | Pn | 02 57 09.0 | -6.8 |
| REFA | | | | S | Sn | 02 57 24.9 | -12 |
| **SVSK** | **Karacayir** | **1.93** | **235** | *e*PN | **Pn** | **02 57 20.0** | **+0.6** |
| **SVSK** | **Karacayir** | **1.93** | **235** | *e*Pn | **Pn** | **02 57 20.0** | **+0.6** |
| **PTK** | **Pertek** | **2.15** | **173** | *e*PN | **Pn** | **02 57 23.0** | **+0.3** |
| **PTK** | **Pertek** | **2.15** | **173** | *e*Pn | **Pn** | **02 57 23.0** | **+0.3** |

*IDC **31** 03:11:37.9±1.6, 32°.66S×178°.46W, h0km, mb4.0/3, mb1 4.2/4, mb1mx3.9/23, mbtmp4.0/4, ML4.0/1, Error ellipse: s-maj=38.5km s-min=29.7km az=64.0*
*ISCJB **31** 03:11:39.8±1.2, 32°.77S±0°.06×178°.14W±0°.2, h33km, mb4.1/5, Error ellipse: s-maj=22.5km s-min=7.8km az=8.7*
*NEIC **31** 03:11:43.5±0.8, 32°.79S×178°.57W, h35km, mb4.3/2, Error ellipse: s-maj=17.3km s-min=15.9km az=87.0*

**ISC 31 03:11:41.9±1.4, 32°.67S±0°.09×178°.4W±0°.2, h33km, n28, σ1s59/29, mb4.3/5, South of Kermadec Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **5.59** | **208** | *e*PN | **Pn** | **03 13 01.6** | **-1.1** |
| MXZ | | | | SN | **Sn** | **03 14 07.9** | **+2.1** |
| **WMGZ** | **Waiomatatini S** | **5.77** | **206** | PN | **Pn** | **03 13 04.9** | **-0.3** |
| **PKGZ** | **Pakihiroa** | **5.94** | **208** | PN | **Pn** | **03 13 06.7** | **-0.9** |
| PKGZ | | | | SN | **Sn** | **03 14 16.6** | **+2.1** |
| **HAZ** | **Te Kaha** | **5.97** | **211** | PN | **Pn** | **03 13 08.6** | **+0.7** |
| HAZ | | | | SN | **Sn** | **03 14 17.8** | **+2.7** |
| **PUZ** | **Puketiti** | **6.05** | **206** | PN | **Pn** | **03 13 07.3** | **-1.8** |
| PUZ | | | | SN | **Sn** | **03 14 17.3** | **+0.1** |
| **CNGZ** | **Carnagh Statio** | **6.44** | **205** | PN | **Pn** | **03 13 13.0** | **-1.4** |
| **MWZ** | **Matawai** | **6.57** | **209** | PN | **Pn** | **03 13 15.1** | **-1.1** |
| MWZ | | | | SN | **Sn** | **03 14 29.9** | **0.0** |
| **URZ** | **Urewera** | **6.69** | **212** | Pn | **Pn** | **03 13 15.9** | **-1.8** |
| | 2.7nm,0.3s,baz=276,slow=6.0,SNR=18 | | | | | | |
| URZ | | | | Sn | **Sn** | **03 14 32.5** | **-0.3** |
| | 3.6nm,0.3s,baz=103,slow=19,SNR=7.8 | | | | | | |
| **URZ** | **Urewera** | **6.69** | **212** | PN | **Pn** | **03 13 16.0** | **-1.8** |
| URZ | | | | *e*SN | **Sn** | **03 14 30.5** | **-2.3** |
| **RIGZ** | **Rimuhau** | **6.79** | **207** | *e*PN | **Pn** | **03 13 17.2** | **-2.1** |
| **SNGZ** | **Shannon Statio** | **7.02** | **209** | PN | **Pn** | **03 13 22.3** | **-0.2** |
| **KNZ** | **Kokohu** | **7.10** | **206** | PN | **Pn** | **03 13 20.8** | **-2.7** |
| **MHGZ** | **Mahia Peninsul** | **7.14** | **204** | PN | **Pn** | **03 13 21.3** | **-2.7** |
| **OUZ** | **Omahuta** | **7.15** | **247** | *e*Pn | **Pn** | **03 13 22.1** | **-2.0** |
| **MRZ** | **Mangatainoka R** | **9.34** | **210** | *e*SN | Sn | 03 15 31.3 | -6.7 |
| **CTAO** | **Charters Tower** | **33.92** | **283** | *e*P | **P** | **03 18 22.9** | **+0.7** |
| | 2.3nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **42.73** | **270** | P | **P** | **03 19 36.7** | **+0.5** |
| | 1.3nm,0.6s,baz=107,slow=7.9,SNR=17 | | | | | | |
| **WRAB** | **Tennant Creek** | **43.91** | **275** | *e*P | **P** | **03 19 46.1** | **+0.3** |
| | 3.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **43.92** | **275** | P | **P** | **03 19 46.0** | **+0.2** |
| | 1.8nm,0.3s,baz=115,slow=7.9,SNR=13 | | | | | | |
| **QSPA** | **South Pole Qui** | **57.45** | **180** | P | P | 03 21 28.8 | +1.5 |
| | 0.6nm,0.9s,baz=41,slow=9.3,SNR=2.3 | | | | | | |
| **KAPI** | **Kappang** | **63.73** | **282** | *e*P | **P** | **03 22 11.0** | **+0.4** |
| **SNAA** | **Sanae** | **75.90** | **179** | P | P | 03 23 33.3 | +8.5 |
| **VNA3** | **Neumayer Olymp** | **76.07** | **176** | P | P | 03 23 35.9 | +10 |
| **VNA2** | **Neumayer--Watz** | **76.50** | **177** | P | P | 03 23 38.4 | +10 |
| | baz=188,slow=2.6 | | | | | | |
| **VNA1** | **Neumayer--Stat** | **76.73** | **177** | P | P | 03 23 40.0 | +11 |
| **EKS2** | **Erkin-Say** | **123.61** | **303** | *e*PKPdf | **PKPdf** | **03 30 37.0** | **+1.0** |
| **FINES** | **FINESS Array B** | **147.15** | **338** | PKPbc | **PKPab** | **03 31 20.7** | **-1.8** |
| | 5.1nm,1.0s,baz=39,slow=2.7,SNR=6.0 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **160.57** | **180** | PKPab | **PKPab** | **03 32 21.0** | **+0.8** |
| | 0.6nm,1.0s,baz=170,slow=5.1,SNR=2.9 | | | | | | |

**IDC 31 03:14:13.0±3.2, 6°.19S×147°.20E, h0km, mb3.4/1, mb1 3.7/3, mb1mx3.5/31, mbtmp3.6/3, ML3.8/1, MS4.3/1, Ms1 4.3/1, ms1mx2.7/16, Error ellipse: s-maj=77.7km s-min=41.1km az=93.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **3.20** | **181** | Pn | Pn | 03 15 04.7 | +0.1 |
| | 6.3nm,0.3s,baz=350,slow=8.2,SNR=12 | | | | | | |
| PMG | | | | Sn | Sn | 03 15 39.6 | -3.8 |
| | 8.0nm,0.3s,baz=37,slow=20,SNR=4.2 | | | | | | |
| **WRA** | **Warramunga Arr** | **18.52** | **221** | P | Pn | 03 18 31.3 | +0.1 |
| | 0.3nm,0.3s,baz=44,slow=11,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **21.58** | **215** | P | P | 03 19 03.6 | -0.8 |
| | 1.2nm,0.4s,baz=52,slow=8.5,SNR=24 | | | | | | |
| **JOW** | **Kunigami** | **37.59** | **332** | LR | LR | 03 32 48.8 | |
| | comp=Z,486nm,21.9s,slow=30 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.32** | **284** | PKPbc | PKPbc | 03 33 53.4 | -0.4 |
| | 0.4nm,0.9s,baz=81,slow=3.7,SNR=4.2 | | | | | | |

*ISCJB **31** 03:18:09.7±0.7, 31°.17S±0°.04×68°.04W±0°.05, h108km±7km, Error ellipse: s-maj=7.2km s-min=6.0km az=146.5*
*SJA **31** 03:18:09.3±0.8, 31°.19S×68°.02W, h105km±3km, ML3.6, MW3.6*
*GUC **31** 03:18:09.9±0.5, 31°.15S×68°.20W, h140km, ML3.8*

**ISC 31 03:18:10.4±1.4, 31°.17S±0°.04×68°.03W±0°.05, h103km±9km, n20, σ0s48/30, 1C-1D, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTLL** | **Cerro Villicun** | **0.41** | **247** | *e*P | **Pn** | **03 18 25.6** | **-0.4** |
| RTLL | | | | *e*S | **Sn** | **03 18 37.9** | **+0.3** |
| **CFAA** | **Coronel Fontan** | **0.47** | **202** | *e*P | **Pn** | **03 18 26.2** | **-0.2** |
| CFAA | | | | *e*S | **Sn** | **03 18 38.3** | **0.0** |
| **SJA** | **San Juan** | **0.58** | **232** | *e*P | **Pn** | **03 18 27.1** | **0.0** |
| **RTCV** | **Cerro Valdivia** | **0.82** | **212** | *e*P | **Pn** | **03 18 29.0** | **-0.3** |
| RTCV | | | | *e*S | **Sn** | **03 18 43.3** | **-0.1** |
| **RTLS** | **Leoncito** | **1.25** | **240** | *e*P | **Pn** | **03 18 34.5** | **+0.4** |
| **ACAN** | **Cantantal** | **1.31** | **147** | *e*P | **Pn** | **03 18 35.0** | **+0.4** |
| ACAN | | | | *e*S | **Sn** | **03 18 52.9** | **-0.1** |
| **AUSP** | **Uspallata** | **1.56** | **227** | *e*P | **Pn** | **03 18 38.1** | **+0.2** |
| AUSP | | | | *e*S | **Sn** | **03 18 59.3** | **+0.6** |
| **ASAL** | **Salagasta** | **1.58** | **206** | *e*P | **Pn** | **03 18 37.8** | **-0.1** |
| **AGUA** | **GUANDACOL** | **1.72** | **346** | *e*P | **Pn** | **03 18 40.3** | **+0.6** |
| **ARCO** | **CERRO ARCO** | **1.84** | **204** | *e*P | **Pn** | **03 18 41.2** | **0.0** |
| ARCO | | | | *e*S | **Sn** | **03 19 04.7** | **+0.1** |
| ARCO | | | | IAML | | 03 19 08.0 | |
| | comp=Z,389nm,0.3s | | | | | | |
| **AAGR** | **Agrelo** | **2.03** | **199** | *e*P | **Pn** | **03 18 43.5** | **0.0** |
| **MRA** | **San Martin** | **2.33** | **123** | *e*P | **Pn** | **03 18 47.3** | **-0.1** |
| **VCA** | **Vinchina** | **2.43** | **356** | *e*P | **Pn** | **03 18 49.6** | **+0.7** |
| **TLL** | **Tololo Astrono** | **2.59** | **292** | *e*P | **Pn** | **03 18 51.2** | **+0.2** |
| TLL | | | | *e*S | **Sn** | **03 19 22.3** | **+0.1** |
| TLL | | | | AML | AML | 03 19 27.0 | |
| | comp=E,501nm,0.5s | | | | | | |
| **TCA** | **Tanti** | **2.94** | **94** | *e*P | **Pn** | **03 18 55.2** | **-0.4** |
| **PEL** | **Peldehue** | **2.99** | **228** | ⇓*i* P | **Pn** | **03 18 56.0** | **-0.2** |
| PEL | | | | *i* S | **Sn** | **03 19 31.3** | **-0.1** |
| PEL | | | | AML | AML | 03 19 34.2 | |
| | comp=N,206nm,0.1s | | | | | | |
| **LSCH** | **La Serena** | **3.05** | **294** | *i* S | **Sn** | **03 19 30.8** | **-1.8** |
| **CLCH** | **Cerro Calan** | **3.07** | **223** | *e*P | **Pn** | **03 18 57.8** | **+0.5** |
| CLCH | | | | AML | AML | 03 19 39.0 | |
| | comp=E,189nm,0.5s | | | | | | |
| **LCO** | **Las Campanas** | **3.16** | **312** | ⇑*i* P | **Pn** | **03 18 58.5** | **-0.1** |
| LCO | | | | *i* S | **Sn** | **03 19 35.6** | **-0.2** |
| LCO | | | | AML | AML | 03 19 44.8 | |
| | comp=E,109nm,0.3s | | | | | | |
| **RCDM** | **Rinconada Maip** | **3.30** | **225** | *e*P | **Pn** | **03 19 00.1** | **-0.2** |
| RCDM | | | | *i* S | **Sn** | **03 19 39.2** | **+0.5** |

*ISCJB **31** 03:21:31.5±0.8, 47°.40N±0°.03×82°.52E±0°.09, h1km±7km, mb3.6/2, Error ellipse: s-maj=9.9km s-min=5.0km az=7.0*
*BJI **31** 03:21:31.0, 47°.27N×82°.79E, h4km, ML3.3/7*
*IDC **31** 03:21:32.2±1.3, 47°.28N×82°.77E, h0km, mb3.5/2, mb1 3.7/6, mb1mx3.4/34, mbtmp3.6/6, ML3.3/4, Error ellipse: s-maj=17.2km s-min=6.3km az=101.0*
*NNC **31** 03:21:33.6±0.6, 47°.24N×82°.69E, h9km±5km, mb3.9, mpv3.6, Error ellipse: s-maj=7.7km s-min=4.8km az=116.0*

**ISC 31 03:21:33.2±1.5, 47°.32N±0°.03×82°.54E±0°.08, h5km±10km, n31, σ1s69/50, 40C-12D, Kazakhstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MK05** | **Makanchi Array** | **0.55** | **198** | ⇑P | **Pb** | **03 21 44.6** | **-0.9** |
| MK05 | | | | ⇑S | **Sb** | **03 21 52.7** | **-0.9** |
| **MK31** | **Makanchi Array** | **0.55** | **198** | ⇑P | **Pb** | **03 21 44.6** | **-0.9** |
| | 17nm,0.2s,baz=255,slow=14,SNR=3530 | | | | | | |
| MK31 | | | | ⇑S | **Sb** | **03 21 52.7** | **-1.0** |
| | 111nm,0.3s,baz=61,slow=45,SNR=5.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **0.55** | **198** | Pg | **Pg** | **03 21 44.2** | **+0.4** |
| | 35nm,0.3s,baz=43,slow=17,SNR=1025 | | | | | | |
| MKAR | | | | Lg | Lg | 03 21 52.3 | |
| | 250nm,0.3s,baz=49,slow=35,SNR=206 | | | | | | |
| **MK06** | **Makanchi Array** | **0.57** | **196** | ⇑P | **Pb** | **03 21 44.6** | **-1.1** |
| MK06 | | | | ⇓S | **Sb** | **03 21 52.6** | **-1.5** |
| **MK02** | **Makanchi Array** | **0.57** | **196** | ⇑P | **Pg** | **03 21 44.7** | **+0.5** |
| MK02 | | | | ⇑S | **Sb** | **03 21 52.7** | **-1.5** |
| **MK01** | **Makanchi Array** | **0.57** | **197** | ⇑P | **Pb** | **03 21 44.7** | **-1.0** |
| MK01 | | | | ⇑S | **Sb** | **03 21 52.8** | **-1.4** |
| **MK04** | **Makanchi Array** | **0.57** | **197** | ⇑P | **Pb** | **03 21 44.7** | **-1.0** |
| MK04 | | | | ⇓S | **Sb** | **03 21 52.7** | **-1.5** |
| **MK09** | **Makanchi Array** | **0.57** | **198** | ⇑P | **Pb** | **03 21 44.9** | **-0.9** |
| MK09 | | | | ⇓S | **Sb** | **03 21 53.0** | **-1.3** |
| **MK03** | **Makanchi Array** | **0.58** | **197** | ⇑P | **Pb** | **03 21 44.8** | **-1.1** |
| MK03 | | | | ⇑S | **Sb** | **03 21 52.9** | **-1.5** |
| **MK07** | **Makanchi Array** | **0.59** | **195** | ⇑P | **Pg** | **03 21 44.8** | **+0.3** |
| MK07 | | | | ⇑S | **Sg** | **03 21 52.8** | **+0.8** |
| **MK08** | **Makanchi Array** | **0.59** | **197** | ⇑P | **Pb** | **03 21 45.1** | **-1.0** |
| MK08 | | | | ⇑S | **Sb** | **03 21 53.5** | **-1.2** |
| **KURBB** | **Kurchatov Arra** | **4.23** | **323** | ⇑Pn | **Pn** | **03 22 41.4** | **+3.1** |
| | 0.9nm,0.2s | | | | | | |
| KURBB | | | | ⇓Pg | **Pg** | **03 22 53.0** | **-1.2** |
| | 13nm,0.6s | | | | | | |
| KURBB | | | | ⇑Lg | Lg | 03 23 50.5 | |
| | 308nm,0.7s | | | | | | |
| **KURBB** | **Kurchatov Arra** | **4.23** | **323** | Pn | **Pn** | **03 22 40.6** | **+2.3** |
| | 0.5nm,0.3s,baz=134,slow=13,SNR=26 | | | | | | |
| KURBB | | | | Pg | **Pb** | **03 22 48.0** | **0.0** |
| | 0.5nm,0.3s,baz=137,slow=17,SNR=20 | | | | | | |
| KURBB | | | | Sn | **Sn** | **03 23 23.4** | **-4.7** |
| | 0.9nm,0.3s,baz=137,slow=19,SNR=4.6 | | | | | | |
| KURBB | | | | Lg | Lg | 03 23 51.2 | |
| | 3.2nm,0.3s,baz=137,slow=33,SNR=9.5 | | | | | | |
| **KURK** | **Kurchatov** | **4.27** | **324** | ⇑Pn | **Pn** | **03 22 41.4** | **+2.6** |
| | 4.1nm,0.7s | | | | | | |
| KURK | | | | ⇑Pg | **Pg** | **03 22 53.4** | **-1.5** |
| | 22nm,0.6s | | | | | | |
| **PDGK** | **Podgornoye** | **4.54** | **209** | ⇑Pn | **Pn** | **03 22 43.9** | **+1.3** |
| | 5.5nm,0.3s | | | | | | |
| PDGK | | | | ⇓Lg | Lg | 03 23 55.5 | |
| | 40nm,0.5s | | | | | | |
| **TKM2** | **Tokmak 2** | **6.59** | **231** | ⇑Pn | **Pn** | **03 23 12.3** | **+1.4** |
| | 2.1nm,0.6s | | | | | | |
| TKM2 | | | | ⇑Pg | Pg | 03 23 34.3 | -5.2 |
| | 3.1nm,0.7s | | | | | | |
| TKM2 | | | | ⇑Lg | Lg | 03 25 04.2 | |
| | 14nm,0.8s | | | | | | |
| **ZALV** | **Zalesovo Beam** | **6.79** | **11** | Pn | **Pn** | **03 23 12.0** | **-1.5** |
| | 1.5nm,0.3s,baz=193,slow=14,SNR=32 | | | | | | |
| ZALV | | | | Sn | **Sn** | **03 24 32.1** | **+0.9** |
| | 1.2nm,0.3s,baz=194,slow=30,SNR=4.4 | | | | | | |
| ZALV | | | | Lg | Lg | 03 25 05.7 | |
| | 1.8nm,0.3s,baz=189,slow=28,SNR=8 | | | | | | |
| **OTUK** | **Ortayu** | **6.94** | **281** | ⇑Pn | **Pn** | **03 23 17.8** | **+2.2** |
| | 0.9nm,0.3s | | | | | | |
| OTUK | | | | ⇑Sn | **Sn** | **03 24 36.4** | **+1.5** |
| | 2.7nm,0.5s | | | | | | |
| OTUK | | | | ⇓Lg | Lg | 03 25 15.8 | |
| | 50nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **7.38** | **234** | ⇑Pn | **Pn** | **03 23 23.9** | **+2.1** |
| | 2.5nm,0.4s | | | | | | |
| AAK | | | | ⇓Lg | Lg | 03 25 27.6 | |
| | 11nm,0.8s | | | | | | |
| **AAK** | **Ala-Archa** | **7.38** | **234** | Pn | **Pn** | **03 23 22.1** | **+0.3** |
| | 1.7nm,0.3s,baz=84,slow=5.6,SNR=14 | | | | | | |
| AAK | | | | Lg | Lg | 03 25 30.0 | |
| | 0.4nm,0.3s,baz=260,slow=22,SNR=5.9 | | | | | | |
| **MNAS** | **Manas** | **8.61** | **239** | ⇓Lg | Lg | 03 26 05.0 | |
| | 8.2nm,1.2s | | | | | | |
| **VOSK** | **Vostochnaya** | **9.20** | **310** | ⇑Pn | **Pn** | **03 23 48.1** | **+1.7** |
| | 0.8nm,0.6s | | | | | | |
| VOSK | | | | ⇑Sn | **Sn** | **03 25 33.8** | **+3.6** |
| | 2.5nm,0.6s | | | | | | |
| VOSK | | | | ⇑Lg | Lg | 03 26 30.9 | |
| | 14nm,0.8s | | | | | | |
| **KK31** | **Karatay Array** | **9.48** | **248** | ⇑Pn | **Pn** | **03 23 51.2** | **+0.8** |
| | 0.5nm,0.2s,baz=62,slow=13,SNR=28 | | | | | | |
| KK31 | | | | ⇑Sn | **Sn** | **03 25 35.7** | **-1.5** |
| | 0.3nm,0.3s | | | | | | |
| KK31 | | | | ⇑Lg | Lg | 03 26 34.2 | |
| | 2.8nm,0.6s,baz=209,slow=28,SNR=3.0 | | | | | | |
| **BVA0** | **Borovoye Array** | **9.66** | **311** | ⇑Pn | **Pn** | **03 23 54.4** | **+1.6** |
| | 2.9nm,1.0s,baz=137,slow=15,SNR=7.1 | | | | | | |
| BVA0 | | | | ⇑Sn | **Sn** | **03 25 43.2** | **+1.6** |
| | 3.2nm,0.7s,baz=17,slow=25,SNR=3.0 | | | | | | |
| BVA0 | | | | ⇓Lg | Lg | 03 26 41.2 | |
| | 5.9nm,0.7s,baz=118,slow=24,SNR=4.1 | | | | | | |
| **BVAR** | **Borovoye Array** | **9.66** | **311** | Pn | **Pn** | **03 23 53.0** | **+0.2** |
| | 0.3nm,0.3s,baz=126,slow=12,SNR=6.4 | | | | | | |
| BVAR | | | | Sn | **Sn** | **03 25 40.4** | **-1.2** |
| | 0.6nm,0.3s,baz=116,slow=23,SNR=4.1 | | | | | | |
| BVAR | | | | Lg | Lg | 03 26 43.6 | |
| | 1.2nm,0.3s,baz=116,slow=29,SNR=4.7 | | | | | | |
| **BRVK** | **Borovoye** | **9.73** | **311** | ⇑Lg | Lg | 03 26 42.9 | |
| | 18nm,1.2s | | | | | | |
| **CHKZ** | **Chkalovo** | **9.90** | **314** | ⇓Sn | **Sn** | **03 25 48.2** | **+0.6** |
| | 1.6nm,0.5s | | | | | | |
| CHKZ | | | | ⇓Lg | Lg | 03 26 49.3 | |
| | 6.9nm,0.6s | | | | | | |
| **ZRNK** | **Zerenda** | **10.35** | **308** | ⇑Pn | **Pn** | **03 24 04.3** | **+2.0** |
| | 1.7nm,0.3s | | | | | | |
| ZRNK | | | | ⇑Sn | **Sn** | **03 26 00.6** | **+2.0** |
| | 1.7nm,0.7s | | | | | | |
| ZRNK | | | | ⇓Lg | Lg | 03 27 05.2 | |
| | 11nm,1.1s | | | | | | |
| **AB31** | **Akbulak array** | **15.16** | **286** | ⇑Pn | **Pn** | **03 25 10.1** | **+2.2** |
| | 0.3nm,0.3s,baz=101,slow=8.3,SNR=6.5 | | | | | | |
| **ILAR** | **Eielson Array** | **61.80** | **22** | P | **P** | **03 31 53.5** | **+1.0** |
| | 0.3nm,0.6s,baz=316,slow=5.1,SNR=6.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **74.27** | **272** | P | **P** | **03 33 10.3** | **-1.3** |
| | 0.4nm,0.9s,baz=44,slow=4.8,SNR=4.1 | | | | | | |

*ATH **31** 03:25:15.0, 40°.55N×19°.58E, h5km±1km, MD3.3/21*
*THE **31** 03:25:16.4, 40°.50N×19°.67E, h3km±1km, ML2.6/3, Error ellipse: s-maj=2.1km s-min=0.6km az=216.0*
*CSEM **31** 03:25:19.7±0.4, 40°.43N×19°.84E, h2km, ML2.1, Error ellipse: s-maj=10.7km s-min=5.4km az=86.0*

*BEO **31** 03:25:26.3±1.5, 40°.78N×19°.97E, h12km±6km, ML2.1/4*

**ISC 31 03:25:17.0±1.2, 40°.49N±0°.02×19°.69E±0°.03, h2km±10km, n74, σ1s31/102, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KEK** | **Kerkira** | **0.78** | **174** | *e*PG | **Pg** | **03 25 30.9** | **-0.9** |
| **KEK** | **Kerkira** | **0.78** | **174** | P | **Pg** | **03 25 31.0** | **-0.9** |
| **KEK** | **Kerkira** | **0.78** | **174** | P | **Pg** | **03 25 31.0** | **-0.9** |
| **TIR** | **Tirane** | **0.87** | **9** | *e*Pg | **Pn** | **03 25 35.8** | **-0.6** |
| TIR | | | | *e*Sg | **Sb** | **03 25 46.7** | **-0.4** |
| **TIR** | **Tirane** | **0.87** | **9** | *e*Pg | **Pn** | **03 25 35.8** | **-0.6** |
| TIR | | | | *e*Sg | **Sb** | **03 25 46.7** | **-0.4** |
| **SGD** | **Sagiada** | **0.97** | **154** | *e*PN | **Pg** | **03 25 35.4** | **-0.2** |
| SGD | | | | *e*SB | **Sb** | **03 25 49.7** | **-0.1** |
| **SGD** | **Sagiada** | **0.97** | **154** | P | **Pg** | **03 25 34.9** | **-0.7** |
| **SGD** | **Sagiada** | **0.97** | **154** | P | **Pg** | **03 25 34.9** | **-0.7** |
| **SGD** | **Sagiada** | **0.97** | **154** | *e*Pn | **Pg** | **03 25 35.4** | **-0.2** |
| SGD | | | | *e*Sb | **Sb** | **03 25 49.7** | **-0.1** |
| **NEST** | **Nestorio** | **1.04** | **93** | *e*PB | **Pg** | **03 25 36.5** | **-0.5** |
| NEST | | | | *e*SB | **Sb** | **03 25 52.2** | **+0.2** |
| **NEST** | **Nestorio** | **1.04** | **93** | P | **Pg** | **03 25 36.2** | **-0.8** |
| **NEST** | **Nestorio** | **1.04** | **93** | P | **Pg** | **03 25 36.2** | **-0.8** |
| **NEST** | **Nestorio** | **1.04** | **93** | *e*Pb | **Pg** | **03 25 36.5** | **-0.5** |
| NEST | | | | *e*Sb | **Sb** | **03 25 52.2** | **+0.2** |
| **OHR** | **Ohrid** | **1.05** | **53** | *i* Pn | **Pg** | **03 25 37.0** | **-0.2** |
| OHR | | | | *i* Sn | **Sn** | **03 25 56.6** | **+2.4** |
| **OHR** | **Ohrid** | **1.05** | **53** | *i* Pn | **Pg** | **03 25 36.9** | **-0.2** |
| OHR | | | | *i* Sn | **Sn** | **03 25 56.5** | **+2.4** |
| **IGT** | **Igoumenitsa** | **1.07** | **152** | *e*PB | **Pg** | **03 25 37.4** | **-0.2** |
| IGT | | | | *e*SB | **Sn** | **03 25 53.9** | **-0.7** |
| **IGT** | **Igoumenitsa** | **1.07** | **152** | P | **Pg** | **03 25 37.0** | **-0.6** |
| IGT | | | | S | **Sb** | **03 25 52.7** | **-0.1** |
| **IGT** | **Igoumenitsa** | **1.07** | **152** | P | **Pg** | **03 25 37.0** | **-0.6** |
| **IGT** | **Igoumenitsa** | **1.07** | **152** | *e*Pb | **Pg** | **03 25 37.4** | **-0.2** |
| IGT | | | | S | **Sb** | **03 25 52.7** | **-0.1** |
| IGT | | | | *e*Sb | **Sn** | **03 25 53.9** | **-0.7** |
| **JAN** | **Janina** | **1.22** | **133** | *e*PG | **Pn** | **03 25 39.5** | **-1.6** |
| JAN | | | | *e*SB | **Sn** | **03 25 57.2** | **-1.0** |
| **JAN** | **Janina** | **1.22** | **133** | P | **Pn** | **03 25 39.1** | **-2.0** |
| JAN | | | | S | **Sn** | **03 25 57.2** | **-1.0** |
| **JAN** | **Janina** | **1.22** | **133** | P | **Pn** | **03 25 39.1** | **-2.0** |
| **JAN** | **Janina** | **1.22** | **133** | *e*Pg | **Pn** | **03 25 39.5** | **-1.6** |
| JAN | | | | *e*Sb | **Sn** | **03 25 57.3** | **-1.0** |
| **FNA** | **Florina** | **1.32** | **76** | *e*PB | **Pn** | **03 25 41.1** | **-1.5** |
| FNA | | | | *e*SB | **Sg** | **03 26 00.3** | **+0.8** |
| **FNA** | **Florina** | **1.32** | **76** | P | **Pn** | **03 25 41.1** | **-1.5** |
| FNA | | | | S | **Sg** | **03 26 00.2** | **+0.8** |
| **FNA** | **Florina** | **1.32** | **76** | P | **Pn** | **03 25 41.1** | **-1.5** |
| FNA | | | | S | **Sg** | **03 26 00.2** | **+0.8** |
| **MEV** | **Metsovon** | **1.37** | **120** | *e*PG | **Pn** | **03 25 42.6** | **-0.8** |
| **MEV** | **Metsovon** | **1.37** | **120** | *e*Pg | **Pn** | **03 25 42.6** | **-0.8** |
| **KZN** | **Kozani** | **1.60** | **96** | *e*PN | **Pb** | **03 25 47.5** | **+0.1** |
| KZN | | | | *e*SN | **Sg** | **03 26 10.9** | **+2.5** |
| **KZN** | **Kozani** | **1.60** | **96** | *e*Pn | **Pb** | **03 25 47.5** | **+0.1** |
| KZN | | | | *e*Sn | **Sg** | **03 26 10.9** | **+2.5** |
| **DSL** | **Palaion Diasel** | **1.73** | **141** | *e*PN | **Pb** | **03 25 50.1** | **+0.5** |
| DSL | | | | *e*SN | **Sg** | **03 26 15.2** | **+2.5** |
| **DSL** | **Palaion Diasel** | **1.73** | **141** | *e*Pn | **Pb** | **03 25 50.1** | **+0.5** |
| DSL | | | | *e*Sn | **Sg** | **03 26 15.2** | **+2.5** |
| **LKD2** | **Lefkada island** | **1.85** | **156** | *e*PN | **Pb** | **03 25 51.6** | **-0.1** |
| LKD2 | | | | *e*SN | **Sg** | **03 26 17.7** | **+1.2** |
| **LKD2** | **Lefkada island** | **1.85** | **156** | *e*Pn | **Pb** | **03 25 51.6** | **-0.1** |
| LKD2 | | | | *e*Sn | **Sg** | **03 26 17.7** | **+1.2** |
| **PDG** | **Podgorica** | **1.97** | **351** | *e*Pn | **Pg** | **03 25 56.7** | **+1.9** |
| PDG | | | | *e*Sg | **Sg** | **03 26 21.6** | **+1.3** |
| **THL** | **Klokotos Trika** | **2.01** | **117** | *e*PN | **Pb** | **03 25 53.7** | **-0.6** |
| THL | | | | *e*SN | **Sg** | **03 26 20.9** | **-0.7** |
| **THL** | **Klokotos Trika** | **2.01** | **117** | P | **Pn** | **03 25 51.8** | **-0.2** |
| **THL** | **Klokotos Trika** | **2.01** | **117

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 175nm,0.5s | | | | | | | | |
| **PDGK** | **Podgornoye** | **2.09** | **41** | ⇑ | *i*P | | **Pg** | **04 18 18.6** | **-1.2** |
| | baz=42 | | | | | | | | |
| PDGK | | | | ⇑ | *i*S | | **Sg** | **04 18 47.1** | **+0.2** |
| | baz=42 | | | | | | | | |
| **KBK** | **Karagaybulak** | **2.17** | **295** | ⇑ | *i*P | | **Pg** | **04 18 19.6** | **-1.7** |
| KBK | baz=295 | | | ⇑ | *i*S | | **Sg** | **04 18 49.6** | **+0.2** |
| | baz=295 | | | | | | | | |
| **KBK** | **Karagaybulak** | **2.17** | **295** | | P | | **Pg** | **04 18 19.8** | **-1.4** |
| | SNR=14 | | | | | | | | |
| **UCH** | **Uchtor** | **2.35** | **282** | ⇑ | *i*P | | **Pb** | **04 18 23.1** | **+1.0** |
| UCH | baz=282 | | | ⇑ | *i*S | | **Sg** | **04 18 57.1** | **+1.8** |
| | baz=282 | | | | | | | | |
| **UCH** | **Uchtor** | **2.35** | **282** | | P | | **Pg** | **04 18 23.6** | **-1.3** |
| | SNR=13 | | | | | | | | |
| **CHMS** | **Chumysh** | **2.45** | **301** | ⇑ | *i*P | | **Pb** | **04 18 24.3** | **+0.7** |
| CHMS | baz=301 | | | ⇑ | *i*S | | **Sg** | **04 18 57.7** | **-0.7** |
| | baz=301 | | | | | | | | |
| **CHMS** | **Chumysh** | **2.45** | **301** | | P | | **Pg** | **04 18 24.4** | **-2.2** |
| | SNR=6.3 | | | | | | | | |
| **ARLS** | **Aral** | **2.46** | **273** | ⇓ | *e*P | | **Pb** | **04 18 23.0** | **-0.8** |
| ARLS | baz=273 | | | ⇓ | *e*S | | **Sb** | **04 18 54.9** | **+0.9** |
| | baz=273 | | | | | | | | |
| **AAK** | **Ala-Archa** | **2.47** | **292** | ⇑ | Pg | | **Pg** | **04 18 25.2** | **-1.9** |
| | 15nm,0.6s | | | | | | | | |
| AAK | | | | ⇓ | Lg | | Lg | 04 18 58.5 | |
| | 33nm,0.5s | | | | | | | | |
| **AAK** | **Ala-Archa** | **2.47** | **292** | ⇑ | *i*P | | **Pg** | **04 18 25.4** | **-1.7** |
| | baz=291 | | | | | | | | |
| AAK | | | | ⇑ | *i*S | | **Sg** | **04 18 58.2** | **-0.9** |
| | baz=291 | | | | | | | | |
| **AAK** | **Ala-Archa** | **2.47** | **292** | | P | | **Pg** | **04 18 25.6** | **-1.4** |
| | SNR=14 | | | | | | | | |
| **USP** | **Ospenovka** | **2.75** | **304** | ⇑ | *e*P | | **Pb** | **04 18 29.2** | **+0.6** |
| | baz=304 | | | | | | | | |
| USP | | | | ⇑ | *i*S | | **Sg** | **04 19 05.7** | **-2.2** |
| | baz=304 | | | | | | | | |
| **USP** | **Ospenovka** | **2.75** | **304** | | P | | **Pb** | **04 18 29.6** | **+0.9** |
| | SNR=8.4 | | | | | | | | |
| **AML** | **Almayashu** | **2.94** | **279** | ⇓ | *i*P | | **Pb** | **04 18 33.8** | **+1.6** |
| | baz=278 | | | | | | | | |
| AML | | | | ⇓ | *i*S | | **Sg** | **04 19 13.8** | **-0.4** |
| | baz=278 | | | | | | | | |
| **AML** | **Almayashu** | **2.94** | **279** | | P | | **Pb** | **04 18 33.2** | **+1.0** |
| | SNR=10 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.98** | **289** | ⇑ | *i*P | | **Pg** | **04 18 34.8** | **-2.1** |
| | baz=289 | | | | | | | | |
| EKS2 | | | | ⇑ | *i*S | | **Sg** | **04 19 15.6** | **+0.1** |
| | baz=289 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **2.98** | **289** | | P | | **Pg** | **04 18 35.5** | **-1.4** |
| | SNR=12 | | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.57** | **242** | ⇑ | Pg | | **Pg** | **04 18 45.9** | **-2.2** |
| | 4.2nm,0.7s | | | | | | | | |
| SFK | | | | ⇓ | Lg | | Lg | 04 19 33.4 | |
| | 11nm,0.7s | | | | | | | | |
| **MNAS** | **Manas** | **3.86** | **283** | ⇓ | Pg | | **Pb** | **04 18 49.6** | **+1.9** |
| | 2.1nm,0.5s | | | | | | | | |
| MNAS | | | | ⇑ | Lg | | Lg | 04 19 42.6 | |
| | 7.2nm,0.5s | | | | | | | | |
| **KK31** | **Karatay Array** | **5.42** | **287** | ⇑ | Pg | | Pg | 04 19 19.6 | -3.9 |
| | 1.2nm,0.5s,baz=103,slow=15,SNR=23 | | | | | | | | |
| KK31 | | | | ⇑ | Lg | | Lg | 04 20 31.2 | |
| | 4.0nm,0.5s,baz=94,slow=29,SNR=9.6 | | | | | | | | |
| **MK31** | **Makanchi Array** | **6.05** | **32** | ⇑ | Pg | | **Pg** | **04 19 33.6** | **-1.8** |
| | 0.4nm,0.3s | | | | | | | | |
| MK31 | | | | ⇑ | Lg | | Lg | 04 20 46.6 | |
| | 2.9nm,0.6s,baz=216,slow=28,SNR=4.0 | | | | | | | | |
| **OTUK** | **Ortayu** | **7.48** | **332** | ⇓ | Pg | | Pg | 04 19 57.5 | -5.2 |
| | 2.0nm,0.9s | | | | | | | | |
| OTUK | | | | ⇑ | Lg | | Lg | 04 21 36.8 | |
| | 4.1nm,0.6s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **8.89** | **4** | ⇓ | Lg | | Lg | 04 22 25.1 | |
| | 7.7nm,0.8s | | | | | | | | |
| **KURK** | **Kurchatov** | **8.98** | **4** | ⇑ | Lg | | Lg | 04 22 27.0 | |
| | 15nm,1.0s | | | | | | | | |
| **VOSK** | **Vostochnaya** | **11.85** | **340** | ⇑ | Lg | | Lg | 04 23 59.4 | |
| | 3.5nm,1.1s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **12.28** | **339** | | Lg | | Lg | 04 24 11.9 | |
| | 3.6nm,1.0s,baz=154,slow=27,SNR=3.8 | | | | | | | | |
| **BRVK** | **Borovoye** | **12.33** | **339** | ⇓ | Lg | | Lg | 04 24 13.0 | |
| | 7.5nm,1.1s | | | | | | | | |
| **ZRNK** | **Zerenda** | **12.61** | **336** | ⇓ | Lg | | Lg | 04 24 22.3 | |
| | 3.6nm,1.0s | | | | | | | | |
| **CHKZ** | **Chkalovo** | **12.81** | **341** | ⇑ | Lg | | Lg | 04 24 28.5 | |
| | 1.8nm,0.9s | | | | | | | | |

*IDC **31** 04:22:29.5±0.8, 15.°60N×145.°90E, h107km±7km, mb4.0/23, mb1 4.1/23, mb1mx3.9/49, mbtmp4.4/23, Error ellipse: s-maj=15.8km s-min=12.8km az=111.0*
*ISCJB **31** 04:22:32.5±0.4, 15.°54N±0.°06×145.°90E±0.°08, h150km, mb4.2/37, Error ellipse: s-maj=11.0km s-min=8.9km az=12.1*
*NEIC **31** 04:22:36.0±4.1, 15.°52N×145.°85E, h169km±38km, mb4.2/14, Error ellipse: s-maj=13.1km s-min=8.7km az=74.0*

**ISC 31 04:22:33.7±0.6, 15.°53N±0.°10×146.°0E±0.°1, h150km, n62, σ0s70/55, mb4.2/37, Mariana Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **H11S3** | **WAKE ISLAND Hy** | **20.04** | **79** | T | T | 04 47 50.1 | | |
| | baz=264,slow=74 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **20.05** | **79** | T | T | 04 47 53.3 | | |
| | baz=264 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **20.05** | **79** | T | T | 04 47 52.1 | | |
| | baz=264,slow=74 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **20.37** | **75** | T | T | 04 48 15.3 | | |
| | baz=263,slow=74,SNR=32 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **20.38** | **75** | T | T | 04 48 17.9 | | |
| | baz=263,slow=74,SNR=32 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **20.39** | **75** | T | T | 04 48 20.5 | | |
| | baz=263,slow=74,SNR=28 | | | | | | | |
| **SIJI** | **Sorong** | **21.83** | **223** | P | | **P** | **04 27 14.2** | **-0.1** |
| | 10nm,0.6s,baz=29,slow=17,SNR=5.5 | | | | | | | |
| **JNU** | **Nakatsue** | **22.22** | **325** | P | | **P** | **04 27 17.9** | **-0.3** |
| | 7.9nm,0.8s,baz=127,slow=2.6,SNR=5.5 | | | | | | | |
| **FAKI** | **Fak Fak** | **22.80** | **218** | *e*P | | **P** | **04 27 23.3** | **-0.5** |
| | 9.1nm,0.6s | | | | | | | |
| **KSRS** | **Korea Array** | **27.06** | **327** | P | | **P** | **04 28 02.4** | **+0.2** |
| | 2.6nm,0.8s,baz=137,slow=10,SNR=7.4 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **27.07** | **327** | P | | **P** | **04 28 02.4** | **+0.1** |
| **CTAO** | **Charters Tower** | **35.39** | **180** | *e*P | | **P** | **04 29 15.2** | **0.0** |
| | 3.0nm,0.8s | | | | | | | |
| **WRAB** | **Tennant Creek** | **37.04** | **198** | *e*P | | **P** | **04 29 28.8** | **-0.5** |
| | 2.1nm,0.5s | | | | | | | |
| **WRA** | **Warramunga Arr** | **37.05** | **198** | P | | **P** | **04 29 29.0** | **-0.4** |
| | 1.9nm,0.8s,baz=13,slow=8.8,SNR=12 | | | | | | | |
| **ASAR** | **Alice Springs** | **40.70** | **197** | P | | **P** | **04 29 59.6** | **-0.1** |
| | 0.4nm,0.4s,baz=16,slow=6.8,SNR=10.0 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **44.97** | **281** | P | | **P** | **04 30 35.1** | **+0.9** |
| | 1.7nm,0.4s,baz=78,slow=6.6,SNR=7.3 | | | | | | | |
| **ULN** | **Ulaanbaatar** | **45.43** | **324** | *e*P | | **P** | **04 30 37.8** | **+0.1** |
| | 2.9nm,0.7s | | | | | | | |
| **KULM** | **Kulim** | **45.62** | **262** | *e*P | | **P** | **04 30 40.1** | **+0.7** |
| | 12nm,0.8s | | | | | | | |
| **SONM** | **Songino Array** | **45.80** | **323** | P | | **P** | **04 30 40.8** | **+0.3** |
| | 1.7nm,0.5s,baz=138,slow=8.7,SNR=9.0 | | | | | | | |
| **PSI** | **Prapat** | **48.00** | **260** | P | | **P** | **04 30 58.5** | **+0.4** |
| | 14nm,0.8s,baz=58,slow=5.7,SNR=5.8 | | | | | | | |
| **LSA** | **Lhasa** | **52.09** | **296** | *e*P | | **P** | **04 31 30.6** | **+1.4** |
| | 13nm,0.6s | | | | | | | |
| **TAPN** | **Taplejung** | **55.06** | **293** | *e*P | | **P** | **04 31 51.1** | **+0.5** |
| | 14nm,0.4s | | | | | | | |
| **ODAN** | **Odare** | **55.35** | **292** | *e*P | | **P** | **04 31 52.7** | **+0.1** |
| | 8.2nm,0.3s | | | | | | | |
| **RAMN** | **Ramite** | **56.05** | **292** | *e*P | | **P** | **04 31 57.8** | **+0.2** |
| | 6.7nm,0.6s | | | | | | | |
| **GUN** | **Gumba** | **56.68** | **293** | *e*P | | **P** | **04 32 02.7** | **+0.5** |
| **PKI** | **Pulchoki** | **57.10** | **293** | *e*P | | **P** | **04 32 05.1** | **0.0** |
| | 5.2nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **57.11** | **293** | *e*Pn | | **P** | **04 32 05.0** | **-0.1** |
| | 15nm,0.7s | | | | | | | |
| **KKN** | **Kakani** | **57.21** | **293** | *e*P | | **P** | **04 32 05.9** | **+0.1** |
| | 8.8nm,0.5s | | | | | | | |
| **DMN** | **Daman** | **57.37** | **293** | *e*P | | **P** | **04 32 07.3** | **+0.4** |
| | 12nm,0.5s | | | | | | | |
| **GKN** | **Gorkha** | **57.78** | **294** | *e*P | | **P** | **04 32 09.9** | **+0.2** |
| | 33nm,0.5s | | | | | | | |
| **DANN** | **Dangsing** | **58.54** | **294** | *e*P | | **P** | **04 32 15.5** | **+0.4** |
| | 4.2nm,0.3s | | | | | | | |
| **KOLN** | **Koldanda** | **58.70** | **293** | *e*P | | **P** | **04 32 16.1** | **0.0** |
| | 34nm,0.8s | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ZALV** | **Zalesovo Beam** | **60.69** | **324** | P | | | **P** | **04 32 27.9** | **-1.1** |
| | 2.6nm,0.5s,baz=104,slow=6.9,SNR=10 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **60.86** | **315** | P | | | **P** | **04 32 30.8** | **+0.5** |
| | 4.1nm,0.4s,baz=90,slow=8.6,SNR=63 | | | | | | | | |
| **KDAK** | **Kodiak Island** | **61.88** | **32** | P | | | **P** | **04 32 38.0** | **+1.1** |
| | 1.9nm,0.5s,baz=297,slow=4.5,SNR=4.3 | | | | | | | | |
| **KURK** | **Kurchatov** | **63.81** | **319** | *e*P | | | **P** | **04 32 49.4** | **-0.4** |
| | 30nm,0.8s | | | | | | | | |
| KURBB | **Kurchatov Arra** | **63.85** | **319** | P | | | **P** | **04 32 50.0** | **-0.1** |
| | 12nm,0.5s,baz=98,slow=7.1,SNR=75 | | | | | | | | |
| **TKM2** | **Tokmak 2** | **65.27** | **310** | *e*P | | | **P** | **04 33 00.2** | **+0.5** |
| | 3.5nm,1.0s | | | | | | | | |
| **AAK** | **Ala-Archa** | **66.07** | **310** | P | | | **P** | **04 33 03.8** | **-1.1** |
| | 0.9nm,0.4s,baz=146,slow=15,SNR=3.8 | | | | | | | | |
| **AAK** | **Ala-Archa** | **66.07** | **310** | *e*P | | | **P** | **04 33 04.6** | **-0.2** |
| | 1.0nm,0.5s | | | | | | | | |
| **ILAR** | **Eielson Array** | **66.37** | **26** | P | | | **P** | **04 33 05.5** | **-0.6** |
| | 1.0nm,0.4s,baz=246,slow=6.2,SNR=24 | | | | | | | | |
| ILAR | | | | pP | | | **PcP** | **04 33 32.2** | **-2.5** |
| | 0.3nm,0.5s,baz=251,slow=5.6,SNR=1.8 | | | | | | | | |
| **EKS2** | **Erkin-Say** | **66.60** | **310** | *e*P | | | **P** | **04 33 08.3** | **+0.2** |
| | 1.7nm,0.7s | | | | | | | | |
| **KKAR** | **Karatay Array** | **68.99** | **311** | *e*P | | | **P** | **04 33 23.1** | **+0.1** |
| | 4.9nm,0.8s | | | | | | | | |
| **BVAR** | **Borovoye Array** | **69.08** | **321** | P | | | **P** | **04 33 22.9** | **-0.4** |
| | 7.1nm,0.3s,baz=105,slow=7.6,SNR=38 | | | | | | | | |
| **BRVK** | **Borovoye** | **69.15** | **321** | *e*P | | | **P** | **04 33 23.7** | **0.0** |
| | 4.1nm,0.4s | | | | | | | | |
| **INK** | **Inuvik** | **72.18** | **23** | P | | | **P** | **04 33 42.2** | **+0.5** |
| | 1.8nm,1.0s,baz=273,slow=12,SNR=4.2 | | | | | | | | |
| ABKAR | **Akbulak array** | **75.83** | **318** | *e*P | | | **P** | **04 34 02.4** | **-0.9** |
| **AKTO** | **Aktyubinsk** | **76.90** | **319** | P | | | **P** | **04 34 08.5** | **-0.9** |
| | 0.9nm,0.5s,baz=92,slow=10,SNR=3.4 | | | | | | | | |
| **GEYT** | **Alibeck** | **78.96** | **306** | P | | | **P** | **04 34 21.6** | **+0.5** |
| | 2.9nm,0.3s,baz=29,slow=3.3,SNR=2.7 | | | | | | | | |
| **YKA** | **Yellowknife Ar** | **80.66** | **28** | P | | | **P** | **04 34 29.9** | **+0.3** |
| | 2.0nm,0.7s,baz=285,slow=5.1,SNR=6.4 | | | | | | | | |
| YKA | | | | pP | | pP | | 04 34 57.1 | -10 |
| | 2.0nm,0.7s,baz=208,slow=41,SNR=2.3 | | | | | | | | |
| **NEW** | **Newport** | **83.09** | **42** | *e*P | | | **P** | **04 34 43.7** | **+1.0** |
| | 2.5nm,0.8s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.89** | **52** | P | | P | | 04 34 54.4 | +2.1 |
| | 1.1nm,0.5s,baz=271,slow=6.0,SNR=11 | | | | | | | | |
| NVAR | | | | pP | | pP | | 04 35 21.6 | -8.3 |
| | 0.7nm,0.5s,baz=275,slow=5.6,SNR=5.1 | | | | | | | | |
| ARCES | **ARCESS Array B** | **85.58** | **342** | P | | | **P** | **04 34 54.1** | **-0.6** |
| | 7.2nm,1.0s,baz=62,slow=5.5,SNR=5.1 | | | | | | | | |
| **DUG** | **Dugway** | **88.44** | **49** | *e*P | | | **P** | **04 35 10.1** | **+0.8** |
| | 1.5nm,0.6s | | | | | | | | |
| **TPAW** | **Teton Pass** | **88.65** | **45** | *e*P | | | **P** | **04 35 11.2** | **+0.8** |
| | 2.4nm,0.9s | | | | | | | | |
| **FFC** | **Flin Flon** | **89.62** | **33** | *e*P | | | **P** | **04 35 14.3** | **-0.1** |
| **FINES** | **FINESS Array B** | **89.86** | **335** | P | | | **P** | **04 35 14.5** | **-0.8** |
| | 2.0nm,0.9s,baz=66,slow=4.6,SNR=6.6 | | | | | | | | |
| **BRTR** | **Keskin Array B** | **96.49** | **314** | P | | | **P** | **04 35 45.0** | **-1.5** |
| | 0.5nm,0.8s,baz=73,slow=5.0,SNR=3.4 | | | | | | | | |
| **DBIC** | **Dimbokro** | **143.64** | **305** | PKhKP | | PKPpre | | 04 41 48.9 | |
| | 1.2nm,0.4s,baz=56,slow=3.4,SNR=5.2 | | | | | | | | |
| **LVC** | **Limon Verde** | **146.35** | **108** | *e*PKPbc | | **PKPab** | | **04 41 59.7** | **+0.6** |
| **LPAZ** | **La Paz** | **147.22** | **96** | PKPbc | | **PKPab** | | **04 42 03.3** | **+0.2** |
| | 2.8nm,0.5s,baz=300,slow=2.5,SNR=15 | | | | | | | | |
| **SAML** | **Samuel** | **150.80** | **80** | *e*PKPbc | | **PKPbc** | | **04 42 10.4** | **+1.1** |

*IDC **31** 04:24:14.1±1.1, 34.°84N×141.°05E, h0km, mb3.6/4, mb1 3.8/7, mb1mx3.6/53, mbtmp3.7/7, ML3.7/3, MS3.1/1, Ms1 3.1/1, ms1mx2.4/24, Error ellipse: s-maj=28.3km s-min=18.0km az=93.0*
*ISCJB **31** 04:24:18.2±0.8, 34.°85N±0.°04×141.°11E±0.°08, h55km±7km, mb3.6/4, Error ellipse: s-maj=11.6km s-min=6.9km az=173.6*
*JMA **31** 04:24:18.1±0.2, 34.°85N×141.°11E, h54km±3km, M3.4*

**ISC 31 04:24:19.2±1.2, 34.°92N±0.°05×141.°14E±0.°08, h52km±10km, n24, σ1s44/27, mb3.6/4, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **BSO1** | **Boso 1** | **0.29** | **207** | P | | **Pn** | **04 24 26.9** | **-0.9** |
| **BSO3** | **Boso 3** | **0.53** | **258** | P | | **Pn** | **04 24 29.6** | **-1.0** |
| BSO3 | | | | S | | **Sn** | **04 24 39.7** | **+0.8** |
| **BSO4** | **Boso 4** | **0.66** | **277** | P | | **Pn** | **04 24 31.6** | **-0.8** |
| BSO4 | | | | S | | **Sn** | **04 24 41.8** | **-0.2** |
| **KTR** | **Katsuura** | **0.71** | **289** | P | | **Pn** | **04 24 32.2** | **-1.0** |
| KTR | | | | S | | **Sn** | **04 24 42.1** | **-1.2** |
| **I30JP** | **ISUMI INFRASON** | **0.78** | **300** | Pn | | **Pn** | **04 24 34.1** | **+0.1** |
| I30JP | | | | Sn | | **Sn** | **04 24 46.5** | **+1.6** |
| **CHOJ** | **Chosi** | **0.82** | **344** | P | | **Pn** | **04 24 34.5** | **0.0** |
| CHOJ | | | | S | | **Sn** | **04 24 45.6** | **-0.1** |
| **JCN** | **Nagara** | **0.92** | **303** | P | | **Pn** | **04 24 35.8** | **0.0** |
| JCN | | | | S | | **Sn** | **04 24 49.1** | **+1.4** |
| **JIM2** | **Oshima 3** | **1.42** | **262** | P | | **Pn** | **04 24 41.4** | **-1.2** |
| JIM2 | | | | S | | **Sn** | **04 24 57.1** | **-3.1** |
| **JHJ** | **Hachijo jima 2** | **2.12** | **213** | Pn | | **Pn** | **04 24 50.1** | **-2.0** |
| | 98nm,0.3s,baz=66,slow=19,SNR=9.2 | | | | | | | |
| JHJ | | | | Sn | | **Sn** | **04 25 15.8** | **-1.5** |
| | 144nm,0.3s,baz=288,slow=23,SNR=8.0 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **2.88** | **305** | Pn | | **Pn** | **04 25 02.0** | **-0.6** |
| | 3.2nm,0.3s,baz=150,slow=14,SNR=31 | | | | | | | |
| MJAR | | | | Sn | | **Sn** | **04 25 38.1** | **+2.0** |
| | 6.5nm,0.3s,baz=118,slow=15,SNR=6.2 | | | | | | | |
| **MAT** | **Matsushiro** | **2.88** | **305** | P | | **Pn** | **04 25 03.1** | **+0.4** |
| MAT | | | | eS | | **Sn** | **04 25 35.9** | **-0.3** |
| **JNU** | **Nakatsue** | **8.70** | **261** | LR | | LR | 04 30 05.5 | |
| | comp=Z,106nm,18.2s,baz=306,slow=41 | | | | | | | |
| **ASAJ** | **Asahikawa** | **9.26** | **7** | Pn | | **Pn** | **04 26 28.3** | **-1.6** |
| | 1.2nm,0.3s,baz=217,slow=7.4,SNR=7.6 | | | | | | | |
| ASAJ | | | | Sn | | **Sn** | **04 28 09.3** | **-3.3** |
| | 0.4nm,0.3s,baz=288,slow=20,SNR=2.9 | | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **27.32** | **117** | T | | T | 04 59 19.4 | |
| | baz=309,slow=75,SNR=7.6 | | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **27.33** | **117** | T | | T | 04 59 12.9 | |
| | baz=309,slow=75,SNR=5.6 | | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **27.34** | **117** | T | | T | 04 59 21.5 | |
| | baz=309,slow=75,SNR=4.9 | | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **27.96** | **119** | T | | T | 05 00 01.6 | |
| | baz=312,slow=75,SNR=12 | | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **27.96** | **119** | T | | T | 05 00 00.2 | |
| | baz=312,slow=75,SNR=14 | | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **27.98** | **119** | T | | T | 05 00 01.5 | |
| | baz=312,slow=75,SNR=8.5 | | | | | | | |
| **SONM** | **Songino Array** | **28.84** | **307** | P | | **P** | **04 30 12.6** | **0.0** |
| | 0.3nm,0.4s,baz=112,slow=6.5,SNR=3.1 | | | | | | | |
| **ILAR** | **Eielson Array** | **51.41** | **31** | P | | P | 04 33 21.6 | +3.1 |
| | 0.3nm,0.6s,baz=266,slow=6.9,SNR=3.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **54.94** | **188** | P | | **P** | **04 33 46.0** | **+1.1** |
| | 1.0nm,0.4s,baz=3.7,slow=7.6,SNR=8.3 | | | | | | | |
| **ASAR** | **Alice Springs** | **58.66** | **188** | P | | **P** | **04 34 12.0** | **+0.7** |
| | 0.4nm,0.7s,baz=1.2,slow=6.4,SNR=4.3 | | | | | | | |
| **LPAZ** | **La Paz** | **147.92** | **62** | PKPbc | | **PKPab** | | **04 44 03.3** | **+0.8** |
| | 0.8nm,0.7s,baz=309,slow=6.5,SNR=2.9 | | | | | | | | |

*DDA **31** 04:27:02.9, 39.°10N×41.°29E, h7km, Md2.6*
*CSEM **31** 04:27:02.2±0.3, 39.°10N×41.°15E, h2km, MD2.6, Error ellipse: s-maj=8.9km s-min=6.4km az=141.0*
*ISK **31** 04:27:02.2, 39.°10N×41.°24E, h7km, MD2.6*
*ISCJB **31** 04:27:03.1±0.6, 39.°11N±0.°03×41.°20E±0.°04, h9km±5km, Error ellipse: s-maj=6.2km s-min=4.7km az=135.9*

**ISC 31 04:27:02.9±0.9, 39.°10N±0.°03×41.°25E±0.°03, h11km±7km, n20, σ0s58/30, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **VRTB** | **Varto-Mus** | **0.17** | **70** | *e*PG | | **Pg** | **04 27 06.4** | **-0.3** |
| **VRTB** | **Varto-Mus** | **0.17** | **70** | *e*Pg | | **Pg** | **04 27 06.4** | **-0.3** |
| **BNGL** | **BINGOL** | **0.17** | **208** | P | | **Pg** | **04 27 06.5** | **-0.2** |
| BNGL | | | | S | | **Sg** | **04 27 10.1** | **+0.6** |
| **BNGB** | **Bing¯¶ǁ** | **0.46** | **256** | *e*PG | | **Pg** | **04 27 11.5** | **-0.5** |
| BNGB | | | | *e*SG | | **Sg** | **04 27 18.2** | **+0.2** |
| **BINT** | **Bingol** | **0.64** | **249** | *e*Pg | | Pg | 04 27 11.5 | -3.8 |
| **EKAR** | **Karacoban** | **0.65** | **76** | *i*P | | **Pb** | **04 27 17.1** | **+0.7** |
| EKAR | | | | *i*S | | **Sn** | **04 27 28.1** | **-0.6** |
| **EKAR** | **Karacoban** | **0.65** | **76** | P | | **Pb** | **04 27 17.1** | **+0.7** |
| EKAR | | | | S | | **Sn** | **04 27 28.1** | **-0.6** |
| **ERZM** | **Erzurum** | **0.81** | **6** | *i*P | | **Pb** | **04 27 19.1** | **0.0** |
| ERZM | | | | *i*S | | **Sb** | **04 27 30.2** | **+0.1** |
| **ERZM** | **Erzurum** | **0.81** | **6** | P | | **Pb** | **04 27 19.1** | **0.0** |
| ERZM | | | | S | | **Sb** | **04 27 30.2** | **+0.1** |
| **SVAN** | **Silvan-Diyarba** | **0.95** | **183** | *e*PG | | **Pg** | **04 27 20.9** | **-0.3** |
| SVAN | | | | *e*SG | | **Sb** | **04 27 34.4** | **+0.3** |
| **SVAN** | **Silvan-Diyarba** | **0.95** | **183** | *e*Pg | | **Pg** | **04 27 20.9** | **-0.3** |
| SVAN | | | | *e*Sg | | **Sb** | **04 27 34.4** | **+0.3** |
| **BEST** | **Besiri** | **1.21** | **179** | P | | **Pb** | **04 27 24.2** | **-1.6** |
| BEST | | | | S | | **Sn** | **04 27 43.5** | **+1.2** |
| **TUTA** | **Tutak** | **1.25** | **76** | *i*P | | **Pn** | **04 27 26.1** | **-0.5** |
| TUTA | | | | *i*S | | **Sn** | **04 27 43.5** | **0.0** |
| **TUTA** | **Tutak** | **1.25** | **76** | P | | **Pn** | **04 27 26.1** | **-0.5** |
| TUTA | | | | S | | **Sn** | **04 27 43.5** | **0.0** |
| **PTK** | **Pertek** | **1.46** | **262** | *e*PN | | **Pn** | **04 27 29.3** | **-0.2** |
| **PTK** | **Pertek** | **1.46** | **262** | *e*Pn | | **Pn** | **04 27 29.3** | **-0.2** |
| **BAYT** | **Ayd¯¯ntepe-Bay** | **1.55** | **327** | *e*PN | | **Pn** | **04 27 30.9** | **+0.3** |
| **BAYT** | **Ayd¯¯ntepe-Bay** | **1.55** | **327** | *e*Pn | | **Pn** | **04 27 30.9** | **+0.3** |
| **MAZI** | **Mazidag** | **1.76** | **201** | *e*PN | | **Pn** | **04 27 34.2** | **+0.7** |
| **MAZI** | **Mazidag** | **1.76** | **201** | *e*Pn | | **Pn** | **04 27 34.2** | **+0.7** |

*BJI **31** 04:30:38.1, 4.°15S×100.°04E, h35km, mb4.7/26, mB5.0/20, Ms4.7/16, MS7 4.3/17*
*IDC **31** 04:30:41.5±0.6, 3.°11S×100.°08E, h0km, mb4.1/16, mb1 4.2/17, mb1mx4.1/40, mbtmp4.1/17, ML4.6/1, MS3.6/10, Ms1 3.6/10, ms1mx3.3/33, Error ellipse: s-maj=22.2km s-min=15.1km az=59.0*
*NEIC **31** 04:30:42.9±0.6, 3.°26S×99.°75E, h10km, mb4.5/8, Error ellipse: s-maj=17.4km s-min=9.2km az=50.0*

**ISC 31 04:30:45.2±0.7, 3.°47S±0.°08×99.°74E±0.°08, h35km, n66, σ1s92/65, mb4.3/23, MS3.6/10, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | | ISC |
| **MNAI** | **Manna** | **3.33** | **106** | *e*Pn | | Pn | 04 31 39.2 | +4.4 |
| **BKNI** | **Bangkinang** | **3.98** | **19** | *e*Pn | | **Pn** | **04 31 44.2** | **+0.3** |
| **GSI** | **Gunungsitoli** | **5.21** | **335** | *e*Pn | | **Pn** | **04 31 58.4** | **-2.3** |
| GSI | | | | *e*Sn | | **Sn** | **04 32 54.6** | **-4.9** |
| **PSI** | **Prapat** | **6.28** | **353** | Pn | | **Pn** | **04 32 12.8** | **-2.7** |
| | 0.3nm,0.3s,baz=197,slow=14,SNR=2.0 | | | | | | | |
| **IPM** | **Ipoh** | **8.00** | **9** | *e*Pn | | **Pn** | **04 32 36.5** | **-2.5** |
| **LEM** | **Lembang** | **8.53** | **113** | Pn | | **Pn** | **04 32 47.9** | **+1.4** |
| | 4.3nm,0.3s,baz=319,slow=19,SNR=1.8 | | | | | | | |
| **KULM** | **Kulim** | **8.74** | **6** | *e*Pn | | **Pn** | **04 32 46.6** | **-2.7** |
| **CISI** | **Cisompet, Garu** | **9.01** | **117** | *e*Pn | | Pn | 04 32 49.6 | -3.3 |
| **KAPI** | **Kappang** | **20.02** | **95** | P | | **P** | **04 35 13.9** | **-1.3** |
| | 1.8nm,0.3s,baz=256,slow=10,SNR=2.8 | | | | | | | |
| **KAPI** | **Kappang** | **20.02** | **95** | *e*P | | **Pn** | **04 35 17.1** | **-0.1** |
| | 29nm,1.1s | | | | | | | |
| **PALK** | **Pallekele** | **21.79** | **299** | LR | | LR | 04 42 34.2 | |
| | comp=Z,152nm,20.8s,baz=116,slow=32 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **21.80** | **358** | P | | **P** | **04 35 31.1** | **-3.3** |
| | 2.4nm,0.6s,baz=184,slow=10,SNR=6.8 | | | | | | | |
| **QIZ** | **Qiongzhong** | **24.47** | **24** | P | | **P** | **04 36 03.0** | **+1.9** |
| QIZ | | | | S | | **S** | **04 40 22.8** | **+3.6** |
| QIZ | | | | PMZ | | | | |
| | 16nm,2.3s | | | | | | | |
| QIZ | | | | LZ | | | | |
| | 160nm,16.6s | | | | | | | |
| **SLVN** | **Son La** | **24.98** | **9** | *e*P | | **P** | **04 36 04.0** | **-1.8** |
| **H08S2** | **Diego Garcia H** | **27.43** | **260** | T | | T | 05 05 35.6 | |
| | baz=82,slow=75,SNR=469 | | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.43** | **260** | T | | T | 05 05 36.3 | |
| | baz=82,slow=75,SNR=775 | | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.45** | **260** | T | | T | 05 05 35.6 | |
| | baz=82,slow=75,SNR=645 | | | | | | | |
| **KMI** | **Kunming** | **28.57** | **6** | P | | P | 04 36 41.5 | +3.2 |
| KMI | | | | pP | | pP | 04 36 51.5 | +3.2 |
| KMI | | | | sP | | sP | 04 36 56.0 | +3.4 |
| KMI | | | | PP | | **PnPn** | **04 37 35.0** | **+6.0** |
| KMI | | | | S | | **S** | **04 41 27.0** | **+2.6** |
| KMI | | | | sS | | sS | 04 41 44.0 | +2.9 |
| KMI | | | | PMZ | | | | |
| | 10.0nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | 140nm,4.4s | | | | | | | |
| KMI | | | | LN | | | | |
| | 390nm,10.7s | | | | | | | |
| KMI | | | | LE | | | | |
| | 410nm,10.4s | | | | | | | |
| KMI | | | | LZ | | | | |
| | 330nm,10.1s | | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.00** | **159** | T | | T | 

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 55nm,16.0s | | | | | | | |
| **TKM2** | **Tokmak 2** | **51.07** | **337** | *e*P | | **P** | **04 39 45.0** | **+0.5** |
| | 8.4nm,0.9s | | | | | | | |
| **AAK** | **Ala-Archa** | **51.26** | **336** | *e*P | | **P** | **04 39 45.7** | **-0.1** |
| | 4.1nm,1.0s | | | | | | | |
| **SONM** | **Songino Array** | **51.42** | **6** | P | | **P** | **04 39 46.5** | **-0.4** |
| | 5.3nm,0.8s,baz=186,slow=8.7,SNR=27 | | | | | | | |
| SONM | | | | PcP | | **PcP** | **04 41 01.5** | **+0.4** |
| | 0.7nm,0.8s,baz=172,slow=5.3,SNR=2.2 | | | | | | | |
| **SONA1** | **Songino Array** | **51.43** | **6** | *e*P | | **P** | **04 39 46.5** | **-0.5** |
| **ULN** | **Ulaanbaatar** | **51.52** | **6** | *e*P | | **P** | **04 39 47.4** | **-0.3** |
| | 7.6nm,1.0s | | | | | | | |
| **EKS2** | **Erkin-Say** | **51.58** | **336** | *e*P | | **P** | **04 39 47.2** | **-1.0** |
| | 8.6nm,0.9s | | | | | | | |
| **MK01** | **Makanchi Array** | **52.34** | **345** | *e*P | | **P** | **04 39 53.7** | **+0.1** |
| **MKAR** | **Makanchi Array** | **52.36** | **345** | P | | **P** | **04 39 54.0** | **+0.1** |
| | 3.3nm,0.8s,baz=149,slow=8.3,SNR=19 | | | | | | | |
| MKAR | | | | LR | | LR | 05 07 03.4 | |
| | comp=Z,43nm,18.1s,baz=167,slow=42 | | | | | | | |
| **MKAR** | **Makanchi Array** | **52.36** | **345** | *e*P | | **P** | **04 39 54.5** | **+0.7** |
| **CN2** | **Changchun** | **52.43** | **23** | *e*P | | P | 04 40 07.0 | +13 |
| **MJAR** | **Matsushiro Arr** | **53.57** | **39** | P | | P | 04 39 59.7 | -3.2 |
| | 3.1nm,0.9s,baz=212,slow=7.8,SNR=8.4 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.56** | **28** | P | | **P** | **04 40 15.0** | **-2.2** |
| | 5.8nm,0.9s,baz=232,slow=5.8,SNR=13 | | | | | | | |
| **GEYT** | **Alibeck** | **56.41** | **321** | LR | | LR | 05 07 39.0 | |
| | comp=Z,81nm,18.6s,baz=140,slow=39 | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **56.88** | **344** | P | | **P** | **04 40 26.2** | **-0.2** |
| | 0.9nm,0.7s,baz=160,slow=6.5,SNR=7.2 | | | | | | | |
| **KURK** | **Kurchatov** | **56.93** | **344** | P | | **P** | **04 40 26.2** | **-0.6** |
| **ZALV** | **Zalesovo Beam** | **58.55** | **350** | P | | **P** | **04 40 38.0** | **-0.2** |
| | 4.4nm,0.8s,baz=177,slow=5.3,SNR=14 | | | | | | | |
| **BVAR** | **Borovoye Array** | **61.46** | **340** | P | | **P** | **04 40 57.6** | **-0.6** |
| | 0.3nm,0.4s,baz=157,slow=7.8,SNR=3.1 | | | | | | | |
| **BRVK** | **Borovoye** | **61.53** | **340** | *e*P | | **P** | **04 40 58.2** | **-0.4** |
| | 1.6nm,0.5s | | | | | | | |
| **ABKAR** | **Akbulak array** | **62.80** | **332** | *e*P | | **P** | **04 41 07.7** | **+0.5** |
| **AKTO** | **Aktyubinsk** | **64.52** | **332** | P | | **P** | **04 41 18.3** | **-0.2** |
| | 0.6nm,0.4s,baz=100,slow=11,SNR=2.6 | | | | | | | |
| **MAW** | **Mawson** | **68.81** | **194** | P | | P | 04 41 50.6 | +5.0 |
| | 1.6nm,0.8s,baz=29,slow=9.9,SNR=5.0 | | | | | | | |
| MAW | | | | LR | | LR | 05 07 55.7 | |
| | comp=Z,45nm,19.8s,baz=62,slow=32 | | | | | | | |
| **MATP** | **Matopo** | **71.22** | **250** | P | | P | 04 42 05.5 | +4.0 |
| | 3.0nm,0.9s,baz=86,slow=6.1,SNR=6.1 | | | | | | | |
| **BRTR** | **Keskin Array B** | **74.12** | **313** | P | | **P** | **04 42 19.6** | **+1.3** |
| | 0.9nm,0.7s,baz=124,slow=6.1,SNR=3.8 | | | | | | | |
| BRTR | | | | LR | | LR | 05 15 18.3 | |
| | comp=Z,21nm,20.6s,baz=78,slow=36 | | | | | | | |
| **BOSA** | **Boshof** | **74.73** | **241** | LR | | LR | 05 11 54.2 | |
| | comp=Z,50nm,18.6s,baz=56,slow=33 | | | | | | | |
| **KOLS** | **Kolonicke sedl** | **84.39** | **320** | *e*pP | | P | 04 43 18.7 | +4.6 |
| **FINES** | **FINESS Array B** | **85.28** | **332** | P | | **P** | **04 43 19.6** | **+1.4** |
| | 6.5nm,1.2s,baz=152,slow=8.6,SNR=5.4 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.75** | **340** | P | | **P** | **04 43 30.8** | **+0.5** |
| | 2.3nm,0.9s,baz=104,slow=3.8,SNR=2.8 | | | | | | | |
| **SNAA** | **Sanae** | **90.68** | **198** | *e*P | | **P** | **04 43 42.8** | **-1.2** |
| | 2.9nm,1.5s | | | | | | | |
| **NOA** | **NORSAR Array B** | **92.29** | **331** | LR | | LR | 05 27 30.9 | |
| | comp=Z,23nm,18.6s,baz=280,slow=37 | | | | | | | |
| **KEST** | **Kesra** | **92.32** | **305** | LR | | LR | 05 22 56.6 | |
| | comp=Z,25nm,21.9s,baz=236,slow=34 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **98.61** | **283** | LR | | LR | 05 27 21.5 | |
| | comp=Z,19nm,18.9s,baz=280,slow=34 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.89** | **40** | PKP | | **PKPdf** | **04 49 55.0** | **+1.2** |
| | 0.2nm,0.6s,baz=302,slow=1.7,SNR=3.3 | | | | | | | |
| **TXAR** | **Lajitas Array** | **146.01** | **38** | PKPbc | | **PKPab** | **04 50 23.1** | **+0.3** |
| | 1.2nm,0.7s,baz=308,slow=1.8,SNR=16 | | | | | | | |

**GUC 31 05:14:59.9±0.5, 34°.98S×74°.00W, h17km±4km, ML4.0, 3C-1D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **CHPI** | **Pichilemu** | **1.74** | **71** | ⇓*i*P | | Pn | 05 15 29.2 | -0.2 |
| CHPI | | | | *i* S | | Sn | 05 15 51.8 | +0.5 |
| **TALC** | **Talca** | **1.98** | **103** | ⇑*i*P | | Pn | 05 15 33.4 | +0.8 |
| TALC | | | | *i* S | | Sn | 05 15 58.0 | +0.9 |
| **NICH** | **Los Niches** | **2.27** | **91** | *e*P | | Pn | 05 15 37.8 | +1.1 |
| NICH | | | | *i* S | | Sb | 05 16 06.5 | -1.8 |
| **CHCH** | **Chadas Angostu** | **2.95** | **70** | *i* P | | Pn | 05 15 47.1 | +0.9 |
| CHCH | | | | *i* S | | Sn | 05 16 23.2 | +1.9 |
| **ANTU** | **Antumapu** | **3.12** | **64** | AML | | AML | 05 16 33.0 | |
| | comp=N,303nm,0.4s | | | | | | | |
| **CLCH** | **Cerro Calan** | **3.27** | **62** | ⇑*i*P | | Pn | 05 15 51.3 | +0.7 |
| CLCH | | | | *i* S | | Sn | 05 16 31.0 | +1.7 |
| CLCH | | | | AML | | AML | 05 16 35.2 | |
| | comp=N,184nm,0.3s | | | | | | | |
| **PEL** | **Peldehue** | **3.30** | **57** | ⇑*i*P | | Pn | 05 15 51.9 | +1.0 |
| PEL | | | | *i* S | | Sn | 05 16 31.3 | +1.3 |
| PEL | | | | AML | | AML | 05 16 33.1 | |
| | comp=N,448nm,0.3s | | | | | | | |

*IDC **31** 05:39:02.1±0.8, 41°.43N×77°.66E, h0km, mb3.9/14, mb1 4.0/21, mb1mx3.9/39, mbtmp3.9/21, ML3.5/7, MS3.0/5, Ms1 3.0/5, ms1mx2.7/32, Error ellipse: s-maj=13.9km s-min=12.4km az=156.0*

*KRNET **31** 05:39:03.9±0.1, 41°.72N×77°.62E, h20km, mb4.2*

*NNC **31** 05:39:04.2±0.4, 41°.69N×77°.66E, h0km, mb4.3, mpv4.1, Error ellipse: s-maj=3.2km s-min=2.4km az=134.0*

*BJI **31** 05:39:05.4, 41°.69N×77°.68E, h8km, ML3.9/9*

*ISCJB **31** 05:39:06.9±0.6, 41°.72N±0°.04×77°.75E±0°.04, h46km±5km, mb3.8/15, MS3.1/2, Error ellipse: s-maj=6.6km s-min=4.5km az=152.1*

*MOS **31** 05:39:06.1±1.5, 41°.62N×77°.70E, h33km, mb4.1/12, Error ellipse: s-maj=8.5km s-min=5.9km az=108.7*

*NEIC **31** 05:39:07.5±0.5, 41°.62N×77°.68E, h35km, mb4.0/2, Error ellipse: s-maj=9.3km s-min=6.8km az=26.0*

**ISC 31 05:39:06.8±0.9, 41°.78N±0°.03×77°.73E±0°.03, h29km±7km, n108, σ1§56/124, mb3.8/15, 31C-29D, Kyrgyzstan-Xinjiang border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | ISC | h m s | ISC |
| **PRZ** | **Przheval'sk** | **0.86** | **35** | ⇓*e*P | | **Pb** | **05 39 22.3** | **-1.0** |
| | baz=38 | | | | | | | |
| PRZ | | | | ⇓*e*S | | **Sb** | **05 39 35.5** | **+0.9** |
| | baz=38 | | | | | | | |
| **ANVS** | **Anan'yevo** | **1.01** | **357** | ⇓*e*P | | **Pn** | **05 39 24.6** | **-0.6** |
| | baz=2.0 | | | | | | | |
| ANVS | | | | ⇓*e*S | | **Sb** | **05 39 39.2** | **+0.5** |
| | baz=2.0 | | | | | | | |
| **ULHL** | **Ulahol** | **1.20** | **293** | P | | **Pn** | **05 39 25.3** | **-2.6** |
| | SNR=342 | | | | | | | |
| **NRN** | **Naryn** | **1.34** | **256** | ⇑*e*P | | **Pn** | **05 39 27.2** | **-2.7** |
| | baz=257 | | | | | | | |
| NRN | | | | ⇑*i*S | | **Sn** | **05 39 46.2** | **-0.7** |
| | baz=257 | | | | | | | |
| **BOOM** | **Boomskoye usch** | **1.51** | **299** | ⇓*e*P | | **Pn** | **05 39 30.8** | **-1.3** |
| | baz=302 | | | | | | | |
| BOOM | | | | ⇓*e*S | | **Sn** | **05 39 50.9** | **0.0** |
| | baz=302 | | | | | | | |
| **KNDC** | **Almaty** | **1.55** | **339** | ⇑P | | **Pn** | **05 39 33.6** | **+1.1** |
| | 1μm,0.5s | | | | | | | |
| KNDC | | | | ⇓S | | **Sb** | **05 39 55.9** | **+1.9** |
| | 3μm,0.5s | | | | | | | |
| **AAA** | **Alma-Ata** | **1.60** | **339** | *e*PN | | **Pn** | **05 39 33.9** | **+0.7** |
| AAA | | | | *e*S | | **Sb** | **05 39 56.0** | **+0.4** |
| AAA | | | | pmax | | pmax | | |
| | comp=Z,5μm,0.4s | | | | | | | |
| AAA | | | | smax | | smax | | |
| | comp=E,3μm,0.4s | | | | | | | |
| **KZA** | **Kyzart** | **1.87** | **280** | P | | **Pn** | **05 39 36.9** | **-0.4** |
| | SNR=68 | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.95** | **307** | ⇑Pn | | **Pn** | **05 39 39.2** | **+1.0** |
| | comp=E,222nm,0.4s | | | | | | | |
| TKM2 | | | | ⇓Sn | | **Sb** | **05 40 05.2** | **-0.6** |
| | comp=E,929nm,0.9s | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.95** | **307** | *e*PN | | **Pn** | **05 39 39.4** | **+1.2** |
| TKM2 | | | | *e* | | | 05 40 04.6 | |
| **TKM2** | **Tokmak 2** | **1.95** | **307** | P | | **Pn** | **05 39 39.4** | **+1.2** |
| | SNR=170 | | | | | | | |
| **TKM2** | **Tokmak 2** | **1.95** | **307** | *e*Pn | | **Pn** | **05 39 39.4** | **+1.2** |
| TKM2 | | | | *e*Sn | | **Sb** | **05 40 04.6** | **-1.2** |
| **PDGK** | **Podgornoye** | **2.02** | **39** | ⇑Pg | | **Pb** | **05 39 42.5** | **-0.3** |
| | comp=E,282nm,0.7s | | | | | | | |
| PDGK | | | | ⇓Lg | | Lg | 05 40 10.8 | |
| | comp=E,2μm,0.5s | | | | | | | |
| **PDGK** | **Podgornoye** | **2.02** | **39** | *i* PN | | **Pb** | **05 39 42.5** | **-0.3** |
| PDGK | | | | pmax | | pmax | | |
| | comp=Z,282nm,0.6s | | | | | | | |
| **KBK** | **Karagaybulak** | **2.25** | **294** | P | | **Pn** | **05 39 44.3** | **+2.1** |
| | SNR=141 | | | | | | | |
| **UCH** | **Uchtor** | **2.44** | **282** | P | | **Pn** | **05 39 47.0** | **+1.9** |
| | SNR=131 | | | | | | | |
| **CHMS** | **Chumysh** | **2.52** | **300** | P | | **Pn** | **05 39 48.4** | **+2.6** |
| | SNR=54 | | | | | | | |
| **FRU** | **Bishkek** | **2.54** | **296** | ⇓*i*PN | | **Pb** | **05 39 49.5** | **-2.2** |
| FRU | | | | *i* S | | **Sb** | **05 40 23.5** | **+1.0** |
| FRU | | | | pmax | | pmax | | |
| | comp=Z,543nm,1.9s | | | | | | | |
| FRU | | | | smax | | smax | | |
| | comp=N,2μm,1.5s | | | | | | | |
| **FRU** | **Bishkek** | **2.54** | **296** | ⇑*e*P | | **Pn** | **05 39 47.2** | **+1.1** |
| | baz=298 | | | | | | | |
| FRU | | | | ⇑*e*S | | **Sb** | **05 40 22.1** | **-0.4** |
| | baz=298 | | | | | | | |
| **ARLS** | **Aral** | **2.55** | **273** | ⇓*e*P | | **Pn** | **05 39 46.9** | **+0.6** |
| | baz=275 | | | | | | | |
| ARLS | | | | ⇓*i*S | | **Sn** | **05 40 18.9** | **+2.4** |
| | baz=275 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.55** | **291** | ⇓Pg | | **Pb** | **05 39 49.4** | **-2.5** |
| | comp=N,176nm,0.8s | | | | | | | |
| AAK | | | | ⇑Lg | | Lg | 05 40 24.5 | |
| | comp=N,439nm,0.6s | | | | | | | |
| **AAK** | **Ala-Archa** | **2.55** | **291** | Pn | | **Pn** | **05 39 49.1** | **+2.7** |
| | comp=N,34nm,0.3s,baz=105,slow=9.4,SNR=153 | | | | | | | |
| AAK | | | | Sn | | **Sb** | **05 40 22.9** | **-0.1** |
| | comp=N,47nm,0.3s,baz=259,slow=18,SNR=20 | | | | | | | |
| AAK | | | | LR | | LR | 05 41 00.6 | |
| | comp=N,165nm,18.5s,baz=158,slow=45 | | | | | | | |
| **AAK** | **Ala-Archa** | **2.55** | **291** | PN | | **Pn** | **05 39 49.0** | **+2.6** |
| AAK | | | | | | | 05 40 22.3 | |
| AAK | | | | pmax | | pmax | | |
| | comp=E,36nm,0.4s | | | | | | | |
| AAK | | | | pmax | | pmax | | |
| | comp=N,493nm,0.7s | | | | | | | |
| **AAK** | **Ala-Archa** | **2.55** | **291** | P | | **Pn** | **05 39 49.1** | **+2.7** |
| | SNR=120 | | | | | | | |
| **KSH** | **Kashi** | **2.62** | **211** | Pn | | **Pb** | **05 39 55.3** | **+2.1** |
| KSH | | | | Sn | | Sb | 05 40 32.3 | +7.3 |
| KSH | | | | SMN | | | | |
| | comp=N,380nm,0.8s | | | | | | | |
| KSH | | | | SME | | | | |
| | comp=N,450nm,0.5s | | | | | | | |
| **USP** | **Ospenovka** | **2.81** | **303** | P | | **Pb** | **05 39 53.5** | **-2.9** |
| | SNR=53 | | | | | | | |
| **AML** | **Almayashu** | **3.03** | **278** | P | | **Pn** | **05 39 54.6** | **+1.5** |
| | SNR=48 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.06** | **288** | *e*PN | | **Pn** | **05 39 54.5** | **+1.1** |
| EKS2 | | | | *e* | | | 05 40 39.4 | |
| **EKS2** | **Erkin-Say** | **3.06** | **288** | P | | **Pn** | **05 39 56.4** | **+3.0** |
| | SNR=155 | | | | | | | |
| **EKS2** | **Erkin-Say** | **3.06** | **288** | *e*Pn | | **Pn** | **05 39 54.5** | **+1.1** |
| EKS2 | | | | *e*Sn | | **Sb** | **05 40 39.4** | **+1.7** |
| **ARSB** | **Arslanbob** | **3.59** | **264** | ⇑*e*P | | **Pn** | **05 40 01.1** | **+0.4** |
| | baz=265 | | | | | | | |
| ARSB | | | | ⇑*i*S | | **Sb** | **05 40 50.5** | **-2.3** |
| | baz=265 | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.66** | **243** | ⇓Pn | | **Pn** | **05 40 01.7** | **+0.1** |
| | comp=N,3.6nm,0.6s | | | | | | | |
| SFK | | | | ⇓Pg | | **Pb** | **05 40 09.7** | **-1.1** |
| | comp=N,9.4nm,0.5s | | | | | | | |
| SFK | | | | ⇓Lg | | Lg | 05 40 58.2 | |
| | comp=N,135nm,0.7s | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.66** | **243** | PN | | **Pn** | **05 40 01.7** | **+0.1** |
| SFK | | | | PG | | **Pb** | **05 40 11.9** | **+1.1** |
| SFK | | | | LG | | Lg | 05 40 58.1 | |
| SFK | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.4s | | | | | | | |
| **SFK** | **Sufi-Kurgan** | **3.66** | **243** | ⇑*e*P | | **Pn** | **05 40 01.7** | **+0.1** |
| | baz=243 | | | | | | | |
| SFK | | | | ⇑*e*S | | **Sb** | **05 40 57.1** | **+2.3** |
| | baz=243 | | | | | | | |
| **MNAS** | **Manas** | **3.95** | **282** | ⇑Pn | | **Pn** | **05 40 06.4** | **+0.8** |
| | comp=Z,4.6nm,0.6s | | | | | | | |
| MNAS | | | | ⇑Pg | | **Pb** | **05 40 14.4** | **-1.3** |
| | comp=Z,26nm,0.5s | | | | | | | |
| MNAS | | | | ⇑Lg | | Lg | 05 41 07.1 | |
| | comp=Z,149nm,0.8s | | | | | | | |
| **MNAS** | **Manas** | **3.95** | **282** | PN | | **Pn** | **05 40 07.4** | **+1.8** |
| MNAS | | | | LG | | Lg | 05 41 07.0 | |
| MNAS | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **MNAS** | **Manas** | **3.95** | **282** | ⇓*e*P | | **Pn** | **05 40 07.0** | **+1.4** |
| | baz=283 | | | | | | | |
| MNAS | | | | ⇓*e*S | | **Sb** | **05 41 05.5** | **+2.4** |
| | baz=283 | | | | | | | |
| **ARK** | **Arkit** | **4.31** | **272** | ⇑*e*P | | **Pn** | **05 40 10.4** | **-0.1** |
| | baz=273 | | | | | | | |
| ARK | | | | ⇑*e*S | | **Sb** | **05 41 16.0** | **+2.5** |
| | baz=273 | | | | | | | |
| **KK31** | **Karatay Array** | **5.50** | **286** | ⇑Pg | | **Pb** | **05 40 43.2** | **+1.1** |
| | comp=Z,30nm,0.8s,baz=99,slow=16,SNR=74 | | | | | | | |
| KK31 | | | | ⇓Lg | | Lg | 05 41 58.0 | |
| | comp=Z,36nm,0.5s,baz=93,slow=28,SNR=9.3 | | | | | | | |
| **KK31** | **Karatay Array** | **5.50** | **286** | *e*PN | | **Pb** | **05 40 42.9** | **+0.8** |
| KK31 | | | | | | | 05 41 53.5 | |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,30nm,0.8s | | | | | | | |
| KK31 | | | | pmax | | pmax | | |
| | comp=Z,33nm,0.6s | | | | | | | |
| **KKAR** | **Karatay Array** | **5.50** | **286** | *e*PN | | **Pb** | **05 40 41.1** | **-1.0** |
| KKAR | | | | *e* | | | 05 41 50.8 | |
| **KKAR** | **Karatay Array** | **5.50** | **286** | *e*Pn | | **Pb** | **05 40 41.1** | **-1.0** |
| KKAR | | | | *e*Sn | | **Sb** | **05 41 50.8** | **+3.2** |
| **MK31** | **Makanchi Array** | **5.99** | **32** | ⇑Pn | | **Pn** | **05 40 36.1** | **+2.7** |
| | comp=Z,5.6nm,0.4s,baz=212,slow=15,SNR=62 | | | | | | | |
| MK31 | | | | ⇑Lg | | Lg | 05 42 14.7 | |
| | comp=Z,54nm,0.7s,baz=214,slow=28,SNR=3.9 | | | | | | | |
| **MK31** | **Makanchi Array** | **5.99** | **32** | PN | | Pn | 05 40 38.3 | +4.8 |
| MK31 | | | | | | | 05 42 12.1 | |
| MK31 | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.6s | | | | | | | |
| MK31 | | | | pmax | | pmax | | |
| | comp=N,29nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **5.99** | **32** | Pn | | Pn | 05 40 37.7 | +4.2 |
| | comp=N,1.1nm,0.3s,baz=204,slow=11,SNR=22 | | | | | | | |
| MKAR | | | | Pg | | Pb | 05 40 55.6 | +5.2 |
| | comp=N,2.1nm,0.3s,baz=219,slow=16,SNR=12 | | | | | | | |
| MKAR | | | | Sn | | Sn | 05 41 48.8 | +7.7 |
| | comp=N,2.1nm,0.3s,baz=221,slow=19,SNR=2.9 | | | | | | | |
| MKAR | | | | Lg | | Lg | 05 42 09.1 | |
| | comp=N,6.2nm,0.3s,baz=212,slow=26,SNR=5.2 | | | | | | | |
| MKAR | | | | LR | | LR | 05 43 17.4 | |
| | comp=N,87nm,18.3s,baz=192,slow=40 | | | | | | | |
| **MKAR** | **Makanchi Array** | **5.99** | **32** | PN | | Pn | 05 40 37.7 | +4.2 |
| MKAR | | | | | | | 05 40 55.6 | |
| MKAR | | | | | | | 05 41 48.8 | |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.3s | | | | | | | |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| MKAR | | | | smax | | smax | | |
| | comp=N,2.0nm,0.3s | | | | | | | |
| MKAR | | | | MLR | | MLR | | |
| | comp=Z,87nm,18.3s | | | | | | | |
| **DZET** | **Dzherino** | **7.42** | **249** | ⇑Pn | | **Pn** | **05 40 53.8** | **+0.5** |
| | comp=Z,6.7nm,0.5s | | | | | | | |
| **DZET** | **Dzherino** | **7.42** | **249** | P | | **Pn** | **05 40 53.7** | **+0.5** |
| DZET | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **OTUK** | **Ortayu** | **7.51** | **331** | ⇑Pn | | **Pn** | **05 40 56.0** | **+1.6** |
| | comp=Z,2.2nm,0.9s | | | | | | | |
| OTUK | | | | ⇑Pg | | Pb | 05 41 22.1 | +5.9 |
| | comp=Z,9.3nm,0.7s | | | | | | | |
| OTUK | | | | ⇑Lg | | Lg | 05 43 03.4 | |
| | comp=Z,71nm,1.0s | | | | | | | |
| **OTUK** | **Ortayu** | **7.51** | **331** | P | | **Pn** | **05 40 56.7** | **+2.4** |
| OTUK | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.9s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.87** | **3** | ⇓Pn | | **Pn** | **05 41 14.2** | **+1.4** |
| | comp=Z,3.8nm,0.5s | | | | | | | |
| KURBB | | | | ⇓Lg | | Lg | 05 43 47.3 | |
| | comp=Z,77nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **8.87** | **3** | Pn | | Pn | 05 41 16.6 | +3.7 |
| | comp=Z,0.2nm,0.3s,baz=192,slow=12,SNR=2.9 | | | | | | | |
| KURBB | | | | Sn | | **Sn** | **05 42 48.5** | **-3.2** |
| | comp=Z,0.3nm,0.3s,baz=196,slow=31,SNR=4.5 | | | | | | | |
| KURBB | | | | Lg | | Lg | 05 43 40.8 | |
| | comp=Z,0.6nm,0.3s,baz=190,slow=31,SNR=7.4 | | | | | | | |
| **KURK** | **Kurchatov** | **8.96** | **4** | P | | **Pn** | **05 41 16.6** | **+2.4** |
| **KURK** | **Kurchatov** | **8.96** | **4** | Pn | | **Pn** | **05 41 16.6** | **+2.4** |
| KURK | | | | Sn | | Sn | 05 42 48.5 | -5.5 |
| KURK | | | | *e*Sn | | Sn | 05 42 54.1 | 0.0 |
| KURK | | | | Lg | | Lg | 05 43 40.8 | |
| **VOSK** | **Vostochnaya** | **11.87** | **340** | ⇑Pn | | **Pn** | **05 41 55.5** | **+1.5** |
| | comp=Z,5.2nm,1.1s | | | | | | | |
| VOSK | | | | ⇓Lg | | Lg | 05 45 24.2 | |
| | comp=Z,34nm,0.9s | | | | | | | |
| **BVA0** | **Borovoye Array** | **12.29** | **339** | ⇑Pn | | **Pn** | **05 42 00.7** | **+0.9** |
| | comp=Z,3.8nm,0.7s,baz=146,slow=9.2,SNR=6.4 | | | | | | | |
| BVA0 | | | | ⇓Lg | | Lg | 05 45 34.6 | |
| | comp=Z,39nm,1.1s,baz=150,slow=26,SNR=7.4 | | | | | | | |
| **BVA0** | **Borovoye Array** | **12.29** | **339** | *i* P | | Pn | 05 42 03.6 | +3.8 |
| BVA0 | | | | pmax | | pmax | | |
| | comp=Z,4.0nm,0.7s | | | | | | | |
| **BVAR** | **Borovoye Array** | **12.29** | **339** | Pn | | **Pn** | **05 41 60.0** | **+0.2** |
| | comp=Z,0.4nm,0.3s,baz=146,slow=13,SNR=4.4 | | | | | | | |
| BVAR | | | | Sn | | **Sn** | **05 44 15.4** | **-0.3** |
| | comp=Z,0.3nm,0.3s,baz=158,slow=16,SNR=3.3 | | | | | | | |
| BVAR | | | | Lg | | Lg | 05 45 25.4 | |
| | comp=Z,0.7nm,0.3s,baz=150,slow=26,SNR=5.9 | | | | | | | |
| **BRVK** | **Borovoye** | **12.35** | **339** | ⇑Lg | | Lg | 05 45 38.5 | |
| | comp=Z,76nm,1.4s | | | | | | | |
| **BRVK** | **Borovoye** | **12.35** | **339** | P | | **Pn** | **05 42 01.9** | **+1.3** |
| BRVK | | | | pmax | | pmax | | |
| | comp=Z,7.0nm,0.6s | | | | | | | |
| **BRVK** | **Borovoye** | **12.35** | **339** | Pn | | **Pn** | **05 42 01.9** | **+1.3** |
| | comp=Z,6.8nm,0.6s | | | | | | | |
| **ZRNK** | **Zerenda** | **12.63** | **335** | ⇓Pn | | **Pn** | **05 42 06.3** | **+1.9** |
| | comp=Z,4.8nm,0.8s | | | | | | | |
| ZRNK | | | | ⇓Lg | | Lg | 05 45 46.8 | |
| | comp=Z,28nm,0.9s | | | | | | | |
| **CHKZ** | **Chkalovo** | **12.82** | **341** | ⇑Pn | | **Pn** | **05 42 07.3** | **+0.3** |
| | comp=Z,2.5nm,0.6s | | | | | | | |
| CHKZ | | | | ⇑Lg | | Lg | 05 45 53.0 | |
| | comp=Z,25nm,1.0s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **13.06** | **19** | Pn | | **Pn** | **05 42 11.7** | **+1.4** |
| | comp=Z,0.2nm,0.3s,baz=214,slow=16,SNR=7.1 | | | | | | | |
| ZALV | | | | Sn | | **Sn** | **05 44 34.9** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=205,slow=24,SNR=3.1 | | | | | | | |
| ZALV | | | | Lg | | Lg | 05 45 52.7 | |
| | comp=Z,0.2nm,0.3s,baz=209,slow=26,SNR=3.4 | | | | | | | |
| ZALV | | | | LR | | LR | 05 47 31.2 | |
| | comp=Z,57nm,18.9s,baz=250,slow=38 | | | | | | | |
| **AB31** | **Akbulak array** | **14.52** | **307** | ⇓Pn | | **Pn** | **05 42 30.7** | **+0.6** |
| | comp=Z,1.3nm,0.6s,baz=118,slow=15,SNR=7.4 | | | | | | | |
| AB31 | | | | ⇑Lg | | Lg | 05 46 44.3 | |
| | comp=Z,4.4nm,0.9s,baz=116,slow=22,SNR=4.0 | | | | | | | |
| **AB31** | **Akbulak array** | **14.52** | **307** | P | | **Pn** | **05 42 29.2** | **-0.9** |
| AB31 | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **ABKAR** | **Akbulak array** | **14.52** | **307** | *e*Pn | | **Pn** | **05 42 29.2** | **-0.9** |
| | comp=Z,1.8nm,0.6s | | | | | | | |
| **GEYT** | **Alibeck** | **15.54** | **262** | Pn | | **Pn** | **05 42 41.1** | **-2.8** |
| | comp=Z,0.3nm,0.3s,baz=76,slow=12,SNR=2.6 | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.14** | **309** | ⇓Pn | | **Pn** | **05 42 53.0** | **+1.5** |
| | comp=Z,4.3nm,1.1s | | | | | | | |
| AKTO | | | | ⇓Lg | | Lg | 05 47 37.2 | |
| | comp=Z,14nm,1.5s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **16.14** | **309** | Pn | | **Pn** | **05 42 50.6** | **-0.9** |
| | comp=Z,0.1nm,0.3s,baz=111,slow=11,SNR=3.0 | | | | | | | |
| AKTO | | | | Sn | | **Sn** | **05 45 49.0** | **-0.5** |
| | comp=Z,0.1nm,0.3s,baz=24,slow=20,SNR=1.7 | | | | | | | |
| **LSA** | **Lhasa** | **16.22** | **134** | *e*P | | **Pn** | **05 42 51.8** | **-1.3** |
| LSA | | | | pmax | | pmax | | |
| | comp=Z,5.0nm,0.4s | | | | | | | |
| **LSA** | **Lhasa** | **16.22** | **134** | *e*Pn | | **Pn** | **05 42 51.8** | **-1.3** |
| | comp=Z,5.3nm,0.4s | | | | | | | |
| **SVE** | **Sverdlovsk** | **18.65** | **330** | *e*P | | Pn | 05 43 27.6 | +5.0 |
| **TLY** | **Talaya** | **20.24** | **52** | *e*P | | Pn | 05 43 42.4 | +0.8 |
| TLY | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,0.6s | | | | | | | |
| **SONM** | **Songino Array** | **21.15** | **64** | P | | **P** | **05 43 50.6** | **+1.1** |
| | comp=Z,2.5nm,1.0s,baz=264,slow=11,SNR=9.7 | | | | | | | |
| SONM | | | | LR | | LR | 05 52 51.2 | |
| | comp=Z,72nm,18.2s,baz=352,slow=39 | | | | | | | |
| **SONM** | **Songino Array** | **21.15** | **64** | P | | **P** | **05 43 50.6** | **+1.1** |
| SONM | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.0s | | | | | | | |
| SONM | | | | MLR | | MLR | | |
| | comp=Z,72nm,18.2s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **21.59** | **64** | ⇓*e*P | | **P** | **05 43 58.4** | **+4.1** |
| ULN | | | | pmax | | pmax | | |
| | comp=Z,3.0nm,1.1s | | | | | | | |
| **ULN** | **Ulaanbaatar** | **21.59** | **64** | *e*P | | **P** | **05 43 55.5** | **+1.2** |
| | comp=Z,5.7nm,1.1s | | | | | | | |
| **CD2** | **Chengdu** | **23.52** | **109** | *e*P | | **P** | **05 44 14.5** | **0.0** |
| **GNI** | **Garni** | **24.88** | **277** | ⇑*e*P | | **P** | **05 44 28.8** | **+1.6** |
| GNI | | | | pmax | | pmax | | |
| | comp=Z,52nm,1.5s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.46** | **136** | P | | **P** | **05 45 07.0** | **-1.2** |
| | comp=Z,0.6nm,0.4s,baz=322,slow=9.9,SNR=2.9 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.46** | **136** | P | | **P** | **05 45 07.0** | **-1.2** |
| CMAR | | | | pmax | | pmax | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **BRTR** | **Keskin Array B** | **33.19** | **281** | P | | **P** | **05 45 42.0** | **+0.9** |
| | comp=Z,1.4nm,0.7s,baz=96,slow=7.9,SNR=8.7 | | | | | | | |
| **BRTR** | **Keskin Array B** | **33.19** | **281** | *i* P | | **P** | **05 45 42.4** | **+1.3** |
| BRTR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.7s | | | | | | | |
| **AKASG** | **Malin Array Be** | **34.17** | **302** | P | | **P** | **05 45 49.6** | **+0.4** |
| | comp=Z,0.2nm,0.3s,baz=81,slow=7.4,SNR=3.6 | | | | | | | |
| **FINES** |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| FETY | | | | *e*SG | **Sb** | 05 41 07.1 | -0.1 | |
| **FETY** | **Fethiye** | **0.52** | **138** | *e*Pg | **Pg** | 05 40 57.4 | -1.7 | |
| FETY | | | | *e*Sg | **Sb** | 05 41 07.1 | -0.1 | |
| **DNZL** | **Cakiroluk** | **0.73** | **25** | *i* P | **Pg** | 05 41 03.5 | +0.3 | |
| DNZL | | | | *i* S | **Sg** | 05 41 13.5 | +0.6 | |
| **DNZL** | **Cakiroluk** | **0.73** | **25** | P | **Pg** | 05 41 03.5 | +0.3 | |
| DNZL | | | | S | **Sg** | 05 41 13.5 | +0.6 | |
| **AYDN** | **Tasoluk** | **0.88** | **316** | *i* P | **Pb** | 05 41 05.5 | -0.5 | |
| AYDN | | | | *i* S | **Sg** | 05 41 16.6 | -1.0 | |
| **AYDN** | **Tasoluk** | **0.88** | **316** | P | **Pb** | 05 41 05.5 | -0.5 | |
| AYDN | | | | S | **Sg** | 05 41 16.6 | -1.0 | |
| **BDRM** | **Kayabasi** | **0.97** | **273** | *i* P | **Pg** | 05 41 07.6 | +0.1 | |
| BDRM | | | | *i* S | **Sb** | 05 41 19.1 | -1.0 | |
| **BDRM** | **Kayabasi** | **0.97** | **273** | P | **Pg** | 05 41 07.6 | +0.1 | |
| BDRM | | | | S | **Sb** | 05 41 19.1 | -1.0 | |
| **AYDB** | **Zeytinkoy-Aydi** | **1.10** | **327** | *e*PG | Pb | 05 41 03.8 | -6.0 | |
| **AYDB** | **Zeytinkoy-Aydi** | **1.10** | **327** | *e*Pg | Pb | 05 41 03.8 | -6.0 | |

*TIR* ***31*** *05:59:38.7, 41˚.35N× 19˚.47E, h2km, ML2.9*
*ISCJB* ***31*** *05:59:43.3± 0.5, 41˚.42N± 0˚.02× 19˚.53E± 0˚.04, h3km, 3km, Error ellipse: s-maj=5.3km s-min=2.7km az=146.3*
*CSEM* ***31*** *05:59:43.3± 0.3, 41˚.39N× 19˚.51E, h5km, ML2.4, Error ellipse: s-maj=6.1km s-min=4.0km az=38.0*
*PDG* ***31*** *05:59:43.5± 0.1, 41˚.39N× 19˚.52E, h19km, ML2.7/10, Error ellipse: s-maj=0.2km s-min=0.3km az=0.0*
*BEO* ***31*** *05:59:46.5± 0.4, 41˚.51N× 19˚.81E, h7km, 3km, ML2.4/5*
**ISC 31 05:59:44.0**± 1.1, **41˚.42N**± 0˚.02× **19˚.52E**± 0˚.03, **h7**km± 9km, **n74,** σ0**85**/109, **11C-18D, Albania**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **TIR** | **Tirane** | **0.27** | **104** | *i* PG | **Pg** | 05 59 49.1 | -0.3 |
| TIR | | | | *i* SG | **Sg** | 05 59 54.0 | +1.1 |
| **TIR** | **Tirane** | **0.27** | **104** | ⇓*i* P | **Pg** | 05 59 49.4 | +0.1 |
| TIR | | | | *i* Sg | **Sg** | 05 59 54.1 | +1.1 |
| **TIR** | **Tirane** | **0.27** | **104** | ⇓*i* P | **Pg** | 05 59 49.4 | +0.1 |
| TIR | | | | *i* Sg | **Sg** | 05 59 54.0 | +1.1 |
| **ULC** | **Ulcinj** | **0.58** | **340** | ⇓*i* Pg | **Pg** | 05 59 54.5 | -0.8 |
| ULC | | | | *e*Sg | **Sb** | 06 00 04.8 | -0.4 |
| **ULC** | **Ulcinj** | **0.58** | **340** | ⇓*i* Pg | **Pg** | 05 59 54.5 | -0.8 |
| ULC | | | | *e*Sg | **Sb** | 06 00 04.8 | -0.4 |
| **DRME** | **Dracevica, Mon** | **0.81** | **342** | ⇓*i* Pg | **Pg** | 05 59 59.0 | -0.6 |
| DRME | | | | *e*Sg | **Sb** | 06 00 12.6 | +1.0 |
| **DRME** | **Dracevica, Mon** | **0.81** | **342** | ⇓*i* Pg | **Pg** | 05 59 59.0 | -0.6 |
| DRME | | | | *e*Sg | **Sb** | 06 00 12.6 | +1.0 |
| **BUM** | **Brajici-Budva** | **1.00** | **332** | ⇓*i* Pg | **Pg** | 06 00 02.7 | -0.5 |
| BUM | | | | *e*Sg | **Sn** | 06 00 18.9 | -0.1 |
| **BUM** | **Brajici-Budva** | **1.00** | **332** | ⇓*i* Pg | **Pg** | 06 00 02.7 | -0.5 |
| BUM | | | | *e*Sg | **Sn** | 06 00 18.9 | -0.1 |
| **OHR** | **Ohrid** | **1.01** | **107** | *i* Pg | **Pg** | 06 00 01.9 | -1.6 |
| OHR | | | | *i* Sg | **Sn** | 06 00 18.1 | -1.1 |
| **OHR** | **Ohrid** | **1.01** | **107** | *i* Pg | **Pg** | 06 00 01.8 | -1.6 |
| OHR | | | | *i* Sg | **Sn** | 06 00 18.1 | -1.1 |
| **PDG** | **Podgorica** | **1.03** | **349** | *e*Pg | **Pg** | 06 00 03.9 | 0.0 |
| PDG | | | | *i* Sg | **Sb** | 06 00 18.8 | +0.8 |
| **PDG** | **Podgorica** | **1.03** | **349** | *e*Pg | **Pg** | 06 00 03.9 | 0.0 |
| PDG | | | | *i* Sg | **Sb** | 06 00 18.8 | +0.8 |
| **TTG** | **Podgorica** | **1.03** | **349** | ⇑*i* Pg | **Pg** | 06 00 03.3 | -0.6 |
| TTG | | | | *e*Sg | **Sn** | 06 00 20.1 | +0.5 |
| **PVY** | **Plav** | **1.22** | **15** | ⇓*i* Pg | **Pb** | 06 00 06.7 | -0.9 |
| PVY | | | | *e*Sg | **Sn** | 06 00 25.9 | +1.3 |
| **PVY** | **Plav** | **1.22** | **15** | ⇓*i* Pg | **Pb** | 06 00 06.7 | -0.9 |
| PVY | | | | *e*Sg | **Sn** | 06 00 25.9 | +1.3 |
| **HCY** | **Herceg Novi** | **1.28** | **324** | ⇓*i* Pg | **Pn** | 06 00 07.9 | -0.5 |
| HCY | | | | *e*Sg | **Sn** | 06 00 27.1 | +1.2 |
| **HCY** | **Herceg Novi** | **1.28** | **324** | ⇓*i* Pg | **Pn** | 06 00 07.9 | -0.5 |
| HCY | | | | *e*Sg | **Sn** | 06 00 27.1 | +1.2 |
| **NKME** | **Niksic** | **1.42** | **343** | ⇓*i* Pg | **Pn** | 06 00 09.7 | -0.5 |
| NKME | | | | *e*Sg | **Sg** | 06 00 30.3 | +0.8 |
| **NKME** | **Niksic** | **1.42** | **343** | ⇓*i* Pg | **Pn** | 06 00 09.7 | -0.5 |
| NKME | | | | *e*Sg | **Sg** | 06 00 30.3 | +0.8 |
| **NKY** | **Niksic** | **1.45** | **345** | ⇓*i* Pg | **Pn** | 06 00 10.1 | -0.7 |
| NKY | | | | *e*Sg | **Sg** | 06 00 31.3 | +0.6 |
| **NKY** | **Niksic** | **1.45** | **345** | ⇓*i* Pg | **Pn** | 06 00 10.1 | -0.7 |
| NKY | | | | *e*Sg | **Sg** | 06 00 31.3 | +0.6 |
| **BEY** | **Berane** | **1.48** | **11** | ⇑*i* Pg | **Pn** | 06 00 10.5 | -0.7 |
| BEY | | | | *e*Sg | **Sg** | 06 00 31.9 | +0.2 |
| **IVA** | **Berane** | **1.48** | **11** | ⇑*i* Pg | **Pn** | 06 00 10.5 | -0.7 |
| IVA | | | | *e*Sg | **Sg** | 06 00 31.9 | +0.2 |
| **NEST** | **Nestorio** | **1.53** | **130** | *e*P | **Pg** | 06 00 13.1 | -0.3 |
| **NEST** | **Nestorio** | **1.53** | **130** | *e*P | **Pg** | 06 00 13.1 | -0.3 |
| **FNA** | **Florina** | **1.54** | **114** | *e*P | **Pb** | 06 00 12.5 | -0.4 |
| **FNA** | **Florina** | **1.54** | **114** | *e*P | **Pb** | 06 00 12.5 | -0.4 |
| **SKO** | **Skopje** | **1.54** | **68** | *i* Pg | **Pg** | 06 00 13.3 | -0.3 |
| SKO | | | | *i* Sg | **Sg** | 06 00 33.9 | +0.3 |
| **SKO** | **Skopje** | **1.54** | **68** | *i* Pg | **Pg** | 06 00 13.3 | -0.3 |
| SKO | | | | *i* Sg | **Sg** | 06 00 33.9 | +0.3 |
| **BRY** | **Bratogost** | **1.66** | **334** | ⇑*i* Pn | **Pn** | 06 00 13.5 | -0.1 |
| BRY | | | | *e*Sn | **Sn** | 06 00 35.8 | +0.6 |
| **BRY** | **Bratogost** | **1.66** | **334** | ⇑*i* Pn | **Pn** | 06 00 13.5 | -0.1 |
| BRY | | | | *e*Sn | **Sn** | 06 00 35.8 | +0.6 |
| **PE1** | **Pezze di Greco** | **1.70** | **250** | *e*Pn | **Pn** | 06 00 13.6 | -0.4 |
| **UPM** | **Unac-Piva** | **1.84** | **346** | ⇓*i* Pn | **Pn** | 06 00 15.5 | -0.8 |
| UPM | | | | *e*Sn | **Sn** | 06 00 40.8 | +0.8 |
| **UPM** | **Unac-Piva** | **1.84** | **346** | ⇓*i* Pn | **Pn** | 06 00 15.5 | -0.8 |
| UPM | | | | *e*Sn | **Sn** | 06 00 40.8 | +0.8 |
| **SJES** | **Sjenica** | **1.88** | **10** | ⇑*i* Pn | **Pn** | 06 00 17.6 | +1.0 |
| SJES | | | | *e*Sg | **Sb** | 06 00 42.1 | -0.3 |
| **SJES** | **Sjenica** | **1.88** | **10** | ⇑*i* Pn | **Pn** | 06 00 17.6 | +1.0 |
| **TAR1** | **Taranto** | **1.91** | **243** | *e*Pn | **Pn** | 06 00 16.8 | -0.2 |
| **PLE** | **Pljevlja** | **1.92** | **357** | ⇑*i* Pn | **Pn** | 06 00 16.6 | -0.6 |
| PLE | | | | *e*Sn | **Sn** | 06 00 42.4 | +0.8 |
| **PLE** | **Pljevlja** | **1.92** | **357** | ⇑*i* Pn | **Pn** | 06 00 16.6 | -0.6 |
| PLE | | | | *e*Sn | **Sn** | 06 00 42.4 | +0.8 |
| **IGT** | **Igoumenitsa** | **1.98** | **161** | *e*P | **Pb** | 06 00 19.0 | -1.4 |
| **IGT** | **Igoumenitsa** | **1.98** | **161** | *e*P | **Pb** | 06 00 19.0 | -1.4 |
| **SELS** | **Selova** | **2.16** | **33** | *e*Pn | **Pn** | 06 00 19.6 | -1.2 |
| **BARS** | **Barje** | **2.21** | **50** | ⇑*i* Pn | **Pn** | 06 00 20.7 | -0.4 |
| BARS | | | | *e*Sg | **Sn** | 06 00 49.4 | +0.7 |
| **BARS** | **Barje** | **2.21** | **50** | ⇑*i* Pn | **Pn** | 06 00 20.7 | -0.4 |
| **IVAS** | **Ivanjica** | **2.21** | **12** | *e*Sn | **Sn** | 06 00 48.8 | 0.0 |
| **IVAS** | **Ivanjica** | **2.21** | **12** | *e*Sn | **Sn** | 06 00 48.8 | 0.0 |
| **GRG** | **Griva** | **2.22** | **101** | *e*P | **Pn** | 06 00 21.4 | +0.1 |
| **GRG** | **Griva** | **2.22** | **101** | *e*P | **Pn** | 06 00 21.4 | +0.1 |
| **BBLS** | **Lazići** | **2.45** | **358** | *e*Pn | **Pn** | 06 00 25.4 | +0.9 |
| BBLS | | | | *e*Sn | **Sn** | 06 00 55.5 | +0.7 |
| **BBLS** | **Lazići** | **2.45** | **358** | *e*Pn | **Pn** | 06 00 25.4 | +0.9 |
| BBLS | | | | *e*Sn | **Sn** | 06 00 55.5 | +0.7 |
| **DSL** | **Palaion Diasel** | **2.58** | **152** | *e*P | **Pn** | 06 00 27.6 | +1.4 |
| **DSL** | **Palaion Diasel** | **2.58** | **152** | *e*P | **Pn** | 06 00 27.6 | +1.4 |
| **GRUS** | **Gruza** | **2.62** | **19** | *e*Pn | **Pn** | 06 00 27.6 | +0.8 |
| **GRUS** | **Gruza** | **2.62** | **19** | *e*Pn | **Pn** | 06 00 27.6 | +0.8 |
| **THL** | **Klokotos Trika** | **2.65** | **133** | *e*P | **Pn** | 06 00 26.6 | -0.6 |
| **THL** | **Klokotos Trika** | **2.65** | **133** | *e*P | **Pn** | 06 00 26.6 | -0.6 |
| **DIVS** | **Divibare** | **2.70** | **7** | *e*Pn | **Pn** | 06 00 29.7 | +1.7 |
| **DIVS** | **Divibare** | **2.70** | **7** | *e*Pn | **Pn** | 06 00 29.7 | +1.7 |
| **LKD2** | **Lefkada island** | **2.77** | **161** | *e*P | **Pn** | 06 00 28.9 | +0.1 |
| **LKD2** | **Lefkada island** | **2.77** | **161** | *e*P | **Pn** | 06 00 28.9 | +0.1 |
| **HORT** | **Hortiatis** | **2.83** | **106** | *e*P | **Pn** | 06 00 29.7 | 0.0 |
| **HORT** | **Hortiatis** | **2.83** | **106** | *e*P | **Pn** | 06 00 29.7 | 0.0 |
| **ZAPS** | **Zavoj** | **2.96** | **50** | *e*Pn | **Pn** | 06 00 31.2 | -0.3 |
| **ZAPS** | **Zavoj** | **2.96** | **50** | *e*Pn | **Pn** | 06 00 31.2 | -0.3 |
| **EVR** | **Evrytania** | **3.05** | **144** | *e*P | **Pn** | 06 00 34.7 | +1.9 |
| **EVR** | **Evrytania** | **3.05** | **144** | *e*P | **Pn** | 06 00 34.7 | +1.9 |
| **PDO** | **Prodromos** | **3.09** | **155** | *e*P | **Pn** | 06 00 33.7 | +0.5 |
| **PDO** | **Prodromos** | **3.09** | **155** | *e*P | **Pn** | 06 00 33.7 | +0.5 |
| **MAKR** | **Makrakomi, Fth** | **3.12** | **139** | *e*P | **Pn** | 06 00 34.9 | +1.2 |
| **MAKR** | **Makrakomi, Fth** | **3.12** | **139** | *e*P | **Pn** | 06 00 34.9 | +1.2 |
| **KUBS** | **Kucevo** | **3.39** | **27** | *e*Pn | **Pn** | 06 00 35.9 | -1.4 |
| **KUBS** | **Kucevo** | **3.39** | **27** | *e*Pn | **Pn** | 06 00 35.9 | -1.4 |
| **KOLS** | **Kolonicke sedl** | **7.77** | **14** | *e*PN | Pn | 06 01 41.4 | +4.0 |

*CRAAG* ***31*** *06:12:30.8, 36˚.61N× 5˚.47E, Ml4.0*
*ISCJB* ***31*** *06:12:31.4± 0.4, 36˚.84N± 0˚.03× 5˚.50E± 0˚.04, h10km, Error ellipse: s-maj=5.5km s-min=3.2km az=42.2*
*CSEM* ***31*** *06:12:32.0± 0.1, 36˚.64N× 5˚.50E, h5km, ML4.0, Error ellipse: s-maj=4.9km s-min=2.7km az=35.0*
*MDD* ***31*** *06:12:33.2± 0.8, 36˚.60N× 5˚.48E, h6km± 10km, mb4.0/22, Error ellipse: s-maj=7.7km s-min=4.8km az=171.0, PRXIMO*
*LDG* ***31*** *06:12:36.4± 0.2, 37˚.05N× 5˚.15E, h2km, Ml3.3/10, Error ellipse: s-maj=3.9km s-min=2.0km az=153.0*
**ISC 31 06:12:31.6**± 0.9, **36˚.67N**± 0˚.05× **5˚.47E**± 0˚.04, **h10**km, **n119,** σ1**62**/140, **Northern Algeria**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **DFRA** | **Djebel Bou Aff** | **0.35** | **110** | P | **Pg** | 06 12 39.0 | +0.4 |
| **DFRA** | **Djebel Bou Aff** | **0.35** | **110** | P | **Pg** | 06 12 39.0 | +0.4 |
| **DFRA** | **Djebel Bou Aff** | **0.35** | **110** | P | **Pg** | 06 12 39.0 | +0.4 |
| **SET** | **Setif** | **0.47** | **186** | P | **Pg** | 06 12 41.0 | +0.3 |
| **SET** | **Setif** | **0.47** | **186** | P | **Pg** | 06 12 41.0 | +0.3 |
| **SET** | **Setif** | **0.47** | **186** | P | **Pg** | 06 12 41.0 | +0.3 |
| **CKHR** | **Kef el Ahmar** | **0.65** | **177** | P | **Pg** | 06 12 44.0 | -0.2 |
| **CKHR** | **Kef el Ahmar** | **0.65** | **177** | P | **Pg** | 06 12 44.0 | -0.2 |
| **CKHR** | **Kef el Ahmar** | **0.65** | **177** | P | **Pg** | 06 12 44.0 | -0.2 |
| **CASM** | **Ain Smara** | **0.92** | **116** | P | **Pn** | 06 12 50.7 | +0.1 |
| **CASM** | **Ain Smara** | **0.92** | **116** | P | **Pn** | 06 12 50.7 | +0.1 |
| **CASM** | **Ain Smara** | **0.92** | **116** | P | **Pn** | 06 12 50.7 | +0.1 |
| **CTEI** | **Djebel Teioual** | **0.97** | **128** | P | **Pg** | 06 12 50.0 | -0.2 |
| **CTEI** | **Djebel Teioual** | **0.97** | **128** | P | **Pg** | 06 12 50.0 | -0.2 |
| **CTEI** | **Djebel Teioual** | **0.97** | **128** | P | **Pg** | 06 12 50.0 | -0.2 |
| **CKFL** | **Kef-Lekhel** | **1.04** | **104** | P | **Pn** | 06 12 53.0 | +0.6 |
| **CKFL** | **Kef-Lekhel** | **1.04** | **104** | P | **Pn** | 06 12 53.0 | +0.6 |
| **CKFL** | **Kef-Lekhel** | **1.04** | **104** | P | **Pn** | 06 12 53.0 | +0.6 |
| **CAEH** | **'Ain El Ouahch** | **1.12** | **84** | P | **Pn** | 06 12 53.7 | +0.4 |
| **CAEH** | **'Ain El Ouahch** | **1.12** | **84** | P | **Pn** | 06 12 53.7 | +0.4 |
| **CAEH** | **'Ain El Ouahch** | **1.12** | **84** | P | **Pn** | 06 12 53.7 | +0.4 |
| **AKET** | **Djebel Ketaf** | **1.42** | **245** | P | **Pb** | 06 12 58.8 | +0.6 |
| **AKET** | **Djebel Ketaf** | **1.42** | **245** | P | **Pb** | 06 12 58.8 | +0.6 |
| **AKET** | **Djebel Ketaf** | **1.42** | **245** | P | **Pb** | 06 12 58.8 | +0.6 |
| **CMAH** | **Djebel Manchou** | **1.57** | **91** | P | **Pn** | 06 12 58.8 | -0.8 |
| **CMAH** | **Djebel Manchou** | **1.57** | **91** | P | **Pn** | 06 12 58.8 | -0.8 |
| **CMAH** | **Djebel Manchou** | **1.57** | **91** | P | **Pn** | 06 12 58.8 | -0.8 |
| **ABSA** | **Djebel Ababsia** | **1.67** | **103** | P | **Pn** | 06 13 00.0 | -0.9 |
| **ABSA** | **Djebel Ababsia** | **1.67** | **103** | P | **Pn** | 06 13 00.0 | -0.9 |
| **CABS** | **Djebel Ababsia** | **1.67** | **103** | P | **Pn** | 06 13 00.0 | -0.9 |
| **CABS** | **Djebel Ababsia** | **1.67** | **103** | P | **Pn** | 06 13 00.0 | -0.9 |
| **ETOS** | **Mallorca** | **3.73** | **327** | P | **Pn** | 06 13 30.9 | +1.6 |
| | 33nm,0.6s,SNR=30 | | | | | | |
| ETOS | | | | S | **Sn** | 06 14 13.9 | +0.6 |
| | 8.5nm,0.3s | | | | | | |
| **ETOS** | **Mallorca** | **3.73** | **327** | P | **Pn** | 06 13 30.9 | +1.6 |
| | 33nm,0.6s,SNR=30 | | | | | | |
| ETOS | | | | S | **Sn** | 06 14 13.9 | +0.6 |
| | 8.5nm,0.3s | | | | | | |
| **EIBI** | **Ibiza** | **4.02** | **307** | P | **Pn** | 06 13 35.0 | +1.7 |
| | 2.6nm,0.2s,SNR=6.9 | | | | | | |
| EIBI | | | | S | **Sn** | 06 14 20.6 | +0.1 |
| | 7.4nm,0.2s | | | | | | |
| **EIBI** | **Ibiza** | **4.02** | **307** | P | **Pn** | 06 13 35.0 | +1.7 |
| | 2.6nm,0.2s,SNR=6.9 | | | | | | |
| EIBI | | | | S | **Sn** | 06 14 20.6 | +0.1 |
| | 7.4nm,0.2s | | | | | | |
| **EBEN** | **Beniarda** | **4.95** | **296** | P | **Pn** | 06 13 48.1 | +2.1 |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| EBEN | | | | S | **Sn** | 06 14 42.2 | -1.2 |
| | 29nm,5.5s,SNR=7.9 | | | | | | |
| **EBEN** | **Beniarda** | **4.95** | **296** | P | **Pn** | 06 13 48.1 | +2.1 |
| | 0.3nm,0.2s,SNR=7.9 | | | | | | |
| EBEN | | | | S | **Sn** | 06 14 42.2 | -1.2 |
| | 29nm,5.5s,SNR=7.9 | | | | | | |
| **EMUR** | **La Murta** | **5.48** | **284** | P | **Pn** | 06 13 54.4 | +1.2 |
| | 2.0nm,0.4s,SNR=6.6 | | | | | | |
| EMUR | | | | S | **Sn** | 06 14 54.8 | -1.5 |
| | 7.3nm,2.0s,SNR=7.9 | | | | | | |
| **EMUR** | **La Murta** | **5.48** | **284** | P | **Pn** | 06 13 54.4 | +1.2 |
| | 2.0nm,0.4s,SNR=6.6 | | | | | | |
| **CFON** | **Fontmartina** | **5.61** | **336** | P | **Pn** | 06 13 56.6 | +1.6 |
| | 2.9nm,0.2s,SNR=6.3 | | | | | | |
| CFON | | | | S | **Sn** | 06 14 58.3 | -1.2 |
| | 7.8nm,0.3s,SNR=7.9 | | | | | | |
| **CFON** | **Fontmartina** | **5.61** | **336** | P | **Pn** | 06 13 56.6 | +1.6 |
| | 2.9nm,0.2s,SNR=6.3 | | | | | | |
| **EPOB** | **Poblet** | **5.79** | **325** | P | **Pn** | 06 13 58.5 | +0.9 |
| | 2.1nm,0.2s,SNR=17 | | | | | | |
| EPOB | | | | S | **Sn** | 06 15 02.7 | -1.5 |
| | 2.2nm,0.2s,SNR=6.5 | | | | | | |
| **EPOB** | **Poblet** | **5.79** | **325** | P | **Pn** | 06 13 58.5 | +0.9 |
| | 2.1nm,0.2s,SNR=17 | | | | | | |
| **ERTA** | **Horta de San J** | **5.87** | **318** | P | **Pn** | 06 14 00.1 | +1.5 |
| | 1.3nm,0.3s,SNR=7.9 | | | | | | |
| ERTA | | | | S | **Sn** | 06 15 03.9 | -1.9 |
| | 2.2nm,0.4s,SNR=7.9 | | | | | | |
| **ERTA** | **Horta de San J** | **5.87** | **318** | P | **Pn** | 06 14 00.1 | +1.5 |
| | 1.3nm,0.3s,SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **5.90** | **292** | P | **Pn** | 06 14 00.5 | +1.4 |
| | 1.6nm,0.3s,SNR=12 | | | | | | |
| ETOB | | | | S | **Sn** | 06 15 04.1 | -2.8 |
| | 2.5nm,0.4s,SNR=7.9 | | | | | | |
| **ETOB** | **Tobarra** | **5.90** | **292** | P | **Pn** | 06 14 00.5 | +1.4 |
| | 1.6nm,0.3s,SNR=12 | | | | | | |
| **EMOS** | **Mosqueruela** | **5.94** | **310** | P | **Pn** | 06 14 01.5 | +1.7 |
| | 1.1nm,0.3s,SNR=6.9 | | | | | | |
| EMOS | | | | S | **Sn** | 06 15 05.9 | -2.0 |
| | 1.2nm,0.4s,SNR=7.9 | | | | | | |
| **EMOS** | **Mosqueruela** | **5.94** | **310** | P | **Pn** | 06 14 01.5 | +1.7 |
| | 1.1nm,0.3s,SNR=6.9 | | | | | | |
| **EMIR** | **Miracle** | **6.07** | **331** | P | **Pn** | 06 14 03.3 | +1.9 |
| | 4.9nm,0.2s,SNR=21 | | | | | | |
| EMIR | | | | S | **Sn** | 06 15 09.6 | -1.3 |
| | 8.8nm,0.3s | | | | | | |
| **EMIR** | **Miracle** | **6.07** | **331** | P | **Pn** | 06 14 03.3 | +1.9 |
| | 4.9nm,0.2s,SNR=21 | | | | | | |
| **EJON** | **La Jonquera** | **6.11** | **342** | P | **Pn** | 06 14 03.3 | +1.4 |
| | 1.3nm,0.3s,SNR=7.9 | | | | | | |
| EJON | | | | S | **Sn** | 06 15 10.8 | -1.0 |
| | 1.2nm,0.2s,SNR=7.9 | | | | | | |
| **EJON** | **La Jonquera** | **6.11** | **342** | P | **Pn** | 06 14 03.3 | +1.4 |
| | 1.3nm,0.3s,SNR=7.9 | | | | | | |
| **SJAF** | **Saint Jean de** | **6.14** | **342** | P | **Pn** | 06 14 03.6 | +1.2 |
| | 1.0nm,0.3s,SNR=7.9 | | | | | | |
| SJAF | | | | S | **Sn** | 06 15 11.5 | -1.1 |
| | 0.7nm,0.2s,SNR=7.9 | | | | | | |
| **SJAF** | **Saint Jean de** | **6.14** | **342** | P | **Pn** | 06 14 03.6 | +1.2 |
| | 1.0nm,0.3s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **6.40** | **336** | P | **Pn** | 06 14 08.3 | +2.3 |
| | 0.2nm,0.3s,SNR=7.9 | | | | | | |
| CLLI | | | | S | **Sn** | 06 15 17.1 | -2.0 |
| | 1.5nm,0.3s,SNR=7.9 | | | | | | |
| **CLLI** | **Llivia** | **6.40** | **336** | P | **Pn** | 06 14 08.3 | +2.3 |
| | 0.2nm,0.3s,SNR=7.9 | | | | | | |
| **PGF** | **Pioggiola** | **6.48** | **24** | *e*Pn | **Pn** | 06 14 07.2 | +0.2 |
| PGF | | | | *e*Sn | Sn | 06 15 15.1 | -5.9 |
| | 2.4nm,0.2s | | | | | | |
| **PGF** | **Pioggiola** | **6.48** | **24** | P | **Pn** | 06 14 07.2 | +0.2 |
| **PGF** | **Pioggiola** | **6.48** | **24** | P | **Pn** | 06 14 07.2 | +0.2 |
| **SESP** | **Santiago Espad** | **6.54** | **285** | S | **Sn** | 06 15 19.9 | -2.8 |
| | 12nm,0.3s,SNR=7.9 | | | | | | |
| **CSOR** | **Sort** | **6.61** | **331** | P | **Pn** | 06 14 11.3 | +2.4 |
| | 2.1nm,0.3s,SNR=25 | | | | | | |
| CSOR | | | | S | **Sn** | 06 15 22.5 | -1.9 |
| | 1.6nm,0.2s,SNR=7.9 | | | | | | |
| **CSOR** | **Sort** | **6.61** | **331** | P | **Pn** | 06 14 11.3 | +2.4 |
| | 2.1nm,0.3s,SNR=25 | | | | | | |
| **LMR** | **La Mourre** | **6.71** | **7** | *e*Pn | **Pn** | 06 14 08.8 | -1.3 |
| LMR | | | | *e*Sn | Sn | 06 15 17.8 | -8.7 |
| | 2.5nm,0.3s | | | | | | |
| **ESAC** | **San Caprasio** | **6.83** | **319** | P | **Pn** | 06 14 14.2 | +2.3 |
| | 7.8nm,0.3s,SNR=4.9 | | | | | | |
| ESAC | | | | S | **Sn** | 06 15 27.6 | -2.2 |
| | 12nm,0.4s,SNR=7.9 | | | | | | |
| **ESAC** | **San Caprasio** | **6.83** | **319** | P | **Pn** | 06 14 14.2 | +2.3 |
| | 7.8nm,0.3s,SNR=4.9 | | | | | | |
| **EQES** | **Quesada** | **6.90** | **282** | P | **Pn** | 06 14 14.2 | +1.3 |
| | 0.3nm,0.5s,SNR=9.3 | | | | | | |
| EQES | | | | S | **Sn** | 06 15 27.9 | -3.7 |
| | 2.4nm,0.4s,SNR=7.9 | | | | | | |
| **EQES** | **Quesada** | **6.90** | **282** | P | **Pn** | 06 14 14.2 | +1.3 |
| | 0.3nm,0.5s,SNR=9.3 | | | | | | |
| **FRF** | **La Foret Royal** | **6.95** | **7** | *e*Pn | **Pn** | 06 14 12.3 | -1.1 |
| FRF | | | | *e*Sn | Sn | 06 15 23.7 | -8.7 |
| | 3.0nm,0.3s | | | | | | |
| **MTLF** | **Montolieu** | **7.12** | **341** | *e*P | **Pn** | 06 14 17.9 | +2.2 |
| **MTLF** | **Montolieu** | **7.12** | **341** | P | **Pn** | 06 14 17.9 | +2.2 |
| **MTLF** | **Montolieu** | **7.12** | **341** | *e*P | **Pn** | 06 14 17.9 | +2.2 |
| **ETOR** | **Torete** | **7.19** | **307** | P | **Pn** | 06 14 17.2 | +0.4 |
| | 5.5nm,1.6s,SNR=7.9 | | | | | | |
| **ETOR** | **Torete** | **7.19** | **307** | P | **Pn** | 06 14 17.2 | +0.4 |
| | 5.5nm,1.6s,SNR=7.9 | | | | | | |
| **SMRF** | **Simiane la Rot** | **7.30** | **1** | *e*Pn | **Pn** | 06 14 16.6 | -1.7 |
| **SBF** | **Sospel** | **7.34** | **11** | *e*Pn | **Pn** | 06 14 18.0 | -0.9 |
| SBF | | | | *e*Sn | Sn | 06 15 33.8 | -8.5 |
| | 6.7nm,0.3s | | | | | | |
| **SELV** | **Sierra Elvira** | **7.38** | **277** | P | **Pn** | 06 14 21.0 | +1.6 |
| | 3.9nm,5.4s,SNR=7.9 | | | | | | |
| **SELV** | **Sierra Elvira** | **7.38** | **277** | P | **Pn** | 06 14 21.0 | +1.6 |
| | 3.9nm,5.4s,SNR=7.9 | | | | | | |
| **EPF** | **Esparros** | **7.48** | **330** | *e*P | **Pn** | 06 14 23.1 | +2.4 |
| EPF | | | | *e*Sn | Sn | 06 15 33.7 | -12 |
| | 3.0nm,0.4s | | | | | | |
| **EPF** | **Esparros** | **7.48** | **330** | P | **Pn** | 06 14 23.1 | +2.4 |
| **EPF** | **Esparros** | **7.48** | **330** | *e*P | **Pn** | 06 14 23.1 | +2.4 |
| **LASF** | **Ste Croix** | **7.50** | **351** | *e*Pn | **Pn** | 06 14 18.9 | -2.1 |
| LASF | | | | *e*Sn | Sn | 06 15 35.4 | -11 |
| | 8.8nm,0.6s | | | | | | |
| **YBER** | **Berdun** | **7.69** | **322** | P | **Pn** | 06 14 25.7 | +2.1 |
| | 18nm,1.9s,SNR=7.9 | | | | | | |
| **YBER** | **Berdun** | **7.69** | **322** | P | **Pn** | 06 14 25.7 | +2.1 |
| | 18nm,1.9s,SNR=7.9 | | | | | | |
| **YMUS** | **Pe˜–a Musera** | **7.74** | **322** | P | **Pn** | 06 14 26.3 | +2.0 |
| | 6.7nm,1.8s,SNR=7.9 | | | | | | |
| **YMUS** | **Pe˜–a Musera** | **7.74** | **322** | P | **Pn** | 06 14 26.3 | +2.0 |
| | 6.7nm,1.8s,SNR=7.9 | | | | | | |
| **ETSF** | **Etsaut** | **7.76** | **325** | *e*P | **Pn** | 06 14 26.4 | +1.8 |
| **ETSF** | **Etsaut** | **7.76** | **325** | P | **Pn** | 06 14 26.4 | +1.8 |
| **ETSF** | **Etsaut** | **7.76** | **325** | *e*P | **Pn** | 06 14 26.4 | +1.8 |
| **YSIG** | **Sigues** | **7.77** | **322** | P | **Pn** | 06 14 26.7 | +2.0 |
| | 17nm,3.0s,SNR=7.9 | | | | | | |
| **YSIG** | **Sigues** | **7.77** | **322** | P | **Pn** | 06 14 26.7 | +2.0 |
| | 17nm,3.0s,SNR=7.9 | | | | | | |
| **YASP** | **Aspurt** | **7.92** | **322** | P | **Pn** | 06 14 28.0 | +1.2 |
| | 16nm,1.7s,SNR=7.9 | | | | | | |
| **YASP** | **Aspurt** | **7.92** | **322** | P | **Pn** | 06 14 28.0 | +1.2 |
| | 16nm,1.7s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **7.97** | **325** | P | **Pn** | 06 14 29.6 | +2.2 |
| | 2.5nm,0.3s,SNR=7.9 | | | | | | |
| **ATE** | **Arette** | **7.97** | **325** | P | **Pn** | 06 14 29.6 | +2.2 |
| | 2.5nm,0.3s,SNR=7.9 | | | | | | |
| **IEPA** | **Eparoz** | **8.01** | **322** | P | **Pn** | 06 14 29.2 | +1.2 |
| | 0.4nm,0.7s,SNR=7.9 | | | | | | |
| **IEPA** | **Eparoz** | **8.01** | **322** | P | **Pn** | 06 14 29.2 | +1.2 |
| | 0.4nm,0.7s,SNR=7.9 | | | | | | |
| **ESDC** | **Sonseca Array** | **8.01** | **295** | P | **Pn** | 06 14 29.9 | +1.9 |
| | 0.4nm,0.2s,baz=111,slow=14,SNR=4.0 | | | | | | |
| **ESDC** | **Sonseca Array** | **8.01** | **295** | P | **Pn** | 06 14 29.9 | +1.9 |
| | 0.4nm,0.2s,SNR=4.0 | | | | | | |
| **IELO** | **Elcoad** | **8.04** | **322** | P | **Pn** | 06 14 29.6 | +1.1 |
| | 1.6nm,0.3s,SNR=7.9 | | | | | | |
| IELO | | | | S | **Sn** | 06 15 55.6 | -3.8 |
| | 17nm,1.2s,SNR=7.9 | | | | | | |
| **IELO** | **Elcoad** | **8.04** | **322** | P | **Pn** | 06 14 29.6 | +1.1 |
| | 1.6nm,0.3s,SNR=7.9 | | | | | | |
| **IUNC** | **Unciti** | **8.11** | **321** | P | **Pn** | 06 14 31.5 | +2.1 |
| | 7.1nm,1.1s,SNR=7.9 | | | | | | |
| **IUNC** | **Unciti** | **8.11** | **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CD2 | | | | Sg | **Sb** | **06 37 35.0** | **+0.1** |
| CD2 | | | | SMN | | | |
| | 490nm,0.5s | | | | | | |
| CD2 | | | | SME | | | |
| | 840nm,0.5s | | | | | | |
| **GYA** | **Guiyang** | **2.84** | **126** | Pg | **Pb** | **06 37 02.0** | **-0.1** |
| GYA | | | | Sn | **Sn** | **06 37 30.5** | **-0.5** |
| GYA | | | | Sg | **Sg** | **06 37 43.0** | **+0.6** |
| GYA | | | | SMN | | | |
| | 180nm,0.8s | | | | | | |
| GYA | | | | SME | | | |
| | 180nm,0.9s | | | | | | |
| **KMI** | **Kunming** | **3.25** | **202** | Pg | **Pn** | **06 37 04.3** | **+1.8** |
| KMI | | | | Sg | **Sb** | **06 37 46.8** | **-2.1** |
| KMI | | | | SMN | | | |
| | 36nm,1.1s | | | | | | |
| KMI | | | | SME | | | |
| | 30nm,1.1s | | | | | | |
| **XAN** | **Xi'an** | **7.18** | **34** | Pg | Pg | 06 38 35.0 | +6.3 |
| XAN | | | | Sn | **Sn** | **06 39 17.0** | **-1.0** |
| XAN | | | | Sg | Sb | 06 39 48.5 | +6.7 |
| XAN | | | | smax | smax | | |
| | comp=N,50nm,1.1s | | | | | | |
| XAN | | | | smax | smax | | |
| | comp=E,44nm,0.9s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **10.74** | **207** | Pn | Pn | 06 38 51.8 | +6.6 |
| | comp=E,0.5nm,0.3s,baz=9.1,slow=13,SNR=3.0 | | | | | | |
| **KSRS** | **Korea Array** | **22.02** | **59** | LR | LR | 06 50 18.5 | |
| | comp=E,41nm,19.1s,baz=178,slow=39 | | | | | | |
| **MKAR** | **Makanchi Array** | **25.27** | **323** | P | **P** | **06 41 38.2** | **+0.6** |
| | comp=E,0.7nm,0.6s,baz=128,slow=12,SNR=6.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **29.40** | **337** | P | **P** | **06 42 13.3** | **-1.2** |
| | comp=E,1.2nm,0.6s,baz=138,slow=6.7,SNR=4.9 | | | | | | |
| **KURBB** | **Kurchatov Array** | **29.64** | **326** | P | **P** | **06 42 14.4** | **-2.4** |
| | comp=E,0.1nm,0.3s,baz=129,slow=9.9,SNR=2.7 | | | | | | |
| **WRA** | **Warramunga Arr** | **56.04** | **145** | P | **P** | **06 45 51.0** | **+0.5** |
| | comp=E,1.0nm,0.4s,baz=336,slow=8.1,SNR=16 | | | | | | |
| **ASAR** | **Alice Springs** | **58.99** | **148** | P | **P** | **06 46 12.1** | **+0.9** |
| | comp=E,0.5nm,0.6s,baz=330,slow=6.2,SNR=8.9 | | | | | | |
| **ARCES** | **ARCESS Array B** | **59.95** | **337** | P | **P** | **06 46 17.5** | **+0.2** |
| | comp=E,5.9nm,1.0s,baz=95,slow=8.2,SNR=3.0 | | | | | | |

**IDC 31 06:58:00.2±1.2,2°.04N×126°.40E,h0km,mb3.9/5, mb1 4.1/5,mb1mx3.7/28,mbtmp3.9/5,MS2.7/2,Ms1 2.7/2, ms1mx2.4/28,Error ellipse: s-maj=143.3km s-min=19.0km az=69.0,Northern Molucca Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **5.07** | **351** | LR | LR | 07 01 11.0 | |
| | comp=Z,112nm,21.0s,baz=260,slow=38 | | | | | | |
| **KAPI** | **Kappang** | **9.65** | **223** | LR | LR | 07 04 46.7 | |
| | comp=Z,32nm,21.3s,baz=109,slow=42 | | | | | | |
| **WRA** | **Warramunga Arr** | **23.19** | **161** | P | P | 07 03 08.4 | -0.5 |
| | 2.2nm,0.5s,baz=338,slow=11,SNR=26 | | | | | | |
| **ASAR** | **Alice Springs** | **26.57** | **164** | P | P | 07 03 40.2 | 0.0 |
| | 0.6nm,0.4s,baz=344,slow=8.2,SNR=19 | | | | | | |
| ASAR | | | | PcP | PcP | 07 07 03.1 | -1.9 |
| | 0.2nm,0.6s,baz=336,slow=2.8,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **48.79** | **342** | P | P | 07 06 47.4 | +0.2 |
| | 0.6nm,0.6s,baz=161,slow=6.1,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **58.76** | **326** | P | P | 07 08 00.0 | -0.1 |
| | 1.1nm,0.3s,baz=118,slow=8.8,SNR=15 | | | | | | |
| **VNDA** | **Vanda** | **81.80** | **173** | P | P | 07 10 21.9 | +1.3 |
| | 0.9nm,0.6s,baz=322,slow=5.1,SNR=3.2 | | | | | | |

*GUC* ***31*** *07:10:36.9±0.7,33.67S×72.34W,h20km±8km,ML5.3*
*MOS* ***31*** *07:10:37.9±1.1,33.70S×72.03W,h20km,mb5.5/15, MS4.8/4,Error ellipse: s-maj=16.0km s-min=7.5km az=100.8*
*ISCJB* ***31*** *07:10:38.0±0.8,33.69S±0.02×72.16W±0.03,h19km±5km, mb5.0/41,MS4.8/16,Error ellipse: s-maj=4.7km s-min=4.0km az=179.0*
*IDC* ***31*** *07:10:39.8±0.7,33.65S×72.01W,h26km±4km,mb4.8/11, mb1 4.9/13,mb1mx4.8/17,mbtmp4.9/13,ML4.8/2,MS4.7/15, Ms1 4.7/15,ms1mx4.6/20,Error ellipse: s-maj=20.4km s-min=16.2km az=81.0*
*NEIC* ***31*** *07:10:40.6±0.1,33.66S×71.86W,mb5.3/24,MW5.2, ML5.3(GUC),Error ellipse: s-maj=6.5km s-min=3.9km az=66.0,Moment Tensor Solution. s22 Moment tensor: Scale 10¹⁶Nm; Mrr5.80; Mθθ-1.65; Mϕϕ-4.16; Mrθ-1.32; Mθϕ-3.65; Mϕr-4.27; Best double couple: M₀7.70000×10¹⁶ NP1:ϕs204.00000°,δ63.00000°,λ78.00000°. NP2: ϕs49.00000°,δ29.00000°,λ112.00000°. Principal axes: T 7.3800, Plg70.0000°, Azm89.0000°; N 0.6900, Plg11.0000°, Azm209.0000°; P -8.0800, Plg17.0000°, Azm303.0000°;*
*NEIC Felt [IV] at Navidad; [III] at Las Cabras, Melipilla, Puchuncavi, Rancagua, San Antonio, San Francisco de Mostazal, Valparaiso and Vina del Mar; [II] at Casablanca, Pichilemu, Santiago and Villa Alemana. Also felt at Quilpue and Rengo.*
*GCMT* ***31*** *07:10:40.6±0.2,33.82S×72.39W,h21km,MW5.3/88, Moment Tensor Solution. s68,c98; s88,c140; Duration: 1s1 Moment tensor: Scale 10¹⁷Nm; Mrr0.62±.02; Mθθ0.04±.01; Mϕϕ-0.66±.02; Mrθ0.01±.02; Mϕϕ-0.02±.01; Mϕr-0.77±.04; Best double couple: M₀1.00400×10¹⁷ NP1:ϕs180.00000°,δ70.00000°,λ89.00000°. NP2: ϕs4.00000°,δ20.00000°,λ94.00000°. Principal axes: T 0.9860, Plg65.0000°, Azm87.0000°; N 0.0360, Plg1.0000°, Azm180.0000°; P -1.0220, Plg25.0000°, Azm271.0000°;*
*nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

**ISC 31 07:10:39.8±0.3,33.74S±0.03×72.13W±0.04,h28km±1km, h27km:pP-P,n705,σ1§30/766,mb5.2/47,MS4.8/18,8C-8D, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LNV** | **Longovilo** | **0.63** | **110** | ⇓*iP* | **Pb** | **07 10 51.6** | **-0.8** |
| **CHPI** | **Pichilemu** | **0.66** | **171** | *eP* | **Pb** | **07 10 51.0** | **-1.8** |
| CHPI | | | | *i* S | **Sb** | **07 11 01.3** | **-0.4** |
| **TACH** | **Talagante** | **0.99** | **86** | ⇑*iP* | **Pn** | **07 10 57.0** | **-1.0** |
| **ROCH** | **El Roble** | **1.21** | **51** | ⇓*iP* | **Pn** | **07 11 00.8** | **-0.2** |
| ROCH | | | | *i* S | **Sb** | **07 11 18.5** | **+1.1** |
| **CHCH** | **Chadas Angostu** | **1.24** | **100** | ⇑*iP* | **Pn** | **07 11 01.2** | **-0.2** |
| **SAN** | **Santiago** | **1.25** | **77** | ⇑*iP* | **Pn** | **07 11 01.6** | **+0.1** |
| SAN | | | | *eS* | **Sb** | **07 11 20.5** | **+1.9** |
| **ANTU** | **Antumapu** | **1.26** | **83** | ⇓*iP* | **Pn** | **07 11 01.8** | **+0.2** |
| ANTU | | | | *i* S | **Sb** | **07 11 20.1** | **+1.4** |
| ANTU | | | | AML | AML | 07 11 21.6 | |
| | comp=N,48μm,0.3s | | | | | | |
| **PEL** | **Peldehue** | **1.34** | **64** | ⇑*iP* | **Pn** | **07 11 03.2** | **+0.4** |
| PEL | | | | *i* S | **Sn** | **07 11 19.8** | **0.0** |
| PEL | | | | AML | AML | 07 11 32.5 | |
| | comp=N,79μm,0.5s | | | | | | |
| **PCH** | **Pirque** | **1.35** | **86** | ⇑*iP* | **Pn** | **07 11 02.8** | **-0.1** |
| **LACH** | **Col Las Americ** | **1.36** | **78** | *i* P | **Pn** | **07 11 03.0** | **0.0** |
| **CLCH** | **Cerro Calan** | **1.37** | **76** | ⇓*iP* | **Pn** | **07 11 03.6** | **+0.4** |
| CLCH | | | | AML | AML | 07 11 31.4 | |
| | comp=N,28μm,0.4s | | | | | | |
| **NICH** | **Los Niches** | **1.47** | **150** | ⇓*iP* | **Pn** | **07 11 04.5** | **+0.1** |
| NICH | | | | *i* S | **Sb** | **07 11 25.2** | **+0.6** |
| **YECH** | **El Yeso** | **1.70** | **88** | ⇑*iP* | **Pn** | **07 11 09.4** | **+1.4** |
| YECH | | | | *i* S | **Sb** | **07 11 33.5** | **+1.7** |
| **TALC** | **Talca** | **1.71** | **166** | ⇑*iP* | **Pn** | **07 11 07.3** | **-0.4** |
| TALC | | | | *i* S | **Sb** | **07 11 31.6** | **0.0** |
| **CCHI** | **Chillan** | **2.86** | **179** | *eP* | **Pn** | **07 11 23.8** | **+0.2** |
| CCHI | | | | AML | AML | 07 12 15.1 | |
| | comp=N,28μm,0.6s | | | | | | |
| **TLL** | **Tololo Astrono** | **3.73** | **18** | *eP* | **Pn** | **07 11 35.0** | **-0.9** |
| TLL | | | | *i* S | **Sn** | **07 12 19.0** | **-0.1** |
| **LSCH** | **La Serena** | **3.89** | **11** | *eP* | **Pn** | **07 11 36.0** | **-1.8** |
| **CFAA** | **Coronel Fontan** | **3.91** | **58** | Pn | **Pn** | **07 11 39.4** | **+1.3** |
| | comp=N,6,6nm,0.3s,baz=229,slow=12,SNR=416 | | | | | | |
| CFAA | | | | Lg | Lg | 07 12 37.6 | |
| | comp=N,19nm,0.3s,baz=319,slow=20,SNR=7.5 | | | | | | |
| CFAA | | | | LR | LR | 07 13 33.2 | |
| | comp=N,2μm,18.8s,baz=236,slow=46 | | | | | | |
| **LCO** | **Las Campanas** | **4.87** | **15** | *ePn* | **Pn** | **07 11 50.0** | **-1.4** |
| LCO | | | | *eSn* | **Sn** | **07 12 44.4** | **-2.6** |
| **PLCA** | **Paso Flores** | **7.10** | **170** | *eP* | **Pn** | **07 12 22.8** | **+0.9** |
| **PLCA** | **Paso Flores** | **7.10** | **170** | *ePn* | **Pn** | **07 12 22.8** | **+0.9** |
| **TRQA** | **Tornquist** | **9.29** | **121** | *ePn* | **Pn** | **07 12 49.7** | **-2.2** |
| **LVC** | **Limon Verde** | **11.44** | **15** | Pn | Pn | 07 13 15.9 | -5.7 |
| | comp=N,58nm,0.3s,baz=204,slow=7.4,SNR=17 | | | | | | |
| LVC | | | | LR | LR | 07 18 01.8 | |
| | comp=N,24μm,20.8s,baz=206,slow=39 | | | | | | |
| **LVC** | **Limon Verde** | **11.44** | **15** | *ePn* | Pn | 07 13 16.4 | -5.2 |
| **CPUP** | **Villa Florida** | **14.78** | **64** | Pn | **Pn** | **07 14 05.9** | **-1.1** |
| | comp=N,0.6nm,0.3s,baz=238,slow=14,SNR=12 | | | | | | |
| CPUP | | | | Sn | **Sn** | **07 16 53.7** | **+3.9** |
| | comp=N,0.6nm,0.3s,baz=202,slow=16,SNR=3.0 | | | | | | |
| CPUP | | | | LR | LR | 07 20 13.3 | |
| | comp=N,7μm,20.1s,baz=244,slow=39 | | | | | | |
| **CPUP** | **Villa Florida** | **14.78** | **64** | *eP* | **Pn** | **07 14 06.8** | **-0.2** |
| CPUP | | | | | | 07 16 53.7 | |
| **CPUP** | **Villa Florida** | **14.78** | **64** | *ePn* | **Pn** | **07 14 06.8** | **-0.2** |
| CPUP | | | | Sn | **Sn** | **07 16 53.7** | **+3.9** |
| **LPAZ** | **La Paz** | **17.74** | **13** | P | **Pn** | **07 14 45.1** | **-0.4** |
| | comp=N,3.1nm,0.3s,baz=186,slow=8.0,SNR=159 | | | | | | |
| **LPAZ** | **La Paz** | **17.74** | **13** | *eP* | **Pn** | **07 14 45.5** | **-0.1** |
| LPAZ | | | | pmax | pmax | | |
| | comp=Z,68nm,0.9s | | | | | | |
| **LPAZ** | **La Paz** | **17.74** | **13** | *ePn* | **Pn** | **07 14 45.5** | **-0.1** |
| | comp=Z,68nm,0.9s | | | | | | |
| **SIV** | **San Ignacio** | **20.29** | **32** | LR | LR | 07 24 28.6 | |
| | comp=Z,6μm,18.7s,baz=211,slow=41 | | | | | | |
| **EFI** | **East Falkland** | **20.63** | **155** | *eP* | **P** | **07 15 16.4** | **-0.5** |
| EFI | | | | pmax | pmax | | |
| | comp=Z,94nm,0.9s | | | | | | |
| **EFI** | **East Falkland** | **20.63** | **155** | P | **P** | **07 15 16.0** | **-0.9** |
| | comp=Z,642nm,1.1s,SNR=32 | | | | | | |
| **EFI** | **East Falkland** | **20.63** | **155** | *eP* | **P** | **07 15 16.4** | **-0.5** |
| | comp=Z,94nm,0.9s | | | | | | |
| **USHA** | **Ushuaia** | **21.25** | **174** | P | **P** | **07 15 26.4** | **+2.9** |
| | comp=Z,34nm,1.0s,baz=4.1,slow=8.8,SNR=7.5 | | | | | | |
| **SAML** | **Samuel** | **26.01** | **21** | *eP* | **P** | **07 16 10.0** | **-0.5** |
| | comp=Z,45nm,0.9s | | | | | | |
| **ATAH** | **Atahualpa** | **27.10** | **346** | LR | LR | 07 25 06.8 | |
| | comp=Z,581nm,19.5s,baz=180,slow=32 | | | | | | |
| **BDFB** | **Brasilia** | **28.25** | **56** | P | **P** | **07 16 29.4** | **-1.4** |
| | comp=Z,30nm,0.5s,baz=224,slow=7.5,SNR=62 | | | | | | |
| BDFB | | | | LR | LR | 07 29 33.4 | |
| | comp=Z,4μm,18.4s,baz=220,slow=40 | | | | | | |
| **BDFB** | **Brasilia** | **28.25** | **56** | *eP* | **P** | **07 16 29.7** | **-1.1** |
| BDFB | | | | pmax | pmax | | |
| | comp=Z,109nm,1.0s | | | | | | |
| **BDFB** | **Brasilia** | **28.25** | **56** | *eP* | **P** | **07 16 29.7** | **-1.1** |
| | comp=Z,108nm,1.0s | | | | | | |
| **OTAV** | **Otavalo** | **34.31** | **349** | *eP* | **P** | **07 17 26.4** | **+1.8** |
| | comp=Z,47nm,1.7s | | | | | | |
| OTAV | | | | *ePcP* | **PcP** | **07 20 01.9** | **+1.4** |
| **ROSC** | **El Rosal** | **38.44** | **356** | P | P | 07 18 03.6 | +3.9 |
| | comp=Z,4.5nm,0.6s,baz=185,slow=5.0,SNR=6.3 | | | | | | |
| **ROSC** | **El Rosal** | **38.44** | **356** | *eP* | P | 07 18 04.0 | +4.3 |
| ROSC | | | | *eSP* | sP | 07 18 14.3 | +3.0 |
| **SDV** | **Santo Domingo** | **42.41** | **2** | *eP* | **P** | **07 18 32.0** | **-0.3** |
| | comp=Z,18nm,0.8s | | | | | | |
| **RCBR** | **Riachuelo** | **43.57** | **59** | *eP* | **P** | **07 18 39.7** | **-1.9** |
| RCBR | | | | *epP* | **pP** | **07 18 48.6** | **-1.4** |
| RCBR | | | | *eSP* | **sP** | **07 18 52.1** | **-1.2** |
| **VNA3** | **Neumayer Olymp** | **49.63** | **158** | P | **P** | **07 19 29.4** | **+0.9** |
| **VNA1** | **Neumayer--Stat** | **49.94** | **157** | P | **P** | **07 19 32.4** | **+1.6** |
| **VNA2** | **Neumayer--Watz** | **50.28** | **157** | P | **P** | **07 19 35.2** | **+1.8** |
| | baz=281,slow=8.0 | | | | | | |
| **CRPR** | **Cabo Rojo, PR** | **51.67** | **6** | *eP* | **P** | **07 19 43.5** | **-0.8** |
| | comp=Z,189nm,1.2s | | | | | | |
| **OBIP** | **Obispado Ponce** | **51.76** | **7** | *eP* | **P** | **07 19 44.5** | **-0.5** |
| | comp=Z,51nm,0.7s | | | | | | |
| **CELP** | **Cerrillos** | **51.79** | **7** | *eP* | **P** | **07 19 44.9** | **-0.3** |
| **SNAA** | **Sanae** | **51.86** | **158** | P | **P** | **07 19 45.6** | **+0.3** |
| **SNAA** | **Sanae** | **51.86** | **158** | *eP* | **P** | **07 19 45.5** | **+0.3** |
| SNAA | | | | pmax | pmax | | |
| | comp=Z,35nm,1.1s | | | | | | |
| **SNAA** | **Sanae** | **51.86** | **158** | *eP* | **P** | **07 19 45.5** | **+0.3** |
| | comp=Z,35nm,1.1s | | | | | | |
| **SDD** | **Santo Domingo** | **51.94** | **3** | *eP* | **P** | **07 19 46.0** | **-0.3** |
| | comp=Z,131nm,1.0s | | | | | | |
| SDD | | | | *epP* | **pP** | **07 19 53.4** | **-1.4** |
| **LRS** | **Lares** | **51.98** | **6** | *eP* | **P** | **07 19 45.9** | **-0.8** |
| **SDDR** | **Presa de Saban** | **52.43** | **1** | *eS* | sP | 07 20 00.9 | -0.8 |
| **RKT** | **Rikitea** | **55.53** | **264** | *eS* | **S** | **07 27 56.9** | **+0.3** |
| | comp=Z,448nm,28.0s | | | | | | |
| RKT | | | | *eLR* | LR | 07 36 25.1 | |
| | comp=Z,615nm,26.0s,baz=115 | | | | | | |
| **RKT** | **Rikitea** | **55.53** | **264** | *eT* | T | 08 20 09.3 | |
| | comp=Z,1.2nm,0.2s | | | | | | |
| **QSPA** | **South Pole Qui** | **56.50** | **180** | *eP* | **P** | **07 20 20.4** | **+1.1** |
| | comp=Z,36nm,1.0s | | | | | | |
| **NVL** | **N'lazarevskaya** | **56.59** | **157** | ⇓*iP* | **P** | **07 20 19.9** | **+0.3** |
| NVL | | | | *eS* | S | 07 28 22.2 | +13 |
| NVL | | | | pmax | pmax | | |
| | comp=Z,27nm,0.9s | | | | | | |
| NVL | | | | MLR | MLR | | |
| | comp=Z,569nm,15.0s | | | | | | |
| **SBA** | **Scott Base** | **63.32** | **192** | *eP* | **P** | **07 21 07.5** | **+1.8** |
| SBA | | | | pmax | pmax | | |
| | comp=Z,74nm,2.1s | | | | | | |
| **SBA** | **Scott Base** | **63.32** | **192** | *eP* | **P** | **07 21 07.5** | **+1.8** |
| | comp=Z,74nm,2.1s | | | | | | |
| **VNDA** | **Vanda** | **64.34** | **191** | P | **P** | **07 21 14.1** | **+1.6** |
| | comp=Z,2.4nm,0.8s,baz=138,slow=3.5,SNR=5.9 | | | | | | |
| VNDA | | | | LR | LR | 07 47 14.3 | |
| | comp=Z,285nm,18.2s,baz=132,slow=34 | | | | | | |
| **035A** | **Encino** | **65.19** | **334** | P | **P** | **07 21 20.9** | **+2.4** |
| | baz=66,SNR=5.0 | | | | | | |
| **034A** | **Hebbronville** | **65.51** | **334** | P | **P** | **07 21 23.0** | **+2.4** |
| | baz=66,SNR=5.0 | | | | | | |
| **TIGA** | **Tifton** | **65.72** | **349** | *eP* | **P** | **07 21 21.5** | **-0.4** |
| **BRAL** | **Brewton** | **65.92** | **346** | *eP* | **P** | **07 21 23.6** | **+0.4** |
| BRAL | | | | *ePcP* | **PcP** | **07 21 54.4** | **+0.5** |
| **SYO** | **Syowa Base** | **66.14** | **159** | ⇓*eP* | **P** | **07 21 22.8** | **-1.4** |
| **SYO** | **Syowa Base** | **66.14** | **159** | ⇓*epP* | pP | 07 21 29.0 | -3.8 |
| **933A** | **Laredo** | **66.23** | **334** | P | **P** | **07 21 27.2** | **+2.0** |
| | baz=67,SNR=9.9 | | | | | | |
| **835A** | **Beeville** | **66.32** | **335** | P | **P** | **07 21 28.0** | **+2.2** |
| | baz=67 | | | | | | |
| **834A** | **Tilden** | **66.43** | **335** | P | **P** | **07 21 28.8** | **+2.3** |
| | baz=67,SNR=21 | | | | | | |
| **736A** | **Circle Diamond** | **66.67** | **336** | P | **P** | **07 21 30.2** | **+2.1** |
| | baz=67,SNR=9.9 | | | | | | |
| **735A** | **Kenedy** | **66.83** | **336** | P | **P** | **07 21 31.1** | **+2.0** |
| | baz=67 | | | | | | |
| **637A** | **Eagle Lake** | **66.88** | **337** | P | **P** | **07 21 31.3** | **+2.0** |
| | baz=67 | | | | | | |
| **833A** | **Chaparral WMA,** | **66.91** | **334** | P | **P** | **07 21 31.5** | **+2.0** |
| | baz=67,SNR=20 | | | | | | |
| **539A** | **Cross D Ranch,** | **67.00** | **339** | P | **P** | **07 21 31.5** | **+1.5** |
| | baz=67 | | | | | | |
| **734A** | **La Parita Cree** | **67.09** | **335** | P | **P** | **07 21 32.4** | **+1.7** |
| | baz=67 | | | | | | |
| **832A** | **Faith Ranch, C** | **67.09** | **333** | P | **P** | **07 21 32.4** | **+1.7** |
| | baz=67,SNR=18 | | | | | | |
| **636A** | **Smothers Creek** | **67.16** | **336** | P | **P** | **07 21 32.9** | **+1.8** |
| | baz=68,SNR=12 | | | | | | |
| **HKT** | **Hockley** | **67.19** | **338** | *eP* | **P** | **07 21 32.1** | **+0.9** |
| **HKT** | **Hockley** | **67.19** | **338** | *eP* | **P** | **07 21 32.1** | **+0.9** |
| **733A** | **Divot King Ran** | **67.24** | **334** | P | **P** | **07 21 33.1** | **+1.5** |
| | baz=68 | | | | | | |
| **TBI** | **Tubuai** | **67.31** | **256** | *eS* | **S** | **07 30 26.1** | **0.0** |
| | comp=Z,798nm,27.5s | | | | | | |
| **TBI** | **Tubuai** | **67.31** | **256** | *eLR* | LR | 07 41 55.8 | |
| | comp=Z,2μm,26.5s,baz=112 | | | | | | |
| **TBI** | **Tubuai** | **67.31** | **256** | *eT* | T | 08 34 53.4 | |
| | comp=Z,5.3nm,0.2s | | | | | | |
| **635A** | **Leesville** | **67.31** | **336** | P | **P** | **07 21 33.2** | **+1.1** |
| | baz=68 | | | | | | |
| **732A** | **Laxson Ranch,** | **67.49** | **334** | P | **P** | **07 21 34.5** | **+1.2** |
| | baz=68,SNR=32 | | | | | | |
| **634A** | **China Grove, S** | **67.50** | **335** | P | **P** | **07 21 34.6** | **+1.3** |
| | baz=68 | | | | | | |
| **GOGA** | **Godfrey** | **67.64** | **350** | *eP* | **P** | **07 21 33.6** | **-0.4** |
| GOGA | | | | *e**PP | **pP** | **07 21 41.8** | **-0.9** |
| **GOGA** | **Godfrey** | **67.64** | **350** | *eP* | **P** | **07 21 33.6** | **-0.4** |
| GOGA | | | | *epP* | **pP** | **07 21 41.8** | **-0.9** |
| **536A** | **Bastrop** | **67.71** | **337** | P | **P** | **07 21 36.1** | **+1.5** |
| | baz=68 | | | | | | |
| **438A** | **Sam Houston St** | **67.83** | **338** | P | **P** | **07 21 36.7** | **+1.5** |
| | baz=68 | | | | | | |
| **535A** | **Dale** | **67.83** | **336** | P | **P** | **07 21 36.9** | **+1.5** |
| | baz=68,SNR=8.6 | | | | | | |
| **VBMS** | **Vicksburg** | **67.85** | **343** | P | **P** | **07 21 36.9** | **+1.5** |
| | baz=68 | | | | | | |
| **VBMS** | **Vicksburg** | **67.85** | **343** | *eP* | **P** | **07 21 36.1** | **+0.7** |
| | comp=Z,70nm,1.4s | | | | | | |
| **633A** | **Saathoff Ranch** | **67.87** | **335** | P | **P** | **07 21 37.2** | **+1.6** |
| | baz=68,SNR=14 | | | | | | |
| **LRAL** | **Lakeview Retre** | **67.88** | **347** | *eP* | **P** | **07 21 35.4** | **-0.2** |
| LRAL | | | | *epP* | **pP** | **07 21 43.8** | **-0.5** |
| **340A** | **Bronson** | **67.98** | **340** | P | **P** | **07 21 37.7** | **+1.5** |
| | baz=68 | | | | | | |
| **339A** | **Huntington** | **68.09** | **339** | P | **P** | **07 21 38.8** | **+1.8** |
| | baz=68,SNR=6.7 | | | | | | |
| **632A** | **Uvalde** | **68.13** | **334** | P | **P** | **07 21 38.6** | **+1.4** |
| | baz=68,SNR=16 | | | | | | |
| **534A** | **Blanco** | **68.14** | **335** | P | **P** | **07 21 38.9** | **+1.5** |
| | baz=68 | | | | | | |
| **436A** | **Wall Ranch, Ga** | **68.26** | **337** | P | **P** | **07 21 39.5** | **+1.5** |
| | baz=69 | | | | | | |
| **631A** | **Perdido Creek** | **68.33** | **333** | P | **P** | **07 21 39.7** | **+1.2** |
| | baz=69,SNR=10 | | | | | | |
| **338A** | **Crockett** | **68.34** | **339** | P | **P** | **07 21 39.6** | **+1.1** |
| | baz=69 | | | | | | |
| **533A** | **Kerrville** | **68.37** | **335** | P | **P** | **07 21 40.0** | **+1.2** |
| | baz=69,SNR=20 | | | | | | |
| **337A** | **Centerville** | **68.48** | **338** | P | **P** | **07 21 41.1** | **+1.7** |
| | baz=69 | | | | | | |
| **435B** | **Jarrell** | **68.53** | **337** | P | **P** | **07 21 41.4** | **+1.6** |
| | baz=69 | | | | | | |
| **239A** | **Gary** | **68.71** | **340** | P | **P** | **07 21 42.7** | **+1.9** |
| | baz=69 | | | | | | |
| **532A** | **Rocksprings** | **68.73** | **334** | P | **P** | **07 21 42.2** | **+1.1** |
| | baz=69,SNR=36 | | | | | | |
| **434A** | **Burnet** | **68.79** | **336** | P | **P** | **07 21 42.7** | **+1.3** |
| | baz=69,SNR=21 | | | | | | |
| **MEH** | **Mehetia** | **68.81** | **262** | *eT* | T | 08 36 44.7 | |
| | comp=Z,22nm,0.2s | | | | | | |
| **CNNC** | **Cliffs of the** | **68.83** | **355** | *eP* | **P** | **07 21 41.9** | **+0.5** |
| **336A** | **Riesel** | **68.85** | **337** | P | **P** | **07 21 43.1** | **+1.5** |
| | baz=69 | | | | | | |
| **335A** | **Moody** | **68.94** | **337** | P | **P** | **07 21 43.9** | **+1.6** |
| | baz=69 | | | | | | |
| **531A** | **Rocksprings** | **69.00** | **334** | P | **P** | **07 21 44.6** | **+1.8** |
| | baz=69,SNR=17 | | | | | | |
| **433A** | **Art** | **69.02** | **335** | P | **P** | **07 21 44.2** | **+1.4** |
| | baz=69,SNR=34 | | | | | | |
| **JCT** | **Junction City** | **69.02** | **335** | *eP* | **P** | **07 21 43.6** | **+0.8** |
| **JCT** | **Junction City** | **69.02** | **335** | P | **P** | **07 21 44.3** | **+1.4** |
| | baz=69,SNR=24 | | | | | | |
| **JCT** | **Junction City** | **69.02** | **335** | *eP* | **P** | **07 21 43.6** | **+0.8** |
| **KMSC** | **Kings Mountain** | **69.06** | **352** | P | **P** | **07 21 44.3** | **+1.4** |
| | baz=69 | | | | | | |
| **KMSC** | **Kings Mountain** | **69.06** | **352** | *eP* | **P** | **07 21 42.6** | **-0.3** |
| | comp=Z,14nm,1.0s | | | | | | |
| KMSC | | | | *epP* | **pP** | **07 21 52.1** | **+0.5** |
| KMSC | | | | *eSP* | **sP** | **07 21 55.1** | **+0.2** |
| **237A** | **Washetta, Mont** | **69.09** | **339** | P | **P** | **07 21 45.1** | **+1.9** |
| | baz=69,SNR=5.1 | | | | | | |
| **334A** | **Lometa** | **69.25** | **336** | P | **P** | **07 21 45.3** | **+1.1** |
| | baz=70,SNR=23 | | | | | | |
| **530A** | **J-C Ranch, Com** | **69.28** | **333** | P | **P** | **07 21 45.5** | **+1.0** |
| | baz=70,SNR=25 | | | | | | |
| **139A** | **Bunkhouse Ranc** | **69.31** | **340** | P | **P** | **07 21 46.0** | **+1.5** |
| | baz=70 | | | | | | |
| **236A** | **Katherine and** | **69.31** | **338** | P | **P** | **07 21 46.1** | **+1.6** |
| | baz=70 | | | | | | |
| **432A** | **Menard** | **69.37** | **335** | P | **P** | **07 21 46.0** | **+1.0** |
| | baz=70,SNR=18 | | | | | | |
| **TXAR** | **Lajitas Array** | **69.47** | **331** | P | **P** | **07 21 45.8** | **+0.1** |
| | comp=Z,4.2nm,0.6s,baz=153,slow=8.3,SNR=67 | | | | | | |
| TXAR | | | | pP | **pP** | **07 21 54.6** | **+0.1** |
| | comp=Z,4.2nm,0.6s,baz=151,slow=7.8,SNR=15 | | | | | | |
| TXAR | | | | LR | LR | 07 48 05.1 | |
| | comp=Z,851nm,18.2s,baz=0.0,slow=32 | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **69.47** | **331** | *eP* | **P** | **07 21 46.1** | **+0.4** |
| **431A** | **Sonora** | **69.49** | **334** | P | **P** | **07 21 46.8** | **+1.1** |
| | baz=70,SNR=10 | | | | | | |
| **138A** | **Matatall Enter** | **69.49** | **339** | P | **P** | **07 21 47.0** | **+1.3** |
| | baz=70 | | | | | | |
| **333A** | **Richland Sprin** | **69.50** | **336** | P | **P** | **07 21 46.8** | **+1.0** |
| | baz=70,SNR=13 | | | | | | |
| **529A** | **Stev Forest Ra** | **69.60** | **332** | P | **P** | **07 21 47.5** | **+1.0** |
| | baz=70,SNR=33 | | | | | | |
| **WHTX** | **Lake Whitney** | **69.60** | **337** | P | **P** | **07 21 47.2** | **+0.9** |
| | baz=70 | | | | | | |
| **137A** | **Heron Place, G** | **69.63** | **339** | P | **P** | **07 21 48.1** | **+1.6** |
| | baz=70,SNR=7.3 | | | | | | |
| **136A** | **Ennis** | **69.75** | **338** | P | **P** | **07 21 48.4** | **+1.1** |
| | baz=70 | | | | | | |
| **Z39A** | **Irene McRaven,** | **69.78** | **340** | P | **P** | **07 21 49.0** | **+1.6** |
| | baz=70 | | | | | | |
| **CPCT** | **Cooper Cave** | **69.80** | **349** | *eP* | **P** | **07 21 47.8** | **+0.3** |
| **OXF** | **Oxford** | **69.80** | **345** | *eP* | **P** | **07 21 47.1** | **-0.4** |
| **OXF** | **Oxford** | **69.80** | **345** | *eP* | **P** | **07 21 47.1** | **-0.4** |
| **SWET** | **Sewanee** | **69.80** | **348** | *eP* | **P** | **07 21 47.6** | **+0.1** |
| **332A** | **Millersview** | **69.81** | **335** | P | **P** | **07 21 48.6** | **+0.9** |
| | baz=70,SNR=11 | | | | | | |
| **430A** | **Baggett Ranch,** | **69.82** | **334** | P | **P** | **07 21 48.6** | **+0.8** |
| | baz=70,SNR=23 | | | | | | |
| **234A** | **Clairette** | **69.83** | **337** | P | **P** | **07 21 48.6** | **+0.8** |
| | baz=70,SNR=19 | | | | | | |
| **TVO** | **Taravao** | **69.84** | **262** | *eT* | T | 08 38 01.8 | |
| | comp=Z,0.7nm,0.3s | | | | | | |
| **TKL** | **Tuckaleechee C** | **69.89** | **350** | *eP* | **P** | **07 21 47.7** | **-0.4** |
| **TKL** | **Tuckaleechee C** | **69.89** | **350** | *eP* | **P** | **07 21 47.7** | **-0.4** |
| **429A** | **Davenport Ranc** | **69.92** | **333** | P | **P** | **07 21 49.5** | **+1.1** |
| | baz=70,SNR=16 | | | | | | |
| **331A** | **San Angelo** | **69.99** | **334** | P | **P** | **07 21 49.9** | **+1.1** |
| | baz=70,SNR=22 | | | | | | |
| **Z38A** | **Mt. Pleasant** | **70.01** | **340** | P | **P** | **07 21 50.1** | **+1.2** |
| | baz=70 | | | | | | |
| **TIAR** | **Tiarei** | **70.03** | **262** | *eT* | T | 08 38 15.8 | |
| | comp=Z,2.1nm,0.2s | | | | | | |
| **233A** | **Rising Star** | **70.10** | **336** | P | **P** | **07 21 50.5** | **+1.0** |
| | baz=70,SNR=15

X37A Clayton 71.38 340 P P 07 21 58.2 +1.1
baz=72
Z32A Haskell 71.48 336 P P 07 21 58.8 +1.0
baz=72,SNR=17
Y34A Reagan Ranch, 71.51 338 P P 07 21 58.7 +0.7
baz=72
228A UT Block 9, Go 71.52 333 P P 07 21 59.1 +0.9
baz=72,SNR=12
W38A Poteau 71.59 341 P P 07 21 59.8 +1.4
baz=72
X36A Centrahoma 71.65 339 P P 07 21 58.6 -0.2
baz=72,SNR=11
X35A Drake 71.68 339 P P 07 21 59.6 +0.6
baz=72
129A Stewart Farms, 71.71 334 P P 07 21 59.6 +0.3
baz=72,SNR=8.9
Z31A Sharp Cattle R 71.71 336 P P 07 21 59.7 +0.5
baz=72,SNR=17
Y33A Hilltop Ranch, 71.83 337 P P 07 21 60.0 0.0
baz=72
W37A Quinton 71.91 340 P P 07 22 01.1 +0.8
baz=72,SNR=5.8
128A Castleberry Fa 71.93 333 P P 07 22 01.3 +0.7
baz=72,SNR=14
Z30A Sanderson Ranc 72.03 335 P P 07 22 01.7 +0.5
baz=72,SNR=13
Y32A R-V Farms, Ver 72.10 336 P P 07 22 02.3 +0.7
baz=72,SNR=10
X34A Smith Ranch, M 72.13 338 P P 07 22 02.2 +0.6
baz=72,SNR=9.8
W36A Wetumka 72.14 339 P P 07 22 01.6 -0.2
baz=72,SNR=6.6
CLNB Carlsbad 72.14 332 eP P 07 22 02.8 +0.9
comp=Z,0.3nm,0.3s
CLNB eP P 07 22 12.3 +1.6
PBMO Poplar Bluff 72.20 345 eP P 07 22 01.6 -0.4
Z29A Hungry Hill Ra 72.21 334 P P 07 22 02.5 +0.2
baz=73,SNR=16
MNTX Cornudas Mount 72.25 331 P P 07 22 02.4 0.0
baz=73
MNTX Cornudas Mount 72.25 331 eP P 07 22 02.1 -0.3
X33A Lawton 72.28 337 P P 07 22 02.1 -0.5
baz=73
V38A Canehill 72.31 341 P P 07 22 02.8 +0.1
baz=73
Y31A Rekieta Farm, 72.34 336 P P 07 22 03.5 +0.5
baz=73,SNR=8.2
W35A Tecumseh 72.34 339 P P 07 22 03.1 +0.2
baz=73,SNR=5.6
X32A Elmer 72.43 337 P P 07 22 03.9 +0.4
baz=73
Z28A Tucker Farm, M 72.49 334 P P 07 22 04.4 +0.4
baz=73,SNR=8.0
V37A Hulbert 72.53 341 P P 07 22 04.4 +0.4
baz=73
WMOK Wichita Mounta 72.56 337 eP P 07 22 04.0 -0.3
WMOK Wichita Mounta 72.56 337 eP P 07 22 04.0 -0.3
V36A Jenks 72.66 340 P P 07 22 05.5 +0.7
baz=73,SNR=9.6
TUL1 Tulsa 72.73 340 P P 07 22 05.7 +0.5
baz=73,SNR=10
TUL1 Tulsa 72.73 340 eP P 07 22 04.7 -0.6
Y29A Porterfield Fa 72.74 335 P P 07 22 06.1 +0.6
baz=73,SNR=20
USIN University of 72.79 347 eP P 07 22 04.9 -0.6
WCI Wyandotte Cave 72.80 348 eP P 07 22 04.8 -0.8
WCI Wyandotte Cave 72.80 348 eP P 07 22 04.8 -0.8
CPRX Cap Rock 72.82 332 eP P 07 22 06.1 +0.1
comp=Z,8.5nm,0.9s
CPRX epP pP 07 22 16.5 +1.8
W33A Caddo, Fort Co 72.84 338 P P 07 22 06.7 +0.8
baz=73,SNR=15
SIUC Southern Illin 72.85 346 eP P 07 22 05.7 -0.2
X31A McDonald Ranch 72.85 336 P P 07 22 06.4 +0.4
baz=73,SNR=12
V35A Meyer Ranch, C 72.90 339 P P 07 22 06.4 +0.1
baz=73,SNR=10
X30A Coker Ranch, T 72.99 335 P P 07 22 07.6 +0.7
baz=73
U37A Salina 73.01 341 P P 07 22 07.6 +0.7
baz=73
W32A Sentinel 73.06 337 P P 07 22 07.9 +0.7
baz=73
U36A Oologah 73.17 340 P P 07 22 08.2 +0.4
baz=74
V34A Guthrie 73.17 339 P P 07 22 08.4 +0.6
baz=74,SNR=7.7
V34A Guthrie 73.17 339 eP P 07 22 08.0 +0.1
MSTX Muleshoe 73.24 334 P P 07 22 09.3 +0.9
baz=74,SNR=17
MSTX Muleshoe 73.24 334 eP P 07 22 08.8 +0.3
X29A Tulia 73.28 335 P P 07 22 09.3 +0.7
baz=74
W31A Holland Ranch, 73.35 336 P P 07 22 09.7 +0.8
baz=74,SNR=5.0
V33A Lossen Ranch, 73.39 338 P P 07 22 10.0 +0.9
baz=74,SNR=10
CER Ceres 73.42 119 eP P 07 22 18.2 +8.5
CER lAmb lAmb 07 22 19.3
comp=Z,60nm,1.1s
U35A Pawnee 73.44 339 P P 07 22 10.2 +0.8
baz=74,SNR=17
MAW Mawson 73.45 164 P P 07 22 09.5 +0.3
comp=Z,16nm,0.7s,baz=218,slow=7.5,SNR=52
MAW LR LR 07 57 24.8
comp=Z,1µm,18.4s,baz=233,slow=38
X28A Dimmitt 73.52 334 P P 07 22 11.0 +0.9
baz=74,SNR=5.3
V32A Arapaho 73.54 337 P P 07 22 11.2 +1.1
baz=74,SNR=5.4
CCM Cathedral Cave 73.61 344 eP P 07 22 10.2 -0.2
CCM e*PP pP 07 22 20.1 +1.0
CCM pmax pmax
comp=Z,32nm,0.8s
CCM Cathedral Cave 73.61 344 eP P 07 22 10.2 -0.2
comp=Z,32nm,0.8s
CCM epP pP 07 22 20.1 +1.0
T37A Cheneyville 18 73.63 341 P P 07 22 11.6 +1.1
baz=74
AMTX Amarillo 73.67 335 P P 07 22 12.1 +1.2
baz=74
AMTX Amarillo 73.67 335 eP P 07 22 12.0 +1.1
U34A Anderson Ranch 73.73 339 P P 07 22 12.1 +1.0
baz=74,SNR=6.0
U34A Anderson Ranch 73.73 339 eP P 07 22 11.4 +0.3
U34A epP pP 07 22 23.2 +3.3
T36A Boggs Farm, Ca 73.83 340 P P 07 22 12.5 +0.8
baz=74,SNR=8.7
W29A Amraillo 73.87 335 P P 07 22 13.1 +1.0
baz=74,SNR=9.4
T35A Sooner Cattle 73.88 340 P P 07 22 13.3 +1.3
baz=74,SNR=9.8
U33A Lingo Farm, Me 73.91 338 P P 07 22 13.5 +1.4
baz=74,SNR=5.2
SLM Saint Louis 73.94 345 eP P 07 22 12.3 0.0
SLM Saint Louis 73.94 345 eP P 07 22 12.3 0.0
121A Cookes Peak, D 73.97 329 P P 07 22 14.3 +1.4
baz=74
121A Cookes Peak, D 73.97 329 eP P 07 22 14.1 +1.2
comp=Z,25nm,1.0s
121A epP pP 07 22 23.2 +1.6
V30A Spur Ranch, Mi 74.12 336 P P 07 22 14.8 +1.3
baz=74
U32A Winter Ranch, 74.13 338 P P 07 22 14.5 +0.9
baz=74,SNR=6.4
T34A McClaskey Farm 74.17 339 P P 07 22 15.1 +1.3
baz=74,SNR=8.6
S37A Fort Scott 74.20 341 P P 07 22 14.8 +0.9
baz=74,SNR=6.5
ACSO Alum Creek Sta 74.28 351 eP P 07 22 13.8 -0.5
ACSO epP pP 07 22 23.0 0.0
S36A Lake Cedric, C 74.38 341 P P 07 22 15.6 +0.7
baz=75,SNR=9.7
S35A Otter Creek Ra 74.54 340 P P 07 22 16.8 +1.0
baz=75,SNR=5.6
T33A Patterson Ranc 74.55 339 P P 07 22 16.9 +1.0
baz=75
V28A Channing 74.64 335 P P 07 22 17.5 +0.9
baz=75,SNR=8.3
R37A Teagarden Farm 74.72 342 P P 07 22 17.4 +0.5
baz=75,SNR=5.4
LIC Lamto 74.76 72 eP P 07 22 17.8 +0.1
comp=Z,106nm,1.5s
U30A WK&E Inc. Balk 74.81 337 P P 07 22 18.5 +1.0
baz=75,SNR=5.2
T32A Huddler Ranch, 74.84 338 P P 07 22 18.9 +1.2
baz=75

R36A Gordon, Harris 74.91 341 P P 07 22 19.3 +1.3
baz=75
TIC Toumodi 75.02 71 eP P 07 22 19.0 -0.2
SUR Sutherland 75.02 119 eP P 07 22 21.1 +1.9
SFIN Scholer Farm 75.03 348 eP P 07 22 18.2 -0.4
LPM Los Pinos Moun 75.03 331 eP P 07 22 20.2 +1.2
LPM epP pP 07 22 30.1 +2.3
KIC Kosan Boka 75.07 72 eP P 07 22 19.4 -0.1
comp=Z,127nm,1.1s
R35A Emporia Munici 75.10 341 P P 07 22 20.0 +0.9
baz=75
TUC Tucson 75.11 327 eP P 07 22 21.2 +1.8
TUC Tucson 75.11 327 eP P 07 22 21.2 +1.8
Q37A Longview Farm, 75.16 342 P P 07 22 20.7 +1.3
baz=76
DBIC Dimbokro 75.16 71 eP P 07 22 19.9 0.0
DBIC Dimbokro 75.16 71 P P 07 22 20.0 0.0
comp=Z,31nm,1.0s,baz=214,slow=5.7,SNR=28
DBIC LR LR 07 54 12.3
comp=Z,490nm,18.8s,baz=216,slow=35
DBIC Dimbokro 75.16 71 eP P 07 22 20.2 +0.2
DBIC Dimbokro 75.16 71 eP P 07 22 20.1 +0.2
U28A Mallet 75.20 335 P P 07 22 20.9 +1.0
baz=76
LAZ Ladron 75.32 331 eP P 07 22 22.9 +2.2
S32A Newby Ranch, P 75.33 338 P P 07 22 21.4 +1.0
baz=76
R34A Isabella, Hill 75.38 340 P P 07 22 21.6 +0.9
baz=76,SNR=5.7
U27A Thompson Grove 75.45 335 P P 07 22 22.7 +1.4
baz=76
Q36A Arnold C. Orve 75.50 341 P P 07 22 22.3 +0.9
baz=76
ANMO Albuquerque 75.52 331 eP P 07 22 22.2 +0.4
ANMO pmax pmax
comp=Z,10.0nm,1.0s
ANMO Albuquerque 75.52 331 eP P 07 22 23.0 +1.2
Q35A Mercer Eighty, 75.56 341 P P 07 22 22.7 +1.0
baz=76
T29A Hugoton 75.59 336 P P 07 22 22.9 +0.9
baz=76
R33A Olander Ranch, 75.60 339 P P 07 22 23.1 +1.2
baz=76
HDIL Hopedale 75.61 347 P P 07 22 22.1 +0.2
baz=76
HDIL Hopedale 75.61 347 eP P 07 22 21.6 -0.2
214A Organ Pipe Nat 75.76 325 P P 07 22 25.0 +1.9
baz=76
T28A Walsh 75.83 336 P P 07 22 24.7 +1.2
baz=76,SNR=9.2
Q34A Chapman 75.87 340 P P 07 22 24.5 +1.1
baz=76
R32A Long Quarter, 75.92 339 P P 07 22 25.1 +1.2
baz=76,SNR=7.2
KSU1 Kansas State U 75.94 341 P P 07 22 24.9 +1.0
baz=76
KSU1 Kansas State U 75.94 341 eP P 07 22 24.4 +0.5
S29A Ulysses 75.95 337 P P 07 22 25.5 +1.5
baz=76,SNR=5.6
T27A Campo 75.99 335 P P 07 22 25.6 +1.3
baz=76
R31A Burdett 76.05 338 P P 07 22 25.6 +1.0
baz=76
P36A Good Intent, A 76.05 342 P P 07 22 24.9 +0.4
baz=76
P35A Duane Minner, 76.18 341 P P 07 22 26.0 +0.8
baz=76,SNR=5.2
S28A Manter 76.18 336 P P 07 22 26.2 +0.8
baz=76,SNR=12
Q33A Connelly Farm, 76.19 340 P P 07 22 26.4 +1.1
baz=76
R30A Dighton 76.28 338 P P 07 22 26.9 +1.1
baz=77
Q32A Meitler Ranch, 76.40 339 P P 07 22 27.8 +1.3
baz=77,SNR=7.6
T26A Comanche Natio 76.40 335 P P 07 22 27.8 +1.1
baz=77,SNR=7.2
P34A Walnut Farm, R 76.42 341 P P 07 22 27.7 +1.1
baz=77
O36A Bolckow 76.47 342 P P 07 22 28.3 +1.5
baz=77
CBKS Cedar Bluff 76.60 338 eP P 07 22 28.4 +0.8
CBKS e*PP PcP 07 22 39.8 +0.7
CBKS Cedar Bluff 76.60 338 P P 07 22 29.0 +1.4
baz=77
CBKS Cedar Bluff 76.60 338 eP P 07 22 28.4 +0.8
CBKS epP PcP 07 22 39.8 +0.7
T25A Trinidad 76.66 334 P P 07 22 30.5 +2.3
baz=77,SNR=16
T25A Trinidad 76.66 334 eP P 07 22 29.6 +1.3
Q31A Ellis 76.67 338 P P 07 22 29.6 +1.5
baz=77,SNR=6.4
R29A Marienthal 76.69 337 P P 07 22 29.6 +1.4
baz=77
S26A Kim 76.76 335 P P 07 22 30.8 +2.1
baz=77,SNR=16
R28A Tribune 76.83 336 P P 07 22 30.5 +1.4
baz=77,SNR=8.9
N37A Lee Faris, Mou 76.88 343 P P 07 22 30.0 +0.9
baz=77
Q30A Quinter 76.90 338 P P 07 22 30.7 +1.3
baz=77,SNR=11
DRV Dumont d'Urvil 76.94 193 P P 07 22 25.0 -4.3
DRV PP PP 07 25 24.0 +2.1
DRV S S 07 32 00.0 -15
DRV SP ScS 07 32 46.0 +2.1
DRV SS SS 07 37 12.0 +1.1
DRV L L 07 43 00.0
DRV R 07 49 00.0
O34A Beatrice 76.98 341 P P 07 22 30.4 +0.7
baz=77
P32A Huiting Farm, 77.00 339 P P 07 22 30.5 +0.7
baz=77
W18A Petrified Fore 77.02 329 P P 07 22 30.6 +0.3
baz=77
W18A Petrified Fore 77.02 329 eP P 07 22 31.2 +0.9
comp=Z,25nm,1.3s
Q29A Oakley 77.06 337 P P 07 22 31.3 +1.0
baz=77,SNR=6.7
R27A Eads 77.12 336 P P 07 22 31.8 +1.1
baz=78,SNR=14
O33A Heron 77.12 340 P P 07 22 31.5 +1.0
baz=78
P31A Stockton 77.14 339 P P 07 22 31.8 +1.2
baz=78,SNR=5.3
N35A Tabor 77.33 342 P P 07 22 32.2 +0.5
baz=78,SNR=6.3
M37A Trindle Farm, 77.45 343 P P 07 22 33.0 +0.7
baz=78
Q28A Sharon Springs 77.49 337 P P 07 22 33.7 +0.9
baz=78
N34A Lincoln 77.54 341 P P 07 22 33.9 +1.1
baz=78
SDCO Great Sand Dun 77.60 333 P P 07 22 35.1 +1.5
baz=78,SNR=6.7
SDCO Great Sand Dun 77.60 333 eP P 07 22 34.8 +1.1
GLA Glamis 77.63 324 P P 07 22 35.5 +1.9
baz=78
P29A Atwood 77.69 338 P P 07 22 35.3 +1.5
baz=78,SNR=6.3
O31A Woolen Ranch, 77.70 339 P P 07 22 35.0 +1.2
baz=78
N33A J Bar K, Exete 77.70 341 P P 07 22 34.8 +1.0
baz=78
KSCO Kaye Shedlock' 77.71 336 P P 07 22 35.9 +1.9
baz=78
KSCO Kaye Shedlock' 77.71 336 eP P 07 22 34.9 +0.8
comp=Z,32nm,1.1s
M35A Neola 77.92 342 P P 07 22 36.6 +1.7
baz=78
P28A Saint Francis 77.93 337 P P 07 22 36.8 +1.6
baz=78
O30A MW Ranch, Wils 77.95 338 P P 07 22 37.0 +1.8
baz=78
Y12C Blythe 78.05 325 P P 07 22 37.9 +2.1
baz=78
JFWS Jewell Farm 78.07 346 eP P 07 22 35.9 +0.2
JFWS Jewell Farm 78.07 346 eP P 07 22 35.9 +0.2
WUAZ Wupatki 78.07 328 P P 07 22 37.8 +1.6
baz=78
WUAZ Wupatki 78.07 328 eP P 07 22 37.7 +1.6
M34A Aspy Farms, Fr 78.18 341 P P 07 22 37.9 +1.5
baz=78
N31A Bailey Ranch, 78.21 340 P P 07 22 38.0 +1.3
baz=79
BAR Barrett 78.24 323 eP P 07 22 38.7 +1.7
SOE Somerset East 78.27 121 eP P 07 22 38.4 +0.9

SOE lAmb lAmb 07 22 46.9
comp=Z,49nm,1.2s
MONP Monument Peak 78.28 323 P P 07 22 39.0 +1.6
baz=79
MVCO Mesa Verde 78.30 331 P P 07 22 38.9 +1.5
baz=79
MVCO Mesa Verde 78.30 331 eP P 07 22 38.6 +1.1
K38A Parkersburg 78.33 345 P P 07 22 39.1 +1.9
baz=79
BC3 Big Chuckawall 78.42 324 P P 07 22 39.9 +1.8
baz=79
BGNE Belgrade 78.52 340 P P 07 22 40.1 +1.8
baz=79
Q24A Divide 78.55 334 P P 07 22 40.5 +1.6
baz=79,SNR=10
Q24A Divide 78.55 334 eP P 07 22 40.1 +1.2
K37A Belmond 78.64 344 P P 07 22 40.7 +1.8
baz=79
IRM Iron Mountain 78.69 325 P P 07 22 41.4 +2.0
baz=79
K36A Gilmore City 78.71 343 P P 07 22 40.8 +1.5
baz=79
N28A Pribbeno Ranch 78.87 338 P P 07 22 42.1 +1.8
baz=79
PFO Pinyon Flat Ob 78.88 324 eP P 07 22 42.4 +1.8
PFO Pinyon Flat Ob 78.88 324 P P 07 22 42.2 +1.6
baz=79
PFO Pinyon Flat Ob 78.88 324 eP P 07 22 42.4 +1.8
BELC Belle Mtn. Jos 78.97 324 P P 07 22 42.5 +1.4
baz=79
K35A Storm Lake 78.98 343 P P 07 22 41.7 +0.9
baz=79
L33A Hoskins 78.98 341 P P 07 22 42.4 +1.6
baz=79
L32A Elgin 79.03 341 P P 07 22 43.1 +2.0
baz=79
PV01 Paradox Valley 79.12 332 eP P 07 22 44.2 +2.2
J37A Redenius Farm, 79.14 344 P P 07 22 42.1 +0.5
baz=80
MURC Murrieta 79.24 323 P P 07 22 43.9 +1.5
baz=80
PV05 Paradox Valley 79.29 331 eP P 07 22 44.9 +2.0
PV05 esP sP 07 22 53.7 -1.3
M29A Burnside Ranch 79.30 339 P P 07 22 44.3 +1.7
baz=80
J36A Seneca 1, Swea 79.34 344 P P 07 22 43.3 +0.6
baz=80,SNR=6.6
HVD Gariep Dam 79.36 120 eP P 07 22 44.2 +0.6
HVD lAmb lAmb 07 22 45.3
comp=Z,1µm,3.4s
SMCO Snowmass 79.41 333 eP P 07 22 44.7 +1.0
comp=Z,44nm,1.5s
L31A Butterfield Fa 79.42 340 P P 07 22 44.1 +0.9
baz=80
GMRC Granite Mounta 79.43 325 P P 07 22 44.8 +1.2
baz=80
ISCO Idaho Springs 79.46 334 eP P 07 22 44.9 +1.0
ISCO Idaho Springs 79.46 334 P P 07 22 45.2 +1.4
baz=80,SNR=5.5
ISCO Idaho Springs 79.46 334 eP P 07 22 44.9 +1.0
M28A Bar X Bar Ranc 79.46 338 P P 07 22 44.9 +1.4
baz=80
L30A Spencer Herefo 79.47 339 P P 07 22 44.4 +0.9
baz=80
PV10 Paradox Valley 79.52 331 eP P 07 22 44.9 +0.7
I38A Scanlan Farm, 79.57 345 P P 07 22 44.3 +0.4
baz=80,SNR=7.3
J35A Milford 79.58 343 P P 07 22 44.2 +0.1
baz=80
K32A Verdigre 79.63 341 P P 07 22 44.9 +0.5
baz=80
I37A Lemond, Waseca 79.78 345 P P 07 22 45.6 +0.5
baz=80
L29A Maesberg Ranch 79.80 339 P P 07 22 46.5 +1.2
baz=80
K31A O'Neill 79.81 340 P P 07 22 46.6 +1.2
baz=80,SNR=7.8
I35A Creekview Farm 79.99 343 P P 07 22 46.7 +0.5
baz=80,SNR=11
TUQ Turquoise Moun 80.09 325 P P 07 22 49.0 +1.8
baz=80
K30A Basset 80.10 340 P P 07 22 48.4 +1.5
baz=80
RRX Edison Barstow 80.16 324 P P 07 22 49.1 +1.7
baz=80
MWC Mount Wilson 80.17 323 eP P 07 22 50.0 +2.3
MWC Mount Wilson 80.17 323 eP P 07 22 50.0 +2.3
H37A Dierke Farm, C 80.21 345 P P 07 22 48.8 +1.4
baz=80
BOSA Boshof 80.26 118 eP P 07 22 48.4 -0.1
BOSA lAmb lAmb 07 22 58.0
comp=Z,45nm,1.4s
BOSA IAMs_20 IAMs_20 07 59 17.9
comp=Z,852nm,16.6s
BOSA Boshof 80.26 118 P P 07 22 48.3 -0.1
comp=Z,24nm,1.1s,baz=240,slow=3.7,SNR=12
BOSA LR LR 07 53 40.0
comp=Z,280nm,21.4s,baz=244,slow=32
BOSA Boshof 80.26 118 eP P 07 22 49.0 +0.5
BOSA Boshof 80.26 118 eP P 07 22 49.0 +0.5
J32A Parkston 80.26 341 P P 07 22 49.0 +1.3
baz=81
ECSD EROS Data Cent 80.28 342 P P 07 22 48.8 +1.0
baz=81,SNR=6.5
ECSD EROS Data Cent 80.28 342 eP P 07 22 47.6 -0.2
ECSD esP sP 07 22 59.4 -0.5
DECC Green Verdugo 80.33 323 P P 07 22 50.0 +1.6
baz=81
I34A Hadley 80.37 343 P P 07 22 49.6 +1.3
baz=81
K29A Lazy Trails An 80.39 339 P P 07 22 50.0 +1.5
baz=81
GSC Goldstone 80.41 324 eP P 07 22 51.3 +2.5
GSC e*SP sP 07 22 59.3 -1.6
GSC Goldstone 80.41 324 P P 07 22 50.4 +1.6
baz=81
GSC Goldstone 80.41 324 eP P 07 22 51.3 +2.5
GSC esP sP 07 22 59.3 -1.6
J31A Geddes 80.43 341 P P 07 22 50.0 +1.4
baz=81
H36A Jessenland, He 80.43 344 P P 07 22 49.9 +1.4
baz=81
N23A Red Feather La 80.54 335 P P 07 22 50.9 +1.2
baz=81
SHPR Sheep Range 80.60 326 eP P 07 22 51.2 +1.3
I33A Coleman 80.62 342 P P 07 22 50.9 +1.3
baz=81
CCUT Cedar City 80.64 328 eP P 07 22 52.2 +2.0
EDW2 Edwards Air Fo 80.65 323 P P 07 22 51.6 +1.5
baz=81
K28A Ten Mile Ranch 80.66 339 P P 07 22 51.7 +1.7
baz=81,SNR=5.7
O20A White River Ci 80.72 333 P P 07 22 52.3 +1.8
baz=81,SNR=5.7
O20A White River Ci 80.72 333 eP P 07 22 51.9 +1.3
PHWY Pilot Hill 80.73 335 eP P 07 22 51.5 +0.8
SRU San Rafael 80.75 331 eP P 07 22 51.5 +0.8
SRU San Rafael 80.75 331 eP P 07 22 51.5 +0.8
I32A Karley and Nic 80.77 342 P P 07 22 51.1 +0.7
baz=81
BSC Santa Cruz Isl 80.79 322 P P 07 22 51.0 +0.2
baz=81
SPMN St. Paul 80.80 345 P P 07 22 51.1 +0.6
baz=81
SPMN St. Paul 80.80 345 eP P 07 22 50.7 +0.2
OSI Osito Adit 80.81 323 P P 07 22 52.0 +1.1
baz=81
OSI Osito Adit 80.81 323 eP P 07 22 53.3 +2.3
H34A Spellman Lake, 80.94 343 P P 07 22 52.1 +0.8
baz=81
LRMC Laurel Mountai 80.98 324 P P 07 22 52.4 +0.5
baz=81
J29A Okreek 80.98 340 P P 07 22 52.8 +1.1
baz=81,SNR=11
G36A St. Michael 81.01 345 P P 07 22 52.9 +1.2
baz=81
I31A Royce, Wessing 81.06 341 P P 07 22 52.9 +1.0
baz=81
P18A Preston Nutter 81.07 331 eP P 07 22 54.5 +1.9
P17A Butcher Ranch, 81.14 331 eP P 07 22 54.4 +1.6
SBC Santa Barbara 81.18 322 P P 07 22 52.8 0.0
baz=82
I30A Oacoma 81.19 340 P P 07 22 53.4 +0.7
baz=82
H33A Prehn Over Nor 81.19 342 P P 07 22 53.1 +0.4
baz=82,SNR=7.0
H32A Carlson Farm, 81.21 342 P P 07 22 53.4 +0.7

baz=82
**J28A Allard Ranch,** 81.27 339 P P 07 22 54.6 +1.5
baz=82,SNR=8.4
**J27A Elkhorn Farm,** 81.34 338 P P 07 22 55.3 +1.6
baz=82,SNR=8.1
**MPMC Manual Prospec** 81.35 324 P P 07 22 55.2 +1.2
baz=82
**FURC Furnace Creek,** 81.37 325 P P 07 22 55.7 +1.9
baz=82,SNR=5.9
**G34A Benson** 81.45 343 P P 07 22 55.2 +1.1
baz=82
**H31A Wolsey** 81.46 341 P P 07 22 54.6 +0.5
baz=82
**TPNV Topopah Spring** 81.47 326 eP P 07 22 56.3 +1.8
**TPNV Topopah Spring** 81.47 326 P P 07 22 56.0 +1.4
baz=82,SNR=8.8
**TPNV Topopah Spring** 81.47 326 eP P 07 22 56.3 +1.8
**ISA Isabella** 81.52 323 eP P 07 22 56.4 +1.7
**ISA Isabella** 81.52 323 P P 07 22 56.5 +1.7
baz=82,SNR=7.7
**ISA Isabella** 81.52 323 eP P 07 22 56.4 +1.7
**I29A Vivian Onida** 81.54 340 P P 07 22 55.3 +0.7
baz=82
**F36A Milaca** 81.56 345 P P 07 22 54.6 +0.1
baz=82,SNR=6.9
**DAC Darwin (Calif)** 81.57 324 eP P 07 22 56.5 +1.4
**DAC Darwin (Calif)** 81.57 324 eP P 07 22 56.5 +1.4
**PKM Peak Mountain** 81.59 322 P P 07 22 56.7 +1.5
baz=82,SNR=7.9
**J26A Sides Ranch, S** 81.73 338 P P 07 22 57.0 +1.3
baz=82
**I28A Midland** 81.77 339 P P 07 22 57.2 +1.4
baz=82,SNR=5.6
**F35A Swanville** 81.79 344 P P 07 22 56.2 +0.4
baz=82
**F34A Alexandria** 81.89 344 P P 07 22 56.8 +0.5
baz=82
**G32A Webster** 81.92 342 P P 07 22 57.6 +1.1
baz=82
**VES Vestal, Richgr** 81.96 323 P P 07 22 58.7 +1.7
baz=82,SNR=6.2
**E37A Wrenshall** 82.00 346 P P 07 22 59.1 +2.2
baz=82
**SMMC Simmler** 82.01 322 P P 07 22 58.9 +1.6
baz=82
**J25A Sunshine Ranch** 82.03 337 P P 07 22 58.7 +1.4
baz=82
**H29A Onida** 82.07 340 P P 07 22 58.0 +0.7
baz=82,SNR=5.7
**O16A Springville** 82.08 331 eP P 07 22 53.0 -4.7
**NLU North Lily Min** 82.10 330 eP P 07 22 59.6 +1.7
**I27A Quinn** 82.10 339 P P 07 22 58.8 +1.2
baz=82
**E36A McGregor** 82.13 345 P P 07 22 58.3 +0.8
baz=82,SNR=5.3
**SEK Senekal** 82.16 119 eP P 07 22 57.8 -0.8
SEK IAmb IAmb 07 22 59.0
comp=Z,63nm,1.6s
**F33A 5 Mile Ranch,** 82.17 343 P P 07 22 58.3 +0.6
baz=82
**G30A Faulkton** 82.24 341 P P 07 22 59.1 +0.9
baz=83
**K22A Casper** 82.29 335 P P 07 23 00.0 +1.3
baz=83
**R11A Troy Canyon, C** 82.30 327 P P 07 23 00.4 +1.5
baz=83,SNR=13
**R11A Troy Canyon, C** 82.30 327 eP P 07 23 00.4 +1.5
comp=Z,41nm,1.6s
R11A epP pP 07 23 09.2 +1.4
**I26A New Underwood** 82.31 338 P P 07 23 00.0 +1.3
baz=83
**H28A Mission Ridge** 82.35 340 P P 07 22 59.8 +1.0
baz=83,SNR=6.6
**LBTB Lobatse** 82.48 115 eP P 07 23 00.2 0.0
LBTB IAmb IAmb 07 23 01.3
comp=Z,59nm,1.2s
LBTB IAMs_20 IAMs_20 07 57 40.0
comp=Z,792nm,17.5s
**G29A Hoven** 82.51 341 P P 07 23 00.3 +0.7
baz=83,SNR=6.1
**I25A Rochford** 82.58 338 P P 07 23 01.1 +0.9
baz=83,SNR=5.4
**DUG Dugway** 82.61 330 eP P 07 23 01.5 +1.1
**DUG Dugway** 82.61 330 P P 07 23 01.7 +1.3
baz=83,SNR=8.3
**DUG Dugway** 82.61 330 eP P 07 23 01.5 +1.1
**H27A Howes** 82.62 339 P P 07 23 01.1 +0.9
baz=83,SNR=5.0
**F31A Hecla** 82.68 342 P P 07 23 01.0 +0.5
baz=83,SNR=5.8
**G28A Parade** 82.68 340 P P 07 23 01.6 +1.0
baz=83,SNR=8.8
**TCUT Toone Canyon** 82.81 331 eP P 07 23 03.0 +1.4
comp=Z,25nm,1.2s
TCUT epP pP 07 23 13.1 +2.6
**D35A Remer** 82.83 345 P P 07 23 01.9 +0.7
baz=83
**F30A Leola** 82.86 341 P P 07 23 02.3 +0.9
baz=83
**C38A Sawbill Land.** 82.89 347 P P 07 23 02.1 +0.6
baz=83
**MTUM Tungsten Hills** 82.90 324 eP P 07 23 04.3 +2.2
**F29A Eureka** 83.07 341 P P 07 23 03.3 +0.8
baz=83,SNR=6.6
**H25A Fruitdale** 83.07 338 P P 07 23 03.5 +0.8
baz=83
**D34A Park Rapids** 83.09 344 P P 07 23 03.2 +0.7
baz=83
**EYMN Ely** 83.15 347 P P 07 23 03.4 +0.6
baz=84
**C36A Pine Crest Far** 83.23 346 P P 07 23 03.7 +0.5
baz=84
**E31A Nome** 83.23 342 P P 07 23 03.8 +0.5
baz=84
**MLAC Mammoth Lakes** 83.25 324 P P 07 23 04.0 +0.1
baz=84
**G27A Dupree** 83.25 339 P P 07 23 03.9 +0.4
baz=84,SNR=7.0
**HWUT Hardware Ranch** 83.28 331 eP P 07 23 04.2 +0.2
**D33A AnnSam, Waubun** 83.29 344 P P 07 23 03.7 +0.2
baz=84
**F28A McLaughlin** 83.36 340 P P 07 23 04.5 +0.5
baz=84,SNR=7.7
**G26A Maurine** 83.37 339 P P 07 23 04.3 +0.2
baz=84
**C35A Jirik Farms, M** 83.41 345 P P 07 23 04.1 0.0
baz=84
**E30A Jud** 83.44 342 P P 07 23 04.5 +0.1
baz=84
**BW06 Boulder Array** 83.50 333 eP P 07 23 05.4 +0.4
**G25A Newell** 83.53 338 P P 07 23 05.7 +0.7
baz=84,SNR=8.8
**C34A RKJ Ranch, Bem** 83.56 345 P P 07 23 05.3 +0.4
baz=84
**D32A Dogwood Acres,** 83.56 343 P P 07 23 05.4 +0.5
baz=84
**NVAR Mina Array Bea** 83.63 325 P P 07 23 06.6 +0.8
comp=Z,2.4nm,0.7s,baz=156,slow=6.0,SNR=21
NVAR pP pP 07 23 13.7 -1.1
comp=Z,1.9nm,0.6s,baz=152,slow=5.7,SNR=10.0
NVAR LR LR 07 53 33.4
comp=Z,224nm,21.6s,baz=128,slow=31
**D31A Mcclaflin, Tow** 83.65 343 P P 07 23 06.1 +0.7
baz=84,SNR=10
**E29A Napoleon** 83.70 341 P P 07 23 06.1 +0.3
baz=84
**F27A Lemmon** 83.73 339 P P 07 23 06.0 +0.1
baz=84,SNR=9.3
**C33A Trail** 83.85 344 P P 07 23 07.1 +0.7
baz=84
**F26A Lodgepole** 83.90 339 P P 07 23 07.4 +0.6
baz=84
**D30A Buchanan** 83.97 342 P P 07 23 08.0 +0.9
baz=84,SNR=6.8
**B35A Bob, Littlefor** 83.98 346 P P 07 23 07.5 +0.4
baz=84
**E28A Huff** 83.99 341 P P 07 23 08.3 +1.1
baz=84,SNR=5.6
**AHID Auburn Hatcher** 84.08 332 eP P 07 23 08.2 +0.2
**SLR Silverton** 84.09 117 eP P 07 23 08.0 -0.6
SLR IAmb IAmb 07 23 09.3
comp=Z,26nm,1.1s
SLR IAMs_20 IAMs_20 08 05 49.7
comp=Z,819nm,16.2s
**ELK Elko** 84.10 329 eP P 07 23 09.1 +0.9
**ELK Elko** 84.10 329 eP P 07 23 09.1 +0.9
**D29A Pettibone, Tap** 84.14 342 P P 07 23 08.2 +0.3
baz=84
**TOA0 Torodi Ar. Sit** 84.19 70 eP P 07 23 06.7 -2.3
**TOA0 Torodi Ar. Sit** 84.19 70 eP P 07 23 08.8 -0.1
**TORD Torodi Ar. Bea** 84.19 70 P P 07 23 08.8 -0.2
comp=Z,26nm,0.9s,baz=258,slow=4.3,SNR=92
TORD pP pP 07 23 17.0 -0.8
comp=Z,13nm,0.8s,baz=249,slow=5.0,SNR=12
TORD LR LR 07 59 05.8
comp=Z,195nm,18.7s,baz=245,slow=35
**F25A Bowman** 84.20 339 P P 07 23 08.4 0.0
baz=85
**B34A Aery, Baudette** 84.30 345 P P 07 23 08.9 +0.2
baz=85
**CMB Columbia Colle** 84.32 324 eP P 07 23 10.9 +1.7
**CMB Columbia Colle** 84.32 324 eP P 07 23 10.9 +1.7
**C31A Landman Farms,** 84.35 343 P P 07 23 09.2 +0.2
baz=85,SNR=6.7
**AGMN Agassiz Nation** 84.38 344 eP P 07 23 09.0 -0.1
**E26A Carlson Angus** 84.40 339 P P 07 23 10.0 +0.7
baz=85,SNR=6.5
**C30A Mose, Pekin** 84.45 342 P P 07 23 10.5 +1.0
baz=85,SNR=10
**REDW Red Top Meadow** 84.50 333 eP P 07 23 10.5 +0.3
**D28A Regan** 84.52 341 P P 07 23 10.8 +0.9
baz=85
**SNOW Snow King Moun** 84.54 333 eP P 07 23 11.7 +1.2
**LOHW Long Hollow** 84.61 333 eP P 07 23 11.1 +0.3
**B32A Ashes, Strandq** 84.63 344 P P 07 23 11.5 +1.1
baz=85
**TPAW Teton Pass** 84.64 333 eP P 07 23 12.1 +1.1
**D27A Center** 84.71 340 P P 07 23 11.6 +0.7
baz=85
**MOOW Moose Ponds** 84.78 333 eP P 07 23 11.7 +0.1
**FXWY Fox Creek** 84.80 333 eP P 07 23 11.9 +0.3
**MDND Maddock** 84.87 342 P P 07 23 12.4 +0.8
baz=85,SNR=6.2
**MDND Maddock** 84.87 342 eP P 07 23 12.0 +0.4
**A33A Warroad** 84.88 345 P P 07 23 12.2 +0.6
baz=85
**D26A Manning** 84.90 340 P P 07 23 12.8 +0.9
baz=85,SNR=5.8
**B31A Greenbush Farm** 84.92 343 P P 07 23 12.2 +0.4
baz=85,SNR=6.9
**C28A Hausauer Farms** 84.95 341 P P 07 23 12.7 +0.7
baz=85
**IMW Indian Meadow** 84.98 333 eP P 07 23 13.1 +0.4
**FLWY Flagg Ranch** 85.05 333 eP P 07 23 13.7 +0.8
**B30A Myrvik Farm, E** 85.11 343 P P 07 23 13.4 +0.6
baz=85,SNR=14
**C27A Sayler Ranch,** 85.26 341 P P 07 23 14.3 +0.7
baz=86
**D25A Fairfield** 85.27 339 P P 07 23 14.4 +0.7
baz=86
**A31A Linda, St. Vin** 85.28 344 P P 07 23 14.8 +1.2
baz=86
**B29A Wagenman Farm,** 85.38 342 P P 07 23 15.5 +1.4
baz=86,SNR=5.9
**B28A Dugan Ranch, T** 85.62 342 P P 07 23 16.3 +0.9
baz=86
**YMR Madison River** 85.65 333 eP P 07 23 17.1 +1.3
**LAO LASA Array** 85.75 337 P P 07 23 17.1 +0.9
baz=86
**LAO LASA Array** 85.75 337 eP P 07 23 16.3 +0.2
LAO epP pP 07 23 25.7 +0.7
**A29A Manning Farm,** 85.77 342 P P 07 23 16.8 +0.7
baz=86,SNR=5.5
**NSHM Saint Helena R** 85.81 323 eP P 07 23 17.0 +0.5
**QLMT Earthquake Lak** 85.96 333 eP P 07 23 17.8 +0.4
comp=Z,1.3nm,1.0s
QLMT esP sP 07 23 29.7 +0.2
**A28A Rude Farm, Bot** 86.02 342 P P 07 23 18.4 +1.1
baz=86
**HLID Hailey** 86.07 331 P P 07 23 19.1 +1.2
baz=86
**HLID Hailey** 86.07 331 eP P 07 23 19.1 +1.2
**ULM Lac du Bonnet** 86.22 345 P P 07 23 18.6 +0.3
comp=Z,7.2nm,0.9s,baz=186,slow=3.4,SNR=7.0
**B25A Knox Farm, Ray** 86.23 340 P P 07 23 19.6 +1.1
baz=87
**A26A Wade Farm, Ken** 86.48 341 P P 07 23 20.7 +1.1
baz=87
**MCMT McKenzie Canyo** 86.50 332 eP P 07 23 21.3 +1.2
**MFID Camas Ranch** 86.54 330 eP P 07 23 21.0 +0.8
MFID epP pP 07 23 29.8 +0.7
**DGMT Dagmar** 86.71 339 P P 07 23 21.9 +1.1
baz=87
**DGMT Dagmar** 86.71 339 eP P 07 23 21.4 +0.7
**BOZ Bozeman (W)** 86.73 333 eP P 07 23 21.2 +0.1
**BOZ Bozeman (W)** 86.73 333 P P 07 23 21.6 +0.5
baz=87
**BOZ Bozeman (W)** 86.73 333 eP P 07 23 21.1 +0.1
**O03D Paynes Creek** 86.77 324 P P 07 23 22.5 +1.1
baz=87
**A25A Svangstu Ranch** 86.82 340 P P 07 23 22.7 +1.4
baz=87
**DLMT Dillon** 86.85 333 eP P 07 23 23.2 +1.5
**LRM Limekiln Ridge** 87.19 333 eP P 07 23 24.6 +1.2
**MOD Modoc** 87.31 326 eP P 07 23 25.9 +1.9
**MSNA Messina** 87.33 115 eP P 07 23 23.9 -0.7
MSNA IAmb IAmb 07 23 59.0
comp=Z,20nm,1.1s
**WDC Whiskeytown Da** 87.35 324 eP P 07 23 24.1 +0.1
**WDC Whiskeytown Da** 87.35 324 eP P 07 23 24.1 +0.1
**J08A Circle Bar Ran** 87.63 328 eP P 07 23 26.8 +1.3
**HRY Holter Researc** 87.70 334 eP P 07 23 25.9 +0.1
comp=Z,25nm,1.6s
**N02D Trinity Center** 87.73 324 P P 07 23 26.7 +0.7
baz=88
**M04C Macdoel** 87.93 325 P P 07 23 28.4 +1.4
baz=88
**EGMT Eagleton** 88.09 336 P P 07 23 28.9 +1.4
baz=88
**M02C Callahan** 88.12 324 P P 07 23 28.7 +0.9
baz=88
**BMO Blue Mountains** 88.32 330 eP P 07 23 30.0 +1.3
**SCHQ Schefferville** 88.33 3 P P 07 23 28.1 -0.3
comp=Z,2.7nm,0.6s,baz=164,slow=7.7,SNR=5.9
**CHMT Chamberlain Mo** 88.40 333 eP P 07 23 29.5 +0.3
comp=Z,3.1nm,1.4s
**LSZ Lusaka** 89.96 108 eP P 07 23 37.7 +0.5
LSZ e*PP pP 07 23 46.8 +0.6
LSZ pmax pmax
comp=Z,18nm,1.3s
**LSZ Lusaka** 89.96 108 eP P 07 23 37.7 +0.5
comp=Z,18nm,1.3s
LSZ epP pP 07 23 46.8 +0.6
**TAM Tamanrasset** 92.78 64 eP P 07 23 50.0 -0.1
TAM e*PP pP 07 23 58.5 -0.5
TAM pmax pmax
comp=Z,16nm,1.4s
**TAM Tamanrasset** 92.78 64 eP P 07 23 50.0 -0.1
comp=Z,16nm,1.4s
TAM epP pP 07 23 58.5 -0.5
**ESDC Sonseca Array** 96.45 46 LR LR 08 06 27.5
comp=Z,362nm,19.5s,baz=240,slow=35
**DZM Mont Dzumac** 101.34 234 eLR LR 07 57 42.1
comp=Z,609nm,28.8s
**GERES GERESS Array B** 112.02 45 PKiKP PKiKP 07 29 11.6 -0.6
comp=Z,0.8nm,0.8s,baz=48,slow=2.0,SNR=3.6
**CLL Collm** 112.70 43 ePS PS 07 39 48.0 +12
CLL LmV 08 12 00.0
comp=Z,400nm,21.9s
**PRU Pruhonice** 113.01 44 AMS AMS 08 16 40.0
**GOPC GO Pecny, Ondr** 113.12 45 AMS AMS 08 17 20.0
**ILAR Eielson Array** 113.93 333 PKiKP PKiKP 07 29 15.3 +0.1
comp=Z,0.5nm,0.9s,baz=162,slow=0.3,SNR=5.1
**COLA College** 114.34 333 i PKiKP PKPdf 07 29 15.3 -0.6
**UZH Uzhgorod** 117.14 48 ePKiKP PKPdf 07 29 28.5 +6.7
UZH e 07 29 36.9
**KOLS Kolonicke sedl** 117.24 48 eP Pdif 07 25 30.0 -8.7
KOLS e 07 29 18.9
**KOLS Kolonicke sedl** 117.24 48 e Pdif 07 25 30.0 -8.7
**KOLS Kolonicke sedl** 117.24 48 ePKP PKPdf 07 29 18.9 -3.2
**ASAR Alice Springs** 117.77 207 PKP PKPdf 07 29 22.9 -1.2
comp=Z,1.1nm,0.9s,baz=127,slow=1.6,SNR=8.2
ASAR PKKPab PKKPbc 07 39 47.6 +3.2
comp=Z,0.4nm,0.8s,baz=340,slow=3.4,SNR=6.5
**WRA Warramunga Arr** 120.96 209 PKP PKPdf 07 29 29.2 -1.1
comp=Z,1.6nm,0.4s,baz=159,slow=1.8,SNR=27
**WRAB Tennant Creek** 120.96 209 PKiKP PKPdf 07 29 29.0 -1.2
**BRTR Keskin Array B** 121.77 61 PKP PKPdf 07 29 30.8 -0.5
comp=Z,2.3nm,0.7s,baz=192,slow=3.5,SNR=13
**KIEV Kiev** 122.06 47 ePKiKP PKPdf 07 29 30.2 -1.0
**KIEV Kiev** 122.06 47 ePKPdf PKPdf 07 29 30.2 -1.0
**AKASG Malin Array Be** 122.07 47 PKP PKPdf 07 29 29.9 -1.3
comp=Z,2.9nm,0.7s,baz=261,slow=3.1,SNR=11
AKASG PP PP 07 31 08.9 +2.3
comp=Z,1.1nm,0.8s,baz=250,slow=8.2,SNR=4.5
**FINES FINESS Array B** 122.81 34 PKP PKPdf 07 29 31.4 -0.9
comp=Z,3.3nm,0.9s,baz=358,slow=7.0,SNR=2.9
**ARCES ARCESS Array B** 123.81 25 PKP PKPdf 07 29 33.3 -0.8
comp=Z,1.7nm,0.7s,baz=325,slow=1.9,SNR=7.1
**H11S2 WAKE ISLAND Hyl** 125.70 269 T T 09 48 43.1
baz=118,slow=74,SNR=37
**H11S1 WAKE ISLAND Hyl** 125.71 269 T T 09 48 43.5
baz=118,slow=74,SNR=30
**H11S3 WAKE ISLAND Hyl** 125.72 269 T T 09 48 39.1
baz=118,slow=74,SNR=16
**ANN Anapa** 125.93 56 i PKIKP PKPdf 07 29 37.1 -1.7
ANN pmax pmax
comp=Z,30nm,1.4s
**H11N3 WAKE ISLAND Hyl** 126.11 271 T T 09 48 59.9
baz=116
**H11N1 WAKE ISLAND Hyl** 126.12 271 T T 09 49 01.2
baz=116,slow=74
**H11N2 WAKE ISLAND Hyl** 126.12 271 T T 09 49 03.2
baz=116,slow=74
**OBN Obninsk** 127.29 43 i PKIKP PKPdf 07 29 40.6 -0.5
OBN e 07 29 52.2
OBN pmax pmax
comp=Z,40nm,1.9s
OBN MLR MLR
comp=Z,255nm,18.0s
**KLMR Klimovskoe** 129.23 36 ePKIKP PKPdf 07 29 43.7 -0.9
KLMR pmax pmax
comp=Z,36nm,1.3s
**KIV Kislovodsk** 129.41 58 i PKIKP PKPdf 07 29 44.3 -1.4
KIV ePS PS 07 41 59.4 -6.3
KIV pmax pmax
comp=Z,14nm,1.1s
KIV MLR MLR
comp=Z,206nm,21.0s
**KBZ Khabaz** 129.52 58 PKP PKPdf 07 29 47.0 +1.3
comp=Z,2.1nm,0.9s,baz=194,slow=4.2,SNR=3.7
**BILL Bilibino** 132.57 334 i PKIKP PKPdf 07 29 52.2 +1.4
BILL pmax pmax
comp=Z,11nm,1.3s
BILL MLR MLR
comp=Z,179nm,19.0s
**SEY Seymchan** 139.77 330 i PKIKP PKPdf 07 30 04.4 +0.1
**GEYT Alibeck** 139.83 69 PKP PKPdf 07 30 04.4 -0.9
comp=Z,2.1nm,0.3s,baz=283,slow=4.0,SNR=3.9
**AB31 Akbulak array** 141.58 52 PKHKP PKPpre 07 30 01.3
AB31 pmax pmax
comp=Z,9.0nm,0.9s
**ABKAR Akbulak array** 141.58 52 ePKPdf PKPpre 07 30 02.6
ABKAR eSKPbc SKPbc 07 33 43.5 +0.3
ABKAR eSKPab SKPab 07 33 56.7 -0.9
**POO Poona** 146.09 108 ||| iP PKPdf 07 30 16.0 -0.9
comp=Z,70nm,1.0s
**URV Uravakonda** 146.60 117 ePKPab PKPab 07 30 20.0 -0.4
**BRVK Borovoye** 147.06 43 ePKIKP PKPdf 07 30 17.6 +0.2
**BRVK Borovoye** 147.06 43 ePKPdf PKPdf 07 30 17.6 +0.2
**BVA0 Borovoye Array** 147.14 43 i PKP2 PKPdf 07 30 18.6 +1.0
BVA0 pmax pmax
comp=Z,18nm,1.1s
**KUR Kuril'sk** 147.38 303 i PKP2 PKPab 07 30 24.0 +1.4
KUR i PPP PPP 07 37 22.8
**VOSK Vostochnaya** 147.58 43 PKIKP PKPdf 07 30 18.0 -0.3
VOSK pmax pmax
comp=Z,24nm,0.9s
**SKHT Srikalahasti** 147.60 121 ePKPbc PKPbc 07 30 21.8 -0.4
**KLRI Killari** 147.99 111 ePKPbc PKPbc 07 30 22.6 -0.6
**RCLA Racherla** 148.19 118 ePKPbc PKPbc 07 30 23.5 -0.2
**DZET Dzherino** 148.28 69 PKIKP PKPdf 07 30 21.7 +1.6
DZET pmax pmax
comp=Z,22nm,0.6s
**YAK Yakutsk** 148.46 340 ePKP2 PKPbc 07 30 21.9 -1.1
YAK pmax pmax
comp=E,6.0nm,1.8s
YAK pmax pmax
comp=N,5.0nm,1.1s
YAK pmax pmax
comp=Z,48nm,0.9s
**YUK Yuzh-Kuril'sk** 148.94 301 i PKIKP PKPdf 07 30 21.5 +0.7
**HYB Hyderabad** 149.11 114 i PKP PKPdf 07 30 21.5 -0.4
HYB e 07 30 25.0
HYB e 07 30 30.0
HYB e 07 30 35.0
**HYBB Hyderabad (bro** 149.11 114 ePKPdf PKPdf 07 30 22.0 +0.1
HYBB ePKiKP PKiKP 07 30 26.8 -0.5
**NJS Nagarjunasagar** 149.14 117 ePKPbc PKPbc 07 30 24.9 -1.2
**KK31 Karatay Array** 149.48 61 i PKP2 PKPbc 07 30 26.0 -0.3
KK31 pmax pmax
comp=Z,7.0nm,0.6s
**KKAR Karatay Array** 149.48 61 ePKHKP PKPdf 07 30 22.0 +0.3
**KKAR Karatay Array** 149.48 61 ePKPdf PKPdf 07 30 22.0 +0.3
KKAR ePKPbc PKPbc 07 30 26.2 0.0
**NKL Nikolayevsk** 149.67 320 ePKP2 PKPbc 07 30 26.0 -0.3
**OTUK Ortayu** 149.82 51 PKHKP PKPpre 07 30 23.3
OTUK pmax pmax
comp=Z,42nm,1.2s
**SRSP Sriramsagar** 149.84 112 ePKiKP PKPbc 07 30 28.2 +0.4
**YSS Yuzh-Sakhalins** 150.58 307 ePKPbc PKPbc 07 30 28.2 -0.5
YSS e 07 30 38.0
YSS pmax pmax
comp=Z,20nm,0.8s
**MNAS Manas** 151.00 62 PKIKP PKPdf 07 30 24.9 +0.6
MNAS pmax pmax
comp=Z,30nm,1.5s
**PVM Polavaram** 151.29 118 ePKPab PKPab 07 30 38.3 -1.0
**EKS2 Erkin-Say** 151.92 61 ePKIKP PKPdf 07 30 26.3 +0.6
EKS2 e 07 30 33.1
EKS2 e 07 30 41.6
**EKS2 Erkin-Say** 151.92 61 ePKPdf PKPdf 07 30 26.3 +0.6
EKS2 ePKPbc PKiKP 07 30 33.1 +0.6
EKS2 ePKPab PKPab 07 30 41.6 +0.1
**SFK Sufi-Kurgan** 151.92 67 PKIKP PKPbc 07 30 31.5 -0.9
SFK pmax pmax
comp=Z,46nm,0.8s
**AAK Ala-Archa** 152.44 61 ePKIKP PKPdf 07 30 27.1 +0.6
AAK e 07 30 34.4
**AAK Ala-Archa** 152.44 61 ePKPdf PKPdf 07 30 27.1 +0.6
AAK ePKPbc PKiKP 07 30 34.4 +0.8
**FRU Bishkek** 152.51 61 ePKIKP PKPbc 07 30 34.0 +0.6
FRU pmax pmax
comp=Z,72nm,2.0s
**NVS Novosibirsk** 152.76 32 ePKIKP PKPdf 07 30 26.6 +0.3
NVS pmax pmax
comp=Z,44nm,1.2s
**TKM2 Tokmak 2** 153.21 60 ePKIKP PKPdf 07 30 27.9 +0.2
TKM2 e 07 30 35.9
TKM2 e 07 30 45.8
**TKM2 Tokmak 2** 153.21 60 ePKPdf PKPdf 07 30 27.9 +0.2
TKM2 ePKPbc PKiKP 07 30 35.9 +0.6
TKM2 ePKPab PKPab 07 30 45.8 -1.2
**KSH Kashi** 153.84 68 ePKPbc PKPdf 07 30 29.5 +0.9
KSH esPKP 07 30 44.0
KSH SKS SKSdf 07 37 31.8 -1.8
KSH PPMZ
comp=Z,170nm,5.9s
KSH LN
comp=Z,270nm,5.3s
KSH LE
comp=Z,200nm,6.8s
KSH LZ
comp=Z,200nm,5.3s
**ZALV Zalesovo Beam** 154.04 32 PKP PKPdf 07 30 28.1 -0.1
comp=Z,3.9nm,0.8s,baz=282,slow=2.9,SNR=14
ZALV PKPbc PKPbc 07 30 36.1 -0.2
comp=Z,16nm,0.7s,baz=290,slow=3.4,SNR=29
ZALV PKPab PKPab 07 30 47.5 -2.4
comp=Z,10nm,0.6s,baz=305,slow=3.1,SNR=8.3
**BOD Bodaibo** 155.56 352 ePKP2 PKPab 07 30 53.5 -2.6
BOD pmax pmax
comp=Z,14nm,1.1s
**MK31 Makanchi Array** 156.65 48 i PKIKP PKPdf 07 30 31.6 -0.4
MK31 pmax pmax
comp=Z,4.0nm,1.1s
**MKAR Makanchi Array** 156.65 48 PKP PKPdf 07 30 32.6 +0.5
comp=Z,2.8nm,0.9s,baz=291,slow=1.0,SNR=14
MKAR PKPab PKPab 07 31 01.1 -0.2
comp=Z,3.6nm,0.6s,baz=278,slow=3.6,SNR=10
**MDJ Mudanjiang** 160.02 309 PKP PKPdf 07 30 36.8 +0.7
**WMQ Urumqi** 161.37 51 PKP PKPdf 07 30 37.0 -0.7
WMQ PP PP 07 35 08.0 +2.5
WMQ SKS SKSdf 07 37 37.0 -3.8
WMQ SKKS SKKSac 07 41 50.0 -1.8
WMQ SS SS 07 55 20.0 -0.1

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| WMQ | | | | | PPMZ | | | |
| | comp=Z,45nm,12.0s | | | | | | | |
| WMQ | | | | | LN | | | |
| | comp=Z,190nm,25.0s | | | | | | | |
| WMQ | | | | | LE | | | |
| | comp=Z,210nm,25.0s | | | | | | | |
| WMQ | | | | | LZ | | | |
| | comp=Z,230nm,26.0s | | | | | | | |
| **ZAK** | **Zakamensk** | **163.03** | **10** | *e*PKP2 | **PKPab** | 07 31 29.2 | +0.3 | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,1.9s | | | | | | | |
| ZAK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,1.8s | | | | | | | |
| **CN2** | **Changchun** | **163.04** | **311** | *e*PKP | **PKPdf** | 07 30 38.0 | -1.3 | |
| CN2 | | | | *ep*PKP | **pPKPdf** | 07 30 48.0 | -0.5 | |
| CN2 | | | | *e*PP | **PP** | 07 35 16.5 | +2.3 | |
| CN2 | | | | *e*SS | SS | 07 55 37.0 | -0.2 | |
| CN2 | | | | PPMZ | | | | |
| | comp=Z,100nm,8.0s | | | | | | | |
| CN2 | | | | LN | | | | |
| | comp=Z,800nm,20.0s | | | | | | | |
| CN2 | | | | LE | | | | |
| | comp=Z,900nm,20.0s | | | | | | | |
| CN2 | | | | LZ | | | | |
| | comp=Z,1μm,22.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **163.13** | **150** | *e*PKIKP | **PKPdf** | 07 30 38.0 | -2.2 | |
| **CHTO** | **Chiang Mai** | **163.13** | **150** | *e*PKPdf | **PKPdf** | 07 30 38.0 | -2.2 | |
| **QIZ** | **Qiongzhong** | **165.25** | **187** | PKP | **PKPdf** | 07 30 39.5 | -2.5 | |
| QIZ | | | | SS | SS | 07 55 59.5 | +1.5 | |
| QIZ | | | | LZ | | | | |
| | comp=Z,130nm,24.9s | | | | | | | |
| **SONM** | **Songino Array** | **165.87** | **4** | PKP | **PKPdf** | 07 30 41.3 | -0.6 | |
| | comp=Z,0.5nm,0.7s,baz=284,slow=3.6,SNR=3.7 | | | | | | | |
| SONM | | | | PKPab | **PKPab** | 07 31 42.7 | +1.2 | |
| | comp=Z,2.0nm,0.8s,baz=338,slow=4.1,SNR=7.5 | | | | | | | |
| SONM | | | | PP | **PP** | 07 35 29.1 | +0.9 | |
| | comp=Z,0.4nm,0.5s,baz=353,slow=4.5,SNR=3.8 | | | | | | | |
| **KMI** | **Kunming** | **170.32** | **151** | PKP | **PKPdf** | 07 30 45.3 | -0.4 | |
| **NJ2** | **Nanjing** | **170.62** | **263** | *e*PKP | **PKPdf** | 07 30 46.0 | +0.6 | |
| **BJI** | **Beijing** | **170.85** | **316** | PKP | **PKPdf** | 07 30 46.0 | +0.8 | |
| BJI | | | | SS | SS | 07 57 00.3 | +4.5 | |
| BJI | | | | LN | | | | |
| | comp=Z,270nm,24.3s | | | | | | | |
| BJI | | | | LE | | | | |
| | comp=Z,260nm,24.7s | | | | | | | |
| BJI | | | | LZ | | | | |
| | comp=Z,300nm,24.3s | | | | | | | |
| **GTA** | **Gaotai** | **171.40** | **47** | *e*PKP | **PKPdf** | 07 30 46.5 | +0.8 | |
| GTA | | | | pPKP | **pPKPdf** | 07 30 57.3 | +2.3 | |
| GTA | | | | sPKP | | 07 31 01.0 | | |
| GTA | | | | PKPab | **PKPab** | 07 32 07.8 | +1.4 | |
| GTA | | | | PP | **PP** | 07 36 00.0 | +2.8 | |
| GTA | | | | SKS | **SKSdf** | 07 37 44.5 | -2.8 | |
| GTA | | | | SKKS | **SKKSac** | 07 42 41.8 | -0.4 | |
| GTA | | | | SS | **SS** | 07 56 59.3 | -2.4 | |
| GTA | | | | PPMZ | | | | |
| | comp=Z,94nm,6.9s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,200nm,18.5s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,160nm,16.1s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,280nm,18.5s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **172.32** | **339** | *e*PKP | **PKPdf** | 07 30 45.0 | -1.1 | |
| HHC | | | | PP | **PP** | 07 36 03.5 | +2.5 | |
| HHC | | | | SS | SS | 07 57 08.0 | -1.3 | |
| HHC | | | | PPMZ | | | | |
| | comp=Z,110nm,8.6s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,160nm,11.1s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,190nm,11.7s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,190nm,14.8s | | | | | | | |
| **GYA** | **Guiyang** | **172.67** | **171** | PKP | **PKPdf** | 07 30 46.0 | -0.7 | |
| GYA | | | | PKPab | **PKPab** | 07 32 14.5 | +2.4 | |
| GYA | | | | PKS | **PKSdf** | 07 34 17.8 | -1.4 | |
| GYA | | | | PP | **PP** | 07 36 06.5 | +4.0 | |
| GYA | | | | PPMZ | | | | |
| | comp=Z,150nm,8.5s | | | | | | | |
| **WHN** | **Wuhan** | **173.65** | **242** | PKP | **PKPdf** | 07 30 46.3 | -0.5 | |
| **CD2** | **Chengdu** | **175.52** | **128** | PKP | **PKPdf** | 07 30 47.3 | -0.2 | |
| CD2 | | | | pPKP | **pPKPdf** | 07 30 55.8 | -0.9 | |
| CD2 | | | | sPKP | | 07 30 59.0 | | |
| CD2 | | | | PP | **PP** | 07 36 17.0 | -0.4 | |
| CD2 | | | | SKS | **SKSdf** | 07 37 48.5 | -0.2 | |
| CD2 | | | | SKKS | **SKKSac** | 07 43 01.0 | -1.1 | |
| CD2 | | | | SS | **SS** | 07 57 41.5 | -0.3 | |
| CD2 | | | | PPMZ | | | | |
| | comp=Z,180nm,5.2s | | | | | | | |
| **LZH** | **Lanzhou** | **175.94** | **54** | *e*PKP | **PKPdf** | 07 30 47.3 | -0.3 | |
| LZH | | | | pPKP | **pPKPdf** | 07 30 55.5 | -1.3 | |
| LZH | | | | sPKP | | 07 30 59.8 | | |
| LZH | | | | SKKS | | 07 42 59.0 | | |
| LZH | | | | SS | **SS** | 07 57 40.0 | -6.2 | |
| LZH | | | | PPMZ | | | | |
| | comp=Z,290nm,5.3s | | | | | | | |
| LZH | | | | LN | | | | |
| | comp=Z,780nm,18.0s | | | | | | | |
| LZH | | | | LE | | | | |
| | comp=Z,590nm,15.7s | | | | | | | |
| LZH | | | | LZ | | | | |
| | comp=Z,910nm,19.6s | | | | | | | |
| **XAN** | **Xi'an** | **179.08** | **289** | PKP | **PKPdf** | 07 30 48.0 | +0.1 | |
| XAN | | | | pPKP | **pPKPdf** | 07 30 55.8 | -1.4 | |

*JMA **31** 07:24:31.7±0.4, 44°.00N×147°.92E, h0km, M4.0*
*SKHL **31** 07:24:31.2±0.5, 44°.40N×148°.21E, h39km±3km, mb4.2/4*

**ISC 31 07:24:28.8±2.9, 44°.36N±0°.09×148°.2E±0°.2, h7km±25km, n13, σ1°38/19, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUR** | **Kuril'sk** | **0.90** | **347** | *i* P | **Pg** | **07 24 45.7** | **-0.4** |
| KUR | | | | AMB | AMB | 07 24 46.4 | |
| | 20nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 07 24 46.4 | |
| | 8.0nm,0.2s | | | | | | |
| KUR | | | | AMB | AMB | 07 24 46.4 | |
| | 111nm,0.2s | | | | | | |
| KUR | | | | *i* S | **Sg** | **07 24 57.0** | **-0.8** |
| KUR | | | | A | A | 07 24 58.4 | |
| | 430nm,0.2s | | | | | | |
| KUR | | | | A | A | 07 24 58.4 | |
| | 540nm,0.2s | | | | | | |
| **SHO** | **Shikotan** | **1.07** | **244** | *e*P | **Pb** | **07 24 50.0** | **+0.4** |
| SHO | | | | AMB | AMB | 07 24 51.0 | |
| | 88nm,0.3s | | | | | | |
| SHO | | | | *i* S | **Sb** | **07 25 04.3** | **+0.5** |
| SHO | | | | A | A | 07 25 04.8 | |
| | 411nm,0.2s | | | | | | |
| SHO | | | | A | A | 07 25 04.8 | |
| | 714nm,0.2s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **1.68** | **260** | *i* P | **Pn** | **07 24 59.2** | **+0.6** |
| YUK | | | | AMB | AMB | 07 25 01.8 | |
| | 39nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 07 25 01.8 | |
| | 57nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 07 25 01.8 | |
| | 128nm,0.4s | | | | | | |
| YUK | | | | *i* S | **Sn** | **07 25 19.9** | **-0.4** |
| YUK | | | | A | A | 07 25 24.7 | |
| | 245nm,0.3s | | | | | | |
| YUK | | | | A | A | 07 25 24.7 | |
| | 151nm,0.3s | | | | | | |
| **NEM2** | **Nemuro 2** | **2.01** | **241** | P | **Pn** | **07 25 02.9** | **-0.1** |
| NEM2 | | | | *e*S | **Sn** | **07 25 25.6** | **-2.8** |
| **JRA** | **Rausu** | **2.23** | **260** | P | **Pn** | **07 25 07.6** | **+1.6** |
| **JNK** | **Nakash** | **2.60** | **254** | P | **Pn** | **07 25 12.3** | **+1.1** |
| JNK | | | | *e*S | **Sn** | **07 25 42.4** | **-0.6** |
| **JAK** | **Akkeshi** | **2.86** | **243** | P | **Pn** | **07 25 15.1** | **+0.4** |
| JAK | | | | *e*S | **Sn** | **07 25 47.3** | **-2.0** |
| **JAR** | **Ashorobuto** | **3.35** | **253** | P | **Pn** | **07 25 23.3** | **+1.8** |
| **JOB** | **Onbets** | **3.46** | **247** | P | **Pn** | **07 25 24.4** | **+1.4** |
| **JCH** | **Churui** | **3.90** | **245** | P | **Pn** | **07 25 29.8** | **+0.8** |
| **JNBK** | **Urakawa-nobuka** | **4.46** | **244** | P | **Pn** | **07 25 37.9** | **+1.2** |
| **YSS** | **Yuzh-Sakhalins** | **4.59** | **306** | *e*P | **Pn** | **07 25 39.7** | **+1.1** |
| YSS | | | | AMB | AMB | 07 25 43.3 | |
| | 8.0nm,0.3s | | | | | | |
| **JKB** | **Kayabe** | **5.77** | **247** | P | **Pn** | **07 25 56.2** | **+1.5** |

**IDC 31 07:47:57.2±4.2, 7°.43S×132°.10E, h0km, mb3.2/1,**
**mb1 3.3/3, mb1mx3.2/29, mbtmp3.1/3, ML3.2/2, Error ellipse: s-maj=293.0km s-min=32.4km az=74.0, Tanimbar Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **12.62** | **170** | Pn | Pn | 07 50 57.9 | -0.3 |
| | 0.1nm,0.3s,baz=350,slow=13,SNR=4.6 | | | | | | |
| WRA | | | | Sn | Sn | 07 53 08.5 | -11 |
| | 0.2nm,0.3s,baz=350,slow=25,SNR=5.0 | | | | | | |
| **ASAR** | **Alice Springs** | **16.23** | **174** | Pn | Pn | 07 51 47.2 | +0.3 |
| | 0.1nm,0.3s,baz=350,slow=9.1,SNR=4.4 | | | | | | |
| **MKAR** | **Makanchi Array** | **69.74** | **326** | P | P | 07 59 09.2 | 0.0 |
| | 0.1nm,0.4s,baz=136,slow=6.7,SNR=2.3 | | | | | | |

*GUC **31** 08:37:02.9±0.5, 21°.63S×68°.59W, h138km±8km, ML3.7*
*ISCJB **31** 08:37:03.0±0.9, 21°.66S±0°.05×68°.5W±0°.1, h135km±9km, mb3.6/6, Error ellipse: s-maj=22.9km s-min=7.3km az=11.2*
*IDC **31** 08:37:06.7±4.1, 21°.48S×68°.28W, h150km±33km, mb3.5/6, mb1 3.6/7, mb1mx3.5/16, mbtmp3.9/7, Error ellipse: s-maj=36.1km s-min=22.0km az=36.0*

**ISC 31 08:37:03.7±1.3, 21°.66S±0°.06×68°.5W±0°.1, h126km±11km, n15, σ0°55/21, mb3.8/6, 4C-2D, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PB01** | **IPOC Station P** | **1.13** | **303** | ⇑ *i* P | **Pn** | **08 37 27.5** | **-0.2** |
| PB01 | | | | *i* S | **Sn** | **08 37 45.8** | **0.0** |
| PB01 | | | | AML | AML | 08 37 48.5 | |
| | comp=E,1μm,0.2s | | | | | | |
| **PB07** | **IPOC Station P** | **1.32** | **267** | ⇑ *i* P | **Pn** | **08 37 29.7** | **-0.1** |
| PB07 | | | | *i* S | **Sn** | **08 37 49.5** | **0.0** |
| PB07 | | | | AML | AML | 08 37 51.5 | |
| | comp=N,2μm,0.4s | | | | | | |
| **PB06** | **IPOC Station P** | **1.46** | **224** | ⇑ *i* P | **Pn** | **08 37 31.5** | **+0.2** |
| PB06 | | | | *e*S | **Sn** | **08 37 52.8** | **+0.6** |
| PB06 | | | | AML | AML | 08 37 57.4 | |
| | comp=E,392nm,0.3s | | | | | | |
| **PB04** | **IPOC Station P** | **1.70** | **246** | ⇑ *i* P | **Pn** | **08 37 33.9** | **-0.1** |
| PB04 | | | | *i* S | **Sn** | **08 37 57.2** | **0.0** |
| PB04 | | | | AML | AML | 08 38 00.3 | |
| | comp=N,458nm,0.1s | | | | | | |
| **PB10** | **IPOC Station P** | **2.67** | **226** | ⇓ *i* P | **Pn** | **08 37 45.8** | **-0.1** |
| PB10 | | | | AML | AML | 08 38 33.1 | |
| | comp=E,276nm,0.2s | | | | | | |
| **MNMC** | **Minimini** | **2.73** | **337** | ⇓ *i* P | **Pn** | **08 37 46.7** | **-0.3** |
| MNMC | | | | *i* S | **Sn** | **08 38 20.2** | **0.0** |
| MNMC | | | | AML | AML | 08 38 22.1 | |
| | comp=E,674nm,0.3s | | | | | | |
| **PB13** | **IPOC Station P** | **3.45** | **343** | *e*P | **Pn** | **08 37 57.0** | **+0.4** |
| **LPAZ** | **La Paz** | **5.35** | **3** | P | **Pn** | **08 38 22.9** | **+0.8** |
| | comp=E,3.3nm,0.3s,baz=194,slow=18,SNR=89 | | | | | | |
| LPAZ | | | | S | **Sn** | **08 39 23.1** | **+0.1** |
| | baz=221,slow=19,SNR=1.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **60.99** | **325** | P | **P** | **08 47 04.3** | **+0.3** |
| | comp=E,0.2nm,0.6s,baz=146,slow=8.5,SNR=2.9 | | | | | | |
| **DBIC** | **Dimbokro** | **68.39** | **73** | P | **P** | **08 47 51.2** | **-1.0** |
| | comp=E,3.6nm,0.7s,baz=243,slow=6.8,SNR=4.5 | | | | | | |
| **ULM** | **Lac du Bonnet** | **75.59** | **342** | P | **P** | **08 48 33.3** | **-1.0** |
| | comp=E,1.9nm,0.6s,baz=172,slow=7.1,SNR=2.9 | | | | | | |
| **NVAR** | **Mina Array Bea** | **75.87** | **322** | P | **P** | **08 48 37.4** | **+0.9** |
| | comp=E,0.2nm,0.5s,baz=150,slow=7.3,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **77.02** | **70** | P | **P** | **08 48 42.6** | **-0.6** |
| | comp=E,0.6nm,0.3s,baz=251,slow=5.6,SNR=23 | | | | | | |
| **MAW** | **Mawson** | **84.06** | **163** | P | **P** | **08 49 20.6** | **+0.8** |
| | comp=E,1.4nm,1.1s,baz=225,slow=13,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **133.02** | **210** | PKP | **PKPdf** | **08 56 05.3** | **+0.3** |
| | comp=E,0.3nm,0.7s,baz=146,slow=2.0,SNR=3.0 | | | | | | |

*CSEM **31** 08:37:19.8±0.4, 36°.59N×30°.62E, h5km, MD2.9, Error ellipse: s-maj=8.8km s-min=4.7km az=145.0*
*ISCJB **31** 08:37:20.4±1.3, 36°.63N±0°.06×30°.55E±0°.06, h3km±7km, Error ellipse: s-maj=10.6km s-min=6.8km az=142.2*
*ISK **31** 08:37:20.0, 36°.63N×30°.59E, h11km, MD2.9*
*DDA **31** 08:37:22.9, 36°.82N×30°.62E, h7km, Md2.6*

**ISC 31 08:37:22.3±1.1, 36°.72N±0°.04×30°.54E±0°.03, h11km±8km, n36, σ0°85/44, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ANTB** | **Antalya** | **0.20** | **27** | *e*PG | **Pg** | **08 37 26.2** | **-0.3** |
| ANTB | | | | *e*SG | **Sg** | **08 37 30.6** | **+1.1** |
| **ANTB** | **Antalya** | **0.20** | **27** | *e*Pg | **Pg** | **08 37 26.2** | **-0.3** |
| ANTB | | | | *e*Sg | **Sg** | **08 37 30.6** | **+1.1** |
| **KORT** | **Korkueli** | **0.32** | **331** | *i* P | **Pg** | **08 37 28.6** | **-0.1** |
| KORT | | | | *i* S | **Sg** | **08 37 33.3** | **+0.3** |
| **KORT** | **Korkueli** | **0.32** | **331** | P | **Pg** | **08 37 28.6** | **-0.1** |
| KORT | | | | S | **Sg** | **08 37 33.3** | **+0.3** |
| **ELL** | **Elmali** | **0.51** | **273** | *e*PG | **Pg** | **08 37 31.5** | **-0.7** |
| **ELL** | **Elmali** | **0.51** | **273** | *e*Pg | **Pg** | **08 37 31.5** | **-0.7** |
| **BCK** | **Bucak** | **0.74** | **3** | *e*PG | **Pg** | **08 37 36.4** | **-0.2** |
| BCK | | | | *e*SG | **Sb** | **08 37 48.3** | **+0.9** |
| **BCK** | **Bucak** | **0.74** | **3** | *e*Pg | **Pg** | **08 37 36.4** | **-0.2** |
| BCK | | | | *e*Sg | **Sb** | **08 37 48.3** | **+0.9** |
| **SUTC** | **Sutluce-Ispart** | **0.84** | **26** | *e*PG | **Pg** | **08 37 37.4** | **-1.1** |
| **SUTC** | **Sutluce-Ispart** | **0.84** | **26** | *e*Pg | **Pg** | **08 37 37.4** | **-1.1** |
| **AKAS** | **Kas** | **0.90** | **237** | P | **Pn** | **08 37 42.5** | **+1.5** |
| AKAS | | | | S | **Sn** | **08 37 56.2** | **+2.1** |
| **GOLH** | **Golhisar** | **0.94** | **304** | *i* P | **Pn** | **08 37 41.1** | **-0.5** |
| **GOLH** | **Golhisar** | **0.94** | **304** | P | **Pn** | **08 37 41.1** | **-0.5** |
| **ISP** | **Isparta** | **1.10** | **359** | *e*PN | **Pn** | **08 37 43.6** | **-0.2** |
| **ISP** | **Isparta** | **1.10** | **359** | *e*Pn | **Pn** | **08 37 43.6** | **-0.2** |
| **FETY** | **Fethiye** | **1.17** | **266** | *e*PN | **Pb** | **08 37 43.5** | **-1.2** |
| **FETY** | **Fethiye** | **1.17** | **266** | *e*Pn | **Pb** | **08 37 43.5** | **-1.2** |
| **BAGO** | **Egridir - ISPA** | **1.28** | **9** | P | **Pn** | **08 37 45.5** | **-0.8** |
| BAGO | | | | S | **Sg** | **08 38 05.3** | **+1.7** |
| **GAZI** | **Gazipasa** | **1.51** | **108** | *i* P | **Pg** | **08 37 50.9** | **-0.4** |
| **GAZI** | **Gazipasa** | **1.51** | **108** | P | **Pg** | **08 37 50.9** | **-0.4** |
| **DALY** | **Dalyan (Mu¨la** | **1.52** | **274** | *e*PN | **Pn** | **08 37 48.2** | **-1.2** |
| **DALY** | **Dalyan (Mu¨la** | **1.52** | **274** | *e*Pn | **Pn** | **08 37 48.2** | **-1.2** |
| **DNZL** | **Cakiroluk** | **1.53** | **309** | *i* P | **Pg** | **08 37 51.6** | **-0.1** |
| **DNZL** | **Cakiroluk** | **1.53** | **309** | P | **Pg** | **08 37 51.6** | **-0.1** |
| **DENT** | **Denizli** | **1.58** | **311** | *e*PN | **Pn** | **08 37 49.9** | **-0.5** |
| **DENT** | **Denizli** | **1.58** | **311** | *e*Pn | **Pn** | **08 37 49.9** | **-0.5** |
| **KHL** | **Karahalli** | **1.79** | **333** | *e*PN | **Pn** | **08 37 52.9** | **-0.4** |
| **KHL** | **Karahalli** | **1.79** | **333** | *e*Pn | **Pn** | **08 37 52.9** | **-0.4** |
| **SHUT** | **Suhut-Afyon** | **1.83** | **0** | *e*PN | **Pn** | **08 37 53.4** | **-0.4** |
| **SHUT** | **Suhut-Afyon** | **1.83** | **0** | *e*Pn | **Pn** | **08 37 53.4** | **-0.4** |
| **YER** | **Yerkesik** | **1.85** | **283** | *e*PN | **Pn** | **08 37 53.3** | **-0.8** |
| **YER** | **Yerkesik** | **1.85** | **283** | *e*Pn | **Pn** | **08 37 53.3** | **-0.8** |
| **KONT** | **Konya--Tatoy** | **1.90** | **49** | *e*PN | **Pn** | **08 37 53.8** | **-0.9** |
| **KONT** | **Konya--Tatoy** | **1.90** | **49** | *e*Pn | **Pn** | **08 37 53.8** | **-0.9** |
| **KIZT** | **Kizilcal** | **2.40** | **26** | *e*PN | **Pn** | **08 38 01.5** | **-0.2** |
| **KIZT** | **Kizilcal** | **2.40** | **26** | *e*Pn | **Pn** | **08 38 01.5** | **-0.2** |

**IDC 31 09:02:38.4±4.7, 3°.08S×99°.77E, h0km, mb3.4/3, mb1 3.5/3, mb1mx3.3/24, mbtmp3.4/3, Error ellipse: s-maj=179.8km s-min=29.9km az=55.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **H08S2** | **Diego Garcia H** | **27.53** | **259** | T | T | 09 38 17.4 | |
| | baz=80,slow=75,SNR=14 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.53** | **259** | T | T | 09 38 18.2 | |
| | baz=80,slow=75,SNR=12 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.55** | **259** | T | T | 09 38 14.9 | |
| | baz=80,slow=75,SNR=17 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.35** | **159** | T | T | 09 46 06.9 | |
| | baz=333 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.36** | **159** | T | T | 09 46 08.0 | |
| | baz=333 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.36** | **159** | T | T | 09 46 04.0 | |
| | baz=333 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.66** | **119** | P | P | 09 09 55.2 | -0.4 |
| | 0.2nm,0.7s,baz=304,slow=9.1,SNR=2.7 | | | | | | |
| **SONM** | **Songino Array** | **51.03** | **6** | P | P | 09 11 43.6 | +1.2 |
| | 0.3nm,0.5s,baz=184,slow=8.1,SNR=2.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.00** | **345** | P | P | 09 11 48.0 | -1.6 |
| | 0.4nm,0.5s,baz=148,slow=8.5,SNR=4.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.69** | **38** | PKPbc | PKPdf | 09 22 19.5 | -0.3 |
| | 0.2nm,0.8s,baz=305,slow=2.2,SNR=3.8 | | | | | | |

*ISCJB **31** 09:20:16.8±0.8, 3°.75S±0°.1×100°.0E±0°.1, h33km, mb3.9/11, Error ellipse: s-maj=23.0km s-min=11.6km az=147.1*
*IDC **31** 09:20:19.4±0.9, 3°.71S×99°.92E, h36km±5km, mb3.7/11,*
*mb1 3.8/13, mb1mx3.7/38, mbtmp3.9/13, ML4.0/2, MS2.7/1, Ms1 2.7/1, ms1mx2.3/45, Error ellipse: s-maj=25.8km s-min=14.7km az=66.0*

**ISC 31 09:20:19.1±0.9, 3°.7S±0°.1×100°.0E±0°.2, h35km, n20, σ0°92/17, mb4.0/11, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PSI** | **Prapat** | **6.50** | **351** | Pn | **Pn** | **09 21 50.1** | **-2.3** |
| | 0.9nm,0.3s,baz=164,slow=18,SNR=3.0 | | | | | | |
| PSI | | | | LR | LR | 09 24 18.4 | |
| | comp=Z,71nm,21.3s,baz=38,slow=37 | | | | | | |
| **LEM** | **Lembang** | **8.25** | **113** | Pn | **Pn** | **09 22 15.7** | **-0.8** |
| | 8.8nm,0.3s,baz=311,slow=19,SNR=2.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **22.00** | **357** | P | **P** | **09 25 10.7** | **+0.3** |
| | 3.5nm,0.5s,baz=188,slow=11,SNR=15 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.61** | **261** | T | T | 09 55 21.7 | |
| | baz=82,slow=74 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.62** | **261** | T | T | 09 55 21.9 | |
| | baz=82,slow=74 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.63** | **261** | T | T | 09 55 32.6 | |
| | baz=82 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.74** | **159** | T | T | 10 02 48.1 | |
| | baz=336,slow=76,SNR=13 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.75** | **159** | T | T | 10 02 54.3 | |
| | baz=336,slow=76,SNR=13 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.76** | **159** | T | T | 10 02 59.7 | |
| | baz=336,slow=76,SNR=9.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.22** | **119** | P | **P** | **09 27 27.3** | **-0.2** |
| | 0.7nm,0.6s,baz=303,slow=9.2,SNR=6.5 | | | | | | |
| **ASAR** | **Alice Springs** | **38.34** | **124** | P | **P** | **09 27 37.0** | **+0.1** |
| | 1.2nm,0.9s,baz=300,slow=7.7,SNR=10 | | | | | | |
| ASAR | | | | PcP | **PcP** | **09 29 50.6** | **+0.2** |
| | 0.3nm,0.7s,baz=245,slow=2.6,SNR=4.2 | | | | | | |
| **KSRS** | **Korea Array** | **48.47** | **30** | P | **P** | **09 28 59.6** | **+1.3** |
| | 1.8nm,0.9s,baz=230,slow=7.9,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **51.59** | **6** | P | **P** | **09 29 22.9** | **+0.9** |
| | 1.8nm,0.7s,baz=191,slow=8.6,SNR=8.4 | | | | | | |
| SONM | | | | pP | **pP** | **09 29 33.2** | **+0.7** |
| | 4.3nm,0.8s,baz=189,slow=8.9,SNR=12 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.61** | **345** | P | **P** | **09 29 30.2** | **+0.7** |
| | 1.0nm,0.5s,baz=148,slow=7.6,SNR=8.3 | | | | | | |
| MKAR | | | | pP | **pP** | **09 29 40.6** | **+0.6** |
| | 2.9nm,0.6s,baz=148,slow=7.8,SNR=14 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **53.59** | **38** | P | **P** | **09 29 36.2** | **-0.7** |
| | 1.2nm,0.9s,baz=209,slow=6.8,SNR=3.3 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **55.63** | **28** | P | **P** | **09 29 52.1** | **+0.6** |
| | 2.6nm,0.8s,baz=217,slow=7.4,SNR=6.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.78** | **350** | P | **P** | **09 30 13.8** | **+0.2** |
| | 0.9nm,0.4s,baz=171,slow=10,SNR=4.2 | | | | | | |
| **MAW** | **Mawson** | **68.68** | **194** | P | **P** | **09 31 18.2** | **-0.3** |
| | 0.4nm,0.6s,baz=45,slow=14,SNR=4.2 | | | | | | |
| **BRTR** | **Keskin Array B** | **74.41** | **313** | P | **P** | **09 31 53.3** | **-0.6** |
| | 0.5nm,0.6s,baz=136,slow=5.1,SNR=3.8 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.03** | **39** | PKPbc | **PKPab** | **09 39 57.5** | **+0.8** |
| | 0.4nm,0.6s,baz=302,slow=1.6,SNR=6.5 | | | | | | |
| TXAR | | | | pPKPbc | pPKPbc | 09 40 07.5 | +0.1 |
| | 0.6nm,0.6s,baz=204,slow=0.5,SNR=4.9 | | | | | | |

**IDC 31 09:20:32.2±1.8, 34°.72S×55°.29E, h0km, mb3.7/3, mb1 4.0/4, mb1mx3.5/36, mbtmp3.8/4, ML4.2/1, MS3.4/11, Ms1 3.4/11, ms1mx3.2/39, Error ellipse: s-maj=104.2km s-min=26.6km az=31.0, Southwest Indian Ridge**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OPO** | **Ambohidratompo** | **17.62** | **334** | P | Pn | 09 24 39.2 | -0.2 |
| | 0.8nm,0.3s,baz=158,slow=15,SNR=5.0 | | | | | | |
| OPO | | | | LR | LR | 09 29 42.0 | |
| | comp=Z,115nm,19.2s,baz=152,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **26.21** | **275** | LR | LR | 09 34 11.3 | |
| | comp=Z,35nm,20.2s,baz=96,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **27.42** | **283** | LR | LR | 09 34 42.4 | |
| | comp=Z,37nm,21.9s,baz=138,slow=31 | | | | | | |
| **MATP** | **Matopo** | **27.58** | **294** | LR | LR | 09 35 14.2 | |
| | comp=Z,65nm,20.7s,baz=128,slow=32 | | | | | | |
| **H08S1** | **Diego Carcia H** | **31.24** | **34** | T | T | 09 58 58.9 | |
| | baz=208,slow=76,SNR=126 | | | | | | |
| **H08S2** | **Diego Garcia H** | **31.25** | **34** | T | T | 09 58 59.7 | |
| | baz=208,slow=76,SNR=57 | | | | | | |
| **H08S3** | **Diego Garcia H** | **31.26** | **34** | T | T | 09 59 00.4 | |
| | baz=208,slow=76,SNR=93 | | | | | | |
| **H08N3** | **Diego Garcia H** | **31.74** | **31** | T | T | 09 59 36.1 | |
| | baz=206,slow=75,SNR=47 | | | | | | |
| **H08N1** | **Diego Garcia H** | **31.75** | **31** | T | T | 09 59 36.5 | |
| | baz=206,slow=75,SNR=36 | | | | | | |
| **H08N2** | **Diego Garcia H** | **31.76** | **31** | T | T | 09 59 36.9 | |
| | baz=206,slow=75,SNR=40 | | | | | | |
| **MAW** | **Mawson** | **33.22** | **175** | LR | LR | 09 37 05.5 | |
| | comp=Z,74nm,21.2s,baz=61,slow=30 | | | | | | |
| **KMBO** | **Kilima Mbogo** | **37.42** | **329** | LR | LR | 09 40 31.6 | |
| | comp=Z,58nm,21.0s,baz=98,slow=32 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **47.69** | **108** | T | T | 10 20 17.7 | |
| | baz=252,slow=75,SNR=9.1 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **47.70** | **108** | T | T | 10 20 17.2 | |
| | baz=252,slow=75,SNR=8.4 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **47.71** | **108** | T | T | 10 20 18.2 | |
| | baz=252,slow=75,SNR=10 | | | | | | |
| **VNDA** | **Vanda** | **59.85** | **166** | LR | LR | 09 54 06.9 | |
| | comp=Z,47nm,19.9s,baz=290,slow=34 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **67.21** | **45** | LR | LR | 09 58 20.7 | |
| | comp=Z,16nm,18.6s,baz=75,slow=34 | | | | | | |
| **ASAR** | **Alice Springs** | **67.95** | **104** | P | P | 09 31 32.8 | -0.5 |
| | 0.6nm,0.9s,baz=234,slow=5.9,SNR=4.2 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.62** | **303** | P | P | 09 31 43.6 | +0.1 |
| | 0.8nm,0.7s,baz=128,slow=6.3,SNR=7.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **70.16** | **101** | P | P | 09 31 47.6 | +0.6 |
| | 0.9nm,0.9s,baz=233,slow=4.7,SNR=5.6 | | | | | | |
| **BRTR** | **Keskin Array B** | **76.72** | **343** | LR | LR | 10 04 34.6 | |
| | comp=Z,22nm,18.7s,baz=84,slow=34 | | | | | | |
| **

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TCW** | **Tory Channel** | **2.69** | **199** | PN | Pn | 09 34 56.1 | -2.0 |
| TCW | | | | AML | AML | 09 35 32.9 | |
| **MSWZ** | **Moikau Station** | **2.75** | **183** | PN | Pn | 09 34 56.6 | -2.2 |
| **PLWZ** | **Palliser** | **2.91** | **182** | PN | Pn | 09 34 58.1 | -2.4 |
| **TUWZ** | **Tuamarina** | **2.99** | **202** | PN | Pn | 09 34 59.1 | -2.3 |
| **NNZ** | **Nelson** | **2.99** | **211** | PN | Pn | 09 34 58.9 | -2.6 |
| **QRZ** | **Quartz Range** | **3.10** | **225** | PN | Pn | 09 34 59.0 | -3.7 |
| **THZ** | **Tophouse** | **3.65** | **211** | ⇓PN | Pn | 09 35 06.7 | -2.6 |
| **KHZ** | **Kahutara** | **4.01** | **200** | PN | Pn | 09 35 10.8 | -2.8 |
| **DSZ** | **Denniston Nort** | **4.14** | **221** | PN | Pn | 09 35 11.4 | -3.9 |
| **LTZ** | **Lake Taylor** | **4.76** | **209** | PN | Pn | 09 35 19.0 | -4.0 |
| **OXZ** | **Oxford** | **5.31** | **208** | PN | Pn | 09 35 25.3 | -4.6 |

*IDC **31** 09:37:08.1±2.9, 25°.21N×62°.43E, h0km, mb3.8/7, mb1 3.9/7, mb1mx3.6/31, mbtmp3.8/7, MS3.3/4, Ms1 3.3/4, ms1mx2.9/42, Error ellipse: s-maj=66.8km s-min=27.5km az=161.0*

*ISCJB **31** 09:37:10.9±1.0, 25°.2N±0°.1×62°.5E±0°.1, h33km, mb3.7/7, MS3.4/3, Error ellipse: s-maj=23.0km s-min=7.5km az=143.0*

*OMAN **31** 09:37:10.9±99.0, 25°.15N×62°.64E, h34km±21km, Error ellipse: s-maj=114.4km s-min=10.7km az=256.0*

**ISC 31 09:37:13.0**±1.1, **25°.2N**±0°.1×**62°.42E**±0°.10, **h35**km, **n19,** σ1**9**1/**17**, **mb3.7**/**7**, **MS3.4**/3, **8C, Southwestern Pakistan**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **WBK** | **Wadi Bani Khal** | **4.04** | **232** | P | | **Pn** | **09 38 12.0** | **-0.4** |
| | SNR=22 | | | | | | | |
| **WBK** | **Wadi Bani Khal** | **4.04** | **232** | ⇑S | | **Sn** | **09 38 55.0** | **-3.6** |
| **SMDO** | **Samad** | **4.50** | **243** | ⇑P | | **Pn** | **09 38 19.1** | **+0.3** |
| | SNR=17 | | | | | | | |
| **JMDO** | **Jabal Madar** | **4.82** | **236** | ⇑P | | **Pn** | **09 38 23.5** | **+0.4** |
| | SNR=35 | | | | | | | |
| **BSY** | **Bisya** | **5.34** | **244** | ⇑P | | **Pn** | **09 38 31.7** | **+1.5** |
| **BANOM** | **Banah** | **5.58** | **279** | P | | **Pn** | **09 38 34.0** | **+0.4** |
| | SNR=13 | | | | | | | |
| BANOM | | | | ⇑S | | **Sn** | **09 39 33.1** | **-3.4** |
| **ARQ** | **Araqi** | **5.68** | **253** | ⇑P | | **Pn** | **09 38 37.9** | **+3.0** |
| ARQ | | | | ⇑S | | **Sn** | **09 39 42.2** | **+3.3** |
| **ASHO** | **Ashiyiah** | **5.79** | **267** | ⇑P | | **Pn** | **09 38 36.8** | **+0.3** |
| **GEYT** | **Alibeck** | **13.26** | **345** | LR | | LR | 09 45 18.2 | |
| | comp=Z,49nm,20.4s,baz=145,slow=37 | | | | | | | |
| **MKAR** | **Makanchi Array** | **26.79** | **31** | P | | **P** | **09 42 48.0** | **-1.7** |
| | 0.8nm,0.6s,baz=210,slow=8.6,SNR=6.5 | | | | | | | |
| MKAR | | | | LR | | LR | 09 55 50.7 | |
| | comp=Z,71nm,19.1s,baz=208,slow=42 | | | | | | | |
| **H08N2** | **Diego Garcia H** | **32.38** | **164** | T | | T | 10 17 29.1 | |
| | baz=345,slow=75,SNR=187 | | | | | | | |
| **H08N3** | **Diego Garcia H** | **32.40** | **164** | T | | T | 10 17 30.3 | |
| | baz=345,slow=75,SNR=174 | | | | | | | |
| **H08N1** | **Diego Garcia H** | **32.40** | **164** | T | | T | 10 17 28.6 | |
| | baz=345,slow=75,SNR=186 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **33.26** | **24** | P | | **P** | **09 43 46.9** | **+0.1** |
| | 0.5nm,0.4s,baz=229,slow=12,SNR=3.0 | | | | | | | |
| **AKASG** | **Malin Array Be** | **36.06** | **324** | P | | **P** | **09 44 11.2** | **+0.2** |
| | 0.8nm,0.5s,baz=126,slow=7.7,SNR=5.4 | | | | | | | |
| **SONM** | **Songino Array** | **41.26** | **45** | P | | **P** | **09 44 55.5** | **+0.6** |
| | 0.4nm,0.6s,baz=260,slow=8.6,SNR=3.6 | | | | | | | |
| SONM | | | | LR | | LR | 10 05 17.8 | |
| | comp=Z,79nm,19.1s,baz=168,slow=41 | | | | | | | |
| **FINES** | **FINESS Array B** | **43.83** | **336** | P | | **P** | **09 45 15.3** | **-0.1** |
| | 4.0nm,1.1s,baz=125,slow=12,SNR=3.3 | | | | | | | |
| FINES | | | | LR | | LR | 10 04 24.4 | |
| | comp=Z,52nm,20.6s,baz=184,slow=37 | | | | | | | |
| **NOA** | **NORSAR Array B** | **49.79** | **330** | P | | **P** | **09 46 01.7** | **-0.4** |
| | 1.9nm,1.0s,baz=119,slow=7.5,SNR=2.7 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **58.18** | **270** | P | | **P** | **09 47 04.2** | **+0.3** |
| | 0.5nm,1.0s,baz=69,slow=6.6,SNR=3.6 | | | | | | | |

*ISCJB **31** 09:41:03.9±0.5, 41°.72N±0°.02×24°.30E±0°.03, h6km±3km, Error ellipse: s-maj=3.9km s-min=3.0km az=167.5*

*CSEM **31** 09:41:04.6±0.1, 41°.68N×24°.31E, h5km, MD2.7, Error ellipse: s-maj=2.6km s-min=2.1km az=72.0*

*SOF **31** 09:41:04.1, 41°.71N×24°.30E, h5km, MD2.7*

*ATH **31** 09:41:04.6, 41°.65N×24°.30E, h19km±1km, MD3.3/16*

*THE **31** 09:41:05.3, 41°.64N×24°.28E, h3km, ML3.0/9, Error ellipse: s-maj=0.7km s-min=0.4km az=201.0*

*BEO **31** 09:41:08.3±1.0, 41°.83N×24°.13E, h10km±5km, ML2.8/8*

**ISC 31 09:41:04.2**±1.1, **41°.71N**±0°.02×**24°.31E**±0°.02, **h5**km±9km, **n98,** σ0**81**/142, **2C, Greece-Bulgaria border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **RZN** | **Rozhen** | **0.30** | **95** | *i* Pg | | **Pg** | **09 41 11.1** | **+0.9** |
| **RZN** | **Rozhen** | **0.30** | **95** | *i* Pg | | **Pg** | **09 41 11.1** | **+0.9** |
| **MMB** | **Musomiste** | **0.45** | **254** | *i* Pg | | **Pg** | **09 41 12.7** | **-0.2** |
| **MMB** | **Musomiste** | **0.45** | **254** | *i* Pg | | **Pg** | **09 41 12.7** | **-0.2** |
| **NVR** | **Nevrokopi** | **0.49** | **223** | *e*PB | | **Pg** | **09 41 13.4** | **-0.3** |
| NVR | | | | *e*SB | | **Sg** | **09 41 20.1** | **-0.1** |
| **NVR** | **Nevrokopi** | **0.49** | **223** | P | | **Pg** | **09 41 13.4** | **-0.3** |
| NVR | | | | S | | **Sg** | **09 41 20.0** | **-0.1** |
| **NVR** | **Nevrokopi** | **0.49** | **223** | P | | **Pg** | **09 41 13.4** | **-0.3** |
| NVR | | | | S | | **Sg** | **09 41 20.0** | **-0.1** |
| **KAVA** | **Kavala** | **0.73** | **168** | P | | **Pg** | **09 41 17.8** | **-0.4** |
| KAVA | | | | S | | **Sg** | **09 41 28.0** | **+0.3** |
| **KAVA** | **Kavala** | **0.73** | **168** | P | | **Pg** | **09 41 17.8** | **-0.4** |
| KAVA | | | | S | | **Sg** | **09 41 28.0** | **+0.3** |
| **SRS** | **Serrai** | **0.80** | **222** | *e*PN | | **Pg** | **09 41 19.2** | **-0.4** |
| SRS | | | | *e*SN | | **Sg** | **09 41 30.2** | **+0.2** |
| **SRS** | **Serrai** | **0.80** | **222** | P | | **Pg** | **09 41 19.2** | **-0.4** |
| SRS | | | | S | | **Sg** | **09 41 30.1** | **+0.1** |
| **SRS** | **Serrai** | **0.80** | **222** | P | | **Pg** | **09 41 19.2** | **-0.4** |
| SRS | | | | S | | **Sg** | **09 41 30.1** | **+0.1** |
| **KDZ** | **Kurdzhali** | **0.83** | **94** | *i* Pg | | **Pg** | **09 41 19.6** | **-0.5** |
| **KDZ** | **Kurdzhali** | **0.83** | **94** | *i* Pg | | **Pg** | **09 41 19.6** | **-0.5** |
| **PGB** | **Panagyurishte** | **0.84** | **353** | *i* Pg | | **Pg** | **09 41 20.1** | **-0.3** |
| **PGB** | **Panagyurishte** | **0.84** | **353** | *i* Pg | | **Pg** | **09 41 20.1** | **-0.3** |
| **KKB** | **Krupnik** | **0.93** | **280** | *i* Pg | | **Pg** | **09 41 22.3** | **+0.3** |
| **KKB** | **Krupnik** | **0.93** | **280** | *i* Pg | | **Pg** | **09 41 22.3** | **+0.3** |
| **SOH** | **Sokhos** | **1.15** | **219** | *e*PN | | **Pg** | **09 41 25.5** | **-0.7** |
| **SOH** | **Sokhos** | **1.15** | **219** | P | | **Pg** | **09 41 25.4** | **-0.7** |
| SOH | | | | S | | **Sg** | **09 41 40.8** | **-0.2** |
| **SOH** | **Sokhos** | **1.15** | **219** | P | | **Pg** | **09 41 25.4** | **-0.7** |
| SOH | | | | S | | **Sg** | **09 41 40.8** | **-0.2** |
| **KNT** | **Kendrikon** | **1.20** | **243** | *e*PN | | **Pb** | **09 41 27.3** | **0.0** |
| **KNT** | **Kendrikon** | **1.20** | **243** | P | | **Pg** | **09 41 26.8** | **-0.3** |
| KNT | | | | S | | **Sb** | **09 41 43.3** | **+0.2** |
| **KNT** | **Kendrikon** | **1.20** | **243** | P | | **Pg** | **09 41 26.8** | **-0.3** |
| **KNT** | **Kendrikon** | **1.20** | **243** | *e*Pn | | **Pb** | **09 41 27.3** | **0.0** |
| KNT | | | | S | | **Sb** | **09 41 43.3** | **+0.2** |
| **VTS** | **Vitosha** | **1.20** | **317** | *i* Pg | | **Pn** | **09 41 28.4** | **+0.6** |
| **VTS** | **Vitosha** | **1.20** | **317** | *i* Pg | | **Pn** | **09 41 28.4** | **+0.6** |
| **VAY** | **Valandovo** | **1.36** | **254** | *i* Pg | | **Pg** | **09 41 32.4** | **+2.0** |
| VAY | | | | *i* Sg | | **Sn** | **09 41 50.2** | **+1.9** |
| **VAY** | **Valandovo** | **1.36** | **254** | *i* Pg | | **Pg** | **09 41 32.4** | **+2.0** |
| VAY | | | | *i* Sg | | **Sn** | **09 41 50.2** | **+1.9** |
| **VAY** | **Valandovo** | **1.36** | **254** | *e*Pg | | **Pg** | **09 41 31.0** | **+0.7** |
| **VAY** | **Valandovo** | **1.36** | **254** | P | | **Pn** | **09 41 29.9** | **+0.1** |
| **VAY** | **Valandovo** | **1.36** | **254** | P | | **Pn** | **09 41 29.9** | **+0.1** |
| **VAY** | **Valandovo** | **1.36** | **254** | *e*Pg | | **Pg** | **09 41 31.0** | **+0.7** |
| VAY | | | | *i* Sg | | **Sn** | **09 41 50.1** | **+1.9** |
| **OUR** | **Ouranopolis** | **1.40** | **190** | *e*PN | | **Pn** | **09 41 29.8** | **-0.6** |
| OUR | | | | *e*SN | | **Sb** | **09 41 48.5** | **-0.4** |
| **OUR** | **Ouranopolis** | **1.40** | **190** | P | | **Pn** | **09 41 29.7** | **-0.6** |
| OUR | | | | S | | **Sg** | **09 41 49.0** | **-0.1** |
| **OUR** | **Ouranopolis** | **1.40** | **190** | P | | **Pn** | **09 41 29.7** | **-0.6** |
| OUR | | | | *e*Sn | | **Sb** | **09 41 48.5** | **-0.4** |
| OUR | | | | S | | **Sg** | **09 41 49.0** | **-0.1** |
| **HORT** | **Hortiatis** | **1.44** | **220** | *e*PN | | **Pn** | **09 41 30.7** | **-0.3** |
| HORT | | | | *e*SN | | **Sb** | **09 41 49.6** | **-0.6** |
| **HORT** | **Hortiatis** | **1.44** | **220** | P | | **Pn** | **09 41 30.5** | **-0.5** |
| **HORT** | **Hortiatis** | **1.44** | **220** | *e*Pn | | **Pn** | **09 41 30.7** | **-0.3** |
| HORT | | | | *e*Sn | | **Sb** | **09 41 49.6** | **-0.6** |
| **THE** | **Thessaloniki** | **1.48** | **224** | *e*PN | | **Pn** | **09 41 31.4** | **-0.1** |
| THE | | | | *e*SN | | **Sb** | **09 41 51.3** | **0.0** |
| **THE** | **Thessaloniki** | **1.48** | **224** | P | | **Pn** | **09 41 31.2** | **-0.3** |
| THE | | | | S | | **Sb** | **09 41 51.0** | **-0.3** |
| **THE** | **Thessaloniki** | **1.48** | **224** | *e*Pn | | **Pn** | **09 41 31.4** | **-0.1** |
| THE | | | | S | | **Sb** | **09 41 51.0** | **-0.3** |
| THE | | | | *e*Sn | | **Sb** | **09 41 51.3** | **0.0** |
| **PLG** | **Polygyros** | **1.49** | **206** | *e*PN | | **Pn** | **09 41 31.7** | **+0.1** |
| PLG | | | | *e*SN | | **Sb** | **09 41 51.2** | **-0.3** |
| **PLG** | **Polygyros** | **1.49** | **206** | P | | **Pn** | **09 41 31.3** | **-0.3** |
| PLG | | | | S | | **Sn** | **09 41 51.5** | **+0.1** |
| **PLG** | **Polygyros** | **1.49** | **206** | P | | **Pn** | **09 41 31.3** | **-0.3** |
| **PLG** | **Polygyros** | **1.49** | **206** | *e*Pn | | **Pn** | **09 41 31.7** | **+0.1** |
| PLG | | | | *e*Sn | | **Sb** | **09 41 51.2** | **-0.3** |
| PLG | | | | S | | **Sn** | **09 41 51.5** | **+0.1** |
| **ALN** | **Alexandroupoli** | **1.54** | **121** | *e*PN | | **Pn** | **09 41 32.9** | **+0.6** |
| **ALN** | **Alexandroupoli** | **1.54** | **121** | *e*Pn | | **Pn** | **09 41 32.9** | **+0.6** |
| **SMTH** | **Samothraki Isl** | **1.55** | **143** | *e*Pn | | **Pn** | **09 41 32.2** | **-0.2** |
| SMTH | | | | *e*SN | | **Sn** | **09 41 52.7** | **-0.1** |
| **SMTH** | **Samothraki Isl** | **1.55** | **143** | P | | **Pn** | **09 41 32.4** | **0.0** |
| SMTH | | | | S | | **Sb** | **09 41 53.3** | **+0.2** |
| **SMTH** | **Samothraki Isl** | **1.55** | **143** | P | | **Pn** | **09 41 32.4** | **0.0** |
| SMTH | | | | *e*Sn | | **Sn** | **09 41 52.7** | **-0.1** |
| SMTH | | | | S | | **Sb** | **09 41 53.3** | **+0.2** |
| **GRG** | **Griva** | **1.62** | **243** | *e*PN | | **Pn** | **09 41 33.6** | **+0.1** |
| GRG | | | | *e*SN | | **Sn** | **09 41 55.1** | **+0.3** |
| **GRG** | **Griva** | **1.62** | **243** | P | | **Pn** | **09 41 33.4** | **-0.1** |
| **GRG** | **Griva** | **1.62** | **243** | *e*Pn | | **Pn** | **09 41 33.6** | **+0.1** |
| GRG | | | | *e*Sn | | **Sn** | **09 41 55.1** | **+0.3** |
| **MPEP** | **Malo Peshtene** | **1.69** | **346** | *i* Pg | | **Pb** | **09 41 36.6** | **+0.8** |
| **PAIG** | **Paliouri** | **1.85** | **195** | *e*PN | | **Pn** | **09 41 36.0** | **-0.5** |
| **PAIG** | **Paliouri** | **1.85** | **195** | P | | **Pn** | **09 41 35.9** | **-0.5** |
| **PAIG** | **Paliouri** | **1.85** | **195** | *e*Pn | | **Pn** | **09 41 36.0** | **-0.5** |
| **LIA** | **Limnos Island** | **1.93** | **160** | *e*PN | | **Pn** | **09 41 38.4** | **+0.8** |
| **LIA** | **Limnos Island** | **1.93** | **160** | P | | **Pn** | **09 41 37.8** | **+0.2** |
| LIA | | | | S | | **Sn** | **09 42 02.8** | **+0.6** |
| **LIA** | **Limnos Island** | **1.93** | **160** | P | | **Pn** | **09 41 37.8** | **+0.2** |
| **LIA** | **Limnos Island** | **1.93** | **160** | *e*Pn | | **Pn** | **09 41 38.4** | **+0.8** |
| LIA | | | | S | | **Sn** | **09 42 02.8** | **+0.6** |
| **ZAPS** | **Zavoj** | **1.99** | **322** | *e*Pn | | **Pb** | **09 41 40.5** | **-0.4** |
| ZAPS | | | | *e*Sn | | **Sn** | **09 42 02.7** | **-1.2** |
| **LIT** | **Litokhoron** | **2.12** | **221** | *e*PN | | **Pn** | **09 41 40.4** | **+0.1** |
| **LIT** | **Litokhoron** | **2.12** | **221** | *e*Pn | | **Pn** | **09 41 40.4** | **+0.1** |
| **BARS** | **Barje** | **2.16** | **302** | *e*Pn | | **Pn** | **09 41 42.1** | **+1.3** |
| BARS | | | | *e*Sn | | **Sn** | **09 42 06.5** | **-1.4** |
| **BARS** | **Barje** | **2.16** | **302** | *e*Pn | | **Pn** | **09 41 42.1** | **+1.3** |
| BARS | | | | *e*Sn | | **Sn** | **09 42 06.5** | **-1.4** |
| **XOR** | **Xorichti** | **2.50** | **200** | *e*PN | | **Pn** | **09 41 45.1** | **-0.3** |
| **XOR** | **Xorichti** | **2.50** | **200** | P | | **Pn** | **09 41 45.1** | **-0.3** |
| **XOR** | **Xorichti** | **2.50** | **200** | P | | **Pn** | **09 41 45.1** | **-0.3** |
| **BOVS** | **Bovan** | **2.72** | **316** | ⇑*i* Pn | | **Pn** | **09 41 50.8** | **+2.4** |
| **BOVS** | **Bovan** | **2.72** | **316** | ⇑*i* Pn | | **Pn** | **09 41 50.8** | **+2.4** |
| **BOLS** | **Boljevac** | **2.74** | **321** | *e*Pn | | **Pn** | **09 41 48.6** | **-0.1** |
| **BOLS** | **Boljevac** | **2.74** | **321** | *e*Pn | | **Pn** | **09 41 48.6** | **-0.1** |
| **THL** | **Klokotos Trika** | **2.77** | **220** | *e*PN | | **Pn** | **09 41 49.3** | **+0.2** |
| **THL** | **Klokotos Trika** | **2.77** | **220** | *e*Pn | | **Pn** | **09 41 49.3** | **+0.2** |
| **SELS** | **Selova** | **2.80** | **304** | *e*Pn | | **Pn** | **09 41 50.9** | **+1.3** |
| **SELS** | **Selova** | **2.80** | **304** | *e*Pn | | **Pn** | **09 41 50.9** | **+1.3** |
| **AGG** | **Agios Georgios** | **3.08** | **210** | P | | **Pn** | **09 41 53.6** | **+0.1** |
| **AGG** | **Agios Georgios** | **3.08** | **210** | P | | **Pn** | **09 41 53.6** | **+0.1** |
| **MAKR** | **Makrakomi, Fth** | **3.17** | **212** | *e*PN | | **Pn** | **09 41 55.7** | **+1.0** |
| **MAKR** | **Makrakomi, Fth** | **3.17** | **212** | *e*Pn | | **Pn** | **09 41 55.7** | **+1.0** |
| **KUBS** | **Kucevo** | **3.32** | **325** | *e*Pn | | **Pn** | **09 41 58.2** | **+1.5** |
| KUBS | | | | *e*Sn | | **Sn** | **09 42 35.4** | **-1.1** |
| **KUBS** | **Kucevo** | **3.32** | **325** | *e*Pn | | **Pn** | **09 41 58.2** | **+1.5** |
| KUBS | | | | *e*Sn | | **Sn** | **09 42 35.4** | **-1.1** |
| **GRUS** | **Gruza** | **3.42** | **311** | *e*Pn | | **Pn** | **09 41 58.7** | **+0.5** |
| **GRUS** | **Gruza** | **3.42** | **311** | *e*Pn | | **Pn** | **09 41 58.7** | **+0.5** |
| **DSF** | **Desfina** | **3.57** | **203** | *e*PN | | **Pn** | **09 42 00.1** | **-0.1** |
| **DSF** | **Desfina** | **3.57** | **203** | *e*Pn | | **Pn** | **09 42 00.1** | **-0.1** |
| **IVAS** | **Ivanjica** | **3.59** | **303** | *e*Pn | | **Pn** | **09 42 02.0** | **+1.5** |
| **IVAS** | **Ivanjica** | **3.59** | **303** | *e*Pn | | **Pn** | **09 42 02.0** | **+1.5** |
| **KALE** | **Kalithea** | **3.71** | **207** | *e*PN | | **Pn** | **09 42 02.2** | **0.0** |
| **KALE** | **Kalithea** | **3.71** | **207** | *e*Pn | | **Pn** | **09 42 02.2** | **0.0** |
| **DIVS** | **Divibare** | **3.97** | **308** | *e*Pn | | **Pn** | **09 42 07.3** | **+1.6** |
| **DIVS** | **Divibare** | **3.97** | **308** | *e*Pn | | **Pn** | **09 42 07.3** | **+1.6** |
| **BBLS** | **Lazići** | **4.20** | **302** | *e*Pn | | **Pn** | **09 42 09.5** | **+0.6** |
| **BBLS** | **Lazići** | **4.20** | **302** | *e*Pn | | **Pn** | **09 42 09.5** | **+0.6** |
| **BZS** | **Buzias** | **4.36** | **334** | *e*Pn | | **Pn** | **09 42 11.6** | **+0.5** |
| BZS | | | | *e*Sg | | **Sg** | **09 43 21.8** | **-2.5** |
| **BZS** | **Buzias** | **4.36** | **334** | *e*Pn | | **Pn** | **09 42 11.6** | **+0.5** |
| BZS | | | | *e*Sg | | **Sg** | **09 43 21.8** | **-2.5** |

*NIED **31** 09:49:00, 27°.10N×130°.00E, h8km, Mw4.1 Best double couple: M0 1.88000×10^15 NP1:φs17.00000°, δ34.00000°, λ-105.00000°. NP2:φs215.00000°, δ57.00000°, λ-80.00000°.*

*IDC **31** 09:49:08.3±0.7, 27°.06N×129°.98E, h0km, mb4.0/16, mb1 4.1/20, mb1mx4.0/46, mbtmp4.0/20, ML3.3/4, MS3.3/5, Ms1 3.3/5, ms1mx2.9/41, Error ellipse: s-maj=20.0km s-min=15.5km az=91.0*

*ISCJB **31** 09:49:10.1±1.0, 27°.04N±0°.03×129°.94E±0°.03, h26km±7km, mb4.0/24, MS3.4/4, Error ellipse: s-maj=5.1km s-min=3.5km az=41.9*

*JMA **31** 09:49:11.0±0.1, 27°.08N×130°.01E, h53km, M4.3*

*NEIC **31** 09:49:12.2±2.5, 27°.01N×129°.82E, h23km±18km, mb4.6/6, MW4.1(NIED), Error ellipse: s-maj=12.3km s-min=7.8km az=123.0*

*MOS **31** 09:49:13.3±1.7, 27°.11N×129°.83E, h46km, mb4.2/15, Error ellipse: s-maj=15.2km s-min=7.9km az=99.6*

**ISC 31 09:49:10.5**±2.9, **27°.06N**±0°.03×**129°.93E**±0°.04, **h13**km±18km, **n86,** σ1**39**/109, **mb4.1**/24, **MS3.5**/4, **Ryukyu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **JTK** | **Tokunoshima** | **1.13** | **310** | P | | **Pb** | **09 49 31.5** | **-0.5** |
| JTK | | | | S | | **Sb** | **09 49 46.3** | **-0.3** |
| **JOKE** | **Okinoerabujima** | **1.25** | **284** | P | | **Pb** | **09 49 33.7** | **-0.2** |
| JOKE | | | | S | | **Sn** | **09 49 50.2** | **-0.1** |
| **JZK** | **Kikaishima** | **1.25** | **2** | P | | **Pn** | **09 49 33.0** | **-0.8** |
| JZK | | | | S | | **Sb** | **09 49 48.4** | **-1.7** |
| **JAMN** | **Amaminishikomi** | **1.36** | **331** | P | | **Pn** | **09 49 34.1** | **-1.1** |
| JAMN | | | | S | | **Sn** | **09 49 50.9** | **-2.2** |
| **JAM** | **Amami Oshima** | **1.38** | **348** | P | | **Pn** | **09 49 34.3** | **-1.2** |
| JAM | | | | S | | **Sn** | **09 49 50.7** | **-2.9** |
| **JOW** | **Kunigami** | **1.49** | **262** | P | | **Pn** | **09 49 37.3** | **+0.3** |
| JOW | | | | S | | **Sn** | **09 49 55.7** | **-0.7** |
| **JOW** | **Kunigami** | **1.49** | **262** | Pn | | **Pn** | **09 49 37.4** | **+0.4** |
| | 24nm,0.3s,baz=0.1,slow=30,SNR=282 | | | | | | | |
| JOW | | | | Sn | | **Sn** | **09 49 56.1** | **-0.3** |
| | 95nm,0.3s,baz=343,slow=19,SNR=19 | | | | | | | |
| **JOW** | **Kunigami** | **1.49** | **262** | *e*Pn | | **Pn** | **09 49 37.5** | **+0.4** |
| JOW | | | | *e*Sn | | **Sb** | **09 49 56.9** | **-0.2** |
| **JMZ** | **Minamidaito 2** | **1.69** | **136** | P | | **Pn** | **09 49 37.9** | **-1.8** |
| JMZ | | | | S | | **Sn** | **09 49 57.6** | **-3.6** |
| **JIH** | **Iheya** | **1.75** | **270** | P | | **Pn** | **09 49 41.1** | **+0.6** |
| JIH | | | | S | | **Sn** | **09 50 03.0** | **+0.3** |
| **JNTH** | **Nagotoyohara** | **1.79** | **253** | P | | **Pn** | **09 49 41.0** | **-0.1** |
| JNTH | | | | S | | **Sn** | **09 50 02.8** | **-0.8** |
| **JJT2** | **Tamagusuku 2** | **2.16** | **246** | P | | **Pn** | **09 49 46.5** | **+0.4** |
| JJT2 | | | | S | | **Sn** | **09 50 12.4** | **-0.4** |
| **JTAJ** | **Takarajima** | **2.19** | **343** | P | | **Pn** | **09 49 45.1** | **-1.4** |
| JTAJ | | | | S | | **Sn** | **09 50 09.8** | **-3.7** |
| **JAGN** | **Aguni-jima** | **2.45** | **260** | P | | **Pn** | **09 49 50.0** | **+0.2** |
| JAGN | | | | S | | **Sn** | **09 50 19.0** | **-0.9** |
| **JNN** | **Nakanoshima** | **2.78** | **359** | P | | **Pn** | **09 49 53.7** | **-1.0** |
| JNN | | | | S | | **Sn** | **09 50 24.8** | **-3.3** |
| **JKE** | **Kume jima 2** | **2.91** | **256** | P | | **Pn** | **09 49 56.0** | **-0.4** |
| JKE | | | | *e*S | | **Sn** | **09 50 31.5** | **+0.3** |
| **JOGS** | **Gusukube** | **4.67** | **242** | P | | **Pn** | **09 50 20.6** | **-0.1** |
| JOGS | | | | *e*S | | **Sn** | **09 51 12.7** | **-2.1** |
| **JIKM** | **Ikemajima** | **4.72** | **244** | P | | **Pn** | **09 50 20.8** | **-0.6** |
| JIKM | | | | *e*S | | **Sn** | **09 51 15.6** | **-0.4** |
| **JIRB** | **Irabujima** | **4.82** | **244** | P | | **Pn** | **09 50 22.5** | **-0.3** |
| JIRB | | | | *e*S | | **Sn** | **09 51 17.1** | **-1.5** |
| **JTJ** | **Tarama** | **5.29** | **244** | P | | **Pn** | **09 50 28.4** | **-0.8** |
| JTJ | | | | *e*S | | **Sn** | **09 51 28.0** | **-2.0** |
| **JISG** | **Ishigakijimahi** | **5.63** | **245** | P | | **Pn** | **09 50 32.1** | **-1.8** |
| JISG | | | | S | | **Sn** | **09 51 33.7** | **-4.7** |
| **JIJ** | **Ishigaki jima** | **5.87** | **244** | P | | **Pn** | **09 50 36.8** | **-0.4** |
| JIJ | | | | *e*S | | **Sn** | **09 51 40.2** | **-4.1** |
| **JNU** | **Nakatsue** | **6.10** | **8** | Pn | | **Pn** | **09 50 40.2** | **-0.3** |
| | 3.2nm,0.3s,baz=199,slow=10,SNR=32 | | | | | | | |
| JNU | | | | Sn | | Sn | 09 51 43.6 | -6.6 |
| | 0.4nm,0.3s,baz=285,slow=20,SNR=1.9 | | | | | | | |
| **JNU** | **Nakatsue** | **6.10** | **8** | *e*Pn | | **Pn** | **09 50 40.4** | **0.0** |
| | 6.6nm,0.7s | | | | | | | |
| JNU | | | | Sn | | Sn | 09 51 43.6 | -6.6 |
| **YHNB** | **Yeheng** | **8.06** | **255** | *e*Pn | | **Pn** | **09 51 07.4** | **0.0** |
| **YULB** | **Yu-li** | **8.62** | **247** | *e*Pn | | **Pn** | **09 51 11.9** | **-3.1** |
| YULB | | | | *e*Sn | | **Sn** | **09 52 50.1** | **-2.1** |
| **SSLB** | **Suanglung** | **8.74** | **250** | *e*Pn | | **Pn** | **09 51 14.6** | **-2.1** |
| SSLB | | | | *e*Sn | | **Sn** | **09 52 54.9** | **-0.3** |
| **TPUB** | **Ta-pu** | **9.21** | **248** | *e*Pn | | **Pn** | **09 51 22.0** | **-1.2** |
| **KSAR** | **Wonju Array Be** | **10.50** | **351** | P | | **Pn** | **09 51 40.0** | **-0.7** |
| **KSAR** | **Wonju Array Be** | **10.50** | **351** | Pn | | **Pn** | **09 51 40.0** | **-0.7** |
| **KSRS** | **Korea Array** | **10.51** | **351** | Pn | | **Pn** | **09 51 40.0** | **-0.7** |
| | 0.1nm,0.3s,baz=170,slow=16,SNR=5.6 | | | | | | | |
| KSRS | | | | LR | | LR | 09 55 22.0 | |
| | comp=Z,48nm,21.6s,baz=172,slow=36 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **11.79** | **35** | Pn | | Pn | 09 52 02.3 | +3.9 |
| | 0.1nm,0.3s,baz=222,slow=16,SNR=3.0 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **17.19** | **5** | Pn | | **P** | **09 53 11.2** | **-0.6** |
| | 0.2nm,0.3s,baz=181,slow=13,SNR=5.0 | | | | | | | |
| **BJT** | **Baijiatuao** | **17.26** | **322** | *e*P | | **P** | **09 53 14.3** | **+1.6** |
| BJT | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.6s | | | | | | | |
| **BJT** | **Baijiatuao** | **17.26** | **322** | *e*P | | **P** | **09 53 14.2** | **+1.6** |
| | comp=Z,11nm,0.6s | | | | | | | |
| **ASAJ** | **Asahikawa** | **19.86** | **28** | P | | **Pn** | **09 53 42.5** | **-0.3** |
| | comp=Z,0.1nm,0.3s,baz=240,slow=20,SNR=2.4 | | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **22.29** | **24** | P | | **P** | **09 54 11.0** | **+3.6** |
| **SONM** | **Songino Array** | **27.72** | **325** | P | | **P** | **09 54 59.7** | **+1.0** |
| | comp=Z,1.2nm,0.6s,baz=137,slow=9.8,SNR=7.4 | | | | | | | |
| **SONM** | **Songino Array** | **27.72** | **325** | P | | **P** | **09 54 59.7** | **+1.0** |
| SONM | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.77** | **260** | P | | **P** | **09 55 17.8** | **+0.8** |
| | comp=Z,1.3nm,0.4s,baz=59,slow=6.6,SNR=5.0 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.77** | **260** | P | | **P** | **09 55 17.8** | **+0.8** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **PETK** | **Petropavlovsk-** | **33.21** | **31** | LR | | LR | 10 08 56.0 | |
| | comp=Z,24nm,19.5s,baz=89,slow=36 | | | | | | | |
| **SEY** | **Seymchan** | **38.80** | **16** | P | | **P** | **09 56 36.6** | **+2.0** |
| | comp=Z,0.8nm,0.5s,baz=197,slow=19,SNR=4.8 | | | | | | | |
| **SEY** | **Seymchan** | **38.80** | **16** | P | | **P** | **09 56 36.7** | **+2.0** |
| SEY | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.13** | **311** | P | | **P** | **09 57 02.1** | **-0.4** |
| | comp=Z,0.4nm,0.6s,baz=104,slow=11,SNR=4.6 | | | | | | | |
| MKAR | | | | PcP | | **PcP** | **09 58 56.2** | **-0.7** |
| | comp=Z,0.6nm,0.7s,baz=80,slow=3.8,SNR=3.2 | | | | | | | |
| **MKAR** | **Makanchi Array** | **42.13** | **311** | P | | **P** | **09 57 02.1** | **-0.4** |
| MKAR | | | | | | | 09 58 56.2 | |
| MKAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **42.53** | **322** | P | | **P** | **09 57 03.1** | **-2.5** |
| | comp=Z,0.7nm,0.4s,baz=114,slow=9.6,SNR=2.3 | | | | | | | |
| ZALV | | | | PcP | | **PcP** | **09 58 57.1** | **-0.9** |
| | comp=Z,0.5nm,0.5s,baz=121,slow=4.3,SNR=3.6 | | | | | | | |
| **ZALV** | **Zalesovo Beam** | **

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| KKB | Krupnik | 0.10 | 92 | *i* Pg | Pg | 09 52 07.6 | +0.1 |
| VAY | Valandovo | 0.62 | 208 | *i* Pg | Pb | 09 52 17.2 | 0.0 |
| VAY | | | | *i* Sg | Sb | 09 52 25.6 | -0.2 |
| VAY | | | | *e*Lg | Lg | 09 52 26.9 | |
| | comp=E,195nm,0.6s | | | | | | |
| VAY | | | | *e*Lg | Lg | 09 52 27.8 | |
| | comp=N,206nm,0.4s | | | | | | |
| VAY | Valandovo | 0.62 | 208 | *i* Pg | Pb | 09 52 17.2 | 0.0 |
| VAY | | | | *i* Sg | Sb | 09 52 25.6 | -0.2 |
| VAY | | | | *e*Lg | Lg | 09 52 26.9 | |
| | comp=E,195nm,0.6s | | | | | | |
| VAY | | | | *e*Lg | Lg | 09 52 27.8 | |
| | comp=N,206nm,0.4s | | | | | | |
| VAY | Valandovo | 0.62 | 208 | *i* Pg | Pg | 09 52 16.8 | +0.1 |
| VAY | | | | *i* Sg | Sg | 09 52 24.9 | +0.1 |
| VAY | Valandovo | 0.62 | 208 | P | Pg | 09 52 16.7 | +0.1 |
| VAY | Valandovo | 0.62 | 208 | P | Pg | 09 52 16.7 | +0.1 |
| VAY | | | | *i* Sg | Sg | 09 52 24.9 | +0.1 |
| VAY | | | | *e*Lg | Lg | 09 52 27.7 | |
| | comp=N,206nm,0.4s | | | | | | |
| MMB | Musomiste | 0.64 | 116 | *i* Pg | Pb | 09 52 17.4 | -0.3 |
| MMB | Musomiste | 0.64 | 116 | *i* Pg | Pb | 09 52 17.4 | -0.3 |
| KNT | Kendrikon | 0.71 | 184 | *e*PN | Pg | 09 52 18.0 | -0.4 |
| KNT | | | | *e*SN | Sg | 09 52 27.1 | -0.5 |
| KNT | Kendrikon | 0.71 | 184 | P | Pg | 09 52 17.9 | -0.4 |
| KNT | | | | S | Sg | 09 52 27.1 | -0.5 |
| KNT | Kendrikon | 0.71 | 184 | P | Pg | 09 52 17.9 | -0.4 |
| KNT | | | | S | Sg | 09 52 27.1 | -0.5 |
| VTS | Vitosha | 0.75 | 14 | *i* Pg | Pg | 09 52 18.6 | -0.5 |
| VTS | Vitosha | 0.75 | 14 | *i* Pg | Pg | 09 52 18.6 | -0.5 |
| NVR | Nevrokopi | 0.85 | 127 | *e*PN | Pg | 09 52 20.7 | -0.4 |
| NVR | | | | *e*SN | Sg | 09 52 32.4 | +0.1 |
| NVR | Nevrokopi | 0.85 | 127 | P | Pg | 09 52 20.6 | -0.5 |
| NVR | | | | S | Sg | 09 52 32.1 | -0.2 |
| NVR | Nevrokopi | 0.85 | 127 | P | Pg | 09 52 20.6 | -0.5 |
| NVR | | | | S | Sg | 09 52 32.1 | -0.2 |
| NVR | | | | *e*Sn | Sg | 09 52 32.4 | +0.1 |
| SRS | Serrai | 0.89 | 147 | *e*PN | Sg | 09 52 21.4 | -0.4 |
| SRS | | | | *e*SN | Sg | 09 52 32.9 | -0.5 |
| SRS | Serrai | 0.89 | 147 | P | Pg | 09 52 21.2 | -0.6 |
| SRS | | | | S | Sg | 09 52 33.1 | -0.3 |
| SRS | Serrai | 0.89 | 147 | P | Pg | 09 52 21.2 | -0.6 |
| SRS | | | | S | Sg | 09 52 33.1 | -0.3 |
| GRG | Griva | 1.00 | 205 | *e*PN | Pb | 09 52 23.1 | -0.7 |
| GRG | | | | *e*SN | Sb | 09 52 36.7 | -0.2 |
| GRG | Griva | 1.00 | 205 | P | Pb | 09 52 23.3 | -0.5 |
| GRG | Griva | 1.00 | 205 | P | Pb | 09 52 23.3 | -0.5 |
| GRG | | | | *e*Sn | Sb | 09 52 36.7 | -0.2 |
| SOH | Sokhos | 1.09 | 164 | *e*PN | Pb | 09 52 25.0 | -0.3 |
| SOH | | | | *e*SN | Sn | 09 52 40.2 | -0.3 |
| SOH | Sokhos | 1.09 | 164 | P | Pb | 09 52 24.7 | -0.6 |
| SOH | Sokhos | 1.09 | 164 | P | Pb | 09 52 24.7 | -0.6 |
| SOH | Sokhos | 1.09 | 164 | *e*Pn | Pb | 09 52 25.0 | -0.3 |
| SOH | | | | *e*Sn | Sn | 09 52 40.2 | -0.3 |
| THE | Thessaloniki | 1.24 | 180 | *e*PN | Pn | 09 52 27.5 | 0.0 |
| THE | | | | *e*SN | Sn | 09 52 44.1 | 0.0 |
| THE | Thessaloniki | 1.24 | 180 | P | Pn | 09 52 27.5 | 0.0 |
| THE | Thessaloniki | 1.24 | 180 | P | Pn | 09 52 27.5 | 0.0 |
| THE | | | | *e*Sn | Sn | 09 52 44.1 | 0.0 |
| BARS | Barje | 1.27 | 319 | *e*Pg | Pn | 09 52 27.8 | -0.2 |
| BARS | | | | *i* Sg | Sb | 09 52 42.9 | -1.7 |
| BARS | Barje | 1.27 | 319 | *e*Pg | Pn | 09 52 27.8 | -0.2 |
| BARS | | | | *i* Sg | Sb | 09 52 42.9 | -1.7 |
| HORT | Hortiatis | 1.27 | 175 | *e*PN | Pb | 09 52 28.4 | -0.1 |
| HORT | | | | *e*SN | Sg | 09 52 45.7 | 0.0 |
| HORT | Hortiatis | 1.27 | 175 | P | Pn | 09 52 28.2 | 0.0 |
| HORT | Hortiatis | 1.27 | 175 | *e*Pn | Pb | 09 52 28.4 | -0.1 |
| HORT | | | | *e*Sn | Sg | 09 52 45.7 | 0.0 |
| RZN | Rozhen | 1.33 | 97 | *i* Pg | Pg | 09 52 30.1 | 0.0 |
| RZN | Rozhen | 1.33 | 97 | *i* Pg | Pg | 09 52 30.1 | 0.0 |
| ZAPS | Zavoj | 1.42 | 350 | *e*Pg | Pb | 09 52 31.0 | 0.0 |
| ZAPS | | | | *i* Sg | Sg | 09 52 50.2 | -0.2 |
| KAVA | Kavala | 1.46 | 126 | P | Pb | 09 52 31.1 | -0.5 |
| KAVA | | | | S | Sb | 09 52 50.5 | +0.4 |
| KAVA | Kavala | 1.46 | 126 | P | Pb | 09 52 31.1 | -0.5 |
| KAVA | | | | S | Sb | 09 52 50.5 | +0.4 |
| PLG | Polygyros | 1.54 | 166 | *e*PN | Pn | 09 52 32.3 | +0.5 |
| PLG | | | | *e*SN | Sb | 09 52 52.2 | -0.2 |
| PLG | Polygyros | 1.54 | 166 | P | Pn | 09 52 32.1 | +0.3 |
| PLG | | | | S | Sb | 09 52 52.0 | -0.4 |
| PLG | Polygyros | 1.54 | 166 | P | Pn | 09 52 32.1 | +0.3 |
| PLG | | | | *e*Sn | Sb | 09 52 52.2 | -0.2 |
| MPEP | Malo Peshtene | 1.59 | 21 | *i* Pg | Pb | 09 52 34.2 | +0.3 |
| FNA | Florina | 1.61 | 228 | *e*PN | Pn | 09 52 33.5 | +0.8 |
| FNA | | | | *e*SN | Sb | 09 52 55.2 | +0.8 |
| FNA | Florina | 1.61 | 228 | *e*Pn | Pn | 09 52 33.5 | +0.8 |
| FNA | | | | *e*Sn | Sb | 09 52 55.2 | +0.8 |
| OUR | Ouranopolis | 1.72 | 153 | *e*PN | Pn | 09 52 34.4 | +0.2 |
| OUR | | | | *e*SN | Sb | 09 52 56.7 | -0.8 |
| OUR | Ouranopolis | 1.72 | 153 | P | Pn | 09 52 34.4 | +0.2 |
| OUR | | | | S | Sn | 09 52 56.5 | +0.5 |
| OUR | Ouranopolis | 1.72 | 153 | P | Pn | 09 52 34.4 | +0.2 |
| OUR | | | | S | Sn | 09 52 56.5 | +0.5 |
| LIT | Litokhoron | 1.80 | 191 | *e*PN | Pb | 09 52 36.9 | -0.5 |
| LIT | Litokhoron | 1.80 | 191 | *e*Pn | Pb | 09 52 36.9 | -0.5 |
| SELS | Selova | 1.91 | 315 | *e*Pn | Pb | 09 52 39.2 | -0.1 |
| BOVS | Bovan | 1.99 | 333 | *e*Pn | Pb | 09 52 39.9 | -0.7 |
| BOVS | | | | *e*Sn | Sn | 09 53 02.9 | +0.2 |
| BOVS | Bovan | 1.99 | 333 | *e*Pn | Pb | 09 52 39.9 | -0.7 |
| BOVS | | | | *e*Sn | Sn | 09 53 02.9 | +0.2 |
| PAIG | Paliouri | 2.02 | 164 | *e*PB | Pn | 09 52 38.5 | +0.2 |
| PAIG | Paliouri | 2.02 | 164 | *e*Pb | Pn | 09 52 38.5 | +0.2 |
| NEST | Nestorio | 2.05 | 225 | *e*PN | Pn | 09 52 40.2 | +1.4 |
| NEST | Nestorio | 2.05 | 225 | *e*Pn | Pn | 09 52 40.2 | +1.4 |
| BOLS | Boljevac | 2.09 | 340 | *e*Sn | Sb | 09 53 07.1 | -1.2 |
| BOLS | Boljevac | 2.09 | 340 | *e*Sn | Sb | 09 53 07.1 | -1.2 |
| XOR | Xorichti | 2.51 | 176 | *e*PN | Pn | 09 52 45.1 | 0.0 |
| XOR | Xorichti | 2.51 | 176 | *e*Pn | Pn | 09 52 45.1 | 0.0 |
| ALN | Alexandroupoli | 2.52 | 112 | *e*PN | Pn | 09 52 46.8 | +1.6 |
| ALN | Alexandroupoli | 2.52 | 112 | *e*Pn | Pn | 09 52 46.8 | +1.6 |
| GRUS | Gruza | 2.60 | 322 | *e*Pn | Pn | 09 52 48.2 | +1.8 |
| GRUS | Gruza | 2.60 | 322 | *e*Pn | Pn | 09 52 48.2 | +1.8 |
| SJES | Sjenica | 2.60 | 303 | *e*Pn | Pn | 09 52 48.9 | +2.4 |
| IVAS | Ivanjica | 2.68 | 310 | *e*Pn | Pn | 09 52 48.2 | +0.7 |
| IVAS | | | | *e*Sn | Sn | 09 53 20.2 | +0.4 |
| IVAS | Ivanjica | 2.68 | 310 | *e*Pn | Pn | 09 52 48.2 | +0.7 |
| IVAS | | | | *e*Sn | Sn | 09 53 20.2 | +0.4 |
| KUBS | Kucevo | 2.71 | 340 | *e*Pn | Pn | 09 52 48.8 | +1.0 |
| KUBS | | | | *e*Sn | Sn | 09 53 20.9 | +0.4 |
| KUBS | Kucevo | 2.71 | 340 | *e*Pn | Pn | 09 52 48.8 | +1.0 |
| KUBS | | | | *e*Sn | Sn | 09 53 20.9 | +0.4 |
| AGG | Agios Georgios | 2.88 | 190 | *e*PN | Pn | 09 52 50.9 | +0.7 |
| AGG | Agios Georgios | 2.88 | 190 | *e*Pn | Pn | 09 52 50.9 | +0.7 |
| TRUS | Trudelj | 3.00 | 322 | *e*Pn | Pn | 09 52 53.5 | +1.6 |
| TRUS | Trudelj | 3.00 | 322 | *e*Pn | Pn | 09 52 53.5 | +1.6 |
| DIVS | Divibare | 3.11 | 317 | *e*Pn | Pn | 09 52 53.4 | 0.0 |
| DIVS | Divibare | 3.11 | 317 | *e*Pn | Pn | 09 52 53.4 | 0.0 |

*SZGRF* ***31*** *09:57:12.2,24.°32S×178.°76W,h544km*
*MOS* ***31*** *09:58:07.1±1.0,23.°69S×179.°95E,h499km,mb5.0/28, Error ellipse: s-maj=10.4km s-min=8.5km az=48.6*
*AUST* ***31*** *09:58:07.1±0.6,23.°63S×179.°87W,h490km,Error ellipse: s-maj=1.0km s-min=0.9km az=313.0*
*ISCJB* ***31*** *09:58:08.4±0.5,23.°84S±0.°03×179.°93E±0.°03,h515km±6km, mb4.9/176,Error ellipse: s-maj=4.6km s-min=3.4km az=142.9*
*BJI* ***31*** *09:58:08.3,23.°90S×180.°00E,h527km,mb4.6/26, mB5.0/20*
*IDC* ***31*** *09:58:09.0±0.5,23.°73S×179.°95W,h515km±4km,mb4.3/21, mb1 4.4/23,mb1mx4.4/24,mbtmp5.2/23,Error ellipse: s-maj=10.5km s-min=9.1km az=53.0*
*NEIC* ***31*** *09:58:10.3±0.4,23.°85S×179.°95E,h527km±4km, mb5.0/162,Error ellipse: s-maj=4.7km s-min=3.3km az=148.0*
**ISC 31 09:58:09.5±0.3,23.°85S±0.°04×179.°99W±0.°05, h523km±2km,h523km;pP-P,n631,σ1s27/711,mb5.0/178, 27C-11D,South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| RAO | Raoul Island | 5.69 | 161 | P | P | | 09 59 44.4 | +0.5 |
| | 320nm,0.3s,baz=45,slow=19,SNR=7.4 | | | | | | | |
| RAO | | | | S | S | | 10 00 58.1 | -3.0 |
| | 267nm,0.3s,baz=31,slow=19,SNR=3.9 | | | | | | | |
| RAO | Raoul Island | 5.69 | 161 | *e*P | P | | 09 59 43.8 | 0.0 |
| RAO | | | | *e*S | S | | 10 00 59.2 | -1.9 |
| RAO | Raoul Island | 5.69 | 161 | *e*P | P | | 09 59 43.8 | 0.0 |
| RAO | | | | *e*S | S | | 10 00 59.2 | -1.9 |
| MSVF | Nonsavu | 6.36 | 343 | P | P | | 09 59 50.0 | -0.4 |
| | 577nm,0.5s,SNR=36 | | | | | | | |
| MSVF | Nonsavu | 6.36 | 343 | *e*P | P | | 09 59 50.4 | -0.1 |
| NIUE | Niue | 10.50 | 65 | P | P | | 10 00 31.5 | -0.9 |
| | baz=10,SNR=3.7 | | | | | | | |
| AFI | Afiamalu | 12.57 | 40 | P | P | | 10 00 49.6 | -4.6 |
| | 5.4nm,0.3s,baz=102,slow=1.9,SNR=8.0 | | | | | | | |
| AFI | | | | S | S | | 10 02 57.4 | -12 |
| | 1.8nm,0.3s,baz=232,slow=20,SNR=3.0 | | | | | | | |
| DZM | Mont Dzumac | 12.63 | 275 | *e*P | P | | 10 00 57.4 | +2.6 |
| | 91nm,1.0s | | | | | | | |
| DZM | Mont Dzumac | 12.63 | 275 | P | P | | 10 00 55.7 | +1.0 |
| | 1.5nm,0.3s,baz=174,slow=18,SNR=18 | | | | | | | |
| DZM | Mont Dzumac | 12.63 | 275 | *e*P | P | | 10 00 56.7 | +1.9 |
| OUZ | Omahuta | 12.63 | 205 | *e*P | P | | 10 00 57.7 | +3.2 |
| URZ | Urewera | 14.58 | 189 | P | P | | 10 01 12.6 | -2.2 |
| | 10.0nm,0.3s,baz=5.1,slow=1.4,SNR=39 | | | | | | | |
| URZ | | | | S | S | | 10 03 44.7 | -3.0 |
| | 5.9nm,0.3s,baz=245,slow=21,SNR=16 | | | | | | | |
| URZ | Urewera | 14.58 | 189 | *e*P | P | | 10 01 14.4 | -0.4 |
| URZ | | | | *e*S | S | | 10 03 44.9 | -2.8 |
| HIZ | Hauiti | 15.27 | 196 | *e*P | P | | 10 01 25.7 | +3.7 |
| | 95nm,1.2s | | | | | | | |
| WHHZ | Waihua | 15.37 | 188 | SN | S | | 10 03 59.1 | -3.3 |
| BKZ | Black Stump Fm | 15.56 | 190 | *e*P | P | | 10 01 24.4 | -0.8 |
| | 20nm,0.5s | | | | | | | |
| BKZ | | | | *e*S | S | | 10 04 03.4 | -2.7 |
| BFZ | Birch Farm | 17.08 | 190 | *e*P | P | | 10 01 38.3 | -1.8 |
| | 366nm,2.0s | | | | | | | |
| BFZ | | | | *e*S | S | | 10 04 30.6 | -1.5 |
| MRZ | Mangatainoka R | 17.18 | 191 | PN | P | | 10 01 38.7 | -2.3 |
| MRZ | | | | SN | S | | 10 04 28.9 | -4.8 |
| SNZO | South Karori | 17.97 | 193 | *e*P | P | | 10 01 47.1 | -1.1 |
| | 729nm,2.7s | | | | | | | |
| NNZ | Nelson | 18.19 | 196 | PN | P | | 10 01 50.0 | -0.3 |
| NNZ | | | | SN | S | | 10 04 46.6 | -3.5 |
| THZ | Tophouse | 18.82 | 197 | *e*P | P | | 10 01 56.0 | -0.1 |
| | 39nm,1.2s | | | | | | | |
| THZ | | | | *e*S | S | | 10 05 00.1 | -0.5 |
| KHZ | Kahutara | 19.29 | 195 | *e*SN | S | | 10 05 04.9 | -2.9 |
| KHZ | Kahutara | 19.29 | 195 | *e*P | P | | 10 01 59.2 | -1.0 |
| | 188nm,2.0s | | | | | | | |
| LTZ | Lake Taylor | 19.95 | 197 | PN | P | | 10 02 04.7 | -1.6 |
| LHI | Lord Howe Isla | 20.05 | 243 | P | P | | 10 02 10.1 | +2.8 |
| | baz=20,SNR=3.5 | | | | | | | |
| LHI | Lord Howe Isla | 20.05 | 243 | *e*P | P | | 10 02 09.8 | +2.5 |
| | 125nm,0.8s | | | | | | | |
| OXZ | Oxford | 20.51 | 197 | PN | P | | 10 02 09.9 | -1.5 |
| OXZ | Oxford | 20.51 | 197 | *e*P | P | | 10 02 09.9 | -1.5 |
| | 29nm,0.5s | | | | | | | |
| OXZ | | | | *e*S | S | | 10 05 27.4 | -0.1 |
| MQZ | McQueen's Vall | 20.71 | 195 | PN | P | | 10 02 12.9 | -0.3 |
| MQZ | McQueen's Vall | 20.71 | 195 | *e*P | P | | 10 02 13.6 | +0.4 |
| | 53nm,1.3s | | | | | | | |
| RPZ | Rata Peaks | 21.14 | 198 | P | P | | 10 02 16.4 | -0.7 |
| | 11nm,0.6s,baz=11,slow=10,SNR=5.9 | | | | | | | |
| RPZ | Rata Peaks | 21.14 | 198 | *e*P | P | | 10 02 16.7 | -0.4 |
| | 16nm,0.6s | | | | | | | |
| WKZ | Wanaka | 22.77 | 201 | *e*P | P | | 10 02 31.5 | -0.3 |
| | 381nm,2.8s | | | | | | | |
| HNR | Honiara | 23.93 | 303 | P | P | | 10 02 40.8 | -1.6 |
| | 148nm,0.8s,baz=198,slow=4.7,SNR=10 | | | | | | | |
| HNR | Honiara | 23.93 | 303 | *e*P | P | | 10 02 42.2 | -0.3 |
| HNR | | | | pmax | pmax | | | |
| | comp=Z,137nm,0.8s | | | | | | | |
| HNR | Honiara | 23.93 | 303 | *e*P | P | | 10 02 42.2 | -0.3 |
| | comp=Z,137nm,0.8s | | | | | | | |
| DCZ | Deep Cove | 23.97 | 203 | *e*P | P | | 10 02 43.0 | +0.6 |
| | comp=Z,182nm,2.7s | | | | | | | |
| WHZ | Wether Hill Ro | 24.07 | 201 | *e*P | P | | 10 02 43.2 | 0.0 |
| | comp=Z,20nm,0.6s | | | | | | | |
| ARMA | Armidale | 26.05 | 249 | P | P | | 10 03 03.1 | +1.9 |
| | baz=20,SNR=62 | | | | | | | |
| ARMA | Armidale | 26.05 | 249 | *e*P | P | | 10 03 03.1 | +1.9 |
| | comp=Z,55nm,0.7s | | | | | | | |
| EIDS | Eidsvold | 26.33 | 261 | P | P | | 10 03 04.5 | +1.0 |
| | baz=26,SNR=48 | | | | | | | |
| EIDS | Eidsvold | 26.33 | 261 | *e*P | P | | 10 03 04.5 | +1.0 |
| | comp=Z,75nm,0.6s | | | | | | | |
| MGCD | Mangrove Creek | 26.98 | 243 | P | P | | 10 03 11.3 | +2.1 |
| | baz=27,SNR=17 | | | | | | | |
| RMQ | Roma | 28.38 | 258 | P | P | | 10 03 23.4 | +1.9 |
| | baz=28,SNR=60 | | | | | | | |
| CNB | Canberra Magne | 28.89 | 240 | P | P | | 10 03 27.9 | +2.0 |
| | baz=29,SNR=18 | | | | | | | |
| PAE | Paea | 29.05 | 84 | *e*P | P | | 10 03 27.3 | -0.2 |
| | comp=Z,15nm,1.2s | | | | | | | |
| PPT2 | Papeete2 | 29.08 | 83 | *e*P | P | | 10 03 28.0 | +0.2 |
| | comp=Z,77nm,1.3s | | | | | | | |
| PPT | Papeete | 29.09 | 83 | P | P | | 10 03 27.6 | -0.2 |
| | comp=Z,35nm,0.8s,baz=267,slow=21,SNR=4.7 | | | | | | | |
| PPT | Papeete | 29.09 | 83 | *e*P | P | | 10 03 28.5 | +0.7 |
| PPT | Papeete | 29.09 | 83 | *e*P | P | | 10 03 28.5 | +0.7 |
| CAN | Canberra | 29.18 | 240 | *e*P | P | | 10 03 30.1 | +1.6 |
| CAN | | | | pmax | pmax | | | |
| | comp=Z,49nm,0.7s | | | | | | | |
| CAN | Canberra | 29.18 | 240 | *e*P | P | | 10 03 30.1 | +1.6 |
| | comp=Z,49nm,0.7s | | | | | | | |
| TIAR | Tiarei | 29.30 | 83 | *e*P | P | | 10 03 29.9 | +0.3 |
| | comp=Z,25nm,1.0s | | | | | | | |
| TVO | Taravao | 29.32 | 84 | *e*P | P | | 10 03 30.1 | +0.2 |
| | comp=Z,11nm,0.8s | | | | | | | |
| YNG | Young | 29.42 | 242 | P | P | | 10 03 32.1 | +1.6 |
| | baz=30,SNR=13 | | | | | | | |
| MILA | Mila | 29.54 | 236 | P | P | | 10 03 33.2 | +1.6 |
| | baz=30,SNR=7.9 | | | | | | | |
| CMSA | Cobar Meteorol | 31.25 | 248 | P | P | | 10 03 47.2 | +1.0 |
| | baz=31,SNR=101 | | | | | | | |
| PMOR | Pomariorio Ree | 31.46 | 80 | *e*P | P | | 10 03 48.3 | +0.1 |
| | comp=Z,86nm,1.1s | | | | | | | |
| CTA | Charters Tower | 31.49 | 270 | P | P | | 10 03 49.1 | +0.6 |
| | comp=Z,168nm,0.5s,baz=93,slow=11,SNR=448 | | | | | | | |
| CTA | | | | ScP | ScP | | 10 09 22.2 | +2.9 |
| | comp=Z,9.9nm,0.9s,baz=89,slow=3.9,SNR=8.3 | | | | | | | |
| CTAO | Charters Tower | 31.49 | 270 | *e*P | P | | 10 03 49.5 | +1.0 |
| CTAO | | | | pmax | pmax | | | |
| | comp=Z,173nm,0.7s | | | | | | | |
| CTAO | Charters Tower | 31.49 | 270 | *e*P | P | | 10 03 49.5 | +1.0 |
| | comp=Z,172nm,0.7s | | | | | | | |
| VAH | Vaihoa | 31.61 | 80 | *e*P | P | | 10 03 49.3 | -0.3 |
| | comp=Z,55nm,1.2s | | | | | | | |
| QLP | Quilpie | 32.42 | 258 | P | P | | 10 03 57.0 | +0.6 |
| | baz=32,SNR=41 | | | | | | | |
| TOO | Toolangi | 32.49 | 237 | P | P | | 10 03 58.1 | +1.3 |
| | baz=33,SNR=34 | | | | | | | |
| TAU | Tasmania Unive | 32.98 | 227 | *e*P | P | | 10 04 02.2 | +1.4 |
| TAU | | | | pmax | pmax | | | |
| | comp=Z,710nm,2.4s | | | | | | | |
| TAU | Tasmania Unive | 32.98 | 227 | *e*P | P | | 10 04 02.2 | +1.4 |
| | comp=Z,710nm,2.4s | | | | | | | |
| RABL | Rabaul | 33.22 | 302 | P | P | | 10 04 02.3 | -0.9 |
| | baz=33,SNR=4.5 | | | | | | | |
| MTSU | Mount Surprise | 33.75 | 273 | P | P | | 10 04 08.6 | +0.9 |
| | baz=34,SNR=106 | | | | | | | |
| PMG | Port Moresby | 34.49 | 289 | P | P | | 10 04 13.7 | -0.3 |
| | comp=Z,164nm,0.8s,baz=106,slow=5.6,SNR=46 | | | | | | | |
| PMG | | | | ScP | ScP | | 10 09 32.8 | +2.9 |
| | comp=Z,13nm,0.8s,baz=71,slow=3.7,SNR=3.8 | | | | | | | |
| PMG | Port Moresby | 34.49 | 289 | *e*P | P | | 10 04 14.2 | +0.3 |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,187nm,0.8s | | | | | | | |
| PMG | Port Moresby | 34.49 | 289 | P | P | | 10 04 14.2 | +0.3 |
| | baz=34,SNR=29 | | | | | | | |
| PMG | Port Moresby | 34.49 | 289 | *e*P | P | | 10 04 14.2 | +0.3 |
| | comp=Z,187nm,0.8s | | | | | | | |
| PMG | | | | ScP | ScP | | 10 09 32.8 | +2.9 |
| ARPS | Mount Arapiles | 35.16 | 240 | P | P | | 10 04 20.2 | +0.9 |
| | baz=35,SNR=15 | | | | | | | |
| COEN | Coen | 36.12 | 279 | P | P | | 10 04 28.2 | +0.7 |
| | baz=36,SNR=30 | | | | | | | |
| COEN | Coen | 36.12 | 279 | *e*P | P | | 10 04 28.1 | +0.6 |
| | comp=Z,43nm,0.9s | | | | | | | |
| HTT | Hallett | 37.10 | 246 | P | P | | 10 04 28.7 | -6.8 |
| | baz=37,SNR=28 | | | | | | | |
| QIS | Mount Isa | 37.47 | 267 | P | P | | 10 04 38.6 | 0.0 |
| | baz=38,SNR=14 | | | | | | | |
| MANU | Manus Island | 38.31 | 300 | *e*P | P | | 10 04 45.4 | -0.1 |
| BBOO | Buckleboo | 39.48 | 247 | P | P | | 10 04 54.7 | 0.0 |
| | baz=40,SNR=55 | | | | | | | |
| BBOO | Buckleboo | 39.48 | 247 | *e*P | P | | 10 04 54.7 | 0.0 |
| | comp=Z,44nm,0.6s | | | | | | | |
| AS01 | Alice Springs | 42.01 | 261 | *e*P | P | | 10 05 15.1 | 0.0 |
| ASAR | Alice Springs | 42.05 | 261 | P | P | | 10 05 15.6 | +0.1 |
| | comp=Z,82nm,0.8s,baz=100,slow=7.1,SNR=598 | | | | | | | |
| ASAR | | | | pP | pP | | 10 06 47.9 | -1.8 |
| | comp=Z,2.3nm,0.5s,baz=94,slow=6.1,SNR=1.9 | | | | | | | |
| ASAR | | | | ScP | ScP | | 10 10 01.2 | +2.3 |
| | comp=Z,28nm,0.7s,baz=108,slow=4.0,SNR=45 | | | | | | | |
| ASAR | | | | S | S | | 10 10 55.5 | -1.4 |
| | comp=Z,3.0nm,0.7s,baz=97,slow=15,SNR=7.2 | | | | | | | |
| ASAR | | | | ScS | ScS | | 10 14 19.6 | +0.5 |
| | comp=Z,3.2nm,1.0s,baz=101,slow=7.6,SNR=8.8 | | | | | | | |
| WRAB | Tennant Creek | 42.41 | 266 | *d* P | P | | 10 05 17.6 | -0.7 |
| WRAB | | | | pmax | pmax | | | |
| | comp=Z,195nm,0.9s | | | | | | | |
| WRAB | Tennant Creek | 42.41 | 266 | P | P | | 10 05 17.0 | -1.3 |
| | comp=Z,808nm,0.9s | | | | | | | |
| WRAB | Tennant Creek | 42.41 | 266 | *e*P | P | | 10 05 18.0 | -0.3 |
| | comp=Z,105nm,0.9s | | | | | | | |
| WRA | Warramunga Arr | 42.42 | 266 | P | P | | 10 05 17.7 | -0.7 |
| | comp=Z,85nm,0.6s,baz=102,slow=8.2,SNR=228 | | | | | | | |
| WRA | | | | ScP | ScP | | 10 10 03.1 | +2.6 |
| | comp=Z,19nm,0.9s,baz=100,slow=4.1,SNR=25 | | | | | | | |
| WRA | | | | S | S | | 10 10 58.9 | -3.3 |
| | comp=Z,4.5nm,0.8s,baz=101,slow=14,SNR=7.3 | | | | | | | |
| JAY | Jayapura | 43.51 | 293 | P | P | | 10 05 26.6 | -0.3 |
| | comp=Z,70nm,0.7s,baz=150,slow=3.2,SNR=18 | | | | | | | |
| JAY | Jayapura | 43.51 | 293 | P | P | | 10 05 26.9 | -0.1 |
| | baz=44,SNR=8.6 | | | | | | | |
| KDU | Kakadu | 46.30 | 275 | P | P | | 10 05 47.7 | -0.6 |
| | baz=46,SNR=24 | | | | | | | |
| WRKA | Warakurna | 46.86 | 257 | P | P | | 10 05 52.6 | 0.0 |
| | baz=47,SNR=126 | | | | | | | |
| MTN | Manton Dam | 47.46 | 274 | *e*P | P | | 10 05 56.3 | -0.8 |
| | comp=Z,44nm,0.4s | | | | | | | |
| KNRA | Kununurra | 48.70 | 270 | P | P | | 10 06 06.5 | +0.2 |
| | baz=49,SNR=39 | | | | | | | |
| FAKI | Fak Fak | 50.58 | 287 | P | P | | 10 06 19.7 | -0.5 |
| | baz=51,SNR=8.3 | | | | | | | |
| FAKI | Fak Fak | 50.58 | 287 | *e*P | P | | 10 06 18.8 | -1.5 |
| | comp=Z,50nm,1.1s | | | | | | | |
| KMBL | Kambalda | 51.55 | 248 | P | P | | 10 06 26.6 | -0.5 |
| | baz=52,SNR=8.7 | | | | | | | |
| SIJI | Sorong | 52.43 | 288 | P | P | | 10 06 33.1 | -0.5 |
| | comp=Z,170nm,0.7s,baz=91,slow=6.4,SNR=77 | | | | | | | |
| SWI | Sorong | 52.44 | 288 | P | P | | 10 06 33.6 | -0.1 |
| | baz=52,SNR=15 | | | | | | | |
| PALU | Palau | 54.19 | 299 | P | P | | 10 06 45.9 | -0.2 |
| | baz=54,SNR=7.6 | | | | | | | |
| SBA | Scott Base | 54.43 | 183 | *e*P | P | | 10 06 49.9 | +3.1 |
| SBA | | | | pmax | pmax | | | |
| | comp=Z,32nm,0.9s | | | | | | | |
| SBA | Scott Base | 54.43 | 183 | *e*P | P | | 10 06 49.9 | +3.1 |
| | comp=Z,32nm,0.9s | | | | | | | |
| VNDA | Vanda | 54.43 | 185 | P | P | | 10 06 48.6 | +1.8 |
| | comp=Z,4.6nm,0.7s,baz=356,slow=4.8,SNR=15 | | | | | | | |
| VNDA | | | | PcP | PcP | | 10 07 43.2 | +0.8 |
| | comp=Z,3.3nm,0.6s,baz=11,slow=1.7,SNR=7.3 | | | | | | | |
| VNDA | | | | ScP | ScP | | 10 10 50.9 | +0.5 |
| | comp=Z,2.9nm,0.8s,baz=9.5,slow=4.5,SNR=5.8 | | | | | | | |
| SOEI | Soe | 54.85 | 275 | P | P | | 10 06 52.4 | +1.4 |
| | baz=55,SNR=12 | | | | | | | |
| SOEI | Soe | 54.85 | 275 | *e*P | P | | 10 06 52.4 | +1.4 |
| | comp=Z,156nm,0.9s | | | | | | | |
| KLBR | Kellerberrin | 55.02 | 247 | P | P | | 10 06 51.5 | -0.3 |
| | baz=55,SNR=35 | | | | | | | |
| RKGY | Rocky Gully | 55.27 | 243 | P | P | | 10 06 53.6 | +0.2 |
| | baz=55,SNR=8.2 | | | | | | | |
| NWAO | Narrogin (SRO) | 55.27 | 246 | *e*P | P | | 10 06 53.5 | +0.1 |
| NWAO | | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.6s | | | | | | | |
| NWAO | Narrogin (SRO) | 55.27 | 246 | P | P | | 10 06 53.5 | +0.1 |
| | baz=55,SNR=16 | | | | | | | |
| NWAO | Narrogin (SRO) | 55.27 | 246 | *e*P | P | | 10 06 53.5 | +0.1 |
| | comp=Z,8.9nm,0.6s | | | | | | | |
| MBWA | Marble Bar | 55.39 | 260 | *e*P | P | | 10 06 54.2 | -0.3 |
| | comp=Z,65nm,1.0s | | | | | | | |
| BLDU | Ballidu | 56.06 | 248 | P | P | | 10 06 58.7 | -0.3 |
| | baz=56,SNR=57 | | | | | | | |
| TNTI | Ternate | 56.63 | 288 | *e*P | P | | 10 07 02.5 | -0.6 |
| | comp=Z,145nm,1.0s | | | | | | | |
| MORW | Morawa | 56.90 | 250 | P | P | | 10 07 04.7 | -0.1 |
| | baz=57,SNR=19 | | | | | | | |
| MMRI | Maumere | 57.13 | 275 | *e*P | P | | 10 07 06.1 | -0.5 |
| | comp=Z,73nm,0.9s | | | | | | | |
| LUWI | Luwuk | 59.83 | 283 | P | P | | 10 07 24.8 | 0.0 |
| | baz=60,SNR=4.6 | | | | | | | |
| LUWI | Luwuk | 59.83 | 283 | *e*P | P | | 10 07 24.9 | 0.0 |
| | comp=Z,98nm,1.1s | | | | | | | |
| GIRL | Giralia | 59.94 | 257 | P | P | | 10 07 26.7 | +1.3 |
| | baz=60,SNR=4.9 | | | | | | | |
| CASY | Casey | 60.16 | 206 | *e*P | P | | 10 07 26.4 | +0.3 |
| | comp=Z,122nm,2.0s | | | | | | | |
| KAPI | Kappang | 60.83 | 278 | *e*P | P | | 10 07 31.6 | +0.2 |
| | comp=Z,20nm,1.0s | | | | | | | |
| JAGI | Jajag, Banyuwa | 64.58 | 272 | P | P | | 10 07 54.5 | -1.2 |
| | baz=65,SNR=4.1 | | | | | | | |
| JAGI | Jajag, Banyuwa | 64.58 | 272 | *e*P | P | | 10 07 54.5 | -1.2 |
| | comp=Z,175nm,1.9s | | | | | | | |
| QSPA | South Pole Qui | 66.23 | 180 | P | P | | 10 08 06.5 | +1.2 |
| | comp=Z,44nm,0.6s,baz=22,slow=1.2,SNR=137 | | | | | | | |
| QSPA | | | | PKP2bc | P'P'bc | | 10 36 33.8 | -4.0 |
| | comp=Z,1.7nm,0.8s,baz=248,slow=1.2,SNR=3.9 | | | | | | | |
| QSPA | South Pole Qui | 66.23 | 180 | *e*P | P | | 10 08 06.7 | +1

PKM Peak Mountain 81.64 46 P P 10 09 34.0 +0.8
baz=82
BLG Laguna Peak 81.67 47 P P 10 09 33.9 +0.8
baz=82
SAO San Andreas Ge 81.71 44 eP P 10 09 34.6 +1.3
SAO pmax pmax
comp=Z,23nm,0.9s
SAO San Andreas Ge 81.71 44 eP P 10 09 34.6 +1.3
comp=Z,23nm,0.9s
SMMC Simmler 81.77 46 P P 10 09 34.7 +1.0
baz=82
IPM Ipoh 81.77 279 eP P 10 09 34.2 0.0
comp=Z,16nm,0.6s
LRV Little Rabbit 81.78 44 eP P 10 09 35.1 +1.5
NSHM Saint Helena R 82.08 42 eP P 10 09 36.0 +0.9
HOPS Hopland 82.09 41 eP P 10 09 36.6 +1.4
comp=Z,52nm,1.1s
OSI Osito Adit 82.20 47 P P 10 09 36.7 +0.8
baz=82
OSI Osito Adit 82.20 47 eP P 10 09 37.1 +1.3
comp=Z,14nm,1.0s
KCPM Cahto Peak 82.23 40 eP P 10 09 36.9 +0.9
comp=Z,15nm,1.0s
MDJ Mudanjiang 82.23 326 P P 10 09 36.5 +0.8
MDJ PMZ
comp=Z,10.0nm,1.1s
MDJ PMZ
comp=Z,97nm,6.7s
MDJ Mudanjiang 82.23 326 eP P 10 09 36.7 +1.0
comp=Z,12nm,1.0s
DECC Green Verdugo 82.25 47 P P 10 09 36.8 +0.7
baz=82
PASC Pasadena Art C 82.30 48 eP P 10 09 36.7 +0.3
comp=Z,12nm,0.9s
109C Camp Elliot, M 82.31 49 P P 10 09 36.9 +0.5
baz=82
MWC Mount Wilson 82.42 48 eP P 10 09 37.6 +0.4
MWC pmax pmax
comp=Z,25nm,1.3s
MWC Mount Wilson 82.42 48 eP P 10 09 37.5 +0.4
comp=Z,25nm,1.3s
ARVC Arvin 82.43 46 P P 10 09 37.8 +0.8
baz=83
KULM Kulim 82.44 279 eP P 10 09 38.0 +0.5
comp=Z,261nm,2.4s
HABR Khabarovsk 82.47 332 eP P 10 09 37.4 +0.6
HABR e 10 12 52.0
HABR eS S 10 19 02.0 -7.8
HABR eSS SS 10 24 42.7 -4.1
HABR eSSS SSS 10 28 16.3
HABR pmax pmax
comp=Z,9.0nm,1.9s
HABR MLR MLR
comp=Z,76nm,18.0s
BAR Barrett 82.49 49 eP P 10 09 38.4 +1.0
comp=Z,55nm,1.7s
KMRM Mail Ridge 82.50 40 eP P 10 09 38.7 +1.5
comp=Z,102nm,1.5s
MURC Murrieta 82.64 48 P P 10 09 38.8 +0.6
baz=83
VES Vestal, Richgr 82.68 46 P P 10 09 38.8 +0.7
baz=83
BFSC Mount Baldy Ra 82.70 48 P P 10 09 39.1 +0.6
baz=83,SNR=9.0
SLBS Sierra La Lagu 82.77 60 eP P 10 09 40.4 +1.4
comp=Z,23nm,0.8s
MONP Monument Peak 82.78 49 P P 10 09 39.7 +0.7
baz=83,SNR=12
EDW2 Edwards Air Fo 82.84 47 P P 10 09 40.0 +0.8
baz=83,SNR=16
RCTC Rector, Farmer 82.86 45 P P 10 09 39.6 +0.6
baz=83
KHMM Horse Mountain 82.90 39 eP P 10 09 41.2 +1.8
comp=Z,67nm,1.5s
ISA Isabella 82.98 46 eP P 10 09 40.6 +0.8
ISA pmax pmax
comp=Z,29nm,0.8s
ISA Isabella 82.98 46 P P 10 09 40.7 +0.8
baz=83,SNR=29
ISA Isabella 82.98 46 eP P 10 09 40.6 +0.8
comp=Z,29nm,0.8s
SII Sitkinak Islan 83.02 14 eP P 10 09 40.5 +1.1
comp=Z,196nm,1.4s
SYO Syowa Base 83.06 193 eP P 10 09 38.0 -1.6
CMB Columbia Colle 83.16 43 eP P 10 09 41.1 +0.5
CMB pmax pmax
comp=Z,30nm,0.9s
CMB Columbia Colle 83.16 43 eP P 10 09 41.1 +0.5
comp=Z,30nm,0.9s
PFO Pinyon Flat Ob 83.16 49 eP P 10 09 41.6 +0.7
PFO pmax pmax
comp=Z,27nm,1.5s
PFO Pinyon Flat Ob 83.16 49 P P 10 09 41.5 +0.7
baz=83,SNR=5.6
PFO Pinyon Flat Ob 83.16 49 eP P 10 09 41.6 +0.7
comp=Z,27nm,1.5s
BBRC Big Bear Solar 83.21 48 P P 10 09 41.7 +0.5
baz=84
SWSC Sam W. Stewart 83.25 50 P P 10 09 42.1 +1.0
baz=84,SNR=5.7
OHCM Honcut 83.27 42 eP P 10 09 41.6 +0.6
LRMC Laurel Mountai 83.39 47 P P 10 09 42.8 +0.8
baz=84,SNR=19
WDC Whiskeytown Da 83.41 40 eP P 10 09 42.6 +0.9
WDC pmax pmax
comp=Z,25nm,1.1s
WDC Whiskeytown Da 83.41 40 eP P 10 09 42.6 +0.9
comp=Z,25nm,1.1s
RRX Edison Barstow 83.51 47 P P 10 09 43.2 +0.7
baz=84
N02D Trinity Center 83.56 40 P P 10 09 43.7 +1.1
baz=84,SNR=5.3
GSI Gunungsitoli 83.61 274 eP P 10 09 44.1 +0.7
comp=Z,237nm,1.9s
O03D Paynes Creek 83.67 41 P P 10 09 44.1 +0.9
baz=84,SNR=9.3
BELC Belle Mtn. Jos 83.70 49 P P 10 09 44.3 +0.8
baz=84,SNR=19
M02C Callahan 83.74 39 P P 10 09 44.7 +1.2
baz=84,SNR=6.0
CN2 Changchun 83.85 324 ⇓P P 10 09 44.5 +0.6
CN2 eSP sP 10 12 28.0 -2.9
CN2 eS S 10 19 27.0 +3.3
CN2 PMZ
comp=Z,10.0nm,0.8s
CN2 PMZ
comp=Z,200nm,4.0s
MPMC Manual Prospec 83.86 46 P P 10 09 44.9 +0.6
baz=84,SNR=14
BC3 Big Chuckawall 83.88 49 P P 10 09 45.2 +0.8
baz=84,SNR=9.8
GSC Goldstone 83.88 47 eP P 10 09 45.0 +0.7
GSC pmax pmax
comp=Z,22nm,0.9s
GSC Goldstone 83.88 47 P P 10 09 45.1 +0.7
baz=84,SNR=21
GSC Goldstone 83.88 47 eP P 10 09 45.0 +0.7
comp=Z,22nm,0.9s
MLAC Mammoth Lakes 83.90 44 P P 10 09 45.1 +0.6
baz=84,SNR=7.5
MTUM Tungsten Hills 83.91 45 eP P 10 09 45.4 +0.9
DAC Darwin (Calif) 83.91 46 eP P 10 09 45.1 +0.5
DAC pmax pmax
comp=Z,9.0nm,1.0s
DAC Darwin (Calif) 83.91 46 eP P 10 09 45.1 +0.5
comp=Z,8.6nm,1.0s
HEC Hector,Ludlow 83.94 48 P P 10 09 45.3 +0.7
baz=84,SNR=18
GLA Glamis 83.98 50 eP P 10 09 46.3 +1.4
GLA pmax pmax
comp=Z,38nm,0.9s
GLA Glamis 83.98 50 P P 10 09 46.3 +1.4
baz=84,SNR=13
GLA Glamis 83.98 50 eP P 10 09 46.3 +1.4
comp=Z,38nm,0.9s
YBH Yreka Blue Hor 84.04 39 eP P 10 09 46.1 +1.1
YBH pmax pmax
comp=Z,166nm,2.6s
YBH Yreka Blue Hor 84.04 39 eP P 10 09 46.1 +1.1
comp=Z,166nm,2.6s
GMRC Granite Mounta 84.36 48 P P 10 09 47.4 +0.6
baz=85,SNR=15
IRM Iron Mountain 84.37 49 P P 10 09 47.7 +1.0
baz=85,SNR=19
HUMO Hull Mountain 84.45 38 eP P 10 09 48.2 +1.3
comp=Z,112nm,1.2s
GRAC Grapevine Rang 84.48 46 P P 10 09 48.0 +0.9
baz=85
KLR Kul'dur 84.49 331 eP P 10 09 44.3 -2.6
FURC Furnace Creek, 84.51 46 P P 10 09 48.1 +0.9
baz=85,SNR=9.2
TUQ Turquoise Moun 84.55 48 P P 10 09 48.4 +0.7
baz=85,SNR=14
SKNT Sakolnakorn 84.56 291 P P 10 09 49.1 +1.2
SHOC Shoshone 84.57 47 P P 10 09 48.9 +1.3
baz=85,SNR=9.0
M04C Macdoel 84.58 40 P P 10 09 48.8 +1.2
baz=85
Y12C Blythe 84.58 50 P P 10 09 48.6 +0.9
baz=85,SNR=14
NV01 Mina Array Sit 84.71 44 eP P 10 09 48.8 +0.3
NVAR Mina Array Bea 84.71 44 P P 10 09 48.9 +0.4
comp=Z,5.8nm,0.7s,baz=225,slow=8.5,SNR=50
SNAA Sanae 84.72 179 P P 10 09 47.3 -0.6
SNAA Sanae 84.72 179 eP P 10 09 47.0 -0.9
SNAA pmax pmax
comp=Z,4.0nm,0.6s
SNAA Sanae 84.72 179 eP P 10 09 47.0 -0.9
comp=Z,3.7nm,0.6s
214A Organ Pipe Nat 84.83 52 P P 10 09 49.6 +0.6
baz=85,SNR=10
214A Organ Pipe Nat 84.83 52 eP P 10 09 49.5 +0.5
comp=Z,67nm,1.0s
LDFC Landfair 84.90 48 eP P 10 09 50.8 +1.4
comp=Z,60nm,0.9s
I03D Drain, OR 84.93 37 P P 10 09 50.2 +1.1
baz=85
VNA3 Neumayer Olymp 84.93 177 P P 10 09 48.8 0.0
NEE2 Needles Airpor 85.07 49 P P 10 09 50.9 +0.9
baz=85
PDMCI Parker Dam,Lak 85.14 49 P P 10 09 51.3 +0.9
baz=85,SNR=10
K04D Chiloquin, OR 85.15 39 P P 10 09 51.8 +1.3
baz=85
TPNV Topopah Spring 85.19 46 eP P 10 09 51.5 +0.7
TPNV pmax pmax
comp=Z,11nm,0.7s
TPNV Topopah Spring 85.19 46 P P 10 09 51.7 +0.9
baz=85,SNR=14
TPNV Topopah Spring 85.19 46 eP P 10 09 51.5 +0.7
comp=Z,11nm,0.7s
NVL N'lazarevskaya 85.28 184 eP P 10 09 49.5 -1.0
NVL pmax pmax
comp=Z,15nm,0.8s
J04D Umpqua Nationa 85.33 38 P P 10 09 52.5 +1.1
baz=86,SNR=5.7
VNA2 Neumayer--Watz 85.34 178 P P 10 09 50.9 +0.1
baz=185,slow=3.4
I04A Tendick Farm, 85.51 38 P P 10 09 53.0 +1.0
baz=86
MOD Modoc 85.55 40 eP P 10 09 53.2 +0.7
comp=Z,14nm,0.9s
VNA1 Neumayer--Stat 85.58 177 P P 10 09 52.2 +0.3
SHPR Sheep Range 85.66 47 eP P 10 09 53.9 +0.8
K05A Summer Lake 85.71 39 eP P 10 09 54.3 +1.0
comp=Z,30nm,1.0s
J05D Fort Rock, OR 85.86 39 P P 10 09 54.9 +1.0
baz=86,SNR=9.5
R11A Troy Canyon, C 86.41 45 P P 10 09 57.0 +0.4
baz=87
R11A Troy Canyon, C 86.41 45 eP P 10 09 56.7 +0.1
comp=Z,3.9nm,1.0s
I05D Terrebonne, OR 86.45 38 P P 10 09 57.6 +1.0
baz=87
TUC Tucson 86.48 52 eP P 10 09 58.6 +1.6
TUC pmax pmax
comp=Z,29nm,0.9s
TUC Tucson 86.48 52 eP P 10 09 58.6 +1.6
comp=Z,29nm,0.9s
BMN Battle Mountai 86.55 43 eP P 10 09 58.0 +0.7
BMN pmax pmax
comp=Z,16nm,0.9s
BMN Battle Mountai 86.55 43 eP P 10 09 58.0 +0.7
comp=Z,16nm,0.9s
BRLK Bradley Lake 86.67 14 eP P 10 09 56.8 -0.3
comp=Z,163nm,2.1s
GYA Guiyang 86.73 301 P P 10 09 56.8 -1.5
GYA pP pP 10 11 53.3 +0.1
GYA sP sP 10 12 46.0 -0.2
GYA PP PP 10 13 31.8 +1.2
GYA SKS SKSac 10 19 33.5 -2.0
GYA S S 10 19 51.5 -0.8
GYA PMZ
comp=Z,20nm,1.0s
GYA PMZ
comp=Z,120nm,5.2s
F04A Amboy 86.86 36 eP P 10 09 59.4 +1.1
comp=Z,53nm,1.2s
WVOR Wild Horse Val 86.86 41 eP P 10 09 59.3 +0.7
WVOR pmax pmax
comp=Z,24nm,1.1s
WVOR Wild Horse Val 86.86 41 eP P 10 09 59.3 +0.7
comp=Z,24nm,1.1s
LVP Lakeview Peak 86.95 36 P P 10 09 59.6 +0.7
BJI Beijing 87.00 316 P P 10 09 58.3 -0.8
BJI S S 10 19 45.0 -9.0
BJI PMZ
comp=Z,6.0nm,0.7s
BJI PMZ
comp=Z,93nm,3.2s
NLWA Neilton Lookou 87.03 34 eP P 10 10 00.5 +1.3
comp=Z,95nm,1.5s
G05D Wamic, OR 87.03 37 P P 10 10 00.4 +1.2
baz=87
I07A Izee 87.34 39 eP P 10 10 01.7 +0.9
comp=Z,37nm,1.0s
G06A Carlson Farm, 87.40 37 eP P 10 10 01.9 +1.0
comp=Z,24nm,1.0s
CCUT Cedar City 87.44 47 eP P 10 10 02.7 +1.1
comp=Z,13nm,0.9s
J08A Circle Bar Ran 87.51 40 eP P 10 10 02.5 +0.9
comp=Z,50nm,1.2s
SPU Mount Spurr 87.69 13 eP P 10 10 03.1 +1.2
LON Longmire 87.70 36 eP P 10 10 02.8 +0.4
LON pmax pmax
comp=Z,8.0nm,0.8s
LON Longmire 87.70 36 eP P 10 10 02.8 +0.4
comp=Z,7.7nm,0.8s
WUAZ Wupatki 87.72 49 P P 10 10 03.2 +0.4
baz=88
WUAZ Wupatki 87.72 49 eP P 10 10 03.8 +1.0
comp=Z,17nm,1.2s
D05A Enumclaw 87.88 35 eP P 10 10 04.8 +1.7
comp=Z,70nm,1.1s
ELK Elko 87.97 43 eP P 10 10 04.5 +0.5
ELK pmax pmax
comp=Z,7.0nm,0.9s
ELK Elko 87.97 43 eP P 10 10 04.5 +0.5
comp=Z,6.5nm,0.9s
PGC Sidney 88.06 34 eP P 10 10 04.9 +1.1
comp=Z,125nm,1.6s
TRW Toppenish Ridg 88.10 37 P P 10 10 05.1 +0.9
RC01 Rabbit Creek A 88.11 14 eP P 10 10 03.5 -0.3
comp=Z,61nm,1.3s
SUA Susitna One 88.22 14 eP P 10 10 04.7 +0.2
comp=Z,20nm,0.8s
PLCA Paso Flores 88.29 134 eP P 10 10 06.9 +1.4
PLCA pmax pmax
comp=Z,310nm,3.0s
PLCA Paso Flores 88.29 134 P P 10 10 06.7 +1.2
baz=88,SNR=6.0
PLCA Paso Flores 88.29 134 eP P 10 10 06.9 +1.4
comp=Z,310nm,3.0s
G08A Pilot Rock 88.38 38 eP P 10 10 06.5 +0.9
comp=Z,33nm,1.1s
A04D Lummi Island 88.48 34 P P 10 10 06.9 +1.1
baz=89
B05A Bryant 88.51 34 P P 10 10 07.0 +1.0
baz=89
LTY Liberty 88.63 36 eP P 10 10 07.0 +0.3
comp=Z,10nm,0.7s
E07A Sunnyside 88.64 37 eP P 10 10 08.0 +1.3
comp=Z,27nm,0.9s
PMR Palmer 88.69 14 eP P 10 10 06.5 0.0
PMR pmax pmax
comp=Z,43nm,1.7s
PMR Palmer 88.69 14 eP P 10 10 06.5 0.0
comp=Z,43nm,1.7s
XAN Xi'an 88.72 308 P P 10 10 08.8 +1.4
XAN PMZ
comp=Z,8.0nm,0.8s
HAWA Hanford 88.72 37 eP P 10 10 08.3 +1.3
comp=Z,23nm,0.9s
121A Cookes Peak, D 88.78 54 P P 10 10 08.3 +0.4
baz=89
121A Cookes Peak, D 88.78 54 eP P 10 10 09.2 +1.3
comp=Z,17nm,1.1s
H2OWA Water 88.78 37 P P 10 10 08.4 +1.1
C06D Leavenworth 88.92 35 P P 10 10 08.9 +0.9
baz=89
RPW Rockport 88.92 35 P P 10 10 08.2 +0.2
B06A Marblemount 88.98 35 eP P 10 10 08.9 +0.7
comp=Z,27nm,1.1s
ETW Entiat 89.03 36 P P 10 10 09.1 +0.5
BMO Blue Mountains 89.07 39 eP P 10 10 09.1 +0.3
comp=Z,40nm,1.8s
MFID Camas Ranch 89.11 41 eP P 10 10 09.8 +0.7
comp=Z,28nm,1.0s
DUG Dugway 89.22 45 eP P 10 10 10.5 +0.8
DUG pmax pmax
comp=Z,15nm,1.5s
DUG Dugway 89.22 45 P P 10 10 10.4 +0.8
baz=90
DUG Dugway 89.22 45 eP P 10 10 10.4 +0.8
comp=Z,15nm,1.5s
EFI East Falkland 89.25 148 eP P 10 10 10.2 +0.7
EFI pmax pmax
comp=Z,522nm,2.5s
EFI East Falkland 89.25 148 eP P 10 10 10.2 +0.7
comp=Z,522nm,2.5s
KMI Kunming 89.25 298 P P 10 10 10.0 -0.3
KMI pP pP 10 12 07.3 +1.5
KMI sP sP 10 12 58.0 -0.6
KMI PP PP 10 13 53.3 +2.7
KMI SKS SKSac 10 19 49.5 -1.2
KMI S S 10 20 15.0 -0.9
KMI sS sS 10 23 41.8 -0.2
KMI SS SS 10 26 31.0 +4.6
KMI PMZ
comp=Z,9.0nm,1.1s
WTV Waterville 89.28 36 P P 10 10 09.9 +0.2
SCM Sheep Creek Mo 89.32 15 eP P 10 10 09.6 +0.1
SCM pmax pmax
comp=Z,105nm,1.9s
SCM Sheep Creek Mo 89.32 15 eP P 10 10 09.6 +0.1
comp=Z,105nm,1.9s
D08A Wollman Farm, 89.46 37 eP P 10 10 11.5 +1.1
comp=Z,16nm,0.9s
BGU Big Grassy Mou 89.47 44 eP P 10 10 11.7 +0.8
comp=Z,12nm,1.4s
CM01 Chiang Mai Arr 89.49 290 eP P 10 10 12.7 +1.4
WRAK Wrangell Islan 89.51 24 eP P 10 10 12.2 +1.8
comp=Z,93nm,1.8s
CMAR Chiang Mai Arr 89.52 290 P P 10 10 13.2 +1.8
comp=Z,3.4nm,0.5s,baz=139,slow=3.4,SNR=24
CMAR pP pP 10 12 07.8 +0.8
comp=Z,0.7nm,0.4s,baz=144,slow=42,SNR=1.1
CMAR PP PP 10 13 50.8 -1.8
comp=Z,1.1nm,0.4s,baz=123,slow=6.6,SNR=6.5
NLU North Lily Min 89.57 45 eP P 10 10 12.4 +1.0
comp=Z,11nm,1.1s
CHTO Chiang Mai 89.67 291 eP P 10 10 13.9 +1.8
CHTO pmax pmax
comp=Z,12nm,1.0s
CHTO Chiang Mai 89.67 291 eP P 10 10 13.9 +1.8
comp=Z,12nm,1.0s
F10A Beach Ranch, E 89.76 38 eP P 10 10 12.1 +0.1
comp=Z,12nm,0.8s
TMUT Trail Mountain 89.80 46 eP P 10 10 13.6 +1.0
comp=Z,100nm,0.8s
MPU Maple Canyon 89.89 46 eP P 10 10 14.3 +1.4
comp=Z,18nm,0.9s
B08A Colville Reser 90.02 36 eP P 10 10 12.9 -0.1
comp=Z,22nm,1.6s
HLID Hailey 90.05 41 P P 10 10 14.2 +0.7
baz=90,SNR=19
HLID Hailey 90.05 41 eP P 10 10 14.4 +0.9
comp=Z,12nm,1.0s
SPUT South Promonto 90.05 44 eP P 10 10 14.2 +0.6
comp=Z,21nm,1.0s
KTH Kantishna Hill 90.06 13 eP P 10 10 11.8 -1.1
comp=Z,10.0nm,1.0s
O16A Springville 90.08 45 eP P 10 10 13.2 -0.5
comp=Z,17nm,0.9s
HVU Hansel Valley 90.09 44 eP P 10 10 14.4 +0.7
HVU pmax pmax
comp=Z,18nm,0.8s
HVU Hansel Valley 90.09 44 eP P 10 10 14.4 +0.7
comp=Z,18nm,0.8s
TRF Thorofare Moun 90.10 13 eP P 10 10 12.9 -0.3
comp=Z,12nm,0.9s
SRU San Rafael 90.15 47 eP P 10 10 14.8 +0.7
SRU pmax pmax
comp=Z,31nm,0.9s
SRU San Rafael 90.15 47 eP P 10 10 14.8 +0.7
comp=Z,31nm,0.9s
LAZ Ladron 90.16 52 eP P 10 10 15.6 +1.3
Y22D IRIS PASSCAL I 90.16 53 P P 10 10 14.7 +0.4
baz=90
CTU Camp Tracy 90.17 45 eP P 10 10 15.0 +0.9
comp=Z,21nm,0.9s
MNTX Cornudas Mount 90.17 55 P P 10 10 15.1 +0.9
baz=90
MNTX Cornudas Mount 90.17 55 eP P 10 10 14.9 +0.7
comp=Z,12nm,0.9s
P17A Butcher Ranch, 90.20 46 eP P 10 10 15.4 +1.1
comp=Z,24nm,1.1s
RND Reindeer 90.36 13 eP P 10 10 14.1 -0.2
RND pmax pmax
comp=Z,16nm,1.1s
RND Reindeer 90.36 13 eP P 10 10 14.1 -0.2
comp=Z,16nm,1.1s
HHC Hu-ho-hao-te 90.39 315 eP P 10 10 12.5 -2.6
HHC PP PP 10 14 00.5 +1.4
HHC SS SS 10 26 45.5 +3.5
HHC PMZ
comp=Z,20nm,0.7s
HHC PMZ
comp=Z,89nm,4.4s
TX31 Lajitas Ar. Si 90.39 58 eP P 10 10 15.7 +0.4
TXAR Lajitas Array 90.39 58 P P 10 10 16.2 +0.9
comp=Z,11nm,0.7s,baz=214,slow=6.3,SNR=154
TXAR PP PP 10 14 04.0 +4.7
comp=Z,0.3nm,0.9s,baz=254,slow=7.7,SNR=4.0
BNM Barren Site 90.41 53 eP P 10 10 16.6 +1.1
LPM Los Pinos Moun 90.49 52 eP P 10 10 16.8 +1.0
MVCO Mesa Verde 90.57 49 P P 10 10 16.9 +0.7
baz=91
PV05 Paradox Valley 90.59 48 eP P 10 10 17.7 +1.4
P18A Preston Nutter 90.60 46 eP P 10 10 17.3 +0.9
comp=Z,11nm,0.9s
TCUT Toone Canyon 90.61 45 eP P 10 10 17.0 +0.7
comp=Z,44nm,0.9s
MCK McKinley 90.63 13 eP P 10 10 16.5 +1.0
MCK pmax pmax
comp=Z,67nm,2.2s
MCK McKinley 90.63 13 eP P 10 10 16.5 +1.0
comp=Z,67nm,2.2s
HWUT Hardware Ranch 90.77 44 eP P 10 10 17.1 +0.2
comp=Z,10nm,0.7s
PV09 Paradox Valley 90.78 48 eP P 10 10 18.0 +0.9
PV10 Paradox Valley 90.78 48 eP P 10 10 17.4 +0.3
ANMO Albuquerque 90.92 52 eP P 10 10 18.2 +0.5
ANMO pmax pmax
comp=Z,12nm,1.1s
ANMO Albuquerque 90.92 52 eP P 10 10 18.2 +0.5
comp=Z,12nm,1.1s
PV01 Paradox Valley 90.98 48 eP P 10 10 18.7 +0.7
CD2 Chengdu 91.06 303 P P 10 10 17.5 -0.8
CD2 pP pP 10 12 13.5 -0.6
CD2 PP PP 10 14 04.5 0.0
CD2 SKS SKSac 10 19 58.8 -1.6
CD2 S S 10 20 31.8 +0.3
CD2 sS sS 10 24 00.8 +2.1
CD2 SS SS 10 26 55.0 +3.2
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.4s
MENT Mentasta 91.14 16 eP P 10 10 18.6 +0.7
HDA Harding Lake 91.64 14 eP P 10 10 20.1 -0.1
comp=Z,12nm,1.1s
DOT Dot Lake 91.66 15 eP P 10 10 20.2 0.0
comp=Z,291nm,2.8s
AHID Auburn Hatcher 91.67 43 eP P 10 10 21.9 +0.9
comp=Z,13nm,0.8s
CCB Clear Creek Bu 91.67 13 eP P 10 10 19.6 -0.7
comp=Z,42nm,2.2s
MCMT McKenzie Canyo 91.68 41 eP P 10 10 21.6 +0.5
COLA College 91.86 13 eP P 10 10 20.0 -1.1

COLA pmax pmax
comp=Z,3.0nm,0.8s
529A Stev Forest Ra 91.87 58 P P 10 10 22.2 +0.1
baz=92
IL1 Eielson Array 91.98 14 eP P 10 10 20.6 -1.1
ILAR Eielson Array 91.98 14 P P 10 10 20.4 -1.3
comp=Z,1.3nm,0.8s,baz=214,slow=6.2,SNR=9.3
ILAR pP pP 10 12 16.1 -1.5
comp=Z,0.1nm,0.5s,baz=322,slow=34,SNR=1.3
DLMT Dillon 92.12 41 eP P 10 10 23.7 +0.7
comp=Z,49nm,2.3s
REDW Red Top Meadow 92.13 43 eP P 10 10 23.7 +0.5
comp=Z,20nm,1.4s
TPAW Teton Pass 92.14 43 eP P 10 10 24.1 +0.8
comp=Z,17nm,1.4s
FXWY Fox Creek 92.17 43 eP P 10 10 24.1 +0.7
comp=Z,11nm,1.6s
O20A White River Ci 92.19 47 P P 10 10 23.7 +0.2
baz=92,SNR=5.1
O20A White River Ci 92.19 47 eP P 10 10 24.1 +0.6
comp=Z,6.6nm,0.9s
BSMT Bassoo Peak 92.21 38 eP P 10 10 23.4 0.0
SNOW Snow King Moun 92.25 43 eP P 10 10 24.6 +0.9
comp=Z,12nm,1.1s
429A Davenport Ranc 92.35 58 P P 10 10 24.6 +0.3
baz=92,SNR=29
IMW Indian Meadow 92.36 43 eP P 10 10 24.9 +0.6
comp=Z,15nm,1.5s
MOOW Moose Ponds 92.40 43 eP P 10 10 25.0 +0.6
comp=Z,25nm,2.2s
LOHW Long Hollow 92.42 43 eP P 10 10 24.9 +0.4
comp=Z,19nm,1.8s
228A UT Block 9, Go 92.47 56 P P 10 10 25.1 +0.2
baz=93
QLMT Earthquake Lak 92.54 42 eP P 10 10 25.8 +0.7
CHMT Chamberlain Mo 92.57 39 eP P 10 10 25.2 +0.1
530A J-C Ranch, Com 92.57 58 P P 10 10 25.6 +0.3
baz=93,SNR=5.2
SMCO Snowmass 92.58 48 eP P 10 10 25.5 -0.1
comp=Z,8.4nm,0.8s
FLWY Flagg Ranch 92.60 42 eP P 10 10 26.4 +1.1
comp=Z,66nm,2.5s
SLMT Seeley Lake 92.60 39 eP P 10 10 25.8 +0.6
BW06 Boulder Array 92.64 44 eP P 10 10 25.6 0.0
comp=Z,6.5nm,0.9s
329A Wagon Wheel Ra 92.66 57 P P 10 10 26.1 +0.4
baz=93
YMR Madison River 92.74 42 eP P 10 10 27.3 +1.4
comp=Z,6.4nm,0.6s
128A Castleberry Fa 92.78 56 P P 10 10 26.3 +0.1
baz=93
832A Faith Ranch, C 92.83 60 P P 10 10 26.4 0.0
baz=93,SNR=8.0
H17A Grant Village 92.84 42 P P 10 10 26.8 +0.4
baz=93
631A Perdido Creek 92.84 59 P P 10 10 27.0 +0.5
baz=93,SNR=14
BOZ Bozeman (W) 92.85 41 eP P 10 10 26.9 +0.6
BOZ pmax pmax
comp=Z,106nm,2.9s
BOZ Bozeman (W) 92.85 41 P P 10 10 27.2 +0.9
baz=93
BOZ Bozeman (W) 92.85 41 eP P 10 10 26.9 +0.6
comp=Z,106nm,2.9s
SDCO Great Sand Dun 92.92 50 P P 10 10 27.2 +0.2
baz=93
SDCO Great Sand Dun 92.92 50 eP P 10 10 27.3 +0.2
comp=Z,7.4nm,0.9s
430A Baggett Ranch, 92.93 58 P P 10 10 27.1 +0.2
baz=93
732A Laxson Ranch, 93.03 60 P P 10 10 27.7 +0.4
baz=93,SNR=7.2
933A Laredo 93.11 61 P P 10 10 28.2 +0.5
baz=93
MSTX Muleshoe 93.17 54 P P 10 10 28.3 +0.3
baz=93
MSTX Muleshoe 93.17 54 eP P 10 10 28.2 +0.3
comp=Z,56nm,1.9s
DAWY Dawson 93.17 17 eP P 10 10 27.4 +0.2
comp=Z,81nm,2.3s
531A Rocksprings 93.19 59 P P 10 10 28.4 +0.3
baz=93,SNR=13
330A Mertzon 93.24 57 P P 10 10 28.5 +0.1
baz=93
129A Stewart Farms, 93.25 56 P P 10 10 28.9 +0.5
baz=94
HRY Holter Researc 93.28 40 eP P 10 10 28.8 +0.5
EGAK Eagle 93.30 16 eP P 10 10 27.7 0.0
comp=Z,7.1nm,0.9s
833A Chaparral WMA, 93.31 61 P P 10 10 28.8 +0.1
baz=94
LZH Lanzhou 93.35 308 eP P 10 10 26.8 -2.1
LZH pP pP 10 12 23.5 -1.3
LZH sP sP 10 13 21.0 +3.5
LZH PMZ
comp=Z,24nm,1.0s
LZH PMZ
comp=Z,84nm,4.7s
034A Hebbronville 93.35 62 P P 10 10 28.9 +0.1
baz=94
431A Sonora 93.37 58 P P 10 10 28.8 -0.1
baz=94
T25A Trinidad 93.41 51 P P 10 10 29.2 +0.1
baz=94
T25A Trinidad 93.41 51 eP P 10 10 29.5 +0.4
comp=Z,4.6nm,0.8s
230A Sterling City 93.50 57 P P 10 10 29.7 +0.2
baz=94
632A Uvalde 93.51 59 P P 10 10 29.6 +0.1
baz=94,SNR=12
Y28A McKinney Farm, 93.53 55 P P 10 10 29.9 +0.3
baz=94
532A Rocksprings 93.68 59 P P 10 10 30.8 +0.4
baz=94,SNR=16
Q24A Divide 93.73 49 P P 10 10 31.5 +0.8
baz=94
Q24A Divide 93.73 49 eP P 10 10 31.3 +0.6
comp=Z,7.1nm,0.8s
ISCO Idaho Springs 93.80 48 P P 10 10 31.1 +0.1
baz=94
JCT Junction City 93.91 58 eP P 10 10 31.5 +0.1
JCT pmax pmax
comp=Z,6.0nm,0.8s
JCT Junction City 93.91 58 P P 10 10 31.4 +0.1
baz=94
JCT Junction City 93.91 58 eP P 10 10 31.5 +0.1
comp=Z,5.7nm,0.8s
Y29A Porterfield Fa 93.94 55 P P 10 10 31.7 +0.2
baz=94
633A Saathoff Ranch 93.97 60 P P 10 10 32.2 +0.6
baz=94,SNR=7.0
LCO Las Campanas 94.07 124 eP P 10 10 33.1 +0.6
comp=Z,76nm,1.6s
432A Menard 94.08 58 P P 10 10 32.2 0.0
baz=94,SNR=15
N23A Red Feather La 94.09 47 P P 10 10 32.6 +0.3
baz=94
231A Bronte 94.13 57 P P 10 10 32.4 0.0
baz=94
S26A Kim 94.29 51 P P 10 10 33.3 +0.2
baz=94
533A Kerrville 94.34 59 P P 10 10 33.6 +0.2
baz=94,SNR=12
332A Millersview 94.34 58 P P 10 10 33.3 0.0
baz=94,SNR=6.7
131A Roby 94.39 56 P P 10 10 33.7 +0.2
baz=95
T27A Campo 94.58 52 P P 10 10 34.6 +0.2
baz=95
433A Art 94.58 59 P P 10 10 34.5 +0.1
baz=95,SNR=17
232A Coleman 94.63 57 P P 10 10 34.6 0.0
baz=95
534A Blanco 94.76 59 P P 10 10 35.3 0.0
baz=95,SNR=12
Z31A Sharp Cattle R 94.85 56 P P 10 10 35.6 0.0
baz=95
333A Richland Sprin 94.90 58 P P 10 10 36.0 +0.1
baz=95
R27A Eads 95.06 50 P P 10 10 36.6 0.0
baz=95
434A Burnet 95.25 59 P P 10 10 37.6 +0.2
baz=95,SNR=6.0
Z32A Haskell 95.35 56 P P 10 10 38.0 +0.1
baz=96
334A Lometa 95.49 58 P P 10 10 38.8 +0.3
baz=96,SNR=7.5
KSCO Kaye Shedlock' 95.51 50 P P 10 10 38.9 +0.3
baz=96
KSCO Kaye Shedlock' 95.51 50 eP P 10 10 39.3 +0.7
comp=Z,15nm,0.9s
X31A McDonald Ranch 95.53 55 P P 10 10 38.8 +0.2
baz=96
R28A Tribune 95.79 51 P P 10 10 39.9 +0.1
baz=96,SNR=6.6
234A Clairette 95.84 58 P P 10 10 40.4 +0.3
baz=96
Z33A Whitaker Ranch 95.89 56 P P 10 10 40.5 +0.2
baz=96
P28A Saint Francis 96.36 50 P P 10 10 42.7 +0.3
baz=97,SNR=5.2
O28A Krutsinger Ran 96.58 49 P P 10 10 43.6 +0.2
baz=97
Q29A Oakley 96.61 50 P P 10 10 43.6 +0.2
baz=97
LAO LASA Array 96.62 42 P P 10 10 43.8 +0.5
baz=97
P29A Atwood 96.95 50 P P 10 10 45.1 +0.1
baz=97
N28A Pribbeno Ranch 96.99 49 P P 10 10 45.5 +0.4
baz=97
SONM Songino Array 97.07 319 P P 10 10 44.8 -0.6
comp=Z,0.2nm,0.4s,baz=119,slow=5.6,SNR=2.6
SONM PP PP 10 14 45.7 -4.6
comp=Z,1.0nm,0.8s,baz=120,slow=8.0,SNR=4.3
SONM PKKPbc PKKPbc 10 27 23.4 -0.8
comp=Z,1.0nm,0.6s,baz=290,slow=1.8,SNR=5.8
236A Katherine and 97.09 58 P Pdif 10 10 46.0 +0.4
baz=97
Q30A Quinter 97.18 51 P Pdif 10 10 46.5 +0.5
baz=97
H25A Fruitdale 97.33 44 P P 10 10 46.9 +0.4
baz=98
GTA Gaotai 97.67 310 eP P 10 10 52.0 +3.7
GTA pP pP 10 12 51.3 +6.7
GTA sP sP 10 13 40.3 +3.2
GTA PMZ
comp=Z,7.0nm,1.1s
ZALV Zalesovo Beam 111.92 321 PKiKP PKiKP 10 15 42.7 -2.0
comp=Z,0.9nm,0.6s,baz=126,slow=2.6,SNR=3.7
ZALV SKP SKPdf 10 18 30.0 -0.5
comp=Z,0.6nm,0.3s,baz=168,slow=2.9,SNR=4.1
MKAR Makanchi Array 112.13 313 PKiKP PKiKP 10 15 44.5 -0.9
comp=Z,1.3nm,0.8s,baz=55,slow=1.4,SNR=6.2
MKAR SKP SKPdf 10 18 30.9 -0.3
comp=Z,1.0nm,0.7s,baz=73,slow=1.6,SNR=6.0
MKAR PKKPbc PKKPbc 10 26 38.6 -0.4
comp=Z,0.9nm,0.6s,baz=273,slow=3.7,SNR=6.4
MKAR PKKPab PKKPab 10 26 46.9 -0.7
comp=Z,2.0nm,0.7s,baz=275,slow=3.9,SNR=11
KURK Kurchatov 115.17 316 PKiKP PKPdf 10 15 49.8 -1.2
KURK 10 16 59.7
KURK 10 18 37.2
KURK Kurchatov 115.17 316 PKP PKPdf 10 15 49.8 -1.2
KURK PP PP 10 16 59.6 -1.6
KURK SKP 10 18 37.2
KURBB Kurchatov Arra 115.22 316 PKP PKPdf 10 15 49.8 -1.3
comp=Z,1.7nm,0.7s,baz=100,slow=1.9,SNR=22
KURBB PP PP 10 16 59.6 -1.9
comp=Z,1.0nm,0.8s,baz=91,slow=6.6,SNR=5.2
KURBB SKP SKPdf 10 18 37.2 +0.3
comp=Z,1.6nm,0.8s,baz=97,slow=1.9,SNR=8.4
KSH Kashi 115.25 304 ePKP PKPdf 10 15 49.5 -2.2
KSH ePP PP 10 17 12.0 +10
KSH esPKP 10 18 47.5
KSH PKS PKSdf 10 19 25.3 -3.2
KSH SKS SKSdf 10 22 09.3 -5.0
KSH SKKS SKKSac 10 23 07.5 -1.2
KSH PPMZ
comp=Z,91nm,4.2s
HUMP Col San Antoni 118.72 82 ePKPdf PKPdf 10 15 57.5 -1.3
BDFB Brasilia 118.83 125 PKP PKPdf 10 15 58.1 -1.2
comp=Z,3.5nm,0.6s,baz=211,slow=2.1,SNR=7.1
BDFB Brasilia 118.83 125 ePKIKP PKPdf 10 15 59.1 -0.2
BDFB Brasilia 118.83 125 ePKPdf PKPdf 10 15 59.1 -0.2
KBL Kabul 119.83 297 ePKIKP PKPdf 10 16 00.7 -0.1
KBL Kabul 119.83 297 ePKPdf PKPdf 10 16 00.7 -0.1
BVAR Borovoye Array 120.41 319 PKP PKPdf 10 16 00.3 -0.7
comp=Z,2.0nm,0.5s,baz=27,slow=3.6,SNR=7.3
BVAR SKP SKPdf 10 18 47.6 +0.7
comp=Z,2.4nm,0.9s,baz=132,slow=3.0,SNR=4.9
BRVK Borovoye 120.47 319 c iPKIKP PKPdf 10 15 58.6 -2.6
BRVK pmax pmax
comp=Z,7.0nm,1.7s
FRB Frobisher Bay 120.59 29 PKP PKPdf 10 15 59.6 -1.4
comp=Z,9.4nm,0.7s,baz=260,slow=4.9,SNR=5.1
SUR Sutherland 120.66 200 ePKPdf PKPdf 10 16 02.7 +0.1
SCHQ Schefferville 122.43 39 PKP PKPdf 10 16 02.7 -2.2
comp=Z,4.1nm,0.8s,baz=293,slow=7.7,SNR=3.1
BOSA Boshof 122.45 206 PKP PKPdf 10 16 05.7 -0.4
comp=Z,3.3nm,0.7s,baz=209,slow=2.6,SNR=8.6
BOSA PKKPbc PKKPbc 10 26 01.8 -1.6
comp=Z,3.5nm,0.8s,baz=16,slow=2.8,SNR=4.0
BOSA Boshof 122.45 206 ePKIKP PKPdf 10 16 06.5 +0.5
BOSA Boshof 122.45 206 ePKPdf PKPdf 10 16 06.5 +0.5
BOSA PKKPbc PKKPbc 10 26 01.8 -1.6
SPITS Spitsbergen Ar 125.07 356 PKP PKPdf 10 16 08.9 -0.5
comp=Z,10nm,0.8s,baz=74,slow=6.2,SNR=4.2
LBTB Lobatse 125.47 209 ePKIKP PKPdf 10 16 12.0 +0.1
LBTB Lobatse 125.47 209 ePKPdf PKPdf 10 16 12.0 +0.1
SFJD Kangerlussuaq 126.72 22 PKP PKPdf 10 16 11.8 -0.9
comp=Z,5.4nm,0.5s,baz=224,slow=3.2,SNR=3.7
AKTO Aktyubinsk 128.27 316 PKP PKPdf 10 16 16.1 0.0
comp=Z,2.4nm,0.7s,baz=98,slow=1.6,SNR=6.2
AKTO SKPbc SKPbc 10 18 47.4
comp=Z,2.6nm,0.8s,baz=68,slow=2.2,SNR=5.8
DRLN Deer Lake 128.75 45 ePKPdf PKPdf 10 16 19.1 +1.9
GEYT Alibeck 128.95 300 SKPbc SKPbc 10 18 51.1
comp=Z,8.9nm,0.8s,baz=112,slow=0.8,SNR=11
ARCES ARCESS Array B 131.84 348 PKP PKPdf 10 16 21.6 -0.8
comp=Z,4.6nm,0.8s,baz=12,slow=1.3,SNR=11
ARCES SKPbc SKPbc 10 18 59.5 0.0
comp=Z,5.8nm,0.8s,baz=28,slow=5.5,SNR=5.0
LSZ Lusaka 132.35 218 ePKIKP PKPdf 10 16 26.7 +1.5
LSZ Lusaka 132.35 218 ePKPdf PKPdf 10 16 26.7 +1.5
KMBO Kilima Mbogo 136.13 241 SKPbc SKPbc 10 19 17.0 +1.6
comp=Z,0.7nm,0.4s,baz=109,slow=2.4,SNR=6.1
FINES FINESS Array B 138.40 341 PKhKP PKPpre 10 16 26.3
comp=Z,3.2nm,1.0s,baz=46,slow=5.5,SNR=3.9
FINES SKPbc SKPbc 10 19 19.9 -0.1
comp=Z,11nm,0.8s,baz=106,slow=4.2,SNR=16
OBN Obninsk 138.73 329 SKPbc SKPbc 10 19 21.5 +0.4
comp=Z,8.8nm,0.4s,baz=84,slow=18,SNR=3.5
OBN Obninsk 138.73 329 i PKIKP PKPdf 10 16 35.6 0.0
OBN e 10 19 30.7
OBN pmax pmax
comp=Z,28nm,1.7s
NB2 NORSAR Subarra 142.03 351 PKP PKPpre 10 16 37.0
comp=Z,3.8nm,1.1s,baz=10,slow=3.2
NOA NORSAR Array B 142.03 351 PKhKP PKPpre 10 16 37.3
comp=Z,3.2nm,0.8s,baz=16,slow=4.7,SNR=7.3
NOA SKPbc SKPbc 10 19 29.9 +0.3
comp=Z,3.4nm,0.8s,baz=15,slow=4.2,SNR=7.2
HFS Hagfors 142.50 349 PKhKP PKPpre 10 16 38.3
comp=Z,5.9nm,0.5s,baz=72,slow=4.8,SNR=25
HFS SKP SKPbc 10 19 29.9 -0.9
comp=Z,6.3nm,0.8s,baz=132,slow=2.2,SNR=6.5
KONO Kongsberg 143.59 352 ePKIKP PKPab 10 16 42.3 -0.5
KONO Kongsberg 143.59 352 ePKPbc PKPab 10 16 42.3 -0.5
MALT Malatya 144.35 303 ||PKIKP PKPab 10 16 48.0 +1.5
MALT Malatya 144.35 303 i/P PKPab 10 16 48.0 +1.5
AKASG Malin Array Be 144.93 327 PKP PKPdf 10 16 46.5 -0.2
comp=Z,2.0nm,0.3s,baz=47,slow=4.6,SNR=14
AKASG pPKP pPKPdf 10 18 47.2 -3.0
comp=Z,0.2nm,0.3s,baz=96,slow=8.7,SNR=2.1
AKASG SKPbc SKiKP 10 19 37.3 +0.1
comp=Z,14nm,0.7s,baz=44,slow=2.7,SNR=24
KIEV Kiev 144.95 327 ePKIKP PKPdf 10 16 46.9 +0.2
KIEV Kiev 144.95 327 ePKPdf PKPdf 10 16 46.9 +0.2
AK11 Malin Array Si 144.98 327 ePKPdf PKPdf 10 16 47.0 +0.2
SUW Suwalki 145.22 336 ePKP PKPbc 10 16 47.6 -0.5
SUW Suwalki 145.22 336 ePKIKP PKPbc 10 16 47.7 -0.4
ASF Jabal al Asfar 146.53 293 PKPbc PKPbc 10 16 53.4 +0.7
comp=Z,2.4nm,0.5s,baz=99,slow=4.8,SNR=3.2
ASF pPKPbc pPKPbc 10 18 52.6 -1.3
comp=Z,1.6nm,0.5s,baz=349,slow=2.1,SNR=2.7
BRTR Keskin Array B 147.56 307 PKPbc PKPbc 10 16 55.1 -0.1
comp=Z,3.3nm,0.6s,baz=150,slow=5.5,SNR=5.3
BRTR pPKPbc pPKPbc 10 18 55.0 -1.9
comp=Z,1.5nm,0.8s,baz=108,slow=3.3,SNR=5.8
MMAI Mount Meron Ar 147.69 294 PKPbc PKPbc 10 16 56.9 +1.2
comp=Z,4.6nm,0.5s,baz=71,slow=6.4,SNR=10
MMAI pPKPbc pPKPbc 10 18 56.5 -0.8
comp=Z,0.5nm,0.3s,baz=168,slow=26,SNR=1.8
BEL Belsk 147.83 336 ePKP PKPbc 10 16 55.2 0.0
BEL Belsk 147.83 336 ePKP2 PKPbc 10 16 55.3 0.0
BR231 Keskin MP Arra 148.14 308 ePKPbc PKPbc 10 16 55.8 -0.9
EIL Elat 148.35 288 PKPbc PKPbc 10 16 57.8 +0.5
comp=Z,4.1nm,0.7s,baz=20,slow=7.4,SNR=4.2
EKA Eskdalemuir Ar 148.47 3 PKP PKPdf 10 16 50.9 -1.6
comp=Z,0.9nm,0.8s,baz=318,slow=1.0,SNR=3.8
EKA PKPbc PKPbc 10 16 56.0 -0.7
comp=Z,2.4nm,0.5s,baz=344,slow=2.7,SNR=17
ESK Eskdalemuir 148.48 4 ePKHKP PKPbc 10 16 56.2 -0.6
ESK Eskdalemuir 148.48 4 ePKPbc PKPbc 10 16 56.2 -0.6
KWP Kalwaria Pacla 148.73 331 ePKP PKPbc 10 16 57.6 0.0
KWP Kalwaria Pacla 148.73 331 ePKHKP PKPbc 10 16 57.6 0.0
CFR Carcaliu 148.80 320 ⇑PKHKP PKPbc 10 16 57.9 0.0
CFR Carcaliu 148.80 320 ⇑P PKPbc 10 16 57.9 0.0
BURAR Bucovina Array 148.93 326 ||PKP2 PKPbc 10 16 59.7 +1.4
BURAR Bucovina Array 148.93 326 ||P PKPbc 10 16 59.7 +1.4
BUR04 Bucovina Ar. S 148.93 326 ePKPbc PKPbc 10 16 59.7 +1.3
BSEG Bad Segeberg 148.97 348 ePKPbc PKPbc 10 16 59.0 +1.0
baz=21,slow=2.2
CSS Prodhromos 149.07 299 ePKPbc PKPbc 10 16 59.1 +0.1
VRI Vrincioaia 149.22 322 ⇑PKHKP PKPbc 10 16 59.2 +0.2
VRI Vrincioaia 149.22 322 ⇑P PKPbc 10 16 59.2 +0.2
KOLS Kolonicke sedl 149.43 331 ePKHKP PKPbc 10 16 59.9 +0.5
KOLS Kolonicke sedl 149.43 331 ePKP PKPbc 10 16 59.9 +0.5
OJC Ojcow 149.49 335 ePKP PKPbc 10 16 59.1 -0.4
OJC Ojcow 149.49 335 ePKHKP PKPbc 10 16 59.1 -0.4
OJC Ojcow 149.49 335 ePKPbc PKPbc 10 16 59.1 -0.4
STHS Stebnicka Huta 149.53 332 ePKHKP PKPbc 10 17 00.0 +0.4
STHS Stebnicka Huta 149.53 332 ePKP PKPbc 10 17 00.0 +0.4
RUE Ruedersdorf 149.54 343 ePKPbc PKPbc 10 17 00.4 +1.0
baz=21,slow=2.2
UZH Uzhgorod 149.65 330 ePKIKP PKPdf 10 16 52.1 -2.5
MLR Muntele Rosu 149.88 322 PKPbc PKPbc 10 16 59.4 -1.3
comp=Z,0.4nm,0.4s,baz=132,slow=1.5,SNR=4.4
MLR Muntele Rosu 149.88 322 ||P PKPbc 10 17 00.8 +0.1
DOPR Dopca 149.90 323 ⇑P PKPbc 10 17 00.6 0.0
NIE Niedzica 149.92 333 ePKP PKPbc 10 17 01.2 +0.7
NIE Niedzica 149.92 333 ePKHKP PKPbc 10 17 01.2 +0.7
KSP Ksiaz 150.24 339 ePKP PKPbc 10 17 01.5 +0.3
KSP Ksiaz 150.24 339 ePKIKP PKPbc 10 17 01.6 +0.3
DSB Dublin 150.25 8 ePKPbc PKPbc 10 17 01.0 -0.1
CJR Cluj-Napoca 150.36 326 ||PKIKP PKPbc 10 17 02.3 +0.6
CJR Cluj-Napoca 150.36 326 ||P PKPbc 10 17 02.3 +0.6
NRDL Niedersach Rie 150.38 347 ePKPbc PKPbc 10 17 02.3 +0.9
baz=21,slow=2.2
VOIR 150.41 323 ⇑PKIKP PKPbc 10 17 02.8 +0.9
VOIR 150.41 323 ⇑P PKPbc 10 17 02.8 +0.9
OKC Ostrava-Krasne 150.44 336 ePKIKP PKPbc 10 17 01.8 +0.1
OKC Ostrava-Krasne 150.44 336 ⇑ePKP PKPbc 10 17 01.8 +0.1
LANS Liptovska Anna 150.47 334 ePKIKP PKPbc 10 17 03.1 +1.3
LANS Liptovska Anna 150.47 334 ePKP PKPbc 10 17 03.1 +1.3
ISP Isparta 150.48 305 ⇑PKIKP PKPbc 10 17 01.8 -0.6
ISP Isparta 150.48 305 ⇑P PKPbc 10 17 01.8 -0.6
ISP Isparta 150.48 305 ePKPbc PKPbc 10 17 01.7 -0.6
ASSE Asse, Remlinge 150.60 347 ePKPbc PKPbc 10 17 02.9 +1.0
baz=21,slow=2.2
UPC Upice 150.62 339 ePKIKP PKPbc 10 17 02.5 +0.4
UPC Upice 150.62 339 ⇑ePKP PKPbc 10 17 02.5 +0.4
UPC epPKP pPKPdf 10 19 09.3 +10
DPC Dobruska-Polom 150.66 338 ePKIKP PKPbc 10 17 02.7 +0.5
DPC e 10 17 09.5
DPC Dobruska-Polom 150.66 338 ⇑ePKP PKPbc 10 17 02.7 +0.5
DPC ePKPAB PKPab 10 17 09.5 -2.0
DPC epPKP pPKPdf 10 19 09.6 +10
ARR Arges 150.68 323 ⇑P PKPbc 10 17 03.9 +1.4
MORC Moravsky Berou 150.71 336 ePKIKP PKPbc 10 17 02.3 -0.1
MORC Moravsky Berou 150.71 336 ||P PKPbc 10 17 02.9 +0.5
MORC Moravsky Berou 150.71 336 ePKPbc PKPbc 10 17 02.3 -0.1
KRLC Kraliky 150.73 338 ePKIKP PKPbc 10 17 02.8 +0.4
KRLC Kraliky 150.73 338 ⇑ePKP PKPbc 10 17 02.8 +0.4
DRGR 150.75 327 ⇑PKIKP PKPbc 10 17 02.7 +0.1
DRGR 150.75 327 ⇑P PKPbc 10 17 02.7 +0.1
CLL Collm 150.81 343 ⇑PKIKP PKPbc 10 17 02.4 -0.1
CLL pmax pmax
comp=Z,25nm,0.9s
CLL Collm 150.81 343 ePKPbc PKPbc 10 17 03.3 +0.8
baz=21,slow=2.2
CLL epPKPbc pPKPbc 10 19 09.8 +4.9
CLL Collm 150.81 343 ⇑PKPbc PKPbc 10 17 02.4 -0.1
comp=Z,25nm,0.9s
CLL i pPKPbc pPKPbc 10 19 06.1 +1.2
comp=Z,12nm,1.1s
CLL Collm 150.81 343 ePKPbc PKPbc 10 17 02.4 -0.1
CLZ Clausthal 150.94 347 ePKPbc PKPbc 10 17 03.8 +1.0
baz=21,slow=2.2
BRG Berggiesshubel 150.94 342 ePKP PKPdf 10 16 56.3 -0.2
comp=Z,6.3nm,1.1s
BRG i 10 17 02.8
comp=Z,12nm,0.7s
BRG e 10 17 10.1
comp=Z,6.3nm,0.9s
BRG epPKP pPKPdf 10 19 09.8 +10
comp=Z,7.8nm,0.9s
BRG Berggiesshubel 150.94 342 ePKIKP PKPdf 10 16 56.3 -0.2
BRG e 10 17 10.1
BRG pmax pmax
comp=Z,6.0nm,1.1s
BRG pmax pmax
comp=Z,12nm,0.7s
BRG pmax pmax
comp=Z,6.0nm,0.9s
BRG pmax pmax
comp=Z,8.0nm,1.0s
BRG Berggiesshubel 150.94 342 ePKPbc PKPbc 10 17 03.7 +0.9
baz=21,slow=2.2
BRG epPKPbc pPKPbc 10 19 10.4 +5.2
IBBN Ibbenburen 150.97 350 ePKPbc PKPbc 10 17 04.6 +1.8
baz=21,slow=2.2
PVCC Panska Ves 151.06 341 ePKIKP PKPbc 10 17 03.4 +0.3
PVCC Panska Ves 151.06 341 ⇑ePKP PKPbc 10 17 03.4 +0.3
FBE Freiberg 151.06 342 ePKPbc PKPbc 10 17 04.2 +1.2
baz=21,slow=2.2
FBE epPKPbc pPKPbc 10 19 10.9 +5.4
CWF Charnwood Fore 151.14 2 ePKPbc PKPbc 10 17 02.7 -0.5
NEUB Neuenburg 151.21 345 ePKPbc PKPbc 10 17 04.2 +0.8
baz=21,slow=2.2
GTTG Gyttingen 151.31 347 ePKPbc PKPbc 10 17 04.3 +0.7
baz=21,slow=2.2
GOPC GO Pecny, Ondr 151.53 340 ePKIKP PKPbc 10 17 04.1 -0.1
GOPC GO Pecny, Ondr 151.53 340 ⇑ePKP PKPbc 10 17 04.1 -0.1
PRU Pruhonice 151.54 340 ePKIKP PKPbc 10 17 03.9 -0.3
PRU Pruhonice 151.54 340 ⇑ePKP PKPbc 10 17 03.9 -0.3
PRU epPKP pPKPdf 10 19 11.2 +10
TANN Tannenbergstha 151.76 343 ePKPbc PKPbc 10 17 05.4 +0.7
baz=21,slow=2.2
MOX Moxa 151.77 344 ePKPbc PKPbc 10 17 05.3 +0.6
baz=21,slow=2.2
WERD Werda 151.78 343 ePKPbc PKPbc 10 17 05.4 +0.7
baz=21,slow=2.2
PLN Plauen 151.78 343 ePKPbc PKPbc 10 17 05.4 +0.7
baz=21,slow=2.2
GUNZ Gunzen 151.85 343 ePKPbc PKPbc 10 17 05.8 +0.9
baz=21,slow=2.2
GUNZ epPKPbc pPKPbc 10 19 12.4 +4.9
BUG Bochum--Univer 151.89 350 ePKPbc PKPbc 10 17 05.3 +0.4
baz=21,slow=2.2
WERN Wernitzgruen 151.90 343 ePKPbc PKPbc 10 17 06.1 +1.1
baz=21,slow=2.2
WERN epPKPbc pPKPbc 10 19 12.8 +5.1
BZS Buzias 152.11 326 ⇑PKIKP PKPbc 10 17 04.9 -0.7
BZS Buzias 152.11 326 ⇑P PKPbc 10 17 04.9 -0.7
MANZ Manzenberg 152.25 343 ePKPbc PKPbc 10 17 06.6 +0.8
baz=21,slow=2.2
MANZ epPKPbc pPKPbc 10 19 13.3 +4.9
ROTZ Rotzenmuhle 152.42 343 ePKPbc PKPbc 10 17 06.9 +0.8
baz=21,slow=2.2
KHC Kasperske Hory 152.60 340 ePKIKP PKPbc 10 17 06.1 -0.5
KHC Kasperske Hory 152.60 340 ⇑ePKP PKPbc 10 17 06.1 -0.5
KHC ex x 10 17 12.1
KHC epPKP pPKPdf 10 19 09.3 +6.5
KHC Kasperske Hory 152.60 340 ePKPbc PKPbc 10 17 05.2 -1.4
GEC2 GERESS Array S 152.81 340 epPKPbc pPKPbc 10 19 15.1 +5.2
GERES GERESS Array B 152.81 340 PKP PKPdf 10 16 59.0 -0.5
comp=Z,0.5nm,0.7s,baz=116,slow=6.1,SNR=3.8
GERES PKPbc PKPbc 10 17 06.8 -0.4
comp=Z,1.1nm,0.6s,baz=45,slow=2.1,SNR=6.3
GERES epPKPbc pPKPbc 10 19 07.2 -2.6
comp=Z,0.3nm,0.6s,baz=44,slow=26,SNR=1.9
TNS Taunus Mts 152.86 348 ePKPbc PKPbc 10 17 07.7 +0.6
baz=21,slow=2.2
KIC Kosan Boka 162.02 165 ePKIKP PKPdf 10 17 10.9 -0.8
comp=Z,28nm,1.0s
TIC Toumodi 162.22 163 ePKIKP PKPdf 10 17 10.2 -1.7

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **DBIC** | **Dimbokro** | **162.29 164** | PKP | **PKPdf** | **10 17 10.8** | **-1.1** |
| | comp=Z,3.7nm,0.7s,baz=145,slow=1.4,SNR=7.3 | | | | | |
| DBIC | | | PKPab | **PKPab** | **10 18 02.3** | **-0.1** |
| | comp=Z,7.5nm,0.7s,baz=167,slow=5.8,SNR=8.8 | | | | | |
| **DBIC** | **Dimbokro** | **162.29 164** | *e*PKIKP | **PKPdf** | **10 17 11.7** | **-0.3** |
| DBIC | | | *e* | | 10 18 03.3 | |
| **DBIC** | **Dimbokro** | **162.29 164** | *e*PKPdf | **PKPdf** | **10 17 11.7** | **-0.3** |
| DBIC | | | *e*PKPab | **PKPab** | **10 18 03.2** | **+0.8** |
| **ESDC** | **Sonseca Array** | **163.87 11** | PKPab | **PKPab** | **10 18 08.3** | **-0.6** |
| | comp=Z,0.5nm,0.5s,baz=336,slow=3.2,SNR=6.0 | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **169.24 189** | *e*PKIKP | **PKPdf** | **10 17 15.3** | **-2.1** |
| **TOA0** | **Torodi Ar. Sit** | **169.24 189** | *e*PKPdf | **PKPdf** | **10 17 16.3** | **-1.1** |
| TOA0 | | | *e*PKPab | **PKPab** | **10 18 33.2** | **+0.1** |
| **TORD** | **Torodi Ar. Bea** | **169.24 189** | PKP | **PKPdf** | **10 17 16.2** | **-1.2** |
| | comp=Z,5.4nm,1.1s,baz=212,slow=5.1,SNR=19 | | | | | |
| TORD | | | PKPab | **PKPab** | **10 18 33.2** | **+0.1** |
| | comp=Z,6.5nm,0.8s,baz=182,slow=3.5,SNR=29 | | | | | |
| TORD | | | pPKPab | **pPKPab** | **10 20 29.2** | **-0.3** |
| | comp=Z,0.3nm,0.7s,baz=191,slow=3.0,SNR=1.4 | | | | | |
| TORD | | | PP | **PP** | **10 22 20.8** | **-1.4** |
| | comp=Z,2.1nm,0.9s,baz=179,slow=4.9,SNR=6.9 | | | | | |

**IDC 31 10:02:14.5±36.0, 10°88S×119°23E, h0km, mb3.8/4, mb1 3.8/4, mb1mx3.5/38, mbtmp3.8/4, Error ellipse: s-maj=871.6km s-min=199.3km az=142.0, Sumba region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SONM** | **Songino Array** | **59.56 350** | | P | P | 10 12 20.0 | 0.0 |
| | 0.9nm,0.6s,baz=169,slow=7.4,SNR=6.1 | | | | | | |
| **MKAR** | **Makanchi Array** | **66.23 333** | | P | P | 10 13 04.2 | -0.1 |
| | 0.5nm,0.5s,baz=130,slow=6.6,SNR=4.0 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **70.75 334** | | P | P | 10 13 32.6 | +0.2 |
| | 0.2nm,0.5s,baz=139,slow=5.9,SNR=5.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **70.87 339** | | P | P | 10 13 33.0 | -0.1 |
| | 0.7nm,0.5s,baz=125,slow=6.2,SNR=3.1 | | | | | | |

*ISCJB **31** 10:20:15.7±0.8, 31°17S±0°.04×68°.31W±0°.05, h107km±7km, Error ellipse: s-maj=7.5km s-min=5.8km az=1.5*
*SJA **31** 10:20:15.4±0.8, 31°.21S×68°.29W, h104km±3km, ML3.8, MW3.6*
*GUC **31** 10:20:17.0±0.5, 31°.19S×68°.53W, h135km, ML3.8*
**ISC 31 10:20:16.5±1.5, 31°19S±0°.04×68°29W±0°.05, h102km±9km, n17, σ0°50/28, 3D, San Juan Province**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RTLL** | **Cerro Villicun** | **0.21 228** | | *e*P | **Pn** | **10 20 30.8** | **-0.2** |
| RTLL | | | | *e*S | **Sn** | **10 20 42.1** | **+0.1** |
| **SJA** | **San Juan** | **0.41 214** | | *e*P | **Pn** | **10 20 32.0** | **0.0** |
| SJA | | | | *e*S | **Sn** | **10 20 43.3** | **-0.3** |
| **CFAA** | **Coronel Fontan** | **0.42 174** | | *e*P | **Pn** | **10 20 31.9** | **-0.1** |
| **RTCV** | **Cerro Valdivia** | **0.71 197** | | *e*P | **Pn** | **10 20 33.9** | **-0.4** |
| **AVFE** | **Valle Fertil** | **0.89 54** | | *e*P | **Pn** | **10 20 36.5** | **+0.5** |
| AVFE | | | | *e*S | **Sn** | **10 20 51.0** | **+0.3** |
| AVFE | | | | IAML | | 10 20 52.2 | |
| | comp=Z,2μm,0.4s | | | | | | |
| **RTLS** | **Leoncito** | **1.05 234** | | *e*P | **Pn** | **10 20 38.3** | **+0.4** |
| **AUSP** | **Uspallata** | **1.39 222** | | *e*P | **Pn** | **10 20 42.0** | **+0.1** |
| AUSP | | | | *e*S | **Sn** | **10 21 01.6** | **+0.5** |
| **ASAL** | **Salagasta** | **1.48 198** | | *e*P | **Pn** | **10 20 42.5** | **-0.1** |
| ASAL | | | | *e*S | **Sn** | **10 21 02.8** | **+0.4** |
| **ARCO** | **CERRO ARCO** | **1.74 198** | | *e*P | **Pn** | **10 20 46.1** | **+0.1** |
| ARCO | | | | *e*S | **Sn** | **10 21 08.4** | **0.0** |
| **AAGR** | **Agrelo** | **1.95 193** | | *e*P | **Pn** | **10 20 48.5** | **0.0** |
| AAGR | | | | *e*S | **Sn** | **10 21 12.7** | **-0.4** |
| **TLL** | **Tololo Astrono** | **2.39 294** | | *e*P | **Pn** | **10 20 54.8** | **+0.3** |
| TLL | | | | *e*S | **Sn** | **10 21 23.9** | **+0.4** |
| TLL | | | | AML | AML | 10 21 27.0 | |
| | comp=E,979nm,0.4s | | | | | | |
| **PEL** | **Peldehue** | **2.82 225** | | *i*P | **Pn** | **10 21 00.2** | **+0.3** |
| PEL | | | | *e*S | **Sn** | **10 21 32.7** | **-0.6** |
| PEL | | | | AML | AML | 10 21 39.9 | |
| | comp=N,282nm,0.4s | | | | | | |
| **LSCH** | **La Serena** | **2.85 296** | | *i*P | **Pn** | **10 20 59.8** | **-0.4** |
| LSCH | | | | *i*S | **Sn** | **10 21 32.4** | **-1.5** |
| **CLCH** | **Cerro Calan** | **2.91 220** | | *e*P | **Pn** | **10 21 02.0** | **+0.9** |
| CLCH | | | | AML | AML | 10 21 40.8 | |
| | comp=E,139nm,0.5s | | | | | | |
| **TCA** | **Tanti** | **3.17 94** | | *e*P | **Pn** | **10 21 04.2** | **-0.4** |
| **VACH** | **Vallenar** | **3.37 320** | | *i*P | **Pn** | **10 21 07.8** | **+0.6** |
| VACH | | | | *i*S | **Sn** | **10 21 46.1** | **-0.4** |
| **CDCH** | **Caldera** | **4.66 331** | | *e*P | **Pn** | **10 21 24.7** | **+0.1** |

*ISCJB **31** 10:30:40.8±1.1, 37°.1S±0°.1×179°.31W±0°.08, h31km, mb3.9/2, Error ellipse: s-maj=15.8km s-min=9.2km az=171.1*
*IDC **31** 10:30:40.8±1.8, 36°.76S×179°.74W, h0km, mb4.1/2, mb1 4.3/2, mb1mx3.8/30, mbtmp4.1/2, ML3.1/1, Error ellipse: s-maj=47.8km s-min=34.6km az=159.0*
*WEL **31** 10:30:42.1±0.5, 36°.86S×179°.32W, h33km, ML3.7/5, Error ellipse: s-maj=4.9km s-min=4.6km az=0.0*
**ISC 31 10:30:44.4±1.4, 37°.0S±0°.1×179°.50W±0°.08, h31km, n28, σ1°10/33, East of North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MXZ** | **Matakaoa Point** | **1.83 253** | | PN | **Pn** | **10 31 12.7** | **-1.0** |
| MXZ | | | | SN | **Sn** | **10 31 35.8** | **+0.1** |
| **WMGZ** | **Waiomatatini S** | **1.84 244** | | PN | **Pn** | **10 31 13.7** | **-0.1** |
| **PUZ** | **Puketiti** | **2.06 239** | | PN | **Pn** | **10 31 16.6** | **-0.3** |
| PUZ | | | | SN | **Sn** | **10 31 43.1** | **+1.5** |
| PUZ | | | | AML | AML | 10 32 02.8 | |
| **PKGZ** | **Pakihiroa** | **2.10 246** | | PN | **Pn** | **10 31 17.0** | **-0.4** |
| **HAZ** | **Te Kaha** | **2.28 251** | | PN | **Pn** | **10 31 19.9** | **0.0** |
| **TWGZ** | **Tauwhareparae** | **2.30 240** | | PN | **Pn** | **10 31 20.1** | **-0.2** |
| TWGZ | | | | SN | **Sn** | **10 31 49.7** | **+2.1** |
| **TKGZ** | **Te Karaka** | **2.53 236** | | PN | **Pn** | **10 31 23.1** | **-0.2** |
| **MWZ** | **Matawai** | **2.69 240** | | PN | **Pn** | **10 31 25.1** | **-0.5** |
| MWZ | | | | SN | **Sn** | **10 31 57.9** | **+0.7** |
| MWZ | | | | AML | AML | 10 31 58.7 | |
| **RIGZ** | **Rimuhau** | **2.73 232** | | PN | **Pn** | **10 31 26.1** | **-0.1** |
| **MHGZ** | **Mahia Peninsul** | **2.94 223** | | PN | **Pn** | **10 31 28.7** | **-0.3** |
| **URZ** | **Urewera** | **2.96 245** | | PN | **Pn** | **10 31 29.1** | **-0.1** |
| URZ | | | | SN | **Sn** | **10 32 04.4** | **+0.7** |
| URZ | | | | AML | AML | 10 32 04.8 | |
| **URZ** | **Urewera** | **2.96 245** | | **Pn** | **Pn** | **10 31 28.6** | **-0.6** |
| | 2.5nm,0.3s,baz=84,slow=16,SNR=12 | | | | | | |
| URZ | | | | Sn | **Sn** | **10 32 04.3** | **+0.7** |
| | 4.4nm,0.3s,baz=73,slow=4.7,SNR=4.4 | | | | | | |
| **KNZ** | **Kokohu** | **2.98 228** | | PN | **Pn** | **10 31 28.8** | **-0.8** |
| **SNGZ** | **Shannon Statio** | **3.05 234** | | PN | **Pn** | **10 31 30.3** | **-0.2** |
| **NMHZ** | **Naumai** | **3.57 234** | | PN | **Pn** | **10 31 37.5** | **-0.2** |
| **BKZ** | **Black Stump Fm** | **3.81 235** | | PN | **Pn** | **10 31 40.1** | **-0.9** |
| BKZ | | | | AML | AML | 10 32 24.8 | |
| **MCHZ** | **McNeill Hill** | **3.84 230** | | *e*PN | **Pn** | **10 31 40.8** | **-0.6** |
| **BHHZ** | **Black Hill Sta** | **4.26 234** | | *e*PN | **Pn** | **10 31 46.6** | **-0.7** |
| **TSZ** | **Takapari Road** | **4.67 228** | | PN | **Pn** | **10 31 50.8** | **-2.0** |
| **DVHZ** | **Dannevirke** | **4.70 225** | | PN | **Pn** | **10 31 51.6** | **-1.7** |
| **BFZ** | **Birch Farm** | **4.92 221** | | PN | **Pn** | **10 31 53.7** | **-2.6** |
| **MRZ** | **Mangatainoka R** | **5.28 225** | | PN | **Pn** | **10 31 58.9** | **-2.2** |
| **CTZ** | **Chatham Island** | **7.04 163** | | PN | **Pn** | **10 32 25.0** | **-0.2** |
| **RPZ** | **Rata Peaks** | **9.82 224** | | Sn | Sn | 10 34 42.6 | -10 |
| | 0.3nm,0.3s,baz=81,slow=19,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **41.97 275** | | P | **P** | **10 38 32.1** | **-0.6** |
| | 1.8nm,0.5s,baz=116,slow=7.7,SNR=43 | | | | | | |
| **WRA** | **Warramunga Arr** | **43.55 280** | | P | **P** | **10 38 44.2** | **-1.4** |
| | 1.2nm,0.5s,baz=121,slow=7.8,SNR=8.8 | | | | | | |
| **FINES** | **FINESS Array B** | **150.79 335** | | PKPbc | **PKPbc** | **10 50 33.4** | **+0.7** |
| | 3.1nm,0.9s,baz=74,slow=3.2,SNR=3.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **156.18 183** | | PKPab | **PKPab** | **10 51 05.5** | **+1.6** |
| | 0.3nm,0.5s,baz=189,slow=3.2,SNR=3.7 | | | | | | |

*AUST **31** 10:33:41.5, 8°.00N×127°.02E, h30km*
*ISCJB **31** 10:33:48.8±0.6, 7°.29N±0°.03×126°.71E±0°.06, h68km±7km, mb3.9/8, Error ellipse: s-maj=10.3km s-min=5.7km az=173.4*
*IDC **31** 10:33:48.4±1.9, 7°.57N×126°.79E, h60km±16km, mb3.7/8, mb1 4.0/10, mb1mx3.6/41, mbtmp4.2/10, MS3.4/2, Ms1 3.5/2, ms1mx2.6/35, Error ellipse: s-maj=28.4km s-min=14.2km az=69.0*
*MAN **31** 10:33:52, 7°.27N×126°.45E, h32km, mb5.1, ML4.0, MS4.2*
**ISC 31 10:33:49.4±0.8, 7°26N±0°.04×126°71E±0°.07, h61km±7km, n41, σ1°54/44, mb3.9/8, 1C-2D, Mindanao**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **MATI** | **Mati** | **0.55 235** | | *e*P | **Pn** | **10 34 01.5** | **-0.5** |
| MATI | | | | *e*S | **Sn** | **10 34 09.8** | **-1.4** |
| **BIPH** | **Bislig** | **0.98 339** | | *i*P | **Pn** | **10 34 06.5** | **-0.8** |
| BIPH | | | | *i*S | **Sn** | **10 34 18.8** | **-1.7** |
| **DAV** | **Davao City (W)** | **1.14 260** | | P | **Pn** | **10 34 10.6** | **+1.2** |
| | 174nm,0.3s,baz=70,slow=2.6,SNR=42 | | | | | | |
| DAV | | | | LR | LR | 10 34 18.9 | |
| | comp=Z,109nm,18.9s,baz=40,slow=23 | | | | | | |
| DAV | | | | S | | | |
| | 592nm,0.3s,baz=107,slow=19,SNR=77 | | | | | | |
| **KCP** | **Kidapawan** | **1.62 261** | | *e*P | **Pn** | **10 34 15.1** | **-0.9** |
| KCP | | | | *i*S | **Sn** | **10 34 35.4** | **-0.5** |
| **BUKP** | **Musuan** | **1.74 291** | | *e*P | **Pn** | **10 34 18.2** | **+0.7** |
| BUKP | | | | *e*S | **Sn** | **10 34 39.1** | **+0.4** |
| **BUTP** | **Butuan** | **2.01 328** | | *e*P | **Pn** | **10 34 23.2** | **+2.1** |
| BUTP | | | | *e*S | **Sn** | **10 34 45.4** | **+0.3** |
| **CTBH** | **Cotabato--PC H** | **2.44 269** | | *e*P | **Pn** | **10 34 27.2** | **+0.3** |
| CTBH | | | | *e*S | **Sn** | **10 34 53.1** | **-2.6** |
| **SCPH** | **Surigao** | **2.78 334** | | *e*P | Pn | 10 34 35.0 | +3.4 |
| SCPH | | | | *e*S | **Sn** | **10 35 04.8** | **+0.8** |
| **PAGZ** | **Pagadian** | **3.35 280** | | *e*P | **Pn** | **10 34 40.3** | **+0.9** |
| **MSLP** | **Maasin** | **3.39 328** | | *e*P | **Pn** | **10 34 40.3** | **+0.4** |
| **PLP** | **Palo** | **4.24 336** | | *e*P | **Pn** | **10 34 52.9** | **+1.4** |
| PLP | | | | *e*S | **Sn** | **10 35 40.1** | **+0.4** |
| **SIJI** | **Sorong** | **9.27 150** | | P | **Pn** | **10 36 02.1** | **+1.6** |
| | 2.9nm,0.3s,baz=269,slow=23,SNR=9.4 | | | | | | |
| SIJI | | | | S | **Sn** | **10 37 38.8** | **-4.6** |
| | 0.4nm,0.3s,baz=60,slow=20,SNR=1.9 | | | | | | |
| **BATI** | **Baumata** | **17.62 190** | | P | **P** | **10 37 54.2** | **+3.1** |
| | 6.1nm,0.3s,baz=346,slow=18,SNR=5.6 | | | | | | |
| **KDU** | **Kakadu** | **20.63 164** | | P | **P** | **10 38 25.3** | **+1.3** |
| | baz=21,SNR=5.8 | | | | | | |
| **KNRA** | **Kununurra** | **22.88 175** | | P | **P** | **10 38 48.9** | **+0.9** |
| | baz=24,SNR=29 | | | | | | |
| **COEN** | **Coen** | **26.68 142** | | P | **P** | **10 39 23.9** | **+0.9** |
| | baz=27,SNR=4.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **28.06 165** | | P | **P** | **10 39 35.2** | **-0.1** |
| | 1.3nm,0.5s,baz=346,slow=10,SNR=4.8 | | | | | | |
| WRA | | | | PcP | **PcP** | **10 42 48.8** | **-0.1** |
| | 0.3nm,0.4s,baz=335,slow=2.5,SNR=3.1 | | | | | | |
| WRA | | | | ScP | **ScP** | **10 46 24.0** | **-0.7** |
| | 0.2nm,0.6s,baz=334,slow=2.6,SNR=2.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **29.22 295** | | LR | LR | 10 51 24.1 | |
| | comp=Z,21nm,18.8s,baz=156,slow=36 | | | | | | |
| **QIS** | **Mount Isa** | **30.41 156** | | P | **P** | **10 39 57.1** | **+0.9** |
| | baz=31,SNR=14 | | | | | | |
| **MTSU** | **Mount Surprise** | **30.64 146** | | P | **P** | **10 39 59.8** | **+1.6** |
| | baz=31,SNR=5.9 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **30.98 18** | | P | P | 10 39 56.6 | -4.5 |
| | 1.1nm,0.7s,baz=197,slow=9.5,SNR=4.0 | | | | | | |
| **ASAR** | **Alice Springs** | **31.53 167** | | P | **P** | **10 40 06.2** | **+0.2** |
| | 1.0nm,0.3s,baz=340,slow=7.1,SNR=25 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 42 58.0** | **+0.3** |
| | 0.8nm,0.4s,baz=348,slow=2.5,SNR=11 | | | | | | |
| ASAR | | | | ScP | **ScP** | **10 46 34.6** | **-1.3** |
| | 0.4nm,0.5s,baz=339,slow=3.1,SNR=4.5 | | | | | | |
| **WRKA** | **Warakurna** | **32.14 177** | | P | **P** | **10 40 12.1** | **+0.8** |
| | baz=33,SNR=9.0 | | | | | | |
| **CTA** | **Charters Tower** | **33.30 145** | | P | **P** | **10 40 23.7** | **+2.2** |
| | 1.7nm,0.6s,baz=333,slow=6.8,SNR=3.4 | | | | | | |
| **MEEK** | **Meekatharra** | **34.60 193** | | P | **P** | **10 40 33.3** | **+0.6** |
| | baz=36,SNR=4.6 | | | | | | |
| **KMBL** | **Kambalda** | **38.69 187** | | P | **P** | **10 41 08.5** | **+1.1** |
| | baz=40,SNR=7.3 | | | | | | |
| **KLBR** | **Kellerberrin** | **39.57 192** | | P | **P** | **10 41 16.0** | **+1.2** |
| | baz=41,SNR=10 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **40.45 70** | | T | T | 11 24 57.4 | |
| | baz=262 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **40.46 70** | | T | T | 11 25 02.1 | |
| | baz=262 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **40.46 70** | | T | T | 11 25 01.1 | |
| | baz=262 | | | | | | |
| **BBOO** | **Buckleboo** | **40.83 168** | | P | **P** | **10 41 26.2** | **+1.0** |
| | baz=42,SNR=11 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **40.87 68** | | T | T | 11 25 35.1 | |
| | baz=265 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **40.88 68** | | T | T | 11 25 25.8 | |
| | baz=265 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **40.89 68** | | T | T | 11 25 32.4 | |
| | baz=265 | | | | | | |
| **MKAR** | **Makanchi Array** | **54.68 324** | | P | P | 10 43 08.8 | -3.6 |
| | 0.5nm,0.5s,baz=127,slow=7.8,SNR=4.5 | | | | | | |
| **KURBB** | **Kurchatov Arra** | **58.79 326** | | P | **P** | **10 43 39.0** | **-2.3** |
| | 0.4nm,0.5s,baz=128,slow=6.8,SNR=5.1 | | | | | | |
| **AFI** | **Afiamalu** | **64.57 109** | | LR | LR | 11 06 42.9 | |
| | comp=Z,111nm,21.4s,baz=105,slow=31 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.15 340** | | P | **P** | **10 46 26.4** | **-2.1** |
| | 7.6nm,1.1s,baz=60,slow=5.4,SNR=2.6 | | | | | | |
| **FINES** | **FINESS Array B** | **88.73 332** | | P | **P** | **10 46 34.3** | **-1.8** |
| | 0.6nm,0.4s,baz=90,slow=3.8,SNR=4.1 | | | | | | |
| **TXAR** | **Lajitas Array** | **119.42 51** | | PKP | **PKPdf** | **10 52 32.3** | **-0.6** |
| | 0.1nm,0.5s,baz=248,slow=1.0,SNR=2.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **121.74 290** | | PKP | **PKPdf** | **10 52 36.5** | **-1.1** |
| | 0.2nm,0.4s,baz=104,slow=1.5,SNR=4.4 | | | | | | |

*ISCJB **31** 10:40:22.8±2.2, 15°.88S±0°.09×167°.8E±0°.4, h177km, mb3.8/4, Error ellipse: s-maj=47.8km s-min=12.3km az=176.4*
*IDC **31** 10:40:22.9±5.8, 15°.89S×167°.89E, h170km±53km, mb3.5/5, mb1 3.7/6, mb1mx3.4/29, mbtmp4.0/6, Error ellipse: s-maj=48.9km s-min=33.9km az=3.0*
**ISC 31 10:40:23.4±1.7, 15°9S±0°.1×168°0E±0°.3, h177km, n7, σ1°07/9, mb3.7/5, Vanuatu Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DZM** | **Mont Dzumac** | **6.28 193** | | P | **Pn** | **10 41 54.0** | **0.0** |
| | 2.8nm,0.3s,baz=360,slow=19,SNR=66 | | | | | | |
| DZM | | | | S | **Sn** | **10 43 05.5** | **0.0** |
| | 0.6nm,0.3s,baz=180,slow=17,SNR=2.6 | | | | | | |
| **CTA** | **Charters Tower** | **21.04 255** | | P | **P** | **10 44 55.1** | **+1.5** |
| | 1.8nm,0.6s,baz=87,slow=11,SNR=4.4 | | | | | | |
| **WRA** | **Warramunga Arr** | **32.19 258** | | P | **P** | **10 46 33.0** | **-1.8** |
| | 0.6nm,0.3s,baz=85,slow=8.9,SNR=8.1 | | | | | | |
| **ASAR** | **Alice Springs** | **32.88 251** | | P | **P** | **10 46 40.2** | **-0.6** |
| | 2.7nm,0.5s,baz=79,slow=8.8,SNR=46 | | | | | | |
| ASAR | | | | PcP | **PcP** | **10 49 21.9** | **+0.6** |
| | 0.3nm,0.7s,baz=86,slow=3.5,SNR=3.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **76.03 294** | | P | **P** | **10 51 52.3** | **+0.6** |
| | 0.7nm,0.4s,baz=111,slow=4.9,SNR=2.9 | | | | | | |
| **SONM** | **Songino Array** | **83.84 323** | | P | **P** | **10 52 32.9** | **-0.2** |
| | 0.5nm,0.3s,baz=129,slow=5.2,SNR=4.0 | | | | | | |
| **ARCES** | **ARCESS Array B** | **121.57 345** | | PKP | **PKPdf** | **10 58 55.0** | **-0.2** |
| | 6.4nm,1.0s,baz=27,slow=2.2,SNR=2.4 | | | | | | |

*ISCJB **31** 10:53:13.3±1.9, 36°.36N±0°.07×37°.0E±0°.1, h8km±8km, Error ellipse: s-maj=18.2km s-min=6.2km az=35.4*
*DDA **31** 10:53:13.2, 36°38N×36°.96E, h7km, Md2.8*
**ISC 31 10:53:13.2±2.7, 36°37N±0°.1×37°0E±0°.1, h11km±12km, n6, σ0°56/10, Jordan - Syria region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KUZU** | **Kuzuini** | **0.41 10** | | P | **Pg** | **10 53 20.9** | **-0.4** |
| **TAHT** | **Tahtakopru-Hat** | **0.65 271** | | *e*PG | **Pb** | **10 53 27.3** | **+0.7** |
| TAHT | | | | *e*SG | **Sb** | **10 53 34.7** | **-0.8** |
| **YAYL** | **Yayladag** | **0.79 245** | | P | **Pg** | **10 53 28.2** | **-0.3** |
| YAYL | | | | S | **Sb** | **10 53 39.5** | **-0.2** |
| **KAMA** | **Osmaniye** | **0.86 343** | | P | **Pg** | **10 53 29.7** | **-0.1** |
| KAMA | | | | S | **Sg** | **10 53 41.1** | **+0.1** |
| **HCB** | **Kahramanmara¯** | **0.98 356** | | P | **Pg** | **10 53 32.0** | **0.0** |
| HCB | | | | S | **Sn** | **10 53 46.2** | **-0.5** |
| **KMRS** | **Kahramanmaras** | **1.14 356** | | *e*PG | Pg | 10 53 39.3 | +4.2 |
| KMRS | | | | *e*SG | **Sn** | **10 53 51.0** | **+0.3** |

**IDC 31 11:10:26.1±5.3, 22°33S×178°07W, h0km, mb3.9/2, mb1 4.2/2, mb1mx3.7/17, mbtmp3.9/2, Error ellipse: s-maj=315.7km s-min=73.9km az=158.0, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ASAR** | **Alice Springs** | **44.07 259** | | P | P | 11 18 36.1 | -0.1 |
| | 1.4nm,0.8s,baz=94,slow=7.9,SNR=17 | | | | | | |
| **WRA** | **Warramunga Arr** | **44.31 264** | | P | P | 11 18 38.0 | -0.2 |
| | 1.7nm,0.8s,baz=102,slow=8.5,SNR=18 | | | | | | |
| **AKASG** | **Malin Array Be** | **144.57 330** | | PKP | PKPdf | 11 30 03.8 | -0.7 |
| | 0.8nm,0.4s,baz=40,slow=4.3,SNR=7.0 | | | | | | |

**MEX 31 11:13:17.5±0.6, 18°64N×104°56W, h5km, MD4.0, Near coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **R15V** | | **0.76 46** | | *e*P | Pg | 11 13 30.4 | -1.7 |
| R15V | | | | *e*S | Sg | 11 13 41.2 | -0.8 |
| **CJM** | **Chamela** | **0.97 332** | | *i*P | Pg | 11 13 29.8 | -6.3 |
| CJM | | | | *e*S | Sg | 11 13 42.6 | -6.1 |
| **MMIG** | **Aquila** | **1.20 107** | | *e*P | Pg | 11 13 37.5 | -3.1 |
| MMIG | | | | *i*S | Sg | 11 13 53.2 | -3.0 |
| **EZ5V** | | **1.23 47** | | *e*P | Pg | 11 13 38.5 | -3.0 |
| EZ5V | | | | *e*S | Sg | 11 13 53.6 | -4.1 |

**JMA 31 11:33:09.3±0.2, 40°.15N×144°.86E, h48km, M3.6, Off east coast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JEM** | **Erimo** | **2.27 326** | | P | Pn | 11 33 45.8 | +1.6 |
| JEM | | | | *e*S | Sn | 11 34 12.6 | +1.7 |
| **JTH** | **Tanohata** | **2.31 266** | | P | Pn | 11 33 45.7 | +0.8 |
| JTH | | | | *e*S | Sn | 11 34 12.0 | -0.1 |
| **MIYJ** | **Miyakonagasawa** | **2.41 257** | | P | Pn | 11 33 47.7 | +1.5 |
| MIYJ | | | | *e*S | Sn | 11 34 15.5 | +1.0 |
| **JANG** | **Nango** | **2.57 276** | | P | Pn | 11 33 49.8 | +1.4 |
| JANG | | | | *e*S | Sn | 11 34 19.5 | +1.0 |
| **JNBK** | **Urakawa-nobuka** | **2.66 324** | | P | Pn | 11 33 51.7 | +2.1 |
| **JCH** | **Churui** | **2.71 336** | | P | Pn | 11 33 51.4 | +1.1 |
| JCH | | | | *e*S | Sn | 11 34 22.7 | +0.9 |
| **JOM** | **Ohasama** | **2.83 257** | | P | Pn | 11 33 53.9 | +1.9 |
| JOM | | | | *e*S | Sn | 11 34 26.3 | +1.4 |
| **JAK** | **Akkeshi** | **2.85 358** | | P | Pn | 11 33 52.5 | +0.3 |
| JAK | | | | *e*S | Sn | 11 34 25.4 | +0.2 |
| **JTM** | **Tenmabayashi** | **2.96 284** | | P | Pn | 11 33 55.9 | +2.1 |
| JTM | | | | *e*S | Sn | 11 34 30.3 | +2.2 |
| **JMK** | **Ichinoseki** | **3.06 248** | | P | Pn | 11 33 56.5 | +1.4 |
| JMK | | | | *e*S | Sn | 11 34 30.6 | +0.2 |
| **JOT** | **Ohata** | **3.15 294** | | P | Pn | 11 33 58.6 | +2.3 |
| JOT | | | | *e*S | Sn | 11 34 34.3 | +1.7 |
| **JAH** | **Hinai** | **3.24 272** | | P | Pn | 11 34 00.2 | +2.6 |
| JAH | | | | *e*S | Sn | 11 34 36.7 | +1.8 |
| **JAR** | **Ashorobuto** | **3.25 346** | | P | Pn | 11 33 58.3 | +0.6 |
| JAR | | | | *e*S | Sn | 11 34 35.4 | +0.3 |
| **NEM2** | **Nemuro 2** | **3.28 11** | | P | Pn | 11 33 57.0 | -1.1 |
| NEM2 | | | | *e*S | Sn | 11 34 33.4 | -2.5 |
| **JRG** | **Rokugo** | **3.34 258** | | *e*S | Sn | 11 34 39.3 | +1.8 |
| **JKB** | **Kayabe** | **3.38 302** | | *e*S | Sn | 11 34 40.2 | +2.0 |
| **JFR** | **Furan** | **3.46 331** | | P | Pn | 11 34 02.2 | +1.6 |
| **JYK** | **Kaneyama** | **3.69 252** | | P | Pn | 11 34 05.8 | +2.0 |
| **JOU** | **Okura** | **3.71 243** | | P | Pn | 11 34 05.4 | +1.3 |
| JOU | | | | *e*S | Sn | 11 34 47.0 | +0.3 |
| **JRA** | **Rausu** | **3.79 3** | | P | Pn | 11 34 04.8 | -0.3 |
| **JTKR** | **Abashiri--Toko** | **3.88 350** | | P | Pn | 11 34 07.8 | +1.4 |
| JTKR | | | | *e*S | Sn | 11 34 51.3 | +0.6 |
| **JKK2** | **Kamakawa 2** | **4.04 338** | | P | Pn | 11 34 10.4 | +1.8 |
| JKK2 | | | | *e*S | Sn | 11 34 56.8 | +2.2 |
| **JFT** | **Otama** | **4.40 235** | | P | Pn | 11 34 14.5 | +0.9 |
| JFT | | | | *e*S | Sn | 11 35 03.4 | -0.2 |

*DDA **31** 11:34:33.7, 37°.25N×27°.63E, h23km, Md2.7*
*ISCJB **31** 11:34:34.4±0.5, 37°.26N±0°.02×27°.62E±0°.03, h8km±3km, Error ellipse: s-maj=3.9km s-min=3.3km az=4.0*
*ISK **31** 11:34:34.0, 37°.29N×27°.68E, h5km, MD2.9*
*CSEM **31** 11:34:34.6±0.2, 37°.27N×27°.61E, h10km, MD2.7, Error ellipse: s-maj=4.3km s-min=3.7km az=78.0*
*ATH **31** 11:34:34.6, 37°.31N×27°.64E, h18km, MD3.1/7*
**ISC 31 11:34:34.3±0.9, 37°28N±0°.02×27°66E±0°.02, h15km±7km, n58, σ0°88/86, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BDRM** | **Kayabasi** | **0.27 218** | | *i*P | **Pg** | **11 34 39.9** | **-0.3** |
| BDRM | | | | *i*S | **Sg** | **11 34 43.9** | **-0.3** |
| **BDRM** | **Kayabasi** | **0.27 218** | | P | **Pg** | **11 34 39.9** | **-0.3** |
| BDRM | | | | S | **Sg** | **11 34 43.9** | **-0.3** |
| **AYDN** | **Tasoluk** | **0.42 25** | | *i*P | **Pn** | **11 34 45.1** | **-0.7** |
| AYDN | | | | *i*S | **Sb** | **11 34 50.8** | **+1.2** |
| **AYDN** | **Tasoluk** | **0.42 25** | | P | **Pn** | **11 34 45.1** | **-0.7** |
| AYDN | | | | S | **Sb** | **11 34 50.8** | **+1.2** |
| **YER** | **Yerkesik** | **0.52 106** | | PG | **Pg** | **11 34 44.6** | **-0.1** |
| YER | | | | *e*SG | **Sg** | **11 34 51.9** | **+0.2** |
| **YER** | **Yerkesik** | **0.52 106** | | *i*Pg | **Pg** | **11 34 44.6** | **-0.1** |
| YER | | | | *e*Sg | **Sg** | **11 34 51.9** | **+0.2** |
| **GCAM** | **G?zlcaml?** | **0.54 321** | | *i*P | **Pg** | **11 34 44.9** | **0.0** |
| **GCAM** | **G?zlcaml?** | **0.54 321** | | P | **Pg** | **11 34 44.9** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.69 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **DST** | **Dursunbey** | **2.44** | **18** | *e*Pn | | **Pn** | **11 35 15.5** | **+1.9** |

*IDC **31** 11:35:45.5±1.9, 17°.37S×177°.57W, h339km±20km, mb3.5/7, mb1 3.8/8, mb1mx3.5/21, mbtmp4.2/8, Error ellipse: s-maj=35.1km s-min=13.8km az=146.0*

*ISCJB **31** 11:35:48.2±0.8, 17°.55S±0°.2×177°.4W±0°.1, h392km, mb3.7/7, Error ellipse: s-maj=29.3km s-min=10.8km az=146.9*

**ISC 31 11:35:50.0±0.9, 17°.4S±0°.2×177°.3W±0°.2, h392km, n21, σ1§31/21, mb3.8/7, 6C-1D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AFI** | **Afiamalu** | **6.39** | **58** | P | Pn | 11 37 22.0 | -4.7 |
| | 3.9nm,0.3s,baz=332,slow=12,SNR=6.4 | | | | | | |
| AFI | | | | S | **S** | **11 38 41.9** | **-3.8** |
| | 1.4nm,0.3s,baz=304,slow=23,SNR=1.6 | | | | | | |
| **RPZ** | **Rata Peaks** | **27.99** | **198** | P | **P** | **11 41 05.8** | **-0.7** |
| | 5.1nm,0.6s,baz=56,slow=7.3,SNR=1.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **45.73** | **259** | P | **P** | **11 43 32.2** | **-2.0** |
| | 0.8nm,0.6s,baz=95,slow=7.3,SNR=10 | | | | | | |
| **ASAR** | **Alice Springs** | **45.91** | **254** | P | **P** | **11 43 34.4** | **-1.2** |
| | 7.9nm,0.7s,baz=88,slow=8.1,SNR=133 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **68.14** | **323** | P | **P** | **11 46 09.0** | **-0.2** |
| | 1.5nm,0.9s,baz=160,slow=3.9,SNR=3.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **78.37** | **43** | P | **P** | **11 47 10.4** | **+1.8** |
| | 1.0nm,0.7s,baz=226,slow=9.5,SNR=8.9 | | | | | | |
| **TXAR** | **Lajitas Array** | **84.87** | **57** | P | **P** | **11 47 44.4** | **+2.2** |
| | 2.3nm,1.1s,baz=191,slow=13,SNR=8.8 | | | | | | |
| **ILAR** | **Eielson Array** | **85.19** | **13** | P | **P** | **11 47 43.1** | **+0.3** |
| | 0.8nm,0.5s,baz=223,slow=5.4,SNR=19 | | | | | | |
| **ARCES** | **ARCESS Array B** | **126.02** | **350** | PKP | **PKPdf** | **11 54 05.8** | **+0.2** |
| | 4.0nm,0.9s,baz=50,slow=1.9,SNR=6.7 | | | | | | |
| **FINES** | **FINESS Array B** | **133.00** | **345** | PKP | **PKPdf** | **11 54 19.1** | **+0.1** |
| | 3.0nm,1.0s,baz=302,slow=11,SNR=3.4 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.16** | **316** | PKP | **PKPab** | **11 54 42.6** | **-0.4** |
| | 1.1nm,0.7s,baz=76,slow=1.8,SNR=5.8 | | | | | | |
| **CLL** | **Collm** | **145.21** | **349** | *i* P | **PKPab** | **11 54 42.8** | **+0.2** |
| | comp=Z,5.0nm,1.0s | | | | | | |
| CLL | | | | *e* | | 11 54 49.0 | |
| **BRG** | **Berggiesshubel** | **145.44** | **347** | *e*(P) | **PKPab** | **11 54 43.5** | **-0.1** |
| | comp=Z,12nm,1.6s | | | | | | |
| **MLR** | **Muntele Rosu** | **145.94** | **330** | ⇑*i*P | **PKPab** | **11 54 46.1** | **+0.2** |
| **DRGR** | | **146.36** | **335** | ⇓*i*P | **PKPbc** | **11 54 45.7** | **+0.1** |
| **ARR** | **Arges** | **146.64** | **331** | ⇑*i*P | **PKPab** | **11 54 47.8** | **-0.8** |
| **GERES** | **GERESS Array B** | **147.40** | **346** | PKPbc | **PKPbc** | **11 54 48.7** | **+0.3** |
| | comp=Z,0.7nm,0.5s,baz=41,slow=4.3,SNR=3.9 | | | | | | |
| **GZR** | **Gura Zlata** | **147.45** | **333** | ⇑*i*P | **PKPbc** | **11 54 49.2** | **+0.6** |
| **WTTA** | **Wattenberg** | **149.34** | **348** | ⇑*i*PKPbc | **PKPbc** | **11 54 54.3** | **+0.8** |
| | comp=Z,5.9nm,0.7s | | | | | | |
| **DAVA** | **Damuels** | **149.64** | **350** | ⇑*i*PKPbc | **PKPbc** | **11 54 54.9** | **+0.7** |
| | comp=Z,6.8nm,1.0s | | | | | | |
| **ABTA** | **Abfaltersbach** | **149.65** | **347** | ⇑*i*PKPbc | **PKPbc** | **11 54 54.3** | **+0.2** |
| | comp=Z,5.8nm,0.8s | | | | | | |

**IDC 31 11:43:45.8±3.6, 3°.52S×99°.27E, h0km, mb3.4/6, mb1 3.6/6, mb1mx3.5/31, mbtmp3.5/6, Error ellipse: s-maj=142.1km s-min=23.7km az=58.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **CMAR** | **Chiang Mai Arr** | **21.84** | **359** | P | P | 11 48 40.7 | +0.6 |
| | 0.6nm,0.3s,baz=186,slow=9.6,SNR=4.2 | | | | | | |
| **H08S2** | **Diego Garcia H** | **26.96** | **260** | T | T | 12 18 52.5 | |
| | baz=82,slow=74,SNR=26 | | | | | | |
| **H08S3** | **Diego Garcia H** | **26.97** | **260** | T | T | 12 18 51.5 | |
| | baz=82,SNR=23 | | | | | | |
| **H08S1** | **Diego Carcia H** | **26.98** | **260** | T | T | 12 18 52.5 | |
| | baz=82,slow=74,SNR=24 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **34.12** | **158** | T | T | 12 27 13.7 | |
| | baz=336,slow=74,SNR=3.3 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **34.13** | **158** | T | T | 12 27 14.7 | |
| | baz=336,slow=74,SNR=3.3 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **34.14** | **158** | T | T | 12 27 13.0 | |
| | baz=336 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.88** | **118** | P | P | 11 51 04.2 | -0.8 |
| | 0.3nm,0.7s,baz=296,slow=8.4,SNR=2.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.98** | **124** | P | P | 11 51 14.5 | +0.3 |
| | 0.1nm,0.3s,baz=304,slow=8.4,SNR=1.9 | | | | | | |
| **SONM** | **Songino Array** | **51.52** | **6** | P | P | 11 52 53.1 | -0.4 |
| | 0.3nm,0.7s,baz=177,slow=5.2,SNR=2.0 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.30** | **345** | P | P | 11 52 59.6 | +0.4 |
| | 0.5nm,0.7s,baz=160,slow=8.9,SNR=2.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.52** | **350** | P | P | 11 53 42.6 | -1.3 |
| | 0.8nm,0.5s,baz=165,slow=6.2,SNR=3.7 | | | | | | |
| **TXAR** | **Lajitas Array** | **146.34** | **38** | PKPbc | PKPbc | 12 03 29.6 | +0.1 |
| | 0.3nm,0.7s,baz=270,slow=1.3,SNR=4.4 | | | | | | |

**MEX 31 11:45:04.5±0.8, 18°.63N×104°.70W, h17km±999km, MD4.0, Near coast of Jalisco**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **R15V** | | **0.86** | **52** | *i* P | Pb | 11 45 17.9 | -3.3 |
| R15V | | | | *e*S | Sb | 11 45 28.9 | -3.7 |
| **CJM** | **Chamela** | **0.92** | **339** | *e*P | Pb | 11 45 17.3 | -4.8 |
| CJM | | | | *i* S | Sb | 11 45 28.4 | -5.7 |
| **MMIG** | **Aquila** | **1.33** | **105** | *e*P | Pn | 11 45 24.8 | -3.6 |
| MMIG | | | | *i* S | Sn | 11 45 40.7 | -5.0 |
| **EZ5V** | | **1.34** | **51** | *e*P | Pn | 11 45 26.0 | -2.8 |
| EZ5V | | | | *i* S | Sn | 11 45 42.1 | -4.4 |

**KRSC 31 11:46:51.1±0.9, 55°.75N×162°.62E, h58km±14km, ML3.6, Near east coast of Kamchatka Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KBTR** | **Krutoberegovo** | **0.47** | **14** | *e*P | Pn | 11 47 03.6 | +1.1 |
| KBTR | | | | *e*S | Sn | 11 47 11.8 | +1.0 |
| **SMKR** | **Semkarok** | **1.05** | **323** | *i* P | Pn | 11 47 11.0 | +1.2 |
| SMKR | | | | *e*S | Sn | 11 47 24.5 | +0.8 |
| **BDR** | **Baidarnaya** | **1.14** | **316** | *e*P | Pn | 11 47 11.8 | +0.8 |
| BDR | | | | *e*S | Sn | 11 47 26.9 | +1.2 |
| **SRKR** | **Sorokina** | **1.22** | **319** | *i* P | Pn | 11 47 13.5 | +1.5 |
| **BZMR** | **Bezymyannaya** | **1.22** | **279** | P | Pn | 11 47 13.6 | +1.5 |
| **BZWR** | **Bezymyannyi-We** | **1.22** | **281** | *e*P | Pn | 11 47 13.2 | +1.0 |
| BZWR | | | | *e*S | Sn | 11 47 28.8 | +0.9 |
| **KLY** | **Klyuchi** | **1.24** | **298** | *e*P | Pn | 11 47 11.7 | -0.5 |
| KLY | | | | *i* S | Sn | 11 47 26.2 | -1.8 |
| **KIRR** | **Kirishev** | **1.30** | **280** | *e*P | Pn | 11 47 14.7 | +1.4 |
| KIRR | | | | *e*S | Sn | 11 47 30.9 | +1.1 |
| **MKZ** | **Mys Kozlova** | **1.30** | **203** | *e*P | Pn | 11 47 15.2 | +2.1 |
| MKZ | | | | *e*S | Sn | 11 47 31.5 | +2.0 |
| **KMNR** | **Kamenistaya** | **1.35** | **271** | *e*P | Pn | 11 47 15.8 | +2.0 |
| KMNR | | | | *e*S | Sn | 11 47 32.8 | +2.0 |
| **KPT** | **Kopyto** | **1.37** | **280** | *e*P | Pn | 11 47 15.9 | +1.8 |
| KPT | | | | *e*S | Sn | 11 47 33.5 | +2.2 |
| **KZV** | **Kizimen** | **1.48** | **245** | *i* P | Pn | 11 47 17.7 | +2.1 |
| KZV | | | | *i* S | Sn | 11 47 36.0 | +2.0 |
| **TUMR** | **Tumrok** | **1.49** | **253** | *i* P | Pn | 11 47 18.1 | +2.4 |
| TUMR | | | | *e*S | Sn | 11 47 36.4 | +2.2 |
| **KOZ** | **Kozyrevsk** | **1.58** | **282** | *e*P | Pn | 11 47 19.4 | +2.6 |
| KOZ | | | | *e*S | Sn | 11 47 39.6 | +3.4 |
| **SRDR** | **Sredinnyy** | **1.73** | **290** | *i* P | Pn | 11 47 21.3 | +2.4 |
| SRDR | | | | *e*S | Sn | 11 47 42.0 | +2.1 |
| **ESO** | **Esso** | **2.22** | **276** | *e*P | Pn | 11 47 29.1 | +3.6 |
| ESO | | | | *e*S | Sn | 11 47 56.1 | +4.3 |
| **SPN** | **Mys Shipunski** | **3.06** | **211** | *e*P | Pn | 11 47 39.3 | +2.3 |
| SPN | | | | *e*S | Sn | 11 48 14.8 | +2.4 |
| **NLC** | **Nalytchevo** | **3.22** | **218** | *e*P | Pn | 11 47 42.1 | +3.0 |
| NLC | | | | *e*S | Sn | 11 48 18.3 | +2.1 |
| **SDLR** | **Sedlovina** | **3.30** | **223** | *e*P | Pn | 11 47 43.3 | +2.8 |
| **KRX** | **Arik** | **3.33** | **226** | *e*P | Pn | 11 47 45.6 | +4.7 |
| **SMAR** | **Somma** | **3.34** | **223** | *e*P | Pn | 11 47 44.2 | +3.0 |
| **AVH** | **Avacha** | **3.37** | **224** | *e*P | Pn | 11 47 44.9 | +3.6 |
| **UGLR** | **Uglovaya** | **3.38** | **223** | *e*P | Pn | 11 47 44.9 | +3.4 |
| **GNL** | **Ganaly** | **3.41** | **235** | *e*P | Pn | 11 47 44.9 | +3.0 |
| **PET** | **Petropavlovsk** | **3.59** | **222** | *e*P | Pn | 11 47 47.5 | +3.3 |
| PET | | | | *e*S | Sn | 11 48 28.1 | +2.9 |
| **RUS** | **Russkaya** | **4.11** | **218** | *e*P | Pn | 11 47 53.3 | +1.9 |

*ISCJB **31** 11:50:42.0±0.4, 3°.05S±0°.05×139°.68E±0°.05, h54km, mb4.0/10, MS3.2/5, Error ellipse: s-maj=7.1km s-min=6.2km az=140.2*

*IDC **31** 11:50:42.2±1.8, 3°.01S×139°.80E, h43km±19km, mb3.7/7, mb1 3.9/8, mb1mx3.7/19, mbtmp3.9/8, ML4.4/2, MS3.2/6, Ms1 3.3/6, ms1mx2.9/24, Error ellipse: s-maj=17.7km s-min=13.1km az=113.0*

*NEIC **31** 11:50:44.0±1.0, 2°.91S×139°.81E, h58km±10km, mb4.4/8, Error ellipse: s-maj=11.6km s-min=9.0km az=205.0*

*NEIC Felt [III] at Genyem.*

*AUST **31** 11:50:43.2±0.0, 3°.12S×139°.79E, h40km, Error ellipse: s-maj=1.0km s-min=0.8km az=226.0*

**ISC 31 11:50:43.6±0.5, 3°.01S±0°.06×139°.74E±0°.05, h54km, n49, σ1§58/47, mb4.0/10, MS3.3/5, Irian Jaya**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **JAY** | **Jayapura** | **1.08** | **63** | P | **Pn** | **11 51 00.9** | **-1.6** |
| | 335nm,0.3s,baz=214,slow=23,SNR=1006 | | | | | | |
| JAY | | | | S | **Sn** | **11 51 13.6** | **-2.9** |
| | 672nm,0.3s,baz=99,slow=15,SNR=14 | | | | | | |
| **JAY** | **Jayapura** | **1.08** | **63** | P | **Pn** | **11 51 00.9** | **-1.6** |
| | baz=1.1,SNR=197 | | | | | | |
| **MMPI** | **Merauke** | **5.46** | **173** | P | Pn | 11 52 05.2 | +2.8 |
| | baz=5.4,SNR=4.5 | | | | | | |
| **FAKI** | **Fak Fak** | **7.49** | **271** | P | **Pn** | **11 52 29.7** | **-0.5** |
| | baz=7.5,SNR=40 | | | | | | |
| **FAKI** | **Fak Fak** | **7.49** | **271** | *e*Pn | **Pn** | **11 52 29.4** | **-0.8** |
| | 29nm,0.4s | | | | | | |
| FAKI | | | | *e*Sn | **Sn** | **11 53 51.1** | **-2.7** |
| **SIJI** | **Sorong** | **8.74** | **284** | P | **Pn** | **11 52 46.8** | **-0.6** |
| | 12nm,0.3s,baz=266,slow=22,SNR=43 | | | | | | |
| **SWI** | **Sorong** | **8.74** | **284** | P | **Pn** | **11 52 48.5** | **+1.1** |
| | baz=8.8,SNR=18 | | | | | | |
| **PMG** | **Port Moresby** | **9.73** | **131** | LR | LR | 11 56 44.5 | |
| | comp=Z,132nm,18.6s,baz=318,slow=37 | | | | | | |
| **PMG** | **Port Moresby** | **9.73** | **131** | *e*Pn | **Pn** | **11 53 03.6** | **+2.7** |
| **COEN** | **Coen** | **11.39** | **163** | P | **Pn** | **11 53 24.2** | **+0.6** |
| | baz=11,SNR=25 | | | | | | |
| **COEN** | **Coen** | **11.39** | **163** | *e*Pn | **Pn** | **11 53 24.3** | **+0.6** |
| | 9.5nm,0.5s | | | | | | |
| **PALU** | **Palau** | **11.55** | **333** | P | **Pn** | **11 53 27.9** | **+2.0** |
| | baz=12,SNR=5.9 | | | | | | |
| **KDU** | **Kakadu** | **12.01** | **216** | P | **Pn** | **11 53 30.1** | **-1.9** |
| | baz=12,SNR=71 | | | | | | |
| **MTN** | **Manton Dam** | **12.96** | **221** | P | **Pn** | **11 53 43.2** | **-1.9** |
| | baz=13,SNR=32 | | | | | | |
| **MTSU** | **Mount Surprise** | **15.68** | **164** | P | **P** | **11 54 22.6** | **-1.7** |
| | baz=16,SNR=16 | | | | | | |
| **KNRA** | **Kununurra** | **16.59** | **220** | P | **Pn** | **11 54 30.9** | **-1.8** |
| | baz=17,SNR=79 | | | | | | |
| **SOEI** | **Soe** | **16.77** | **246** | P | **P** | **11 54 38.8** | **+2.2** |
| | baz=17,SNR=3.2 | | | | | | |
| **SOEI** | **Soe** | **16.77** | **246** | *e*P | **P** | **11 54 37.8** | **+1.3** |
| | 49nm,0.8s | | | | | | |
| **LUWI** | **Luwuk** | **17.07** | **276** | P | **P** | **11 54 41.1** | **+1.3** |
| | baz=17,SNR=3.9 | | | | | | |
| **LUWI** | **Luwuk** | **17.07** | **276** | *e*P | **P** | **11 54 40.2** | **+0.4** |
| | 27nm,0.8s | | | | | | |
| **QIS** | **Mount Isa** | **17.44** | **180** | P | **Pn** | **11 54 40.3** | **-2.9** |
| | baz=17,SNR=20 | | | | | | |
| **BATI** | **Baumata** | **17.49** | **245** | P | **P** | **11 54 46.9** | **+2.5** |
| | 7.6nm,0.3s,baz=177,slow=2.4,SNR=8.3 | | | | | | |
| **WRAB** | **Tennant Creek** | **17.62** | **197** | *e*P | **Pn** | **11 54 42.9** | **-2.6** |
| | 11nm,0.4s | | | | | | |
| **WRA** | **Warramunga Arr** | **17.64** | **197** | P | **Pn** | **11 54 42.5** | **-3.1** |
| | 1.6nm,0.3s,baz=17,slow=13,SNR=29 | | | | | | |
| WRA | | | | S | Sn | 11 57 52.3 | -9.1 |
| | 0.7nm,0.3s,baz=14,slow=22,SNR=6.9 | | | | | | |
| **CTA** | **Charters Tower** | **18.12** | **160** | P | **Pn** | **11 54 52.2** | **+0.6** |
| | 0.4nm,0.3s,baz=353,slow=10,SNR=7.4 | | | | | | |
| **CTAO** | **Charters Tower** | **18.12** | **160** | *e*P | **Pn** | **11 54 52.5** | **+0.9** |
| | 5.2nm,0.8s | | | | | | |
| **MMRI** | **Mammere** | **18.28** | **251** | *e*P | **Pn** | **11 54 55.1** | **+1.6** |
| | 18nm,0.8s | | | | | | |
| **ASAR** | **Alice Springs** | **21.30** | **195** | P | **P** | **11 55 24.8** | **-1.1** |
| | 1.9nm,0.5s,baz=26,slow=10,SNR=30 | | | | | | |
| ASAR | | | | S | **S** | **11 59 20.2** | **+0.5** |
| | 1.6nm,0.7s,baz=6.1,slow=28,SNR=4.5 | | | | | | |
| ASAR | | | | LR | LR | 12 04 10.3 | |
| | comp=Z,108nm,19.4s,baz=8.0,slow=38 | | | | | | |
| **QLP** | **Quilpie** | **23.83** | **170** | P | **P** | **11 55 52.3** | **+0.6** |
| | baz=24,SNR=6.9 | | | | | | |
| **WRKA** | **Warakurna** | **24.52** | **206** | P | **P** | **11 55 56.7** | **-1.5** |
| | baz=25,SNR=29 | | | | | | |
| **EIDS** | **Eidsvold** | **24.76** | **155** | P | **P** | **11 56 02.5** | **+2.2** |
| | baz=25,SNR=11 | | | | | | |
| **EIDS** | **Eidsvold** | **24.76** | **155** | *e*P | **P** | **11 56 02.3** | **+2.0** |
| | 14nm,0.6s | | | | | | |
| **MBWA** | **Marble Bar** | **26.55** | **226** | *e*P | **P** | **11 56 18.2** | **+1.6** |
| | 13nm,1.1s | | | | | | |
| **ARMA** | **Armidale** | **29.49** | **159** | *e*P | **P** | **11 56 42.1** | **-0.8** |
| | 4.7nm,0.8s | | | | | | |
| **KSAR** | **Wonju Array Be** | **41.73** | **346** | P | **P** | **11 58 27.9** | **+0.6** |
| **KSRS** | **Korea Array** | **41.73** | **346** | P | **P** | **11 58 27.9** | **+0.6** |
| | 0.9nm,0.6s,baz=157,slow=8.2,SNR=4.8 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.48** | **300** | P | **P** | **11 58 57.4** | **-0.5** |
| | 0.7nm,0.3s,baz=111,slow=6.6,SNR=4.8 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **47.51** | **352** | LR | LR | 12 16 30.8 | |
| | comp=Z,40nm,21.5s,baz=123,slow=33 | | | | | | |
| **RPZ** | **Rata Peaks** | **49.11** | **150** | LR | LR | 12 21 47.6 | |
| | comp=Z,29nm,19.2s,baz=360,slow=38 | | | | | | |
| **PETK** | **Petropavlovsk-** | **57.92** | **13** | LR | LR | 12 22 23.7 | |
| | comp=Z,5.9nm,21.4s,baz=181,slow=33 | | | | | | |
| **MKAR** | **Makanchi Array** | **70.66** | **322** | P | **P** | **12 01 53.8** | **+0.1** |
| | 0.5nm,0.5s,baz=92,slow=9.7,SNR=4.0 | | | | | | |
| **VNDA** | **Vanda** | **75.39** | **175** | P | **P** | **12 02 20.9** | **-0.2** |
| | 1.4nm,0.7s,baz=328,slow=5.9,SNR=3.6 | | | | | | |
| VNDA | | | | LR | LR | 12 33 45.2 | |
| | comp=Z,32nm,21.8s,baz=318,slow=34 | | | | | | |
| **MAW** | **Mawson** | **92.24** | **202** | P | **P** | **12 02 59.1** | **+0.5** |
| | 1.1nm,0.8s,baz=67,slow=7.0,SNR=2.9 | | | | | | |
| **ILAR** | **Eielson Array** | **85.68** | **24** | P | **P** | **12 03 15.2** | **-1.0** |
| | 1.0nm,0.7s,baz=262,slow=4.2,SNR=10 | | | | | | |
| **KIC** | **Kosan Boka** | **144.46** | **277** | *e*PKP1 | **PKPab** | **12 10 13.3** | **-0.1** |
| | 11nm,0.9s | | | | | | |
| **DBIC** | **Dimbokro** | **144.55** | **277** | PKP | **PKPab** | **12 10 13.8** | **+0.1** |
| | 3.6nm,0.5s,baz=77,slow=3.4,SNR=12 | | | | | | |
| **TIC** | **Toumodi** | **144.71** | **277** | *e*PKP1 | **PKPab** | **12 10 14.0** | **-0.3** |
| **LIC** | **Lamto** | **144.75** | **276** | *e*PKP1 | **PKPab** | **12 10 14.4** | **0.0** |
| | 55nm,1.3s | | | | | | |
| **LPAZ** | **La Paz** | **146.43** | **126** | PKPbc | **PKPab** | **12 10 21.0** | **-0.4** |
| | 1.1nm,0.7s,baz=134,slow=4.3,SNR=4.3 | | | | | | |

*CSEM **31** 11:55:53.9, 14°.86N×41°.93E, h5km, ML3.7, After DHMR*

**DHMR 31 11:55:53.9±0.8, 14°.86N×41°.93E, h5km±10km, ML3.7, 1D, Ethiopia**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **HAJJ** | **Hajjah** | **1.81** | **62** | *i* P | Pn | 11 56 26.3 | +0.3 |
| HAJJ | | | | *i* S | Sg | 11 56 52.3 | -0.4 |
| HAJJ | | | | AML | AML | 11 56 54.1 | |
| | comp=E,808nm,0.4s | | | | | | |
| **HAJJ** | **Hajjah** | **1.81** | **62** | *i* P | Pn | 11 56 26.3 | +0.3 |
| HAJJ | | | | *i* S | Sg | 11 56 52.3 | -0.4 |
| | comp=E,404nm,0.4s | | | | | | |
| **UDYN** | **Al 'Udayn** | **2.16** | **114** | *i* P | Pb | 11 56 32.4 | -1.3 |
| UDYN | | | | *i* S | Sg | 11 57 02.6 | -1.1 |
| **TRBA** | **At Turbah** | **2.66** | **127** | ⇓*i*P | Pb | 11 56 40.3 | -2.0 |
| TRBA | | | | *i* S | Sb | 11 57 16.1 | +0.5 |
| **LBOS** | | **3.36** | **107** | *i* P | Pn | 11 56 49.8 | +2.4 |
| LBOS | | | | *i* S | Sb | 11 57 34.0 | -1.8 |
| **BDHA** | **Al Bayda'** | **3.63** | **104** | *i* P | Pn | 11 56 54.0 | +2.9 |
| BDHA | | | | *i* S | Sb | 11 57 39.5 | -3.9 |
| BDHA | | | | AML | AML | 11 57 51.2 | |
| | comp=N,386nm,0.8s | | | | | | |
| **BDHA** | **Al Bayda'** | **3.63** | **104** | *i* P | Pn | 11 56 54.0 | +2.9 |
| BDHA | | | | *i* S | Sb | 11 57 39.5 | -3.9 |
| | comp=N,193nm,0.8s | | | | | | |

*IDC **31** 12:08:08.3±2.9, 23°.71S×179°.99E, h495km±31km, mb3.3/5, mb1 3.6/6, mb1mx3.2/22, mbtmp4.2/6, Error ellipse: s-maj=34.0km s-min=21.6km az=164.0*

*ISCJB **31** 12:08:09.5±0.9, 23°.8S±0°.1×180°.0E±0°.1, h518km, mb3.7/5, Error ellipse: s-maj=16.8km s-min=13.4km az=1.7*

*AUST **31** 12:08:09.1, 25°.15S×179°.95E, h450km*

**ISC 31 12:08:10.3±1.0, 23°.9S±0°.1×179°.9W±0°.1, h518km, n14, σ1§08/14, mb3.8/5, South of Fiji Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **URZ** | **Urewera** | **14.52** | **189** | P | **P** | **12 11 16.2** | **+1.1** |
| | 1.7nm,0.3s,baz=280,slow=2.1,SNR=10 | | | | | | |
| URZ | | | | S | **S** | **12 13 45.8** | **-1.7** |
| | 0.2nm,0.3s,baz=344,slow=12,SNR=2.1 | | | | | | |
| **EIDS** | **Eidsvold** | **26.36** | **261** | P | **P** | **12 13 05.4** | **+0.4** |
| | baz=26,SNR=4.5 | | | | | | |
| **RMQ** | **Roma** | **28.41** | **258** | P | **P** | **12 13 24.3** | **+1.4** |
| | baz=28,SNR=4.3 | | | | | | |
| **MTSU** | **Mount Surprise** | **33.80** | **273** | P | **P** | **12 14 09.3** | **+0.1** |
| | baz=34,SNR=9.1 | | | | | | |
| **HTT** | **Hallett** | **37.12** | **246** | P | P | 12 14 29.5 | -7.2 |
| | baz=36,SNR=3.5 | | | | | | |
| **BBOO** | **Buckleboo** | **39.49** | **247** | P | **P** | **12 14 55.4** | **-0.6** |
| | baz=39,SNR=8.3 | | | | | | |
| **ASAR** | **Alice Springs** | **42.09** | **261** | P | **P** | **12 15 16.3** | **-0.6** |
| | 3.0nm,0.5s,baz=96,slow=7.4,SNR=61 | | | | | | |
| ASAR | | | | ScP | **ScP** | **12 20 02.4** | **+1.6** |
| | 1.5nm,0.9s,baz=111,slow=4.1,SNR=12 | | | | | | |
| **WRA** | **Warramunga Arr** | **42.47** | **266** | P | **P** | **12 15 18.6** | **-1.2** |
| | 3.1nm,0.3s,baz=95,slow=8.3,SNR=26 | | | | | | |
| **WRKA** | **Warakurna** | **46.89** | **257** | P | **P** | **12 15 53.2** | **-0.7** |
| | baz=46,SNR=6.9 | | | | | | |
| **MORW** | **Morawa** | **56.93** | **250** | P | **P** | **12 17 05.7** | **-0.5** |
| | baz=56,SNR=3.3 | | | | | | |
| **CISI** | **Cisompet, Garu** | **70.78** | **270** | P | P | 12 18 40.5 | +5.6 |
| | baz=71,SNR=9.6 | | | | | | |
| **MAW** | **Mawson** | **77.76** | **200** | P | **P** | **12 19 14.0** | **+0.8** |
| | 1.6nm,1.0s,baz=129,slow=6.5,SNR=3.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **84.72** | **44** | P | **P** | **12 19 49.0** | **-0.7** |
| | 0.4nm,0.6s,baz=230,slow=6.5,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **90.39** | **58** | P | **P** | **12 20 16.6** | **0.0** |
| | 0.8nm,0.7s,baz=212,slow=6.6,SNR=12 | | | | | | |

*BJI **31** 12:23:37.2, 3°.81S×100°.16E, h25km, mb4.9/59, mB5.0/48, Ms4.8/43, Ms7 4.5/41*

*IDC **31** 12:23:38.2±0.5, 3°.41S×100°.10E, h0km, mb4.5/20, mb1 4.6/23, mb1mx4.4/39, mbtmp4.6/23, ML4.2/3, MS3.9/13, Ms1 3.9/13, ms1mx3.7/25, Error ellipse: s-maj=16.4km s-min=11.6km az=48.0*

*AUST **31** 12:23:39.4±6.8, 3°.74S×99°.97E, h3km, Error ellipse: s-maj=3.1km s-min=0.8km az=236.0*

*NEIC **31** 12:23:39.8±2.4, 3°.46S×100°.04E, h9km±14km, mb5.1/23, Error ellipse: s-maj=9.4km s-min=4.5km az=54.0*

*ISCJB **31** 12:23:40.7±0.3, 3°.40S±0°.04×100°.13E±0°.04, h27km, mb4.8/76, MS4.0/16, Error ellipse: s-maj=6.6km s-min=4.2km az=44.3*

*MOS **31** 12:23:42.0±1.2, 3°.25S×100°.29E, h35km, mb5.1/40, MS4.3/4, Error ellipse: s-maj=11.3km s-min=5.4km az=109.2*

**ISC 31 12:23:42.4±0.5, 3°.51S±0°.05×100°.04E±0°.06, h27km±2km, h27km:pP-P, n318, σ1§42/340, mb4.9/76, MS4.0/16, 16C-7D, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MNAI** | **Manna** | **3.03** | **106** | P | **Pn** | **12 24 28.9** | **+0.3** |
| | baz=3.0,SNR=10 | | | | | | |
| **MNAI** | **Manna** | **3.03** | **106** | *e*Pn | **Pn** | **12 24 28.0** | **-0.6** |
| **PPI** | **Padang Panjang** | **3.06** | **7** | P | **Pn** | **12 24 27.1** | **-1.8** |
| | baz=3.3,SNR=25 | | | | | | |
| **BKNI** | **Bangkinang** | **3.94** | **15** | P | Pn | 12 24 45.8 | +4.6 |
| | baz=4.2,SNR=4.0 | | | | | | |
| **BKNI** | **Bangkinang** | **3.94** | **15** | *e*Pn | **Pn** | **12 24 39.3** | **-1.8** |
| **GSI** | **Gunungsitoli** | **5.38** | **333** | *e*Pn | **Pn** | **12 24 59.2** | **-1.7** |
| **BTDF** | **Bukit Timah Da** | **6.11** | **38** | P | Pn | 12 25 18.6 | +7.7 |
| | baz=6.4,SNR=4.1 | | | | | | |
| **PSI** | **Prapat** | **6.37** | **350** | Pn | **Pn** | **12 25 11.7** | **-3.0** |
| | 1.0nm,0.3s,baz=142,slow=16,SNR=5.2 | | | | | | |
| **PSI** | **Prapat** | **6.37** | **350** | *e*P | **Pn** | **12 25 11.9** | **-2.7** |
| **PSI** | **Prapat** | **6.37** | **350** | P | **Pn** | **12 25 15.9** | **+1.2** |
| | baz=6.5,SNR=3.0 | | | | | | |
| **PSI** | **Prapat** | **6.37** | **350** | *e*Pn | **Pn** | **12 25 11.9** | **-2.7** |
| **MYKOM** | **Kota Tinggi** | **6.50** | **36** | *e*Pn | **Pn** | **12 25 14.7** | **-1.6** |
| **IPM** | **Ipoh** | **8.00** | **7** | *e*Pn | **Pn** | **12 25 36.4** | **-0.5** |
| **LEM** | **Lembang** | **8.23** | **114** | Pn | **Pn** | **12 25 39.6** | **-0.7** |
| | 9.2nm,0.3s,baz=335,slow=22,SNR=7.9 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.72** | **118** | P | **Pn** | **12 25 45.8** | **-1.0** |
| | baz=8.7,SNR=11 | | | | | | |
| **CISI** | **Cisompet, Garu** | **8.72** | **118** | *e*Pn | **Pn** | **12 25 44.6** | **-2.2** |
| **KULM** | **Kulim** | **8.77** | **4** | *e*Pn | **Pn** | **12 25 46.2** | **-1.2** |
| **SMRI** | **Semarang** | **10.93** | **109** | *e*Pn | **Pn** | **12 26 18.1** | **+0.9** |
| **UGM** | **Wanagama** | **11.31** | **113** | *e*Pn | **Pn** | **12 26 21.6** | **-0.7** |
| **SBUM** | **Sibu** | **13.54** | **64** | *e*Pn | **Pn** | **12 26 54.1** | **+1.3** |
| **JAGI** | **Jajag, Banyuwa** | **14.87** | **110** | P | **Pn** | **12 27 08.9** | **-2.1** |
| | baz=15,SNR=3.1 | | | | | | |
| **JAGI** | **Jajag, Banyuwa** | **14.87** | **110** | *e*Pn | **Pn** | **12 27 09.3** | **-1.7** |
| **DLV** | **T Lat** | **17.50** | **29** | *e*Pn | **P** | **12 27 46.6** | **+0.7** |
| | 366nm,2.1s | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.73** | **60** | P | **Pn** | **12 28 00.3** | **+0.4** |
| | baz=19,SNR=5.1 | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.73** | **60** | *e*P | **Pn** | **12 27 59.8** | **-0.1** |
| | 40nm,1.0s | | | | | | |
| **UTHA** | **Uthaitani** | **18.96** | **358** | P | Pn | 12 28 08.2 | +5.8 |
| | 4.2nm,1.0s | | | | | | |
| **CHA

GYA sS **sS** **12 35 08.0 +1.8**
GYA PMZ
comp=Z,20nm,1.1s
GYA PMZ
comp=Z,120nm,4.9s
GYA LN
comp=Z,490nm,17.9s
GYA LE
comp=Z,460nm,17.6s
GYA LZ
comp=Z,510nm,17.5s
**SIJI Sorong 31.31 86** P **P** **12 29 57.7 -3.0**
comp=Z,3.9nm,0.4s,baz=323,slow=6.6,SNR=6.4
**ODAN Odare 32.58 339** *e*P **P** **12 30 12.1 +0.2**
comp=Z,29nm,0.7s
**TAPN Taplejung 32.91 340** *e*P **P** **12 30 15.7 +0.8**
comp=Z,89nm,1.0s
**RAMN Ramite 32.95 338** *e*P **P** **12 30 15.6 +0.4**
comp=Z,22nm,0.7s
**TPUB Ta-pu 33.37 36** *e*P **P** **12 30 17.9 -0.7**
comp=Z,367nm,2.2s
**H01W3 Cape Leeuwin H 33.85 159** T T 13 06 13.2
baz=336,slow=76,SNR=97
**H01W2 Cape Leeuwin H 33.86 159** T T 13 06 15.3
baz=336,slow=76,SNR=108
**H01W1 Cape Leeuwin H 33.86 159** T T 13 06 10.0
baz=336,slow=76,SNR=72
**GUN Gumba 34.09 337** *e*P **P** **12 30 25.6 +0.4**
comp=Z,55nm,0.8s
**LSA Lhasa 34.10 346** P **P** **12 30 26.0 +0.5**
LSA PMZ
comp=Z,30nm,1.2s
**LSA Lhasa 34.10 346** *e*P **P** **12 30 25.6 +0.2**
LSA pmax pmax
comp=Z,50nm,1.4s
**LSA Lhasa 34.10 346** *e*P **P** **12 30 25.6 +0.2**
comp=Z,50nm,1.4s
**DMN Daman 34.13 336** *e*P **P** **12 30 26.0 +0.6**
comp=Z,46nm,1.0s
**KKN Kakani 34.22 336** *e*P **P** **12 30 26.2 0.0**
**CD2 Chengdu 34.41 6** *e*P **P** **12 30 27.3 -0.3**
CD2 pP **pP** **12 30 35.8 +0.2**
CD2 PP **PP** **12 31 45.8 -0.1**
CD2 S **S** **12 35 54.8 +0.6**
CD2 sS **sS** **12 36 09.3 +1.9**
CD2 PMZ
comp=Z,10.0nm,0.5s
CD2 PMZ
comp=Z,120nm,5.2s
**NACB Ninganchiao 34.60 36** *e*P **P** **12 30 29.5 +0.2**
comp=Z,31nm,0.8s
**GKN Gorkha 34.67 336** *e*P **P** **12 30 30.0 0.0**
**ENH Enshi 34.79 14** *e*P **P** **12 30 29.6 -1.2**
comp=Z,19nm,0.9s
**KOLN Koldanda 34.91 334** *e*P **P** **12 30 32.4 +0.3**
comp=Z,47nm,0.9s
**WHN Wuhan 36.52 21** ⇓P **P** **12 30 45.3 -0.4**
WHN LZ
comp=Z,2µm,17.0s
**WRA Warramunga Arr 37.21 119** P **P** **12 30 51.5 -0.4**
comp=Z,4.5nm,0.9s,baz=300,slow=10.0,SNR=36
WRA PcP **PcP** **12 33 09.0 -2.5**
comp=Z,0.8nm,0.9s,baz=300,slow=2.9,SNR=3.2
**WRAB Tennant Creek 37.22 119** *e*P **P** **12 30 51.9 +0.1**
WRAB *e**PP **pP** **12 31 00.1 +0.2**
WRAB pmax pmax
comp=Z,72nm,2.1s
**WRAB Tennant Creek 37.22 119** *e*P **P** **12 30 51.9 +0.1**
comp=Z,72nm,2.1s
WRAB *ep*P **pP** **12 31 00.1 +0.2**
**XAN Xi'an 38.28 12** P **P** **12 30 59.0 -1.6**
XAN pP **pP** **12 31 07.0 -1.7**
XAN S **S** **12 36 55.0 +1.8**
XAN PMZ
comp=Z,62nm,0.9s
XAN PMZ
comp=Z,150nm,5.2s
XAN LE
comp=Z,700nm,20.2s
XAN LZ
comp=Z,620nm,13.1s
**ASAR Alice Springs 38.35 125** P **P** **12 31 01.9 +0.5**
comp=Z,2.2nm,0.7s,baz=297,slow=7.3,SNR=38
ASAR PcP **PcP** **12 33 12.8 -2.1**
comp=Z,0.7nm,0.7s,baz=289,slow=2.2,SNR=2.6
ASAR S **S** **12 36 58.7 +4.1**
comp=Z,0.3nm,0.6s,baz=293,slow=15,SNR=5.8
**AS01 Alice Springs 38.39 125** *e*P **P** **12 31 01.9 +0.2**
**LZH Lanzhou 39.55 5** *e*P **P** **12 31 11.5 +0.1**
LZH pP **pP** **12 31 18.5 -1.0**
LZH sP **sP** **12 31 22.5 -0.3**
LZH PP **PnPn** **12 32 47.5 +1.9**
LZH S **S** **12 37 17.5 +4.9**
LZH sS sS 12 37 33.0 +7.1
LZH PMZ
comp=Z,44nm,1.1s
LZH PMZ
comp=Z,200nm,4.7s
LZH LN
comp=Z,600nm,15.6s
LZH LE
comp=Z,670nm,15.0s
LZH LZ
comp=Z,880nm,16.6s
**NJ2 Nanjing 39.63 25** *e*P **P** **12 31 12.0 +0.1**
NJ2 PMZ
comp=Z,8.0nm,1.1s
**QIS Mount Isa 42.07 117** P **P** **12 31 35.1 +2.9**
baz=42,SNR=3.8
**GTA Gaotai 42.71 360** ⇑P **P** **12 31 37.0 -0.3**
GTA pP **pP** **12 31 47.0 +1.6**
GTA sP **sP** **12 31 50.8 +2.1**
GTA S **S** **12 37 58.3 -1.1**
GTA sS **sS** **12 38 15.0 +2.2**
GTA SS **SS** **12 41 03.8 -6.8**
GTA PMZ
comp=Z,8.0nm,1.2s
GTA PMZ
comp=Z,160nm,4.5s
GTA LN
comp=Z,380nm,13.8s
GTA LE
comp=Z,560nm,14.7s
GTA LZ
comp=Z,350nm,13.8s
**HHC Hu-ho-hao-te 45.39 12** *e*P **P** **12 31 58.8 +0.1**
HHC S **S** **12 38 40.3 +2.0**
HHC SS **ScS** **12 41 57.3 +3.5**
HHC PMZ
comp=Z,46nm,1.2s
HHC PMZ
comp=Z,130nm,6.2s
HHC LN
comp=Z,230nm,16.0s
HHC LE
comp=Z,450nm,18.2s
HHC LZ
comp=Z,150nm,15.3s
**BJT Baijiatuau 45.78 17** *e*P **P** **12 32 01.3 -0.4**
BJT pmax pmax
comp=Z,32nm,1.0s
**BJT Baijiatuau 45.78 17** *e*P **P** **12 32 01.3 -0.4**
comp=Z,32nm,1.0s
**BJI Beijing 45.80 17** P **P** **12 32 01.3 -0.6**
BJI S **S** **12 38 48.0 +4.0**
BJI PMZ
comp=Z,31nm,1.1s
BJI PMZ
comp=Z,230nm,7.9s
BJI LN
comp=Z,780nm,15.7s
BJI LE
comp=Z,330nm,14.3s
BJI LZ
comp=Z,360nm,15.7s
**JNU Nakatsue 46.68 36** P **P** **12 32 07.5 -1.4**
comp=Z,39nm,0.9s,baz=139,slow=7.4,SNR=11
**JNU Nakatsue 46.68 36** *e*P **P** **12 32 08.2 -0.7**
comp=Z,61nm,1.0s
**CTAO Charters Tower 47.94 114** *e*P **P** **12 32 19.4 +0.4**
CTAO pmax pmax
comp=Z,11nm,0.9s
**CTAO Charters Tower 47.94 114** *e*P **P** **12 32 19.4 +0.4**
comp=Z,11nm,0.9s
**QLP Quilpie 48.09 123** P **P** **12 32 21.6 +1.6**
baz=48,SNR=4.6

**KSH Kashi 48.21 335** *e*P **P** **12 32 19.5 -1.4**
KSH *ep*P **pP** **12 32 27.0 -2.1**
KSH *e*PP **PP** **12 34 11.3 -2.2**
KSH PcS **PcS** **12 37 43.8 0.0**
KSH S **S** **12 39 13.5 -5.2**
KSH SS SS 12 42 39.5 -9.0
KSH PMZ
comp=Z,170nm,5.9s
KSH LN
comp=Z,150nm,5.0s
KSH LE
comp=Z,230nm,5.1s
KSH LZ
comp=Z,250nm,5.9s
**KSAR Wonju Array Be 48.27 30** P **P** **12 32 20.7 -0.5**
**KSAR Wonju Array Be 48.27 30** P **P** **12 32 20.6 -0.5**
**KSRS Korea Array 48.30 30** P **P** **12 32 20.6 -0.7**
comp=Z,24nm,1.2s,baz=221,slow=7.9,SNR=25
**KS01 Wonju Array Si 48.30 30** *e*P **P** **12 32 20.3 -1.1**
**WMQ Urumqi 48.41 348** P **P** **12 32 23.0 +0.7**
WMQ sP **sP** **12 32 37.0 +3.2**
WMQ PP **PP** **12 34 16.0 +0.9**
WMQ S **S** **12 39 22.0 +0.7**
WMQ SS SS 12 42 43.0 -8.5
WMQ PMZ
comp=Z,74nm,1.0s
WMQ PMZ
comp=Z,270nm,5.0s
WMQ LN
comp=Z,180nm,16.0s
WMQ LE
comp=Z,210nm,15.0s
WMQ LZ
comp=Z,160nm,16.0s
**SFK Sufi-Kurgan 49.70 333** P **P** **12 32 32.7 +0.3**
SFK pmax pmax
comp=Z,7.0nm,0.8s
**PDGK Podgornoye 50.18 341** *i* P **P** **12 32 35.4 -0.2**
PDGK pmax pmax
comp=Z,32nm,1.1s
**KZA Kyzart 50.66 336** P **P** **12 32 39.7 -0.2**
SNR=6.0
**CMSA Cobar Meteorol 51.14 128** P **P** **12 32 45.6 +2.4**
baz=51,SNR=5.7
**TKM2 Tokmak 2 51.23 337** *e*P **P** **12 32 44.2 +0.3**
TKM2 pmax pmax
comp=Z,20nm,1.0s
**TKM2 Tokmak 2 51.23 337** P **P** **12 32 44.2 +0.3**
SNR=11
**TKM2 Tokmak 2 51.23 337** *e*P **P** **12 32 44.2 +0.3**
comp=Z,20nm,1.0s
**KBK Karagaybulak 51.26 336** P **P** **12 32 44.9 +0.7**
SNR=7.2
**AML Almayashu 51.34 335** P **P** **12 32 45.3 +0.3**
SNR=8.8
**AAK Ala-Archa 51.43 336** *e*P **P** **12 32 45.7 +0.4**
AAK pmax pmax
comp=Z,8.0nm,0.9s
**AAK Ala-Archa 51.43 336** *e*P **P** **12 32 45.7 +0.4**
comp=Z,8.0nm,0.9s
**SONM Songino Array 51.44 5** P **P** **12 32 45.5 +0.3**
comp=Z,23nm,0.9s,baz=189,slow=8.3,SNR=92
SONM PcP **PcP** **12 33 59.3 -0.2**
comp=Z,3.7nm,1.1s,baz=187,slow=3.0,SNR=2.2
**SONA1 Songino Array 51.45 5** *e*P **P** **12 32 45.8 +0.4**
**ULN Ulaanbaatar 51.53 6** *e*P **P** **12 32 46.3 +0.3**
ULN pmax pmax
comp=Z,26nm,1.0s
**ULN Ulaanbaatar 51.53 6** *e*P **P** **12 32 46.3 +0.3**
comp=Z,26nm,1.0s
**FRU Bishkek 51.54 336** *e*P **P** **12 32 45.0 -1.0**
FRU *i* 12 32 54.0
**EKS2 Erkin-Say 51.74 335** *e*P **P** **12 32 48.3 +0.6**
EKS2 pmax pmax
comp=Z,15nm,0.8s
**EKS2 Erkin-Say 51.74 335** P **P** **12 32 48.3 +0.6**
SNR=8.6
**EKS2 Erkin-Say 51.74 335** *e*P **P** **12 32 48.3 +0.6**
comp=Z,15nm,0.8s
**USP Ospenovka 51.95 336** P **P** **12 32 49.0 -0.2**
SNR=9.6
**MNAS Manas 52.14 334** P **P** **12 32 50.4 -0.2**
MNAS pmax pmax
comp=Z,20nm,1.5s
**CN2 Changchun 52.35 23** *e*P P 12 32 55.5 +3.5
CN2 PMZ
comp=Z,10.0nm,0.7s
**MK01 Makanchi Array 52.46 345** *e*P **P** **12 32 53.0 +0.1**
**MK31 Makanchi Array 52.49 345** *i* P **P** **12 32 52.5 -0.5**
MK31 pmax pmax
comp=Z,19nm,0.7s
**MKAR Makanchi Array 52.49 345** P **P** **12 32 52.8 -0.2**
comp=Z,6.8nm,0.6s,baz=154,slow=9.0,SNR=46
MKAR LR LR 12 59 17.0
comp=Z,146nm,18.9s,baz=157,slow=41
**MKAR Makanchi Array 52.49 345** *e*P **P** **12 32 53.1 +0.1**
**MAKZ Makanchi 52.59 344** *e*P **P** **12 32 52.8 -0.9**
**MAJO Matsushiro 53.42 38** *e*P **P** **12 33 00.2 +0.1**
MAJO pmax pmax
comp=Z,170nm,2.6s
**MAJO Matsushiro 53.42 38** *e*P **P** **12 33 00.2 +0.1**
comp=Z,170nm,2.6s
**MAT Matsushiro 53.42 38** P **P** **12 32 57.2 -2.9**
**MJAR Matsushiro Arr 53.42 38** P **P** **12 32 58.0 -2.1**
comp=Z,8.4nm,1.2s,baz=222,slow=7.9,SNR=9.0
**MJAR Matsushiro Arr 53.42 38** P **P** **12 32 58.0 -2.1**
**KK31 Karatay Array 53.51 333** *i* P **P** **12 32 59.7 -0.9**
KK31 pmax pmax
comp=Z,1.0nm,0.5s
**KKAR Karatay Array 53.51 333** *e*P **P** **12 32 59.8 -0.8**
**KKAR Karatay Array 53.51 333** *e*P **P** **12 32 59.8 -0.8**
**ZAK Zakamensk 53.75 3** *e*P **P** **12 33 00.3 -2.0**
ZAK pmax pmax
comp=Z,4.0nm,1.0s
**VLA Vladivostok 54.59 28** *e*P P 12 33 04.3 -4.1
VLA pmax pmax
comp=Z,15nm,0.9s
**HVS Khovu-Aksy 54.71 355** *e*P **P** **12 33 06.7 -2.5**
HVS pmax pmax
comp=Z,11nm,1.2s
**MDJ Mudanjiang 54.72 26** P **P** **12 33 08.8 -0.6**
MDJ pP **pP** **12 33 14.8 -2.9**
MDJ sP **sP** **12 33 16.5 -4.5**
MDJ PP **PP** **12 35 12.3 0.0**
MDJ ScP **ScP** **12 38 09.0 +0.3**
MDJ PcS **PcS** **12 38 10.5 -0.9**
MDJ S **S** **12 40 49.5 +1.4**
MDJ sS **sS** **12 40 59.3 -2.6**
MDJ ScS **ScS** **12 42 56.5 -0.4**
MDJ PMZ
comp=Z,10.0nm,0.8s
MDJ PMZ
comp=Z,75nm,3.8s
MDJ LN
comp=Z,240nm,10.2s
MDJ LE
comp=Z,230nm,13.6s
MDJ LZ
comp=Z,320nm,12.7s
**MDJ Mudanjiang 54.72 26** *e*P **P** **12 33 08.7 -0.7**
comp=Z,9.1nm,0.8s
**TLY Talaya 55.07 3** *e*P **P** **12 33 11.4 -0.4**
TLY pmax pmax
comp=Z,11nm,1.1s
TLY MLR MLR
comp=Z,331nm,18.0s
**HIA Hailar 55.28 16** *e*P **P** **12 33 12.6 -0.8**
HIA pmax pmax
comp=Z,15nm,1.3s
**HIA Hailar 55.28 16** *e*P **P** **12 33 12.6 -0.8**
comp=Z,15nm,1.3s
**USRK Ussuriysk Ar. 55.47 28** P **P** **12 33 14.2 -0.6**
comp=Z,29nm,0.7s,baz=222,slow=5.8,SNR=58
USRK LR LR 12 59 36.7
comp=Z,214nm,18.6s,baz=215,slow=39
**OTUK Ortayu 56.94 338** P **P** **12 33 24.2 -1.1**
OTUK pmax pmax
comp=Z,9.0nm,1.0s
**KURK Kurchatov 57.06 344** *e*P **P** **12 33 25.4 -0.6**
KURK pmax pmax
comp=Z,33nm,0.8s
**KURK Kurchatov 57.06 344** *e*P **P** **12 33 25.4 -0.6**
comp=Z,33nm,0.8s
**ZAA0 Zalesovo Array 58.65 350** P **P** **12 33 36.8 -0.3**
baz=59,SNR=12

**ZAA0 Zalesovo Array 58.65 350** *e*P **P** **12 33 36.6 -0.5**
**ZALV Zalesovo Beam 58.65 350** P **P** **12 33 36.7 -0.4**
comp=Z,29nm,0.9s,baz=175,slow=5.2,SNR=74
**ZALV Zalesovo Beam 58.65 350** *i* P **P** **12 33 36.7 -0.4**
ZALV pmax pmax
comp=Z,28nm,0.9s
**KLR Kul'dur 59.29 24** *e*P P 12 33 37.7 -3.9
KLR pmax pmax
comp=Z,57nm,1.6s
**NVS Novosibirsk 59.80 349** ⇑*i*P **P** **12 33 44.0 -1.0**
NVS pmax pmax
comp=Z,19nm,1.1s
NVS pmax pmax
comp=N,12nm,1.3s
NVS pmax pmax
comp=E,15nm,1.3s
**ASAJ Asahikawa 60.83 34** P **P** **12 33 52.1 -0.2**
comp=E,4.8nm,0.5s,baz=250,slow=6.2,SNR=7.7
**ASAJ Asahikawa 60.83 34** *e*P **P** **12 33 52.5 +0.2**
comp=E,59nm,1.7s
**VOSK Vostochnaya 61.16 340** P **P** **12 33 52.6 -1.8**
VOSK pmax pmax
comp=Z,6.0nm,1.0s
**BVA0 Borovoye Array 61.61 340** *i* P **P** **12 33 56.3 -1.1**
BVA0 pmax pmax
comp=Z,8.0nm,1.1s
**BRVK Borovoye 61.67 340** *e*P **P** **12 33 56.3 -1.5**
BRVK pmax pmax
comp=Z,3.0nm,0.9s
**ZRNK Zerenda 62.03 339** P **P** **12 33 58.8 -1.4**
ZRNK pmax pmax
comp=Z,6.0nm,1.0s
**CHKZ Chkalovo 62.08 341** P **P** **12 33 59.0 -1.5**
CHKZ pmax pmax
comp=Z,18nm,1.3s
**BOD Bodaibo 62.16 8** ⇑*i*P **P** **12 34 00.8 -0.2**
BOD pmax pmax
comp=Z,20nm,1.5s
**YSS Yuzh-Sakhalins 62.74 32** ⇑*e*P **P** **12 34 04.0 -1.1**
YSS *e* 12 34 11.3
YSS pmax pmax
comp=Z,50nm,0.9s
**KMBO Kilima Mbogo 62.77 271** P **P** **12 34 08.3 +2.0**
comp=Z,0.6nm,0.3s,baz=32,slow=7.4,SNR=3.9
**KMBO Kilima Mbogo 62.77 271** *ce*P **P** **12 34 09.1 +2.8**
KMBO pmax pmax
comp=Z,1.0nm,0.3s
**KMBO Kilima Mbogo 62.77 271** *e*P **P** **12 34 07.9 +1.6**
comp=Z,5.5nm,1.3s
**AB31 Akbulak array 62.98 332** *i* P **P** **12 34 05.3 -1.4**
AB31 pmax pmax
comp=Z,12nm,0.7s
**ABKAR Akbulak array 62.98 332** *e*P **P** **12 34 05.7 -1.0**
**AKTO Aktyubinsk 64.70 332** P **P** **12 34 15.3 -2.7**
AKTO pmax pmax
comp=Z,10.0nm,1.4s
**SVE Sverdlovsk 68.09 338** ⇑*e*P **P** **12 34 39.4 -0.1**
SVE pmax pmax
comp=Z,15nm,1.2s
**MAW Mawson 68.84 194** P **P** **12 34 44.8 +0.8**
comp=Z,1.9nm,0.9s,baz=9.5,slow=6.9,SNR=5.6
MAW LR LR 13 00 30.6
comp=Z,84nm,20.4s,baz=61,slow=32
**YAK Yakutsk 69.19 14** *e*P **P** **12 34 44.0 -2.2**
YAK pmax pmax
comp=Z,37nm,0.9s
YAK pmax pmax
comp=N,16nm,1.2s
YAK pmax pmax
comp=E,15nm,1.5s
YAK MLR MLR
comp=N,145nm,16.0s
YAK MLR MLR
comp=Z,187nm,16.0s
**NEY Neytrino 69.38 319** *e*P **P** **12 34 47.4 -0.7**
NEY pmax pmax
comp=Z,2.0nm,1.0s
**KBZ Khabaz 69.47 319** P **P** **12 34 47.7 -0.7**
comp=Z,3.6nm,0.8s,baz=147,slow=12,SNR=5.1
**KIV Kislovodsk 69.71 320** *e*P **P** **12 34 50.5 +0.5**
KIV *e*S **S** **12 43 57.3 -0.1**
KIV pmax pmax
comp=Z,12nm,1.1s
**MATP Matopo 71.49 250** P **P** **12 35 03.0 +1.6**
comp=Z,3.6nm,0.9s,baz=43,slow=1.8,SNR=7.3
**VRH Novokhopyorsk 73.59 326** *e*P **P** **12 35 12.2 -0.9**
VRH pmax pmax
comp=N,5.0nm,0.6s
VRH pmax pmax
comp=E,10.0nm,0.6s
VRH pmax pmax
comp=Z,10.0nm,0.6s
**PEA0 Petropavlovsk- 74.14 32** *e*P **P** **12 35 15.6 -0.7**
**PETK Petropavlovsk- 74.14 32** P **P** **12 35 15.4 -0.8**
comp=Z,1.7nm,0.6s,baz=229,slow=2.3,SNR=5.4
PETK LR LR 13 07 33.0
comp=Z,37nm,21.0s,baz=233,slow=36
**BRTR Keskin Array B 74.37 313** P **P** **12 35 17.4 -0.7**
comp=Z,2.1nm,0.6s,baz=136,slow=7.5,SNR=12
BRTR LR LR 13 11 58.4
comp=Z,32nm,18.0s,baz=106,slow=39
**BRTR Keskin Array B 74.37 313** *ce*P **P** **12 35 17.3 -0.8**
BRTR pmax pmax
comp=Z,2.0nm,0.6s
**VORD Divnogorie 74.86 325** *e*P **P** **12 35 20.4 -0.1**
VORD pmax pmax
comp=N,8.0nm,0.9s
VORD pmax pmax
comp=E,10.0nm,0.9s
VORD pmax pmax
comp=Z,9.0nm,0.9s
**BOSA Boshof 74.97 241** LR LR 13 00 13.2
comp=Z,70nm,21.6s,baz=94,slow=29
**VSR Storozhevoye 75.03 325** *e*P **P** **12 35 20.8 -0.7**
VSR pmax pmax
comp=N,4.0nm,0.6s
VSR pmax pmax
comp=E,6.0nm,0.6s
VSR pmax pmax
comp=Z,10.0nm,0.6s
**SEY Seymchan 77.01 22** *e*P P 12 35 28.3 -4.2
**BKZ Black Stump Fm 77.29 129** *e*P **P** **12 35 35.5 +0.7**
comp=Z,464nm,2.6s
**OBN Obninsk 78.09 328** *e*P **P** **12 35 38.3 -0.4**
OBN *i* 12 35 46.4
OBN *e* 12 38 37.6
OBN *e*S **S** **12 45 31.9 +0.8**
OBN *e*SS **SS** **12 50 33.3 +0.2**
OBN pmax pmax
comp=Z,12nm,1.1s
OBN MLR MLR
comp=Z,80nm,14.0s
**KLMR Klimovskoe 79.20 334** *e*P **P** **12 35 43.5 -1.2**
KLMR pmax pmax
comp=Z,39nm,1.6s
**AKASG Malin Array Be 80.70 323** P **P** **12 35 51.8 -1.2**
comp=Z,0.5nm,0.4s,baz=97,slow=4.0,SNR=6.4
AKASG LR LR 13 15 21.9
comp=Z,70nm,21.3s,baz=295,slow=38
**AKASG Malin Array Be 80.70 323** *ce*P **P** **12 35 53.5 +0.5**
AKASG pmax pmax
comp=Z,1.0nm,0.4s
**VRI Vrincioaia 80.98 317** ⇑P **P** **12 35 55.4 +0.7**
**VRI Vrincioaia 80.98 317** ⇑*i*P **P** **12 35 55.4 +0.7**
**TESR Tescani 81.20 318** ⇑*i*P **P** **12 35 56.8 +1.0**
**MLR Muntele Rosu 81.42 317** ⇓P **P** **12 35 58.1 +0.9**
**MLR Muntele Rosu 81.42 317** ⇓*i*P **P** **12 35 58.1 +0.9**
**VOIR 82.02 317** ⇓P **P** **12 36 02.5 +2.2**
**VOIR 82.02 317** ⇓*i*P **P** **12 36 02.5 +2.2**
**BURAR Bucovina Array 82.42 319** ⇑P **P** **12 36 03.7 +1.3**
**BURAR Bucovina Array 82.42 319** ⇑*i*P **P** **12 36 03.7 +1.3**
**BUR04 Bucovina Ar. S 82.42 319** *e*P **P** **12 36 03.3 +0.9**
**BZS Buzias 84.42 316** ⇓P **P** **12 36 13.1 +0.5**
**BZS Buzias 84.42 316** ⇓*i*P **P** **12 36 13.1 +0.5**
**UZH Uzhgorod 84.55 319** *e*P **P** **12 36 13.9 +0.8**
**KOLS Kolonicke sedl 84.62 320** *e*P **P** **12 36 14.4 +0.8**
KOLS pmax pmax
comp=Z,30nm,1.8s
**KOLS Kolonicke sedl 84.62 320** *e*P **P** **12 36 14.4 +0.8**
**STHS Stebnicka Huta 85.38 320** *e*P **P** **12 36 18.8 +1.5**
STHS pmax pmax
comp=Z,4.0nm,0.9s
**STHS Stebnicka Huta 85.38 320** *e*P **P** **12 36 18.8 +1.5**
**FINES FINESS Array B 85.46 332** P **P** **12 36 16.9 -0.6**
comp=Z,3.1nm,1.0s,baz=124,slow=4.6,SNR=10

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| FINES | | | | LR | LR | 13 17 59.9 | | | |
| | comp=Z,74nm,18.0s,baz=127,slow=38 | | | | | | | | |
| **FINES** | **FINESS Array B** | **85.46** | **332** | *i* P | **P** | **12 36 15.8** | **-1.6** | | |
| FINES | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **PSZ** | **Piszkesteto** | **85.99** | **318** | ⇑P | **P** | **12 36 22.3** | **+1.8** | | |
| **PSZ** | **Piszkesteto** | **85.99** | **318** | ⇑*i* P | **P** | **12 36 22.3** | **+1.8** | | |
| **ARCES** | **ARCESS Array B** | **87.90** | **340** | LR | LR | 13 19 45.3 | | | |
| | comp=Z,158nm,20.6s,baz=98,slow=38 | | | | | | | | |
| **GERES** | **GERESS Array B** | **90.21** | **319** | P | **P** | **12 36 40.8** | **+0.2** | | |
| | comp=Z,1.0nm,0.8s,baz=120,slow=5.4,SNR=7.4 | | | | | | | | |
| GERES | | | | LR | LR | 13 21 23.5 | | | |
| | comp=Z,34nm,19.3s,baz=90,slow=38 | | | | | | | | |
| **SNAA** | **Sanae** | **90.72** | **198** | *e*P | **P** | **12 36 43.3** | **+0.7** | | |
| SNAA | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,1.0s | | | | | | | | |
| **NOA** | **NORSAR Array B** | **92.48** | **331** | LR | LR | 13 23 41.1 | | | |
| | comp=Z,64nm,18.0s,baz=70,slow=39 | | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **98.91** | **283** | LR | LR | 13 20 05.8 | | | |
| | comp=Z,43nm,19.1s,baz=40,slow=34 | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **130.73** | **40** | PKP | **PKPdf** | **12 42 53.5** | **+1.7** | | |
| | comp=Z,0.6nm,0.6s,baz=268,slow=2.6,SNR=5.6 | | | | | | | | |
| **EYMN** | **Ely** | **134.63** | **11** | *e*PKPdf | **PKPdf** | **12 42 57.4** | **-1.2** | | |
| **MNTX** | **Cornudas Mount** | **143.15** | **38** | *e*PKPdf | **PKPdf** | **12 43 15.0** | **+0.3** | | |
| **V32A** | **Arapaho** | **143.41** | **27** | P | PKPbc | 12 43 11.9 | -0.2 | | |
| | baz=143 | | | | | | | | |
| **T36A** | **Boggs Farm, Ca** | **143.55** | **22** | P | PKPbc | 12 43 12.9 | +0.4 | | |
| | baz=143 | | | | | | | | |
| **W32A** | **Sentinel** | **143.82** | **27** | P | PKPab | 12 43 12.8 | +0.1 | | |
| | baz=144 | | | | | | | | |
| **U35A** | **Pawnee** | **143.83** | **23** | P | PKPab | 12 43 12.7 | +0.1 | | |
| | baz=144 | | | | | | | | |
| **T37A** | **Cheneyville 18** | **143.84** | **20** | P | PKPab | 12 43 12.9 | +0.3 | | |
| | baz=144 | | | | | | | | |
| **X31A** | **McDonald Ranch** | **143.88** | **29** | P | PKPab | 12 43 13.1 | +0.2 | | |
| | baz=144 | | | | | | | | |
| **V34A** | **Guthrie** | **143.97** | **25** | P | PKPbc | 12 43 13.6 | -0.2 | | |
| | baz=144 | | | | | | | | |
| **Z29A** | **Hungry Hill Ra** | **144.10** | **32** | P | PKPbc | 12 43 14.6 | +0.2 | | |
| | baz=144 | | | | | | | | |
| **W33A** | **Caddo, Fort Co** | **144.14** | **26** | P | PKPbc | 12 43 14.8 | +0.5 | | |
| | baz=144 | | | | | | | | |
| **V35A** | **Meyer Ranch, C** | **144.31** | **24** | P | PKPbc | 12 43 14.7 | -0.1 | | |
| | baz=144 | | | | | | | | |
| **WMOK** | **Wichita Mounta** | **144.35** | **27** | *e*PKIKP | **PKPab** | **12 43 14.5** | **-0.2** | | |
| **WMOK** | **Wichita Mounta** | **144.35** | **27** | *e*PKPdf | **PKPab** | **12 43 14.5** | **-0.2** | | |
| **W34A** | **Bridge Creek,** | **144.38** | **25** | P | **PKPab** | **12 43 14.9** | **+0.1** | | |
| | baz=144 | | | | | | | | |
| **X32A** | **Elmer** | **144.38** | **28** | P | **PKPab** | **12 43 14.8** | **0.0** | | |
| | baz=144 | | | | | | | | |
| **Z30A** | **Sanderson Ranc** | **144.38** | **31** | P | **PKPab** | **12 43 15.0** | **+0.1** | | |
| | baz=144 | | | | | | | | |
| **U37A** | **Salina** | **144.41** | **21** | P | PKPbc | 12 43 15.3 | +0.2 | | |
| | baz=144 | | | | | | | | |
| **228A** | **UT Block 9, Go** | **144.48** | **34** | P | PKPbc | 12 43 15.9 | +0.3 | | |
| | baz=144 | | | | | | | | |
| **129A** | **Stewart Farms,** | **144.50** | **33** | P | PKPbc | 12 43 15.7 | +0.1 | | |
| | baz=144 | | | | | | | | |
| **TUL1** | **Tulsa** | **144.60** | **22** | P | **PKPab** | **12 43 15.6** | **+0.1** | | |
| | baz=144 | | | | | | | | |
| **TUL1** | **Tulsa** | **144.60** | **22** | *e*PKPdf | **PKPab** | **12 43 15.5** | **0.0** | | |
| **U38A** | **Gravette** | **144.64** | **20** | P | **PKPab** | **12 43 15.4** | **-0.3** | | |
| | baz=144 | | | | | | | | |
| **X33A** | **Lawton** | **144.64** | **27** | P | **PKPab** | **12 43 15.3** | **-0.5** | | |
| | baz=144 | | | | | | | | |
| **Y32A** | **R-V Farms, Ver** | **144.65** | **29** | P | **PKPab** | **12 43 15.7** | **-0.1** | | |
| | baz=144 | | | | | | | | |
| **V36A** | **Jenks** | **144.65** | **23** | P | PKPbc | 12 43 15.8 | -0.1 | | |
| | baz=144 | | | | | | | | |
| **SLBS** | **Sierra La Lagu** | **144.77** | **53** | *e*PKPdf | **PKPdf** | **12 43 18.1** | **+0.4** | | |
| **W35A** | **Tecumseh** | **144.83** | **24** | P | PKPbc | 12 43 16.5 | 0.0 | | |
| | baz=145 | | | | | | | | |
| **Z31A** | **Sharp Cattle R** | **144.86** | **30** | P | **PKPab** | **12 43 16.5** | **-0.1** | | |
| | baz=145 | | | | | | | | |
| **V37A** | **Hulbert** | **144.87** | **22** | P | **PKPab** | **12 43 16.2** | **-0.3** | | |
| | baz=145 | | | | | | | | |
| **X34A** | **Smith Ranch, M** | **144.89** | **26** | P | PKPbc | 12 43 16.8 | +0.1 | | |
| | baz=145 | | | | | | | | |
| **SIUC** | **Southern Illin** | **144.92** | **13** | *e*PKPdf | **PKPab** | **12 43 16.6** | **0.0** | | |
| **WCI** | **Wyandotte Cave** | **144.97** | **9** | *e*PKIKP | **PKPab** | **12 43 16.4** | **-0.4** | | |
| **WCI** | **Wyandotte Cave** | **144.97** | **9** | *e*PKPdf | **PKPab** | **12 43 16.4** | **-0.4** | | |
| **130A** | **Snyder** | **145.00** | **32** | P | **PKPab** | **12 43 17.2** | **0.0** | | |
| | baz=145 | | | | | | | | |
| **Y33A** | **Hilltop Ranch,** | **145.03** | **28** | P | **PKPbc** | **12 43 16.7** | **-0.5** | | |
| | baz=145 | | | | | | | | |
| **229A** | **Bryant Ranch,** | **145.03** | **34** | P | **PKPbc** | **12 43 17.1** | **-0.2** | | |
| | baz=145 | | | | | | | | |
| **W36A** | **Wetumka** | **145.10** | **24** | P | **PKPbc** | **12 43 17.1** | **-0.3** | | |
| | baz=145 | | | | | | | | |
| **V38A** | **Canehill** | **145.15** | **21** | P | **PKPbc** | **12 43 16.8** | **-0.7** | | |
| | baz=145 | | | | | | | | |
| **Z32A** | **Haskell** | **145.19** | **29** | P | **PKPbc** | **12 43 17.2** | **-0.5** | | |
| | baz=145 | | | | | | | | |
| **131A** | **Roby** | **145.24** | **31** | P | **PKPbc** | **12 43 17.9** | **-0.1** | | |
| | baz=145 | | | | | | | | |
| **329A** | **Wagon Wheel Ra** | **145.30** | **34** | P | **PKPab** | **12 43 18.4** | **+0.1** | | |
| | baz=145 | | | | | | | | |
| **W37A** | **Quinton** | **145.42** | **23** | P | **PKPbc** | **12 43 18.3** | **-0.1** | | |
| | baz=145 | | | | | | | | |
| **X35A** | **Drake** | **145.43** | **25** | P | **PKPbc** | **12 43 18.0** | **-0.5** | | |
| | baz=145 | | | | | | | | |
| **Y34A** | **Reagan Ranch,** | **145.46** | **27** | P | **PKPbc** | **12 43 18.2** | **-0.4** | | |
| | baz=145 | | | | | | | | |
| **230A** | **Sterling City** | **145.47** | **33** | P | **PKPab** | **12 43 19.0** | **+0.1** | | |
| | baz=145 | | | | | | | | |
| **PBMO** | **Poplar Bluff** | **145.52** | **15** | *e*PKPdf | **PKPdf** | **12 43 18.1** | **-0.5** | | |
| **X36A** | **Centrahoma** | **145.54** | **24** | P | **PKPab** | **12 43 19.0** | **0.0** | | |
| | baz=145 | | | | | | | | |
| **Z33A** | **Whitaker Ranch** | **145.56** | **29** | P | **PKPdf** | **12 43 18.6** | **-0.2** | | |
| | baz=145 | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.66** | **30** | P | **PKPdf** | **12 43 19.1** | **+0.1** | | |
| | baz=146 | | | | | | | | |
| **ABTX** | **Abilene, Hawle** | **145.66** | **30** | *e*PKPdf | **PKPab** | **12 43 19.6** | **0.0** | | |
| **330A** | **Mertzon** | **145.81** | **33** | P | **PKPdf** | **12 43 19.4** | **+0.1** | | |
| | baz=146 | | | | | | | | |
| **W38A** | **Poteau** | **145.82** | **22** | P | **PKPbc** | **12 43 19.8** | **+0.2** | | |
| | baz=146 | | | | | | | | |
| **TX31** | **Lajitas Ar. Si** | **145.86** | **39** | *e*PKPdf | **PKPab** | **12 43 21.3** | **+0.8** | | |
| **TXAR** | **Lajitas Array** | **145.86** | **39** | PKPbc | **PKPab** | **12 43 20.8** | **+0.3** | | |
| | comp=Z,9.4nm,0.7s,baz=296,slow=1.4,SNR=72 | | | | | | | | |
| **231A** | **Bronte** | **145.86** | **32** | P | **PKPbc** | **12 43 19.9** | **-0.1** | | |
| | baz=146 | | | | | | | | |
| **X37A** | **Clayton** | **145.92** | **23** | P | **PKPdf** | **12 43 19.6** | **+0.2** | | |
| | baz=146 | | | | | | | | |
| **429A** | **Davenport Ranc** | **145.99** | **35** | P | **PKPbc** | **12 43 20.5** | **0.0** | | |
| | baz=146 | | | | | | | | |
| **133A** | **Hamilton Ranch** | **146.04** | **29** | P | **PKPbc** | **12 43 20.5** | **+0.1** | | |
| | baz=146 | | | | | | | | |
| **X38A** | **Whitesboro** | **146.06** | **22** | P | **PKPbc** | **12 43 20.0** | **-0.4** | | |
| | baz=146 | | | | | | | | |
| **Y36A** | **Durant** | **146.15** | **25** | P | **PKPbc** | **12 43 20.3** | **-0.4** | | |
| | baz=146 | | | | | | | | |
| **529A** | **Stev Forest Ra** | **146.17** | **36** | P | **PKPbc** | **12 43 21.3** | **+0.3** | | |
| | baz=146 | | | | | | | | |
| **Z35A** | **Perchaven, San** | **146.22** | **27** | P | **PKPbc** | **12 43 20.7** | **-0.2** | | |
| | baz=146 | | | | | | | | |
| **430A** | **Baggett Ranch,** | **146.25** | **34** | P | **PKPbc** | **12 43 21.1** | **-0.1** | | |
| | baz=146 | | | | | | | | |
| **232A** | **Coleman** | **146.25** | **31** | P | **PKPbc** | **12 43 21.1** | **0.0** | | |
| | baz=146 | | | | | | | | |
| **331A** | **San Angelo** | **146.29** | **33** | P | **PKPbc** | **12 43 21.3** | **+0.1** | | |
| | baz=146 | | | | | | | | |
| **LCO** | **Las Campanas** | **146.46** | **195** | *e*PKPdf | **PKPab** | **12 43 23.2** | **+0.2** | | |
| **233A** | **Rising Star** | **146.52** | **30** | P | **PKPbc** | **12 43 22.1** | **+0.2** | | |
| | baz=146 | | | | | | | | |
| **332A** | **Millersview** | **146.60** | **32** | P | **PKPbc** | **12 43 22.6** | **+0.5** | | |
| | baz=146 | | | | | | | | |
| **MIAR** | **Mount Ida** | **146.63** | **21** | *e*PKP2 | **PKPbc** | **12 43 22.1** | **0.0** | | |
| **MIAR** | **Mount Ida** | **146.63** | **21** | P | **PKPbc** | **12 43 22.5** | **+0.4** | | |
| | baz=146 | | | | | | | | |
| **MIAR** | **Mount Ida** | **146.63** | **21** | *e*PKPdf | **PKPbc** | **12 43 22.1** | **0.0** | | |
| **Z36A** | **Blue Ridge** | **146.63** | **26** | P | **PKPbc** | **12 43 22.2** | **+0.1** | | |
| | baz=146 | | | | | | | | |
| **530A** | **J-C Ranch, Com** | **146.67** | **35** | P | **PKPbc** | **12 43 22.7** | **+0.3** | | |
| | baz=146 | | | | | | | | |
| **431A** | **Sonora** | **146.68** | **34** | P | **PKPbc** | **12 43 22.7** | **+0.2** | | |
| | baz=146 | | | | | | | | |
| **WVT** | **Waverly** | **146.74** | **12** | *e*PKP2 | **PKPbc** | **12 43 22.3** | **-0.1** | | |
| **WVT** | **Waverly** | **146.74** | **12** | *e*PKPdf | **PKPbc** | **12 43 22.3** | **-0.1** | | |
| **UALR** | **University of** | **146.84** | **19** | *e*PKPdf | **PKPbc** | **12 43 22.8** | **+0.1** | | |
| **234A** | **Clairette** | **146.91** | **29** | P | **PKPbc** | **12 43 23.1** | **+0.1** | | |
| | baz=147 | | | | | | | | |
| **TZTN** | **Tazewell** | **146.96** | **5** | *e*PKPdf | **PKPbc** | **12 43 22.9** | **-0.1** | | |
| **432A** | **Menard** | **146.97** | **32** | P | **PKPbc** | **12 43 23.3** | **0.0** | | |
| | baz=147 | | | | | | | | |
| **Y39A** | **Lockesburg** | **146.99** | **22** | P | **PKPbc** | **12 43 23.6** | **+0.5** | | |
| | baz=147 | | | | | | | | |
| **333A** | **Richland Sprin** | **147.04** | **31** | P | **PKPbc** | **12 43 23.4** | **0.0** | | |
| | baz=147 | | | | | | | | |
| **531A** | **Rocksprings** | **147.10** | **34** | P | **PKPbc** | **12 43 23.6** | **-0.1** | | |
| | baz=147 | | | | | | | | |
| **JCT** | **Junction City** | **147.27** | **33** | *e*PKP2 | **PKPbc** | **12 43 24.6** | **+0.5** | | |
| **JCT** | **Junction City** | **147.27** | **33** | P | **PKPbc** | **12 43 23.0** | **-1.1** | | |
| | baz=147 | | | | | | | | |
| **JCT** | **Junction City** | **147.27** | **33** | *e*PKPbc | **PKPbc** | **12 43 24.6** | **+0.5** | | |
| **334A** | **Lometa** | **147.41** | **30** | P | **PKPbc** | **12 43 24.3** | **-0.2** | | |
| | baz=147 | | | | | | | | |
| **433A** | **Art** | **147.44** | **32** | P | **PKPbc** | **12 43 23.8** | **-0.7** | | |
| | baz=147 | | | | | | | | |
| **532A** | **Rocksprings** | **147.49** | **33** | P | **PKPbc** | **12 43 24.4** | **-0.3** | | |
| | baz=147 | | | | | | | | |
| **631A** | **Perdido Creek** | **147.66** | **35** | P | **PKPbc** | **12 43 25.4** | **+0.2** | | |
| | baz=148 | | | | | | | | |
| **434A** | **Burnet** | **147.81** | **30** | P | **PKPbc** | **12 43 25.3** | **-0.3** | | |
| | baz=148 | | | | | | | | |
| **TKL** | **Tuckaleechee C** | **147.82** | **6** | *e*PKP2 | **PKPbc** | **12 43 25.0** | **-0.4** | | |
| **TKL** | **Tuckaleechee C** | **147.82** | **6** | *e*PKPbc | **PKPbc** | **12 43 25.0** | **-0.4** | | |
| **CPCT** | **Cooper Cave** | **147.94** | **7** | *e*PKPbc | **PKPbc** | **12 43 25.7** | **-0.1** | | |
| **SWET** | **Sewanee** | **147.97** | **9** | *e*PKPbc | **PKPbc** | **12 43 25.3** | **-0.6** | | |
| **533A** | **Kerrville** | **148.00** | **32** | P | **PKPdf** | **12 43 24.4** | **+1.3** | | |
| | baz=148 | | | | | | | | |
| **238A** | **Jacksonville** | **148.28** | **25** | P | **PKPbc** | **12 43 25.9** | **-0.8** | | |
| | baz=148 | | | | | | | | |
| **534A** | **Blanco** | **148.33** | **32** | P | **PKPbc** | **12 43 26.0** | **-1.0** | | |
| | baz=148 | | | | | | | | |
| **633A** | **Saathoff Ranch** | **148.40** | **33** | P | **PKPbc** | **12 43 25.9** | **-1.2** | | |
| | baz=148 | | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.50** | **2** | P | **PKPbc** | **12 43 26.0** | **-1.2** | | |
| | baz=148 | | | | | | | | |
| **KMSC** | **Kings Mountain** | **148.50** | **2** | *e*PKPbc | **PKPbc** | **12 43 26.9** | **-0.3** | | |
| **436A** | **Wall Ranch, Ga** | **148.57** | **29** | P | **PKPbc** | **12 43 27.3** | **-0.2** | | |
| | baz=148 | | | | | | | | |
| **832A** | **Faith Ranch, C** | **148.85** | **36** | P | **PKPbc** | **12 43 26.7** | **-1.6** | | |
| | baz=149 | | | | | | | | |
| **HKT** | **Hockley** | **149.71** | **28** | *e*PKPdf | **PKPdf** | **12 43 26.8** | **+1.1** | | |
| **933A** | **Laredo** | **149.76** | **36** | P | **PKPbc** | **12 43 32.0** | **+1.3** | | |
| | baz=150 | | | | | | | | |

**PRE 31 12:37:07.7±1.6, 26°05'S×29°70E, h0km, ML3.1,**
**Suspected explosion, South Africa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **ERPM** | **east rand prop** | **1.34** | **257** | *e*P | Pg | 12 37 32.4 | -1.3 |
| ERPM | | | | *e*S | Sb | 12 37 51.9 | 0.0 |
| ERPM | | | | AML | AML | 12 37 58.3 | |
| | comp=Z,144nm,0.3s | | | | | | |
| **WDLM** | **Western Deep L** | **2.08** | **259** | *e*P | Pn | 12 37 44.6 | +0.5 |
| WDLM | | | | *e*S | Sb | 12 38 12.6 | -0.5 |
| WDLM | | | | AML | AML | 12 38 15.2 | |
| | comp=Z,230nm,0.4s | | | | | | |
| **POGA** | **Pongola** | **2.16** | **128** | *e*P | Pb | 12 37 46.9 | -0.9 |
| POGA | | | | *e*S | Sb | 12 38 14.5 | -0.5 |
| POGA | | | | AML | AML | 12 38 21.5 | |
| | comp=Z,210nm,0.3s | | | | | | |
| **KSR** | **Koster** | **2.53** | **274** | *e*P | Pn | 12 37 51.4 | +1.1 |
| KSR | | | | *e*S | Sn | 12 38 22.8 | +0.8 |
| KSR | | | | AML | AML | 12 38 30.9 | |
| | comp=Z,43nm,0.4s | | | | | | |
| **BFSD** | **Buffelsfontein** | **2.73** | **252** | *e*P | Pn | 12 37 54.2 | +1.1 |
| BFSD | | | | *e*S | Sn | 12 38 25.8 | -1.2 |
| BFSD | | | | AML | AML | 12 38 38.3 | |
| | comp=Z,62nm,0.2s | | | | | | |
| **MSNA** | **Messina** | **3.70** | **5** | *e*P | Pn | 12 38 04.0 | -2.3 |
| MSNA | | | | *e*S | Sn | 12 38 48.4 | -2.2 |
| MSNA | | | | AML | AML | 12 39 04.0 | |
| | comp=Z,107nm,0.7s | | | | | | |
| **KSD** | **Kokstad** | **4.48** | **183** | *e*P | Pn | 12 38 17.9 | +0.8 |
| KSD | | | | *e*S | Sn | 12 39 08.4 | -1.7 |
| KSD | | | | AML | AML | 12 39 37.1 | |
| | comp=Z,18nm,0.5s | | | | | | |
| **HVD** | **Gariep Dam** | **5.86** | **218** | *e*P | Pn | 12 38 36.1 | 0.0 |
| HVD | | | | *e*S | Sn | 12 39 42.4 | -1.7 |
| HVD | | | | AML | AML | 12 40 18.6 | |
| | comp=Z,15nm,0.5s | | | | | | |
| **CVNA** | **Calvinia** | **10.26** | **236** | *e*P | Pn | 12 39 38.5 | +2.1 |
| CVNA | | | | *e*S | Sn | 12 41 26.0 | -6.2 |
| CVNA | | | | AML | AML | 12 42 41.1 | |
| | comp=Z,10nm,0.4s | | | | | | |

**AUST 31 12:57:02.6, 6.98S×129.54E, h100km, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **FAKI** | **Fak Fak** | **4.86** | **34** | P | Pn | 12 58 17.8 | +4.4 |
| | baz=4.9,SNR=8.7 | | | | | | |
| **MTN** | **Manton Dam** | **6.04** | **165** | P | Pn | 12 58 28.9 | -0.6 |
| | baz=6.1,SNR=9.0 | | | | | | |
| **SWI** | **Sorong** | **6.32** | **16** | P | Pn | 12 58 38.2 | +4.9 |
| | baz=6.4,SNR=3.6 | | | | | | |
| **KDU** | **Kakadu** | **6.37** | **153** | P | Pn | 12 58 33.4 | -0.5 |
| | baz=6.4,SNR=10 | | | | | | |
| **KNRA** | **Kununurra** | **8.68** | **185** | P | Pn | 12 59 02.3 | -3.1 |
| | baz=8.7,SNR=6.0 | | | | | | |
| **WRKA** | **Warakurna** | **18.00** | **184** | P | P | 13 01 02.9 | -2.7 |
| | baz=18,SNR=4.4 | | | | | | |
| **MTSU** | **Mount Surprise** | **18.18** | **129** | P | Pn | 13 01 12.2 | +3.6 |
| | baz=18,SNR=4.3 | | | | | | |

*YARS **31** 13:05:33.3±0.6, 60.53N±0.02×141.45E±0.04, h10km, MSV2.9*
*NERS **31** 13:05:34.3, 60.38N×141.77E, h7km*
**ISC 31 13:05:35.8±0.9, 60.59N±0.06×141.72E±0.04, h10km, n14,**
**σ2s85/18, Eastern Siberia**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **OCHR** | **Omchak** | **3.17** | **67** | *e*P | **Pn** | **13 06 26.5** | **+0.8** |
| OCHR | | | | *e*Pg | **Pb** | **13 06 33.3** | **+1.1** |
| OCHR | | | | Pgmax | | 13 06 35.1 | |
| | 20nm,0.2s | | | | | | |
| OCHR | | | | *e*Sg | **Sb** | **13 07 13.8** | **+2.9** |
| OCHR | | | | Sgmax | | 13 07 17.3 | |
| | 120nm,0.4s | | | | | | |
| **SUUS** | **Susuman** | **3.78** | **52** | *e*Pg | **Pg** | **13 06 47.0** | **-1.0** |
| SUUS | | | | *e*Sg | **Sg** | **13 07 34.6** | **-2.3** |
| SUUS | | | | Sgmax | | 13 07 36.9 | |
| | 60nm,0.3s | | | | | | |
| **UNR** | **Ust'-Nera** | **4.06** | **9** | *e*P | **Pb** | **13 06 47.0** | **-0.3** |
| UNR | | | | Pm | | 13 06 47.0 | |
| | comp=Z,70nm,0.2s | | | | | | |
| UNR | | | | *e*S | **Sb** | **13 07 40.4** | **+4.1** |
| UNR | | | | Sm | | 13 07 40.4 | |
| | comp=E,178nm,0.3s | | | | | | |
| **MGD** | **Magadan 1** | **4.51** | **93** | *e*Sg | **Sb** | **13 07 54.2** | **+4.8** |
| **SEY** | **Seymchan** | **5.58** | **60** | *e*Sg | **Sg** | **13 08 31.5** | **-3.2** |
| SEY | | | | *e*Sg | **Sg** | **13 08 32.5** | **-2.2** |
| | comp=E,10.0nm,0.2s | | | | | | |
| SEY | | | | *e*Sg | **Sg** | **13 08 32.5** | **-2.2** |
| | comp=E,10.0nm,0.2s | | | | | | |
| **NBS** | **Nizhniy Bestya** | **5.87** | **288** | *e*S | **Sb** | **13 08 31.8** | **+3.5** |
| **CGD** | **Chagda** | **5.92** | **257** | *e*P | **Pn** | **13 07 00.5** | **-2.9** |
| CGD | | | | *e*P | **Pb** | **13 07 17.8** | **-1.2** |
| CGD | | | | *e*S | Sn | 13 08 03.8 | -7.4 |
| CGD | | | | *e*S | **Sb** | **13 08 32.1** | **+2.2** |
| CGD | | | | Sm | | 13 08 32.1 | |
| | comp=N,30nm,0.5s | | | | | | |
| **MOMR** | **Moma** | **5.94** | **6** | *e*S | Sg | 13 08 39.3 | -6.9 |
| MOMR | | | | Sm | | 13 08 39.3 | |
| | comp=E,25nm,0.1s | | | | | | |
| **TBGR** | **Tabaga** | **5.97** | **287** | *e*P | **Pb** | **13 07 19.5** | **-0.3** |
| TBGR | | | | *e*S | **Sb** | **13 08 33.6** | **+2.3** |
| TBGR | | | | Sm | | 13 08 33.6 | |
| | comp=N,40nm,0.8s | | | | | | |
| **YAK** | **Yakutsk** | **5.98** | **289** | *e*S | Sn | 13 08 05.2 | -7.4 |
| YAK | | | | *e*S | **Sb** | **13 08 34.8** | **+3.3** |
| YAK | | | | Sm | | 13 08 34.8 | |
| | comp=N,12nm,0.5s | | | | | | |
| **BTGS** | **Batagay** | **7.73** | **339** | *e*S | Sg | 13 09 33.2 | -10 |
| BTGS | | | | Sm | | 13 09 33.2 | |
| | comp=E,18nm,0.9s | | | | | | |
| **ALDR** | **Aldan** | **8.51** | **264** | *e*S | Sg | 13 09 51.6 | -17 |
| ALDR | | | | Sm | | 13 09 51.6 | |
| | comp=N,11nm,0.8s | | | | | | |
| **IENR** | **Iengra** | **9.86** | **251** | *e*S | Sn | 13 10 32.4 | +44 |
| IENR | | | | Sm | | 13 10 32.4 | |
| | comp=N,11nm,0.4s | | | | | | |
| **OLMR** | **Olekminsk** | **10.48** | **278** | *e*S | Sn | 13 10 52.7 | +49 |
| OLMR | | | | Sm | | 13 10 52.7 | |
| | comp=N,13nm,0.8s | | | | | | |

**IDC 31 13:10:11.2±9.4, 2°51S×100°71E, h0km, mb3.3/4, mb1 3.6/4, mb1mx3.4/27, mbtmp3.4/4, Error ellipse: s-maj=326.0km s-min=24.3km az=62.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **20.91** | **355** | P | P | 13 14 56.3 | +0.9 |
| | 1.1nm,0.8s,baz=186,slow=10,SNR=6.1 | | | | | | |
| **H08S2** | **Diego Garcia H** | **28.55** | **259** | T | T | 13 45 53.9 | |
| | baz=80 | | | | | | |
| **H08S3** | **Diego Garcia H** | **28.56** | **259** | T | T | 13 45 36.6 | |
| | baz=80 | | | | | | |
| **H08S1** | **Diego Garcia H** | **28.57** | **259** | T | T | 13 46 13.5 | |
| | baz=80 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.13** | **120** | P | P | 13 17 23.8 | -0.2 |
| | 0.5nm,0.9s,baz=297,slow=8.8,SNR=3.1 | | | | | | |
| **ASAR** | **Alice Springs** | **38.38** | **126** | P | P | 13 17 34.7 | +0.1 |
| | 0.3nm,0.7s,baz=302,slow=8.3,SNR=5.3 | | | | | | |
| **SONM** | **Songino Array** | **50.38** | **5** | P | P | 13 19 09.7 | -0.7 |
| | 0.2nm,0.3s,baz=190,slow=6.7,SNR=2.4 | | | | | | |

**AUST 31 13:42:34.8±0.0, 9°36S×123°54E, h0km, Error ellipse: s-maj=3.8km s-min=1.2km az=26.0, Timor region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SOEI** | **Soe** | **0.82** | **119** | P | Pg | 13 42 49.9 | -0.9 |
| | baz=0.8,SNR=1000 | | | | | | |
| **KNRA** | **Kununurra** | **8.09** | **141** | P | Pn | 13 44 33.7 | 0.0 |
| | baz=8.1,SNR=18 | | | | | | |
| **MTN** | **Manton Dam** | **8.22** | **116** | P | Pn | 13 44 35.6 | +0.1 |
| | baz=8.2,SNR=9.3 | | | | | | |
| **LEM** | **Lembang** | **15.96** | **278** | P | Pn | 13 46 20.4 | -0.7 |
| | baz=16,SNR=3.2 | | | | | | |
| **WRKA** | **Warakurna** | **16.24** | **164** | P | Pn | 13 46 25.5 | +1.0 |
| | baz=16,SNR=5.1 | | | | | | |

*NIED **31** 13:51:00, 33.40N×140.10E, h83km, Mw3.9 Best double couple: M0 7.99000×10^14 NP1:φs352.00000°, δ61.00000°, λ-15.00000°. NP2:φs90.00000°, δ77.00000°, λ-150.00000°.*
*ISCJB **31** 13:51:52.6±0.5, 33.37N±0.04×140.19E±0.06, h102km±3km, mb3.7/11, Error ellipse: s-maj=8.9km s-min=5.9km az=169.3*
*IDC **31** 13:51:53.5±0.9, 33.28N×140.04E, h96km±5km, mb3.5/11, mb1 3.8/12, mb1mx3.6/30, mbtmp3.9/12, Error ellipse: s-maj=27.6km s-min=9.7km az=77.0*
*JMA **31** 13:51:54.4±0.1, 33.44N×140.14E, h89km±1km, M3.6*
**ISC 31 13:51:53.6±0.8, 33.39N±0.05×140.18E±0.07, h96km±6km, n37, σ1s04/44, mb3.8/11, Southeast of Honshu**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JHJ2** | **Mitsune** | **0.41** | **228** | P | **Pn** | **13 52 08.6** | **+0.2** |
| JHJ2 | | | | S | **Sn** | **13 52 19.5** | **+0.2** |
| **JHJ** | **Hachijo jima 2** | **0.43** | **231** | P | **Pn** | **13 52 08.7** | **+0.2** |
| | 1μm,0.3s,baz=60,slow=23,SNR=112 | | | | | | |
| JHJ | | | | S | **Sn** | **13 52 19.4** | **-0.1** |
| | 2μm,0.3s,baz=20,slow=22,SNR=39 | | | | | | |
| **JHCJ** | **Hachijojimakas** | **0.45** | **226** | P | **Pn** | **13 52 08.7** | **+0.1** |
| JHCJ | | | | S | **Sn** | **13 52 19.5** | **-0.3** |
| **JKO** | **Kozu shima** | **1.18** | **313** | P | **Pn** | **13 52 15.9** | **+0.1** |
| JKO | | | | S | **Sn** | **13 52 31.9** | **-0.6** |
| **BSO1** | **Boso 1** | **1.43** | **27** | P | **Pn** | **13 52 19.2** | **+1.0** |
| **BSO3** | **Boso 3** | **1.44** | **11** | P | **Pn** | **13 52 19.5** | **+0.9** |
| BSO3 | | | | S | **Sn** | **13 52 38.8** | **+1.2** |
| **JIM2** | **Oshima 3** | **1.47** | **335** | P | **Pn** | **13 52 19.7** | **-0.1** |
| JIM2 | | | | S | **Sn** | **13 52 37.7** | **-1.0** |
| **BSO4** | **Boso 4** | **1.60** | **5** | P | **Pn** | **13 52 21.8** | **+0.9** |
| **JIZS** | **Izushimoda** | **1.71** | **321** | P | **Pn** | **13 52 22.4** | **+0.1** |
| JIZS | | | | S | **Sn** | **13 52 43.1** | **-1.0** |
| **KTJJ** | **Kamata 2** | **1.79** | **329** | P | **Pn** | **13 52 23.5** | **+0.1** |
| KTJJ | | | | S | **Sn** | **13 52 45.5** | **-0.5** |
| **JOD2** | **Odawara 2** | **2.08** | **335** | P | **Pn** | **13 52 27.4** | **+0.3** |
| JOD2 | | | | S | **Sn** | **13 52 52.2** | **-0.4** |
| **TK02** | **Tokai 2** | **2.10** | **286** | S | **Sn** | **13 52 54.6** | **+1.9** |
| **TK04** | **Tokai 4** | **2.16** | **298** | S | **Sn** | **13 52 54.4** | **+0.1** |
| **SHZ3** | **Shizuoka 3** | **2.34** | **316** | P | **Pn** | **13 52 31.3** | **+0.8** |
| SHZ3 | | | | S | **Sn** | **13 52 59.8** | **+1.0** |
| **JYN** | **Shimob** | **2.50** | **328** | P | **Pn** | **13 52 33.7** | **+1.0** |
| **MJAR** | **Matsushiro Arr** | **3.54** | **333** | P | **Pn** | **13 52 47.9** | **+1.4** |
| | 14nm,0.3s,baz=175,slow=14,SNR=150 | | | | | | |
| MJAR | | | | S | **Sn** | **13 53 28.7** | **+1.3** |
| | 5.7nm,0.3s,baz=159,slow=19,SNR=16 | | | | | | |
| **MAT** | **Matsushiro** | **3.54** | **333** | P | **Pn** | **13 52 47.3** | **+0.8** |
| MAT | | | | S | **Sn** | **13 53 25.5** | **-2.0** |
| **JNU** | **Nakatsue** | **7.80** | **271** | P | **Pn** | **13 53 45.6** | **+1.3** |
| | 0.3nm,0.3s,baz=68,slow=19,SNR=2.9 | | | | | | |
| **KSRS** | **Korea Array** | **10.79** | **296** | P | **Pn** | **13 54 27.5** | **+2.5** |
| | 0.1nm,0.3s,baz=107,slow=14,SNR=6.2 | | | | | | |
| **ASAJ** | **Asahikawa** | **10.88** | **9** | P | **Pn** | **13 54 23.4** | **-2.8** |
| | 1.8nm,0.3s,baz=217,slow=11,SNR=22 | | | | | | |
| ASAJ | | | | S | S

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| BOZC | | | | | S | | Sg | 14 05 16.7 | +1.1 | | |
| **EZN** | **Ezine** | **0.48** | **19** | *e*PG | **Pg** | 14 05 09.8 | +0.3 | | | | |
| EZN | | | | *e*SG | **Sb** | 14 05 16.9 | -0.9 | | | | |
| **EZN** | **Ezine** | **0.48** | **19** | *e*Pg | **Pg** | 14 05 09.8 | +0.3 | | | | |
| EZN | | | | *e*Sg | **Sb** | 14 05 16.9 | -0.9 | | | | |
| **GADA** | **Gvkgeada** | **0.83** | **348** | *e*PG | **Pb** | 14 05 17.0 | +0.2 | | | | |
| **GADA** | **Gvkgeada** | **0.83** | **348** | *e*Pg | **Pb** | 14 05 17.0 | +0.2 | | | | |
| **LIA** | **Limnos Island** | **0.90** | **306** | *e*PG | **Pg** | 14 05 16.9 | -0.5 | | | | |
| LIA | | | | *e*SB | **Sg** | 14 05 28.8 | -0.2 | | | | |
| **LIA** | **Limnos Island** | **0.90** | **306** | *e*Pg | **Pg** | 14 05 16.9 | -0.5 | | | | |
| LIA | | | | *e*Sb | **Sg** | 14 05 28.8 | -0.2 | | | | |
| **CHOS** | **Chios island** | **0.99** | **183** | *e*PG | **Pb** | 14 05 19.5 | +0.1 | | | | |
| CHOS | | | | *e*SG | **Sb** | 14 05 33.0 | +0.5 | | | | |
| **CHOS** | **Chios island** | **0.99** | **183** | *e*Pg | **Pb** | 14 05 19.5 | +0.1 | | | | |
| CHOS | | | | *e*Sg | **Sb** | 14 05 33.0 | +0.5 | | | | |
| **GELI** | **Tayfur-Gelibol** | **1.06** | **15** | *e*PN | **Pg** | 14 05 20.6 | +0.1 | | | | |
| GELI | | | | *e*SN | **Sn** | 14 05 36.5 | +0.6 | | | | |
| **GELI** | **Tayfur-Gelibol** | **1.06** | **15** | *e*Pn | **Pg** | 14 05 20.6 | +0.1 | | | | |
| GELI | | | | *e*Sn | **Sn** | 14 05 36.5 | +0.6 | | | | |
| **URLA** | **Izmir** | **1.08** | **160** | *i* P | **Pb** | 14 05 20.5 | -0.4 | | | | |
| URLA | | | | *i* S | **Sb** | 14 05 34.7 | -0.4 | | | | |
| **URLA** | **Izmir** | **1.08** | **160** | P | **Pb** | 14 05 20.5 | -0.4 | | | | |
| URLA | | | | S | **Sb** | 14 05 34.7 | -0.4 | | | | |
| **ZEY** | **˙zmir** | **1.17** | **165** | P | **Pb** | 14 05 21.6 | -0.9 | | | | |
| ZEY | | | | S | **Sg** | 14 05 38.2 | +0.3 | | | | |
| **SMTH** | **Samothraki Isl** | **1.19** | **338** | *e*PB | **Pb** | 14 05 22.3 | -0.5 | | | | |
| SMTH | | | | *e*SB | **Sb** | 14 05 37.9 | -0.3 | | | | |
| **SMTH** | **Samothraki Isl** | **1.19** | **338** | *e*Pb | **Pb** | 14 05 22.3 | -0.5 | | | | |
| SMTH | | | | *e*Sg | **Sb** | 14 05 37.9 | -0.3 | | | | |
| **BALY** | **Balya** | **1.21** | **72** | *i* P | **Pn** | 14 05 22.5 | -0.8 | | | | |
| BALY | | | | *i* S | **Sn** | 14 05 40.7 | +0.9 | | | | |
| **BALY** | **Balya** | **1.21** | **72** | P | **Pn** | 14 05 22.5 | -0.8 | | | | |
| BALY | | | | S | **Sn** | 14 05 40.7 | +0.9 | | | | |
| **ERIK** | **Erikli-Kesan** | **1.33** | **13** | *e*PN | **Pb** | 14 05 25.1 | -0.1 | | | | |
| **ERIK** | **Erikli-Kesan** | **1.33** | **13** | *e*Pn | **Pb** | 14 05 25.1 | -0.1 | | | | |
| **GONE** | **Gonen-Balikesi** | **1.38** | **60** | *e*PN | **Pn** | 14 05 24.9 | -0.6 | | | | |
| **GONE** | **Gonen-Balikesi** | **1.38** | **60** | *e*Pn | **Pn** | 14 05 24.9 | -0.6 | | | | |
| **BALB** | **Balikesir** | **1.39** | **78** | *e*PN | **Pn** | 14 05 24.6 | -1.0 | | | | |
| **BALB** | **Balikesir** | **1.39** | **78** | *e*Pn | **Pn** | 14 05 24.6 | -1.0 | | | | |
| **ALN** | **Alexandroupoli** | **1.52** | **358** | *e*PN | **Pb** | 14 05 28.7 | +0.2 | | | | |
| **ALN** | **Alexandroupoli** | **1.52** | **358** | *e*Pn | **Pb** | 14 05 28.0 | -0.5 | | | | |
| ALN | | | | *e*SB | **Sg** | 14 05 49.0 | -0.1 | | | | |
| **ALN** | **Alexandroupoli** | **1.52** | **358** | *e*Pn | **Pb** | 14 05 28.0 | -0.5 | | | | |
| ALN | | | | *e*Sb | **Sg** | 14 05 49.0 | -0.1 | | | | |
| **RKY** | **Sarkoy-Tekirda** | **1.54** | **31** | *e*PN | **Pn** | 14 05 27.9 | +0.1 | | | | |
| **RKY** | **Sarkoy-Tekirda** | **1.54** | **31** | *e*Pn | **Pn** | 14 05 27.9 | +0.1 | | | | |
| **SART** | **Tekirdag** | **1.54** | **31** | *i* P | **Pn** | 14 05 27.3 | -0.6 | | | | |
| SART | | | | *i* S | **Sg** | 14 05 49.6 | -0.2 | | | | |
| **SART** | **Tekirdag** | **1.54** | **31** | P | **Pn** | 14 05 27.3 | -0.6 | | | | |
| SART | | | | S | **Sg** | 14 05 49.6 | -0.2 | | | | |
| **EDC** | **Edincik** | **1.65** | **54** | *e*PN | **Pn** | 14 05 29.1 | -0.2 | | | | |
| **EDC** | **Edincik** | **1.65** | **54** | *e*Pn | **Pn** | 14 05 29.1 | -0.2 | | | | |
| **MRMT** | **Marmara Adasi** | **1.67** | **42** | *e*PN | **Pn** | 14 05 29.5 | -0.1 | | | | |
| **MRMT** | **Marmara Adasi** | **1.67** | **42** | *e*Pn | **Pn** | 14 05 29.5 | -0.1 | | | | |
| **SMG** | **Samos** | **1.75** | **161** | *e*PB | **Pg** | 14 05 33.3 | -0.5 | | | | |
| SMG | | | | *e*SB | **Sg** | 14 05 57.8 | +1.2 | | | | |
| **SMG** | **Samos** | **1.75** | **161** | *e*Pb | **Pg** | 14 05 33.3 | -0.5 | | | | |
| SMG | | | | *e*Sb | **Sg** | 14 05 57.8 | +1.2 | | | | |
| **EDRB** | **Edirne** | **2.52** | **11** | *e*PN | **Pn** | 14 05 42.3 | +1.2 | | | | |
| **EDRB** | **Edirne** | **2.52** | **11** | *e*Pn | **Pn** | 14 05 42.3 | +1.2 | | | | |

*DDA **31** 14:31:39.4, 37˚.21N×28˚.47E, h7km, Md2.6*
*CSEM **31** 14:31:39.3, 37˚.19N×28˚.46E, h5km, MD2.6, Error ellipse: s-maj=7.5km s-min=5.9km az=68.0*

**ISC 31 14:31:39.3±1.1, 37˚.20N±0˚.04×28˚.44E±0˚.04, h5km±14km, n10, σ1§12/19, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **YER** | **Yerkesik** | **0.14** | **244** | *e*PG | **Pg** | | **14 31 41.5** | **-0.6** |
| YER | | | | *e*SG | **Sg** | | **14 31 44.2** | **+0.2** |
| **YER** | **Yerkesik** | **0.14** | **244** | *e*Pg | **Pg** | | **14 31 41.5** | **-0.6** |
| **TURN** | **Turunc** | **0.35** | **158** | *i* P | **Pg** | | **14 31 46.1** | **+0.1** |
| TURN | | | | *i* S | **Sb** | | **14 31 55.5** | **+1.7** |
| **TURN** | **Turunc** | **0.35** | **158** | P | **Pg** | | **14 31 46.1** | **+0.1** |
| TURN | | | | S | **Sb** | | **14 31 55.5** | **+1.7** |
| **DALY** | **Dalyan (Mu˘la** | **0.42** | **155** | *e*PG | **Pg** | | **14 31 47.3** | **0.0** |
| DALY | | | | *e*SG | **Sb** | | **14 31 53.7** | **-2.0** |
| **DALY** | **Dalyan (Mu˘la** | **0.42** | **155** | *e*Pg | **Pg** | | **14 31 47.3** | **0.0** |
| DALY | | | | *e*Sg | **Sb** | | **14 31 53.7** | **-2.0** |
| **AYDN** | **Tasoluk** | **0.64** | **316** | *i* P | **Pg** | | **14 31 52.8** | **-0.2** |
| AYDN | | | | *i* S | **Sg** | | **14 32 01.4** | **+1.4** |
| **AYDN** | **Tasoluk** | **0.64** | **316** | P | **Pb** | | **14 31 52.9** | **-0.2** |
| AYDN | | | | S | **Sg** | | **14 32 01.4** | **+1.4** |
| **DNZL** | **Cakiroluk** | **0.69** | **44** | *i* P | **Pg** | | **14 31 52.2** | **-0.4** |
| DNZL | | | | *i* S | **Sg** | | **14 32 01.8** | **+0.2** |
| **DNZL** | **Cakiroluk** | **0.69** | **44** | P | **Pg** | | **14 31 52.2** | **-0.4** |
| DNZL | | | | S | **Sg** | | **14 32 01.8** | **+0.2** |

**IDC 31 14:51:45.7±7.3, 23˚.71N×108˚.88W, h0km, mb3.3/1, mb1 3.7/3, mb1mx3.5/27, mbtmp3.3/3, ML3.4/2, MS2.8/3, Ms1 2.8/3, ms1mx2.6/15, Error ellipse: s-maj=123.1km s-min=30.2km az=163.0, Gulf of California**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **LPIG** | **La Paz** | **1.36** | **287** | Pn | Pg | | 14 52 10.9 | -0.9 |
| | 33nm,0.3s,baz=129,slow=3.4,SNR=12 | | | | | | | |
| LPIG | | | | Sn | Sg | | 14 52 21.4 | -8.1 |
| | 115nm,0.3s,baz=207,slow=20,SNR=16 | | | | | | | |
| LPIG | | | | LR | LR | | 14 52 26.8 | |
| | comp=Z,123nm,21.5s,baz=46,slow=30 | | | | | | | |
| **TXAR** | **Lajitas Array** | **7.29** | **39** | Pn | Pn | | 14 53 33.1 | -0.6 |
| | 0.2nm,0.3s,baz=211,slow=14,SNR=14 | | | | | | | |
| TXAR | | | | Sn | Sn | | 14 54 52.4 | -5.0 |
| | 0.1nm,0.3s,baz=212,slow=21,SNR=1.0 | | | | | | | |
| TXAR | | | | Lg | Lg | | 14 55 22.9 | |
| | 0.2nm,0.3s,baz=224,slow=32,SNR=3.5 | | | | | | | |
| TXAR | | | | LR | LR | | 14 56 46.0 | |
| | comp=Z,30nm,19.3s,baz=0.0,slow=41 | | | | | | | |
| **CMIG** | **Matias Romero** | **14.68** | **114** | LR | LR | | 15 00 44.0 | |
| | comp=Z,63nm,20.6s,baz=358,slow=37 | | | | | | | |
| **NVAR** | **Mina Array Bea** | **16.73** | **333** | Pn | P | | 14 55 44.0 | -0.3 |
| | 0.1nm,0.3s,baz=148,slow=12,SNR=5.9 | | | | | | | |
| **JTS** | **JuntasAbangare** | **26.43** | **116** | LR | LR | | 15 08 17.0 | |
| | comp=Z,32nm,18.8s,baz=4.0,slow=38 | | | | | | | |
| **ILAR** | **Eielson Array** | **47.88** | **339** | P | P | | 15 00 26.6 | +1.5 |
| | 0.3nm,0.6s,baz=134,slow=7.8,SNR=4.9 | | | | | | | |

*ISCJB **31** 15:09:30.9±0.6, 32˚.21N±0˚.04×115˚.24W±0˚.05, h19km±11km, Error ellipse: s-maj=6.7km s-min=5.8km az=154.3*
*MEX **31** 15:09:31.7±0.3, 32˚.34N×115˚.06W, h31km±6km, MD3.5*
*ECX **31** 15:09:31.9±0.4, 32˚.20N×115˚.25W, h5km, MD2.5, ML2.7*

**ISC 31 15:09:30.2±1.4, 32˚.21N±0˚.03×115˚.24W±0˚.05, h15km±13km, n15, σ0§32/21, 3C-3D, California-Baja California border region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MBIG** | **Mexicali** | **0.20** | **10** | *i* P | **Pb** | | **15 09 36.3** | **+0.7** |
| MBIG | | | | *i* S | **Sb** | | **15 09 39.4** | **+0.1** |
| **CPBX** | **Cerro Prieto** | **0.22** | **345** | *e*P | **Pb** | | **15 09 36.2** | **+0.3** |
| CPBX | | | | *e*S | **Sb** | | **15 09 39.6** | **-0.2** |
| CPBX | | | | IAML | | | 15 09 42.8 | |
| | comp=E,3μm,0.2s | | | | | | | |
| CPBX | | | | *e* | | | 15 09 42.8 | |
| **EMSC** | **East Mesa** | **0.57** | **22** | ⇑*i*P | **Pb** | | **15 09 42.4** | **+0.5** |
| **SGL** | **Mount Signal** | **0.60** | **317** | ⇓*i*P | **Pb** | | **15 09 42.7** | **+0.2** |
| **RDX** | **Rancho Dawling** | **0.66** | **245** | ⇑*e*P | **Pg** | | **15 09 43.4** | **+0.2** |
| RDX | | | | *e*S | **Sg** | | **15 09 52.1** | **+0.2** |
| **COA** | **Coachella** | **0.66** | **8** | *e*P | **Pb** | | **15 09 43.8** | **0.2** |
| **YMD** | **Yuma Desert** | **0.68** | **59** | ⇑*i*P | **Pb** | | **15 09 43.8** | **0.0** |
| **YUH** | **Yuha Desert** | **0.73** | **307** | ⇓*i*P | **Pb** | | **15 09 44.6** | **0.0** |
| **ECBX** | **El Chinero** | **0.75** | **168** | *e*P | **Pb** | | **15 09 45.1** | **+0.1** |
| ECBX | | | | *e*S | **Sb** | | **15 09 55.1** | **+0.2** |
| ECBX | | | | IAML | | | 15 09 56.2 | |
| | comp=N,388nm,0.3s | | | | | | | |
| ECBX | | | | ⇓*e* | | | 15 09 56.2 | |
| **RMX** | **La Rumorosa** | **0.81** | **299** | *e*P | **Pg** | | **15 09 45.7** | **-0.3** |
| RMX | | | | *e*S | **Sg** | | **15 09 56.4** | **-0.4** |
| RMX | | | | IAML | | | 15 09 57.2 | |
| | comp=N,196nm,0.2s | | | | | | | |
| RMX | | | | *e* | | | 15 09 57.2 | |
| **SPIG** | **San Pedro Mart** | **1.17** | **190** | *e*P | **Pn** | | **15 09 52.0** | **-0.4** |
| **SPX** | **San Pedro Mart** | **1.17** | **190** | *e*Pn | **Pn** | | **15 09 52.1** | **-0.4** |
| **CBX** | **Cerro Bola** | **1.21** | **275** | *e*Pn | **Pn** | | **15 09 52.4** | **-0.4** |
| CBX | | | | *e*S | **Sb** | | **15 10 08.7** | **+0.2** |
| **CBX** | **Cerro Bola** | **1.21** | **275** | *e*P | **Pn** | | **15 09 52.7** | **-0.1** |
| **ECNX** | **Esteban Cantu** | **1.28** | **245** | *e*P | **Pn** | | **15 09 53.9** | **+0.2** |

*ISCJB **31** 15:10:34.7±0.8, 10˚.37S±0˚.09×161˚.4E±0˚.1, h61km, mb3.8/8, Error ellipse: s-maj=20.0km s-min=8.7km az=148.1*
*IDC **31** 15:10:40.9±1.0, 10˚.26S×161˚.22E, h94km±7km, mb3.5/8, mb1 3.7/9, mb1mx3.5/27, mbtmp3.9/9, MS3.2/1, Ms1 3.2/1, ms1mx2.5/15, Error ellipse: s-maj=20.1km s-min=12.3km az=45.0*

**ISC 31 15:10:36.4±0.9, 10˚.3S±0˚.1×161˚.4E±0˚.1, h61km, n12, σ1§31/14, mb3.8/8, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **HNR** | **Honiara** | **1.71** | **302** | P | **Pn** | | **15 11 06.3** | **+2.3** |
| | 274nm,0.3s,baz=178,slow=6.5,SNR=186 | | | | | | | |
| HNR | | | | LR | LR | | 15 11 21.0 | |
| | comp=Z,59nm,18.1s,baz=166,slow=27 | | | | | | | |
| HNR | | | | S | **Sn** | | **15 11 26.4** | **+1.6** |
| | 583nm,0.3s,baz=312,slow=23,SNR=9.9 | | | | | | | |
| **HNR** | **Honiara** | **1.71** | **302** | *i* P | **Pn** | | **15 11 04.5** | **+0.5** |
| HNR | | | | *i* S | **Sn** | | **15 11 23.5** | **-1.4** |
| **DZM** | **Mont Dzumac** | **12.62** | **158** | P | P | | 15 13 40.2 | -2.4 |
| | 0.2nm,0.3s,baz=355,slow=9.2,SNR=19 | | | | | | | |
| DZM | | | | S | **Sn** | | **15 15 53.4** | **+1.3** |
| | 0.4nm,0.3s,baz=0.4,slow=15,SNR=1.9 | | | | | | | |
| **PMG** | **Port Moresby** | **14.08** | **273** | LR | LR | | 15 18 30.9 | |
| | comp=Z,92nm,19.7s,baz=96,slow=34 | | | | | | | |
| **WRA** | **Warramunga Arr** | **27.79** | **247** | P | **P** | | **15 16 19.5** | **-0.5** |
| | 1.1nm,0.7s,baz=74,slow=9.0,SNR=5.3 | | | | | | | |
| WRA | | | | pP | pP | | 15 16 42.5 | +7.6 |
| | 1.0nm,0.7s,baz=75,slow=9.4,SNR=2.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **29.39** | **240** | P | **P** | | **15 16 32.9** | **-1.3** |
| | 0.6nm,0.8s,baz=67,slow=10,SNR=5.5 | | | | | | | |
| ASAR | | | | pP | pP | | 15 16 55.8 | +6.7 |
| | 0.4nm,0.7s,baz=64,slow=10.0,SNR=3.5 | | | | | | | |
| **MJAR** | **Matsushiro Ar.** | **51.50** | **336** | P | **P** | | **15 19 34.8** | **-1.2** |
| | 0.9nm,0.6s,baz=172,slow=8.7,SNR=4.7 | | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **60.50** | **336** | P | **P** | | **15 20 40.9** | **+0.8** |
| | 3.6nm,0.8s,baz=159,slow=7.5,SNR=6.5 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **67.95** | **295** | P | **P** | | **15 21 29.5** | **+0.1** |
| | 0.3nm,0.5s,baz=132,slow=5.4,SNR=1.6 | | | | | | | |
| CMAR | | | | pP | **PcP** | | **15 21 53.9** | **-1.6** |
| | 0.6nm,0.7s,baz=134,slow=5.0,SNR=3.6 | | | | | | | |
| **SONM** | **Songino Array** | **75.63** | **325** | P | **P** | | **15 22 15.4** | **+0.4** |
| | 1.7nm,0.6s,baz=140,slow=5.3,SNR=9.1 | | | | | | | |
| **ILAR** | **Eielson Array** | **84.25** | **20** | P | **P** | | **15 23 01.4** | **+0.3** |
| | 0.2nm,0.4s,baz=245,slow=5.0,SNR=12 | | | | | | | |
| ILAR | | | | pP | pP | | 15 23 24.6 | +6.5 |
| | 0.8nm,1.1s,baz=208,slow=7.2,SNR=2.3 | | | | | | | |
| **MKAR** | **Makanchi Array** | **90.12** | **318** | P | **P** | | **15 23 29.2** | **-0.7** |
| | 0.3nm,0.4s,baz=89,slow=6.5,SNR=4.7 | | | | | | | |

*NDI **31** 15:12:35.4±1.1, 32˚.95N×82˚.90E, h33km, ML3.1*
*IDC **31** 15:12:35.5±0.7, 32˚.75N×82˚.31E, h0km, mb4.0/18, mb1 4.2/20, mb1mx4.1/39, mbtmp4.1/20, ML3.6/2, MS3.3/9, Ms1 3.3/9, ms1mx3.1/29, Error ellipse: s-maj=20.8km s-min=14.2km az=48.0*
*ISCJB **31** 15:12:38.5±0.2, 32˚.75N±0˚.02×82˚.32E±0˚.03, h33km, mb4.0/18, MS3.2/8, Error ellipse: s-maj=4.0km s-min=3.5km az=18.4*
*NEIC **31** 15:12:40.1±2.1, 32˚.76N×82˚.30E, h32km±16km, mb4.2/2, Error ellipse: s-maj=9.5km s-min=6.1km az=53.0*
*BJI **31** 15:12:44.9, 33˚.32N×82˚.59E, h43km, mb4.4/18, mB4.6/9, Ms3.9/13, Ms7 3.7/11*

**ISC 31 15:12:41.2±0.4, 32˚.80N±0˚.05×82˚.27E±0˚.04, h35km, n75, σ2§07/89, mb4.1/18, MS3.1/8, Xizang**

| Code | Station Name | Δ° | AZ° | Phase | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **SMLA** | **Simla** | **4.65** | **250** | *i* P | **Pn** | | **15 13 50.5** | **+1.6** |
| SMLA | | | | *i* S | **Sn** | | **15 14 46.3** | **+4.6** |
| SMLA | | | | AML | AML | | 15 14 54.8 | |
| | comp=E,53nm,0.2s | | | | | | | |
| SMLA | | | | AML | AML | | 15 14 54.9 | |
| | comp=N,47nm,0.5s | | | | | | | |
| **DHRM** | **DHARAMSHALA** | **5.08** | **265** | *e*P | **Pn** | | **15 13 56.1** | **+1.1** |
| DHRM | | | | *e*S | **Sn** | | **15 14 55.8** | **+3.3** |
| DHRM | | | | AML | AML | | 15 15 14.0 | |
| | comp=N,70nm,0.5s | | | | | | | |
| DHRM | | | | AML | AML | | 15 15 20.1 | |
| | comp=E,90nm,0.6s | | | | | | | |
| **AYAN** | **Aya Nagar** | **6.18** | **227** | *e*S | **Sn** | | **15 15 20.7** | **+1.4** |
| **KUDL** | **Kundal** | **6.81** | **229** | *e*P | **Pn** | | **15 14 19.4** | **+0.7** |
| KUDL | | | | *e*S | **Sn** | | **15 15 35.0** | **0.0** |
| KUDL | | | | AML | AML | | 15 15 43.5 | |
| | comp=N,7.8nm,0.3s | | | | | | | |
| KUDL | | | | AML | AML | | 15 15 46.1 | |
| | comp=E,7.8nm,0.9s | | | | | | | |
| **KHET** | **Khetri** | **7.30** | **232** | *e*P | **Pn** | | **15 14 26.9** | **+1.4** |
| KHET | | | | *e*S | **Sn** | | **15 15 46.1** | **-1.0** |
| KHET | | | | AML | AML | | 15 16 22.1 | |
| | comp=N,5.9nm,0.7s | | | | | | | |
| KHET | | | | AML | AML | | 15 16 23.2 | |
| | comp=E,5.7nm,0.5s | | | | | | | |
| **CHCP** | **Chirah Chowk** | **7.60** | **279** | P | **Pn** | | **15 14 30.1** | **+0.6** |
| **LSA** | **Lhasa** | **8.20** | **110** | P | **Pn** | | **15 14 40.5** | **+2.3** |
| **LSA** | **Lhasa** | **8.20** | **110** | *e*Pn | **Pn** | | **15 14 38.8** | **+0.6** |
| **KSH** | **Kashi** | **8.42** | **325** | *e*P | **Pn** | | **15 14 41.0** | **+0.2** |
| KSH | | | | S | **Sn** | | **15 16 13.5** | **-1.1** |
| **CEP** | **Cherat** | **8.74** | **280** | P | **Pn** | | **15 14 46.4** | **+1.2** |
| CEP | | | | S | **Sn** | | **15 16 21.0** | **-1.5** |
| **THW** | **Thamme Wali** | **8.87** | **273** | P | **Pn** | | **15 14 48.5** | **+1.6** |
| **KBL** | **Kabul** | **11.16** | **283** | *e*Pn | **Pn** | | **15 15 17.4** | **-1.1** |
| KBL | | | | *e*Sn | **Sn** | | **15 17 21.1** | **-1.0** |
| **TKM2** | **Tokmak 2** | **11.39** | **334** | *e*Pn | **Pn** | | **15 15 22.7** | **+1.1** |
| **AAK** | **Ala-Archa** | **11.58** | **330** | Pn | Pn | | 15 15 27.5 | +3.3 |
| | comp=E,0.3nm,0.3s,baz=143,slow=11,SNR=6.2 | | | | | | | |
| **AAK** | **Ala-Archa** | **11.58** | **330** | *e*Pn | **Pn** | | **15 15 26.5** | **+2.3** |
| **WMQ** | **Urumqi** | **11.80** | **20** | P | **Pn** | | **15 15 29.0** | **+2.0** |
| WMQ | | | | sP | | | 15 15 44.0 | |
| WMQ | | | | PMZ | | | | |
| | comp=E,11nm,0.8s | | | | | | | |
| WMQ | | | | LN | | | | |
| | comp=E,140nm,10.0s | | | | | | | |
| WMQ | | | | LE | | | | |
| | comp=E,92nm,8.0s | | | | | | | |
| WMQ | | | | LZ | | | | |
| | comp=E,130nm,9.0s | | | | | | | |
| **EKS2** | **Erkin-Say** | **11.92** | **328** | *e*Pn | **Pn** | | **15 15 29.5** | **+0.8** |
| **KKAR** | **Karatay Array** | **13.84** | **321** | P | **Pn** | | **15 15 55.4** | **+0.6** |
| | comp=E,2.8nm,0.5s | | | | | | | |
| **MK01** | **Makanchi Array** | **13.96** | **0** | *e*Pn | **Pn** | | **15 15 54.6** | **-1.8** |
| **MKAR** | **Makanchi Array** | **13.98** | **0** | Pn | **Pn** | | **15 15 55.3** | **-1.4** |
| | comp=E,0.5nm,0.3s,baz=182,slow=12,SNR=23 | | | | | | | |
| MKAR | | | | LR | LR | | 15 22 15.9 | |
| | comp=E,152nm,18.7s,baz=177,slow=41 | | | | | | | |
| **MKAR** | **Makanchi Array** | **13.98** | **0** | *e*Pn | **Pn** | | **15 15 54.2** | **-2.6** |
| **MAKZ** | **Makanchi** | **13.99** | **359** | *e*Pn | **Pn** | | **15 15 55.8** | **-1.1** |
| **RPR** | **Rampur** | **14.14** | **192** | *e*Pn | **Pn** | | **15 15 57.8** | **-1.3** |
| **SRSP** | **Sriramsagar** | **14.26** | **195** | *e*Pn | **Pn** | | **15 15 58.1** | **-2.5** |
| **CHLP** | **Challavanipeta** | **14.32** | **173** | *e*Pn | **Pn** | | **15 16 02.0** | **+0.5** |
| CHLP | | | | *e*P | P | | 15 16 04.4 | -3.7 |
| **PVM** | **Polavaram** | **15.49** | **182** | *e*Pn | **Pn** | | **15 16 15.6** | **-1.5** |
| **KLRI** | **Killari** | **15.53** | **201** | *e*Pn | **Pn** | | **15 16 15.2** | **-2.5** |
| **GTA** | **Gaotai** | **15.63** | **60** | *e*Pn | **P** | | **15 16 25.3** | **+2.6** |
| GTA | | | | pP | **pP** | | **15 16 34.8** | **+3.0** |
| GTA | | | | sP | **sP** | | **15 16 38.8** | **+2.5** |
| GTA | | | | pmax | pmax | | | |
| | comp=Z,6.0nm,1.0s | | | | | | | |
| **HYBB** | **Hyderabad (bro** | **15.68** | **193** | *e*Pn | **Pn** | | **15 16 17.1** | **-2.4** |
| **HYB** | **Hyderabad** | **15.68** | **193** | *i* P | **Pn** | | **15 16 17.0** | **-2.6** |
| **HYB** | **Hyderabad** | **15.68** | **193** | *e*P | **Pn** | | **15 16 17.0** | **-2.6** |
| **NJS** | **Nagarjunasagar** | **16.39** | **190** | *e*P | **Pn** | | **15 16 27.3** | **-1.4** |
| **SRLM** | **Srisailam** | **16.91** | **191** | *e*Pn | **Pn** | | **15 16 33.7** | **-1.5** |
| SRLM | | | | *e*P | **P** | | **15 16 34.6** | **-2.3** |
| **ADKI** | **Addanki** | **17.01** | **188** | *e*Pn | **Pn** | | **15 16 34.5** | **-1.9** |
| **RCLA** | **Racherla** | **17.53** | **191** | *e*Pn | **Pn** | | **15 16 41.6** | **-1.2** |
| **KURBB** | **Kurchatov Arra** | **18.02** | **352** | P | **Pn** | | **15 16 47.1** | **-1.7** |
| | comp=Z,0.1nm,0.3s,baz=173,slow=11,SNR=53 | | | | | | | |
| **KURK** | **Kurchatov** | **18.11** | **353** | P | **Pn** | | **15 16 47.1** | **-2.7** |
| **URV** | **Uravakonda** | **18.35** | **196** | *e*P | **P** | | **15 16 49.6** | **-3.2** |
| **CD2** | **Chengdu** | **18.35** | **90** | *e*P | P | | 15 16 45.5 | -7.3 |
| CD2 | | | | pP | **Pn** | | **15 16 48.8** | **-4.1** |
| CD2 | | | | sP | sP | | 15 16 50.0 | -16 |
| CD2 | | | | S | Sn | | 15 20 08.0 | -8.9 |
| CD2 | | | | sS | **S** | | **15 20 18.5** | **-2.2** |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| CD2 | | | | pmax | pmax | | | |
| | comp=Z,120nm,5.2s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=N,590nm,10.7s | | | | | | | |
| CD2 | | | | LR | LR | | | |
| | comp=Z,280nm,12.2s | | | | | | | |
| **SKHT** | **Srikalahasti** | **19.11** | **188** | *e*Pn | **Pn** | | **15 17 02.7** | **+0.5** |
| **KMI** | **Kunming** | **19.45** | **108** | P | **P** | | **15 17 05.8** | **+0.7** |
| KMI | | | | pP | **pP** | | **15 17 16.5** | **+2.2** |
| KMI | | | | sP | **sP** | | **15 17 22.5** | **+3.7** |
| KMI | | | | PP | **PnPn** | | **15 17 24.8** | **+4.7** |
| KMI | | | | S | S | | 15 20 35.3 | -8.0 |
| KMI | | | | sS | **sS** | | **15 20 53.0** | **-4.9** |
| KMI | | | | SS | **SnSn** | | **15 21 04.5** | **+6.4** |
| KMI | | | | PMZ | | | | |
| | comp=Z,18nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,170nm,4.7s | | | | | | | |
| KMI | | | | LN | | | | |
| | comp=Z,250nm,5.6s | | | | | | | |
| KMI | | | | LE | | | | |
| | comp=Z,200nm,5.3s | | | | | | | |
| KMI | | | | LZ | | | | |
| | comp=Z,120nm,6.2s | | | | | | | |
| **GEYT** | **Alibeck** | **20.33** | **291** | P | **P** | | **15 17 14.8** | **+0.3** |
| | comp=Z,7.8nm,0.8s,baz=119,slow=9.3,SNR=14 | | | | | | | |
| GEYT | | | | LR | LR | | 15 25 38.5 | |
| | comp=Z,54nm,21.8s,baz=195,slow=38 | | | | | | | |
| **CHTO** | **Chiang Mai** | **20.43** | **129** | *e*P | **P** | | **15 17 13.7** | **-1.9** |
| | comp=Z,7.1nm,0.8s | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **20.69** | **130** | P | **P** | | **15 17 17.9** | **-0.4** |
| | comp=Z,10nm,0.8s,baz=311,slow=10,SNR=71 | | | | | | | |
| CMAR | | | | LR | LR | | 15 25 38.3 | |
| | comp=Z,71nm,18.4s,baz=332,slow=38 | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **20.73** | **130** | *e*P | **P** | | **15 17 16.8** | **-2.0** |
| **ZAA0** | **Zalesovo Array** | **21.22** | **4** | *e*P | **P** | | **15 17 23.5** | **-0.2** |
| **ZALV** | **Zalesovo Beam** | **21.22** | **4** | P | **P** | | **15 17 23.8** | **0.0** |
| | comp=Z,4.0nm,0.7s,baz=198,slow=10,SNR=19 | | | | | | | |
| ZALV | | | | LR | LR | | 15 25 45.5 | |
| | comp=Z,19nm,21.7s,baz=248,slow=37 | | | | | | | |
| **BVAR** | **Borovoye Array** | **21.95** | **341** | P | **P** | | **15 17 31.6** | **-0.1** |
| | comp=Z,2.9nm,0.4s,baz=157,slow=10,SNR=14 | | | | | | | |
| **BRVK** | **Borovoye** | **22.01** | **340** | *e*P | **P** | | **15 17 31.7** | **-0.6** |
| | comp=Z,7.2nm,0.6s | | | | | | | |
| **XAN** | **Xi'an** | **22.26** | **79** | P | **P** | | **15 17 34.5** | **-0.7** |
| XAN | | | | pP | **pP** | | **15 17 44.8** | **+0.3** |
| XAN | | | | PMZ | | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **ABKAR** | **Akbulak array** | **23.41** | **321** | *e*P | **P** | | **15 17 45.6** | **-1.2** |
| **SONM** | **Songino Array** | **23.61** | **43** | P | **P** | | **15 17 48.6** | **-0.4** |
| | comp=Z,1.8nm,0.8s,baz=250,slow=7.5,SNR=13 | | | | | | | |
| SONM | | | | LR | LR | | 15 28 06.6 | |
| | comp=Z,61nm,20.1s,baz=194,slow=39 | | | | | | | |
| **SONA1** | **Songino Array** | **23.62** | **43** | *e*P | **P** | | **15 17 49.1** | **-0.1** |
| **HHC** | **Hu-ho-hao-te** | **24.70** | **63** | *e*P | **P** | | **15 17 58.3** | **-0.8** |
| HHC | | | | S | **S** | | **15 22 13.5** | **-5.2** |
| HHC | | | | PMZ | | | | |
| | comp=Z,18nm,0.7s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,150nm,7.4s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,600nm,14.3s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,310nm,12.6s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,84nm,13.6s | | | | | | | |
| **AKTO** | **Aktyubinsk** | **25.11** | **322** | P | **P** | | **15 18 02.0** | **-0.5** |
| | comp=Z,5.2nm,0.6s,baz=117,slow=11,SNR=19 | | | | | | | |
| **CN2** | **Changchun** | **35.26** | **59** | *e*P | **P** | | **15 19 35.0** | **+2.6** |
| **BRTR** | **Keskin Array B** | **39.43** | **294** | P | **P** | | **15 20 07.6** | **-0.4** |
| | comp=Z,0.5nm,0.6s,baz=116,slow=8.4,SNR=3.9 | | | | | | | |
| BRTR | | | | LR | LR | | 15 42 19.6 | |
| | comp=Z,18nm,18.1s,baz=38,slow=45 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **MANT** | **Manisa** | **1.29** | **13** | *i* P | **Pn** | **15 16 58.9** | **-0.5** |
| MANT | | | | *i* S | **Sb** | **15 17 16.0** | **-0.3** |
| **MANT** | **Manisa** | **1.29** | **13** | P | **Pn** | **15 16 58.9** | **-0.5** |
| MANT | | | | S | **Sb** | **15 17 16.0** | **-0.3** |
| **KULA** | **Kula-Manisa** | **1.33** | **16** | *e*PN | **Pn** | **15 16 59.1** | **-0.8** |
| **KULA** | **Kula-Manisa** | **1.33** | **16** | *e*Pn | **Pn** | **15 16 59.1** | **-0.8** |
| **IZM** | **Izmir** | **1.37** | **328** | *e*PN | **Pn** | **15 16 59.1** | **-1.3** |
| **IZM** | **Izmir** | **1.37** | **328** | *e*Pn | **Pn** | **15 16 59.1** | **-1.3** |
| **ELL** | **Elmali** | **1.47** | **109** | *e*PN | **Pn** | **15 17 01.2** | **-0.5** |
| **ELL** | **Elmali** | **1.47** | **109** | *e*Pn | **Pn** | **15 17 01.2** | **-0.5** |
| **AKAS** | **Kas** | **1.52** | **131** | *i* P | **Pg** | **15 17 05.1** | **+0.8** |
| **AKAS** | **Kas** | **1.52** | **131** | P | **Pg** | **15 17 05.1** | **+0.8** |
| AKAS | | | | S | Sg | 15 17 32.1 | +8.1 |

*ISK **31** 15:24:59.6, 37°.28N×28°.29E, h5km, MD2.5*
*ISCJB **31** 15:25:01.0±0.5, 37°.21N±0°.03×28°.20E±0°.05, h3km±8km, Error ellipse: s-maj=6.9km s-min=3.8km az=147.8*
*DDA **31** 15:25:01.0, 37°.21N×28°.21E, h7km, Md2.7*
*CSEM **31** 15:25:01.1±0.2, 37°.23N×28°.24E, h5km, MD2.5, Error ellipse: s-maj=6.8km s-min=3.9km az=58.0*

**ISC 31 15:25:00.9**±0.9,**37°24N**±0°.03×**28°24E**±0°.03,**h8**km±7km, **n26**,σ0⁰**55**/**40**,**Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **YER** | **Yerkesik** | **0.11** | **163** | PG | **Pg** | **15 25 03.1** | **-0.2** |
| YER | | | | *e*SG | **Sg** | **15 25 05.6** | **+0.4** |
| **YER** | **Yerkesik** | **0.11** | **163** | *i* Pg | **Pg** | **15 25 03.2** | **-0.2** |
| YER | | | | *e*Sg | **Sg** | **15 25 05.6** | **+0.4** |
| **TURN** | **Turunc** | **0.47** | **142** | *i* P | **Pg** | **15 25 08.6** | **-1.3** |
| TURN | | | | *i* S | **Sg** | **15 25 15.9** | **-0.1** |
| **TURN** | **Turunc** | **0.47** | **142** | P | **Pg** | **15 25 08.6** | **-1.3** |
| TURN | | | | S | **Sg** | **15 25 15.9** | **-0.1** |
| **AYDN** | **Tasoluk** | **0.51** | **326** | *i* P | **Pb** | **15 25 12.2** | **+0.1** |
| AYDN | | | | *i* S | **Sb** | **15 25 19.7** | **-0.1** |
| **AYDN** | **Tasoluk** | **0.51** | **326** | P | **Pb** | **15 25 12.2** | **+0.1** |
| AYDN | | | | S | **Sb** | **15 25 19.7** | **-0.1** |
| **DALY** | **Dalyan (Mu˘la** | **0.54** | **142** | *e*PG | **Pg** | **15 25 11.2** | **0.0** |
| DALY | | | | *e*SG | **Sb** | **15 25 19.8** | **-0.6** |
| **DALY** | **Dalyan (Mu˘la** | **0.54** | **142** | *e*Pg | **Pg** | **15 25 11.2** | **0.0** |
| DALY | | | | *e*Sg | **Sb** | **15 25 19.8** | **-0.6** |
| **BDRM** | **Kayabasi** | **0.66** | **255** | *i* P | **Pg** | **15 25 12.9** | **-0.7** |
| **BDRM** | **Kayabasi** | **0.66** | **255** | P | **Pg** | **15 25 12.9** | **-0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.76** | **338** | *e*PG | **Pg** | **15 25 15.0** | **-0.5** |
| AYDB | | | | *e*SG | **Sg** | **15 25 26.1** | **+0.7** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.76** | **338** | *e*Pg | **Pg** | **15 25 15.0** | **-0.5** |
| AYDB | | | | *e*Sg | **Sg** | **15 25 26.1** | **+0.7** |
| **DNZL** | **Cakiroluk** | **0.78** | **55** | *i* P | **Pb** | **15 25 16.8** | **-0.1** |
| DNZL | | | | *i* S | **Sn** | **15 25 30.2** | **-0.3** |
| **DNZL** | **Cakiroluk** | **0.78** | **55** | P | **Pb** | **15 25 16.8** | **-0.1** |
| DNZL | | | | S | **Sn** | **15 25 30.2** | **-0.3** |
| **FETY** | **Fethiye** | **0.91** | **132** | *e*PG | **Pg** | **15 25 18.1** | **-0.1** |
| **FETY** | **Fethiye** | **0.91** | **132** | *e*Pg | **Pg** | **15 25 18.1** | **-0.1** |
| **GCAM** | **G?zelcaml?** | **0.93** | **300** | *i* P | **Pn** | **15 25 20.0** | **-0.2** |
| **GCAM** | **G?zelcaml?** | **0.93** | **300** | P | **Pn** | **15 25 20.0** | **-0.2** |
| **NIS1** | **Nisyros Isl.** | **1.06** | **234** | *e*PN | **Pn** | **15 25 22.7** | **+0.6** |
| **NIS1** | **Nisyros Isl.** | **1.06** | **234** | *e*Pn | **Pn** | **15 25 22.7** | **+0.6** |
| **MANT** | **Manisa** | **1.27** | **11** | *i* P | **Pn** | **15 25 25.2** | **0.0** |
| MANT | | | | *i* S | **Sn** | **15 25 43.5** | **+0.8** |
| **MANT** | **Manisa** | **1.27** | **11** | P | **Pn** | **15 25 25.2** | **0.0** |
| MANT | | | | S | **Sn** | **15 25 43.5** | **+0.8** |
| **KULA** | **Kula-Manisa** | **1.31** | **14** | *e*PN | **Pn** | **15 25 25.4** | **-0.3** |
| **KULA** | **Kula-Manisa** | **1.31** | **14** | *e*Pn | **Pn** | **15 25 25.4** | **-0.3** |
| **AKAS** | **Kas** | **1.49** | **132** | *i* P | **Pg** | **15 25 30.1** | **+0.7** |
| **AKAS** | **Kas** | **1.49** | **132** | P | **Pg** | **15 25 30.1** | **+0.7** |

*KRNET **31** 15:47:19.3±0.1, 39°.95N×71°.73E, h26km, mb1.6*
*NNC **31** 15:47:21.1±0.8, 40°.17N×71°.95E, h0km, mb2.6, mpv2.4, Error ellipse: s-maj=8.7km s-min=4.7km az=13.0*

**ISC 31 15:47:19.0**±1.2,**40°04N**±0°.05×**71°80E**±0°.03,**h7**km±14km, **n11**,σ0⁰**91**/**18**,**12C-9D**,**Tajikistan**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BTK** | **Batken** | **0.75** | **272** | ⇓*e*P | **Pg** | **15 47 33.9** | **+0.5** |
| | baz=280 | | | | | | |
| BTK | | | | ⇓*e*S | **Sg** | **15 47 42.0** | **-1.2** |
| | baz=280 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.31** | **91** | ⇓P | **Pg** | **15 47 44.8** | **+0.7** |
| | 0.7nm,0.2s | | | | | | |
| SFK | | | | ⇑S | **Sg** | **15 48 00.4** | **-0.7** |
| | 4.7nm,0.2s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.31** | **91** | ⇑*e*P | **Pg** | **15 47 45.7** | **+1.6** |
| | baz=86 | | | | | | |
| SFK | | | | ⇑*e*S | **Sn** | **15 48 01.4** | **-0.3** |
| | baz=86 | | | | | | |
| **SFK** | **Sufi-Kurgan** | **1.31** | **91** | ⇑*i*P | **Pg** | **15 47 44.3** | **+0.2** |
| | baz=86 | | | | | | |
| SFK | | | | ⇑*i*S | **Sg** | **15 48 00.4** | **-0.7** |
| | baz=86 | | | | | | |
| **ARK** | **Arkit** | **1.76** | **4** | ⇑*e*P | **Pb** | **15 47 51.2** | **-0.4** |
| | baz=6.0 | | | | | | |
| ARK | | | | ⇑*e*S | **Sg** | **15 48 15.0** | **-0.6** |
| | baz=6.0 | | | | | | |
| **MNAS** | **Manas** | **2.50** | **12** | ⇓Pg | **Pb** | **15 48 04.5** | **+0.2** |
| | 0.6nm,0.4s | | | | | | |
| MNAS | | | | ⇓Lg | Lg | 15 48 37.5 | |
| | 4.1nm,0.7s | | | | | | |
| **MNAS** | **Manas** | **2.50** | **12** | ⇑*i*P | **Pb** | **15 48 04.6** | **+0.3** |
| | baz=13 | | | | | | |
| MNAS | | | | ⇑*i*S | **Sb** | **15 48 36.9** | **+1.6** |
| | baz=13 | | | | | | |
| **AML** | **Almayashu** | **2.53** | **34** | ⇑*i*P | **Pb** | **15 48 04.1** | **-0.9** |
| | baz=33 | | | | | | |
| AML | | | | ⇑*i*S | **Sb** | **15 48 35.3** | **-1.2** |
| | baz=33 | | | | | | |
| **DZET** | **Dzherino** | **2.61** | **243** | ⇓Pn | **Pb** | **15 48 06.3** | **+0.2** |
| | 4.0nm,0.4s | | | | | | |
| DZET | | | | ⇑Sn | **Sg** | **15 48 42.2** | **-0.6** |
| | 28nm,0.6s | | | | | | |
| **KK31** | **Karatay Array** | **3.21** | **343** | ⇓Pg | **Pb** | **15 48 16.6** | **+0.4** |
| | 0.4nm,0.5s,baz=161,slow=14,SNR=4.5 | | | | | | |
| KK31 | | | | ⇓Lg | Lg | 15 48 59.0 | |
| | 1.3nm,0.6s,baz=163,slow=28,SNR=6.4 | | | | | | |
| **AAK** | **Ala-Archa** | **3.29** | **37** | ⇓Lg | Lg | 15 49 00.9 | |
| | 2.3nm,0.5s | | | | | | |

*ISCJB **31** 16:08:27.4±0.6, 4°.76N±0°.07×127°.6E±0°.1, h10km, mb4.1/9, MS3.2/3, Error ellipse: s-maj=20.0km s-min=7.2km az=156.0*
*IDC **31** 16:08:28.1±1.0, 4°.48N×127°.15E, h0km, mb3.9/6, mb1 4.0/8, mb1mx3.7/43, mbtmp3.9/8, ML4.0/2, MS3.3/4, Ms1 3.3/4, ms1mx2.9/36, Error ellipse: s-maj=112.2km s-min=16.7km az=66.0*
*NEIC **31** 16:08:29.3±0.7, 4°.77N×127°.60E, h10km, mb4.6/3, Error ellipse: s-maj=24.3km s-min=9.1km az=72.0*

**ISC 31 16:08:28.9**±0.8,**4°82N**±0°.10×**127°8E**±0°.2,**h10**km,**n19**, σ1⁰**82**/**18**,**mb4.1**/**9**,**MS3.2**/3,**Talaud Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **DAV** | **Davao City (W)** | **3.12** | **316** | Pn | **Pn** | **16 09 15.4** | **-2.9** |
| | 96nm,0.3s,baz=176,slow=1.0,SNR=5.3 | | | | | | |
| **DAV** | **Davao City (W)** | **3.12** | **316** | *e*Pn | **Pn** | **16 09 15.1** | **-3.1** |
| DAV | | | | *e*Pg | **Pb** | **16 09 25.7** | **+1.2** |
| **TNTI** | **Ternate** | **4.04** | **186** | *e*P | **Pn** | **16 09 31.6** | **+0.8** |
| **SIJI** | **Sorong** | **6.64** | **148** | Pn | **Pn** | **16 10 08.2** | **+1.6** |
| | 0.5nm,0.3s,baz=0.0,slow=20,SNR=3.9 | | | | | | |
| SIJI | | | | Sn | **Sn** | **16 11 18.9** | **-3.6** |
| | 0.2nm,0.3s,baz=159,slow=23,SNR=2.1 | | | | | | |
| **LUWI** | **Luwuk** | **7.67** | **221** | *e*P | **Pn** | **16 10 20.0** | **-0.8** |
| | 131nm,1.0s | | | | | | |
| **FAKI** | **Fak Fak** | **8.89** | **150** | *e*P | **Pn** | **16 10 39.4** | **+1.8** |
| **BATI** | **Baumata** | **15.48** | **195** | LR | LR | 16 19 16.4 | |
| | comp=Z,82nm,19.1s,baz=156,slow=43 | | | | | | |
| **LEM** | **Lembang** | **23.21** | **240** | LR | LR | 16 24 16.4 | |
| | comp=Z,50nm,20.2s,baz=255,slow=42 | | | | | | |
| **WRAB** | **Tennant Creek** | **25.43** | **165** | *e*P | **P** | **16 13 56.0** | **-1.0** |
| | 4.8nm,0.7s | | | | | | |
| **WRA** | **Warramunga Arr** | **25.44** | **166** | P | **P** | **16 13 56.0** | **-1.0** |
| | 3.5nm,1.1s,baz=343,slow=9.9,SNR=7.3 | | | | | | |
| WRA | | | | LR | LR | 16 26 10.8 | |
| | comp=Z,79nm,18.1s,baz=345,slow=42 | | | | | | |
| **ASAR** | **Alice Springs** | **28.94** | **168** | P | **P** | **16 14 27.5** | **-1.0** |
| | 0.4nm,0.7s,baz=350,slow=7.1,SNR=9.0 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **31.25** | **298** | LR | LR | 16 27 57.9 | |
| | comp=Z,54nm,18.2s,baz=148,slow=38 | | | | | | |
| **ULN** | **Ulaanbaatar** | **46.42** | **341** | P | **P** | **16 16 56.8** | **+0.9** |
| **SONM** | **Songino Array** | **46.62** | **340** | P | **P** | **16 16 58.9** | **+1.5** |
| | 0.6nm,0.6s,baz=129,slow=12,SNR=7.9 | | | | | | |
| **MKAR** | **Makanchi Array** | **57.27** | **324** | P | **P** | **16 18 17.8** | **+1.0** |
| | 0.6nm,0.5s,baz=116,slow=8.2,SNR=7.7 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **60.10** | **332** | P | **P** | **16 18 36.7** | **+0.4** |
| | 0.5nm,0.3s,baz=120,slow=8.8,SNR=4.6 | | | | | | |
| **KURK** | **Kurchatov** | **61.40** | **327** | *e*P | **P** | **16 18 46.2** | **+1.0** |
| | 4.0nm,0.9s | | | | | | |
| **BRVK** | **Borovoye** | **67.06** | **326** | *e*P | **P** | **16 19 22.1** | **-0.2** |
| | 9.4nm,1.4s | | | | | | |
| **ARCES** | **ARCESS Array B** | **89.79** | **340** | P | **P** | **16 21 28.7** | **+1.3** |
| | 2.4nm,0.9s,baz=81,slow=6.5,SNR=2.8 | | | | | | |

*ISCJB **31** 16:14:16.2±1.0, 7°.0S±0°.1×105°.18E±0°.09, h10km, mb3.6/6, Error ellipse: s-maj=22.2km s-min=10.6km az=21.7*
*IDC **31** 16:14:17.5±2.1, 6°.88S×105°.26E, h0km, mb3.4/4, mb1 3.7/6, mb1mx3.5/39, mbtmp3.6/6, ML4.2/1, Error ellipse: s-maj=54.8km s-min=23.1km az=36.0*
*NEIC **31** 16:14:18.7±1.4, 7°.02S×105°.26E, h10km, mb4.0/2, Error ellipse: s-maj=38.5km s-min=14.3km az=40.0*

**ISC 31 16:14:18.3**±1.4,**7°1S**±0°.2×**105°2E**±0°.1,**h10**km,**n16**, σ1⁰**25**/**11**,**mb3.6**/**6**,**Jawa**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LEM** | **Lembang** | **2.39** | **83** | Pn | **Pn** | **16 14 59.0** | **+1.3** |
| | 60nm,0.3s,baz=26,slow=5.1,SNR=30 | | | | | | |
| LEM | | | | Sn | **Sn** | **16 15 26.3** | **-0.8** |
| | 22nm,0.3s,baz=134,slow=22,SNR=7.1 | | | | | | |
| **CISI** | **Cisompet, Garu** | **2.60** | **100** | *e*P | **Pn** | **16 14 58.4** | **-2.1** |
| CISI | | | | *e*S | Sn | 16 15 25.4 | -6.9 |
| **MNAI** | **Manna** | **3.55** | **320** | *e*Pg | **Pb** | **16 15 21.2** | **0.0** |
| **BATI** | **Baumata** | **18.48** | **101** | P | **P** | **16 18 34.9** | **+0.3** |
| | baz=281,slow=16 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **28.83** | **165** | T | T | 16 50 32.2 | |
| | baz=344,slow=76,SNR=35 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **28.85** | **165** | T | T | 16 50 33.9 | |
| | baz=344,slow=76,SNR=24 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **28.85** | **165** | T | T | 16 50 32.1 | |
| | baz=344,slow=76,SNR=15 | | | | | | |
| **WRA** | **Warramunga Arr** | **30.98** | **117** | P | **P** | **16 20 36.7** | **+0.6** |
| | 0.4nm,0.5s,baz=293,slow=10,SNR=2.5 | | | | | | |
| **WRAB** | **Tennant Creek** | **30.98** | **117** | *e*P | **P** | **16 20 36.9** | **+0.8** |
| | 0.8nm,0.5s | | | | | | |
| **ASAR** | **Alice Springs** | **32.07** | **124** | P | **P** | **16 20 47.4** | **+1.7** |
| | 0.2nm,0.8s,baz=302,slow=7.9,SNR=1.5 | | | | | | |
| **H08S2** | **Diego Garcia H** | **32.46** | **267** | T | T | 16 55 05.2 | |
| | baz=91,slow=76,SNR=152 | | | | | | |
| **H08S3** | **Diego Garcia H** | **32.47** | **267** | T | T | 16 55 05.9 | |
| | baz=91,slow=76,SNR=122 | | | | | | |
| **H08S1** | **Diego Carcia H** | **32.48** | **267** | T | T | 16 55 06.6 | |
| | baz=91,slow=76,SNR=137 | | | | | | |
| **SONM** | **Songino Array** | **54.72** | **1** | P | **P** | **16 23 47.3** | **-0.6** |
| | 0.3nm,0.6s,baz=182,slow=7.4,SNR=2.3 | | | | | | |
| **ULN** | **Ulaanbaatar** | **54.76** | **2** | *e*P | **P** | **16 23 49.0** | **+0.8** |
| | 1.0nm,0.4s | | | | | | |
| **MKAR** | **Makanchi Array** | **57.41** | **341** | P | **P** | **16 24 06.0** | **-1.1** |
| | 0.4nm,0.7s,baz=159,slow=8.3,SNR=2.2 | | | | | | |

*ISCJB **31** 16:21:43.7±0.7, 3°.55S±0°.08×128°.19E±0°.09, h91km, mb3.8/6, Error ellipse: s-maj=14.3km s-min=10.0km az=30.5*
*IDC **31** 16:21:47.1±2.0, 3°.52S×128°.34E, h108km±20km, mb3.7/7, mb1 4.0/10, mb1mx3.6/39, mbtmp4.2/10, Error ellipse: s-maj=19.1km s-min=14.9km az=101.0*

**ISC 31 16:21:45.5**±0.8,**3°57S**±0°.10×**128°2E**±0°.1,**h91**km,**n10**, σ1⁰**01**/**11**,**mb4.0**/**6**,**Seram**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SIJI** | **Sorong** | **4.07** | **49** | P | **Pn** | **16 22 46.9** | **+1.2** |
| SIJI | | | | S | **Sn** | **16 23 31.0** | **-1.2** |
| | 62nm,0.3s,baz=37,slow=20,SNR=23 | | | | | | |
| **KAPI** | **Kappang** | **8.54** | **260** | P | Pn | 16 23 50.5 | +4.1 |
| | 2.4nm,0.3s,baz=136,slow=4.8,SNR=9.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **17.34** | **160** | P | **Pn** | **16 25 41.4** | **-0.5** |
| | 3.0nm,0.3s,baz=342,slow=12,SNR=73 | | | | | | |
| **ASAR** | **Alice Springs** | **20.72** | **165** | P | **P** | **16 26 18.6** | **-0.2** |
| | 14nm,0.8s,baz=346,slow=12,SNR=224 | | | | | | |
| ASAR | | | | PcP | **PcP** | **16 30 23.8** | **-1.5** |
| | 0.6nm,0.5s,baz=346,slow=1.9,SNR=4.4 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **36.19** | **308** | P | **P** | **16 28 40.1** | **+0.4** |
| | 1.9nm,0.9s,baz=137,slow=7.0,SNR=12 | | | | | | |
| **SONM** | **Songino Array** | **54.65** | **342** | P | **P** | **16 31 05.1** | **0.0** |
| | 0.6nm,0.8s,baz=148,slow=6.6,SNR=3.3 | | | | | | |
| **MKAR** | **Makanchi Array** | **64.39** | **327** | P | **P** | **16 32 11.4** | **-0.5** |
| | 1.2nm,0.5s,baz=123,slow=8.1,SNR=11 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **67.74** | **334** | P | **P** | **16 32 32.2** | **-0.9** |
| | 0.7nm,0.5s,baz=117,slow=8.6,SNR=3.5 | | | | | | |
| **SEY** | **Seymchan** | **68.81** | **12** | P | **P** | **16 32 40.0** | **+0.3** |
| | 2.6nm,0.8s,baz=188,slow=9.5,SNR=3.6 | | | | | | |
| **VNDA** | **Vanda** | **76.05** | **173** | P | **P** | **16 33 23.6** | **+1.1** |
| | 0.4nm,0.5s,baz=319,slow=9.3,SNR=3.1 | | | | | | |

*NIED **31** 16:26:00, 43°.70N×144°.80E, h122km, Mw4.1 Best double couple: M0 1.80000×10^15 NP1:φ=340.00000°, δ12.00000°, λ38.00000°. NP2:φ=212.00000°, δ83.00000°, λ99.00000°.*
*BJI **31** 16:26:33.0, 43°.41N×145°.34E, h130km, mb4.6/12, mB5.1/3*
*ISCJB **31** 16:26:37.6±0.3, 43°.78N±0°.03×144°.77E±0°.04, h134km±1km, mb4.1/30, Error ellipse: s-maj=5.4km s-min=4.1km az=141.4*
*MOS ⇑ 16:26:37.9±0.9, 43°.86N×144°.64E, h134km, mb4.2/18, Error ellipse: s-maj=8.6km s-min=6.6km az=97.7*
*SKHL **31** 16:26:38.4±0.6, 43°.79N×144°.76E, h131km±3km, mb4.2/4, msh4.7/1*
*JMA **31** 16:26:38.4±0.1, 43°.70N×144°.83E, h129km±1km, M3.6*
*IDC **31** 16:26:39.3±0.7, 43°.76N×144°.77E, h131km±5km, mb3.8/17, mb1 3.9/21, mb1mx3.7/42, mbtmp4.1/21, Error ellipse: s-maj=13.5km s-min=8.7km az=176.0*
*NEIC **31** 16:26:39.0±0.4, 43°.76N×144°.70E, mb4.5/4, MW4.1(NIED), Error ellipse: s-maj=9.6km s-min=5.8km az=133.0*

**ISC 31 16:26:38.7**±0.5,**43°77N**±0°.04×**144°74E**±0°.04,**h128**km±4km, **n125**,σ0⁰**95**/156,**mb4.1**/30,**3C-2D**,**Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **JNK** | **Nakash** | **0.19** | **185** | P | **Pn** | **16 26 56.1** | **-0.3** |
| JNK | | | | *e*S | **Sn** | **16 27 09.0** | **-0.6** |
| **JRA** | **Rausu** | **0.32** | **59** | P | **Pn** | **16 26 56.6** | **-0.1** |
| JRA | | | | *e*S | **Sn** | **16 27 10.1** | **-0.2** |
| **JTKR** | **Abashiri--Toko** | **0.64** | **289** | P | **Pn** | **16 26 58.9** | **+0.5** |
| JTKR | | | | *e*S | **Sn** | **16 27 14.2** | **+0.9** |
| **JAK** | **Akkeshi** | **0.78** | **183** | P | **Pn** | **16 26 58.8** | **-0.7** |
| JAK | | | | *e*S | **Sn** | **16 27 13.9** | **-1.3** |
| **NEM2** | **Nemuro 2** | **0.83** | **119** | P | **Pn** | **16 26 58.8** | **-1.1** |
| NEM2 | | | | *e*S | **Sn** | **16 27 13.7** | **-2.3** |
| **YUK** | **Yuzh-Kuril'sk** | **0.85** | **72** | *d*PN | **Pn** | **16 27 00.2** | **+0.1** |
| YUK | | | | *i* S | **Sn** | **16 27 17.1** | **+0.8** |
| YUK | | | | pmax | pmax | | |
| | comp=N,370nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=E,627nm,0.4s | | | | | | |
| YUK | | | | pmax | pmax | | |
| | comp=Z,2μm,0.4s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,402nm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,1μm,0.6s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=N,4μm,2.5s | | | | | | |
| YUK | | | | smax | smax | | |
| | comp=E,4μm,2.5s | | | | | | |
| **YUK** | **Yuzh-Kuril'sk** | **0.85** | **72** | *i* P | **Pn** | **16 27 00.2** | **+0.1** |
| YUK | | | | AMB | AMB | 16 27 01.0 | |
| | comp=E,370nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 16 27 01.0 | |
| | comp=E,630nm,0.4s | | | | | | |
| YUK | | | | AMB | AMB | 16 27 01.0 | |
| | comp=E,195nm,0.4s | | | | | | |
| YUK | | | | *i* S | **Sn** | **16 27 17.1** | **+0.8** |
| YUK | | | | A | A | 16 27 17.4 | |
| | comp=E,410nm,0.3s | | | | | | |
| YUK | | | | A | A | 16 27 17.4 | |
| | comp=E,103nm,0.3s | | | | | | |
| YUK | | | | A | A | 16 27 18.6 | |
| | comp=E,410nm,2.0s | | | | | | |
| YUK | | | | A | A | 16 27 18.6 | |
| | comp=E,370nm,2.0s | | | | | | |
| **JAR** | **Ashorobuto** | **0.85** | **237** | P | **Pn** | **16 27 00.5** | **+0.4** |
| JAR | | | | *e*S | **Sn** | **16 27 17.2** | **+0.9** |
| **JMP** | **Maruseppu** | **1.03** | **284** | P | **Pn** | **16 27 02.2** | **+0.5** |
| JMP | | | | *e*S | **Sn** | **16 27 19.9** | **+0.7** |
| **JOB** | **Onbets** | **1.09** | **218** | P | **Pn** | **16 27 02.4** | **+0.1** |
| JOB | | | | *e*S | **Sn** | **16 27 20.0** | **-0.2** |
| **HRK** | **Horoka** | **1.21** | **256** | *e*P | **Pn** | **16 27 04.3** | **+0.7** |
| HRK | | | | *e*S | **Sn** | **16 27 23.5** | **+1.0** |
| **JKK2** | **Kamakawa 2** | **1.45** | **275** | P | **Pn** | **16 27 07.0** | **+0.9** |
| JKK2 | | | | *e*S | **Sn** | **16 27 28.6** | **+1.6** |
| **JCH** | **Churui** | **1.54** | **222** | P | **Pn** | **16 27 07.1** | **0.0** |
| JCH | | | | *e*S | **Sn** | **16 27 27.7** | **-1.0** |
| **ASAJ** | **Asahikawa** | **1.59** | **283** | P | **Pn** | **16 27 09.0** | **+1.3** |
| ASAJ | | | | *e*S | **Sn** | **16 27 31.4** | **+1.6** |
| **ASAJ** | **Asahikawa** | **1.59** | **283** | P | **Pn** | **16 27 09.2** | **+1.5** |
| | comp=E,94nm,0.3s,baz=155,slow=9.1,SNR=1557 | | | | | | |
| ASAJ | | | | S | **Sn** | **16 27 31.4** | **+1.6** |
| | comp=E,15nm,0.3s,baz=314,slow=24,SNR=18 | | | | | | |
| ASAJ | | | | LR | LR | 16 27 48.0 | |
| | comp=E,364nm,18.0s,baz=168,slow=43 | | | | | | |
| **ASAJ** | **Asahikawa** | **1.59** | **283** | PN | **Pn** | **16 27 09.2** | **+1.5** |
| ASAJ | | | | S | **Sn** | **16 27 31.4** | **+1.6** |
| ASAJ | | | | pmax | pmax | | |
| | comp=Z,94nm,0.3s | | | | | | |
| ASAJ | | | | smax | smax | | |
| | comp=N,15nm,0.3s | | | | | | |
| ASAJ | | | | MLR | MLR | | |
| | comp=Z,364nm,18.0s | | | | | | |
| **JFR** | **Furan** | **1.68** | **250** | P | **Pn** | **16 27 09.3** | **+0.5** |
| JFR | | | | *e*S | **Sn** | **16 27 32.5** | **+0.8** |
| **JSE** | **Soyaes** | **1.95** | **308** | P | **Pn** | **16 27 12.8** | **+0.9** |
| JSE | | | | *e*S | **Sn** | **16 27 38.8** | **+1.4** |
| **JNBK** | **Urakawa-nobuka** | **2.09** | **225** | P | **Pn** | **16 27 12.8** | **-0.8** |
| JNBK | | | | *e*S | **Sn** | **16 27 39.3** | **-1.1** |
| **ERM** | **Erimo** | **2.11** | **214** | *e*PN | **Pn** | **16 27 14.9** | **+1.0** |
| ERM | | | | *e* | | 16 27 42.8 | |
| **ERM** | **Erimo** | **2.11** | **214** | *e*P | **Pn** | **16 27 14.4** | **+0.5** |
| **ERM** | **Erimo** | **2.11** | **214** | *e*Pn | **Pn** | **16 27 14.9** | **+1.0** |
| ERM | | | | *e*Sn | **Sn** | **16 27 42.8** | **+2.0** |
| **KUR** | **Kuril'sk** | **2.67** | **56** | *d*PN | **Pn** | **16 27 21.6** | **+0.7** |
| KUR | | | | *i* S | **Sn** | **16 27 55.2** | **+1.7** |
| KUR | | | | pmax | pmax | | |
| | comp=N,14nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=E,14nm,0.5s | | | | | | |
| KUR | | | | pmax | pmax | | |
| | comp=Z,67nm,0.5s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,96nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,88nm,0.6s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=N,456nm,2.2s | | | | | | |
| KUR | | | | smax | smax | | |
| | comp=E,479nm,2.2s | | | | | | |
| **KUR** | **Kuril'sk** | **2.67** | **56** | *i* P | **Pn** | **16 27 21.0** | **+0.1** |
| KUR | | | | AMB | AMB | 16 27 23.1 | |
| | comp=E,14nm,0.5s | | | | | | |
| KUR | | | | AMB | AMB | 16 27 23.1 | |
| | comp=E,67nm,0.5s | | | | | | |
| KUR | | | | *i* S | **Sn** | **16 27 53.2** | **-0.3** |
| KUR | | | | A | A | 16 27 57.5 | |
| | comp=E,456nm,2.0s | | | | | | |
| KUR | | | | A | A | 16 27 57.5 | |
| | comp=E,479nm,2.0s | | | | | | |
| KUR | | | | A | A | 16 27 58.3 | |
| | comp=E,65nm,0.6s | | | | | | |
| KUR | | | | A | A | 16 27 58.3 | |
| | comp=E,92nm,0.6s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **3.48** | **337** | ⇑*e*PN | **Pn** | **16 27 32.0** | **+0.6** |
| YSS | | | | *e*S | **Sn** | **16 28 12.0** | **-0.3** |
| YSS | | | | pmax | pmax | | |
| | comp=Z,20nm,0.8s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=N,50nm,0.9s | | | | | | |
| YSS | | | | smax | smax | | |
| | comp=E,140nm,1.2s | | | | | | |
| **YSS** | **Yuzh-Sakhalins** | **3.48** | **337** | *e*P | **Pn** | **16 27 32.0** | **+0.6** |
| YSS | | | | AMB | AMB | 16 27 33.0 | |
| | comp=E,20nm,0.8s | | | | | | |
| YSS | | | | *e*S | **Sn** | **16 28 12.0** | **-0.3** |
| YSS | | | | A | A | 16 28 15.0 | |
| | comp=E,50nm,0.5s | | | | | | |
| YSS | | | | A | A | 16 28 15.0 | |
| | comp=E,14nm,0.5s | | | | | | |
| **UGL** | **Uglegorsk** | **5.62** | **342** | *e*PN | **Pn** | **16 27 58.3** | **-1.7** |
| UGL | | | | *e*S | **Sn** | **16 29 02.1** | **-1.3** |
| **UGL** | **Uglegorsk** | **5.62** | **342** | *e*P | **Pn** | **16 27 58.3** | **-1.7** |
| UGL | | | | *e*S | **Sn** | **16 29 02.1** | **-1.3** |
| **HABR** | **Khabarovsk** | **8.21** | **308** | *e*PN | **Pn** | **16 28 31.8** | **-3.0** |
| HABR | | | | *e*S | **Sn** | **16 30 02.2** | **-3.7** |
| HABR | | | | pmax | pmax | | |
| | comp=N,16nm,1.1s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=Z,58nm,1.1s | | | | | | |
| HABR | | | | pmax | pmax | | |
| | comp=E,42nm,1.1s | | | | | | |
| HABR | | | | MLR | MLR | | |
| | comp=Z,44nm,16.0s | | | | | | |
| **MAJO** | **Matsushiro** | **8.78** | **217** | PN | **Pn** | **16 28 42.9** | **+0.2** |
| **MAJO** | **Matsushiro** | **8.78** | **217** | *e*P | **Pn** | **16 28 42.3** | **-0.4** |
| **MAJO** | **Matsushiro** | **8.78** | **217** | P | **Pn** | **16 28 42.9** | **+0.2** |
| **MJAR** | **Matsushiro Arr** | **8.78** | **217** | P | **Pn** | **16 28 42.2** | **-0.5** |
| | comp=Z,0.4nm,0.3s,baz=28,slow=12,SNR=7.6 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **9.21** | **277** | P | **Pn** | **16 28 48.9** | **+0.6** |
| | comp=Z,0.6nm,0.3s,baz=92,slow=13,SNR=10 | | | | | | |
| **VLA** | **Vladivostok** | **9.38** | **270** | *e*PN | **Pn** | **16 28 50.9** | **+0.3** |
| VLA | | | | pmax | pmax | | |
| | comp=Z,20nm,1.2s | | | | | | |
| **VLA** | **Vladivostok** | **9.38** | **270** | *e*P | **Pn** | **16 28 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **ILAR** | **Eielson Array** | **42.50** | **36** | P | | **P** | | **16 34 21.4** | **+0.6** |
| | comp=Z,1.6nm,0.7s,baz=250,slow=5.3,SNR=24 | | | | | | | | |
| **ILAR** | **Eielson Array** | **42.50** | **36** | P | | **P** | | **16 34 21.4** | **+0.6** |
| ILAR | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.7s | | | | | | | | |
| **MK31** | **Makanchi Array** | **43.02** | **297** | *i* P | | **P** | | **16 34 25.3** | **0.0** |
| MK31 | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.9s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.02** | **297** | P | | **P** | | **16 34 25.7** | **+0.4** |
| | comp=Z,2.7nm,0.7s,baz=82,slow=9.1,SNR=14 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.02** | **297** | *ce*P | | **P** | | **16 34 25.7** | **+0.4** |
| MKAR | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.7s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **43.02** | **297** | *e*P | | **P** | | **16 34 25.6** | **+0.3** |
| **KURK** | **Kurchatov** | **44.07** | **303** | *e*P | | **P** | | **16 34 33.3** | **-0.2** |
| KURK | | | | pmax | | pmax | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **KURK** | **Kurchatov** | **44.07** | **303** | *e*P | | **P** | | **16 34 33.3** | **-0.2** |
| **KURK** | **Kurchatov** | **44.07** | **303** | *e*P | | **P** | | **16 34 33.3** | **-0.2** |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.87** | **251** | P | | **P** | | **16 34 49.1** | **+0.9** |
| | comp=Z,0.9nm,0.7s,baz=39,slow=8.1,SNR=5.9 | | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **45.87** | **251** | P | | **P** | | **16 34 49.1** | **+0.9** |
| CMAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| **INK** | **Inuvik** | **47.26** | **30** | P | | **P** | | **16 34 58.8** | **+0.4** |
| | comp=Z,1.4nm,0.5s,baz=313,slow=4.5,SNR=4.2 | | | | | | | | |
| **INK** | **Inuvik** | **47.26** | **30** | P | | **P** | | **16 34 58.8** | **+0.4** |
| INK | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | | |
| **BVA0** | **Borovoye Array** | **48.13** | **309** | *i* P | | **P** | | **16 35 04.9** | **-0.5** |
| BVA0 | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **BRVK** | **Borovoye** | **48.18** | **309** | *i* P | | **P** | | **16 35 05.6** | **-0.1** |
| BRVK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **BRVK** | **Borovoye** | **48.18** | **309** | *e*P | | **P** | | **16 35 05.6** | **-0.1** |
| **TAPN** | **Taplejung** | **48.27** | **270** | *e*P | | **P** | | **16 35 07.5** | **+0.4** |
| | comp=Z,6.6nm,0.6s | | | | | | | | |
| **GUN** | **Gumba** | **49.27** | **272** | *e*P | | **P** | | **16 35 15.2** | **+0.4** |
| | comp=Z,35nm,0.5s | | | | | | | | |
| **RAMN** | **Ramite** | **49.30** | **270** | *e*P | | **P** | | **16 35 15.1** | **+0.2** |
| | comp=Z,23nm,0.5s | | | | | | | | |
| **AAK** | **Ala-Archa** | **49.77** | **295** | P | | **P** | | **16 35 17.2** | **-1.0** |
| AAK | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.8s | | | | | | | | |
| **AAK** | **Ala-Archa** | **49.77** | **295** | *e*P | | **P** | | **16 35 17.2** | **-1.0** |
| **KKN** | **Kakani** | **49.77** | **272** | *e*P | | **P** | | **16 35 19.1** | **+0.6** |
| | comp=Z,8.2nm,0.5s | | | | | | | | |
| **PKI** | **Pulchoki** | **49.81** | **272** | *e*P | | **P** | | **16 35 18.9** | **+0.1** |
| | comp=Z,8.8nm,0.5s | | | | | | | | |
| **PKIN** | **Phulchoki** | **49.81** | **272** | *e*P | | **P** | | **16 35 19.2** | **+0.4** |
| | comp=Z,6.6nm,0.5s | | | | | | | | |
| **DMN** | **Daman** | **50.00** | **272** | *e*P | | **P** | | **16 35 20.4** | **+0.1** |
| | comp=Z,13nm,0.5s | | | | | | | | |
| **GKN** | **Gorkha** | **50.12** | **273** | *e*P | | **P** | | **16 35 21.3** | **+0.3** |
| | comp=Z,21nm,0.4s | | | | | | | | |
| **DANN** | **Dangsing** | **50.55** | **274** | *e*P | | **P** | | **16 35 25.6** | **+1.2** |
| | comp=Z,5.1nm,0.4s | | | | | | | | |
| **KOLN** | **Koldanda** | **51.00** | **273** | *e*P | | **P** | | **16 35 28.4** | **+0.7** |
| | comp=Z,13nm,0.4s | | | | | | | | |
| **MNAS** | **Manas** | **51.15** | **295** | P | | **P** | | **16 35 28.8** | **+0.3** |
| MNAS | | | | pmax | | pmax | | | |
| | comp=Z,11nm,0.8s | | | | | | | | |
| **KK31** | **Karatay Array** | **52.15** | **297** | *i* P | | **P** | | **16 35 35.2** | **-0.6** |
| KK31 | | | | pmax | | pmax | | | |
| | comp=Z,5.0nm,0.7s | | | | | | | | |
| **KKAR** | **Karatay Array** | **52.15** | **297** | *e*P | | **P** | | **16 35 36.0** | **+0.1** |
| KKAR | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.6s | | | | | | | | |
| **KKAR** | **Karatay Array** | **52.15** | **297** | *e*P | | **P** | | **16 35 36.0** | **+0.1** |
| | comp=Z,3.7nm,0.6s | | | | | | | | |
| **RES** | **Resolute Bay** | **55.44** | **16** | P | | **P** | | **16 35 58.8** | **-0.4** |
| | comp=Z,2.4nm,0.6s,baz=337,slow=3.9,SNR=4.2 | | | | | | | | |
| **RES** | **Resolute Bay** | **55.44** | **16** | P | | **P** | | **16 35 58.8** | **-0.4** |
| RES | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | | |
| **AB31** | **Akbulak array** | **55.68** | **308** | *i* P | | **P** | | **16 36 01.2** | **-0.1** |
| AB31 | | | | pmax | | pmax | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | | |
| **ABKAR** | **Akbulak array** | **55.68** | **308** | *e*P | | **P** | | **16 36 01.5** | **+0.2** |
| | comp=Z,2.9nm,0.4s | | | | | | | | |
| **GEYT** | **Alibeck** | **62.89** | **298** | P | | **P** | | **16 36 51.4** | **+0.3** |
| | comp=Z,3.8nm,0.5s,baz=56,slow=2.7,SNR=8.0 | | | | | | | | |
| **FINES** | **FINESS Array B** | **64.05** | **332** | P | | **P** | | **16 36 58.0** | **-0.3** |
| | comp=Z,3.8nm,0.5s,baz=53,slow=6.9,SNR=26 | | | | | | | | |
| **FINES** | **FINESS Array B** | **64.05** | **332** | *i* P | | **P** | | **16 36 58.0** | **-0.3** |
| FINES | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.5s | | | | | | | | |
| **FINES** | **FINESS Array B** | **64.05** | **332** | *e*P | | **P** | | **16 36 58.0** | **-0.3** |
| **WRA** | **Warramunga Arr** | **64.11** | **191** | P | | **P** | | **16 36 59.2** | **0.0** |
| | comp=Z,1.5nm,0.8s,baz=13,slow=7.2,SNR=7.8 | | | | | | | | |
| **WRA** | **Warramunga Arr** | **64.11** | **191** | *i* P | | **P** | | **16 36 59.7** | **+0.6** |
| WRA | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.8s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **64.11** | **191** | *e*P | | **P** | | **16 36 59.7** | **+0.6** |
| **ASAR** | **Alice Springs** | **67.84** | **191** | P | | **P** | | **16 37 23.1** | **+0.2** |
| | comp=Z,0.6nm,0.6s,baz=7.3,slow=6.2,SNR=13 | | | | | | | | |
| **ASAR** | **Alice Springs** | **67.84** | **191** | P | | **P** | | **16 37 23.1** | **+0.2** |
| ASAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | | |
| **KIV** | **Kislovodsk** | **68.44** | **311** | *e*P | | **P** | | **16 37 26.1** | **-0.6** |
| KIV | | | | pmax | | pmax | | | |
| | comp=Z,13nm,1.1s | | | | | | | | |
| **KIV** | **Kislovodsk** | **68.44** | **311** | *e*P | | **P** | | **16 37 26.1** | **-0.6** |
| **KBZ** | **Khabaz** | **68.47** | **310** | P | | **P** | | **16 37 27.9** | **+1.2** |
| | comp=Z,5.9nm,0.8s,baz=65,slow=3.0,SNR=9.4 | | | | | | | | |
| **KBZ** | **Khabaz** | **68.47** | **310** | P | | **P** | | **16 37 27.9** | **+1.2** |
| KBZ | | | | pmax | | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | | | |
| **NB2** | **NORSAR Subarra** | **68.94** | **338** | P | | **P** | | **16 37 29.1** | **-0.3** |
| | comp=Z,2.0nm,0.8s,baz=36,slow=6.2 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.94** | **338** | P | | **P** | | **16 37 29.1** | **-0.3** |
| | comp=Z,3.6nm,0.9s,baz=35,slow=6.0,SNR=8.7 | | | | | | | | |
| **NOA** | **NORSAR Array B** | **68.94** | **338** | P | | **P** | | **16 37 29.1** | **-0.3** |
| NOA | | | | pmax | | pmax | | | |
| | comp=Z,4.0nm,0.9s | | | | | | | | |
| **NVAR** | **Mina Array Bea** | **69.03** | **57** | P | | **P** | | **16 37 31.8** | **+1.1** |
| | comp=Z,1.0nm,0.6s,baz=291,slow=6.8,SNR=8.7 | | | | | | | | |
| NVAR | | | | pP | | **pP** | | **16 38 02.9** | **+0.8** |
| | comp=Z,1.5nm,0.8s,baz=279,slow=6.8,SNR=6.8 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.52** | **323** | P | | **P** | | **16 37 38.9** | **-0.3** |
| | comp=Z,1.5nm,0.4s,baz=42,slow=6.3,SNR=11 | | | | | | | | |
| **AKASG** | **Malin Array Be** | **70.52** | **323** | *ce*P | | **P** | | **16 37 38.9** | **-0.3** |
| AKASG | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.4s | | | | | | | | |
| **CLL** | **Collm** | **76.47** | **331** | *e*P | | **P** | | **16 38 14.0** | **0.0** |
| **CLL** | **Collm** | **76.47** | **331** | *e*P | | **P** | | **16 38 14.0** | **0.0** |
| **CLL** | **Collm** | **76.47** | **331** | *e*P | | **P** | | **16 38 14.0** | **0.0** |
| **GERES** | **GERESS Array B** | **78.27** | **329** | P | | **P** | | **16 38 24.4** | **+0.1** |
| | comp=Z,0.4nm,0.4s,baz=33,slow=5.6,SNR=6.9 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.07** | **55** | P | | **P** | | **16 38 56.0** | **+0.7** |
| | comp=Z,1.0nm,0.7s,baz=298,slow=3.4,SNR=6.8 | | | | | | | | |
| TXAR | | | | pP | | **pP** | | **16 39 27.6** | **-0.2** |
| | comp=Z,0.5nm,0.7s,baz=308,slow=4.6,SNR=3.3 | | | | | | | | |
| **TXAR** | **Lajitas Array** | **84.07** | **55** | P | | **P** | | **16 38 56.0** | **+0.7** |
| TXAR | | | | *PP | | **pP** | | **16 39 27.6** | **-0.2** |
| TXAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |
| TXAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.7s | | | | | | | | |

**GUC 31 16:30:32.0±0.4, 35.73S×73.41W, h16km±3km, ML3.9, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **COCH** | **Cobquecura** | **0.65** | **129** | *e*P | | | Pg | 16 30 43.6 | -1.2 |
| COCH | | | | *e*S | | | Sg | 16 30 52.1 | -1.3 |
| COCH | | | | AML | | | AML | 16 30 53.2 | |
| | comp=N,8μm,0.7s | | | | | | | | |
| **CCHI** | **Chillan** | **1.39** | **129** | *e*P | | | Pn | 16 30 55.1 | -1.7 |
| CCHI | | | | *e*S | | | Sn | 16 31 12.8 | -2.0 |
| CCHI | | | | AML | | | AML | 16 31 18.2 | |
| | comp=N,2μm,0.6s | | | | | | | | |
| **TALC** | **Talca** | **1.49** | **78** | *e*P | | | Pn | 16 30 56.7 | -1.4 |
| TALC | | | | *e*S | | | Sn | 16 31 15.8 | -1.4 |
| **CHPI** | **Pichilemu** | **1.76** | **41** | *e*P | | | Pn | 16 31 01.1 | -0.8 |
| CHPI | | | | *e*S | | | Sn | 16 31 23.1 | -0.8 |
| **NICH** | **Los Niches** | **1.92** | **69** | *e*P | | | Pn | 16 31 04.0 | -0.1 |
| NICH | | | | *e*S | | | Sn | 16 31 28.0 | 0.0 |
| **CLCH** | **Cerro Calan** | **3.32** | **46** | *e*P | | | Pn | 16 31 24.1 | +0.7 |
| CLCH | | | | *e*S | | | Sn | 16 32 03.4 | +0.7 |
| CLCH | | | | AML | | | AML | 16 32 27.8 | |
| | comp=E,297nm,0.6s | | | | | | | | |
| **PEL** | **Peldehue** | **3.42** | **42** | *e*P | | | Pn | 16 31 25.4 | +0.6 |
| PEL | | | | *e*S | | | Sn | 16 32 05.5 | +0.4 |
| PEL | | | | AML | | | AML | 16 32 32.0 | |
| | comp=E,343nm,0.8s | | | | | | | | |

*CSEM **31** 16:37:10.0±0.5, 37.98N×27.50E, h24km±3km, MD2.4, Error ellipse: s-maj=10.8km s-min=6.2km az=138.0*
*ISCJB **31** 16:37:11.7±0.7, 37.90N±0.04×27.65E±0.08, h30km±5km, Error ellipse: s-maj=10.2km s-min=6.8km az=14.1*
*DDA **31** 16:37:11.8, 37.85N×27.53E, h7km, Md2.8*
*ISK **31** 16:37:12.6, 37.94N×27.82E, h27km, MD2.4*
**ISC 31 16:37:11.0±1.4, 37.92N±0.03×27.58E±0.04, h21km±2km, n14, σ1.9 06/26, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **AYDB** | **Zeytinkoy-Aydi** | **0.24** | **85** | *e*Pg | | | **Pb** | **16 37 17.6** | **+0.3** |
| AYDB | | | | *e*SG | | | **Sb** | **16 37 21.3** | **-0.3** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.24** | **85** | *e*Pg | | | **Pb** | **16 37 17.6** | **+0.3** |
| AYDB | | | | *e*Sg | | | **Sb** | **16 37 21.3** | **-0.3** |
| **AYDN** | **Tasoluk** | **0.35** | **138** | *i* P | | | **Pn** | **16 37 20.5** | **-0.5** |
| AYDN | | | | *i* S | | | **Sb** | **16 37 24.7** | **+1.0** |
| **AYDN** | **Tasoluk** | **0.35** | **138** | P | | | **Pn** | **16 37 20.5** | **-0.5** |
| AYDN | | | | S | | | **Sb** | **16 37 24.7** | **+1.0** |
| **GCAM** | **G?zelcaml?** | **0.36** | **231** | *i* P | | | **Pb** | **16 37 18.0** | **-0.5** |
| GCAM | | | | *i* S | | | **Sb** | **16 37 22.2** | **-1.4** |
| **GCAM** | **G?zelcaml?** | **0.36** | **231** | P | | | **Pb** | **16 37 18.0** | **-0.5** |
| GCAM | | | | S | | | **Sb** | **16 37 22.2** | **-1.4** |
| **IZM** | **Izmir** | **0.54** | **332** | *e*PG | | | **Pn** | **16 37 25.9** | **+2.4** |
| **BDRM** | **Kayabasi** | **0.86** | **187** | *i* P | | | **Pn** | **16 37 27.4** | **+0.1** |
| BDRM | | | | *i* S | | | **Sb** | **16 37 37.6** | **-0.9** |
| **BDRM** | **Kayabasi** | **0.86** | **187** | P | | | **Pb** | **16 37 27.4** | **+0.1** |
| BDRM | | | | S | | | **Sb** | **16 37 37.6** | **-0.9** |
| **YER** | **Yerkesik** | **0.96** | **145** | *e*PG | | | **Pb** | **16 37 29.6** | **+0.5** |
| YER | | | | *e*SG | | | **Sb** | **16 37 41.8** | **+0.4** |
| **YER** | **Yerkesik** | **0.96** | **145** | *e*Pg | | | **Pb** | **16 37 29.6** | **+0.5** |
| YER | | | | *e*Sg | | | **Sb** | **16 37 41.8** | **+0.4** |
| **AKS** | **Akhisar** | **0.97** | **11** | *e*PG | | | **Pn** | **16 37 30.6** | **+1.1** |
| **KULA** | **Kula-Manisa** | **1.03** | **55** | *e*PG | | | **Pb** | **16 37 29.2** | **-1.1** |
| KULA | | | | *e*SG | | | **Sb** | **16 37 41.8** | **-1.6** |
| **KULA** | **Kula-Manisa** | **1.03** | **55** | *e*Pg | | | **Pb** | **16 37 29.2** | **-1.1** |
| KULA | | | | *e*Sg | | | **Sb** | **16 37 41.8** | **-1.6** |

*BJI **31** 16:38:44.7, 6.30S×150.72E, h4km, mb5.0/59, mB5.6/53, Ms5.6/74, Ms7 5.3/66*
*ISCJB **31** 16:38:48.2±0.9, 6.41S±0.02×150.17E±0.02, h14km±5km, mb5.3/159, MS5.5/219, Error ellipse: s-maj=4.1km s-min=3.8km az=164.1*
*NEIC **31** 16:38:49.5±0.1, 6.39S×150.16E, h10km, mb5.5/106, MS5.5/178, MW5.7, Error ellipse: s-maj=5.8km s-min=5.0km az=131.0, Moment Tensor Solution. s28 Moment tensor: Scale 10^17Nm; Mrr=2.65; Mθθ 3.25; Mϕϕ-0.60; Mrθ-3.13; Mθϕ 0.38; Mrϕ 0.08; Best double couple: M◎4.30000×10^17 NP1:ϕs256.00000°, δ22.00000°, λ-103.00000°. NP2:ϕs90.00000°, δ68.00000°, λ-85.00000°. Principal axes: T 4.6200, Plg23.0000°, Azm176.0000°; N -0.6100, Plg5.0000°, Azm268.0000°; P -4.0200, Plg66.0000°, Azm9.0000°;*
*IDC **31** 16:38:50.0±2.5, 6.34S×150.03E, h16km±14km, mb4.9/21, mb1 4.9/23, mb1mx4.9/29, mbtmp4.9/23, ML4.2/1, MS5.3/21, Ms1 5.3/21, ms1mx5.2/26 Error ellipse: s-maj=14.1km s-min=10.6km az=114.0*
*GCMT **31** 16:38:49.5±0.1, 6.63S×150.33E, h14km, MW5.8/116, Moment Tensor Solution. s116, c229; s115, c380; Duration: 2s0 Moment tensor: Scale 10^17Nm; Mrr-5.03±.05; Mθθ 5.43±.04; Mϕϕ-0.40±.04; Mrθ-4.26±.12; Mθϕ-0.01±.03; Mϕr-1.27±.10; Best double couple: M◎6.87100×10^17 NP1:ϕs79.00000°, δ65.00000°, λ-100.00000°. NP2:ϕs282.00000°, δ26.00000°, λ-69.00000°. Principal axes: T 6.9690, Plg20.0000°, Azm177.0000°; N -0.1980, Plg9.0000°, Azm83.0000°; P -6.7720, Plg68.0000°, Azm330.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface/mantle waves, cutoff=50s.*
*MOS **31** 16:38:52.8±1.5, 6.16S×149.94E, h37km, mb5.6/49, MS5.5/43 Error ellipse: s-maj=8.9km s-min=6.2km az=87.0*
*AUST **31** 16:38:52.0±1.8, 6.63S×150.45E, h33km±14km, Error ellipse: s-maj=8.3km s-min=5.4km az=73.0*
**ISC 31 16:38:50.8±0.3, 6.39S±0.03×150.26E±0.04, h18km±1km, h18km:pP-P, n887, σ1.9 70/827, mb5.4/153, MS5.5/220, 44C-25D, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| **RABL** | **Rabaul** | **2.90** | **41** | P | | | **Pn** | **16 39 35.6** | **-0.5** |
| | baz=3.0,SNR=881 | | | | | | | | |
| **PMG** | **Port Moresby** | **4.29** | **225** | Pn | | | **Pn** | **16 39 55.8** | **+0.6** |
| | 64nm,0.3s,baz=59,slow=5.3,SNR=139 | | | | | | | | |
| PMG | | | | Sn | | | **Sn** | **16 40 45.0** | **+0.2** |
| | 128nm,0.3s,baz=49,slow=12,SNR=3.5 | | | | | | | | |
| **PMG** | **Port Moresby** | **4.29** | **225** | *e*P | | | **Pn** | **16 39 56.0** | **+0.8** |
| PMG | | | | *e* | | | | 16 40 45.7 | |
| **PMG** | **Port Moresby** | **4.29** | **225** | P | | | **Pn** | **16 39 55.4** | **+0.2** |
| | baz=4.3,SNR=472 | | | | | | | | |
| **PMG** | **Port Moresby** | **4.29** | **225** | *e*Pn | | | **Pn** | **16 39 56.0** | **+0.8** |
| PMG | | | | *e*Sn | | | **Sn** | **16 40 45.7** | **+0.9** |
| **MANU** | **Manus Island** | **5.19** | **326** | P | | | Pn | 16 40 13.4 | +5.7 |
| | baz=5.5,SNR=16 | | | | | | | | |
| **HNR** | **Honiara** | **10.06** | **108** | Pn | | | **Pn** | **16 41 15.7** | **+1.2** |
| | baz=243,slow=6.8,SNR=2.4 | | | | | | | | |
| HNR | | | | LR | | | LR | 16 44 42.3 | |
| | comp=Z,11μm,18.6s,baz=281,slow=34 | | | | | | | | |
| **HNR** | **Honiara** | **10.06** | **108** | *e*Pn | | | **Pn** | **16 41 15.6** | **+1.0** |
| **COEN** | **Coen** | **10.25** | **222** | P | | | **Pn** | **16 41 16.6** | **-0.5** |
| | baz=10,SNR=16 | | | | | | | | |
| **COEN** | **Coen** | **10.25** | **222** | *e*Pn | | | **Pn** | **16 41 16.2** | **-0.9** |
| **JAY** | **Jayapura** | **10.27** | **292** | Pn | | | Pn | 16 41 26.0 | +8.6 |
| | 2.5nm,0.3s,baz=100,slow=7.7,SNR=10 | | | | | | | | |
| JAY | | | | LR | | | LR | 16 45 42.4 | |
| | comp=Z,23μm,19.2s,baz=98,slow=41 | | | | | | | | |
| **JAY** | **Jayapura** | **10.27** | **292** | P | | | **Pn** | **16 41 19.4** | **+1.9** |
| | baz=11,SNR=4.1 | | | | | | | | |
| **MTSU** | **Mount Surprise** | **13.03** | **206** | P | | | **Pn** | **16 41 54.9** | **-0.3** |
| | baz=13,SNR=27 | | | | | | | | |
| **CTA** | **Charters Tower** | **14.16** | **196** | Pn | | | **Pn** | **16 42 08.4** | **-2.2** |
| | 0.7nm,0.3s,baz=32,slow=15,SNR=12 | | | | | | | | |
| CTA | | | | LR | | | LR | 16 47 52.6 | |
| | comp=Z,12μm,18.2s,baz=6.0,slow=38 | | | | | | | | |
| **CTAO** | **Charters Tower** | **14.16** | **196** | *e*P | | | **Pn** | **16 42 08.9** | **-1.7** |
| **CTAO** | **Charters Tower** | **14.16** | **196** | *e*Pn | | | **Pn** | **16 42 08.9** | **-1.7** |
| **QIS** | **Mount Isa** | **17.46** | **215** | P | | | **Pn** | **16 42 52.7** | **-1.0** |
| | baz=17,SNR=30 | | | | | | | | |
| **FAKI** | **Fak Fak** | **18.27** | **280** | P | | | **P** | **16 43 06.5** | **+2.7** |
| | baz=18,SNR=4.1 | | | | | | | | |
| **FAKI** | **Fak Fak** | **18.27** | **280** | *e*Pn | | | **P** | **16 43 04.4** | **+0.6** |
| | 444nm,1.6s | | | | | | | | |
| **KDU** | **Kakadu** | **18.61** | **249** | P | | | **P** | **16 43 06.5** | **-1.0** |
| | baz=19,SNR=30 | | | | | | | | |
| **EIDS** | **Eidsvold** | **18.89** | **178** | P | | | **P** | **16 43 09.0** | **-1.4** |
| | baz=19,SNR=68 | | | | | | | | |
| **EIDS** | **Eidsvold** | **18.89** | **178** | *e*P | | | **P** | **16 43 08.9** | **-1.5** |
| | 344nm,1.0s | | | | | | | | |
| **SIJI** | **Sorong** | **19.72** | **285** | P | | | **Pn** | **16 43 20.8** | **-0.4** |
| | 1.0nm,0.3s,baz=76,slow=10,SNR=10 | | | | | | | | |
| SIJI | | | | LR | | | LR | 16 52 49.8 | |
| | comp=Z,15μm,19.1s,baz=124,slow=43 | | | | | | | | |
| **SWI** | **Sorong** | **19.73** | **285** | P | | | **Pn** | **16 43 21.0** | **-0.3** |
| | baz=20,SNR=8.6 | | | | | | | | |
| **MTN** | **Manton Dam** | **19.91** | **250** | P | | | **P** | **16 43 21.9** | **+0.2** |
| | baz=20,SNR=49 | | | | | | | | |
| **MTN** | **Manton Dam** | **19.91** | **250** | *e*P | | | **P** | **16 43 21.6** | **-0.1** |
| | 1μm,1.4s | | | | | | | | |
| **RMQ** | **Roma** | **20.03** | **184** | P | | | **P** | **16 43 22.3** | **-0.7** |
| | baz=20,SNR=55 | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.49** | **227** | *c* P | | | **P** | **16 43 26.5** | **-1.5** |
| WRAB | | | | | | pmax | pmax | | |
| | comp=Z,1μm,1.7s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.49** | **227** | P | | | **P** | **16 43 26.6** | **-1.5** |
| | comp=Z,1μm,0.7s | | | | | | | | |
| **WRAB** | **Tennant Creek** | **20.49** | **227** | *e*P | | | **P** | **16 43 26.5** | **-1.5** |
| | comp=Z,297nm,0.9s | | | | | | | | |
| WRAB | | | | LR | | | LR | | |
| | comp=Z,7μm,22.0s | | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.50** | **227** | P | | | **P** | **16 43 26.7** | **-1.5** |
| | comp=Z,71nm,0.6s,baz=52,slow=11,SNR=129 | | | | | | | | |
| WRA | | | | S | | | **S** | **16 47 13.4** | **-3.6** |
| | comp=Z,10nm,1.0s,baz=50,slow=18,SNR=3.4 | | | | | | | | |
| WRA | | | | PcP | | | **PcP** | **16 47 42.2** | **+2.5** |
| | comp=Z,8.0nm,0.8s,baz=45,slow=2.4,SNR=3.8 | | | | | | | | |
| WRA | | | | LR | | | LR | 16 51 34.1 | |
| | comp=Z,6μm,20.9s,baz=50,slow=38 | | | | | | | | |
| **PALU** | **Palau** | **20.83** | **311** | P | | | Pn | 16 43 34.9 | +0.7 |
| | baz=21,SNR=9.7 | | | | | | | | |
| **QLP** | **Quilpie** | **20.88** | **195** | P | | | **P** | **16 43 30.8** | **-1.4** |
| | baz=21,SNR=105 | | | | | | | | |
| **DZM** | **Mont Dzumac** | **22.08** | **137** | *e*P | | | **P** | **16 43 44.6** | **-0.5** |
| | comp=Z,445nm,1.0s | | | | | | | | |
| DZM | | | | *e*S | | | **S** | **16 47 41.9** | **-6.2** |
| | comp=Z,9μm,21.0s | | | | | | | | |
| DZM | | | | *e*LQ | | | LQ | 16 48 14.6 | |
| | comp=Z,19μm,25.0s | | | | | | | | |
| DZM | | | | *e*LR | | | LR | 16 49 06.1 | |
| | comp=Z,22μm,24.5s | | | | | | | | |
| **DZM** | **Mont Dzumac** | **22.08** | **137** | LR | | | LR | 16 50 47.2 | |
| | comp=Z,14μm,21.3s,baz=352,slow=32 | | | | | | | | |
| **KWAJ** | **Kwajalein Atol** | **22.96** | **49** | PFAKE | | | | 16 44 10.0 | +16 |
| KWAJ | | | | LR | | | LR | | |
| | comp=Z,9μm,19.0s | | | | | | | | |
| **KNRA** | **Kununurra** | **23.00** | **245** | P | | | **P** | **16 43 53.2** | **-1.8** |
| | baz=23,SNR=86 | | | | | | | | |
| **AS01** | **Alice Springs** | **23.25** | **221** | *e*P | | | **P** | **16 43 55.3** | **-2.2** |
| **AS31** | **Alice Springs** | **23.29** | **221** | PFAKE | | | | 16 44 10.0 | +12 |
| AS31 | | | | LR | | | LR | | |
| | comp=Z,100nm,19.0s | | | | | | | | |
| **ASAR** | **Alice Springs** | **23.29** | **221** | P | | | **P** | **16 43 55.9** | **-1.9** |
| | comp=Z,44nm,0.9s,baz=59,slow=8.3,SNR=107 | | | | | | | | |
| ASAR | | | | ScP | | | **ScP** | **16 51 23.7** | **+1.1** |
| | comp=Z,9.0nm,1.0s,baz=48,slow=3.4,SNR=8.3 | | | | | | | | |
| ASAR | | | | LR | | | LR | 16 53 36.3 | |
| | comp=Z,6μm,18.3s,baz=37,slow=38 | | | | | | | | |
| **SARN** | **Sarigan** | **23.37** | **349** | *e*P | | | **P** | **16 43 58.3** | **-0.3** |
| **TARA** | **Tarawa** | **23.90** | **72** | PFAKE | | | | 16 44 20.0 | +16 |
| TARA | | | | LR | | | LR | | |
| | comp=Z,13μm,19.0s | | | | | | | | |
| **TNTI** | **Ternate** | **23.93** | **286** | PFAKE | | | | 16 44 10.0 | +5.9 |
| TNTI | | | | LR | | | LR | | |
| | comp=Z,12μm,20.0s | | | | | | | | |
| **ARMA** | **Armidale** | **23.94** | **177** | P | | | **P** | **16 44 01.7** | **-2.3** |
| | baz=24,SNR=16 | | | | | | | | |
| **ARMA** | **Armidale** | **23.94** | **177** | *e*P | | | **P** | **16 44 01.8** | **-2.3** |
| | comp=Z,307nm,1.3s | | | | | | | | |
| ARMA | | | | LR | | | LR | | |
| | comp=Z,21μm,18.0s | | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.38** | **189** | P | | | **P** | **16 44 14.3** | **-2.8** |
| | baz=25,SNR=52 | | | | | | | | |
| **SOEI** | **Soe** | **25.94** | **261** | P | | | **P** | **16 44 23.7** | **+1.1** |
| | baz=26,SNR=16 | | | | | | | | |
| **SOEI** | **Soe** | **25.94** | **261** | *e*P | | | **P** | **16 44 22.4** | **-0.2** |
| | comp=Z,846nm,1.1s | | | | | | | | |
| **BATI** | **Baumata** | **26.58** | **260** | P | | | **P** | **16 44 28.6** | **+0.4** |
| | comp=Z,118nm,0.8s,baz=140,slow=1.8,SNR=39 | | | | | | | | |
| **MGCD** | **Mangrove Creek** | **26.70** | **178** | P | | | **P** | **16 44 26.9** | **-2.1** |
| | baz=27,SNR=4.4 | | | | | | | | |
| **YNG** | **Young** | **27.82** | **183** | P | | | **P** | **16 44 37.8** | **-1.4** |
| | baz=28,SNR=6.9 | | | | | | | | |
| **MMRI** | **Maumere** | **27.86** | **264** | *e*P | | | **P** | **16 44 37.9** | **-1.9** |
| | comp=Z,292nm,0.8s | | | | | | | | |
| **LUWI** | **Luwuk** | **27.93** | **280** | P | | | **P** | **16 44 42.1** | **+1.8** |
| | baz=28,SNR=6.8 | | | | | | | | |
| **LUWI** | **Luwuk** | **27.93** | **280** | *e*P | | | **P** | **16 44 40.9** | **+0.6** |
| | comp=Z,268nm,1.2s | | | | | | | | |
| **DAV** | **Davao City (W)** | **28.02** | **298** | PFAKE | | | | 16 44 50.0 | +8.9 |
| DAV | | | | LR | | | LR | | |
| | comp=Z,5μm,21.0s | | | | | | | | |
| **WRKA** | **Warakurna** | **28.03** | **226** | P | | | **P** | **16 44 39.0** | **-2.2** |
| | baz=28,SNR=62 | | | | | | | | |
| **CAN** | **Canberra** | **28.81** | **182** | *e*P | | | **P** | **16 44 47.2** | **-0.8** |
| CAN | | | | pmax | | pmax | | | |
| | comp=Z,218nm,1.6s | | | | | | | | |
| CAN | | | | MLR | | MLR | | | |
| | comp=Z,22μm,18.0s | | | | | | | | |
| **CAN** | **Canberra** | **28.81** | **182** | *e*P | | | **P** | **16 44 47.2** | **-0.8** |
| | comp=Z,218nm,1.6s | | | | | | | | |
| CAN | | | | LR | | | LR | | |
| | comp=Z,22μm,18.0s | | | | | | | | |
| **MSVF** | **Nonsavu** | **29.37** | **115** | *e*P | | | **P** | **16 44 53.8** | **+0.5** |
| MSVF | | | | pmax | | pmax | | | |
| | comp=Z,80nm,1.1s | | | | | | | | |
| MSVF | | | | MLR | | MLR | | | |
| | comp=Z,6μm,18.0s | | | | | | | | |
| **MSVF** | **Nonsavu** | **29.37** | **115** | P | | | P | 16 44 58.2 | +4.9 |
| | comp=Z,356nm,1.0s,SNR=5.0 | | | | | | | | |
| **MSVF** | **Nonsavu** | **29.37** | **115** | *e*P | | | **P** | **16 44 53.8** | **+0.5** |
| | comp=Z,80nm,1.1s | | | | | | | | |
| MSVF | | | | LR | | | LR | | |
| | comp=Z,6μm,18.0s | | | | | | | | |
| **BBOO** | **Buckleboo** | **29.42** | **205

**BLDU Ballidu 39.63 228** P **P** **16 46 20.6 -1.1**
baz=40,SNR=8.1
**URZ Urewera 39.98 146** P **P** **16 46 27.0 +2.5**
comp=Z,12nm,0.8s,baz=307,slow=3.1,SNR=4.3
**URZ Urewera 39.98 146** *e*P **P** **16 46 22.8 -1.6**
URZ LR LR
comp=Z,8μm,21.0s
**BKZ Black Stump Fm 40.31 148** PFAKE 16 46 40.0 +13
BKZ LR LR
comp=Z,7μm,21.0s
**NWAO Narrogin (SRO) 40.48 225** P **P** **16 46 26.9 -1.8**
comp=Z,6.8nm,0.7s,baz=110,slow=0.0,SNR=3.6
NWAO LR LR 17 02 37.1
comp=Z,22nm,19.5s,baz=183,slow=35
**NWAO Narrogin (SRO) 40.48 225** *e*P **P** **16 46 28.5 -0.2**
NWAO pmax pmax
comp=Z,68nm,1.1s
**NWAO Narrogin (SRO) 40.48 225** *e*P **P** **16 46 28.5 -0.2**
comp=Z,68nm,1.1s
**YOJ Yonaguni jima 40.57 320** PFAKE 16 46 40.0 +11
YOJ LR LR
comp=Z,6μm,18.0s
**THZ Tophouse 40.57 154** *e*P **P** **16 46 31.8 +2.4**
comp=Z,37nm,0.9s
THZ LR LR
comp=Z,4μm,20.0s
**KSM Kuching 40.64 280** *e*P **P** **16 46 31.4 +1.2**
comp=Z,58nm,1.2s
KSM LR LR
comp=Z,2μm,20.0s
**TWG Pinlang 40.72 316** PFAKE 16 46 40.0 +9.2
TWG LR LR
comp=Z,18μm,18.0s
**YULB Yu-li 40.95 317** *e*P **P** **16 46 32.5 -0.1**
comp=Z,28nm,0.8s
YULB LR LR
comp=Z,3μm,19.0s
**SNZO South Karori 41.03 152** PFAKE 16 46 40.0 +6.9
SNZO LR LR
comp=Z,8μm,20.0s
**NACB Ninganchiao 41.28 318** *e*P **P** **16 46 36.4 +1.0**
comp=Z,49nm,0.8s
**BFZ Birch Farm 41.30 150** PFAKE 16 46 50.0 +15
BFZ LR LR
comp=Z,12μm,20.0s
**TPUB Ta-pu 41.34 317** P **P** **16 46 34.9 -1.0**
comp=Z,48nm,0.8s
TPUB LR LR
comp=Z,3μm,18.0s
**KHZ Kahutara 41.38 154** PFAKE 16 46 50.0 +14
KHZ LR LR
comp=Z,5μm,18.0s
**RPZ Rata Peaks 41.42 157** *e*P **P** **16 46 34.5 -1.8**
comp=Z,56nm,1.2s
RPZ LR LR
comp=Z,10μm,20.0s
**SSLB Suanglung 41.45 317** P **P** **16 46 34.8 -2.0**
comp=Z,23nm,0.8s
SSLB LR LR
comp=Z,4μm,18.0s
**OXZ Oxford 41.49 156** *e*P **P** **16 46 39.0 +2.2**
comp=Z,32nm,0.8s
OXZ LR LR
comp=Z,10μm,18.0s
**RKGY Rocky Gully 41.60 223** P **P** **16 46 36.8 -1.0**
baz=42,SNR=5.5
**DCZ Deep Cove 41.61 162** *e*P **P** **16 46 36.3 -1.5**
comp=Z,77nm,1.2s
DCZ LR LR
comp=Z,2μm,19.0s
**WKZ Wanaka 41.64 160** PFAKE 16 46 50.0 +12
WKZ LR LR
comp=Z,4μm,21.0s
**YHNB Yeheng 41.77 319** *e*P **P** **16 46 37.1 -2.4**
comp=Z,686nm,2.1s
YHNB LR LR
comp=Z,5μm,20.0s
**TATO Taipei 41.91 319** *e*P **P** **16 46 42.5 +2.0**
TATO LR LR
comp=Z,7μm,18.0s
**MQZ McQueen's Vall 42.05 156** PFAKE 16 46 50.0 +8.6
MQZ LR LR
comp=Z,8μm,20.0s
**CISI Cisompet, Garu 42.13 266** P **P** **16 46 40.6 -2.0**
baz=42,SNR=38
**CISI Cisompet, Garu 42.13 266** *e*P **P** **16 46 40.4 -2.2**
comp=Z,1μm,1.3s
CISI LR LR
comp=Z,2μm,21.0s
**WHZ Wether Hill Ro 42.23 162** PFAKE 16 46 50.0 +7.1
WHZ LR LR
comp=Z,2μm,18.0s
**LEM Lembang 42.35 267** LR LR 17 09 27.6
comp=Z,2μm,18.0s,slow=44
**LEM Lembang 42.35 267** P **P** **16 46 45.0 +0.5**
baz=42,SNR=11
**ODZ Otahua Downs 42.40 159** PFAKE 16 47 00.0 +16
ODZ LR LR
comp=Z,2μm,18.0s
**JNU Nakatsue 43.39 336** *e*P **P** **16 46 51.3 -1.2**
comp=Z,25nm,0.8s
**QZH Quanzhou 43.82 317** P **P** **16 46 57.0 +1.0**
QZH S **S** **16 53 25.8 -0.4**
QZH LN
comp=Z,3μm,11.5s
QZH LE
comp=Z,8μm,20.6s
QZH LZ
comp=Z,6μm,16.0s
**MJAR Matsushiro Arr 44.18 346** P **P** **16 46 56.3 -2.4**
comp=Z,12nm,0.9s,baz=169,slow=6.7,SNR=19
MJAR ScP **ScP** **16 52 33.5 -1.1**
comp=Z,13nm,1.0s,baz=179,slow=5.2,SNR=11
MJAR LR LR 17 04 46.7
comp=Z,3μm,18.4s,baz=175,slow=35
**MAJO Matsushiro 44.18 346** *e*P **P** **16 46 55.9 -2.8**
MAJO pmax pmax
comp=Z,25nm,0.8s
MAJO MLR MLR
comp=Z,4μm,18.0s
**MAJO Matsushiro 44.18 346** *e*P **P** **16 46 55.9 -2.8**
comp=Z,25nm,0.8s
MAJO LR LR
comp=Z,4μm,18.0s
**MAT Matsushiro 44.18 346** P **P** **16 46 57.5 -1.2**
MAT S **S** **16 53 33.8 +2.6**
**XMIS Christmas Isla 44.28 262** P **P** **16 47 00.0 +0.1**
baz=44,SNR=5.8
**XMIS Christmas Isla 44.28 262** *e*P **P** **16 47 01.0 +1.1**
comp=Z,291nm,1.0s
**DLV T Lat 45.36 294** PFAKE 16 47 20.0 +11
DLV LR LR
comp=Z,2μm,18.0s
**MIDW Midway 46.47 41** PFAKE 16 47 30.0 +13
MIDW LR LR
comp=Z,2μm,21.0s
**GZH Guangzhou 46.48 310** P **P** **16 47 18.3 +1.1**
GZH S S 16 54 12.5 +7.8
GZH ScS **ScS** **16 57 06.0 -6.0**
GZH PMZ
comp=Z,2μm,9.6s
GZH LN
comp=Z,3μm,16.7s
GZH LE
comp=Z,3μm,16.9s
GZH LZ
comp=Z,5μm,16.9s
**SSE Sheshan 46.50 325** *e*P P 16 47 13.3 -3.9
SSE S **S** **16 54 04.8 0.0**
SSE PMZ
comp=Z,16nm,0.8s
SSE PMZ
comp=Z,110nm,3.5s
SSE LN
comp=Z,2μm,21.8s
SSE LE
comp=Z,4μm,21.9s
SSE LZ
comp=Z,4μm,19.3s
**QIZ Qiongzhong 47.16 303** P **P** **16 47 22.0 -0.5**
QIZ pP **pP** **16 47 25.0 -3.3**
QIZ sP **sP** **16 47 26.5 -4.0**
QIZ S **S** **16 54 14.3 -0.3**
QIZ sS **sS** **16 54 26.0 +2.0**
QIZ PMZ
comp=Z,23nm,1.6s
QIZ LN
comp=Z,4μm,21.1s
QIZ LE
comp=Z,950nm,18.3s
QIZ LZ
comp=Z,3μm,18.1s
**QIZ Qiongzhong 47.16 303** PFAKE 16 47 30.0 +7.4
QIZ LR LR
comp=Z,3μm,20.0s
**TJN Taejon 47.66 335** *e*P **P** **16 47 25.6 -0.5**
**KSRS Korea Array 48.35 336** P **P** **16 47 30.6 -0.8**
comp=Z,12nm,0.8s,baz=152,slow=7.5,SNR=30
KSRS ScP **ScP** **16 52 51.3 -0.7**
comp=Z,7.6nm,1.1s,baz=146,slow=6.2,SNR=5.6
KSRS LR LR 17 05 43.8
comp=Z,3μm,21.5s,baz=106,slow=34
**KSAR Wonju Array Be 48.35 336** P **P** **16 47 30.7 -0.8**
**KSAR Wonju Array Be 48.35 336** P **P** **16 47 30.6 -0.8**
KSAR ScP **ScP** **16 52 51.3 -0.8**
**KS01 Wonju Array Si 48.38 336** *e*P **P** **16 47 29.9 -1.8**
**NJ2 Nanjing 48.55 324** *e*P **P** **16 47 34.5 +1.4**
NJ2 S S 16 54 27.5 -6.5
NJ2 PMZ
comp=Z,19nm,0.6s
NJ2 PMZ
comp=Z,1μm,12.0s
NJ2 LN
comp=Z,5μm,17.1s
NJ2 LE
comp=Z,4μm,25.1s
NJ2 LZ
comp=Z,2μm,20.3s
**ERM Erimo 48.61 353** *e*P **P** **16 47 34.0 +0.6**
ERM pmax pmax
comp=Z,51nm,1.2s
**ERM Erimo 48.61 353** PFAKE 16 47 50.0 +17
ERM LR LR
comp=Z,3μm,20.0s
**INCN Inchon 48.90 335** *e*P **P** **16 47 35.6 -0.2**
comp=Z,154nm,1.5s
INCN LR LR
comp=Z,2μm,19.0s
**PPI Padang Panjang 50.09 275** P **P** **16 47 46.1 +0.9**
baz=50,SNR=4.7
**WHN Wuhan 50.31 319** ⇓P P 16 47 52.3 +5.7
WHN sP sP 16 48 08.0 +13
WHN S **S** **16 55 01.8 +3.0**
WHN LR LR
comp=N,3μm,13.5s
WHN LR LR
comp=E,6μm,16.5s
WHN LR LR
comp=Z,6μm,15.4s
**YUK Yuzh-Kuril'sk 50.35 356***d* *i*P **P** **16 47 44.2 -2.4**
YUK *i* 16 47 57.7
YUK *i* 16 49 44.1
YUK *i* S **S** **16 54 55.5 -3.2**
YUK pmax pmax
comp=Z,529nm,7.3s
**ASAJ Asahikawa 50.75 353** *e*P **P** **16 47 48.6 -1.0**
comp=Z,11nm,0.8s
**KULM Kulim 50.86 282** *e*P **P** **16 47 49.6 -1.5**
comp=Z,30nm,0.9s
KULM LR LR
comp=Z,2μm,19.0s
**SKNT Sakolnakorn 51.30 298** P P 16 48 00.8 +6.5
comp=Z,46nm,2.1s
**KUR Kuril'sk 51.44 358***d* *i*P **P** **16 47 53.2 -1.6**
KUR *i* 16 49 12.0
KUR *i* S **S** **16 55 11.6 -2.2**
KUR *i* 16 57 45.2
KUR *i* SS **SS** **16 58 46.7 -3.3**
KUR *i* SSS SSS 17 00 25.0
KUR pmax pmax
comp=Z,334nm,9.7s
**MSHR Mys Shultsa 51.75 342** *e*P **P** **16 47 56.0 -1.2**
**VLA Vladivostok 52.03 343** *e*P **P** **16 47 58.4 -0.8**
VLA pmax pmax
comp=Z,70nm,1.2s
**PSI Prapat 52.06 279** *e*P **P** **16 48 03.0 +2.8**
PSI pmax pmax
comp=Z,50nm,1.2s
PSI MLR MLR
comp=Z,3μm,22.0s
**PSI Prapat 52.06 279** *e*P **P** **16 48 03.0 +2.8**
comp=Z,50nm,1.2s
PSI LR LR
comp=Z,3μm,22.0s
**KHON Khomkaen 52.08 296** P P 16 48 09.9 +10
comp=Z,8.5nm,0.9s
**DL2 Dalian 52.30 332** P **P** **16 47 59.3 -2.1**
DL2 S **S** **16 55 23.0 -3.0**
DL2 PMZ
comp=Z,38nm,1.4s
DL2 PMZ
comp=Z,610nm,7.9s
DL2 LN
comp=Z,1μm,21.1s
DL2 LE
comp=Z,660nm,21.2s
DL2 LZ
comp=Z,2μm,21.3s
**NONG Nongkai 52.45 298** P P 16 48 09.7 +6.8
comp=Z,276nm,0.8s
**TIA Tai'an 52.55 326** ⇑P **P** **16 48 05.8 +2.5**
TIA S **S** **16 55 27.3 -2.2**
TIA sS sS 16 55 44.3 +5.2
TIA PMZ
comp=Z,20nm,0.8s
TIA PMZ
comp=Z,1μm,13.7s
TIA LN
comp=Z,3μm,19.0s
TIA LE
comp=Z,2μm,16.7s
TIA LZ
comp=Z,4μm,20.8s
**CHAI Chaiyaphum 52.67 295** P P 16 48 08.4 +3.9
comp=Z,9.1nm,1.0s
**NAYO Nakonayok 52.72 293** P P 16 48 11.1 +6.2
comp=Z,27nm,1.1s
**USRK Ussuriysk Ar. 52.99 344** P **P** **16 48 06.0 -0.3**
comp=Z,5.7nm,0.7s,baz=133,slow=8.4,SNR=14
USRK LR LR 17 08 41.0
comp=Z,2μm,19.6s,baz=163,slow=34
**GSI Gunungsitoli 53.14 276** *e*P **P** **16 48 09.1 +1.0**
comp=Z,170nm,1.2s
GSI LR LR
comp=Z,2μm,21.0s
**GYA Guiyang 53.40 310**⇑ *i*P P 16 48 16.8 +6.9
GYA PP **PcP** **16 49 19.3 +2.2**
GYA ScP **ScP** **16 53 15.0 +0.8**
GYA S **S** **16 55 42.8 +1.2**
**GYA Guiyang 53.40 310** SS **SKiKP** **16 59 22.5 -3.7**
GYA pmax pmax
comp=Z,40nm,1.0s
GYA pmax pmax
comp=Z,160nm,6.3s
GYA LR LR
comp=N,890nm,19.8s
GYA LR LR
comp=E,760nm,20.2s
GYA LR LR
comp=Z,810nm,18.5s
**ENH Enshi 53.44 315** P **P** **16 48 10.8 +0.7**
ENH LR LR
comp=Z,1μm,22.0s
**YSS Yuzh-Sakhalins 53.53 354***be*P **P** **16 48 10.0 -0.3**
YSS *e* 16 48 25.0
YSS *e* 16 49 18.6
YSS *e*PPP PPP 16 51 14.0
YSS *e*S **S** **16 55 38.0 -4.4**
YSS *e*PS PKiKP 16 56 00.0 +6.3
YSS *e*SS SS 16 59 10.0 -13
YSS *e*SSS SSS 17 01 03.0
YSS pmax pmax
comp=Z,800nm,11.0s
YSS smax smax
comp=N,1μm,12.0s
YSS MLR MLR
comp=N,1μm,17.0s
YSS MLR MLR
comp=E,900nm,17.0s
YSS MLR MLR
comp=Z,2μm,17.0s
**PKDT Phuket 53.69 285** P P 16 48 24.0 +12
**LOEI Loei 53.90 297** P **P** **16 48 16.7 +3.1**
**MDJ Mudanjiang 54.08 342** P **P** **16 48 13.8 -0.6**
MDJ pP **pP** **16 48 17.8 -2.4**
MDJ sP **sP** **16 48 19.0 -3.4**
MDJ PcP **PcP** **16 49 18.5 -0.6**
MDJ PP **PP** **16 50 15.5 -0.6**
MDJ ScP **ScP** **16 53 17.5 +0.9**
MDJ PcS **PcS** **16 53 19.5 +1.2**
MDJ S **S** **16 55 54.3 +4.4**
MDJ PMZ
comp=Z,30nm,1.4s
MDJ PMZ
comp=Z,1μm,9.6s
MDJ LN
comp=Z,2μm,24.7s
MDJ LE
comp=Z,1μm,24.7s
MDJ LZ
comp=Z,3μm,25.3s
**MDJ Mudanjiang 54.08 342** *e*P **P** **16 48 13.4 -1.0**
comp=Z,48nm,0.9s
MDJ LR LR
comp=Z,3μm,22.0s
**UTTA Uttaradit 54.61 297** P P 16 48 24.9 +6.1
comp=Z,4.9nm,0.8s,comp=Z,56nm
**SRDT SRDT 54.75 292** P P 16 48 29.8 +10
comp=Z,83nm,1.2s,comp=Z,6μm
**CN2 Changchun 54.77 338** ⇑P **P** **16 48 18.3 -1.1**
CN2 *e*sP **sP** **16 48 25.0 -2.5**
CN2 *e*S **S** **16 55 57.3 -1.9**
CN2 PMZ
comp=Z,10.0nm,1.2s
CN2 PMZ
comp=Z,200nm,4.0s
CN2 LN
comp=Z,2μm,16.0s
CN2 LE
comp=Z,2μm,16.0s
CN2 LZ
comp=Z,2μm,17.0s
**UTHA Uthaitani 54.84 294** P P 16 48 26.8 +6.3
comp=Z,8.1nm,0.9s,comp=Z,76nm
**NANT Nan 54.88 298** P **P** **16 48 23.2 +2.5**
**KHLT Khaolaem Dam 55.38 293** P P 16 48 34.3 +10
comp=Z,17nm,1.1s
**UMPA Umpang Tak 55.59 294** P P 16 48 35.1 +9.2
comp=Z,12nm,1.0s,comp=Z,96nm
**LAMP Lampang 55.71 297** P P 16 48 34.2 +7.5
comp=Z,5.1nm,0.9s
**KMI Kunming 55.82 306** P **P** **16 48 29.8 +2.1**
KMI pP **pP** **16 48 33.0 -0.5**
KMI sP **sP** **16 48 34.3 -1.4**
KMI PP **PP** **16 50 36.3 +3.9**
KMI S **S** **16 56 14.8 +0.3**
KMI ScS **ScS** **16 58 14.5 -2.3**
KMI SS **SS** **17 00 00.5 0.0**
KMI PMZ
comp=Z,14nm,1.0s
KMI PMZ
comp=Z,470nm,7.1s
KMI LN
comp=Z,4μm,20.3s
KMI LE
comp=Z,2μm,17.4s
KMI LZ
comp=Z,3μm,18.7s
**BJT Baijiatuau 55.86 329** PFAKE 16 48 40.0 +13
BJT LR LR
comp=Z,3μm,19.0s
**BJI Beijing 55.87 329** P **P** **16 48 28.3 +0.9**
BJI PP **PP** **16 50 34.0 +1.7**
BJI S **S** **16 56 12.0 -2.1**
BJI SS **SS** **17 00 04.8 +4.5**
BJI PMZ
comp=Z,12nm,1.4s
BJI PMZ
comp=Z,1μm,13.2s
BJI LN
comp=Z,4μm,18.1s
BJI LE
comp=Z,2μm,16.9s
**XAN Xi'an 56.08 319** P **P** **16 48 27.5 -1.6**
XAN pP **pP** **16 48 35.0 0.0**
XAN PP **PP** **16 50 35.0 +0.6**
XAN S **S** **16 56 14.5 -2.8**
XAN SS **SS** **17 00 08.0 +4.1**
XAN PMZ
comp=Z,14nm,1.2s
XAN PMZ
comp=Z,620nm,10.1s
XAN LN
comp=Z,2μm,19.2s
XAN LE
comp=Z,3μm,20.2s
XAN LZ
comp=Z,3μm,19.2s
**HABR Khabarovsk 56.24 348** *e*P **P** **16 48 27.3 -2.6**
HABR *e**PP **pP** **16 48 37.4 +1.6**
HABR *e**SP **sP** **16 48 41.6 +3.6**
HABR *e* 16 49 24.5
HABR 16 50 33.2
HABR *e*S **S** **16 56 14.7 -4.1**
HABR *e**SS **sS** **16 56 31.9 +3.5**
HABR *e* 16 58 13.8
HABR *e*SS **SS** **17 00 02.5 -3.3**
HABR pmax pmax
comp=Z,62nm,2.4s
HABR pmax pmax
comp=E,42nm,2.4s
HABR pmax pmax
comp=N,42nm,2.4s
HABR MLR MLR
comp=Z,2μm,18.0s
**CM01 Chiang Mai Arr 56.27 297** *e*P **P** **16 48 30.5 -0.2**
**CMAR Chiang Mai Arr 56.30 297** P **P** **16 48 30.5 -0.5**
comp=Z,1.1nm,0.6s,baz=119,slow=5.3,SNR=11
CMAR PKPPKP P'P'df 17 18 21.9 -7.2
comp=Z,0.8nm,0.3s,baz=282,slow=3.5,SNR=6.5
**CMAR Chiang Mai Arr 56.30 297***ce*P **P** **16 48 31.1 +0.2**
CMAR pmax pmax
comp=Z,1.0nm,0.6s
**CMMT Chiang Mai 56.42 297** P P 16 48 37.5 +5.7
comp=Z,22nm,0.7s
**CHTO Chiang Mai 56.43 297** P P 16 48 37.6 +5.8
comp=Z,115nm,1.8s
**CHTO Chiang Mai 56.43 297** *e*P **P** **16 48 31.2 -0.6**
CHTO pmax pmax
comp=Z,14nm,0.9s
CHTO MLR MLR
comp=Z,1μm,18.0s
**CHTO Chiang Mai 56.43 297** *e*P **P** **16 48 31.2 -0.6**
comp=Z,14nm,0.9s
CHTO LR LR
comp=Z,1μm,18.0s
**SKR Severo-Kuril's 57.07 4** *e*P P 16 48 22.0 -14
SKR *e*SSS SSS 17 02 27.0
SKR pmax pmax
comp=Z,2μm,12.0s
SKR MLR MLR
comp=N,3μm,20.0s
SKR MLR MLR
comp=E,4μm,20.0s
SKR MLR MLR
comp=Z,4μm,20.0s
**TYV Tymovskoe 57.40 354** *e*P P 16 48 45.0 +6.9
TYV *e* 16 52 06.0
TYV pmax pmax
comp=N,9.0nm,0.8s
**KLR Kul'dur 57.70 346** *e*P **P** **16 48 38.2 -2.1**
KLR *e*S **S** **16 56 38.0 -0.1**
KLR pmax pmax
comp=Z,80nm,1.6s
**OPA Opana 57.87 60** *e*P P 16 48 45.8 +3.8
**OPA Opana 57.87 60** *e*P P 16 48 45.8 +3.8
**CD2 Chengdu 57.89 313** P **P** **16 48 43.5 +1.4**
CD2 pP **pP** **16 48 46.0 -1.9**
CD2 PP **PP** **16 50 52.3 +1.7**
CD2 PcS **PcS** **16 53 36.5 +0.7**
CD2 S **S** **16 56 46.0 +4.6**
CD2 sS **sS** **16 56 50.3 -0.7**
CD2 SS **SS** **17 00 39.0 +6.4**
CD2 PMZ
comp=Z,50nm,0.8s
CD2 PMZ
comp=Z,1μm,8.3s
CD2 LN

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | comp=Z,4μm,17.8s | | | | | | | | |
| CD2 | | | | LE | | | | | |
| | comp=Z,3μm,16.6s | | | | | | | | |
| CD2 | | | | LZ | | | | | |
| | comp=Z,3μm,14.7s | | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.91** | **326** | *e*P | **P** | | **16** | **48** | **48.5** **-0.5** |
| HHC | | | | SS | SS | | 17 | 00 | 52.0 +3.6 |
| HHC | | | | PMZ | | | | | |
| | comp=Z,21nm,1.0s | | | | | | | | |
| HHC | | | | PMZ | | | | | |
| | comp=Z,650nm,8.8s | | | | | | | | |
| HHC | | | | LN | | | | | |
| | comp=Z,3μm,16.7s | | | | | | | | |
| HHC | | | | LE | | | | | |
| | comp=Z,2μm,15.2s | | | | | | | | |
| HHC | | | | LZ | | | | | |
| | comp=Z,3μm,18.2s | | | | | | | | |
| **POHA** | **Pohakuloa** | **59.32** | **63** | *e*P | **P** | | **16** | **48** | **52.4** **0.0** |
| | comp=Z,165nm,1.1s | | | | | | | | |
| POHA | | | | LR | LR | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | |
| **PEA0** | **Petropavlovsk-** | **59.61** | **5** | *e*P | **P** | | **16** | **48** | **52.6** **-0.9** |
| **PETK** | **Petropavlovsk-** | **59.61** | **5** | P | **P** | | **16** | **48** | **50.9** **-2.6** |
| | comp=Z,12nm,0.8s,baz=173,slow=7.9,SNR=12 | | | | | | | | |
| PETK | | | | LR | LR | | 17 | 16 | 17.0 |
| | comp=Z,2μm,18.0s,baz=198,slow=38 | | | | | | | | |
| **PET** | **Petropavlovsk** | **59.62** | **6** | *e*P | **P** | | **16** | **48** | **53.2** **-0.3** |
| PET | | | | *e*S | **S** | | **16** | **57** | **01.0** **-1.8** |
| PET | | | | *e*SS | **SS** | | **17** | **01** | **00.1** **+1.4** |
| PET | | | | pmax | pmax | | | | |
| | comp=Z,900nm,15.9s | | | | | | | | |
| PET | | | | pmax | pmax | | | | |
| | comp=Z,1μm,16.7s | | | | | | | | |
| PET | | | | pmax | pmax | | | | |
| | comp=Z,76nm,1.1s | | | | | | | | |
| PET | | | | MLR | MLR | | | | |
| | comp=Z,2μm,18.0s | | | | | | | | |
| PET | | | | MLR | MLR | | | | |
| | comp=Z,2μm,17.0s | | | | | | | | |
| **PPT** | **Papeete** | **59.68** | **107** | LR | LR | | 17 | 12 | 55.0 |
| | comp=Z,643nm,18.3s,baz=270,slow=34 | | | | | | | | |
| **PAE** | **Paea** | **59.68** | **107** | *e*P | **P** | | **16** | **48** | **55.7** **+1.0** |
| | comp=Z,15nm,1.1s | | | | | | | | |
| **PPT2** | **Papeete2** | **59.68** | **107** | *e*P | **P** | | **16** | **48** | **56.0** **+1.2** |
| | comp=Z,93nm,1.3s | | | | | | | | |
| PPT2 | | | | *e*S | **S** | | **16** | **57** | **02.6** **-2.5** |
| | comp=Z,2μm,25.8s | | | | | | | | |
| PPT2 | | | | *e*LQ | LQ | | 17 | 03 | 56.6 |
| | comp=Z,8μm,31.2s | | | | | | | | |
| PPT2 | | | | *e*LR | LR | | 17 | 06 | 03.7 |
| | comp=Z,2μm,25.8s | | | | | | | | |
| **NKL** | **Nikolayevsk** | **59.87** | **353** | *e*P | **P** | | **16** | **48** | **53.0** **-2.2** |
| NKL | | | | *e*S | **S** | | **16** | **57** | **06.0** **0.0** |
| NKL | | | | *e* | | | 17 | 01 | 02.0 |
| NKL | | | | pmax | pmax | | | | |
| | comp=Z,1μm,13.0s | | | | | | | | |
| NKL | | | | pmax | pmax | | | | |
| | comp=N,800nm,14.0s | | | | | | | | |
| NKL | | | | smax | smax | | | | |
| | comp=N,2μm,13.0s | | | | | | | | |
| NKL | | | | MLR | MLR | | | | |
| | comp=Z,2μm,16.0s | | | | | | | | |
| NKL | | | | MLR | MLR | | | | |
| | comp=N,1μm,19.0s | | | | | | | | |
| NKL | | | | MLR | MLR | | | | |
| | comp=E,1μm,13.0s | | | | | | | | |
| **TIAR** | **Tiarei** | **59.90** | **107** | *e*P | **P** | | **16** | **48** | **57.4** **+1.2** |
| | comp=E,35nm,1.1s | | | | | | | | |
| **TVO** | **Taravao** | **60.00** | **107** | *e*P | **P** | | **16** | **48** | **58.1** **+1.1** |
| | comp=E,51nm,1.2s | | | | | | | | |
| **TBI** | **Tubuai** | **60.24** | **113** | *e*P | **P** | | **16** | **48** | **59.2** **+0.8** |
| | comp=E,464nm,1.5s | | | | | | | | |
| TBI | | | | *e*S | **S** | | **16** | **57** | **09.5** **-2.4** |
| | comp=E,2μm,26.2s | | | | | | | | |
| TBI | | | | *e*LQ | LQ | | 17 | 04 | 21.9 |
| | comp=E,4μm,36.5s | | | | | | | | |
| TBI | | | | *e*LR | LR | | 17 | 07 | 29.2 |
| | comp=E,4μm,35.8s | | | | | | | | |
| **DRV** | **Dumont d'Urvil** | **60.59** | **185** | P | P | | 16 | 48 | 50.0 -10 |
| DRV | | | | PP | PP | | 16 | 51 | 08.0 -5.6 |
| DRV | | | | S | S | | 16 | 57 | 07.0 -8.0 |
| DRV | | | | R | | | 17 | 07 | 00.0 |
| **LZH** | **Lanzhou** | **60.65** | **318** | *e*P | **P** | | **16** | **49** | **01.0** **-0.2** |
| LZH | | | | pP | **pP** | | **16** | **49** | **04.5** **-2.6** |
| LZH | | | | sP | **sP** | | **16** | **49** | **08.8** **-0.5** |
| LZH | | | | PP | **PP** | | **16** | **51** | **14.0** **-1.1** |
| LZH | | | | S | **S** | | **16** | **57** | **14.3** **-2.8** |
| LZH | | | | SS | **SS** | | **17** | **01** | **18.8** **+2.8** |
| LZH | | | | PMZ | | | | | |
| | comp=E,60nm,1.4s | | | | | | | | |
| LZH | | | | PMZ | | | | | |
| | comp=E,380nm,6.3s | | | | | | | | |
| LZH | | | | LN | | | | | |
| | comp=E,1μm,14.4s | | | | | | | | |
| LZH | | | | LE | | | | | |
| | comp=E,1μm,13.7s | | | | | | | | |
| LZH | | | | LZ | | | | | |
| | comp=E,2μm,16.0s | | | | | | | | |
| **MEH** | **Mehetia** | **61.13** | **107** | *e*P | **P** | | **16** | **49** | **05.4** **+0.8** |
| | comp=E,33nm,1.0s | | | | | | | | |
| **PMOR** | **Pomariorio Ree** | **61.21** | **104** | *e*P | **P** | | **16** | **49** | **06.5** **+1.3** |
| | comp=E,348nm,1.2s | | | | | | | | |
| **VAH** | **Vaihoa** | **61.47** | **104** | *e*P | **P** | | **16** | **49** | **07.9** **+1.0** |
| | comp=E,114nm,1.2s | | | | | | | | |
| **HIA** | **Hailar** | **61.49** | **338** | *d i*P | **P** | | **16** | **49** | **06.0** **-0.5** |
| HIA | | | | pmax | pmax | | | | |
| | comp=Z,17nm,0.9s | | | | | | | | |
| **HIA** | **Hailar** | **61.49** | **338** | *e*P | **P** | | **16** | **49** | **05.2** **-1.3** |
| HIA | | | | LR | LR | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| **GTA** | **Gaotai** | **65.14** | **319** | ⇑P | **P** | | **16** | **49** | **32.3** **+1.3** |
| GTA | | | | pP | **pP** | | **16** | **49** | **37.0** **+0.1** |
| GTA | | | | sP | **sP** | | **16** | **49** | **39.3** **+0.2** |
| GTA | | | | S | **S** | | **16** | **58** | **14.5** **+1.3** |
| GTA | | | | sS | **sS** | | **16** | **58** | **22.8** **-0.2** |
| GTA | | | | SS | **SS** | | **17** | **02** | **27.5** **+1.5** |
| GTA | | | | PMZ | | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| GTA | | | | PMZ | | | | | |
| | comp=Z,770nm,5.5s | | | | | | | | |
| GTA | | | | LN | | | | | |
| | comp=Z,1μm,16.2s | | | | | | | | |
| GTA | | | | LE | | | | | |
| | comp=Z,1μm,17.1s | | | | | | | | |
| GTA | | | | LZ | | | | | |
| | comp=Z,2μm,17.6s | | | | | | | | |
| **CASY** | **Casey** | **65.77** | **196** | PFAKE | | | 16 | 49 | 50.0 +16 |
| CASY | | | | LR | LR | | | | |
| | comp=Z,4μm,19.0s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **66.04** | **330** | *i*P | **P** | | **16** | **49** | **35.1** **-1.6** |
| ULN | | | | pmax | pmax | | | | |
| | comp=Z,14nm,1.2s | | | | | | | | |
| **ULN** | **Ulaanbaatar** | **66.04** | **330** | *e*P | **P** | | **16** | **49** | **35.1** **-1.6** |
| | comp=Z,27nm,1.3s | | | | | | | | |
| ULN | | | | LR | LR | | | | |
| | comp=Z,3μm,20.0s | | | | | | | | |
| **CIT** | **Chita** | **66.08** | **336** | *e*P | **P** | | **16** | **49** | **35.5** **-1.2** |
| CIT | | | | *e* | | | 16 | 49 | 50.4 |
| CIT | | | | *e* | | | 16 | 50 | 01.3 |
| **CLNS** | **Chul'man** | **66.35** | **345** | *e*P | **P** | | **16** | **49** | **36.2** **-2.1** |
| CLNS | | | | *e**PP | **pP** | | **16** | **49** | **45.2** **+1.0** |
| CLNS | | | | *e* | | | 16 | 50 | 03.1 |
| CLNS | | | | *e* | | | 16 | 52 | 01.7 |
| CLNS | | | | *e*PPP | PPP | | 16 | 53 | 38.6 |
| CLNS | | | | *e*S | **S** | | **16** | **58** | **26.7** **-0.4** |
| CLNS | | | | *e*SSS | SSS | | 17 | 05 | 37.7 |
| CLNS | | | | pmax | pmax | | | | |
| | comp=E,6.0nm,1.1s | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | |
| | comp=Z,19nm,1.2s | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | |
| | comp=N,8.0nm,1.1s | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | |
| | comp=E,6.0nm,0.9s | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | |
| | comp=Z,4.0nm,0.8s | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | |
| | comp=N,4.0nm,0.8s | | | | | | | | |
| CLNS | | | | smax | smax | | | | |
| | comp=E,464nm,14.8s | | | | | | | | |
| CLNS | | | | smax | smax | | | | |
| | comp=N,826nm,12.6s | | | | | | | | |
| CLNS | | | | pmax | pmax | | | | |
| | comp=Z,822nm,15.0s | | | | | | | | |
| **SONM** | **Songino Array** | **66.36** | **329** | P | **P** | | **16** | **49** | **37.2** **-1.4** |
| | comp=Z,8.3nm,0.9s,baz=132,slow=5.4,SNR=32 | | | | | | | | |
| SONM | | | | PKPPKP | **P'P'df** | | **17** | **18** | **14.9** **+4.4** |
| | comp=Z,7.9nm,1.1s,baz=274,slow=1.8,SNR=18 | | | | | | | | |
| SONM | | | | LR | LR | | 17 | 20 | 00.4 |
| | comp=Z,1μm,18.6s,baz=141,slow=37 | | | | | | | | |
| **SONA1** | **Songino Array** | **66.36** | **329** | *e*P | **P** | | **16** | **49** | **37.3** **-1.4** |
| **LSA** | **Lhasa** | **67.08** | **306** | P | **P** | | **16** | **49** | **44.0** **-0.1** |
| LSA | | | | PMZ | | | | | |
| | comp=Z,7.0nm,1.3s | | | | | | | | |
| **LSA** | **Lhasa** | **67.08** | **306** | *e*P | **P** | | **16** | **49** | **43.6** **-0.4** |
| LSA | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| LSA | | | | MLR | MLR | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | |
| **LSA** | **Lhasa** | **67.08** | **306** | *e*P | **P** | | **16** | **49** | **43.6** **-0.4** |
| | comp=Z,24nm,1.0s | | | | | | | | |
| LSA | | | | LR | LR | | | | |
| | comp=Z,2μm,21.0s | | | | | | | | |
| **TAPN** | **Taplejung** | **69.08** | **302** | *e*P | **P** | | **16** | **49** | **54.5** **-2.0** |
| **ODAN** | **Odare** | **69.19** | **302** | *e*P | **P** | | **16** | **49** | **55.7** **-1.4** |
| **ZAK** | **Zakamensk** | **69.56** | **330** | *e*P | **P** | | **16** | **49** | **56.2** **-2.5** |
| ZAK | | | | pmax | pmax | | | | |
| | comp=Z,21nm,1.3s | | | | | | | | |
| **CHLP** | **Challavanipeta** | **69.78** | **292** | *e*P | **P** | | **16** | **50** | **00.1** **-0.5** |
| **RAMN** | **Ramite** | **69.89** | **302** | *e*P | **P** | | **16** | **50** | **00.6** **-0.8** |
| | comp=Z,45nm,1.0s | | | | | | | | |
| **YAK** | **Yakutsk** | **70.05** | **350** | *e*P | **P** | | **16** | **49** | **59.7** **-1.6** |
| YAK | | | | *e**PP | **pP** | | **16** | **50** | **09.7** **+2.4** |
| YAK | | | | *e* | | | 16 | 50 | 25.6 |
| YAK | | | | *e*S | **S** | | **16** | **59** | **07.6** **-3.4** |
| YAK | | | | *e*SS | **SS** | | **17** | **03** | **40.2** **-0.7** |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,33nm,1.2s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=E,8.0nm,1.3s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=N,16nm,1.3s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=Z,119nm,2.5s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=N,15nm,1.4s | | | | | | | | |
| YAK | | | | pmax | pmax | | | | |
| | comp=E,20nm,1.7s | | | | | | | | |
| YAK | | | | smax | smax | | | | |
| | comp=E,139nm,3.5s | | | | | | | | |
| YAK | | | | smax | smax | | | | |
| | comp=N,42nm,2.7s | | | | | | | | |
| YAK | | | | MLR | MLR | | | | |
| | comp=E,691nm,18.0s | | | | | | | | |
| **TLY** | **Talaya** | **70.21** | **331** | *e*P | P | | 16 | 49 | 54.1 -8.5 |
| TLY | | | | *e* | | | 16 | 50 | 25.7 |
| TLY | | | | *e*S | **S** | | **16** | **59** | **13.9** **+0.5** |
| TLY | | | | *e* | | | 16 | 59 | 54.1 |
| TLY | | | | *e*SS | **SS** | | **17** | **03** | **40.1** **-3.8** |
| TLY | | | | pmax | pmax | | | | |
| | comp=Z,13nm,1.5s | | | | | | | | |
| **IRK** | **Irkutsk** | **70.28** | **332** | *e*P | P | | 16 | 50 | 09.7 +6.7 |
| IRK | | | | pmax | pmax | | | | |
| | comp=Z,30nm,1.8s | | | | | | | | |
| **BOD** | **Bodaibo** | **70.40** | **340** | *e*P | **P** | | **16** | **50** | **01.2** **-2.4** |
| BOD | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,1.8s | | | | | | | | |
| **PALK** | **Pallekele** | **70.70** | **280** | *e*P | **P** | | **16** | **50** | **05.5** **-0.9** |
| PALK | | | | pmax | pmax | | | | |
| | comp=Z,57nm,1.1s | | | | | | | | |
| **PALK** | **Pallekele** | **70.70** | **280** | *e*P | **P** | | **16** | **50** | **05.5** **-0.9** |
| | comp=Z,57nm,1.1s | | | | | | | | |
| **GUN** | **Gumba** | **70.80** | **302** | *e*P | **P** | | **16** | **50** | **05.9** **-1.2** |
| **PKI** | **Pulchoki** | **71.09** | **302** | *e*P | **P** | | **16** | **50** | **07.0** **-1.9** |
| | comp=Z,62nm,1.1s | | | | | | | | |
| **PKIN** | **Phulchoki** | **71.10** | **302** | *e*P | **P** | | **16** | **50** | **06.9** **-2.0** |
| | comp=Z,41nm,1.0s | | | | | | | | |
| **KKN** | **Kakani** | **71.27** | **302** | *e*P | **P** | | **16** | **50** | **08.0** **-1.8** |
| | comp=Z,47nm,1.0s | | | | | | | | |
| **VNDA** | **Vanda** | **71.35** | **177** | P | **P** | | **16** | **50** | **08.3** **-0.8** |
| | comp=Z,12nm,0.9s,baz=330,slow=6.5,SNR=14 | | | | | | | | |
| VNDA | | | | LR | LR | | 17 | 20 | 17.1 |
| | comp=Z,3μm,18.0s,baz=356,slow=35 | | | | | | | | |
| **VNDA** | **Vanda** | **71.35** | **177** | *e*P | **P** | | **16** | **50** | **08.1** **-1.0** |
| VNDA | | | | pmax | pmax | | | | |
| | comp=Z,169nm,2.3s | | | | | | | | |
| **VNDA** | **Vanda** | **71.35** | **177** | *e*P | **P** | | **16** | **50** | **08.1** **-1.0** |
| | comp=Z,169nm,2.3s | | | | | | | | |
| **DMN** | **Daman** | **71.36** | **302** | *e*P | **P** | | **16** | **50** | **09.0** **-1.4** |
| | comp=Z,111nm,1.0s | | | | | | | | |
| **MOY** | **Mondy** | **71.49** | **330** | *e*P | **P** | | **16** | **50** | **09.1** **-1.4** |
| MOY | | | | pmax | pmax | | | | |
| | comp=Z,48nm,3.6s | | | | | | | | |
| **MIR** | **Mirnyy** | **71.55** | **201** | ⇑*e*P | P | | 16 | 50 | 19.0 +8.6 |
| MIR | | | | pmax | pmax | | | | |
| | comp=Z,80nm,1.5s | | | | | | | | |
| **PVM** | **Polavaram** | **71.73** | **290** | *e*P | **P** | | **16** | **50** | **12.4** **-0.1** |
| **GKN** | **Gorkha** | **71.87** | **302** | *e*P | **P** | | **16** | **50** | **11.8** **-1.6** |
| | comp=Z,50nm,0.8s | | | | | | | | |
| **SBA** | **Scott Base** | **71.94** | **176** | *e*P | **P** | | **16** | **50** | **12.2** **-0.5** |
| SBA | | | | pmax | pmax | | | | |
| | comp=Z,96nm,1.7s | | | | | | | | |
| SBA | | | | MLR | MLR | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| **SBA** | **Scott Base** | **71.94** | **176** | *e*P | **P** | | **16** | **50** | **12.2** **-0.5** |
| | comp=Z,96nm,1.7s | | | | | | | | |
| SBA | | | | LR | LR | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| **MDRS** | **Chennai** | **72.17** | **286** | *ex* | P | | 16 | 50 | 11.6 -3.5 |
| **KOLN** | **Kolanda** | **72.68** | **302** | *e*P | **P** | | **16** | **50** | **16.0** **-2.3** |
| | comp=Z,49nm,0.9s | | | | | | | | |
| **SKHT** | **Srikalahasti** | **72.81** | **286** | *e*P | **P** | | **16** | **50** | **17.3** **-1.6** |
| **ADKI** | **Addanki** | **72.98** | **289** | *e*P | **P** | | **16** | **50** | **19.9** **-0.1** |
| **RKT** | **Rikitea** | **73.53** | **112** | *e*P | **P** | | **16** | **50** | **23.4** **+0.3** |
| | comp=Z,159nm,1.1s | | | | | | | | |
| RKT | | | | *e*S | **S** | | **16** | **59** | **49.6** **-3.0** |
| | comp=Z,1μm,26.8s | | | | | | | | |
| **RKT** | **Rikitea** | **73.53** | **112** | *e*LQ | LQ | | 17 | 09 | 51.1 |
| | comp=Z,2μm,35.8s | | | | | | | | |
| RKT | | | | *e*LR | LR | | 17 | 13 | 06.6 |
| | comp=Z,3μm,36.0s | | | | | | | | |
| **NJS** | **Nagarjunasagar** | **73.75** | **289** | *e*P | **P** | | **16** | **50** | **23.6** **-0.9** |
| **SRLM** | **Srisailam** | **74.05** | **289** | *e*P | **P** | | **16** | **50** | **25.3** **-1.1** |
| **RPR** | **Rampur** | **74.25** | **292** | *e*P | **P** | | **16** | **50** | **27.5** **+0.1** |
| **HYB** | **Hyderabad** | **74.64** | **290** | *i*P | **P** | | **16** | **50** | **28.0** **-1.7** |
| **HYBB** | **Hyderabad (bro** | **74.64** | **290** | *e*P | **P** | | **16** | **50** | **29.6** **-0.2** |
| **HVS** | **Khovu-Aksy** | **74.98** | **327** | *i*P | **P** | | **16** | **50** | **30.8** **-0.3** |
| HVS | | | | pmax | pmax | | | | |
| | comp=Z,7.0nm,1.1s | | | | | | | | |
| **BILL** | **Bilibino** | **75.12** | **6** | *i*P | **P** | | **16** | **50** | **30.7** **-0.7** |
| BILL | | | | *i* | | | 16 | 50 | 45.0 |
| BILL | | | | *e*S | **S** | | **17** | **00** | **10.3** **+1.6** |
| BILL | | | | *e*SS | **SS** | | **17** | **05** | **02.7** **+4.5** |
| BILL | | | | pmax | pmax | | | | |
| | comp=Z,13nm,0.7s | | | | | | | | |
| BILL | | | | MLR | MLR | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **SRSP** | **Sriramsagar** | **75.14** | **291** | *e*P | **P** | | **16** | **50** | **31.4** **-1.2** |
| **WMQ** | **Urumqi** | **75.22** | **318** | P | P | | 16 | 50 | 36.0 +3.4 |
| WMQ | | | | PP | PP | | 16 | 53 | 31.0 +10 |
| WMQ | | | | S | S | | 17 | 00 | 17.0 +6.1 |
| **WMQ** | **Urumqi** | **75.22** | **318** | SS | SS | | 17 | 05 | 10.0 +9.1 |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,24nm,1.0s | | | | | | | | |
| WMQ | | | | pmax | pmax | | | | |
| | comp=Z,370nm,8.0s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=N,2μm,22.0s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=E,990nm,20.0s | | | | | | | | |
| WMQ | | | | LR | LR | | | | |
| | comp=Z,910nm,20.0s | | | | | | | | |
| **WMQ** | **Urumqi** | **75.22** | **318** | P | **P** | | **16** | **50** | **31.8** **-0.8** |
| WMQ | | | | PMZ | | | | | |
| | comp=Z,12nm,1.0s | | | | | | | | |
| **URV** | **Uravakonda** | **75.37** | **287** | *e*P | **P** | | **16** | **50** | **34.7** **+0.7** |
| **KLRI** | **Killari** | **76.59** | **290** | *e*P | **P** | | **16** | **50** | **38.9** **-2.0** |
| **DGAR** | **Diego Garcia** | **77.15** | **264** | *e*P | **P** | | **16** | **50** | **43.3** **-0.8** |
| **DGAR** | **Diego Garcia** | **77.15** | **264** | PFAKE | | | 16 | 51 | 00.0 +16 |
| DGAR | | | | LR | LR | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **PTCN** | **Pitcairn Islan** | **77.96** | **114** | PFAKE | | | 16 | 51 | 00.0 +12 |
| PTCN | | | | LR | LR | | | | |
| | comp=Z,1μm,19.0s | | | | | | | | |
| **KDAK** | **Kodiak Island** | **78.73** | **27** | PFAKE | | | 16 | 51 | 00.0 +8.0 |
| KDAK | | | | LR | LR | | | | |
| | comp=Z,2μm,19.0s | | | | | | | | |
| **POO** | **Poona** | **79.24** | **290** | *e*P | P | | 16 | 50 | 52.0 -3.7 |
| **SVW2** | **Sparrevohn** | **79.28** | **24** | *e*P | **P** | | **16** | **50** | **57.1** **+2.2** |
| | comp=Z,18nm,1.0s | | | | | | | | |
| **MK01** | **Makanchi Array** | **79.86** | **320** | *e*P | **P** | | **16** | **50** | **57.8** **-0.7** |
| MK01 | | | | *e*PKKPbc | PKKPbc | | 17 | 09 | 54.0 +7.4 |
| **MKAR** | **Makanchi Array** | **79.87** | **320** | P | **P** | | **16** | **50** | **56.0** **-2.6** |
| | comp=Z,1.0nm,0.5s,baz=96,slow=7.2,SNR=12 | | | | | | | | |
| MKAR | | | | PKKPbc | **PKKPbc** | | **17** | **09** | **49.0** **+2.4** |
| | comp=Z,0.9nm,0.9s,baz=351,slow=1.6,SNR=3.5 | | | | | | | | |
| MKAR | | | | PKPPKP | P'P'df | | 17 | 17 | 54.0 +6.3 |
| | comp=Z,0.2nm,0.4s,baz=321,slow=9.4,SNR=4.1 | | | | | | | | |
| **MKAR** | **Makanchi Array** | **79.87** | **320** | *e*P | **P** | | **16** | **50** | **58.7** **+0.2** |
| MKAR | | | | pmax | pmax | | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | | |
| **MKAR** | **Makanchi Array** | **79.87** | **320** | *e*P | **P** | | **16** | **50** | **59.0** **+0.5** |
| MKAR | | | | PKKPbc | **PKKPbc** | | **17** | **09** | **49.0** **+2.4** |
| MKAR | | | | P'P' | P'P'df | | 17 | 17 | 54.0 +6.3 |
| **MAKZ** | **Makanchi** | **80.08** | **320** | *e*P | **P** | | **16** | **51** | **02.0** **+2.3** |
| **ZAA0** | **Zalesovo Array** | **81.08** | **327** | *e*P | P | | 16 | 51 | 01.3 -3.5 |
| ZAA0 | | | | *e*PKKPbc | **PKKPbc** | | **17** | **09** | **42.8** **-1.3** |
| **ZALV** | **Zalesovo Beam** | **81.08** | **327** | P | **P** | | **16** | **51** | **02.0** **-2.8** |
| | comp=Z,4.4nm,0.6s,baz=110,slow=4.8,SNR=13 | | | | | | | | |
| ZALV | | | | PKKPbc | **PKKPbc** | | **17** | **09** | **42.6** **-1.5** |
| | comp=Z,0.6nm,0.5s,baz=346,slow=3.1,SNR=4.4 | | | | | | | | |
| ZALV | | | | PKPPKP | **P'P'df** | | **17** | **17** | **48.9** **+4.0** |
| | comp=Z,0.3nm,0.3s,baz=263,slow=3.7,SNR=3.7 | | | | | | | | |
| ZALV | | | | LR | LR | | 17 | 27 | 08.6 |
| | comp=Z,2μm,19.3s,baz=77,slow=36 | | | | | | | | |
| **KSH** | **Kashi** | **82.06** | **311** | P | **P** | | **16** | **51** | **12.8** **+2.3** |
| KSH | | | | *e*sP | **sP** | | **16** | **51** | **19.5** **+0.8** |
| KSH | | | | *e*PP | PP | | 16 | 54 | 25.5 +6.9 |
| KSH | | | | S | **S** | | **17** | **01** | **26.3** **+1.8** |
| KSH | | | | SS | SS | | 17 | 06 | 54.8 +11 |
| KSH | | | | PMZ | | | | | |
| | comp=Z,640nm,7.6s | | | | | | | | |
| KSH | | | | LN | | | | | |
| | comp=Z,550nm,13.4s | | | | | | | | |
| KSH | | | | LE | | | | | |
| | comp=Z,670nm,13.4s | | | | | | | | |
| KSH | | | | LZ | | | | | |
| | comp=Z,870nm,17.8s | | | | | | | | |
| **PMR** | **Palmer** | **82.18** | **25** | *e*P | **P** | | **16** | **51** | **10.2** **-0.2** |
| PMR | | | | pmax | pmax | | | | |
| | comp=Z,10.0nm,0.8s | | | | | | | | |
| **PMR** | **Palmer** | **82.18** | **25** | *e*P | **P** | | **16** | **51** | **10.2** **-0.2** |
| | comp=Z,9.7nm,0.8s | | | | | | | | |
| **NVS** | **Novosibirsk** | **82.29** | **327** | ⇓*i*P | **P** | | **16** | **51** | **11.0** **-0.1** |
| NVS | | | | *e*S | **S** | | **17** | **01** | **26.0** **+0.2** |
| NVS | | | | pmax | pmax | | | | |
| | comp=N,30nm,2.6s | | | | | | | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=E,48nm,2.6s | | | | | | | | |
| NVS | | | | pmax | pmax | | | | |
| | comp=Z,77nm,2.6s | | | | | | | | |
| NVS | | | | smax | smax | | | | |
| | comp=N,92nm,2.6s | | | | | | | | |
| NVS | | | | smax | smax | | | | |
| | comp=E,29nm,2.6s | | | | | | | | |
| **KTH** | **Kantishna Hill** | **82.44** | **23** | *e*P | **P** | | **16** | **51** | **08.9** **-3.0** |
| | comp=E,22nm,1.0s | | | | | | | | |
| **SML** | **Sawmill** | **82.61** | **25** | *e*P | **P** | | **16** | **51** | **10.6** **-2.1** |
| SML | | | | pmax | pmax | | | | |
| | comp=Z,33nm,0.9s | | | | | | | | |
| **SML** | **Sawmill** | **82.61** | **25** | *e*P | **P** | | **16** | **51** | **10.6** **-2.1** |
| | comp=Z,33nm,0.9s | | | | | | | | |
| **TRF** | **Thorofare Moun** | **82.64** | **23** | P | P | | 16 | 51 | 09.6 -3.4 |
| | comp=Z,25nm,1.2s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.05** | **25** | *e*P | **P** | | **16** | **51** | **17.3** **+2.3** |
| SCM | | | | pmax | pmax | | | | |
| | comp=Z,41nm,1.2s | | | | | | | | |
| **SCM** | **Sheep Creek Mo** | **83.05** | **25** | *e*P | **P** | | **16** | **51** | **17.3** **+2.3** |
| | comp=Z,41nm,1.2s | | | | | | | | |
| **MAW** | **Mawson** | **83.14** | **203** | P | **P** | | **16** | **51** | **14.2** **-1.1** |
| | comp=Z,7.9nm,1.1s,baz=98,slow=8.7,SNR=15 | | | | | | | | |
| MAW | | | | PKKPbc | **PKKPbc** | | **17** | **09** | **37.6** **-1.7** |
| | comp=Z,0.5nm,0.4s,baz=86,slow=2.4,SNR=4.2 | | | | | | | | |
| MAW | | | | PKPPKP | **P'P'df** | | **17** | **17** | **42.8** **-0.4** |
| | comp=Z,1.7nm,0.9s,baz=51,slow=5.6,SNR=3.8 | | | | | | | | |
| MAW | | | | LR | LR | | 17 | 27 | 34.0 |
| | comp=Z,2μm,18.8s,baz=72,slow=35 | | | | | | | | |
| **MAW** | **Mawson** | **83.14** | **203** | P | **P** | | **16** | **51** | **13.8** **-1.6** |
| | baz=83,SNR=8.6 | | | | | | | | |
| **MAW** | **Mawson** | **83.14** | **203** | P | **P** | | **16** | **51** | **14.2** **-1.1** |
| MAW | | | | *e*PKKPbc | **PKKPbc** | | **17** | **09** | **38.4** **-0.9** |
| MAW | | | | P'P' | **P'P'df** | | **17** | **17** | **42.8** **-0.4** |
| **RND** | **Reindeer** | **83.17** | **23** | *e*P | **P** | | **16** | **51** | **14.6** **-1.1** |
| RND | | | | pmax | pmax | | | | |
| | comp=Z,45nm,1.1s | | | | | | | | |
| **RND** | **Reindeer** | **83.17** | **23** | *e*P | **P** | | **16** | **51** | **14.6** **-1.1** |
| | comp=Z,45nm,1.1s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **83.22** | **314** | P | **P** | | **16** | **51** | **16.9** **+0.4** |
| TKM2 | | | | pmax | pmax | | | | |
| | comp=Z,9.0nm,0.8s | | | | | | | | |
| TKM2 | | | | MLR | MLR | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **TKM2** | **Tokmak 2** | **83.22** | **314** | P | **P** | | **16** | **51** | **16.9** **+0.4** |
| | comp=Z,8.6nm,0.8s | | | | | | | | |
| TKM2 | | | | LR | LR | | | | |
| | comp=Z,1μm,20.0s | | | | | | | | |
| **KZA** | **Kyzart** | **83.25** | **314** | P | **P** | | **16** | **51** | **19.0** **+2.0** |
| | SNR=5.2 | | | | | | | | |
| **MLY** | **Manley** | **83.27** | **21** | *e*P | **P** | | **16** | **51** | **14.6** **-1.6** |
| | comp=Z,31nm,1.2s | | | | | | | | |
| **MCK** | **McKinley** | **83.30** | **23** | *e*P | **P** | | **16** | **51** | **13.3** **-2.9** |
| MCK | | | | pmax | pmax | | | | |
| | comp=Z,48nm,0.9s | | | | | | | | |
| **MCK** | **McKinley** | **83.30** | **23** | *e*P | **P** | | **16** | **51** | **13.3** **-2.9** |
| | comp=Z,48nm,0.9s | | | | | | | | |
| **BWN** | **Browne** | **83.31** | **23** | *e*P | **P** | | **16** | **51** | **15.8** **-0.5** |
| | comp=Z,163nm,1.6s | | | | | | | | |
| **DIV** | **Divide** | **83.40** | **26** | *e*PcP | **PcP** | | **16** | **51** | **22.7** **+1.5** |
| **KURK** | **Kurchatov** | **83.47** | **323** | P | **P** | | **16** | **51** | **14.6** **-2.8** |
| | comp=Z,91nm,0.8s,SNR=7.0 | | | | | | | | |
| **KLU** | **Klutina** | **83.49** | **26** | *e*P | **P** | | **16** | **51** | **17.4** **+0.1** |
| | comp=Z,25nm,0.9s | | | | | | | | |
| **RAGM** | **Ragged Mountai** | **83.56** | **27** | *e*P | **P** | | **16** | **51** | **17.4** **-0.4** |
| | comp=Z,100nm,0.6s | | | | | | | | |
| **QSPA** | **South Pole Qui** | **83.58** | **180** | PFAKE | | | 16 | 51 | 30.0 +12 |
| QSPA | | | | LR | LR | | | | |
| | comp=Z,2μm,20.0s | | | | | | | | |
| **KBK** | **Karagaybulak** | **83.61** | **314** | P | **P** | | **16** | **51** | **19.6** **+1.1** |
| | SNR=5.4 | | | | | | | | |
| **UCH** | **Uchtor** | **83.82** | **314** | P | **P** | | **16** | **51** | **20.8** **+0.9** |
| | SNR=16 | | | | | | | | |
| **BMRM** | **Bremner River** | **83.84** | **26** | *e*P | **P** | | **16** | **51** | **17.0** **-2.1** |
| | comp=Z,53nm,1.4s | | | | | | | | |
| **FRU** | **Bishkek** | **83.89** | **314** | *e*P | P | | 16 | 51 | 23.0 +3.2 |
| FRU | | | | *e*S | **S** | | **17** |

**ILAR Eielson Array 84.58 23** P P 16 51 18.8 -3.9
comp=Z,13nm,0.8s,baz=250,slow=5.1,SNR=26
ILAR PKPPKP P'P'df 17 17 46.8 +8.9
comp=Z,1.2nm,1.1s,baz=27,slow=2.1,SNR=4.4
ILAR LR LR 17 25 48.8
comp=Z,2μm,19.9s,baz=259,slow=33
**COLD Coldfoot 84.59 20** *e*P **P 16 51 21.8 -0.9**
comp=Z,23nm,1.3s
**MENT Mentasta 85.05 25** *e*P **P 16 51 22.7 -2.5**
**DOT Dot Lake 85.20 24** *e*P **P 16 51 23.2 -2.7**
comp=Z,77nm,1.2s
**EGAK Eagle 86.81 24** *e*P **P 16 51 32.7 -1.1**
comp=Z,31nm,1.0s
EGAK LR LR
comp=Z,3μm,20.0s
**KKAR Karatay Array 86.89 314** *e*P **P 16 51 32.1 -2.6**
KKAR pmax pmax
comp=Z,10.0nm,0.8s
**KKAR Karatay Array 86.89 314** *e*P **P 16 51 32.1 -2.6**
comp=Z,10.0nm,0.8s
**DAWY Dawson 87.27 24** *e*P **P 16 51 35.3 -0.9**
comp=Z,34nm,1.1s
**WRAK Wrangell Islan 88.36 33** PFAKE 16 51 50.0 +8.6
WRAK LR LR
comp=Z,4μm,22.0s
**BRVK Borovoye 89.07 324** *i* P **P 16 51 45.4 +0.5**
BRVK pmax pmax
comp=Z,14nm,1.7s
**BRVK Borovoye 89.07 324** PFAKE 16 52 00.0 +15
BRVK LR LR
comp=Z,1μm,21.0s
**MRIV Mauritius Mete 90.39 250** *e*P **P 16 51 54.8 +3.0**
**KCPM Cahto Peak 91.09 50** *e*P **P 16 51 55.9 +1.1**
**L02D Cave Junction, 91.39 48** P **P 16 51 56.6 +0.6**
baz=92
**HOPS Hopland 91.39 51** *e*P P 16 52 00.3 +4.3
comp=Z,56nm,1.4s
**NSHM Saint Helena R 91.70 52** *e*P **P 16 52 00.0 +2.5**
**I03D Drain, OR 91.77 46** P **P 16 51 58.9 +1.3**
baz=92
**M02C Callahan 91.85 49** P **P 16 51 58.9 +0.7**
baz=92,SNR=11
**NLWA Neilton Lookou 91.87 43** PFAKE 16 52 10.0 +12
NLWA LR LR
comp=Z,3μm,19.0s
**N02D Trinity Center 91.91 49** P **P 16 51 59.1 +0.6**
baz=92,SNR=7.5
**WDC Whiskeytown Da 91.99 50** *e*P **P 16 51 58.9 +0.1**
WDC pmax pmax
comp=Z,36nm,1.4s
**WDC Whiskeytown Da 91.99 50** *e*P **P 16 51 58.9 +0.1**
comp=Z,36nm,1.4s
**YBH Yreka Blue Hor 92.00 48** P **P 16 51 58.3 -0.6**
comp=Z,11nm,1.0s,baz=261,slow=0.6,SNR=14
**YBH Yreka Blue Hor 92.00 48** *e*P **P 16 51 58.5 -0.4**
YBH pmax pmax
comp=Z,37nm,1.3s
**YBH Yreka Blue Hor 92.00 48** *e*P **P 16 51 58.5 -0.4**
comp=Z,37nm,1.3s
**SAO San Andreas Ge 92.42 53** *e*P **P 16 52 03.6 +2.7**
SAO pmax pmax
comp=Z,22nm,1.3s
**SAO San Andreas Ge 92.42 53** *e*P **P 16 52 03.6 +2.7**
comp=Z,22nm,1.3s
**O03D Paynes Creek 92.52 50** P **P 16 52 01.5 +0.2**
baz=93,SNR=11
**J04D Umpqua Nationa 92.61 47** P **P 16 52 01.9 +0.1**
baz=93,SNR=5.9
**M04C Macdoel 92.65 48** P **P 16 52 02.4 +0.4**
baz=93,SNR=8.9
**OHCM Honcut 92.66 51** *e*P **P 16 52 01.8 -0.1**
**H04A Detroit Lake 92.71 46** *e*P **P 16 52 04.5 +2.4**
comp=Z,66nm,1.6s
**LRV Little Rabbit 92.72 54** *e*P **P 16 52 05.2 +2.9**
**B05A Bryant 93.15 42** P **P 16 52 04.7 +0.8**
baz=93
**J05D Fort Rock, OR 93.25 47** P **P 16 52 04.7 0.0**
baz=93,SNR=12
**I05D Terrebonne, OR 93.28 46** P **P 16 52 05.0 +0.2**
baz=93
**G05D Wamic, OR 93.38 45** P **P 16 52 05.6 +0.5**
baz=94
**CMB Columbia Colle 93.39 52** *e*P **P 16 52 04.4 -1.0**
CMB pmax pmax
comp=Z,38nm,1.3s
**CMB Columbia Colle 93.39 52** *e*P **P 16 52 04.4 -1.0**
comp=Z,38nm,1.3s
**SMMC Simmler 93.44 55** P **P 16 52 06.4 +0.7**
baz=94,SNR=7.6
**PKM Peak Mountain 93.55 55** P **P 16 52 06.8 +0.4**
baz=94,SNR=30
**BSC Santa Cruz Isl 93.62 56** P **P 16 52 07.0 +0.5**
baz=94
**SNCC San Nicolas Is 93.64 57** P **P 16 52 07.2 +0.6**
baz=94
**MOD Modoc 93.80 48** *e*P **P 16 52 07.0 -0.4**
comp=Z,36nm,1.3s
**BLG Laguna Peak 94.10 56** P **P 16 52 09.3 +0.6**
baz=94
**MSEY Mahe Island 94.22 265** PFAKE 16 52 20.0 +10
MSEY LR LR
comp=Z,789nm,20.0s
**VES Vestal, Richgr 94.23 55** P **P 16 52 09.4 +0.2**
baz=94,SNR=8.5
**ARVC Arvin 94.38 55** P **P 16 52 10.2 +0.3**
baz=94
**OSI Osito Adit 94.42 56** P **P 16 52 10.5 +0.3**
baz=94
**OSI Osito Adit 94.42 56** *e*P **P 16 52 11.5 +1.3**
comp=Z,100nm,1.4s
**SCI San Clemente I 94.44 57** P **P 16 52 10.3 0.0**
baz=94
**E07A Sunnyside 94.51 44** *e*P **P 16 52 12.8 +2.4**
comp=Z,75nm,2.0s
**I07A Izee 94.57 46** *e*P **P 16 52 11.1 +0.4**
comp=Z,31nm,1.4s
**CIS Catalina Islan 94.59 57** P **P 16 52 11.4 +0.4**
baz=95,SNR=10
**WASM Alta Sierra Ca 94.65 55** *e*P **P 16 52 08.7 -2.7**
**ISA Isabella 94.71 55** *e*P **P 16 52 10.9 -0.6**
ISA pmax pmax
comp=Z,65nm,1.4s
**ISA Isabella 94.71 55** P **P 16 52 11.9 +0.4**
baz=95,SNR=20
**ISA Isabella 94.71 55** *e*P **P 16 52 10.9 -0.6**
comp=Z,65nm,1.4s
**DECC Green Verdugo 94.72 56** P **P 16 52 12.1 +0.5**
baz=95
**HAWA Hanford 94.72 44** *e*P **P 16 52 13.5 +2.2**
comp=Z,9.8nm,0.9s
HAWA LR LR
comp=Z,3μm,20.0s
**MTUM Tungsten Hills 94.77 53** *e*P **P 16 52 11.7 -0.2**
**PASC Pasadena Art C 94.83 56** *e*P **P 16 52 12.6 +0.5**
comp=Z,103nm,1.1s
**MWC Mount Wilson 94.94 56** *e*P **P 16 52 12.6 -0.2**
MWC pmax pmax
comp=Z,105nm,1.0s
**MWC Mount Wilson 94.94 56** *e*P **P 16 52 12.6 -0.2**
comp=Z,105nm,1.0s
**ABKAR Akbulak array 95.00 319** P **P 16 52 09.4 -3.0**
**B08A Colville Reser 95.00 42** *e*P P 16 52 15.9 +3.4
comp=Z,14nm,1.1s
**TIN Tinemaha 95.01 53** P **P 16 52 13.3 +0.4**
baz=95
**G08A Pilot Rock 95.04 45** *e*P **P 16 52 12.6 -0.3**
comp=Z,14nm,1.1s
**EDW2 Edwards Air Fo 95.05 56** P **P 16 52 13.1 +0.1**
baz=95,SNR=31
**NV01 Mina Array Sit 95.05 52** *e*P **P 16 52 12.3 -1.0**
**NVAR Mina Array Bea 95.05 52** P **P 16 52 12.8 -0.4**
comp=Z,15nm,0.8s,baz=253,slow=6.7,SNR=66
NVAR PKPPKP P'P'df 17 17 32.4 +12
comp=Z,0.2nm,0.4s,baz=0.0,slow=0.3,SNR=4.0
NVAR LR LR 17 31 10.2
comp=Z,5μm,18.4s,baz=273,slow=33
**WVOR Wild Horse Val 95.08 48** P **P 16 52 11.8 -1.3**
WVOR pmax pmax
comp=Z,45nm,1.5s
WVOR MLR MLR
comp=Z,3μm,19.0s
**WVOR Wild Horse Val 95.08 48** P **P 16 52 11.8 -1.3**
comp=Z,45nm,1.5s
WVOR LR LR
comp=Z,3μm,19.0s
**J08A Circle Bar Ran 95.26 47** *e*P **P 16 52 14.8 +0.9**
comp=Z,20nm,1.3s

**BFSC Mount Baldy Ra 95.27 56** P **P 16 52 14.3 +0.1**
baz=95,SNR=18
**LRMC Laurel Mountai 95.33 55** P **P 16 52 14.4 -0.1**
baz=96,SNR=54
**DAC Darwin (Calif) 95.47 54** *e*P **P 16 52 14.5 -0.6**
DAC pmax pmax
comp=Z,90nm,1.4s
**DAC Darwin (Calif) 95.47 54** *e*P **P 16 52 14.5 -0.6**
comp=Z,90nm,1.4s
**MPMC Manual Prospec 95.54 54** P **P 16 52 15.7 +0.2**
baz=96,SNR=36
**GEYT Alibeck 95.57 307** P **P 16 52 13.7 -1.7**
comp=Z,4.8nm,1.0s,baz=18,slow=2.3,SNR=8.4
GEYT LR LR 17 36 02.1
comp=Z,698nm,22.0s,baz=80,slow=36
**MURC Murrieta 95.61 57** P **P 16 52 15.7 +0.1**
baz=96
**109C Camp Elliot, M 95.64 58** P **P 16 52 16.2 +0.4**
baz=96,SNR=9.4
**GRAC Grapevine Rang 95.69 54** P **P 16 52 16.5 +0.5**
baz=96,SNR=6.3
**BBRC Big Bear Solar 95.88 56** P **P 16 52 17.2 0.0**
baz=96
**BAR Barrett 95.99 58** *e*P **P 16 52 16.6 -0.8**
comp=Z,25nm,1.0s
**BMN Battle Mountai 96.02 50** *e*P **P 16 52 18.0 +0.5**
BMN pmax pmax
comp=Z,15nm,1.1s
**BMN Battle Mountai 96.02 50** *e*P **P 16 52 18.0 +0.5**
comp=Z,15nm,1.1s
**GSC Goldstone 96.04 55** *e*P **P 16 52 17.0 -0.7**
GSC pmax pmax
comp=Z,34nm,1.1s
**GSC Goldstone 96.04 55** P **P 16 52 18.3 +0.6**
baz=96,SNR=18
**GSC Goldstone 96.04 55** *e*P **P 16 52 17.0 -0.7**
comp=Z,34nm,1.1s
**FURC Furnace Creek, 96.07 54** P **P 16 52 17.8 +0.2**
baz=96,SNR=15
**BMO Blue Mountains 96.19 46** *e*P **P 16 52 17.4 -0.7**
BMO pmax pmax
comp=Z,42nm,1.6s
**BMO Blue Mountains 96.19 46** *e*P **P 16 52 17.4 -0.7**
comp=Z,42nm,1.6s
**PFO Pinyon Flat Ob 96.23 57** P **P 16 52 18.8 +0.2**
comp=Z,20nm,1.0s,baz=268,slow=3.4,SNR=17
**PFO Pinyon Flat Ob 96.23 57** *e*P **P 16 52 18.6 0.0**
PFO pmax pmax
comp=Z,33nm,1.0s
PFO MLR MLR
comp=Z,4μm,20.0s
**PFO Pinyon Flat Ob 96.23 57** P **P 16 52 18.5 0.0**
comp=Z,168nm,1.0s,SNR=14
**PFO Pinyon Flat Ob 96.23 57** P **P 16 52 18.2 -0.4**
comp=Z,168nm,1.0s,SNR=14
**PFO Pinyon Flat Ob 96.23 57** P **P 16 52 19.2 +0.6**
baz=96,SNR=18
**PFO Pinyon Flat Ob 96.23 57** *e*P **P 16 52 18.6 0.0**
comp=Z,33nm,1.0s
PFO LR LR
comp=Z,4μm,20.0s
**F10A Beach Ranch, E 96.30 45** *e*P **P 16 52 18.6 0.0**
comp=Z,16nm,1.1s
**HEC Hector,Ludlow 96.41 56** P **P 16 52 19.6 +0.3**
baz=96,SNR=12
**NEW Newport 96.47 42** P **P 16 52 18.7 -0.5**
comp=Z,1.6nm,0.7s,baz=231,slow=2.0,SNR=4.8
**NEW Newport 96.47 42** *e*P **P 16 52 19.3 +0.1**
NEW pmax pmax
comp=Z,68nm,2.2s
NEW MLR MLR
comp=Z,3μm,20.0s
**NEW Newport 96.47 42** P **P 16 52 19.6 +0.4**
baz=97
**NEW Newport 96.47 42** *e*P **P 16 52 19.3 +0.1**
comp=Z,68nm,2.2s
NEW LR LR
comp=Z,3μm,20.0s
**IBP Imperial Bould 96.47 58** P **P 16 52 19.9 +0.3**
baz=97
**SHOC Shoshone 96.51 55** P **P 16 52 20.1 +0.4**
baz=97,SNR=8.4
**TPNV Topopah Spring 96.59 54** *e*P **P 16 52 19.8 -0.4**
TPNV pmax pmax
comp=Z,25nm,1.1s
**TPNV Topopah Spring 96.59 54** P **P 16 52 19.9 -0.4**
baz=97,SNR=22
**TPNV Topopah Spring 96.59 54** *e*P **P 16 52 19.8 -0.4**
comp=Z,25nm,1.1s
**BELC Belle Mtn. Jos 96.63 57** P **P 16 52 20.4 0.0**
baz=97,SNR=19
**SWSC Sam W. Stewart 96.74 58** P **P 16 52 20.8 +0.1**
baz=97
**TUQ Turquoise Moun 96.77 55** P **P 16 52 21.2 +0.2**
baz=97,SNR=21
**GMRC Granite Mounta 96.95 56** P **P 16 52 21.7 -0.1**
baz=97,SNR=21
**BC3 Big Chuckawall 97.07 57** P Pdif 16 52 22.6 +0.1
baz=97,SNR=24
**R11A Troy Canyon, C 97.18 52** P Pdif 16 52 23.1 +0.1
baz=97,SNR=21
**R11A Troy Canyon, C 97.18 52** *e*P Pdif 16 52 23.0 0.0
comp=Z,16nm,1.1s
**MFID Canas Ranch 97.19 47** *e*P Pdif 16 52 26.5 +3.7
comp=Z,23nm,1.5s
**IRM Iron Mountain 97.34 56** P Pdif 16 52 23.8 +0.2
baz=98,SNR=25
**SHPR Sheep Range 97.44 54** *e*P **P 16 52 23.8 -0.2**
**ELK Elko 97.54 50** P **P 16 52 24.1 -0.4**
comp=Z,5.2nm,0.9s,baz=44,slow=3.2,SNR=11
**GLA Glamis 97.56 58** P Pdif 16 52 25.0 +0.4
GLA pmax pmax
comp=Z,44nm,1.3s
**GLA Glamis 97.56 58** P **P 16 52 24.4 -0.1**
baz=98
**GLA Glamis 97.56 58** P Pdif 16 52 25.0 +0.4
comp=Z,44nm,1.3s
**Y12C Blythe 97.84 57** P Pdif 16 52 25.8 +0.1
baz=98
**YKA Yellowknife Ar 98.01 28** P Pdif 16 52 26.4 +0.7
comp=Z,1.9nm,0.7s,baz=271,slow=4.8,SNR=4.1
**BSMT Basson Peak 98.02 43** P Pdif 16 52 27.0 +0.5
comp=Z,3.1nm,0.7s
**NVL N'lazarevskaya 98.17 193** *e*P P 16 52 17.1 -9.3
NVL *e**PP Pdif 16 52 29.4 +3.0
NVL *e* 16 56 37.3
NVL *e*PS **PS 17 05 21.1 +2.5**
NVL pmax pmax
comp=Z,3.0nm,0.3s
NVL MLR MLR
comp=Z,4μm,17.0s
**PDMCI Parker Dam,Lak 98.19 56** P Pdif 16 52 27.5 +0.3
baz=98,SNR=8.5
**HLID Hailey 98.22 47** P Pdif 16 52 27.6 +0.1
baz=98
**HLID Hailey 98.22 47** *e*P **P 16 52 27.0 -0.5**
comp=Z,16nm,1.3s
HLID LR LR
comp=Z,3μm,19.0s
**CCUT Cedar City 98.91 53** *e*P Pdif 16 52 31.4 +0.7
comp=Z,16nm,1.2s
**214A Organ Pipe Nat 99.22 59** P **Pdif 16 52 32.0 +0.1**
baz=99
**DUG Dugway 99.38 50** *e*P **Pdif 16 52 35.0 +2.4**
DUG pmax pmax
comp=Z,21nm,1.5s
DUG MLR MLR
comp=Z,2μm,20.0s
**DUG Dugway 99.38 50** P **Pdif 16 52 32.7 0.0**
baz=100
**DUG Dugway 99.38 50** *e*P **Pdif 16 52 35.0 +2.4**
comp=Z,21nm,1.5s
DUG LR LR
comp=Z,2μm,20.0s
**SPUT South Promonto 99.66 49** *e*Pdif **Pdif 16 52 34.7 +0.8**
comp=Z,10nm,1.1s
**MSU Marysvale 99.86 52** *e*P **Pdif 16 52 35.6 +0.7**
**MSU Marysvale 99.86 52** *e*Pdif **Pdif 16 52 35.6 +0.7**
**NLU North Lily Min 99.94 51** *e*Pdif **Pdif 16 52 36.5 +1.3**
**SNAA Sanae 100.11 188** P **Pdif 16 52 34.5 -0.7**
**SNAA Sanae 100.11 188** *e*P **Pdif 16 52 34.4 -0.7**
SNAA *e 16 56 43.0
SNAA pmax pmax
comp=Z,4.0nm,1.1s
**SNAA Sanae 100.11 188** *e*Pdif **Pdif 16 52 34.4 -0.7**
comp=Z,3.8nm,1.1s
SNAA *ePP **PP 16 56 43.0 +3.0**

**ABPO Ambohimpanom 100.15 249** PFAKE 16 52 50.0 +13
ABPO LR LR
comp=Z,447nm,19.0s
**BOZ Bozeman (W) 100.21 45** P **Pdif 16 52 36.2 0.0**
baz=100
**BOZ Bozeman (W) 100.21 45** PFAKE 16 52 50.0 +14
BOZ LR LR
comp=Z,2μm,20.0s
**HWUT Hardware Ranch 100.32 49** *e*Pdif **Pdif 16 52 37.8 +0.9**
HWUT LR LR
comp=Z,2μm,20.0s
**O16A Springville 100.38 50** *e*Pdif **Pdif 16 52 40.4 +3.2**
**WUAZ Wupatki 100.48 55** P **Pdif 16 52 37.6 -0.1**
baz=101
**WUAZ Wupatki 100.48 55** *e*Pdif **Pdif 16 52 37.3 -0.4**
WUAZ LR LR
comp=Z,2μm,20.0s
**TMUT Trail Mountain 100.61 51** *e*Pdif **Pdif 16 52 38.6 +0.2**
comp=Z,27nm,0.9s
**AHID Auburn Hatcher 100.65 48** PFAKE 16 52 50.0 +12
AHID LR LR
comp=Z,3μm,20.0s
**FXWY Fox Creek 100.68 47** *e*PP PP 16 56 48.3 +2.4
**TPAW Teton Pass 100.74 47** *e*Pdif **Pdif 16 52 40.4 +1.6**
**TUC Tucson 100.94 58** *e*P **Pdif 16 52 40.6 +0.9**
TUC MLR MLR
comp=Z,2μm,19.0s
**TUC Tucson 100.94 58** *e*Pdif **Pdif 16 52 40.6 +0.9**
TUC LR LR
comp=Z,2μm,19.0s
**H17A Grant Village 100.99 46** P **Pdif 16 52 39.5 -0.4**
baz=101
**LKWY Lake 101.11 46** PFAKE 16 52 50.0 +10
LKWY LR LR
comp=Z,3μm,19.0s
**EGMT Eagleton 101.40 42** PFAKE 16 52 50.0 +8.6
EGMT LR LR
comp=Z,3μm,20.0s
**BW06 Boulder Array 101.78 48** *e*Pdif **Pdif 16 52 44.0 +0.6**
BW06 LR LR
comp=Z,4μm,20.0s
**RLMT Red Lodge 101.89 45** PFAKE 16 53 00.0 +16
RLMT LR LR
comp=Z,1μm,19.0s
**PV05 Paradox Valley 102.29 53** *e*Pdif **Pdif 16 52 51.7 +6.0**
**PV01 Paradox Valley 102.70 52** *e*Pdif **Pdif 16 52 48.2 +0.7**
comp=Z,643nm,1.0s
**MVCO Mesa Verde 102.79 53** P **Pdif 16 52 47.6 -0.4**
baz=103
**MVCO Mesa Verde 102.79 53** *e*Pdif **Pdif 16 52 50.4 +2.4**
MVCO LR LR
comp=Z,3μm,20.0s
**O20A White River Ci 102.88 50** P **Pdif 16 52 48.0 -0.3**
baz=103
**O20A White River Ci 102.88 50** *e*Pdif **Pdif 16 52 51.2 +2.9**
**121A Cookes Peak, D 103.48 58** P **Pdif 16 52 50.7 -0.4**
baz=104
**121A Cookes Peak, D 103.48 58** Pdif **Pdif 16 52 51.8 +0.6**
comp=Z,9.3nm,1.0s
**LAO LASA Array 103.90 44** P **Pdif 16 52 52.2 -0.2**
baz=104
**LAO LASA Array 103.90 44** PFAKE 16 53 00.0 +7.5
LAO LR LR
comp=Z,2μm,19.0s
**K22A Casper 104.02 48** P **Pdif 16 52 53.1 -0.1**
baz=104
**ANMO Albuquerque 104.52 56** *e*P **Pdif 16 52 58.2 +2.5**
ANMO MLR MLR
comp=Z,2μm,19.0s
**ANMO Albuquerque 104.52 56** *e*Pdif **Pdif 16 52 58.2 +2.5**
ANMO LR LR
comp=Z,2μm,19.0s
**N23A Red Feather La 104.59 50** P **Pdif 16 52 55.3 -0.6**
baz=105
**KBS Kingsbay 104.60 352** PFAKE 16 53 10.0 +15
KBS LR LR
comp=Z,1μm,22.0s
**ISCO Idaho Springs 104.92 51** PFAKE 16 53 10.0 +12
ISCO LR LR
comp=Z,2μm,19.0s
**PHWY Pilot Hill 104.92 49** *e*PKiKP **PKiKP 16 57 11.5 -1.0**
**DGMT Dagmar 105.06 42** PFAKE 16 57 20.0
DGMT LR LR
comp=Z,2μm,20.0s
**SDCO Great Sand Dun 105.14 53** PFAKE 16 57 20.0
SDCO LR LR
comp=Z,4μm,20.0s
**FFC Flin Flon 105.43 35** PFAKE 16 57 20.0
FFC LR LR
comp=Z,2μm,20.0s
**HSPB Hornsund (broa 105.43 350** *e*PP PP 16 57 19.7 -0.3
HSPB *e*SKSac **SKSac 17 03 40.7 +3.3**
**MNTX Cornudas Mount 105.54 59** P **PKiKP 16 57 13.4 -0.1**
baz=106
**MNTX Cornudas Mount 105.54 59** *e*Pdif **Pdif 16 53 03.4 +3.3**
MNTX *e*PP **PP 16 57 22.1 -0.3**
MNTX LR LR
comp=Z,2μm,19.0s
**RSSD Black Hills 105.69 46** *e*P **Pdif 16 52 55.7 -5.0**
**RSSD Black Hills 105.69 46** *e*Pdif **Pdif 16 52 55.7 -5.0**
**GNI Garni 105.95 310** PFAKE 16 57 30.0
GNI LR LR
comp=Z,754nm,20.0s
**RAYN Ar Rayn 106.03 293** PFAKE 16 57 30.0
RAYN LR LR
comp=Z,1μm,22.0s
**KIV Kislovodsk 107.05 314** *i* P **Pdif 16 53 03.7 -2.9**
KIV *e* 16 57 31.6
KIV *e* 17 03 41.1
KIV *e*PS **PS 17 06 49.6 -4.5**
KIV *e*SS SS 17 12 36.6 -2.9
KIV *e*SSS SSS 17 16 41.9
KIV pmax pmax
comp=Z,9.0nm,1.1s
KIV MLR MLR
comp=Z,782nm,20.0s
**KEV Kevo 107.06 342** PFAKE 16 57 30.0
KEV LR LR
comp=Z,2μm,22.0s
**TX31 Lajitas Ar. Si 107.11 61** *e*PKiKP **PKiKP 16 57 20.0 +3.3**
TX31 *e*PP **PP 16 57 31.8 -2.3**
TX31 *e*PKKPdf PKKPab 17 08 55.5 +7.3
**TXAR Lajitas Array 107.11 61** Pdiff **Pdif 16 53 12.9 +5.7**
comp=Z,0.8nm,0.8s,baz=272,slow=3.7,SNR=5.0
TXAR PKiKP **PKiKP 16 57 14.4 -2.2**
comp=Z,0.4nm,0.8s,baz=270,slow=0.9,SNR=3.0
TXAR PKKP PKKPdf 17 08 41.5 -5.5
comp=Z,0.8nm,0.8s,baz=126,slow=4.3,SNR=6.0
**OGNE Ogallala 107.53 49** PFAKE 16 57 30.0
OGNE LR LR
comp=Z,2μm,19.0s
**HAMF Hammerfest 107.56 344** *e*PP PP 16 57 38.8 +3.0
HAMF *e*SKSac **SKSac 17 03 48.7 +1.7**
**ARCES ARCESS Array B 107.62 342** PKiKP **PKiKP 16 57 14.1 -2.3**
comp=Z,3.5nm,0.7s,baz=64,slow=5.5,SNR=5.2
**CBKS Cedar Bluff 109.55 51** PFAKE 16 57 30.0
CBKS LR LR
comp=Z,4μm,20.0s
**ABTX Abilene, Hawle 110.34 58** P **PKiKP 16 57 22.5 0.0**
baz=110
**JCT Junction City 110.39 60** *e*PKKPab PKKPab 17 08 34.4 +0.8
JCT LR LR
comp=Z,3μm,20.0s
**AGMN Agassiz Nation 110.55 41** PFAKE 16 57 30.0
AGMN LR LR
comp=Z,3μm,21.0s
**WMOK Wichita Mounta 110.83 55** PFAKE 16 57 40.0
WMOK LR LR
comp=Z,1μm,19.0s
**F33A 5 Mile Ranch, 110.83 43** P **PKiKP 16 57 24.1 +1.1**
baz=111
**333A Richland Sprin 111.02 59** P **PKiKP 16 57 24.3 +0.4**
baz=111
**ECSD EROS Data Cent 111.05 46** P **PKiKP 16 57 23.5 -0.1**
baz=111
**ECSD EROS Data Cent 111.05 46** *e*PKKPdf PKKPdf 17 08 39.0 -0.9
ECSD LR LR
comp=Z,2μm,19.0s
**X33A Lawton 111.08 56** P **PKiKP 16 57 24.3 +0.5**
baz=111
**B34A Aery, Baudette 111.28 40** P **PKiKP 16 57 24.2 +0.5**
**FINES FINESS Array B 111.42 335** PKiKP **PKiKP 16 57 22.7 -0.9**
comp=Z,1.4nm,0.8s,baz=132,slow=2.1,SNR=1.2
**434A Burnet 111.68 59** P **PKiKP 16 57 24.6 -0.5**

baz=112
**Q34A Chapman** 111.69 51 P PKiKP 16 57 25.5 +0.6
baz=112
**KSU1 Kansas State U** 111.92 50 PFAKE 16 57 40.0
KSU1 LR LR
comp=Z,4μm,20.0s
**KVTX Kingsville** 112.29 63 PFAKE 16 57 40.0
KVTX LR LR
comp=Z,2μm,20.0s
**D36A Goodland** 112.59 41 P PKiKP 16 57 26.7 +0.4
baz=113
**C36A Pine Crest Far** 112.65 41 P PKiKP 16 57 26.6 +0.2
baz=113
**F36A Milaca** 112.70 43 P PKiKP 16 57 27.5 +1.0
baz=113
**KMBO Kilima Mbogo** 112.72 266 PFAKE 16 57 40.0
KMBO LR LR
comp=Z,1μm,20.0s
**K36A Gilmore City** 112.83 46 P PKiKP 16 57 27.7 +0.8
baz=113
**R36A Gordon, Harris** 112.91 51 P PKiKP 16 57 27.6 +0.4
baz=113
**V36A Jenks** 112.98 54 P PKiKP 16 57 28.0 +0.6
baz=113
**D37A Cotton** 113.08 41 P PKiKP 16 57 28.0 +0.7
baz=113
**J37A Redenius Farm,** 113.31 45 P PKiKP 16 57 28.2 +0.4
baz=113
**K37A Belmond** 113.38 46 P PKiKP 16 57 28.9 +0.9
baz=113
**EYMN Ely** 113.46 40 PFAKE 16 57 40.0
EYMN LR LR
comp=Z,2μm,20.0s
**W37A Quinton** 113.50 55 P PKiKP 16 57 28.6 +0.2
baz=114
**SUMG Summit** 113.67 3 *e*PKIKP PKiKP 16 57 37.3 +9.1
SUMG pmax pmax
comp=Z,23nm,1.3s
**SUMG Summit** 113.67 3 *i* P PKiKP 16 57 37.3 +9.1
comp=Z,23nm,1.3s
**SUMG Summit** 113.67 3 *e*PKKPab PKKPab 17 08 20.7 +2.0
**SCIA State Center** 113.89 47 PFAKE 16 57 40.0
SCIA LR LR
comp=Z,2μm,20.0s
**U38A Gravette** 114.12 53 P PKPdf 16 57 29.5 -0.1
baz=114
**V38A Canehill** 114.20 54 P PKPdf 16 57 30.2 +0.5
baz=114
**AKASG Malin Array Be** 114.28 323 PKP PKPdf 16 57 28.1 -1.3
comp=Z,2.2nm,0.6s,baz=62,slow=2.2,SNR=11
**AKASG Malin Array Be** 114.28 323 *c i*PKIKP PKPdf 16 57 29.0 -0.4
AKASG pmax pmax
comp=Z,2.0nm,0.6s
**KIEV Kiev** 114.29 323 *e*PKIKP PKPdf 16 57 27.4 -2.0
KIEV MLR MLR
comp=Z,2μm,19.0s
**KIEV Kiev** 114.29 323 *e*PKPdf PKPdf 16 57 27.4 -2.0
KIEV LR LR
comp=Z,2μm,19.0s
**AK11 Malin Array Si** 114.32 323 *e*PKiKP PKPdf 16 57 28.0 -1.5
**BRTR Keskin Array B** 114.44 311 PKP PKPdf 16 57 29.4 -0.9
comp=Z,1.6nm,0.8s,baz=142,slow=4.2,SNR=9.6
BRTR PKKP **PKKPab 17 08 19.1 +3.5**
comp=Z,1.3nm,0.9s,baz=197,slow=3.8,SNR=4.6
**BRTR Keskin Array B** 114.44 311 *c i*PKIKP PKPdf 16 57 30.2 -0.1
BRTR pmax pmax
comp=Z,2.0nm,0.8s
**NATX Nacogdoches** 114.63 58 PFAKE 16 57 40.0 +9.3
NATX LR LR
comp=Z,2μm,19.0s
**ANTO Ankara** 115.05 311 *e*PKIKP **PKPdf 16 57 31.7 +0.3**
ANTO MLR MLR
comp=Z,500nm,21.0s
**ANTO Ankara** 115.05 311 *e*PKiKP **PKPdf 16 57 31.7 +0.3**
ANTO LR LR
comp=Z,500nm,21.0s
**BR231 Keskin MP Arra** 115.07 311 *e*PKiKP **PKiKP 16 57 29.0 -2.4**
**MIAR Mount Ida** 115.10 55 P **PKPdf 16 57 32.3 +0.9**
baz=115
**MIAR Mount Ida** 115.10 55 PFAKE 16 57 40.0 +8.5
MIAR LR LR
comp=Z,2μm,19.0s
**COWI Conover** 115.56 42 PFAKE 16 57 40.0 +7.9
COWI LR LR
comp=Z,2μm,19.0s
**CSS Prodhromos** 115.64 306 PFAKE 16 57 40.0 +7.5
CSS LR LR
comp=Z,149nm,21.0s
**JFWS Jewell Farm** 115.75 45 PFAKE 16 57 40.0 +7.5
JFWS LR LR
comp=Z,2μm,20.0s
**UALR University of** 116.06 54 *e*PKPdf **PKPdf 16 57 34.9 +1.6**
**SUW Suwalki** 116.29 328 *e*P **PKPdf 16 57 33.3 +0.2**
**SUW Suwalki** 116.29 328 *e*PKIKP **PKPdf 16 57 33.3 +0.2**
**BOSA Boshof** 116.65 234 PKP **PKPdf 16 57 34.1 -0.7**
comp=Z,1.4nm,0.5s,baz=134,slow=2.7,SNR=6.2
BOSA PKKP **PKKPab 17 08 05.2 -1.7**
comp=Z,3.7nm,0.8s,baz=324,slow=7.6,SNR=4.1
**CFR Carcaliu** 116.87 318 ⇑PKIKP **PKPdf 16 57 34.5 0.0**
**CFR Carcaliu** 116.87 318 ⇑*i*P **PKPdf 16 57 34.5 0.0**
**HDIL Hopedale** 117.09 48 PFAKE 16 57 50.0 +15
HDIL LR LR
comp=Z,2μm,19.0s
**HARR Harsova** 117.17 317 ⇓PKIKP **PKPdf 16 57 32.4 -2.7**
**HARR Harsova** 117.17 317 ⇓*i*P **PKPdf 16 57 32.4 -2.7**
**ISP Isparta** 117.25 309 PFAKE 16 57 50.0 +14
ISP LR LR
comp=Z,522nm,20.0s
**TESR Tescani** 117.38 320 ⇑*i*P **PKPdf 16 57 31.3 -4.2**
**MSAB Monastry St. A** 117.44 317 ⇑*i*P **PKPdf 16 57 36.4 +0.7**
**NB2 NORSAR Subarra** 117.51 339 PKPdf **PKPdf 16 57 34.5 -0.9**
comp=Z,6.2nm,1.1s,baz=44,slow=1.9
**NB2 NORSAR Subarra** 117.51 339 PKPdf **PKPdf 16 57 34.5 -0.9**
baz=44,slow=1.9
**NOA NORSAR Array B** 117.51 339 PKP **PKPdf 16 57 34.4 -1.0**
comp=Z,3.1nm,0.8s,baz=51,slow=1.8,SNR=8.4
**DOMB Dombas** 117.55 341 *e*PP PP 16 58 47.0 -0.2
**VRI Vrincioaia** 117.56 319 ⇑PKIKP **PKPdf 16 57 34.8 -1.1**
**VRI Vrincioaia** 117.56 319 ⇑*i*P **PKPdf 16 57 34.8 -1.1**
**PLOR Plostina** 117.62 319 ⇑PKIKP **PKPdf 16 57 36.3 +0.2**
**PLOR Plostina** 117.62 319 ⇑*i*P **PKPdf 16 57 36.3 +0.2**
**LVV L'vov** 117.69 324 *i* PKIKP **PKPdf 16 57 36.2 +0.2**
LVV *e* 17 04 28.2
**SFJD Kangerlussuaq** 117.82 9 PFAKE 16 57 50.0 +14
SFJD LR LR
comp=Z,1μm,22.0s
**BURAR Bucovina Array** 117.87 321 ⇑PKIKP **PKPdf 16 57 36.4 -0.2**
**BURAR Bucovina Array** 117.87 321 ⇑*i*P **PKPdf 16 57 36.4 -0.2**
**BUR04 Bucovina Ar. S** 117.87 321 *e*PKPdf **PKPdf 16 57 36.5 -0.1**
BUR04 *e*PKKPbc **PKKPab 17 08 05.0 +4.7**
**MLR Muntele Rosu** 118.21 319 ⇓PKIKP **PKPdf 16 57 35.8 -1.5**
**MLR Muntele Rosu** 118.21 319 ⇓*i*P **PKPdf 16 57 35.8 -1.5**
**KSL Kastellorizon** 118.38 308 *e*P **PKPdf 16 57 41.7 +4.0**
**KSL Kastellorizon** 118.38 308 *e*P **PKPdf 16 57 41.7 +4.0**
**SUR Sutherland** 118.38 228 PFAKE 16 57 50.0 +12
SUR LR LR
comp=Z,3μm,22.0s
**DOPR Dopca** 118.39 319 ⇑*i*P **PKPdf 16 57 38.4 +0.9**
**KWP Kalwaria Pacla** 118.55 324 *e*P **PKPdf 16 57 38.4 +0.8**
**KWP Kalwaria Pacla** 118.55 324 *e*PKIKP **PKPdf 16 57 38.5 +0.8**
**KWP Kalwaria Pacla** 118.55 324 ⇑*i*P **PKPdf 16 57 38.2 +0.5**
**LSZ Lusaka** 118.71 249 *e*PKIKP **PKPdf 16 57 40.1 +1.0**
LSZ MLR MLR
comp=Z,1μm,21.0s
**LSZ Lusaka** 118.71 249 *e*PKPdf **PKPdf 16 57 40.1 +1.0**
LSZ LR LR
comp=Z,1μm,21.0s
**SFIN Scholer Farm** 118.75 47 P **PKPdf 16 57 38.8 +0.4**
baz=119
**SFIN Scholer Farm** 118.75 47 *e*PKPdf **PKPdf 16 57 39.4 +1.0**
**VOIR** 118.81 319 ⇓PKIKP **PKPdf 16 57 38.2 -0.2**
**VOIR** 118.81 319 ⇓*i*P **PKPdf 16 57 38.2 -0.2**
**KONO Kongsberg** 119.05 338 PFAKE 16 57 50.0 +12
KONO LR LR
comp=Z,2μm,21.0s
**KOLS Kolonicke sedl** 119.11 323 *e*PKIKP **PKPdf 16 57 37.8 -1.0**
**KOLS Kolonicke sedl** 119.11 323 *e*PKP **PKPdf 16 57 37.8 -1.0**
**ARR Arges** 119.11 319 ⇑*i*P **PKPdf 16 57 39.0 0.0**
**PAYG Puerto Ayora** 119.17 94 PFAKE 16 57 50.0 +10
PAYG LR LR
comp=Z,894nm,19.0s
**HUMR Humele** 119.20 318 ⇑*i*P **PKPdf 16 57 37.5 -1.6**
**UZH Uzhgorod** 119.23 323 *i* PKIKP **PKPdf 16 57 40.1 +1.1**
UZH *e* 16 57 49.9
UZH *e* 17 04 25.5
UZH *e*PS **PS 17 08 42.7 -5.3**
**MBAR Mbarara** 119.24 266 PFAKE 16 57 50.0 +10
MBAR LR LR
comp=Z,830nm,21.0s
**CJR Cluj-Napoca** 119.25 321 ⇑PKIKP **PKPdf 16 57 40.3 +1.1**
**CJR Cluj-Napoca** 119.25 321 ⇑*i*P **PKPdf 16 57 40.3 +1.1**
**HOPE Hope Point** 119.28 175 PFAKE 16 57 50.0 +11
HOPE LR LR
comp=Z,2μm,20.0s
**STHS Stebnicka Huta** 119.49 324 *e*PKIKP **PKPdf 16 57 40.8 +1.3**
**STHS Stebnicka Huta** 119.49 324 *e*PKP **PKPdf 16 57 40.8 +1.3**
**ARG Arkhangelos** 119.51 308 *e*P **PKPdf 16 57 36.2 -3.7**
**ARG Arkhangelos** 119.51 308 *e*P **PKPdf 16 57 36.2 -3.7**
**LOT Lotru** 119.64 319 ⇓*i*P **PKPdf 16 57 40.4 +0.3**
**DRGR** 119.77 321 ⇑PKIKP **PKPdf 16 57 39.6 -0.6**
**DRGR** 119.77 321 ⇑*i*P **PKPdf 16 57 39.6 -0.6**
**OJC Ojcow** 119.94 326 *e*P **PKPdf 16 57 40.6 +0.3**
**OJC Ojcow** 119.94 326 *e*PKIKP **PKPdf 16 57 40.7 +0.4**
**PLCA Paso Flores** 119.98 145 *e*PKIKP **PKPdf 16 57 43.5 +2.6**
**PLCA Paso Flores** 119.98 145 *e*PKPdf **PKPdf 16 57 43.5 +2.6**
**DEV Deva** 120.02 320 ⇓PKIKP **PKPdf 16 57 39.8 -0.8**
**DEV Deva** 120.02 320 ⇓*i*P **PKPdf 16 57 39.8 -0.8**
**NIE Niedzica** 120.04 325 *e*P **PKPdf 16 57 40.3 -0.3**
**NIE Niedzica** 120.04 325 *e*PKIKP **PKPdf 16 57 40.4 -0.2**
**SMG Samos** 120.10 310 *e*P **PKPdf 16 57 40.9 -0.1**
**SMG Samos** 120.10 310 *e*P **PKPdf 16 57 40.9 -0.1**
**GZR Gura Zlata** 120.31 320 ⇑PKIKP **PKPdf 16 57 40.2 -1.1**
**GZR Gura Zlata** 120.31 320 ⇑*i*P **PKPdf 16 57 40.2 -1.1**
**KARP Karpathos** 120.44 308 *e*P PKPdf 16 57 35.9 -5.9
**KARP Karpathos** 120.44 308 *e*P PKPdf 16 57 35.9 -5.9
**AAM Ann Arbor** 120.56 44 PFAKE 16 57 50.0 +8.3
AAM LR LR
comp=Z,2μm,20.0s
**LANS Liptovska Anna** 120.64 325 *e*PKIKP **PKPdf 16 57 41.9 +0.1**
**LANS Liptovska Anna** 120.64 325 *e*PKP **PKPdf 16 57 41.9 +0.1**
**SIRR Siria** 120.65 321 ⇓*i*P **PKPdf 16 57 41.0 -0.8**
**LRAL Lakeview Retre** 120.77 55 *e*PKPdf **PKPdf 16 57 43.6 +1.1**
**BZS Buzias** 120.95 320 ⇓PKIKP **PKPdf 16 57 41.3 -1.1**
**BZS Buzias** 120.95 320 ⇓*i*P **PKPdf 16 57 41.3 -1.1**
**PSZ Piszkesteto** 120.98 323 *e*PKIKP **PKPdf 16 57 40.9 -1.6**
PSZ MLR MLR
comp=Z,1μm,19.0s
**PSZ Piszkesteto** 120.98 323 ⇑*i*P **PKPdf 16 57 41.0 -1.6**
**PSZ Piszkesteto** 120.98 323 *e*PKPdf **PKPdf 16 57 40.9 -1.6**
PSZ LR LR
comp=Z,1μm,19.0s
**OKC Ostrava-Krasne** 121.05 326 *e*PKIKP **PKPdf 16 57 42.0 -0.5**
OKC *e* 16 57 51.1
OKC MLR MLR
comp=Z,1μm,20.5s
**OKC Ostrava-Krasne** 121.05 326 *e*PKPdf **PKPdf 16 57 42.0 -0.5**
OKC *ep*PKP **PKiKP 16 57 43.3 +0.7**
OKC *es*PKP 16 57 49.1
OKC AMS AMS 17 56 50.0
comp=Z,1μm,20.5s
**BRAL Brewton** 121.17 58 PFAKE 16 57 50.0 +6.8
BRAL LR LR
comp=Z,2μm,21.0s
**MORC Moravsky Berou** 121.42 326 ⇑PKIKP **PKPdf 16 57 42.8 -0.5**
**MORC Moravsky Berou** 121.42 326 ⇑*i*P **PKPdf 16 57 42.8 -0.5**
**MORC Moravsky Berou** 121.42 326 *e*PKPdf **PKPdf 16 57 42.5 -0.7**
**KSP Ksiaz** 121.53 328 *e*P **PKPdf 16 57 42.4 -1.0**
**KSP Ksiaz** 121.53 328 *e*PKIKP **PKPdf 16 57 42.4 -1.0**
**SANT Santorini** 121.54 309 PFAKE 16 58 00.0 +16
SANT LR LR
comp=Z,412nm,19.0s
**KRLC Kraliky** 121.68 327 *e*PKIKP PKPdf 16 57 50.5 +6.8
**KRLC Kraliky** 121.68 327 *ex* PKPdf 16 57 50.5 +6.8
**TEIG Tepich** 121.68 70 PFAKE 16 58 00.0 +15
TEIG LR LR
comp=Z,1μm,21.0s
**ACSO Alum Creek Sta** 121.77 46 *e*PKPdf **PKPdf 16 57 43.5 -0.7**
ACSO LR LR
comp=Z,2μm,19.0s
**DPC Dobruska-Polom** 121.78 327 *e*PKIKP **PKPdf 16 57 44.7 +0.8**
DPC *e* 16 57 51.5
DPC *e*PS **PS 17 09 07.1 -3.7**
DPC *e*SS SS 17 15 53.3 +0.8
DPC MLR MLR
comp=Z,2μm,21.5s
**DPC Dobruska-Polom** 121.78 327 *e*PKPdf **PKPdf 16 57 44.7 +0.8**
DPC *ex* x 16 57 51.5
DPC *e*PS **PS 17 09 07.1 -3.7**
DPC *e*SS SS 17 15 53.3 +0.8
DPC AMS AMS 17 52 00.0
comp=Z,2μm,21.5s
**LAST Lasithi** 121.86 308 *e*P **PKPdf 16 57 43.5 -1.1**
**LAST Lasithi** 121.86 308 *e*P **PKPdf 16 57 43.5 -1.1**
**LAST Lasithi** 121.86 308 *e*PKPdf **PKPdf 16 57 45.0 +0.5**
**UPC Upice** 121.86 327 *e*PKIKP **PKPdf 16 57 44.8 +0.8**
UPC *e* 16 57 51.1
UPC *e* 16 59 25.1
UPC *e*PS **PS 17 09 07.6 -3.8**
UPC MLR MLR
comp=Z,2μm,18.5s
**UPC Upice** 121.86 327 *e*PKPdf **PKPdf 16 57 44.8 +0.8**
UPC *ep*PKP **pPKPdf 16 57 51.1 +0.8**
UPC *e*PP PP 16 59 25.1 +7.9
UPC *e*PS **PS 17 09 07.6 -3.8**
UPC *e*SS SS 17 15 57.3 +3.9
UPC AMS AMS 17 52 10.0
comp=Z,2μm,18.5s
**RUE Ruedersdorf** 121.89 330 *e*PKPdf **PKPdf 16 57 45.2 +1.3**
baz=53,slow=1.9
**VAY Valandovo** 122.03 315 *i* P **PKPdf 16 57 43.2 -1.4**
**VAY Valandovo** 122.03 315 *i* P **PKPdf 16 57 43.2 -1.4**
**CPCT Cooper Cave** 122.13 52 *e*PKPdf **PKPdf 16 57 45.8 +0.8**
**VRAC Vranov** 122.19 326 ⇓PKIKP **PKPdf 16 57 41.4 -3.3**
**VRAC Vranov** 122.19 326 ⇓*i*P **PKPdf 16 57 41.4 -3.3**
**IDI Anoyia** 122.29 308 *e*P **PKPdf 16 57 43.8 -1.6**
**IDI Anoyia** 122.29 308 *e*P **PKPdf 16 57 43.8 -1.6**
**IDI Anoyia** 122.29 308 *e*PKPdf **PKPdf 16 57 45.0 -0.4**
**SIVA Sivas** 122.43 308 *e*P **PKPdf 16 57 40.8 -4.8**
**SIVA Sivas** 122.43 308 *e*P **PKPdf 16 57 40.8 -4.8**
**ZST Bratislava** 122.48 325 *e*PKIKP **PKPdf 16 57 43.7 -1.6**
**ZST Bratislava** 122.48 325 *e*PKP **PKPdf 16 57 43.7 -1.6**
**TZTN Tazewell** 122.56 50 *e*PKPdf **PKPdf 16 57 47.3 +1.4**
**SKO Skopje** 122.56 316 *i* P **PKPdf 16 57 44.3 -1.3**
**SKO Skopje** 122.56 316 *i* P **PKPdf 16 57 44.3 -1.3**
**SADO Sadowa** 122.57 40 PKP **PKPdf 16 57 44.6 -0.9**
comp=Z,20nm,1.1s,baz=288,slow=7.2,SNR=4.9
**SADO Sadowa** 122.57 40 *e*PKPdf **PKPdf 16 57 46.3 +0.8**
SADO *ep*PKPdf **pPKPdf 16 57 49.2 -2.6**
**BSEG Bad Segeberg** 122.61 333 *e*PKPdf **PKPdf 16 57 46.8 +1.5**
baz=53,slow=1.9
**PVCC Panska Ves** 122.62 328 *e*PKIKP **PKPdf 16 57 45.0 -0.5**
PVCC MLR MLR
comp=Z,2μm,17.6s
**PVCC Panska Ves** 122.62 328 *e*PKPdf **PKPdf 16 57 45.0 -0.5**
PVCC *ep*PKP **PKiKP 16 57 46.2 +0.5**
PVCC AMS AMS 17 52 10.0
comp=Z,2μm,17.6s
**DIVS Divibare** 122.65 319 ⇓*i*P **PKPdf 16 57 44.7 -1.1**
**TKL Tuckaleechee C** 122.65 52 PKP **PKPdf 16 57 44.3 -1.7**
comp=Z,9.7nm,0.8s,baz=189,slow=1.9,SNR=6.1
**TKL Tuckaleechee C** 122.65 52 *e*PKIKP **PKPdf 16 57 47.7 +1.7**
**TKL Tuckaleechee C** 122.65 52 *e*PKPdf **PKPdf 16 57 47.7 +1.7**
**BRG Berggiesshubel** 122.75 329 *e*PKP **PKPdf 16 57 44.9 -0.8**
comp=Z,17nm,0.9s
BRG PP **PP 16 59 24.0 +0.9**
BRG SP SP 17 09 18.0 +2.1
BRG SS SS 17 16 13.0 +8.4
comp=N,777nm,13.3s
comp=E,2μm,17.9s
comp=Z,2μm,21.6s
**BRG Berggiesshubel** 122.75 329 *e*PKIKP **PKPdf 16 57 44.9 -0.8**
BRG 16 59 24.0
BRG SP SP 17 09 18.0 +2.1
BRG SS SS 17 16 13.0 +8.4
BRG pmax pmax
comp=Z,17nm,1.0s
BRG MLR MLR
comp=N,777nm,13.3s
BRG MLR MLR
comp=E,2μm,17.9s
BRG MLR MLR
comp=Z,2μm,21.6s
**BRG Berggiesshubel** 122.75 329 *e*PKPdf **PKPdf 16 57 46.8 +1.1**
baz=53,slow=1.9
**VAM Vamos** 122.80 308 *e*P **PKPdf 16 57 45.0 -1.3**
**VAM Vamos** 122.80 308 *e*P **PKPdf 16 57 45.0 -1.3**
**TREC Trest** 122.81 326 *e*PKIKP **PKPdf 16 57 45.3 -0.6**
TREC *e* 16 57 52.6
TREC MLR MLR
comp=Z,2μm,21.5s
**TREC Trest** 122.81 326 *e*PKPdf **PKPdf 16 57 45.3 -0.6**
TREC *ep*PKP **PKiKP 16 57 46.5 +0.4**
TREC *es*PKP 16 57 52.6
TREC AMS AMS 17 52 50.0
comp=Z,2μm,21.5s
**GOPC GO Pecny, Ondr** 122.85 327 *e*PKIKP **PKPdf 16 57 45.2 -0.8**
GOPC *e* 16 57 52.5
GOPC *e*PS **PS 17 09 19.6 -0.6**
GOPC MLR MLR
comp=Z,1μm,20.5s
**GOPC GO Pecny, Ondr** 122.85 327 *e*PKPdf **PKPdf 16 57 45.2 -0.8**
GOPC *ep*PKP **PKiKP 16 57 46.5 +0.3**
GOPC *es*PKP 16 57 52.5
GOPC *e*PS **PS 17 09 19.6 -0.6**
GOPC AMS AMS 17 53 20.0
comp=Z,1μm,20.5s
**PRU Pruhonice** 122.94 328 *e*PKIKP **PKPdf 16 57 45.3 -0.8**
PRU *e* 16 57 52.6
PRU *e* 16 59 31.4
PRU *e*PS **PS 17 09 17.3 -3.6**
PRU MLR MLR
comp=Z,1μm,17.6s
**PRU Pruhonice** 122.94 328 *e*PKPdf **PKPdf 16 57 45.3 -0.8**
PRU *ep*PKP **PKiKP 16 57 46.6 +0.3**
PRU *es*PKP 16 57 52.6
PRU *e*PP PP 16 59 31.4 +6.9
PRU *e*PS **PS 17 09 17.3 -3.6**
PRU AMS AMS 17 52 20.0
comp=Z,1μm,17.6s
**PRA Prague** 122.95 328 *e*PS PS 17 09 18.8 -2.2
PRA AMS AMS 17 52 20.0
comp=Z,2μm,20.9s
**CLL Collm** 122.97 329 ⇑*i*PKIKP **PKPdf 16 57 44.6 -1.5**
CLL *e*PS **PS 17 09 24.0 +2.9**
CLL pmax pmax
comp=Z,15nm,0.8s
CLL MLR MLR
comp=Z,1μm,20.2s
**CLL Collm** 122.97 329 *e*PKPdf **PKPdf 16 57 47.1 +1.0**
baz=53,slow=1.9
**CLL Collm** 122.97 329 ⇑*i*PKPdf **PKPdf 16 57 44.6 -1.5**
comp=Z,15nm,0.8s
CLL *e* 16 57 53.0
comp=Z,21nm,0.8s
CLL *e*PP PP 16 59 33.0 +8.4
CLL *e*PPP PPP 17 01 54.0
CLL *e*PS **PS 17 09 24.0 +2.9**
CLL *e*PPS PPS 17 10 47.0
CLL *e*SS SS 17 16 12.0 +4.6
CLL *e*SSS SSS 17 20 42.0
CLL LmV 17 52 00.0
comp=Z,1μm,20.2s
**CLL Collm** 122.97 329 *e*PKPdf **PKPdf 16 57 44.6 -1.5**
**FBE Freiberg** 123.02 329 *e*PKPdf **PKPdf 16 57 47.6 +1.4**
baz=53,slow=1.9
**AGG Agios Georgios** 123.04 313 *e*PKIKP **PKPdf 16 57 46.1 -0.6**
**AGG Agios Georgios** 123.04 313 *e*PKPdf **PKPdf 16 57 46.1 -0.6**
**CONA Conrad Observa** 123.33 325 ⇓*i*PKPdf **PKPdf 16 57 45.8 -1.3**
comp=Z,17nm,0.8s
**OHR Ohrid** 123.35 316 *e*P **PKPdf 16 57 45.1 -2.1**
**OHR Ohrid** 123.35 316 *e*P **PKPdf 16 57 45.1 -2.1**
**ANKY Antikythira Is** 123.36 309 *e*P **PKPdf 16 57 50.6 +3.3**
**ANKY Antikythira Is** 123.36 309 *e*P **PKPdf 16 57 50.6 +3.3**
**VLI Veliai** 123.37 310 *e*P PKPdf 16 57 54.3 +7.0
**VLI Veliai** 123.37 310 *e*P PKPdf 16 57 54.3 +7.0
**GOGA Godfrey** 123.54 54 *e*PKIKP **PKPdf 16 57 48.6 +0.8**
GOGA MLR MLR
comp=Z,2μm,20.0s
**GOGA Godfrey** 123.54 54 *e*PKPdf **PKPdf 16 57 48.6 +0.8**
GOGA LR LR
comp=Z,2μm,20.0s
**ASSE Asse, Remlinge** 123.61 331 *e*PKPdf **PKPdf 16 57 48.5 +1.3**
baz=53,slow=1.9
**NRDL Niedersach Rie** 123.64 332 *e*PKPdf **PKPdf 16 57 48.9 +1.6**
baz=53,slow=1.9
**NEUB Neuenburg** 123.65 330 *e*PKPdf **PKPdf 16 57 48.6 +1.2**
baz=53,slow=1.9
**TANN Tannenbergstha** 123.78 329 *e*PKPdf **PKPdf 16 57 48.8 +1.0**
baz=53,slow=1.9
**WERD Werda** 123.84 329 *e*PKPdf **PKPdf 16 57 48.9 +1.1**
baz=53,slow=1.9
**GUNZ Gunzen** 123.88 329 *e*PKPdf **PKPdf 16 57 49.0 +1.1**
baz=53,slow=1.9
**PLN Plauen** 123.89 329 *e*PKPdf **PKPdf 16 57 49.0 +1.1**
baz=53,slow=1.9
**TIR Tirane** 123.90 316 PFAKE 16 58 00.0 +12
TIR LR LR
comp=Z,1μm,19.0s
**WERN Wernitzgruen** 123.90 329 *e*PKPdf **PKPdf 16 57 49.2 +1.2**
baz=53,slow=1.9
**CLZ Clausthal** 123.94 331 *e*PKPdf **PKPdf 16 57 49.4 +1.4**
baz=53,slow=1.9
**KHC Kasperske Hory** 123.94 327 *e*PKIKP **PKPdf 16 57 47.4 -0.7**
KHC *e* 16 57 54.8
KHC *e* 16 59 34.6
KHC *e*PS **PS 17 09 28.6 -1.3**
KHC MLR MLR
comp=Z,1μm,16.5s
**KHC Kasperske Hory** 123.94 327 *e*PKPdf **PKPdf 16 57 47.4 -0.7**
KHC *ep*PKP **PKiKP 16 57 48.9 +0.5**
KHC *es*PKP 16 57 54.8
KHC *e*PP PP **16 59 34.6 +3.3**
KHC *e*PS **PS 17 09 28.6 -1.3**
KHC *e*SS SS 17 16 25.7 +5.8
KHC AMS AMS 17 53 10.0
comp=Z,1μm,16.5s
**KHC Kasperske Hory** 123.94 327 *e*PKPdf **PKPdf 16 57 47.2 -0.9**
**TIGA Tifton** 123.96 56 P **PKPdf 16 57 48.6 0.0**
baz=124
**TIGA Tifton** 123.96 56 *e*PKPdf **PKPdf 16 57 48.2 -0.4**
**GEC2 GERESS Array S** 124.03 327 *e*PKIKP **PKPdf 16 57 47.4 -1.0**
**GEC2 GERESS Array S** 124.03 327 *e*PKPdf **PKPdf 16 57 49.3 +0.9**
baz=53,slow=1.9
**GEC2 GERESS Array S** 124.03 327 *e*PKPdf **PKPdf 16 57 47.4 -1.0**
**GERES GERESS Array B** 124.03 327 PKP **PKPdf 16 57 46.8 -1.6**
comp=Z,8.0nm,0.6s,baz=65,slow=1.4,SNR=48
**MOX Moxa** 124.07 329 *e*PKPdf **PKPdf 16 57 49.2 +0.9**
baz=53,slow=1.9
MOX *eL* L 17 53 11.7
comp=Z,1μm,20.9s
**MANZ Manzenberg** 124.22 329 *e*PKPdf **PKPdf 16 57 49.7 +1.1**
baz=53,slow=1.9
**MMNY Mt. Morris Dam** 124.28 42 *e*PKPdf **PKPdf 16 57 51.5 +2.6**
**MOA Molln** 124.28 326 ⇑*i*PKPdf **PKPdf 16 57 47.2 -1.6**
comp=Z,12nm,0.9s
**ROTZ Rotzenmuhle** 124.30 328 *e*PKPdf **PKPdf 16 57 49.8 +1.0**
baz=53,slow=1.9
**WET Wettzell** 124.31 327 *e*PKPdf **PKPdf 16 57 49.8 +1.0**
baz=53,slow=1.9
**GTTG Gvttingen** 124.32 331 *e*PKPdf **PKPdf 16 57 49.9 +1.2**
baz=53,slow=1.9
**SOKA Soboth** 124.47 324 ⇓*i*PKPdf **PKPdf 16 57 48.0 -1.3**
comp=Z,29nm,1.0s
**BLA Blacksburg** 124.71 49 *e*PKIKP **PKPdf 16 57 50.3 +0.4**
BLA MLR MLR
comp=Z,4μm,20.0s
**BLA Blacksburg** 124.71 49 *e*PKPdf **PKPdf 16 57 50.3 +0.4**
BLA LR LR
comp=Z,4μm,20.0s
**KMSC Kings Mountain** 124.71 51 P **PKPdf 16 57 50.3 +0.4**
baz=125
**KMSC Kings Mountain** 124.71 51 *e*PKPdf **PKPdf 16 57 49.7 -0.2**
**GRF Grafenberg Arr** 124.85 329 *e*L L 17 54 42.9
comp=Z,2μm,19.1s
**GRFO Grafenberg** 124.86 329 *e*PKIKP **PKPdf 16 57 50.5 +0.7**
**GRFO Grafenberg** 124.86 329 *e*PKPdf **PKPdf 16 57 50.5 +0.7**
**JSC Jenkinsville** 125.04 52 *e*PKIKP **PKPdf 16 57 52.2 +1.6**
**JSC Jenkinsville** 125.04 52 *e*PKPdf **PKPdf 16 57 52.1 +1.6**
**LJU Ljubljana** 125.10 324 *e*PKPdf **PKPdf 16 57 51.0 +0.6**
**RJOB Jochberg** 125.16 326 *e*PKPdf **PKPdf 16 57 51.9 +1.4**
baz=53,slow=1.9
**SSPA Standing Stone** 125.20 44 *e*PKPdf **PKPdf 16 57 50.1 -0.6**
**KBA Koelnbreinsper** 125.23 325 ⇑*i*PKPdf **PKPdf 16 57 47.4 -3.5**
comp=Z,33nm,1.1s
**CRNS Crni Vrh** 125.24 324 *i* PKPdf **PKPdf 16 57 51.0 +0.3**
**JTS JuntasAbangare** 125.29 82 PKP **PKPdf 16 57 51.3 -0.3**
comp=Z,10nm,0.9s,baz=320,slow=5.1,SNR=7.9
**JTS JuntasAbangare** 125.29 82 *i* PKIKP **PKPdf 16 57 49.9 -1.7**
**JTS JuntasAbangare** 125.29 82 *e*PKPdf **PKPdf 16 57 53.4 +1.7**
JTS LR LR
comp=Z,885nm,20.0s

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CEY** | **Cerknica** | **125.32** | **323** | *e*PKPdf | **PKPdf** | **16 57 51.0** | **+0.2** |
| **CADS** | **Cadrg** | **125.47** | **324** | *e*PKPdf | **PKPdf** | **16 57 50.7** | **-0.4** |
| **LONY** | **Lake Ozonia** | **125.50** | **38** | *e*PKPdf | **PKPdf** | **16 57 51.5** | **+0.3** |
| LONY | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **BUG** | **Bochum--Univer** | **125.66** | **332** | *e*PKPdf | **PKPdf** | **16 57 52.4** | **+1.2** |
| | baz=53,slow=1.9 | | | | | | |
| **FUR** | **Furstenfeldbru** | **125.74** | **327** | *e*PKPdf | **PKPdf** | **16 57 52.5** | **+0.9** |
| | baz=53,slow=1.9 | | | | | | |
| **BINY** | **Binghamton** | **125.79** | **41** | *e*PKPdf | **PKPdf** | **16 57 53.0** | **+1.1** |
| **ABTA** | **Abfaltersbach** | **125.88** | **325**⇑ | *i*PKPdf | **PKPdf** | **16 57 49.8** | **-2.2** |
| | comp=Z,34nm,1.0s,SNR=5.6 | | | | | | |
| **TNS** | **Taunus Mts** | **125.91** | **331** | *e*PKPdf | **PKPdf** | **16 57 53.0** | **+1.1** |
| | baz=53,slow=1.9 | | | | | | |
| **NCB** | **Newcomb** | **126.05** | **39** | *e*PKPdf | **PKPdf** | **16 57 53.0** | **+0.7** |
| NCB | | | | LR | LR | | |
| | comp=Z,3µm,20.0s | | | | | | |
| **WATA** | **Walderalm** | **126.07** | **326**⇓ | *i*PKPdf | **PKPdf** | **16 57 50.9** | **-1.5** |
| | comp=Z,21nm,0.7s,SNR=9.5 | | | | | | |
| **WTTA** | **Wattenberg** | **126.08** | **326**⇓ | *i*PKPdf | **PKPdf** | **16 57 51.4** | **-1.1** |
| | comp=Z,49nm,0.9s,SNR=8.1 | | | | | | |
| **NHSC** | **New Hope** | **126.26** | **53** | PFAKE | | 16 58 00.0 | +7.1 |
| NHSC | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **MOTA** | **Moosalm** | **126.32** | **326**⇑ | *i*PKPdf | **PKPdf** | **16 57 51.1** | **-1.8** |
| | comp=Z,36nm,0.8s,SNR=11 | | | | | | |
| **RETA** | **Reutte** | **126.43** | **327**⇑ | *i*PKPdf | **PKPdf** | **16 57 49.1** | **-3.9** |
| | comp=Z,17nm,1.2s | | | | | | |
| **SDMD** | **Soldier's Deli** | **126.45** | **45** | *e*PKPdf | **PKPdf** | **16 57 54.3** | **+1.2** |
| **STU** | **Stuttgart** | **126.47** | **329** | *e*PKIKP | **PKPdf** | **16 57 52.1** | **-0.8** |
| **STU** | **Stuttgart** | **126.47** | **329** | *e*PKPdf | **PKPdf** | **16 57 53.7** | **+0.8** |
| | baz=53,slow=1.9 | | | | | | |
| **STU** | **Stuttgart** | **126.47** | **329** | *e*PKPdf | **PKPdf** | **16 57 52.1** | **-0.8** |
| **MVL** | **Millersville** | **126.53** | **44** | *e*PKPdf | **PKPdf** | **16 57 55.2** | **+1.9** |
| **TRQA** | **Tornquist** | **126.56** | **148** | PFAKE | | 16 58 10.0 | +16 |
| TRQA | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **CBN** | **Corbin** | **126.57** | **46** | PFAKE | | 16 58 10.0 | +17 |
| CBN | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **MDV** | **Middlebury** | **126.68** | **38** | *e*PKPdf | **PKPdf** | **16 57 54.0** | **+0.6** |
| **FETA** | **Feichten** | **126.72** | **326**⇑ | *i*PKiKP | **PKPdf** | **16 57 53.3** | **-0.4** |
| | comp=Z,48nm,1.0s,SNR=5.5 | | | | | | |
| **ESK** | **Eskdalemuir** | **126.80** | **341** | PFAKE | | 16 58 00.0 | +6.7 |
| ESK | | | | LR | LR | | |
| | comp=Z,912nm,21.0s | | | | | | |
| **MEM** | **Membach** | **126.81** | **332** | PKP | **PKPdf** | **16 57 53.4** | **-0.1** |
| **TIP** | **Timpagrande** | **126.96** | **315** | *e*PKPdf | **PKPdf** | **16 57 55.1** | **+0.8** |
| TIP | | | | LR | LR | | |
| | comp=Z,451nm,20.0s | | | | | | |
| **DAVA** | **Damuels** | **127.03** | **327**⇑ | *i*PKPdf | **PKPdf** | **16 57 52.5** | **-1.7** |
| | comp=Z,45nm,1.1s | | | | | | |
| **LCO** | **Las Campanas** | **127.16** | **134** | *e*PKPdf | **PKPdf** | **16 57 56.6** | **+1.4** |
| LCO | | | | LR | LR | | |
| | comp=Z,723nm,20.0s | | | | | | |
| **BFO** | **Black Forest** | **127.19** | **329***c* | *i*PKIKP | **PKPdf** | **16 57 54.7** | **+0.4** |
| **BFO** | **Black Forest** | **127.19** | **329** | *e*PKPdf | **PKPdf** | **16 57 54.8** | **+0.5** |
| | baz=53,slow=1.9 | | | | | | |
| **BFO** | **Black Forest** | **127.19** | **329** | PFAKE | | 16 58 10.0 | +16 |
| BFO | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **CUC** | **Castrocucco** | **127.26** | **316** | PFAKE | | 16 58 10.0 | +15 |
| CUC | | | | LR | LR | | |
| | comp=Z,645nm,22.0s | | | | | | |
| **BCLA** | **Clavier** | **127.27** | **333** | PKP | **PKPdf** | **16 57 54.1** | **-0.2** |
| **CFAA** | **Coronel Fontan** | **127.30** | **138** | PKP | **PKPdf** | **16 57 54.5** | **-0.6** |
| | comp=Z,1.5nm,0.9s,baz=226,slow=4.8,SNR=11 | | | | | | |
| **CNNC** | **Cliffs of the** | **127.33** | **50** | PFAKE | | 16 58 10.0 | +15 |
| CNNC | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| **WLF** | **Walferdange** | **127.39** | **331** | PKP | **PKPdf** | **16 57 54.7** | **+0.1** |
| **WLF** | **Walferdange** | **127.39** | **331** | *e*PKIKP | **PKPdf** | **16 57 55.1** | **+0.4** |
| WLF | | | | MLR | MLR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **WLF** | **Walferdange** | **127.39** | **331** | *e*PKPdf | **PKPdf** | **16 57 56.4** | **+1.8** |
| | baz=53,slow=1.9 | | | | | | |
| **WLF** | **Walferdange** | **127.39** | **331** | *e*PKPdf | **PKPdf** | **16 57 55.0** | **+0.4** |
| WLF | | | | LR | LR | | |
| | comp=Z,2µm,19.0s | | | | | | |
| **SNF** | **Seneffe** | **127.67** | **333** | PKP | **PKPdf** | **16 57 55.3** | **+0.2** |
| **TUE** | **Stuetta** | **127.81** | **327** | *e*PKPdf | **PKPdf** | **16 57 54.7** | **-1.1** |
| TUE | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **DOU** | **Dourbes** | **127.82** | **333** | PKP | **PKPdf** | **16 57 56.8** | **+1.4** |
| **CWF** | **Charnwood Fore** | **128.26** | **338** | *e*PKPdf | **PKPdf** | **16 57 57.1** | **+1.0** |
| **PKME** | **Peaks-Kenny Pk** | **128.28** | **35** | PFAKE | | 16 58 10.0 | +14 |
| PKME | | | | LR | LR | | |
| | comp=Z,4µm,19.0s | | | | | | |
| **VLC** | **Villacollemand** | **128.59** | **324** | PFAKE | | 16 58 10.0 | +13 |
| VLC | | | | LR | LR | | |
| | comp=Z,751nm,22.0s | | | | | | |
| **WDD** | **Wield Dalam** | **129.99** | **312** | PFAKE | | 16 58 10.0 | +10 |
| WDD | | | | LR | LR | | |
| | comp=Z,491nm,21.0s | | | | | | |
| **BNI** | **Bardonecchia** | **130.16** | **327** | *e*PKIKP | **PKPdf** | **16 58 00.1** | **-0.2** |
| BNI | | | | MLR | MLR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **BNI** | **Bardonecchia** | **130.16** | **327** | *e*PKPdf | **PKPdf** | **16 58 00.1** | **-0.2** |
| BNI | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **CLTB** | **Caltabellotta** | **130.17** | **315** | PFAKE | | 16 58 10.0 | +10 |
| CLTB | | | | LR | LR | | |
| | comp=Z,477nm,19.0s | | | | | | |
| **BCIP** | **Isla Barro Col** | **130.32** | **83** | PFAKE | | 16 58 10.0 | +8.8 |
| BCIP | | | | LR | LR | | |
| | comp=Z,629nm,20.0s | | | | | | |
| **OTAV** | **Otavalo** | **131.02** | **95** | *e*PKPdf | **PKPdf** | **16 58 05.6** | **+2.5** |
| OTAV | | | | LR | LR | | |
| | comp=Z,667nm,19.0s | | | | | | |
| **SSB** | **Saint Sauveur** | **131.16** | **328** | PFAKE | | 16 58 10.0 | +8.0 |
| SSB | | | | LR | LR | | |
| | comp=Z,2µm,20.0s | | | | | | |
| **VSL** | **Villasalto** | **131.81** | **319** | PFAKE | | 16 58 10.0 | +6.6 |
| VSL | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **MTDJ** | **Mount Denham** | **131.99** | **71** | PFAKE | | 16 58 20.0 | +16 |
| MTDJ | | | | LR | LR | | |
| | comp=Z,576nm,21.0s | | | | | | |
| **LVC** | **Limon Verde** | **132.05** | **128** | PFAKE | | 16 58 20.0 | +15 |
| LVC | | | | LR | LR | | |
| | comp=Z,796nm,21.0s | | | | | | |
| **KEST** | **Kesra** | **133.78** | **315** | PKP | **PKPdf** | **16 58 08.2** | **+0.9** |
| | comp=Z,10nm,0.8s,baz=281,slow=0.9,SNR=6.5 | | | | | | |
| **KEST** | **Kesra** | **133.78** | **315** | *e*PKPdf | **PKPdf** | **16 58 09.9** | **+2.6** |
| **GTBY** | **Guantanamo Bay** | **133.98** | **69** | PFAKE | | 16 58 20.0 | +12 |
| GTBY | | | | LR | LR | | |
| | comp=Z,843nm,21.0s | | | | | | |
| **ROSC** | **El Rosal** | **135.61** | **90** | PKP | **PKPdf** | **16 58 12.2** | **+0.5** |
| | comp=Z,9.3nm,0.5s,baz=266,slow=22,SNR=8.3 | | | | | | |
| **ROSC** | **El Rosal** | **135.61** | **90** | *e*PKPdf | **PKPdf** | **16 58 14.4** | **+2.7** |
| **LPAZ** | **La Paz** | **135.83** | **121** | PKP | **PKPdf** | **16 58 13.3** | **+1.0** |
| | comp=Z,9.8nm,0.9s,baz=253,slow=1.5,SNR=15 | | | | | | |
| **LPAZ** | **La Paz** | **135.83** | **121** | *e*PKIKP | PKPpre | 16 58 06.1 | |
| LPAZ | | | | | | 16 58 13.3 | |
| **LPAZ** | **La Paz** | **135.83** | **121** | *e*PKPpre | PKPpre | 16 58 06.1 | |
| LPAZ | | | | PKP | **PKPdf** | **16 58 13.3** | **+1.0** |
| **GRTK** | **Grand Turk** | **137.28** | **65** | PFAKE | | 16 58 30.0 | +16 |
| GRTK | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **SDDR** | **Presa de Saban** | **137.70** | **69** | PFAKE | | 16 58 30.0 | +15 |
| SDDR | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **CPUP** | **Villa Florida** | **137.88** | **142** | PKP | **PKPdf** | **16 58 16.3** | **+1.2** |
| | comp=Z,15nm,1.1s,baz=267,slow=1.6,SNR=10 | | | | | | |
| **CPUP** | **Villa Florida** | **137.88** | **142** | *e*PKIKP | **PKPdf** | **16 58 16.9** | **+1.8** |
| **CPUP** | **Villa Florida** | **137.88** | **142** | *e*PKPdf | **PKPdf** | **16 58 16.9** | **+1.8** |
| **BBSR** | **BB Station** | **138.44** | **47** | PFAKE | | 16 58 30.0 | +14 |
| BBSR | | | | LR | LR | | |
| | comp=Z,3µm,21.0s | | | | | | |
| **SDV** | **Santo Domingo** | **139.41** | **84** | *e*PKPpre | PKPpre | 16 58 11.1 | |
| SDV | | | | *e*PKPdf | **PKiKP** | **16 58 20.8** | **0.0** |
| SDV | | | | LR | LR | | |
| | comp=Z,643nm,20.0s | | | | | | |
| **ES19** | **SONSECA Array** | **139.50** | **329** | *e*PKPdf | **PKPdf** | **16 58 20.6** | **+2.9** |
| **ESDC** | **Sonseca Array** | **139.56** | **329** | PKP | **PKPdf** | **16 58 17.9** | **+0.1** |
| | comp=Z,2.4nm,0.8s,baz=21,slow=2.2,SNR=7.0 | | | | | | |
| **PGAV** | **Gavieira, Arco** | **139.77** | **335** | *e*PKPdf | **PKPdf** | **16 58 17.6** | **-0.6** |
| **PAB** | **San Pablo** | **139.85** | **329** | PFAKE | | 16 58 30.0 | +12 |
| PAB | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **MVO** | **Moncorvo** | **139.88** | **333** | *e*PKPdf | **PKPdf** | **16 58 19.7** | **+1.3** |
| **POLO** | **Lamas de Olo** | **140.05** | **334** | *e*PKPdf | **PKPdf** | **16 58 21.0** | **+2.2** |
| **MTE** | **Manteigas** | **140.73** | **333** | *e*PKPdf | **PKPdf** | **16 58 21.0** | **+1.0** |
| **MTE** | **Manteigas** | **140.73** | **333** | PFAKE | | 16 58 30.0 | +10 |
| MTE | | | | LR | LR | | |
| | comp=Z,2µm,21.0s | | | | | | |
| **PTOM** | **Tomar** | **141.75** | **333** | *e*PKPdf | **PKPdf** | **16 58 22.4** | **+0.7** |
| **LSP** | **Las Mesas** | **141.77** | **69** | *e*PKPdf | **PKPdf** | **16 58 24.4** | **+2.1** |
| **CRPR** | **Cabo Rojo, PR** | **141.78** | **69** | *e*PKPdf | **PKPdf** | **16 58 23.2** | **+0.8** |
| **SIV** | **San Ignacio** | **141.84** | **126** | PKP | **PKPdf** | **16 58 22.3** | **-0.3** |
| | comp=Z,6.0nm,0.8s,baz=212,slow=3.4,SNR=9.5 | | | | | | |
| **LRS** | **Lares** | **141.96** | **68** | *e*PKPdf | **PKPdf** | **16 58 23.6** | **+0.9** |
| **OBIP** | **Obispado Ponce** | **142.24** | **69** | *e*PKPdf | **PKPdf** | **16 58 25.4** | **+2.3** |
| **PBAR** | **Barrancos** | **142.25** | **330** | *e*PKPdf | **PKPdf** | **16 58 23.6** | **+0.9** |
| **TAM** | **Tamanrasset** | **142.32** | **299** | *e*PKIKP | PKPpre | 16 58 19.4 | |
| TAM | | | | MLR | MLR | | |
| | comp=Z,693nm,19.0s | | | | | | |
| **TAM** | **Tamanrasset** | **142.32** | **299** | *e*PKPpre | PKPpre | 16 58 19.4 | |
| TAM | | | | LR | LR | | |
| | comp=Z,693nm,19.0s | | | | | | |
| **EVO** | **Evora** | **142.44** | **332** | *e*PKPdf | **PKPdf** | **16 58 26.0** | **+3.0** |
| **SJG** | **San Juan** | **142.65** | **68** | PFAKE | | 16 58 40.0 | +16 |
| SJG | | | | LR | LR | | |
| | comp=Z,873nm,19.0s | | | | | | |
| **PBEJ** | **Beja** | **142.77** | **331** | *e*PKPdf | **PKPdf** | **16 58 24.3** | **+0.7** |
| **HUMP** | **Col San Antoni** | **142.92** | **68** | *e*PKPdf | **PKPdf** | **16 58 26.8** | **+2.4** |
| **PCVE** | **Castro Verde** | **143.16** | **331** | *e*PKPdf | **PKPdf** | **16 58 28.1** | **+3.8** |
| **SAML** | **Samuel** | **143.35** | **114** | *e*PKPpre | PKPpre | 16 58 20.5 | |
| SAML | | | | LR | LR | | |
| | comp=Z,769nm,20.0s | | | | | | |
| **STVI** | **Saint Thomas** | **143.69** | **68** | *e*PKPdf | **PKPdf** | **16 58 24.5** | **-1.2** |
| **RTC** | **Rabat Centre** | **145.32** | **325** | PFAKE | | 16 58 40.0 | +12 |
| RTC | | | | LR | LR | | |
| | comp=Z,6µm,20.0s | | | | | | |
| **SMRT** | **St. Maarten** | **145.50** | **67** | *e*PKPdf | **PKPab** | **16 58 29.3** | **+0.2** |
| **ANWB** | **Willy Bob** | **146.78** | **67** | PFAKE | | 16 58 40.0 | +6.0 |
| ANWB | | | | LR | LR | | |
| | comp=Z,1µm,20.0s | | | | | | |
| **SHEL** | **Horse Pasture** | **147.48** | **227** | PFAKE | | 16 58 40.0 | +3.2 |
| SHEL | | | | LR | LR | | |
| | comp=Z,706nm,20.0s | | | | | | |
| **FDF** | **Fort de France** | **148.07** | **72** | *e*PKP2 | **PKPbc** | **16 58 37.1** | **+0.6** |
| FDF | | | | MLR | MLR | | |
| | comp=Z,840nm,20.0s | | | | | | |
| **FDF** | **Fort de France** | **148.07** | **72** | *e*PKPbc | **PKPbc** | **16 58 37.1** | **+0.6** |
| FDF | | | | LR | LR | | |
| | comp=Z,840nm,20.0s | | | | | | |
| **TOA0** | **Torodi Ar. Sit** | **148.32** | **285** | *e*PKP1 | **PKPdf** | **16 58 35.1** | **+1.4** |
| **TOA0** | **Torodi Ar. Sit** | **148.32** | **285** | *e*PKPdf | **PKPdf** | **16 58 33.1** | **-0.6** |
| **TORD** | **Torodi Ar. Bea** | **148.32** | **285** | PKPbc | **PKPdf** | **16 58 35.1** | **+1.4** |
| | comp=Z,42nm,0.8s,baz=38,slow=2.9,SNR=62 | | | | | | |
| **BDFB** | **Brasilia** | **151.60** | **141** | PKP | **PKPdf** | **16 58 39.4** | **+0.4** |
| | comp=Z,9.8nm,0.8s,baz=150,slow=6.3,SNR=13 | | | | | | |
| BDFB | | | | PKPbc | **PKPbc** | **16 58 44.9** | **-0.3** |
| | comp=Z,40nm,0.9s,baz=244,slow=1.1,SNR=27 | | | | | | |
| BDFB | | | | PKPab | **PKPab** | **16 58 54.5** | **+0.9** |
| | comp=Z,129nm,0.9s,baz=0.2,slow=2.1,SNR=27 | | | | | | |
| **BDFB** | **Brasilia** | **151.60** | **141** | *e*PKIKP | **PKPdf** | **16 58 40.4** | **+1.4** |
| BDFB | | | | | | 16 58 54.6 | |
| **BDFB** | **Brasilia** | **151.60** | **141** | *e*PKPdf | **PKPdf** | **16 58 40.4** | **+1.4** |
| BDFB | | | | PKPab | **PKPab** | **16 58 54.5** | **+0.9** |
| **KIC** | **Kosan Boka** | **155.15** | **271** | *e*PKP1 | PKPdf | 16 58 53.8 | +10 |
| | comp=Z,106nm,1.2s | | | | | | |
| **DBIC** | **Dimbokro** | **155.27** | **272** | PKP | **PKPdf** | **16 58 44.0** | **-0.2** |
| | comp=Z,9.9nm,1.1s,baz=102,slow=2.2,SNR=4.8 | | | | | | |
| DBIC | | | | PKPbc | PKPbc | 16 58 54.2 | |
| | comp=Z,23nm,1.1s,baz=39,slow=1.9,SNR=12 | | | | | | |
| **DBIC** | **Dimbokro** | **155.27** | **272** | *e*PKIKP | **PKPdf** | **16 58 46.3** | **+2.1** |
| DBIC | | | | *e* | | 16 58 54.8 | |
| **DBIC** | **Dimbokro** | **155.27** | **272** | *e*PKPdf | **PKPdf** | **16 58 46.2** | **+2.1** |
| DBIC | | | | *e*PKPbc | PKPbc | 16 58 54.8 | |
| **TIC** | **Toumodi** | **155.44** | **272** | *e*PKP1 | PKPdf | 16 58 52.8 | +8.3 |
| **ASCN** | **Ascension** | **159.07** | **227** | PFAKE | | 16 59 00.0 | +11 |
| ASCN | | | | LR | LR | | |
| | comp=Z,1µm,19.0s | | | | | | |
| **RCBR** | **Riachuelo** | **166.39** | **153** | PFAKE | | 16 59 10.0 | +14 |
| RCBR | | | | LR | LR | | |
| | comp=Z,1µm,21.0s | | | | | | |

**IDC 31 16:39:25.1±802.0, 30.06N×104.13E, h0km, Error ellipse: s-maj=370.2km s-min=212.0km az=69.0, Sichuan**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | | Op ISC h m s | ISC |
| **I34MN** | **SONGINO INFRAS** | **17.81** | **5** | *i* | | 18 32 40.0 | |
| | baz=186,slow=334,SNR=0.1 | | | | | | |
| **I45RU** | **USSURIYSK INFR** | **26.16** | **50** | *i* | | 19 17 45.0 | |
| | baz=245,slow=321,SNR=3.5 | | | | | | |
| **I39PW** | **PALAU INFRASON** | **36.28** | **122** | *i* | | 20 23 10.0 | |
| | baz=308,slow=318,SNR=0.7 | | | | | | |

*CSEM **31** 16:41:57.4±0.3, 38.50N×26.63E, h18km±3km, MD2.8, Error ellipse: s-maj=8.8km s-min=5.7km az=49.0*
*ATH **31** 16:41:57.3, 38.54N×26.65E, h20km±5km, MD3.1/4*
*ISK **31** 16:41:57.4, 38.58N×26.74E, h9km, MD2.7*
*DDA **31** 16:41:57.1, 38.54N×26.70E, h7km, Md2.8*
*ISCJB **31** 16:41:57.9±0.4, 38.51N±0.03×26.63E±0.04, h21km±5km, Error ellipse: s-maj=6.3km s-min=3.8km az=143.3*
*THE **31** 16:41:58.5, 38.47N×26.59E, h27km±2km, ML2.0/3, Error ellipse: s-maj=3.0km s-min=0.5km az=235.0*

**ISC 31 16:41:57.3±0.9, 38.52N±0.02×26.65E±0.03, h16km±7km, n31,σ0946/52, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | | Op ISC h m s | ISC |
| **URLA** | **Izmir** | **0.17** | **194** | *i* | P | **Pg** | **16 42 01.4** | **-0.1** |
| URLA | | | | *i* | S | **Sb** | **16 42 05.5** | **+0.3** |
| **URLA** | **Izmir** | **0.17** | **194** | | P | **Pg** | **16 42 01.4** | **-0.1** |
| URLA | | | | | S | **Sb** | **16 42 05.5** | **+0.3** |
| **ZEY** | **˜zmir** | **0.30** | **202** | | P | **Pg** | **16 42 03.7** | **+0.1** |
| ZEY | | | | | S | **Sb** | **16 42 09.1** | **0.0** |
| **CHOS** | **Chios island** | **0.48** | **254** | *e*PG | | **Pn** | **16 42 09.1** | **-0.5** |
| **CHOS** | **Chios island** | **0.48** | **254** | *e*PB | | **Pb** | **16 42 07.5** | **+0.1** |
| CHOS | | | | *e*SB | | **Sb** | **16 42 14.6** | **+0.2** |
| **CHOS** | **Chios island** | **0.48** | **254** | | P | **Pb** | **16 42 07.6** | **+0.1** |
| CHOS | | | | | S | **Sb** | **16 42 14.4** | **0.0** |
| **CHOS** | **Chios island** | **0.48** | **254** | *e*Pb | | **Pb** | **16 42 07.5** | **+0.1** |
| **CHOS** | **Chios island** | **0.48** | **254** | *e*Pg | | **Pn** | **16 42 09.1** | **-0.5** |
| **IZM** | **Izmir** | **0.50** | **104** | *e*PG | | **Pg** | **16 42 06.6** | **-0.6** |
| IZM | | | | *e*SG | | **Sg** | **16 42 13.5** | **-0.4** |
| **IZM** | **Izmir** | **0.50** | **104** | *e*Pg | | **Pg** | **16 42 06.6** | **-0.6** |
| IZM | | | | *e*Sg | | **Sg** | **16 42 13.5** | **-0.4** |
| **PRK** | **Paraskevi** | **0.78** | **338** | *e*PN | | **Pb** | **16 42 12.2** | **-0.3** |
| PRK | | | | *e*SN | | **Sg** | **16 42 23.1** | **+0.3** |
| **PRK** | **Paraskevi** | **0.78** | **338** | | P | **Pn** | **16 42 13.3** | **-0.4** |
| PRK | | | | | S | **Sn** | **16 42 24.6** | **-0.5** |
| **PRK** | **Paraskevi** | **0.78** | **338** | *e*Pn | | **Pb** | **16 42 12.2** | **-0.3** |
| **PRK** | **Paraskevi** | **0.78** | **338** | | P | **Pn** | **16 42 13.3** | **-0.4** |
| PRK | | | | *e*Sn | | **Sg** | **16 42 23.1** | **+0.3** |
| PRK | | | | | S | **Sn** | **16 42 24.6** | **-0.5** |
| **SMG** | **Samos** | **0.82** | **169** | *e*PN | | **Pb** | **16 42 12.7** | **-0.5** |
| SMG | | | | *e*SN | | **Sn** | **16 42 25.5** | **-0.6** |
| **SMG** | **Samos** | **0.82** | **169** | | P | **Pb** | **16 42 12.7** | **-0.5** |
| **SMG** | **Samos** | **0.82** | **169** | | P | **Pb** | **16 42 12.7** | **-0.5** |
| **SMG** | **Samos** | **0.82** | **169** | *e*Pn | | **Pb** | **16 42 13.2** | **0.0** |
| SMG | | | | *e*Sn | | **Sn** | **16 42 25.5** | **-0.6** |
| **SIGR** | **SIGRI** | **0.93** | **318** | *e*PG | | **Pn** | **16 42 15.8** | **+0.2** |
| **SIGR** | **SIGRI** | **0.93** | **318** | *e*PN | | **Pb** | **16 42 15.1** | **+0.1** |
| SIGR | | | | *e*SN | | **Sg** | **16 42 27.7** | **+0.4** |
| **SIGR** | **SIGRI** | **0.93** | **318** | | P | **Pb** | **16 42 14.9** | **-0.1** |
| SIGR | | | | | S | **Sg** | **16 42 27.8** | **+0.4** |
| **SIGR** | **SIGRI** | **0.93** | **318** | | P | **Pb** | **16 42 14.9** | **-0.1** |
| **SIGR** | **SIGRI** | **0.93** | **318** | *e*Pg | | **Pn** | **16 42 15.8** | **+0.2** |
| SIGR | | | | | S | **Sg** | **16 42 27.8** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.14** | **120** | *e*PN | | **Pb** | **16 42 18.9** | **+0.3** |
| AYDB | | | | *e*SN | | **Sg** | **16 42 34.6** | **+0.6** |
| **AYDB** | **Zeytinkoy-Aydi** | **1.14** | **120** | *e*Pn | | **Pb** | **16 42 18.9** | **+0.3** |
| AYDB | | | | *e*Sn | | **Sg** | **16 42 34.7** | **+0.6** |
| **AYDN** | **Tasoluk** | **1.30** | **131** | *i* | P | **Pg** | **16 42 22.8** | **+0.6** |
| **AYDN** | **Tasoluk** | **1.30** | **131** | | P | **Pg** | **16 42 22.8** | **+0.6** |
| AYDN | | | | | S | **Sg** | **16 42 39.9** | **+0.7** |
| **BALY** | **Balya** | **1.44** | **32** | *i* | P | **Pn** | **16 42 23.0** | **+0.3** |
| BALY | | | | *i* | S | **Sg** | **16 42 43.1** | **-0.5** |
| **BALY** | **Balya** | **1.44** | **32** | | P | **Pn** | **16 42 23.0** | **+0.3** |
| BALY | | | | | S | **Sg** | **16 42 43.1** | **-0.5** |
| **GELI** | **Tayfur-Gelibol** | **1.88** | **356** | *e*PN | | **Pn** | **16 42 29.9** | **+1.1** |
| **GELI** | **Tayfur-Gelibol** | **1.88** | **356** | *e*Pn | | **Pn** | **16 42 29.9** | **+1.1** |

*CSEM **31** 16:42:13.5±0.3, 39.30N×20.01E, h1km, ML2.0, Error ellipse: s-maj=7.1km s-min=3.2km az=77.0*
*THE **31** 16:42:13.8, 39.30N×20.05E, h5km, ML2.0/3, Error ellipse: s-maj=1.3km s-min=0.4km az=82.0*
*ATH **31** 16:42:14.2, 39.33N×20.02E, h10km±4km, MD3.2/8*

**ISC 31 16:42:13.7±1.2, 39.30N±0.02×20.03E±0.04, h3km±11km, n34,σ0856/54, Greece-Albania border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | | | Op ISC h m s | ISC |
| **IGT** | **Igoumenitsa** | **0.34** | **45** | *e*PG | | **Pg** | **16 42 19.8** | **-0.4** |
| IGT | | | | *e*SB | | **Sg** | **16 42 25.0** | **+0.4** |
| **IGT** | **Igoumenitsa** | **0.34** | **45** | P | | **Pg** | **16 42 19.8** | **-0.4** |
| IGT | | | | S | | **Sg** | **16 42 25.1** | **+0.6** |
| **IGT** | **Igoumenitsa** | **0.34** | **45** | P | | **Pg** | **16 42 19.8** | **-0.4** |
| IGT | | | | S | | **Sg** | **16 42 24.9** | **+0.4** |
| **IGT** | **Igoumenitsa** | **0.34** | **45** | P | | **Pg** | **16 42 19.8** | **-0.4** |
| IGT | | | | S | | **Sg** | **16 42 24.9** | **+0.4** |
| **SGD** | **Sagiada** | **0.35** | **27** | P | | **Pg** | **16 42 20.6** | **+0.1** |
| **SGD** | **Sagiada** | **0.35** | **27** | P | | **Pg** | **16 42 20.4** | **-0.1** |
| **SGD** | **Sagiada** | **0.35** | **27** | P | | **Pg** | **16 42 20.4** | **-0.1** |
| **KEK** | **Kerkira** | **0.45** | **337** | *e*PB | | **Pg** | **16 42 22.5** | **+0.1** |
| KEK | | | | *e*SB | | **Sg** | **16 42 28.4** | **+0.1** |
| **KEK** | **Kerkira** | **0.45** | **337** | *e*Pb | | **Pg** | **16 42 22.5** | **+0.1** |
| KEK | | | | *e*Sb | | **Sg** | **16 42 28.4** | **+0.1** |
| **LKD2** | **Lefkada island** | **0.71** | **136** | *e*PB | | **Pg** | **16 42 27.6** | **+0.4** |
| LKD2 | | | | *e*SB | | **Sb** | **16 42 39.1** | **+0.4** |
| **LKD2** | **Lefkada island** | **0.71** | **136** | P | | **Pg** | **16 42 27.1** | **-0.1** |
| LKD2 | | | | S | | **Sb** | **16 42 38.5** | **-0.2** |
| **LKD2** | **Lefkada island** | **0.71** | **136** | P | | **Pg** | **16 42 27.1** | **-0.1** |
| LKD2 | | | | S | | **Sg** | **16 42 37.2** | **+0.8** |
| **LKD2** | **Lefkada island** | **0.71** | **136** | P | | **Pg** | **16 42 27.1** | **-0.1** |
| **LKD2** | **Lefkada island** | **0.71** | **136** | *e*Pb | | **Pg** | **16 42 27.6** | **+0.4** |
| LKD2 | | | | S | | **Sg** | **16 42 37.2** | **+0.8** |
| LKD2 | | | | *e*Sb | | **Sb** | **16 42 39.1** | **+0.4** |
| **DSL** | **Palaion Diasel** | **0.85** | **101** | P | | **Pg** | **16 42 29.0** | **-0.9** |
| **DSL** | **Palaion Diasel** | **0.85** | **101** | P | | **Pg** | **16 42 29.2** | **-0.7** |
| **DSL** | **Palaion Diasel** | **0.85** | **101** | P | | **Pg** | **16 42 29.2** | **-0.7** |
| **PDO** | **Prodromos** | **1.14** | **127** | P | | **Pg** | **16 42 34.8** | **-0.7** |
| PDO | | | | S | | **Sn** | **16 42 52.3** | **-0.3** |
| **PDO** | **Prodromos** | **1.14** | **127** | P | | **Pg** | **16 42 34.8** | **-0.7** |
| PDO | | | | S | | **Sb** | **16 42 51.0** | **-0.2** |
| **PDO** | **Prodromos** | **1.14** | **127** | P | | **Pg** | **16 42 34.8** | **-0.7** |
| PDO | | | | S | | **Sb** | **16 42 51.0** | **-0.2** |
| **VLS** | **Valsamata** | **1.20** | **158** | *e*PG | | **Pb** | **16 42 37.2** | **+0.1** |
| VLS | | | | *e*SB | | **Sn** | **16 42 55.4** | **+1.2** |
| **VLS** | **Valsamata** | **1.20** | **158** | P | | **Pg** | **16 42 36.1** | **-0.6** |
| VLS | | | | S | | **Sb** | **16 42 53.4** | **+0.4** |
| **VLS** | **Valsamata** | **1.20** | **158** | P | | **Pg** | **16 42 36.1** | **-0.6** |
| **VLS** | **Valsamata** | **1.20** | **158** | *e*Pg | | **Pb** | **16 42 37.2** | **+0.1** |
| VLS | | | | S | | **Sb** | **16 42 53.4** | **+0.4** |
| VLS | | | | *e*Sb | | **Sn** | **16 42 55.4** | **+1.2** |
| **KFL** | **Anninata** | **1.33** | **153** | P | | **Pn** | **16 42 38.0** | **-1.1** |
| KFL | | | | S | | **Sg** | **16 42 56.7** | **+0.4** |
| **KFL** | **Anninata** | **1.33** | **153** | P | | **Pn** | **16 42 38.0** | **-1.1** |
| KFL | | | | S | | **Sg** | **16 42 56.7** | **+0.4** |
| **NEST** | **Nestorio** | **1.37** | **35** | *e*PB | | **Pb** | **16 42 40.0** | **0.0** |
| **NEST** | **Nestorio** | **1.37** | **35** | *e*Pb | | **Pb** | **16 42 40.0** | **0.0** |
| **THL** | **Klokotos Trika** | **1.56** | **79** | *e*PB | | **Pg** | **16 42 44.1** | **+0.5** |
| **THL** | **Klokotos Trika** | **1.56** | **79** | *e*Pb | | **Pg** | **16 42 44.1** | **+0.5** |
| **MAKR** | **Makrakomi, Fth** | **1.66** | **99** | *e*PB | | **Pg** | **16 42 46.3** | **+0.8** |
| **MAKR** | **Makrakomi, Fth** | **1.66** | **99** | *e*Pb | | **Pg** | **16 42 46.3** | **+0.8** |
| **AGG** | **Agios Georgios** | **1.81** | **98** | *e*PN | | **Pb** | **16 42 47.3** | **-0.2** |
| **AGG** | **Agios Georgios** | **1.81** | **98** | *e*Pn | | **Pb** | **16 42 47.3**

*MSK at Listvyanka*
**ISC 31 17:29:13.4±1.1, 51°81N±0°03 × 105°28E±0°02, h10km±9km, n29, σ1§74/52, 8C-1D, Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSTR** | **Listvyanka** | **0.29** | **282** | *e*Pg | **Pg** | **17 29 19.7** | **+0.5** |
| LSTR | | | | *e* | | 17 29 23.9 | |
| LSTR | | | | pmax | pmax | | |
| | comp=Z,130nm,0.1s | | | | | | |
| LSTR | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | |
| **LSTR** | **Listvyanka** | **0.29** | **282** | ⇑*i*Pg | **Pg** | **17 29 19.7** | **+0.5** |
| LSTR | | | | *e*Sg | **Sg** | **17 29 23.8** | **+0.8** |
| LSTR | | | | Pmax | | | |
| | comp=E,239nm,0.1s | | | | | | |
| LSTR | | | | Smax | | | |
| | comp=E,2μm,0.2s | | | | | | |
| **IRK** | **Irkutsk** | **0.76** | **305** | ⇑*i*Pg | **Pg** | **17 29 27.8** | **-0.3** |
| IRK | | | | *e* | | 17 29 37.5 | |
| IRK | | | | pmax | pmax | | |
| | comp=Z,893nm,0.2s | | | | | | |
| IRK | | | | smax | smax | | |
| | comp=E,3μm,0.3s | | | | | | |
| **IRK** | **Irkutsk** | **0.76** | **305** | ⇑*i*Pg | **Pg** | **17 29 27.8** | **-0.3** |
| IRK | | | | *e*Sg | **Sg** | **17 29 37.5** | **-0.5** |
| IRK | | | | Pmax | | | |
| | comp=E,904nm,0.2s | | | | | | |
| IRK | | | | Smax | | | |
| | comp=E,3μm,0.3s | | | | | | |
| **KAB** | **Kabansk** | **0.88** | **74** | ⇑*i*PG | **Pb** | **17 29 30.4** | **-0.4** |
| KAB | | | | *e* | | 17 29 42.9 | |
| KAB | | | | pmax | pmax | | |
| | comp=Z,174nm,0.5s | | | | | | |
| KAB | | | | smax | smax | | |
| | comp=E,3μm,0.6s | | | | | | |
| **KAB** | **Kabansk** | **0.88** | **74** | *e*Pg | **Pb** | **17 29 30.4** | **-0.4** |
| KAB | | | | *e*Sg | **Sb** | **17 29 42.8** | **+0.2** |
| KAB | | | | Pmax | | | |
| | comp=E,109nm,0.2s | | | | | | |
| KAB | | | | Smax | | | |
| | comp=E,3μm,0.6s | | | | | | |
| **TLY** | **Talaya** | **1.03** | **264** | *c i*PG | **Pb** | **17 29 32.2** | **-1.0** |
| TLY | | | | *e* | | 17 29 45.6 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,48nm,0.4s | | | | | | |
| TLY | | | | smax | smax | | |
| | comp=E,427nm,0.3s | | | | | | |
| **TLY** | **Talaya** | **1.03** | **264** | *e*Pg | **Pb** | **17 29 32.3** | **-1.0** |
| TLY | | | | *e*Sg | **Sb** | **17 29 46.3** | **-0.5** |
| TLY | | | | *e*Sb | **Sn** | **17 29 47.4** | **-0.9** |
| TLY | | | | Pmax | | | |
| | comp=E,93nm,0.2s | | | | | | |
| TLY | | | | max | | | |
| | comp=E,484nm,0.2s | | | | | | |
| **HRMR** | **Khuramsha** | **1.06** | **99** | ⇓*i*Pg | **Pb** | **17 29 33.4** | **-0.3** |
| | comp=E,300nm,0.3s | | | | | | |
| HRMR | | | | ⇑*i*Pg | **Pb** | **17 29 33.4** | **-0.3** |
| | comp=E,333nm,0.3s | | | | | | |
| HRMR | | | | ⇑*i*Pg | **Pb** | **17 29 33.4** | **-0.3** |
| | comp=E,853nm,0.3s | | | | | | |
| HRMR | | | | *e*Sg | **Sb** | **17 29 47.2** | **-0.4** |
| **TRG** | **Tyrgan** | **1.16** | **34** | *e*PG | **Pb** | **17 29 34.5** | **-0.9** |
| TRG | | | | *e* | | 17 29 49.5 | |
| TRG | | | | pmax | pmax | | |
| | comp=Z,111nm,0.1s | | | | | | |
| TRG | | | | smax | smax | | |
| | comp=N,1μm,0.1s | | | | | | |
| **TRG** | **Tyrgan** | **1.16** | **34** | *e*Pg | **Pb** | **17 29 34.6** | **-0.9** |
| TRG | | | | *e*Sg | **Sb** | **17 29 49.6** | **-0.9** |
| TRG | | | | Pmax | | | |
| | comp=N,115nm,0.1s | | | | | | |
| TRG | | | | Smax | | | |
| | comp=N,1μm,0.1s | | | | | | |
| **ZRHB** | **Zarechye** | **1.37** | **56** | *e*Pg | **Pn** | **17 29 38.7** | **+0.1** |
| ZRHB | | | | *e*Sg | **Sn** | **17 29 56.3** | **-0.5** |
| ZRHB | | | | Pmax | | | |
| | comp=N,41nm,0.2s | | | | | | |
| ZRHB | | | | Smax | | | |
| | comp=N,842nm,0.6s | | | | | | |
| **UUDB** | **Ulan-Yde** | **1.48** | **87** | ⇑*i*Pg | **Pn** | **17 29 40.5** | **+0.5** |
| UUDB | | | | *e*Sg | **Sb** | **17 30 00.3** | **+0.5** |
| UUDB | | | | Pmax | | | |
| | comp=N,52nm,0.2s | | | | | | |
| UUDB | | | | Smax | | | |
| | comp=N,358nm,0.2s | | | | | | |
| **ARS** | **Arshan** | **1.78** | **275** | *e*PN | **Pn** | **17 29 44.6** | **+0.4** |
| ARS | | | | *e* | | 17 30 07.2 | |
| ARS | | | | pmax | pmax | | |
| | comp=Z,61nm,0.1s | | | | | | |
| ARS | | | | smax | smax | | |
| | comp=E,640nm,0.5s | | | | | | |
| **ARS** | **Arshan** | **1.78** | **275** | *e*Pg | **Pn** | **17 29 44.7** | **+0.5** |
| ARS | | | | *e*Sg | **Sb** | **17 30 07.6** | **-0.8** |
| ARS | | | | Pmax | | | |
| | comp=E,74nm,0.2s | | | | | | |
| ARS | | | | Smax | | | |
| | comp=E,643nm,0.5s | | | | | | |
| **ZAK** | **Zakamensk** | **1.91** | **222** | *e*PN | **Pb** | **17 29 48.5** | **+0.2** |
| ZAK | | | | *e* | | 17 30 13.8 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,11nm,0.2s | | | | | | |
| ZAK | | | | smax | smax | | |
| | comp=N,143nm,0.3s | | | | | | |
| **ZAK** | **Zakamensk** | **1.91** | **222** | *e*Pg | **Pb** | **17 29 48.2** | **-0.1** |
| ZAK | | | | *e*Sg | **Sb** | **17 30 13.9** | **+1.8** |
| ZAK | | | | Pmax | | | |
| | comp=N,10.0nm,0.2s | | | | | | |
| ZAK | | | | Smax | | | |
| | comp=N,139nm,0.4s | | | | | | |
| **OGRR** | **Ongureny** | **2.31** | **36** | *e*Pn | **Pn** | **17 29 51.5** | **0.0** |
| OGRR | | | | *e*Pg | **Pb** | **17 29 53.7** | **-1.5** |
| OGRR | | | | *e*Sg | **Sb** | **17 30 23.7** | **-0.1** |
| OGRR | | | | Pmax | | | |
| | comp=N,12nm,0.1s | | | | | | |
| OGRR | | | | Smax | | | |
| | comp=N,96nm,0.3s | | | | | | |
| **MOY** | **Mondy** | **2.67** | **269** | *e*Pg | **Pb** | **17 30 00.4** | **-0.9** |
| MOY | | | | *e*Sg | **Sb** | **17 30 34.9** | **+0.7** |
| MOY | | | | Pmax | | | |
| | comp=N,47nm,0.2s | | | | | | |
| MOY | | | | Smax | | | |
| | comp=N,122nm,0.4s | | | | | | |
| **SYVR** | **Suvo** | **3.41** | **55** | *e*Pn | **Pn** | **17 30 06.2** | **-0.4** |
| SYVR | | | | *e*Pg | **Pb** | **17 30 14.9** | **+1.0** |
| SYVR | | | | *e*Sg | **Sb** | **17 30 59.1** | **+3.7** |
| SYVR | | | | Pmax | | | |
| | comp=N,4.0nm,0.2s | | | | | | |
| SYVR | | | | Smax | | | |
| | comp=N,22nm,0.4s | | | | | | |
| **ORL** | **Orlik** | **3.45** | **284** | *e*PN | **Pb** | **17 30 13.7** | **-0.9** |
| ORL | | | | *e* | | 17 30 59.9 | |
| ORL | | | | pmax | pmax | | |
| | comp=Z,49nm,0.5s | | | | | | |
| ORL | | | | smax | smax | | |
| | comp=N,112nm,0.8s | | | | | | |
| **ORL** | **Orlik** | **3.45** | **284** | *e* | **Pn** | **17 30 08.6** | **+1.4** |
| ORL | | | | *e*Pg | **Pb** | **17 30 14.1** | **-0.5** |
| ORL | | | | *e*Sg | **Sb** | **17 30 59.0** | **+2.5** |
| ORL | | | | Pmax | | | |
| | comp=N,27nm,0.7s | | | | | | |
| ORL | | | | Smax | | | |
| | comp=N,58nm,0.4s | | | | | | |
| **ULN** | **Ulaanbaatar** | **4.11** | **163** | *e*Pg | **Pb** | **17 30 28.2** | **+2.3** |
| ULN | | | | *e*Sg | **Sg** | **17 31 23.2** | **-2.1** |
| **YLYR** | **Ulyunkhan** | **4.67** | **47** | *e*Pg | **Pn** | **17 30 23.4** | **-0.5** |
| YLYR | | | | *e*Sg | **Sb** | **17 31 36.9** | **+5.2** |
| YLYR | | | | Smax | | | |
| | comp=N,14nm,0.3s | | | | | | |
| **KPC** | **Khapcheranga** | **4.97** | **112** | *e*Pn | **Pn** | **17 30 26.7** | **-1.4** |
| KPC | | | | *e*Pg | **Pb** | **17 30 43.2** | **+2.7** |
| KPC | | | | *e*Sg | **Sg** | **17 31 47.9** | **-5.0** |
| KPC | | | | Pmax | | | |
| | comp=N,5.0nm,0.3s | | | | | | |
| KPC | | | | Smax | | | |
| | comp=N,51nm,0.6s | | | | | | |
| **KMO** | **Kumora** | **5.38** | **38** | *e*Pn | **Pn** | **17 30 31.5** | **-2.1** |
| KMO | | | | *e*Pg | **Pb** | **17 30 48.5** | **+1.1** |
| KMO | | | | *e*Sg | **Sb** | **17 31 57.2** | **+5.2** |
| KMO | | | | Pmax | | | |
| | comp=N,7.0nm,0.7s | | | | | | |
| KMO | | | | Smax | | | |
| | comp=N,19nm,1.0s | | | | | | |
| **SVKR** | **Severomuysk** | **6.52** | **45** | *e*Sg | Sg | 17 32 35.3 | -7.0 |
| SVKR | | | | Smax | | | |
| | comp=N,22nm,0.3s | | | | | | |
| **NLYR** | **Nelyaty** | **7.71** | **48** | *e*Sg | Sg | 17 33 09.8 | -11 |
| NLYR | | | | Smax | | | |
| | comp=N,13nm,1.7s | | | | | | |
| **TUP** | **Tupik** | **9.20** | **68** | *e*Sg | Sn | 17 33 58.1 | +48 |
| TUP | | | | Smax | | | |
| | comp=N,24nm,1.3s | | | | | | |

*BYKL **31** 17:29:25.3±0.2, 51°.82N × 105°.26E, h21km±4km*
*MOS **31** 17:29:26.1±3.0, 51°.78N × 105°.25E, h10km, mb4.3/1, Error ellipse: s-maj=42.5km s-min=26.3km az=1.1*
**ISC 31 17:29:26.0±1.1, 51°.83N±0°.04 × 105°.29E±0°.02, h7km±10km, n26, σ1§40/36, Lake Baykal region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **LSTR** | **Listvyanka** | **0.28** | **278** | *e*PG | **Pg** | **17 29 31.4** | **-0.2** |
| LSTR | | | | *e* | | 17 29 35.5 | |
| LSTR | | | | pmax | pmax | | |
| | comp=Z,247nm,0.1s | | | | | | |
| LSTR | | | | smax | smax | | |
| | comp=E,3μm,0.4s | | | | | | |
| **LSTR** | **Listvyanka** | **0.28** | **278** | *e*Pg | **Pg** | **17 29 31.4** | **-0.2** |
| LSTR | | | | *e*Sg | **Sg** | **17 29 35.6** | **+0.2** |
| LSTR | | | | Pmax | | | |
| | comp=E,284nm,0.1s | | | | | | |
| LSTR | | | | Smax | | | |
| | comp=E,2μm,0.2s | | | | | | |
| **IRK** | **Irkutsk** | **0.75** | **304** | *e*Sg | **Sg** | **17 29 49.2** | **-1.0** |
| IRK | | | | Smax | | | |
| | comp=E,3μm,0.4s | | | | | | |
| **KAB** | **Kabansk** | **0.87** | **75** | *e*Pg | **Pb** | **17 29 41.8** | **-1.6** |
| KAB | | | | *e*Sg | **Sb** | **17 29 54.1** | **-1.2** |
| KAB | | | | Pmax | | | |
| | comp=E,99nm,0.2s | | | | | | |
| KAB | | | | Smax | | | |
| | comp=E,3μm,0.5s | | | | | | |
| **TLY** | **Talaya** | **1.03** | **262** | *e*PG | **Pb** | **17 29 44.4** | **-1.7** |
| TLY | | | | *e* | | 17 29 58.2 | |
| TLY | | | | pmax | pmax | | |
| | comp=Z,98nm,0.1s | | | | | | |
| TLY | | | | smax | smax | | |
| | comp=N,1μm,0.1s | | | | | | |
| **TLY** | **Talaya** | **1.03** | **262** | *e*Pg | **Pb** | **17 29 44.4** | **-1.7** |
| TLY | | | | *e*Sg | **Sb** | **17 29 57.6** | **-2.3** |
| TLY | | | | Pmax | | | |
| | comp=N,73nm,0.1s | | | | | | |
| TLY | | | | Smax | | | |
| | comp=N,1μm,0.1s | | | | | | |
| **HRMR** | **Khuramsha** | **1.06** | **100** | *e*Pg | **Pb** | **17 29 45.0** | **-1.6** |
| HRMR | | | | *e*Sg | **Sb** | **17 29 59.6** | **-1.0** |
| HRMR | | | | *e*Sb | **Sg** | **17 30 01.9** | **+1.9** |
| **TRG** | **Tyrgan** | **1.14** | **35** | *e*Pg | **Pn** | **17 29 46.8** | **-1.5** |
| TRG | | | | *e*Sg | **Sb** | **17 30 01.9** | **-1.0** |
| TRG | | | | Pmax | | | |
| | comp=N,80nm,0.1s | | | | | | |
| TRG | | | | Smax | | | |
| | comp=N,914nm,0.1s | | | | | | |
| **ZRHB** | **Zarechye** | **1.36** | **57** | *e*Pg | **Pn** | **17 29 50.7** | **-0.6** |
| ZRHB | | | | *e*Sg | **Sn** | **17 30 09.2** | **-0.3** |
| ZRHB | | | | Pmax | | | |
| | comp=N,67nm,0.2s | | | | | | |
| ZRHB | | | | Smax | | | |
| | comp=N,1μm,0.7s | | | | | | |
| **UUDB** | **Ulan-Yde** | **1.47** | **88** | *e*Pg | **Pn** | **17 29 52.2** | **-0.7** |
| UUDB | | | | *e* | | 17 29 54.2 | |
| UUDB | | | | *e*Sg | **Sn** | **17 30 11.9** | **-0.5** |
| UUDB | | | | max | | | |
| | comp=N,227nm,0.3s | | | | | | |
| UUDB | | | | Smax | | | |
| | comp=N,368nm,0.3s | | | | | | |
| **ARS** | **Arshan** | **1.78** | **274** | *e*PN | **Pn** | **17 29 58.0** | **+0.9** |
| ARS | | | | *e* | | 17 30 21.5 | |
| ARS | | | | pmax | pmax | | |
| | comp=Z,118nm,0.2s | | | | | | |
| ARS | | | | smax | smax | | |
| | comp=E,963nm,0.6s | | | | | | |
| **ARS** | **Arshan** | **1.78** | **274** | *e*Pg | **Pn** | **17 29 57.2** | **+0.1** |
| ARS | | | | *e*Sg | **Sn** | **17 30 20.4** | **+0.4** |
| ARS | | | | Pmax | | | |
| | comp=E,107nm,0.2s | | | | | | |
| ARS | | | | Smax | | | |
| | comp=E,864nm,0.3s | | | | | | |
| **ZAK** | **Zakamensk** | **1.93** | **222** | *e*PN | Pn | 17 29 53.8 | -5.4 |
| ZAK | | | | *e* | | 17 30 23.5 | |
| ZAK | | | | pmax | pmax | | |
| | comp=Z,23nm,0.4s | | | | | | |
| ZAK | | | | smax | smax | | |
| | comp=N,321nm,0.3s | | | | | | |
| **ZAK** | **Zakamensk** | **1.93** | **222** | *e*Pg | **Pn** | **17 30 00.0** | **+0.8** |
| ZAK | | | | *e*Sg | **Sb** | **17 30 25.6** | **0.0** |
| ZAK | | | | Pmax | | | |
| | comp=N,17nm,0.1s | | | | | | |
| ZAK | | | | Smax | | | |
| | comp=N,212nm,0.2s | | | | | | |
| **OGRR** | **Ongureny** | **2.29** | **37** | *e*Sg | **Sb** | **17 30 36.1** | **-0.1** |
| OGRR | | | | Smax | | | |
| | comp=N,123nm,0.3s | | | | | | |
| **MOY** | **Mondy** | **2.67** | **268** | *e*PN | **Pb** | **17 30 13.6** | **-0.6** |
| MOY | | | | *e* | | 17 30 47.8 | |
| MOY | | | | pmax | pmax | | |
| | comp=Z,46nm,0.2s | | | | | | |
| MOY | | | | smax | smax | | |
| | comp=E,235nm,0.7s | | | | | | |
| **MOY** | **Mondy** | **2.67** | **268** | *e*Pg | **Pn** | **17 30 11.9** | **+2.4** |
| MOY | | | | *e*Sg | **Sb** | **17 30 46.5** | **-0.7** |
| MOY | | | | Pmax | | | |
| | comp=E,46nm,0.3s | | | | | | |
| MOY | | | | Smax | | | |
| | comp=E,238nm,0.7s | | | | | | |
| **SYVR** | **Suvo** | **3.40** | **56** | *e*Pg | **Pb** | **17 30 26.6** | **+0.2** |
| SYVR | | | | *e*Sg | **Sb** | **17 31 12.2** | **+4.3** |
| SYVR | | | | Pmax | | | |
| | comp=E,12nm,0.3s | | | | | | |
| SYVR | | | | Smax | | | |
| | comp=E,36nm,0.4s | | | | | | |
| **ORL** | **Orlik** | **3.44** | **284** | *e*PN | **Pb** | **17 30 27.4** | **+0.1** |
| ORL | | | | *e* | | 17 31 12.8 | |
| ORL | | | | pmax | pmax | | |
| | comp=Z,44nm,0.5s | | | | | | |
| ORL | | | | smax | smax | | |
| | comp=N,110nm,0.9s | | | | | | |
| **ORL** | **Orlik** | **3.44** | **284** | *e*Pg | **Pb** | **17 30 27.2** | **-0.1** |
| ORL | | | | *e*Sg | **Sb** | **17 31 11.5** | **+2.1** |
| ORL | | | | Pmax | | | |
| | comp=N,43nm,0.4s | | | | | | |
| ORL | | | | Smax | | | |
| | comp=N,109nm,0.6s | | | | | | |
| **ULN** | **Ulaanbaatar** | **4.13** | **163** | *e*Pg | **Pb** | **17 30 39.3** | **+0.3** |
| ULN | | | | *e*Sg | Sb | 17 31 33.7 | +4.5 |
| **YLYR** | **Ulyunkhan** | **4.66** | **47** | *e*Sg | Sb | 17 31 49.1 | +5.0 |
| YLYR | | | | Smax | | | |
| | comp=N,27nm,0.7s | | | | | | |
| **KPC** | **Khapcheranga** | **4.98** | **113** | *e*Pn | **Pn** | **17 30 40.4** | **-0.7** |
| KPC | | | | *e*Pg | **Pb** | **17 30 54.3** | **+0.9** |
| KPC | | | | *e*Sg | Sb | 17 31 58.6 | +5.2 |
| KPC | | | | Pmax | | | |
| | comp=N,7.0nm,0.3s | | | | | | |
| KPC | | | | Smax | | | |
| | comp=N,64nm,0.8s | | | | | | |
| **KMO** | **Kumora** | **5.36** | **38** | *e*Pg | **Pb** | **17 31 01.3** | **+1.4** |
| KMO | | | | *e*Sg | Sb | 17 32 10.7 | +6.4 |
| KMO | | | | Pmax | | | |
| | comp=N,4.0nm,0.6s | | | | | | |
| KMO | | | | Smax | | | |
| | comp=N,35nm,1.2s | | | | | | |
| **NLYR** | **Nelyaty** | **7.69** | **49** | *e*Sg | Sb | 17 33 24.6 | +13 |
| NLYR | | | | Smax | | | |
| | comp=N,25nm,1.2s | | | | | | |
| **TUP** | **Tupik** | **9.19** | **68** | *e*Sg | Sn | 17 34 10.1 | +48 |
| TUP | | | | Smax | | | |
| | comp=N,29nm,1.1s | | | | | | |

**IDC 31 17:32:10.3±3.4, 3°.54S × 99°.87E, h0km, mb3.4/6, mb1 3.5/6, mb1mx3.3/55, mbtmp3.4/6, Error ellipse: s-maj=136.3km s-min=20.1km az=57.0, Southwest of Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.88** | **358** | P | P | 17 37 05.8 | +0.8 |
| | 0.5nm,0.6s,baz=185,slow=11,SNR=4.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.54** | **260** | T | T | 18 07 48.2 | |
| | baz=82,slow=75,SNR=11 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.55** | **260** | T | T | 18 07 31.4 | |
| | baz=82,slow=75,SNR=8.1 | | | | | | |
| **H08S1** | **Diego Carcia H** | **27.56** | **260** | T | T | 18 07 49.2 | |
| | baz=82,slow=75,SNR=13 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **33.88** | **159** | T | T | 18 15 15.4 | |
| | baz=337 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **33.90** | **159** | T | T | 18 14 50.9 | |
| | baz=337 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **33.90** | **159** | T | T | 18 14 53.0 | |
| | baz=337 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.35** | **119** | P | P | 17 39 24.7 | -0.3 |
| | 0.3nm,0.4s,baz=304,slow=9.0,SNR=4.4 | | | | | | |
| **ASAR** | **Alice Springs** | **38.48** | **124** | P | P | 17 39 34.2 | -0.2 |
| | 0.2nm,0.4s,baz=299,slow=7.4,SNR=10 | | | | | | |
| **SONM** | **Songino Array** | **51.48** | **6** | P | P | 17 41 17.0 | -0.7 |
| | 0.4nm,0.7s,baz=186,slow=8.7,SNR=3.5 | | | | | | |
| **MKAR** | **Makanchi Array** | **52.47** | **345** | P | P | 17 41 25.7 | +0.7 |
| | 0.5nm,0.7s,baz=160,slow=9.4,SNR=2.8 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **58.65** | **350** | P | P | 17 42 07.8 | -1.5 |
| | 0.5nm,0.4s,baz=136,slow=5.8,SNR=3.2 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.99** | **39** | PKPbc | PKPab | 17 51 53.2 | -0.2 |
| | 0.3nm,0.8s,baz=339,slow=2.3,SNR=3.0 | | | | | | |

*ISCJB **31** 17:32:41.7±0.5, 48°.03S±0°.08 × 9°.7W±0°.1, h10km, mb4.3/15, MS4.0/2, Error ellipse: s-maj=13.5km s-min=11.0km az=3.3*
*IDC **31** 17:32:41.5±0.6, 48°.11S × 9°.67W, h0km, mb4.3/13, mb1 4.3/13, mb1mx4.1/34, mbtmp4.3/13, MS4.0/2, Ms1 4.0/2, ms1mx3.5/15, Error ellipse: s-maj=16.9km s-min=16.1km az=71.0*
*NEIC **31** 17:32:43.0±0.4, 48°.17S × 9°.68W, h10km, mb4.7/2, Error ellipse: s-maj=12.1km s-min=11.3km az=95.0*
**ISC 31 17:32:43.2±0.5, 48°.1S±0°.1 × 9°.7W±0°.1, h10km, n33, σ1§13/26, mb4.3/15, Southern Mid-Atlantic Ridge**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **VNA1** | **Neumayer--Stat** | **22.59** | **179** | P | **P** | **17 37 46.1** | **+2.7** |
| **VNA2** | **Neumayer--Watz** | **22.88** | **178** | P | **P** | **17 37 48.4** | **+1.9** |
| | baz=358,slow=9.5 | | | | | | |
| **SNAA** | **Sanae** | **23.82** | **175** | P | **P** | **17 37 55.9** | **-0.1** |
| **SNAA** | **Sanae** | **23.82** | **175** | P | **P** | **17 37 55.7** | **-0.3** |
| | 4.6nm,0.8s,baz=344,slow=6.9,SNR=32 | | | | | | |
| **SNAA** | **Sanae** | **23.82** | **175** | *e*P | **P** | **17 37 55.9** | **-0.1** |
| **BOSA** | **Boshof** | **33.22** | **67** | P | **P** | **17 39 19.6** | **-0.8** |
| | 6.8nm,1.0s,baz=250,slow=8.1,SNR=5.0 | | | | | | |
| **LBTB** | **Lobatse** | **36.06** | **63** | P | **P** | **17 39 44.5** | **-0.4** |
| | 4.5nm,0.9s,baz=231,slow=8.1,SNR=4.4 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **39.27** | **352** | T | T | 18 22 06.9 | |
| | baz=175,slow=75,SNR=27 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **39.28** | **352** | T | T | 18 22 04.9 | |
| | baz=175,slow=75,SNR=28 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **39.29** | **352** | T | T | 18 22 05.6 | |
| | baz=175,slow=75,SNR=31 | | | | | | |
| **MAW** | **Mawson** | **40.29** | **146** | P | **P** | **17 40 19.7** | **-0.2** |
| | 8.9nm,0.9s,baz=261,slow=6.4,SNR=26 | | | | | | |
| MAW | | | | LR | LR | 17 55 42.5 | |
| | comp=Z,182nm,18.9s,baz=296,slow=34 | | | | | | |
| **MATP** | **Matopo** | **41.28** | **61** | P | **P** | **17 40 28.4** | **-0.5** |
| | 2.9nm,0.6s,baz=227,slow=6.2,SNR=8.2 | | | | | | |
| **QSPA** | **South Pole Qui** | **42.12** | **180** | P | **P** | **17 40 35.6** | **+0.3** |
| | 4.5nm,0.9s,baz=219,slow=3.5,SNR=12 | | | | | | |
| **CPUP** | **Villa Florida** | **42.90** | **283** | P | **P** | **17 40 42.0** | **+0.2** |
| | 4.8nm,1.1s,baz=113,slow=4.6,SNR=3.8 | | | | | | |
| **BDFB** | **Brasília** | **45.16** | **303** | P | **P** | **17 41 00.7** | **+0.5** |
| | 4.4nm,0.6s,baz=133,slow=5.4,SNR=7.7 | | | | | | |
| **CFAA** | **Coronel Fontan** | **46.74** | **269** | P | **P** | **17 41 11.8** | **-0.7** |
| | 0.7nm,0.8s,baz=136,slow=10,SNR=8.1 | | | | | | |
| **LVC** | **Limon Verde** | **53.09** | **277** | *e*P | P | 17 41 55.3 | -5.8 |
| **SBA** | **Scott Base** | **54.26** | **179** | *e*P | **P** | **17 42 06.2** | **-2.4** |
| | 17nm,1.5s | | | | | | |
| **VNDA** | **Vanda** | **54.51** | **178** | P | **P** | **17 42 11.3** | **+0.9** |
| | 2.0nm,0.9s,baz=227,slow=7.8,SNR=5.6 | | | | | | |
| VNDA | | | | LR | LR | 18 03 31.3 | |
| | comp=Z,181nm,19.7s,baz=239,slow=34 | | | | | | |
| **DBIC** | **Dimbokro** | **54.74** | **6** | P | **P** | **17 42 13.2** | **+0.5** |
| | 4.1nm,0.9s,baz=119,slow=8.2,SNR=3.2 | | | | | | |
| **LPAZ** | **La Paz** | **57.08** | **283** | P | **P** | **17 42 29.5** | **-0.8** |
| | 1.5nm,0.7s,baz=190,slow=4.7,SNR=5.8 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **61.85** | **13** | P | **P** | **17 43 02.5** | **+0.1** |
| | 4.5nm,1.0s,baz=197,slow=7.8,SNR=27 | | | | | | |
| **TAM** | **Tamanrasset** | **71.91** | **15** | P | **P** | **17 44 08.2** | **+1.6** |
| | 5.0nm,0.8s | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **83.31** | **137** | T | T | 19 18 00.9 | |
| | baz=216,slow=75,SNR=6.5 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **83.32** | **137** | T | T | 19 18 01.2 | |
| | baz=216,slow=75,SNR=5.2 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **83.32** | **137** | T | T | 19 18 00.7 | |
| | baz=216,slow=75,SNR=7.6 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **115.89** | **91** | PKP | **PKPdf** | **17 51 26.1** | **-0.1** |
| | 0.8nm,1.0s,baz=251,slow=2.8,SNR=4.0 | | | | | | |
| **NVAR** | **Mina Array Bea** | **128.88** | **287** | PKP | **PKPdf** | **17 51 51.5** | **+0.8** |
| | 0.5nm,0.8s,baz=183,slow=3.0,SNR=3.7 | | | | | | |
| **SONM** | **Songino Array** | **138.34** | **66** | PKP | **PKPdf** | **17 52 09.5** | **+1.4** |
| | 0.4nm,0.8s,baz=302,slow=2.7,SNR=3.3 | | | | | | |
| **INK** | **Inuvik** | **145.89** | **327** | PKPbc | **PKPdf** | **17 52 19.7** | **-1.0** |
| | 4.0nm,0.6s,baz=88,slow=8.4,SNR=11 | | | | | | |
| **KSAR** | **Wonju Array Be** | **147.46** | **93** | PKPbc | **PKPbc** | **17 52 26.0** | **-0.9** |
| **KSRS** | **Korea Array** | **147.49** | **93** | PKPbc | **PKPbc** | **17 52 26.0** | **-0.9** |
| | 2.7nm,0.9s,baz=251,slow=4.0,SNR=5.1 | | | | | | |
| **ILAR** | **Eielson Array** | **151.83** | **322** | PKPbc | **PKPbc** | **17 52 35.5** | **-1.3** |
| | 1.9nm,0.7s,baz=41,slow=0.8,SNR=29 | | | | | | |

**IDC 31 17:36:19.6±3.6, 18°.18S × 178°.05W, h642km±45km, mb3.0/4, mb1 3.4/4, mb1mx2.8/33, mbtmp4.0/4, Error ellipse: s-maj=112.9km s-min=16.2km az=156.0, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **WRA** | **Warramunga Arr** | **44.91** | **260** | P | P | 17 43 39.9 | -0.1 |
| | 0.5nm,0.3s,baz=95,slow=7.4,SNR=6.1 | | | | | | |
| **ASAR** | **Alice Springs** | **45.04** | **254** | P | P | 17 43 41.0 | +0.1 |
| | 2.8nm,0.7s,baz=94,slow=7.3,SNR=49 | | | | | | |
| ASAR | | | | PcP | PcP | 17 45 07.5 | 0.0 |
| | 0.8nm,0.5s,baz=105,slow=3.8,SNR=13 | | | | | | |
| ASAR | | | | S | S | 17 49 35.2 | 0.0 |
| | 0.8nm,0.7s,baz=92,slow=15,SNR=6.6 | | | | | | |
| **NVAR** | **Mina Array Bea** | **79.38** | **44** | P | P | 17 47 20.8 | -0.6 |
| | 0.7nm,0.7s,baz=217,slow=7.2,SNR=4.0 | | | | | | |
| **TXAR** | **Lajitas Array** | **85.86** | **57** | P | P | 17 47 53.6 | -0.1 |
| | 0.8nm,0.7s,baz=189,slow=6.3,SNR=10 | | | | | | |
| **BRTR** | **Keskin Array B** | **145.21** | **315** | PKPbc | PKPdf | 17 54 46.8 | +0.6 |
| | 1.2nm,0.7s,baz=106,slow=2.9,SNR=6.8 | | | | | | |
| **ASF** | **Jabal al Asfar** | **145.60** | **301** | PKPbc | PKPbc | 17 54 48.6 | -0.1 |
| | 1.2nm,0.4s,baz=102,slow=2.5,SNR=3.9 | | | | | | |
| **BRG** | **Berggiesshubel** | **146.01** | **346** | *e*(P) | PKPbc | 17 54 48.7 | -0.4 |
| | 2.0nm,0.7s | | | | | | |
| **MMAI** | **Mount Meron Ar** | **146.57** | **303** | PKPbc | PKPbc | 17 54 51.2 | -0.1 |
| | 2.2nm,0.6s,baz=77,slow=5.2,SNR=3.9 | | | | | | |
| **GERES** | **GERESS Array B** | **147.96** | **345** | PKPbc | PKPbc | 17 54 53.8 | -0.6 |
| | 0.3nm,0.6s,baz=27,slow=4.5,SNR=4.4 | | | | | | |

*ISCJB **31** 17:42:06.9±0.3, 51°.59N±0°.02 × 16°.12E±0°.02, h0km, Error ellipse: s-maj=2.5km s-min=2.0km az=24.2*
*CSEM **31** 17:42:09.1±0.1, 51°.56N × 16°.08E, h2km, ML3.9/13, Error ellipse: s-maj=2.9km s-min=2.5km az=32.0*
*BGR **31** 17:42:10.4±0.5, 51°.54N × 16°.12E, h1km, ML3.5/17, Error ellipse: s-maj=6.7km s-min=2.2km az=22.0*
*IDC **31** 17:42:10.3±0.6, 51°.55N × 15°.98E, h0km, mb1 3.6/8, mb1mx3.4/42, mbtmp3.6/8, ML3.2/8, Error ellipse: s-maj=9.1km s-min=5.8km az=98.0*
*STR **31** 17:42:13.0±0.8, 51°.22N × 15°.94E, h5km, Ml3.6, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*
*LDG **31** 17:42:13.0±0.2, 51°.31N × 15°.88E, h1km, Ml3.6/12, Error ellipse: s-maj=6.3km s-min=3.4km az=13.0, Suspected Mining induced.*
*VIE **31** 17:42:13.7±0.5, 51°.23N × 16°.12E, h0km, mb3.0/7, ml3.3/7, Error ellipse: s-maj=3.4km s-min=3.0km az=165.0, Suspected Mining induced.*
*UPP **31** 17:42:14.9, 51°.95N × 15°.63E, h0km, ML1.8, Suspected Mining explosion.*
**ISC 31 17:42:08.7±0.6, 51°.60N±0°.02 × 16°.06E±0°.02, h0km, n141, σ1§52/208, 13C-4D, Poland**

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **KSP** | **Ksiaz** | **0.77** | **169** | *e*Pg | **Pg** | **17 42 23.9** | **+0.6** |
| KSP | | | | *i* Sg | **Sg** | **17 42 33.6** | **+0.3** |
| KSP | | | | *e* | | 17 42 38.2 | |
| **KSP** | **Ksiaz** | **0.77** | **169** | Pg | **Pg** | **17 42 24.0** | **+0.6** |
| KSP | | | | Sg | **Sg** | **17 42 33.6** | **+0.3** |
| **UPC** | **Upice** | **1.09** | **182** | *e*PG | **Pg** | **17 42 29.9** | **+0.3** |
| UPC | | | | *e*SG | **Sg** | **17 42 44.0** | **+0.3** |
| | comp=Z,255nm,0.4s | | | | | | |
| **UPC** | **Upice** | **1.09** | **182** | Pg | **Pg** | **17 42 29.9** | **+0.3** |
| UPC | | | | Sg | **Sg** | **17 42 44.0** | **+0.3** |
| | 255nm,0.4s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.26** | **172** | *e*Pg | **Pg** | **17 42 32.7** | **-0.1** |
| DPC | | | | *e*Sg | **Sg** | **17 42 48.4** | **-0.7** |
| **DPC** | **Dobruska-Polom** | **1.26** | **172** | *e*PG | **Pg** | **17 42 32.7** | **-0.1** |
| DPC | | | | *e*SG | **Sg** | **17 42 47.7** | **-1.4** |
| | comp=Z,130nm,0.5s | | | | | | |
| **DPC** | **Dobruska-Polom** | **1.26** | **172** | Pg | **Pg** | **17 42 32.7** | **-0.1** |
| DPC | | | | Sg | **Sg** | **17 42 48.4** | **-0.7** |
| **PVCC** | **Panska Ves** | **1.43** | **222** | *e*PG | **Pn** | **17 42 36.3** | **+0.5** |
| PVCC | | | | *e*SG | **Sn** | **17 42 56.3** | **+1.0** |
| | comp=Z,518nm,0.5s | | | | | | |
| **PVCC** | **Panska Ves** | **1.43** | **222** | Pg | **Pn** | **17 42 36.3** | **+0.5** |
| PVCC | | | | Sg | **Sn** | **17 42 56.3** | **+1.0** |
| | 518nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **242** | PN | **Pn** | **17 42 37.0** | **-0.1** |
| BRG | | | | PG | **Pg** | **17 42 39.0** | **+1.2** |
| BRG | | | | SG | **Sn** | **17 42 59.2** | **+1.7** |
| | 229nm,0.5s | | | | | | |
| **BRG** | **Berggiesshubel** | **1.52** | **242** | *e*Pn | **Pn** | **17 42 37.3** | **+0.2** |
| BRG | | | | *e*Pg | **Pg** | **17 42 38.9** | **+1.1** |
| BRG | | | | *e*Sg | **Sn** | **17 42 59.0** | **+1.5** |
| **BRG** | **Berggiesshubel** | **1.52** | **242** | Pn | **Pn** | **17 42 37.3** | **+0.2** |
| **KRLC** | **Kraliky** | **1.59** | **163** | *e*PG | **Pn** | **17 42 38.0** | **-0.1** |
| KRLC | | | | *e*SG | **Sn** | **17 42 58.6** | **-0.8** |
| **KRLC** | **Kraliky** | **1.59** | **163** | Pg | **Pn** | **17 42 38.0** | **-0.1** |
| KRLC | | | | Sg | **Sn** | **17 42 58.6** | **-0.8** |
| **GKP** | **Gorka Klasztor** | **1.82** | **23** | *e*Pn | **Pg** | 17 42 49.2 | +5.6 |
| GKP | | | | *e*Pg | Pb | 17 42 52.2 | +9.3 |
| GKP | | | | *e*Sn | **Sg** | **17 43 10.9** | **+3.7** |
| GKP | | | | *e*Sg | Sb | 17 43 16.6 | +10 |
| **FBE** | **Freiberg** | **1.83** | **249** | *e*Pg | **Pg** | **17 42 44.4** | **+0.6** |
| FBE | | | | *e*Sg | **Sg** | **17 43 08.4** | **+0.9** |
| **FBE** | **Freiberg** | **1.83** | **249** | Pg | **Pg** | **17 42 44.4** | **+0.6** |
| FBE | | | | Sg | **Sg** | **17 43 08.4** | **+0.9** |
| **PRA** | **Prague** | **1.85** | **215** | *e*PN | **Pn** | **17 42 41.7** | **+0.1** |
| PRA | | | | *e*SG | **Sb** | **17 43 08.0** | **+1.1** |
| | comp=Z,174nm,0.6s | | | | | | |
| **PRA** | **Prague** | **1.85** | **215** | Pn | **Pn** | **17 42 41.7** | **+0.1** |
| PRA | | | | Sg | **Sb** | **17 43 08.0** | **+1.1** |
| | 174nm,0.6s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.87** | **206** | *e*PN | **Pn** | **17 42 42.1** | **+0.1** |
| GOPC | | | | *e*PG | Pb | **17 42 44.2** | **+0.5** |
| GOPC | | | | *e*SG | **Sb** | **17 43 08.4** | **+0.8** |
| | comp=Z,135nm,0.7s | | | | | | |
| **GOPC** | **GO Pecny, Ondr** | **1.87** | **206** | Pn | **Pn** | **17 42 42.1** | **+0.1** |
| **PRU** | **Pruhonice** | **1.88** | **212** | *e*PN | **Pn** | **17 42 42.2** | **+0.2** |
| PRU | | | | *e*PG | **Pg** | **17 42 45.3** | **+0.6** |
| PRU | | | | *e*SG | **Sb** | **17 43 08.9** | **+1.1** |
| | comp=Z,108nm,0.4s | | | | | | |
| **PRU** | **Pruhonice** | **1.88** | **212** | Pn | **Pn** | **17 42 42.2** | **+0.2** |
| **CLL** | **Collm** | **1.94** | **263** | *e*Pn | **Pn** | **17 42 43.2** | **+0.4** |
| CLL | | | | *e*Sg | **Sg** | **17 43 12.2** | **+1.3** |
| **CLL** | **Collm** | **1.94** | **263** | *i* Pn | **Pn** | **17 42 43.0** | **+0.2** |
| | comp=Z,43nm,0.5s | | | | | | |
| CLL | | | | *i* Pg | **Pg** | **17 42 46.4** | **+0.6** |
| CLL | | | | *i* | | 17 42 50.3 | |
| CLL | | | | *i* Sg | **Sg** | **17 43 12.5** | **+1.6** |
| | comp=Z,95nm,0.7s | | | | | | |
| **CLL** | **Collm** | **1.94** | **263** | Pn | **Pn** | **17 42 43.2** | **+0.4** |
| CLL | | | | Sg | **Sg** | **17 43 12.2** | **+1.3** |
| **RAC** | **Raciborz** | **2.03** | **137** | *e*Pg | **Pb** | **17 42 47.6** | **+1.2** |
| RAC | | | | *e*Sg | **Sb** | **17 43 12.6** | **+0.4** |
| **MORC** | **Moravsky Berou** | **2.05** | **152** | *e*Pn | **Pn** | **17 42 44.3** | **-0.2** |
| **MORC** | **Moravsky Berou** | **2.05** | **152** | ⇑*i*P | **Pn** | **17 42 44.4** | **-0.1** |
| **MORC** | **Moravsky Berou** | **2.05** | **152** | S | **Sn** | **17 43 09.7** | **-1.1** |
| **MORC** | **Moravsky Berou** | **2.05** | **152** | Pn | **Pn** | **17 42 44.3** | **-0.2** |
| MORC | | | | *e*Sg | **Sn** | **17 43 12.0** | **+1.2** |
| **OKC** | **Ostrava-Krasne** | **2.20** | **142** | *e*Sg | **Sb** | **17 43 17.1** | **0.0** |
| **OKC** | **Ostrava-Krasne** | **2.20** | **142** | *e*PN | **Pn** | **17 42 45.7** | **-0.8** |
| OKC | | | | *e*PG | **Pb** | **17 42 49.8** | **+0.4** |
| OKC | | | | *e*SG | **Sb** | **17 43 17.2** | **0.0** |
| | comp=Z,103nm,0.5s | | | | | | |
| **OKC** | **Ostrava-Krasne** | **2.20** | **142** | Pn | **Pn** | **17 42 45.7** | **-0.8** |
| **CHZP** | **Chorzow** | **2.27** | **124** | *e*Pg | **Pg** | **17 42 52.5** | **+0.4** |
| **VRAC** | **Vranov** | **2.32** | **171** | Pn | **Pn** | **17 42 48.7** | **+0.7** |
| | comp=Z,5.1nm,0.3s,baz=340,slow=14,SNR=36 | | | | | | |
| VRAC | | | | Lg | Lg | 17 43 21.9 | |
| | comp=Z,19nm,0.3s,baz=274,slow=21,SNR=11 | | | | | | |
| **VRAC** | **Vranov** | **2.32** | **171** | ⇑*i*P | **Pn** | **17 42 48.4** | **+0.3** |
| **VRAC** | **Vranov** | **2.32** | **171** | ⇑*i*P | **Pn** | **17 42 48.4** | **+0.3** |
| **VRAC** | **Vranov** | **2.32** | **171** | *e*Pn | **Pn** | **17 42 48.8** | **+0.7** |
| VRAC | | | | *e*Sg | **Sb** | **17 42 49.0** | **-0.3** |
| **TREC** | **Trest** | **2.33** | **189** | *e*PN | **Pn** | **17 42 48.8** | **+0.5** |
| TREC | | | | *e*PG | Pb | **17 42 52.8** | **+1.2** |
| TREC | | | | *e*SG | **Sb** | **17 43 22.7** | **+1.7** |
| | comp=Z,76nm,0.4s | | | | | | |
| **TREC** | **Trest** | **2.33** | **189** | Pn | **Pn** | **17 42 48.8** | **+0.5** |
| **TANN** | **Tannenbergstha** | **2.56** | **244** | *e*Pn | **Pn** | **17 42 52.2** | **+0.7** |
| **TANN** | **Tannenbergstha** | **2.56** | **244** | Pn | **Pn** | **17 42 52.2** | **+0.7** |
| **WERD** | **Werda** | **2.64** | **246** | *e*Pn | **Pn** | **17 42 53.1** | **+0.6** |
| **WERD** | **Werda** | **2.64** | **246** | Pn | **Pn** | **17 42 53.1** | **+0.6** |
| **OJC** | **Ojcow** | **2.74** | **119** | *e*Pn | **Pn** | **17 42 51.9** | **-1.9** |
| OJC | | | | *e*Sg | **Sg** | **17 43 36.4** | **-0.2** |
| **OJC** | **Ojcow** | **2.74** | **119** | *e*Pg | **Pb** | **17 43 00.7** | **+2.2** |
| OJC | | | | *e*Sg | **Sg** | **17 43 36.1** | **-0.5** |
| **OJC** | **Ojcow** | **2.74** | **119** | Pn | **Pn** | **17 42 51.9** | **-1.9** |
| **OJC** | **Ojcow** | **2.74** | **119** | *e*Pg | **Pb** | **17 43 00.7** | **+2.2** |
| OJC | | | | Sg | **Sg** | **17 43 36.4** | **-0.2** |
| **KHC** | **Kasperske Hory** | **2.94** | **214** | *e*PN | **Pn** | **17 42 57.0** | **+0.4** |
| KHC | | | | *e*PG | **Pb** | **17 43 03.4** | **+1.5** |
| KHC | | | | *e*SN | **Sn** | **17 43 31.9** | **-0.7** |
| KHC | | | | *e*SG | **Sg** | **17 43 42.2** | **-0.8** |
| | comp=Z,44nm,0.4s | | | | | | |
| **KHC** | **Kasperske Hory** | **2.94** | **214** | Pn | **Pn** | **17 42 57.0** | **+0.4** |
| **MOX** | **Moxa** | **2.96** | **253** | *e*Pn | **Pn** | **17 42 57.3** | **+0.4** |
| **MOX** | **Moxa** | **2.96** | **253** | Pn | **Pn** | **17 42 57.3** | **+0.4** |
| **MANZ** | **Manzenberg** | **2.98** | **239** | *e*Pn | **Pn** | **17 42 58.3** | **+1.1** |
| **MANZ** | **Manzenberg** | **2.98** | **239** | Pn | **Pn** | **17 42 58.3** | **+1.1** |
| **ROTZ** | **Rotzenmuhle** | **3.06** | **235** | *e*Pn | **Pn** | **17 42 59.2** | **+0.9** |
| **ROTZ** | **Rotzenmuhle** | **3.06** | **235** | Pn | **Pn** | **17 42 59.2** | **+0.9** |
| **GEC2** | **GERESS Array S** | **3.15** | **210** | *e*Pn | **Pn** | **17 42 59.7** | **+0.1** |
| **GEC2** | **GERESS Array S** | **3.15** | **210** | Pn | **Pn** | **17 42 59.7** | **+0.1** |
| **GERES** | **GERESS Array B** | **3.15** | **210** | Pn | **Pn** | **17 42 60.0** | **+0.4** |
| | comp=Z,4.3nm,0.3s,baz=30,slow=13,SNR=139 | | | | | | |
| GERES | | | | Pg | **Pb** | **17 43 07.0** | **+1.5** |
| | comp=Z,7.0nm,0.3s,baz=30,slow=16,SNR=42 | | | | | | |
| GERES | | | | Lg | Lg | 17 43 49.4 | |
| | comp=Z,15nm,0.3s,baz=30,slow=27,SNR=14 | | | | | | |
| **WET** | **Wettzell** | **3.19** | **221** | *e*Pn | **Pn** | **17 43 00.7** | **+0.6** |
| **WET** | **Wettzell** | **3.19** | **221** | Pn | **Pn** | **17 43 00.7** | **+0.6** |
| **SMOL** | **Smolenice** | **3.21** | **164** | *e*PG | **Pg** | **17 43 09.7** | **-0.5** |
| SMOL | | | | *e*SG | **Sg** | **17 43 51.5** | **-0.2** |
| **SMOL** | **Smolenice** | **3.21** | **164** | *e*Pg | **Pg** | **17 43 09.7** | **-0.5** |
| SMOL | | | | *e*Sg | **Sg** | **17 43 51.5** | **-0.2** |
| **LANS** | **Liptovska Anna** | **3.28** | **137** | *e*PN | **Pn** | **17 43 01.8** | **+0.5** |
| LANS | | | | *e*PG | **Pg** | **17 43 10.9** | **-0.6** |
| LANS | | | | *e*SG | **Sg** | **17 43 53.8** | **-0.1** |
| **LANS** | **Liptovska Anna** | **3.28** | **137** | *e*Pn | **Pn** | **17 43 01.8** | **+0.5** |
| **ZST** | **Bratislava** | **3.47** | **168** | *e*PG | **Pg** | **17 43 14.2** | **-1.0** |
| ZST | | | | *e*SG | **Sb** | **17 43 57.5** | **+3.9** |
| **ZST** | **Bratislava** | **3.47** | **168** | *e*Pg | **Pg** | **17 43 14.2** | **-1.0** |
| ZST | | | | *e*Sg | **Sb** | **17 43 57.5** | **+3.9** |
| **NIE** | **Niedzica** | **3.47** | **127** | *e*P | **Pg** | **17 43 17.2** | **+2.0** |
| NIE | | | | *e*S | **Sg** | **17 44 00.8** | **+0.6** |
| **CLZ** | **Clausthal** | **3.55** | **276** | *e*Pn | **Pn** | **17 43 06.8** | **+1.8** |
| **CLZ** | **Clausthal** | **3.55** | **276** | Pn | **Pn** | **17 43 06.8** | **+1.8** |
| **BSD** | **Bornholm Skovb** | **3.59** | **349** | *i* P | **Pn** | **17 43 05.5** | **0.0** |
| BSD | | | | *i* S | **Sn** | **17 43 45.3** | **-3.3** |
| **BSD** | **Bornholm Skovb** | **3.59** | **349** | *i* P | **Pn** | **17 43 05.6** | **0.0** |
| | SNR=49 | | | | | | |
| BSD | | | | *i* S | **Sn** | **17 43 45.3** | **-3.3** |
| **GRA1** | **Grafenberg Arr** | **3.62** | **240** | Pn | **Pn** | **17 43 07.2** | **+1.1** |
| **GRF** | **Grafenberg Arr** | **3.62** | **240** | *e*Pn | **Pn** | **17 43 07.2** | **+1.1** |
| **CONA** | **Conrad Observa** | **3.67** | **182** | ⇓*i*Pn | **Pn** | **17 43 07.4** | **+0.6** |
| CONA | | | | ⇑*i*Sg | **Sb** | **17 44 03.9** | **+4.3** |
| | comp=Z,60nm,0.5s | | | | | | |
| **CONA** | **Conrad Observa** | **3.67** | **182** | Pn | **Pn** | **17 43 07.4** | **+0.6** |
| CONA | | | | Sg | **Sb** | **17 44 03.9** | **+4.3** |
| | comp=Z,60nm,0.5s | | | | | | |
| **MOA** | **Molln** | **3.93** | **198** | ⇓*i*Pn | **Pn** | **17 43 11.0** | **+0.8** |
| MOA | | | | ⇑*i*Sg | **Sb** | **17 44 11.9** | **+5.1** |
| | comp=Z,67nm,0.6s | | | | | | |
| **MOA** | **Molln** | **3.93** | **198** | Pn | **Pn** | **17 43 11.0** | **+0.8** |
| MOA | | | | Sg | **Sb** | **17 44 11.9** | **+5.1** |
| | comp=Z,67nm,0.6s | | | | | | |
| **STHS** | **Stebnicka Huta** | **3.96** | **121** | *e*PN | **Pn** | **17 43 11.4** | **+0.7** |
| STHS | | | | *e*PG | **Pg** | **17 43 26.0** | **+1.4** |
| STHS | | | | *e*SG | **Sg** | **17 44 20.3** | **+4.4** |
| **STHS** | **Stebnicka Huta** | **3.96** | **121** | *e*Pn | **Pn** | **17 43 11.4** | **+0.7** |
| **ARSA** | **Arzberg** | **4.37** | **185** | ⇑*i*Pn | **Pn** | **17 43 16.1** | **-0.1** |
| ARSA | | | | ⇑*i*Sg | **Sg** | **17 44 26.0** | **-2.8** |
| | comp=Z,56nm,0.9s | | | | | | |
| **ARSA** | **Arzberg** | **4.37** | **185** | Pn | **Pn** | **17 43 16.1** | **-0.1** |
| ARSA | | | | Sg | **Sg** | **17 44 26.0** | **-2.8** |
| | comp=Z,56nm,0.9s | | | | | | |
| **PSZ** | **Piszkesteto** | **4.44** | **145** | S | **Pn** | **17 43 18.2** | **+0.9** |
| **BLEU** | **Blekinge** | **4.72** | **358** | P | **Pn** | **17 43 21.4** | **+0.4** |
| BLEU | | | | S | **Sn** | **17 44 13.2** | **-3.2** |
| **KOLS** | **Kolonicke sedl** | **4.79** | **121** | *e*PN | **Pn** | **17 43 21.7** | **-0.4** |
| KOLS | | | | *e*PG | **Pg** | **17 43 43.1** | **+2.6** |
| **KOLS** | **Kolonicke sedl** | **4.79** | **121** | *e*SG | **Sg** | **17 44 46.3** | **+3.8** |
| **KOLS** | **Kolonicke sedl** | **4.79** | **121** | *e*Pn | **Pn** | **17 43 21.7** | **-0.4** |
| **KOLS** | **Kolonicke sedl** | **4.79** | **121** | *e*Pg | **Pg** | **17 43 43.1** | **+2.6** |
| KOLS | | | | *e*Sg | **Sg** | **17 44 46.3** | **+3.8** |
| **KBA** | **Koelnbreinsper** | **4.86** | **203** | ⇑*i*Pn | **Pn** | **17 43 24.3** | **+1.1** |
| KBA | | | | ⇓*i*Sg | **Sg** | **17 44 44.1** | **-0.6** |
| | comp=Z,27nm,0.6s | | | | | | |
| **KBA** | **Koelnbreinsper** | **4.86** | **203** | Pn | **Pn** | **17 43 24.3** | **+1.1** |
| KBA | | | | Sg | **Sg** | **17 44 44.1** | **-0.6** |
| | comp=Z,27nm,0.6s | | | | | | |
| **TOD** | **Tromm** | **5.04** | **250** | P | **Pn** | **17 43 26.3** | **+0.9** |
| TOD | | | | S | **Sn** | **17 44 27.0** | **+2.7** |
| **WTTA** | **Wattenberg** | **5.21** | **215** | ⇑*i*Pn | **Pn** | **17 43 29.6** | **+1.6** |
| WTTA | | | | ⇓*i*Sg | **Sg** | **17 44 56.3** | **+0.3** |
| | comp=Z,17nm,0.5s | | | | | | |
| **WTTA** | **Wattenberg** | **5.21** | **215** | Pn | **Pn** | **17 43 29.6** | **+1.6** |
| WTTA | | | | Sg | **Sg** | **17 44 56.3** | **+0.3** |
| | comp=Z,17nm,0.5s | | | | | | |
| **PDKS** | **Podkum** | **5.58** | **188** | *i* Pn | **Pn** | **17 43 34.6** | **+1.6** |
| **PDKS** | **Podkum** | **5.58** | **188** | *i* Pn | **Pn** | **17 43 34.6** | **+1.6** |
| **BYXU** | **Byxelkrok** | **5.73** | **5** | P | **Pn** | **17 43 35.8** | **+0.9** |
| **FABU** | **Falkenberg** | **5.76** | **341** | P | **Pn** | **17 43 34.9** | **-0.4** |
| **ASPU** | **Aespoe** | **5.84** | **3** | P | **Pn** | **17 43 37.4** | **+1.0** |
| **LANF** | **Langenberg** | **5.91** | **247** | P | **Pn** | **17 43 37.6** | **+0.2** |
| **LANF** | **Langenberg** | **5.91** | **247** | P | **Pn** | **17 43 37.6** | **+0.2** |
| **RUP** | **Ruppelstein** | **6.03** | **255** | P | **Pn** | **17 43 40.4** | **+1.2** |
| **VSTU** | **Vaestervik** | **6.08** | **2** | P | **Pn** | **17 43 39.6** | **-0.1** |
| **DAVOX** | **Davos/Dischmat** | **6.30** | **222** | Pn | **Pn** | **17 43 43.8** | **+0.9** |
| | comp=Z,0.3nm,0.3s,baz=90,slow=15,SNR=5.4 | | | | | | |
| DAVOX | | | | Lg | Lg | 17 45 26.6 | |
| | comp=Z,0.8nm,0.3s,baz=59,slow=7.5,SNR=3.2 | | | | | | |
| **FELD** | **Feldberg im Sc** | **6.42** | **238** | P | **Pn** | **17 43 44.0** | **-0.5** |
| **DRGR** | | **6.49** | **135** | ⇑*i*P | **Pn** | **17 43 46.1** | **+0.7** |
| **DRGR** | | **6.49** | **135** | ⇑*i*P | **Pn** | **17 43 46.1** | **+0.7** |
| **CDF** | **Champ du Feu** | **6.50** | **244** | *e*Pn | **Pn** | **17 43 44.4** | **-1.2** |
| **CDF** | **Champ du Feu** | **6.50** | **244** | *e*Pg | Pg | 17 44 09.5 | -3.7 |
| CDF | | | | *e*Sg | Sg | 17 45 29.7 | -7.6 |
| | comp=Z,48nm,0.9s | | | | | | |
| **CDF** | **Champ du Feu** | **6.50** | **244** | *e*Pn | **Pn** | **17 43 44.4** | **-1.2** |
| **ECH** | **Echery** | **6.67** | **243** | P | **Pn** | **17 43 49.0** | **+1.1** |
| **ECH** | **Echery** | **6.67** | **243** | P | **Pn** | **17 43 49.0** | **+1.1** |
| **VIKU** | **Vikbolandet** | **6.93** | **3** | P | **Pn** | **17 43 51.9** | **+0.5** |
| **HINF** | **Hinteralfeld** | **7.07** | **241** | *e*Pn | **Pn** | **17 43 51.9** | **-1.5** |
| **HINF** | **Hinteralfeld** | **7.07** | **241** | *e*Pg | Pg | 17 44 19.2 | -4.9 |
| HINF | | | | *e*Sg | Sb | 17 45 46.6 | +9.4 |
| | comp=Z,27nm,0.9s | | | | | | |
| **HINF** | **Hinteralfeld** | **7.07** | **241** | *e*Pn | **Pn** | **17 43 51.9** | **-1.5** |
| **BURAR** | **Bucovina Array** | **7.16** | **120** | ⇑*i*P | **Pn** | **17 43 54.8** | **+0.1** |
| **BURAR** | **Bucovina Array** | **7.16** | **120** | ⇑*i*P | **Pn** | **17 43 54.8** | **+0.1** |
| **HAU** | **Haudompre** | **7.24** | **244** | *e*Pn | **Pn** | **17 43 54.8** | **-0.9** |
| **HAU** | **Haudompre** | **7.24** | **244** | *e*Pg | Pg | 17 44 22.9 | -4.5 |
| HAU | | | | *e*Sg | Sg | 17 45 52.5 | -8.6 |
| | comp=Z,28nm,0.8s | | | | | | |
| **HAU** | **Haudompre** | **7.24** | **244** | *e*Pn | **Pn** | **17 43 54.8** | **-0.9** |
| **GIVF** | **Givet** | **7.27** | **263** | *e*Pn | **Pn** | **17 43 56.2** | **+0.1** |
| GIVF | | | | *e*Sg | **Sg** | **17 45 56.4** | **-5.7** |
| | comp=Z,13nm,0.7s | | | | | | |
| **GIVF** | **Givet** | **7.27** | **263** | *e*Pn | **Pn** | **17 43 56.2** | **+0.1** |
| **PAGF** | **Fort de Pagny** | **7.32** | **249** | *e*Pn | **Pn** | **17 43 55.8** | **-0.9** |
| PAGF | | | | *e*Sg | Sg | 17 45 55.7 | -7.8 |
| | comp=Z,1.9nm,0.6s | | | | | | |
| **PAGF** | **Fort de Pagny** | **7.32** | **249** | *e*Pn | **Pn** | **17 43 55.8** | **-0.9** |
| **BAIF** | **Baives** | **7.67** | **263** | *e*Pn | **Pn** | **17 44 01.6** | **+0.1** |
| **BAIF** | **Baives** | **7.67** | **263** | *e*Pg | Sg | 17 46 08.6 | -6.1 |
| | comp=Z,12nm,0.9s | | | | | | |
| **BAIF** | **Baives** | **7.67** | **263** | *e*Pn | **Pn** | **17 44 01.6** | **+0.1** |
| **MEZF** | **Maizieres J'vi** | **7.74** | **251** | *e*Pn | **Pn** | **17 44 01.5** | **-1.0** |
| MEZF | | | | *e*Sg | Sg | 17 46 09.0 | -8.0 |
| | comp=Z,7.9nm,0.7s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **7.74** | **251** | *e*Pn | **Pn** | **17 44 01.5** | **-1.0** |
| **SFTF** | **Sexfontaines** | **7.89** | **249** | *e*Pn | **Pn** | **17 44 04.0** | **-0.6** |
| SFTF | | | | *e*Sg | Sg | 17 46 13.2 | -8.6 |
| | comp=Z,71nm,1.4s | | | | | | |
| **SFTF** | **Sexfontaines** | **7.89** | **249** | *e*Pn | **Pn** | **17 44 04.0** | **-0.6** |
| **AKASG** | **Malin Array Be** | **8.33** | **91** | Pn | **Pn** | **17 44 09.1** | **-1.5** |
| | comp=Z,1.9nm,0.3s,baz=280,slow=12,SNR=12 | | | | | | |
| AKASG | | | | Sn | **Sn** | **17 45 40.8** | **-4.4** |
| | comp=Z,1.0nm,0.3s,baz=289,slow=33,SNR=3.5 | | | | | | |
| AKASG | | | | Lg | Lg | 17 46 40.2 | |
| | comp=Z,0.1nm,0.3s,baz=279,slow=30,SNR=3.5 | | | | | | |
| **HFS** | **Hagfors** | **8.66** | **352** | Pn | **Pn** | **17 44 14.8** | **-0.3** |
| | comp=Z,0.2nm,0.3s,baz=158,slow=12,SNR=8.1 | | | | | | |
| HFS | | | | Sn | **Sn** | **17 45 50.1** | **-3.2** |
| | comp=Z,0.2nm,0.3s,baz=172,slow=25,SNR=3.4 | | | | | | |
| HFS | | | | Lg | Lg | 17 46 47.1 | |
| | comp=Z,0.2nm,0.3s,baz=175,slow=33,SNR=2.0 | | | | | | |
| **LOR** | **Lormes** | **9.05** | **246** | *e*Pn | **Pn** | **17 44 19.3** | **-1.3** |
| | baz=78 | | | | | | |
| LOR | | | | *e*Sg | Sn | 17 46 49.4 | +46 |
| | comp=Z,5.7nm,0.7s | | | | | | |
| **LOR** | **Lormes** | **9.05** | **246** | *e*Pn | **Pn** | **17 44 19.3** | **-1.3** |
| **NOA** | **NORSAR Array B** | **9.84** | **346** | Pn | **Pn** | **17 44 29.3** | **-2.0** |
| | comp=Z,0.1nm,0.3s,baz=182,slow=12,SNR=2.6 | | | | | | |
| NOA | | | | Sn | **Sn** | **17 46 19.2** | **-3.1** |
| | comp=Z,0.1nm,0.3s,baz=165,slow=18,SNR=2.7 | | | | | | |
| **FINES** | **FINESS Array B** | **11.30** | **25** | Pn | **Pn** | **17 44 50.3** | **-0.9** |
| | comp=Z,0.3nm,0.3s,baz=208,slow=12,SNR=9.6 | | | | | | |
| FINES | | | | Sn | Sn | 17 46 48.8 | -9.2 |
| | comp=Z,0.5nm,0.3s,baz=217,slow=21,SNR=6.8 | | | | | | |
| **EKA** | **Eskdalemuir Ar** | **12.04** | **296** | Pn | **Pn** | **17 44 58.3** | **-3.1** |
| | baz=103,slow=14,SNR=5.3 | | | | | | |
| **ARCES** | **ARCESS Array B** | **18.54** | **10** | Pn | **P** | **17 46 24.4** | **-2.2** |
| | comp=Z,0.1nm,0.3s,baz=187,slow=13,SNR=6.9 | | | | | | |

**IDC 31 17:42:12.2±3.1, 6°14S×150°26E, h0km, mb3.6/2, mb1 3.9/3, mb1mx3.5/32, mbtmp3.8/3, ML1.5/1, Error ellipse: s-maj=118.1km s-min=37.0km az=122.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.47** | **223** | Pn | Pn | 17 43 23.3 | +2.1 |
| | 1.8nm,0.3s,baz=29,slow=11,SNR=9.0 | | | | | | |
| PMG | | | | Sn | Sn | 17 44 12.9 | -1.1 |
| | 1.3nm,0.3s,baz=128,slow=17,SNR=2.8 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.68** | **227** | P | P | 17 46 53.8 | -0.2 |
| | 4.2nm,0.6s,baz=52,slow=11,SNR=25 | | | | | | |
| **ASAR** | **Alice Springs** | **23.48** | **220** | P | P | 17 47 22.8 | -1.0 |
| | 0.7nm,0.7s,baz=55,slow=8.9,SNR=14 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.26** | **285** | PKPbc | PKPbc | 18 02 01.4 | -0.1 |
| | 0.4nm,0.6s,baz=59,slow=2.4,SNR=4.7 | | | | | | |

*MOS **31** 17:51:03.6±2.3, 49°30N×156°78E, h7km, mb4.2/1, Error ellipse: s-maj=49.6km s-min=7.7km az=80.5*

**KRSC 31 17:51:03.6±2.4, 49°31N×156°78E, h7km±43km, ML4.0, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.45** | **343** | *e*P | Pn | 17 51 28.2 | -1.9 |
| SKR | | | | *e*S | Sn | 17 51 47.1 | -2.2 |
| **SKR** | **Severo-Kuril's** | **1.45** | **343** | *e*PN | Pn | 17 51 16.1 | -14 |
| SKR | | | | pmax | pmax | | |
| | comp=Z,80nm,0.3s | | | | | | |
| **PAU** | **Pauzhetka** | **2.17** | **0** | *e*P | Pn | 17 51 40.9 | +0.9 |
| PAU | | | | *e*S | Sb | 17 52 09.9 | -0.2 |
| **PAU** | **Pauzhetka** | **2.17** | **0** | PN | Pn | 17 51 40.9 | +0.9 |
| PAU | | | | S | Sb | 17 52 09.9 | -0.2 |
| **RUS** | **Russkaya** | **3.32** | **19** | *e*P | Pn | 17 51 58.6 | +2.7 |
| RUS | | | | *e*S | Sb | 17 52 40.5 | -2.8 |
| **RUS** | **Russkaya** | **3.32** | **19** | PN | Pn | 17 51 58.6 | +2.7 |
| **PET** | **Petropavlovsk** | **3.91** | **17** | *e*P | Pb | 17 52 08.4 | -4.3 |
| **PET** | **Petropavlovsk** | **3.91** | **17** | PN | Pb | 17 52 08.4 | -4.3 |
| **UGLR** | **Uglovaya** | **4.12** | **17** | *e*P | Pb | 17 52 11.9 | -4.6 |
| **AVH** | **Avacha** | **4.15** | **16** | *e*P | Pb | 17 52 13.1 | -4.0 |
| **AVH** | **Avacha** | **4.15** | **16** | PN | Pb | 17 52 13.1 | -4.0 |
| **SMAR** | **Somma** | **4.16** | **17** | *e*P | Pb | 17 52 12.8 | -4.6 |
| **SMAR** | **Somma** | **4.16** | **17** | PN | Pb | 17 52 12.8 | -4.6 |
| **SDLR** | **Sedlovina** | **4.19** | **18** | *e*P | Pn | 17 52 12.9 | +4.8 |
| **SDLR** | **Sedlovina** | **4.19** | **18** | PN | Pn | 17 52 12.9 | +4.8 |
| **NLC** | **Nalytchevo** | **4.19** | **22** | P | Pn | 17 52 11.2 | +3.3 |
| NLC | | | | S | Sn | 17 53 01.7 | +4.6 |
| **NLC** | **Nalytchevo** | **4.19** | **22** | PN | Pn | 17 52 11.2 | +3.3 |
| **KRX** | **Arik** | **4.22** | **15** | *e*P | Pn | 17 52 13.4 | +4.8 |
| **SPN** | **Mys Shipunski** | **4.31** | **27** | *e*P | Pn | 17 52 13.6 | +4.1 |
| SPN | | | | *e*S | Sb | 17 53 06.6 | -5.2 |
| **SPN** | **Mys Shipunski** | **4.31** | **27** | PN | Pn | 17 52 13.6 | +4.1 |
| **GNL** | **Ganaly** | **4.46** | **9** | *e*P | Pn | 17 52 15.5 | +3.8 |
| **GNL** | **Ganaly** | **4.46** | **9** | PN | Pn | 17 52 15.5 | +3.8 |
| **MKZ** | **Mys Kozlova** | **6.08** | **28** | *e*P | Pn | 17 52 37.2 | +3.4 |
| **MKZ** | **Mys Kozlova** | **6.08** | **28** | PN | Pn | 17 52 37.2 | +3.4 |
| **KBTR** | **Krutoberegovo** | **7.82** | **26** | *e*P | Pn | 17 53 01.7 | +4.0 |
| **KBTR** | **Krutoberegovo** | **7.82** | **26** | PN | Pn | 17 53 01.7 | +4.0 |

*DDA **31** 18:03:18.1, 35°49N×29°43E, h28km, Md3.2*
*ATH **31** 18:03:20.6, 35°88N×29°55E, h67km±2km*
*ISK **31** 18:03:21.4, 35°88N×29°66E, h8km, MD3.4*
*ISCJB **31** 18:03:21.7±0.4, 35°72N±0°03×29°50E±0°03, h50km±9km, Error ellipse: s-maj=5.7km s-min=3.6km az=9.3*
*CSEM **31** 18:03:22.8±0.2, 35°75N×29°51E, h40km, MD3.2, Error ellipse: s-maj=5.5km s-min=3.8km az=9.0*
*NIC **31** 18:03:23.4, 35°92N×29°61E, h25km, ML3.0*

**ISC 31 18:03:22.7±0.8, 35°75N±0°03×29°50E±0°02, h43km±15km, n64, σ1°10/92, 2D, Eastern Mediterranean Sea**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **KSL** | **Kastellorizon** | **0.40** | **9** | *e*P | **Pn** | **18 03 31.9** | **-0.5** |
| KSL | | | | *e*S | **Sn** | **18 03 39.6** | **+0.5** |
| **AKAS** | **Kas** | **0.49** | **10** | *i* P | **Pn** | **18 03 33.1** | **-0.5** |
| AKAS | | | | *i* S | **Sn** | **18 03 41.9** | **+0.7** |
| **AKAS** | **Kas** | **0.49** | **10** | P | **Pn** | **18 03 33.1** | **-0.5** |
| AKAS | | | | S | **Sn** | **18 03 41.9** | **+0.7** |
| **FETY** | **Fethiye** | **0.95** | **339** | *e*PG | **Pn** | **18 03 38.9** | **-0.7**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| CMSA | Cobar Meteorol | 35.27 | 240 | P | P | 18 12 57.2 | +0.3 |
| | baz=35,SNR=28 | | | | | | |
| MTSU | Mount Surprise | 35.41 | 263 | P | P | 18 12 58.5 | +0.3 |
| | baz=36,SNR=4.4 | | | | | | |
| QLP | Quilpie | 35.61 | 249 | P | P | 18 12 59.9 | +0.1 |
| | baz=36,SNR=14 | | | | | | |
| COEN | Coen | 37.07 | 270 | P | P | 18 13 13.0 | +1.1 |
| | baz=37,SNR=11 | | | | | | |
| TOO | Toolangi | 37.34 | 230 | P | P | 18 13 14.8 | +0.9 |
| | baz=38,SNR=7.6 | | | | | | |
| BBOO | Buckleboo | 43.53 | 241 | P | P | 18 14 03.3 | +0.1 |
| | baz=44,SNR=44 | | | | | | |
| WRA | Warramunga Arr | 44.66 | 259 | P | P | 18 14 11.7 | -0.5 |
| | 5.2nm,0.5s,baz=93,slow=6.9,SNR=41 | | | | | | |
| ASAR | Alice Springs | 44.84 | 254 | P | P | 18 14 13.4 | -0.2 |
| | 60nm,0.5s,baz=89,slow=7.9,SNR=2050 | | | | | | |
| ASAR | | | | PcP | PcP | 18 15 43.4 | -0.3 |
| | 0.6nm,0.5s,baz=96,slow=3.7,SNR=3.8 | | | | | | |
| KDU | Kakadu | 47.53 | 269 | P | P | 18 14 34.0 | 0.0 |
| | baz=48,SNR=3.3 | | | | | | |
| MTN | Manton Dam | 48.77 | 268 | P | P | 18 14 42.9 | -0.4 |
| | baz=49,SNR=5.7 | | | | | | |
| WRKA | Warakurna | 49.91 | 252 | P | P | 18 14 51.4 | -0.2 |
| | baz=50,SNR=180 | | | | | | |
| KNRA | Kununurra | 50.49 | 264 | P | P | 18 14 55.6 | -0.3 |
| | baz=51,SNR=8.5 | | | | | | |
| MEEK | Meekatharra | 58.51 | 249 | P | P | 18 15 51.2 | -0.8 |
| | baz=59,SNR=7.4 | | | | | | |
| KLBR | Kellerberrin | 58.94 | 243 | P | P | 18 15 54.0 | -0.8 |
| | baz=59,SNR=8.1 | | | | | | |
| MORW | Morawa | 60.57 | 246 | P | P | 18 16 04.9 | -0.9 |
| | baz=61,SNR=4.0 | | | | | | |
| UGM | Wanagama | 69.62 | 268 | P | P | 18 17 02.6 | -0.2 |
| | baz=70,SNR=3.2 | | | | | | |
| MAW | Mawson | 84.14 | 200 | P | P | 18 18 20.6 | -0.3 |
| | 2.3nm,0.8s,baz=139,slow=8.2,SNR=7.8 | | | | | | |
| TXAR | Lajitas Array | 85.86 | 58 | P | P | 18 18 30.9 | +0.8 |
| | 0.3nm,0.7s,baz=219,slow=6.2,SNR=5.3 | | | | | | |
| BRTR | Keskin Array B | 144.54 | 315 | PKP | PKPdf | 18 25 21.6 | -0.8 |
| | 0.8nm,0.8s,baz=126,slow=5.2,SNR=3.8 | | | | | | |
| GERES | GERESS Array B | 147.30 | 345 | PKPbc | PKPbc | 18 25 29.3 | -0.7 |
| | 0.3nm,0.5s,baz=349,slow=5.4,SNR=4.2 | | | | | | |

**IDC 31 18:11:15.7±2.0, 6.12S×150.19E, h0km, mb3.6/3, mb1 4.0/4, mb1mx3.6/22, mbtmp3.7/4, ML1.5/1, Error ellipse: s-maj=133.8km s-min=23.6km az=126.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PMG | Port Moresby | 4.43 | 222 | Pn | Pn | 18 12 26.4 | +2.1 |
| | 1.6nm,0.3s,baz=67,slow=7.4,SNR=8.5 | | | | | | |
| PMG | | | | Sn | Sn | 18 13 16.3 | -0.3 |
| | 3.0nm,0.3s,baz=99,slow=19,SNR=5.0 | | | | | | |
| WRA | Warramunga Arr | 20.64 | 227 | P | P | 18 15 57.4 | +0.3 |
| | 4.8nm,0.8s,baz=51,slow=11,SNR=18 | | | | | | |
| ASAR | Alice Springs | 23.45 | 220 | P | P | 18 16 25.1 | -1.9 |
| | 1.3nm,0.8s,baz=58,slow=9.3,SNR=4.9 | | | | | | |
| ILAR | Eielson Array | 84.36 | 23 | P | P | 18 23 49.2 | -0.4 |
| | 0.3nm,0.8s,baz=247,slow=4.7,SNR=2.9 | | | | | | |
| TORD | Torodi Ar. Bea | 148.19 | 285 | PKPbc | PKPbc | 18 31 05.0 | +0.2 |
| | 0.6nm,0.5s,baz=56,slow=3.0,SNR=11 | | | | | | |

**IDC 31 18:14:48.4±1.5, 7.58S×119.86E, h0km, mb3.6/3, mb1 3.7/5, mb1mx3.5/28, mbtmp3.6/5, ML3.7/2, Error ellipse: s-maj=71.7km s-min=20.3km az=64.0, Flores Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| KAPI | Kappang | 2.55 | 358 | Pn | Pn | 18 15 32.4 | +1.4 |
| | 7.7nm,0.3s,baz=189,slow=4.1,SNR=73 | | | | | | |
| KAPI | | | | Sn | Sn | 18 16 02.0 | -0.8 |
| | 4.5nm,0.3s,baz=298,slow=24,SNR=4.4 | | | | | | |
| WRA | Warramunga Arr | 18.66 | 133 | P | P | 18 19 08.1 | 0.0 |
| | 0.3nm,0.3s,baz=306,slow=12,SNR=3.7 | | | | | | |
| ASAR | Alice Springs | 20.92 | 141 | P | P | 18 19 32.9 | +0.1 |
| | 0.7nm,0.3s,baz=321,slow=11,SNR=25 | | | | | | |
| MKAR | Makanchi Array | 63.59 | 332 | P | P | 18 25 21.0 | -0.1 |
| | 0.4nm,0.6s,baz=148,slow=7.3,SNR=3.6 | | | | | | |
| ZALV | Zalesovo Beam | 68.03 | 339 | P | P | 18 25 49.2 | -0.2 |
| | 0.3nm,0.3s,baz=132,slow=6.0,SNR=2.3 | | | | | | |

**IDC 31 18:24:04.6±3.5, 5.98S×149.78E, h0km, mb3.1/2, mb1 3.4/3, mb1mx3.2/30, mbtmp3.2/3, ML1.0/1, Error ellipse: s-maj=142.3km s-min=36.2km az=117.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| PMG | Port Moresby | 4.28 | 217 | Pn | Pn | 18 25 12.9 | +1.8 |
| | 0.6nm,0.3s,baz=255,slow=20,SNR=3.7 | | | | | | |
| PMG | | | | Sn | Sn | 18 26 02.3 | +0.5 |
| | 0.7nm,0.3s,baz=261,slow=19,SNR=3.6 | | | | | | |
| WRA | Warramunga Arr | 20.44 | 226 | P | P | 18 28 43.6 | -0.3 |
| | 0.8nm,0.6s,baz=52,slow=11,SNR=6.1 | | | | | | |
| ASAR | Alice Springs | 23.29 | 219 | P | P | 18 29 13.9 | -0.4 |
| | 0.5nm,0.9s,baz=51,slow=9.6,SNR=5.3 | | | | | | |
| TORD | Torodi Ar. Bea | 147.76 | 285 | PKPbc | PKPbc | 18 43 51.7 | -0.8 |
| | 0.7nm,1.2s,baz=94,slow=2.5,SNR=2.7 | | | | | | |

*ISCJB **31** 18:28:21.0±0.3, 4.09N±0.05×123.10E±0.08, h573km, mb3.7/14, Error ellipse: s-maj=10.7km s-min=6.0km az=177.6*

*IDC **31** 18:28:21.5±0.8, 4.06N×123.10E, h561km±10km, mb3.2/14, mb1 3.3/17, mb1mx3.1/45, mbtmp4.2/17, Error ellipse: s-maj=19.4km s-min=9.0km az=81.0*

*AUST **31** 18:28:24.9, 3.50N×123.00E, h600km*

**ISC 31 18:28:22.1±0.5, 4.07N±0.06×123.06E±0.10, h573km, n34, σ1§04/38, mb3.8/14, Celebes Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| DAV | Davao City (W) | 3.90 | 40 | P | P | 18 29 44.0 | -0.9 |
| | 70nm,0.3s,baz=60,slow=1.4,SNR=29 | | | | | | |
| DAV | | | | S | S | 18 30 50.0 | -2.3 |
| | 49nm,0.3s,baz=164,slow=15,SNR=3.9 | | | | | | |
| LUWI | Luwuk | 5.08 | 183 | P | P | 18 29 51.8 | -2.2 |
| | baz=4.5,SNR=13 | | | | | | |
| KKM | Kota Kinabalu | 7.09 | 286 | P | P | 18 30 10.9 | -1.1 |
| | baz=7.2,SNR=11 | | | | | | |
| SIJI | Sorong | 9.56 | 121 | P | P | 18 30 34.0 | -2.0 |
| | 1.2nm,0.3s,baz=225,slow=21,SNR=5.5 | | | | | | |
| KAPI | Kappang | 9.61 | 200 | P | P | 18 30 36.0 | -0.5 |
| | 0.7nm,0.3s,baz=0.6,slow=5.7,SNR=7.1 | | | | | | |
| KAPI | | | | S | S | 18 32 26.7 | -0.1 |
| | baz=90,slow=20,SNR=3.5 | | | | | | |
| BATI | Baumata | 14.19 | 178 | P | P | 18 31 21.7 | -1.5 |
| | 6.9nm,0.3s,baz=348,slow=1.7,SNR=28 | | | | | | |
| BATI | | | | S | S | 18 33 52.8 | +0.8 |
| | 2.1nm,0.3s,baz=257,slow=5.3,SNR=4.4 | | | | | | |
| MTN | Manton Dam | 18.62 | 155 | P | P | 18 32 05.6 | +1.0 |
| | baz=18,SNR=5.8 | | | | | | |
| KDU | Kakadu | 19.09 | 151 | P | P | 18 32 08.4 | -0.5 |
| | baz=19,SNR=5.6 | | | | | | |
| KNRA | Kununurra | 20.41 | 164 | P | P | 18 32 20.8 | 0.0 |
| | baz=20,SNR=7.2 | | | | | | |
| WRA | Warramunga Arr | 26.31 | 155 | P | P | 18 33 12.4 | -0.9 |
| | 4.3nm,0.4s,baz=335,slow=9.7,SNR=38 | | | | | | |
| WRA | | | | ScP | ScP | 18 39 07.3 | +1.1 |
| | 0.4nm,0.4s,baz=341,slow=3.0,SNR=4.6 | | | | | | |
| QIS | Mount Isa | 29.37 | 147 | P | P | 18 33 40.2 | +0.2 |
| | baz=29,SNR=9.1 | | | | | | |
| WRKA | Warakurna | 29.38 | 170 | P | P | 18 33 40.1 | +0.2 |
| | baz=29,SNR=7.1 | | | | | | |
| ASAR | Alice Springs | 29.53 | 160 | P | P | 18 33 41.2 | -0.1 |
| | 2.6nm,0.4s,baz=340,slow=7.0,SNR=144 | | | | | | |
| ASAR | | | | ScP | ScP | 18 39 17.8 | +1.6 |
| | 0.8nm,0.6s,baz=339,slow=2.8,SNR=14 | | | | | | |
| RABL | Rabaul | 30.22 | 105 | P | P | 18 33 48.2 | +0.8 |
| | baz=30,SNR=3.6 | | | | | | |
| MEEK | Meekatharra | 30.83 | 188 | P | P | 18 33 52.1 | -0.3 |
| | baz=30,SNR=7.8 | | | | | | |
| CTA | Charters Tower | 33.10 | 137 | P | P | 18 34 12.6 | +0.8 |
| | 0.9nm,0.4s,baz=312,slow=14,SNR=3.8 | | | | | | |
| KSRS | Korea Array | 33.52 | 7 | P | P | 18 34 15.8 | +0.7 |
| | 1.1nm,0.6s,baz=185,slow=10,SNR=5.1 | | | | | | |
| MORW | Morawa | 33.63 | 191 | P | P | 18 34 16.1 | +0.1 |
| | baz=33,SNR=6.2 | | | | | | |
| MJAR | Matsushiro Arr | 35.20 | 21 | P | P | 18 34 28.4 | -0.7 |
| | 3.1nm,0.7s,baz=193,slow=9.2,SNR=14 | | | | | | |
| KLBR | Kellerberrin | 35.82 | 188 | P | P | 18 34 34.2 | -0.1 |
| | baz=35,SNR=9.1 | | | | | | |
| BBOO | Buckleboo | 38.70 | 162 | P | P | 18 34 58.3 | +0.5 |
| | baz=38,SNR=8.0 | | | | | | |
| HTT | Hallett | 40.20 | 159 | P | P | 18 35 03.6 | -6.3 |
| | baz=40,SNR=7.4 | | | | | | |
| USRK | Ussuriysk Ar. | 40.74 | 10 | P | P | 18 35 13.2 | -0.6 |
| | 2.2nm,0.6s,baz=207,slow=4.4,SNR=4.7 | | | | | | |
| CMSA | Cobar Meteorol | 41.46 | 150 | P | P | 18 35 21.4 | +1.7 |
| | baz=41,SNR=7.6 | | | | | | |
| ARPS | Mount Arapiles | 44.25 | 158 | P | P | 18 35 42.4 | +1.0 |
| | baz=44,SNR=8.7 | | | | | | |
| SONM | Songino Array | 45.90 | 344 | P | P | 18 35 55.0 | +1.0 |
| | 0.3nm,0.4s,baz=161,slow=8.6,SNR=4.0 | | | | | | |
| MKAR | Makanchi Array | 55.23 | 327 | P | P | 18 37 03.0 | +1.3 |
| | 3.6nm,0.3s,baz=123,slow=7.5,SNR=94 | | | | | | |
| PETK | Petropavlovsk- | 56.56 | 24 | P | P | 18 37 11.9 | +1.1 |
| | 4.1nm,1.0s,baz=203,slow=4.1,SNR=5.9 | | | | | | |
| ZALV | Zalesovo Beam | 58.67 | 335 | P | P | 18 37 25.0 | 0.0 |
| | 1.2nm,0.7s,baz=134,slow=4.3,SNR=5.5 | | | | | | |
| ASF | Jabal al Asfar | 84.61 | 302 | P | P | 18 39 57.3 | +1.1 |
| | 2.1nm,0.6s,baz=68,slow=7.5,SNR=4.0 | | | | | | |
| ILAR | Eielson Array | 86.37 | 25 | P | P | 18 40 03.5 | -0.4 |
| | 0.2nm,0.6s,baz=239,slow=5.5,SNR=4.3 | | | | | | |
| BRTR | Keskin Array B | 86.98 | 309 | P | P | 18 40 07.0 | -0.6 |
| | 0.6nm,0.7s,baz=140,slow=6.8,SNR=4.2 | | | | | | |
| FINES | FINESS Array B | 89.80 | 332 | P | P | 18 40 19.6 | -0.3 |
| | 1.4nm,0.7s,baz=160,slow=6.1,SNR=4.0 | | | | | | |
| TORD | Torodi Ar. Bea | 119.33 | 287 | PKP | PKPdf | 18 46 07.7 | -0.2 |
| | 0.2nm,0.3s,baz=78,slow=2.1,SNR=9.5 | | | | | | |

*IDC **31** 18:28:27.0±2.0, 3.88S×100.04E, h0km, mb4.1/7, mb1 4.2/8, mb1mx3.8/47, mbtmp4.1/8, ML4.1/1, MS3.3/1, Ms1 3.3/1, ms1mx2.7/46, Error ellipse: s-maj=68.8km s-min=18.2km az=57.0*

*NEIC **31** 18:28:28.9±1.5, 3.73S×100.22E, h10km, mb4.3/5, Error ellipse: s-maj=43.6km s-min=9.8km az=52.0*

**ISC 31 18:28:32.6±1.6, 3.85S±0.2×100.36E±0.2, h35km, n32, σ1§16/18, mb4.3/12, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| LEM | Lembang | 7.94 | 113 | Pn | Pn | 18 30 27.4 | +1.7 |
| | 2.8nm,0.3s,baz=139,slow=20,SNR=4.8 | | | | | | |
| CISI | Cisompet, Garu | 8.41 | 117 | ePn | Pn | 18 30 29.9 | -2.2 |
| | 73nm,0.6s | | | | | | |
| CISI | | | | eSn | Sn | 18 32 06.1 | +0.2 |
| KAPI | Kappang | 19.48 | 94 | LR | LR | 18 41 03.7 | |
| | comp=Z,78nm,19.1s,baz=256,slow=38 | | | | | | |
| CMAR | Chiang Mai Arr | 22.13 | 357 | P | P | 18 33 24.6 | -0.7 |
| | 3.8nm,0.8s,baz=183,slow=9.6,SNR=18 | | | | | | |
| CHTO | Chiang Mai | 22.48 | 357 | eP | P | 18 33 26.8 | -2.3 |
| | 3.3nm,0.7s | | | | | | |
| SLVN | Son La | 25.21 | 8 | P | P | 18 33 54.8 | -0.5 |
| | 8.0nm,0.8s | | | | | | |
| H08S2 | Diego Garcia H | 27.88 | 261 | T | T | 19 04 11.2 | |
| | baz=82,slow=75,SNR=58 | | | | | | |
| H08S3 | Diego Garcia H | 27.89 | 261 | T | T | 19 04 06.2 | |
| | baz=82,slow=75,SNR=52 | | | | | | |
| H08S1 | Diego Garcia H | 27.90 | 261 | T | T | 19 04 12.6 | |
| | baz=82,slow=75,SNR=88 | | | | | | |
| ODAN | Odare | 32.90 | 339 | eP | P | 18 35 09.8 | +6.0 |
| | 19nm,0.7s | | | | | | |
| TAPN | Taplejung | 33.23 | 339 | eP | P | 18 35 07.9 | +1.1 |
| | 9.9nm,0.7s | | | | | | |
| RAMN | Ramite | 33.27 | 337 | eP | P | 18 35 13.9 | +6.8 |
| | 22nm,0.8s | | | | | | |
| H01W3 | Cape Leeuwin H | 33.53 | 159 | T | T | 19 10 47.0 | |
| | baz=336,slow=76,SNR=21 | | | | | | |
| H01W2 | Cape Leeuwin H | 33.54 | 159 | T | T | 19 10 58.9 | |
| | baz=336,slow=76,SNR=25 | | | | | | |
| H01W1 | Cape Leeuwin H | 33.54 | 159 | T | T | 19 10 45.0 | |
| | baz=336,slow=76,SNR=24 | | | | | | |
| PKI | Pulchoki | 34.30 | 336 | eP | P | 18 35 24.1 | +8.0 |
| | 11nm,0.6s | | | | | | |
| PKIN | Phulchoki | 34.31 | 336 | eP | P | 18 35 24.2 | +8.1 |
| | 6.8nm,0.3s | | | | | | |
| GUN | Gumba | 34.41 | 337 | eP | P | 18 35 21.3 | +4.1 |
| | 30nm,0.4s | | | | | | |
| DMN | Daman | 34.45 | 336 | eP | P | 18 35 25.1 | +7.7 |
| KKN | Kakani | 34.54 | 336 | eP | P | 18 35 24.3 | +6.2 |
| | 14nm,0.5s | | | | | | |
| ENH | Enshi | 34.99 | 14 | eP | P | 18 35 21.7 | -0.1 |
| | 7.5nm,0.4s | | | | | | |
| GKN | Gorkha | 34.99 | 335 | eP | P | 18 35 28.4 | +6.5 |
| KOLN | Koldanda | 35.23 | 334 | eP | P | 18 35 36.0 | +12 |
| WRA | Warramunga Arr | 36.90 | 119 | P | P | 18 35 38.1 | -0.2 |
| | 1.1nm,0.6s,baz=304,slow=8.9,SNR=4.4 | | | | | | |
| ASAR | Alice Springs | 38.03 | 124 | P | P | 18 35 47.9 | +0.1 |
| | 0.5nm,0.5s,baz=294,slow=7.8,SNR=4.5 | | | | | | |
| ASAR | | | | PcP | PcP | 18 38 03.1 | +0.1 |
| | 0.3nm,0.5s,baz=279,slow=2.2,SNR=4.4 | | | | | | |
| SONM | Songino Array | 51.67 | 5 | P | P | 18 37 37.4 | +1.2 |
| | 2.8nm,0.7s,baz=188,slow=9.8,SNR=21 | | | | | | |
| ULN | Ulaanbaatar | 51.77 | 6 | eP | P | 18 37 35.3 | -1.6 |
| | 1.8nm,0.9s | | | | | | |
| EKS2 | Erkin-Say | 52.07 | 335 | eP | P | 18 37 39.0 | -0.2 |
| | 5.6nm,0.8s | | | | | | |
| MKAR | Makanchi Array | 52.80 | 345 | P | P | 18 37 44.4 | 0.0 |
| | 1.7nm,0.6s,baz=141,slow=8.9,SNR=7.5 | | | | | | |
| USRK | Ussuriysk Ar. | 55.60 | 27 | P | P | 18 38 05.5 | +0.7 |
| | 3.2nm,0.6s,baz=222,slow=6.2,SNR=7.0 | | | | | | |
| ZALV | Zalesovo Beam | 58.95 | 349 | P | P | 18 38 27.9 | -0.3 |
| | 4.5nm,0.7s,baz=176,slow=5.7,SNR=21 | | | | | | |
| TXAR | Lajitas Array | 145.93 | 39 | PKPbc | PKPab | 18 48 10.4 | +0.6 |
| | 1.6nm,0.7s,baz=290,slow=1.9,SNR=13 | | | | | | |

*CSEM **31** 18:36:20.5, 36.81N×23.06E, h4km, MD2.6, After ATH*

**ATH 31 18:36:20.3, 36.83N×23.05E, h5km, MD2.6/4, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| VLI | Veliai | 0.14 | 219 | ePG | Pg | 18 36 23.4 | +0.2 |
| VLI | | | | eSG | Sg | 18 36 25.1 | -0.1 |
| VLI | Veliai | 0.14 | 219 | ePg | Pg | 18 36 23.4 | +0.2 |
| VLI | | | | eSg | Sg | 18 36 25.1 | -0.1 |
| VLX | Vlachokerasia | 0.76 | 315 | ePB | Pg | 18 36 35.0 | -0.1 |
| VLX | | | | eSB | Sg | 18 36 45.9 | +0.8 |
| VLX | Vlachokerasia | 0.76 | 315 | ePg | Pg | 18 36 35.0 | -0.1 |
| VLX | | | | eSg | Sg | 18 36 45.9 | +0.8 |
| ITM | Ithomi | 0.96 | 292 | ePB | Pg | 18 36 38.8 | -0.1 |
| ITM | | | | eSB | Sb | 18 36 52.8 | +0.1 |
| ITM | Ithomi | 0.96 | 292 | ePb | Pg | 18 36 38.8 | -0.1 |
| ITM | | | | eSg | Sb | 18 36 52.8 | +0.1 |
| PYL | PYLOS | 1.05 | 274 | ePN | Pb | 18 36 40.8 | -0.2 |
| PYL | | | | eSB | Sb | 18 36 55.3 | +0.2 |
| PYL | PYLOS | 1.05 | 274 | ePg | Pb | 18 36 40.8 | -0.2 |
| PYL | | | | eSg | Sb | 18 36 55.3 | +0.2 |

**IDC 31 18:36:48.0±6.6, 0.30N×122.27E, h189km±63km, mb3.1/4, mb1 3.2/4, mb1mx2.9/50, mbtmp3.6/4, Error ellipse: s-maj=119.9km s-min=16.2km az=65.0, Minahassa Peninsula, Sulawesi**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| WRA | Warramunga Arr | 23.34 | 150 | P | P | 18 41 39.5 | 0.0 |
| | 1.2nm,0.5s,baz=325,slow=11,SNR=14 | | | | | | |
| WRA | | | | PcP | PcP | 18 45 20.5 | -0.6 |
| | 0.4nm,0.6s,baz=329,slow=2.2,SNR=2.7 | | | | | | |
| ASAR | Alice Springs | 26.37 | 155 | P | P | 18 42 06.9 | 0.0 |
| | 0.5nm,0.5s,baz=344,slow=14,SNR=16 | | | | | | |
| ASAR | | | | PcP | PcP | 18 45 27.4 | -0.3 |
| | 0.5nm,0.3s,baz=346,slow=2.1,SNR=28 | | | | | | |
| SONM | Songino Array | 49.32 | 346 | P | P | 18 45 17.5 | -0.5 |
| | 0.7nm,0.7s,baz=147,slow=8.5,SNR=5.7 | | | | | | |
| MKAR | Makanchi Array | 57.98 | 329 | P | P | 18 46 21.1 | +0.2 |
| | 0.5nm,0.3s,baz=125,slow=8.6,SNR=9.2 | | | | | | |

*NEIC **31** 18:45:42.8, 38.36S×177.84E, h30km, ML4.0(WEL), After WEL.*

*NEIC Felt at Gisborne.*

**WEL 31 18:45:43.0±0.1, 38.36S×177.85E, h33km, ML3.9/34, 10C-13D, Error ellipse: s-maj=0.9km s-min=0.6km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| TWGZ | Tauwhareparae | 0.21 | 29 | P* | Pn | 18 45 49.5 | +0.1 |
| TWGZ | | | | S* | Sb | 18 45 54.3 | -0.1 |
| TWGZ | Tauwhareparae | 0.21 | 29 | P* | Pn | 18 45 49.6 | +0.1 |
| MWZ | Matawai | 0.26 | 275 | ↓P* | Pb | 18 45 48.9 | -1.4 |
| MWZ | | | | S* | Sn | 18 45 53.6 | -1.2 |
| CNGZ | Carnagh Statio | 0.31 | 115 | P* | Pn | 18 45 51.3 | +0.1 |
| CNGZ | Carnagh Statio | 0.31 | 115 | P* | Pn | 18 45 51.3 | +0.2 |
| RIGZ | Rimuhau | 0.36 | 192 | ↑PN | Pb | 18 45 51.5 | -0.1 |
| RIGZ | | | | S* | Sn | 18 45 59.1 | +1.3 |
| RAGZ | Rawiri | 0.37 | 248 | ↓P* | Pb | 18 45 50.8 | -1.0 |
| RAGZ | | | | S* | Sb | 18 45 57.4 | -0.5 |
| RAGZ | Rawiri | 0.37 | 248 | P* | Pb | 18 45 50.8 | -1.0 |
| PUZ | Puketiti | 0.43 | 48 | PN | Pb | 18 45 52.6 | +0.1 |
| PUZ | | | | SN | Sn | 18 46 01.0 | +1.4 |
| PUZ | | | | AML | AML | 18 46 01.6 | |
| PUZ | Puketiti | 0.43 | 48 | P* | Pb | 18 45 52.2 | -0.3 |
| PKGZ | Pakihiroa | 0.52 | 20 | ↓PN | Pb | 18 45 53.6 | -0.4 |
| PRGZ | Paritu Road | 0.57 | 178 | PN | Pb | 18 45 54.1 | -0.7 |
| PRGZ | Paritu Road | 0.57 | 178 | P* | Pb | 18 45 54.1 | -0.7 |
| SNGZ | Shannon Statio | 0.58 | 223 | ↓PN | Pb | 18 45 54.5 | -0.5 |
| SNGZ | Shannon Statio | 0.58 | 223 | P* | Pb | 18 45 54.5 | -0.5 |
| URZ | Urewera | 0.59 | 279 | ↓PN | Pn | 18 45 53.7 | -1.4 |
| URZ | | | | AML | AML | 18 46 05.2 | |
| URZ | | | | AML | AML | 18 46 05.7 | |
| URZ | Urewera | 0.59 | 279 | ↓P* | Pn | 18 45 53.7 | -1.4 |
| HAZ | Te Kaha | 0.60 | 355 | ↑PN | Pn | 18 45 54.2 | -1.0 |
| KNZ | Kokohu | 0.68 | 192 | ↑PN | Pn | 18 45 55.3 | -1.0 |
| KNZ | | | | AML | AML | 18 46 09.3 | |
| KNZ | | | | AML | AML | 18 46 11.6 | |
| KNZ | Kokohu | 0.68 | 192 | Pn | Pn | 18 45 55.3 | -1.0 |
| WMGZ | Waiomatatini S | 0.70 | 40 | ↓PN | Pb | 18 45 56.5 | 0.0 |
| WMGZ | Waiomatatini S | 0.70 | 40 | Pn | Pn | 18 45 56.5 | 0.0 |
| MHGZ | Mahia Peninsul | 0.80 | 177 | PN | Pb | 18 45 57.2 | -0.8 |
| MHGZ | Mahia Peninsul | 0.80 | 177 | Pn | Pn | 18 45 57.2 | -0.8 |
| RAHZ | Arahi | 0.82 | 227 | PN | Pn | 18 45 57.7 | -0.6 |
| RAHZ | Arahi | 0.82 | 227 | Pn | Pn | 18 45 57.7 | -0.6 |
| WHHZ | Waihua | 0.87 | 214 | PN | Pn | 18 45 58.5 | -0.4 |
| MXZ | Matakaoa Point | 0.87 | 24 | PN | Pn | 18 45 59.0 | +0.1 |
| MXZ | | | | AML | AML | 18 46 13.5 | |
| MXZ | | | | AML | AML | 18 46 13.6 | |
| MXZ | | | | AML | AML | 18 46 14.4 | |
| MXZ | | | | AML | AML | 18 46 14.4 | |
| MXZ | Matakaoa Point | 0.87 | 24 | Pn | Pn | 18 45 59.0 | +0.1 |
| EDRZ | Edgecumbe | 0.91 | 285 | ↑PN | Pn | 18 45 59.2 | -0.4 |
| EDRZ | | | | AML | AML | 18 46 15.0 | |
| EDRZ | | | | AML | AML | 18 46 16.6 | |
| EDRZ | Edgecumbe | 0.91 | 285 | Pn | Pn | 18 45 59.2 | -0.4 |
| WIZ | White Island | 0.98 | 327 | PN | Pn | 18 45 59.2 | -1.2 |
| WIZ | White Island | 0.98 | 327 | Pn | Pn | 18 45 59.2 | -1.2 |
| MARZ | Manawahe | 1.00 | 291 | ↓PN | Pn | 18 46 00.1 | -0.7 |
| MARZ | Manawahe | 1.00 | 291 | Pn | Pn | 18 46 00.1 | -0.7 |
| RRRZ | Republican Roa | 1.05 | 270 | ↑PN | Pn | 18 46 01.2 | -0.3 |
| RRRZ | Republican Roa | 1.05 | 270 | Pn | Pn | 18 46 01.2 | -0.3 |
| TARZ | Mount Tarawera | 1.07 | 276 | ↓PN | Pn | 18 46 01.5 | -0.3 |
| TARZ | Mount Tarawera | 1.07 | 276 | Pn | Pn | 18 46 01.5 | -0.3 |
| NMHZ | Naumai | 1.10 | 228 | PN | Pn | 18 46 01.9 | -0.4 |
| NMHZ | Naumai | 1.10 | 228 | Pn | Pn | 18 46 02.0 | -0.3 |
| ARHZ | Aropaoanui | 1.13 | 216 | PN | Pn | 18 46 02.2 | -0.2 |
| ARHZ | Aropaoanui | 1.13 | 216 | Pn | Pn | 18 46 02.2 | -0.2 |
| OPRZ | Ohinepanea | 1.14 | 296 | ↑PN | Pn | 18 46 01.6 | -1.1 |
| OPRZ | Ohinepanea | 1.14 | 296 | Pn | Pn | 18 46 01.6 | -1.1 |
| PRRZ | Plateau Road | 1.16 | 262 | ↓PN | Pn | 18 46 02.5 | -0.4 |
| PRRZ | Plateau Road | 1.16 | 262 | Pn | Pn | 18 46 02.5 | -0.3 |
| HLRZ | Highlands Stat | 1.19 | 275 | PN | Pn | 18 46 03.1 | -0.2 |
| ALRZ | Allen Road | 1.20 | 260 | ↓PN | Pn | 18 46 03.2 | -0.4 |
| ALRZ | Allen Road | 1.20 | 260 | Pn | Pn | 18 46 03.2 | -0.4 |
| MRHZ | Matea Rd | 1.22 | 247 | PN | Pn | 18 46 03.6 | -0.3 |
| HRRZ | Handcock Road | 1.23 | 268 | PN | Pn | 18 46 03.8 | -0.2 |
| HRRZ | Handcock Road | 1.23 | 268 | Pn | Pn | 18 46 03.8 | -0.2 |
| KARZ | Kaharoa | 1.31 | 284 | PN | Pn | 18 46 04.2 | -0.8 |
| KARZ | Kaharoa | 1.31 | 284 | Pn | Pn | 18 46 04.2 | -0.8 |
| BKZ | Black Stump Fm | 1.34 | 232 | PN | Pn | 18 46 04.9 | -0.6 |
| BKZ | | | | AML | AML | 18 46 23.9 | |
| BKZ | | | | AML | AML | 18 46 25.4 | |
| BKZ | Black Stump Fm | 1.34 | 232 | Pn | Pn | 18 46 04.9 | -0.6 |
| WPRZ | Whakapapataran | 1.34 | 262 | PN | Pn | 18 46 05.0 | -0.4 |
| WPRZ | Whakapapataran | 1.34 | 262 | Pn | Pn | 18 46 05.0 | -0.4 |
| MCHZ | McNeill Hill | 1.41 | 219 | PN | Pn | 18 46 05.8 | -0.6 |
| MCHZ | McNeill Hill | 1.41 | 219 | Pn | Pn | 18 46 05.8 | -0.6 |
| CKHZ | Cape Kidnapper | 1.44 | 205 | PN | Pn | 18 46 05.4 | -1.3 |
| CKHZ | Cape Kidnapper | 1.44 | 205 | Pn | Pn | 18 46 05.4 | -1.3 |
| KWHZ | Kaweka Forest | 1.54 | 226 | PN | Pn | 18 46 07.6 | -0.7 |
| KUTZ | Kaahu Road | 1.60 | 265 | ↑PN | Pn | 18 46 08.8 | -0.3 |
| KUTZ | Kaahu Road | 1.60 | 265 | Pn | Pn | 18 46 08.8 | -0.3 |
| KAHZ | Kahuranaki | 1.63 | 208 | PN | Pn | 18 46 07.8 | -1.6 |
| KAHZ | Kahuranaki | 1.63 | 208 | Pn | Pn | 18 46 07.8 | -1.6 |
| RITZ | Rihia Road | 1.68 | 248 | PN | Pn | 18 46 09.9 | -0.2 |
| RITZ | | | | AML | AML | 18 46 32.0 | |
| RITZ | | | | AML | AML | 18 46 35.4 | |
| RITZ | Rihia Road | 1.68 | 248 | Pn | Pn | 18 46 09.9 | -0.2 |
| RATZ | Rangitukua | 1.71 | 252 | PN | Pn | 18 46 10.2 | -0.4 |
| RATZ | | | | AML | AML | 18 46 34.5 | |
| RATZ | | | | AML | AML | 18 46 37.6 | |
| RATZ | Rangitukua | 1.71 | 252 | Pn | Pn | 18 46 10.2 | -0.4 |
| KRHZ | Kereru | 1.73 | 221 | PN | Pn | 18 46 09.5 | -1.3 |
| BHHZ | Black Hill Sta | 1.80 | 230 | PN | Pn | 18 46 10.9 | -0.9 |
| BHHZ | Black Hill Sta | 1.80 | 230 | Pn | Pn | 18 46 10.9 | -0.9 |
| KATZ | Kakaramea | 1.80 | 249 | ↑PN | Pn | 18 46 11.6 | -0.3 |
| KATZ | Kakaramea | 1.80 | 249 | Pn | Pn | 18 46 11.6 | -0.3 |
| PXZ | Pawanui | 1.84 | 204 | PN | Pn | 18 46 09.7 | -2.6 |
| PXZ | | | | AML | AML | 18 46 34.6 | |
| PXZ | | | | AML | AML | 18 46 56.4 | |
| KRVZ | Karewarewa | 1.88 | 246 | PN | Pn | 18 46 12.4 | -0.6 |
| KRVZ | | | | AML | AML | 18 46 38.2 | |
| KRVZ | | | | AML | AML | 18 46 42.4 | |
| KRVZ | Karewarewa | 1.88 | 246 | Pn

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **TSZ** | **Takapari Road** | **2.25 220** | PN | Pn | 18 46 15.6 | -2.3 | |
| TSZ | | | AML | AML | 18 46 44.9 | | |
| TSZ | | | AML | AML | 18 46 51.5 | | |
| **TSZ** | **Takapari Road** | **2.25 220** | Pn | Pn | 18 46 15.6 | -2.3 | |
| **DVHZ** | **Dannevirke** | **2.34 213** | PN | Pn | 18 46 16.7 | -2.5 | |
| **DVHZ** | **Dannevirke** | **2.34 213** | Pn | Pn | 18 46 16.7 | -2.5 | |
| **HIZ** | **Hauiti** | **2.36 265** | PN | Pn | 18 46 19.6 | +0.2 | |
| **HIZ** | **Hauiti** | **2.36 265** | Pn | Pn | 18 46 19.6 | +0.2 | |
| **MKAZ** | **Moumakai** | **2.47 299** | ⇓PN | Pn | 18 46 20.1 | -0.7 | |
| **MKAZ** | **Moumakai** | **2.47 299** | Pn | Pn | 18 46 20.1 | -0.7 | |
| **VRZ** | **Vera Road** | **2.54 251** | PN | Pn | 18 46 21.9 | +0.1 | |
| **VRZ** | **Vera Road** | **2.54 251** | Pn | Pn | 18 46 21.9 | +0.1 | |
| **POWZ** | **Post Office Ro** | **2.60 218** | PN | Pn | 18 46 20.7 | -2.0 | |
| **POWZ** | **Post Office Ro** | **2.60 218** | Pn | Pn | 18 46 20.7 | -2.0 | |
| **BFZ** | **Birch Farm** | **2.63 208** | PN | Pn | 18 46 20.1 | -3.1 | |
| BFZ | | | AML | AML | 18 46 52.8 | | |
| BFZ | | | AML | AML | 18 46 53.0 | | |
| **BFZ** | **Birch Farm** | **2.63 208** | Pn | Pn | 18 46 20.1 | -3.1 | |
| **WAZ** | **Wanganui** | **2.63 237** | PN | Pn | 18 46 23.5 | +0.3 | |
| WAZ | | | AML | AML | 18 47 04.9 | | |
| WAZ | | | AML | AML | 18 47 06.3 | | |
| **WAZ** | **Wanganui** | **2.63 237** | Pn | Pn | 18 46 23.5 | +0.3 | |
| **PRWZ** | **Pori Road** | **2.64 213** | PN | Pn | 18 46 20.9 | -2.3 | |
| **PRWZ** | **Pori Road** | **2.64 213** | Pn | Pn | 18 46 20.9 | -2.3 | |
| **TIWZ** | **Tintock** | **2.86 212** | AML | AML | 18 46 59.5 | | |
| TIWZ | | | AML | AML | 18 46 59.6 | | |
| **MRZ** | **Mangatainoka R** | **2.90 217** | PN | Pn | 18 46 23.5 | -3.3 | |
| MRZ | | | AML | AML | 18 46 58.3 | | |
| MRZ | | | AML | AML | 18 47 00.5 | | |
| **MRZ** | **Mangatainoka R** | **2.90 217** | Pn | Pn | 18 46 23.5 | -3.3 | |
| **LREZ** | **Lake Rotokare** | **2.91 247** | PN | Pn | 18 46 27.7 | +0.8 | |
| **PREZ** | **Palmer Road** | **3.05 250** | PN | Pn | 18 46 30.1 | +1.1 | |
| **PREZ** | **Palmer Road** | **3.05 250** | Pn | Pn | 18 46 30.1 | +1.1 | |
| **NEZ** | **North Egmont** | **3.07 252** | PN | Pn | 18 46 30.6 | +1.3 | |
| **NEZ** | **North Egmont** | **3.07 252** | Pn | Pn | 18 46 30.6 | +1.3 | |
| **HOWZ** | **Holdsworth Sta** | **3.12 215** | PN | Pn | 18 46 25.9 | -3.9 | |
| **HOWZ** | **Holdsworth Sta** | **3.12 215** | Pn | Pn | 18 46 25.9 | -3.9 | |
| **PKE** | **Pukeiti** | **3.13 253** | PN | Pn | 18 46 31.2 | +1.0 | |
| **PKE** | **Pukeiti** | **3.13 253** | Pn | Pn | 18 46 31.2 | +1.0 | |
| **TMWZ** | **Te Maipa** | **3.14 208** | PN | Pn | 18 46 26.4 | -3.8 | |
| **TMWZ** | **Te Maipa** | **3.14 208** | Pn | Pn | 18 46 26.4 | -3.8 | |
| **KHEZ** | **Kahui Hut** | **3.14 251** | PN | Pn | 18 46 31.1 | +0.9 | |
| **KHEZ** | **Kahui Hut** | **3.14 251** | Pn | Pn | 18 46 31.4 | +1.2 | |
| **OGWZ** | **Otaki Gorge** | **3.22 219** | PN | Pn | 18 46 28.0 | -3.2 | |
| **OGWZ** | **Otaki Gorge** | **3.22 219** | Pn | Pn | 18 46 28.0 | -3.2 | |
| **MTW** | **Mount Morrison** | **3.33 212** | AML | AML | 18 47 08.1 | | |
| MTW | | | AML | AML | 18 47 08.1 | | |
| **KIW** | **Kapiti Island** | **3.38 221** | PN | Pn | 18 46 30.2 | -3.3 | |
| KIW | | | AML | AML | 18 47 13.8 | | |
| **KIW** | **Kapiti Island** | **3.38 221** | Pn | Pn | 18 46 30.2 | -3.3 | |
| **TRWZ** | **Traveller** | **3.47 208** | PN | Pn | 18 46 30.8 | -3.9 | |
| **TRWZ** | **Traveller** | **3.47 208** | Pn | Pn | 18 46 30.8 | -3.9 | |
| **CAW** | **Cannon Point** | **3.49 217** | PN | Pn | 18 46 30.7 | -4.2 | |
| CAW | | | AML | AML | 18 47 12.5 | | |
| CAW | | | AML | AML | 18 47 14.5 | | |
| **CAW** | **Cannon Point** | **3.49 217** | Pn | Pn | 18 46 30.7 | -4.2 | |
| **PAWZ** | **Paruwai Farm** | **3.55 211** | PN | Pn | 18 46 32.0 | -3.9 | |
| PAWZ | | | AML | AML | 18 47 13.9 | | |
| **PAWZ** | **Paruwai Farm** | **3.55 211** | Pn | Pn | 18 46 32.0 | -3.9 | |
| **MSWZ** | **Moikau Station** | **3.65 212** | PN | Pn | 18 46 32.9 | -4.4 | |
| MSWZ | | | AML | AML | 18 47 15.6 | | |
| **MSWZ** | **Moikau Station** | **3.65 212** | Pn | Pn | 18 46 32.9 | -4.4 | |
| **PLWZ** | **Palliser** | **3.78 211** | PN | Pn | 18 46 34.4 | -4.6 | |
| **PLWZ** | **Palliser** | **3.78 211** | Pn | Pn | 18 46 34.4 | -4.6 | |
| **BHW** | **Baring Head** | **3.81 216** | AML | AML | 18 47 19.3 | | |
| **SNZO** | **South Karori** | **3.82 218** | *e*Pn | Pn | 18 46 37.5 | -2.0 | |
| SNZO | | | *e*Sn | Sn | 18 47 22.5 | -0.6 | |
| **DUWZ** | **D'Urville Isla** | **3.90 230** | PN | Pn | 18 46 37.8 | -2.8 | |
| **DUWZ** | **D'Urville Isla** | **3.90 230** | Pn | Pn | 18 46 37.8 | -2.8 | |
| **TCW** | **Tory Channel** | **3.97 223** | PN | Pn | 18 46 37.6 | -3.9 | |
| TCW | | | AML | AML | 18 47 25.2 | | |
| TCW | | | AML | AML | 18 47 25.2 | | |
| **TCW** | **Tory Channel** | **3.97 223** | Pn | Pn | 18 46 37.6 | -3.9 | |
| **TUWZ** | **Tuamarina** | **4.30 223** | PN | Pn | 18 46 42.2 | -3.9 | |
| TUWZ | | | AML | AML | 18 47 33.4 | | |
| TUWZ | | | AML | AML | 18 47 34.6 | | |
| **TUWZ** | **Tuamarina** | **4.30 223** | Pn | Pn | 18 46 42.2 | -3.9 | |
| **NNZ** | **Nelson** | **4.48 229** | PN | Pn | 18 46 44.8 | -3.7 | |
| **NNZ** | **Nelson** | **4.48 229** | Pn | Pn | 18 46 44.8 | -3.7 | |
| **BSWZ** | **Blackbirch Sta** | **4.54 221** | PN | Pn | 18 46 44.7 | -4.6 | |
| **BSWZ** | **Blackbirch Sta** | **4.54 221** | Pn | Pn | 18 46 44.7 | -4.6 | |
| **QRZ** | **Quartz Range** | **4.80 237** | PN | Pn | 18 46 49.2 | -3.7 | |
| **QRZ** | **Quartz Range** | **4.80 237** | Pn | Pn | 18 46 49.2 | -3.7 | |
| **THZ** | **Tophouse** | **5.10 227** | PN | Pn | 18 46 53.1 | -4.0 | |
| THZ | | | AML | AML | 18 47 53.5 | | |
| THZ | | | AML | AML | 18 47 55.5 | | |
| **THZ** | **Tophouse** | **5.10 227** | Pn | Pn | 18 46 53.1 | -4.0 | |
| **KHZ** | **Kahutara** | **5.22 218** | PN | Pn | 18 46 53.3 | -5.5 | |
| **KHZ** | **Kahutara** | **5.22 218** | Pn | Pn | 18 46 53.3 | -5.5 | |
| **LTZ** | **Lake Taylor** | **6.13 222** | PN | Pn | 18 47 06.1 | -5.2 | |
| **LTZ** | **Lake Taylor** | **6.13 222** | Pn | Pn | 18 47 06.1 | -5.2 | |
| **MQZ** | **McQueen's Vall** | **6.63 215** | PN | Pn | 18 47 10.4 | -7.7 | |
| **OXZ** | **Oxford** | **6.64 220** | PN | Pn | 18 47 13.2 | -5.0 | |
| **OXZ** | **Oxford** | **6.64 220** | Pn | Pn | 18 47 13.2 | -5.0 | |
| **CTZ** | **Chatham Island** | **6.81 144** | PN | Pn | 18 47 18.8 | -1.7 | |
| **CTZ** | **Chatham Island** | **6.81 144** | Pn | Pn | 18 47 19.3 | -1.2 | |
| **FOZ** | **Fox Glacier** | **8.07 227** | Pn | Pn | 18 47 30.9 | -7.0 | |
| **LBZ** | **Lake Benmore** | **8.34 221** | PN | Pn | 18 47 36.7 | -4.8 | |
| **LBZ** | **Lake Benmore** | **8.34 221** | Pn | Pn | 18 47 36.7 | -4.8 | |
| **ODZ** | **Otahua Downs** | **8.58 217** | Pn | Pn | 18 47 39.2 | -5.7 | |
| **JCZ** | **Jackson Bay** | **8.92 227** | PN | Pn | 18 47 44.5 | -5.1 | |
| **JCZ** | **Jackson Bay** | **8.92 227** | Pn | Pn | 18 47 44.5 | -5.1 | |

**IDC 31 18:46:01.7±4.2,6°12S×150°22E,h0km,mb3.2/2, mb1 3.5/3,mb1mx3.2/38,mbtmp3.3/3,ML3.1/1,Error ellipse: s-maj=203.0km s-min=38.3km az=123.0,New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.46** | **223** | Pn | Pn | 18 47 12.2 | +1.7 |
| | 1.1nm,0.3s,baz=301,slow=2.5,SNR=5.5 | | | | | | |
| PMG | | | | Sn | Sn | 18 48 01.5 | -1.7 |
| | 1.3nm,0.3s,baz=252,slow=20,SNR=3.6 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.66** | **227** | P | P | 18 50 42.6 | -0.7 |
| | 1.2nm,0.6s,baz=51,slow=10,SNR=6.4 | | | | | | |
| **ASAR** | **Alice Springs** | **23.47** | **220** | P | P | 18 51 12.9 | -0.3 |
| | 0.4nm,0.8s,baz=57,slow=8.1,SNR=4.4 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.22** | **285** | PKPbc | PKPbc | 19 05 50.5 | -0.4 |
| | 0.3nm,0.6s,baz=76,slow=2.2,SNR=4.5 | | | | | | |

*IDC **31** 18:49:09.7±0.6,6°26S×150°31E,h0km,mb4.4/23, mb1 4.5/26,mb1mx4.4/39,mbtmp4.4/26,ML3.3/3,MS4.2/16, Ms1 4.2/16,ms1mx4.1/26,Error ellipse: s-maj=17.5km s-min=13.1km az=95.0*

*GCMT **31** 18:49:11.2±0.2,6°64S×150°28E,h17km,MW5.1/74, Moment Tensor Solution. s50,c68; s74,c125; Duration: 0 Moment tensor: Scale $10^{16}$Nm; $M_{rr}$-4.14±.20; $M_{\theta\theta}$4.16±.13; $M_{\phi\phi}$-0.01±.12; $M_{r\theta}$-3.87±.36; $M_{\theta\phi}$0.84±.08; $M_{\phi r}$-1.31±.38; Best double couple: M□5.88300×$10^{16}$ NP1:ϕ8 74.00000°,δ67.00000°,λ-94.00000°. NP2: ϕs 265.00000°,δ23.00000°,λ-80.00000°. Principal axes: T 5.9560, Plg22.0000°, Azm167.0000°; N -0.1440, Plg4.0000°, Azm75.0000°; P -5.8110, Plg68.0000°, Azm335.0000°; nsta1 refers to body waves, cutoff=40s. nsta2 refers to surface waves, cutoff=50s.*

*NEIC **31** 18:49:11.2±0.3,6°29S×150°27E,h10km,mb5.1/12 Error ellipse: s-maj=8.5km s-min=5.4km az=102.0*

*AUST **31** 18:49:14.8±2.0,6°53S×150°41E,h33km±16km,Error ellipse: s-maj=8.2km s-min=6.5km az=98.0*

*BJI **31** 18:49:16.7,5°81S×149°72E,h23km,mb4.7/30,mB5.1/29, Ms4.9/24,Ms7 4.6/22*

**ISC 31 18:49:14.0±0.5,6°31S±0°04×150°15E±0°06,h24km±2km, h24km:pP-P,n157,σ1s32/182,mb4.5/31,MS4.1/13,6C-6D, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **RABL** | **Rabaul** | **2.91** | **44** | P | **Pn** | **18 49 58.2** | **-0.6** |
| | baz=2.9,SNR=458 | | | | | | |
| **PMG** | **Port Moresby** | **4.27** | **224** | Pn | **Pn** | **18 50 19.4** | **+1.9** |
| | 38nm,0.3s,baz=57,slow=5.6,SNR=115 | | | | | | |
| PMG | | | | Sn | **Sn** | **18 51 07.8** | **+1.2** |
| | 146nm,0.3s,baz=203,slow=18,SNR=18 | | | | | | |
| **PMG** | **Port Moresby** | **4.27** | **224** | P | **Pn** | **18 50 19.3** | **+1.8** |
| | baz=4.3,SNR=70 | | | | | | |
| **PMG** | **Port Moresby** | **4.27** | **224** | *e*Pn | **Pn** | **18 50 19.3** | **+1.9** |
| PMG | | | | *e*Sn | **Sn** | **18 51 07.1** | **+0.5** |
| PMG | | | | Sn | **Sn** | **18 51 07.8** | **+1.2** |
| **MANU** | **Manus Island** | **5.07** | **327** | *e*P | Pb | 18 50 36.1 | -6.0 |
| **HNR** | **Honiara** | **10.19** | **108** | LR | LR | 18 55 04.6 | |
| | comp=Z,929nm,18.6s,baz=270,slow=35 | | | | | | |
| **COEN** | **Coen** | **10.24** | **222** | P | **Pn** | **18 51 40.7** | **+1.2** |
| | baz=10,SNR=7.0 | | | | | | |
| **COEN** | **Coen** | **10.24** | **222** | *e*Pn | **Pn** | **18 51 39.4** | **-0.1** |
| | 18nm,0.8s | | | | | | |
| COEN | | | | *e*Sn | **Sn** | **18 53 29.6** | **-4.0** |
| **MTSU** | **Mount Surprise** | **13.06** | **205** | P | **Pn** | **18 52 17.5** | **-0.7** |
| | baz=13,SNR=14 | | | | | | |
| **CTA** | **Charters Tower** | **14.21** | **195** | Pn | **Pn** | **18 52 33.7** | **-0.1** |
| | 0.2nm,0.3s,baz=14,slow=15,SNR=5.3 | | | | | | |
| CTA | | | | LR | LR | 18 58 04.5 | |
| | comp=Z,963nm,18.2s,baz=9.5,slow=37 | | | | | | |
| **CTAO** | **Charters Tower** | **14.21** | **195** | *e*Pn | **Pn** | **18 52 32.9** | **-0.9** |
| **QIS** | **Mount Isa** | **17.47** | **215** | P | **Pn** | **18 53 15.3** | **-0.8** |
| | baz=18,SNR=23 | | | | | | |
| SIJI | | | | LR | LR | 19 03 09.5 | |
| | comp=Z,1μm,19.1s,baz=100,slow=42 | | | | | | |
| **KDU** | **Kakadu** | **18.54** | **249** | P | **Pn** | **18 53 30.1** | **+0.7** |
| | baz=19,SNR=6.9 | | | | | | |
| **EIDS** | **Eidsvold** | **18.97** | **177** | P | **P** | **18 53 32.6** | **-1.1** |
| | baz=19,SNR=12 | | | | | | |
| **EIDS** | **Eidsvold** | **18.97** | **177** | *e*P | **P** | **18 53 31.4** | **-2.3** |
| | 111nm,1.3s | | | | | | |
| **SIJI** | **Sorong** | **19.60** | **285** | P | **P** | **18 53 41.2** | **+0.5** |
| | 0.2nm,0.3s,baz=63,slow=16,SNR=2.5 | | | | | | |
| SIJI | | | | LR | LR | 19 03 09.5 | |
| | comp=Z,1μm,19.1s,baz=100,slow=42 | | | | | | |
| **MTN** | **Manton Dam** | **19.83** | **249** | *e*P | **Pn** | **18 53 44.4** | **-0.5** |
| | 101nm,1.1s | | | | | | |
| **RMQ** | **Roma** | **20.11** | **184** | P | **P** | **18 53 45.9** | **-0.2** |
| | baz=20,SNR=21 | | | | | | |
| **WRAB** | **Tennant Creek** | **20.47** | **227** | P | **P** | **18 53 50.0** | **-0.1** |
| | 1μm,0.8s,SNR=64 | | | | | | |
| **WRAB** | **Tennant Creek** | **20.47** | **227** | *e*P | **P** | **18 53 49.6** | **-0.5** |
| | 150nm,0.8s | | | | | | |
| **WRA** | **Warramunga Arr** | **20.48** | **227** | P | **P** | **18 53 50.5** | **+0.2** |
| | 41nm,0.6s,baz=52,slow=11,SNR=59 | | | | | | |
| WRA | | | | S | **S** | **18 57 38.8** | **+0.2** |
| | 12nm,1.1s,baz=52,slow=20,SNR=9.9 | | | | | | |
| WRA | | | | ScP | **ScP** | **19 01 38.6** | **+1.5** |
| | 7.0nm,1.3s,baz=40,slow=2.3,SNR=9.5 | | | | | | |
| **PALU** | **Palau** | **20.70** | **311** | P | Pn | 18 53 58.4 | +3.3 |
| | baz=21,SNR=4.1 | | | | | | |
| **QLP** | **Quilpie** | **20.93** | **195** | P | **P** | **18 53 54.4** | **-0.6** |
| | baz=21,SNR=77 | | | | | | |
| **AAI** | **Ambon** | **22.02** | **276** | P | **P** | **18 54 08.7** | **+1.7** |
| | baz=22,SNR=4.0 | | | | | | |
| **DZM** | **Mont Dzumac** | **22.21** | **136** | *e*P | **P** | **18 54 12.2** | **+3.2** |
| | 104nm,1.2s | | | | | | |
| DZM | | | | *e*S | **S** | **18 58 11.4** | **-1.1** |
| | 776nm,21.9s | | | | | | |
| DZM | | | | *e*LR | LR | 18 59 39.0 | |
| | 2μm,23.1s | | | | | | |
| **DZM** | **Mont Dzumac** | **22.21** | **136** | P | **P** | **18 54 08.8** | **-0.2** |
| | 8.1nm,0.6s,baz=358,slow=22,SNR=6.2 | | | | | | |
| DZM | | | | LR | LR | 19 01 08.9 | |
| | comp=Z,1μm,21.2s,baz=353,slow=32 | | | | | | |
| **KNRA** | **Kununurra** | **22.94** | **244** | P | **P** | **18 54 16.4** | **-0.3** |
| | baz=23,SNR=25 | | | | | | |
| **AS01** | **Alice Springs** | **23.25** | **220** | *e*P | **P** | **18 54 18.9** | **-0.9** |
| **ASAR** | **Alice Springs** | **23.28** | **220** | P | **P** | **18 54 19.8** | **-0.3** |
| | 22nm,0.9s,baz=54,slow=9.0,SNR=45 | | | | | | |
| ASAR | | | | S | **S** | **18 58 31.6** | **+0.4** |
| | 10nm,0.9s,baz=39,slow=19,SNR=9.0 | | | | | | |
| ASAR | | | | ScP | **ScP** | **19 01 46.1** | **+2.0** |
| | 3.0nm,1.1s,baz=46,slow=3.6,SNR=7.1 | | | | | | |
| ASAR | | | | LR | LR | 19 03 47.6 | |
| | comp=Z,504nm,19.3s,baz=46,slow=38 | | | | | | |
| **ARMA** | **Armidale** | **24.02** | **177** | P | **P** | **18 54 26.1** | **-1.2** |
| | baz=24,SNR=24 | | | | | | |
| **ARMA** | **Armidale** | **24.02** | **177** | *e*P | **P** | **18 54 25.6** | **-1.6** |
| | 160nm,1.2s | | | | | | |
| **CMSA** | **Cobar Meteorol** | **25.44** | **189** | P | **P** | **18 54 38.3** | **-1.7** |
| | baz=25,SNR=16 | | | | | | |
| **BATI** | **Baumata** | **26.49** | **260** | P | **P** | **18 54 51.7** | **+2.0** |
| | 45nm,0.8s,baz=150,slow=5.1,SNR=10 | | | | | | |
| **DAV** | **Davao City (W)** | **27.89** | **298** | LR | LR | 19 06 51.6 | |
| | comp=Z,301nm,18.2s,baz=168,slow=38 | | | | | | |
| **YNG** | **Young** | **27.90** | **183** | P | **P** | **18 55 01.4** | **-0.8** |
| | baz=28,SNR=4.6 | | | | | | |
| **WRKA** | **Warakurna** | **28.01** | **226** | P | **P** | **18 55 02.9** | **-0.5** |
| | baz=28,SNR=48 | | | | | | |
| **BBOO** | **Buckleboo** | **29.45** | **205** | P | **P** | **18 55 16.6** | **+0.6** |
| | baz=30,SNR=6.2 | | | | | | |
| **BBOO** | **Buckleboo** | **29.45** | **205** | *e*P | **P** | **18 55 16.9** | **+0.9** |
| | 129nm,1.9s | | | | | | |
| **KAPI** | **Kappang** | **30.27** | **271** | P | **P** | **18 55 24.6** | **+1.1** |
| | 6.0nm,0.3s,baz=75,slow=4.1,SNR=8.5 | | | | | | |
| KAPI | | | | LR | LR | 19 10 04.9 | |
| | comp=Z,251nm,20.0s,baz=105,slow=41 | | | | | | |
| **KAPI** | **Kappang** | **30.27** | **271** | *e*P | **P** | **18 55 22.3** | **-1.2** |
| | 8.9nm,1.1s | | | | | | |
| **ARPS** | **Mount Arapiles** | **31.25** | **193** | P | **P** | **18 55 31.4** | **-0.5** |
| | baz=31,SNR=6.5 | | | | | | |
| **TOO** | **Toolangi** | **31.40** | **187** | P | **P** | **18 55 32.6** | **-0.7** |
| | baz=31,SNR=4.8 | | | | | | |
| **MBWA** | **Marble Bar** | **32.93** | **240** | *e*P | **P** | **18 55 47.1** | **+0.3** |
| | 21nm,0.9s | | | | | | |
| **MEEK** | **Meekatharra** | **36.19** | **232** | P | **P** | **18 56 15.6** | **+0.5** |
| | baz=36,SNR=14 | | | | | | |
| **KMBL** | **Kambalda** | **36.34** | **223** | P | **P** | **18 56 16.4** | **+0.1** |
| | baz=36,SNR=19 | | | | | | |
| **MORW** | **Morawa** | **39.35** | **231** | P | **P** | **18 56 42.4** | **+0.7** |
| | baz=40,SNR=3.9 | | | | | | |
| **KLBR** | **Kellerberrin** | **39.36** | **226** | P | **P** | **18 56 41.4** | **-0.3** |
| | baz=40,SNR=10 | | | | | | |
| **JHJ** | **Hachijo jima 2** | **40.43** | **347** | LR | LR | 19 12 45.7 | |
| | comp=Z,232nm,18.1s,baz=40,slow=35 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **40.46** | **225** | P | **P** | **18 56 50.7** | **-0.2** |
| | 8.4nm,0.8s,baz=283,slow=0.6,SNR=3.6 | | | | | | |
| **DCZ** | **Deep Cove** | **41.72** | **162** | *e*P | **P** | **18 57 03.4** | **+2.4** |
| | 23nm,1.2s | | | | | | |
| **LEM** | **Lembang** | **42.24** | **267** | P | **P** | **18 57 07.2** | **+1.3** |
| | 42nm,0.8s,baz=4.5,slow=4.7,SNR=15 | | | | | | |
| **LEM** | **Lembang** | **42.24** | **267** | P | **P** | **18 57 07.3** | **+1.3** |
| | baz=42,SNR=3.1 | | | | | | |
| **JNU** | **Nakatsue** | **43.28** | **336** | P | **P** | **18 57 14.3** | **+0.4** |
| | 10nm,0.9s,baz=140,slow=1.4,SNR=5.7 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.07** | **346** | P | **P** | **18 57 19.1** | **-1.1** |
| | 1.8nm,1.0s,baz=172,slow=6.1,SNR=3.5 | | | | | | |
| MJAR | | | | LR | LR | 19 15 07.0 | |
| | comp=Z,203nm,18.1s,baz=190,slow=35 | | | | | | |
| **QIZ** | **Qiongzhong** | **47.02** | **303** | P | P | 18 57 39.3 | -4.5 |
| QIZ | | | | pP | pP | 18 57 48.5 | -2.8 |
| QIZ | | | | sP | sP | 18 57 52.5 | -1.7 |
| QIZ | | | | S | **S** | **19 04 31.5** | **-2.9** |
| QIZ | | | | sS | sS | 19 04 46.0 | -0.7 |
| QIZ | | | | PMZ | | | |
| | 300nm,4.0s | | | | | | |
| QIZ | | | | LN | | | |
| | 660nm,4.5s | | | | | | |
| QIZ | | | | LZ | | | |
| | 220nm,21.5s | | | | | | |
| **KSRS** | **Korea Array** | **48.23** | **336** | P | **P** | **18 57 54.0** | **+1.2** |
| | 1.8nm,0.8s,baz=148,slow=7.4,SNR=7.8 | | | | | | |
| **KSAR** | **Wonju Array Be** | **48.24** | **336** | P | **P** | **18 57 54.0** | **+1.1** |
| **KS01** | **Wonju Array Si** | **48.26** | **336** | *e*P | **P** | **18 57 52.7** | **-0.4** |
| **NJ2** | **Nanjing** | **48.42** | **324** | *e*P | **P** | **18 57 53.5** | **-1.0** |
| NJ2 | | | | PMZ | | | |
| | 10.0nm,0.6s | | | | | | |
| **WHN** | **Wuhan** | **50.18** | **319** | *e*P | **P** | **18 58 10.0** | **+2.1** |
| **USRK** | **Ussuriysk Ar.** | **52.88** | **344** | P | **P** | **18 58 28.4** | **+0.5** |
| | 0.7nm,0.4s,baz=163,slow=7.0,SNR=8.8 | | | | | | |
| **GYA** | **Guiyang** | **53.26** | **310** | P | **P** | **18 58 31.8** | **+0.6** |
| GYA | | | | PP | **PP** | **19 00 33.5** | **+1.9** |
| GYA | | | | ScP | **ScP** | **19 03 34.3** | **-0.9** |
| GYA | | | | S | **S** | **19 06 01.5** | **0.0** |
| GYA | | | | PMZ | | | |
| | 20nm,1.0s | | | | | | |
| GYA | | | | PMZ | | | |
| | 120nm,7.0s | | | | | | |
| GYA | | | | LN | | | |
| | 530nm,19.2s | | | | | | |
| GYA | | | | LE | | | |
| | 490nm,20.0s | | | | | | |
| GYA | | | | LZ | | | |
| | 510nm,18.6s | | | | | | |
| **MDJ** | **Mudanjiang** | **53.97** | **342** | P | **P** | **18 58 37.0** | **+1.1** |
| MDJ | | | | pP | **pP** | **18 58 42.3** | **-1.1** |
| MDJ | | | | sP | **sP** | **18 58 44.5** | **-1.8** |
| MDJ | | | | PP | **PP** | **19 00 38.5** | **+1.0** |
| MDJ | | | | ScP | **ScP** | **19 03 40.0** | **+2.3** |
| MDJ | | | | PcS | **PcS** | **19 03 41.3** | **+1.2** |
| MDJ | | | | S | **S** | **19 06 13.0** | **+2.8** |
| MDJ | | | | sS | **sS** | **19 06 24.0** | **+1.4** |
| MDJ | | | | ScS | **ScS** | **19 08 21.3** | **-2.5** |
| MDJ | | | | PMZ | | | |
| | 10.0nm,1.0s | | | | | | |
| MDJ | | | | PMZ | | | |
| | 75nm,5.5s | | | | | | |
| MDJ | | | | LN | | | |
| | 170nm,6.0s | | | | | | |
| MDJ | | | | LE | | | |
| | 31nm,6.5s | | | | | | |
| MDJ | | | | LZ | | | |
| | 210nm,8.0s | | | | | | |
| **CN2** | **Changchun** | **54.65** | **338** | *e*P | P | 18 58 45.5 | +4.6 |
| CN2 | | | | PMZ | | | |
| | 10.0nm,0.7s | | | | | | |
| **KMI** | **Kunming** | **55.69** | **306** | P | **P** | **18 58 50.5** | **+1.5** |
| KMI | | | | pP | **pP** | **18 58 57.5** | **+0.9** |
| KMI | | | | sP | **sP** | **18 59 00.3** | **+0.8** |
| KMI | | | | PP | **PP** | **19 00 56.5** | **+2.9** |
| KMI | | | | S | **S** | **19 06 33.0** | **-1.4** |
| KMI | | | | sS | **sS** | **19 06 44.5** | **-2.4** |
| KMI | | | | ScS | **ScS** | **19 08 34.8** | **-2.6** |
| KMI | | | | PMZ | | | |
| | 8.0nm,1.0s | | | | | | |
| KMI | | | | PMZ | | | |
| | 110nm,4.2s | | | | | | |
| KMI | | | | LN | | | |
| | 240nm,8.6s | | | | | | |
| KMI | | | | LE | | | |
| | 240nm,9.5s | | | | | | |
| KMI | | | | LZ | | | |
| | 340nm,11.8s | | | | | | |
| **BJI** | **Beijing** | **55.75** | **329** | P | **P** | **18 58 49.0** | **+0.2** |
| BJI | | | | S | **S** | **19 06 36.5** | **+2.3** |
| BJI | | | | PMZ | | | |
| | 5.0nm,0.5s | | | | | | |
| BJI | | | | PMZ | | | |
| | 97nm,3.8s | | | | | | |
| BJI | | | | LN | | | |
| | 360nm,20.3s | | | | | | |
| BJI | | | | LE | | | |
| | 250nm,16.6s | | | | | | |
| BJI | | | | LZ | | | |
| | 280nm,18.8s | | | | | | |
| **XAN** | **Xi'an** | **55.95** | **319** | P | **P** | **18 58 53.3** | **+2.8** |
| XAN | | | | pP | **pP** | **18 59 01.0** | **+2.9** |
| XAN | | | | PMZ | | | |
| | 6.0nm,1.6s | | | | | | |
| XAN | | | | PMZ | | | |
| | 110nm,5.0s | | | | | | |
| XAN | | | | LN | | | |
| | 220nm,18.2s | | | | | | |
| XAN | | | | LE | | | |
| | 250nm,16.2s | | | | | | |
| XAN | | | | LZ | | | |
| | 250nm,17.2s | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **56.17** | **297** | P | **P** | **18 58 53.0** | **+0.7** |
| | 0.9nm,1.1s,baz=146,slow=2.2,SNR=4.6 | | | | | | |
| CMAR | | | | LR | LR | 19 20 02.3 | |
| | comp=Z,54nm,22.0s,baz=120,slow=33 | | | | | | |
| **CD2** | **Chengdu** | **57.76** | **313** | *e*P | **P** | **18 59 03.8** | **+0.4** |
| CD2 | | | | pP | **pP** | **18 59 11.0** | **0.0** |
| CD2 | | | | PP | **PP** | **19 01 12.0** | **+0.3** |
| CD2 | | | | PcS | **PcS** | **19 03 57.5** | **0.0** |
| CD2 | | | | S | **S** | **19 07 02.0** | **+0.7** |
| CD2 | | | | PMZ | | | |
| | 10.0nm,0.5s | | | | | | |
| CD2 | | | | PMZ | | | |
| | 120nm,5.2s | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **58.78** | **326** | *e*P | **P** | **18 59 13.5** | **+3.1** |
| HHC | | | | S | **S** | **19 07 16.0** | **+1.5** |
| HHC | | | | PMZ | | | |
| | 20nm,0.6s | | | | | | |
| HHC | | | | PMZ | | | |
| | 140nm,7.4s | | | | | | |
| HHC | | | | LN | | | |
| | 280nm,16.0s | | | | | | |
| HHC | | | | LE | | | |
| | 290nm,16.0s | | | | | | |
| HHC | | | | LZ | | | |
| | 250nm,15.7s | | | | | | |
| **PETK** | **Petropavlovsk-** | **59.54** | **5** | LR | LR | 19 19 49.6 | |
| | comp=Z,201nm,22.0s,baz=140,slow=31 | | | | | | |
| **PPT2** | **Papeete2** | **59.81** | **107** | *e*LR | LR | 19 16 27.6 | |
| | 170nm,25.2s | | | | | | |
| **TBI** | **Tubuai** | **60.37** | **113** | *e*S | **S** | **19 07 34.5** | **-0.8** |
| | 198nm,30.0s | | | | | | |
| TBI | | | | *e*LQ | LQ | 19 14 47.7 | |
| | 331nm,40.2s | | | | | | |
| TBI | | | | *e*LR | LR | 19 17 22.0 | |
| | 290nm,36.2s | | | | | | |
| **LZH** | **Lanzhou** | **60.52** | **318** | *e*P | P | 18 59 26.8 | +4.2 |
| LZH | | | | pP | pP | 18 59 32.0 | +1.8 |
| LZH | | | | sP | sP | 18 59 35.3 | +2.2 |
| LZH | | | | PP | PP | 19 01 41.8 | +5.6 |
| LZH | | | | PMZ | | | |
| | 26nm,1.1s | | | | | | |
| LZH | | | | PMZ | | | |
| | 120nm,4.6s | | | | | | |
| LZH | | | | LN | | | |
| | 410nm,13.0s | | | | | | |
| LZH | | | | LE | | | |
| | 470nm,13.4s | | | | | | |
| LZH | | | | LZ | | | |
| | 590nm,16.1s | | | | | | |
| **DRV** | **Dumont d'Urvil** | **60.66** | **185** | P | **P** | **18 59 25.0** | **+2.2** |
| DRV | | | | R | | 19 18 00.0 | |
| **GTA** | **Gaotai** | **65.01** | **319** | *e*P | P | 18 59 55.8 | +3.4 |
| GTA | | | | pP | pP | 19 00 02.0 | +1.9 |
| GTA | | | | sP | sP | 19 00 04.8 | +1.8 |
| GTA | | | | PMZ | | | |
| | 4.0nm,1.2s | | | | | | |
| GTA | | | | PMZ | | | |
| | 160nm,5.2s | | | | | | |
| GTA | | | | LN | | | |
| | 170nm,14.7s | | | | | | |
| GTA | | | | LE | | | |
| | 190nm,14.3s | | | | | | |
| GTA | | | | LZ | | | |
| | 190nm,15.2s | | | | | | |
| **SONM** | **Songino Array** | **66.23** | **329** | P | **P** | **19 00 00.1** | **-0.1** |
| | 2.1nm,1.0s,baz=133,slow=5.4,SNR=7.7 | | | | | | |
| **SONA1** | **Songino Array** | **66.23** | **329** | *e*P | **P** | **18 59 59.7** | **-0.5** |
| **LSA** | **Lhasa** | **66.94** | **306** | *e*P | **P** | **19 00 05.3** | **-0.2** |
| | 3.9nm,0.8s | | | | | | |
| **VNDA** | **Vanda** | **71.44** | **177** | P | **P** | **19 00 32.2** | **+0.3** |
| | 7.1nm,0.9s,baz=329,slow=7.1,S

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **KKAR** | **Karatay Array** | **86.76** | **314** | *e*P | | **P** | **19 01 56.5** | **+0.1** |
| | 2.6nm,0.9s | | | | | | | |
| **BVAR** | **Borovoye Array** | **88.87** | **324** | P | | **P** | **19 02 04.9** | **-1.3** |
| | 1.1nm,0.8s,baz=100,slow=3.4,SNR=5.8 | | | | | | | |
| **O03D** | **Paynes Creek** | **92.55** | **50** | P | | **P** | **19 02 23.7** | **0.0** |
| | baz=92 | | | | | | | |
| **M04C** | **Macdoel** | **92.68** | **48** | P | | **P** | **19 02 25.4** | **+1.1** |
| | baz=93 | | | | | | | |
| **J05D** | **Fort Rock, OR** | **93.27** | **47** | P | | **P** | **19 02 27.8** | **+0.8** |
| | baz=93 | | | | | | | |
| **PKM** | **Peak Mountain** | **93.59** | **55** | P | | **P** | **19 02 29.7** | **+1.0** |
| | baz=94 | | | | | | | |
| **VES** | **Vestal, Richgr** | **94.27** | **55** | P | | **P** | **19 02 31.9** | **+0.2** |
| | baz=94 | | | | | | | |
| **ISA** | **Isabella** | **94.75** | **55** | P | | **P** | **19 02 34.2** | **+0.2** |
| | baz=95 | | | | | | | |
| **MWC** | **Mount Wilson** | **94.99** | **56** | *e*P | | **P** | **19 02 34.1** | **-1.1** |
| | 38nm,1.2s | | | | | | | |
| **NVAR** | **Mina Array Bea** | **95.09** | **52** | P | | **P** | **19 02 35.8** | **+0.2** |
| | 4.0nm,1.0s,baz=257,slow=5.5,SNR=17 | | | | | | | |
| NVAR | | | | LR | | LR | 19 39 08.0 | |
| | comp=Z,398nm,19.9s,baz=246,slow=32 | | | | | | | |
| **EDW2** | **Edwards Air Fo** | **95.09** | **56** | P | | **P** | **19 02 36.0** | **+0.5** |
| | baz=95 | | | | | | | |
| **BFSC** | **Mount Baldy Ra** | **95.32** | **56** | P | | **P** | **19 02 37.4** | **+0.7** |
| | baz=95 | | | | | | | |
| **LRMC** | **Laurel Mountai** | **95.38** | **55** | P | | **P** | **19 02 38.1** | **+1.2** |
| | baz=95 | | | | | | | |
| **GEYT** | **Alibeck** | **95.44** | **307** | P | | **P** | **19 02 37.4** | **+0.4** |
| | 0.8nm,0.4s,baz=139,slow=7.9,SNR=3.9 | | | | | | | |
| **MPMC** | **Manual Prospec** | **95.58** | **54** | P | | **P** | **19 02 38.6** | **+0.8** |
| | baz=96 | | | | | | | |
| **109C** | **Camp Elliot, M** | **95.69** | **58** | P | | **P** | **19 02 39.5** | **+1.3** |
| | baz=96 | | | | | | | |
| **GSC** | **Goldstone** | **96.09** | **55** | P | | **P** | **19 02 40.7** | **+0.6** |
| | baz=96 | | | | | | | |
| **IBP** | **Imperial Bould** | **96.52** | **58** | P | | **P** | **19 02 43.2** | **+1.1** |
| | baz=96 | | | | | | | |
| **TPNV** | **Topopah Spring** | **96.63** | **54** | P | | **P** | **19 02 43.0** | **+0.4** |
| | baz=96 | | | | | | | |
| **BELC** | **Belle Mtn. Jos** | **96.68** | **57** | P | | **P** | **19 02 43.6** | **+0.8** |
| | baz=97 | | | | | | | |
| **TUQ** | **Turquoise Moun** | **96.81** | **55** | P | | **P** | **19 02 44.4** | **+0.9** |
| | baz=97 | | | | | | | |
| **GMRC** | **Granite Mounta** | **97.00** | **56** | P | | **P** | **19 02 45.5** | **+1.2** |
| | baz=97 | | | | | | | |
| **BC3** | **Big Chuckawall** | **97.11** | **57** | P | | Pdif | 19 02 46.2 | +1.3 |
| | baz=97 | | | | | | | |
| **IRM** | **Iron Mountain** | **97.39** | **56** | P | | Pdif | 19 02 47.0 | +1.0 |
| | baz=97 | | | | | | | |
| **GLA** | **Glamis** | **97.61** | **58** | P | | Pdif | 19 02 48.2 | +1.1 |
| | baz=98 | | | | | | | |
| **MLR** | **Muntele Rosu** | **118.08** | **319** | ⇓*i*P | | **PKPdf** | **19 07 59.3** | **0.0** |
| **VOIR** | | **118.68** | **319** | ⇑*i*P | | **PKPdf** | **19 07 57.8** | **-2.6** |
| **ARR** | **Arges** | **118.98** | **319** | ⇑*i*P | | **PKPdf** | **19 08 02.3** | **+1.4** |
| **KOLS** | **Kolonicke sedl** | **118.98** | **323** | *e*PKP | | **PKPdf** | **19 08 01.9** | **+1.1** |
| **STHS** | **Stebnicka Huta** | **119.37** | **324** | *e*PKP | | **PKPdf** | **19 08 02.7** | **+1.2** |
| **DRGR** | | **119.64** | **321** | ⇑*i*P | | **PKPdf** | **19 08 01.9** | **-0.3** |
| **GZR** | **Gura Zlata** | **120.17** | **320** | ⇓*i*P | | **PKPdf** | **19 08 03.3** | **+0.1** |
| **LANS** | **Liptovska Anna** | **120.52** | **325** | *e*PKP | | **PKPdf** | **19 08 05.2** | **+1.5** |
| **BZS** | **Buzias** | **120.82** | **320** | ⇓*i*P | | **PKPdf** | **19 08 04.3** | **-0.1** |
| **DPC** | **Dobruska-Polom** | **121.66** | **327** | *e*PKPdf | | **PKPdf** | **19 08 05.8** | **-0.1** |
| **DIVS** | **Divibare** | **122.52** | **319** | ⇓*i*P | | **PKPdf** | **19 08 07.8** | **0.0** |
| **BRG** | **Berggiesshubel** | **122.62** | **329** | *e*P | | **PKPdf** | **19 08 07.3** | **-0.3** |
| | 9.0nm,1.4s | | | | | | | |
| **BRG** | **Berggiesshubel** | **122.62** | **329** | *e*PKPdf | | **PKPdf** | **19 08 08.7** | **+1.0** |
| | baz=53,slow=1.9 | | | | | | | |
| **PRU** | **Pruhonice** | **122.81** | **328** | *e*PKPdf | | **PKPdf** | **19 08 07.7** | **-0.4** |
| **CLL** | **Collm** | **122.85** | **329** | *e*PKPdf | | **PKPdf** | **19 08 08.9** | **+0.8** |
| | baz=53,slow=1.9 | | | | | | | |
| **CLL** | **Collm** | **122.85** | **329** | *e*P | | **PKPdf** | **19 08 08.0** | **-0.1** |
| **FBE** | **Freiberg** | **122.90** | **329** | *e*PKPdf | | **PKPdf** | **19 08 09.4** | **+1.3** |
| | baz=53,slow=1.9 | | | | | | | |
| **CONA** | **Conrad Observa** | **123.20** | **325** | ⇓*i*PKiKP | | **PKiKP** | **19 08 09.1** | **-0.1** |
| | 3.7nm,1.0s | | | | | | | |
| **NRDL** | **Niedersach Rie** | **123.52** | **332** | *e*PKPdf | | **PKPdf** | **19 08 10.7** | **+1.5** |
| | baz=53,slow=1.9 | | | | | | | |
| **TANN** | **Tannenbergstha** | **123.66** | **329** | *e*PKPdf | | **PKPdf** | **19 08 10.8** | **+1.1** |
| | baz=53,slow=1.9 | | | | | | | |
| **WERD** | **Werda** | **123.72** | **329** | *e*PKPdf | | **PKPdf** | **19 08 10.8** | **+1.0** |
| | baz=53,slow=1.9 | | | | | | | |
| **GUNZ** | **Gunzen** | **123.75** | **329** | *e*PKPdf | | **PKPdf** | **19 08 11.0** | **+1.1** |
| | baz=53,slow=1.9 | | | | | | | |
| **PLN** | **Plauen** | **123.77** | **329** | *e*PKPdf | | **PKPdf** | **19 08 10.9** | **+1.0** |
| | baz=53,slow=1.9 | | | | | | | |
| **CLZ** | **Clausthal** | **123.81** | **331** | *e*PKPdf | | **PKPdf** | **19 08 11.3** | **+1.3** |
| | baz=53,slow=1.9 | | | | | | | |
| **KHC** | **Kasperske Hory** | **123.81** | **327** | *e*PKPdf | | **PKPdf** | **19 08 10.6** | **+0.5** |
| KHC | | | | *e*pPKP | | **pPKPdf** | **19 08 15.6** | **-2.6** |
| KHC | | | | *ex* | | x | 19 08 19.2 | |
| **GEC2** | **GERESS Array S** | **123.91** | **327** | *e*PKPdf | | **PKPdf** | **19 08 11.2** | **+0.8** |
| | baz=53,slow=1.9 | | | | | | | |
| **GERES** | **GERESS Array B** | **123.91** | **327** | PKP | | **PKPdf** | **19 08 10.0** | **-0.4** |
| | 1.6nm,0.5s,baz=93,slow=1.4,SNR=15 | | | | | | | |
| **MANZ** | **Manzenberg** | **124.09** | **329** | *e*PKPdf | | **PKPdf** | **19 08 11.7** | **+1.1** |
| | baz=53,slow=1.9 | | | | | | | |
| **WET** | **Wettzell** | **124.18** | **327** | *e*PKPdf | | **PKPdf** | **19 08 11.9** | **+1.1** |
| | baz=53,slow=1.9 | | | | | | | |
| **RJOB** | **Jochberg** | **125.04** | **326** | *e*PKPdf | | **PKPdf** | **19 08 12.8** | **+0.3** |
| | baz=53,slow=1.9 | | | | | | | |
| **WTTA** | **Wattenberg** | **125.95** | **326** | ⇓*i*PKiKP | | **PKPdf** | **19 08 14.6** | **+0.1** |
| | 12nm,1.0s | | | | | | | |
| **MOTA** | **Moosalm** | **126.20** | **326** | ⇑*i*PKiKP | | **PKPdf** | **19 08 14.7** | **-0.2** |
| | 7.7nm,1.0s | | | | | | | |
| **FETA** | **Feichten** | **126.60** | **326** | ⇑*i*PKPdf | | **PKPdf** | **19 08 13.1** | **-2.6** |
| | 7.3nm,1.4s | | | | | | | |
| **DAVA** | **Damuels** | **126.90** | **327** | ⇑*i*PKiKP | | **PKiKP** | **19 08 16.7** | **0.0** |
| | 7.6nm,1.0s | | | | | | | |
| **LPAZ** | **La Paz** | **135.97** | **121** | PKP | | **PKPdf** | **19 08 34.6** | **-0.1** |
| | 1.2nm,0.8s,baz=38,slow=6.5,SNR=4.5 | | | | | | | |
| **CPUP** | **Villa Florida** | **138.01** | **142** | PKP | | **PKPdf** | **19 08 37.6** | **+0.1** |
| | 2.1nm,0.9s,baz=314,slow=1.5,SNR=3.2 | | | | | | | |
| **SDV** | **Santo Domingo** | **139.51** | **84** | *e*PKPdf | | **PKPdf** | **19 08 40.3** | **-0.5** |
| **SAML** | **Samuel** | **143.48** | **114** | *e*PKPdf | | **PKPdf** | **19 08 47.0** | **-0.7** |
| **TORD** | **Torodi Ar. Bea** | **148.20** | **285** | PKPbc | | **PKPbc** | **19 08 58.9** | **-0.2** |
| | 8.2nm,0.6s,baz=44,slow=2.4,SNR=157 | | | | | | | |
| **BDFB** | **Brasilia** | **151.73** | **141** | PKPbc | | **PKPbc** | **19 09 06.6** | **-1.2** |
| | 4.9nm,0.4s,baz=335,slow=1.2,SNR=10.0 | | | | | | | |

**LJU 31 18:54:31.1, 45°28N×14°70E, h18km, ML0.6, Northwestern Balkan Peninsula**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **BOJS** | **Bojanci** | **0.45** | **60** | *i* Pg | Pg | 18 54 40.3 | 0.0 |
| BOJS | | | | *i* Sg | Sb | 18 54 47.3 | +0.3 |
| **VISS** | **Visnje** | **0.53** | **11** | *i* Pg | Pb | 18 54 42.0 | +0.2 |
| VISS | | | | *i* Sg | Sb | 18 54 49.7 | +0.5 |

**IDC 31 18:55:45.6±3.8, 2°82S×99°91E, h0km, mb3.5/5, mb1 3.7/5, mb1mx3.3/45, mbtmp3.5/5, MS4.3/1, Ms1 4.3/1, ms1mx3.0/34, Error ellipse: s-maj=162.3km s-min=21.1km az=56.0, Southern Sumatera**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **CMAR** | **Chiang Mai Arr** | **21.16** | **357** | P | P | 19 00 33.5 | +0.8 |
| | 2.5nm,0.9s,baz=185,slow=9.1,SNR=8.9 | | | | | | |
| **H08S2** | **Diego Garcia H** | **27.71** | **259** | T | T | 19 30 44.7 | |
| | baz=82,slow=75,SNR=3.3 | | | | | | |
| **H08S3** | **Diego Garcia H** | **27.72** | **259** | T | T | 19 30 43.9 | |
| | baz=82,slow=75,SNR=3.3 | | | | | | |
| **H08S1** | **Diego Garcia H** | **27.73** | **259** | T | T | 19 30 44.6 | |
| | baz=82,slow=75,SNR=3.3 | | | | | | |
| **WRA** | **Warramunga Arr** | **37.66** | **119** | P | P | 19 03 01.3 | -1.7 |
| | 0.9nm,0.9s,baz=292,slow=8.2,SNR=6.2 | | | | | | |
| **ASAR** | **Alice Springs** | **38.85** | **125** | P | P | 19 03 14.6 | +1.6 |
| | 0.2nm,0.5s,baz=300,slow=8.7,SNR=4.2 | | | | | | |
| **SONM** | **Songino Array** | **50.76** | **6** | LR | LR | 19 30 13.1 | |
| | comp=Z,294nm,18.4s,baz=10.0,slow=41 | | | | | | |
| **MKAR** | **Makanchi Array** | **51.79** | **345** | P | P | 19 04 55.0 | -0.3 |
| | 0.2nm,0.5s,baz=160,slow=8.9,SNR=4.5 | | | | | | |
| **ZALV** | **Zalesovo Beam** | **57.95** | **350** | P | P | 19 05 39.5 | -0.2 |
| | 0.6nm,0.6s,baz=186,slow=5.8,SNR=3.6 | | | | | | |
| **TXAR** | **Lajitas Array** | **145.40** | **38** | PKPbc | PKPbc | 19 15 25.0 | -1.4 |
| | 0.1nm,0.4s,baz=327,slow=2.1,SNR=3.7 | | | | | | |

*ISCJB **31** 18:58:15.9±0.6, 11°86N±0°08×141°8E±0°2, h10km, mb4.3/17, MS3.9/4, Error ellipse: s-maj=22.2km s-min=11.3km az=168.8*
*IDC **31** 18:58:16.2±0.6, 11°92N×141°83E, h0km, mb4.3/14, mb1 4.5/14, mb1mx4.2/39, mbtmp4.3/14, MS3.8/4, Ms1 3.8/4, ms1mx3.3/34, Error ellipse: s-maj=25.4km s-min=14.9km az=77.0*
*NEIC **31** 18:58:17.6±0.5, 11°88N×141°88E, h10km, mb4.3/3, Error ellipse: s-maj=20.6km s-min=11.0km az=78.0*

**ISC 31 18:58:17.7±0.7, 11°9N±0°1×141°9E±0°2, h10km, n22, σ0s95/21, mb4.4/17, MS3.8/4, Western Caroline Islands**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **21.79** | **166** | LR | LR | 19 10 23.1 | |
| | comp=Z,191nm,20.0s,baz=326,slow=33 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **24.78** | **353** | P | P | 19 03 41.0 | +1.3 |
| | 2.0nm,0.8s,baz=178,slow=10,SNR=6.3 | | | | | | |
| **WRAB** | **Tennant Creek** | **32.46** | **193** | *e*P | P | 19 04 48.9 | +0.4 |
| | 1.6nm,0.5s | | | | | | |
| **WRA** | **Warramunga Arr** | **32.47** | **193** | P | P | 19 04 49.1 | +0.6 |
| | 1.6nm,0.6s,baz=13,slow=9.7,SNR=12 | | | | | | |
| **USRK** | **Ussuriysk Ar.** | **33.31** | **347** | P | P | 19 04 55.5 | -0.1 |
| | 8.8nm,0.8s,baz=170,slow=10.0,SNR=17 | | | | | | |
| **ASAR** | **Alice Springs** | **36.17** | **192** | P | P | 19 05 21.1 | +0.6 |
| | 0.6nm,0.5s,baz=19,slow=12,SNR=18 | | | | | | |
| ASAR | | | | PcP | **PcP** | 19 07 47.1 | +0.9 |
| | 0.6nm,0.6s,baz=33,slow=2.6,SNR=9.1 | | | | | | |
| **DZM** | **Mont Dzumac** | **41.48** | **144** | P | P | 19 06 04.2 | -1.0 |
| | 4.7nm,0.6s,baz=2.4,slow=5.5,SNR=5.9 | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **41.85** | **284** | P | P | 19 06 07.2 | -1.1 |
| | 1.9nm,0.5s,baz=84,slow=6.5,SNR=10 | | | | | | |
| **ULN** | **Ulaanbaatar** | **46.18** | **328** | *e*P | P | 19 06 43.7 | +0.9 |
| | 1.7nm,0.8s | | | | | | |
| **SONM** | **Songino Array** | **46.50** | **327** | P | P | 19 06 45.9 | +0.5 |
| | 1.1nm,0.8s,baz=138,slow=5.9,SNR=7.0 | | | | | | |
| SONM | | | | PcP | **PcP** | 19 08 19.4 | -0.3 |
| | 0.6nm,0.6s,baz=154,slow=3.8,SNR=4.3 | | | | | | |
| **LSA** | **Lhasa** | **50.19** | **299** | *e*P | P | 19 07 15.3 | +0.8 |
| | 4.6nm,0.6s | | | | | | |
| **MKAR** | **Makanchi Array** | **60.70** | **317** | P | P | 19 08 29.8 | +0.3 |
| | 2.4nm,0.7s,baz=103,slow=8.8,SNR=4.4 | | | | | | |
| **KURK** | **Kurchatov** | **64.01** | **321** | P | P | 19 08 51.5 | 0.0 |
| **KURBB** | **Kurchatov Arra** | **64.05** | **321** | P | P | 19 08 51.5 | -0.2 |
| | 7.1nm,0.7s,baz=105,slow=6.8,SNR=27 | | | | | | |
| **RAR** | **Rarotonga** | **66.09** | **120** | LR | LR | 19 34 32.8 | |
| | comp=Z,37nm,18.7s,baz=266,slow=33 | | | | | | |
| **BVAR** | **Borovoye Array** | **69.45** | **322** | P | P | 19 09 25.9 | -0.3 |
| | 4.1nm,0.7s,baz=106,slow=7.6,SNR=7.1 | | | | | | |
| **ILAR** | **Eielson Array** | **71.37** | **25** | P | P | 19 09 36.4 | -1.2 |
| | 1.4nm,0.6s,baz=246,slow=6.1,SNR=30 | | | | | | |
| **ARCES** | **ARCESS Array B** | **87.78** | **342** | P | P | 19 11 05.9 | -0.9 |
| | 1.6nm,0.6s,baz=66,slow=6.8,SNR=12 | | | | | | |
| ARCES | | | | LR | LR | 19 53 09.8 | |
| | comp=Z,56nm,20.5s,baz=68,slow=38 | | | | | | |
| **NVAR** | **Mina Array Bea** | **90.28** | **51** | P | P | 19 11 20.8 | +1.4 |
| | 2.6nm,0.7s,baz=264,slow=6.4,SNR=25 | | | | | | |
| **FINES** | **FINESS Array B** | **91.44** | **334** | P | P | 19 11 22.0 | -2.1 |
| | 3.3nm,0.5s,baz=80,slow=5.1,SNR=17 | | | | | | |
| **AKASG** | **Malin Array Be** | **94.68** | **324** | LR | LR | 19 59 02.2 | |
| | comp=Z,107nm,18.3s,baz=260,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **150.61** | **102** | PKPbc | **PKPbc** | **19 18 12.6** | **+0.8** |
| | 3.5nm,0.8s,baz=290,slow=2.9,SNR=12 | | | | | | |

*ISCJB **31** 19:03:54.9±0.2, 38°13N±0°02×75°43E±0°04, h135km, mb4.1/23, Error ellipse: s-maj=4.8km s-min=2.8km az=165.9*
*MOS **31** 19:03:56.8±1.1, 38°28N×75°38E, h139km, mb4.2/12, Error ellipse: s-maj=10.3km s-min=5.6km az=105.1*
*NEIC **31** 19:03:56.1±1.5, 38°17N×75°39E, h122km±11km, mb4.5/4, Error ellipse: s-maj=15.6km s-min=9.0km az=179.0*
*IDC **31** 19:03:56.0±3.2, 38°11N×75°39E, h123km±27km, mb3.8/15, mb1 4.0/20, mb1mx3.8/44, mbtmp4.3/20, Error ellipse: s-maj=21.6km s-min=13.2km az=5.0*
*NNC **31** 19:03:57.0±1.3, 38°24N×75°04E, h148km±12km, mb3.6, mpv4.6, Error ellipse: s-maj=14.1km s-min=8.2km az=153.0*
*BJI **31** 19:03:57.2, 38°28N×75°47E, h124km, mb4.2/8, mB4.5/7*

**ISC 31 19:03:56.5±0.4, 38°11N±0°04×75°28E±0°04, h135km, n132, σ1s76/138, mb4.1/23, 16C-18D, Southern Xinjiang**

| Code | Station Name | Δ° | AZ° | Phase ID | | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **KSH** | **Kashi** | **1.51** | **21** | P | Pn | 19 04 19.3 | -5.8 |
| KSH | | | | S | Sn | 19 04 35.8 | -11 |
| KSH | | | | SMN | | | |
| | 3μm,0.2s | | | | | | |
| KSH | | | | SME | | | |
| | 5μm,0.3s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.35** | **325** | ⇑P | **Pn** | **19 04 34.2** | **-1.0** |
| | 55nm,0.2s | | | | | | |
| SFK | | | | ⇓S | **Sn** | **19 05 02.6** | **-2.5** |
| | 810nm,0.4s | | | | | | |
| **SFK** | **Sufi-Kurgan** | **2.35** | **325** | PN | **Pn** | **19 04 34.2** | **-1.0** |
| SFK | | | | S | **Sn** | **19 05 02.5** | **-2.5** |
| SFK | | | | pmax | pmax | | |
| | comp=Z,55nm,0.2s | | | | | | |
| SFK | | | | smax | smax | | |
| | comp=N,475nm,0.6s | | | | | | |
| **KZA** | **Kyzart** | **3.96** | **360** | P | **Pn** | **19 04 54.9** | **-1.3** |
| | SNR=396 | | | | | | |
| **UCH** | **Uchtor** | **4.16** | **352** | P | **Pn** | **19 04 57.9** | **-0.9** |
| | SNR=386 | | | | | | |
| **AML** | **Almayashu** | **4.20** | **344** | P | **Pn** | **19 04 58.0** | **-1.2** |
| | SNR=108 | | | | | | |
| **ULHL** | **Ulahol** | **4.20** | **10** | P | **Pn** | **19 04 58.0** | **-1.1** |
| | SNR=39 | | | | | | |
| **KBK** | **Karagaybulak** | **4.55** | **357** | P | **Pn** | **19 05 03.1** | **-0.7** |
| | SNR=37 | | | | | | |
| **AAK** | **Ala-Archa** | **4.56** | **353** | ⇑P | **Pn** | **19 05 03.2** | **-0.6** |
| | comp=N,75nm,0.5s | | | | | | |
| **AAK** | **Ala-Archa** | **4.56** | **353** | P | **Pn** | **19 05 03.3** | **-0.6** |
| | comp=N,25nm,0.3s,baz=144,slow=7.4,SNR=233 | | | | | | |
| **AAK** | **Ala-Archa** | **4.56** | **353** | PN | **Pn** | **19 05 03.3** | **-0.6** |
| AAK | | | | pmax | pmax | | |
| | comp=Z,25nm,0.3s | | | | | | |
| **AAK** | **Ala-Archa** | **4.56** | **353** | P | **Pn** | **19 05 03.3** | **-0.6** |
| | SNR=59 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.69** | **346** | *e*PN | **Pn** | **19 05 04.8** | **-0.7** |
| **EKS2** | **Erkin-Say** | **4.69** | **346** | P | **Pn** | **19 05 04.9** | **-0.7** |
| | SNR=106 | | | | | | |
| **EKS2** | **Erkin-Say** | **4.69** | **346** | *e*Pn | **Pn** | **19 05 04.8** | **-0.7** |
| **CHCP** | **Chirah Chowk** | **4.73** | **201** | P | Pn | 19 05 10.1 | +4.0 |
| **FRU** | **Bishkek** | **4.75** | **354** | *i* PN | **Pn** | **19 05 06.0** | **-0.2** |
| FRU | | | | pmax | pmax | | |
| | comp=Z,130nm,2.0s | | | | | | |
| FRU | | | | pmax | pmax | | |
| | comp=E,190nm,1.8s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.81** | **3** | ⇑P | **Pn** | **19 05 06.4** | **-0.9** |
| | comp=E,80nm,0.4s | | | | | | |
| **TKM2** | **Tokmak 2** | **4.81** | **3** | PN | **Pn** | **19 05 06.4** | **-0.9** |
| **TKM2** | **Tokmak 2** | **4.81** | **3** | P | **Pn** | **19 05 06.6** | **-0.7** |
| | SNR=132 | | | | | | |
| **TKM2** | **Tokmak 2** | **4.81** | **3** | *e*Pn | **Pn** | **19 05 06.4** | **-0.9** |
| **MNAS** | **Manas** | **4.86** | **335** | ⇓P | **Pn** | **19 05 06.7** | **-1.2** |
| | comp=E,83nm,0.5s | | | | | | |
| MNAS | | | | ⇑S | **Sn** | **19 06 00.4** | **-3.0** |
| | comp=E,66nm,0.4s | | | | | | |
| **MNAS** | **Manas** | **4.86** | **335** | PN | **Pn** | **19 05 06.6** | **-1.2** |
| MNAS | | | | pmax | pmax | | |
| | comp=Z,83nm,0.5s | | | | | | |
| **CHMS** | **Chumysh** | **4.90** | **355** | P | **Pn** | **19 05 07.5** | **-0.8** |
| | SNR=44 | | | | | | |
| **CEP** | **Cherat** | **5.08** | **214** | P | **Pn** | **19 05 13.4** | **+2.6** |
| CEP | | | | S | **Sn** | **19 06 09.0** | **+0.4** |
| **DZET** | **Dzherino** | **5.11** | **280** | ⇓P | **Pn** | **19 05 10.1** | **-1.1** |
| | comp=Z,26nm,0.4s | | | | | | |
| DZET | | | | ⇓S | **Sn** | **19 06 04.5** | **-4.9** |
| | comp=Z,279nm,0.7s | | | | | | |
| **DZET** | **Dzherino** | **5.11** | **280** | PN | **Pn** | **19 05 10.0** | **-1.1** |
| DZET | | | | pmax | pmax | | |
| | comp=Z,26nm,0.4s | | | | | | |
| **USP** | **Ospenovka** | **5.19** | **354** | P | **Pn** | **19 05 10.9** | **-1.2** |
| | SNR=49 | | | | | | |
| **KNDC** | **Almaty** | **5.26** | **14** | ⇓P | **Pn** | **19 05 11.9** | **-1.2** |
| | comp=Z,40nm,0.5s | | | | | | |
| KNDC | | | | ⇓S | **Sn** | **19 06 13.7** | **+0.8** |
| | comp=Z,85nm,0.5s | | | | | | |
| **THW** | **Thamme Wali** | **6.04** | **210** | P | **Pn** | **19 05 25.3** | **+1.7** |
| **PDGK** | **Podgornoye** | **6.11** | **30** | ⇑P | **Pn** | **19 05 22.7** | **-1.7** |
| | comp=Z,40nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **6.17** | **325** | ⇑P | **Pn** | **19 05 23.7** | **-1.5** |
| | comp=Z,14nm,0.4s | | | | | | |
| KK31 | | | | ⇑S | **Sn** | **19 06 29.5** | **-5.1** |
| | comp=Z,13nm,0.3s,baz=199,slow=142,SNR=6.0 | | | | | | |
| **KKAR** | **Karatay Array** | **6.17** | **325** | *e*PN | **Pn** | **19 05 23.8** | **-1.4** |
| KKAR | | | | pmax | pmax | | |
| | comp=Z,27nm,0.3s | | | | | | |
| **KKAR** | **Karatay Array** | **6.17** | **325** | *e*Pn | **Pn** | **19 05 23.8** | **-1.4** |
| | comp=Z,27nm,0.3s | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **SARP** | **Sargodha** | **6.53** | **200** | P | | **Pn** | **19 05 31.4** | **+1.2** |
| **BHK** | **Bhakra** | **6.74** | **172** | *e*P | | **Pn** | **19 05 32.0** | **-1.0** |
| BHK | | | | *e*S | | **Sn** | **19 06 46.8** | **-1.8** |
| **SMLA** | **Simla** | **7.14** | **167** | *i* P | | **Pn** | **19 05 38.9** | **+0.6** |
| SMLA | | | | *i* S | | **Sn** | **19 06 54.7** | **-3.3** |
| SMLA | | | | AML | | AML | 19 07 00.7 | |
| | comp=E,430nm,0.5s | | | | | | | |
| SMLA | | | | AML | | AML | 19 07 00.8 | |
| | comp=N,388nm,0.5s | | | | | | | |
| **BHGR** | **Bahadurgarh** | **9.50** | **171** | *e*S | | Sn | 19 07 48.6 | -6.5 |
| **NDI** | **New Delhi** | **9.54** | **170** | *e*P | | **Pn** | **19 06 09.5** | **-1.1** |
| NDI | | | | *e*S | | Sn | 19 07 49.0 | -7.1 |
| **KUDL** | **Kundal** | **9.99** | **174** | *e*P | | **Pn** | **19 06 15.9** | **-0.6** |
| KUDL | | | | *e*S | | Sn | 19 07 58.5 | -8.4 |
| KUDL | | | | AML | | AML | 19 08 11.7 | |
| | comp=N,30nm,0.2s | | | | | | | |
| KUDL | | | | AML | | AML | 19 08 11.8 | |
| | comp=E,41nm,0.5s | | | | | | | |
| **KHET** | **Khetri** | **10.02** | **177** | *e*P | | **Pn** | **19 06 15.7** | **-1.3** |
| KHET | | | | *e*S | | Sn | 19 07 56.6 | -11 |
| KHET | | | | AML | | AML | 19 08 06.8 | |
| | comp=E,32nm,0.4s | | | | | | | |
| KHET | | | | AML | | AML | 19 08 07.0 | |
| | comp=N,33nm,0.3s | | | | | | | |
| **MK31** | **Makanchi Array** | **10.10** | **29** | ⇑P | | **Pn** | **19 06 16.2** | **-1.8** |
| | comp=N,8.2nm,0.5s,baz=187,slow=13,SNR=4.2 | | | | | | | |
| MK31 | | | | S | | **Sn** | **19 08 12.1** | **+2.6** |
| | comp=N,5.8nm,0.9s,baz=214,slow=26,SNR=5.0 | | | | | | | |
| **MK31** | **Makanchi Array** | **10.10** | **29** | P | | **Pn** | **19 06 16.1** | **-1.8** |
| MK31 | | | | pmax | | pmax | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **MKAR** | **Makanchi Array** | **10.10** | **29** | P | | **Pn** | **19 06 16.5** | **-1.5** |
| | comp=Z,2.1nm,0.3s,baz=201,slow=15,SNR=81 | | | | | | | |
| **MKAR** | **Makanchi Array** | **10.10** | **29** | *e*P | | **Pn** | **19 06 16.5** | **-1.5** |
| MKAR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| **DANN** | **Dangsing** | **12.04** | **141** | *e*P | | **Pn** | **19 06 41.9** | **-2.1** |
| **KOLN** | **Koldanda** | **12.45** | **143** | *e*P | | **Pn** | **19 06 47.1** | **-2.2** |
| | comp=Z,51nm,0.4s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.72** | **9** | ⇓P | | **Pn** | **19 06 50.8** | **-1.6** |
| | comp=Z,5.0nm,0.7s | | | | | | | |
| **KURBB** | **Kurchatov Arra** | **12.72** | **9** | P | | Pn | 19 06 48.7 | -3.7 |
| | comp=Z,0.1nm,0.3s,baz=196,slow=12,SNR=22 | | | | | | | |
| **GKN** | **Gorkha** | **12.77** | **139** | *e*P | | **Pn** | **19 06 50.7** | **-2.6** |
| | comp=Z,44nm,0.2s | | | | | | | |
| **KURK** | **Kurchatov** | **12.83** | **10** | P | | Pn | 19 06 48.7 | -5.0 |
| **KURK** | **Kurchatov** | **12.83** | **10** | P | | Pn | 19 06 48.7 | -5.0 |
| **KKN** | **Kakani** | **13.27** | **138** | *e*P | | **Pn** | **19 06 57.0** | **-2.9** |
| | comp=Z,42nm,0.5s | | | | | | | |
| **DMN** | **Daman** | **13.33** | **139** | *e*P | | **Pn** | **19 06 58.2** | **-2.4** |
| | comp=Z,22nm,0.3s | | | | | | | |
| **GUN** | **Gumba** | **13.50** | **136** | *e*P | | **Pn** | **19 07 00.8** | **-2.2** |
| | comp=Z,25nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **13.50** | **138** | *e*P | | **Pn** | **19 07 00.4** | **-2.5** |
| | comp=Z,14nm,0.2s | | | | | | | |
| **PKI** | **Pulchoki** | **13.52** | **138** | *e*P | | **Pn** | **19 07 00.4** | **-2.7** |
| | comp=Z,16nm,0.2s | | | | | | | |
| **GEYT** | **Alibeck** | **13.54** | **275** | P | | **Pn** | **19 07 00.2** | **-2.8** |
| | comp=Z,0.9nm,0.3s,baz=105,slow=9.7,SNR=7.7 | | | | | | | |
| GEYT | | | | S | | Sn | 19 09 25.3 | -7.2 |
| | comp=Z,0.8nm,0.3s,baz=110,slow=15,SNR=6.0 | | | | | | | |
| **RAMN** | **Ramite** | **14.65** | **136** | *e*P | | **Pn** | **19 07 14.7** | **-2.7** |
| | comp=Z,36nm,0.4s | | | | | | | |
| **VOSK** | **Vostochnaya** | **14.92** | **350** | ⇓P | | **Pn** | **19 07 17.3** | **-3.0** |
| | comp=Z,6.3nm,0.8s | | | | | | | |
| **TAPN** | **Taplejung** | **14.97** | **132** | *e*P | | **Pn** | **19 07 18.8** | **-2.7** |
| | comp=Z,14nm,0.3s | | | | | | | |
| **ODAN** | **Odare** | **15.16** | **134** | *e*P | | **Pn** | **19 07 21.0** | **-2.8** |
| | comp=Z,32nm,0.6s | | | | | | | |
| **BVA0** | **Borovoye Array** | **15.30** | **349** | ⇑P | | **Pn** | **19 07 24.7** | **-0.4** |
| | comp=Z,8.4nm,1.0s,baz=157,slow=13,SNR=30 | | | | | | | |
| **BVA0** | **Borovoye Array** | **15.30** | **349** | *i* P | | **Pn** | **19 07 24.4** | **-0.7** |
| BVA0 | | | | pmax | | pmax | | |
| | comp=Z,8.0nm,1.0s | | | | | | | |
| **BVAR** | **Borovoye Array** | **15.30** | **349** | P | | **Pn** | **19 07 24.7** | **-0.4** |
| | comp=Z,1.5nm,0.3s,baz=159,slow=10,SNR=14 | | | | | | | |
| **BVAR** | **Borovoye Array** | **15.30** | **349** | P | | **Pn** | **19 07 24.7** | **-0.4** |
| BVAR | | | | pmax | | pmax | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| **BRVK** | **Borovoye** | **15.35** | **349** | *e*P | | **P

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AKASG | **Malin Array Be** | **34.67** | **306** | P | **P** | **19** | **10** | **34.0 +1.2** |
| | comp=Z,0.8nm,0.4s,baz=79,slow=7.4,SNR=12 | | | | | | | |
| AKASG | **Malin Array Be** | **34.67** | **306** | P | **P** | **19** | **10** | **34.0 +1.2** |
| AKASG | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **KIEV** | **Kiev** | **34.68** | **306** | *e*P | **P** | **19** | **10** | **33.2 +0.3** |
| KIEV | | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | | |
| **CFR** | **Carcaliu** | **35.51** | **297** | ⇑P | **P** | **19** | **10** | **42.2 +2.1** |
| **CFR** | **Carcaliu** | **35.51** | **297** | ⇑*i*P | **P** | **19** | **10** | **42.2 +2.1** |
| **PLOR** | **Plostina** | **36.49** | **298** | ⇓P | P | 19 | 10 | 51.8 +3.3 |
| **PLOR** | **Plostina** | **36.49** | **298** | ⇓*i*P | P | 19 | 10 | 51.8 +3.3 |
| **MLR** | **Muntele Rosu** | **37.02** | **298** | ⇓P | P | 19 | 10 | 57.0 +3.9 |
| **MLR** | **Muntele Rosu** | **37.02** | **298** | ⇓*i*P | P | 19 | 10 | 57.0 +3.9 |
| **VOIR** | | **37.65** | **298** | ⇓P | **P** | **19** | **11** | **00.9 +2.5** |
| **VOIR** | | **37.65** | **298** | ⇓*i*P | **P** | **19** | **11** | **00.9 +2.5** |
| **ARR** | **Arges** | **37.95** | **298** | ⇑*i*P | **P** | **19** | **11** | **03.7 +2.8** |
| **FINES** | **FINESS Array B** | **38.12** | **324** | P | **P** | **19** | **11** | **03.2 +1.2** |
| | comp=Z,2.0nm,0.3s,baz=119,slow=10,SNR=29 | | | | | | | |
| **FINES** | **FINESS Array B** | **38.12** | **324** | P | **P** | **19** | **11** | **03.2 +1.2** |
| FINES | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| **LOT** | **Lotru** | **38.54** | **298** | ⇑*i*P | P | 19 | 11 | 09.1 +3.2 |
| **DRGR** | | **39.10** | **300** | ⇓P | **P** | **19** | **11** | **13.1 +2.6** |
| **DRGR** | | **39.10** | **300** | ⇓*i*P | **P** | **19** | **11** | **13.1 +2.6** |
| **ARCES** | **ARCESS Array B** | **41.02** | **336** | P | **P** | **19** | **11** | **27.1 +1.3** |
| | comp=Z,6.5nm,0.5s,baz=107,slow=9.1,SNR=53 | | | | | | | |
| **ARCES** | **ARCESS Array B** | **41.02** | **336** | P | **P** | **19** | **11** | **27.2 +1.3** |
| ARCES | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.5s | | | | | | | |
| **GERES** | **GERESS Array B** | **44.81** | **304** | P | **P** | **19** | **11** | **58.4 +1.6** |
| | comp=Z,0.4nm,0.4s,baz=53,slow=9.2,SNR=5.2 | | | | | | | |
| **GERES** | **GERESS Array B** | **44.81** | **304** | *e*P | **P** | **19** | **11** | **59.7 +2.9** |
| **CLL** | **Collm** | **44.86** | **308** | *e*P | **P** | **19** | **11** | **59.0 +2.0** |
| **NB2** | **NORSAR Subarra** | **45.19** | **322** | P | **P** | **19** | **12** | **00.1 +0.6** |
| | comp=Z,2.3nm,0.6s,baz=90,slow=7.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **45.19** | **322** | P | **P** | **19** | **12** | **00.2 +0.8** |
| | comp=Z,2.5nm,0.5s,baz=91,slow=7.8,SNR=8.9 | | | | | | | |
| **NOA** | **NORSAR Array B** | **45.19** | **322** | P | **P** | **19** | **12** | **00.3 +0.8** |
| NOA | | | | pmax | pmax | | | |
| | comp=Z,3.0nm,0.5s | | | | | | | |
| **ESDC** | **Sonseca Array** | **59.70** | **299** | P | **P** | **19** | **13** | **48.1 +1.3** |
| | comp=Z,0.9nm,0.5s,baz=55,slow=6.8,SNR=11 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **69.14** | **271** | P | **P** | **19** | **14** | **49.2 +0.7** |
| | comp=Z,3.7nm,0.6s,baz=48,slow=5.5,SNR=80 | | | | | | | |
| **INK** | **Inuvik** | **71.73** | **11** | P | **P** | **19** | **15** | **04.0 +0.7** |
| | comp=Z,2.1nm,0.6s,baz=334,slow=4.2,SNR=8.6 | | | | | | | |
| **INK** | **Inuvik** | **71.73** | **11** | P | **P** | **19** | **15** | **04.0 +0.7** |
| INK | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.6s | | | | | | | |
| **ILAR** | **Eielson Array** | **72.26** | **18** | P | **P** | **19** | **15** | **06.2 -0.3** |
| | comp=Z,1.0nm,0.8s,baz=310,slow=5.1,SNR=8.8 | | | | | | | |
| **ILAR** | **Eielson Array** | **72.26** | **18** | P | **P** | **19** | **15** | **06.3 -0.3** |
| ILAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.9s | | | | | | | |
| **DBIC** | **Dimbokro** | **78.16** | **269** | P | **P** | **19** | **15** | **42.5 +1.4** |
| | comp=Z,5.2nm,0.6s,baz=24,slow=6.3,SNR=17 | | | | | | | |
| **DBIC** | **Dimbokro** | **78.16** | **269** | P | **P** | **19** | **15** | **42.5 +1.4** |
| DBIC | | | | pmax | pmax | | | |
| | comp=Z,5.0nm,0.6s | | | | | | | |
| **KIC** | **Kosan Boka** | **78.26** | **269** | *e*PKIKP | **P** | **19** | **15** | **43.1 +1.4** |
| | comp=Z,12nm,0.5s | | | | | | | |
| **TIC** | **Toumodi** | **78.31** | **269** | *e*PKIKP | **P** | **19** | **15** | **43.1 +1.1** |
| **LIC** | **Lamto** | **78.56** | **269** | *e*PKIKP | **P** | **19** | **15** | **43.3 -0.1** |
| | comp=Z,41nm,1.5s | | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.42** | **5** | P | **P** | **19** | **15** | **47.9 +0.7** |
| | comp=Z,1.4nm,0.4s,baz=346,slow=5.7,SNR=5.1 | | | | | | | |
| **YKA** | **Yellowknife Ar** | **79.42** | **5** | P | **P** | **19** | **15** | **47.9 +0.7** |
| YKA | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | | |
| **WRA** | **Warramunga Arr** | **80.03** | **125** | P | **P** | **19** | **15** | **51.5 +0.4** |
| | comp=Z,0.4nm,0.6s,baz=324,slow=4.8,SNR=3.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **82.46** | **128** | P | **P** | **19** | **16** | **04.2 +0.4** |
| | comp=Z,0.5nm,0.6s,baz=318,slow=5.0,SNR=7.9 | | | | | | | |
| **ASAR** | **Alice Springs** | **82.46** | **128** | P | **P** | **19** | **16** | **04.3 +0.4** |
| ASAR | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.6s | | | | | | | |

**IDC 31 19:13:50.0±4.5, 5.96S×149.89E, h0km, mb3.2/2, mb1 3.6/3, mb1mx3.4/22, mbtmp3.5/3, ML1.7/1, Error ellipse: s-maj=195.5km s-min=41.6km az=117.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **PMG** | **Port Moresby** | **4.37** | **218** | Pn | Pn | 19 14 59.9 | +2.2 |
| | 2.8nm,0.3s,baz=309,slow=3.0,SNR=9.9 | | | | | | |
| PMG | | | | Sn | Sn | 19 15 47.8 | -1.5 |
| | 2.6nm,0.3s,baz=227,slow=19,SNR=3.0 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.54** | **226** | P | P | 19 18 29.9 | -0.5 |
| | 1.1nm,0.6s,baz=52,slow=11,SNR=7.4 | | | | | | |
| **ASAR** | **Alice Springs** | **23.38** | **220** | P | P | 19 18 59.6 | -1.0 |
| | 0.7nm,1.0s,baz=50,slow=10,SNR=4.1 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.86** | **285** | PKPbc | PKPbc | 19 33 37.7 | -0.5 |
| | 0.5nm,0.5s,baz=60,slow=2.8,SNR=11 | | | | | | |

*MOS **31** 19:23:39.3±1.0, 6.13S×130.52E, h114km, mb5.0/12, Error ellipse: s-maj=15.8km s-min=7.0km az=114.6*
*BJI **31** 19:23:39.2, 6.71S×130.70E, h150km, mb4.8/42, mB5.0/24*
*ISCJB **31** 19:23:40.6±0.2, 6.13S±0.02×130.52E±0.03, h124km, mb4.7/44, Error ellipse: s-maj=4.4km s-min=3.2km az=164.1*
*AUST **31** 19:23:42.6±0.2, 6.23S×130.47E, h119km, Error ellipse: s-maj=0.7km s-min=0.6km az=245.0*
*NEIC **31** 19:23:44.8±0.6, 6.17S×130.47E, h149km±6km, mb4.8/15, Error ellipse: s-maj=7.5km s-min=5.8km az=221.0*
*IDC **31** 19:23:44.1±1.8, 6.16S×130.40E, h137km±17km, mb4.1/17, mb1 4.2/21, mb1mx4.1/32, mbtmp4.6/21, MS3.7/1, Ms1 3.7/1, ms1mx2.7/26, Error ellipse: s-maj=14.0km s-min=11.0km az=65.0*

**ISC 31 19:23:42.1±0.3, 6.17S±0.04×130.59E±0.04, h124km, n183, σ1s74/198, mb4.8/54, 5C, Banda Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | Time | Res |
|---|---|---|---|---|---|---|---|
| | | | | Op | ISC | h m s | ISC |
| **SAUI** | **Saumlaki** | **1.94** | **159** | *e*Pn | Pn | 19 24 19.6 | +4.5 |
| **AAI** | **Ambon** | **3.43** | **316** | P | Pn | 19 24 38.3 | +4.1 |
| | baz=3.4,SNR=28 | | | | | | |
| **FAKI** | **Fak Fak** | **3.62** | **27** | P | **Pn** | **19** | **24** | **39.9 +3.1** |
| | baz=3.8,SNR=1000 | | | | | | | |
| **FAKI** | **Fak Fak** | **3.62** | **27** | *e*Pn | **Pn** | **19** | **24** | **39.9 +3.1** |
| FAKI | | | | *e*Sn | **Sn** | **19** | **25** | **18.6 -0.6** |
| **SIJI** | **Sorong** | **5.30** | **7** | P | **Pn** | **19** | **25** | **01.3 +2.0** |
| | 151nm,0.3s,baz=229,slow=23,SNR=1174 | | | | | | | |
| SIJI | | | | S | **Sn** | **19** | **25** | **57.8 -1.6** |
| | 54nm,0.3s,baz=184,slow=4.6,SNR=3.6 | | | | | | | |
| **SWI** | **Sorong** | **5.31** | **7** | P | **Pn** | **19** | **25** | **01.4 +2.0** |
| | baz=5.4,SNR=245 | | | | | | | |
| **MTN** | **Manton Dam** | **6.66** | **175** | P | **Pn** | **19** | **25** | **18.7 +1.2** |
| | baz=6.6,SNR=456 | | | | | | | |
| **MTN** | **Manton Dam** | **6.66** | **175** | *e*Pn | **Pn** | **19** | **25** | **18.9 +1.4** |
| **KDU** | **Kakadu** | **6.74** | **164** | P | **Pn** | **19** | **25** | **20.0 +1.4** |
| | baz=6.7,SNR=187 | | | | | | | |
| **SOEI** | **Soe** | **7.20** | **240** | P | **Pn** | **19** | **25** | **26.6 +1.6** |
| | baz=7.1,SNR=104 | | | | | | | |
| **SOEI** | **Soe** | **7.20** | **240** | *e*Pn | **Pn** | **19** | **25** | **26.3 +1.3** |
| SOEI | | | | *e*Sn | **Sn** | **19** | **26** | **46.0 +0.6** |
| **BATI** | **Baumata** | **7.94** | **239** | P | **Pn** | **19** | **25** | **35.8 +0.9** |
| | 170nm,0.3s,baz=68,slow=6.7,SNR=155 | | | | | | | |
| BATI | | | | S | **Sn** | **19** | **27** | **01.2 -2.0** |
| | 66nm,0.3s,baz=141,slow=23,SNR=18 | | | | | | | |
| **MMRI** | **Maumere** | **8.64** | **253** | *e*Pn | **Pn** | **19** | **25** | **47.0 +2.8** |
| **KNRA** | **Kununurra** | **9.62** | **191** | P | **Pn** | **19** | **25** | **56.3 -1.1** |
| | baz=9.6,SNR=993 | | | | | | | |
| **MMPI** | **Merauke** | **9.98** | **104** | P | Pn | 19 | 26 | 06.2 +3.8 |
| | baz=10,SNR=4.8 | | | | | | | |
| **KAPI** | **Kappang** | **10.85** | **276** | P | **Pn** | **19** | **26** | **12.9 -1.1** |
| | 0.6nm,0.3s,baz=57,slow=17,SNR=3.2 | | | | | | | |
| **KAPI** | **Kappang** | **10.85** | **276** | *e*Pn | **Pn** | **19** | **26** | **13.1 -0.9** |
| **PALU** | **Palau** | **13.97** | **16** | P | **P** | **19** | **26** | **57.9 -0.9** |
| | baz=14,SNR=6.1 | | | | | | | |
| **WRAB** | **Tennant Creek** | **14.17** | **165** | *e*P | **Pn** | **19** | **26** | **54.5 -2.8** |
| WRAB | | | | *e* | | 19 | 29 | 33.6 |
| **WRAB** | **Tennant Creek** | **14.17** | **165** | *e*Pn | **Pn** | **19** | **26** | **54.5 -2.8** |
| WRAB | | | | *e*Sn | **Sn** | **19** | **29** | **33.5 -0.3** |
| **WRA** | **Warramunga Arr** | **14.17** | **165** | P | **Pn** | **19** | **26** | **55.5 -1.8** |
| | 4.7nm,0.3s,baz=338,slow=13,SNR=49 | | | | | | | |
| WRA | | | | S | Sn | 19 | 29 | 22.0 -12 |
| | 5.1nm,0.3s,baz=350,slow=21,SNR=10 | | | | | | | |
| **COEN** | **Coen** | **14.61** | **123** | P | **P** | **19** | **27** | **07.2 +1.4** |
| | baz=15,SNR=25 | | | | | | | |
| **COEN** | **Coen** | **14.61** | **123** | *e*Pn | **P** | **19** | **27** | **05.6 -0.3** |
| COEN | | | | *e*Sn | **Sn** | **19** | **29** | **40.3 -4.2** |
| **MYLDM** | **Lahad Datu** | **16.51** | **313** | *e*P | **P** | **19** | **27** | **29.4 +2.4** |
| | 35nm,0.9s | | | | | | | |
| **PMG** | **Port Moresby** | **16.73** | **102** | P | **P** | **19** | **27** | **33.5 +4.1** |
| | 1.6nm,0.3s,baz=304,slow=4.0,SNR=8.5 | | | | | | | |
| PMG | | | | S | **Sn** | **19** | **30** | **29.5 -6.1** |
| | 1.7nm,0.3s,baz=245,slow=14,SNR=4.2 | | | | | | | |
| **PMG** | **Port Moresby** | **16.73** | **102** | P | **P** | **19** | **27** | **33.5 +4.1** |
| PMG | | | | S | **Sn** | **19** | **30** | **29.5 -6.1** |
| PMG | | | | pmax | pmax | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | |
| PMG | | | | smax | smax | | | |
| | comp=N,2.0nm,0.3s | | | | | | | |
| **PMG** | **Port Moresby** | **16.73** | **102** | P | **P** | **19** | **27** | **34.0 +4.6** |
| | baz=17,SNR=7.2 | | | | | | | |
| **PMG** | **Port Moresby** | **16.73** | **102** | *e*P | **P** | **19** | **27** | **33.2 +3.8** |
| | comp=N,23nm,0.6s | | | | | | | |
| PMG | | | | S | **Sn** | **19** | **30** | **29.5 -6.1** |
| **QIS** | **Mount Isa** | **16.77** | **149** | P | **P** | **19** | **27** | **31.6 +1.8** |
| | baz=17,SNR=27 | | | | | | | |
| **ASAR** | **Alice Springs** | **17.69** | **170** | P | **Pn** | **19** | **27** | **41.3 +0.5** |
| | comp=N,10nm,0.3s,baz=345,slow=10,SNR=471 | | | | | | | |
| ASAR | | | | S | S | 19 | 30 | 44.1 -13 |
| | comp=N,0.4nm,0.3s,baz=333,slow=16,SNR=5.6 | | | | | | | |
| **AS01** | **Alice Springs** | **17.70** | **170** | *e*P | **Pn** | **19** | **27** | **40.7 -0.2** |
| **MTSU** | **Mount Surprise** | **17.92** | **133** | P | **Pn** | **19** | **27** | **45.4 +1.9** |
| | baz=18,SNR=12 | | | | | | | |
| **MBWA** | **Marble Bar** | **18.24** | **214** | *e*P | **P** | **19** | **27** | **46.0 0.0** |
| | comp=N,23nm,0.6s | | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.79** | **310** | P | **Pn** | **19** | **27** | **53.2 -0.8** |
| | baz=19,SNR=19 | | | | | | | |
| **KKM** | **Kota Kinabalu** | **18.79** | **310** | *e*P | **P** | **19** | **27** | **52.0 -0.1** |
| | comp=N,79nm,0.8s | | | | | | | |
| **WRKA** | **Warakurna** | **18.89** | **186** | P | **Pn** | **19** | **27** | **54.3 -0.8** |
| | baz=19,SNR=422 | | | | | | | |
| **UGM** | **Wanagama** | **19.99** | **264** | P | **Pn** | **19** | **28** | **10.0 +2.0** |
| | baz=20,SNR=3.2 | | | | | | | |
| **SBUM** | **Sibu** | **20.24** | **294** | *e*P | **P** | **19** | **28** | **08.3 +0.5** |
| | comp=N,45nm,0.7s | | | | | | | |
| **CTA** | **Charters Tower** | **20.57** | **134** | P | Pn | 19 | 28 | 14.0 -0.7 |
| | comp=N,2.9nm,0.6s,baz=291,slow=9.4,SNR=7.1 | | | | | | | |
| **CTA** | **Charters Tower** | **20.57** | **134** | P | Pn | 19 | 28 | 14.0 -0.7 |
| **KSM** | **Kuching** | **21.62** | **290** | *e*P | **P** | **19** | **28** | **22.9 +0.3** |
| | comp=N,18nm,0.7s | | | | | | | |
| **CISI** | **Cisompet, Garu** | **22.65** | **265** | P | **P** | **19** | **28** | **32.4 -0.8** |
| | baz=22,SNR=12 | | | | | | | |
| **CISI** | **Cisompet, Garu** | **22.65** | **265** | *e*P | **P** | **19** | **28** | **32.5 -0.8** |
| | comp=N,94nm,0.6s | | | | | | | |
| **LEM** | **Lembang** | **22.83** | **267** | P | **P** | **19** | **28** | **33.7 -1.3** |
| | comp=N,20nm,0.6s,baz=64,slow=12,SNR=7.9 | | | | | | | |
| **MEEK** | **Meekatharra** | **23.34** | **208** | P | **P** | **19** | **28** | **39.6 +0.1** |
| | baz=23,SNR=10.0 | | | | | | | |
| **QLP** | **Quilpie** | **24.11** | **149** | P | **P** | **19** | **28** | **47.8 +1.4** |
| | baz=24,SNR=10 | | | | | | | |
| **KMBL** | **Kambalda** | **26.36** | **197** | P | **P** | **19** | **29** | **07.2 +0.4** |
| | baz=26,SNR=4.9 | | | | | | | |
| **MORW** | **Morawa** | **26.61** | **209** | P | **P** | **19** | **29** | **13.4 +4.4** |
| | baz=27,SNR=3.5 | | | | | | | |
| **BBOO** | **Buckleboo** | **27.00** | **170** | P | **P** | **19** | **29** | **12.7 +0.3** |
| | baz=27,SNR=13 | | | | | | | |
| **KLBR** | **Kellerberrin** | **28.00** | **204** | P | **P** | **19** | **29** | **21.6 +0.2** |
| | baz=28,SNR=7.7 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **28.93** | **153** | P | **P** | **19** | **29** | **31.2 +1.5** |
| | baz=29,SNR=16 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **29.39** | **203** | P | **P** | **19** | **29** | **34.2 +0.5** |
| | comp=N,2.9nm,0.4s,baz=194,slow=0.4,SNR=5.8 | | | | | | | |
| **ARPS** | **Mount Arapiles** | **32.15** | **163** | P | **P** | **19** | **29** | **59.6 +1.7** |
| | baz=32,SNR=9.9 | | | | | | | |
| **QIZ** | **Qiongzhong** | **32.32** | **321** | P | **P** | **19** | **30** | **00.5 +0.8** |
| QIZ | | | | pP | pP | 19 | 30 | 33.0 +6.3 |
| QIZ | | | | sP | sP | 19 | 30 | 46.3 +5.3 |
| QIZ | | | | S | **S** | **19** | **35** | **05.5 +0.9** |
| QIZ | | | | sS | sS | 19 | 35 | 57.5 +5.6 |
| QIZ | | | | PMZ | | | | |
| | comp=N,26nm,1.4s | | | | | | | |
| **PSI** | **Prapat** | **32.85** | **285** | P | **P** | **19** | **30** | **02.1 -2.4** |
| | comp=N,20nm,0.7s,baz=115,slow=6.6,SNR=10 | | | | | | | |
| **PSI** | **Prapat** | **32.85** | **285** | *e*P | **P** | **19** | **30** | **04.9 +0.4** |
| PSI | | | | pmax | pmax | | | |
| | comp=Z,25nm,0.8s | | | | | | | |
| **PSI** | **Prapat** | **32.85** | **285** | *e*P | **P** | **19** | **30** | **04.9 +0.4** |
| | comp=Z,25nm,0.8s | | | | | | | |
| **KHON** | **Khomkaen** | **35.42** | **309** | P | **P** | **19** | **30** | **26.4 -0.1** |
| | comp=Z,21nm,0.8s,comp=Z,401nm | | | | | | | |
| **CHAI** | **Chaiyaphum** | **35.81** | **308** | P | **P** | **19** | **30** | **29.2 -0.7** |
| | comp=Z,14nm,0.5s,comp=Z,228nm | | | | | | | |
| **PBKT** | **Sadao Pong** | **36.99** | **308** | P | P | 19 | 30 | 47.7 +7.8 |
| **LOEI** | **Loei** | **37.31** | **310** | P | **P** | **19** | **30** | **40.0 -2.6** |
| | comp=Z,181nm,1.2s,comp=Z,9μm | | | | | | | |
| **UTHA** | **Uthaitani** | **37.65** | **305** | P | **P** | **19** | **30** | **45.1 -0.3** |
| | comp=Z,11nm,0.8s,comp=Z,96nm | | | | | | | |
| **UTTA** | **Uttaradit** | **38.00** | **309** | P | **P** | **19** | **30** | **48.3 0.0** |
| | comp=Z,11nm,0.9s,comp=Z,81nm | | | | | | | |
| **DZM** | **Mont Dzumac** | **38.06** | **118** | P | **P** | **19** | **30** | **50.7 +1.8** |
| | comp=Z,1.8nm,0.6s,baz=181,slow=5.7,SNR=2.8 | | | | | | | |
| **LAMP** | **Lampang** | **39.16** | **309** | P | **P** | **19** | **30** | **58.7 +0.6** |
| | comp=Z,5.7nm,0.7s | | | | | | | |
| **NJ2** | **Nanjing** | **39.62** | **344** | *e*P | **P** | **19** | **31** | **02.0 +0.4** |
| NJ2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| **CM01** | **Chiang Mai Arr** | **39.62** | **309** | *e*P | **P** | **19** | **31** | **01.6 -0.3** |
| CM01 | | | | *e*PcP | **PcP** | **19** | **33** | **07.2 +0.5** |
| **CMAR** | **Chiang Mai Arr** | **39.66** | **309** | P | **P** | **19** | **31** | **02.2 0.0** |
| | comp=Z,9.5nm,0.9s,baz=139,slow=7.5,SNR=54 | | | | | | | |
| CMAR | | | | PcP | **PcP** | **19** | **33** | **07.7 +0.9** |
| | comp=Z,1.9nm,0.8s,baz=168,slow=2.7,SNR=10.0 | | | | | | | |
| **CMAR** | **Chiang Mai Arr** | **39.66** | **309** | *c*e*c*P | **P** | **19** | **31** | **02.2 0.0** |
| CMAR | | | | pmax | pmax | | | |
| | comp=Z,11nm,0.9s | | | | | | | |
| **WHN** | **Wuhan** | **39.68** | **338** | ⇑P | **P** | **19** | **31** | **03.3 +1.1** |
| **CMMT** | **Chiang Mai** | **39.86** | **309** | P | **P** | **19** | **31** | **03.7 -0.2** |
| | comp=Z,21nm,0.9s | | | | | | | |
| **CHTO** | **Chiang Mai** | **39.86** | **309** | P | **P** | **19** | **31** | **03.8 -0.1** |
| | comp=Z,92nm,0.9s | | | | | | | |
| **CHTO** | **Chiang Mai** | **39.86** | **309** | *e*P | **P** | **19** | **31** | **02.5 -1.4** |
| CHTO | | | | pmax | pmax | | | |
| | comp=Z,20nm,1.0s | | | | | | | |
| **CHTO** | **Chiang Mai** | **39.86** | **309** | *e*P | **P** | **19** | **31** | **02.5 -1.4** |
| | comp=Z,20nm,1.0s | | | | | | | |
| **GYA** | **Guiyang** | **39.87** | **325** | *e*P | **P** | **19** | **31** | **05.8 +1.8** |
| GYA | | | | PMZ | | | | |
| | comp=Z,10.0nm,1.0s | | | | | | | |
| **KMI** | **Kunming** | **41.25** | **320** | P | **P** | **19** | **31** | **17.5 +2.0** |
| KMI | | | | PMZ | | | | |
| | comp=Z,5.0nm,1.0s | | | | | | | |
| KMI | | | | PMZ | | | | |
| | comp=Z,140nm,4.0s | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **43.08** | **9** | P | **P** | **19** | **31** | **28.9 -1.0** |
| | comp=Z,1.1nm,0.6s,baz=185,slow=9.4,SNR=5.7 | | | | | | | |
| **KSAR** | **Wonju Array Be** | **43.45** | **357** | P | **P** | **19** | **31** | **33.8 +0.9** |
| **KSAR** | **Wonju Array Be** | **43.45** | **357** | P | **P** | **19** | **31** | **33.8 +0.9** |
| **KSRS** | **Korea Array** | **43.46** | **357** | P | **P** | **19** | **31** | **33.8 +0.9** |
| | comp=Z,0.8nm,0.5s,baz=175,slow=8.7,SNR=5.6 | | | | | | | |
| **KSRS** | **Korea Array** | **43.46** | **357** | P | **P** | **19** | **31** | **33.8 +0.9** |
| KSRS | | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.5s | | | | | | | |
| **CD2** | **Chengdu** | **44.92** | **327** | *e*P | **P** | **19** | **31** | **45.5 +0.7** |
| CD2 | | | | pP | pP | 19 | 32 | 19.0 +5.9 |
| CD2 | | | | PP | **PP** | **19** | **33** | **33.8 +1.6** |
| CD2 | | | | PcS | **PcS** | **19** | **37** | **17.5 -0.6** |
| CD2 | | | | S | **S** | **19** | **38** | **13.5 -0.2** |
| CD2 | | | | PMZ | | | | |
| | comp=Z,10.0nm,0.5s | | | | | | | |
| CD2 | | | | PMZ | | | | |
| | comp=Z,120nm,5.4s | | | | | | | |
| **XAN** | **Xi'an** | **44.94** | **334** | P | **P** | **19** | **31** | **44.3 -0.5** |
| XAN | | | | PMZ | | | | |
| | comp=Z,19nm,0.8s | | | | | | | |
| **BJI** | **Beijing** | **47.86** | **345** | P | **P** | **19** | **32** | **06.5 -0.9** |
| BJI | | | | PMZ | | | | |
| | comp=Z,23nm,0.6s | | | | | | | |
| **LZH** | **Lanzhou** | **48.95** | **331** | *e*P | **P** | **19** | **32** | **17.3 +1.2** |
| LZH | | | | pP | **pP** | **19** | **32** | **49.0 +4.1** |
| LZH | | | | PMZ | | | | |
| | comp=Z,23nm,1.1s | | | | | | | |
| LZH | | | | PMZ | | | | |
| | comp=Z,82nm,4.7s | | | | | | | |
| **HHC** | **Hu-ho-hao-te** | **49.94** | **341** | *e*P | **P** | **19** | **32** | **26.5 +3.0** |
| HHC | | | | S | **S** | **19** | **39** | **25.8 +1.2** |
| HHC | | | | PMZ | | | | |
| | comp=Z,14nm,0.7s | | | | | | | |
| HHC | | | | PMZ | | | | |
| | comp=Z,110nm,7.4s | | | | | | | |
| HHC | | | | LN | | | | |
| | comp=Z,130nm,17.3s | | | | | | | |
| HHC | | | | LE | | | | |
| | comp=Z,170nm,13.6s | | | | | | | |
| HHC | | | | LZ | | | | |
| | comp=Z,100nm,14.8s | | | | | | | |
| **CN2** | **Changchun** | **49.95** | **355** | *e*P | P | 19 | 32 | 28.0 +4.7 |
| **USRK** | **Ussuriysk Ar.** | **50.15** | **1** | P | **P** | **19** | **32** | **25.5 +0.7** |
| | comp=Z,2.5nm,0.7s,baz=184,slow=6.2,SNR=6.2 | | | | | | | |
| **LSA** | **Lhasa** | **52.01** | **315** | P | **P** | **19** | **32** | **39.3 -0.3** |
| LSA | | | | PMZ | | | | |
| | comp=Z,14nm,0.8s | | | | | | | |
| **LSA** | **Lhasa** | **52.01** | **315** | *e*P | **P** | **19** | **32** | **39.1 -0.5** |
| LSA | | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.4s | | | | | | | |
| **LSA** | **Lhasa** | **52.01** | **315** | *e*P | **P** | **19** | **32** | **39.1 -0.5** |
| | comp=Z,6.8nm,0.4s | | | | | | | |
| **CHLP** | **Challavanipeta** | **52.02** | **299** | *e*P | **P** | **19** | **32** | **38.3 -1.0** |
| CHLP | | | | IAmb | IAmb | 19 | 32 | 39.0 |
| | comp=Z,24nm,1.0s | | | | | | | |
| **ODAN** | **Odare** | **53.16** | **310** | *e*P | **P** | **19** | **32** | **47.4 -0.5** |
| | comp=Z,39nm,0.6s | | | | | | | |
| **TAPN** | **Taplejung** | **53.18** | **311** | *e*P | **P** | **19** | **32** | **47.6 -0.5** |
| | comp=Z,57nm,0.4s | | | | | | | |
| **GTA** | **Gaotai** | **53.53** | **330** | ⇑P | **P** | **19** | **32** | **50.8 +0.6** |
| GTA | | | | pP | pP | 19 | 33 | 25.5 +6.0 |
| GTA | | | | sP | sP | 19 | 33 | 42.0 +8.8 |
| GTA | | | | S | **S** | **19** | **40** | **12.0 -1.9** |
| GTA | | | | sS | sS | 19 | 41 | 14.0 +10 |
| GTA | | | | SS | **SS** | **19** | **43** | **55.3 -0.9** |
| GTA | | | | PMZ | | | | |
| | comp=Z,16nm,1.3s | | | | | | | |
| GTA | | | | PMZ | | | | |
| | comp=Z,160nm,4.5s | | | | | | | |
| GTA | | | | LN | | | | |
| | comp=Z,97nm,15.0s | | | | | | | |
| GTA | | | | LE | | | | |
| | comp=Z,110nm,16.9s | | | | | | | |
| GTA | | | | LZ | | | | |
| | comp=Z,97nm,16.4s | | | | | | | |
| **PVM** | **Polavaram** | **53.68** | **297** | *e*P | **P** | **19** | **32** | **50.6 -0.9** |
| PVM | | | | IAmb | IAmb | 19 | 32 | 51.2 |
| | comp=Z,12nm,0.7s | | | | | | | |
| **RAMN** | **Ramite** | **53.81** | **310** | *e*P | **P** | **19** | **32** | **52.5 -0.1** |
| | comp=Z,127nm,0.4s | | | | | | | |
| **SKHT** | **Srikalahasti** | **54.23** | **292** | *e*P | **P** | **19** | **32** | **54.1 -1.5** |
| SKHT | | | | IAmb | IAmb | 19 | 32 | 55.1 |
| | comp=Z,128nm,0.6s | | | | | | | |
| **ADKI** | **Addanki** | **54.67** | **294** | *e*P | **P** | **19** | **32** | **57.6 -1.1** |
| ADKI | | | | IAmb | IAmb | 19 | 32 | 59.3 |
| | comp=Z,12nm,0.8s | | | | | | | |
| **GUN** | **Gumba** | **54.85** | **310** | *e*P | **P** | **19** | **32** | **59.9 -0.4** |
| | comp=Z,83nm,0.5s | | | | | | | |
| **PKI** | **Pulchoki** | **55.04** | **310** | *e*P | **P** | **19** | **33** | **00.7 -0.9** |
| | comp=Z,9.1nm,0.4s | | | | | | | |
| **PKIN** | **Phulchoki** | **55.05** | **310** | *e*P | **P** | **19** | **33** | **00.7 -0.9** |
| | comp=Z,12nm,0.4s | | | | | | | |
| **KKN** | **Kakani** | **55.25** | **310** | *e*P | **P** | **19** | **33** | **02.3 -0.7** |
| | comp=Z,26nm,0.4s | | | | | | | |
| **DMN** | **Daman** | **55.29** | **310** | *e*P | **P** | **19** | **33** | **02.9 -0.4** |
| | comp=Z,22nm,0.4s | | | | | | | |
| **RCLA** | **Racherla** | **55.47** | **293** | *e*P | **P** | **19** | **33** | **02.8 -1.6** |
| RCLA | | | | IAmb | IAmb | 19 | 33 | 04.1 |
| | comp=Z,9.7nm,1.0s | | | | | | | |
| **NJS** | **Nagarjunasagar** | **55.51** | **295** | *e*P | **P** | **19** | **33** | **03.4 -1.4** |
| NJS | | | | IAmb | IAmb | 19 | 33 | 03.8 |
| | comp=Z,8.5nm,0.8s | | | | | | | |
| **SRLM** | **Srisailam** | **55.73** | **294** | *e*P | **P** | **19** | **33** | **04.5 -2.0** |
| SRLM | | | | IAmb | IAmb | 19 | 33 | 06.9 |
| | comp=Z,15nm,1.1s | | | | | | | |
| **GKN** | **Gorkha** | **55.84** | **310** | *e*P | **P** | **19** | **33** | **06.7 -0.5** |
| | comp=Z,74nm,0.5s | | | | | | | |
| **RPR** | **Rampur** | **56.32** | **297** | *e*P | **P** | **19** | **33** | **09.1 -1.4** |
| RPR | | | | IAmb | IAmb | 19 | 33 | 10.0 |
| | comp=Z,15nm,0.6s | | | | | | | |
| **HYB** | **Hyderabad** | **56.48** | **295** | *i* P | **P** | **19** | **33** | **09.0 -2.7** |
| **HYBB** | **Hyderabad (bro** | **56.48** | **295** | *e*P | **P** | **19** | **33** | **09.9 -1.8** |
| HYBB | | | | IAmb | IAmb | 19 | 33 | 10.3 |
| | comp=Z,14nm,0.5s | | | | | | | |
| **KOLN** | **Koldanda** | **56.53** | **309** | *e*P | **P** | **19** | **33** | **11.7 -0.4** |
| | comp=Z,33nm,0.6s | | | | | | | |
| **DANN** | **Dangsing** | **56.69** | **310** | *e*P | **P** | **19** | **33** | **12.7 -0.6** |
| **AFI** | **Afiamalu** | **57.16** | **103** | LR | LR | 19 | 59 | 02.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| MNAS | | | pmax | pmax | | | |
| | comp=Z,24nm,1.1s | | | | | | |
| **KURK** | **Kurchatov** | **72.12 328** | *eP* | **P** | **19 34 52.8** | **-0.2** | |
| KURK | | | pmax | pmax | | | |
| | comp=Z,27nm,0.8s | | | | | | |
| **KURK** | **Kurchatov** | **72.12 328** | *eP* | **P** | **19 34 52.8** | **-0.2** | |
| | comp=Z,27nm,0.8s | | | | | | |
| **NVS** | **Novosibirsk** | **72.39 333** | *eP* | **P** | **19 34 53.7** | **-0.8** | |
| **DZET** | **Dzherino** | **72.48 314** | P | **P** | **19 34 55.2** | **-0.4** | |
| DZET | | | pmax | pmax | | | |
| | comp=Z,13nm,0.5s | | | | | | |
| **KK31** | **Karatay Array** | **73.10 318** | *i* P | **P** | **19 34 59.0** | **0.0** | |
| KK31 | | | pmax | pmax | | | |
| | comp=Z,6.0nm,0.8s | | | | | | |
| **KKAR** | **Karatay Array** | **73.10 318** | *eP* | **P** | **19 34 58.5** | **-0.5** | |
| KKAR | | | pmax | pmax | | | |
| | comp=Z,9.0nm,0.9s | | | | | | |
| **KKAR** | **Karatay Array** | **73.10 318** | *eP* | **P** | **19 34 58.5** | **-0.5** | |
| | comp=Z,8.6nm,0.9s | | | | | | |
| **MAW** | **Mawson** | **75.94 201** | P | **P** | **19 35 14.9** | **0.0** | |
| | comp=Z,1.5nm,0.3s,baz=74,slow=19,SNR=3.9 | | | | | | |
| **IDAH** | **Dahanechah** | **77.33 305** | *eP* | **P** | **19 35 22.9** | **-0.9** | |
| **IMON** | **Monand** | **77.62 306** | *eP* | **P** | **19 35 25.2** | **-0.2** | |
| IMON | | | *eP* | **P** | **19 35 26.0** | **+0.6** | |
| **BVA0** | **Borovoye Array** | **77.67 328** | *i* P | **P** | **19 35 24.4** | **-0.5** | |
| BVA0 | | | pmax | pmax | | | |
| | comp=Z,7.0nm,0.8s | | | | | | |
| **BVAR** | **Borovoye Array** | **77.67 328** | P | **P** | **19 35 24.6** | **-0.3** | |
| | comp=Z,5.0nm,0.6s,baz=131,slow=9.4,SNR=38 | | | | | | |
| **BRVK** | **Borovoye** | **77.75 328** | *i* P | **P** | **19 35 24.5** | **-0.8** | |
| BRVK | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | |
| **BRVK** | **Borovoye** | **77.75 328** | *eP* | **P** | **19 35 23.7** | **-1.6** | |
| **CHKZ** | **Chkalovo** | **77.86 328** | P | **P** | **19 35 24.2** | **-1.7** | |
| CHKZ | | | pmax | pmax | | | |
| | comp=Z,7.0nm,1.0s | | | | | | |
| **GEYT** | **Alibeck** | **80.12 310** | P | **P** | **19 35 38.8** | **+0.1** | |
| | comp=Z,5.6nm,0.7s,baz=157,slow=4.8,SNR=12 | | | | | | |
| **ISRV** | **Sarvestan** | **82.18 301** | *eP* | **P** | **19 35 49.2** | **-0.9** | |
| **AB31** | **Akbulak array** | **82.22 321** | *eP* | **P** | **19 35 48.6** | **-0.9** | |
| AB31 | | | pmax | pmax | | | |
| | comp=Z,1.0nm,0.4s | | | | | | |
| **ABKAR** | **Akbulak array** | **82.22 321** | *eP* | **P** | **19 35 46.6** | **-2.9** | |
| **IPAR** | **Pars** | **82.32 301** | *eP* | **P** | **19 35 50.2** | **-0.7** | |
| **IKAZ** | **Kazeroun** | **83.34 301** | *eP* | **P** | **19 35 54.8** | **-1.4** | |
| **SVE** | **Sverdlovsk** | **84.36 329**⇑ | *eP* | **P** | **19 36 00.4** | **+0.1** | |
| SVE | | | pmax | pmax | | | |
| | comp=Z,15nm,1.2s | | | | | | |
| **RAYN** | **Ar Rayn** | **87.94 294** | *eP* | **P** | **19 36 15.6** | **-3.1** | |
| **ILAR** | **Eielson Array** | **92.35 25** | P | **P** | **19 36 36.5** | **-1.7** | |
| | comp=Z,0.7nm,0.9s,baz=270,slow=4.3,SNR=4.9 | | | | | | |
| **BRTR** | **Keskin Array B** | **99.25 309** | P | **Pdif** | **19 37 08.6** | **-1.7** | |
| | comp=Z,0.4nm,0.8s,baz=228,slow=1.5,SNR=4.3 | | | | | | |
| **BRTR** | **Keskin Array B** | **99.25 309** | *i* P | **Pdif** | **19 37 10.1** | **-0.2** | |
| **ARCES** | **ARCESS Array B** | **101.00 340** | P | **Pdif** | **19 37 15.9** | **-1.4** | |
| | comp=Z,4.7nm,0.9s,baz=19,slow=7.7,SNR=3.6 | | | | | | |
| **FINES** | **FINESS Array B** | **102.31 332** | P | **Pdif** | **19 37 21.2** | **-2.0** | |
| | comp=Z,3.5nm,1.0s,baz=48,slow=3.1,SNR=3.7 | | | | | | |
| **FINES** | **FINESS Array B** | **102.31 332** | *i* P | **Pdif** | **19 37 20.8** | **-2.4** | |
| FINES | | | pmax | pmax | | | |
| | comp=Z,4.0nm,1.0s | | | | | | |
| **KOLS** | **Kolonicke sedl** | **106.63 319** | *eP* | **Pdif** | **19 37 43.8** | **+1.0** | |
| **KOLS** | **Kolonicke sedl** | **106.63 319** | PDIF | **Pdif** | **19 37 43.8** | **+1.0** | |
| **STHS** | **Stebnicka Huta** | **107.21 320** | *eP* | **Pdif** | **19 37 45.6** | **+0.2** | |
| **STHS** | **Stebnicka Huta** | **107.21 320** | PDIF | **Pdif** | **19 37 45.5** | **+0.2** | |
| **TORD** | **Torodi Ar. Bea** | **129.22 282** | PKP | **PKPdf** | **19 42 36.5** | **-0.3** | |
| | comp=Z,1.0nm,0.5s,baz=84,slow=2.3,SNR=14 | | | | | | |
| **DBIC** | **Dimbokro** | **135.73 273** | PKP | **PKPdf** | **19 42 47.9** | **-1.3** | |
| | comp=Z,1.7nm,0.4s,baz=98,slow=3.5,SNR=3.5 | | | | | | |
| **JTS** | **JuntasAbangare** | **144.60 81** | PKP | **PKPdf** | **19 43 04.7** | **-0.4** | |
| | comp=Z,4.0nm,0.6s,baz=237,slow=23,SNR=4.3 | | | | | | |
| **CPUP** | **Villa Florida** | **146.80 167** | PKPbc | **PKPbc** | **19 43 10.8** | **+0.3** | |
| **LPAZ** | **La Paz** | **151.00 141** | PKPbc | **PKPbc** | **19 43 22.7** | **+0.4** | |
| | comp=Z,5.2nm,0.3s,baz=34,slow=3.3,SNR=34 | | | | | | |

**GUC 31 19:36:40.0±0.4, 21°.17S×68°.67W, h142km±4km, ML3.5, Chile-Bolivia border region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PB01** | **IPOC Station P** | **0.77** | **279** | *eP* | | Pn | 19 37 02.5 | +0.2 |
| PB01 | | | | *eS* | | Sn | 19 37 19.6 | +0.5 |
| PB01 | | | | AML | | AML | 19 37 20.8 | |
| | comp=E,416nm,0.3s | | | | | | | |
| **PB09** | **IPOC Station P** | **0.82** | **220** | *eP* | | Pn | 19 37 03.1 | +0.3 |
| PB09 | | | | *eS* | | Sn | 19 37 20.6 | +0.5 |
| PB09 | | | | AML | | AML | 19 37 21.7 | |
| | comp=N,1μm,0.4s | | | | | | | |
| **PB07** | **IPOC Station P** | **1.26** | **243** | *eP* | | Pn | 19 37 07.3 | +0.6 |
| PB07 | | | | *eS* | | Sn | 19 37 27.6 | +0.6 |
| PB07 | | | | AML | | AML | 19 37 29.5 | |
| | comp=E,467nm,0.2s | | | | | | | |
| **PB11** | **IPOC Station P** | **1.67** | **326** | *eP* | | Pn | 19 37 11.3 | +0.1 |
| PB11 | | | | *eS* | | Sn | 19 37 35.4 | +0.5 |
| PB11 | | | | AML | | AML | 19 37 37.9 | |
| | comp=E,1μm,0.8s | | | | | | | |
| **MNMC** | **Minimini** | **2.20** | **337** | *eP* | | Pn | 19 37 18.1 | +0.6 |
| MNMC | | | | *eS* | | Sn | 19 37 46.9 | +0.6 |
| MNMC | | | | AML | | AML | 19 37 49.2 | |
| | comp=N,290nm,1.1s | | | | | | | |

**GUC 31 19:39:56.1±0.3, 33°.75S×72°.18W, h16km±5km, ML4.1, Off coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **LNV** | **Longovilo** | **0.67** | **108** | *eP* | | Pg | 19 40 09.2 | -0.1 |
| **TACH** | **Talagante** | **1.04** | **85** | *eP* | | Pb | 19 40 15.0 | -0.8 |
| **CHCH** | **Chadas Angostu** | **1.28** | **99** | *eP* | | Pn | 19 40 19.1 | -0.4 |
| **SAN** | **Santiago** | **1.30** | **77** | *eP* | | Pn | 19 40 19.3 | -0.4 |
| SAN | | | | *eS* | | Sn | 19 40 36.9 | +0.1 |
| **PEL** | **Peldehue** | **1.39** | **65** | *eP* | | Pn | 19 40 20.9 | -0.1 |
| PEL | | | | *eS* | | Sb | 19 40 39.6 | +0.3 |
| PEL | | | | AML | | AML | 19 40 43.4 | |
| | comp=E,9μm,0.6s | | | | | | | |
| **FSR** | **Penalolen** | **1.41** | **79** | *eP* | | Pn | 19 40 21.3 | +0.1 |
| FSR | | | | *eS* | | Sb | 19 40 40.1 | +0.3 |
| **LACH** | **Col Las Americ** | **1.41** | **78** | *eP* | | Pn | 19 40 21.1 | -0.1 |
| LACH | | | | *eS* | | Sb | 19 40 40.0 | 0.0 |
| **CLCH** | **Cerro Calan** | **1.42** | **76** | *eP* | | Pn | 19 40 21.3 | -0.1 |
| CLCH | | | | *eS* | | Sb | 19 40 40.6 | +0.4 |
| CLCH | | | | AML | | AML | 19 40 49.3 | |
| | comp=E,3μm,0.5s | | | | | | | |
| **NICH** | **Los Niches** | **1.48** | **148** | *eP* | | Pn | 19 40 22.1 | +0.1 |
| NICH | | | | *eS* | | Sb | 19 40 41.8 | 0.0 |
| **TALC** | **Talca** | **1.71** | **165** | *eP* | | Pn | 19 40 25.7 | +0.5 |
| TALC | | | | *eS* | | Sb | 19 40 48.3 | +0.1 |

**IDC 31 19:48:55.4±3.3, 6°.98S×151°.24E, h0km, mb3.4/2, mb1 3.8/3, mb1mx3.4/29, mbtmp3.6/3, ML1.3/1, Error ellipse: s-maj=121.7km s-min=45.9km az=128.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PMG** | **Port Moresby** | **4.71** | **239** | Pn | | Pn | 19 50 07.3 | -0.5 |
| | 0.9nm,0.3s,baz=14,slow=8.3,SNR=3.2 | | | | | | | |
| PMG | | | | Sn | | Sn | 19 50 57.9 | -5.2 |
| | 0.8nm,0.3s,baz=153,slow=18,SNR=3.4 | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.86** | **230** | P | | P | 19 53 38.6 | -0.6 |
| | 2.5nm,0.7s,baz=57,slow=11,SNR=13 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.51** | **223** | P | | P | 19 54 08.2 | +0.9 |
| | 0.7nm,0.8s,baz=50,slow=10,SNR=4.9 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **149.41** | **284** | PKPbc | | PKPbc | 20 08 47.0 | -0.7 |
| | 0.3nm,0.6s,baz=56,slow=3.4,SNR=4.9 | | | | | | | |

**IDC 31 19:54:15.7±3.6, 5°.99S×149°.85E, h0km, mb3.1/2, mb1 3.5/3, mb1mx3.3/21, mbtmp3.3/3, ML1.0/1, Error ellipse: s-maj=144.5km s-min=36.6km az=118.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PMG** | **Port Moresby** | **4.32** | **218** | Pn | | Pn | 19 55 24.6 | +2.0 |
| | 0.7nm,0.3s,baz=51,slow=6.5,SNR=3.6 | | | | | | | |
| PMG | | | | Sn | | Sn | 19 56 13.6 | -0.1 |
| | 1.8nm,0.3s,baz=125,slow=16,SNR=3.2 | | | | | | | |
| **WRA** | **Warramunga Arr** | **20.48** | **226** | P | | P | 19 58 54.5 | -0.8 |
| | 1.4nm,0.6s,baz=52,slow=11,SNR=8.4 | | | | | | | |
| **ASAR** | **Alice Springs** | **23.33** | **219** | P | | P | 19 59 25.5 | -0.2 |
| | 0.3nm,0.8s,baz=61,slow=9.6,SNR=4.0 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **147.83** | **285** | PKPbc | | PKPbc | 20 14 03.1 | -0.6 |
| | 0.3nm,0.6s,baz=55,slow=3.8,SNR=3.7 | | | | | | | |

**IDC 31 19:59:20.6±6.8, 6°.42S×154°.24E, h122km±53km, mb3.1/4, mb1 3.4/5, mb1mx3.2/22, mbtmp3.6/5, Error ellipse: s-maj=68.3km s-min=29.9km az=117.0, Bougainville - Solomon Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **PMG** | **Port Moresby** | **7.62** | **247** | P | | Pn | 20 01 08.5 | -0.4 |
| | 2.1nm,0.3s,baz=69,slow=8.1,SNR=8.2 | | | | | | | |
| PMG | | | | S | | Sn | 20 02 33.7 | 0.0 |
| | 0.8nm,0.3s,baz=204,slow=20,SNR=2.0 | | | | | | | |
| **WRA** | **Warramunga Arr** | **23.54** | **233** | P | | P | 20 04 20.9 | +0.8 |
| | 0.3nm,0.5s,baz=56,slow=10,SNR=2.6 | | | | | | | |
| **ASAR** | **Alice Springs** | **26.01** | **227** | P | | P | 20 04 42.5 | +0.1 |
| | 0.2nm,0.3s,baz=55,slow=9.0,SNR=5.5 | | | | | | | |
| **SONM** | **Songino Array** | **68.45** | **328** | P | | P | 20 10 11.2 | +1.6 |
| | 0.3nm,0.5s,baz=140,slow=5.3,SNR=4.2 | | | | | | | |
| **ILAR** | **Eielson Array** | **83.12** | **22** | P | | P | 20 11 31.6 | -0.8 |
| | 0.9nm,1.1s,baz=249,slow=4.8,SNR=4.6 | | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **152.15** | **286** | PKPbc | | PKPbc | 20 19 01.3 | -1.5 |
| | 0.3nm,0.6s,baz=66,slow=2.3,SNR=5.5 | | | | | | | |

*ISK* ***31*** *20:16:43.6, 36°.08N×29°.15E, h10km, MD2.7*
*ISCJB* ***31*** *20:16:44.5±1.3, 36°.09N±0°.06×29°.14E±0°.05, h4km±6km, Error ellipse: s-maj=10.4km s-min=6.0km az=10.3*
*DDA* ***31*** *20:16:45.0, 36°.17N×29°.10E, h13km, Md2.9*
*CSEM* ***31*** *20:16:45.4±0.7, 36°.13N×29°.19E, h8km, MD2.9, Error ellipse: s-maj=12.9km s-min=6.7km az=9.0*
**ISC 31 20:16:44.3±1.8, 36°.13N±0°.08×29°.16E±0°.03, h5km±11km, n22, σ0°.45/39, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **AKAS** | **Kas** | **0.38** | **73** | *i* P | | **Pb** | **20 16 53.1** | **-0.4** |
| AKAS | | | | *i* S | | **Sb** | **20 16 59.7** | **-0.1** |
| **AKAS** | **Kas** | **0.38** | **73** | P | | **Pb** | **20 16 53.1** | **-0.4** |
| AKAS | | | | S | | **Sb** | **20 16 59.6** | **-0.1** |
| **FETY** | **Fethiye** | **0.51** | **353** | *e*PG | | **Pg** | **20 16 54.8** | **+0.6** |
| FETY | | | | *e*SG | | **Sb** | **20 17 03.1** | **-0.5** |
| **FETY** | **Fethiye** | **0.51** | **353** | *e*Pg | | **Pg** | **20 16 54.8** | **+0.6** |
| FETY | | | | *e*Sg | | **Sb** | **20 17 03.1** | **-0.5** |
| **DALY** | **Dalyan (Mu¨la** | **0.80** | **330** | *e*PG | | **Pg** | **20 17 00.0** | **+0.3** |
| DALY | | | | *e*SG | | **Sb** | **20 17 12.0** | **+0.1** |
| **DALY** | **Dalyan (Mu¨la** | **0.80** | **330** | *e*Pg | | **Pg** | **20 17 00.0** | **+0.3** |
| DALY | | | | *e*Sg | | **Sb** | **20 17 12.0** | **+0.1** |
| **ELL** | **Elmali** | **0.87** | **44** | *e*PG | | **Pg** | **20 17 01.4** | **+0.5** |
| ELL | | | | *e*SG | | **Sb** | **20 17 14.3** | **+0.4** |
| **ELL** | **Elmali** | **0.87** | **44** | *e*Pg | | **Pg** | **20 17 01.4** | **+0.5** |
| ELL | | | | *e*Sg | | **Sb** | **20 17 14.3** | **+0.4** |
| **TURN** | **Turunc** | **0.87** | **329** | *i* P | | **Pn** | **20 17 03.1** | **-0.1** |
| **TURN** | **Turunc** | **0.87** | **329** | P | | **Pn** | **20 17 03.1** | **-0.1** |
| TURN | | | | S | | **Sn** | **20 17 17.9** | **+1.6** |
| **GOLH** | **Golhisar** | **1.15** | **16** | *i* P | | **Pg** | **20 17 06.7** | **+0.2** |
| GOLH | | | | *i* S | | **Sn** | **20 17 23.1** | **-0.4** |
| **GOLH** | **Golhisar** | **1.15** | **16** | P | | **Pg** | **20 17 06.7** | **+0.2** |
| GOLH | | | | S | | **Sn** | **20 17 23.1** | **-0.4** |
| **DNZL** | **Cakiroluk** | **1.56** | **357** | *i* P | | **Pn** | **20 17 13.3** | **+0.4** |
| DNZL | | | | *i* S | | **Sb** | **20 17 34.0** | **0.0** |
| **DNZL** | **Cakiroluk** | **1.56** | **357** | P | | **Pn** | **20 17 13.3** | **+0.4** |
| DNZL | | | | S | | **Sb** | **20 17 34.0** | **0.0** |
| **BDRM** | **Kayabasi** | **1.67** | **305** | *i* P | | **Pb** | **20 17 15.0** | **-0.6** |
| BDRM | | | | *i* S | | **Sb** | **20 17 37.1** | **+0.2** |
| **BDRM** | **Kayabasi** | **1.67** | **305** | P | | **Pb** | **20 17 15.0** | **-0.6** |
| BDRM | | | | S | | **Sb** | **20 17 37.1** | **+0.2** |
| **AYDN** | **Tasoluk** | **1.84** | **327** | *i* P | | **Pg** | **20 17 19.9** | **+0.2** |
| AYDN | | | | *i* S | | **Sg** | **20 17 43.2** | **-0.4** |
| **AYDN** | **Tasoluk** | **1.84** | **327** | P | | **Pg** | **20 17 19.9** | **+0.2** |
| AYDN | | | | S | | **Sg** | **20 17 43.2** | **-0.4** |
| **SUTC** | **Sutluce-Ispart** | **2.00** | **47** | *e*PN | | **Pn** | **20 17 18.9** | **0.0** |
| **SUTC** | **Sutluce-Ispart** | **2.00** | **47** | *e*Pn | | **Pn** | **20 17 18.9** | **0.0** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.08** | **331** | *e*PN | | **Pn** | **20 17 20.1** | **+0.1** |
| **AYDB** | **Zeytinkoy-Aydi** | **2.08** | **331** | *e*Pn | | **Pn** | **20 17 20.1** | **+0.1** |

**WEL 31 20:24:46.2±0.4, 37°.76S×175°.81E, h255km±4km, ML3.9/5, 5C-3D, Error ellipse: s-maj=6.4km s-min=5.8km az=90.0, North Island**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **URZ** | **Urewera** | **1.14** | **117** | PN | | Pn | 20 25 22.1 | -0.4 |
| URZ | | | | SN | | S | 20 25 51.0 | -0.1 |
| **MWZ** | **Matawai** | **1.47** | **114** | PN | | Pn | 20 25 25.3 | +0.5 |
| MWZ | | | | SN | | S | 20 25 54.9 | -0.3 |
| **BKZ** | **Black Stump Fm** | **1.51** | **159** | ⇑PN | | Pn | 20 25 25.0 | 0.0 |
| BKZ | | | | SN | | S | 20 25 54.8 | -1.0 |
| BKZ | | | | AML | | AML | 20 25 57.6 | |
| **TUVZ** | **Tukino** | **1.52** | **185** | PN | | Pn | 20 25 25.5 | +0.3 |
| **WHVZ** | **Whangaehu Hut** | **1.54** | **187** | ⇑PN | | Pn | 20 25 25.7 | +0.2 |
| **HAZ** | **Te Kaha** | **1.56** | **91** | ⇓PN | | Pn | 20 25 25.4 | 0.0 |
| HAZ | | | | SN | | S | 20 25 55.6 | -0.6 |
| **PKVZ** | **Pokaka** | **1.58** | **193** | PN | | Pn | 20 25 25.9 | +0.3 |
| **SNGZ** | **Shannon Statio** | **1.58** | **131** | PN | | Pn | 20 25 25.8 | +0.2 |
| SNGZ | | | | SN | | S | 20 25 56.2 | -0.4 |
| **WNVZ** | **Wahianoa** | **1.58** | **186** | PN | | Pn | 20 25 25.9 | +0.2 |
| **MOVZ** | **Moawhango** | **1.65** | **182** | PN | | Pn | 20 25 25.9 | -0.3 |
| **BHHZ** | **Black Hill Sta** | **1.74** | **174** | ⇑PN | | Pn | 20 25 26.6 | -0.3 |
| **RIGZ** | **Rimuhau** | **1.80** | **122** | PN | | Pn | 20 25 27.4 | 0.0 |
| **MCHZ** | **McNeill Hill** | **1.82** | **158** | PN | | Pn | 20 25 27.6 | +0.1 |
| **KRHZ** | **Kereru** | **1.94** | **167** | PN | | Pn | 20 25 27.8 | -0.7 |
| **WAZ** | **Wanganui** | **2.10** | **198** | PN | | Pn | 20 25 29.5 | -0.4 |
| **PNHZ** | **Pukenui** | **2.18** | **172** | PN | | Pn | 20 25 29.5 | -1.1 |
| **KAHZ** | **Kahuranaki** | **2.20** | **158** | PN | | Pn | 20 25 30.1 | -0.8 |
| **TSZ** | **Takapari Road** | **2.30** | **177** | PN | | Pn | 20 25 30.5 | -1.4 |
| **DVHZ** | **Dannevirke** | **2.56** | **174** | PN | | Pn | 20 25 32.4 | -1.9 |
| **PRWZ** | **Pori Road** | **2.80** | **178** | PN | | Pn | 20 25 34.9 | -1.9 |
| **MRZ** | **Mangatainoka R** | **2.91** | **184** | PN | | Pn | 20 25 35.5 | -2.4 |
| MRZ | | | | AML | | AML | 20 26 17.5 | |
| MRZ | | | | AML | | AML | 20 26 17.5 | |
| **OGWZ** | **Otaki Gorge** | **3.10** | **189** | PN | | Pn | 20 25 37.6 | -2.3 |
| **HOWZ** | **Holdsworth Sta** | **3.15** | **184** | PN | | Pn | 20 25 37.6 | -2.9 |
| **KIW** | **Kapiti Island** | **3.18** | **192** | ⇓PN | | Pn | 20 25 38.2 | -2.6 |
| **TMWZ** | **Te Maipa** | **3.35** | **179** | PN | | Pn | 20 25 40.0 | -2.7 |
| **DUWZ** | **D'Urville Isla** | **3.38** | **205** | PN | | Pn | 20 25 40.7 | -2.4 |
| **CAW** | **Cannon Point** | **3.40** | **190** | PN | | Pn | 20 25 40.3 | -3.0 |
| CAW | | | | AML | | AML | 20 26 25.1 | |
| CAW | | | | AML | | AML | 20 26 25.6 | |
| **TRWZ** | **Traveller** | **3.64** | **181** | PN | | Pn | 20 25 42.9 | -3.1 |
| **TCW** | **Tory Channel** | **3.65** | **199** | PN | | Pn | 20 25 43.2 | -2.9 |
| TCW | | | | AML | | AML | 20 26 33.1 | |
| TCW | | | | AML | | AML | 20 26 33.5 | |
| **MSWZ** | **Moikau Station** | **3.68** | **187** | PN | | Pn | 20 25 43.2 | -3.3 |
| **BHW** | **Baring Head** | **3.72** | **191** | PN | | Pn | 20 25 43.9 | -2.9 |
| **PLWZ** | **Palliser** | **3.83** | **186** | PN | | Pn | 20 25 44.7 | -3.6 |
| **NNZ** | **Nelson** | **3.94** | **208** | ⇓PN | | Pn | 20 25 46.1 | -3.2 |
| **TUWZ** | **Tuamarina** | **3.94** | **201** | PN | | Pn | 20 25 46.3 | -3.2 |
| TUWZ | | | | AML | | AML | 20 26 36.4 | |
| TUWZ | | | | AML | | AML | 20 26 36.8 | |
| **QRZ** | **Quartz Range** | **3.99** | **219** | ⇑PN | | Pn | 20 25 46.4 | -3.5 |
| **BSWZ** | **Blackbirch Sta** | **4.23** | **200** | PN | | Pn | 20 25 49.7 | -3.1 |
| **THZ** | **Tophouse** | **4.59** | **208** | ⇑PN | | Pn | 20 25 53.2 | -3.9 |
| **KHZ** | **Kahutara** | **4.97** | **200** | PN | | Pn | 20 25 57.9 | -3.7 |
| **DSZ** | **Dennistone Nort** | **5.04** | **217** | PN | | Pn | 20 25 58.1 | -4.5 |

*ISCJB* ***31*** *20:29:58.0±1.2, 38°.86N±0°.04×25°.9E±0°.1, h12km, Error ellipse: s-maj=12.8km s-min=6.2km az=169.6*
*DDA* ***31*** *20:29:58.0, 38°.89N×26°.04E, h7km, Md2.6*
**ISC 31 20:29:57.9±1.5, 38°.86N±0°.04×25°.94E±0°.09, h12km, n6, σ1°.35/9, Aegean Sea**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **SIGR** | **SIGRI** | **0.36** | **350** | *e*PG | | **Pb** | **20 30 06.3** | **0.0** |
| **CHOS** | **Chios island** | **0.48** | **169** | *e*PG | | **Pg** | **20 30 08.4** | **+1.0** |
| **URLA** | **Izmir** | **0.71** | **134** | P | | **Pg** | **20 30 11.0** | **-0.8** |
| URLA | | | | S | | **Sg** | **20 30 20.5** | **-0.6** |
| **ZEY** | **¨zmir** | **0.76** | **144** | P | | **Pg** | **20 30 12.2** | **-0.3** |
| ZEY | | | | S | | **Sb** | **20 30 23.9** | **+0.6** |
| **EZN** | **Ezine** | **1.01** | **17** | *e*PG | | **Pg** | **20 30 16.8** | **-0.7** |
| **BALY** | **Balya** | **1.57** | **55** | P | | **Pg** | **20 30 30.5** | **+2.3** |
| BALY | | | | S | | **Sg** | **20 30 47.0** | **-1.6** |

*ISK* ***31*** *20:30:45.1, 40°.82N×35°.12E, h6km, MD2.6*

*ISCJB* ***31*** *20:30:48.6±0.7, 40°.57N±0°.06×35°.28E±0°.07, h11km, Error ellipse: s-maj=10.8km s-min=4.8km az=137.9*
*DDA* ***31*** *20:30:48.2, 40°.58N×35°.21E, h7km, Md2.7*
*CSEM* ***31*** *20:30:48.4±0.3, 40°.57N×35°.24E, h10km, MD2.7, Error ellipse: s-maj=12.3km s-min=5.7km az=139.0*
**ISC 31 20:30:48.2±0.9, 40°.57N±0°.05×35°.25E±0°.04, h11km, n12, σ0°.38/20, Turkey**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **CORM** | **Corum** | **0.61** | **231** | *e*PG | | **Pg** | **20 30 59.7** | **-0.5** |
| CORM | | | | *e*SG | | **Sb** | **20 31 10.4** | **+0.7** |
| **CORM** | **Corum** | **0.61** | **231** | *e*Pg | | **Pg** | **20 30 59.7** | **-0.5** |
| CORM | | | | *e*Sg | | **Sb** | **20 31 10.4** | **+0.7** |
| **HAVZ** | **Havza** | **0.62** | **35** | *i* P | | **Pg** | **20 31 00.1** | **-0.2** |
| HAVZ | | | | *i* S | | **Sb** | **20 31 09.8** | **0.0** |
| **HAVZ** | **Havza** | **0.62** | **35** | P | | **Pg** | **20 31 00.1** | **-0.2** |
| HAVZ | | | | S | | **Sb** | **20 31 09.8** | **0.0** |
| **CDAG** | **Cicekdag** | **1.16** | **216** | *i* P | | **Pb** | **20 31 09.9** | **-0.4** |
| CDAG | | | | *i* S | | **Sn** | **20 31 26.8** | **+0.4** |
| **CDAG** | **Cicekdag** | **1.16** | **216** | P | | **Pb** | **20 31 09.9** | **-0.4** |
| CDAG | | | | S | | **Sn** | **20 31 26.8** | **+0.4** |
| **ELDT** | **Eldivan** | **1.39** | **267** | *i* P | | **Pb** | **20 31 14.2** | **-0.1** |
| ELDT | | | | *i* S | | **Sg** | **20 31 33.4** | **+0.3** |
| **ELDT** | **Eldivan** | **1.39** | **267** | P | | **Pb** | **20 31 14.2** | **-0.1** |
| ELDT | | | | S | | **Sg** | **20 31 33.4** | **+0.3** |
| **SVSK** | **Karacayir** | **1.49** | **115** | *e*PN | | **Pb** | **20 31 15.9** | **0.0** |
| **SVSK** | **Karacayir** | **1.49** | **115** | *e*Pn | | **Pb** | **20 31 15.9** | **0.0** |
| **KAMT** | **Kaman** | **1.68** | **225** | *e*PN | | **Pn** | **20 31 17.4** | **-0.2** |
| **KAMT** | **Kaman** | **1.68** | **225** | *e*Pn | | **Pn** | **20 31 17.5** | **-0.2** |

*ISCJB* ***31*** *20:41:05.5±1.5, 42°.11N±0°.06×144°.00E±0°.07, h32km±11km, Error ellipse: s-maj=11.3km s-min=7.7km az=154.3*
*JMA* ***31*** *20:41:06.3±0.1, 42°.16N×143°.86E, h55km±3km, M3.2*
*SKHL* ***31*** *20:41:09.9±0.6, 42°.13N×144°.27E, h40km±3km, mb4.9/1, msh4.3/1*
**ISC 31 20:41:05.6±2.7, 42°.08N±0°.09×143°.93E±0°.05, h31km±19km, n14, σ1°.64/21, 2C-3D, Hokkaido region**

| Code | Station Name | Δ° | AZ° | Phase | ID | ISC | Time | Res |
|---|---|---|---|---|---|---|---|---|
| | | | | Op | | | h m s | ISC |
| **JEM** | **Erimo** | **0.58** | **264** | P | | **Pn** | **20 41 18.4** | **+0.7** |
| **JCH** | **Churui** | **0.68** | **322** | ⇓P | | **Pn** | **20 41 19.0** | **-0.1** |
| JCH | | | | *e*S | | **Sb** | **20 41 27.9** | **-0.3** |
| **JOB** | **Onbets** | **0.82** | **355** | ⇓P | | **Pn** | **20 41 21.2** | **+0.1** |
| JOB | | | | *e*S | | **Sn** | **20 41 32.2** | **0.0** |
| **JNBK** | **Urakawa-nobuka** | **0.90** | **283** | P | | **Pn** | **20 41 22.0** | **-0.1** |
| **JAK** | **Akkeshi** | **1.07** | **31** | ⇑P | | **Pn** | **20 41 24.7** | **+0.2** |
| JAK | | | | *e*S | | **Sn** | **20 41 38.2** | **-0.2** |
| **JAR** | **Ashorobuto** | **1.22** | **354** | ⇓P | | **Pn** | **20 41 26.2** | **-0.4** |
| JAR | | | | *e*S | | **Sn** | **20 41 41.0** | **-1.0** |
| **JBT2** | **Biratori 2** | **1.35** | **301** | P | | **Pn** | **20 41 27.4** | **-1.0** |
| **JFR** | **Furan** | **1.46** | **318** | P | | **Pn** | **20 41 29.6** | **-0.3** |
| **JNK** | **Nakash** | **1.61** | **21** | ⇑P | | **Pn** | **20 41 31.5** | **-0.4** |
| JNK | | | | *e*S | | **Sn** | **20 41 49.7** | **-2.0** |
| **YUK** | **Yuzh-Kuril'sk** | **2.41** | **35** | *i* P | | **Pn** | **20 41 44.3** | **+1.4** |
| YUK | | | | AMB | | AMB | 20 41 44.9 | |
| | 17nm,0.4s | | | | | | | |
| YUK | | | | AMB | | AMB | 20 41 44.9 | |
| | 19nm,0.4s | | | | | | | |
| YUK | | | | AMB | | AMB | 20 41 44.9 | |
| | 40nm,0.4s | | | | | | | |
| YUK | | | | *i* S | | **Sn** | **20 42 10.5** | **-0.9** |
| YUK | | | | A | | A | 20 42 11.3 | |
| | 72nm,0.5s | | | | | | | |
| YUK | | | | A | | A | 20 42 11.3 | |
| | 144nm,0.5s | | | | | | | |
| **SHO** | **Shikotan** | **2.78** | **49** | *eP* | | **Pn** | **20 41 48.7** | **+0.7** |
| SHO | | | | AMB | | AMB | 20 41 49.2 | |
| | 41nm,0.6s | | | | | | | |
| SHO | | | | *i* S | | **Sn** | **20 42 17.9** | **-2.5** |
| SHO | | | | A | | A | 20 42 21.0 | |
| | 76nm,0.3s | | | | | | | |
| SHO | | | | A | | A | 20 42 21.0 | |
| | 41nm,0.3s | | | | | | | |
| **KUR** | **Kuril'sk** | **4.25** | **41** | *i* P | | **Pn** | **20 42 10.2** | **+2.0** |
| KUR | | | | AMB | | AMB | 20 42 14.1 | |
| | 209nm,4.0s | | | | | | | |
| KUR | | | | *i* S | | **Sn** | **20 42 55.0** | **-1.7** |
| KUR | | | | A | | A | 20 43 06.2 | |
| | 200nm,2.0s | | | | | | | |
| KUR | | | | A | | A | 20 43 

baz=23,slow=76,SNR=11
**MCMT McKenzie Canyo 38.41 77** *e*P **P 20 52 54.3 +0.6**
1.8nm,0.5s
**MJAR Matsushiro Arr 38.61 267** LR LR 21 08 06.0
comp=Z,17nm,21.0s,baz=195,slow=35
**NVAR Mina Array Bea 38.73 89** P **P 20 52 57.6 +1.2**
2.6nm,1.1s,baz=298,slow=7.9,SNR=6.8
**SONM Songino Array 50.58 300** P **P 20 54 29.7 -1.0**
0.3nm,0.5s,baz=57,slow=8.0,SNR=3.7
SONM LR LR 21 15 54.0
comp=Z,25nm,19.8s,baz=61,slow=36
**TXAR Lajitas Array 53.83 87** P **P 20 54 55.3 +0.2**
0.9nm,0.6s,baz=295,slow=5.6,SNR=7.3
**ARCES ARCESS Array B 58.20 353** P P 20 55 23.3 -2.4
5.3nm,1.1s,baz=15,slow=7.5,SNR=3.6
**MKAR Makanchi Array 63.30 313** P **P 20 56 00.0 -0.7**
0.1nm,0.4s,baz=42,slow=6.8,SNR=3.6
**NOA NORSAR Array B 67.33 359** P P 20 56 24.8 -1.8
0.4nm,0.6s,baz=4.4,slow=4.5,SNR=2.4
**CMAR Chiang Mai Arr 75.66 282** P **P 20 57 16.6 -0.8**
0.9nm,0.6s,baz=29,slow=6.4,SNR=7.1
**WRA Warramunga Arr 85.92 230** P P 20 58 10.2 -1.9
0.3nm,0.8s,baz=38,slow=6.1,SNR=2.3
**ESDC Sonseca Array 88.05 10** LR LR 21 41 17.5
comp=Z,24nm,18.0s,baz=290,slow=38
**ASAR Alice Springs 89.32 229** P **P 20 58 27.9 -0.5**
0.8nm,0.5s,baz=26,slow=4.7,SNR=17

**MEX 31 20:49:11.3±0.4, 15°27N×93°19W, h85km±10km, MD3.8, Near coast of Chiapas**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PCIG** | | **0.43** | **356** | *e*P | Pn | 20 49 23.7 | -1.3 |
| PCIG | | | | *e*S | Sn | 20 49 33.2 | -1.9 |
| **CCIG** | **Comitan** | **1.43** | **45** | *i* P | Pn | 20 49 34.1 | -2.0 |
| CCIG | | | | *i* S | Sn | 20 49 53.2 | -1.7 |

**IDC 31 21:09:25.6±3.5, 6°15S×150°12E, h0km, mb3.5/2, mb1 3.8/3, mb1mx3.5/24, mbtmp3.7/3, ML1.5/1, Error ellipse: s-maj=139.0km s-min=38.3km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.37** | **222** | Pn | Pn | 21 10 34.5 | +1.3 |
| | 1.9nm,0.3s,baz=74,slow=3.9,SNR=3.6 | | | | | | |
| PMG | | | | Sn | Sn | 21 11 23.5 | -1.4 |
| | 1.9nm,0.3s,baz=6.9,slow=18,SNR=6.9 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.57** | **227** | P | P | 21 14 06.3 | +0.1 |
| | 3.4nm,0.7s,baz=52,slow=11,SNR=11 | | | | | | |
| **ASAR** | **Alice Springs** | **23.38** | **220** | P | P | 21 14 35.7 | -0.5 |
| | 0.6nm,0.6s,baz=57,slow=9.1,SNR=7.6 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.13** | **285** | PKPbc | PKPbc | 21 29 13.9 | -0.6 |
| | 0.4nm,0.8s,baz=52,slow=2.0,SNR=4.2 | | | | | | |

*ATH **31** 21:29:47.5, 36°00N×23°82E, h35km±1km, MD3.5/40*
*ISCJB **31** 21:29:48.1±0.4, 36°02N±0°02×23°81E±0°03, h26km±4km, Error ellipse: s-maj=4.9km s-min=2.5km az=141.4*
*CSEM **31** 21:29:48.0±0.2, 36°04N×23°84E, h15km, ML2.9, Error ellipse: s-maj=4.6km s-min=3.0km az=40.0*
*THE **31** 21:29:49.0, 35°99N×23°79E, h24km±3km, ML2.9/4, Error ellipse: s-maj=4.0km s-min=0.6km az=223.0*
**ISC 31 21:29:48.5±1.1, 36°03N±0°03×23°83E±0°02, h22km±13km, n133, σ0°88/179, Southern Greece**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **ANKY** | **Antikythira Is** | **0.46** | **250** | *e*PB | **Pb** | **21 29 58.1** | **+0.3** |
| ANKY | | | | *e*SB | **Sb** | **21 30 03.8** | **-0.4** |
| **ANKY** | **Antikythira Is** | **0.46** | **250** | P | **Pb** | **21 29 57.8** | **0.0** |
| ANKY | | | | S | **Sb** | **21 30 03.8** | **-0.4** |
| **ANKY** | **Antikythira Is** | **0.46** | **250** | P | **Pb** | **21 29 57.8** | **0.0** |
| **ANKY** | **Antikythira Is** | **0.46** | **250** | *e*Pb | **Pb** | **21 29 58.1** | **+0.3** |
| ANKY | | | | S | **Sb** | **21 30 03.8** | **-0.4** |
| **IMMV** | **Iera Moni Meta** | **0.58** | **167** | *e*PN | **Pb** | **21 30 00.2** | **+0.2** |
| IMMV | | | | *e*SN | **Sb** | **21 30 07.7** | **-0.1** |
| **IMMV** | **Iera Moni Meta** | **0.58** | **167** | *e*Pn | **Pb** | **21 30 00.2** | **+0.2** |
| **KYTH** | **Kithira** | **0.69** | **292** | *e*PN | **Pb** | **21 30 01.5** | **-0.4** |
| **KYTH** | **Kithira** | **0.69** | **292** | P | **Pb** | **21 30 01.4** | **-0.4** |
| **KYTH** | **Kithira** | **0.69** | **292** | P | **Pb** | **21 30 01.4** | **-0.4** |
| **VAM** | **Vamos** | **0.69** | **154** | *e*PN | **Pb** | **21 30 02.1** | **+0.3** |
| VAM | | | | *e*SN | **Sb** | **21 30 11.3** | **+0.4** |
| **VAM** | **Vamos** | **0.69** | **154** | P | **Pb** | **21 30 02.1** | **+0.3** |
| VAM | | | | S | **Sb** | **21 30 11.1** | **+0.2** |
| **VAM** | **Vamos** | **0.69** | **154** | P | **Pb** | **21 30 02.1** | **+0.3** |
| VAM | | | | S | **Sb** | **21 30 11.1** | **+0.2** |
| **MHLO** | **Agia Marina, M** | **0.81** | **35** | *e*PN | **Pn** | **21 30 04.4** | **-0.1** |
| MHLO | | | | *e*SN | **Sn** | **21 30 15.3** | **-0.5** |
| **MHLO** | **Agia Marina, M** | **0.81** | **35** | P | **Pn** | **21 30 04.3** | **+0.4** |
| **MHLO** | **Agia Marina, M** | **0.81** | **35** | *e*Pn | **Pn** | **21 30 04.4** | **-0.1** |
| MHLO | | | | *e*SN | **Sn** | **21 30 15.3** | **-0.5** |
| **VLI** | **Veliai** | **0.99** | **314** | *e*PN | **Pn** | **21 30 06.3** | **-0.8** |
| **VLI** | **Veliai** | **0.99** | **314** | P | **Pn** | **21 30 06.3** | **-0.8** |
| VLI | | | | S | **Sb** | **21 30 18.5** | **-1.2** |
| **VLI** | **Veliai** | **0.99** | **314** | P | **Pn** | **21 30 06.3** | **-0.8** |
| VLI | | | | S | **Sb** | **21 30 18.5** | **-1.2** |
| **IDI** | **Anoyia** | **1.14** | **130** | *e*PN | **Pn** | **21 30 08.4** | **-0.7** |
| IDI | | | | *e*SN | **Sn** | **21 30 23.2** | **-0.9** |
| **IDI** | **Anoyia** | **1.14** | **130** | P | **Pn** | **21 30 08.6** | **-0.5** |
| **IDI** | **Anoyia** | **1.14** | **130** | P | **Pn** | **21 30 08.6** | **-0.5** |
| **SERI** | **Serifos** | **1.25** | **25** | *e*PN | **Pn** | **21 30 10.4** | **-0.2** |
| SERI | | | | *e*SN | **Sn** | **21 30 26.4** | **-0.4** |
| **SERI** | **Serifos** | **1.25** | **25** | *e*Pn | **Pn** | **21 30 10.4** | **-0.2** |
| SERI | | | | *e*Sn | **Sn** | **21 30 26.4** | **-0.4** |
| **SIVA** | **Sivas** | **1.29** | **141** | *e*PN | **Pn** | **21 30 10.5** | **-0.6** |
| SIVA | | | | *e*SN | **Sn** | **21 30 26.5** | **-1.2** |
| **SIVA** | **Sivas** | **1.29** | **141** | P | **Pn** | **21 30 10.5** | **-0.6** |
| **SIVA** | **Sivas** | **1.29** | **141** | P | **Pn** | **21 30 10.5** | **-0.6** |
| **THR5** | **Thira Island,** | **1.29** | **72** | P | **Pb** | **21 30 11.9** | **-0.2** |
| **THR5** | **Thira Island,** | **1.29** | **72** | P | **Pb** | **21 30 11.9** | **-0.2** |
| **THR6** | **Thira Island,** | **1.31** | **75** | P | **Pb** | **21 30 12.6** | **+0.2** |
| **THR6** | **Thira Island,** | **1.31** | **75** | P | **Pb** | **21 30 12.6** | **+0.2** |
| **THR3** | **Thira Island,** | **1.33** | **73** | P | **Pb** | **21 30 12.6** | **-0.1** |
| **THR3** | **Thira Island,** | **1.33** | **73** | P | **Pb** | **21 30 12.6** | **-0.1** |
| **SANT** | **Santorini** | **1.36** | **75** | *e*PN | **Pn** | **21 30 12.8** | **+0.5** |
| SANT | | | | *e*SN | **Sn** | **21 30 30.0** | **+0.4** |
| **SANT** | **Santorini** | **1.36** | **75** | P | **Pn** | **21 30 12.7** | **+0.5** |
| SANT | | | | S | **Sn** | **21 30 30.0** | **+0.4** |
| **SANT** | **Santorini** | **1.36** | **75** | P | **Pn** | **21 30 12.7** | **+0.5** |
| SANT | | | | S | **Sn** | **21 30 30.0** | **+0.4** |
| **THR1** | **Thera Island** | **1.36** | **75** | P | **Pn** | **21 30 12.8** | **+0.6** |
| **THR1** | **Thera Island** | **1.36** | **75** | P | **Pn** | **21 30 12.8** | **+0.6** |
| **DYR** | **Agios Nikonas** | **1.41** | **302** | *e*PN | **Pn** | **21 30 13.5** | **+0.7** |
| **DYR** | **Agios Nikonas** | **1.41** | **302** | P | **Pn** | **21 30 13.5** | **+0.7** |
| **DYR** | **Agios Nikonas** | **1.41** | **302** | P | **Pn** | **21 30 13.5** | **+0.7** |
| **KRND** | **KRANIDI** | **1.46** | **338** | *e*PN | **Pn** | **21 30 14.0** | **+0.5** |
| **KRND** | **KRANIDI** | **1.46** | **338** | P | **Pn** | **21 30 13.6** | **+0.1** |
| **KRND** | **KRANIDI** | **1.46** | **338** | P | **Pn** | **21 30 13.6** | **+0.1** |
| **KRND** | **KRANIDI** | **1.46** | **338** | *e*Pn | **Pn** | **21 30 14.0** | **+0.5** |
| **DID** | **Didima** | **1.55** | **342** | *e*PB | **Pn** | **21 30 14.7** | **-0.1** |
| DID | | | | *e*SN | **Sn** | **21 30 33.9** | **-0.3** |
| **DID** | **Didima** | **1.55** | **342** | P | **Pn** | **21 30 14.6** | **-0.2** |
| **DID** | **Didima** | **1.55** | **342** | P | **Pn** | **21 30 14.6** | **-0.2** |
| DID | | | | *e*Sn | **Sn** | **21 30 33.9** | **-0.3** |
| **LAST** | **Lasithi** | **1.60** | **122** | *e*PN | **Pn** | **21 30 15.3** | **-0.2** |
| LAST | | | | *e*SN | **Sn** | **21 30 33.9** | **-1.6** |
| **LAST** | **Lasithi** | **1.60** | **122** | P | **Pn** | **21 30 15.3** | **-0.2** |
| **LAST** | **Lasithi** | **1.60** | **122** | P | **Pn** | **21 30 15.3** | **-0.2** |
| **NPS** | **Neapolis** | **1.64** | **117** | *e*PN | **Pn** | **21 30 14.1** | **-1.9** |
| NPS | | | | *e*SN | **Sn** | **21 30 36.4** | **-0.1** |
| **NPS** | **Neapolis** | **1.64** | **117** | *e*Pn | **Pn** | **21 30 14.1** | **-1.9** |
| **APE** | **Apeiranthos** | **1.72** | **52** | *e*PN | **Pn** | **21 30 17.2** | **+0.1** |
| APE | | | | *e*SN | **Sn** | **21 30 37.5** | **-1.0** |
| **APE** | **Apeiranthos** | **1.72** | **52** | P | **Pn** | **21 30 17.5** | **+0.4** |
| **APE** | **Apeiranthos** | **1.72** | **52** | *e*Pn | **Pn** | **21 30 17.2** | **+0.1** |
| **APE** | **Apeiranthos** | **1.72** | **52** | P | **Pn** | **21 30 17.5** | **+0.4** |
| APE | | | | *e*Sn | **Sn** | **21 30 37.5** | **-1.0** |
| **NAIG** | **Nisos Aigina** | **1.75** | **351** | *e*PN | **Pn** | **21 30 17.5** | **0.0** |
| **NAIG** | **Nisos Aigina** | **1.75** | **351** | *e*Pn | **Pn** | **21 30 17.5** | **0.0** |
| **VLX** | **Vlachokerasia** | **1.77** | **319** | *e*PB | **Pn** | **21 30 18.6** | **+0.7** |
| **VLX** | **Vlachokerasia** | **1.77** | **319** | P | **Pn** | **21 30 18.2** | **+0.3** |
| **VLX** | **Vlachokerasia** | **1.77** | **319** | P | **Pn** | **21 30 18.2** | **+0.3** |
| **VLX** | **Vlachokerasia** | **1.77** | **319** | *e*Pb | **Pn** | **21 30 18.6** | **+0.7** |
| **VLY** | **Voula,Athens** | **1.82** | **359** | *e*PN | **Pn** | **21 30 18.8** | **+0.3** |
| VLY | | | | *e*SN | **Sn** | **21 30 40.0** | **-0.9** |
| **VLY** | **Voula,Athens** | **1.82** | **359** | *e*Pn | **Pn** | **21 30 18.8** | **+0.3** |
| VLY | | | | *e*Sn | **Sn** | **21 30 40.0** | **-0.9** |
| **PYL** | **PYLOS** | **1.89** | **298** | *e*PB | **Pn** | **21 30 20.3** | **+0.9** |
| **PYL** | **PYLOS** | **1.89** | **298** | *e*Pb | **Pn** | **21 30 20.3** | **+0.9** |
| **ITM** | **Ithomi** | **1.91** | **308** | *e*PB | **Pb** | **21 30 21.8** | **-0.9** |
| **ITM** | **Ithomi** | **1.91** | **308** | *e*Pb | **Pb** | **21 30 21.8** | **-0.9** |
| **PTL** | **Penteli** | **2.02** | **1** | *e*PN | **Pn** | **21 30 21.5** | **+0.3** |
| PTL | | | | *e*SN | **Sn** | **21 30 44.5** | **-1.2** |
| **PTL** | **Penteli** | **2.02** | **1** | *e*Pn | **Pn** | **21 30 21.5** | **+0.3** |
| PTL | | | | *e*Sn | **Sn** | **21 30 44.5** | **-1.2** |
| **LTK** | **Loutraki** | **2.11** | **341** | *e*PN | **Pn** | **21 30 22.9** | **+0.5** |
| **LTK** | **Loutraki** | **2.11** | **341** | P | **Pn** | **21 30 22.7** | **+0.3** |
| **LTK** | **Loutraki** | **2.11** | **341** | P | **Pn** | **21 30 22.7** | **+0.3** |
| **ZKR** | **Zakros** | **2.15** | **114** | *e*PB | **Pn** | **21 30 23.6** | **+0.6** |
| **ZKR** | **Zakros** | **2.15** | **114** | *e*Pb | **Pn** | **21 30 23.6** | **+0.6** |
| **VILL** | **Villia** | **2.17** | **349** | *e*Pn | **Pn** | **21 30 23.6** | **+0.3** |
| **THAL** | **Thalero** | **2.21** | **335** | *e*PB | **Pn** | **21 30 25.2** | **+1.4** |
| THAL | | | | *e*SN | **Sn** | **21 30 49.8** | **-0.6** |
| **THAL** | **Thalero** | **2.21** | **335** | *e*Pb | **Pn** | **21 30 25.2** | **+1.4** |
| THAL | | | | *e*Sn | **Sn** | **21 30 49.8** | **-0.6** |
| **VIL2** | **Platees** | **2.23** | **349** | *e*PN | **Pn** | **21 30 23.6** | **-0.4** |
| **GUR** | **Goura** | **2.25** | **328** | *e*PN | **Pn** | **21 30 24.7** | **+0.3** |
| GUR | | | | *e*SN | **Sn** | **21 30 51.3** | **-0.2** |
| **GUR** | **Goura** | **2.25** | **328** | P | **Pn** | **21 30 24.4** | **0.0** |
| GUR | | | | S | **Sn** | **21 30 51.6** | **+0.1** |
| **GUR** | **Goura** | **2.25** | **328** | P | **Pn** | **21 30 24.4** | **0.0** |
| **GUR** | **Goura** | **2.25** | **328** | *e*Pn | **Pn** | **21 30 24.7** | **+0.3** |
| GUR | | | | *e*Sn | **Sn** | **21 30 51.3** | **-0.2** |
| GUR | | | | S | **Sn** | **21 30 51.6** | **+0.1** |
| **EREA** | **Eretria** | **2.39** | **2** | *e*PN | **Pn** | **21 30 26.9** | **+0.6** |
| EREA | | | | *e*SN | **Sn** | **21 30 54.0** | **-0.9** |
| **EREA** | **Eretria** | **2.39** | **2** | *e*Pn | **Pn** | **21 30 26.9** | **+0.6** |
| EREA | | | | *e*Sn | **Sn** | **21 30 54.0** | **-0.9** |
| **KLV** | **Kalavryta, Ach** | **2.42** | **327** | *e*PN | **Pn** | **21 30 27.5** | **+0.8** |
| KLV | | | | *e*SN | **Sn** | **21 30 55.4** | **-0.3** |
| **KLV** | **Kalavryta, Ach** | **2.42** | **327** | *e*Pn | **Pn** | **21 30 27.5** | **+0.8** |
| KLV | | | | *e*Sn | **Sn** | **21 30 55.4** | **-0.3** |
| **DESF** | **Desfina** | **2.59** | **337** | *e*PN | **Pn** | **21 30 30.5** | **+1.3** |
| **DESF** | **Desfina** | **2.59** | **337** | *e*Pn | **Pn** | **21 30 30.5** | **+1.3** |
| **DSF** | **Desfina** | **2.59** | **337** | *e*PN | **Pn** | **21 30 30.1** | **+0.9** |
| **DSF** | **Desfina** | **2.59** | **337** | *e*Pn | **Pn** | **21 30 30.1** | **+0.9** |
| **LAKA** | **Lakka** | **2.66** | **327** | *e*PN | **Pn** | **21 30 30.7** | **+0.7** |
| LAKA | | | | *e*SN | **Sn** | **21 31 01.0** | **-0.5** |
| **LAKA** | **Lakka** | **2.66** | **327** | *e*Pn | **Pn** | **21 30 30.7** | **+0.7** |
| LAKA | | | | *e*Sn | **Sn** | **21 31 01.0** | **-0.5** |
| **LKR** | **Lokris** | **2.70** | **346** | *e*PN | **Pn** | **21 30 31.2** | **+0.7** |
| **LKR** | **Lokris** | **2.70** | **346** | *e*Pn | **Pn** | **21 30 31.2** | **+0.7** |
| **KALE** | **Kalithea** | **2.72** | **331** | *e*PN | **Pn** | **21 30 32.0** | **+1.2** |
| **KALE** | **Kalithea** | **2.72** | **331** | *e*Pn | **Pn** | **21 30 32.0** | **+1.2** |
| **KARP** | **Karpathos** | **2.75** | **99** | *e*PN | **Pn** | **21 30 32.1** | **+0.8** |
| **KARP** | **Karpathos** | **2.75** | **99** | *e*Pn | **Pn** | **21 30 32.1** | **+0.8** |
| **EFP** | **Efpalio** | **2.84** | **328** | *e*PN | **Pn** | **21 30 33.8** | **+1.3** |
| EFP | | | | *e*SN | **Sn** | **21 31 06.4** | **+0.4** |
| **EFP** | **Efpalio** | **2.84** | **328** | *e*Pn | **Pn** | **21 30 33.8** | **+1.3** |
| EFP | | | | *e*Sn | **Sn** | **21 31 06.4** | **+0.4** |
| **AXAR** | **Agios Charalam** | **2.89** | **342** | *e*PN | **Pn** | **21 30 33.3** | **+0.2** |
| **AXAR** | **Agios Charalam** | **2.89** | **342** | *e*Pn | **Pn** | **21 30 33.3** | **+0.2** |
| **SMIA** | **Simia** | **2.89** | **350** | *e*PN | **Pn** | **21 30 33.8** | **+0.6** |
| **SMIA** | **Simia** | **2.89** | **350** | *e*Pn | **Pn** | **21 30 33.8** | **+0.6** |
| **AOS** | **Alonnisos** | **3.14** | **1** | *e*PN | **Pn** | **21 30 37.0** | **+0.5** |
| **AOS** | **Alonnisos** | **3.14** | **1** | *e*Pn | **Pn** | **21 30 37.0** | **+0.5** |
| **SKIA** | **Skiathos** | **3.15** | **355** | *e*PN | **Pn** | **21 30 37.3** | **+0.6** |
| **SKIA** | **Skiathos** | **3.15** | **355** | *e*Pn | **Pn** | **21 30 37.3** | **+0.6** |
| **AGG** | **Agios Georgios** | **3.22** | **339** | *e*PN | **Pn** | **21 30 39.1** | **+1.4** |
| AGG | | | | *e*SN | **Sn** | **21 31 15.6** | **+0.3** |
| **AGG** | **Agios Georgios** | **3.22** | **339** | *e*Pn | **Pn** | **21 30 39.1** | **+1.4** |
| AGG | | | | *e*Sn | **Sn** | **21 31 15.6** | **+0.3** |
| **MAKR** | **Makrakomi, Fth** | **3.27** | **336** | *e*PN | **Pn** | **21 30 39.7** | **+1.3** |
| **MAKR** | **Makrakomi, Fth** | **3.27** | **336** | *e*Pn | **Pn** | **21 30 39.7** | **+1.3** |
| **NEO** | **Neokhori** | **3.31** | **352** | *e*PN | **Pn** | **21 30 38.9** | **0.0** |
| **NEO** | **Neokhori** | **3.31** | **352** | *e*Pn | **Pn** | **21 30 38.9** | **0.0** |
| **PDO** | **Prodromos** | **3.32** | **321** | *e*PN | **Pn** | **21 30 41.2** | **+2.1** |
| **PDO** | **Prodromos** | **3.32** | **321** | *e*Pn | **Pn** | **21 30 41.2** | **+2.1** |
| **XOR** | **Xorichti** | **3.37** | **352** | *e*PN | **Pn** | **21 30 41.0** | **+1.2** |
| **XOR** | **Xorichti** | **3.37** | **352** | *e*Pn | **Pn** | **21 30 41.0** | **+1.2** |
| **ARG** | **Arkhangelos** | **3.49** | **86** | *e*PN | **Pn** | **21 30 43.3** | **+2.0** |
| **ARG** | **Arkhangelos** | **3.49** | **86** | *e*Pn | **Pn** | **21 30 43.3** | **+2.0** |
| **LKD2** | **Lefkada island** | **3.74** | **318** | *e*PN | **Pn** | **21 30 47.2** | **+2.4** |
| **LKD2** | **Lefkada island** | **3.74** | **318** | *e*Pn | **Pn** | **21 30 47.2** | **+2.4** |
| **DSL** | **Palaion Diasel** | **3.78** | **326** | *e*PN | **Pn** | **21 30 48.3** | **+2.8** |
| DSL | | | | *e*SN | **Sn** | **21 31 29.4** | **+0.1** |
| **DSL** | **Palaion Diasel** | **3.78** | **326** | *e*Pn | **Pn** | **21 30 48.3** | **+2.8** |
| DSL | | | | *e*Sn | **Sn** | **21 31 29.4** | **+0.1** |
| **PAIG** | **Paliouri** | **3.90** | **358** | *e*PN | **Pn** | **21 30 47.5** | **+0.6** |
| **PAIG** | **Paliouri** | **3.90** | **358** | *e*Pn | **Pn** | **21 30 47.5** | **+0.6** |
| **OUR** | **Ouranopolis** | **4.30** | **2** | *e*PN | **Pn** | **21 30 53.0** | **+0.5** |
| **OUR** | **Ouranopolis** | **4.30** | **2** | *e*Pn | **Pn** | **21 30 53.0** | **+0.5** |
| **KEK** | **Kerkira** | **4.87** | **320** | *e*PN | **Pn** | **21 31 00.3** | **0.0** |
| **KEK** | **Kerkira** | **4.87** | **320** | *e*Pn | **Pn** | **21 31 00.3** | **0.0** |
| **NEST** | **Nestorio** | **4.89** | **334** | *e*PN | **Pn** | **21 31 03.6** | **+2.8** |
| **NEST** | **Nestorio** | **4.89** | **334** | *e*Pn | **Pn** | **21 31 03.6** | **+2.8** |

**IDC 31 21:31:48.1±3.1, 6°11S×150°15E, h0km, mb3.9/2, mb1 4.2/3, mb1mx3.6/29, mbtmp4.0/3, ML1.9/1, MS2.7/1, Ms1 2.7/1, ms1mx2.4/21, Error ellipse: s-maj=125.5km s-min=34.4km az=121.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.42** | **222** | Pn | Pn | 21 32 58.4 | +1.9 |
| | 4.6nm,0.3s,baz=50,slow=7.6,SNR=9.4 | | | | | | |
| PMG | | | | Sn | Sn | 21 33 48.6 | -0.1 |
| | 10nm,0.3s,baz=148,slow=6.4,SNR=9.7 | | | | | | |
| **HNR** | **Honiara** | **10.26** | **109** | LR | LR | 21 37 21.2 | |
| | comp=Z,45nm,21.1s,baz=272,slow=32 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.62** | **227** | P | P | 21 36 29.1 | -0.2 |
| | 5.9nm,0.6s,baz=52,slow=10,SNR=28 | | | | | | |
| **ASAR** | **Alice Springs** | **23.43** | **220** | P | P | 21 36 58.4 | -0.9 |
| | 1.4nm,0.6s,baz=56,slow=9.3,SNR=14 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.14** | **285** | PKPbc | PKPbc | 21 51 36.7 | -0.4 |
| | 0.8nm,0.6s,baz=52,slow=3.3,SNR=20 | | | | | | |

**KRSC 31 21:33:12.6±1.9, 50°41N×157°85E, h104km±30km, ML3.6, Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.14** | **284** | *e*P | Pn | 21 33 36.3 | +1.5 |
| SKR | | | | *e*S | Sn | 21 33 52.3 | +0.7 |
| **RUS** | **Russkaya** | **2.06** | **11** | *e*P | Pn | 21 33 48.4 | +2.3 |
| RUS | | | | *e*S | Sn | 21 34 13.8 | +2.1 |
| **SMAR** | **Somma** | **2.91** | **11** | *e*P | Pn | 21 33 59.1 | +1.6 |
| **SDLR** | **Sedlovina** | **2.94** | **12** | *e*P | Pn | 21 33 59.0 | +1.2 |
| **KRX** | **Arik** | **2.99** | **9** | P | Pn | 21 33 59.2 | +0.7 |
| **SPN** | **Mys Shipunski** | **3.01** | **26** | *e*P | Pn | 21 34 01.5 | +3.0 |
| **GNL** | **Ganaly** | **3.29** | **1** | P | Pn | 21 34 06.1 | +3.7 |
| **MKZ** | **Mys Kozlova** | **4.78** | **28** | *e*P | Pn | 21 34 24.8 | +2.6 |
| **KBTR** | **Krutoberegovo** | **6.52** | **25** | P | Pn | 21 34 47.5 | +1.6 |

**IDC 31 21:34:20.2±3.9, 6°11S×150°02E, h0km, mb3.3/2, mb1 3.7/2, mb1mx3.3/28, mbtmp3.4/2, Error ellipse: s-maj=148.3km s-min=48.4km az=116.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **20.52** | **226** | P | P | 21 38 59.9 | -0.4 |
| | 1.4nm,0.6s,baz=52,slow=11,SNR=5.6 | | | | | | |
| **ASAR** | **Alice Springs** | **23.34** | **220** | P | P | 21 39 30.3 | -0.1 |
| | 0.2nm,0.3s,baz=56,slow=8.7,SNR=3.3 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.02** | **285** | PKPbc | PKPbc | 21 54 08.4 | -0.5 |
| | 0.3nm,0.5s,baz=73,slow=2.4,SNR=6.4 | | | | | | |

*ISCJB **31** 21:40:35.3±1.1, 52°2S±0°1×16°5E±0°4, h10km, mb3.8/6, MS3.1/8, Error ellipse: s-maj=38.9km s-min=21.1km az=173.8*
*IDC **31** 21:40:35.8±1.1, 52°19S×16°81E, h0km, mb3.8/6, mb1 3.9/6, mb1mx3.6/26, mbtmp3.8/6, MS3.2/8, Ms1 3.2/8, ms1mx3.0/27, Error ellipse: s-maj=46.4km s-min=24.8km az=76.0*
**ISC 31 21:40:37.2±1.1, 52°2S±0°2×16°7E±0°3, h10km, n18, σ0°86/7, mb3.8/6, MS3.4/8, Southwest of Africa**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SUR** | **Sutherland** | **20.03** | **10** | LR | LR | 21 51 06.8 | |
| | comp=Z,11nm,19.4s,baz=162,slow=32 | | | | | | |
| **SNAA** | **Sanae** | **21.38** | **197** | P | **P** | **21 45 24.5** | **+0.1** |
| | 4.1nm,0.9s,baz=32,slow=11,SNR=26 | | | | | | |
| SNAA | | | | LR | LR | 21 51 37.3 | |
| | comp=Z,34nm,19.5s,baz=24,slow=31 | | | | | | |
| **BOSA** | **Boshof** | **24.41** | **19** | LR | LR | 21 54 02.4 | |
| | comp=Z,113nm,19.4s,baz=182,slow=33 | | | | | | |
| **MAW** | **Mawson** | **26.98** | **142** | P | **P** | **21 46 19.7** | **+1.1** |
| | 1.2nm,0.7s,baz=302,slow=9.5,SNR=4.8 | | | | | | |
| MAW | | | | LR | LR | 21 54 42.0 | |
| | comp=Z,50nm,21.4s,baz=242,slow=31 | | | | | | |
| **LBTB** | **Lobatse** | **27.98** | **17** | LR | LR | 21 56 19.1 | |
| | comp=Z,106nm,18.3s,baz=188,slow=34 | | | | | | |
| **QSPA** | **South Pole Qui** | **38.04** | **180** | P | **P** | **21 47 54.7** | **-0.6** |
| | 0.3nm,0.3s,baz=253,slow=8.8,SNR=4.1 | | | | | | |
| **VNDA** | **Vanda** | **48.75** | **170** | P | **P** | **21 49 21.8** | **+0.4** |
| | 0.7nm,0.8s,baz=217,slow=4.9,SNR=3.8 | | | | | | |
| VNDA | | | | LR | LR | 22 08 34.3 | |
| | comp=Z,70nm,21.2s,baz=198,slow=34 | | | | | | |
| **H10S2** | **ASCENSION HYDR** | **50.10** | **318** | T | T | 22 44 04.4 | |
| | baz=155,slow=75,SNR=12 | | | | | | |
| **H10S3** | **ASCENSION HYDR** | **50.11** | **318** | T | T | 22 44 05.4 | |
| | baz=155,slow=75,SNR=12 | | | | | | |
| **H10S1** | **ASCENSION HYDR** | **50.11** | **318** | T | T | 22 44 05.8 | |
| | baz=155,slow=75,SNR=13 | | | | | | |
| **DBIC** | **Dimbokro** | **61.45** | **335** | LR | LR | 22 11 16.0 | |
| | comp=Z,30nm,21.0s,baz=122,slow=30 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **66.35** | **344** | P | **P** | **21 51 26.1** | **+0.3** |
| | 0.8nm,0.9s,baz=189,slow=4.4,SNR=4.4 | | | | | | |
| **H01W2** | **Cape Leeuwin H** | **67.48** | **118** | T | T | 23 05 20.4 | |
| | baz=220,slow=75,SNR=8.4 | | | | | | |
| **H01W3** | **Cape Leeuwin H** | **67.49** | **118** | T | T | 23 05 24.2 | |
| | baz=220,slow=75,SNR=10 | | | | | | |
| **H01W1** | **Cape Leeuwin H** | **67.49** | **118** | T | T | 23 05 25.4 | |
| | baz=220,slow=75,SNR=9.9 | | | | | | |
| **ASAR** | **Alice Springs** | **86.78** | **125** | P | **P** | **21 53 20.6** | **-1.0** |
| | 0.8nm,0.5s,baz=205,slow=4.2,SNR=11 | | | | | | |
| **BRTR** | **Keskin Array B** | **92.73** | **13** | LR | LR | 22 37 22.4 | |
| | comp=Z,11nm,18.4s,baz=42,slow=37 | | | | | | |
| **NVAR** | **Mina Array Bea** | **146.04** | **264** | PKPbc | **PKPab** | **22 00 17.6** | **+0.1** |
| | 2.8nm,0.8s,baz=143,slow=4.2,SNR=20 | | | | | | |

*ISCJB **31** 21:43:00.3±1.5, 18°49S±0°07×71°5W±0°1, h41km, mb3.8/2, Error ellipse: s-maj=13.7km s-min=10.1km az=177.8*
*GUC **31** 21:43:02.8±0.4, 18°49S×71°17W, h36km±4km, ML4.1*
*IDC **31** 21:43:21.5±11.0, 17°43S×70°45W, h167km±59km, mb3.5/2, mb1 3.3/3, mb1mx3.0/22, mbtmp3.8/3, Error ellipse: s-maj=230.9km s-min=48.4km az=21.0*
**ISC 31 21:43:02.1±1.7, 18°45S±0°09×71°4W±0°1, h41km, n9, σ0°68/13, 1C, Off coast of northern Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PB13** | **IPOC Station P** | **1.77** | **87** | *e*P | **Pn** | **21 43 31.1** | **+0.3** |
| PB13 | | | | *e*S | **Sn** | **21 43 53.1** | **+0.5** |
| PB13 | | | | AML | AML | 21 44 02.4 | |
| | comp=E,9μm,0.6s | | | | | | |
| **MNMC** | **Minimini** | **1.81** | **112** | *e*P | **Pn** | **21 43 31.0** | **0.0** |
| MNMC | | | | *e*S | **Sn** | **21 43 52.7** | **-0.2** |
| MNMC | | | | AML | AML | 21 44 03.3 | |
| | comp=E,2μm,0.6s | | | | | | |
| **PB11** | **IPOC Station P** | **2.08** | **129** | ↑*i* P | **Pn** | **21 43 35.0** | **+0.4** |
| PB11 | | | | *i* S | **Sn** | **21 43 59.6** | **+0.2** |
| PB11 | | | | AML | AML | 21 44 03.4 | |
| | comp=N,3μm,0.4s | | | | | | |
| **PB01** | **IPOC Station P** | **3.13** | **146** | *e*P | **Pn** | **21 43 48.7** | **-0.3** |
| PB01 | | | | *e*S | **Sn** | **21 44 24.4** | **-0.8** |
| PB01 | | | | AML | AML | 21 44 26.4 | |
| | comp=N,355n

**ISC 31 21:52:30.8±0.8, 45°16N±0°01×6°56E±0°01, h12km±6km, n117, σ0°79/182, 7C-1D, France**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNI** | **Bardonecchia** | **0.14** | **142** | ⇑*i*Pg | **Pg** | **21 52 34.3** | **+0.1** |
| | 2µm,0.3s | | | | | | |
| **BNI** | **Bardonecchia** | **0.14** | **142** | ⇑*i*Pg | **Pg** | **21 52 34.3** | **+0.1** |
| | 2µm,0.3s | | | | | | |
| BNI | | | | Sg | **Sg** | **21 52 36.3** | **-0.4** |
| | 498nm,0.4s | | | | | | |
| **RRL** | **Rocca Remolon** | **0.29** | **145** | Pg | **Pg** | **21 52 36.9** | **+0.1** |
| RRL | | | | S | **Sg** | **21 52 40.9** | **+0.1** |
| **GDM** | **Grand'Maison** | **0.32** | **278** | Pg | **Pg** | **21 52 37.3** | **0.0** |
| GDM | | | | Sg | **Sg** | **21 52 41.6** | **-0.1** |
| **GDM** | **Grand'Maison** | **0.32** | **278** | Pg | **Pg** | **21 52 37.3** | **0.0** |
| GDM | | | | Sg | **Sg** | **21 52 41.6** | **-0.1** |
| **LPG** | **La Plagne** | **0.37** | **22** | *e*Pg | **Pb** | **21 52 39.2** | **-0.2** |
| LPG | | | | *e*Sg | **Sb** | **21 52 44.7** | **-0.5** |
| | 140nm,0.3s | | | | | | |
| **LPG** | **La Plagne** | **0.37** | **22** | *e*Pg | **Pb** | **21 52 39.2** | **-0.2** |
| LPG | | | | *e*Sg | **Sb** | **21 52 44.7** | **-0.5** |
| | 70nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.38** | **19** | *e*Pg | **Pb** | **21 52 39.3** | **-0.3** |
| LPL | | | | *e*Sg | **Sb** | **21 52 45.4** | **-0.1** |
| | 135nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.38** | **19** | *e*Pg | **Pb** | **21 52 39.3** | **-0.3** |
| LPL | | | | *e*Sg | **Sb** | **21 52 45.4** | **-0.1** |
| | 67nm,0.3s | | | | | | |
| **MBDF** | **Montbardon** | **0.46** | **161** | *e*Pg | **Pg** | **21 52 39.4** | **-0.4** |
| MBDF | | | | *e*Sg | **Sg** | **21 52 44.5** | **-1.4** |
| | 46nm,0.2s | | | | | | |
| **MBDF** | **Montbardon** | **0.46** | **161** | *e*Pg | **Pg** | **21 52 39.4** | **-0.4** |
| MBDF | | | | *e*Sg | **Sg** | **21 52 44.5** | **-1.4** |
| | 23nm,0.2s | | | | | | |
| **RSP** | **Reno Superiore** | **0.50** | **91** | P | **Pb** | **21 52 41.4** | **-0.2** |
| RSP | | | | S | **Sb** | **21 52 48.3** | **-0.6** |
| RSP | | | | Sg | **Sg** | **21 52 48.7** | **+1.5** |
| | 71nm,0.2s | | | | | | |
| **LSD** | **Lago del Serru** | **0.51** | **53** | ⇓*i*Pg | Pg | 21 52 36.3 | -4.4 |
| | 431nm,0.3s | | | | | | |
| **LSD** | **Lago del Serru** | **0.51** | **53** | P | **Pb** | **21 52 41.8** | **0.0** |
| LSD | | | | Sg | **Sb** | **21 52 49.4** | **+0.2** |
| **ORIF** | **Oris-en-Rattie** | **0.54** | **244** | *e*Pg | **Pg** | **21 52 41.0** | **-0.3** |
| ORIF | | | | *e*Sg | **Sg** | **21 52 47.4** | **-1.1** |
| | 129nm,0.2s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **0.54** | **244** | *e*Pg | **Pg** | **21 52 41.0** | **-0.3** |
| ORIF | | | | *e*Sg | **Sg** | **21 52 47.4** | **-1.1** |
| | 65nm,0.2s | | | | | | |
| **GRN** | **Grenoble** | **0.58** | **279** | Pg | **Pb** | **21 52 42.9** | **-0.1** |
| GRN | | | | Sg | **Sb** | **21 52 50.7** | **-0.6** |
| **GRN** | **Grenoble** | **0.58** | **279** | Pg | **Pb** | **21 52 42.9** | **-0.1** |
| GRN | | | | Sg | **Sb** | **21 52 50.7** | **-0.6** |
| **BHB** | **Bricherasio** | **0.59** | **122** | P | **Pg** | **21 52 42.5** | **+0.2** |
| **BHB** | **Bricherasio** | **0.59** | **122** | Pg | **Pb** | **21 52 42.8** | **-0.3** |
| BHB | | | | S | **Sg** | **21 52 50.3** | **+0.2** |
| **SURF** | **Saint Ours** | **0.70** | **165** | Pg | **Pg** | **21 52 43.9** | **-0.5** |
| SURF | | | | Sg | **Sb** | **21 52 54.0** | **-0.7** |
| **SURF** | **Saint Ours** | **0.70** | **165** | Pg | **Pg** | **21 52 43.9** | **-0.5** |
| SURF | | | | Sg | **Sb** | **21 52 54.0** | **-0.7** |
| **PZZ** | **Stroppo** | **0.76** | **149** | P | **Pg** | **21 52 44.9** | **-0.6** |
| PZZ | | | | Sg | **Sg** | **21 52 55.2** | **-0.3** |
| | 169nm,0.3s | | | | | | |
| **DOI** | **San Damiano** | **0.82** | **143** | ⇑*i*Pg | Pg | 21 52 41.8 | -4.8 |
| | 355nm,0.3s | | | | | | |
| **DOI** | **San Damiano** | **0.82** | **143** | Pg | **Pg** | **21 52 46.1** | **-0.5** |
| DOI | | | | Sg | **Sg** | **21 52 57.3** | **+0.1** |
| | 117nm,0.4s | | | | | | |
| **TRAV** | **Traversella** | **0.91** | **67** | Pg | **Pb** | **21 52 49.3** | **+0.8** |
| TRAV | | | | Sg | **Sb** | **21 53 00.7** | **+0.1** |
| **EMV** | **Vieux Emosson** | **0.94** | **15** | ⇑*i*Pg | **Pg** | **21 52 46.1** | **-2.8** |
| | 67nm,0.6s | | | | | | |
| **EMV** | **Vieux Emosson** | **0.94** | **15** | ⇑*i*Pg | **Pg** | **21 52 46.1** | **-2.8** |
| | 67nm,0.6s | | | | | | |
| **SALAN** | **Lac Salanfe** | **1.03** | **16** | ⇑*i*Pg | **Pg** | **21 52 49.5** | **-1.1** |
| | 18nm,0.4s | | | | | | |
| **SALAN** | **Lac Salanfe** | **1.03** | **16** | ⇑*i*Pg | **Pg** | **21 52 49.5** | **-1.1** |
| | 18nm,0.4s | | | | | | |
| **STV** | **Sant Anna di V** | **1.06** | **149** | P | **Pb** | **21 52 51.1** | **-0.1** |
| **DIX** | **Grande Dixence** | **1.10** | **33** | *e*Pg | **Pg** | **21 52 51.2** | **-0.8** |
| | 76nm,1.0s | | | | | | |
| **DIX** | **Grande Dixence** | **1.10** | **33** | *e*Pg | **Pg** | **21 52 51.2** | **-0.8** |
| | 76nm,1.0s | | | | | | |
| **GRYON** | **Gryon** | **1.16** | **19** | *e*Pg | **Pg** | **21 52 52.4** | **-0.7** |
| | 18nm,0.4s | | | | | | |
| **GRYON** | **Gryon** | **1.16** | **19** | *e*Pg | **Pg** | **21 52 52.4** | **-0.7** |
| | 18nm,0.4s | | | | | | |
| **AIGLE** | **Aigle** | **1.22** | **13** | *e*Pg | **Pb** | **21 52 53.7** | **-0.1** |
| | 58nm,0.6s | | | | | | |
| **AIGLE** | **Aigle** | **1.22** | **13** | *e*Pg | **Pb** | **21 52 53.7** | **-0.1** |
| | 58nm,0.6s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **1.31** | **23** | *e*Pg | **Pn** | **21 52 54.5** | **-0.7** |
| | 40nm,0.5s | | | | | | |
| **SENIN** | **Lac Senin/Sane** | **1.31** | **23** | *e*Pg | **Pn** | **21 52 54.5** | **-0.7** |
| | 40nm,0.5s | | | | | | |
| **MVIF** | **Mont Vial** | **1.33** | **161** | Pn | **Pn** | **21 52 55.6** | **+0.3** |
| **MVIF** | **Mont Vial** | **1.33** | **161** | Pn | **Pn** | **21 52 55.6** | **+0.3** |
| **VIVF** | **Saint-Julien-I** | **1.37** | **258** | *e*Pg | **Pg** | **21 52 57.2** | **+0.1** |
| VIVF | | | | *e*Sg | **Sg** | **21 53 15.8** | **+0.8** |
| | 17nm,0.2s | | | | | | |
| **VIVF** | **Saint-Julien-I** | **1.37** | **258** | *e*Pg | **Pg** | **21 52 57.2** | **+0.1** |
| VIVF | | | | *e*Sg | **Sg** | **21 53 15.8** | **+0.8** |
| | 8.7nm,0.2s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.38** | **211** | *e*Pg | **Pg** | **21 52 57.6** | **+0.4** |
| SMRF | | | | *e*Sg | **Sn** | **21 53 14.5** | **+0.5** |
| | 11nm,0.3s | | | | | | |
| **SMRF** | **Simiane la Rot** | **1.38** | **211** | *e*Pg | **Pg** | **21 52 57.6** | **+0.4** |
| SMRF | | | | *e*Sg | **Sn** | **21 53 14.5** | **+0.5** |
| | 5.6nm,0.3s | | | | | | |
| **LUCF** | **Luceram** | **1.38** | **156** | Pn | **Pn** | **21 52 56.3** | **+0.3** |
| **LUCF** | **Luceram** | **1.38** | **156** | Pn | **Pn** | **21 52 56.3** | **+0.3** |
| **CALN** | **Calern** | **1.43** | **170** | Pg | **Pg** | **21 52 57.7** | **-0.5** |
| **CALN** | **Calern** | **1.43** | **170** | Pg | **Pg** | **21 52 57.7** | **-0.5** |
| **SBF** | **Sospel** | **1.44** | **154** | *e*Pg | **Pg** | **21 52 58.0** | **-0.4** |
| SBF | | | | *e*Sg | **Sb** | **21 53 15.3** | **-0.5** |
| | 44nm,0.3s | | | | | | |
| **SBF** | **Sospel** | **1.44** | **154** | *e*Pg | **Pg** | **21 52 58.0** | **-0.4** |
| SBF | | | | *e*Sg | **Sb** | **21 53 15.3** | **-0.5** |
| | 22nm,0.3s | | | | | | |
| **CABF** | **La Chapelle** | **1.49** | **347** | *e*Pg | **Pg** | **21 53 00.1** | **+0.7** |
| CABF | | | | *e*Sg | **Sg** | **21 53 21.2** | **+2.4** |
| | 16nm,0.2s | | | | | | |
| **CABF** | **La Chapelle** | **1.49** | **347** | *e*Pg | **Pg** | **21 53 00.1** | **+0.7** |
| CABF | | | | *e*Sg | **Sg** | **21 53 21.2** | **+2.4** |
| | 7.8nm,0.2s | | | | | | |
| **REVF** | **Revere** | **1.53** | **158** | Pg | **Pg** | **21 52 59.6** | **-0.6** |
| **REVF** | **Revere** | **1.53** | **158** | Pg | **Pg** | **21 52 59.6** | **-0.6** |
| **FRF** | **La Foret Royal** | **1.60** | **178** | *e*Pg | **Pg** | **21 53 01.0** | **-0.4** |
| FRF | | | | *e*Sg | **Sb** | **21 53 20.5** | **+0.1** |
| | 30nm,0.3s | | | | | | |
| **FRF** | **La Foret Royal** | **1.60** | **178** | *e*Pg | **Pg** | **21 53 01.0** | **-0.4** |
| FRF | | | | *e*Sg | **Sb** | **21 53 20.5** | **+0.1** |
| | 15nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **1.82** | **181** | *e*Pg | **Pb** | **21 53 04.7** | **+0.6** |
| LMR | | | | *e*Sg | **Sb** | **21 53 27.5** | **+0.6** |
| | 11nm,0.3s | | | | | | |
| **LMR** | **La Mourre** | **1.82** | **181** | *e*Pg | **Pb** | **21 53 04.7** | **+0.6** |
| LMR | | | | *e*Sg | **Sb** | **21 53 27.5** | **+0.6** |
| | 5.3nm,0.3s | | | | | | |
| **LOMF** | **Lomont** | **2.20** | **5** | Pg | **Pg** | **21 53 14.1** | **+1.1** |
| **LOMF** | **Lomont** | **2.20** | **5** | Pg | **Pg** | **21 53 14.1** | **+1.1** |
| **LASF** | **Ste Croix** | **2.21** | **242** | *e*Pg | **Pg** | **21 53 12.6** | **-0.6** |
| LASF | | | | *e*Sg | **Sg** | **21 53 41.4** | **-0.5** |
| | 1.3nm,0.2s | | | | | | |
| **LASF** | **Ste Croix** | **2.21** | **242** | *e*Pg | **Pg** | **21 53 12.6** | **-0.6** |
| LASF | | | | *e*Sg | **Sg** | **21 53 41.4** | **-0.5** |
| | 0.6nm,0.2s | | | | | | |
| **PLDF** | **La Plantade** | **2.22** | **293** | Pn | **Pn** | **21 53 07.7** | **+0.2** |
| **PLDF** | **La Plantade** | **2.22** | **293** | Pn | **Pn** | **21 53 07.7** | **+0.2** |
| **LBL** | **Lubilhac** | **2.34** | **273** | Pn | **Pn** | **21 53 09.0** | **-0.2** |
| **LBL** | **Lubilhac** | **2.34** | **273** | Pn | **Pn** | **21 53 09.0** | **-0.2** |
| **SMF** | **Signal de Mont** | **2.41** | **309** | *e*Pn | **Pn** | **21 53 11.1** | **+1.0** |
| **SMF** | **Signal de Mont** | **2.41** | **309** | *e*Pg | **Pg** | **21 53 17.0** | **0.0** |
| SMF | | | | *e*Sg | **Sg** | **21 53 47.8** | **-0.5** |
| | 15nm,0.3s | | | | | | |
| **SMF** | **Signal de Mont** | **2.41** | **309** | *e*Pn | **Pn** | **21 53 11.1** | **+1.0** |
| **SMF** | **Signal de Mont** | **2.41** | **309** | *e*Pg | **Pg** | **21 53 17.0** | **0.0** |
| SMF | | | | *e*Sg | **Sg** | **21 53 47.8** | **-0.5** |
| | 7.6nm,0.3s | | | | | | |
| **HINF** | **Hinteralfeld** | **2.67** | **4** | *e*Pn | **Pn** | **21 53 14.6** | **+1.0** |
| **HINF** | **Hinteralfeld** | **2.67** | **4** | *e*Pg | **Pg** | **21 53 21.8** | **-0.1** |
| HINF | | | | *e*Sg | **Sg** | **21 53 56.8** | **+0.3** |
| | 5.8nm,0.4s | | | | | | |
| **HINF** | **Hinteralfeld** | **2.67** | **4** | *e*Pn | **Pn** | **21 53 14.6** | **+1.0** |
| **HINF** | **Hinteralfeld** | **2.67** | **4** | *e*Pg | **Pg** | **21 53 21.8** | **-0.1** |
| HINF | | | | *e*Sg | **Sg** | **21 53 56.8** | **+0.3** |
| | 2.9nm,0.4s | | | | | | |
| **AVF** | **Avril sur Loir** | **2.77** | **307** | *e*Pn | **Pn** | **21 53 15.8** | **+0.8** |
| **AVF** | **Avril sur Loir** | **2.77** | **307** | *e*Pg | **Pg** | **21 53 24.1** | **+0.3** |
| AVF | | | | *e*Sg | **Sg** | **21 53 58.3** | **-1.4** |
| | 11nm,0.5s | | | | | | |
| **AVF** | **Avril sur Loir** | **2.77** | **307** | *e*Pn | **Pn** | **21 53 15.8** | **+0.8** |
| **AVF** | **Avril sur Loir** | **2.77** | **307** | *e*Pg | **Pg** | **21 53 24.1** | **+0.3** |
| AVF | | | | *e*Sg | **Sg** | **21 53 58.3** | **-1.4** |
| | 5.3nm,0.5s | | | | | | |
| **LOR** | **Lormes** | **2.82** | **319** | *e*Pn | **Pn** | **21 53 16.6** | **+0.9** |
| **LOR** | **Lormes** | **2.82** | **319** | *e*Pg | **Pg** | **21 53 25.0** | **+0.1** |
| | baz=151 | | | | | | |
| LOR | | | | *e*Sg | **Sg** | **21 54 00.2** | **-1.3** |
| | 5.7nm,0.3s,baz=156 | | | | | | |
| **LOR** | **Lormes** | **2.82** | **319** | *e*Pn | **Pn** | **21 53 16.6** | **+0.9** |
| **LOR** | **Lormes** | **2.82** | **319** | *e*Pg | **Pg** | **21 53 25.0** | **+0.1** |
| LOR | | | | *e*Sg | **Sg** | **21 54 00.2** | **-1.3** |
| | 2.8nm,0.3s | | | | | | |
| **HAU** | **Haudompre** | **2.85** | **357** | *e*Pn | **Pn** | **21 53 17.3** | **+1.2** |
| **HAU** | **Haudompre** | **2.85** | **357** | *e*Pg | **Pg** | **21 53 25.1** | **-0.3** |
| HAU | | | | *e*Sg | **Sg** | **21 54 02.5** | **+0.1** |
| | 6.4nm,0.3s | | | | | | |
| **HAU** | **Haudompre** | **2.85** | **357** | *e*Pn | **Pn** | **21 53 17.3** | **+1.2** |
| **HAU** | **Haudompre** | **2.85** | **357** | *e*Pg | **Pg** | **21 53 25.1** | **-0.3** |
| HAU | | | | *e*Sg | **Sg** | **21 54 02.5** | **+0.1** |
| | 3.2nm,0.3s | | | | | | |
| **SSF** | **Saint Saulge** | **2.85** | **313** | *e*Pn | **Pn** | **21 53 17.5** | **+1.4** |
| **SSF** | **Saint Saulge** | **2.85** | **313** | *e*Pg | **Pg** | **21 53 25.3** | **-0.1** |
| SSF | | | | *e*Sg | **Sg** | **21 54 01.8** | **-0.6** |
| | 5.9nm,0.3s | | | | | | |
| **SSF** | **Saint Saulge** | **2.85** | **313** | *e*Pn | **Pn** | **21 53 17.5** | **+1.4** |
| **SSF** | **Saint Saulge** | **2.85** | **313** | *e*Pg | **Pg** | **21 53 25.3** | **-0.1** |
| SSF | | | | *e*Sg | **Sg** | **21 54 01.8** | **-0.6** |
| | 3.0nm,0.3s | | | | | | |
| **BGF** | **Bois d'Agland** | **2.95** | **300** | *e*Pn | **Pn** | **21 53 19.2** | **+1.8** |
| **BGF** | **Bois d'Agland** | **2.95** | **300** | *e*Pg | **Pg** | **21 53 26.9** | **-0.4** |
| BGF | | | | *e*Sg | **Sg** | **21 54 05.8** | **+0.3** |
| | 8.3nm,0.3s | | | | | | |
| **BGF** | **Bois d'Agland** | **2.95** | **300** | *e*Pn | **Pn** | **21 53 19.2** | **+1.8** |
| **BGF** | **Bois d'Agland** | **2.95** | **300** | *e*Pg | **Pg** | **21 53 26.9** | **-0.4** |
| BGF | | | | *e*Sg | **Sg** | **21 54 05.8** | **+0.3** |
| | 4.2nm,0.3s | | | | | | |
| **CAF** | **Calviac** | **3.20** | **267** | *e*Pn | **Pn** | **21 53 22.6** | **+1.7** |
| **CAF** | **Calviac** | **3.20** | **267** | *e*Pg | **Pg** | **21 53 31.1** | **-0.9** |
| CAF | | | | *e*Sg | **Sg** | **21 54 12.8** | **-0.6** |
| | 0.9nm,0.2s | | | | | | |
| **CAF** | **Calviac** | **3.20** | **267** | *e*Pn | **Pn** | **21 53 22.6** | **+1.7** |
| **CAF** | **Calviac** | **3.20** | **267** | *e*Pg | **Pg** | **21 53 31.1** | **-0.9** |
| CAF | | | | *e*Sg | **Sg** | **21 54 12.8** | **-0.6** |
| | 0.4nm,0.2s | | | | | | |
| **SFTF** | **Sexfontaines** | **3.22** | **342** | *e*Pg | **Pg** | **21 53 32.1** | **-0.4** |
| | baz=150 | | | | | | |
| SFTF | | | | *e*Sg | **Sg** | **21 54 14.1** | **-0.2** |
| | 10nm,0.4s | | | | | | |
| **SFTF** | **Sexfontaines** | **3.22** | **342** | *e*Pg | **Pg** | **21 53 32.1** | **-0.4** |
| SFTF | | | | *e*Sg | **Sg** | **21 54 14.1** | **-0.2** |
| | 5.1nm,0.4s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.25** | **292** | *e*Pn | **Pn** | **21 53 21.8** | **+0.2** |
| **TCF** | **Toulx Ste Croi** | **3.25** | **292** | *e*Pg | **Pg** | **21 53 32.5** | **-0.5** |
| TCF | | | | *e*Sg | **Sg** | **21 54 15.1** | **0.0** |
| | 4.3nm,0.4s | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.25** | **292** | *e*Pn | **Pn** | **21 53 21.8** | **+0.2** |
| **TCF** | **Toulx Ste Croi** | **3.25** | **292** | *e*Pg | **Pg** | **21 53 32.5** | **-0.5** |
| TCF | | | | *e*Sg | **Sg** | **21 54 15.1** | **0.0** |
| | 2.2nm,0.4s | | | | | | |
| **CDF** | **Champ du Feu** | **3.29** | **8** | *e*Pn | **Pn** | **21 53 22.6** | **+0.3** |
| **CDF** | **Champ du Feu** | **3.29** | **8** | *e*Pg | **Pg** | **21 53 33.2** | **-0.7** |
| CDF | | | | *e*Sg | **Sg** | **21 54 15.9** | **-0.6** |
| | 2.5nm,0.3s | | | | | | |
| **CDF** | **Champ du Feu** | **3.29** | **8** | *e*Pn | **Pn** | **21 53 22.6** | **+0.3** |
| **CDF** | **Champ du Feu** | **3.29** | **8** | *e*Pg | **Pg** | **21 53 33.2** | **-0.7** |
| CDF | | | | *e*Sg | **Sg** | **21 54 15.9** | **-0.6** |
| | 1.2nm,0.3s | | | | | | |
| **HYF** | **Humbligny** | **3.44** | **309** | *e*Pg | **Pg** | **21 53 36.1** | **-0.7** |
| HYF | | | | *e*Sg | **Sg** | **21 54 21.4** | **0.0** |
| **HYF** | **Humbligny** | **3.44** | **309** | *e*Pg | **Pg** | **21 53 36.1** | **-0.7** |
| HYF | | | | *e*Sg | **Sg** | **21 54 21.4** | **0.0** |
| **PAGF** | **Fort de Pagny** | **3.45** | **351** | *e*Pg | **Pg** | **21 53 36.2** | **-0.6** |
| | baz=168 | | | | | | |
| PAGF | | | | *e*Sg | **Sg** | **21 54 21.1** | **-0.3** |
| | 0.3nm,0.2s,baz=173 | | | | | | |
| **PAGF** | **Fort de Pagny** | **3.45** | **351** | *e*Pg | **Pg** | **21 53 36.2** | **-0.6** |
| PAGF | | | | *e*Sg | **Sg** | **21 54 21.1** | **-0.3** |
| | 0.2nm,0.2s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **3.50** | **343** | *e*Pg | **Pg** | **21 53 37.1** | **-0.7** |
| | baz=158 | | | | | | |
| MEZF | | | | *e*Sg | **Sg** | **21 54 22.8** | **-0.4** |
| | 10nm,0.5s | | | | | | |
| **MEZF** | **Maizieres J'vi** | **3.50** | **343** | *e*Pg | **Pg** | **21 53 37.1** | **-0.7** |
| MEZF | | | | *e*Sg | **Sg** | **21 54 22.8** | **-0.4** |
| | 5.1nm,0.5s | | | | | | |
| **RJF** | **Les Rejaudoux** | **3.57** | **274** | *e*Pg | **Pg** | **21 53 37.0** | **-2.1** |
| RJF | | | | *e*Sg | **Sg** | **21 54 24.6** | **-0.7** |
| | 3.7nm,0.3s | | | | | | |
| **RJF** | **Les Rejaudoux** | **3.57** | **274** | *e*Pg | **Pg** | **21 53 37.0** | **-2.1** |
| RJF | | | | *e*Sg | **Sg** | **21 54 24.6** | **-0.7** |
| | 1.9nm,0.3s | | | | | | |

**WEL 31 21:53:19.8±0.1, 42°90S×171°84E, h5km, ML3.7/21, 4C-4D, Error ellipse: s-maj=0.9km s-min=0.8km az=90.0, South Island**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **LTZ** | **Lake Taylor** | **0.34** | **70** | ⇓PG | Pg | 21 53 26.8 | +0.4 |
| LTZ | | | | SG | Sg | 21 53 31.8 | +1.0 |
| LTZ | | | | AML | AML | 21 53 32.2 | |
| **OXZ** | **Oxford** | **0.45** | **161** | ⇑PG | Pg | 21 53 28.7 | +0.1 |
| OXZ | | | | SG | Sg | 21 53 34.9 | +0.5 |
| **WVZ** | **Waitaha Valley** | **0.83** | **257** | ⇓P* | Pg | 21 53 35.3 | -0.4 |
| WVZ | | | | AML | AML | 21 53 52.5 | |
| **CRLZ** | **Canterbury Las** | **0.89** | **140** | P* | Pg | 21 53 37.0 | +0.2 |
| CRLZ | | | | AML | AML | 21 53 50.1 | |
| CRLZ | | | | AML | AML | 21 53 51.0 | |
| **RPZ** | **Rata Peaks** | **1.00** | **215** | P* | Pg | 21 53 38.7 | -0.3 |
| RPZ | | | | AML | AML | 21 53 53.7 | |
| RPZ | | | | AML | AML | 21 53 57.1 | |
| **MQZ** | **McQueen's Vall** | **1.00** | **144** | ⇓P* | Pg | 21 53 38.6 | -0.4 |
| MQZ | | | | AML | AML | 21 53 52.3 | |
| MQZ | | | | AML | AML | 21 53 53.0 | |
| **DSZ** | **Denniston Nort** | **1.15** | **359** | ⇑P* | Pg | 21 53 41.6 | -0.4 |
| DSZ | | | | AML | AML | 21 53 58.3 | |
| DSZ | | | | AML | AML | 21 53 58.3 | |
| DSZ | | | | AML | AML | 21 54 01.7 | |
| DSZ | | | | AML | AML | 21 54 01.7 | |
| **KHZ** | **Kahutara** | **1.34** | **70** | AML | AML | 21 54 06.3 | |
| KHZ | | | | AML | AML | 21 54 08.6 | |
| **THZ** | **Tophouse** | **1.38** | **35** | ⇑PN | Pn | 21 53 44.8 | -1.1 |
| THZ | | | | AML | AML | 21 54 09.1 | |
| THZ | | | | AML | AML | 21 54 10.0 | |
| **FOZ** | **Fox Glacier** | **1.71** | **246** | ⇓PN | Pn | 21 53 48.6 | -1.6 |
| FOZ | | | | AML | AML | 21 54 12.3 | |
| FOZ | | | | AML | AML | 21 54 12.5 | |
| FOZ | | | | AML | AML | 21 54 12.5 | |
| **LBZ** | **Lake Benmore** | **1.91** | **218** | AML | AML | 21 54 24.5 | |
| LBZ | | | | AML | AML | 21 54 32.1 | |
| **BSWZ** | **Blackbirch Sta** | **1.92** | **53** | AML | AML | 21 54 25.3 | |
| BSWZ | | | | AML | AML | 21 54 25.7 | |
| **NNZ** | **Nelson** | **2.03** | **35** | AML | AML | 21 54 25.5 | |
| NNZ | | | | AML | AML | 21 54 31.1 | |
| **QRZ** | **Quartz Range** | **2.13** | **14** | PN | Pn | 21 53 55.5 | -0.5 |
| QRZ | | | | AML | AML | 21 54 01.1 | |
| QRZ | | | | AML | AML | 21 54 36.5 | |
| QRZ | | | | AML | AML | 21 54 36.5 | |
| **TUWZ** | **Tuamarina** | **2.14** | **48** | PN | Pn | 21 53 57.0 | +0.8 |
| TUWZ | | | | AML | AML | 21 54 31.2 | |
| TUWZ | | | | AML | AML | 21 54 35.9 | |
| **ODZ** | **Otahua Downs** | **2.31** | **202** | PN | Pn | 21 53 56.9 | -1.7 |
| ODZ | | | | AML | AML | 21 54 07.0 | |
| ODZ | | | | AML | AML | 21 54 42.2 | |
| **TCW** | **Tory Channel** | **2.48** | **48** | PN | Pn | 21 54 01.8 | +1.1 |
| TCW | | | | AML | AML | 21 54 39.9 | |
| TCW | | | | AML | AML | 21 54 43.3 | |
| **JCZ** | **Jackson Bay** | **2.53** | **241** | ⇑PN | Pn | 21 54 01.3 | -0.4 |
| JCZ | | | | AML | AML | 21 54 35.8 | |
| JCZ | | | | AML | AML | 21 54 50.3 | |
| **DUWZ** | **D'Urville Isla** | **2.61** | **37** | PN | Pn | 21 54 04.0 | +1.4 |
| DUWZ | | | | AML | AML | 21 54 43.7 | |
| DUWZ | | | | AML | AML | 21 54 45.4 | |
| **EAZ** | **Earnscleugh** | **2.96** | **217** | PN | Pn | 21 54 05.6 | -1.8 |
| EAZ | | | | AML | AML | 21 55 00.3 | |
| **CAW** | **Cannon Point** | **3.00** | **54** | PN | Pn | 21 54 07.7 | -0.3 |
| CAW | | | | AML | AML | 21 54 44.7 | |
| CAW | | | | AML | AML | 21 54 47.1 | |
| **KIW** | **Kapiti Island** | **3.06** | **49** | PN | Pn | 21 54 09.1 | +0.2 |
| **TUZ** | **Tuapeka** | **3.44** | **207** | PN | Pn | 21 54 12.5 | -1.5 |
| **MRZ** | **Mangatainoka R** | **3.58** | **53** | PN | Pn | 21 54 14.6 | -1.3 |
| MRZ | | | | AML | AML | 21 55 17.1 | |
| **NEZ** | **North Egmont** | **4.00** | **26** | *e*PN | Pn | 21 54 22.5 | +0.6 |
| **PKE** | **Pukeiti** | **4.04** | **24** | PN | Pn | 21 54 23.4 | +1.1 |
| **VRZ** | **Vera Road** | **4.37** | **31** | PN | Pn | 21 54 28.0 | +1.2 |
| **WNVZ** | **Wahianoa** | **4.56** | **40** | PN | Pn | 21 54 29.5 | -0.1 |
| **APZ** | **The Paps** | **4.79** | **214** | PN | Pn | 21 54 30.9 | -1.8 |
| **HIZ** | **Hauiti** | **4.94** | **29** | PN | Pn | 21 54 34.5 | -0.2 |

**IDC 31 21:58:11.8±2.4, 6°44S×147°53E, h0km, mb3.5/2, mb1 3.8/3, mb1mx3.5/17, mbtmp3.5/3, ML3.8/1, Error ellipse: s-maj=173.8km s-min=30.5km az=123.0, Eastern New Guinea region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **WRA** | **Warramunga Arr** | **18.56** | **222** | P | P | 22 02 29.7 | -0.7 |
| | 0.3nm,0.3s,baz=39,slow=12,SNR=3.5 | | | | | | |
| **ASAR** | **Alice Springs** | **21.57** | **216** | P | P | 22 03 03.8 | +0.6 |
| | 0.5nm,0.3s,baz=56,slow=8.5,SNR=11 | | | | | | |
| **ILAR** | **Eielson Array** | **85.67** | **23** | P | P | 22 10 52.7 | +0.5 |
| | 0.2nm,0.5s,baz=238,slow=5.0,SNR=4.7 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **145.71** | **284** | PKPbc | PKPdf | 22 17 52.0 | -1.4 |
| | 0.6nm,0.7s,baz=67,slow=2.7,SNR=4.3 | | | | | | |

*CSEM **31** 22:14:15.7±0.1, 45°17N×6°52E, h5km, ML2.7/29, Error ellipse: s-maj=1.7km s-min=1.4km az=67.0*
*ZUR **31** 22:14:15.5, 45°13N×6°42E, h7km±5km, ML2.2/9*
*GEN **31** 22:14:15.9, 45°11N×6°51E, h1km, ML2.1*
*LDG **31** 22:14:16.7±0.1, 45°14N×6°56E, h2km, Md2.8/3, Ml2.7/25, Error ellipse: s-maj=1.3km s-min=0.9km az=95.0*
*STR **31** 22:14:17.2±0.2, 45°16N×6°53E, h1km, Ml2.7, Error ellipse: s-maj=0.0km s-min=0.0km az=0.0*

**ISC 31 22:14:16.1±0.9, 45°16N±0°01×6°53E±0°01, h10km±7km, n128, σ1°00/201, 7C, France**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **BNI** | **Bardonecchia** | **0.15** | **135** | ⇑*i*Pg | **Pg** | **22 14 19.3** | **-0.3** |
| | 4µm,0.3s | | | | | | |
| **BNI** | **Bardonecchia** | **0.15** | **135** | ⇑*i*Pg | **Pg** | **22 14 19.3** | **-0.3** |
| | 4µm,0.3s | | | | | | |
| BNI | | | | Sg | **Sg** | **22 14 21.1** | **-0.9** |
| **GDM** | **Grand'Maison** | **0.29** | **278** | Pg | **Pg** | **22 14 22.3** | **+0.2** |
| GDM | | | | Sg | **Sg** | **22 14 26.7** | **+0.7** |
| **GDM** | **Grand'Maison** | **0.29** | **278** | Pg | **Pg** | **22 14 22.3** | **+0.2** |
| GDM | | | | Sg | **Sg** | **22 14 26.7** | **+0.7** |
| **RRL** | **Rocca Remolon** | **0.30** | **142** | Pg | **Pg** | **22 14 21.8** | **-0.5** |
| RRL | | | | S | **Sg** | **22 14 25.7** | **-0.7** |
| RRL | | | | Sg | **Sb** | **22 14 26.0** | **-3.0** |
| **LPG** | **La Plagne** | **0.37** | **25** | *e*Pg | **Pg** | **22 14 24.2** | **+0.6** |
| LPG | | | | *e*Sg | **Sg** | **22 14 29.2** | **+0.7** |
| | 170nm,0.3s | | | | | | |
| **LPG** | **La Plagne** | **0.37** | **25** | *e*Pg | **Pg** | **22 14 24.2** | **+0.6** |
| LPG | | | | *e*Sg | **Sg** | **22 14 29.2** | **+0.7** |
| | 85nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.38** | **22** | *e*Pg | **Pg** | **22 14 24.4** | **+0.6** |
| LPL | | | | *e*Sg | **Sg** | **22 14 29.6** | **+0.7** |
| | 152nm,0.3s | | | | | | |
| **LPL** | **La Plagne** | **0.38** | **22** | *e*Pg | **Pg** | **22 14 24.4** | **+0.6** |
| LPL | | | | *e*Sg | **Sg** | **22 14 29.6** | **+0.7** |
| | 76nm,0.3s | | | | | | |
| **MBDF** | **Montbardon** | **0.47** | **158** | *e*Pg | **Pg** | **22 14 24.4** | **-0.9** |
| MBDF | | | | *e*Sg | **Sg** | **22 14 29.9** | **-1.6** |
| | 86nm,0.3s | | | | | | |
| **MBDF** | **Montbardon** | **0.47** | **158** | *e*Pg | **Pg** | **22 14 24.4** | **-0.9** |
| MBDF | | | | *e*Sg | **Sg** | **22 14 29.9** | **-1.6** |
| | 43nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-Rattie** | **0.52** | **242** | *e*Pg | **Pg** | **22 14 25.9** | **-0.3** |
| ORIF | | | | *e*Sg | **Sg** | **22 14 32.5** | **-0.6** |
| | 123nm,0.3s | | | | | | |
| **ORIF** | **Oris-en-

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| SBF | | | | *e*Sg | | **Sg** | **22 15 02.1** | **-0.7** |
| | 118nm,0.6s | | | | | | | |
| **SBF** | **Sospel** | **1.45** | **153** | *e*Pg | | **Pn** | **22 14 43.1** | **+0.6** |
| SBF | | | | *e*Sg | | **Sg** | **22 15 02.1** | **-0.7** |
| | 59nm,0.6s | | | | | | | |
| **CABF** | **La Chapelle** | **1.48** | **348** | *e*Pg | | **Pg** | **22 14 44.9** | **+0.4** |
| CABF | | | | *e*Sg | | **Sn** | **22 15 04.3** | **+1.8** |
| | 24nm,0.3s | | | | | | | |
| **CABF** | **La Chapelle** | **1.48** | **348** | *e*Pg | | **Pg** | **22 14 44.9** | **+0.4** |
| CABF | | | | *e*Sg | | **Sn** | **22 15 04.3** | **+1.8** |
| | 12nm,0.3s | | | | | | | |
| **REVF** | **Revere** | **1.54** | **157** | Pg | | **Pg** | **22 14 46.1** | **+0.4** |
| REVF | | | | Sg | | **Sg** | **22 15 07.8** | **+2.1** |
| **REVF** | **Revere** | **1.54** | **157** | Pg | | **Pg** | **22 14 46.1** | **+0.4** |
| REVF | | | | Sg | | **Sg** | **22 15 07.8** | **+2.1** |
| **FRF** | **La Foret Royal** | **1.60** | **177** | *e*Pg | | **Pb** | **22 14 45.9** | **+0.1** |
| FRF | | | | *e*Sg | | **Sg** | **22 15 06.7** | **-0.9** |
| | 50nm,0.5s | | | | | | | |
| **FRF** | **La Foret Royal** | **1.60** | **177** | *e*Pg | | **Pb** | **22 14 45.9** | **+0.1** |
| FRF | | | | *e*Sg | | **Sg** | **22 15 06.7** | **-0.9** |
| | 25nm,0.5s | | | | | | | |
| **LMR** | **La Mourre** | **1.83** | **180** | *e*Pg | | **Pb** | **22 14 49.6** | **0.0** |
| LMR | | | | *e*Sg | | **Sb** | **22 15 12.6** | **0.0** |
| | 28nm,0.4s | | | | | | | |
| **LMR** | **La Mourre** | **1.83** | **180** | *e*Pg | | **Pb** | **22 14 49.6** | **0.0** |
| LMR | | | | *e*Sg | | **Sb** | **22 15 12.6** | **0.0** |
| | 14nm,0.4s | | | | | | | |
| **LASF** | **Ste Croix** | **2.19** | **241** | *e*Pn | | **Pn** | **22 14 53.0** | **+0.3** |
| **LASF** | **Ste Croix** | **2.19** | **241** | *e*Pg | | **Pg** | **22 14 58.4** | **+0.3** |
| LASF | | | | *e*Sg | | **Sg** | **22 15 26.2** | **-0.4** |
| | 2.8nm,0.4s | | | | | | | |
| **LASF** | **Ste Croix** | **2.19** | **241** | *e*Pn | | **Pn** | **22 14 53.0** | **+0.3** |
| **LASF** | **Ste Croix** | **2.19** | **241** | *e*Pg | | **Pg** | **22 14 58.4** | **+0.3** |
| LASF | | | | *e*Sg | | **Sg** | **22 15 26.2** | **-0.4** |
| | 1.4nm,0.4s | | | | | | | |
| **LOMF** | **Lomont** | **2.20** | **5** | Pg | | **Pg** | **22 14 58.9** | **+0.6** |
| **LOMF** | **Lomont** | **2.20** | **5** | Pg | | **Pg** | **22 14 58.9** | **+0.6** |
| **LBL** | **Lubilhac** | **2.32** | **273** | Pn | | **Pn** | **22 14 55.2** | **+0.7** |
| **LBL** | **Lubilhac** | **2.32** | **273** | Pn | | **Pn** | **22 14 55.2** | **+0.7** |
| **SMF** | **Signal de Mont** | **2.39** | **309** | *e*Pn | | **Pn** | **22 14 56.4** | **+1.0** |
| **SMF** | **Signal de Mont** | **2.39** | **309** | *e*Pg | | **Pg** | **22 15 01.3** | **-0.6** |
| SMF | | | | *e*Sg | | **Sg** | **22 15 31.6** | **-1.3** |
| | 16nm,0.3s | | | | | | | |
| **SMF** | **Signal de Mont** | **2.39** | **309** | *e*Pn | | **Pn** | **22 14 56.4** | **+1.0** |
| **SMF** | **Signal de Mont** | **2.39** | **309** | *e*Pg | | **Pg** | **22 15 01.3** | **-0.6** |
| SMF | | | | *e*Sg | | **Sg** | **22 15 31.6** | **-1.3** |
| | 7.8nm,0.3s | | | | | | | |
| **AGO** | **Saint Agoulin** | **2.54** | **292** | Pn | | **Pn** | **22 14 57.9** | **+0.4** |
| **AGO** | **Saint Agoulin** | **2.54** | **292** | Pn | | **Pn** | **22 14 57.9** | **+0.4** |
| **PYM** | **Petit Puy Mans** | **2.54** | **285** | Pn | | **Pn** | **22 14 58.8** | **+1.2** |
| **PYM** | **Petit Puy Mans** | **2.54** | **285** | Pn | | **Pn** | **22 14 58.8** | **+1.2** |
| **HINF** | **Hinteralfeld** | **2.67** | **5** | *e*Pn | | **Pn** | **22 14 59.3** | **+0.1** |
| **HINF** | **Hinteralfeld** | **2.67** | **5** | *e*Pg | | **Pg** | **22 15 06.6** | **-0.6** |
| HINF | | | | *e*Sg | | **Sg** | **22 15 41.0** | **-0.7** |
| | 6.9nm,0.4s | | | | | | | |
| **HINF** | **Hinteralfeld** | **2.67** | **5** | *e*Pn | | **Pn** | **22 14 59.3** | **+0.1** |
| **HINF** | **Hinteralfeld** | **2.67** | **5** | *e*Pg | | **Pg** | **22 15 06.6** | **-0.6** |
| HINF | | | | *e*Sg | | **Sg** | **22 15 41.0** | **-0.7** |
| | 3.5nm,0.4s | | | | | | | |
| **AVF** | **Avril sur Loir** | **2.75** | **307** | *e*Pn | | **Pn** | **22 15 02.4** | **+2.1** |
| **AVF** | **Avril sur Loir** | **2.75** | **307** | *e*Pg | | **Pg** | **22 15 08.4** | **-0.3** |
| AVF | | | | *e*Sg | | **Sg** | **22 15 43.8** | **-0.5** |
| | 7.7nm,0.4s | | | | | | | |
| **AVF** | **Avril sur Loir** | **2.75** | **307** | *e*Pn | | **Pn** | **22 15 02.4** | **+2.1** |
| **AVF** | **Avril sur Loir** | **2.75** | **307** | *e*Pg | | **Pg** | **22 15 08.4** | **-0.3** |
| AVF | | | | *e*Sg | | **Sg** | **22 15 43.8** | **-0.5** |
| | 3.8nm,0.4s | | | | | | | |
| **LOR** | **Lormes** | **2.81** | **320** | *e*Pn | | **Pn** | **22 15 01.5** | **+0.4** |
| **LOR** | **Lormes** | **2.81** | **320** | *e*Pg | | **Pg** | **22 15 09.2** | **-0.6** |
| LOR | | | | *e*Sg | | **Sg** | **22 15 45.8** | **-0.4** |
| | 6.0nm,0.4s | | | | | | | |
| **LOR** | **Lormes** | **2.81** | **320** | *e*Pn | | **Pn** | **22 15 01.5** | **+0.4** |
| **LOR** | **Lormes** | **2.81** | **320** | *e*Pg | | **Pg** | **22 15 09.2** | **-0.6** |
| LOR | | | | *e*Sg | | **Sg** | **22 15 45.8** | **-0.4** |
| | 3.0nm,0.4s | | | | | | | |
| **SSF** | **Saint Saulge** | **2.83** | **313** | *e*Pn | | **Pn** | **22 15 01.9** | **+0.5** |
| **SSF** | **Saint Saulge** | **2.83** | **313** | *e*Pg | | **Pg** | **22 15 09.4** | **-1.0** |
| SSF | | | | *e*Sg | | **Sg** | **22 15 46.6** | **-0.5** |
| | 5.2nm,0.3s | | | | | | | |
| **SSF** | **Saint Saulge** | **2.83** | **313** | *e*Pn | | **Pn** | **22 15 01.9** | **+0.5** |
| **SSF** | **Saint Saulge** | **2.83** | **313** | *e*Pg | | **Pg** | **22 15 09.4** | **-1.0** |
| SSF | | | | *e*Sg | | **Sg** | **22 15 46.6** | **-0.5** |
| | 2.6nm,0.3s | | | | | | | |
| **HAU** | **Haudompre** | **2.85** | **358** | *e*Pn | | **Pn** | **22 15 01.3** | **-0.4** |
| **HAU** | **Haudompre** | **2.85** | **358** | *e*Pg | | **Pg** | **22 15 10.0** | **-0.7** |
| HAU | | | | *e*Sg | | **Sg** | **22 15 47.0** | **-0.5** |
| | 8.3nm,0.3s | | | | | | | |
| **HAU** | **Haudompre** | **2.85** | **358** | *e*Pn | | **Pn** | **22 15 01.3** | **-0.4** |
| **HAU** | **Haudompre** | **2.85** | **358** | *e*Pg | | **Pg** | **22 15 10.0** | **-0.7** |
| HAU | | | | *e*Sg | | **Sg** | **22 15 47.0** | **-0.5** |
| | 4.2nm,0.3s | | | | | | | |
| **BGF** | **Bois d'Agland** | **2.93** | **300** | *e*Pn | | **Pn** | **22 15 03.0** | **+0.3** |
| **BGF** | **Bois d'Agland** | **2.93** | **300** | *e*Pg | | **Pg** | **22 15 11.0** | **-1.1** |
| BGF | | | | *e*Sg | | **Sg** | **22 15 47.8** | **-2.2** |
| | 24nm,0.6s | | | | | | | |
| **BGF** | **Bois d'Agland** | **2.93** | **300** | *e*Pn | | **Pn** | **22 15 03.0** | **+0.3** |
| **BGF** | **Bois d'Agland** | **2.93** | **300** | *e*Pg | | **Pg** | **22 15 11.0** | **-1.1** |
| BGF | | | | *e*Sg | | **Sg** | **22 15 47.8** | **-2.2** |
| | 12nm,0.6s | | | | | | | |
| **SFTF** | **Sexfontaines** | **3.21** | **342** | *e*Pn | | **Pn** | **22 15 06.6** | **-0.1** |
| **SFTF** | **Sexfontaines** | **3.21** | **342** | *e*Pg | | **Pg** | **22 15 16.7** | **-0.9** |
| SFTF | | | | *e*Sg | | **Sg** | **22 15 58.2** | **-1.0** |
| | 7.3nm,0.3s | | | | | | | |
| **SFTF** | **Sexfontaines** | **3.21** | **342** | *e*Pn | | **Pn** | **22 15 06.6** | **-0.1** |
| **SFTF** | **Sexfontaines** | **3.21** | **342** | *e*Pg | | **Pg** | **22 15 16.7** | **-0.9** |
| SFTF | | | | *e*Sg | | **Sg** | **22 15 58.2** | **-1.0** |
| | 3.7nm,0.3s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.23** | **292** | *e*Pn | | **Pn** | **22 15 06.9** | **0.0** |
| **TCF** | **Toulx Ste Croi** | **3.23** | **292** | *e*Pg | | **Pg** | **22 15 16.8** | **-1.1** |
| TCF | | | | *e*Sg | | **Sg** | **22 15 58.9** | **-0.8** |
| | 4.0nm,0.5s | | | | | | | |
| **TCF** | **Toulx Ste Croi** | **3.23** | **292** | *e*Pn | | **Pn** | **22 15 06.9** | **0.0** |
| **TCF** | **Toulx Ste Croi** | **3.23** | **292** | *e*Pg | | **Pg** | **22 15 16.8** | **-1.1** |
| TCF | | | | *e*Sg | | **Sg** | **22 15 58.9** | **-0.8** |
| | 2.0nm,0.5s | | | | | | | |
| **CDF** | **Champ du Feu** | **3.29** | **9** | *e*Pn | | **Pn** | **22 15 07.9** | **+0.1** |
| **CDF** | **Champ du Feu** | **3.29** | **9** | *e*Pg | | **Pg** | **22 15 18.5** | **-0.7** |
| CDF | | | | *e*Sg | | **Sg** | **22 16 00.6** | **-1.2** |
| | 3.1nm,0.4s | | | | | | | |
| **CDF** | **Champ du Feu** | **3.29** | **9** | *e*Pn | | **Pn** | **22 15 07.9** | **+0.1** |
| **CDF** | **Champ du Feu** | **3.29** | **9** | *e*Pg | | **Pg** | **22 15 18.5** | **-0.7** |
| CDF | | | | *e*Sg | | **Sg** | **22 16 00.6** | **-1.2** |
| | 1.5nm,0.4s | | | | | | | |
| **HYF** | **Humbligny** | **3.42** | **309** | *e*Pn | | **Pn** | **22 15 09.4** | **-0.2** |
| HYF | | | | *e*Sg | | **Sg** | **22 16 04.8** | **-1.2** |
| **HYF** | **Humbligny** | **3.42** | **309** | *e*Pn | | **Pn** | **22 15 09.4** | **-0.2** |
| HYF | | | | *e*Sg | | **Sg** | **22 16 04.8** | **-1.2** |
| **PAGF** | **Fort de Pagny** | **3.44** | **351** | *e*Pn | | **Pn** | **22 15 09.5** | **-0.3** |
| **PAGF** | **Fort de Pagny** | **3.44** | **351** | *e*Pg | | **Pg** | **22 15 20.9** | **-1.1** |
| PAGF | | | | *e*Sg | | **Sg** | **22 16 05.2** | **-1.3** |
| | 0.8nm,0.3s | | | | | | | |
| **PAGF** | **Fort de Pagny** | **3.44** | **351** | *e*Pn | | **Pn** | **22 15 09.5** | **-0.3** |
| **PAGF** | **Fort de Pagny** | **3.44** | **351** | *e*Pg | | **Pg** | **22 15 20.9** | **-1.1** |
| PAGF | | | | *e*Sg | | **Sg** | **22 16 05.2** | **-1.3** |
| | 0.4nm,0.3s | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **3.49** | **344** | *e*Pn | | **Pn** | **22 15 10.6** | **+0.1** |
| **MEZF** | **Maizieres J'vi** | **3.49** | **344** | *e*Pg | | **Pg** | **22 15 22.8** | **-0.2** |
| MEZF | | | | *e*Sg | | **Sg** | **22 16 06.8** | **-1.4** |
| | 10nm,0.5s | | | | | | | |
| **MEZF** | **Maizieres J'vi** | **3.49** | **344** | *e*Pn | | **Pn** | **22 15 10.6** | **+0.1** |
| **MEZF** | **Maizieres J'vi** | **3.49** | **344** | *e*Pg | | **Pg** | **22 15 22.8** | **-0.2** |
| MEZF | | | | *e*Sg | | **Sg** | **22 16 06.8** | **-1.4** |
| | 5.2nm,0.5s | | | | | | | |
| **GIVF** | **Givet** | **5.08** | **348** | *e*Pn | | **Pn** | **22 15 32.0** | **-0.2** |
| GIVF | | | | *e*Sg | | **Sg** | **22 16 56.3** | **-2.7** |
| | 2.1nm,0.4s | | | | | | | |
| **GIVF** | **Givet** | **5.08** | **348** | *e*Pn | | **Pn** | **22 15 32.0** | **-0.2** |
| GIVF | | | | *e*Sg | | **Sg** | **22 16 56.3** | **-2.7** |
| | 1.0nm,0.4s | | | | | | | |
| **BAIF** | **Baives** | **5.14** | **343** | *e*Pn | | **Pn** | **22 15 33.3** | **+0.1** |
| BAIF | | | | *e*Sg | | **Sg** | **22 16 58.6** | **-2.6** |
| | 0.9nm,0.5s | | | | | | | |
| **BAIF** | **Baives** | **5.14** | **343** | *e*Pn | | **Pn** | **22 15 33.3** | **+0.1** |
| BAIF | | | | *e*Sg | | **Sg** | **22 16 58.6** | **-2.6** |
| | 0.4nm,0.5s | | | | | | | |

*SZGRF **31** 22:18:50.1, 16˚.65S×176˚.95W, h33km*
*ISCJB **31** 22:19:33.1±0.2, 15˚.89S±0˚.04×177˚.59W±0˚.05, h400km,*
*mb4.6/89, Error ellipse: s-maj=7.7km s-min=3.8km*
*az=41.9*
*IDC **31** 22:19:33.8±1.5, 15˚.75S×177˚.58W, h396km±16km,*

*mb4.0/12, mb1 4.2/15, mb1mx3.9/33, mbtmp4.7/15, Error*
*ellipse: s-maj=18.5km s-min=11.1km az=134.0*
*NEIC **31** 22:19:35.8±0.7, 15˚.90S×177˚.55W, h419km±7km, mb4.7/81,*
*Error ellipse: s-maj=8.6km s-min=4.7km az=134.0*
*AUST **31** 22:19:36.6, 15˚.94S×177˚.07W, h450km*
**ISC 31 22:19:34.2±0.4, 15˚.87S±0˚.07×177˚.46W±0˚.07, h400km,**
**n229, σ1ş17/195, mb4.6/92, 17C-9D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase | Op | ID | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **4.68** | **246** | *e*P | | Pn | 22 20 57.5 | +4.4 |
| MSVF | | | | *e*S | | **S** | **22 21 59.1** | **+1.9** |
| **AFI** | **Afiamalu** | **5.83** | **71** | P | | **Pn** | **22 21 05.8** | **+0.7** |
| | 37nm,0.3s,baz=42,slow=2.3,SNR=58 | | | | | | | |
| AFI | | | | S | | **S** | **22 22 19.3** | **+0.2** |
| | 3.5nm,0.3s,baz=60,slow=17,SNR=2.0 | | | | | | | |
| **AFI** | **Afiamalu** | **5.83** | **71** | *e*P | | **Pn** | **22 21 05.8** | **+0.7** |
| AFI | | | | *e*S | | **S** | **22 22 20.6** | **+1.5** |
| **RAO** | **Raoul Island** | **13.32** | **182** | P | | **P** | **22 22 28.9** | **+0.5** |
| | 44nm,0.3s,baz=77,slow=14,SNR=2.7 | | | | | | | |
| RAO | | | | S | | **S** | **22 24 50.5** | **-1.9** |
| | 44nm,0.3s,baz=276,slow=23,SNR=4.0 | | | | | | | |
| **RAO** | **Raoul Island** | **13.32** | **182** | *e*P | | **P** | **22 22 28.9** | **+0.5** |
| RAO | | | | *e*S | | **S** | **22 24 49.5** | **-2.9** |
| RAO | | | | *e*S | | S | 22 24 50.5 | -1.9 |
| **DZM** | **Mont Dzumac** | **16.42** | **245** | P | | **P** | **22 23 03.0** | **+0.8** |
| | 1.1nm,0.3s,baz=9.1,slow=7.5,SNR=12 | | | | | | | |
| **DZM** | **Mont Dzumac** | **16.42** | **245** | *e*P | | **P** | **22 23 03.0** | **+0.8** |
| | 44nm,1.5s | | | | | | | |
| **OUZ** | **Omahuta** | **20.87** | **201** | *e*P | | **P** | **22 23 49.1** | **+2.6** |
| | 44nm,0.6s | | | | | | | |
| **URZ** | **Urewera** | **22.81** | **191** | P | | **P** | **22 24 01.4** | **-2.7** |
| | 28nm,0.7s,baz=86,slow=2.0,SNR=16 | | | | | | | |
| **URZ** | **Urewera** | **22.81** | **191** | *e*P | | **P** | **22 24 01.7** | **-2.4** |
| **HIZ** | **Hauiti** | **23.55** | **195** | *e*P | | **P** | **22 24 11.9** | **+1.1** |
| | 92nm,1.3s | | | | | | | |
| **BKZ** | **Black Stump Fm** | **23.81** | **192** | *e*P | | **P** | **22 24 11.2** | **-1.9** |
| | 31nm,1.3s | | | | | | | |
| **BFZ** | **Birch Farm** | **25.32** | **191** | *e*P | | **P** | **22 24 24.5** | **-2.1** |
| | 642nm,3.0s | | | | | | | |
| **SNZO** | **South Karori** | **26.24** | **193** | *e*P | | **P** | **22 24 33.0** | **-1.7** |
| | 96nm,1.4s | | | | | | | |
| **THZ** | **Tophouse** | **27.11** | **196** | *e*P | | **P** | **22 24 41.3** | **-1.2** |
| | 16nm,0.9s | | | | | | | |
| **OXZ** | **Oxford** | **28.80** | **196** | *e*P | | **P** | **22 24 56.2** | **-1.0** |
| | 24nm,0.7s | | | | | | | |
| **MQZ** | **McQueen's Vall** | **29.00** | **195** | *e*P | | **P** | **22 24 58.7** | **-0.3** |
| | 39nm,1.3s | | | | | | | |
| **RPZ** | **Rata Peaks** | **29.43** | **197** | P | | **P** | **22 25 02.3** | **-0.5** |
| | 7.4nm,0.4s,baz=350,slow=0.3,SNR=6.4 | | | | | | | |
| **ODZ** | **Otahua Downs** | **30.77** | **197** | *e*P | | P | 22 25 09.9 | -4.6 |
| | 209nm,2.6s | | | | | | | |
| **EIDS** | **Eidsvold** | **30.86** | **247** | P | | **P** | **22 25 16.2** | **+0.6** |
| | baz=31,SNR=5.0 | | | | | | | |
| **EIDS** | **Eidsvold** | **30.86** | **247** | *e*P | | **P** | **22 25 16.2** | **+0.6** |
| | 17nm,1.3s | | | | | | | |
| **WKZ** | **Wanaka** | **31.04** | **199** | *e*P | | **P** | **22 25 15.7** | **-1.2** |
| | 32nm,0.9s | | | | | | | |
| **ARMA** | **Armidale** | **31.77** | **237** | P | | **P** | **22 25 25.1** | **+1.5** |
| | baz=32,SNR=4.8 | | | | | | | |
| **ARMA** | **Armidale** | **31.77** | **237** | *e*P | | **P** | **22 25 23.1** | **-0.4** |
| | 134nm,2.3s | | | | | | | |
| **WHZ** | **Wether Hill Ro** | **32.34** | **199** | *e*P | | **P** | **22 25 28.1** | **+0.1** |
| | 65nm,1.5s | | | | | | | |
| **RMQ** | **Roma** | **33.13** | **246** | P | | **P** | **22 25 37.3** | **+2.1** |
| | baz=33,SNR=8.2 | | | | | | | |
| **MGCD** | **Mangrove Creek** | **33.22** | **233** | P | | **P** | **22 25 37.8** | **+1.9** |
| | baz=34,SNR=9.2 | | | | | | | |
| **CTAO** | **Charters Tower** | **34.73** | **258** | *e*P | | **P** | **22 25 50.3** | **+1.5** |
| | 38nm,2.0s | | | | | | | |
| **CNB** | **Canberra Magne** | **35.40** | **231** | P | | **P** | **22 25 56.0** | **+1.6** |
| | baz=36,SNR=12 | | | | | | | |
| **MTSU** | **Mount Surprise** | **36.58** | **261** | P | | **P** | **22 26 04.5** | **+0.1** |
| | baz=37,SNR=11 | | | | | | | |
| **CMSA** | **Cobar Meteorol** | **36.97** | **238** | P | | **P** | **22 26 06.9** | **-0.5** |
| | baz=37,SNR=19 | | | | | | | |
| **QLP** | **Quilpie** | **37.14** | **247** | P | | **P** | **22 26 08.4** | **-0.5** |
| | baz=37,SNR=5.4 | | | | | | | |
| **COEN** | **Coen** | **38.05** | **268** | P | | **P** | **22 26 17.6** | **+1.0** |
| | baz=38,SNR=8.6 | | | | | | | |
| **COEN** | **Coen** | **38.05** | **268** | *e*P | | **P** | **22 26 17.1** | **+0.4** |
| | 17nm,0.9s | | | | | | | |
| **TOO** | **Toolangi** | **39.17** | **229** | P | | **P** | **22 26 25.5** | **0.0** |
| | baz=39,SNR=18 | | | | | | | |
| **HLK** | **Haleakala** | **41.94** | **30** | *e*P | | **P** | **22 26 48.2** | **0.0** |
| | 254nm,1.4s | | | | | | | |
| **HTT** | **Hallett** | **42.98** | **238** | P | | P | 22 26 48.6 | -7.7 |
| | baz=43,SNR=7.3 | | | | | | | |
| **BBOO** | **Buckleboo** | **45.20** | **239** | P | | **P** | **22 27 13.1** | **-0.5** |
| | baz=46,SNR=24 | | | | | | | |
| **BBOO** | **Buckleboo** | **45.20** | **239** | *e*P | | **P** | **22 27 13.4** | **-0.2** |
| | 95nm,1.9s | | | | | | | |
| **WRAB** | **Tennant Creek** | **45.92** | **257** | *e*P | | **P** | **22 27 18.6** | **-0.7** |
| | 17nm,0.8s | | | | | | | |
| **WRA** | **Warramunga Arr** | **45.93** | **257** | P | | **P** | **22 27 18.3** | **-1.1** |
| | 4.0nm,0.4s,baz=89,slow=6.8,SNR=33 | | | | | | | |
| **AS01** | **Alice Springs** | **46.20** | **252** | *e*P | | **P** | **22 27 20.6** | **-0.9** |
| **AS31** | **Alice Springs** | **46.24** | **252** | *e*P | | **P** | **22 27 21.4** | **-0.4** |
| | 17nm,0.4s | | | | | | | |
| AS31 | | | | *e*S | | S | 22 33 32.5 | -5.6 |
| **ASAR** | **Alice Springs** | **46.25** | **252** | P | | **P** | **22 27 21.4** | **-0.4** |
| | 35nm,0.5s,baz=86,slow=8.1,SNR=476 | | | | | | | |
| ASAR | | | | S | | S | 22 33 32.5 | -5.6 |
| | 1.4nm,0.6s,baz=82,slow=16,SNR=12 | | | | | | | |
| **KDU** | **Kakadu** | **48.54** | **267** | P | | P | 22 27 43.1 | +3.9 |
| | baz=49,SNR=5.4 | | | | | | | |
| **WRKA** | **Warakurna** | **51.36** | **250** | P | | **P** | **22 27 59.9** | **-0.2** |
| | baz=52,SNR=23 | | | | | | | |
| **KMBL** | **Kambalda** | **57.03** | **243** | P | | **P** | **22 28 39.4** | **-1.1** |
| | baz=57,SNR=6.3 | | | | | | | |
| **MBWA** | **Marble Bar** | **59.47** | **255** | *e*P | | P | 22 28 55.2 | -2.0 |
| | 32nm,1.4s | | | | | | | |
| **MEEK** | **Meekatharra** | **60.02** | **248** | P | | **P** | **22 28 60.0** | **-0.9** |
| | baz=60,SNR=10 | | | | | | | |
| **KLBR** | **Kellerberrin** | **60.56** | **242** | P | | **P** | **22 29 03.5** | **-0.9** |
| | baz=61,SNR=15 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **60.98** | **241** | P | | **P** | **22 29 06.8** | **-0.3** |
| | baz=61,SNR=5.7 | | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **60.98** | **241** | *e*P | | **P** | **22 29 06.4** | **-0.7** |
| | 94nm,1.8s | | | | | | | |
| **BLDU** | **Ballidu** | **61.49** | **244** | P | | **P** | **22 29 09.8** | **-0.7** |
| | baz=62,SNR=5.6 | | | | | | | |
| **MORW** | **Morawa** | **62.14** | **245** | P | | **P** | **22 29 14.2** | **-0.7** |
| | baz=62,SNR=6.5 | | | | | | | |
| **VNDA** | **Vanda** | **62.54** | **185** | P | | **P** | **22 29 17.7** | **+1.1** |
| | 1.9nm,0.5s,baz=356,slow=7.0,SNR=16 | | | | | | | |
| **MJAR** | **Matsushiro Arr** | **66.84** | **322** | P | | **P** | **22 29 43.5** | **-1.2** |
| | 2.4nm,0.9s,baz=159,slow=7.7,SNR=4.8 | | | | | | | |
| **PETK** | **Petropavlovsk-** | **71.96** | **345** | P | | **P** | **22 30 14.5** | **-0.8** |
| | 4.7nm,0.6s,baz=145,slow=6.5,SNR=4.0 | | | | | | | |
| **PEA1** | **Petropavlovsk-** | **71.97** | **345** | *e*P | | **P** | **22 30 14.5** | **-0.8** |
| **QSPA** | **South Pole Qui** | **74.17** | **180** | *e*P | | **P** | **22 30 29.1** | **+0.9** |
| | 14nm,0.6s | | | | | | | |
| **SAO** | **San Andreas Ge** | **74.33** | **44** | *e*P | | **P** | **22 30 30.1** | **+0.7** |
| | 15nm,0.9s | | | | | | | |
| **KMRM** | **Mail Ridge** | **74.88** | **40** | *e*P | | **P** | **22 30 34.0** | **+1.5** |
| | 46nm,0.8s | | | | | | | |
| **CMB** | **Columbia Colle** | **75.74** | **43** | *e*P | | **P** | **22 30 37.6** | **+0.2** |
| | 11nm,0.9s | | | | | | | |
| **YBH** | **Yreka Blue Hor** | **76.38** | **39** | *e*P | | **P** | **22 30 41.7** | **+0.8** |
| | 12nm,1.0s | | | | | | | |
| **MTUM** | **Tungsten Hills** | **76.59** | **45** | *e*P | | **P** | **22 30 42.9** | **+0.6** |
| **SLBS** | **Sierra La Lagu** | **76.77** | **60** | *e*P | | **P** | **22 30 44.1** | **+0.7** |
| | 153nm,2.4s | | | | | | | |
| **GLA** | **Glamis** | **77.05** | **50** | *e*P | | **P** | **22 30 46.2** | **+1.4** |
| | 7.7nm,0.8s | | | | | | | |
| **NV01** | **Mina Array Sit** | **77.33** | **44** | *e*P | | **P** | **22 30 46.9** | **+0.4** |
| **NVAR** | **Mina Array Bea** | **77.33** | **44** | P | | **P** | **22 30 46.9** | **+0.4** |
| | 7.3nm,0.6s,baz=227,slow=8.9,SNR=77 | | | | | | | |
| **MOD** | **Modoc** | **77.95** | **40** | *e*P | | **P** | **22 30 49.4** | **-0.2** |
| | 5.0nm,0.8s | | | | | | | |
| **TPNV** | **Topopah Spring** | **77.96** | **46** | *e*P | | **P** | **22 30 50.3** | **+0.5** |
| | 10nm,0.7s | | | | | | | |
| **K05A** | **Summer Lake** | **78.05** | **39** | *e*P | | **P** | **22 30 50.3** | **+0.1** |
| | 302nm,3.0s | | | | | | | |
| **CNPM** | **China Poot** | **78.10** | **13** | *e*P | | **P** | **22 30 48.6** | **-1.2** |
| | 388nm,2.3s | | | | | | | |
| **BRLK** | **Bradley Lake** | **78.39** | **13** | *e*P | | **P** | **22 30 50.4** | **-1.1** |
| | 100nm,1.4s | | | | | | | |
| **H04A** | **Detroit Lake** | **78.43** | **37** | *e*P | | **P** | **22 30 51.5** | **-0.5** |
| | 212nm,2.9s | | | | | | | |
| **SHPR** | **Sheep Range** | **78.49** | **47** | *e*P | | **P** | **22 30 53.2** | **+0.5** |
| **BMN** | **Battle Mountai** | **79.10** | **42** | *e*P | | **P** | **22 30 56.6** | **+0.7** |
| | 12nm,0.8s | | | | | | | |
| **R11A** | **Troy Canyon, C** | **79.12** | **45** | *e*P | | **P** | **22 30 56.4** | **+0.3** |
| **WVOR** | **Wild Horse Val** | **79.27** | **40** | *e*P | | **P** | **22 30 57.4** | **+0.6** |
| | 9.2nm,0.9s | | | | | | | |
| **SPU** | **Mount Spurr** | **79.43** | **12** | *e*P | | **P** | **22 30 55.5** | **-1.6** |
| **TUC** | **Tucson** | **79.74** | **52** | *e*P | | **P** | **22 31 00.7** | **+1.3** |
| | 7.6nm,0.8s | | | | | | | |
| **J08A** | **Circle Bar Ran** | **79.88** | **39** | *e*P | | **P** | **22 31 00.4** | **+0.5** |
| | 14nm,1.1s | | | | | | | |
| **D05A** | **Enumclaw** | **80.02** | **35** | *e*P | | **P** | **22 31 01.8** | **+1.4** |
| | 66nm,1.5s | | | | | | | |
| **CCUT** | **Cedar City** | **80.26** | **47** | *e*P | | **P** | **22 31 03.3** | **+1.1** |
| | 4.7nm,0.9s | | | | | | | |
| **RAGM** | **Ragged Mountai** | **80.45** | **16** | *e*P | | **P** | **22 31 04.7** | **+2.3** |
| | 232nm,0.6s | | | | | | | |
| **ELK** | **Elko** | **80.56** | **43** | *e*P | | **P** | **22 31 04.3** | **+0.6** |
| | 3.2nm,0.8s | | | | | | | |
| **G08A** | **Pilot Rock** | **80.65** | **38** | *e*P | | **P** | **22 31 04.4** | **+0.5** |
| | 7.8nm,0.9s | | | | | | | |
| **HAWA** | **Hanford** | **80.94** | **36** | *e*P | | **P** | **22 31 05.8** | **+0.6** |
| | 82nm,2.5s | | | | | | | |
| **BMO** | **Blue Mountains** | **81.39** | **39** | *e*P | | **P** | **22 31 07.8** | **0.0** |
| | 11nm,1.4s | | | | | | | |
| **MFID** | **Camas Ranch** | **81.54** | **40** | *e*P | | **P** | **22 31 09.1** | **+0.5** |
| | 8.3nm,1.0s | | | | | | | |
| **DUG** | **Dugway** | **81.90** | **44** | *e*P | | **P** | **22 31 11.1** | **+0.5** |
| | 5.4nm,0.8s | | | | | | | |
| **F10A** | **Beach Ranch, E** | **82.04** | **38** | *e*P | | **P** | **22 31 10.7** | **-0.4** |
| | 8.8nm,0.9s | | | | | | | |
| **RND** | **Reindeer** | **82.09** | **13** | *e*P | | **P** | **22 31 10.2** | **-0.8** |
| | 142nm,2.4s | | | | | | | |
| **HLID** | **Hailey** | **82.50** | **41** | *e*P | | **P** | **22 31 13.5** | **-0.2** |
| | 8.7nm,0.8s | | | | | | | |
| **TMUT** | **Trail Mountain** | **82.57** | **46** | *e*P | | **P** | **22 31 14.9** | **+0.6** |
| | 52nm,1.0s | | | | | | | |
| **MPU** | **Maple Canyon** | **82.61** | **45** | *e*P | | **P** | **22 31 15.0** | **+0.8** |
| | 5.6nm,0.9s | | | | | | | |
| **SPUT** | **South Promonto** | **82.67** | **44** | *e*P | | **P** | **22 31 15.6** | **+1.1** |
| | 8.8nm,0.9s | | | | | | | |
| **HVU** | **Hansel Valley** | **82.68** | **43** | *e*P | | **P** | **22 31 15.2** | **+0.7** |
| | 10nm,0.8s | | | | | | | |
| **O16A** | **Springville** | **82.79** | **45** | *e*P | | **P** | **22 31 14.7** | **-0.5** |
| | 38nm,1.9s | | | | | | | |
| **CTU** | **Camp Tracy** | **82.85** | **44** | *e*P | | **P** | **22 31 16.5** | **+1.0** |
| | 8.2nm,1.0s | | | | | | | |
| **SRU** | **San Rafael** | **82.96** | **46** | *e*P | | **P** | **22 31 16.5** | **+0.5** |
| | 11nm,0.8s | | | | | | | |
| **MLY** | **Manley** | **83.18** | **11** | *e*P | | **P** | **22 31 15.2** | **-1.2** |
| | 89nm,2.5s | | | | | | | |
| **WRH** | **Wood River Hil** | **83.20** | **12** | *e*P | | **P** | **22 31 15.6** | **-0.8** |
| | 29nm,1.2s | | | | | | | |
| **HDA** | **Harding Lake** | **83.38** | **13** | *e*P | | **P** | **22 31 16.3** | **-1.0** |
| | 16nm,0.6s | | | | | | | |
| **P18A** | **Preston Nutter** | **83.38** | **46** | *e*P | | **P** | **22 31 19.0** | **+0.6** |
| | 106nm,2.8s | | | | | | | |
| **HWUT** | **Hardware Ranch** | **83.40** | **44** | *e*P | | **P** | **22 31 18.5** | **+0.3** |
| | 6.6nm,1.1s | | | | | | | |
| **CCB** | **Clear Creek Bu** | **83.41** | **12** | *e*P | | **P** | **22 31 16.2** | **-1.2** |
| | 21nm,1.0s | | | | | | | |
| **PV05** | **Paradox Valley** | **83.50** | **48** | *e*P | | **P** | **22 31 20.0** | **+1.1** |
| **MDM** | **Murphy Dome** | **83.60** | **12** | *e*P | | **P** | **22 31 17.4** | **-1.1** |
| | 15nm,1.0s | | | | | | | |
| **COLA** | **College** | **83.60** | **12** | *e*P | | P | 22 31 16.6 | -1.7 |
| | 26nm,0.8s | | | | | | | |
| **PV09

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GOPC | **GO Pecny, Ondr** | **144.62** | **346** | *e*PKP | | PKPbc | 22 38 23.2 | -0.5 |
| WERD | **Werda** | **144.62** | **349** | *e*PKPbc | | PKPbc | 22 38 22.9 | -0.8 |
| | baz=14,slow=3.0 | | | | | | | |
| TANN | **Tannenbergstha** | **144.62** | **349** | *e*PKPbc | | PKPbc | 22 38 23.1 | -0.7 |
| | baz=14,slow=3.0 | | | | | | | |
| GUNZ | **Gunzen** | **144.70** | **349** | *e*PKPbc | | PKPbc | 22 38 23.5 | -0.4 |
| | baz=14,slow=3.0 | | | | | | | |
| VRAC | **Vranov** | **144.74** | **344** | ⇓ *i*P | | PKPbc | 22 38 23.7 | -0.4 |
| WERN | **Wernitzgruen** | **144.76** | **349** | *e*PKPbc | | **PKPdf** | **22 38 23.7** | **-0.5** |
| | baz=14,slow=3.0 | | | | | | | |
| NKC | **Novy Kostel** | **144.80** | **349** | *e*PKP | | **PKPdf** | **22 38 23.8** | **-0.4** |
| NKC | | | | *ex* | | x | 22 38 25.5 | |
| DRGR | | **144.90** | **336** | ⇓ *i*P | | **PKPdf** | **22 38 23.7** | **-0.9** |
| VOIR | | **144.98** | **332** | ⇓ *i*P | | **PKPdf** | **22 38 24.8** | **0.0** |
| PSZ | **Piszkesteto** | **144.99** | **340** | ⇑ *i*P | | **PKPdf** | **22 38 25.1** | **+0.4** |
| SULR | | **144.99** | **330** | ⇑ *i*P | | **PKPdf** | **22 38 25.5** | **+0.8** |
| TREC | **Trest** | **145.03** | **345** | *e*PKP | | **PKPdf** | **22 38 24.5** | **-0.2** |
| MANZ | **Manzenberg** | **145.10** | **349** | *e*PKPbc | | **PKPdf** | **22 38 24.8** | **+0.1** |
| | baz=14,slow=3.0 | | | | | | | |
| ARR | **Arges** | **145.22** | **332** | ⇓ *i*P | | **PKPdf** | **22 38 26.4** | **+1.2** |
| SMOL | **Smolenice** | **145.23** | **343** | *e*PKP | | **PKPdf** | **22 38 26.1** | **+1.1** |
| ROTZ | **Rotzenmuhle** | **145.29** | **349** | *e*PKPbc | | **PKPdf** | **22 38 25.7** | **+0.7** |
| | baz=14,slow=3.0 | | | | | | | |
| TNS | **Taunus Mts** | **145.41** | **353** | *e*PKPbc | | **PKPdf** | **22 38 25.7** | **+0.4** |
| | baz=14,slow=3.0 | | | | | | | |
| GRF | **Grafenberg Arr** | **145.54** | **350** | *e*PKPbc | | **PKPdf** | **22 38 26.8** | **+1.3** |
| | baz=14,slow=3.0 | | | | | | | |
| GRFO | **Grafenberg** | **145.54** | **350** | *e*PKPdf | | **PKPdf** | **22 38 26.7** | **+1.2** |
| KHC | **Kasperske Hory** | **145.63** | **347** | *e*PKP | | **PKPdf** | **22 38 25.9** | **+0.2** |
| KHC | | | | *ex* | | x | 22 38 29.1 | |
| KHC | **Kasperske Hory** | **145.63** | **347** | *e*PKPdf | | **PKPdf** | **22 38 25.9** | **+0.2** |
| HUMR | **Humele** | **145.71** | **331** | ⇑ *i*P | | **PKPdf** | **22 38 27.4** | **+1.5** |
| WET | **Wettzell** | **145.76** | **348** | *e*PKPbc | | **PKPdf** | **22 38 27.4** | **+1.4** |
| | baz=14,slow=3.0 | | | | | | | |
| GEC2 | **GERESS Array S** | **145.87** | **347** | *e*PKPbc | | **PKPdf** | **22 38 26.9** | **+0.7** |
| | baz=14,slow=3.0 | | | | | | | |
| GEC2 | **GERESS Array S** | **145.87** | **347** | *e*PKPdf | | **PKPdf** | **22 38 27.0** | **+0.8** |
| GERES | **GERESS Array B** | **145.87** | **347** | PKPbc | | **PKPdf** | **22 38 26.9** | **+0.7** |
| | comp=Z,3.5nm,0.6s,baz=19,slow=3.2,SNR=22 | | | | | | | |
| WLF | **Walferdange** | **146.17** | **356** | P | | **PKPdf** | **22 38 28.5** | **+2.0** |
| WLF | **Walferdange** | **146.17** | **356** | *e*PKPbc | | **PKPdf** | **22 38 28.5** | **+2.0** |
| | baz=14,slow=3.0 | | | | | | | |
| CONA | **Conrad Observa** | **146.20** | **344** | ⇑ *i*PKPab | | **PKPdf** | **22 38 28.2** | **+1.4** |
| | comp=Z,12nm,1.1s | | | | | | | |
| BZS | **Buzias** | **146.30** | **336** | ⇓ *i*P | | **PKPdf** | **22 38 28.3** | **+1.4** |
| MOA | **Molln** | **146.68** | **346** | ⇑ *i*PKPbc | | **PKPdf** | **22 38 29.4** | **+1.9** |
| | comp=Z,6.3nm,0.7s | | | | | | | |
| FUR | **Furstenfeldbru** | **147.00** | **349** | *e*PKPbc | | **PKPdf** | **22 38 30.3** | **+2.3** |
| | baz=14,slow=3.0 | | | | | | | |
| RJOB | **Jochberg** | **147.11** | **347** | *e*PKPbc | | **PKPdf** | **22 38 30.6** | **+2.3** |
| | baz=14,slow=3.0 | | | | | | | |
| BFO | **Black Forest** | **147.28** | **353** | *e*PKPbc | | **PKPdf** | **22 38 30.9** | **+2.4** |
| | baz=14,slow=3.0 | | | | | | | |
| BFO | **Black Forest** | **147.28** | **353** | *e*PKPbc | | **PKPdf** | **22 38 30.8** | **+2.4** |
| SOKA | **Soboth** | **147.57** | **344** | ⇑ *i*PKPbc | | **PKPdf** | **22 38 31.2** | **+2.1** |
| | comp=Z,7.6nm,1.1s | | | | | | | |
| RETA | **Reutte** | **147.75** | **350** | ⇑ *i*PKPbc | | **PKPdf** | **22 38 32.1** | **+2.7** |
| | comp=Z,4.1nm,0.6s | | | | | | | |
| WTTA | **Wattenberg** | **147.80** | **348** | ⇑ *i*PKPbc | | **PKPdf** | **22 38 32.4** | **+2.8** |
| | comp=Z,11nm,0.7s | | | | | | | |
| MYKA | **Terra Mystica** | **147.97** | **346** | ⇑ *i*PKPbc | | **PKPdf** | **22 38 32.0** | **+2.2** |
| | comp=Z,5.9nm,0.6s | | | | | | | |
| DAVA | **Damuels** | **148.09** | **351** | ⇑ *i*PKiKP | | **PKPbc** | **22 38 33.4** | **-0.4** |
| | comp=Z,12nm,1.1s | | | | | | | |
| ABTA | **Abfaltersbach** | **148.12** | **347** | ⇑ *i*PKPbc | | **PKPdf** | **22 38 32.4** | **+2.4** |
| | comp=Z,9.9nm,0.7s | | | | | | | |
| DIVS | **Divibare** | **148.21** | **336** | ⇑ *i*P | | **PKPbc** | **22 38 33.7** | **-0.4** |
| FUORN | **Ofenpass-Fuorn** | **148.67** | **350** | *e*PKPbc | | **PKPbc** | **22 38 35.2** | **-0.2** |
| PDG | **Podgorica** | **149.89** | **335** | ⇓ *i*P | | **PKPbc** | **22 38 37.7** | **-0.4** |
| AGG | **Agios Georgios** | **151.14** | **327** | *e*PKPbc | | **PKPbc** | **22 38 39.8** | **-1.4** |
| LAST | **Lasithi** | **151.88** | **317** | ⇑ *i*P | | **PKPbc** | **22 38 42.8** | **-0.3** |
| LAST | **Lasithi** | **151.88** | **317** | *e*PKPbc | | **PKPbc** | **22 38 42.0** | **-1.1** |
| TORD | **Torodi Ar. Bea** | **177.17** | **163** | PKP | | **PKPdf** | **22 38 56.4** | **-1.9** |
| | comp=Z,1.0nm,0.8s,baz=315,slow=0.5,SNR=7.0 | | | | | | | |
| TORD | | | | PKPab | | PKPab | 22 40 46.7 | +1.8 |
| | comp=Z,0.7nm,1.0s,baz=294,slow=4.6,SNR=5.7 | | | | | | | |
| TOA1 | **Torodi Ar. Sit** | **177.17** | **163** | *e*PKPdf | | **PKPdf** | **22 38 56.4** | **-1.9** |

*ISCJB **31** 22:22:59.0±0.5, 12°.41N±0°.04×126°.26E±0°.08, h41km, mb4.2/19, MS2.7/2, Error ellipse: s-maj=11.6km s-min=5.7km az=5.8*
*IDC **31** 22:23:00.8±5.7, 12°.48N×126°.43E, h44km±55km, mb3.8/14, mb1 4.0/15, mb1mx3.8/34, mbtmp4.1/15, ML4.2/1, MS2.9/3, Ms1 2.9/3, ms1mx2.6/27, Error ellipse: s-maj=34.2km s-min=14.8km az=74.0*
*NEIC **31** 22:23:02.0±1.4, 12°.46N×126°.38E, h56km±13km, mb4.7/7, Error ellipse: s-maj=12.8km s-min=5.4km az=79.0*
**ISC 31 22:23:00.8**±0.6,**12°.39N**±0°.06×**126°.2E**±0°.1,**h41**km,**n39,**
**σ1§05/39,mb4.2/19,2D,Philippine Islands region**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| PLP | **Palo** | **1.73** | **226** | ⇓ | *e*P | **Pn** | | **22 23 28.3** | **-0.1** |
| PLP | | | | | *e*S | **Sn** | | **22 23 46.2** | **-3.1** |
| SCPH | **Surigao** | **2.69** | **196** | *e* | P | Pn | | 22 23 52.9 | +11 |
| SCPH | | | | | *e*S | **Sn** | | **22 24 12.8** | **-0.2** |
| RCP | **Roxas** | **3.52** | **257** | ⇓ | *e*P | **Pn** | | **22 23 53.2** | **+0.2** |
| DAV | **Davao City (W)** | **5.32** | **187** | LR | | LR | | 22 27 06.0 | |
| | comp=Z,204nm,20.4s,baz=346,slow=45 | | | | | | | | |
| SZP | **Santa** | **7.59** | **313** | *e* | Pn | **Pn** | | **22 24 50.8** | **+1.9** |
| KAPI | **Kappang** | **18.45** | **201** | P | | **Pn** | | **22 27 14.7** | **+1.2** |
| | 0.8nm,0.3s,baz=37,slow=7.6,SNR=7.9 | | | | | | | | |
| KAPI | **Kappang** | **18.45** | **201** | *e*P | | **Pn** | | **22 27 14.7** | **+1.2** |
| | 14nm,0.9s | | | | | | | | |
| BATI | **Baumata** | **22.59** | **187** | P | | **P** | | **22 27 59.4** | **+1.4** |
| | 13nm,0.4s,baz=159,slow=0.3,SNR=5.1 | | | | | | | | |
| KS15 | **Wonju Array Si** | **24.99** | **3** | *e*P | | **P** | | **22 28 19.9** | **-0.8** |
| KSAR | **Wonju Array Be** | **24.99** | **3** | P | | **P** | | **22 28 19.9** | **-0.8** |
| KSRS | **Korea Array** | **25.01** | **3** | P | | **P** | | **22 28 19.9** | **-0.9** |
| | 1.1nm,0.5s,baz=186,slow=9.9,SNR=3.8 | | | | | | | | |
| KSRS | | | | LR | | LR | | 22 37 21.1 | |
| | comp=Z,23nm,19.9s,baz=138,slow=35 | | | | | | | | |
| UGM | **Wanagama** | **25.51** | **219** | *e*P | | **P** | | **22 28 26.1** | **+0.4** |
| | 365nm,1.6s | | | | | | | | |
| MJAR | **Matsushiro Arr** | **26.35** | **22** | LR | | LR | | 22 38 08.2 | |
| | comp=Z,25nm,19.4s,baz=200,slow=35 | | | | | | | | |
| CM31 | **Chiang Mai Arr** | **26.98** | **286** | *e*P | | **P** | | **22 28 38.8** | **-0.2** |
| CMAR | **Chiang Mai Ar** | **26.98** | **286** | P | | **P** | | **22 28 38.8** | **-0.2** |
| | 1.4nm,0.7s,baz=95,slow=7.4,SNR=9.5 | | | | | | | | |
| WRA | **Warramunga Arr** | **33.10** | **166** | P | | **P** | | **22 29 32.8** | **-0.3** |
| | 0.8nm,0.4s,baz=346,slow=9.3,SNR=3.3 | | | | | | | | |
| WRA | | | | PcP | | **PcP** | | **22 32 16.0** | **+0.2** |
| | 0.4nm,0.3s,baz=328,slow=3.4,SNR=3.1 | | | | | | | | |
| AS31 | **Alice Springs** | **36.61** | **168** | *e*P | | **P** | | **22 30 03.4** | **+0.1** |
| | 1.2nm,0.4s | | | | | | | | |
| ASAR | **Alice Springs** | **36.61** | **168** | P | | **P** | | **22 30 03.4** | **+0.1** |
| | 1.3nm,0.4s,baz=349,slow=8.1,SNR=12 | | | | | | | | |
| SONA0 | **Songino Array** | **39.04** | **339** | *e*P | | **P** | | **22 30 23.7** | **0.0** |
| SONM | **Songino Array** | **39.04** | **339** | P | | **P** | | **22 30 23.7** | **0.0** |
| | 1.2nm,0.9s,baz=151,slow=10,SNR=6.7 | | | | | | | | |
| BBOO | **Buckleboo** | **45.91** | **168** | *e*P | | **P** | | **22 31 20.5** | **+1.0** |
| | 151nm,2.4s | | | | | | | | |
| MK01 | **Makanchi Array** | **50.33** | **322** | *e*P | | **P** | | **22 31 54.1** | **+0.5** |
| MK32 | **Makanchi Array** | **50.35** | **322** | *e*P | | **P** | | **22 31 54.3** | **+0.6** |
| MKAR | **Makanchi Array** | **50.35** | **322** | P | | **P** | | **22 31 54.3** | **+0.6** |
| | 2.3nm,0.9s,baz=105,slow=9.2,SNR=9.6 | | | | | | | | |
| ZALV | **Zalesovo Beam** | **52.77** | **331** | P | | **P** | | **22 32 11.2** | **-0.5** |
| | 0.9nm,0.6s,baz=122,slow=7.2,SNR=5.3 | | | | | | | | |
| ZAA1 | **Zalesovo Array** | **52.77** | **331** | *e*P | | **P** | | **22 32 11.2** | **-0.5** |
| KURK | **Kurchatov** | **54.33** | **325** | *e*P | | **P** | | **22 32 23.3** | **+0.3** |
| | 13nm,1.1s | | | | | | | | |
| GEYT | **Alibeck** | **65.27** | **306** | P | | **P** | | **22 33 39.6** | **+1.0** |
| | 0.6nm,0.4s,baz=75,slow=2.2,SNR=3.2 | | | | | | | | |
| RAYN | **Ar Rayn** | **76.77** | **291** | *e*P | | **P** | | **22 34 48.8** | **+0.1** |
| | 3.0nm,0.8s | | | | | | | | |
| ILAR | **Eielson Array** | **77.56** | **26** | P | | **P** | | **22 34 49.7** | **-2.6** |
| | 0.5nm,1.0s,baz=269,slow=5.0,SNR=3.7 | | | | | | | | |
| ILB | **Eielson Array** | **77.56** | **26** | *e*P | | **P** | | **22 34 49.7** | **-2.6** |
| ARA0 | **ARCESS Array S** | **82.21** | **340** | *e*P | | **P** | | **22 35 17.7** | **+0.4** |
| ARCES | **ARCESS Array B** | **82.21** | **340** | P | | **P** | | **22 35 17.7** | **+0.4** |
| | 4.6nm,1.0s,baz=63,slow=8.5,SNR=3.9 | | | | | | | | |
| FIA0 | **FINESS Array S** | **84.03** | **332** | *e*P | | **P** | | **22 35 26.6** | **-0.2** |
| FINES | **FINESS Array B** | **84.03** | **332** | P | | **P** | | **22 35 26.6** | **-0.2** |
| | 3.7nm,1.0s,baz=59,slow=5.4,SNR=3.9 | | | | | | | | |
| AKASG | **Malin Array Be** | **84.92** | **321** | P | | **P** | | **22 35 30.8** | **-0.8** |
| | 0.6nm,0.4s,baz=61,slow=3.8,SNR=6.3 | | | | | | | | |
| AKBB | **Malin Array Si** | **84.92** | **321** | *e*P | | **P** | | **22 35 30.8** | **-0.8** |
| MAW | **Mawson** | **91.67** | **200** | P | | **P** | | **22 36 03.7** | **+0.5** |
| | 0.6nm,0.4s,baz=30,slow=8.1,SNR=5.5 | | | | | | | | |
| MAW | **Mawson** | **91.67** | **200** | *e*P | | **P** | | **22 36 03.7** | **+0.5** |
| | 14nm,3.0s | | | | | | | | |

*MOS **31** 22:40:07.6±2.2, 48°.88N×154°.57E, h199km, mb4.3/1, Error ellipse: s-maj=49.3km s-min=7.2km az=67.2*
*KRSC **31** 22:40:11.7±1.9, 49°.45N×154°.50E, h256km±18km, ML4.2*
*IDC **31** 22:40:12.9±1.9, 50°.05N×152°.91E, h239km±23km, mb3.1/4, mb1 3.4/7, mb1mx3.0/60, mbtmp3.8/7, Error ellipse: s-maj=84.1km s-min=16.2km az=135.0*
**ISC 31 22:40:13.2**±0.9,**49.7N**±0°.2×**153°.6E**±0°.2,**h250**km,**n38,**
**σ1§85/36,mb3.4/4,Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| SKR | **Severo-Kuril's** | **1.94** | **57** | *e*P | | Pn | | 22 40 52.3 | -2.7 |
| SKR | **Severo-Kuril's** | **1.94** | **57** | *e*PN | | Pn | | 22 40 40.5 | -14 |
| SKR | | | | pmax | | pmax | | | |
| | comp=Z,130nm,0.7s | | | | | | | | |
| SKR | | | | pmax | | pmax | | | |
| | comp=N,160nm,0.9s | | | | | | | | |
| SKR | | | | pmax | | pmax | | | |
| | comp=E,160nm,0.9s | | | | | | | | |
| MIPR | **Malaya Ipel'ka** | **3.31** | **36** | *e*P | | **Pn** | | **22 41 07.2** | **-1.8** |
| APC | **Apacha** | **3.98** | **33** | *e*P | | **Pn** | | **22 41 14.7** | **-1.9** |
| APC | **Apacha** | **3.98** | **33** | PN | | **Pn** | | **22 41 14.7** | **-1.9** |
| RUS | **Russkaya** | **4.18** | **46** | *e*P | | **Pn** | | **22 41 16.7** | **-2.3** |
| RUS | | | | *e*S | | S | | 22 42 06.1 | -5.2 |
| RUS | **Russkaya** | **4.18** | **46** | PN | | **Pn** | | **22 41 16.7** | **-2.3** |
| RUS | | | | S | | S | | 22 42 06.1 | -5.2 |
| PETK | **Petropavlovsk-** | **4.32** | **35** | P | | **Pn** | | **22 41 19.2** | **-1.4** |
| | comp=E,1.0nm,0.3s,baz=220,slow=13,SNR=19 | | | | | | | | |
| PETK | **Petropavlovsk-** | **4.32** | **35** | PN | | **Pn** | | **22 41 19.3** | **-1.4** |
| PETK | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| KOK | **Koryaka** | **4.83** | **39** | P | | **Pn** | | **22 41 25.5** | **-1.3** |
| KOK | **Koryaka** | **4.83** | **39** | PN | | **Pn** | | **22 41 25.5** | **-1.3** |
| UGLR | **Uglovaya** | **4.85** | **41** | *e*P | | **Pn** | | **22 41 25.8** | **-1.3** |
| AVH | **Avacha** | **4.85** | **40** | *e*P | | **Pn** | | **22 41 25.4** | **-1.7** |
| AVH | **Avacha** | **4.85** | **40** | PN | | **Pn** | | **22 41 25.4** | **-1.7** |
| SMAR | **Somma** | **4.88** | **40** | *e*P | | **Pn** | | **22 41 25.3** | **-2.2** |
| SMAR | **Somma** | **4.88** | **40** | PN | | **Pn** | | **22 41 25.3** | **-2.2** |
| GNL | **Ganaly** | **4.88** | **32** | *e*P | | **Pn** | | **22 41 26.2** | **-1.3** |
| GNL | **Ganaly** | **4.88** | **32** | PN | | **Pn** | | **22 41 26.2** | **-1.3** |
| KRX | **Arik** | **4.89** | **39** | *e*P | | **Pn** | | **22 41 26.6** | **-1.0** |
| SDLR | **Sedlovina** | **4.92** | **40** | P | | **Pn** | | **22 41 26.5** | **-1.5** |
| SDLR | **Sedlovina** | **4.92** | **40** | PN | | **Pn** | | **22 41 26.5** | **-1.5** |
| NLC | **Nalytchevo** | **5.05** | **44** | *e*P | | **Pn** | | **22 41 26.7** | **-2.7** |
| NLC | **Nalytchevo** | **5.05** | **44** | PN | | **Pn** | | **22 41 26.7** | **-2.7** |
| SPN | **Mys Shipunski** | **5.32** | **47** | *e*P | | **Pn** | | **22 41 30.1** | **-2.6** |
| SPN | | | | *e*S | | S | | 22 42 26.6 | -10 |
| SPN | **Mys Shipunski** | **5.32** | **47** | PN | | **Pn** | | **22 41 30.1** | **-2.6** |
| SPN | | | | S | | S | | 22 42 26.6 | -10 |
| MKZ | **Mys Kozlova** | **7.03** | **43** | *e*P | | **Pn** | | **22 41 51.0** | **-3.0** |
| MKZ | **Mys Kozlova** | **7.03** | **43** | PN | | **Pn** | | **22 41 51.0** | **-3.0** |
| KBTR | **Krutoberegovo** | **8.62** | **37** | *e*P | | **Pn** | | **22 42 13.0** | **-1.1** |
| KBTR | **Krutoberegovo** | **8.62** | **37** | PN | | **Pn** | | **22 42 13.0** | **-1.1** |
| ASAJ | **Asahikawa** | **9.32** | **238** | P | | **Pn** | | **22 42 22.5** | **-0.6** |
| | comp=Z,1.6nm,0.3s,baz=56,slow=12,SNR=8.8 | | | | | | | | |
| ASAJ | **Asahikawa** | **9.32** | **238** | PN | | **Pn** | | **22 42 22.5** | **-0.6** |
| ASAJ | | | | pmax | | pmax | | | |
| | comp=Z,2.0nm,0.3s | | | | | | | | |
| MJAR | **Matsushiro Arr** | **17.20** | **226** | P | | **P** | | **22 43 56.5** | **-0.5** |
| | comp=Z,0.7nm,0.3s,baz=23,slow=11,SNR=8.2 | | | | | | | | |
| MJAR | **Matsushiro Arr** | **17.20** | **226** | P | | **P** | | **22 43 56.5** | **-0.5** |
| MJAR | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| ILAR | **Eielson Array** | **34.13** | **41** | P | | **P** | | **22 46 34.1** | **0.0** |
| | comp=Z,0.2nm,0.4s,baz=263,slow=6.3,SNR=5.6 | | | | | | | | |
| INK | **Inuvik** | **39.06** | **34** | P | | **P** | | **22 47 15.4** | **0.0** |
| | comp=Z,0.5nm,0.3s,baz=284,slow=8.3,SNR=4.0 | | | | | | | | |
| INK | **Inuvik** | **39.06** | **34** | P | | **P** | | **22 47 15.5** | **0.0** |
| INK | | | | pmax | | pmax | | | |
| | comp=Z,1.0nm,0.3s | | | | | | | | |
| NVAR | **Mina Array Bea** | **60.85** | **64** | P | | **P** | | **22 50 02.1** | **+2.6** |
| | comp=Z,0.5nm,0.6s,baz=316,slow=6.3,SNR=4.1 | | | | | | | | |
| TXAR | **Lajitas Array** | **75.82** | **61** | P | | **P** | | **22 51 33.9** | **+2.0** |
| | comp=Z,0.4nm,0.5s,baz=286,slow=5.2,SNR=5.6 | | | | | | | | |

*ISCJB **31** 22:43:09.7±0.3, 50°.98N±0°.03×101°.88W±0°.03, h0km, mb3.3/3, Error ellipse: s-maj=3.9km s-min=3.0km az=173.1*
*NEIC **31** 22:43:14.8, 50°.81N×101°.89W, h1km, mb3.9/1, MN3.6(OTT), After OTT.*
*NEIC Felt in the Langenburg area, Saskatchewan.*
*OTT **31** 22:43:14.8±0.3, 50°.81N×101°.89W, h1km, MN3.6/10*
*OTT Esterhazy, Sk. Felt. 13km west from Langenburg, Sk. Felt. Induced.*
*IDC **31** 22:43:15.5±0.8, 50°.74N×101°.84W, h0km, mb3.4/3, mb1 3.9/8, mb1mx3.6/47, mbtmp3.6/8, ML3.6/3, Error ellipse: s-maj=15.2km s-min=7.4km az=13.0*
**ISC 31 22:43:12.2**±0.6,**50°.91N**±0°.04×**101°.83W**±0°.03,**h0**km,**n72,**
**σ1§91/100,mb3.2/3,Manitoba**

| Code | Station Name | Δ° | AZ° | Phase | ID | Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|---|---|
| A27A | **Ledoux Ranch,** | **2.00** | **169** | P | | **Pn** | | **22 43 47.4** | **+0.3** |
| | baz=1.8 | | | | | | | | |
| A27A | | | | S | | **Sn** | | **22 44 11.4** | **-1.4** |
| | baz=1.8 | | | | | | | | |
| A26A | **Wade Farm, Ken** | **2.02** | **184** | P | | **Pn** | | **22 43 48.1** | **+0.6** |
| | baz=1.7 | | | | | | | | |
| A26A | | | | S | | **Sn** | | **22 44 12.3** | **-1.1** |
| | baz=1.7 | | | | | | | | |
| A25A | **Svangstu Ranch** | **2.14** | **203** | P | | **Pn** | | **22 43 49.7** | **+0.5** |
| | baz=1.8 | | | | | | | | |
| A25A | | | | S | | **Sn** | | **22 44 15.3** | **-1.2** |
| | baz=1.8 | | | | | | | | |
| A28A | **Rude Farm, Bot** | **2.24** | **153** | P | | **Pb** | | **22 43 53.3** | **-0.3** |
| | baz=2.1 | | | | | | | | |
| A28A | | | | S | | **Sb** | | **22 44 20.9** | **-1.0** |
| | baz=2.1 | | | | | | | | |
| B27A | **Peters Farms,** | **2.54** | **171** | P | | **Pn** | | **22 43 55.9** | **+1.3** |
| | baz=2.3 | | | | | | | | |
| B27A | | | | S | | **Sn** | | **22 44 26.2** | **+0.1** |
| | baz=2.3 | | | | | | | | |
| B26A | **Jensen Ranch,** | **2.55** | **186** | P | | **Pn** | | **22 43 55.4** | **+0.6** |
| | baz=2.3 | | | | | | | | |
| B26A | | | | Sb | | **Sn** | | **22 44 26.9** | **+0.3** |
| | baz=2.3 | | | | | | | | |
| A29A | **Manning Farm,** | **2.60** | **139** | P | | **Pb** | | **22 43 59.1** | **-0.6** |
| | baz=2.5 | | | | | | | | |
| A29A | | | | S | | **Sb** | | **22 44 30.9** | **-1.3** |
| | baz=2.5 | | | | | | | | |
| B28A | **Dugan Ranch, T** | **2.64** | **158** | P | | **Pn** | | **22 43 58.2** | **+2.2** |
| | baz=2.4 | | | | | | | | |
| B28A | | | | S | | **Sn** | | **22 44 30.1** | **+1.4** |
| | baz=2.4 | | | | | | | | |
| B25A | **Knox Farm, Ray** | **2.78** | **199** | P | | **Pn** | | **22 43 58.8** | **+0.8** |
| | baz=2.5 | | | | | | | | |
| B25A | | | | S | | **Sn** | | **22 44 32.1** | **-0.1** |
| | baz=2.5 | | | | | | | | |
| DGMT | **Dagmar** | **2.88** | **213** | P | | **Pn** | | **22 44 00.2** | **+0.8** |
| | baz=2.6 | | | | | | | | |
| DGMT | | | | S | | **Sn** | | **22 44 34.2** | **-0.6** |
| | baz=2.6 | | | | | | | | |
| DGMT | **Dagmar** | **2.88** | **213** | *e*Pn | | **Pn** | | **22 43 59.9** | **+0.5** |
| DGMT | | | | *e*Sn | | **Sn** | | **22 44 33.8** | **-1.0** |
| B29A | **Wagenman Farm,** | **2.93** | **146** | S | | **Sn** | | **22 44 39.0** | **+3.2** |
| | baz=2.8 | | | | | | | | |
| C26A | **Wahner Farm, P** | **3.09** | **183** | P | | **Pn** | | **22 44 02.7** | **+0.5** |
| | baz=2.8 | | | | | | | | |
| C27A | **Sayler Ranch,** | **3.21** | **176** | P | | **Pn** | | **22 44 05.0** | **+1.1** |
| | baz=2.9 | | | | | | | | |
| MDND | **Maddock** | **3.39** | **154** | Pn | | **Pn** | | **22 44 08.2** | **+1.8** |
| MDND | | | | *e*Pg | | **Pb** | | **22 44 15.3** | **+2.2** |
| FFC | **Flin Flon** | **3.82** | **359** | *e*Pn | | Pn | | 22 44 16.5 | +4.3 |
| ULM | **Lac du Bonnet** | **3.85** | **98** | Pn | | **Pn** | | **22 44 15.2** | **+2.6** |
| | 0.5nm,0.3s,baz=282,slow=14,SNR=4.5 | | | | | | | | |
| ULM | | | | Pg | | **Pg** | | **22 44 24.8** | **-1.2** |
| | 3.0nm,0.3s,baz=280,slow=16,SNR=20 | | | | | | | | |
| ULM | | | | Sn | | **Sn** | | **22 44 58.5** | **0.0** |
| | 5.8nm,0.3s,baz=293,slow=13,SNR=3.2 | | | | | | | | |
| ULM | | | | Lg | | Lg | | 22 45 13.4 | |
| | 11nm,0.3s,baz=306,slow=8.7,SNR=14 | | | | | | | | |
| ULM | **Lac du Bonnet** | **3.85** | **98** | PN | | Pn | | 22 44 15.7 | +3.1 |
| ULM | | | | PG | | **Pg** | | **22 44 24.7** | **-1.2** |
| ULM | | | | SN | | **Sn** | | **22 45 00.3** | **+1.7** |
| ULM | | | | LG | | Lg | | 22 45 14.6 | |
| ULM | | | | Trac | | | | 22 45 15.9 | |
| | comp=Z,99nm,0.4s | | | | | | | | |
| AGMN | **Agassiz Nation** | **4.68** | **122** | *e*Pn | | **Pn** | | **22 44 25.5** | **+1.5** |
| AGMN | | | | *e*Pg | | **Pb** | | **22 44 37.0** | **+2.0** |
| AGMN | | | | *e*Sn | | **Sn** | | **22 45 20.0** | **+1.0** |
| LAO | **LASA Array** | **5.12** | **216** | *e*Pn | | **Pn** | | **22 44 30.9** | **+0.7** |
| LAO | | | | *e*S | | **Sb** | | **22 45 45.4** | **+0.6** |
| EPLO | **Experimental L** | **5.34** | **100** | PN | | **Pn** | | **22 44 35.0** | **+1.9** |
| EPLO | | | | SN | | **Sn** | | **22 45 34.7** | **-0.6** |
| EPLO | | | | Trac | | | | 22 46 03.2 | |
| | comp=Z,5μm,0.5s | | | | | | | | |
| EPLO | | | | LG | | Lg | | 22 46 04.6 | |
| EPLO | **Experimental L** | **5.34** | **100** | Pn | | **Pn** | | **22 44 35.0** | **+1.9** |
| EPLO | | | | Sn | | **Sn** | | **22 45 34.7** | **-0.6** |
| EPLO | | | | Lg | | Lg | | 22 46 04.6 | |
| EGMT | **Eagleton** | **5.92** | **244** | *e*P | | **Pn** | | **22 44 42.4** | **+1.3** |
| EGMT | | | | *e*Sn | | **Sn** | | **22 45 45.4** | **-4.3** |
| SOLO | **Sioux Lookout** | **6.29** | **94** | PN | | **Pn** | | **22 44 47.6** | **+1.5** |
| SOLO | | | | SN | | **Sn** | | **22 45 57.1** | **-1.5** |
| SOLO | | | | Trac | | | | 22 46 00.7 | |
| | comp=Z,42nm,0.5s | | | | | | | | |
| SOLO | | | | LG | | Lg | | 22 46 29.2 | |
| SOLO | **Sioux Lookout** | **6.29** | **94** | Pn | | **Pn** | | **22 44 47.6** | **+1.5** |
| SOLO | | | | Sn | | **Sn** | | **22 45 57.1** | **-1.5** |
| SOLO | | | | Lg | | Lg | | 22 46 29.2 | |
| ATKO | **Atikokan Iron** | **6.94** | **104** | PN | | **Pn** | | **22 44 57.1** | **+2.1** |
| ATKO | | | | SN | | **Sn** | | **22 46 11.5** | **-3.0** |
| ATKO | | | | LG | | Lg | | 22 46 46.6 | |
| ATKO | | | | Trac | | | | 22 46 48.2 | |
| | comp=Z,92nm,1.2s | | | | | | | | |
| ATKO | **Atikokan Iron** | **6.94** | **104** | Pn | | **Pn** | | **22 44 57.1** | **+2.1** |
| ATKO | | | | Sn | | **Sn** | | **22 46 11.5** | **-3.0** |
| ATKO | | | | Lg | | Lg | | 22 46 46.6 | |
| RSSD | **Black Hills** | **6.96** | **193** | *e*Pn | | **Pn** | | **22 44 57.5** | **+2.0** |
| RSSD | | | | *e*Pg | | **Pb** | | **22 45 17.0** | **+3.0** |
| PKLO | **Pickle Lake** | **7.24** | **81** | PN | | **Pn** | | **22 45 00.5** | **+1.4** |
| PKLO | | | | SN | | **Sn** | | **22 46 19.1** | **-2.8** |
| PKLO | | | | LG | | Lg | | 22 47 00.3 | |
| PKLO | | | | Trac | | | | 22 47 06.1 | |
| | comp=Z,68nm,0.8s | | | | | | | | |
| EYMN | **Ely** | **7.36** | **110** | PN | | **Pn** | | **22 45 02.0** | **+1.1** |
| EYMN | | | | SN | | **Sn** | | **22 46 23.4** | **-1.7** |
| EYMN | | | | LG | | Lg | | 22 46 59.2 | |
| EYMN | | | | Trac | | | | 22 47 08.7 | |
| | comp=Z,3.9nm,0.6s | | | | | | | | |
| EYMN | **Ely** | **7.36** | **110** | *e*Pn | | **Pn** | | **22 45 02.1** | **+1.1** |
| EYMN | | | | *e*Sn | | **Sn** | | **22 46 23.8** | **-1.3** |
| EDM | **Edmonton** | **7.47** | **293** | SN | | **Sn** | | **22 46 23.5** | **-4.2** |
| EDM | | | | LG | | Lg | | 22 47 04.7 | |
| EDM | | | | Trac | | | | 22 47 10.6 | |
| | comp=Z,71nm,0.8s | | | | | | | | |
| EDM | **Edmonton** | **7.47** | **293** | *e*Pn | | **Pn** | | **22 45 03.7** | **+1.4** |
| EDM | | | | *e*Sg | | Sg | | 22 47 06.0 | -5.8 |
| PRDA | **Priddis** | **7.88** | **275** | PN | | **Pn** | | **22 45 10.7** | **+2.6** |
| PRDA | | | | SN | | **Sn** | | **22 46 32.6** | **-5.4** |
| PRDA | | | | Lg | | Lg | | 22 47 14.2 | |
| PRDA | | | | Trac | | | | 22 47 29.8 | |
| | comp=Z,33nm,0.6s | | | | | | | | |
| PRDA | **Priddis** | **7.88** | **275** | Pn | | **Pn** | | **22 45 10.7** | **+2.6** |
| PRDA | | | | Sn | | **Sn** | | **22 46 32.6** | **-5.4** |
| PRDA | | | | Lg | | Lg | | 22 47 32.6 | |
| ECSD | **EROS Data Cent** | **8.00** | **152** | *e*Pn | | **Pn** | | **22 45 09.5** | **-0.1** |
| ECSD | | | | *e*Sn | | Sn | | 22 46 34.8 | -6.1 |
| WALA | **Waterton Lakes** | **8.01** | **261** | PN | | **Pn** | | **22 45 09.3** | **-0.5** |
| WALA | | | | SN | | Sn | | 22 46 35.1 |

MNAS **Manas** **12.90 237** ⇑Lg Lg 22 50 02.7
1.6nm,0.8s

**IDC 31 22:45:34.6±1.2,6°32S×150°42E, h0km, mb4.0/4, mb1 4.3/6, mb1mx3.8/37, mbtmp4.1/6, ML2.1/1, MS3.1/4, Ms1 3.1/4, ms1mx2.8/22, Error ellipse: s-maj=55.0km s-min=22.5km az=133.0, New Britain region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **PMG** | **Port Moresby** | **4.45** | **226** | Pn | Pn | 22 46 45.1 | +1.7 |
| | 7.4nm,0.3s,baz=41,slow=10,SNR=18 | | | | | | |
| PMG | | | | Sn | Sn | 22 47 32.3 | -3.7 |
| | 12nm,0.3s,baz=202,slow=22,SNR=11 | | | | | | |
| **HNR** | **Honiara** | **9.93** | **109** | LR | LR | 22 51 31.2 | |
| | comp=Z,77nm,18.5s,baz=206,slow=36 | | | | | | |
| **SIJI** | **Sorong** | **19.86** | **285** | P | P | 22 50 07.8 | +0.3 |
| | 0.8nm,0.3s,baz=126,slow=19,SNR=2.5 | | | | | | |
| SIJI | | | | LR | LR | 22 59 45.4 | |
| | comp=Z,112nm,19.0s,baz=280,slow=43 | | | | | | |
| **WRA** | **Warramunga Arr** | **20.67** | **228** | P | P | 22 50 16.2 | -0.1 |
| | 9.0nm,0.6s,baz=52,slow=11,SNR=34 | | | | | | |
| **ASAR** | **Alice Springs** | **23.44** | **221** | P | P | 22 50 44.5 | -1.4 |
| | 3.3nm,1.0s,baz=58,slow=8.5,SNR=16 | | | | | | |
| ASAR | | | | LR | LR | 22 59 21.2 | |
| | comp=Z,44nm,20.3s,baz=54,slow=35 | | | | | | |
| **MJAR** | **Matsushiro Arr** | **44.15** | **346** | LR | LR | 23 08 37.0 | |
| | comp=Z,19nm,21.3s,baz=95,slow=31 | | | | | | |
| **ILAR** | **Eielson Array** | **84.46** | **22** | P | P | 22 58 07.2 | -1.8 |
| | 0.6nm,0.9s,baz=251,slow=5.2,SNR=3.3 | | | | | | |
| **NVAR** | **Mina Array Bea** | **94.88** | **52** | P | P | 22 59 01.1 | +1.7 |
| | 0.5nm,0.7s,baz=253,slow=6.2,SNR=4.1 | | | | | | |
| **GERES** | **GERESS Array B** | **124.06** | **327** | PKP | PKPdf | 23 04 35.5 | +0.1 |
| | 0.5nm,0.5s,baz=57,slow=3.6,SNR=3.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **148.46** | **285** | PKPbc | PKPbc | 23 05 24.5 | +0.1 |
| | 1.7nm,0.5s,baz=97,slow=2.7,SNR=45 | | | | | | |

*NEIC **31** 22:46:20.4, 52°59N×169°31W, h1km, ML3.4(AEIC), After AEIC.*
*IDC **31** 22:46:23.9±6.3, 52°97N×168°70W, h0km, mb3.7/4, mb1 4.1/6, mb1mx3.6/55, mbtmp3.8/6, ML3.5/2, MS3.1/1, Ms1 3.1/1, ms1mx2.4/33, Error ellipse: s-maj=111.8km s-min=37.0km az=87.0*
**ISC 31 22:46:20.0±2.0, 52.7N±0.2×169.56W±0.10, h6km±11km, n27, σ1§19/25, mb3.7/4, Fox Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NIKH** | **Nikolski High** | **0.49** | **59** | P | **Pb** | **22 46 31.7** | **+0.6** |
| NIKH | | | | S | **Sb** | **22 46 40.0** | **+1.4** |
| **OKSO** | **Okmok South** | **1.06** | **53** | P | **Pn** | **22 46 41.1** | **-0.3** |
| OKSO | | | | S | **Sn** | **22 46 56.3** | **-0.1** |
| **OKCE** | **Okmok Cone E** | **1.10** | **50** | P | **Pn** | **22 46 41.7** | **-0.3** |
| OKCE | | | | S | **Sn** | **22 46 59.6** | **+2.2** |
| **OKAK** | **Okmok** | **1.12** | **40** | P | **Pb** | **22 46 41.1** | **-0.6** |
| **OKTU** | **Okmok Mt. Tuli** | **1.13** | **54** | P | **Pn** | **22 46 43.0** | **+0.6** |
| **OKRE** | **Okmok R'deer P** | **1.16** | **46** | P | **Pg** | **22 46 44.0** | **+1.8** |
| **OKER** | **Okmok East Rim** | **1.17** | **51** | P | **Pn** | **22 46 44.1** | **+1.1** |
| **OKFG** | **Magazine Ridge** | **1.21** | **55** | P | **Pg** | **22 46 43.3** | **+0.2** |
| OKFG | | | | S | **Sn** | **22 47 00.3** | **+0.1** |
| **MSOM** | **Makushin Julie** | **1.91** | **54** | P | **Pn** | **22 46 53.3** | **+0.2** |
| **MGOD** | **Makushin Gods** | **1.94** | **55** | P | **Pb** | **22 46 54.6** | **-1.1** |
| **MCIR** | **Makushin Cirqu** | **2.02** | **51** | P | **Pb** | **22 46 56.1** | **-1.0** |
| **MSW** | **Makushin Switc** | **2.05** | **53** | P | **Pb** | **22 46 56.0** | **-1.6** |
| MSW | | | | S | **Sg** | **22 47 24.9** | **-0.8** |
| **MTBL** | **Makushin Table** | **2.13** | **53** | P | **Pn** | **22 46 56.9** | **+0.8** |
| **KOFP** | **Korovin Flat P** | **2.81** | **263** | P | **Pb** | **22 47 10.8** | **+0.2** |
| **KDAK** | **Kodiak Island** | **10.92** | **56** | Pn | **Pn** | **22 48 55.6** | **-1.0** |
| | 0.3nm,0.3s,baz=347,slow=19,SNR=4.0 | | | | | | |
| KDAK | | | | Sn | **Sn** | **22 51 00.8** | **+1.8** |
| | 0.1nm,0.3s,baz=46,slow=8.7,SNR=3.4 | | | | | | |
| **ILAR** | **Eielson Array** | **16.73** | **35** | Pn | **Pn** | **22 50 12.4** | **-2.2** |
| | 0.1nm,0.3s,baz=231,slow=11,SNR=8.3 | | | | | | |
| **INK** | **Inuvik** | **23.11** | **34** | P | **P** | **22 51 25.1** | **-1.2** |
| | 2.2nm,1.0s,baz=216,slow=8.7,SNR=4.6 | | | | | | |
| **YKA** | **Yellowknife Ar** | **30.10** | **49** | P | **P** | **22 52 29.3** | **-0.5** |
| | 1.1nm,0.7s,baz=276,slow=6.9,SNR=3.4 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **37.66** | **218** | T | T | 23 33 21.2 | |
| | baz=24,slow=76,SNR=79 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **37.67** | **218** | T | T | 23 33 22.1 | |
| | baz=24,slow=76,SNR=103 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **37.68** | **218** | T | T | 23 33 23.0 | |
| | baz=24,slow=76,SNR=71 | | | | | | |
| **NVAR** | **Mina Array Bea** | **37.79** | **91** | P | P | 22 53 39.0 | +1.9 |
| | 0.4nm,0.7s,baz=299,slow=9.2,SNR=3.6 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **38.85** | **218** | T | T | 23 34 50.9 | |
| | baz=23,slow=76,SNR=1149 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **38.87** | **218** | T | T | 23 34 52.1 | |
| | baz=23,slow=76,SNR=804 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **38.87** | **218** | T | T | 23 34 52.2 | |
| | baz=23,slow=76,SNR=1003 | | | | | | |
| **KSRS** | **Korea Array** | **45.25** | **276** | LR | LR | 23 15 43.7 | |
| | comp=Z,19nm,18.4s,baz=118,slow=38 | | | | | | |
| **TXAR** | **Lajitas Array** | **52.86** | **89** | P | **P** | **22 55 36.6** | **+0.1** |
| | 1.1nm,0.6s,baz=286,slow=5.0,SNR=11 | | | | | | |

**KRSC 31 22:51:05.8±2.1, 49°78N×158°24E, h52km±42km, ML3.8, East of Kuril Islands**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **SKR** | **Severo-Kuril's** | **1.64** | **305** | *e*P | Pn | 22 51 33.7 | +1.6 |
| SKR | | | | *e*S | Sn | 22 51 52.8 | +0.8 |
| **RUS** | **Russkaya** | **2.67** | **4** | *e*P | Pn | 22 51 48.6 | +2.4 |
| RUS | | | | *e*S | Sn | 22 52 22.4 | +5.1 |
| **MIPR** | **Malaya Ipel'ka** | **2.67** | **340** | *e*P | Pn | 22 51 49.8 | +3.5 |
| **APC** | **Apacha** | **3.23** | **348** | *e*P | Pn | 22 51 57.0 | +3.2 |
| **UGLR** | **Uglovaya** | **3.46** | **6** | *e*P | Pn | 22 52 00.5 | +3.3 |
| **AVH** | **Avacha** | **3.51** | **5** | *e*P | Pn | 22 52 02.1 | +4.2 |
| **SMAR** | **Somma** | **3.51** | **6** | *e*P | Pn | 22 52 01.8 | +3.7 |
| **SPN** | **Mys Shipunski** | **3.51** | **18** | *e*P | Pn | 22 52 02.4 | +4.7 |
| SPN | | | | *e*S | Sn | 22 52 41.0 | +3.0 |
| **SDLR** | **Sedlovina** | **3.53** | **6** | *e*P | Pn | 22 52 01.8 | +3.6 |
| **KRX** | **Arik** | **3.60** | **4** | *e*P | Pn | 22 52 02.1 | +2.9 |
| **GNL** | **Ganaly** | **3.93** | **357** | *e*P | Pn | 22 52 08.1 | +4.4 |
| **MKZ** | **Mys Kozlova** | **5.25** | **23** | *e*P | Pn | 22 52 24.5 | +3.0 |
| **KBTR** | **Krutoberegovo** | **7.01** | **21** | *e*P | Pn | 22 52 49.8 | +4.1 |

*CSEM **31** 23:08:24.6, 38°82N×27°87E, h6km, MD2.9, After DDA*
*ISK **31** 23:08:24.5, 38°80N×27°88E, h2km, MD2.9*
*DDA **31** 23:08:24.6, 38°82N×27°87E, h6km, Md2.9*
**ISC 31 23:08:25.3±0.9, 38°82N±0.02×27°85E±0.02, h5km±6km, n30, σ0§73/44, Turkey**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **AKHS** | **Akhisar** | **0.06** | **334** | *i* P | **Pg** | **23 08 26.6** | **-0.2** |
| AKHS | | | | *i* S | **Sg** | **23 08 28.2** | **+0.3** |
| **AKHS** | **Akhisar** | **0.06** | **334** | P | **Pg** | **23 08 26.6** | **-0.2** |
| AKHS | | | | S | **Sg** | **23 08 28.2** | **+0.3** |
| **AKS** | **Akhisar** | **0.07** | **333** | *e*PG | **Pg** | **23 08 26.6** | **-0.2** |
| **IZM** | **Izmir** | **0.62** | **228** | *e*PG | **Pb** | **23 08 37.6** | **-1.1** |
| **KULA** | **Kula-Manisa** | **0.70** | **116** | *e*PG | **Pg** | **23 08 37.7** | **-1.1** |
| **DEMI** | **Demirci** | **0.71** | **72** | *i* P | **Pg** | **23 08 38.3** | **-0.6** |
| DEMI | | | | *i* S | **Sg** | **23 08 48.0** | **-0.2** |
| **DEMI** | **Demirci** | **0.71** | **72** | P | **Pg** | **23 08 38.3** | **-0.6** |
| DEMI | | | | S | **Sg** | **23 08 48.0** | **-0.2** |
| **BALB** | **Balikesir** | **0.82** | **2** | *e*PG | **Pb** | **23 08 41.7** | **-0.2** |
| BALB | | | | *e*SG | **Sb** | **23 08 53.6** | **+0.4** |
| **AYDB** | **Zeytinkoy-Aydi** | **0.87** | **178** | *e*PG | **Pg** | **23 08 41.9** | **-0.2** |
| **BALY** | **Balya** | **0.94** | **349** | *i* P | **Pg** | **23 08 43.0** | **-0.2** |
| BALY | | | | *i* S | **Sb** | **23 08 56.6** | **-0.1** |
| **BALY** | **Balya** | **0.94** | **349** | P | **Pg** | **23 08 43.0** | **-0.2** |
| BALY | | | | S | **Sb** | **23 08 56.6** | **-0.1** |
| **DST** | **Dursunbey** | **0.98** | **37** | *e*PG | **Pb** | **23 08 44.6** | **-0.2** |
| **AYDN** | **Tasoluk** | **1.16** | **179** | *i* P | **Pn** | **23 08 48.4** | **+0.2** |
| AYDN | | | | *i* S | **Sn** | **23 09 04.3** | **-0.1** |
| **AYDN** | **Tasoluk** | **1.16** | **179** | P | **Pn** | **23 08 48.4** | **+0.2** |
| AYDN | | | | S | **Sn** | **23 09 04.3** | **-0.1** |
| **ZEY** | **˜zmir** | **1.21** | **242** | P | **Pg** | **23 08 47.9** | **-0.5** |
| ZEY | | | | S | **Sb** | **23 09 04.1** | **-0.3** |
| **KHAL** | **Karahalli** | **1.36** | **109** | *i* P | **Pb** | **23 08 50.7** | **-0.6** |
| KHAL | | | | *i* S | **Sn** | **23 09 09.2** | **-0.3** |
| **KHAL** | **Karahalli** | **1.36** | **109** | P | **Pb** | **23 08 50.7** | **-0.6** |
| KHAL | | | | S | **Sn** | **23 09 09.2** | **-0.3** |
| **TVSB** | **Tavsanli** | **1.40** | **63** | *e*PN | **Pb** | **23 08 51.7** | **-0.3** |
| **KHL** | **Karahalli** | **1.40** | **110** | *e*PN | **Pb** | **23 08 51.5** | **-0.4** |
| **ORLT** | **Orhaneli** | **1.47** | **33** | *e*PN | **Pg** | **23 08 53.0** | **-0.4** |
| **DNZL** | **Cakiroluk** | **1.47** | **140** | *i* P | **Pg** | **23 08 52.9** | **-0.6** |
| DNZL | | | | *i* S | **Sg** | **23 09 14.7** | **+2.2** |
| **DNZL** | **Cakiroluk** | **1.47** | **140** | P | **Pg** | **23 08 52.9** | **-0.6** |
| DNZL | | | | S | **Sg** | **23 09 14.7** | **+2.2** |
| **CHOS** | **Chios island** | **1.47** | **253** | *e*PN | **Pg** | **23 08 53.3** | **-0.2** |
| **EDC** | **Edincik** | **1.52** | **0** | *e*PN | **Pb** | **23 08 53.8** | **-0.1** |
| **SIGR** | **SIGRI** | **1.60** | **285** | *e*PN | **Pb** | **23 08 55.2** | **-0.1** |
| **MRMT** | **Marmara Adasi** | **1.79** | **354** | *e*PN | **Pb** | **23 08 57.7** | **-0.9** |
| **GELI** | **Tayfur-Gelibol** | **1.90** | **326** | *e*PN | **Pb** | **23 08 59.2** | **-1.1** |
| **RKY** | **Sarkoy-Tekirda** | **1.94** | **345** | *e*PN | **Pb** | **23 08 59.7** | **-1.3** |
| **ERIK** | **Erikli-Kesan** | **2.12** | **331** | *e*PN | **Pn** | **23 09 02.3** | **+1.0** |
| **GULT** | **Gulveren** | **2.61** | **51** | *e*PN | **Pn** | **23 09 09.1** | **+0.9** |

*ISCJB **31** 23:09:00.5±0.5, 34°78S±0.04×71°84W±0.09, h61km±5km, mb4.1/10, Error ellipse: s-maj=13.2km s-min=4.5km az=21.6*
*GUC **31** 23:09:00.8±0.5, 34°79S×71°82W, h42km±2km, ML4.4*
*IDC **31** 23:09:00.4±0.6, 34°82S×71°97W, h42km±4km, mb3.8/8, mb1 3.9/12, mb1mx3.8/30, mbtmp4.0/12, ML4.2/3, MS3.3/6, Ms1 3.3/6, ms1mx3.1/21, Error ellipse: s-maj=20.8km s-min=11.4km az=111.0*
*NEIC **31** 23:09:00.4±0.4, 34°76S×71°84W, mb4.5/2, Error ellipse: s-maj=11.0km s-min=6.8km az=88.0*
*NEIC Felt [IV] at Paredones and [III] at Constitucion, Curico, Licanten, Pichilemu, Rancagua, San Fernando, San Javier, Santa Cruz and Talca.*
**ISC 31 23:09:00.7±0.5, 34.79S±0.04×71.82W±0.07, h43km±4km, n34, σ1§10/44, mb4.2/10, MS3.5/3, Near coast of central Chile**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **NICH** | **Los Niches** | **0.53** | **114** | *e*P | **Pn** | **23 09 12.1** | **+0.2** |
| NICH | | | | *e*S | **Sn** | **23 09 20.8** | **+0.9** |
| **TALC** | **Talca** | **0.62** | **166** | *e*P | **Pn** | **23 09 13.4** | **+0.2** |
| **COCH** | **Cobquecura** | **1.55** | **210** | *e*P | **Pn** | **23 09 26.9** | **+1.1** |
| COCH | | | | *e*S | **Sn** | **23 09 46.7** | **+1.9** |
| COCH | | | | AML | AML | 23 09 52.8 | |
| | comp=E,6μm,0.8s | | | | | | |
| **ANTU** | **Antumapu** | **1.57** | **39** | *e*P | **Pn** | **23 09 27.0** | **+1.0** |
| ANTU | | | | *e*S | **Sn** | **23 09 47.2** | **+2.0** |
| **SAN** | **Santiago** | **1.65** | **36** | *e*P | **Pn** | **23 09 28.1** | **+1.0** |
| SAN | | | | *e*S | **Sn** | **23 09 49.0** | **+1.9** |
| **LACH** | **Col Las Americ** | **1.71** | **39** | *e*P | **Pn** | **23 09 29.1** | **+1.1** |
| LACH | | | | *e*S | **Sn** | **23 09 50.8** | **+2.0** |
| **CLCH** | **Cerro Calan** | **1.75** | **38** | *e*P | **Pn** | **23 09 29.7** | **+1.1** |
| CLCH | | | | *e*S | **Sn** | **23 09 51.8** | **+2.1** |
| CLCH | | | | AML | AML | 23 09 56.3 | |
| | comp=N,8μm,2.1s | | | | | | |
| **CCHI** | **Chillan** | **1.82** | **187** | *e*P | **Pn** | **23 09 30.5** | **+1.1** |
| CCHI | | | | *e*S | **Sn** | **23 09 53.0** | **+1.7** |
| **PEL** | **Peldehue** | **1.90** | **30** | *e*P | **Pn** | **23 09 31.9** | **+1.3** |
| PEL | | | | *e*S | **Sn** | **23 09 55.8** | **+2.6** |
| PEL | | | | AML | AML | 23 10 01.8 | |
| | comp=N,7μm,0.4s | | | | | | |
| **CFAA** | **Coronel Fontan** | **4.37** | **44** | P | **Pn** | **23 10 05.4** | **+0.8** |
| | comp=N,0.1nm,0.3s,baz=217,slow=13,SNR=12 | | | | | | |
| CFAA | | | | S | Sn | 23 11 00.8 | +6.5 |
| | comp=N,2.2nm,0.3s,baz=125,slow=9.1,SNR=6.7 | | | | | | |
| CFAA | | | | LR | LR | 23 11 59.3 | |
| | comp=N,44nm,20.8s,baz=227,slow=40 | | | | | | |
| **LCO** | **Las Campanas** | **5.84** | **10** | *e*Pn | **Pn** | **23 10 24.2** | **-0.7** |
| | comp=N,27nm,0.5s | | | | | | |
| LCO | | | | *e*Sn | **Sn** | **23 11 30.0** | **-0.8** |
| **TRQA** | **Tornquist** | **8.57** | **115** | *e*Pn | **Pn** | **23 11 01.7** | **-0.5** |
| **LVC** | **Limon Verde** | **12.40** | **13** | P | **Pn** | **23 11 54.2** | **-0.6** |
| | comp=N,4.7nm,0.3s,baz=188,slow=19,SNR=2.3 | | | | | | |
| LVC | | | | LR | LR | 23 17 03.2 | |
| | comp=N,522nm,19.2s,baz=214,slow=39 | | | | | | |
| **CPUP** | **Villa Florida** | **15.05** | **60** | P | **Pn** | **23 12 30.4** | **-0.1** |
| | comp=N,0.1nm,0.3s,baz=112,slow=11,SNR=3.5 | | | | | | |
| CPUP | | | | LR | LR | 23 18 42.0 | |
| | comp=N,182nm,18.4s,baz=234,slow=38 | | | | | | |
| **LPAZ** | **La Paz** | **18.72** | **11** | P | **P** | **23 13 16.0** | **-0.3** |
| | comp=N,0.4nm,0.3s,baz=173,slow=6.6,SNR=11 | | | | | | |
| **SIV** | **San Ignacio** | **21.06** | **30** | P | **P** | **23 13 40.3** | **-0.9** |
| | comp=N,7.3nm,0.8s,baz=228,slow=9.6,SNR=22 | | | | | | |
| SIV | | | | LR | LR | 23 22 33.4 | |
| | comp=N,55nm,18.7s,baz=207,slow=38 | | | | | | |
| **BDFB** | **Brasilia** | **28.64** | **54** | LR | LR | 23 27 33.9 | |
| | comp=N,104nm,18.8s,baz=216,slow=39 | | | | | | |
| **SNAA** | **Sanae** | **50.79** | **158** | P | **P** | **23 17 57.0** | **+0.8** |
| | comp=N,0.6nm,0.8s,baz=286,slow=7.9,SNR=5.2 | | | | | | |
| **QSPA** | **South Pole Qui** | **55.45** | **180** | P | **P** | **23 18 31.0** | **+0.4** |
| | comp=N,1.8nm,0.8s,baz=186,slow=2.3,SNR=5.3 | | | | | | |
| QSPA | | | | pP | **pP** | **23 18 42.9** | **-0.1** |
| | comp=N,3.5nm,0.9s,baz=126,slow=5.5,SNR=7.4 | | | | | | |
| QSPA | | | | sP | **sP** | **23 18 48.0** | **0.0** |
| | comp=N,1.9nm,0.5s,baz=163,slow=0.9,SNR=6.1 | | | | | | |
| **PPT** | **Papeete** | **70.31** | **262** | LR | LR | 23 43 58.0 | |
| | comp=N,27nm,19.9s,baz=9.0,slow=30 | | | | | | |
| **TXAR** | **Lajitas Array** | **70.51** | **331** | P | **P** | **23 20 11.4** | **+0.5** |
| | comp=N,0.3nm,0.5s,baz=152,slow=6.5,SNR=9.3 | | | | | | |
| TXAR | | | | pP | **pP** | **23 20 23.6** | **0.0** |
| | comp=N,1.2nm,0.5s,baz=156,slow=9.1,SNR=17 | | | | | | |
| **SWET** | **Sewanee** | **70.88** | **348** | *e*P | **P** | **23 20 12.0** | **-1.1** |
| | comp=N,2.9nm,0.7s | | | | | | |
| **WVT** | **Waverly** | **72.12** | **346** | *e*P | **P** | **23 20 19.5** | **-0.9** |
| | comp=N,6.7nm,0.8s | | | | | | |
| **MAW** | **Mawson** | **72.37** | **163** | P | **P** | **23 20 21.4** | **-0.2** |
| | comp=N,1.7nm,0.8s,baz=229,slow=7.8,SNR=4.6 | | | | | | |
| MAW | | | | pP | **pP** | **23 20 35.0** | **+0.8** |
| | comp=N,2.2nm,0.7s,baz=211,slow=10,SNR=4.3 | | | | | | |
| MAW | | | | sP | **sP** | **23 20 39.2** | **0.0** |
| | comp=N,2.4nm,0.8s,baz=201,slow=8.8,SNR=3.8 | | | | | | |
| **DBIC** | **Dimbokro** | **75.26** | **71** | P | **P** | **23 20 38.8** | **-0.6** |
| | comp=N,3.0nm,0.8s,baz=225,slow=10.0,SNR=3.0 | | | | | | |
| DBIC | | | | sP | **sP** | **23 20 55.8** | **-1.2** |
| | comp=N,2.9nm,0.6s,baz=221,slow=4.3,SNR=2.7 | | | | | | |
| **BOSA** | **Boshof** | **79.55** | **117** | P | **P** | **23 21 03.5** | **+0.1** |
| | comp=N,4.1nm,0.8s,baz=243,slow=5.5,SNR=5.3 | | | | | | |
| BOSA | | | | pP | **pP** | **23 21 16.1** | **-0.1** |
| | comp=N,1.9nm,0.5s,baz=226,slow=9.9,SNR=1.9 | | | | | | |
| **TORD** | **Torodi Ar. Bea** | **84.31** | **70** | P | **P** | **23 21 27.9** | **-0.4** |
| | comp=N,1.9nm,0.9s,baz=247,slow=3.9,SNR=7.7 | | | | | | |
| TORD | | | | pP | **pP** | **23 21 41.0** | **-0.2** |
| | comp=N,2.3nm,0.7s,baz=249,slow=3.2,SNR=4.5 | | | | | | |
| TORD | | | | sP | **sP** | **23 21 45.7** | **-0.4** |
| | comp=N,2.3nm,0.8s,baz=225,slow=5.1,SNR=9.0 | | | | | | |
| **H11S2** | **WAKE ISLAND Hy** | **25.93** | **268** | T | T | 01 46 27.6 | |
| | baz=124,slow=74 | | | | | | |
| **H11S1** | **WAKE ISLAND Hy** | **25.95** | **268** | T | T | 01 46 27.8 | |
| | baz=124,slow=74 | | | | | | |
| **H11S3** | **WAKE ISLAND Hy** | **25.95** | **268** | T | T | 01 46 27.6 | |
| | baz=124 | | | | | | |
| **H11N3** | **WAKE ISLAND Hy** | **26.37** | **270** | T | T | 01 46 53.5 | |
| | baz=118,slow=76 | | | | | | |
| **H11N1** | **WAKE ISLAND Hy** | **26.38** | **270** | T | T | 01 46 56.8 | |
| | baz=118,slow=76 | | | | | | |
| **H11N2** | **WAKE ISLAND Hy** | **26.39** | **270** | T | T | 01 46 55.8 | |
| | baz=118,slow=76 | | | | | | |
| **SONM** | **Songino Array** | **166.90** | **5** | PKP | **PKPdf** | **23 29 00.5** | **-0.8** |
| | comp=N,0.1nm,0.3s,baz=121,slow=1.6,SNR=3.5 | | | | | | |

*BJI **31** 23:14:34.1, 20°60S×178°10E, h658km, mb4.6/5, mB5.0/4*
*AUST **31** 23:14:36.0±11.0, 17°46S×178°74W, h443km±1km, Error ellipse: s-maj=3.1km s-min=2.4km az=299.0*
*MOS **31** 23:14:39.9±1.1, 16°97S×179°29W, h495km, mb4.7/22, Error ellipse: s-maj=12.2km s-min=9.2km az=139.2*
*IDC **31** 23:14:41.3±1.2, 17°16S×179°18W, h508km±13km, mb3.9/18, mb1 4.0/20, mb1mx3.9/30, mbtmp4.8/20, Error ellipse: s-maj=14.5km s-min=10.7km az=149.0*
*NEIC **31** 23:14:44.2±0.6, 17°07S×179°35W, h541km±7km, mb4.6/81, Error ellipse: s-maj=11.9km s-min=6.1km az=152.0*
*ISCJB **31** 23:14:44.3±0.2, 17°06S±0.07×179°36W±0.05, h550km, mb4.5/105, Error ellipse: s-maj=11.0km s-min=3.9km az=151.1*
**ISC 31 23:14:44.8±0.3, 17°07S±0.08×179°25W±0.07, h550km, n486, σ1§12/474, mb4.6/106, 24C-32D, Fiji Islands region**

| Code | Station Name | Δ° | AZ° | Phase ID Op | ISC | Time h m s | Res ISC |
|---|---|---|---|---|---|---|---|
| **MSVF** | **Nonsavu** | **2.67** | **255** | *e*P | **P** | **23 15 58.4** | **+0.4** |
| **MSVF** | **Nonsavu** | **2.67** | **255** | *e*P | **P** | **23 15 58.4** | **+0.4** |
| **AFI** | **Afiamalu** | **7.86** | **67** | P | P | 23 16 36.7 | -4.5 |
| | 12nm,0.3s,baz=8.2,slow=1.7,SNR=14 | | | | | | |
| **AFI** | **Afiamalu** | **7.86** | **67** | *e*P | **P** | **23 16 38.1** | **-3.1** |
| **AFI** | **Afiamalu** | **7.86** | **67** | *e*P | **P** | **23 16 38.1** | **-3.1** |
| **DZM** | **Mont Dzumac** | **14.37** | **247** | P | **P** | **23 17 46.6** | **-1.4** |
| | 1.4nm,0.3s,baz=187,slow=11,SNR=14 | | | | | | |
| **DZM** | **Mont Dzumac** | **14.37** | **247** | *e*P | **P** | **23 17 46.6** | **-1.4** |
| | 15nm,0.7s | | | | | | |
| **URZ** | **Urewera** | **21.36** | **188** | P | **P** | **23 18 50.1** | **-2.8** |
| | 11nm,0.5s,baz=282,slow=1.5,SNR=12 | | | | | | |
| **URZ** | **Urewera** | **21.36** | **188** | *e*P | **P** | **23 18 50.4** | **-2.6** |
| **HNR** | **Honiara** | **21.61** | **288** | P | **P** | **23 18 55.1** | **-0.5** |
| | 72nm,0.4s,baz=241,slow=3.5,SNR=9.6 | | | | | | |
| **RPZ** | **Rata Peaks** | **27.81** | **195** | P | **P** | **23 19 47.8** | **-2.3** |
| | 4.6nm,0.4s,baz=78,slow=1.7,SNR=3.9 | | | | | | |
| **PPT** | **Papeete** | **28.32** | **95** | P | **P** | **23 19 52.6** | **-2.3** |
| | 14nm,0.8s,baz=243,slow=23,SNR=2.5 | | | | | | |
| **ARMA** | **Armidale** | **29.69** | **238** | P | **P** | **23 20 07.5** | **+0.8** |
| | baz=30,SNR=5.3 | | | | | | |
| **RMQ** | **Roma** | **31.08** | **247** | P | **P** | **23 20 19.7** | **+1.0** |
| | baz=31,SNR=7.8 | | | | | | |
| **MGCD** | **Mangrove Creek** | **31.14** | **233** | P | **P** | **23 20 20.0** | **+1.0** |
| | baz=31,SNR=5.3 | | | | | | |
| **CTA** | **Charters Tower** | **32.81** | **259** | P | **P** | **23 20 32.9** | **-0.5** |
| | 2.0nm,0.3s,baz=61,slow=8.1,SNR=4.0 | | | | | | |
| CTA | | | | PcP | **PcP** | **23 23 03.1** | **+1.0** |
| | 3.0nm,0.5s,baz=90,slow=4.0,SNR=4.4 | | | | | | |
| **CNB** | **Canberra Magne** | **33.32** | **231** | P | **P** | **23 20 38.6** | **+1.0** |
| | baz=34,SNR=6.6 | | | | | | |
| **PMG** | **Port Moresby** | **33.54** | **279** | P | **P** | **23 20 39.4** | **-0.2** |
| | 17nm,0.8s,baz=134,slow=11,SNR=4.4 | | | | | | |
| **MTSU** | **Mount Surprise** | **34.71** | **263** | P | **P** | **23 20 49.8** | **+0.4** |
| | baz=35,SNR=5.8 | | | | | | |
| **CMSA** | **Cobar Meteorol** | **34.88** | **239** | P | **P** | **23 20 50.9** | **+0.3** |
| | baz=35,SNR=21 | | | | | | |
| **QLP** | **Quilpie** | **35.09** | **248** | P | **P** | **23 20 52.6** | **+0.1** |
| | baz=35,SNR=6.3 | | | | | | |
| **MANU** | **Manus Island** | **36.05** | **291** | P | P | 23 21 07.2 | +6.6 |
| | baz=37,SNR=3.4 | | | | | | |
| **TOO** | **Toolangi** | **37.09** | **230** | P | **P** | **23 21 09.6** | **+0.8** |
| | baz=37,SNR=9.9 | | | | | | |
| **HTT** | **Hallett** | **40.89** | **238** | P | P | 23 21 32.8 | -6.8 |
| | baz=41,SNR=12 | | | | | | |
| **BBOO** | **Buckleboo** | **43.12** | **240** | P | **P** | **23 21 57.4** | **+0.3** |
| | baz=43,SNR=12 | | | | | | |
| **WRAB** | **Tennant Creek** | **43.99** | **259** | *e*P | **P** | **23 22 03.6** | **-0.5** |
| WRAB | | | | pmax | pmax | | |
| | comp=Z,2.0nm,0.6s | | | | | | |
| **WRAB** | **Tennant Creek** | **43.99** | **259** | *e*P | **P** | **23 22 03.6** | **-0.5** |
| | comp=Z,2.5nm,0.6s | | | | | | |
| **WRA** | **Warramunga Arr** | **44.00** | **259** | P | **P** | **23 22 03.3** | **-0.9** |
| | comp=Z,1.2nm,0.3s,baz=94,slow=7.2,SNR=8.3 | | | | | | |
| WRA | | | | PcP | **PcP** | **23 23 38.3** | **+0.6** |
| | comp=Z,1.4nm,0.4s,baz=86,slow=3.5,SNR=9.5 | | | | | | |
| WRA | | | | ScP | **ScP** | **23 26 41.2** | **+3.9** |
| | comp=Z,3.1nm,1.0s,baz=88,slow=4.1,SNR=6.8 | | | | | | |
| WRA | | | | S | **S** | **23 27 53.1** | **-3.6** |
| | comp=Z,0.5nm,0.3s,baz=104,slow=12,SNR=2.7 | | | | | | |
| **ASAR** | **Alice Springs** | **44.26** | **253** | P | **P** | **23 22 06.1** | **0.0** |
| | comp=Z,14nm,0.4s,baz=86,slow=8.2,SNR=181 | | | | | | |
| ASAR | | | | PcP | **PcP** | **23 23 38.8** | **+0.3** |
| | comp=Z,4.0nm,0.6s,baz=97,slow=4.0,SNR=14 | | | | | | |
| ASAR | | | | ScP | **ScP** | **23 26 42.9** | **+4.5** |
| | comp=Z,3.4nm,0.7s,baz=98,slow=4.4,SNR=16 | | | | | | |
| ASAR | | | | S | **S** | **23 27 58.6** | **-1.6** |
| | comp=Z,2.1nm,0.8s,baz=84,slow=16,SNR=11 | | | | | | |
| **KDU** | **Kakadu** | **46.78** | **268** | P | **P** | **23 22 26.0** | **+0.7** |
| | baz=47,SNR=4.1 | | | | | | |
| **WRKA** | **Warakurna** | **49.35** | **251** | P | **P** | **23 22 44.8** | **+0.4** |
| | baz=50,SNR=87 | | | | | | |
| **KMBL** | **Kambalda** | **54.97** | **243** | P | **P** | **23 23 24.2** | **-0.4** |
| | baz=55,SNR=4.5 | | | | | | |
| **MEEK** | **Meekatharra** | **57.98** | **249** | P | **P** | **23 23 45.3** | **-0.1** |
| | baz=58,SNR=4.4 | | | | | | |
| **KLBR** | **Kellerberrin** | **58.49** | **243** | P | **P** | **23 23 48.7** | **-0.1** |
| | baz=59,SNR=15 | | | | | | |
| **NWAO** | **Narrogin (SRO)** | **58.90** | **242** | P | **P** | **23 23 51.4** | **-0.2** |
| | comp=Z,3.6nm,0.5s,baz=287,slow=0.2,SNR=4.5 | | | | | | |
| **BLDU** | **Balliduu** | **59.42** | **244** | P | **P** | **23 23 55.0** | **0.0** |
| | baz=60,SNR=7.2 | | | | | | |
| **MORW** | **Morawa** | **60.09** | **246** | P | **P** | **23 23 59.6** | **+0.1** |
| | baz=60,SNR=6.5 | | | | | | |
| **SBA** | **Scott Base** | **61.21** | **183** | *e*P | **P** | **23 24 06.5** | **+0.6** |
| **SBA** | **Scott Base** | **61.21** | **183** | *e*P | **P** | **23 24 06.5** | **+0.6** |
| **GIRL** | **Giralia** | **62.37** | **253** | P | **P** | **23 24 16.0** | **+1.4** |
| | baz=63,SNR=4.0 | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| GSC | **Goldstone** baz=79,SNR=5.8 | 78.80 | 48 | P | | P | | 23 25 52.4 | +1.2 |
| HEC | **Hector,Ludlow** baz=79,SNR=12 | 78.91 | 48 | P | | P | | 23 25 52.8 | +1.1 |
| M04C | **Macdoel** baz=79 | 78.95 | 40 | P | | P | | 23 25 53.3 | +1.4 |
| BC3 | **Big Chuckawall** baz=79 | 78.96 | 50 | P | | P | | 23 25 53.2 | +1.1 |
| GRAC | **Grapevine Rang** baz=80,SNR=13 | 79.27 | 46 | P | | P | | 23 25 55.2 | +1.6 |
| FURC | **Furnace Creek,** baz=80 | 79.35 | 47 | P | | P | | 23 25 55.1 | +1.2 |
| GMRC | **Granite Mounta** baz=80,SNR=5.7 | 79.36 | 49 | P | | P | | 23 25 55.6 | +1.4 |
| NV01 | **Mina Array Sit** | 79.38 | 44 | *e*P | | P | | 23 25 55.1 | +0.8 |
| NVAR | **Mina Array Bea** comp=Z,12nm,0.8s,baz=227,slow=8.8,SNR=87 | 79.38 | 44 | P | | P | | 23 25 55.4 | +1.1 |
| IRM | **Iron Mountain** baz=80,SNR=6.7 | 79.43 | 49 | P | | P | | 23 25 56.0 | +1.5 |
| K04D | **Chiloquin, OR** baz=80 | 79.48 | 39 | P | | P | | 23 25 56.2 | +1.6 |
| TUQ | **Turquoise Moun** baz=80,SNR=11 | 79.50 | 48 | P | | P | | 23 25 56.5 | +1.5 |
| J04D | **Umpqua Nationa** baz=80,SNR=5.1 | 79.62 | 39 | P | | P | | 23 25 57.3 | +1.8 |
| Y12C | **Blythe** baz=80 | 79.69 | 50 | P | | P | | 23 25 56.7 | +0.9 |
| I04A | **Tendick Farm,** baz=80 | 79.76 | 38 | P | | P | | 23 25 57.3 | +1.3 |
| LDFC | **Landfair** comp=Z,42nm,1.0s | 79.90 | 49 | *e*P | | P | | 23 25 58.9 | +1.8 |
| MOD | **Modoc** comp=Z,14nm,0.6s | 79.96 | 40 | *e*P | | P | | 23 25 58.3 | +1.0 |
| IRO | **Indian Ridge** | 79.98 | 38 | P | | P | | 23 25 58.0 | +0.7 |
| TPNV | **Topopah Spring** baz=80,SNR=8.7 | 80.02 | 46 | P | | P | | 23 25 59.1 | +1.4 |
| K05A | **Summer Lake** comp=Z,18nm,0.7s | 80.06 | 40 | *e*P | | P | | 23 25 59.2 | +1.4 |
| NEE2 | **Needles Airpor** baz=80 | 80.11 | 49 | P | | P | | 23 26 00.1 | +2.1 |
| 214A | **Organ Pipe Nat** baz=80,SNR=7.6 | 80.13 | 52 | P | | P | | 23 25 59.3 | +1.1 |
| J05D | **Fort Rock, OR** baz=80,SNR=17 | 80.17 | 39 | P | | P | | 23 25 59.6 | +1.3 |
| MA2 | **Magadan** | 80.18 | 345 | *e*P | | P | | 23 25 58.2 | +0.4 |
| PDMCI | **Parker Dam,Lak** baz=80 | 80.23 | 50 | P | | P | | 23 26 00.2 | +1.6 |
| H04A | **Detroit Lake** comp=Z,11nm,0.6s | 80.41 | 37 | *e*P | | P | | 23 25 59.5 | +0.1 |
| SHPR | **Sheep Range** comp=Z,16nm,1.5s | 80.56 | 47 | *e*P | | P | | 23 26 01.3 | +0.8 |
| I05D | **Terrebonne, OR** baz=81 | 80.71 | 38 | P | | P | | 23 26 02.2 | +1.2 |
| LVP | **Lakeview Peak** | 81.09 | 36 | P | | P | | 23 26 03.9 | +0.9 |
| BMN | **Battle Mountai** | 81.14 | 43 | *e*P | | P | | 23 26 04.5 | +1.1 |
| BMN | comp=Z,23nm,1.2s | | | pmax | pmax | | | | |
| BMN | **Battle Mountai** comp=Z,24nm,1.2s | 81.14 | 43 | *e*P | | P | | 23 26 04.5 | +1.1 |
| VLL | **Laurance Lake** | 81.15 | 37 | P | | P | | 23 26 04.5 | +1.2 |
| R11A | **Troy Canyon, C** baz=81 | 81.17 | 45 | P | | P | | 23 26 04.5 | +0.8 |
| R11A | **Troy Canyon, C** comp=Z,4.8nm,0.8s | 81.17 | 45 | *e*P | | P | | 23 26 04.8 | +1.1 |
| FL2 | **Flat Top 2** | 81.20 | 36 | P | | P | | 23 26 05.0 | +1.5 |
| G05D | **Wamic, OR** baz=82 | 81.23 | 37 | P | | P | | 23 26 05.0 | +1.4 |
| WVOR | **Wild Horse Val** | 81.29 | 41 | *e*P | | P | | 23 26 05.2 | +1.1 |
| WVOR | comp=Z,20nm,1.0s | | | pmax | pmax | | | | |
| WVOR | **Wild Horse Val** comp=Z,20nm,1.0s | 81.29 | 41 | *e*P | | P | | 23 26 05.2 | +1.1 |
| TDL | **Tradedollar La** | 81.36 | 36 | P | | P | | 23 26 05.8 | +1.5 |
| G06A | **Carlson Farm,** comp=Z,163nm,2.5s | 81.63 | 38 | *e*P | | P | | 23 26 06.3 | +0.7 |
| VTHM | **Trough** | 81.64 | 38 | P | | P | | 23 26 06.5 | +0.8 |
| TUC | **Tucson** | 81.83 | 53 | *e*P | | P | | 23 26 08.5 | +1.5 |
| TUC | comp=Z,20nm,1.0s | | | pmax | pmax | | | | |
| TUC | **Tucson** comp=Z,20nm,1.0s | 81.83 | 53 | *e*P | | P | | 23 26 08.5 | +1.5 |
| J08A | **Circle Bar Ran** comp=Z,25nm,1.1s | 81.89 | 40 | *e*P | | P | | 23 26 08.3 | +1.2 |
| PMR | **Palmer** | 81.98 | 14 | *e*P | | P | | 23 26 07.0 | +0.1 |
| PMR | comp=Z,6.0nm,0.6s | | | pmax | pmax | | | | |
| PMR | **Palmer** comp=Z,6.4nm,0.6s | 81.98 | 14 | *e*P | | P | | 23 26 07.0 | +0.1 |
| JBO | **Jordan Butte** | 82.22 | 38 | P | | P | | 23 26 09.7 | +1.0 |
| CCUT | **Cedar City** comp=Z,13nm,1.0s | 82.32 | 47 | *e*P | | P | | 23 26 11.1 | +1.4 |
| DIV | **Divide** comp=Z,19nm,0.7s | 82.40 | 16 | *e*P | | P | | 23 26 09.4 | +0.2 |
| A04D | **Lummi Island** baz=83 | 82.49 | 34 | P | | P | | 23 26 11.2 | +1.4 |
| B05A | **Bryant** baz=83 | 82.55 | 34 | P | | P | | 23 26 11.6 | +1.4 |
| SCM | **Sheep Creek Mo** | 82.62 | 15 | *e*P | | P | | 23 26 10.7 | +0.4 |
| SCM | comp=Z,343nm,2.3s | | | pmax | pmax | | | | |
| SCM | **Sheep Creek Mo** comp=Z,343nm,2.3s | 82.62 | 15 | *e*P | | P | | 23 26 10.7 | +0.4 |
| LTY | **Liberty** comp=Z,102nm,2.4s | 82.75 | 36 | *e*P | | P | | 23 26 12.1 | +0.8 |
| SEY | **Seymchan** | 82.78 | 347 | *i*P | | P | | 23 26 11.1 | +0.1 |
| WUAZ | **Wupatki** baz=83 | 82.81 | 50 | P | | P | | 23 26 12.7 | +0.7 |
| WUAZ | **Wupatki** comp=Z,23nm,1.0s | 82.81 | 50 | *e*P | | P | | 23 26 13.6 | +1.5 |
| SNIWA | **Snively Ranch** | 82.88 | 37 | P | | P | | 23 26 13.3 | +1.4 |
| RSW | **Rattlesnake Hi** | 82.88 | 37 | P | | P | | 23 26 13.1 | +1.1 |
| HAWA | **Hanford** comp=Z,38nm,1.4s | 82.91 | 37 | *e*P | | P | | 23 26 13.1 | +1.1 |
| CAST | **Castle Rocks** comp=Z,29nm,0.8s | 82.97 | 12 | *e*P | | P | | 23 26 10.8 | -1.2 |
| H2OWA | **Water** | 82.98 | 37 | P | | P | | 23 26 13.6 | +1.2 |
| KTH | **Kantishna Hill** comp=Z,15nm,0.8s | 83.33 | 12 | *e*P | | P | | 23 26 12.8 | -1.0 |
| TRF | **Thorofare Moun** comp=Z,30nm,0.8s | 83.37 | 13 | *e*P | | P | | 23 26 13.6 | -0.6 |
| MFID | **Camas Ranch** comp=Z,15nm,1.0s | 83.56 | 41 | *e*P | | P | | 23 26 16.4 | +0.8 |
| MSU | **Marysvale** | 83.60 | 47 | *e*P | | P | | 23 26 17.0 | +1.0 |
| MSU | comp=Z,14nm,1.1s | | | pmax | pmax | | | | |
| MSU | **Marysvale** comp=Z,14nm,1.1s | 83.60 | 47 | *e*P | | P | | 23 26 17.0 | +1.0 |
| RND | **Reindeer** | 83.64 | 13 | *e*P | | P | | 23 26 15.6 | +0.2 |
| RND | comp=Z,26nm,0.7s | | | pmax | pmax | | | | |
| RND | **Reindeer** comp=Z,26nm,0.7s | 83.64 | 13 | *e*P | | P | | 23 26 15.6 | +0.2 |
| SAW | **Saint Andrews** | 83.72 | 36 | P | | P | | 23 26 16.9 | +0.8 |
| MCK | **McKinley** | 83.90 | 13 | *e*P | | P | | 23 26 16.4 | -0.2 |
| MCK | comp=Z,18nm,1.0s | | | pmax | pmax | | | | |
| MCK | **McKinley** comp=Z,18nm,1.0s | 83.90 | 13 | *e*P | | P | | 23 26 16.4 | -0.2 |
| GYA | **Guiyang** | 83.93 | 300 | *e*P | | P | | 23 25 57.8 | -20 |
| GYA | | | | pP | | pP | | 23 28 15.0 | -1.5 |
| GYA | | | | sP | | sP | | 23 29 19.5 | +7.2 |
| GYA | | | | PP | | PP | | 23 29 25.5 | -16 |
| GYA | | | | SKS | | SKSac | | 23 35 17.3 | -32 |
| GYA | | | | S | | SKKSac | | 23 35 27.8 | -28 |
| GYA | comp=Z,10.0nm,1.0s | | | PMZ | | | | | |
| GYA | comp=Z,110nm,5.6s | | | PMZ | | | | | |
| DUG | **Dugway** baz=84 | 83.95 | 45 | P | | P | | 23 26 18.3 | +0.7 |
| F10A | **Beach Ranch, E** comp=Z,23nm,0.9s | 84.03 | 38 | *e*P | | P | | 23 26 17.9 | +0.1 |
| 121A | **Cookes Peak, D** baz=84 | 84.22 | 54 | P | | P | | 23 26 18.9 | -0.2 |
| MAW | **Mawson** comp=Z,1.2nm,0.3s,baz=136,slow=5.4,SNR=13 | 84.38 | 200 | P | | P | | 23 26 19.8 | +0.8 |
| MAW | **Mawson** baz=84,SNR=7.5 | 84.38 | 200 | P | | P | | 23 26 20.1 | +1.2 |
| C09A | **Chrisman Ranch** comp=Z,20nm,1.4s | 84.41 | 36 | *e*P | | P | | 23 26 20.1 | +0.7 |
| HLID | **Hailey** baz=85,SNR=20 | 84.53 | 41 | P | | P | | 23 26 21.6 | +1.3 |
| HLID | **Hailey** comp=Z,11nm,0.8s | 84.53 | 41 | *e*P | | P | | 23 26 21.6 | +1.3 |
| TMUT | **Trail Mountain** comp=Z,21nm,0.8s | 84.63 | 46 | *e*P | | P | | 23 26 21.8 | +0.7 |
| MLY | **Manley** | 84.68 | 12 | *e*P | | P | | 23 26 20.3 | -0.1 |
| | comp=Z,9.1nm,1.0s | | | | | | | | |
| SPUT | **South Promonto** comp=Z,7.7nm,0.9s | 84.72 | 44 | *e*P | | P | | 23 26 22.6 | +1.3 |
| WRH | **Wood River Hil** comp=Z,17nm,0.8s | 84.73 | 13 | *e*P | | P | | 23 26 19.6 | -1.0 |
| CTU | **Camp Tracy** comp=Z,4.7nm,0.7s | 84.90 | 45 | *e*P | | P | | 23 26 23.8 | +1.5 |
| CCB | **Clear Creek Bu** comp=Z,28nm,1.4s | 84.95 | 13 | *e*P | | P | | 23 26 20.3 | -1.3 |
| DOT | **Dot Lake** comp=Z,40nm,0.7s | 84.96 | 15 | *e*P | | P | | 23 26 20.7 | -1.1 |
| XAN | **Xi'an** | 85.12 | 308 | P | | P | | 23 26 25.0 | +1.7 |
| XAN | comp=Z,11nm,1.1s | | | pmax | pmax | | | | |
| MDM | **Murphy Dome** comp=Z,20nm,1.1s | 85.13 | 13 | *e*P | | P | | 23 26 19.9 | -2.7 |
| COLA | **College** | 85.13 | 13 | *e*P | | P | | 23 26 22.0 | -0.5 |
| COLA | comp=Z,25nm,1.1s | | | pmax | pmax | | | | |
| COLA | **College** comp=Z,25nm,1.1s | 85.13 | 13 | *e*P | | P | | 23 26 22.0 | -0.5 |
| HIA | **Hailar** | 85.22 | 325 | *e*P | | P | | 23 26 21.5 | -1.9 |
| HIA | comp=Z,3.0nm,0.8s | | | pmax | pmax | | | | |
| IL1 | **Eielson Array** | 85.25 | 13 | *e*P | | P | | 23 26 22.3 | -0.8 |
| ILAR | **Eielson Array** comp=Z,2.8nm,0.5s,baz=226,slow=4.9,SNR=52 | 85.25 | 13 | P | | P | | 23 26 22.5 | -0.7 |
| NEW | **Newport** | 85.31 | 36 | *e*P | | P | | 23 26 24.1 | +0.2 |
| NEW | comp=Z,9.0nm,1.0s | | | pmax | pmax | | | | |
| NEW | **Newport** comp=Z,9.3nm,1.0s | 85.31 | 36 | *e*P | | P | | 23 26 24.1 | +0.2 |
| TCUT | **Toone Canyon** comp=Z,16nm,0.7s | 85.32 | 45 | *e*P | | P | | 23 26 25.5 | +1.1 |
| HWUT | **Hardware Ranch** comp=Z,3.1nm,0.6s | 85.44 | 44 | *e*P | | P | | 23 26 25.3 | +0.4 |
| BILL | **Bilibino** | 85.52 | 355 | *i*P | | P | | 23 26 22.8 | -1.6 |
| BILL | comp=Z,35nm,2.5s | | | pmax | pmax | | | | |
| PV10 | **Paradox Valley** comp=Z,118nm,0.8s | 85.74 | 48 | *e*P | | P | | 23 26 27.2 | +0.8 |
| LPM | **Los Pinos Moun** comp=Z,8.2nm,1.1s | 85.82 | 52 | *e*P | | P | | 23 26 27.6 | +0.7 |
| PV01 | **Paradox Valley** comp=Z,587nm,1.3s | 85.97 | 48 | *e*P | | P | | 23 26 28.1 | +0.6 |
| HHC | **Hu-ho-hao-te** | 86.11 | 315 | *e*P | | P | | 23 26 24.0 | -4.0 |
| HHC | comp=Z,26nm,0.9s | | | pmax | pmax | | | | |
| HHC | comp=Z,170nm,5.1s | | | pmax | pmax | | | | |
| MCMT | **McKenzie Canyo** comp=Z,7.0nm,1.1s | 86.12 | 41 | *e*P | | P | | 23 26 28.9 | +0.8 |
| ANMO | **Albuquerque** | 86.21 | 52 | *e*P | | P | | 23 26 29.6 | +0.9 |
| ANMO | comp=Z,11nm,1.0s | | | pmax | pmax | | | | |
| ANMO | **Albuquerque** comp=Z,11nm,1.0s | 86.21 | 52 | *e*P | | P | | 23 26 29.6 | +0.9 |
| TX31 | **Lajitas Ar. Si** | 86.22 | 58 | *e*P | | P | | 23 26 30.6 | +1.9 |
| TXAR | **Lajitas Array** comp=Z,6.3nm,0.8s,baz=215,slow=6.7,SNR=67 | 86.22 | 58 | P | | P | | 23 26 30.7 | +2.0 |
| AHID | **Auburn Hatcher** comp=Z,6.5nm,0.9s | 86.28 | 43 | *e*P | | P | | 23 26 29.2 | +0.3 |
| MSO | **Missoula** baz=87 | 86.43 | 39 | P | | P | | 23 26 30.5 | +1.1 |
| MSO | **Missoula** comp=Z,141nm,3.0s | 86.43 | 39 | *e*P | | P | | 23 26 29.6 | +0.3 |
| BSMT | **Basoo Peak** comp=Z,6.1nm,0.7s | 86.44 | 38 | *e*P | | P | | 23 26 29.7 | +0.2 |
| DLMT | **Dillon** comp=Z,31nm,1.5s | 86.54 | 40 | *e*P | | P | | 23 26 31.0 | +1.1 |
| EGAK | **Eagle** comp=Z,79nm,2.1s | 86.62 | 15 | *e*P | | P | | 23 26 27.0 | -2.7 |
| TPAW | **Teton Pass** comp=Z,7.8nm,0.9s | 86.71 | 43 | *e*P | | P | | 23 26 32.2 | +1.3 |
| REDW | **Red Top Meadow** comp=Z,18nm,0.9s | 86.72 | 43 | *e*P | | P | | 23 26 32.0 | +1.1 |
| KMI | **Kunming** | 86.74 | 297 | P | | P | | 23 26 15.0 | -16 |
| KMI | comp=Z,6.0nm,0.6s | | | PMZ | | | | | |
| COLD | **Coldfoot** comp=Z,14nm,1.1s | 86.74 | 11 | *e*P | | P | | 23 26 30.7 | +0.5 |
| SNOW | **Snow King Moun** comp=Z,18nm,0.9s | 86.82 | 43 | *e*P | | P | | 23 26 32.7 | +1.3 |
| LRM | **Limekiln Ridge** comp=Z,62nm,1.0s | 86.84 | 40 | *e*P | | P | | 23 26 32.1 | +0.6 |
| CHMT | **Chamberlain Mo** | 86.88 | 39 | *e*P | | P | | 23 26 31.9 | +0.3 |
| IMW | **Indian Meadow** comp=Z,16nm,0.9s | 86.90 | 42 | *e*P | | P | | 23 26 32.9 | +1.0 |
| MOOW | **Moose Ponds** comp=Z,5.5nm,0.9s | 86.96 | 42 | *e*P | | P | | 23 26 33.4 | +1.3 |
| QLMT | **Earthquake Lak** comp=Z,2.8nm,1.2s | 87.02 | 41 | *e*P | | P | | 23 26 33.5 | +1.2 |
| O20A | **White River Ci** baz=87,SNR=6.2 | 87.05 | 47 | P | | P | | 23 26 32.9 | +0.4 |
| O20A | **White River Ci** comp=Z,25nm,1.4s | 87.05 | 47 | *e*P | | P | | 23 26 33.5 | +1.0 |
| FLWY | **Flagg Ranch** comp=Z,42nm,1.5s | 87.14 | 42 | *e*P | | P | | 23 26 33.8 | +0.9 |
| YFT | **Old Faithful** comp=Z,10nm,0.8s | 87.22 | 42 | *e*P | | P | | 23 26 36.1 | +2.9 |
| YMR | **Madison River** comp=Z,9.9nm,0.8s | 87.24 | 42 | *e*P | | P | | 23 26 33.3 | 0.0 |
| BOZ | **Bozeman (W)** | 87.27 | 40 | *e*P | | P | | 23 26 32.8 | -0.6 |
| BOZ | comp=Z,82nm,2.7s | | | pmax | pmax | | | | |
| BOZ | **Bozeman (W)** baz=88 | 87.27 | 40 | P | | P | | 23 26 34.4 | +1.0 |
| BOZ | **Bozeman (W)** comp=Z,82nm,2.7s | 87.27 | 40 | *e*P | | P | | 23 26 32.8 | -0.6 |
| BW06 | **Boulder Array** comp=Z,10nm,0.7s | 87.30 | 44 | *e*P | | P | | 23 26 34.1 | +0.4 |
| H17A | **Grant Village** baz=88 | 87.36 | 42 | P | | P | | 23 26 34.6 | +0.6 |
| WALA | **Waterton Lakes** comp=Z,6.1nm,0.8s | 87.54 | 37 | *e*P | | P | | 23 26 35.1 | +0.6 |
| 529A | **Stev Forest Ra** baz=88 | 87.69 | 58 | P | | P | | 23 26 34.5 | -1.1 |
| CMAR | **Chiang Mai Arr** comp=Z,1.4nm,0.4s,baz=110,slow=4.9,SNR=7.3 | 87.85 | 290 | P | | P | | 23 26 38.0 | +1.5 |
| CD2 | **Chengdu** | 87.94 | 303 | *e*P | | P | | 23 26 16.5 | -20 |
| CD2 | | | | pP | | pP | | 23 28 35.0 | -1.9 |
| CD2 | | | | PP | | PP | | 23 29 55.5 | -18 |
| CD2 | | | | SKS | | S | | 23 35 43.0 | -51 |
| CD2 | | | | S | | **SKSac** | | **23 36 06.5** | **-6.5** |
| CD2 | | | | sS | | sS | | 23 40 14.3 | +5.8 |
| CD2 | | | | SS | | SS | | 23 42 16.5 | -23 |
| CD2 | comp=Z,10.0nm,0.5s | | | PMZ | | | | | |
| CD2 | comp=Z,120nm,5.2s | | | PMZ | | | | | |
| SDCO | **Great Sand Dun** baz=88 | 88.03 | 50 | P | | P | | 23 26 36.8 | -0.4 |
| SDCO | **Great Sand Dun** comp=Z,3.8nm,1.0s | 88.03 | 50 | *e*P | | P | | 23 26 37.6 | +0.3 |
| 429A | **Davenport Ranc** baz=88,SNR=11 | 88.13 | 57 | P | | P | | 23 26 36.4 | -1.2 |
| 128A | **Castleberry Fa** baz=89 | 88.38 | 55 | P | | P | | 23 26 37.8 | -1.0 |
| 530A | **J-C Ranch, Com** baz=89 | 88.41 | 58 | P | | P | | 23 26 37.8 | -1.1 |
| MSTX | **Muleshoe** comp=Z,13nm,0.9s | 88.64 | 54 | *e*P | | P | | 23 26 40.4 | +0.4 |
| ISCO | **Idaho Springs** | 88.76 | 48 | *e*P | | P | | 23 26 40.4 | -0.2 |
| ISCO | comp=Z,44nm,2.5s | | | pmax | pmax | | | | |
| ISCO | **Idaho Springs** baz=89 | 88.76 | 48 | P | | P | | 23 26 40.5 | -0.2 |
| ISCO | **Idaho Springs** comp=Z,44nm,2.5s | 88.76 | 48 | *e*P | | P | | 23 26 40.4 | -0.2 |
| Q24A | **Divide** baz=89 | 88.76 | 49 | P | | P | | 23 26 40.6 | -0.1 |
| N23A | **Red Feather La** baz=89,SNR=7.6 | 88.96 | 47 | P | | P | | 23 26 41.9 | +0.4 |
| 330A | **Mertzon** baz=89 | 88.98 | 57 | P | | P | | 23 26 40.5 | -1.0 |
| Y28A | **McKinney Farm,** baz=89 | 89.03 | 54 | P | | P | | 23 26 41.2 | -0.6 |
| 531A | **Rocksprings** baz=89,SNR=13 | 89.06 | 58 | P | | P | | 23 26 43.0 | +1.0 |
| T26A | **Comanche Natio** baz=89 | 89.21 | 51 | P | | P | | 23 26 43.2 | +0.5 |
| Z29A | **Hungry Hill Ra** baz=89 | 89.22 | 55 | P | | P | | 23 26 42.3 | -0.3 |
| 933A | **Laredo** baz=89,SNR=6.4 | 89.24 | 61 | P | | P | | 23 26 43.3 | +0.6 |
| K22A | **Casper** baz=90 | 89.27 | 45 | P | | P | | 23 26 43.4 | +0.6 |
| 833A | **Chaparral WMA,** baz=90,SNR=6.1 | 89.38 | 60 | P | | P | | 23 26 41.9 | -1.5 |
| 632A | **Uvalde** baz=90,SNR=9.2 | 89.45 | 59 | P | | P | | 23 26 45.6 | +1.9 |
| PHWY | **Pilot Hill** comp=Z,9.9nm,1.0s | 89.46 | 46 | *e*P | | P | | 23 26 44.9 | +1.0 |
| S26A | **Kim** baz=90 | 89.47 | 50 | P | | P | | 23 26 42.9 | -0.8 |
| EGMT | **Eagleton** baz=90 | 89.50 | 39 | P | | P | | 23 26 44.8 | +1.2 |
| 331A | **San Angelo** baz=90 | 89.55 | 57 | P | | P | | 23 26 43.1 | -1.1 |
| 130A | **Snyder** baz=90 | 89.56 | 56 | P | | P | | 23 26 43.5 | -0.7 |
| 532A | **Rocksprings** baz=90,SNR=9.1 | 89.56 | 58 | P | | P | | 23 26 45.4 | +1.1 |
| 733A | **Divot King Ran** baz=90 | 89.59 | 60 | P | | P | | 23 26 46.2 | +1.8 |
| Z30A | **Sanderson Ranc** baz=90 | 89.68 | 55 | P | | P | | 23 26 44.2 | -0.5 |
| JCT | **Junction City** | 89.77 | 58 | *e*P | | P | | 23 26 44.4 | -0.8 |
| JCT | comp=Z,5.0nm,0.7s | | | pmax | pmax | | | | |
| JCT | **Junction City** comp=Z,5.5nm,0.7s | 89.77 | 58 | *e*P | | P | | 23 26 44.4 | -0.8 |
| T27A | **Campo** baz=90 | 89.81 | 51 | P | | P | | 23 26 44.4 | -1.0 |
| 231A | **Bronte** baz=90,SNR=12 | 89.85 | 57 | P | | P | | 23 26 46.2 | +0.6 |
| EDM | **Edmonton** | 89.90 | 33 | *e*P | | P | | 23 26 44.7 | -0.5 |
| EDM | comp=Z,205nm,2.7s | | | pmax | pmax | | | | |
| EDM | **Edmonton** comp=Z,205nm,2.7s | 89.90 | 33 | *e*P | | P | | 23 26 44.7 | -0.5 |
| 432A | **Menard** baz=90,SNR=18 | 89.91 | 58 | P | | P | | 23 26 46.7 | +0.8 |
| 633A | **Saathoff Ranch** baz=90,SNR=12 | 89.94 | 59 | P | | P | | 23 26 47.9 | +1.9 |
| 035A | **Encino** baz=90 | 90.00 | 62 | P | | P | | 23 26 44.9 | -1.4 |
| Y30A | **Stafford Cattl** baz=90 | 90.06 | 55 | P | | P | | 23 26 47.6 | +1.0 |
| 332A | **Millersview** baz=90,SNR=18 | 90.12 | 57 | P | | P | | 23 26 47.7 | +0.8 |
| 533A | **Kerrville** baz=90,SNR=5.5 | 90.25 | 59 | P | | P | | 23 26 48.2 | +0.7 |
| T28A | **Walsh** baz=90 | 90.29 | 51 | P | | P | | 23 26 47.0 | -0.5 |
| 232A | **Coleman** baz=91,SNR=8.5 | 90.37 | 57 | P | | P | | 23 26 49.0 | +1.1 |
| 433A | **Art** baz=91,SNR=17 | 90.44 | 58 | P | | P | | 23 26 49.4 | +1.1 |
| Z31A | **Sharp Cattle R** baz=91,SNR=5.1 | 90.46 | 55 | P | | P | | 23 26 49.1 | +0.8 |
| ABTX | **Abilene, Hawle** baz=91,SNR=7.8 | 90.62 | 56 | P | | P | | 23 26 50.1 | +1.0 |
| ABTX | **Abilene, Hawle** comp=Z,7.5nm,0.6s | 90.62 | 56 | *e*P | | P | | 23 26 49.6 | +0.5 |
| U29A | **Oasis Ranch, S** baz=91 | 90.68 | 52 | P | | P | | 23 26 48.5 | -0.8 |
| 534A | **Blanco** baz=91,SNR=20 | 90.70 | 59 | P | | P | | 23 26 50.8 | +1.3 |
| 333A | **Richland Sprin** baz=91 | 90.71 | 58 | P | | P | | 23 26 50.3 | +0.7 |
| T29A | **Hugoton** baz=91 | 90.91 | 51 | P | | P | | 23 26 49.8 | -0.6 |
| R28A | **Tribune** baz=91,SNR=5.3 | 90.95 | 50 | P | | P | | 23 26 51.4 | +0.8 |
| 233A | **Rising Star** baz=91,SNR=6.4 | 91.01 | 57 | P | | P | | 23 26 52.0 | +1.1 |
| LAO | **LASA Array** baz=91 | 91.11 | 41 | P | | P | | 23 26 52.9 | +1.8 |
| LAO | **LASA Array** comp=Z,26nm,1.0s | 91.11 | 41 | *e*P | | P | | 23 26 51.6 | +0.5 |
| 434A | **Burnet** baz=91,SNR=15 | 91.12 | 58 | P | | P | | 23 26 52.5 | +1.1 |
| U30A | **WK&E Inc. Balk** baz=91 | 91.18 | 52 | P | | P | | 23 26 50.4 | -1.2 |
| 133A | **Hamilton Ranch** baz=91,SNR=6.3 | 91.19 | 56 | P | | P | | 23 26 52.8 | +1.1 |
| Y32A | **R-V Farms, Ver** baz=91 | 91.24 | 55 | P | | P | | 23 26 53.0 | +1.1 |
| 334A | **Lometa** baz=92,SNR=11 | 91.32 | 58 | P | | P | | 23 26 53.5 | +1.1 |
| X32A | **Elmer** baz=92,SNR=6.7 | 91.51 | 55 | P | | P | | 23 26 53.6 | +0.4 |
| RSSD | **Black Hills** | 91.52 | 44 | *e*P | | P | | 23 26 53.5 | +0.3 |
| RSSD | comp=Z,4.0nm,0.8s | | | pmax | pmax | | | | |
| RSSD | **Black Hills** comp=Z,3.6nm,0.8s | 91.52 | 44 | *e*P | | P | | 23 26 53.5 | +0.3 |
| I25A | **Rochford** baz=92 | 91.68 | 44 | P | | P | | 23 26 53.8 | -0.1 |
| W32A | **Sentinel** baz=92 | 91.77 | 54 | P | | P | | 23 26 54.8 | +0.5 |
| ULN | **Ulaanbaatar** | 92.00 | 320 | *e*P | | P | | 23 26 50.8 | -4.4 |
| ULN | comp=Z,3.0nm,0.9s | | | pmax | pmax | | | | |
| SONM | **Songino Array** comp=Z,0.5nm,0.5s,baz=118,slow=3.8,SNR=7.3 | 92.39 | 320 | P | | P | | 23 26 57.1 | 0.0 |
| DGMT | **Dagmar** baz=93 | 93.07 | 40 | P | | P | | 23 27 00.2 | +0.2 |
| DGMT | **Dagmar** comp=Z,21nm,1.2s | 93.07 | 40 | *e*P | | P | | 23 27 01.2 | +1.2 |
| D25A | **Fairfield** baz=93 | 93.12 | 42 | P | | P | | 23 27 00.4 | +0.1 |
| T33A | **Patterson Ranc** baz=93 | 93.18 | 52 | P | | P | | 23 26 59.7 | -1.1 |
| R32A | **Long Quarter,** baz=94 | 93.27 | 51 | P | | P | | 23 27 00.3 | -0.8 |
| D26A | **Manning** baz=94 | 93.64 | 42 | P | | P | | 23 27 02.7 | 0.0 |
| YKA | **Yellowknife Ar** comp=Z,4.4nm,0.7s,baz=241,slow=4.6,SNR=9.8 | 93.91 | 25 | P | | P | | 23 27 03.0 | -0.4 |
| T35A | **Sooner Cattle** baz=95 | 94.44 | 53 | P | | P | | 23 27 05.2 | -1.3 |
| TUL1 | **Tulsa** baz=95 | 94.69 | 54 | P | | P | | 23 27 06.2 | -1.5 |
| Q34A | **Chapman** baz=95 | 94.74 | 51 | P | | P | | 23 27 06.6 | -1.2 |
| P34A | **Walnut Farm, R** baz=95 | 95.02 | 50 | P | | P | | 23 27 07.9 | -1.2 |
| KSU1 | **Kansas State U** baz=95 | 95.04 | 51 | P | | P | | 23 27 07.7 | -1.5 |
| P35A | **Duane Minner,** baz=96 | 95.61 | 51 | P | | P | | 23 27 10.5 | -1.2 |
| T37A | **Cheneyville 18** baz=96 | 95.72 | 53 | P | | P | | 23 27 10.8 | -1.4 |
| S37A | **Fort Scott** baz=96 | 95.98 | 52 | P | | P | | 23 27 12.2 | -1.2 |
| R37A | **Teagarden Farm** baz=96 | 96.14 | 52 | P | | P | | 23 27 13.0 | -1.1 |
| P36A | **Good Intent, A** baz=96 | 96.23 | 51 | P | | P | | 23 27 13.4 | -1.1 |
| ZALV | **Zalesovo Beam** comp=Z,0.9nm,0.6s,baz=114,slow=1.8,SNR=5.3 | 107.08 | 322 | PKiKP | | **PKiKP** | | 23 32 08.1 | -0.1 |
| MKAR | **Makanchi Array** comp=Z,0.7nm,0.5s,baz=87,slow=0.7,SNR=8.8 | 107.98 | 314 | PKiKP | | **PKiKP** | | 23 32 09.7 | -0.5 |
| BRVK | **Borovoye** | 115.75 | 321 | *i*PKiKP | | PKPpre | | 23 32 12.8 | |
| BDFB | **Brasilia** comp=Z,2.1nm,0.6s,baz=252,slow=6.4,SNR=3.3 | 121.95 | 121 | PKP | | **PKPdf** | | 23 32 37.9 | 0.0 |
| ARCES | **ARCESS Array B** comp=Z,3.9nm,0.7s,baz=102,slow=1.9,SNR=27 | 125.35 | 350 | PKP | | **PKPdf** | | 23 32 42.9 | +0.2 |
| GEYT | **Alibeck** comp=Z,3.3nm,0.7s,baz=42,slow=2.4,SNR=10 | 125.91 | 305 | PKP | | **PKPdf** | | 23 32 45.6 | +0.8 |
| BOSA | **Boshof** comp=Z,1.0nm,0.6s,baz=180,slow=8.1,SNR=3.1 | 128.78 | 208 | PKP | | **PKPdf** | | 23 32 51.6 | +0.8 |
| BOSA | | | | SKPbc | | SKPbc | | 23 35 23.1 | |
| FINES | **FINESS Array B** comp=Z,2.5nm,0.8s,baz=69,slow=2.2,SNR=15 | 132.16 | 344 | PKP | | **PKPdf** | | 23 32 56.9 | +1.1 |
| FINES | | | | SKPbc | | **SKPab** | | 23 35 34.3 | +1.4 |
| NB2 | **NORSAR Subarra** comp=Z,3.3nm,1.0s,baz=251,slow=5.8,SNR=3.3 | 135.45 | 353 | PKPdf | | **PKPdf** | | 23 33 02.6 | +0.5 |
| NOA | **NORSAR Array B** comp=Z,0.8nm,0.4s,baz=27,slow=1.8 | 135.45 | 353 | PKP | | **PKPdf** | | 23 33 03.6 | +1.5 |
| GNI | **Garni** | 135.63 | 310 | *e*PKiKP | | **PKPdf** | | 23 33 03.2 | -0.1 |
| GNI | **Garni** | 135.63 | 310 | *e*PKPdf | | **PKPdf** | | 23 33 03.2 | -0.1 |
| AKASG | **Malin Array Be** comp=Z,2.7nm,0.6s,baz=41,slow=2.7,SNR=7.5 | 139.45 | 332 | PKP | | **PKPdf** | | 23 33 11.8 | +2.0 |
| KMBO | **Kilima Mbogo** comp=Z,1.0nm,0.7s,baz=50,slow=8.3,SNR=4.8 | 139.74 | 247 | PKP | | **PKPdf** | | 23 33 13.2 | +1.4 |
| BSEG | **Bad Segeberg** baz=24,slow=3.0 | 142.46 | 351 | *e*PKPab | | **PKPdf** | | 23 33 12.3 | -2.7 |
| KWP | **Kalwaria Pacla** | 142.98 | 336 | *e*PKP | | **PKPdf** | | 23 33 14.7 | -1.4 |
| KWP | **Kalwaria Pacla** | 142.98 | 336 | *i*PKiKP | | **PKPdf** | | 23 33 15.2 | -0.9 |
| KWP | **Kalwaria Pacla** | 142.98 | 336 | *i*P | | **PKPdf** | | 23 33 15.1 | -1.0 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| RUE | Ruedersdorf | 143.20 | 347 | *e*PKPab | PKPbc | 23 33 15.0 | +0.4 |
| | baz=24,slow=3.0 | | | | | | | |
| WRDH | Warideh | 143.39 | 307 | *i* P | PKPab | 23 33 10.4 | -5.3 |
| TLCR | | 143.43 | 326 | ⇑PKIKP | **PKPdf** | **23 33 16.9** | **-0.1** |
| TLCR | | 143.43 | 326 | ⇑*i*P | **PKPdf** | **23 33 16.9** | **-0.1** |
| ZALF | Zalf | 143.50 | 303 | *i* P | **PKPdf** | **23 33 17.6** | **0.0** |
| BURAR | Bucovina Array | 143.50 | 332 | ⇑PKIKP | **PKPdf** | **23 33 17.1** | **-0.1** |
| BURAR | Bucovina Array | 143.50 | 332 | ⇑*i*P | **PKPdf** | **23 33 17.1** | **-0.1** |
| WME | Myndd Eilian | 143.53 | 5 | *e*P | PKPbc | 23 33 15.6 | 0.0 |
| LHO | Holmfirth | 143.54 | 3 | *e*P | PKPab | 23 33 15.4 | -0.1 |
| OJC | Ojcow | 143.55 | 339 | *e*PKP | **PKPdf** | **23 33 16.4** | **-0.6** |
| OJC | Ojcow | 143.55 | 339 | *e*PKIKP | **PKPdf** | **23 33 16.5** | **-0.6** |
| BR131 | Keskin Array S | 143.62 | 315 | P | **PKPdf** | **23 33 17.6** | **-0.2** |
| | baz=144,SNR=9.6 | | | | | | | |
| BRTR | Keskin Array B | 143.62 | 315 | PKP | **PKPdf** | **23 33 17.3** | **-0.4** |
| | comp=Z,10nm,0.9s,baz=114,slow=2.8,SNR=47 | | | | | | | |
| TESR | Tescani | 143.63 | 329 | ⇓*i*P | **PKPdf** | **23 33 18.3** | **+1.0** |
| BIDA | Albida | 143.63 | 306 | *i* P | PKPab | 23 33 11.1 | -5.5 |
| YRC | Rhoscolyn | 143.65 | 5 | *e*P | PKPbc | 23 33 15.9 | -0.1 |
| WPM1 | Penmaenmawr | 143.70 | 5 | *e*P | PKPab | 23 33 16.0 | -0.2 |
| STHS | Stebnicka Huta | 143.71 | 337 | *e*PKIKP | **PKPdf** | **23 33 17.6** | **+0.2** |
| STHS | Stebnicka Huta | 143.71 | 337 | *e*PKP | **PKPdf** | **23 33 17.6** | **+0.2** |
| KOLS | Kolonicke sedl | 143.71 | 336 | *e*PKIKP | **PKPdf** | **23 33 17.3** | **-0.1** |
| KOLS | Kolonicke sedl | 143.71 | 336 | *e*PKP | **PKPdf** | **23 33 17.3** | **-0.1** |
| HAWK | Haweek | 143.74 | 306 | *i* P | PKPbc | 23 33 11.5 | -5.5 |
| CFR | Carcaliu | 143.80 | 327 | ⇓PKIKP | **PKPdf** | **23 33 17.7** | **+0.1** |
| CFR | Carcaliu | 143.80 | 327 | ⇓*i*P | **PKPdf** | **23 33 17.7** | **+0.1** |
| YLL | Llanberis | 143.80 | 5 | *e*P | PKPbc | 23 33 16.3 | -0.2 |
| NRDL | Niedersach Rie | 143.89 | 350 | *e*PKPab | **PKPdf** | **23 33 17.2** | **-0.2** |
| | baz=24,slow=3.0 | | | | | | | |
| PETR | Petresti | 143.90 | 328 | ⇑*i*P | **PKPdf** | **23 33 19.0** | **+1.2** |
| UZH | Uzhgorod | 143.95 | 336 | ⇓*i*PKIKP | **PKPdf** | **23 33 18.2** | **+0.4** |
| SALA | Sala | 144.04 | 302 | *i* P | PKPbc | 23 33 14.9 | -3.3 |
| VRI | Vrincioaia | 144.05 | 329 | ⇓PKIKP | **PKPab** | **23 33 17.6** | **-0.2** |
| VRI | Vrincioaia | 144.05 | 329 | ⇓*i*P | **PKPab** | **23 33 17.6** | **-0.2** |
| NIE | Niedzica | 144.05 | 338 | *e*PKP | **PKPdf** | **23 33 18.7** | **+0.7** |
| NIE | Niedzica | 144.05 | 338 | *e*PKIKP | **PKPdf** | **23 33 18.8** | **+0.7** |
| KSP | Ksiaz | 144.08 | 343 | *e*PKP | **PKPdf** | **23 33 18.7** | **+0.7** |
| KSP | Ksiaz | 144.08 | 343 | *e*PKIKP | **PKPdf** | **23 33 18.7** | **+0.7** |
| FOEL | Foel Wylfa | 144.12 | 4 | *e*P | **PKPab** | **23 33 17.7** | **-0.1** |
| ASSE | Asse, Remlinge | 144.14 | 350 | *e*PKPab | **PKPdf** | **23 33 18.2** | **+0.3** |
| | baz=24,slow=3.0 | | | | | | | |
| ARCR | ARCALIA | 144.28 | 332 | ⇓*i*P | **PKPab** | **23 33 19.7** | **+1.1** |
| CWF | Charnwood Fore | 144.37 | 2 | *e*P | PKPbc | 23 33 18.2 | -0.1 |
| CWF | Charnwood Fore | 144.37 | 2 | *e*PKPab | **PKPab** | **23 33 18.6** | **-0.1** |
| IBBN | Ibbenburen | 144.40 | 353 | *e*PKPab | **PKPab** | **23 33 19.2** | **+0.3** |
| | baz=24,slow=3.0 | | | | | | | |
| OKC | Ostrava-Krasne | 144.42 | 341 | *e*PKIKP | **PKPab** | **23 33 19.5** | **+0.5** |
| OKC | Ostrava-Krasne | 144.42 | 341 | *e*PKP | **PKPab** | **23 33 19.5** | **+0.5** |
| BRBR | Barbar | 144.45 | 304 | *i* P | PKPpre | 23 33 10.0 | |
| UPC | Upice | 144.46 | 343 | *e*PKIKP | **PKPab** | **23 33 19.9** | **+0.8** |
| UPC | Upice | 144.46 | 343 | *e*PKP | **PKPab** | **23 33 19.9** | **+0.8** |
| CLL | Collm | 144.47 | 347 | ⇓*i*PKIKP | **PKPab** | **23 33 19.2** | **+0.1** |
| CLL | | | | pmax | pmax | | |
| | comp=Z,61nm,1.0s | | | | | | | |
| CLL | Collm | 144.47 | 347 | *e*PKPab | **PKPab** | **23 33 19.3** | **+0.2** |
| | baz=24,slow=3.0 | | | | | | | |
| CLL | Collm | 144.47 | 347 | ⇓*i*PKPbc | **PKPab** | **23 33 19.2** | **+0.1** |
| | comp=Z,61nm,1.0s | | | | | | | |
| CLZ | Clausthal | 144.47 | 350 | *e*PKPab | **PKPab** | **23 33 19.6** | **+0.4** |
| | baz=24,slow=3.0 | | | | | | | |
| HLM1 | Long Mynd | 144.51 | 4 | *e*P | PKPbc | 23 33 18.9 | +0.1 |
| DPC | Dobruska-Polom | 144.51 | 343 | *e*PKIKP | **PKPab** | **23 33 20.2** | **+0.8** |
| DPC | Dobruska-Polom | 144.51 | 343 | *e*PKP | **PKPab** | **23 33 20.2** | **+0.8** |
| LANS | Liptovska Anna | 144.57 | 339 | *e*PKIKP | **PKPab** | **23 33 21.0** | **+1.3** |
| LANS | Liptovska Anna | 144.57 | 339 | *e*PKP | **PKPab** | **23 33 21.0** | **+1.3** |
| AMRR | Amara | 144.60 | 327 | ⇓PKIKP | **PKPab** | **23 33 21.4** | **+1.6** |
| AMRR | Amara | 144.60 | 327 | ⇓*i*P | **PKPab** | **23 33 21.4** | **+1.6** |
| KRLC | Kraliky | 144.63 | 342 | *e*PKIKP | **PKPab** | **23 33 20.2** | **+0.3** |
| KRLC | Kraliky | 144.63 | 342 | *e*PKP | **PKPab** | **23 33 20.2** | **+0.3** |
| DOPR | Dopca | 144.63 | 330 | ⇓*i*P | **PKPab** | **23 33 21.2** | **+1.2** |
| BRG | Berggiesshubel | 144.66 | 346 | *i* PKP | **PKPab** | **23 33 20.0** | **+0.1** |
| | comp=Z,27nm,1.0s | | | | | | | |
| BRG | Berggiesshubel | 144.66 | 346 | *i* PKIKP | **PKPab** | **23 33 20.0** | **+0.1** |
| BRG | | | | pmax | pmax | | |
| | comp=Z,27nm,1.0s | | | | | | | |
| BRG | Berggiesshubel | 144.66 | 346 | *e*PKPab | **PKPab** | **23 33 20.2** | **+0.4** |
| | baz=24,slow=3.0 | | | | | | | |
| ISR | Istrita | 144.66 | 328 | ⇑PKIKP | **PKPab** | **23 33 20.9** | **+0.7** |
| ISR | Istrita | 144.66 | 328 | ⇑*i*P | **PKPab** | **23 33 20.9** | **+0.7** |
| MORC | Moravsky Berou | 144.66 | 341 | ⇓PKIKP | **PKPab** | **23 33 20.3** | **+0.3** |
| MORC | Moravsky Berou | 144.66 | 341 | ⇓*i*P | **PKPab** | **23 33 20.3** | **+0.3** |
| FBE | Freiberg | 144.75 | 346 | *e*PKPab | **PKPab** | **23 33 20.8** | **+0.6** |
| | baz=24,slow=3.0 | | | | | | | |
| NEUB | Neuenburg | 144.82 | 348 | *e*PKPab | **PKPab** | **23 33 20.6** | **+0.2** |
| | baz=24,slow=3.0 | | | | | | | |
| PVCC | Panska Ves | 144.82 | 345 | *e*PKIKP | **PKPab** | **23 33 20.8** | **+0.3** |
| PVCC | Panska Ves | 144.82 | 345 | *e*PKP | **PKPab** | **23 33 20.8** | **+0.3** |
| GTTG | Gvttingen | 144.83 | 350 | *e*PKPab | **PKPab** | **23 33 20.7** | **+0.2** |
| | baz=24,slow=3.0 | | | | | | | |
| CJR | Cluj-Napoca | 144.90 | 332 | ⇓PKIKP | **PKPab** | **23 33 21.4** | **+0.4** |
| CJR | Cluj-Napoca | 144.90 | 332 | ⇓*i*P | **PKPab** | **23 33 21.4** | **+0.4** |
| SECR | | 144.96 | 328 | ⇑*i*P | **PKPab** | **23 33 21.0** | **-0.3** |
| MCH1 | Michaelchurch | 145.02 | 4 | *e*P | **PKPbc** | **23 33 19.8** | **-0.5** |
| VOIR | | 145.18 | 330 | ⇓PKIKP | **PKPab** | **23 33 21.7** | **-0.5** |
| VOIR | | 145.18 | 330 | ⇓*i*P | **PKPab** | **23 33 21.7** | **-0.5** |
| MONM | Monmouth | 145.19 | 4 | *e*P | **PKPbc** | **23 33 20.6** | **-0.2** |
| DRGR | | 145.23 | 333 | ⇓PKP2 | **PKPab** | **23 33 22.1** | **-0.2** |
| DRGR | | 145.23 | 333 | ⇓*i*P | **PKPab** | **23 33 22.1** | **-0.2** |
| PRA | Prague | 145.28 | 344 | *e*PKP2 | **PKPab** | **23 33 21.8** | **-0.5** |
| PRA | Prague | 145.28 | 344 | *e*PKP | **PKPab** | **23 33 21.8** | **-0.5** |
| PRU | Pruhonice | 145.32 | 344 | *e*PKP2 | **PKPab** | **23 33 22.3** | **-0.2** |
| PRU | Pruhonice | 145.32 | 344 | *e*PKP | **PKPab** | **23 33 22.3** | **-0.2** |
| GOPC | GO Pecny, Ondr | 145.33 | 344 | *e*PKP2 | **PKPab** | **23 33 22.2** | **-0.3** |
| GOPC | GO Pecny, Ondr | 145.33 | 344 | *e*PKP | **PKPab** | **23 33 22.2** | **-0.3** |
| BTMR | Bucharest-Geot | 145.36 | 327 | ⇑*i*P | PKPpre | 23 33 11.8 | |
| VRAC | Vranov | 145.37 | 342 | ⇑PKP2 | **PKPab** | **23 33 22.4** | **-0.3** |
| VRAC | Vranov | 145.37 | 342 | ⇑*i*P | **PKPab** | **23 33 22.4** | **-0.3** |
| MOX | Moxa | 145.39 | 348 | *e*PKPab | **PKPab** | **23 33 22.2** | **-0.5** |
| | baz=24,slow=3.0 | | | | | | | |
| PLN | Plauen | 145.43 | 347 | *e*PKPab | **PKPab** | **23 33 22.4** | **-0.4** |
| | baz=24,slow=3.0 | | | | | | | |
| TANN | Tannenbergstha | 145.43 | 347 | *e*PKPab | **PKPab** | **23 33 22.5** | **-0.5** |
| | baz=24,slow=3.0 | | | | | | | |
| WERD | Werda | 145.43 | 347 | *e*PKPab | **PKPab** | **23 33 22.6** | **-0.3** |
| | baz=24,slow=3.0 | | | | | | | |
| ARR | Arges | 145.43 | 330 | ⇓*i*P | **PKPbc** | **23 33 21.5** | **-0.3** |
| PSZ | Piszkesteto | 145.45 | 337 | *e*PKP2 | **PKPab** | **23 33 22.5** | **-0.7** |
| PSZ | Piszkesteto | 145.45 | 337 | *e*PKPab | **PKPab** | **23 33 22.5** | **-0.7** |
| GUNZ | Gunzen | 145.50 | 347 | *e*PKPab | **PKPab** | **23 33 22.8** | **-0.4** |
| | baz=24,slow=3.0 | | | | | | | |
| WERN | Wernitzgruen | 145.56 | 347 | *e*PKPab | **PKPab** | **23 33 23.1** | **-0.3** |
| | baz=24,slow=3.0 | | | | | | | |
| NKC | Novy Kostel | 145.60 | 347 | *e*PKP2 | **PKPab** | **23 33 23.1** | **-0.5** |
| NKC | Novy Kostel | 145.60 | 347 | *e*PKP | **PKPab** | **23 33 23.1** | **-0.5** |
| NKC | | | | *ex* | x | 23 33 24.4 | |
| TREC | Trest | 145.70 | 343 | *e*PKP2 | **PKPab** | **23 33 23.3** | **-0.7** |
| TREC | Trest | 145.70 | 343 | *e*PKP | **PKPab** | **23 33 23.3** | **-0.7** |
| SMOL | Smolenice | 145.81 | 340 | *e*PKP2 | **PKPab** | **23 33 24.5** | **+0.1** |
| SMOL | Smolenice | 145.81 | 340 | *e*PKP | **PKPab** | **23 33 24.5** | **+0.1** |
| MANZ | Manzenberg | 145.91 | 347 | *e*PKPab | **PKPab** | **23 33 23.9** | **-0.9** |
| | baz=24,slow=3.0 | | | | | | | |
| CSS | Prodhromos | 145.94 | 308 | *e*PKPab | **PKPbc** | **23 33 23.0** | **-0.6** |
| ROTZ | Rotzenmuhle | 146.09 | 347 | *e*PKPab | **PKPab** | **23 33 24.7** | **-0.8** |
| | baz=24,slow=3.0 | | | | | | | |
| MEM | Membach | 146.27 | 354 | PKPbc | **PKPbc** | **23 33 24.7** | **+0.8** |
| GZR | Gura Zlata | 146.28 | 332 | ⇑PKIKP | **PKPab** | **23 33 26.0** | **-0.5** |
| GZR | Gura Zlata | 146.28 | 332 | ⇑*i*P | **PKPab** | **23 33 26.0** | **-0.5** |
| TNS | Taunus Mts | 146.35 | 351 | *e*PKPab | **PKPbc** | **23 33 25.1** | **+0.8** |
| | baz=24,slow=3.0 | | | | | | | |
| KHC | Kasperske Hory | 146.36 | 345 | *e*PKP2 | **PKPab** | **23 33 25.5** | **-1.2** |
| KHC | Kasperske Hory | 146.36 | 345 | *e*PKP | **PKPbc** | **23 33 25.3** | **+1.0** |
| KHC | Kasperske Hory | 146.36 | 345 | *e*PKPab | **PKPab** | **23 33 25.5** | **-1.2** |
| GRF | Grafenberg Arr | 146.37 | 348 | *e*PKPab | **PKPab** | **23 33 25.4** | **-1.2** |
| | baz=24,slow=3.0 | | | | | | | |
| CSKK | Cs˙ákako | 146.52 | 338 | ⇓*e* | **PKPbc** | **23 33 25.4** | **+0.7** |
| SNF | Seneffe | 146.52 | 356 | PKPbc | **PKPbc** | **23 33 25.6** | **+1.0** |
| WET | Wettzell | 146.52 | 346 | *e*PKPab | **PKPbc** | **23 33 25.7** | **+1.0** |
| | baz=24,slow=3.0 | | | | | | | |
| BCLA | Clavier | 146.53 | 355 | PKPab | **PKPab** | **23 33 27.5** | **+0.3** |
| GEC2 | GERESS Array S | 146.59 | 344 | *e*PKPab | **PKPbc** | **23 33 25.8** | **+0.8** |
| | baz=24,slow=3.0 | | | | | | | |
| GERES | GERESS Array B | 146.59 | 344 | PKPbc | **PKPbc** | **23 33 25.7** | **+0.8** |
| | comp=Z,7.8nm,0.8s,baz=19,slow=2.6,SNR=33 | | | | | | | |
| BZS | Buzias | 146.62 | 333 | ⇓PKP2 | **PKPbc** | **23 33 25.6** | **+0.5** |
| BZS | Buzias | 146.62 | 333 | ⇓*i*P | **PKPbc** | **23 33 25.6** | **+0.5** |
| CONA | Conrad Observa | 146.82 | 341 | ⇑*i*PKiKP | **PKiKP** | **23 33 26.8** | **-0.8** |
| | comp=Z,19nm,0.6s,SNR=8.8 | | | | | | | |
| DOU | Dourbes | 146.91 | 355 | PKPbc | **PKPbc** | **23 33 26.5** | **+0.8** |
| BANR | Banloc | 147.02 | 333 | ⇓*i*P | **PKPab** | **23 33 27.6** | **-1.7** |
| WLF | Walferdange | 147.19 | 354 | PKPbc | **PKPbc** | **23 33 27.9** | **+1.5** |
| WLF | Walferdange | 147.19 | 354 | *e*PKPab | **PKPbc** | **23 33 27.9** | **+1.5** |
| | baz=24,slow=3.0 | | | | | | | |
| MOA | Molln | 147.35 | 343 | ⇓*i*PKiKP | **PKiKP** | **23 33 27.9** | **-0.7** |
| | comp=Z,16nm,1.2s | | | | | | | |
| ARSA | Arzberg | 147.53 | 341 | ⇑*i*PKiKP | **PKiKP** | **23 33 28.2** | **-0.8** |
| | comp=Z,8.9nm,1.2s | | | | | | | |
| STU | Stuttgart | 147.64 | 350 | *e*PKP2 | **PKPbc** | **23 33 28.8** | **+1.2** |
| STU | Stuttgart | 147.64 | 350 | *e*PKPab | **PKPbc** | **23 33 28.6** | **+1.0** |
| | baz=24,slow=3.0 | | | | | | | |
| STU | Stuttgart | 147.64 | 350 | *e*PKPab | **PKPbc** | **23 33 28.8** | **+1.2** |
| FUR | Furstenfeldbru | 147.81 | 347 | *e*PKPab | **PKPbc** | **23 33 29.1** | **+1.0** |
| | baz=24,slow=3.0 | | | | | | | |
| RJOB | Jochberg | 147.85 | 345 | *e*PKPab | **PKPbc** | **23 33 29.0** | **+0.7** |
| | baz=24,slow=3.0 | | | | | | | |
| SOKA | Soboth | 148.19 | 341 | ⇓*i*PKPbc | **PKPbc** | **23 33 29.2** | **0.0** |
| | comp=Z,6.7nm,0.7s | | | | | | | |
| PERS | Pernice | 148.20 | 341 | *i* PKPbc | **PKPbc** | **23 33 29.4** | **+0.2** |
| BFO | Black Forest | 148.21 | 350 | *e*PKP2 | **PKPbc** | **23 33 29.9** | **+0.8** |
| BFO | Black Forest | 148.21 | 350 | *e*PKPab | **PKPbc** | **23 33 29.9** | **+0.8** |
| | baz=24,slow=3.0 | | | | | | | |
| BFO | Black Forest | 148.21 | 350 | *e*PKPab | **PKPbc** | **23 33 29.9** | **+0.8** |
| KBA | Koelnbreinsper | 148.31 | 344 | ⇑*i*PKPbc | **PKPbc** | **23 33 29.6** | **0.0** |
| | comp=Z,9.0nm,0.5s | | | | | | | |
| WATA | Walderalm | 148.52 | 346 | ⇑*i*PKiKP | **PKiKP** | **23 33 30.5** | **-0.6** |
| | comp=Z,10nm,0.5s | | | | | | | |
| DIVS | Divibare | 148.53 | 333 | ⇓*i*P | **PKPbc** | **23 33 30.9** | **+0.8** |
| RETA | Reutte | 148.56 | 347 | ⇓*i*PKiKP | **PKiKP** | **23 33 30.7** | **-0.4** |
| | comp=Z,7.4nm,0.5s | | | | | | | |
| WTTA | Wattenberg | 148.57 | 346 | ⇑*i*PKiKP | **PKiKP** | **23 33 31.0** | **-0.4** |
| | comp=Z,29nm,0.6s,SNR=7.2 | | | | | | | |
| MOTA | Moosalm | 148.62 | 346 | ⇓*i*PKiKP | **PKPbc** | **23 33 30.7** | **+0.4** |
| | comp=Z,9.6nm,0.6s,SNR=7.4 | | | | | | | |
| MYKA | Terra Mystica | 148.64 | 343 | ⇑*i*PKPbc | **PKPbc** | **23 33 30.2** | **-0.1** |
| | comp=Z,11nm,0.5s | | | | | | | |
| PDKS | Podkum | 148.75 | 341 | *i* PKPbc | **PKPbc** | **23 33 31.1** | **+0.6** |
| ABTA | Abfaltersbach | 148.84 | 344 | *i* PKiKP | **PKPbc** | **23 33 31.0** | **+0.2** |
| | comp=Z,18nm,0.6s,SNR=5.7 | | | | | | | |
| DAVA | Damuels | 148.94 | 348 | ⇑*i*PKiKP | **PKiKP** | **23 33 32.4** | **+0.3** |
| | comp=Z,20nm,1.0s | | | | | | | |
| CRNS | Crni Vrh | 148.96 | 342 | *e*PKPbc | **PKPbc** | **23 33 31.3** | **+0.2** |
| BLY | Banja Luka | 149.14 | 337 | ⇑*i*P | **PKPbc** | **23 33 32.4** | **+0.9** |
| BOJS | Bojanci | 149.16 | 340 | *e*PKPbc | **PKPbc** | **23 33 32.5** | **+1.1** |
| VAY | Valandovo | 149.40 | 327 | *i* P | **PKPbc** | **23 33 32.9** | **+0.7** |
| VAY | Valandovo | 149.40 | 327 | *i* P | **PKPbc** | **23 33 32.9** | **+0.7** |
| SKO | Skopje | 149.50 | 329 | *i* P | **PKPbc** | **23 33 33.8** | **+1.4** |
| SKO | Skopje | 149.50 | 329 | *i* P | **PKPbc** | **23 33 33.8** | **+1.4** |
| TUE | Stuetta | 149.82 | 348 | *e*PKPbc | **PKPbc** | **23 33 33.9** | **+0.6** |
| PDG | Podgorica | 150.18 | 332 | ⇓*i*P | **PKPbc** | **23 33 32.0** | **-2.0** |
| OHR | Ohrid | 150.46 | 328 | *i* P | **PKPbc** | **23 33 35.2** | **+0.4** |
| OHR | Ohrid | 150.46 | 328 | *i* P | **PKPbc** | **23 33 35.2** | **+0.4** |
| SANT | Santorini | 150.87 | 316 | *e*PKPbc | **PKPbc** | **23 33 33.3** | **-2.6** |
| LAST | Lasithi | 151.53 | 314 | ⇑*i*P | **PKPbc** | **23 33 38.5** | **+1.1** |
| SIVA | Sivas | 152.07 | 314 | ⇓*i*P | **PKPbc** | **23 33 39.5** | **+1.0** |
| ESDC | Sonseca Array | 157.10 | 9 | PKPab | **PKPab** | **23 34 12.0** | **-0.2** |
| | comp=Z,0.3nm,0.5s,baz=346,slow=4.6,SNR=5.1 | | | | | | | |
| TOA0 | Torodi Ar. Sit | 176.00 | 193 | P | **PKPdf** | **23 33 52.2** | **-0.6** |
| | baz=176,SNR=4.5 | | | | | | | |
| TORD | Torodi Ar. Bea | 176.00 | 193 | PKP | **PKPdf** | **23 33 52.4** | **-0.4** |
| | comp=Z,1.7nm,0.7s,baz=315,slow=0.7,SNR=14 | | | | | | | |
| TORD | | | | PKPab | **PKPab** | **23 35 35.9** | **0.0** |
| | comp=Z,0.3nm,0.6s,baz=152,slow=6.2,SNR=2.9 | | | | | | | |

# ISC Computed Locations for October 2010

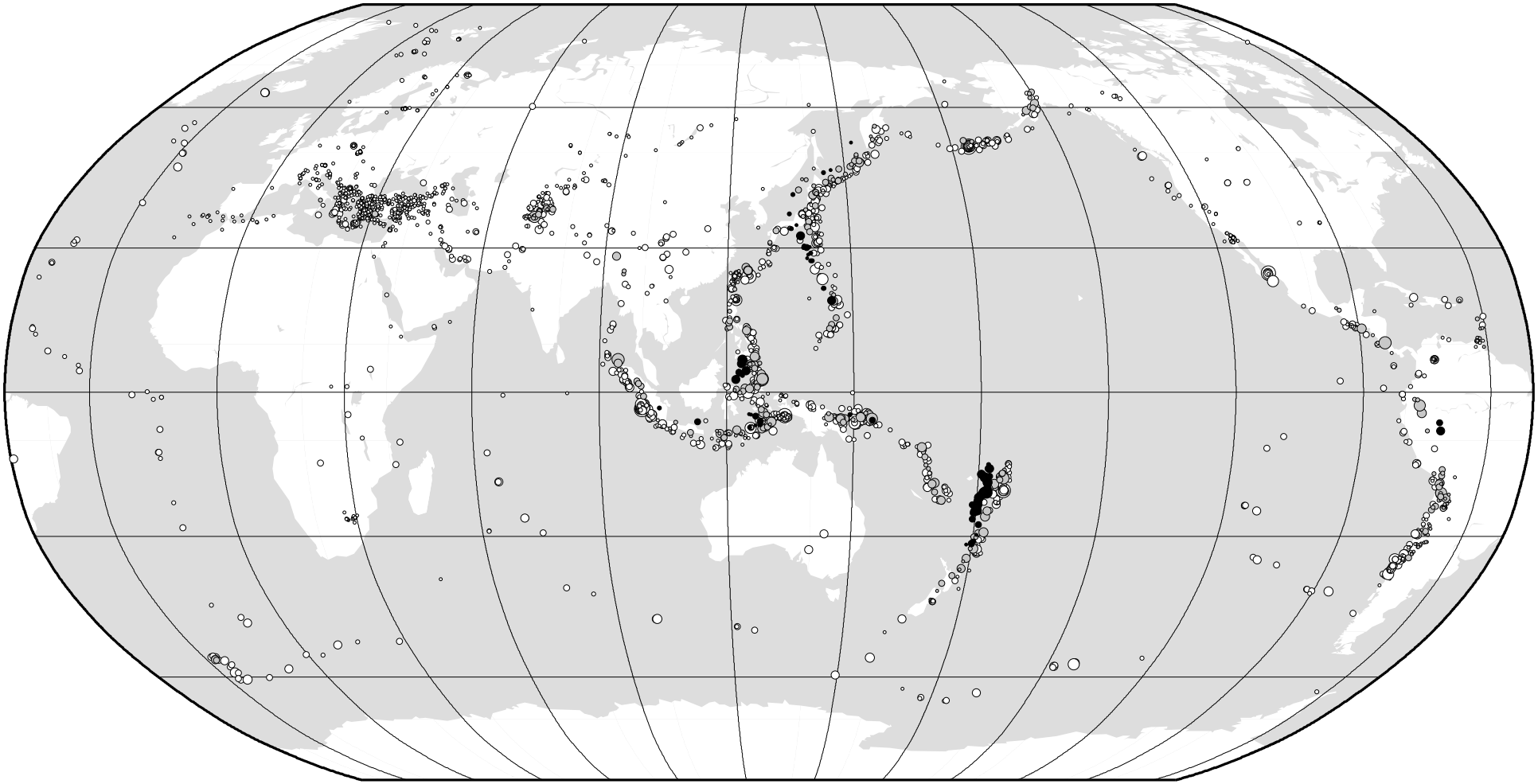

| Depth (km) | 0-70 | 70-300 | >300 |
|---|---|---|---|
| M=8 | ○ | ○ | ● |
| M=6.5 | ○ | ○ | ● |
| M=4 | ○ | ○ | ● |

Robinson Projection, centred on 0˚N,130˚E

3104 Events